KOLAR Document ID: 1392650

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 # 30742
Name: Palomino Petroleum, Inc.
Address 1: 4924 SE 84TH ST
Address 2:
City: NEWTON State: KS Zip: 67114 + 8827
Contact Person: Klee Robert Watchous
Phone: (316) 799-1000
CONTRACTOR: License # 33575
Name: WW Drilling, LLC
Wellsite Geologist: Andrew Stenzel
Purchaser: None

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 #:

01/18/2018	01/31/2018	01/31/2018
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No.: 15-063-22318-00-00
Spot Description:
SE - NE - NW - NW Sec. 17 Twp. 14 S. R. 30 ☐ East ☑ West
564 Feet from ☑ North / ☐ South Line of Section
1047 Feet from ☐ East / ☑ West Line of Section
Footages Calculated from Nearest Outside Section Corner:
☐ NE ☑ NW ☐ SE ☐ SW
GPS Location: Lat: *(e.g. xx.xxxxx)* , Long: *(e.g. -xxx.xxxxx)*
Datum: ☐ NAD27 ☐ NAD83 ☐ WGS84
County: Gove
Lease Name: SWART TRUCKING, INC. Well #: 1
Field Name: None (Wildcat)
Producing Formation: None
Elevation: Ground: 2824 Kelly Bushing: 2829
Total Vertical Depth: 4721 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 218 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: 0 ppm Fluid volume: 0 bbls
Dewatering method used: Evaporated
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: 02/23/2018
☐ **Confidential Release Date:** 02/23/2020
☑ **Wireline Log Received** ☑ **Drill Stem Tests Received**
☑ **Geologist Report / Mud Logs Received**
☐ **UIC Distribution**
ALT ☐ I ☑ II ☐ III **Approved by:** Karen Ritter **Date:** 02/23/2018

Operator Name: Palomino Petroleum, Inc. Lease Name: SWART TRUCKING, INC. Well #: 1

Sec. 17 Twp. 14 S. R. 30 ☐ East ☑ West County: Gove

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 *(Attach Additional Sheets)*	☑ Yes	☐ No	
Samples Sent to Geological Survey	☑ Yes	☐ No	
Cores Taken	☐ Yes	☑ No	
Electric Log Run	☑ Yes	☐ No	
Geologist Report / Mud Logs	☑ Yes	☐ No	

List All E. Logs Run:
Attached

☑ Log Formation (Top), Depth and Datum ☐ Sample

Name	Top	Datum
Attached	Attached	Attached

CASING RECORD ☑ New ☐ 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
Surface	12.250	8.625	24	218	Common	165	2% gel, 3% c.c.

ADDITIONAL CEMENTING / SQUEEZE RECORD

Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
☐ Perforate ☐ Protect Casing ☐ Plug Back TD ☐ 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: ☐ Flowing ☐ Pumping ☐ Gas Lift ☐ Other *(Explain)*

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

DISPOSITION OF GAS:	METHOD OF COMPLETION:	PRODUCTION INTERVAL:
☐ Vented ☐ Sold ☐ Used on Lease *(If vented, Submit ACO-18.)*	☐ Open Hole ☐ Perf. ☐ Dually Comp. *(Submit ACO-5)* ☐ Commingled *(Submit ACO-4)*	Top / Bottom

Shots Per Foot	Perforation Top	Perforation Bottom	Bridge Plug Type	Bridge Plug Set At	Acid, Fracture, Shot, Cementing Squeeze Record *(Amount and Kind of Material Used)*

TUBING RECORD: Size: Set At: Packer At:

Mail to: KCC - Conservation Division, 266 N. Main, Suite 220, Wichita, Kansas 67202

Form	ACO1 - Well Completion
Operator	Palomino Petroleum, Inc.
Well Name	SWART TRUCKING, INC. 1
Doc ID	1392650

All Electric Logs Run

Sonic
Litho Density
Dual Induction
Micro

Form	ACO1 - Well Completion
Operator	Palomino Petroleum, Inc.
Well Name	SWART TRUCKING, INC. 1
Doc ID	1392650

Tops

Name	Top	Datum
Anhy.	2280	(+ 549)
Base Anhy.	2311	(+ 518)
Heebner	3886	(-1057)
Toronto	3908	(-1079)
Lansing	3925	(-1096)
Muncie Creek	4076	(-1247)
Stark Shale	4166	(-1337)
Hushpuckney	4201	(-1372)
BKC	4241	(-1412)
Pawnee	4361	(-1532)
Myrick Sta.	4394	(-1565)
Ft. Scott	4423	(-1594)
Cherokee Sh.	4447	(-1618)
Miss.	4529	(-1700)
LTD	4721	(-1892)

Form	ACO1 - Well Completion
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Doc ID	1392650

Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement	Number of Sacks Used	Type and Percent Additives
Surface	12.250	8.625	24	218	Common	165	2% gel, 3% c.c.

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: 1/31/2018
Invoice # 591

P.O.#:

Due Date: 3/2/2018
Division: *Russell*

Invoice

Contact:
Palomino Petroleum Inc
Address/Job Location:

4924 SE 84th
Newton Ks 67114

Reference:
STEWART TRUCKING 1 SEC 17-14-30

Description of Work:
PLUG JOB

Services / Items Included:	*Quantity*	*Price*	*Taxable*	*Item*	*Quantity*	*Price*	*Taxable*
Labor		$ 609.31	Yes				
Common-Class A	144	$ 2,025.83	Yes				
POZ Mix-Standard	96	$ 458.93	Yes				
Bulk Truck Matl-Material Service Charge	249	$ 170.05	Yes				
Pump Truck Mileage-Job to Nearest Camp	40	$ 122.93	Yes				
Bulk Truck Mileage-Job to Nearest Bulk Plant	40	$ 95.61	Yes				
Flo Seal	60	$ 81.95	Yes				
Dry Hole Plug	1	$ 38.24	Yes				

Invoice Terms:
Net 30

SubTotal:	$	*3,602.85*
Discount Available ONLY if Invoice is Paid & Received within listed terms of invoice:	$	(90.07)
SubTotal for Taxable Items:	$	3,512.78
SubTotal for Non-Taxable Items:	$	-
Total:	$	3,512.78
8.50% Gove County Sales Tax Tax:	$	298.59
Amount Due:	**$**	**3,811.37**
Applied Payments:		
Balance Due:	**$**	**3,811.37**

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. 591

Cell 785-324-1041

Date	Sec.	Twp.	Range	County	State	On Location	Finish
1-31-18	17	14	30	Gove	KS		12:30 AM

Location Gove 11 S 1E W 9W Into

Lease Stewart Trucking Well No. 1

Contractor WW #8

Type Job Rotary Plug

Hole Size 7 7/8 T.D. 4720

Csg. Depth

Tbg. Size Depth

Tool Depth

Cement Left in Csg. Shoe Joint

Meas Line Displace

EQUIPMENT

Pumptrk 20 No. Cementer Craig

Helper

Bulktrk No. Driver Brett

Bulktrk Driver

Bulktrk 21 No. Driver

Driver Doug

JOB SERVICES & REMARKS

Remarks:

Rat Hole 30SK

Mouse Hole

Centralizers

Baskets

D/V or Port Collar

1st 2302 50SK

2nd 1349 100SK

3rd 248 50SK

4th 40' 10SK

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.

Charge To Palomino Petroleum

Street

City State

The above was done to satisfaction and supervision of owner agent or contractor.

Cement Amount Ordered 240 60/40 4% GEL 1/4# FC

Common	144
Poz. Mix	96
Gel.	9
Calcium	
Hulls	
Salt	
Flowseal	60#
Kol-Seal	
Mud CLR 48	
CFL-117 or CD110 CAF 38	
Sand	
Handling	249
Mileage	

FLOAT EQUIPMENT

Guide Shoe 8 5/8 Dry Hole Plug

Centralizer

Baskets

AFU Inserts

Float Shoe

Latch Down

Pumptrk Charge plug

Mileage 40

Tax

Discount

Total Charge

X Signature

Quality Oilwell Cementing

PRESSURE PUMPING LLC

REMIT TO

QES Pressure Pumping LLC
Dept:970
P.O.Box 4346
Houston,TX 77210-4346

MAIN OFFICE

P.O.Box884
Chanute,KS 66720
620/431-9210,1-800/467-8676
Fax 620/431-0012

Invoice

Invoice# 812263

Invoice Date: 01/23/18 Terms: Net 30 Page 1

PALOMINO PETROLEUM, INC.

4924 SE 84TH STREET
NEWTON KS 67114-8827
USA

RECEIVED
JAN 26 2018

SWART TRUCKING #1

Part No	Description	Quantity	Unit Price	Discount(%)	Total
CE0471	Cement Pump Charge 301' - 500' (Coalbed/Methane)	1.000	1,150.0000	30.000	805.00
CE0002	Equipment Mileage Charge - Heavy Equipment	30.000	7.1500	30.000	150.15
CE0711	Minimum Cement Delivery Charge	1.000	660.0000	30.000	462.00
CC5871	Surface Blend II, 2% Gel/3% CaCl	165.000	24.0000	30.000	2,772.00
CC5326	Sodium Chloride, Salt	100.000	0.0000	0.000	0.00

Subtotal	5,984.50
Discounted Amount	1,795.35
SubTotal After Discount	4,189.15

Amount Due 6,321.10 If paid after 02/22/18

Tax:	235.62
Total:	4,424.77

QES

PRESSURE PUMPING LLC
PO Box 884, Chanute, KS 66720
620-431-9210 or 800-467-8676

9903
9797

TICKET NUMBER 54998
LOCATION Oakley KS
FOREMAN Jerry Y

FIELD TICKET & TREATMENT REPORT
CEMENT

Invoice #812263

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
1-18-18	6285	Swart Trucking #1	17	14S	30W	Gove

CUSTOMER: Palomino

MAILING ADDRESS: 4924 SE 84th Street

CITY: Newton | STATE: KS | ZIP CODE: 67114-8827

Open South to I-70 East to 26 Now into

TRUCK #	DRIVER	TRUCK #	DRIVER
731	Coryl		
566	Seth		

JOB TYPE Surface | HOLE SIZE 12 1/4 | HOLE DEPTH 229 | CASING SIZE & WEIGHT 8 5/8 23#

CASING DEPTH 218 | DRILL PIPE | TUBING | OTHER

SLURRY WEIGHT 15.2 | SLURRY VOL 1.24 | WATER gal/sk | CEMENT LEFT in CASING 20'

DISPLACEMENT 12 1/2 | DISPLACEMENT PSI | MIX PSI | RATE

REMARKS: Safty meeting rig up on 4W8 circulate casing mix 165 sks com 3%cc wash up & disp. with 12 1/2 bbl H2O & shut in Circulated approx 3bbl to pit

Cement did Circulate

Thank you
Jerry & crew

ACCOUNT CODE	QUANITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
CE0471	1	PUMP CHARGE	1150.00	1150.00
CE0002	30	MILEAGE	7.15	214.50
CE0711	7.76	ton mileage delivery (min)	660.00	660.00
CC5871	165 sks	surface blend cf	24.00	3960.00
CC5526	100 gal	Salt	NC	NC
			Subtotal	5984.50
			-30%	1795.35
			Subtotal	4189.15
			SALES TAX	235.62
			ESTIMATED TOTAL	4424.77

15-882

Ravin 3737

AUTHORIZTION Paul Gonzalez TITLE Rig Manager DATE 1-19-18

I acknowledge that the payment terms, unless specifically amended in writing on the front of the form or in the customer's account records, at our office, and conditions of service on the back of this form are in effect for services identified on this form.

TERMS AND CONDITIONS

ATTENTION: THESE TERMS AND CONDITIONS CONTAIN INDEMNITY PROVISIONS FOR DAMAGE TO PERSONS AND PROPERTY.

All Services or Products provided by **QES Pressure Pumping LLC** (f/k/a Consolidated Oil Well Services LLC) are subject to these Terms and Conditions unless superseded by a Master Service Agreement signed by the parties. In the event Customer does not accept these Terms and Conditions as written, Customer must request a Master Service Agreement from QES' Contracts Administration Department at msa@qesla.com

The operations, services, supplies/materials, personnel or goods to be provided ("Services" or "Products" as applicable) by QES Pressure Pumping LLC ("QES") will be provided to you as customer ("Customer") in accordance with the following terms and conditions ("Agreement"). QES and Customer may be referred to as "Party" or "Parties".

1. Price and Taxes. Customer will pay QES for the Services or Products in accordance with QES' quoted price which exclude applicable taxes or process license fees. Customer shall pay all applicable taxes and process license fees related to the Services and/or Products. QES' prices are subject to change without notice.

2. Terms of Payment. Customer will pay QES cash in advance for Services and Products unless QES has approved credit prior to the performance of the Services and/or delivery of the Products. Credit terms for approved accounts require full payment of the invoiced amount within 30 days from the date of invoice. All invoices not paid within 30 days will be charged an interest rate of 1.5% per month or the maximum rate allowed under applicable state law, whichever is higher. Customer will be responsible for any fees incurred by QES in the collection of any amounts owed to QES including but not limited to attorney's fees and/or collection fee costs.

3. Proof of Services or Delivery of Products. QES will furnish verification of proof of Services performed and Product delivered to Customer's representative at the time of performance of the Services or Product delivery. Customer agrees to sign and return such verification indicating Customer's acceptance of the Services or Products.

4. Delivery or Completion. All liability and responsibility of QES ceases when (1) Products are delivered to the Customer by QES and no longer in the care, custody and control of QES or (2) when the carrier receives the Products and/or shipment. QES will not be responsible for loss or damage to Products in transit or for delays of carriers in delivering goods. In case of shortage, non-conformance, or apparent damage, it is the Customer's responsibility to secure written acknowledgement from the carrier before Customer accepts delivery. Additionally, QES will not be liable for any damage for delays in delivery or completion due to a Force Majeure (as defined below), acts or omissions of the Customer, third party material or manufacturing delays, impossibility or impracticability of performance or any other cause or causes beyond the control of QES. In the event of a delay caused by the aforesaid, the delivery or completion date will be extended for a period equal to any such delay, and the purchase or service will not be void or voidable as a result thereof.

5. Well or Service Site Conditions. Customer, having custody and control of the well and/or service site, and having superior knowledge of the same and the conditions surrounding them, warrant that the well and/or service site will be in proper condition to receive and accommodate Services and Products. Upon QES' request, Customer will provide documentation to verify that the well or service site is adequate to support the Services and the delivery of Products. Customer also warrants that QES' personnel and equipment will be able to safely access the well and service site and that any special equipment or road improvements required for such access will be the responsibility of Customer, unless otherwise agreed to by the parties.

6. Chemical Handling and Hazardous Materials. Customer agrees that for any waste created as part of the Services, Customer will be considered the "generator" for purposes of any applicable laws or regulations pertaining to the transportation, storage and handling of chemicals and hazardous materials.

7. Data, Data Transmission and Storage. QES does not warrant or guarantee the accuracy of any research analysis, survey, or other data generated for the Services. QES is not responsible for any accidental or intentional interception of such data by third parties and it is the responsibility of the Customer to safeguard such data against loss including any need to secure digital or paper copies for storage.

8. WARRANTIES - LIMITATION OF LIABILITY.

a) QES warrants that the Services and Products will: (i) be free from defects in materials and workmanship; (ii) be performed in a good and workmanlike manner, in accordance with good oilfield servicing practices; and (iii) conform to the plans, specifications and technical information provided in writing by Customer until the Services or Products are accepted by Customer or QES' contractual obligations are met. In the event that Customer discovers a defect in the Services or Products within the warranty period specified above, Customer will notify QES of such defect. In the event that QES confirms that the Services or Products are defective, QES's liability and Customer's exclusive remedy in any cause of action (whether in tort, contract, breach of warranty or otherwise) arising out of the sale or use of any Services or Products is expressly limited to, at QES' option, the (i) replacement of such Services or Products upon their return to QES or (ii) a credit to Customer for the full price paid by Customer for the defective segment of the Services or Products upon their return to QES. In the case of products or parts not wholly of QES' manufacture, QES' liability will be limited to the extent of its recovery from the manufacturer of such products or parts under its liability to QES. QES will not be liable for any damages, claims, losses or expenses of Customer resulting from such defects or for damages resulting from delays, loss of use, or other direct, indirect, incidental, punitive or consequential damages of any kind. QES will not be responsible for: (i) failures of Services that have been in any way tampered with or altered by anyone other than an authorized representative of QES; (ii) failures due to lack of compliance with recommended maintenance procedures; and (iii) products requiring replacement due to normal wear and tear.

b) EXCEPT FOR THE WARRANTIES EXPRESSLY STATED ABOVE, THERE ARE NO OTHER WARRANTIES. THE PARTIES EXPRESSLY EXCLUDE AND CUSTOMER WAIVES ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

c) IN NO EVENT WILL QES' ENTIRE LIABILITY (IN TORT, CONTRACT, WARRANTY, INFRINGEMENT OR OTHERWISE) TO CUSTOMER EXCEED THE PURCHASE PRICE ACTUALLY PAID BY CUSTOMER FOR THE SERVICES OR PRODUCTS THAT GIVE RISE TO A DISPUTE. THIS PROVISION WILL SURVIVE ANY TERMINATION OF THIS AGREEMENT.

9. INDEMNIFICATION AND WAIVER OF CONSEQUENTIAL DAMAGES.

9.1 For purpose of this Section 9, the following definitions will apply. "QES Group" means QES Pressure Pumping LLC, its parent company, and affiliated companies, and its and their officers, directors, employees, contractors, subcontractors and invitees. "Customer Group" means Customer, its parent (if any), subsidiary and affiliated companies, co-owners, co-venturers, partners and any entity with whom Customer has an economic interest with respect to the Services, including Customer's joint interest owners and partners and its and their officers, directors, employees, contractors (not including QES), subcontractors and invitees.

9.2 QES INDEMNITY. QES AGREES TO PROTECT, DEFEND, INDEMNIFY AND HOLD HARMLESS CUSTOMER GROUP FROM AND AGAINST ALL CLAIMS, DEMANDS, AND CAUSES OF ACTION OF EVERY KIND AND CHARACTER, ARISING IN CONNECTION WITH THE SERVICES, ON ACCOUNT OF BODILY INJURY, ILLNESS, OR DEATH OF ANY MEMBER OF QES GROUP OR, DAMAGE TO OR LOSS OF PROPERTY OF ANY MEMBER OF QES GROUP.

9.3 CUSTOMER INDEMNITY. CUSTOMER AGREES TO PROTECT, DEFEND, INDEMNIFY AND HOLD HARMLESS QES GROUP FROM AND AGAINST ALL CLAIMS, DEMANDS, AND CAUSES OF ACTION OF EVERY KIND AND CHARACTER, ARISING IN CONNECTION WITH THE SERVICES, ON ACCOUNT OF BODILY INJURY ILLNESS, OR DEATH OF ANY MEMBER OF CUSTOMER GROUP OR DAMAGE TO OR LOSS OF PROPERTY OF ANY MEMBER OF CUSTOMER GROUP.

9.4 WELL. CUSTOMER WILL RELEASE, PROTECT, DEFEND, AND INDEMNIFY QES GROUP FROM AND AGAINST ALL CLAIMS, DEMANDS AND CAUSES OF ACTION OF EVERY KIND AND CHARACTER IN THE EVENTS OF: (I) LOSS OR DAMAGE TO ANY GEOLOGICAL FORMATION, STRATA OR OIL OR GAS RESERVOIR OR MINERAL OR WATER RESOURCE BENEATH THE SURFACE OF THE LAND OR WATER, (II) LOSS OR DAMAGE TO THE HOLE OR WELL, (III) IMPAIRMENT OF PROPERTY RIGHTS OR OTHER INTERESTS IN OR TO OIL, GAS, MINERAL OR WATER RESOURCES, AND (IV) REGAINING CONTROL OF ANY WILD WELL OR OUT OF CONTROL WELL, UNDERGROUND OR ABOVE THE SURFACE, INCLUDING REMOVAL OF WRECK, DEBRIS, EQUIPMENT, AND HAZARDOUS MATERIALS AND REMEDIATING ENVIRONMENTAL DAMAGE.

9.5 POLLUTION RESPONSIBILITY. Subject to paragraphs 9.2 and 9.3, it is understood and agreed between Customer and QES that the responsibility for pollution shall be as follows:

(a) QES WILL ASSUME RESPONSIBILITY FOR CONTROL AND REMOVAL OF AND WILL PROTECT, DEFEND AND INDEMNIFY CUSTOMER GROUP FROM AND AGAINST ALL CLAIMS, DEMANDS AND CAUSES OF ACTION OF EVERY KIND OF CHARACTER ARISING FROM POLLUTION OR CONTAMINATION WHICH ORIGINATES ABOVE THE SURFACE OF THE LAND OR WATER FROM THE EQUIPMENT OF ANY MEMBER OF QES GROUP MAINTAINED IN QES GROUPS' CARE, CUSTODY AND CONTROL, AND ARISING FROM THE PERFORMANCE OF THE SERVICES.

(b) CUSTOMER WILL ASSUME RESPONSIBILITY FOR CONTROL AND REMOVAL OF AND WILL PROTECT, DEFEND AND INDEMNIFY QES GROUP FROM AND AGAINST ALL CLAIMS, DEMANDS AND CAUSES OF ACTION OF EVERY KIND AND CHARACTER ARISING FROM POLLUTION OTHER THAN THAT DESCRIBED IN SECTION 9.5(A) ABOVE, WHICH MAY OCCUR DURING THE CONDUCT OF OPERATIONS HEREUNDER, INCLUDING, BUT NOT LIMITED TO, POLLUTION RESULTING FROM FIRE, BLOWOUT, CRATERING, SEEPAGE OR OTHER UNCONTROLLED FLOW OF OIL, GAS OR OTHER SUBSTANCE.

9.6 WAIVER OF CONSEQUENTIAL DAMAGES. NOTWITHSTANDING ANY PROVISION TO THE CONTRARY, CUSTOMER AND QES FURTHER AGREE THAT NEITHER PARTY WILL BE LIABLE TO THE OTHER OR EACH OTHER'S RESPECTIVE GROUP FOR ANY CONSEQUENTIAL, INCIDENTAL OR INDIRECT DAMAGES, INCLUDING BUT NOT LIMITED TO, LOSS OF PROFIT, LOSS OF PRODUCTION, REVENUE, OR ANTICIPATED BUSINESS ("LOSSES"). CUSTOMER AGREES TO INDEMNIFY AND HOLD QES GROUP HARMLESS FROM AND AGAINST ANY AND ALL CLAIMS FOR SUCH LOSSES ASSERTED BY MEMBERS OF CUSTOMER GROUP. QES AGREES TO INDEMNIFY AND HOLD CUSTOMER GROUP HARMLESS FROM AND AGAINST ANY AND ALL CLAIMS FOR SUCH LOSSES ASSERTED BY MEMBERS OF QES GROUP.

9.7 EXCEPT AS OTHERWISE EXPRESSLY LIMITED BY THIS AGREEMENT OR BY LAW, ALL RELEASES, INDEMNITY OBLIGATIONS AND OTHER LIABILITIES ASSUMED UNDER THIS AGREEMENT WILL BE WITHOUT LIMIT AND WITHOUT REGARD TO THE CAUSE OR CAUSES, INCLUDING, WITHOUT LIMITATION, PREEXISTING CONDITIONS, UNSEAWORTHINESS, STRICT LIABILITY, WILLFUL MISCONDUCT, AND THE SOLE, JOINT, GROSS, OR CONCURRENT NEGLIGENCE OF ANY PARTY.

9.8. Each Party hereunder agrees to support its indemnity obligations with liability insurance coverage with limits of liability not less than ten million dollars ($10,000,000). It is the express intention of the Parties that the indemnities contained herein apply to the fullest extent permitted by applicable law, and in no event will a Party's indemnity obligation be limited to the amount of insurance carried by each Party.

THIS SECTION 9 WILL SURVIVE THE TERMINATION OR EXPIRATION OF THIS AGREEMENT.

10. Insurance. All insurance policies of either Party, in any way related to the Services, whether or not required by this Agreement, shall to the extent of the risks and liabilities assumed by such party, (i) name the other party group as additional insured (except for worker's compensation, OEE/COW, or professional liability policies), (ii) waive subrogation as to the other party group; and (iii) be primary and non-contributory to any insurance of the other party group.

11. Force Majeure. Except the obligation to make payments when due, neither QES nor Customer will be liable nor deemed to be in breach of this Agreement for any delay or failure in performance resulting from the acts of God, civil or military authority, material change of law, any governmental action, acts of public enemy, war, accidents, fires, explosions, earthquakes, floods, failure of transportation, national strikes, acute or unusual labor, material or equipment shortages, or any similar or dissimilar cause beyond the reasonable control of either Party. The Party so affected will as soon as such a cause or event occurs promptly notify the other Party in writing concerning the cause and the estimated effect and take reasonable measures with proper dispatch to remedy the condition. In the event Customer declares a force majeure occurrence, QES will be compensated at the standard daily rate for the materials and personnel that are standing idle as a consequence of the force majeure occurrence until Customer terminates the work order or work resumes.

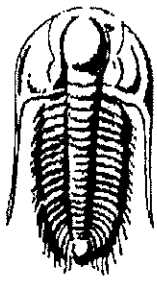
12. Governing Law. This Agreement will be governed by the laws of the State of Texas, without regard to its conflicts of law provisions. The Parties agree to submit to the exclusive jurisdiction of the federal or state courts located in Houston, Harris County, Texas with respect to any and all disputes that arise out of or are related in any way to the subject matter of this Agreement. This Section 12 will survive the termination or expiration of this Agreement.

13. Independent Contractor. QES will be an independent contractor with respect to the Services performed, and neither QES nor anyone employed by QES will be deemed for any purpose to be the employee, agent, servant, borrowed servant or representative of Customer.

14. Severability. In the event any provision of this Agreement is inconsistent with or contrary to any applicable law, rule or regulation, the provision will be deemed modified to the extent required to comply and the remaining terms, as modified, will remain in full force and effect.

15. Waiver. A waiver on the part of either Party of any breach of any term, provision or condition of this Agreement will not constitute a precedent and not bind either Party hereto to a waiver of any succeeding or other breach of the same or any other term, provision or condition of this Agreement.

16. Entire Agreement. This Agreement contains the entire agreement of the Parties with regard to the subject matter hereof and supersedes any prior oral and written agreements, contracts, representations or warranty between the Parties relating to the subject matter hereof. No amendment or modification of this Agreement will be effective unless it is in writing and signed by an authorized representative of each Party. If the Parties enter into a Master Service Agreement, then any term or condition herein which conflicts with the provisions of such Master Service Agreement will be deemed invalid.



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Palomino Petroleum**

4924 SE. 84th St
Newton KS 67114

ATTN: Andrew Stenzel

Swart Trucking Inc 1

17-14-30 Gove,KS

Start Date: 2018.01.23 @ 22:18:15
End Date: 2018.01.24 @ 06:08:45
Job Ticket #: 64414 DST #: 1

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

Printed: 2018.01.31 @ 10:59:01

Palomino Petroleum 17-14-30 Gove,KS Swart Trucking Inc 1 DST # 1 Toronto - LKC A 2018.01.23

DRILL STEM TEST REPORT

TRILOBITE TESTING, INC.

Palomino Petroleum

4924 SE 84th St
Newton KS 67114

ATTN: Andrew Stenzel

17-14-30 Gove,KS

Swart Trucking Inc 1

Job Ticket: 64414 **DST#: 1**

Test Start: 2018.01.23 @ 22:18:15

GENERAL INFORMATION:

Formation: **Toronto - LKC A**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 00:59:45
Time Test Ended: 06:08:45

Test Type: Conventional Bottom Hole (Initial)
Tester: Mike Roberts
Unit No: 81

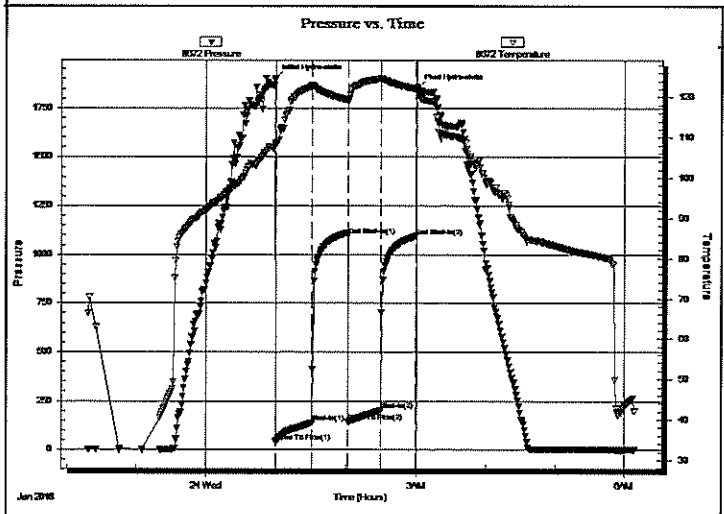
Interval: 3885.00 ft (KB) To 3938.00 ft (KB) (TVD)
Total Depth: 3938.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2829.00 ft (KB)
2824.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 8672 **Inside**
Press@RunDepth: 202.25 psig @ 3933.00 ft (KB)
Start Date: 2018.01.23 End Date: 2018.01.24
Start Time: 22:18:15 End Time: 06:08:45

Capacity: 8000.00 psig
Last Calib.: 2018.01.24
Time On Btm: 2018.01.24 @ 00:59:30
Time Off Btm: 2018.01.24 @ 03:01:15

TEST COMMENT: IF:BOB in 16 min.
IS:No returb blow
FF:BOB in 18 min.
FS:No return blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1902.37	108.59	Initial Hydro-static
1	39.81	108.18	Open To Flow (1)
32	138.97	122.69	Shut-In(1)
62	1098.03	119.25	End Shut-In(1)
62	143.15	118.83	Open To Flow (2)
91	202.25	124.46	Shut-In(2)
121	1094.38	122.02	End Shut-In(2)
122	1854.14	122.35	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
119.00	mcw 10%m 90%w (collars)	0.59
124.00	mcw 40%m 60%w	1.74
124.00	mud 100 %m	1.74

Gas Rates

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

DRILL STEM TEST REPORT

TRILOBITE TESTING, INC.

Palomino Petroleum

4924 SE 84th St
Newton KS 67114

ATTN: Andrew Stenzel

17-14-30 Gove,KS

Swart Trucking Inc 1

Job Ticket: 64414 **DST#: 1**

Test Start: 2018.01.23 @ 22:18:15

GENERAL INFORMATION:

Formation: **Toronto - LKC A**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 00:59:45
Time Test Ended: 06:08:45

Test Type: Conventional Bottom Hole (Initial)
Tester: Mike Roberts
Unit No: 81

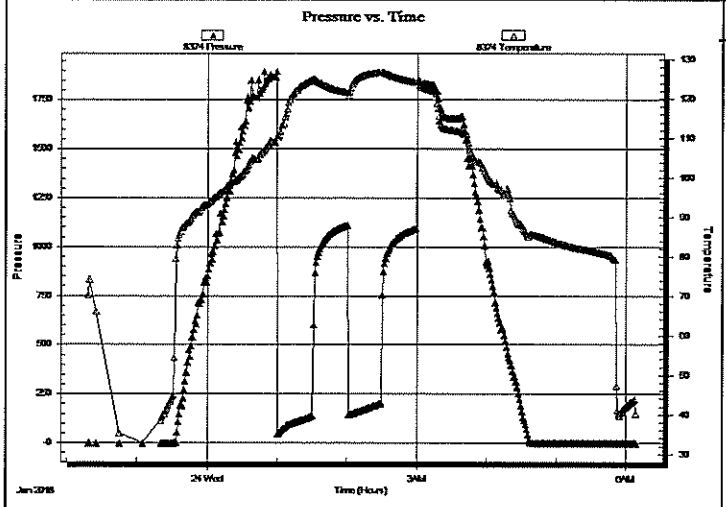
Interval: 3885.00 ft (KB) To 3938.00 ft (KB) (TVD)
Total Depth: 3938.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2829.00 ft (KB)
2824.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 8374 **Outside**
Press@RunDepth: psig @ 3933.00 ft (KB)
Start Date: 2018.01.23 End Date: 2018.01.24
Start Time: 22:18:15 End Time: 06:08:30

Capacity: 8000.00 psig
Last Calib.: 2018.01.24
Time On Btm:
Time Off Btm:

TEST COMMENT: IF:BOB in 16 min.
IS:No returb blow
FF:BOB in 18 min.
FS:No return blow



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
119.00	mcw 10%m 90%w (collars)	0.59
124.00	mcw 40%m 60%w	1.74
124.00	mud 100 %m	1.74

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Palomino Petroleum

4924 SE. 84th St
Newton KS 67114

ATTN: Andrew Stenzel

17-14-30 Gove,KS

Swart Trucking Inc 1

Job Ticket: 64414 **DST#: 1**

Test Start: 2018.01.23 @ 22:18:15

Tool Information

Drill Pipe:	Length:	3746.00 ft	Diameter:	3.80 inches	Volume:	52.55 bbl	Tool Weight:		1500.00 lb
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	Weight set on Packer:		20000.00 lb
Drill Collar:	Length:	119.00 ft	Diameter:	2.25 inches	Volume:	0.59 bbl	Weight to Pull Loose:		70000.00 lb
					Total Volume:	53.14 bbl	Tool Chased		0.00 ft
Drill Pipe Above KB:		8.00 ft					String Weight:	Initial	50000.00 lb
Depth to Top Packer:		3885.00 ft						Final	53000.00 lb
Depth to Bottom Packer:		ft							
Interval between Packers:		53.00 ft							
Tool Length:		81.00 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			3858.00		
Shut In Tool	5.00			3863.00		
Hydraulic tool	5.00			3868.00		
Jars	5.00			3873.00		
Safety Joint	3.00			3876.00		
Packer	5.00			3881.00	28.00	Bottom Of Top Packer
Packer	4.00			3885.00		
Stubb	1.00			3886.00		
Perforations	3.00			3889.00		
Change Over Sub	1.00			3890.00		
Drill Pipe	32.00			3922.00		
Change Over Sub	1.00			3923.00		
Perforations	10.00			3933.00		
Recorder	0.00	8672	Inside	3933.00		
Recorder	0.00	8374	Outside	3933.00		
Bullnose	5.00			3938.00	53.00	Bottom Packers & Anchor
Total Tool Length:	**81.00**					

DRILL STEM TEST REPORT

FLUID SUMMARY

Palomino Petroleum

4924 SE 84th St
Newton KS 67114

ATTN: Andrew Stenzel

17-14-30 Gove,KS

Swart Trucking Inc 1

Job Ticket: 64414 **DST#: 1**

Test Start: 2018.01.23 @ 22:18:15

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	0 deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	28000 ppm
Viscosity:	63.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	9.48 in³	Gas Cushion Type:			
Resistivity:	0.00 ohm.m	Gas Cushion Pressure:	psig		
Salinity:	2500.00 ppm				
Filter Cake:	1.00 inches				

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
119.00	mcw 10%m 90%w (collars)	0.585
124.00	mcw 40%m 60%w	1.739
124.00	mud 100 %m	1.739

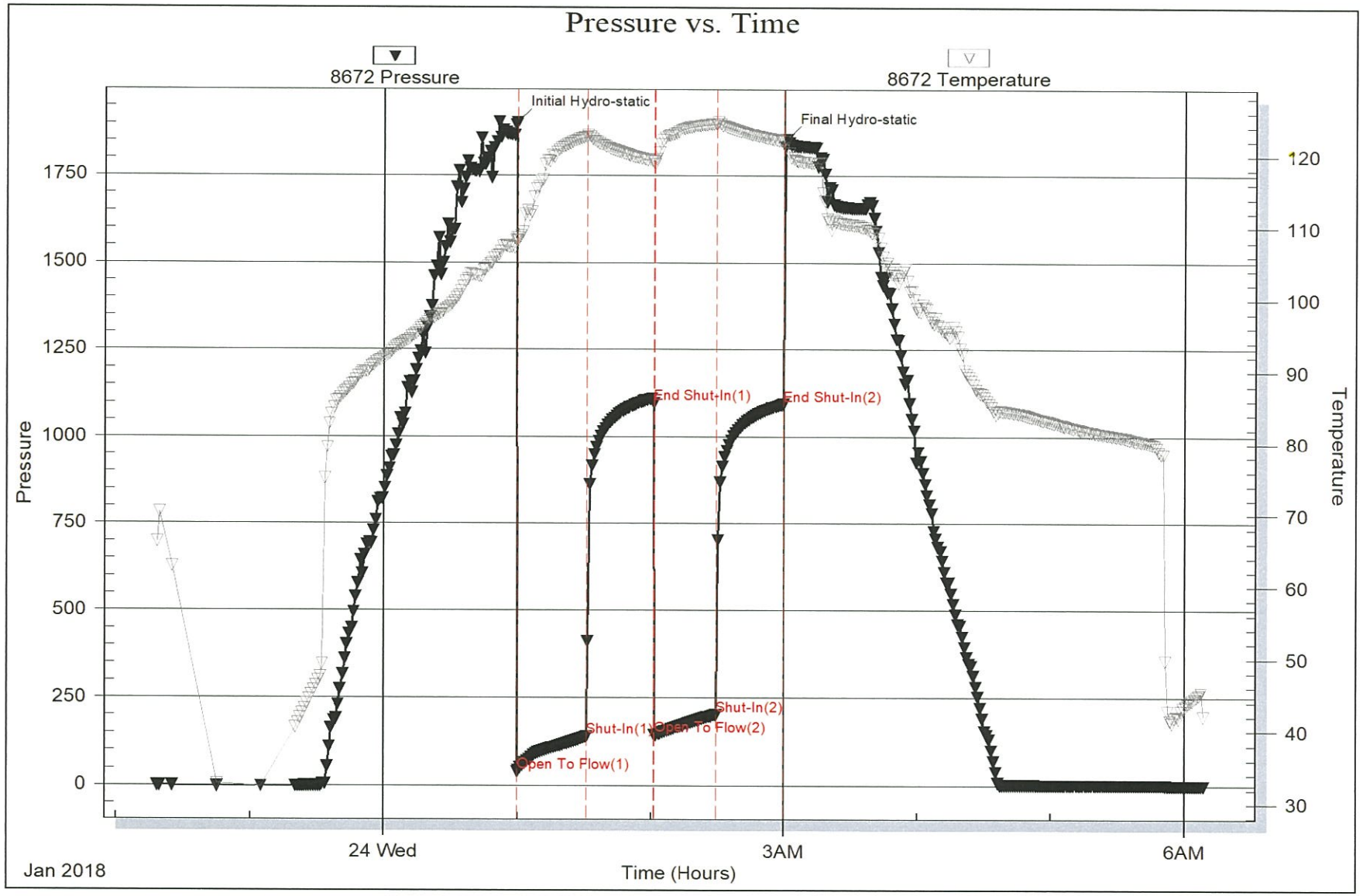
Total Length: 367.00 ft Total Volume: 4.063 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

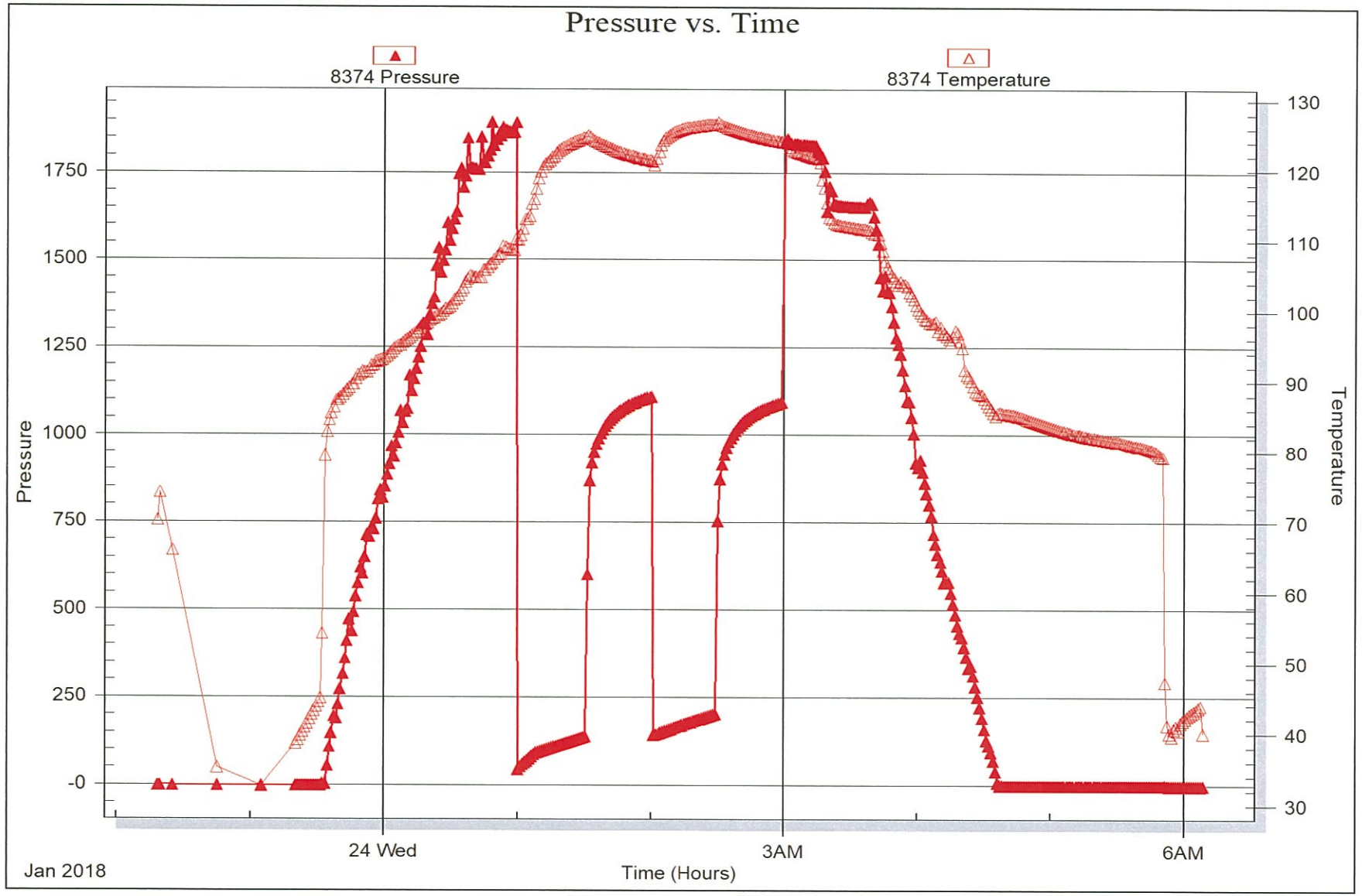
Recovery Comments: RW=.368@43.8*= 28,000 ppm

Serial #: 8672 **Inside** Palomino Petroleum Swart Trucking Inc 1 DST Test Number: 1

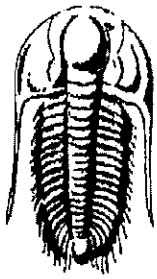


Trilobite Testing, Inc Ref. No: 64414 Printed: 2018.01.31 @ 10:59:02

Serial #: 8374 **Outside** Palomino Petroleum Sw art Trucking Inc 1 DST Test Number: 1



Trilobite Testing, Inc Ref. No: 64414 Printed: 2018.01.31 @ 10:59:03



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Palomino Petroleum**

4924 SE. 84th St
Newton KS 67114

ATTN: Andrew Stenzel

Swart Trucking Inc 1

17-14-30 Gove,KS

Start Date: 2018.01.24 @ 20:54:15
End Date: 2018.01.25 @ 04:06:30
Job Ticket #: 64415 DST #: 2

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

Printed: 2018.01.31 @ 10:58:36

DRILL STEM TEST REPORT

TRILOBITE TESTING, INC.

Palomino Petroleum

4924 SE 84th St
Newton KS 67114

ATTN: Andrew Stenzel

17-14-30 Gove,KS

Swart Trucking Inc 1

Job Ticket: 64415 **DST#: 2**

Test Start: 2018.01.24 @ 20:54:15

GENERAL INFORMATION:

Formation: **LKC D-F**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 23:27:15
Time Test Ended: 04:06:30

Test Type: Conventional Bottom Hole (Reset)
Tester: Mike Roberts
Unit No: 81

Interval: 3973.00 ft (KB) To 4023.00 ft (KB) (TVD)
Total Depth: 4023.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

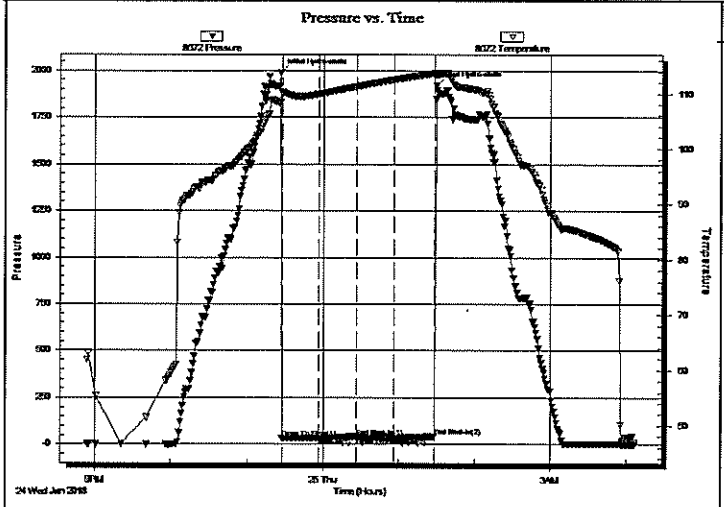
Reference Elevations: 2829.00 ft (KB)
2824.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 8672 **Inside**

Press@RunDepth: 34.40 psig @ 4018.00 ft (KB)
Start Date: 2018.01.24 End Date: 2018.01.25
Start Time: 20:54:15 End Time: 04:06:30

Capacity: 8000.00 psig
Last Calib.: 2018.01.25
Time On Btm: 2018.01.24 @ 23:26:15
Time Off Btm: 2018.01.25 @ 01:29:30

TEST COMMENT: IF:Built to 1/8" blow
IS:No return blow
FF:No blow
FS:No return blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1988.95	108.45	Initial Hydro-static
1	33.36	109.98	Open To Flow (1)
30	33.85	109.88	Shut-In(1)
60	40.58	111.28	End Shut-In(1)
60	33.40	111.28	Open To Flow (2)
90	34.40	112.52	Shut-In(2)
123	41.77	113.67	End Shut-In(2)
124	1918.84	113.45	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	mud 100%m	0.02

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

TRILOBITE TESTING, INC.

Palomino Petroleum

4924 SE. 84th St
Newton KS 67114

ATTN: Andrew Stenzel

17-14-30 Gove,KS

Swart Trucking Inc 1

Job Ticket: 64415 **DST#: 2**

Test Start: 2018.01.24 @ 20:54:15

GENERAL INFORMATION:

Formation: **LKC D-F**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 23:27:15
Time Test Ended: 04:06:30

Test Type: Conventional Bottom Hole (Reset)
Tester: Mike Roberts
Unit No: 81

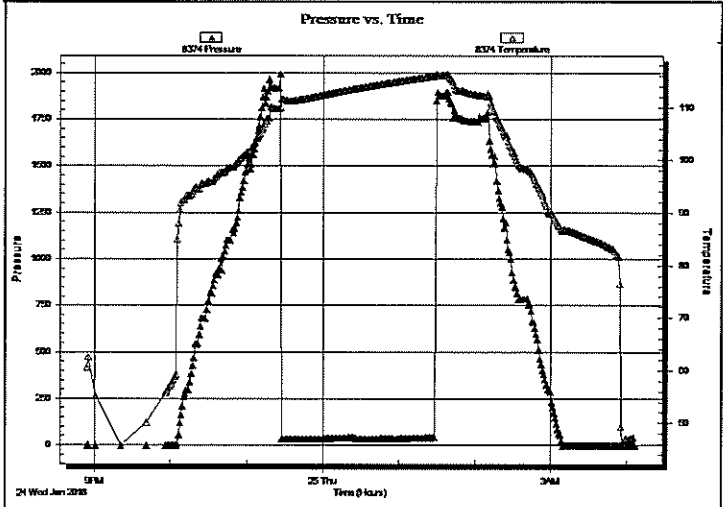
Interval: 3973.00 ft (KB) To 4023.00 ft (KB) (TVD)
Total Depth: 4023.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2829.00 ft (KB)
2824.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 8374 **Outside**
Press@RunDepth: psig @ 4018.00 ft (KB)
Start Date: 2018.01.24 End Date: 2018.01.25
Start Time: 20:54:15 End Time: 04:06:30

Capacity: 8000.00 psig
Last Calib.: 2018.01.25
Time On Btm:
Time Off Btm:

TEST COMMENT: IF:Built to 1/8" blow
IS:No return blow
FF:No blow
FS:No return blow



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
5.00	mud 100%m	0.02

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Palomino Petroleum

4924 SE 84th St
Newton KS 67114

ATTN: Andrew Stenzel

17-14-30 Gove,KS

Swart Trucking Inc 1

Job Ticket: 64415 **DST#: 2**

Test Start: 2018.01.24 @ 20:54:15

Tool Information

Drill Pipe:	Length:	3843.00 ft	Diameter:	3.80 inches	Volume:	53.91 bbl	
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	
Drill Collar:	Length:	119.00 ft	Diameter:	2.25 inches	Volume:	0.59 bbl	
					Total Volume:	54.50 bbl	

Drill Pipe Above KB:	17.00 ft
Depth to Top Packer:	3973.00 ft
Depth to Bottom Packer:	ft
Interval between Packers:	50.00 ft
Tool Length:	78.00 ft
Number of Packers:	2 Diameter: 6.75 inches

Tool Weight:	1500.00 lb
Weight set on Packer:	20000.00 lb
Weight to Pull Loose:	80000.00 lb
Tool Chased	0.00 ft
String Weight: Initial	53000.00 lb
Final	53000.00 lb

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Change Over Sub	1.00			3946.00		
Shut In Tool	5.00			3951.00		
Hydraulic tool	5.00			3956.00		
Jars	5.00			3961.00		
Safety Joint	3.00			3964.00		
Packer	5.00			3969.00	28.00	Bottom Of Top Packer
Packer	4.00			3973.00		
Stubb	1.00			3974.00		
Perforations	1.00			3975.00		
Change Over Sub	1.00			3976.00		
Drill Pipe	31.00			4007.00		
Change Over Sub	1.00			4008.00		
Perforations	10.00			4018.00		
Recorder	0.00	8672	Inside	4018.00		
Recorder	0.00	8374	Outside	4018.00		
Bullnose	5.00			4023.00	50.00	Bottom Packers & Anchor
Total Tool Length:	**78.00**					

TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Palomino Petroleum

4924 SE 84th St
Newton KS 67114

ATTN: Andrew Stenzel

17-14-30 Gove,KS

Swart Trucking Inc 1

Job Ticket: 64415 **DST#: 2**

Test Start: 2018.01.24 @ 20:54:15

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	0 deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	0 ppm
Viscosity:	51.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	9.50 in³	Gas Cushion Type:			
Resistivity:	0.00 ohm.m	Gas Cushion Pressure:	psig		
Salinity:	3400.00 ppm				
Filter Cake:	1.00 inches				

Recovery Information

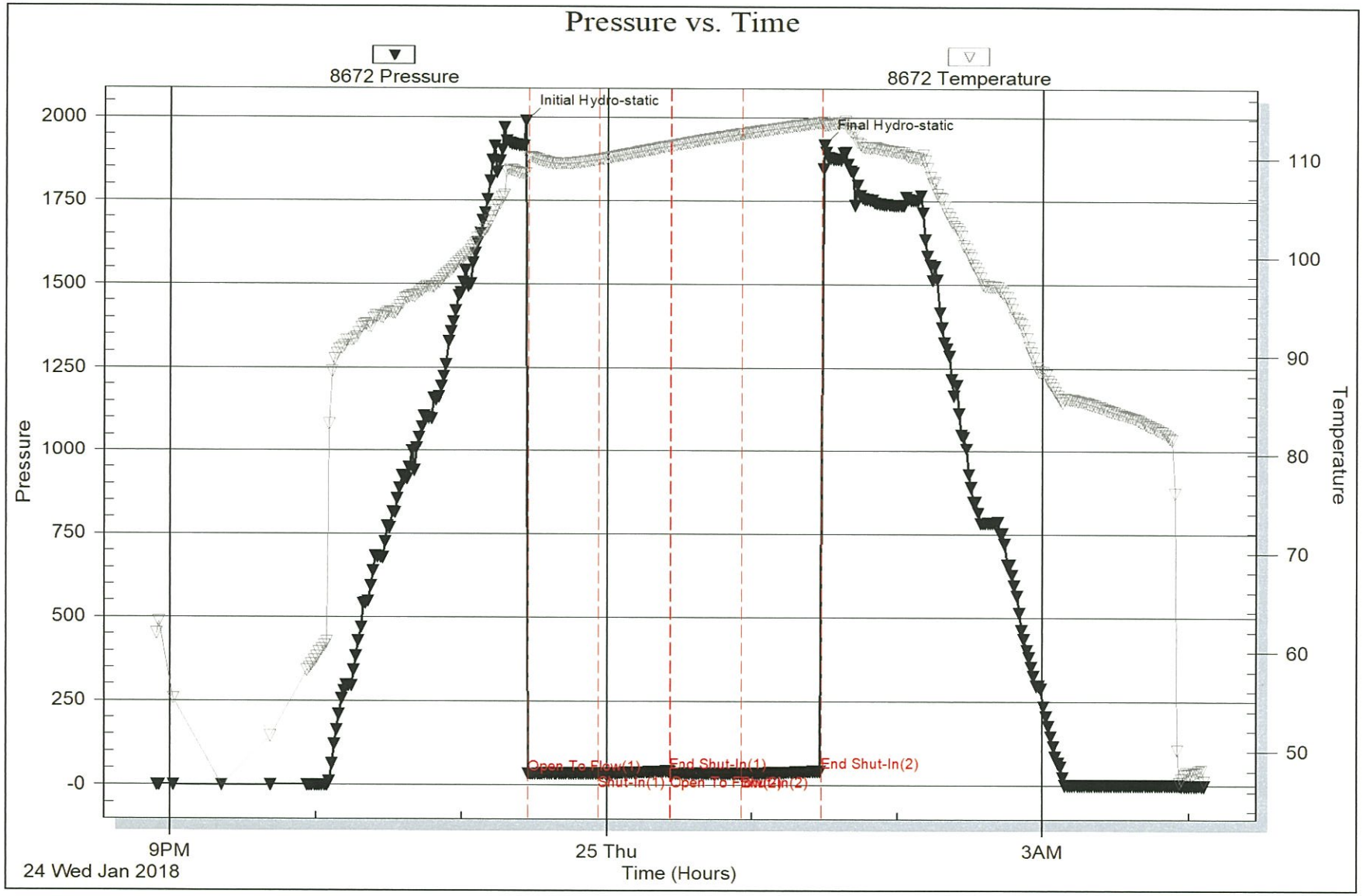
Recovery Table

Length ft	Description	Volume bbl
5.00	mud 100%m	0.025

Total Length: 5.00 ft Total Volume: 0.025 bbl

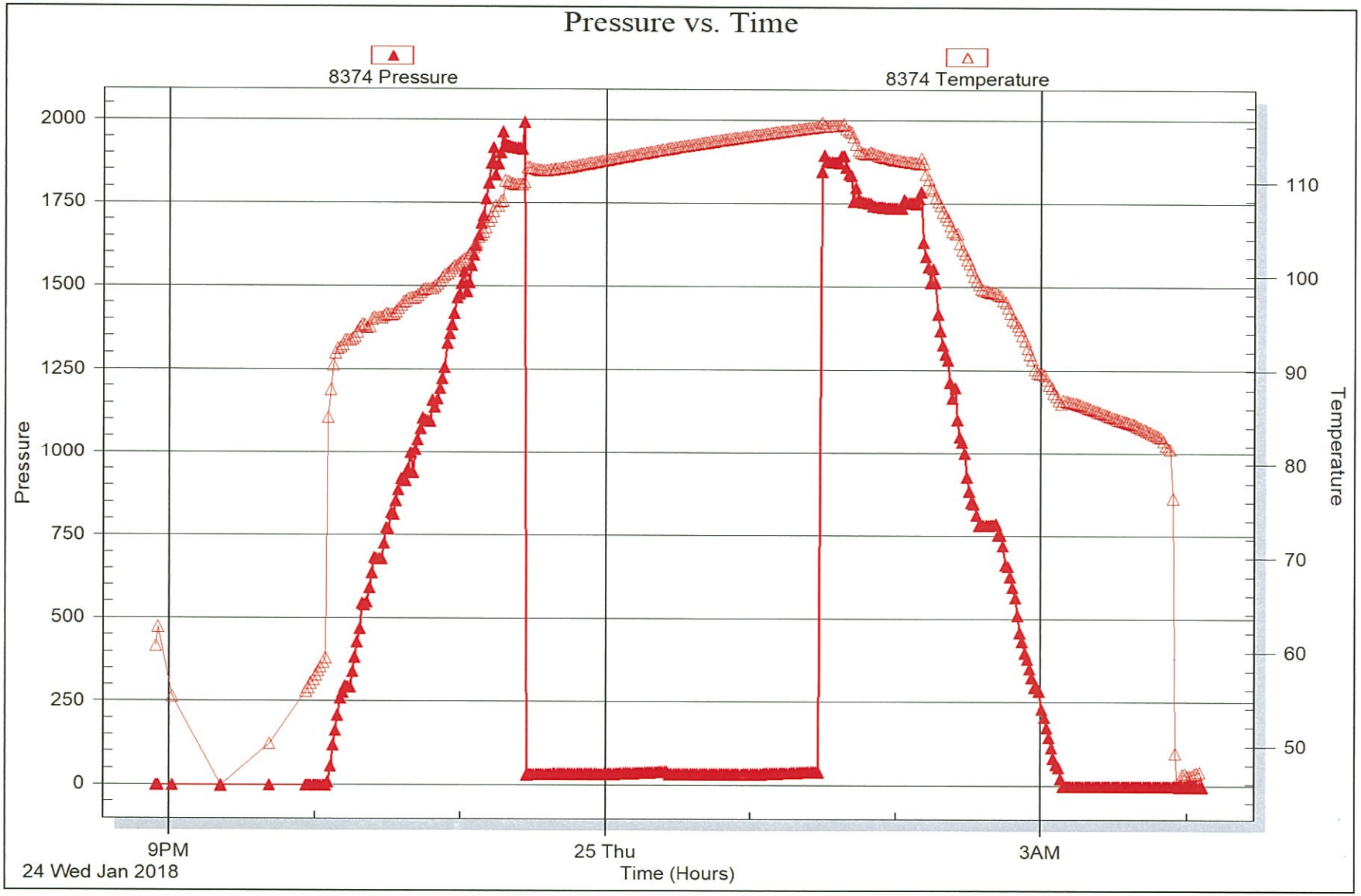
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

Serial #: 8672 **Inside** Palomino Petroleum Swart Trucking Inc 1 . DST Test Number: 2



Trilobite Testing, Inc Ref. No: 64415 Printed: 2018.01.31 @ 10:58:37

Serial #: 8374 **Outside** Palomino Petroleum Sw art Trucking Inc 1 DST Test Number: 2



Trilobite Testing, Inc Ref. No: 64415 Printed: 2018.01.31 @ 10:58:37

TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Palomino Petroleum**

4924 SE. 84th St
Newton KS 67114

ATTN: Andrew Stenzel

Swart Trucking Inc 1

17-14-30 Gove,KS

Start Date: 2018.01.25 @ 18:24:15
End Date: 2018.01.26 @ 02:10:30
Job Ticket #: 64416 DST #: 3

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

Printed: 2018.01.31 @ 10:58:12

DRILL STEM TEST REPORT

Palomino Petroleum

4924 SE 84th St
Newton KS 67114

ATTN: Andrew Stenzel

17-14-30 Gove,KS

Swart Trucking Inc 1

Job Ticket: 64416 **DST#: 3**

Test Start: 2018.01.25 @ 18:24:15

GENERAL INFORMATION:

Formation: LKC H-I
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 21:41:00
Time Test Ended: 02:10:30

Test Type: Conventional Bottom Hole (Reset)
Tester: Mike Roberts
Unit No: 81

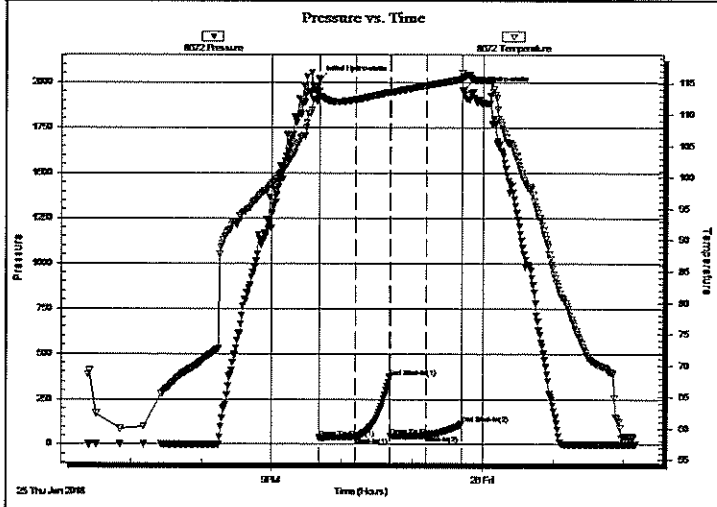
Interval: 4074.00 ft (KB) To 4141.00 ft (KB) (TVD)
Total Depth: 4141.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2829.00 ft (KB)
2824.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 8672 **Inside**
Press@RunDepth: 48.12 psig @ 4136.00 ft (KB)
Start Date: 2018.01.25 End Date: 2018.01.26
Start Time: 18:24:15 End Time: 02:10:30

Capacity: 8000.00 psig
Last Calib.: 2018.01.26
Time On Btm: 2018.01.25 @ 21:40:45
Time Off Btm: 2018.01.25 @ 23:42:15

TEST COMMENT: IF:Built to 1/8" blow
IS:No return blow
FF:No blow
FS:No return blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2012.37	113.69	Initial Hydro-static
1	35.41	112.55	Open To Flow (1)
31	42.11	112.36	Shut-In(1)
60	372.41	113.57	End Shut-In(1)
60	46.92	113.38	Open To Flow (2)
91	48.12	114.60	Shut-In(2)
122	114.11	115.63	End Shut-In(2)
122	1956.19	116.64	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	mud w ith oil spots	0.02

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

TRILOBITE TESTING, INC.

Palomino Petroleum

4924 SE 84th St
Newton KS 67114

ATTN: Andrew Stenzel

17-14-30 Gove,KS

Swart Trucking Inc 1

Job Ticket: 64416 **DST#: 3**

Test Start: 2018.01.25 @ 18:24:15

GENERAL INFORMATION:

Formation: LKC H-I
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 21:41:00
Time Test Ended: 02:10:30

Test Type: Conventional Bottom Hole (Reset)
Tester: Mike Roberts
Unit No: 81

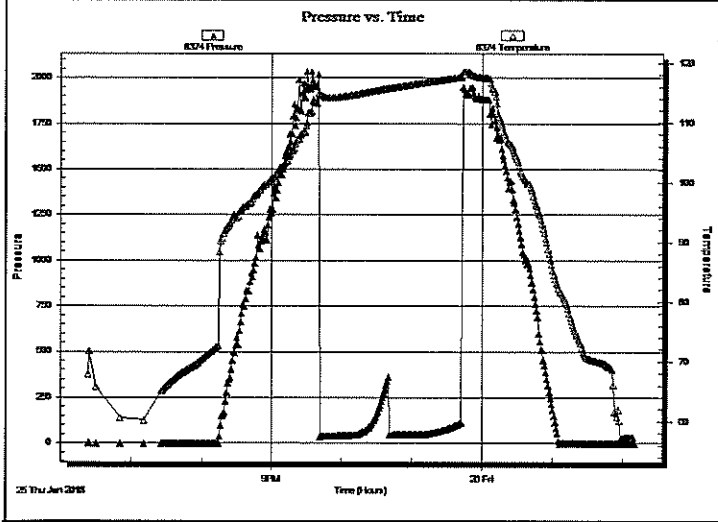
Interval: 4074.00 ft (KB) To 4141.00 ft (KB) (TVD)
Total Depth: 4141.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2829.00 ft (KB)
2824.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 8374 **Outside**
Press@RunDepth: psig @ 4136.00 ft (KB)
Start Date: 2018.01.25 End Date: 2018.01.26
Start Time: 18:24:15 End Time: 02:10:45

Capacity: 8000.00 psig
Last Calib.: 2018.01.26
Time On Btm:
Time Off Btm:

TEST COMMENT: IF:Built to 1/8" blow
IS:No return blow
FF:No blow
FS:No return blow



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
5.00	mud with oil spots	0.02

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Palomino Petroleum

4924 SE 84th St
Newton KS 67114

ATTN: Andrew Stenzel

17-14-30 Gove,KS

Swart Trucking Inc 1

Job Ticket: 64416 **DST#: 3**

Test Start: 2018.01.25 @ 18:24:15

Tool Information

Drill Pipe:	Length:	3937.00 ft	Diameter:	3.80 inches	Volume:	55.23 bbl	
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	
Drill Collar:	Length:	119.00 ft	Diameter:	2.25 inches	Volume:	0.59 bbl	
					Total Volume:	55.82 bbl	

Drill Pipe Above KB:	10.00 ft
Depth to Top Packer:	4074.00 ft
Depth to Bottom Packer:	ft
Interval between Packers:	67.00 ft
Tool Length:	95.00 ft
Number of Packers:	2 Diameter: 6.75 inches

Tool Weight:	1500.00 lb
Weight set on Packer:	20000.00 lb
Weight to Pull Loose:	70000.00 lb
Tool Chased	0.00 ft
String Weight: Initial	53000.00 lb
Final	53000.00 lb

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Change Over Sub	1.00			4047.00		
Shut In Tool	5.00			4052.00		
Hydraulic tool	5.00			4057.00		
Jars	5.00			4062.00		
Safety Joint	3.00			4065.00		
Packer	5.00			4070.00	28.00	Bottom Of Top Packer
Packer	4.00			4074.00		
Stubb	1.00			4075.00		
Perforations	2.00			4077.00		
Change Over Sub	1.00			4078.00		
Drill Pipe	32.00			4110.00		
Change Over Sub	1.00			4111.00		
Perforations	25.00			4136.00		
Recorder	0.00	8672	Inside	4136.00		
Recorder	0.00	8374	Outside	4136.00		
Bullnose	5.00			4141.00	67.00	Bottom Packers & Anchor
Total Tool Length:	**95.00**					

TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Palomino Petroleum

4924 SE 84th St
Newton KS 67114

ATTN: Andrew Stenzel

17-14-30 Gove,KS

Swart Trucking Inc 1

Job Ticket: 64416 **DST#: 3**

Test Start: 2018.01.25 @ 18:24:15

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	0 deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	0 ppm
Viscosity:	63.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	8.72 in³	Gas Cushion Type:			
Resistivity:	0.00 ohm.m	Gas Cushion Pressure:	psig		
Salinity:	3500.00 ppm				
Filter Cake:	1.00 inches				

Recovery Information

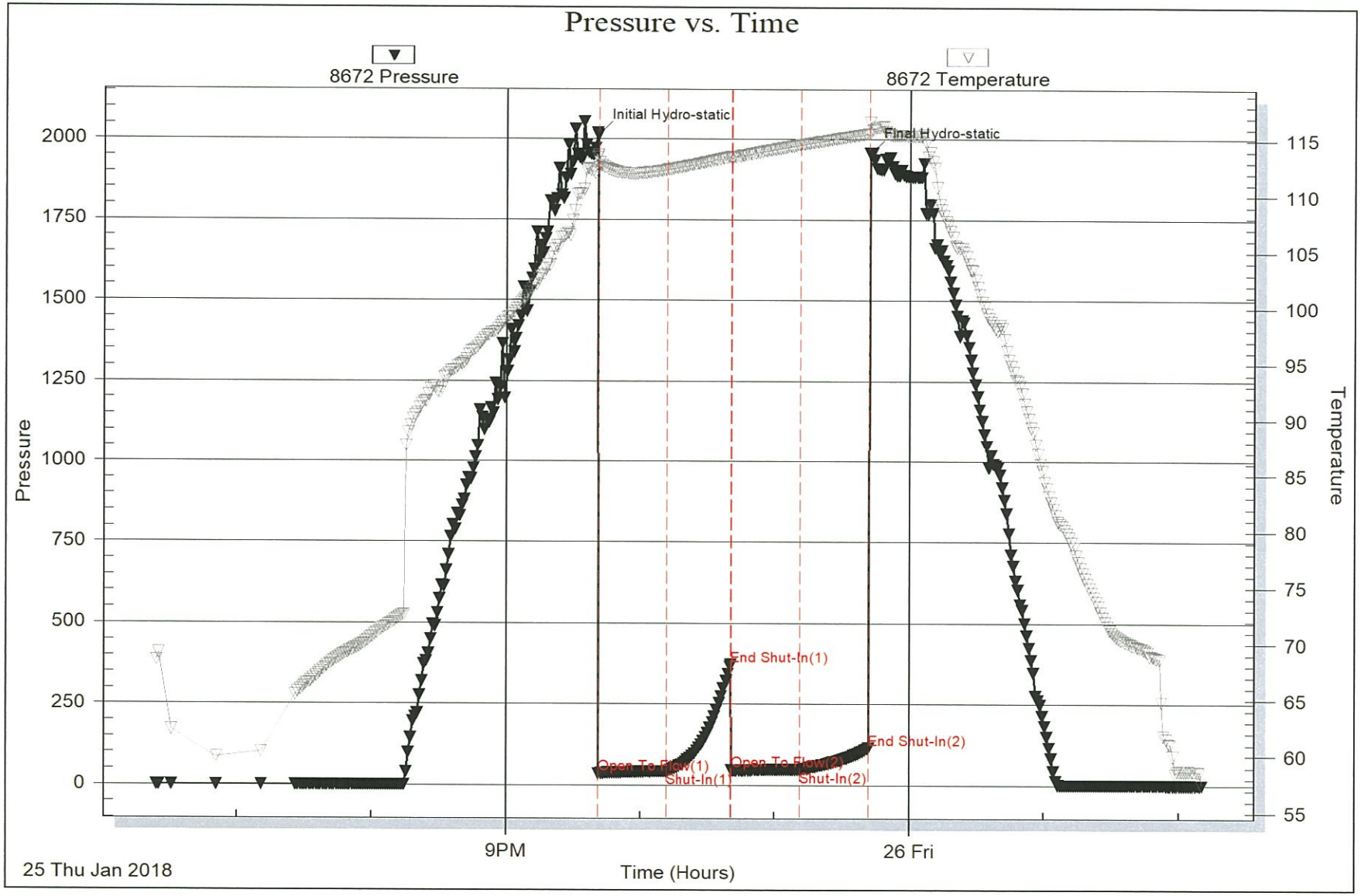
Recovery Table

Length ft	Description	Volume bbl
5.00	mud with oil spots	0.025

Total Length: 5.00 ft Total Volume: 0.025 bbl

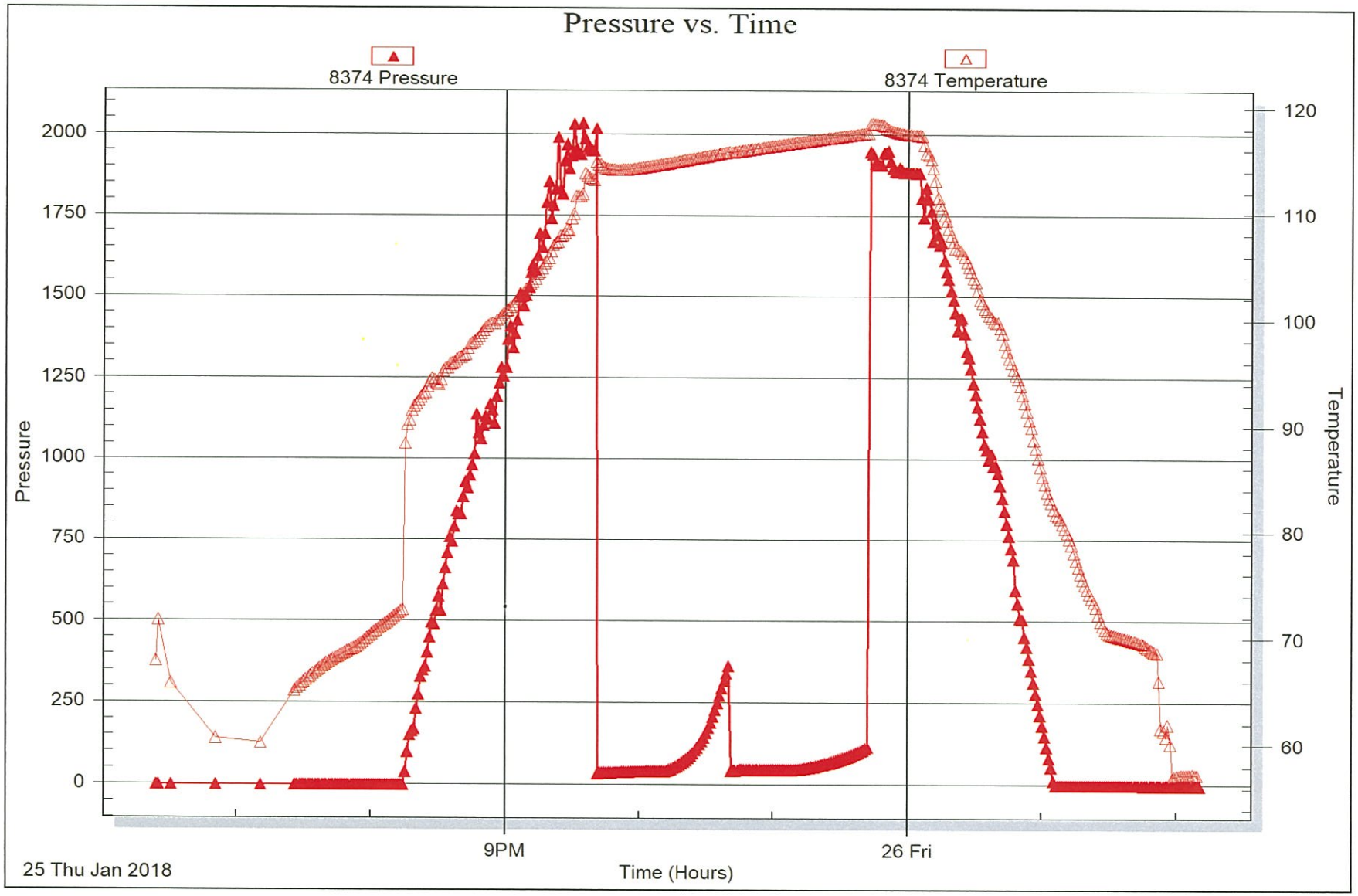
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

Serial #: 8672 **Inside** Palomino Petroleum Swart Trucking Inc 1 DST Test Number: 3



Trilobite Testing, Inc Ref. No: 64416 Printed: 2018.01.31 @ 10:58:13

Serial #: 8374 **Outside** Palomino Petroleum Sw art Trucking Inc 1 DST Test Number: 3



Trilobite Testing, Inc Ref. No: 64416 Printed: 2018.01.31 @ 10:58:13

TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Palomino Petroleum**

4924 SE. 84th St
Newton KS 67114

ATTN: Andrew Stenzel

Swart Trucking Inc 1

17-14-30 Gove,KS

Start Date: 2018.01.26 @ 17:33:00
End Date: 2018.01.27 @ 00:11:00
Job Ticket #: 64417 DST #: 4

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

Printed: 2018.01.31 @ 10:57:48

DRILL STEM TEST REPORT

TRILOBITE TESTING, INC.

Palomino Petroleum

4924 SE 84th St
Newton KS 67114

ATTN: Andrew Stenzel

17-14-30 Gove,KS

Swart Trucking Inc 1

Job Ticket: 64417 **DST#: 4**

Test Start: 2018.01.26 @ 17:33:00

GENERAL INFORMATION:

Formation: **LKC K-L**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 19:50:00
Time Test Ended: 00:11:00

Test Type: Conventional Bottom Hole (Reset)
Tester: Mike Roberts
Unit No: 81

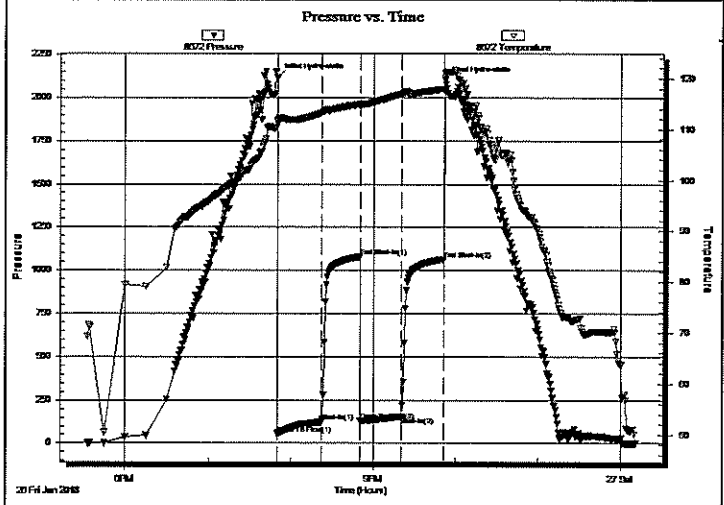
Interval: 4164.00 ft (KB) To 4243.00 ft (KB) (TVD)
Total Depth: 4243.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2829.00 ft (KB)
2824.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 8672 **Inside**
Press@RunDepth: 154.13 psig @ 4238.00 ft (KB)
Start Date: 2018.01.26 End Date: 2018.01.27
Start Time: 17:33:15 End Time: 00:11:00

Capacity: 8000.00 psig
Last Calib.: 2018.01.27
Time On Btm: 2018.01.26 @ 19:49:45
Time Off Btm: 2018.01.26 @ 21:52:30

TEST COMMENT: IF:Built to 8" blow
IS:No return blow
FF:Built to 7" blow
FS:No return blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2114.07	111.65	Initial Hydro-static
1	53.62	110.79	Open To Flow (1)
33	122.94	113.18	Shut-In(1)
61	1078.73	114.97	End Shut-In(1)
61	132.36	114.54	Open To Flow (2)
91	154.13	116.93	Shut-In(2)
122	1064.10	117.94	End Shut-In(2)
123	2102.13	121.02	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
119.00	mud 100%m (collars)	0.59
92.00	mud with oil spots 100%m	1.29

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

Palomino Petroleum

4924 SE. 84th St
Newton KS 67114

ATTN: Andrew Stenzel

17-14-30 Gove,KS

Swart Trucking Inc 1

Job Ticket: 64417 **DST#: 4**

Test Start: 2018.01.26 @ 17:33:00

GENERAL INFORMATION:

Formation: **LKC K-L**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 19:50:00
Time Test Ended: 00:11:00

Test Type: Conventional Bottom Hole (Reset)
Tester: Mike Roberts
Unit No: 81

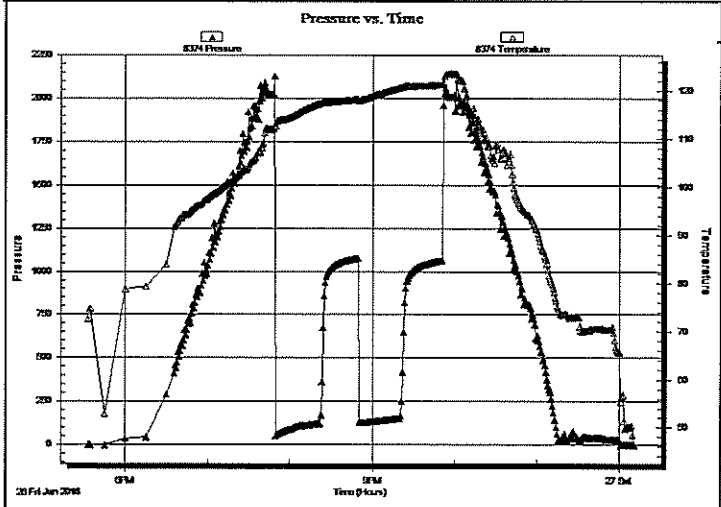
Interval: 4164.00 ft (KB) To 4243.00 ft (KB) (TVD)
Total Depth: 4243.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2829.00 ft (KB)
2824.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 8374 **Outside**
Press@RunDepth: psig @ 4238.00 ft (KB)
Start Date: 2018.01.26 End Date: 2018.01.27
Start Time: 17:33:15 End Time: 00:10:45

Capacity: 8000.00 psig
Last Calib.: 1899.12.30
Time On Btm:
Time Off Btm:

TEST COMMENT: IF:Built to 8" blow
IS:No return blow
FF:Built to 7" blow
FS:No return blow



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
119.00	mud 100%m (collars)	0.59
92.00	mud with oil spots 100%m	1.29

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Palomino Petroleum

4924 SE. 84th St
Newton KS 67114

ATTN: Andrew Stenzel

17-14-30 Gove,KS

Swart Trucking Inc 1

Job Ticket: 64417 DST#: 4

Test Start: 2018.01.26 @ 17:33:00

Tool Information

Drill Pipe:	Length:	4031.00 ft	Diameter:	3.80 inches	Volume:	56.54 bbl	
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	
Drill Collar:	Length:	119.00 ft	Diameter:	2.25 inches	Volume:	0.59 bbl	
					Total Volume:	57.13 bbl	

Drill Pipe Above KB:	14.00 ft
Depth to Top Packer:	4164.00 ft
Depth to Bottom Packer:	ft
Interval between Packers:	79.00 ft
Tool Length:	107.00 ft
Number of Packers:	2 Diameter: 6.75 inches

Tool Weight:	1500.00 lb
Weight set on Packer:	20000.00 lb
Weight to Pull Loose:	80000.00 lb
Tool Chased	0.00 ft
String Weight: Initial	54000.00 lb
Final	56000.00 lb

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Change Over Sub	1.00			4137.00		
Shut In Tool	5.00			4142.00		
Hydraulic tool	5.00			4147.00		
Jars	5.00			4152.00		
Safety Joint	3.00			4155.00		
Packer	5.00			4160.00	28.00	Bottom Of Top Packer
Packer	4.00			4164.00		
Stubb	1.00			4165.00		
Perforations	2.00			4167.00		
Change Over Sub	1.00			4168.00		
Drill Pipe	64.00			4232.00		
Change Over Sub	1.00			4233.00		
Perforations	5.00			4238.00		
Recorder	0.00	8672	Inside	4238.00		
Recorder	0.00	8374	Outside	4238.00		
Bullnose	5.00			4243.00	79.00	Bottom Packers & Anchor
Total Tool Length:	**107.00**					

TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Palomino Petroleum

4924 SE 84th St
Newton KS 67114

ATTN: Andrew Stenzel

17-14-30 Gove,KS

Swart Trucking Inc 1

Job Ticket: 64417 **DST#: 4**

Test Start: 2018.01.26 @ 17:33:00

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	0 deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	0 ppm
Viscosity:	57.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	9.52 in³	Gas Cushion Type:			
Resistivity:	0.00 ohm.m	Gas Cushion Pressure:	psig		
Salinity:	3600.00 ppm				
Filter Cake:	1.00 inches				

Recovery Information

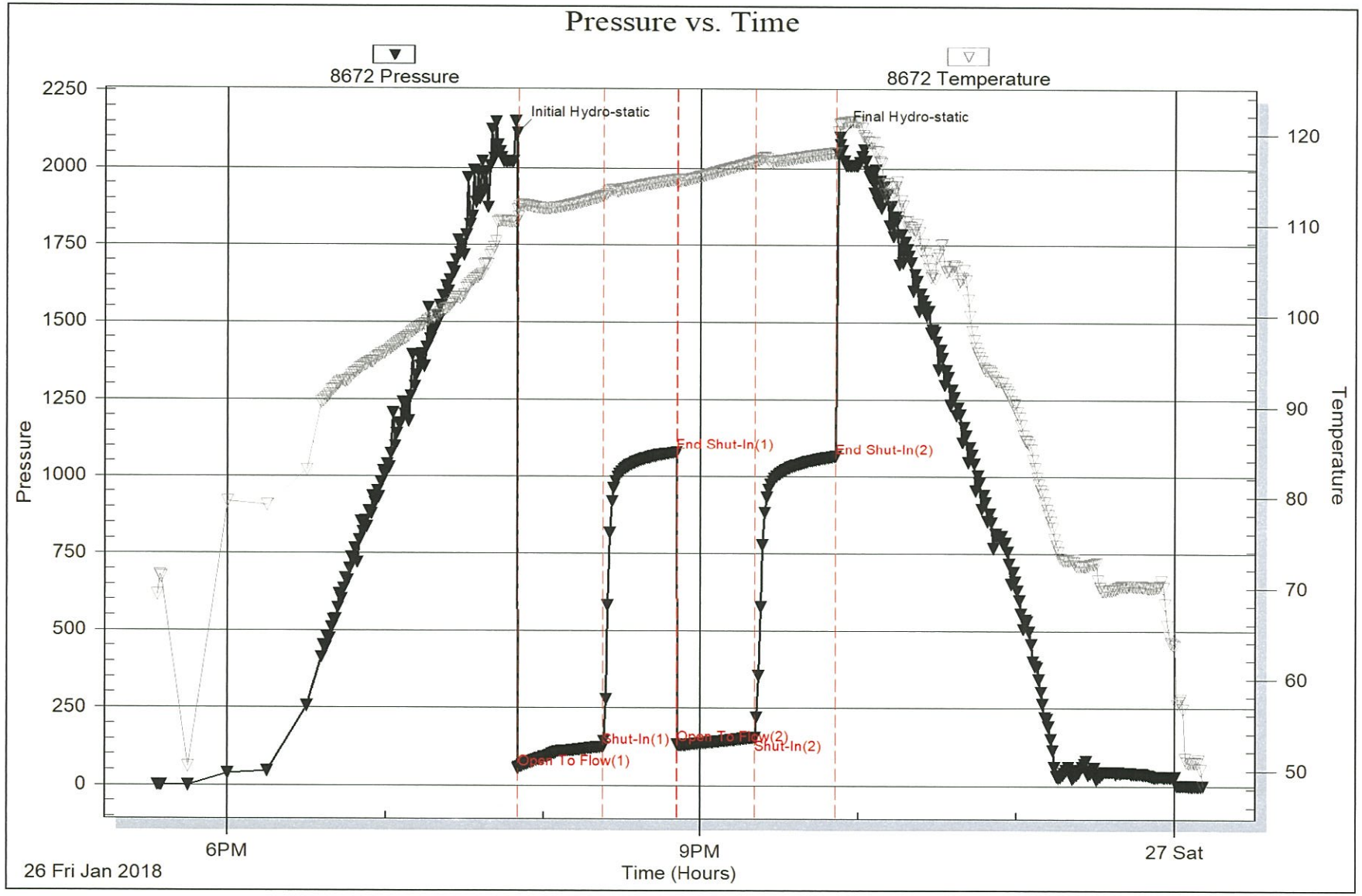
Recovery Table

Length ft	Description	Volume bbl
119.00	mud 100%m (collars)	0.585
92.00	mud with oil spots 100%m	1.291

Total Length: 211.00 ft Total Volume: 1.876 bbl

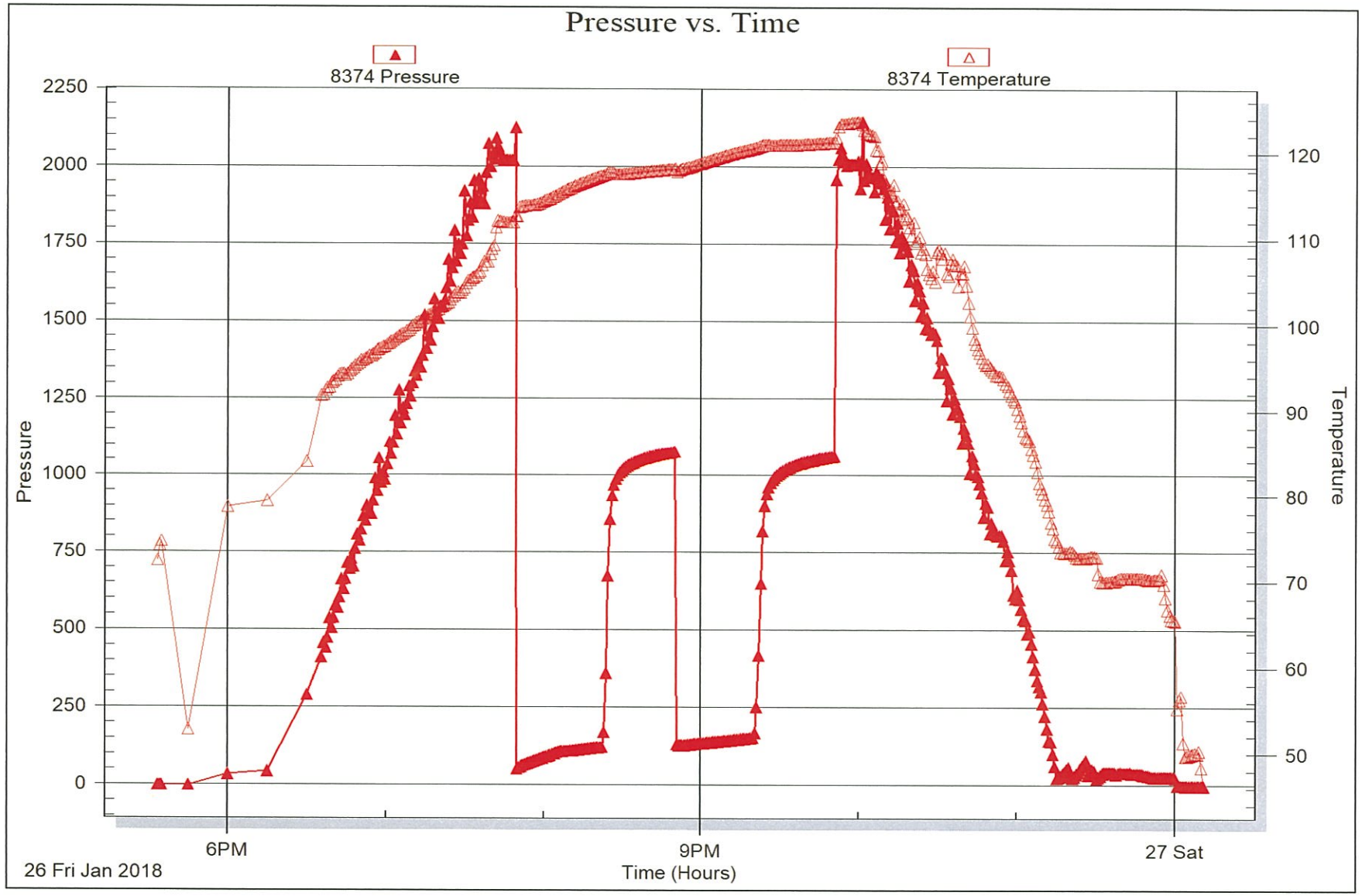
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

Serial #: 8672 **Inside** Palomino Petroleum Swart Trucking Inc 1 DST Test Number: 4

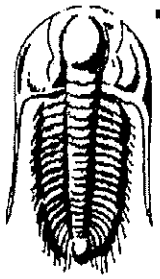


Trilobite Testing, Inc Ref. No: 64417 Printed: 2018.01.31 @ 10:57:49

Serial #: 8374 **Outside** Palomino Petroleum Swart Trucking Inc 1 DST Test Number: 4



Trilobite Testing, Inc Ref. No: 64417 Printed: 2018.01.31 @ 10:57:49



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Palomino Petroleum**

4924 SE. 84th St
Newton KS 67114

ATTN: Andrew Stenzel

Swart Trucking Inc 1

17-14-30 Gove,KS

Start Date: 2018.01.27 @ 22:51:15
End Date: 2018.01.28 @ 05:15:30
Job Ticket #: 64418 DST #: 5

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

Printed: 2018.01.31 @ 10:57:00

DRILL STEM TEST REPORT

TRILOBITE TESTING, INC.

Palomino Petroleum

4924 SE 84th St
Newton KS 67114

ATTN: Andrew Stenzel

17-14-30 Gove,KS

Swart Trucking Inc 1

Job Ticket: 64418 **DST#: 5**

Test Start: 2018.01.27 @ 22:51:15

GENERAL INFORMATION:

Formation: **Pawnee - Myrick Stat**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 01:10:30
Time Test Ended: 05:15:30

Test Type: Conventional Bottom Hole (Reset)
Tester: Mike Roberts
Unit No: 81

Interval: 4358.00 ft (KB) To 4426.00 ft (KB) (TVD)
Total Depth: 4426.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

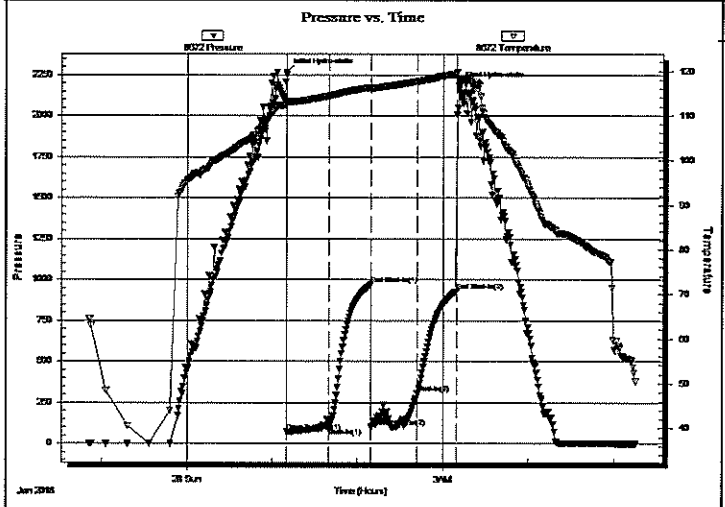
Reference Elevations: 2829.00 ft (KB)
2824.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 8672 **Inside**

Press@RunDepth: 307.23 psig @ 4421.00 ft (KB)
Start Date: 2018.01.27 End Date: 2018.01.28
Start Time: 22:51:15 End Time: 05:15:30

Capacity: 8000.00 psig
Last Calib.: 2018.01.28
Time On Btm: 2018.01.28 @ 01:10:15
Time Off Btm: 2018.01.28 @ 03:11:15

TEST COMMENT: IF:Built to 1/4" blow
IS:No return blow
FF:No blow
FS:No return blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2267.83	113.26	Initial Hydro-static
1	70.53	112.73	Open To Flow (1)
30	94.02	114.34	Shut-In(1)
59	971.91	116.26	End Shut-In(1)
60	101.16	115.75	Open To Flow (2)
92	307.23	117.58	Shut-In(2)
120	928.99	119.18	End Shut-In(2)
121	2183.83	118.10	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
119.00	mud with oil spots	0.59

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

TRILOBITE TESTING, INC.

Palomino Petroleum

4924 SE 84th St
Newton KS 67114

ATTN: Andrew Stenzel

17-14-30 Gove,KS

Swart Trucking Inc 1

Job Ticket: 64418 **DST#: 5**

Test Start: 2018.01.27 @ 22:51:15

GENERAL INFORMATION:

Formation: **Pawnee - Myrick Stat**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 01:10:30
Time Test Ended: 05:15:30

Test Type: Conventional Bottom Hole (Reset)
Tester: Mike Roberts
Unit No: 81

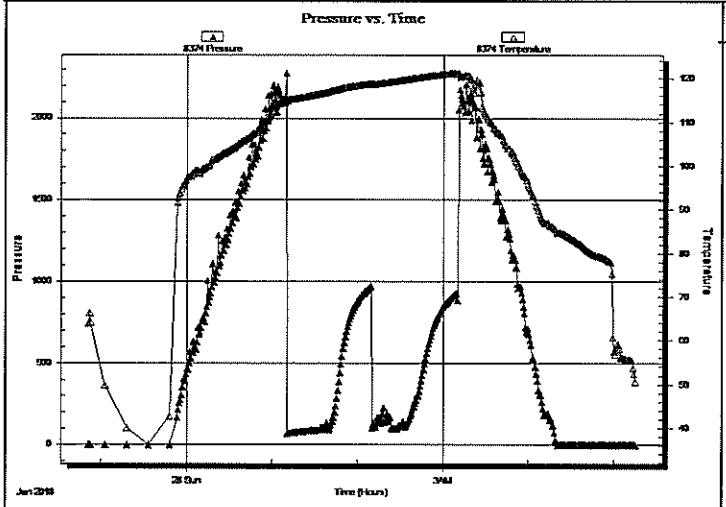
Interval: 4358.00 ft (KB) To 4426.00 ft (KB) (TVD)
Total Depth: 4426.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2829.00 ft (KB)
2824.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 8374 **Outside**
Press@RunDepth: psig @ 4421.00 ft (KB)
Start Date: 2018.01.27 End Date: 2018.01.28
Start Time: 22:51:15 End Time: 05:15:45

Capacity: 8000.00 psig
Last Calib.: 2018.01.28
Time On Btm:
Time Off Btm:

TEST COMMENT: IF:Built to 1/4" blow
IS:No return blow
FF:No blow
FS:No return blow



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
119.00	mud with oil spots	0.59

* Recovery from multiple tests

Gas Rates

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

TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Palomino Petroleum

4924 SE. 84th St
Newton KS 67114

ATTN: Andrew Stenzel

17-14-30 Gove,KS

Swart Trucking Inc 1

Job Ticket: 64418 **DST#: 5**

Test Start: 2018.01.27 @ 22:51:15

Tool Information

Drill Pipe:	Length:	4225.00 ft	Diameter:	3.80 inches	Volume:	59.27 bbl	
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	
Drill Collar:	Length:	119.00 ft	Diameter:	2.25 inches	Volume:	0.59 bbl	
					Total Volume:	59.86 bbl	

Drill Pipe Above KB:	14.00 ft
Depth to Top Packer:	4358.00 ft
Depth to Bottom Packer:	ft
Interval between Packers:	68.00 ft
Tool Length:	96.00 ft
Number of Packers:	2 Diameter: 6.75 inches

Tool Weight:		1500.00 lb
Weight set on Packer:		20000.00 lb
Weight to Pull Loose:		80000.00 lb
Tool Chased		0.00 ft
String Weight:	Initial	54000.00 lb
	Final	54000.00 lb

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Change Over Sub	1.00			4331.00		
Shut In Tool	5.00			4336.00		
Hydraulic tool	5.00			4341.00		
Jars	5.00			4346.00		
Safety Joint	3.00			4349.00		
Packer	5.00			4354.00	28.00	Bottom Of Top Packer
Packer	4.00			4358.00		
Stubb	1.00			4359.00		
Perforations	3.00			4362.00		
Change Over Sub	1.00			4363.00		
Drill Pipe	32.00			4395.00		
Change Over Sub	1.00			4396.00		
Perforations	25.00			4421.00		
Recorder	0.00	8672	Inside	4421.00		
Recorder	0.00	8374	Outside	4421.00		
Bullnose	5.00			4426.00	68.00	Bottom Packers & Anchor
Total Tool Length:	**96.00**					

TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Palomino Petroleum

4924 SE 84th St
Newton KS 67114

ATTN: Andrew Stenzel

17-14-30 Gove,KS

Swart Trucking Inc 1

Job Ticket: 64418 **DST#: 5**

Test Start: 2018.01.27 @ 22:51:15

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	0 deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	0 ppm
Viscosity:	62.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	7.16 in³	Gas Cushion Type:			
Resistivity:	0.00 ohm.m	Gas Cushion Pressure:	psig		
Salinity:	3000.00 ppm				
Filter Cake:	1.00 inches				

Recovery Information

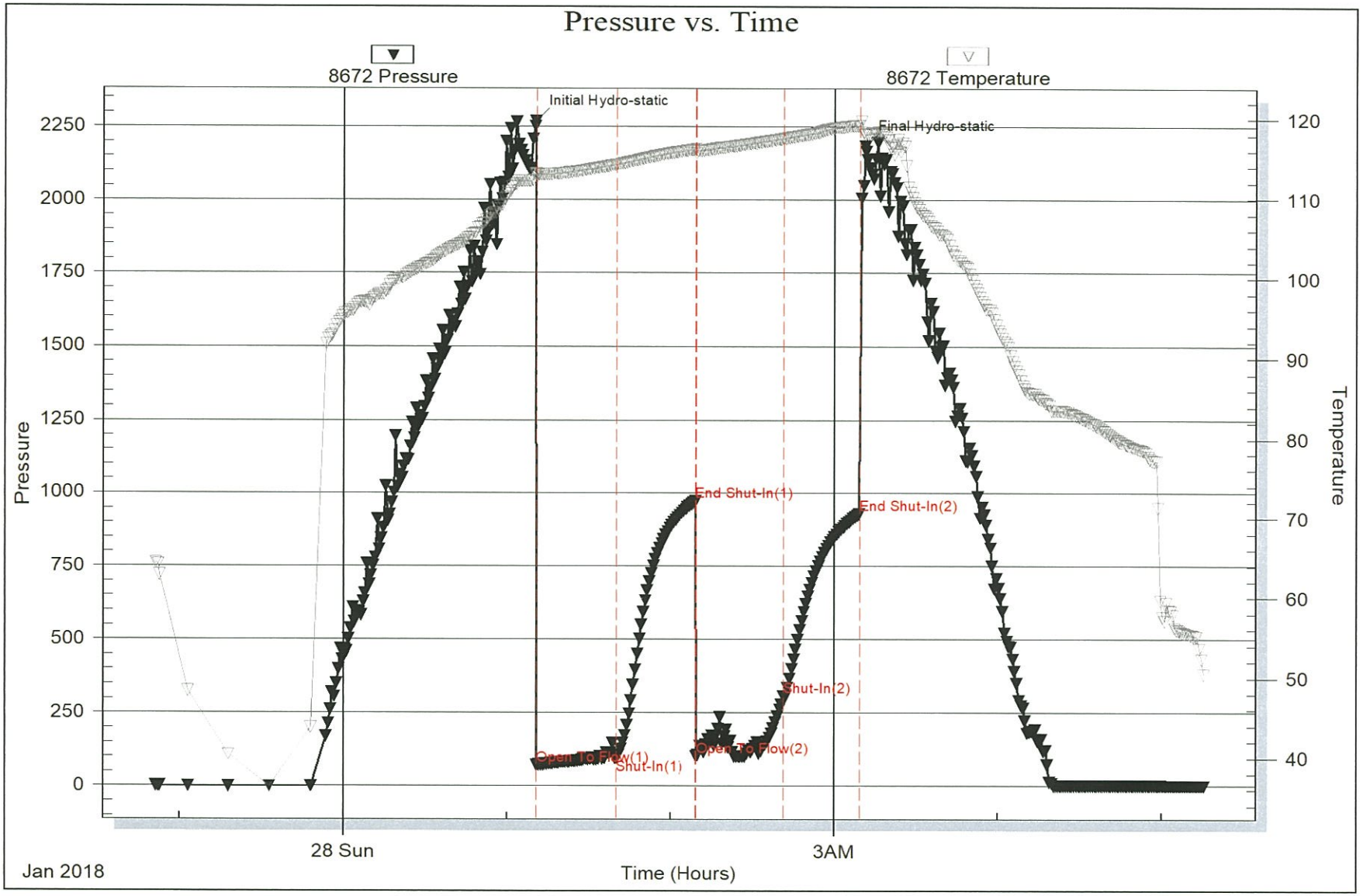
Recovery Table

Length ft	Description	Volume bbl
119.00	mud with oil spots	0.585

Total Length: 119.00 ft Total Volume: 0.585 bbl

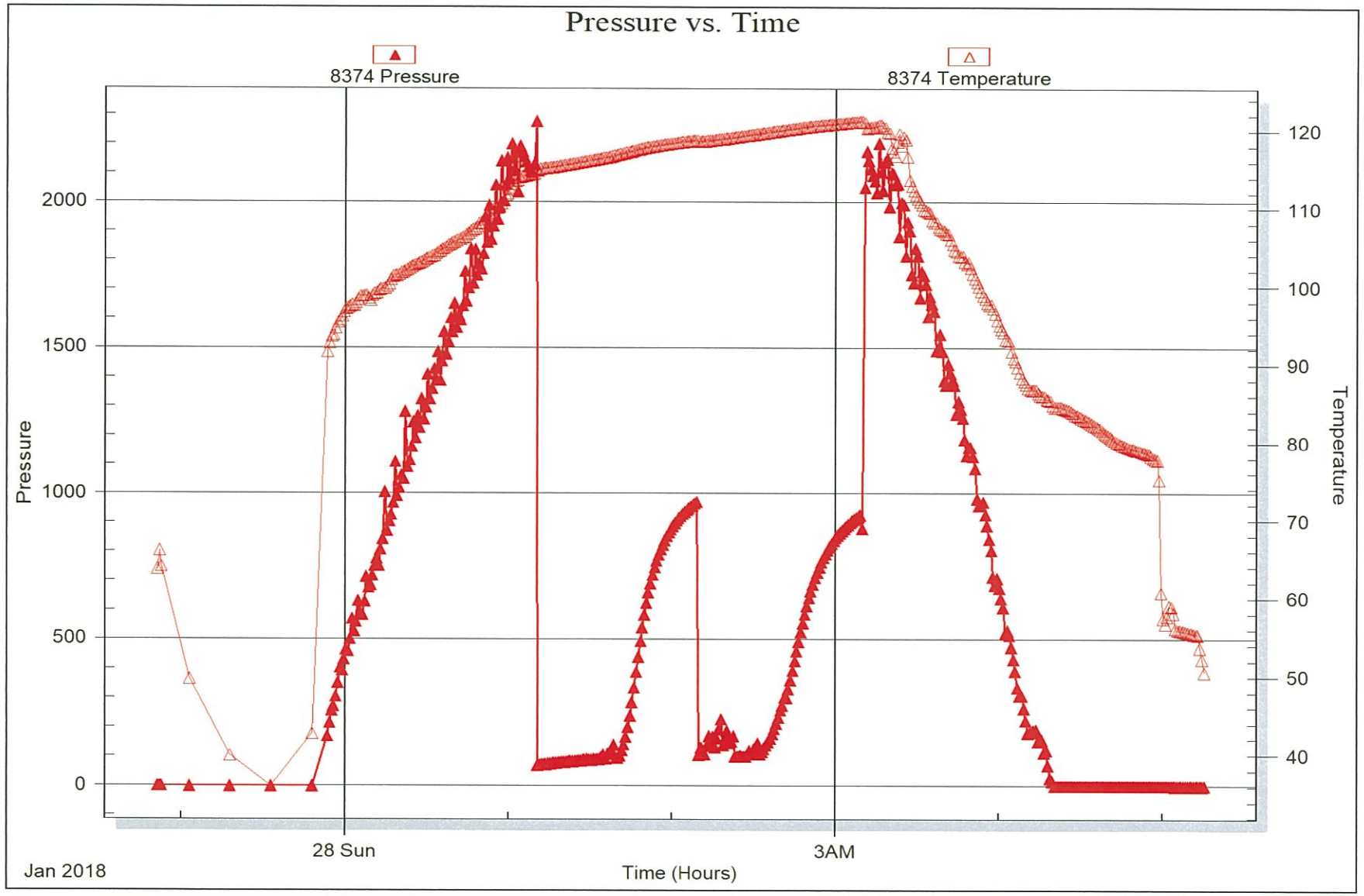
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

Serial #: 8672 **Inside** Palomino Petroleum Swart Trucking Inc 1 DST Test Number: 5

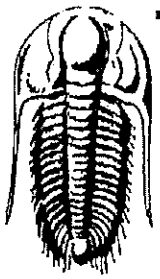


Trilobite Testing, Inc Ref. No: 64418 Printed: 2018.01.31 @ 10:57:01

Serial #: 8374 **Outside** Palomino Petroleum Swart Trucking Inc 1 DST Test Number: 5



Trilobite Testing, Inc Ref. No: 64418 Printed: 2018.01.31 @ 10:57:01



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Palomino Petroleum**

4924 SE. 84th St
Newton KS 67114

ATTN: Andrew Stenzel

Swart Trucking Inc 1

17-14-30 Gove,KS

Start Date: 2018.01.28 @ 19:37:15
End Date: 2018.01.29 @ 02:47:30
Job Ticket #: 64419 DST #: 6

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

Printed: 2018.01.31 @ 10:56:32

Palomino Petroleum 17-14-30 Gove,KS Swart Trucking Inc 1 DST # 6 Johnson 2018.01.28

DRILL STEM TEST REPORT

TRILOBITE TESTING, INC.

Palomino Petroleum

4924 SE 84th St
Newton KS 67114

ATTN: Andrew Stenzel

17-14-30 Gove,KS

Swart Trucking Inc 1

Job Ticket: 64419 **DST#: 6**

Test Start: 2018.01.28 @ 19:37:15

GENERAL INFORMATION:

Formation: **Johnson**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 22:17:45
Time Test Ended: 02:47:30

Test Type: Conventional Bottom Hole (Reset)
Tester: Mike Roberts
Unit No: 81

Interval: 4416.00 ft (KB) To 4516.00 ft (KB) (TVD)
Total Depth: 4516.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

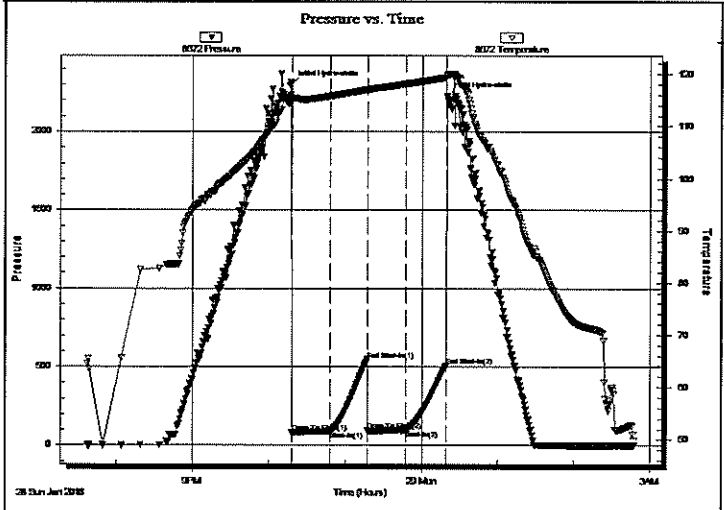
Reference Elevations: 2829.00 ft (KB)
2824.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 8672 **Inside**

Press@RunDepth: 94.94 psig @ 4511.00 ft (KB)
Start Date: 2018.01.28 End Date: 2018.01.29
Start Time: 19:37:15 End Time: 02:47:30

Capacity: 8000.00 psig
Last Calib.: 2018.01.29
Time On Btm: 2018.01.28 @ 22:17:30
Time Off Btm: 2018.01.29 @ 00:19:15

TEST COMMENT: IF:Built to 1/2" blow
IS:No return blow
FF:No blow
FS:No return blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2301.50	116.02	Initial Hydro-static
1	80.09	114.77	Open To Flow (1)
30	88.02	115.77	Shut-In(1)
59	545.94	117.04	End Shut-In(1)
60	92.26	116.83	Open To Flow (2)
90	94.94	118.13	Shut-In(2)
121	503.79	119.34	End Shut-In(2)
122	2224.56	119.87	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
70.00	mud with oil spots	0.34

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

TRILOBITE TESTING, INC.

Palomino Petroleum

4924 SE. 84th St
Newton KS 67114

ATTN: Andrew Stenzel

17-14-30 Gove,KS

Swart Trucking Inc 1

Job Ticket: 64419 **DST#: 6**

Test Start: 2018.01.28 @ 19:37:15

GENERAL INFORMATION:

Formation: **Johnson**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 22:17:45
Time Test Ended: 02:47:30

Test Type: Conventional Bottom Hole (Reset)
Tester: Mike Roberts
Unit No: 81

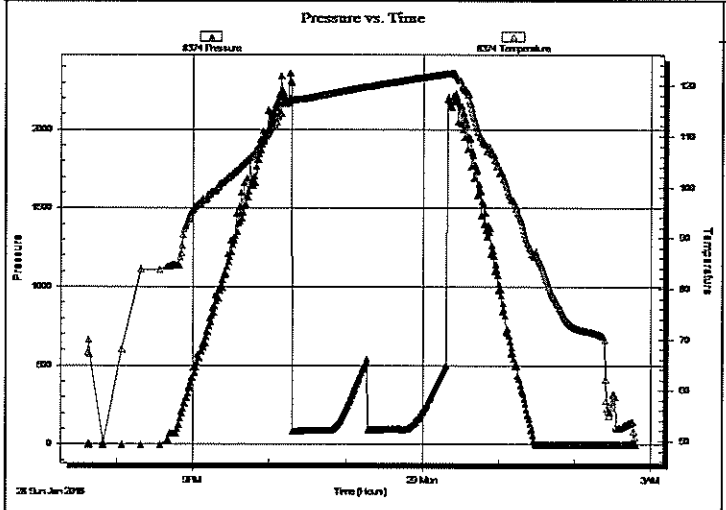
Interval: 4416.00 ft (KB) To 4516.00 ft (KB) (TVD)
Total Depth: 4516.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2829.00 ft (KB)
2824.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 8374 **Outside**
Press@RunDepth: psig @ 4511.00 ft (KB)
Start Date: 2018.01.28 End Date: 2018.01.29
Start Time: 19:37:15 End Time: 02:47:45

Capacity: 8000.00 psig
Last Calib.: 2018.01.29
Time On Btm:
Time Off Btm:

TEST COMMENT: IF:Built to 1/2" blow
IS:No return blow
FF:No blow
FS:No return blow



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
70.00	mud with oil spots	0.34

* Recovery from multiple tests

Gas Rates

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

TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Palomino Petroleum

4924 SE. 84th St
Newton KS 67114

ATTN: Andrew Stenzel

17-14-30 Gove,KS

Swart Trucking Inc 1

Job Ticket: 64419 **DST#: 6**

Test Start: 2018.01.28 @ 19:37:15

Tool Information

Drill Pipe:	Length:	4290.00 ft	Diameter:	3.80 inches	Volume:	60.18 bbl	
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	
Drill Collar:	Length:	119.00 ft	Diameter:	2.25 inches	Volume:	0.59 bbl	
					Total Volume:	60.77 bbl	

Drill Pipe Above KB:	24.00 ft
Depth to Top Packer:	4416.00 ft
Depth to Bottom Packer:	ft
Interval between Packers:	100.00 ft
Tool Length:	131.00 ft
Number of Packers:	2 Diameter: 6.75 inches

Tool Weight:	1500.00 lb
Weight set on Packer:	20000.00 lb
Weight to Pull Loose:	80000.00 lb
Tool Chased	0.00 ft
String Weight: Initial	60000.00 lb
Final	60000.00 lb

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Change Over Sub	1.00			4386.00		
Shut In Tool	5.00			4391.00		
Hydraulic tool	5.00			4396.00		
Jars	5.00			4401.00		
EM Tool	3.00			4404.00		
Safety Joint	3.00			4407.00		
Packer	5.00			4412.00	31.00	Bottom Of Top Packer
Packer	4.00			4416.00		
Stubb	1.00			4417.00		
Perforations	3.00			4420.00		
Change Over Sub	1.00			4421.00		
Drill Pipe	64.00			4485.00		
Change Over Sub	1.00			4486.00		
Perforations	25.00			4511.00		
Recorder	0.00	8672	Inside	4511.00		
Recorder	0.00	8374	Outside	4511.00		
Bullnose	5.00			4516.00	100.00	Bottom Packers & Anchor
Total Tool Length:	**131.00**					

DRILL STEM TEST REPORT

FLUID SUMMARY

Palomino Petroleum

4924 SE 84th St
Newton KS 67114

ATTN: Andrew Stenzel

17-14-30 Gove,KS

Swart Trucking Inc 1

Job Ticket: 64419 **DST#: 6**

Test Start: 2018.01.28 @ 19:37:15

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	0 deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	0 ppm
Viscosity:	64.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	9.55 in³	Gas Cushion Type:			
Resistivity:	0.00 ohm.m	Gas Cushion Pressure:	psig		
Salinity:	3300.00 ppm				
Filter Cake:	1.00 inches				

Recovery Information

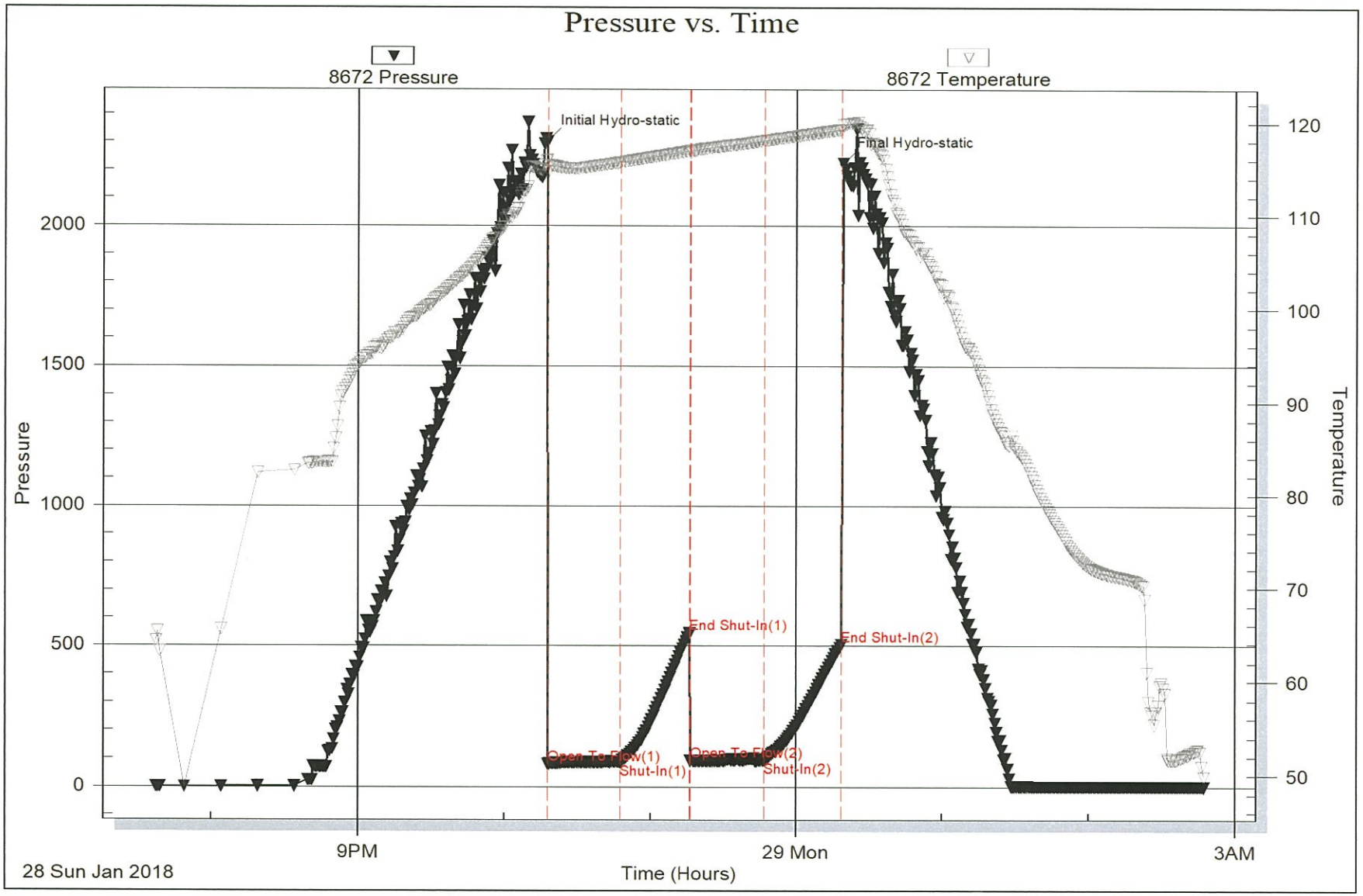
Recovery Table

Length ft	Description	Volume bbl
70.00	mud with oil spots	0.344

Total Length: 70.00 ft Total Volume: 0.344 bbl

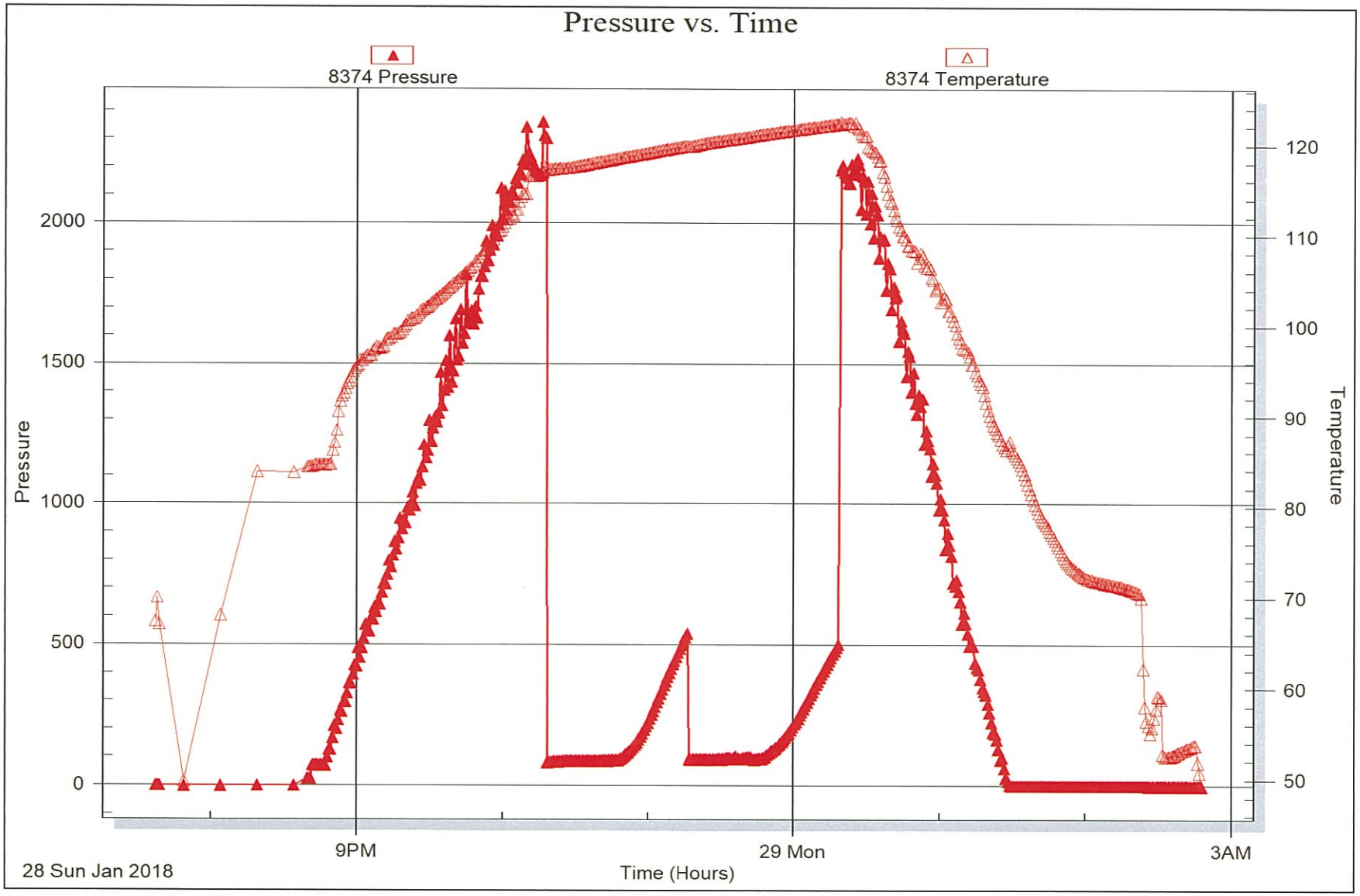
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

Serial #: 8672 **Inside** Palomino Petroleum Sw art Trucking Inc 1 DST Test Number: 6

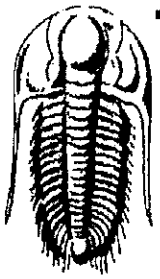


Trilobite Testing, Inc Ref. No: 64419 Printed: 2018.01.31 @ 10:56:33

Serial #: 8374 **Outside** Palomino Petroleum Swart Trucking Inc 1 DST Test Number: 6



Trilobite Testing, Inc Ref. No: 64419 Printed: 2018.01.31 @ 10:56:33



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Palomino Petroleum**

4924 SE. 84th St
Newton KS 67114

ATTN: Andrew Stenzel

Swart Trucking Inc 1

17-14-30 Gove,KS

Start Date: 2018.01.30 @ 09:18:15
End Date: 2018.01.30 @ 15:42:15
Job Ticket #: 64420 DST #: 7

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

Printed: 2018.01.31 @ 10:55:49

Palomino Petroleum 17-14-30 Gove,KS Swart Trucking Inc 1 DST #7 LKC C 2018.01.30

DRILL STEM TEST REPORT

TRILOBITE TESTING, INC.

Palomino Petroleum

4924 SE 84th St
Newton KS 67114

ATTN: Andrew Stenzel

17-14-30 Gove,KS

Swart Trucking Inc 1

Job Ticket: 64420 **DST#: 7**

Test Start: 2018.01.30 @ 09:18:15

GENERAL INFORMATION:

Formation: **LKC C**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 11:28:30
Time Test Ended: 15:42:15

Test Type: Conventional Bottom Hole (Reset)
Tester: Mike Roberts
Unit No: 81

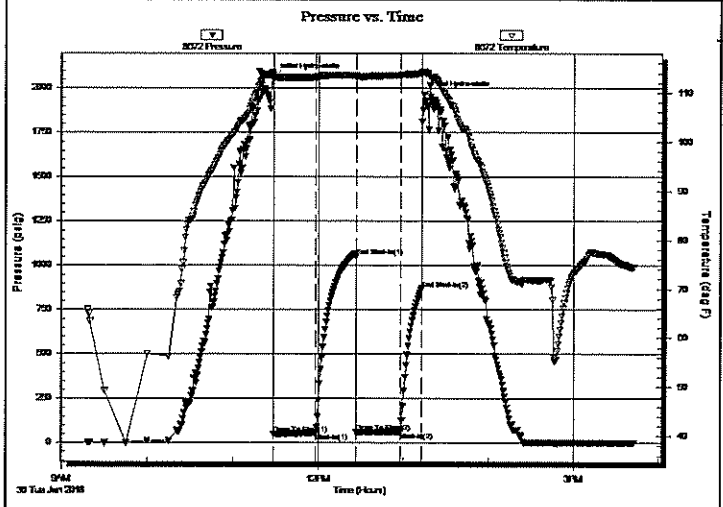
Interval: 3947.00 ft (KB) To 3984.00 ft (KB) (TVD)
Total Depth: 4720.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2829.00 ft (KB)
2824.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 8672 **Inside**
Press@RunDepth: 63.14 psig @ 3950.00 ft (KB)
Start Date: 2018.01.30 End Date: 2018.01.30
Start Time: 09:18:15 End Time: 15:42:15

Capacity: 8000.00 psig
Last Calib.: 2018.01.30
Time On Btm: 2018.01.30 @ 11:28:15
Time Off Btm: 2018.01.30 @ 13:14:30

TEST COMMENT: IF:Built to 3/4" blow
IS:No return blow
FF:No blow
FS:No return blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2062.89	113.68	Initial Hydro-static
1	50.03	112.91	Open To Flow (1)
30	54.45	113.20	Shut-In(1)
59	1052.03	113.57	End Shut-In(1)
59	59.43	113.20	Open To Flow (2)
90	63.14	113.60	Shut-In(2)
105	868.56	113.89	End Shut-In(2)
107	1965.00	114.21	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
70.00	mud 100% m	0.34

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

TRILOBITE TESTING, INC.

Palomino Petroleum

4924 SE. 84th St
Newton KS 67114

ATTN: Andrew Stenzel

17-14-30 Gove,KS

Swart Trucking Inc 1

Job Ticket: 64420 **DST#: 7**

Test Start: 2018.01.30 @ 09:18:15

GENERAL INFORMATION:

Formation: LKC C
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 11:28:30
Time Test Ended: 15:42:15

Test Type: Conventional Bottom Hole (Reset)
Tester: Mike Roberts
Unit No: 81

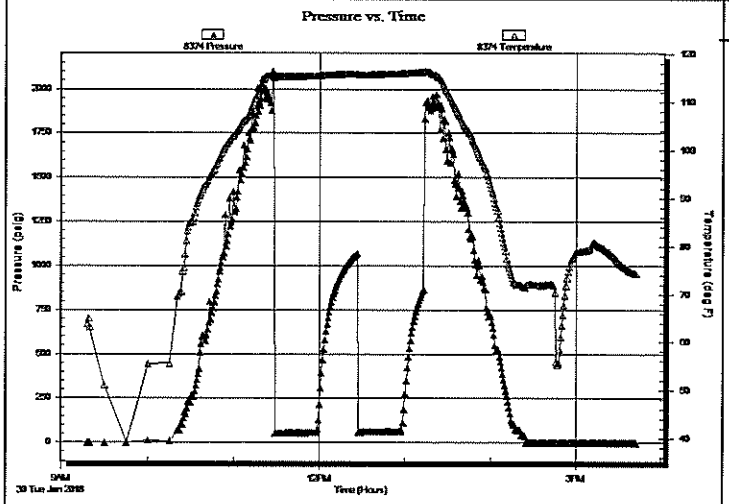
Interval: 3947.00 ft (KB) To 3984.00 ft (KB) (TVD)
Total Depth: 4720.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2829.00 ft (KB)
2824.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 8374 **Outside**
Press@RunDepth: psig @ 3950.00 ft (KB)
Start Date: 2018.01.30 End Date: 2018.01.30
Start Time: 09:18:15 End Time: 15:42:30

Capacity: 8000.00 psig
Last Calib.: 2018.01.30
Time On Btm:
Time Off Btm:

TEST COMMENT: IF:Built to 3/4" blow
IS:No return blow
FF:No blow
FS:No return blow



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
70.00	mud 100% m	0.34

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

TRILOBITE TESTING, INC.

Palomino Petroleum

4924 SE 84th St
Newton KS 67114

ATTN: Andrew Stenzel

17-14-30 Gove,KS

Swart Trucking Inc 1

Job Ticket: 64420 **DST#: 7**

Test Start: 2018.01.30 @ 09:18:15

GENERAL INFORMATION:

Formation: **LKC C**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 11:28:30
Time Test Ended: 15:42:15

Test Type: Conventional Bottom Hole (Reset)
Tester: Mike Roberts
Unit No: 81

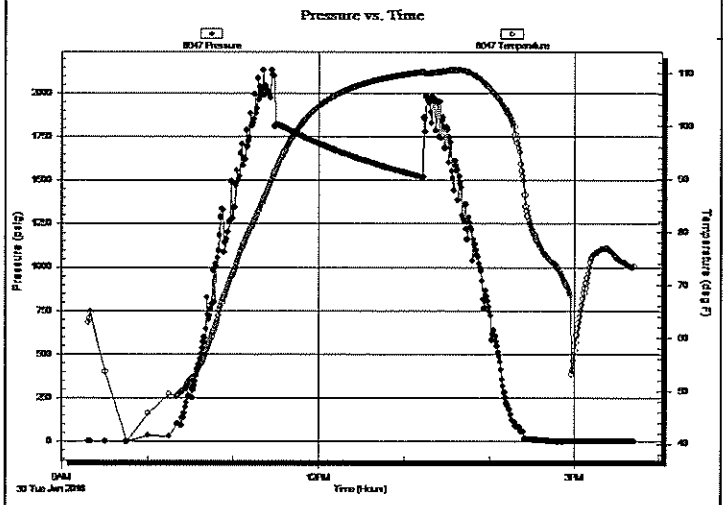
Interval: 3947.00 ft (KB) To 3984.00 ft (KB) (TVD)
Total Depth: 4720.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2829.00 ft (KB)
2824.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 8647 **Below (Straddle)**
Press@RunDepth: psig @ 4715.00 ft (KB)
Start Date: 2018.01.30 End Date: 2018.01.30
Start Time: 09:18:15 End Time: 15:42:45

Capacity: 8000.00 psig
Last Calib.: 2018.01.30
Time On Btm:
Time Off Btm:

TEST COMMENT: IF:Built to 3/4" blow
IS:No return blow
FF:No blow
FS:No return blow



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
70.00	mud 100% m	0.34

* Recovery from multiple tests

Gas Rates

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

TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Palomino Petroleum

4924 SE 84th St
Newton KS 67114

ATTN: Andrew Stenzel

17-14-30 Gove,KS

Swart Trucking Inc 1

Job Ticket: 64420 **DST#: 7**

Test Start: 2018.01.30 @ 09:18:15

Tool Information

Drill Pipe:	Length:	3820.00 ft	Diameter:	3.80 inches	Volume:	53.58 bbl	
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	
Drill Collar:	Length:	119.00 ft	Diameter:	2.25 inches	Volume:	0.59 bbl	
					Total Volume:	54.17 bbl	

Drill Pipe Above KB:	20.00 ft
Depth to Top Packer:	3947.00 ft
Depth to Bottom Packer:	ft
Interval between Packers:	774.00 ft
Tool Length:	802.00 ft
Number of Packers:	2 Diameter: 6.75 inches

Tool Weight:	1500.00 lb
Weight set on Packer:	25000.00 lb
Weight to Pull Loose:	80000.00 lb
Tool Chased	0.00 ft
String Weight: Initial	66000.00 lb
Final	67000.00 lb

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Change Over Sub	1.00			3920.00		
Shut In Tool	5.00			3925.00		
Hydraulic tool	5.00			3930.00		
Jars	5.00			3935.00		
Safety Joint	3.00			3938.00		
Packer	5.00			3943.00	28.00	Bottom Of Top Packer
Packer	4.00			3947.00		
Stubb	1.00			3948.00		
Perforations	2.00			3950.00		
Recorder	0.00	8672	Inside	3950.00		
Recorder	0.00	8374	Outside	3950.00		
Perforations	30.00			3980.00		
Blank Off Sub	1.00			3981.00		
Packer - Shale	3.00			3984.00		
Stubb	1.00			3985.00		
Change Over Sub	1.00			3986.00		
Drill Pipe	729.00			4715.00		
Recorder	0.00	8647	Below	4715.00		
Change Over Sub	1.00			4716.00		
Bullnose	5.00			4721.00	774.00	Bottom Packers & Anchor
Total Tool Length:	**802.00**					

TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Palomino Petroleum

4924 SE. 84th St
Newton KS 67114

ATTN: Andrew Stenzel

17-14-30 Gove,KS

Swart Trucking Inc 1

Job Ticket: 64420 **DST#: 7**

Test Start: 2018.01.30 @ 09:18:15

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	0 deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	0 ppm
Viscosity:	62.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	10.37 in³	Gas Cushion Type:			
Resistivity:	0.00 ohm.m	Gas Cushion Pressure:	psig		
Salinity:	3000.00 ppm				
Filter Cake:	1.00 inches				

Recovery Information

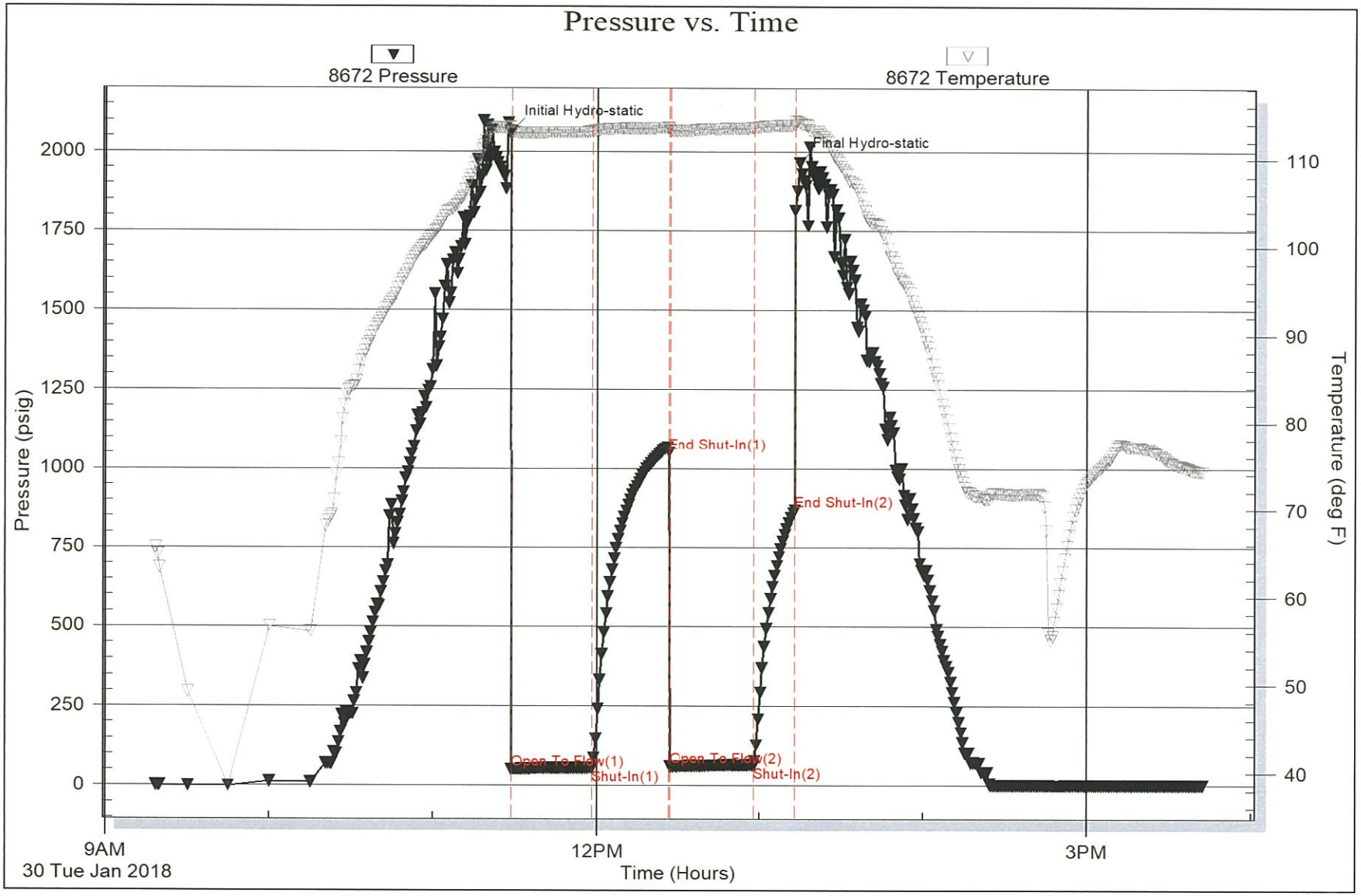
Recovery Table

Length ft	Description	Volume bbl
70.00	mud 100% m	0.344

Total Length: 70.00 ft Total Volume: 0.344 bbl

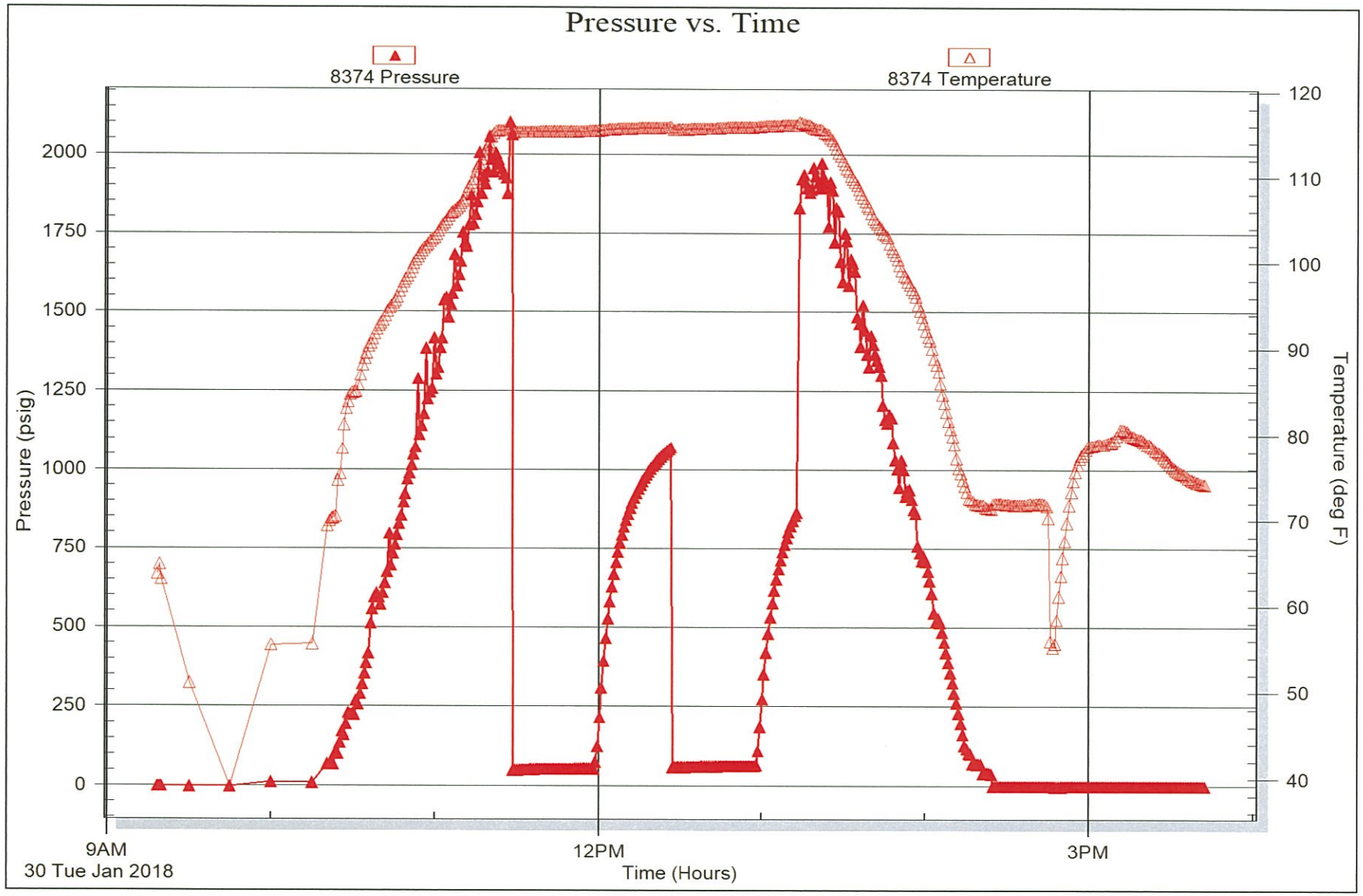
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

Serial #: 8672 **Inside** Palomino Petroleum Swart Trucking Inc 1 DST Test Number: 7



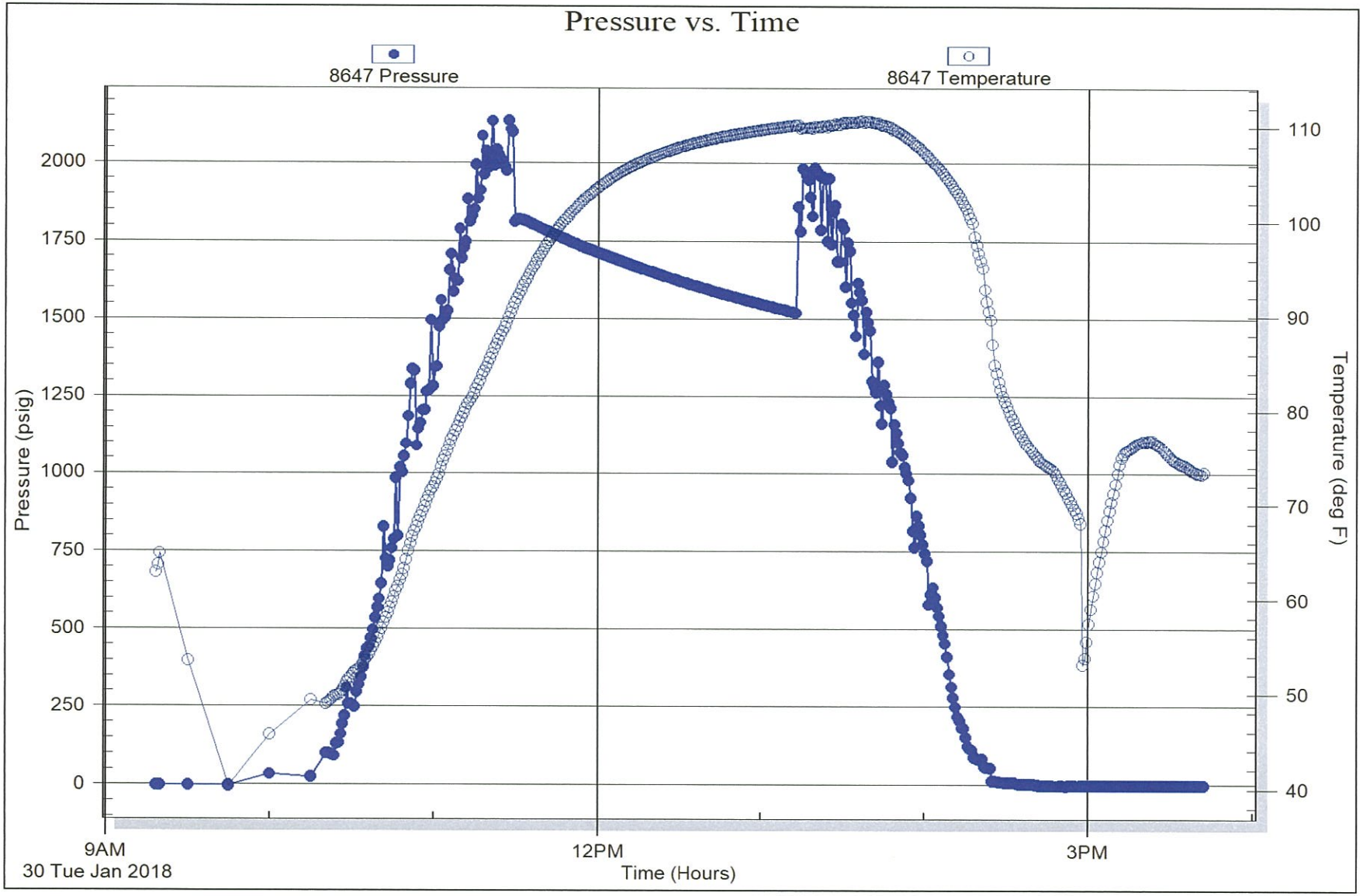
Trilobite Testing, Inc Ref. No: 64420 Printed: 2018.01.31 @ 10:55:51

Serial #: 8374 **Outside** Palomino Petroleum Swart Trucking Inc 1 DST Test Number: 7



Trilobite Testing, Inc Ref. No: 64420 Printed: 2018.01.31 @ 10:55:51

Serial #: 8647 Below (Straddle) Rabbino Petroleum Swart Trucking Inc 1 DST Test Number: 7



Trilobite Testing, Inc Ref. No: 64420 Printed: 2018.01.31 @ 10:55:51

TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

4/10

Test Ticket

NO. 6441a

Well Name & No. Swart Trucking Inc. #1 Test No. 1 Date 1-23-18

Company Palomino Petroleum Inc Elevation 2829 KB 2824 GL

Address 4924 SE 84th St. Newton KS 67114

Co. Rep / Geo. Andrew Stenzel Rig Luce

Location: Sec. 17 Twp. 14 Rge. 30 Co. Gove State KS

Interval Tested 3885-3938 Zone Tested Toronto - LKC A

Anchor Length 53 Drill Pipe Run 3746 Mud Wt. 8.9

Top Packer Depth 3880 Drill Collars Run 119 Vis 63

Bottom Packer Depth 3885 Wt. Pipe Run 0 WL 9.6

Total Depth 3938 Chlorides 2500 ppm System LCM 1

Blow Description IF: BOB in 16 Min

IS: No Return Blow

FF: BOB in 18 Min

FS: No Return Blow

Rec 124	Feet of Mud	%gas	%oil	%water	100	%mud
Rec 124	Feet of MCW	%gas	%oil	60 %water	40	%mud
Rec 119	Feet of ~~MCW~~ MCW (Collars)	%gas	%oil	90 %water	10	%mud
Rec	Feet of	%gas	%oil	%water		%mud
Rec	Feet of	%gas	%oil	%water		%mud

Rec Total 367 BHT 122 Gravity — API RW .308 @ 43.8 °F Chlorides 28000 ppm

(A) Initial Hydrostatic 1902	☐ Test 1050	T-On Location 19:40
(B) First Initial Flow 39	☐ Jars 250	T-Started 22:18
(C) First Final Flow 138	☐ Safety Joint 75	T-Open 01:00
(D) Initial Shut-In 1098	☐ Circ Sub NC	T-Pulled 03:00
(E) Second Initial Flow 143	☐ Hourly Standby	T-Out 06:08
(F) Second Final Flow 202	☐ Mileage 96 RT = $72.00	Comments
(G) Final Shut-In 1094	☐ Sampler	
(H) Final Hydrostatic 1854	☐ Straddle	☐ Ruined Shale Packer
Initial Open 30	☐ Shale Packer	☐ Ruined Packer
Initial Shut-In 30	☐ Extra Packer	☐ Extra Copies
Final Flow 30	☐ Extra Recorder	Sub Total 0
Final Shut-In 30	☐ Day Standby	Total 1447
	☐ Accessibility	MP/DST Disc't
	Sub Total 1447	

Approved By _____ Our Representative Mike Roberts

Trilobite Testing Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.

TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

4/10

Test Ticket

NO. 64415

Well Name & No. Swart Trucking Inc #1 Test No. 2 Date 1-24-18

Company Palomino Petroleum Inc Elevation 2829 KB 2824 GL

Address 4924 SE 84th St Newton KS 67114

Co. Rep / Geo. Andrew Stenzel Rig Luw 8

Location: Sec. 17 Twp. 14 Rge. 30 Co. Gove State KS

Interval Tested 3973-4023 Zone Tested LKC D-F

Anchor Length 50 Drill Pipe Run 3843 Mud Wt. 9.1

Top Packer Depth 3968 Drill Collars Run 119 Vis 51

Bottom Packer Depth 3973 Wt. Pipe Run 0 WL 9.6

Total Depth 4023 Chlorides 3400 ppm System LCM 1

Blow Description IF: Built to 1/8" Blow

IS: No Return Blows

FF: No Blow

FS: No Return Blow

Rec 5	Feet of Mud	%gas	%oil	%water 100	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 5 BHT 112 Gravity — API RW — @ — °F Chlorides — ppm

(A) Initial Hydrostatic 1988	☐ Test 1150	T-On Location 20:00
(B) First Initial Flow 33	☐ Jars 250	T-Started 20:54
(C) First Final Flow 33	☐ Safety Joint 75	T-Open 23:27
(D) Initial Shut-In 40	☐ Circ Sub NC	T-Pulled 01:27
(E) Second Initial Flow 33	☐ Hourly Standby	T-Out
(F) Second Final Flow 34	☐ Mileage 9@ RT = $72.00	Comments
(G) Final Shut-In 41	☐ Sampler	
(H) Final Hydrostatic 1918	☐ Straddle	☐ Ruined Shale Packer
	☐ Shale Packer	☐ Ruined Packer
Initial Open 30	☐ Extra Packer	☐ Extra Copies
Initial Shut-In 30	☐ Extra Recorder	Sub Total 0
Final Flow 30	☐ Day Standby	Total 1547
Final Shut-In 30	☐ Accessibility	MP/DST Disc't
	Sub Total 1547	

Approved By Our Representative Mike Rolatz

Trilobite Testing Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.

TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

4/10

Test Ticket

NO. 64416

Well Name & No. Swart Trucking Inc. #1 Test No. 3 Date 1-25-18

Company Palomino Petroleum Inc Elevation 2829 KB 2824 GL

Address 4924 SE 84th St. Newton KS 67114

Co. Rep / Geo. Andrew Stenzel Rig WW 8

Location: Sec. 17 Twp. 14 Rge. 30 Co. Gove State KS

Interval Tested 4074-4141 Zone Tested LKC H-I

Anchor Length 67 Drill Pipe Run 3937 Mud Wt. 9.0

Top Packer Depth 4069 Drill Collars Run 119 Vis 63

Bottom Packer Depth 4074 Wt. Pipe Run 0 WL 8.8

Total Depth 4141 Chlorides 3500 ppm System LCM 1

Blow Description IF: Built to 1/8" Blow

IS: No Return Blow

FF: No Blow

FS: No Return Blow

Rec 5	Feet of mud with Oil Spots	%gas	%oil	%water 100	%mud	
Rec	Feet of	%gas	%oil	%water	%mud	
Rec	Feet of	%gas	%oil	%water	%mud	
Rec	Feet of	%gas	%oil	%water	%mud	
Rec	Feet of	%gas	%oil	%water	%mud	

Rec Total 5 BHT 116 Gravity — API RW — @ — °F Chlorides — ppm

(A) Initial Hydrostatic 2012	☑ Test 1150	T-On Location 17:15	
(B) First Initial Flow 35	☑ Jars 250	T-Started 18:24	
(C) First Final Flow 42	☑ Safety Joint 75	T-Open 21:42	
(D) Initial Shut-In 372	☑ Circ Sub NC	T-Pulled 23:42	
(E) Second Initial Flow 46	☐ Hourly Standby	T-Out 02:10	
(F) Second Final Flow 48	☑ Mileage 96RT = $72.00	Comments	
(G) Final Shut-In 114	☐ Sampler		
(H) Final Hydrostatic 1956	☐ Straddle	☐ Ruined Shale Packer	
	☐ Shale Packer	☐ Ruined Packer	
Initial Open 30	☐ Extra Packer	☐ Extra Copies	
Initial Shut-In 30	☐ Extra Recorder	Sub Total 0	
Final Flow 30	☐ Day Standby	Total 1547	
Final Shut-In 30	☐ Accessibility	MP/DST Disc't	
	Sub Total 1547		

Approved By [signature] Our Representative Mike Roberts

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

4/10

Test Ticket

NO. 64417

Well Name & No. Swart Trucking Inc. #1 Test No. 4 Date 1-26-18

Company Palomino Petroleum Inc. Elevation 2829 KB 2824 GL

Address 4924 SE 84th St Newton KS 67114

Co. Rep / Geo. Andrew Stenzel Rig WW 8

Location: Sec. 17 Twp. 14 Rge. 30 Co. Grove State KS

Interval Tested 4164-4243 Zone Tested LKC K-L

Anchor Length 79 Drill Pipe Run 4031 Mud Wt. 9.1

Top Packer Depth 4159 Drill Collars Run 119 Vis 57

Bottom Packer Depth 4164 Wt. Pipe Run Ø WL 9.6

Total Depth 4243 Chlorides 3600 ppm System LCM 1

Blow Description IF: Built to 8" Blow

IS: No Return Blow

FF: Built to 7" Blow

FS: No Return Blow

Rec 92	Feet of MUD with Oil Spots	%gas	%oil	%water	10	%mud
Rec 119	Feet of MUD	%gas	%oil	%water	100	%mud
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 117 Gravity — API RW — @ — °F Chlorides — ppm

(A) Initial Hydrostatic 2114	☑ Test 1150	T-On Location 16:45	
(B) First Initial Flow 53	☑ Jars 250	T-Started 17:33	
(C) First Final Flow 122	☑ Safety Joint 75	T-Open 19:50	
(D) Initial Shut-In 1078	☑ Circ Sub NC	T-Pulled 21:50	
(E) Second Initial Flow 132	☐ Hourly Standby	T-Out 00:11	
(F) Second Final Flow 154	☑ Mileage 96 RT = $92.00	Comments	
(G) Final Shut-In 1064	☐ Sampler		
(H) Final Hydrostatic 2102	☐ Straddle	☐ Ruined Shale Packer	
	☐ Shale Packer	☐ Ruined Packer	
Initial Open 30	☐ Extra Packer	☐ Extra Copies	
Initial Shut-In 30	☐ Extra Recorder	Sub Total 0	
Final Flow 30	☐ Day Standby	Total 1547	
Final Shut-In 30	☐ Accessibility	MP/DST Disc't	
	Sub Total 1547		

Approved By _____ Our Representative Mike Rich

Trilobite Testing Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.

TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

4/10

Test Ticket

NO. 64418

Well Name & No. Swart Trucking Inc #1 Test No. 5 Date 1-27-18

Company Palomino Petroleum Inc Elevation 2829 KB 2824 GL

Address 4924 SE 84th St. Newton KS 67114

Co. Rep / Geo. Andrew Stenzel Rig WW 8

Location: Sec. 17 Twp. 14 Rge. 30 Co. Gove State KS

Interval Tested 4358-4426 Zone Tested Pawnee-Myrick Station

Anchor Length ~~358~~ 68' Drill Pipe Run 4225 Mud Wt. 9.1

Top Packer Depth ~~353~~ 4353 Drill Collars Run 119 Vis 62

Bottom Packer Depth ~~426~~ 4358 Wt. Pipe Run 0 WL 7.2

Total Depth 4426 Chlorides 3000 ppm System LCM 1

Blow Description IF: Built to ½" Blow
IS: No Return Blow
FF: No Blow
FS: No Return Blow

Rec 119	Feet of mud with Oil spots	%gas	%oil	%water 100	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 119 BHT 118 Gravity — API RW — @ — °F Chlorides — ppm

(A) Initial Hydrostatic 2267	☑ Test 1150	T-On Location 21:30
(B) First Initial Flow 70	☑ Jars 250	T-Started 22:51
(C) First Final Flow 94	☑ Safety Joint 75	T-Open 01:10
(D) Initial Shut-In 971	☑ Circ Sub NC	T-Pulled 03:10
(E) Second Initial Flow 101	☐ Hourly Standby	T-Out 05:15
(F) Second Final Flow 307	☑ Mileage 96 RT = $ 72.00	Comments
(G) Final Shut-In 928	☐ Sampler	
(H) Final Hydrostatic 2183	☐ Straddle	☐ Ruined Shale Packer
	☐ Shale Packer	☐ Ruined Packer
Initial Open 30	☐ Extra Packer	☐ Extra Copies
Initial Shut-In 30	☐ Extra Recorder	Sub Total 0
Final Flow 30	☐ Day Standby	Total 1547
Final Shut-In 30	☐ Accessibility	MP/DST Disc't
	Sub Total 1547	

Approved By _____ Our Representative Mike Bolaños

Trilobite Testing Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test. tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.

TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

4/10

Test Ticket

NO. 64419

Well Name & No. Swart Trucking Inc. Test No. 6 Date 1-28-18

Company Palomino Petroleum Inc Elevation 2829 KB 2824 GL

Address 4924 SE 84th St Newton KS 67114

Co. Rep / Geo. Andrew Stenzel Rig WW 8

Location: Sec. 17 Twp. 14 Rge. 30 Co. Trove State KS

Interval Tested 4416-4514 Zone Tested Johnson

Anchor Length 100 Drill Pipe Run ~~3990~~ 4290 Mud Wt. 9.2

Top Packer Depth 4411 Drill Collars Run 119 Vis 64

Bottom Packer Depth 4416 Wt. Pipe Run 0 WL 9.4

Total Depth 4514 Chlorides 3300 ppm System LCM 1

Blow Description IF: Built to 1/2" Blow

IS: No Return Blow

FF: No Blow

FS: No Return Blow

Rec 70	Feet of mud with oil spots	%gas	%oil	%water	100%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 70 BHT 120 Gravity — API RW — @ — °F Chlorides — ppm

(A) Initial Hydrostatic 2301	☑ Test 1150	T-On Location 18:15
(B) First Initial Flow 80	☑ Jars 250	T-Started 19:37
(C) First Final Flow 88	☑ Safety Joint 75	T-Open 22:12
(D) Initial Shut-In 545	☑ Circ Sub NC	T-Pulled 00:12
(E) Second Initial Flow 92	☐ Hourly Standby	T-Out 02:47
(F) Second Final Flow 94	☑ Mileage 96 RT = $72.00/-	Comments
(G) Final Shut-In 503	☐ Sampler	
(H) Final Hydrostatic 2245	☐ Straddle	☐ Ruined Shale Packer
	☐ Shale Packer	☐ Ruined Packer
Initial Open 30	☐ Extra Packer	☐ Extra Copies
Initial Shut-In 30	☐ Extra Recorder	Sub Total 0
Final Flow 30	☐ Day Standby	Total 1547
Final Shut-In 30	☐ Accessibility	MP/DST Disc't
	Sub Total 1547	

Approved By _____ Our Representative Matt Robb

Trilobite Testing Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.

TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

4/10

Test Ticket

NO. 64420

Well Name & No. Swart Trucking Inc Test No. 7 Date 1-29-18

Company Palomino Petroleum Inc Elevation 2829 KB 2824 GL

Address 4924 SE 84th St Newton KS 67114

Co. Rep / Geo. Andrew Stenzel Rig Lulu 8

Location: Sec. 17 Twp. 14 Rge. 30 Co. Gove State KS

Interval Tested 3947-3984 4720TD Zone Tested LKC C

Anchor Length 37 Drill Pipe Run 3820 Mud Wt. 9.3

Top Packer Depth 3942 Drill Collars Run 119 Vis 62

Bottom Packer Depth 3947 Wt. Pipe Run Ø WL 10.4

Total Depth 4720 Chlorides 3000 ppm System LCM 1

Blow Description IF: Built to 3/4" Blow

IS: No Return Blow

FF: No Blow

FS: No Return Blow

Rec 70	Feet of MW	%gas	%oil	%water 100	%mud	
Rec	Feet of	%gas	%oil	%water	%mud	
Rec	Feet of	%gas	%oil	%water	%mud	
Rec	Feet of	%gas	%oil	%water	%mud	
Rec	Feet of	%gas	%oil	%water	%mud	

Rec Total 70 BHT 112 Gravity — API RW — @ — °F Chlorides — ppm

(A) Initial Hydrostatic 2062	☒ Test 1150	T-On Location 08:30	
(B) First Initial Flow 50	☒ Jars 250	T-Started 09:18	
(C) First Final Flow 54	☒ Safety Joint 75	T-Open 11:28	
(D) Initial Shut-In 1052	☒ Circ Sub NC	T-Pulled 13:15	
(E) Second Initial Flow 59	☐ Hourly Standby	T-Out 15:42	
(F) Second Final Flow 63	☒ Mileage 96RT=#72.00	Comments	
(G) Final Shut-In 868	☐ Sampler		
(H) Final Hydrostatic 1965	☒ Straddle 600	☐ Ruined Shale Packer	
	☒ Shale Packer 250	☐ Ruined Packer	
Initial Open 30	☐ Extra Packer	☐ Extra Copies	
Initial Shut-In 30	☐ Extra Recorder	Sub Total 0	
Final Flow 30	☐ Day Standby	Total 2397	
Final Shut-In 15	☐ Accessibility	MP/DST Disc't	
	Sub Total 2397		

Approved By _____ Our Representative Mike Roberts

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Andrew Stenzel
Geologist
Ness City, Kansas

Home
(785) 798-3400

Cell
(785) 798-5977

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

Well Name:	Swart Trucking, Inc.		
Well Id:			
Location:	NE-SE-NW-NW Sec. 17-14S-30W (Gove County)		
License Number:	15-063-22318	Region:	KANSAS
Spud Date:	1/18/18	Drilling Completed:	1/31/18
Surface Coordinates:	564' FNL & 1047' FWL		
Bottom Hole Coordinates:			
Ground Elevation (ft):	2824	K.B. Elevation (ft):	2829
Logged Interval (ft):	3500 To: TD	Total Depth (ft):	4720
Formation:	Mississippi		
Type of Drilling Fluid:	Mud-Co Chemical		

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

OPERATOR

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

GEOLOGIST

Name: Andrew Stenzel
Company: Petroleum Geologist
Address: 501 S. Franklin
Ness City, KS 67560

DRILLING REPORT

DAILY DRILLING REPORT:
1/18/18 MIRU, ran surface casing
1/19/18 Waiting on cement @ 218'
1/20/18 Drilling @ 1742'
1/21/18 Drilling @ 2770'
1/22/18 Drilling @ 3414'
1/23/18 Drilling @ 3825'
1/24/18 DST #1
1/25/18 DST #2
1/26/18 DST #3
1/27/18 Drilling @ 4284', DST #4
1/28/18 DST #5
1/29/18 DST #6
1/30/18 Ran electric logs, DST #7

1/24/18 DST #1
1/25/18 DST #2
1/26/18 DST #3
1/27/18 Drilling @ 4284', DST #4
1/28/18 DST #5
1/29/18 DST #6
1/30/18 Ran electric logs, DST #7
1/31/18 Plugged & Abandoned

SERVICES

RIG: WW DRILLING, RIG #8

MUD: MUDCO
LOGS: GEMINI WIRELINE
TESTER: TRILOBITE TESTING

CASING RECORD

SURFACE Casing: Ran 5 jts new 8 5/8", 24# casing @ 218', cemented with 165 sx common 2% gel, 3%c.c., cement did circulate, plug down @ 1:15am

PRODUCTION Casing: None

Formation Tops

Sample Tops		LogTops	
Anhy.	2287 (+542)	Anhy.	2280 (+549)
Base Anhy.	2316 (+513)	Base Anhy.	2311 (+518)
Heebner	3886 (-1057)	Heebner	3886 (-1057)
Toronto	3908 (-1079)	Toronto	3908 (-1079)
Lansing	3924 (-1095)	Lansing	3925 (-1096)
Muncie Cr	4076 (-1247)	Muncie Cr	4076 (-1247)
Stark Sh	4167 (-1338)	Stark Sh	4166 (-1337)
Hushpuckney	4196 (-1367)	Hushpuckney	4201 (-1372)
BKC	4240 (-1411)	BKC	4241 (-1412)
Pawnee	4367 (-1538)	Pawnee	4361 (-1532)
Myrick St	4395 (-1566)	Myrick St	4394 (-1565)
Ft. Scott	4423 (-1594)	Ft. Scott	4423 (-1594)
Cher. Sh.	4449 (-1620)	Cher. Sh.	4447 (-1618)
Miss.	4526 (-1697)	Miss.	4529 (-1700)
RTD	4720 (-1891)	LTD	4721 (-1892)

TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Palomino Petroleum

4924 SE 84th St
Newton KS 67114

ATTN: Andrew Stenzel

17-14-30 Gove,KS

Swart Trucking Inc 1

Job Ticket: 64414 DST#: 1

Test Start: 2018.01.23 @ 22:18:15

GENERAL INFORMATION:

Formation: Toronto - LKC A
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 00:59:45
Time Test Ended: 06:08:45

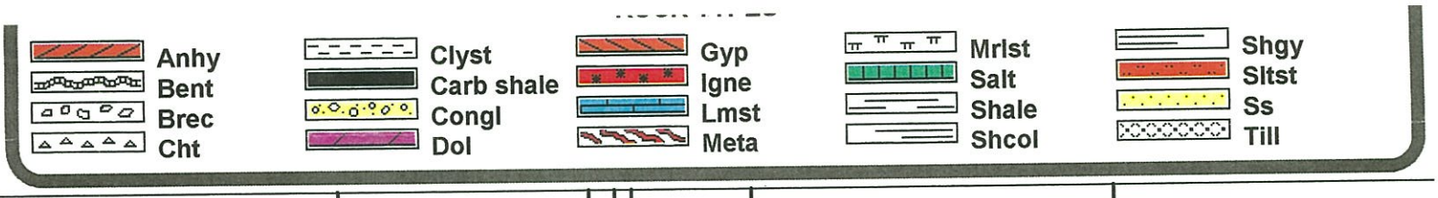
Test Type: Conventional Bottom Hole (Initial)
Tester: Mike Roberts
Unit No: 81

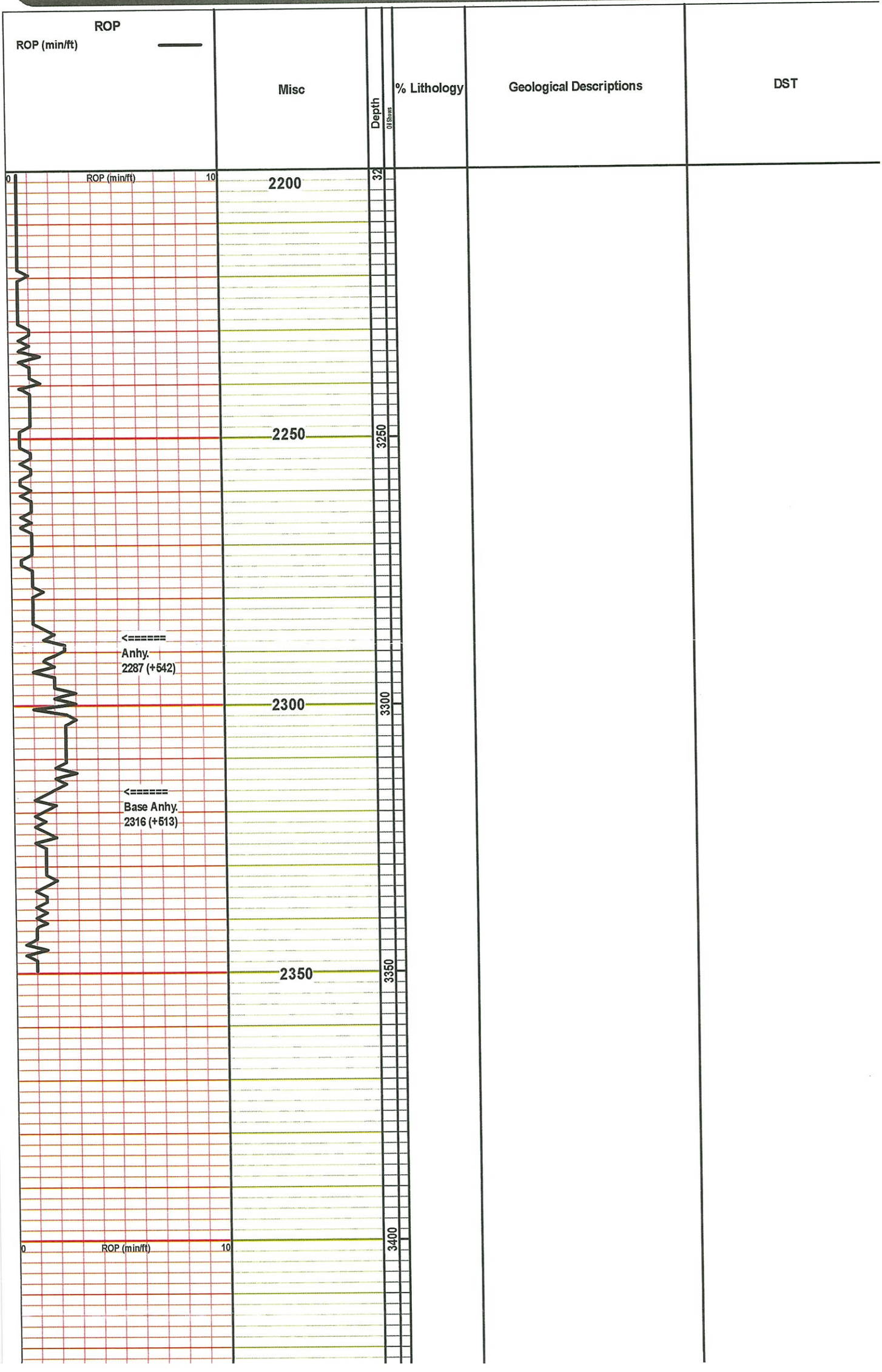
Interval: 3885.00 ft (KB) To 3938.00 ft (KB) (TVD)
Total Depth: 3938.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

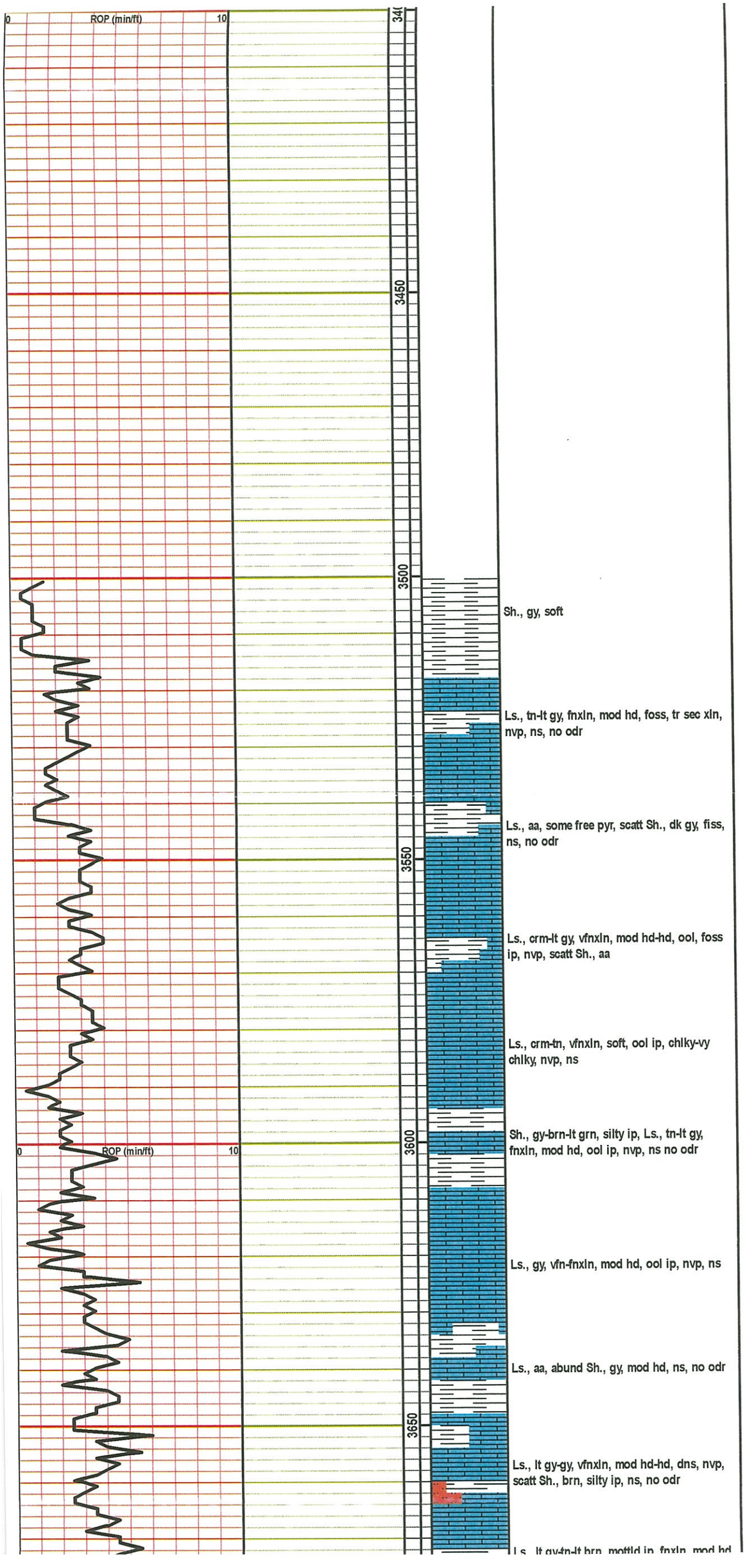
Reference Elevations: 2829.00 ft (KB)
2824.00 ft (CF)
KB to GR/CF: 5.00 ft

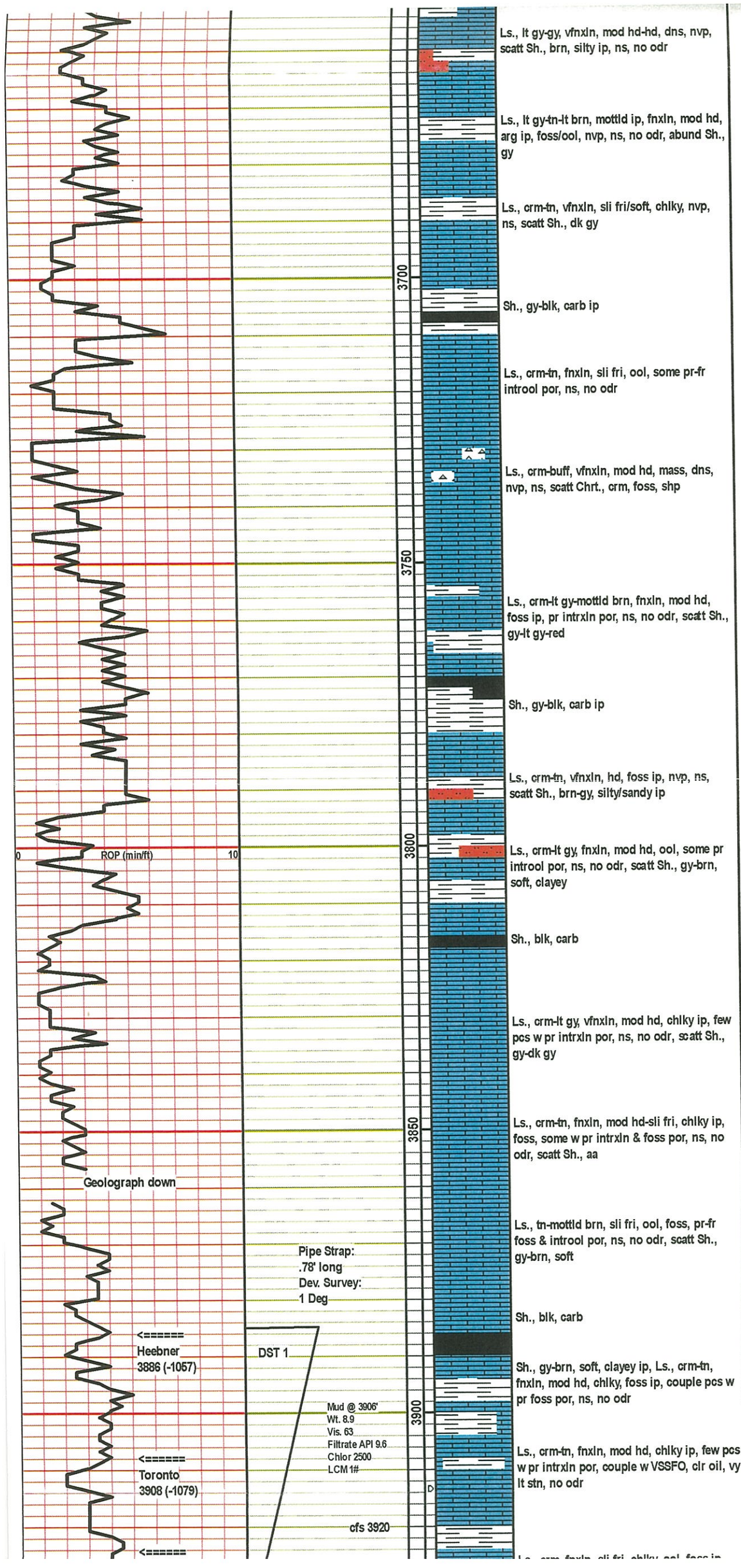
Serial #: 8672 Inside
Press@RunDepth: 202.25 psig @ 3933.00 ft (KB)
Start Date: 2018.01.23 End Date: 2018.01.24
Start Time: 22:18:15 End Time: 06:08:45

Capacity: 8000.00 psig
Last Calib.: 2018.01.24
Time On Btm: 2018.01.24 @ 00:59:30
Time Off Btm: 2018.01.24 @ 03:01:15


Anhy
Bent
Brec
Cht
Clyst
Carb shale
Congl
Dol
Gyp
Igne
Lmst
Meta
Mrlst
Salt
Shale
Shcol
Shgy
Sltst
Ss
Till


ROP
ROP (min/ft)
Misc
Depth
Oil Shows
% Lithology
Geological Descriptions
DST
0
ROP (min/ft)
10
2200
2250
2300
2350
3250
3300
3350
3400
<======
Anhy.
2287 (+542)
<======
Base Anhy.
2316 (+513)
0
ROP (min/ft)
10


0
ROP (min/ft)
10
3450
3500
3550
3600
3650
Sh., gy, soft
Ls., tn-lt gy, fnxln, mod hd, foss, tr sec xln, nvp, ns, no odr
Ls., aa, some free pyr, scatt Sh., dk gy, fiss, ns, no odr
Ls., crm-lt gy, vfnxln, mod hd-hd, ool, foss ip, nvp, scatt Sh., aa
Ls., crm-tn, vfnxln, soft, ool ip, chlky-vy chlky, nvp, ns
Sh., gy-brn-lt grn, silty ip, Ls., tn-lt gy, fnxln, mod hd, ool ip, nvp, ns no odr
Ls., gy, vfn-fnxln, mod hd, ool ip, nvp, ns
Ls., aa, abund Sh., gy, mod hd, ns, no odr
Ls., lt gy-gy, vfnxln, mod hd-hd, dns, nvp, scatt Sh., brn, silty ip, ns, no odr



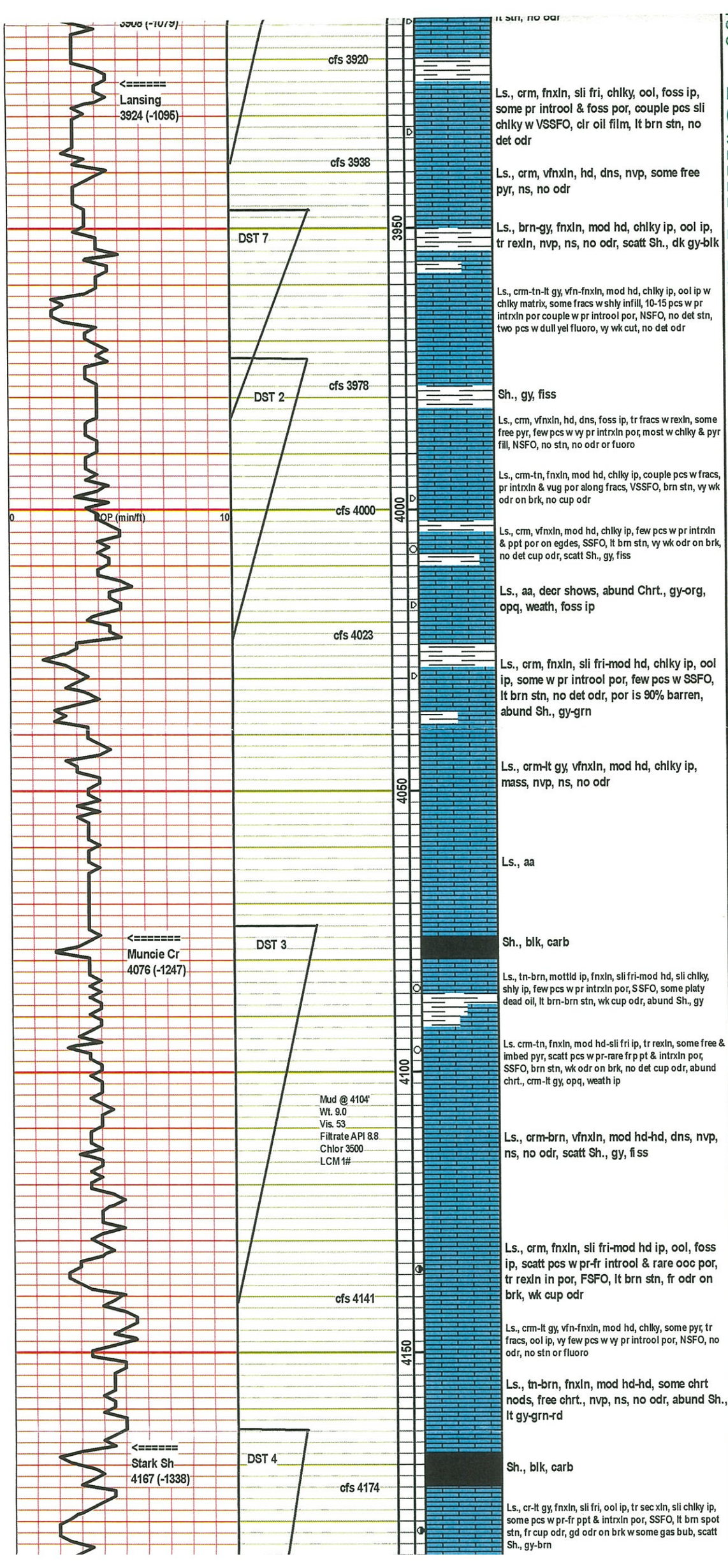
DST #1 3885-3938

30-30-30-30
IF: BOB in 16 min
IS: No blow
FF: BOB in 18 min
FS: No blow

Recovery:
124' Mud
124' MCW (60%W, 40%M)
119' MCW (90%W, 10%M)
—
367' TF

FP: 39-138; 143-202
SIP: 1098-1094
HP: 1902-1854

BHT: 122
Gravity: --
Chlor: 28000



Gravity: –
Chlor: 28000

DST #7 3947-3984 (Straddle)

30-30-30-15
IF: Built to 3/4"
IS: No blow
FF: No blow
FS: No blow

Recovery: 70' Mud

FP: 50-54; 59-63
SIP: 1052-868
HP: 2062-1965

BHT: 114
Gravity: –
Chlor: —

DST #2 3973-4023

30-30-30-30
IF: Built to 1/8"
IS: No blow
FF: No blow
FS: No blow

Recovery: 5' Mud

FP: 33-33; 33-34
SIP: 40-41
HP: 1988-1918

BHT: 112
Gravity: –
Chlor: —

DST #3 4074-4141

30-30-30-30
IF: Built to 1/8"
IS: No blow
FF: No blow
FS: No blow

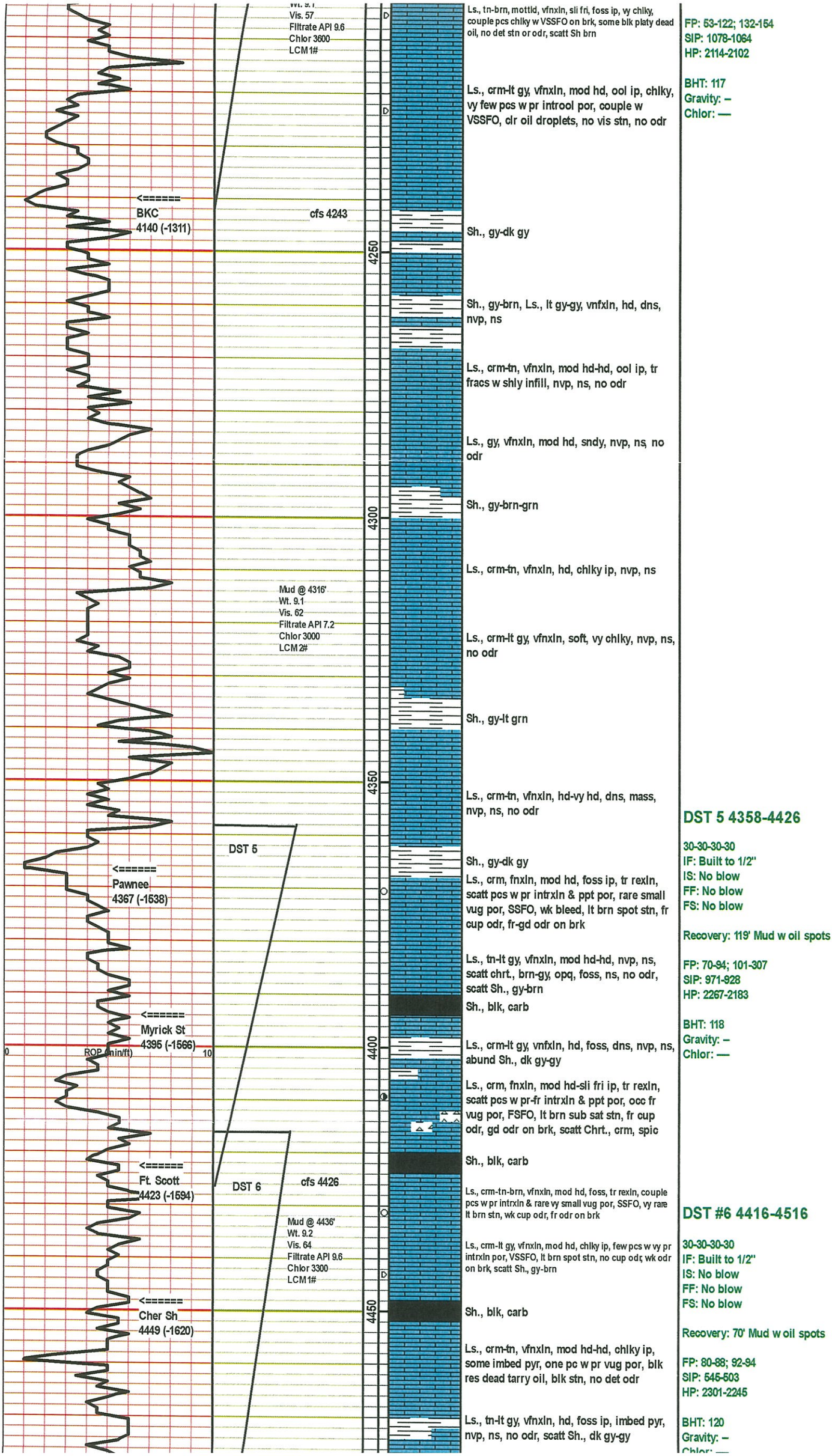
Recovery: 5' Mud w oil spots

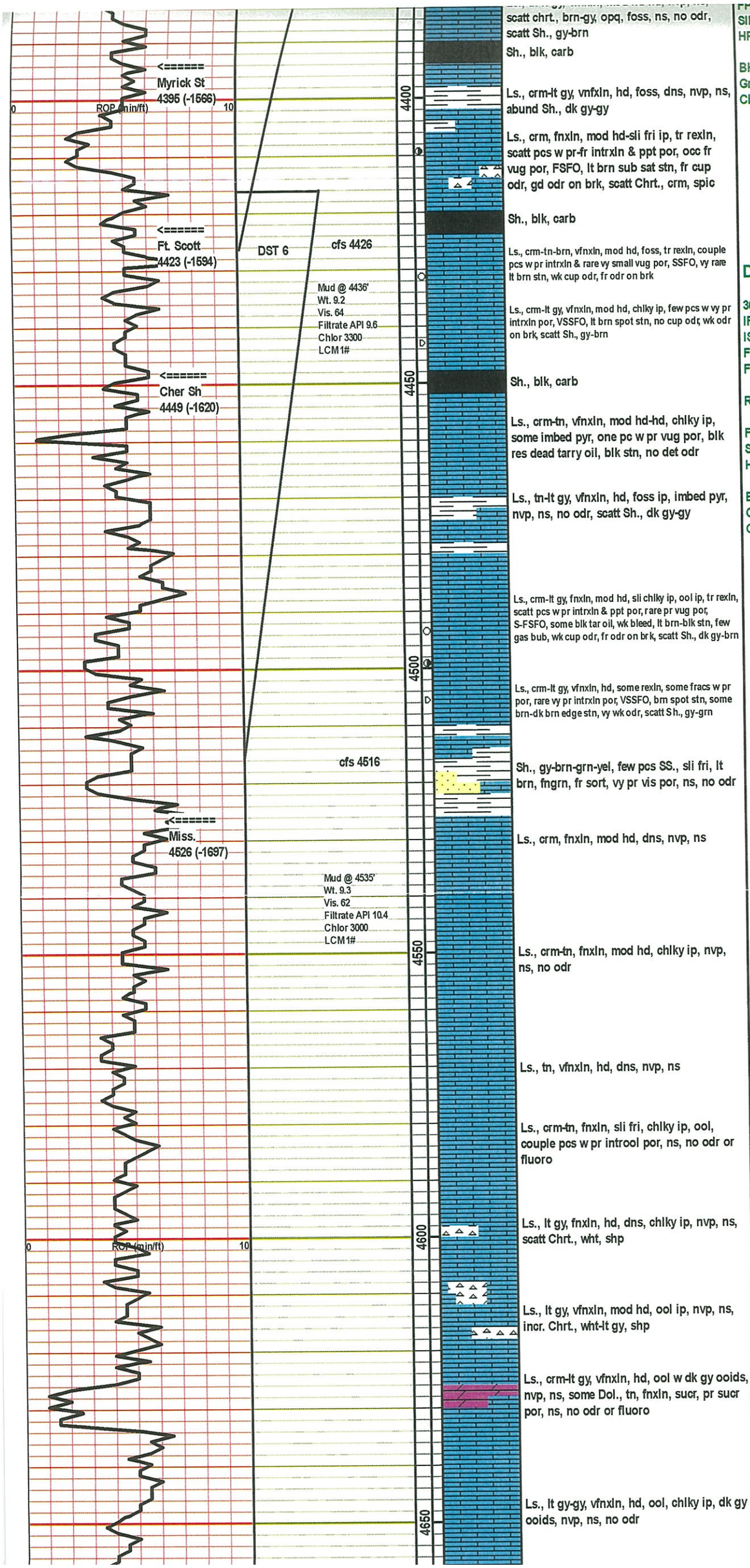
FP: 35-42; 46-48
SIP: 372-114
HP: 2012-1956

BHT: 116
Gravity: –
Chlor: —

DST #4 4164-4243

30-30-30-30
IF: Built to 8"
IS: No blow
FF: Built to 7"
FS: No blow


Wt. 9.1
Vis. 57
Filtrate API 9.6
Chlor 3600
LCM 1#
BKC
4140 (-1311)
cfs 4243
4250
4300
Mud @ 4316'
Wt. 9.1
Vis. 62
Filtrate API 7.2
Chlor 3000
LCM 2#
4350
DST 5
Pawnee
4367 (-1538)
Myrick St
4395 (-1566)
0
ROP (min/ft)
10
4400
Ft. Scott
4423 (-1594)
DST 6
cfs 4426
Mud @ 4436'
Wt. 9.2
Vis. 64
Filtrate API 9.6
Chlor 3300
LCM 1#
Cher Sh
4449 (-1620)
4450
Ls., tn-brn, mottld, vfnxln, sli fri, foss ip, vy chlky, couple pcs chlky w VSSFO on brk, some blk platy dead oil, no det stn or odr, scatt Sh brn
Ls., crm-lt gy, vfnxln, mod hd, ool ip, chlky, vy few pcs w pr introol por, couple w VSSFO, clr oil droplets, no vis stn, no odr
Sh., gy-dk gy
Sh., gy-brn, Ls., lt gy-gy, vnfxln, hd, dns, nvp, ns
Ls., crm-tn, vfnxln, mod hd-hd, ool ip, tr fracs w shly infill, nvp, ns, no odr
Ls., gy, vfnxln, mod hd, sndy, nvp, ns, no odr
Sh., gy-brn-grn
Ls., crm-tn, vfnxln, hd, chlky ip, nvp, ns
Ls., crm-lt gy, vfnxln, soft, vy chlky, nvp, ns, no odr
Sh., gy-lt grn
Ls., crm-tn, vfnxln, hd-vy hd, dns, mass, nvp, ns, no odr
Sh., gy-dk gy
Ls., crm, fnxln, mod hd, foss ip, tr rexln, scatt pcs w pr intrxln & ppt por, rare small vug por, SSFO, wk bleed, lt brn spot stn, fr cup odr, fr-gd odr on brk
Ls., tn-lt gy, vfnxln, mod hd-hd, nvp, ns, scatt chrt., brn-gy, opq, foss, ns, no odr, scatt Sh., gy-brn
Sh., blk, carb
Ls., crm-lt gy, vnfxln, hd, foss, dns, nvp, ns, abund Sh., dk gy-gy
Ls., crm, fnxln, mod hd-sli fri ip, tr rexln, scatt pcs w pr-fr intrxln & ppt por, occ fr vug por, FSFO, lt brn sub sat stn, fr cup odr, gd odr on brk, scatt Chrt., crm, spic
Sh., blk, carb
Ls., crm-tn-brn, vfnxln, mod hd, foss, tr rexln, couple pcs w pr intrxln & rare vy small vug por, SSFO, vy rare lt brn stn, wk cup odr, fr odr on brk
Ls., crm-lt gy, vfnxln, mod hd, chlky ip, few pcs w vy pr intrxln por, VSSFO, lt brn spot stn, no cup odr, wk odr on brk, scatt Sh., gy-brn
Sh., blk, carb
Ls., crm-tn, vfnxln, mod hd-hd, chlky ip, some imbed pyr, one pc w pr vug por, blk res dead tarry oil, blk stn, no det odr
Ls., tn-lt gy, vfnxln, hd, foss ip, imbed pyr, nvp, ns, no odr, scatt Sh., dk gy-gy
FP: 53-122; 132-154
SIP: 1078-1064
HP: 2114-2102
BHT: 117
Gravity: –
Chlor: —
DST 5 4358-4426
30-30-30-30
IF: Built to 1/2"
IS: No blow
FF: No blow
FS: No blow
Recovery: 119' Mud w oil spots
FP: 70-94; 101-307
SIP: 971-928
HP: 2267-2183
BHT: 118
Gravity: –
Chlor: —
DST #6 4416-4516
30-30-30-30
IF: Built to 1/2"
IS: No blow
FF: No blow
FS: No blow
Recovery: 70' Mud w oil spots
FP: 80-88; 92-94
SIP: 545-503
HP: 2301-2245
BHT: 120
Gravity: –
Chlor: —



FP: 70-94; 101-307
SIP: 971-928
HP: 2267-2183

BHT: 118
Gravity: –
Chlor: —

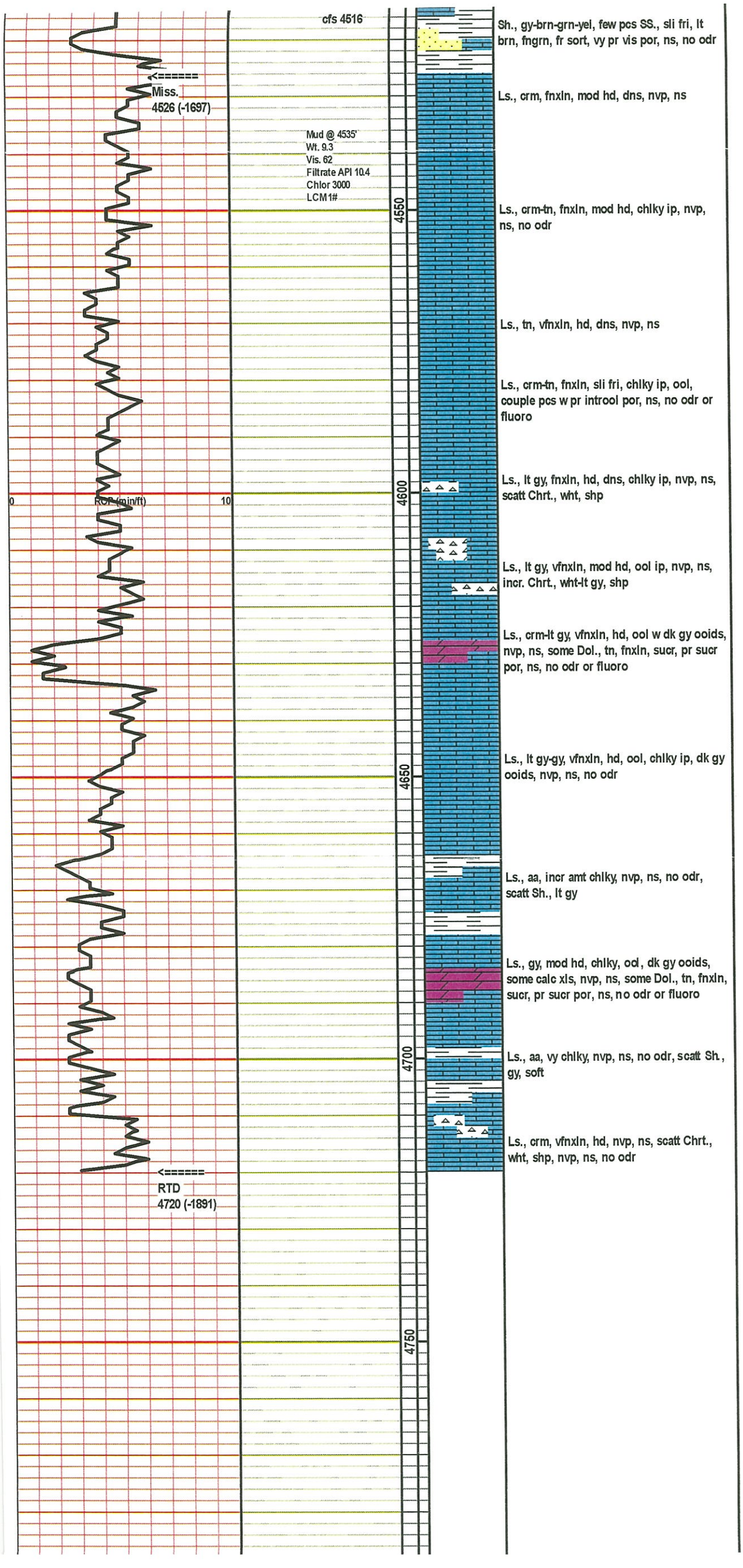
DST #6 4416-4516

30-30-30-30
IF: Built to 1/2"
IS: No blow
FF: No blow
FS: No blow

Recovery: 70' Mud w oil spots

FP: 80-88; 92-94
SIP: 545-503
HP: 2301-2245

BHT: 120
Gravity: –
Chlor: —


cfs 4516
Miss.
4526 (-1697)
Mud @ 4535'
Wt. 9.3
Vis. 62
Filtrate API 10.4
Chlor 3000
LCM 1#
0
ROP (min/ft)
10
RTD
4720 (-1891)
4550
4600
4650
4700
4750
Sh., gy-brn-grn-yel, few pcs SS., sli fri, lt brn, fngrn, fr sort, vy pr vis por, ns, no odr
Ls., crm, fnxln, mod hd, dns, nvp, ns
Ls., crm-tn, fnxln, mod hd, chlky ip, nvp, ns, no odr
Ls., tn, vfnxln, hd, dns, nvp, ns
Ls., crm-tn, fnxln, sli fri, chlky ip, ool, couple pcs w pr introol por, ns, no odr or fluoro
Ls., lt gy, fnxln, hd, dns, chlky ip, nvp, ns, scatt Chrt., wht, shp
Ls., lt gy, vfnxln, mod hd, ool ip, nvp, ns, incr. Chrt., wht-lt gy, shp
Ls., crm-lt gy, vfnxln, hd, ool w dk gy ooids, nvp, ns, some Dol., tn, fnxln, sucr, pr sucr por, ns, no odr or fluoro
Ls., lt gy-gy, vfnxln, hd, ool, chlky ip, dk gy ooids, nvp, ns, no odr
Ls., aa, incr amt chlky, nvp, ns, no odr, scatt Sh., lt gy
Ls., gy, mod hd, chlky, ool, dk gy ooids, some calc xls, nvp, ns, some Dol., tn, fnxln, sucr, pr sucr por, ns, no odr or fluoro
Ls., aa, vy chlky, nvp, ns, no odr, scatt Sh., gy, soft
Ls., crm, vfnxln, hd, nvp, ns, scatt Chrt., wht, shp, nvp, ns, no odr