

Confidentiality Requested:

Yes No

**KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION**

Form ACO-1

January 2018

Form must be Typed

Form must be Signed

All blanks must be Filled

**WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE**

OPERATOR: License # _____

Name: _____

Address 1: _____

Address 2: _____

City: _____ State: _____ Zip: _____ + _____

Contact Person: _____

Phone: (_____) _____

CONTRACTOR: License # _____

Name: _____

Wellsite Geologist: _____

Purchaser: _____

Designate Type of Completion:

New Well Re-Entry Workover

Oil WSW SWD

Gas DH EOR

OG GSW

CM (Coal Bed Methane)

Cathodic Other (Core, Expl., etc.): _____

If Workover/Re-entry: Old Well Info as follows:

Operator: _____

Well Name: _____

Original Comp. Date: _____ Original Total Depth: _____

Deepening Re-perf. Conv. to EOR Conv. to SWD
 Plug Back Liner Conv. to GSW Conv. to Producer

Commingled Permit #: _____

Dual Completion Permit #: _____

SWD Permit #: _____

EOR Permit #: _____

GSW Permit #: _____

Spud Date or Date Reached TD Completion Date or Recompletion Date

API No.: _____

Spot Description: _____

_____ - _____ - _____ Sec. _____ Twp. _____ S. R. _____ East West

_____ Feet from North / South Line of Section

_____ Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:

NE NW SE SW

GPS Location: Lat: _____, Long: _____
(e.g. xx.xxxxx) (e.g. -xxx.xxxxx)

Datum: NAD27 NAD83 WGS84

County: _____

Lease Name: _____ Well #: _____

Field Name: _____

Producing Formation: _____

Elevation: Ground: _____ Kelly Bushing: _____

Total Vertical Depth: _____ Plug Back Total Depth: _____

Amount of Surface Pipe Set and Cemented at: _____ Feet

Multiple Stage Cementing Collar Used? Yes No

If yes, show depth set: _____ Feet

If Alternate II completion, cement circulated from: _____

feet depth to: _____ w/ _____ sx cmt.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: _____ ppm Fluid volume: _____ bbls

Dewatering method used: _____

Location of fluid disposal if hauled offsite: _____

Operator Name: _____

Lease Name: _____ License #: _____

Quarter _____ Sec. _____ Twp. _____ S. R. _____ East West

County: _____ Permit #: _____

AFFIDAVIT

I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Submitted Electronically

KCC Office Use ONLY

Confidentiality Requested

Date: _____

Confidential Release Date: _____

Wireline Log Received Drill Stem Tests Received

Geologist Report / Mud Logs Received

UIC Distribution

ALT I II III Approved by: _____ Date: _____

Operator Name: _____ Lease Name: _____ Well #: _____

Sec. _____ Twp. _____ S. R. _____ East West County: _____

INSTRUCTIONS: Show important tops of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed.

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to kcc-well-logs@kcc.ks.gov. Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

Drill Stem Tests Taken <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i> Samples Sent to Geological Survey <input type="checkbox"/> Yes <input type="checkbox"/> No Cores Taken <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Run <input type="checkbox"/> Yes <input type="checkbox"/> No Geologist Report / Mud Logs <input type="checkbox"/> Yes <input type="checkbox"/> No List All E. Logs Run:	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample Name Top Datum
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CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate <input type="checkbox"/> Protect Casing <input type="checkbox"/> Plug Back TD <input type="checkbox"/> Plug Off Zone				

1. Did you perform a hydraulic fracturing treatment on this well? Yes No *(If No, skip questions 2 and 3)*
2. Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? Yes No *(If No, skip question 3)*
3. Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry? Yes No *(If No, fill out Page Three of the ACO-1)*

Date of first Production/Injection or Resumed Production/Injection:	Producing Method: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> _____			
Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio Gravity

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <i>(Submit ACO-4)</i>	PRODUCTION INTERVAL: Top Bottom
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Shots Per Foot	Perforation Top	Perforation Bottom	Bridge Plug Type	Bridge Plug Set At	Acid, Fracture, Shot, Cementing Squeeze Record <i>(Amount and Kind of Material Used)</i>

TUBING RECORD:	Size:	Set At:	Packer At:	
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Form	ACO1 - Well Completion
Operator	Palomino Petroleum, Inc.
Well Name	MCJUNKIN 1
Doc ID	1430645

All Electric Logs Run

Micro
Dual Induction
Dual Receiver Cement Bond
Compensated Density Neutron

Form	ACO1 - Well Completion
Operator	Palomino Petroleum, Inc.
Well Name	MCJUNKIN 1
Doc ID	1430645

Tops

Name	Top	Datum
Anhy.	1489	(+ 759)
Base Anhy.	1497	(+ 751)
Heebner	3740	(-1492)
Lansing	3788	(-1540)
BKC	4140	(-1892)
Pawnee	4222	(-1974)
Ft. Scott	4300	(-2052)
Cherokee Sh.	4324	(-2076)
Miss.	4394	(-2146)
LTD	4532	(-2284)



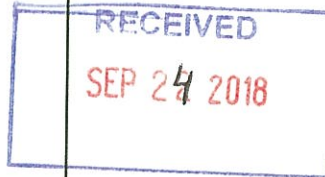
P. O. Box 466
Ness City, KS 67560
Off: 785-798-2300



Invoice

DATE	INVOICE #
9/20/2018	31731

BILL TO
Palomino Petroleum Inc. 4924 S E 84th Street Newton, KS 67114-8827



- Acidizing
- Cement
- Tool Rental

TERMS	Well No.	Lease	County	Contractor	Well Type	Well Category	Job Purpose	Operator
Net 30		McJunkin	Ness	H-D Oilfield Rig #5	Oil	Development	Port Collar & Pe...	Blaine

PRICE REF.	DESCRIPTION	QTY	UM	UNIT PRICE	AMOUNT
575D	Mileage - 1 Way	30	Miles	5.00	150.00
576D-D	Pump Charge - Deep Surface (> 500 Ft.) & Port Collars	1	Job	1,300.00	1,300.00
330	Swift Multi-Density Standard (MIDCON II)	165	Sacks	16.25	2,681.25T
276	Flocele	50	Lb(s)	2.50	125.00T
300 - 15%	Regular Acid	200	230	1.90	380.00
230	Surf-3 ESA-N35 (Losurf 300)	1	Gallon(s)	25.00	25.00
235	INH.1 ESA-28	1	Gallon(s)	40.00	40.00
104	Port Collar Tool Rental	1	Each	200.00	200.00T
581D	Service Charge Cement	275	Sacks	1.75	481.25
583D	Drayage	404.28	Ton Miles	0.85	343.64
	Subtotal				5,726.14
	Sales Tax Ness County			6.50%	195.41

*cement for port collar
9/20*

We Appreciate Your Business!

Total

\$5,921.55



Services, Inc.

TICKET 031731

PAGE 1 OF 1

CHARGE TO: Roberto Polanco
 ADDRESS
 CITY, STATE, ZIP CODE

1. SERVICE LOCATIONS: Ness City KS WELL/PROJECT NO. LEASE McIntosh COUNTY/PARISH Ness STATE KS CITY Greene DATE 20 Sep 18 OWNER
 2. TICKET TYPE: SERVICE SALES CONTRACTOR RIG NAME/NO. 5 SHIPPED W/CT DELIVERED TO location ORDER NO.
 3. WELL TYPE: oil WELL CATEGORY: Development JOB PURPOSE: pre-drill & pad squeeze WELL PERMIT NO. WELL LOCATION
 4. REFERRAL LOCATION INVOICE INSTRUCTIONS

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING LOC	ACCT	DF	DESCRIPTION	QTY. U/M			UNIT PRICE	AMOUNT
						QTY.	U/M	QTY.		
575					MILEAGE	30	mi		5.00	150.00
575					TRK W/					
575					PUMP CHARGE	1	ea		1300.00	1300.00
575					SMUD cement	16.25	sk		2681.25	4381.25
575					Fluore	50	lb		2.50	125.00
575					Rig Acid	200	gal		1.90	380.00
575					slurp-3	1	gal		25.00	25.00
575					Fluor-1	1	gal		48.00	48.00
575					Standard cement					
575					Port collar opening tool Rental	5 1/2	in		1.00	5.50
575					Service charge					
575					Dayage					

LEGAL TERMS: Customer hereby acknowledges and agrees to the terms and conditions on the reverse side hereof which include, but are not limited to, PAYMENT, RELEASE, INDEMNITY, and LIMITED WARRANTY provisions.

REMIT PAYMENT TO:
 SWIFT SERVICES, INC.
 P.O. BOX 466
 NESS CITY, KS 67560

MUST BE SIGNED BY CUSTOMER OR CUSTOMER'S AGENT PRIOR TO START OF WORK OR DELIVERY OF GOODS.
 DATE SIGNED: 9/13 TIME SIGNED: 1:15 PM
 A.M. P.M.
 CUSTOMER ACCEPTANCE OF MATERIALS AND SERVICES. The customer hereby acknowledges receipt of the materials and services listed on this ticket.

APPROVAL: [Signature]
 SWIFT OPERATOR
 SURVEY: OUR EQUIPMENT PERFORMED WITHOUT BREAKDOWN? WE UNDERSTOOD AND MET YOUR NEEDS? OUR SERVICE WAS PERFORMED WITHOUT DELAY? WE OPERATED THE EQUIPMENT AND PERFORMED JOB CALCULATIONS SATISFACTORILY?
 ARE YOU SATISFIED WITH OUR SERVICE? YES NO
 TOTAL: 5921.35

Thank You!

JOB LOG

SWIFT Services, Inc.

DATE 20 Sep 18	PAGE NO. 1
TICKET NO. 31731	

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
								200sk SMD cement w/ 7" floater 75sk standard cement 2x 5 1/2 Port collar - 1468'
	0830							on loc TRK 114
	0845					1000	1000	test to 1000 psi
	0900					200		inj rate 3 1/2 bpm @ 200
		3 1/2				200		mix SMD cement @ 11.2 ppg
		3 1/2	1			200		- circ to surface - → cement to surface ←
								{ 165 mixed } 15 to pit
	0930		7 1/2					Displace 7 1/2" bb1 close port collar
						1000	1000	test to 1000 psi
	0950							Reverse hole clean - 2 cement plugs -
								wash truck pull tool
	1030							Run perforators to 4420-24 4430-31
	1100							test truck to 300 psi - bleed off swab test
								- attempt truck repairs
	1437							spot acid - wash through communication piece @ 4304 - breakdown w) 561 A:io
	1520	3	32			700		2 bbl overfish 3 bpm @ 700 psi 4 min. to vacuum swab back acid - switch out trucks
								smudgy back oil Rack up - overnight fill
	1710							job complete truck Blaine Flint / MAC



P. O. Box 466
Ness City, KS 67560
Off: 785-798-2300

Invoice

DATE	INVOICE #
9/11/2018	31648

BILL TO	<div data-bbox="738 331 1058 493" data-label="Text"> <p>RECEIVED SEP 15 2018</p> </div>
Palomino Petroleum Inc. 4924 S E 84th Street Newton, KS 67114-8827	

- Acidizing
- Cement
- Tool Rental

TERMS	Well No.	Lease	County	Contractor	Well Type	Well Category	Job Purpose	Operator
Net 30	#1	McJunkin	Ness	WW Rig #14	Oil	Development	Cement Long Str...	Blaine

PRICE REF.	DESCRIPTION	QTY	UM	UNIT PRICE	AMOUNT
575D	Mileage - 1 Way	25	Miles	5.00	125.00
578D-L	Pump Charge - Long String	1	Job	1,300.00	1,300.00
403-5	5 1/2" Cement Basket	1	Each	275.00	275.00T
404-5	5 1/2" Port Collar	1	Each	2,500.00	2,500.00T
406-5	5 1/2" Latch Down Plug & Baffle	1	Each	250.00	250.00T
407-5	5 1/2" Insert Float Shoe With Auto Fill	1	Each	325.00	325.00T
409-5	5 1/2" Turbolizer	10	Each	85.00	850.00T
419-5	5 1/2" Rotating Head Rental	1	Each	200.00	200.00T
330	Swift Multi-Density Standard (MIDCON II)	125	Sacks	16.25	2,031.25T
325	Standard Cement	100	Sacks	13.00	1,300.00T
284	Calseal	5	Sack(s)	35.00	175.00T
283	Salt	500	Lb(s)	0.20	100.00T
285	CFR-1	50	Lb(s)	4.50	225.00T
276	Flocele	50	Lb(s)	2.50	125.00T
281	Mud Flush	500	Gallon(s)	1.50	750.00T
221	Liquid KCL (Clayfix)	4	Gallon(s)	25.00	100.00T
581D	Service Charge Cement	225	Sacks	1.75	393.75
582D	Minimum Drayage Charge	1	Each	250.00	250.00
	Subtotal				11,275.00
	Sales Tax Ness County			6.50%	598.41

We Appreciate Your Business!

Total

\$11,873.41



Services, Inc.

CHARGE TO: Palomino
 ADDRESS
 CITY, STATE, ZIP CODE

TICKET 031648

SERVICE LOCATIONS
 1. Nevo City, KS
 2.
 3.
 4.

WELL/PROJECT NO. #1 LEASE McStunkin COUNTY/PARISH Neos STATE KS CITY Nevo City DATE 11 SEP 18 OWNER
 CONTRACTOR
 WELL TYPE 0.1 WELL CATEGORY Development JOB PURPOSE Cement long string RIG NAME/NO. 14 SHIPPED VIA Truck DELIVERED TO location WELL PERMIT NO.
 INVOICE INSTRUCTIONS

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING			DESCRIPTION	QTY.	U/M	QTY.	U/M	UNIT PRICE	AMOUNT
		LOC	ACCT	DF							
575					MILEAGE	25	mi			5.00	125.00
578					Pump charge	1	ea			1300.00	1300.00
403					Cement Project	5 1/2	in	1	ea	275.00	275.00
404					Popf collar	5 1/2	in	1	ea	2500.00	2500.00
406					Batch down plug & balls	5 1/2	in	1	ea	250.00	250.00
407					Insert float sleeve w/ AUTO FILL	5 1/2	in	1	ea	325.00	325.00
409					TU-BED LIZAR	5 1/2	in	10	ea	85.00	850.00
419					Rotating head rental	5 1/2	in	1	ea	200.00	200.00

LEGAL TERMS: Customer hereby acknowledges and agrees to the terms and conditions on the reverse side hereof which include, but are not limited to, **PAYMENT, RELEASE, INDEMNITY, and LIMITED WARRANTY** provisions.

MUST BE SIGNED BY CUSTOMER OR CUSTOMER'S AGENT PRIOR TO START OF WORK OR DELIVERY OF GOODS.
 X [Signature]
 DATE SIGNED _____ TIME SIGNED _____
 A.M. P.M.

REMIT PAYMENT TO:
 SWIFT SERVICES, INC.
 P.O. BOX 466
 NESS CITY, KS 67560
 785-798-2300

SURVEY	AGREE	UNDECIDED	DISAGREE	PAGE TOTAL
OUR EQUIPMENT PERFORMED WITHOUT BREAKDOWN?				5825.00
WE UNDERSTOOD AND MET YOUR NEEDS?				545.00
OUR SERVICE WAS PERFORMED WITHOUT DELAY?				11,275.00
WE OPERATED THE EQUIPMENT AND PERFORMED JOB CALCULATIONS SATISFACTORILY?				598.41
ARE YOU SATISFIED WITH OUR SERVICE?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	TOTAL
<input type="checkbox"/> CUSTOMER DID NOT WISH TO RESPOND				11893.41

CUSTOMER ACCEPTANCE OF MATERIALS AND SERVICES The customer hereby acknowledges receipt of the materials and services listed on this ticket.
 SWIFT OPERATOR [Signature] APPROVAL [Signature]
 Thank You!



PO Box 466
Ness City, KS 67560
Off: 785-798-2300

TICKET CONTINUATION

TICKET No. 31648

CUSTOMER *Pelumbo*

WELL *McJunkin #1*

DATE *11 Sep 18* 9:02 AM

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING			TIME	DESCRIPTION	WELL				DATE	UNIT PRICE	AMOUNT
		LOC	ACCT	DF			QTY	U/M	QTY	U/M			

336						SHD cement	100	SK	135	SK	16.25	2031.25
275						Standard cement (50-4-2)	100	SK			13.00	1300.00
284						cat seal	500	1/6	5	SK	35.00	175.00
283						salt	500	1/6			0.20	100.00
285						CEP-1	50	1/6			4.50	225.00
276						Fluclo	50	1/6			2.50	125.00
281						MARFIL 15 h	500	gal			1.50	750.00
221						KCL liquid	4	gal			25.00	100.00
582						DRAGAGE LUNCH					2.50	250.00
581						SERVICE CHARGE					1.75	393.75
						MILEAGE CHARGE						
						TOTAL MILEAGE CHARGE						
						LOADED MILES						
						CUBIC FEET						
						TON MILES						
CONTINUATION TOTAL												5450.00



QUALITY OILWELL CEMENTING, INC.
 PO Box 32 - 740 WEST WICHITA AVE, RUSSELL KS 67665
 PHONE:785-324-1041 FAX:785-483-1087
 EMAIL: cementing@ruraltel.net

Date: 9/4/2018
 Invoice # 953

P.O.#:
 Due Date: 10/4/2018
 Division: Russell

Invoice



Contact:
 Palomino Petroleum Inc
Address/Job Location:

4924 SE 84th
 Newton Ks 67114

Reference:
 MCJUNKIN 1 SEC 15-20-22

Description of Work:
 SURFACE JOB

Services / Items Included:	Quantity	Price	Taxable	Item	Quantity	Price	Taxable
Labor		\$ 641.27	No				
Common-Class A	120	\$ 1,776.75	Yes				
Calcium Chloride	6	\$ 241.50	Yes				
POZ Mix-Standard	30	\$ 150.94	Yes				
Bulk Truck Matl-Material Service Charge	159	\$ 114.28	No				
Pump Truck Mileage-Job to Nearest Camp	23	\$ 74.39	No				
Premium Gel (Bentonite)	3	\$ 62.53	Yes				
Bulk Truck Mileage-Job to Nearest Bulk Plant	23	\$ 57.86	No				

Invoice Terms:

Net 30

	<i>SubTotal:</i>	\$ 3,119.52
	<i>Discount Available ONLY if Invoice is Paid & Received within listed terms of invoice:</i>	\$ (77.99)
<hr/>		
	SubTotal for Taxable Items:	\$ 2,175.93
	SubTotal for Non-Taxable Items:	\$ 865.61
<hr/>		
	Total:	\$ 3,041.53
	Tax:	\$ 141.44
	Amount Due:	\$ 3,182.97
	Applied Payments:	
	Balance Due:	\$ 3,182.97

6.50% Ness County Sales Tax

Thank You For Your Business!

Past Due Invoices are subject to a service charge (annual rate of 24%)
 This does not include any applicable taxes unless it is listed.
 ©2008-2013 Straker Investments, LLC. All rights reserved.

QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-2025

Home Office P.O. Box 32 Russell, KS 67665

No. 953

Cell 785-324-1041

Date	9-4-18	Sec.	15	Twp.	20	Range	22	County	Ness	State	KS	On Location		Finish	11:00 PM
------	--------	------	----	------	----	-------	----	--------	------	-------	----	-------------	--	--------	----------

Location *Bazine 95 to 40 Rd 2 1/2 W 9 into*

Lease	<i>McJunkin</i>	Well No.	<i>1E1</i>	Owner	To Quality Oilwell Cementing, Inc. You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.
Contractor	<i>WW #14</i>				
Type Job	<i>Surface</i>				
Hole Size	<i>12 1/4</i>	T.D.	<i>229'</i>	Charge To	<i>Palomina Petrochem</i>
Csg.	<i>8 5/8</i>	Depth	<i>229'</i>	Street	
Tbg. Size		Depth		City	State
Tool		Depth		The above was done to satisfaction and supervision of owner agent or contractor.	
Cement Left in Csg.	<i>20'</i>	Shoe Joint		Cement Amount Ordered	<i>150 80/120 3 3/16 cc 2 1/16 bcd</i>

Meas Line Displace *13 bbl*

EQUIPMENT

Pumptrk	<i>16</i>	No.	Cementer		Common	<i>120</i>
			Helper	<i>Brett</i>	Poz. Mix	<i>30</i>
Bulktrk	<i>14</i>	No.	Driver	<i>David</i>	Gel.	<i>3</i>
			Driver	<i>Jim</i>	Calcium	<i>6</i>

JOB SERVICES & REMARKS

Remarks:	Hulls
Rat Hole	Salt
Mouse Hole	Flowseal
Centralizers	Kol-Seal
Baskets	Mud CLR 48
D/V or Port Collar	CFL-117 or CD110 CAF 38
	Sand

*Ran 229' 8 5/8 & Est circulation
Mix 150 sx
Displaced 13 bbl*

Cement circulated!!

FLOAT EQUIPMENT

Handling	<i>159</i>
Mileage	
Guide Shoe	
Centralizer	
Baskets	
AFU Inserts	
Float Shoe	
Latch Down	

Pumptrk Charge *Surface*
Mileage *23*

X Signature *[Handwritten Signature]*

Tax	
Discount	
Total Charge	

Aaron L. Young

Drilling Time and Sample Log

Scale 1:240 (5"=100') Imperial
Measured Depth Log

Well Name: McJunkin #1
 API: 15-135-26019
 Location: Section 15 - T20S - R22W
 License Number: 30742
 Spud Date: 09 / 04 / 2018
 Surface Coordinates: 1780' FNL and 2553' FEL
 Approx. SW - NW - SW - NE

Region: Ness Co., KS
 Drilling Completed: 09 / 10 / 2018

Bottom Hole
 Coordinates:
 Ground Elevation (ft): 2237' K.B. Elevation (ft): 2248'
 Logged Interval (ft): 3700' To: 4530' Total Depth (ft): 4530'
 Formation: Mississippian
 Type of Drilling Fluid: Chemical - Mud-Co

Printed by MudLog from WellSight Systems 1-800-447-1534 www.WellSight.com

OPERATOR

Company: Palomino Petroleum, Inc.
 Address: 4924 SE 84th St
 Newton, KS 67114+8827

GEOLOGIST

Name: Aaron L. Young, M.S.
 Company: Young Consulting LLC
 Address: 100 S. Main, Suite 505
 Wichita, Kansas 67202

General Info

CONTRACTOR: WW Drilling, Rig #14

BIT RECORD:

No.	Size	Make	Jets	Out	Feet	Hours
1	12-1/4	SMITH	15-15-15	229	218	3.0
2	7-7/8	F27IY	15-15-15	4530	4301	94.5

SURVEYS: 229'-.25, 1449'-.75, 4373'-1.75, 4402-.75, 4530'-.75

GENERAL DRILLING AND PUMP INFORMATION:

Drilling with 35,000 - 38,000 lbs. on bit and approx 90 RPM.
 Running 8 stands of collars; 461'
 Pumping approx 1000 psi at standpipe.

Daily Status

09/04/18 - MIRT & Spud at 5:15pm, ran 5 jts. new 23# 8 5/8" surface pipe set at 229' and cemented w/ 150 sx Common 3% cc & 2% gel. Cement did circulate. Plug down at 11:00pm

09/05/18 - Drilling @ 229'

09/06/18 - Drilling @ 1810'

09/07/18 - Drilling @ 3000'

09/08/18 - Drilling @ 3850'

09/09/18 - Drilling @ 4350', DST #1 4320'-4405'

09/10/18 - Tripping out of hole for DST #2 4405'-4417', TD'd @ 4530'

09/11/18 - Logged, Ran 108 jts. 5 1/2 14# casing set 2' off bottom @ 4529'. Pumped Desco flush for 1 hr. Pump 500 gal mud flush with additives followed by 20 bbl. KCL water and cemented with 75 sacks SMD cement and 100 sacks EA-2 cement. Good circulation at all times. Had 650# lift pressure. Plug down @ 8:45pm. Pressured to 1500#, released and held. Plugged rat hole with 30 sacks SMD cement and mouse hole with 20 sacks SMD cement. Basket at 1513'. FDC's at 4409' and 4417', Centralizers at 4486', 4400', 4315, 4230', 4146', 4069', 3984', 3898', 3813', 1515'. Shoe joint = 43.44'. Port collar at 1471'

DST #1 MISSISSIPPI

4,320' - 4,405'

30-30-30-30

IF: Slowly built to 10"

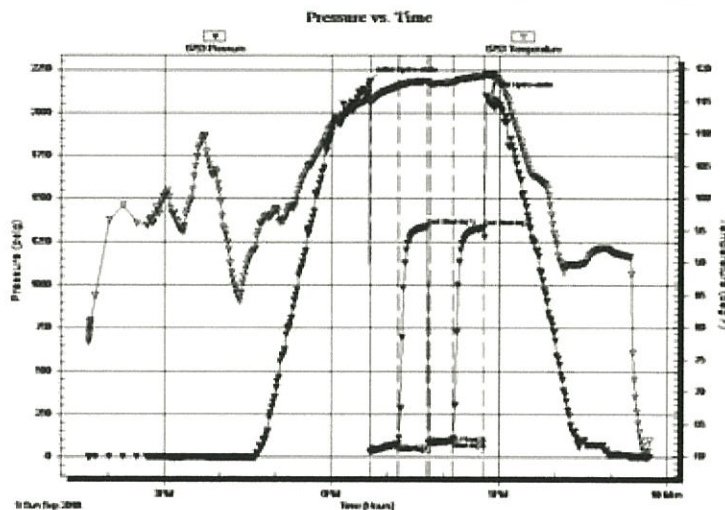
ISI: No blow

FF: BOB in 23 min (14.25")

FSI: No blow

Rec'd: 116' HOCM (40% O, 60% M), & 95' MCO (60% O, 40% M)

SIP: 1340-1333# FP: 31-74#, 80-97# HP: 2184-2099#



DST #2 MISSISSIPPI

4,405' - 4,417'

30-30-30-30

IF: Slowly built to 5.5", slowly died to 3.5"

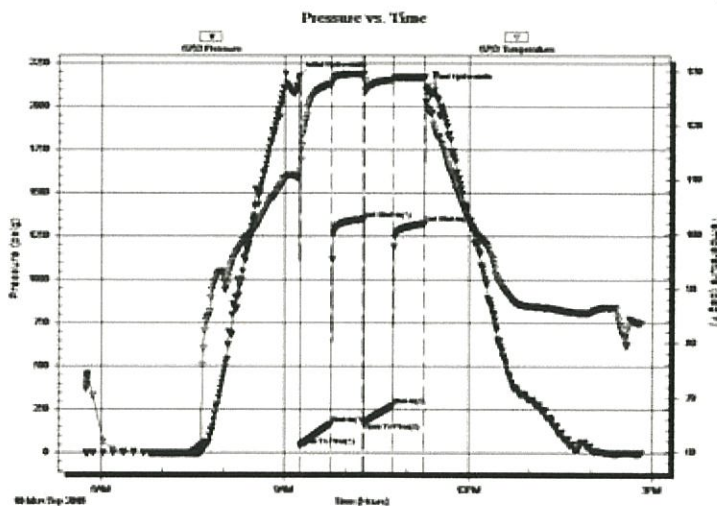
ISI: Surface blow died in 1 min

FF: Slowly built to 1.5"

FSI: Slowly built to 1" then slowly died to .25"

Rec'd: 150' WOCM (35% O, 15% W, 50% M), & 570' CGO (30% G, 70% O), 475' GIP

SIP: 1351-1325# FP: 41-169#, 177-273# HP: 2176-2113#



ROCK TYPES

- Anhy
- Bent
- Brec
- Cht
- Clyst
- Coal
- Congl
- Dol

- Gyp
- Igne
- Lmst
- Meta
- Mrlst
- Salt
- Shale
- Shcol

- Shgy
- Sltst
- Ss
- Till
- Carb sh
- Dol
- Dtd
- Gry sh

- Sandylms
- Shale
- Sltstn
- Shlyslts
- Sltys
- Lms

ACCESSORIES

MINERAL

- Anhy
- Arggrn
- Arg
- Bent
- Bit
- Brecfrag
- Calc
- Carb
- Chtdk
- Chtlt
- Dol
- Feldspar
- Ferrpel
- Ferr
- Glau
- Gyp
- Hvymin
- Kaol
- Marl
- Minxl
- Nodule
- Phos
- Pyr

- Salt
- Sandy
- Silt
- Sil
- Sulphur
- Tuff
- Chlorite
- Dol
- Sand
- Silty

FOSSIL

- Algae
- Amph
- Belm
- Bioclst
- Brach
- Bryozoa
- Cephal
- Coral
- Crin
- Echin
- Fish
- Foram

STRINGER

- Anhy
- Arg
- Bent
- Coal
- Dol
- Gyp
- Ls
- Mrst
- Slststrg
- Ssstrg
- Carbsh

- Fossil
- Gastro
- Oolite
- Ostra
- Pelec
- Pellet
- Pisolite
- Plant
- Strom
- Fuss
- Oomold

- Clystn
- Dol
- Grysh
- Gryslt
- Lms
- Sandylms
- Sh
- Slststn

TEXTURE

- Boundst
- Chalky
- Cryxln
- Earthy
- Finexln
- Grainst
- Lithogr
- Microxln
- Mudst
- Packst
- Wackest

OTHER SYMBOLS

POROSITY TYPE

- Earthy
- Fenest
- Fracture
- Inter
- Moldic
- Organic
- Pinpoint
- Vuggy

SORTING

- Well
- Moderate
- Poor

ROUNDING

- Rounded
- Subrnd
- Subang
- Angular

OIL SHOWS

- Even
- Spotted
- Ques
- Dead
- Gas show

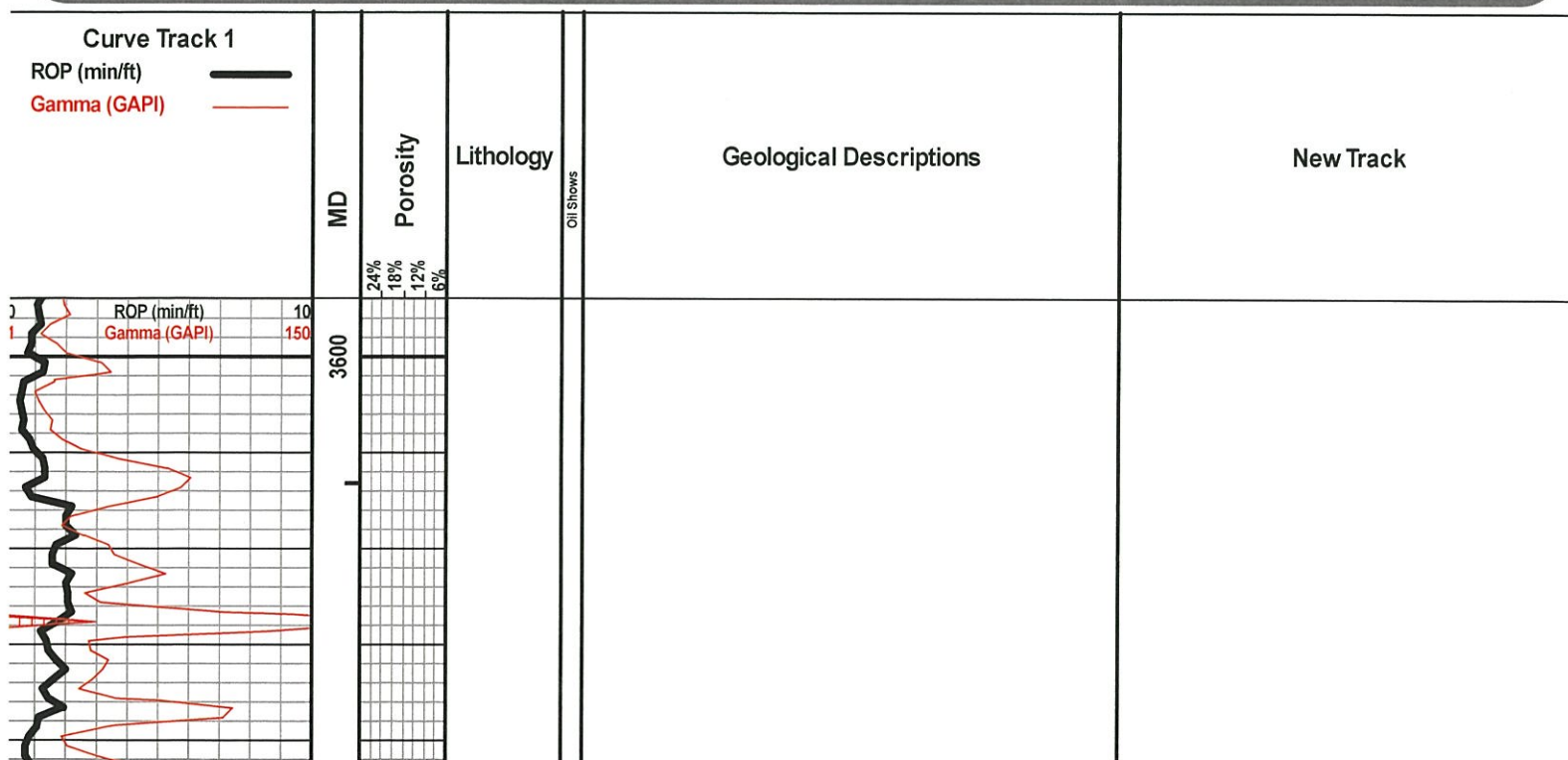
INTERVALS

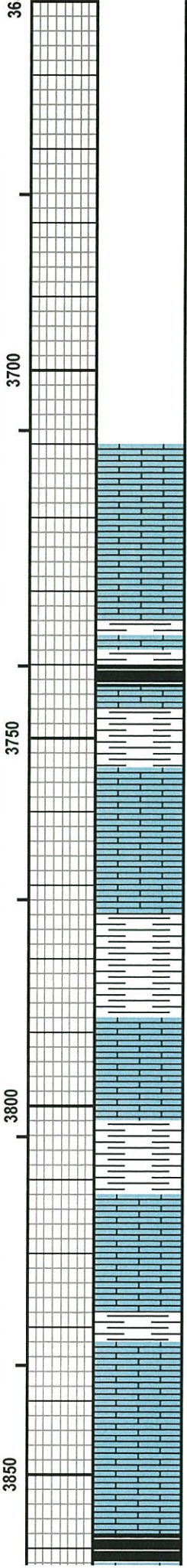
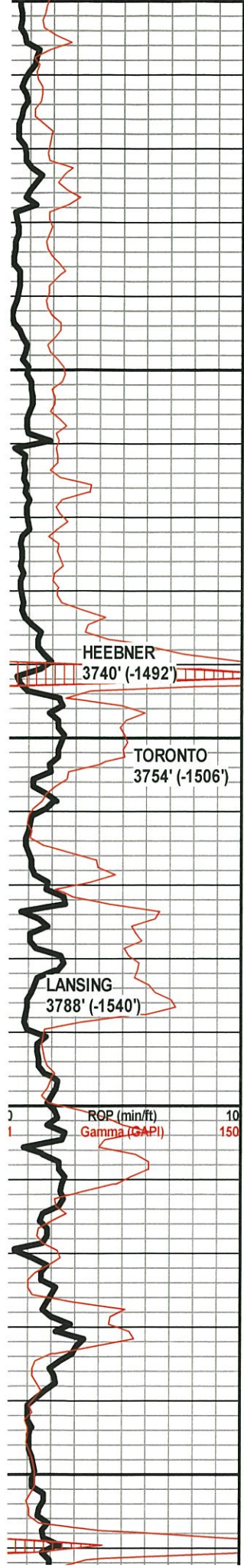
- Core
- Dst

- Dst

EVENTS

- Rft
- Sidewall
- Conn





36

3700

HEEBNER
3740' (-1492')

TORONTO
3754' (-1506')

3750

LANSING
3788' (-1540')

3800

3850

LS - TAN / GY, VF / F XLN, MOD DNS / DNS, FOSS IN PT

LS - WHT / GY, VF / F XLN, V CHKY IN PT, MOD DNS IN PT, FEW SCAT BRN PIECES LS - F / M XLN, DNS

SH - BLK, CARB, W/ LS - CRM, F XLN, MOD DNS, FOSS, STYLOLITIZED IN PT

SH - LT GY / GRN, V SOFT, GRN IS MOD DNS

LS - WHT / LT GY / TAN, PRED CHKY, MOD DNS IN PT, FOSS IN PT

SH - GRN / RD, W/ LS - CRM / TAN / GY, F XLN, MOD DNS / DNS, FOSS

SH - RD / GRN / GY

LS - CRM / TAN, F XLN, MOD DNS / DNS, FOSS

SH - GY / RD / GRN, W/ LS - CRM / TAN, F XLN, FOSS, STYLOLITIZED IN PT

LS - CRM / TAN, F XLN, FOSS, FOSS REPLACED BY CALCITE

SH - GRN / RD, W/ LS - WHT / CRM, VF XLN, CHKY / SUBCHKY

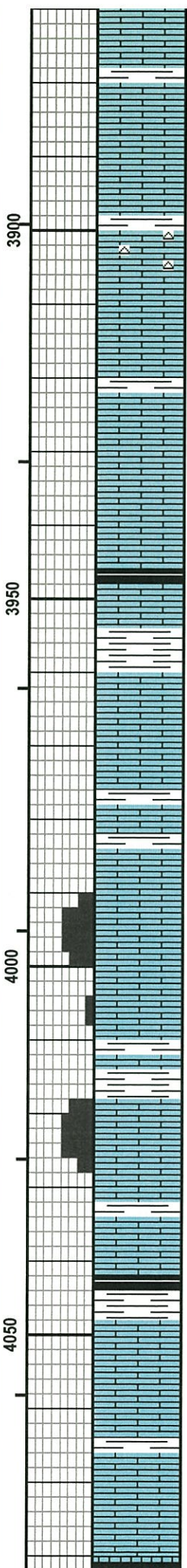
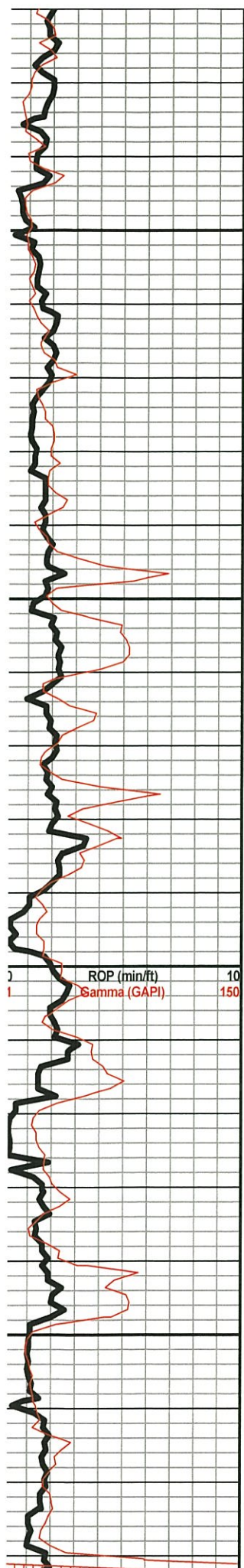
LS - CRM / TAN / GY IN PT, F XLN, MOD DNS, FOSS, W/ SH - RD / GRN

LS - CRM / TAN, VF / F XLN, PRED SUBCHKY, MOD DNS IN PT

SH - BLK, CARB, W/ LS - CRM / TAN, VF / F XLN, SUBCHKY / MOD DNS, FOSS

WT 8.9
VIS 60
LCM 2#

WT 8.9
VIS 60
LCM 1#



PT, W/ SH - GRN / RD / GY

LS - CRM, VF XLN, SUBCHKY / CHKY

LS - CRM / TAN, VF / F XLN, MOD DNS, FOSS IN PT, W/ SH - GY / GRN

SH - GRN / GY / RD, W/ LS - CRM / TAN, F XLN, MOD DNS, FOSS

LS - CRM / TAN, VF XLN, SUBCHKY / CHKY, W/ CHT - WHT, PRED OPAQ, SLI TRANSLUCNT, FRSH, FOSS, W/ SH - GRN / RD / GY

LS - CRM / WHT IN PT, VF XLN, PRED SUBCHKY / CHKY IN PT

LS - TAN / BRN / GY IN PT, F XLN, MOD DNS / DNS, FOSS, W/ SH - RD / GRN / GY

LS - GY / WHT / CRM, VF XLN, SUBCHKY / CHKY

SH - BLK, CARB, W/ LS - CRM / TAN, VF / F XLN, MOD DNS, FOSS

SH - GY / GRN / RD

LS - CRM / TAN, VF / F XLN, MOD DNS / SUBCHKY, FOSS IN PT

SH - GRN / GY, W/ LS - CRM / TAN, F XLN, MOD DNS, FOSS

LS - CRM, F XLN, OOLITIC, F / G OOLMOLDIC POR, NS, NO ODOR, SLI MINERAL FLUOR, ABUND FOSS

LS - CRM, F XLN, SLI OOLITIC, ABUND FOSS, P OOLMOLDIC POR IN PT, MOD DNS / DNS

LS - WHT, VF XLN, V CHKY, W/ SH - GRN / RD

LS - CRM / TAN, F XLN, OOLTIC, P / F / G OOLMOLDIC POR, NS, NO ODOR, SLI MINERAL FLUOR, ABUND FOSS, W/ LS - WHT, VF XLN, V CHKY

SH - GRN / GY, W/ LS - CRM / TAN / GY IN PT, VF / F XLN, PRED MOD DNS / DNS, SUBCHKY IN PT

SH - GRN / RD / MAR / DK GY, W/ LS - CRM / TAN, VF XLN, MOD DNS / SUBCHKY, CHKY IN PT

LS - TAN / CRM, F XLN, MOD DNS / DNS, FOSS, W/ SH - BLK, SLI CARB

LS - PRED WHT / CRM IN PT, VF XLN, V CHKY, SUBCHKY IN PT

LS - CRM / TAN, VF / F XLN, MOD DNS / SUBCHKY, FOSS IN PT, W/ SH - GRN

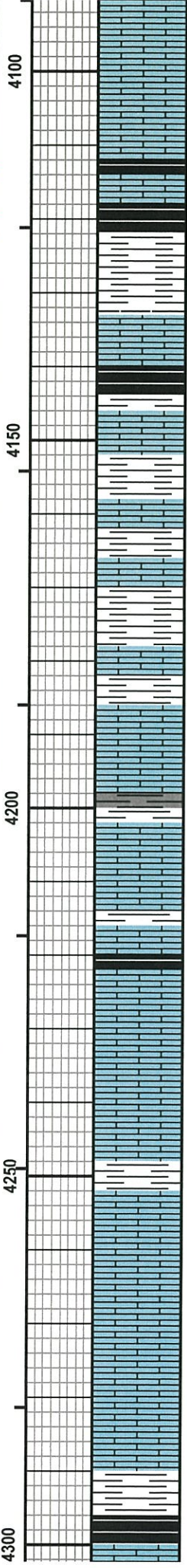
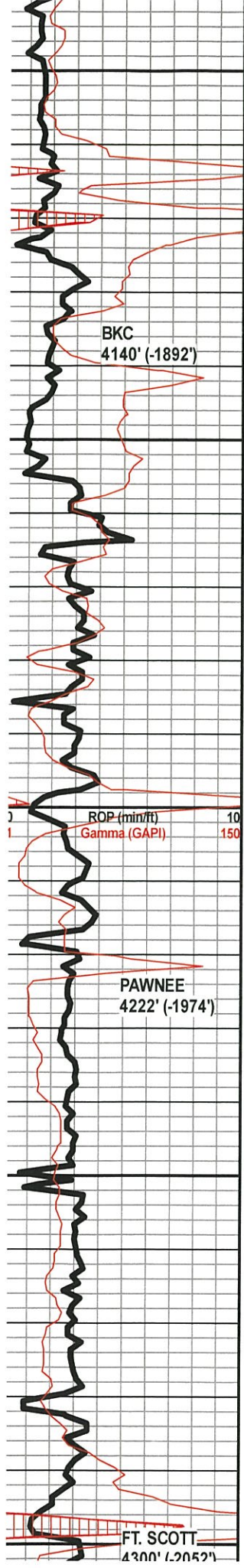
LCM 1#

WORKED ON PUMP

WT 9.2
VIS 53
LCM 1#

WT 9.2
VIS 54
LCM 1#

WT 9.3
VIS 80
LCM 2#



LS - CRM / TAN / GY, VF / F XLN, PRED MOD DNS / DNS, FOSS, SUBCHKY IN PT, W/ SH - RD / GY / GRN

SH - BLK, CARB, W/ LS - CRM, VF XLN, MOD DNS / SUBCHKY, CHKY IN PT

SH - RD / GRN / GY

LS - TAN / GY, F XLN, MOD DNS / DNS, FOSS, W, SH - RD / GY / GRN

SH - BLK, SLI CARB

LS - CRM / TAN, VF / F XLN, MOD DNS / SUBCHKY, W/ SH - GY / GRN / RD

SH - GRN, W/ LS - TAN / GY, F / M XLN, MOD DNS / DNS, FOSS IN PT

SH - GY / GRN, W/ LS - CRM / TAN / GY, F XLN, MOD DNS / DNS, SUBCHKY IN PT, FOSS IN PT

SH - RD / GRN / GY, W/ LS - CRM / TAN, F XLN, M XLN IN PT, DNS, FOSS IN PT

LS - WHT / CRM, VF XLN, CHKY / SUBCHKY, W/ SH - RD / MAR / GRN / GY

SH - DK GY / GRN / RD, W/ LS - CRM, F XLN, MOD DNS / DNS, FOSS IN PT

LS - CRM / TAN, VF / F XLN, MOD DNS / DNS, SUBCHKY IN PT, FOSS IN PT

SH - BLK, CARB, W/ LS - CRM, F XLN, MOD DNS / DNS, FOSS IN PT

LS - CRM / TAN, F / M XLN, V DNS, FOSS IN PT, W/ LS - WHT / CRM, VF XLN, SUBCHKY / CHKY

LS - CRM / TAN, F XLN, MOD DNS / DNS

LS - CRM / TAN, F / M XLN, DNS, W/ SH TURQ GRN, WAXY, PYRITIC IN PT

LS - TAN / LT GY, F / M XLN, DNS / V DNS

LS - TAN / GY / DK GY IN PT, F / M XLN, DNS / V DNS

LS - TAN / GY, F XLN, MOD DNS / DNS

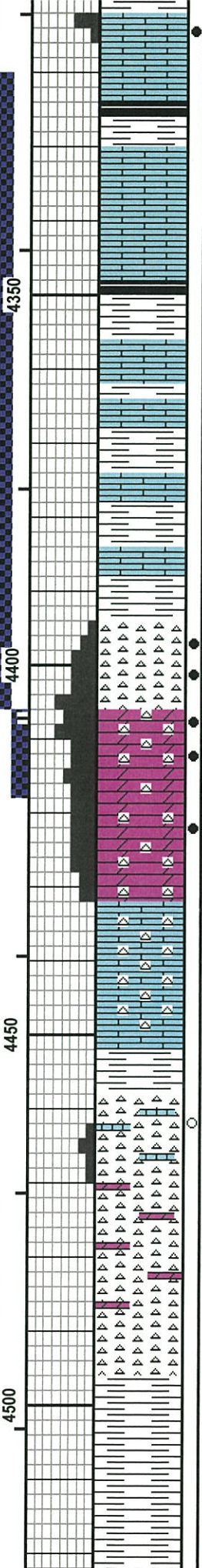
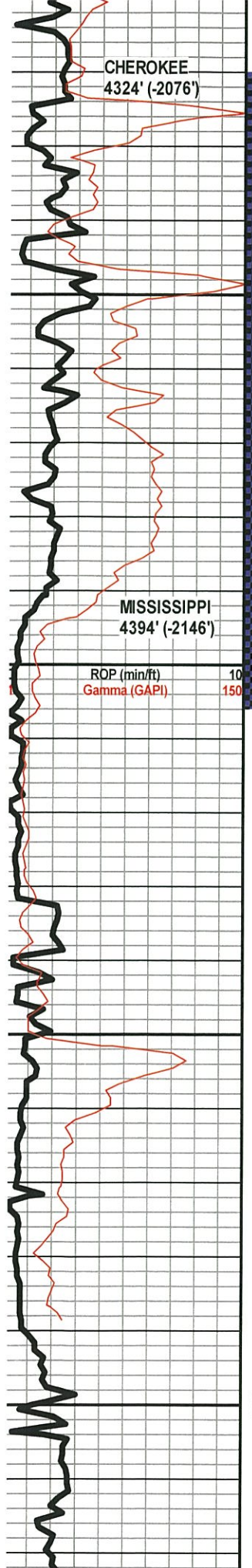
LS - GY / DK GY, F XLN, MOD DNS / DNS, W/ SH - DK GY

SH - BLK, CARB

WT 9.2
VIS 67
LCM 1#

WT 9.2
VIS 52
LCM 2#

WT 9/2
VIS 58
LCM 2#



SUBCHKY, CHKY IN PT

LS - CRM / TAN / LT BRN, F XLN, P INTXLN & VUG POR, SSFO, SLI ODOR, BRI YEL-GRN FLUOR, FOSS

SH - BLK, CARB, W/ LS - CRM / TAN, F XLN, MOD DNS, FOSS IN PT

LS - CRM, VF / F XLN, MOD DNS / SUBCHKY, FOSS IN PT, W/ SH - RD GRN

LS - CRM, VF XLN, SUBCHKY / MOD DNS, W/ SH - GRN / BLK

SH - BLK, CARB, W/ LS - CRM, VF XLN, SUBCHKY

SH - GY / GY / RD, W/ LS - CRM / TAN, F XLN, MOD DNS

SH - RD / GRN / GY / MAR, W/ CHT - YEL / TAN / GY, FRSH, SLI TRANSLUCNT, FOSS, NO SHOW, NO ODOR, FEW PIECES OF LS - WHT / CRM, VF XLN, SUBCHKY / CHKY, V CHKY IN PT

SH - GRN / MAR / GY / RD / YEL, W/ LS - CRM / TAN, VF / F XLN, SUBCHKY / MOD DNS, W/ FEW PIECES OF CHT - YEL / TAN / GY, SLI TRANSLUCNT, FRSH

CHT - WHT / GY, PRED OPAQ, SLI TRANSLUCNT IN PT, 75% FRSH, 25% WEATH, P / F WEATH POR, F VUG POR, ABUND STN, SSFO, FEW FLOATING OIL DROPLETS, F ODOR, BRI YEL-GRN FLUOR

DOLO - BRN, CRM / TAN IN PT, F / G INTERXLN POR, SUCROSIC, GSFO, G ODOR, V BRI YEL-GRN FLUOR, CHTY

DOLO - CRM / TAN / LT GY, VF / F XLN, F / G INTXL POR, SUCROSIC, SSFO IN PT, LESS OIL SAT THAN ABOVE, SLI ODOR, BRI FLUOR, CHTY, SUBCHKY / CHKY IN PT

LS - CRM, VF XLN, SUBCHKY, FOSS, NO VIS POR, NS, ABUND WHT FRSH CHT

LS - CRM / WHT, VF XLN, SUBCHKY / CHKY, CHTY IN PT W/ WHT FRSH CHT

SH - RD / GRN / GY

CHT - WHT / GY, PRED OPAQ, TRANSLUCNT IN PT, FRSH, SCAT WEATH PIECES W/ P WEATH POR, EDGE STN IN PT, NSFO, NO ODOR, DULL FLUOR

CHT - WHT, OPAQ, FRSH, W/ SCAT DOLO - GY, VF XLN, SUBCHKY / CHKY, NSFO, NO ODOR

SH - RD / GRN / GY

SH - GY / GRN / RD

WT 9.4
VIS 59
LCM 1#

DST #1
MISSISSIPPI
4,320' - 4,405'
30-30-30-30

IF: Slowly built to 10"
ISI: No blow
FF: BOB in 23 min (14.25")
FSI: No blow

Rec'd: 116' HOCM (40% O, 60% M), & 95' MCO (60% O, 40% M)

SIP: 1340-1333#
FP: 31-74#, 80-97#
HP: 2184-2099#

WT 9.2
VIS 67
STRAP 0.6' LONG TO BOARD

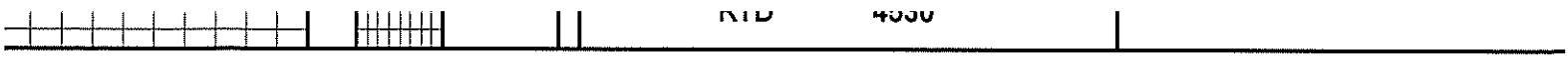
DST #2
MISSISSIPPI
4,405' - 4,417'
30-30-30-30

IF: Slowly built to 5.5", slowly died to 3.5"
ISI: Surface blow died in 1 min
FF: Slowly built to 1.5"
FSI: Slowly built to 1" then slowly died to .25"

Rec'd: 150' WOCM (35% O, 15% W, 50% M), & 570' CGO (30% G, 70% O), 475' GIP

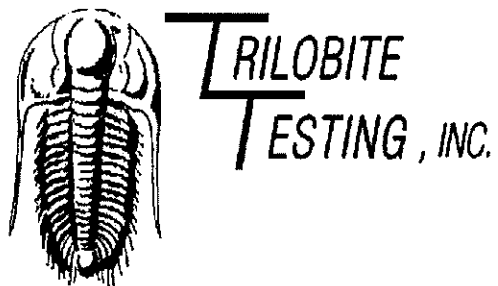
SIP: 1351-1325#
FP: 41-169#, 177-273#
HP: 2176-2113#

WT 9.0
VIS 52



NID

4000



DRILL STEM TEST REPORT

Prepared For: **Palomino Petroleum, Inc.**

4924 SE 84th St.
Newton, KS 67114

ATTN: Aaron Young

McJunkin #1

15-20S-22W Ness,KS

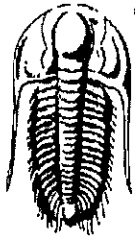
Start Date: 2018.09.09 @ 13:38:26

End Date: 2018.09.09 @ 23:41:56

Job Ticket #: 63148 DST #: 1

Trilobite Testing, Inc
1515 Commerce Parkway Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2018.09.11 @ 10:17:37



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Palomino Petroleum, Inc.

15-20S-22W Ness,KS

4924 SE 84th St.
New ton, KS 67114

McJunkin #1

Job Ticket: 63148

DST#: 1

ATTN: Aaron Young

Test Start: 2018.09.09 @ 13:38:26

GENERAL INFORMATION:

Formation: **Mississippian**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 18:41:56

Time Test Ended: 23:41:56

Test Type: Conventional Bottom Hole (Initial)

Tester: Brannan Lonsdale

Unit No: 73

Interval: **4320.00 ft (KB) To 4405.00 ft (KB) (TVD)**

Reference Elevations: 2248.00 ft (KB)

Total Depth: 4405.00 ft (KB) (TVD)

2237.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 11.00 ft

Serial #: 6753

Outside

Press@RunDepth: 97.49 psig @ 4321.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2018.09.09

End Date:

2018.09.09

Last Calib.:

2018.09.09

Start Time: 13:38:31

End Time:

23:41:56

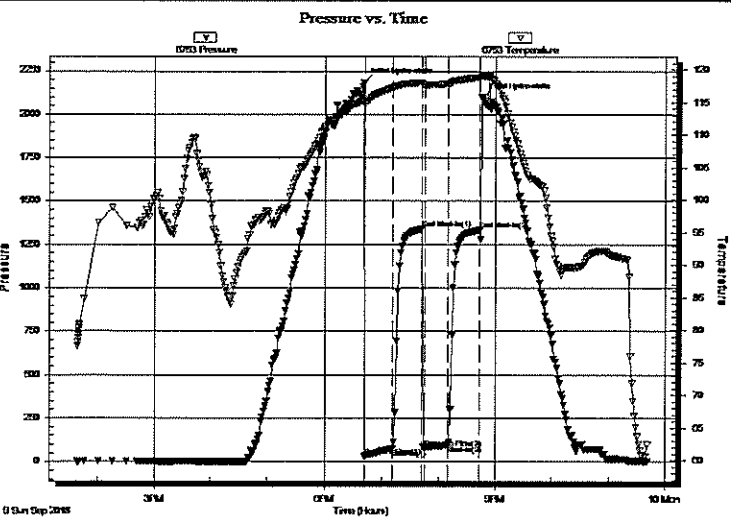
Time On Btm:

2018.09.09 @ 18:40:56

Time Off Btm:

2018.09.09 @ 20:45:56

TEST COMMENT: 30- IF- Slow ly built to 10"
30- IS- No blow
30- FF- Slow ly built to 14.25"(BOB 23mins)
30- FS- No blow



PRESSURE SUMMARY

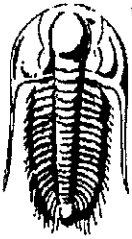
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2183.89	115.12	Initial Hydro-static
1	31.22	114.62	Open To Flow (1)
31	74.37	117.32	Shut-In(1)
62	1339.75	118.04	End Shut-In(1)
64	80.20	117.67	Open To Flow (2)
90	97.49	117.88	Shut-In(2)
123	1333.31	118.79	End Shut-In(2)
125	2098.76	119.06	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
116.00	HOCM, 40%O 60%M	0.57
95.00	MCO, 40%M 60%O	1.35

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Palomino Petroleum, Inc.
4924 SE 84th St.
New ton, KS 67114
ATTN: Aaron Young

15-20S-22W Ness,KS
McJunkin #1
Job Ticket: 63148 DST#: 1
Test Start: 2018.09.09 @ 13:38:26

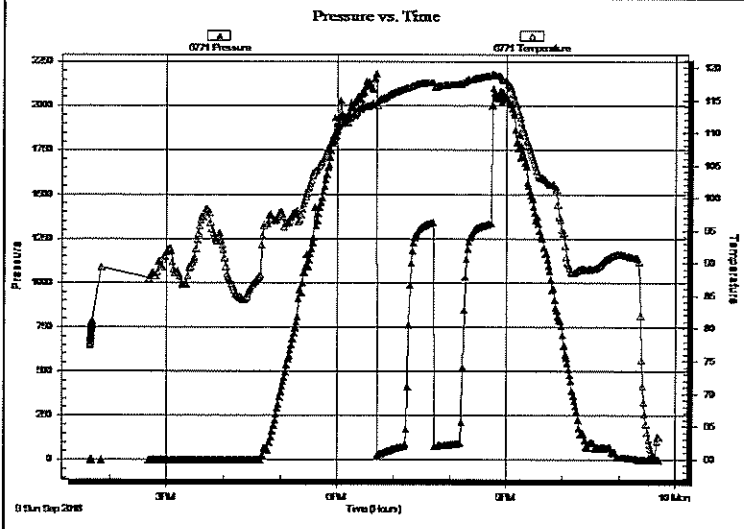
GENERAL INFORMATION:

Formation: **Mississippian**
Deviated: No Whipstock: ft (KB) Test Type: Conventional Bottom Hole (Initial)
Time Tool Opened: 18:41:56 Tester: Brannan Lonsdale
Time Test Ended: 23:41:56 Unit No: 73

Interval: **4320.00 ft (KB) To 4405.00 ft (KB) (TVD)** Reference Elevations: 2248.00 ft (KB)
Total Depth: 4405.00 ft (KB) (TVD) 2237.00 ft (CF)
Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 11.00 ft

Serial #: 6771 Inside
Press@RunDepth: psig @ 4321.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2018.09.09 End Date: 2018.09.09 Last Calib.: 2018.09.09
Start Time: 13:39:00 End Time: 23:42:19 Time On Btm:
Time Off Btm:

TEST COMMENT: 30- IF- Slow ly built to 10"
30- ISI- No blow
30- FF- Slow ly built to 14.25"(BOB 23mins)
30- FSI- No blow



PRESSURE SUMMARY

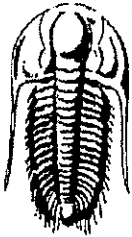
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

Recovery

Length (ft)	Description	Volume (bbl)
116.00	HOCM, 40%O 60%M	0.57
95.00	MCO, 40%M 60%O	1.35

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Palomino Petroleum, Inc.

15-20S-22W Ness,KS

4924 SE 84th St.
New ton, KS 67114

McJunkin #1

Job Ticket: 63148

DST#: 1

ATTN: Aaron Young

Test Start: 2018.09.09 @ 13:38:26

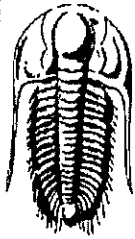
Tool Information

Drill Pipe:	Length: 4186.00 ft	Diameter: 3.82 inches	Volume: 59.34 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: ft	Diameter: inches	Volume: - bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 116.00 ft	Diameter: 2.25 inches	Volume: 0.57 bbl	Weight to Pull Loose: 66000.00 lb
			<u>Total Volume: - bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	10.00 ft			String Weight: Initial 64000.00 lb
Depth to Top Packer:	4320.00 ft			Final 65000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	85.00 ft			
Tool Length:	113.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4293.00	
Shut In Tool	5.00			4298.00	
Hydraulic tool	5.00			4303.00	
Jars	5.00			4308.00	
Safety Joint	3.00			4311.00	
Packer	5.00			4316.00	28.00 Bottom Of Top Packer
Packer	4.00			4320.00	
Stubb	1.00			4321.00	
Recorder	0.00	6771	Inside	4321.00	
Recorder	0.00	6753	Outside	4321.00	
Perforations	16.00			4337.00	
Change Over Sub	1.00			4338.00	
Drill Pipe	63.00			4401.00	
Change Over Sub	1.00			4402.00	
Bullnose	3.00			4405.00	85.00 Bottom Packers & Anchor

Total Tool Length: 113.00



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Palomino Petroleum, Inc.

15-20S-22W Ness,KS

4924 SE 84th St.
New ton, KS 67114

McJunkin #1

Job Ticket: 63148

DST#: 1

ATTN: Aaron Young

Test Start: 2018.09.09 @ 13:38:26

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

35 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 72.00 sec/qt

Cushion Volume:

bbl

Water Loss: 8.37 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 6400.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
116.00	HOCM, 40%O 60%M	0.570
95.00	MCO, 40%M 60%O	1.347

Total Length: 211.00 ft

Total Volume: 1.917 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

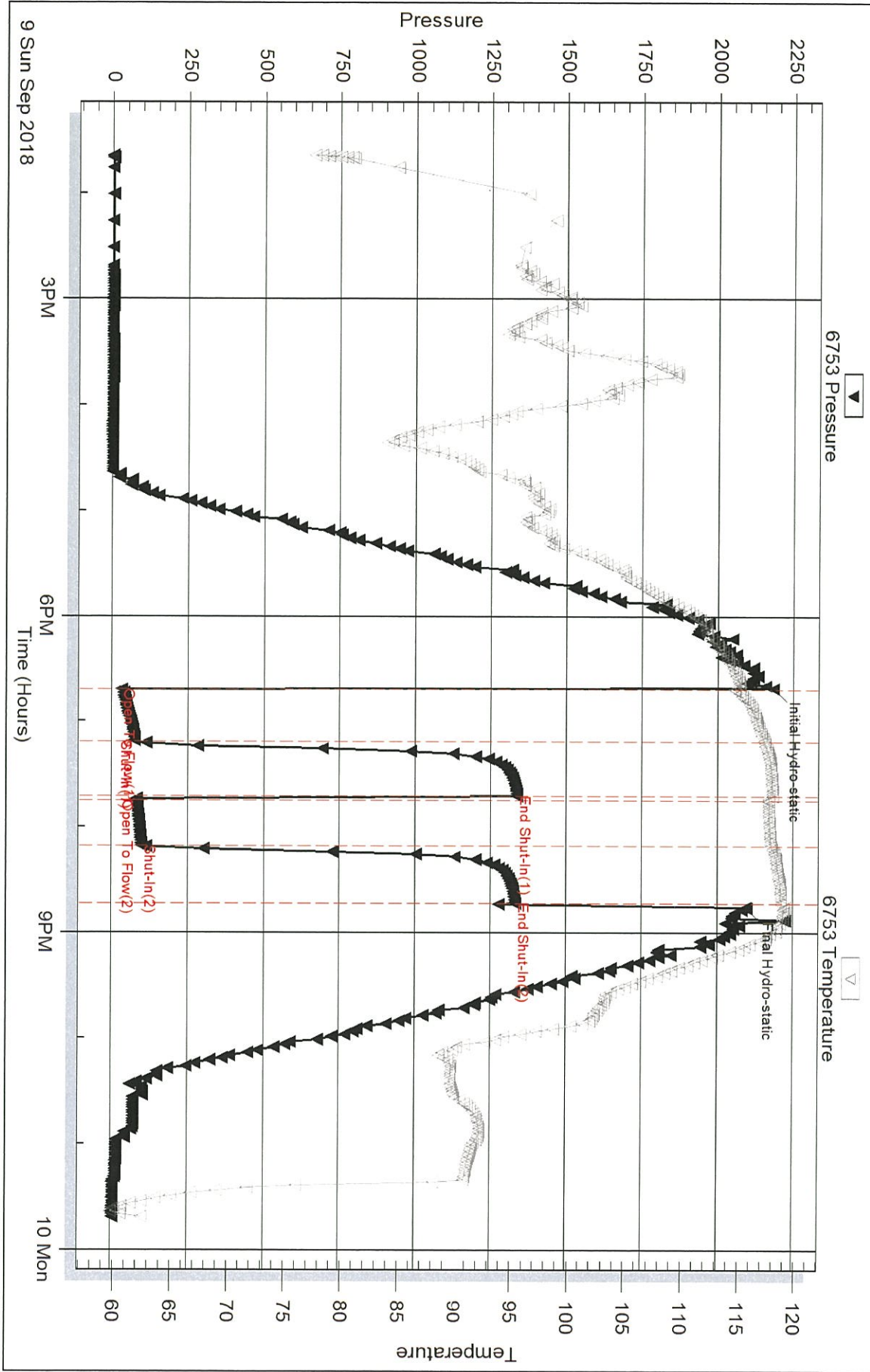
Serial #: 6753

Outside Palomino Petroleum, Inc.

McJunkin #1

DST Test Number: 1

Pressure vs. Time



Trilobite Testing, Inc

Ref. No: 63148

Printed: 2018.09.11 @ 10:17:38

Serial #: 6771

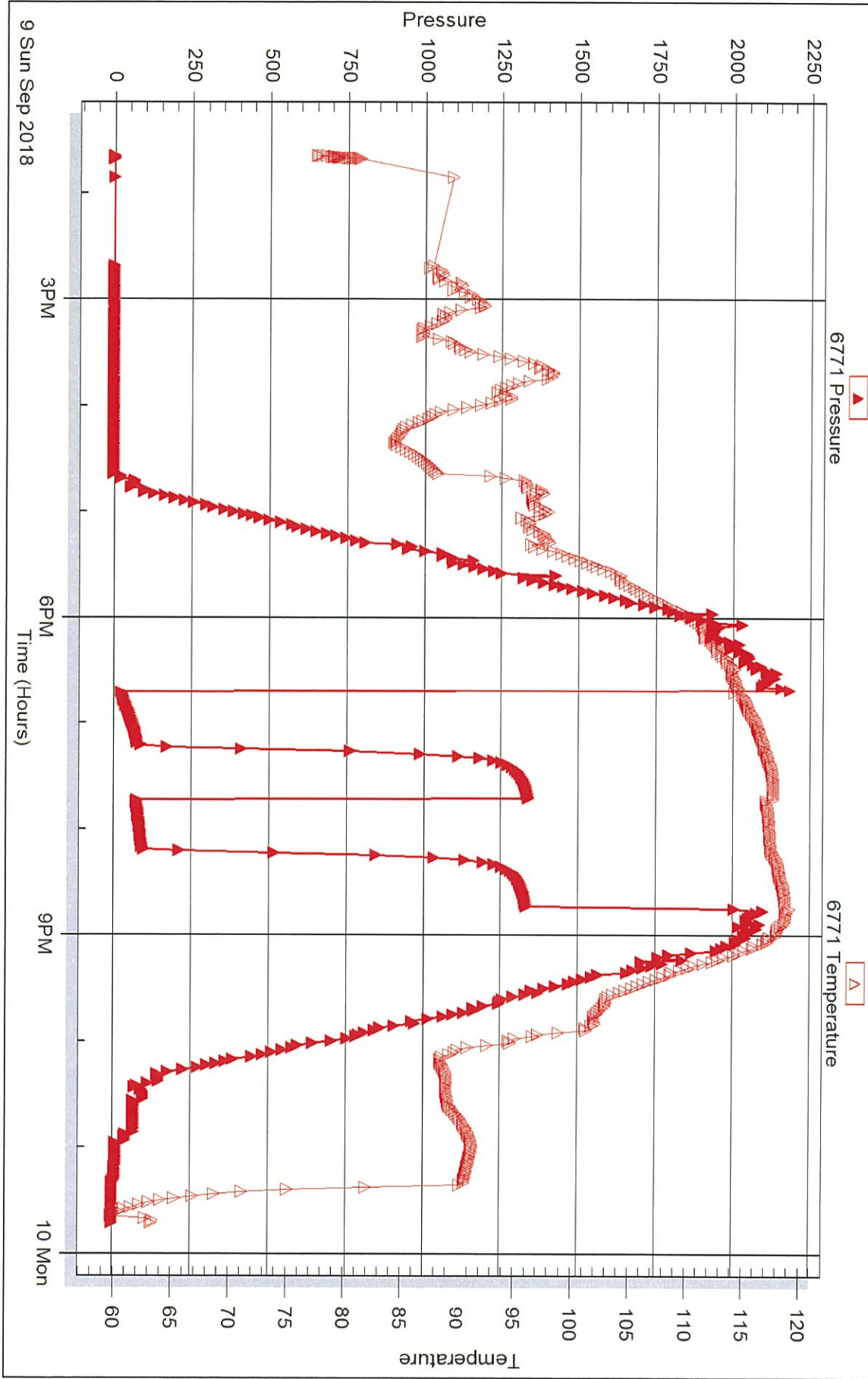
Inside

Palomino Petroleum, Inc.

McJunkin #1

DST Test Number: 1

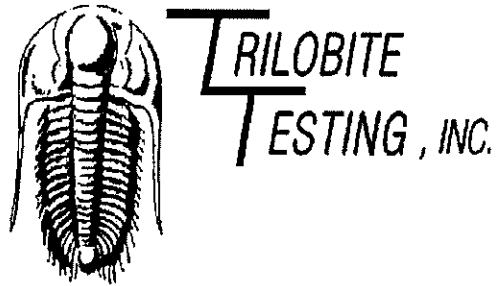
Pressure vs. Time



Triobite Testing, Inc

Ref. No: 63148

Printed: 2018.09.11 @ 10:17:38



DRILL STEM TEST REPORT

Prepared For: **Palomino Petroleum, Inc.**

4924 SE 84th St.
Newton, KS 67114

ATTN: Aaron Young

McJunkin #1

15-20S-22W Ness,KS

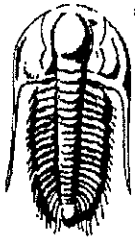
Start Date: 2018.09.10 @ 05:44:56

End Date: 2018.09.10 @ 14:48:26

Job Ticket #: 63149 DST #: 2

Trilobite Testing, Inc
1515 Commerce Parkway Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2018.09.11 @ 10:17:12



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Palomino Petroleum, Inc.

15-20S-22W Ness,KS

4924 SE 84th St.
New ton, KS 67114

McJunkin #1

Job Ticket: 63149

DST#: 2

ATTN: Aaron Young

Test Start: 2018.09.10 @ 05:44:56

GENERAL INFORMATION:

Formation: **Mississippian**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 09:15:26

Time Test Ended: 14:48:26

Test Type: Conventional Bottom Hole (Reset)

Tester: Brannan Lonsdale

Unit No: 73

Interval: **4405.00 ft (KB) To 4417.00 ft (KB) (TVD)**

Reference Elevations: 2248.00 ft (KB)

Total Depth: 4417.00 ft (KB) (TVD)

2237.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 11.00 ft

Serial #: 6753

Outside

Press@RunDepth: 273.16 psig @ 4406.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2018.09.10

End Date: 2018.09.10

Last Calib.: 2018.09.10

Start Time: 05:45:01

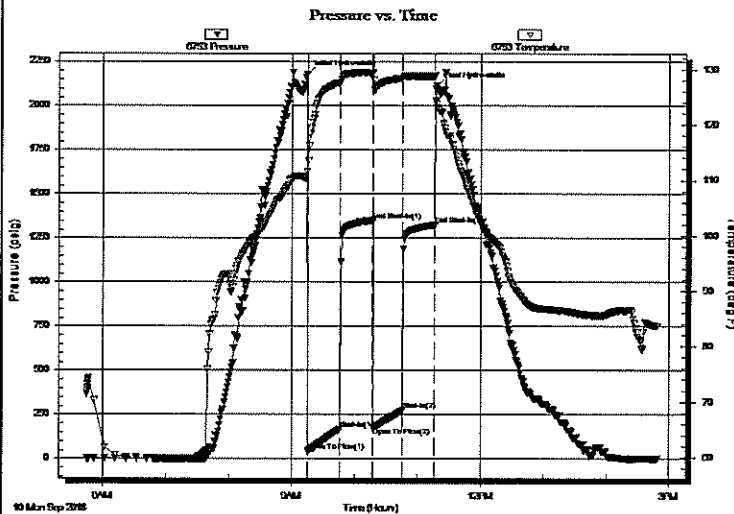
End Time: 14:48:26

Time On Btm: 2018.09.10 @ 09:14:26

Time Off Btm: 2018.09.10 @ 11:17:56

TEST COMMENT: 30- IF- Slow ly built to 5.5" then slow ly died back to 3.5"
30- IS- Surface blow died 1min
30- FF- Slow ly built to 1.5"
30- FS- Slow ly built to 1" then slow ly died back to .25"

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2176.12	111.53	Initial Hydro-static
1	41.47	113.58	Open To Flow (1)
32	168.79	127.59	Shut-In(1)
63	1351.19	129.48	End Shut-In(1)
64	177.24	128.13	Open To Flow (2)
91	273.16	128.40	Shut-In(2)
122	1325.23	128.83	End Shut-In(2)
124	2113.15	123.77	Final Hydro-static

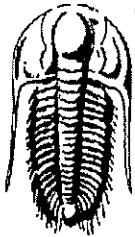
Recovery

Length (ft)	Description	Volume (bbl)
150.00	WOCM, 15%W 35%O 50%M	1.05
570.00	CGO, 30%G 70%O	8.08
0.00	475' GIP	0.00

* Recovery from multiple tests

Gas Rates

Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Palomino Petroleum, Inc.
4924 SE 84th St.
New ton, KS 67114
ATTN: Aaron Young

15-20S-22W Ness,KS
McJunkin #1
Job Ticket: 63149 DST#: 2
Test Start: 2018.09.10 @ 05:44:56

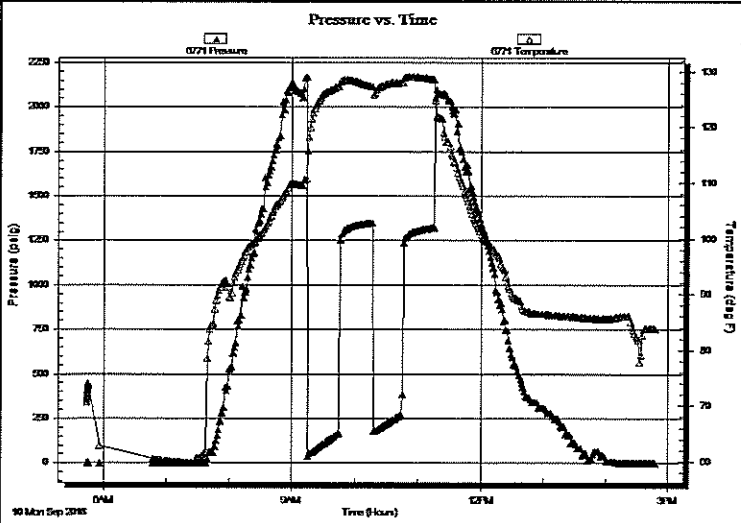
GENERAL INFORMATION:

Formation: **Mississippian**
Deviated: No Whipstock: ft (KB) Test Type: Conventional Bottom Hole (Reset)
Time Tool Opened: 09:15:26 Tester: Brannan Lonsdale
Time Test Ended: 14:48:26 Unit No: 73

Interval: **4405.00 ft (KB) To 4417.00 ft (KB) (TVD)** Reference Elevations: 2248.00 ft (KB)
Total Depth: 4417.00 ft (KB) (TVD) 2237.00 ft (CF)
Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 11.00 ft

Serial #: 6771 Inside
Press@RunDepth: psig @ 4406.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2018.09.10 End Date: 2018.09.10 Last Calib.: 2018.09.10
Start Time: 05:44:06 End Time: 14:47:25 Time On Btm:
Time Off Btm:

TEST COMMENT: 30- IF- Slow ly built to 5.5" then slow ly died back to 3.5"
30- IS- Surface blow died 1min
30- FF- Slow ly built to 1.5"
30- FS- Slow ly built to 1" then slow ly died back to .25"



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

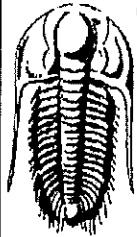
Recovery

Length (ft)	Description	Volume (bbl)
150.00	WOCM, 15%W 35%O 50%M	1.05
570.00	CGO, 30%G 70%O	8.08
0.00	475' GIP	0.00

* Recovery from multiple tests

Gas Rates

Choke (inches)	Pressure (psig)	Gas Rate (Mc/d)



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Palomino Petroleum, Inc.

15-20S-22W Ness,KS

4924 SE 84th St.
New ton, KS 67114

McJunkin #1

Job Ticket: 63149

DST#: 2

ATTN: Aaron Young

Test Start: 2018.09.10 @ 05:44:56

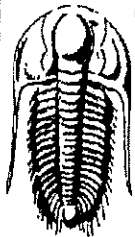
Tool Information

Drill Pipe:	Length: 4281.00 ft	Diameter: 3.82 inches	Volume: 60.68 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: ft	Diameter: inches	Volume: - bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 116.00 ft	Diameter: 2.25 inches	Volume: 0.57 bbl	Weight to Pull Loose: 67000.00 lb
			<u>Total Volume: - bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	20.00 ft			String Weight: Initial 63000.00 lb
Depth to Top Packer:	4405.00 ft			Final 64000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	12.00 ft			
Tool Length:	40.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4378.00	
Shut In Tool	5.00			4383.00	
Hydraulic tool	5.00			4388.00	
Jars	5.00			4393.00	
Safety Joint	3.00			4396.00	
Packer	5.00			4401.00	28.00 Bottom Of Top Packer
Packer	4.00			4405.00	
Stubb	1.00			4406.00	
Recorder	0.00	6771	Inside	4406.00	
Recorder	0.00	6753	Outside	4406.00	
Perforations	8.00			4414.00	
Bullnose	3.00			4417.00	12.00 Bottom Packers & Anchor

Total Tool Length: 40.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Palomino Petroleum, Inc.

15-20S-22W Ness,KS

4924 SE 84th St.
New ton, KS 67114

McJunkin #1

Job Ticket: 63149

DST#: 2

ATTN: Aaron Young

Test Start: 2018.09.10 @ 05:44:56

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

38 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

24000 ppm

Viscosity: 72.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.36 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 6400.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
150.00	WOCM, 15%W 35%O 50%M	1.052
570.00	CGO, 30%G 70%O	8.080
0.00	475' GIP	0.000

Total Length: 720.00 ft Total Volume: 9.132 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

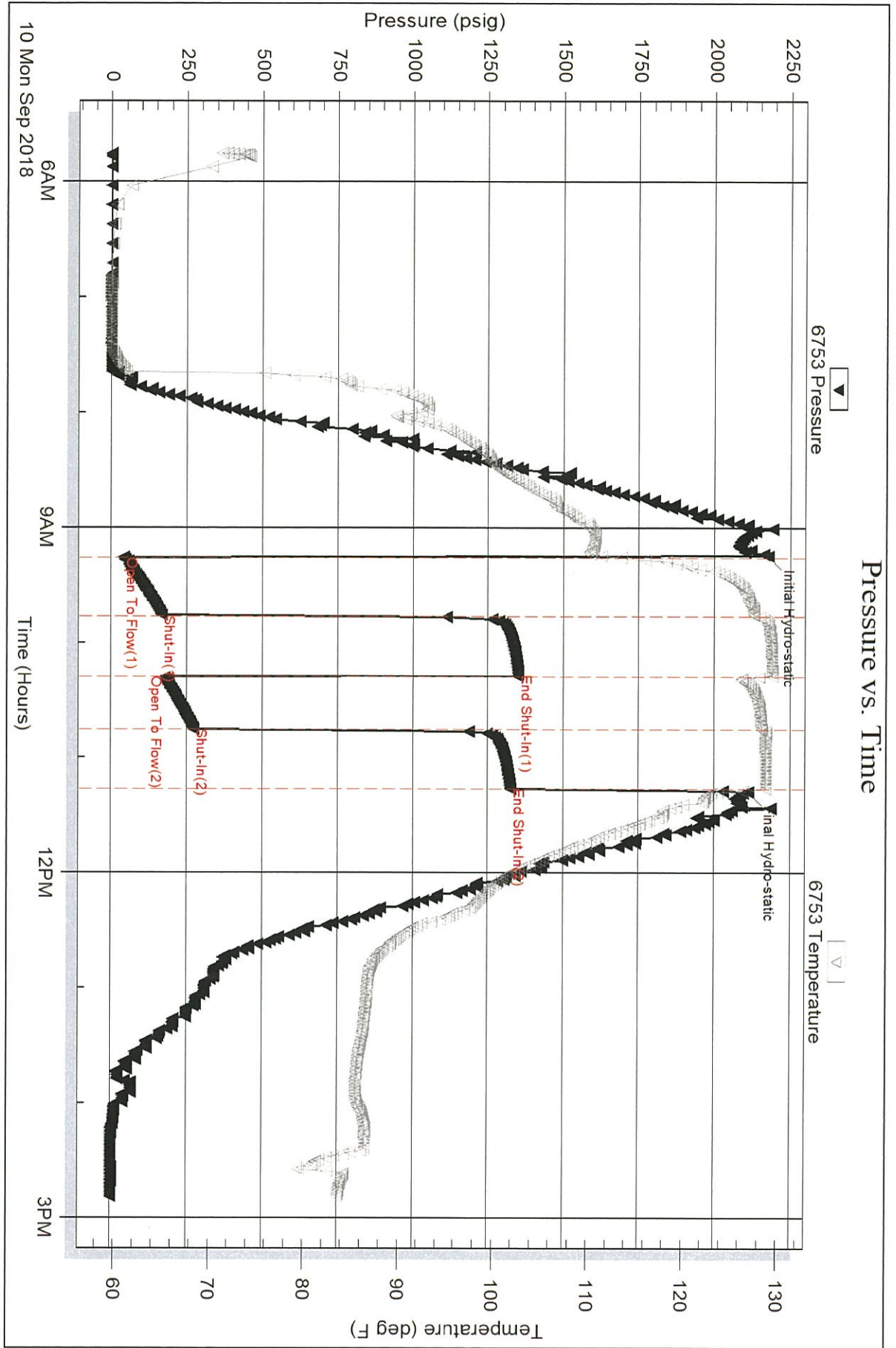
Recovery Comments: RW: .23@82deg

Serial #: 6753

Outside Palomino Petroleum, Inc.

McJunkin #1

DST Test Number: 2



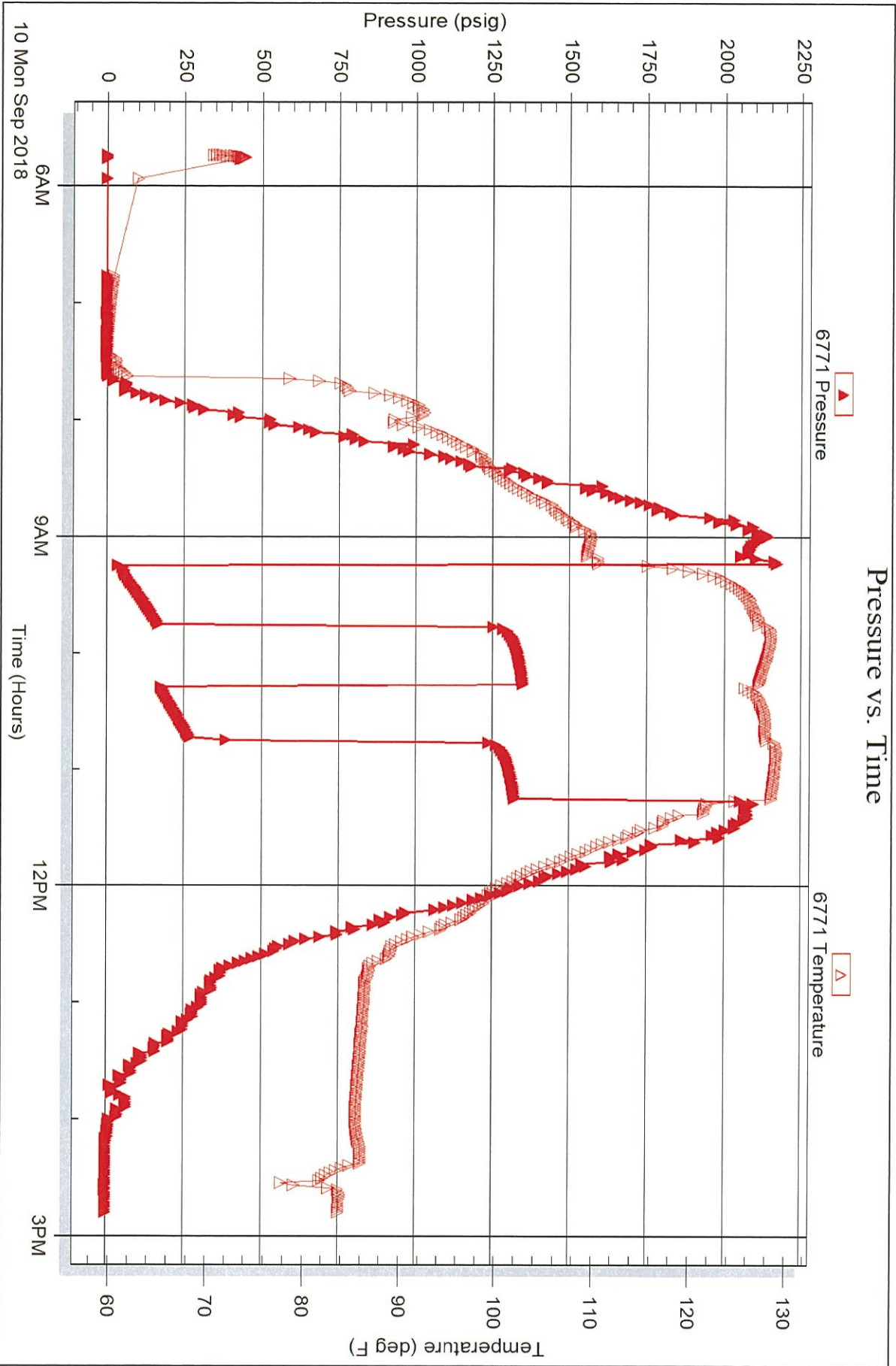
Serial #: 6771

Inside

Palomino Petroleum, Inc.

McJunkin #1

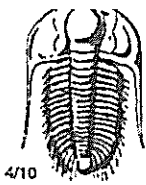
DST Test Number: 2



Trilobite Testing, Inc

Ref. No: 63149

Printed: 2018.09.11 @ 10:17:13



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 63148

Well Name & No. McJunkin #1 Test No. 1 Date 9/9/18
 Company Palomino Petroleum, Inc Elevation 2248 KB 2237 GL
 Address 4924 SE 84th St. Newton, KS 67114
 Co. Rep / Geo. Aaron Young Rig WW #14
 Location: Sec. 15 Twp. 20 S Rge. 22 W Co. Neosho State KS

Interval Tested 4320-4405 Zone Tested Mississippian
 Anchor Length 85' Drill Pipe Run 4186 Mud Wt. 9.4
 Top Packer Depth 4315 Drill Collars Run 116 Vis 22
 Bottom Packer Depth 4320 Wt. Pipe Run — WL 8.4
 Total Depth 4405 Chlorides 6400 ppm System LCM 1[#]
 Blow Description IF - slowly built to 10"
ISI - No flow
PF - BOB 23 mins. (14 1/4")
FST - No flow

Rec	Feet of	%gas	%oil	%water	%mud
<u>116</u>	<u>HOCA</u>	<u>40</u>	<u>—</u>	<u>60</u>	<u>—</u>
<u>95</u>	<u>MCO</u>	<u>60</u>	<u>—</u>	<u>40</u>	<u>—</u>
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

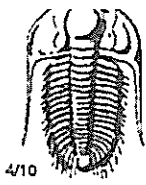
Rec Total 211' BHT 119° Gravity 35 API RW — @ — °F Chlorides — ppm

(A) Initial Hydrostatic <u>2184</u>	<input checked="" type="checkbox"/> Test <u>1150</u>	T-On Location <u>1321</u>
(B) First Initial Flow <u>31</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>1338</u>
(C) First Final Flow <u>74</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>1841</u>
(D) Initial Shut-In <u>1340</u>	<input type="checkbox"/> Circ Sub	T-Pulled <u>2041</u>
(E) Second Initial Flow <u>80</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>2341</u>
(F) Second Final Flow <u>97</u>	<input checked="" type="checkbox"/> Mileage <u>128 RT 128</u>	Comments
(G) Final Shut-In <u>1333</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>2099</u>	<input type="checkbox"/> Straddle	
Initial Open <u>30</u>	<input type="checkbox"/> Shale Packer	
Initial Shut-In <u>30</u>	<input type="checkbox"/> Extra Packer	
Final Flow <u>30</u>	<input type="checkbox"/> Extra Recorder	
Final Shut-In <u>30</u>	<input type="checkbox"/> Day Standby	
	<input type="checkbox"/> Accessibility	
	Sub Total <u>1603</u>	

Approved By _____

Our Representative

Brannan Lonsdale



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 63149

Well Name & No. McJunkin #1 Test No. 2 Date 9/10/18
 Company Palomina Petroleum, Inc. Elevation 2248 KB 2237GL
 Address 4924 SE. 84th St, Newton, KS 67114
 Co. Rep / Geo. Aaron Young Rig WW 14
 Location: Sec. 15 Twp. 20 S Rge. 22 W Co. Ness State KS

Interval Tested 4405-4417 Zone Tested Mississippian
 Anchor Length 12' Drill Pipe Run 4281 Mud Wt. 9.4
 Top Packer Depth 4400 Drill Collars Run 116 Vis 72
 Bottom Packer Depth 4405 Wt. Pipe Run _____ WL 8.4
 Total Depth 4417 Chlorides 6400 ppm System LCM 1st

Blow Description IF - slowly built to 5 1/2" then slowly died back to 3 1/2"
BT - Surface blow died within
FF - slowly built to 1 1/2"
EST - slowly built to 1" then slowly died back to 1/4"

Rec	Feet of	%gas	%oil	%water	%mud
<u>150</u>	<u>WOCM</u>	<u>35</u>	<u>15</u>	<u>50</u>	<u>0</u>
<u>570</u>	<u>CGO</u>	<u>30</u>	<u>70</u>	<u>0</u>	<u>0</u>
<u>425'</u>	<u>GPP</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
_____	_____	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
_____	_____	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>

Rec Total 720 BHT 129° Gravity 38 API RW 23 @ 82° F Chlorides 24000 ppm

(A) Initial Hydrostatic 2176 Test 1150 T-On Location 0529
 (B) First Initial Flow 41 Jars 250 T-Started 0544
 (C) First Final Flow 169 Safety Joint 75 T-Open 0914
 (D) Initial Shut-In 1351 Circ Sub _____ T-Pulled 1114
 (E) Second Initial Flow 177 Hourly Standby _____ T-Out 1447
 (F) Second Final Flow 273 Mileage 128 RT 128 Comments _____
 (G) Final Shut-In 1325 Sampler _____
 (H) Final Hydrostatic 2113 Straddle _____

Initial Open 30 Shale Packer _____
 Initial Shut-In 30 Ruined Packer _____
 Final Flow 30 Extra Packer _____
 Final Shut-In 30 Extra Recorder _____
 Sub Total 0 Day Standby _____
 Total 1603 Accessibility _____
 Sub Total 1603 MP/DST Disc't _____

Approved By _____

Our Representative

Brennan Lonsdale