



**RADIAL CEMENT BOND W/
VARIABLE DENSITY,
GAMMA RAY, CCL, TEMP LOG**

Company GREAT WESTERN OIL & GAS
 Well SELTZER LD 09-376HC
 Field WATTENBERG
 County ADAMS
 State COLORADO

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Location: API #: 05-001-10194
 NWNE
 SEC 4 TWP 1S RGE 67W
 Permanent Datum GL Elevation 5140'
 Log Measured From KB
 Drilling Measured From KB
 Other Services NONE
 Elevation KB: 5160'
 D.F.
 G.L. 5140'

Date	29-JUL-2021		
Run Number	TWO		
Depth Driller	18398'		
Depth Logger	8526'		
Bottom Logged Interval	8525'		
Top Log Interval	SURFACE		
Open Hole Size	-		
Type Fluid	WATER		
Density / Viscosity	-		
Max. Recorded Temp.	234 DegF		
Estimated Cement Top	-		
Time Well Ready	1145		
Time Logger on Bottom	1220		
Equipment Number	65		
Location	PLATTEVILLE		
Recorded By	H.HILL		
Witnessed By	G. TRAUGHBER		

	Borehole Record		Tubing Record				
	Bit	From	To	Size	Weight	From	To
Casing Record							
Surface String		9-5/8"		Wgt/ft		Top	Bottom
Prot. String				36#		SURFACE	2026'
Production String		5-1/2"		20#		SURFACE	18398'
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

TOOL CENTRALIZED VIA 3 X GEMCO CENTRALIZERS
 TOOL ZEROED TO KELLY BUSHING
 LOG CORRELATED TO MARKER JOINT AT 7510' - 7521'

THANK YOU FOR USING KLX ENERGY SERVICES

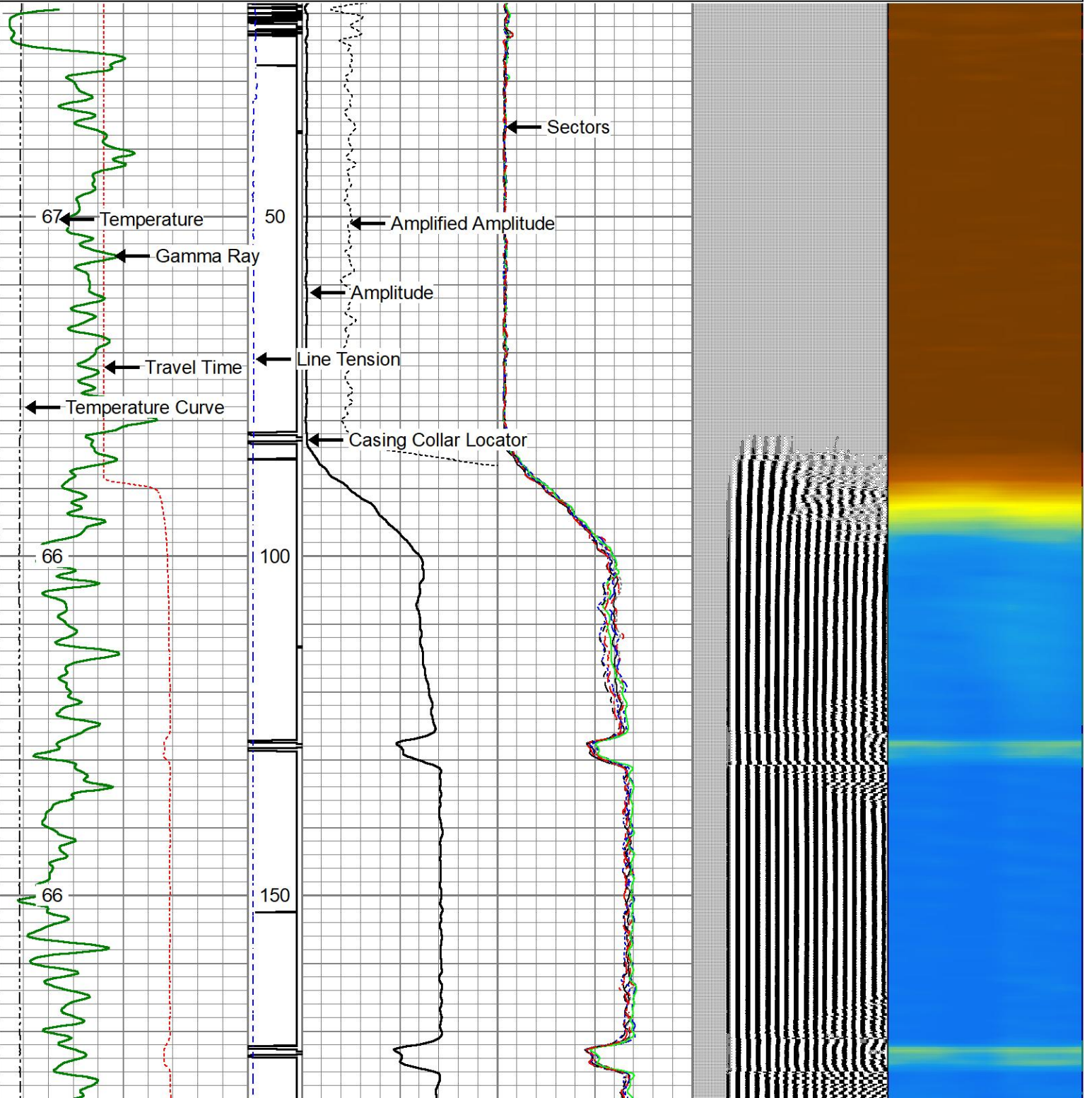


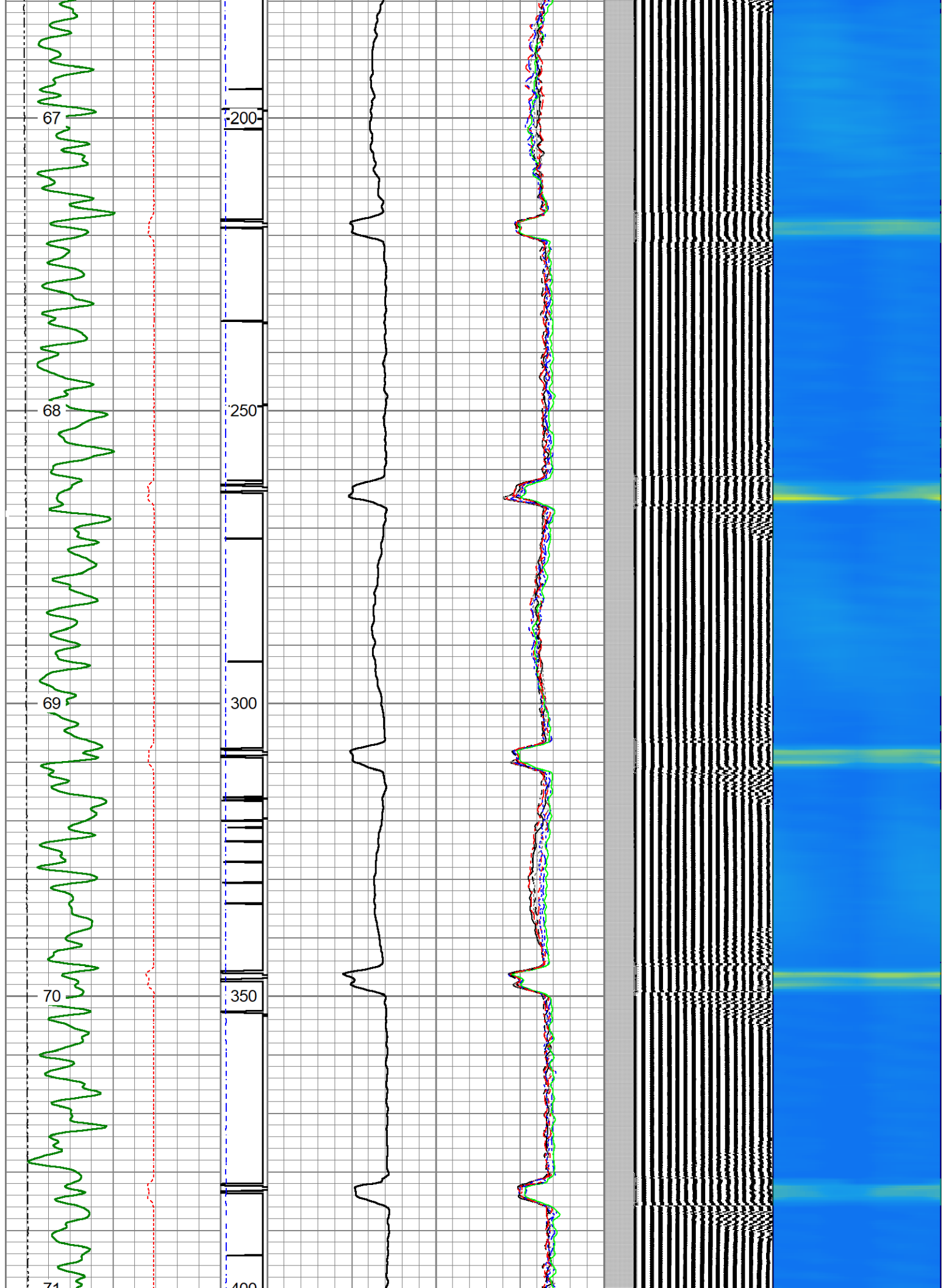
MAIN PASS

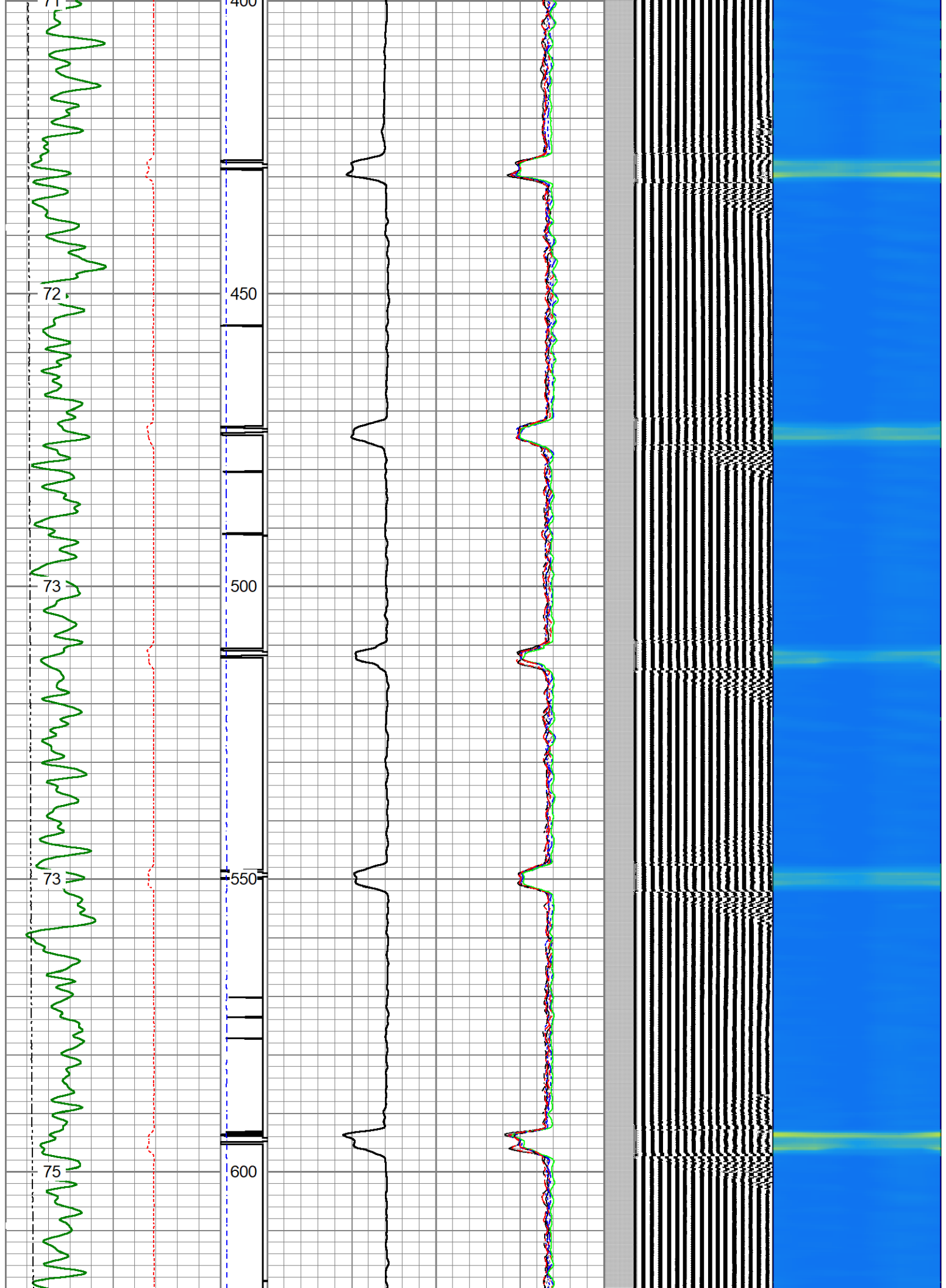
0 PSI

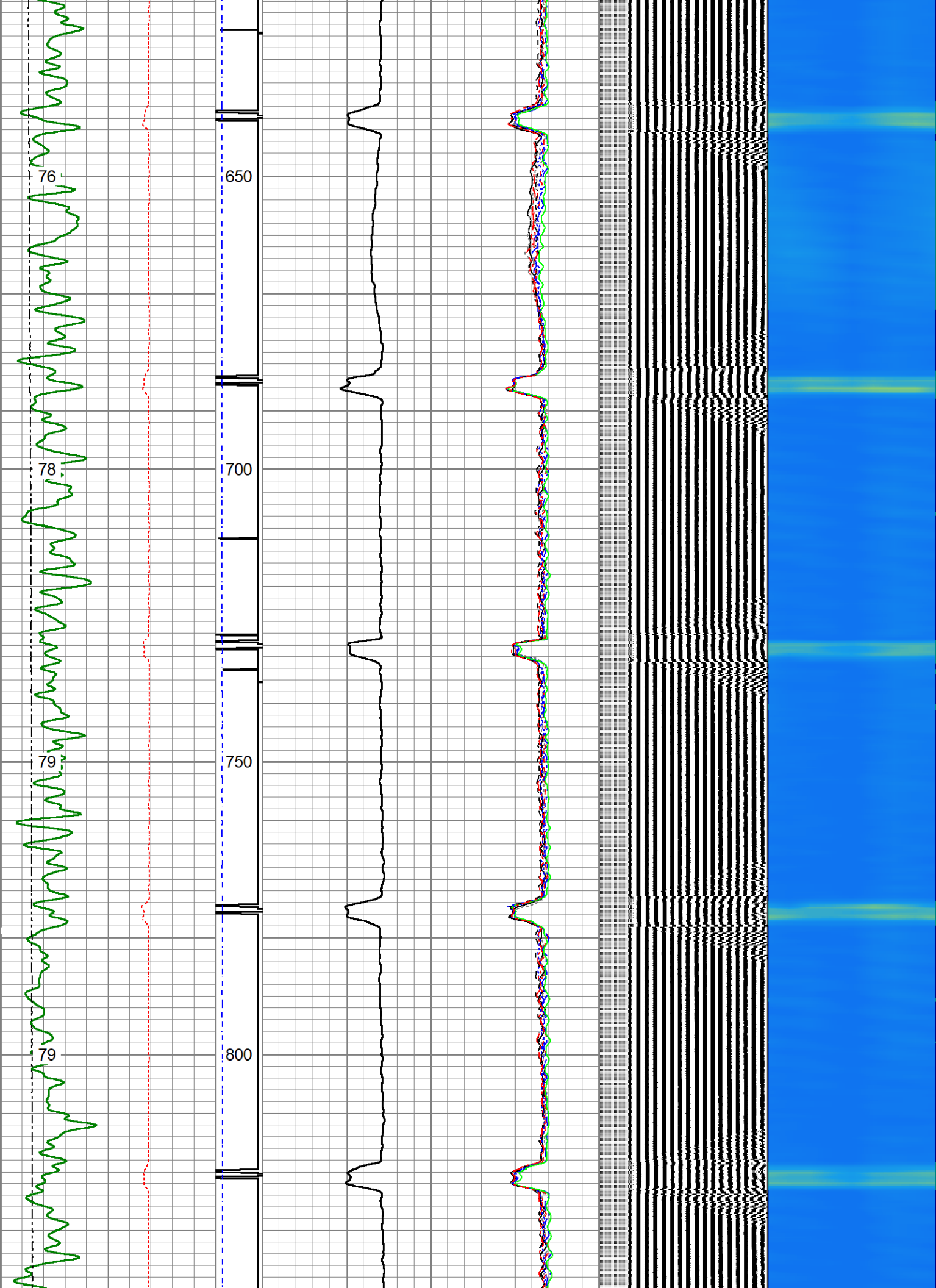
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 Dataset Pathname pass8
 Presentation Format rcbl_hh
 Dataset Creation Thu Jul 29 12:17:55 2021
 Charted by Depth in Feet scaled 1:240

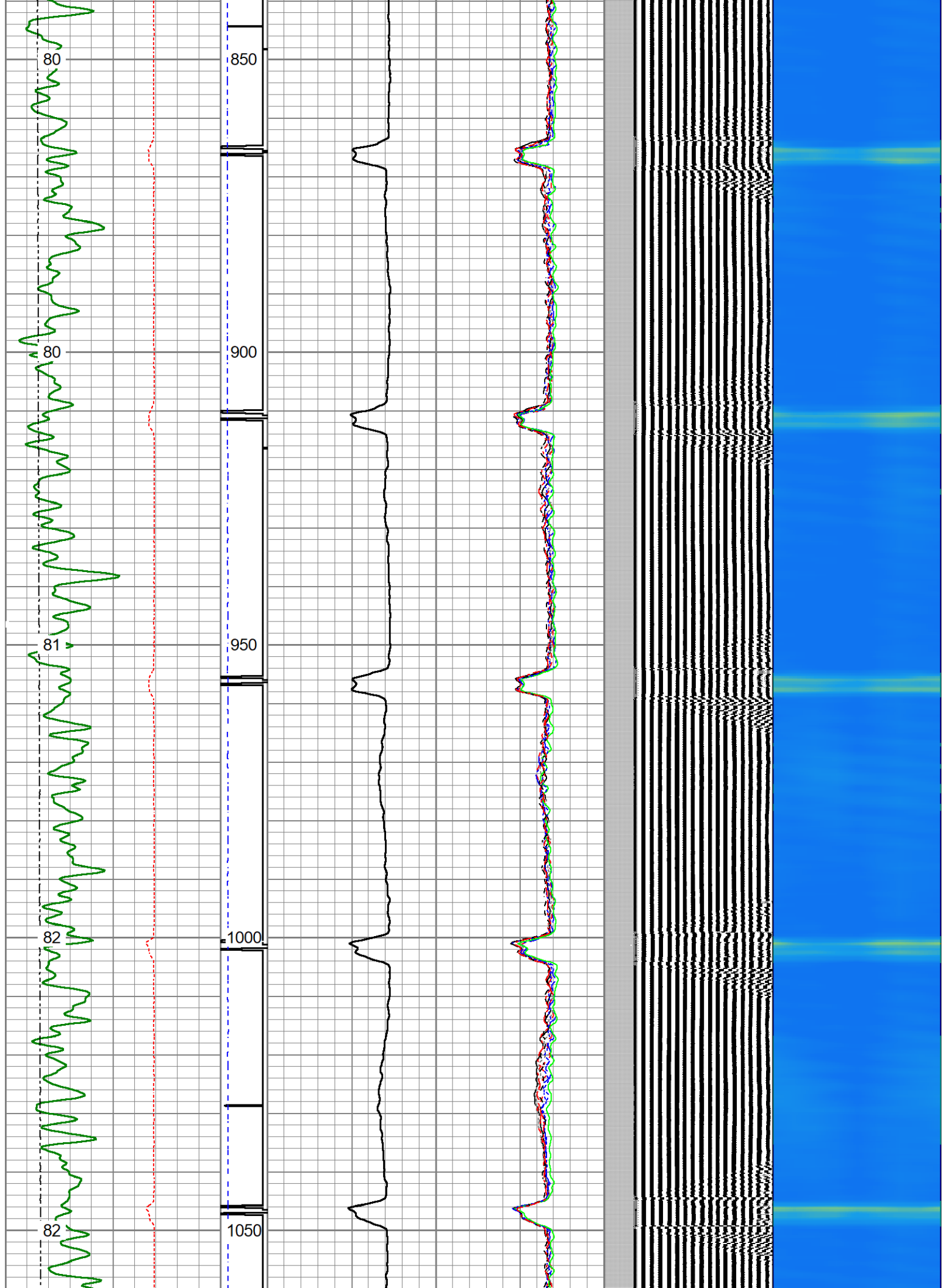
400	Travel Time (usec)	200	ing Co	0	Amplitude (mV)	100	-5	Sector 1	150	Variable Density 200 (usec) 1200	1 Cement Map 8
0	Gamma Ray (GAPI)	150	9 -1		Amplified Amplitude		-5	Sector 2	150		
50	TEMP (degF)	250	e Tens	0	(mV)	10	-5	Sector 3	150		
	TEMP (degF)		(lb)				-5	Sector 4	150		
			(2000)				-5	Sector 5	150		
							-5	Sector 6	150		
							-5	Sector 7	150		
							-5	Sector 8	150		

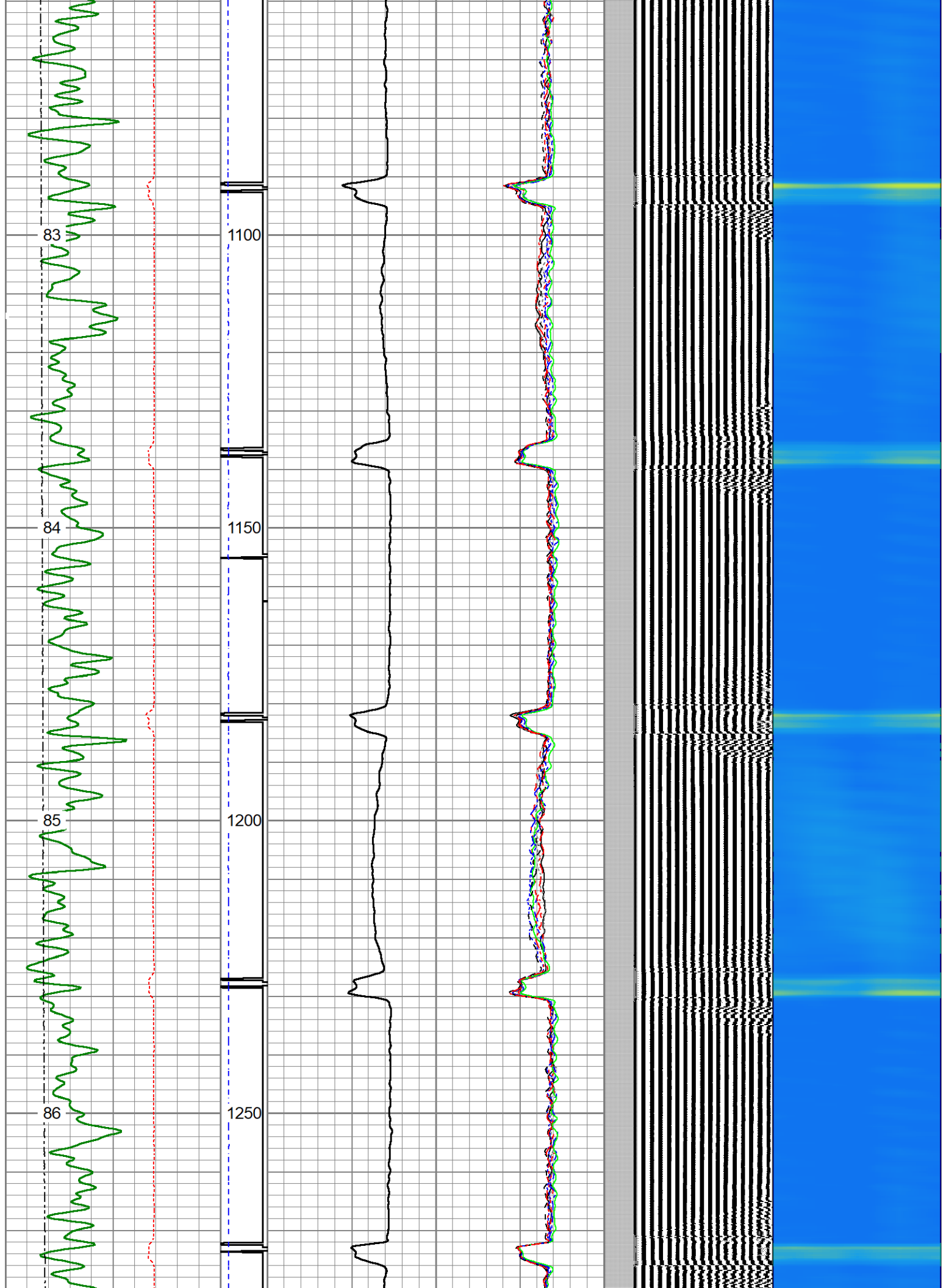


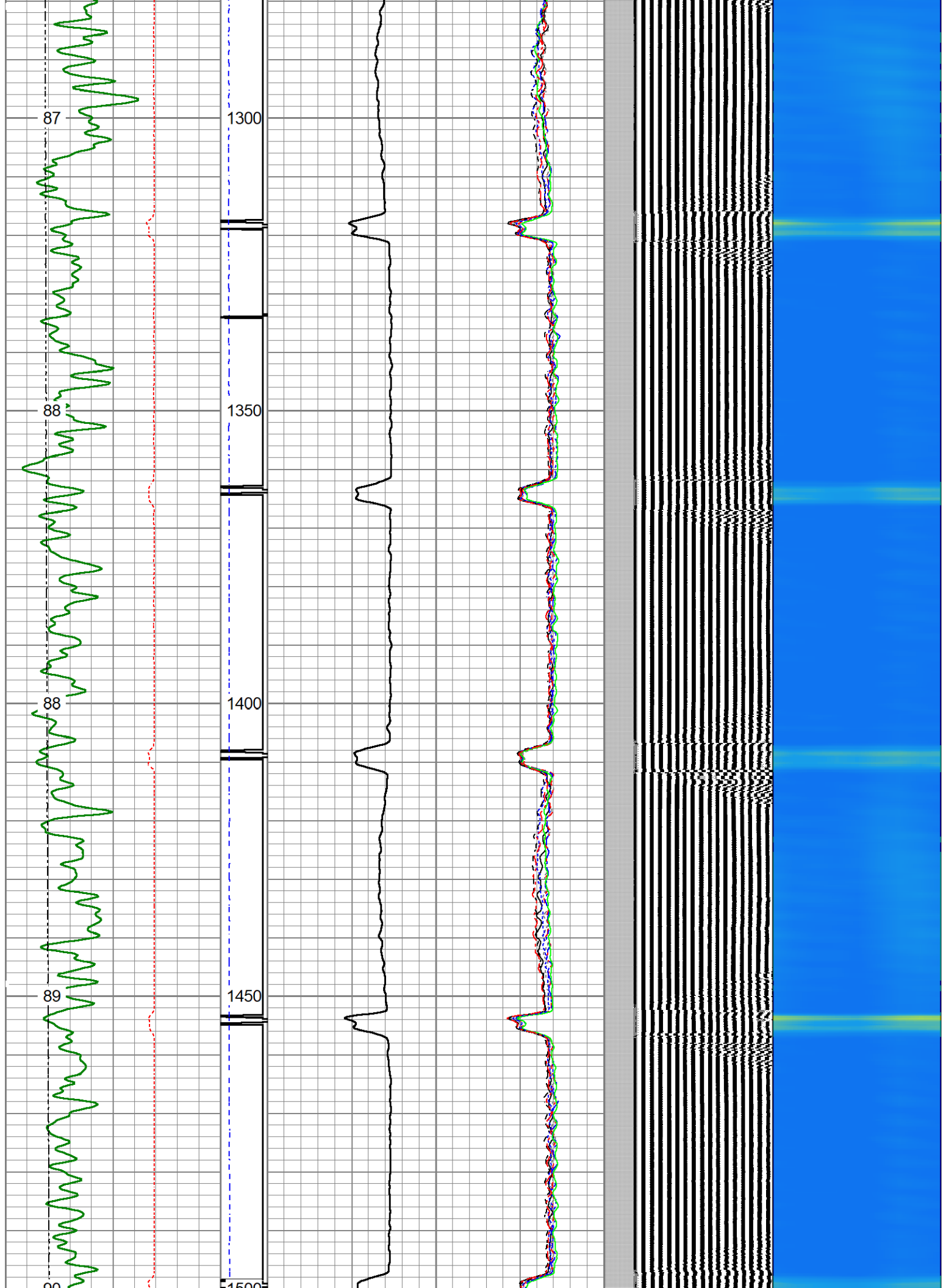


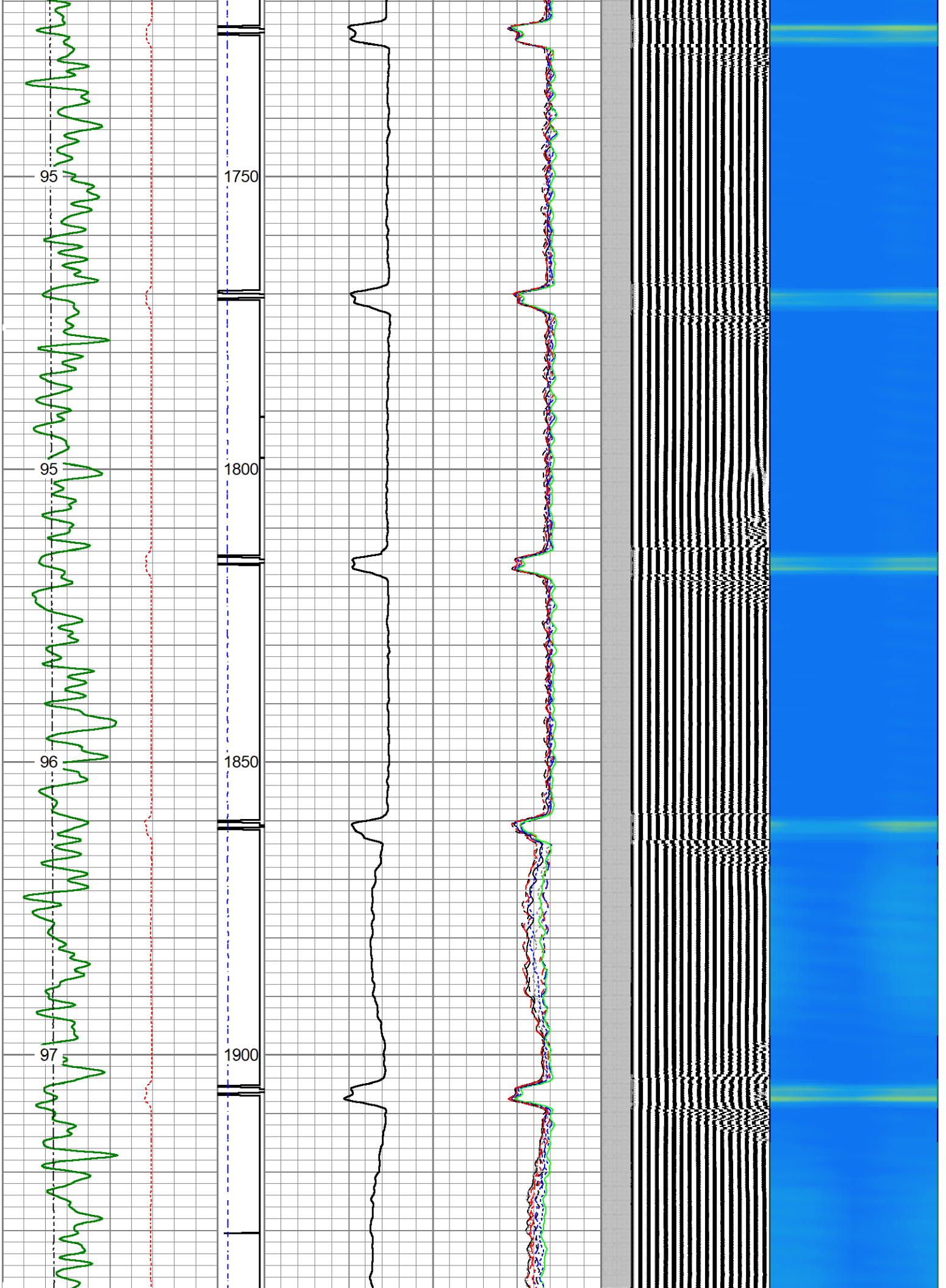


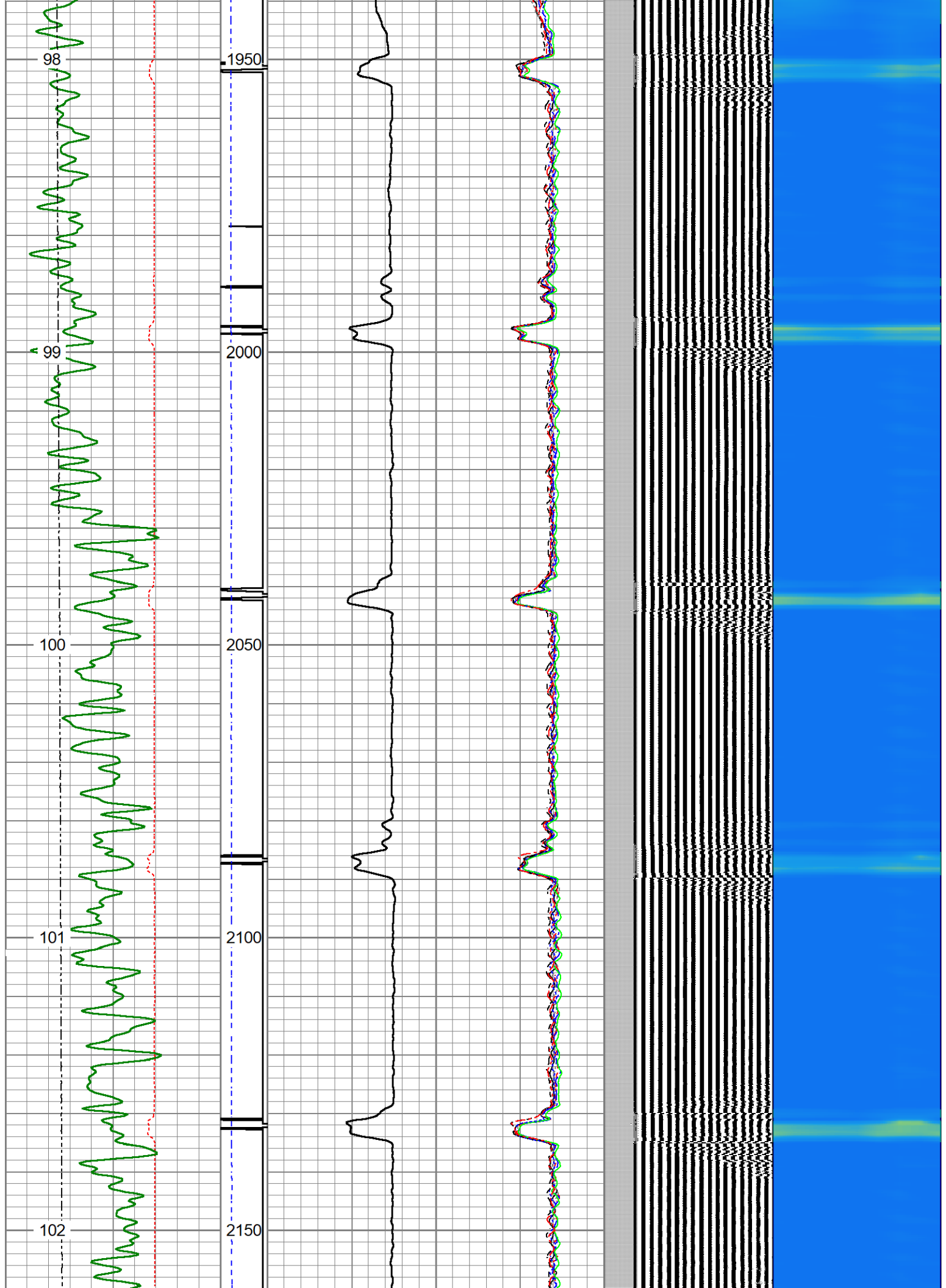


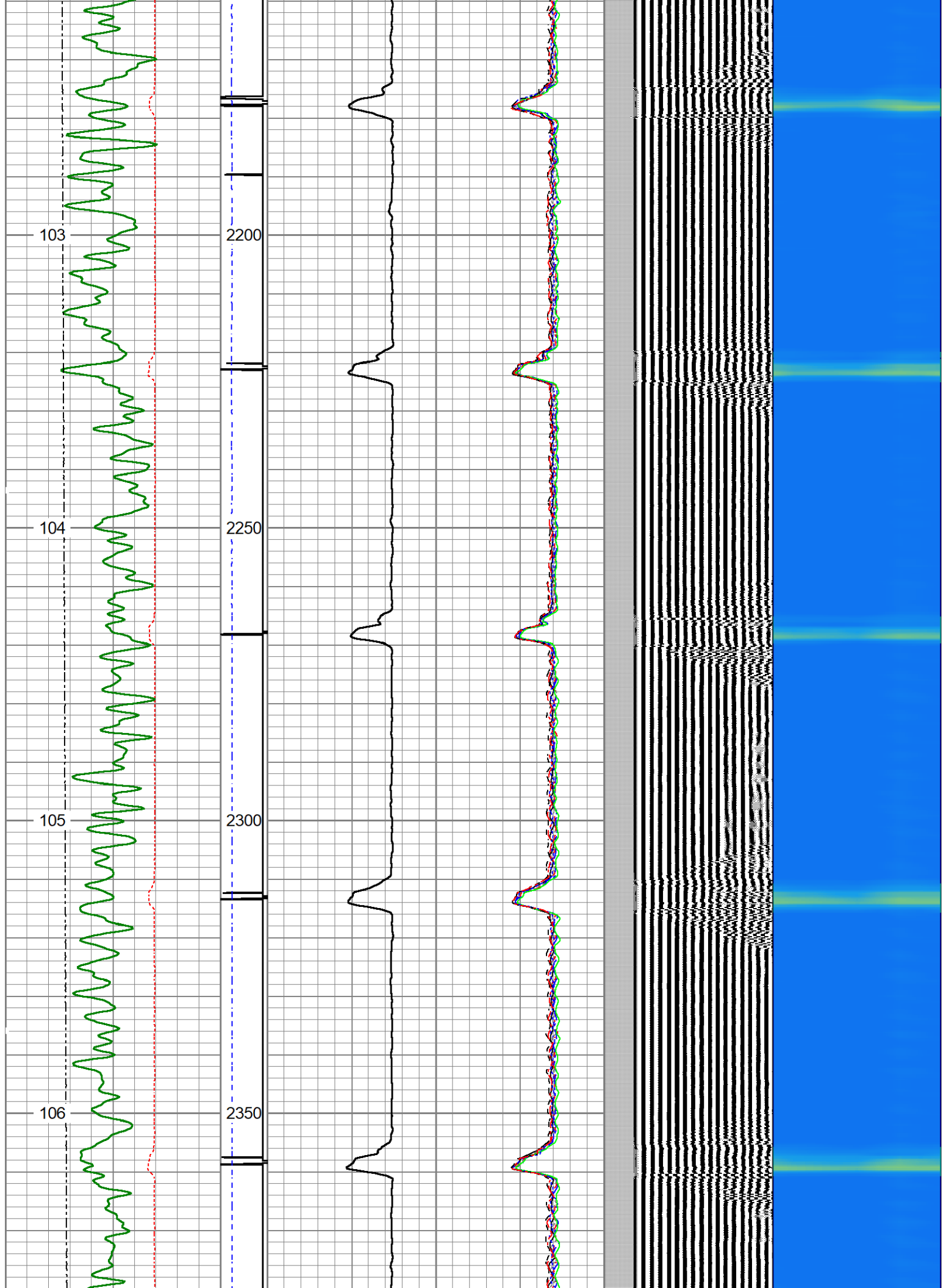


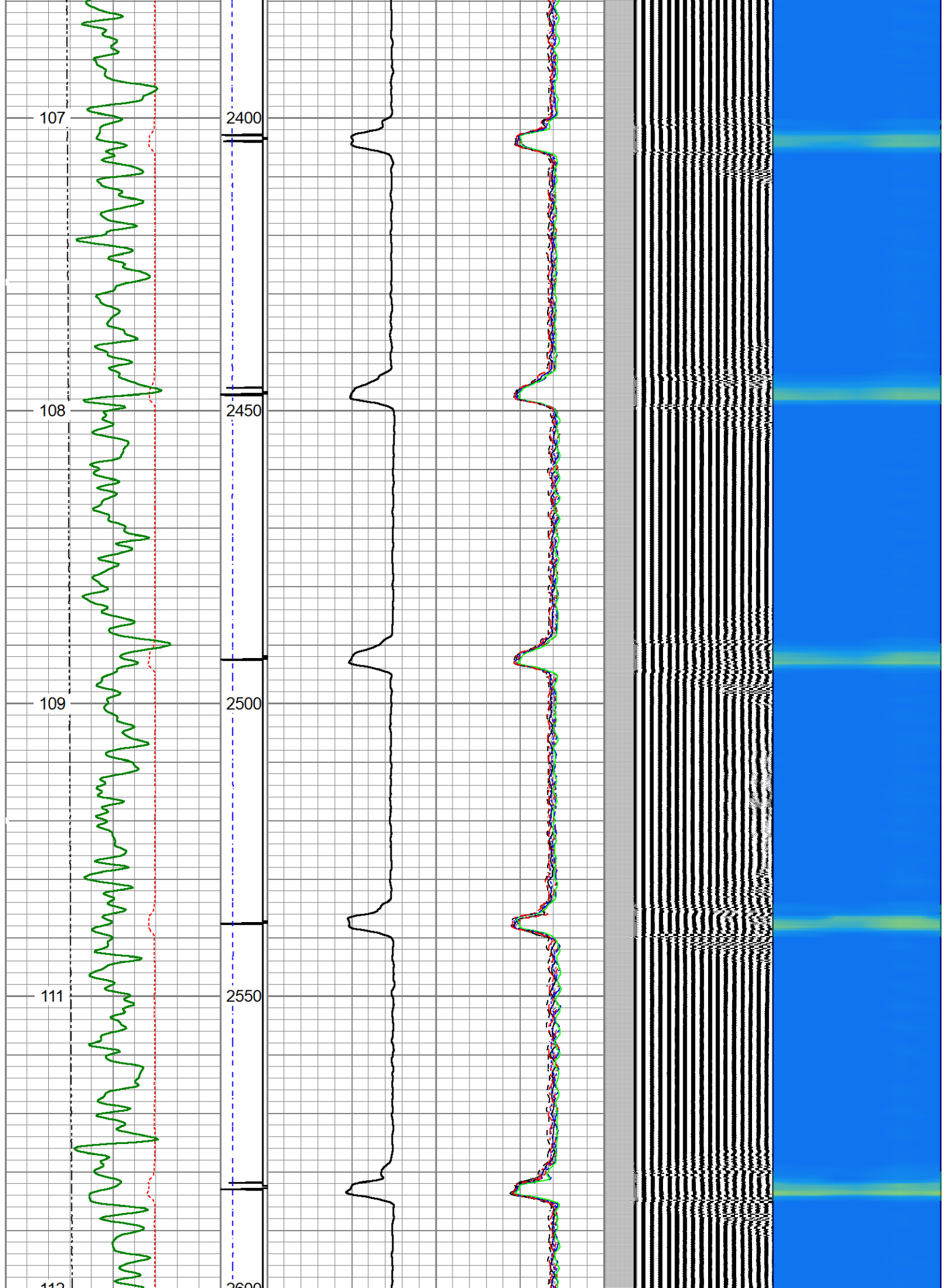


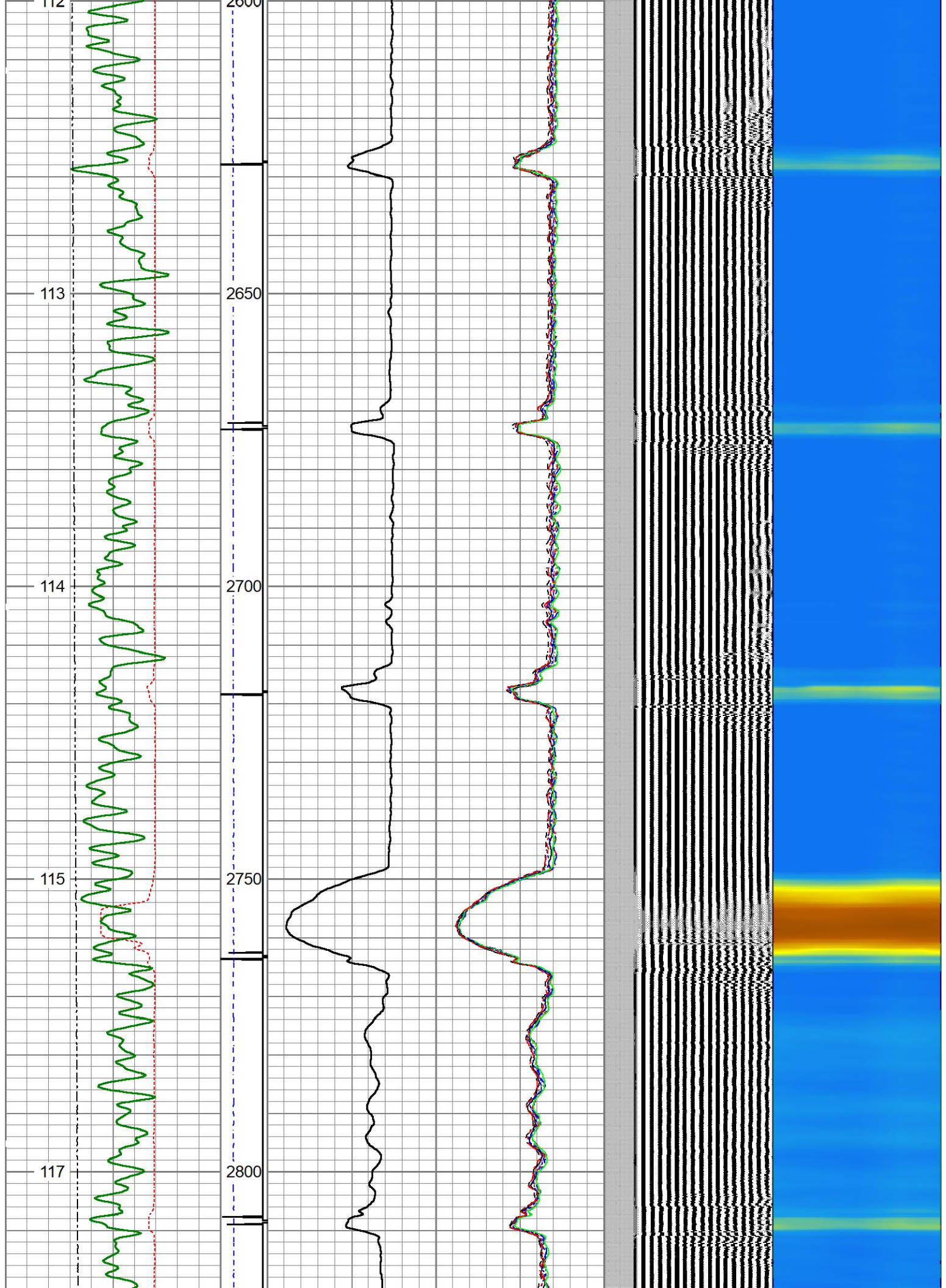


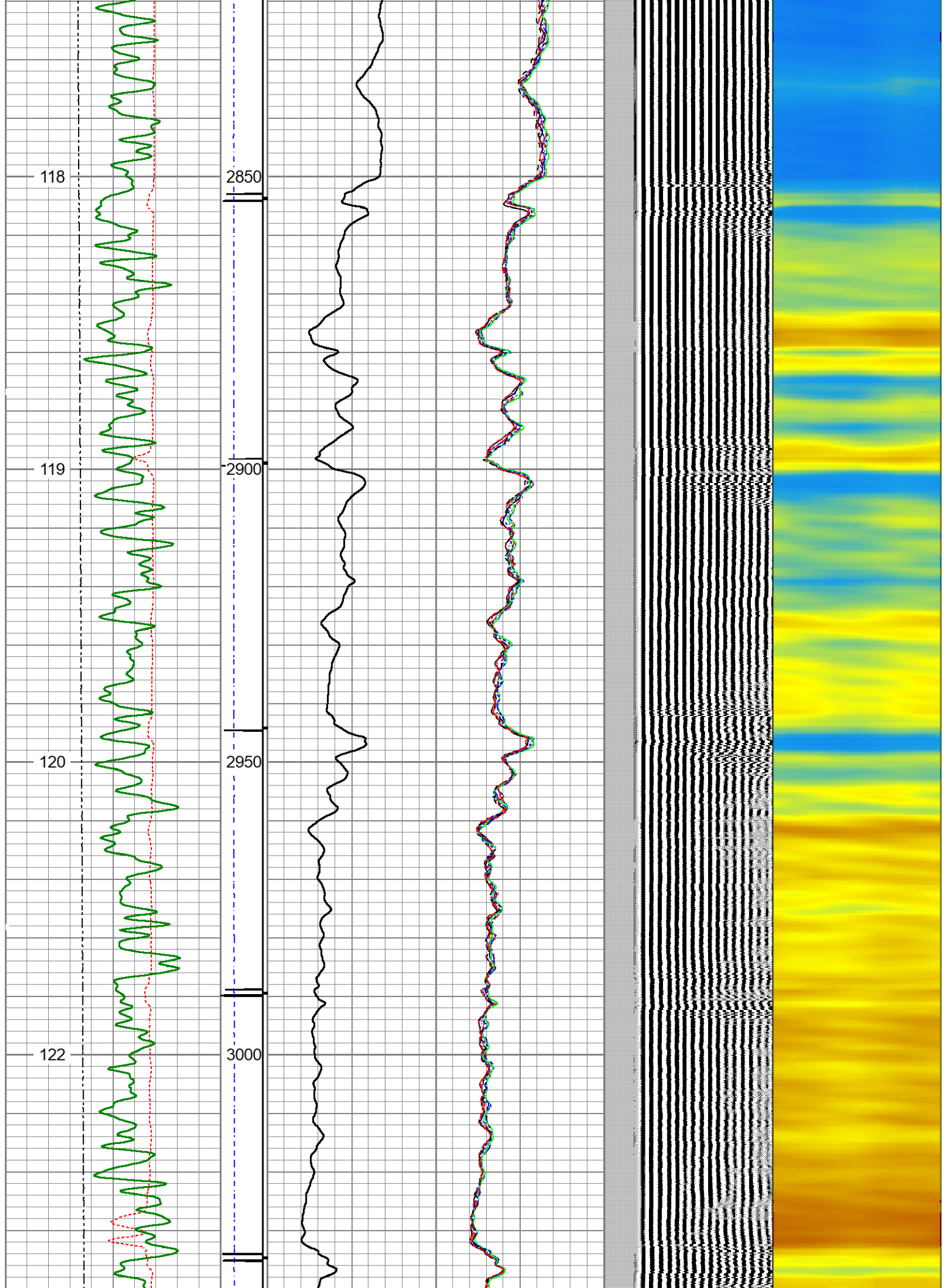


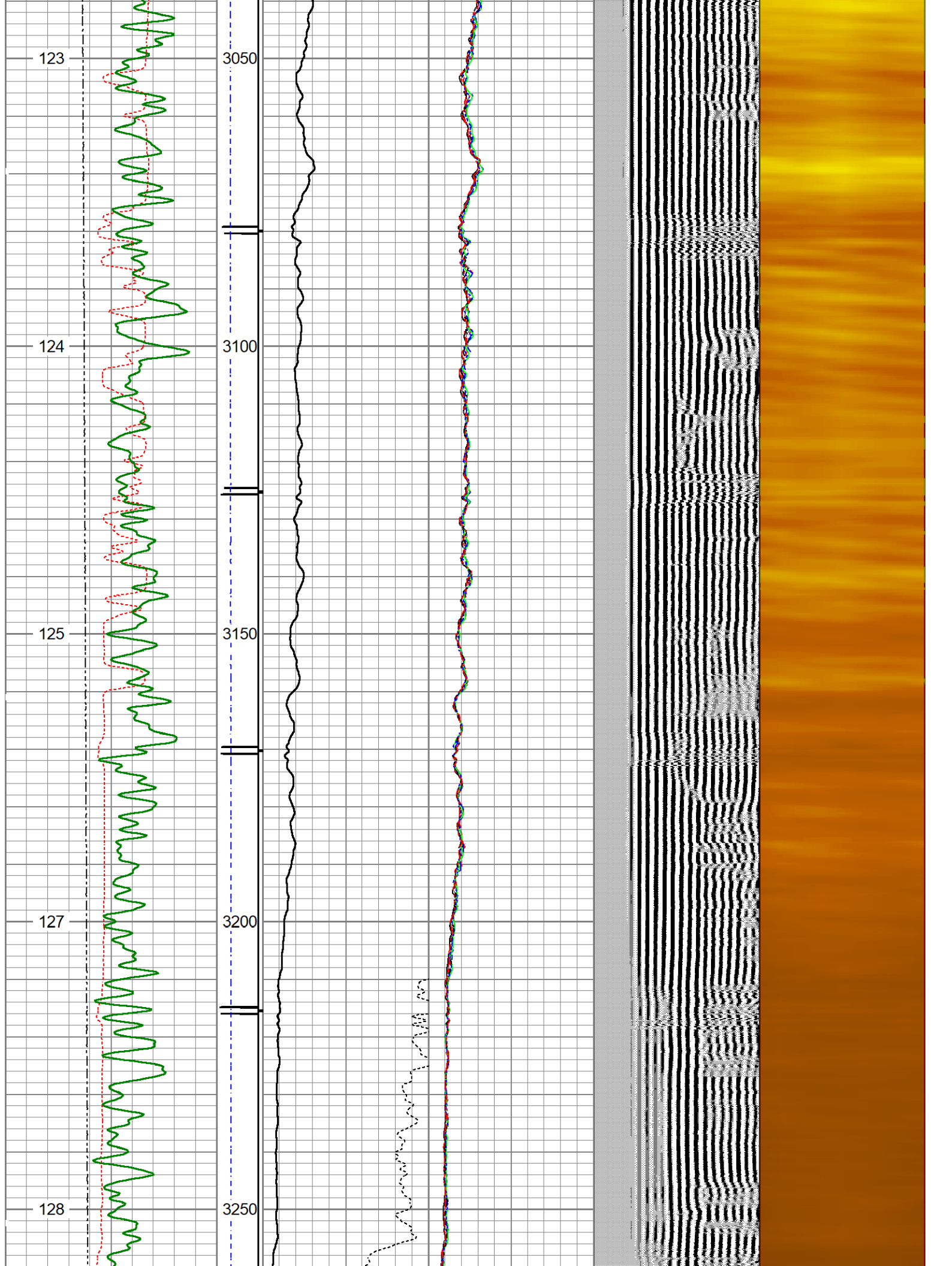


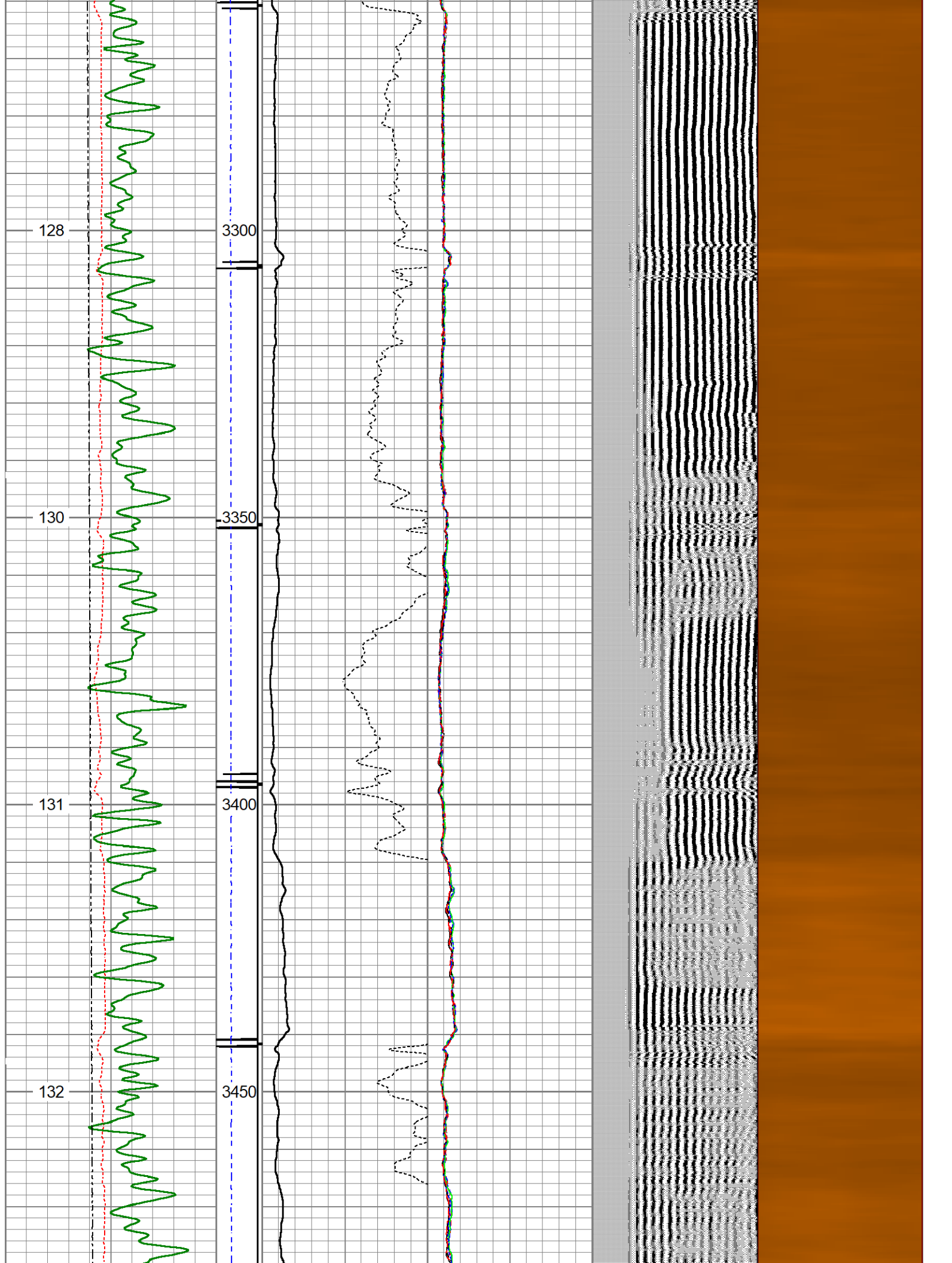


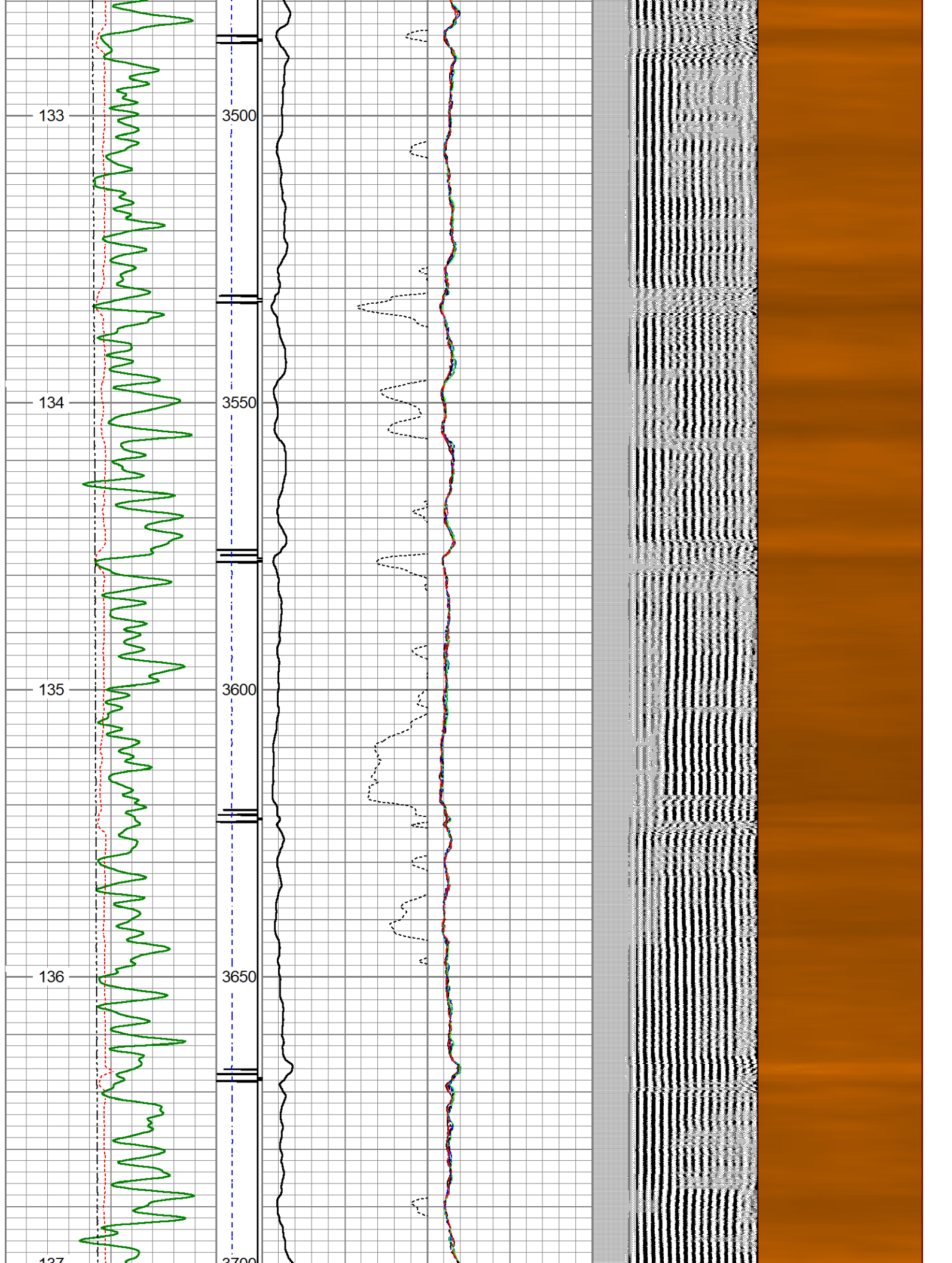


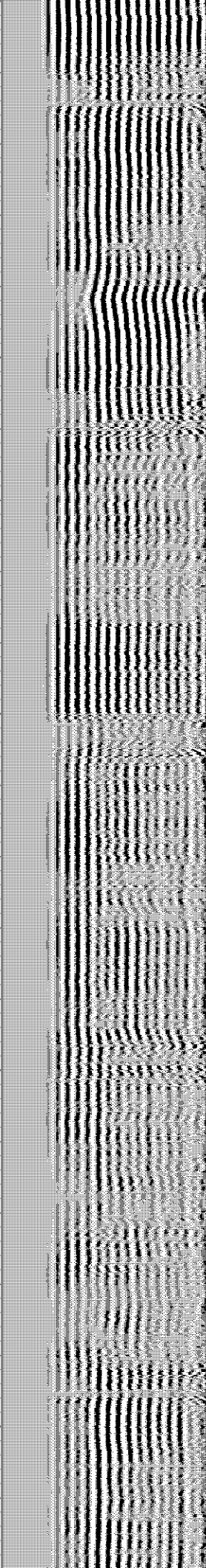
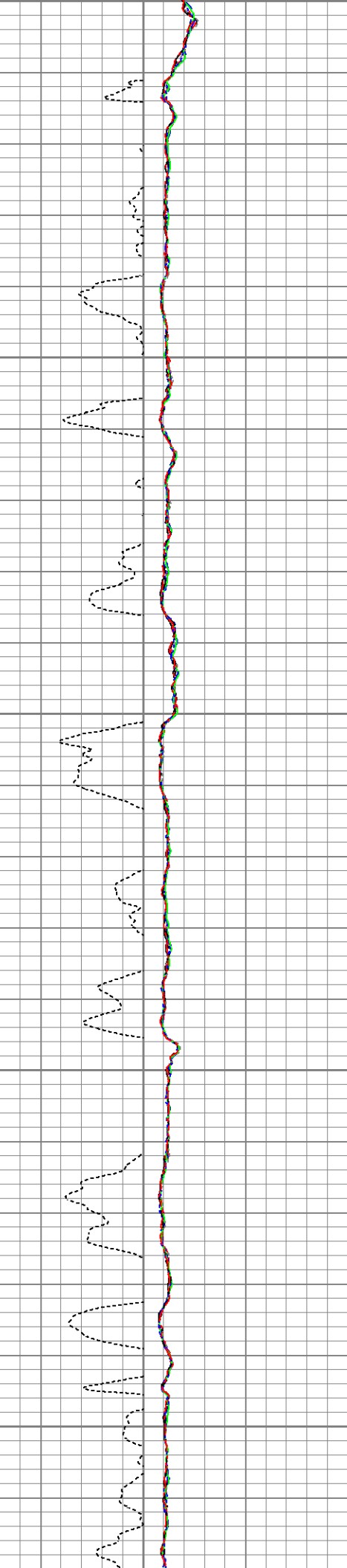
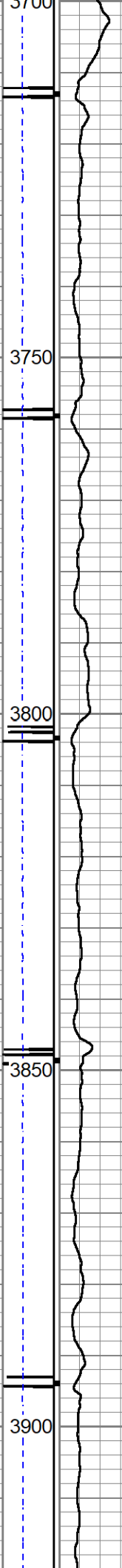
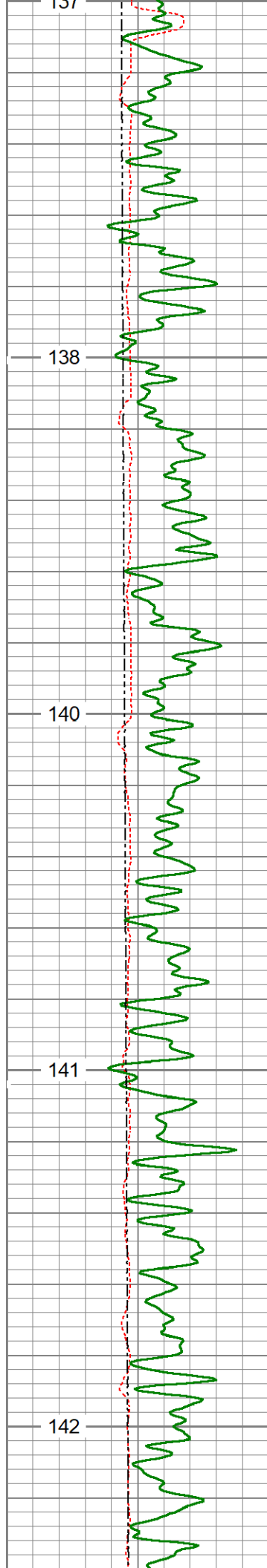


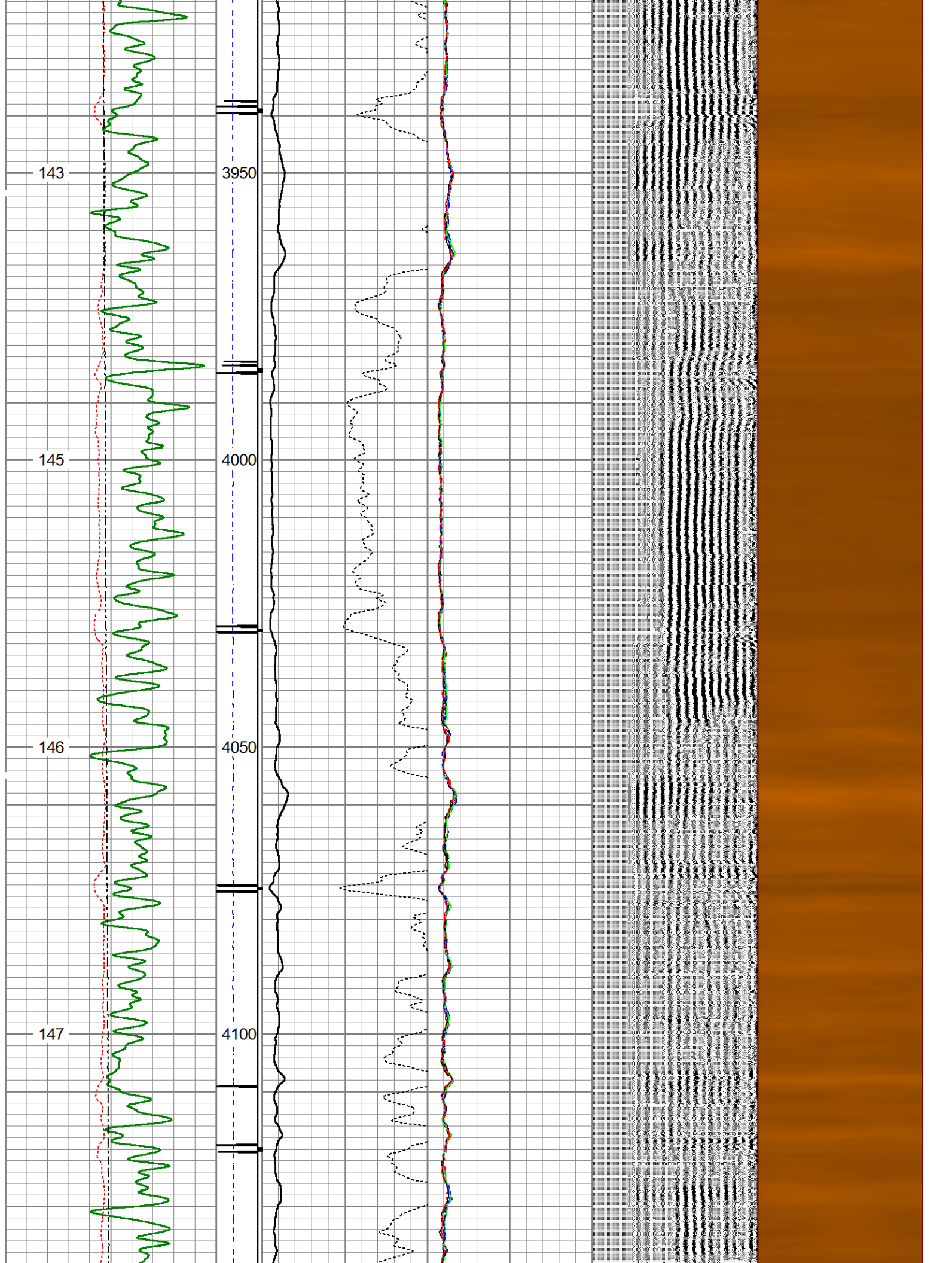


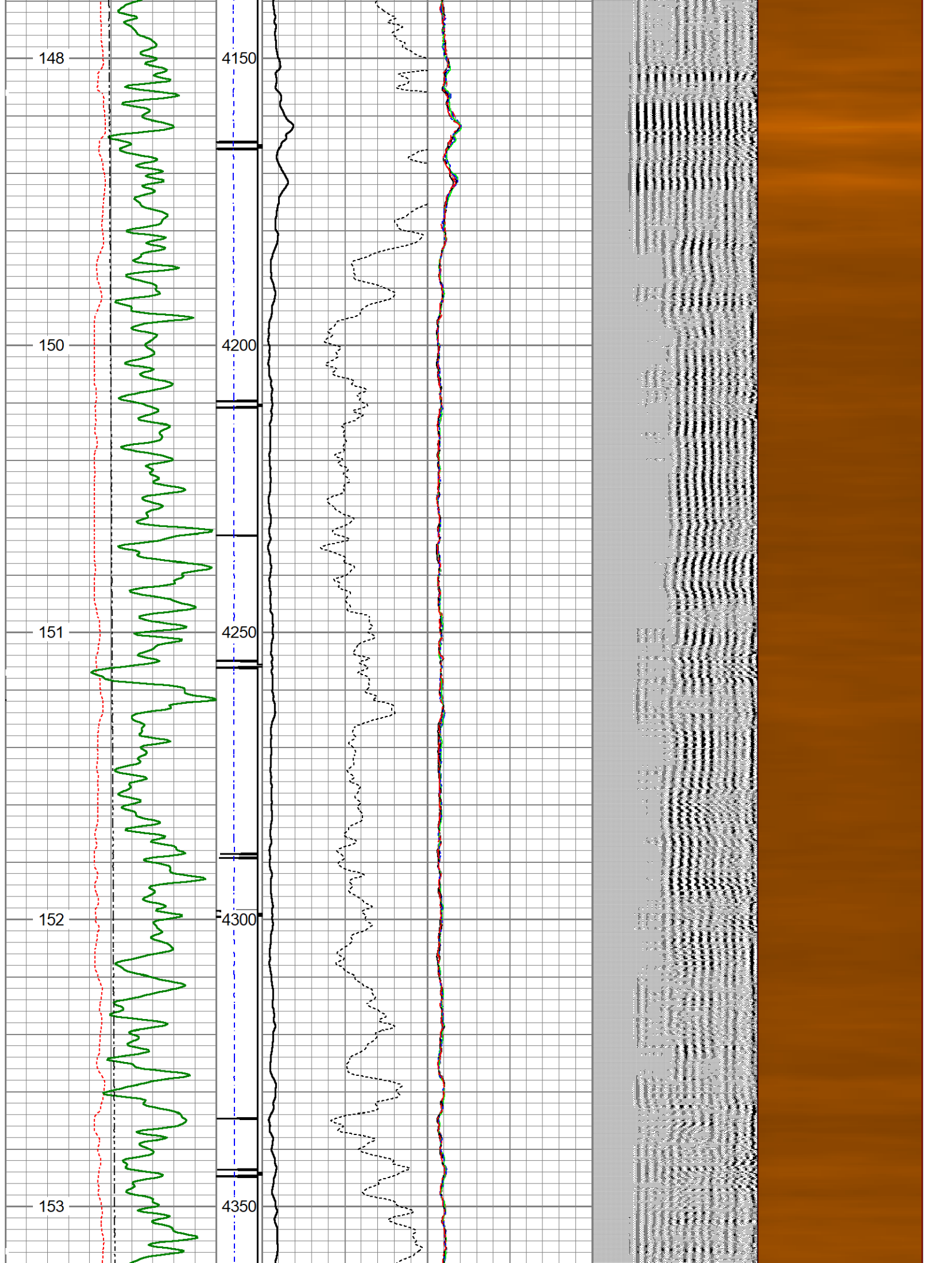


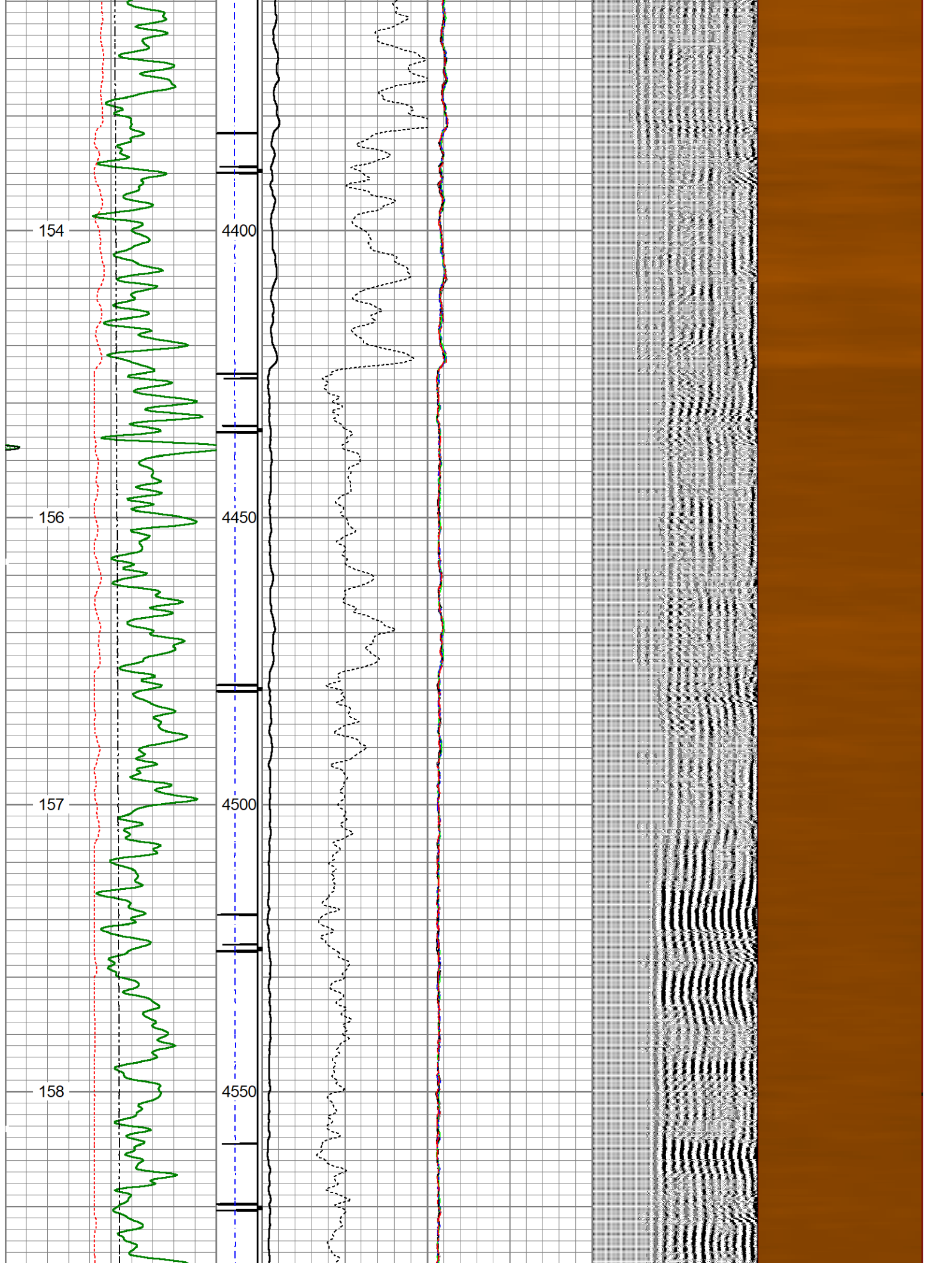


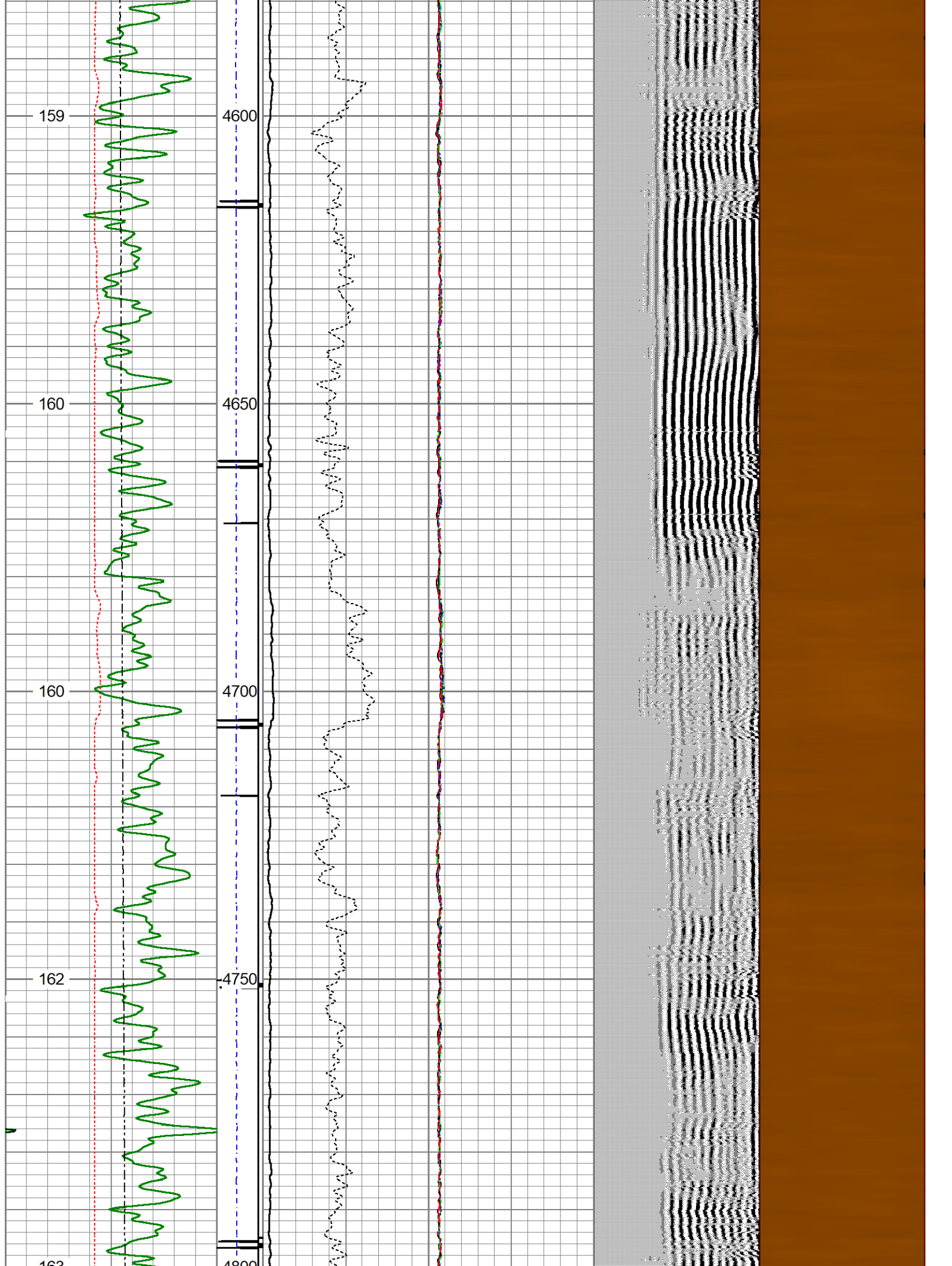


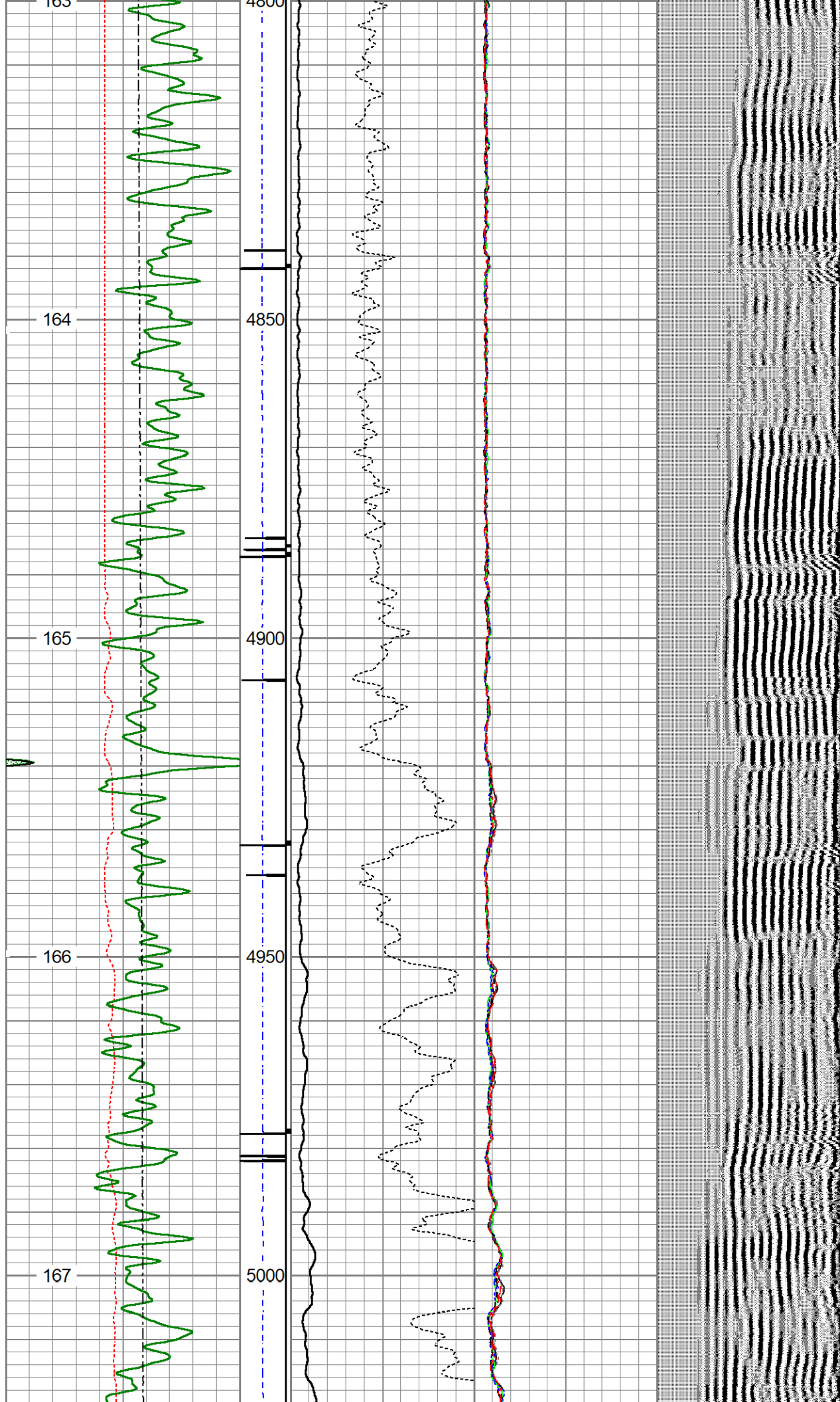


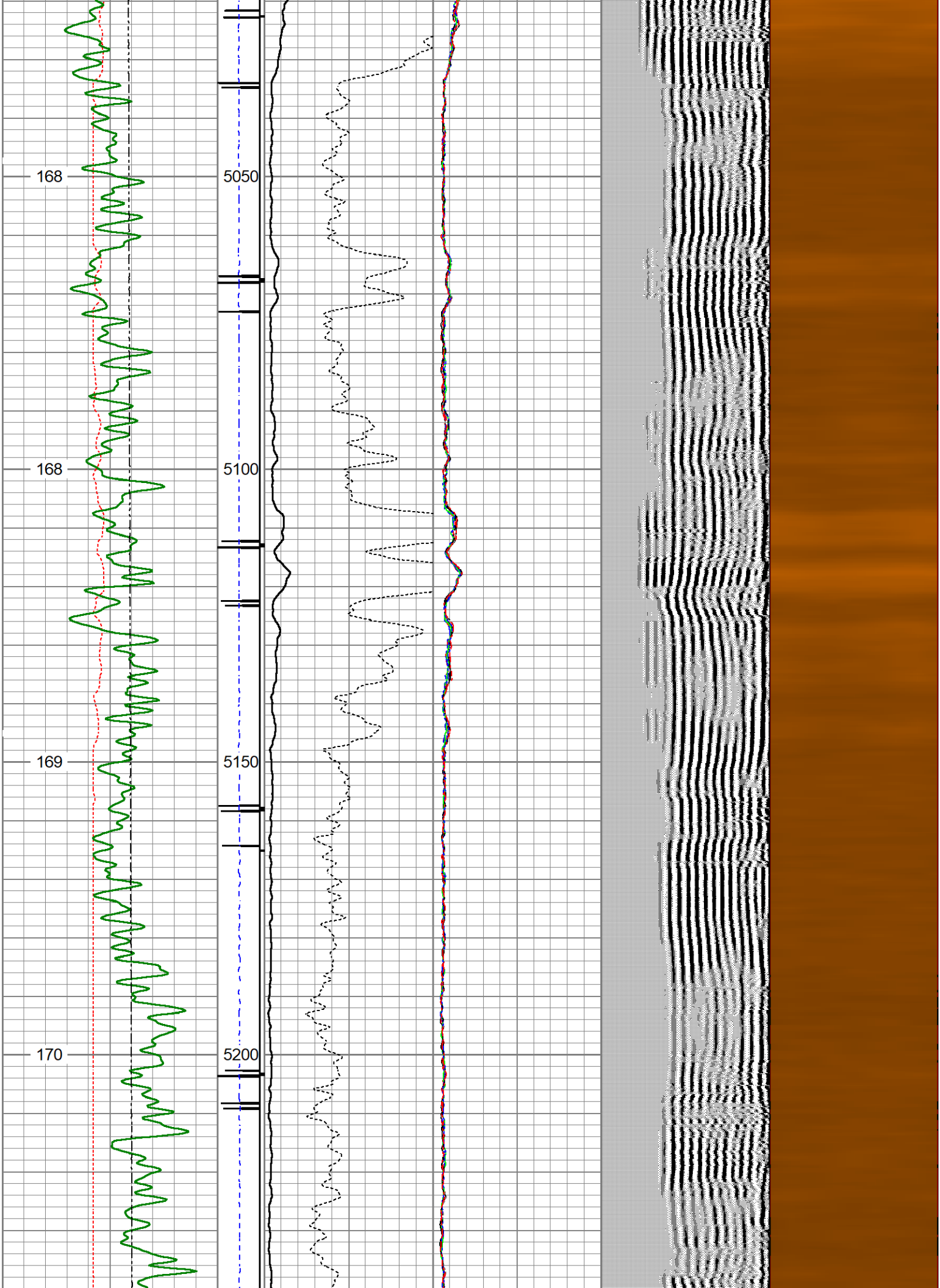


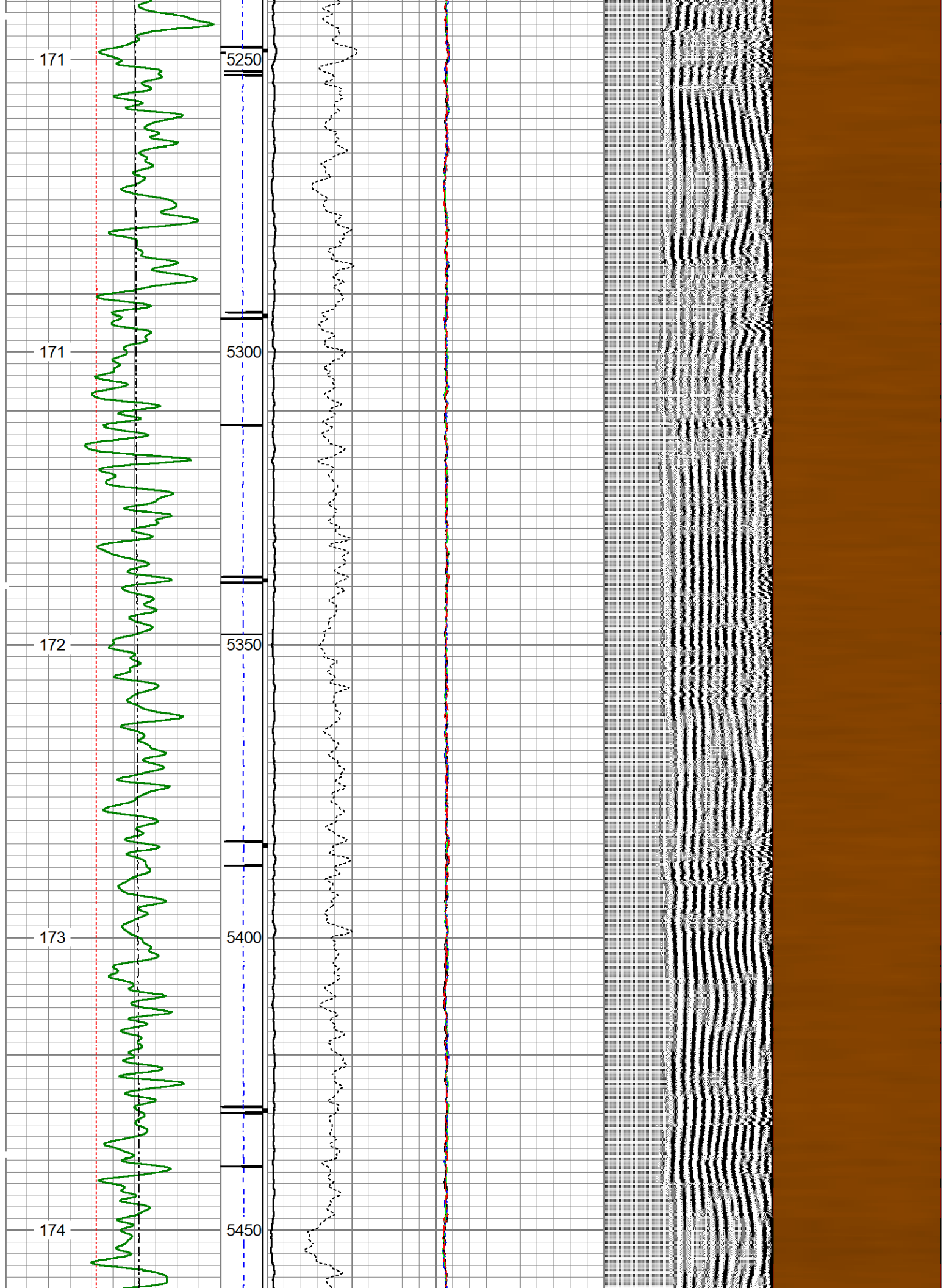


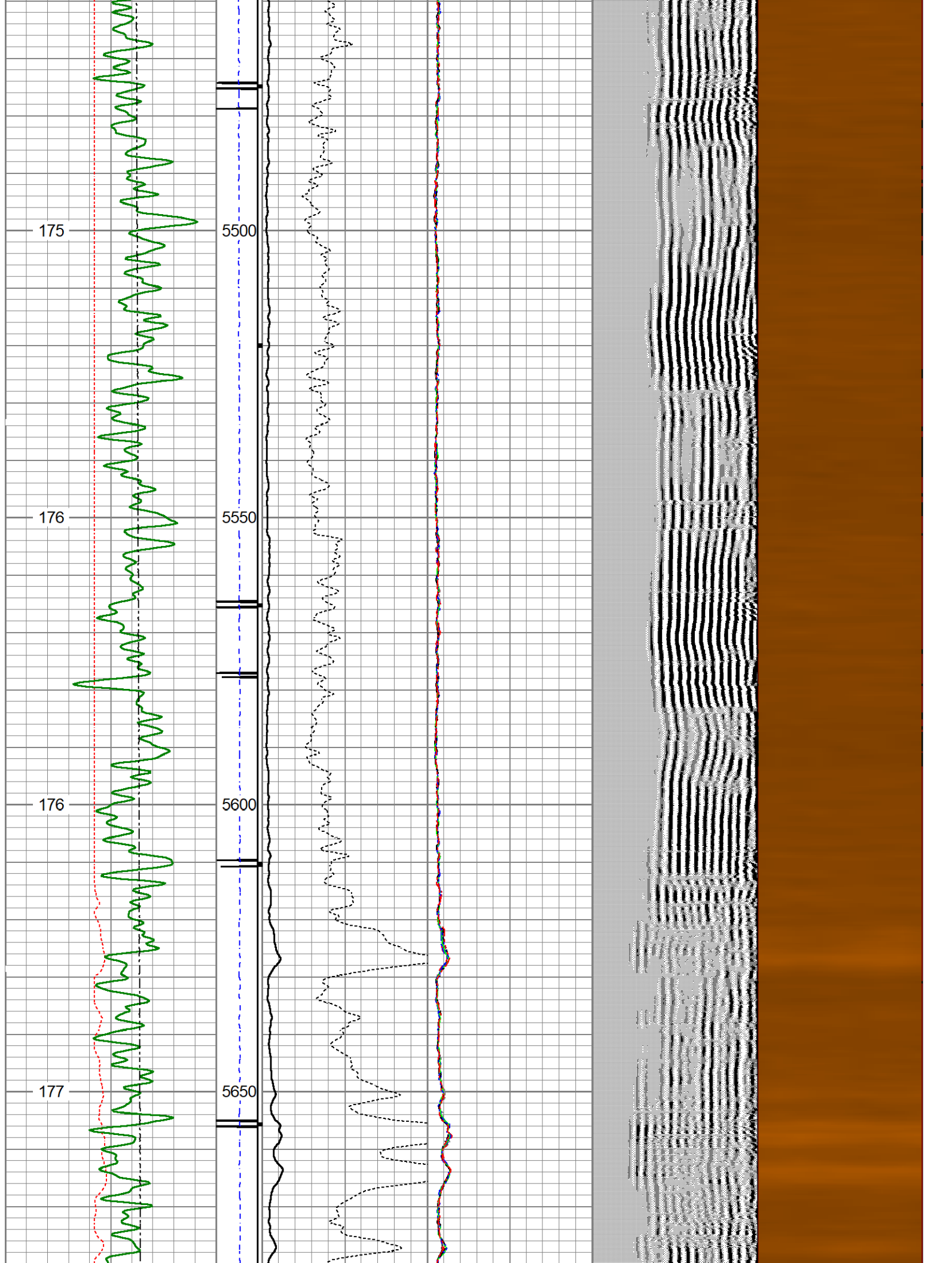


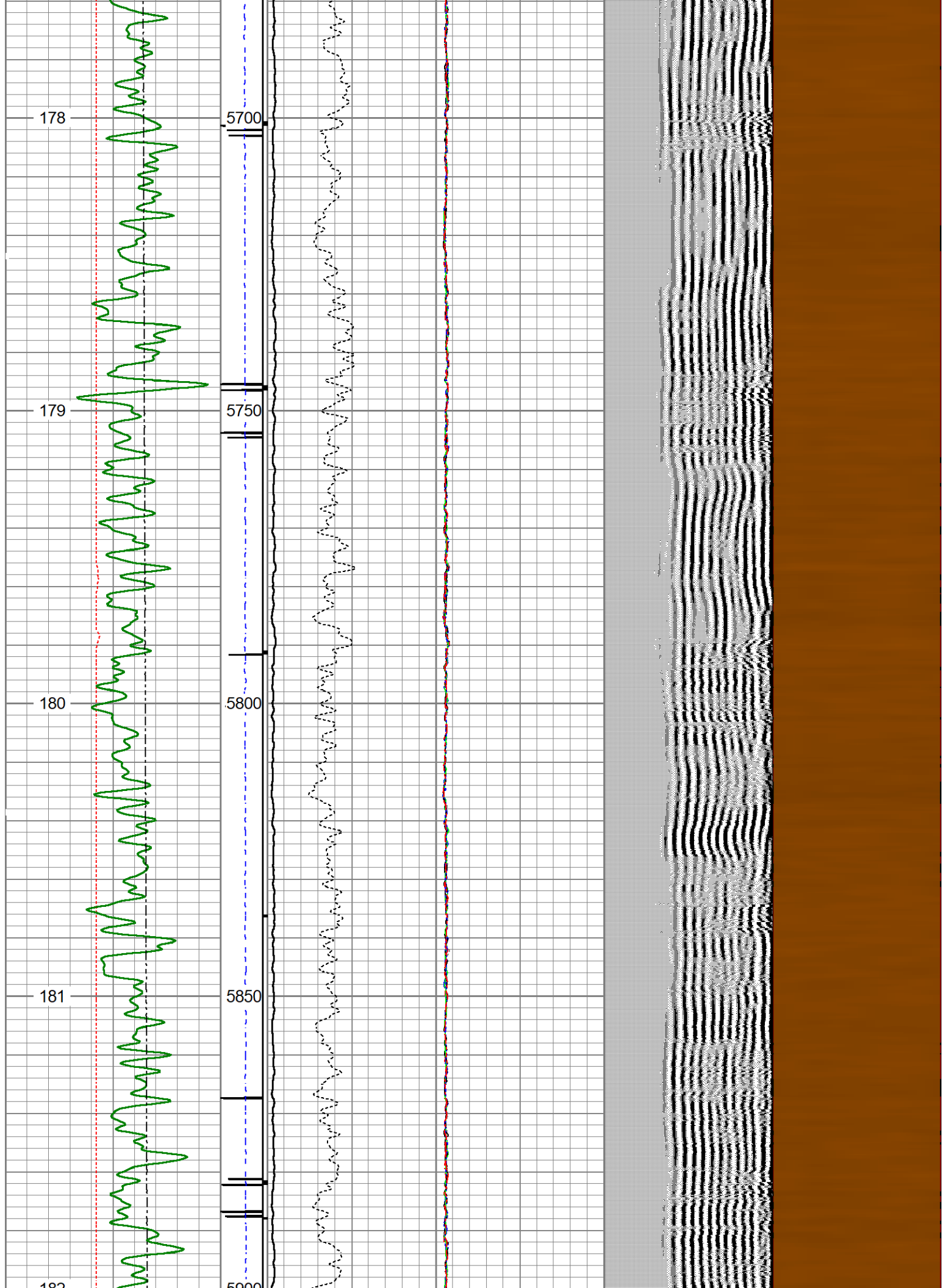


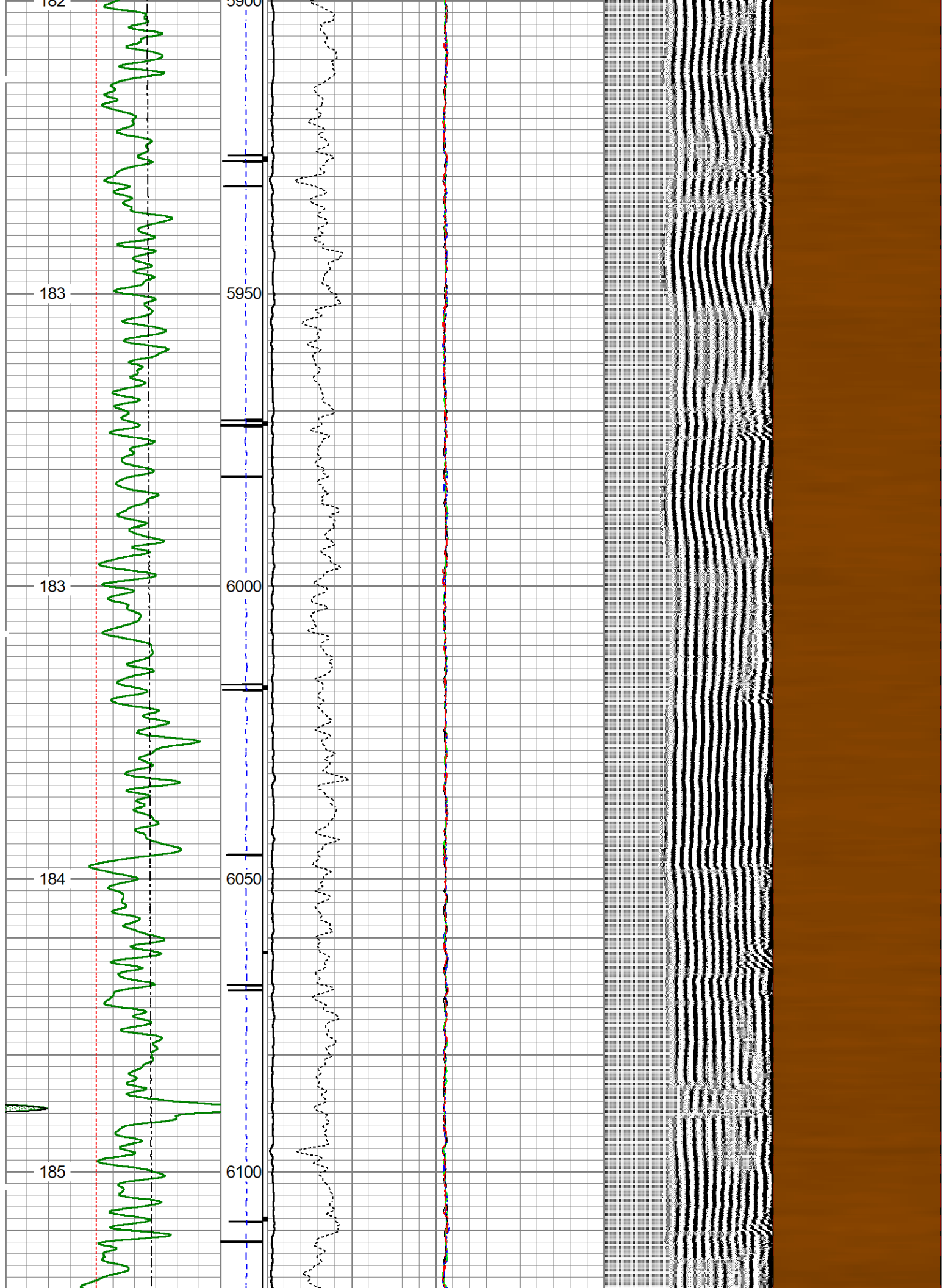


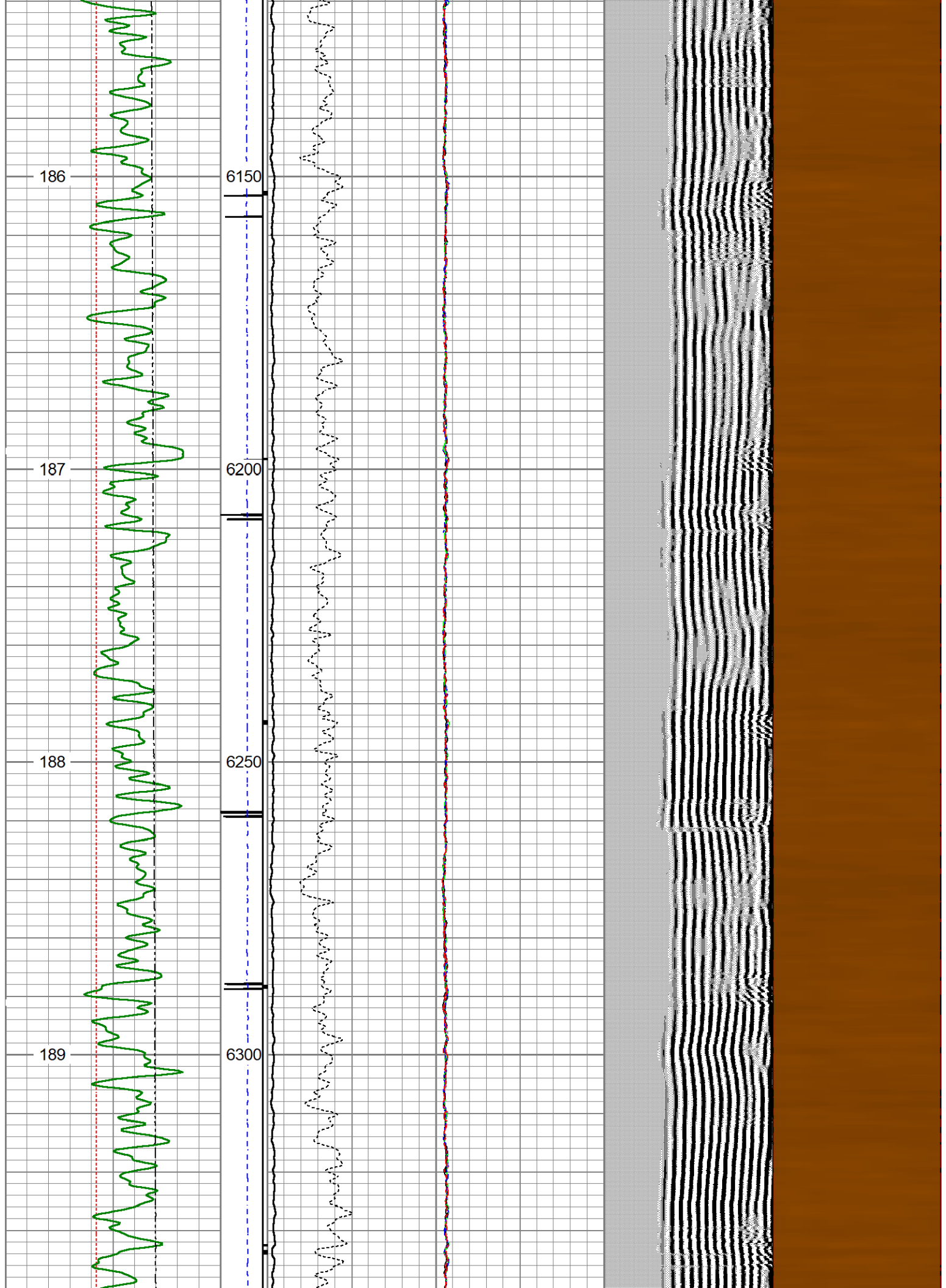




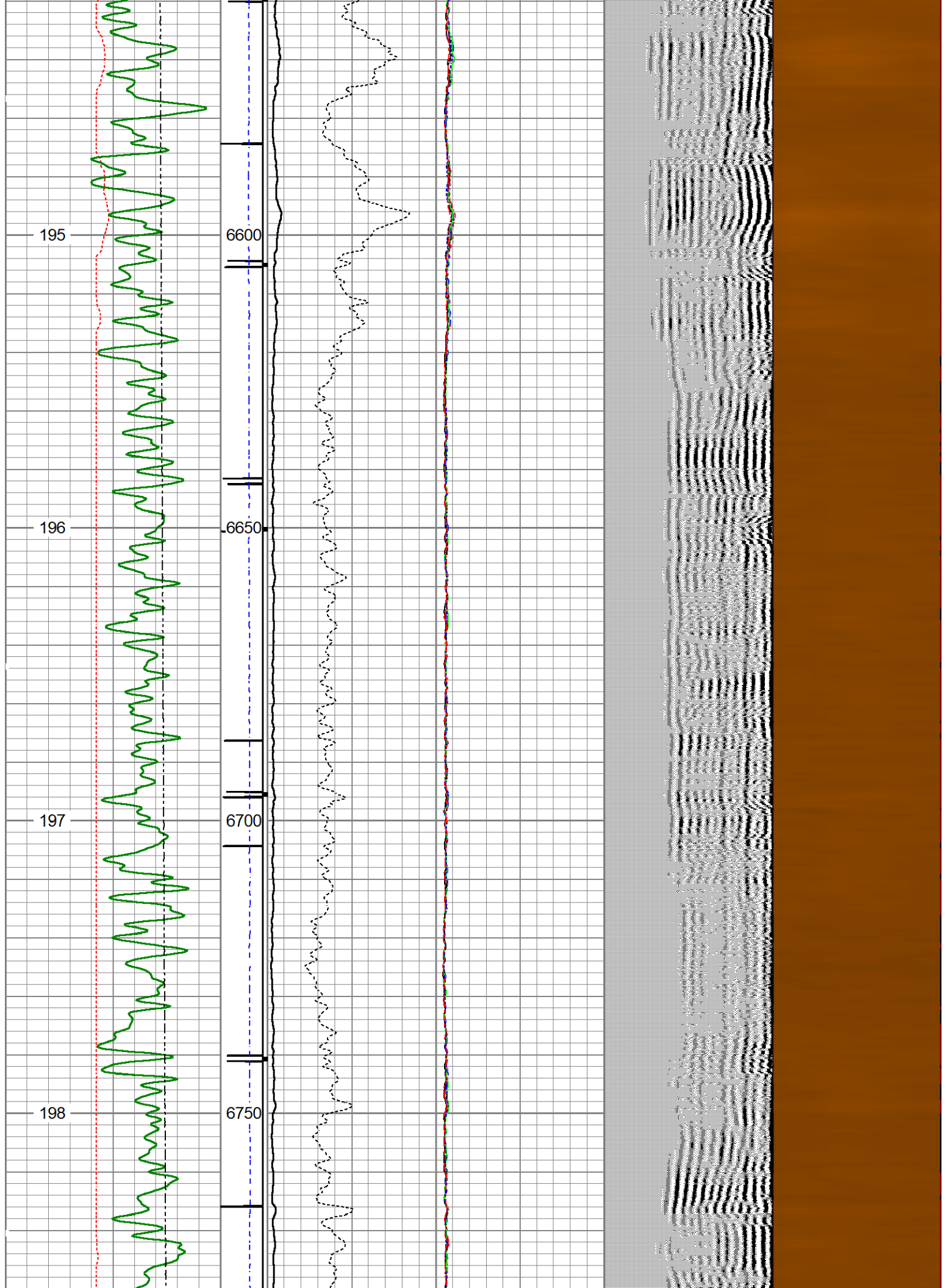


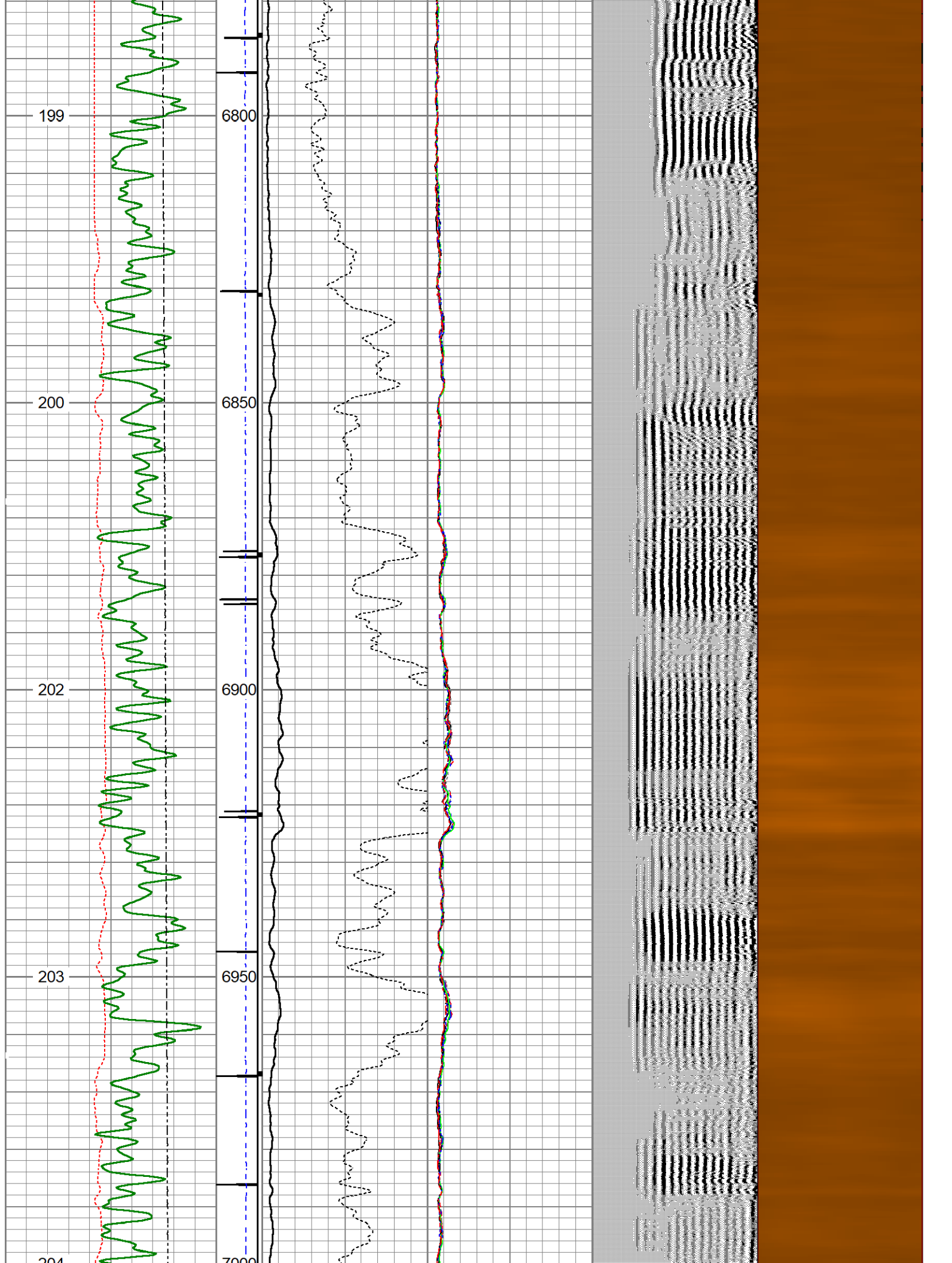


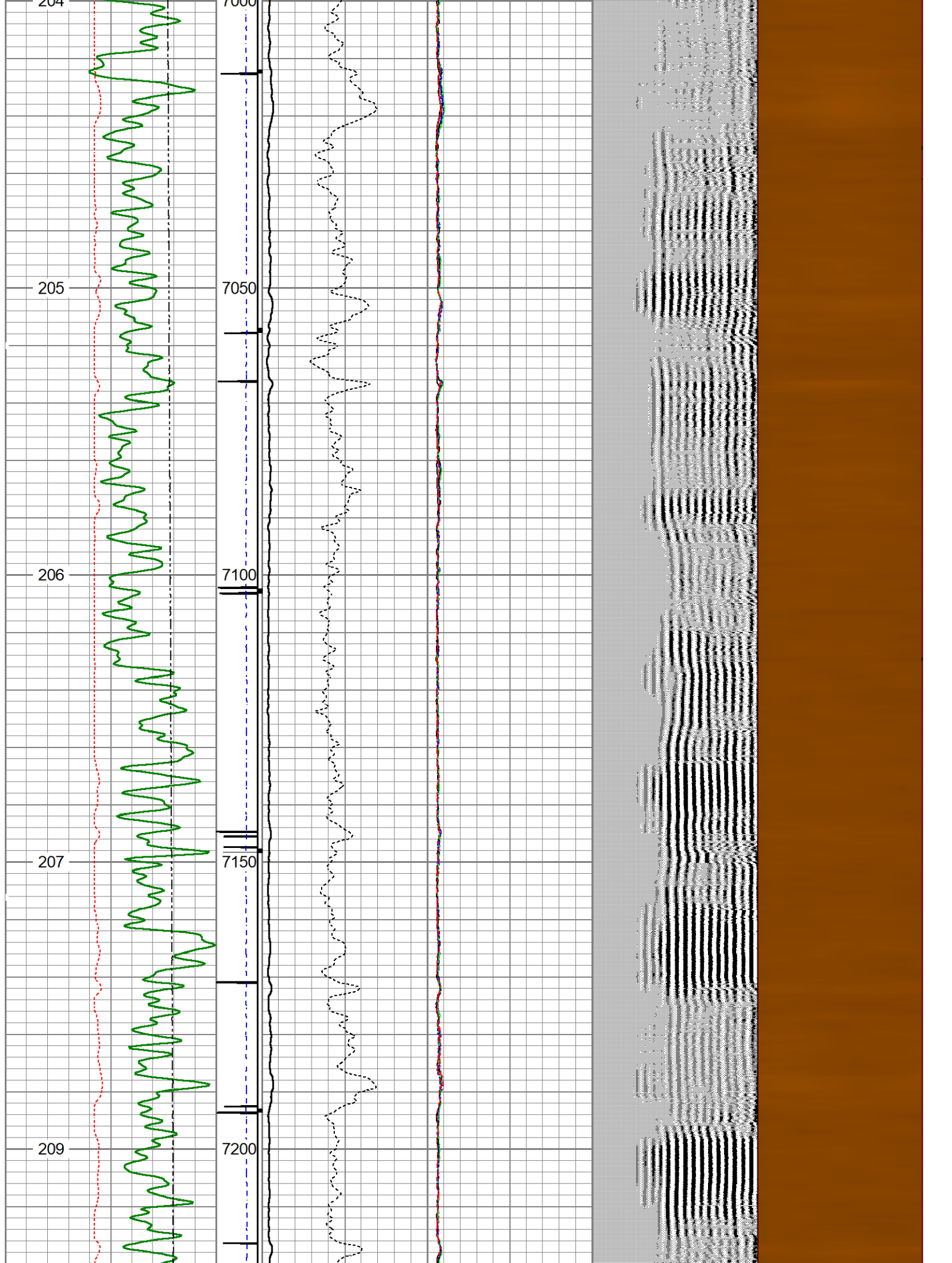


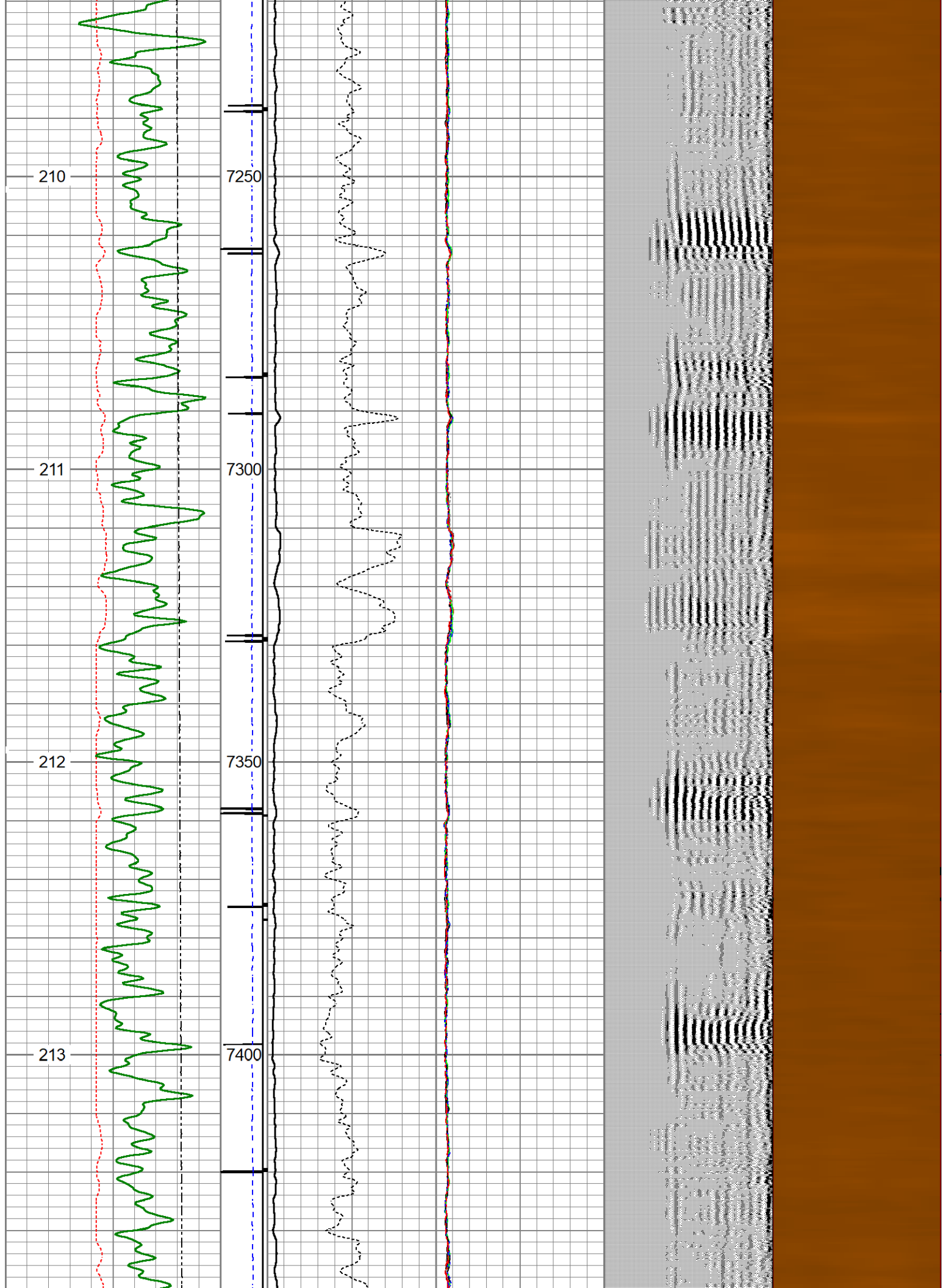


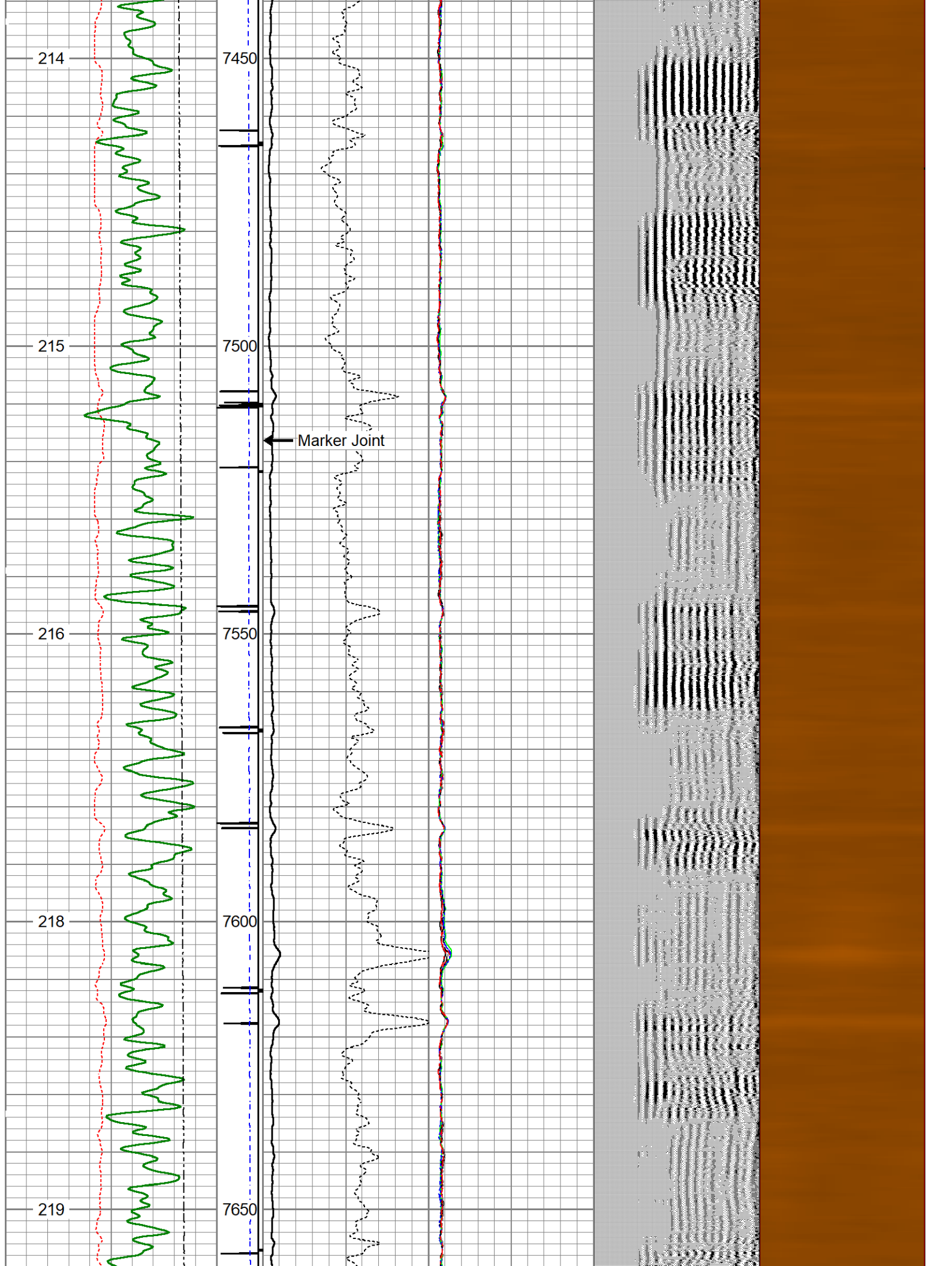


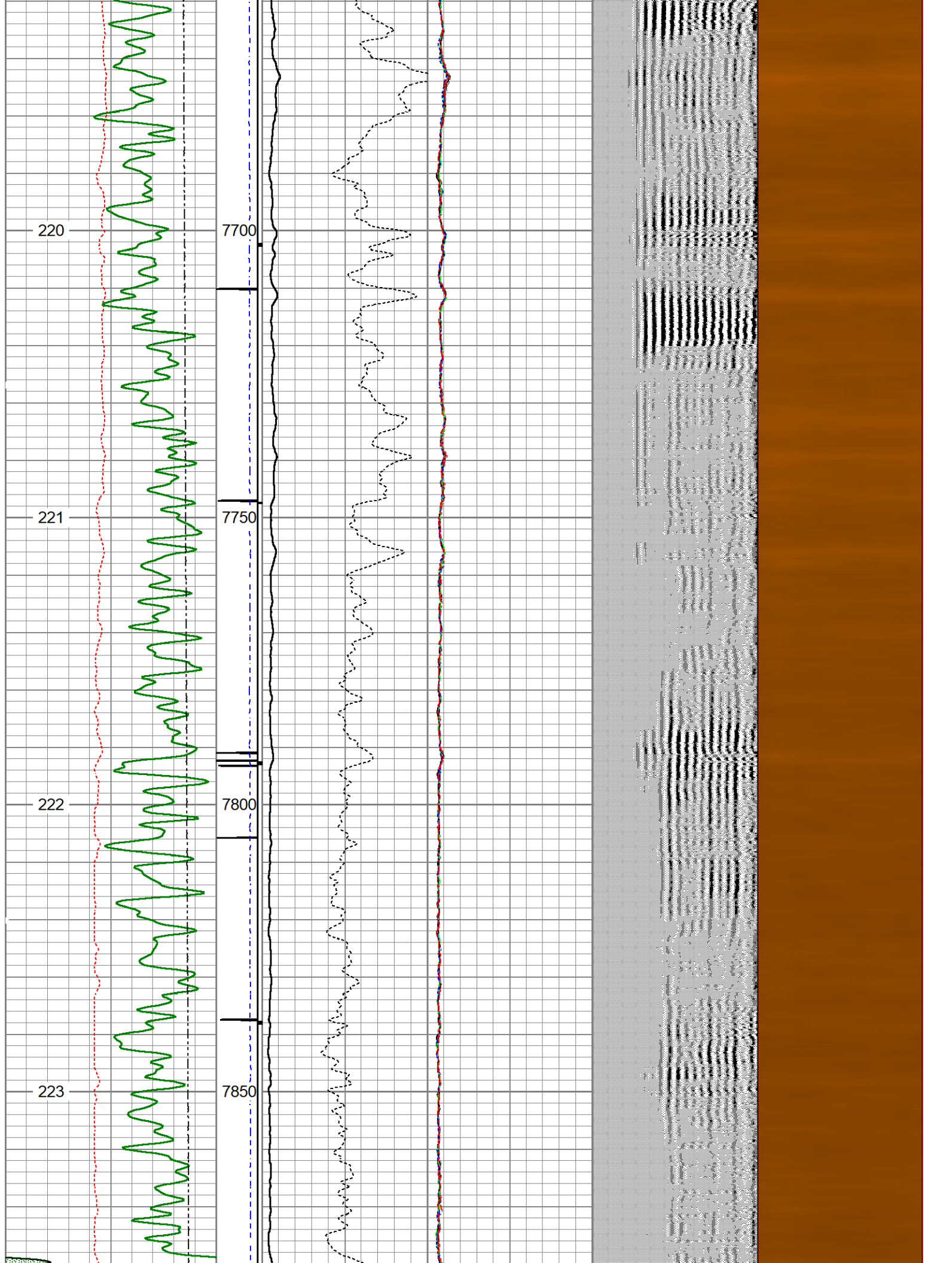


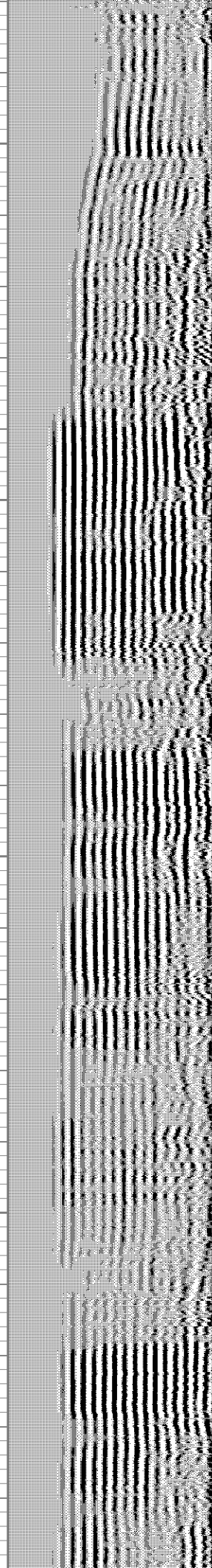
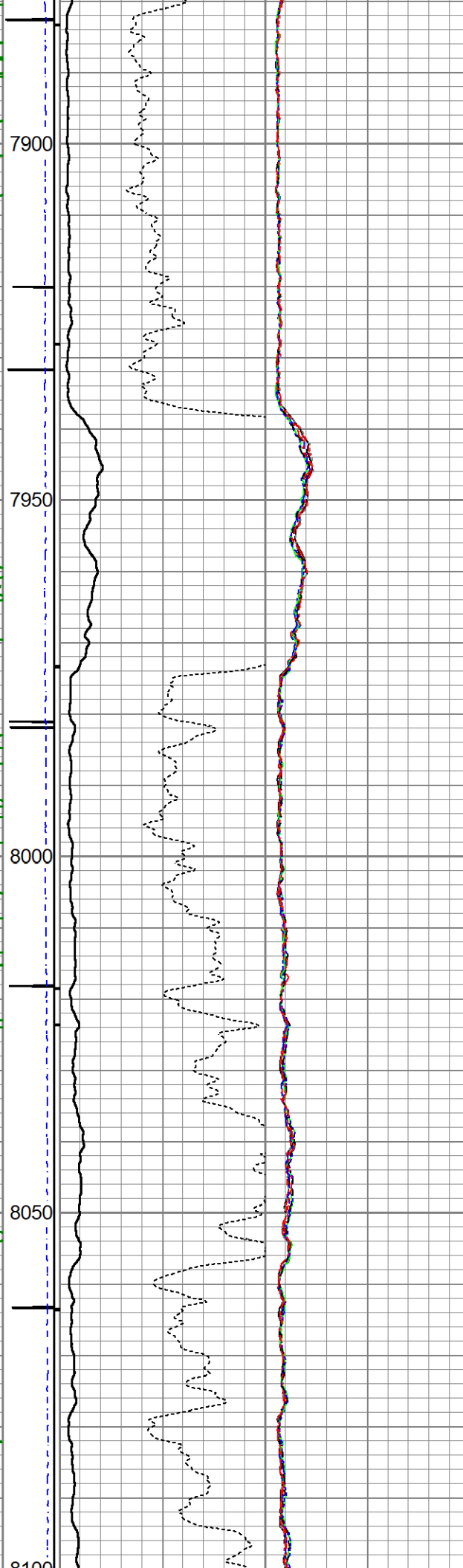
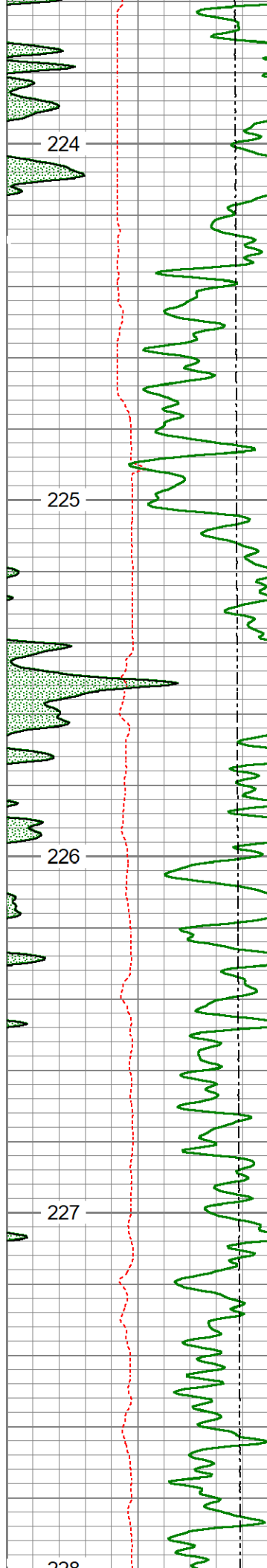


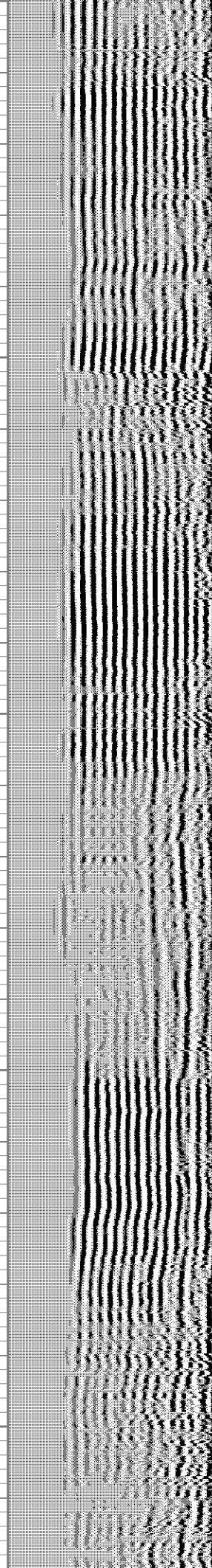
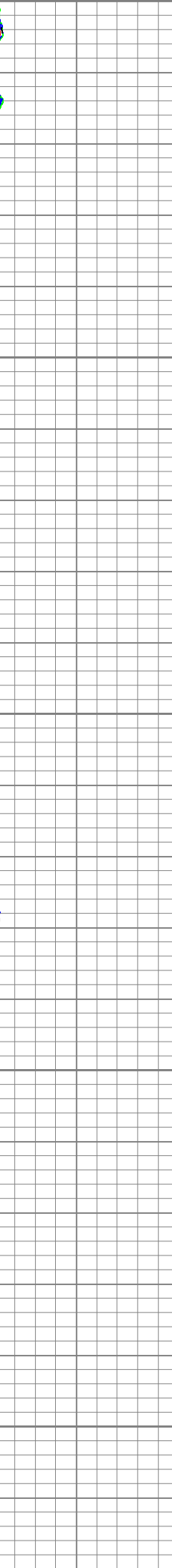
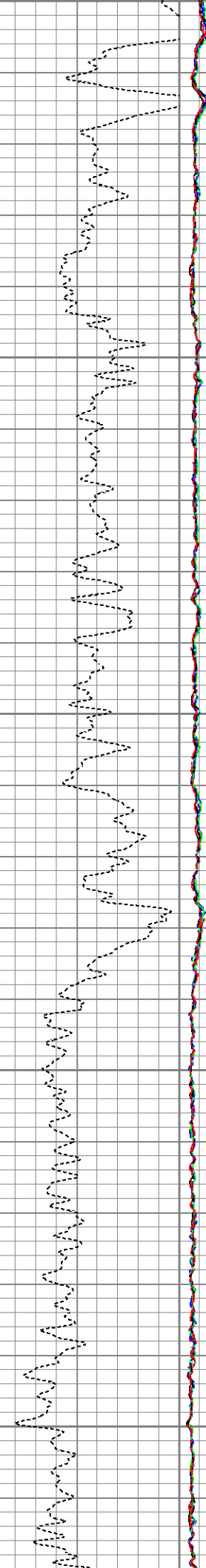
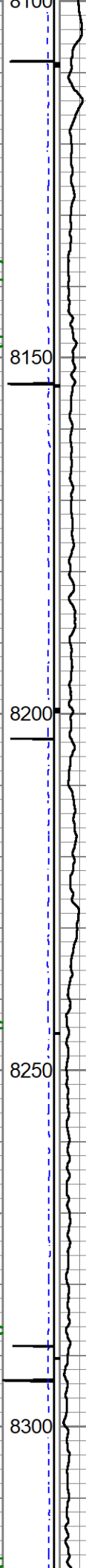
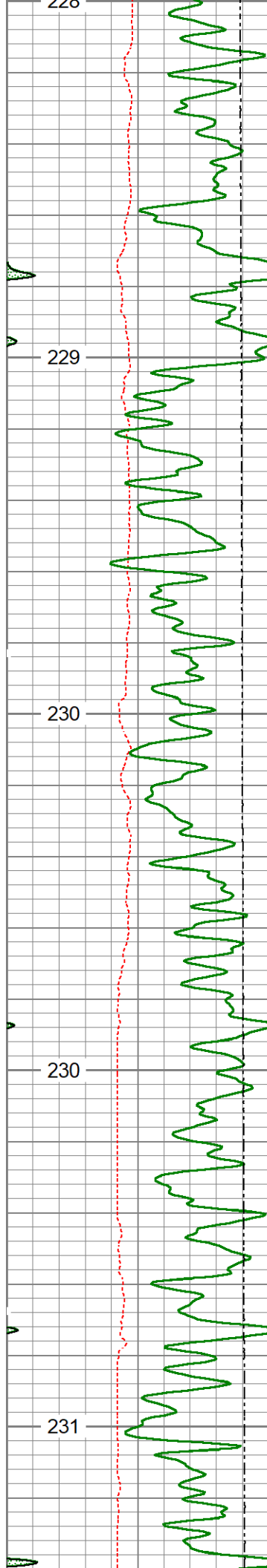


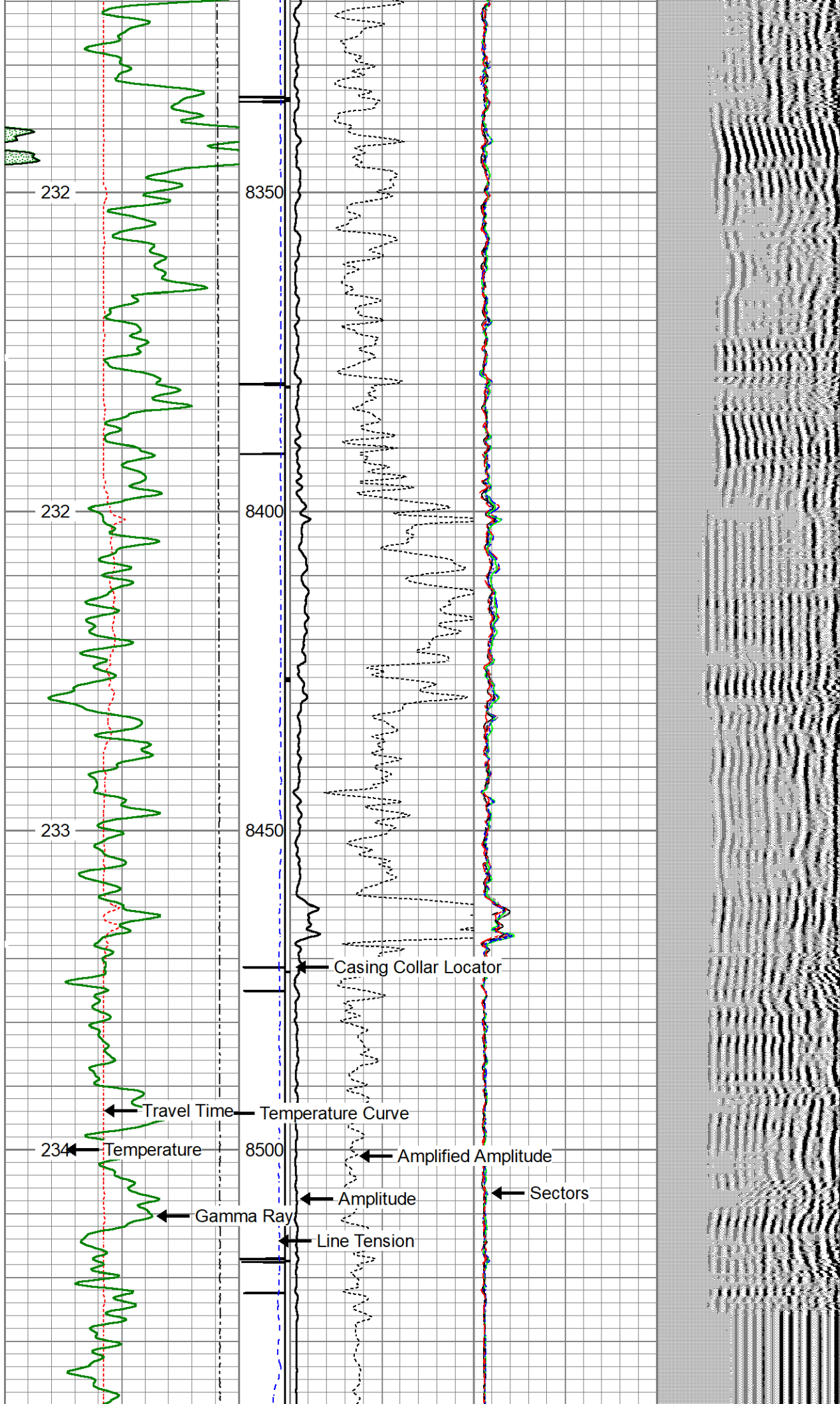


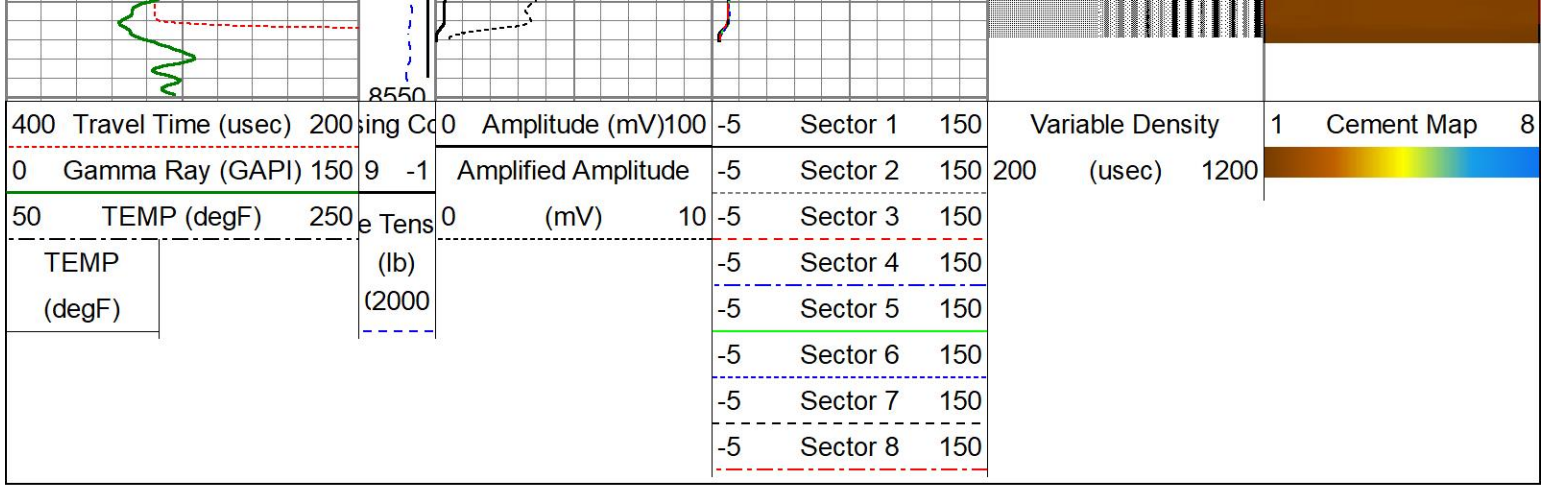










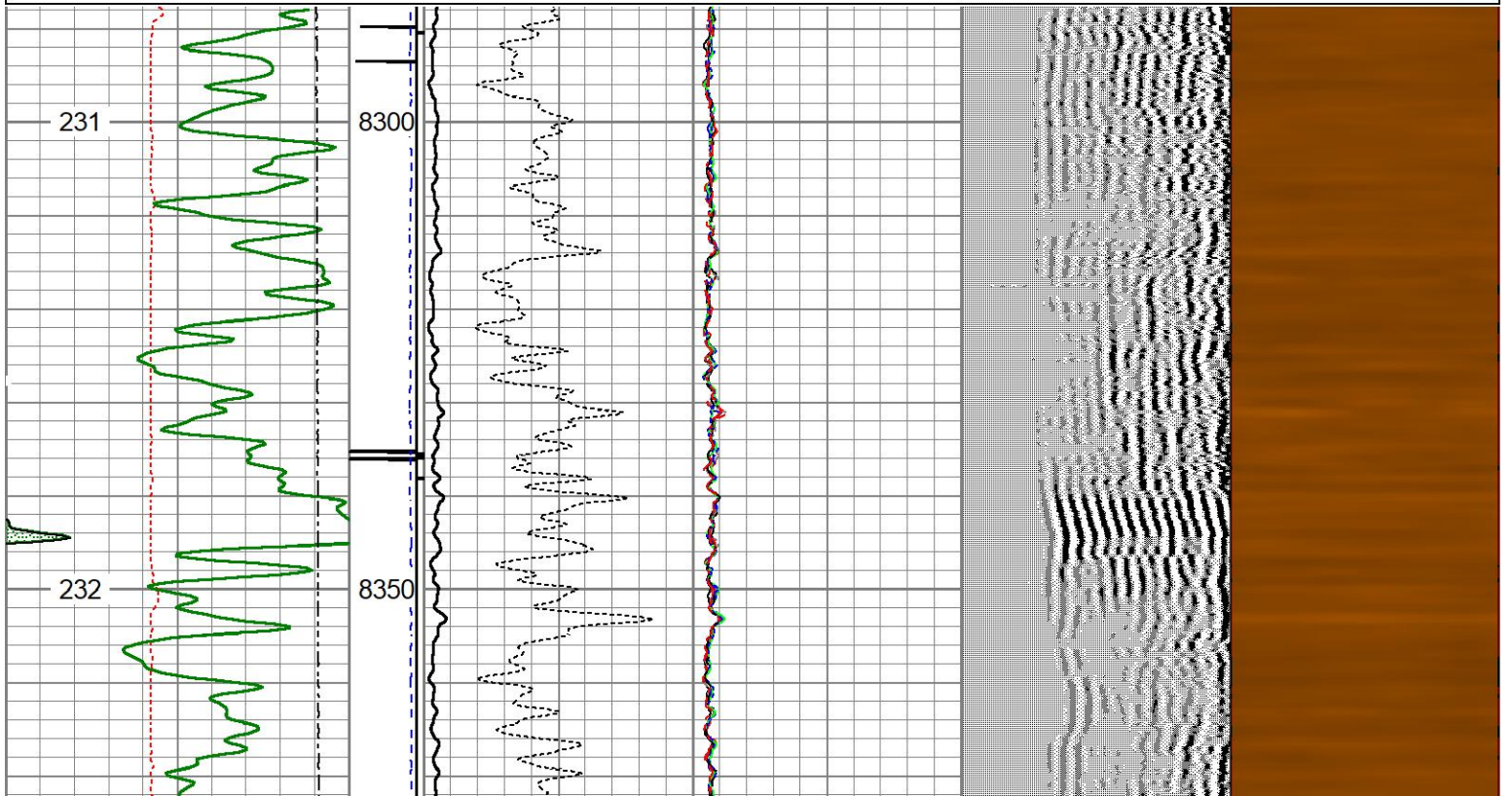
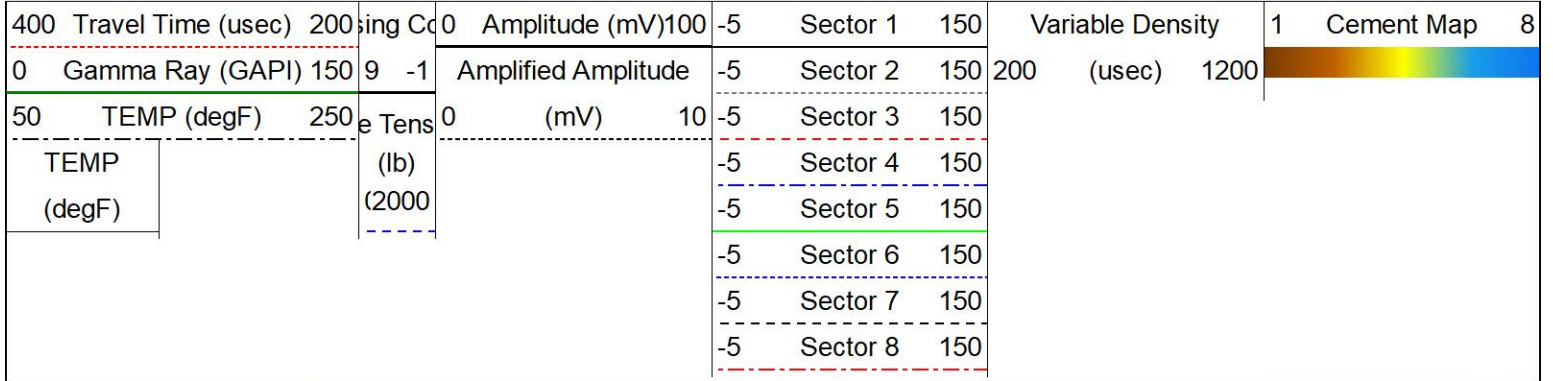


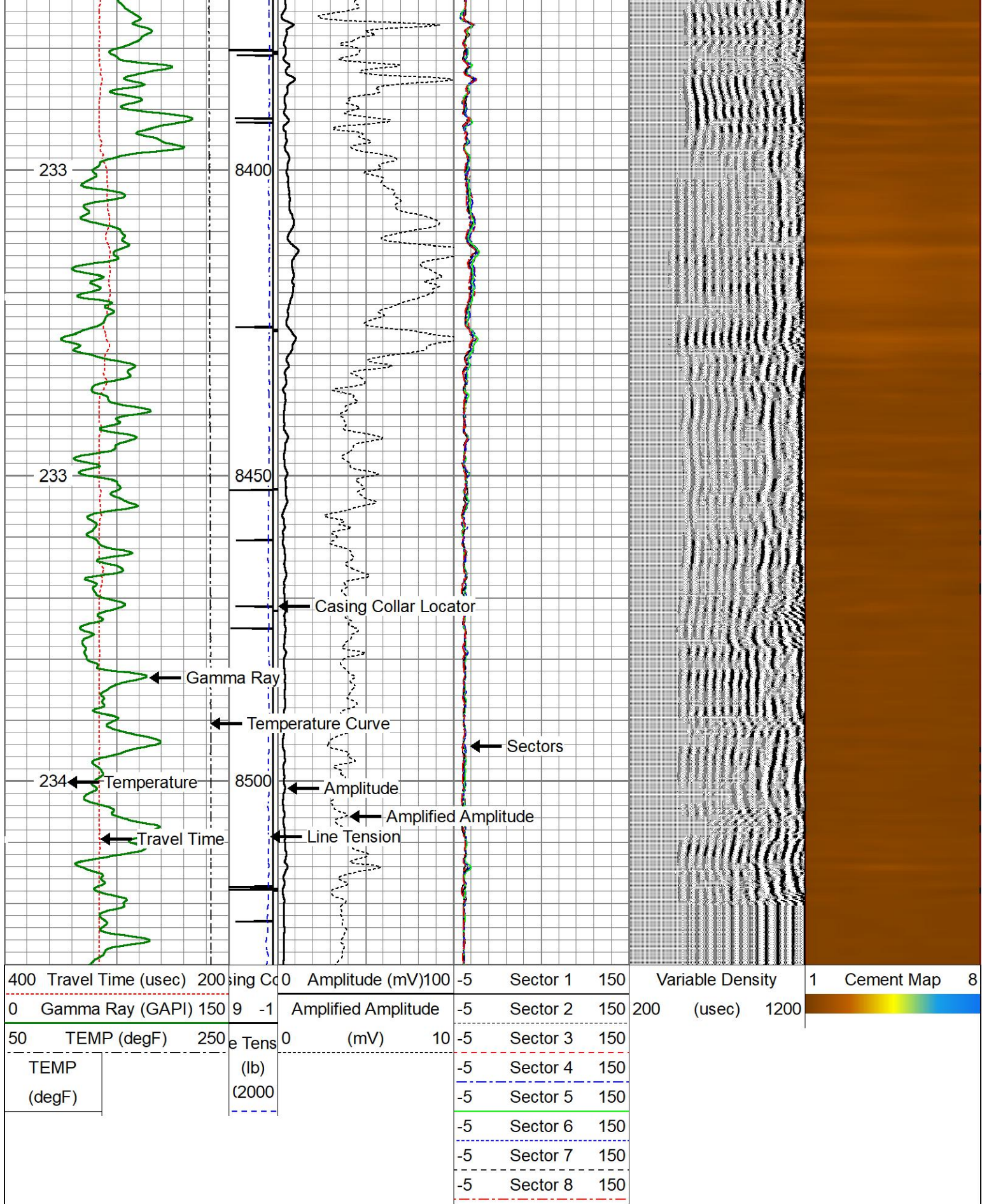


REPEAT PASS

0 PSI

Database File: gw_seltzer_376hc_rcbl_072921.db
 Dataset Pathname: pass6
 Presentation Format: rcbl_hh
 Dataset Creation: Thu Jul 29 12:12:41 2021
 Charted by: Depth in Feet scaled 1:240





Calibration Report

Database File gw_seltzer_376hc_rcbl_072921.db
 Dataset Pathname pass8
 Dataset Creation Thu Jul 29 12:17:55 2021

Gamma Ray Calibration Report

Type / Serial: Probe275dig / 080829

SHOP CALIBRATION

Wed Sep 23 10:09:42 2020

	Counts/Sec.	Gain	Offset	Jig	Units
Background	0.0				cps
Calibrator	1.0	0.8000			cps
					GAPI/cps

PRIMARY VERIFICATION

Background	0.0				cps
Calibrator	0.0				cps
Difference				0.0	GAPI

BEFORE SURVEY VERIFICATION

Background	0.0				cps
Calibrator	0.0				cps
Difference				0.0	GAPI

AFTER SURVEY VERIFICATION

Background	0.0				cps
Calibrator	0.0				cps
Difference				0.0	GAPI

Segmented Cement Bond Log Calibration Report

Serial Number: FW1409-41
 Tool Model: Probe 2.75 Radii W/Temp
 Calibration Casing Diameter: 5.500 in
 Calibration Depth: 1341.125 ft

Master Calibration, performed Thu Jul 29 11:48:50 2021:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.003	0.410	1.000	71.921	174.391	0.470
CAL	0.002	0.553				
5'	0.003	0.350	1.000	71.921	204.019	0.477
SUM						
S1	0.006	0.424	0.000	100.000	239.581	-1.506
S2	0.001	0.417	0.000	100.000	240.467	-0.311
S3	0.003	0.415	0.000	100.000	243.014	-0.768
S4	0.002	0.409	0.000	100.000	245.681	-0.468
S5	0.001	0.406	0.000	100.000	246.978	-0.286
S6	0.001	0.422	0.000	100.000	237.773	-0.345
S7	0.001	0.425	0.000	100.000	236.013	-0.279
S8	0.002	0.425	0.000	100.000	236.128	-0.432


Internal Reference Calibration, performed (Not Performed):

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	0.002	0.553	1.000	0.000


Air Zero Calibration, performed Mon Aug 31 16:50:37 2020:

		Raw (v)	Calibrated (v)	Results
		Zero	Zero	Offset
	3'	0.000	0.000	0.000
	5'	0.000	0.000	0.000
	SUM			
	S1	0.000	0.000	0.000
	S2	0.000	0.000	0.000
	S3	0.000	0.000	0.000
	S4	0.000	0.000	0.000
	S5	0.000	0.000	0.000
	S6	0.000	0.000	0.000
	S7	0.000	0.000	0.000
	S8	0.000	0.000	0.000

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
HeadVolt	15.73		CHD-Titan Titan 1 7/16" GO Cablehead	1.00	1.44	5.00
Temp	12.88		RBT-Probe 2.75 Radii W/Temp (FW1409-41) Probe 2.75" Radial with Integral Temperature Sub	9.21	2.75	90.00
WVFS8	10.65					
WVFS7	10.65					
WVFS6	10.65					
WVFS5	10.65					
WVFS4	10.65					
WVFS3	10.65					
WVFS2	10.65					
WVFS1	10.65					
WVFCAL	10.65					
WVF3FT	10.65					
WVF5FT	9.65					
HEADVOLT	6.40					
CCL	5.44					
			GR Probe 2.75 dia (080820)	0.40	0.75	57.00

GR	1.42		<small>GR-Probe 2 3/4" (060629) HT Probe 2 3/4" Gamma CCL</small>	6.40	2.75	57.00
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Dataset: gw_seltzer_376hc_rcbl_072921.db: field/well/run1/pass8
 Total length: 16.60 ft
 Total weight: 152.00 lb
 O.D.: 2.75 in

	Company	GREAT WESTERN OIL & GAS
	Well	SELTZER LD 09-376HC
	Field	WATTENBERG
	County	ADAMS
	State	COLORADO Country