



PIONEER
Pioneer Energy Services

TEMPERATURE SURVEY LOG

Company **EAST CHEYENNE GAS STORAGE**
Well **DORTHY STRANGE #1 WP-D011**
Field **WEST PEETZ**
County **LOGAN** State **CO**

Comp. **EAST CHEYENNE GAS STORAGE**
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Field **WEST PEETZ**
Co. **LOGAN**
State **CO**

Location: **API # : 05-075-07146**
2304' FSL & 1639' FEL
NWSE
SEC 6 TWP 11N RGE 52W
Permanent Datum **GL** Elevation **4547'**
Log Measured From **KB** 13' Above Perm. Datum
Drilling Measured From **KB**
Other Services
GR
CCL
Elevation
K.B. 4560'
D.F. 4559'
G.L. 4547'

Date of Service	14 JUNE 2016		
Run Number	1		
Depth Driller or PBTD	5335'		
Depth Logger	3050'		
Bottom Log Interval	3050'		
Top Log Interval	SURFACE		
Open Hole Size	7.875"		
Type Fluid	WATER		
Fluid Level	SURFACE		
Fluid Density	N/A		
Max. Recorded Temperature	127 F		
Max. Wellhead Pressure	0 PSI		
Wellhead Connection	N/A		
Estimated Cement Top	N/A		
Unit Number	P-129		
Wireline Size	9/32"		
Location	FT. MORGAN		
Recorded By	SHAUN STUMP		
Witnessed By	GARY OHLMAN		
	Size	Wt/Ft	Top
Tubing Record			Bottom
Surface Casing	9-5/8"	25.4#	SURFACE 215'
Production Casing	5-1/2"	15.5#	SURFACE 5298'
Liner Record			

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All interpretations are opinions based on inferences from electrical or other measurements and Pioneer Wireline Services, LLC cannot and does not guarantee the accuracy or correctness of any interpretation, and Pioneer Wireline Services, LLC will not be liable or responsible for any loss, costs, damages, or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees.

Comments

N/A DENOTES NOT AVAILABLE OR NON-APPLICABLE.
0 PSI ON WELL WHILE LOGGING

CORRELATED DEPTH TO PERFS AT 1213' AND 1237'
PRESENTATION CHANGES AS PER CUSTOMER REQUEST

S.O. 2-290185

THANK YOU FOR USING PIONEER ENERGY SERVICES!

Your Pioneer Energy Services Crew	Tool Data - Services	Serial Number
Engineer: S. STUMP Operator: S. SCHUMAN Operator: M. GARCIA Operator:	GR/CCL TEMP	1210-03 138


Top - Bottom


BHTEMP_Src TEMP	BOREID in 7.875	BOTTEMP degF 127	CASEOD in 5.5	CASETHCK in 0	CASEWGHT lb/ft 15.5	MAXAMPL mV 0
MINAMPL mV 1	MINATTN db/ft 0.08	PERFS 0	PPT usec 0	SRFTEMP degF 0	TDEPTH ft 0	

Variable Description

BHTEMP_Src : BHTEMP Input Source Selector
BOREID : Borehole I.D.
BOTTEMP : Bottom Hole Temperature
CASEOD : Casing O.D.
CASETHCK : Casing Thickness
CASEWGHT : Casing Weight
MAXAMPL : Maximum Amplitude

MINAMPL : Minimum Amplitude
MINATTN : Minimum Attenuation
PERFS : Perforation Flag
PPT : Predicted Pipe Time
SRFTEMP : Surface Temperature
TDEPTH : Total Depth

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
CCL	4.91		Cable Head-Titan 1 11/16" Titan Cable Head	1.03	1.69	2.00
			GR_CCL-275 Probe GR-CCL (1210-03) Probe 2 3/4" Gamma Ray / CCL Analog - Neg Pulse	4.54	2.75	60.00
GR	2.17		TEMP 128 Probe (Probe 128)	1.27	1.38	12.00

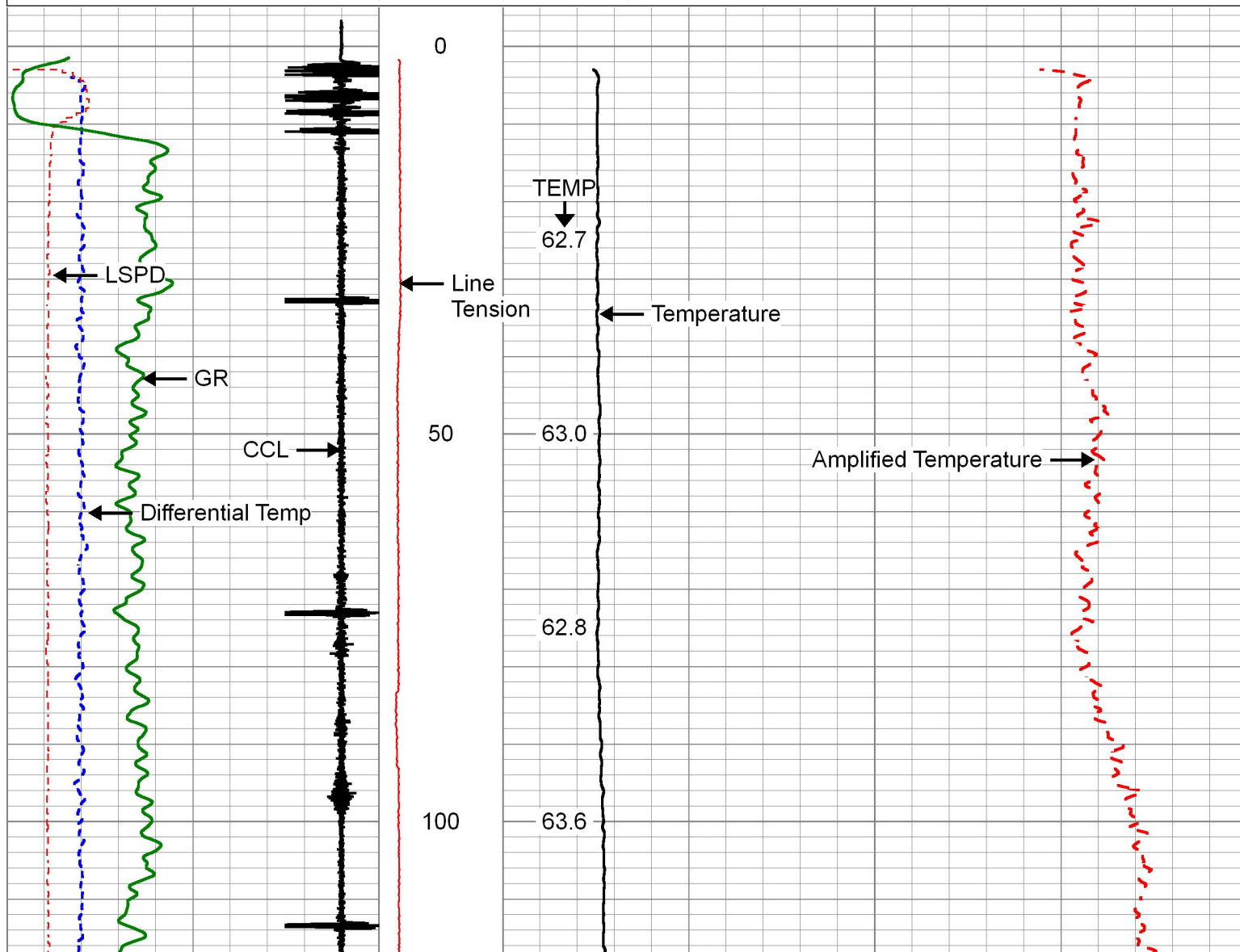
TEMP		0.08	<div>  </div>		TEMP-138 Probe (Probe-138)	1.27	1.38	12.00
			Dataset: 2-290185.db: field/well/run1/pass4 Total length: 6.84 ft Total weight: 74.00 lb O.D.: 2.75 in					

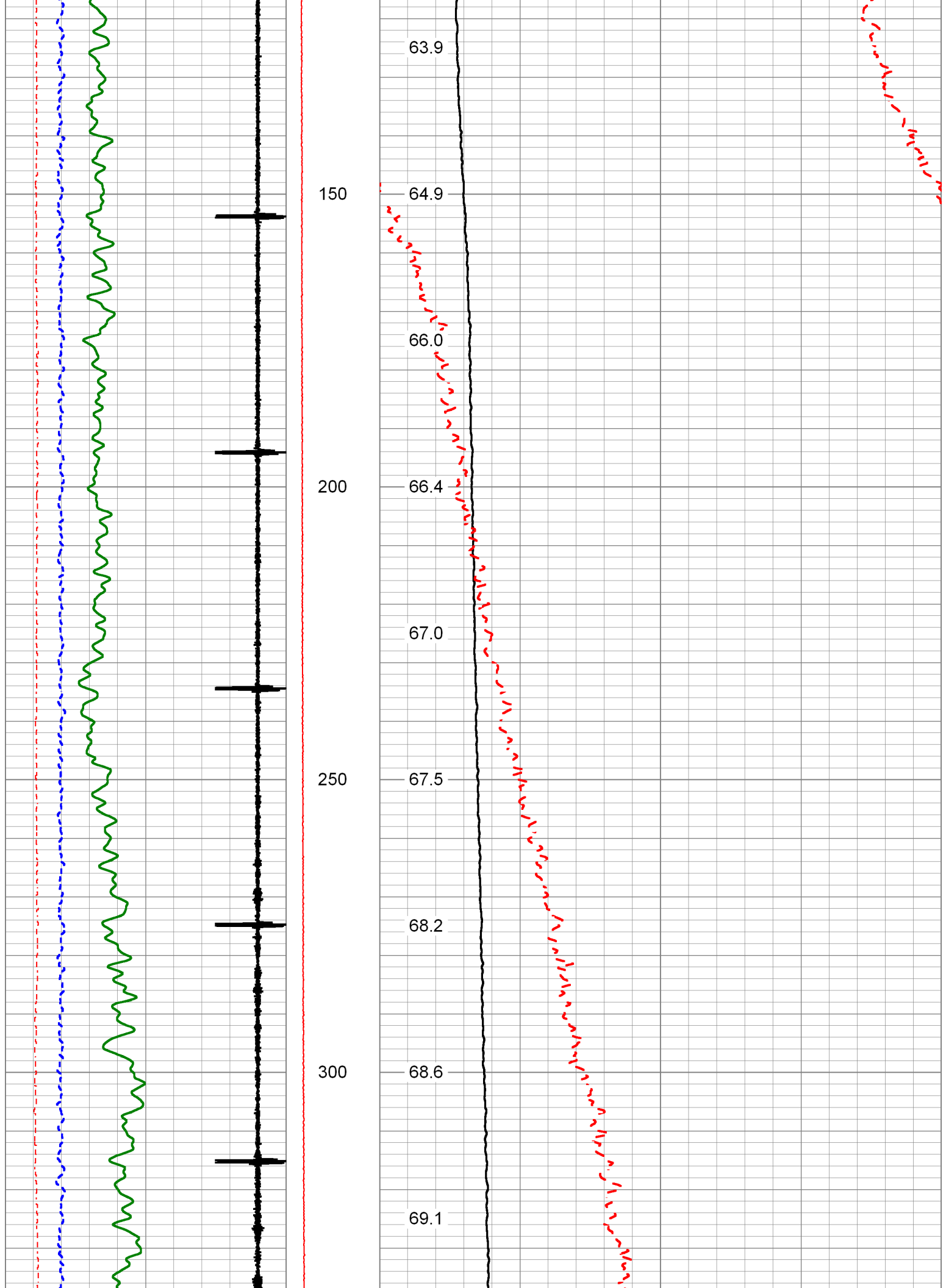


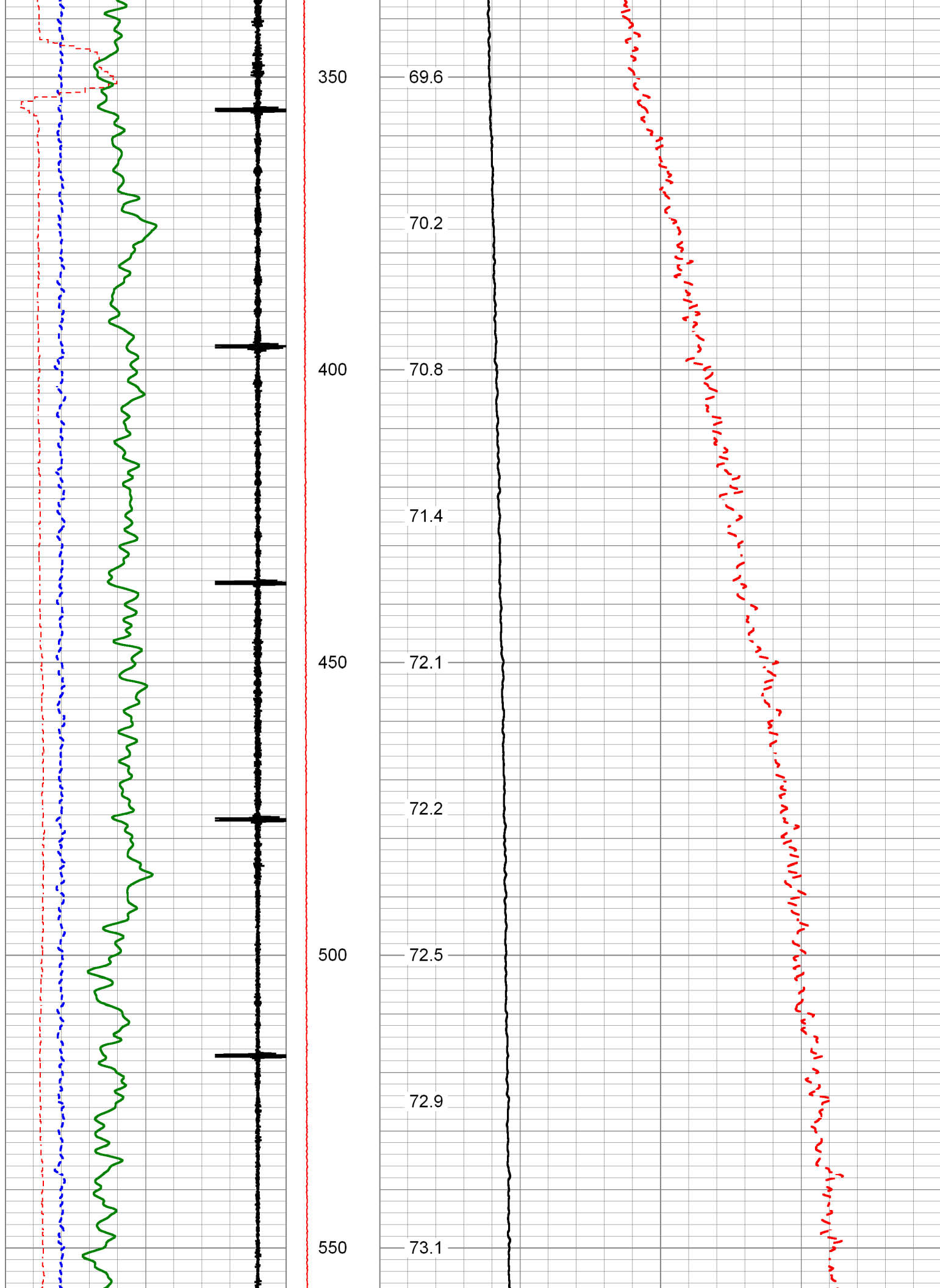
MAIN LOG

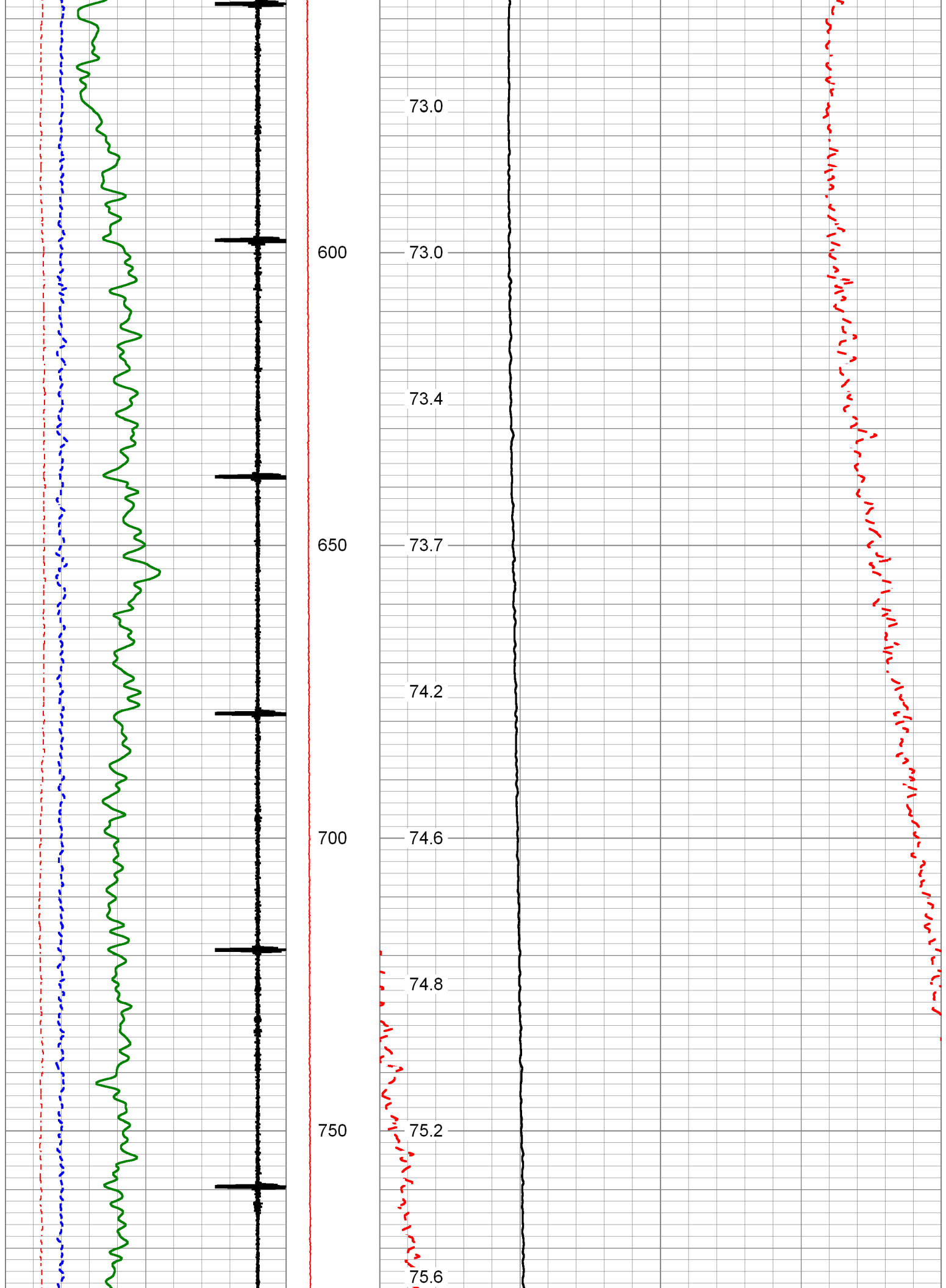
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Presentation Format	pinr_temp
Dataset Creation	Tue Jun 14 08:06:36 2016
Charted by	Depth in Feet scaled 1:240

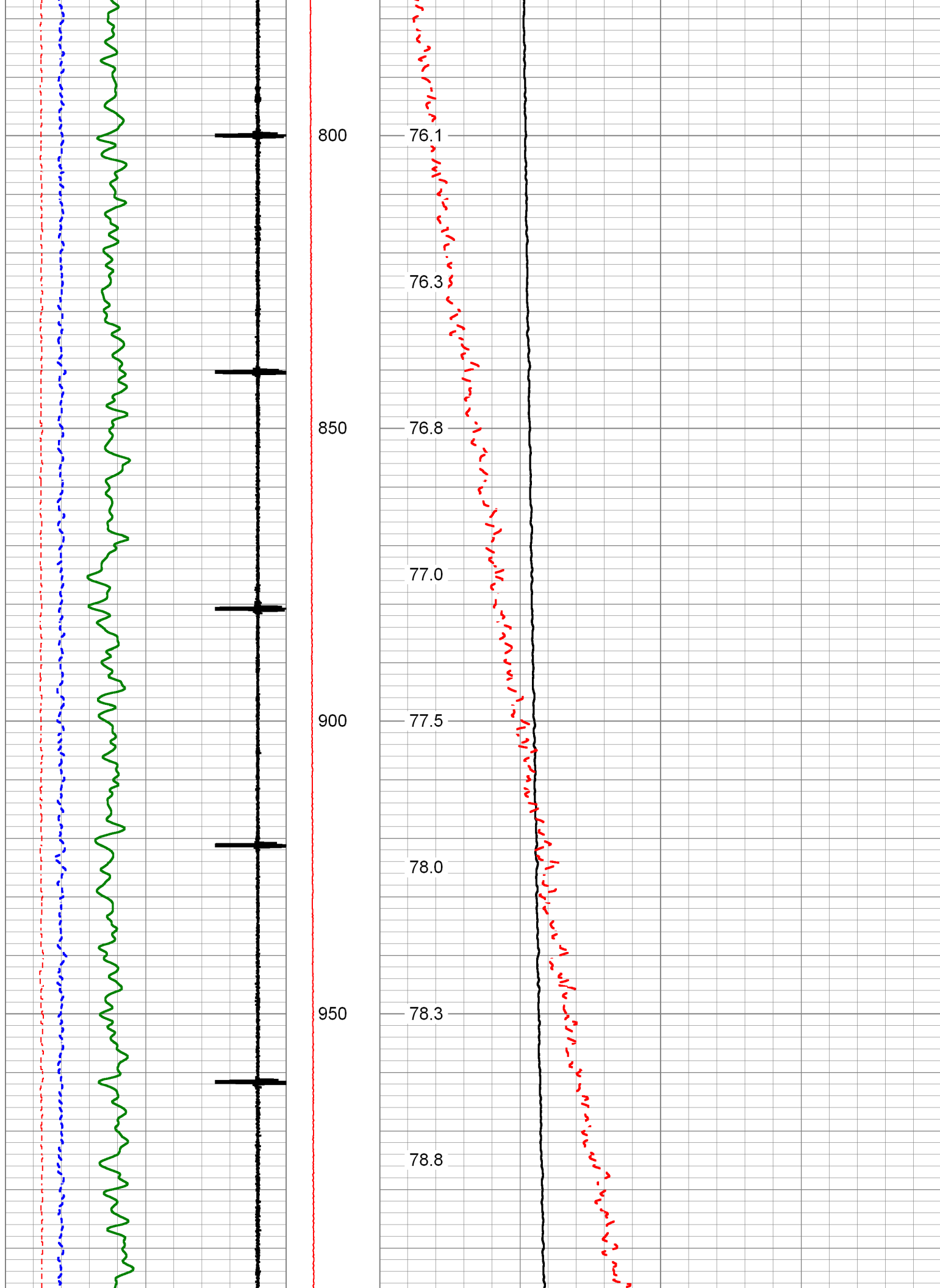
-9	CCL	1	Line	50	Temperature (degF)	150
2	Differential Temp (degF)	-8	Tension	75	Amplified Temperature (degF)	85
25	LSPD (ft/min)	75	0 (lb1000)	TEMP		
0	GR (GAPI)	200		(degF)		

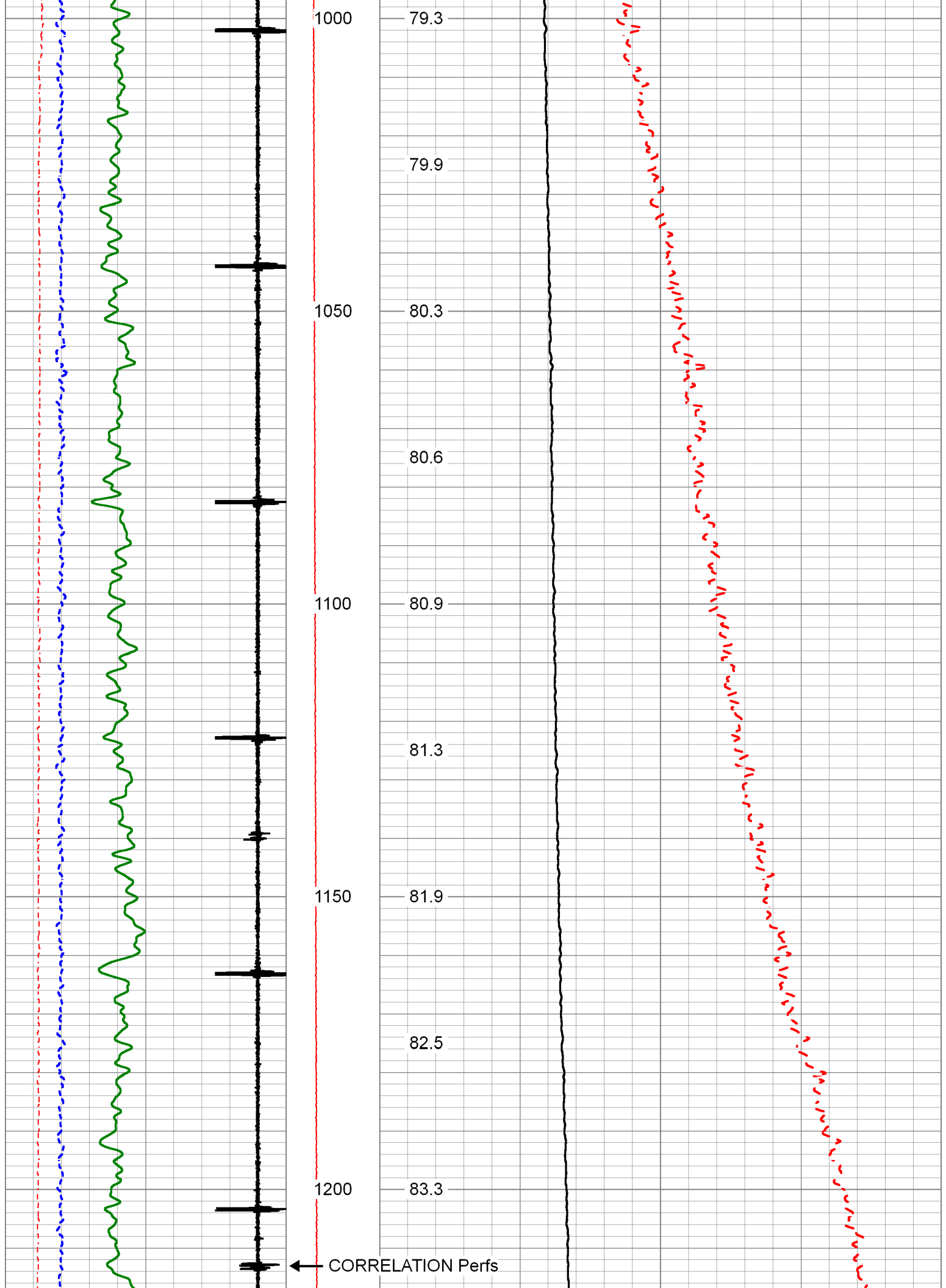


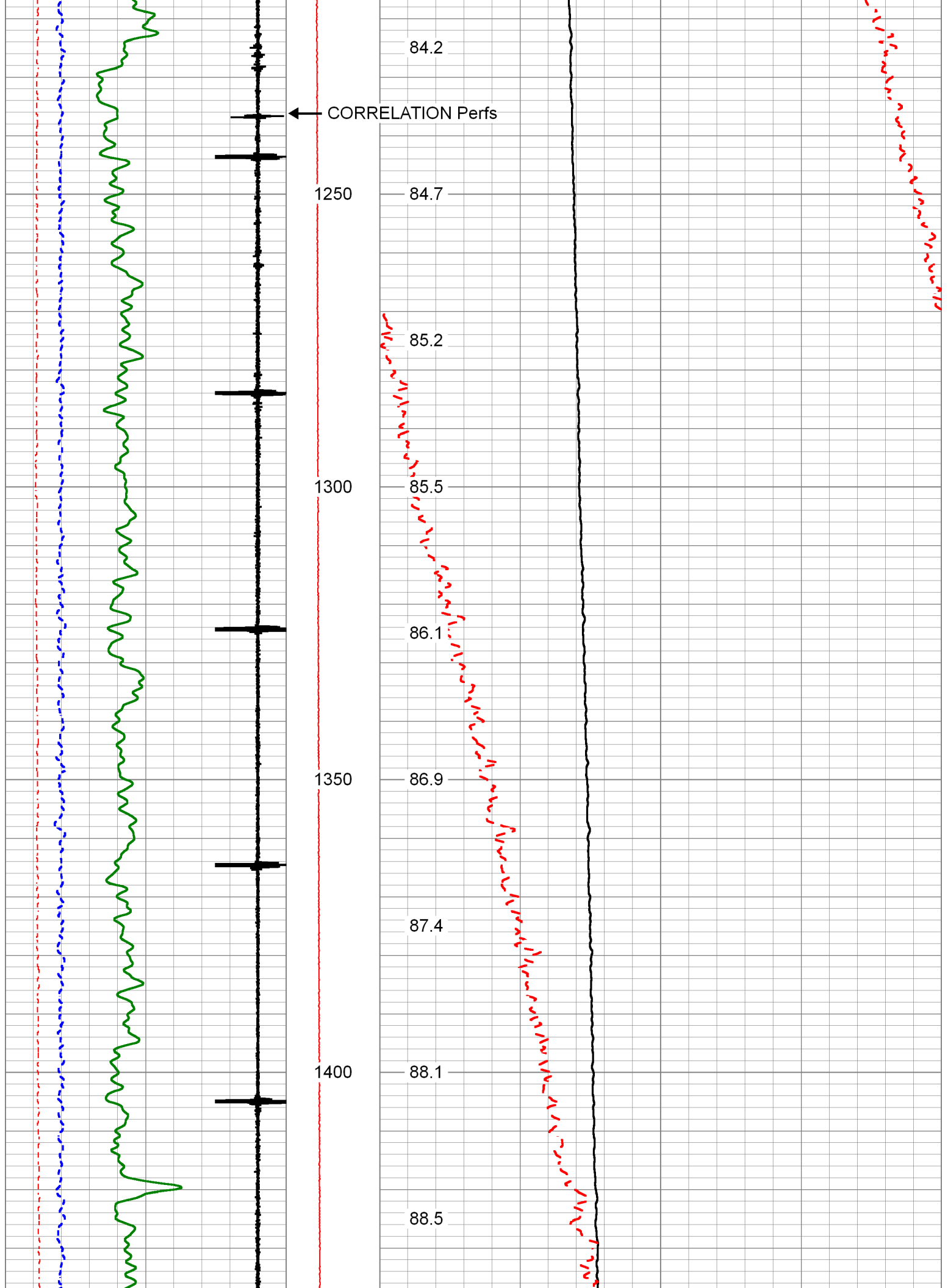


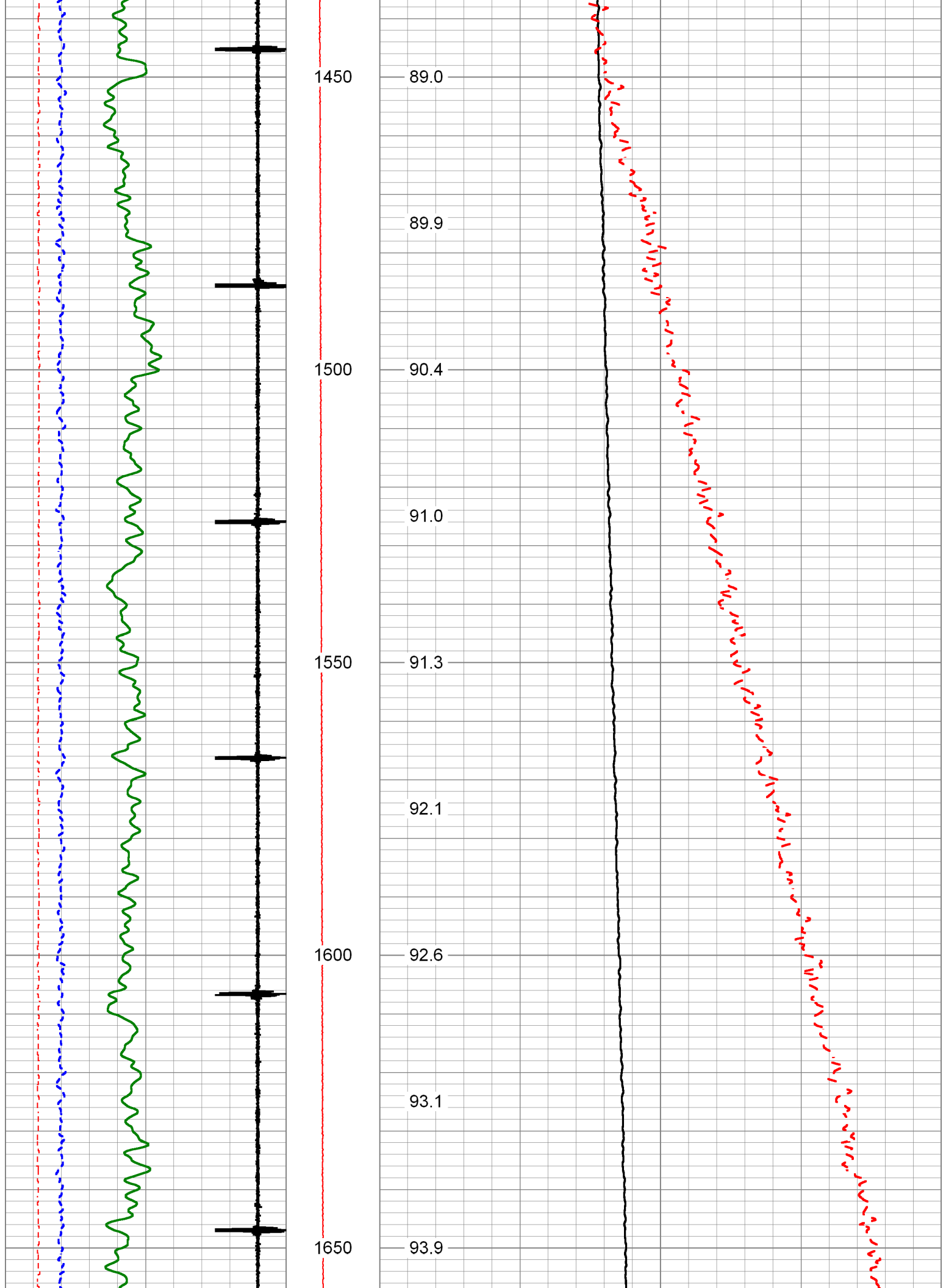


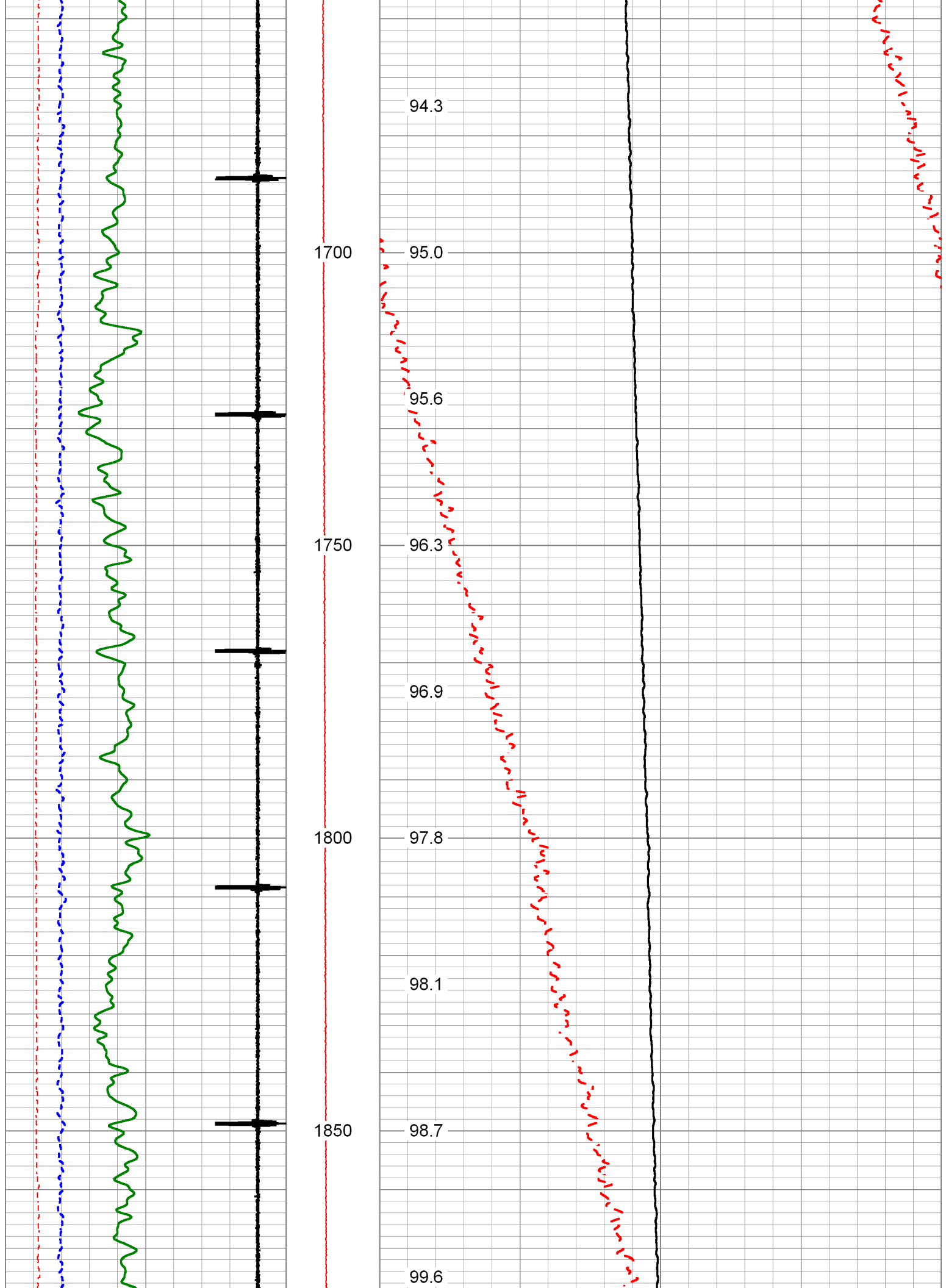


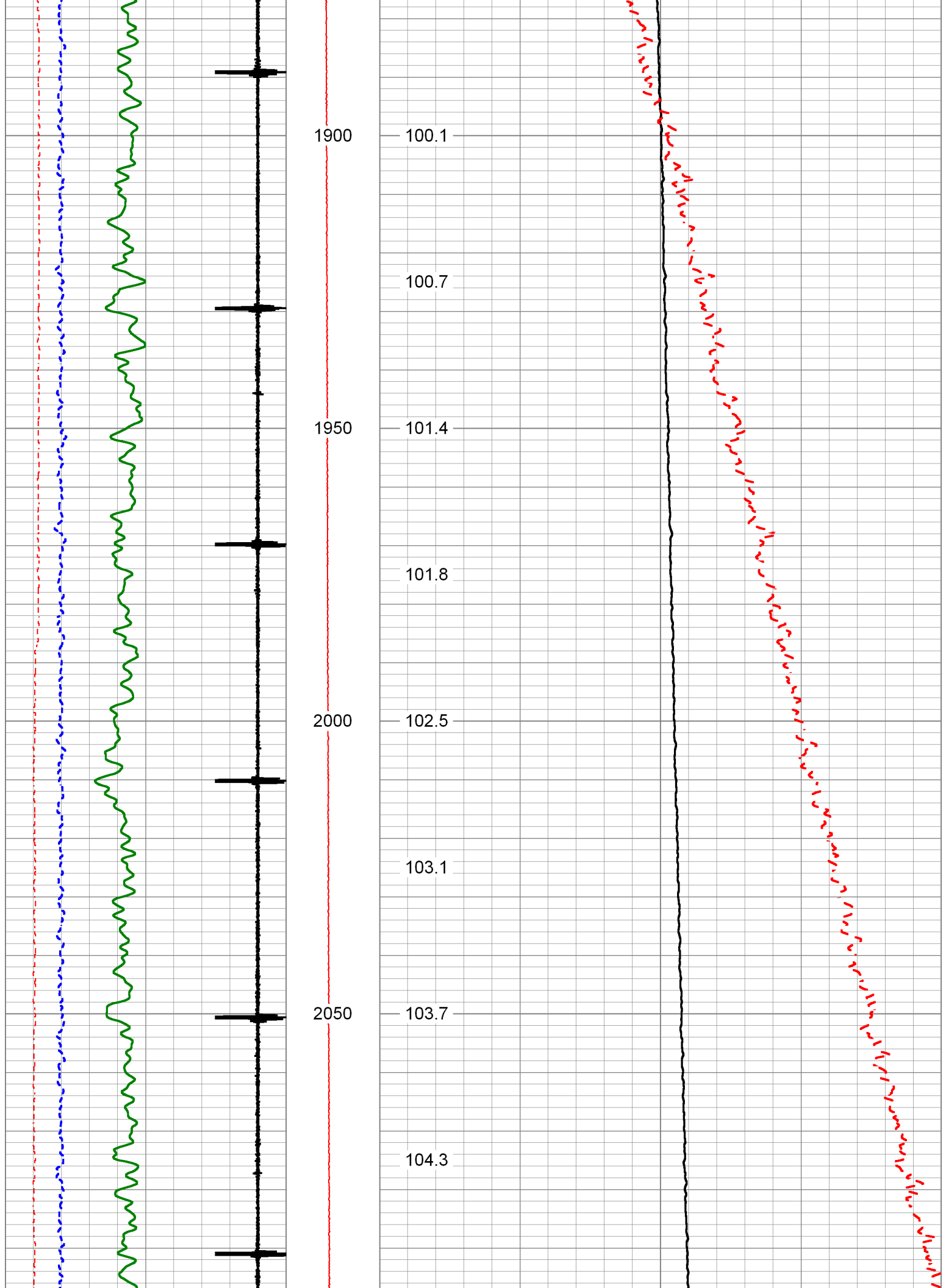


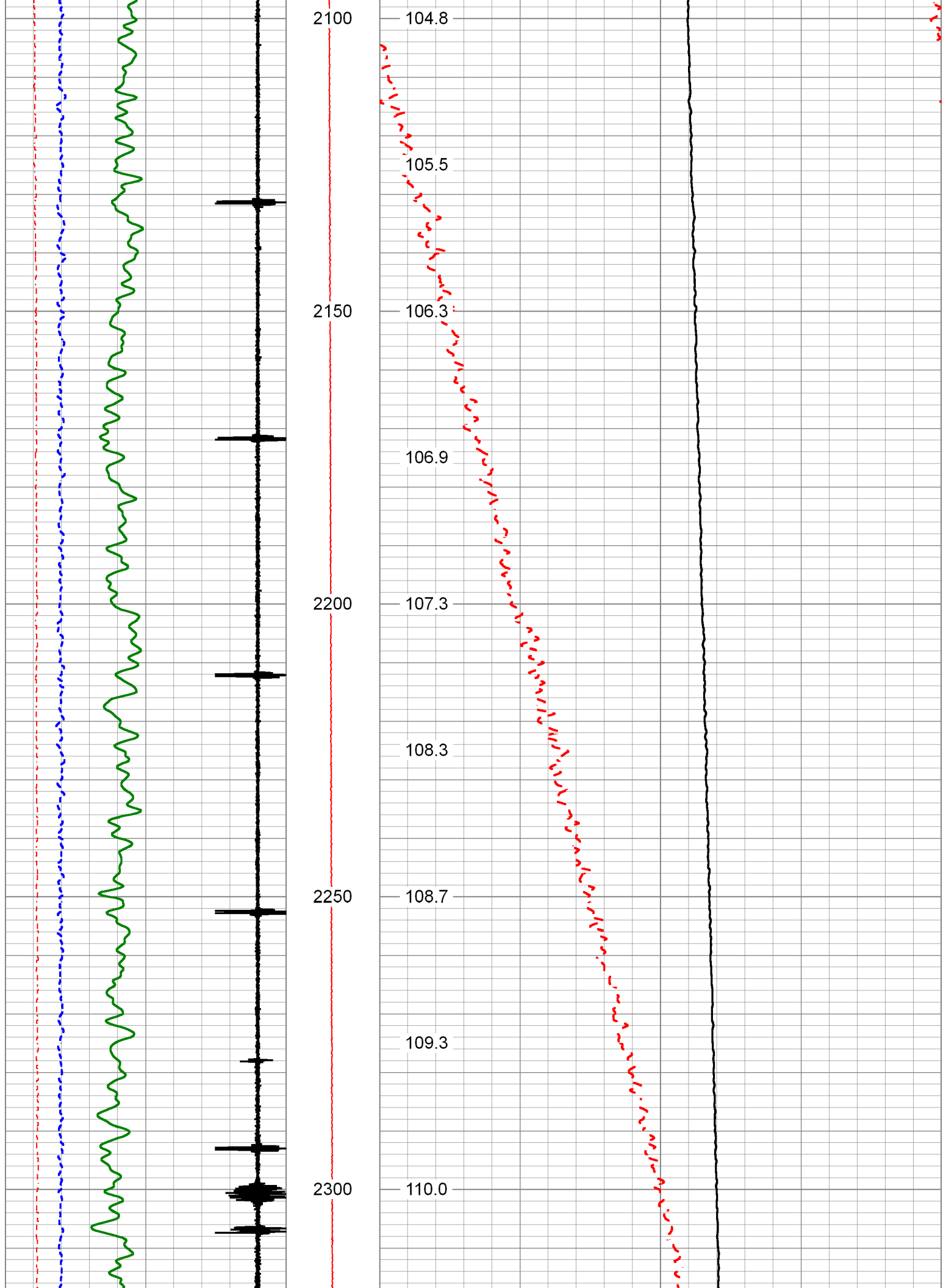


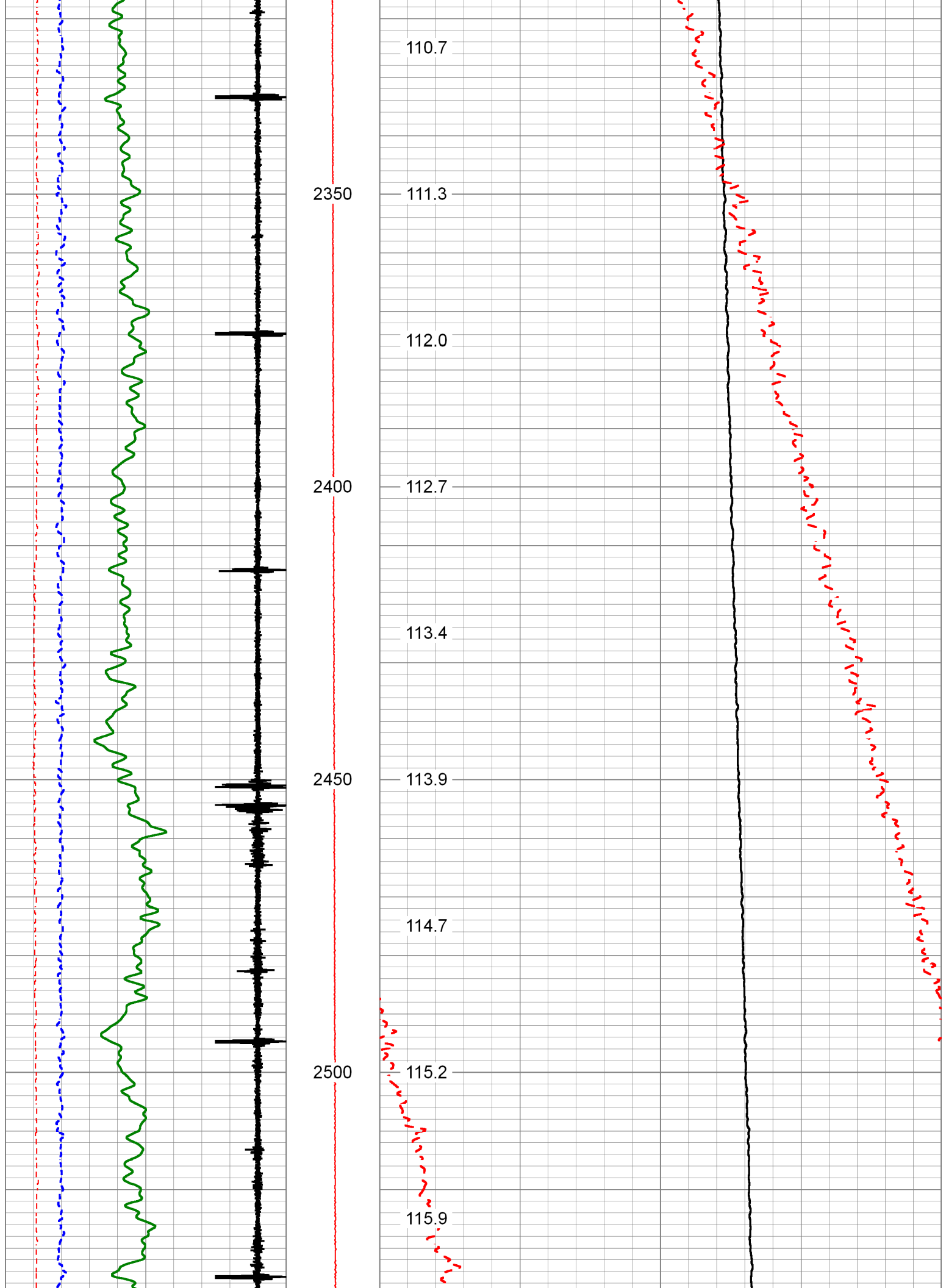


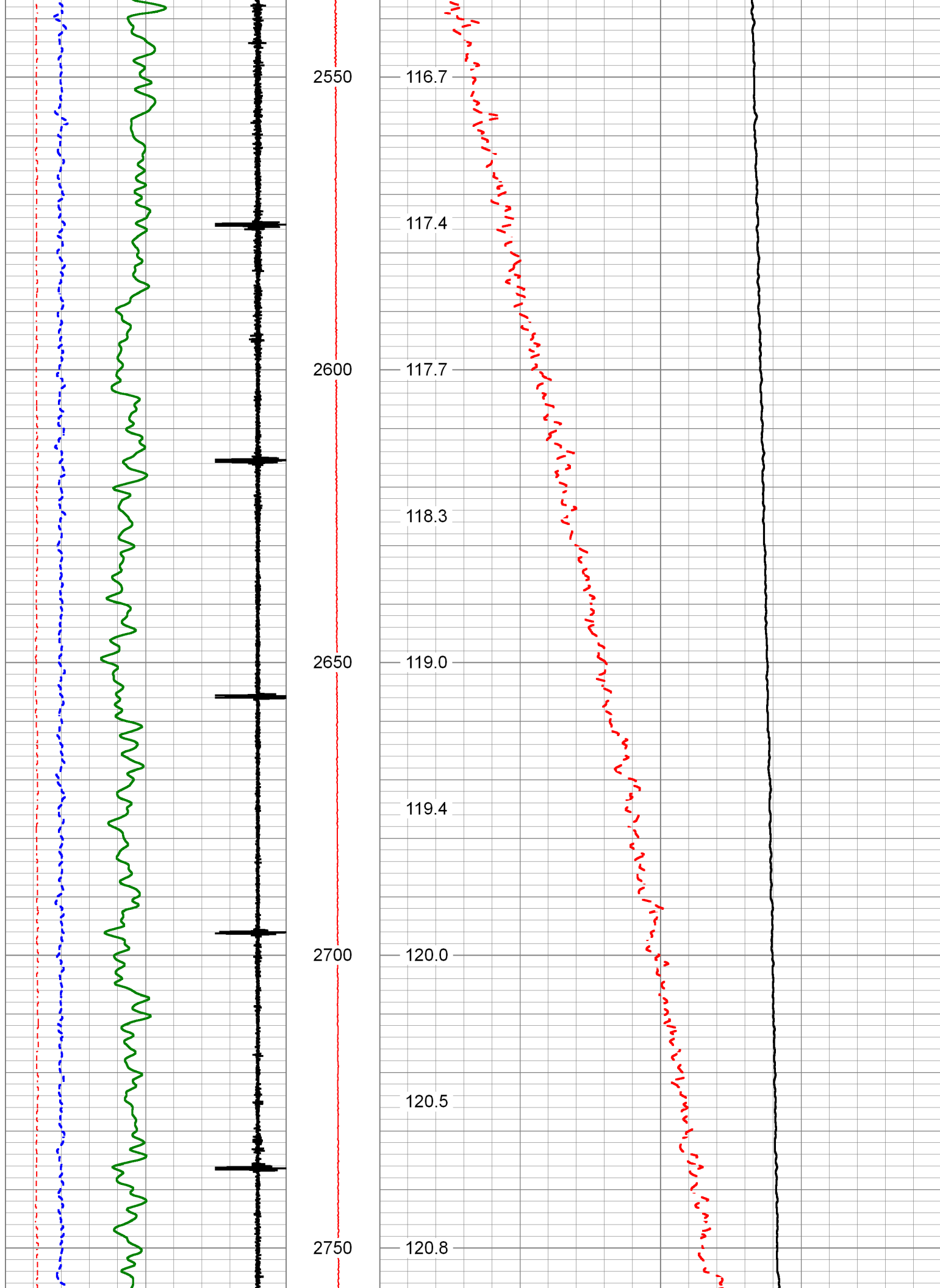


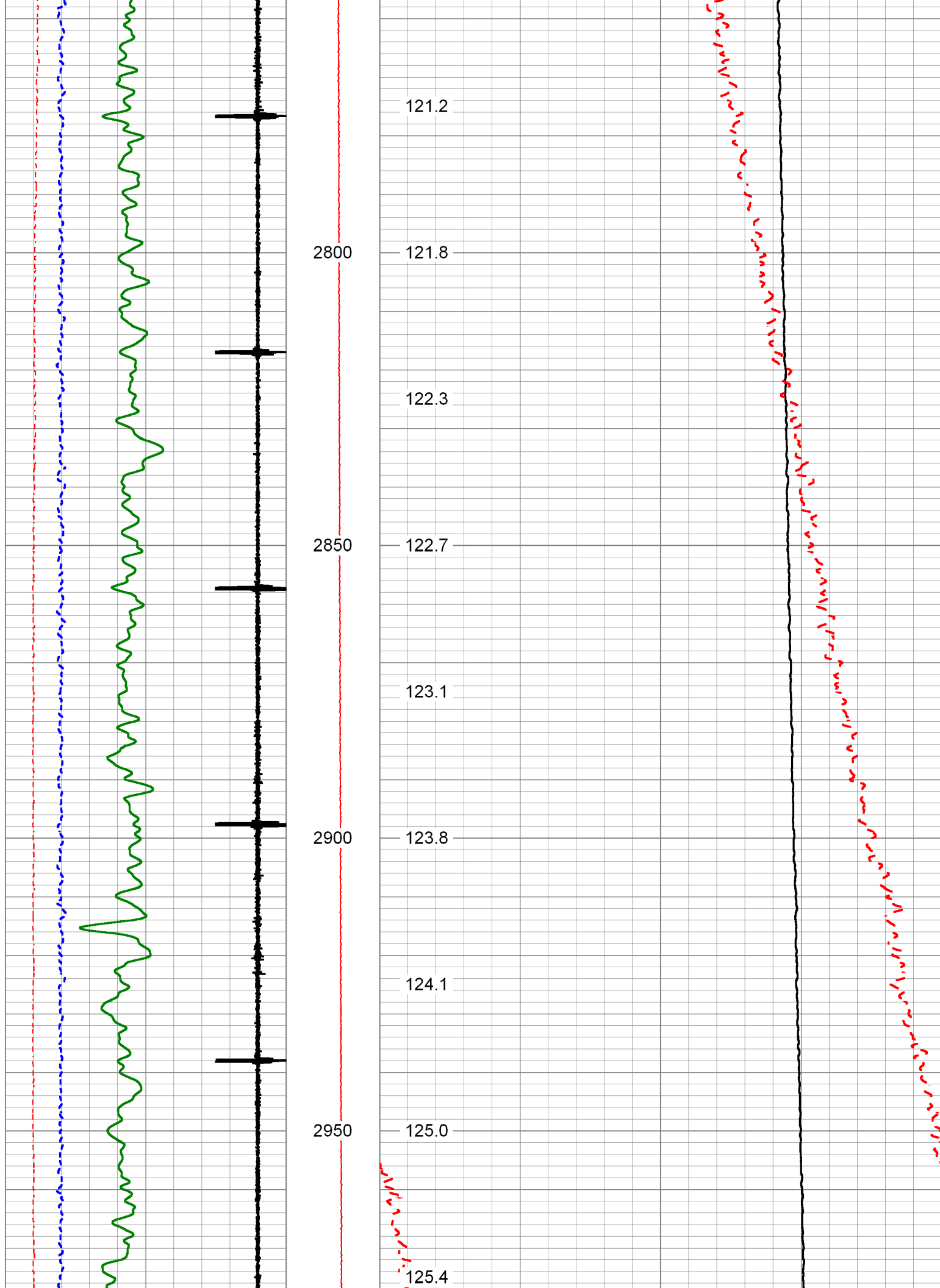


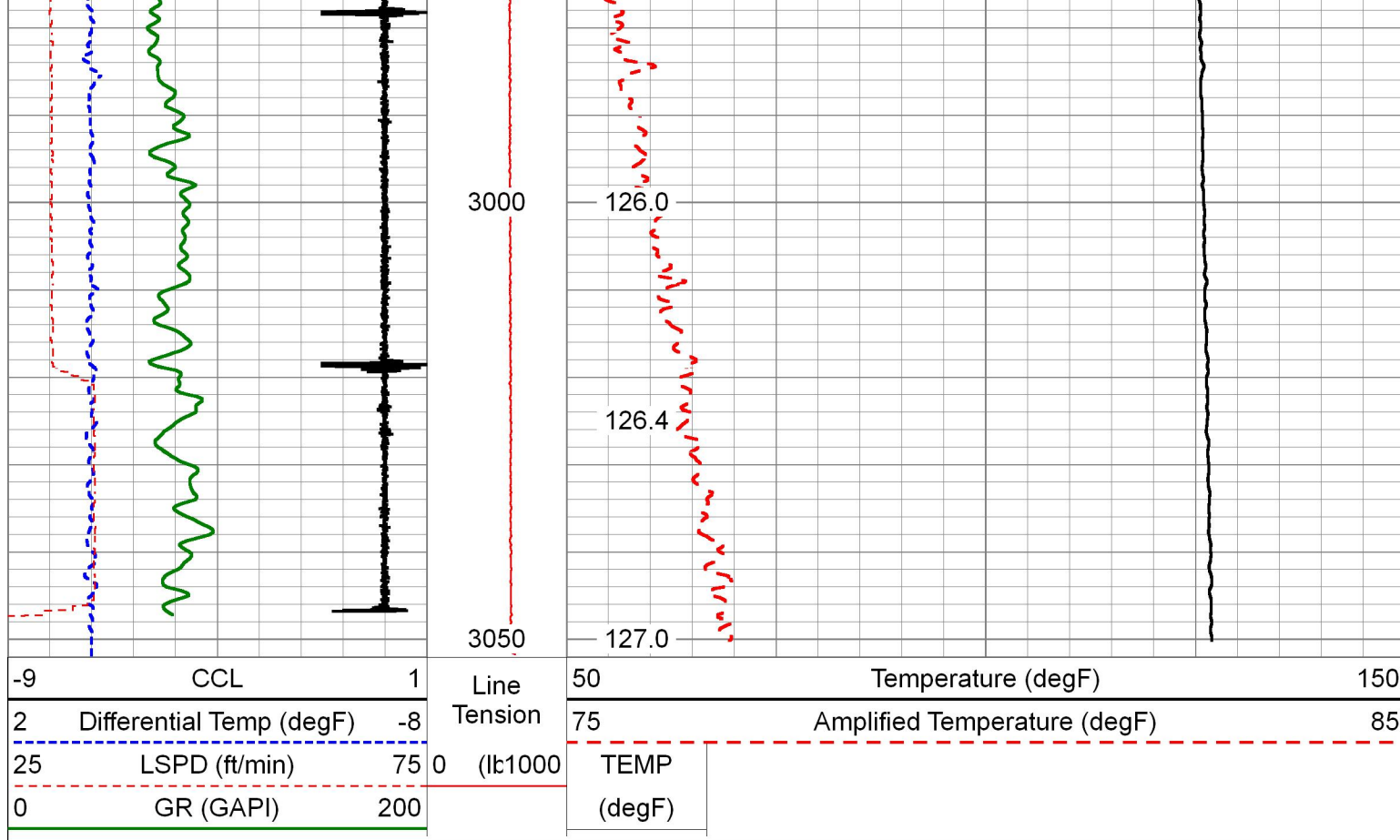













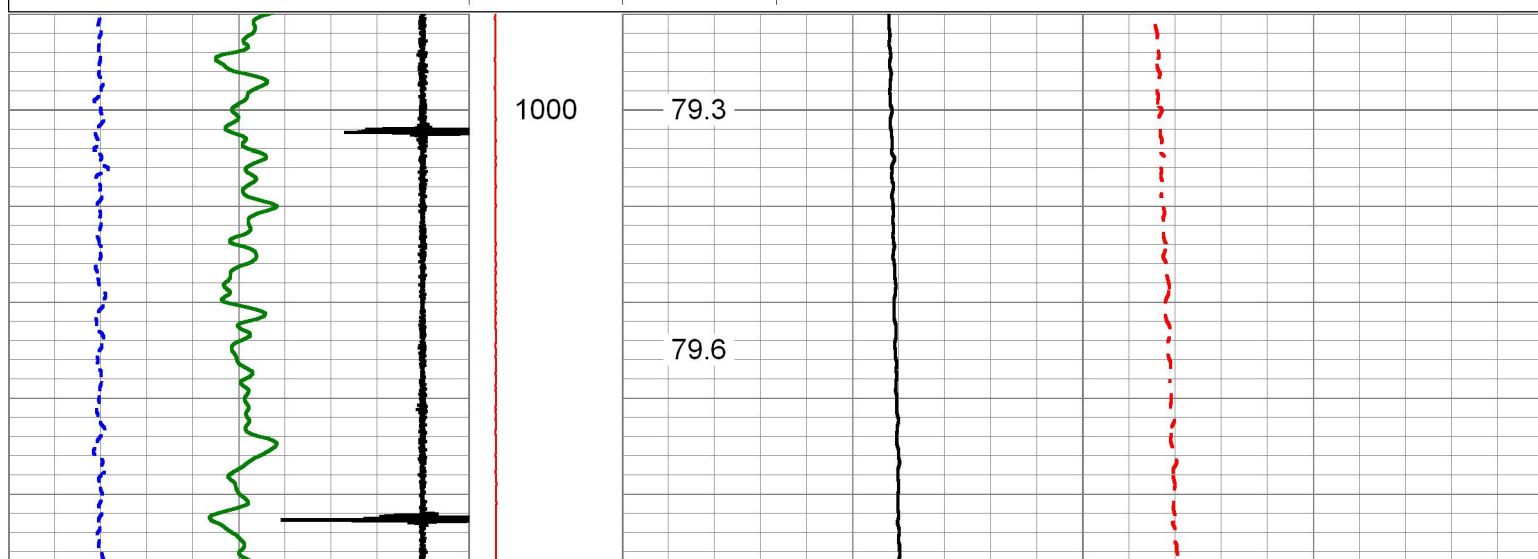
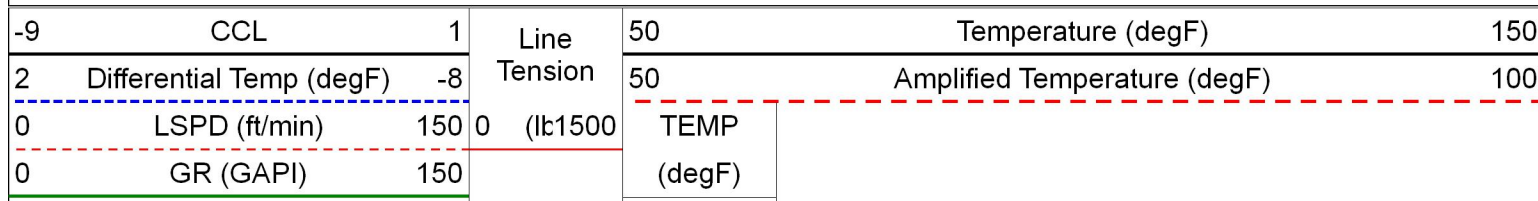


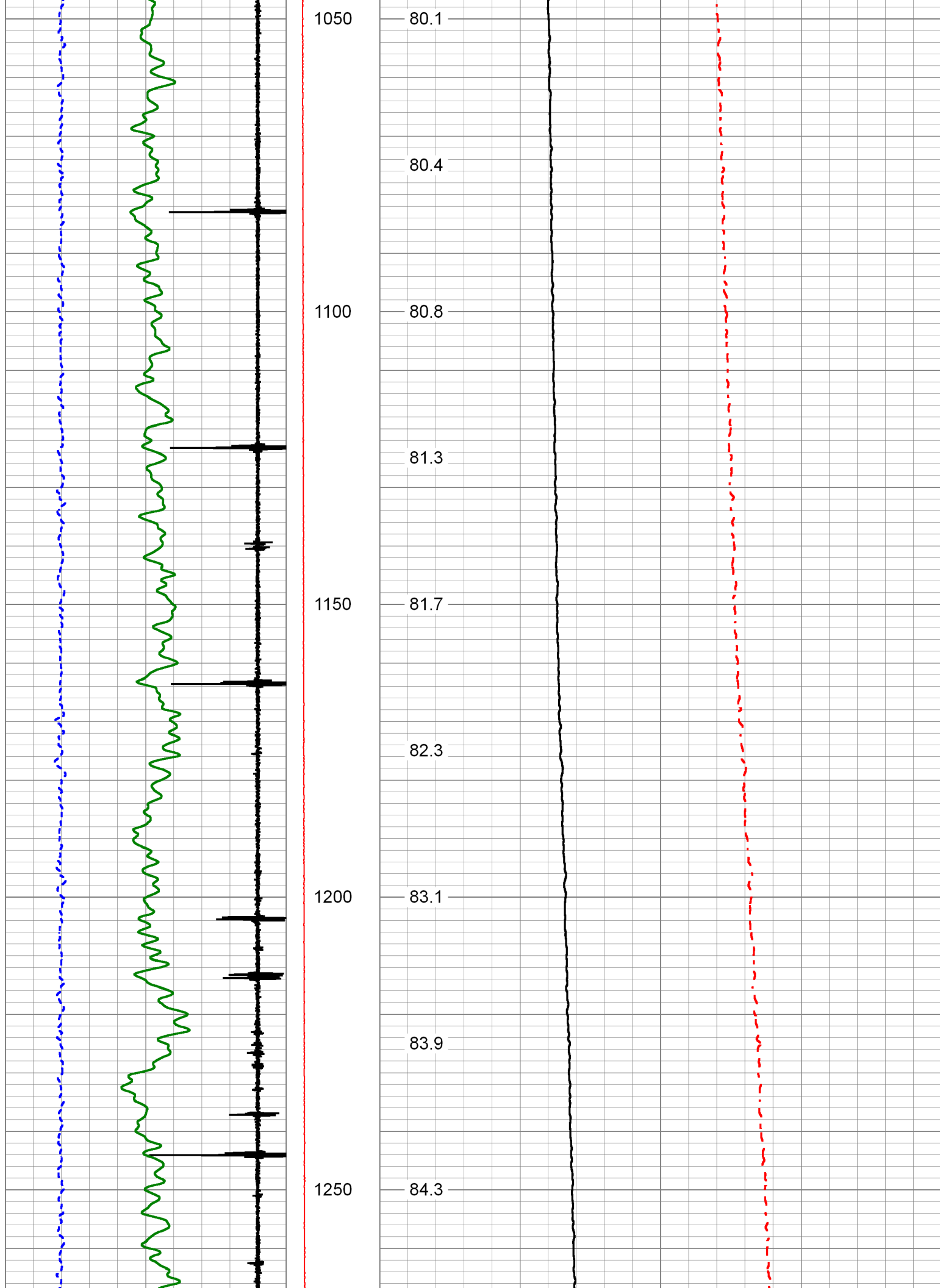
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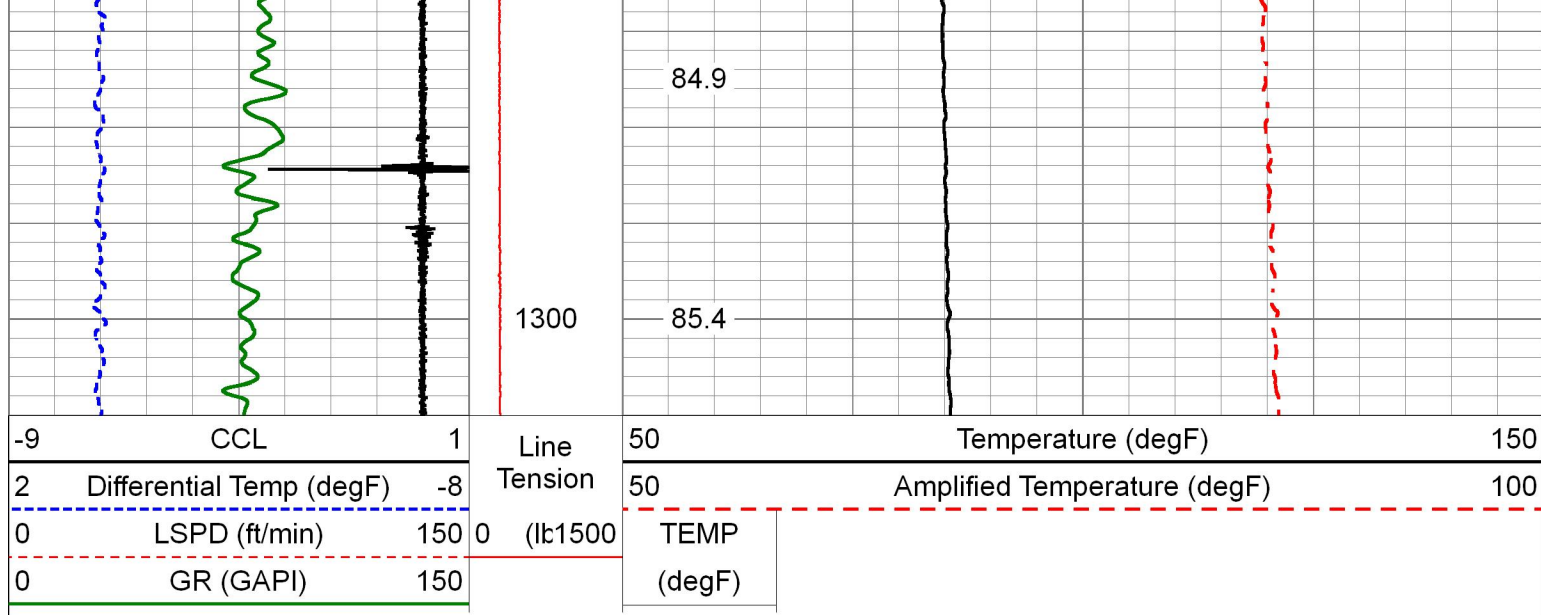
REPEAT PEAT

DOWN PASS INTEREST AREA

Database File 2-290185.db
 Dataset Pathname INTREST
 Presentation Format pinr_temp
 Dataset Creation Tue Jun 14 08:47:21 2016
 Charted by Depth in Feet scaled 1:240

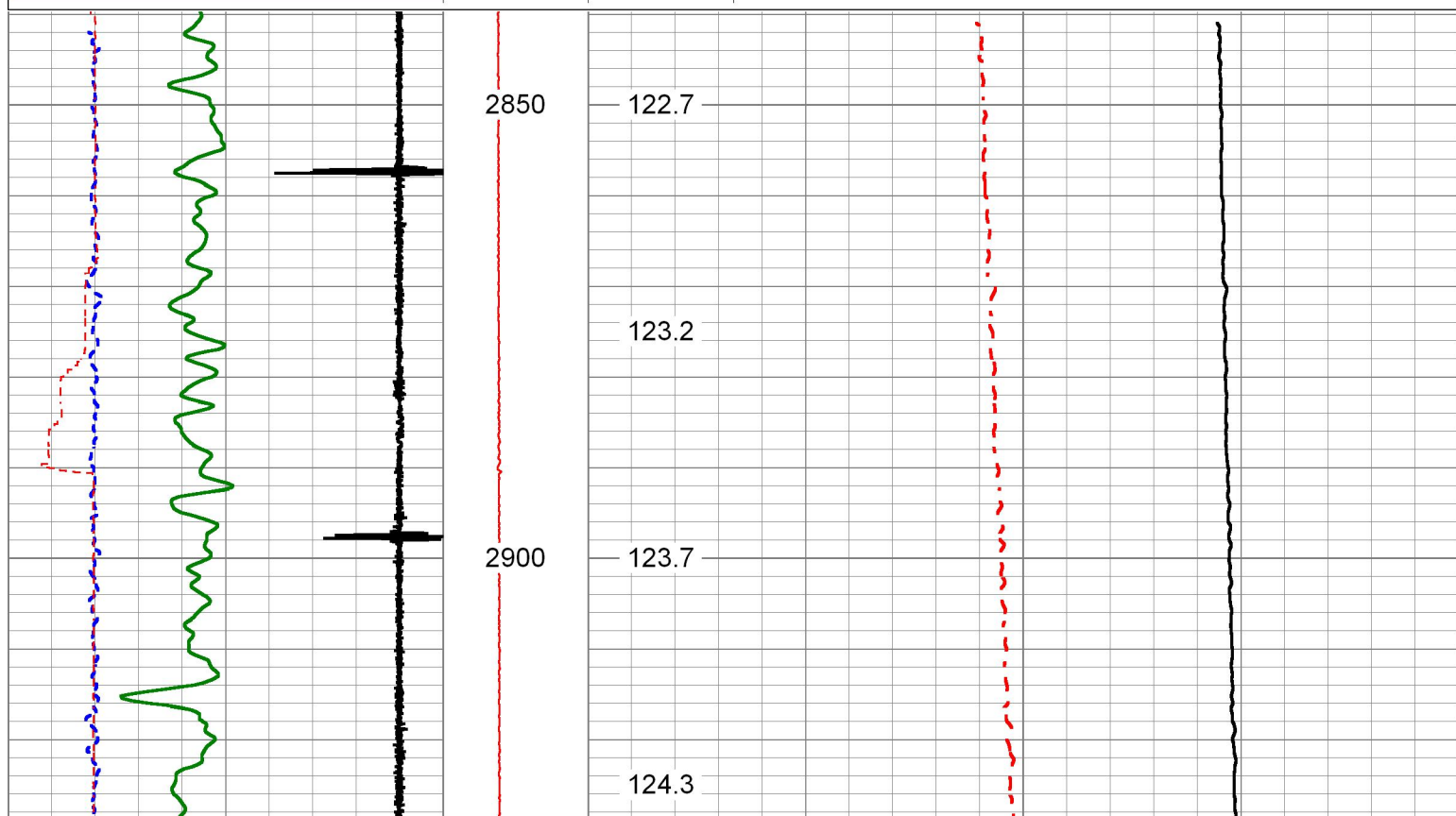
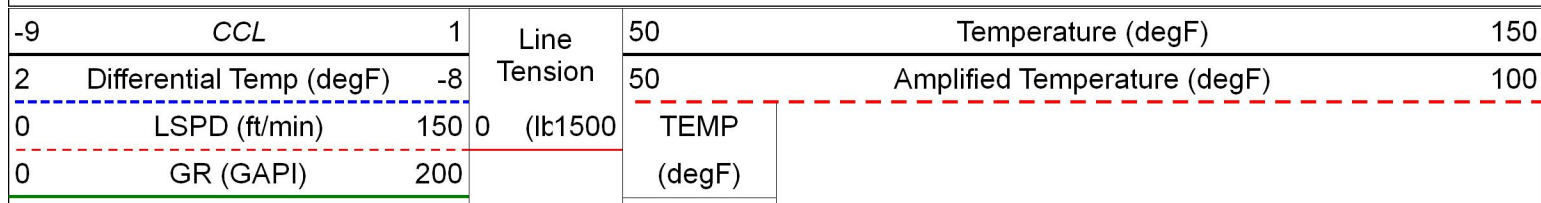


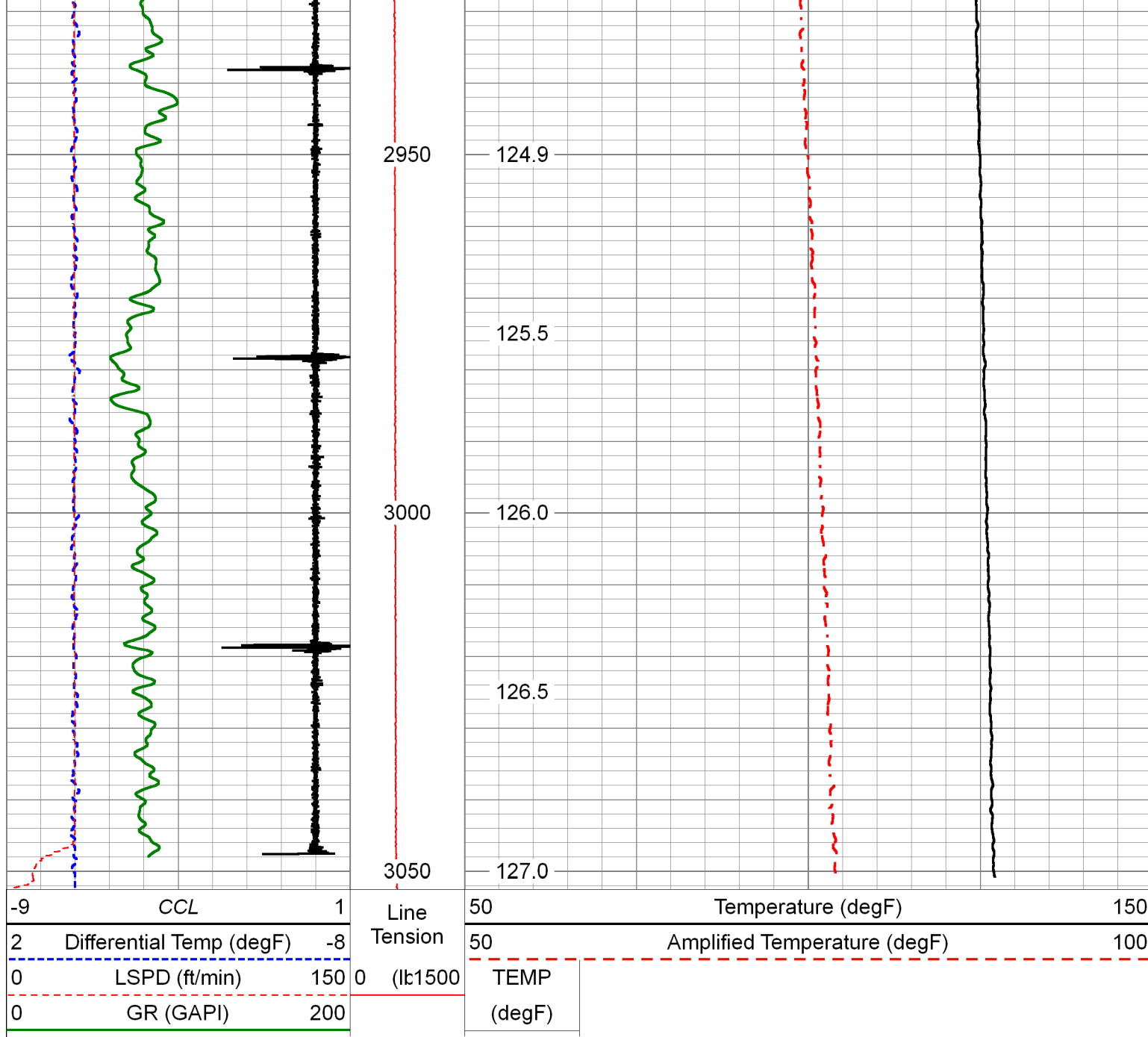




REPEAT SECTION

Database File 2-290185.db
Dataset Pathname REPEAT
Presentation Format pinr_temp
Dataset Creation Tue Jun 14 08:07:24 2016
Charted by Depth in Feet scaled 1:240





Calibration Report				
Database File	2-290185.db			
Dataset Pathname	pass4			
Dataset Creation	Tue Jun 14 08:06:36 2016			
Temperature Calibration Report				
Serial Number:	Probe-138			
Tool Model:	138 Probe			
Performed:	Mon Jun 13 15:38:33 2016			
	Reference	Reading		
Low Reference:	35.00 degF	0.07	cps	
High Reference:	212.00 degF	1.41	cps	
Gain:	0.09			
Offset:	10.00			
Delta Spacing	2			

Gamma Ray Calibration Report

Serial Number:	1210-03	
Tool Model:	275 Probe GR-CCL	
Performed:	Mon Jun 13 15:39:18 2016	
Calibrator Value:	320.0	GAPI
Background Reading:	0.6	cps
Calibrator Reading:	1.7	cps
Sensitivity:	0.8000	GAPI/cps



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Well	DORTHY STRANGE #1 WP-D011	
Field	WEST PEETZ	
County	LOGAN	
State	CO	Country USA