



Compensated Neutron
Gamma Ray
Casing Collar Log

Company Kerr-McGee Oil & Gas Onshore, L.P.

Well Howard 29C-29HZ

Field Wattenberg

County Weld State Colorado

Location: API #: 05-123-37909

SEC 32 TWP 1N RGE 67W

Permanent Datum Ground Level Elevation 5031'

Log Measured From Kelly Bushing 25 FT

Drilling Measured From Kelly Bushing

Elevation

K.B. 5056'

D.F. ---

G.L. 5031'

Date 18-AUG-2021

Run Number ONE

Depth Driller 15599 FT

Depth Logger 7994 FT

Bottom Logged Interval 7990 FT

Top Log Interval Surface

Open Hole Size 8.75, 6.13

Type Fluid Water

Density / Viscosity 8.34 lb/gal

Max. Recorded Temp. N/A

Estimated Cement Top N/A

Time Well Ready ROA

Time Logger on Bottom 09:05

Equipment Number HD-343

Location Plateville, CO

Recorded By Greg Lueck

Witnessed By Dale James

Borehole Record

Run Number

Bit

From

To

Size

Weight

Tubing Record

Run Number

Bit

From

To

Size

Weight

Run Number

Bit

From

To

Size

Weight

Top

Bottom

Surface

8251 FT

7149 FT

15595 FT

999 FT

7990 FT

8.75, 6.13

Water

N/A

N/A

ROA

09:05

HD-343

Plateville, CO

Greg Lueck

Dale James

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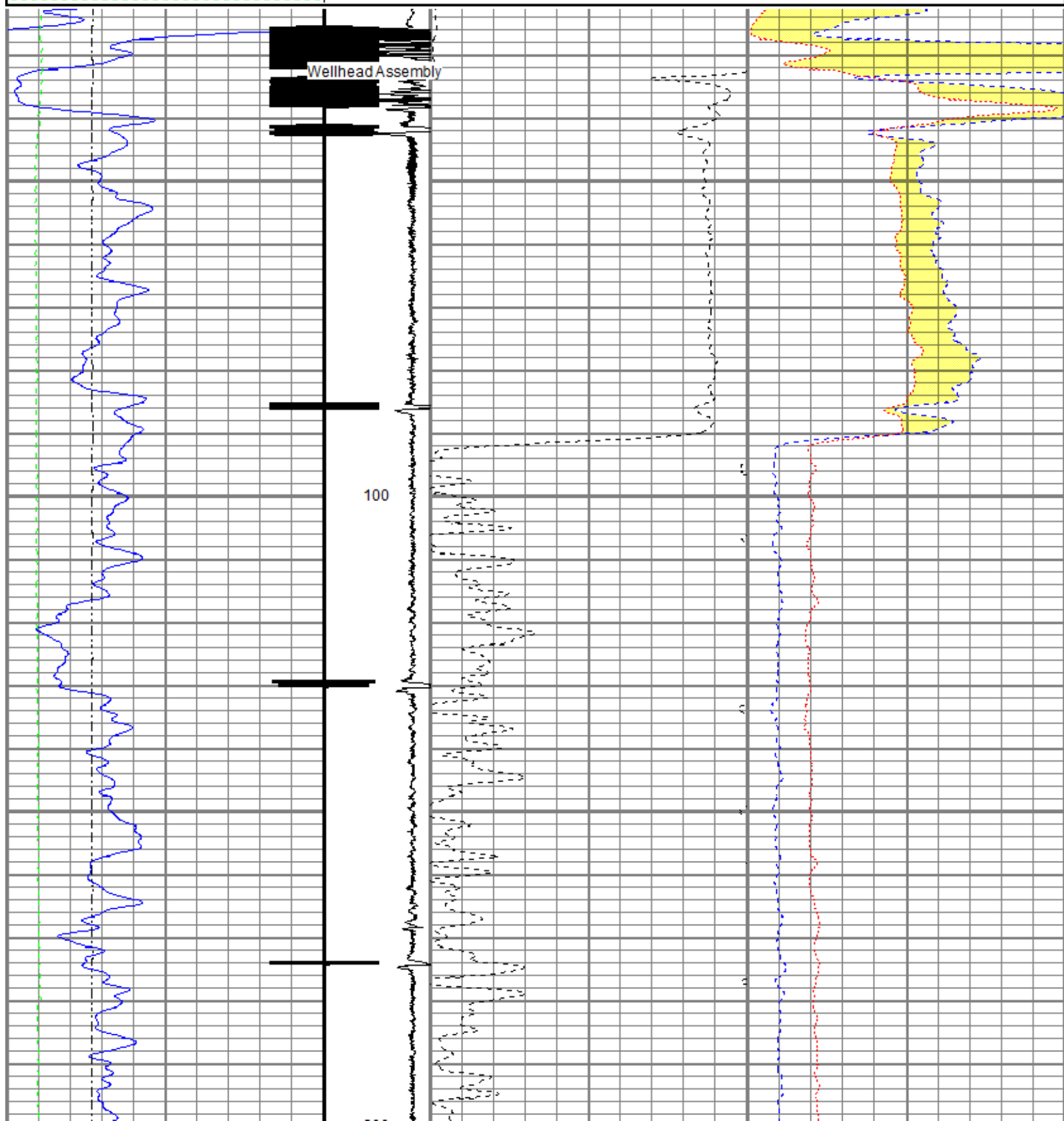
ROA

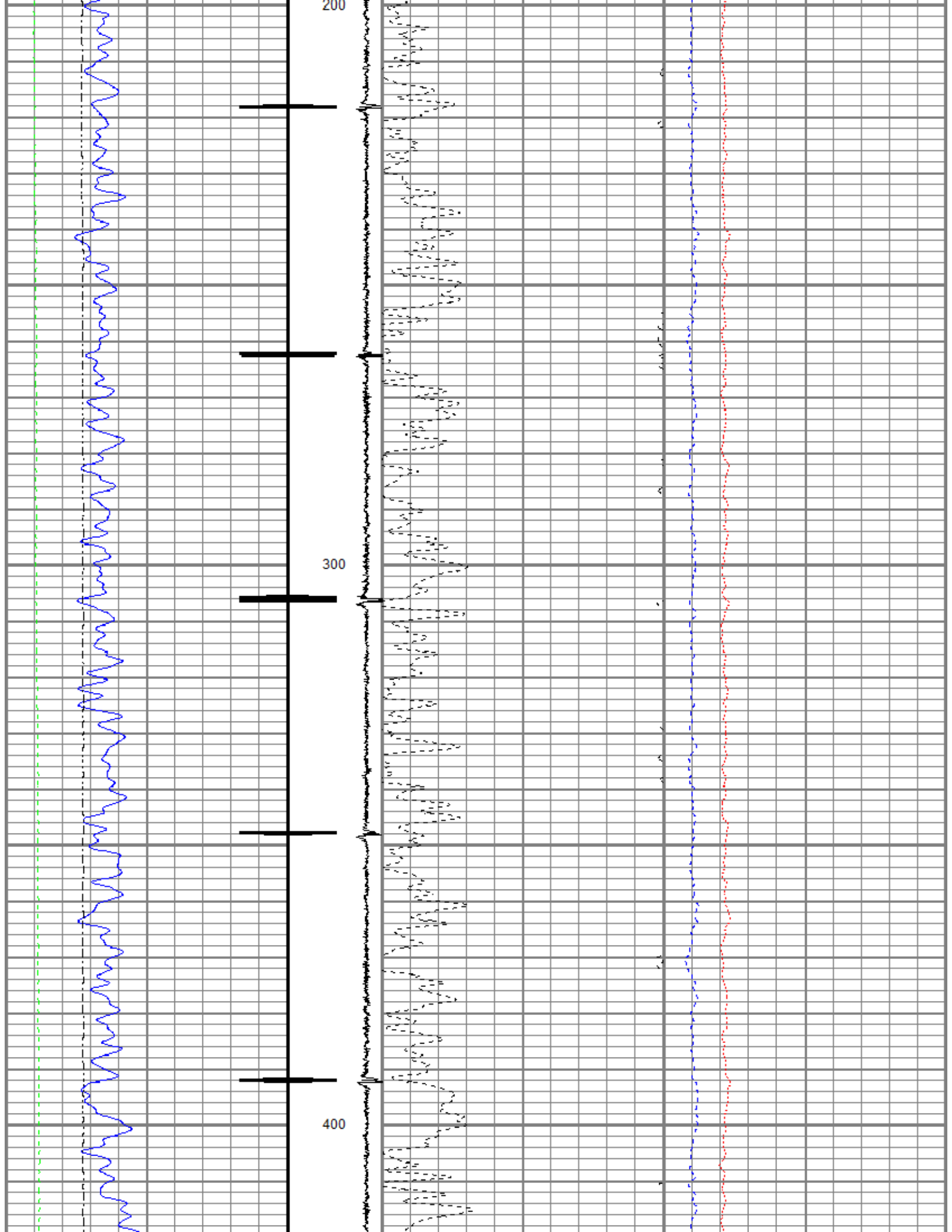
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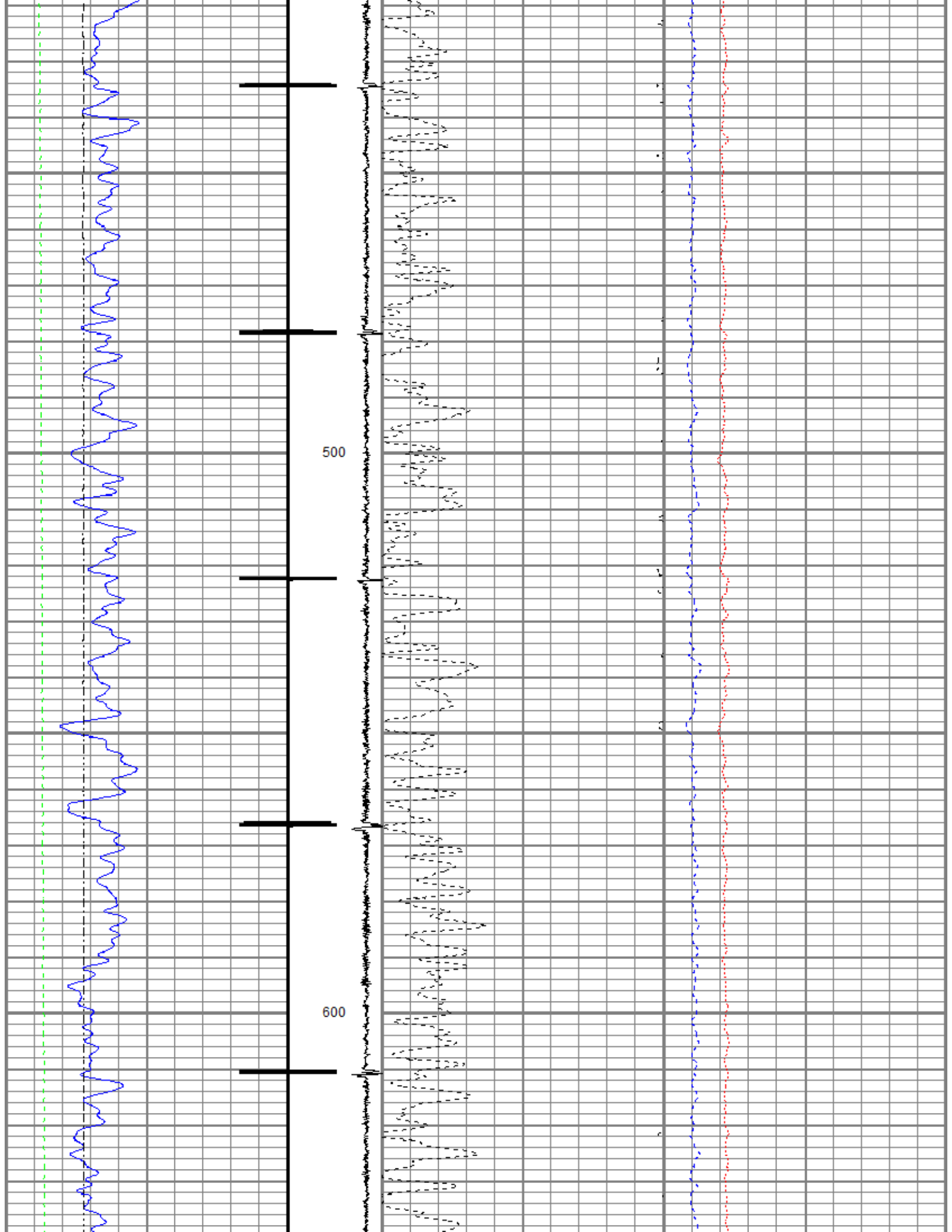
HD-343

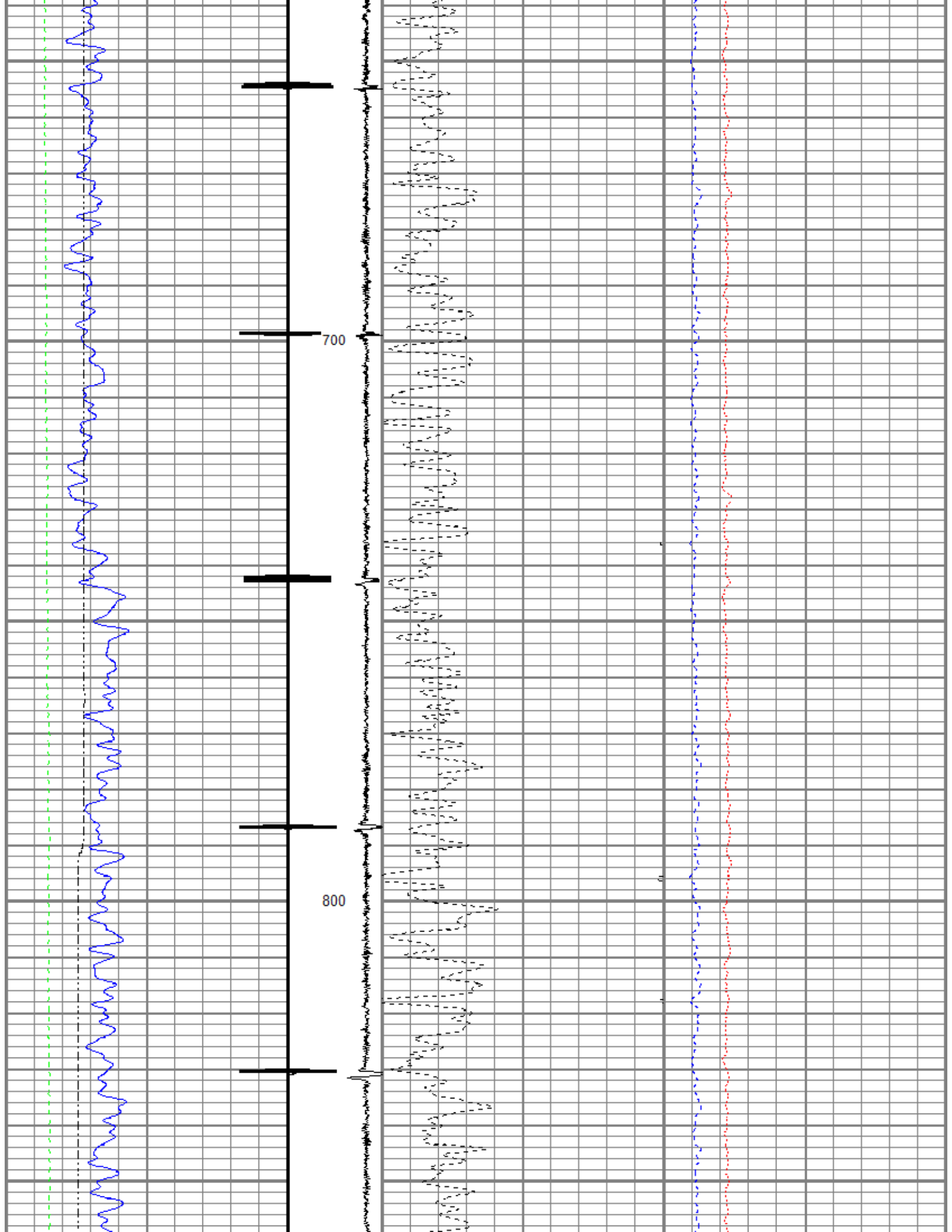
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Dataset Pathname pass6
Presentation Format ros_cnl_probe
Dataset Creation Wed Aug 18 09:17:19 2021
Charted by Depth in Feet scaled 1:240

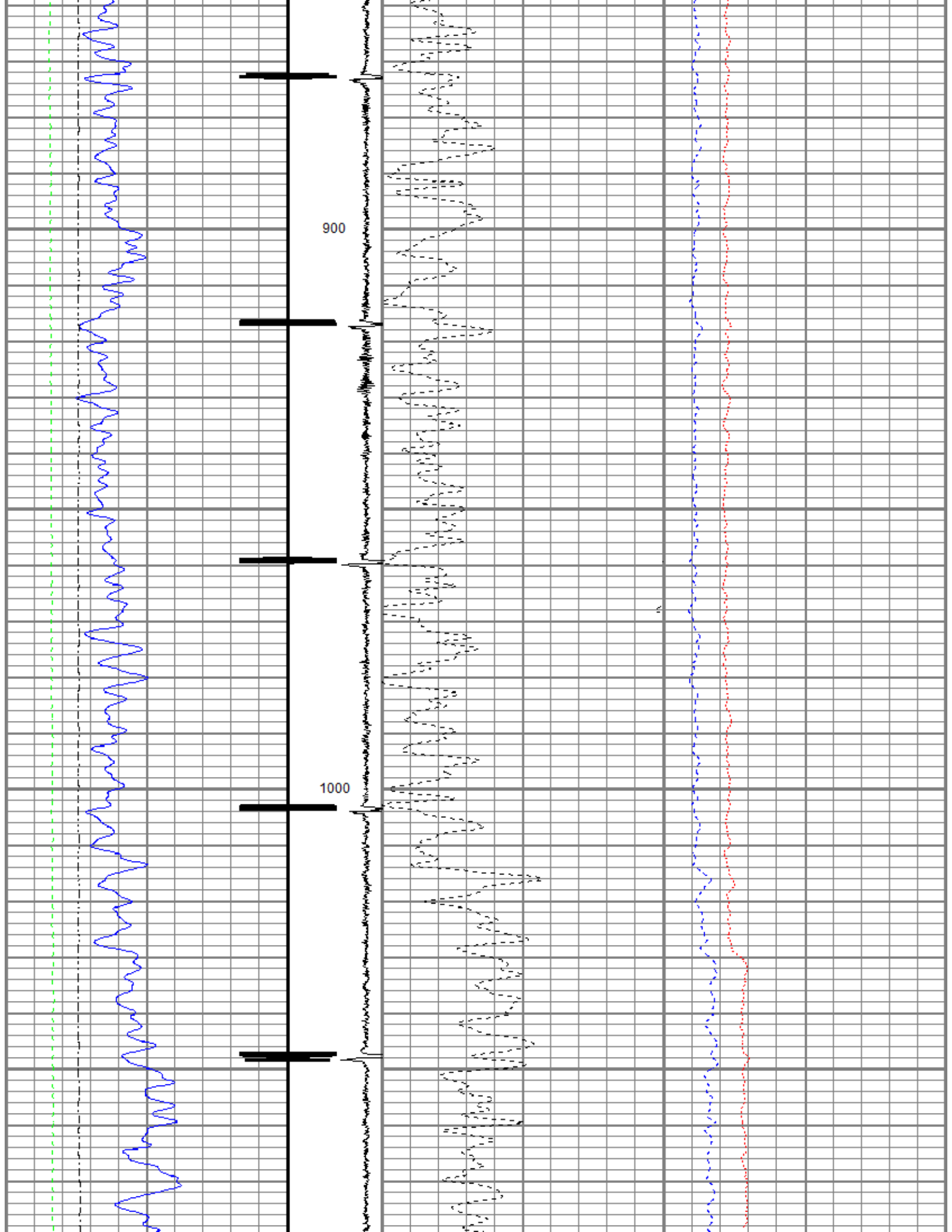
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Casing Collar Locator									0	Near Neutron (cps)	5000
-100	Line Speed (ft/min)	100									
0	Line Tension (lb)	2000									

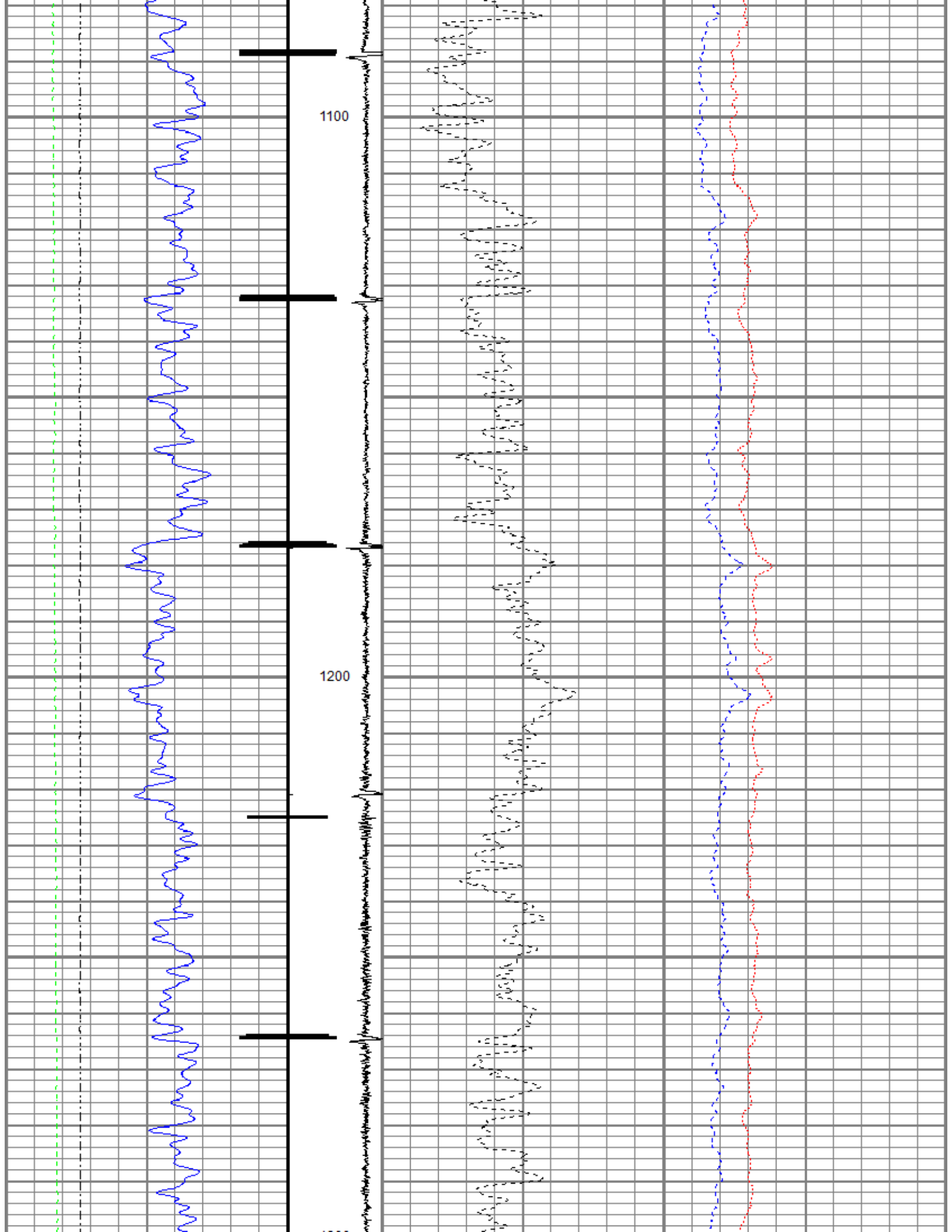


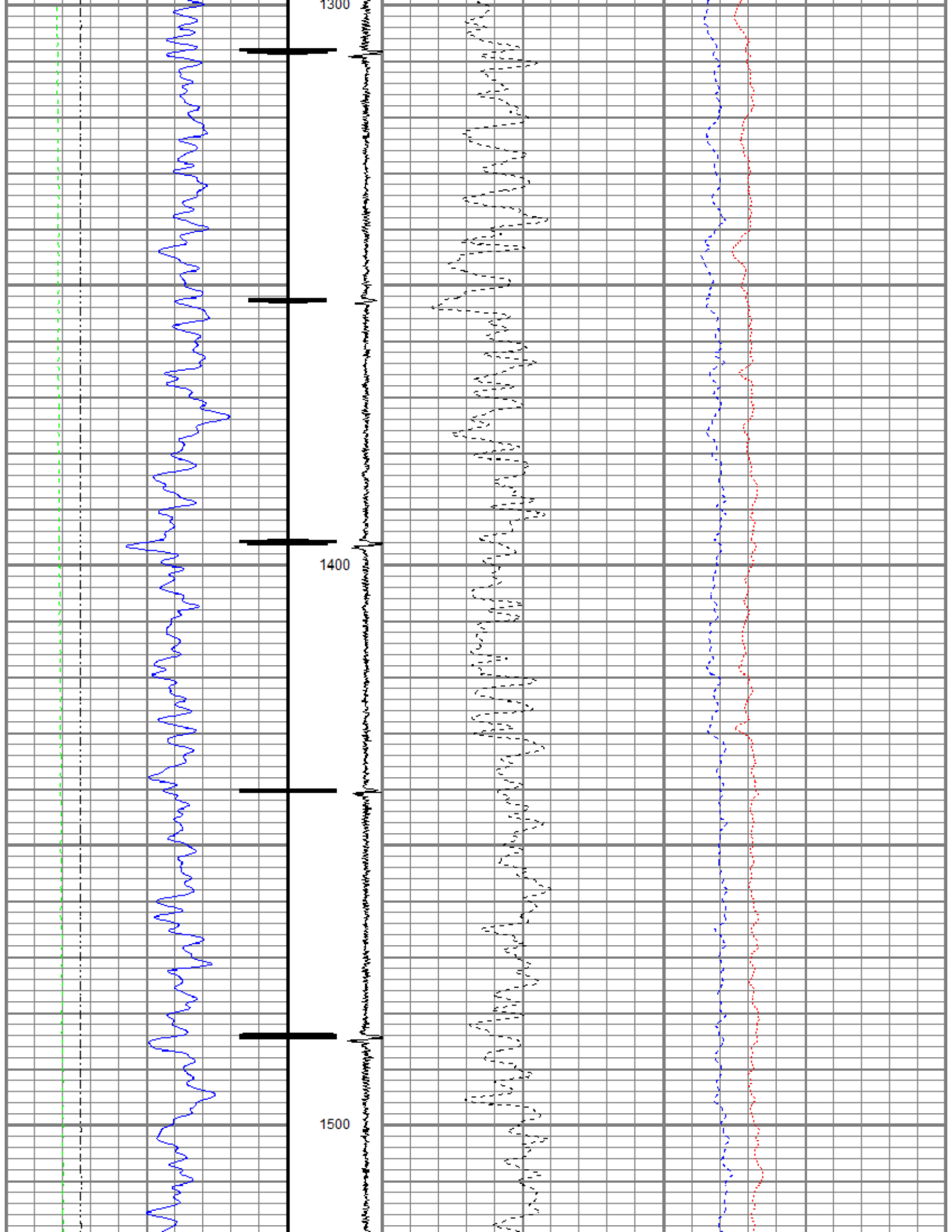


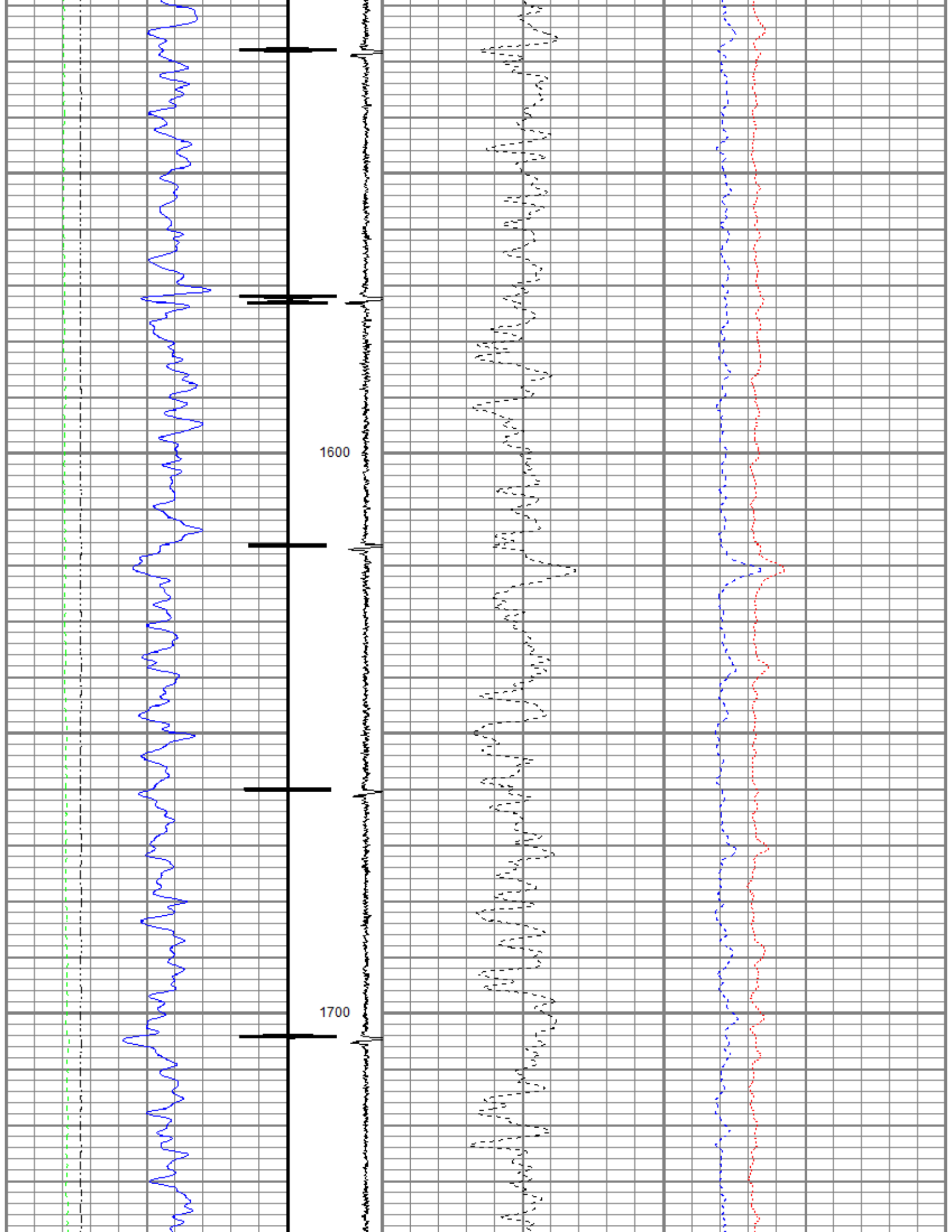


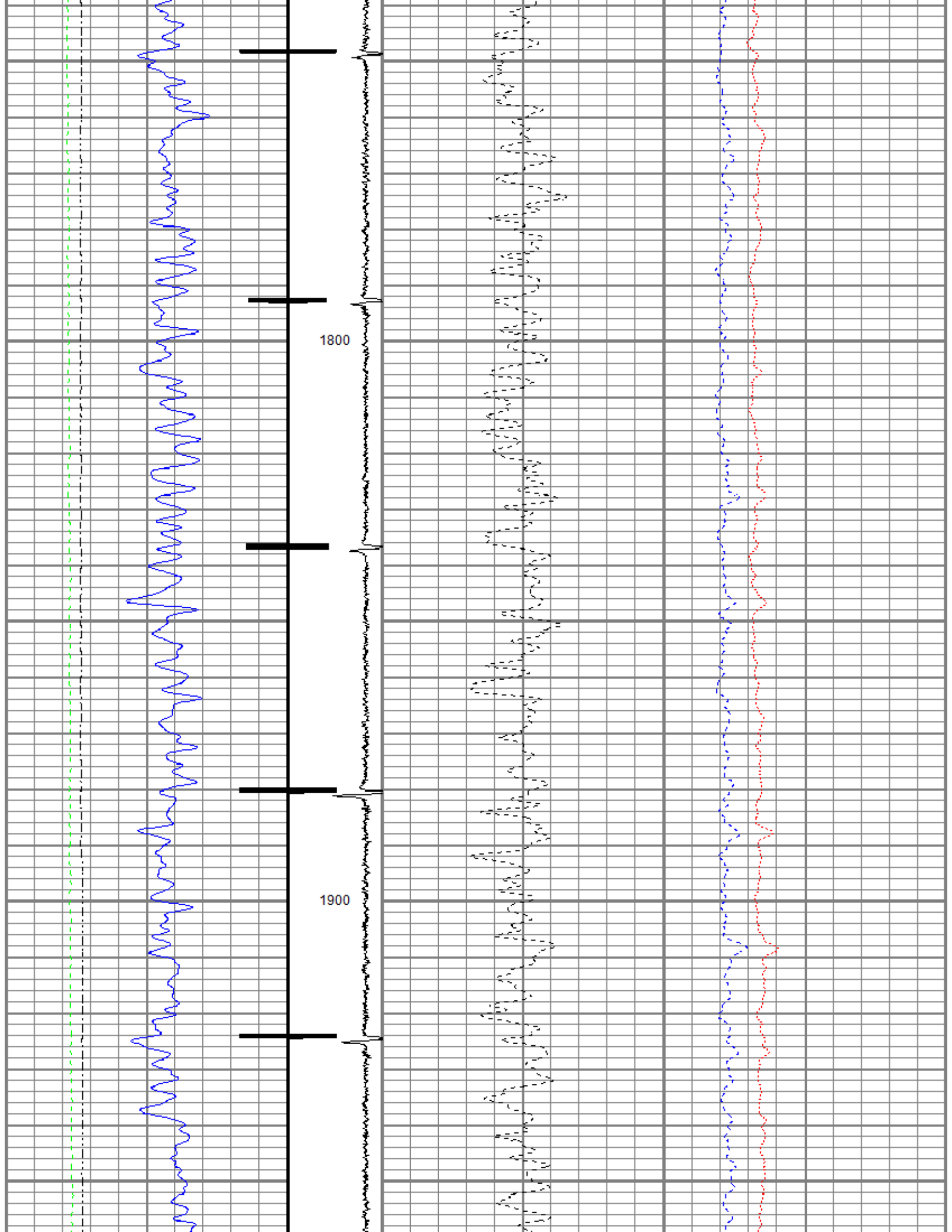


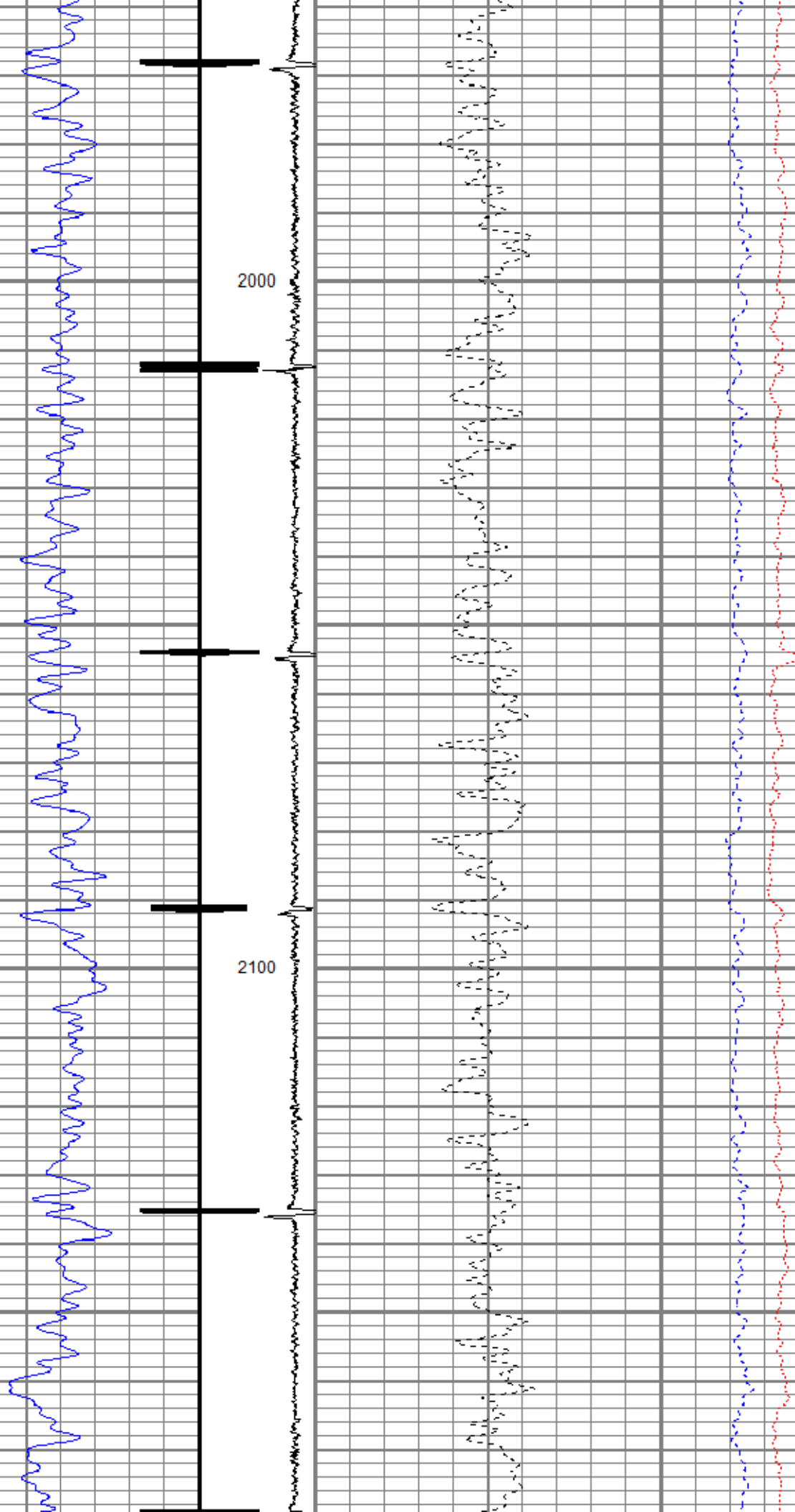


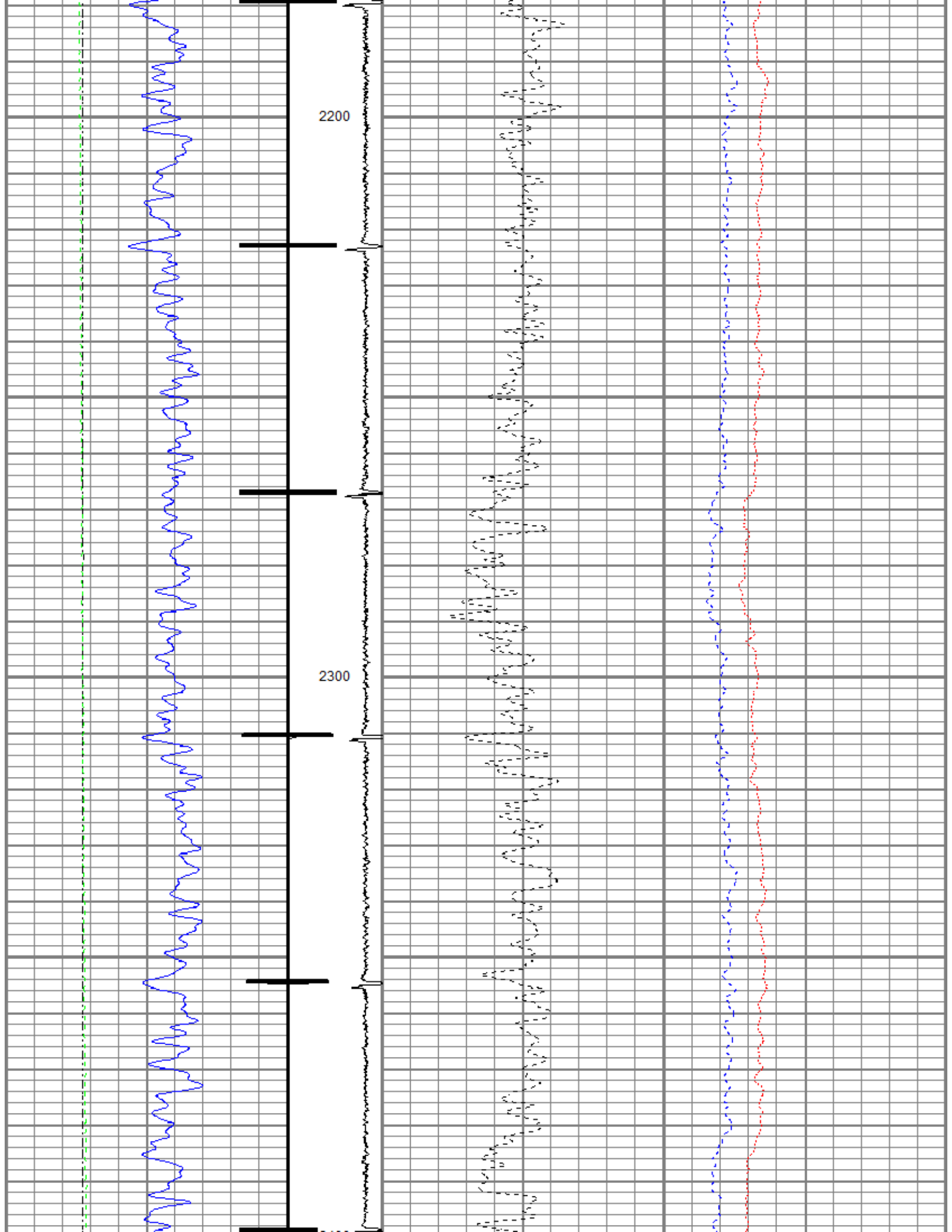


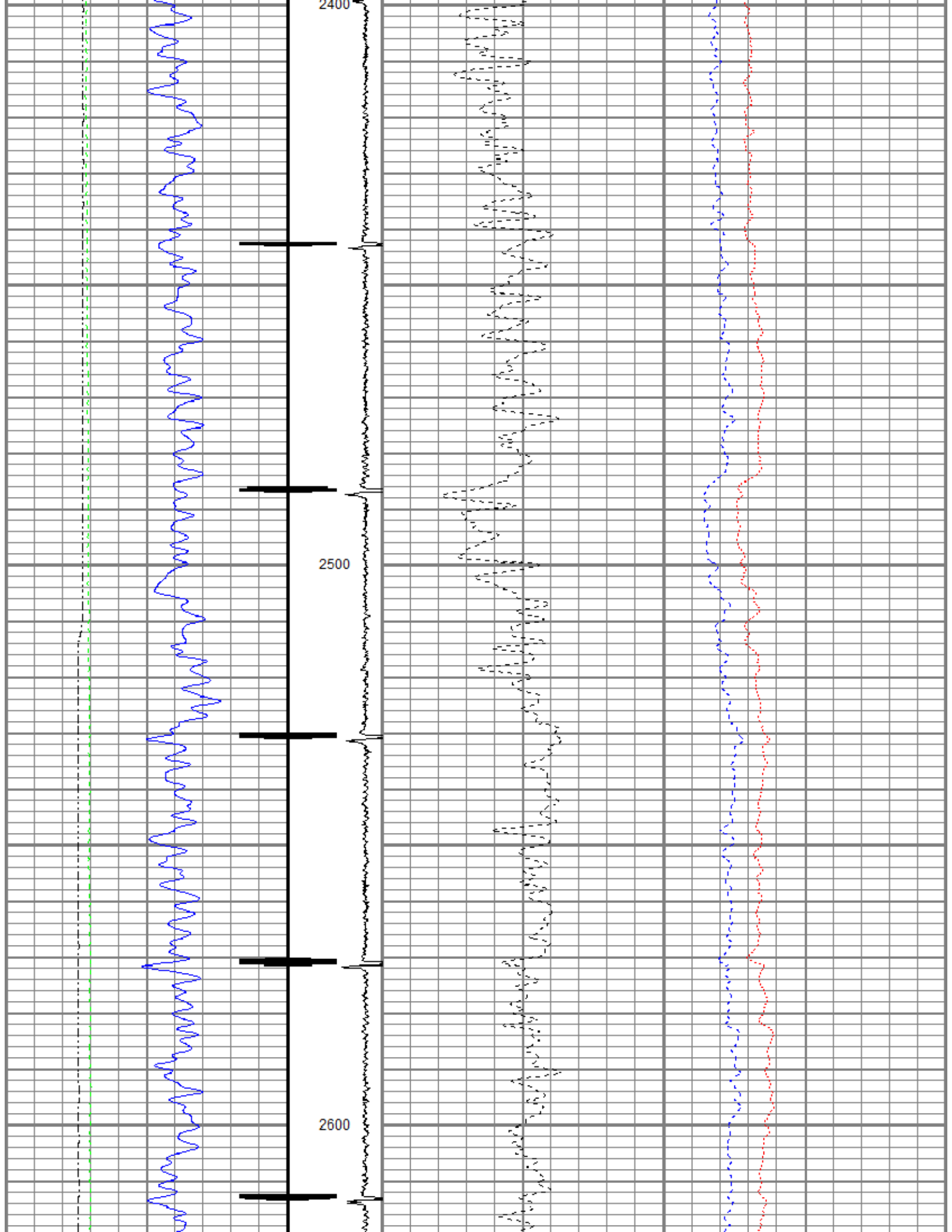


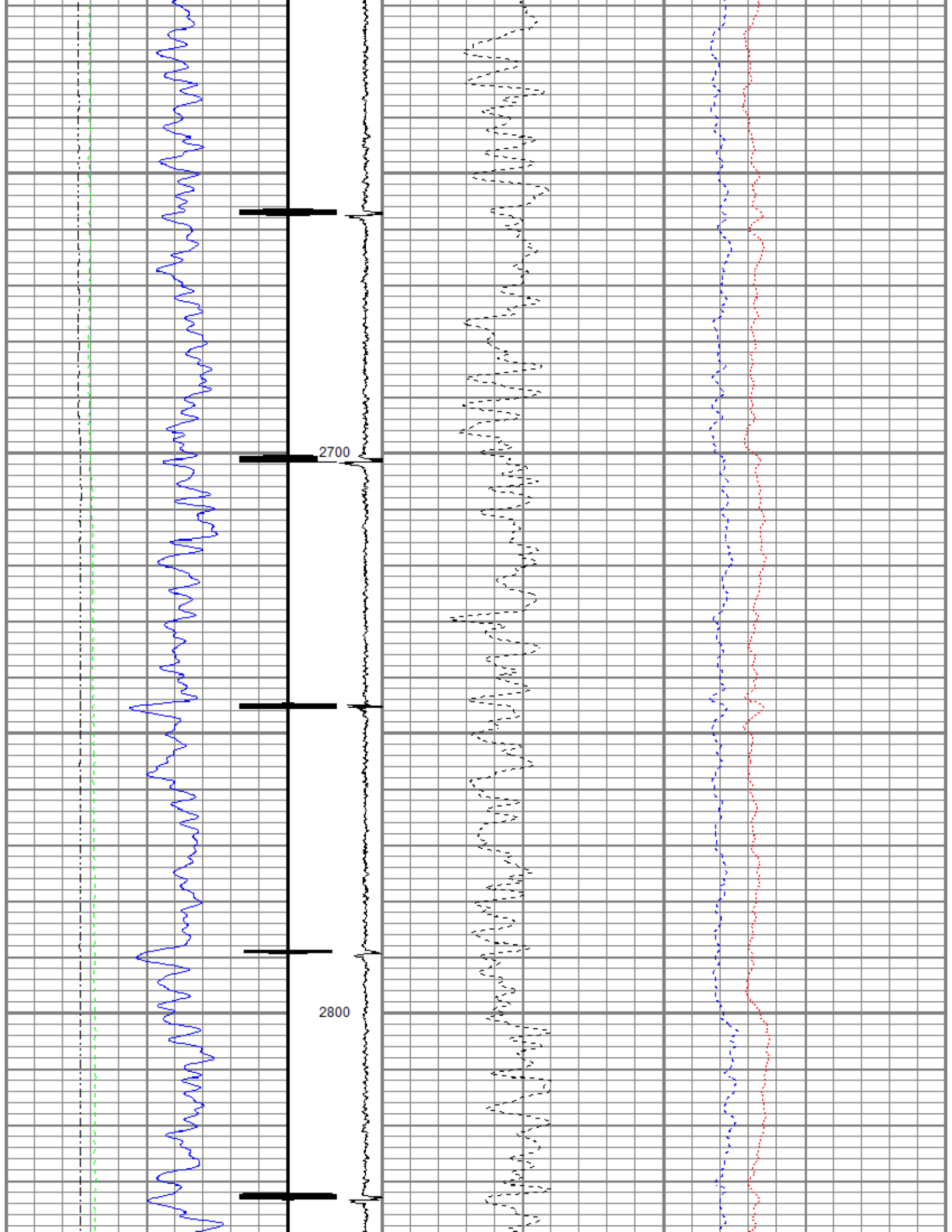


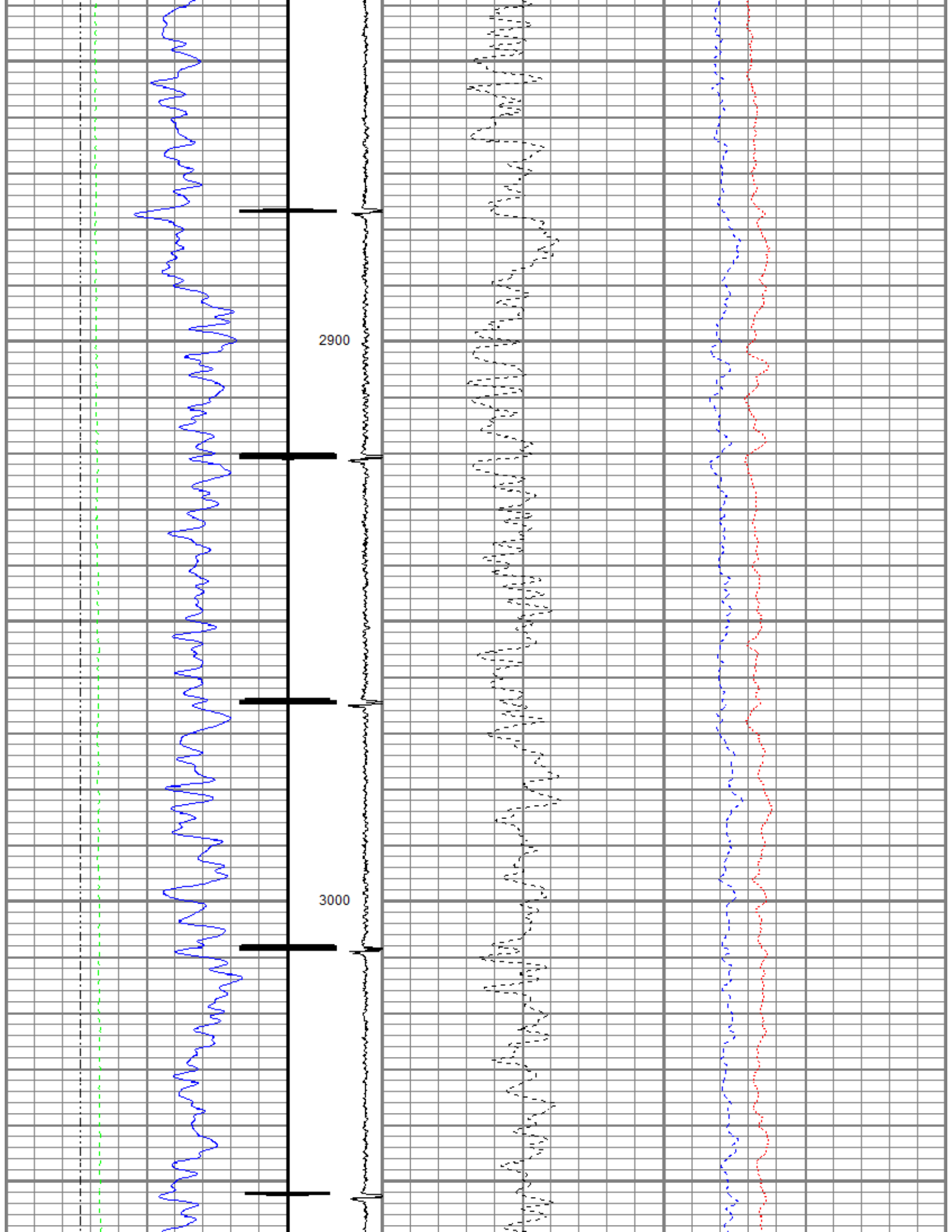


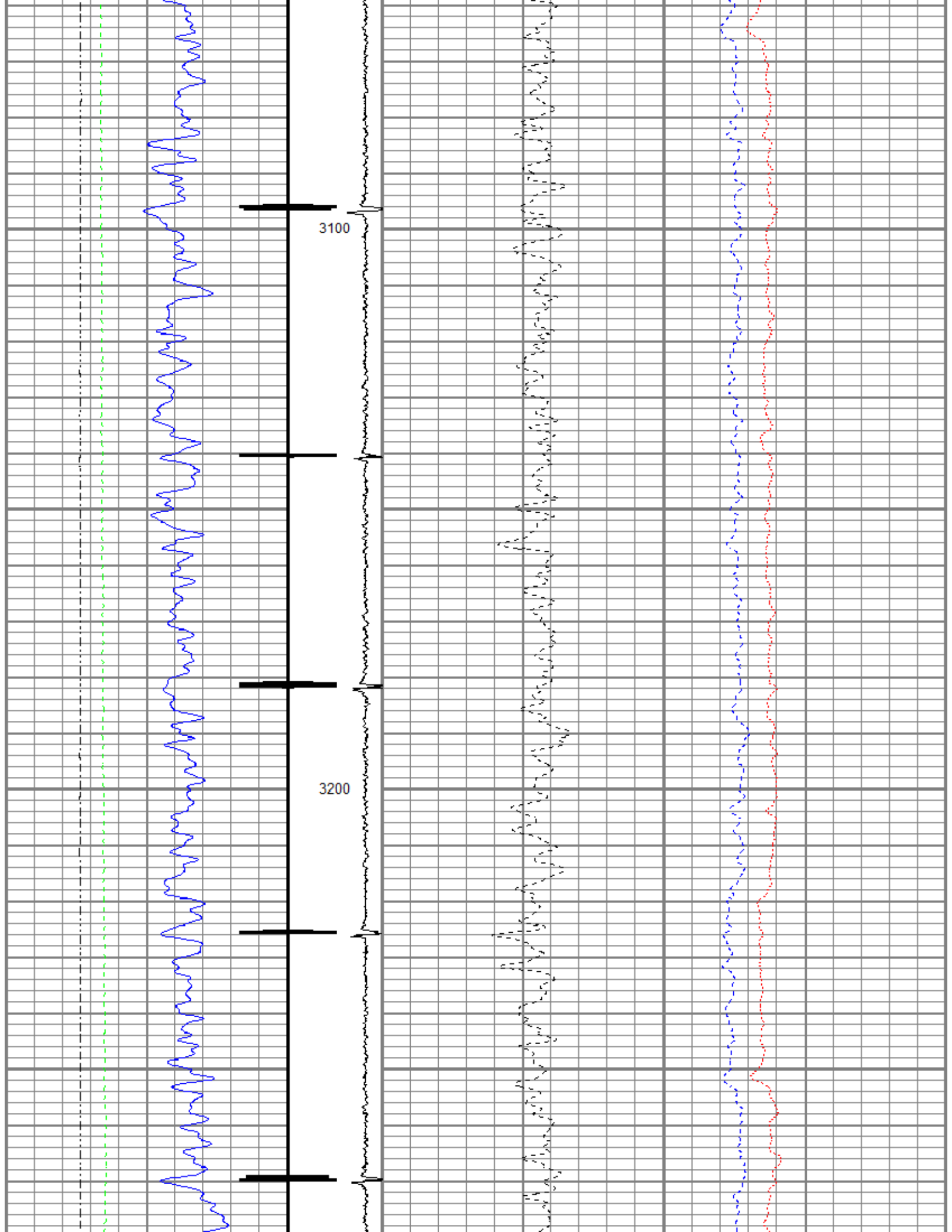


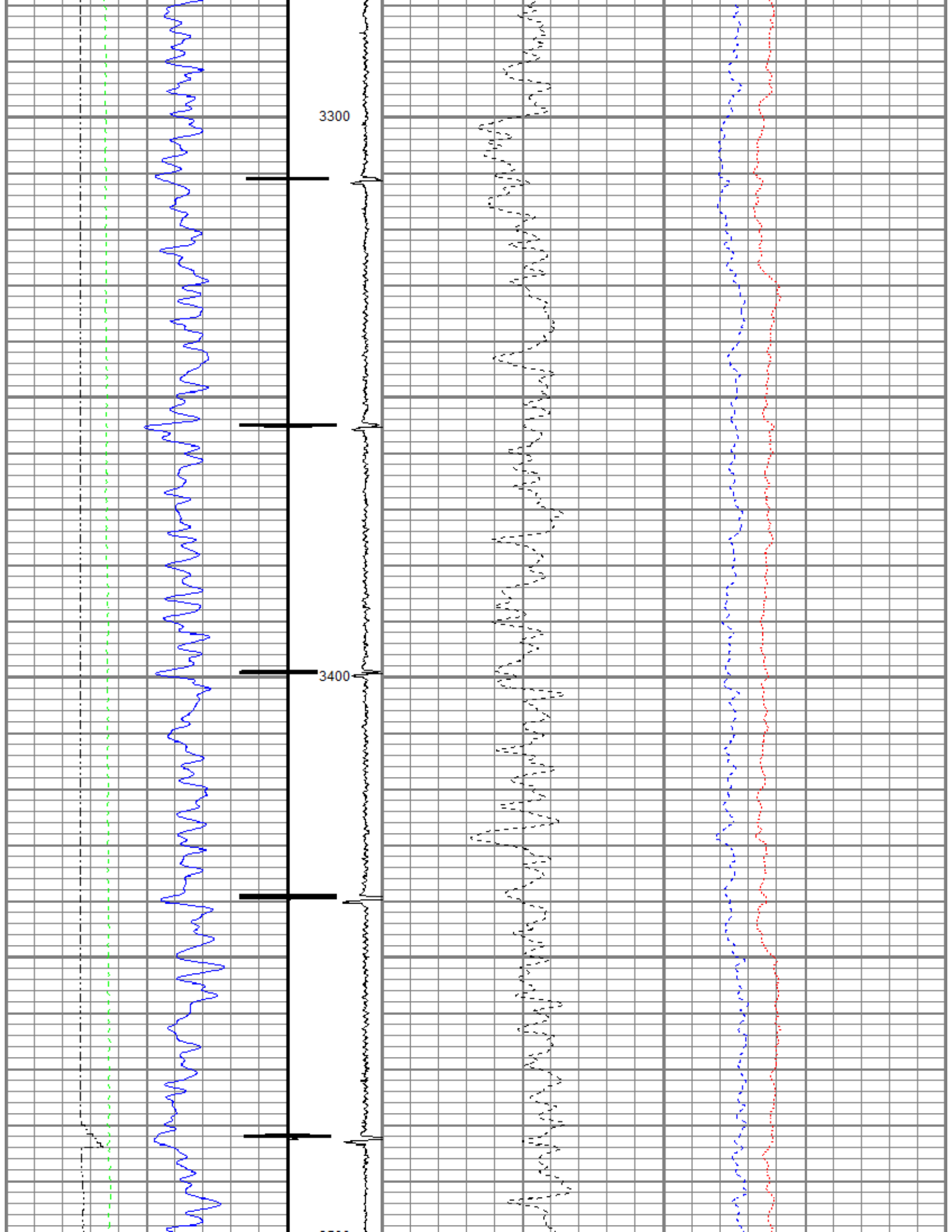


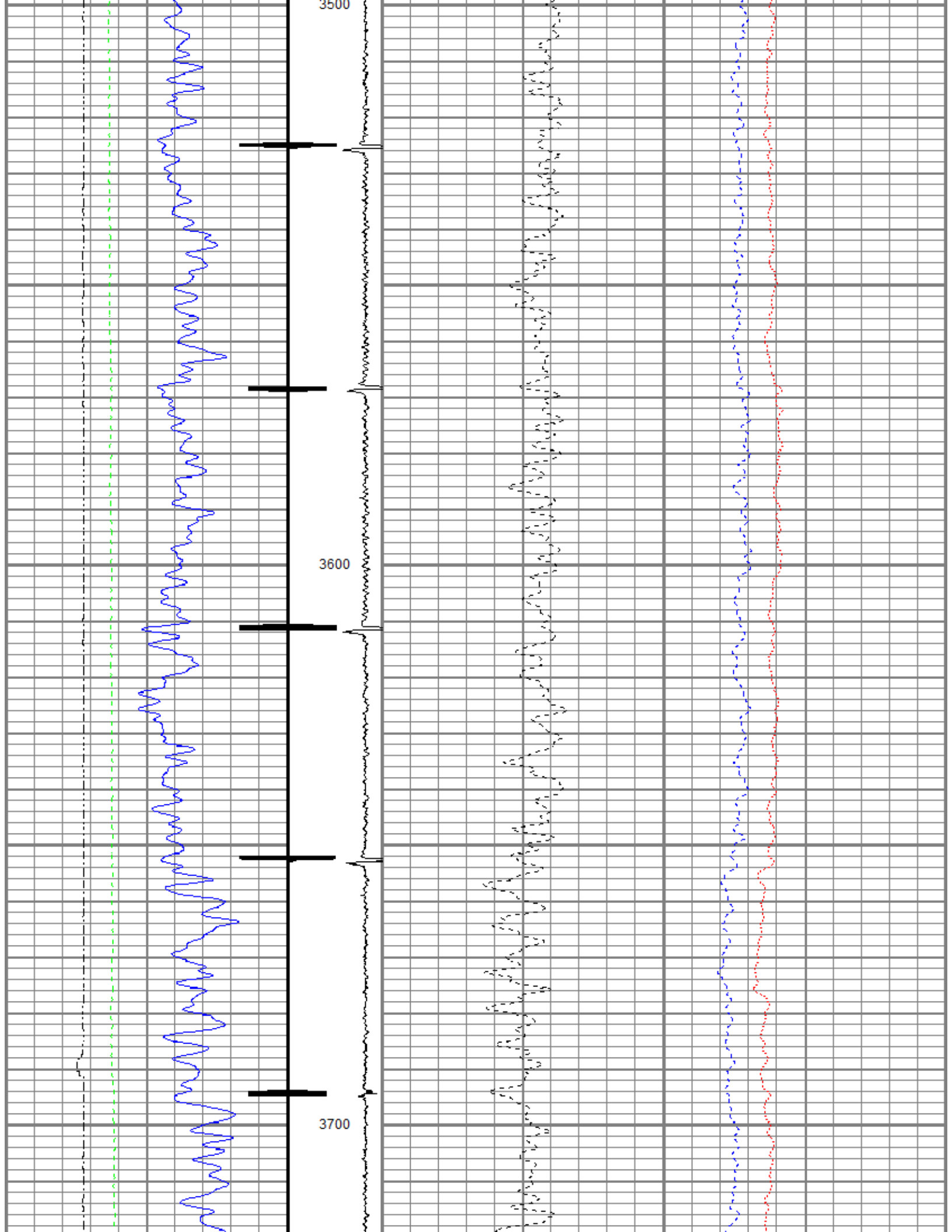


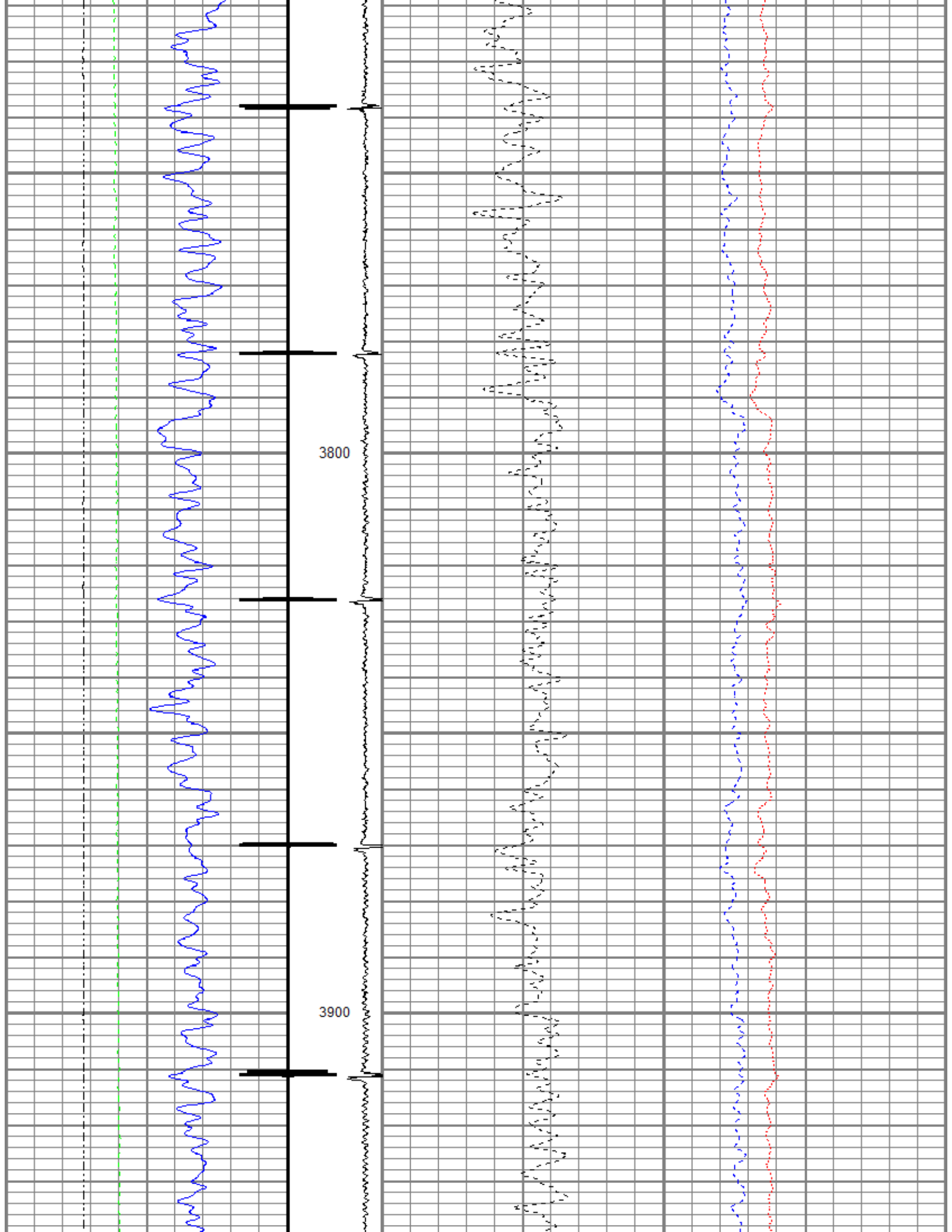


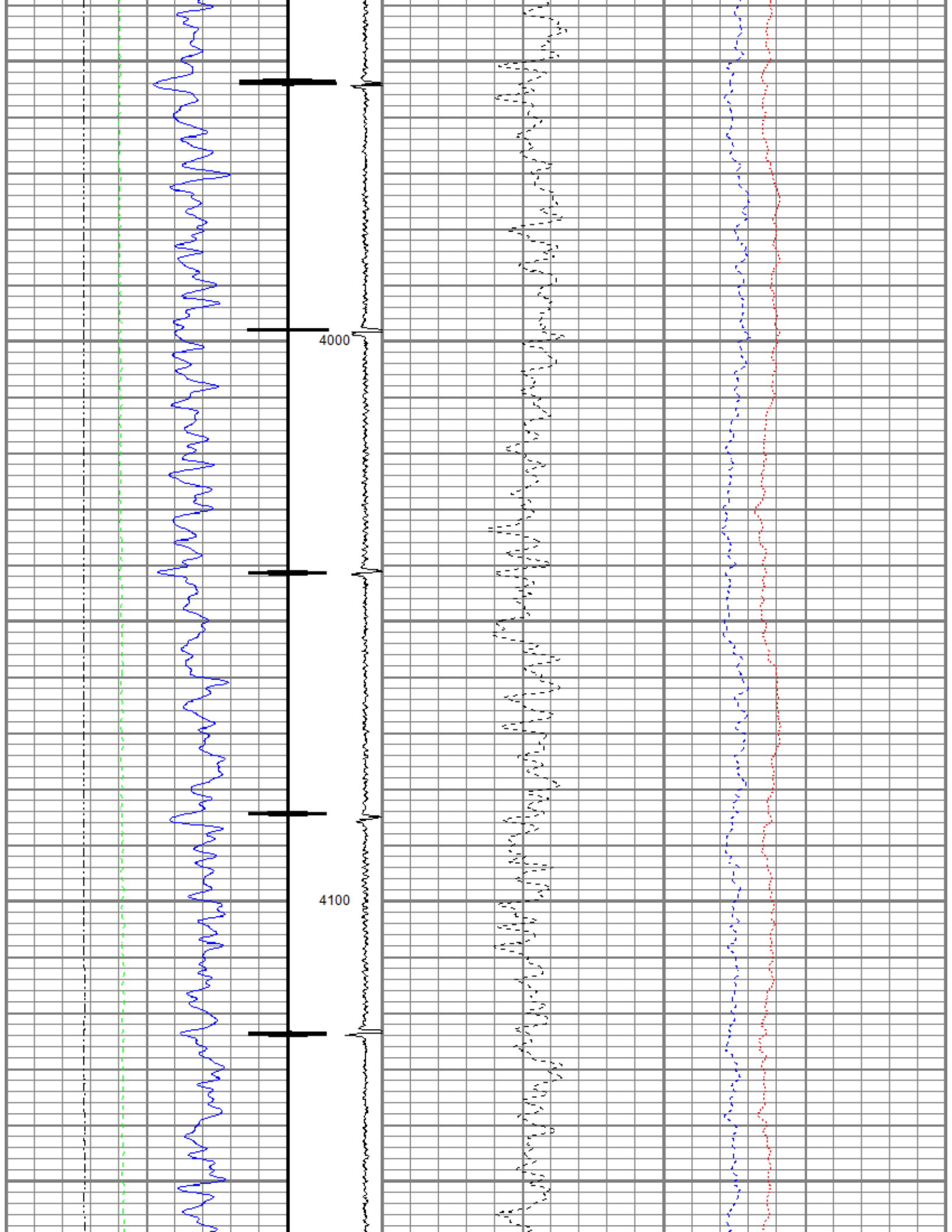


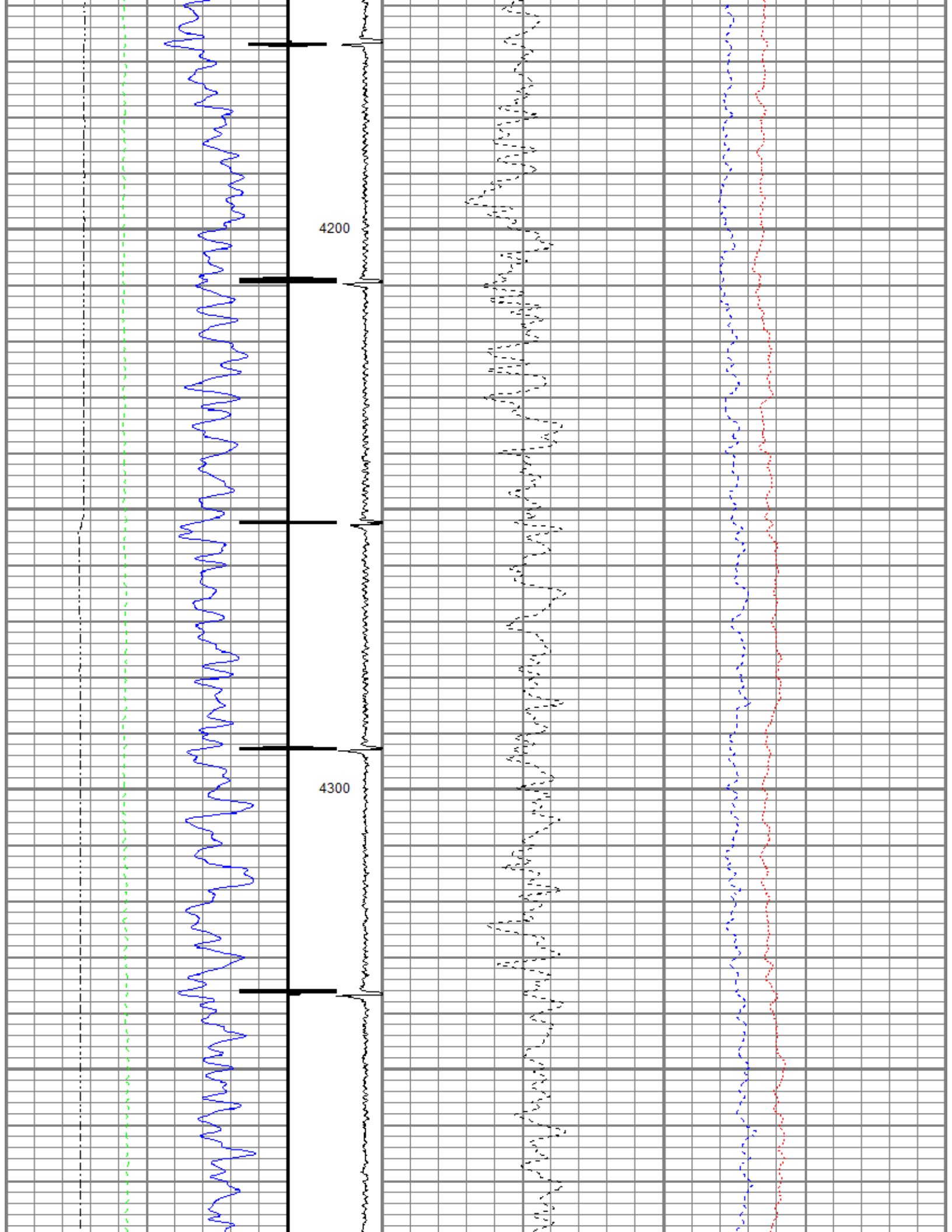


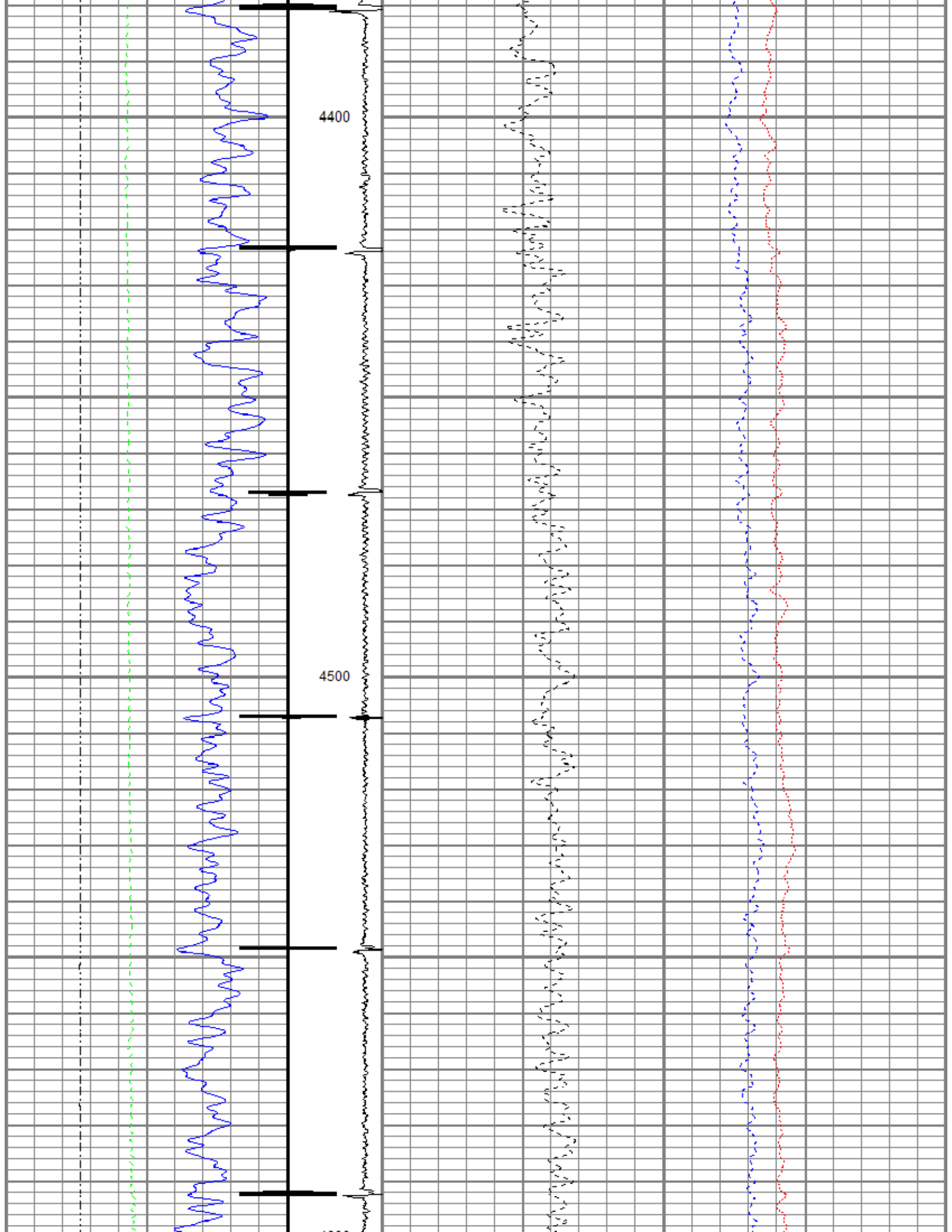


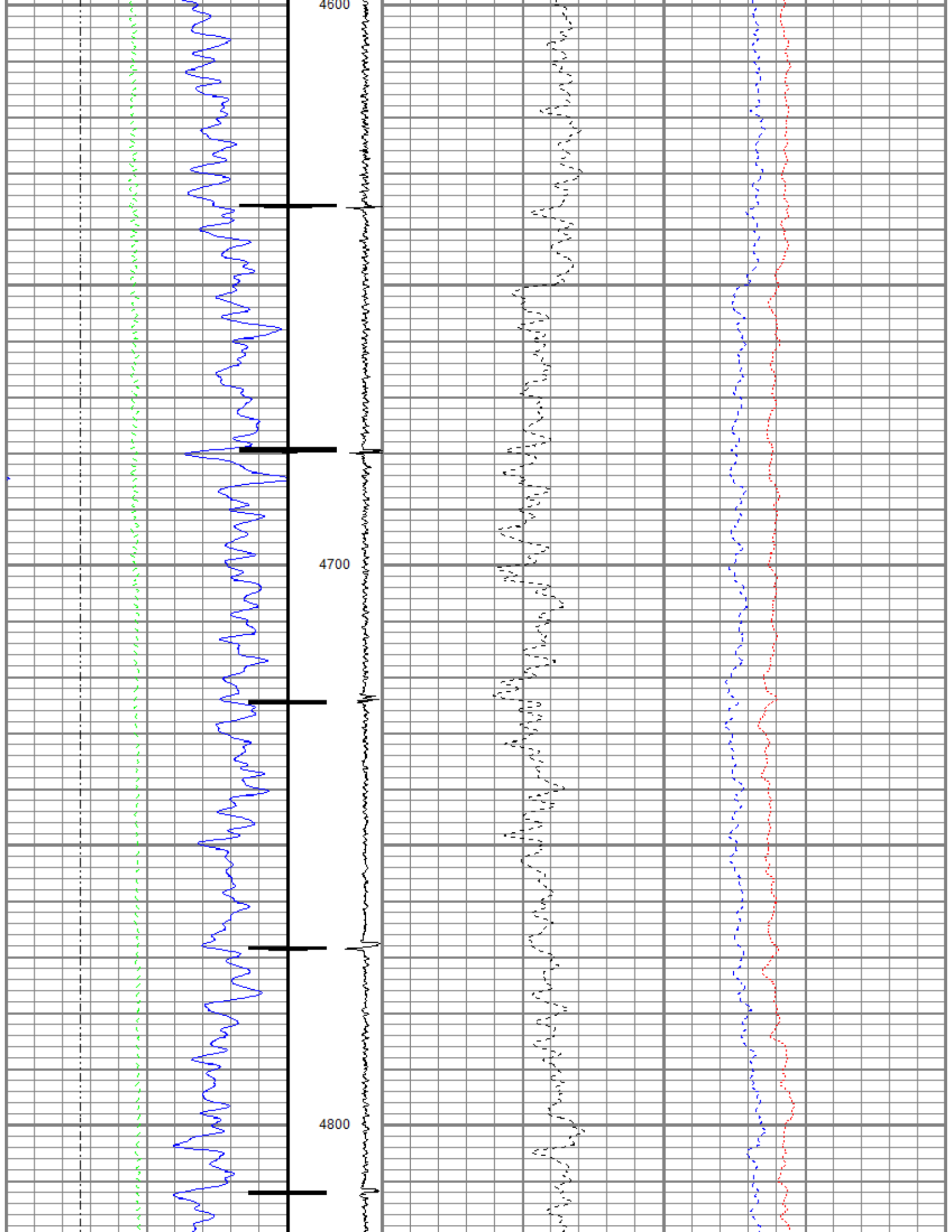


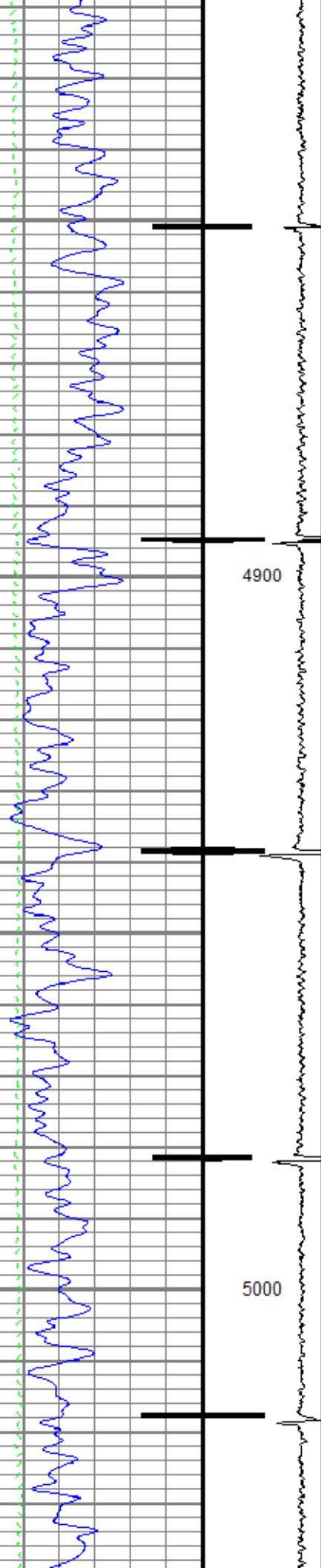






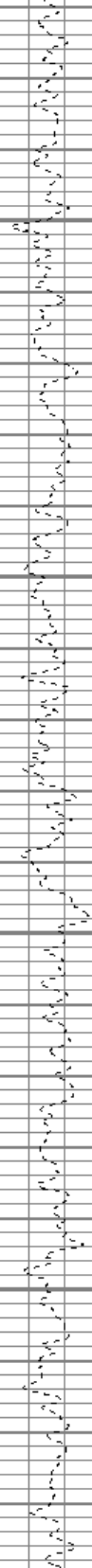


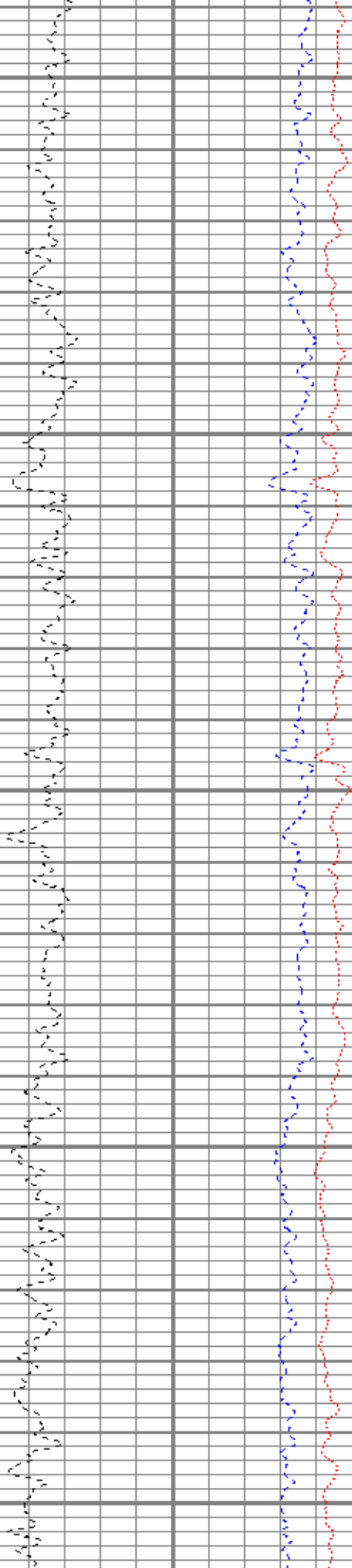
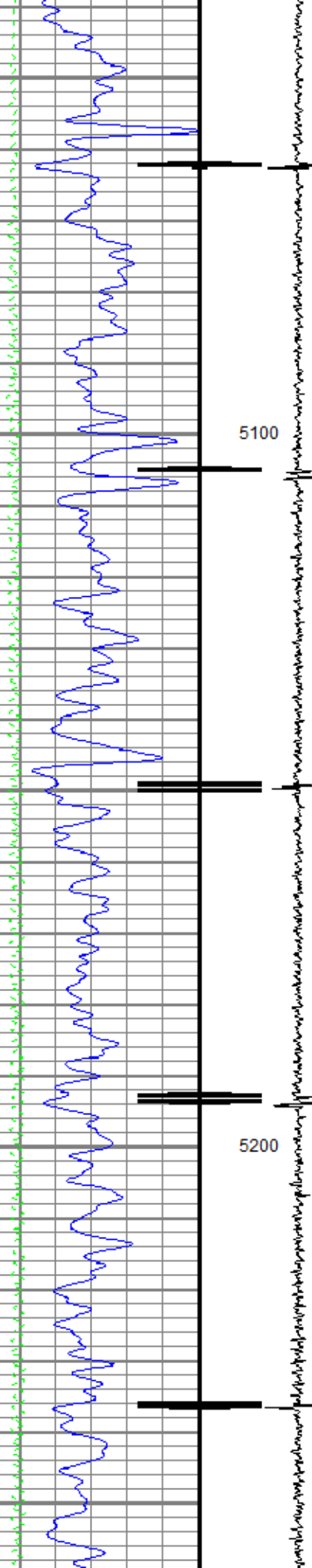


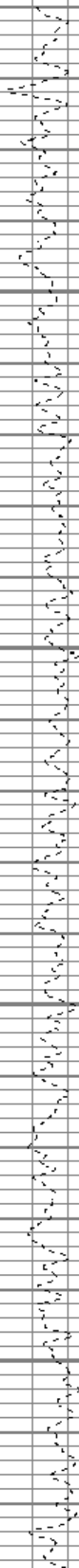
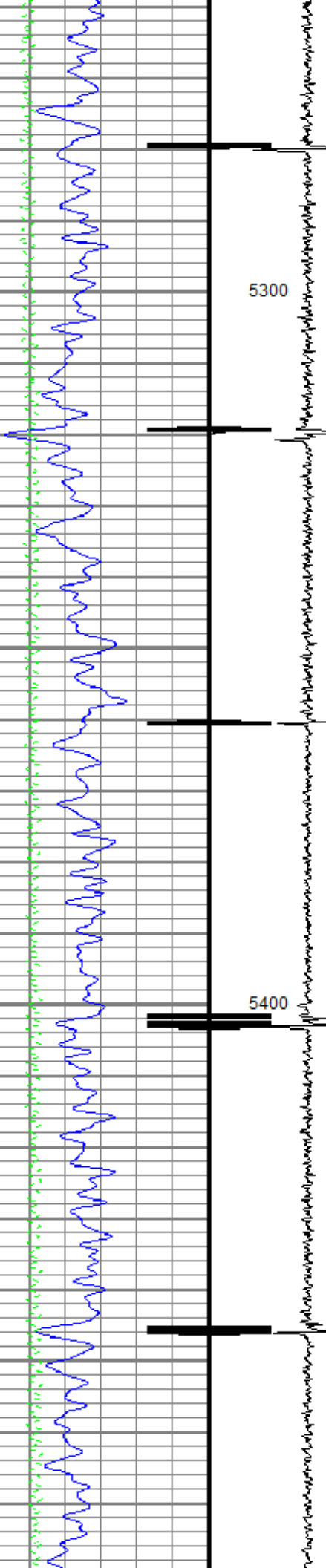


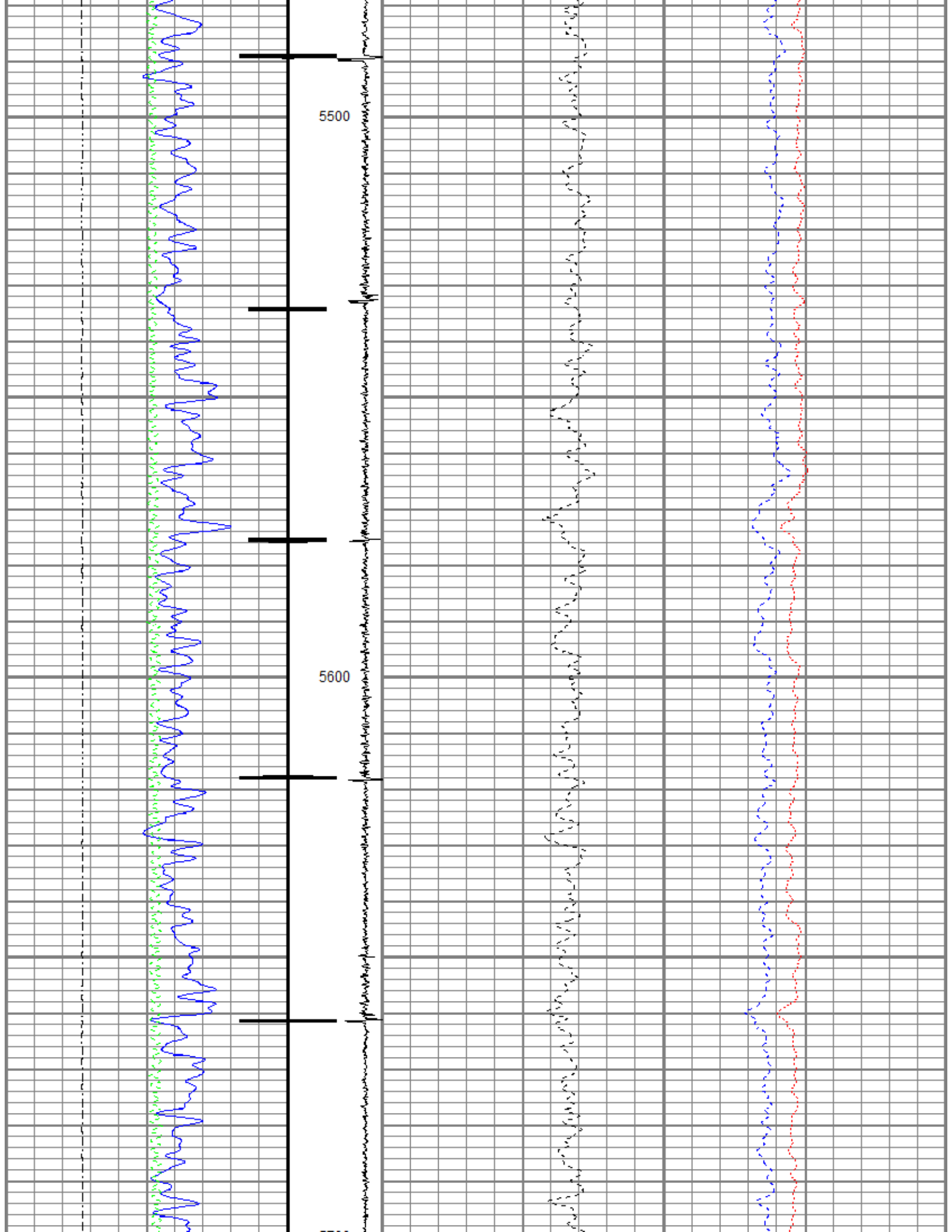
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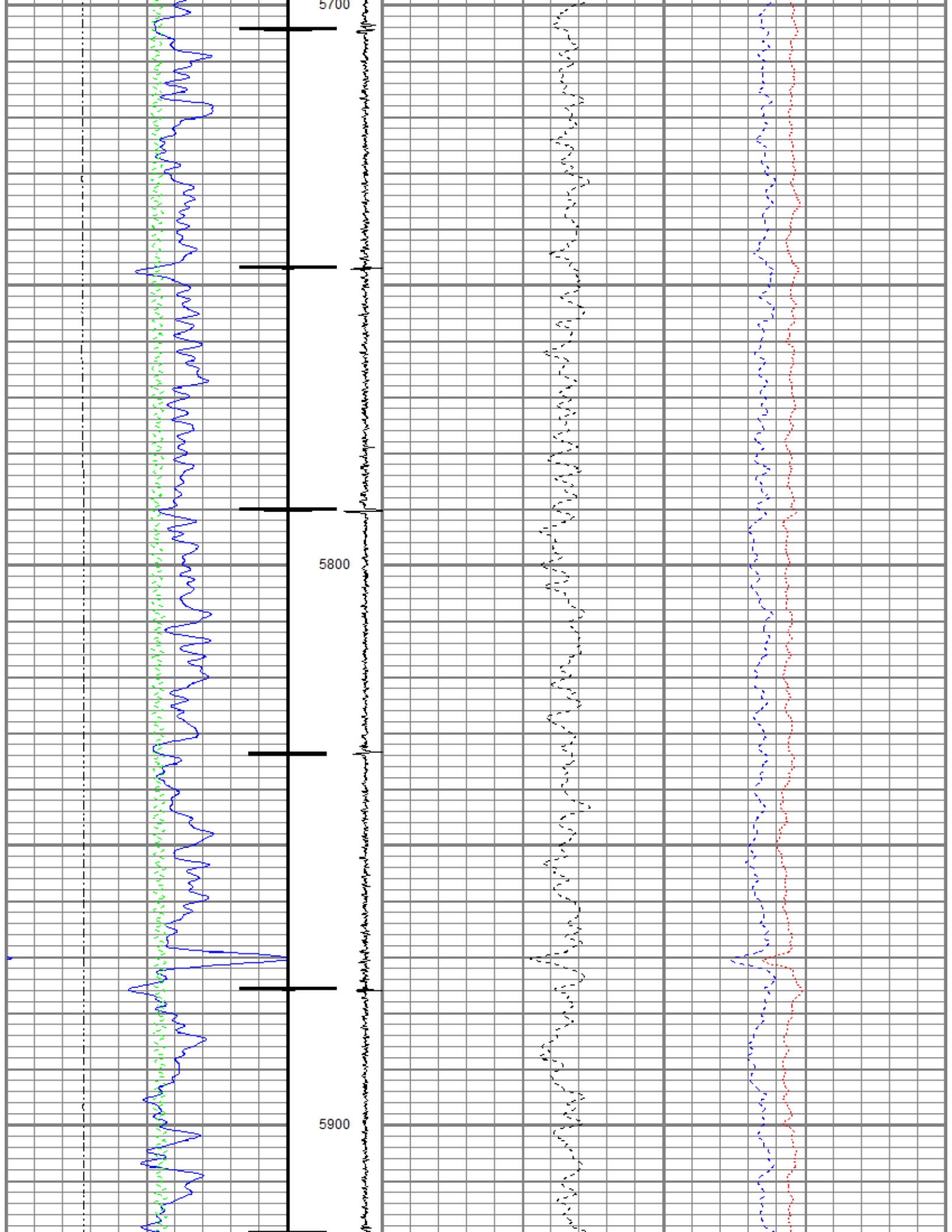
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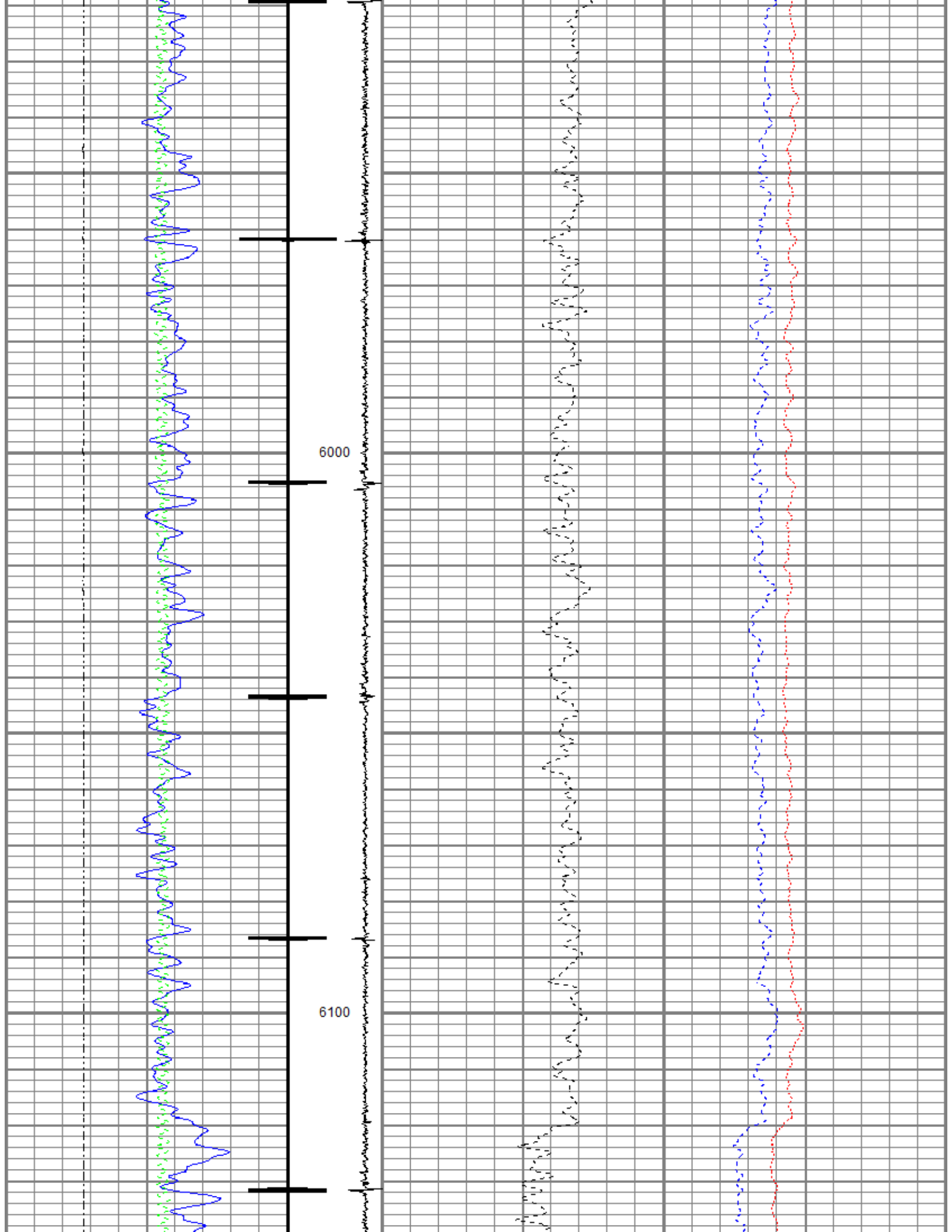


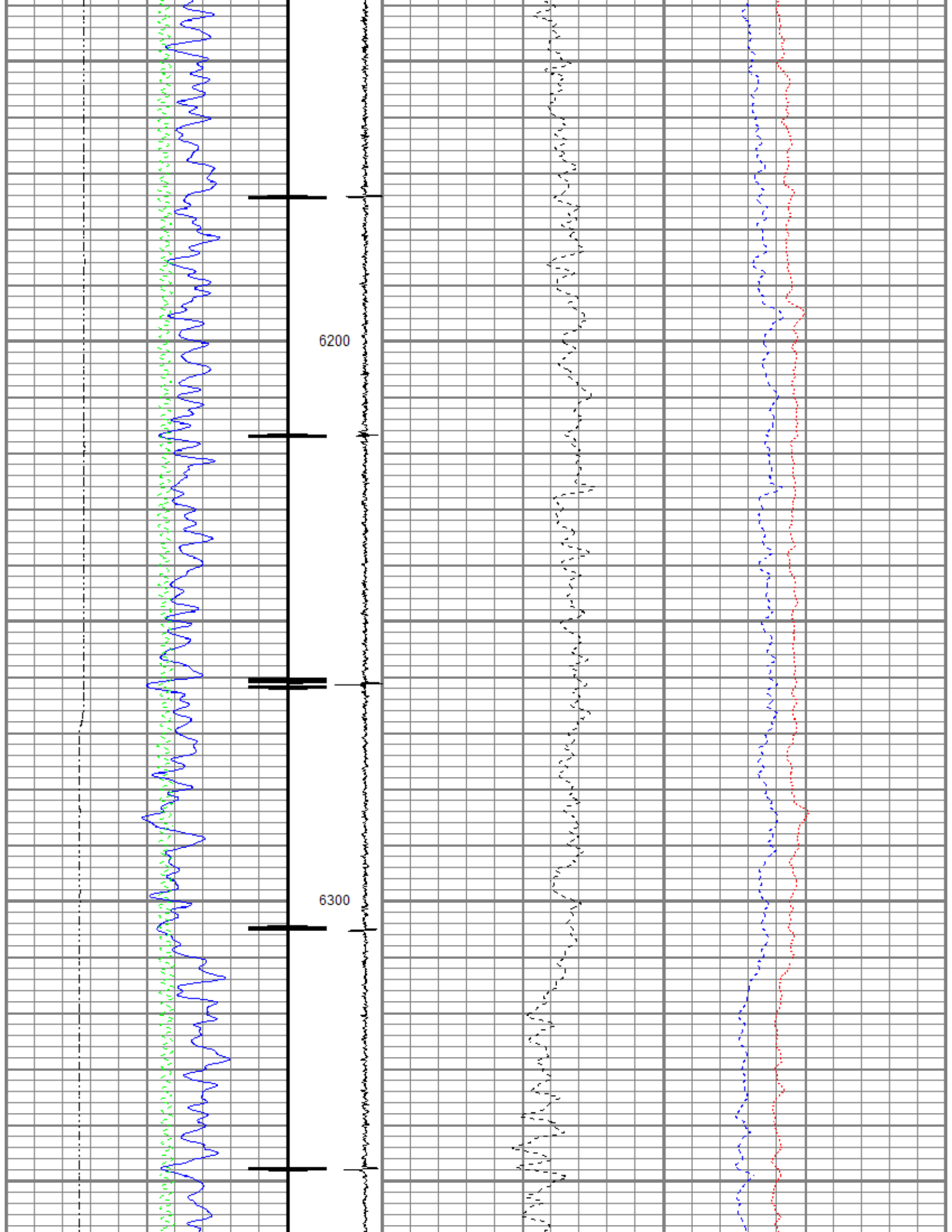


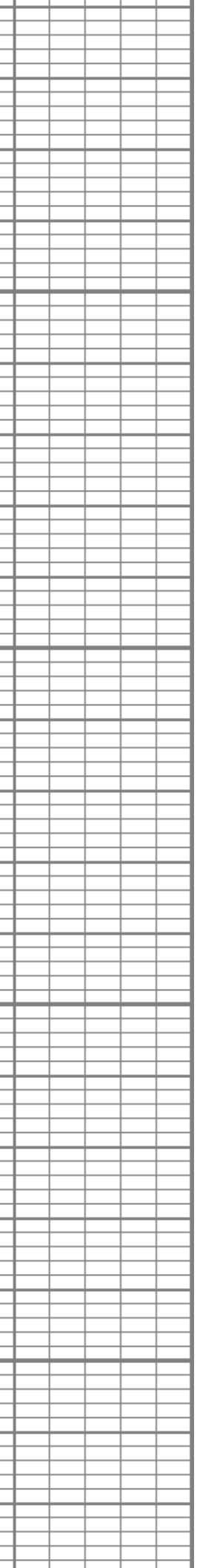
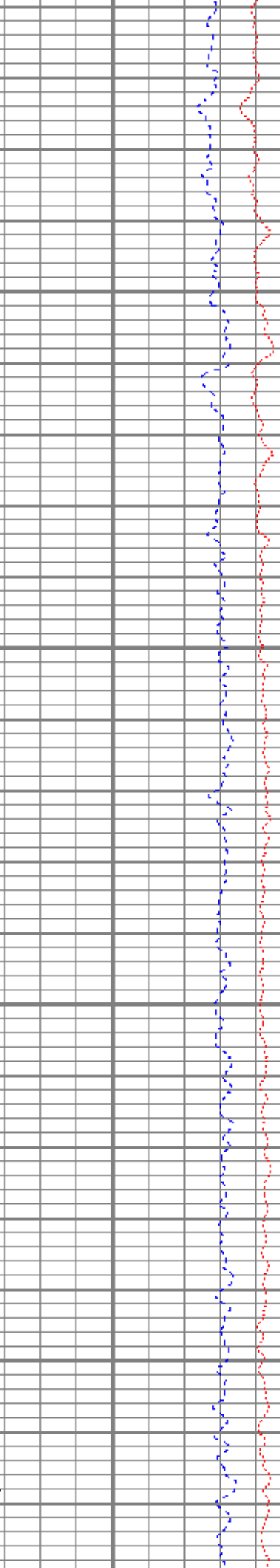
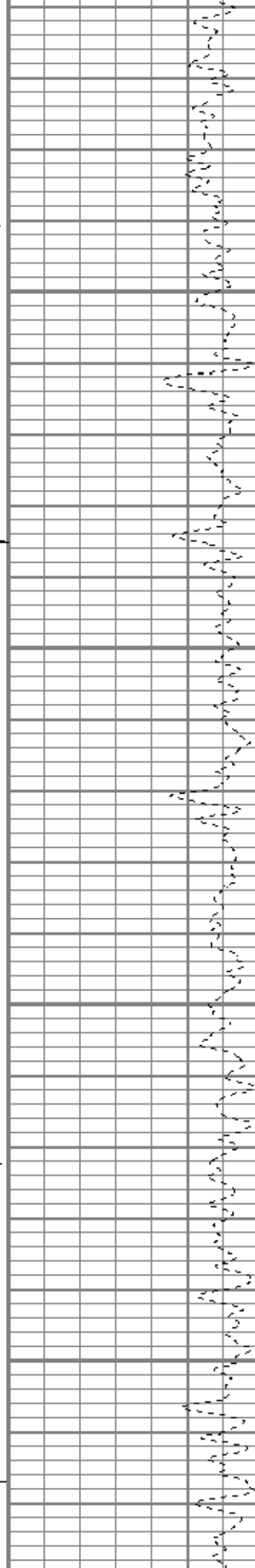
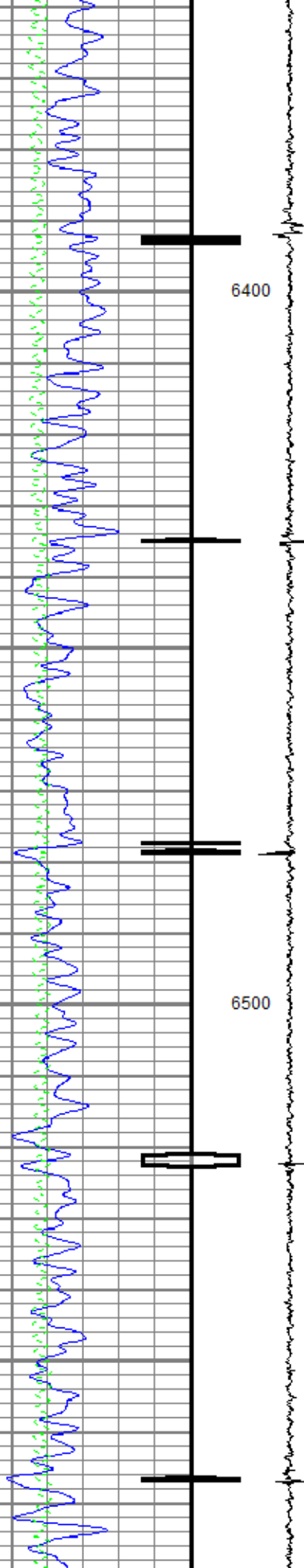


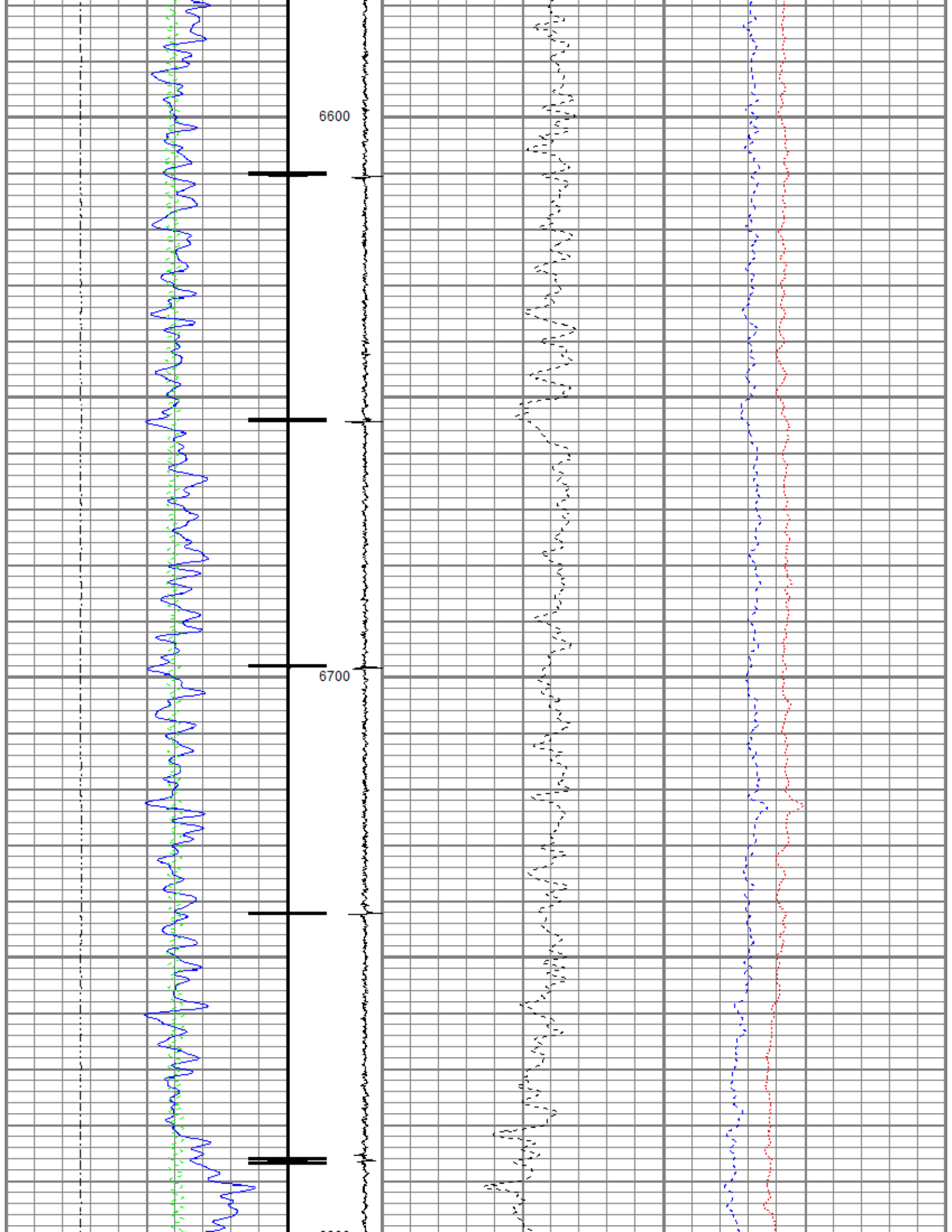


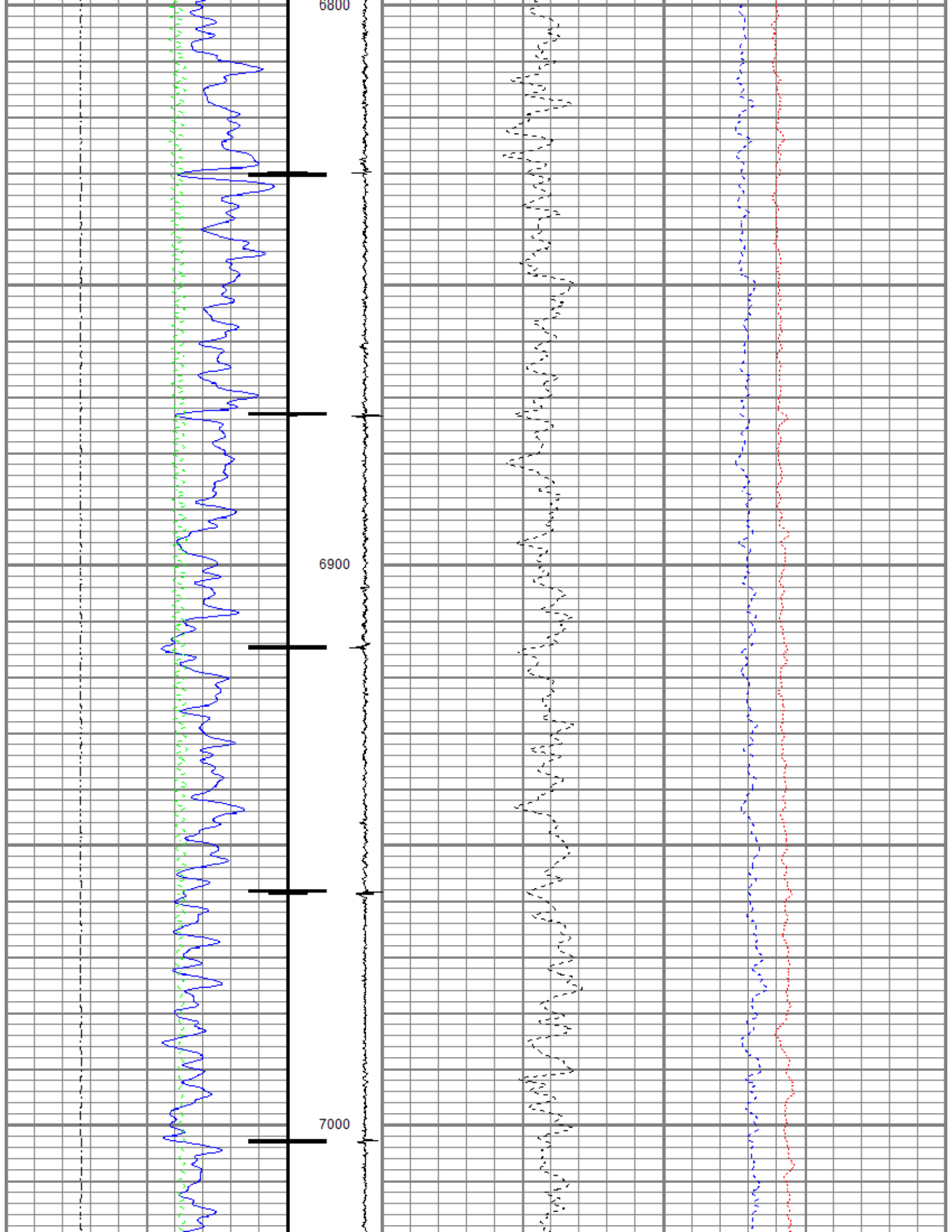


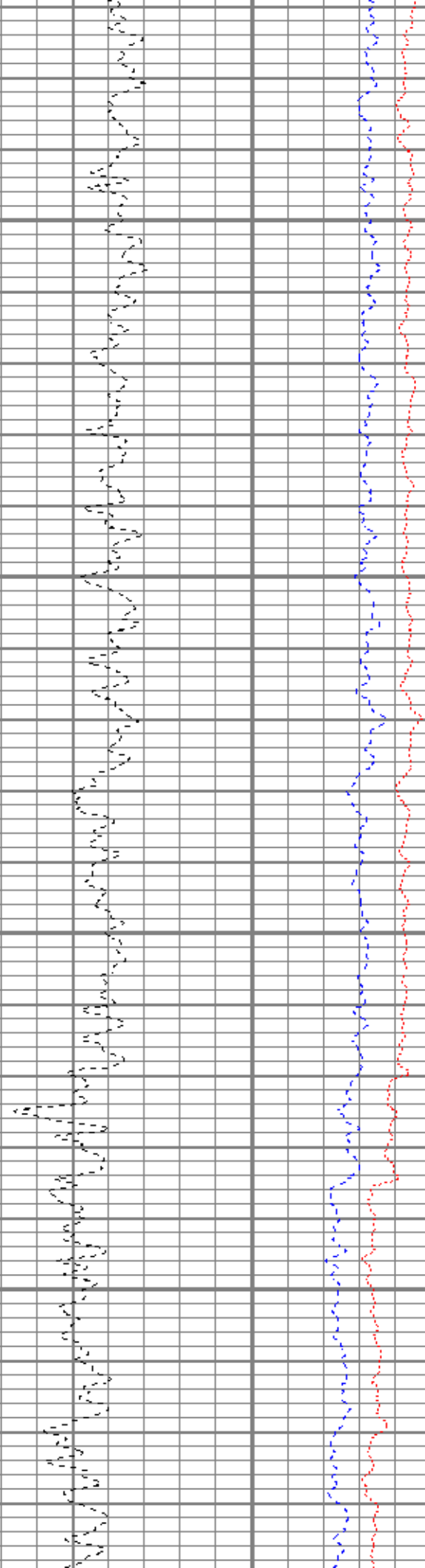
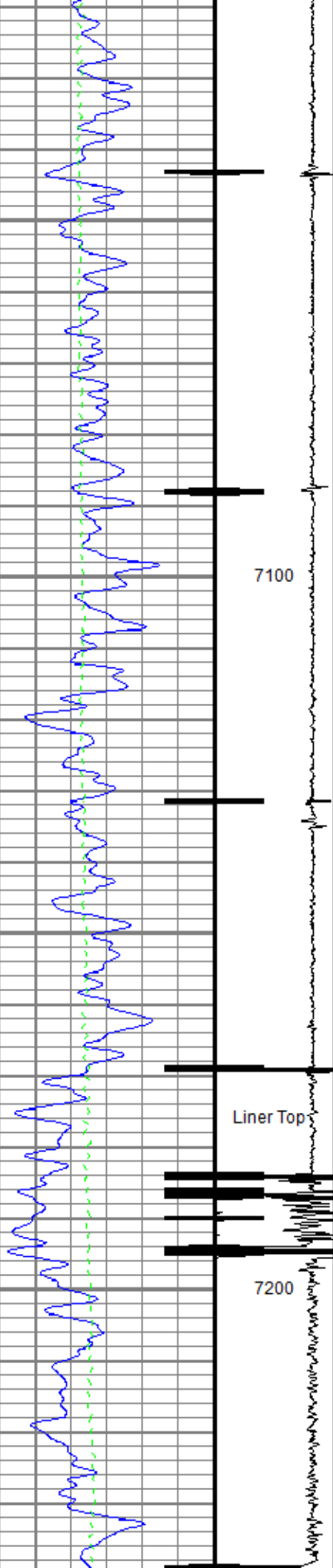


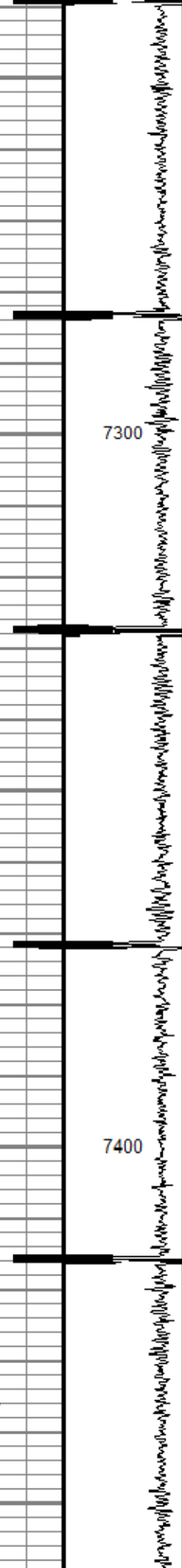






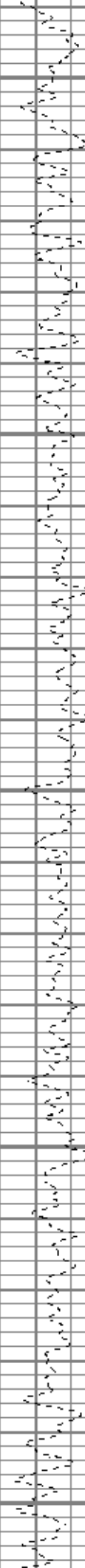


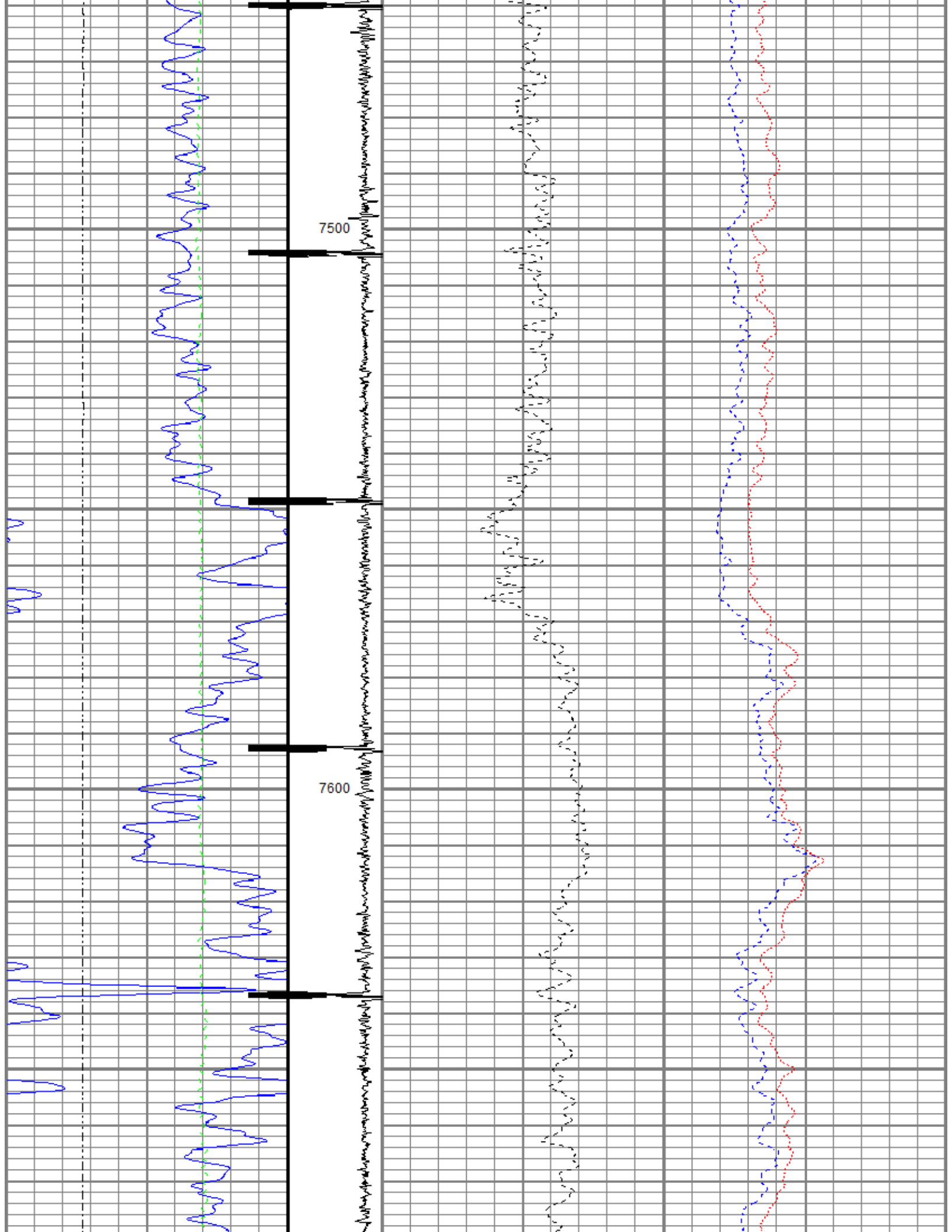


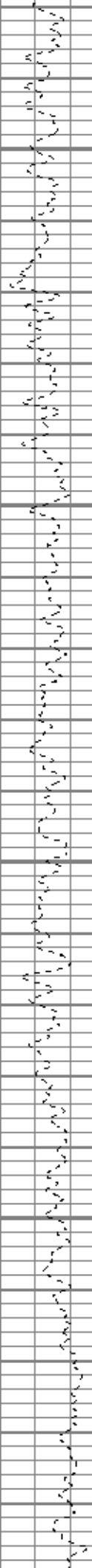
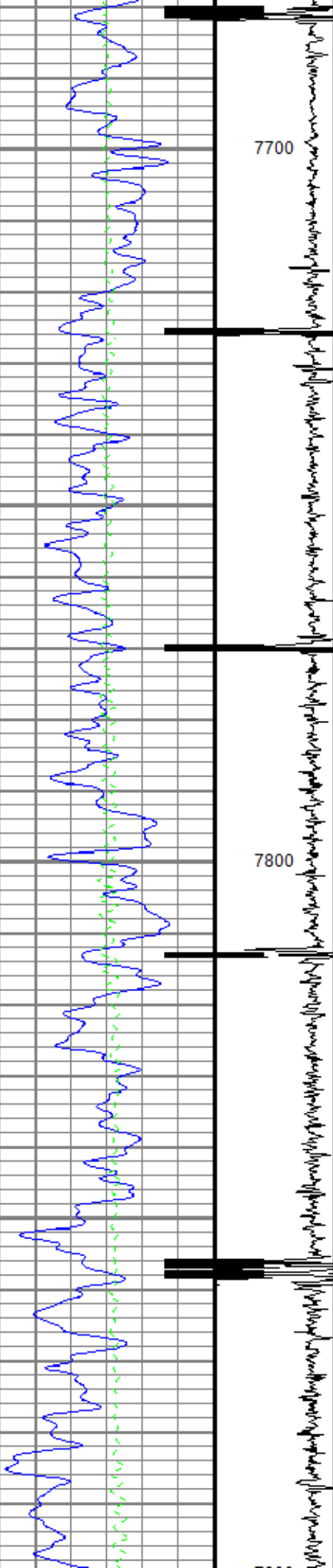


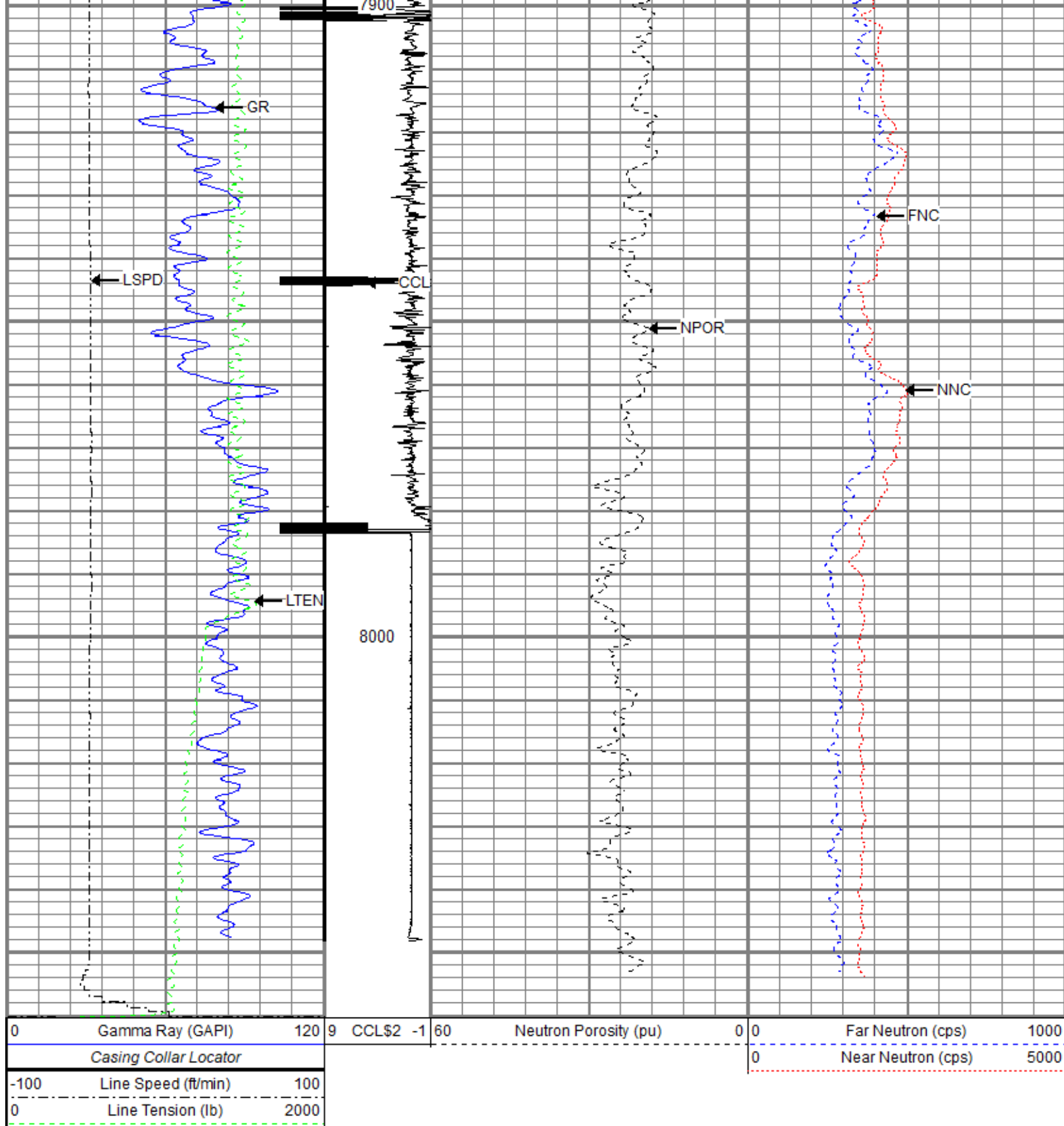
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7400







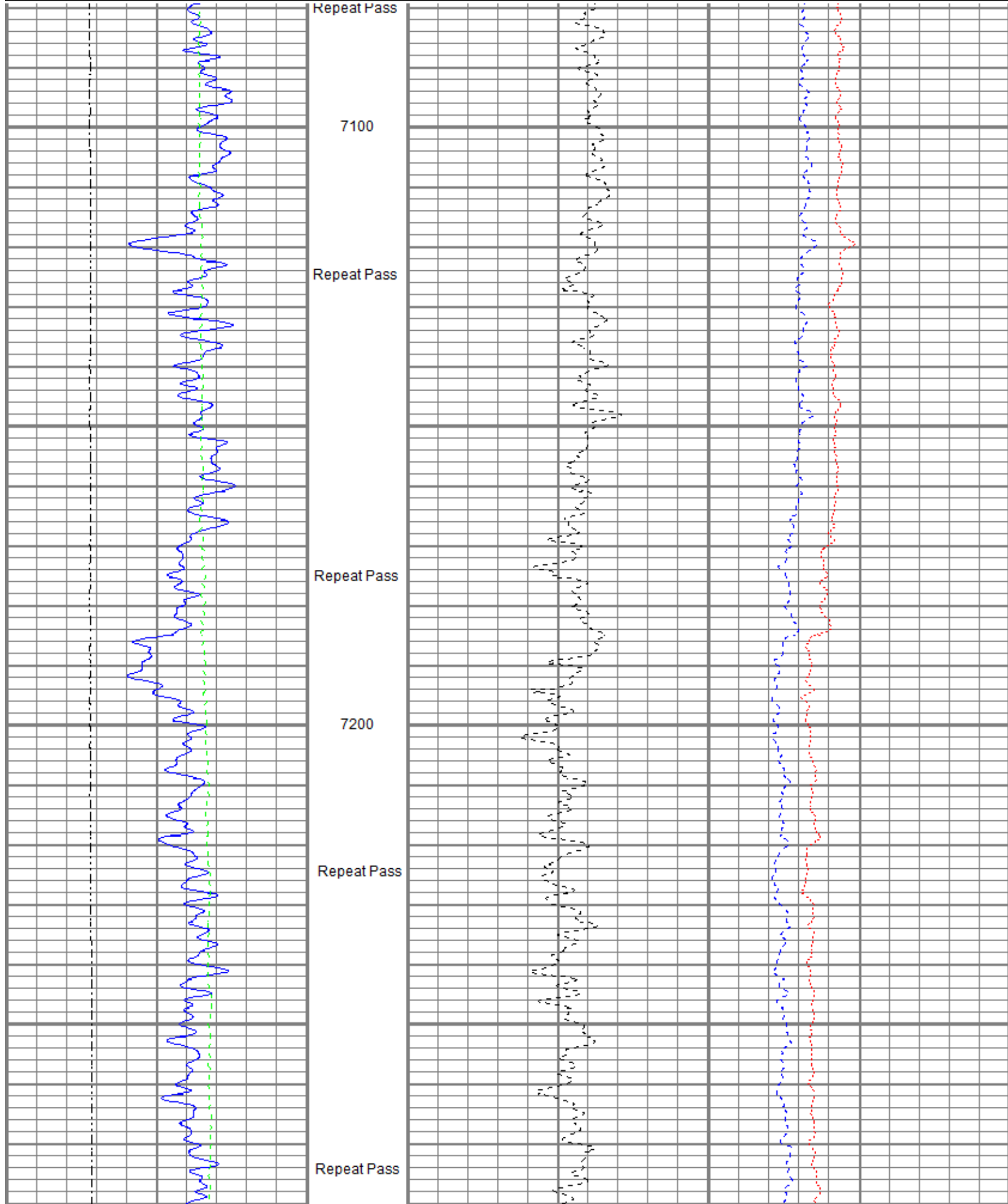


Repeat Pass


Recorded With 0 PSI Surface Induced Pressure

Database File oxy_howard_29c_29hz_cnl_18_aug_2021.db
 Dataset Pathname pass2
 Presentation Format ros_cnl_probe
 Dataset Creation Wed Aug 18 09:00:25 2021


0	Gamma Ray (GAPI)	120	60	Neutron Porosity (pu)	0	0	Far Neutron (cps)	1000
-100	Line Speed (ft/min)	100				0	Near Neutron (cps)	5000
0	Line Tension (lb)	2000						



Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
CCL\$2 CCL\$1 GR	11.83 11.83 10.50		Titan CHD-14375 GO Titan 1-7/16" Assembled Electric Cable Head with 1" Fishing Neck	1.03	1.44	3.60
			Probe CENT-2750 Probe 2-3/4" Electric Inline Bowspring Centralizer	2.88	2.75	20.00
			Probe GR-CCL-2750 6PB (FW1304-134) Probe 2-3/4" rev.1 Digital Scintillation Gamma Ray/CCL Combined with 6 Pin Bottom for CNT	4.80	2.75	55.00
			Probe CN-2750 BL (FW1308-020_A1483) Probe 2-3/4" Compensated Neutron with Bottom Load	5.03	2.75	60.00
CNLS CNSSC	4.53 4.12		Probe CENT-2750 Probe 2-3/4" Electric Inline Bowspring Centralizer	2.88	2.75	20.00

LOCTIM	0.00				
UTCTIM	0.00				
Dataset: oxy_howard_29c_29hz_cnl_18_aug_2021.db: field/well/run1/pass6 Total length: 16.63 ft Total weight: 158.60 lb O.D.: 2.75 in					

Calibration Report					
Database File	oxy_howard_29c_29hz_cnl_18_aug_2021.db				
Dataset Pathname	pass6				
Dataset Creation	Wed Aug 18 09:17:19 2021				
Compensated Neutron Calibration Report					
Serial Number:			FW1308-020_A1483		
Tool Model:			2750 BL		
CALIBRATION		Mon Oct 19 14:19:51 2020			
Detector	Readings		Target		Normalization
Short Space	3241.60	cps	0.00	cps	1.0000
Long Space	452.04	cps	0.00	cps	1.0000
		Measured	Reference		
Ratio	7.1710		6.7797		
CNRAT Gain	0.9454				
Gamma Ray Calibration Report					
Serial Number:		FW1304-134			
Tool Model:		2750 6PB			
Performed:		Mon Oct 19 14:19:51 2020			
Calibrator Value:		637.0	GAPI		
Background Reading:		113.3	cps		
Calibrator Reading:		1072.4	cps		
Sensitivity:		0.6641	GAPI/cps		

	Company	Kerr-McGee Oil & Gas Onshore, L.P.
	Well	Howard 29C-29HZ
	Field	Wattenberg
	County	Weld
	State	Colorado