



WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # _____

Name: _____

Address 1: _____

Address 2: _____

City: _____ State: _____ Zip: _____ + _____

Contact Person: _____

Phone: (_____) _____

CONTRACTOR: License # _____

Name: _____

Wellsite Geologist: _____

Purchaser: _____

Designate Type of Completion:

- New Well Re-Entry Workover
- Oil WSW SWD SIOW
- Gas D&A ENHR SIGW
- OG GSW Temp. Abd.
- 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 ENHR Conv. to SWD
- Conv. to GSW
- Plug Back: _____ Plug Back Total Depth _____
- Commingled Permit #: _____
- Dual Completion Permit #: _____
- SWD Permit #: _____
- ENHR Permit #: _____
- GSW Permit #: _____

Spud Date or Recompletion Date Date Reached TD Completion Date or Recompletion Date

API No. 15 - _____

Spot Description: _____

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

_____ Feet from North / South Line of Section

_____ Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE NW SE SW

County: _____

Lease Name: _____ Well #: _____

Field Name: _____

Producing Formation: _____

Elevation: Ground: _____ Kelly Bushing: _____

Total Depth: _____ Plug Back Total Depth: _____

Amount of Surface Pipe Set and Cemented at: _____ Feet

Multiple Stage Cementing Collar Used? Yes No

If yes, show depth set: _____ Feet

If Alternate II completion, cement circulated from: _____

feet depth to: _____ w/ _____ sx cmt.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: _____ ppm Fluid volume: _____ bbls

Dewatering method used: _____

Location of fluid disposal if hauled offsite: _____

Operator Name: _____

Lease Name: _____ License #: _____

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

County: _____ Permit #: _____

AFFIDAVIT

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

Submitted Electronically

KCC Office Use ONLY

- Letter of Confidentiality Received
Date: _____
- Confidential Release Date: _____
- Wireline Log Received
- Geologist Report Received
- UIC Distribution
- ALT I II III Approved by: _____ Date: _____



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

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

INSTRUCTIONS: Show important tops and base 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. Attach complete copy of all Electric Wire-line Logs surveyed. Attach final geological well site report.

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

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
_____ Perforate _____ Protect Casing _____ Plug Back TD _____ Plug Off Zone				

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record <i>(Amount and Kind of Material Used)</i>	Depth

TUBING RECORD:	Size:	Set At:	Packer At:	Liner Run: <input type="checkbox"/> Yes <input type="checkbox"/> No
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Date of First, Resumed Production, SWD or ENHR.	Producing Method: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> _____
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Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
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DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____ <input type="checkbox"/> Other <i>(Specify)</i> _____	PRODUCTION INTERVAL: _____ _____
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ALLIED OIL & GAS SERVICES, LLC 052920 ^{KB}

Federal Tax I.D.# 20-5975804

REMIT TO P.O. BOX 31
RUSSELL, KANSAS 67665

SERVICE POINT:
Liberal KS

DATE <u>03-06-13</u>	SEC. <u>12</u>	TWP. <u>32S</u>	RANGE <u>32W</u>	CALLED OUT	ON LOCATION	JOB START <u>09:00</u>	JOB FINISH <u>10:00</u>
LEASE <u>Holt</u>		WELL# <u>3-12</u>		LOCATION		COUNTY <u>Stevens</u>	STATE <u>KS</u>
OLD OR (NEW) (Circle one)							

CONTRACTOR Duke # a
 TYPE OF JOB Surface
 HOLE SIZE 12 1/4 T.D.
 CASING SIZE 8 5/8 DEPTH 1734
 TUBING SIZE DEPTH
 DRILL PIPE DEPTH
 TOOL DEPTH
 PRES. MAX 1500 MINIMUM
 MEAS. LINE SHOE JOINT
 CEMENT LEFT IN CSG.
 PERFS.
 DISPLACEMENT 106 BBI

OWNER American warrior
 CEMENT
 AMOUNT ORDERED Lead 425 SKS AMD cmt
2.5# Flo-saw, Tail 150 SKS 2% cc

EQUIPMENT

PUMP TRUCK CEMENTER Ruben Chavez / Kelly Edger
 #541 HELPER Cesar Pavia
 BULK TRUCK
 #456-556 DRIVER Ruben Chavez
 BULK TRUCK
 # DRIVER

COMMON <u>class A 425sk</u>	@ <u>17.90</u>	<u>7,607.50</u>
POZMIX	@	
GEL	@	
CHLORIDE	@	
ASC	@	
<u>Flo-Saw 106#</u>	@ <u>2.97</u>	<u>314.82</u>
<u>Class C Premium Plus 150sk</u>	@ <u>24.40</u>	<u>3,660.00</u>
	@	
<u>Sodium metasilicate 799#</u>	@ <u>3.30</u>	<u>2,636.70</u>
<u>Gyp Seal 8sk</u>	@ <u>37.60</u>	<u>300.80</u>
<u>Calcium chloride 19sk</u>	@ <u>64.00</u>	<u>1,216.00</u>
	@	
	@	
HANDLING <u>629</u>	@ <u>2.48</u>	<u>1,559.92</u>
MILEAGE <u>527</u>	@ <u>2.60</u>	<u>1,370.20</u>
TOTAL		<u>18,665.94</u>

REMARKS:

got Back 25 BBI cmt
Thank you!

SERVICE

DEPTH OF JOB <u>1734</u>		
PUMP TRUCK CHARGE		<u>2,213.75</u>
EXTRA FOOTAGE	@	
MILEAGE <u>Heavy Vehicle 20mi</u>	@ <u>7.70</u>	<u>154.00</u>
MANIFOLD	@	
<u>Light Vehicle 20 miles</u>	@ <u>4.40</u>	<u>88.00</u>
<u>Head Rental</u>	@ <u>275.00</u>	<u>275.00</u>
TOTAL		<u>2,730.75</u>

CHARGE TO: American warrior
 STREET _____
 CITY _____ STATE _____ ZIP _____

PLUG & FLOAT EQUIPMENT

<u>1-8 5/8 AFU Insert</u>	@ <u>446.94</u>	<u>446.94</u>
<u>3-8 5/8 centralizer</u>	@ <u>74.88</u>	<u>224.64</u>
<u>1-8 5/8 guide shoe</u>	@ <u>460.98</u>	<u>460.98</u>
<u>18 5/8 cement basket</u>	@ <u>559.26</u>	<u>559.26</u>
	@	
TOTAL		<u>1,691.82</u>

To: Allied Oil & Gas Services, LLC.
 You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

SALES TAX (If Any) _____
 TOTAL CHARGES 23,088.51
 DISCOUNT _____ IF PAID IN 30 DAYS

PRINTED NAME Alexandro V.
 SIGNATURE [Signature]

NET 18,470.80

ALLIED OIL & GAS SERVICES, LLC

KB
052158

Federal Tax I.D.# 20-5975804

REMIT TO P.O. BOX 31
RUSSELL, KANSAS 67665

SERVICE POINT

LIBERAL KS

DATE <u>3-16-13</u>	SEC. <u>12</u>	TWP. <u>32S</u>	RANGE <u>32W</u>	CALLED OUT	ON LOCATION	JOB START <u>6:00 PM</u>	JOB FINISH <u>7:00 PM</u>
LEASE <u>Holt</u>	WELL # <u>312</u>	LOCATION <u>83+51 7W 7N</u>		COUNTY <u>STEVENS</u>	STATE <u>KS</u>		
OLD OR NEW (Circle one)		<u>2 1/2 W to Loc.</u>					

CONTRACTOR <u>Duke #6</u>	OWNER <u>Same</u>
TYPE OF JOB <u>PTA</u>	
HOLE SIZE <u>7 7/8</u>	T.D. <u>6320'</u>
CASING SIZE <u>8 3/8 2 1/4</u>	DEPTH <u>1734'</u>
TUBING SIZE	DEPTH
DRILL PIPE	DEPTH
TOOL	DEPTH
PRES. MAX <u>500 PSI</u>	MINIMUM <u>0</u>
MEAS. LINE	SHOE JOINT
CEMENT LEFT IN CSG.	
PERFS.	
DISPLACEMENT <u>21 / 5</u>	
EQUIPMENT	

CEMENT		
AMOUNT ORDERED <u>170 60/40</u>		
<u>4 1/2 GEL 1/4 FLO SEAL</u>		
COMMON	@	
POZMIX	@	
GEL	@	
CHLORIDE	@	
ASC	@	
<u>170 SK TYPE 2</u>	@ <u>1595</u>	<u>271150</u>
<u>FLO SEAL 4 1/2"</u>	@ <u>292</u>	<u>12474</u>
HANDLING <u>172</u>	@ <u>248</u>	<u>42656</u>
MILEAGE <u>7.6</u>	@ <u>2.6</u>	<u>19916</u>
		TOTAL <u>375680</u>

PUMP TRUCK	CEMENTER <u>Robblyan</u>
# <u>549/550</u>	HELPER <u>A Tapia</u>
BULK TRUCK	
# <u>456/239</u>	DRIVER <u>A Espinosa</u>
BULK TRUCK	
#	DRIVER

REMARKS:

Thank You!

CHARGE TO: AMERICAL WARRIOR

STREET _____

CITY _____ STATE _____ ZIP _____

SERVICE

DEPTH OF JOB	<u>1734</u>	
PUMP TRUCK CHARGE		<u>1250.00</u>
EXTRA FOOTAGE	@	
MILEAGE	@ <u>7.6</u>	<u>199.00</u>
MANIFOLD	@	
<u>CTUEN</u>	@ <u>440</u>	<u>110.00</u>
		TOTAL <u>1552.00</u>

PLUG & FLOAT EQUIPMENT

<u>N/A</u>	@	
	@	
	@	
	@	
		TOTAL _____

To: Allied Oil & Gas Services, LLC.
You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

PRINTED NAME _____

SIGNATURE [Signature]

SALES TAX (If Any) _____

TOTAL CHARGES 5308.80

DISCOUNT Emilia's Paper IF PAID IN 30 DAYS

Net \$ 4247.04



DRILL STEM TEST REPORT

Prepared For: **American Warrior Inc**

PO Box 399
Garden City KS 67846

ATTN: Pete Debennham

Holt #3-12

12-32s-35w Stevens,KS

Start Date: 2013.03.09 @ 06:10:35

End Date: 2013.03.09 @ 14:15:59

Job Ticket #: 50047 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620

Printed: 2013.03.20 @ 15:19:37



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

American Warrior Inc
PO Box 399
Garden City KS 67846
ATTN: Pete Debennham

12-32s-35w Stevens,KS

Holt #3-12

Job Ticket: 50047

DST#: 1

Test Start: 2013.03.09 @ 06:10:35

GENERAL INFORMATION:

Formation: **KC A**
 Deviated: No Whipstock: 0.00 ft (KB)
 Time Tool Opened: 08:54:45
 Time Test Ended: 14:15:59
 Interval: **4714.00 ft (KB) To 4740.00 ft (KB) (TVD)**
 Total Depth: 4740.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Shane McBride
 Unit No: 55
 Reference Elevations: 2933.00 ft (KB)
 2920.00 ft (CF)
 KB to GR/CF: 13.00 ft

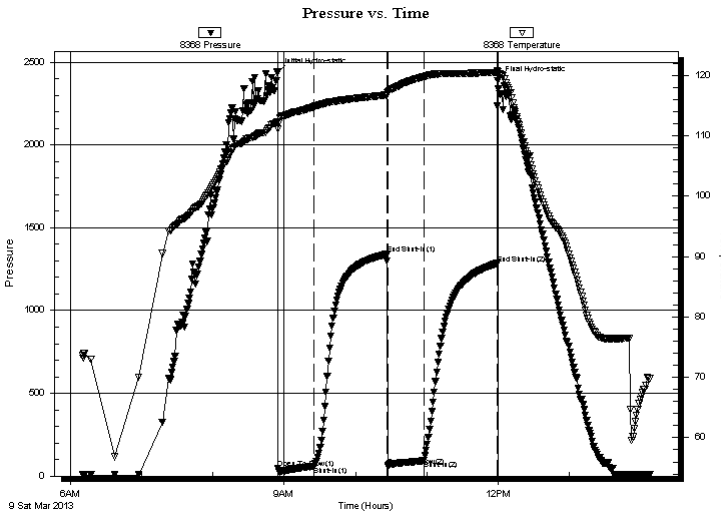
Serial #: 8368

Outside

Press @ Run Depth: 93.89 psig @ 4715.00 ft (KB)
 Start Date: 2013.03.09 End Date: 2013.03.09
 Start Time: 06:10:35 End Time: 14:07:59
 Capacity: 8000.00 psig
 Last Calib.: 2013.03.09
 Time On Btm: 2013.03.09 @ 08:54:30
 Time Off Btm: 2013.03.09 @ 11:59:30

TEST COMMENT: B.O.B. in 9 1/2 min. Surging blow
 No return
 B.O.B. in 15 1/2 min.
 No return

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2436.87	112.23	Initial Hydro-static
1	46.50	111.10	Open To Flow (1)
31	59.70	114.79	Shut-In(1)
92	1339.09	116.73	End Shut-In(1)
93	59.84	117.09	Open To Flow (2)
123	93.89	119.76	Shut-In(2)
185	1283.81	120.49	End Shut-In(2)
185	2390.43	120.66	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
150.00	w c m 35%w 65%m	0.74
0.00	330' w eak gas in pipe	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

American Warrior Inc

12-32s-35w Stevens,KS

PO Box 399
Garden City KS 67846

Holt #3-12

Job Ticket: 50047

DST#: 1

ATTN: Pete Debennham

Test Start: 2013.03.09 @ 06:10:35

Tool Information

Drill Pipe:	Length: 4522.00 ft	Diameter: 3.80 inches	Volume: 63.43 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: 25000.00 lb
Drill Collar:	Length: 188.00 ft	Diameter: 2.25 inches	Volume: 0.92 bbl	Weight to Pull Loose: 98000.00 lb
			<u>Total Volume: 64.35 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	23.00 ft			String Weight: Initial 73000.00 lb
Depth to Top Packer:	4714.00 ft			Final 77000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	26.00 ft			
Tool Length:	53.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Change Over Sub	1.00			4688.00	
Shut In Tool	5.00			4693.00	
Hydraulic tool	5.00			4698.00	
Jars	5.00			4703.00	
Safety Joint	2.00			4705.00	
Packer	5.00			4710.00	27.00 Bottom Of Top Packer
Packer	4.00			4714.00	
Stubb	1.00			4715.00	
Recorder	0.00	6667	Inside	4715.00	
Recorder	0.00	8368	Outside	4715.00	
Perforations	20.00			4735.00	
Bullnose	5.00			4740.00	26.00 Bottom Packers & Anchor

Total Tool Length: 53.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

American Warrior Inc

12-32s-35w Stevens,KS

PO Box 399
Garden City KS 67846

Holt #3-12

Job Ticket: 50047

DST#: 1

ATTN: Pete Debennham

Test Start: 2013.03.09 @ 06:10:35

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:

40000 ppm

Viscosity: 49.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.17 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 2500.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
150.00	w c m 35%w 65%m	0.738
0.00	330' weak gas in pipe	0.000

Total Length: 150.00 ft Total Volume: 0.738 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

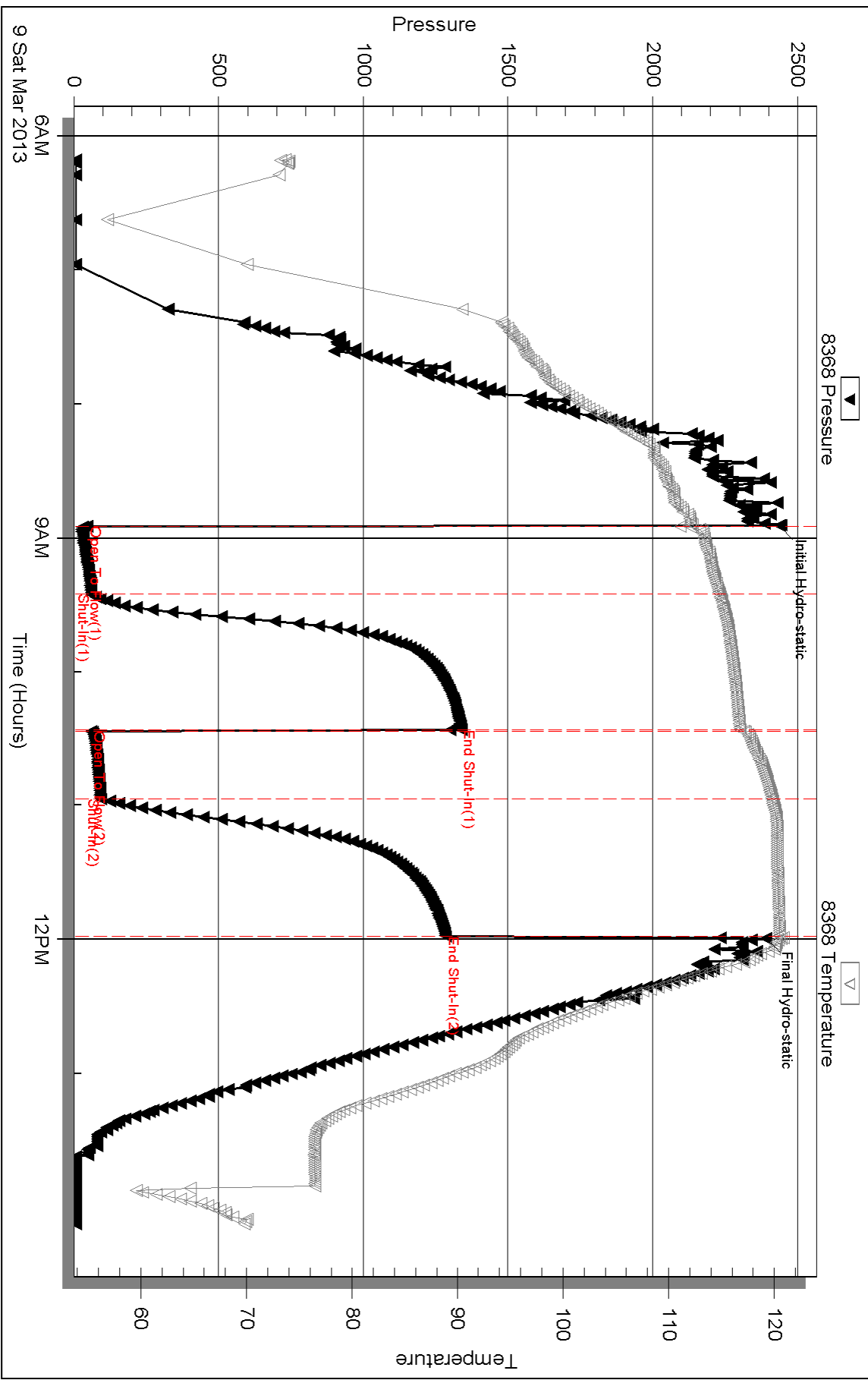
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: rw .170 @ 70*f = 40,000

Pressure vs. Time



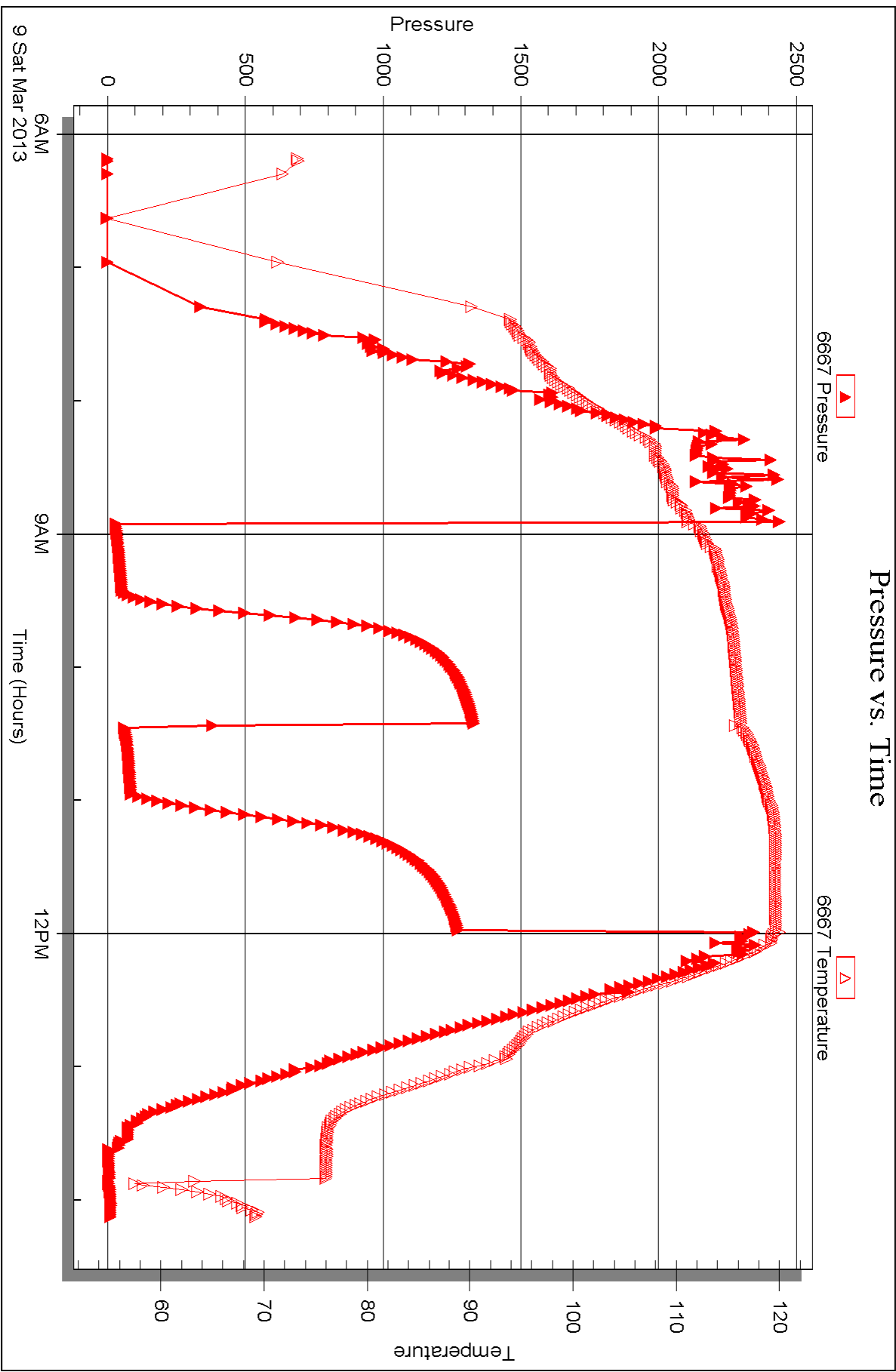
Serial #: 6667

Inside

American Warrior Inc

Holt #3-12

DST Test Number: 1





DRILL STEM TEST REPORT

Prepared For: **American Warrior Inc**

PO Box 399
Garden City KS 67846

ATTN: Pete Debennham

Holt #3-12

12-32s-35w Stevens,KS

Start Date: 2013.03.13 @ 21:50:56

End Date: 2013.03.14 @ 04:05:56

Job Ticket #: 50048 DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620

Printed: 2013.03.20 @ 15:18:57



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

American Warrior Inc
 PO Box 399
 Garden City KS 67846
 ATTN: Pete Debennham

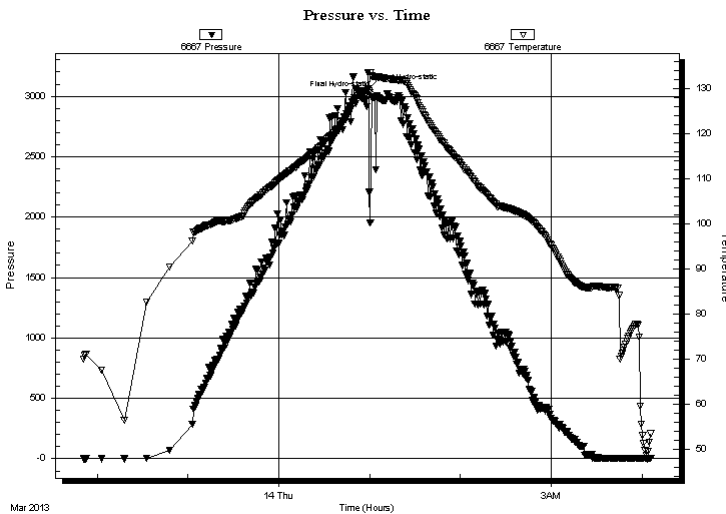
12-32s-35w Stevens,KS
Holt #3-12
 Job Ticket: 50048 **DST#: 2**
 Test Start: 2013.03.13 @ 21:50:56

GENERAL INFORMATION:

Formation: **Chester**
 Deviated: No Whipstock: 0.00 ft (KB)
 Time Tool Opened: 01:00:00
 Time Test Ended: 04:05:56
 Interval: **6045.00 ft (KB) To 6060.00 ft (KB) (TVD)**
 Total Depth: 6060.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Shane McBride
 Unit No: 55
 Reference Elevations: 2933.00 ft (KB)
 2920.00 ft (CF)
 KB to GR/CF: 13.00 ft

Serial #: 6667 Inside
 Press @ Run Depth: psig @ 6046.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2013.03.13 End Date: 2013.03.14 Last Calib.: 2013.03.14
 Start Time: 21:50:56 End Time: 04:05:56 Time On Btm: 2013.03.14 @ 00:59:26
 Time Off Btm: 2013.03.14 @ 01:04:41

TEST COMMENT: Packers failed @ open , reset failed again , pull tool



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	3063.29	129.40	Initial Hydro-static
6	3001.98	132.65	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
500.00	mud 100% m	5.30

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

American Warrior Inc

12-32s-35w Stevens,KS

PO Box 399
Garden City KS 67846

Holt #3-12

Job Ticket: 50048

DST#: 2

ATTN: Pete Debennham

Test Start: 2013.03.13 @ 21:50:56

Tool Information

Drill Pipe:	Length: 5852.00 ft	Diameter: 3.80 inches	Volume: 82.09 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: 25000.00 lb
Drill Collar:	Length: 188.00 ft	Diameter: 2.25 inches	Volume: 0.92 bbl	Weight to Pull Loose: 90000.00 lb
			<u>Total Volume: 83.01 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	22.00 ft			String Weight: Initial 82000.00 lb
Depth to Top Packer:	6045.00 ft			Final 84000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	15.00 ft			
Tool Length:	42.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			6019.00	
Shut In Tool	5.00			6024.00	
Hydraulic tool	5.00			6029.00	
Jars	5.00			6034.00	
Safety Joint	2.00			6036.00	
Packer	5.00			6041.00	27.00 Bottom Of Top Packer
Packer	4.00			6045.00	
Stubb	1.00			6046.00	
Recorder	0.00	6667	Inside	6046.00	
Recorder	0.00	8368	Outside	6046.00	
Perforations	9.00			6055.00	
Bullnose	5.00			6060.00	15.00 Bottom Packers & Anchor

Total Tool Length: 42.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

American Warrior Inc

12-32s-35w Stevens,KS

PO Box 399
Garden City KS 67846

Holt #3-12

Job Ticket: 50048

DST#: 2

ATTN: Pete Debennham

Test Start: 2013.03.13 @ 21:50:56

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: 50.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.39 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 3000.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
500.00	mud 100% m	5.301

Total Length: 500.00 ft Total Volume: 5.301 bbl

Num Fluid Samples: 0

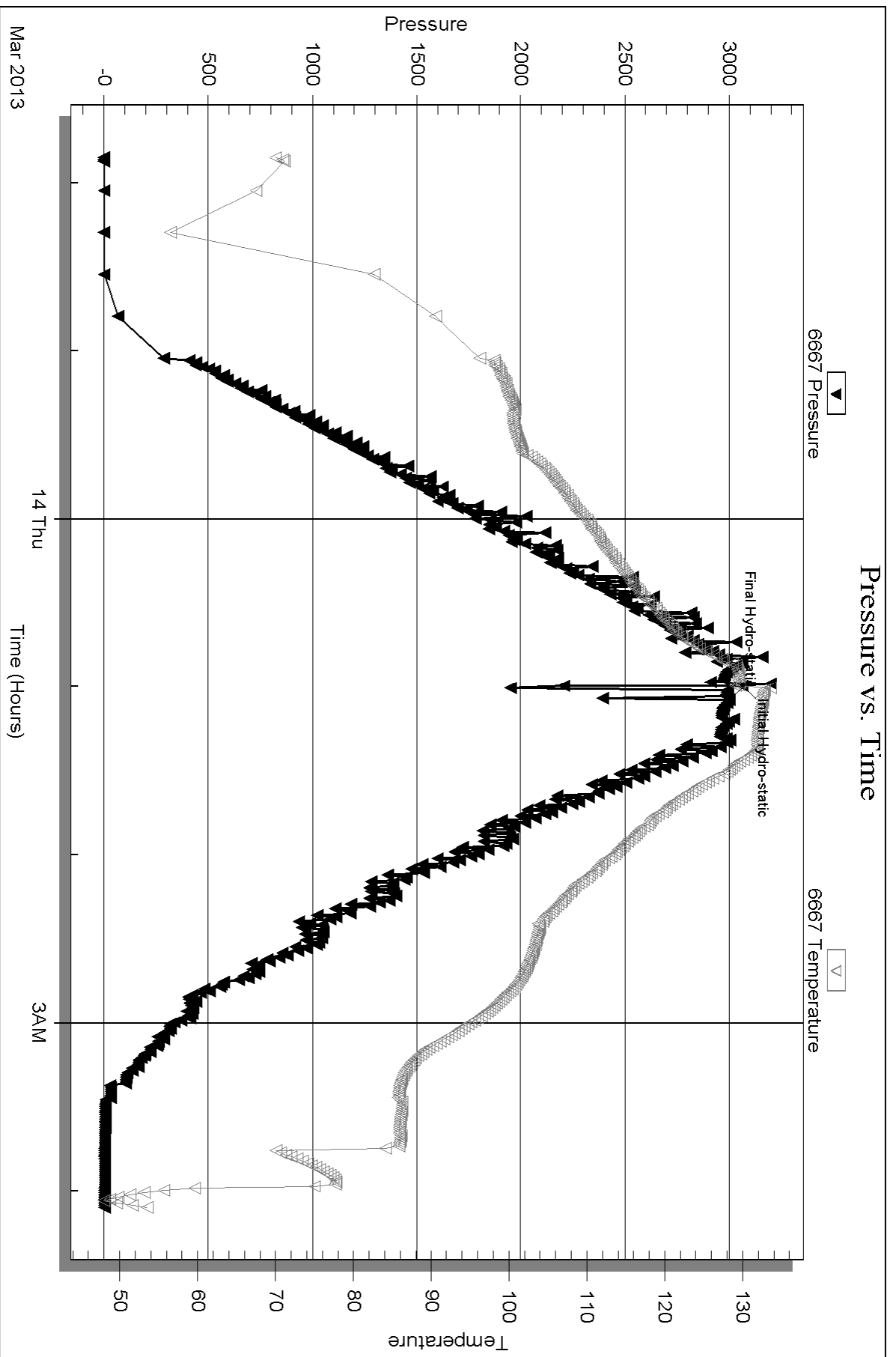
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

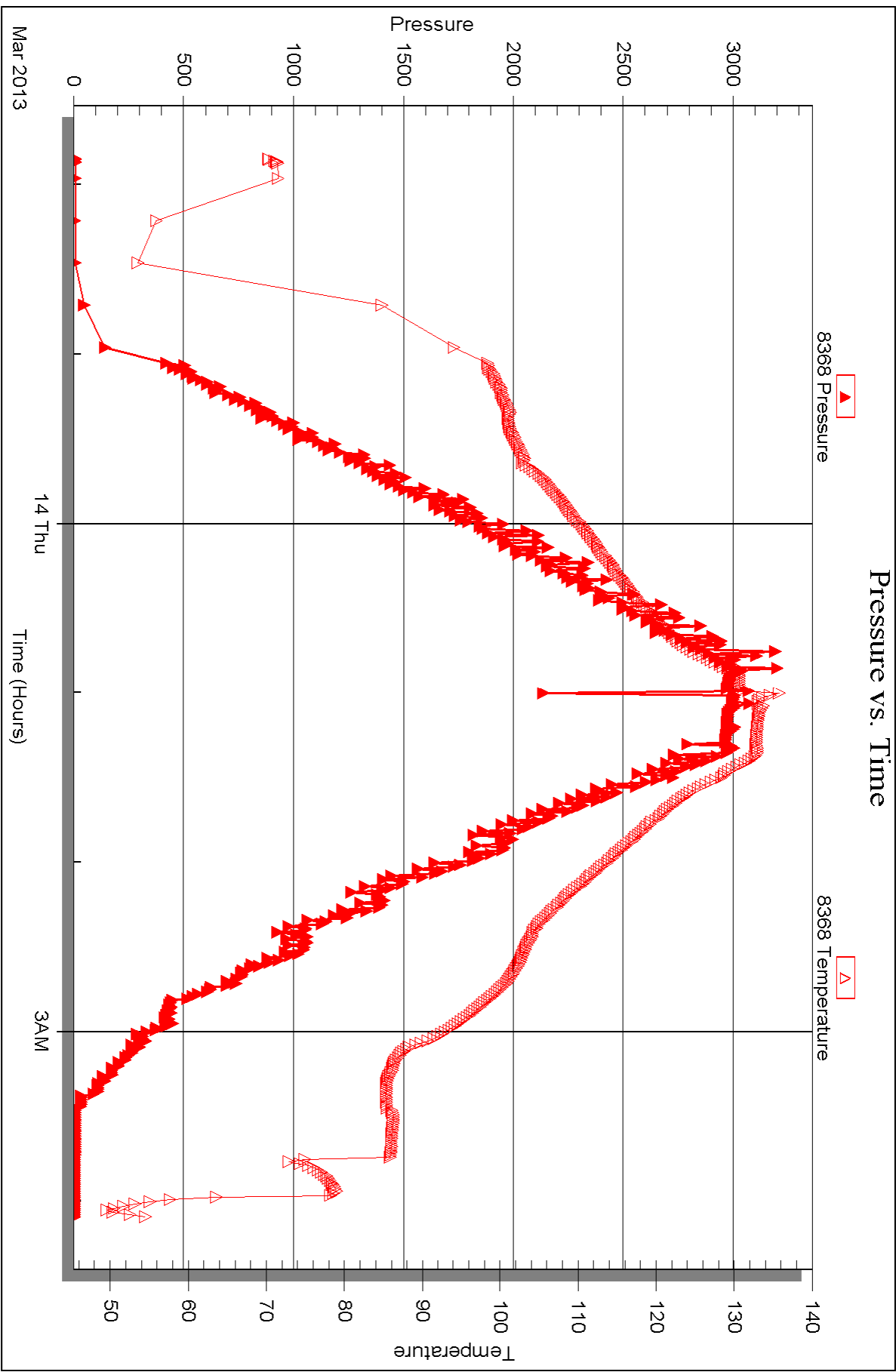


Serial #: 8368

Outside American Warrior Inc

Holt #3-12

DST Test Number: 2



Triobite Testing, Inc

Ref. No: 50048

Printed: 2013.03.20 @ 15:19:00



DRILL STEM TEST REPORT

Prepared For: **American Warrior Inc**

PO Box 399
Garden City KS 67846

ATTN: Pete Debennham

Holt #3-12

12-32s-35w Stevens,KS

Start Date: 2013.03.14 @ 04:26:08

End Date: 2013.03.14 @ 12:52:53

Job Ticket #: 50049 DST #: 3

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620

Printed: 2013.03.20 @ 15:18:14



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

American Warrior Inc
 PO Box 399
 Garden City KS 67846
 ATTN: Pete Debennham

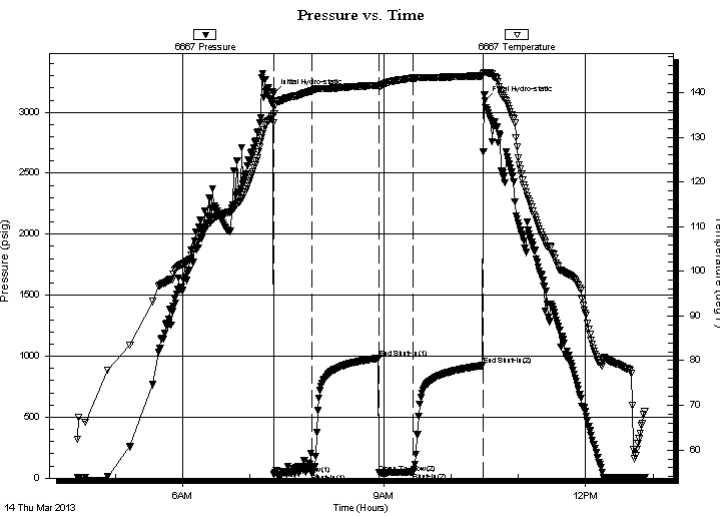
12-32s-35w Stevens,KS
Holt #3-12
 Job Ticket: 50049 **DST#: 3**
 Test Start: 2013.03.14 @ 04:26:08

GENERAL INFORMATION:

Formation: **Chester**
 Deviated: No Whipstock: 0.00 ft (KB)
 Time Tool Opened: 07:21:08
 Time Test Ended: 12:52:53
 Interval: **6035.00 ft (KB) To 6060.00 ft (KB) (TVD)**
 Total Depth: 6060.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Shane McBride
 Unit No: 55
 Reference Elevations: 2933.00 ft (KB)
 2920.00 ft (CF)
 KB to GR/CF: 13.00 ft

Serial #: 6667 Inside
 Press @ Run Depth: 51.31 psig @ 6036.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2013.03.14 End Date: 2013.03.14 Last Calib.: 2013.03.14
 Start Time: 04:26:08 End Time: 12:52:53 Time On Btm: 2013.03.14 @ 07:20:53
 Time Off Btm: 2013.03.14 @ 10:29:53

TEST COMMENT: 1/2" blow
 No return
 Weak surface blow, died in 11 min.
 No return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	3151.12	134.77	Initial Hydro-static
1	27.81	133.23	Open To Flow (1)
35	41.28	140.31	Shut-In(1)
94	983.57	141.64	End Shut-In(1)
95	42.98	141.27	Open To Flow (2)
125	51.31	143.27	Shut-In(2)
187	923.26	143.76	End Shut-In(2)
189	3096.04	144.53	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	Heavy thick mud 100% m	0.30

* Recovery from multiple tests

Gas Rates

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



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

American Warrior Inc
 PO Box 399
 Garden City KS 67846
 ATTN: Pete Debennham

12-32s-35w Stevens,KS
Holt #3-12
 Job Ticket: 50049 **DST#: 3**
 Test Start: 2013.03.14 @ 04:26:08

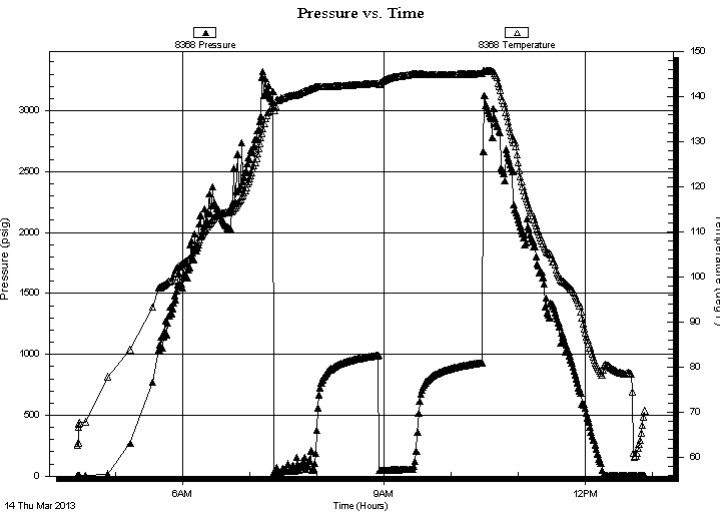
GENERAL INFORMATION:

Formation: **Chester**
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 Interval: **6035.00 ft (KB) To 6060.00 ft (KB) (TVD)**
 Total Depth: 6060.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Shane McBride
 Unit No: 55
 Reference Elevations: 2933.00 ft (KB)
 2920.00 ft (CF)
 KB to GR/CF: 13.00 ft

Serial #: 8368 Outside

Press @ Run Depth: psig @ 6036.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2013.03.14 End Date: 2013.03.14 Last Calib.: 2013.03.14
 Start Time: 04:26:01 End Time: 12:52:55 Time On Btm:
 Time Off Btm:

TEST COMMENT: 1/2" blow
 No return
 Weak surface blow, died in 11 min.
 No return



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
60.00	Heavy thick mud 100%m	0.30

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

American Warrior Inc

12-32s-35w Stevens,KS

PO Box 399
Garden City KS 67846

Holt #3-12

Job Ticket: 50049

DST#: 3

ATTN: Pete Debennham

Test Start: 2013.03.14 @ 04:26:08

Tool Information

Drill Pipe:	Length: 5852.00 ft	Diameter: 3.80 inches	Volume: 82.09 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:	25000.00 lb
Drill Collar:	Length: 188.00 ft	Diameter: 2.25 inches	Volume: 0.92 bbl	Weight to Pull Loose:	98000.00 lb
			<u>Total Volume: 83.01 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	32.00 ft			String Weight: Initial	82000.00 lb
Depth to Top Packer:	6035.00 ft			Final	82000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	25.00 ft				
Tool Length:	52.00 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			6009.00	
Shut In Tool	5.00			6014.00	
Hydraulic tool	5.00			6019.00	
Jars	5.00			6024.00	
Safety Joint	2.00			6026.00	
Packer	5.00			6031.00	27.00 Bottom Of Top Packer
Packer	4.00			6035.00	
Stubb	1.00			6036.00	
Recorder	0.00	6667	Inside	6036.00	
Recorder	0.00	8368	Outside	6036.00	
Perforations	19.00			6055.00	
Bullnose	5.00			6060.00	25.00 Bottom Packers & Anchor

Total Tool Length: 52.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

American Warrior Inc

12-32s-35w Stevens,KS

PO Box 399
Garden City KS 67846

Holt #3-12

Job Ticket: 50049

DST#: 3

ATTN: Pete Debennham

Test Start: 2013.03.14 @ 04:26:08

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: 50.00 sec/qt

Cushion Volume:

bbf

Water Loss: 6.38 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 3000.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbf
60.00	Heavy thick mud 100%m	0.295

Total Length: 60.00 ft Total Volume: 0.295 bbf

Num Fluid Samples: 0

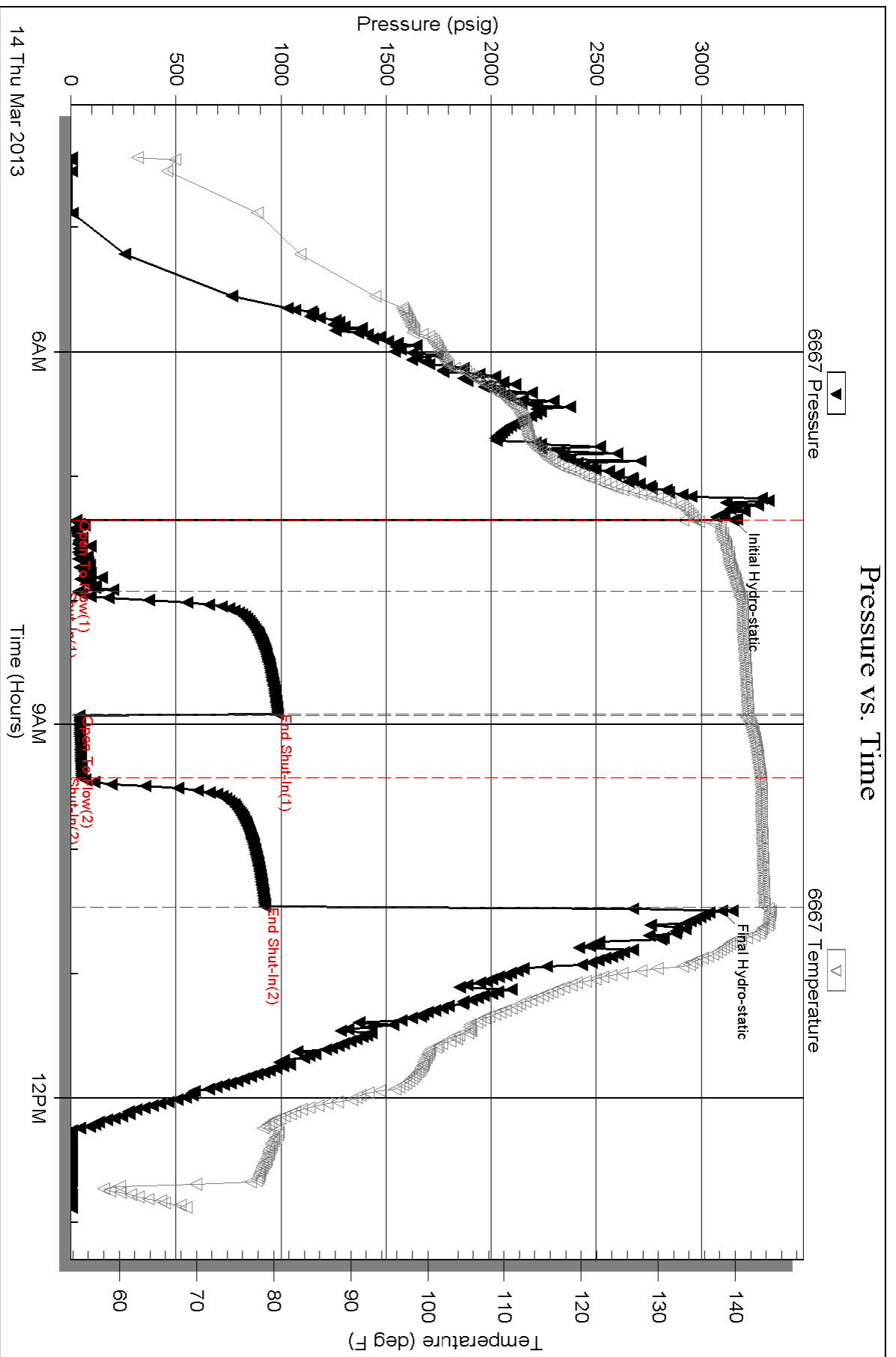
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

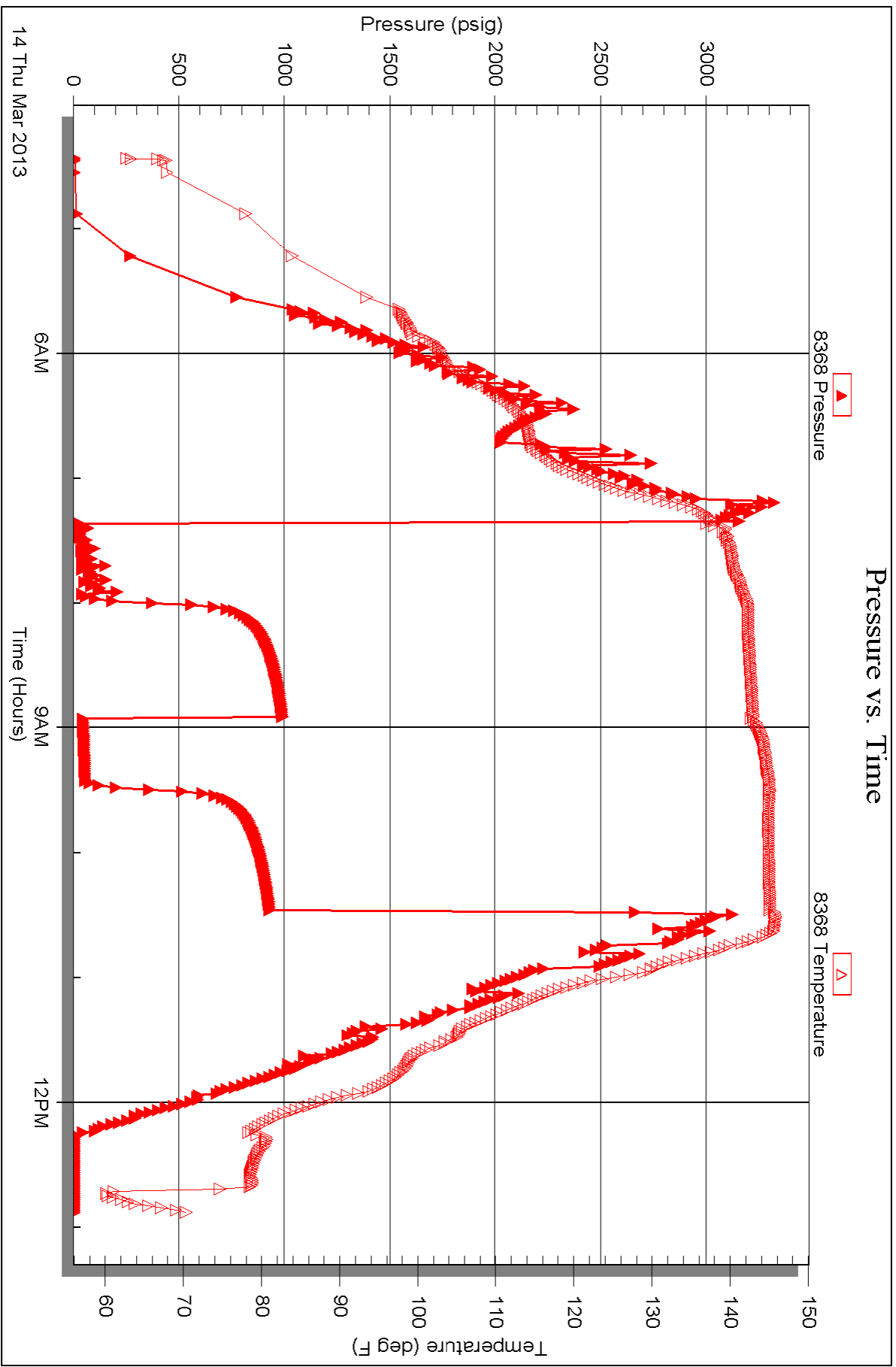


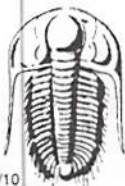
Serial #: 8368

Outside American Warrior Inc

Holt #3-12

DST Test Number: 3





TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 50047

4/10

Well Name & No. Holt # 3-12 Test No. #1 Date 3/9/13
 Company American Warrior Inc Elevation 2933 KB 2920 GL
 Address 3118 Cumming Rd. P.O. Box 399 Garden City, KS 67846
 Co. Rep / Geo. Pete Debenham Rig Duke #9
 Location: Sec. 12 Twp. 32S Rge. 35W Co. Stevens State Ks

Interval Tested 4714 4740 Zone Tested LC "A"
 Anchor Length 26 Drill Pipe Run 4322' Mud Wt. 9.2
 Top Packer Depth 4709 Drill Collars Run 188' Vis 19
 Bottom Packer Depth 4714 Wt. Pipe Run --- WL 7.2
 Total Depth 4740 Chlorides 2500 ppm System LCM #8
 Blow Description B.O.B. in 9 1/2 min
No return
B.O.B. in 15 1/2 min.
No return

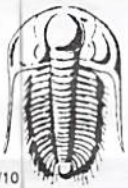
Rec	Feet of	%gas	%oil	%water	%mud
<u>150'</u>	<u>WCM</u>			<u>35%</u>	<u>65%</u>
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of <u>330' weak Gas w Pipe</u>	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 150' BHT 121° Gravity --- API RW .170 @ 70° F Chlorides 40,000 ppm

(A) Initial Hydrostatic <u>2436</u>	<input checked="" type="checkbox"/> Test 1250	T-On Location <u>05:45</u>
(B) First Initial Flow <u>46</u>	<input checked="" type="checkbox"/> Jars 250	T-Started <u>06:10</u>
(C) First Final Flow <u>59</u>	<input checked="" type="checkbox"/> Safety Joint 75	T-Open <u>08:56</u>
(D) Initial Shut-In <u>1339</u>	<input checked="" type="checkbox"/> Circ Sub <u>N/C</u>	T-Pulled <u>11:54</u>
(E) Second Initial Flow <u>59</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>14:15</u>
(F) Second Final Flow <u>93</u>	<input checked="" type="checkbox"/> Mileage <u>200 RT</u> 310	Comments
(G) Final Shut-In <u>1283</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>2390</u>	<input type="checkbox"/> Straddle	<input type="checkbox"/> Ruined Shale Packer
	<input type="checkbox"/> Shale Packer	<input type="checkbox"/> Ruined Packer
Initial Open <u>30</u>	<input type="checkbox"/> Extra Packer	<input type="checkbox"/> Extra Copies
Initial Shut-In <u>60</u>	<input type="checkbox"/> Extra Recorder	Sub Total <u>0</u>
Final Flow <u>30</u>	<input type="checkbox"/> Day Standby	Total <u>1885</u>
Final Shut-In <u>60</u>	<input type="checkbox"/> Accessibility	MP/DST Disc't
	Sub Total <u>1885</u>	

Approved By [Signature] Our Representative [Signature]

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

Test Ticket

NO. 50048

4/10

Well Name & No. Holt #3-12 Test No. #2 Date 3/13/13
 Company American Warrior Inc Elevation 2933 KB 2920 GL
 Address 318 Cumming Rd - P.O. Box 399, Garden City, KS 67846
 Co. Rep / Geo. Bill Rig Lake #9
 Location: Sec. 12 Twp. 32S Rge. 35W Co. Stevens State KS

Interval Tested 6045 6060 Zone Tested Chester
 Anchor Length 15 Drill Pipe Run 5852' Mud Wt. 9.2
 Top Packer Depth 6040 Drill Collars Run 188' Vis 50
 Bottom Packer Depth 6045 Wt. Pipe Run WL 6.4
 Total Depth 6060 Chlorides 3000 ppm System LCM #70
 Blow Description Packers Failed @ open, Reset failed again, Pull Tool.

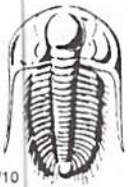
Rec	Feet of	%gas	%oil	%water	%mud
<u>500</u>	<u>Mud</u>			<u>100</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 500' BHT 133° Gravity API RW @ °F Chlorides ppm

(A) Initial Hydrostatic 3063 Test 1250 T-On Location 21:00
 (B) First Initial Flow Jars 250 T-Started 21:50
 (C) First Final Flow Safety Joint 75 T-Open 01:00
 (D) Initial Shut-In Circ Sub N/C T-Pulled 01:05
 (E) Second Initial Flow Hourly Standby T-Out 04:10
 (F) Second Final Flow Mileage 200 RT 310 Comments
 (G) Final Shut-In Sampler
 (H) Final Hydrostatic 3001 Straddle Ruined Shale Packer
 Shale Packer Ruined Packer
 Extra Packer Extra Copies
 Extra Recorder Sub Total 2625
 Day Standby 1d 78.75h Total 4510
 Accessibility MP/DST Disc't
 Sub Total 1885

Approved By [Signature] Our Representative [Signature]

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 50049

4/10

Well Name & No. Holt #3-12 Test No. #3 Date 3/14/13
 Company American Warrior Inc Elevation 2933 KB 2920 GL
 Address 318 Cumming Rd P.O. Box 399 Garden City, KS 67846
 Co. Rep / Geo. Bill Kemp Rig Duke #9
 Location: Sec. 12 Twp. 32S Rge. 35W Co. Stevens State KS

Interval Tested 6035 6060 Zone Tested Chester
 Anchor Length 25 Drill Pipe Run 5852 Mud Wt. 9.2
 Top Packer Depth 6030 Drill Collars Run 188 Vis 30
 Bottom Packer Depth 6035 Wt. Pipe Run --- WL 6.4
 Total Depth 6060 Chlorides 3000 ppm System LCM # 10

Blow Description 1/2" in blow
No return
Weak Surface blow died in 11 min.
No return

Rec	Feet of	%gas	%oil	%water	%mud
<u>60'</u>	<u>Heavy Thick Mud</u>			<u>100%</u>	
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 60' BHT 144° Gravity --- API RW --- @ --- °F Chlorides --- ppm

(A) Initial Hydrostatic <u>3151</u>	<input checked="" type="checkbox"/> Test <u>1450</u>	T-On Location <u>---</u>
(B) First Initial Flow <u>27</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>04:25</u>
(C) First Final Flow <u>41</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>07:25</u>
(D) Initial Shut-In <u>983</u>	<input checked="" type="checkbox"/> Circ Sub <u>n/c</u>	T-Pulled <u>10:25</u>
(E) Second Initial Flow <u>42</u>	<input type="checkbox"/> Hourly Standby <u>---</u>	T-Out <u>13:00</u>
(F) Second Final Flow <u>51</u>	<input checked="" type="checkbox"/> Mileage <u>200 RT</u> 310	Comments <u>Picked up tool 7:30 on 3/16</u>
(G) Final Shut-In <u>923</u>	<input type="checkbox"/> Sampler <u>---</u>	<input type="checkbox"/> Ruined Shale Packer <u>---</u>
(H) Final Hydrostatic <u>3096</u>	<input type="checkbox"/> Straddle <u>---</u>	<input type="checkbox"/> Ruined Packer <u>---</u>
	<input type="checkbox"/> Shale Packer <u>---</u>	<input type="checkbox"/> Extra Copies <u>---</u>

Initial Open 30
 Initial Shut-In 60
 Final Flow 30
 Final Shut-In 60

Sub Total 2085

Total 2885

MP/DST Direct ---

Approved By Bill Kemp Our Representative [Signature]

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MBC WELL LOGGING LLC

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

Well Name: HOLT 3-12 AMERICAN WARRIOR INC
 Location: STEVENS COUNTY, KANSAS USA
 Licence Number: 4058
 Spud Date: 3-4-2013
 Surface Coordinates: 1,514'fsl, 336'fwl SEC 12-T32S-R35W
 DK RIG 9
 Bottom Hole Coordinates: PIONEER WLC -DIL/SP/GR CNL/CAL/PE/
 API-15-189-22791-00
 Ground Elevation (ft): 2923' K.B. Elevation (ft): 2933'
 Logged Interval (ft): 4100 To: 6320 Total Depth (ft): ELOG 6314
 Formation: ST LOUIS P & A HOLT 3-12
 Type of Drilling Fluid: TURBO DRILLING FLUIDS,

Region: WILDCAT
 Drilling Completed: 3-15-2013

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

OPERATOR

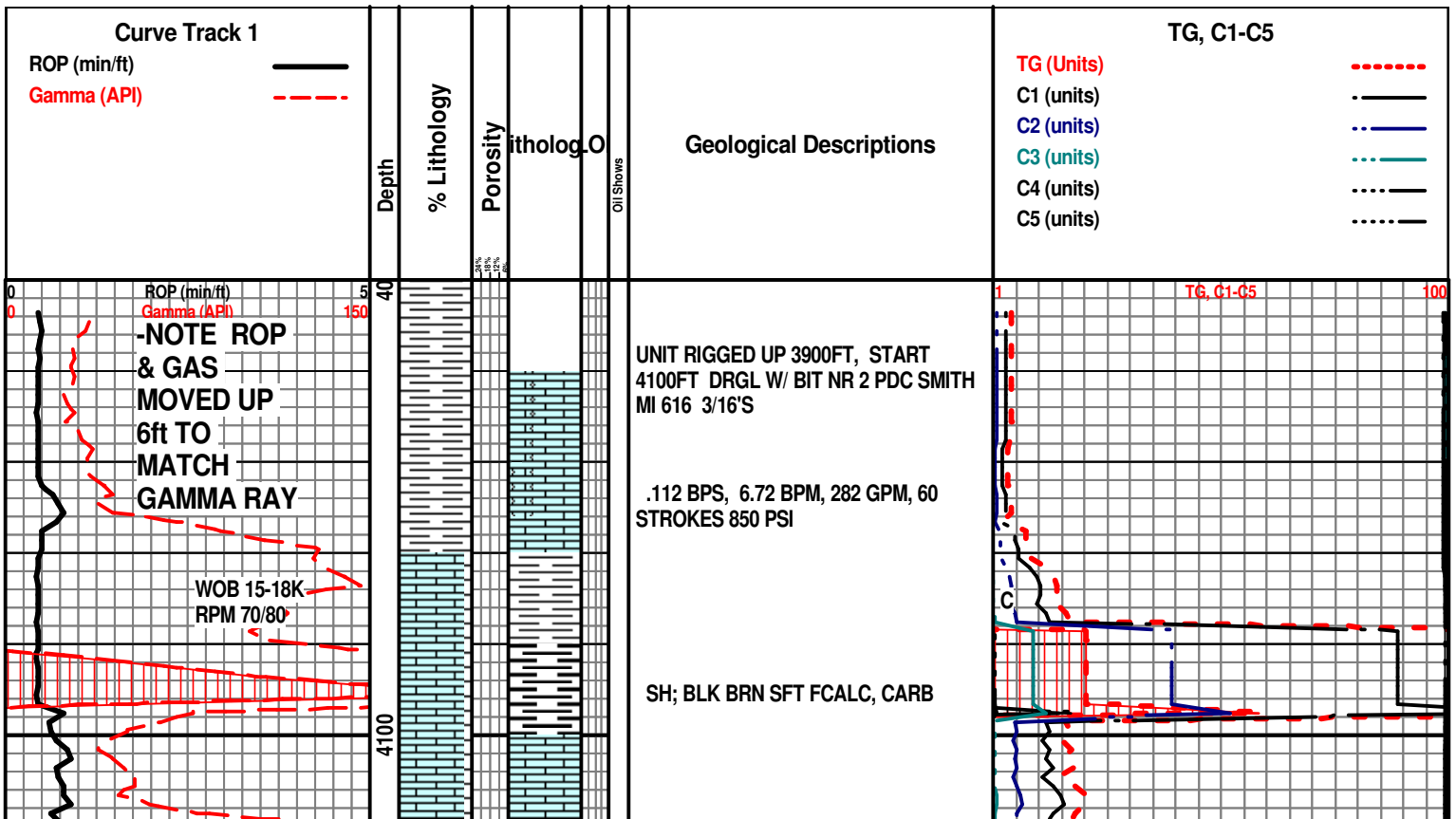
Company: AMERICAN WARRIOR INC
 Address: KEVIN WILES% -GEOLOGY
 3118 CUMMINGS RD
 GARDEN CITY, KANSAS 87646

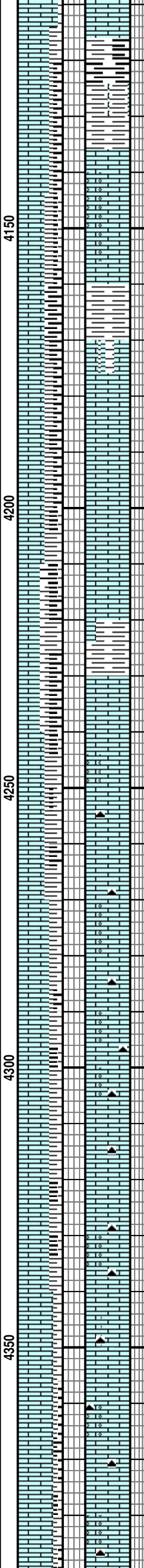
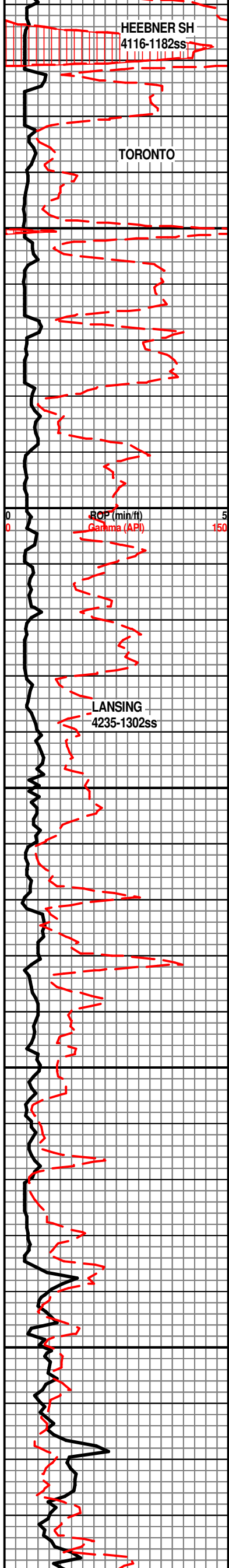
MUDLOGGER

Name: BILL KEMP
 Company: MBC WELL LOGGING LLC
 Address: 21156 RD 22
 MEADE, KANSAS 67864

ROCK TYPES

	Anhy		Oolitic ls -1		Salt		Grn sh strk		Calc shale
	Brec		Stgensndy-1		Sndy sh--reg		Lmy sh-2		Granitewash
	Cht		New ls-1		Sndy sh		Grn mott gy		Ls shly-b
	Coal		Carby shale		Slst-1		Shale-1		Poor sortd ss
	Congl		Lmy carby		Slty-shale		Red sh-1		Snd-ls-sh
	Dolo new		Carb sh		Lmy ss-1		Stgensndy-arkos		
	Newdolo ls		Gyp		Arkosic snd		Sndy ool ls		
	Ls & ooids		Slst		Ss		Sndy-ls-1		





LS; DIRTY LT GY SHLY FOSS SME VF GR PELL

SH; BLK BRN CARB SME LT GY TO GRN

LS; PALE BUFF WH, CHLKY TO SPARRY W/VF OOL & FOSS, NO ODOR, MFNSOC

SH; LT GY SILKEY

LS; GY FOSS SHLY

LS; LT GY BRTL SHLY & FOSS, INCRS LT BUFF/TN, FLAKEY MICRO FOSS SME OOL, NO ODOR, MFNSOC

SH; GY MED GY SME GRN

LS; LT BUFF, TN, GRITTY W/SME VF OOL CLSTRS, SME GY/TN HD DNS XLN, NO ODOR, MFNSOC

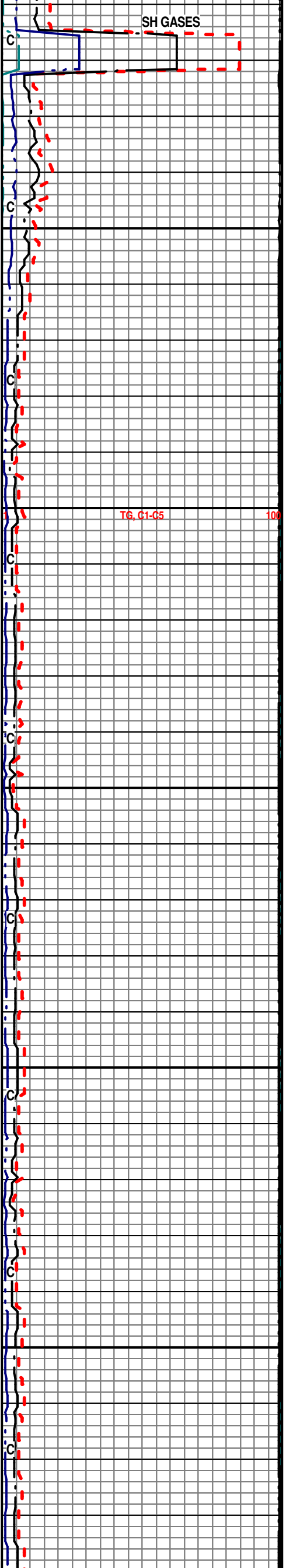
LS; GY WH HD DNS XLN W/TN FOSS CHT

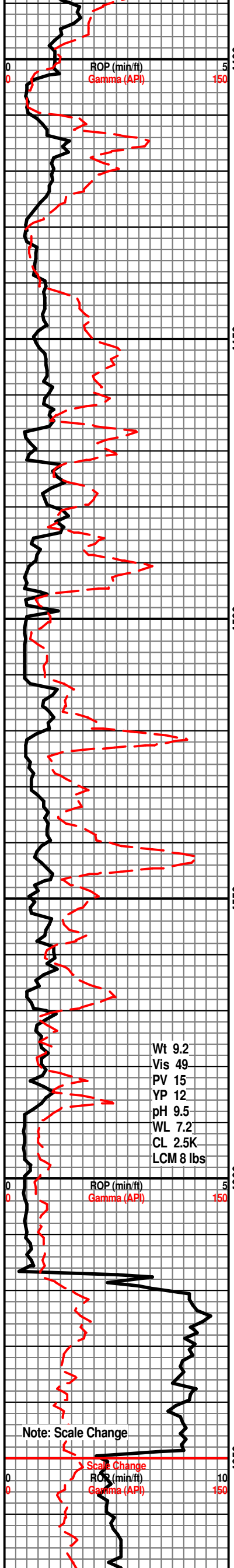
LS; LT BUFF CHLKY W/SHADOW VF OOL, PRED TN HD CRYP XLN, NO ODOR, MFNSOC

LS; CRM-BUFF WH SPARITIC VF OOL, SME W/FOSS, TN VIT CHT, INCRS VF GRITTY LM DUST W/MICRO BRN CARB PCES

LS; MED BRN HD CRYP TO VF XLN, SME SHELL FOSS FRGS

LS; DIRTY BRTL CHLKY TO VF GRN



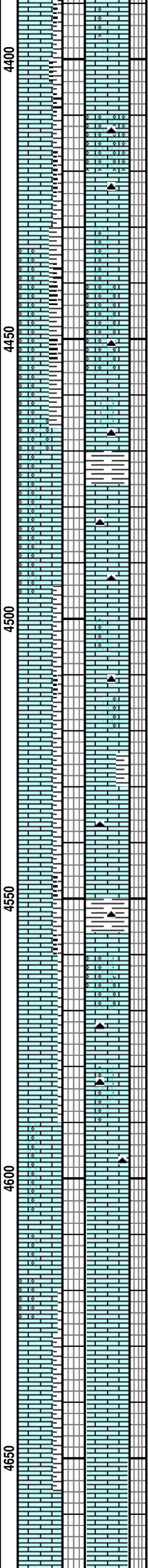


ROP (min/ft)
Gamma (API)

Wt 9.2
Vis 49
PV 15
YP 12
pH 9.5
WL 7.2
CL 2.5K
LCM 8 lbs

Note: Scale Change

Scale Change
ROP (min/ft)
Gamma (API)



LS; BUFF BRIL CHLKY TO VF GRNY
"DUSTY" VF OOL IP, SME DK BRN
SPARITIC VF OOL W/FOSS TUBES, NO
ODOR, MFNSOC

LS; BUFF RGH TXT, VF OOL W/ MED
VUGS, NO ODOR, MFNSOC

LS; LT TN BRN HD DNS VF XLN,
SHLY

LS; GY BRN SPARRY MED
OOLMOLD, SME VF OOL, WH CHT, NO
ODOR, MFNSOC

TR SFT LT RUST RED SH. PRED DK
GY

LS; LT BUFF BRN HD DNS RGH
GRITTY TXT, S-CHLKY, SLI SHLY, BRN
CHT, NO ODOR, MFNSOC

LS; LT GY BRN TN HD DNS F XLN
SME FOSS, SHLY INTR BEDD VF OOL
STRINGERS

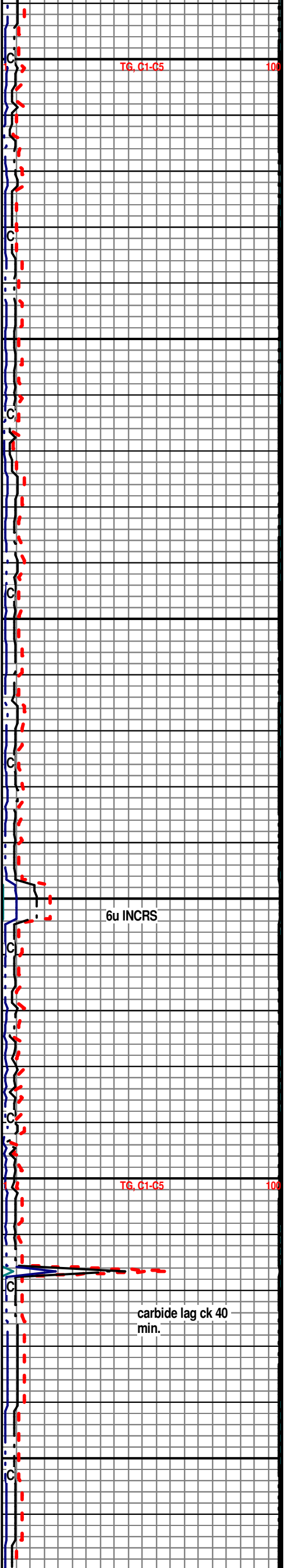
LS; TN SPARRY VF OOL W/MED TO
CRS VUGS & MOLDS, THIN RIM COAT,
NO ODOR, MFNSOC

LS; TN SPARRY VF OOL W/MED TO
CRS VUGS & MOLDS, THIN RIM COAT,
NO ODOR, MFNSOC

TRIP PDC BIT 4621, NB NR
3 CONE BIT 77/8"

LS; Med to lt mot brn f xln micsuc ip
sbchky cln foss occ isol pp vug &
moldic por no flor no stn or cut

LS; Mot brn gy f xln hd dns sil ip cln to
arg foss p vis por no show



TG, C1-C5

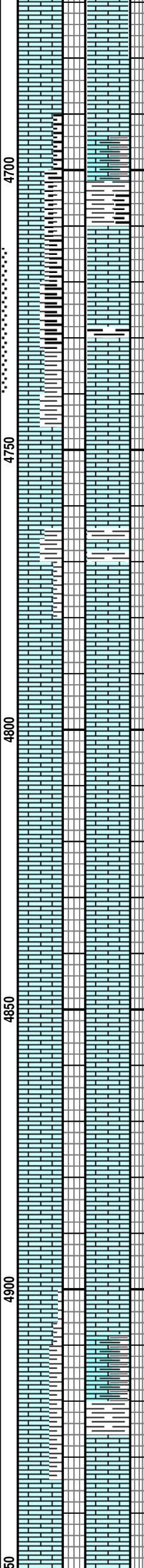
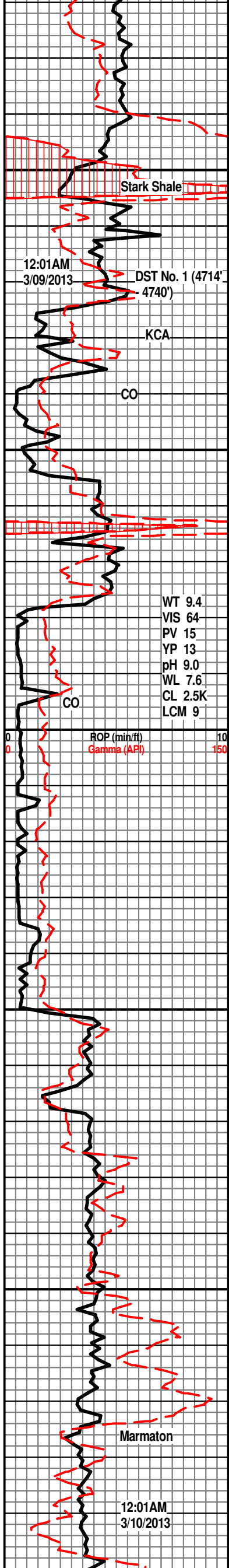
100

6u INCRS

TG, C1-C5

100

carbide lag ck 40
min.



LS: Mot brn gy f xln hd dns sil ip cln to arg foss p vis por no show

LS: Mot brn gy f xln hd dns sil ip arg to mrlly ip foss p vis por no show

SH: Blk dk gy frm sbfis to blkly carb micaq

LS: Mot brn gy f xln hd dns sil ip cln to arg foss p vis por no show

LS: Lt to med mot brn bf micxln micsuc to sl gran ip cln brit foss carb inclr fr intxln & f vug por pale lt bl to occ med yel hydrc flor(5% spl) fr to slow strmg to bldng cut no stn show dissipated when dried

LS: Med brn f xln brit cln v ool with exc oomoldic por goldbrn min flor no stn or cut

LD: Med to lt brn crpxln hd dns sil foss cln tt no show intbd with SH: Blk dk brn frm sbfis to blkly carb calc

LS: Brn oomicr f xln brit cln dull orngbrn min flor no stn no cut occ pyr & carb inclr

LS: Brn oomicr f xln brit cln pyr ip occ carb inclr dull orngbrn min flor no stn no cut

LS: Brn oomicr f xln brit cln pyr ip occ carb inclr dull orngbrn min flor no stn no cut

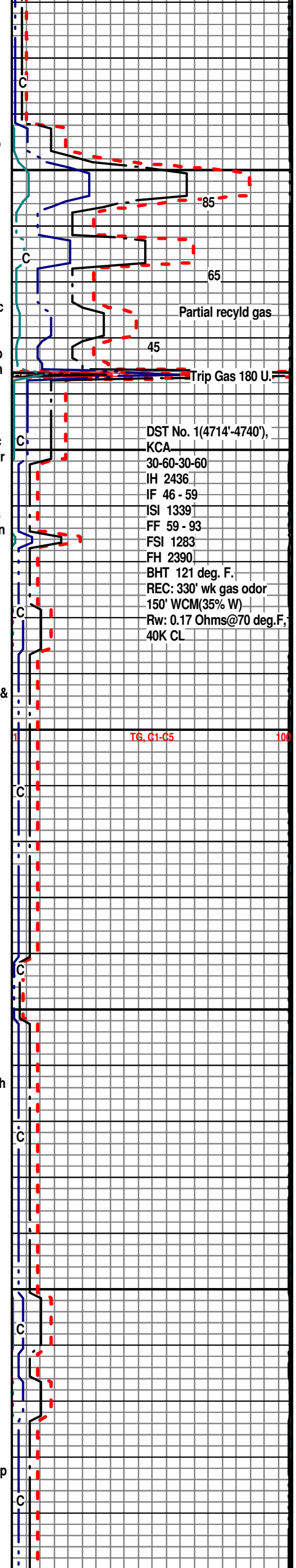
LS: Mot brn to gy f xln hd dns arg to mrlly ip p vis por no show occ v ool with moldic por - aa no show

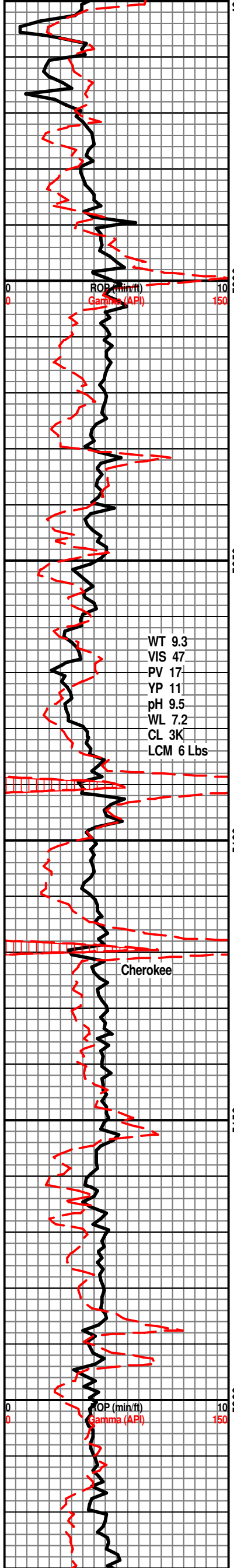
LS: Mot brn to gy f xln hd dns arg to mrlly ip p vis por no show

LS: Med to dk mot brn to gy micr f xln hd dns arg to mrlly ip foss tt no show

SH: Dk gy to brn frm blkly calc carb

LS: Med to lt mot brn bf f xln sbchky iop foss occ sndy & sl glauc pyr ip tt no show

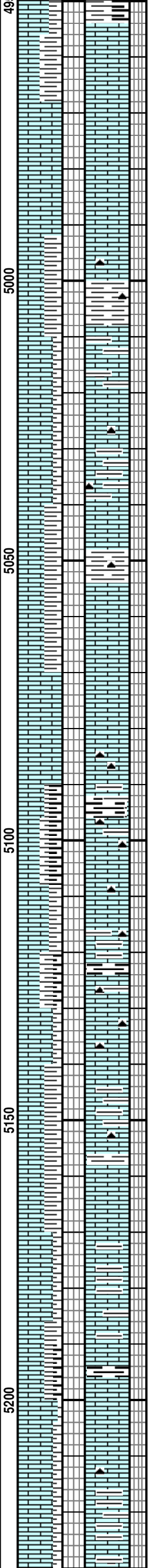




ROF (min/ft)
Gamma (API)

WT 9.3
VIS 47
PV 17
YP 11
pH 9.5
WL 7.2
CL 3K
LCM 6 Lbs

Cherokee



SH: Blk dk brn frm sbfis calc carb

LS: Brn bf f xln brit sbchky ip cln foss occ sndy & sl glauc pyr v ool with moldic por dull min flor no stn or cut no show

LS: Med brn crpxln hd dns sil foss tt no show

SH: Dk gy blk hd blk calc carb stly calc intbd with LS: Med mot brn to gy crpxln to micxln ip arg top mrlly ip foss ool pred hd sil & tt occ tr intxln & moldic por no flor no stn or cut tr CHRT: Brn mlky gy hd xln

KLS: Lt to med brn f xln sbchky ip cln to arg foss p vis por no show occ foss with tr moldic por

SH: Dk gy blk hd blk calc carb stly calc LS: Med mot brn to gy crpxln to micxln ip arg top mrlly ip foss ool pred hd sil & tt occ tr intxln & moldic por no flor no stn or cut tr CHRT: Brn mlky gy hd xln

LS: Med mot brn to gy crpxln to micxln ip arg top mrlly ip foss ool pred hd sil & tt occ tr intxln & moldic por no flor no stn or cut tr CHRT: Brn mlky gy hd xln

SH: Blk dk brn frm fis to blk ip wxy carb tr CHRT: Brn dk mlky gy hd xln

LS: Gy brn bf micr crpxln hd dns sil pyr arg to mrlly ip tt no show

SH: Blk frm fis carb

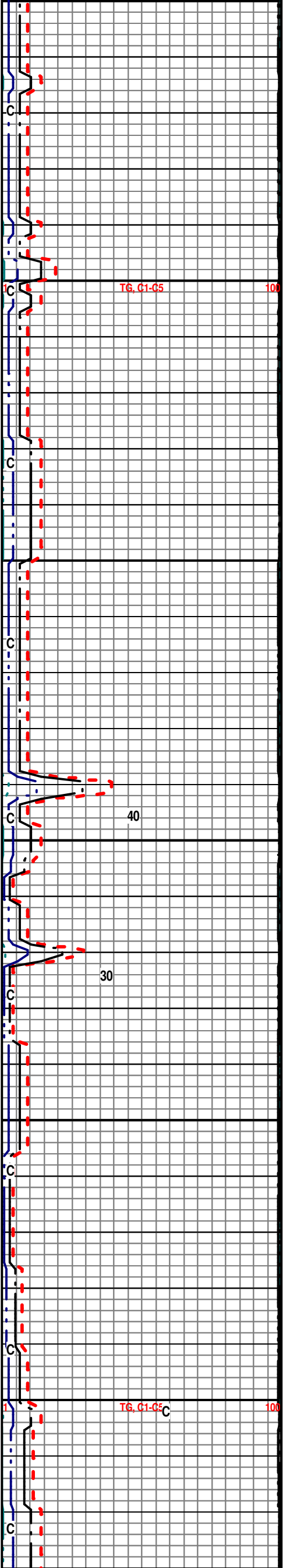
LS: Med to dk mot brn fcrpxln hd dns sil pyr arg to mrlly ip foss carb tt no show

LS: Pred aa dk mot brn to gy dk brn crpxln hd dns stly ip carb foss arg to mrlly tt no show intbd with SH: Dk gy to blk blk calc

LS: Med to dk mot brn to gy occ blk crpxln hd dns sil ip foss carb arg to mrlly occ cln tt no flor no stn or cut intbd with SH: Gy blk blk foss carb tr CHRT: Brn mlky gy hd xln occ tripol

LS: Med to dk brn f xln dns mrlly stly p vis por no show

LS: Med to dk mot brn to gy occ blk crpxln hd dns sil ip foss carb arg to mrlly occ cln tt no flor no stn or cut intbd with SH: Gy blk blk foss carb tr CHRT: Brn mlky gy hd xln occ tripol

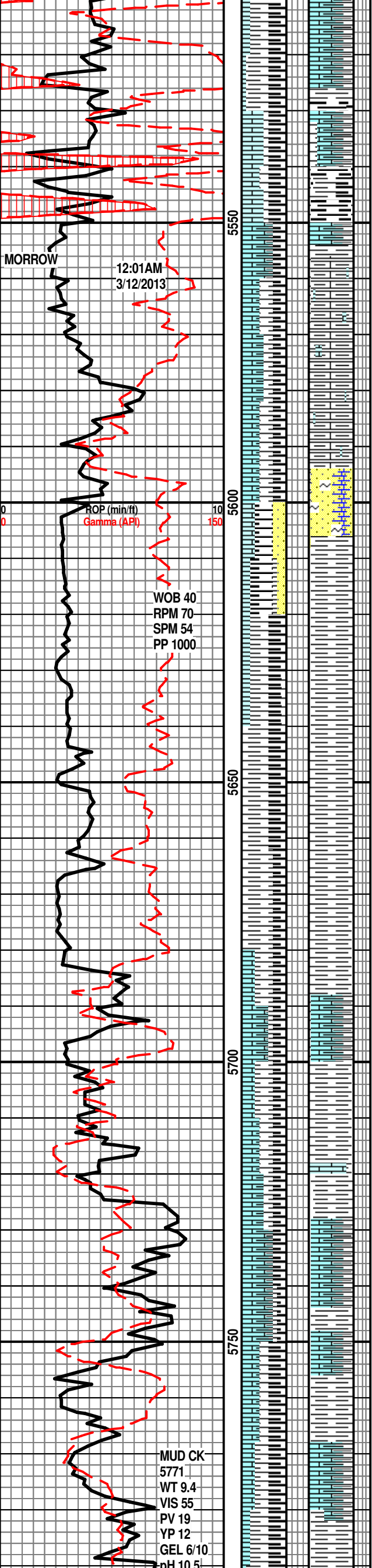


TG, C1-C5

40

30

TG, C1-C5



LS: LY GY TO GYISH TAN VF XLN V SHALY APPEAR

SH: BLK F TEXT FIRM CARB BLKY

SHALE GAS

SH: LT TO DK GY F TEXT FIRM MOSTLY PLTY INTER BEDDED WITH SME LS:LT GY VF XLN SHALY

SS: VF CLR RND QTZ GNS WELL SORTED TIGHTLY CEMENTED IN OFF WHT MICROXLN LIMEY MTX TRS GLAUC

TG, C1-C5

100

SH: MOST LT GY SLI SILTY SLI WEATHERED APPEAR SME BLK BLKY SLI CARB APPEAR SME DK BRN MUDST

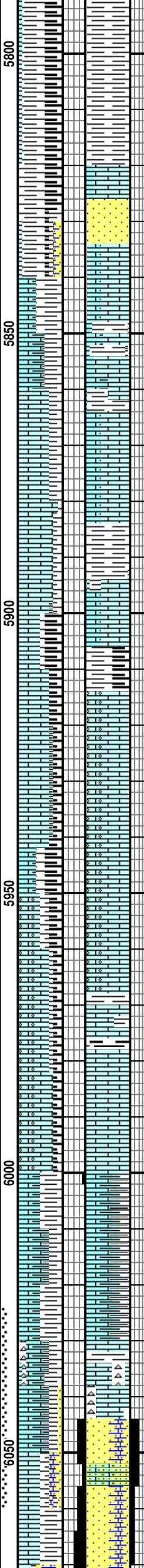
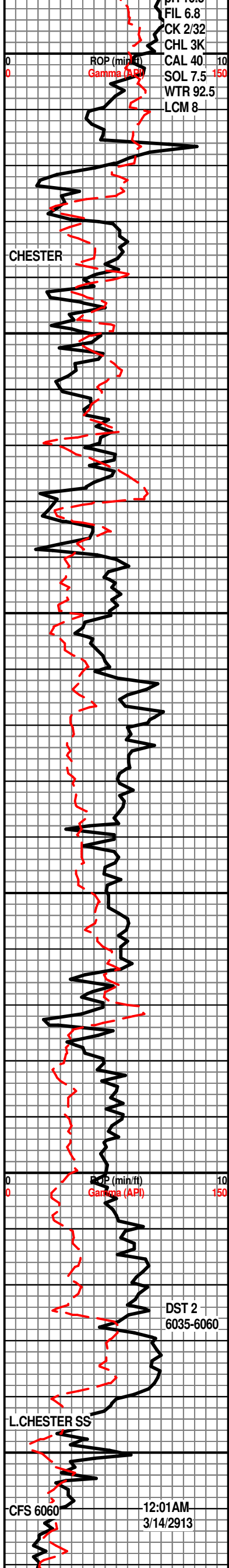
SH: MOST BLK TO DK GY F TEXT FIRM SME PIECES MICRO PYRITIC SME FREE PYR SME LT GY SFT SILTY TEXT

LS: LT GY VF XLN V SHALY APPEAR

SH: DK GY TO BLK SLI CARB APPEAR PLTY F TEXT OOLITIC IP

LS: TAN LT TO DK BRN SME DK GY TAN MOTT VF XLN SUB-CHLKY TRS SUCROSIC

SH: LT TO FK GY TRS RED TRS LT BRN F TEXT FIRM PLTY TO SPLINTERY



SH: LT TO FK GY TRS RED TRS LT BRN F TEXT FIRM PLTY TO SPLINTERY

LS:TAN LT TO DK BRN SME DK GY TAN MOTT VF XLN SUB-CHLKY TRS SUCROSIC

SS:VF CLR RND QTZ GNS WELL SORT WELL CEMENT IN LT GY CALC SHALY APPEARING MTX TRS IMBEDDED GLAUC TRS MICRO MICA

LS: LT GY GY/WHT MOTT VF XLN SLI CHLKY APPEAR FIRM

LS: LT GY GY/WHT MOTT VF XLN SLI CHLKY APPEAR FIRM

SH:DK GY TO BLK F TEXT FIRM PLTY TO SPLINTERY SLI CARB APPEAR

SH:DK GY TO BLK F TEXT FIRM PLTY TO SPLINTERY SLI CARB APPEAR

LS:TAN LT BRN VF XLN SUB CHLKY FIRM SME IMBEDDED OOLITES

LS:LT BRN VF XLN TO SME MICRO XLN MOD SFT TO HD DEMSE SHALY IP

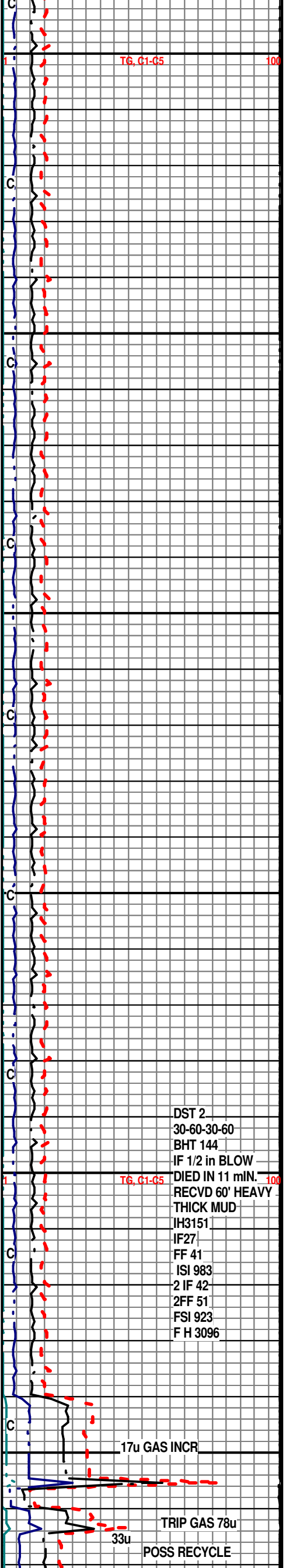
SH: SME BLK F TEXT FIRM BLKY CARB SME SLI CARBSME LT GY SILTY SFT WEATHERED APPEAR

LS:LT BRN VF XLN TO SME MICRO XLN MOD SFT TO HD DEMSE SHALY IP

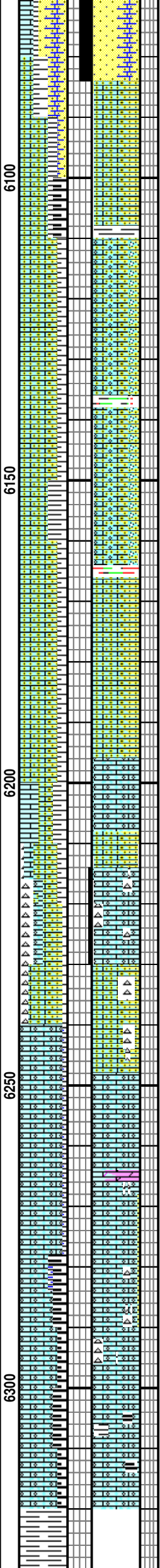
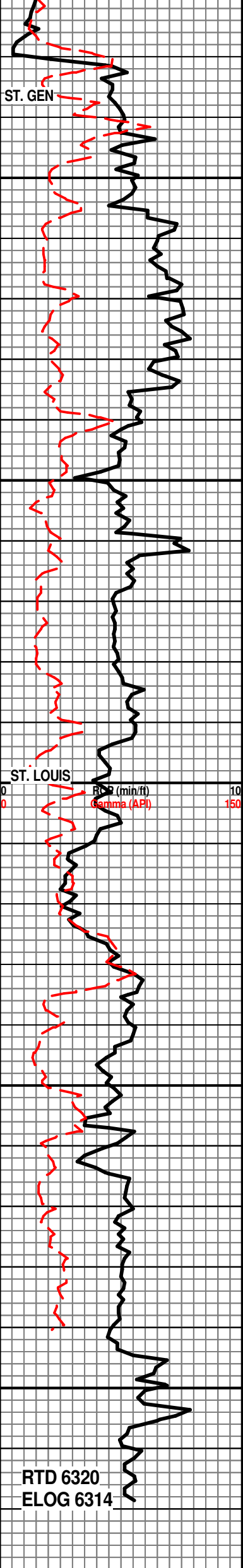
LS:DK GY DK GY/BRN VF XLN SHALY APPEAR

LS:DK GY TO GY/BRN VF XLN SLI SHALY SME LT GN TINTED CHERT

SS:VF TO OCCAS MED CLR QTZ GNS MOD WELL SORTED MOD WELL CEMENT IN OFF WHT CALCMTX ABUND DK BRN O STAIN BRIGHT GOLD TO BRIGHT YELLOW GOLD FLUOR SME MILKY YELLOW RING CUT SME BRIGHT BLUE FLASH CUT FAIR TO GOOD INTERGRAN POR



DST 2
 30-60-30-60
 BHT 144
 IF 1/2 in BLOW
 DIED IN 11 mLN.
 RECVD 60' HEAVY
 THICK MUD
 IH3151
 IF27
 FF 41
 ISI 983
 2 IF 42
 2FF 51
 FSI 923
 F H 3096



LS: OFF WHT MICRO XLN WITH ABUND IMBEDDED CLR SUBRND TO SANG QTZC GNS TRS CHLORITE

SH: REDDISH BRN LT TO DK GYL T GN F TEXT FIRM BLKY TO PLTY

LS: OFF WHT TO TAN MICRO XLN HD DENSE WITH IMBEDDED VF XLR SANG QTZ GNS

SH: REDDISH BRN LT TO DK GYL T GN F TEXT FIRM BLKY TO PLTY

LS: OFF WHT TO TAN MICRO XLN HD DENSE WITH IMBEDDED VF XLR SANG QTZ GNS

SH: REDDISH BRN LT TO DK GYL T GN F TEXT FIRM BLKY TO PLTY

LS: OFF WHT TO TAN MICRO XLN HD DENSE WITH IMBEDDED VF XLR SANG QTZ GNS

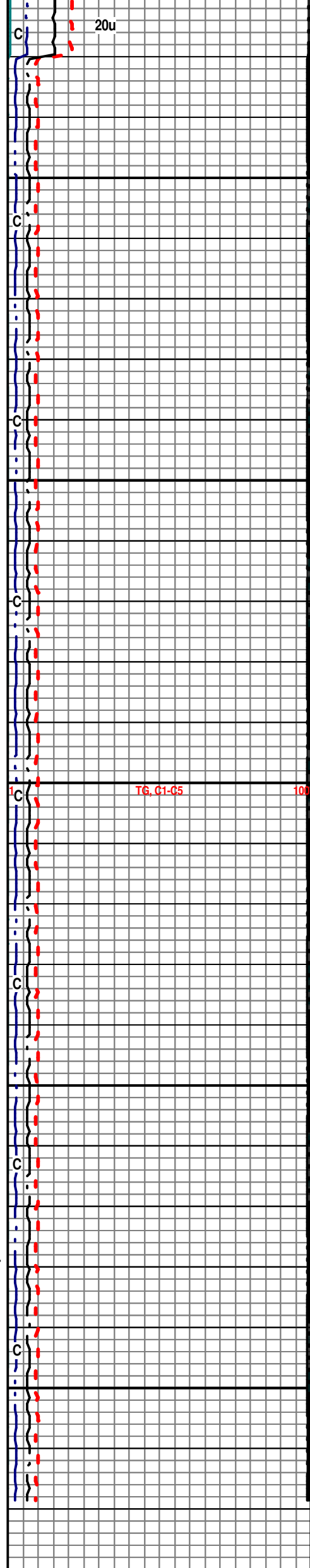
LS: OFF WHT TO TAN MICRO XLN HD DENSE FRACTURED W ABUND IMBEDDED OOLITES SME TRANSLUCENT CHERT

LS: OFF WHT TO TAN VF XLN CHLKY MOD SFT SME IMBEDDED CLR SANG QTZ GNS OOLITIC IP WITH SME FAIR TO POOR VUGULAR POR ABUND TRANSLU CHERT TRS DK BRN O STAIN YELLOW FLUOR NO CUT

LS: OFF WHT TO TAN MICRO XLN HD DENSE WITH IMBEDDED VF XLR SANG QTZ GNS

LS: OFF WHT TO TAN VF XLN CHLKY FRACTURED W ABUND IMBEDDED OOLITES SME TRANSLUCENT CHERT FEW SCATTERED QTZ GNS

TRS. BLK BLKY CARBY APPEARINH SH



RTD 6320
ELOG 6314

THANKS FOR USING
MBC WELL LOGGING
AUSTIN & MARLA GARNER
& BILL KEMP