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

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

Thank you for your assistance.

Archives and Records Staff

MF111895

PSA # 00528		Control 07-109256	Base File	County REEVES
	Survey	T&P	RY CO	
	Block	56		
	Block Name			
	Township	3-S		
	Section/Tract	18		
	Land Part	ALL		
	Part Descriptio	n		
	Acres	640		
\mathcal{N}	Depth Below	Dept	h Above	Depth Other
Leasing: HX	Name	CIMA	REX ENERGY C	0.
Analyst: IS	Lease Date	7/14/2	010	
	Primary Term	3 yrs		
Maps: SC	Bonus (\$)	\$240,0	000.00	
GIS:INC_	Rental (\$)	\$0.00		
DocuShare:	Lease Royalty	0.1250	0	

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

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Blease 11/12/10	Scanned 5m 03B0/2022
4) Final Letter 9/20/11	23. Production Sharing Agreement
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5 cmail from Lesset. 620.13	Scanued sm 0126/2023
11 11 1 1 1 1 1 1 1 7 6 1 1 7	See MF039970#65, Comm 3 Gas lift Approx / Pers
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	25. i Nut 13518 - API 42. 389. 40696 4/26/2024 26. i Nut 13519 - API 42. 389. 40698 4/26/2024
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0	28. iNut 13521 - API 42.389. 40700 4/26/2024
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Scanned cm 11/05/2019	
21. Partial release 11/08/19	
22. Ltr & fee 11/08/19	
Scanual SM 11 13/2019	

RAL REVIEW SHEET

Transaction #	6884				Geol	ogist:	F	R. Widmayer			
Lessor: The	e Allar Company				Leas	e Date:	7	/14/2010	UŁ		
Lessee: Cir	marex Energy Co.				Gro	ss Acres		640			
					Net	Acres:		640			
LEASE DESCRIPT	ION										
County			Base File No	Part	Sec.	Block	Twp	Survey			Abst#
REEVES	07-1	109256	111008	ALL	18	56	03S	T & P RY C)		3372
TERMS OFFERED			TERM	S RECOM	MENDED						
Primary Term:	3 years			ry Term	_	years					
Bonus/Acre:	\$750	0.00		s/Acre		\$7	50.00				
Rental/Acre:	\$1	1.00	Renta	l/Acre			\$1.00				
	Davis				47			1			
Rovalty:	1/4		Rovat	tv	1/4	4					
Royalty:	1/4		Royal	ty	174	1		J			
Royalty:	1/4		Royal	ty	11/	1					
	1/4 Lessee		Royal Date	ty	Term	Bonus/	Ac.	Rental/Ac.	Royalt	y D	istance
COMPARISONS		eum Corporat	Date	/8/2005			11.000	OZZZE SOCIAL MANAGEMENT	Royalty	y D	istance Last Lease
COMPARISONS MF#	Lessee	eum Corporat	Date		Term	Bonus/	11.000	OZZZE SOCIAL MANAGEMENT		y D	
COMPARISONS MF#	Lessee	eum Corporat	Date		Term	Bonus/	11.000	OZZZE SOCIAL MANAGEMENT		y D	
COMPARISONS MF#	Lessee	eum Corporat	Date		Term	Bonus/	11.000	OZZZE SOCIAL MANAGEMENT		y D	

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 Commiss FROM: Robert Hatter, Director of Miner	
Tracey Throckmorton, Geoscien	ce Manager
	County: REEVES nus/Acre \$750.00 ntal/Acre \$1.00
Consideration Recommended: Not Recommended: Comments: Paid up rentals.	Date: <u>8 /4 /10</u>
Lease Form Recommended: Not Recommended: Comments:	Date:
Louis Renaud, Deputy Commissioner Recommended:	Date: 8/18/10
Bill Warnick, General Counsel Recommended: Not Recommended:	Date: 8/23/10
Approved:	Date:
Jerry Patterson, Commissioner Approved: Cuy Culture Not Approved:	Date: 8 25 10

DAI	POLADIN	,		
Date Filed:	8015ahu	8	(1	10

CIMAREX ENERGY CO 1700 LINCOLN STREET **SUITE 1800**

DENVER CO 80203-4518 (303) 295-3995

Check Number 0001330310

Description * Discount **Net Amount** Inva Date Amount = Invoice # REQ21707262010 07/26/2010 240.000.00 0.00 240,000.00 121

019275



1700 LINCOLN STREET **SUITE 1800**

DENVER CO 80203-4518 (303) 295-3995

Check Number

0001327554

Invoice #	Inv. Date	Description	Amount	Discount	Net Amount
REQ217072110D	o7/21/2010		25.00	0.00	25.00
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023492

Cimarex Energy Co.

600 N. Marienfeld St.

Suite 600

Midland, Texas 79701

PHONE 432.571.7800



November 10, 2010

Mineral Leasing Division Texas General Land Office Attn: Drew Reid P.O. Box 12873 Austin, TX 78701-1495

RE: Mineral Classified Leases

All of Section 18, Block 56, T-3, Abst 3372, T&P RR Survey

Reeves County, TX

Dear Mr. Reid,

Please find enclosed a certified copy of the Oil and Gas Lease filed of record in Reeves County, Texas covering the above captioned lands, along with a check representing the bonus consideration for said lease. Specifically, please find the following certified copy of the lease and corresponding check as follows:

Lessor: The Allar Company, a Texas corporation

Recorded: Book 853, P. 55

Check Number 0001330310 - \$240,000.00 (bonus consideration)

Additionally, please find enclosed a \$25.00 check to cover the filing fee for the above lease.

Please respond with written verification of receipt of the above check, along with written verification of receipt and acceptance of the above recorded lease. If I can be of further assistance, please contact me at the number below.

Sincerely,

Todd Meador (432) 571-7858 Cimarex Energy Co.

600 N. Marienfeld St.

Suite 600

Midland, Texas 79701

PHONE 432.571.7800





July 15, 2010

Mineral Leasing Division Texas General Land Office Attn: Drew Reid P.O. Box 12873 Austin, TX 78701-1495

RE: Mineral Classified Leases

All Section 18, Blk 56-T3, Abstract 3372, T&P RR Co. Survey

Reeves County, TX

Dear Mr. Reid,

The Allar Co., acting as agent for the State of Texas, as Lessor, and Cimarex Energy Co., as Lessee, ("The Parties") have reached an agreement to lease the above-captioned lands in Reeves County, TX. The agreed upon terms of the lease are as follows:

Primary Term:

three (3) years

Royalty:

one-fourth (1/4)

Bonus Consideration:

\$750.00 / net acre

Rentals:

\$1.00 per acre, payment of which is included in the bonus

Consideration payment

The Allar Co. is the "Owner of the Soil" for an undivided 100% interest.

An addendum to the lease form has been attached to the lease and is enclosed for your review. Additionally, a check in the amount of \$100.00 has been included to cover the processing fee.

If the lease meets with the approval of the State of Texas, please notify me at the letterhead address or via email at tmeador@cimarex.com, and I will send the originals to be recorded in Reeves County. A certified copy of the recorded leases will be provided to the State when available, along with the bonus consideration.

If I can be of further assistance, please contact me at the number below.

Sincerely,

Todd Meador

Landman

(432) 571-7858

Cc: Renne Underwood



CIMAREX ENERGY CO 1700 LINCOLN STREET

SUITE 1800 DENVER CO 80203-4518 (303) 295-3995

Check Number 0001327553

REQ217072110C 07/2	. Date & D	escription page 19 16 % 19 19	Amount 100.00	Discount 0.00	6Net Amount 100.00
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FILE # 3421

General Land Office Relinquishment Act Lease Form Revised, September 1997

The State of Texas

Austin, Texas

OIL AND GAS LEASE

THIS AGREEMENT is made and entered into this 14th	day of July	2010 , between the	e State of Texas, acting
by and through its agent, The Allar Company, aTexas corporation			
of P.O. Box 1567, Graham, Texas 76450			
(Give Permanent Address)			
said agent herein referred to as the owner of the soil (whether one or mo	re), and Cimarex Energy Co.		
of 600 N. Marienfeld Street, Suite 600, Midland, Texas 79701		hereinafter calle	ed Lessee
(Give Permanent Address)			
1. GRANTING CLAUSE. For and in consideration of the amore performed by Lessee under this lease, the State of Texas acting by anothe sole and only purpose of prospecting and drilling for and producin stations, telephone lines and other structures thereon, to produce, save, situated in Reeves County. State of Texas, to-	through the owner of the se g oil and gas, laying pipe li take care of, treat and trans	oil, hereby grants, leases a nes, building tanks, storing	nd lets unto Lessee, for oil and building power
All of Section 18, Block 56, Township 3, Abstract 3372, T.&P. Railroad 0	Company Survey		
		14120	
containing 640.0 acres, more or less. The bonus consider	ration paid for this lease is as	s follows	
To the State of Texas: Two Hundred Forty Thousand	and No/100		
Dollars (\$240,000 00	_)		
To the owner of the soil: Two Hundred Forty Thousa	nd and No/100		
Dollars (\$240,000.00)		
001013 (02-10,000 00			
Total bonus consideration: Four Hundred Eighty Tho	usand and No/100		
Dollars (\$480,000.00	_)		
The total bonus consideration paid represents a bonus of Seven Hundred	Fifty and No/100		
Dollars (\$750		net acres	
		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
TERM. Subject to the other provisions in this lease, this leas			years from
this date (herein called "primary term") and as long thereafter as oil and in this lease, the term "produced in paying quantities" means that the r			
covered exceed out of pocket operational expenses for the six months la			



STANTON A PROPERTY OF THE STANTON OF		premises on or before one (1) year from this date, this lease shall terminate, e owner of the soil or to his credit in the N/A - PAID UP LEASE
unless on or before such anniversary date Le	Bank at	e owner or the soil of to his dealt in the NA - PAID OF LEASE
Lessee shall pay or tender to the COMMISS or before said date. Payments under this pa one (1) year from said date. Payments under	IONER OF THE GENERAL La tragraph shall operate as a re r this paragraph shall be in the	anges in the ownership of said land), the amount specified below; in addition, AND OFFICE OF THE STATE OF TEXAS, AT AUSTIN, TEXAS, a like sum on ntal and shall cover the privilege of deferring the commencement of a well for following amounts:
Dollars (\$_		
To the State of Texas: _		
Dollars (\$		
Total Delay Rental:		
		No.

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:
- owner of the soil:

 (A) OIL. Royalty payable on oil, which is defined as including all hydrocarbons produced in a liquid form at the mouth of the well and also as all condensate, distillate, and other liquid hydrocarbons recovered from oil or gas run through a separator or other equipment, as hereinafter provided, shall be 1/4 part of the gross production or the market value thereof, at the option of the owner of the soil or the Commissioner of the General Land Office, such value to be determined by 1) the highest posted price, plus premium, if any, offered or paid for oil, condensate, distillate, or other liquid hydrocarbons, respectively, of a like type and gravity in the general area where produced and when run, or 2) the highest market price thereof offered or paid in the general area where produced and when run, or 3) the gross proceeds of the sale thereof, whichever is the greater. Lessee agrees that before any gas produced from the leased premises is sold, used or processed in a plant, it will be run free of cost to the royalty owners through an adequate oil and gas separator of conventional type, or other equipment at least as efficient, so that all liquid hydrocarbons recoverable from the gas by such means will be recovered. The requirement that such gas be run through a separator or other equipment may be waived, in writing, by the royalty owners upon such terms and conditions as they prescribe.
- (B) NON PROCESSED GAS. Royalty on any gas (including flared gas), which is defined as all hydrocarbons and gaseous substances not defined as oil in subparagraph (A) above, produced from any well on said land (except as provided herein with respect to gas processed in a plant for the extraction of gasoline, liquid hydrocarbons or other products) shall be 1/4 part of the gross production or the market value thereof, at the option of the owner of the soil or the Commissioner of the General Land Office, such value to be based on the highest market price paid or offered for gas of comparable quality in the general area where produced and when run, or the gross price paid or offered to the producer, whichever is the greater; provided that the maximum pressure base in measuring the gas under this lease shall not at any time exceed 14.65 pounds per square inch absolute, and the standard base temperature shall be sixty (60) degrees Fahrenheit, correction to be made for pressure according to Boyle's Law, and for specific gravity according to tests made by the Balance Method or by the most approved method of testing being used by the industry at the time of testing.
- (C) PROCESSED GAS. Royalty on any gas processed in a gasoline plant or other plant for the recovery of gasoline or other liquid hydrocarbons shall be 1/4 part of the residue gas and the liquid hydrocarbons extracted or the market value thereof, at the option of the owner of the soil or the Commissioner of the General Land Office. All royalties due herein shall be based on one hundred percent (100%) of the total plant production of residue gas attributable to gas produced from this lease, and on fifty percent (50%), or that percent accruing to Lessee, whichever is the greater, of the total plant production of liquid hydrocarbons attributable to the gas produced from this lease; provided that if liquid hydrocarbons are recovered from gas processed in a plant in which Lessee (or its parent, subsidiary or affiliate) owns an interest, then the percentage applicable to liquid hydrocarbons shall be fifty percent (50%) or the highest percent accruing to a third party processing gas through such plant under a processing agreement negotiated at arm's length (or if there is no such third party, the highest percent then being specified in processing agreements or contracts in the industry), whichever is the greater. The respective royalties on residue gas and on liquid hydrocarbons shall be determined by 1) the highest market price paid or offered for any gas (or liquid hydrocarbons) of comparable quality in the general area, or 2) the gross price paid or offered for such residue gas (or the weighted average gross selling price for the respective grades of liquid hydrocarbons), whichever is the greater. In no event, however, shall the royalties payable under this paragraph be less than the royalties which would have been due had the gas not been processed.
- (D) OTHER PRODUCTS. Royalty on carbon black, sulphur or any other products produced or manufactured from gas (excepting liquid hydrocarbons) whether said gas be "casinghead," "dry," or any other gas, by fractionating, burning or any other processing shall be 1/4 part of the gross production of such products, or the market value thereof, at the option of the owner of the soil or the Commissioner of the General Land Office, such market value to be determined as follows: 1) on the basis of the highest market price of each product for the same month in which such 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.



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- 6. ROYALTY IN KIND. Notwithstanding any other provision in this lease, at any time or from time to time, the owner of the soil or the Commissioner of the General Land Office may, at the option of either, upon not less than sixty (60) days notice to the holder of the lease, require that the payment of any royalties accruing to such royalty owner under this lease be made in kind. The owner of the soil's or the Commissioner of the General Land Office's right to take its royalty in kind shall not diminish or negate the owner of the soil's or the Commissioner of the General Land Office's rights or Lessee's obligations, whether express or implied, under this lease.
- 7. NO DEDUCTIONS. Lessee agrees that all royalties accruing under this lease (including those paid in kind) shall be without deduction for the cost of producing, gathering, storing, separating, treating, dehydrating, compressing, processing, transporting, and otherwise making the oil, gas and other products hereunder ready for sale or use. Lessee agrees to compute and pay royalties on the gross value received, including any reimbursements for severance taxes and production related costs.
- 8. PLANT FUEL AND RECYCLED GAS. No royalty shall be payable on any gas as may represent this lease's proportionate share of any fuel used to process gas produced hereunder in any processing plant. Notwithstanding any other provision of this lease, and subject to the written consent of the owner of the soil and the Commissioner of the General Land Office, Lessee may recycle gas for gas lift purposes on the leased premises or for injection into any oil or gas producing formation underlying the leased premises after the liquid hydrocarbons contained in the gas have been removed; no royalties shall be payable on the recycled gas until it is produced and sold or used by Lessee in a manner which entitles the royalty owners to a royalty under this lease.
- 9, ROYALTY PAYMENTS AND REPORTS. All royalties not taken in kind shall be paid to the Commissioner of the General Land Office at Austin, Texas, in the following manner:

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

- 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 filling 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 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 producting lease and the payment shall extern of the lease for a period of one year from the end of the primary term, or from the first day of the month following the month in which production ceased, and, after that, if no suitable production facilities or suitable market for the oil or gas exists, Lessee may extend the lease for four more successive periods of one (1) year by paying the same amount each year on or before the expiration of each shut-in year.
- 15. COMPENSATORY ROYALTIES. If, during the period the lease is kept in effect by payment of the shut-in oil or gas royalty, oil or gas is sold and delivered in paying quantities from a well located within one thousand (1,000) feet of the leased premises and completed in the same producing reservoir, or in any case in which drainage is occurring, the right to continue to maintain the lease by paying the shut-in oil or gas royalty shall cease, but the lease shall remain effective for the remainder of the year for which the royalty has been paid. The Lessee may maintain the lease for four more successive years by Lessee paying compensatory royalty at the royalty rate provided in the lease of the market value of production from the well causing the drainage or which is completed in the same producing reservoir and within one thousand (1,000) feet of the leased premises. The compensatory royalty is to be paid monthly, one-half (1/2) to the Commissioner of the General Land Office and one-half (1/2) to the owner of the soil, beginning on or before the last day of the month following the month in which the oil or gas is produced from the well causing the drainage or that is completed in the same producing reservoir and located within one thousand (1,000) feet of the leased premises. If the compensatory royalty paid in any 12-month period is an amount less than the annual shut-in oil or gas royalty, Lessee shall pay an amount equal to the difference within thirty (30) days from the end of the 12-month period. Compensatory royalty payments which are not timely paid will accrue penalty and interest in accordance with Paragraph 9 of this lease. None of these provisions will relieve Lessee of the obligation of reasonable development nor the obligation to drill offset wells as provided in Texas Natural Resources Code 52 173, however, at the determination of the Commissioner, and with the Commissioner's written approval, the payment of compensatory royalties can satisfy the obligation to drill offset wells.
- 16. RETAINED ACREAGE. Notwithstanding any provision of this lease to the contrary, after a well producing or capable of producing oil or gas has been completed on the leased premises, Lessee shall exercise the diligence of a reasonably prudent operator in drilling such additional well or wells as may be reasonably necessary for the proper development of the leased premises and in marketing the production thereon.
- (A) VERTICAL. In the event this lease is in force and effect two (2) years after the expiration date of the primary or extended term it shall then terminate as to all of the leased premises, EXCEPT (1) 40 acres surrounding each oil well capable of producing in paying quantities and 320 acres surrounding each gas well capable of producing in paying quantities (including a shut-in oil or gas well as provided in Paragraph 14 hereof), or a well upon which Lessee is then engaged in continuous drilling or reworking operations, or (2) the number of acres included in a producing pooled unit pursuant to Texas Natural Resources Code 52.151-52.154, or (3) such greater or lesser number of acres as may then be allocated for production purposes to a proration unit for each such producing well under the rules and regulations of the Railroad Commission of Texas, or any successor agency, or other governmental authority having jurisdiction. If at any time after the effective date of the partial termination provisions hereof, the applicable field rules are changed or the well or wells located thereon are reclassified so that less acreage is thereafter allocated to said well or wells for production purposes, this lease shall thereupon terminate as to all acreage not thereafter allocated to said well or wells for production purposes. Notwithstanding the termination of this lease as to a portion of the lands covered hereby, Lessee shall nevertheless continue to have the right of ingress to and egress from the lands still subject to this lease for all purposes described in Paragraph 1 hereof, together with easements and rights-of-way for existing roads, existing pipelines and other existing facilities on, over and across all the lands described in Paragraph 1 hereof ('the retained lands'), for access to and from the retained lands and for the gathering or transportation of oil, gas and other minerals produced from the retained lands.



- (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 country 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, nots, 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 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, or otherwise severed, so that payments determined on a per acre basis under the terms of this lease during the primary term shall be calculated based upon the number of acres outside the boundaries of a pooled unit, or, if after the expiration of the primary term, the number of acres actually retained and covered by this lease.
- 21. USE OF WATER. Lessee shall have the right to use water produced on said land necessary for operations under this lease except water from wells or tanks of the owner of the soil; provided, however, Lessee shall not use potable water or water suitable for livestock or irrigation purposes for waterflood operations without the prior consent of the owner of the soil.
- 22. AUTHORIZED DAMAGES. Lessee shall pay the owner of the soil for damages caused by its operations to all personal property, improvements, livestock and crops on said land.
 - 23. PIPELINE DEPTH. When requested by the owner of the soil, Lessee shall bury its pipelines below plow depth
- 24. WELL LOCATION LIMIT. No well shall be drilled nearer than two hundred (200) feet to any house or barn now on said premises without the written consent of the owner of the soil.



- 25. POLLUTION. In developing this area. Lessee shall use the highest degree of care and all proper safeguards to prevent pollution. Without irmiting 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 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 assignment 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 er 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, iding 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 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 royally 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 failure to comply with any and all environmental laws, 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

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'S VIOLATION OF THE FOREGOING PROHIBITION SHALL CONSTITUTE A MATERIAL BREACH AND DEFAULT HEREUNDER AND 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 DURING LESSEE'S OCCUPANCY OR FEDERACH OF THE LEASED PREMISES DURING LESSEE'S OCCUPANCY OR SPELICABLE 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 TH

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 country 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.

Title: Atterney - in - Fact For Cimarca Energy Co.

Date: 8-31-2010

LESSEE

STATE OF IEXAS	STATE OF TEXAS
BY: Individually and as agent for the State of Texas	BY Individually and as agent for the State of Texas
Date: 7/14/10	Date:
STATE OF TEXAS	STATE OF TEXAS
BY:	BY:
Individually and as agent for the State of Texas	Individually and as agent for the State of Texas
Date:	Date:



	(CORPORATION ACKNOWLEDGMENT)
COUNTY OF Midland	
BEFORE ME, the undersigned authority, on this day personal	lly appeared Resc Alexander
known to me to be the person whose name is subscribed to the foregoin	ng instruments as Atturny - in - Faut
Cimens Energy Co.	
executed the same for the purposes and consideration therein expresses	
Given under my hand and seal of office this the 3/3/ day	VOT AUGUST 2010
KAROL MAYO Notary Public, State of Texas	Kaiol Majo
My Commission Expires April 20, 2011	Notary Public in and for STATE & TEXAS
STATE OF TEXAS	(CORPORATION ACKNOWLEDGMENT)
COUNTY OF YOUNG	
BEFORE ME, the undersigned authority, on this day personal	lly appeared Edwin Smith Graham IV
known to me to be the person whose name is subscribed to the foregoin	
of The Allar Company and as agent for the State of Texas	E THE CARCINATION OF THE PROPERTY OF
executed the same for the purposes and consideration therein expresses	d, in the capacity stated, and as the act and deed of said corporation.
STATE OF BEFORE ME, the undersigned authority, on this day personal	(**) (5)2)
known to me to be the persons whose names are subscribed to the fore purposes and consideration therein expressed.	egoing instrument, and acknowledged to me that they executed the same for th
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Given under my hand and seal of office this the day	, of 20
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	Notary Public in and for
STATE OF	Notary Public in and for
STATE OF	
Control of Charles 22 and Charles 22	(INDIVIDUAL ACKNOWLEDGMENT)
BEFORE ME, the undersigned authority, on this day personal	(INDIVIDUAL ACKNOWLEDGMENT)
BEFORE ME, the undersigned authority, on this day personal	(INDIVIDUAL ACKNOWLEDGMENT)
BEFORE ME, the undersigned authority, on this day personal known to me to be the persons whose names are subscribed to the fore	(INDIVIDUAL ACKNOWLEDGMENT) Illy appeared egoing instrument, and acknowledged to me that they executed the same for the
BEFORE ME, the undersigned authority, on this day personal known to me to be the persons whose names are subscribed to the fore purposes and consideration therein expressed.	(INDIVIDUAL ACKNOWLEDGMENT) Illy appeared egoing instrument, and acknowledged to me that they executed the same for the



Addendum attached to Paid Up Oil & Gas Lease between The Allar Company as agent for the State of Texas and Cimarex Energy Co. dated July 14, 2010

40. Delay Rentals

This is a Paid-Up Oil & Gas Lease; however, delay rentals are \$1.00 per acre which would be one annual payment of \$640.00. This payment is included in the initial bonus payment made to both the State and agent at the time of execution of the lease, and are therefore paid in full.

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

FILE # 3421

FILED FOR RECORD ON THE 24TH DAY OF SEPTEMBER

A.D. 2010 1:27 P M.

DULY RECORDED ON THE 28TH DAY OF SEPTEMBER A.D. 2010 9:00 A M.

DIANNE O. FLOREZ, COUNTY CLERK REEVES COUNTY, TEXAS



Lea	se
Date Filed:	11/4/11

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

COUNTY OF REEVES

The above and foregoing is a full, true and correct photographic copy of the original record now in my lawful custody and possession, as the same is original record in the public records of my office, found in VOL 853
filed/recorded in the public records of my office, found in VOL 853
PAGE 55 THRU 64

OFFICIAL BUSSES

I hereby certified on 9/30/2010 BEENES COUNTY, TEXAS

WALLEY GALLENDO DEPUTY



GENERAL LAND OFFICE

JERRY PATTERSON, COMMISSIONER

September 20, 2011

Todd Meador Cimarex Energy Co 600 N Marienfeld St, Suite 600 Midland TX 79701

Re: State Lease MF 111895

Relinquishment Act Lease dated July 14, 2010 covering Sec 18, Blk 56, T-3, A-3372, T&P RR Co Survey, Reeves Co TX, recorded Book 853, pg 55 The Allar Company, agent for State of TX, Lessor

Dear Mr. Meador:

The certified copy of the Relinquishment Act lease covering the referenced tract has been approved and filed in our records under Mineral File number MF-111895. Please refer to this 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.

Your remittance of \$240,000.00 has been applied to the State's portion of the cash. Your remittances of \$100.00 and \$25.00 have been applied to the processing fee and filing fee.

Sincerely yours,

Drew Reid

Minerals Leasing

Energy Resources (512) 475-1534

drew.reid@glo.state.tx.us

-			
Leas	e		
ate Filed:	11811		
Jerry E. P	atterson, Co	ommissione	r

From:

Jesse Arellano

To:

Bonn, Carl

CC:

Reid, Drew; celliott@cimarex.com

Date:

6/20/2013 2:42 PM

Subject:

Section 18 Reeves County

Attachments: Sledge Well.jpg

Carl,

I just got off the phone with Cody Elliott from Cimarex. His company is about to spud a well on their lease M-111895. In their curative the found a well by Sledge to be producing although in small quantities. The well is shown with a blue box around it and the well ID is 08-17101.

Please review and report back to Cody as soon as possible. His phore # is 432-571-7806. Ellvorp

Thanks

ja

API 389-00799

File No	ME 111895
conqi	I tram Jelle
Date Filed:	6-20-13
	atterson, Commissioner

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By CBonh

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MF 043 ter eft 2/17/ OIL AND GAS LEA	Reviou ASE TERMINATI	Stamp File) ONS WORKSH	***************************************	Colama !
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Lease Name	Richey		21 38	9-00799
Last month Produced Last Month Royalty Paid Last Prod Report GLO1 OR GLO 2	3 + AC	porter Produ	19 phan	csg foil
Unitized Y/N/ Shut-in being paid Y/N//	Term <i>3</i>	7	Sec 18 640 a	,
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1065 Late	wa com	\mathcal{L}	/U *	

From:

Carl Bonn

To:

Hatter, Robert

CC:

Hill, Andrew

Date:

6/25/2013 11:21 AM

Subject:

Fwd: Sledge Bros. Lease MF111895

Attachments: MF111895A.0613.JPG; MF111895B.0613.JPG; MF111895C.0613.JPG;

MF111895D.0613.JPG; MF111895E.0613.JPG; MF111895F.0613.JPG; MF111895H.0613.JPG; MF1118

MF111895L.0613.JPG; MF111895M.0613.JPG; Bonn, Carl.vcf

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Let me know if I should request the RRC to seal the well.

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
>>> Andrew Hill 6/25/2013 10:57 AM >>>
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Please let me know if you need anything else.

Andy Hill

Field Inspector

Energy Resources Division

West Texas Region

File No. M=11895 omgilfrom Andy Hil
Date Filed: 6.25-13 Jerry Patterson, Commissioner By M

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GENERAL LAND OFFICE

JERRY PATTERSON, COMMISSIONER

June 27, 2013

MF111895

Sledge Bros. Oil Co. 1925 W. State Highway 302 Kermit, Texas 79745

Re:

Richey, M. T., et al No. 1 Well, Ken Regan (Delaware Field)

RRC ID No. 08-17101, API No. 389-00799

Dear Sir/Madam,

The General Land Office (GLO) is the mineral owner under Section 18, Block 56, Township 3-S, Reeves County, Texas, where the above referenced well is located. According to the records of the Railroad Commission (RRC), Sledge Bros. Oil Co. is the designated operator of the well. The records of the GLO indicate that said minerals were leased to Cimarex Energy Co. on July 14, 2010 and that the oil and gas lease is valid and subsisting as of this date. Sledge Bros. Oil Co. can not legally produce oil or gas from the well. A recent inspection by the GLO indicates that production facilities associated with the well are inoperable and remain on the property.

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Your attention in this matter is appreciated. If you should have any questions, please contact Robert Hatter, in our Mineral Leasing Division at either (512) 475-1542 or robert.hatter@glo.texas.gov.

Sincerely,

C. Louis Renaud

Deputy Commissioner

Energy Resources

File No. MF 1/1895

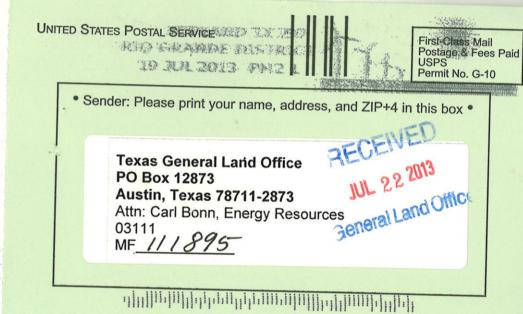
Oate Filed: 6-27-13

Jerry Patterson, Commissioner

By Chapter

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U.S. Postal Servi CERTIFIED MAIL RECEIPT (Domestic Mail Only, No Insurance Coverage Provided) For delivery information visit our website at www.usps.com П H П Certified Fee Postmark Return Receipt Fee (Endorsement Required) Restricted Delivery Fee (Endorsement Required) ப Total Postage & Fees | \$ H Sent To or PO Box No. See Reverse for Instructions PS Form 3800, August 2006



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- For an additional fee, delivery may be restricted to the addressee or addressee's authorized agent. Advise the clerk or mark the mailpiece with the endorsement "Restricted Delivery".
- If a postmark on the Certified Mail receipt is desired, please present the article at the post office for postmarking. If a postmark on the Certified Mail receipt is not needed, detach and affix label with postage and mail.

IMPORTANT: Save this receipt and present it when making an inquiry.

PS Form 3800, August 2006 (Reverse) PSN 7530-02-000-9047

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY		
 Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. 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: Sledge Bros. Oil Co PO Box 953 	A. Signature X		
Midland, 7x 79702	Service Type ☐ Certified Mail ☐ Express Mail ☐ Registered ☐ Return Receipt for Merchandise ☐ Insured Mail ☐ C.O.D. Restricted Delivery? (Extra Fee) ☐ Yes		
2. Article Number 7011 1150 (Transfer from service label)	0001 2416 2475		
PS Form 3811, February 2004 Domestic Retu	urn Receipt 102595-02-M-1540		



GENERAL LAND OFFICE

JERRY PATTERSON, COMMISSIONER

Certified Mail 7011 1150 0001 2416 2475 to: Sledge Bros. Oil Co. PO Boc 953 Midland, TX 79702

MF 111895

Sledge Bros. Oil Co. 1925 W. State Highway 302 Kermit, Texas 79745

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Sincerely,

C. Louis Renaud

Deputy Commissioner

Energy Resources

File No	M	15	1/1	8	15
Cer	4.	1	tr	70	Sledge

Date Filed: 6-27-13

Jerry Patterson, Commissioner

By 6-2011

Clmarex Energy Co.

600 N. Marienfeld St.

Suite 600

Midland, Texas 79701

PHONE 432.571.7800



June 27, 2013

Texas General Land Office Attn: Carl Bonn 1700 N. Congress Ave., Ste. 840 Austin, Texas 79701

Via Federal Express

RECEIVED 7-1-13

MF 111895 also see MF 647118

Dear Mr. Bonn,

Enclosed herein is a copy of letter dated June 27, 2013 to ConocoPhillips Company, regarding an Oil and Gas Lease in Section 18, Block 56, Township 3, T&P Ry. Co. Reeves County, Texas. Please retain for your records. If you have any questions or concerns, please contact me at the number below.

Sincerely,

Cimarex Energy Co.

Viviana M. Bush Land Technician

432.571.7846 (direct)

VILLAMAN PULL

June 27, 2013

CIMAREX

Attn: Jason Lyons ConocoPhillips Company 600 N. Dairy Ashford Houston, TX 77079-1175



Re: Section 18, Block 56, Township 3, T. & P.Ry. Co. Survey, Reeves County, Texas; M. T. Richey, et al., #1 Oil Well; The Allar Company, et al., Oil and Gas Lease MF:047118, dated May 29, 1954, recorded in Volume 161, Page 343, Deed Records, Reeves County, Texas

Mr. Lyons:

On July 14, 2010, Cimarex Energy Co. acquired an oil and gas lease from The Allar Company as Agent for the State of Texas covering all mineral interest in Section 18, Block 56, Township 3, in the T. & P. Ry. Co. Survey in Reeves County, Texas. The State of Texas approved the lease and it has been filed of record in Volume 853, Page 55, Deed Records, Reeves County, Texas.

During recent preparations by Cimarex to drill its Eighteen Mile 56-18 #1H Well in Section 18, it came to our attention, and that of the General Land Office, that Section 18 contains an unplugged, partially equipped oil well ostensibly operated by Sledge Bros. Oil Co. ("Sledge") located in Midland, Texas. The well name is M. T. Richey, et al., #1. The M.T. Ritchey well was drilled in 1956 under the terms of that certain Oil and Gas Lease dated March 29, 1954, covering all of Section 18 from The Allar Company, et al., as agent for the State of Texas under the Relinquishment Act to Neville G. Penrose, Inc. (the 'Expired Lease"). Records indicate that Sledge owned rights in the Expired Lease from the surface to 5,200 feet and that ConocoPhillips owned all depths below 5,200 feet.

The General Land Office investigated the M.T. Ritchey well and the Expired Lease and has informed Cimarex that the Expired Lease is terminated and of no force or effect. No production has been reported to the General Land Office and no royalties have been paid to the State subsequent to 2005. Although public production information indicates that 11 barrels of oil were sold in 2011, 9 barrels in 2012, and 8 barrels in 2013, the State has not been paid and holds that such production is not in compliance with the Expired Lease terms regarding production in paying quantities. The State investigator assigned to the matter reported that it was not a producing well and lacked equipment to operate.

Cimarex Energy Co. has a permit to drill its Eighteen Mile 56-18 #1H Well with an anticipated spud date in the first week of July. The location is built and a rig move is imminent.

Delaying drilling operations is not possible due to a pending expiration date. Cimarex, on its behalf and that of the General Land Office, do hereby request that ConocoPhillips execute the enclosed Release of Oil and Gas Lease for the Expired Lease.

I have attached correspondence from the Texas General Land Office indicating that the GLO considers the Lease terminated. Thank you for your attention to this matter.

Sincerely yours,

Cody Elliott, Landman

Cimarex Energy Co.
600 N. Marienfeld Street, Suite 600
Midland, TX 79701
Direct 432-571-7806, Cell 432-269-9220
celliott@cimarex.com

cc: Attn: Carl F. Bonn

Texas General Land Office 1700 N. Congress Ave. Austin, Texas 78701-1495

RELEASE OF OIL AND GAS LEASE

KNOW ALL MEN BYTHESE PRESENTS, THAT the undersigned owner does herby release, relinquish, surrender and forever quitclaim to the Lessor(s), and to the heirs, personal representatives, successors and assigns of said Lessor(s), all right, title and interest in an to the Oil and Gas Lease more fully described below, presently owned by the undersigned and covering lands in Reeves County, Texas:

Oil and Gas Lease dated May 29, 1954, between The Allar Company, a corporation, Margaret R. Causbie, joined by her husband, J. M. Causbie, all of Graham, Texas individually and as agent for the State of Texas, as Lessors, and Neville G. Penrose, Inc., a corporation, as Lessee, recorded in Book 161, Page 343, Deed Records, Reeves County, Texas, covering in so far and only in so far as to All of Section 18, Block 56, Township Three (3), T&P Survey, further limited to all rights below 5,200 feet.

Executed this	s day of	, 2013
	ConocoPhilips Company	,
	BY:	
STATE OF		
COUNTY OF		
BEFORE ME, the u	ndersigned authority, on this	day personally appeared
		be the person whose name is
		for ConocoPhillips
Company and acknowledge	to me that he executed the s	ame for the purposes and consideration
therein expressed, in the cap	city stated, and as the act ar	nd deed of said Company.
Given under my han	d and seal of office this	day of,
2013.		
My commission expires		
•		Notary Public State of

,	
/	10
	101

File No. M	1-111895 From Chmarx
Date Filed:	7-1-17

From:

Jesse Arellano

To:

Bonn, Carl

CC:

Reid, Drew; celliott@cimarex.com

Date:

6/20/2013 2:42 PM

Subject:

Section 18 Reeves County

Attachments: Sledge Well.jpg

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Thanks

ja

API 389-00799

File No.	ME 111895
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Date Filed:	6-20-13
Jerry Pa	tterson, Commissioner

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By CBONK

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MF 043 ter eft 2/17/ OIL AND GAS LEA	Reviou ASE TERMINATI	Stamp File) ONS WORKSH	***************************************	Colama !
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Lease Name	Richey		21 38	9-0079 <i>9</i>
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Unitized Y/N/ Shut-in being paid Y/N//	Term <i>3</i>	7	Sec 18 640 a	,
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1065 Late	wa com	\mathcal{L}	/U *	

From:

Carl Bonn

To:

Hatter, Robert

CC:

Hill, Andrew

Date:

6/25/2013 11:21 AM

Subject:

Fwd: Sledge Bros. Lease MF111895

Attachments: MF111895A.0613.JPG; MF111895B.0613.JPG; MF111895C.0613.JPG;

MF111895D.0613.JPG; MF111895E.0613.JPG; MF111895F.0613.JPG; MF111895H.0613.JPG; MF111895I.0613.JPG; MF111895J.0613.JPG; MF111895J.0613.JPG; MF111895J.0613.JPG; MF111895J.0613.JPG; MF111895J.0613.JPG; MF111895J.0613.JPG;

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Let me know if I should request the RRC to seal the well.

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
>>> Andrew Hill 6/25/2013 10:57 AM >>>
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Andy Hill

Field Inspector

Energy Resources Division

West Texas Region

File No. M=11895 omgilfrom Andy Hill
Date Filed: 6.25-13 Jerry Patterson, Commissioner By 00000000000000000000000000000000000

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GENERAL LAND OFFICE

JERRY PATTERSON, COMMISSIONER

June 27, 2013

MF111895

Sledge Bros. Oil Co. 1925 W. State Highway 302 Kermit, Texas 79745

Re:

Richey, M. T., et al No. 1 Well, Ken Regan (Delaware Field)

RRC ID No. 08-17101, API No. 389-00799

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Your attention in this matter is appreciated. If you should have any questions, please contact Robert Hatter, in our Mineral Leasing Division at either (512) 475-1542 or robert.hatter@glo.texas.gov.

Sincerely,

C. Louis Renaud

Deputy Commissioner

Energy Resources

File No. MF 1/1895

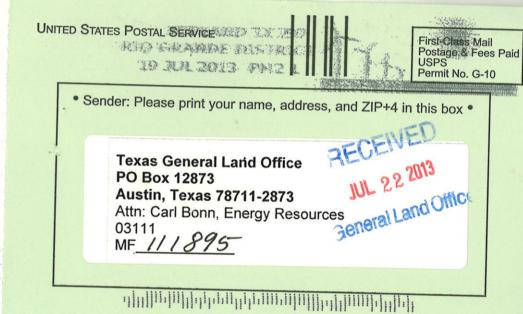
Oate Filed: 6-27-13

Jerry Patterson, Commissioner

By Chapter

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PS Form 3800, August 2006 (Reverse) PSN 7530-02-000-9047

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Complete items 1, 2, and 3. Also complete tem 4 if Restricted Delivery is desired. 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. Article Addressed to: Seedge Bros. Oil Co. Po Box 953 Midland, 7x 79702 Article Number (Transfer from service label)	A. Signature X
Midland, 7x 79702	3. Service Type Certified Mail
2. Article Number 7011 1150 (Transfer from service label)	0001 2416 2475
PS Form 3811, February 2004 Domestic Ret	urn Receipt 102595-02-M-1540



GENERAL LAND OFFICE

JERRY PATTERSON, COMMISSIONER

Certified Mail 7011 1150 0001 2416 2475
to: Sledge Bros. Oil Co. PO Boc 953
Midland, TX 79702

MF 111895

Sledge Bros. Oil Co. 1925 W. State Highway 302 Kermit, Texas 79745

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Sincerely.

C. Louis Renaud

Deputy Commissioner

Torico Menarca

Energy Resources

File No	M	11=	1/1	8	15
Cer	4.	1	tr	70	Sledge

Date Filed: 6-27-13

Jerry Patterson Commissioner

By 6-2011

Clmarex Energy Co.

600 N. Marienfeld St.

Suite 600

Midland, Texas 79701

PHONE 432.571.7800



June 27, 2013

Texas General Land Office Attn: Carl Bonn 1700 N. Congress Ave., Ste. 840 Austin, Texas 79701

Via Federal Express

RECEIVED 7-1-13

MF 111895 also see MF 647118

Dear Mr. Bonn,

Enclosed herein is a copy of letter dated June 27, 2013 to ConocoPhillips Company, regarding an Oil and Gas Lease in Section 18, Block 56, Township 3, T&P Ry. Co. Reeves County, Texas. Please retain for your records. If you have any questions or concerns, please contact me at the number below.

Sincerely,

Cimarex Energy Co.

Viviana M. Bush Land Technician

432.571.7846 (direct)

VILLAMAN PULL

June 27, 2013

CIMAREX

Attn: Jason Lyons ConocoPhillips Company 600 N. Dairy Ashford Houston, TX 77079-1175



Re: Section 18, Block 56, Township 3, T. & P.Ry. Co. Survey, Reeves County, Texas; M. T. Richey, et al., #1 Oil Well; The Allar Company, et al., Oil and Gas Lease MF:047118, dated May 29, 1954, recorded in Volume 161, Page 343, Deed Records, Reeves County, Texas

Mr. Lyons:

On July 14, 2010, Cimarex Energy Co. acquired an oil and gas lease from The Allar Company as Agent for the State of Texas covering all mineral interest in Section 18, Block 56, Township 3, in the T. & P. Ry. Co. Survey in Reeves County, Texas. The State of Texas approved the lease and it has been filed of record in Volume 853, Page 55, Deed Records, Reeves County, Texas.

During recent preparations by Cimarex to drill its Eighteen Mile 56-18 #1H Well in Section 18, it came to our attention, and that of the General Land Office, that Section 18 contains an unplugged, partially equipped oil well ostensibly operated by Sledge Bros. Oil Co. ("Sledge") located in Midland, Texas. The well name is M. T. Richey, et al., #1. The M.T. Ritchey well was drilled in 1956 under the terms of that certain Oil and Gas Lease dated March 29, 1954, covering all of Section 18 from The Allar Company, et al., as agent for the State of Texas under the Relinquishment Act to Neville G. Penrose, Inc. (the 'Expired Lease"). Records indicate that Sledge owned rights in the Expired Lease from the surface to 5,200 feet and that ConocoPhillips owned all depths below 5,200 feet.

The General Land Office investigated the M.T. Ritchey well and the Expired Lease and has informed Cimarex that the Expired Lease is terminated and of no force or effect. No production has been reported to the General Land Office and no royalties have been paid to the State subsequent to 2005. Although public production information indicates that 11 barrels of oil were sold in 2011, 9 barrels in 2012, and 8 barrels in 2013, the State has not been paid and holds that such production is not in compliance with the Expired Lease terms regarding production in paying quantities. The State investigator assigned to the matter reported that it was not a producing well and lacked equipment to operate.

Cimarex Energy Co. has a permit to drill its Eighteen Mile 56-18 #1H Well with an anticipated spud date in the first week of July. The location is built and a rig move is imminent.

Delaying drilling operations is not possible due to a pending expiration date. Cimarex, on its behalf and that of the General Land Office, do hereby request that ConocoPhillips execute the enclosed Release of Oil and Gas Lease for the Expired Lease.

I have attached correspondence from the Texas General Land Office indicating that the GLO considers the Lease terminated. Thank you for your attention to this matter.

Sincerely yours,

Cody Elliott, Landman

Cimarex Energy Co.
600 N. Marienfeld Street, Suite 600
Midland, TX 79701
Direct 432-571-7806, Cell 432-269-9220
celliott@cimarex.com

cc: Attn: Carl F. Bonn

Texas General Land Office 1700 N. Congress Ave. Austin, Texas 78701-1495

RELEASE OF OIL AND GAS LEASE

KNOW ALL MEN BYTHESE PRESENTS, THAT the undersigned owner does herby release, relinquish, surrender and forever quitclaim to the Lessor(s), and to the heirs, personal representatives, successors and assigns of said Lessor(s), all right, title and interest in an to the Oil and Gas Lease more fully described below, presently owned by the undersigned and covering lands in Reeves County, Texas:

Oil and Gas Lease dated May 29, 1954, between The Allar Company, a corporation, Margaret R. Causbie, joined by her husband, J. M. Causbie, all of Graham, Texas individually and as agent for the State of Texas, as Lessors, and Neville G. Penrose, Inc., a corporation, as Lessee, recorded in Book 161, Page 343, Deed Records, Reeves County, Texas, covering in so far and only in so far as to All of Section 18, Block 56, Township Three (3), T&P Survey, further limited to all rights below 5,200 feet.

Executed this	s day of	, 2013
	ConocoPhilips Company	y
	BY:	
STATE OF	**************************************	
COUNTY OF		
	ndersigned authority, on this	
		be the person whose name is
subscribed to the foregoing	instrument as	for ConocoPhillips
Company and acknowledge	to me that he executed the:	same for the purposes and consideration
therein expressed, in the cap	city stated, and as the act ar	nd deed of said Company.
Given under my han	d and seal of office this	day of,
2013.		
My commission expires		
		Motory Public State of

,	
/	10
	101

File No. M	1-111895 From Chmarx
Date Filed:	7-1-17

MF 111895

From:

"Cody T. Elliott" <celliott@cimarex.com>
Carl Bonn <Carl.Bonn@GLO.TEXAS.GOV>

To: Date:

8/2/2013 8:51 AM

Subject:

RE: Eighteenmile reports MF111895 - Cimarex well spud

Attachments: EIGHTEENMILE 56-18 1H (253084) - Sat, 2013-07-06_AM.PDF; EIGHTEENMILE 56-18 1H (253084) - Sun, 2013-07-07_AM.PDF; EIGHTEENMILE 56-18 1H (253084) - Tue, 2013-07-09_AM.PDF; EIGHTEENMILE 56-18 1H (253084) - Wed, 2013-07-10_AM.PDF; EIGHTEENMILE 56-18 1H (253084) - Thu, 2013-07-18_AM.PDF; EIGHTEENMILE 56-18 1H (253084) - Fri, 2013-07-19_AM.PDF; EIGHTEENMILE 56-18 1H (253084) - Sat, 2013-07-20_AM.PDF

I will forward you all the reports I have access to.

More to come.

Cody

----Original Message----

From: Carl Bonn [mailto:Carl.Bonn@GLO.TEXAS.GOV]

Sent: Friday, August 02, 2013 8:42 AM

To: Cody T. Elliott

Subject: RE: Eighteenmile reports MF111895 - Cimarex well spud

Cody,

Good report but since the lease was due to expire 7/14/13 we are looking for activity over and across 7/14/13 and continuining. The more proof of operations to hold the lease past the end of the primary term the better.

Carl

>>> "Cody T. Elliott" <celliott@cimarex.com> 8/2/2013 8:23 AM >>> Carl,

Attached are the first and latest drilling reports we have on the well located in Section 18, Block 56 (Eighteenmile 56/18 1H).

Cody

-----Original Message----From: Viviana Bush
Sent: Friday, August 02, 2013 8:20 AM
To: Carl Bonn; Cody T. Elliott
Subject: RE: Eighteenmile reports
Importance: High

Cody,

Please see Mr. Bonn's request below.

Viv

Viviana M. Bush Land Technician Cimarex Energy Co. 600 N. Marienfield, Ste. 600 Midland, Texas 79701



BLM/BIA

Cimarex Energy Co.

Morning Drilling Report

AFE: Property API# Prop TD

428085-023.01 42-389-33823

253084 15,367

Well Name State/County Objective **EIGHTEENMILE 56-18 1H** Tue, Jul 2, 2013 TX. Reeves 18 / Blk 53 / Wolfcamp A Present Operation MD H&P 218 -2.750 0 Wait on Daylight, MIRU 0 0 0 0.00 0.00 0 0 0 DP AV DC Av HHP/SQ Inch Bit Dia Cost/Ft 24 Hrs Frac Gradient MW wable SICE Cost/Ft.(OA) Last Shoe TVD 0.00 0.000 0 0 0.00 \$0.00 \$0.00 0 Off BF Pump #3 -Pump #2 -0 0 EDR EDR Choke Slow Stroke Stand Pipe Slow Stroke Stand Pipe EDR Choke On B 0 VS Out PV <u>yp</u> LCM MW in MW Out ys in VS OW PV YP MBI PM ME AKPOM WES NACL 100.00 100.00 Chlorides 0.W Calcium Depth Checked Chlorides WaterPcf 0.W Depth Checked Lime Calcium QiPet Lime 100.00 Bit # Size Manufacturer Serial # Jet #1 Jet #2 Jet #3 Jet #4 Jet #5 Jet #6 Jet #7 Jet #8 TFA WOB Rotary RPM Diff Pressure Motor RPM Bit In Bit Out Footage Hours FT/HR Cum. Bit Hrs. Inner Outer Duli Location Bearing Guage Other Reason Drag Torque, and Weight Mud additives in last 24 hours \$0.00 Pickup Weight Diesel on Hand Daily Solids = bbls @ Rotating Weight Total Solids = bbls @ \$0.00 Slackoff Weight Diesel Used Today Daily Liquids = bbls @ \$0.00 Average Drag Total Liquids = bbls @ \$0.00 Maximum Drag Torque On Bottom Meter Reading BOP Pressure Testing Torque Off Bottom MCF Used Today Last BOP Test: Daily Total ВНА# Rotating Sliding Total CUM Rotating Time Distribution Daily 48.00 Feet Hours Hours Totals 24.00 48.00 ROP ROP %Time %Time %Feet %Feet Time Desc Chronological Activity (0600 Hours to 0600 Hours) 12.00 MIRU/RDMO Rig Down, Move Pipe, Frac Tanks, Set Frac Tanks, Engines, Prepare To Lower Derrick, Set Out Pumps, Pits, Lower Derrick @ 4:30 PM, Move And Set Pits, Engine Package, 50 % Rig Moved, 75% Rigged Down Rig Move Goal Hours, 114, Hours Used 48, Hours Left 66 2 Pole Trucks, 2 Forklift, 2 Tandems, 11 Road Trucks Shut Down: F/ Daylight, Steam Clean Derrick, Sub 12.00 MIRU/RDMO Next 24 hours: Move Rig, Rig Up Elevations- GL: 0.00 DF: 0.00 KB: 0.00 GHG Emissions 0.00 Next Casing: 9.625 @ 3500 Acc: 0 Spills: 0 Insp: 0 Casing Qty BHA Wt Grd Thread CUM KOP MD/TVD Pen Pt MD/TVD Landing Pt MD/TVD OD ID Length Depth Incl TVD NI-S E/-W DLS Total Length = Projection To Bit: Kelly = Last Inspected BHA Hours: Total Depth = Final Closure = feet @ Azimuth Planned VS = feet @ Azimuth Daily Well Cost \$24,648 Contact Contact Engineer Mark Audas 432 620 1928 Computer Wellsite 36 303-285 2380 Cum Drilling Cost \$206,170 Cum Compl Cost Foreman - Day 580.243.9241 432.571.7844 Randy Payne Geologist Kim Nordstog \$206.170 Foreman - Night Dustin Porter 580,465,8199 Cody T. Elliot Cum Well Cost Landman Cum Intangible Cost \$206,170 Manager Larry Seigrist 432.620.1934 Cum Tangible Cost Cum Mud Cost 50 Safety Supt Fred Jones 918 606 5904 \$1,280 918.557.4177 Safety Supt Sheldon Waeger Scott Lucas 432.894.5572



BLM/BIA:

Cimarex Energy Co. Morning Drilling Report

AFE: Property: API#: Prop TD:

253084 428085-023.01 42-389-33823 15,367

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Completion Rig Coal Tubing Coal Tubing Stimulation Legal/Regulatory/Curretive Vest Control Insurance Contingency Construction For Well Equipment Construction For Well Equipment Construction For Sales P/L Intangible Onve Pipe Conductor Pipe Alater String Surface Casing Intermediate Casing Production Casing Or Liner Tubing VIC Well Equipment Vellhead, Tree, Chokes Jumping Unit, Engine Liner Hanger, Isolation Packer Packer, Ripples Pumping Unit, Engine Life Equipment (Bhp. Rods, Anchors) Metering Equipment Tangible - Well Equipment Clacks, Tanks Steps. Stairs Saltery (Heater Treater, Separator) Jipoline Los Lose Tangible - Lease Equipment		DIDC 265	-	100		DICC 240	*	-	+			
Cool Tubing Completion Logging, Perforating Stimulation Legal/Regulatory/Curative Vel Control Insurance Construction For Well Equipment Construction For Well Equipment Construction For Sales P/L Intangible Drive Pipe Conductor Pipe Nater String Unface Casing Intermediate Casing Production Casing Or Liner Tubing Luff Cooling Luff Equipment Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Tacker, Nippies Pumping Unit, Engine Itt Equipment (Ric Lease Equipment Aria, Tanks Steps, Stairs Saltery (Healer Treater, Separator) Pipeline to Sales Tangible - Lease Equipment Tangible - Lease Equipment Sales Sales Tangible - Lease Equipment		DIDC 270	-			DIGC 245				*	1	
Completion Logging, Perforating Stimulation Stimulatio						DICC 115 DICC 260						
Stimulationegal/Regulatory/Curative Vell Control Insurance Contingency Construction For Well Equipment Construction For Well Equipment Construction For Sales Equipment Construction For Sales P/L Intangible Onve Pipe Conductor Pipe Valer String Surface Casing Intermediate Casing Intermediate Casing Production Casing Or Liner (Well Equipment Vellhead, Tree, Chokes June Hanger, Isolation Packer Packer, Nipples Pumping Unit, Engine It Equipment (Bhp, Rods, Anchors) Actering Equipment Tangible - Well Equipment Interpretation For Sales Tangible - Well Equipment Jick Lease Equipment Jick Le						DIGC 200			W 20 00 1			
Legal/Regulatory/Curative Well Control Insurance Donatruction For Well Equipment Donatruction For Well Equipment Donatruction For Sales P/L Intangible Drive Pipe Donductor Pipe Nater String Unface Casing Intermediate Casing Production Casing Or Liner Tubing Unface Casing Orduction Casing Or Liner Tubing Unface Casing Production Casing Or Liner Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nippies Pumping Unit, Engine Ilf Equipment Will Equipment Tangible - Well Equipment Anks, Tanks Steps, Stairs Saltery (Healer Treater, Separator) Propeline to Sales Tangible - Lease Equipment						DICC.210						
Well Control Insurance Contingency Continuous For Well Equipment Construction For Lease Equipment Construction For Lease Equipment Construction For Sales P/L Intangible Conve Pipe Conductor Pipe Nater String Surface Casing Production Casing Or Liner Voling Vold Equipment Vellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples Umping Uml. Engine Lift Equipment (Bhp. Rods, Anchors) Metering Equipment Tangible - Well Equipment Anks, Tanks Steps, Stars Saltery (Healer Treater, Separator) Flow Lines (Line Pipe From Wellhead) Tighshore Production Structure For Pipeline to Sales Tangible - Lease Equipment PAA Costs		DIDC 300		10,000	10,000	DICC 280						
Construction For Well Equipment Construction For Lease Equipment Construction For Lease Equipment Construction For Sales P/I. Intangible Drive Pipe Conductor Pipe Nater String Surface Casing Intermediate Casing Production Casing Or Liner Tubing VIC Well Equipment Neithead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples Pumping Unit, Engine Lift Equipment (Brip, Rods, Anchors) Metering Equipment Tangible - Well Equipment Anaks, Tanks Steps, Stairs Saltery (Healer Treater, Separator) Filow Lines (Line Pipe From Welthead) Dishove Production Structure For Pipeline to Sales Tangible - Lease Equipment		DIDC 285	-	5,000	5,000			-				
Construction For Lease Equipment Construction For Sales P/L Intangible Drive Pipe Conductor Pipe Water String Surface Casing Intermediate Casing Production Casing Or Liner Tubing Vict Well Equipment Welthead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples "umping Unit, Engine Ith Equipment (Bhp. Rods, Anchors) Metering Equipment Tangible - Well Equipment Tangible - Lease Equipment		DIDC.435	1,174	9,818	9,818	DICC 220	-				-	
Construction For Sales P/L Intangible Drive Pipe Conductor Pipe Mater String Surface Casing Intermediate Casing Production Casing Or Liner Unding NIC Well Equipment Wellhead, Tree, Chokes Liner Hanger, Solation Packer Packer, Nipples Pumping Unit, Engine Life Equipment (Bhp. Rods, Anchors) Metering Equipment Tangible - Well Equipment Fanks, Tanks Steps, Stairs Saltery (Heater Treater, Separator) Pipeline to Sales Tangible - Lease Equipment						DWEA.110				+	+	
Intangible Drive Pipe Conductor Pipe Nater String String Interrectaing Inte						DLEO:110	-			-		
Orive Pipe Conductor Pipe Nater String Surface Casing Intermediate Casing Production Casing Or Liner Vibring						DICC 265	3		- 1	,		
Conductor Pipe Water String Surface Casing Intermediate Casing Production Casing Or Liner Volting WC Well Equipment Veithead, Tree, Chokes Juner Hanger, Isolation Packer Packer, Nipples Pumping Unit, Engine It Equipment (Bhp. Rods, Anchors) Actering Equipment Tangible - Well Equipment Anks, Tanks Steps, Stairs Sattery (Heater Treater, Separator) Jordon Lines (Line) Jordon Lines (Line) Tangible - Lease Equipment Sangible - Lease Equipment Tangible - Lease Equipment Tangibl			24,648	206,170	206,170		0	0	. 0	0	0	_
Conductor Pipe Nater String Surface Casing Intermediate Casing Production Casing Or Liner Voling, NC Well Equipment Wellhead, Tree, Chokes Jumping Unit, Engine Jumping Equipment Tangible - Well Equipment Fanks, Tanks Steps, Stairs Saltery (Heater Treater, Separator) Jone Units (Line Pipe From Wellhead) Offshore Production Structure For Jupeline to Sales Tangible - Lease Equipment Tangible - Lease Equipment Lease Equipment Tangible - Lease Equipment Tangible - Lease Equipment Tangible - Lease Equipment		DWEB.150		-				-		14		
Water String Surface Casing Intermediate Casing Production Casing Or Liner (Usbing Well Equipment Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples Pumping Unit, Engine Lift Equipment (Bhp. Rods, Anchors) Metering Equipment Tangible - Well Equipment (Tanks, Tanks Steps, Stairs Statery, (Healer Treater, Separator) Filow Lines (Line Pipe From Wellhead) Offshore Production Structure For Pipeline to Sales Tangible - Lease Equipment P&A Costs		DWEB 130								-		
Surface Casing Intermediate Casing Production Casing Or Liner Tubing NIC Well Equipment Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples Pumping Unit, Engine Lift Equipment (Bhp. Rods, Anchors) Metering Equipment Tanglible – Well Equipment Panks, Tanks Steps, Stairs Statery (Heater Treater, Separator) Flow Lines (Line Pipe From Wellhead) Offshore Production Structure For Pipeline to Sales Tanglible – Lease Equipment Tanglible – Lease Equipment		DWEB 135								-		
Production Casing Or Liner Tubing WC Well Equipment Welthead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples Pumping Unit, Engine Lift Equipment (Bhp. Rods, Anchors) Metering Equipment Tangible - Well Equipment Tangible - Well Equipment Tanks, Tanks Steps, Stairs Statery (Heater Treater, Separator) Filow Lines (Line Pipe From Wellhead) Offshore Production Structure For Pipeline to Sales Tangible - Lease Equipment Tangible - Lease Equipment		DWEB 140	-							-	-	
Tubing I/C Well Equipment Withead, Tree, Chokes Inner Hanger, Isolation Packer Packer, Nipples Pumping Unit, Engine Iff Equipment Tangible - Well Equipment RIC Lease Equipment Saltery (Healer Treater, Separator) Flow Lines (Line Pipe From Wellhead) Offshore Production Structure For Pipeline to Sales Tangible - Lease Equipment Tangible - Lease		DWEB.145	-	1.0				-	-			
NC Well Equipment Welshead, Tree, Chokes Uner Hanger, Solation Packer Packer, Nipples Pumping Unit, Engine Life Equipment (Bhp, Rods, Anchors) Wetering Equipment Tangible - Well Equipment Innks, Tanks Steps, Stairs Statery (Healer Treater, Separator) Fine Units (Line Pipe From Welthead) Offshore Production Structure For Pipeline to Sales Tangible - Lease Equipment Tangible - Lease Equipment						DWEA 100	-	-	À.	-		
Wellhead, Tree, Chokes Inder Hanger, Isolation Packer Packer, Nipples Pumping Unit, Engine Iff Equipment (Bhp. Rods, Anchors) Medering Equipment Tangible - Well Equipment Tanks, Tanks, Steps, Stairs Slattery (Healter Treater, Separator) Pilow Lines (Une Pipe From Wellhead) Offishore Production Structure For Pipeline to Sales Tangible - Lease Equipment PAA Costs						DWEA 105			*			
Uner Hanger, Isolation Packer Packer, Nipples Pumping Unit, Engine Iff Equipment (Brip, Rods, Anchors) Metering Equipment Tangible - Well Equipment VIC Lease Equipment Tanks, Tanks Steps, Stairs Satery (Heater Treater, Separator) Flow Lines (Line Pipe From Wellhead) Offshore Production Structure For Pipeline to Sales Tangible - Lease Equipment		nuen us				DWEA 115 DWEA 120					- 1	
Packer, Nipples Pumping Unit. Engine Life Equipment (Bhp. Rods, Anchors) Metering Equipment Tangible - Well Equipment Inches Equipment Tanks, Tanks Steps, Stairs Statery (Healer Treater, Separator) Flow Lines (Line Pipe From Wellhead) Offshore Production Structure For Pipeline to Sales Tangible - Lease Equipment P&A Costs		DWEB 115 DWEB 100				DWEA.125				103	1	
Pumping Unit, Engine Iff Equipment (Brp. Rods, Anchors) Metering Equipment Tangible - Well Equipment Tangible - Well Equipment Tanks, Tanks, Steps, Stairs Statery (Healter Treater, Separator) Filow Lines (Line Pipe From Wellhead) Offshore Production Structure For Pipeline to Sales Tangible - Lease Equipment P&A Costs		DAXED INC				DWEA 130				- 2		
Metering Equipment (Bhp. Rods, Anchors) Metering Equipment Tangible - Well Equipment NIC Lease Equipment Tanks, Tanks Steps, Stairs Battery (Heater Treater, Separator) Flow Lines (Line Pipe From Welthead) Offshore Production Structure For Pipeline to Sales Tangible - Lease Equipment						DLEG 100						
Tangible - Well Equipment Tangible - Well Equipment Tanks Steps, Stairs Satery (Heater Treater, Separator) Tow Lines (Line Pipe From Wellhead) Offshore Production Structure For Pipeline to Sales Tangible - Lease Equipment						DLEO:105	-			- 14		
Tangible - Well Equipment anks, Tanks Steps, Stairs Sattery (Heater Treater, Separator) Flow Lines (Line Pipe From Wellhead) Mishore Production Structure For Pipeline to Sales Tangible - Lease Equipment PAA Costs						DLEQ.220		-	-	-	+	
VC Lease Equipment (anks, Tanks Steps, Stairs (attary (Healer Treater, Separator) (Flow Lines (Line Pipe From Wellhead) (Mishore Production Structure For (Pipeline to Sales Tangible - Lease Equipm (28A Costs	pment		0	0	D D		0	0	0	0	0	
anks, Tanks Steps, Stairs statery (Heater Treater, Separator) low Lines (Line Pipe From Wellhead) ### The Production Structure For ippeline to Sales Tangible - Lease Equipm #### Tangible - Lease Equipm												
Battery (Heater Treater, Separator) Flow Lines (Line Pipe From Wellhead) Offshore Production Structure For Pipeline to Sales Tangible - Lease Equipm 28A Costs	THE RESERVED	110				DLEQ 115	3		-	+	-	
Flow Lines (Line Pipe From Wellhead) Offshore Production Structure For Pipeline to Sales Tangible - Lease Equipm P&A Costs						DLEQ.120		-	-		.+	
Offshore Production Structure For Pipeline to Sales Tangible - Lease Equipm P&A Costs				1 -		DLEO:125			-	- 2	-	
Pipeline to Sales Tangible - Lease Equipm P&A Costs						DLEG 130 DWEA 135						
Tangible - Lease Equipm						DWEA 140				1		
P&A Costs	inment		0	0	n.	18	0	0	0	0	0	_
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Andrew Control of the		DIDC 295			0	DICC 275				14		
FOA			0	0	0		0	0	0	0	0	
					V			-		-	-	



Safety Supt

Safety Supt

Fred Jones

Scott Lucas

Sheldon Waeger

918.606.5904

918.557.4177

432.894.5572

Cimarex Energy Co.

Morning Drilling Report

AFE: Property:

Cum Tangible Cost

Cum Mud Cost

\$0

\$2,560

253084 42-389-33823

BLM/BIA Objective **EIGHTEENMILE 56-18 1H** TX, Reeves 18 / Blk 53 / Wolfcamp A Thu, Jul 4, 2013 MIRU-96 Hrs Used of 114 Hr Rig Move Goal H&P 218 -0.750 0 4 0 0 0 0.00 0.00 DP Size DP Av DC Av Jet Velocity HHP/SQ Inch Bit Dia List Shoe TVD Max Allowable SICF 0.00 0.000 0 0 0 0.00 \$0.00 \$0.00 0 0.00 0 Pump #1 GPS Pump #2 -Pump #3 Off BE 0 Slow Stroke EDR Choke EDR EDR On BP 0 MW In MW.Qu YS In VS Cut PV YP **APIFiltrate** Get Strength LCM MW.in MW Out VS in VS.Out PV YP Gal Strength HTHP PE MF Cake Solida Sand MBT PH PM Cake Solids Sand AKPOM WPS ES CACL2 NACL 100.00 100.00 Chlorides Calcium 앤 Water D.W Lime Depth Checked Chlorides Calcium ORPst. WaterPct 0.W Lime Depth Checked 100.00 Bit.# Jet#1 Jet#2 Jet#3 Jet#4 Jet#5 Jet#6 Jet#7 Rotary RPM Diff Pressure Drag Torque, and Weigh ng / Mud Dispose Rotating Weight Slackoff Weight Diesel Received 2.373 Total Solids = bbls @ \$0.00 Diesel Used Today bbls @ \$0.00 Daily Liquids = Average Drag bbis @ \$0.00 Maximum Drag Torque On Bottom Meter Reading MCF Used Today Last BOP Test e: 0 Total Sliding Total Rotating BHA# CUM 1 MIRU/RDMO Feet Feet 24.00 96.00 Hours Totals 24.00 96.00 ROP ROP %Time %Time %Feet %Feet Time Desc Chronological Activity (0600 Hours to 0600 Hours) Move & set rig in. Pin derrick together & electricians are replacing service wire's and box on top drive. Back yard set in 80% Will pin derrick to floor & raise when done with repairs. Estimated spud 12.00 MIRU/RDMO 7/5/2013 Rig Move Goal Hours, 114 hrs, 96 Hours Used , 18 hrs left 2 Pole Trucks, 2 Forklift, 2 Tandems, 11 Road Trucks Walt on day lights 0.00 Operational Note Next 24 hours: Rig up/ rig repair GL: 0.00 DF: 0.00 KB: 0.00 GHG Emissions Elevations-0.00 9.625 @ 3500 Acc: 0 Spills: 0 insp: 0 Casing Qty BHA Wt Grd Thread OD ID Length CUM KOP MD/TVD Pen Pt MD/TVD Landing Pt MD/TVD Pilot DLS TVD Depth Total Length = Kelly = Last Inspected BHA Hours: Total Depth = Final Closure = feet @ Azimuth Planned VS = feet @ Azimuth \$28.533 Contact Daily Well Cost 432.620.1928 303-285,2380 Cum Drilling Cost \$259,350 Wellsite 36 Mark Audas Engineer Computer Lyman Nance 580-216-1492 432.571.7844 Cum Compl Cost Foreman - Day Geologist \$259,350 Foreman - Night Jody Solansky 210 334 8052 Landman Cody T. Elliot 432.571.7806 Cum Well Cost Cum Intangible Cost \$259,350 Manager Larry Seigrist 432,620,1934



Cimarex Energy Co.

Morning Drilling Report

API# 42-389-33823

Prop TD 15,367 Fri, Jul 5, 2013

BLM/BIA Well Name EIGHTEENMILE 56-18 1H TX, Reeves 18 / Blk 521 Wolfcamp A H&P 218 5 0.250 0 Rig up to spud 0.00 0.00 0 0 0 DP Av DC Size DC AV Cost/Ft 24 Hrs Jet Velocity Cost/Ft (OA) Last Shoe TVD Frac Gradient MW wable SICF 0.00 0.000 0 0 0.00 \$0.00 \$0.00 0.00 0 0 GPS Off BP Pump #1 -PZ-11 Pump #2 - PZ-11 Pump #3 -6.00 11.00 3 837 6.00 11.00 3 837 0 0 EDR EDR Stand Pipe 0 LCM VS In PV 8.40 8.40 29 100.00 AlkPOM ES Cake Cake 1 0.30 99.70 0.01 7.00 0.01 0.01 0.11 100.00 08 Q.W Lime Depth Checked Calcium OilPpt WaterPct D.W Lime Depth Checked 99.70 4.000 120@13:30 Bit.# Serial # Jet#1 Jet#2 Jet#3 Jet#4 Jet#5 Jet#6 Jet#7 Jet#8 TFA Rotary RPM Guage Diff Pressure Motor RPM Bit In Bit Out Hours FT/HR Cum. Bit Hirs. Inner Outer Dull Location Bearing Other Reason Pickup Weight Diesel on Hand 8.689 Engineer - 24 H Daily Solids = bbis @ \$0.00 Total Solids = bbls @ \$0.00 7,021 Rotating Weight Diesel Received Diesel Used Today \$0.00 Slackoff Weight Average Drag Total Liquids = bbis @ \$0.00 Maximum Drag Torque On Botto Meter Reading Torque Off Bottom MCF Used Toda Last BOP Test Total Sliding Total Rotating CUM Time Distribut 24.00 Feet Totals 24.00 120.00 ROP %Time ROP %Time Time Desc Chronological Activity (0600 Hours to 0600 Hours) Rig up H&P 218, RAISE MAST, R/U AIR HOIST, RAISE DEFUB ARM, PULL OUT DOGHOUSE CABLE TRAY, PLUG IN DOGHOUSE, MAST, AND DEFUB ARM, DRIVE IN ALL GROUND RODS, POWER UP GENERATOR, RIG UP STAND PIPE AND VIBRATOR HOSES, RUN OUT 24.00 MIRU/RDMO DRAWWORKS, RUN OUT TDS, RIG UP ROTARY TOOLS SPOOL UP ADS. UNDOCK TDS. TROUBLESHOOT TDS, DRESS OUT SHAKERS, R/U PIPE WRANGLER, RUN OUT MP 1/2, PIPE WRANGLER, L/D MRCS, WELD ON CONDUCTOR 0.00 Operational Note Rig Move Goal Hours, 114 hrs, 120 Hours Used , 5 hrs over Estimated spud 7/5/2013 @ 2:00 p.m 24.00 Next 24 hours: Estimated spud 14:00 7/5/13 Elevations-GL: 0.00 DF: 0.00 GHG Emissions 0.00 9.625 @ 3500 Acc: 0 Spills: 0 Insp: 0 Casing BHA Wt Grd Thread OD ID Length CUM KOP MD/TVD Pen Pt MD/TVD Landing Pt MD/TVD Depth TVD DLS Total Length = Projection To Bit Kelly = Last Inspected BHA Hours Total Depth = Final Closure = feet @ Azimuth Planned VS = feet (B) Azimuth Daily Well Cost \$78.321 \$337,671 432.620.1928 Cum Drilling Cost Engineer Mark Audas Computer Wellsite 36 303-285.2380 580-216-1492 432.571.7844 Cum Compl Cost Foreman - Day Lyman Nance Geologist Kim Nordstog Jody Solansky Cum Well Cost Foreman - Night 210.334.8052 Cody T. Elliot 432.571.7806 Cum Intangible Cost \$337,671 Manager Larry Seignist 432.620.1934 Cum Tangible Cost Safety Supt Fred Jones 918.606.5904 Cum Mud Cost \$11,841 918.557.4177 Sheldon Waeger Safety Supt Scott Lucas 432.894.5572



BLM/BIA

Well Name

Cimarex Energy Co.

Morning Drilling Report

AFE: API#

Objective

428085-023.01 42-389-33823 Prop TD

EIGHTEENMILE 56-18 1H Fri, Jul 5, 2013 TX, Reeves 18 / Blk 53 / Wolfcamp A H&P 218 5 0.250 0 Rig up to spud 0.00 n 0 0 0.00 Variance To Compl. Variance To Orlg. B.C.P Drig. Cost Afe A.C.P Dry Hole Compl Compl Afe Casing Well Sub Ledger Description Vendor & Description loads & Location Preparation / Restors Chapman [Dig Ditches] / Lee Truck 2.280 HDC 105 DICC.105 Damages Mud/Fluids Disposal Charges Day Rate DIDC:115 DIGC:120 Bits **DIDC 125** DICC:125 22,275 22,275 mmons Petroleum (Fuel for Rig) Water 009 / Completion Fluids 109 Lee Trucking [Deliver Fresh water] 6,126 6 126 DICC 135 Fas-Line [Transfer Pump] / Haliburto DIDG 145 Road Runner [Diaphram Pump / Tra DIDG 150 Mud & Additives 9.281 11.841 11,841 Surface Rentals 370 1,850 1,850 DICC 140 Downhole Rentals 4,960 4,960 DICC.145 DSTS, Formation Tests DIDC:160 Mud Logging Open Hole Logging DIDG.160 Cementing, thru Intermediate Casing 836 0100,160 EL Farmer [2 pipe rack] / Wilbanks T DIDC 190 Casing Crews DICC 165 DIDG 200 DICC.170 Extra labor, Welding, etc. 4,335 4.335 Supervision Brother consulting / Lyman Nance [S DIDC 210 3,700 22,200 22,200 DICC 180 Trailer, Camp & Catering 3,255 6,275 Cimarex [Satelite] [sat/phone/interco DIDC 280 Other misc expenses DIDC 220 DICC.190 8,000 Dverhead DICC 199 Remedial Cementing D/DC 231 DICC 215 Mobilize & Demobilize H&P Inter. Drilling Co. [MOS Rate] DIDC 240 17 385 86 925 Directional Orilling Lenco (Septio) / Stellar (trailer / Water DIDC 245 165 825 825 Marine/Air Transportation IDC 275 DICC 250 olids Control-Equip/Services KSW Oilfield Rentals [Float Pumps] Well Control-Equip/Services DIDC.265 DICC 240 Fishing & Sidetrack Services DICC 245 Coil Tubing ICC 260 Completion Logging, Perforating DICC 200 10,000 DICC 280 DIDC 300 10.000 Legal/Regulatory/Curative DIDC:435 3,730 16,080 DICC 220 Construction For Well Equipment WEA 110 Construction For Lease Equipment DLEQ.110 Drive Pipe Water String DWEB 135 Surface Casing WEB 140 Intermediate Casing WEB.145 Production Casing Or Lines WEA:100 DWEA-105 Tubing N/C Well Equipme WEA.115 DWEB.115 Wellhead Tree Chokes WEA 120 iner Hanger, Isolation Packer WEB.100 Packer, Nipples **DWEA 130** umping Unit, Engine LEQ.100 Lift Equipment (Bhp. Rods, Anchors) DLEQ.105 LEQ. 220 Tangible - Well Equipmen N/C Lease Equipment QLEQ.115 Tanks, Tanks Steps, Stairs OLEQ.120 Battery (Heater Treater, Separator....) XLEQ. 125 Offshore Production Structure For ... WEA 135 Pipeline to Sales Tangible - Lease Equipmen P&A Costs P&A 78,321 337,671 Total Costs



Cimarex Energy Co.

AFE : Property : API # :

253084 428085-023.01 42-389-33823

M/BIA:							rilling	перы						Prop TD	Ł.	15,3
lell Name	IGHTEENMILI	E EC 19 1L			2022	tate/County		n. Township			<u>Object</u> Wolfcar		0	Date	at, Jul	6 201
ontractor / Rig	Rpt #	DFS	-	resent Ope		X, Reeves		18 / Bik 53	. F		Vvoitcar		IVD	Footage	FT/HR	Houn
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	I/Anhydrite	0	0		0	925										
0.00 B.000		Av Jet Velo 19 272		SQ Inch Bit 2.11	Dia	\$62.2			3.32	Last	Shoe TV	2 1	Frac Gradie 0.0		Max Allow	vable SIC
Pump #1 - PZ-1		GF			-11	400.2			p.#3 -				GPS	GP		Off BP
	11.00 1 Stand Pipe ED	00 3.8 OR Chel		Stroke	11.00 Stand Pi				w Stroke	Stand Pig		EDR	Choke	76		450 On BP
Sidw Sticke	ananu ripe cu	rie crio	de Siow	STOKE	aunu ri	pe con	Grid		IN GUINE	diana ris	17	cun	Croke			1,675
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8.40 8.40 Cake Solds		and MBI	1 1 PH	1 PM	100.0		Sake	Solids	Liquid	Sand	AkF	OM	WPS	ES	GACL2	NAC
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128 990			56.73	5,50	s. Inn	er Outer	Dull	Location	Bearing	Guage	Other	Reason		Pressure 0 - 400	61-1	
Drag Torque and W	C. C	Diesel					d additives in	1700					_	ning / Mud C		
ckup Weight otating Weight		on Hand Received	7,527	fork lift	er - 24 H		nk Wrap iagel		transportati soda Ash	on-c		ly Solids : al Solids :		bbls		\$0 \$0
ackoff Weight		Used Today	1,162	6								ly Liquids		bbls	200	\$0 \$0
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rque On Bottom		Reading Jsed Today									tor	BOP Tes		Pressure Te	sting Days si	nce- III
ily Rota		ding	Total	BHA#	1	Rotating	Slid	ling	Total		Code		istributio	n	Daily	CU
	862 5.50		862 5.50	Feet		862 5.50			862 5.50		1 MI 2 Dr	RU/RDM0)		13.00 5.50	133.0
OP 15	66.73		156.73	ROP		156.73			156.73		6 Tri	pping			5.00	5.0
	0.00			%Time %Feet	11	100.00					10 De	viation Su	irvey		0.50 24.00	144.0
	Note TRRC call	ed 7-3-2013 @	10:00 a.m.			00 Hours to										
0.00 Operational N 13.00 MIRU/RDMO 5.00 Tripping 1.75 Drilling 0.25 Deviation Sur 3.00 Drilling	Rig Move Hook up c draw work Pick up Sc Rotating fi 07/06/201 Viscosity* Survey Rotating fi MotorDiff-	Goal Hours, 1" conductor & ret- is & torque cyli- cout tool, Moto- com 128" to 248 3 WOB=15 R 32 Gallons Pe 167" 1.7" com 248" to 726 Pressure=150	uild flow line nder on flooi r, IBS, Flow 8', 120 FT @ otaryRPM=2 r Minute=38	drift, shoot 0 68.57 Re 25 Motori 14 Pump	od mud, st ck sub M/L OP using RPM=61 Pressures	rap BHA, test J bit & tag @ Bit #1 - S/N:1 MotorDiffPret =450 B=15 Rotaryl	128' 19160 on BH saure=100 RPM=40 M	IA #1 (Seq Mud Weigt otorRPM=	#1) - ht=8.4							
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13.00 MIRU/RDMO 5.00 Tripping 1.75 Drilling 0.25 Deviation Sur 3.00 Drilling 0.25 Deviation Sur 0.75 Drilling 24.00 24.00 Drilling 24.00 24.00 Drilling 24.00 25 Deviation Sur 10.75 Drilling 26.00 27 Drilling 26.00 27 Drilling 27 Drilling 28 Drill Sur 29 Drill Sur 29 Drill Sur 20 Drilling 29 Drill Sur 20 Drilling 21 Drilling 21 Drilling 21 Drilling 21 Drilling 21 Drilling 21 Drilling 22 D	Rig Move Hook up c draw work Pick up St. Rotating in MotorDiff Pressures Viscosity Survey & Rotating in MotorDiff Pressures Vivey Survey & Rotating in MotorDiff Pressures Vivey Survey & Rotating in MotorDiff Pressures Vivey Survey & Survey & Rotating in MotorDiff Pressures Vivey Survey & Su	Goal Hours, 1' on onductor & reb s & torque eyil court tool, Motor orm 128' to 24t 3 WOB+15 R 167' 1.7' orm 248' to 24t 3 WOB+15 R 167' 1.7' orm 248' to 72t ressure=150' 1.0' orm 25' to 99t ressure=400' 1.500	Thread 6 5/8 6 5/8 6 5/8 6 5/8 6 5/8 6 5/8 6 5/8 7	o, mix sput. drift, shock of the first of t	Control Cont	BHA, test J bit & tag @ Bit #1 - S/N: the Motor Difference Sin #1 - S/N: the Sin	128' 9160 on Bhsaure #100 Minute #768 Minute #768 Drift 1.50 22.30 24.28 60.28 76.30 81.21 89.26 93.43 227.41 276.03 632.43 635.36 811.56 841.77 990.10	Mud Weight otorRPM= Pump otorRPM= Pump Els Burst KC Depth 167 645 Final C Planne	#1) - 11=8.4 123 123 Collaps OP MD/TVD 0 /0 Incl. 7 1.70 5 2.50 Closure =	Azi. 0.00 0.00 0.00 0.00 0.00 0.00	Pen Pf 16 64 64	Joint MD/TVD MD/TVD 5.98 4.65 2 (VS 2.48 19.99 19.99 20.00 Azim	Capacity Landing P 0 / N/-S 2 48 19.99 19.99 nuth	Displ MD/TVD E/-W 0.00 0.00 New Su	PlugggDisp Disp Disp Disp Disp Disp Disp Disp
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13.00 MIRU/RDMO 5.00 Tripping 1.75 Drilling 0.25 Deviation Sur 3.00 Drilling 0.25 Deviation Sur 0.75 Drilling 0.25 Deviation Sur 0.75 Drilling 24.00 24.00 24.00 24.24 hours: Drill/s 24.00 25 Deviation Sur 26.25 Deviation Sur 26.25 Deviation Sur 26.26 Deviation Sur 27.26 Deviation Sur 28.26 Deviation Sur 29.26 Deviation Sur 2	Rig Move Hook up c draw work Pick up St Rotating in MotorDiff Pressures Rotating in MotorDiff Pressures Survey Sur	Goal Hours, 1' on onductor & reb s & torque eyil court tool, Motor orm 128' to 24t 3 WOB+15 R 167' 1.7' orm 248' to 24t 3 WOB+15 R 167' 1.7' orm 248' to 72t ressure=150' 1.0' orm 25' to 99t ressure=400' 1.500	Thread 6 5/8 6 5/8 6 5/8 6 5/8 6 5/8 6 5/8 6 5/8 6 5/8 6 5/8 7 5/	o, mix sput, drift, shock of the first of t	S	BHA, test J bit & tag @ Bit #1 - S/N: the Motor Difference Sin #1 - S/N: the Sin	128' 19160 on Bhssure = 100 RPM=40 M Minute=768 RPM=50 M Minute=768 Drift 1.50 22.30 24.28 60.21 62.88 76.30 81.21 89.26 93.43 272.41 276.03 632.43 635.36 811.56 841.77 990.10 Well	Burst Els Burst Els Burst Els Burst Els Burst Els Burst Burst	#1) - 11=8.4 123 123 Collaps OP MD/TVD 0 /0 Incl. 7 1.70 5 2.50 Closure =	Azi. Piper V V V V V V V V V V V V V V V V V V V	Pen PP PP Pen PP PP Pen PP PP Pen PP	Join Strend MD/TVD MD/TVD 5.98 6.98 6.55 6.65 6.65 6.65 6.65 6.65 6.65 6.6	VS 2.48 19.99 19.99 Daily W Cum Dr Cum	Capacity Landing P 0 / N/-S 2.48 19.99 19.99 suth suth suth suith	0 Displ t MD/TVD 0 0 E/-W 0.00 0.00 New Su	D.00 Plugged Disp Disp Disp Disp Disp Disp Disp Disp
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13.00 MIRU/RDMO 5.00 Tripping 1.75 Drilling 0.25 Deviation Sur 3.00 Drilling 0.25 Deviation Sur 3.00 Drilling 0.25 Deviation Sur 0.75 Drilling 0.25 Deviation Sur 0.75 Drilling 0.26 Deviation Sur 0.75 Drilling 0.27 Deviation Sur 0.75 Drilling 0.28 At Casing 0.29 Deviation Sur 0.75 Drilling 0.75 D	Rig Move Hook up c draw work Pick up St Rotating for 107/06/201 Viscosityve Survey @ Rotating for MotorDiff Pressures Survey @ Rotating for Rotating for Rotating for Rotating for Pressures Survey @ Rotating for Rotating for MotorDiff Pressures Survey @ Rotating for Rotating for MotorDiff Pressures 104 Rotating for Rotating f	Goal Hours, 1' onductor & reb s & torque eyil cout tool, Motor m 128' to 24t 3 WOB+15 R 32 Gallons Pe 167' 1.7' om 248' to 72t ressure=150' 1.150' 645' 2.5' onductor 1,500 Wit Grd 99.00 59.16 J-55 59.16 J-55 59.16 J-55	### Thread 15	o, mix sput, o, mix sput, odiff, shock of 68.57 R odiff, shock odif	Control Cont	BHA, test J bit & tag @ Bit #1 - S/N: the Motor Difference Sin #1 - S/N: the Sin	128' 19160 on Bhssure = 100 RPM=40 M Minute=768 RPM=50 M Minute=768 Drift CUM 1.50 22.30 24.28 60.21 62.88 76.30 81.21 89.26 93.43 272.41 276.03 632.43 635.36 811.56 841.77 990.10 Well	Burst Els Burst Els Burst Els Brial G Planne	#1) - 11=8.4 123 123 Collaps OP MD/TVD 0 /0 Incl. 7 1.70 5 2.50 Closure =	Azi. Piper V V V V V V V V V V V V V V V V V V V	Body Red Market	Join Strend MD/TVD MD/TVD 5.98 6.98 6.55 6.65 6.65 6.65 6.65 6.65 6.65 6.6	US 2.48 19.99 19.90 Azim Cum Cu Cum Cu Cum Cum Cum Cum Cum Cum	Capacity Landing P 0 / N/-S 2.48 19.99 19.99 suth suth silling Cost amplic Cost complications cost cost complications cost cost cost cost cost cost cost cost	Displ t MD/TVD 0 E/-W 0.00 0.00 New Su	Piugge Disp



AFE : Property : API # :

253084 428085-023.01 42-389-33823 15,367

BLM/BIA:					=		port				Prop Ti	0:	15,36
Well Name EIGHTEE	NMILE 56-18 11	н		State/	County		vnship, Rang Blk 53 /	2	<u>Objective</u> Wolfcamp		Date	Sat, Jul	6, 201
Contractor / Rig H&P 218	Rpt # DFS 6 0.250	ODFS 1	Present Oper		Drill 12 1/4	Hole @ 9	90'		MR 990	IVD 990	Footage 990	FT/HR 180.00	Hour 5.5
Sub Ledger Description	Vendor & Descr	intion	B.C.P Code	Daily Drig. Cost	Cum Drlg. Cost	Variance To Drlg. Afe Over/Under	A.C.P Code	Daily Compl. Cost	Cum Compl. Cost	Variance To Compl. Ate	Dry Hole Cost	After Casing Point	Comp Well Cost
Roads & Location Preparation / Restors	The second second second second	· Pinon	DIDC 100		99,160	99,160	DIGC 100	Cost	COST	13-11-10-10-1	- COST	- Ont	Cus
Damages			DIDC:105	-	1.7		DICC 105						
Mud/Fluids Disposal Charges			DIDC.255	-			DIGC 235		-			-	
Day Rate	H&P 218 [Day Rate / FR	C Charge]	DIDC 115	27,135	27,135 29,733		DICC 120						
Misc Prep Cost (Mouse Hole, Rat Hole, Bits	Ulterra [12.25 Bit]		DIDC 125	12,500	12,500	29.735	DIGC.125				- 0	_	
Fuel	Onema [12:20 Dit]		DIDC 135	12,000	22,275		DICC 130						
Water 009 / Completion Fluids 109			DIDC 140		6,126		DICC.135						
Mud & Additives	Fas-Line [Transfer Pump			5,979	17,820	17,820			-		+		
Surface Rentals	American Safety Services			810	2,660		DICC 140	-					
Downhole Rentals DSTS, Formation Tests	Baker [motor] / San Jan [Deliver mot	DIDC.160	6,358	11,318	11,318	DICC:145	-			-		
Mud Logging			DIDC 170							- 3			
Open Hole Logging			DIDC_180	-									
Cementing, thru Intermediate Casing			DIDC 185	-			DICC.155		-				
Tubular Inspections	EL Farmer [2 pipe rack] /	Wilbanks T		209	1,045	1,045	DICC:160	-			-	-	
Casing Crews			DIDC.195	0.000		-	DICC 165		-			-	
Extra labor, Welding, etc.	GF Lozoya Welding [Wel	d Conducto		1,125	1,125		DICC 170		-			*	
Trucking Supervision	Brother consulting / Lyma	an Nance in	DIDC 205 DIDC 210	3,700	4,335 25,900		DICC 175 DICC 180						
Trailer, Camp & Catering	Cimarex [Satelite] [sat/ph			455	6,730		DICC 255				-		
Other misc expenses			DIDC 220	75.5			DICC.190	-	-	-		-	
Overhead			DIDC 225	-	8,000	8,000	DICC 195		-		ė		
Remedial Cementing			DIDC 231	-			DICC 215	-				-	
Mobilize & Demobilize	Lance IS-control of	miles (180)	DIDC 245	100	86,925	86,925			+			,	
Directional Drilling Dock, Dispatcher, Crane	Lenco [Septic] / Stellar [tr	raner / Wate	DIDG.245	165	990	990	DICC 230	T. Cy	-				
Marine/Air Transportation			DIDC:275		04		DICC 250		1				
Solids Control-Equip/Services	KSW Oilfield Rentals [Flo	at Pumps)	DIDC 260	250	1,500	1.500			-		+		
Well Control-Equip/Services	Assessment of the second		DIDC.265	-	1.0		DICC 240	-					
Fishing & Sidetrack Services			DIDC 270	-	1.4		DICC 245	-	÷	- 2	-	-	
Completion Rig			17/10				DICC,115	-			- 1	-	
Coll Tubing							DIGC 260 DIGC 200						
Completion Logging, Perforating Stimulation							DIGC 210				-		
Legal/Regulatory/Curative			DIDC.300		10,000	10,000	DICC 280	-	-		- 4	-	
Well Control Insurance			DIDC 285		5,000	5.000						-	
Contingency			DIDC.435	2,934	19,014	19,014	DICC 220	-					
Construction For Well Equipment							DWEA.110	-		-	- 1		
							A CHEST POSSESSION					the second second	
			Harry (DLEQ 110		X L				
Construction For Sales P/L	ible			61 620	180 281	200 201	DLEG 110 DICC 265		-			-	
	jible			61,620	399,291	399,291	100000000000000000000000000000000000000	0	0	b		-	
Construction For Sales P/L Intang	pible		DWE8.150	61,620	399,291	399,291	100000000000000000000000000000000000000	0	0	b	0	0	
Construction For Sales P/L Intang Drive Pipe Conductor Pipe	gible		DWEB 130	61,620	399,291	399,291	100000000000000000000000000000000000000	0	0	0	0	0	
Construction For Sales P/L Intang Drive Pipe Conductor Pipe Water String	pible		DWEB 130 DWEB 135	61,620	359,291	309,291	100000000000000000000000000000000000000	0	0	0	0	0	
Construction For Sales P/L Intang Drive Pipe Conductor Pipe Water String Surface Casing	pible		DWEB 130 DWEB 135 DWEB 140	61,620	399,291	309,291	100000000000000000000000000000000000000	0	0	0	0	0	
Construction For Sales P/L Intang Drive Pipe Conductor Pipe Water String Surface Casing Intermediate Casing	pible		DWEB 130 DWEB 135	61,620	399,291	399,291	DICC 285	0	0	0	0	-	
Construction For Sales P/L Intang Drive Pipe Conductor Pipe Water String String Intermediate Casing Intermediate Casing Production Casing Or Liner	jible		DWEB 130 DWEB 135 DWEB 140	61,620	389,291	399,291	100000	0	0	0	0	0	
Construction For Sales P/L Intang Drive Pipe Conductor Pipe Valet String Surface Casing Intermediate Casing Production Casing Or Liner Tubing NIC Well Equipment	pible		DWEB.135 DWEB.140 DWEB.145	61,620	389,291	399,291	DICC 285 DWEA 100 DWEA 105 DWEA 115	0	0	0	0	0	
Construction For Sales P/L Intang Drive Pipe Conductor Pipe Water String Surface Casing Intermediate Casing Production Casing or Liner Tubing Tubing Not Well Equipment Wellhead, Tree, Chokes	pible		DWEB 130 DWEB 135 DWEB 140 DWEB 145	61,620	339,291	399,291	DICC 285 OWEA 100 DWEA 105 DWEA 120	0	0	0	0	0	
Construction For Sales P/L Intang Drive Pipe Conductor Pipe Water String Surface Casing Intermediate Casing Production Casing Or Liner Tubing NIC Well Equipment Welthead. Tree, Chokes Liner Hanger, Isolation Packer	yible		DWEB.135 DWEB.140 DWEB.145	61,620	339,291	193,000	DIGC 285 OWEA 100 DWEA 105 OWEA 115 OWEA 120 DWEA 125	0	-	0	0	0	
Construction For Sales P/L Intang Drive Pipe Conductor Pipe Water String Surface Casing Intermediate Casing Production Casing Or Liner Tubing N/C Well Equipment Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples	jible		DWEB 130 DWEB 135 DWEB 140 DWEB 145	61,520	399,291	192,000	DICC 265 DWEA 100 DWEA 105 DWEA 105 DWEA 120 DWEA 120 DWEA 120 DWEA 120 DWEA 130	0	0	0	0	0	
Construction For Sales P/L Intang Drive Pipe Conductor Pipe Valter String Surface Casing Intermediate Casing Production Casing Or Liner Tubing VIC Well Equipment Welthead. Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples Pumping Unit, Engine	jible		DWEB 130 DWEB 135 DWEB 140 DWEB 145	61,520	399,291	399,281	DIGC 285 OWEA 100 DWEA 105 OWEA 115 OWEA 120 DWEA 125		0		0	0	
Construction For Sales P/L Intang Drive Pipe Onductor Pipe Nater String Surface Casing Intermediate Casing Production Casing Or Liner Tubing VIC Well Equipment Welthead. Tree, Chokes Liner Hanger, Isolation Packer Packer, Ripples Uff Equipment (Bipp, Rods, Anchors)	jible		DWEB 130 DWEB 135 DWEB 140 DWEB 145	61,420	399,291	399,281	DIGC 285 DWEA 100 DWEA 105 DWEA 120	0	0	0	- 0		
Construction For Sales P/L Intang Drive Pipe Onductor Pipe Nater String Surface Casing Intermediate Casing Production Casing Or Liner Tubing VIC Well Equipment Welthead. Tree, Chokes Liner Hanger, Isolation Packer Packer, Ripples Uff Equipment (Bipp, Rods, Anchors)			DWEB 130 DWEB 135 DWEB 140 DWEB 145	61,420	399,291		DIGC 285 DWEA 100 DWEA 105 DWEA 120 DWEA 130 DWEA 130 DWEA 130 DWEA 130	9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9			- 0	0	
Construction For Sales P/L Intang Drive Pipe Conductor Pipe Valter String Surface Casing Intermediate Casing Production Casing Or Liner Tubing NIC Well Equipment Welthead: Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples Pumping Unit, Engine Lift Equipment (Brip, Rods, Anchors) Metering Equipment Tangible - Wel			DWEB 130 DWEB 135 DWEB 140 DWEB 145				DIGC 285 DWEA 100 DWEA 105 DWEA 105 DWEA 120 DWEA 120 DWEA 130 DLEG 100 DLEG 100 DLEG 220						
Construction For Sales P/L Intang Drive Pipe Conductor Pipe Water String Surface Casing Intermediate Casing Production Casing Or Liner Tubing NIC West Equipment Wethead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples Pumping Unit, Engine Lift Equipment (Bhp., Rods, Anchors) Metering Equipment Tangible – Wel NIC Lease Equipment			DWEB 130 DWEB 135 DWEB 140 DWEB 145				DWEA 100 DWEA 105 DWEA 105 DWEA 105 DWEA 125 DWEA 120 DWEA 130 DWEA 130 DWE						
Construction For Sales P/L Intang Drive Pipe Conductor Pipe Water String Surface Casing Intermediate Casing Production Casing Or Liner Tübing NIC Well Equipment Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Ripples Pumping Unit, Engine Liner Equipment (Bip, Rods, Anchors) Metering Equipment Tangible - Well NIC Lease Equipment Tangible - Well NIC Lease Equipment Tanks, Tanks Steps, Stairs			DWEB 130 DWEB 135 DWEB 140 DWEB 145				DIGC 285 COMEA 100 DIMEA 108 DIMEA 108 DIMEA 128 DIMEA 128 DIMEA 120 DIEG 100 DIEG 100 DIEG 100 DIEG 100 DIEG 100			0			
Construction For Sales P/L Intang Drive Pipe Conductor Pipe Onductor Pipe Nater String Surface Casing Intermediate Casing Production Casing Or Liner Tubing NIC Well Equipment Welthead. Tee, Chokes Liner Hanger, Isolation Packer Packer, Nipples Pumping Unit. Engine Lift Equipment (Bipp. Rods. Anchors) Metering Equipment Tangible - Wel NIC Lease Equipment NIC Lease Equipment Saletery (Healets Steps. Stairs Saletery (Healets Treater, Separator)			DWEB 130 DWEB 135 DWEB 140 DWEB 145				DWEA 100 DWEA 105 DWEA 105 DWEA 105 DWEA 125 DWEA 120 DWEA 130 DWEA 130 DWE			0			
Drive Pipe Conductor Pipe Water String Surface Casing Intermediate Casing Production Casing Or Liner Tubing NIC Well Equipment Wellhead, Tire, Chokes Liner Hanger, Isolation Packer Packer, Nipples Pumping Unit, Engine Life Equipment (Bhp. Rods, Anchors) Metering Equipment			DWEB 130 DWEB 135 DWEB 140 DWEB 145				DIGC 285 DIWEA 100 DIWEA 105 DIWEA 105 DIWEA 120 DIWEA 120 DIWEA 120 DIEG 100 DIEG 100 DIEG 100 DIEG 120 DIEG 120 DIEG 120			0			
Construction For Sales P/L Intang Drive Pipe Conductor Pipe Water String Surface Casing Intermediate Casing Production Casing Or Liner Tubing NIC Well Equipment Wellhead. Tree. Chokes Liner Hanger, Isolation Packer Packer, Nipples Pumping Unit. Engine Lift Equipment (Bip. Rods, Anchora) Metering Equipment Tangible - Well NIC Lease Equipment Tangible - Well NIC Lease Equipment Flow Lines (Line Pipe From Wellhead) Flow Lines (Line Pipe From Wellhead)			DWEB 130 DWEB 135 DWEB 140 DWEB 145				OWEA 100 OWEA 100 OWEA 105 OWEA 105 OWEA 130 OWEA 130 OLEO 100 OLEO 100 OLEO 100 OLEO 100 OLEO 100 OLEO 100 OLEO 100			6			
Construction For Sales P/L Intang Drive Pipe Conductor Pipe Mater String Surface Casing intermediate Casing Production Casing Or Liner Tubing NIC Well Equipment Wellhead, Tree, Chokes Liner Hanger, Solation Packer Packer, Nipples Pumping Unit, Engine Liner Equipment (Bhp. Rods, Anchors) Wetering Equipment Tangible – Well NIC Lease Equipment Tarks, Tarks Steps, Stairs Saltery (Healet Treater, Separator) Flow Lines (Line Pipe From Wellhead) Offshore Production Structure For	I Equipment		DWEB 130 DWEB 135 DWEB 140 DWEB 145			0	DIGC 285 DIMEA 100 DIMEA 105 DIMEA 105 DIMEA 105 DIMEA 105 DIMEA 105 DIMEA 106 D			0			
Construction For Sales P/L Intang Drive Pipe Conductor Pipe Onductor Pipe Nater String Surface Casing Intermediate Casing Production Casing Or Liner Utuling VICE Well Equipment Velibrad, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples Pumping Unit, Engine Lift Equipment (Bhp, Rods, Anchors) Metering Equipment Tanglible - Well NIC Lease Equipment Tanglible - Well NIC Lease Equipment Janks, Tanks Steps, Stairs Janks Steps, Stairs Liner Pipe From Wellhead) Offshore Production Structure For Ippeline to Sales Tanglible - Leas	I Equipment		DWEB.135 DWEB.135 DWEB.145 DWEB.145 DWEB.145	0	0	0	DIGC 285 DIWEA 100 DAWEA 105 DAWEA 105 DAWEA 105 DAWEA 105 DAWEA 106 DAWEA 106 DAWEA 107 DAWEA 108	0	0	0		-	
Construction For Sales P/L Intang Drive Pipe Conductor Pipe Mater String Surface Casing Intermediate Casing Production Casing Or Liner Tubing NIC Well Equipment Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples Pumping Unit, Engine Life Equipment (Bipp, Rods, Anchors) Wetering Equipment Tangible - Well NIC Lease Equipment Tangible - Well NIC Lease Equipment Tanks Steps, Stairs Saletery (Feater Treater, Separator) Pipeline Units (Line Pipe From Wellhead) Offshore Production Structure For Pipeline to Sales Tangible - Leas Tangible - Leas	l Equipment e Equipment		DWEB 130 DWEB 135 DWEB 140 DWEB 145	0	0	0	DIGC 285 DIMEA 100 DIMEA 105 DIMEA 105 DIMEA 105 DIMEA 105 DIMEA 105 DIMEA 106 D			0	0	0	
Construction For Sales P/L Intang Drive Pipe Conductor Pipe Water String Surface Casing Intermediate Casing Production Casing Or Liner Tubing NIC Well Equipment Velibread, Tree, Chakes Liner Hanger, Solation Packer Packer, Nipples Pumping Unit, Engine Life Equipment (Bhp, Rods, Anchors) Metering Equipment Tanglible – Well NIC Lease Equipment Tanglible – Well NIC Lease Equipment Fanks, Tanks Steps, Stairs Battery (Heatter Treater, Separator) Flow Lines (Line Pipe From Wellhead) Offshore Production Structure For Pipeline to Sales Tanglible – Leas	l Equipment e Equipment		DWEB.135 DWEB.135 DWEB.145 DWEB.145 DWEB.145	0	0	0	DIGC 285 DIWEA 100 DAWEA 105 DAWEA 105 DAWEA 105 DAWEA 105 DAWEA 106 DAWEA 106 DAWEA 107 DAWEA 108	0	0	0		-	
Construction For Sales P/L Intang Drive Pipe Onductor Pipe Nater String Surface Casing Intermediate Casing Production Casing Or Liner Utiling NIC Well Equipment Veilibed, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples Tumping Unit, Engine Life Equipment (Bipe, Rods, Anchors) Metering Equipment (Bipe, Rods, Englishe – Well NIC Lease Equipment Tanglible – Well NIC Lease Equipment Innks, Tanks Steps, Stairs Saltery (Teater, Tester, Separator,) Pipeline to Sales Tanglible – Leas Tanglible – Leas	l Equipment e Equipment		DWEB.135 DWEB.135 DWEB.145 DWEB.145 DWEB.145	0	0	0	DIGC 285 DIWEA 100 DAWEA 105 DAWEA 105 DAWEA 105 DAWEA 105 DAWEA 106 DAWEA 106 DAWEA 107 DAWEA 108			0	0	0	
Construction For Sales P/L Intang Drive Pipe Onductor Pipe Nater String Surface Casing Intermediate Casing Production Casing Or Liner Utiling NIC Well Equipment Veilibed, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples Tumping Unit, Engine Life Equipment (Bipe, Rods, Anchors) Metering Equipment (Bipe, Rods, Englishe – Well NIC Lease Equipment Tanglible – Well NIC Lease Equipment Innks, Tanks Steps, Stairs Saltery (Teater, Tester, Separator,) Pipeline to Sales Tanglible – Leas Tanglible – Leas	l Equipment e Equipment		DWEB.135 DWEB.135 DWEB.145 DWEB.145 DWEB.145	0	0	0	DIGC 285 DIWEA 100 DAWEA 105 DAWEA 105 DAWEA 105 DAWEA 105 DAWEA 106 DAWEA 106 DAWEA 107 DAWEA 108			0	0	0	
Construction For Sales P/L Intang Drive Pipe Onductor Pipe Nater String Surface Casing Intermediate Casing Production Casing Or Liner Utiling NIC Well Equipment Veilibed, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples Tumping Unit, Engine Life Equipment (Bipe, Rods, Anchors) Metering Equipment (Bipe, Rods, Englishe – Well NIC Lease Equipment Tanglible – Well NIC Lease Equipment Innks, Tanks Steps, Stairs Saltery (Teater, Tester, Separator,) Pipeline to Sales Tanglible – Leas Tanglible – Leas	l Equipment e Equipment		DWEB.135 DWEB.135 DWEB.145 DWEB.145 DWEB.145	0	0	0	DIGC 285 DIWEA 100 DAWEA 105 DAWEA 105 DAWEA 105 DAWEA 105 DAWEA 106 DAWEA 106 DAWEA 107 DAWEA 108			0	0	0	
Construction For Sales P/L Intang Drive Pipe Onductor Pipe Nater String Surface Casing Intermediate Casing Production Casing Or Liner Utiling NIC Well Equipment Veilibed, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples Tumping Unit, Engine Life Equipment (Bipe, Rods, Anchors) Metering Equipment (Bipe, Rods, Englishe – Well NIC Lease Equipment Tanglible – Well NIC Lease Equipment Innks, Tanks Steps, Stairs Saltery (Teater, Tester, Separator,) Pipeline to Sales Tanglible – Leas Tanglible – Leas	l Equipment e Equipment		DWEB.135 DWEB.135 DWEB.145 DWEB.145 DWEB.145	0	0	0	DIGC 285 DIWEA 100 DAWEA 105 DAWEA 105 DAWEA 105 DAWEA 105 DAWEA 106 DAWEA 106 DAWEA 107 DAWEA 108			0	0	0	
Construction For Sales P/L Intang Drive Pipe Onductor Pipe Nater String Surface Casing Intermediate Casing Production Casing Or Liner Utiling NIC Well Equipment Veilibed, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples Tumping Unit, Engine Life Equipment (Bipe, Rods, Anchors) Metering Equipment (Bipe, Rods, Englishe – Well NIC Lease Equipment Tanglible – Well NIC Lease Equipment Innks, Tanks Steps, Stairs Saltery (Teater, Tester, Separator,) Pipeline to Sales Tanglible – Leas Tanglible – Leas	l Equipment e Equipment		DWEB.135 DWEB.135 DWEB.145 DWEB.145 DWEB.145	0	0	0	DIGC 285 DIWEA 100 DAWEA 105 DAWEA 105 DAWEA 105 DAWEA 105 DAWEA 106 DAWEA 106 DAWEA 107 DAWEA 108			0	0	0	
Construction For Sales P/L Intang Drive Pipe Conductor Pipe Mater String Surface Casing Intermediate Casing Production Casing Or Liner Tubing NIC Well Equipment Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples Pumping Unit, Engine Life Equipment (Bipp, Rods, Anchors) Wetering Equipment Tangible - Well NIC Lease Equipment Tangible - Well NIC Lease Equipment Tanks Steps, Stairs Saletery (Feater Treater, Separator) Pipeline Units (Line Pipe From Wellhead) Offshore Production Structure For Pipeline to Sales Tangible - Leas Tangible - Leas	l Equipment e Equipment		DWEB.135 DWEB.135 DWEB.145 DWEB.145 DWEB.145	0	0	0	DIGC 285 DIWEA 100 DAWEA 105 DAWEA 105 DAWEA 105 DAWEA 105 DAWEA 106 DAWEA 106 DAWEA 107 DAWEA 108			0	0	0	
Construction For Sales P/L Intang Drive Pipe Conductor Pipe Mater String Surface Casing Intermediate Casing Production Casing Or Liner Tubing NIC Well Equipment Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples Pumping Unit, Engine Ide Equipment (Bips, Rods, Anchors) Wetering Equipment Tangible - Well NIC Lease Equipment Tangible - Well NIC Lease Equipment Tanks Steps, Stairs Saletery (Feater Treater, Separator) Pipeline Units (Line Pipe From Wellhead) Offshore Production Structure For Pipeline to Sales Tangible - Leas P&A Costs	l Equipment e Equipment		DWEB.135 DWEB.135 DWEB.145 DWEB.145 DWEB.145	0	0	0	DIGC 285 DIWEA 100 DAWEA 105 DAWEA 105 DAWEA 105 DAWEA 105 DAWEA 106 DAWEA 106 DAWEA 107 DAWEA 108			0	0	0	
Construction For Sales P/L Intang Drive Pipe Conductor Pipe Water String Surface Casing Intermediate Casing Production Casing Or Liner Tübing NIC Well Equipment Wellhead, Tree, Chokes Liner Hanger, Solation Packer Packer, Nipples Pumping Unit, Engine Life Equipment (Biph, Rods, Anchors) Metering Equipment Tangible - Well NIC Lease Equipment Tangible - Well NIC Lease Equipment Tanks Steps, Stairs Battery (Healter Treater, Separator,) Pipeline to Sales Tangible - Leas Tangible - Leas	l Equipment e Equipment		DWEB.135 DWEB.135 DWEB.145 DWEB.145 DWEB.145	0	0	0	DIGC 285 DIWEA 100 DAWEA 105 DAWEA 105 DAWEA 105 DAWEA 105 DAWEA 106 DAWEA 106 DAWEA 107 DAWEA 108			0	0	0	
Construction For Sales P/L Intang Drive Pipe Conductor Pipe Mater String Surface Casing Intermediate Casing Production Casing Or Liner Tubing NIC Well Equipment Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples Pumping Unit, Engine Ide Equipment (Bips, Rods, Anchors) Wetering Equipment Tangible - Well NIC Lease Equipment Tangible - Well NIC Lease Equipment Tanks Steps, Stairs Saletery (Feater Treater, Separator) Pipeline Units (Line Pipe From Wellhead) Offshore Production Structure For Pipeline to Sales Tangible - Leas P&A Costs	l Equipment e Equipment		DWEB.135 DWEB.135 DWEB.145 DWEB.145 DWEB.145	0	0	0	DIGC 285 DIWEA 100 DAWEA 105 DAWEA 105 DAWEA 105 DAWEA 105 DAWEA 106 DAWEA 106 DAWEA 107 DAWEA 108			0	0	0	
Construction For Sales P/L Intang Drive Pipe Conductor Pipe Mater String Surface Casing Intermediate Casing Production Casing Or Liner Tubing NIC Well Equipment Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples Pumping Unit, Engine Ide Equipment (Bips, Rods, Anchors) Wetering Equipment Tangible - Well NIC Lease Equipment Tangible - Well NIC Lease Equipment Tanks Steps, Stairs Saletery (Feater Treater, Separator) Pipeline Units (Line Pipe From Wellhead) Offshore Production Structure For Pipeline to Sales Tangible - Leas P&A Costs	l Equipment e Equipment		DWEB.135 DWEB.135 DWEB.145 DWEB.145 DWEB.145	0	0	0	DIGC 285 DIWEA 100 DAWEA 105 DAWEA 105 DAWEA 105 DAWEA 105 DAWEA 106 DAWEA 106 DAWEA 107 DAWEA 108			0	0	0	
Construction For Sales P/L Intang Drive Pipe Onductor Pipe Nater String Surface Casing Intermediate Casing Production Casing Or Liner Utiling NIC Well Equipment Veilibed, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples Tumping Unit, Engine Life Equipment (Bipe, Rods, Anchors) Metering Equipment (Bipe, Rods, Englishe – Well NIC Lease Equipment Tanglible – Well NIC Lease Equipment Innks, Tanks Steps, Stairs Saltery (Teater, Tester, Separator,) Pipeline to Sales Tanglible – Leas Tanglible – Leas	l Equipment e Equipment		DWEB.135 DWEB.135 DWEB.145 DWEB.145 DWEB.145	0	0	0	DIGC 285 DIWEA 100 DAWEA 105 DAWEA 105 DAWEA 105 DAWEA 105 DAWEA 106 DAWEA 106 DAWEA 107 DAWEA 108			0	0	0	
Construction For Sales P/L Intang Drive Pipe Onductor Pipe Nater String Surface Casing Intermediate Casing Production Casing Or Liner Utiling NIC Well Equipment Veilibed, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples Tumping Unit, Engine Life Equipment (Bipe, Rods, Anchors) Metering Equipment (Bipe, Rods, Englishe – Well NIC Lease Equipment Tanglible – Well NIC Lease Equipment Innks, Tanks Steps, Stairs Saltery (Teater, Tester, Separator,) Pipeline to Sales Tanglible – Leas Tanglible – Leas	l Equipment e Equipment		DWEB.135 DWEB.135 DWEB.145 DWEB.145 DWEB.145	0	0	0	DIGC 285 DIWEA 100 DAWEA 105 DAWEA 105 DAWEA 105 DAWEA 105 DAWEA 106 DAWEA 106 DAWEA 107 DAWEA 108			0	0	0	
Construction For Sales P/L Intang Drive Pipe Conductor Pipe Mater String Surface Casing Intermediate Casing Production Casing Or Liner Tubing NIC Well Equipment Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples Pumping Unit, Engine Ide Equipment (Bips, Rods, Anchors) Wetering Equipment Tangible - Well NIC Lease Equipment Tangible - Well NIC Lease Equipment Tanks Steps, Stairs Saletery (Feater Treater, Separator) Pipeline Units (Line Pipe From Wellhead) Offshore Production Structure For Pipeline to Sales Tangible - Leas P&A Costs	l Equipment e Equipment		DWEB.135 DWEB.135 DWEB.145 DWEB.145 DWEB.145	0	0	0	DIGC 285 DIWEA 100 DAWEA 105 DAWEA 105 DAWEA 105 DAWEA 105 DAWEA 106 DAWEA 106 DAWEA 107 DAWEA 108			0	0	0	
Construction For Sales P/L Intang Drive Pipe Onductor Pipe Nater String Surface Casing Intermediate Casing Production Casing Or Liner Utiling NIC Well Equipment Veilibed, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples Tumping Unit, Engine Life Equipment (Bipe, Rods, Anchors) Metering Equipment (Bipe, Rods, Englishe – Well NIC Lease Equipment Tanglible – Well NIC Lease Equipment Innks, Tanks Steps, Stairs Saltery (Teater, Tester, Separator,) Pipeline to Sales Tanglible – Leas Tanglible – Leas	l Equipment e Equipment		DWEB.135 DWEB.135 DWEB.145 DWEB.145 DWEB.145	0	0	0	DIGC 285 DIWEA 100 DAWEA 105 DAWEA 105 DAWEA 105 DAWEA 105 DAWEA 106 DAWEA 106 DAWEA 107 DAWEA 108			0	0	0	
Construction For Sales P/L Intang Drive Pipe Conductor Casing Cond	l Equipment e Equipment		DWEB.135 DWEB.135 DWEB.145 DWEB.145 DWEB.145	0	0	0	DIGC 285 DIWEA 100 DAWEA 105 DAWEA 105 DAWEA 105 DAWEA 105 DAWEA 106 DAWEA 106 DAWEA 107 DAWEA 108			0	0	0	
Construction For Sales P/L Intang Drive Pipe Conductor Pipe Conductor Pipe Nater String Intermediate Casing Intermediate Int	l Equipment e Equipment		DWEB.135 DWEB.135 DWEB.145 DWEB.145 DWEB.145	0	0	0	DIGC 285 DIWEA 100 DAWEA 105 DAWEA 105 DAWEA 105 DAWEA 105 DAWEA 106 DAWEA 106 DAWEA 107 DAWEA 108				0	0	
intang Whe Pipe Conductor Pipe Water String Water Stri	l Equipment e Equipment		DWEB.135 DWEB.135 DWEB.145 DWEB.145 DWEB.145	0	0	0	DIGC 285 DIWEA 100 DAWEA 105 DAWEA 105 DAWEA 105 DAWEA 105 DAWEA 106 DAWEA 106 DAWEA 107 DAWEA 108			0	0	0	
Construction For Sales P/L Intang Drive Pipe Conductor Pipe Conductor Pipe Nater String Intermediate Casing Intermediate Int	l Equipment e Equipment		DWEB.135 DWEB.135 DWEB.145 DWEB.145 DWEB.145	0	0	0	DIGC 285 DIWEA 100 DAWEA 105 DAWEA 105 DAWEA 105 DAWEA 105 DAWEA 106 DAWEA 106 DAWEA 107 DAWEA 108			0	0	0	

61,620

399,291



9.625 @ 3500

Casing

Description

From

Drift

Burst

Cimarex Energy Co. Morning Drilling Report

AFE: Property API # : Prop TD 253084 428085-023.01 42-389-33823 15,367

0.00

Joint Strength

Capacity

		EENMILE 56-18 11	1		TX, Re			Township 8 / Blk 53				camp A		Date	un, Jul	7, 201
Confractor	H&P 218	Rpt # DFS 7 1.250	ODFS Pre	esent Operati		rill 12 1/	4 Hole @	3071			-	MD 3,071	3,071	Footage 2,081	160.08	13.00
ormation	Red Bed/Anhydr	BGG	2 00	10	1995							-1011	0,011			-
DP Size		DP Av DC Av Jet Velo		Q Inch Bit Di		Cost/Ft 24 Hi	rs.:	Cost/F	1.(OA)	La	st Shoe	TVD	Frac Gra	dient MW	Max Allow	vable SIC
0.00		125 219 272		2.13		\$37.40	-	\$15			0		_	.00		0
Pump 6	6.00 PZ-11 6.00 11.00) 100 3.8		PZ-1	11.00	100	3.8		0.83				GP	76		0#BP
	Stroke Stand P				Stand Pipe	EDR	Chok		w Stroke	Stand 8	Pipe	EDR	Chok			On BP
- W	Win MW Out V	Sin VSOM PV y	P Gel S	trength	APiFiltrate	LCM	MWtr	MW.C	ut VS in	VS OL	d P	V YP	Gal S	Strength	HTHE	2,300
			1 1	1	100.00	SAME.	0	8110	20 X010	¥3.00	a L	¥ 1E	5013	30 (0.1620.)	Birs.	100
1		Liquid Sand MBT		PM 0.04	PE O O O	ME	Cake	Solida	Liquid	Sans	l é	UKPOM	WES	ES	CACLE	NACI
_	1 0.60 5	99.40 0.01	7.00 o.w	0.01	0.01 Depth Cf	0.11 hecked	D Chlor	tes	100,00 Galgium	DiPct	Water	Pet 0.	W	Lime	Depth Ch	ecked
	4,100	99.40		-	1076@	-	, eccomo				SHOW				. HIM I I I I I	
題	U 22 22 22 22 22 22 22 22 22 22 22 22 22	Manufacturer Type Ulterra U616		Serial # 19160		#1 Jet#2 4 14		1#4 Jet 14 1		Jet #7	Jet #8	TFA 0.902	0	WOB 33-33	Rotary F	
Bit	AND RESIDENCE OF THE PARTY OF T			um, Bit Hrs.	Inner			Location	Bearing	Guage	Oth	-		Off Pressure	Motor R	
12 Bt	1000000		52.96	6.25 Serial #	1	3 #1 Jet#2	BT Jet#3 J	t#4 Jet	X #5 Jet #6	In Jet #7	C7 Jet #8	TFA	A 4	450 - 450 WOB	123 - 1 Rotary F	
		mith Tool Ct MI616		JG734		4 14		14 1		201.97	201.90	0.902	0	32-42	60 -6	
Bit		THE STATE OF THE S	62.20	um. Bit Hrs. 18,50	Inner	Outer	Dull	Location	Bearing	Guage	Oth	er Reas		Off Pressure	Motor R 117 - 1	
1,0 Pre	ag Torque, and Weight	1,967 12.25 Diesel	02.20	10.50		Mud.i	additives in la	st 24 hours						arming / Mud D		23
Pickup V		,000 Diesel on Hand	6,168	transport		4 Engin	eer - 24 HI	1	scale Char	ge		Daily Solids		bbls		\$0.
Stackoff		,000 Diesel Received ,000 Diesel Used Today	1,359	Aquagel	2	80 mf-55		3	soda Ash			Total Solids Daily Liquid		bbls		\$0.
verage Maximur		000 Natural Gar	1	1							- 1	Total Liquid	is =	bbls	0	\$0.
		,000 Meter Reading		1									BC	3P Pressure Te	sting	
		,000 MCF Used Today					60.0		-		_	Last BOP T		4100		ince:
Daily	Rotating 2,081	Sliding	Total 2,081	BHA# 2 Feet	R	otating 1,987	Slidi	ng	Total 1,987	_	Code	MIRU/RDM	Distribut 40	tion	Daily	133.00
Hours	13.00		13.00	Hours		12.25			12.25			Drilling Washing/R	a memin o		0.50	18.50
ROP %Time	160.08		160,08	ROP %Time		162.20			162.20			Tripping	eaming		8.75	13.75
%Feet	100.00			%Feet		100.00					and Carles	Lubricate F Deviation S			0.50	1.75
Hours	Time Desc			ogical Acti	vity (0600 F	lours to 06	00 Hours)			_	Tot			165	24.00	168.0
0.50	Lubricate Rig	Service rig (fix oil leak o	n top drive)													
0.50	Lubricate Rig Drilling	Service rig (fix oil leak o Rotating from 990' to 1,0 MotorDiffPressure=450 Pressure=1,600	84', 94 FT @						123							
0.75	Drilling Deviation Survey	Rotating from 990' to 1,0 MotorDiffPressure=450 Pressure=1,600 Survey @ 1001', 3.9	84', 94 FT @ Mud Weight*						123							
0.75	Drilling	Rotating from 990' to 1,0 MotorDiffPressure=450 Pressure=1,600	84', 94 FT @ Mud Weight* ight hole)						123							
0.75 0.25 4.00 0.25 1.25	Deviation Survey Tripping Tripping Tripping	Rotating from 990' to 1,0 Motor DiffPressure=450 Pressure=1,600 Survey @ 1001', 3,9 Trip out for scout tool (T JSA on laying down scout Lay down scout tool & bi	84', 94 FT @ Mud Weight= ight hole) ut tool t #1						123							
0.75 0.25 4.00 0.25	Drilling Deviation Survey Tripping Tripping	Rotating from 990' to 1,0 MotorDiffPressure=450 Pressure=1,600 Survey @ 1001', 3.9 Trip out for scout tool { T JSA on laying down scot Lay down scout tool & bi Pick up new scout tool & Trip in hole with BHA#2	84', 94 FT @ Mud Weight= ight hole) ut tool t #1						123							
0.75 0.25 4.00 0.25 1.25 1.00	Deviation Survey Tripping Tripping Tripping Tripping	Rotating from 990' to 1,0 MotorDiffPressure=450 Pressure=4,500 Survey @ 1001', 3.9 Trip out for scout tool (T JSA on laying down scot Lay down scout tool & Dick up new sco	84', 94 FT @ Mud Weight= ight hole) ut tool t #1 bit #2 .273', 189 FT	8.4 Viscon	ROP WOE	lons Per M	ryRPM=60	Pump								
0.75 4.00 0.25 1.25 1.00 1.50 0.50 1.25	Drilling Deviation Survey Tripping Tripping Tripping Tripping Tripping Washing/Reaming Drilling Tripping	Rotating from 990' to 1,0 Motor DiffPressure=450 Pressure=4,500 Survey @ 1001', 3.9 Trip out for scout tool (T JSA on laying down scout tool & Diffe to 1000 prick up new scout tool & Diffe to 1000 prick up new scout tool & Trip in hole with BHA#2 Wash 90' to bottom Rotating from 1,084' to 1 Motor DiffPressure=500 Pressure=1,825 Install rotating head.	84', 94 FT @ Mud Weight= ight hole) at tool t #1 bit #2 ,273', 189 FT Mud Weight=	8.4 Viscon	ROP WOE	Jons Per M 3=33 Rota Jons Per M	ryRPM=60 linute=767	Pump MotorRP Pump	M=123							
0.75 0.25 4.00 0.25 1.25 1.00 1.50 0.50 1.25	Drilling Deviation Survey Tripping Tripping Tripping Tripping Tripping Washing/Reaming Drilling Tripping	Rotating from 990' to 1,0 Motor DiffPressure=450 Pressure=1,000 Survey @ 1001', 3.9 Trip out for scout tool (T JSA on laying down scout tool & bi-pick up new scout tool & Trip in hole with BHA#2 Wash 90' to bottom Rotating from 1,084' to 1 Motor DiffPressure=500 Pressure=1,825	84', 94 FT @ Mud Weight= light hole) It tool It #1 bit #2 .273', 189 FT Mud Weight= .557', 284 FT	8.4 Viscon	ROP WOE	B=33 Rota Ions Per M	ryRPM=60 inute=768	MotorRP Pump MotorRP	M=123							
0.75 4.00 0.25 1.25 1.00 1.50 0.50 1.25 0.75 1.50	Drilling Deviation Survey Tripping Tripping Tripping Tripping Tripping Washing/Reaming Orilling Tripping Drilling Deviation Survey	Rotating from 990' to 1,0 Motor DiffPressure=450 Pressure=1,600 Survey @ 1001', 3.9 Trip out for scout tool (T 3SA on laying down scou. Lay down scout tool & bi Pick up new scout tool & bi Pick up new scout tool & bi Pick up new scout tool & Trip in hole with BHA #2 Wash 90' to bottom Rotating from 1,084' to 1 Motor DiffPressure=500 Pressure=1,825 Install rotating head. Rotating from 1,273' to 1 Motor DiffPressure=600 Pressure=2,200 Survey @ 1476'.1'	Mud Weights ight hole) if tool if tool if 1 bit #2 273', 189 F1 Mud Weights 557', 284 F1 Mud Weights	@ 151.20 8.4 Viscon	ROP WOE ity=28 Gal	B=33 Rota Ions Per M 3=32 Rota Ions Per M	ryRPM=60 inute=767 ryRPM=60 inute=731	MotorRP Pump MotorRP Pump	M=123							
0.75 4.00 0.25 1.25 1.00 1.50 0.50 1.25 0.75 1.50	Drilling Deviation Survey Tripping Tripping Tripping Tripping Tripping Washing/Reaming Orilling Tripping Drilling Deviation Survey Drilling	Rotating from 990' to 1,0 Motor DiffPressure=450 Pressure=1,600 Survey @ 1001', 3.9 Trip out for scout tool (T 35A on laying down scout tool & bi-pick up new scout tool & bi-pick up new scout tool & Trip in hole with BHA #2 Wash 90' to bottom Rotating from 1,084' to 1 Motor DiffPressure=500 Pressure=1,825 Install rotating head. Rotating from 1,273' to 1 Motor DiffPressure=600 Pressure=2,200 Survey @ 1476'. 1' Rotating from 1,557' to 2 Motor RPM=123. Motor Dump Pressure=2,300 Pump Pressure=2,300 Pu	Mud Weights ight hole) if tool if #1 bit #2 273', 189 F1 Mud Weights 557', 284 F1 Mud Weights ,030', 473 F1	@ 151.20 8.4 Viscos @ 189.33 9.2 Viscos	ROP WOE ity=28 Gal ROP WOE ity=28 Gal ROP WOE ROP WOE ROP WOE	3=33 Rota Jons Per M 3=32 Rota Jons Per M 3=33 Rota 3=33 Rota	ryRPM=60 linute=767 ryRPM=60 linute=731	MotorRP Pump MotorRP Pump	M=123 M=117							
0.75 0.25 4.00 0.25 1.25 1.50 0.50 1.25 0.75 1.50 0.25 2.50	Drilling Deviation Survey Tripping Tripping Tripping Tripping Tripping Washing/Reaming Drilling Drilling Deviation Survey Drilling	Rotating from 990' to 1,0 Motor DiffPressure=450 Pressure=1,600 Survey @ 1001', 3.9 Tip out for scout tool (T JSA on laying down scout tool & Discout tool &	84', 94 FT @ Mud Weight* light hole) If tool	@ 151.20 @ 159.20 @ 189.33 @ 2 Viscos @ 189.20 @ 189.20 @ 189.20 @ 189.20	ROP WOEldy=28 Gall ROP WOEldy=28 Gall ROP WOEldy=28 Gall ROP WOEldy=2 1	B=33 Rota lons Per M B=32 Rota lons Per M S=33 Rota Viscosity=2	ryRPM=60 inute=767 ryRPM=60 inute=731 ryRPM=60 8 Gallons	MotorRP Pump MotorRP Pump	M=123 M=117 M=731							
0.75 4.00 0.25 1.25 1.00 1.50 0.50 1.25 0.75 1.50	Drilling Deviation Survey Tripping Tripping Tripping Tripping Tripping Washing/Reaming Orilling Tripping Drilling Deviation Survey Drilling	Rotating from 990' to 1,0 Motor DiffPressure=450 Pressure=1,500 Survey @ 1001', 3.9 Trip out for scout tool (T 35A on laying down scou. Lay down scout tool & bi Pick up new scout tool & bi Pick up new scout tool & Trip in hole with BHA #2 Wash 90' to bottom Rotating from 1,084' to 1 Motor DiffPressure=500 Pressure=1,825 Install rotating head. Rotating from 1,273' to 1 Motor DiffPressure=600 Pressure=2,200 Survey @ 1476' 1' Rotating from 1,557' to 2 Motor RPM=123 Motor Dump Pressure=2,350 Survey @ 1949' 4' Rotating from 2,030' to 2 Motor DiffPressure=2,300 to 2 Motor DiffPressure=2,300 Survey @ 1949' 4' Rotating from 2,030' to 2 Motor DiffPressure=2,300' to 2 Motor DiffPressure=8450 Survey @ 1949' 4' Rotating from 2,030' to 2 Motor DiffPressure=8500' to 2 Motor DiffPressure=8450' to 1001 Pressure=8450' to 1001 Pressure=850'	84', 94 FT @ Mud Weight* light hole) It tool It #1 bit #2 273', 189 FT Mud Weight* Mud Weight* ,030', 473 FT iffPressure=6 ,553', 473 FT	@ 151.20 @ 151.20 @ 189.33 9.2 Viscot @ 189.20 @ 189.20	ROP WOE ity=28 Gal ROP WOE ity=28 Gal ROP WOE leight=9.2 1	3=33 Rota Jons Per M 3=32 Rota Jons Per M 3=33 Rota Viscosity=2	ryRPM=60 linute=767 ryRPM=60 linute=767 ryRPM=60 linute=731 ryRPM=60 28 Gallons	MotorRP Pump MotorRP Pump) Per Minut MotorRP	M=123 M=117 M=731							
0.75 4.00 0.25 1.25 1.00 0.50 1.50 0.75 1.50 0.25 2.50 0.25 2.75	Drilling Deviation Survey Tripping Tripping Tripping Tripping Tripping Washing/Reaming Orilling Tripping Drilling Deviation Survey Drilling Deviation Survey Drilling Deviation Survey Drilling	Rotating from 990' to 1,0 Motor DiffPressure=450 Pressure=1,600 Survey @ 1001', 3.9 Trip out for scout tool (T JSA on laying down scout Lay down scout tool & bi Pick up new scout tool & bi Pick up new scout tool & Trip in hole with BHA #2 Wash 90' to bottom Rotating from 1,084' to 1 Motor DiffPressure=500 Pressure=1,825 install rotating head. Rotating from 1,273' to 1 Motor DiffPressure=600 Pressure=2,200 Survey @ 1476'.1' Rotating from 1,557' to 2 Motor RPM=123 Motor Dump Pressure=2,350 Survey @ 1949'. Rotating from 2,030' to 2 Motor DiffPressure=2,350 Survey @ 1949'. Rotating from 2,030' to 2 Motor DiffPressure=650 Pressure=2,550 Survey @ 242' 4'	84', 94 FT @ Mud Weight* light hole) It tool It #1 bit #2 ,273', 189 FT Mud Weight* Mud Weight* ,030', 473 FT iffPressure=6 ,503', 473 FT Mud Weight*	#8.4 Viscon #8.4 Viscon #8.4 Viscon #8.2 Viscon #8.9 20 Viscon #8.9 20 Viscon #8.9 20 Viscon #8.9 20 Viscon	ROP WOE ity=28 Gal ROP WOE ity=28 Gal ROP WOE ity=28 Gal	3=33 Rotas Jons Per M 3=32 Rotas Jons Per M 3=33 Rotas Viscosity=2 3=42 Rotas Jons Per M	ryRPM=60 linute=767 ryRPM=60 linute=731 ryRPM=60 28 Gallons ryRPM=730	MotorRP Pump MotorRP Pump) Per Minut MotorRP Pump	M=123 M=117 he=731 M=117							
0.75 4.00 0.25 1.25 1.00 0.50 1.50 0.75 1.50 0.25 2.50 0.25 2.75	Drilling Deviation Survey Tripping Tripping Tripping Tripping Tripping Washing/Reaming Drilling Tripping Drilling Deviation Survey Drilling Deviation Survey Drilling	Rotating from 990' to 1,0 MotorDiffPressure=450 Pressure=1,600 Survey @ 1001', 3.9 Trip out for scout tool { T JSA on laying down scout Lay down scout tool & b Pick up new scout tool & Trip in hole with BHA #2 Wash 90' to bottom Rotating from 1,084' to 1 MotorDiffPressure=500 Pressure=1,825 Install rotating head Rotating from 1,273' to 1 MotorDiffPressure=200 Survey @ 1476'.1' Rotating from 1,557' to 2 MotorRPM=123 MotorD Pump Pressure=2,350 Survey @ 1949'.4' Rotating from 2,030' to 2 MotorDiffPressure=650 Pressure=2,250 MotorDiffPressure=650 Pressure=2,250	84', 94 FT @ Mud Weight* light hole) If tool I #1 bit #2 273', 189 FT Mud Weight* ,557', 284 FT Mud Weight* ,030', 473 FT Mud Weight* ,030', 473 FT Mud Weight*	#8.4 Viscon #6.8 151.20 #6.8 151.20 #6.8 189.33 #9.2 Viscon #6.189.20 #6.189.20 #6.189.20 #6.189.20 #6.189.20	ROP WOE ity=28 Gal ROP WOE ity=28 Gal ROP WOE ity=29 Gal ROP WOE ity=29 Gal	3=33 Rota lons Per M 3=32 Rota lons Per M 3=33 Rota Viscosity=2 3=42 Rota lons Per M	ryRPM=60 inute=767 ryRPM=60 inute=731 ryRPM=60 88 Gallons ryRPM=75 inute=730	MotorRP Pump MotorRP Pump MotorRP Pump MotorRP Pump MotorRP MotorRP MotorRP MotorRP MotorRP MotorRP	M=123 M=117 he=731 M=117							
0.75 4.00 0.25 4.00 0.25 1.25 1.00 1.50 0.50 1.25 0.75 1.50 0.25 2.50 0.25 2.75	Drilling Deviation Survey Tripping Tripping Tripping Tripping Tripping Tripping Tripping Drilling Drilling Deviation Survey Drilling Deviation Survey Drilling Deviation Survey Drilling Deviation Survey Drilling	Rotating from 990' to 1,0 Motor DiffPressure=450 Pressure=1,000 Survey @ 1001', 3.9 Trip out for scout tool (T JSA on laying down scout tool & Direct DiffPressure=500 Pressure=1,825 Install rotating from 1,084' to 1 Motor DiffPressure=500 Pressure=2,200 Survey @ 1476' 1' Rotating from 1,273' to 1 Motor DiffPressure=2,200 Survey @ 1476' 1' Rotating from 1,557' to 2 Motor DiffPressure=2,200 Survey @ 1499' 4" Rotating from 2,030' to 2 Motor DiffPressure=2,250 Survey @ 242' 4" Rotating from 2,030' to 2 Motor DiffPressure=650 Pressure=2,250 Survey @ 2242' 4" Rotating from 2,030' to 2 Motor DiffPressure=650 Pressure=2,250 Survey @ 2895' 1.0" Survey @ 2895' 1.0"	Mud Weight* (Strict of the control	#8.4 Viscon ### 151.20 ### 189.33 ### 19.2 Viscon ### 172.00	ROP WOE ity=28 Gal ROP WOE ity=28 Gal ROP WOE ity=29 Gal ROP WOE ity=29 Gal	3=33 Rota lons Per M 3=32 Rota lons Per M 3=33 Rota Viscosity=2 3=42 Rota lons Per M	ryRPM=60 inute=767 ryRPM=60 inute=731 ryRPM=60 88 Gallons ryRPM=75 inute=730	MotorRP Pump MotorRP Pump) Per Minut MotorRP Pump MotorRP	M=123 M=117 M=117 M=117 M=117							
0.75 4.00 0.25 4.00 0.25 1.00 1.50 0.50 1.25 0.75 1.50 0.25 2.50 0.25 2.75 0.25 0.25 0.25 0.25 0.25 0.25	Drilling Deviation Survey Tripping Tripping Tripping Tripping Tripping Washing/Reaming Orilling Drilling Deviation Survey Drilling Deviation Survey Drilling Deviation Survey Drilling	Rotating from 990' to 1,0 MotorDiffPressure=450 Pressure=1,600 Survey @ 1001', 3.9 Trip out for scout tool (T 35A on laying down scou. Lay down scout tool & bi Pick up new scout tool & bi Rotating from 1,2673' to 1 MotorDiffPressure=500 Pressure=2,350 Survey @ 1476' .1' Rotating from 1,557' to 2 MotorDiffPressure=650 Pressure=2,250 Survey @ 1242' 4' Rotating from 2,503' to 2 MotorDiffPressure=650 Pressure=2,200 Survey @ 2895' 1.0' Rotating from 2,593' to 2 MotorDiffPressure=650 Pressure=2,200 Survey @ 2895' 1.0' Rotating from 2,976' to 3 MotorDiffPressure=650 Pressure=2,200 Survey @ 2895' 1.0' Rotating from 2,976' to 3 MotorDiffPressure=650 Pressure=2,200 Survey @ 2895' 1.0' Rotating from 2,976' to 3 MotorDiffPressure=650	84', 94 FT @ Mud Weight* light hole) It tool It #1 bit #2 273', 189 FT Mud Weight* Mud Weight* ,030', 473 FT Mud Weight* ,976', 473 FT Mud Weight* ,976', 473 FT Mud Weight*	#8.4 Viscon F@ 151.20 #8.4 Viscon F@ 189.33 #9.2 Viscon F@ 189.20 F@ 172.00 Mud W #9.6 Viscon F@ 145.54 #9.7 Viscon @ 95.00 R	ROP WOE ity=28 Gal ROP WOE ity=28 Gal ROP WOE ity=29 Gal ROP WOE ity=29 Gal	3=33 Rotalions Per M 3=32 Rotalions Per M 3=33 Rotalions Per M 3=342 Rotalions Per M 3=42 Rotalions Per M 42 RotaryF	ryRPM=60 linute=767 ryRPM=60 linute=731 ryRPM=60 28 Gallons ryRPM=75 linute=730 ryRPM=75 N	MotorRP Pump MotorRP Pump MotorRP Pump MotorRP Pump MotorRP Pump	M=123 M=117 M=117 M=117 M=117							
0.75 4.00 0.25 4.00 0.25 1.25 1.00 1.50 0.50 1.25 0.75 1.50 0.25 2.50 0.25 2.75	Drilling Deviation Survey Tripping Tripping Tripping Tripping Tripping Tripping Tripping Drilling Drilling Deviation Survey Drilling Deviation Survey Drilling Deviation Survey Drilling Deviation Survey Drilling	Rotating from 990' to 1,0 Motor DiffPressure=450 Pressure=1,600 Survey @ 1001', 3.9 Trip out for scout tool (T JSA on laying down scou. Lay down scout tool & Di Pick up new scout not be Rotating from 1,084' to 1 Motor DiffPressure=500 Pressure=2,200 Survey @ 1476' .1' Rotating from 1,557' to 2 Motor DiffPressure=650 Pressure=2,250 Survey @ 242' .4' Rotating from 2,030' to 2 Motor DiffPressure=650 Pressure=2,250 Survey @ 2242' .4' Rotating from 2,503' to 2 Motor DiffPressure=650 Pressure=2,200 Survey @ 2895' 1.0' Rotating from 2,976' to 3 Rotating from 2,976' to 3 Rotating from 2,976' to 3	Mud Weight- ight hole) if tool if too	#8.4 Viscon ### 151.20 ### 189.33 ### 172.00 ### 1	ROP WOE ity=28 Gal ROP WOE ity=28 Gal ROP WOE ity=29 Gal ROP WOE ity=29 Gal	3=33 Rotal lons Per M 3=32 Rotal lons Per M 3=33 Rota Viscosity=2 3=42 Rotal lons Per M 42 RotaryF 42 RotaryF 42 RotaryF	ryRPM=60 inute=767 ryRPM=60 inute=731 ryRPM=60 88 Gallons ryRPM=75 inute=730 ryRPM=75 inute=730	MotorRP Pump MotorRP Pump MotorRP Pump MotorRP Pump MotorRP Pump	M=123 M=117 M=117 M=117 M=117							



BLM/BIA

Cimarex Energy Co.

Morning Drilling Report

AFE:

253084 5-023.01 3823

roperty	428085-023.01
API#	42-389-33823
Prop TD :	15,367

Well h	ame							9	tale/County	Sestio	n, Township, Ra
	EIGHTEE	NMIL	E 56-	18 1H	+			T	X, Reeves		18 / Blk 53 /
Contra	ptor / Rig	Rpt #	DFS	8	ODFS	Present I	Operatio	20			
	H&P 218	7	1.2	50	2				Drill 12	1/4 Hole (@ 3071'
Qty	BHA 2		Wt	Grd	Thread	01)	ID	Length	CUM	KOP
1	Smith Tool Co MI616MPX				6 5/8 R	eg 12:2	50 3	.000	1.50	1.50	10,459
-1	Vertical Scoout SDI-962-VS	608-027			6 5/8	10.5	00 2	.500	20.90	22.40	Depth
_1	Double pin SDI-800-XO-00	4			6 5/8	8.5	00 2	875	1.98	24.38	167
1	Baker 9.5 M1XL .16 Rev/G	al 1245			6 5/8	9.5	00		35.93	60.31	645
1	Crossover				6 5/8 X	7 9.2	50 2	.875	2.67	62.98	1.001
1	Shock sub SS 1104				7 5/8	9.8	75 3	.000	13.42	76.40	CONTRACTOR SANGER
- 1	Flo-drift FD 2012088				7 5/8	9.5	00		4.91	81.31	1,476
1	IBS				7 5/8	9.5	00 3	.000	8.05	89.36	1,949
1	Crossover				7 5/8 X	6 9.5	00 3	.000	4,17	93.53	2,422
1	6 - 8" DC				6 5/8	8.0	00 2	.875	178.98	272.51	2,895
1	Crossover				6 5/8 X	4. 7.7	50 2	.875	3.62	276.13	Projection
1	12 - 6" DC		99.00		4.5 XH	6.5	00 2	500	356.40	632.53	2,960
1	Crossover				NC-50	5.0	00 3	.000	2.93	635.46	Final Clos
1	5" NC50 SpiralWate HWDP		59.16	J-55	NC50	5.0	00 3	.000	176.20	811.66	
1	Knight Jars		59,16	J-55	NC50	5.0	00 3	.000	30.21	841.87	Planned
1	5" NC50 SpiralWate HWDP		59.16	J-55	NC50	5.0	00 3	.000	148.33	990.20	
16							ВН	A =	990.20		
66									2,080.80	3,071.00	
66						1	DrillPip	pe =	2,080.80		
						Tot	al Leng	gth =	3,071.00		
							Ke	illy =	0.00		
Last	inspected BHA Hours: 1	8.50				To	tal Dep	oth =	3,071.00		

/ Blk 53 /	CHAR	V	Volfcamp A		S	un, Jul 7	7, 2013
3071'			M₽ 3,071	1∀R 3,071	Footage 2,081	FT/HR 160.08	Hours 13.00
-	MD/TVD / 10,459		Pen Pt MD/T 11,450 / 11,0	USON I		t MD/TVD / 11,000	Pilot N
Depth	Incl.	Azi.	TVD	VS	N/-S	E/-W	DLS
167	1.70	0.00	166.98	2.48	2.48	0.00	1.02
645	2.50	0.00	644.65	19.99	19.99	0.00	0.17
1,001	3.90	0.00	1,000.09	39.86	39.86	0.00	0.39
1,476	0.10	0.00	1,474.71	56.44	56.44	0.00	0.80
1,949	0.40	0.00	1,947.71	58.50	58.50	0.00	0.06
2,422	0.40	0.00	2,420.69	61.81	61.81	0.00	0.00
2,895	1.00	0.00	2,893.66	67.58	67.58	0.00	0.13
Projection	To Bit:	65.00					
2,960	1.00	0.00	2,958.65	68.38	68.38	0.00	0.11
Final Clos	sure =	67.58	feet @	0.00 Az	imuth	New Su	non
Planned \	/S =	0.00	feet @	0.00 Az	imuth	Hew Su	xey.

Objective

Contact		
Engineer	Mark Audas	432.620.1928
Foreman - Day	Lyman Nance	580-216-1492
Foreman - Night	Jody Solansky	210.334.8052
Manager	Larry Seigrist	432.620.1934
Safety Supt	Fred Jones	918.606.5904
Safety Supt	Sheldon Waeger	918.557.4177
Superintendent	Scott Lucas	432.894.5572

Contact Computer Geologist Landman 303-285.2380 432.571.7844 432.571.7806 Wellsite 36 Kim Nordstog Cody T. Elliot

Daily Well Cost
Cum Drilling Cost
Cum Compl Cost
Cum Well Cost
Cum Intangible Cost
Cum Tangible Cost
Cum Mud Cost \$77,820 \$477,111 \$0 \$477,111 \$477,111 \$0 \$26,505



Well Name

Cimarex Energy Co. Morning Drilling Report

AFE: Property: API#: Prop TD:

253084 428085-023.01 42-389-33823 15,367

EIGHTEE					TX, R			Blk 53 /		Wolfcamp			un, Jul	
Contractor / Rig H&P 218	7 Rpt #	DFS 1.250	ODFS 2	Present Ope		rill 12 1/4 l	Hole @ 30	071'		MD 3,07	1 3,071	Footage 2,081	160.08	Hours 13.00
Sub-Ladger Description	Vand	or & Desc	detten	B.C.P	Daily Drig.	Cum Drig.	Variance To Drig. Ate	A.C.P	Daily Compl.	Cum Compl.	Variance To Compl. Afe	Dry Hole	After Casing	Compl. Well
Sub Ledger Description Roads & Location Preparation / Restore	vend	or & Desc	ription	Code DIDC 100	Cost	99,160	DverAUnder 99,160	Code DICC 100	Cost	Cost	Gver/Under	Cost	Point	Cost
Damages				DIDC 105	-			DICC.105		7777	T. 17	1 7 7 2		
Mud/Fluids Disposal Charges Day Rate	H&P 218 [Da	av Rata / FR	RC Charnel	DIDC:255 DIDC:115	27,135	54,270	54 270	DIGC 235 DIGC 120	-	9				
Misc Prep Cost (Mouse Hole, Rat Hole,	nor ziojoi	ay reason re	ro crimidal	DIDC-120	27,100	29,733	29.733	Na di Nazania				-		
Bits	Smith [12 1/	4 bit]		DIDC 125	12,500	25,000		DICC.125	-	- 1				
Fuel Water 009 / Completion Fluids 109				DIDC 135 DIDC 140		22,275 6,126		DICC.130 DICC.135	-					
Mud & Additives	Fas-Line [Tin	ansfer Pum	p] / Haliburto		8,685	26,505	26,505	<u> </u>					-	
Surface Rentals	American Sa	afety Service	es [H2S Paci	DIDG:150	810	3,470		DICC 140			4	-	-	
Downhole Rentals	Baker [Motor	r] / FLo-drift	(Survey Too		19,200	30,518	30,518	DICC.145	-	-	-	2	-	
DSTS, Formation Tests Mud Logging				DIDC 160 DIDC 170	1							-		
Open Hole Logging	700			DIDC.180	-						-			
Cementing, thru Intermediate Casing				DIDC 185	-	+		DICC 155			-		-	
Tubular Inspections Casing Crews	EL Farmer (2	2 pipe rack]	/ Wilbanks T	DIDC 190 DIDC 195	209	1,254	1.254	DICC 165				-		
Extra labor, Welding, etc.				DIDC 200		1,125	1.125	DICC.170						
Trucking	Logan Trans	portation [D	leliver 4 jts a		750	5,085		DICC 175					-	
Supervision	Brother cons				3,700	29,600		DICC 180	-	- 4	-			
Trailer, Camp & Catering	Cimarex [Sa	telite] [sat/p	hone/interco	DIDC 280 DIDC 220	455	7,185	7.185	DICC 255				-	-	
Other misc expenses Overhead				DIDC 225		8,000	8 000	DICC 190 DICC 196		2				
Remedial Cementing	77			DIDC-231			-	DICC 215	-		-	-	-	
Mobilize & Demobilize	Component			DIDC 240	-	86,925	86,925						-	
Directional Drilling	Lenco [Septi	ic] / Pason [Internet / Wo		270	1,260	1,260	DICC 230					1	
Dock, Dispatcher, Crane Marine/Air Transportation				DIDG 250 DIDG 275				DIGC 250						
Solids Control-Equip/Services	KSW Oiffield	Rentals [FI	oat Pumps]	DIDC 260	250	1,750	1,750				-		-	
Well Control-Equip/Services	Weatherford	[Rot Head]	l l	DIDC 265	150	150	150	DIGG 240	-		-	-	-	
Fishing & Sidetrack Services				DIDC 270		+		DICC 245 DICC 115	-		1	-	-	
Completion Rig Coil Tubing								DICC 260		-		- 0		
Completion Logging, Perforating								DICC:200				-	-	
Stimulation				MEDICAL PROPERTY OF THE PARTY O				DICC.210	-		-			
Legal/Regulatory/Curative	70			DIDC 300 DIDC 285		10,000		DICC 280	1 2		*		*	
Well Control Insurance Contingency				DIDC 235	3,706	5,000 22,720	5,000	DICC.220			2			
Construction For Well Equipment				E45.304537		2001.000	885,180	DWEA 110					-	
Construction For Lease Equipment								DLEQ 110	-	-		-		
Construction For Sales P/L								DICC 265	-	-		-	-	
Intang	ible				77,820	477,111	477,511		0	0		0	0	(
Drive Pipe				DWEB.150	-	-	-	THE RE					-	
Conductor Pipe				OWEB 130	-	7				-		-	-	
Water String				DWEB.135 DWEB.140							-			
Surface Casing Intermediate Casing				DWEB.145	1							-		
Production Casing Or Liner								DWEA 100	12	-		2	-	
Tubing				1000				DWEA 105			-			
N/C Well Equipment				DWEB.115				DWEA 115 DWEA 120				- 2	1	
Wellhead, Tree, Chokes Liner Hanger, Isolation Packer				DWEB.100		- 1		DWEA.125						
Packer, Nipples	-							DWEA 130	-	- 1	1	-		
Pumping Unit, Engine								DLEQ 100	-	-			+	
Lift Equipment (Bhp. Rods, Anchors)								DLEG 105 DLEG 220			-		-	
Metering Equipment Tangible - Well	Fauinmen				0	0	0	acadaca. Kalik	0	0	.0	0	0	
ranginie - Well	Lyaipmen					-			-					
N/C Lease Equipment		505					1111	DLEQ.115	-	-		-	-	
Tanks, Tanks Steps, Stairs								DLEQ 120 DLEQ 125		-		1		
Battery (Heater Treater, Separator) Flow Lines (Line Pipe From Wellhead)								DLEG 125 DLEG 130	1				-	
Offshore Production Structure For								DWEA 135				-		
Pipeline to Sales								DWEA.140	-	-				
Tangible - Leas	e Equipmen	nt			0	0	0		0	0	0	0	0	(
P&A Costs				DIDC 295	-		4	DICC 275	-					
P&A	A				0	0	0		0	0	0	0	0	0
The second second						7								7
Total C	osts				77,820	477,111	427,111		0	0	. 0	0	0	0



AFE : Property : API # :

253084 428085-023.01 42-389-33823

.M/BIA :													- 10	rop TD :		
ell Name El	GHTEENMILE	E 56-18 1H	ı			Ate/County		/ Blk 53 /	e.	4000	camp A		Date		n, Jul t	8, 201
h&P 218	Rpt #	DFS 2.250	ODFS Pr	esent Opera		late on bo	ottom with	9 5/8 casin	ıg	3	MD 3,492	3,49		ootage 421	FT/HR 129.54	3.2
metion Red Bed/Ar	nhydrite/Salt	BGG 0	0		0 10	05										
DP Size DC Size 5.00 8.000		19 Jet Veloc		2.51	Dia.	Cost/F1. 24 \$445.8		Cost/Ft (OA) \$190.38	1	Last Shoe	TVD		o.00	WW	Max Allow	able SIC
Pump #1 - PZ-11		GP GP			-11	\$445.0	GPS		,	0			SPS	GPM	_	Off BP
THE RESERVE OF THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NAMED IN COLUMN TW	N. Pallerson	00 3.83		.00	11.00					esta (Section 1)				767		,300
Slow Stroke S	Stand Pipe EC	OR Chok	e Slow	Stroke	Stand Pi	pe EDR	Choke	Slow Stroi	ke Stan	d Pipe	EDR	Ch	oke		99	.900
MW.in MW.Ou	VS In VS Out	PV Y	P GelS	trength	APIFiltra	te LCM	p MW.in	MW.Out	VS In VS	Dut Pi	V YP	Ge	l Strengt	h	HTHP	LC
10.00 10.00		1		1 EM	100.0		Ĭ.	Solds 11	ouid Sa	end A	AKPOM .	WPS		ES	CACLZ	NACI
1 1.10		and MBT	8.00	0.01			M Cake		ouid <u>Sa</u>	100	SIACOM	MES		inst .	MC/APPE	13/25/2
Chlorides C	Calcium Oil	Water	0.W	Lime		th Checked	Chiorid	es Calciu	n <u>QilPct</u>	Water	Pd 9	.W	Lime		Depth Che	cked
175,000 Bit # Size	Manufacturer	98.90		Serial		2@11:11 Jet#1 Jet#	#2 Jet #3 Jet	#4 Jet#5 Je	et #6 Jet #7	Jet #8	TFA		WOE	n	Rotary R	DU
2 12.25				JG73		14 14			14	Jet. WO	0.90	20	42.4		80 - 8	
8it In Bit Ou 1,084 3,49			55.35	um. Bit Hrs 21.75	i Inne	er Outer	Dull Li	ocation Bea	iring Guag	e Othe	er Rea	ison	Diff Pre		Motor Ri 117 - 1	
Drag Torque, and W		Diesel	33.33	21.75		Mu	d additives in las	t 24 hours				Soil		/ Mud Di		20
ickup Weight		on Hand	5,023	-17.77.53	er - 24 H	7987 7 22	a-DeFOAM F	7 zeo-G			Daily Solid			bbls (\$0 \$0
otating Weight lackoff Weight		Received Used Today	1,145	mf-55		4 cau	SUC	5 Drillin	g Paper		Daily Liqu			bbis		50
verage Drag aximum Drag	15,000	Natural Gus		1							Total Liqui	ds =		bbls (1	\$0
orque On Bottom	Meter	Reading		1									SOP Pres	saure Tes		
aily Rotal	-	Jsed Today	Total	BHA# :	2	Rotating	Slidin	. 7	otal	Code	Last BOP	Test.	utlan		Days sil	cui
	421	ding	421	Feet	-	2,408	Sildin		408	1	MIRU/RD		ution			133.0
	3.25 9.54		3.25 129.54	Hours		15.50 155.35			5.50 5.35		Drilling Washing/	Reaming	9		3.25	21.7
Time 10	0.00		120.04	%Time		100.00				5	Cond. Mu				5.00 5.25	5.0
	0.00			%Feet	41 14 100	100.00	0500 111			323	Tripping Lubricate	Rig			0.50	1.0
3.00 Drilling		rom 3,071' to 3,				00 Hours to WOB=42 Ro		MotorRPM=11	7		Deviation Run Casi				0.25 8.75	8.7
	MotorDiffF Pressure=	ressure=600	Mud Weight	=10 Visco	osity=29	Gallons Per I	Minute=767 P	ump		Tota					4.00	192.0
0.25 Orilling 1.00 Cond. Mud & 3.00 Tripping 0.00 Operational N 3.25 Tripping 0.50 Lubricate Rig 0.75 Run Casing 7.00 Run Casing	MotorDiffF Pressure= Circ Circulate t Trip out Note Notified Ti Lay down Rig service S/M & Rig Make Up I	up casing crev Float Shoe, 2 J	492', 44 FT Mud Weight- urface casin- eeps to clear rag and takin o.m. Linda op tool and bit. v to run 9 5/8 oints 9 5/8 C	#10.1 Vis g. n hole. ng proper perator #8 8 surface (casing, Flo	fill casing.	9 Gallons Pe	r Minute=767	Pump								
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AFE: Property API#: Prop TD

253084 428085-023.01 42-389-33823 15,367

EIGHTEE	NMILE 56-1	8 1H		State/S TX, Re			wnship, Rang 3lk 53 /	2.	<u>Objective</u> Wolfcamp	A	M	Ion, Jul	8, 201
Contractor / Rig H&P 218	Rpt # DFS 2.25	ODFS	Present Ope	ration	e on bottor			ia:	MR 3,49	IVD	Footage	FT/HR 129.54	Hours
1101 210	0 2.20	0 0				Variance	oro cusiii			Variance	421		
			B.C.P	Daily Drig.	Cum Drig.	To Drig. Afe	A.C.P	Daily Compl.	Cum Compl.	To Compl. Afe	Dry Hole	After	Comp
Sub Ledger Description	Vendor & [escription	Code	Cost	Cost	Dver/Under	Code	Cost	Cost	Qve//Under	Cost	Point	Cost
Roads & Location Preparation / Restors			DIDC 100		99.160	99,160	DIGC 100	1			4		
Damages Mud/Fluids Disposal Charges	-		DIDC 105 DIDC 255				DICC 105 DICC 235				*		
Mud/Fluids Disposal Charges Day Rate	H&P 218 [Day Rat	FRC Charge!	DIDC.115	27,135	81,405	81.405	DICC 120						
Misc Prep Cost (Mouse Hole, Rat Hole,		Editor of Contragent	DIDC 120		29,733	29,733							
Bits			DIDC 125	-	25,000		DICC 125						
Fuel			DIDC 135	-	22,275		DICC 130				9		
Water 009 / Completion Fluids 109 Mud & Additives	Fas-Line [Transfer	Dissert / Malth. etc.	DIDC 140	5,646	6,126 32,151	32,151	DICC.135						
Surface Rentals	American Safety S			810	4,280		DICC 140				-		Eller
Downhole Rentals	Baker [Motor] / FLo			9,799	40,317		DICC.145				-	+	
DSTS, Formation Tests			DIDC 160	-	-				-				
Mud Logging			DIDC.170	-								+	
Open Hole Logging Cementing, thru Intermediate Casing	Weatherford [Floa	Enun & Cantra	DIDC 180	10,911	10,911	10.011	DICC 155						
Tubular Inspections	EL Farmer [2 pipe			1,496	2,750		DICC.160						
Casing Crews	Express Energy [C			15,924	15,924	15,924	DICC 165				-		
Extra labor, Welding, etc.			DIDC 200	-	1,125		DIGC:170						
Trucking	Donthes and W	Homes Mary	DIDC 205	3,700	5,085		DICC.175		*		-	-	
Supervision Trailer, Camp & Catering	Brother consulting Cimarex [Satelite]			3,700 455	33,300 7,640		DICC 180 DICC 255					-	
Other misc expenses	(onence)		DIDC.220		,,040	1,019	DICC.190				-	-	
Dverhead			DIDC-225	-	8,000	8,000	DICC 195						
Remedial Cementing			DIDC 231	-			DICC 215		-				
Mobilize & Demobilize	I have been a second	in the second	DIDC 240	070	86,925	86,925					-		
Directional Drilling Dock, Dispatcher, Crane	Lenco (Septic) / Pa	son (internet / W	DIDC 250	270	1,530	1,530	DICC 230		-			*	
Marine/Air Transportation			DIDC 275				DIGG.250		15				
Solids Control-Equip/Services	KSW Oilfield Renta		DIDC 260	250	2,000	2.000			9		-		
Well Control-Equip/Services	Weatherford [Rot	Head]	DIDC 265	150	300	300	DIGC 240					-	
Fishing & Sidetrack Services			DIDC 270	-	-		DICC 245 DICC 115	-			-		
Completion Rig Coll Tubing							DICC 260					- 1	-
Completion Logging, Perforating	7 11 11 11						DICC 200						
Stimulation							DICC 210	-					
Legal/Regulatory/Curative			DIDC.300	-	10,000		DICC 280	-				-	-
Well Control Insurance			DIDC 285 DIDC 435	2 927	5,000	5,000	0100.220				-		
Contingency Construction For Well Equipment			UIDU 430	3,827	26,547	20,047	DICC 220 DWEA 110				-		
Construction For Lease Equipment			100		4 2 3 7		DLEG 110					-	
Construction For Sales P/L							DICC 265	-	-		-	-	
Intang	gible			80,373	557,484	557,484		0	0	0	0	0	
Dalla Dine			OWEB 150										
Drive Pipe Conductor Pipe			DWEB.130										
Water String			DWEB 135	-	-						-		
Surface Casing	Cimarex Pipe Yard	(9 5/8 surface ca	DWEB.140	107,310	107,310	107,310			-		- 1	-	
Intermediate Casing			DWEB.145	-							7.		
Production Casing Or Liner							DWEA 100 DWEA 105	-				9	
Tubing N/C Well Equipment							DWEA 115						
Wellhead, Tree, Chokes			DWEB.115				DWEA.120		3		- 4		
Liner Hanger, Isolation Packer			DWEB.100		-		DWEA.125					-	
Packer, Nipples							DWEA 130						
Pumping Unit, Engine Lift Equipment (Bhp. Rods, Anchors)							DLEG 100 DLEG 105						
Lift Equipment (Bnp, Rods, Anchors) Metering Equipment			-				DLEO.220		1				
Tangible - Wel	Il Equipment			107,310	107,310	197_310		0		0	0		
- Anglists - Att	market from the		_						0			0	
N/C Lease Equipment									0			0	
			1 331				DLEQ.115		-			0	
			1000			y jar	DLEQ 116 DLEQ 120		-		+	-	
Battery (Heater Treater, Separator)							DLEQ 115 DLEQ 120 DLEQ 125		0		-	-	
Battery (Heater Treater, Separator,) Flow Lines (Line Pipe From Wellhead)							DLEQ 116 DLEQ 120		0		-	-	
Battery (Heater Treater, Separator) Flow Lines (Line Pipe From Wellhead) Offshore Production Structure For							DLEQ 116 DLEQ 120 DLEQ 125 DLEQ 130		0		1	-	
Battery (Heater Treater, Separator) Flow Lines (Line Pipe From Wellhead) Offshore Production Structure For	ie Equipment			0	0	0	DLEQ 115 DLEQ 120 DLEQ 125 DLEQ 130 DWEA 135			0	0		
Battery (Heater Treater, Separator,) Flow Lines (Line Pipe From Welthead) Offshore Production Structure For Pipeline to Sales Tangible - Leas	se Equipment			0			DLEQ 115 DLEQ 120 DLEQ 125 DLEQ 130 DWEA 135 DWEA 140		0	0		-	
Battery (Heater Treater, Separator,) Flow Lines (Line Pipe From Weithead) Offshore Production Structure For Pipeline to Sales Tangible - Leas			DIDC 296	-	-	0	DLEQ 115 DLEQ 120 DLEQ 125 DLEQ 130 DWEA 135	0	0	0		-	
Battery (Heater Treater, Separator,) Flow Lines (Line Pipe From Welthead) Offshore Production Structure For Pipeline to Sales Tangible - Leas			DIDC 256	0			DLEQ 115 DLEQ 120 DLEQ 125 DLEQ 130 DWEA 135 DWEA 140		0	0		-	
Battery (Heater Treater, Separator,) Flow Lines (Line Pipe From Welthead) Offshore Production Structure For Pipeline to Sales Tangible - Leas			DIDC 296	-	-	0	DLEQ 115 DLEQ 120 DLEQ 125 DLEQ 130 DWEA 135 DWEA 140	0	0	0		-	
Battery (Heater Treater, Separator,) Flow Lines (Line Pipe From Welthead) Offshore Production Structure For Pipeline to Sales Tangible - Leas			DIDC 295	-	-	0	DLEQ 115 DLEQ 120 DLEQ 125 DLEQ 130 DWEA 135 DWEA 140	0	0	0		-	
Battery (Heater Treater, Separator,) Flow Lines (Line Pipe From Welthead) Offshore Production Structure For Pipeline to Sales Tangible - Leas			010C 295	-	-	0	DLEQ 115 DLEQ 120 DLEQ 125 DLEQ 130 DWEA 135 DWEA 140	0	0	0		-	
Battery (Heater Treater, Separator,) Flow Lines (Line Pipe From Welthead) Offshore Production Structure For Pipeline to Sales Tangible - Leas			DIDC 295	-	-	0	DLEQ 115 DLEQ 120 DLEQ 125 DLEQ 130 DWEA 135 DWEA 140	0	0	0		-	
Battery (Heater Treater, Separator,) Flow Lines (Line Pipe From Welthead) Offshore Production Structure For Pipeline to Sales Tangible - Leas			DIDC 295	-	-	0	DLEQ 115 DLEQ 120 DLEQ 125 DLEQ 130 DWEA 135 DWEA 140	0	0	0		-	
Battery (Heater Treater, Separator,) Flow Lines (Line Pipe From Welthead) Offshore Production Structure For Pipeline to Sales Tangible - Leas			DIDC 295	-	-	0	DLEQ 115 DLEQ 120 DLEQ 125 DLEQ 130 DWEA 135 DWEA 140	0	0	0		-	
Battery (Heater Treater, Separator,) Flow Lines (Line Pipe From Welthead) Offshore Production Structure For Pipeline to Sales Tangible - Leas			DIDC 225	-	-	0	DLEQ 115 DLEQ 120 DLEQ 125 DLEQ 130 DWEA 135 DWEA 140	0	0	0		-	
Battery (Heater Treater, Separator,) Flow Lines (Line Pipe From Welthead) Offshore Production Structure For Pipeline to Sales Tangible - Leas			OIDC 295	-	-	0	DLEQ 115 DLEQ 120 DLEQ 125 DLEQ 130 DWEA 135 DWEA 140	0	0	0		-	
Battery (Heater Treater, Separator,) Flow Lines (Line Pipe From Welthead) Offshore Production Structure For Pipeline to Sales Tangible - Leas			01DC 295	-	-	0	DLEQ 115 DLEQ 120 DLEQ 125 DLEQ 130 DWEA 135 DWEA 140	0	0	0		-	
Battery (Heater Treater, Separator,) Flow Lines (Line Pipe From Welthead) Offshore Production Structure For Pipeline to Sales Tangible - Leas			OIDC 295	-	-	0	DLEQ 115 DLEQ 120 DLEQ 125 DLEQ 130 DWEA 135 DWEA 140	0	0	0		-	
Battery (Heater Treater, Separator,) Flow Lines (Line Pipe From Welthead) Offshore Production Structure For Pipeline to Sales Tangible - Leas			DIDC 295	-	-	0	DLEQ 115 DLEQ 120 DLEQ 125 DLEQ 130 DWEA 135 DWEA 140	0	0	0		-	
Battery (Heater Treater, Separator,) Flow Lines (Line Pipe From Welthead) Offshore Production Structure For Pipeline to Sales Tangible - Leas			DIDC 255	-	-	0	DLEQ 115 DLEQ 120 DLEQ 125 DLEQ 130 DWEA 135 DWEA 140	0	0	0		-	
Battery (Heater Treater, Separator,) Flow Lines (Line Pipe From Weithead) Offshore Production Structure For Pipeline to Sales Tangible - Leas			000226	-	-	0	DLEQ 115 DLEQ 120 DLEQ 125 DLEQ 130 DWEA 135 DWEA 140	0	0	0		-	
P&A Costs			0iDC 295	-	-	0	DLEQ 115 DLEQ 120 DLEQ 125 DLEQ 130 DWEA 135 DWEA 140	0	0	0		-	
Battery (Heater Treater, Separator,) Flow Lines (Line Pipe From Weithead) Offshore Production Structure For Pipeline to Sales Tangible - Leas			DIDC 295	-	-	0	DLEQ 115 DLEQ 120 DLEQ 125 DLEQ 130 DWEA 135 DWEA 140	0	0	0		-	
Battery (Heater Treater, Separator,) Flow Lines (Line Pipe From Welthead) Offshore Production Structure For Pipeline to Sales Tangible - Leas			DIDC 295	-	-	0	DLEQ 115 DLEQ 120 DLEQ 125 DLEQ 130 DWEA 135 DWEA 140	0	0	0		-	
Battery (Heater Treater, Separator,) Flow Lines (Line Pipe From Welthead) Offshore Production Structure For Pipeline to Sales Tangible - Leas			DIDC 295	-	-	0	DLEQ 115 DLEQ 120 DLEQ 125 DLEQ 130 DWEA 135 DWEA 140	0	0	0		-	
Battery (Heater Treater, Separator,) Flow Lines (Line Pipe From Welthead) Offshore Production Structure For Pipeline to Sales Tangible - Leas			000226	-	-	0	DLEQ 115 DLEQ 120 DLEQ 125 DLEQ 130 DWEA 135 DWEA 140	0	0	0		-	



AFE: Property: API#: Prop TD:

253084 428085-023.01 42-389-33823 15,367

LM/BIA :		WOI	illig Di	ining i	кероп		Prop TD	15,36
Yell Name EIGHTEENMILE	56-18 1H	100	tate/County X, Reeves		8 / Blk 53 /	Objective Wolfcamp A	Date Tue, Ju	1.9 201
ontractor / Rig Rpt #		esent Operation	A, Reeves		0 / BIK 33 /	MQ IVQ	Footage FRAR	Hours
H&P 218 9	3.250 4	92 10	_	est BOP's		3,492 3,492	0 0.00	0.0
Red Bed/Anhydrite/Salt	9 CG 0 0		205					
DP Size DC Size DP Av DC A		Q Inch Bit Dia.	Cost/Ft_24		Cost/Ft (OA)			owable SIC
0.00 8.000 63 109 Pump #1 - PZ-11	9 136 GPS Pump	0.31 #2- PZ-11	\$0.00) GF	\$234.29 Pump #3		PS GPM	Off BP
6.00 11.00 100		FZ-11			J.Mildi.Rac.		384	550
Slow Stroke Stand Pipe EDR		Stroke Stand P	pe EDR	Chol	se Slow Stroke	Stand Pipe EDR Cho		On BP
				T				550
10.00 10.00 31 31	PV YP GelS 1 1 1	1 100.0		o MW in	MW Out VS In	VS Out PV YP Get	Strength HTHP	24
Cake Solids Liquid San			E ME	Cake	Solids Liquid	Sand AlkPOM WPS	ES CAGLZ	NAC
1 1.10 98.90 0.0		11000	11 0.23	D	100.00	CALLET TOWNED TO THE		
Chlorides Galcium Oil 175,000	Water <u>0.W</u> 98.90		oth Checked	Chlor	des Calcium	OiPct WaterPct O:W	Lime Depth 3	Shecked
Bit # Size Manufacturer	Type	Serial #	2@11:02 Jet#1 Jet#	12 Jet#3 J	et #4 Jet #5 Jet #6	Jet#7 Jet#8 TFA	WOB Rotar	y RPM
2 12.250 3mith Tool Co	MI616MPX	JG7348	14 14		14 14 14	0.9020	32.42 60	600
	Hours FT/HR C 15,50 155.35	um. Bit Hrs. Inn 21.75 1	er Outer 2	WT	Location Bearing Side X	The second secon		123
Drag Torque, and Weight	Diesel	21.70		d additives in la			Farming / Mud Disposal	120
Pickup Weight Diesel or		Engineer - 24 H	1			Daily Solids =	bbls @	\$0.
Rotating Weight Diesel Ro Blackoff Weight Diesel Un	eceived 7,301 sed Today 696					Total Solids = Daily Liquids =	bbls @	\$0.
verage Drag	Natural Gas					Total Liquids =	bbls @	\$0
laximum Drag prque On Bottom Meter Re						B	OP Pressure Testing	
orque Off Bottom MCF Use						Last BOP Test		since:
aily Rotating Slidin	ng Total	BHA# 2	Rotating	Slidi		Code Time Distribu	rtion Daily	CUI
eet		Feet Hours	2,408 15.50		2,408 15.50	1 MIRU/RDMO 2 Drilling		133.0
top.		ROP	155.35		155,35	3 Washing/Reaming		0.5
Time Feet		%Time	100.00			5 Cond. Mud & Circ 6 Tripping	4.50	9.5
Hours Time Desc		%Feet	100.00			7 Lubricate Rig		1.0
CONTRACTOR OF THE PROPERTY OF	SA with cementers & rig of	ogical Activity (06 crew on cementing		Jeou Hours		10 Deviation Survey 12 Run Casing		2.0 8.7
3.00 Cement Casing Pressure ter	st lines to 4000 psi pump	20 bbls spacer, Le	ead Stage 1 6			13 Cement Casing	5.00	5.0
	% Bentonite + 2% CaCl 1 bls, 608 ft2 Class C + 1%					14 Wait On Cement 15 NU BOP's	4.00 9.00	9.0
	age plug Displace with 25 sed back 1.5 bbls to truck					16 Test BOP's	1.50	1.5
	st 20 bbls with truck, swit					Totals	24.00	216.0
	u DV tool @ 100 SPM @		N. (11 Deligrape 2023 Deligra	ever med mention	CONTRACTOR IN THE CONTRACTOR I			
	ge 2, W/ 20 BBL Spacer, Bentonite, WT 13.7, Yie							
362 ft2 Class	C, W/ 2% Calcium Chlo	ride, WT 14.8, Yie	ld 1.34, Mixed	@ 6.34 Ga	VSK, Shut down			
	place w/118 bbl FW burn nt to surface with partial r							
	Down Flow Line, Turnbu			Mold On Hon	d Test Head To			
1200 PSI F/	ductor, 9 5/8 Casing, Mak 15 Min.	e Final Cut, Instal	vveii Head, v	weld On Hea	d, lest riead to			
	OPE, Flowline, orbit valve				toward 5000 rel			
high for 5 min	pper and lower pipes, blir ns each test. Test Annula							
24.00								
ext 24 hours: Finish test BOPE, pick up B	-	1.	0.440		Elevations-	200-10 Z	B: 25.00 GHG	0.00
ext Casing: 9.625 @ 3500 Acc:	0		Spitts: 0			Pipe Body Joint		Plugge
<u>Casing</u> Description		From To		Drift	Burst Collap	se Yield Strength	Capacity Displ	Displ
JRF 9-5/8" 40# J-55 LT&C Special Drift		0 3,492		8.750	3,950 2,57		0.07582 0.01455	0.090
1 Smith Tool Co MI616MPX	Vt Grd Thread 6 5/8 Reg	OD ID 12.250 3.000	Length 1.50	1.50	10,459 / 10,45		Landing Pt MD/TV 15,367 / 11,000	D Pil
1 Vertical Scoout SDI-962-VS08-02	6 5/8	10.500 2.500	20.90	22.40	Depth Incl.	Azi. TVD VS	N/-S E/-W	
1 Double pin SDI-800-XO-004 1 Baker 9.5 M1XL .16 Rev/Gal 1245	6 5/8 6 5/8	8.500 2.875 9.500	1.98	24.38 60.31	167 1.70	0.00 166.98 2.48		
1 Crossover	6 5/8 X 7	9.250 2.875	2.67	62.98	645 2.50 1,001 3.90	0.00 644.65 19.99 0.00 1,000.09 39.86		
1 Shock sub SS 1104 1 Flo-drift FD 2012088	7 5/8 7 5/8	9.875 3.000 9.500	13.42	76.40 81.31	1,476 0.10	0.00 1,474.71 56.44		
1 /BS	7 5/8	9.500 3.000	8.05	89.36	1,949 0.40	0.00 1,947.71 58.50	58.50 0.00	0
1 Crossover 1 6 - 8" DC	7 5/8 X 6 6 5/8	9.500 3.000 8.000 2.875	4.17 178.98	93.53 272.51	2,422 0.40 2,895 1.00	0.00 2,420.69 61.81 0.00 2,893.66 67.58	61.81 0.00 67.58 0.00	
1 Crossover	6 5/8 X 4.	7.750 2.875	3.62	276.13	3,365 0.30	0.00 2,893.66 67.56		
1 12 - 6" DC 9 1 Crossover	9.00 4.5 XH NC-50	6.500 2.500 5.000 3.000	356.40 2.93	632.53 635.46	Projection To Bit:	65.00		
1 5" NC50 SpiralWate HWDP 5	9.16 J-55 NC50	5.000 3.000	176.20	811.66	3,430 0.30 Final Closure =	0.00 3,428.62 73.65	73.65 0.00 zimuth	0.
	9.16 J-55 NC50 9.16 J-55 NC50	5.000 3.000 5.000 3.000	30.21 148.33	841.87 990.20	Planned VS =		zimuth New :	Survey
1 5 NC50 Spiralvvate HVVDP 5	2 U U-U3 NG30	BHA =	990.20	430.20				
		Total Length =	990.20					
et less atad DUA Va		Kelly =	2,501.80					
st Inspected BHA Hours: 21.75		Total Depth =	3,492.00					
9.63 Surface Casing Detai			O.D.		Neight Grade	Thread Len		Botton
37 9-5/8" 40# J-55 LT&C Special Dri 1 Weatherford Model E-751 Standa		Collar	9.625 9.625	8.835 8.921	40.00 J-55 0.00 Standard	LT&C 1,564 LT&C 2	4.85 -5.83 2.59 1,559.02	1,559.0
44 9-5/8" 40# J-55 LT&C Special Dri	ift Casing		9.625	8.835	40.00 J-55	LT&C 1,845	5.27 1,561.61	3,406.8
1 Weatherford Model E-402 Stands			9.625 9.625	8.921 8.835	0.00 Standard 40.00 J-55		1.16 3,406.88 2.34 3,408.04	3,408.04
2 9-5/8" 40# J-55 LT&C Special Dr 1 Weatherford Model E-303 Standa			9.625	8.835	0.00 Standard		1.62 3,490.38	3,490.30
	Company of the Compan							



Cimarex Energy Co.

Morning Drilling Report

AFE:
Property:
API#:
Prop TD:

253084 428085-023.01 42-389-33823 15.367

BLM/BIA :					Worning Dri	illing Report			Prop TD		15,367
Well Name EIG	SHTEENMILE	E 56-18 1	н		State/County TX, Reeves	Section, Township, Range 18 / Blk 53 /	Objective Wolfcamp A		Date T	ue, Jul	9, 2013
Contractor / Rig H&P 218	Rpt #	3.250	opes 4	Present Ope		st BOP's	M□ 3,492	3,492	Footage 0	0.00	0.00
Gontact Engineer Foreman - Day Foreman - Night Manager Safety Supt Safety Supt Superintendent	Mark Audas Lyman Nance Jody Solansky Larry Seigrist Fred Jones Sheldon Waege Scott Lucas		580-2 210.33 432.63 918.60 918.55	20.1928 16-1492 34.8052 20.1934 06.5904 57.4177 94.5572	Contact Computer Geologist Landman	Wellsite 36 Kim Nordstog Cody T. Elliot	303-285-2380 432-571.7844 432-571.7806	Cum Cum Cum Cum	Well Cost Drilling Cost Compl Cost Well Cost ntangible Cost Fangible Cost Mud Cost	ost	\$153,331 \$818,125 \$0 \$818,125 \$695,579 \$122,546 \$33,737



BLM/BIA Well Name

Cimarex Energy Co. Morning Drilling Report

AFE: Property: API#: Prop TD

253084 428085-023.01 42-389-33823 15,367

Well Name				County		wriship Rang	2	Objective		Date		
	NMILE 56-18 1H	Dragger Cong		eeves	18/8	3lk 53 /		Wolfcamp			Tue, Jul	9, 2013 Hours
Contractor / Rig H&P 218	9 3.250 4	Present Oper	elign	Test	BOP's			MD 3,49	2 3,492	Footage 2 0	0.00	0.00
			J. 100 J.		Variance			91.19	Variance			
Sub Ledger Description	Vendor & Description	B.C.P Code	Daily Drlg. Cost	Cum Drig. Cost	To Drig. Afe Over/Under	A.C.P Code	Daily Compl. Cost	Cum Compl. Cost	To Compl. Afe	Dry Hole Cost	After Casing Point	Compl. Well Cost
Roads & Location Preparation / Restors		DIDC 100		99,160	99,160	DICC 100	3+	-		-		
Damages Mud/Fluids Disposal Charges		DIDC 105 DIDC 255				DICC 105 DICC 235				-		
Day Rate	H&P 218 [Day Rate / FRC Charge]	DIDC:115	27,135	108,540	108,540	DIGG:120	-			-		
Misc Prep Cost (Mouse Hole, Rat Hole,		DIDC 120	-	29,733	29,733				-			
Bits Fuel	Ulterra [Bit #1] Sun Coast [RIG FUEL]	DIDC 125 DIDC 135	300 23,144	25,300 45,419		DICC:125 DICC:130			100000			1
Water 009 / Completion Fluids 109	our coast [riid FOEL]	DIDC.140	23,144	6,126		DICC.135						
Mud & Additives	Fas-Line [Transfer Pump] / Haliburto		1,586	33,737	33,737			-	-	9		
Surface Rentals Downhole Rentals	American Safety Services [H2S Paci Baker [Motor] / Bull Dog Services [Re		810 6,041	5,090 46,358		DICC 145				- 3		
DSTS, Formation Tests	baker (worter) / buil bog services (no	DIDC-160	0,041	40,000	40,000	MINN, I'VE				-		
Mud Logging		QIDG.170	-						-		-	
Open Hole Logging Cementing, thru Intermediate Casing	Baker Hughes Cementing (Cement 6	DIDC 180	65,109	76,020	76,000	DICC 155		- 1	-			
Tubular Inspections	EL Farmer [2 pipe rack] / Wilbanks T		209	2,959		DICC.160						
Casing Crews		DIDC 195		15,924		DICC 165						
Extra labor, Welding, etc.	Man Welding [weld on head and flow	DIDC 200	1,280	2,405		DICC.170	-			*		
Trucking Supervision	Brother consulting / Lyman Nance (S	DIDC 205 DIDC 210	3,700	5,085 37,000		DICC.175 DICC.180			BULLE			
Trailer, Camp & Catering	Cimarex [Satelite] [sat/phone/interco	DIDC 280	455	8,095		DICC 255		-				
Other misc expenses		DIDC-220	-	-		DICC.190	-			1	-	
Overhead Remedial Cementing		DIDC 225 DIDC 231	-	8,000	8,000	DICC:195 DICC:215						
Mobilize & Demobilize		DIDC 240	1	86,925	86,925	THE PERSON NAMED IN	- 3					
Directional Drilling	Lenco [Septic] / Pason [Internet / Wo	DIDC 245	270	1,800	1,800	i i i i i i i i i i i i i i i i i i i			I I I I I I			
Dock, Dispatcher, Crane Marine/Air Transportation		DIDC.250 DIDC.275		-		DIGC 230 DIGC 250	-	-	-	*	-	
Marine/Air Transportation Solids Control-Equip/Services	KSW Oilfield Rentals [Float Pumps]	DIDC 260	250	2,250	2.250	Mary Properties						
Well Control-Equip/Services	Mc Guire Industries [Seperator & Ign	DIDC 265	1,230	1,530		DIGC.240			1			-
Fishing & Sidetrack Services Completion Rig		DIDC 270	-	-		DICC 245 DICC 115	-	-	1	*		-
Completion Rig Coll Tubing		-				DICC 250						
Completion Logging, Perforating				HE TALL		DICC 200	-	-	+			
Stimulation		DIDE NO				DICC 210			,		-	
Legal/Regulatory/Curative Well Control Insurance		DIDC 300 DIDC 285		10,000	5,000	DICC 280	-			-		
Contingency		DIDC.435	6,576	33,123		DICC 220	: -				-	
Construction For Well Equipment				7,54		DWEA 110			-		-	-
Construction For Lease Equipment Construction For Sales P/L						DIEC 110 DICC 265	-					
Intang	nible		138,095	695,579	895,579	RCHOLANC.	0	0	0	0	0	0
- Intang	nois .			3331033								
Drive Pipe		DWEB 150	-									
Conductor Pipe Water String		DWE8 130 DWE8 135						-		- 1		
Surface Casing		DWEB 140		107,310	107.310							
Intermediate Casing		DWEB.145	-						7	-	-	
Production Casing Or Liner						DWEA 100 DWEA 105	3			-		
Tubing: N/C Well Equipment						DWEA 115						
Wellhead, Tree, Chokes	Downing [Studs and ring gaskets / W		15,236	15,236	15,236	DWEA.120	-			-	2	
Liner Hanger, Isolation Packer		DWEB.100	-			DWEA125	-					
Packer, Nipples Pumping Unit, Engine						DWEA 130 DLEG 100				1	-	
Lift Equipment (Bhp, Rods, Anchors)						DLEO 105	-	Maria II.		-		
Metering Equipment						DLE 0.220	-					
Tangible - Wel	I Equipment		15,236	122,646	122,846		0	0	.0	0	0	0
N/C Lease Equipment						DLEQ 115						
Tanks, Tanks Steps, Stairs						DLEQ 120				+	-	
Battery (Heater Treater, Separator,)						DLEQ.125	-		To the	-	-	
Flow Lines (Line Pipe From Wellhead) Offshore Production Structure For						DLEQ 130 DWEA 135						
Pipeline to Sales						DWEA 140	-					
Tangible - Leas	e Equipment		0	0	0		0	0	0	0	0	0
		DUDG OVE				DIOC STE						
P&A Costs		DIDC 295	- 1			DICC 275	- 0	0		0	0	
P8.	A		0	0	0			0	0		0	0
Total C	osts		153,331	818,125	919,125		0	0	0	0	0	0



AFE : Property API # : Prop TD :

253084 428085-023.01 42-389-33823 15,367

			_				447		Prop TD	181	15,36
EIGHT	EENMILE 56-18 1	н		X, Reeves	Section, Town		Wolfcar		Date: We	d, Jul 1	0, 201
ontractor / Rig	Rpt # DFS	AND STREET, ST	nt Operation	D-III 9 24	1 U-I- @ 400		0.0000	D IVO	Footage	FT/HR	Hours
H&P 218	10 4,250	5 G CG	IG I	Drill 8 3/4	4 Hole @ 466	•	4,6	64 4,66	4 1,172	142.06	8.25
100% Sand		Ø. 2024	38								
	PAv DC Av Jet Veli 255 384 23		nch Bit Dia. .45	\$71.31		193.33	Last Shoe TV		o.00	Max Allow	able SICI
Pump #1 - PZ-11			PZ-11		GPS	Pump #3 -			IPS GP	М	Off BP
6.00 11.00		337 6.00			3.837				53		,500
Slow Stroke Stand Pr	pe EDR Ch	oke Slow Stro	oke Stand P	ipe EDR	Choke	Slow Stroke St	and Pipe	EDR Ch	oke		,900
MW in MW Out VS	In VS Out PV	YP Gel Stren	agth APIFilto	ste LCM	_ MW.in M	W Out VS In V	S Out PV	YP Ge	Strength	HTHP	LC
9.25 9.25 3		1 1	1 100.		Ĭ					-	
The same of the sa	equid <u>Sand MB</u> 8.60 0.01	12.00	Acceptable and	30 0.46	M Cake Sole	100.00	Sand AlkE	OM WPS	ES	CACL2	NACL
Chlorides Calcium	Oil Water	19715		oth Checked	Chlorides	Galgian Oil	Pot WaterPo	2.W	Lime	Depth Chr	ched
81,000	98.60		349	2@11:55							
3 8.750 to	Manufacturer Tys aker Hughe T 60		Serial # 145250	Jet#1 Jet#2 11 11	Jet#3 Jet#4 11 12	Jet #5 Jet #5 Jet 12 12 12		TFA 0.7202	wов 20-24	Rotary R	
	sker Hughe T 60 Footage Hours	10100000	Bit Hrs. Inc	7.77.7	Dull Locatio		age Other	Reason	Diff Pressure	Motor R	
3,492 4,664		142.06 3	0.00					Tarity (200 - 400	124-1	24
Drag Torque and Weight ckup Weight 175.	000 Diesel on Hand	10,568 E	ingineer - 24 H		additives in last 24 h	1 shrink Wrap	12 Da	ily Solids =	Farming / Mud ! bbls		\$0.0
otating Weight 160,	000 Diesel Received			3.5.10	nonestatione#1	an arminant (Corto)	Tot	al Solids =	bbls	@	\$0.0
lackoff Weight 150, verage Drag 15,	000	1,060					10000	lly Liquids ≃ al Liquids ≈	bbls		\$0.0
aximum Drag 16,	000 Natural Gi	11							3OP Pressure To		5.41
The state of the s	000 Meter Reading 000 MCF Used Today						Las		07/10/2013	Days si	nce:
ally Rotating	Sliding	Total B	HA# 3	Rotating	Sliding	Total	Code	Time Distrib		Daily	CUI
et 1,172			eet	1,172		1,172		RU/RDMO		8.25	133.0
ours 8.25 OP 142.06			OP	8.25 142.06		8.25 142.06	3 W	illing ashing/Reaming	1	0.20	0.5
Time 100.00		-	Time	100.00				nd. Mud & Circ pping		5.75	9.5
Feet 100.00			Feet	100.00	200 (11)			bricate Rig		0.50	1.5
2.75 Test BOP's	Test BOP, Upper and lo			ld 250 psi low		for 5 mins	and Administration	viation Survey in Casing		0.75	8.75
0.50 Test BOP's	each test. Test Annular Test casing @ 1500 psi		d 2500 psi higi	5 mins each te	est		13 Ce	ment Casing			5.0
0.50 Test BOP's	Rig down tester	(good (est)					- DOM: DOM:	ait On Cement J BOP's		1.50	10.5
0.50 Lubricate Rig	Service rig						16 Te	st BOP's		4.25	5.75
1.00 NU BOP's 2.00 Tripping	Install wear bushing Wit Pick up BHA # 3	messed by Lyma	n Nance				24 Dr Totals	II Cmt / Shoe To	est	3.00	3,00
0.50 Tripping	JSA safety meeting Trip		Filmon and Manager				Liolais				
0.50 NU BOP's 0.75 Tripping	Cement cellar up to bas Trip in hole to DV tool @		(Lyman Nanc	e.)							
	t Drill DV tool @ 1559'										
2.50 Tripping 0.50 Test BOP's	Finish GIH with BHA #3 Test Float collar & casin	Annual State of the Land State of the State									
	t Drill float equipment, sh				- 0011-70 11-1-	-DDM-121					
0.75 Drilling	Rotating from 3,492' to MotorDiffPressure=250										
0.25 Deviation Survey	Pressure=1,650 Survey @ 3550°.7°										
2.75 Drilling	Rotating from 3,623' to MotorDiffPressure=200 Pressure=1,725					rRPM=124					
0.25 Deviation Survey	Survey @ 3929' .2"			Version of the							
2.75 Drilling	Rotating from 4,002' to MotorDiffPressure=300										
	Pressure=1,775 Survey @ 4307' .3"						100				
0.25 Deviation Survey											
0.25 Deviation Survey 2.00 Drilling	Rotating from 4,380' to	Mud Weight=9.	Viscosity=30	Gallons Per M	inute=538 Pump						
2.00 Drilling											
2.00 Drilling	Rotating from 4,380' to MotorDiffPressure=400 Pressure=1,900							The state of the s		GHG En	noissin
2.00 Drilling 4.00 t 24 hours, Drill/ Survey	Rotating from 4,380' to MotorDiffPressure=400 Pressure=1,900			Snille B			TIME THE PARTY OF	F: 25.00	KB: 25.00	-	Go Strong
2.00 Drilling 24.00 tt 24 hours, Drill/ Survey	Rotating from 4,380' to MotorDiffPressure=400 Pressure=1,900			Spills 0			2,866.00 C	F: 25.00	KB: 25.00	0	.00
2.00 Drilling 24.00 4.00 4.10 1.124 hours: Drill/ Survey 4.103 (Casing: 7.000 @ 106 6.4109 6.41	Rotating from 4,380' to MotorDiffPressure=400 Pressure=1,900	Fr	om To	ID		inst Collapse	Pipe Body Yield	Joint Strength	Capacity	Displ	.00 Plugge Disp
2.00 Drilling 4.00 1 24 hours: Drill/ Survey 1 Casing: 7.000 @ 104 asing Description RF 9-5/8* 40# J-55 LT&	Rotating from 4,380' to MotorDiffPressure=400 Pressure=1,900 Acc. 0 Acc. 0 C Special Drift Casing		om To 0 3,49	ID 2 8.835	8.750 3,	inst Collapse 950 2,570	Pipe Body Yield 630,000	Joint Strength 520,000	Capacity 0.07582	Displ 0.01455	Plugge Disp
4.00 1.24 hours: Drill/ Survey 1.Casing: 7.000 ⊕ 104 4sing Descriptic RF 9-5/8* 40# J-55 LT& YZ BHA 3 1. Baker Hughes T 607 X	Rotating from 4,380' to MotorDiffPressure=400 Pressure=1,900 Acc. 0 Acc. 0 C Special Drift Casing Wt Grd	Thread (0 3,49 OD ID .750 2,500	2 8.835 Length	8.750 3, CUM 1.00	arst Collapse 950 2,570 KOP MD/TVD 10,459 / 10,459	Pipe Body Yield 630,000 Pen Pi 11,450	Joint Strength 520,000 MD/TVD / 11,000	Capacity 0.07582 Landing F	Displ 0.01455 Pt MD/TVD / 11,000	Plugge Disp 0.090
2.00 Drilling 4.00 1.24 hours: Drill/ Survey tt Casing: 7.000 @ 104 taking Descripting RF 9-5/8* 40# J-55 LT& ty BHA 3 1 Baker Hughes T 607 X 1 Vertical Scoout SDI-712	Rotating from 4,380' to MotorDiffPressure=400 Pressure=1,900 Acc. 0 Acc. 0 C Special Drift Casing Wt Grd	Thread (4.5 reg 8 4.5 XH 7	om Te 0 3,49 OD ID	10 2 8.835 Length	8.750 3, CUM 1.00	arst Collapse 950 2,570 KOP MD/TVD 10,459 / 10,459 pth incl.	Pipe Body Yield 630,000 Pen Pi 11,450 Azi.	Joint Strength 520,000 MD/TVD / 11,000 TVD VS	Capacity 0.07582 Landing F 15,367 N/-S	Displ 0.01455 Pt MD/TVD / 11,000 E/-W	Pilipge Disp 0.090:
2.00 Drilling 24.00 at 24 hours: Drill/ Survey at Casing: 7.000 @ 106 assing Description Exp. 1.00	Rotating from 4,380' to MotorDiffPressure=400 Pressure=1,900 Acc. 0 Acc. 0 C Special Drift Casing Wt Grd	Thread 6 4.5 reg 8 4.5 XH 7 4.5 XH 6 4.5 XH 6	om Te 0 3,49 OD ID .750 2,500 .375 1,875 .750 2,000 .625 2,250	2 8.835 Length 1.00 19.62 30.41 12.36	8.750 3. CUM 1.00 20.62 De 51.03 63.39 67.44	Int Int	Pipe Body Yield 630,000 Pen P: 11,450 Azi. 0.00 16	Joint Strength 520,000 MD/TVD / 11,000 TVD VS 6.98 2.46 4.65 19.95	Capacity 0.07582 Landing F 15,367 N/-S 3 2.48 9 19,99	Displ 0.01455 Pt MD/TVD / 11,000 E/-W 0.00 0.00	Plugge Disp 0.0900 Pill Y Di
2.00 Drilling 24.00 42.4 hours: Drill/ Survey 45 Casing: 7.000 @ 106 24.51 25 BHA 3 1 Baker Hughes T 607 X 1 Vertical Scoot SDI-712 1 Jaguar motor .23 rpg 1 Shock sub SS 6538 1 Flo-drift FD 1666 1 JAIBS	Rotating from 4,380' to MotorDiffPressure=400 Pressure=1,900 Acc: 0 On Acc: 0 Wt Grd -VS08-011	Thread (4.5 reg 8 4.5 XH 7 4.5 XH 6 4.5 XH 6 4.5 XH 6 4.5 XH 8	om Te 0 3,49 OD ID .750 2,500 .375 1,875 .750 2,000 .625 2,250 .500 2,250 .625 2,250	2 8.835 Length 1.00 19.62 30.41 12.36 4.05 6.04	8.750 3. CUM 1.00 20.62 51.03 63.39 67.44 73.48	Interest Collapse 950 2,570	Pipe Body Yield 630,000 Pen P: 11,450 Azi. 0.00 16 0.00 64	Joint Strength 520,000 MD/TVD // 11,000 TVD VS 6.98 2.46 4.65 19.95 0.09 39.86	Capacity 0.07582 Landing F 15,367 N/-S 3 2.48 9 19.99 5 39.86	Displ 0.01455 Pt MD/TVD / 11,000 E/-W 0.00 0.00 0.00	Plugge Displ 0:0903 Pill Y
2.00 Drilling 24.00 tt 24 hours: Drill/ Survey tt Casing: 7.000 @ 104 casing Description RF 9-5/8* 40# J-55 LT& ty BHA 3 1 Baker Hughes T 607 X 1 Vertical Scoout SDI-712 J Jaguar motor 23 rpg 1 Shock sub SS 6538 1 Flo-drift FD 1666	Rotating from 4,380' to MotorDiffPressure=400 Pressure=1,900 Acc. 0 Acc. 0 C Special Drift Casing Wt Grd	Thread (4.5 reg 8 4.5 XH 7 4.5 XH 6 4.5 XH 6 4.5 XH 6 4.5 XH 8 4.5 XH 6 6 4.5 XH 6	om To 0 3.49 OD ID	2 8.835 Length 1.00 19.62 30.41 12.36 4.05	8.750 3. CUM 1.00 20.62 De 51.03 63.39 67.44 73.48 1 429.88	Int Int	Pipe Body Yield 630,000 Pen P: 11,450 Azi. 0.00 16 0.00 64	Joint Strength 520,000 MD/TVD // 11,000 TVD VS 6.98 2.46 19,939 0.09 39.86 4.71 56.44	Capacity 0.07582 Landing F 15,367 N/-S 3 2.48 3 19.99 5 39.86 4 56.44	Displ 0.01455 Pt MD/TVD / 11,000 E/-W 0.00 0.00	Plugge Disp 0.0900 Pill Y Di 1.
2.00 Drilling 24.00 24.124 hours: Drill/ Survey 24.125	Rotating from 4,380' to Motor DiffPressure = 400 Pressure = 1,900 Storm C Special Drift Casing Wt Grd -VS08-011 99.00 VDP 59.16 J-55	Thread 6 4.5 reg 8 4.5 XH 7 4.5 XH 6 4.5 XH 6 4.5 XH 6 4.5 XH 8 4.5 XH 8 4.5 XH 8 NC-50 5 NC50 5	om Te 0 3.49 OD ID 750 2.500 .375 1.875 7.750 2.000 .625 2.250 .500 2.250 .625 2.250 .500 2.500 .000 3.000 .000 3.000	Length 1.00 19.62 30.41 12.36 4.05 6.04 356.40 2.93 176.20	8.750 3, CUM 1.00 20.62 De 51.03 63.39 67.44 73.48 429.88 1 429.88 1 432.81 1 609.01 2	Int wst Collapse 950 2,570 KOP MD/TVD 10,459 / 10,459 pth Incl. 167 1,70 645 2,50 001 3,90 001 3,90 476 0,10 949 0,40 422 0,40	Pipe Body Yield 630,000 Pen Pi 11,450 Azi. 0.00 16 0.00 64 0.00 1,00 0.00 1,47 0.00 1,94 0.00 2,42	Joint Strength 520,000 (MD/TVD) / 11,000 (MD/TVD) / 11,000 (MD/TVD) / 15,000 (MD/TVD)	Capacity 0.07582 Landing F 15,367 N/-S 2.48 9 19.99 5 39.86 4 56.44 58.50 61.81	Displ 0.01455 Pt MD/TVD / 11,000 E/-W 0.00 0.00 0.00 0.00 0.00 0.00	Pilugge Disp 0:0903 Pili Y Di 1: 0: 0: 0:
24.00 Drilling 24.00 St 24 hours: Drill/ Survey xt Casing: 7.000 @ 106 casing Description IRF 9-5/8* 40# J-55 LT& To BHA 3 1 Baker Hughes T 607 X 1 Vertical Scoout SDI-712 1 Jaguar motor 23 rpg 1 Shock sub SS 5538 1 JAIBS 1 JA IBS 1 12 - 6* DC 1 Crossover	Rotating from 4,380' to Motor DiffPressure=400 Pressure=1,900 8 600 Acc. 0 On C Special Drift Casing Wt Grd -VS08-011 99.00 VDP 59.16 J-55 59.16 J-55	Thread 4.5 reg 8 4.5 XH 7 4.5 XH 6 6 4.5 XH 6 6 NC-50 5 NC50 5 NC50 5	om Tc 0 3,49 DD ID 750 2,500 3,75 1,875 750 2,000 625 2,250 500 2,250 625 2,250 500 3,000 3,000	2 8.835 Length 1.00 19.62 30.41 12.36 4.05 6.04 356.40 2.93	8.750 3. CUM 1.00 20.62 51.03 63.39 67.44 73.48 1 429.88 1 429.88 1 432.81 1 639.22 2	Int September	Pipe Body Yield 630,000 Pen Pi 11,450 Azi. 0.00 16 0.00 64 0.00 1,00 0.00 1,47	Joint Strength 520,000 (MD/TVD) / 11,000 TVD VS 6,98 2,44 4,65 19,95 0,09 39,88 4,71 56,44 7,71 58,55 0,69 61,8 3,66 67,58	Capacity 0.07582 Landing F 15,367 N/S 3 2.48 9 19.99 5 39.86 4 56.44 5 8.50 61.81 67.58	Displ 0.01455 Pt MD/TVD / 11,000 E/-W 0.00 0.00 0.00 0.00 0.00	Plugge Displ 0.0903 Pill Y Di 0.000 0.000 0.000
24.00 Drilling 24.00 st 24 hours: Drill/ Survey st Casing: 7.000 @ 106 Casing Description IRF 9-5/8* 40# J-55 LT& TV BHA 3 1 Baker Hughes T 607 X 1 Vertical Scoout SDI-712 1 Jaguar motor 23 rpg 1 Shock sub SS 6538 1 JA IBS 1 12 - 6* DC 1 Crossover 1 5* NC50 SpiralWate HV 15 NC50 SpiralWate HV	Rotating from 4,380' to Motor DiffPressure = 400 Pressure = 1,900 Pres	Thread (4.5 reg 8 4.5 XH 7 4.5 XH 6 NC-50 5 NC50 5 NC50 5 NC50 5	om Tc 0 3.49 0 5.500 1D 750 2.500 .375 1.875 750 2.000 .625 2.250 .500 2.250 .625 2.250 .500 3.000 .000 3.000 .000 3.000 .000 3.000 .000 BHA =	2 8.835 Length 1.00 19.62 30.41 12.36 4.05 6.04 356.40 2.93 176.20 30.21 148.33 787.55	8.750 3. CUM 1.00 20.62 De 51.03 63.39 67.44 73.48 1.29.88 1.432.81 609.01 2 639.22 2 787.55 3	Interest Collapse 950 2,570 KOP MD/TVD 10,459 / 10,459 th Incl. 167 1,70 645 2,50 001 3,90 476 0,10 949 0,40 422 0,40 885 1,00 385 1,00 385 0,30 5550 0,70	Pipe Body Yield 630,000 Pen Pi 11,450 Azi. 0.00 16 0.00 0,00 0.00 1,47 0.00 2,42 0.00 2,89 0.00 3,54 0.00 3,54	Joint Strength 520,000 (MD/TVD) / 11,000 (MD/TVD) / 11,000 (MD/TVD) / 16,98 (2.44 ,65 19.95 ,0.99 39.86 ,4.71 56.44 ,7.71 58.55 ,0.69 61.81 3.66 67.55 ,8.62 72.93 8.62 74.53	Capacity 0.07582 Landing F 15,367 N/-S 2.48 9 19,99 3.39.86 5.644 5.850 61.81 67.58 2.72.92 74.53	Displ 0.01455 Pt MD/TVD / 11,000 E/-W 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	Display Pilipipe O.0903 Pilipi
24.00 Drilling 24.00 Drilling 24.00 Drilling 24.00 Drilling 24.00 Drilling 24.00 Description 25.00 Description 26.00 Description 27.00 ⊕ 106 28.00 Description 28.00 Description 29.56* 40# J-55 LT& 20.00 Description 20.00 Descri	Rotating from 4,380' to Motor DiffPressure = 400 Pressure = 1,900 Pres	Thread (4.5 reg 8 4.5 XH 7 4.5 XH 6 NC-50 5 NC50 5 NC50 5 NC50 5	om Te 0 3,49 OD ID 750 2,500 3,75 1,875 2,000 6,25 2,250 6,625 2,250 6,625 2,250 0,000 3,000 0,000 0,000 3,000 0,	2 8.835 Length 1.00 19.62 30.41 12.36 4.05 6.04 356.40 2.93 176.20 30.21 148.33 787.55	8.750 3. CUM 1.00 20.62 De 51.03 63.39 67.44 173.48 1429.88 1429.88 1609.01 2787.55 33 4.663.55 33	Int set Collapse 950 2,570 KOP MD/TVD 10,459 / 10,459 the Incl. 167 1.70 645 2,50 001 3,90 4476 0,10 949 0,40 422 0,40 885 1,00 385 1,00 385 0,30 5550 0,70 929 0,20	Pipe Body Yield 630,000 630,000 630,000 11,450 0.00 160,000 1,000 0.00 1,47 0.00 1,000 0,000 1,47 0.00 2,42 0.00 2,89 0.00 3,36 0.00 3,36 0.00 3,36	Joint Strength 520,000 (MD/TVD 0711,000 TVD VS 6.98 2.48 4.65 19.96 0.09 39.86 4.71 56.44 7.71 58.55 7.71 58.55 7.75 8.66 77.58 7.75 8.66 77.56 77.56 77.56 77.56 77.56 77.56 77.56	Capacity 0.07582 Landing F 15,367 N/-S 1,929 3.39.86 5.644 5.850 61.81 67.58 2.72.92 77.51	Displ 0.01455 Pt MD/TVD / 11,000 E/-W 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	Displ 0.0903 Pili- Pili- O. O. O. O. O. O. O. O. O.
24.00 Drilling 24.00 Drilling 24.00 Drilling 24.00 Drilling 24.00 Drilling 24.00 Description 25.00 Description 26.00 Description 27.00 ⊕ 106 28.00 Description 28.00 Description 29.56* 40# J-55 LT& 20.00 Description 20.00 Descri	Rotating from 4,380' to Motor DiffPressure = 400 Pressure = 1,900 Pres	Thread (4.5 reg 8 4.5 XH 7 4.5 XH 6 NC-50 5 NC50 5 NC50 5 NC50 5 NC50 5 NC50 5	0 3.49 DD ID 750 2.500 375 1.875 7.750 2.000 .625 2.250 .625 2.250 .500 2.500 .000 3.000 .000 3.000 .000 3.000 BHA = .000 4.276	2 8.835 Length 1.00 19.62 30.41 12.36 4.05 6.04 356.40 2.93 176.20 30.21 148.33 787.55 3,876.00	8.750 3. CUM 1.00 20.622 De 51.03 63.39 67.44 73.48 1 429.88 1 429.88 1 429.88 1 609.01 2 639.22 787.55 3 3 4,663.55 3 4,663.55	Interest Collapse	Pipe Body Yield 630,000 Pen Pin 1,450 Azi. 0.00 1,000 64 0.00 1,47 0.00 1,47 0.00 2,42 0.00 2,89 0.00 3,54 0.00 3,54 0.00 3,54 0.00 3,54 0.00 3,55	Joint Strength 520,000 (MD/TVD) / 11,000 (MD/TVD) / 11,000 (MD/TVD) / 16,98 (2.44 (4.65 19.95 (0.09 39.86 (4.71 56.44 (7.71 58.56 (0.69 61.81 3.66 67.58 (3.62 74.53 7.60 77.51 5.60 79.16	Capacity 0.07582 Landing F 15,367 N/S 3 2.48 3 19,99 5 39.86 5 56,44 5 58,50 61,81 67,92 74,53 77,51 79,16	Displ 0.01455 Pt MD/TVD / 11,000 E/-W 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	Plugge Displication of the control o
24.00 Drilling 24.00 xt 24 hours: Drill Survey xt Casing: 7.000 @ 106 Casing Description JRF 9-5/8* 40# J-55 LT& Ity BHA 3 1 Baker Hughes T 607 X 1 Vertical Scoout SDI-712 Jaguar motor 23 rpg 1 Shock sub SS 6538 1 Flo-drift FD 1666 1 JA IBS 1 12 - 6* DC 1 Crossover 1 5* NC50 SpiralWate HV 1 Knight Jars	Rotating from 4,380' to Motor DiffPressure = 400 Pressure = 1,900 Pres	Thread (4.5 reg 8 4.5 xH 6 4.5 xH 6 4.5 xH 8 5 NC50 5 NC50 5 NC50 5 NC50 5 NC50 5 NC50 5	om Tc 0 3,49 DD ID 750 2,500 3,75 1,875 7,750 2,000 2,625 2,250 5,000 2,500 2,500 2,500 0,000 3,000 0,	2 8.835 Length 1.00 19.62 30.41 12.36 4.05 6.04 356.40 2.93 176.20 30.21 148.33 787.55 3.876.00 3.876.00	8.750 3. CUM 1.00 20.622 De 51.03 63.39 67.44 73.48 1. 429.88 1. 429.88 1. 609.01 2. 639.22 2. 787.55 3. 4,663.55 3. 4,663.55 4.	Interest Collapse	Pipe Body Yield 630,000 Pen Pi 11,450 Azi. 0.00 16 0.00 0,000 1,47 0.00 1,94 0.00 2,89 0.00 3,54 0.00 3,54 0.00 3,54 0.00 3,54 0.00 3,54 0.00 3,54 0.00 3,54 0.00 3,54	Joint Strength 520,000 (MD/TVD) / 11,000 TVD VS 6,98 2,44 6,65 19,96 0,09 39,86 4,71 56,44 7,71 56,56 69,56 61,81 3,66 67,56 3,66 72,95 8,62 74,55 7,60 77,5 6,60 79,16	Capacity 0.07582 Landing F 15,367 N/S 3 2.48 3 19,99 5 39.86 5 56.44 5 56.50 61.81 67.92 74.53 77.51 79.16	Displ 0.01455 Pt MD/TVD / 11,000 E/-W 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	Display Displa



AFE : Proper API # :

253084 5-023.01 89-33823 15,367

perty	428085-023.0
#:	42-389-3382
TO	16.36

Well Name					State/County	Section, Township, Range		Objective		Date		
EIC	SHTEENMILE	56-18 1	Н		TX, Reeves	18 / Blk 53 /	١	Volfcamp A		We	d, Jul 1	0, 2013
Contractor / Rig H&P 218	10	0FS 4.250	ODFS 5	Present Ope		4 Hole @ 4664'		MQ 4,664	4,664	Footage 1,172	FT/HR 142.06	Hours 8.25
Contact Engineer Foreman - Day Foreman - Night Manager Safety Supt Safety Supt Superintendent	Mark Audas Lyman Nance Jody Solansky Larry Seigrist Fred Jones Sheldon Waege Scott Lucas	ır	580-2 210.33 432.62 918.60 918.55	20.1928 16-1492 34.8052 20.1934 06.5904 57.4177	Contact Computer Geologist Landman	Wellsite 36 Kim Nordstog Cody T. Elliot	432	285.2380 571.7844 571.7806	Cum (Cum (Cum (Cum (Well Cost Orilling Cost Compl Cost Well Cost Intangible Co Mud Cost	ost	\$83,574 \$901,699 \$0 \$901,699 \$779,153 \$122,546 \$37,314



BLM/BIA Well Name

Cimarex Energy Co. Morning Drilling Report

AFE : Property : API # :

253084 428085-023.01 42-389-33823 15,367 Objective Wolfcamp A

Well Name			_		State	County	Section To	woship, Rang	ig.	Objective		Prop TD Date		15,367
EIGHTEE			4		TX, F	Reeves		Blk 53 /		Wolfcamp	A	We	d, Jul 1	-
Contractor / Riq H&P 218	10	4.250	obrs 5	Present Oper		Drill 8 3/4 H	lole @ 46	64'		MR 4,66	1M2 4 4,664	Footage 1,172	FT/HR 142.06	Hours 8.25
Sub Ledger Description	Ver	ndor & Desc	ription	B.C.P Code	Daily Drlg. Cost	Cum Drig. Cost	Variance To Drig. Afe OverAlrider	A.C.P Code	Daily Compl. Cost	Cum Compl. Cost	Variance To Compl. Afe	Dry Hole Cost	After Casing Point	Compl. Well Cost
Roads & Location Preparation / Restors		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		DIDC.100	- Cost	99,160		DICC 100	- Cost	- Cust	-	COST		COST
Damages	- Silver			DIDC 105 DIDC 255	-			DICC 105 DICC 235	100		- 4	- 1	-	
Mud/Fluids Disposal Charges Day Rate	H&P 218	[Day Rate / FI	RC Charge	DIDC 115	27,135	135,675	135,878	DICC 120			-			
Misc Prep Cost (Mouse Hole, Rat Hole,	NACIALITIES.	1. #15.50# (1) (15.50 × 1) (10.1		DIDC 120		29,733	29,733				-			
Bits	BAKER [Bit #3]		DIDC 125 DIDC 135	10,500	35,800		DICC 125	-		+		-	
Fuel Water 009 / Completion Fluids 109				DIDC.138		45,419 6,126		DICC 130 DICC 135	10		-		-	
Mud & Additives	Fas-Line	(Transfer Pum	p] / Haliburto		3,577	37,314	37,314			-				
Surface Rentals		Safety Service			810	5,900		DICC 140		-		7.	-	
Downhole Rentals DSTS. Formation Tests	Baker [Mi	lotor] / FLo-dri	ft (Survey Toc	DIDC 160	17,272	63,630	63,630	DIGC 145	-			-		
Mud Logging	Pason [V	Vork station] / V	West Texas V	The state of the s	1,005	1,005	1.005			-		-	-	
Open Hole Logging				DIDC.180	-				4 4 7		9		-	
Cementing, thru Intermediate Casing	El Esma	er [2 pipe rack]	11860 ante T	DIDC 185	209	76,020 3,168		DIGC 155 DIGC 160						
Tubular Inspections Casing Crews	EL Parme	er (z pipe rack)	/ VVIIDANKS	DIDC.195	205	15,924		DICC 165		-			-	
Extra labor, Welding, etc.				DIDC 200	-	2,405	2,405	DICC.170	-	-			-	
Trucking	8	D 20		DIDC 205	2 700	5,085	5,085		-	-	-		À	
Supervision Trailer, Camp & Catering		consulting / Lyn [Satelite] [sat/p			3,700 4,501	40,700 12,596		DICC 180 DICC 265						
Other misc expenses	- marex	'amount femals		DIDC 220	4,001	, 2,550	14.000	DIGG.190						
Overhead				DIDC 225	-	8,000	8,000	DIGC 195	-		-	-	-	
Remedial Cementing Mobilize & Demobilize				DIDC 231 DIDC 240	-	86,925	80.000	DICC 215	-	-	LITE S		-	
Directional Drilling	Lenco (Se	eptic] / Pason	Internet / Wo		270	2,070	56,925 2,070			-			-	
Dock, Dispatcher, Crane	Constitution of the	oracio e transferio del	- According to the Control of the Co	DIDC 250	-	THE COS.	110000	DICC 230						
Marine/Air Transportation				DIDC 275	-			DICC 250	-			-	-	
Solids Control-Equip/Services Well Control-Equip/Services		field Rentals (F egy services To		DIDC 260 DIDC 265	250 10,365	2,500 11,895	2,500	DICC:240		-				
Fishing & Sidetrack Services	Dattie ene	egy services in	ester frest tit	DIDC 270	10,365	11,090	11,030	DICC 245				-		
Completion Rig								DICC.115				-	V -	
Coil Tubing								DIGC 260	-	-			-	
Completion Logging, Perforating Stimulation					-35			DICC 200 DICC 210						
Legal/Regulatory/Curative	Bar Harris			DIDC 300		10,000	10,000	DIGC 280					-	
Well Control Insurance				DIDC_285	-	5,000	5,000			-				
Contingency				DIDC.435	3,980	37,103	37,103	DICC 220	-	-	-	-	-	
Construction For Well Equipment Construction For Lease Equipment								DWEA 110 DLEQ 110			1	-	-	
Construction For Sales P/L								DICC_265			-	4		
Intang	gible				83,574	779,163	779,153		0	0	0	0	0	
Drive Pipe				DWEB,150									-	
Conductor Pipe				DWEB 130								-	-	
Water String				DWEB.135	-						1111	-	+	
Surface Casing				DWEB 140	-	107,310	107.310					-	-	
Intermediate Casing Production Casing Or Liner				DWEB.145				DWEA 100						
Tubing				- du	Contract of			DWEA 105	-		-	-	-	
N/C Well Equipment								DWEA 115	-	-				
Wellhead, Tree, Chokes Liner Hanger, Isolation Packer				DWEB.115 DWEB.100		15,236	15,236	DWEA 120 DWEA 125	-				- 1	
Packer, Nipples	200			MAXIEST 1992				DWEA 130	1					
Pumping Unit, Engine								DLEG 100			,	-	-	
Lift Equipment (Bhp. Rods, Anchors)								DLEQ 106	-		-	-	-	
Metering Equipment Tangible - Wel	Easter				0	122,546	122,540	DLEQ.220	0	0	0	0	0	_
rangible - vvei	Equipm	lent			-	122,040	184,070				-			
N/C Lease Equipment	100		- 7-			-	41/20	OLEQ 115	-					
Tanks, Tanks Steps, Stairs Battery (Heater Treater, Separator)	-							DLEQ.120 DLEQ.125	-				- 1	
Flow Lines (Line Pipe From Wellhead)								DLEQ.130		-				
Offshore Production Structure For								DWEA135				-		
Pipeline to Sales								DWEA 140	- 4	-	- 4			
Tangible - Leas	e Equipn	nent	_	_	0	0	0		0	0	c	0	0	
P&A Costs			_1=2	DIDC 295	-	1.		DICC 275	- L	1		-	014	
P8/	A				0	0	0		0	0	0	0	0	
4.														
Total C	nete				83,574	901,699	903,699		0	.0	0	0	0	



AFE: Property: API#: Prop TD:

253084 428085-023.01 42-389-33823 15,367

Vell Name	FIGURES		FC 40 4			Str			Township			Objective		**	es tests	
entractor / Rig	EIGHTEE	Rpt #	56-18 1 DFS		Present Ope	ration	(, Reeves		8 / Blk 53 /		-	Nolfcamp A	IVD	Footage	hu, Jul	18, 20°
H&P 2	218	18	12.250	13	00	IG Tox	gging wel	with Sch	lumberg	er		12,000	12,00	0 0	0.00	0.0
80 %	Shale 20% Lin			0	0	0		pring Sand @		_		Sand @ 10			AMP A@	
	.500 DP Av	DC A		olocity HH	0.00	t Dia.	\$0.00		\$136			492		adient MW	Max Allo	36
	PZ-11					-11	v.	GF 2.00		#3.			G		PM	Off BP
6.00 Slow Stroke	11.00 Stand Pipe	EDR		.837 hoke Sk	6.00 w Stroke	11.00 Stand Pip		3.8 Chok		Stroke	Stand Pipe	EDR	Cho		0	On BP
MW in M	AW Out VS In	VS Out	EV	YP Ge	Strength	APIFiltrat	e LCM	MWin	MW Ou	t VS In	VS Out	PV	YP Gel	Strength	HTHE	0
	9.20 29	29	1	1		100.0		0	3000	1 10 11	33.59		12 201	20.00.000	111111	
	5olids Liquid 2.80 97.2	5an 0 0.0		BI EH 8.0				Cake	Solida	Liquid 100.00	Sand	AKPOM	WPS	ES	CACL2	NAC
Chlorides	Calcum	Q1 0.0	Water	9.W	Lime		h Checked	D Shion	285 5		DIPES Y	VaterPct	0.W	Line	Depth C	basked
55,000	1,560 Size Man	ufacturer	97.20	0 /pe	Seria		0@10:46 Jet#1 Jet#	2 Jet#3 J	et#4 Jet#	5 Jet#6 J	et#7 Jet	#8 TF		WOB	Datas	DOM
		Hughe		07 X	7145		11 11		12 12	12	12	E44.	202	30-32	Rotary 45 -	
	Bit Out Foots 12,000 8,5		Hours 55.75	54.63	177.50		r Outer		Location Taper	Bearing (Guage 01			Diff Pressure 400 - 400	Motor	
Drag Torque	and Weight		Diase					d additives in le	et 24 hours				Soil	Ferming / Mud	Disposal	
ckup Weight stating Weight	43,000 43,000	Diesel or Diesel R		10,5 7,2	100000	1	- 1000	neer - 24 HI A-DeFOAM		Bariod 41 (S' austic soda	1) 7	0 Daily So 0 Total So			is@ is@	\$0
sckoff Weight erage Drag	43,000	Diesel U	sed Today	1	10 Wall-n	ut Mediur	15 BAR	O-Seal Clar	13 p	lug-git	1	3 Daily Lic Total Lic		300 bb		\$1,500
ximum Drag		Maria P	Natural C	200	-							110000000		OP Pressure		3,14153
que On Bottom que Off Bottom		Meter Re	ed Today									Last BO		7/10/2013		since:
ily et	Rotating	Slidir	ng	Total	BHA#	3	Rotating 8,508	Stidi	ng	Total 8,508	C	ode Tir 1 MIRU/R	me Distribu	ition	Daily	133.0
urs					Hours		155.75			155.75		2 Drilling				177.5
ime					ROP %Time		54.63 100.00			54.63		3 Washin 4 Lost Cir	g/Reaming roulation			4.
eet					%Feet		100.00					5 Cond. N 6 Tripping	Mud & Circ		2.50	19.5
ours Tin	me Desc Mud & Circ Pu	ımp hi vis	sweeps ar	Chron nd clean/con			00 Hours to 0	600 Hours)			$-\parallel$	7 Lubrica			0.50	3.
1.00 Cond N				vork pipe slo								11 Wreline	Logging		11.00	11.0
0.50 Deviatio						We William a		A								
0.50 Deviation	Mud & Circ Sp 10	ot kill mud 1095', 11.3	d (150 bbl 3 slug)	9.8 brine Est			150 bbl 11.3,				110	12 Run Ca 13 Cement	t Casing			
0.50 Deviation 1.50 Cond. N	Mud & Circ Sp 10 g Ch	ot kill mud 1095', 11.3 neck flow &	d (150 bbl 3 slug) & trip out o	9.8 brine Est	Gyro surv	ey, No fill u	until above 56	500' (Proper				13 Cement 14 Wait Or	t Casing Cement			5.0 4.0
0.50 Deviation 1.50 Cond. No. 0.00 Tripping 3.00 Wireline	Mud & Circ Sp 10 g Cr e Logging He e Logging Ru	oot kill mud 1095', 11.3 neck flow & ald safety i un wireline	d (150 bbl 3 slug) & trip out o meeting w logs Qua	9.8 brine Est f hole getting th Schlumbe d combo= Ge	g Gyro surv erger, rig up	ey, No fill u Lubricator		500' (Proper equipment.	fills after 56	500)		13 Cement 14 Wait Or 15 NU BOI 16 Test BC	t Casing in Cement P's OP's			5.4 4.1 10.5
0.50 Deviation 1.50 Cond. No. 0.00 Tripping 3.00 Wireline 8.00 Wireline	Mud & Circ Sp 10 g Cr e Logging He e Logging Ru	oot kill mud 1095', 11.3 neck flow & ald safety i un wireline	d (150 bbl 3 slug) & trip out o meeting w	9.8 brine Est f hole getting th Schlumbe d combo= Ge	g Gyro surv erger, rig up	ey, No fill u Lubricator	until above 56 r and wireline	500' (Proper equipment.	fills after 56	500)		13 Cement 14 Wait Or 15 NU BOI	t Casing n Cement P's OP's ontrol	st		5.0 4.0 10.0 5.7 0.7 3.0
0.50 Deviation 1.50 Cond. N 0.00 Tripping 3.00 Wireline 8.00 Wireline	Mud & Circ Sp 10 g Cr e Logging He e Logging Ru bb	oot kill mud 1095', 11.3 neck flow & eld safety i un wireline li/hr, Tagge	d (150 bbl 3 slug) & trip out o meeting w r logs Qua ed up @ 1	9.8 brine Est f hole getting th Schlumbe d combo= Ge 1978*	g Gyro surv erger, rig up	ey, No fill u Lubricator	until above 56 r and wireline	500' (Proper equipment.	fills after 56	31		13 Cement 14 Wait Or 15 NU BOI 16 Test BC 22 Well Co 24 Drill Cm Totals	t Casing t Cement P's OP's ontrol tt / Shoe Te		24.00	5.0 10.5 5.7 0.7 3.0 432.0
0.50 Deviation 1.50 Cond. N 0.00 Tripping 3.00 Wireline 8.00 Wireline 4.00	Mud & Circ Sp 10 g Cr e Logging He e Logging Ru	oot kill mud 1095', 11.3 neck flow & eld safety i un wireline li/hr, Tagge	d (150 bbl 3 slug) & trip out o meeting w r logs Qua ed up @ 1	9.8 brine Est f hole getting th Schlumbe d combo= Ge 1978*	g Gyro surv erger, rig up	ey, No fill L Lubricator Perosity, I	until above 56 r and wireline	500' (Proper equipment.	fills after 56	yations- C		13 Cement 14 Wait Or 15 NU BOI 16 Test BC 22 Well Co 24 Drill Cm Totals	t Casing t Cement P's OP's ontrol tt / Shoe Te	st (B: 25.00	GHG E	5.0 10.5 5.7 0.7 3.0 432.0
0.50 Deviation 1.50 Cond. N 0.00 Tripping 3.00 Wireline 8.00 Wireline 4.00 1.24 hours: 1 1.24 hours: 1	Mud & Circ Sp 10 g Cr e Logging He e Logging Ru bb	oot kill muc 1095', 11.3 neck flow & eld safety un wireline I/hr, Tagge	d (150 bbl 3 slug) & trip out o meeting w logs Qua- ed up @ 1	9.8 brine Est f hole getting th Schlumbe d combo= Ge 1978*	g Gyro surv erger, rig up	ey, No fill L Lubricator Perosity, I	until above 56 r and wireline Resistivity an	500' (Proper equipment.	fills after 56	yations G	GL: 2,866.1 Insp: 0	13 Cement 14 Wait Or 15 NU BOI 16 Test BC 22 Well Co 24 Drill Cm Totals Body	t Casing t Cement P's OP's ontrol tt / Shoe Te		GHG E	5.0 4.0 5.7 0.7 3.0 432.0 Plugg
0.50 Deviation 1.50 Cond. N 0.00 Tripping 3.00 Wireline 8.00 Wireline 4.00 t 24 hours: F t Casing: 7	Mud & Circ Sp 10 10 10 10 10 10 10 1	oot kill muc 1095', 11.3 neck flow & eld safety un wireline un wireline lifthr, Tagge	d (150 bbl 3 slug) & trip out o meeting w logs Quared up @ 1 truck to cu	9.8 brine Est f hole getting th Schlumbe d combo= Ge 1978*	g Gyro surv erger, rig up amma Ray,	S	until above 56 r and wireline Resistivity an pills; 0	600' (Proper equipment. d Density. H	fills after 56 ole seeping	one of the state o	SL: 2,866.0	13 Cement 14 Wait Or 15 NU BOI 16 Test BC 22 Well Co 24 Drill Cm Totals Body	t Casing t Cement P's OP's ontrol tt / Shoe Te Joint	(B: 25.00	GHG E	5.4.10.5.0.0.3.1432.1 mission 0.00 Plugg
0.50 Deviation 1.50 Cond. N 0.00 Tripping 3.00 Wireline 8.00 Wireline 4.00 4.00 4.00 4.00 4.00 6.00 6.00 6.00	Mud & Circ Sp. 10 g CF Logging He Logging Rt. bb Finish logging & 7.000 @ 10600 Description □# J-55 LT&C Sp. 3	oot kill muc 1095', 11.3 neck flow & eld safety un wireline liftr, Taggi rig up 2nd Acc:	d (150 bbl 3 slug) & trip out o meeting w logs Quared up @ 1 truck to cu	9.8 brine Est f hole getting th Schlumbe d combo= Gi 1978* ut cores	g Gyro surv erger, rig up amma Ray,	S	until above 56 r and wireline Resistivity an pills: 0	500' (Proper equipment. d Density. H	Ele:	yations C	SL: 2,866.0	13 Cement 14 Wait Or 15 NU BOI 16 Test BC 22 Well Co 224 Drill Cm Totals 00 DF: 25 Body 10 000 Pen Pt MD/	t Casing o Cement P's oP's introl t / Shoe Te Joint Strength 520,000	Capacity 0.07582	GHG E	5.0 4.1 5.0 0.3.1 432.0 0.00 Plugg Dis 0.090
0.50 Deviation 1.50 Cond. N 0.00 Tripping 3.00 Wireline 8.00 Wireline 4.00 1.24 hours: 1 1.24 hours: 7 2.24 hours: 7 2.25 BHA 3 1.26 BHA 3 1.27 BHA 3 1.28 BHA 3 1.29 BHA 3 1.29 BHA 3 1.20 BHA 3 1.2	Mud & Circ Sp. 10 g	oot kill muc 1095', 11.3 neck flow & eld safety un wireline li/hr, Taggi rig up 2nd Acc:	d (150 bbl 3 slug) 3 slug) & trip out o meeting w logs Quared up @ 1 truck to cu	9.8 brine Est f hole getting th Schlumbe Gid combo= Gi 1978' I Thread 4.5 reg 4.5 XH	g Gyro survr greer, rig up amma Ray, From 0 0 8.750 7.375	ey. No fill to Lubricators. Perosity, I Sill To 3,492 ID 2,500 1,875	until above 56 r and wireline Resistivity an pills: 0 pills: 0 Length 1,00 19,62	Drift 8.750 CUM 1.00 20.62	Burst 3,950 KO Depth	collapse 2.570 P MD/TVD 39 / 10.439 Incl.	SL: 2,866.insp: 0 Pipe Yiu 630	13 Cement 14 Wait Or 15 NU BO/1 16 Test BC 22 Well Co. 24 Drill Cm Totals 0,000 Pen Pt MD/ 11,430 / 11	t Casing 1 Cement P's 1)P's 1)	Capacity 0.07582 Landing 15,367 N/-S	Displ 0.01455 Pt MD/TVD / 11,000 E/-W	5.0 4.0 5.7 0.7 3.0 432.0 mission 0.00 Plugg Dist 0.090
0.50 Deviation 1.50 Cond. N 0.00 Tripping 3.00 Wireline 8.00 Wireline 4.00 1.24 hours: F 1.4 Casing: 7 2.24 hours: F 1.5 BHA 3 1.5 BHA	Mud & Circ Sp. 10 g Ch	oot kill muc 1095', 11.3 neck flow & eld safety un wireline li/hr, Taggi rig up 2nd Acc:	d (150 bbl 3 slug) 3 slug) & trip out o meeting w logs Quared up @ 1 truck to cu	9.8 brine Est f hole gettingth Schlumbe d combo= Gi 1978' 1 Thread 4.5 reg 4.5 XH 4.5 XH 4.5 XH	g Gyro surverger, rig up amma Ray, From 0 OD 8.750 7.375 6.625	yey, No fill Lubricator, Perosity, I	pills: 0 ib 8.835 Length 1.00 19.62 30.41 12.36	Drift 8.750 CUM 1.00 2.62 51.03 63.39	Electric Burst 3,950	collapse 2.570 P MD/TVD 39 / 10.439	SL: 2,866.0 Insp: 0 Pipe! Yis	13 Cement 14 Wait Or 15 NU BO/ 15 NU BO/ 16 Test BC 22 Well Co 24 Drill Cm Totals 00 DF: 25 86dy eld 0,000 Pen Pt MD/ 11,430 / 11	t Casing Cement P's P's Introl Int / Shoe Te Joint Strength 520,000 TVD ,000	(8: 25.00 Capacity 0.07582 Landing 15,367	Displ 0.01455 Pt MD/TV0	5.0 4.6 10.5 5.7 3.6 432.0 0.00 Plugg Dist 0.090
0.50 Deviation 1.50 Cond. N 0.00 Tripping 3.00 Wireline 8.00 Wireline 4.00 1.24 hours; F 1.24 hours; F 1.24 hours; F 1.24 hours; F 1.25 hours; F 1.25 hours; F 1.26 hours	Mud & Circ Sp. 10 g Ch	oot kill muc 1095', 11.3 1095', 11.3 1095', 11.3 1096', 11.3 1096	d (150 bbt 3 slug) 8 trip out or or meeting we logs Quared up @ 1 truck to co	9.8 brine Est f hole getting th Schlumbe d combo= Gi 1978' I Thread 4.5 reg 4.5 XH 4.5 XH 4.5 XH 4.5 XH 4.5 XH	Gyro surverger, rig up amma Ray, From OD 8.750 6.750 6.656 6.500 8.625	Si To 3,492 ID 2,500 1,875 2,000 2,250 2,250 2,250	until above 56 r and wireline Resistivity an ID 8.835 Length 1.00 19.62 30.41 12.36 4.05 6.04	Drift 8.750 CUM 1.00 20.62 51.03 63.39 67.48	Burst 3,950 KO 10,4; A 307 4,887 5,160	Collapse 2.570 P MD/TVD 39 / 10.439 Incl. 0.30 0.10 0.20	SL: 2,866.1 Insp. 0 Pipe I Yiu 630 Azi. 0.00 0.00 0.00	13 Cement 14 Wait Or 15 NU BOI 16 Test BC 22 Well Co 22 Well Co 24 Drill Cm Totals 0.000 Pen Pt MD/ 11.430 / 11 TVD 4.305.60 5.158.59	t Casing 1 Cement 1 1 C	Capacity 0.07582 Landing 15,367 N/-S 79.16 80.48 81.72	Displ 0.01455 Pt MD/TVD / 11,000 E/-W 0.00 0.00 0.00	5.6 4.6 10.5 5.7 0.7 3.6 432.1 mission 0.00 Plugg Dist 0.090 0.090
0.50 Deviation 1.50 Cond. N 0.00 Tripping 3.00 Wireline 8.00 Wireline 4.00 1.24 hours: F 1.4 Casing: 7 2.5 BHA 3 1.5 BHA 3 1.5 BHA 3 1.5 Vertical Sco 1.5 Jayuar moto 1.5 Shock sub 3 1.5 Floodrift FD 1.5 JA IBS 1.1 12-6 DC	Mud & Circ Sp. 10 g Ch	oot kill muc 1095', 11.3 1095', 11.3 1095', 11.3 1096', 11.3 1096	d (150 bbl 3 slug) 3 slug) & trip out o meeting w logs Quared up @ 1 truck to cu	9.8 brine Est f hole getting th Schlumbe d combo= Gi 1978* I Thread 4.5 reg 4.5 XH 4.5 XH 4.5 XH 4.5 XH	g Gyro survr greer, rig up amma Ray, From 0 0 0.8.750 7.375 6.750 6.625 6.500	Si To 3,492 ID 2,500 1,875 2,000 2,250 2,250 2,250	pills; 0 8.835 Length 1.00 19.62 30.41 12.36 4.05	BOO' (Proper equipment. d Density. H Drift 8.750 CUM 1.00 20.62 51.03 63.39 67.44	Burst 3,950 KO Depth 4,307 4,687 5,160 5,632 6,104	Collapse 2.570 P MD/TVD 39 / 10.439 Incl. 0.30 0.10 0.20 0.30 0.50	Azi. 0.00 0.00 0.00 0.00	13 Cement 14 Wait Or 15 NU BOJ 16 Test BC 22 Well Co 224 Drill Cm Totals 00 DF: 25 Body 88 80 11,430 / 11 TVD 4,305.60 4,685.60 5,158.59 6,630.59 6,102.58	Casing Cerent P's OP's OP's OP's OP's OP's OP's OP's	Capacity 0.07582 Landing 15,367 N/-S 79.16 80.48 81.72 83.78 87.08	Displ 0.01455 Pt MD/TVD / 11,000 E/-W 0.00 0.00 0.00 0.00	5.0.4.0.10.0.00.00.00.00.00.00.00.00.00.00.00
0.50 Deviation 1.50 Cond. N 0.00 Tripping 3.00 Wireline 8.00 Wireline 4.00 t 24 hours: F t Casing: 7 asting RF 9-5/8*40 Y BHA 3 1 Baker Hugh 1 Vertical Foot 1 Jaylar mote 1 Shock sub 3 1 Flo-drift FD 1 JA IBS 1 1 Crossover 1 5*NC50 Sp	Mud & Circ Sp. 10 g CF Logging He Logging R. Bb Finish logging & 7,000 @ 10600 Description 0# J-55 LT&C Sp. 3 res T 607 X Sout SDI-712-VSt or 23 rpg SS 6538 1666	oot kill muc 095', 11.3' neck flow k eld safety un wireline lithr. Tagge rig up 2nd Acc:	d (150 bbt 3 slug) 8 trip out or or meeting we logs Quared up @ 1 truck to co	9.8 brine Est f hole getting th Schlumbe d combo= Gi 1978' I Thread 4.5 reg 4.5 XH 4.5 XH 4.5 XH 4.5 XH 4.5 XH 0.050 NC50	g Gyro surviverger, rig up amma Ray, From OD 8.750 6.625 6.500 8.625 6.500	SI To 3,492 ID 2,500 2,250 2,250 2,500	pills; 0 iD 8.835 Length 1.00 19.62 30.41 12.36 4.05 6.04 356.40	Drift 8.750 CUM 1.00 20.62 51.03 63.39 67.44 73.48 429.88	Burst 3,950 Company	collapse 2.570 P MD/TVD 39 / 10.439 Incl. 0.30 0.10 0.20 0.30	Azi. 0.00 0.00 0.00	13 Cement 14 Wait Or 15 NU BO 16 Test BC 22 Well Cc 22 Well Cc 24 Drill Cm Totals 0,000 Pen Pt MD/ 11,430 / 11 TVD 4,305.60 4,685.60 5,158.59 5,630.59	t Casing t Carrent P's OP's OP's OP's OP's OP's OP's OP's	Capacity 0.07582 Landing 15,367 N/-S 79.16 80.48 81.72 83.78	Displ 0.01455 Pt MD/TVD 2 / 11,000 E/-W 0.00 0.00 0.00	5.0.4 4.0.0 5.0.0 5.0.0 7.0.0
0.50 Deviation 1.50 Cond. N 0.00 Tripping 3.00 Wireline 8.00 Wireline 4.00 t 24 hours: f t Casing: 7 asing RF 9-5/8*40 Y BHA 3 1 Baker Hugh 1 Vertical Sco 1 Jaguar moto 1 Shock sub 5: 1 Floe-drift FD 1 JA IBS 1 12-6*DC 1 Crossover 1 5* NC50 Sp 1 Knight Jars 1 5* NC50 Sp	Mud & Circ Sp. 10 g CF Logging He Logging R. Bb Finish logging & 7,000 @ 10600 Description 0# J-55 LT&C Sp. 3 res T 607 X Sout SDI-712-VSt or 23 rpg SS 6538 1666	oot kill mucoost kill mucoost kill mucoost (1908-11). Acc: ecial Drift 08-011	d (150 bbt 3 slug) 3 slug) try	9.8 brine Est f hole getting th Schlumbe G: 1978' J Thread 4.5 reg 4.5 XH 4.5 XH 4.5 XH 4.5 XH 4.5 XH 0.50 NC50 NC50	g Gyro survr erger, rig up amma Ray, Prom OD 8.750 6.750 6.625 6.500 5.000	S To 3,492 ID 2,500 2,250 2,250 2,500 3,000	pills: 0 10 8.835 Length 1.00 19.62 30.41 12.36 4.05 6.04 356.40 2.93 176.20 30.21 148.33	Drift 8.750 CUM 1.00 20.62 51.03 63.39 67.44 73.48 429.88 432.81 609.01	Burst 3,950 KO 10,4: Depth 4,307 4,687 5,160 5,632 6,104 6,484 6,957 7,429	Collapse 2.570 P MD/TVD 39 / 10,439 Incl. 0.30 0.10 0.20 0.50 0.20 0.10	Azi. 0.00 0.00 0.00 0.00 0.00	13 Cement 14 Wait Or 15 NU BO 16 Test BO 22 Well Co 22 Well Co 24 Drill Cr Totals 00 DF: 25 0000 Pen Pt MD/ 11.430 / 11 TVD 4.305.60 4.685.60 5.158.59 6.102.58 6.482.57 7.427.57	t Casing t Carsing t Cerent P's P's P's Printrol tf / Shoe Te Joint Strength 520,000 TVD ,000 VS 79.14 80.47 81.71 83.77 87.06 89.38 91.03 92.27	Capacity 0.07582 Landing 15,367 N/-S 79.16 80.48 81.72 83.78 87.08 89.40 91.05 92.28	Displ 0.01455 Pt MD/TVC / 11,000 0.00 0.00 0.00 0.00 0.00 0.00 0.	5.0.4 4.1.1 10.0 10.0 10.0 10.0 10.0 10.0
0.50 Deviation 1.50 Cond. N 0.00 Tripping 3.00 Wireline 8.00 Wireline 4.00 t 24 hours: f t Casing: 7 asing RF 9-5/8*40 Y BHA 3 1 Baker Hugh 1 Vertical Sco 1 Jaguar moto 1 Shock sub 5: 1 Floe-drift FD 1 JA IBS 1 12-6*DC 1 Crossover 1 5* NC50 Sp 1 Knight Jars 1 5* NC50 Sp	Mud & Circ Sp. 10 g He Logging He Logging & R. bb Finish logging & R. 7.000 @ 10600 Description 0# J-55 LT&C Sp. 3 nes T 607 X bout SDI-712-VSt or 23 rpg SS 6538	oot kill mucoost kill mucoost kill mucoost (1908-11). Acc: ecial Drift 08-011	d (150 bbt 3 slug) 3 slug) 4 trip out o meeting w logs Quared up @ 1 bruck to co Casing Wt Gro 99.00	9.8 brine Est f hole getting th Schlumbe G: 1978' J Thread 4.5 reg 4.5 XH 4.5 XH 4.5 XH 4.5 XH 4.5 XH 0.50 NC50 NC50	g Gyro surv rrger, rig up amma Ray, 0 0 0 8.750 7.375 6.505 6.625 6.500 5.000 5.000	S. S. To 3.492 1D 2.500 1.875 2.000 2.250 2.250 2.250 2.250 2.500 3.000 3.000	pills; 0 B 8.835 Length 1.00 19.62 30.41 12.36 4.05 6.04 356.40 2.93 176.20 30.21	Drift 8.750 CUM 1.00 20.62 51.03 67.44 73.48 429.88 432.81 609.01 639.22	Burst 3,950 KO 10,4: Depth 4,307 5,160 5,632 6,104 6,484 6,957 7,429 7,808 8,279	collapse 2.570 P MD/TVD 39 / 10.439 Incl. 0.30 0.50 0.20 0.20 0.20 0.90 0.20 0.20	Azi. 2.866.30 Pipe I Yh 630 0.00 0.00 0.00 0.00 0.00 0.00 0.00	13 Cement 14 Wait Or 15 NU BOI 16 Test BC 22 Well Ce 24 Drill Cm Totals Bedy 16	Casing Casing Cement P's Comment P's Comment P's Comment Comme	Capacity 0.07582 Landing 15,367 N/-S 79.16 80.48 81.72 83.78 89.40 91.05 92.28 95.59 100.11	Displ 0.01455 Pt MD/TVC / 11,000 E/-W 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	5.0.4.4.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1
0.50 Deviation 1.50 Cond. N 0.00 Tripping 3.00 Wireline 8.00 Wireline 4.00 1.24 hours: F 1.24 hours	Mud & Circ Sp. 10 g Che Logging He Logging & R. Burner Community C	oot kill mucoot kill kill kill kill kill kill kill kil	d (150 bbt 3 slug) 3 slug) 4 trip out o meeting w logs Quared up @ 1 bruck to co Casing Wt Gro 99.00	9.8 brine Est f hole getting th Schlumbe G: 1978' J Thread 4.5 reg 4.5 XH 4.5 XH 4.5 XH 4.5 XH 4.5 XH 0.50 NC50 NC50	Gyro surv riger, rig up amma Ray, 0 0 0 0 8.750 6.737 6.750 6.625 6.500 8.625 6.500 5.000 5.000 5.000	SI Lubricator Perosity, I Lubricator Perosity, I I I I I I I I I	pills; 0 iD 8.835 Length 1.00 19.62 30.41 12.36 4.05 6.04 4.05 6.04 2.93 17.50 178.75 787.55	Drift 8.750 CUM 1.00 20.62 51.03 67.44 73.48 429.88 432.81 609.01 639.22	Burst 3,950 KO 10,4 Depth 4,307 4,687 5,160 5,632 6,104 6,484 6,484 6,487 7,429 9,131	Collapse 2.570 P MD/TVD 39 / 10.439 Incl. 0.30 0.10 0.20 0.30 0.50 0.20 0.20 0.10 0.90	Azi. 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0	13 Cement 14 Wait Or 15 NU B0: 16 Test B0 22 Well Ce 22 Well Ce 24 Drill Cm Totals 00 DF: 25 8e-dy 11.430 / 11 TVD 4,085.60 5,185.59 5,630.59 6,102.58 6,482.57 6,955.57 7,806.55	t Casing t Carsing t Cerement P's P's P's Introl tt / Shoe Te Joint 55.00 K Joint 55.00 VS 79.14 80.47 81.71 83.77 87.06 89.38 91.03 92.27 95.57	Capacity 0.07582 Landing 15,367 N/-S 79.16 80.48 81.72 83.78 87.90 91.05 92.28 95.59 100.11 106.80	Displ 0.01455 Pt MD/TVC / 11,000 E/-W 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	5.0.4 4.1.1 10.0 10.0 10.0 10.0 10.0 10.0
0.50 Deviation 1.50 Cond. N 0.00 Tripping 3.00 Wireline 8.00 Wireline 4.00 1.24 hours: F 1.24 hours	Mud & Circ Sp. 10 g Che Logging He Logging & R. Burner Community C	oot kill mucoost kill mucoost kill mucoost (1908-11). Acc: ecial Drift 08-011	d (150 bbt 3 slug) 3 slug) 4 trip out o meeting w logs Quared up @ 1 bruck to co Casing Wt Gro 99.00	9.8 brine Est f hole getting th Schlumbe G: 1978' J Thread 4.5 reg 4.5 XH 4.5 XH 4.5 XH 4.5 XH 4.5 XH 0.50 NC50 NC50	Gyro surv riger, rig up amma Ray, 0 0 0 0 8.750 6.737 6.750 6.625 6.500 8.625 6.500 5.000 5.000 5.000	SI Lubricator Perosity,	pills; 0 B. 8.35 Length 1.00 19.62 30.41 12.36 4.05 6.04 356.40 2.93 176 20 30.21 148.33 787.55	Drift 8.750 CUM 1.00 20.62 51.03 67.44 73.48 429.88 432.81 609.01	Burst 3,950 Cole seeping	Collapse 2.570 P MD/TVD 39 / 10.439 Incl. 0.30 0.10 0.20 0.30 0.50 0.20 0.20 0.70 0.60 0.60 0.60	Azi. 2.866.10 0.00 0.00 0.00 0.00 0.00 0.00 0.00	13 Cement 14 Wait Or 15 NU BOI 16 Test BC 22 Well Ce 22 Well Ce 24 Drill Cm Totals DF: 25 Body 10,000 Pen Pt MD/ 11,430 / 11 TVD 4,305.60 5,188.59 5,630.59 6,102.58 6,482.57 6,955.57 7,427.57 7,806.55 8,277.52 9,129.50 9,507.47 9,602.47	t Casing t Casing t Cement P's Cement P's Sintrol td / Shoe Te Joint Strength 520,000 VS 79.14 80.47 81.71 83.77 87.06 89.38 91.03 92.27 100.09 106.78 111.07	Capacity 0.07582 Landing 15,367 N/-S 79.16 80.48 81.72 83.78 87.98 89.40 91.05 92.58 95.59 100.11 106.80 111.09	Displ 0.01455 Pt MD/TVC / 11.000 0.00 0.00 0.00 0.00 0.00 0.00 0.	5.0.4 4.9.1 10.0 0.00 Plugger 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.
0.50 Deviation 1.50 Cond. N 0.00 Tripping 3.00 Wireline 8.00 Wireline 4.00 1.24 hours: F 1.24 hours	Mud & Circ Sp. 10 g Che Logging He Logging & R. Burner Community C	oot kill mucoot kill kill kill kill kill kill kill kil	d (150 bbt 3 slug) 3 slug) 4 trip out o meeting w logs Quared up @ 1 bruck to co Casing Wt Gro 99.00	9.8 brine Est f hole getting th Schlumbe G: 1978' J Thread 4.5 reg 4.5 XH 4.5 XH 4.5 XH 4.5 XH 4.5 XH 0.50 NC50 NC50	Gyro surv riger, rig up amma Ray, 0 0 0 0 8.750 6.737 6.750 6.625 6.500 8.625 6.500 5.000 5.000 5.000	SI Lubricator Perosity, I Lubricator Perosity, I I I I I I I I I	pills; 0 iD 8.835 Length 1.00 19.62 30.41 12.36 4.05 6.04 4.05 6.04 2.93 17.50 178.75 787.55	Drift 8.750 CUM 1.00 20.62 51.03 67.44 73.48 429.88 432.81 609.01	Burst 3,950 Burst 3,950 KOI 10,4: Depth 4,307 4,687 5,160 5,632 6,104 6,484 6,957 7,429 7,808 8,279 9,131 9,509	Collapse 2.570 P MD/TVD 39 / 10.439 Incl. 0.30 0.10 0.20 0.30 0.50 0.20 0.20 0.20 0.20 0.20 0.20 0.2	Azi. 2,856.10 0.00 0.00 0.00 0.00 0.00 0.00 0.00	13 Cement 14 Wait Or 15 NU B0: 16 Test B0 22 Well Co 22 Well Co 22 Well Co 24 Drill Cr Totals DDF: 25 DDF: 25	t Casing t Carsing t Cerent P's Common P's Sintrol t / Shoe Te Joint Strength 520,000 TVD ,000 VS 79.14 80.47 81.71 83.77 87.06 89.38 91.03 92.27 95.57 100.09 106.78 111.07	Capacity 0.07582 Landing 15,367 Nr-S 79,16 80,48 81,72 83,78 87,08 89,40 91,05 92,28 95,59 100,11 106,80 111,09	Displ 0.01455 Pt MD/TVC / 11,000 0.00 0.00 0.00 0.00 0.00 0.00 0.0	5.0.4 4.9.1 5.0.0 0.00 Plugggggggggggggggggggggggggggggggggggg
0.50 Deviation 1.50 Cond. N 0.00 Tripping 3.00 Wireline 8.00 Wireline 4.00 1.24 hours: F 1.24 hours	Mud & Circ Sp. 10 g Che Logging He Logging & R. Burner Community C	oot kill mucoot kill kill kill kill kill kill kill kil	d (150 bbt 3 slug) 3 slug) 4 trip out o meeting w logs Quared up @ 1 bruck to co	9.8 brine Est f hole getting th Schlumbe G: 1978' J Thread 4.5 reg 4.5 XH 4.5 XH 4.5 XH 4.5 XH 4.5 XH 0.50 NC50 NC50	Gyro surv riger, rig up amma Ray, 0 0 0 0 8.750 6.737 6.750 6.625 6.500 8.625 6.500 5.000 5.000 5.000	SI Lubricator Perosity, I Lubricator Perosity, I I I I I I I I I	pills; 0 iD 8.835 Length 1.00 19.62 30.41 12.36 4.05 6.04 4.05 6.04 2.93 17.50 178.75 787.55	Drift 8.750 CUM 1.00 20.62 51.03 67.44 73.48 429.88 432.81 609.01	Burst 3,950 Electric Superior	Collapse 2.570 P MD/TVD 39 / 10.439 Incl. 0.30 0.10 0.20 0.30 0.50 0.20 0.20 0.70 0.60 0.60 0.50 0.30	Azi. 2,866.16 0.00 0.00 0.00 0.00 0.00 0.00 0.00	13 Cement 14 Wait Or 15 NU B01 16 Test B0 22 Well Co 22 Well Co 24 Drill Cr Totals DDF: 25 Body 10,000 Pen Pt MD/ 11,430 / 11 TVD 4,305,60 4,685,60 5,163,59 6,102,58 6,482,57 7,806,55 8,277,52 9,129,507 9,866,45 10,642,44 10,642,44	t Casing t Casing t Cement P's O'P's Introl tf / Shoe Te Joint Strength 520,000 VS 79.14 80.47 81.71 83.77 87.06 89.38 91.03 92.27 95.57 100.09 106.78 111.07 114.79 117.42 119.41	Capacity 0.07582 Landing 15,367 N/-S 79,16 80,48 81,72 83,78 89,40 91,05 92,28 95,59 100,11 106,80 111,09 112,09 114,81 117,44 119,43	Displ 0.01455 Pt MD/TVC / 11,000 0.00 0.00 0.00 0.00 0.00 0.00 0.0	5.0.432.1 432.1 432.1 432.1 6.0.00 6.0.00 7 6.0.00 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7
0.50 Deviation 1.50 Cond. N 0.00 Tripping 3.00 Wireline 8.00 Wireline 4.00 1.24 hours: F 1.24 hours	Mud & Circ Sp. 10 g Che Logging He Logging & R. Burner Community C	oot kill mucoot kill kill kill kill kill kill kill kil	d (150 bbt 3 slug) 3 slug) 4 trip out o meeting w logs Quared up @ 1 bruck to co	9.8 brine Est f hole getting th Schlumbe G: 1978' J Thread 4.5 reg 4.5 XH 4.5 XH 4.5 XH 4.5 XH 4.5 XH 0.50 NC50 NC50	Gyro surv riger, rig up amma Ray, 0 0 0 0 8.750 6.737 6.750 6.625 6.500 8.625 6.500 5.000 5.000 5.000	SI Lubricator Perosity, I Lubricator Perosity, I I I I I I I I I	pills; 0 iD 8.835 Length 1.00 19.62 30.41 12.36 4.05 6.04 4.05 6.04 2.93 17.50 178.75 787.55	Drift 8.750 CUM 1.00 20.62 51.03 67.44 73.48 429.88 432.81 609.01	Burst 3,950 KO 10,4: Depth 4,307 4,687 5,160 5,632 6,104 6,484 6,957 7,429 9,131 9,509 9,604 9,888 10,265	Collapse 2.570 P MD/TVD 39 / 10.439 Incl. 0.30 0.50 0.20 0.20 0.20 0.20 0.70 0.60 0.60 0.50 0.30	Azi. 2.866.13 Azi. 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	13 Cement 14 Wait Or 15 NU BO! 16 Test BC 22 Well Co 22 Well Co 22 Well Co 24 Drill Cr Totals 00 DF: 25 0000 Pen Pt MD/ 11.430 / 11 TVD 4.305.60 4.685.60 5.158.59 6.102.58 6.482.57 7.427.57 7.806.55 8.277.52 9.129.50 9.507.47 9.602.47 9.602.47 9.886.45 10.263.44	t Casing t Casing t Cement P's Common P's Strength Strength Strength S20,000 TVD ,000 VS 79.14 80.47 81.71 83.77 87.06 89.38 91.03 92.27 95.57 100.09 106.78 111.07 112.07	Capacity 0.07582 Landing 15,367 N/-S 79,16 80,48 81,72 83,78 87,08 89,40 91,05 92,28 95,59 100,11 106,80 111,09 114,81 117,44	Displ 0.01455 Pt MD/TVC / 11,000 0.00 0.00 0.00 0.00 0.00 0.00 0.0	5.0.3.1 5.0.0 5.0.0 5.0.0 5.0.0 5.0.0 5.0.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.
0.50 Deviation 1.50 Cond. N 0.00 Tripping 3.00 Wireline 8.00 Wireline 4.00 1.24 hours: F 1.24 hours	Mud & Circ Sp. 10 g Che Logging He Logging & R. Burner Community C	oot kill mucoot kill kill kill kill kill kill kill kil	d (150 bbt 3 slug) 3 slug) 4 trip out o meeting w logs Quared up @ 1 bruck to co	9.8 brine Est f hole getting th Schlumbe G: 1978' J Thread 4.5 reg 4.5 XH 4.5 XH 4.5 XH 4.5 XH 4.5 XH 0.50 NC50 NC50	Gyro surv riger, rig up amma Ray, 0 0 0 0 8.750 6.737 6.750 6.625 6.500 8.625 6.500 5.000 5.000 5.000	SI Lubricator Perosity, I Lubricator Perosity, I I I I I I I I I	pills; 0 iD 8.835 Length 1.00 19.62 30.41 12.36 4.05 6.04 4.05 6.04 2.93 17.50 178.75 787.55	Drift 8.750 CUM 1.00 20.62 51.03 67.44 73.48 429.88 432.81 609.01	Burst 3,950 Burst 3,950 10,4: Depth 4,307 4,687 5,160 5,632 6,104 6,484 6,957 7,429 7,808 8,279 9,131 9,509 9,604 9,888 10,265 10,644 11,021 11,496 11,873	Collapse 2,570 P MD/TVD 39 / 10,439 Incl. 0,30 0,10 0,20 0,30 0,50 0,20 0,20 0,00 0,60 0,60 0,60 0,50 0,30 0,30 1,00 0,30 0,50	Azi. 2,856.10 0.00 0.00 0.00 0.00 0.00 0.00 0.00	13 Cement 14 Wait Or 15 NU BO! 16 Test BC 22 Well Co 22 Well Co 22 Well Co 24 Drill Cr Totals DDF: 25 DDF: 25	t Casing t Casing t Cement P's Comment P's Sintrol tf / Shoe Te Joint Strength 520,000 VS 79.14 80.47 81.71 83.77 87.06 89.38 91.03 92.27 95.57 100.09 112.07 114.79 117.42 119.41 123.68 129.07 131.70	Capacity 0.07582 Landing 15,367 N/-S 79,16 80,48 81,72 83,78 87,08 89,40 91.05 92,28 95.59 100,11 106,80 111,09 112,09 114,81 117,44 119,43 123,71 129,09 131,73	Displ 0.01455 Pt MD/TVC / 11,000 0.00 0.00 0.00 0.00 0.00 0.00 0.0	5.0.432.1 432.1 432.1 432.1 432.1 6.0.99 6.0
0.50 Deviation 1.50 Cond. N 0.00 Tripping 3.00 Wireline 8.00 Wireline 4.00 1.24 hours: F 1.4 Casing: 7 1.5 BHA 3 1.5 BHA 3 1.5 BHA 3 1.5 Flo-drift FD 1.5 JA IBS 1.7 Flo-drift FD 1.5 Flo-drift	Mud & Circ Sp. 10 g Che Logging He Logging & R. Bubble Finish logging & R.	oot kill mucoot kill kill kill kill kill kill kill kil	d (150 bbt 3 slug) 3 slug) 4 trip out o meeting w logs Quared up @ 1 bruck to co	9.8 brine Est f hole getting th Schlumbe G: 1978' J Thread 4.5 reg 4.5 XH 4.5 XH 4.5 XH 4.5 XH 4.5 XH 0.50 NC50 NC50	Gyro surv riger, rig up amma Ray, 0 0 0 0 8.750 6.737 6.750 6.625 6.500 8.625 6.500 5.000 5.000 5.000	SI Lubricator Perosity, I Lubricator Perosity, I I I I I I I I I	pills; 0 iD 8.835 Length 1.00 19.62 30.41 12.36 4.05 6.04 4.05 6.04 2.93 17.50 178.75 787.55	Drift 8.750 CUM 1.00 20.62 51.03 67.44 73.48 429.88 432.81 609.01	Burst 3,950 Ele: Burst 3,950 10,4: Depth 4,307 4,687 5,160 5,632 6,104 6,957 7,429 9,131 9,509 9,504 9,888 10,265 10,644 11,021 11,496	Collapse 2.570 P MD/TVD 39 / 10.439 Incl. 0.30 0.10 0.20 0.30 0.50 0.20 0.70 0.60 0.60 0.50 0.30 1.00 0.30 1.00 0.30 1.00 0.30 1.00 0.30 0.50 0.20 0.20 0.70 0.70 0.70 0.70 0.70 0.7	Azi. 2.866.13 Azi. 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	13 Cement 14 Wait Or 15 NU BO! 16 Test BC 22 Well Co 22 Well Co 22 Well Co 23 Well Co 24 Drill Cr Totals 00 DF: 25 00 D	t Casing t Casing t Cement P's P's P's Introl tf / Shoe Te 5.00 K Joint Strength 520,000 TVD ,000 VS 79.14 80.47 81.71 83.77 87.06 89.38 91.03 92.27 95.57 100.09 111.07 112.07 114.79 117.42 119.41 123.68 129.07	Capacity 0.07582 Landing 15,367 N/-S 79.16 80,48 81.72 83,78 87.98 89,40 91.05 92.28 95.59 100.11 106.80 111.09 114.81 117.44 119.43 123,71 129.09	Displ 0.01455 Pt MD/TVC / 11,000 0.00 0.00 0.00 0.00 0.00 0.00 0.0	5.0.432.1. 5.0.00 7.1. 5.0.00 9.0.000 9.0.000 9.0.000 9.0.000 9.0.0000 9.0.0000 9.0.0000 9.0.00000 9.0.00000000
0.50 Deviation 1.50 Cond. N 0.00 Tripping 3.00 Wireline 8.00 Wireline 4.00 1.24 hours: F 1.4 Casing: 7 1.5 BHA 3 1.5 BHA 3 1.5 BHA 3 1.5 Flo-drift FD 1. JA IBS 1. 12-6 DC 1. Grossover 1. Tripping 1	Mud & Circ Sp. 10 g Che Logging He Logging & R. Bubble Finish logging & R.	oot kill mucoot kill kill kill kill kill kill kill kil	d (150 bbt 3 slug) 3 slug) 4 trip out o meeting w logs Quared up @ 1 bruck to co	9.8 brine Est f hole getting th Schlumbe G: 1978' J Thread 4.5 reg 4.5 XH 4.5 XH 4.5 XH 4.5 XH 4.5 XH 0.50 NC50 NC50	Gyro surv riger, rig up amma Ray, 0 0 0 0 8.750 6.737 6.750 6.625 6.500 8.625 6.500 5.000 5.000 5.000	SI Lubricator Perosity, I Lubricator Perosity, I I I I I I I I I	pills; 0 iD 8.835 Length 1.00 19.62 30.41 12.36 4.05 6.04 4.05 6.04 2.93 17.50 178.75 787.55	Drift 8.750 CUM 1.00 20.62 51.03 67.44 73.48 429.88 432.81 609.01	Burst 3,950 Ele: Burst 3,950 10,4: Depth 4,307 4,687 5,160 6,484 6,957 7,429 7,808 8,279 9,131 9,509 9,604 9,888 10,265 10,644 11,021 11,496 11,873 11,927 Projection 11,992	Collapse 2.570 P MD/TVD 39 / 10.439 Incl. 0.30 0.50 0.20 0.20 0.70 0.60 0.60 0.50 0.30 0.30 0.30 0.50 0.70 0.60 0.70 0.70 0.70 0.70 0.70 0.7	Azi. 2.866.13 Azi. 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	13 Cement 14 Wait Or 15 NU BO! 16 Test BC 22 Well Co 22 Well Co 22 Well Co 24 Drill Cr Totals 00 DF: 25 0000 Pen Pt MD/ 11.430 / 11 TVD 4.305.60 4.685.60 5.158.59 6.102.58 6.482.57 7.427.57 7.806.55 8.277.52 9.129.50 9.507.47 9.602.47 9.602.47 9.602.47 9.602.47 9.602.47 9.886.45 10.263.44 10.642.44 11.019.41 11.494.38 11.871.37 11.992.37	t Casing t Casing t Cement P's P's P's Introl tf / Shoe Te 5.00 K Joint Strength 520,000 TVD ,000 VS 79.14 80.47 81.71 83.77 87.06 89.38 91.03 92.27 95.57 100.09 106.78 111.07 114.79 119.41 123.68 123.63 132.43	Capacity 0.07582 Landing 15,367 N/-S 79,16 80,48 81,72 83,78 87,08 89,40 91,05 92,28 95,59 100,11 106,80 111,09 112,09 114,81 117,44 119,43 123,71 132,06	Displ 0.01455 Pt MD/TVC / 11,000 0.00 0.00 0.00 0.00 0.00 0.00 0.0	5.0.3.1 5.0.3.1 5.0.3.1 5.0.3.1 5.0.3.1 5.0.3.1 5.0.3.1 5.0.3.1 5.0.3.1 5.0.3.1 5.0.3.1 5.0.3
0.50 Deviation 1.50 Cond. N 1.50 Cond. N 1.50 Wireline 8.00 Wireline 8.00 Wireline 8.4.00 1.24 hours: F 1.24 hours: F 1.24 hours: F 1.25 Ha A 1.25 Ha Ba A 1.26 Ha Ba B 1.26 Ha	Mud & Circ Sp. 10 g Che Logging He Logging & R. Bubble Finish logging & R.	oot kill mucoot kill kill kill kill kill kill kill kil	d (150 bbt 3 slug) 3 slug) 4 trip out o meeting w logs Quared up @ 1 bruck to co	9.8 brine Est f hole getting th Schlumbe G: 1978' J Thread 4.5 reg 4.5 XH 4.5 XH 4.5 XH 4.5 XH 4.5 XH 0.50 NC50 NC50	Gyro surv riger, rig up amma Ray, 0 0 0 0 8.750 6.737 6.750 6.625 6.500 8.625 6.500 5.000 5.000 5.000	SI Lubricator Perosity, I Lubricator Perosity, I I I I I I I I I	pills; 0 iD 8.835 Length 1.00 19.62 30.41 12.36 4.05 6.04 4.05 6.04 2.93 17.50 178.75 787.55	Drift 8.750 CUM 1.00 20.62 51.03 67.44 73.48 429.88 432.81 609.01	Burst 3,950 KOJ 10,4: Depth 4,307 4,687 5,160 5,632 6,104 6,484 6,957 7,429 9,131 9,509 9,604 9,888 10,265 10,644 11,021 11,496 11,873 11,927 Projectio	Collapse 2,570 P MD/TVD 39 / 10,439 Incl. 0,30 0,10 0,20 0,30 0,50 0,20 0,20 0,00 0,60 0,60 0,50 0,30 0,30 1,00 0,30 1,00 0,30 0,30 1,00 0,30 0,3	Azi. 2.866.13 Azi. 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	13 Cement 14 Wait Or 15 NU BO! 16 Test BC 22 Well Co 22 Well Co 22 Well Co 24 Drill Cr Totals DDF: 25 DDF: 25	t Casing t Casing t Cement P's P's P's Introl tf / Shoe Te 5.00 K Joint Strength 520,000 TVD ,000 VS 79.14 80.47 81.71 83.77 87.06 89.38 91.03 92.27 95.57 100.09 106.78 111.07 114.79 119.41 123.68 123.63 132.43	Capacity 0.07582 Landing 15,367 N/-S 79,16 80,48 81,72 83,78 89,40 91.05 92,28 95.59 100,11 106,80 111,09 112,09 114,81 117,44 119,43 123,71 129,09 131,73 132,06	Displ 0.01455 Pt MD/TVC / 11,000 0.00 0.00 0.00 0.00 0.00 0.00 0.0	5.0.3.1 5.0.3.1 5.0.3.1 5.0.3.1 5.0.3.1 5.0.3.1 5.0.3.1 5.0.3.1 5.0.3.1 5.0.3.1 5.0.3.1 5.0.3
0.50 Deviation 1.50 Cond. N 10.00 Tripping 3.00 Wireline 8.00 Wireline 24.00 At 24 hours: F At Casing: 7 assins RF 9-5/8* 4(TY BHA 3 1 Baker Hugh 1 Vertical Sco 1 Jaguar moto 1 Shock sub 3 1 Flo-drift FD 1 JA IBS 1 12 - 6* DC 1 Crossover 1 Shock sub 5 1 Flo-drift FD 1 JA IBS 1 Shock sub 5 1 Flo-drift FD 1 JA IBS 1 Shock sub 5 1 Flo-drift FD 1 JA IBS 1 Shock sub 5 1 Flo-drift FD 1 Shock sub 5 1 Shock sub 5 1 Shock sub 5 1 Shock sub 5 1 Shock su	Mud & Circ Sp. 10 g	oot kill mucoot kill kill kill kill kill kill kill kil	d (150 bbt 3 slug) 3 slug) 4 trip out o meeting w logs Quared up @ 1 bruck to co	9.8 brine Est f hole getting th Schlumbe d combo= G: 1978' J Thread 4.5 reg 4.5 XH 4.5 XH 4.5 XH 4.5 XH 0.50 NC50 NC50 NC50	G Gyro surverger, rig up amma Ray, amma Ray, on the survey of the survey	Si	pitts; 0 B. 8.835 Length 1.00 19.62 30.41 12.36 4.05 6.04 356.40 2.93 30.21 148.33 787.55 787.55 11,212.45 12,000.00	Drift 8.750 CUM 1.00 20.62 51.03 63.39 67.44 73.48 429.88 432.81 609.01 639.22 787.55	Burst 3,950 KOI 10,4: Depth 4,307 5,160 5,632 6,104 6,484 6,957 7,429 9,131 9,509 9,604 9,888 10,265 10,645 11,496 11,873 11,927 Projectio 11,992 Final CI Piannee	Collapse 2,570 P MD/TVD 39 / 10,439 Incl. 0,30 0,10 0,20 0,30 0,50 0,20 0,20 0,00 0,60 0,60 0,50 0,30 0,30 1,00 0,30 1,00 0,30 0,30 1,00 0,30 0,3	Azi. 2.866.0 Pipe Yih 630 0.00 0.00 0.00 0.00 0.00 0.00 0.00	13 Cement 14 Wait Or 15 NU Boi 16 Test BC 22 Well Ce 22 Well Ce 24 Drill Cm Totals DDF: 25 Body 11 A30 / 11 TVD 4 ,305,60 5 ,158,59 5 ,630,59 6 ,102,58 6 ,482,57 6 ,955,57 7 ,427,57 7 ,427,57 7 ,805,55 8 ,277,52 9 ,129,50 9 ,507,47 9 ,886,45 10 ,263,44 11 ,019,41 11 ,494,38 11 ,871,37 11 ,990,37 1 feet ⊕ 1 feet ⊕ 1 feet ⊕ 1 feet ⊕	t Casing t Casing t Cement P's P's P's Introl tf / Shoe Te 5.00 K Joint Strength 520,000 TVD ,000 VS 79.14 80.47 81.71 83.77 87.06 89.38 91.03 92.27 95.57 110.09 106.78 111.07 112.07 112.07 112.19 117.42 119.41 123.68 129.07 131.70 132.03	Capacity 0.07582 Landing 15,367 N/-S 79.16 80.48 81.72 83.78 89.40 91.05 92.28 95.59 100.11 106.80 111.09 114.81 117.44 119.43 123.71 129.09 131.73 132.05	Displ 0.01455 Pt MD/TVC / 11,000 0.00 0.00 0.00 0.00 0.00 0.00 0.0	5.0.4 432.1 432.1 432.1 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6
0.50 Deviation 1.50 Cond. N 10.00 Tripping 3.00 Wireline 8.00 Wireline 8.00 Wireline 8.00 Wireline 1.4.00 xt 24 hours: F xt Casing: 7 Casing 1.5 BHA 3 1 Paker Hugh 1 Vertical Sco 1 Jaguar mote 1 Shock sub 3 1 Filo-drift FD 1 Ja HBS 1 12 - 6 DC 1 Crossover 1 5 NC50 Sp 1 Knight Jars 1 5 NC50 Sp	Mud & Circ Sp. 100 g 100	oot kill muc 095', 11.3' 11.3' eld safety In wireline I/hr. Tagge Pecial Drift 1 08-011	d (150 bbt 3 slug) 3 slug) 4 trip out o meeting w logs Quared up @ 1 bruck to co	9.8 brine Est f hole gettingth Schlumbe d combo= Gi 1978' 1 Thread 4.5 rsg 4.5 rsg 4.5 xH 4.5 xH 4.5 xH 4.5 xH 0.0 rc50	Gyro surverger, rig up amma Ray, amma Ray, of the survey o	S To 3,492 ID 2,500 3,000 3,000 3,000 3,000 3,000 BHA = ength = Kelly = Contact Compression Compres	pills: 0 8.835 Length 1.00 19.62 30.41 12.36 4.05 6.04 356.40 2.93 176.20 30.21 148.33 787.55 787.55 11,212.45 12,000.00	Drift 8.750 CUM 1.00 20.62 51.03 63.39 67.44 429.88 429.81 609.01 639.22 787.55	Burst 3,950 Electric	Collapse 2,570 P MD/TVD 39 / 10,439 Incl. 0,30 0,10 0,20 0,30 0,50 0,20 0,20 0,00 0,60 0,60 0,50 0,30 0,30 1,00 0,30 1,00 0,30 0,30 1,00 0,30 0,3	Azi. 2,866.16 00 00 00 00 00 00 00 00 00 00 00 00 00	13 Cement 14 Wait Or 15 NU Bo! 16 Test BC 22 Well Co 22 Well Co 22 Well Co 24 Drill Cr Totals DDF: 25 Body 10,000 Pen Pt MD/ 11,430 / 11 TVD 4,305,60 4,685,60 5,163,59 6,102,58 6,482,57 7,806,55 8,277,52 9,129,50 7,427,57 7,806,55 8,277,52 9,129,50 1,129,50 1,129,50 1,139,50 1	Casing Ca	Capacity 0.07582 Landing 15,367 N/-S 79,16 80,48 81,72 83,78 89,40 91,05 92,28 95,59 100,11 106,80 111,09 112,09 114,81 117,44 119,43 123,71 129,09 131,73 132,06 132,45 zimuth zimuth Viveli Cost Drilling Cost Compil Cost	GHG E Displ 0.01455 Pt MD/TVC / 11,000 0.00 0.00 0.00 0.00 0.00 0.00 0.0	Plugg Distance
0.50 Deviation 1.50 Cond. N 10.00 Tripping 3.00 Wireline 8.00 Wireline 24.00 xt 24 hours: F xt Casing: 7 Casing IRF 9-5/8* 46 2ty BHA 3 1 Baker Hugh 1 Vertical Sco 1 Jaguar moto 1 Shock sub 3 1 Flo-drift FD 1 JA IBS 1 12 - 6* DC 1 Crossover 1 5* NC50 Sp 1 Knight Jars 1 5* NC50 Sp	Mud & Circ Sp. 10 g C Finish logging & 10 g C Finish	oot kill mucoott kill kill kill kill kill kill kill ki	d (150 bbt 3 slug) 3 slug) 4 trip out o meeting w logs Quared up @ 1 bruck to co	9.8 brine Est f hole getting th Schlumbe d combo= Gi 1978' I Thread 4.5 reg 4.5 XH 4.5 XH 4.5 XH 4.5 XH 4.5 XH 0.50 NC50 NC50 NC50 NC50 SC50 NC50 NC50 NC50 NC50 NC50 NC50 NC50 N	Gyro surverger, rig up amma Ray, amma Ray, on the survey of the survey o	Si	pills: 0 8.835 Length 1.00 19.62 30.41 12.36 4.05 6.04 356.40 2.93 176.20 30.21 148.33 787.55 787.55 11,212.45 12,000.00	Drift 8.750 CUM 1.00 20.62 51.03 63.39 67.44 429.88 429.81 609.01 639.22 787.55	Burst 3,950 Burst 3,950 10,4: Depth 4,307 4,687 5,160 5,632 6,104 6,484 6,957 7,429 7,808 8,279 9,131 9,509 9,604 9,818 10,265 10,644 11,021 11,496 11,873 11,927 Projectiol 11,992 Final CI Plannecs	Collapse 2,570 P MD/TVD 39 / 10,439 Incl. 0,30 0,10 0,20 0,30 0,50 0,20 0,20 0,00 0,60 0,60 0,50 0,30 0,30 1,00 0,30 1,00 0,30 0,30 1,00 0,30 0,3	Azi. 2,866.16 00 00 00 00 00 00 00 00 00 00 00 00 00	13 Cement 14 Wait Or 15 NU Bo! 16 Test BC 22 Well Co 22 Well Co 22 Well Co 24 Drill Cr Totals DD DF: 25 DD DD DF: 25 DD DD DF: 25 DD DD DF: 25 DD DD DD DF: 25 DD DD DD DD DD DD DD	t Casing t Casing t Cement P's P's P's P's Introl tf / Shoe Te 5.00 K Joint Strength 520,000 TVD ,000 VS 79.14 80.47 81.71 87.06 89.38 91.03 92.27 95.57 110.09 106.78 111.07 112.07 112.07 112.10 113.170 132.03 132.43 0.00 A Daily Cum Cum Cum	Capacity 0.07582 Landing 15,367 N/-S 79,16 80,48 81,72 83,78 87,08 89,40 91,05 92,28 95,59 100,11 106,80 111,09 114,81 117,44 119,43 123,71 129,09 131,73 132,06 132,45 zimuth zimuth Drilling Cos	Displ 0.01455 Pt MD/TVC / 11,000 0.00	5.0.432.00 5.7.432.00 7.0.00 9.0.90 9.0.00 9.0.00 9.0.00 9.0.00 9.0.00 9.0.00 9.0.00 9.0.00 9.0.00 9.0.00
0.50 Deviation 1.50 Cond. N 1.50 Cond. N 10.00 Tripping 3.00 Wireline 8.00 Wireline 24.00 xt 24 hours: f xt Casing: 7 2asing 1 Baker Hugh 1 Vertical Sco 1 Jaguar moto 1 Shock sub 3 1 Elo-drift FD 1 Ja (BS) 1 12 - 6° DC 1 Crossover 1 5° NC50 Sp 1 Knight Jars 1 5° NC50 Sp	Mud & Circ Sp. 100 g Community of the Logging Rubb Finish logging & Rubb Description The Community of t	ecial Drift Acc: ecial Drift 77.50	d (150 bbt 3 slug) 3 slug) 4 trip out o meeting w logs Quared up @ 1 bruck to co	9.8 brine Est f hole gettingth Schlumbe d combo= Gi 1978' 1 Thread 4.5 rsg 4.5 rsg 4.5 xH 4.5 xH 4.5 xH 4.5 xH 0.0 rc50	Gyro surverger, rig up amma Ray, rig up amma Ray, on the surverger, rig up amma Ray, on the survey of the survey o	S To 3,492 ID 2,500 3,000 3,000 3,000 3,000 3,000 BHA = ength = Kelly = Contact Compression Compres	pills: 0 8.835 Length 1.00 19.62 30.41 12.36 4.05 6.04 356.40 2.93 176.20 30.21 148.33 787.55 787.55 11,212.45 12,000.00	Drift 8.750 CUM 1.00 20.62 51.03 63.39 67.44 429.88 429.81 609.01 639.22 787.55	Burst 3,950 Electric	Collapse 2,570 P MD/TVD 39 / 10,439 Incl. 0,30 0,10 0,20 0,30 0,50 0,20 0,20 0,00 0,60 0,60 0,50 0,30 0,30 1,00 0,30 1,00 0,30 0,30 1,00 0,30 0,3	Azi. 2,866.16 00 00 00 00 00 00 00 00 00 00 00 00 00	13 Cement 14 Wait Or 15 NU Bo! 16 Test BC 22 Well Co 22 Well Co 22 Well Co 24 Drill Cr Totals DDF: 25 Body 10,000 Pen Pt MD/ 11,430 / 11 TVD 4,305,60 4,685,60 5,163,59 6,102,58 6,482,57 7,806,55 8,277,52 9,129,50 7,427,57 7,806,55 8,277,52 9,129,50 1,129,50 1,129,50 1,139,50 1	Casing Ca	Capacity 0.07582 Landing 15,367 N/-S 79.16 80.48 81.72 83.78 89.40 91.05 92.28 92.59 100.11 106.80 111.09 112.09 114.81 117.44 119.43 123.71 129.09 131.73 132.65 zimuth zimuth Veli Cost Urilling Cost Compl Cost Well Cost	SHG E Displ O.01455 Pt MD/TVC / 11,000 E/-W O.00 O.00	5.6.4.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1



Cimarex Energy Co.

Morning Drilling Report

AFE: Property: API#: 253084 428085-023.01 42-389-33823

NMILE 56-18 1H Rpt # DFS ODFS 18 12.250 13									Prop T		
1000 CONTRACTOR 1000 CONTRACTO		State/C			wnship, Rano		Objective	A	_	hu, Jul 1	
	Present Oper		ng well wi	th Schlur	nberger		12,00	00 12,00	Footage 0 0	0.00	0.00
Vendor & Description	B.C.P Code	Daily Drig. Cost	Cum Drig. Cost	Variance To Orig. Ate Over/Under	A.C.P Code	Daily Compl. Cost	Cum Compl. Cost	Variance To Compl. Afe	Dry Hole Cost	After Casing Point	Compl. Well Cost
Cuatro [Water Location]	DIDC:100	650	99,810	A CONTRACTOR OF THE PERSON NAMED IN	DICC 100	2001	-	-15,000	120,000	15,000	135,00
	DIDC.105	-			DICC 105	-			40,000		40,00
H&P 218 [Day Rate / FRC Charge]	DIDC 255 DIDC 115	27,135	352,755		DIGG 235		207	-122,000	50,000 692,000	90,000	140,00
Har 218 [Day Rate / FRC Charge]		27,135	46,104	5.104	50506,140	2		-122,000		122,000	41,00
	DIDC/125		35,800		DICC.125			- TOTAL	85,000		85,00
Sun Coast [Rig fuel]	DIDC 135	23,965	92,709	. 10.00 (40.00.0	Market Street, St.		-	-25,000	148,000	25,000	173,00
		-	6,126		DICC:135	- 2	-	-10,000		10,000	25,00
		2000			DICC 145			180 000		180 000	231,00
	DIDC.155							10.000	179,000	10,000	189,00
	DIDC 160	-					W.	-	-		
		1,005	9,045	-27,955			-		37,000	1.0	37,00
					DICC 155			65 000		65 000	40,00
							- 2				40,00
The state of the s	DIDC 195		15,924					15,000	35,000	15,000	50,00
	DIDC 200	-	2,405			-		-8,000	20,000	8,000	28,00
	DIDC 205	-	16,815				-	-20,000	20,000	20,000	40,00
		6650				*		200			143,00
Certainex [Cateline] [sauphone/interco		1,055	19,036								56,00
	DIDC 225		8,000	1,000	DICC.195			-2,000	8,000	2,000	10,00
	DIDC:231	-			DICC 215	-	-				
		-		19,352					200,000	140	200,00
Gyro-Data [Drop Gyro] / Lenco [Sept		7,265	11,225	-408,775	Ding san				420,000		420,00
		1							-		
KSW Oilfield Rentals [Float Pumps] :		715	7,755	-22.245	-				30,000	3.7	30,00
Mc Guire Industries [Seperator & Ign		1,455	33,685					-30,000	65,000	30,000	95,00
San Jan [Deliver whipstock]	DIDC 270	525	525	109,475			-	00000	110,000		110,00
THE PERSON NAMED IN COLUMN 1											52,00 180,00
	-										100,00
					DIGC 210		-	-1.587,000	140	1,587,000	1,587,00
ALCOHOL: NO.	DIDC.300	-	10,000		DIGC 280		-	1	10,000		10,00
									5,000		5,00
	DIDC 435	5,206	71,905	-83,095				-131,000	155,000	131,000	286,00
								404.659	- 27	404.659	404,65
					DICC 265			NATIONAL C	- 4	-	
ble		109,317	1,505,999	-1,738,001		0	0	-3,154,659	3,248,000	3,154,659	6,402,65
	DIAFD 150								- 22		
	DWEB.135		-					-			
	DWEB.140		107,310	-6,690			+		114,000	-	114,00
	DWEB.145	-		-452,000			100		452,000	-	452,00
		_						100000000000000000000000000000000000000			80,00
			-					-02,000		00,000	00,00
	DWEB 115	-	15,236	-29,764		-	-	-38,000	45,000	38,000	83,00
	DWEB.100		-		DWEA 125		-	-75,000		75,000	75,00
					DWEA 130			-25,000		25,000	25,00
					DLEQ 100 DLEQ 105			-25,000	(4)	25,000	25,00
					DLEQ.220			-20,000		20,000	20,00
	_				per la constant de la						
Equipment		0	122,546	-418,454		0	0	328,000	611,000	328,000	939,00
Equipment		0	122,546	488,454		0	0		611,000		939,00
Equipment		0	122,546	488,454	DLEQ.115	0	0	-158,589	611,000	158,589	158,58
Equipment		0	122,546	428,454	DLEQ.120	0	0	-158,589 -110,182	611,000	158,589 110,182	158,58 110,18
Equipment		0	122,546	428,454		0	-	-158,589	611,000	158,589	939,00 158,58 110,18 194,06 335,05
Equipment		0	122,546	428,454	DLEQ.120 DLEQ.125	0	-	-158,589 -110,182 -194,064	611,000	158,589 110,182 194,064	158,58 110,18 194,06
Equipment		0	122,546	428,454	DLEQ.120 DLEQ.125 DLEQ.130	0	-	-158,589 -110,182 -194,064	611,000	158,589 110,182 194,064	158,58 110,18 194,06
Equipment e Equipment		0	122,546	-488,454 0	DLEQ.120 DLEQ.125 DLEQ.130 DWEA.135	0	-	-158,589 -110,182 -194,064	611,000	158,589 110,182 194,064 335,050	158,58 110,18 194,06
e Equipment			0	488,454	DLEQ 120 DLEQ 125 DLEQ 130 DWEA 135 DWEA 140			-158,589 -110,182 -194,064 -335,050		158,589 110,182 194,064 335,050	158,58 110,18 194,06 335,05
e Equipment	DIDC 295			432,454	DLEQ.120 DLEQ.125 DLEQ.130 DWEA.135			-158,589 -110,182 -194,064 -335,050		158,589 110,182 194,064 335,050 797,885	158,58 110,18 194,06 335,05
	Sun Coast [Rig fuel] [] / Fas-Line [Triansfer Pump] / Halib American Safety Services [HZS Paci BAKER [Reamer] / Baker (Motor) [9 Pason [Work Station] / West Texas V Hughes Olifield [Deliver packoff] / Oi Cuatro [Fresh water cement] EL Farmer [2 pipe rack] / Wilbanks T Brother consulting / Lyman Nance [S Cimarex [Safelite] [sat/phone/interco Gyro-Data [Drop Gyro] / Lenco [Sept KSW Olifield Rentals [Float Pumps] / Mc Guire Industries [Seperator & Ign San Jan [Deliver whipstock]	DICC 120 DICC 120 DICC 120 DICC 120 DICC 125 DICC 125	DIDC 120 DIDC 128 DIDC 128 DIDC 128 DIDC 128 DIDC 149 DIDC 138 DIDC 149 DIDC 158 DIDC 140 DIDC 158 DIDC 140 DIDC 158 DIDC 140 DIDC 158 DIDC 158 DIDC 140 DIDC 158 DIDC 159 DIDC 158 DIDC 159 DIDC 159	DIDC 120	DIDC_120	DIDC 120	Discription Control Control	DICE_120	DIDC 120 35,800 49,200 DIDC 126 25,500 25,201 DIDC 128 20,000	Discription Control Control	Sun Coast Rig Aver 2001 35,800 46,200 2001



AFE : Property : API # : 253084 428085-023.01 42-389-33823

M/BIA:														TD:	15,36
ell Name	EIGHTEENMILE	56-18 1H			2000	. Reeves		Township, R	ange		Objective Notfcamp /	A.	Date	Fri, Jul	_
ontractor / Rig H&P 218	Rpt#	DFS 13.250		esent Oper	ation		Work on T	on drive	\supset		MQ 12,000	IME			Hours
ersation		BGG	CG		TG Top	25				e Carion	Sand @ 1			CAMP A @	
DP Size DC Siz	ale 20% Lime ze DPAv DC	Av Jet Veloci	dy HHP/S	Q inch Bit	0.00	Cost/Ft 24	pring Sand @ Hrs	Cost/Ft.(Sand @ 1		indent MW		owable SICF
0.00 6.500 Pump #1 - PZ-		O O	S Pump	0.00	11	\$0.00	GPS	\$146.		3	,492		9.40 sps	GPM	36 Off BP
6.00	11.00	3.83	-	.00	11.00		3.83	7					363	0	0
Slow Stroke	Stand Pipe EDF	R Choke	e Slow	Stroke	Stand Pip	e EDR	Choke	Slow	Stroke	Stand Pipe	EDI	R Ch	oke		On BP
MWIn MWO		PV Y		trength	APIFitrate		o MW.In	MW.Out	VS In	VS Out	PV	YP G	ol Strength	HTHP	LCI
9.20 9.20 Cake Sold		1 1 nd MBT	1 PH	1 PM	100.00		Sake	Solida	Liquid	Sand	AIRPOM	WPS	ES	CACL2	NAGL
1 2.6 Chlorides	50 97.40 0.0 Calcium Oil	01 Water	8.00	0.0		0.24 h Checked	U Chloride		100.00 alcium	OilPet V	MaterPct	9.W	Lime	Death /	Checked
57,000	1,680	97.40	0	SHILLS		0@12:42	24,000,000	53 53	ADMINIT	MILM 3	AMAKALIS	MAL	MILOR	#GBGIT7	ACCOUNT.
Bit.# Siz 4 8.7	ize Manufacturer 750 JZ Bits	710120	RR	Serial K099		Jet#1 Jet#	#2 Jet#3 Jet	#4 Jet#5	Jet#6 .	Jet #7 Jet	TOTAL CO.	TFA 0000	0.0		y RPM - O
Bit In Bit C	Out Footage	Hours F	T/HR C	lum. Bit Hr	s. Inner	r Outer	Dull Lo	ocation	Bearing	Guage	Other	Reason	Diff Pressur	e Motor	RPM
O O		0.00 (0.00	177.50) (Mu	d additives in las	t 24 hours			T	Sai	0-0 Farming / M		-0
ickup Weight otating Weight		on Hand Received	10,016	Engine	er - 24 H	1 Tax		1,780 B	ariod 41 (S	IT)	5 Daily S Total S	Solids = Solids =		bls @	\$0.0
lackoff Weight verage Drag	The second secon	Used Today	552								Daily L	iquids =		bls @	\$3,480.0
aximum Drag		Natural Gas		-							TOTAL L		BOP Pressur		33,400)
rque On Bottom rque Off Bottom	- PROSESSON	Reading sed Today									Last B		07/10/2013		since:
aily Rot	tating Slid	ing	Total	BHA# Feet	4	Rotating	Slidin	g	Total	C		ime Distrib	ution	Daily	CUN 133.00
ours				Hours							2 Drilling				177.50
Time				%Time							4 Lost C	irculation			4.75
Feet Time D	Desc		Chrono	%Feet	othritu (080	00 Hours to	0600 Hours)			=	6 Trippin			6.00	19.50 41.75
3.50 Wireline Log	gging Run wire lin	ne logs Quad o	combo= Gar	nma Ray				ole seeping	g 1		7 Lubric 8 Rig Ri	ate Rig epair		6.00	3.50 6.00
			78' Log to 34	192								tion Survey		12.00	8.75
8.50 Wreline Log		de wall core De	epths / total	of 40							11 VVIrelii	ne Logging			
8.50 Wireline Log	ogging Run # 2 Sic 10,517,105 194,9136,9	de wall core De 13,10511,104 133,9128,912	epths / total 19,10417,10 6,9119,9069	of 40 0408,9244 9,9056,90	50,9042,9	034,9010,90	07,9005,8992	,8988,898;	2,8957		12 Run C			12.00	8.75
8.50 Wreline Log	ogging Run # 2 Sid 10,517,105 194,9136,9 ,8953,8928	de wall core De 13,10511,104	epths / total 19,10417,10 6,9119,9069 912,& 8905	of 40 0408,9244 9,9056,90 Pooh with	50,9042,9 wireline &	034,9010,90 & rig dn wirli	07,9005,8992 ne tools. Well	,8988,898; flowing .5	2,8957 bbl/hr		12 Run 0 13 Ceme 14 Wait 0	asing nt Casing on Cement		12.00	8.75 5.00 4.00
	ogging Run # 2 Sic 10,517,105 194,9136,9 ,8953,8928 Attempt to wear bushi	de wall core De 13,10511,104 133,9128,912 1,8922,8914,89	epths / total 19,10417,10 6,9119,9069 912,& 8905' hing. (Dog no flowing .5 bi	of 40 0408,9244 9,9056,90 Pooh with ut froze to bi/hr	50,9042,9 wireline & packing n	034,9010,90 & rig dn wirlin nut, decided	107,9005,8992 ne tools. Well to proceed with	,8988,898; flowing ,5 i	2,8957 bbl/hr		12 Run C 13 Ceme 14 Wait C 15 NU BC 16 Test B	asing nt Casing On Cement OP's		12,00	8.75 5.00 4.00 10.50 5.75
2.00 Tripping 4.00 Tripping 6.00 Rig Repair	pgging Run # 2 Sic 10,517,105 194,9136,9 ,8953,8928 Attempt to wear bushing	de wall core De 13,10511,104 133,9128,9126 8,8922,8914,89 pull wear bush ng due to well	epths / total 19,10417,10 6,9119,9069 912,& 8905' ning. (Dog nu flowing. 5 bi p in from sur	of 40 0408,924- 9,9056,90 Pooh with at froze to bithir rface to 3	50,9042,9 n wireline & packing n 554' Filling	034,9010,90 & rig dn wirlin nut, decided g pipe every	107,9005,8992 ne tools. Well to proceed with	,8988,898; flowing ,5 i	2,8957 bbl/hr		12 Run C 13 Ceme 14 Wait C 15 NU BC 16 Test B 22 Well C	asing nt Casing On Cement OP's	est	12.00	8.75 5.00 4.00 10.50 5.75 0.75
2.00 Tripping 4.00 Tripping 6.00 Rig Repair 24.00	egging Run # 2 Sic 10,517,105 194,9136,9 ,8953,8928 Attempt to wear bushin Make up bi Shut down	de wall core De 113,10511,104 1133,9128,9121 8922,8914,89 pull wear bush ng due to well t & bit sub, Trij due to A/C mo	epths / total 19,10417,10 6,9119,9069 912,& 8905' ning. (Dog nu flowing. 5 bi p in from sur	of 40 0408,924- 9,9056,90 Pooh with at froze to bithir rface to 3	50,9042,9 n wireline & packing n 554' Filling	034,9010,90 & rig dn wirlin nut, decided g pipe every	107,9005,8992 ne tools. Well to proceed with	,8988,898; flowing .5 i hout pulling per Trip)	2,8957 bbl/hr g		12 Run C 13 Ceme 14 Wait C 15 NU B0 16 Test B 22 Well C 24 Drill C	asing Int Casing On Cement OP's OOP's Control Int / Shoe T	324	24.00	8.79 5.00 4.00 10.50 5.79 0.79 3.00 456.00
2.00 Tripping 4.00 Tripping 6.00 Rig Repair 24.00 ext 24 hours: Finis	pgging Run # 2 Sic 10,517,105 194,9136,9 ,8953,8928 Attempt to wear bushing	de wall core De 13,10511,104 1133,9128,912 8922,8914,89 pull wear bush ng due to well 1 & bit sub, Trip due to A/C mo	epths / total 19,10417,10 6,9119,9069 912,& 8905' ning. (Dog nu flowing. 5 bi p in from sur	of 40 0408,924- 9,9056,90 Pooh with at froze to bithir rface to 3	s50,9042,9 n wireline & packing n 554' Filling m, Change	034,9010,90 & rig dn wirlin nut, decided g pipe every	107,9005,8992 ne tools. Well to proceed with	,8988,898; flowing .5 i hout pulling per Trip)	2,8957 bbl/hr g		12 Run C 13 Ceme 14 Wait C 15 NU B0 16 Test B 22 Well C 24 Drill C	asing Int Casing On Cement OP's OOP's Control Int / Shoe T	est KB: 25.00	24.00	8.75 5.00 4.00 10.50 5.75 0.75 3.00 456.00
2.00 Tripping 4.00 Tripping 6.00 Rig Repair 24.00 xt 24 hours: Finis xt Casing: 7.00	pgging Run # 2 \$\frac{1}{10,517,105}\$ 194,9136,9 ,8953,8926 Attempt to wear bushin Make up bit Shut down sh wiper trip & GIH wit 00 @ 10600 Acc:	de wall core De 13,10511,104 1133,9128,912 8922,8914,89 pull wear bush ng due to well 1 & bit sub, Trip due to A/C mo	epths / total 19,10417,10 6,9119,9069 912,& 8905' ning. (Dog nu flowing. 5 bi p in from sur	of 40 0408,9244 3,9056,90 Pooh with at froze to bi/hr rface to 3 went dow	50,9042,9 n wireline 8 n packing n 554' Filling m, Change	034,9010,90 & rig dn wirlinut, decided g pipe every e out same	107,9005,8992 ne tools. Well to proceed with	,8988,898; flowing .5 i hout pulling per Trip)	2,8957 bbl/hr g	GL: 2.866. insp: 0	12 Run C 13 Ceme 14 Wait C 15 NU BC 16 Test B 22 Well C 24 Drill C Totals	asing nt Casing on Cement OP's Control mt / Shoe T	KB: 25.00	24.00 GHG	8.75 5.00 4.00 10.50 5.75 0.75 3.00 456.00 Emissions 0.00
2.00 Tripping 4.00 Tripping 6.00 Rig Repair 24.00 xt 24 hours: Finis xt Casing: 7.00	logging Run # 2 % 10,517,105 194,9136,9 ,8953,8928 Attempt to wear bushin Make up bit Shut down	de wall core De 113,10511,104 1133,9128,9121 8922,8914,89 pull wear bush ng due to well t & bit sub, Trip due to A/C mo	epths / total 19,10417,10 6,9119,9069 912,& 8905' ning. (Dog nu flowing. 5 bi p in from sur	of 40 0408,924- 9,9056,90 Pooh with at froze to bithir rface to 3	s50,9042,9 n wireline & packing n 554' Filling m, Change	i034,9010,90 & rig dn wirlin nut, decided g pipe every e out same	107,9005,8992 re tools. Well to proceed with 25 stands (Wig	,8988,898; flowing .5 i hout pulling per Trip)	2,8957 bbl/hr g	GL: 2.866.	12 Run C 13 Ceme 14 Wait C 15 NU B0 16 Test B 22 Well C 24 Drill C Totals	asing on Casing on Cement OP's Control on / Shoe T	324	24.00 GHG	8.75 5.00 4.00 10.50 5.75 0.75 3.00 456.00 Emission 0.00 Plugge
2.00 Tripping 4.00 Tripping 6.00 Rig Repair 24.00 xt 24 hours: Finis xt Casing: 7.00 Casing 6 URF 9-5/8* 40# J Rty BHA 4	pgging Run # 2 % 10,517,105 194,9136,9 ,8953,8928 Attempt to wear bushin Make up bi Shut down sh wiper trip & GIH wit 00 @ 10600 Acc: Description J-55 LT&C Special Drift	de wall core De 1051,1051,104 1133,9128,912 1,8922,8914,89 pull wear bush ng due to well 1 & bit sub, Trip due to A/C mo th whipstock 0 th Casing	epths / total 19,10417,106,9119,906 312,8 8905' sing. (Dog ni flowing 5 bi p in from sur tor on TDS	of 40 408,924 3,9056,90 Pooh with at froze to bi/hr rface to 3 went dow	50,9042,9 n wireline & packing n S554* Filling m, Change	034,9010,90 & rig dn wirlin tut, decided g pipe every e out same pills: 0 ID 8.835 Length	Drift 8.750 CUM	,8988,898; flowing .5 hout pulling over Trip) Elev Burst 3,950 KOP	2,8957 bbb/hr g ations- Collaps 2,570	GL: 2.866. Insp: 0 Pipe e Yi	12 Run C 13 Geme 14 Wait C 15 NU BC 15 NU BC 15 NU BC 15 NU BC 24 Drill C Totals 00 DF: Body eld 00,000 Pen Pt Mi	asing nt Casing nt Casing nt Casing nt Casing on Cement Opp's OP's Control mt / Shoe T Joint Strength 520,000 O/TVD	KB: 25.00 Capacit 0.07582	24.00 GHG y Displ 0.01455 g Pt MD/TV	8.75 5.00 4.00 10.55 5.75 0.75 3.00 456.00 Plugge Displ 0.0903 D Pile
2.00 Tripping 4.00 Tripping 6.00 Rig Repair 24.00 xt 24 hours: Finis xt Casing: 7.00 Casing URF 9-5/8* 40# J Xty BHA 4 1 JZ Bits 710120 1 Bit sub	pgging Run # 2 % 10,517,105 194,9136,9 ,8953,8928 Attempt to wear bushin Make up bi Shut down sh wiper trip & GIH wit 00 @ 10600 Acc: Description J-55 LT&C Special Drift	de wall core D. de wall core D. 13. 10511, 10511, 104 13.3, 9128, 912, 8922, 8914, 89 pull wear bushing due to well 18. bit sub, Trij due to A/C mo th whilpstock 0 It Casing Wt Grd	epths / total 19,10417,116, 6,9119,906 212,8 8905' 112,8 8905' 112,8 8905' 113,8 8905' 114,8 8905' 115,1 8905' 115	of 40 408,924-9 3,9056,90 Pooh with at froze to bi/hr rface to 3 went dow	iso,9042,9 n wireline & packing n 554' Filling m, Change SI To 3,492 ID 2,250	0034,9010,908 rig dn wirlinut, decided pipipe every e out same	07,9005,8992 re tools. Well to proceed with too proceed with 25 stands (Wip Drift 8.750 CUM 1.00 4.00	Burst 3,950 KOP 10,27 Depth	2,8957 bbb/hr g ations- Collaps: 2,570 P MD/TVD 10 / 10,270 Incl.	GL: 2.866. Insp: 0 Pipe e Yie 634	12 Run C 13 Ceme 14 Wait C 16 Test B 22 Well C 24 Drill C Totals Body eld 0,000 Pen Pt M 11,430 / 1	asing int Casing int	Capacit 0.07582 Landin 15,3	24.00 GHG y Displ 0.01455 g Pt MD/TV 57 / 11,000 G E/-W	8.75 5.00 4.00 10.50 5.75 0.75 3.00 456.00 Plugge Displ 0.0903 D Pill Y
2.00 Tripping 4.00 Tripping 6.00 Rig Repair 24.00 xt 24 hours: Finis xt Casing: 7.00 Casing 152 BHA 4 1 JZ Brs 710120 1 Bit sub 1 12 - 6° DC 1 Crossover	pgging Run # 2 5 10,517,105 194,9136,9 ,8953,8926 Attempt to wear bushing Make up bit Shut down 195 19600 Acs: Description Description DRR	de wall core D. de wall core D. 13.10511,1051,1051 13.9128,912,8912,892,8914,89 19.101 was bushing due to well it & bit sub, Trip due to well it & bit sub, Trip due to A/C mo th whilpstock 0 th Casing Wit Grd	epths / total 19,10417,106,0919,906 6,9119,906 112,& 8905' sing, (Dog nt flowing, 5-b) p in from sur totor on TDS	of 40 1408,9244 3,9056,90 Pooh with at froze to bi/hr rface to 3 went dow From 0 OD 8.750 6.500 5.000	550,9042,9 n wireline & packing n S54° Filling m, Change T0 3,492 ID 2,250 2,500 3,000	pills: 0 pills: 0 political to the control of the	07,9005,8922 ne tools. Well to proceed with proceedings of the proceedings of t	Burst 3,950 KOP 10,27	2,8957 bbb/hr g ations- Collaps: 2,570 P MD/TVD 0 / 10,270	GL: 2,866. Insp: 0 Pipe e Yi	12 Run C 13 Ceme 14 Wait C 15 NU BC 16 Test B 22 Well C 24 Drill C Totals 00 DF: Body eld 0,000 Pen Pt MI 11,430 / 1	asing int Casing int	Capacit 0.07582 Landin 15,3 N/4	24.00 GHG y Displ 0.01455 g Pt MD/TV 57 / 11,000 8 E/-W 8 -49.56	8.75 5.00 4.00 10.55 5.77 0.77 3.00 456.00 Plugge Disploy 0.090 D Pill Y DL
2.00 Tripping 4.00 Tripping 6.00 Rig Repair 24.00 xt 24 hours: Finis xt Casing: 7.00 assing (1) RF 9-5/8* 409 J ty BHA 4 1 JZ Bits 710120 1 Bit sub 1 12 - 6* DC 1 Crossover 1 5* NC50 Spirall 1 Knight Jars	pgging Run # 2 % 10,517,105 194,9136,9 ,8953,8928 Attempt to wear bushin Make up bi Shut down sh wiper trip & GIH wit 00 @ 10600 Acc: Description J-55 LT&C Special Drift DRR Wate HWDP	de wall core De de wall core De d	ppths / total 19,10417,10 6,9119,9056 112,& 8905' sing. (Dog nt flowing 5 b) p in from sur stor on TDS	of 40 1408,9244 3,9056,90 Pooh with at froze to bilhir inface to 3 went dow From 0 0 0 0 8.750 6.500 6.500 5.000 5.000	554: Filling m, Change St. To 3,492 ID 2,250 2,500 3,000 3,000 3,000	034,9010,90 8 rig dn wirlinut, decided 3 pipe every e out same ID 8.835 Length 1.00 3.56.40 2.93 1.76.20 30.21	Drift 8-750 CUM 1.00 4.00 360.30 363.33 539.57 4	8988.898: 898: 898: 898: 898: 898: 898:	2,8957 bbbhr g ations- 2,570 P MD/TVD 10,270 Incl. 0,37 0,30 0,35	GL: 2.866. Insp: 0 Pyl: 634 Azi. 162.51 159.83 149.43	12 Run C 13 Ceme 14 Wait C 15 NU B 16 Test B 22 Well C 24 Drill C Totals 00 DF: Bedy eld 0,000 Pen Pt MI 11,430 / 1 TO,248.2 10,343.0	asing nt Casing	Capacit 0.07582 Landin 15.3 N/-4 6 1.2: 6 0.7/ 4 0.2:	24.00 GHG y Displ 0.01455 g Pt MD/TV 67 / 11,000 6 E/-W- 65 - 49.38 6 - 49.18	8.75 5.00 10.55 5.75 0.77 0.77 0.70 456.00 Emission 0.00 Plugge Displ 0.0903 D Pill Y DL 3 0.0 6 0.0
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2.00 Tripping 4.00 Tripping 6.00 Rig Repair 24:00 xt 24 hours: Finis xt Casing: 7.00 2aaing ft BHA 4 1 JZ Bits 710120 1 12 - 6" DC 1 Crossover 1 5" NC50 Spirally 7	egging Run # 2 % 10,517,105 194,9136,9 ,8953,8928 Attempt to wear bushin Make up bi Shut down Sh wiper trip & GIH wit 00 @ 10600 Acc: Description J-55 LT&C Special Drift 0 RR Wate HWDP	de wall core De de wall core De de de Vall core De d	ppths / total 19,10417,10 6,9119,9056 112,& 8905' sing. (Dog nt flowing 5 b) p in from sur stor on TDS	of 40 dot408.9244.0408.9244.09 poofs with frace to building frace to 3.00 from 00 DD 8.750 6.500 6.500 5.000 5.000 Total Li	Si	034,9010,908 rig dn widilung de wery e out same pills: 0 pills:	Drift 8-750 CUM 1.00 4.00 360.30 363.33 539.57 4	Burst 3,950 (OP) 10,250 (OP) 10,250 (OP) 10,251 (OP) 10,345 (OP) 10,534 (OP) 11,196 (OP) 11,196 (OP) 11,196 (OP) 11,196 (OP) 11,385 (OP) 11,574 (OP) 1	2,8957 bbihr g Collaps: 2,570 D MD/TVD 0 / 10,270 Incl. 0.37 0.30 0.35 0.24 0.60 0.73 0.49 0.39 0.35 0.39	Azi. 162.51 159.83 149.43 155.30 156.52 279.30 267.74 254.47 238.04 209.17 192.08 170.92 160.35 166.91 226.18 264.51 248.23	12 Run C 14 Run C 14 Wait C 15 NU B0 16 Test B 22 Well C 24 Drill C Totals 00 DF:: 10,000 Pen Pt M1 11,430 /1 10,153 /7 10,248 /2 10,343 /0 10,522 /2 10,815 /9 11,990 /4 11,194 /0 11,194 /0 11,288 /5 11,288 /5 11,383 /1 11,478 /0 11,572 /5 11,674 /8 11,572 /5 11,674 /8	asing nt Casing	KB: 25.00 Capacit 0.07582 Landin 15,3 N/-4 6 1.2: 6 0.7: 4 0.2: 2 -0.5: 4 -0.5: 4 -0.5: 4 -0.5: 5 -6.6: 6 -6.6:	24.00 GHG O.01455 g Pt MD/TV F7 / 11,000 8	8.75 5.00 4.00 10.50 5.77 3.00 456.00 Plugge Displ 0.090 D Pitl 5.00 0.090 D Pitl 6.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0
2.00 Tripping 4.00 Tripping 6.00 Rig Repair 24:00 xt 24 hours: Finis xt Casing: 7.00 2aaing ft BHA 4 1 JZ Bits 710120 1 12 - 6" DC 1 Crossover 1 5" NC50 Spirally 7	egging Run # 2 % 10,517,105 194,9136,9 ,8953,8928 Attempt to wear bushin Make up bi Shut down Sh wiper trip & GIH wit 00 @ 10600 Acc: Description J-55 LT&C Special Drift 0 RR Wate HWDP	de wall core De de wall core De de de Vall core De d	ppths / total 19,10417,10 6,9119,9056 112,& 8905' sing. (Dog nt flowing 5 b) p in from sur stor on TDS	of 40 dot408.9244.0408.9244.09 poofs with frace to building frace to 3.00 from 00 DD 8.750 6.500 6.500 5.000 5.000 Total Li	Si	034,9010,908 rig dn widilung de wery e out same pills: 0 pills:	Drift 8-750 CUM 1.00 4.00 360.30 363.33 539.57 4	Burst 3.950 (Control of the Control	2,8957 bbl/hr g Collaps 2,570 P MD/TVD P 0 / 10,270 Incl. 0.37 0.30 0.35 0.35 0.36 0.24 0.60 0.77 0.88 0.73 0.39 0.39 0.39 0.39 0.39 0.39 0.39 0.3	GL: 2.866. Insp: 0 Pipe e Yie 630 Azi. 162.51 159.83 149.43 155.30 156.52 279.30 267.74 238.04 209.17 192.08 170.92 160.35 166.91 228.18 264.51	12 Run C 13 Ceme 14 Wait C 15 NU B 16 Test B 22 Well C 24 Drill C Totals 00 DF:: 10,153,7 10,248,2 10,343,0 10,437,6 10,532,2 10,626,8 10,721,2 10,815,9 10,910,3 11,093,4 11,194,0 11,288,5 11,383,3 11,672,5 11,378,0 11,572,5	asing nt Casing	KB: 25.00 Capacit 0.07582 Landin 15.3 N/-4 6 0.7 4 0.2 3 -0.2 4 -0.5 4 -0.7 6 -1.2 2 -2.3 7 -3.5 5 -5.2 2 -6.4 5 -6.6 6 -2 6 -6.4 7.1	24.00 GHG O.01455 g Pt MD/TV 67 / 11,000 8	8.75 5.00 4.00 10.50 5.77 3.00 456.00 Emissions 0.00 Plugge Displ 0.0903
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2.00 Tripping 4.00 Tripping 6.00 Rig Repair 24.00 ext 24 hours: Finis ext Casing: 7.00 Casing URF 9-5/8" 40# J 20ty BHA 4 1 JZ Bits 710120 1 Bit sub 1 12 - 6" DC 1 Crossover 1 5" NC50 Spirally 1 Knight Jars 1 5" NC50 Spirally	egging Run # 2 % 10,517,105 194,9136,9 ,8953,8928 Attempt to wear bushin Make up bi Shut down Sh wiper trip & GIH wit 00 @ 10600 Acc: Description J-55 LT&C Special Drift 0 RR Wate HWDP	de wall core De de wall core De de de Vall core De d	ppths / total 19,10417,10 6,9119,9056 112,& 8905' sing. (Dog nt flowing 5 b) p in from sur stor on TDS	of 40 dot408,9244 dot408,9244 dot408,9244 from 0 Dot 8,750 6,500 6,500 5,000 5,000 Total L	50,9042.9 is wireline & packing in wireline & packing in State in packing in State i	034,9010,908 rig dn wirlinut, decided uter but same pills: 0 ID 8.835 Length 1.00 3.00 3.56.40 2.93 176.20 3.02 3.02 1.1,281.93 12.000.00	07,9005,8922 re tools. Well to proceed with proceed with proceed with the proceeding t	Burst 3,950 KOP 10,250 10,250 10,250 10,251 10,628 10,723 10,818 11,906 11,101 11,196 11,764 11,658 11,909 Projection 11,909 Final Cite Planned	2,8957 bbl/hr g Collapsi 2,570 PMD/TVD 10 / 10,270 Incl. 0.37 0.30 0.35 0.35 0.36 0.24 0.60 0.75 0.97 0.88 0.73 0.39 0.39 0.39 0.39 0.39 0.39 0.31 0.60 0.75 0.88 0.73 0.39 0.39 0.39 0.39 0.39 0.39 0.39 0.3	GL: 2.866. Insp. 0 Pipe via 63/ 162.51 159.83 159.83 155.30 156.52 279.30 267.74 254.47 238.04 209.17 192.08 170.92 160.35 166.91 248.23 213.08 218.24 222.61 56.33 4.633.00	12 Run C 13 Ceme 14 Wait C 15 NU B 16 Test B 22 Well C 24 Drill C Totals 00 DF:: 10,000 Pen Pt M 11,430 / 1 10,153.7 10,248.2 10,626.8 10,910.3 11,0910.3 11,093.9 11,194.0 11,285.5 11,383.3 11,572.5 11,667.4 11,762.0 11,566.6 11,906.9 11,906.9	Joint Strength 520,000 D/TVD 11,000 D/TVD 11,000 D/TVD 12,000 D/TVD 14,000 D/TVD 15,000 D/TVD 15	KB: 25.00 Capacit 0.07582 Landin 15,3 N/-4 6 1.2.2 6 0.7 4 0.2.3 3 -0.2.2 2 -0.5 4 -0.5 4 -0.7 6 -1.2 2 -2.3 7 -5.8 5 -6.6 7 -7.8 7 -7.8 Azimuth Azimuth	24.00 GHG Property Displ 0.01455 GPY MO/TV 7 1-10-10-10-10-10-10-10-10-10-10-10-10-10	8.75 5.00 4.00 10.50 5.75 3.00 456.00 Plugge Displ 0.0903 D Plid 10.50 5.00 6.00 6.00 6.00 6.00 6.00 6.00
2.00 Tripping 4.00 Tripping 5.00 Rig Repair 24.00 xt 24 hours: Finis ext Casing: 7.00 Casing ture 9-5/8" 40# J 2ty BHA 4 1 JZ Bits 710120 1 Bit sub 1 12 - 6" DC 1 Crossover 1 5" NC50 Spiralv 1 Knight Jars 1 5" NC50 Spiralv 7 ast Inspected BHA H	Jogging Run # 2 5 10,517,105 194,9136,9 (8953,8926 Attempt to wear bushing Make up bit in the property of the	de wall core De de wall core De de de Vall core De d	ppths / total 19,10417,10 6,9119,9050 112,8,8905' ining, (Log ning, Clog ning	of 40 of 40 of 40 of 40 of 40 of 92 of 40 of 92	Si	034,9010,908 rig dn wirlinut, decided of pipe every e out same pills: 0 8.835 Length 1.00 3.00 3.56.40 2.93 176.20 178.97 11,281.93 12,000.00	Drift 8.750 CUM 1.00 4.00 360.40 363.33 599.34 718.07	Burst 3,950 (CP) (CP) (CP) (CP) (CP) (CP) (CP) (CP)	2,8957 bbl/hr g Collapsi 2,570 PMD/TVD 10 / 10,270 Incl. 0.37 0.30 0.35 0.35 0.36 0.24 0.60 0.75 0.97 0.88 0.73 0.39 0.39 0.39 0.39 0.39 0.39 0.31 0.60 0.75 0.88 0.73 0.39 0.39 0.39 0.39 0.39 0.39 0.39 0.3	GL: 2.866. Insp: 0 Pipe Pipe Pipe Pipe Pipe Pipe Pipe Pipe	12 Run C 13 Ceme 14 Wait C 15 NU B 16 Test B 22 Well C 24 Drill C Totals 00 DF:: 10,000 Pen Pt M 11,430 / 1 10,153 / 7 10,248 2 10,626 8 10,910 3 11,003 9 11,194 0 11,194 0 11,194 0 11,195 0 11,196 9 11,196 9 11,906 9 11,906 9 11,906 9 11,906 9 11,906 9 11,906 9	asing nt Casing	KB: 25.00 Capacit 0.07582 Landin 15.3 N/4 6 1.2: 6 0.7: 4 0.2: 3 -0.2: 2 -0.5 4 -0.5: 4 -0.5: 4 -0.5: 5 -5.2: 2 -6.4 5 -5.6: 5 -5.2: 2 -6.4 7 -7.8: 7 -7.8 Azimuth Azimuth Capacit Of Column Colum	24.00 GHG O.01455 g Pt MD/TV 67 / 11,000 6 E/-W 8 -49.56 7 -49.36 8 -49.11 -48.67 -48.61 -48.61 -53.21 -53.21 -55.26 -53.21 -55.26 -55.36	8.75 5.00 4.00 10.50 5.77 3.00 456.00 Emissions 0.00 Plugge Displ 0.0903 D Pill 5 0.3 5 0.3 5 0.3 5 0.3 6 0.3 6 0.3 7 0.
2.00 Tripping 4.00 Tripping 6.00 Rig Repair 24.00 ext 24 hours: Finis ext Casing: 7.00 Gasing 6 URF 9-5/8" 40# J Dty BHA 4 1 JZ Bits 710120 1 12 - 6" DC 1 Crossover 1 5" NC50 Spirall 1 Knight Jars 1 5" NC50 Spirall 7 ast Inspected BHA H	gging Run # 2 5 10,517,105 194,9136,9 ,8953,8926 Attempt to wear bushing Make up bit is hut down. Sh wiper trip & GIH with 100 @ 10600 Acc: Description DRR Wate HWDP Wate HWDP Hours: 177.50	de wall core Do de wall core Do de wall core Do de wall core Do de wall was been de de to well de to well de to well to whipstock 0 It Casing Wit Grd 99.00 59.16 J-55 59.16 J-55 59.16 J-55	Popular Total 19,10417,10 6,9119,9050 112,8,8905' ining, (Log ning, (Log ning, (Log ning), (Log ning) flowing 5 bi p in from surptor on TDS Thread 4.5 Reg 4.5 XH 4.5 XH NC-50 NC50 NC50 NC50 NC50 NC50	of 40 of 40 of 40 of 40 of 80 of 40 of 80	Substitute	034,9010,908 rig dn wirlinut, decided of pipe every e out same pills: 0 8.835 Length 1.00 3.00 3.56.40 2.93 176.20 178.97 11,281.93 12,000.00	Drift 8.750 CUM 1.00 4.00 360.40 363.33 599.34 718.07	Burst 3,950 (Control of the control	2,8957 bbl/hr g Collapsi 2,570 PMD/TVD 10 / 10,270 Incl. 0.37 0.30 0.35 0.35 0.36 0.24 0.60 0.75 0.97 0.88 0.73 0.39 0.39 0.39 0.39 0.39 0.39 0.31 0.60 0.75 0.88 0.73 0.39 0.39 0.39 0.39 0.39 0.39 0.39 0.3	GL: 2.866. Insp: 0 Pipe Pipe Pipe Pipe Pipe Pipe Pipe Pipe	12 Run C 13 Ceme 14 Wait C 15 NU B 16 Test B 22 Well C 24 Drill C Totals 00 DF:: 10,000 Pen Pt M 11,430 / 1 TVI 10,153.7 10,248.2 10,626.8 10,437.6 10,532.2 10,626.8 11,478.0 11,572.5 11,667.4 11,762.0 11,566.6 11,906.9	asing nt Casing	KB: 25.00 Capacit 0.07582 Landin 15,3 N/-4 6 1.2: 6 0,7; 4 0.2: 3 -0.5: 4 -0.5: 4 -0.5: 4 -0.5: 5 -4.5: 5 -4.5: 5 -6.6: 4 -7.1: 5 -7.8: 7 -7.8:	24.00 GHG O.01455 g Pt MD/TV F7 / 11,000 8 -49.56 8 -49.57 1 -49.60 1 -49.61 2 -48.88 1 -49.61 3 -50.77 5-3.49 1 -53.76 5-53.21 5-53.21 5-55.22 6 -53.33 5-56.60 G G Cost Cost Cost Cost	8.75 5.00 4.00 10.50 5.75 3.00 456.00 Plugge Displ 0.090 0.0903 D Plitpl 3 0.2 8 0.0 5 0.2 9 0.0 9 0



Cimarex Energy Co.

Morning Drilling Report

AFE : Property : API # :

0 -4,280,544 3,859,000 4,280,544 8,139,544

428085-023.01 42-389-33823

BI M/RIA Prop TD Well Name **EIGHTEENMILE 56-18 1H** Fri, Jul 19, 2013 TX, Reeves 18 / Blk 53 / Wolfcamp A H&P 218 19 13.250 14 Rig Repair. Work on Top drive 12 000 12 000 0.00 0.00 0 Variance To Drlg. Variance To Compl. B.C.P A.C.P Drig. Afe Compl Compl. Afe Casing Sub Ledger Description Vendor & Description Cost Cost Cost Roads & Location Preparation / Res 99.810 15.000 135.00 IDC 105 -40,00 DICC 105 40,000 40,000 Damages Mud/Fluids Disposal Charges 50.000 90 000 140 000 H&P 218 (Day Rate / FRC Charge) 27,135 379,890 Day Rate DIDC:115 -312,110 DICC 120 -122,000 692,000 122,000 814,000 isc Prep Cost (Mouse Hole, Rat Ho Rits DDC:125 35 800 49.200 DICC.125 85 000 85 000 92,709 148,000 173,000 Water 009 / Completion Fluids 109 Cuatro [Deliver Fresh water] DIDC:140 1.652 7,778 -7,222 DICC 135 -10,000 15,000 10,000 25 000 [] / Fas-Line [Transfer Pump] / Halib DIDC 145 American Safety Services [H2S Pacl DIDC 150 Mud & Additives 3.171 104.189 195 811 300 000 300.000 Surface Rentals -37.810 DICC.140 13,190 hole Rentals Jaguar [Motor correction / Motor LIH DIDC 155 7,205 175,843 -3,157 DICC 145 10,00 179,000 10.000 189.000 DSTS Formation Tests DIDC 160 Pason [Work Station] / West Texas V DIDC 170 Mud Logging Open Hole Logging Schlumberger [Logging service & cu['] DIDC 180] 61,024 63.359 23,359 40.000 40 000 Cementing, thru Intermediate Casing 79,080 100.92 180,000 65,000 245,000 Tubular Inspections EL Farmer [2 pipe rack] / Wilbanks T DIDC 190 -21,218 DICC.160 -10,000 30,000 10,000 40,000 Casing Crews 15.924 35,000 15,000 50 000 DIDC 200 -17:595 DICC:170 -8,000 28,000 Extra labor, Welding, etc. 2,405 20,000 8,000 16,815 20,000 20,000 40,000 Supervision Brother consulting / Lyman Nance (S DIDC 210 3 700 77.700 35 300 DICC 180 +30 DOC 113 000 30 000 143 000 Trailer, Camp & Catering 19,491 48,000 8,000 Cimarex [Satelite] [sat/phone/interco Other misc expenses DIDC.220 -1.000 DICC.190 -60,000 1,000 60.000 61.000 8,000 verhead 8,000 2,000 10,000 DICC.215 Mobilize & Demobilize HDC 240 219 352 200 000 200 000 Directional Drilling Acme [Deliver Directional tools] / Ler DIDC 245 8,005 400,770 420,000 420,000 19,230 Marine/Air Transportation DC 275 DIGG 250 KSW Oiffield Rentals [Float Pumps] lids Cantrol-Equip/Services Well Control-Equip/Services Mc Guire Industries [Seperator & Ign DIDC 265 1,455 35,140 -29,860 DICC 240 -30,000 65,000 30,000 95.000 Fishing & Sidetrack Services 525 109 475 DICC 245 110.000 110.000 DICC.115 52,000 52,000 Coll Tubing NCC 260 180 00 180 000 180 000 Completion Logging, Perforating -100,000 100,000 100,000 DICC 200 1,587,00 1,587,000 1.587.000 DIDC 300 10.000 10 000 Legal/Regulatory/Curative DICC 280 10,000 DIDC.435 5,827 77,732 DICC 220 -131,000 155,000 131,000 286,000 Construction For Well Equipment **NEA 110** DLEQ 110 404,659 404,659 404,659 Construction For Lease Equipment Construction For Sales P/L 122,368 1,632,368 -3.154,658 3.248,000 3.164,659 6,402,659 Drive Pipe WEB 130 Water String DWEB 135 Surface Casing Intermediate Casing WEB.145 452.000 452,000 452,000 80.000 Production Casing Or Lines OWEA 100 80,000 OWEA 105 85,000 85,000 85,000 N/C Well Equipmen WEA 115 WEB.115 Wellhead, Tree, Chokes 15,236 **DWEA 120** 38,000 WEA:125 75,000 -25,000 75 000 75.000 25,000 25,000 Packer, Nipples **DWEA 130** imping Unit, Engine Lift Equipment (Bhp, Rods, Anchors) DLEQ.106 -25.000 25.000 25,000 Metering Equipment LEQ 220 122,546 939,000 Tangible - Well Equipment 328,000 158 589 N/C Lease Equipment 158,58 Tanks, Tanks Steps, Stairs DLEQ.120 110,182 110,182 Battery (Heater Treater, Separator,...) low Lines (Line Pipe From Wellhead DLEQ 130 335,050 335,050 Offshore Production Structure For ... WEA.135 Tangible - Lease Equip P&A Costs PSA

1,754,914 -2.104,086

122,368

Total Costs



AFE:
Property:
API#:
Prop TD:

253084 428085-023.01 42-389-33823 15,367

"M/BIA :														Prop TI	D	15,3
Veil Name EIGHTEENMILE	56-18 11	4			Réeves	2	Section, Tow 18 / B		ange		Objective Wolfcamp	A .	1	Date	at, Jul 2	20 20
ontractor / Rig Rpt #	DFS	ODFS P	resent Cour	alies		7					MD	D		Footage	FT/HR	Hour
H&P 218 20	14.250 BGG	15	\rightarrow	c & Con	dition Ho	ole For	r Whips	tock (@ 10458	3'	12,00	0 12,0	000	0	0.00	0.0
80 % Shale 20% Lime	0		5	558	2nd Bone sp	100				e Spring	Sand @ 1	0078		WOLF C	AMP A @	10380
0.00 6.500 123 2	Av Jet Velo	city HHP/	0.00	Dia.	Cost/Ft. 24 t			150.3			,492	Frac	Gradin 9.4	O MW		wable Sid
Pump #1 - PZ-11	GP GP	Ps Pump		-11	\$0.00		GPS	Pump.		3	,432		GPS	_	РМ	Off BP
	50 3.8		5.00	11.00	50		3.837							31	84	640
Slow Stroke Stand Pipe ED	R Choi	ke Slow	v Stroke	Stand Pipe	EDR		Choke	Slow :	Stroke	Stand Pipe	e EDI	R C	hoke			On BP
MWin MWOu VSin VSOut	PV Y	P Gei	Strength	APIFitrate	LCM	0 1	MW in	MW Out	VS to	VS Out	PV	YP (Jel Str	ength	HTHP	1.5
9.20 9.20 29 29		1 1	1	100.00		Î.	All Par	4-	110.10	Wind.	AL DOM	1000			C 4 (0) (0)	NAC
	and MBT	8.00	PM 0.01	1 0.0	ME 1 0.27	M SA	ake So		Liquid 100.00	Sand	ARPOM	WE	2	ES	CACLZ	NAC
Chloridea Calcium Qii	Water	0.W	Lime		Checked	D	Chlorides	_		O)Pct	MaterPct	0.W	la.	ing	Depth C	backed
55,000 1,680	98.10				@12:06			70000	15.00		1000				100707	2000
Bit # Size Manufacturer 4 8.750 JZ Bits	710120		K099		Jet#1 Jet#	2 Jet #	F3 Jet #4	Jet #5	Jet#6	et#7 Jet		0000		0 · 0	Rotary 0 -	
Bit in Bit Out Footage	Hours	FT/HR (Cum. Bit Hrs	Inner	Outer	Duli	Locati	on	Bearing	Guage	Other	Reason		Pressure	Motor	RPM
0 0 0 0 Drag Torque, and Weight	0.00 Digsel	0.00	177.50		Mud	d additive	is in last 24	hours				Se		0 - 0 ming / Mud	O - I	0
Pickup Weight 300,000 Diesel	on Hand	9,26	3 Engine	er - 24 H	1 Tax			00				Solids =		bbl	is @	\$0
	Received Used Today	75	3									Solids =			is@ is@	\$0 \$0
Average Drag 30,000	Natural Gar											iquids =		1,280 bb		\$3,480
Maximum Drag 33,000 Meter F	Reading		1										BOP	Pressure 1	Testing	
	sed Today										_	OP Test		10/2013	Days	
Daily Rotating Slid	ing	Total	BHA# 4	4	Rotating	- 8	Sliding		Total	0	SCOTIST	rime Distri	butio	in	Daily	CU 133.0
lours			Hours								2 Drilling	g				177.5
ROP 4Time			ROP %Time								3 Washi 4 Lost C	ing/Reami Dirculation	ng			4.
(Feet			%Feet									Mud & Ci	rc		4.50	24.0
Hours Time Desc 15.00 Rig Repair Repair top	44		_	tivity (060	0 Hours to 0	0600 Ho	ours)					ate Rig			4.50	46.2
	drive. Change hrough choke			le.							8 Rig Ri 10 Deviat	epair tion Surve	v		15.00	21.
								tands				ne Logging				23.
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3.00 Operational Note Circulate the Ground Tripping Continue T displaced in	more than nor ottoms up @	mal.					n. Last 5 s	50071000			12 Run C	asing				
0.00 Operational Note Circulate the Continue To displaced the Circulate by Continue To displaced the Circulate by Tripping 1.50 Cond. Mud & Circ Circulate by Continue To Continue	nore than nore ottoms up @ F TIH F/ 8250° T/	mal. 8250' w/ 12- / 10458 with	15' Flare for	or 45 min.	Max gas 88 placement.	units			. E4		12 Run C 13 Ceme 14 Wait C	asing nt Casing On Cemen				5.0
0.00 Operational Note Circulate the Continue To Continue To Condinue To Cond. Mud & Circ 1.50 Cond. Mud & Circ Circulate b Continue To Continue To Cond. Mud & Circ 3.00 Cond. Mud & Circ Circulate 2 Prepare to Prepare to Prepare to Condinue To Circulate 2 Prepare to Circul	more than nor ottoms up @	mal. 8250' w/ 12- / 10458 with	15' Flare for	or 45 min.	Max gas 88 placement.	units			s 54.		12 Run C 13 Ceme	casing nt Casing on Cemen OP's				5.0 4.0 10.5
0.00 Operational Note Circulate bt 3.00 Tripping Continue T 1.50 Cond. Mud & Circ Circulate b 1.50 Tripping Continue T 3.00 Cond. Mud & Circ Circulate 2	more than nor ottoms up @ i TIH F/ 8250° T/ 2.5 bottoms up	mal. 8250' w/ 12- / 10458 with	15' Flare for	or 45 min.	Max gas 88 placement.	units			s 54.		12 Run C 13 Ceme 14 Wait C 15 NU BC 16 Test B 22 Well C	casing int Casing On Cement OP's IOP's Control				5.0 4.0 10.5 5.7
0.00 Operational Note Circulate the Continue To Continue To Condinue To Cond. Mud & Circ 1.50 Cond. Mud & Circ Circulate b Continue To Continue To Cond. Mud & Circ 3.00 Cond. Mud & Circ Circulate 2 Prepare to Prepare to Prepare to Condinue To Circulate 2 Prepare to Circul	more than nor ottoms up @ i TIH F/ 8250° T/ 2.5 bottoms up	mal. 8250' w/ 12- / 10458 with	15' Flare for	or 45 min.	Max gas 88 placement.	units			s 54.		12 Run C 13 Ceme 14 Wait C 15 NU BC 16 Test B 22 Well C	casing nt Casing On Cement OP's IOP's			24.00	5. 4. 10. 5. 0. 3.
0.00 Operational Note 3.00 Tripping Continue T displaced for 1.50 Cond. Mud & Circ Circulate b 1.50 Tripping Continue T 3.00 Cond. Mud & Circ Circulate b Cond. Mud & Circ Circulate 2 Prepare to 24.00	more than nore lottoms up @ 1 FIH F/ 8250° T/ 2.5 bottoms up spot kill mud.	mal. 8250' w/ 12- / 10458 with @ 10458',	15' Flare for	or 45 min.	Max gas 88 placement. re Max gas 9	units		max ga		GL: 2,866	12 Run C 13 Ceme 14 Wait C 15 NU BC 16 Test B 22 Well C 24 Drill C	casing int Casing On Cement OP's IOP's Control	t Test	25.00	GHG E	5.0.5.0.3.0 480.0 mission
0.00 Operational Note 3.00 Tripping Continue T displaced for 1.50 Cond. Mud & Circ Circulate b 1.50 Tripping Continue T 3.00 Cond. Mud & Circ Circulate b Cond. Mud & Circ Circulate 2 Prepare to 24.00	more than normostroms up @ 171H F/ 8250* T/ .5 bottoms up spot kill mud.	mal. 8250' w/ 12- / 10458 with @ 10458',	15' Flare for	or 45 min. ag and disp s up 30' fla	Max gas 88 placement.	units		max ga	ations- (3L: 2,866.	12 Run C 13 Ceme 14 Wait C 15 NU BC 16 Test B 22 Well C 24 Drill C Totals	casing ont Casing On Cement OP's IOP's Control omt / Shoe	t Test	25.00	GHG E	5.0 10.5 5.7 0.7 3.0 480.0 mission 320.00
O.00 Operational Note Circulate the 3.00 Tripping Continue Tourished Tripping Continue Tourished Tripping Continue Tourished Tripping Continue Tourished Tou	more than nor ottoms up @ ! TH F/ 8250* T/ .5 bottoms up spot kill mud. BIH and set sa	mal. 8250' w/ 12- / 10458 with @ 10458',	-15' Flare for normal draft bottomic	or 45 min. ag and disparate to 30° fla	Max gas 88 placement. Fre Max gas 9 mills: 0	units 558, 2nd	nd 5' flare,	Eleva	collapse	3L: 2,866. Insp: 0	12 Run C 13 Ceme 14 Wait C 15 NU B 16 Test B 22 Well C 24 Drill C Totals 00 DF:	Casing nt Casing on Cement OP's LOP's Control of the Casing of the Casin	Test	Capacity	GHG E	5.0 10.5 5.7 0.7 3.0 480.6 Plugg Disp
0.00 Operational Note	more than norrottoms up @ ! FIH F/ 82500 T/ S bottoms up spot kill mud. BiH and set sa 0 ft Casing	mal. 8250' w/ 12- 10458 with @ 10458',	15' Flare It normal dra 1st bottoms	or 45 min. ag and dispand disp	Max gas 88 placement. re Max gas 5 mills. 0 mill	Dri 8.7	in 8	Eleva	Collapse	3L: 2,866. Insp: 0	12 Run C 13 Ceme 14 Walt C 15 NU BC 15 NU BC 15 VE BC 24 Drill C Totals 00 DF::	casing nt Casing nt Casing On Cement OP's OP's Control mt / Shoe 25.00 Joint Strength 520,000	t Test KB:	Capacity	GHG E 4, Displ 0.01455	5.0 4.0 5.7 3.0 480.0 mission 320.00 Plugg Disj
O.00 Operational Note Circulate the 3.00 Tripping Continue Tourished Tripping Continue Tourished Tripping Continue Tourished Tripping Continue Tourished Tou	more than nor ottoms up @ ! TH F/ 8250* T/ .5 bottoms up spot kill mud. BIH and set sa	mal. 8250' w/ 12- / 10458 with @ 10458',	-15' Flare for normal draft bottomic	or 45 min. ag and disparate to 30° fla	Max gas 88 placement. Fre Max gas 9 mills: 0	Dri 8.7	in 8	Eleva	collapse	3L: 2,866. Insp: 0	12 Run C 13 Ceme 14 Wait C 15 NU B 16 Test B 22 Well C 24 Drill C Totals 00 DF:	casing int	t Test KB:	Capacity 0.07582 Landing	GHG E	5.0 4.0 10.5 5.7 3.0 480.0 mission 320.00 Plugg Disp 0.090
0.00 Operational Note	more than norrotroms up @ interference in the factor of th	mal. 8250° w/ 12-6250° w/ 12-6250° w/ 10458 with @ 10458°, 104	From 0 OD 8.750 6.500	or 45 min. ag and disparation of 45 min. Sp To 3,492 ID 2,250	Max gas 88 placement. re Max gas 1 iills: 0 iii 8.835 Length 1.00 3.00	Dri 8.7	in 8 750 3 M Do	Elevs Surst ,950 KOP 10,270 epth	Collapse 2,570 MO/TVD 0 / 10,270 Inci.	3L: 2,866. Insp: 0 Pipe Yi 63	12 Run C 13 Ceme 14 Wait C 14 Wait C 15 NU BG 16 Test B 22 Well C 24 Drill C Totals Body eld 0,000 Pen Pt Mt 11,430 / 1	casing on Casing on Casing On Cement OP's Control of Casing OP's Control of Casing OP's Control of Casing OP's Control of Casing OP's Casi	KB:	Capacity .07582 Landing 15,367 N/-S	GHG E 4. Displ 0.01455 Pt MD/TVD / / 11,000 E/-W	D
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0.00 Operational Note	more than nor contens up @ !! H FI 8250 *! II FI 8250 *! I	mal. 8250" w/ 12-10458 w/ 10458", 1045	From 0 0 8.750 6.500 5.000 5.000	5g To 3,492 ID 2,250 2,500 3,000 3,000	Max gas 88 lolacement. re Max gas ! iiiis: 0 iii 8.835 Length 1.00 3.00 356.40 2.93 176.20	Dri 8.7 CUP 1.4 360.363.539.1	in 8 750 3 M 00 Do	Elevs KOP 10,270 ppth 0,155 0,250 3,345	Collapse 2,570 MD/TVD 0 / 10,270 Incl. 0.37 0.30 0.35	Azi. 162.51 159.83 149.43	12 Run C 13 Ceme 14 Wait C 15 NU B 16 Test B 22 Well C 24 Drill C Totals 00 DF:: Body eld 0,000 Pen Pt Mt 11,430 / 1 TVL 10,153,7 10,248,2 10,343,0	casing int Casing on Ceasing int Casing int Casing on Cement of Ceasing OP's Control of Ceasing int Casing int	KB: KB: S S S S S S S S S S S S S S S S S S S	Capacity 0.07582 Landing 15,367 N/-S 1.28 0.76 0.28	Displ 0.01455 Pt MD/TVD / / 11,000 E/-W -49.56 -49.38 -49.15	5.1 4.1 10.3 5.3 480.3 mission 320.00 Plugs Dist
0.00 Operational Note	more than norototoms up @ 1/14 Ft 9250 Tt 1/15 bottoms up spot kill mud. SiH and set sa 0 ft Casing Wt Grd 99.00	mal. 8250° w/ 12-10458° w/ 10458° w/	From 0 OD 8.750 6.500 6.500 5.000 5.000 5.000	Se To 3,492 ID 2,250 3,000 3,000 3,000 3,000	Max gas 88 blacement. re Max gas : ills: 0 ib 8.835 Length 1.00 3.00 356.40 2.93 176.20 30.21 148.33	Dri 8.7 CUN 14.1 360.363.3	in 8 750 3 M 10 10 10 10 10 10 10 10 10 10 10 10 10	Elevs KOP 10,270 ppth 0,155 0,250 1,345	Collapse 2,570 MD/TVD 0 / 10,270 Incl. 0.37 0.30 0.35 0.33	Azi. 2.866. Insp: 0 Pipe Pipe Fine 159.83 149.43 155.30	12 Run C 13 Ceme 14 Wait C 15 NU BC 16 Test B 22 Well C 24 Drill C Totals 00 DF:: 0,000 Pen Pt Mt 11,430 / 1 10,153,7: 10,153,7: 10,343,0 10,437,6	Casing Int	KB: KB: SS 36 16 64 13	Capacity 0.07582 Landing 15,367 N/-S 1.28 0.76 0.28 -0.22	GHG E 4, Displ 0.01455 Pt MD/TVD 7/11,000 E/-W -49.56 -49.38 -49.15 -48.89	5.0. 10.1. 5.1. 0.0. 3.3. 480. Plugged Dissipation of Community of Com
0.00 Operational Note	more than nor contons up @ 1/14 Fr 8250 T. 15.5 bottoms up spot kill mud. BilH and set sa 0 ### Grd 99.00 59.16 J-55 59.16 J-55	mal. 8250' w/ 12-10458 w/ 10458' w/	From 0 OD 8.750 6.500 6.500 5.000 5.000 5.000	Sp To 3,492 ID 2,250 2,500 3,000 3,000 3,000 3,000 BHA =	Max gas 88 blacement. re Max gas 5 iblacement. re Max gas 5 iblacement. iblacement. ibl	Dri 8.7 CUI 1	in 8 750 3 M 00 00 00 40 33 10 774 10 112 10	Elevs KOP 10,27(250 345 345 345 345 346 386 387 387 387 387 387 387 387 387	Collapse 2,570 MO/TVD 3 / 10,270 Incl. 0.37 0.35 0.35 0.33 0.06 0.24	Azi. 2,866. Insp: 0 Pipe Yi 63 162.51 159.83 149.43 155.30 156.52 279.30	12 Run C 13 Ceme 14 Wait C 15 NU Bd 16 Test B 22 Well C 24 Drill C Totals 00 DF:: Body eld 0,000 Pen Pt Mt 11,430 / 1 TVC 10,153 / 7 10,248 / 2 10,343 / 0 10,532 / 2 10,626 / 8	Casing Int Cas	KB: KB: S S S S S S S S S S S S S S S S S S S	Capacity 0.07582 Landing 15,367 N/-S 1.28 0.76 0.28 -0.22 -0.51 -0.52	GHG E 4, Displ 0.01455 Pt MD/TVD / /11,000 E/-W 49.56 49.38 49.15 -48.89 -48.75 -48.93	5, 4.10.15.1
0.00 Operational Note	more than nor contons up @ 1/14 Fr 8250 T. 15.5 bottoms up spot kill mud. BilH and set sa 0 ### Grd 99.00 59.16 J-55 59.16 J-55	mal. 8250' w/ 12-10458 w/ 10458' w/	From 0 OD 8.750 6.500 5.000 5.000 5.000 6.5000 6.5000 6.5000 6.5000 6.5000 6.5000	SE To 3,492 ID 2,250 3,000 3,000 3,000 BHA =	Max gas 88 s lalacement. re Max gas s lalacement. s lalacem	Drift 5558, 2nd 6558, 2nd	in 8 10 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Elevs MOP 10,270 SOP 10,270	Collapse 2,570 MO/TVD 0 / 10,270 Incl. 0,37 0,30 0,35 0,33 0,06 0,24 0,60	Azi. 162.51 159.83 149.43 155.30 156.52 279.30 267.74	12 Run C 12 Run C 14 Run C 15 NU B 16 Test B 22 Well C 24 Drill C 17 Totals 10 DF: 1 11 A30 L 17 Total 10 A37.6 10 A37.6 10 A37.6 10 A37.6 10 A37.1	Joint Strength 520,000 D/TVD 11,000 D VS 8 0,7 0,7 1,7 1,7 1,7 1,7 1,7 1,7 1,7 1,7 1,7 1	KB: KB: S S S S S S S S S S S S S S S S S S S	Capacity .07582 Landing 15,367 N/-S 1.28 0.76 0.28 -0.22 -0.51 -0.52 -0.51	GHG E 4, Displ 0.01455 Pt MD/TVD // 11,000 E/-W -49.56 -49.38 -49.15 -48.89 -48.75 -48.93 -49.62	5, 4. 10. 5, 10. 10. 10. 10. 10. 10. 10. 10. 10. 10.
0.00 Operational Note	more than nor contons up @ 1/14 Fr 8250 T. 15.5 bottoms up spot kill mud. BilH and set sa 0 ### Grd 99.00 59.16 J-55 59.16 J-55	mal. 8250' w/ 12-10458 w/ 10458' w/	From 0 OD 8.750 6.500 6.500 5.000 5.000 5.000 5.000 5.000	Te 3,492 ID 2,250 2,500 3,000 3,000 BHA = Pipe = ength = 1	Max gas 88 blacement. re Max gas : IIIIs: 0 III 8.835 Length 1.00 3.00 356.40 3.02 30.21 176.20 30.21 148.33 718.07 9,740.05 10,458.12	Drift 5558, 2nd 6558, 2nd	in 8 7550 3 M 00 00 00 00 00 00 10 10 10 10 10 10 10	Elevs KOP 10,27(250 345 345 345 345 346 386 387 387 387 387 387 387 387 387	Collapse 2,570 MO/TVD 3 / 10,270 Incl. 0.37 0.35 0.35 0.33 0.06 0.24	Azi. 2,866. Insp: 0 Pipe Yi 63 162.51 159.83 149.43 155.30 156.52 279.30	12 Run C 13 Ceme 14 Wait C 15 NU Bd 16 Test B 22 Well C 24 Drill C Totals 00 DF:: Body eld 0,000 Pen Pt Mt 11,430 / 1 TVC 10,153 / 7 10,248 / 2 10,343 / 0 10,532 / 2 10,626 / 8	Joint Strength 520,000 D/TVD 11,000 D/T 1,7 1,7 1,7 1,7 1,6 1,1 6 1,2 1,3 1,3 1,3 1,4 1,4 1,4 1,4 1,4 1,4 1,4 1,4 1,4 1,4	KB: KB: S S 36 16 64 13 42 44 44 64	Capacity 0.07582 Landing 15,367 N/-S 1.28 0.76 0.28 -0.22 -0.51 -0.52	GHG E 4, Displ 0.01455 Pt MD/TVD / /11,000 E/-W 49.56 49.38 49.15 -48.89 -48.75 -48.93	5. 4. 10. 5. 5. 4. 480. Pluggious pisson 0.099 1 ((((((((((((((((((
0.00 Operational Note	more than nor contons up @ 1/14 Fr 8250 T. 15.5 bottoms up spot kill mud. BilH and set sa 0 ### Grd 99.00 59.16 J-55 59.16 J-55	mal. 8250' w/ 12-10458 w/ 10458' w/	From 0 OD 8.750 6.500 6.500 5.000 5.000 5.000 5.000 5.000	To 3,492 ID 2,250 2,500 3,000 3,000 3,000 BHA =	Max gas 88 s lalacement. re Max gas s lalacement. s lalacem	Drift 5558, 2nd 6558, 2nd	in 8 10 10 10 10 10 10 10 10 10 10 10 10 10	Elevs 850 802 10,270 10,27	2,570 MO/TVD 0,710,270 Incl. 0.37 0.30 0.35 0.06 0.24 0.60 0.75 0.97 0.88	Azi. 2.866. 63 Pipe 97 63 Azi. 162.51 159.83 149.43 155.30 267.74 254.47 223.04 209.17	12 Run C 12 Run C 14 Wait C 15 NU B4 16 Test B 12 Well C 24 Drill C Totals 00 DF:: 10,000 Pen Pt Mt 11,430 / 11 10,248 2 10,343 0 10,437 6 10,532 2 10,815.9 10,910 3 11,030 9	Joint Strength 520,000 DFT 11,000	KB: KB: SS	Capacity 107582 Landing 15,367 N/-S 1 28 0.76 0.28 -0.22 -0.51 -0.52 -0.52 -0.51 -0.70 -1.28 -2.33	GHG E 4. Displ 0.01455 Pt M0/TVD / 11,000 E-W -49.56 -49.38 -49.15 -48.93 -48.93 -49.62 -50.71 -51.98 -53.01	5, 4, 10, 5, 1, 10, 10, 10, 10, 10, 10, 10, 10, 10,
0.00 Operational Note	more than nor contons up @ 1/14 Fr 8250 T. 15.5 bottoms up spot kill mud. BilH and set sa 0 ### Grd 99.00 59.16 J-55 59.16 J-55	mal. 8250' w/ 12-10458 w/ 10458' w/	From 0 8.750 6.500 6.500 5.000 5.000 5.000 Total Le	To 3,492 ID 2,250 2,500 3,000 3,000 3,000 BHA =	Max gas 88 blacement. re Max gas 5 ID 8.835 Length 1.00 3.00 3.66 40 2.93 176.20 3.0.21 148.33 718.07 9,740.05 10,458.12	Drift 5558, 2nd 6558, 2nd	in 8 100 000 000 000 000 000 000 000 000 0	Elevs 950 KOP 10,27(2)	Collapse 2,570 MD/TVD 0 / 10,270 Incl. 0.37 0.30 0.35 0.06 0.24 0.60 0.75 0.97	Azi. 2,866. 3 Pipe yi. 633 Azi. 162.51 155.83 149.43 155.30 156.52 279.30 267.74 238.04	12 Run C 1 14 Run C 1 15 NU BG 1 16 Test B 22 Well C 24 Drill C Totals 10 0.000 Pen Pt Mt 11.430 / 1 10.153,7 10.248,2 10.343,0 10.721,2 10.626,8 10.721,2 10.815,9 10.910,3	Joint Strength 520,000 D/TVD 11,000 D VS 8 8 0,7 7 0,7 1.7 1.7 1.7 1.3 1.3 1.3 1.3 1.3 1.3 1.3 1.3 1.3 1.3	KB: KB: SS	Capacity .07582 Landing .15,367 N/-S .1.28 .0.76 .0.28 .0.22 .0.51 .0.52 .0.51 .0.70 .1.28	GHG E 4, Displ 0.01455 Pt MD/TVD / / 11,000 E/-W -49.38 -49.15 -48.89 -48.75 -48.93 -49.75 -48.93 -49.75 -4	5, 4, 10, 5, 5, 0, 3, 3, 480, 1480,
0.00 Operational Note	more than nor contons up @ 1/14 Fr 8250 T. 15.5 bottoms up spot kill mud. BilH and set sa 0 ### Grd 99.00 59.16 J-55 59.16 J-55	mal. 8250' w/ 12-10458 w/ 10458' w/	From 0 8.750 6.500 6.500 5.000 5.000 5.000 Total Le	To 3,492 ID 2,250 2,500 3,000 3,000 3,000 BHA =	Max gas 88 blacement. re Max gas 5 ID 8.835 Length 1.00 3.00 3.66 40 2.93 176.20 3.0.21 148.33 718.07 9,740.05 10,458.12	Drift 5558, 2nd 6558, 2nd	in 8 750 3 M 000 Di 103 33 100 553 110 110 110 110 110 110 110 110 110 11	Elevs KOP 10,270 psth 0,155 0,250 0,345 0,439 0,818 0,912 0,006 1,196 290	Collapse 2,570 MO/TVD 2/10,270 Incl. 0,37 0,30 0,35 0,33 0,06 0,24 0,60 0,75 0,88 0,73 0,49 0,49 0,39	Azi. 2.866. 633 Azi. 2.866. 633 Azi. 2.866. 633 Azi. 2.866. 633 Azi. 2.867. 74 Azi. 2.868. 633 Azi. 2.867. 74 Azi. 2.868. 633 Azi. 2.867. 74 Azi. 2.868. 633 A	12 Run C 13 Ceme 14 Wait C 15 NU B 16 Test B 22 Well C 24 Drill C Totals 00 DF:: Body eld 0,000 Pen Pt Mt 11,430 / 1 TVt 10,153,7 10,248,2 10,343,0 10,721,2 10,343,0 10,721,2 10,815,9 10,910,3 11,003,9 11,003,9 11,194,0 11,288,5	Casing Interest Casing Interest Casing Interest Casing Interest Casing Interest Casing Interest Casing	KB: KB: KB: KB: KB: KB: KB: KB:	Capacity .07582 Landingg 15,367 N/-S 1,28 0,76 0,28 -0,22 -0,51 -0,52 -0,51 -0,70 -1,28 -2,33 -3,57 -4,56 -5,26	GHG E 4, Displ 0.01455 Pt MD/TVD / 11,000 EW -49,38 49,15 -48,89 48,75 -48,93 49,62 -50,71 -51,98 -53,56 -53,39	5./ 4. 10.: 5.5. 0. 0. 3.: 480.: 7. 10.: 8. 10.: 9. 10
0.00 Operational Note	more than nor contons up @ 1/14 Fr 8250 T. 15.5 bottoms up spot kill mud. BilH and set sa 0 ### Grd 99.00 59.16 J-55 59.16 J-55	mal. 8250' w/ 12-10458 w/ 10458' w/	From 0 8.750 6.500 6.500 5.000 5.000 5.000 Total Le	To 3,492 ID 2,250 2,500 3,000 3,000 3,000 BHA =	Max gas 88 blacement. re Max gas 5 ID 8.835 Length 1.00 3.00 3.66 40 2.93 176.20 3.0.21 148.33 718.07 9,740.05 10,458.12	Drift 5558, 2nd 6558, 2nd	in 8 10 5 flare, in 8 10 f	Elevs KOP 10,270 10	2,570 MD/TVD 0 / 10,270 Incl. 0.37 0.30 0.35 0.33 0.06 0.24 0.60 0.75 0.97 0.83 0.49	Azi. 2,866. Azi. 162.51 159.83 149.43 156.52 279.30 156.52 279.30 156.74 254.47 238.04 170.92	12 Run C 12 Run C 14 Run C 14 Puit C 15 NU B 16 Test B 22 Well C 24 Drill C 15 NU B 16 Test B 16	Joint Strength 520,000 DT/VD 11,000 DT 11,000 T 1.7 T	KB: KB: SS 336 1664 113 42 444 444 444 445 577 566 225 884	Capacity .07582 Landing 15,367 N/-S 1.28 0.76 0.28 -0.22 -0.51 -0.52 -0.51 -0.70 -1.28 -2.33 -3.57 -4.56	GHG E 4, Displ 0.01455 Pt MD/TVD / 11,000 -49,56 -49,38 -49,15 -48,89 -48,75 -48,93 -48,75 -48,93 -49,15 -51,98 -53,01 -53,49 -53,55	5.4 4.0 5.5 0.0 9.7 480.0 10 10 10 10 10 10 10 10 10 10 10 10 10
0.00 Operational Note	more than nor contons up @ 1/14 Fr 8250 T. 15.5 bottoms up spot kill mud. BilH and set sa 0 ### Grd 99.00 59.16 J-55 59.16 J-55	mal. 8250' w/ 12-10458 w/ 10458' w/	From 0 8.750 6.500 6.500 5.000 5.000 5.000 Total Le	To 3,492 ID 2,250 2,500 3,000 3,000 3,000 BHA =	Max gas 88 blacement. re Max gas 5 ID 8.835 Length 1.00 3.00 3.66 40 2.93 176.20 3.0.21 148.33 718.07 9,740.05 10,458.12	Drift 5558, 2nd 6558, 2nd	in 8 750 3 750 3 10 10 10 10 10 10 10 10 10 10 10 10 10	Elevs MOP 10,270 Pepth 1,155 1,439 1,534 1,723 1,818 1,912 1,960	Collapse 2,570 MD/TVD 0,710,270 Incl. 0,37 0,30 0,35 0,33 0,06 0,24 0,60 0,75 0,97 0,88 0,73 0,49 0,39 0,35 0,23 0,44	Azi. 2,866. Azi. 162.51 159.83 149.43 155.30 156.52 279.30 156.52 279.30 170.92 160.35 160.91 160.35	12 Run C 1 14 Run C 1 15 NU B 6 16 Test B 22 Well C 24 Drill C 1 16 Totals 00 DF:: Body eld 0,000 Pen Pt Mt 11,430 / 1 10,437,6 10,532.2 10,626.8 10,721.2 10,815.9 10,910.3 11,093.9 11,094.0 (11,288.5 11,383.3 11,478.0 11,572.5 11,478.0 11,572.5 11,478.0 11,572.5 11,478.0 11,572.5 1	Casing Interest Casing Interest Casing Interest Casing Interest Casing Interest Casing Interest Casing	KB: KB: SS 336 116 64 13 42 44 44 44 64 226 332 57 56 225 84 42	Capacity 1.07582 Landing 15,367 N/-S 1.28 0.76 0.28 -0.22 -0.51 -0.52 -0.51 -0.70 -1.28 -2.33 -3.57 -4.56 -5.26 -5.26 -5.26 -5.26 -6.41	GHG E 4, Displ 0.01455 Pt MD/TVD / /11,000 EW 49,58 49,15 -48,89 48,75 -48,93 49,62 -50,71 53,56 -53,01 -53,56 -53,21 -53,21 -53,21 -53,21 -53,21 -53,21 -53,21 -53,21 -53,21 -53,21 -53,21 -53,21 -53,21	5./ 4. 10. 5. 5. 0. 0. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3.
0.00 Operational Note	more than nor contons up @ 1/14 Fr 8250 T. 15.5 bottoms up spot kill mud. BilH and set sa 0 ### Grd 99.00 59.16 J-55 59.16 J-55	mal. 8250' w/ 12-10458 w/ 10458' w/	From 0 8.750 6.500 6.500 5.000 5.000 5.000 Total Le	To 3,492 ID 2,250 2,500 3,000 3,000 3,000 BHA =	Max gas 88 blacement. re Max gas 5 ID 8.835 Length 1.00 3.00 3.66 40 2.93 176.20 3.0.21 148.33 718.07 9,740.05 10,458.12	Drift 5558, 2nd 6558, 2nd	in 8 100 000 000 000 000 000 000 000 000 0	Elevs 950 KOP 10,270 950 10,270 950 10,270 950 10,270 968 1,155 1,459 1,4	Collapse 2,570 MOTTO 0,10,270 Incl. 0,37 0,30 0,35 0,35 0,36 0,24 0,60 0,75 0,88 0,73 0,49 0,39 0,35 0,23 0,36 0,44 0,60	Azi. 2,866,61 632,286,51 632,286,51 633,162,51 633,162,51 633,162,63 634,162,63 634,163,163,163,163,163,163,163,163,163,163	12 Run C 12 Run C 14 Run C 15 NU B 16 Test B 22 Well C 24 Drill C 24 Drill C 25 Totals 00 DF: 10 153.7 10.248.2 10.343.0 10.437.6 10.532.2 10.815.9 10.910.3 11.999.4 11.194.0 11.288.5 11.383.3 11.478.0 11.572.5 11.667.4	Joint Strength 520,000 D/TVD 11,000 D/T 11,000 T/T 11,0	KB: KB: S S 36 16 64 13 42 44 44 664 63 32 57 56 25 42 65	Capacity 0.07582 Landing 15,367 N/-S 1.28 0.76 0.28 -0.51 -0.52 -0.51 -0.70 -1.28 -2.33 -3.57 4.56 -5.26 -5.84 -6.25 -6.41 -6.63	GHG E 4, Displ 0.01455 Pt MD/TVD / 11,000 E/-W -49,56 -49,35 -48,75 -48,89 -48,75 -48,75 -48,75 -48,75 -50,71 -51,98 -53,01 -53,49 -53,55 -53,38 -53,28	5, 4, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10
0.00 Operational Note	more than nor contons up @ 1/14 Fr 8250 T. 15.5 bottoms up spot kill mud. BilH and set sa 0 ### Grd 99.00 59.16 J-55 59.16 J-55	mal. 8250' w/ 12-10458 w/ 10458' w/	From 0 8.750 6.500 6.500 5.000 5.000 5.000 Total Le	To 3,492 ID 2,250 2,500 3,000 3,000 3,000 BHA =	Max gas 88 blacement. re Max gas 5 ID 8.835 Length 1.00 3.00 3.66 40 2.93 176.20 3.0.21 148.33 718.07 9,740.05 10,458.12	Drift 5558, 2nd 6558, 2nd	m 8 750 3 M 00 00 00 00 00 10 10 10 10 10 10 10 10	Elevs 800 10,250 10	Collapse 2,570 MD/TVD 0/10,270 Incl. 0,37 0,30 0,35 0,33 0,06 0,24 0,60 0,75 0,97 0,88 0,39 0,39 0,39 0,35 0,44 0,60 0,42 0,60 0,42 0,33	Azi. 2,866 1 Azi. 162,51 159,83 156,52 279,30 156,52 279,30 170,92 160,35 170,92 160,35 170,92 180,36 170,92 180,36 170,92 180,36 170,92 180,36 170,92 180,36 170,92 180,36 180,91 180	12 Run C 13 Ceme 14 Wait C 15 NU B 16 Test B 22 Well C 24 Drill C 24 Drill C 25 Drill C 26 Drill C 27 Drill C 28 Drill C 29 Drill C 29 Drill C 20 Drill C	Casing Interest Casing Interest Casing Interest Casing Interest Casing Interest Casing Interest Casing	KB: SS	Capacity 7.07582 Landing 15,3676 128 0.76 0.28 0.76 0.28 0.70 0.51 0.52 0.51 1.28 2.33 3.36 5.26 5.26 6.41 6.63 6.71 7.11	GHG E 4, Displ 0.01455 Pt MD/TVD 7 / 11,000 EF-W 49.38 49.15 48.89 48.75 48.89 53.01 53.49 53.21 53.21 53.21 53.21 53.21 55.35	5. 4. 10. 10. 3. 480. Plugged of the text
0.00 Operational Note	more than nor contons up @ 1/14 Fr 8250 T. 15.5 bottoms up spot kill mud. BilH and set sa 0 ### Grd 99.00 59.16 J-55 59.16 J-55	mal. 8250' w/ 12-10458 w/ 10458' w/	From 0 8.750 6.500 6.500 5.000 5.000 5.000 Total Le	To 3,492 ID 2,250 2,500 3,000 3,000 3,000 BHA =	Max gas 88 blacement. re Max gas 5 ID 8.835 Length 1.00 3.00 3.66 40 2.93 176.20 3.0.21 148.33 718.07 9,740.05 10,458.12	Drift 5558, 2nd 6558, 2nd	in B 750 3 750 3 10 10 10 10 10 10 10 10 10 10 10 10 10	Elevs 809 10,270 10,270 10,270 10,270 10,250 10,250 10,250 10,250 10,250 10,250 10,250 10,250 10,250 10,250 10,270 10,250 10	Collapse 2,570 MO/TVO 0 / 10,270 Incl. 0,37 0,30 0,35 0,33 0,06 0,24 0,60 0,75 0,88 0,73 0,49 0,39 0,35 0,23 0,44 0,60 0,44 0,60 0,42 0,60 0,43 0,60 0,43 0,60 0,43 0,60 0,43 0,60 0,43 0,60 0,43 0,60 0,43 0,60 0,43 0,60 0,43 0,60 0,43 0,60 0,43 0,60 0,43 0,60 0,43 0,60 0,43 0,60 0,43 0,60 0,43	Azi. 162.51 162.51 159.83 149.83 155.30 267.74 209.17 192.08 100.32 160.	12 Run C 13 Ceme 14 Wait C 15 NU B 16 Test B 22 Weil C 24 Drill C 24 Drill C Totals 00 DF:: 10,000 Pen Pt Mt 11,430 / 1 10,437.6 10,532 / 2 10,815.9 10,910.3 11,903.9	Casing Interest Casing Interest Casing Interest Casing Interest Casing Interest Casing Interest Casing	KB: SS	Capacity 107582 Landing 15,3677 N/S 128 0.76 0.28 0.76 0.51 -0.50 -0.51 -0.52 -0.51 128 6.25 5.26 6.41 7.11	GHG E 4, Displ 0.01455 Pf MD/TVD / / 11,000 -49,56 -49,56 -49,15 -48,89 -48,73 -48,73 -49,62 -50,71 -51,3,81 -53,56 -53,56 -53,56 -53,21 -53,28 -53,21 -53,26 -53,21 -53,26 -53,26 -53,21 -55,26	5./ 4. 10. 5. 0. 3. 3. 480. 0. 0. 999 Pluggged P
0.00 Operational Note	more than nor contons up @ 1/14 Fr 8250 T. 15.5 bottoms up spot kill mud. BilH and set sa 0 ### Grd 99.00 59.16 J-55 59.16 J-55	mal. 8250' w/ 12-10458 w/ 10458' w/	From 0 8.750 6.500 6.500 5.000 5.000 5.000 Total Le	To 3,492 ID 2,250 2,500 3,000 3,000 3,000 BHA =	Max gas 88 blacement. re Max gas 5 ID 8.835 Length 1.00 3.00 3.66 40 2.93 176.20 3.0.21 148.33 718.07 9,740.05 10,458.12	Drift 5558, 2nd 6558, 2nd	in 8 10 10 10 10 10 10 10 10 10 10 10 10 10	Elevs 809 10,270 10,270 10,270 10,270 10,250 10,250 10,250 10,250 10,250 10,250 10,250 10,250 10,250 10,250 10,270 10,250 10	Collapse 2,570 MD/TVD 0/10,270 Incl. 0,37 0,30 0,35 0,33 0,06 0,24 0,60 0,75 0,97 0,88 0,39 0,39 0,39 0,35 0,44 0,60 0,42 0,60 0,42 0,33	Azi. 2.866 91 150.35 166.91 1228.18 264.51 160.35 130.08 213.08 2	12 Run C 13 Ceme 14 Wait C 15 NU B 16 Test B 22 Well C 24 Drill C 24 Drill C 25 Drill C 26 Drill C 27 Drill C 28 Drill C 29 Drill C 29 Drill C 20 Drill C	Joint Strength 520,000 D/TVD 11,000 D/T 11,0	Test KB: SS 36 64 13 42 44 44 64 26 57 57 56 62 57 65 84 42 65 14 65 87	Capacity 7.07582 Landing 15,3676 128 0.76 0.28 0.76 0.28 0.70 0.51 0.52 0.51 1.28 2.33 3.36 5.26 5.26 6.41 6.63 6.71 7.11	GHG E 4, Displ 0.01455 Pt MD/TVD 7 / 11,000 EF-W 49.38 49.15 48.89 48.75 48.89 53.01 53.49 53.21 53.21 53.21 53.21 53.21 55.35	5. 4. 10. 15. 10. 15. 15. 15. 15. 15. 15. 15. 15. 15. 15
0.00 Operational Note	more than nor contons up @ 1/14 Fr 8250 T. 15.5 bottoms up spot kill mud. BilH and set sa 0 ### Grd 99.00 59.16 J-55 59.16 J-55	mal. 8250' w/ 12-10458 w/ 10458' w/	From 0 8.750 6.500 6.500 5.000 5.000 5.000 Total Le	To 3,492 ID 2,250 2,500 3,000 3,000 3,000 BHA =	Max gas 88 blacement. re Max gas 5 ID 8.835 Length 1.00 3.00 3.66 40 2.93 176.20 3.0.21 148.33 718.07 9,740.05 10,458.12	Drift 5558, 2nd 6558, 2nd	m 8 750 3 M 00	Elevs KOP 10.275 2.250 3.453 3.818 9.912 1.196 2.290 3.853 4.80 5.744 6.699 7.64 8.588 9.909 nal Clo	Collapse 2,570 MD/TVD 0,710,270 Incl. 0,37 0,30 0,35 0,33 0,06 0,24 0,60 0,75 0,97 0,88 0,73 0,49 0,39 0,35 0,44 0,60 0,42 0,43 0,43 0,33 0,33 To Bit: 0,33 sure =	Azi. 2,866. Azi. 162.51 159.83 155.30 156.52 279.30 156.52 279.30 170.92 160.35 170.92 160.35 264.51 228.18 264.51 228.21 228.61 228.21 228.61 56.30	12 Run C 13 Ceme 14 Wait C 15 NU B 16 Test B 22 Well C 24 Drill C 24 Drill C 25 Totals 20 DF: 21 Totals 20 DF: 21 Totals 21 Totals 22 Test B 23 Test B 24 Drill C 25 Totals 26 Drill C 26 Drill C 27 Drill C 28 Drill C 28 Drill C 29 Drill C 29 Drill C 20 D	Joint Strength 520,000 D/TVD 11,000 D/TVD 11	KB: KB: SS 336 16 64 13 44 44 44 44 44 46 42 26 32 25 88 42 25 42 87 87 Azim	Capacity 7.07582 Landing 15.3676 0.7682 0.76 0.28 0.76 0.28 0.70 0.51 0.52 0.51 1.28 2.33 3.57 4.56 6.25 6.41 6.63 7.711 7.761	GHG E 4, Displ 0.01455 Pt MD/TVD / 11,000 -49.58 -49.15 -48.89 -48.75 -48.89 -48.75 -51.98 -53.38 -53.28 -53.28 -53.28 -53.28 -53.28 -53.28 -53.28 -53.28 -53.28 -53.28	5. 4. 10. 5. 0. 3. 480. Plugging Diese 0.099 I ((((((((((((((((((
0.00 Operational Note 3.00 Tripping Continue T Gisplaced 1.50 Cond. Mud & Circ Circulate b Continue T Gisplaced 2.00 Cond. Mud & Circ Circulate b Continue T 3.00 Cond. Mud & Circ Circulate b Continue T 3.00 Cond. Mud & Circ Circulate 2 Prepare to 24.00 Circulate 2 Prepa	more than nor contons up @ 1/14 Fr 8250 T. 15.5 bottoms up spot kill mud. BilH and set sa 0 ### Grd 99.00 59.16 J-55 59.16 J-55	mal. 8250' w/ 12-10458 w/ 10458' w/	From 0 8.750 6.500 6.500 5.000 5.000 5.000 Total Le	To 3,492 ID 2,250 2,500 3,000 3,000 3,000 BHA = Pipe = mgth = 1 Kelly = 10 K	Max gas 88 placement. re Max gas 9 ib 8.835 Length 1.00 3.00 356.40 2.93 176.20 30.21 148.33 718.07 9,740.05 9,740.05 10,458.12 1,541.88 12,000.00	Drift 5558, 2nd 65558,	m 8 750 3 M 00	Elevs 950 KOP 10,270 10,27	Collapse 2,570 MD/TVD 0,710,270 Incl. 0,37 0,30 0,35 0,33 0,06 0,24 0,60 0,75 0,97 0,88 0,73 0,49 0,39 0,35 0,44 0,60 0,42 0,43 0,43 0,33 0,33 To Bit: 0,33 sure =	Azi. 2,866. Azi. 162.51 159.83 155.30 156.52 279.30 156.52 279.30 170.92 160.35 170.92 160.35 264.51 228.18 264.51 228.21 228.61 228.21 228.61 56.30	12 Run C 13 Ceme 14 Wait C 15 NU B 16 Test B 22 Well C 24 Drill C 17 Totals 10 DF:: 10 DF:: 11 H A S 11 DF:: 11 DF:: 12 DF:: 13 DF:: 14 DF:: 15 DF:: 16 DF:: 17 DF:: 18 DF::	Joint Strength 520,000 DTVD 11,000 DT 1,000 T	KB: KB: KB: KB: KB: KB: KB: KB:	Capacity 7.07582 Landing 15,367 N/S 128 128 0.76 0.28 -0.51 -0.50 -0.51 -0.52 -0.51 -0.70 -1.28 -2.33 -3.57 -4.56 -5.84 -6.63 -7.11 -7.61 -7.61 -7.83	GHG E 4, Displ 0.01455 Pt MD/TVD / 11,000 -49.58 -49.15 -48.89 -48.75 -48.89 -48.75 -51.98 -53.38 -53.21 -53.28 -53.28 -55.80 -55.80	5. 4. 10. 5. 0. 3. 480. Plugged of the first of the firs
0.00 Operational Note	more than nor contons up @ 1/14 Fr 8250 T. 15.5 bottoms up spot kill mud. BilH and set sa 0 ### Grd 99.00 59.16 J-55 59.16 J-55	mal. 8250° w/ 12-10458 with @ 10458°, 1 Thread 4.5 Reg 4.5 XH 4.5 XH NC-50 NC50 NC50 NC50	From 0 OD 8.750 6.500 6.500 5.000 5.000 Total D	To 3,492 ID 2,250 2,500 3,000 3,000 3,000 BHA = Pipe = ingth = 1	Max gas 88 placement. re Max gas 5 lib 8.835 Length 1.00 3.00 3.66 40 2.93 176.20 3.0.21 148.33 718.07 9,740.05 9,740.05 1,541.88 12,000.00	Drift 8.77 CUN 1:: 4.4 360.0 363.0 5699.718.0 110,458.	in B 1750 3 M 100 100 100 100 100 100 100 100 100 1	Elevs Section Page	Collapse 2,570 MD/TVD 0,710,270 Incl. 0,37 0,30 0,35 0,33 0,06 0,24 0,60 0,75 0,97 0,88 0,73 0,49 0,39 0,35 0,44 0,60 0,42 0,43 0,43 0,33 0,33 To Bit: 0,33 sure =	Azi. 2,866 Nage: 0 Pipe vi. 633 Nage: 162,51 Nage: 159,83 Nage: 155,30 Nage: 155,30 Nage: 156,51 Nage: 156,93	12 Run C 13 Ceme 14 Wait C 15 NU B 16 Test B 22 Well C 24 Drill C 17 Totals 10 DF:: 10 Totals 11,430 / 1 11,430 / 1 10,532 / 1 10,532 / 1 10,632 / 1 10,632 / 1 11,903 / 1 11,903 / 1 11,903 / 1 11,903 / 1 11,903 / 1 11,905 / 1 11,855 / 1 11,762 / 1 11,867 / 1 11,762 / 1 11,866 / 1 11,906 / 9	Sasing Interest	KB: SS 336 16 64 113 42 44 44 66 65 114 66 65 114 66 65 114 66 65 114 67 Azim more Dr. Azim D	Capacity 7.07582 Landing 15,367 N/S 0.28 0.76 0.28 0.76 0.20 0.51 0.52 0.51 0.52 0.51 1.28 0.76 1.28 0.76 1.28 0.76 1.28 1.28 1.28 1.28 1.28 1.28 1.28 1.28	GHG E 4, Displ 0.01455 Pt MD/TVD / 11,000 E/-W 49.58 -49.15 -48.93 -49.62 -50.71 -51.98 -53.01 -53.49 -53.55 -53.38 -53.21 -54.61 -55.62 -55.80 -55.80	5, 4. 10. 5. 0. 3. 3. 480. missio 0. 0.09i
0.00 Operational Note Circulate th 3.00 Tripping Continue T displaced in fish laced in	more than nor contons up @ 1/14 Fr 8250 T. 15.5 bottoms up spot kill mud. BilH and set sa 0 ### Grd 99.00 59.16 J-55 59.16 J-55	mal. 8250° w/ 12-10458 with @ 10458°, 1 10458°	From 0 OD 8.750 6.500 6.500 5.000 5.000 Total D	Te 3,492 ID 2,250 2,500 3,000 3,000 3,000 BHA = Pipe = ingth = 1 Keity = ingth = 1	Max gas 88 placement. re Max gas 98 placement. 1.00 8.835 Length 1.00 3.00 3.00 3.00 3.00 3.00 3.00 3.00	Drift 8.77 CUI 1.1.458.	in 8 10 10 10 10 10 10 10 10 10 10 10 10 10	Elevs KOP 10.275 10.250 2.504 6.628 8.818 9.912 1.101 1.196 6.574 6.669 9.09 9.09 9.09 1.006 6.658 9.006 6.658	Collapse 2,570 MD/TVD 0,710,270 Incl. 0,37 0,30 0,35 0,33 0,06 0,24 0,60 0,75 0,97 0,88 0,73 0,49 0,39 0,35 0,44 0,60 0,42 0,43 0,43 0,33 0,33 To Bit: 0,33 sure =	Azi. 2,866. Azi. 162.51 159.83 149.43 155.30 156.52 279.30 170.92 160.35 170.92 160.35 170.92 160.35 170.92 160.35 170.92 160.35 170.92 160.35 170.92 160.35 170.92 160.35 160.31 160.	12 Run C 13 Ceme 14 Wait C 15 NU B 16 Test B 22 Well C 24 Drill C 17 Totals 10 DF: 10 Totals 11 1,430 / 11 11 1,430 / 11 10 153.7 10 153.7 10 153.2 10 16 15 10 10 17 10 11 1,430 / 11 11 1,430 / 11 11 1,430 / 11 11 1,430 / 11 11 1,430 / 11 11 1,430 / 11 11 1,430 / 11 11 1,430 / 11 11 1,430 / 11 11 1,667 / 4 11 1,669 / 6 11 1,906.9 11 1,906.9 5 feet @ 0 feet @ 0 feet @ 0 feet @	Joint Strength 520,000 DFV 1,000 DFV	KB: KB: KB: S 336 164 1342 444 446 6426 5756 6587 Azim Azim Cc	Capacity 107582 Landing 15,367 N/S 128 6 0.76 0.28 8 0.76 0.51 1 0.52 0.51 1 1.28 6 2.33 3.57 4 5.6 6 6.25 6 6.63 7 7.11 7 7.61 7 7.83 1 0.78	GHG E 4, Displ 0.01455 Pt MD/TVD / 11,000 E-W 49,58 49,15 -48,89 48,75 -48,93 49,62 -50,71 -51,98 -53,01 -53,49 -53,55 -53,38 -53,21 -53,28 -53,21 -55,26 -55,80 -55,80 Gy	5. 4. 10. 10. 10. 10. 10. 10. 10. 10. 10. 10
0.00 Operational Note	more than nor contons up @ 1/14 Fr 8250 T. 15.5 bottoms up spot kill mud. BilH and set sa 0 ### Grd 99.00 59.16 J-55 59.16 J-55	mal. 8250° w/ 12-10458 with @ 10458°, 1 10458°	From 0 8.750 6.500 6.500 6.500 5.000 7.000 1 Total D	To 3,492 ID 2,250 2,500 3,000 3,000 3,000 BHA = Pipe = mgth = 1 Reflection Contact Comput Geological Comput Geologi	Max gas 88 placement. re Max gas 98 placement. s. 835 Length 1.00 3.00 3.00 3.00 3.00 3.00 3.00 3.00	Drift 8.77 CUI 1.1.458.	M 00 00 00 00 00 00 00 00 00 00 00 00 00	Elevs KOP 10.275 10.250 2.504 6.628 8.818 9.912 1.101 1.196 6.574 6.669 9.09 9.09 9.09 1.006 6.658 9.006 6.658	Collapse 2,570 MD/TVD 2,710,270 Incl. 0,37 0,30 0,35 0,33 0,06 0,24 0,60 0,75 0,97 0,88 0,73 0,49 0,39 0,35 0,44 0,60 0,42 0,40 0,40 0,40 0,40 0,40 0,41 0,60 0,42 0,43 0,33 0,33 To Bit: 0,33 sure =	Azi. 2,866. Azi. 162.51 159.83 149.43 155.30 156.52 279.30 170.92 160.35 170.92 160.35 170.92 160.35 170.92 160.35 170.92 160.35 170.92 160.35 170.92 160.35 170.92 160.35 160.31 160.	12 Run C 13 Ceme 14 Wait C 15 NU B 16 Test B 22 Well C 24 Drill C 24 Drill C 25 Drill C 26 Drill C 27 Drill C 28 Drill C 29 Drill C 29 Drill C 20 Drill C	Sasing Interest	Test KB: S 336 16 64 13 42 44 44 64 65 57 56 65 14 65 87 Azimm Dr	Capacity 7.07582 Landing 15,367 N/S 0.28 0.76 0.28 0.76 0.28 0.51 0.52 0.51 1.28 0.76 1.28 1.28 1.28 1.28 1.28 1.28 1.28 1.28	GHG E 4, Displ 0.01455 Pt MD/TVD/ / 11,000 EF-W 49.58 49.15 -48.89 48.75 -48.93 -49.62 -50.71 -51.98 -53.01 -53.21 -53.21 -55.62 -55.80 Gy	5./ 4.10.10.5.0.0.3.3.20.00 Phagas of the control
0.00 Operational Note Circulate th 3.00 Tripping Continue T displaced filsplaced for 1.50 Cond. Mud & Circ Circulate b 1.50 Cond. Mud & Circ Circulate b 1.50 Tripping Continue T 3.00 Cond. Mud & Circ Circulate b 24.00 Cond. Mud & Circ Circulate b 24.00 Prepare to 25.00 Prepare to 26.00 Prepare to 26.00 Prepare to 26.00 Prepare to 27.00 Prepare to 28.00 Prepare to 29.00 Prepare to 29.00 Prepare to 20.00 Prepare	more than nor contents up @ !! H FI of a 250 °! II. I S bottoms up spot kill mud. 3IH and set sa 0 ft Casing Wt Grd 99.00 59.16 J-55 59.16 J-55 59.16 J-55	mal. 8250° wl 12-10458 wth 12-110458 wth 12-110458°, 1	From 0 OD 8.750 6.500 6.500 5.000 5.000 5.000 Total Le Total D	To 3,492 ID 2,250 2,500 3,000 3,000 BHA = Pipe = mgth = 1 Kelly = Depth = 1	Max gas 88 placement. re Max gas 98 placement. s. 835 Length 1.00 3.00 3.00 3.00 3.00 3.00 3.00 3.00	Drift 8.77 CUI 1.1.458.	M 00 00 00 00 00 00 00 00 00 00 00 00 00	Elevs KOP 10.275 10.250 2.504 6.628 8.818 9.912 1.101 1.196 6.574 6.669 9.09 9.09 9.09 1.006 6.658 9.006 6.658	Collapse 2,570 MD/TVD 2,710,270 Incl. 0,37 0,30 0,35 0,33 0,06 0,24 0,60 0,75 0,97 0,88 0,73 0,49 0,39 0,35 0,44 0,60 0,42 0,40 0,40 0,40 0,40 0,40 0,41 0,60 0,42 0,43 0,33 0,33 To Bit: 0,33 sure =	Azi. 2,866. Azi. 162.51 159.83 149.43 155.30 156.52 279.30 170.92 160.35 170.92 160.35 170.92 160.35 170.92 160.35 170.92 160.35 170.92 160.35 170.92 160.35 170.92 160.35 160.31 160.	12 Run C 13 Ceme 14 Wait C 15 NU B 16 Test B 22 Well C 24 Drill C 24 Drill C 25 Drill C 26 Drill C 27 Drill C 28 Drill C 29 Drill C 29 Drill C 20 Drill C	Joint Strength 520,000 DP's Joint Strength 520,000 DP's Joint Strength 520,000 DP 11,000 DP 11,0	Test KB: S 36 64 13 44 44 44 44 44 44 44 44 44 47 48 65 65 14 Azim Cc Azim Cc	Capacity 107582 Landing 15,367 N/S 128 6 0.76 0.28 0.76 0.05 1.28 0.05 1.28 0.51 1.28 0.51 1.28 0.75 1.28	GHG E 4, Displ 0.01455 Pt MD/TVD/ / 11,000 EF-W 49.58 49.15 -48.89 48.75 -48.93 -49.62 -50.71 -51.98 -53.01 -53.21 -53.21 -55.62 -55.80 Gy	5.4.4.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.



Total Costs

BLM/BIA

Cimarex Energy Co. Morning Drilling Report

AFE: Property: API#: Prop TD:

253084 428085-023.01 42-389-33823

Rpt# DFS ODFS 20 14.250 15	Present Oper				3lk 53 /		Wolfcamp) M		at, Jul 2	
14.200			ition Hole	For Whin	stock @	10458'	12,00	TVD	Footage	FT/HR 0.00	Hours 0.00
				Variance	STOCK W			Variance	0 0		
Vendor & Description	B.C.P	Daily Drlg. Cost	Cum Drig. Cost	To Drig. Afe Over/Under	A.C.P Code	Daily Compl. Cost	Compl. Cost	To Compl. Afe Diver/Linder	Dry Hole Cost	After Casing Point	Well Cost
	DIDC_100	-	99,810	223 000 000 000	DICC 100	Cost	- Cont	-15,000	120,000	15,000	135,
	DIDC 105	-			DICC 105				40,000		40,
H&P 218 [Day Rate / FRC Charge]	DIDC.255 DIDC.115	27,135	407,025		DICC 235 DICC 120	-		-90,000 -122,000	50,000	90,000	140, 814,
nor 210 [Day Rate / PRO Grange]	DIDC.120	21,135	46,104	5.104	NONATION.			-122,000	41,000	122,000	41.
	DIDC 125	-	35,800		DICC:125	-		-	85,000	-	85,
		1 107				-			100000000000000000000000000000000000000	1075077575	173,
					UNIAL 139	-		-10,000		10,000	300,
	DIDC 150	810	14,000		DICC.140			-180.000	51,000	180,000	231
	DIDC 155	-	175,843	-3.157	DIGC 145		-	-10,000	179,000	10,000	189
Dance (Mark Station) / Mart Tours		1.005	11.055	75.046					37 000		37.
		500	63,859	23,859	-	-		-	40,000		40.
	DIDC 185	-	79,080				-	-65,000	180,000	65,000	245
EL Farmer [2 pipe rack] / Wilbanks T		209	8,992					-10,000	30,000	10,000	40.
											50.
	DIDC 205		16,815				-	-20,000	20,000	20,000	40.
		3,700	81,400					-30,000	113,000	30,000	143,
[] / Cimarex [Satelite] [sat/phone/inte		1,255	20,746				-		110000000000000000000000000000000000000		56, 61,
	DIDC 225		8,000	-1,000	DICC 195	-		-2,000	8,000	2,000	10
	DIDC 231	-			DIGC 215						
Production and Control of the Contro	DIDC 240	7 100	219,352	19,352			-	-	200,000	+	200
Lendo [Septic] / Pason [Internet / Wo		7,420	26,650	-393,350	DICC 23/3		-	1 1	420,000	*	420
	DIDC 275				DICC 250					- C	
	DIDC 260	715	9,185	-20,815					30,000	-	30
Mc Guire Industries (Seperator & Ign		1,455	36,595					-30,000	65,000	30,000	95
	12/DC 270	-	525	-109,475				.52.000	110,000	52 000	110
					DICC 260			-180,000		180,000	180
								-100,000		100,000	100
			*****		DICC 210	-	_	-1,587,000		1,587,000	1,587
					DIGG.280			7			10
		2.356		-74.912	DICC 220			-131.000		131.000	286,
	TEGUNAL TAL	7250000	CONTROL OF		DWEA 110			+	*	7	
					7.1			404.659	1	404,659	404,
lb.t-		46 473	1 601 041	4 820 160	10000 AND			3 454 050	3 249 000	3 154 559	6,402
DIE .			1000 7000 7	-1.444,141				4,115,1152		3,131,213	
										-	
	DWEB.135		-						-		
	DWEB.140		107,310	-6,690					114,000	-	114,
	DWEB.145	-		-452,000	DIASTA 100			90.000	452,000	80.000	452, 80,
					DWEA 105			-85,000			85,
					DWEA 115	-			-		
	DWEB.115	-	15,236	-29,764		3		-38,000	45,000	38,000	83,
	DWEB.100								955		75,
								-25,000	-	25,000	20,
					DLEQ.105	-		-25,000		25,000	25,
Equipment		0	122 546	422.454	DLEQ.220	0		.328 000	611.000	328 000	939
Equipment		-	122,040	400,404					011,000		
	and the same					-					158,
					DLEO 125	-		-194.064	(*)	194,064	194
					DLEG: 130		+	-335,050		335,050	335,
						-					
e Equipment					MYEA 140			.797.695		797.986	797
Equipment							-	101,000		137,000	101
	DIDC 295		-		DIGC 275	4	0		-		
		0	0	- 0		0	. 0		0	0	
	American Safety Services [H2S Paci Pason [Work Station] / West Texas V Hughes Oilfield Transportation [Retu EL Farmer [2 pipe rack] / Wilbanks T Brother consulting / Lyman Nance [S [] / Cimarex [Satelite] [sat/phone/inte		1,127 1,127 1,127 1,127 1,127 1,127 1,126 1,12	Cuatro Deliver Fresh water	Discrete Discrete	Cuatro Deliver Fresh water		Custor Colorison Fresh value DIDC.149 1,127 8,905 6,696 DIDC.155	Claste Discher Fresh water DIDC.150 1,127 8,005 6,006 DIC.150 1,126 105,575 144,025 105,575 144,025 105,575 144,025 105,575 144,025 105,575 144,025 105,575 144,025 105,575 144,025 145,000 175,443 145,000 175,443 145,000 175,443 145,000 175,443 145,000 175,443 145,000 175,443 145,000	Guard Diptovis Fresh water) Ji Fai-Live Trans-Promity Fresh 2010.1.59 15.5775 15	Guero (Divense Freish water) File Freish Proposition File File



Cimarex Energy Co.

Morning Drilling Report

AFE: 253084
Property: 428085-023.01
API #: 42-389-33823
Prop TD: 15,367

		A

LM/BIA:															
Vell Name	IGHTEENMIL	F 56-18 1H				X, Reeves		Township			Objective Wolfcamp A		Date	ın, Jul 2	1 2013
ontractor / Ring	Rpt #	DFS	ODFS E	resent Ope	ration						MD	IVD	Footage	FT/HR	Hours
H&P 218	21	15.250 BGG	16			ro & prepa	re to rele	ase fron	n whipsto	ock.	12,000	12,000	0 0	0.00	0.00
	ale 20% Lime	0		0	0		pring Sand (Sand @ 10			AMPA@1	
0.00 0.000		C Av Jet Veloc	sty HHP	0.00	t Dia	\$0.00		\$154			,492		.40		vable SICP
Pump #1 - PZ-		GP	-		2-11		GP		p.#3.			GF	PS GF		Off BP
6.00 Slow Stroke	11.00 Stand Pipe E	3.83 DR Chok		5.00 v Stroke	11.0		3.83 Chok		w Strake	Stand Pipe	EDR	Chol	ke ()	On BP
E-10-20-10-		2000	12 200	2005/12	CONTRACT	dest central			6-04-05-11	10110/HO De		-			0
9.10 9.10			P Gel 1 1	Strength 1	100.0		o MW in	MW O	ut VS In	VS Out	PV :	P Gel	Strength	HTHP	LCM
Cake Solid		Sand MBT	PH	PM		E ME	Sake	Solids	Liquid	Sand	AlkPOM	WPS	ES	CACL2	MAGL
1 0.8 Chlorides	0 99.20 0	0.01 Water	8.00 o.w	Lima	1.51	01 0.21 oth Checked	D Chlori	des (100.00 Calcium	OiPet)	NaterPct	OW	Lime	Depth Ch	arked.
72,000	1,840	99.20	SCALL	MILLIA		00@12:42	30,350,	802	official in	MILES I	DOMESTICAL	SCAL	E-11/E	MORNOLINE	SOCIOL.
8t# So 4 8.7		7 Type		Sena K099		Jet#1 Jet#	2 Jet#3 Je	et#4 Jet#	15 Jel #6 .	Jet #7 Jet	#8 TF		W08 0-0	Rotary i	
Bit In Bit C		0.071		Cum. Bit H		er Outer	Dull	Location	Bearing	Guage			Diff Pressure	Motor F	PM
0 0 Drag Torque, and V		0.00 Diesel	0.00	177.50	0	More	t satellines in la	at 7d house				Soil F	0 - 0 arming / Mud	0 - 0)
Pickup Weight	280,000 Diese	on Hand	8,30	3 Engine	eer - 24 H	1 Tax	addilives in la	1,584	MF-55	1	0 Daily So	fids =	bbl	s @	\$0.00
Rotating Weight Slackoff Weight		Received Used Today	96	0							Total So Daily Lic		bbl	6 (C)	\$0.00
Average Drag	30,000	Natural Gas		-							Total Liq		1,280 bbl		\$3,480.00
faximum Drag orque On Bottom	1000000	Reading		1									OP Pressure 1		
orque Off Bottom		Used Today									Last BO		7/10/2013		ince:
aily Rot eet	ating Si	ding	Total	BHA# Feet	4	Rotating	Slidi	ng	Total	C	ode Tir 1 MIRU/R	ne Distribu DMO	tion	Daily	133.00
ours OP				Hours							2 Drilling 3 Washin	g/Reaming			177.50
Time				ROP %Time	y .						4 Lost Cir	culation			4.75
Feet				%Feet		2000					5 Cond. N 6 Tripping	Aud & Circ		2.00	26.00 61.75
2.00 Cond. Mud		nud, 150 bbl 10				with 80 bbl 10				$-\parallel$	7 Lubricat 8 Rig Rep			0.50	4.00
4.50 Tripping	Trip out o	f hole (proper fil									10 Deviation	n Survey			8.75
0.50 Tripping	Clean rig										11 Wireline				23.00 8.75
0.50 Lubricate Ri	ig Service ri	g & Work on top	drive.								12 Run Ca	sing			
1.50 Directional	Work Pick up S	g & Work on top mith whip stock	& scribe				1427				12 Run Ca 13 Cement	Casing			5,00
	Work Pick up S	mith whip stock le with Smith op	& scribe	ip stock (② controlle	ed speed, Fill (every 15 star	nds. (Good	i	2		Casing Cement			
1.50 Directional V	Work Pick up S Trip in ho displacen Work Rig up Gy	mith whip stock le with Smith op nent) yro data, GIH &	& scribe en hole wh orient whip	stock, Co	nfirmed w						13 Cement 14 Wait On 15 NU BOR 16 Test BO	Casing Cement P's		6.00	5.00 4.00 10.50 5.75
1.50 Directional V 10.50 Tripping 4.00 Directional V 0.50 Directional V	Work Pick up S Trip in ho displacen Work Rig up Gy 4,73,5.93 Work Pooh w/ Gy	mith whip stock le with Smith op- nent) yro data, GIH & 5, 3.48 (Directio Gyro & prepare t	& scribe en hole who orient whip and Plan 3 to release t	stock, Co called for rom whips	nfirmed w 1.8) stock.	hip face direct	ion with 5 po	ints 4.72,			13 Cement 14 Wait On 15 NU BOR 16 Test BO 20 Directio 22 Well Co	Casing Cement P's P's nal Work		6.00	5.00 4.00 10.50 5.75 6.00 0.75
1.50 Directional V 10.50 Tripping 4.00 Directional V	Work Pick up S Trip in ho displacen Work Rig up Gy 4,73,5.93 Work Pooh w/ Gy	mith whip stock le with Smith op- nent) yro data, GIH & 5, 3.48 (Directio	& scribe en hole who orient whip and Plan 3 to release t	stock, Co called for rom whips	nfirmed w 1.8) stock.	hip face direct	ion with 5 po	ints 4.72,			13 Cement 14 Wait On 15 NU BOR 16 Test BO 20 Directio 22 Well Co 24 Drill Cm	Casing Cement P's P's nal Work	st		5,00 4.00 10.50 5.75 6.00 0.75 3.00
1.50 Directional V 10.50 Tripping 4.00 Directional V 0.50 Directional V 0.00 Operational 24.00	Work Pick up S Trip in ho displacen Work Rig up G 4.73, 5.93 Work Pooh w/ G Note Plan to S	mith whip stock le with Smith op- nent) yro data, GIH & 5, 3.48 (Directio Gyro & prepare t et whip top @ 11	& scribe en hole who orient whip anal Plan 3 to release to 0270', 3.48	stock, Co called for rom whips az, Botto	nfirmed w 1.8) stock.	hip face direct	ion with 5 po	ints 4.72.	3.43.		13 Cement 14 Wait On 15 NU BOF 16 Test BO 20 Directio 22 Well Co 24 Drill Cm Totals	Casing Cement P's nal Work ntrol		24.00	5,00 4,00 10,50 5,75 6,00 0,75
1.50 Directional V 10.50 Tripping 4.00 Directional V 0.50 Directional V 0.00 Operational 24.00	Work Pick up S Trip in ho displacen Work Rig up S 4.73, 5.93 Work Pooh w (Note Plan to S whip stock, Mill off s	mith whip stock le with Smith op- nent) yro data, GIH & 5, 3.48 (Directio Gyro & prepare t et whip top @ 11	& scribe en hole who orient whip anal Plan 3 to release to 0270', 3.48	stock, Co called for rom whips az, Botto	nfirmed wi 1.8) stock, m face @	hip face direct	ion with 5 po	ints 4.72.	3.43.		13 Cement 14 Wait On 15 NU BOF 16 Test BO 20 Directio 22 Well Co 24 Drill Cm Totals	Casing Cement P's nal Work ntrol	st B: 25.00	24.00 GHG E	5.00 4.00 10.50 5.75 6.00 0.75 3.00 504.00
1.50 Directional V 10.50 Tripping 4.00 Directional V 0.50 Directional V 0.50 Operational 24.00 Operational 24.00 Set Venture: Set V ext Casing: 7.00	Work Pick up S Trip in ho displacen Work Rig up S 4.73, 5.93 Work Pooh w (Note Plan to S whip stock, Mill off s	mith whip stock le with Smith op- nent) yro data, GIH & 5, 3.48 (Directio Gyro & prepare t et whip top @ 11	& scribe en hole who orient whip anal Plan 3 to release to 0270', 3.48	stock, Co called for rom whips az, Botto	nfirmed wi 1.8) stock, m face @	hip face direct	ion with 5 po	ints 4.72.	3.43.	GL: 2.866.	13 Cement 14 Wait On 15 NU BOF 16 Test BO 20 Directio 22 Well Co 24 Drill Cm Totals	Casing Cement P's nal Work ntrol		24.00 GHG E	5.00 4.00 10.50 5.75 6.00 0.75 3.00 504.00
1.50 Directional V 10.50 Tripping 4.00 Directional V 0.50 Directional V 0.00 Operational 24.00 Ext. 24 hours: Set V ext. Casing: 7.00	Work Pick up S Trip in ho be displacen Work Rig up G 4.73, 5.93 Work Pooh w/ 6 Note Plan to S whip stock, Mill off s 0 @ 10600 Ac	mith whip stock ie with Smith opnent) yro data, GIH & 5, 3.48 (Directio Gyro & prepare tet whip top @ 11 lide, TOH for direction of the top of	& scribe en hole who orient whip anal Plan 3 to release to 0270', 3.48	stock, Cor called for rom whips az, Botto	nfirmed wi 1.8) stock. m face @	hip face direct 10284', Botton	ion with 5 pa	ints 4.72.	3.43,	3L 2.866. Insp. 0	13 Cement 14 Wait On 15 NU BOF 16 Test BO 20 Directio 22 Well Co 24 Drill Cm Totals	Casing Cement P's P's nal Work ntrol at / Shoe Ter	B: 25.00	24.00 GHG E	5,00 4,00 10,50 5,75 6,00 0,75 3,00 504,00 Plugged
1.50 Directional V 10.50 Tripping 4.00 Directional V 0.50 Directional V 0.00 Operational 24.00 Directional 24.00 Directi	Work Pick up S Trip in ho displacem Work Rig up G 4.73, 5.9: Work Poot Pian to S while stock, Mill off s 0 @ 10600 Δs: Description -55 LT&C Special D	mith whip stock le with Smith op- neett) pro data, GiH & 5, 3.48 (Directio Gyro & prepare 1 et whip top @ 11 lide, TOH for dir 2: 0	& scribe een hole whi orient whip mal Plan 3 to release to 0270', 3.48 ectioanl to	stock, Cocalled for rom whips az, Botto	nfirmed wi 1.8) stock. m face @	10284', Botton Spills: 0 ID 2 8.835 Length	m of tool @ Drift 8.750 CUM	Ele Burst 3,950	Collapse 2.570	GL 2.866. Insp. 0 Pipe Yi	13 Cement 14 Wait On 15 NU BOI 15 NU BOI 16 Test BO 20 Direction 22 Well Co 24 Drill Cm Totals 00 DF: 25 Body eld 0,000 Pen Pt MD/	Casing Cement P's I Casing Cement P's I Casing Cement P's I Casing	B: 25.00 Capacity 0.07582 Landing	24.00 GHG E 3 Displ 0.01455	5,00 4.00 10.50 5.75 6.00 0.75 3.00 504.00 Plugged Displ 0.09038
1.50 Directional V 10.50 Tripping 4.00 Directional V 0.50 Directional V 0.00 Operational V 0.00 Operational V 0.00 Set 124 hours: Set v ext Casing: 7.00 Casting t URF 9-5/8* 40# J 2ty BHA 5 1 Smith Whipstoc 1 Smith Bil-Mill	Work	mith whip stock le with Smith op- neett) pro data, GiH & 5, 3.48 (Directio Gyro & prepare 1 et whip top @ 11 lide, TOH for dir 2: 0	& scribe en hole who orient whip nal Plan 3 to release to 0270', 3.48 ectioanl to Thread 4.5 iF 4.5 iF	stock, Cocalled for rom whipr az, Botto ols From 0 0 00 8.750 6.500	nfirmed with 1.8) stock. In face @	10284', Botton Spills 0 ID 2 8.835 Length 32.85 8.60	m of tool @ Drift 8.750 CUM 32.85 41.45	Ele Burst 3,950	Collapse	GL 2.866. Insp. 0 Pipe Yi	13 Cement 14 Wait On 15 NU BOI 16 Test BC 20 Directio 22 Well Co 24 Drill Cm Totals 00 DF: 25 Body elid 0,000	Casing Cement P's I Casing Cement P's I Casing Cement P's I Casing	B: 25.00 Capacity 0.07582 Landing	24.00 GHG E: 3 Dispi 0.01455 Pt MD/TVD / 11,000 E/-W	5,00 4.00 10.50 5.75 6.00 0.75 3.00 504.00 Plugged Displ 0.09038 Pilot Y
1.50 Directional V 10.50 Tripping 4.00 Directional V 0.50 Directional V 0.00 Operational V 24.00 xxx 124 hours Set v xxx 1 Casing: 7.00 Casing C URF 9-5/8* 40# J 211 Smith Whipstoc	Work Pick up S Trip in ho displacem Work Rig up G 4.73, 5.9: Work Pooth Note Plan to S while stock, Mill off s 0 @ 10600 Δs: Description -55 LT&C Special D	mith whip stock le with Smith opnent) pro data, GiH & S, 3.48 (Direction Syro & prepare tet whip top @ 11 lide, TOH for direction of th	& scribe een hole who orient whipp mai Plan 3 to release to 0270', 3.48 eectio and to Thread 4.5 IF 4.5 IF 4.5 IF	stock, Cocalled for called for rom whipp az, Botto bls From 0 OD 8.750	nfirmed with 1.8) stock. m face @	hip face direct 10284', Bottor Spills 0 ID 2 8.835 Length 32.85	m of tool @ Drift 8.750 CUM 32.85	Burst 3,950 KO 10,155	Collapse 2.570 PP MD/TVD (770 / 10.270 Inci. 0.37	GL 2.866. Insp. 0 Pipe Yi 63: Azi. 162.51	13 Cement 14 Wait Cn 15 NU Bod 16 Test BC 20 Directio 22 Well Co 22 Well Co 24 Drill Cm Totals 000 DF: 25 Body eld 0,000 Pen Pt MD/ 11,430 / 11 TVD 10,153.78	Casing Cement P's P's nal Work ntrol tt / Shoe Tet Strength 520,000 TVD 000 VS 0.36	B: 25.00 Capacity 0.07582 Landing 15,367 N/-S 1.28	24.00 GHG E: 33 Disp! 0.01455 Pt MD/TVD / 11,000 E/-W -49.56	5,00 4.00 10.50 5.75 6.00 0.75 3.00 504.00 Plugged Displ 0.09038 Pilot Y
1.50 Directional V 10.50 Tripping 4.00 Directional V 0.50 Directional V 0.00 Operational 24.00 Set V 25.00 Set V 26.00 Set V 2	Work Pick up S Trip in ho displaces Work Rig up Gy 4.73, 5.9: Work Poon W Note Plan to S 0 @ 10600 Ags Description -55 LT&C Special D 5 NC50 DP le valve	mith whip stock le with Smith opnenti) ro data, GIH & , 3.48 (Direction Syro & prepared to the whip top @ 11 lide, TOH for direction of the whip top @ 11 lide, TOH for direction of the whip top @ 19 li	& scribe en hole who orient whip mal Plan 3 to release t 0270', 3.48 ectioanl tot Thread 4.5 IF 4.5 IF 4.5 IF NC50 NC50	stock, Cocalled for from whips az, Botto ols From OD 8.750 6.500 6.500 6.750 6.7	To 3,49:	10284', Bottoi 10284', Bottoi 10284', Bottoi 10284', Bottoi 10385'	Drift 8.750 CUM 32.85 41.45 47.25 78.80 84.10	Burst 3,950 KO 10,155 10,250 10,345	Collapse 2,570 P MO/TVD 100,100,270 Incl. 0.37 0.30 0.35	GL 2.866. Insp: 0 Pye Fye 63: Azi. 162.51 159.83 149.43	13 Cement 14 Wait Cn 15 NU Bol 16 Test BC 20 Directio 22 Weil Co 24 Drill Cm Totals 00 DF: 25 Body eld 0,000 Pen Pt MD/ 11,430 / 11 TVD 10,153.78 10,248.27 10,343.07	Casing Cement Ors Services Casing Cement Ors Cas	Capacity 0.07582 Landing 15,367 N/-S 1.28 0.76 0.28	24.00 GHG E 3 Dispi 0.01455 Pt MD/TVD / 11,000 E/-W -49.56 -49.38 -49.15	5,00 4,00 10,50 5,75 6,00 0,75 3,00 504,00 Plugged Displ 0,09038 Pilot Y DLS 0,28
1.50 Directional V 10.50 Tripping 4.00 Directional V 0.50 Directional V 0.50 Directional V 0.00 Operational 24.00 Ext Casing: 7.00 Casing: 7.00 Casing: 7.00 Casing: 1 1 Smith Whipstoc 1 Smith Bil-Mill 1 Smith Float Suit 1 Smith running to 1 Smith multi-cycl 1 Smith multi-cycl 1 Smith Holat Suit 1 Smith Float Sui	Work Pick up S Trip in ho displaces Work Rig up Gr 4.73, 5.9: Note Plan to S while stock, Mill off s 0 @ 10600 Acc Description -55 LT&C Special D NC50 DP le valve	mith whip stock le with Smith opnent) ment) who data, GiH & , 3.46 (Direction Syro & prepare let whip top @ 11 lide, TOH for direction of the data of	& scribe en hole who orient whip mal Plan 3 to release to 0270', 3.48 ectional to: Thread 4.5 IF	stock, Cocalled for com whipped az, Botto ols ols ols ols ols ols ols ols ols ol	To 3,49: ID 2,500 4,276 4,625 2,250 2,250	10284', Botton 10284', Botton 10284', Botton 10288', Botton 10288', Botton 10388', Botton 10388'	Drift 8.750 CUM 22.85 41.45 47.25 78.80 84.10 86.20 83.80	Burst 3,950 Eight 10,1250 10,345 10,439	Collapse 2,570 PMOITVD 100,37 0.30 0.35 0.33	GL 2.866. Insp. 0 Pipe Fig. 162.51 162.51 159.83 149.43 155.30	13 Cement 14 Wait Cn 15 NU Boli 16 Test BC 20 Directio 22 Well Co 24 Drill Cm Totals 00 DF: 25 Body eld 0,000 Pen Pt MD/ 11,430 / 11 TVD 10,153.78 10,248.27 10,343.767	Casing Cement Ors IP's nal Work ntrol Joint Strength 520,000 VS 0.36 0.64 1.13	Capacity 0.07582 Landing 15,367 N/-S 1.28 0.76 0.28	24.00 GHG E: 3 Displ 0.01455 Pt MD/TVD / 11,000 E/-W -49.56 -49.38 -49.15 -48.89	5,00 4,00 10,50 5,75 6,00 0,75 3,00 504,00 Plugged Displ 0,09038 Pilot Y DLS 0,25 0,08 0,006
1.50 Directional V 10.50 Tripping 4.00 Directional V 0.50 Directional V 0.00 Operational 24.00 24.00 24.101 Set V 24.102 Set V 24.103 Set V 24.104 Set V 24.105 Set V 24.105 Set V 25.105 Set V 26.105	Work Pick up S Trip in ho displaces Work Rig up Gr 4.73, 5.9: Note Plan to S while stock, Mill off s 0 @ 10600 Acc Description -55 LT&C Special D NC50 DP le valve	mith whip stock le with Smith opnenti) ro data, GIH & , 3.48 (Direction Syro & prepared to the whip top @ 11 lide, TOH for direction of the whip top @ 11 lide, TOH for direction of the whip top @ 19 li	& scribe en hole who orient whipinal Plan 3 to release to 0270', 3.48 ectional to Thread 4.5 IF 4.5 IF N.050 N.050 4.5 IF 4.5 IF	stock, Cocalled for rom whips az, Botto az, Bo	To 3,49:	10284', Botton 1028	Drift 8.750 CUM 22.85 41.45 78.80 84.10 86.20	Burst 3,950 KO 10,250 10,345 10,435 10,638 10,628	Collapse 2,570 Incl. 0.35 0.35 0.36 0.24	Azi. 162.51 159.83 149.43 155.30 156.52 279.30	13 Cement 14 Wait Cn 15 NU Bod; 16 Test BC 20 Directio 22 Well Co 24 Drill Cm Totals 00 DF: 25 Body eld 0,000 Pen Pt MD/ 11,430 / 11 TVD 10,153.78 10,248.27 10,343.07 10,437.67 10,532.27 10,626.87	Casing Cement P's nal Work ntrol tt / Shoe Ter Joint Strength 520,000 VS 0.36 0.64 1.13 1.42 1.44	Capacity 0.07582 Landing 15,367 N/-S 1.28 0.76 0.28 -0.22 -0.51 -0.52	24.00 GHG E: 3 Displ 0.01455 Pt MD/TVD / 11,000 E/-W -49.56 -49.38 -49.15 -48.89	5,00 4,00 10,50 5,75 6,00 0,75 3,00 504,00 Plugged Displ 0,090,38 Pilot Y DLS 0,25 0,08 0,08 0,08 0,02 0,025 0,025
1.50 Directional V 10.50 Tripping 4.00 Directional V 0.50 Directional V 0.50 Directional V 0.50 Operational 24.00 2xt 24 hours: Set v 2xt Casing: 7.00 Casting: 7.00 Casting: 8-5/8*40# J 2ty BHA 5 1 Smith Whipstoc 1 Smith Bi-Mill 1 Smith running to 1 5* 19.50# S-138 1 Smith multi-cycl 1 Smith Filoat sub 1 Smith UBHO 12 5* NC50 SpiralV 19 109	Work Pick up S Trip in ho displaces Work Rig up Gr 4.73, 5.9: Note Plan to S while stock, Mill off s 0 @ 10600 Acc Description -55 LT&C Special D NC50 DP le valve	mith whip stock le with Smith opnent) ment) who data, GiH & , 3.46 (Direction Syro & prepare let whip top @ 11 lide, TOH for direction of the data of	& scribe en hole who orient whip mal Plan 3 to release to 0270', 3.48 ectional to: Thread 4.5 IF	stock, Cocalled for com whips az, Botto ols From 0 OD 8.750 6.500 6.500 6.750 6.563 6.500 5.000	To 3,49: ID 2,500 1,850 4,276 4,625 2,250 2,250 3,000 BHA =	10284', Botton 10284', Botton 10 2 8.835 Length 32.85 8.80 31.55 5.30 2.10 3.60 354.00 443.80 9.826.20	Drift 8.750 CUM 22.85 41.45 47.25 78.80 84.10 86.20 83.80	Burst 3,950 10,250 10,439 10,634 10,723	Collapse P MO/TO 10,170 0.37 0.30 0.35 0.33 0.06 0.24 0.60	GL 2.866. Insp. 0 Pipe Y1 63: Azi. 162.51 159.83 149.43 156.52 279.30 267.74	13 Cement 14 Wait On 15 NU Bold 16 Test BO 20 Directio 22 Well Co 24 Drill Cm Totals 00 DF: 25 Body eld 0,000 Pen Pt MD/ 11,430 / 11 TVD 10,153.78 10,248.27 10,343.07 10,437.67 10,532.27 10,522.27 10,626.87 10,721.27	Casing Cement '7's Inal Work Introl Joint Strength 520,000 VS 0.36 0.16 0.64 1.13 1.42 1.44 1.44	Capacity 0.07582 Landing 15,367 NJ-S 1.28 0.76 0.28 -0.22 -0.51	24.00 GHG E 3 Dispi 0.01455 Pt MD/TVD / 11,000 E/-W -49.56 -49.38 -49.15 -48.89 -48.75 -48.89 -49.62	5,00 4,00 10,50 5,75 6,00 0,75 3,00 504,00 Plugged Displ 0,09038 Pilot Y DLS 0,025 0,08 0,00 0,00 0,00 0,00 0,00 0,00 0,0
1.50 Directional V 10.50 Tripping 4.00 Directional V 0.50 Directional V 0.50 Directional V 0.50 Operational 24.00 2xt 24 hours: Set v 2xt Casing: 7.00 Casting: 7.00 Casting: 8-5/8*40# J 2ty BHA 5 1 Smith Whipstoc 1 Smith Bi-Mill 1 Smith running to 1 5* 19.50# S-138 1 Smith multi-cycl 1 Smith Filoat sub 1 Smith UBHO 12 5* NC50 SpiralV 19 109	Work Pick up S Trip in ho displaces Work Rig up Gr 4.73, 5.9: Note Plan to S while stock, Mill off s 0 @ 10600 Acc Description -55 LT&C Special D NC50 DP le valve	mith whip stock le with Smith opnent) ment) who data, GiH & , 3.46 (Direction Syro & prepare let whip top @ 11 lide, TOH for direction of the data of	& scribe en hole who orient whip mal Plan 3 to release to 0270', 3.48 ectional to: Thread 4.5 IF	stock, Colocalled for rom whipe az, Botto Dis Series Serie	To 3,49: ID 2.500 4.276 4.625 2.250 3.000	10284', Botton 1028	Drift 8.750 CUM 32.85 41,45 47.25 78.80 84.10 86.20 89.80 443.80	Burst 3,950 KQ 10,250 10,345 10,628 10,723 10,818 10,912	Collapse 2,570 P MOITVQ 170,10,270 Incl. 0,37 0,30 0,35 0,33 0,06 0,24 0,60 0,75 0,97	Azi. 162.51 155.30 149.43 156.52 175.30 175.30 175.30 175.30 175.30 175.30 175.30 175.30 175.30 175.30	13 Cement 14 Wait Cn 15 NU Bol 16 Test BC 20 Directio 22 Well Co 24 Drill Cm Totals 00 DF: 25 Body eld 0,000 Pen Pt MD/ 11,430 / 11 TVD 10,153,78 10,248,27 10,343,07 10,352,67 10,752,27 10,626,87 10,751,27 10,815,96 10,910,35	Casing Cement P's Casing Cement P's P's P's P's P's P's P's P's P's Casing Cement P'	Capacity 0.07582 Landing 15,367 N/-S 1.28 0.76 0.28 -0.22 -0.51 -0.52 -0.51 -0.70 -1.28	24.00 GHG E: 3 Displ 0.01455 Pt MD/TVD / 11,000 E/-W -49.56 -49.38 -49.15 -48.89 -48.75 -48.93 -49.62 -50.71 -51.98	5.00 4.00 10.50 4.00 10.50 5.75 5.75 5.00 0.75 3.00 504.00 Plugged 0.000 Plugged 0.0000 0.000 0.000 0.000 0.000 0.000 0.0000 0.000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000
1.50 Directional V 10.50 Tripping 4.00 Directional V 0.50 Directional V 0.00 Operational 24.00 24.00 24.00 24.00 24.00 24.00 24.00 24.00 24.00 24.00 24.00 24.00 24.00 24.00 24.00 25.00 26.0	Work Pick up S Trip in ho displacem Work Rig up Gy 4.73, 5.9: Work Pooth Note Plan to S whip stock, Mill off s 0 @ 10600 As: Description -55 LT&C Special D is S# 80000483 bool is NC50 DP le valve	mith whip stock le with Smith opnent) ment) who data, GiH & , 3.46 (Direction Syro & prepare let whip top @ 11 lide, TOH for direction of the data of	& scribe en hole who orient whip mal Plan 3 to release to 0270', 3.48 ectional to: Thread 4.5 IF	stock, Coo de la composition della composition d	1.8) stock. m face @ To 3.49: ID 2.500 1.850 4.276 4.625 2.250 2.250 3.000 BHA =	10284', Botton 1028	Drift 8.750 CUM 32.85 41,45 47.25 78.80 84.10 86.20 89.80 443.80	Burst 3,950 10,250 10,345 10,439 10,528 10,723 10,818 10,912 11,006	Collapse 2,570 PMD/TVD 770 / 10,270 Incl. 0.37 0.33 0.35 0.33 0.04 0.60 0.74 0.60 0.79 0.88	S3L 2,866.6 Inse. 0 Pipe S4 S4 S4 S4 S4 S4 S4 S	13 Cement 14 Wait Cn 15 NU Bod 16 Test BC 20 Directio 22 Well Co 24 Drill Cm Totals 00 DF: 25 Body elid 0,000 Pen Pt MD/ 11,430 / 11 TVD 10,153,78 10,248,27 10,437,67 10,437,67 10,751,25 11,003,94	Casing Cement P's Casing Cement P's Casing Cement P's Casing Cement P's Casing Cement Casing	Capacity 0.07582 Landing 15,367 NJ-S 1.28 0.76 0.28 -0.22 -0.51 -0.52 -0.51 -0.70 1.28 -2.33	24.00 GHG E: 3 Dispi 0.01455 Pt MD/TVD / 11,000 E/-W -49.56 -49.38 -49.15 -48.93 -48.75 -48.93 -49.62 -50.71 -51.98 -53.01	5.00 4.00 5.75 5.00 5.75 5.00 0.75 5.00 0.75 5.00 0.75 5.00 0.75 5.00 0.75 5.00 0.75 5.00 0.00 0
1.50 Directional V 10.50 Tripping 4.00 Directional V 0.50 Directional V 0.00 Operational 24.00 24.00 24.00 24.00 24.00 24.00 24.00 24.00 24.00 24.00 24.00 24.00 24.00 24.00 24.00 25.00 26.0	Work Pick up S Trip in ho displacem Work Rig up Gy 4.73, 5.9: Work Pooth Note Plan to S whip stock, Mill off s 0 @ 10600 As: Description -55 LT&C Special D is S# 80000483 bool is NC50 DP le valve	mith whip stock le with Smith opnent) ment) who data, GiH & , 3.46 (Direction Syro & prepare let whip top @ 11 lide, TOH for direction of the control of the	& scribe en hole who orient whip mal Plan 3 to release to 0270', 3.48 ectional to: Thread 4.5 IF	stock, Coo de la composition della composition d	Te 3,49: ID 2,500 1.850 4.276 4.625 2.250 3.000 BHA =	10284', Botton 10284'	Drift 8.750 CUM 32.85 41,45 47.25 78.80 84.10 86.20 89.80 443.80	Burst 3,950 C Depth 10,155 10,250 10,231 10,232 10,231 10,723 11,101 11,101 11,196	Collapse 2,570 P MOTUVO (70) 10,270 O.35 O.35 O.35 O.35 O.55 O.35 O.55 O.37 O.80 O.75 O.87 O.89 O.73 O.89 O.73 O.89	Azi. 162.51 155.83 149.43 156.52 279.30 156.52 279.30 170.92	13 Cement 14 Wait Cn 14 Wait Cn 15 NU Bold 16 Test BC 20 Directio 22 Well Co 24 Drill Cm Totals 00 DF: 25 Body eld 0,000 Pen Pt MD/ 11,430 / 11 TVD 10,153.78 10,248.27 10,343.07 10,532.27 10,626.87 10,031.35 11,093.34 11,194.02	Casing Cement Prs (Casing Cement	Capacity 0.07582 Landing 15.367 N/S 0.76 0.28 0.76 0.28 -0.51 -0.52 -0.51 -0.70 -1.28 -2.33 -3.57 -4.56	24.00 Displ 0.01455 Pt MD/TVD / 11.000 E/-W -49.56 -49.38 -49.15 -48.89 -48.75 -48.93 -49.15 -50.71 -51.98 -53.01 -53.55	5,00 4,00 10,50 4,00 10,50 5,75 5,00 0,75 3,00 604,00 0,00 0,00 0,00 0,00 0,00 0,00
1.50 Directional V 10.50 Tripping 4.00 Directional V 0.50 Directional V 0.00 Operational 24.00 24.00 24.00 24.00 24.00 24.00 24.00 24.00 25.00 26.0	Work Pick up S Trip in ho displacem Work Rig up Gy 4.73, 5.9: Work Pooth Note Plan to S whip stock, Mill off s 0 @ 10600 As: Description -55 LT&C Special D is S# 80000483 bool is NC50 DP le valve	mith whip stock le with Smith opnent) ment) who data, GiH & , 3.46 (Direction Syro & prepare let whip top @ 11 lide, TOH for direction of the control of the	& scribe en hole who orient whip mal Plan 3 to release to 0270', 3.48 ectional to: Thread 4.5 IF	stock, Coo de la composition della composition d	1.8) stock. m face @ To 3.49: ID 2.500 1.850 4.276 4.625 2.250 2.250 3.000 BHA =	10284', Botton 1028	Drift 8.750 CUM 32.85 41,45 47.25 78.80 84.10 86.20 89.80 443.80	Burst 3,950 FQ 10,20 Ppth 10,250 10,345 10,628 10,723 11,100 11,119 11,195 11,1	Collapse 2,570 P MO/TVD 10cl. 0.37 0.30 0.35 0.33 0.06 0.24 0.60 0.75 0.88 0.73 0.49 0.39	Azi. 162.51 152.51 159.83 149.43 156.52 279.30 267.74 238.04 209.17 192.08	13 Cement 14 Wait Cn 14 Wait Cn 15 NU Bol 16 Test BC 20 Directio 22 Well Co 22 Well Co 24 Drill Cm Totals 00 DF: 25 Body eld 0,000 Pen Pt MD/ 11,430 / 11 TVD 10,153.78 10,248.27 10,343.07 10,437.67 10,752.27 10,626.87 10,721.27 10,815.96 10,910.35 11,003.94 11,099.43 11,194.02 11,1288.52	Casing Cement Prs Inal Work Introl Joint Strength 520,000 VS 0.36 0.16 0.64 1.13 1.42 1.44 1.64 2.26 3.32 4.57	Capacity 0.07582 Landing 15,367 N/-S 1.28 0.76 0.28 -0.22 -0.51 -0.52 -0.70 -1.28 -2.33 -3.57	24.00 Displ 0.01455 Pt MD/TVD / 11,000 E/-W -49.56 -49.38 -48.75 -48.89 -48.75 -48.962 -50.71 -51.98 -53.01 -53.49	5.00 4.00 10.50 4.00 10.50 5.75 5.00 0.75 3.00 504.00 Plugged Plispi 0.090 Plugged 0.004 0.02 0.004 0.004 0.004 0.005 0.
1.50 Directional V 10.50 Tripping 4.00 Directional V 0.50 Directional V 0.00 Operational	Work Pick up S Trip in ho displacem Work Rig up Gy 4.73, 5.9: Work Pooth Note Plan to S whip stock, Mill off s 0 @ 10600 As: Description -55 LT&C Special D is S# 80000483 bool is NC50 DP le valve	mith whip stock le with Smith opnent) ment) who data, GiH & , 3.46 (Direction Syro & prepare let whip top @ 11 lide, TOH for direction of the control of the	& scribe en hole who orient whip mal Plan 3 to release to 0270', 3.48 ectional to: Thread 4.5 IF	stock, Coo de la composition della composition d	1.8) stock. m face @ To 3.49: ID 2.500 1.850 4.276 4.625 2.250 2.250 3.000 BHA =	10284', Botton 1028	Drift 8.750 CUM 32.85 41,45 47.25 78.80 84.10 86.20 89.80 443.80	Burst 3,950 Burst 10,250 Depth 10,345 10,343 10,534 10,932 11,101 11,196 11,290 11,101 11,196 11,290 11,101 11,196 11,290	Collapse 2,570 P MO/TVQ 170 / 10,270 Incl. 0.37 0.30 0.35 0.33 0.06 0.24 0.60 0.75 0.97 0.88 0.73 0.49 0.39 0.35 0.23	Azi. 162.51 159.83 155.30 156.52 279.30 170.92 160.91 160.91 160.91 170.92	13 Cement 14 Wait Cn 14 Wait Cn 15 NU Boli 16 Test BC 20 Directio 22 Well Co 24 Drill Cm Totals 00 DF: 25 Body eld 0,000 Pen Pt MD/ 11,430 / 11 TVD 10,153.78 10,248.27 10,626.87 10,437.67 10,532.27 10,626.87 10,721.27 10,721.27 10,721.27 11,039.43 11,194.02 11,288.52 11,038.52 11,188.52 11,478.02	Casing Cement Pris 1 Casing Ce	Capacity 0.07582 Landing 15,367 NJ-S 0.766 0.28 0.766 0.28 0.51 -0.52 -0.51 -0.70 -1.28 -2.33 -3.57 -4.56 -5.26 -5.84 -6.25	24.00 Displ 0.01455 Pt MD/TVD / 11.000 E/-W -49.56 -49.38 -49.15 -48.89 -48.75 -48.93 -49.15 -50.71 -51.98 -53.21 -53.28	5,00 4,00 10,50 10
1.50 Directional V 10.50 Tripping 4.00 Directional V 0.50 Directional V 0.00 Operational 24.00 24.00 24.00 24.00 24.00 24.00 24.00 24.00 25.00 26.0	Work Pick up S Trip in ho displacem Work Rig up Gy 4.73, 5.9: Work Pooth Note Plan to S whip stock, Mill off s 0 @ 10600 As: Description -55 LT&C Special D is S# 80000483 bool is NC50 DP le valve	mith whip stock le with Smith opnent) ment) who data, GiH & , 3.46 (Direction Syro & prepare let whip top @ 11 lide, TOH for direction of the control of the	& scribe en hole who orient whip mal Plan 3 to release to 0270', 3.48 ectional to: Thread 4.5 IF	stock, Coo de la composition della composition d	1.8) stock. m face @ To 3.49: ID 2.500 1.850 4.276 4.625 2.250 2.250 3.000 BHA =	10284', Botton 1028	Drift 8.750 CUM 32.85 41,45 47.25 78.80 84.10 86.20 89.80 443.80	Burst 4.72. Burst 3,950 0,000 10,250 10,345 10,628 10,723 10,106 11,106 11,196 11,196 11,198 11,188 11,189 11,189	Collapse 2,570 (P. MOJTVD 10-10, 270 (P. MOJ	AZL. 2.866. 3 Pipe 6 3 AZL 162.51 159.83 149.43 149.43 149.43 149.43 149.42 156.52 279.30 156.52 279.52 2	13 Cement 14 Wait Cn 14 Wait Cn 15 NU Bold 16 Test BO 20 Directio 22 Well Co 24 Drill Cm Totals 00 DF: 25 Body eld 0,000 Pen Pt MD/ 11,430 / 11 TVD 10,153,28 10,248,27 10,33,07 10,32,27 10,626,87 10,721,27 10,626,87 11,093,43 11,093,43 11,094,43 11,094,43 11,094,43 11,194,02 11,288,52 11,383,32 11,478,02 11,478,02 11,478,02 11,478,02 11,478,02 11,478,02 11,478,02 11,478,02 11,478,02 11,478,02 11,478,02 11,478,02 11,478,02 11,478,02 11,478,02 11,478,02 11,478,02 11,572,52	Casing Cement P's Casing Cement P's P's P's P's P's P's P's P's P's Casing Cement P'	Capacity 0.07582 Landing 15.367 N/-S 1.28 0.76 0.28 -0.22 -0.51 -0.52 -0.51 -0.70 -1.28 -2.33 -3.57 -4.56 -5.26 -5.84 -6.25 -6.41	24.00 GHG E: 3 Dispi 0.01455 P! MD/TVD / 11,000 E.I-W -49.56 -49.38 -49.15 -48.89 -48.93 -49.62 -50.71 -51.98 -53.01 -53.59 -53.38 -53.21 -53.28 -53.79	5.00 4.00 10.50 4.00 10.50 5.75 5.00 0.75 5.00 0.75 3.00 0.75 3.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0
1.50 Directional \(\) 10.50 Tripping 4.00 Directional \(\) 0.50 Directional \(\) 0.00 Operational \(\) 24.00 Operational \(\) 24.00 St (24 hours) Set \(\) 25.01 Smith Whipstoo 1 Smith Bi- Mill 1 Smith Funning te 1 5 '19.50# S-136 1 Smith Funding te 1 5 '19.50# S-136 1 Smith Float sub 1 Smith Float sub 1 Smith Float sub 1 Smith Float Sub 1 Smith UBHO 25 'NC50 SpiralV 19 19 19 19 10 10 10 10 10 10 10 10 10 10 10 10 10	Work Pick up S Trip in ho displacem Work Rig up Gy 4.73, 5.9: Work Pooth Note Plan to S whip stock, Mill off s 0 @ 10600 As: Description -55 LT&C Special D is S# 80000483 bool is NC50 DP le valve	mith whip stock le with Smith opnent) ment) who data, GiH & , 3.46 (Direction Syro & prepare let whip top @ 11 lide, TOH for direction of the control of the	& scribe en hole who orient whip mal Plan 3 to release to 0270', 3.48 ectional to: Thread 4.5 IF	stock, Coo de la composition della composition d	1.8) stock. m face @ To 3.49: ID 2.500 1.850 4.276 4.625 2.250 2.250 3.000 BHA =	10284', Botton 1028	Drift 8.750 CUM 32.85 41,45 47.25 78.80 84.10 86.20 89.80 443.80	Burst 3,950 Burst 10,250 Depth 10,345 10,343 10,534 10,932 11,101 11,196 11,290 11,101 11,196 11,290 11,101 11,196 11,290	Collapse 2,570 PMD/TVD 70 / 10,270 Incl. 0.37 0.30 0.35 0.33 0.04 0.60 0.75 0.88 0.73 0.49 0.39 0.36 0.23 0.44 0.60	Azi. 162.51 162.51 159.83 155.30 155.30 155.30 155.30 267.74 254.47 192.08 170.92 209.17 192.08 170.92 248.23 248.23 213.08	13 Cement 14 Wait Cn 14 Wait Cn 15 NU Boli 16 Test BC 20 Directio 22 Well Co 24 Drill Cm Totals 00 DF: 25 Body eld 0,000 Pen Pt MD/ 11,430 / 11 TVD 10,153,78 10,248,27 10,437,67 10,532,27 10,815,96 10,910,35 11,194,02 11,288,52 11,099,43 11,194,02 11,288,52 11,478,02 11,572,52 11,667,41 11,762,01	Casing Cement Pris 1 Casing Ce	Capacity 0.07582 Landing 15,367 NJ-S 0.766 0.28 0.766 0.28 0.51 -0.52 -0.51 -0.70 -1.28 -2.33 -3.57 -4.56 -5.26 -5.84 -6.25	24.00 Displ 0.01455 Pt MD/TVD / 11,000 E/-W -49.56 -49.36 -49.15 -48.89 -48.75 -48.93 -49.62 -50.71 -51.98 -53.55 -53.36 -53.21 -53.28 -53.79 -54.61 -55.26	5.00 4.00 10.50 10
1.50 Directional V 10.50 Tripping 4.00 Directional V 0.50 Directional V 0.00 Operational	Work Pick up S Trip in ho displacem Work Rig up Gy 4.73, 5.9: Work Pooth Note Plan to S whip stock, Mill off s 0 @ 10600 As: Description -55 LT&C Special D is S# 80000483 bool is NC50 DP le valve	mith whip stock le with Smith opnent) ment) who data, GiH & , 3.46 (Direction Syro & prepare let whip top @ 11 lide, TOH for direction of the control of the	& scribe en hole who orient whip mal Plan 3 to release to 0270', 3.48 ectional to: Thread 4.5 IF	stock, Coo de la composition della composition d	1.8) stock. m face @ To 3.49: ID 2.500 1.850 4.276 4.625 2.250 2.250 3.000 BHA =	10284', Botton 1028	Drift 8.750 CUM 32.85 41,45 47.25 78.80 84.10 86.20 89.80 443.80	Electric 103033 Electric 10333 Electric 10333	Collapse 2,570 PMOITVQ PTO 10,270 Incl. 0.37 0.30 0.55 0.33 0.06 0.24 0.60 0.75 0.97 0.88 0.73 0.49 0.39 0.39 0.35 0.23 0.44 0.60 0.42 0.60 0.42	Azi. 162.51 155.83 156.52 279.30 156.52 279.30 160.55 170.92 160.35 160.91 160.	13 Cement 14 Wait Cn 14 Wait Cn 15 NU Boli 16 Test BC 20 Directio 22 Well Co 24 Drill Cm Totals 00 DF: 25 Body eld 0,000 Pen Pt MD/ 11,430 / 11 TVD 10,153.78 10,248.27 10,343.07 10,343.07 10,532.27 10,626.87 10,031.94 11,093.43 11,194.02 11,288.52 11,383.02 11,672.52 11,383.02 11,672.52 11,478.02 11,772.52 11,672.52 11,672.52	Casing Cement Pris 1 Casing Ce	Capacity 0.07582 Landing 15.367 N/S 0.28 0.76 0.28 0.22 0.51 0.52 0.51 0.70 -1.28 2.33 3.57 4.56 -5.26 -5.84 -6.25 -6.41 -6.63 7.111 -7.61	24.00 Displ 0.01455 Pt MD/TVD 11.000 E/-W -49.56 49.38 49.15 -48.89 48.75 -48.93 49.65 53.31 53.28 53.21 53.28 53.79 54.61 55.26 -55.62	5,00 4.00 10.50 10
1.50 Directional V 10.50 Tripping 4.00 Directional V 0.50 Directional V 0.00 Operational	Work Pick up S Trip in ho displacem Work Rig up Gy 4.73, 5.9: Work Pooth Note Plan to S whip stock, Mill off s 0 @ 10600 As: Description -55 LT&C Special D is S# 80000483 bool is NC50 DP le valve	mith whip stock le with Smith opnent) ment) who data, GiH & , 3.46 (Direction Syro & prepare let whip top @ 11 lide, TOH for direction of the control of the	& scribe en hole who orient whip mal Plan 3 to release to 0270', 3.48 ectional to: Thread 4.5 IF	stock, Coo de la composition della composition d	1.8) stock. m face @ To 3.49: ID 2.500 1.850 4.276 4.625 2.250 2.250 3.000 BHA =	10284', Botton 1028	Drift 8.750 CUM 32.85 41,45 47.25 78.80 84.10 86.20 89.80 443.80	Burst 3,950 Burst 3,950 10,255 10,439 10,628 10,628 11,100 11,106 11,101 11,166 11,115 11,480 11,574 11,858 11,699 11,764	Collapse 2,570 PMOITVQ PTO 10,270 Incl. 0.37 0.30 0.55 0.33 0.06 0.24 0.60 0.75 0.97 0.88 0.73 0.49 0.39 0.39 0.35 0.23 0.44 0.60 0.42 0.60 0.42	Azi. 162.51 162.51 155.83 155.30 156.52 276.74 254.47 122.81 824.51 160.35 166.91 228.18 245.21 248.23 213.08 213.08	13 Cement 14 Wait On 15 NU Bold 16 Test BO 20 Directio 22 Well Co. 24 Drill Cm Totals 00 DF: 25 Body eld 0,000 Pen Pt MD/ 11,430 / 11 TVD 10,153.78 10,243.27 10,825.87 10,625.87 10,626.87 10,626.87 11,039.43 11,194.02 11,285.52 11,383.32 11,478.02 11,572.52 11,667.41 11,762.01 11,855.61 11,906.91	Casing Cement Property Comment Property Comment Property Comment Property Comment Comm	Capacity 0.07582 Landing 15,367 NJ-S 1.28 0.76 0.28 -0.51 -0.52 -0.51 -0.75 -1.28 -2.33 -3.57 -4.56 -5.84 -6.25 -6.41 -6.63 -7.11 -7.61 -7.83	24.00 GHG E 3 Dispi 0.01455 Pt MD/TVD / 11,000 E/-W -49.56 -49.38 -49.15 -48.89 -48.75 -48.93 -49.62 -50.71 -51.98 -53.01 -53.49 -53.55 -53.21 -53.28 -53.79 -54.61 -55.26 -55.62 -55.80	5,00 4,00 10,50 10
1.50 Directional V 10.50 Tripping 4.00 Directional V 0.50 Directional V 0.00 Operational 24.00 24.00 24.00 24.00 24.00 24.00 24.00 24.00 24.00 24.00 24.00 24.00 24.00 24.00 24.00 25.00 26.0	Work Pick up S Trip in ho displacem Work Rig up Gy 4.73, 5.9: Work Pooth Note Plan to S whip stock, Mill off s 0 @ 10600 As: Description -55 LT&C Special D is S# 80000483 bool is NC50 DP le valve	mith whip stock le with Smith opnent) ment) who data, GiH & , 3.46 (Direction Syro & prepare let whip top @ 11 lide, TOH for direction of the control of the	& scribe en hole who orient whip mal Plan 3 to release to 0270', 3.48 ectional to: Thread 4.5 IF	stock, Coo de la composition della composition d	1.8) stock. m face @ To 3.49: ID 2.500 1.850 4.276 4.625 2.250 2.250 3.000 BHA =	10284', Botton 1028	Drift 8.750 CUM 32.85 41,45 47.25 78.80 84.10 86.20 89.80 443.80	Burst 4.72. Burst 3,950 10,250 10,345 10,439 10,534 11,0628 11,101 11,196 11,185 11,480 11,764 11,659 11,764 11,856 11,764 11,856 11,764 11,856 11,764 11,856 11,909 Projectic 11,909	Collapse 2,570 P MD/TVD Incl. 0.37 0.30 0.35 0.33 0.06 0.24 0.60 0.75 0.88 0.73 0.49 0.39 0.35 0.23 0.44 0.60 0.42 0.33 0.33 0.73 0.49 0.50 0.75	Azi. 162.51 162.51 159.83 155.83 155.83 155.83 155.82 279.30 229.17 192.08 170.92 248.23 213.08 218.24 222.61	13 Cement 14 Wait Cn 14 Wait Cn 15 NU Boli 16 Test BC 20 Directio 22 Well Co 24 Drill Cm Totals 00 DF: 25 Body eld 0,000 Pen Pt MD/ 11,430 / 11 TVD 10,153.78 10,248.27 10,43.767 10,532.27 10,815.96 10,910.35 11,093.43 11,194.02 11,288.52 11,093.43 11,194.02 11,288.52 11,478.02 11,572.52 11,667.41 11,762.01 11,856.61 11,906.91	Casing Cement Pris 1 Casing Ce	Capacity 0.07582 Landing 15,367 NJ-S 1,28 0,76 0,28 -0,25 -0,51 -0,52 -0,51 -0,70 -1,28 -2,33 -3,57 -4,56 -5,26 -5,84 -6,25 -6,41 -6,63 -7,11 -7,61 -7,83	24.00 Displ 0.01455 Pt MD/TVD 11.000 E/-W -49.56 49.38 49.15 -48.89 48.75 -48.93 49.65 53.31 53.28 53.21 53.28 53.79 54.61 55.26 -55.62	5,00 4,00 10,50 10
1.50 Directional V 10.50 Tripping 4.00 Directional V 0.00 Operational 24.00 Operational 25.00 Operational 24.00 Operational 25.00 Operatio	Work Pick up S Trip in ho displacem Work Rig up Gy 4.73, 5.9: Work Pooth Note Plan to S whip stock, Mill off s 0 @ 10600 As: Description -55 LT&C Special D is S# 80000483 bool is NC50 DP le valve	mith whip stock le with Smith opnent) ment) who data, GiH & , 3.46 (Direction Syro & prepare let whip top @ 11 lide, TOH for direction of the control of the	& scribe en hole who orient whip mal Plan 3 to release to 0270', 3.48 ectional to: Thread 4.5 IF	stock, Coo de la composition della composition d	1.8) stock. m face @ To 3.49: ID 2.500 1.850 4.276 4.625 2.250 2.250 3.000 BHA =	10284', Botton 1028	Drift 8.750 CUM 32.85 41,45 47.25 78.80 84.10 86.20 89.80 443.80	Burst 4.72. Burst 3,950 10.22 Depth 10.255 10.235 10.245 10.628 10.723 11.066 11.101 11.156 11.290 11.669 11.764 11.669 11.764 11.858 11.909 Final C	Collapse Collapse P MD/TVD PP MD/TVD 10-10-10-10-10-10-10-10-10-10-10-10-10-1	Azi. 162.51 152.51 155.83 149.43 156.52 279.30 156.52 279.30 160.35 170.92 160.35 160.91 222.18 264.51 242.23 213.08 218.24 222.61 50.00 222.61 50.00	13 Cement 14 Wait On 15 NU Bold 16 Test BO 20 Directio 22 Well Co. 24 Drill Cm Totals 00 DF: 25 Body eld 0,000 Pen Pt MD/ 11,430 / 11 TVD 10,153.78 10,243.27 10,825.87 10,625.87 10,626.87 10,626.87 11,039.43 11,194.02 11,285.52 11,383.32 11,478.02 11,572.52 11,667.41 11,762.01 11,855.61 11,906.91	Casing Cement Property Comment Property Comment Property Comment Property Comment Comm	Capacity 0.07582 Landing 15.367 N/-S 1.28 0.76 0.28 -0.22 -0.51 -0.52 -0.51 -0.70 -1.28 -2.33 -3.57 -4.56 -5.26 -5.84 -6.25 -6.41 -6.63 -7.11 -7.61 -7.83	24.00 GHG E 3 Dispi 0.01455 Pt MD/TVD / 11,000 E/-W -49.56 -49.38 -49.15 -48.89 -48.75 -48.93 -49.62 -50.71 -51.98 -53.01 -53.49 -53.55 -53.21 -53.28 -53.79 -54.61 -55.26 -55.62 -55.80	5.00 4.00 10.50 10
1.50 Directional V 10.50 Tripping 4.00 Directional V 0.50 Directional V 0.50 Operational V 24.00 ext 24 hours: Set v ext Gasing: 7.00 Casting: C UURF 9-5/8*40# J CULY BHA 5 1 Smith Whipstoot 1 Smith BI- Mill 1 Smith Vanning to 1 1 Smith BI- Mill 1 Smith VBHO 12 5* NC50 SpiralV 19 309 309 Last Inspected BHA H	Work Pick up S Trip in ho displaces Work Rig up G 4.73, 5.9; Work Poote W Note Plan to S Whip stock, Mill off s 0 @ 10600 Acc Description -55 LT&C Special D S NC50 DP Te valve Whate HWDP	mith whip stock le with Smith opnent) ment) who data, GiH & , 3.46 (Direction Syro & prepare let whip top @ 11 lide, TOH for direction of the control of the	& scribe en hole wh orient whip nal Plan 3 to release to 0270', 3.48 rectioant to: Thread 4.5 IF 4.5 IF 4.5 IF 4.5 IF 4.5 IF NC50	stock, Coo called for rom whiping az, Botto obs. From 0 0 0 0 0 6.500 6.500 6.500 6.500 5.000 0.750 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1.8) 1.8) 1.8) 1.8) 1.8) 1.8) 1.8) 1.8)	hip face direct 10284', Bottor 10284', Botto	Drift 8.750 CUM 32.85 41.45 47.25 78.80 84.10 86.20 443.80	Burst 3,950 10,200 10,200 10,200 10,200 11,1	Collapse 2,570 PMD/TVD 100,000 0.35 0.35 0.06 0.24 0.60 0.75 0.39 0.35 0.30 0.60 0.75 0.35 0.35 0.75 0.88 0.73 0.49 0.39 0.35 0.23 0.60 0.75 0.23 0.75 0.75 0.75 0.75 0.75 0.75 0.75 0.75	Azi. 2.866.6 Pipe Vi	13 Cement 14 Wait Cn 15 NU Bold 16 Test BC 20 Directio 22 Well Co 24 Drill Cm Totals 00 DF: 25 Body eld 10,000 Pen Pt MD/ 11,430 / 11 TVD 10,153.78 10,248.27 10,532.27 10,815.96 10,910.35 11,194.02 11,183.32 11,478.02 11,572.52 11,383.32 11,478.02 11,572.52 11,385.61 11,906.91	Casing Cement Property Comment Property Comment Property Comment Property Comment Comm	Capacity 0.07582 Landing 15,367 NJ-S 1.28 0.76 0.28 -0.22 -0.51 -0.52 -0.51 -0.72 -1.28 -2.33 -3.57 -4.56 -5.84 -6.25 -6.41 -7.63 -7.11 -7.83 zimuth zimuth Well Cost	24.00 GHG E 3 Dispi 0.01455 Pt MD/TVD / 11,000 E/-W -49.56 -49.38 -49.15 -48.89 -48.75 -48.93 -49.62 -50.71 -51.98 -53.01 -53.49 -53.58 -53.21 -53.28 -53.79 -54.61 -55.26 -55.80 Gyr	5.00 4.00 10.50 4.00 10.50 5.75 5.00 0.75 3.00 7.50 3.00 7.50 7.50 7.50 7.50 7.50 7.50 7.50 7
1.50 Directional V 10.50 Tripping 4.00 Directional V 0.00 Operational	Work Pick up S Trip in ho displaces Work Rig up Gy 4.73, 5.9: Work Poon W Note Plan to S While stock, Mill off s 0 @ 10600 Ag Description -55 LT&C Special D S # 80000483 Dol Note Plan to S White HWDP	mith whip stock le with Smith opnent) ment) who data, GiH & , 3.46 (Direction Syro & prepare let whip top @ 11 lide, TOH for direction of the data of	& scribe en hole wh orient whip mal Plan 3 to release it 0270', 3.48 ectioanl to: Thread 4.5 iF 4.5 iF NC50 NC50 A5 iF 4.5 iF NC50 A5 iF A5 iF NC50	stock, Coo called for com whiping az, Botto az	nfirmed with 1.8) atock. In face @ 1.8) atock. In face @ 1.8) atock. In face @ 1.850 atock.	10284', Botton 10384,	Drift 8.750 CUM 32.85 41.45 47.25 78.80 84.10 86.20 89.80 443.80 10.270.00	Elia Surst 4.72. Burst 3,950 10.22 Depth 10.155 10.250 10.345 10.438 10.438 10.438 11.909 11.157 11.574 11.659 11.909 Final Ct 11.909 Final Ct 11.909 Final Ct Planne	Collapse 2,570 PMD/TVD 100,000 0.35 0.35 0.06 0.24 0.60 0.75 0.39 0.35 0.30 0.60 0.75 0.35 0.35 0.75 0.88 0.73 0.49 0.39 0.35 0.23 0.60 0.75 0.23 0.75 0.75 0.75 0.75 0.75 0.75 0.75 0.75	Azl. 162.51 162.51 159.83 155.30 156.52 279.30 160.91 160.	13 Cement 14 Wait Cn 14 Wait Cn 15 NU Boli 16 Test BC 20 Directio 22 Well Co 24 Drill Cm Totals 00 DF: 25 Body eld 0,000 Pen Pt MD/ 11,430 / 11 TVD 10,153.78 10,248.27 10,626.87 10,437.67 10,532.27 10,626.87 11,033.94 11,194.02 11,283.23 11,478.02 11,572.52 11,667.41 11,762.01 11,855.61 11,906.91 11,906.91 11,906.91 11,906.91 11,906.91 11,906.91 11,906.91 11,906.91 11,906.91 11,906.91 11,906.91 11,906.91 11,906.91 11,906.91 11,906.91 11,906.91 11,906.91	Casing Cement Pris 1 Casing Ce	Capacity 0.07582 Landing 15,367 N/-S 1.28 0.76 0.28 -0.22 -0.51 -0.52 -0.51 -0.70 1.28 -2.33 -3.57 4.56 -5.26 -5.84 -6.25 -6.41 -6.63 -7.11 -7.61 -7.63	24.00 Displ 0.01455 Pt MD/TVD / 11,000 E/-W -49.56 -49.38 -49.15 -48.89 -48.75 -48.89 -48.75 -50.71 -51.98 -53.21 -53.28 -53.79 -54.61 -55.26 -55.80 -55.80 Gyr	5.00 4.00 10.50 4.00 10.50 5.75 6.00 0.75 3.00 604.00 Plugged 0.99 0.80 0.00 0.25 0.25 0.26 0.30 0.30 0.30 0.31 0.33 0.31 0.33 0.31 0.00 0.05
1.50 Directional V 10.50 Tripping 4.00 Directional V 0.50 Directional V 0.50 Directional V 0.50 Operational 24.00 ext 24 hours: Set v ext Gasing: 7.00 Casting URF 9-5/8* 40# J URF 9-5/8* 40# J URF 9-5/8* 13 Smith Whipstoc 1 Smith BI- Mill 1 Smith Vanning to 1 Smith BI- Mill 1 Smith Vanning to 1 Smith BI- Mill 1 Smith VBHO 12 5* NC50 SpiralV 19 309 309 Last Inspected BHA H Contact Engineer Foreman - Day Foreman - Day	Work Pick up S Trip in ho displaces Work Rig up Gr 4.73, 5, 9; Work Pooth Note Plan to S whip stock, Mill off s 0 @ 10600 Acc Description -55 LT&C Special D 15 NC50 DP 16 valve 177.50 Mark Audas Lyman Narice Jody Solansky	mith whip stock le with Smith opnent) are data, GIH & , 3.48 (Director growth of the control of	& scribe en hole wh orient whip nal Plan 3 to release to 0270', 3.48 ectioanl to: Thread 4.5 IF 4.5 IF 4.5 IF NC50 4.5 IF 4.5 IF NC50 4.5 IF 8.5 IF NC50 4.5 IF 8.5 IF NC50	stock, Coo called for rom whiping az, Botto of Stock of S	1.8) 1.8) 1.8) 1.8) 1.8) 1.8) 1.8) 1.8)	hip face direct 10284', Botto 10288,	Drift 8.750 CUM 32.85 41.45 47.25 78.80 84.10 86.20 89.80 443.80 10.270.00	Burst 3,950 10,200 10,200 10,200 10,200 11,1	Collapse 2,570 PMD/TVD 100,000 0.35 0.35 0.06 0.24 0.60 0.75 0.39 0.35 0.30 0.60 0.75 0.35 0.35 0.75 0.88 0.73 0.49 0.39 0.35 0.23 0.60 0.75 0.23 0.75 0.75 0.75 0.75 0.75 0.75 0.75 0.75	Azi. 162.51 152.51 155.83 149.43 156.52 279.30 156.52 279.30 160.35 170.92 160.35 248.23 248.	13 Cement 14 Wait Cn 15 NU Bold 16 Test BC 20 Directio 22 Well Co 24 Drill Cm Totals 00 DF: 25 Body eld 10,000 Pen Pt MD/ 11,430 / 11 TVD 10,153.78 10,248.27 10,532.27 10,815.96 10,910.35 11,194.02 11,183.32 11,478.02 11,572.52 11,383.32 11,478.02 11,572.52 11,385.61 11,906.91	Casing Cement Property Communication Joint Strength 520,000 VS 0.36 0.16 0.54 1.13 1.42 1.44 1.54 2.26 3.32 4.57 5.56 6.24 7.25 8.87 262.01 A: Daily Cum Cum Cum Cum	Capacity 0.07582 Landing 15,367 N/S 0.28 0.76 0.28 0.51 -0.52 -0.51 -0.70 -1.28 -2.33 -3.57 -4.56 -5.26 -6.41 -6.63 -7.11 -7.61 -7.83 zimuth zimuth zimuth Well Cost Uvell Cost Well Cost	24.00 GHG E 3 Displ 0.01455 Pt MD/TVD 11,000 E/-W 49.56 49.38 49.15 48.89 48.75 48.89 48.75 48.93 53.55 53.38 53.21 53.28 53.79 54.61 55.26 55.80 Gyr	5.00 4.00 10.50 4.00 10.50 5.75 6.00 0.75 3.00 75 3.00 Plugged Displ 0.0903 Plugged 0.00 0.25 0.25 0.08 0.04 0.22 0.25 0.08 0.04 0.25 0.08 0.03 0.04 0.25 0.08 0.03 0.05 0.05 0.05 0.05 0.05 0.05 0.05
1.50 Directional V 10.50 Tripping 4.00 Directional V 0.00 Operational	Work Pick up S Trip in ho displaces Work Rig up Gy 4.73, 5.9; Work Poon W Note Plan to S whilp stock, Mill off s 0 @ 10600 Acc Description -55 LT&C Special D 5 NC50 DP te valve Mark Audas Lyman Narice Jody Solansky Larry Seigrist Larry Seigrist Larry Seigrist Larry Seigrist Larry Seigrist	mith whip stock le with Smith opnent) are data, GIH & , 3.48 (Director growth of the control of	& scribe en hole wh orient whip mal Plan 3 to release it 0270', 3.48 ectioanl to: Thread 4.5 IF 4.5 IF 4.5 IF NC50 432.620, 580-216- 210 3344 432.620,	stock, Coo called for room whiping az, Botto of Son	1.8 1.8	hip face direct 10284', Botto 10288,	Drift 8.750 CUM 32.85 41.45 47.25 78.80 84.10 86.20 89.80 443.80 10.270.00	Burst 4.72. Burst 3,950 Else Burst 10,20 Depth 10,155 10,236 10,236 10,534 10,628 10,723 11,100 11,100 11,1909 11,1858 11,909 Final C Planne Rel 36 Nordstog	Collapse 2,570 PMD/TVD 100,000 0.35 0.35 0.06 0.24 0.60 0.75 0.39 0.35 0.30 0.60 0.75 0.35 0.35 0.75 0.88 0.73 0.49 0.39 0.35 0.23 0.60 0.75 0.23 0.75 0.75 0.75 0.75 0.75 0.75 0.75 0.75	Azi. 162.51 152.51 155.83 149.43 156.52 279.30 156.52 279.30 160.35 170.92 160.35 248.23 248.	13 Cement 14 Wait Cn 14 Wait Cn 15 NU Bold 16 Test BC 20 Directio 22 Well Co 24 Drill Cm Totals 00 DF: 25 Body eld 0,000 Pen Pt MD/ 11,430 / 11 TVD 10,153.78 10,248.27 10,343.07 10,343.07 10,343.07 10,352.27 10,626.87 10,031.35 11,003.39 11,194.02 11,288.52 11,383.32 11,194.02 11,288.52 11,385.61 11,906.91 11,906.91 11,906.91 11,906.91 11,906.91 11,906.91 11,906.91 11,906.91 11,906.91 285.2380 571.7844	Casing Cement Pris 1 Casing Cement Ce	Capacity 0.07582 Landing 15,367 N/-S 1,28 0.76 0.28 -0.22 -0.51 -0.52 -0.51 -0.70 1.28 -2.33 -3.57 -4.56 -5.26 -5.84 -6.25 -6.41 -6.63 -7.11 -7.61 -7.61 -7.83	24.00 GHG E: 3 Dispi 0.01455 P! MD/TVD / 11,000 E.i.W -49.56 -49.38 -49.15 -48.89 -49.15 -53.59 -53.39 -53.21 -53.28 -53.79 -54.61 -55.62 -55.80 Gyr Gyr Gyr Gyr Gyr Gyr Gyr Gy	5,00 4,00 10,50 5,75 6,00 0,75 3,00 504,00 Plugged Displ 0,09038 Pilot Y DLS 0,25 0,08 0,04 0,29 0,29 0,23 0,35 0,50 0,29 0,34 0,06 0,33 0,31 0,05 0,05
1.50 Directional V 10.50 Tripping 4.00 Directional V 0.50 Directional V 0.50 Directional V 0.50 Operational 24.00 ext 24 hours: Set v ext Gasing: 7.00 Casting URF 9-5/8* 40# J URF 9-5/8* 40# J URF 9-5/8* 13 Smith Whipstoc 1 Smith BI- Mill 1 Smith Vanning to 1 Smith BI- Mill 1 Smith Vanning to 1 Smith BI- Mill 1 Smith VBHO 12 5* NC50 SpiralV 19 309 309 Last Inspected BHA H Contact Engineer Foreman - Day Foreman - Day	Work Pick up S Trip in ho displaces Work Rig up Gr 4.73, 5, 9; Work Pooth Note Plan to S whip stock, Mill off s 0 @ 10600 Acc Description -55 LT&C Special D 15 NC50 DP 16 valve 177.50 Mark Audas Lyman Narice Jody Solansky	mith whip stock le with Smith opnent) are data, GIH & , 3.48 (Director growth of the control of	& scribe en hole wh orient whip nal Plan 3 to release to 0270', 3.48 ectioanl to: Thread 4.5 IF 4.5 IF 4.5 IF NC50 4.5 IF 4.5 IF NC50 4.5 IF 8.5 IF NC50 4.5 IF 8.5 IF NC50	stock, Coo Cooled to Coole	1.8 1.8	hip face direct 10284', Botto 10288,	Drift 8.750 CUM 32.85 41.45 47.25 78.80 84.10 86.20 89.80 443.80 10.270.00	Burst 4.72. Burst 3,950 Else Burst 10,20 Depth 10,155 10,236 10,236 10,534 10,628 10,723 11,100 11,100 11,1909 11,1858 11,909 Final C Planne Rel 36 Nordstog	Collapse 2,570 PMD/TVD 100,000 0.35 0.35 0.06 0.24 0.60 0.75 0.39 0.35 0.30 0.60 0.75 0.35 0.35 0.75 0.88 0.73 0.49 0.39 0.35 0.23 0.60 0.75 0.23 0.75 0.75 0.75 0.75 0.75 0.75 0.75 0.75	Azi. 162.51 152.51 155.83 149.43 156.52 279.30 156.52 279.30 160.35 170.92 160.35 248.23 248.	13 Cement 14 Wait Cn 14 Wait Cn 15 NU Bold 16 Test BC 20 Directio 22 Well Co 24 Drill Cm Totals 00 DF: 25 Body eld 0,000 Pen Pt MD/ 11,430 / 11 TVD 10,153.78 10,248.27 10,343.07 10,343.07 10,343.07 10,352.27 10,626.87 10,031.35 11,003.39 11,194.02 11,288.52 11,383.32 11,194.02 11,288.52 11,385.61 11,906.91 11,906.91 11,906.91 11,906.91 11,906.91 11,906.91 11,906.91 11,906.91 11,906.91 285.2380 571.7844	Casing Cement Pres 1,000 Joint Strength 520,000 VS 0,36 0,16 0,64 1,13 1,42 1,44 1,64 2,26 6,25 6,84 7,25 6,84 7,25 6,84 7,25 6,84 7,25 6,84 7,25 6,84 7,25 6,84 7,25 6,84 7,25 6,84 7,25 6,84 7,25 6,88 7,42 7,65 8,14 8,65 8,87 262,01 A. Dailyl Cum Cum Cum Cum Cum Cum Cum Cum Cum	Capacity 0.07582 Landing 15.367 N/-S 1.28 0.76 0.28 -0.51 -0.52 -0.51 -0.70 -1.28 -2.33 -3.57 -4.56 -5.26 -5.84 -6.25 -6.41 -6.63 -7.11 -7.61 -7.83 2.7.83 2.7.83 2.7.83 2.7.83 2.7.83 2.7.83 2.7.83 2.7.83 2.7.83 2.7.83 2.7.83 2.7.83 2.7.83 2.7.83 2.7.83 2.7.83 2.7.83	24.00 GHG E: 3 Dispi 0.01455 P! MD/TVD / 11,000 E.i.W -49.56 -49.38 -49.15 -48.89 -49.15 -53.59 -53.39 -53.21 -53.28 -53.79 -54.61 -55.62 -55.80 Gyr Gyr Gyr Gyr Gyr Gyr Gyr Gy	5.00 4.00 10.50 4.00 10.50 5.75 6.00 0.75 3.00 604.00 0.75 3.00 0.90 0.90 0.90 0.90 0.90 0.90 0.90



FE:	2530
roperty :	428085-023.0
P1#:	42-389-3382
rop TD	15.38

Well Name FIGHTER	NMILE 56-18	1H			(County Reeves		writing Rang 3lk 53 /	2	Wolfcamp		Date	un, Jul 2	1. 201:
Contractor / Rig	Rpt # DFS	ODFS	Present Ope		Venana	1071	JIK. 2-2 1		MD	IVD	Footage		Hours
H&P 218	21 15.250	16	Pool	w/ Gyro	& prepare	to release	from wh	nipstock.	12,00	00 12,00	0 0	0.00	0.00
				Daily	Cum	Variance To Drlg.		Daily	Cum	Variance To Compl.		After	Compl.
			B.C.P	Drlg.	Drig.	Afe	A.C.P	Compl.	Compl.	Afe	Dry Hole	Casing	Well
Sub Ledger Description	Vendor & De	scription	Code	Cost	Cost	Dyed/Under	Code	Cost	Cost	Dierfünder	Cost	Point	Cost
Roads & Location Preparation / Restora Damages			DIDC 100 DIDC 105		99,810		DICC 100 DICC 105			-15,000	120,000	15,000	135,0
Mud/Fluids Disposal Charges			DIDC.255			-50,000			-	490,000	50,000	90,000	140,0
Day Rate	H&P 218 [Day Rate /	FRC Charge]	DIDC.115	27,135	434,160					-122,000	692,000	122,000	814,0
Misc Prep Cost (Mouse Hole, Rat Hole,			DIDC 120	-	46,104	5.104					41,000	1,7	41,0
Bits Fuel			DIDC 125 DIDC 135		35,800 92,709	-49,200 -55,291	DICC 130			-25.000	85,000 148,000	25,000	85,0 173,0
Water 009 / Completion Fluids 109			DIDC 140		8,905		DICC.135			-10,000	15,000	10,000	25,0
Mud & Additives	[] / Fas-Line [Transfe	r Pump] / Halib		2,960	108,935	-191,065					300,000		300,0
Surface Rentals	American Safety Serv	ices [H2S Paci		810	14,810		DICC.140			-180,000	51,000	180,000	231,0
Downhole Rentals			DIDC.155		175,843	-3,157	DICC_145			-10,000	179,000	10,000	189,0
DSTS, Formation Tests Mud Logging	Pason [Work Station]	/ West Tayas V	DIDC 160	1,005	12,060	-24.940			1		37,000		37.0
Open Hole Logging	, wasti (resis station)	7. 170 00. 100 00.0	DIDC.160	1,000	63,859	23,859					40,000	100	40,0
Cementing, thru Intermediate Casing			DIDC 185		79,080		DICC.155			-65,000	180,000	65,000	245,0
Tubular Inspections	EL Farmer [2 pipe rac	k] / Wilbanks T		209	9,201		DICC.160			-10,000	30,000	10,000	40,0
Casing Crews			DIDC 195		15,924		DICC 165		+	-15,000	35,000	15,000	50,0
Extra labor, Welding, etc. Trucking			DIDC 200 DIDC 205	-	2,405 16,815		DICC.170 DICC.175			-8,000 -20,000	20,000	8,000 20,000	28,0
Supervision	Brother consulting / L	yman Nance IS		3,700	85,100		DICC 180			-30,000	113,000	30,000	143,0
Trailer, Camp & Catering	Cimarex [Satelite] [sa		DIDC 280	455	21,201	-26.799	DIGC 255		-	-8.000	48,000	8,000	56,0
Other misc expenses			DIDC 220	-		-1,000	DICC.190	1	- P	-60,000	1,000	60,000	61,0
Overhead Demodial Computer			DIDC 225	-	8,000		DICC 195 DICC 215		-	2,000	8,000	2,000	10,0
Remedial Cementing Mobilize & Demobilize			DIDC 240		219,352	19.352	netheracity	-	•		200.000		200,0
Directional Orilling	Lenco [Septic] / Paso	n [Internet / Wo		6,420	33,070		100	1			420,000		420,
Dock, Dispatcher, Crane		and the second second	D/DC 250	-	. *		DICC.230		-				
Marine/Air Transportation		-	DIOC 275	-		75	DICC 250				19	-	
Solids Control Equip/Services	KSW Oilfield Rentals Mc Guire Industries [5]		DIDC 260	715 1,455	9,900 38,050	-20,100 26,950	DICC.240		-	-30,000	30,000 65,000	30,000	30,0 95,0
Well Control-Equip/Services Fishing & Sidetrack Services	Mc Guire Industries [seperator & ign	DIDC 270	1,400	525		DICC 245			-30,000	110.000	30,000	110,0
Completion Rig					525	34,470	DICC 115			-52,000		52,000	52,0
Coil Tubing							DICC 260			180,000	(9)	180,000	180,0
Completion Logging, Perforating							DICC 200	-		-100,000	110	100,000	100,0
Stimulation			DIDC 300		10,000		DICC 210 DICC 280		-	-1.587.000	10,000	1,587,000	1,587,0
Legal/Regulatory/Curative Well Control Insurance			DIDC 285		5,000		21VV 20V				5,000		5,0
Contingency			DIDC 435	2,243	82,331	-72,669	DICC 220			-131,000	155,000	131,000	286,0
Construction For Well Equipment						-	DWEA 110				7.4	1.4	
Construction For Lease Equipment						Section 1	DLEQ 110			404,659		404,659	404,6
Construction For Sales P/L				-			DICC 265						
Intang	ible	_		47,107	1,728,948	-1,519,052		0	0	-3,154,659	3,248,000	3,154,659	5,402,6
Drive Pipe			DWEB.150	-						100	-		
Conductor Pipe			DWEB.130						-		7	-	
Water String			DWEB.135	-									
Surface Casing Intermediate Casing			DWEB 140 DWEB 145		107,310	-6 690 -452 000					114,000 452,000		114,0
Production Casing Or Liner			MAXIME JOSE	1		1432,000	DWEA 100			80,000	402,000	80,000	80,0
Tubing							DWEA 105		4	-85,000		85,000	85,0
N/C Well Equipment							DWEA 115				+		
Wellhead, Tree, Chokes			DWEB 115	-	15,236	-29,764	DWEA 120			-38,000 -75,000	45,000	38,000	83,0 75,0
Liner Hanger, Isolation Packer Packer, Nipples			DWEB.100				DWEA.125			-25,000		75,000 25,000	25,0
Pumping Unit, Engine							DLEG 100			20,000	-	20,000	20,0
Lift Equipment (Bhp. Rods, Anchors)				The second			DLEQ.105			-25,000	-	25,000	25,0
Metering Equipment							DLEQ.220	-		-	349	-	
Tangible - Wel	l Equipment			0	122,546	488,454		0	0	-328,000	611,000	328,000	939,
										470.000		150.70	100
N/C Lease Equipment							DLEQ 115 DLEQ 120	1	*	-158,589 -110,182		158,589	158,5
Tanks, Tanks Steps, Stairs Battery (Heater Treater, Separator,)							DLEQ.125		-	-194.064		194,064	194,0
Flow Lines (Line Pipe From Wellhead)							DLEQ.130		14	-335,050	- 2	335,050	335,0
Offshore Production Structure For							DWEA135	- 1					
Pipeline to Sales							DWEA 140				-		
Tangible - Leas	e Equipment			0	0	0		0	0	797,885	0	797,885	797,
P&A Costs			DIDC 295				DICC.275						
P&A Costs P&	^		2100.673	0	0		MINNELL	0	0		0	0	
P&	-			0	0	0		0	0	0	0	0	
											5		



AFE : Property : API # :

253084 428085-023.01 42-389-33823

BLM/BIA:	M	orning Dr	illing Rep	ort		API#: Prop TD:	42-389-3382 15,36
Well Name		State/County	Section, Tow	nship, Range	Objective	Date	An ordered special
EIGHTEENMILE 56-18 1H Contractor / Rig Rpt # DFS ODFS	Present Operation	TX, Reeves	18 / B	k 53 /	Wolfcamp A	Tue TVD Footage	FT/HR Hours
H&P 218 23 17.250 18		Drilling 8 3/4	4" curve to @	10439'	The state of the s	0,377 157	11.21 14.00
70 % Shale 20% Lime 10% Sand 591	<u>08</u> <u>19</u> 1,795 3,458	Znd Bone s	pring Sand @ 907	6 3rd Bo	ne Spring Sand @ 10078	WOLF CAN	MP A @ 10380
DP Size DC Size DP Av DC Av Jet Velocity 5.00 6.750 237 394 214	HHP/SQ Inch Bit Dia	Cost/Ft. 24		Cost/Ft (OA)		rac Gradient MW	Max Allowable SICE
	Pump #2 - PZ-11	\$996.7	GPS .	\$199.39 Pump #3 -	3,492	9.40 GPS GPM	45 of BP
6.00 11.00 65 3.837	6.00 1	1.00 65	3.837			499	
Slow Stroke Stand Pipe EDR Choke	Slow Stroke Sta	nd Pipe EDR	Chake	Slow Stroke	Stand Pipe EDR	Choke	0n BP
MWIn MWOW VSIn VSOW PV YP	Gel Strength AP	Fitrate LCM	o MWin 1	WW.Out VS.In	VS Out PV YP	Gel Strength	HTHP LC
9.15 9.15 29 29 1 1 Cake Solids Liquid Sand MBT	1 1 10 EH EM	00.00 PE ME	L Cake Sol	ids Liquid	Sand AlkPOM	WPS ES	GAGL2 NAGL
	7.00 0.01	0.01 0.18	MU .	100.00	State		and the same
<u>Ortorides</u> <u>Calcium</u> <u>Oil</u> Water <u>O.W</u> 85,000 2,000 99,70	Lime	Depth Checked 0282@11:31	Chlorides	Calcium	OiPct WaterPct O:W	Lime	Depth Checked
Bit # Size Manufacturer Type	Serial #	Jet #1 Jet #	2 Jet#3 Jet#4	Jet #5 Jet #6	Jet#7 Jet#8 TFA	WOB	Rotary RPM
5 8.750 JZ Bits HF43-SBH Bit In Bit Out Footage Hours FT/HR	K20119 Cum. Bit Hrs.	18 18 Inner Outer	18 Dull Locati	9	0.7455 Guage Other Reason	10 - 37 Diff Pressure	0 · 0 Motor RPM
Bit In Bit Out Footage Hours FT/HR 10,282 10,439 157 14.00 11.21	201.00	inner Outer	Dus Locati	on Bearing	Guage Other Reason	50 - 70	68-75
Drag Torque, and Weight Dissel Pickup Weight 280,000 Diesel on Hand	5,976 Engineer - 2		f additives in last 24 1,1		33 Daily Solids =	Soil Farming / Mud Dir bbls (
Rotating Weight 250,000 Diesel Received	MF-55	3	1,1	27 Zeogei	Total Solids =		@ \$0.0
Average Drag 30,000	1,356				Daily Liquids Total Liquids		
Maximum Drag 32,000 Natural Gas Forque On Bottom Meter Reading					3	BOP Pressure Test	ting
Forque Off Bottom MCF Used Today					Last BOP Tes	u tamban menangan	Days since:
Daily Rotating Sliding Total	BHA# 6	Rotating	Sliding	Total 157	The same of the sa		Daily CUM
Feet 157 157 Hours 14.00 14.00			157 14.00	14.00	2 Drilling		4.00 201.00
ROP 11.21 11.21 %Time 100.00	ROP %Time		11.21	11.21	3 Washing/Rea 4 Lost Circulati	C00110-96 (0.50 1.00 4.75
6Feet 100.00	%Feet		100.00		5 Cond. Mud & 6 Tripping		1.00 30.50 6.00 75.75
	ronological Activit			12 4	7 Lubricate Rig		4.00
1.00 Tripping Pick up directional tools, motor, shallow test motor, make up bit	#5	inter. Gnange mor	IOI II OIII 2.30 IO 2.	12 and	8 Rig Repair 9 Cut Drlg Line		1.50 1.50
1.50 Tripping Trip in hole to shoe (3492') Insti 1.00 Cond Mud & Circ Circulate bottoms up through ch		sing psi 180			10 Deviation Sur 11 Wreline Logs		1.00 9.75
1.50 Cut Drlg Line Cut drilling line 93' Set & check		and the second second			12 Run Casing	jing	8.75
3.50 Tripping Trip in hole to 10180' 0.50 Washing/Rearning Wash to bottom with tool face @	3.84 (Top of whip	stock @ 10270')			13 Cement Casi 14 Wait On Cem		5.00
4.50 Drilling Sliding from 10,282' to 10,310',	28 FT @ 6.22 ROP	using Bit #5 - S/N	K20119 on BHA		15 NU BOP's	37.75	10.50
- 07/22/2013 WOB=10 MotorR Gallons Per Minute=560 Pump				sity=29	16 Test BOP's 20 Directional W	lork	5.75 9.00
6.50 Drilling Sliding from 10,310' to 10,377', MotorDiffPressure=70 Mud We					22 Well Control 24 Drill Cmt / Sh	on Tant	0.75
Pressure=1,475 0.50 Deviation Survey Survey 10317 6.80 Az 6.97					Totals		4.00 552.00
1.50 Drilling Sliding from 10,377 to 10,408', MotorDiffPressure=70 Mud We	31 FT @ 20.67 RO				VIII		
Pressure=1,475		27 Gallons Per M	mute=499 Pump				
0.50 Deviation Survey Survey @ 10348' 9.97" AZ.55 T 1.50 Drilling Sliding from 10,408' to 10,439',	31 FT @ 20.67 RO						
MotorDiffPressure=70 Mud We Pressure=1,475	ight=9.2 Viscosity=	27 Gallons Per M	inute=499 Pump	W. IN			
24.00						12-3-7:	GHG Emissions
ext 24 hours; Build curve / surveys ext Casing; 7.000 @ 10600 Acc; 0		Spitts: 0		Elevations-	GL: 2,866.00 DF: 25.00	KB: 25.00	2,400.00
Casing Description	From	To ID	Drift B	urst Collaps	Pipe Body Joint		Plugged Displ Displ
SURF 9-5/8" 40# J-55 LT&C Special Drift Casing		3,492 8.835		,950 2,570		Andrew Committee of the	01455 0.0903
Qty BHA 6 Wt Grd Three			CUM 1.00	KOP MD/TVD 10,270 / 10,270	Pen Pt MD/TVD	Landing Pt 15,376 /	BESTER PARTY
1 JZ Bits HF43-SBH 4.5 R 1 Weatherford motor, 6.22 BB, 7/8 k 4.5 IF	7.750	1.00	28.94 De	pth Incl.	11,430 / 11,000 Azi. TVD	VS N/-S	11,000 Y E/-W DL:
1 Weatherford mule shoe 49777 4.5 IF 1 NM tool carrier 4.5 IF			62 15	,317 6.80 ,348 9.97	6.97 10,316.12 0.55 10,346.78	3.68 4.59 8.19 9.10	-48.69 10.3 -48.44 10.6
2 Flex NMDC 43215 4.5 IF 30 5" 19.50# S-135 NC50 DP 19.50 S-135 NC50			124 20	jection To Bit:	62.00	0.19 9.10	-40,44 10,0
6 5" NC50 SpiralWate HWDP 59.16 J-55 NC50	5.000 3.0	00 176.20	1,246.11	,410 9.97 nal Closure =		17.21 18.11 .64 Azimuth	-47.94 3.5
1 Knight Jars 59.16 J-55 NC50 5 5" NC50 SpiralWate HWDP 59.16 J-55 NC50	5.000 3.0	00 148.33	7,775,000,000	anned VS =		.07 Azimuth	New Survey
48 288 5" 19.50# S-135 NC50 DP 19.50 S-135 NC50	5.000 4.2		10,439.00				
288	DrillPipe	= 9,014.25					
	Total Length Kelly						
ast Inspected BHA Hours: 201.00	Total Depth						
Contact Engineer Mark Audas 432	VALUE OF THE PARTY	ontact computer	Wellsite 3	5	303-285.2380	Daily Well Cost Cum Drilling Cost	\$156,49 \$2,081,43
Foreman - Day Lyman Nance 580-	216-1492	eologist	Kim Nords	stog	432.571.7844	Cum Compl Cost	S
	34.8052 L 320.1934	andman	Cody T. E	liot	432.571.7806	Cum Well Cost Cum Intangible Cos	\$2,081,43 at \$1,958,88
Safety Supt Fred Jones 918.	506.5904					Cum Tangible Cost Cum Mud Cost	\$122,54 \$113,55
1990-1514:1715 p. 1911-1912:1711-711-71-71-71-71-71-71-71-71-71-71-7	557.4177 394.5572					Cam muu Cost	9113,55



Cimarex Energy Co. Morning Drilling Report

AFE : Property : API # : Prop TD :

253084 428085-023.01 42-389-33823 15,367

Contractor / Rig H&P 218	NMILE 56	-18 1H			TX. R	County enves		vnship, Rano Blk 53 /	2	Objectiv		Date	ue, Jul 2	3. 201
	Rpt # DE	FS (DFS 18	Present Oper	ration					MD	IVD	Footage	FT/HR	Hou
7.00.210	23 17.	.250	10		Unilli	ng 8 3/4" d	Variance	10439		10,4	39 10,37 Variance	7 157	11.21	14.0
Sub-Ladon Description	Vander 1	e Desertation		B.C.P	Daily Drlg.	Cum Drlg.	To Drig. Afe	A.C.P	Daily Compl.	Cum Compl.	To Compl. Afe	Dry Hole	After Casing	Com
Sub Ledger Description Roads & Location Preparation / Restora	5 m / / / / / / / / / / / / / / / / / /	& Description Code Service IC	0.01	Code DIDC.100	3,586	Cost 103,396	-16,604	Code DICC 100	Cost	Cost	-15,000	120,000	Point 15,000	Cos 135
Damages				DIDC 105				DICC 105		- 1	- 4	40,000	-	40
Mud/Fluids Disposal Charges				0/DC.255		100 100		DICC.120			-90,000	50,000	90,000	140
Day Rate Misc Prep Cost (Mouse Hole, Rat Hole,	H&P 218 (Day R	Rate / FRG C	narge)	DIDC.120	27,135	488,430 46,104	5 104	DICC.120			-122,000	692,000 41,000	122,000	814
Bits				DIDC:125		45,300	-39,700	DICC.125	-		-	85,000	-	85
Fuel Water 009 / Completion Fluids 109				DIDC 135 DIDC 140		92,709 8,905		DICC 130 DICC 135			-25,000 -10,000	148,000	25,000 10,000	173
Mud & Additives	[] / Fas-Line [Tri	ransfer Pump	1 / Halib		2,530	113,557	-186,443	12/12/01/13/02			-10,000	300,000	10,000	300
Surface Rentals	American Safety			DIDC_150	810	16,430		DICC.140			-180,000	51,000	180,000	231
Downhole Rentals DSTS, Formation Tests				DIDC:155 DIDC:160		175,843	-3,157	DICC.145			-10,000	179,000	10,000	189
Mud Logging	Pason [Work Sta	tation] / West	Texas V		1,005	14,070	-22,930					37,000		37
Open Hole Logging				DIDC 160	-	63,859	23,859				-	40,000	-	40
Cementing, thru Intermediate Casing Tubular Inspections	EL Farmer [2 pip	ne rack1 / Wil	banks T	DIDC 185	209	79,080 9,619	-100,920 -20,382	DICC.155			-65,000 -10,000	180,000	10,000	245
Casing Crews	ect amounte pa	pe monty res	Danna 1	DIDC.195	200	15,924		DICC 165			-15,000	35,000	15,000	50
Extra labor, Welding, etc.				DIDC 200	-	2,405		DICC 170			-8,000	20,000	8,000	28
Trucking Supervision	Brother consulting	ing / Lyman N	lanna IS	DIDC 205	3,700	16,815 92,500		DICC 175 DICC 180			-20,000	20,000	20,000	143.
Trailer, Camp & Catering	Cimarex (Sateliti			DIDC 280	455	22,111	-25 889	DICC 255			-8.000	48,000	8,000	56
Other misc expenses				D(DC,220			-1,000	DIGC 190			-60,000	1,000	60,000	61
Overhead Remedial Cementing				DIDC 225 DIDC 231		8,000		DIGC 195 DIGC 215			-2,000	8,000	2,000	10
Mobilize & Demobilize				DIDC_240		219,352	19,352	winder N				200,000		200
Directional Drilling	Lenco [Septic] /	Pason [Inter	net / Wo		270	39,760	-380,240				-	420,000	171	420
Dock, Dispatcher, Crane				DIDC 250 DIDC 275				DICC 230 DICC 250						
Marine/Air Transportation Solids Control-Equip/Services	KSW Oilfield Re	entals [Float I	umps]		715	11,330	-18,670	SCHOOL STATE		-		30,000		30
Well Control-Equip/Services	Mc Guire Industr	tries [Seperat	or & Ign	DIDC 265	1,455	40,960	-24,040	DIGC 240	35		-30,000	65,000	30,000	95
Fishing & Sidetrack Services	Smith Tool [Whip	pstock & Ser	vice Tec	DIDC 270	107,171	124,150		DICC 245		-	En Ann	110,000	50.000	110
Completion Rig Coll Tubing								DICC 115 DICC 260			-52,000 -180,000		52,000 180,000	52 180
Completion Logging, Perforating	- Marie 1						-	DICC 200			-100,000		100,000	100
Stimulation				DUDG TO				DICC 210			-1,587,000	12000	1,587,000	1,587
Legal/Regulatory/Curetive Well Control Insurance				DIDC 300 DIDC 285	- j	5,000		DICC 280			-	10,000	-	10
Well Control Insurance Contingency				DIDC.435	7,452	93,280	-61.720	DICC 220			-131,000	155,000	131,000	286
Construction For Well Equipment					1,7		1	DWEA.110	14	-			-	
Construction For Lease Equipment Construction For Sales P/L						11000		DLEQ 110 DICC 265			-404,659		404,659	404
Construction For Sales P/L Intang	ible		-		156,493	1,958,889	.1,289,111	MAN 100	0	0	-3,154,659	3,248,000	3,154,659	6,402
				COLUMN TO A STATE OF THE PARTY										
Drive Pipe Conductor Pipe				DWEB 130										
Water String				DWEB 135	-								-	
Surface Casing				DWEB 140	-	107,310	-6,690					114,000		114
Intermediate Casing Production Casing Or Liner				DWEB.145	-	-	-452,000	DWEA 100			-80,000	452,000	80,000	452 80
Tubing							S. Line	DWEA 105			-85,000	- 4	85,000	85.
N/C Well Equipment				DALETT				DWEA 115						
Wellhead, Tree, Chokes Liner Hanger, Isolation Packer				DWEB 115 DWEB 100		15,236	-29,764	DWEA 120 DWEA 125			-38,000 -75,000	45,000	38,000 75,000	83, 75,
Packer, Nipples				NAME AND ADDRESS OF THE PERSON				DWEA 130			-25,000		25,000	25
Pumping Unit, Engine								DLEQ 100	-				-	
Lift Equipment (Bhp. Rods, Anchors) Metering Equipment								DLEQ.105 DLEQ.220			-25,000		25,000	25
Metering Equipment Tangible - Wel	Equipment				0	122,546	488,454	SCHOOL SALE	0	0	-328,000	611,000	328,000	931
								DI CC 1						400
N/C Lease Equipment Tanks, Tanks Steps, Stairs								DLEQ 115 DLEQ 120		-	-158,589 -110,182	1	158,589	158
Battery (Heater Treater, Separator,)								DLEQ 125			194.064		194,064	194
Flow Lines (Line Pipe From Wellhead)								DLEG 130	-		-335,050	1	335,050	335
Offshore Production Structure For								DWEA 135 DWEA 140		-	-		-	
Pipeline to Sales	e Equipment		-		0	0	0	- TIEST 190	0	0	797,885	0	797,885	797
Tapathia I	- Lyuipment						V			-		,	7,21,000	.,,
Tangible - Leas														
Tangible - Leas				DIDC 295	0	- 0		DIGC 275	0	- 0	_	0	0	



BLM/BIA

24.00

Cimarex Energy Co.

Morning Drilling Report

AFE ! Property API# Prop TD

253084 428085-023.01 42-389-33823

EIGHTEENMILE 56-18 1H Wed, Jul 24, 2013 TX. Reeves 18 / Bik 53 / Wolfcamp A Present Operat H&P 218 culate & pump sweeps prepare hole to lay dn 5" dp and rur 10,835 18.250 19 10,728 396 25.55 2nd Bone spring Sand @ 9076 3rd Bone Spring Sand @ 10078 WOLF CAMP A @ 10380 70 % Shale 30% Lime 2.080 4.637 0 Frac Gradient MW 6.750 237 214 1.80 \$154.70 \$197.76 3,492 9.40 Pump #1 PZ-11 Pump.#2 - PZ-11 Pump #3 -3.837 499 6.00 11.00 65 3.837 6.00 11.00 65 1,425 EDR EDR 1,500 VS In MW Out 9.10 9.10 29 29 1 1 100 00 AIRPOM MF Cake CAGL2 NACI 8.00 0.18 100.00 99.80 0.01 0.01 0.01 Depth Checked WaterPct Q.W OHPE Linie 0.W Calcium Qt Lime 81,000 1,880 99.80 10484@09:23 Bit # Serial # Jet #1 Jet #2 Jet #3 Jet #4 Jet #5 Jet #6 Jet #7 Jet #8 18 18 5 8 750 JZ Bits HF43-SBH K20119 18 0.7455 30.45 0.30 Cum. Bit Hrs inner Outer Dull Location Bearing Guage Other Reason 10,282 10,835 553 29.50 18.75 216.50 45 - 145 75.75 Drag Torque, and Weight Mud additives in last 24 hours Soil Farming / Mud Disposal \$0.00 Pickup Weight 292,000 Diesel on Hand 4,463 Engineer - 24 H 1 Tax 4,040 Barazan D Plus Daily Solids = bbls @ Rotating Weight 262.000 PAC-L 6 MF-55 5 Zeogel 22 Total Solids = bbis @ \$0.00 Slackoff Weight 249 000 Diesel Used Today 1,513 Soda Ash Daily Liquids = 1.100 bbls @ \$2 990 00 \$7,775.00 Average Drag 30,000 Total Liquids = 2,860 bbls @ Meter Reading Torque On Bottom **BOP Pressure Testing** e: III Torque Off Bottom MCF Used Toda Last BOP Test: 07/10/2013 BHA# 6 Sliding Total CUM Total Rotating Time Distrib Daily Rotating Sliding 33.00 Feet 2.00 13.50 15.50 2 Drilling 15.50 216.50 27.50 29.50 Washing/Reaming ROP 11.00 25.55 ROP 19.31 18.75 4 Lost Circulation 4.75 %Time %Time 6.78 93.22 1.50 32.00 Cond. Mud & Circ %Feet 94.44 %Feet 75.75 6 Tripping Time Desc Chronological Activity (0600 Hours to 0600 Hours) Lubricate Rig 0.50 4.50 0.50 Deviation Survey Survey @ 10380', inc. 13.88, az. 357.16, TVD 10377 8 Rig Repair 21.00 Sliding from 10,439 to 10,471, 32 FT @ 21.33 ROP WOB=40 MotorRPM=75 1.50 Drilling **Cut Drlg Line** 1.50 MotorDiffPressure=100 Mud Weight=9.3 Viscosity=28 Gallons Per Minute=499 Pump 10 Deviation Survey 16.25 Wireline Logging 23.00 Survey @ 10411' inc. 18 41, az. 357.69, TVD 10407 0.50 Deviation Survey 12 Run Casing 8.75 Sliding from 10,471' to 10,502', 31 FT @ 20.67 ROP WOB=45 MotorRPM=75 1.50 Drilling Cement Casing MotorDiffPressure=100 Mud Weight=9.3 Viscosity=28 Gallons Per Minute=499 Pump Pressure=1,500 14 Wait On Cement 4.00 15 NU BOP's 10.50 0.50 Deviation Survey Survey @ 10443', inc. 22.22, az. 358.72, TVD 10437 16 Test BOP's 5.75 Sliding from 10,502' to 10,536', 34 FT @ 22.67 ROP WOB=45 MotorRPM=75 1.50 Drilling 20 Directional Work 9.00 MotorDiffPressure=100 Mud Weight=9.3 Viscosity=28 Gallons Per Minute=499 Pump 22 Well Control Pressure=1,500 24 Drill Cmt / Shoe Test 3.00 0.50 Deviation Survey Survey @ 10474', inc. 26.32, az. 0.39, TVD 10465' Totals 576.00 Sliding from 10,536' to 10,557', 21 FT @ 0.00 ROP WOB=45 MotorRPM=75 0.00 Drilling MotorDiffPressure=100 Mud Weight=9.3 Viscosity=28 Gallons Per Minute=499 Pump Pressure=1,500 Rotating from 10.557' to 10,566', 09 FT @ 9.00 ROP WOB=30 RotaryRPM=30 MotorRPM=75 1.00 Drilling MotorDiffPressure=45 Mud Weight=9.3 Viscosity=28 Gallons Per Minute=499 Pump Pressure=1,450 0.50 Deviation Survey Survey @ 10506', inc. 29.92, az. 1.03, TVD 10493' 1.00 Drilling Sliding from 10.566' to 10.590'. 24 FT @ 24.00 ROP WOB=45 MotorRPM=75 MotorDiffPressure=100 Mud Weight=9.3 Viscosity=28 Gallor Pressure=1,500 0.50 Drilling Rotating from 10,590' to 10,596', 06 FT @ 12,00 ROP WOB=45 RotaryRPM=30 MotorRPM=75 MotorDiffPressure=100 Mud Weight=9.3 Viscosity=28 Gallons Per Minute=499 Pump Pressure=1.500 Survey @ 1537' 32.99" .23 az 0.50 Deviation Survey 0.50 Lubricate Rig 1.00 Drilling Sliding from 10,596' to 10,623', 27 FT @ 27.00 ROP WOB=45 MotorRPM=75 MotorDiffPressure=100 Mud Weight=9.3 Viscosity=28 Gallons Per Minute=499 Pump Pressure=1,500 Rotating from 10,623' to 10,630', 07 FT @ 14.00 ROP WOB=45 RotatryRPM=30 MotorRPM=75 MotorDiffPressure=100 Mud Weight=9.3 Viscosity=28 Gallons Per Minute=499 Pump 0.50 Drilling Pressure=1.500 Survey @ 10569' 35.12' 03az 1.00 Drilling Sliding from 10,630' to 10,650', 30 FT @ 30.00 ROP WOB=40 MotorRPM=75 MotorDiffPressure=100 Mud Weight=9.2 Viscosity=27 Gallons Per Minute=499 Pump Pressure=1.500 Survey @ 10600' 37.39" 349.49 az 0.50 Deviation Survey 0.50 Drilling Sliding from 10,660' to 10,691', 31 FT @ 62.00 ROP WOB=45 MotorRPM=75 MotorDiffPressure=120 Mud Weight=9.2 Viscosity=27 Gallons Per Minute=499 Pump Pressure=1,515 Survey @ 10632' 39.58° 358.7 az Sliding from 10,691' to 10,723', 32 FT @ 32.00 ROP WOB=45 MotorRPM=75 MotorDiffPressure=120 Mud Weight=9.2 Viscosity=27 Gallons Per Minute=499 Pump 1.00 Drilling Pressure=1,525 0.50 Deviation Survey Survey @ 10663' 42.39" 359.58 az Sliding from 10,723' to 10,754', 31 FT @ 31.00 ROP WOB=45 MotorRPM=75 MotorDiffPressure=135 Mud Weight=9.2 Viscosity=27 Gallons Per Minute=499 Pump 1.00 Drilling Pressure=1,550 MWD @ 10695' 44,85" 1,32 az 1.00 Drilling Sliding from 10,754' to 10,786', 32 FT @ 32,00 ROP WOB=45 MotorRPM=75 MotorDiffPressure=145 Mud Weight=9.2 Viscosity=27 Gallons Per Minute=499 Pump Pressure=1,565 0.50 Deviation Survey Survey @ 10724' 48.03" 1.83 az 2.50 Drilling Sliding from 10,786' to 10,835',49 FT @ 19.60 ROP WOB=45 MotorRPM=75 MotorDiffPressure=120 Mud Weight=9.2 Viscosity=27 Gallons Per Minute=499 Pump Pressure=1,580 urvey @ 10775' 53.18° 2.18 az 1.50 Cond. Mud & Circ Circulate & pump sweeps prepare hole to lay dn 5" dp and run 7" casing, 1st sweep at shaker with a medium load, 2nd sweep at shaker lightly loaded



W CL	2,3300
roperty	428085-023.0
PI#:	42-389-3382
TO THE	45.20

Well Name	EIGHTEE	NIBALL I	- FC 4	10.41				stricounty		Township, B	BEIDE		Objective		Date	4 11.0	4 2042
	170001001111111111111111111111111111111		E-1-2-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-	TOTAL CONT.				Reeves		8 / Blk 53 /		,	Wolfcamp A			d, Jul 2	
Contractor i	H&P 218	24	18.2		ODFS 19	Present Ope culate &	market and the same of the sam	weeps pr	epare hole	e to lay d	n 5" dp	and rur	MD 10,835	10,728	Footage 3 396	25.55	Hours 15.50
Next 24 ho	ours: Lay dn 5" dp an	d run 7°	casing							Elev	ations-	GL: 2,866.	00 DF; 2	5.00 K	B: 25.00	GHG E	missions
Next Casi	ng: 7.000 @ 10600	Acc	0				S	pills: 0				Insp: 0				8	10.00
													Body	Joint		_	Plugged
Casing	Description					From	To	ID	Drift	Burst	Collapse	11	eld	Strength	Capacity	Displ	Displ
SURF	9-5/8" 40# J-55 LT&C S	pecial Dr	ift Casir	ng		0	3,492	8.835	8.750	3,950	2,570	63	0,000	520,000	0.07582	0.01455	0.09038
Qty	BHA 6		Wt	Grd	Thread	OD	ID	Length	CUM	KOP	MD/TVD		Pen Pt MD	/TVD	Landing F	t MD/TVD	Pilot
	Bits HF43-SBH				4.5 Reg			1.00	1.00	10,27	0 / 10,270		11,430 / 11	000,1	15,376	/ 11,000	Y
	atherford motor, 6.22 B				4.5 IF	7.750		27.94	28.94	Depth	Incl.	Azi.	TVD	VS	N/-S	E/-W	DLS
	atherford mule shoe 49	777			4.5 IF	6,750	3.250	3.64	32.58	10,317	6.80	6.97	10,316.12	3.68	4.59	-48.69	10.39
	tool carrier				4.5 IF	6.625	3.250	29.57	62.15	10,348	9.97	0.55	10,346.78	8.19	9.10	-48.44	10.65
	NMDC 43215				4.5 IF	6.750	2.875	62.05	124.20	10.380	13.88	357.16	10.378.09	14.80	15.71	-48.61	12.41
	9.50# S-135 NC50 DP IC50 SpiralWate HWDF		19.50	S-135	NC50	5.000	4.276	945.71	1,069.91	10,411	18.41	357.69	10,407,86	23.40	24.32	-48.99	14.62
	ght Jars		59.16		NC50 NC50	5.000	3.000	176.20 30.31	1,246.11	10,443	22.22	358.72	10,437.86			-49.33	11.96
	IC50 SpiralWate HWDF	,	59.16		NC50	5.000	3.000	148.33	1,424.75	10,474	26.32	0.39	10,466.11		48.16	-49.41	13.41
48	1030 Spiral vale 114 vol	_	55.10	0-23	14000	3.000	BHA =	1,424.75	1,424.75	10,506	29.92	1.03	10,494,33		63.23	-49.22	11.29
	9.50# S-135 NC50 DP	_	19.50	S-135	NC50	5.000	4.276	9,410.25	10.835.00	10.537	32.99	0.23	10.520.77		79.41	-49.05	9.99
300	2.00# 0-100 NOSO DE		10.50	0-100	14000	200000000	IPipe =	9,410.25	10,030.00	10.569	35.12	0.03	10.547.28		97.33	-49.01	6.67
300		-		V 1	_					10.600	37.39	359.49	10.572.28		115.66	-49.08	7,39
			7			Total L		10,835,00		10,632	39.58	358.70	10,572.20		135.57	49.40	7.01
							Kelly =	0.00		10,663	42.39	359.58	10,620.73		155.89	49.70	9.25
Last Inspe	ected BHA Hours: 2	16.50				Total	Depth =	10,835,00		10,665	44.85	1.32	10,643.89		177.97	49.52	8.55
										10,093	48.03	1.83	10,663.87		198.97	-48.94	11.04
										10,724	53.18	2.18	10,696.23		238.34		10.11
													10,696.23	237.41	238.34	47.56	10.11
										Projection		60.00	10 701 00	202.70	221.07		
										10,835	53.18	2.18	10,734.30		284.67	-45.93	4.65
										Final Clo	sure =		4 feet @	348.72 Az		MW	D
										Planned	VS =	4,63	3 feet @	1.07 Az	zimuth	2000.0	
Contact							Conta	ct						Daily	Well Cost		\$61,261
Engineer	Mark A	Audas			432.620	1928	Compr	uter	Well	site 36		303-	285.2380	Cum	Drilling Cost	\$	2,142,696
Foreman	- Day Lymar	Nance			580-216	5-1492	Geolog	gist	Kim	Nordstog		432	571.7844		Compl Cost		\$0
Foreman	- Night Jody S	Solansky			210.334	8052	Landm	nan	Cod	T. Elliot		432	571,7806		Well Cost		2,142,696
Manager	Larry :	Seigrist			432.620	1934									Intangible Co		2,020,150
Safety Su	pt Fred J	ones			918.606	5.5904	N.								Tangible Cos	it	\$122,546
Safety Su	pt Sheld	on Waege	er		918.557	.4177								Cum	Mud Cost		\$123,477
Superinte	ndent Scott	ucas			432.894	5572											



BLM/BIA

Cimarex Energy Co.

Morning Drilling Report

AFE: Property : API#

0 4.280.544 3.859.000 4.280.544 8.139.544

253084 428085-023 01 42-389-33823

Prop TD

Well Name Objective EIGHTEENMILE 56-18 1H Wed, Jul 24, 2013 TX Reeves 18 / Bik 53 / Wolfcamp A H&P 218 24 18.250 19 culate & pump sweeps prepare hole to lay dn 5" dp and rur 10,835 10,728 396 25.55 15.50 Variance To Compl. Afe Variance To Drig. Afe Daily Drlg. B.C.P Drig. A.C.P Compl Casing Compl. Sub Ledger Description Vendor & Description Code Cost Cost Code Cost Cost Cost Cost 120,000 Roads & Location Preparation / Res DC.105 40,000 DIGC.105 40,000 40,000 Damages Mud/Fluids Disposal Charges 50.000 90.000 140.000 H&P 218 (Day Rate / FRC Charge) DIDC 115 27,135 515,565 -122,000 814,000 -176,435 DIGG 120 692,000 122,000 Day Rate Bits HDC:125 45.300 -39,700 DICC 125 85,000 85,000 92,709 148,000 173,000 IDC 135 -55,291 Water 009 / Completion Fluids 109 DIDC_140 8,905 -6,095 DICC 135 10.000 15 000 10,000 25,000 [] / Fas-Line [Transfer Pump] / Halib DIDC 145 Mud & Additives 9,920 123,477 176,523 300,000 300,000 18,410 231,000 Surface Rentals American Safety Services [H2S Paci DIDC 150 1,980 -32,590 175.843 3 157 DICC 145 179.000 10.000 189,000 DSTS, Formation Tests DIDC 160 1,005 15,075 37.000 Mud Logging Pason [Work Station] / West Texas V Open Hole Logging DIDC.180 63 859 23.859 40.000 40.000 180,000 245,000 79,080 100,920 Cementing, thru intermediate Casing 9,828 -20,173 DICC 160 -10,000 30,000 10,000 40.000 Casing Crews 15,924 35,000 15,000 50,000 HDC 200 -17,595 DICC.170 Extra labor, Welding, etc. -8,000 16.815 20.000 20,000 40 000 -30,000 113,000 30,000 3,700 143,000 Supervision. Brother consulting / Lyman Nance (S DIDC 210 96,200 -16,800 DICC 180 Cimarex [Satelite] [sat/phone/interco DIDC 280 Other misc expenses DIDC 220 -1.000 DICC 190 -60,000 1,000 60 000 61.000 8,000 8,000 2,000 10,000 Overhead HDC 225 Remedial Cementing DIDC 231 DICC 215 Mobilize & Demobilize DIDC 240 219 352 200.000 200.000 Directional Drilling Lenco [Septic] / Pason [Internet / Wo DIDC 245 51,080 368,920 DIGC 230 DIGC 250 Marine/Air Transportation DIDC.275 olids Control-Equip/Services KSW Oilfield Rentals [Float Pumps] -30,000 Well Control-Equip/Services Mc Guire Industries [Seperator & Ign DIDC 265] 1,455 42,415 22,585 DIGC 240 65 000 30,000 95.000 Fishing & Sidetrack Services Acme [Return whipstock tools] DIDC 270 450 124,600 14,600 DICC 246 110,000 110,000 52.000 52.000 180.00 180.000 180.000 -100,000 100,000 100,000 Completion Logging, Perforating 1.587.00 1.587.000 1,587,000 10.000 10.000 Legal/Regulatory/Curative DIDC:300 DICC:280 10.000 DIDC.435 2,917 96,198 DICC 220 -131,000 155,000 131,000 286,000 Construction For Well Equipmen WEA.110 DLEQ 110 404,659 404,659 404,659 Construction For Lease Equipment 3,154,658 Drive Pipe Water String **DWEB 135** Surface Casing WEB.140 DWEB.145 452 000 452,000 452,000 Production Casing Or Line DWEA.100 80,000 85,000 85,000 Tubing N/C Well Equipme WEA. 115 DWEB.115 15,236 38,000 45,000 DWEA:120 Wellhead, Tree, Chokes 75.000 75.000 iner Hanger, Isolal 25,000 25,000 25,000 Packer, Nipples DWEA 130 LEQ 100 Pumping Unit, Engine Lift Equipment (Bhp. Rods, Anchors) DLEG 105 -25.000 25,000 25,000 Metering Equipment LEQ 220 Tangible - Well Equipmen 122,546 328,000 939,000 N/C Lease Equipment DLEQ.115 LEQ 120 110,182 110,182 194,064 194,064 194,064 Battery (Heater Treater, Separator__) LEQ. 125 335.050 335.050 low Lines (Line Pipe From Wellhead) Offshore Production Structure For ... **DWEA 135** pipeline to Sales 797,886 Tangible - Lease Equipmen P&A Costs P&A

61,261

2.142.696 -1.716.304

Total Costs



Property API#:

253084 428085-023.01 42-389-33823 15:307 Aug 2, 2013 161R 1650s 3.22 18.25

Well Name						Drilling Re		/	/		Fr	OP TD		15,36
A STATE OF THE PARTY OF THE PAR	2				State/Cour	nty Section, Toy	inship, Rang	. /	28	biestive	Date			
	EIGHTE	ENMILE 56-1	8 1H		TX, Reeve	es 18/8	lk 53 /		Wol	fcamp A	(Fri	Aug	2, 201
ontractor	CONTRACTOR OF STATE	Rpt # DFS		Present Operat	90			3		MD I	VD Fo	otage	FT/HR	Mours
	H&P 218	33 27.25				8 Lateral @ 1439	4' Rev 2		-	14,394 10,	855 8	380	48.22	18,2
noitemne	100 % Shale			CG IG		one spring Sand @ 90	76 3	ord Bone Spring	g Sa	nd @ 10078	Wo	LF CAM	PA@1	0380
DP Size	e DC Size DP	Av DC Av Je	et Velocity Hi	IP/SQ Inch Bit Di	a Cost/	/Ft. 24 Hrs.	CosUFt (OA)	Lass	1 Shor	TVD Fra	c Gradient N	W	Max Allov	vable SICF
4.00	0.000 30	6 170	192	2.22	\$1	49.78	\$243.04		10,6	96	15.00		1,	057
Pump	PZ-11		GPS Pu	mp #2 - PZ-1	1	GPS	Pump #3 -				GPS	GPM		Off BP
6	5.00 11.00	65	3.837									249	1	3,700
Slow	Stroke Stand Pipe	EDR	Chake S	low Stroke	Stand Pipe	EDR Choke	Slow Strai	ke Stand Pi	ipe	EDR	Choké			On BP
														4,000
M	Win MWOut VSIn	VS Out PV	YP G	el Strength	AP(Fitrpte L	CM Mwin	MW Out	VS in VS.Out	E	Y YE	Gel Strengt	2	HTHE	LC
13	3.10 13.10 44	45 20	27 1	1 16	7.60	1								
C	ake Solids Liqu	id Sand	MBI P	H PM	P.E.	ME Cake So	lida Lic	guid Sand		AlkPOM W	95 E	S	CACL2	NACL
	1 17.00 83	00	9.	0.30	0.15	0.20 🖔	100	0.00						
	Chlorides Calcium	Oil Wate		Lime	Depth Check	10	Calcius		Wate	erPct 0:W	Lime		Depth Ch	ecked
	16,000 1,400	2.00 81.0	Zhanna.	Manualle			- Companies	and the same of th	Some	Name of Street	Annua.		-	-
_					13690@12		777.22 12				10000		2000000	2230
Bit		anufacturer	Туре	Serial #		Jet #2 Jet #3 Jet #4		et #5 Jet #7 J	et #8	TFA	WOB		Rotary F	
	1 2000 (212.1 1210)	th Tool Cr CD	STATE OF THE STATE	cdi040		11 10 10	10			0.4157	10-1		80 - 8	
Bit		otage Hours	FT/HR	Cum. Bit Hrs.	Inner Ou	uter Dull Local	tion Bea	iring Guage	Ott	her Reason	Diff Pres		Motor R	
10,8	835 14,394 3	559 61.25	58.11	277.75							150 - 3	2020.00	35-€	55
Dta	ag Torque, and Weight	2	basel			Mud additives in last 24	hours			- 3	Soil Farming	/ Mud Dis	0050	
ckup V	Neight 190,00	Diesel on Hand	i 7,	138 Eng Serv	rice 1	transporation	1 Scale	Charge	1	Daily Solids =		bbis @		\$0.
otating	Weight 160,00	Diesel Receive	d	Bariod	18,000	EP Mudlube	1 Drill-N							
ackoff	141-1-1-1			Distribut.	10,000	Er Mudiube	1 Dull-6	I-Slide	-1	Total Solids =		bbls @	2	\$0.
	Weight 140,00	Diesel Used To	day 1,5	551 Bara-Zan		Zeo-Gel	25 Drill-N	4-Slide	1	Total Solids = Daily Liquids =		bbls @		50
verage		0	1000	1000		The state of the s	2) My 1111 (C	I-Slide	1		2,86	Charles and	3	50
aximur	Drag 30,00 m Drag 32,00	0 Netu	ral Gan	1000		The state of the s	2) My 1111 (C	4-Slide	1	Daily Liquids =	- 1916/6	bbls @	0	50
aximur rque C	Drag 30,00 m Drag 32,00 On Bottom 8,00	Neter Reading	ral Gay	1000		The state of the s	2) My 1111 (C	4-Slide	1	Daily Liquids = Total Liquids =	BOP Pres	bbis @	D Ing	\$0 \$7,775
aximur rque C	Drag 30,00 m Drag 32,00	Neter Reading	ral Gay	1000		The state of the s	2) My 1111 (C	4-Slide	1	Daily Liquids =	- 1916/6	bbis @	0	\$0 \$7,775
aximur rque C rque C	Drag 30,00 m Drag 32,00 On Bottom 8,00	Neter Reading	ral Gay	1000		Zeo-Gel	25	otal	Code	Daily Liquids = Total Liquids = Last BOP Test:	80P Pres 07/28/20	bbls @ 0 bbls @ ssure Test	D Ing	\$0. \$7,775. ince:
aximun rque C rque C	Drag 30,00 m Drag 32,00 On Bottom 8,00 Off Bottom 4,00	Netur Netur Meter Reading MCF Used Tod	mai Gan Jay	551 Bara-Zan	DPlu 5	Zeo-Gel	25 T		Code	Daily Liquids = Total Liquids = Last BOP Test:	80P Pres 07/28/20	bbls @ 0 bbls @ ssure Test	ng Days s	\$0 \$7,775 ince:
rque C rque C aily set	Drag 30,00 m Drag 32,00 On Bottom 8,00 Off Bottom 4,00 Rotating	Netur Netur Meter Reading MCF Used Tod	rai Gan Jay Total	BHA# 7	Rotat	Zeo-Gel ting Sliding	25 T 3,	otal	1 2	Daily Liquids = Total Liquids = Last BOP Test: Time Dist MIRU/RDMO Drilling	80P Pres 07/28/20 ribution	bbls @ 0 bbls @ ssure Test	ng Days s	\$0 \$7,775 ince: CUI 133.0 277.7
aximur orque C orque C aily set ours	Drag 30,00 m Drag 32,00 20 m Bottom 8,00 20 m Bottom 4,00 30 m Bottom 880 30 m Bottom 380 30 m Bottom 380 30 m Bottom 380 30 m Bottom 380 30 m Bottom 30 m Botto	Netur Netur Meter Reading MCF Used Tod	Jay Total 880	BHA# 7	Rotat	Zeo-Gel ting Sliding 559	25 T 3, 6	otal 559	1 2 3	Daily Liquids = Total Liquids = Last BOP Test: Time Dist MIRU/RDMO Drilling Washing/Ream	80P Pres 07/28/20 ribution	bbls @ 0 bbls @ ssure Test	Days s	\$0. \$7,775. ince: CUM 133.00 277.75
aximun orque C orque C aily eet ours	Drag 30,00 m Drag 32,00 Dn Bottom 8,00 Df Bottom 4,00 Rotating 880 18,25	Netur Netur Meter Reading MCF Used Tod	rai Gan lay Total 880 18.25	BHA# 7 Feet Hours	Rotat 3. 61	Zeo-Gel ting Sliding 559	25 T 3, 6	otal 559	1 2 3 4	Daily Liquids = Total Liquids = Last BOP Test: Time Dist MIRU/RDMO Drilling Washing/Ream Lost Circulation	80P Pres 07/28/20 ribution	bbls @ 0 bbls @ ssure Test	Days s	\$0 \$7,775 ince: CUI 133.0 277.7 1.0 4.7
aximum rque C rque C aily eet ours OP	Drag 30,00 m Drag 32,00 Dn Bottom 8,00 Df Bottom 4,00 Rotating 880 18,25 48,22	Netur Netur Meter Reading MCF Used Tod	rai Gan lay Total 880 18.25	BHA# 7 Feet Hours ROP	Rotat 33. 61 58	Zeo-Gel ting Sliding 559 1.25 8.11	25 T 3, 6	otal 559	1 2 3 4 5	Daily Liquids = Total Liquids = Last BOP Test: Time Dist MIRU/RDMO Drilling Washing/Ream Lost Circulatior Cond. Mud & C	80P Pres 07/28/20 ribution	bbls @ 0 bbls @ ssure Test	Days s	\$0 \$7,775 ince: CUI 133.0 277.7 1.0 4.7 40.0
aximur rque C rque C ally eet ours OP Time Feet	Drag 30,00 m Drag 32,00 Drag 32,00 Drag 32,00 Drag Bottom 4,00 Rotating 880 18,25 48,22 100,00 100,00 Drag State S	Netur Netur Meter Reading MCF Used Tod	Total 880 18.25 48.22	BHA# 7 Feet Hours ROP %Time %Feet	Rotat 3. 61 58	Zeo-Gel ting Sliding 559 1.25 8.11 0.00	25 T 3, 6	otal 559	1 2 3 4 5	Daily Liquids = Total Liquids = Total Liquids = Last BOP Test: Time Dist MIRU/RDMO Drilling Washing/Ream Lost Groutation Cond. Mud & C Tripping	80P Pres 07/28/20 ribution	bbls @ 60 bbls @ 600 b	Days s	S0. \$7,775. ince: CUM 133.00 277.75 1.00 4.77 40.00 118.77
aximum orque C orque C aily eet ours OP Time Feet	Drag 30,00 m Drag 32,00 cm Drag 32,00 cm Bottom 8,00 cm Bottom 4,00 cm Bottom 880 cm Section 18,25 cm Section 48,22 cm Section 100,00 cm Drag 100,00 cm Dr	0 Neter Reading 0 MGF Used Tod Silding	fay Total 880 18.25 48.22 Chrc	BHA# 7 Feet Hours ROP %Time %Feet	Rotat 3. 61 58 100	Zeo-Gel ting Sliding 559 125 8.11 0.00 0.00 rs to 0600 Hours	25 T 3, 6, 5	otal 559 1.25 8.11	1 2 3 4 5 6 7	Daily Liquids = Total Liquids = Total Liquids = Last BOP Test: Time Dist MIRU/RDMO Drilling Washing/Ream Lost Circulatior Cond. Mud & C Tripping Lubricate Rig	80P Pres 07/28/20 ribution	bbls @ 60 bbls @ 600 b	Days s	\$0 \$7,775 ince: CU! 133.0 277.7 1.0 4.7 40.0 118.7 7.0
aximur rque C rque C ally eet ours OP Time Feet	Drag 30,00 m Drag 32,00 m Drag 32,00 m Drag 32,00 m Drag 32,00 m Bottom 8,00 m Bottom 4,00 m Bottom 880 18,25 48,22 100,00 100,00 Time Desc Drilling	0 Nature 10 Natu	Total 880 18.25 48.22 Chro	BHA# 7 Feet Hours ROP %Feet snological Acti	Rotat 3. 61 55 100 100 100 100 100 100 100 100 100	Zeo-Gel ting Sliding 559 1.25 8.11 0.00	25 T 3, 6 5	otal 559 1.25 8.11	1 2 3 4 5	Daily Liquids = Total Liquids = Total Liquids = Last BOP Test: Time Dist MIRU/RDMO Drilling Washing/Ream Lost Circulatior Cond. Mud & C Tripping Lubricate Rig Rig Repair	80P Pres 07/28/20 ribution	bbls @ 60 bbls @ 600 b	Days s	\$0 \$7,775 ince: CUI 133.0 277.7 1.0 4.7 40.0 118.7 7.0 29.5
aximum orque C orque C aily eet ours OP Time Feet	Drag 30,00 m Drag 32,00 Drag 32,00 Dr Bottom 8,00 Rotating 880 18,25 48,22 100,00 Time Desc Drilling	0 Nature 10 Natu	Total 880 18.25 48.22 Chro	BHA# 7 Feet Hours ROP %Feet snological Acti	Rotat 3. 61 55 100 100 100 100 100 100 100 100 100	Zeo-Gel ting Sliding 559 1.25 8.11 0.00 0.00 rs to 0600 Hours) 8 RotaryRPM=80 Mo	25 T 3, 6 5	otal 559 1.25 8.11	1 2 3 4 5 6 7 8 9	Daily Liquids = Total Liquids = Total Liquids = Time Dist Time Dist MIRU/RDMO Drilling Washing/Ream Lost Circulation Cond. Mud Schrick Tripping Lubricate Rig Rig Repair Cut Drig Line	BOP Pres 07/28/20 ribution	bbis @ 60 bbis @ 13 D	Days saily	\$0 \$7,775 ince: CUI 133.0 277.7 1.0 4.7 40.0 118.7 7.0 29.5 1.5
aximum orque C orque C aily eet ours OP Time Feet	Drag 30,00 m Drag 32,00 m Drag 38,00 m Drag	0 Nature of Siliding Rotating from 13.5 Rotating from 13.5	Total 880 18.25 48.22 Chro	BHA# 7 Feet Hours ROP %Time %Feet mological Acti 26 FT @ 52.00 ght=13.1 Visco	Rotat 3. 61 58 100 100 vity (0600 Hour ROP WOB=1:	Zeo-Gel ting Sliding 559 1.25 8.11 0.00 0.00 rs to 0600 Hours) 8 RotaryRPM=80 Mo	25 T 3, 6 5	otal 559 1.25 8.11	1 2 3 4 5 6 7 8 9	Daily Liquids = Total Liquids = Total Liquids = Time Dist MIRU/RDMO Drilling Washing/Rean Lost Circulatior Cond. Mud & C Tripping Lubricate Rig Rig Repair Cut Drig Line Deviation Surv.	BOP Pres 07/28/20 ribution	bbis @ 60 bbis @ 13 D	Days s	\$0 \$7,775 ince: CUI 133.0 277.7 1.0 4.7 40.0 118.7 7.0 29.5 1.5 37.7
aximum rque C rque C aily set ours OP Time Feet	Drag 30,00 m Drag 32,00 m Drag	Notating from 13.5 Rotating from 13.5	Total 880 18.25 48.22 Chros 114 to 13.540°, 2=300 Mud Weight NC 91.85 AZ .C 40° to 13.655°, \$140° to 1	BHA# 7 Feet Hours ROP %Time %Feet annological Activities Fig. 13.1 Viscondities 13.1 Viscondities 15.5 FT @ 31.67	Rotat 3. 61 55 100 100 vity (0600 Hour ROP WOB=1: poly=45 Gallor ROP WOB=5	Zeo-Gel ting Sliding 559 1.25 8.11 0.00 0.00 rs to 0600 Hours) 8 RotaryRPM=80 Mons Per Minute=250 Pu 0 RotaryRPM=80 Mo	25 T 3.3.6655 torRPM=65mp	otal 5559 1.25 8.11	1 2 3 4 5 6 7 8 9 10	Daily Liquids = Total Liquids = Total Liquids = Last BOP Test: Time Dist MIRU/RDMO Drilling Washing/Rean Lost Circulation Cond. Mud & C Tripping Lubricate Rig Rig Repair Cut Orlg Line Deviation Surv. Wreline Loggin	BOP Pres 07/28/20 ribution	bbis @ 60 bbis @ 13 D	Days saily	\$0 \$7,775 ince: CUM 133.00 277.75 1.00 4.77 40.00 118.77 7.00 29.55 1.55 37.77 23.00
aximur rque C rque C aily set ours OP Time Feet	Drag 30,00 m Drag 32,00 m Drag 32,00 m Drag 32,00 m Drag 32,00 m Bottom 8,00 m Bottom 4,00 m Bottom 880 m Bottom 18,25 m Bottom 18,25 m Bottom 100,00	Meter Reading MCF Used Tod Siliding Rotating from 13.5 Rotating from 13.5 Rotating from 3.5	Total 880 18.25 48.22 Chrc 114' to 13,540', 2 = 300 Mud Weight 10,635', 150 Mud Weight 150 Mud W	BHA# 7 Feet Hours ROP %Time %Feet woological Active 65 FT @ 52.00 ght=13.1 Viscous 11, Down Link: 15 FT @ 31.50 FT @ 31.5	Rotat 3. 61 55 100 100 vity (0600 Hour ROP WOB=1: poly=45 Gallor ROP WOB=5	Zeo-Gel ting Sliding 559 1.25 8.11 0.00 0.00 rs to 0600 Hours) 8 RotaryRPM=80 Mons Per Minute=250 Pu	25 T 3.3.6655 torRPM=65mp	otal 5559 1.25 8.11	1 2 3 4 5 6 7 8 9	Daily Liquids = Total Liquids = Total Liquids = Time Dist MIRU/RDMO Drilling Washing/Rean Lost Circulatior Cond. Mud & C Tripping Lubricate Rig Rig Repair Cut Drig Line Deviation Surv.	BOP Pres 07/28/20 ribution	bbis @ 60 bbis @ 13 D	Days saily	\$0 \$7,775 ince: CUM 133.0 277.7 1.0 4.7 40.0 118.7 7.0 29.5 1.5 37.7 23.0 32.7
aximur rrque C rrque C orque C DP Time Feet 0.50 0.50 3.00	Drag 30,00 m Drag 32,00 m Drag 38,00 m Drag 380 38,25 48,22 100,00 100,00 100,00 Time Desc Drilling Deviation Survey Drilling	Meter Reading More Used Tod Siliding Rotating from 13,5 Motor DiffPressure+4,000 Survey @ 13519,1 Rotating from 13,5 Motor DiffPressure-Pressure-3,850 Cr	Total 880 18.25 48.22 Chros 14' to 13,540', 2 = 300 Mud Wei, INC 91.85 AZ . C 40' to 13,635', 5 = 150 Mud Wei, ontrol Drill to Br	BHA# 7 Feet Hours ROP % Time % Feet whological Active for \$2.00 pht=13.1 Visco 11, Down Link 15 FT @ 31.67 pht=13.1 Visco ing Down INC	Rotat 3. 61 58 100 100 vity (0600 Hour ROP WOB=1: posity=45 Gallor Tool ROP WOB=14 Gallor	Zeo-Gel ting Sliding 559 1.25 8.11 0.00 0.00 rs to 0600 Hours) 8 RotaryRPM=80 Mons Per Minute=250 Pu 0 RotaryRPM=80 Mo	25 T 3.3.6655 torRPM=65mp	otal 5559 1.25 8.11	1 2 3 4 5 6 7 8 9 10 11 12	Daily Liquids = Total Liquids = Total Liquids = Time Dist Time Dist MIRU/RDMO Drilling Washing/Ream Lost Circulation Cond. Mud & C Tripping Lubricate Rig Rig Repair Cut Drig Line Deviation Surv Wireline Loggin Run Casing	80P Press	bbis @ 60 bbis @ 113 D	Days saily	\$0, \$7,775. ince: CUM 133,0 277,7; 1,0 4,7; 40,0 118,7; 7,0; 29,5; 1,5; 37,7; 23,0; 32,7; 7,5;
aximur rque C crque C crque C crque C crque C cours co	Drag 30,00 m Drag 32,00 m Drag	More Indiana Indiana More India	Total 880 18.25 48.22 Chros 14' to 13.540', 2=300 Mud Weight 18.25 140' to 13.635', 6=150 Mud Weight 19.05 M	BHA# 7 Feet Hours ROP %Time %Feet woological Active FF © \$2.00 11, Down Link 15 FT © 11.3 Visco 11, Down Link 15 FT © 39.7 Down Link 15 FT Ø 39.7 Down Link	Rotat 3.; 61 55; 100 vity (0600 Hour ROP W0B=1: osity=45 Gallor ROP W0B=1: osity=44 Gallor	Zeo-Gel ting Silding 559 1.25 8.11 0.00 0.00 rs to 0600 Hours) 8 RotaryRPM=80 Mons Per Minute=250 Pu 0 RotaryRPM=80 Mons Per Minute=250 Pu	25 T 3, 6 5 torRPM=65 mp	iotal 559 1.25 8.11	1 2 3 4 5 6 7 8 9 10 11 12 13 14	Daily Liquids = Total Liquids = Total Liquids = Last BOP Test: Time Dist MIRU/ROMO Drilling Washing/Rean Lost Circulatior Cond. Mud & C Tripping Lubricate Rig Rig Repair Cut Drig Line Deviation Surv Wireline Loggir Run Casing Cement Casing Cement Casing	80P Press	bbis @ 60 bbis @ 113 D	Days saily	\$0, \$7,775. ince: CUM 133.0 277.7; 1.0 4.7; 40.0 118.7; 7.0 29.5; 1.5; 37.7; 23.0; 32.7; 7.5; 8.0
aximur rrque C rrque C orque C DP Time Feet 0.50 0.50 3.00	Drag 30,00 m Drag 32,00 m Drag 32,00 m Drag 32,00 m Drag 32,00 m Bottom 8,00 m Bottom 4,00 m Bottom 4,00 m Bottom 880 m 18,25 m 48,22 m 100,00 m 100,00 m Time Desc Drilling Deviation Survey Drilling Drill	Meter Reading More Used Tod Siliding Rotating from 13,5 Motor DiffPressure+ Pressure - 2,0 Motor DiffPressure+ Pressure - 3,850 C Survey @ 13519,1 Rotating from 13,6	Total 880 18.25 48.22 Chro 14' to 13,540', 2 =300 Mud Wei INC 91.85 AZ .0 40' to 13,635', 6 =150 Mud Vei INC 95.1, AZ .0 18' to 13,730', 5 18' to 13,730', 5	BHA# 7 Feet Hours ROP %Tiene %Feet Hours 11, Down Link: 15 FT @ 31.67 ght=13.1 Viscoing Down INC 155.8-97, Down IS	Rotat 3.3. 61 58 100 100 100 100 100 100 100 100 100 10	Zeo-Gel ting Silding 559 1.25 8.11 0.00 0.00 8. RotaryRPM=80 Mons Per Minute=250 Pu 8. RotaryRPM=80 Mo	25 T 3. 6 5 5 torRPM=65 mp	iotal 559 1.25 8.11	1 2 3 4 5 6 7 8 9 10 11 12 13 14	Daily Liquids = Total Liquids = Total Liquids = Last BOP Test: Time Dist MIRU/RDMO Drilling Washing/Rean Lost Circulation Cond. Mud & C Tripping Lubricate Rig Rig Repair Cut Orlg Line Deviation Surv Wreline Loggin Run Casing Cement Casing Wait On Cernei	80P Press	bbis @ 60 bbis @ 113 D	Days saily	\$0 \$7,775 ince: CUI 133.0 277.7 1.0 4.7 40.0 118.7 7.0 29.5 37.7 23.0 32.7 7.5 8.0 27.5
aximurrque C rrque C aily set ours OP Time Feet 0.50 0.50 0.75	Drag 30,00 m Drag 32,00 m 32	Meter Reading MCF Used Tod Siliding Rotating from 13,5 Motor DiffPressure+4,000 Survey @ 13519,1 Rotating from 13,5 Gostrey @ 13614,1 Rotating from 13,6 Motor DiffPressure+1 Motor DiffPressure+1 Rotating from 13,6 Motor DiffPressure+1 Moto	Total 880 18.25 48.22 Chro 14' to 13,540', 2 =300 Mud Wei INC 91.85 AZ .0 40' to 13,635', 6 =150 Mud Vei INC 95.1, AZ .0 18' to 13,730', 5 18' to 13,730', 5	BHA# 7 Feet Hours ROP %Tiene %Feet Hours 11, Down Link: 15 FT @ 31.67 ght=13.1 Viscoing Down INC 155.8-97, Down IS	Rotat 3.3. 61 58 100 100 100 100 100 100 100 100 100 10	Zeo-Gel ting Silding 559 1.25 8.11 0.00 0.00 rs to 0600 Hours) 8 RotaryRPM=80 Mons Per Minute=250 Pu 0 RotaryRPM=80 Mons Per Minute=250 Pu	25 T 3. 6 5 5 torRPM=65 mp	iotal 559 1.25 8.11	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	Daily Liquids = Total Liquids = Total Liquids = Total Liquids = Time Dist MIRU/RDMO Drilling Washing/Ream Lost Circulation Cond. Mud & C Tripping Lubricate Rig Rig Repair Cut Drig Line Deviation Surv Wreline Loggir Run Casing Cement Casing Cement Casing Cement Casing NU BOP's	80P Press 07/28/20 ribution	bbls @ 0 bbls @ 10 bbls @	Days saily	\$0 \$7,775 133,0 277,7 40,0 4,7 40,0 118,7 7,0,0 29,5 32,7 7,5,6 8,0 8,0 12,7 15,7
aximur orque Corque Cor	Drag 30,00 m Drag 32,00 m Drag	Rotating from 13,5 Rotating from 13,6	Total 880 18.25 48.22 Chron 14' to 13.540', 2=300 Mud Weight 13.635', 15 15 16' 16' 16' 13.635', 15 16' 16' 16' 13.635', 15 15' 16' 16' 16' 13.635', 15 15' 16' 16' 16' 16' 16' 16' 16' 16' 16' 16	BHA# 7 Feet Hours ROP %Time %Feet sociological Active 66 FT @ 52 00 67 ff @ 11.0 Down Link: 13 T Viscoing Down INC 155 FT @ 31.6 3.33 ght=13.1 Viscoing Town INC 155 FT @ 53.33	Rotat 3. 61 55 100 wity (0600 Hour ROP WOB=1: costy=45 Gallor Tool ROP WOB=1: costy=44 Gallor Link Tool ROP WOB=1:	Zeo-Gel ting Silding 559 1.25 8.11 0.00 0.00 8. RotaryRPM=80 Mons Per Minute=250 Pu 8. RotaryRPM=80 Mo	25 T 3. 6 5 5 torRPM=65 mp	iotal 559 1.25 8.11	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	Daily Liquids = Total Liquids = Total Liquids = Time Dist Time Dist MIRU/ROMO Drilling Washing/Rean Lost Circulatior Cond. Mud & C Tripping Lubricate Rig Rig Repair Cut Drig Line Deviation Surv Wireline Loggir Run Casing Cement Casing Cement Casing Wait On Cemen NU BOP's Test BOP's	80P Press 07/28/20 ribution	bbls @ 0 bbls @ 10 bbls @	Days s ailty 3.25	\$0.55,775. GUM 133,01 133,01 133,01 133,01 14.77 1,01 118.77 1,01 12.95 1,51 37,71 29,51 8,01 12.77 12.22
aximur or que Corque Co	Drag 30,00 m Drag 32,00 m 36,00 m 36	Meter Reading MCF Used Tod Siliding Rotating from 13.5 Motor DiffPressure* Pressure* 23.850 C. Survey @ 13519.1 Rotating from 13.6 Motor DiffPressure* Pressure* 23.850 C. Survey @ 13614.1 Rotating from 13.6 Motor DiffPressure* Pressure* 21.708.1	Total 880 18.25 48.22 Chro 14' to 13,540', 2 =300 Mud Wei INC 91.85 AZ .C 40' to 13,635', 1 =150 Mud Wei ontrol Drill to Br INC 89.51, AZ .3 35' to 13,730', 3 =350 Mud Wei INC 90.12, AZ 3	BHA# 7 Feet Hours ROP % Time % Feet Hours 11, Down Link: 15 FT @ 31.67 155.897, Down IN 155 FT @ 33.9 155.75, Down Link: 155.75, Down Link: 155.77, Down Link: 155.75, Down Link: 155.75	Rotat 3.3. 61 58 100 1019 (0600 House ROP WOB=1: osity=45 Gallor Tool ROP WOB=4 Ink Tool	Zeo-Gel ting Siliding 559 1.25 8.11 0.00 0.00 rs to 0600 Hours) 8 RotaryRPM=80 Mons Per Minute=250 Pu 8 RotaryRPM=80 Mons Per Minute=250 Pu 8 RotaryRPM=80 Mons Per Minute=250 Pu	25 T 3. 6. 5. torRPM=65 mp torRPM=65 mp	otal 5559 1.25 8.11	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 20	Daily Liquids = Total Liquids = Total Liquids = Total Liquids = Time Dist Time Dist MIRU/RDMO Drilling Washing/Ream Lost Circulation Cond. Mud & C Tripping Lubricate Rig Rig Repair Cut Drig Line Deviation Sury Wreline Logic Run Casing Cement Casing Run Casing Cement Casing Test BOP's Test BOP's Test BOP's Test BOP's Test BOP's Oirectional Wor	80P Press 07/28/20 ribution	bbls @ 0 bbls @ 10 bbls @	Days s ailty 3.25	\$0.50 \$7.775. CUM 133.01 277.71. 1.00 477. 1.00 118.77. 7.00 29.50 37.77. 23.00 32.75. 37.76 27.56 8.00 27.56 27.56 20.56 20.56
aximur orque Corque Cor	Drag 30,00	Meter Reading MCF Used Tod Siliding Rotating from 13,5 Motor DiffPressure-4 Pressure-4,000 Survey @ 13519,1 Rotating from 13,6 Survey @ 13614,1 Rotating from 13,6 Survey @ 13708,1 Rotating from 13,6 Rotating from 13,6 Rotating from 13,6 Rotating from 13,7	Total 880 18.25 48.22 Chros 14' to 13,540', 2 = 300 Mud Weight 18.25 Mud W	BHA# 7 Feet Hours ROP % Time % Feet shoological Acti 26 FT @ 52.00 ght=13.1 Visco 11, Down Link 15 FT @ 31.67 ght=13.1 Visco 155.97, Down L 1	Rotat 3 61 58 100 100 vity (0600 Hou ROP WOB=1: osity=45 Gallor Tool ROP WOB=1: osity=44 Gallor Link Tool ROP WOB=1:	Zeo-Gei ting Sliding 559 1.25 8.11 0.00 0.00 rs to 0600 Hours) 8 RotaryRPM=80 Mons Per Minute=250 Pu 8 RotaryRPM=80 Mo	25 1 3.3 6.6 5 torRPM=65 mp torRPM=65 mp	otal 5559 1.25 8.11	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 20 21 22	Daily Liquids = Total Liquids = Total Liquids = Time Dist MIRU/RDMO Drilling Washing/Rean Lost Circulation Cond. Mud & C Tripping Lubricate Rig Rig Repair Cut Drig Line Deviation Surv Wreline Loggir Run Casing Cement Casing Cement Casing Cement Casing Usit On Cemen NU BOP's Test BOP's Directional Wor Weather Well Control	80P President of 1728/20 of 1728/	bbls @ 0 bbls @ 10 bbls @	Days s ailty 3.25	\$0.50 \$7.775. CUM 133.00 277.77. 1.00 118.77. 40.00 118.77. 7.51. 32.77. 7.51. 8.00 27.52. 12.72. 12.22. 0.57. 3.00 3.07. 3.00
aximur or que Corque Co	Drag 30,00 m Drag 32,00 m 32	Meter Reading MCF Used Tod Siliding Rotating from 13,5 Motor DiffPressure-4 Pressure-4,000 Survey @ 13519,1 Rotating from 13,6 Survey @ 13614,1 Rotating from 13,6 Survey @ 13708,1 Rotating from 13,6 Rotating from 13,6 Rotating from 13,6 Rotating from 13,7	Total 880 18.25 48.22 Chros 14' to 13,540', 2 = 300 Mud Weight 18.25 Mud W	BHA# 7 Feet Hours ROP % Time % Feet shoological Acti 26 FT @ 52.00 ght=13.1 Visco 11, Down Link 15 FT @ 31.67 ght=13.1 Visco 155.97, Down L 1	Rotat 3 61 58 100 100 vity (0600 Hou ROP WOB=1: osity=45 Gallor Tool ROP WOB=1: osity=44 Gallor Link Tool ROP WOB=1:	Zeo-Gel ting Siliding 559 1.25 8.11 0.00 0.00 rs to 0600 Hours) 8 RotaryRPM=80 Mons Per Minute=250 Pu 8 RotaryRPM=80 Mons Per Minute=250 Pu 8 RotaryRPM=80 Mons Per Minute=250 Pu	25 1 3.3 6.6 5 torRPM=65 mp torRPM=65 mp	otal 5559 1.25 8.11	1 2 3 4 4 5 6 6 7 8 8 9 10 11 12 13 14 15 16 20 21 22 23 24	Daily Liquids = Total Liquids = Total Liquids = Total Liquids = Total Liquids = Time Dist Time Dist MIRU/RDMO Drilling Washing/Ream Lost Circulation Cond. Mud & C Tripping Lubricate Rig Rig Repair Cut Drig Line Deviation Surv Wreline Loggir Run Casing Cement Casing Run Casi	07/28/20 07/28/20 ribution ing incirc ey gg	bbls @ 0 bbls @ 10 bbls @	Days s ailty 3.25	\$0.50 \$7.775 \$7.
Organic Corporation (Corporation Corporation Corporati	Drag 30,00	Meter Reading MCF Used Tod Siliding Rotating from 13.5 Motor DiffPressure Pressure-4, Motor DiffPressure Pressure-8, 850 C, Survey @ 15519.1 Rotating from 13.5 Motor DiffPressure Pressure-9, 850 C, Survey @ 13708.1 Rotating from 13.6 Rotating from 13.6 Motor DiffPressure Pressure-9, 870 C, Motor DiffPressure Motor DiffPressure Rotating from 13.7	Total 880 18.25 48.22 Chro 114' to 13,540', 2 =300 Mud Weig INC 91.85 AZ .C 40' to 13,635', 5 =150 Mud Weig INC 95,51, AZ 3 330' to 13,35' to 13,730' INC 90.12, AZ 3 30' to 13,825', 5 =350 Mud Weig INC 90.12, AZ 3 30' to 13,825', 5 =350 Mud Weig INC 90.12, AZ 3 30' to 13,825', 5 =350 Mud Weig	BHA# 7 Feet Hours ROP % Time % Feet Hours 13,1 Visco 11, Down Link 15 FT @ 11,67 155 FT @ 63,33 ght=13,1 Visco 155,75, Down L 15 FT @ 63,33 ght=13,1 Visco	Rotat 3.3. 61 58 100 100 100 ROP WOB=1: osity=45 Gallor Tool ROP WOB=1: ink Tool ROP WOB=1: osity=44 Gallor ROP WOB=1: osity=44 Gallor	Zeo-Gei ting Sliding 559 1.25 8.11 0.00 0.00 rs to 0600 Hours) 8 RotaryRPM=80 Mons Per Minute=250 Pu 8 RotaryRPM=80 Mo	25 1 3.3 6.6 5 torRPM=65 mp torRPM=65 mp	otal 5559 1.25 8.11	1 2 3 4 4 5 6 6 7 8 8 9 10 11 12 13 14 15 16 20 21 22 23 24	Daily Liquids = Total Liquids = Total Liquids = Interpolation of the control of	07/28/20 07/28/20 ribution ing incirc ey gg	bbls @ 0 bbls @ 10 bbls @	Days s ailty 3.25	\$0. \$0. \$0. \$0. \$0. \$0. \$0. \$0. \$0. \$0.

Next Cas	ing: 4,500 @ 15	367 Acc: 0	Spills: 0		Insp: 0
Next 24 h	ours; Drill/ Survey	s		Elevations-	GL: 2,866.0
24.00					
	Drilling		7, 95 FT @ 42.22 ROP WOB=13 RotaryRPM=85 Mot leight=13 Viscosity=46 Gallons Per Minute=238 Pum		
0.25	The second secon	Survey @ 14277" 90" 2.47 az		TOWNS OF STREET	
	Drilling	MotorDiffPressure=375 Mud W Pressure=4,000	', 95 FT @ 47.50 ROP WOB=13 RotaryRPM=80 Mot leight=13.1 Viscosity=50 Gallons Per Minute=50 Pure		
0.50		Survey @ 14183' 88.89* 1.91az			
2.00		MotorDiffPressure=375 Mud W Pressure=3,950	*, 95 FT @ 47:50 ROP WOB=15 RotaryRPM=80 Mot leight=13.1 Viscosity=44 Gallons Per Minute=238 Pur		
0.75	Directional Work	Downlink RSS			
0.25	Deviation Survey	Survey @ 14088' 88.52" 359.32	az e		
2.00	Drilling		', 94 FT @ 47.00 ROP WOB=16 RotaryRPM=80 Mot leight=13.1 Viscosity=43 Gallons Per Minute=238 Pu		
0.50	Deviation Survey	Survey @ 13993. INC 89.38, A			
1.50	Drilling		7,67 FT @ 44.67 ROP WOB=12 RotaryRPM=80 Mot eight=13.1 Viscosity=44 Gallons Per Minute=238 Pu Inc		
0.50	Directional Work	Down Link Tool			
0.50	Drilling		*, 28 FT @ 56.00 ROP WOB=18 RotaryRPM=80 Mot leight=13.1 Viscosity=44 Gallons Per Minute=250 Pur		
0.75	Deviation Survey	Survey @ 13898, INC 89.07, A			
1.50	Drilling		', 95 FT @ 63.33 ROP WOB=18 RotaryRPM=80 Mot leight=13.1 Viscosity=44 Gallons Per Minute=250 Pu		
0.50	Lubricate Rig	Lubricate Rig, Survey @ 13803	, INC 89.88, AZ 359.39		2

Vext 24 h	ours: Drill/ Surveys					Elev	ations- GL	:2,866.00 DF	25.00	KB: 25.00	GHG E	missions
Next Cas	ing: 4.500 @ 15367 Acc: 0		Spil	ls: 0			In	sp: 0			1,	190.00
Casing	Description	From	То	ID	Drift	Burst	Collapse	Pipe Body Yield	Joint Strength	Capacity	Displ	Plugged Displ
SURF	9-5/8" 40# J-55 LT&C Special Drift Casing	0	3,492	8.835	8.750	3,950	2,570	630,000	520,000	0.07582	0.01455	0.09038
INTM	7" 32# L-80 LT&C Casing	1	3,499	6.094	5.969	9,050	8,600	745,000	672,000	0.03608	0.01164	0.04772
INTM	7" 32# L-80 LT&C Bond-Coat Casing	3,499	7,015	6.094	5.969	9,050	8,600	745,000	672,000	0.03608	0.01164	0.04772
INTM	7" 32# L-80 LT&C Casing	7,015	9,991	6.094	5.969	9,050	8,600	745,000	672,000	0.03608	0.01164	0.04772
INTM	7" 32# L-80 BT&C x LT&C CrossOver	10,033	10,077	6.094	5.969	9,050	8,600	745,000	791,000	0.03608	0.01164	0.04772
INTM	7" 32# L-80 BT&C Casing	10,077	10,780	6.094	5.969	9,050	8,600	745,000	791,000	0.03608	0.01164	0.04772



Cimarex Energy Co.

Morning Drilling Report

AFE: Property :

253084 428085-023.01

42-389-33823 Prop TD

Fri, Aug 2, 2013

	EIGHTE	ENMIL	E 56-	18 11	ł		Т	X, Reeves	18	/ Blk
Contra	tor / Rig H&P 218	33	27.	S	ODFS 28	Present Ope		ill 6 1/8 L	ateral @ 14	394
Qty	BHA 7		Wt	Grd	Thread	OD	ID	Length	CUM	
.1	Smith Tool Co CDIS513	UE			3 1/2 res	6.000		0.92	0.92	1
1	RSS				3 1/2 if	6.000		12.89	13.81	Dep
1	HEL LWD				3 1/2 if	4.750	2.220	22.22	36.03	12.4
- 1	Filter Sub				3 1/2 if	4.810	2.750	4.69	40.72	12.5
- 1	Motor QLE 7/8 stage 2.1	lobe 21r			3 1/2 if	5.940	2.750	25.78	66.50	1,000
1	NM Stabilizer				3 1/2 if	5.000	2.220	4.99	71.49	12,6
1	X/O				3 1/2 if x	4 5.500	2.375	2.41	73.90	12,7
7							вна =	73.90		12,8
426	4" 14# S-135 NC40 DP		14.0	S-135	NC40	4.000	3.340	14,415.60	14,489.50	12,9
426						Drill	iPipe =	14,415.60		13,0
						Total L	ength =	14,489,50		13,1
							Kelly =	-95.50		13,2
Last	nspected BHA Hours:	277.75				Total	Depth =	14,394.00		13,3

,,	1 000 001			Portoning Cs.			i, rug .	.,
4	394' Rev	2		MD 14,394	I¥₽ 10,855	Footage 880		Hours 18.25
-		MD/TVD 0 / 10,270		Pen Pt MD/7 11,297 / 10,	0.00		t MD/TVD / 10,865	Pilot
	Depth	Incl.	Azi.	TVD	VS	N/-S	E/-W	DLS
	12,476	87.40	2.50	10,855.37	1907.38	1907.94	-12.32	3.44
	12,571	89.13	5.28	10,858.25	2002.21	2002.67	-5.88	3.45
	12,666	91.19	4.87	10,857.98	2096.97	2097.29	2.53	2.21
	12,761	91.42	4.17	10,855.82	2191.77	2191.97	10.01	0.78
	12,856	90.80	3.31	10,853.98	2286.65	2286.75	16.21	1.12
	12,950	90.19	2.49	10,853.17	2380.60	2380.62	20.96	1.09
	13,045	90.49	2.38	10,852.60	2475.57	2475.53	25.00	0.34
	13,140	90.18	0.67	10,852.05	2570.56	2570.49	27.53	1.83
	13,235	90.00	0.80	10,851.90	2665.56	2665.49	28.74	0.23
	13,329	89.63	1.00	10,852.20	2759.56	2759.47	30.22	0.45
	13,424	91.42	2.80	10,851.33	2854.54	2854.41	33.37	2.67
	13,519	91.85	0.01	10,848.62	2949.49	2949.33	35.70	2.97
	13,614	89.51	358.97	10,847.49	3044.44	3044.32	34.85	2.70
	13,708	90.12	359.75	10,847.80	3138.39	3138.31	33.80	1.05
	13,803	89.88	359.39	10,847.80	3233.36	3233.31	33.09	0.46
	13,898	89.07	357.84	10,848.67	3328.26	3328.27	30.79	1.84
	13,993	89.38	358.91	10,849.95	3423.15	3423.22	28.10	1.17
	14,088	88.52	359.32	10,851.69	3518.08	3518.19	26.63	1.00
	14,183	88.89	1.91	10,853.84	3613.04	3613.15	27.65	2.75
	14,277	90.00	2.47	10,854.75	3707.02	3707.08	31.24	1.32
	Projection 14,337	To Bit: 90.00	60.00 2.47	10,855,33	3767.00	3767.03	33.54	0.81
	Final Clo	sure =	3,707.21	feet @	0.48 Azi	muth	1000	
	Planned	VS =	4,633.23	feet @	1.07 Azi	muth	MWC	,

Wolfcamp A

Contact		
Engineer	Mark Audas	432.620.1928
Foreman - Day	Randy Payne	580.243.9241
Foreman - Night	Jody Solansky	210.334.8052
Manager	Larry Seigrist	432.620.1934
Safety Supt	Fred Jones	918.606.5904
Safety Supt	Sheldon Waeger	918.557.4177
Superintendent	Scott Lucas	432.894.5572

Contact Computer Geologist Wellsite 36 303-285.2380 Kim Nordstog Cody T. Elliot 432.571.7844 432.571.7806 Landman

\$131,810 \$3,492,423 \$5,960 \$3,498,383 \$2,895,360 \$603,022 \$254,894 Daily Well Cost Cum Drilling Cost Cum Compl Cost Cum Well Cost Cum Intangible Cost Cum Tangible Cost Cum Mud Cost



AFE: Property : API # : Prop TD : 253084 428085-023.01 42-389-33823 15,367

BLM/BIA: Well Name					State/County Section, Township, Range				Prop TD: 15,36					
EIGHTEENMILE 56-18 1H Contractor / Rig Rpt # DFS ODFS Present Cov			TX, Reeves 18 / Blk 53 /				2	Wolfcamp A		Fri, Aug				
H&P 218	33 27.250 28			Fresent sper		1/8 Later	al @ 14394' Rev 2		14,39				18.25	
Sub Ledger Description	v	/endor & Descr	ription	B.C.P Code	Daily Drlg. Cost	Cum Drig. Cost	To Drig. Afe	A.C.P Code	Daily Compl. Cost	Cum Compl. Cost	Variance To Compl. Afe	Dry Hole Cost	After Casing Point	Comp Well Cost
Roads & Location Preparation / Restor				DIDC_100	-	103,396		DICC 100		-	-15,000	120,000	15,000	135
Damages				DIDG.105				DIGC.105	-			40,000	-	40
Mud/Fluids Disposal Charges	DOMESTICATION OF			DIDC 255	-	11,010		DICC 235		-	-90,000	50,000	90,000	140
Day Rate	H&P 21	16 [Day Rate / FR	RC Charge]	DIDC 115	27,135	759,780	67,780	DICC.120	196		-122,000	692,000	122,000	814
Misc Prep Cost (Mouse Hole, Rat Hole				DIDC-120	-	45,104	5.104			+		41,000	+	41
Bits				DIDG.125		45,600		DIGG.125	-			85,000		85
Fuel				DIDG 135	-	138,746	9,254		-		-25,000	148,000	25,000	173
Water 009 / Completion Fluids 109				DIDC:140		9,979		DIGC 135			-10,000	15,000	10,000	25
Mud & Additives		-Line [Transfer Pi			15,527	254,894	-45,106				-	300,000		300
Surface Rentals		an Safety Service			810	25,700		DICC.140	3	-	-180,000	51,000	180,000	231
Downhole Rentals	Weathe	erford [4" DP & To	ools]	DIDC_155	1,760	192,698	13,698	DICC.145		-	-10,000	179,000	10,000	189
DSTS, Formation Tests				DIDC.160										
Mud Logging	Pason [[Work Station] / W	Nest Texas V		1,005	24,120	-12.880					37,000		37
Open Hole Logging				DIDC.180	-	63,859	23,859					40,000		40
Cementing, thru Intermediate Casing				DIDG 185		133,918		DICC 155			-65,000	180,000	65,000	245
Tubular Inspections	EL Farn	mer [2 pipe rack] /	/ Wibanks T		209	11,709		DICC,160	1,276	1,276	-6,724	30,000	10,000	40
Casing Crews				DIDC.195	-	47,861		DICC 165			-15,000	35,000	15,000	50
Extra labor, Welding, etc.				DIDG.200	-	2,770	-17,230	DICC.170	-		-8,000	20,000	8,000	28
Trucking	Villa & 1	Sons Forkiff, Tru	uck] / Villa ar	DIDC.205	-	16,815	3.185	DIGC.175	4,400	4,400	-15,600	20,000	20,000	40
Supervision	Jody Sc	olansky (Supervis	sion] / Randy	DIDG 210	3,700	129,500	16,500	DICC.180	-	-	-30,000	113,000	30,000	143
Trailer, Camp & Catering		x [Satelite] [sat/ph			455	28,191		DICC 255			-8,000	48,000	8,000	56
Other misc expenses				DIDC:220	-	16		DIGG,190	-		-60,000	1,000	60,000	61
Overhead				DIDC:225		8,000		DICC 195			-2,000	8,000	2,000	10
Remedial Cementing				DIDC.231		(4)		DICC.215	(4)			+		
Mobilize & Demobilize				DIDC 240		219,352	19,352					200,000		200
Directional Drilling	Lenco f	[Septic] / Pason [I	Internet / W		59,480	236,437	-183,563					420,000		420
Dock, Dispatcher, Crane	1			DIDC.250	15,195	200,000		DICC 230						
Marine/Air Transportation				DIDC 275				DICC 250						
Solids Control-Equip/Services	KSWA	liffeld Rentals [Flo	nat Present	100000000000000000000000000000000000000	7,021	24,786	-5.214	month delice		-		30,000		30
Well Control-Equip/Services		re Industries (Sep			2,755	76,987		DICC.240			-30,000	65,000	30,000	95
rves Control-Equiproervices Fishing & Sidetrack Services	- our	- navantes (oeb	maior a ign	DIDG.270	4,700	124,600		DICC 245			100,000	110,000	30,000	110
Completion Rig				MUNICIPALITY		124,000	79,000	DICC.115			-52.000	110,000	52,000	52
Completion Rig Coll Tubing								DICC.250			-180,000		180,000	180
									-	- 1		-		
Completion Logging, Perforating								DICC:200	-		-100,000		100,000	100,
Stimulation								DICC 210	-		1.587.000		1,587,000	1,587
Legal/Regulatory/Curative				DHDC:300	-	10,000		DICC 280	-			10,000		10,
Well Control Insurance				DIDC 285	-	5,000						5,000		5
Contingency				DIDC.435	5,993	137,591	-17,409	DICC 220	284	284	-130,716	155,000	131,000	286
Construction For Well Equipment								DWEA 110		- 1		+	-	
Construction For Lease Equipment								DLEG 110		à à	404.659		404,659	404
Construction For Sales P/L								DICC.265	-				-	
Intang	ible				125,860	2,889,401	-369,619		5,960	5,960	-3.149,690	3,248,000	3,154,659	6,402
Drive Pipe	-			DWEB.150										-
Conductor Pipe				DWEB 130										
Water String				DWE8.135							100	12		
Surface Casing				OWEB 140		107,310	-6.690					114,000		114
Intermediate Casing				DWEB.145		447,792	4,208					452.000		452
AND A SHARE OF A PARTY OF THE P	-			DISEB.140		447,792	14,200				80.000	402,000	80.000	
Production Casing Or Liner								DWEA 100 DWEA 105			-80,000		80,000	80,
Tubing											-85,000	-	85,000	85,
N/C Well Equipment				more water			70.74	DWEA 115	-					-
Wellhead, Tree, Chokes				DWEB.115	-	47,920	2.920	DWEA 120	-	-	-38,000	45,000	38,000	83,
Liner Hanger, Isolation Packer				DWEB.100	-	-		DWEA 125		-	-75,000		75,000	75,
Packer, Nipples					-			DWEA 130	-		-25,000	10	25,000	25,
Pumping Unit, Engine								DLEQ:100						
Lift Equipment (Bhp, Rods, Anchors)								DLEQ 105	-		-25,000		25,000	25,
Metering Equipment								DLE0.220		-		+		
Tangible - Wel	Equip	ment			0	603,022	-7,978		0	0	-328,000	6 11,000	328,000	939
											200 000		150 500	
N/C Lease Equipment								DLEQ 115	-		-158,589		158,589	158
Tanks, Tanks Steps, Stairs								OLEQ.120	-	-	-110,182		110,182	110,
Battery (Heater Treater, Separator)	11/1							DLEQ 125	-		-194,064		194,064	194,
Flow Lines (Line Pipe From Wellhead)								DLEQ 130		-	-335,050		335,050	335,
Offshore Production Structure For								DWEA 135	+		-		-	
Pipeline to Sales								DWEA.140	-	*	11	: 4		
Tangible - Leas	e Equip	ment			0	0	0		0	0	-797,895	0	797,885	797
	_													
BA Costs				DIDC:295	-			DICC 275	-					
P&	A				0	0	0		0	0	0	0	0	
								1	- 1					
Total C	osts				125,850	3,492,423	-366,577		6,960	5,960	-4.274.504	3,859,000	4,280,544	8,130

File No. M=1/1893

Cinquex Drilling

Report

Date Filed: 8-2-13

Jerry E. Patterson Commissioner

By CDD M

Permit

MF 111895

RAILROAD COMMISSION OF TEXAS API No FORM W-1 07/2004 42-389-33823 OIL & GAS DIVISION Drilling Permit # Permit Status Approved 764275 APPLICATION FOR PERMIT TO DRILL, RECOMPLETE, OR RE-ENTER SWR Exception Case/Docket No. This facsimile W-1 was generated electronically from data submitted to the RRC A certification of the automated data is available in the RRC's Austin office 1. RRC Operator No. 2. Operator's Name (as shown on form P-5. Organization Report) 3. Operator Address (include street city state zin): 153438 CIMAREX ENERGY CO. 4 Lease Name 5 Well No. FIGHTEENMILE 56-18 1H GENERAL INFORMATION X New Drill Recompletion Re-Enter Reclass Field Transfer 6. Purpose of filing (mark ALL appropriate boxes): Amended Amended as Drilled (BHL) (Also File Form W-1D) 7. Wellbore Profile (mark ALL appropriate boxes): ☐ Vertical X Horizontal (Also File Form W-1H) Directional (Also File Form W-1D) Sidetrack 8 Total Depth 9. Do you have the right to develop the X Yes No 10 Is this well subject to Statewide Rule 36 (hydrogen sulfide area)? X No Ves minerals under any right-of-way? 10400 SURFACE LOCATION AND ACREAGE INFORMATION 11 RRC District No. 12. County X Land Bay/Estuary 13. Surface Location Inland Waterway REFVES MENTONE 14 This well is to be located miles in a direction from which is the nearest town in the county of the well site. 16. Block 17. Survey 18. Abstract No. 19. Distance to nearest lease line: 15 Section 20. Number of contiguous acres in 56 T3S lease, pooled unit, or unitized tract: 18 T&P RR CO/RITCHEY, A S A-3372 200 6413 425 500 ft from the 21 Lease Perpendiculars: line and ft from the 500 425 ft from the ft from the line and 22. Survey Perpendiculars: X No 23. Is this a pooled unit? Yes X No 25. Are you applying for Substandard Acreage Field? Yes (attach Form W-1A) 24. Unitization Docket No. List all fields of anticipated completion including Wildcat. List one zone per line. FIELD INFORMATION 28 Field Name (exactly as shown in RRC records) 26. RRC 27. Field No. 29. Well Type 30 Completion Depth 31 Distance to Nearest 32. Number of Wells on District No. Well in this Reservoir this lease in this Reservoir 08 10400 0.00 1 71052900 PHANTOM (WOLFCAMP) Oil or Gas Well BOTTOMHOLE LOCATION INFORMATION is required for DIRECTIONAL, HORIZONTAL, AND AMENDED AS DRILLED PERMIT APPLICATIONS (see W-1H attachment) Remarks Certificate: I certify that information stated in this application is true and complete, to the best of my knowledge. Martina Warren, Regulatory Tech Jun 07, 2013 Date submitted Name of filer (432)620-1960 mwarren@cimarex.com **RRC Use Only** Data Validation Time Stamp: Jun 11, 2013 8:20 AM('As Approved' Version) Phone E-mail Address (OPTIONAL)

Permit Status:

Approved

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

RAILROAD COMMISSION OF TEXAS OIL & GAS DIVISION

Form W-1H

07/2004

Supplemental Horizontal Well Information

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

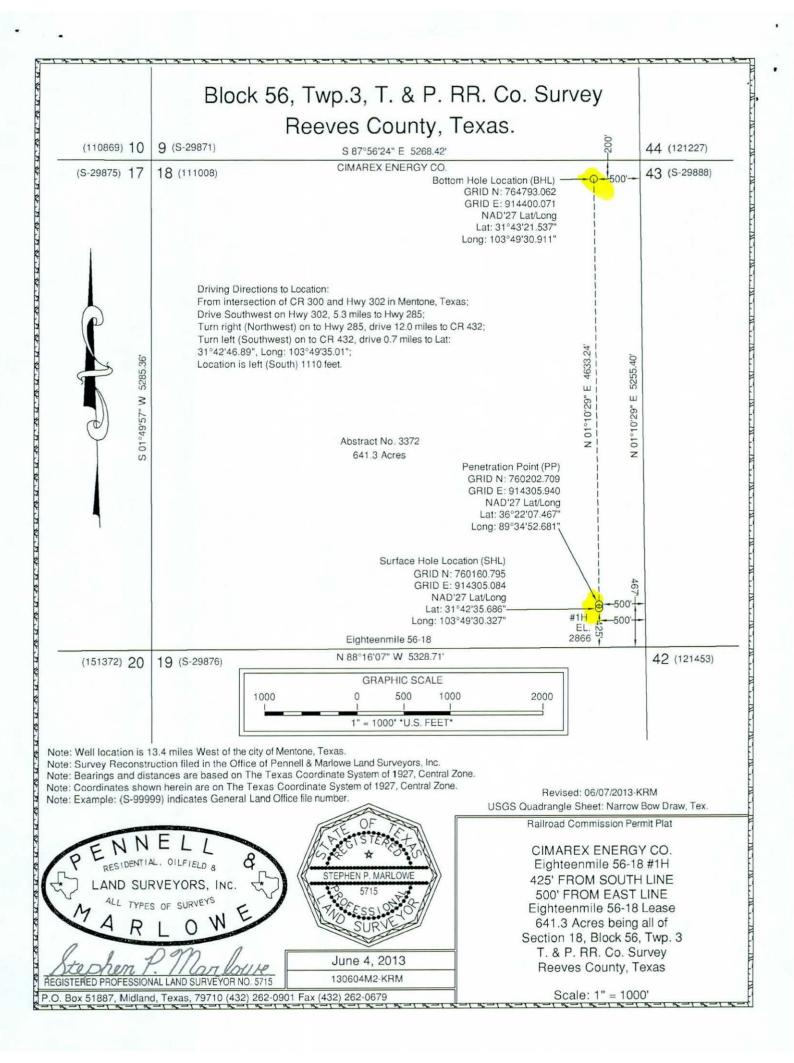
Permit #

764275

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

Approved Date: Jun 11, 2013

RRC Operator No 153438	Operator's Name (exact CIM	ly as shown on form P-5, Or AREX ENERGY CO	**************************************	3. Lea	ase Name EIGHTEEN	4. Well No.	
ateral Drainhole	e Location Information				north de la contraction de la	terror (illustration)	
. Field as shown on	Form W-1 PHANTO	M (WOLFCAMP) (Fi	eld # 71052900	, RRC [District 08)		
Section 18	7. Block 56 T3S	8. Survey T&P RR	CO/ RITCHEY,	AS		9. Abstract 3372	10. County of BHL REEVES
	Lease Line Perpendiculars 200 ft. from the Juryey Line Perpendiculars	N	line. and	500	ft. from the	E	line
-	200 ft. from the _	N	line, and	500	ft. from the	E	line
13. Penetration	n Point Lease Line Perpendic	ulars					
	467 ft. from the	S	line, and	500	ft, from the	E	line



File No. MF 111895

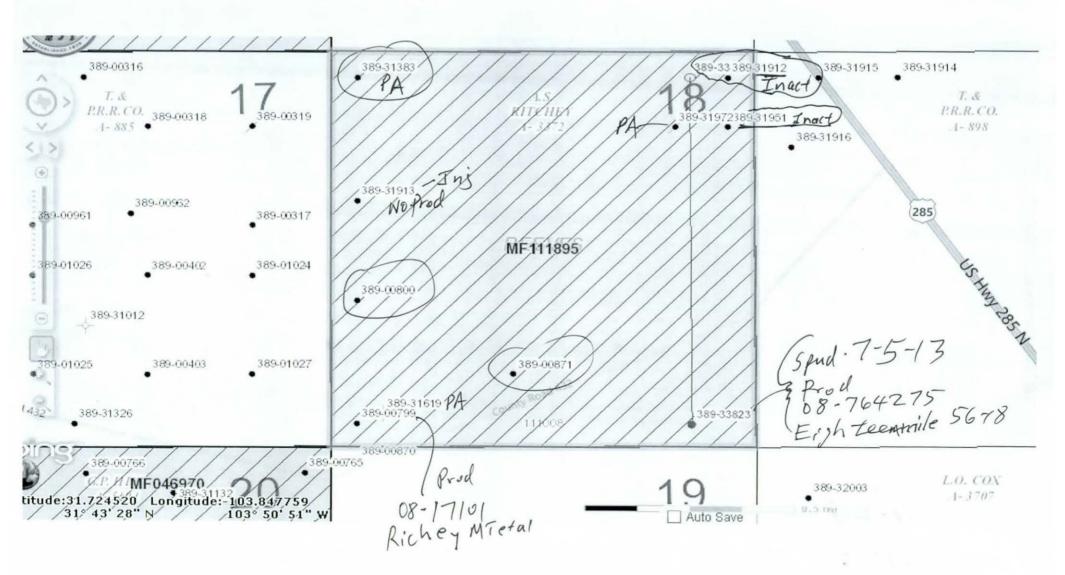
Fermal 389-33823

Eighteen Nile 56-18 #1H

Date Filed: 6/7/13

Jerry E. Patterson, Commissioner

By SSD



Play

Date Filed: 6-11-14

Jerry Patterson, Commissioner

By

MF	CBonn
	Date analysis done B
I. If this is an HROW lease or an Unleased HROW agreement (32.207): Do not process this until at least two years past the primary term. If this is a Free Royalty:	6-11-14
Do not process until there has been no revenue for at least two years.	F 181
 Search for this lease on GIS. Get a picture of how this lease relates to the area around it. 	
III. Search for lease in Alamo	
If this lease is NOT in an Active or Producing unit, go to V. below.	
If this lease has a related unit, go to IV. below.	
IV. Check Units in Alamo	
If this lease is in an Active or Producing Unit: What is Unit # Temporary	or Permanent
If Temporary, has the term expired? Yes No If No, when is expired.	
If Temporary and the term has expired, are there other leases involved?	
[Note: If the unit is expired but is still showing Active or Producing in Alamo, upon make a note here that all the leases in the unit, regardless of anniversary month, mu	late the Status of the Unit in Alamo
If Unit is Permanent and all leases in Unit are terminated, Terminate the Unit in Al	amo and set out the reason in Comm
check here if there are extra sheets with more units.	
V. Check for wells producing under this lease or unit wells in which this lease	is/was a participant.
Well Name API# RRC# Production	Revenue reported within last 2 month
Well Name API# RRC# Production from mo/y 10/13	7 To mo/yr (Yes) 4
check here if there are extra sheets with more wells.	

If it has been more than 60 days since production has been reported, are there any signs (on Alamo or in the file) of a workover in progress _____ or a new well being drilled ____ [check with geologist to ask if he is receiving workover or drilling reports.] or a shut-in royalty payment that has been tendered ____?

If workover or new well is in progress, make an appropriate note in Comments in Alamo under this lease # and make a note on the Anniversary Report. Go to the next lease.

If a shut-in royalty has been tendered, turn this lease status over to the shut-in royalty analyst and make a note on the Anniversary Report. Go to the next lease.

If none of the above, go to VI. below.

File No. M/= 111895

Worksheet / Bod

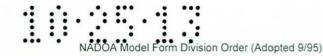
Date Filed: 611-14

Jerry Patterson, Gommissioner

(159.45)

Ву____





CIMAREX ENERGY CO 202 S Cheyenne Ave, Suite 1000 Tulsa, OK 74103

Date: 10/22/2013

MF 111895

Effective Date: 09/01/2013

030618

Owner(s) FAX Number:

Owner(s) Email Address:

Owner: COMMISSIONER OF THE GENERAL

LAND OFFICE STATE OF TEXAS LOCKBOX ACCOUNT PO BOX 12873 AUSTIN, TX 78711-2873 Description: EIGHTEENMILE 56-18 1H - ENT Complete Property Description Listed Below Production: _X Oil ___X Gas ____ Other: Owner COMMISSIONER OF THE GENERAL Owner Number: 030618 Interest Type Code: ST1 Interest Type: State Interest Decimal Interest: 0.12500000 **Property Description** EIGHTEENMILE 56-18 1H Property: 428085-023.01 Operator: CIMAREX ENERGY CO Location: Reeves TX Map Reference Information Reeves, TX US SECTION: 18,BLOCK 56,T-3,T&P, REEVES CTY **TEXAS** The undersigned certifies the ownership of the decimal interest in production proceeds as described payable by (Payor): CIMAREX ENERGY CO Payor shall be notified, in writing, of any change in ownership, decimal interest, or payment address. All such changes shall be effective the first day of the month following receipt of such notice. Payor is authorized to withhold payment pending resolution of a title dispute or adverse claim asserted regarding the interest in production claimed herein by the undersigned The undersigned agrees to indemnify and reimburse Payor any amount attributable to an interest to which the undersigned is not entitled. Payor may accrue proceeds until the total amount equals \$100.00, or as required by applicable state statute. This Division Order does not amend any lease or operating agreement between the undersigned and the lessee or operator or any other contracts for the purchase of oil or gas. In addition to the terms and conditions of this Division Order, the undersigned and Payor may have certain statutory rights under the laws of the state in which the property is located. Owner(s) Signature(s): Owner(s) Tax I.D. Number(s): KEEP THIS COPY Owner(s) Daytime Phone #:

File	No	11695	
_	DIV	ISION ORDER	
Date	Filed:	10/25/13	
Bv	Јеггу Е.	Patterson, Commiss	sioner



15.

TULLS IN THE

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

泛峰 的复数 医乳头中部的 五

Sender: Please print your name, address, and ZIP+4 in this box



Texas General Land Office

Jerry Patterson, Commissioner P.O. Box 12873 Austin, Texas 78711-2873

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
 Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. 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 mailplece, or on the front if space permits. 	A. Signature A. Signature Agent Addresse B. Received by (Printed Name) C. Date of Deliver
1. Article Addressed to: Cimarex Energy Co. Attn: Relacca Johnson 2025 Cheyenne Ave Ste	D. Is delivery address different from item 1? Yes If YES, enter delivery address below: No
2025 Cheyenne Ave Stel 1000 TULSA, OK 14103-3001	3. Service Type Certified Mail Registered Return Receipt for Merchandis Insured Mail C.O.D. 4. Restricted Delivery? (Extra Fee) Yes
2. Article Number (Transfer from service label)	0 0000 5379 0561
PS Form 3811 February 2004 Demostic Pot	urn Pagaint 100000 to 11 to



Texas General Land Office Reconciliation Billing

Jerry Patterson, Commissioner

PO Box 12873 Austin, TX 78711-2873 (800) 998-4456 7:30 - 5:30 M-F

FILE CONV

Cimarex Energy Co.

Attn: Rebecca Johnson

202 S Cheyenne Ave Ste 1000

Tulsa, OK 74103-3001

Billing Date: 11/20/2014

Billing Due Date: 12/20/2014

Customer Number: C000044010

Invoice	Mineral File	Gas Royalty	Oil Royalty	Penalty	Interest	Total Due
15I00170	MF111895	\$0.00	\$2,135.20	\$213.52	\$67.13	\$2,415.85
Total Due		\$0.00	\$2,135.20	\$213.52	\$67.13	\$2,415.85

Penalty and interest have been calculated thru 11/30/2014. Payment remitted after 11/30/2014 will result in additional penalty and interest charges.

Contact Info: Andrea Charlton (512) 463-5190 or andrea.charlton@glo.texas.gov

NOTICE

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

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

Detach and return with payment

Reconciliation Billing

Cimarex Energy Co.

Billing Date: 11/20/2014

Billing Due Date: 12/20/2014

Customer Number: C000044010

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
15I00170	MF111895	\$0.00	\$2,135.20	\$213.52	\$67.13	\$2,415.85
Total Due		\$0.00	\$2,135.20	\$213.52	\$67.13	\$2,415.85
Amt. Paid						

Energy Financial Management SMAR Activity / Invoicing Approval

Auditor/Account Examiner: Andrea Charlton

Company Name:

CIMAREX ENERGY CO.

Customer Number:

C000044010

Mineral File #:

MF111895

Transaction Type:

Volume Reconciliation

Other / Invoice #:

Previous Amount	Current Amount	Date	AE / Reviewer's Notes	Reviewer's Signature	AR Notes
	\$2,415.85	11/05/14	Under reported/paid royalty	MM 11/13/2014	

All original invoices must be approved.

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

Customer ID:

C000044010

Invoice Number:

GLO Lease: MF111895

GLO Review: Review Period: CIMAREX ENERGY CO.

JANUARY THROUGH DECEMBER 2013

Auditor/AE:

Acharlto

Billing Date:

11/5/2014 11/30/2014

P&I Calculation Date:

oyalty Rate:	12.50%		
151	103	Arrests.	1.6

AND DESCRIPTION OF THE PARTY OF		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	
Month / Year	RRC Number	提供 14.05 EA.15 EA.15 EA.	Tract Participation	Price	Gross Value	Royalty Due	Royalty Paid	Additional Royalty Due	Number of Days Late	BEO(#33.207-A/O-T-70/LAGZ-S-(198)	Penalty From Additional	Interest From Additional	Revenue Due
			Rate		(1)X(2)x(3)	(4) * Royalty Rate				Royalty	Royalty	Royalty	(7)+(10)+(11)
Nov-13	08-44792	196.00	1	\$ 87.150860	\$17,081.57	\$2,135.20	\$0.00	\$2,135.20	329	4.250000%	\$213.52	\$67.13	\$2,415.85
TOTALS		196.00			\$17,081.57	\$2,135.20	\$0.00	\$2,135.20			\$213.52	\$67.13	\$2,415.85

ATTENTION: Linda Keith

CERTIFIED MAIL: 7007 0710 0000 5379 0561

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

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

COLUMN (1) RRC VOLUME - REPRESENTS UNDER REPORTED OIL VOLUMES FROM RRC WELL PERMIT ID# 08-44792

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

COLUMN (10)(11)(12) SEE ATTACHMENT III, "SUMMARY OF PENALTY/INTEREST ASSESSMENT RULES", FOR EXPLANATION OF PENALTY AND INTEREST CALCULATION.

NOTE 1: PAYMENT OF THIS INVOICE SHOULD BE SUBMITTED SEPARATELY FROM MONTHLY ROYALTY PAYMENTS, THE PAYMENT CAN BE SUBMITTED BY A HAND CHECK OR A WIRE, DO NOT SUBMIT THE GLO-3 REPORT FOR THIS PAYMENT.

ATTACHMENT III

SUMMARY OF PENALTY/ INTEREST ASSESSMENT RULES FOR DELINQUENT ROYALTIES AND DELINQUENT REQUIRED REPORTS OR DOCUMENTS

no become	Due Before 10/1/75 (Production prior to 8/1/75)	Due After 10/1/75 and Before 9/1/85 (Production 8/1/75 through 6/30/85)	Due After 9/1/85 (Production 7/1/85 through 12/31/09)	Due After 2/26/10 (Production 1/1/10 through present)
<u>PENALTY</u> (1) For delinquent royalty	None	The greater of 1% of the delinquent amount or \$5.00 for each 30-day delinquency	(2) For delinquencies of 30 days or less, the greater of 5% of the delinquent amount or \$25.00; for delinquencies of more than 30 days, the greater of 10% of the delinquent amount or \$25.00	(2) For delinquencies of 30 days or less, the greater of 5% of the delinquent amount or \$25.00; for delinquencies of more than 30 days, the greater of 10% of the delinquent amount or \$25.00
For delinquent report, affidavit, or other document	None	\$5.00 per document for each 30-day period of delinquency	\$10.00 per document for each 30-day period of delinquency	\$10.00 per document for each 30-day period of delinquency
INTEREST (2) For delinquent royalty	6% per year, simple; accrual begins 30 days after due date	6% per year, simple; accrual begins 30 days after due date	(3) 12% per year, simple; accrual begins 60 days after due date	(4) Prime plus 1% set on the first business day of each calendar year

(1) 31 TAC §9.51 (b) (3) (A)

(2) Penalties are not assessed in cases of title dispute as to the state's portion of the royalty or to royalty in dispute as to fair market value except when fraud is involved, in which case the fraud penalty is applicable. Penalty provisions are found at Tex Nat. Res. Code Ann §52,131 (e) (f) (h).

(3) Tex Nat, Res, Code Ann §52.131 (g)

(4) Per 31 TAC §9.51 (b) (3) (E), the interest rate on past due royalty is Wall Street Journal Prime plus 1%, to be adjusted annually.

Calendar Year	Prime Rate	Interest Rate
当时,一定 1000 2010 自由中心 有效的特别	3.25%	4,25%
新兴·马克·克里2019 制度与内部部制	3,25%	4.25%
2012	13.25%	4.25%
2013 建二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十	学生。 第125% 第 25% 第 25% 第 25% 第 25% 第 25% 第 25% 第 25% 第 25% 第 25% 8 25% 8 25% 8 25% 8 25% 8 25% 8 25% 8 25% 8 25% 8 25% 8 25% 8 25% 8 25% 8 25% 8 25% 8 25% 8 25% 8 25% 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	4.25%
以下 10 14 14 2014 2014 2014 2014 2014 2014	3.25%	4.25%

A royalty payment that is not accompanied by the required royalty affidavit identifying the GLO lease number is delinquent, 31 TAC §9.51 (2) (B). The state's power to forfeit a lease shall not be affected by the assessment or payment of any delinquency, penalty, or interest provided in 31 TAC §9.51 (b) (3) (D).

File No. MF 111895

Date Filed: 125/14.

Jerry E. Patterson, Commissioner

By Day of Commissioner



SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. 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.	A. Signature Agent Addressee S.T. Meil And (Printed Name) Coate of Delivery
Article Addressed to:	D. Is delivery address different from item 1? ☐ Yes If YES, enter delivery address below: ☐ No
Cimarex Energy Co. Altn: Relacca Lahnson	MF 111895 Shirley
2025. Cheyenne Ausk	3. Service Type Certified Mail Express Mail Registered Return Receipt for Merchandise
TUCSA, OK. 74103-3001	4. Restricted Delivery? (Extra Fee)
2. Article Number (Transfer from service label) 7011 1150	0001 2415 5583
PS Form 3811, February 2004 Domestic Retu	urn Receipt 102595-02-M-1540



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

COP

Cimarex Energy Co. Attn: Rebecca Johnson

202 S Cheyenne Ave Ste 1000

Tulsa, OK 74103-3001

Billing Date:

9/8/2015

Billing Due Date: 10/8/2015

Customer Number: C000044010

Invoice	Mineral File	Gas Royalty	Oil Royalty	Penalty	Interest	Total Due
16I00014	MF111895	\$0.00	\$2,251.32	\$244.16	\$133.94	\$2,629.42
Total Due		\$0.00	\$2,251.32	\$244.16	\$133.94	\$2,629.42

Penalty and interest have been calculated thru 9/30/2015. Payment remitted after 9/30/2015 will result in additional penalty and interest charges.

Contact Info: Shirley Chou (512) 463-5408 or shirley.chou@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
- 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

Cimarex Energy Co.

Billing Date: 9/8/2015

Billing Due Date: 10/8/2015

Customer Number: C000044010

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
16I00014	MF111895	\$0.00	\$2,251.32	\$244.16	\$133.94	\$2,629.42
Total Due		\$0.00	\$2,251.32	\$244.16	\$133.94	\$2,629.42
Amt. Paid						

Customer ID: C000044010

Invoice Number: GLO Lease: MF111895

GLO Review: CIMAREX ENERGY CO.

Auditor/AF: Billing Date:

schou 9/4/2015

P&I Calculation Date: 9/30/2015

Review Period: JAN 2014 THROUGH JUNE 2014

Royalty Rate: 12.50%

	I and the state of	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	
Month / Year	RRC Number		Tract Participation Rate	Price	Gross Value	Royalty Due	Royalty Paid	Additional Royalty Due	Number of Days Late	Interest Rate For Additional Royalty	Penalty From Additional Royalty	Interest From Additional Royalty	Revenue Due
Jan-14	08-44792	200.00	DETREES ASSESSED.	CONSIDER OF THE	(1)X(2)x(3)	(4) * Royalty Rate						1397419	(7)+(10)+(11)
	CONTRACTOR OF THE PARTY OF THE	200,00	7	\$ 87,662430		\$2,191.56	\$0.00	\$2,191.56	574	4.250000%	\$219.16	\$131.42	\$2,542,14
Jun-14	08-44792	5.00	1	\$ 95,614050	\$478.07	\$59.76	\$0.00	\$59.76	421	4.250000%	\$25.00		\$87.28
TOTALS		205.00			\$18,010.56	\$2,251.32	\$0.00	\$2,251.32			\$244.16		\$2,629.42

COMMENTS: COLUMN (1) VOLUME: REPRESENTS THE UNDER REPORTED SKIM OIL VOLUME FROM RRC # 08-44792 (EIGHTEENMILE 56-18).

COLUMN (3) PRICE: PER GLO-1 PRODUCTION REPORT.

COLUMN (9), (10), (11): SEE ATTACHMENT III, SUMMARY OF PENALTY/INTEREST ASSESSMENT RULES". FOR EXPLANATION OF PENALTY AND INTEREST CALCULATION.

SALES VOLUME REPORTED TO THE GLO WAS COMPARED TO VOLUMES REPORTED TO THE RRC, VOLUMES WERE UNDER REPORTED TO THE GLO RESULTING IN UNDER PAID ROYALTY.

NOTE 1: PLEASE REMIT PAYMENT OF THIS INVOICE SEPARATELY FROM MONTHLY 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.

NOTE 2: NEED TO SUBMIT THE GLO-1 REPORT TO REFLECT THE ADDITIONAL ROYALTY DUE AMOUNT.

ATTENTION: MARY JANE RUSSELL

CERTIFIED MAIL: 70111150000124155583

(17)	File No
	Reeves County Recordilation Billing
	Date Filed: 9/23/15. George P. Bush, Commissioner By Quality Commissioner
	By Vaya tranifer

Cimarex Energy Co. 202 S. Cheyenne Ave. Suite 1000 Tulsa, Oklahoma 74103-4346 PHONE: 918.585.1100

PHONE: 918.585.1100 FAX: 918.585.1133

June 6, 2016

Texas General Land Office Matthew Scott Mineral Leasing 1700 N. Congress Austin, TX 78701

Re:

State Lease No: 111895

Gas Lift Gas Usage Eighteenmile 56-18 1H Reeves County, Texas

Dear Mr. Scott,

Cimarex Energy respectfully requests approval for off-lease gas lift on the above referenced General Land Office (GLO) lease. The gas lift gas will be routed through a gas lift meter located at the well head (#428085023G).

Cimarex will continuously meter the off-lease gas to be utilized for gas lift purposes. The gas BTU content and component analysis obtained at the gas lift meter shall be determined by gas sample chromatographic analysis.

Please feel free to contact me with any questions regarding the commingling at 918-585-1100.

Sincerely,

Sheli Armstrong Regulatory Analyst





File No. MF 11/895	
REEVES	_County
GAS LIFT REQUES	7
Date Filed: 8/8/2016	
George P. Bush, Commissione	r
By MTSCOTT	-

GEORGE P. BUSH, COMMISSIONER

June 21, 2016

Certified Mail: 7011 1150 0001 2416 7227

Ms. Sheli Armstrong Regulatory Analyst Cimarex Energy Co. 202 S. Cheyenne Ave. Suite 1000 Tulsa, Oklahoma 74103-4346

RE: Your Applications Dated 06/06/2016 for Authority to Utilize Gas Produced on the Leased Premises for Gas Lift Purposes and to Use Off-Lease Gas for Gas Lift Makeup Supply as Applicable to Multiple State Lease Tracts Located in Culberson, Reeves, and Ward County, Texas.

Dear Ms. Armstrong:

General Land Office staff has reviewed your twenty-nine letters requesting permission to utilize gas lift on the leased premises and to use makeup or buy-back gas when necessary to meet gas lift system volume requirements. The primary purpose for the makeup gas is for compressor fuel gas supply, gas lift start-up, and instruments and controls.

Of the various lease types identified in the list of leases shown in the table below, typically a Free Royalty lease would not require GLO review and approval if the gas that is recycled on a lease for gas lift purposes is lease gas only. However, since off-lease gas is required to augment the on-lease gas then in effect the production of each Free Royalty lease is commingled with the gas production from other leases and thus commingling authority is required per Texas Administrative Code (TAC) Rule 9.35 for the Free Royalty leases, as it is for all of the other lease types.

Pursuant to the terms of the applicable State leases and TAC Rules, please be advised that the request to recycle gas on the leased premises and to commingle gas produced on the lease with off-lease gas for gas lift make-up supply is approved for the leases listed in the table below **subject to the following conditions**:

Lessee shall install and utilize square-edged orifice meters and meter tubes per all
applicable specifications and requirements of API MPMS 14.3/AGA Report No. 3 for gas
measurement.

Ms. Sheli Armstrong Cimarex Energy Co. June 21, 2016 Page 2 of 3

- 2. Lessee shall continuously meter the gas lift supply to each well and the gas that passes through any other gas lift supply and distribution meter.
- 3. The gas BTU content and component analysis obtained at each lease/unit gas meter shall be determined by gas sample chromatographic analysis.

Mineral File Number	RRC Lease Name	Lease Type	GLO Unit	County
MF077782	Dixieland 10	Upland Fee	NO.	Reeves
MF100861	Darcy State 32	RAL		Reeves
MF106747	Whirlaway 38 State	RAL		Culberson
MF106748	Dust Commander 26	RAL		Culberson
MF109881	Big Sky 55-16	RAL		Reeves
MF109926	Pink Star 28 Unit	RAL	5460	Culberson
MF110709	War Emblem 30 State	Upland Fee	3400	Culberson
MF110711	Lt Gibson 12 State	Upland Fee		Culberson
MF110729	Anaconda State 55-2	Upland Fee		Reeves
MF111341	Cleveland State 57-23	RAL		Reeves
MF111342	Tempest State 57-35	RAL		Reeves
MF111895	Eighteenmile 56-18	RAL		Reeves
MF111928	Beaverhead State 2-24 Unit	RAL	6663	Reeves
MF111989	Beaverhead State 2-24 Unit	RAL	6663	Reeves
MF111990	Judith 2-16 Unit	RAL	6665	Reeves
MF111990	Sapphire State C20-12	RAL		Reeves
MF112125	Zev 22 Unit	Free Royalty		Culberson
MF112126	Unbridled 36 A	Free Royalty	7438	Culberson
MF112127	Northdancer Unit 10	Free Royalty		Culberson
MF112130	Jet Pilot 24 Upland Fee	Free Royalty		Culberson
MF112130	Jet Pilot 24 Unit A	Free Royalty	7568	Culberson
MF114150	Pink Star 28 Unit	Free Royalty	5460	Culberson
MF114243	Flintlock 34-144	HROW 56		Ward
MF114294	Macbeth 22 Upland Fee	Free Royalty		Culberson
MF114728	Black Gold 26 Upland Fee	Free Royalty		Culberson
MF114878	Cannonade 4 Upland Fee	Free Royalty	-	Culberson
MF115407	Donerail 8 Upland Fee	Free Royalty		Culberson
MF115602	Lookout 18 Upland Fee	Free Royalty		Culberson
MF116113	Bridger 1-36	Free Royalty	6676	Reeves
MF116132	Bridger 1-36	River 52.076	6676	Reeves
MF116556	Worsham '6-22'	River 52.076		Reeves & Ward

Ms. Sheli Armstrong Cimarex Energy Co. June 21, 2016 Page 3 of 3

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

Sincerely,

Matthew T. Scott, P.E.

Petroleum Engineer

Energy Resources/Mineral Leasing

Marken Z. Scot

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



File No. MF/1/895	
REFYES	_County
AGREE TO GAS LIFT	
Date Filed: 3/8/2016	
George P. Bush, Commissioner	
BY MT SCOTT	



United States Postal Service

Sender: Please print your name, address, and ZIP+4® in this box

MF 111895 ERIAN GRAY TEXAS GENERAL LAND OFFICE P.O. BOX 12873 AUSTIN, TX 78701

<u> |||-ր-|||-վիվուիսններ-|-վիդի||իլիի||-րուփյուկուդր-իկ</u>

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:

Matt Bruns

Cimarex Endity Co.

600 N. Marienfeld, Suite 600

Midland, TX 79902



9590 9402 1749 6074 7782 93

2 Article Number (Transfer from service label)

7011 1150 0001 2420 7053

COMPLETE THIS SECTION ON DELIVERY

A.	Signatu	re /)	1, 1	/		
V		1		1	11			☐ Agent
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\$/	Receive	d by (Printe	d Na	ame	()	1	C. Date of Delivery
10	0	1	1, 1	1	1	h. 1		2.21.19

D. Is delivery address different from item 1? ☐ Yes
 If YES, enter delivery address below: ☐ No

3. Service Type

ver \$500)

- ☐ Adult Signature
 ☐ Adult Signature Restricted Delivery
 ☐ Certified Mail®
- ☐ Certified Mail Restricted Delivery

sured Mail Restricted Delivery

- □ Collect on Delivery
 □ Collect on Delivery Restricted Delivery
 □ sured Mail
- ☐ Priority Mail Express®
 ☐ Registered Mail™
- ☐ Registered Mail Restricted
 Delivery
- ☐ Return Receipt for Merchandise
- ☐ Signature Confirmation[™]
 ☐ Signature Confirmation

U.S. Postal Service™ CERTIFIED MAIL™ RECEIPT (Domestic Mail Only; No Insurance Coverage Provided)

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

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Certified Fee		
Return Receipt Fee indorsement Required)		Postmark d Here
Restricted Delivery Fee indorsement Required)		r-

Total Postage Matt Bruns

Sent To Cimarex Energy Co.

Street, Apt. No. 600 N. Marienfeld, Suite 600

City, State, ZIP. Midland, TX 79902

7053

2420

1000

1,1,50

7011

Certified Mail Provides:

- A mailing receipt
- A unique identifier for your mailpiece
- A record of delivery kept by the Postal Service for two years

Important Reminders:

- Certified Mail may ONLY be combined with First-Class Mail
 or Priority Mail
- Certified Mail is not available for any class of international mail.
- NO INSURANCE COVERAGE IS PROVIDED with Certified Mail. For valuables, please consider Insured or Registered Mail.
- Far an additional fee, a Return Receipt may be requested to provide proof of delivery. To obtain Return Receipt service, please complete and attach a Return Receipt (PS Form 3811) to the article and add applicable postage to cover the fee. Endorse mailpiece "Return Receipt Requested". To receive a fee waiver for a duplicate return receipt, a USPS_® postmark on your Certified Mail receipt is required.
- For an additional fee, delivery may be restricted to the addressee or addressee's authorized agent. Advise the clerk or mark the mailpiece with the endorsement "Restricted Delivery".
- If a postmark on the Certified Mail receipt is desired, please present the article at the post office for postmarking. If a postmark on the Certified Mail receipt is not needed, detach and affix label with postage and mail.

IMPORTANT: Save this receipt and present it when making an inquiry.

PS Form 3800, August 2006 (Reverse) PSN 7530-02-000-9047



TEXAS GENERAL LAND OFFICE

GEORGE P. BUSH, COMMISSIONER

August 20, 2019

Certified USPS # 7011 1150 0001 2420 7053

Matt Bruns Cimarex Energy Co. 600 N. Marienfeld, Suite 600 Midland, TX 79902

Re: Partial Release of State Lease No. MF 111895
Eighteenmile 56-18 Well No. 1H / API No. 42-389-33823 / RRC Lease No. 08-283294
All of Section 18, Block 56, Township 3, Abstract 3372, T.&P. Railroad Company Survey, Reeves County, Texas, containing approximately 640 acres

Mr. Bruns:

The Texas General Land Office (GLO) has completed a review of the above captioned State Lease of which Cimarex Energy Co. is the current listed operator. The review of our internal records indicated that the GLO has not received a Partial Release as required under the Retained Acreage Clause located in Paragraph No. 16 of the above referenced State Lease.

In accordance with Paragraph No. 16(B) of the State Lease dated July 14, 2010, it appears the above referenced State Lease terminated as to all depths lying below 12,007' subsurface, being 100' below the total depth drilled in the Eighteenmile 56-18 Well No. 1H (API No. 42-389-33823), said well being the deepest well drilled, as reflected in the Gyrodata Incorporated survey dated August 6, 2013.

Please provide the GLO with a Partial Release of the above referenced State Lease as to the terminated depths as required under Paragraph No. 16, effective as of the date of said termination. Additionally, Title 31, §9.92, of the Texas Administrative Code requires that a recorded original or certified copy of the Partial Release, along with a filing fee of twenty-five dollars (\$25.00) for each State Lease affected by said Partial Release, is to be filed with our office.

Should you disagree with this assessment please provide evidence to the GLO at the address shown below within thirty (30) days of receipt of this letter. If you have questions concerning this matter, please feel free to e-mail me at the address below my signature.





File No. MF 111895	
Reeves	County
Partial Release Regu	est
Date Filed: 8/20/2019	
George P. Bush, Comm	issioner R/-

...

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

PARTIAL RELEASE OF OIL AND GAS LEASE

STATE OF TEXAS

§ §

COUNTY OF REEVES

§

CIMAREX ENERGY CO. (hereinafter the "Lessee"), a Delaware corporation, whose address is 600 N. Marienfeld St., Suite 600, Midland, TX 79701, does hereby release, remise, relinquish, and surrender unto the Lessors named below or their successors-in-interest, all of its right, title and interest in and to the Oil and Gas Lease described below ("the Lease"):

Lease No .:

MF-111895

Lease Dated:

July 14, 2010

Original Lessor:

The Allar Company, a Texas Corporation, as agent for the State of

Texas

Original Lessee:

Cimarex Energy Co.

Recorded:

Volume 853, Page 55, Official Public Records of Reeves County,

Texas

Description:

All of Section 18, Block 56, Township 3, Abstract 3372, T&P RR

Co. Survey, Reeves County, Texas, containing 640 acres, more or

less

INSOFAR AND ONLY INSOFAR AS the Lease covers depths below 12,007 feet, being 100 feet below the deepest total depth drilled and logged in the Eighteenmile 56-18 1H (API: 42-389-33823), as seen on the Schlumberger Platform Express Three Detector Litho-Density Compensated Neutron Log in the Cimarex Energy Co. Eighteenmile 56-18 1H (API: 42-389-33823), located 425' FSL and 500' FEL of Section 18, Block 56, Township 3, T&P RR Co. Survey, Reeves County, Texas.

CIMAREX ENERGY CO. expressly retains and reserves all right, title and interest in and to the Lease as to those depths from the surface of the Earth down to and including 12,007 feet, being 100 feet below the total depth drilled and logged in the Eighteenmile 56-18 1H (API: 42-389-33823).

IN WITNESS WHEREOF, this instrument is executed on the date reflected in the acknowledgement below, but it shall be effective for all purposes as of <u>July 14, 2015</u>.

True & C	orrect Copy of a
docun	nent on file at
Reeves	County Texas,
Dianne O. F	lprez, County Clerk
Page	of3

Page 1 of 2

LESSEE:

CIMAREX ENERGY CO.

By:

Roger Alexander, Attorney-in-Fact

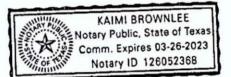
<u>ACKNOWLEDGEMENT</u>

STATE OF TEXAS

8

COUNTY OF MIDLAND

This instrument was acknowledged before me on this had day of Splanby, 2019, by Roger Alexander, acting as Attorney-in-Fact, for CIMAREX ENERGY CO., a Delaware corporation, on behalf of said corporation.



Notary Public in and for State of Texas

My Commission Expires: 3/

True & Correct Copy of a
document on file at
Reeves County Texas,
Dianne O. Florez, County Clerk
Page 2 of 3

Page 2 of 2



Reeves County Dianne O. Florez **Reeves County Clerk**

Instrument Number: 2019014889

Real Property Recordings

PARTIAL RELEASE

ecorded On: September 12, 2019 08:34 AM

Number of Pages: 3

" Examined and Charged as Follows: "

Total Recording: \$30.00

********** THIS PAGE IS PART OF THE INSTRUMENT *********

Any provision herein which restricts the Sale, Rental or use of the described REAL PROPERTY because of color or race is invalid and unenforceable under federal law.

File Information:

Document Number: 2019014889

Receipt Number:

20190912000001

Recorded Date/Time: September 12, 2019 08:34 AM

User:

Lindsey C

Station:

CLERK08

MIDLAND TX 79701

Record and Return To:

CIMAREX ENERGY CO

600 N MARIENFELD STE 600

STATE OF TEXAS

Reeves County

I hereby certify that this Instrument was filed in the File Number sequence on the date/time printed hereon, and was duly recorded in the Official Records of Reeves County, Texas

Dianne O. Florez

Reeves County Clerk

Reeves County, TX

Joianne D. Harry

rue & Correct Copy of

document on

Count

a1.

By A Doputy, Dianne O. Florez, County Clerk REEVES COUNTY, TEXAS	for said County and State do hereby certify that the foregoing is a true and correct copy of Partial Kelege of Sil and Sab Least dated July 14, 2010. flied for record in my office this 12+5 day of September, 2014 at 2,34 A. M. under Clerk's File No.2014 014 889 to be recorded in the Office H. Public Records. Records of Recycs County, Texas. TO CERTIFY WHICH, Witness my hand and official seal at Pocos, Texas this 200 to day of September.	u

File No.	111895
To bed States of the Publish State	Cou
Pa	And release
Date Filed:	11/08/19
George	P. Bush, Commissioner

CIMAREX ENERGY CO 1700 LINCOLN STREET SUITE 3700 **DENVER CO 80203-4518**



(303) 295-3995

Check Number 0001784226

Invoice #	Inv. Date	Description	Amount	Discount	Net Amount
REQ217092719a	09/27/2019		25.00	0.00	25.00
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	mit v	01 1 5 1 10 100 100 10		ale Amanunt III	V 25.00

023492

Cimarex Energy Co. 600 N. Marienfeld St. Suite 600 Midland, TX 79701 Main: 432.571.7800



November 1, 2019



Via-CMRRR: 9407 1108 9876 5047 5681 77

Mineral Leasing Division Texas General Land Office Attn: Deborah A. Cantu

P.O. Box 12873

Austin, TX 78701-1495

RE: Partial Release of Oil and Gas Lease

Section 18, Block 56, Township 3, T&P RR Co. Survey,

Reeves County, Texas

Dear Ms. Cantu,

Please find enclosed a certified copy of the *Partial Release of Oil and Gas Lease* filed of record in Reeves County, Texas covering the above captioned lands, together with a check in the amount of \$25.00 for the proper filing fees regarding the lease stated below:

Lessor: The Allar Company, a Texas Corporation, as agent for the State of Texas Recorded: Vol. 853, Page 55

Please respond with a written verification of receipt and acceptance of the above-recorded lease. If I can be of further assistance, please contact me at the number below.

Sincerely,

Cimarex Energy Co.

Kaimi Brownlee Land Technician

Direct No.: (432) 571-7868

Email: kbrownlee@cimarex.com

-	-
1	~

File No	111895
	County
Ltr	+ See
Date Filed:	11/08/19
George	P. Bush, Commissioner



MEMORANDUM

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

DATE:

June 29, 2023

PSA# 00528

TO:

School Land Board

FROM:

Pooling Committee

SUBJECT:

Anadarko E&P Onshore LLC to have the State enter into a Production

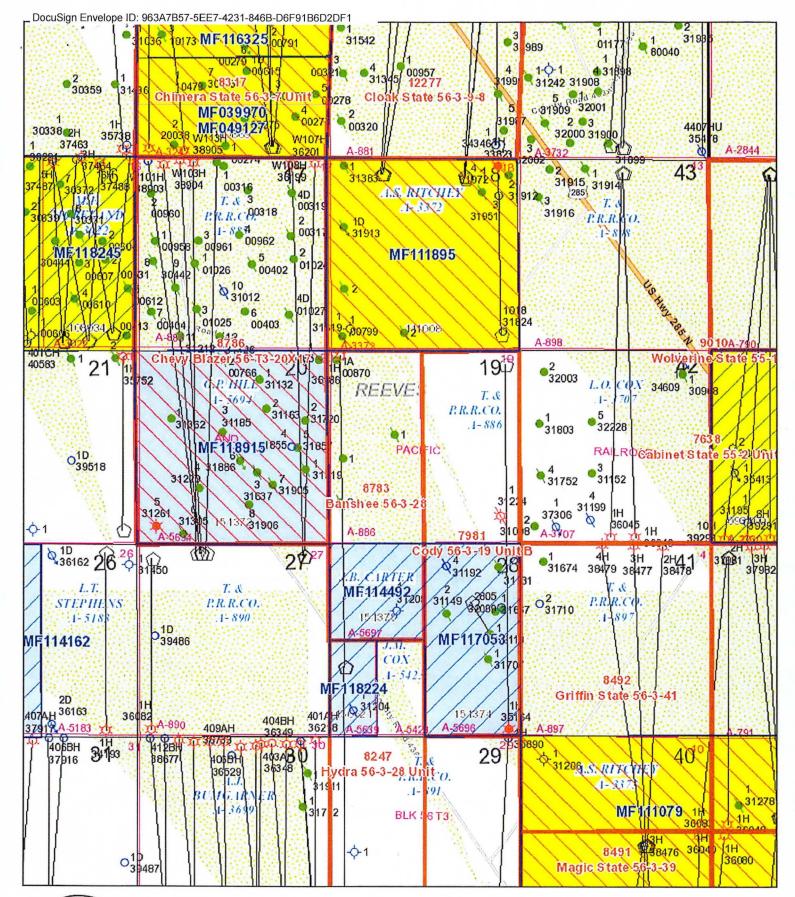
Sharing Agreement for the drilling of one or more allocation wells

- Anadarko E&P Onshore LLC is the operator of State Lease MF111895, State Unit 8783, which includes State Lease MF114492, State Unit 7981, which includes State Lease MF117053, in which the State has a royalty interest, and they are requesting that the royalty owners sign a Production Sharing Agreement, which the School Land Board has the authority to approve pursuant to Texas Natural Resources Code §52.154.
- The Production Sharing Agreement will allow the operator to drill one or more allocation wells which traverse the above units.
- The State's participation in the sharing well will be based on Productive Lateral Length from the first take point to the last take point.

POOLING COMMITTEE RECOMMENDATION:

The Pooling Committee recommends Board approval of the Production Sharing Agreement.

KIH	6/08/23
General Land Office	Date
DocuSigned by:	
Catarina Gonzales	6/12/2023
Office of the Governor	Date
Office of the Governor	Date
Office of the Covernor	Date





GLO Land/Lease Mapping Viewer

Please review all copyright and disclaimer information from our webpage here. https://www.glo.texas.gov/policy/index.html. The Texas General Land Office makes no representations or warranties regarding the accuracy or completeness of the information depicted on this map or the data from which it was produced. This map is not suitable for navigational purposes and does not purport to depict boundaries of private and public land.





PRODUCTION SHARING AGREEMENT

STATE OF TEXAS §

COUNTY OF REEVES §

This **PRODUCTION SHARING AGREEMENT** ("Agreement") is by and between the undersigned parties (collectively the "Interest Owners" or individually an "Interest Owner"), and **Anadarko E&P Onshore LLC**, a Delaware limited liability company, with an address at 5 Greenway Plaza, Suite 110, Houston, Texas 77046 ("Anadarko"). Interest Owners and Anadarko may be collectively referred to herein as the "Parties" or individually as a "Party."

RECITALS

- A. Interest Owners own an interest in the oil and gas leasehold, minerals, royalties, overriding royalties and/or executive rights under the lands described on Exhibit "A", attached hereto and fully incorporated by reference herein and made a part hereof (collectively, the "Lands").
- B. The oil and gas leases described on Exhibit "B" (collectively, the "Leases") are owned by Anadarko and other working interest owners who are Interest Owners.
- C. Anadarko, as operator, plans to, from time to time, drill one or more Horizontal Drainhole Well(s) on the Lands and Leases described on Exhibits "A" and "B".
- D. The Parties wish to encourage further development of the Lands and Leases by the drilling of one or more Horizontal Drainhole Well(s) by Anadarko, and in order to:
 - 1. Prevent physical and economic waste and the drilling of unnecessary wells, and to increase the ultimate recovery of Hydrocarbons from the Lands and Leases; and
 - 2. Protect the correlative rights of all Interest Owners so that each may receive a fair share of the Hydrocarbons in and under their respective proportion of the Lands and Leases.
- E. The Parties desire to establish a basis for allocating and sharing in the proceeds of production of Hydrocarbons from such a Horizontal Drainhole Well(s) deemed a Sharing Well, as defined below.
- F. In consideration of the mutual promises set out herein, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties agree to the following terms, conditions and provisions:

AGREEMENT

1. DEFINITIONS. As used in this Agreement, these words have the following meanings:

- a. "Allocation Factor" means a fraction, the numerator of which is equal to the length, in feet, of that portion of Completed Lateral Length for such Sharing Well that traverses such Tract, and the denominator of which is equal to the total Completed Lateral Length across all Tracts for such Sharing Well.
- b. "Completed Lateral Length" means the horizontal length, in feet, that begins at the first Take Point, and terminates at the last Take Point, less any portion of the Horizontal Drainhole deemed non-productive in the sole opinion of Anadarko. In the event a Sharing Well is developed with more than one Horizontal Drainhole, the Completed Lateral Length shall be the sum of all Completed Lateral Lengths in all such Horizontal Drainholes.
- c. "Correlative Interval" is the depth interval designated by applicable field rules, or new field designation designated by the Texas Railroad Commission for the Horizontal Drainhole Well, or where a correlative interval has not been designated by the Texas Railroad Commission, it shall be the producing interval for the field in which the Horizontal Drainhole Well is completed as shown by information submitted by Anadarko to the Texas Railroad Commission.
- d. "Exploration and Production Activities" means the necessary, incidental, and appurtenant activities and operations to be conducted by Anadarko and convenient to its exploration, exploitation, development, transportation, production operations, and any other operations on the Lands and Leases and in the area, including, but not limited to, any rights granted to Anadarko under the terms of the Leases.
- e. "Horizontal Drainhole" means that portion of the Horizontal Drainhole Well drilled in the Correlative Interval between the penetration point and the terminus.
- f. "Horizontal Drainhole Well" means a horizontal well as defined in Texas Railroad Commission Statewide Rule 86, having a horizontal displacement of at least one hundred (100) feet.
- g. "Hydrocarbons" means oil, gas, condensate, casinghead gas and all by-products thereof that may be produced from a well permitted by the Texas Railroad Commission.
- h. "Sharing Well" means a Horizontal Drainhole Well in which the Completed Lateral Length traverses at least two Tracts listed on Exhibit "A".
- i. "Take Point" means any point along the Horizontal Drainhole where Hydrocarbons can enter the wellbore from the Correlative Interval and be produced.
- i. "Tract" means the individual tracts listed on Exhibit "A", which collectively cover the Lands.
- 2. ALLOCATION. Production of Hydrocarbons from a Sharing Well shall be allocated on the following basis:
 - a. Each Interest Owner shall share the production or proceeds from a Sharing Well on the basis of the Allocation Factor, as defined above.
 - b. Proceeds from production from a Sharing Well shall be paid in accordance with the Allocation Factor, as same may be proportionately reduced, set out in Section 2.c below, subject to the terms of the Leases' royalty provisions, which remain in full force and effect except as expressly modified herein.
 - c. In the event an Interest Owner owns less than 100% of the undivided interest in a Tract in which the Completed Lateral is located, then such Interest Owner's Allocation Factor shall be further proportionately reduced based upon its actual ownership in such tract.
 - d. Under no circumstances shall the sum of all Allocation Factors for all Interest Owners (whether a part of this Agreement or not) in a Sharing Well exceed 1.00 (i.e. 100%).

- 3. Exploration and Production Activities from each Sharing Well, whether or not the entirety of the Sharing Well's Horizontal Drainhole is located on the Lands and regardless of the surface location of such Sharing Well, shall be treated as if there were actual operations on or production from the Lands and will be deemed as actual operations conducted on, or production from, the Lands pursuant to the terms and provisions of each of the Leases and shall be deemed sufficient to maintain the Leases in full force and effect pursuant to the terms thereof.
- 4. Production from any and all Sharing Wells drilled hereunder shall not create any offset obligation under the Leases, whether express or implied, and shall not constitute drainage under the Leases because all Interest Owners are sharing in the production proceeds. This Agreement shall be deemed to constitute satisfaction of Anadarko's obligations (whether express or implied) to protect the Leases from drainage from each Sharing Well drilled, and protection of each Interest Owner's respective correlative rights. The undersigned further agrees that this Agreement affects only production from each Sharing Well drilled hereunder, and in no way affects ownership under other wells drilled or to be drilled which are not Sharing Wells.
- 5. If any State lease contains a retained-acreage clause, partial-termination clause, or other provision that would, based upon the passage of time or the occurrence or non-occurrence of some event or condition, cause the State lease to terminate, except as to certain portions of the leased premises included within certain types of units or otherwise associated with productive wells, then, for the sole purpose of determining the acreage and/or depths of the leased premises under said State lease that is perpetuated by a Sharing Well, that portion of the Sharing Well drilled on the leased premises of said State lease shall be treated as a well drilled entirely on the leased premises, and the acreage retained by said Sharing Well shall be the greater of 40 acres or the amount of acreage determined by the following formula: 0.032 x L = A, where L = the length (in feet) of the horizontal lateral component of the well from the first takepoint to the last takepoint and A = the portion of the State lease retained (in acres) provided that, if A is not divisible by the number 20, A will be rounded up to the next number divisible by 20, i.e. (0.032 x 4500 feet = 144 acres, which rounds up to 160 acres).
- 6. The provisions of any leases, agreements and, to the extent necessary, any division order(s) or transfer order(s) covering or affecting the Lands and Leases, are hereby amended to the extent necessary to make such instruments and agreements conform to the provisions herein, but not otherwise. In the event of a conflict between the terms and conditions of this Agreement and any of the Leases, agreements, division or transfer orders, then this Agreement shall prevail.
- 7. This Agreement shall become effective on April 11, 2023 (the "Effective Date"), and shall remain in effect as to each respective Lease for so long as such Lease is maintained in full force and effect. In the event a Sharing Well is plugged back or recompleted in such manner that the wellbore is no longer a Sharing Well, or in the event a Sharing Well is no longer capable of producing in paying quantities, then Anadarko may terminate this Agreement as to that specific Sharing Well or affected Lease, by filing a notice of termination to that effect in the records of Reeves County, Texas, within ninety (90) days after such occurrence. This Agreement shall become binding as to each Interest Owner upon such owner's execution of this Agreement regardless of whether all Interest Owners have executed this Agreement.

- 8. In addition to the foregoing, the undersigned Interest Owners do hereby RATIFY, ADOPT, and CONFIRM the oil and gas lease(s) covering their respective Lands and Leases, and each lessor does hereby GRANT, LEASE and LET unto Anadarko, all of Interest Owners' interest in the acreage covered by such lease, subject to the same terms and conditions provided for therein, as same may have been amended otherwise or herein.
- 9. It is understood and agreed that the Interest Owners herein do not by the execution hereof intend to pool or communitize the interest which they now own, or may hereafter own in portions of the land covered by the Lands and Leases with the interests of other parties owning an interest in any other portion or portions of the land covered by the Lands and Leases, except as to the extent that the Lands and Leases are already subject to a pooled unit. Further, except as amended by this Agreement made for the sole purpose of allocation of production of Hydrocarbons from one or more Sharing Wells, the Leases described in Exhibit "B" are not otherwise altered or amended, except as set forth in Section (6) above.
- 10. To the extent they have the right to do so, Interest Owners hereby grant, let, lease and demise unto Anadarko surface and subsurface easements and rights-of-way (including all reasonable ingress and egress thereto and therefrom) on, in and under all the Lands and Leases associated with the Sharing Well(s) for Exploration and Production Activities.
- 11. This Agreement may be executed in multiple counterparts, each of which shall be given the same effect as the execution of an original Agreement. Failure of any party hereto to execute a counterpart shall not render this Agreement ineffective as to any other Party hereto that does execute a counterpart thereof, but this Agreement shall be a covenant running with the Land and Leases and be binding upon each executing Party and its, his or her heirs, legal representatives, successors and assigns. The executed counterparts may be combined into one or more instruments for recordation, by combining the signature pages and acknowledgments, and the executing parties agree that such combined instruments shall be effective for all purposes as a single instrument.

{Signature pages to follow}

Anadarko E&P Onshore LLC

Signature:					
Name: John V. Schneider				*	
Title: Attorney-in-Fact					
		ACKNOV	WLEDGMENT	Γ	
STATE OF TEXAS	§				
COUNTY OF HARRIS	§				
This instrument was acknow	ledged bef	ore me on		, 2023, by	, as
Attorney-in-Fact for Anadarl	ko E&P Or	nshore LLC	C, a Delaware li	mited liability comp	pany, on behalf of
said company.					
		Notary P	ublic, State of T	TEXAS	

Date Executed 1823

STATE OF TEXAS

DAWN BUCKINGHAM M.D.

Commissioner, General Land Office

Approved:

leas. DRO

cont. MB

legal 000

exec.

CERTIFICATE

I, Linda Olson, Secretary of the School Land Board of the State of Texas, do hereby certify that at a meeting of the School Land Board duly held on June 29th, 2023, the foregoing instrument was approved by said Board under the provisions of Chapter 32 and 52 of the Natural Resources Code all of which is set forth in the Minutes of the Board of which I am custodian.

IN TESTIMONY WHEREOF, witness my hand this the 18 day of 34/4, 2023

Secretary of the School Land Board

EXHIBIT "A"

Attached to and made a part of that certain Production Sharing Agreement dated April 11, 2023, between Anadarko E&P Onshore LLC, and Interest Owners.

LANDS:

Tract 1: Section 18, Block 56, Township 3, T&P RR Co. Survey, Reeves County, Texas

<u>Tract 2:</u> Cody 56-3-19 Unit B as described in that certain Declaration of Pooled Unit Cody 56-3-19 Unit B, filed as Instrument Number 16-04192, in Reeves County, Texas covering the following described lands: 640.24 acres being the E/2 of Section 19, and the E/2 of Section 28, Block 56, Township 3, T&P RR Co. Survey, Reeves County, Texas

<u>Tract 3:</u> Banshee 56-3-28 Unit as described in that certain Declaration of Pooled Unit Banshee 56-3-28 Unit, filed as Instrument Number 18-04386, in Reeves County, Texas covering the following described lands: 480 acres being the W/2 of Section 19, and the NW/4 of Section 28, Block 56, Township 3, T&P RR Co. Survey, Reeves County, Texas

EXHIBIT "B"

Attached to and made a part of that certain Production Sharing Agreement dated April 11, 2023, between Anadarko E&P Onshore LLC, and Interest Owners

OIL AND GAS LEASES:

1. APC LEASE NO:

25813900

LESSOR:

The Allar Company (State of Texas)

LESSEE:

Cimarex Energy Co.

LEASE DATE:

7/14/2010

RECORDING:

Volume 853, Page 55, Reeves County TX

2. APC LEASE NO:

1345983000

LESSOR:

CHEVRON U.S.A. INC.

LESSEE:

Anadarko E&P Onshore LLC

LEASE DATE:

7/15/2014

RECORDING:

Volume 1138, Page 244, Reeves County, Texas

3. APC LEASE NO:

1361522000

LESSOR:

J.R. Meeker Trust

LESSEE:

Resolute Natural Resources Southwest LLC

LEASE DATE:

9/21/2013

RECORDING:

Volume 1026, Page 356, Reeves County, Texas

4. APC LEASE NO:

1361521000

LESSOR:

Meeker Investments Inc.

LESSEE:

Resolute Natural Resources Southwest LLC

LEASE DATE:

8/15/2013

RECORDING:

Volume 1026, Page 195, Reeves County, Texas

5. APC LEASE NO:

1361520000

LESSOR:

AWP 1983 Trust

LESSEE:

Resolute Natural Resources Southwest LLC

LEASE DATE:

8/15/2013

RECORDING:

Volume 1032, Page 281, Reeves County, Texas

6. APC LEASE NO:

1361491000

LESSOR:

Charles R. Meeker Trust

LESSEE:

Resolute Natural Resources Southwest LLC

LEASE DATE:

11/21/2013

RECORDING:

Volume 1052, Page 147, Reeves County, Texas

7. APC LEASE NO:

1361524000

LESSOR:

John Mason Carter

LESSEE:

Petro-Hunt LLC

LEASE DATE: RECORDING:

3/13/2009 Volume 821, Page 193, Reeves County, Texas

8

8. APC LEASE NO: 1361603000

LESSOR: Cheesman Family Oil and Gas Venture

LESSEE: Petro-Hunt LLC
LEASE DATE: 10/15/2008

RECORDING: Volume 817, Page 707, Reeves County, Texas

9. APC LEASE NO: 1361523000

LESSOR: Catherine Carter Malone

LESSEE: Petro-Hunt LLC

LEASE DATE: 3/13/2009

RECORDING: Volume 821, Page 188, Reeves County, Texas

10. APC LEASE NO: N/A

LESSOR: George C. Fraser, et al LESSEE: Continental Oil Company

LEASE DATE: 07/28/1950

RECORDING: Volume 133, Page 182, Reeves County, Texas

7	D
2	5

File No. MF // 1895	~
Reeves	County
Production Sharing Agreeme	
Date Filed: 07/25/20	23
Commissioner Dawn Buckingh	am, M.D.



Information for processing an Internal Non Unit Transaction (iNut) Length of Lateral

iNut No. 13517

GENERAL INFORMATION

Name of	f Well <u>: Wand Sta</u>	nte 56 – 3 – 1	8 - 19 A #21	.HA AF	PI # <u>42-389-4</u>	0697			
Name of	lame of Operator: Anadarko E&P Onshore LLC RRC # 08-892458								
Operato	perator Contact Person: Cindy Bao Phone: 713-215-7016								
Counties	s: Reeves								
ALLOCA	ATION OF STAT	E UNITS AN	D/OR LEASI	ES BASED O	N LENGTH O	F LATERAL			
Lease Type	Unit/Lease No	Total Lateral Ft.	Unit or Lease Lateral Ft.	Unit or Lease Rylty Decimal		RRAC Participation Factor	State Particpation by Unit/Lease		
FR	8783/MF114492	7152	2134	0.02083333	0.06250000	0.09945934	0.00621621		
RAL	MF111895	7152	5018	0.12500000	0.12500000	0.70162192	0.08770274		
	Totals:					0.80108127	0.09391895 State Net		
Effectiv e Date:							Royalty Revenue in Well		
Comme									
Attach a	a plat showing th	e iNut well wi	ith length of I	aterals marke	ed and the Sta	ate lands mar	ked.		
Highway Mineral	Right of Way (HROW), Unle	ased Highway	y (UH), Crimi	nal Justice (T	DCJ), Parks 8	d Riverbed (UR), & Wildlife (TPW), 3VI), Stephen F.		
Prepare	d by:	Alaı	mo updated b	y:	W	updated by:	Tm		
RAM app	proval by:		GIS updated	by: PL			O		

DO NOT DESTROY



Customer ID

Texas General Land Office

UNIT AGREEMENT MEMO

INUT240001

Unit Number 13517

Operator Name Anadarko E&P Onshore LLC

Effective Date C000044444 **Unitized For**

Unit Name Wand State 56 - 3 - 18 - 19 A # 21H Unit Term

Well

Reeves RRC District 1 08 County 1 Old Unit Number Inactive Status Date

County 2 RRC District 2 RRC District 3 County 3

County 4 RRC District 4

Unit type iNut

State Net Revenue Interest Oil 0.09391895 State Part in Unit 0.80108127

Unit Depth Specified Depths

From Depth

Formation To Depth

Participation Basis Length of Lateral

If Excluions Apply: See Remarks

Lease Number	Tract No	Lease Acres in Unit	Total Unit Acres	Tract Participation	<i>O/G</i>	Lease Royalty	NRI of Lease in Unit	Royalty Rate Reduction Clause
MF111895		0.000000	0.000000	0.70162192	O/G	0.12500000	0.08770274	No
MF114492		0.000000	0.000000	0.09945934	O/G	0.06250000	0.00621621	No

API Number

4238940697

Remarks:		
Prepared By:	Prepared Date:	04/25/2024
GLO Base Updated By:	GLO Base Date:	04125/2024
RAM Approval By:	RAM Approval Date:	0425/2024
GIS By:	GIS Date:	4/29/24
Well Inventory By:	WI Date:	04/25/2024

1/05/2004 4:20:40 DM

09/01/2023

Oil And Gas

Pooling Committee Report

To: School Land Board INUT240001

Date of Board

Meeting:

Unit Number: 13517

Effective Date:

09/01/2023

Unit Expiration Date:

Applicant:

Anadarko E&P Onshore LLC

Attorney Rep:

Operator:

ANADARKO E&P ONSHORE LLC,

Unit Name:

Wand State 56 - 3 - 18 - 19 A # 21H

Field Name:

PHANTOM (WOLFCAMP)

County:

Reeves

<u>Lease</u> <u>Type</u>	<u>Lease</u> <u>Number</u>	<u>Lease</u> <u>Royalty</u>	Expiration Date	<u>Lease</u> <u>Term</u>	<u>Lease</u> <u>Acres</u>	<u>Lease Acres</u> <u>In Unit</u>	Royalty Participation
FR	MF114492	0.06250000	03/13/2012	3 years	160.000000	0.000000	0.00621621
RAL	MF111895	0.12500000	07/14/2013	3 years	640.000000	0.000000	0.08770274

 Private Acres:
 0.000000

 State Acres:
 0.000000

Total Unit Acres: 0.000000

Participation Basis:

Surface Acreage

State Acreage:

80.11%

Unit Type: Unitized for:

iNut Oil And

Gas

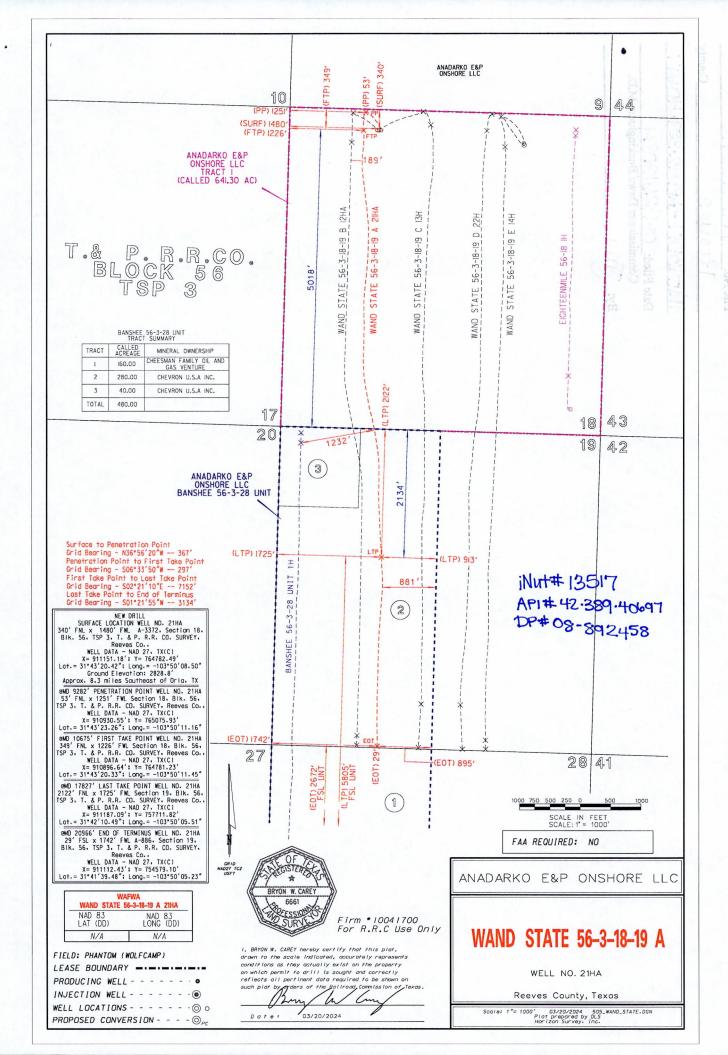
Term:

RRC Rules: Spacing Acres:

9.39%

No

State Net Revenue Interest:



File No. MF111895	24.
Roomes	County
iNut 13517 - API 42.389.406	97
Date Filed: 0+ 26 2024 Commissioner Dawn Buckingham, M.D	
Ву:	



$\label{lem:lemmation} \textbf{Information for processing an Internal Non Unit Transaction (iNut)} \\ \textit{Length of Lateral}$

iNut No. 13518

GENERAL INFORMATION

Name of	f Well <u>: Wand Sta</u>	ate 56 – 3 – 1	8 - 19 B #12	2HA AF	PI # <u>42-389-4</u>	0696		
Name of	f Operator <u>: Anac</u>	larko E&P Ons	shore LLC	R	RC # 08-892	453		
Operato	perator Contact Person: Cindy Bao Phone: 713-215-7016							
	s: Reeves	E UNITS AN	D/OR LEASI	ES BASED O	N LENGTH O	F LATERAL		
Lease Type	Unit/Lease No	Total Lateral Ft.	Unit or Lease Lateral Ft.	Unit or Lease Rylty Decimal		RRAC Participation Factor	State Particpation by Unit/Lease	
FR	8783/MF114492	9856	5107	0.02083333	0.06250000	0.17272048	0.01079503	
RAL	MF111895	9856	4749	0.12500000	0.12500000	0.48183847	0.06022981	
	Totals:					0.65455896		
Effectiv e Date:							State Net Royalty Revenue in Well	
Name of Commer	of Production S	haring Agre	ement, if an	y: PSACOE	528			
Attach a	a plat showing th	e iNut well w	ith length of l	aterals marke	ed and the St	ate lands mar	ked.	
Highway Mineral	Right of Way (HROW), Unle	ased Highway	y (UH), Crimi	nal Justice (T	DCJ), Parks	d Riverbed (UR) & Wildlife (TPW) 3VI), Stephen F	
Prepare	d by:	Alaı	mo updated b	y:	WI	updated by:	\overline{x}	
	proval by:		GIS updated	\mathcal{L}			0	

DO NOT DESTROY



Texas General Land Office

UNIT AGREEMENT MEMO

INUT240001

Unit Number

13518

Operator Name

Anadarko E&P Onshore LLC

Effective Date

09/01/2023

Customer ID

C000044444

Unitized For

Oil And Gas

Unit Name

Wand State 56 - 3 - 18 - 19 B # 12HA

Unit Term

County 1

Reeves

RRC District 1 08

Old Unit Number Inactive Status Date

County 2

RRC District 2

County 3

RRC District 3

County 4

RRC District 4

Unit type

iNut

State Net Revenue Interest Oil 0.07102484

State Part in Unit

0.65455896

Unit Depth

Specified Depths

Well

From Depth

Formation

To Depth

Participation Basis Length of Lateral

If Excluions Apply: See Remarks

Lease Number	Tract No	Lease Acres in Unit	Total Unit Acres	Tract Participation	<i>O/G</i>	Lease Royalty	NRI of Lease in Unit	Royalty Rate Reduction Clause
MF111895		0.000000	0.000000	0.48183847	O/G	0.12500000	0.06022981	No
MF114492		0.000000	0.000000	0.17272048	O/G	0.06250000	0.01079503	No

API Number

4238940696

Remarks:		
Prepared By: GLO Base Updated By: RAM Approval By: GIS By:	Prepared Date: GLO Base Date: RAM Approval Date: GIS Date:	04/26/2024 04/26/2024 04/26/2024 4/29/24

Well Inventory By:

WI Date:

Pooling Committee Report

To:

School Land Board

INUT240001

Unit Number: 13518

Date of Board

Meeting:

09/01/2023

Effective Date:

Unit Expiration Date:

Applicant:

Anadarko E&P Onshore LLC

Attorney Rep:

Operator:

ANADARKO E&P ONSHORE LLC,

Unit Name:

Wand State 56 - 3 - 18 - 19 B # 12HA

Field Name:

PHANTOM (WOLFCAMP)

County:

Reeves

<u>Lease</u> <u>Type</u>	<u>Lease</u> <u>Number</u>	<u>Lease</u> <u>Royalty</u>	Expiration Date	<u>Lease</u> <u>Term</u>	<u>Lease</u> <u>Acres</u>	Lease Acres In Unit	Royalty Participation
FR	MF114492	0.06250000	03/13/2012	3 years	160.000000	0.000000	0.01079503
RAL	MF111895	0.12500000	07/14/2013	3 years	640.000000	0.000000	0.06022981

Private Acres: 0.000000 **State Acres:** 0.000000

Total Unit Acres: 0.000000 **Participation Basis:** Length of Lateral Surface Acreage State Acreage: 65.46%

Unit Type: Unitized for:

Oil And iNut

Gas

Term:

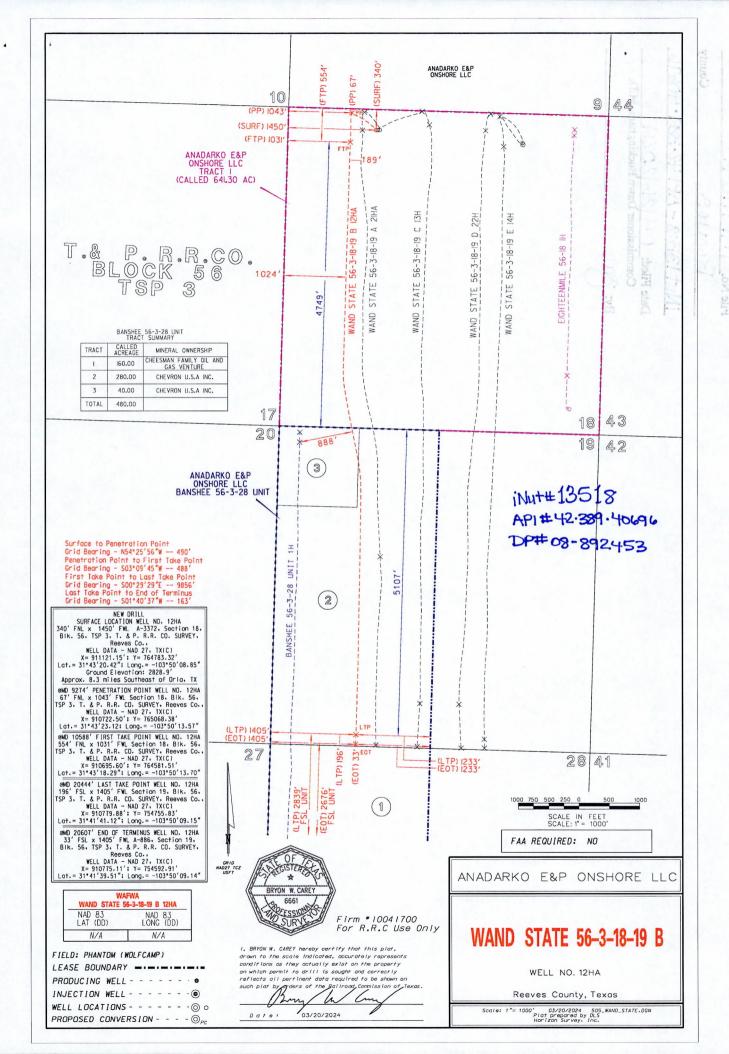
RRC Rules: Spacing Acres:

7.10%

No

State Net Revenue Interest:

4/25/2024 4:38:45 PM INUT240001 1 of 1



25.

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File No. MF111895	
Roomes	County
iNut 13518 - API 42.389	1.40696
Date Filed: 04/26/2024 Commissioner Dawn Buckingham	
Commissioner Dawn Buckingham	n, M.D.



Information for processing an Internal Non Unit Transaction (iNut) Length of Lateral

iNut No. 13519

GENERAL INFORMATION

Name of	f Well <u>: Wand Sta</u>	ate 56 – 3 – 1	8 - 19 C #13	BHA AF	PI # <u>42-389-4</u>	0698	
Name of	f Operator <u>: Anac</u>	larko E&P Ons	shore LLC	R	RC # 08-892	459	
Operato	r Contact Persor	: Cindy Bao		Ph	one <u>: 713-215</u>	5-701 <u>6</u>	
Counties	s: Reeves						
ALLOC/	ATION OF STAT	<u>E UNITS AN</u>	D/OR LEASI	ES BASED O	N LENGTH O	F LATERAL	
Lease Type	Unit/Lease No	Total Lateral Ft.	Unit or Lease Lateral Ft.	Unit or Lease Rylty Decimal	Lease Royalty Decimal	RRAC Participation Factor	State Particpation by Unit/Lease
FR	8783/MF114492	9648	4543	0.02083333	0.06250000	0.15695824	0.00980989
RAL	MF111895	9648	5105	0.12500000	0.12500000	0.52912521	0.06614065
	Totals:					0.68608345	0.07595054
Effectiv e Date:						0.08008343	State Net Royalty Revenue in Well
Name o Comme	of Production S	haring Agre	ement, if an	y: PSACOE	528		
• Attach a	plat showing th	e iNut well w	ith length of l	aterals marke	ed and the Sta	ate lands mar	ked.
Highway Mineral	ypes: Relinquish / Right of Way (Production Alloo SFA), TX A&M (A	HROW), Unle	ased Highway	y (UH), Crimi	nal Justice (T	DCJ), Parks	& Wildlife (TPV
Prepare	d by:	Alaı	mo updated b	py:	W	updated by:	TM
	proval by:		GIS updated	d by: RL			0

DO NOT DESTROY



Texas General Land Office

UNIT AGREEMENT MEMO

INUT240001

Unit Number

13519

Operator Name

Anadarko E&P Onshore LLC

Effective Date

09/01/2023

Customer ID

C000044444

Unitized For

Oil And Gas

Unit Name

Wand State 56 - 3 - 18 - 19 C # 13HA

Unit Term

Ou Ana Gas

County 1

Reeves

RRC District 1 08

Onn I cim

Old Unit Number Inactive Status Date

County 2

RRC District 2

RRC District 3

County 3

RRC District 3

County 4

RRC District 4

Unit type

iNut

State Net Revenue Interest

Oil 0.07595054

State Part in Unit

0.68608345

Unit Depth

Specified Depths

Well

From Depth

Formation

To Depth

Participation Basis Length of Lateral

If Excluions Apply: See Remarks

Lease Number	Tract No	Lease Acres in Unit	Total Unit Acres	Tract Participation	<i>O/G</i>	Lease Royalty	NRI of Lease in Unit	Royalty Rate Reduction Clause
MF111895		0.000000	0.000000	0.52912521	O/G	0.12500000	0.06614065	No
MF114492		0.000000	0.000000	0.15695824	O/G	0.06250000	0.00980989	No

API Number

4238940698

Remarks:			
Prepared By: GLO Base Updated By: RAM Approval By: GIS By:	PL.	Prepared Date: GLO Base Date: RAM Approval Date: GIS Date:	04/26/2024 04/26/2024 04/26/2024 4/29/24

LIGEIGNOA A.GT.EN DIA

Well Inventory By:

10510

WI Date:

1 ~ 5 .

Pooling Committee Report

To:

School Land Board

INUT240001

Unit Number: 13519

Date of Board

Meeting:

09/01/2023

Effective Date:

Unit Expiration Date:

Anadarko E&P Onshore LLC

Attorney Rep:

Operator:

Applicant:

ANADARKO E&P ONSHORE LLC,

Unit Name:

Wand State 56 - 3 - 18 - 19 C # 13HA

Field Name:

PHANTOM (WOLFCAMP)

County:

Reeves

<u>Lease</u> <u>Type</u>	<u>Lease</u> <u>Number</u>	<u>Lease</u> <u>Royalty</u>	Expiration Date	<u>Lease</u> <u>Term</u>	<u>Lease</u> <u>Acres</u>	Lease Acres In Unit	Royalty Participation
FR	MF114492	0.06250000	03/13/2012	3 years	160.000000	0.000000	0.00980989
RAL	MF111895	0.12500000	07/14/2013	3 years	640.000000	0.000000	0.06614065

 Private Acres:
 0.000000

 State Acres:
 0.000000

 Total Unit Acres:
 0.000000

Participation Basis:Length of LateralSurface Acreage5tate Acreage:68.61%State Net Revenue Interest:7.60%

Unit Type:

Unitized for:

iNut

Oil And Gas

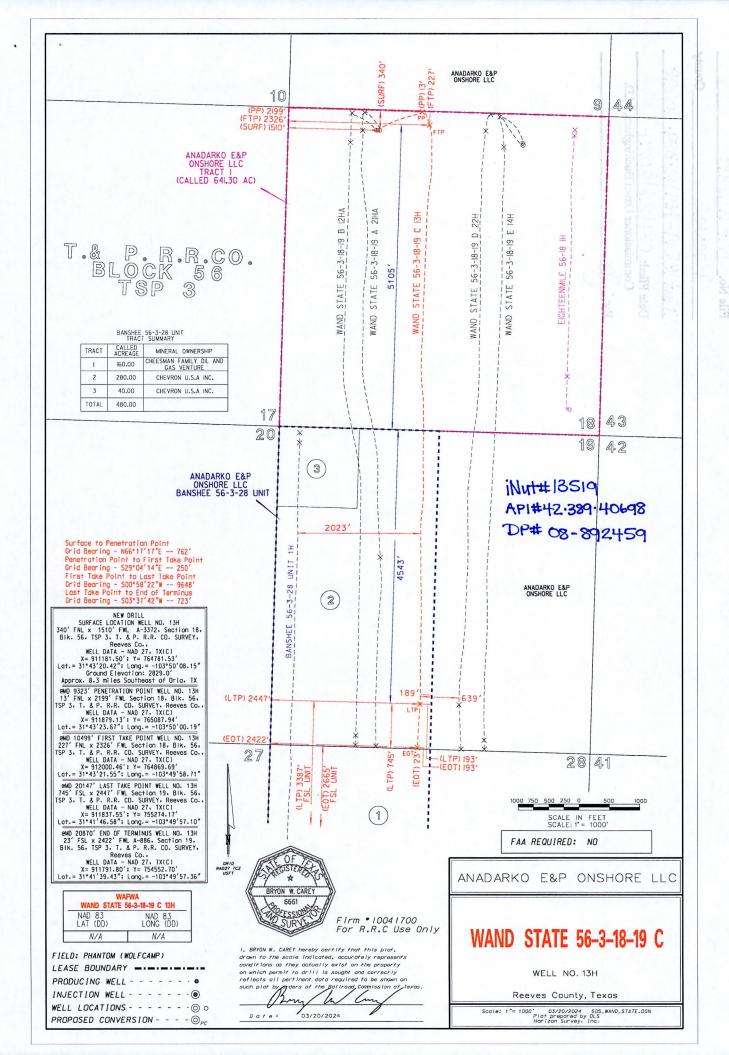
Term:

RRC Rules:

Spacing Acres:

No

4/25/2024 4:38:10 PM INUT240001 1 of 1



26.

File No. MF 111895	
Rolles	_County
iNut 13519 - API 42.389. 40	698
Date Filed: 04/26/2024 Commissioner Dawn Buckingham, M	LD.
Ву:	



Information for processing an Internal Non Unit Transaction (iNut) Length of Lateral

iNut No. 13520

GENERAL INFORMATION

Name o	of Well <u>: Wand Sta</u>	ate 56 - 3 - 1	8 - 19 D #22	<u>PHA</u> AP	PI # <u>42-389-4</u>	<u>0699</u>	
Name o	of Operator <u>: Anac</u>	larko E&P Ons	shore LLC	RI	RC # 08-8924	162	
Operato	or Contact Persor	: Cindy Bao		Ph	one <u>: 713-215</u>	5-701 <u>6</u>	
Countie	s: Reeves						
ALLOC	ATION OF STAT	E UNITS AN	D/OR LEASI	ES BASED OF	N LENGTH O	F LATERAL	
Lease Type	Unit/Lease No	Total Lateral Ft.	Unit or Lease Lateral Ft.	Unit or Lease Rylty Decimal	Lease Royalty Decimal	RRAC Participation Factor	State Particpation by Unit/Lease
FR	7981/MF117053	9554					0.01485165
RAL	MF111895	9554	5014	0.12500000	0.12500000	0.52480636	0.06560080
	Totals:					0.76243283	0.08045245
Effective Date:	09/01/2023						State Net Royalty Revenue in Well
Name (of Production S	haring Agree	ement, if an	y <u>:</u>			
Comme	ents:						
•							
Attach a	a plat showing th	e iNut well wi	th length of l	aterals marke	ed and the Sta	ate lands mar	ked.
Highwa Mineral	y Right of Way (HROW), Unleadation (MPAA)	ased Highway	y (UH), Crimi	nal Justice (T	DCJ), Parks 8	d Riverbed (UR), & Wildlife (TPW), BVI), Stephen F.
Prepare	proval by: \\D	Alar	mo updated b	y:	WI	updated by:	tm
RAM ap	proval by: $\bigvee \mathcal{D}$		GIS updated	by: RC			\circ

DO NOT DESTROY



Texas General Land Office

UNIT AGREEMENT MEMO

INU240001

Unit Number

13520

Operator Name

Anadarko E&P Onshore LLC

Customer ID

C000044444

Effective Date Unitized For

Oil And Gas

Unit Name

Wand State 56 - 3 - 18 - 19 D # 22HA

Unit Term

County 1

Reeves

RRC District 1

Old Unit Number Inactive Status Date

County 2 County 3 RRC District 2

RRC District 3

County 4

RRC District 4

Unit type

iNut

State Net Revenue Interest Oil 0.08045245

State Part in Unit

0.76243283

Unit Depth

Specified Depths

Well

From Depth

Formation

To Depth

Participation Basis Length of Lateral

If Excluions Apply: See Remarks

Lease Number	Tract No	Lease Acres in Unit	Total Unit Acres	Tract Participation	<i>O/G</i>	Lease Royalty	NRI of Lease in Unit	Royalty Rate Reduction Clause
MF111895		0.000000	0.000000	0.52480636	O/G	0.12500000	0.06560080	No
MF117053		0.000000	0.000000	0.23762647	O/G	0.06250000	0.01485165	No

API Number

4238940699

Remarks: 2024 Prepared By: **Prepared Date:**

12520

GLO Base Updated By:

RAM Approval By:

GIS By:

Well Inventory By:

= 17/2024 7.E7.46 ANA

GLO Base Date: RAM Approval Date: GIS Date: WI Date:

1 ~ 4 1

Pooling Committee Report

To:

School Land Board

INU240001

Date of Board

Meeting:

Unit Number: 13520

Effective Date:

Unit Expiration Date:

Applicant:

Anadarko E&P Onshore LLC

Attorney Rep:

Operator:

ANADARKO E&P ONSHORE LLC

Unit Name:

Wand State 56 - 3 - 18 - 19 D # 22HA

Field Name:

PHANTOM (WOLFCAMP)

County:

Reeves

<u>Lease</u> Type	<u>Lease</u> <u>Number</u>	<u>Lease</u> <u>Royalty</u>	Expiration Date	<u>Lease</u> <u>Term</u>	<u>Lease</u> <u>Acres</u>	Lease Acres In Unit	Royalty Participation
FR	MF117053	0.06250000		3 years	320.000000	0.000000	0.01485165
RAL	MF111895	0.12500000	07/14/2013	3 years	640.000000	0.000000	0.06560080

 Private Acres:
 0.000000

 State Acres:
 0.000000

 Total Unit Acres:
 0.000000

Participation Basis:

Surface Acreage

State Acreage:

State Net Revenue Interest:

Length of
Lateral

76.24%

<u>Unit Type:</u> <u>Unitized for:</u>

iNut

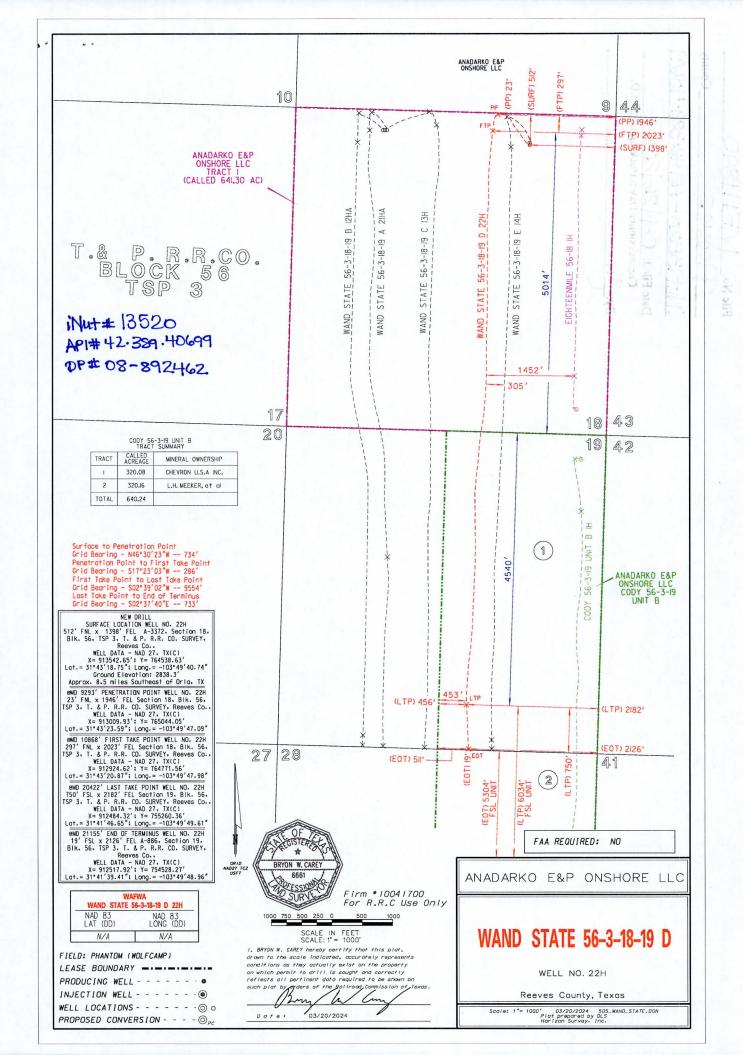
Oil And Gas

Term:

RRC Rules: Spacing Acres:

No

5/7/2024 7:57:54 AM INU240001 1 of 1



27.

County

File No.	MF	11895
	1	

Precues

Nut 13520 - API 42:389:40699

Date Filed: 04/26/2024

Commissioner Dawn Buckingham, M.D.



Information for processing an Internal Non Unit Transaction (iNut) Length of Lateral

iNut No. 13521

GENERAL INFORMATION

Name o	of Well <u>: Wand Sta</u>	ate 56 – 3 – 1	8 - 19 E #14	HA AF	PI # <u>42-389-4</u>	0700	
Name o	of Operator <u>: Anac</u>	larko E&P Ons	shore LLC	R	RC # 08-8924	166	
Operato	or Contact Persor	: Cindy Bao	1, 100 MANUAL PROPERTY OF THE	Ph	one <u>: 713-215</u>	5-701 <u>6</u>	
Countie	s: Reeves						
ALLOCA	ATION OF STAT	E UNITS AN	D/OR LEASI	ES BASED OI	N LENGTH O	F LATERAL	
Lease Type	Unit/Lease No	Total Lateral Ft.	Unit or Lease Lateral Ft.	Unit or Lease Rylty Decimal	Lease Royalty Decimal	RRAC Participation Factor	State Particpation by Unit/Lease
FR	7981/MF117053	9843	5109	0.03125390	0.06250000	0.25955692	0.01622231
RAL	MF111895	9843	4734	0.12500000	0.12500000	0.48095093	0.06011887
	Totals:					0.74050785	0.07634117
Effective Date:	09/01/2023						State Net Royalty Revenue in Well
Name (Comme	of Production S ents:	haring Agre	ement, if an	y ≟			
Attach a	a plat showing th	e iNut well wi	th length of l	aterals marke	ed and the Sta	ate lands mar	ked.
Lease T Highwa Mineral	ypes: Relinquish y Right of Way (Production Alloo (SFA), TX A&M (A	ment Act Lan HROW), Unle	d (RAL), Stat ased Highway	te Fee (SF), F y (UH), Crimi	Free Royalty (nal Justice (T	FR), Unlease DCJ), Parks 8	d Riverbed (UR) & Wildlife (TPW)
	ed by:	Alar	no updated b		WI	updated by:	Jm.
кам ар	proval by:		GIS upuated	i by. L			

DO NOT DESTROY



Texas General Land Office

UNIT AGREEMENT MEMO

INU240001

Unit Number

13521

Operator Name

Anadarko E&P Onshore LLC

Effective Date

Old Unit Number Inactive Status Date

09/01/2023

Customer ID

C000044444

Unitized For

Oil And Gas

Unit Name

Wand State 56 - 3 - 18 - 19 E # 14HA

Unit Term

County 1

Reeves

RRC District 1 08

County 2

RRC District 2

RRC District 3

County 3 County 4

RRC District 4

Unit type

iNut

State Net Revenue Interest Oil 0.07634117

State Part in Unit

0.74050785

Unit Depth

Specified Depths

Well

From Depth

Formation

To Depth

Participation Basis Length of Lateral

If Excluions Apply: See Remarks

Lease Number	Tract No	Lease Acres in Unit	Total Unit Acres	Tract Participation	0/G	Lease Royalty	NRI of Lease in Unit	Royalty Rate Reduction Clause
MF111895		0.000000	0.000000	0.48095093	O/G	0.12500000	0.06011887	No
MF117053		0.000000	0.000000	0.25955692	O/G	0.06250000	0.01622231	No

API Number

4238940700

Remarks:		
Prepared By:	Prepared Date:	04/26/2024
GLO Base Updated By:	GLO Base Date:	04/26/2024
RAM Approval By:	RAM Approval Date:	04/26/2024
GIS By: \mathcal{V}	GIS Date:	04 29 2024

Well Inventory By:

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12521

WI Date:

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Pooling Committee Report

To:

School Land Board

INU240001

Date of Board

Meeting:

Unit Number: 13521

Effective Date:

09/01/2023

Unit Expiration Date:

Applicant:

Anadarko E&P Onshore LLC

Attorney Rep:

Operator:

ANADARKO E&P ONSHORE LLC,

Unit Name:

Wand State 56 - 3 - 18 - 19 E # 14HA

Field Name:

PHANTOM (WOLFCAMP)

County:

Reeves

<u>Lease</u> Type	<u>Lease</u> <u>Number</u>	<u>Lease</u> <u>Royalty</u>	Expiration Date	<u>Lease</u> <u>Term</u>	<u>Lease</u> <u>Acres</u>	Lease Acres In Unit	Royalty Participation
FR	MF117053	0.06250000		3 years	320.000000	0.000000	0.01622231
RAL	MF111895	0.12500000	07/14/2013	3 years	640.000000	0.000000	0.06011887

 Private Acres:
 0.000000

 State Acres:
 0.000000

 Total Unit Acres:
 0.000000

Participation Basis:Length of LateralSurface Acreage74.05%State Net Revenue Interest:7.63%

Unit Type: Unitized for:

iNut

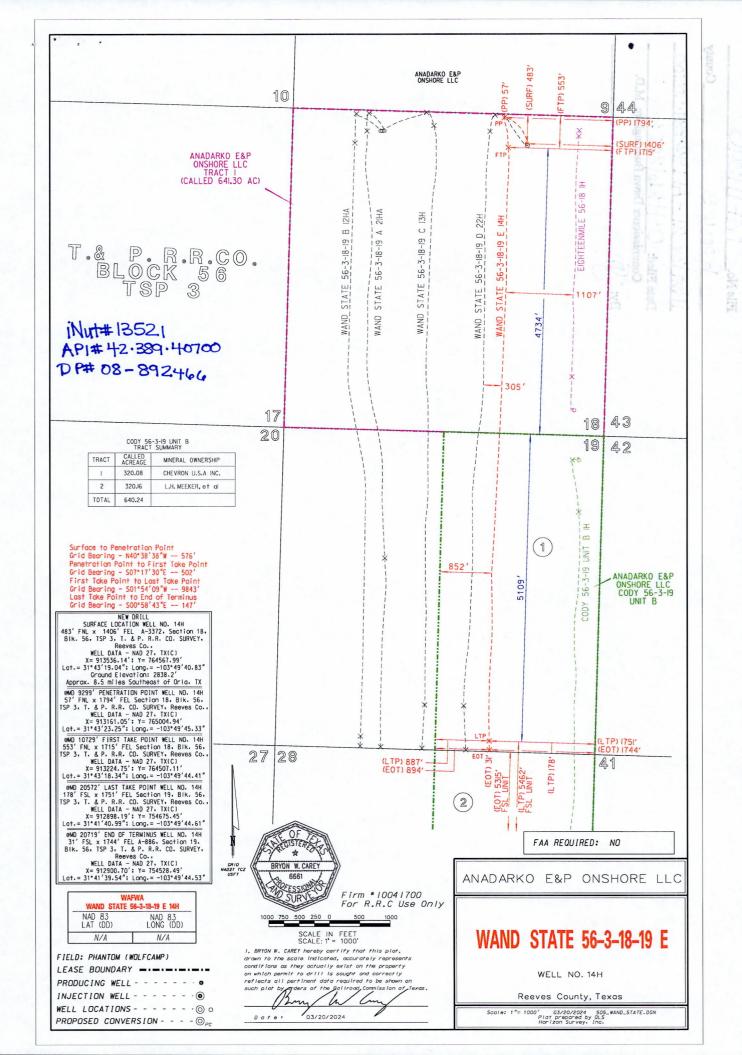
Oil And Gas

Term:

RRC Rules: Spacing Acres:

No

5/7/2024 8:56:50 AM INU240001 1 of 1



28.

Reo NOS County iNut 13521 - API 42:389:40700 Date Filed: O 4 210 2024 Commissioner Dawn Buckingham, M.D. By: M.	File No. MF1118	95
Date Filed: 04/210/2024 Commissioner Dawn Buckingham, M.D.	Reoves	County
	iNut 13521 - API	42.389.40700
	Date Filed: 04/210/2	2024
		uckingham, M.D.

D 6# 58 - 845 Helio V51# H5 -865 - Helio W/A# 199571



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

Cimarex Energy Co.

Attn: Tran Chu

6001 Deauville Blvd. Suite 300 N

Midland, TX 79706-2671

Billing Date:

5/10/2024

Billing Due Date:

6/9/2024

Customer Number: C000044010

Invoice	Mineral File	Gas Royalty	Oil Royalty	Penalty	Interest	Total Due
24I00749	MF111895	\$0.00	\$3,036.90	\$460.15	\$336.48	\$3,833.53
Total Due		\$0.00	\$3,036.90	\$460.15	\$336.48	\$3,833.53

Penalty and interest have been calculated thru 5/31/2024. Payment remitted after 5/31/2024 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

Cimarex Energy Co.

Billing Date: 5/10/2024

Billing Due Date: 6/9/2024

Customer Number: C000044010

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
24I00749	MF111895	\$0.00	\$3,036.90	\$460.15	\$336.48	\$3,833.53
Total Due		\$0.00	\$3,036.90	\$460.15	\$336.48	\$3,833.53
Amt. Paid						

Customer ID:

C000044010

Invoice Number: GLO Lease:

MF111895

GLO Review: CIMAREX ENERGY CO.

Category Oil Auditor/AE: ECortez

Billing Date: 5/8/2024 P&I Calculation Date: 5/31/2024

Review Period:	Sept 2022 - Aug	2023					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			Interest Rate For Additional Royalty	From Additional	Interest Rate From Additional Royalty2	Revenue Due
Dec-22	08-283294	0	1	\$0.000	1	\$0.00	\$10,806.72	\$10,765.91	\$40.81	481	8.50%	\$25.00	\$4.01	\$69.82
Mar-23	08-283294	0	. 1	\$0.000	1	\$0.00	\$15,391.85	\$11,731.42	\$3,660.43	392	8.50%	\$366.04	\$283.86	\$4,310.33
Apr-23	08-283294	0	1	\$0.000	1	\$0.00	\$13,256.02	\$12,564.89	\$691.13	361	8.50%	\$69.11	\$48.61	\$808.85
May-23	08-283294	0	1	\$0.000	1	\$0.00	\$10,920.14	\$11,328.16	(\$408.02)	331	8.50%	\$0.00	\$0.00	(\$408.02)
Jun-23	08-283294	0	1	\$0.000	1	\$0.00	\$10,189.18	\$11,136.63	(\$947.45)	300	8.50%	\$0.00	\$0.00	(\$947.45)
TOTALS		0				\$0.00	\$60,563.91	\$57,527.01	\$3,036.90			\$460.15	\$336.48	\$3,833.53

COMMENTS:

BILLING ON UNDER PAID OIL ROYALTIES TO THE GLO FOR STATE LEASE MF111895

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/rrac/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: account services@glo.texas.gov and eric.cortez@glo.texas.gov NOTING YOUR COMPANY NAME, CUSTOMER ID, INVOICE NUMBER(S) AND AMOUNT OF PAYMENT.

EMAIL:

Chinedu Achebe

Leroy Cantu

Tran Chu

Chinedu.achebe@coterra.com

Leroy Cantu@coterra.com Tran Chu@coterra.com

File No. MF	111895	-
		County
Recon	Bullins	,
Date Filed:	6/4/	2024
Commission	er Dawn Bucking	ham, M.D.
By:		V



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

Cimarex Energy Co.

Attn: Tran Chu

6001 Deauville Blvd. Suite 300 N

Midland, TX 79706-2671

Billing Date:

5/10/2024

Billing Due Date:

6/9/2024

Customer Number:

C000044010

Invoice	Mineral File	Gas Royalty	Oil Royalty	Penalty	Interest	Total Due
24I00751	MF111895	\$1,014.62	\$0.00	\$140.71	\$46.30	\$1,201.63
Total Due		\$1,014.62	\$0.00	\$140.71	\$46.30	\$1,201.63

Penalty and interest have been calculated thru 5/31/2024. Payment remitted after 5/31/2024 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

Cimarex Energy Co.

Billing Date: 5/10/2024

Billing Due Date: 6/9/2024

Remit Payment To:

Texas General Land Office

PO Box 12873

Customer Number: C000044010

Austin, TX 78711-2873

Invoice	Mineral File	Gas Royalty	Oil Royalty	Penalty	Interest	Total Due
24I00751	MF111895	\$1,014.62	\$0.00	\$140.71	\$46.30	\$1,201.63
Total Due		\$1,014.62	\$0.00	\$140.71	\$46.30	\$1,201.63
Amt. Paid						

Customer ID: Invoice Number: C000044010

MF111895 GLO Lease:

Review Period:

GLO Review: CIMAREX ENERGY CO. Sept 2022 - Aug 2023

Category Gas Auditor/AE: ECortez Billing Date: 5/8/2024 P&I Calculation Date: 5/31/2024

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 Paic	Additional Royalty Due		Interest Rate For Additional	From Additional	Interest Rate From Additional Royalty2	Revenue Due
Mar-23	08-283294	308		\$1.752	1.21933	\$657.84	\$82.23	\$0.00	\$82.23	382	8.50%	\$25.00	\$6.19	\$113.42
May-23	08-283294	71	1	\$2.160	1.32000	\$202.44	\$25.30	\$0.00	\$25.30	321	8.50%	\$25.00	\$1.54	\$51.84
Jul-23	08-283294	1,067	1	\$2.160	1.32000	\$3,042.23	\$380.28	\$0.00	\$380.28	259	8.50%	\$38.03	\$17.71	\$436.02
Aug-23	08-283294	1,783	1	\$2.076	1.13844	\$4,214.46	\$526.81	\$0.00	\$526.81	229	8.50%	\$52.68	\$20.86	\$600.35
TOTALS		3,229				\$8,116.97	\$1,014.62	\$0.00	\$1,014.62			\$140.71	\$46.30	\$1,201.63

COMMENTS:

BILLING ON UNDER REPORTED GAS VOLUMES TO THE GLO FOR STATE LEASE MF111895 (08-283294)

COLUMN (3) COLUMNS (5) & (6) UNDER REPORTED VOLUMES: REPORTED RRC VOLUMES MINUS REPORTED GLO2 VOLUMES REPORTED GLO2 PRICES AND BTU FACTORS WERE USED

COLUMNS (12),(13),(14) PLEASE GO TO THIS WEB SITE FOR EXPLANATION OF PENALTY AND INTEREST ASSESSMENTS:

http://www.glo.texas.gov/energy-business/oil-gas/rrac/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: account services@glo.texas.gov and eric.cortez@glo.texas.gov NOTING YOUR COMPANY NAME, CUSTOMER ID, INVOICE NUMBER(S) AND AMOUNT OF PAYMENT.

EMAIL:

Chinedu Achebe

Leroy Cantu

Tran Chu

Chinedu achebe@coterra.com

Leroy.Cantu@coterra.com

Tran.Chu@coterra.com

File No. M	-(1189	5	No. 1994 Sept W. Stewartschild der wie Greiffelbereite beiter zu der
		-	County
Recon	Bill	129	/
Date Filed:		6/	112024
Commiss	ioner Dawn l	Buckingh	am, M.D.
Bv:			VI)