



Compensated Neutron
Gamma Ray
Casing Collar Log

Company	Kerr-McGee Oil and Gas Onshore LP	Company	Kerr-McGee Oil and Gas Onshore LP
Well	Meguire 29C-16HZ	Well	Meguire 29C-16HZ
Field	Wattenberg	Field	Wattenberg
County	Weld	County	Weld
State	Colorado	State	Colorado
Location:		API # : 05-123-41938	Other Services
SEC 21 TWP 2N RGE 65W		Ground Level	Elevation
Permanent Datum		Ground Level	Elevation
Log Measured From		Kelly Bushing	20 FT
Drilling Measured From		Kelly Bushing	Elevation
			K.B. 4916'
			D.F. 4915'
			G.L. 4896'

Date	10-DEC-2015
Run Number	Two
Depth Driller	15481 FT
Depth Logger	7412 FT
Bottom Logged Interval	7410 FT
Top Log Interval	Surface
Open Hole Size	7.875"
Type Fluid	Water
Density / Viscosity	8.34 lbm/gal
Max. Recorded Temp.	246°F
Estimated Cement Top	Surface
Time Well Ready	ROA
Time Logger on Bottom	09:00
Equipment Number	HD-0331
Location	Fort Lupton, CO
Recorded By	C. Bryan
Witnessed By	Darrell Botwell
S. Hopper	

Borehole Record				Tubing Record			
Run Number	Bit	From	To	Size	Weight	From	To
Casing Record	Size (in)	Wgt (lbs/ft)	Grade	Top	Bottom		
Surface Casing	9 5/8	36	J55 LT&C	Surface	1859 FT		
Intermediate #1	5 1/2	17	P-110	Surface	15474 FT		
Intermediate #2							
Liner							

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All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, 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. These interpretations are also subject to our general terms and conditions set out in our current Price Schedule.

Comments

Log ran as per customer request
Depth referenced to Marker Joint Top at 6677 FT
Adjusted log +4 FT to correlate with Marker Joint Top
Gauge Ring/Junk Basket ran to 7526 FT with no debris found
Recorded with 2800 PSI surface induced pressure
Logging tools were clean and free of any debris upon completion of operations

Thank you for choosing FMC Technologies Surface Integrated Services.

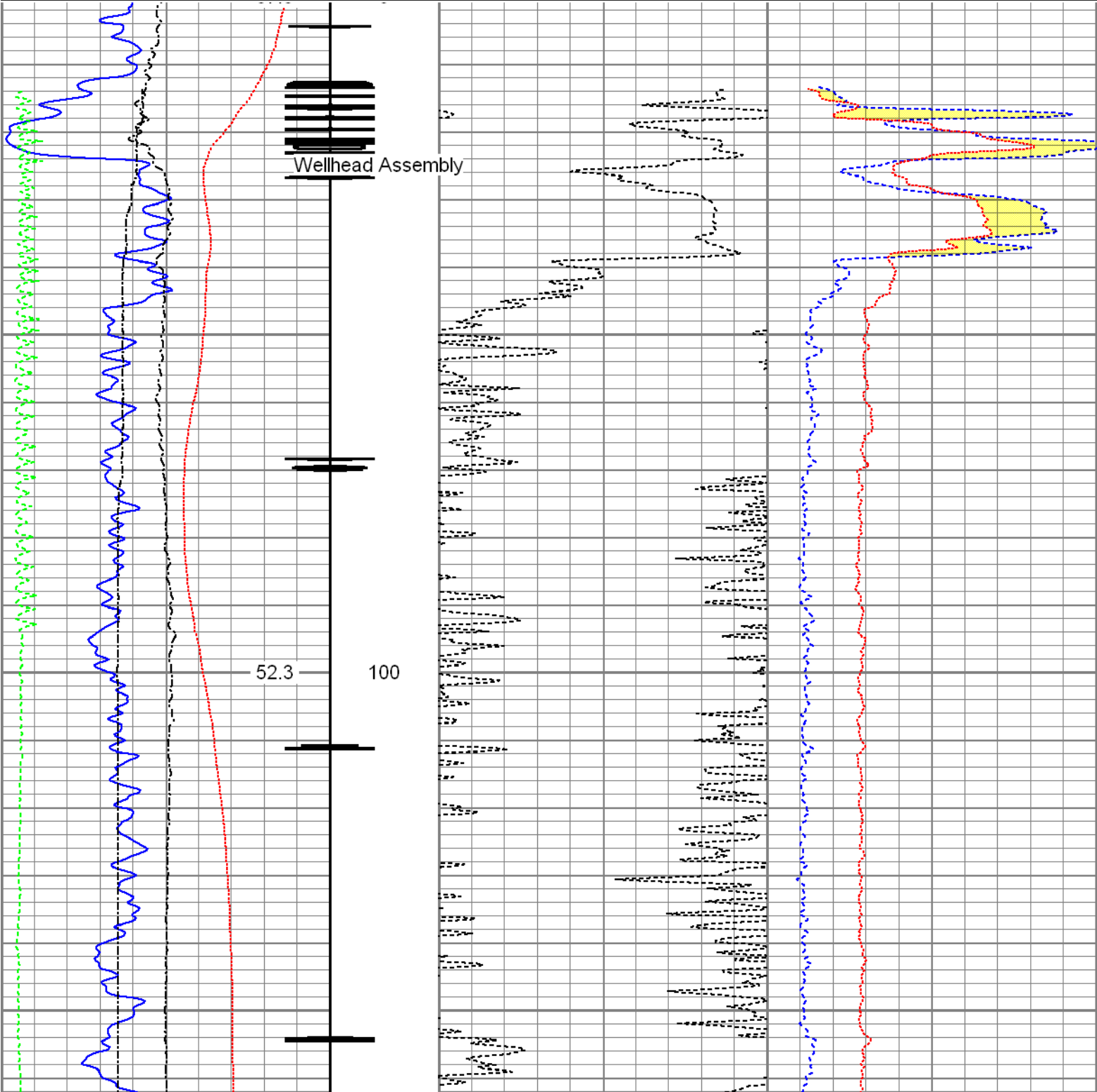


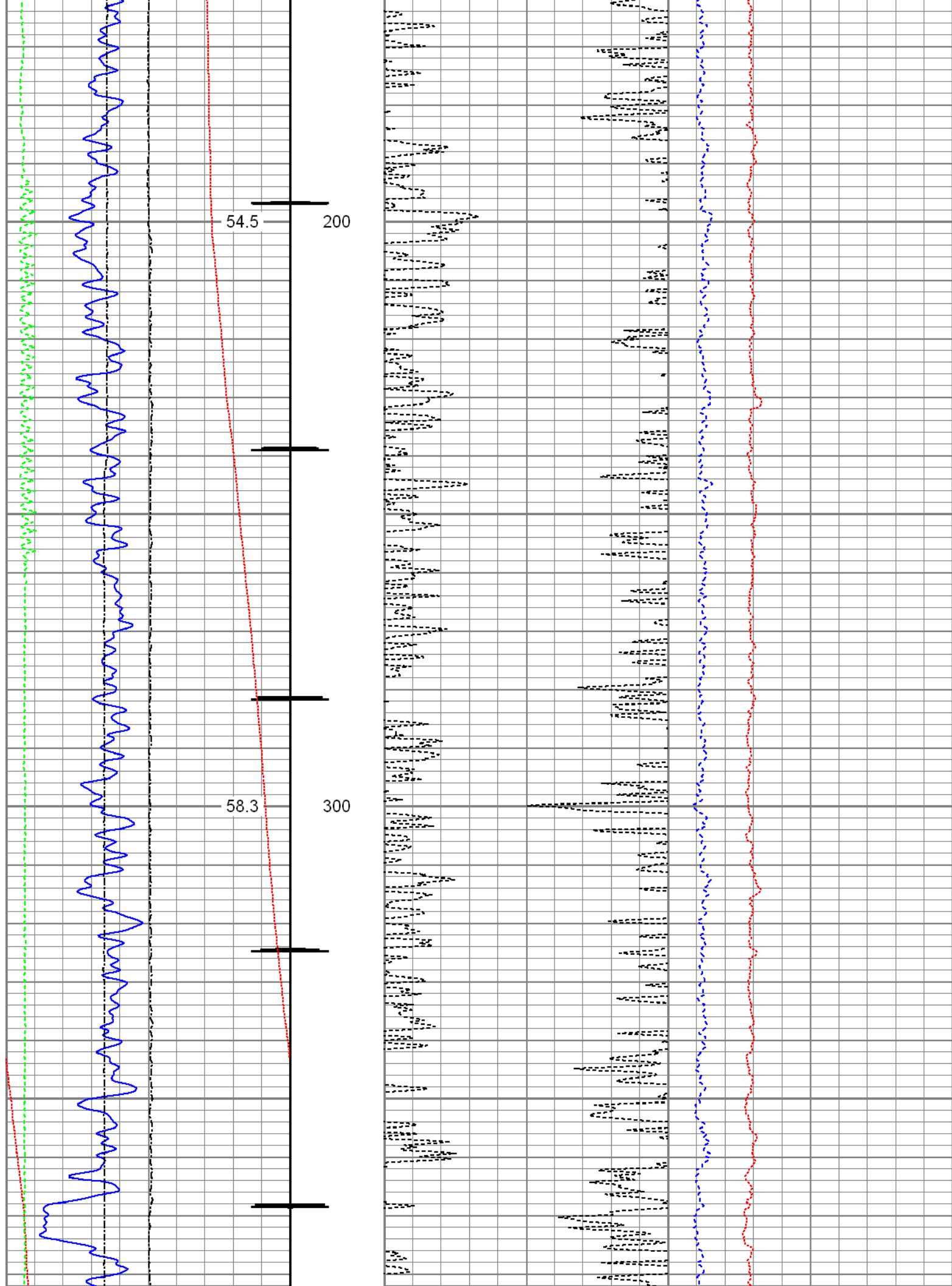
Main Pass

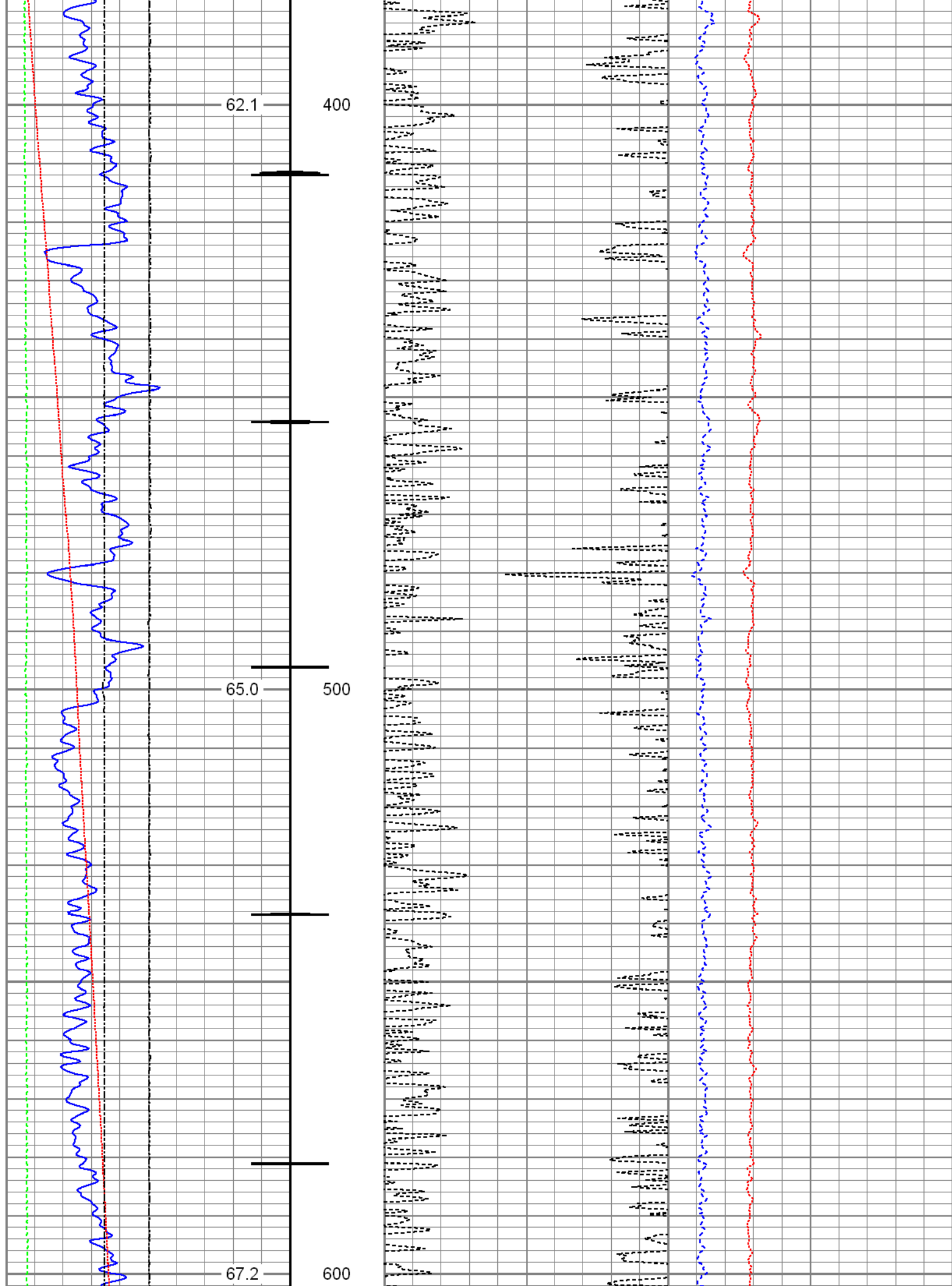
Recorded with 2800 PSI Surface Induced Pressure

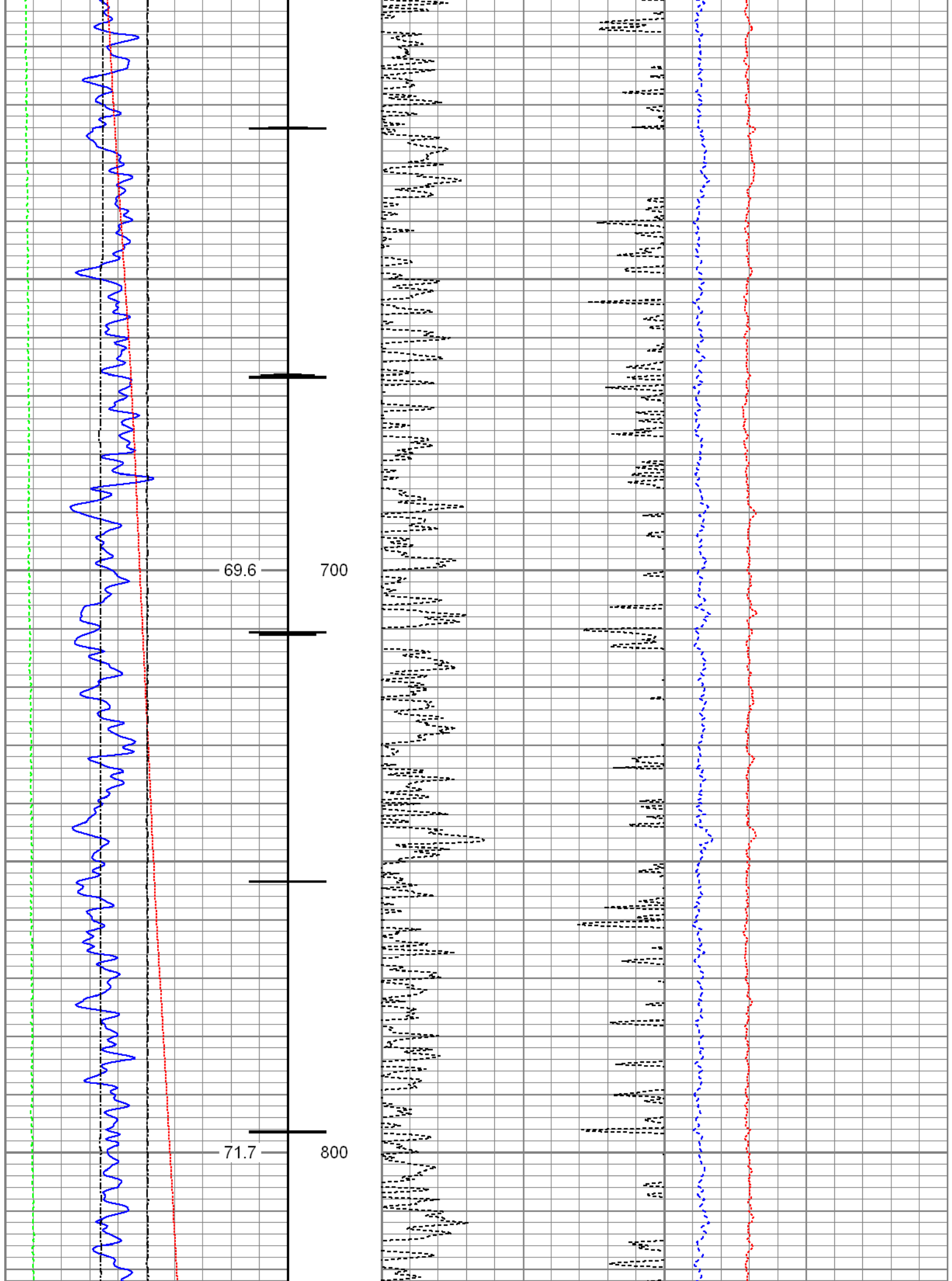
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Dataset Pathname: main
Presentation Format: cnl
Dataset Creation: Thu Dec 10 09:42:01 2015 by Log 7.0 B1
Charted by: Depth in Feet scaled 1:240

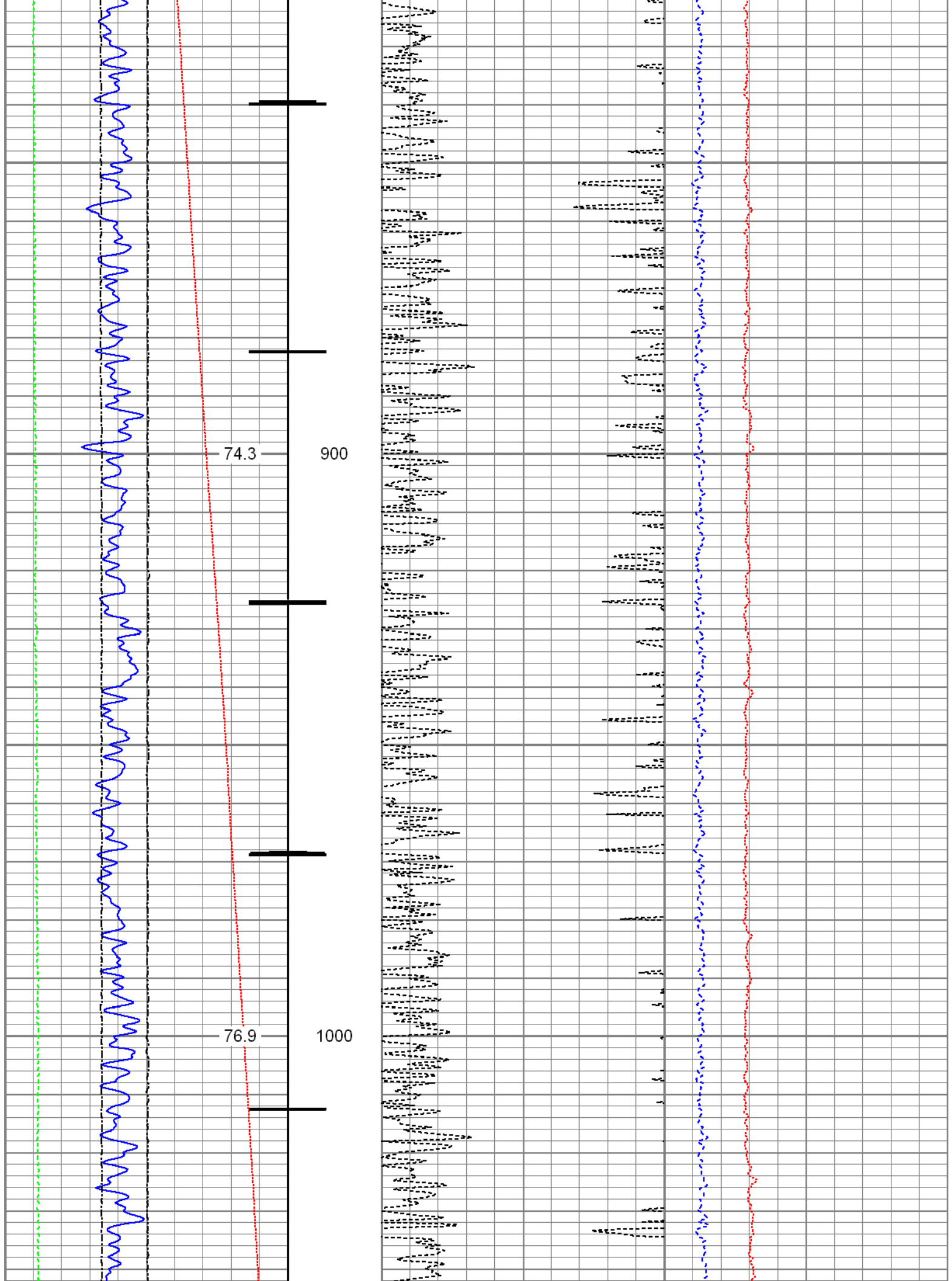
0	Gamma Ray (GAPI)	120	60	Neutron Porosity (pu)	0	0	Far Neutron (cps)	1000
Casing Collar Locator						0	Near Neutron (cps)	10000
0	Temperature (degF)	20						
-100	Line Speed (ft/min)	100						
0	Line Tension (lb)	2000						
-2	Differential Temperature (degF)	2						

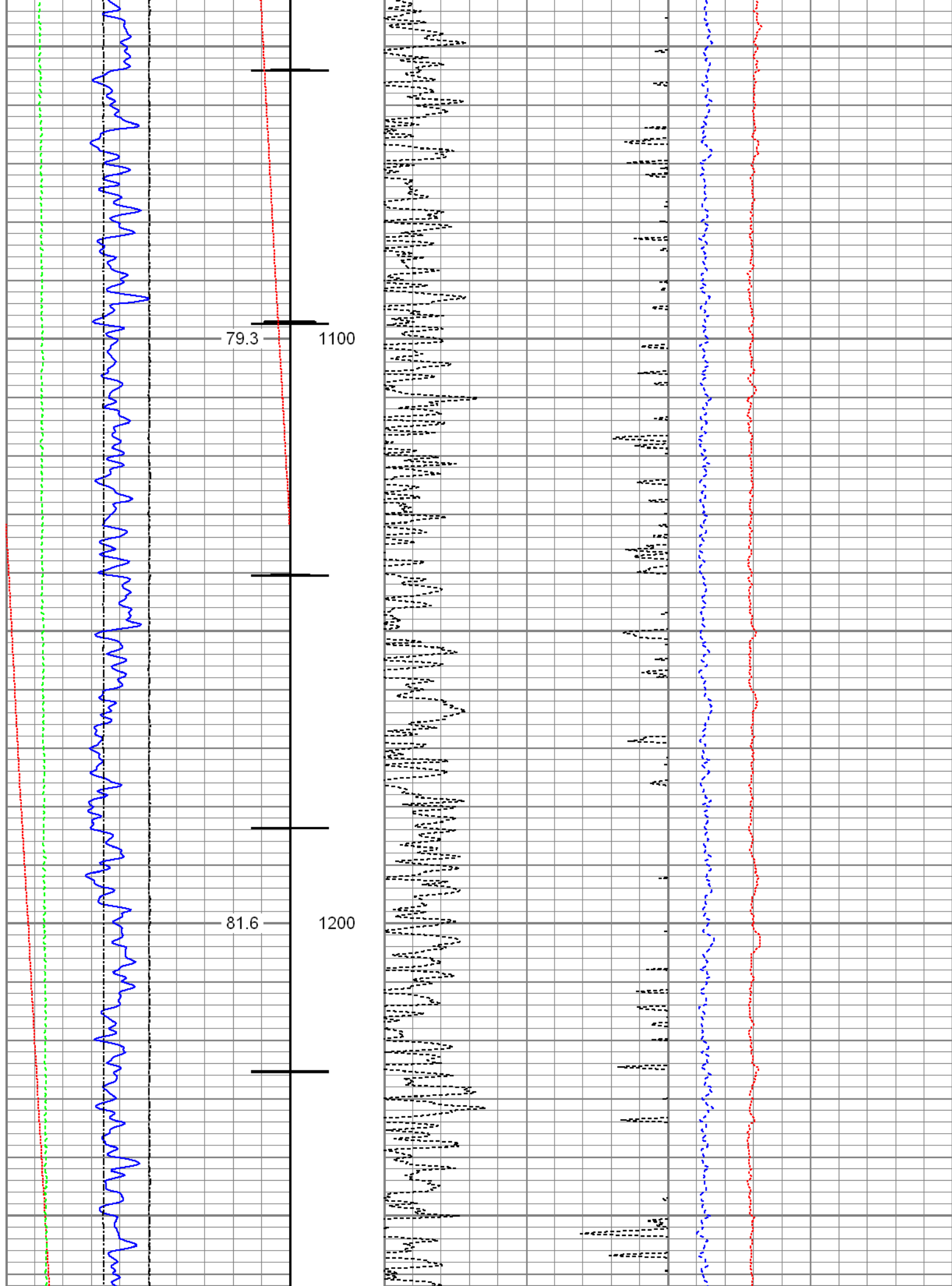


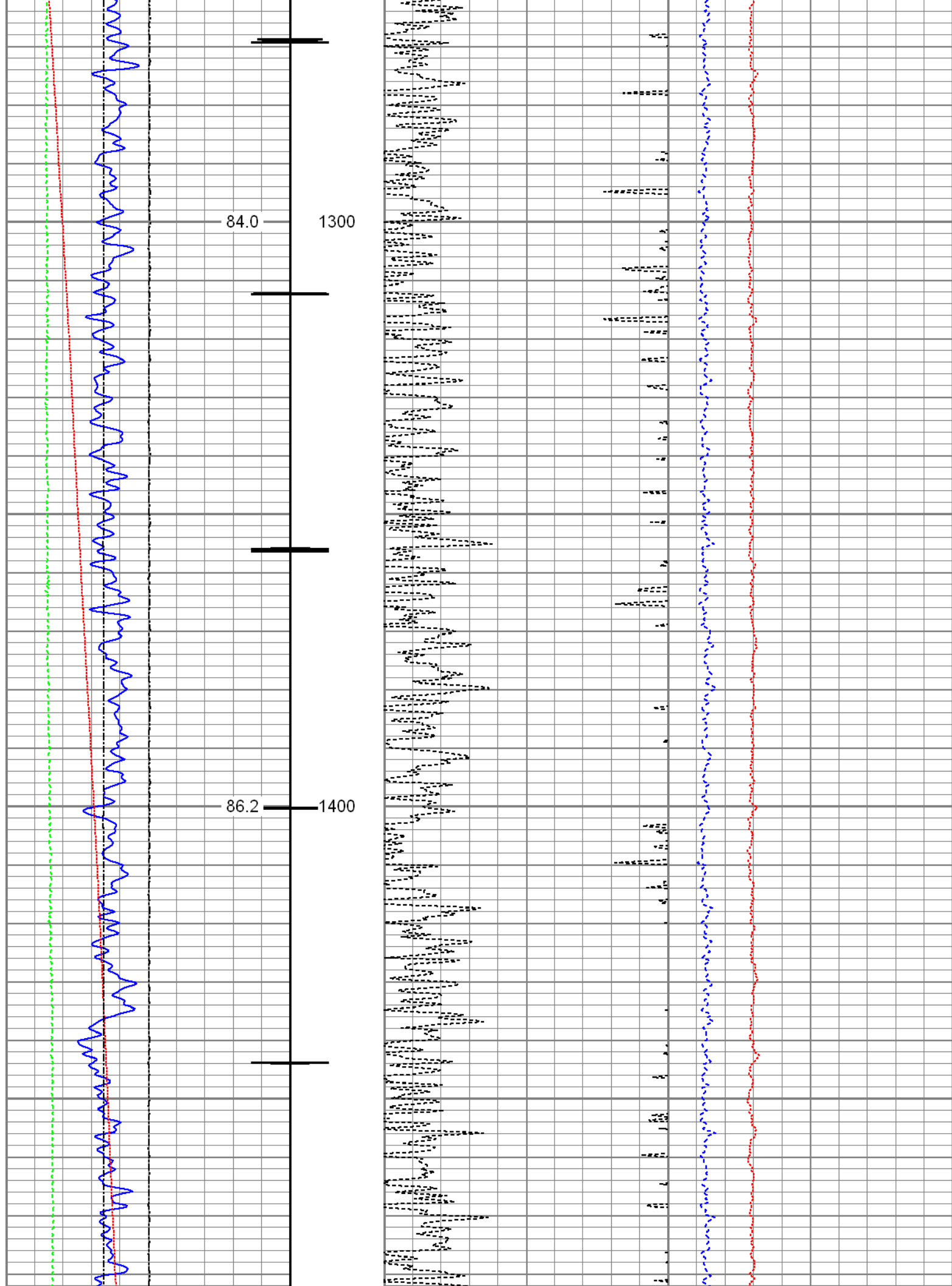


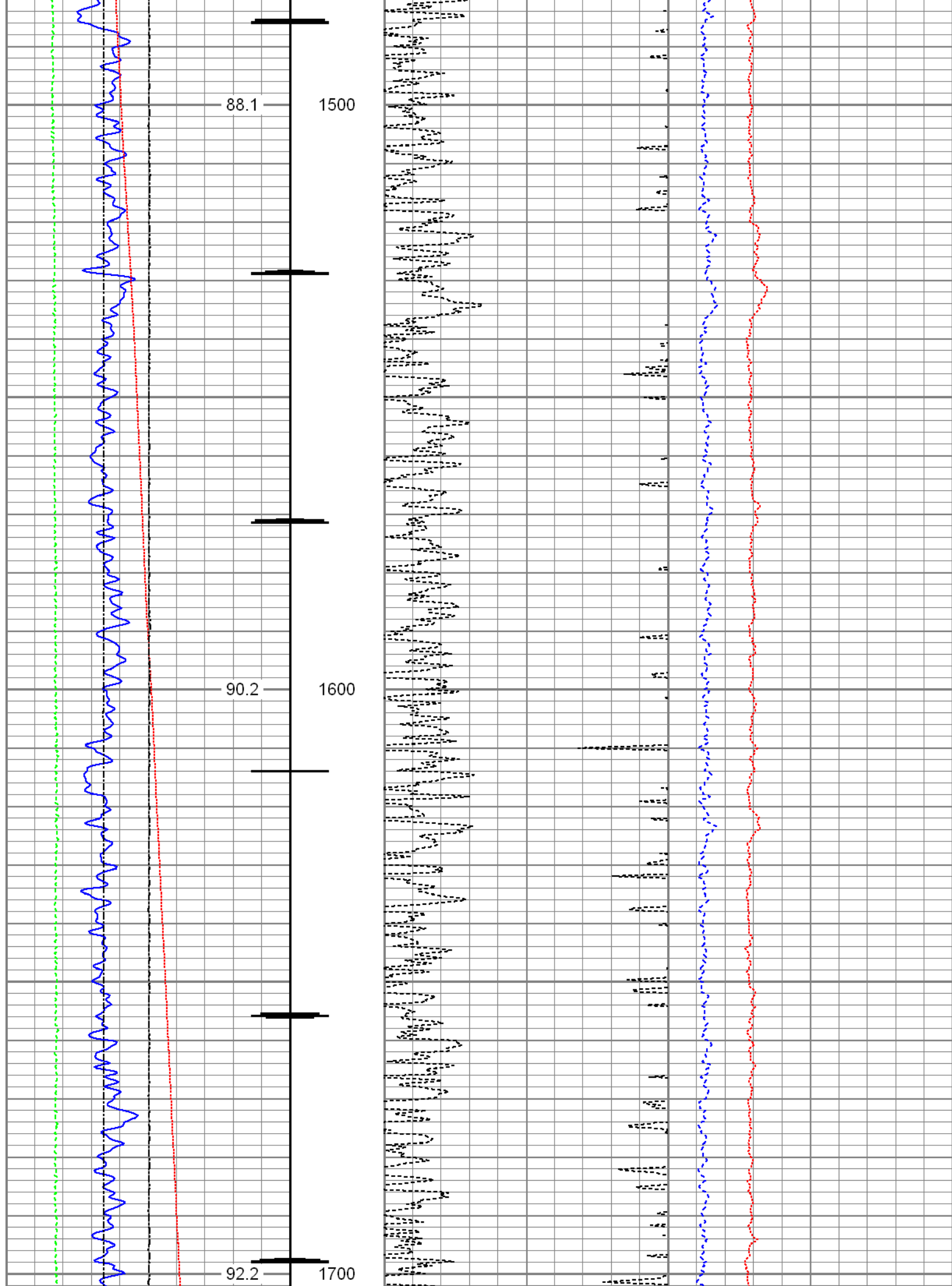


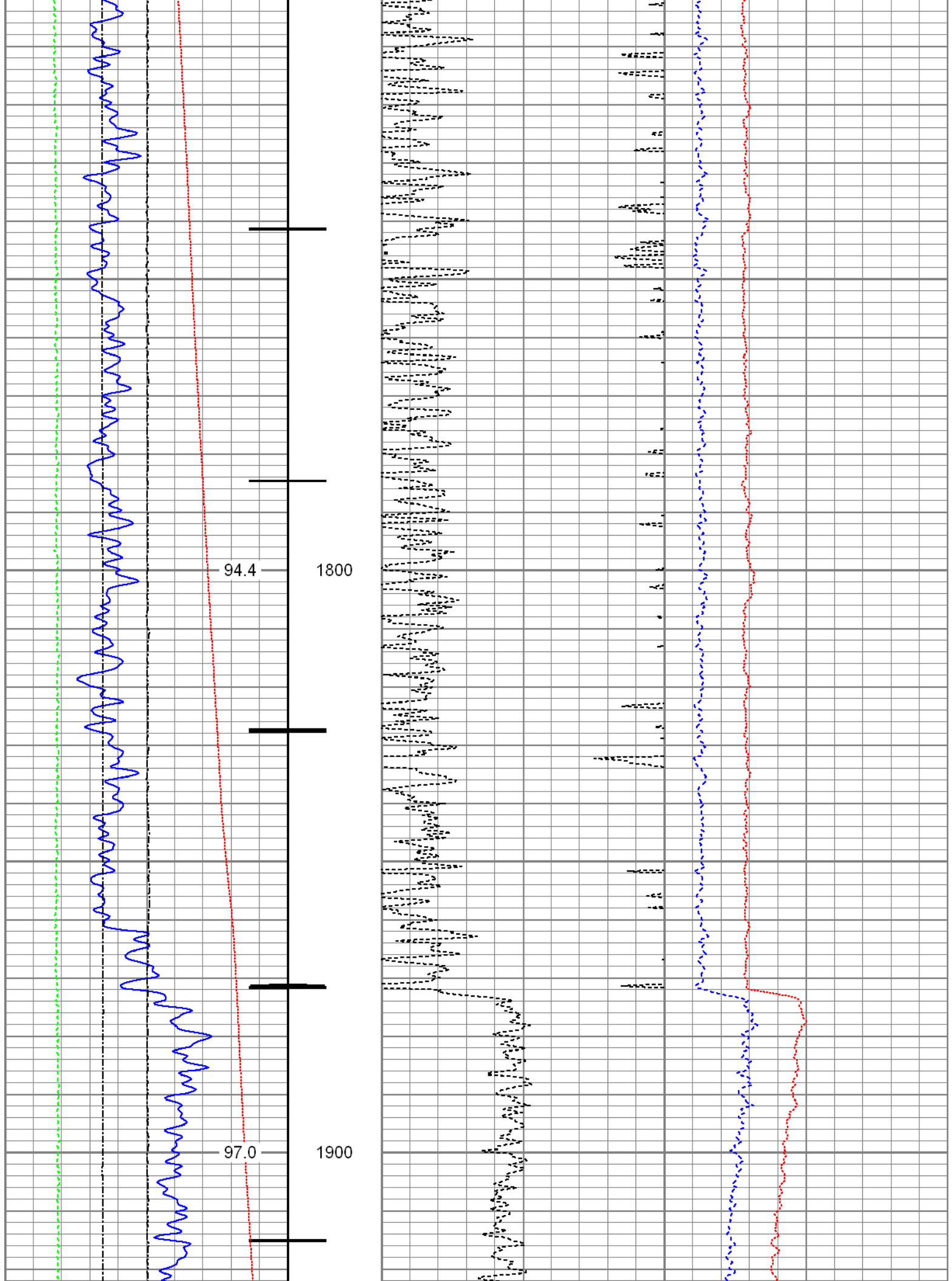


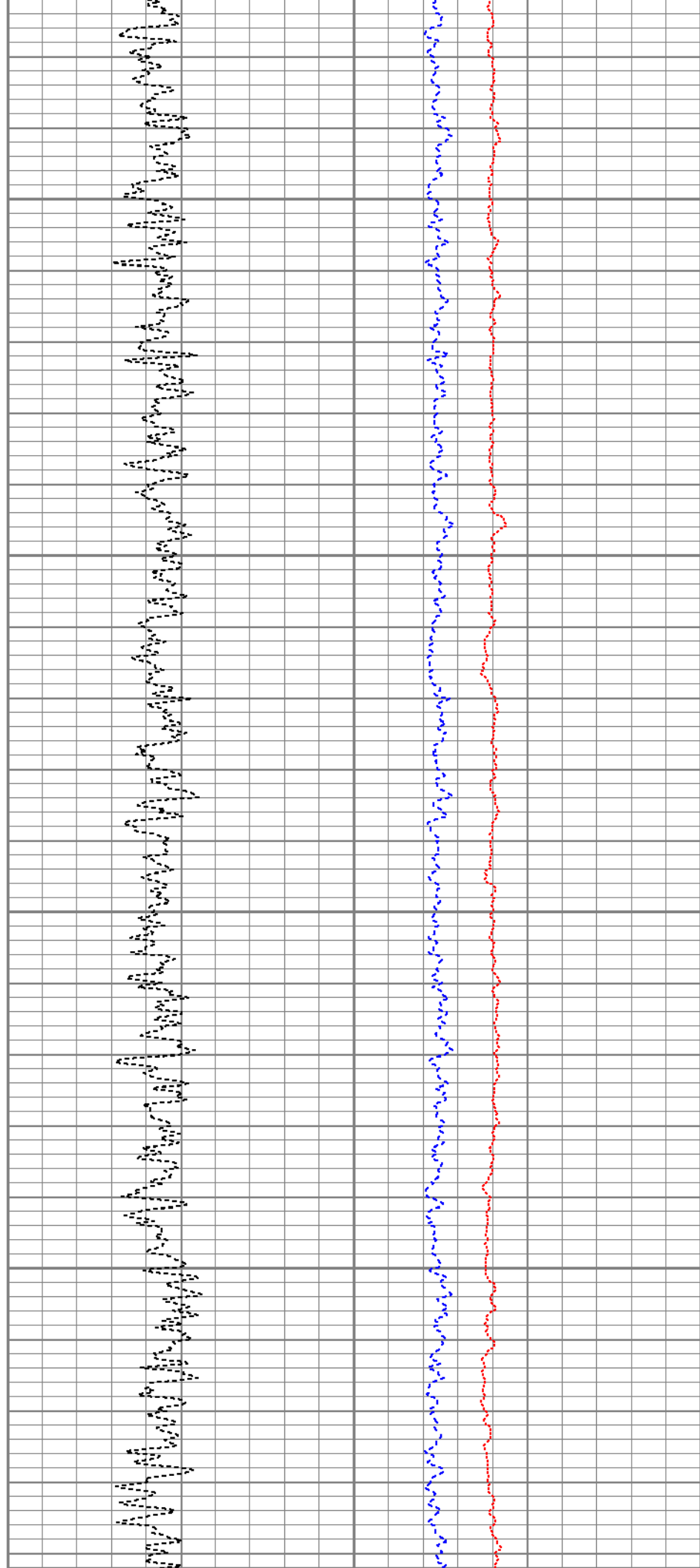
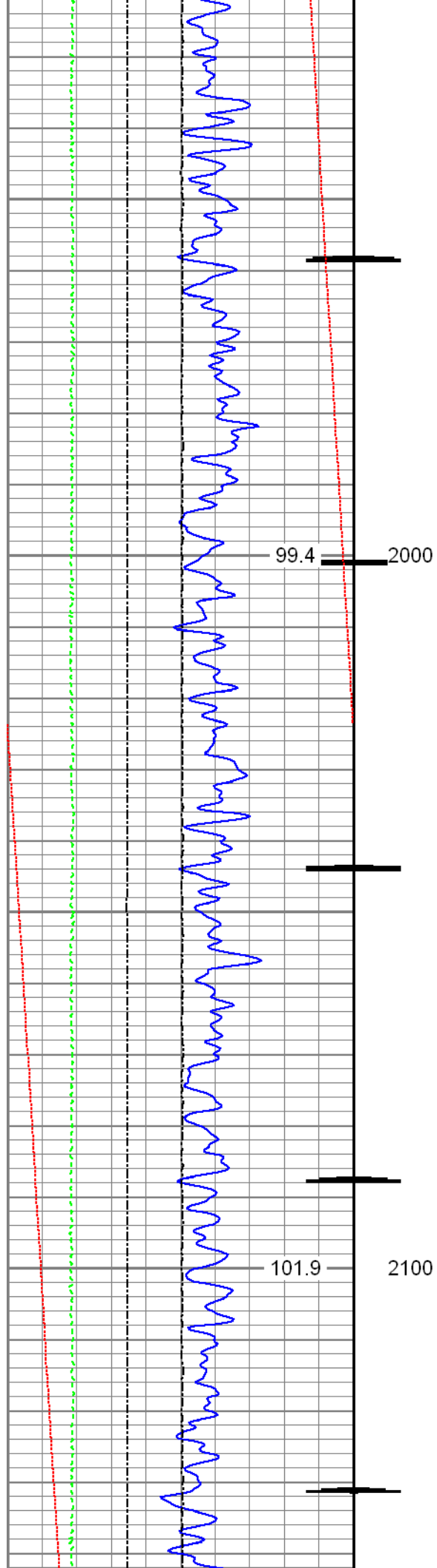


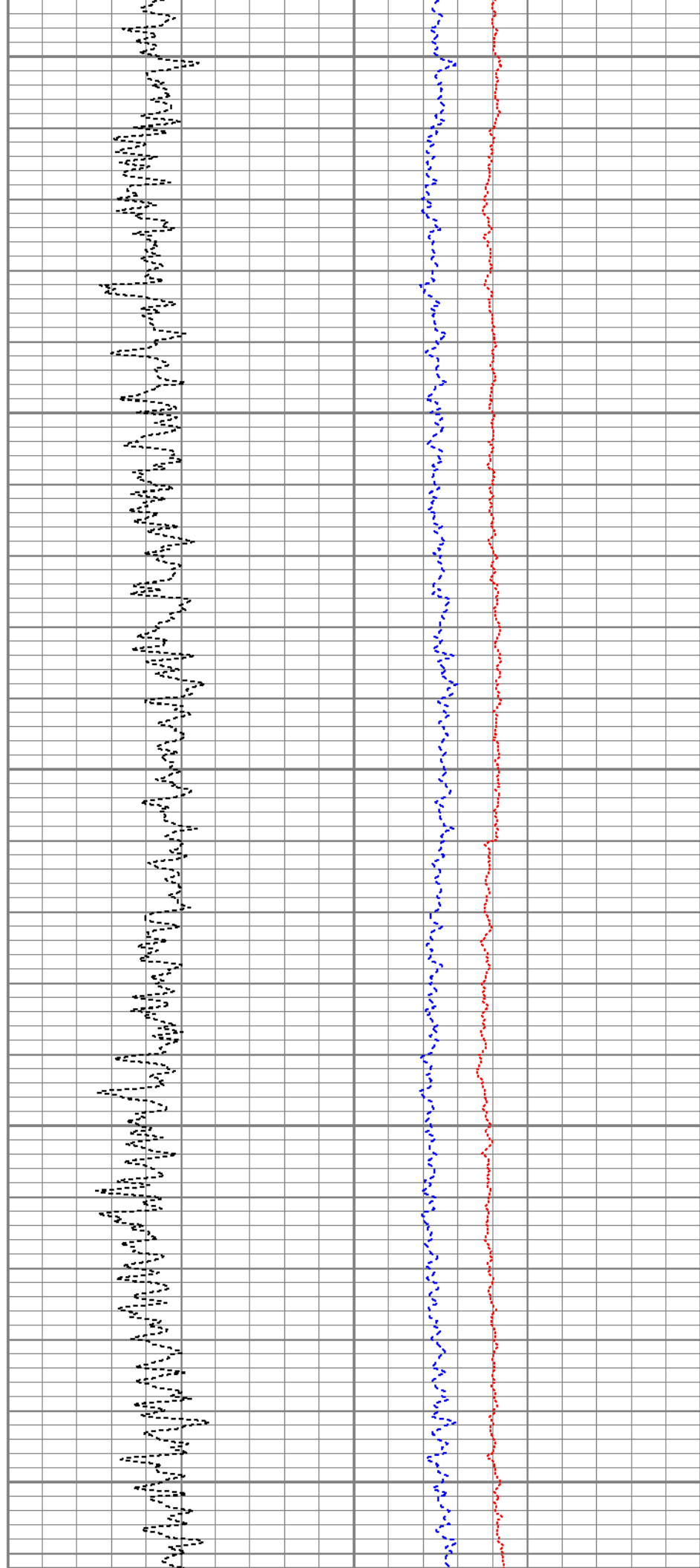
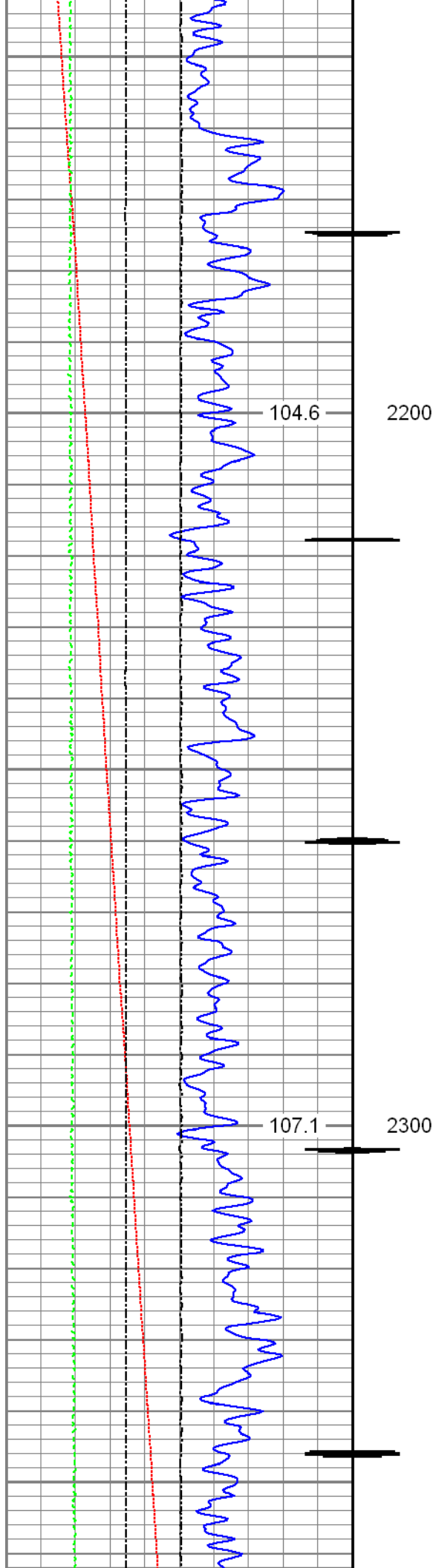


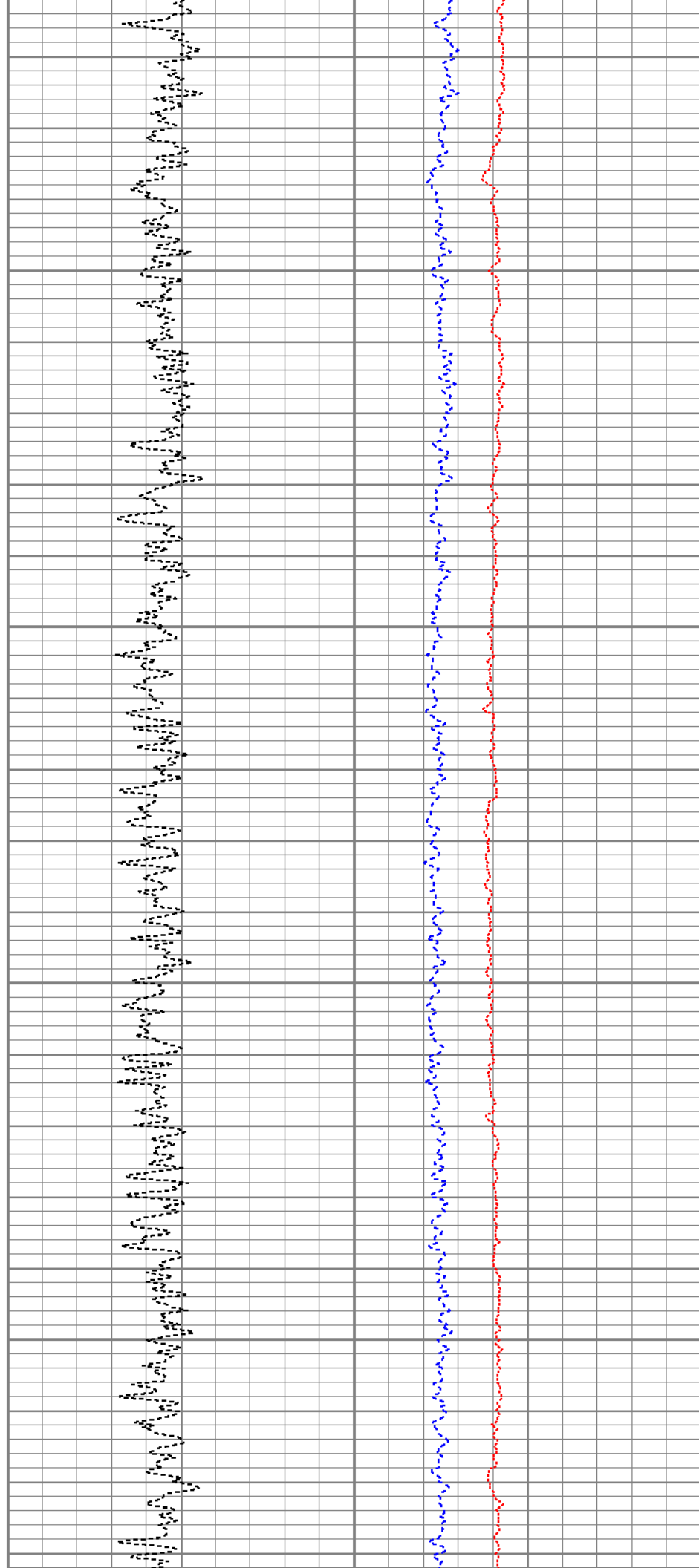
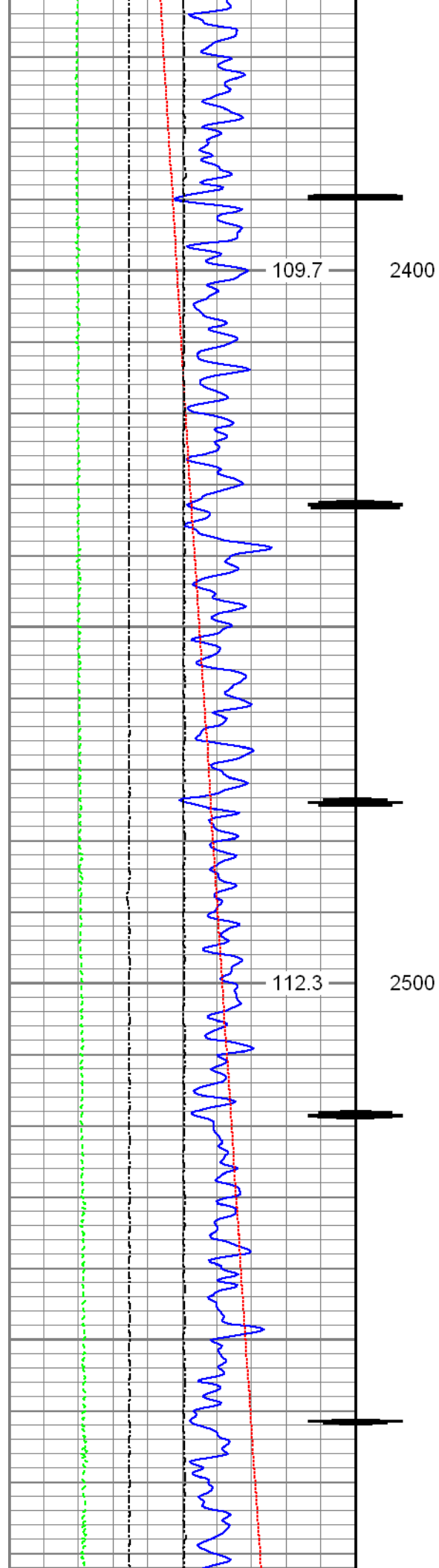


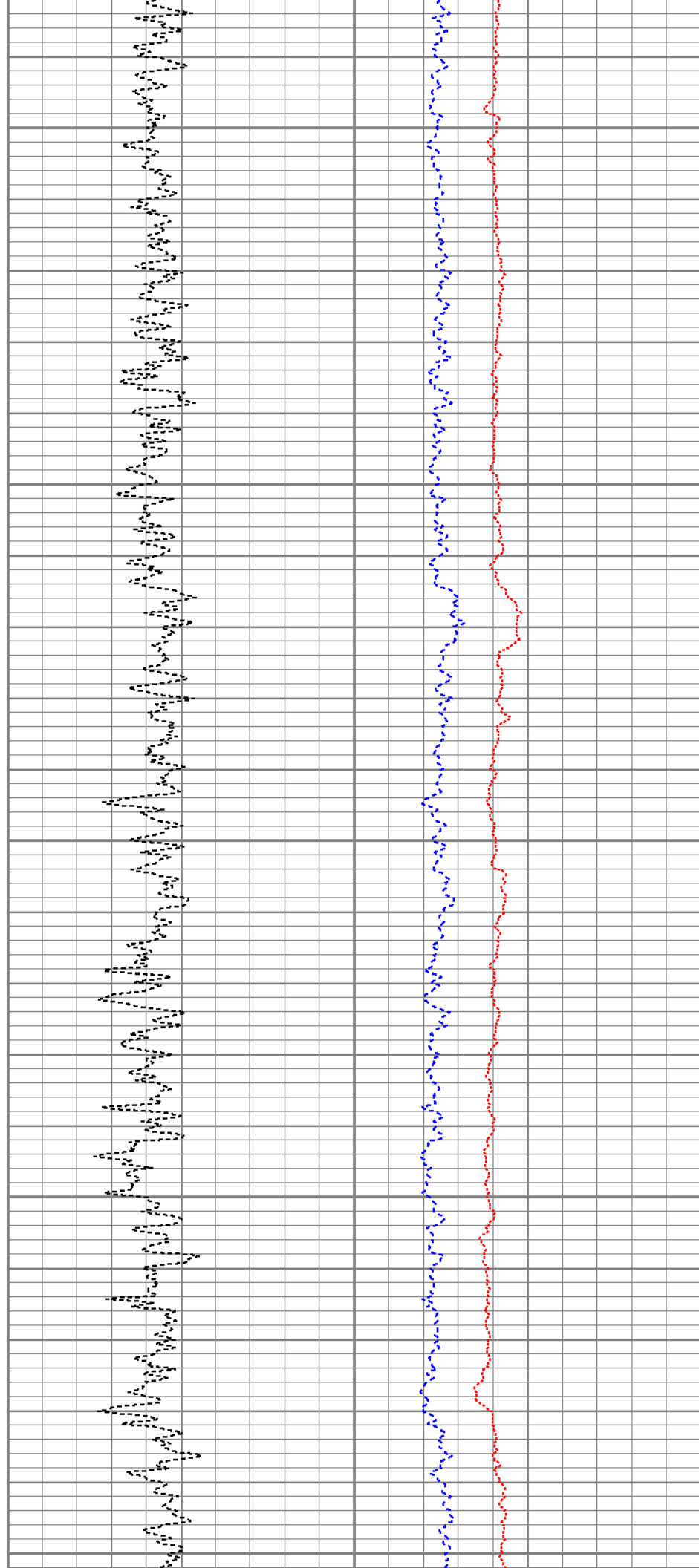
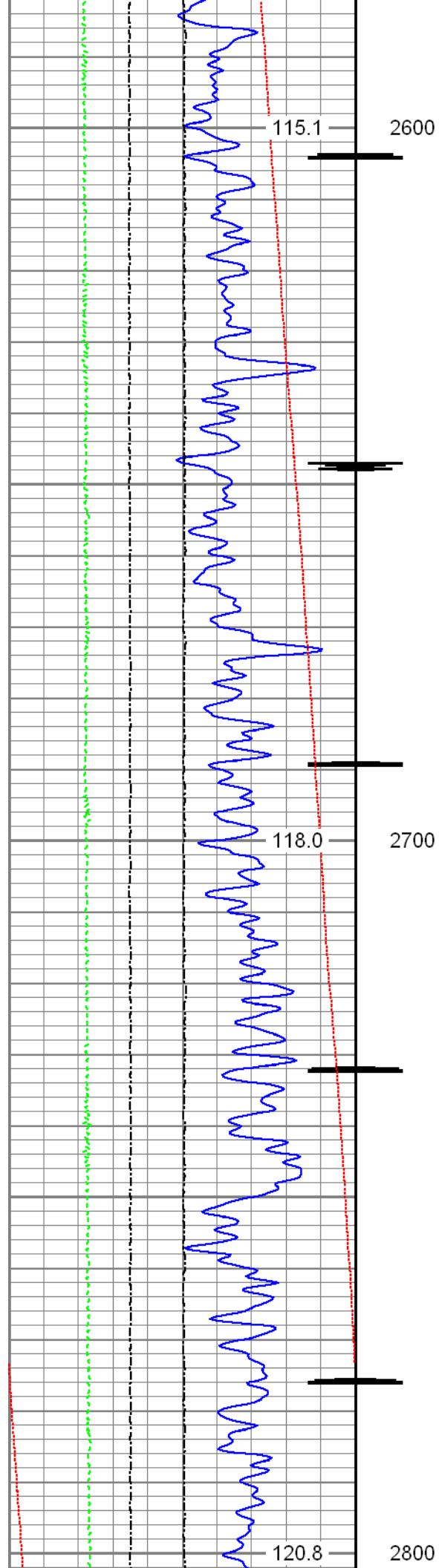


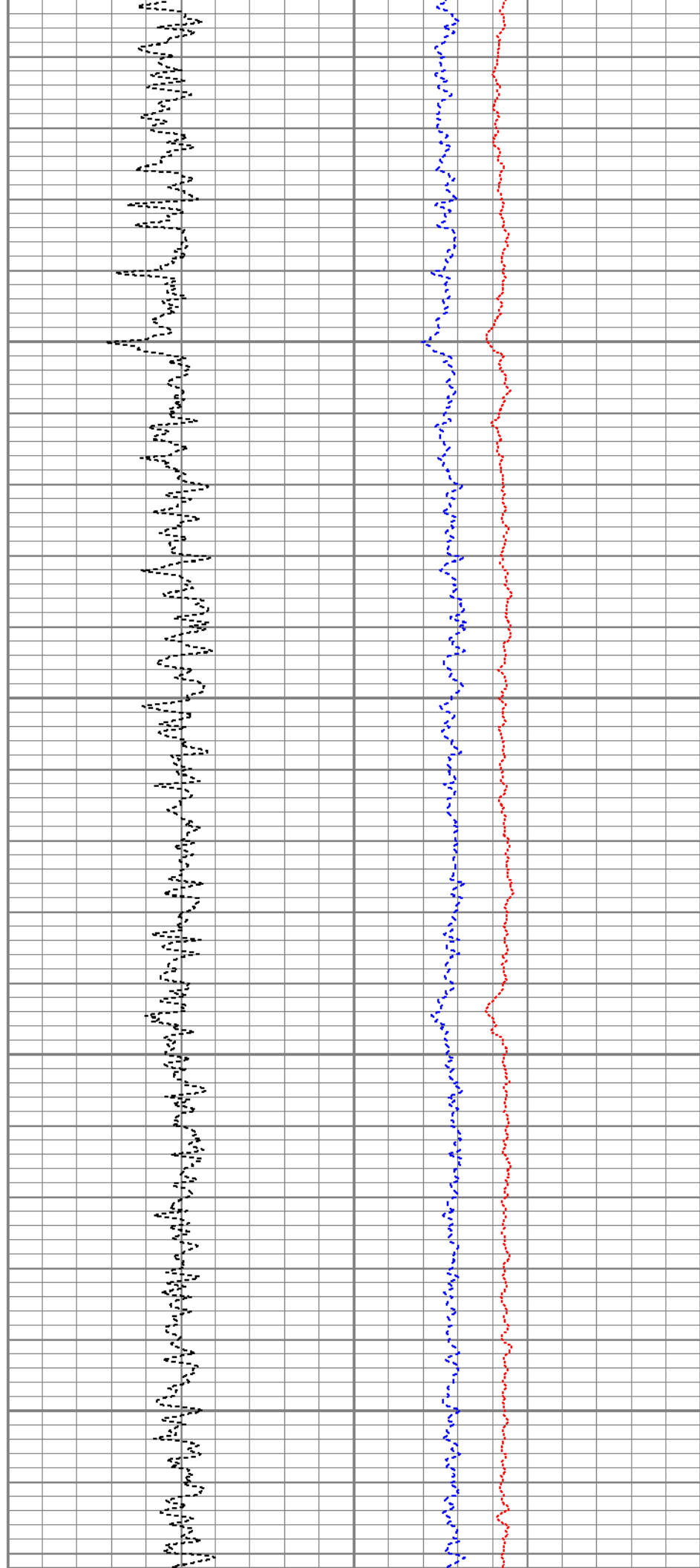
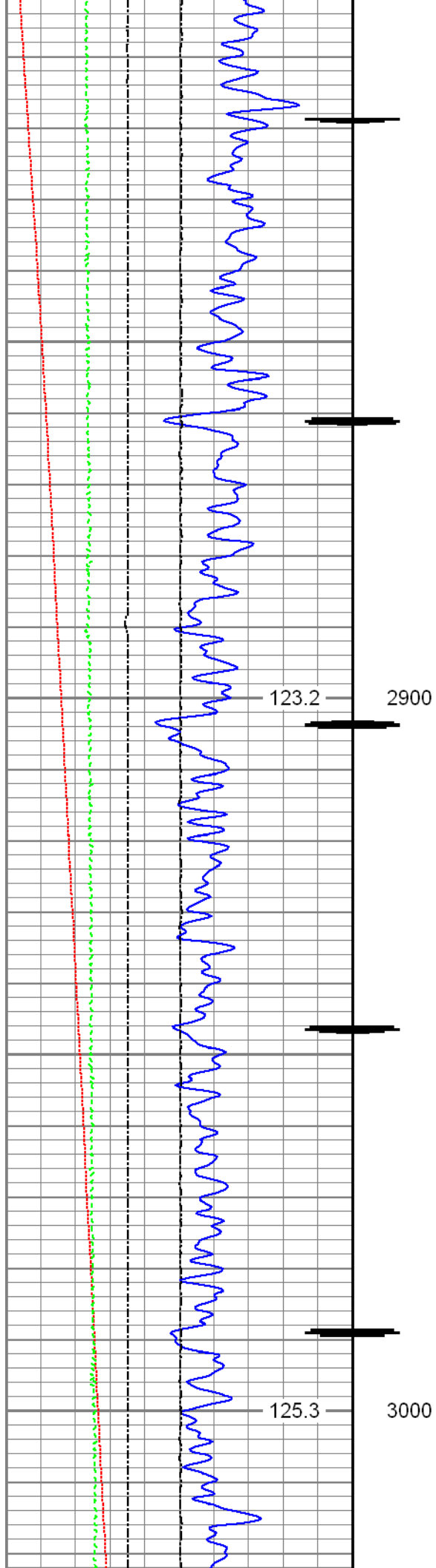


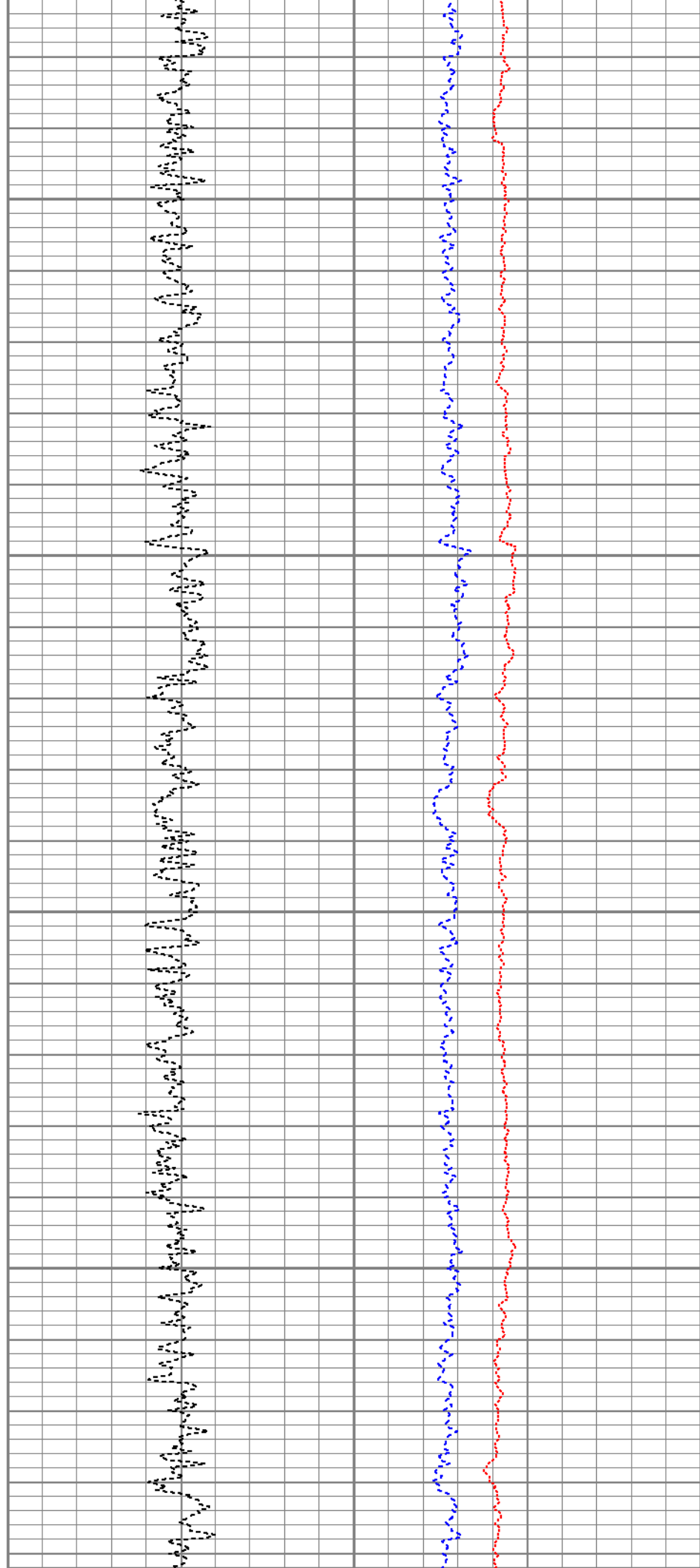
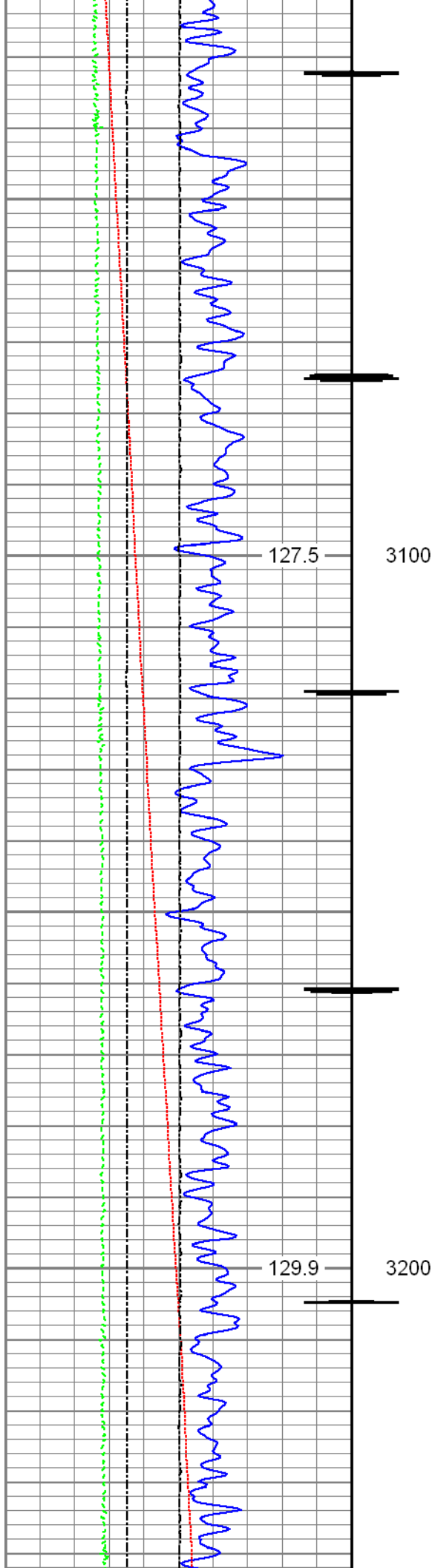


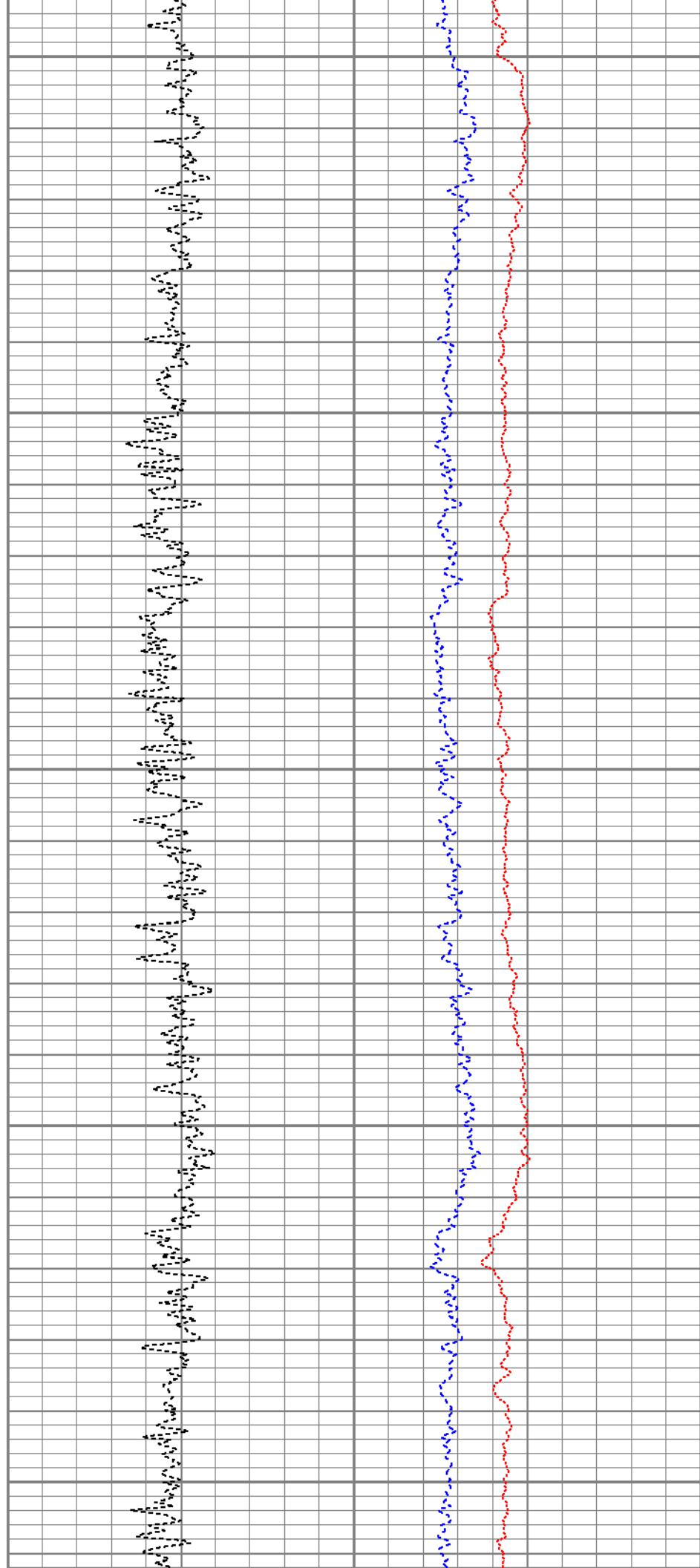
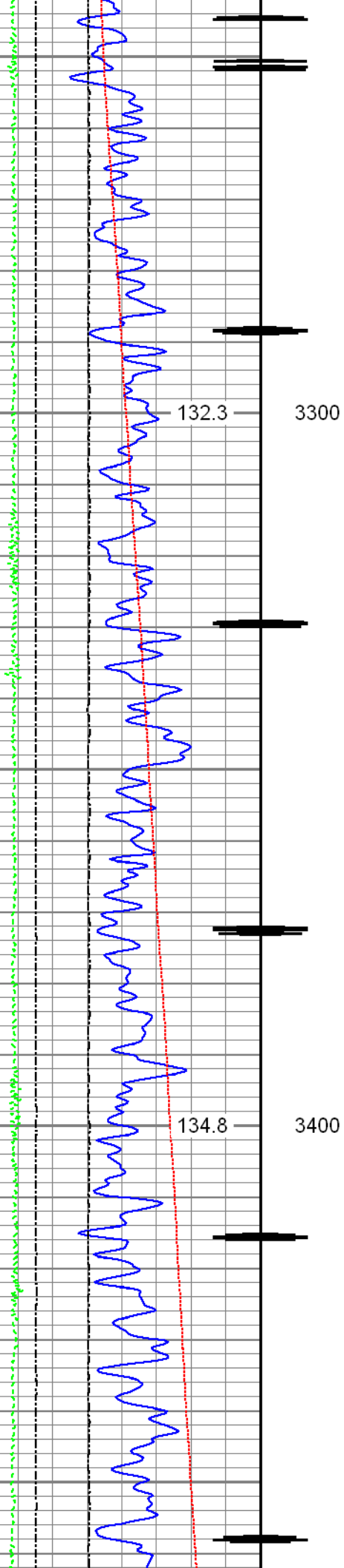


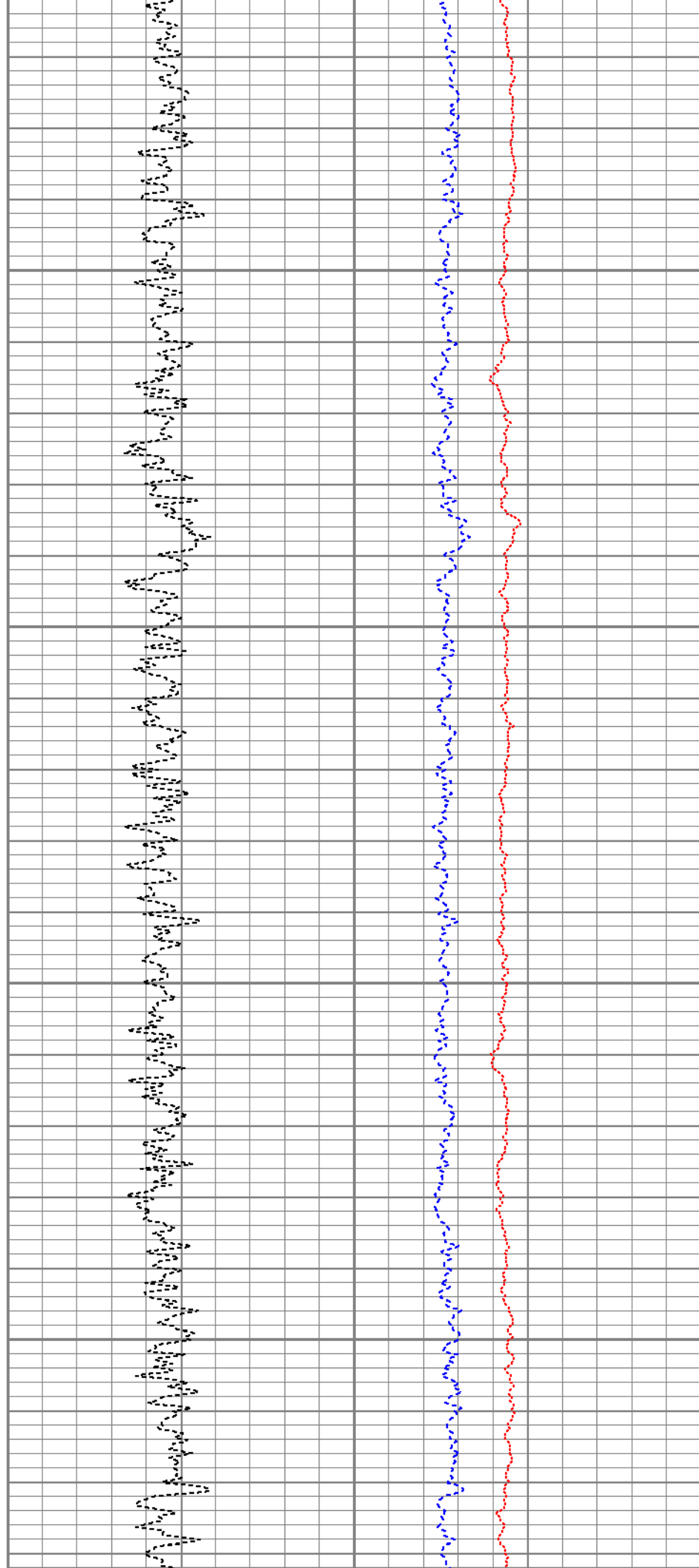
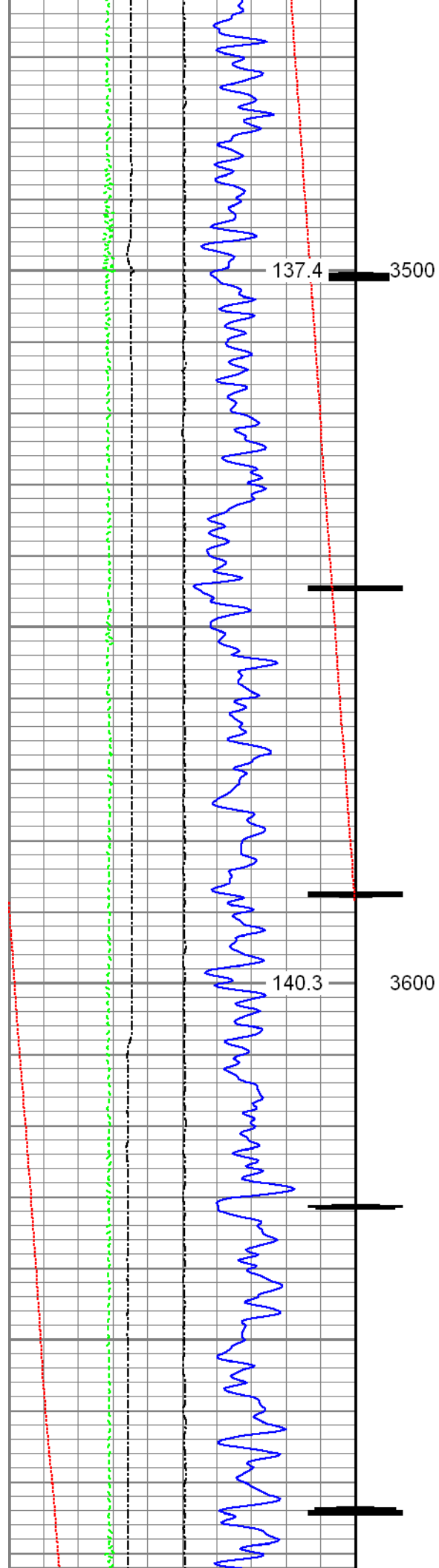


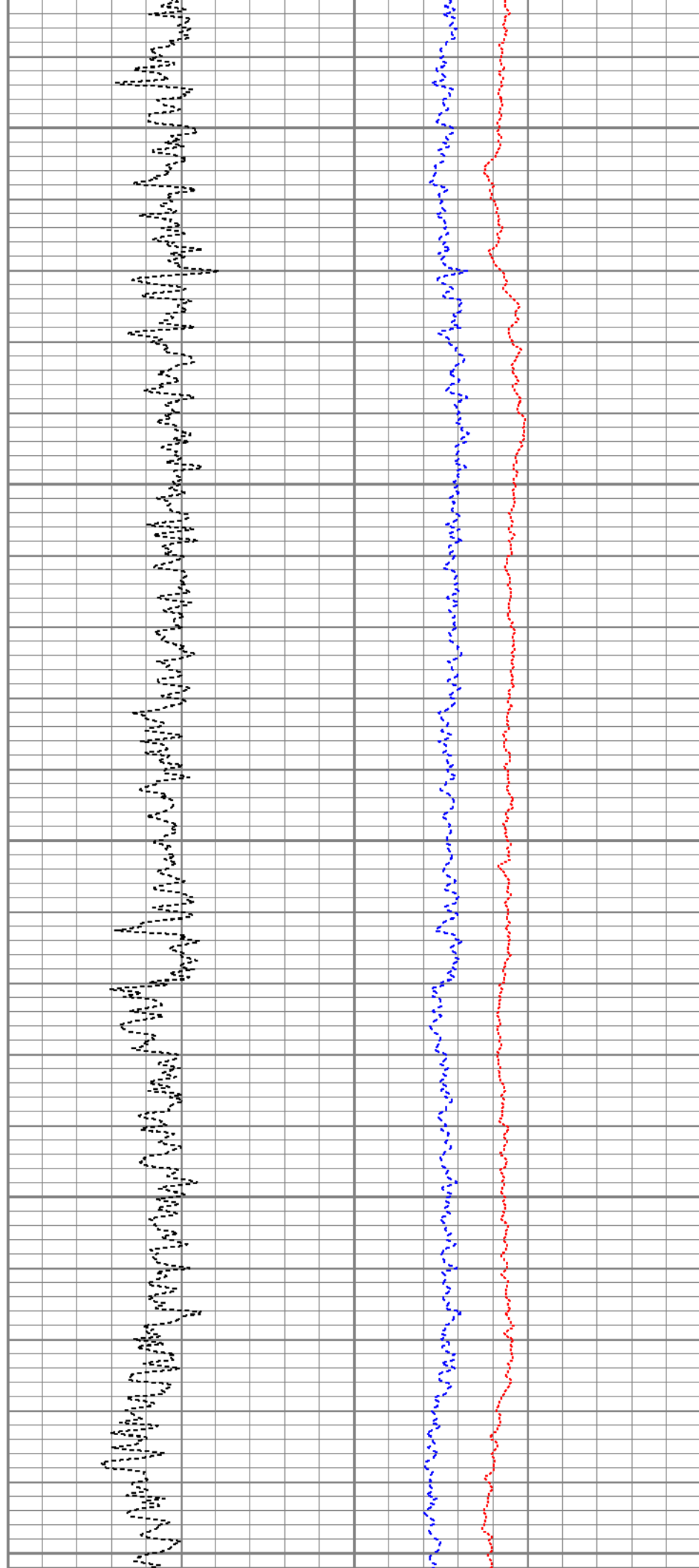
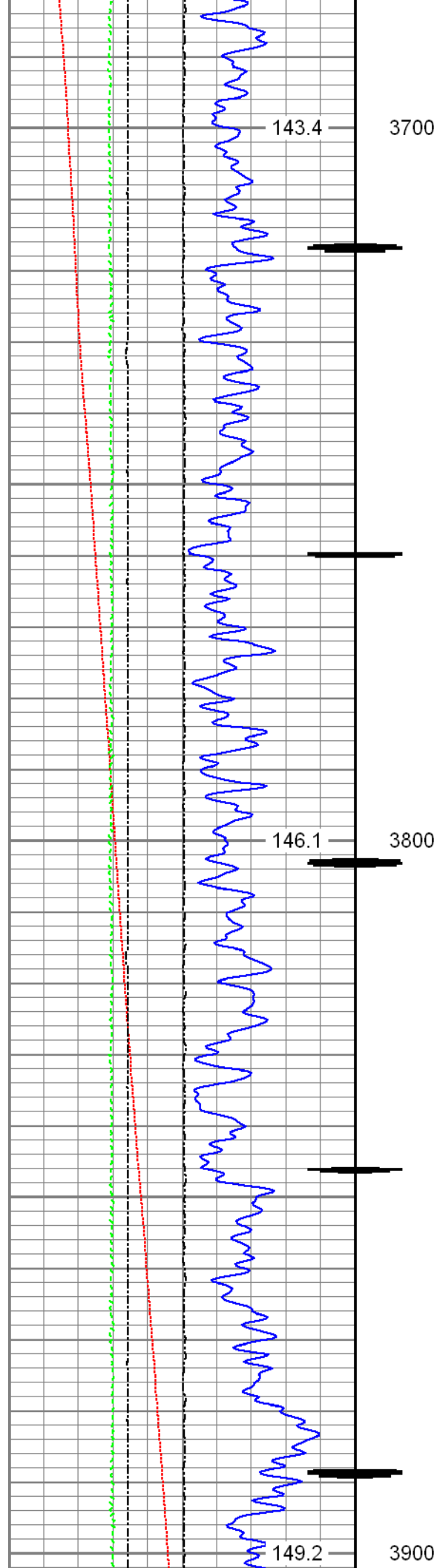


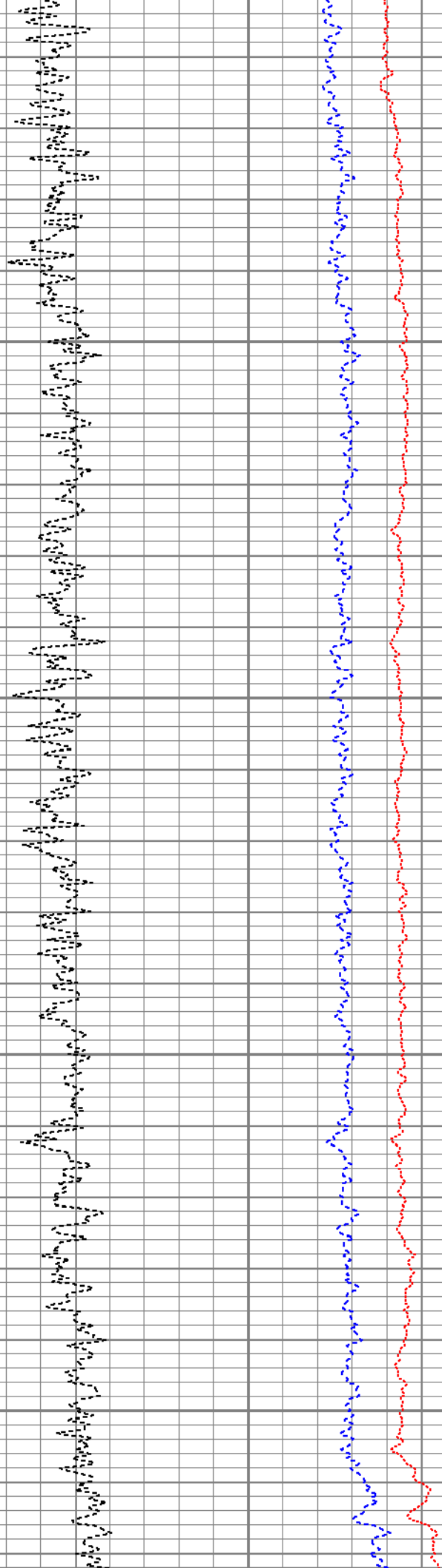
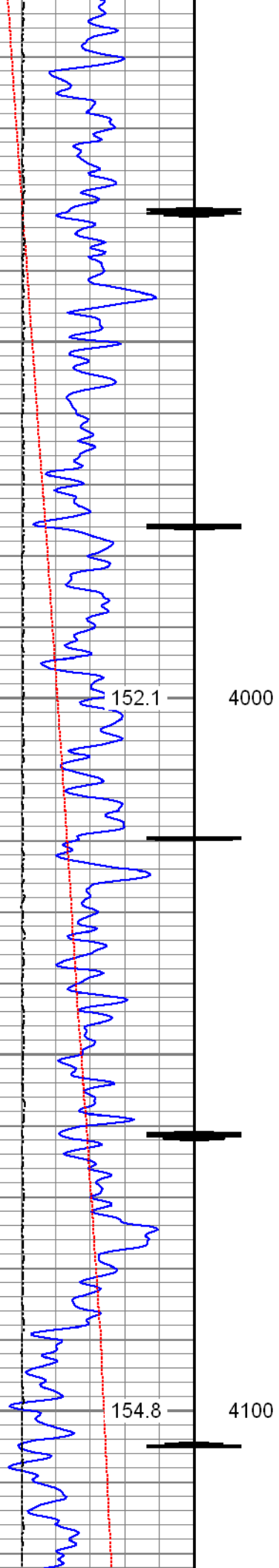


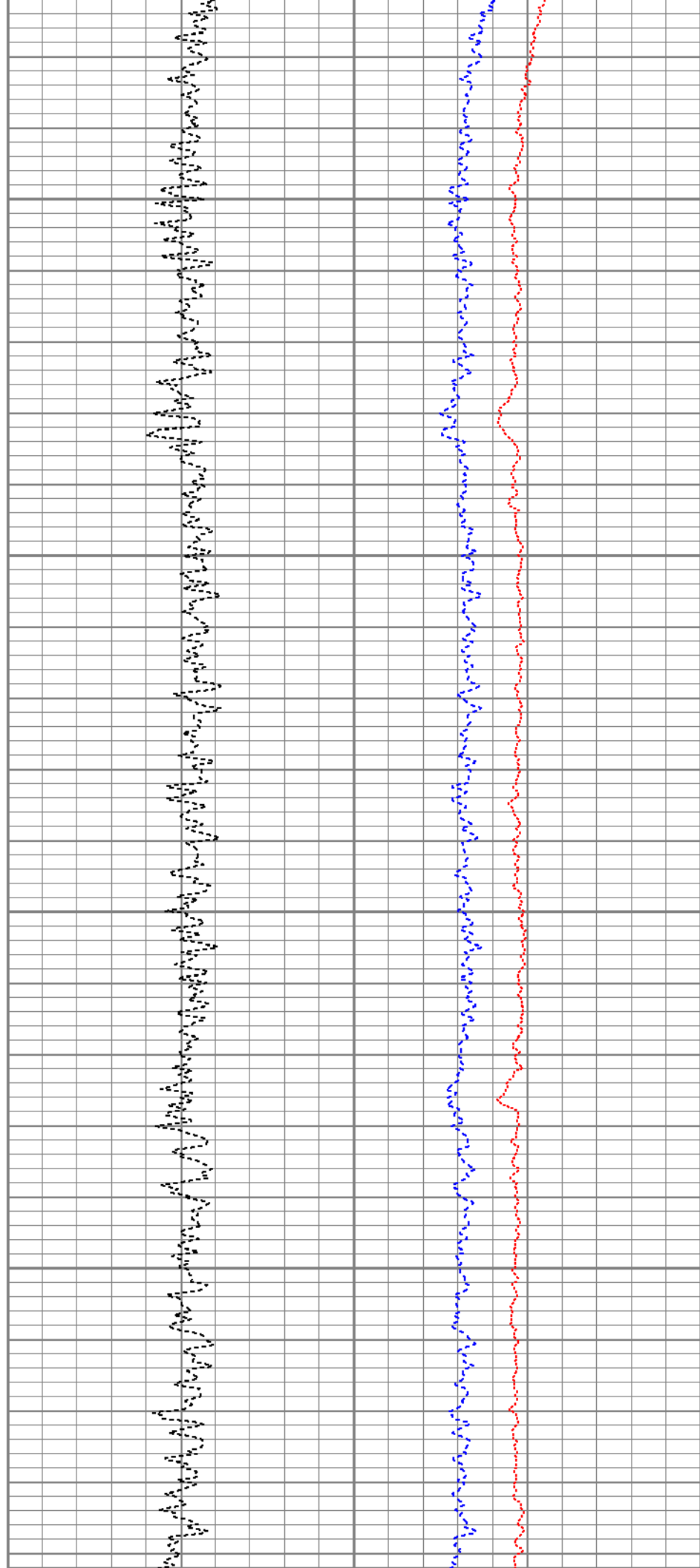
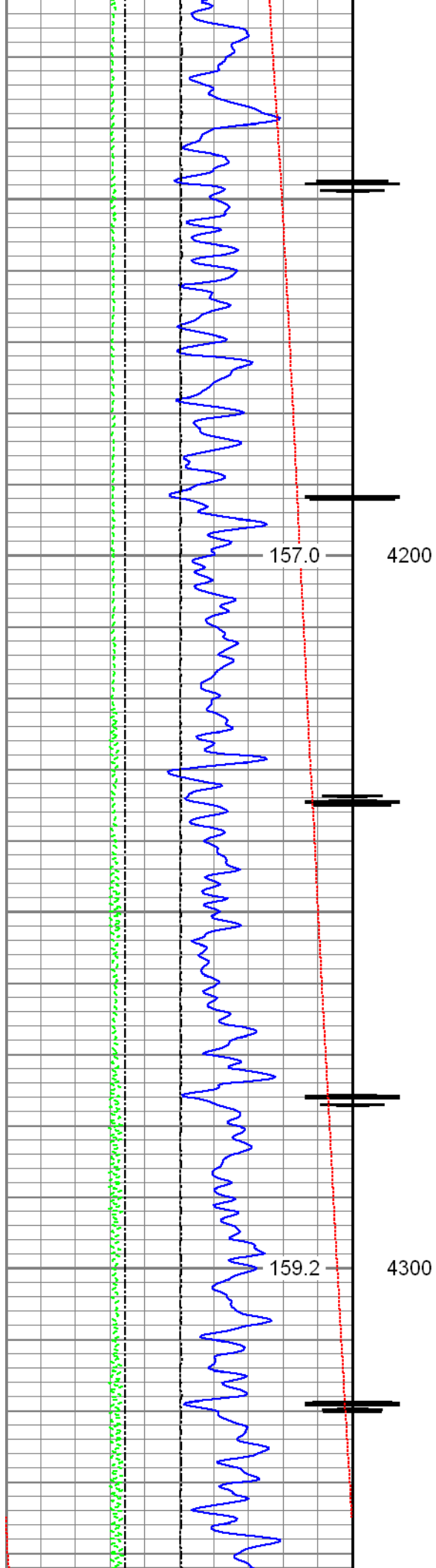


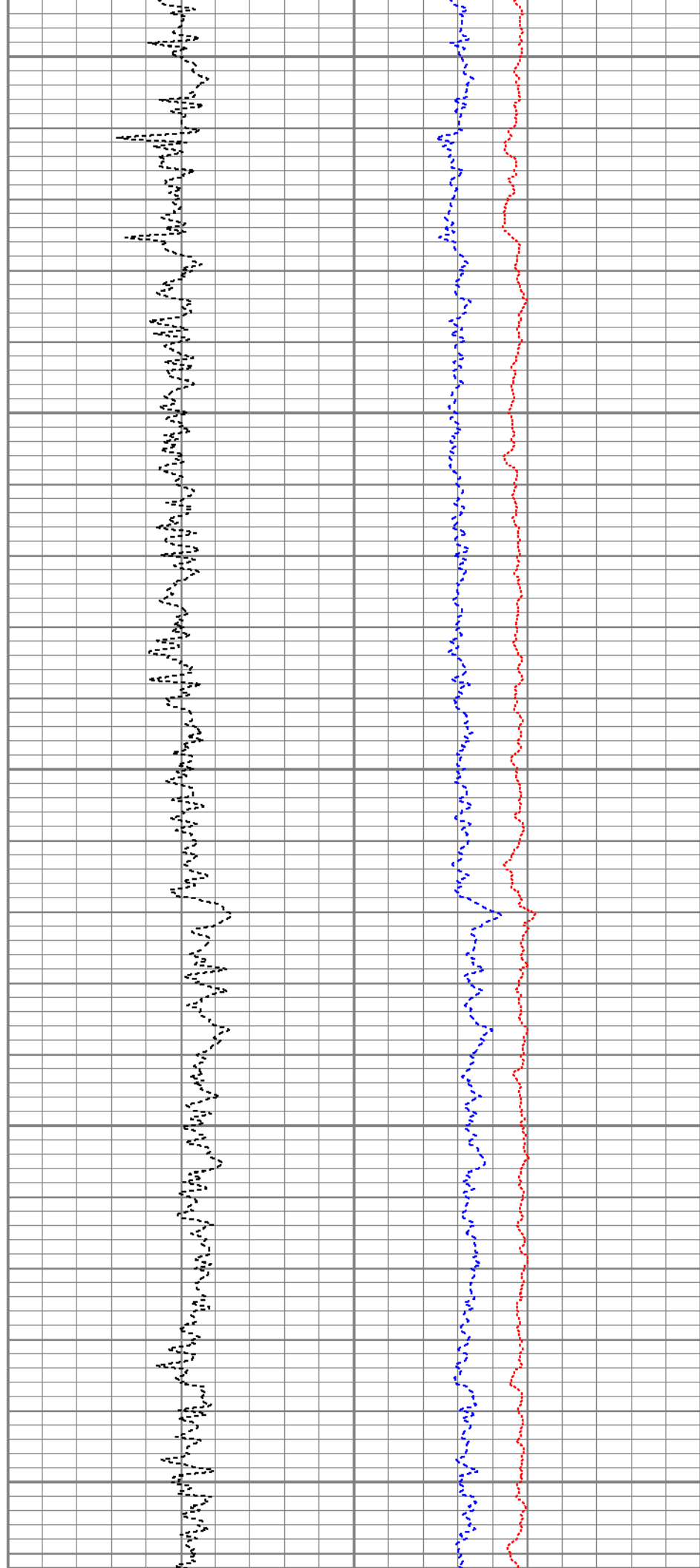
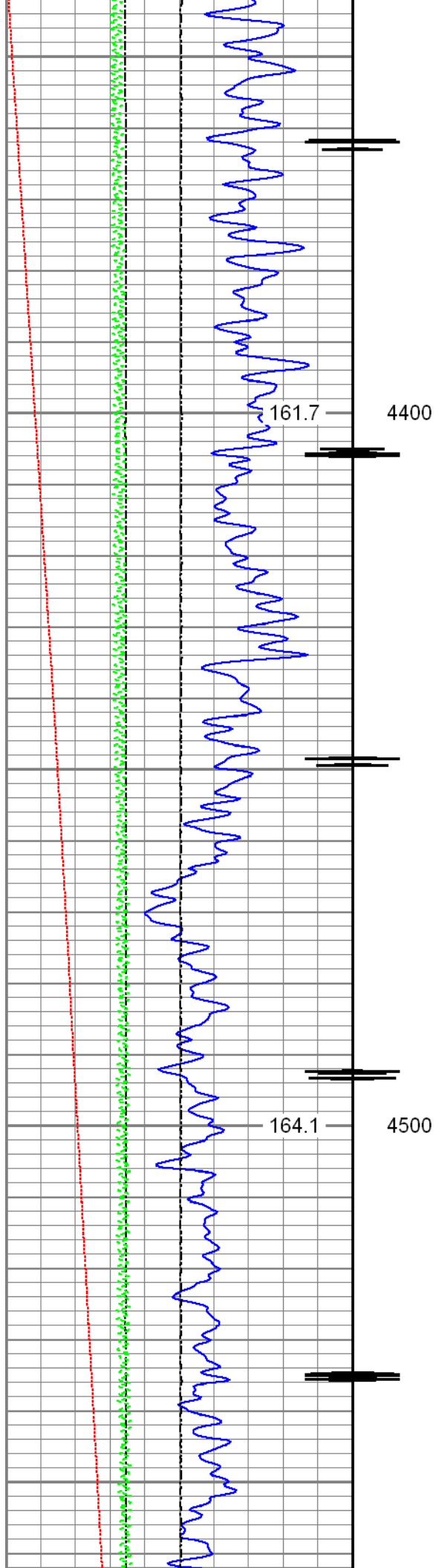


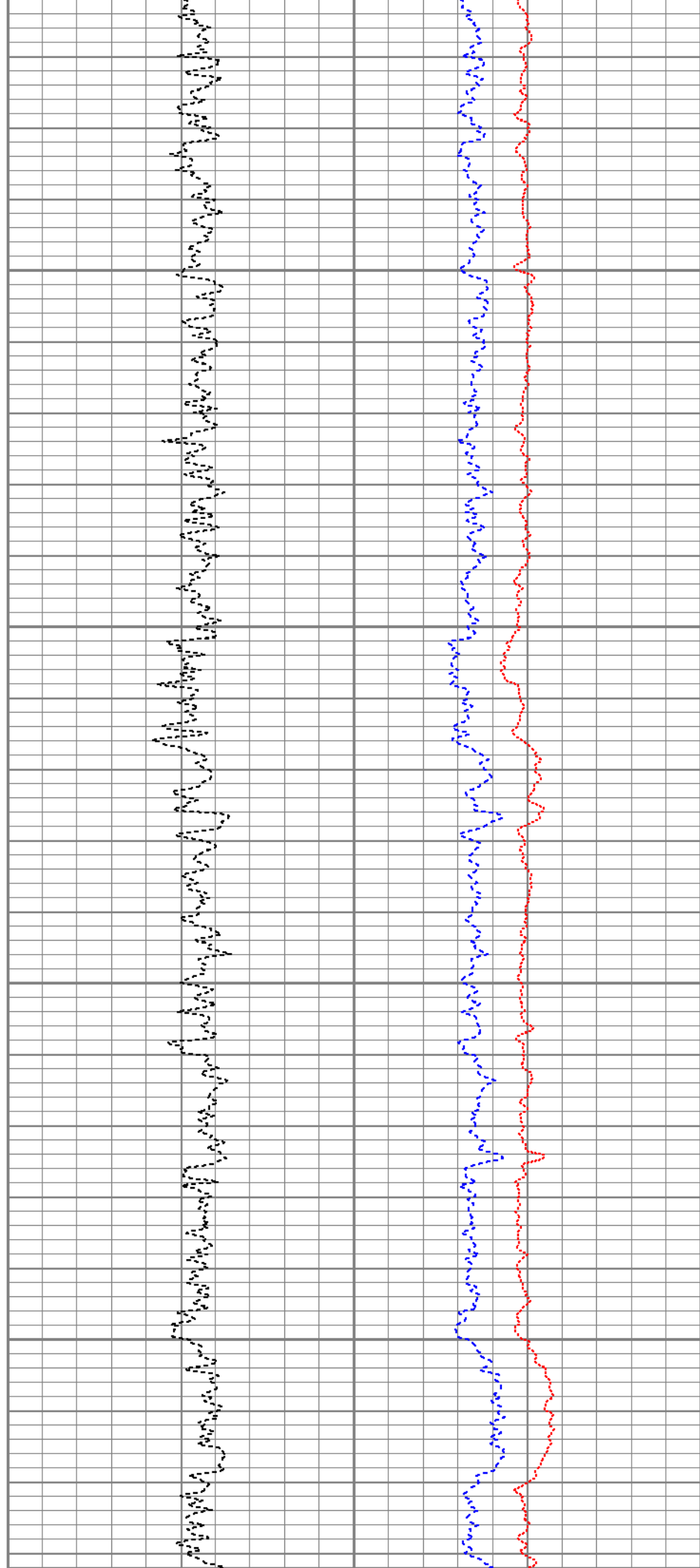
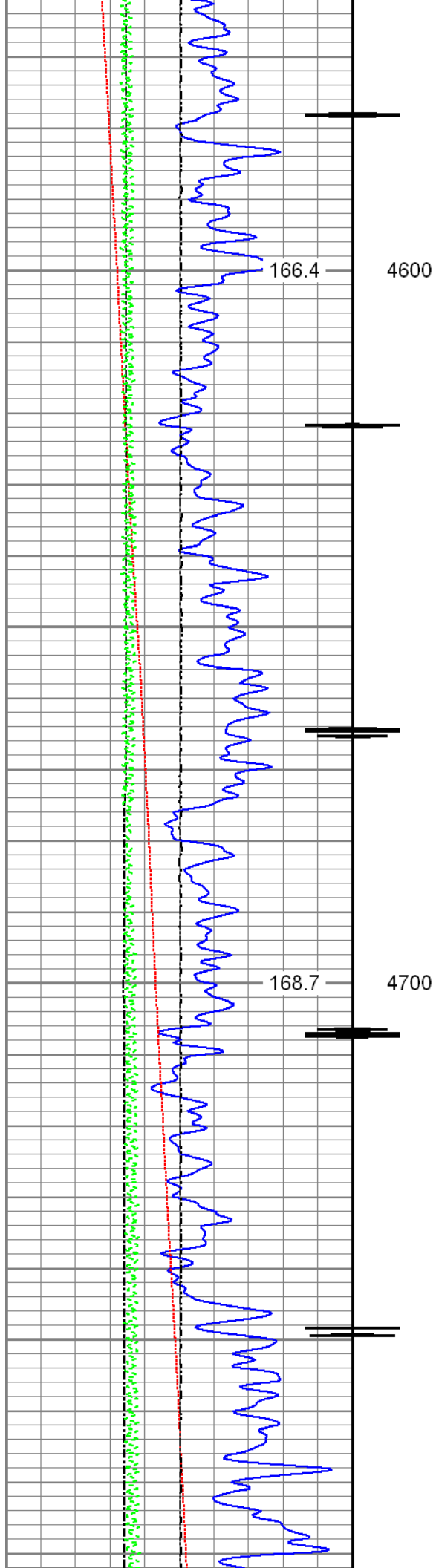


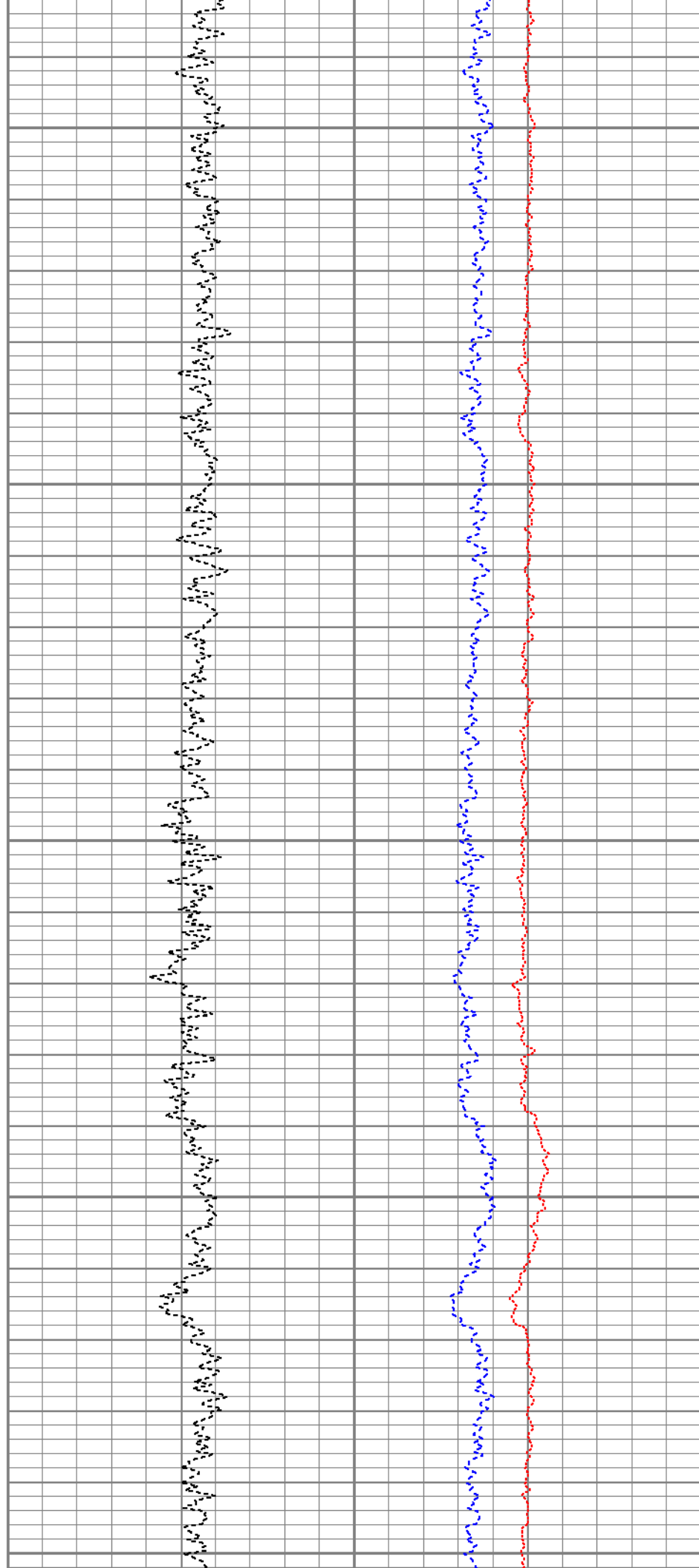
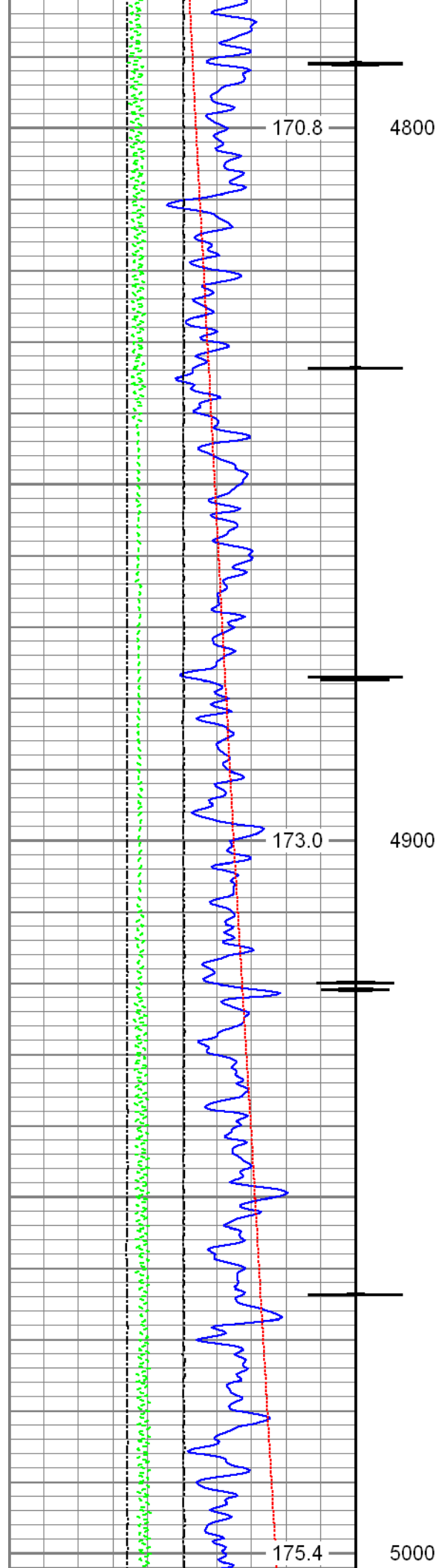


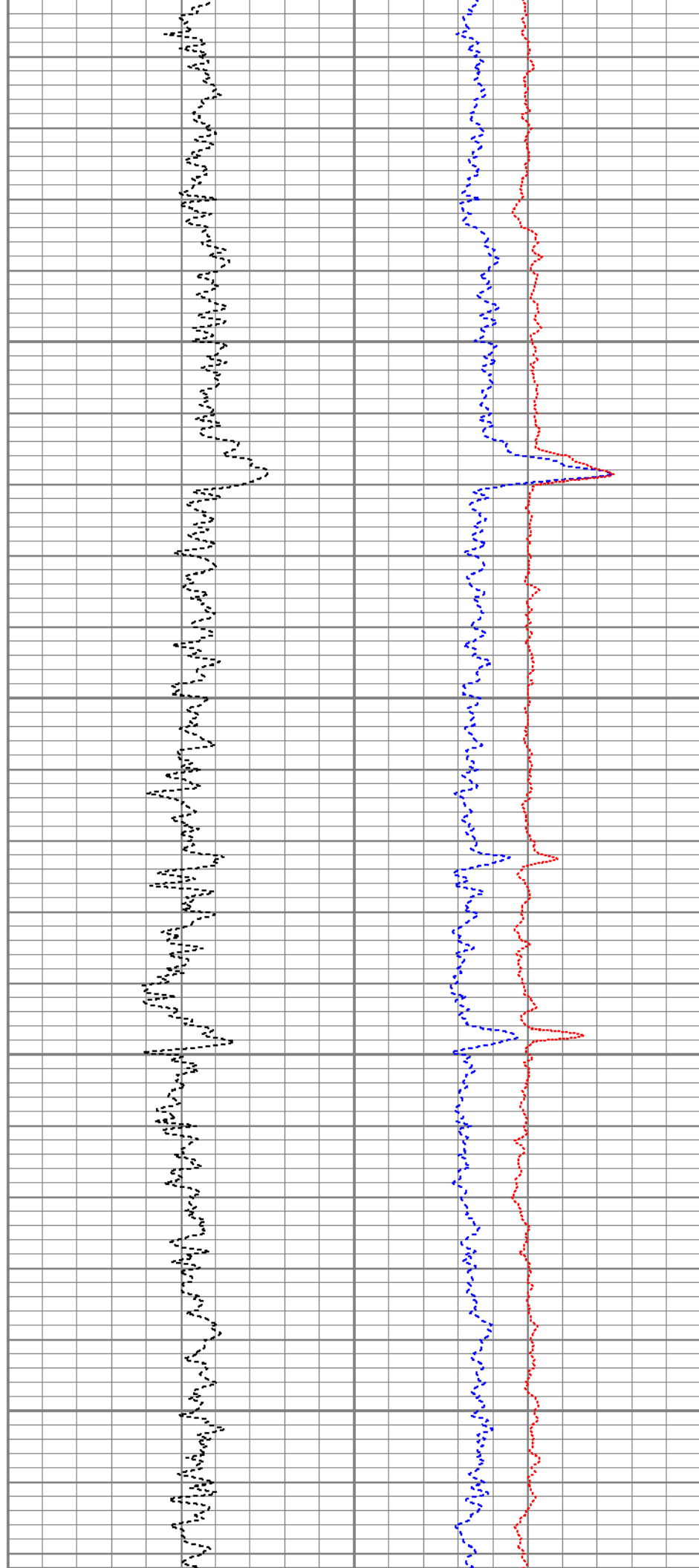
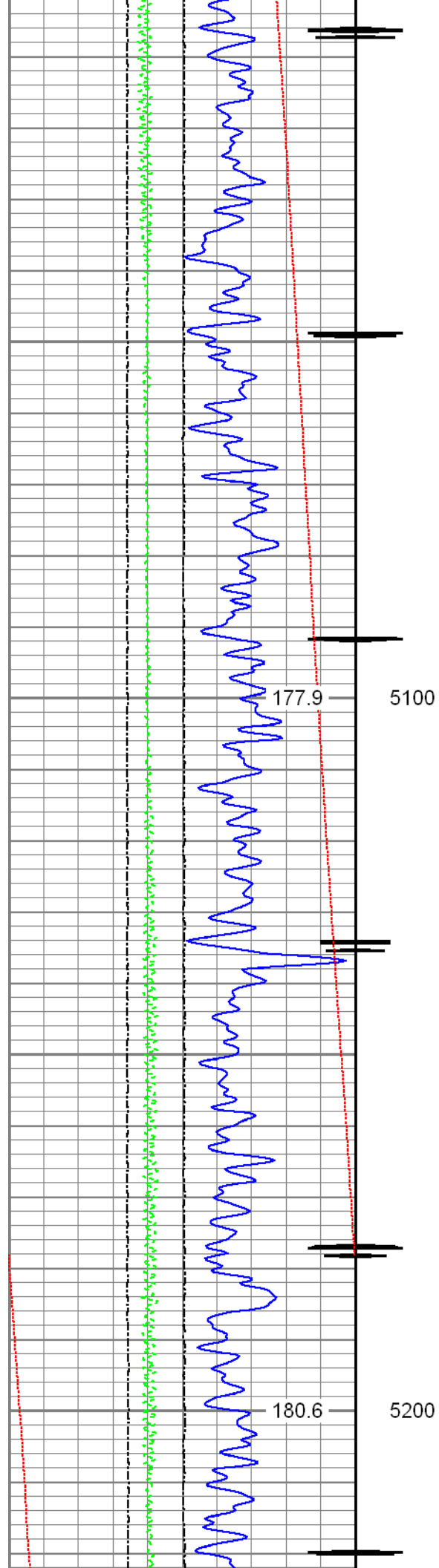


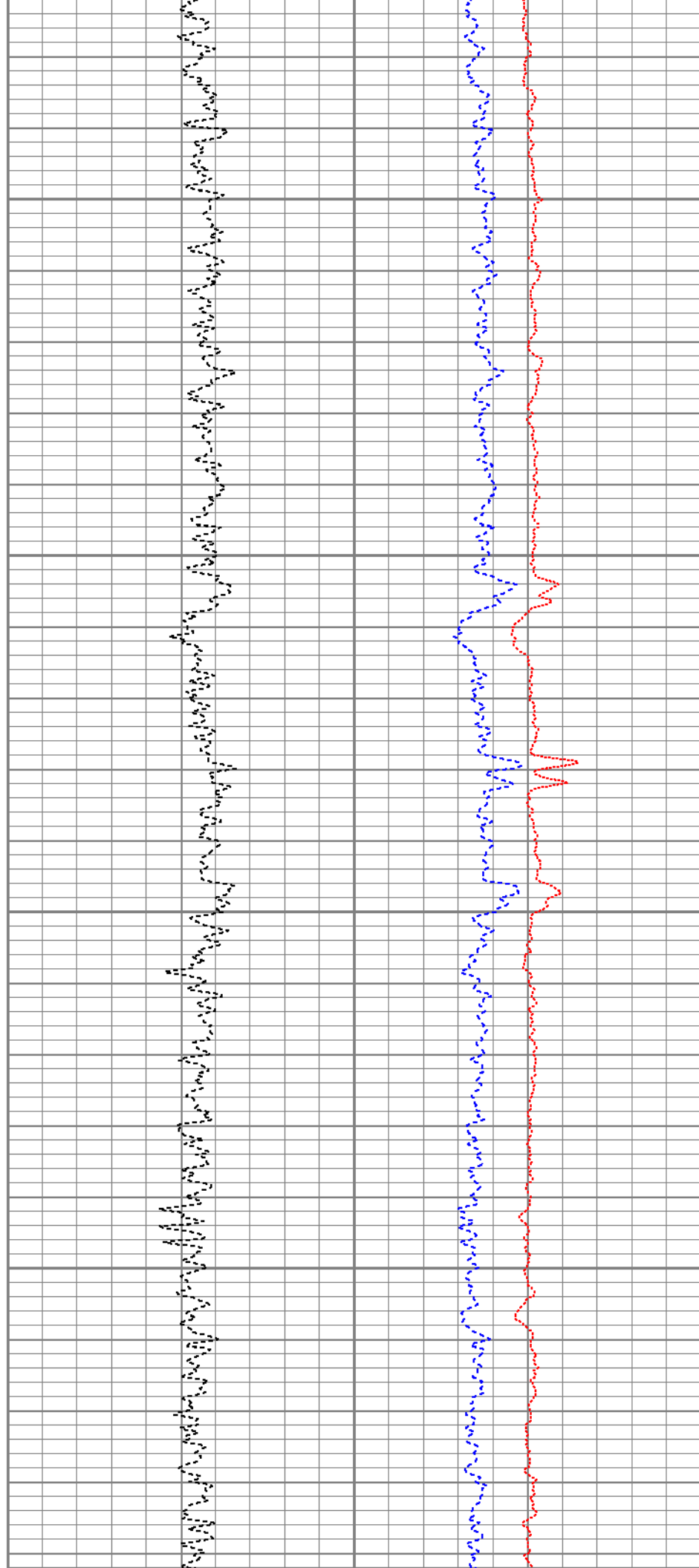
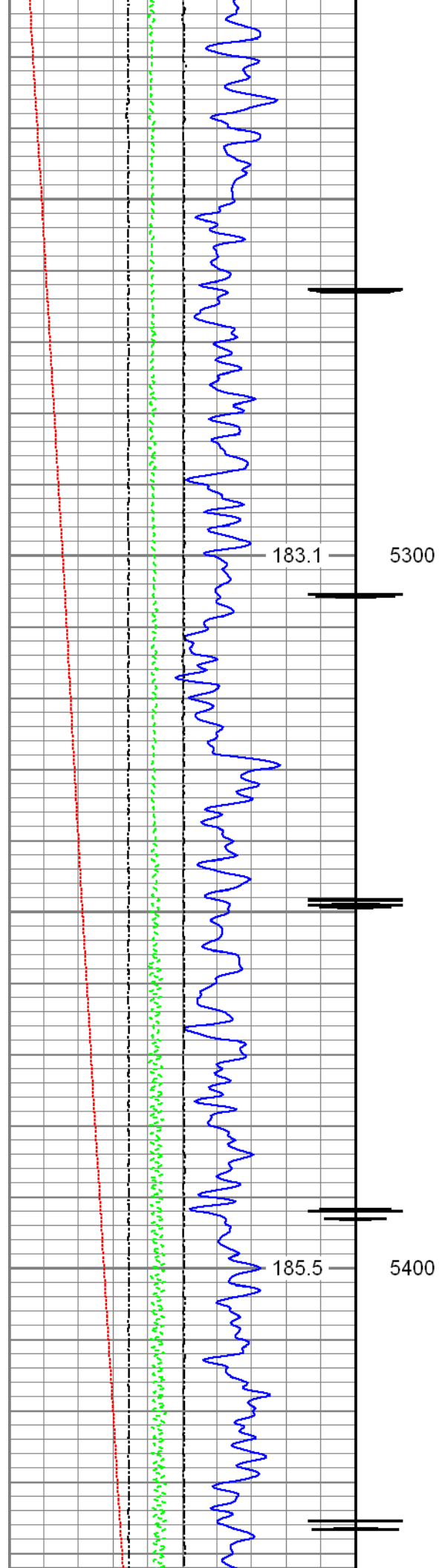


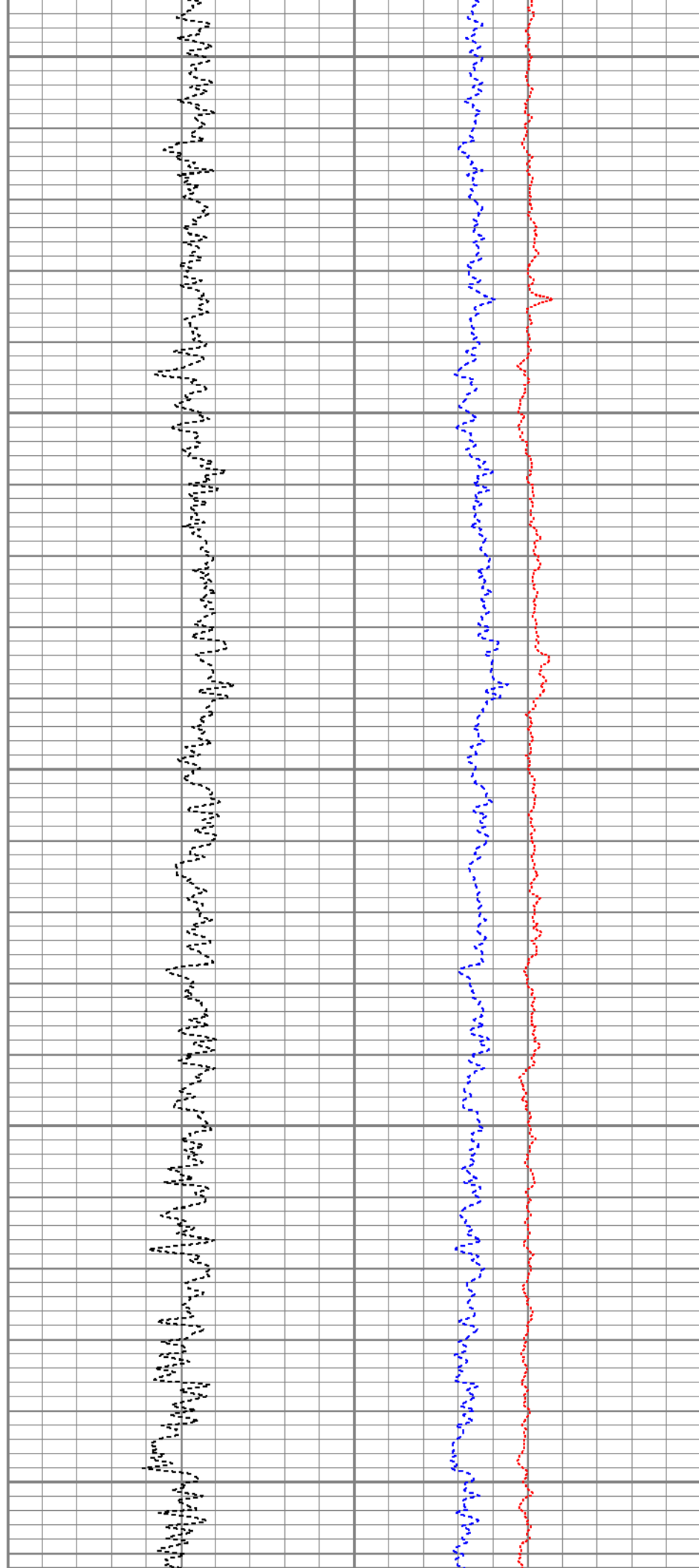
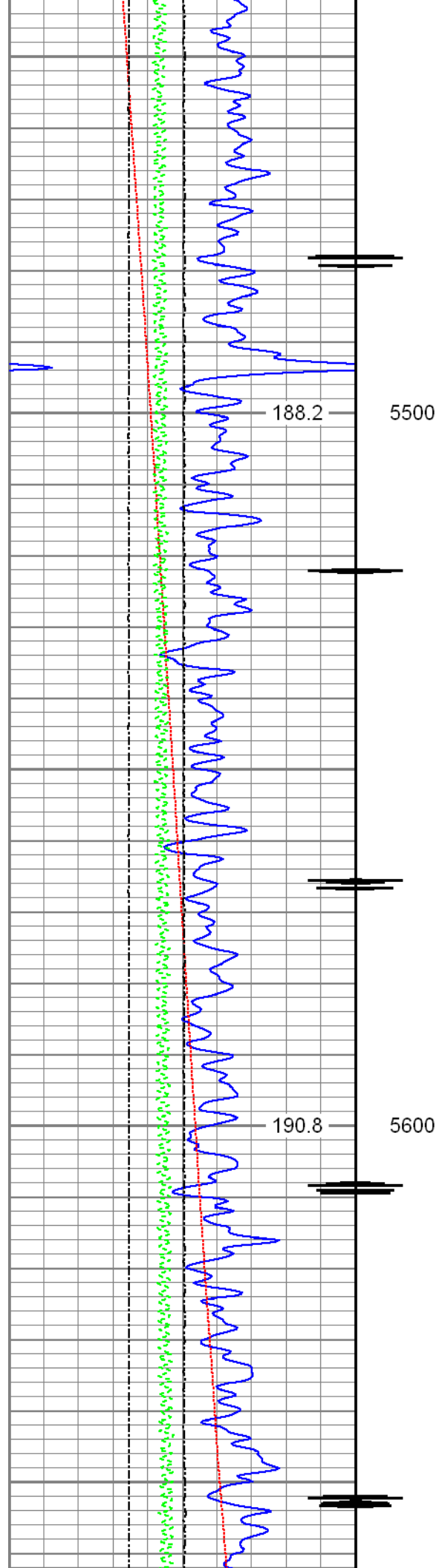


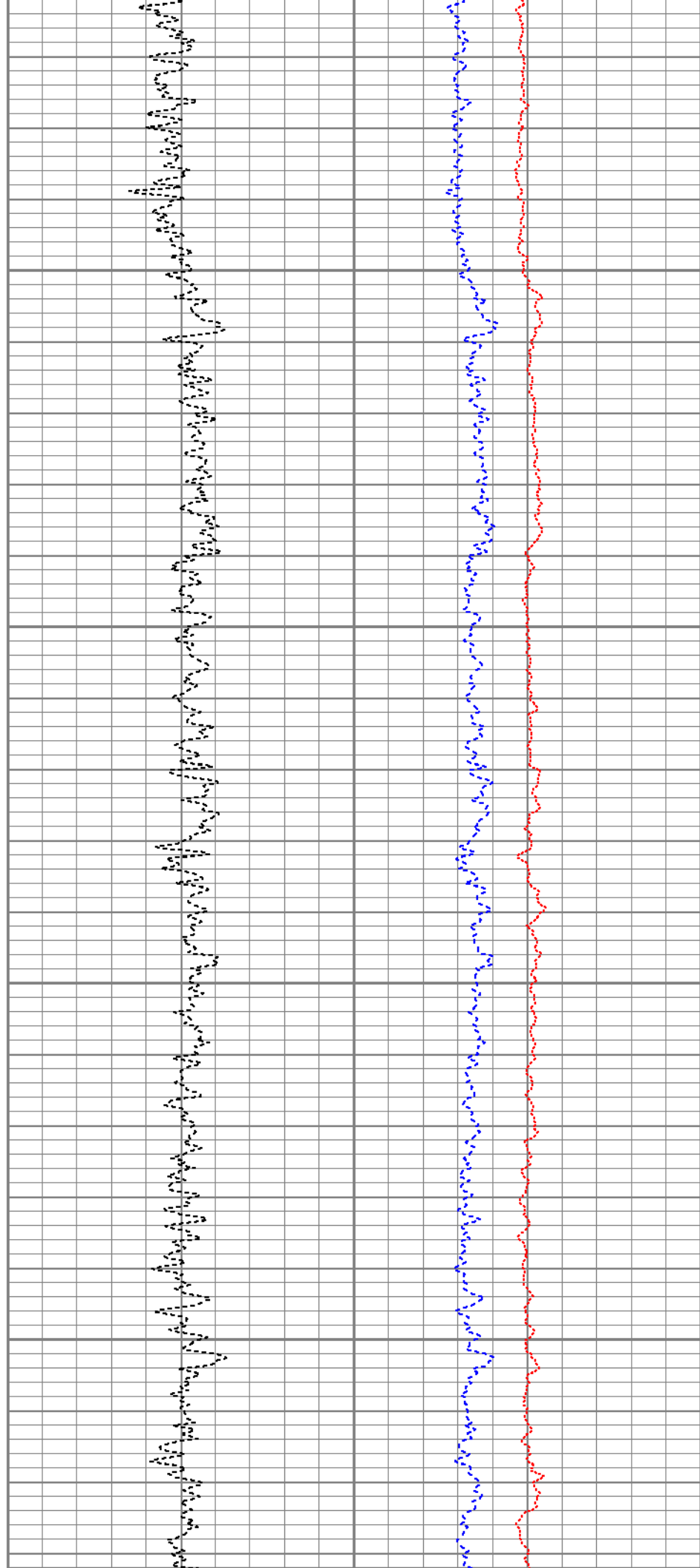
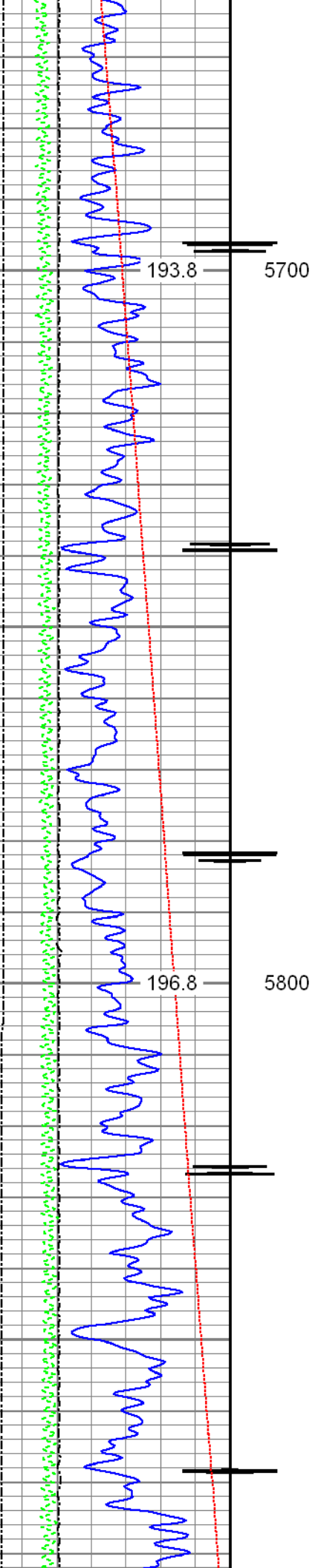


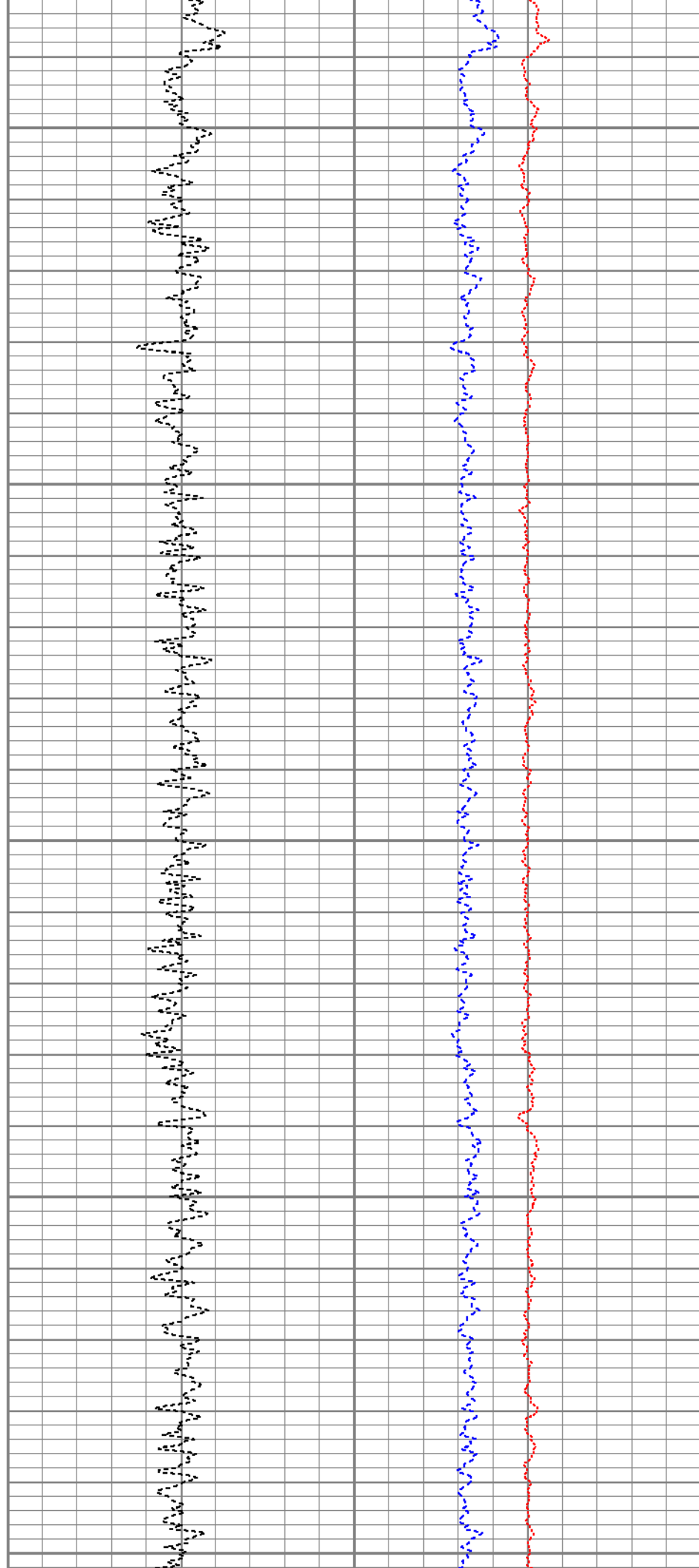
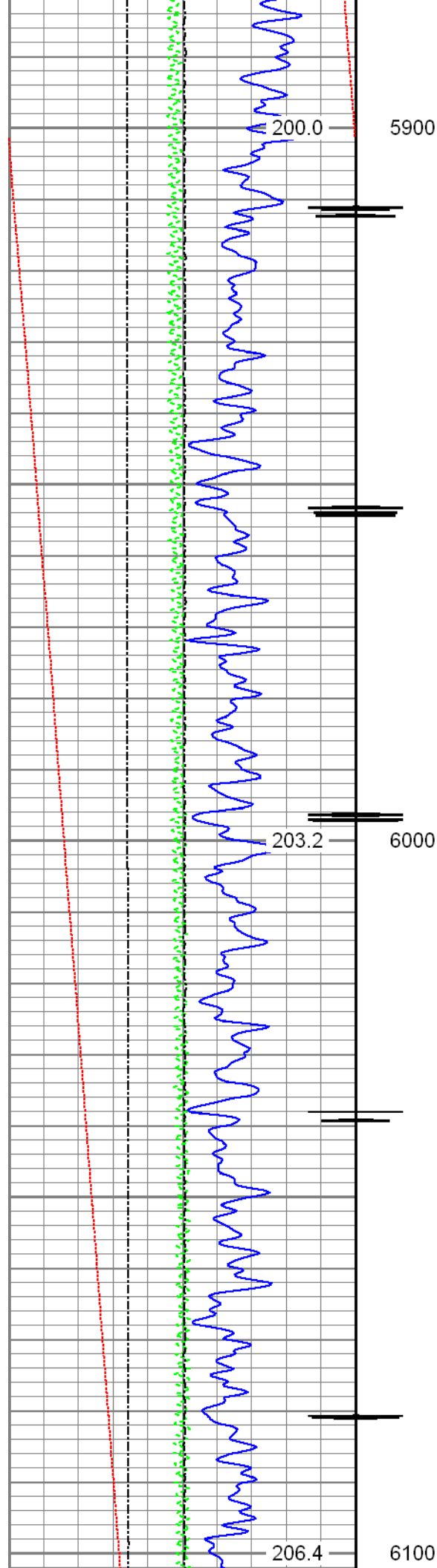


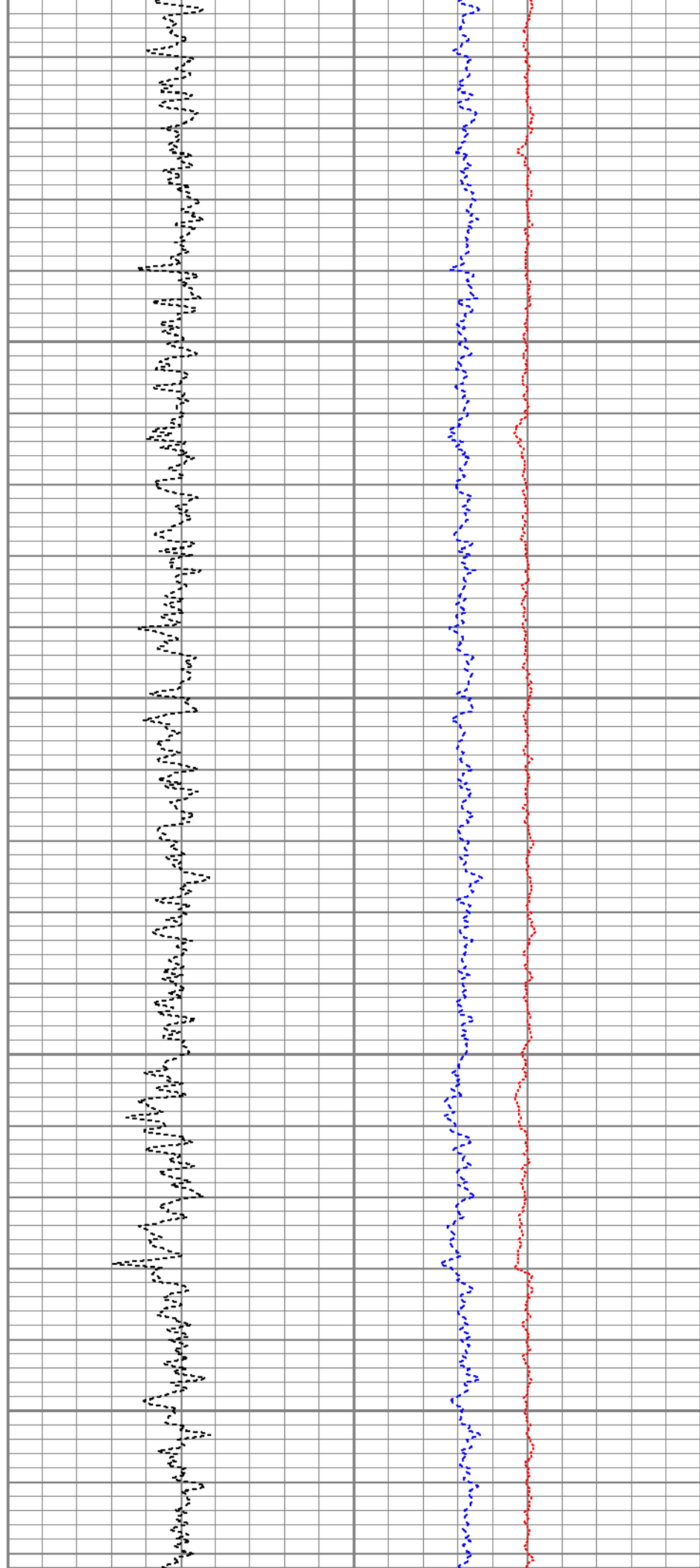
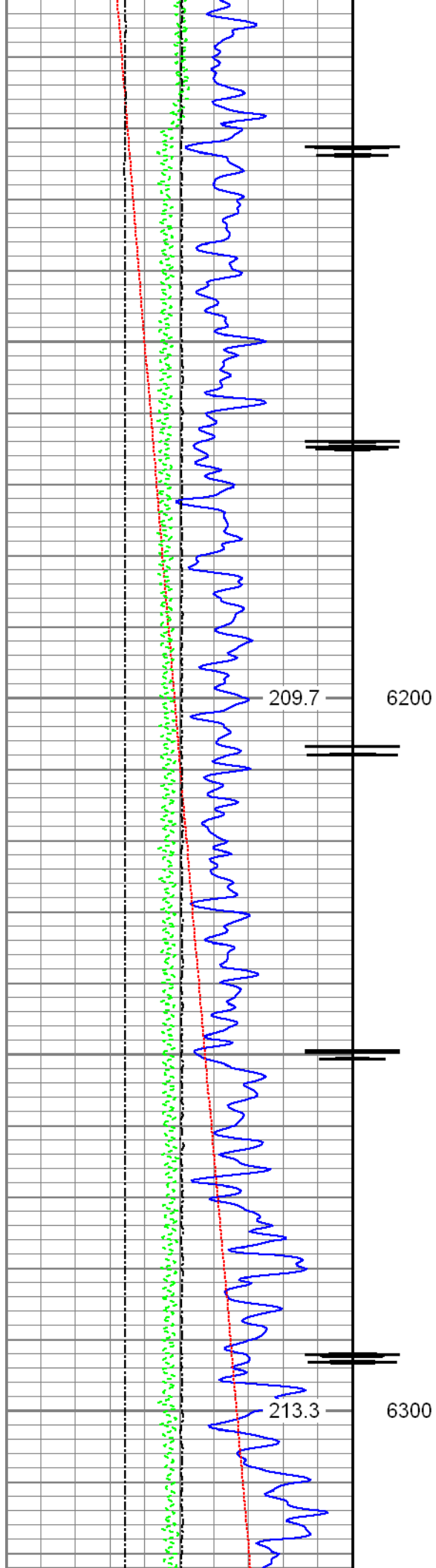


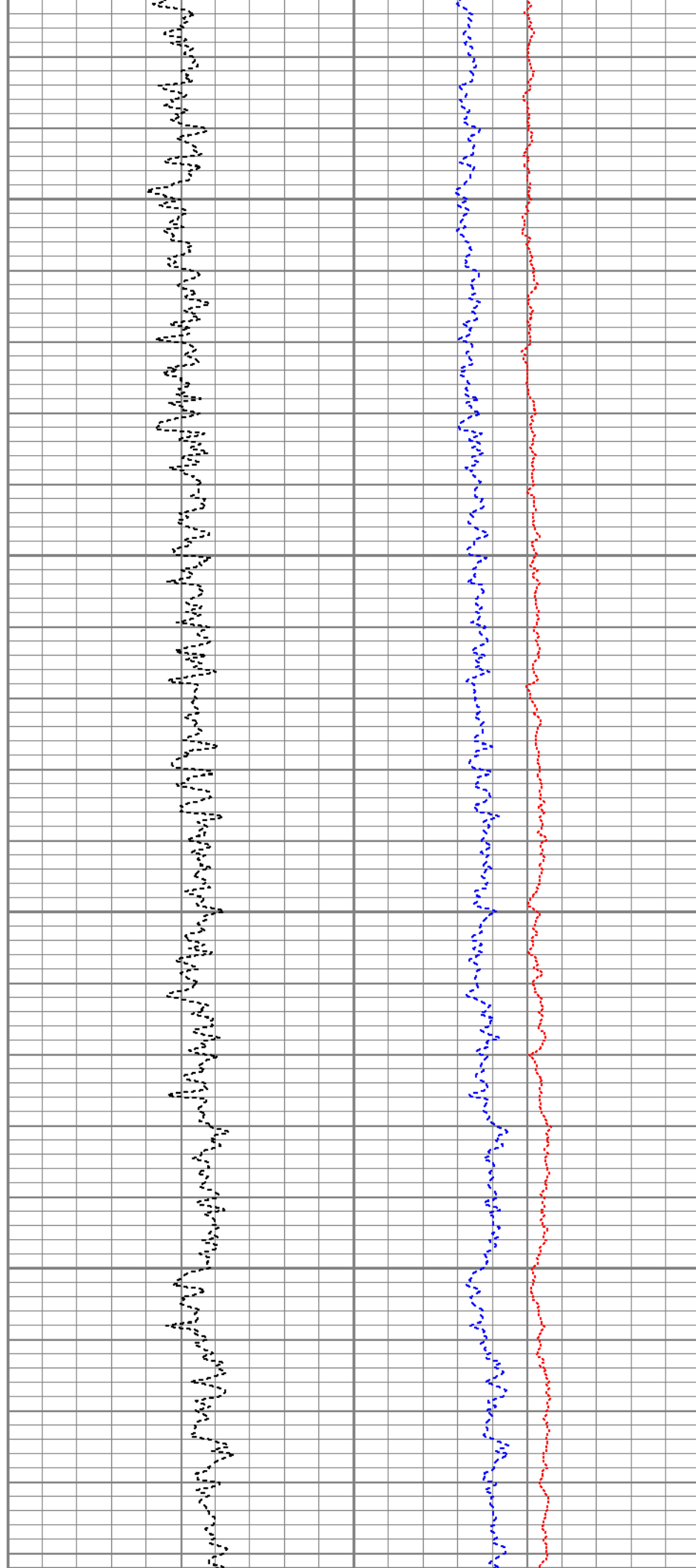
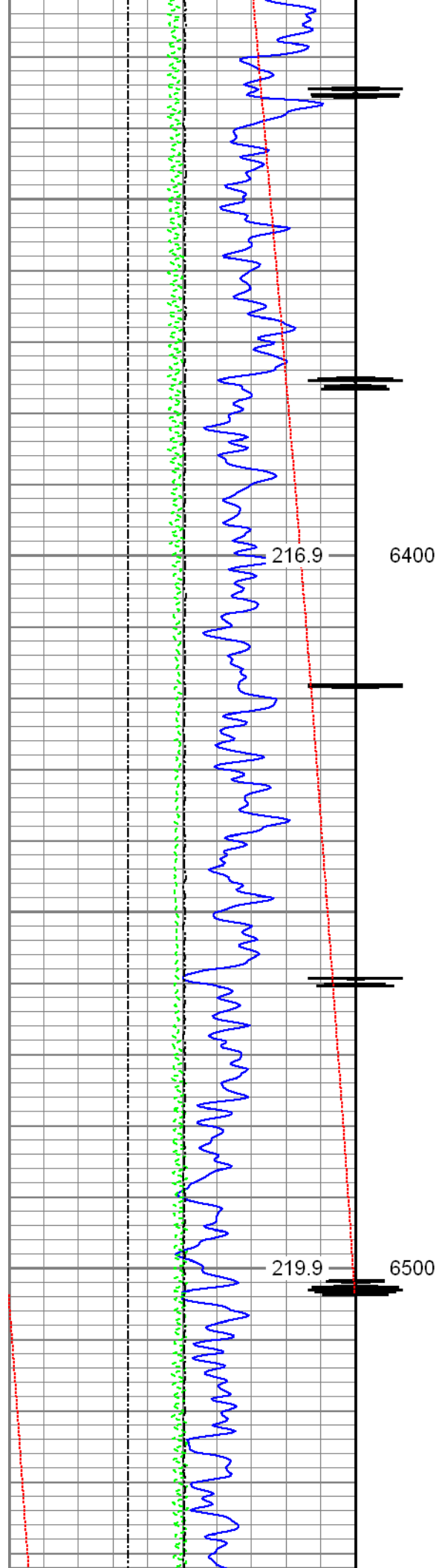


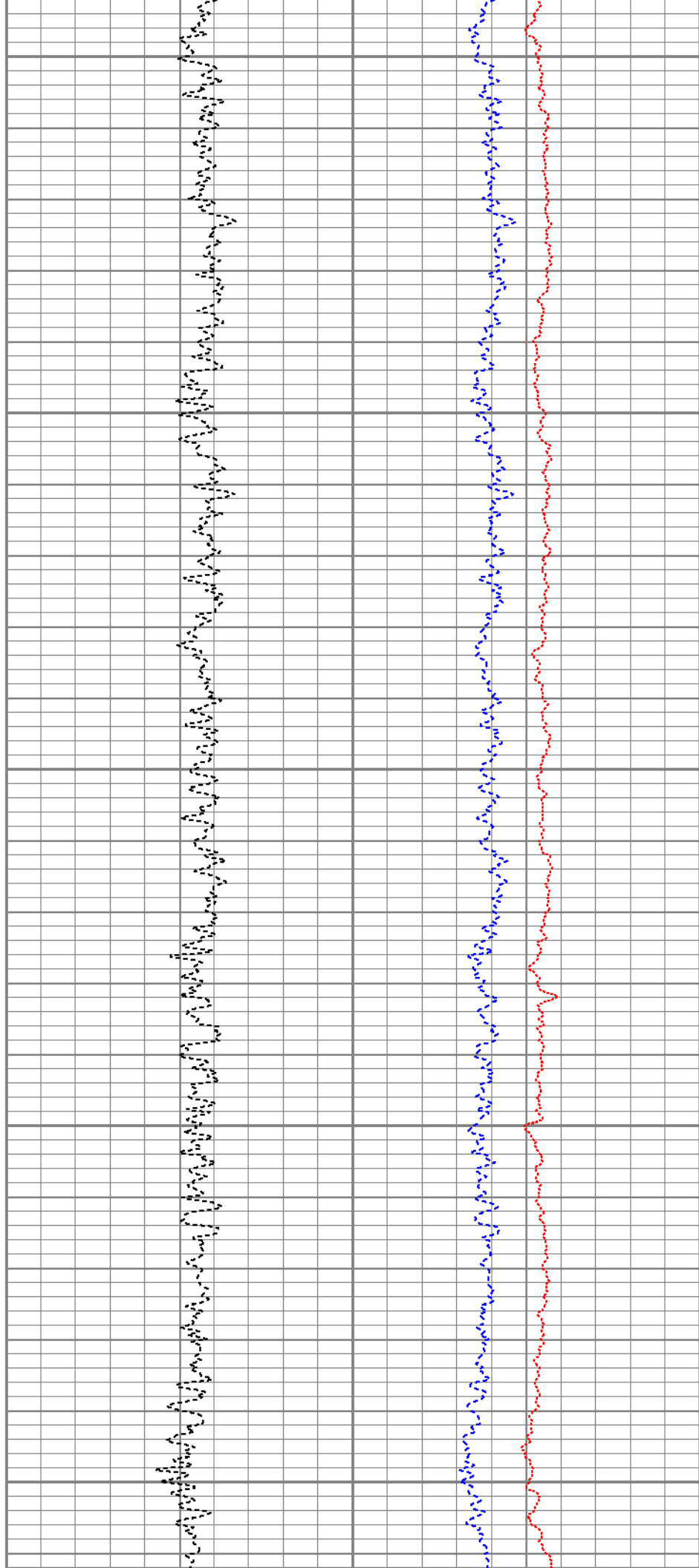
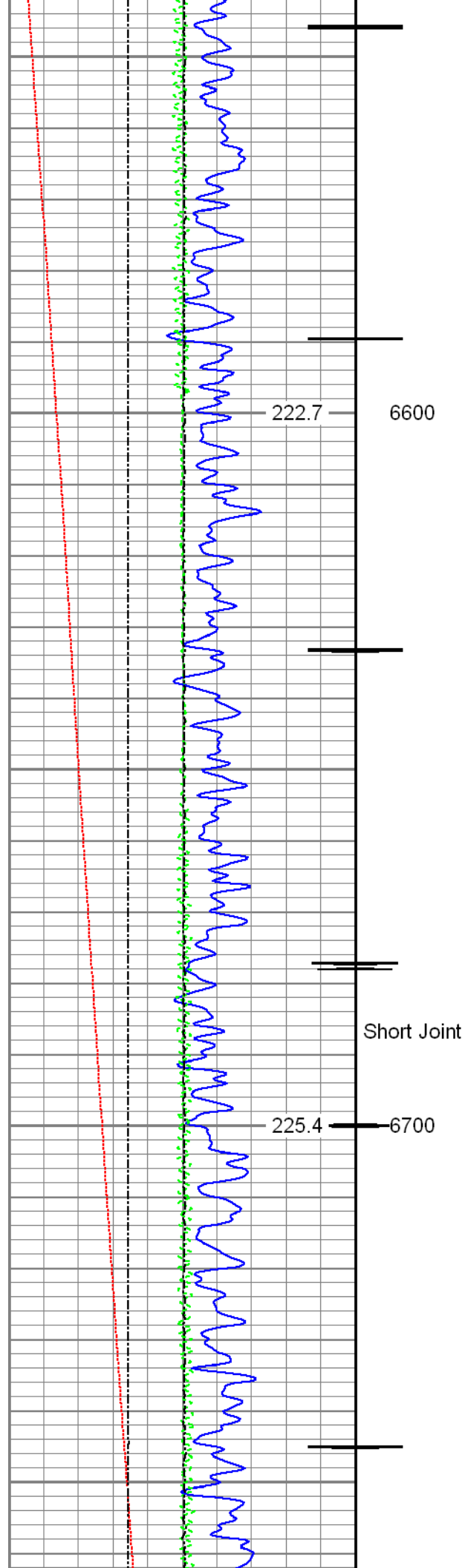


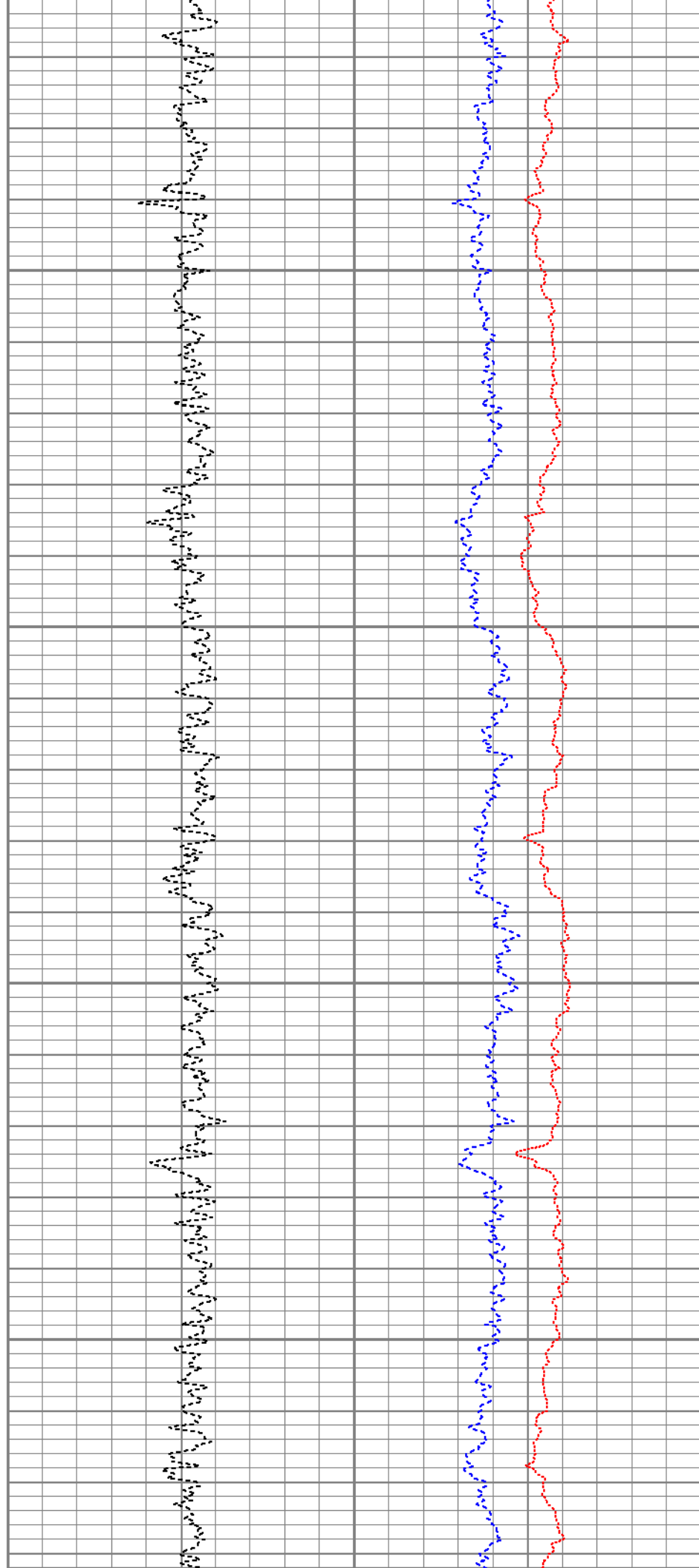
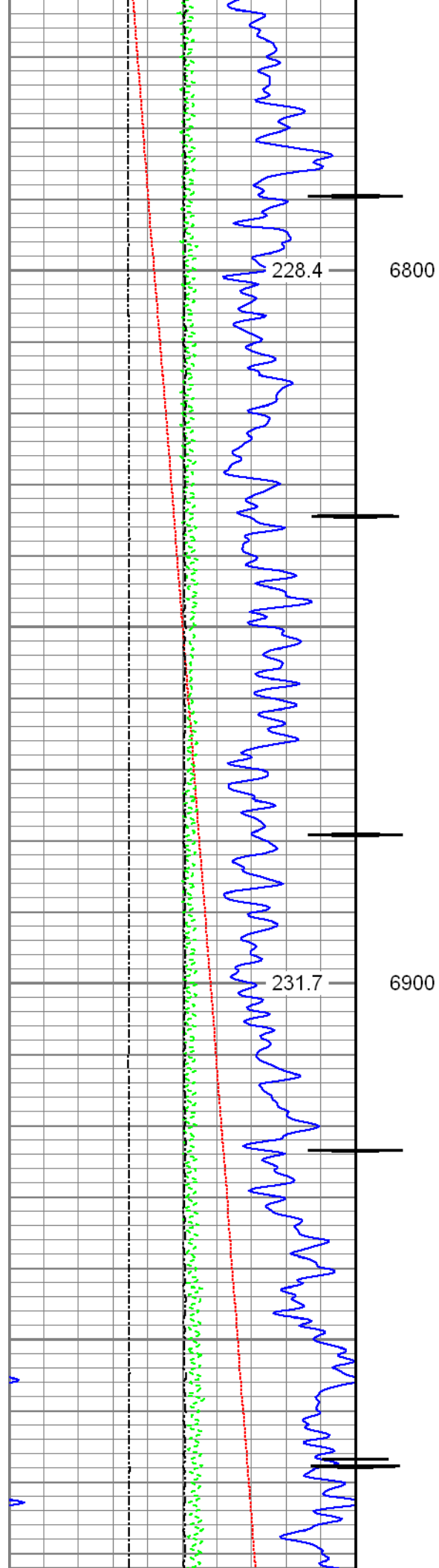


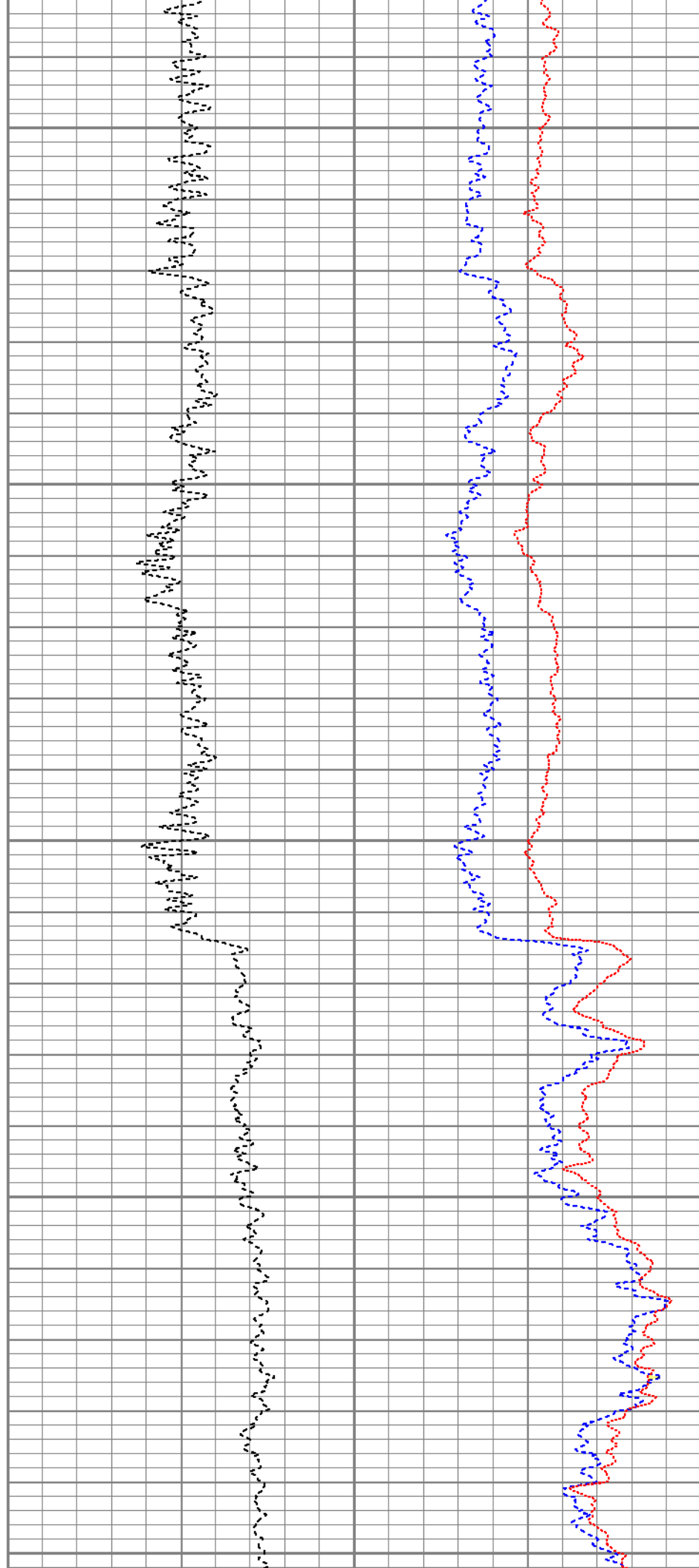
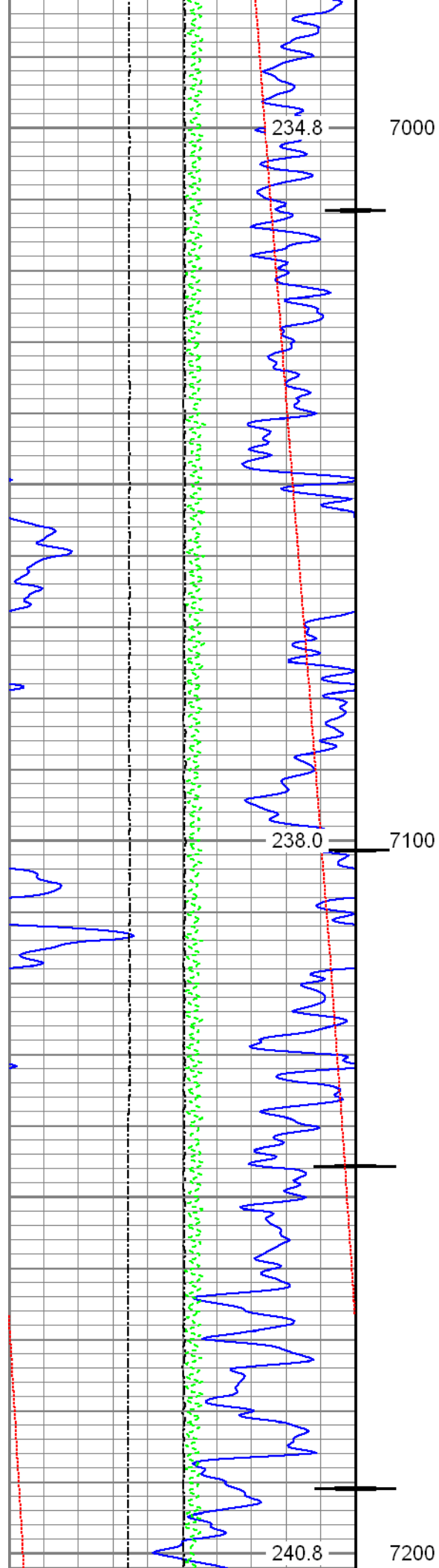












0	Temperature (degF)	20
-100	Line Speed (ft/min)	100
0	Line Tension (lb)	2000
-2	Differential Temperature (degF)	2



Repeat Section

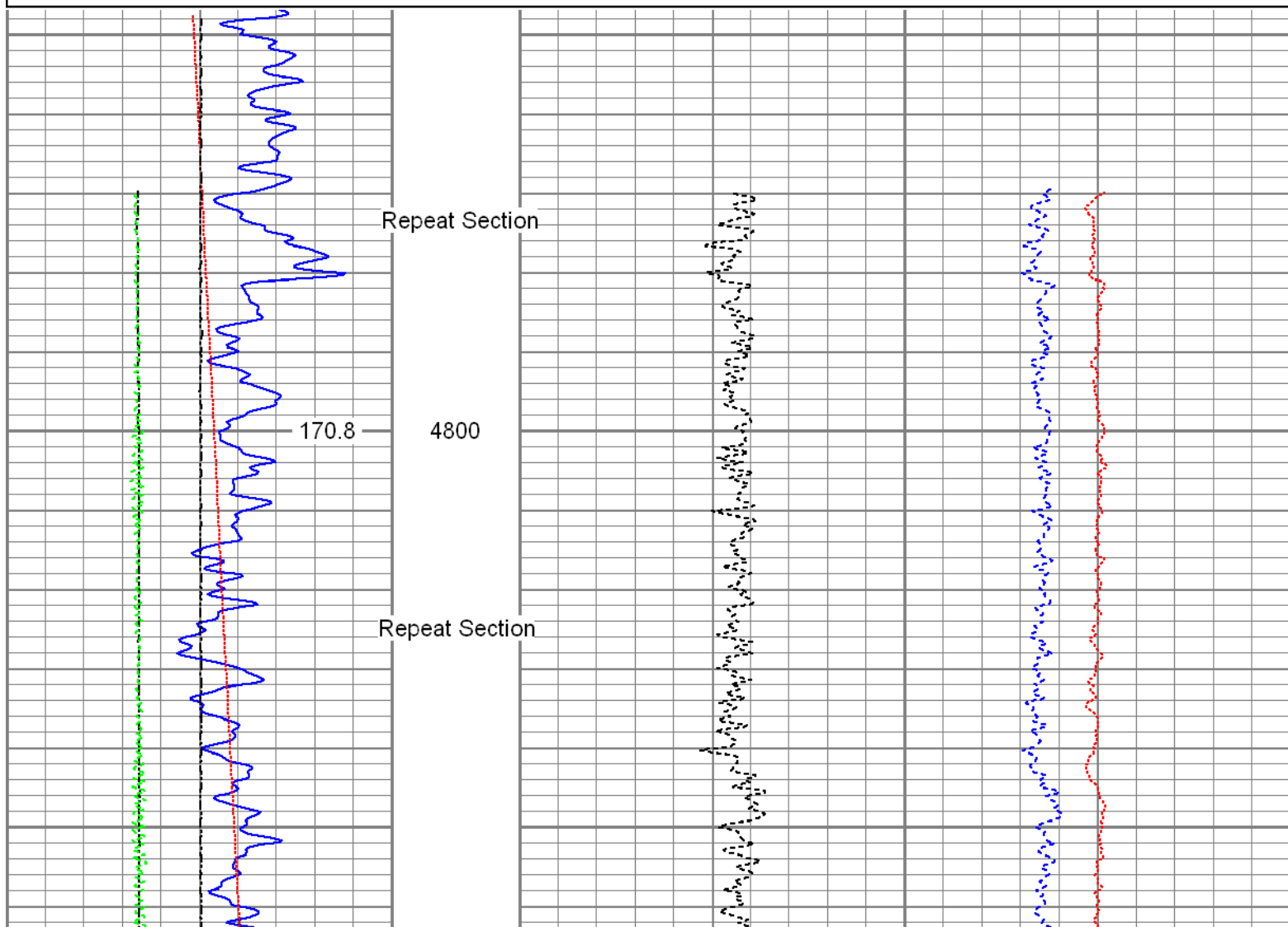
Recorded with 2800 PSI Surface Induced Pressure

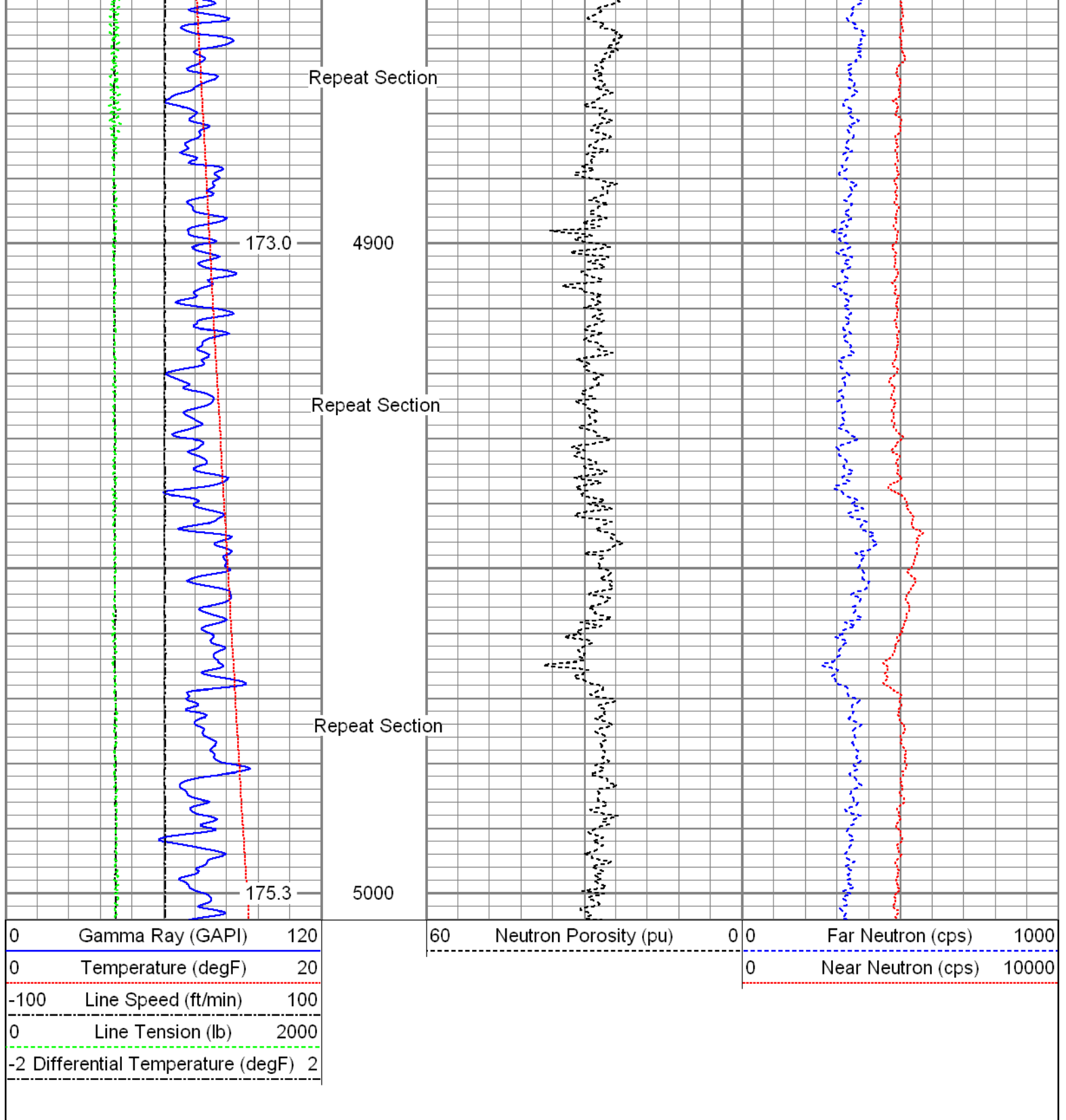
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Dataset Pathname: repeat
Presentation Format: cnl
Dataset Creation: Thu Dec 10 09:15:07 2015 by Log 7.0 B1
Charted by: Depth in Feet scaled 1:240


0	Gamma Ray (GAPI)	120
0	Temperature (degF)	20
-100	Line Speed (ft/min)	100
0	Line Tension (lb)	2000
-2	Differential Temperature (degF)	2

60	Neutron Porosity (pu)	0
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0	Far Neutron (cps)	1000
0	Near Neutron (cps)	10000





Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
GR	24.79		T_CH14375_1_GO Titan 1-7/16" Assembled Electric Cable Head with 1" Fishing Neck	1.03	1.44	4.00
			UW_AGS-UW_AGS_001 (215017) Sondex Adapter - GO Box to Sondex Pin	0.21	1.69	1.00
			UW_XTU-UW_XTU_002 (211461) Crossover Ultrawire Toolbus to Ultralink	1.58	1.69	6.50
			UW_PGR-UW_PGR_020 (10024770) Production Gamma Ray	1.93	1.69	9.50
			UW_PRT-UW_PRT_016 (10025095)	1.04	1.69	5.20

TEMP	23.39		Platinum Resistance Thermometer			
CCL	22.14		UW_CCL-UW_CCL_028 (10009470) Ultrawire 3-1/8" CCL	1.61	3.13	36.00
			UW_PRC-DSSRAC (082) 2-3/4" DSS 5 Arm Roller Centralizer	2.55	2.75	32.00
WV3FT	14.21		UW_RBT-UW_RBT_003 (Default003) Sondex Ultrawire 1-11/16" Radial Bond Tool	9.93	1.69	42.00
WVFS1	14.21					
WVFS2	14.21					
WVFS3	14.21					
WVFS4	14.21					
WVFS5	14.21					
WVFS6	14.21					
CBLTEMP	14.21					
CBLROT	14.21					
WV5FT	13.21					
			UW_PRC #3 -DSSRAC (080) 2-3/4" DSS 5 Arm Roller Centralizer	2.55	2.75	32.00
			CNL-007 (1005) Compensated Neutron Logging Tool	6.61	1.69	30.00
CNLSC	1.53					
CNSSC	1.12					
TSTAMP	0.00					
Dataset: 0512341938_Anadarko_Meguire 29C-16HZ_12-10-15_CNL.db: field/well/run1/main Total Length: 29.03 ft Total Weight: 198.20 lb O.D. 3.13 in						

Calibration Report	
Database File:	0512341938_Anadarko_Meguire 29C-16HZ_12-10-15_CNL.db
Dataset Pathname:	main
Dataset Creation:	Thu Dec 10 09:42:01 2015 by Log 7.0 B1

Compensated Neutron Calibration Report	
Serial Number:	1005
Tool Model:	007

Master Calibration	Tue Jun 03 09:29:29 2014
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Detector	Readings	
Short Space	240.87	cps
Long Space	303.55	cps
Ratio	Measured	Reference
CNRAT Gain K	0.8150	Sleeve: 1.0000
	1.0271	

Before Survey

Detector	Readings	
Short Space		cps
Long Space		cps
Ratio	Measured	Reference

After Survey

Detector	Readings	
Short Space		cps
Long Space		cps
Ratio	Measured	Reference

Segmented Cement Bond Log Calibration Report

Serial Number:	Default003
Tool Model:	UW_RBT_003
Calibration Casing Diameter:	5.500 in
Calibration Depth:	6.842 ft

Master Calibration, performed Thu Dec 10 08:40:28 2015:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3FT	0.001	2.012	1.000	71.921	35.260	0.965
5FT	-0.003	1.928	1.000	71.921	36.725	1.119
S1	0.001	2.289	0.000	100.000	43.711	-0.060
S2	0.001	2.279	0.000	100.000	43.884	-0.026
S3	0.007	1.948	0.000	100.000	51.526	-0.348
S4	-0.000	1.921	0.000	100.000	52.058	0.008
S5	-0.001	1.882	0.000	100.000	53.125	0.036
S6	0.020	2.079	0.000	100.000	48.582	-0.989


Temperature Calibration Report

Serial Number:	10025095
Tool Model:	UW_PRT_016
Performed:	Wed Feb 11 13:43:20 2015

Point #	Reading	Reference
1	12798.00 cps	68.00 degF
2	18136.00 cps	104.00 degF
3	29513.00 cps	176.00 degF
4	10005.00 cps	248.00 degF

4	40905.00	cps	248.00	degF
5	52487.00	cps	320.00	degF
6	58362.00	cps	356.00	degF
7		cps		degF
8		cps		degF
9		cps		degF
10		cps		degF

Gamma Ray Calibration Report		
Serial Number:	10024770	
Tool Model:	UW_PGR_020	
Performed:	Sun Jun 13 13:33:21 1993	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	1.0000	GAPI/cps

	Company	Kerr-McGee Oil and Gas Onshore LP		
	Well	Meguire 29C-16HZ		
	Field	Wattenberg		
	County	Weld		
	State	Colorado		