



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

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

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

Location: API #: 05-001-10197
Other Services: NONE
NWNE
39.999320, -104.892669
SEC 4 TWP 1S RGE 67W
Permanent Datum GL Elevation 5140'
Log Measured From KB
Drilling Measured From KB

Elevation 5160'
D.F.
G.L. 5140'

Date 29-JUL-2021

Run Number TWO

Depth Driller 18175'

Depth Logger 8503'

Bottom Logged Interval 8502'

Top Log Interval SURFACE

Open Hole Size 8-1/2"

Type Fluid WATER

Density / Viscosity -

Max. Recorded Temp. 229 DegF

Estimated Cement Top -

Time Well Ready 0930

Time Logger on Bottom 10:05

Equipment Number 65

Location PLATTEVILLE

Recorded By H.HILL

Witnessed By G.TRAUGHER

Borehole Record		Tubing Record					
Run Number	Bit	From	To	Size	Weight	From	To
Casing Record	Size			Wgt/Ft	Top		Bottom
Surface String	9-5/8"			36#	SURFACE		2052'
Prot. String							
Production String	5-1/2"			20#	SURFACE		18175'
Liner							

<<< Fold Here >>>

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 7285' - 7296'

THANK YOU FOR USING KLX ENERGY SERVICES

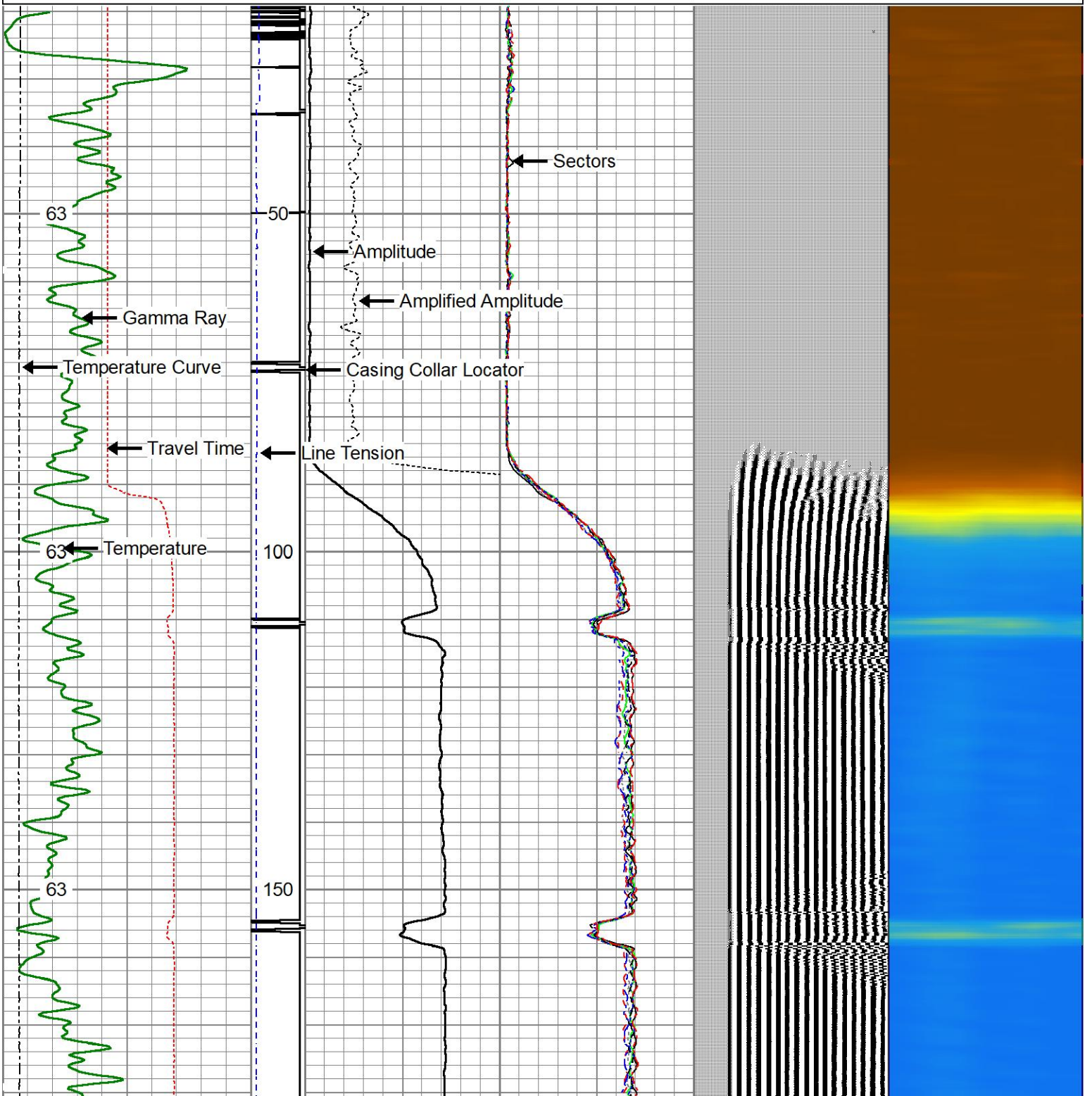


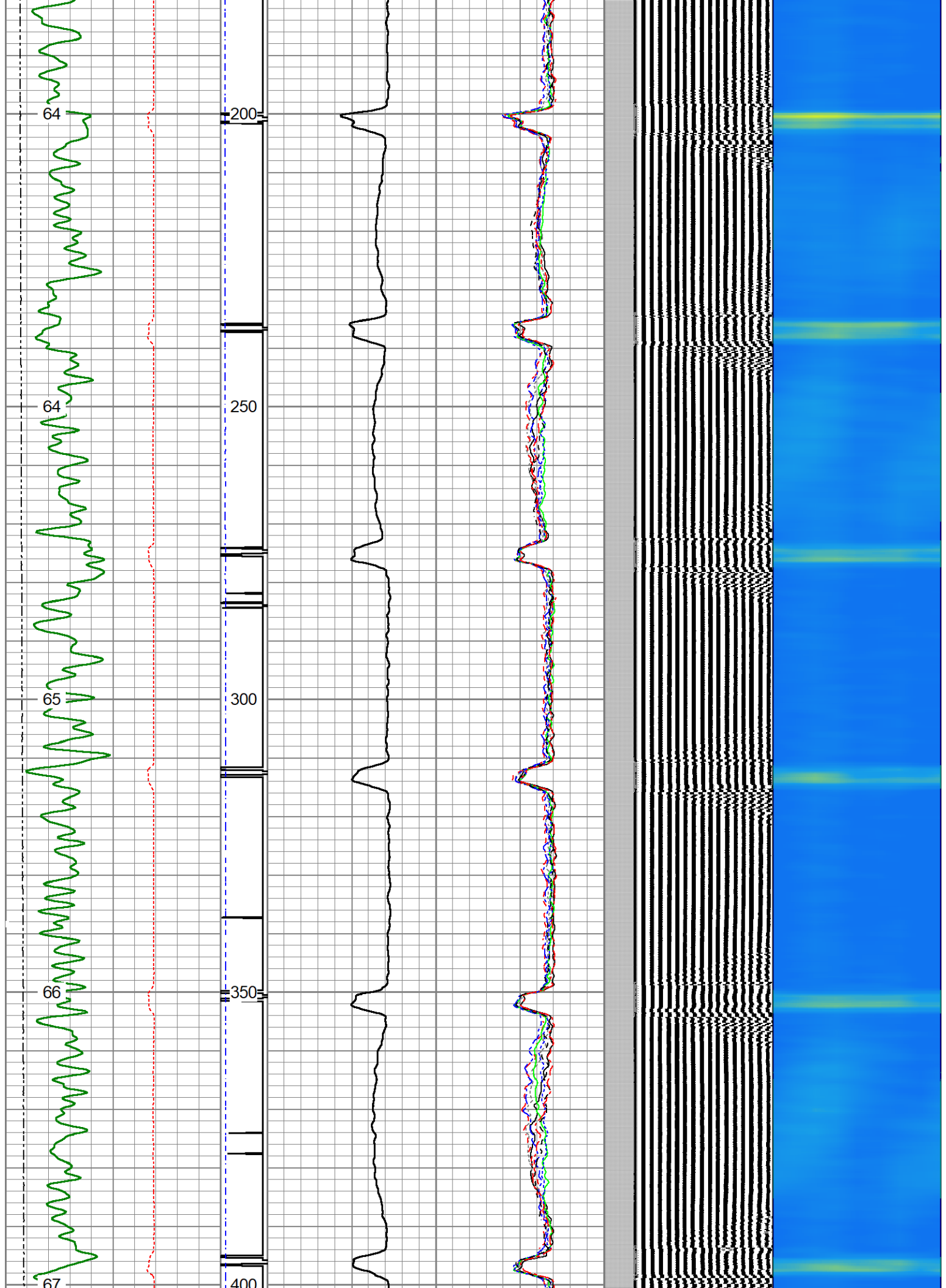
MAIN PASS

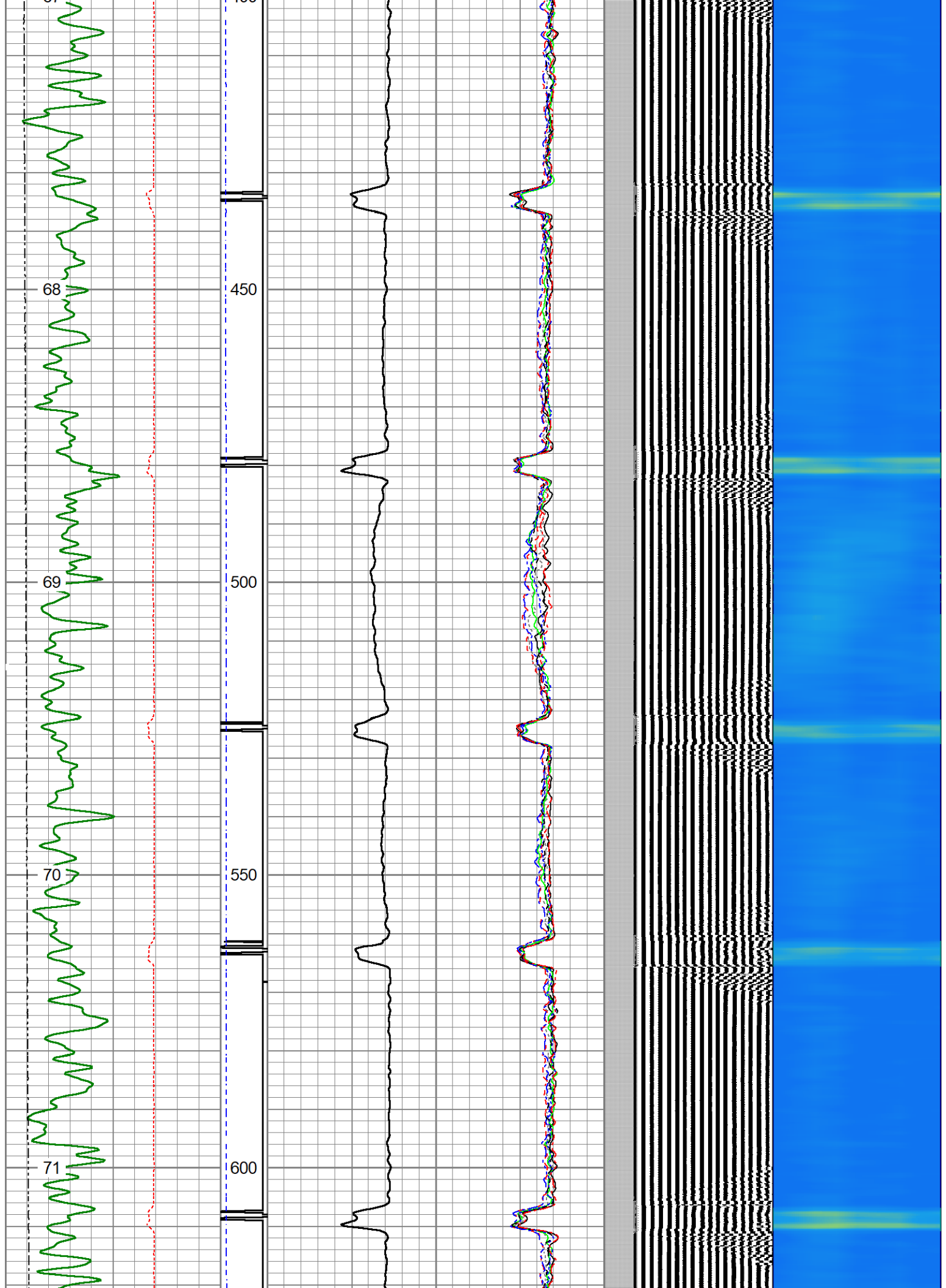
0 PSI

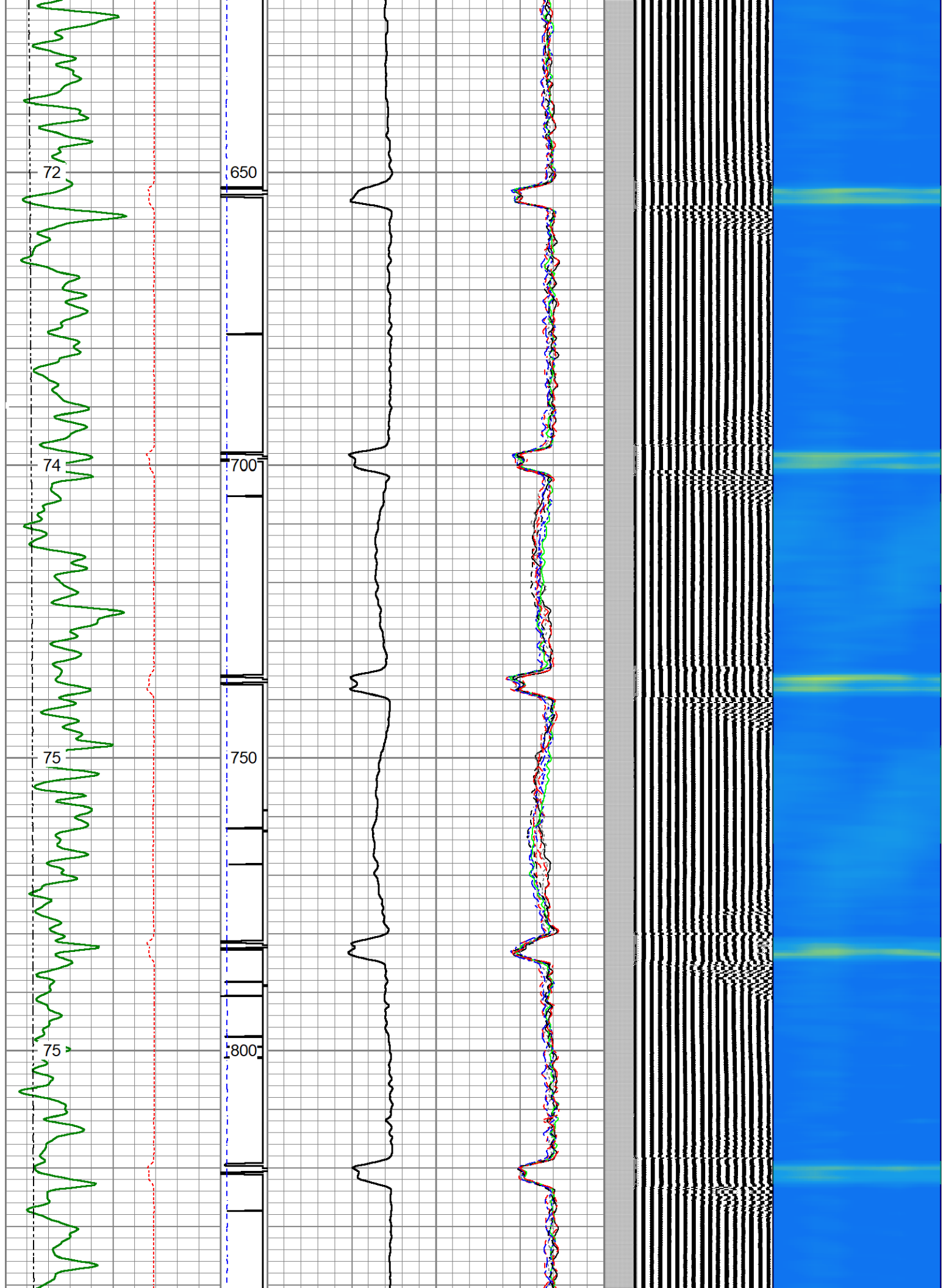
Database File gw_seltzer_376hn_rcbl_072921.db
 Dataset Pathname pass7
 Presentation Format rcbl_hh
 Dataset Creation Thu Jul 29 10:02:29 2021
 Charted by Depth in Feet scaled 1:240

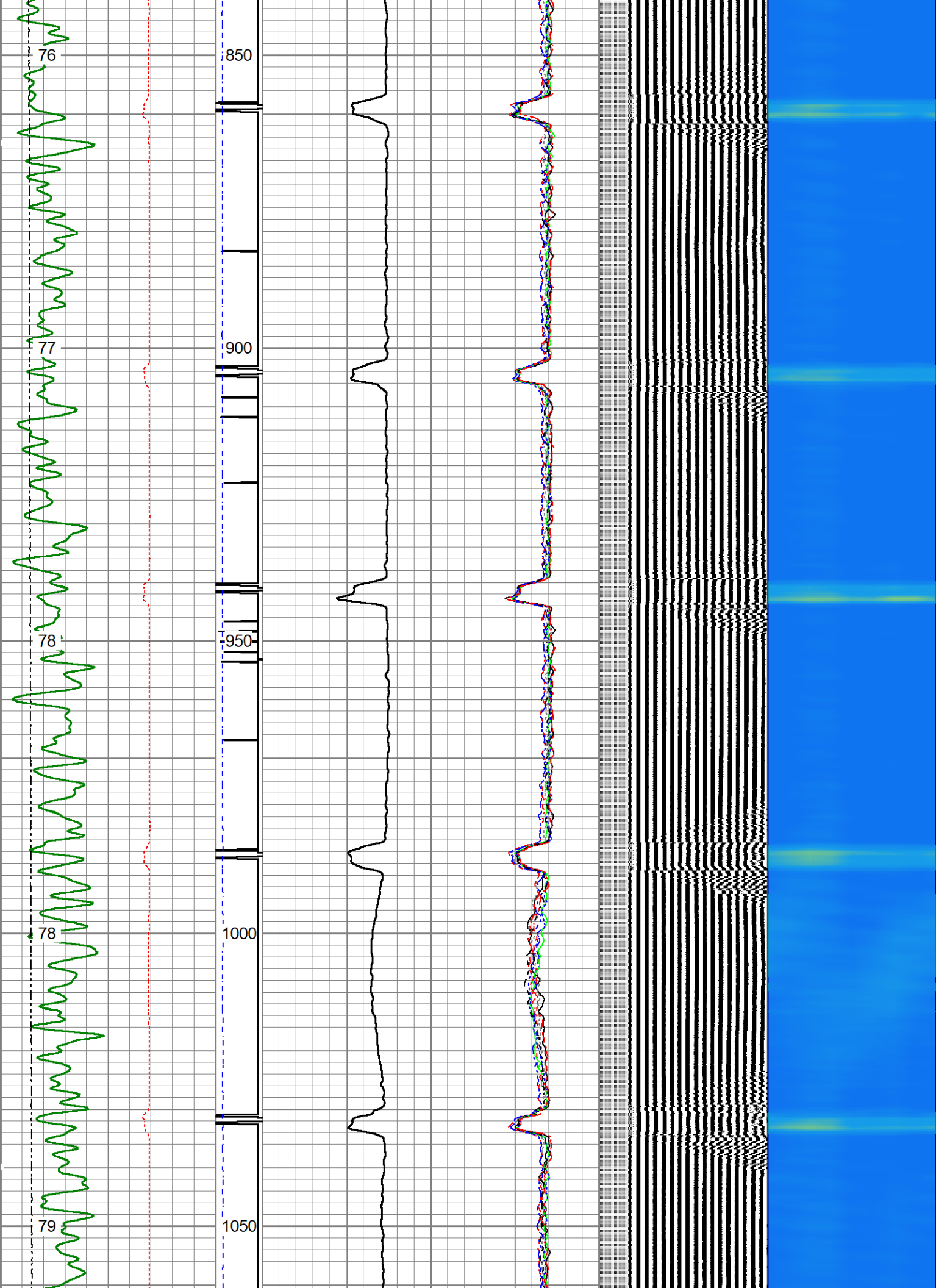
400	Travel Time (usec)	200	ing Co	0	Amplitude (mV)	100	-5	Sector 1	150	Variable Density 200 (usec) 1200	1 Cement Map 8
0	Gamma Ray (GAPI)	150	9 -1		Amplified Amplitude		-5	Sector 2	150		
50	TEMP (degF)	250	e Tens	0	(mV)	10	-5	Sector 3	150		
TEMP			(lb)				-5	Sector 4	150		
(degF)			(2000				-5	Sector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

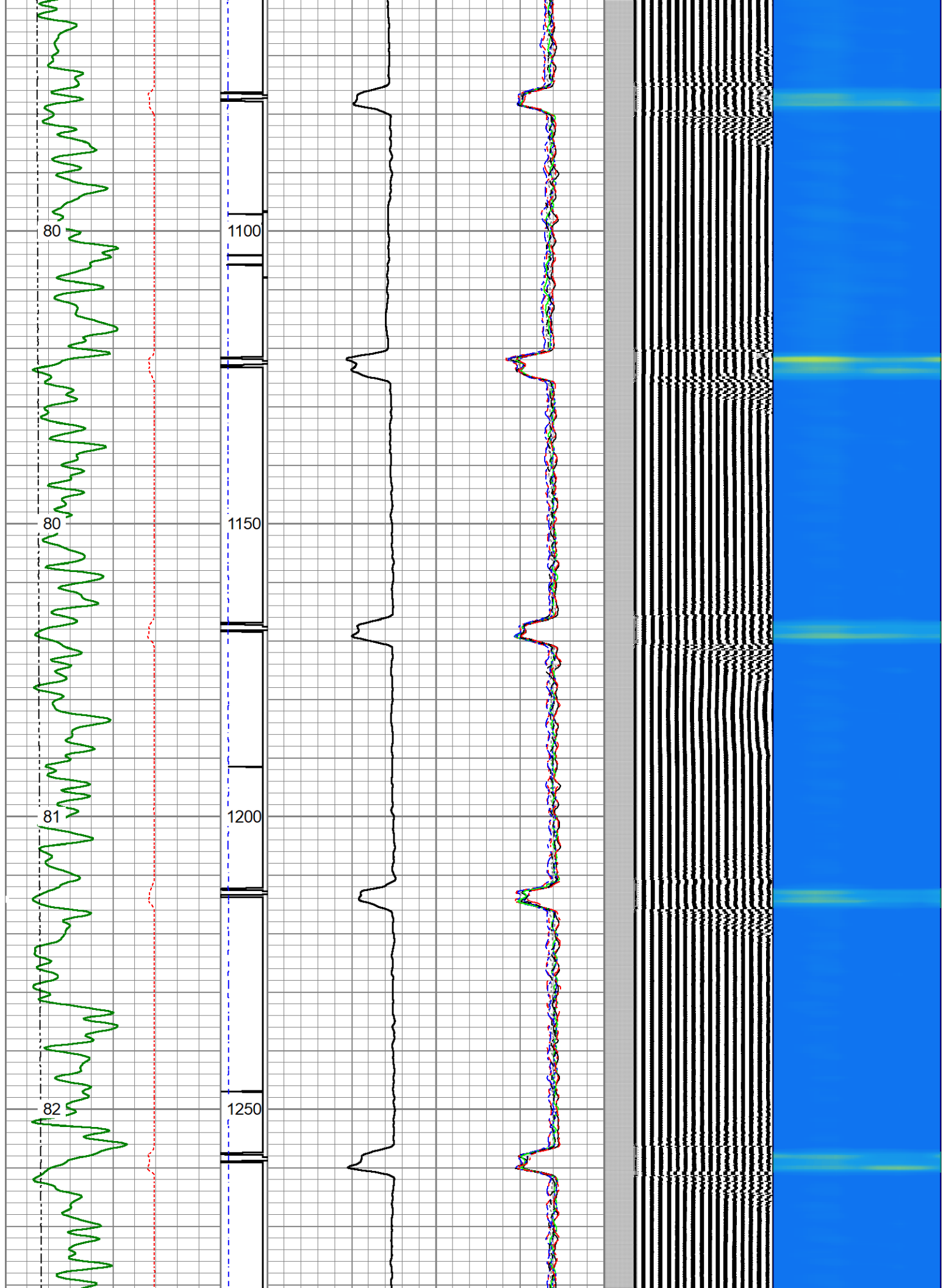


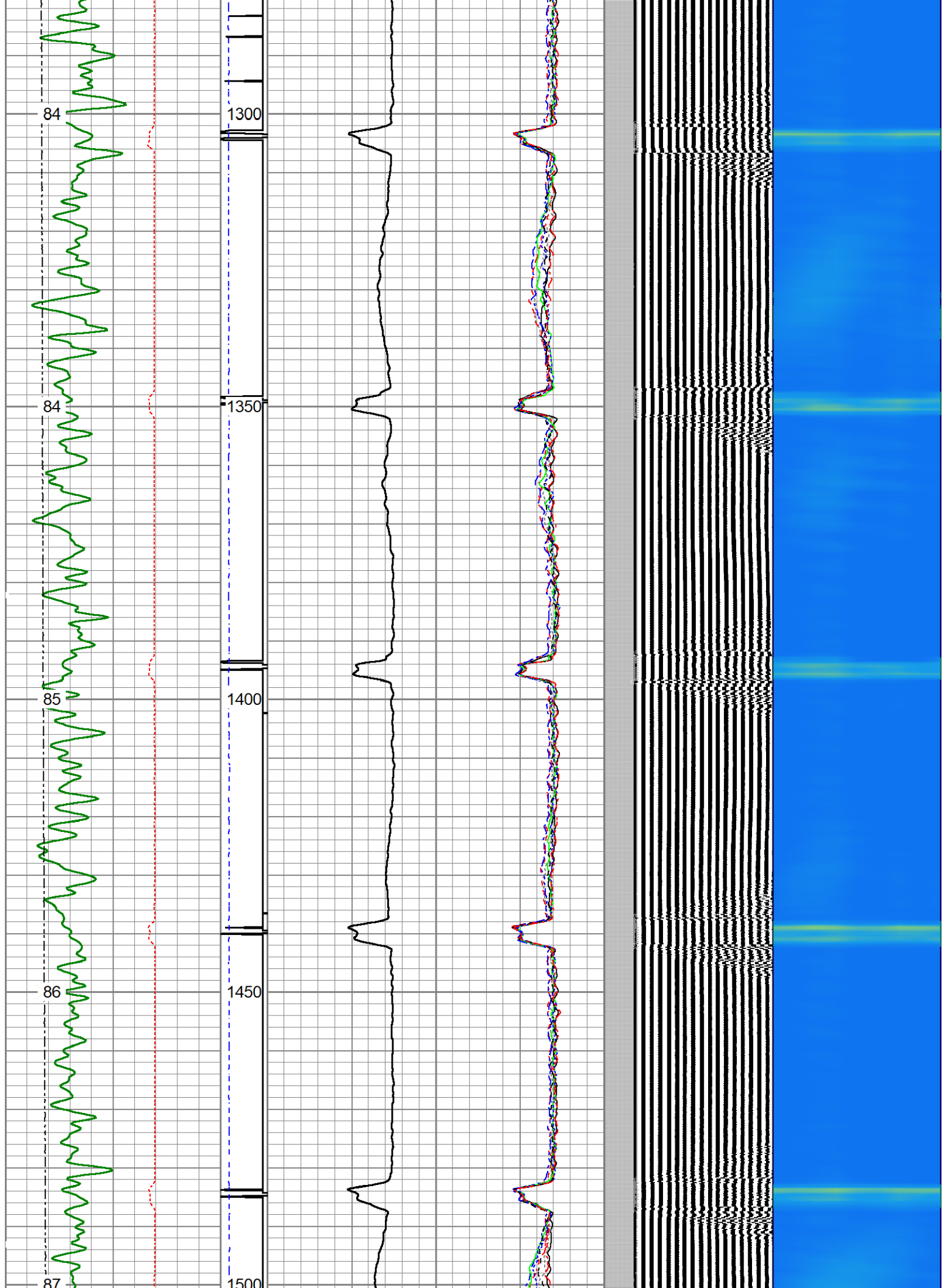


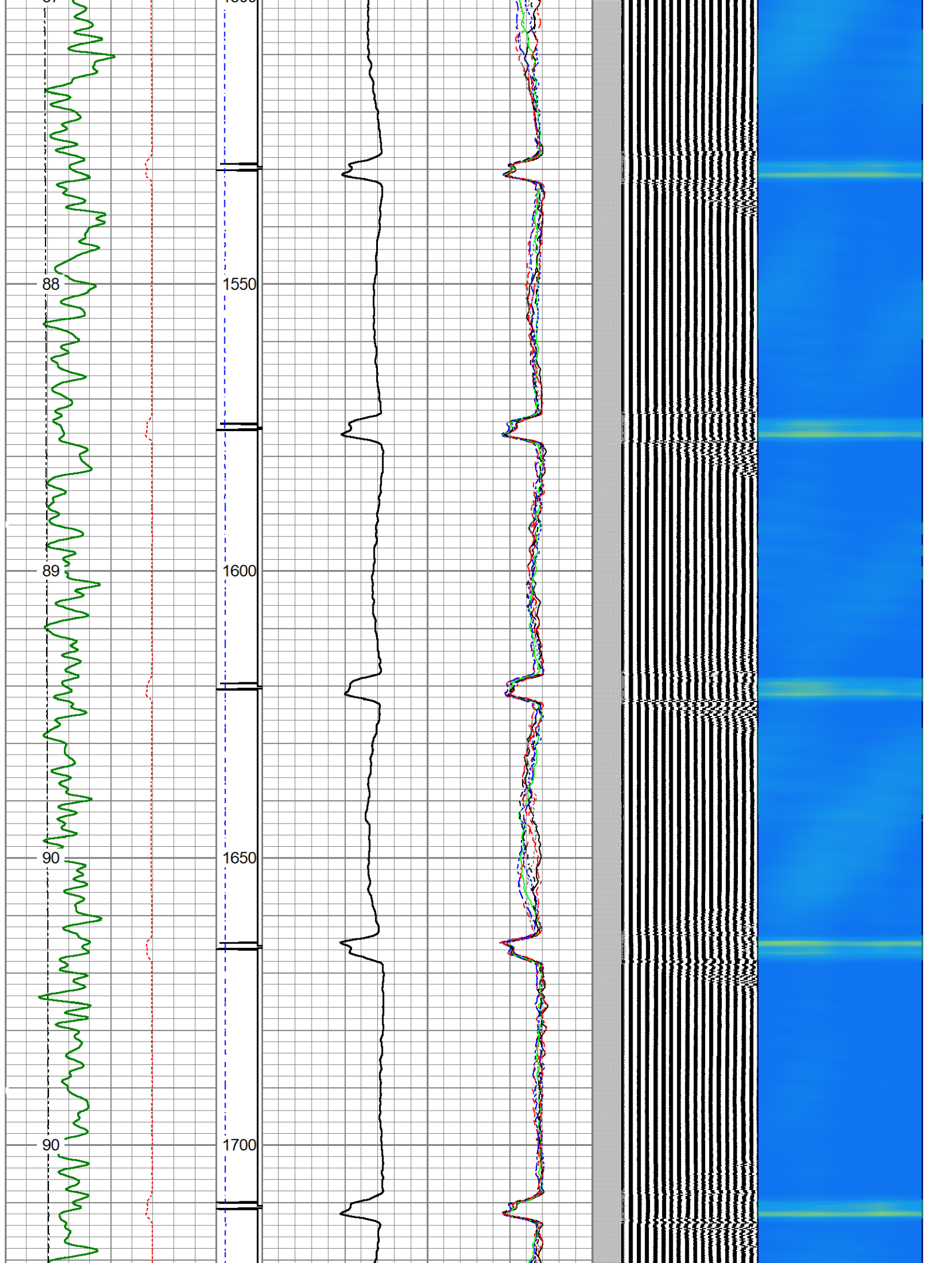


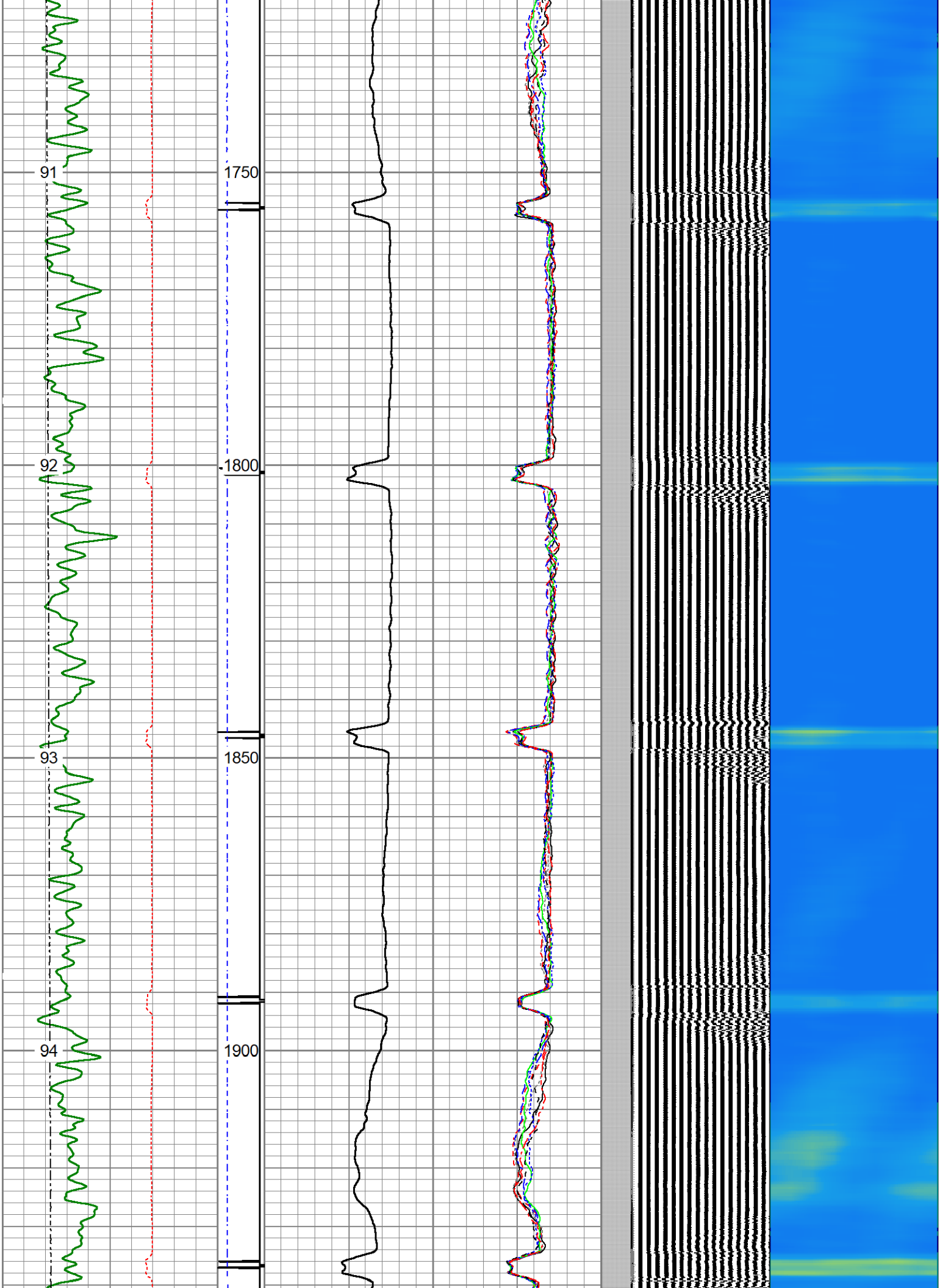


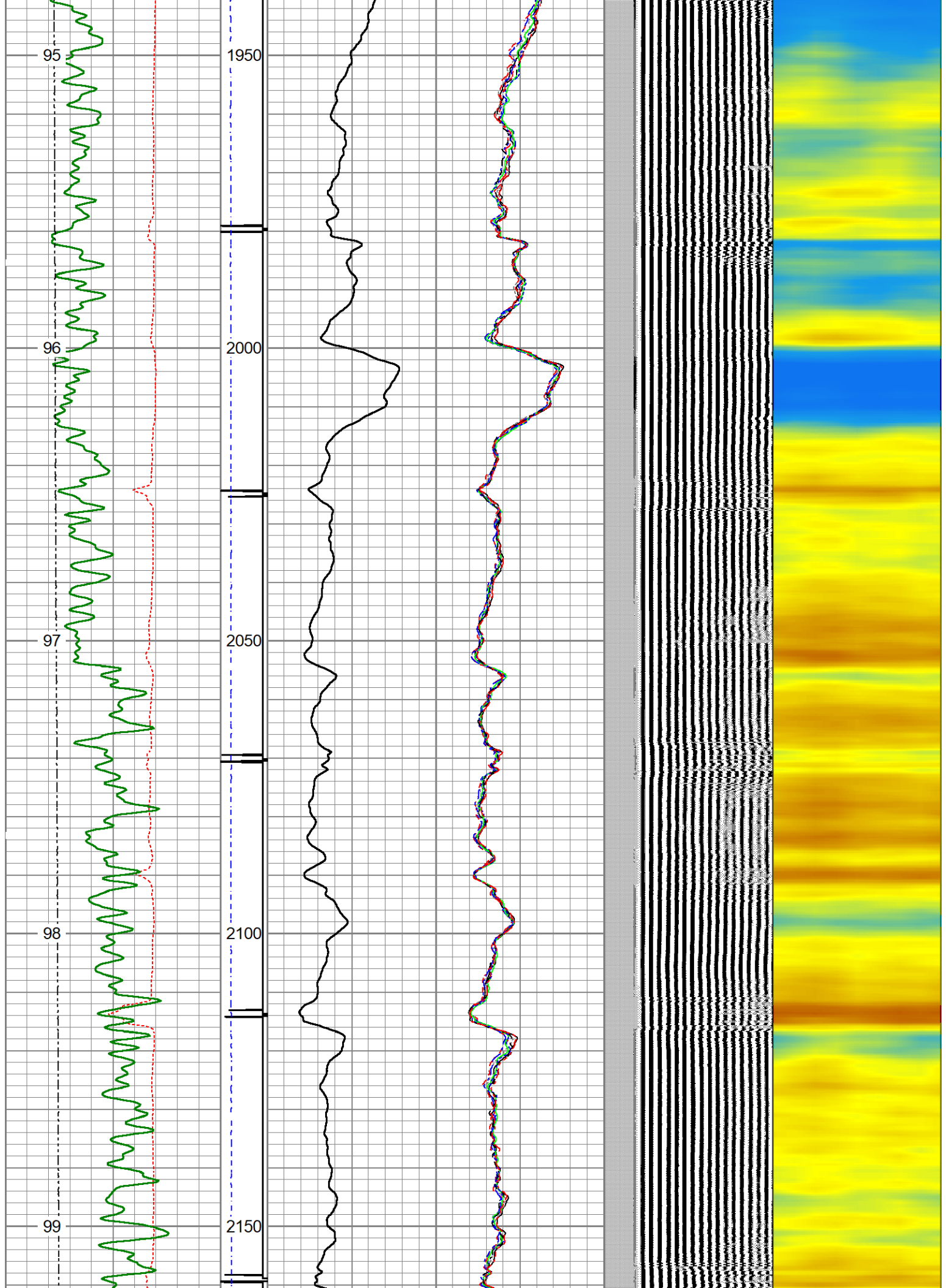


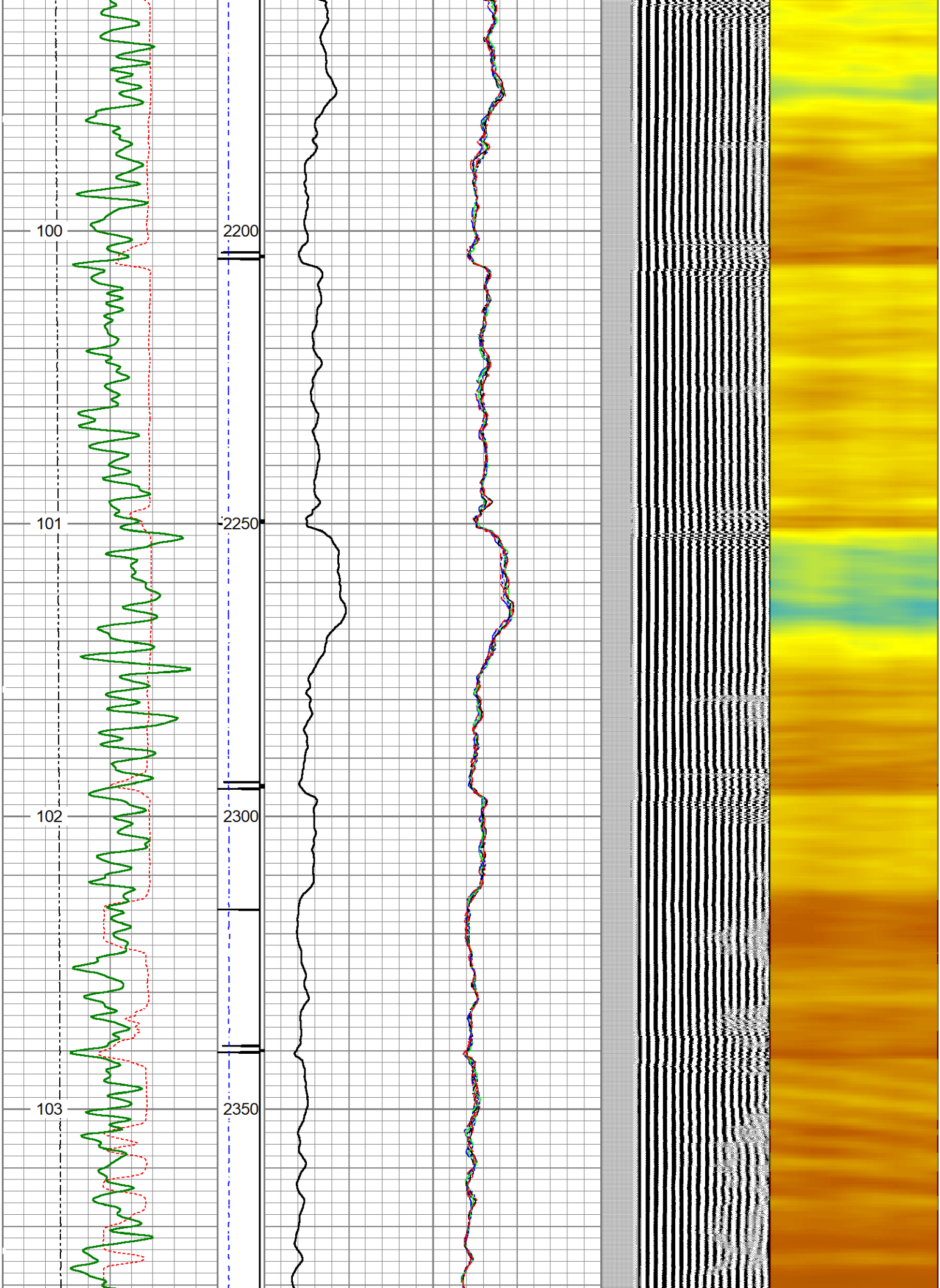


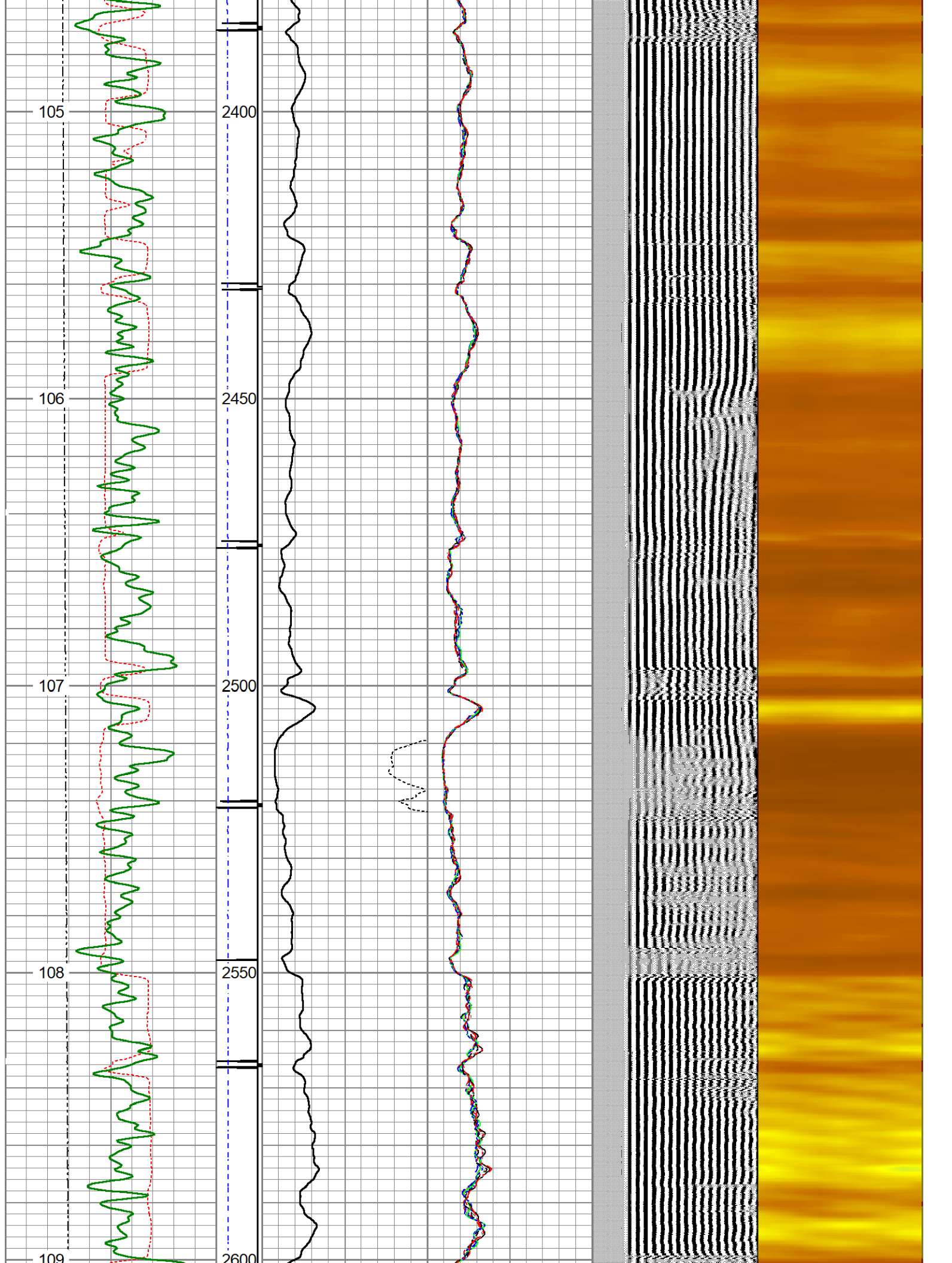


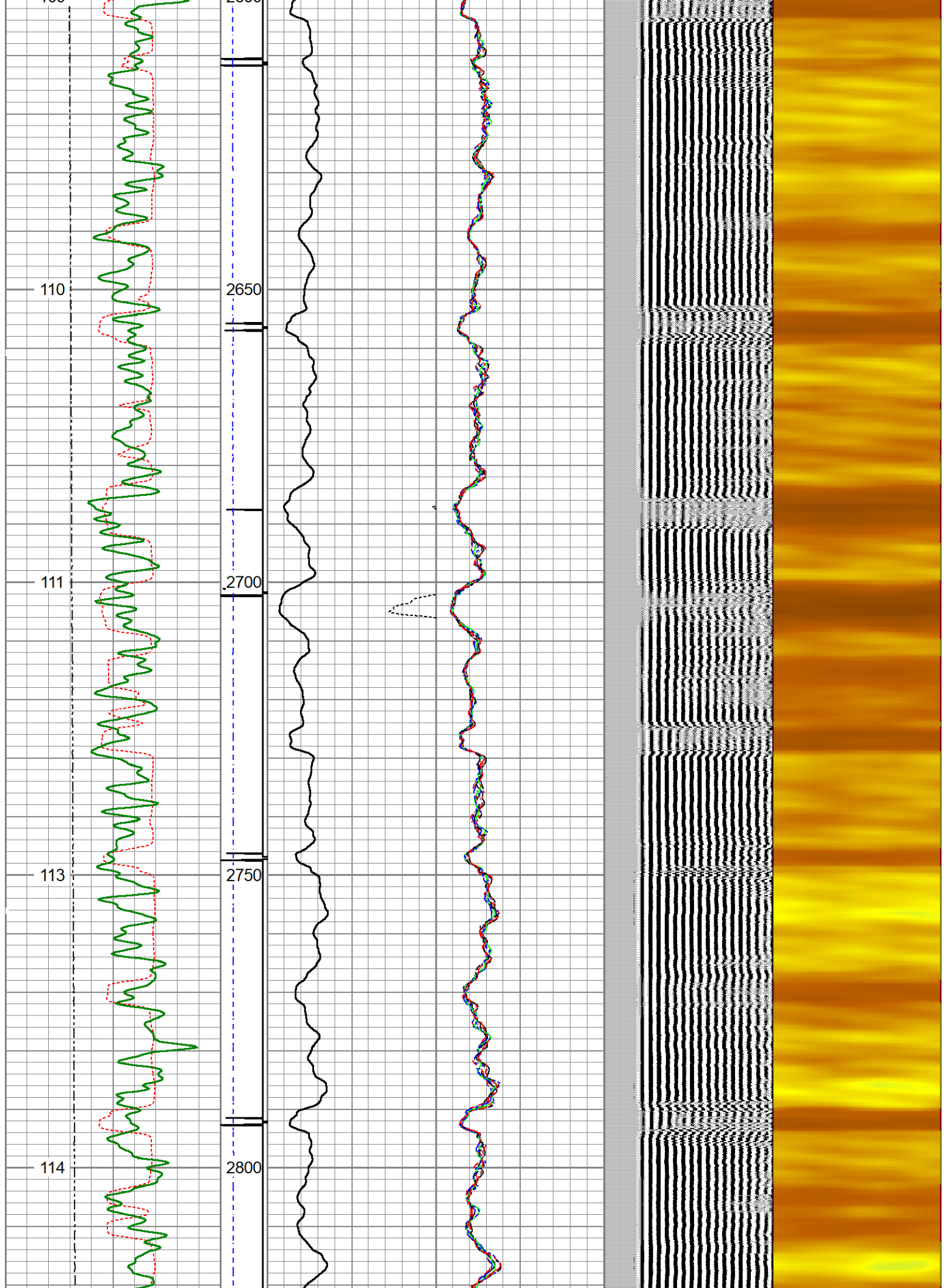


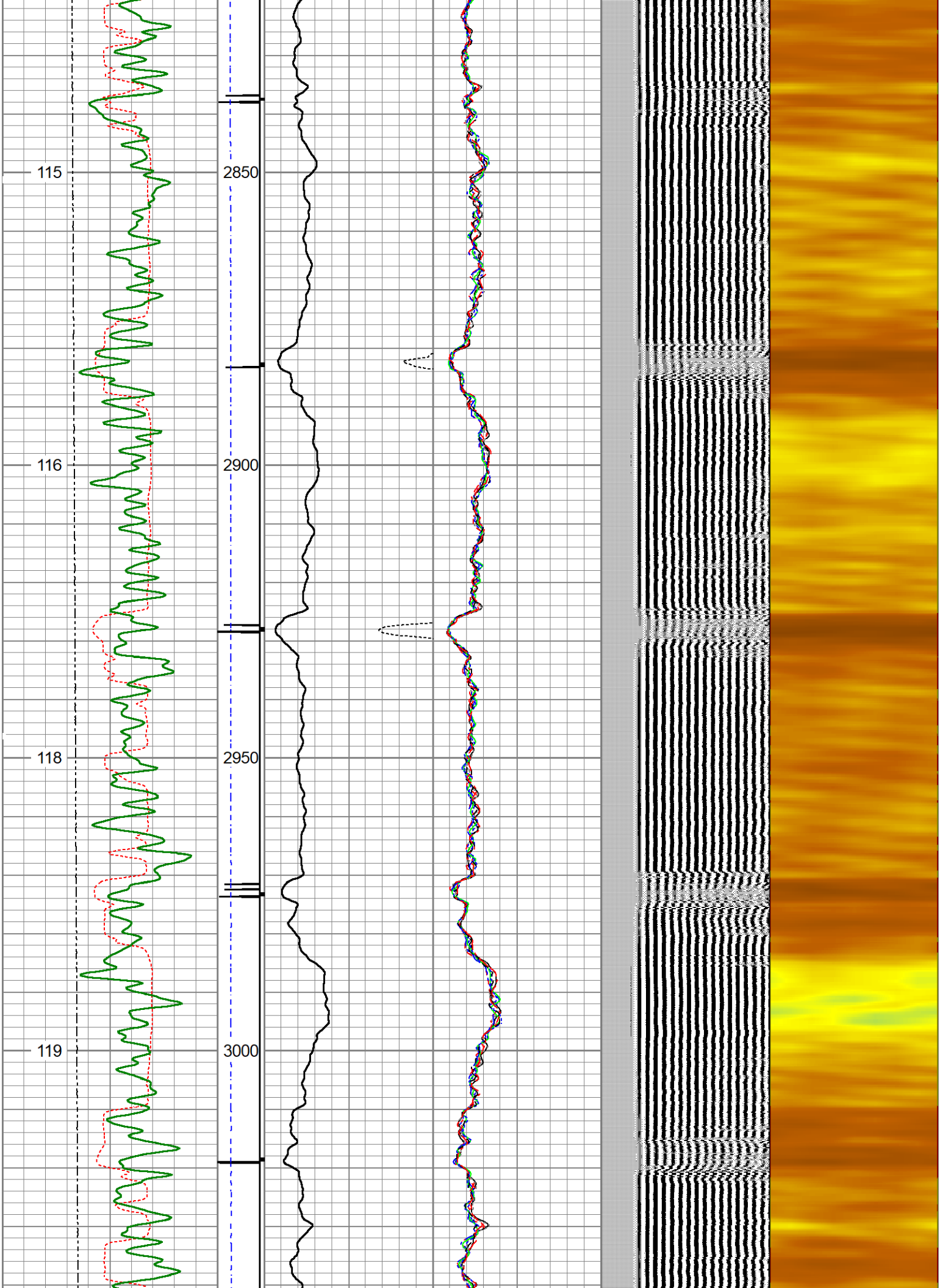


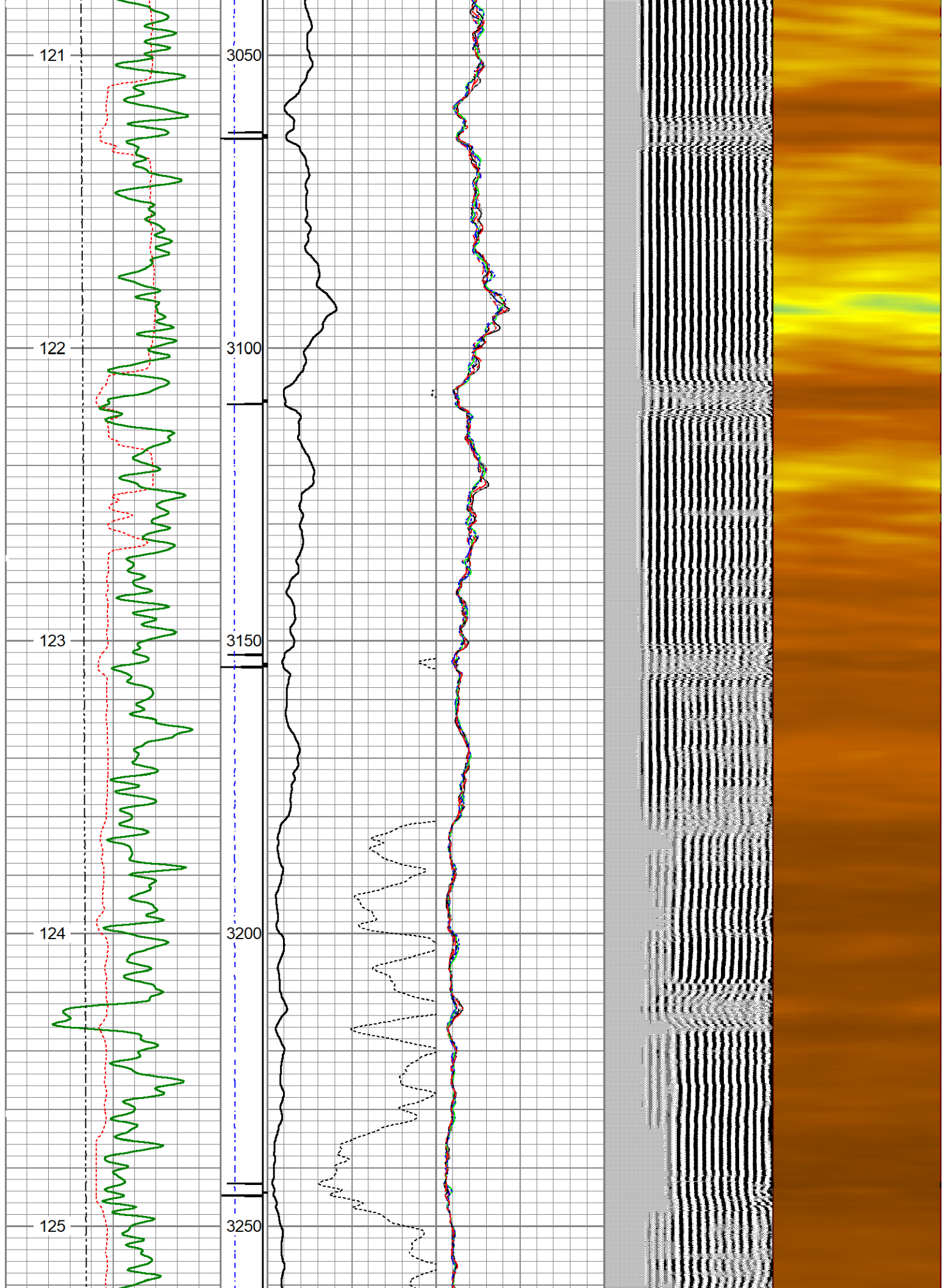


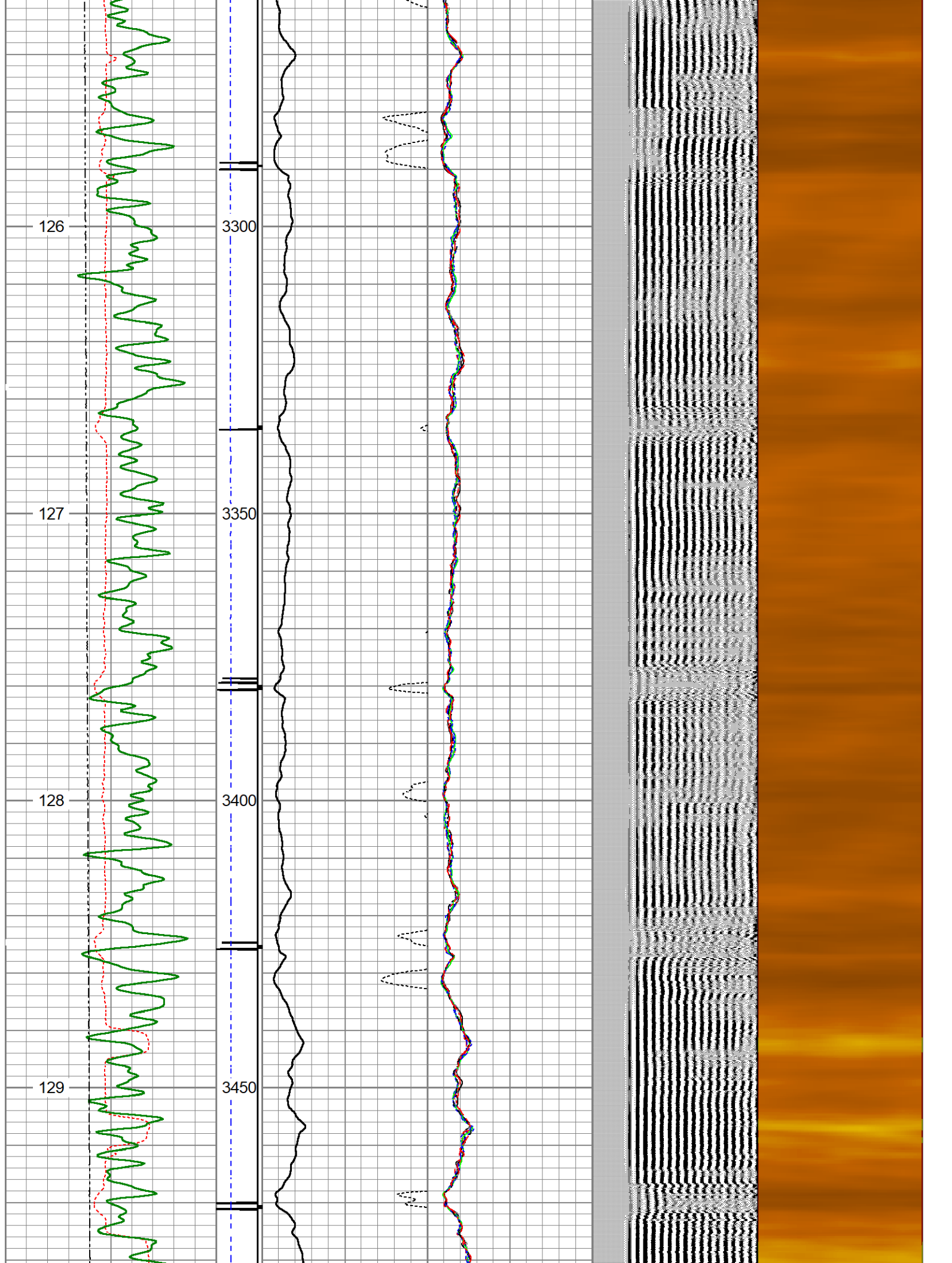


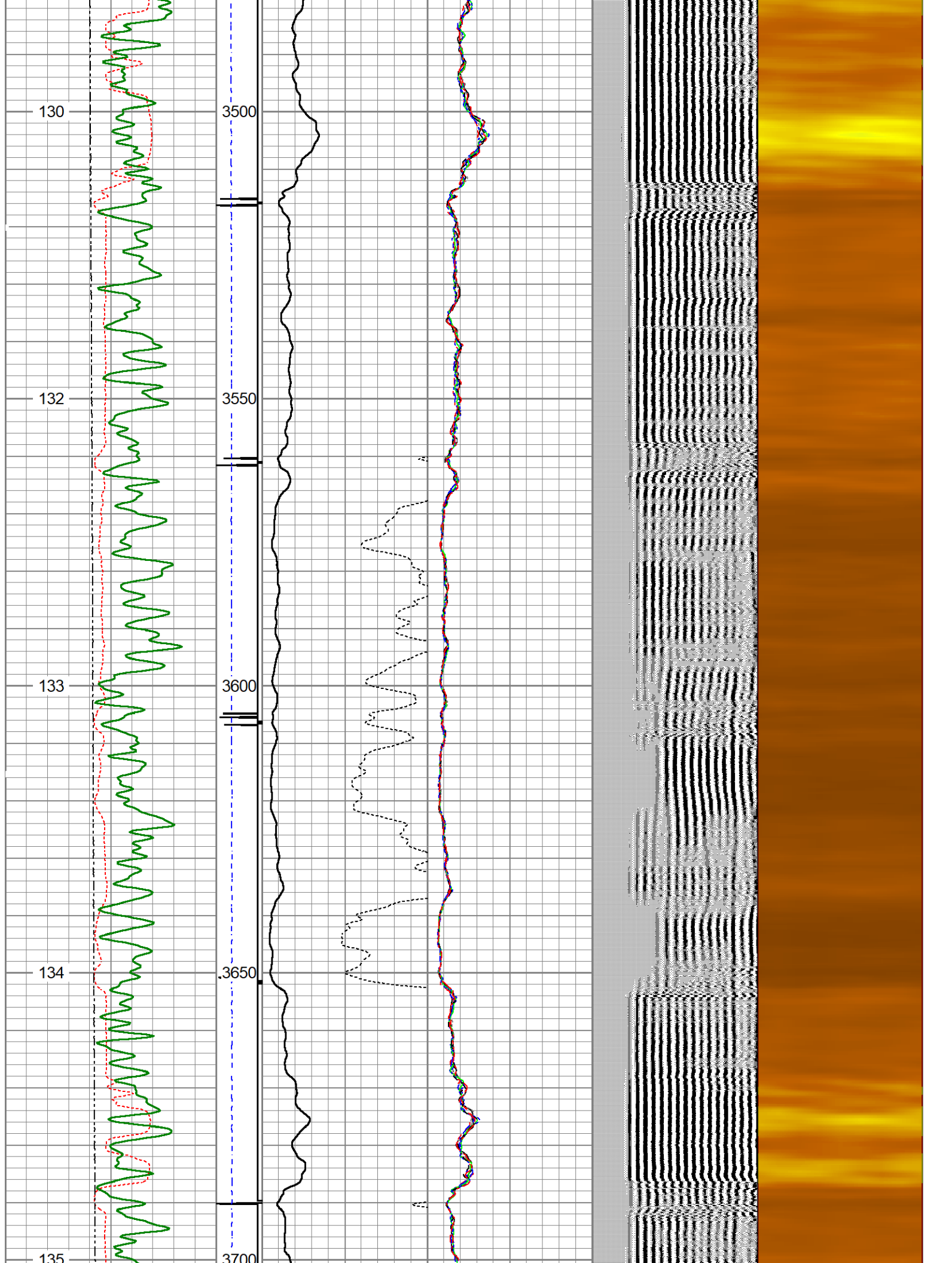


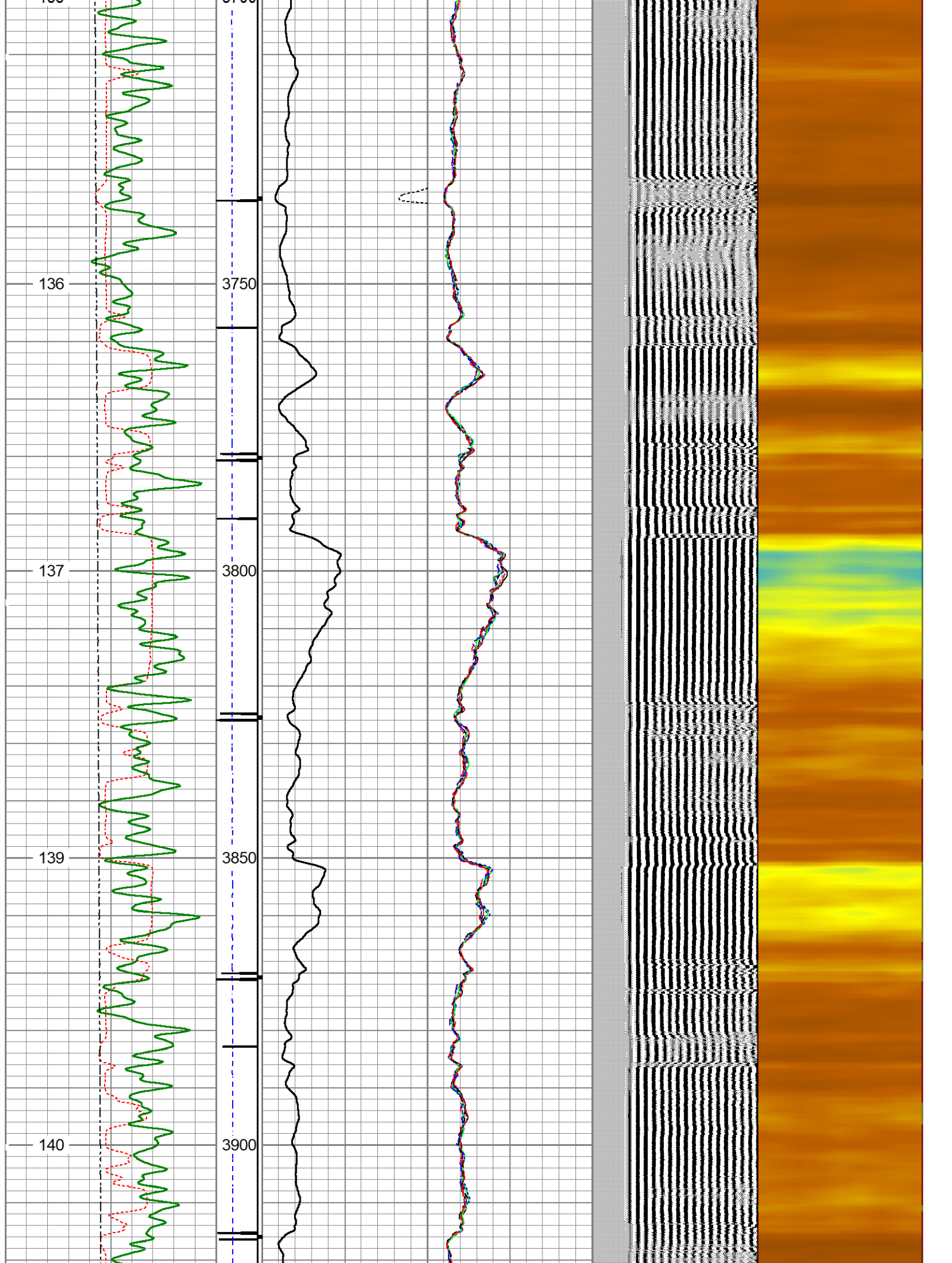


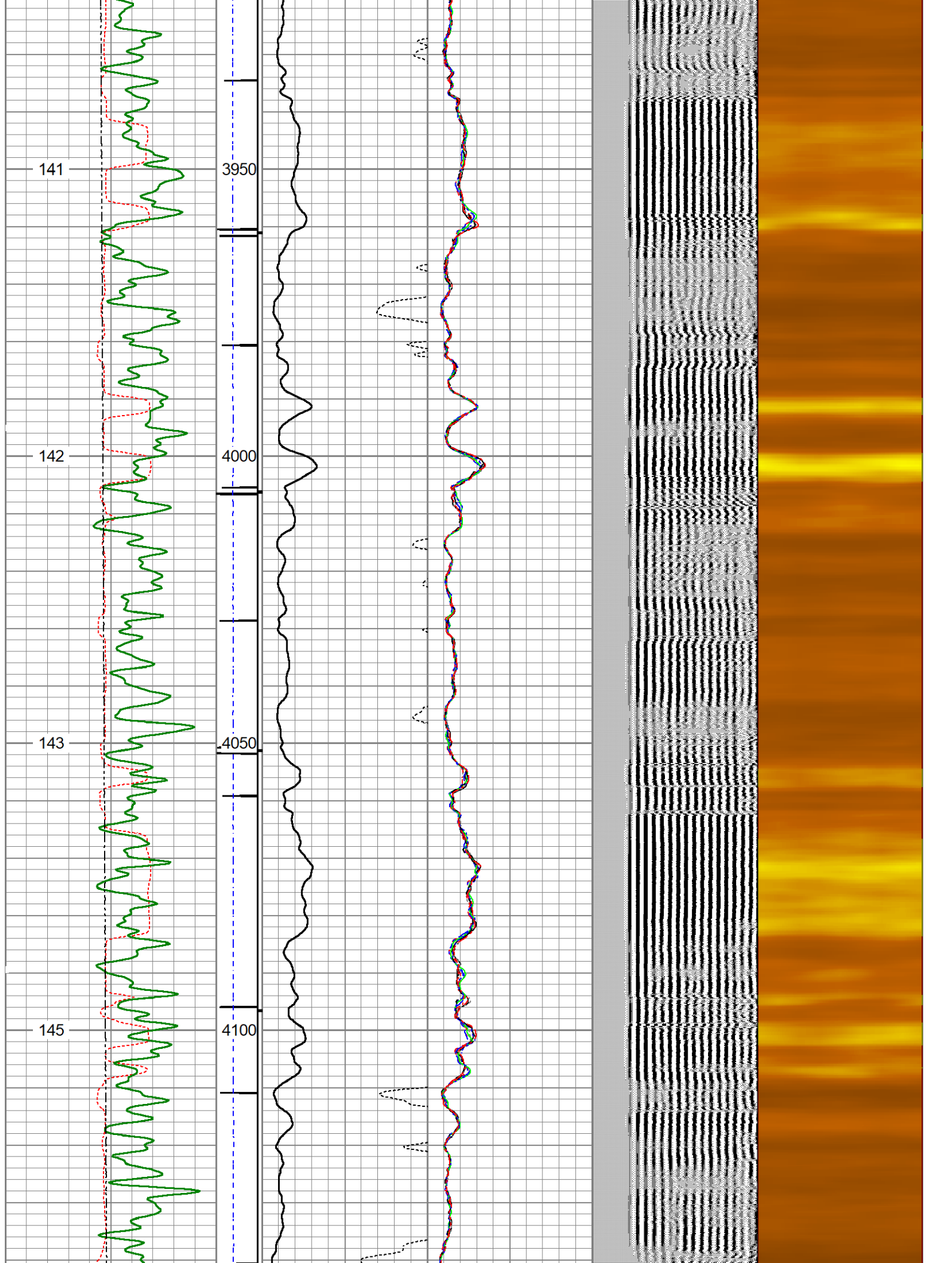












141

3950

142

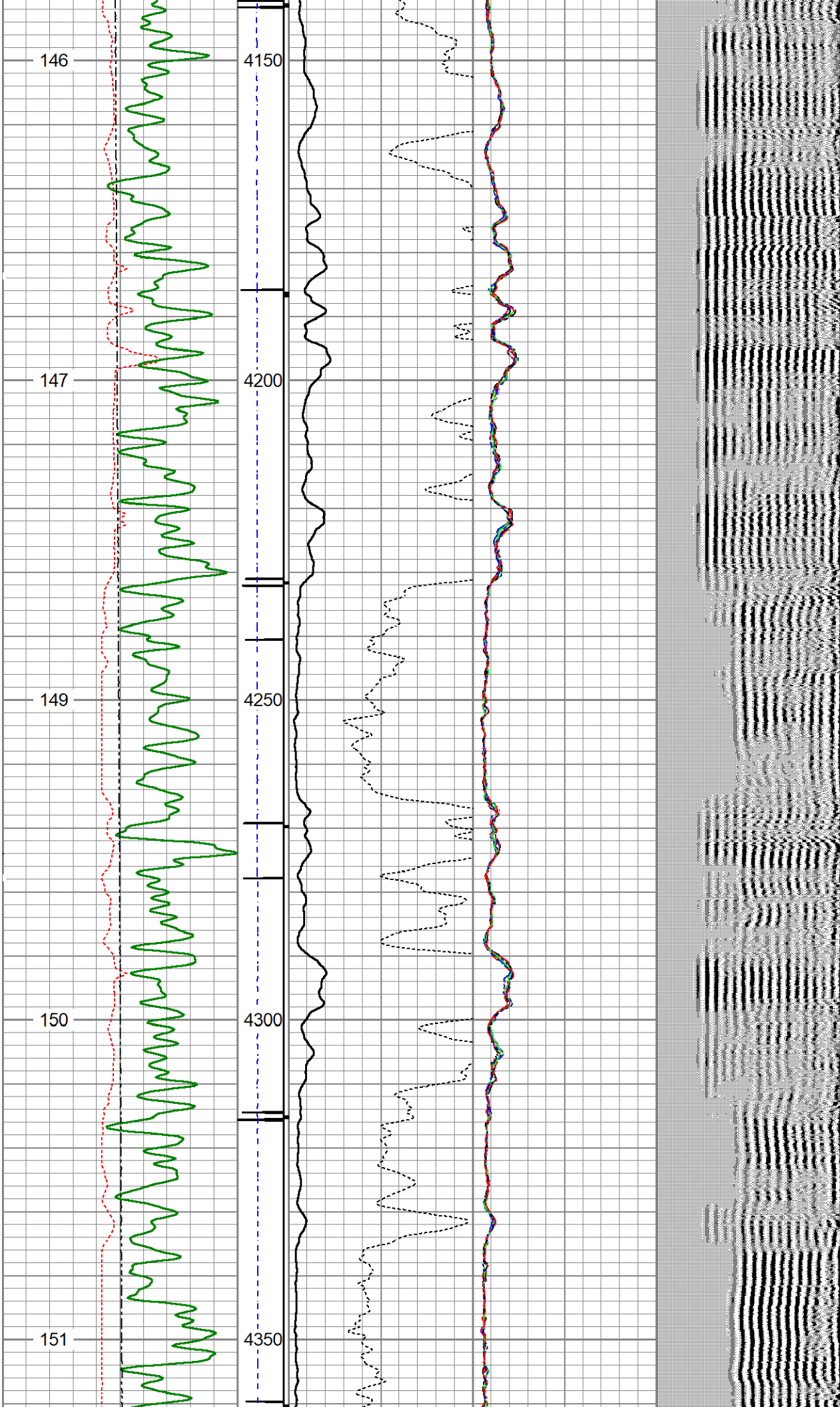
4000

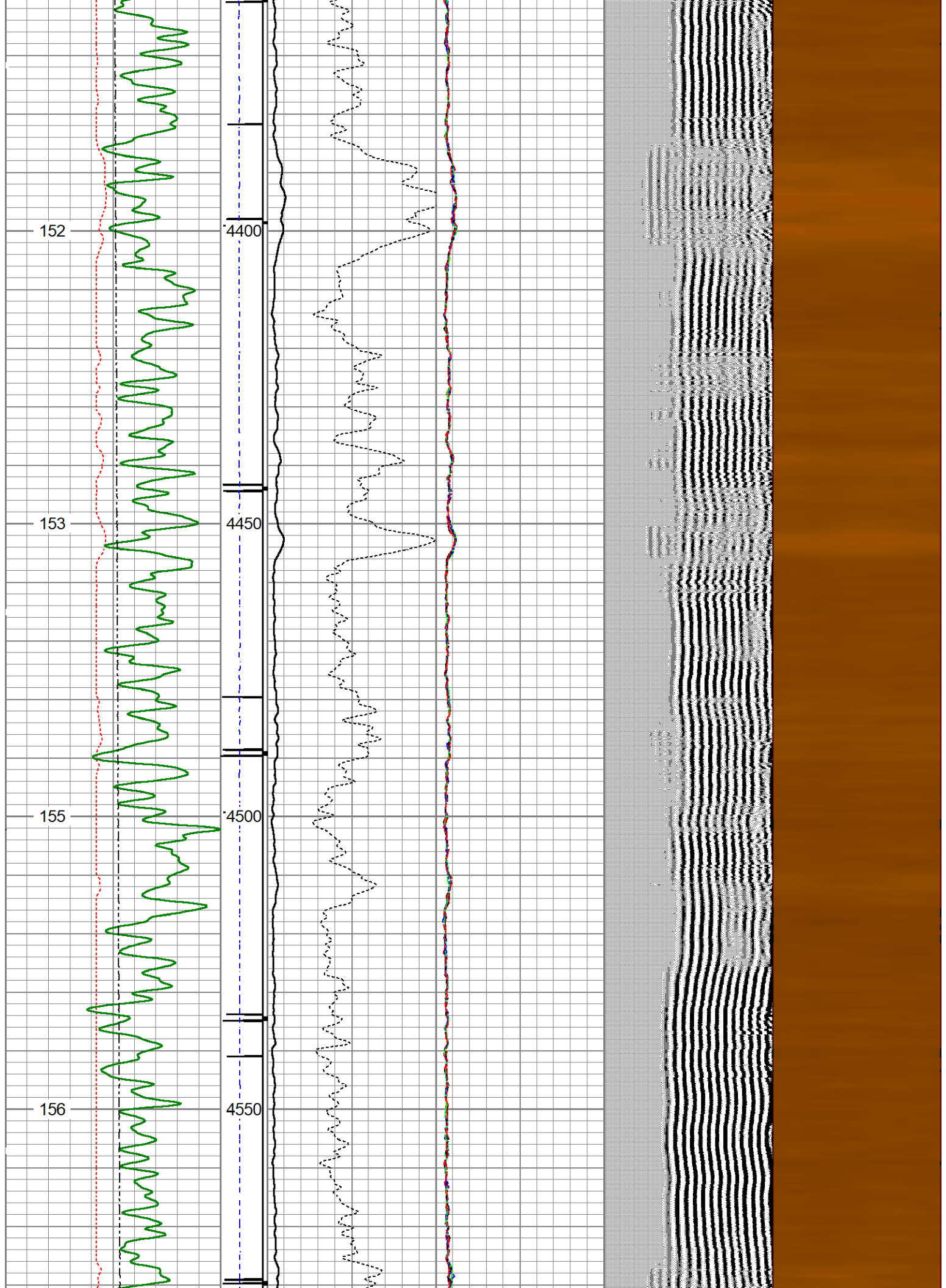
143

4050

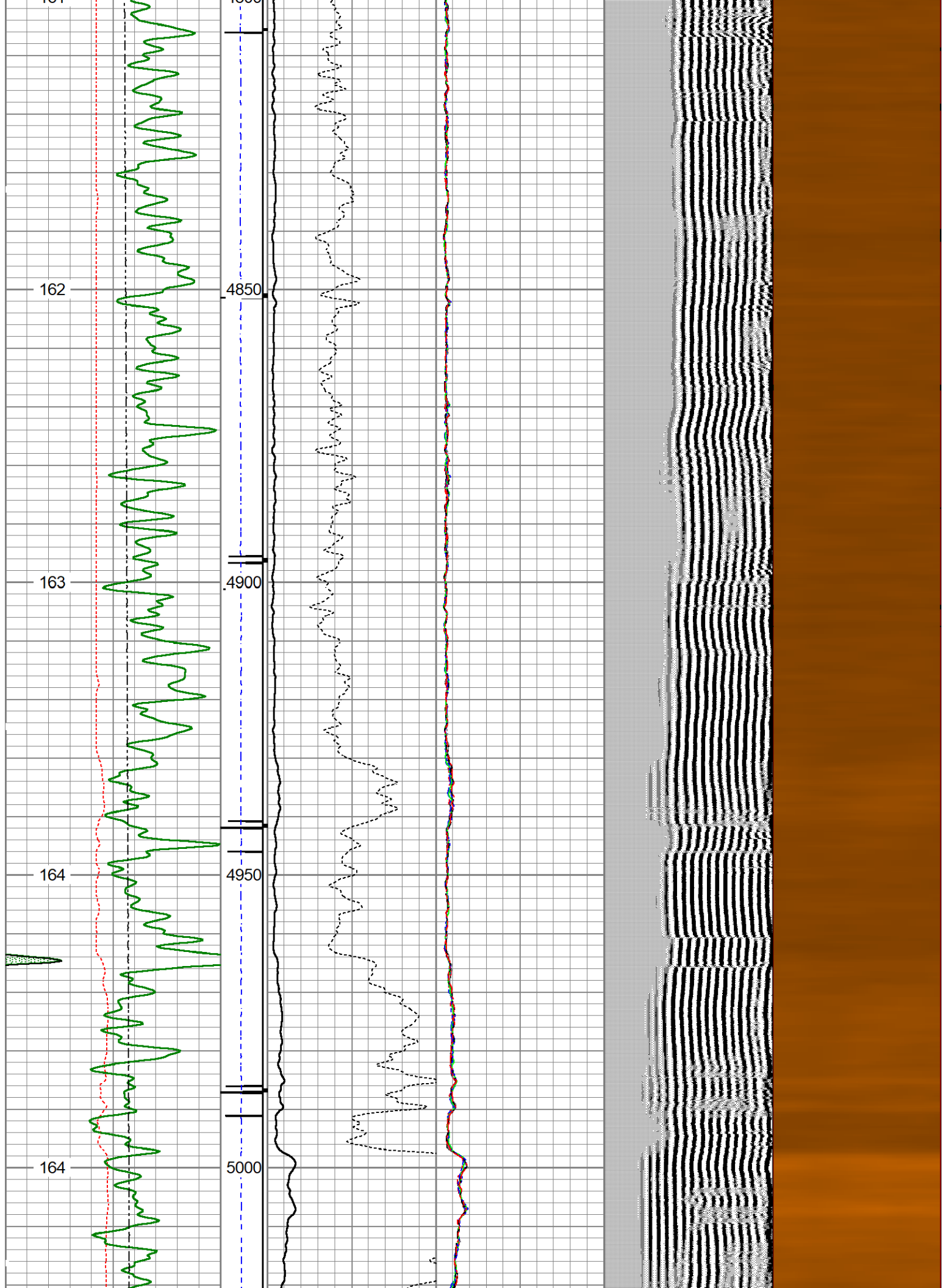
145

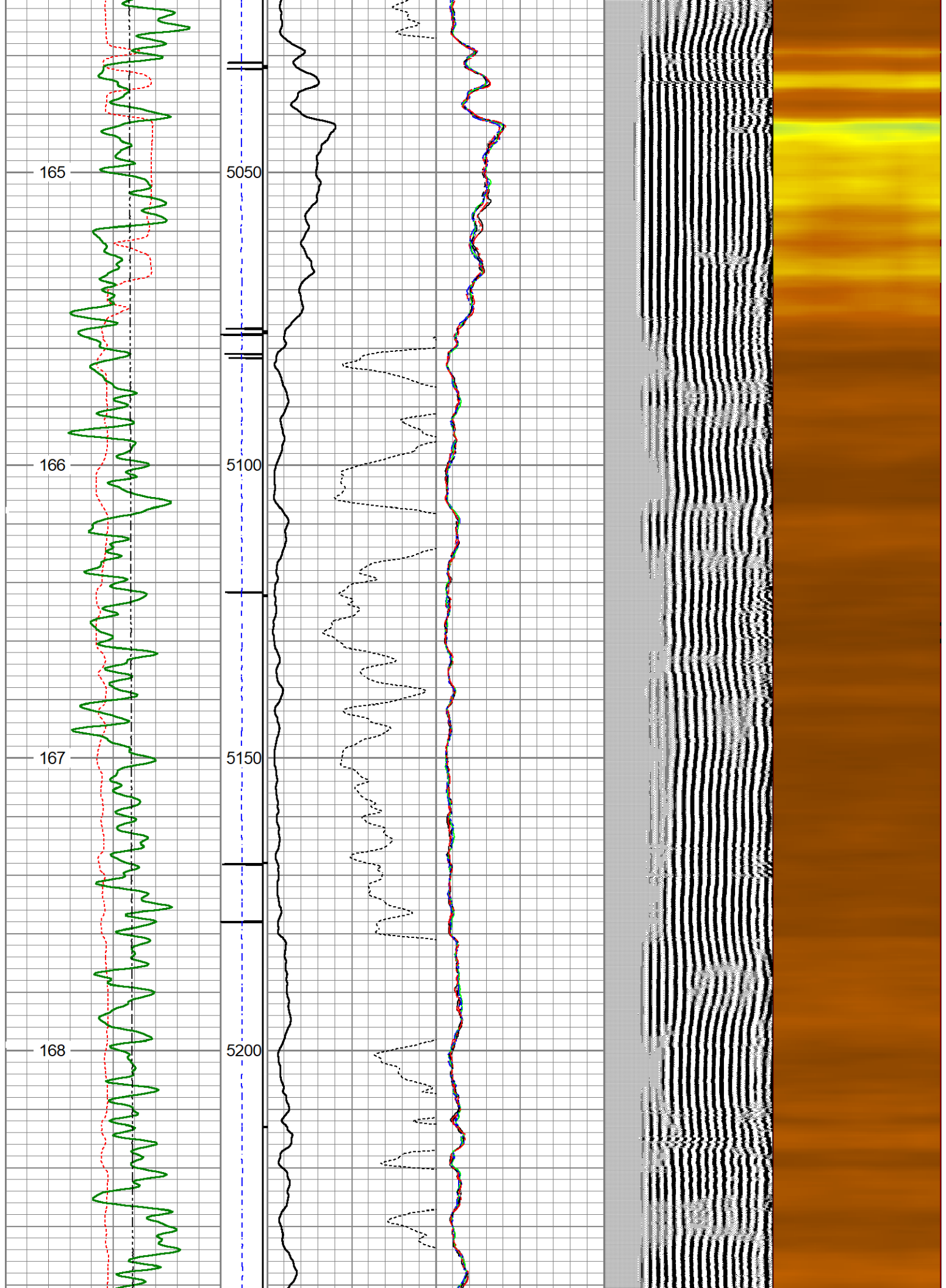
4100

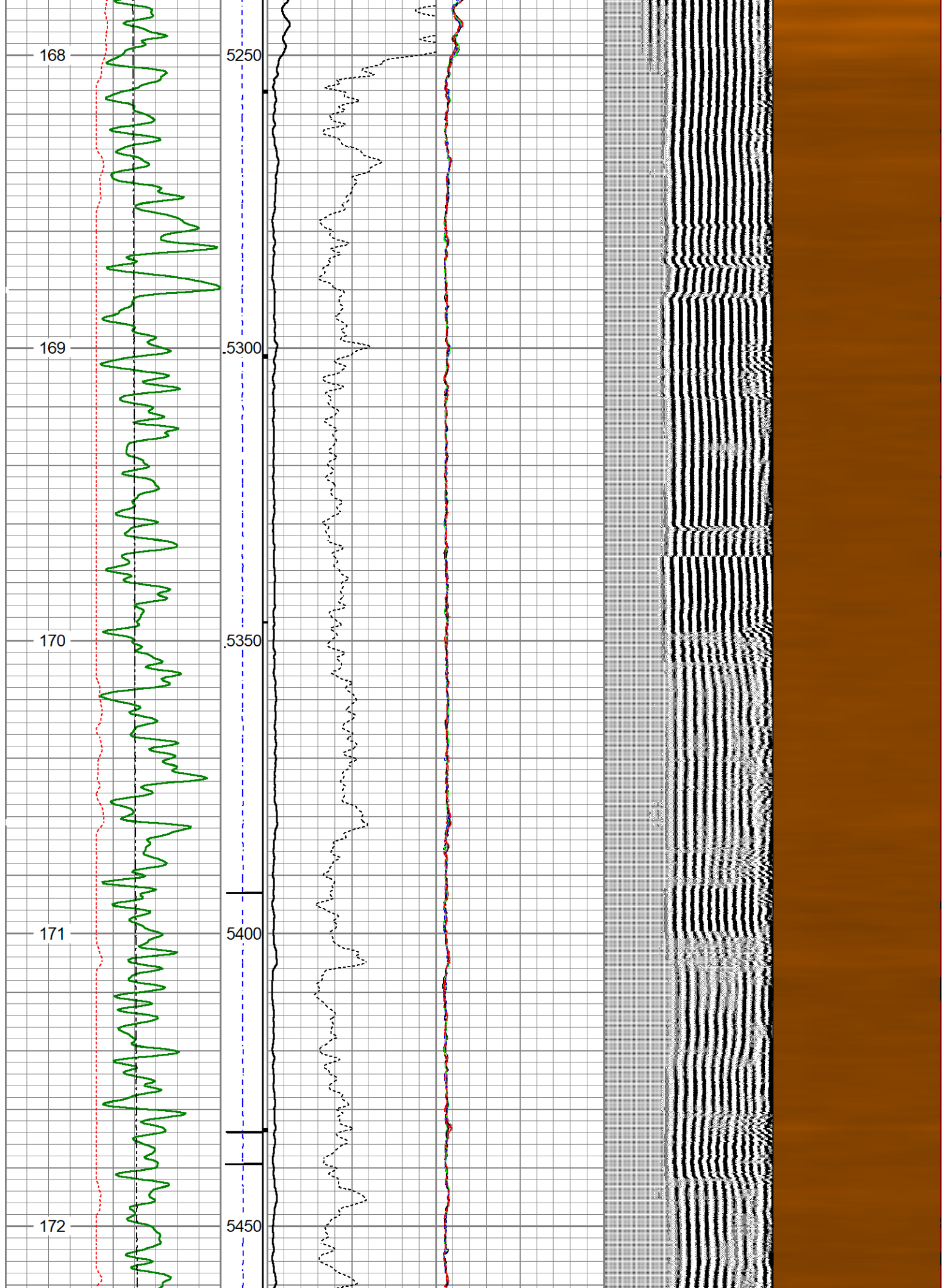


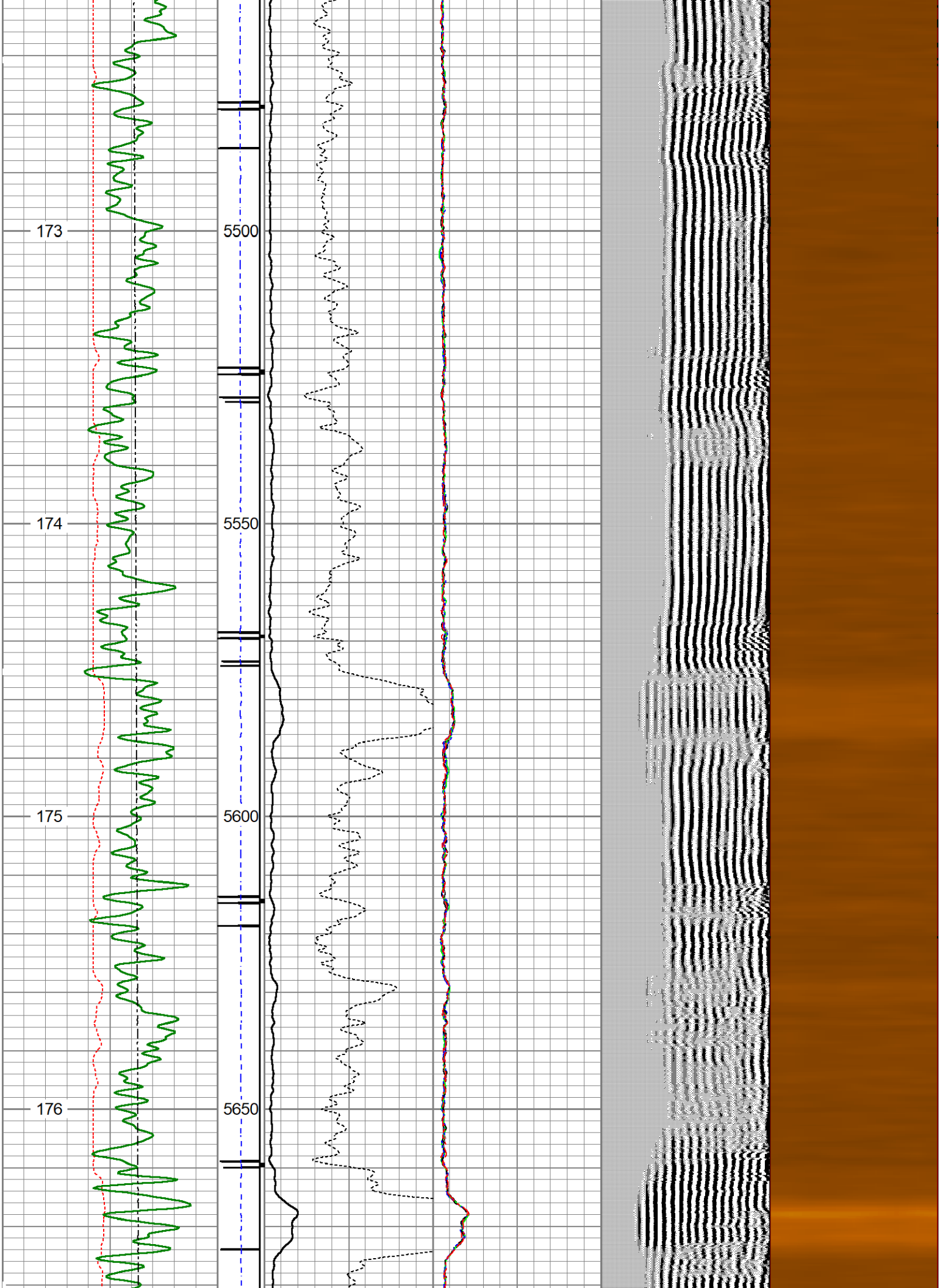


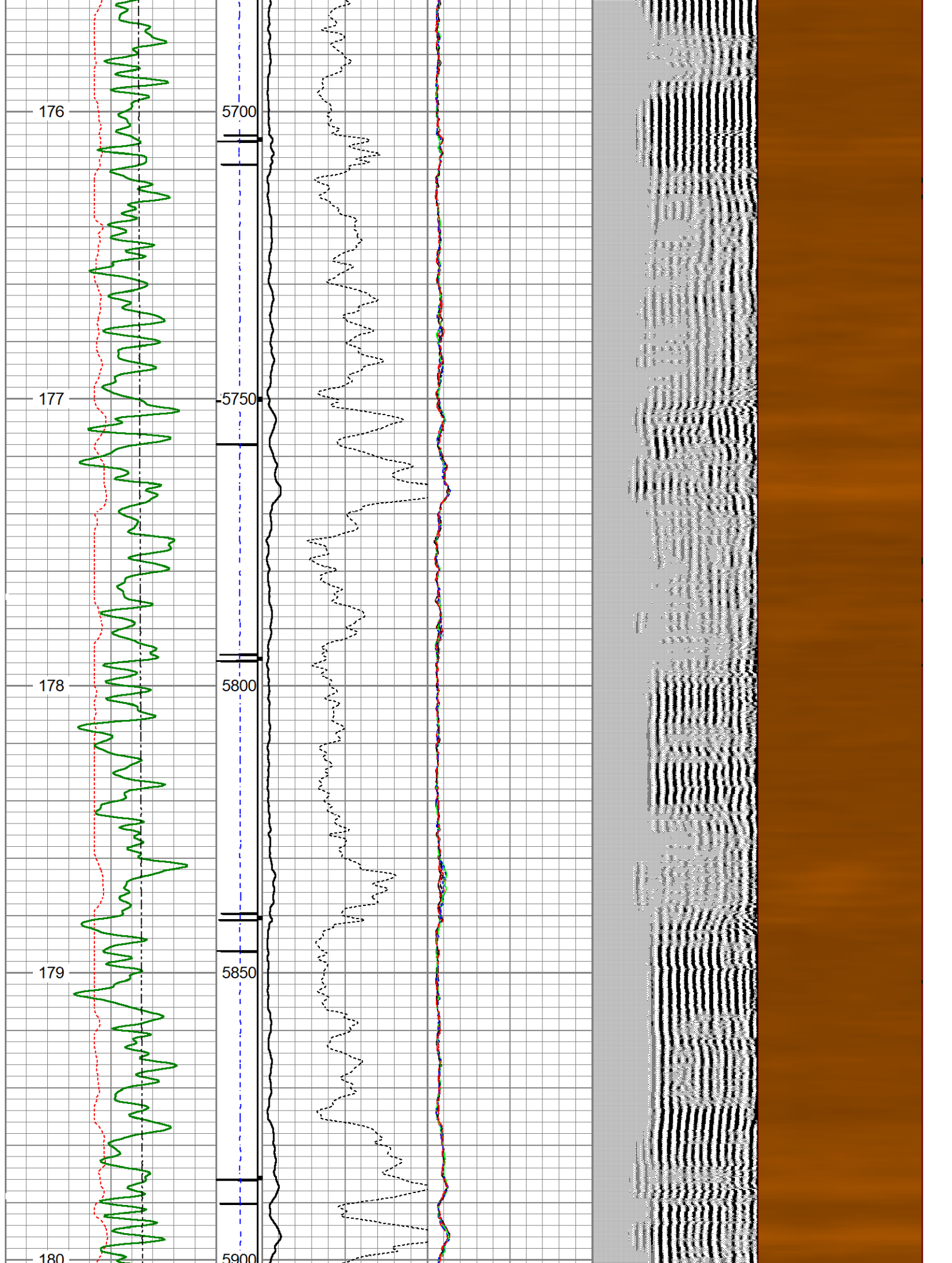


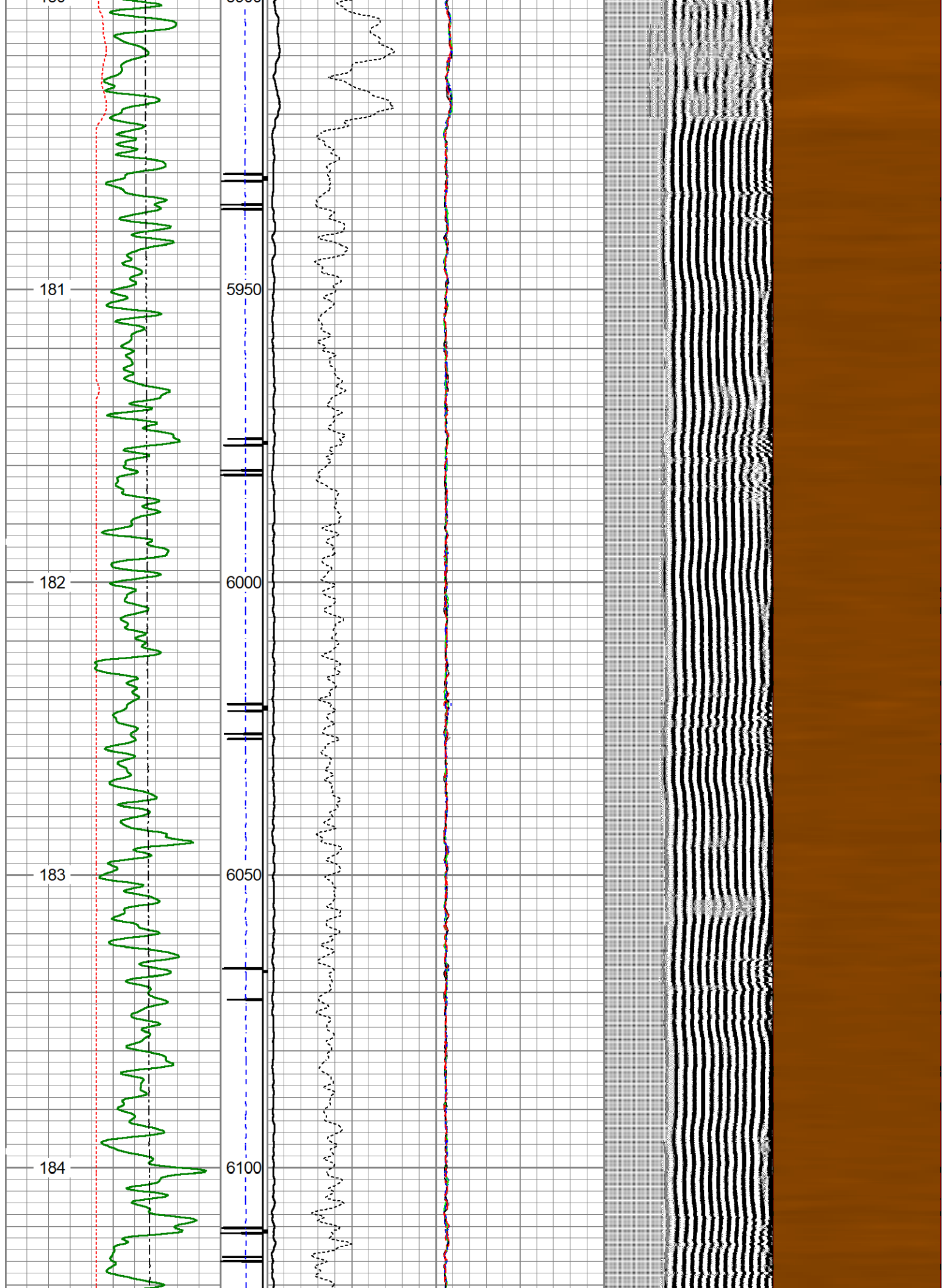


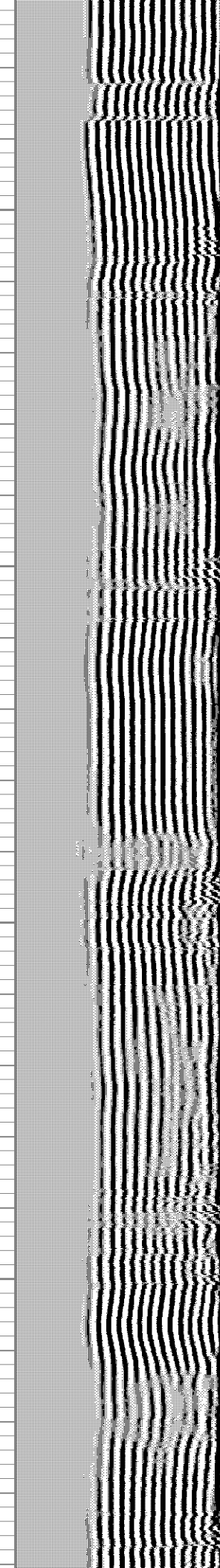
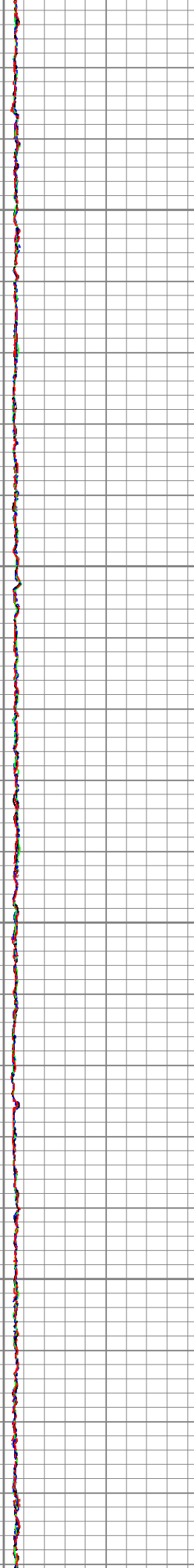
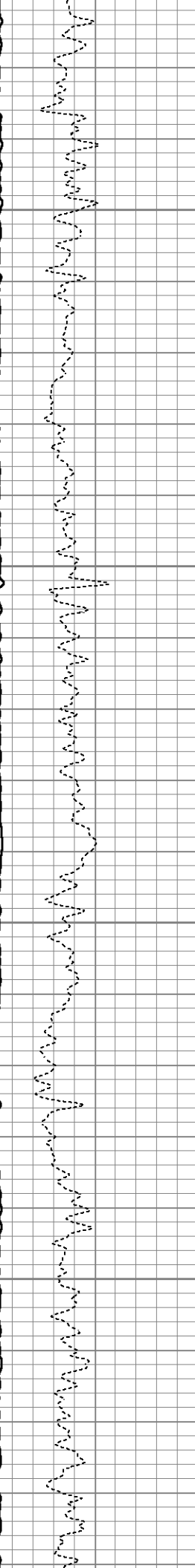
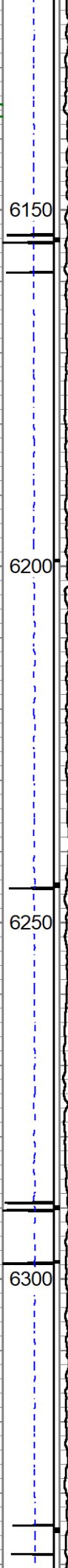
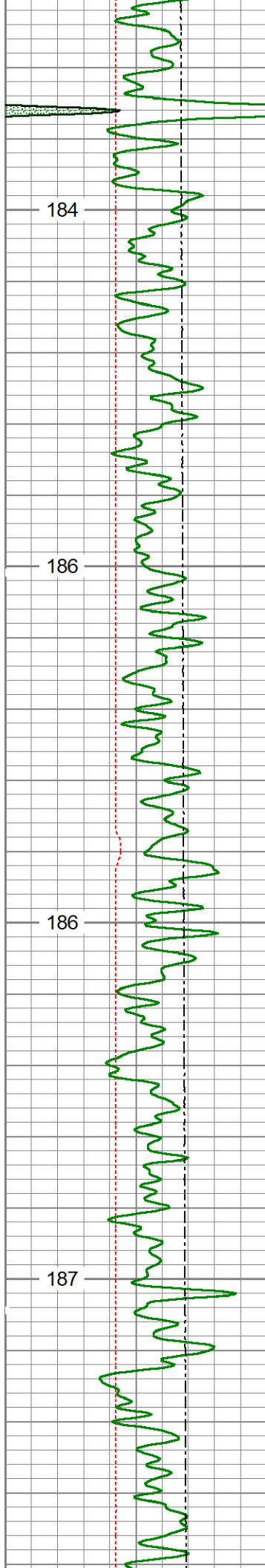


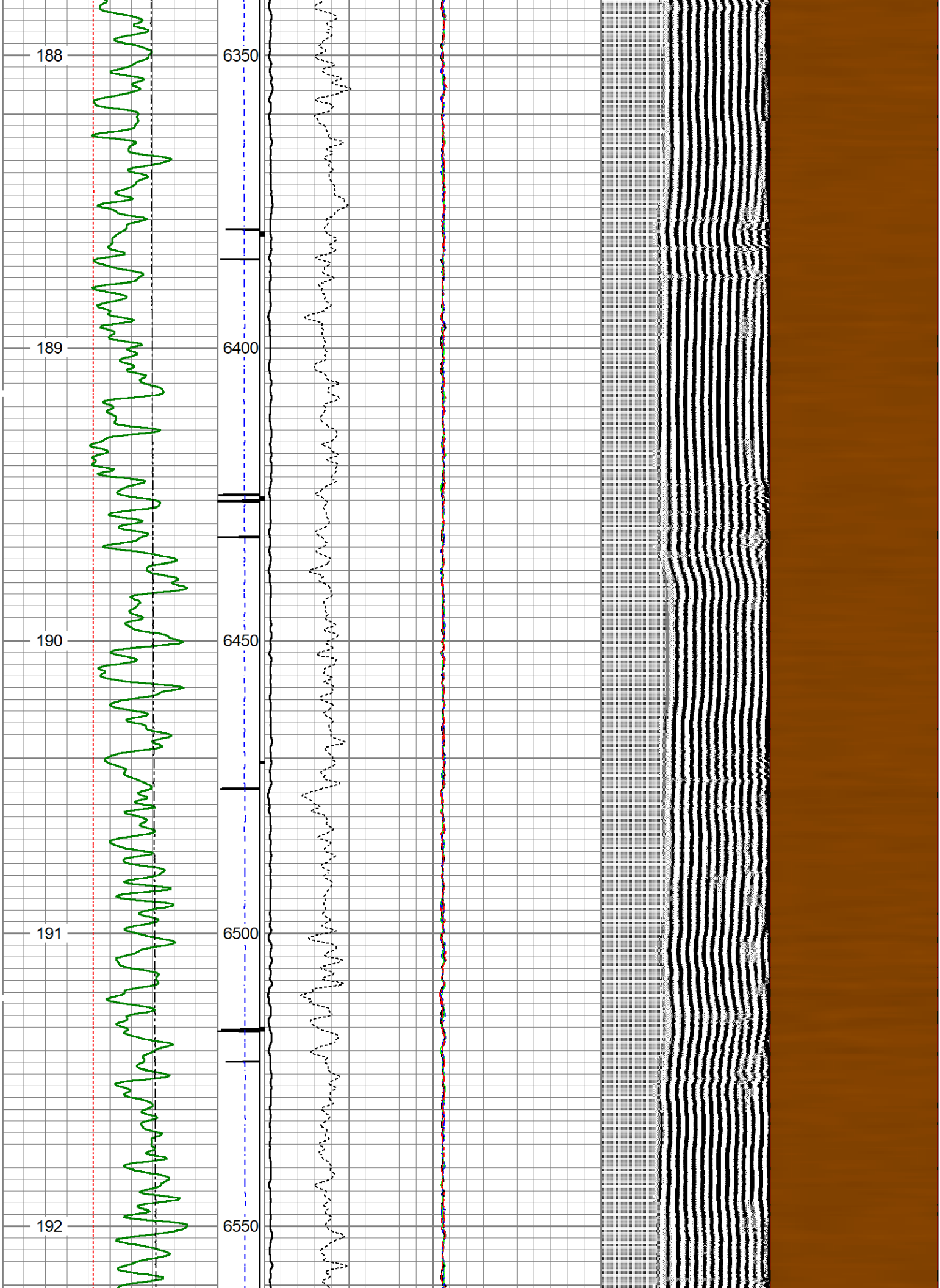


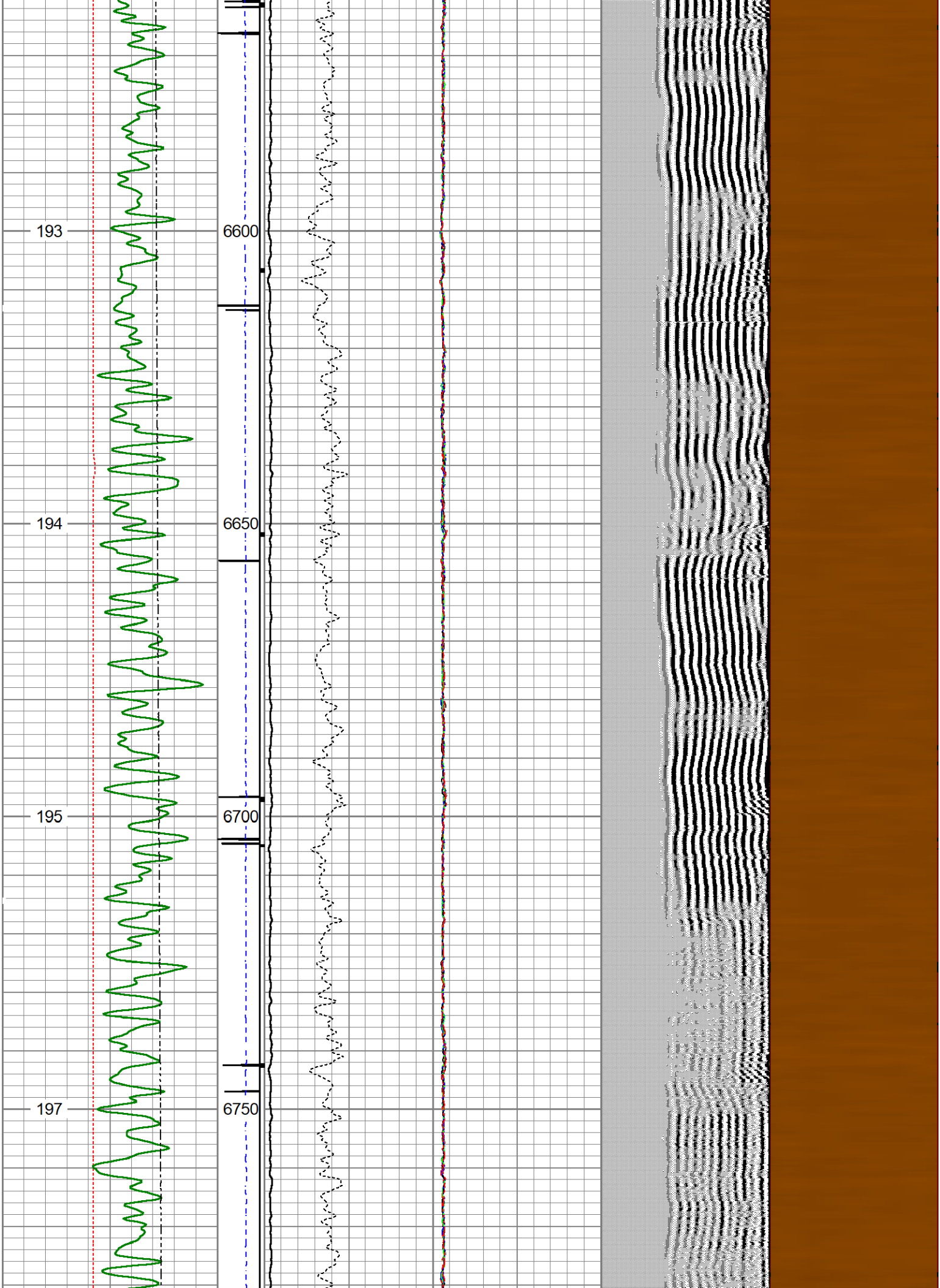


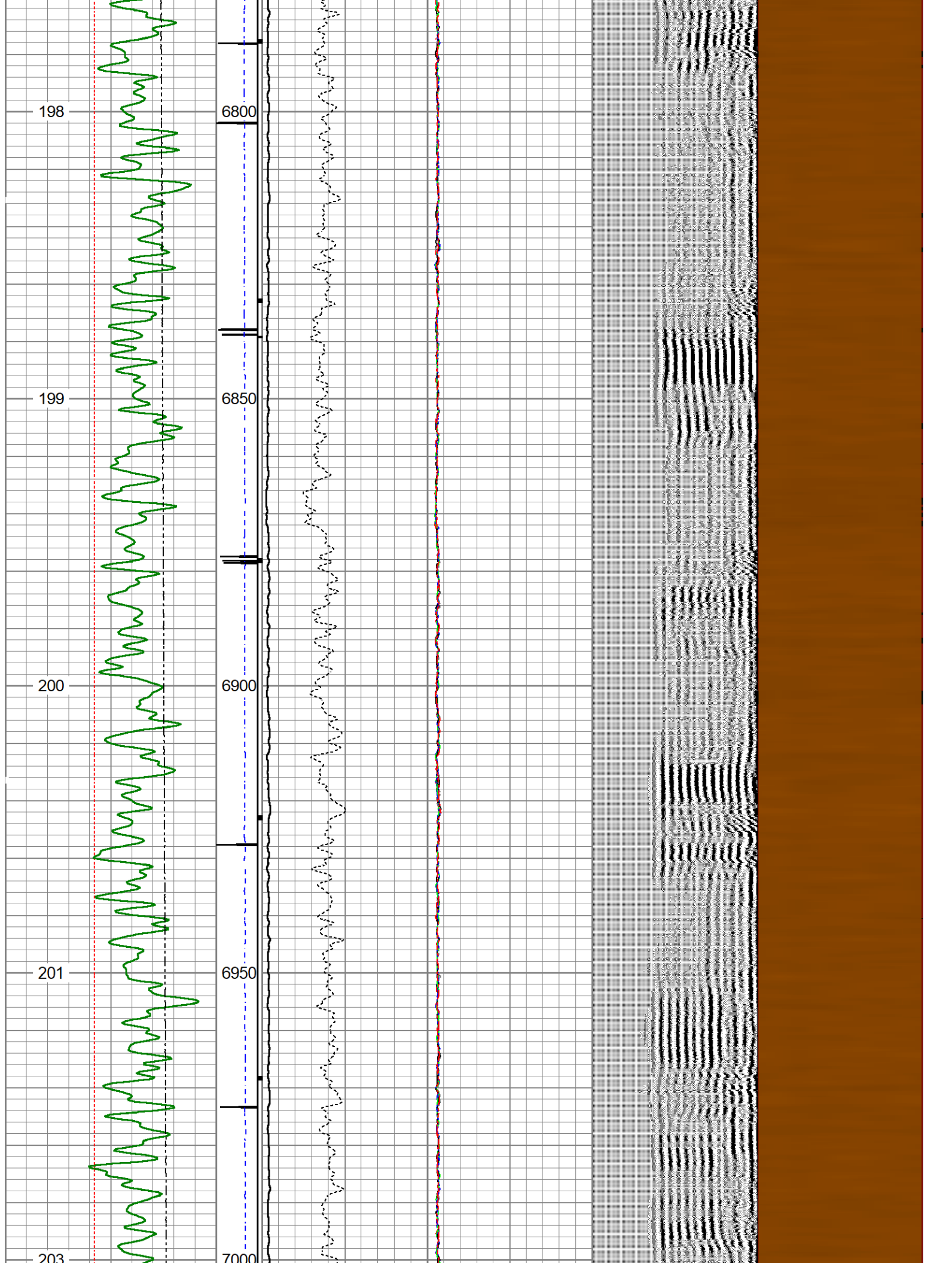


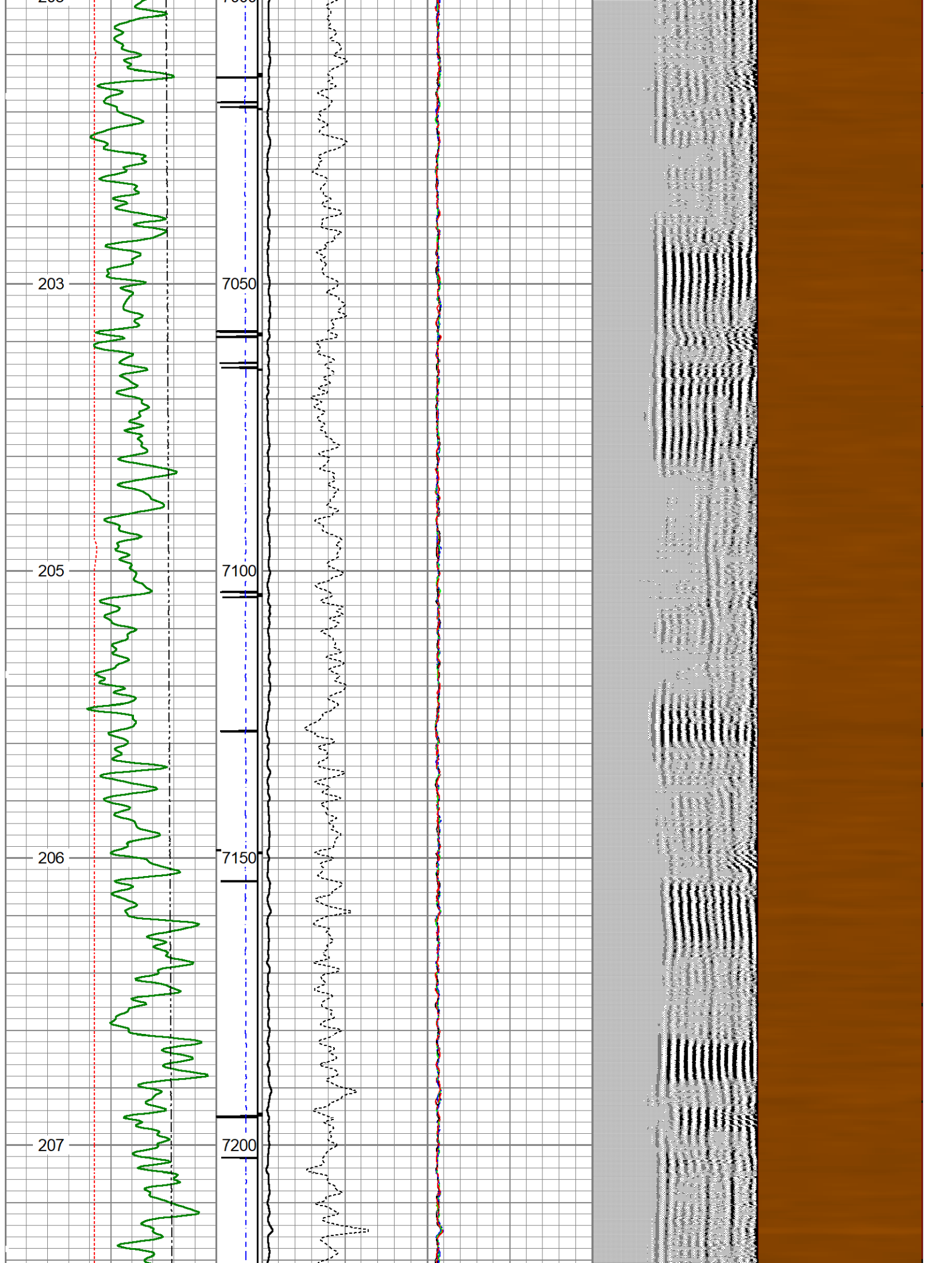


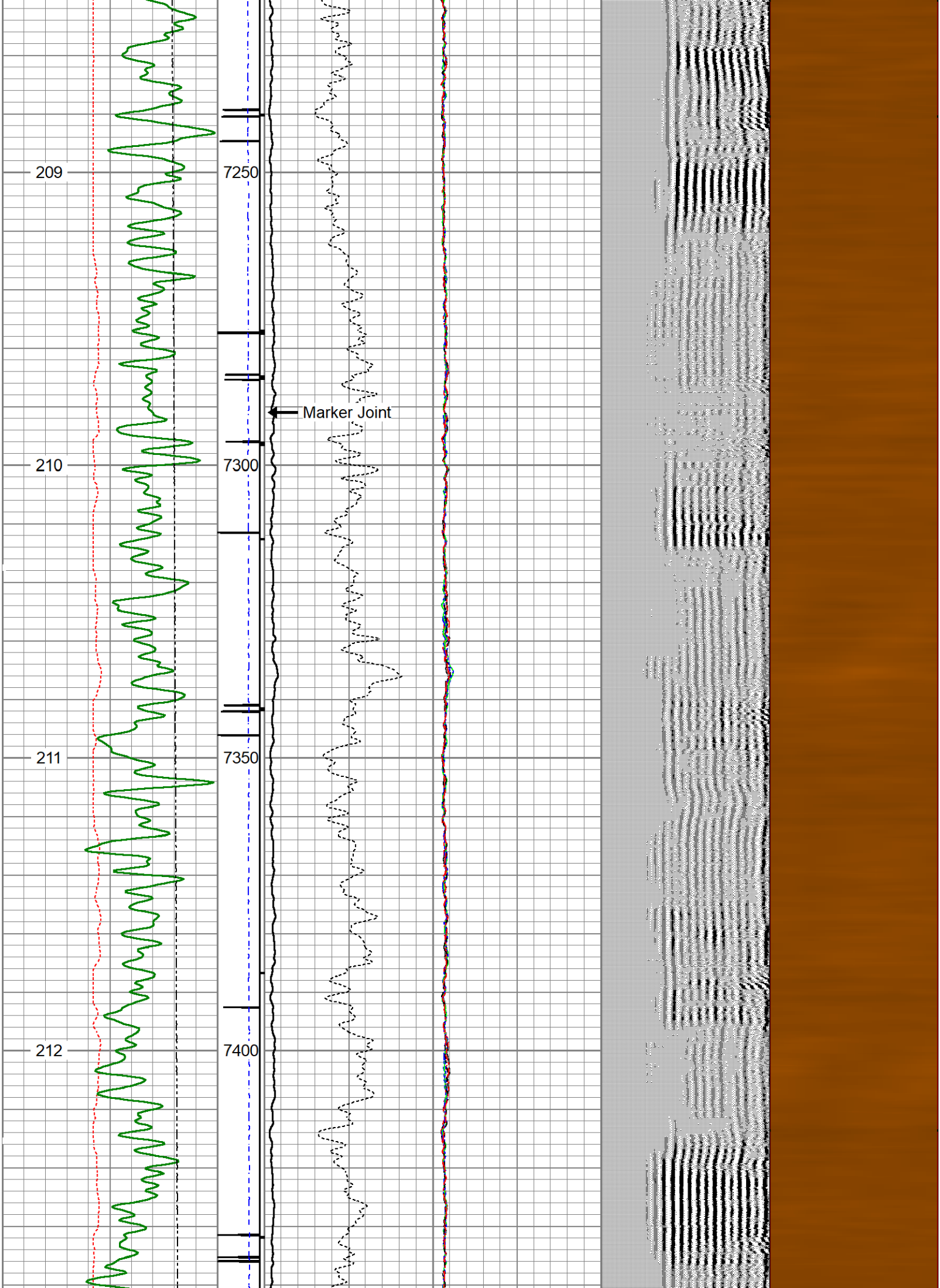


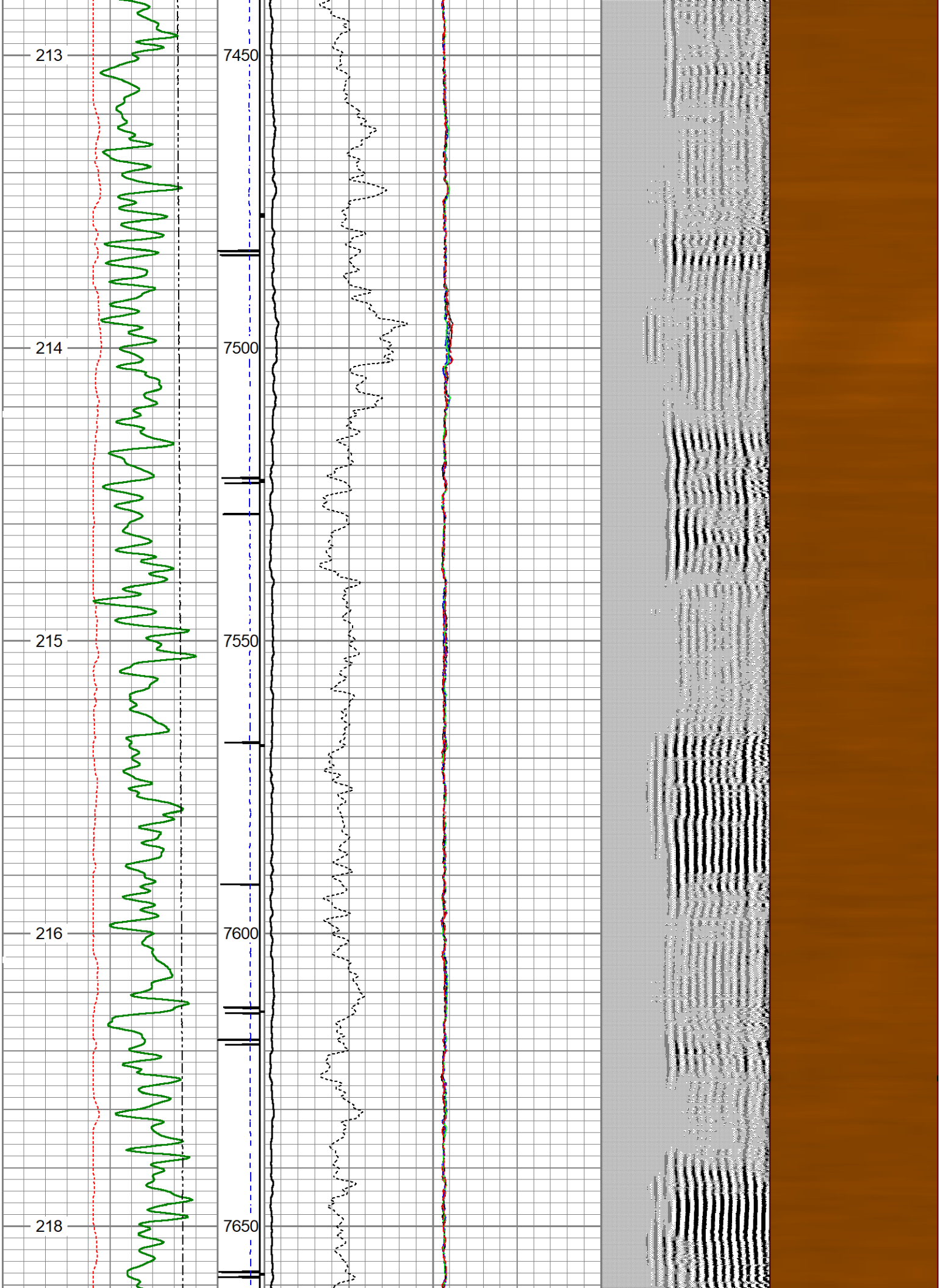


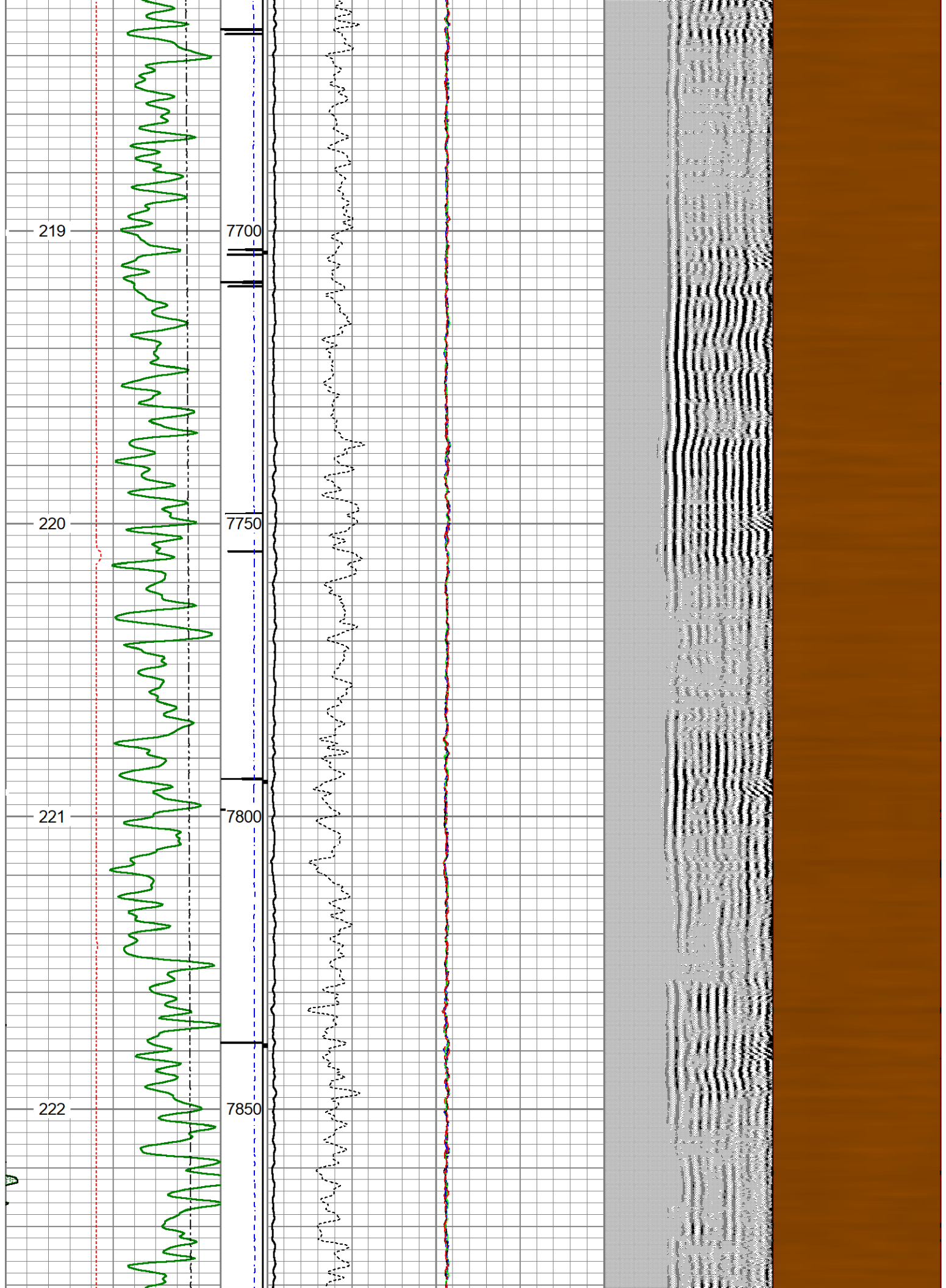












219

7700

220

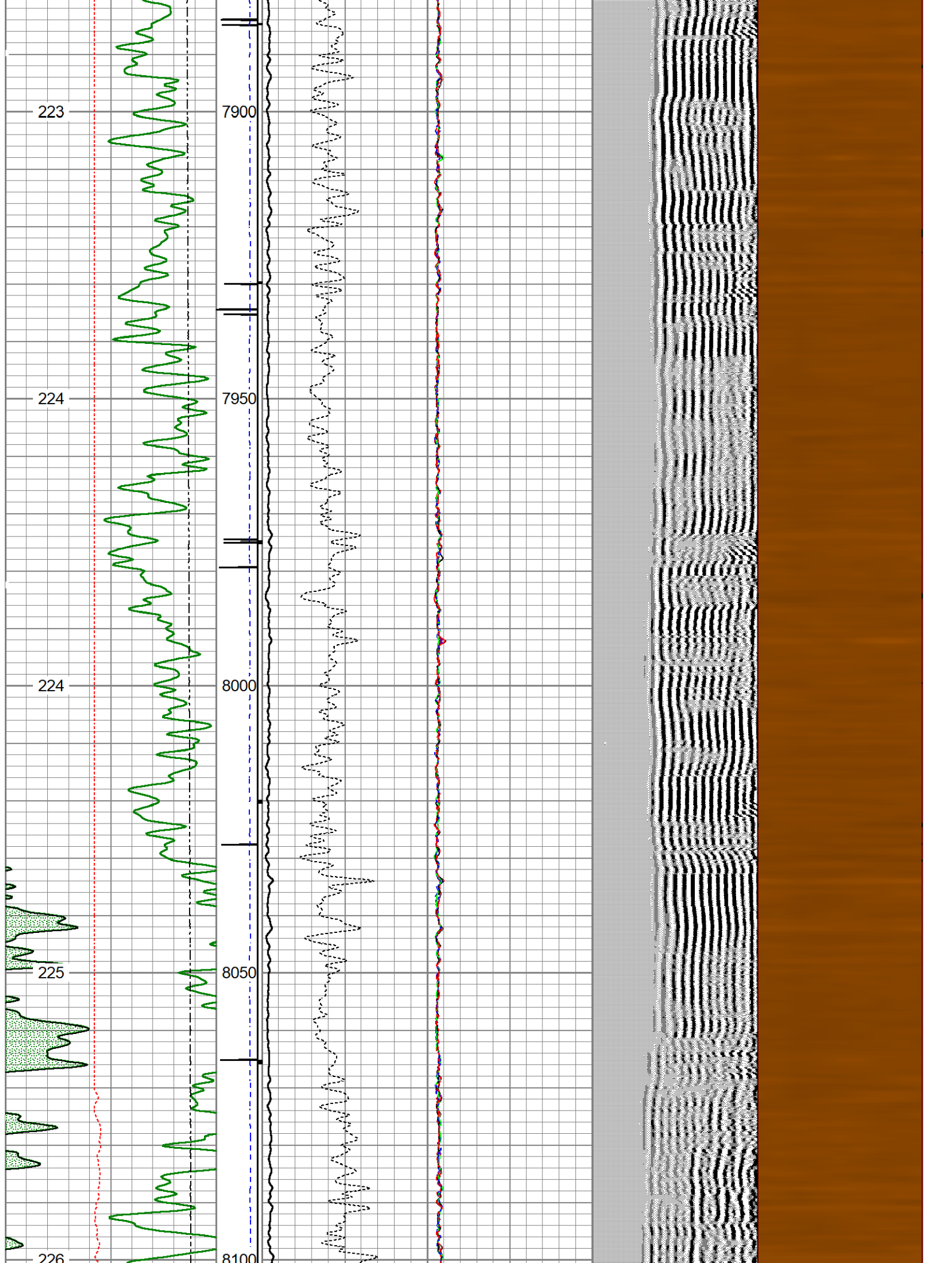
7750

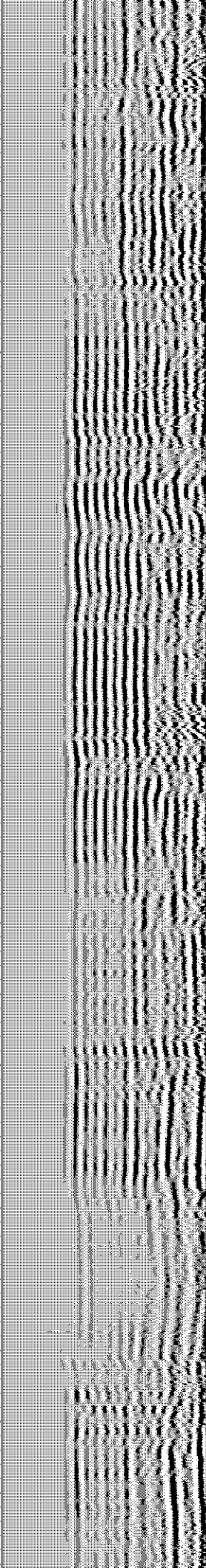
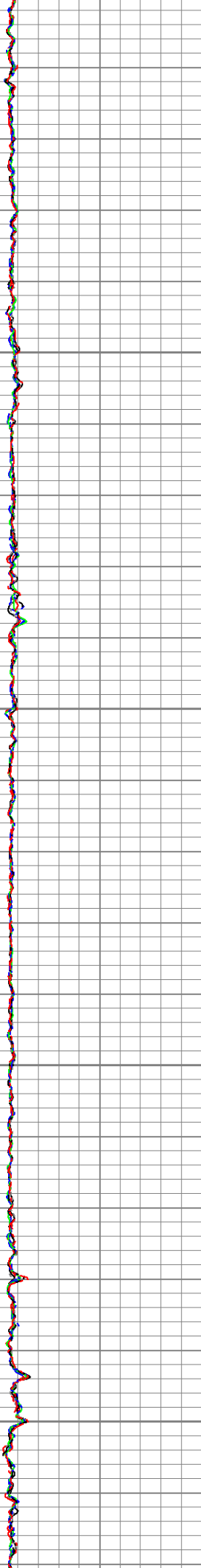
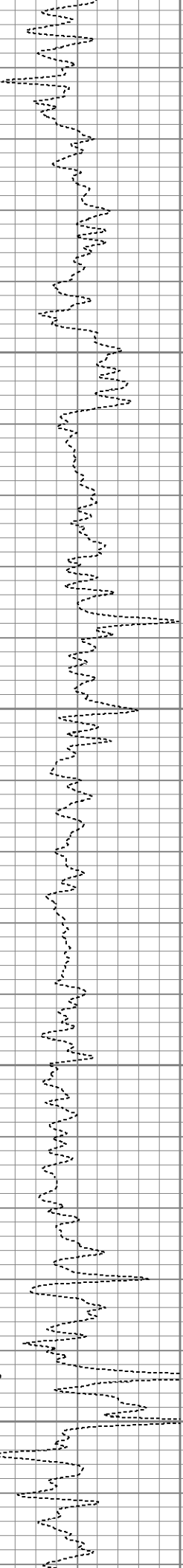
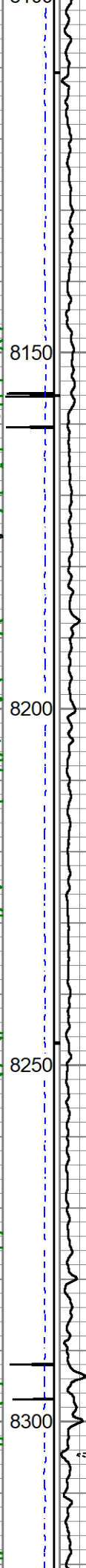
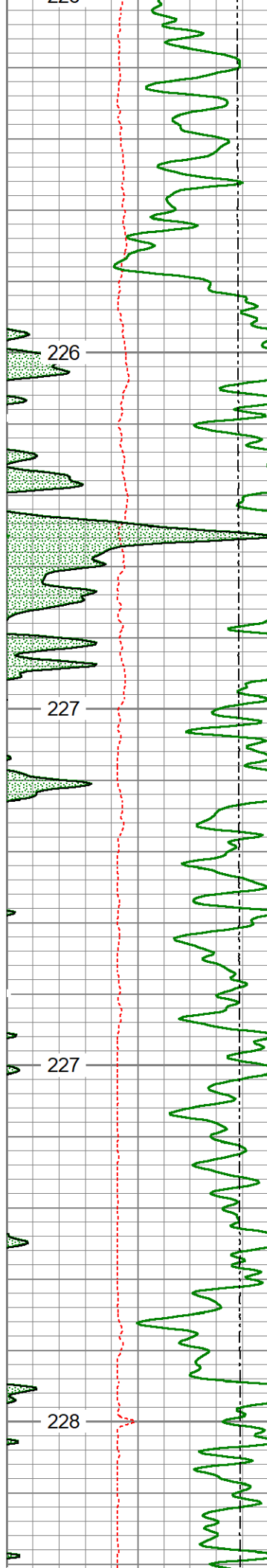
221

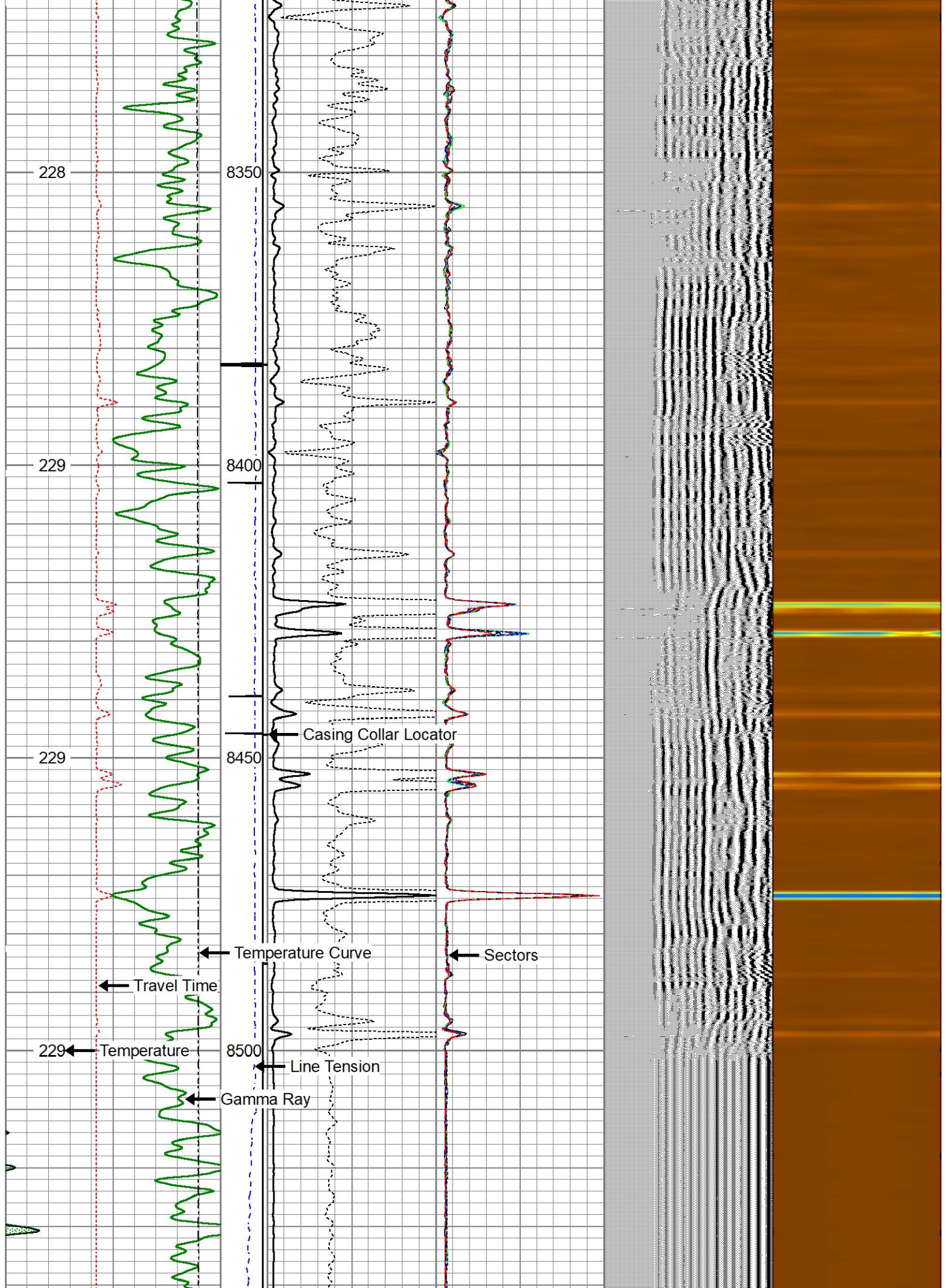
7800

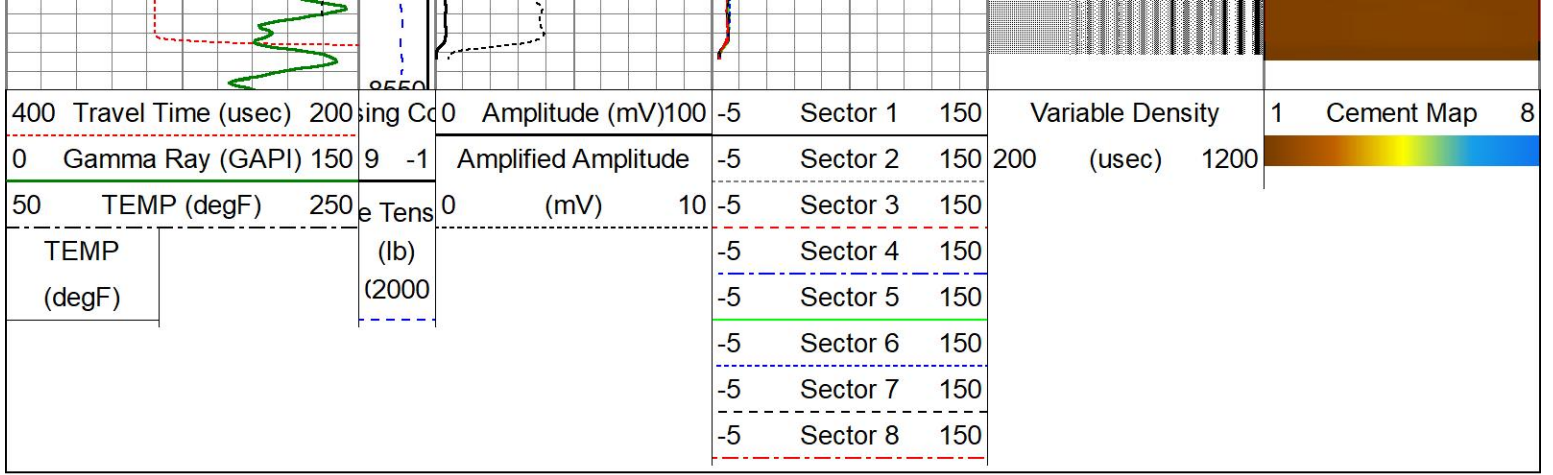
222


7850







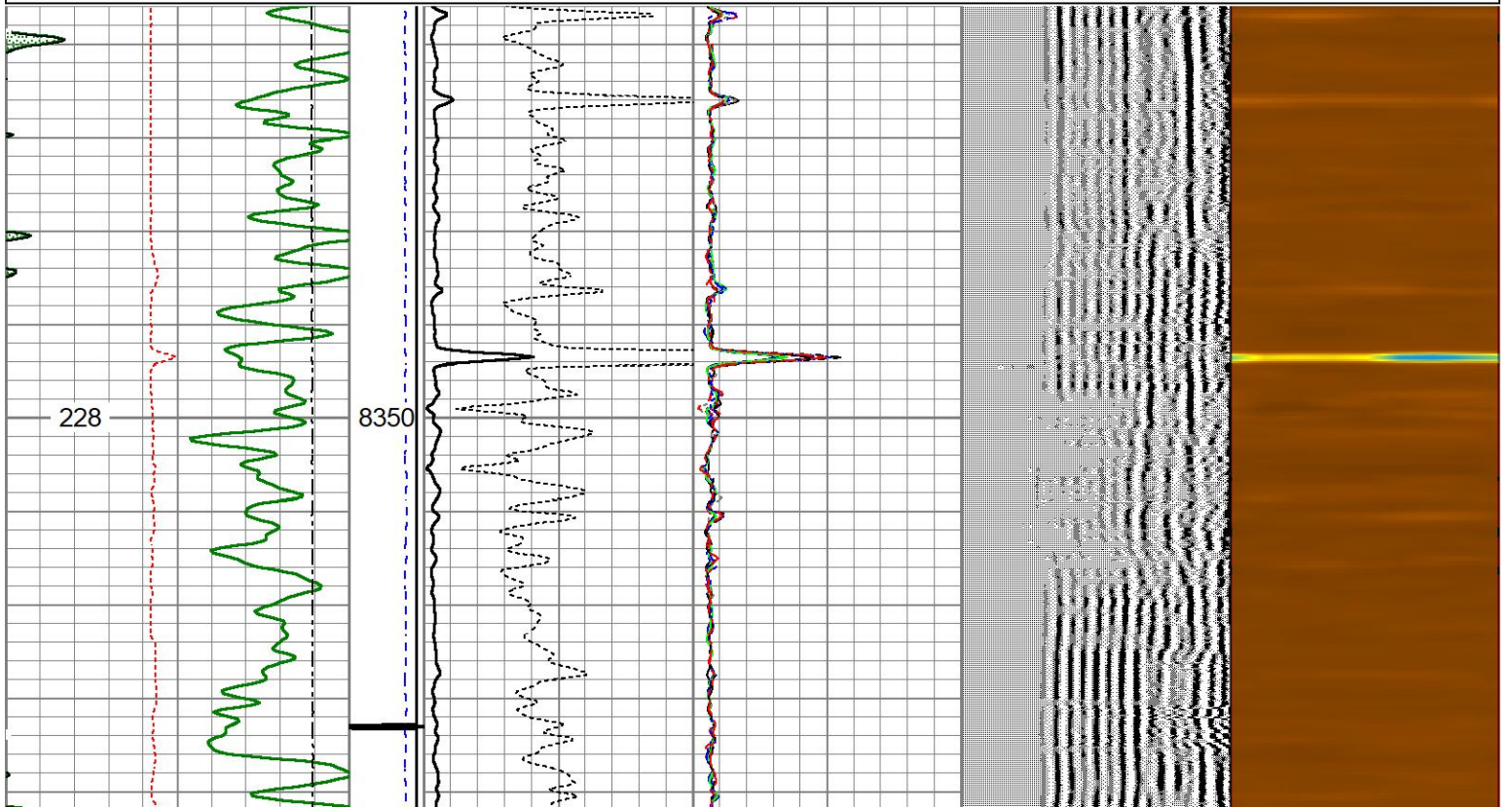
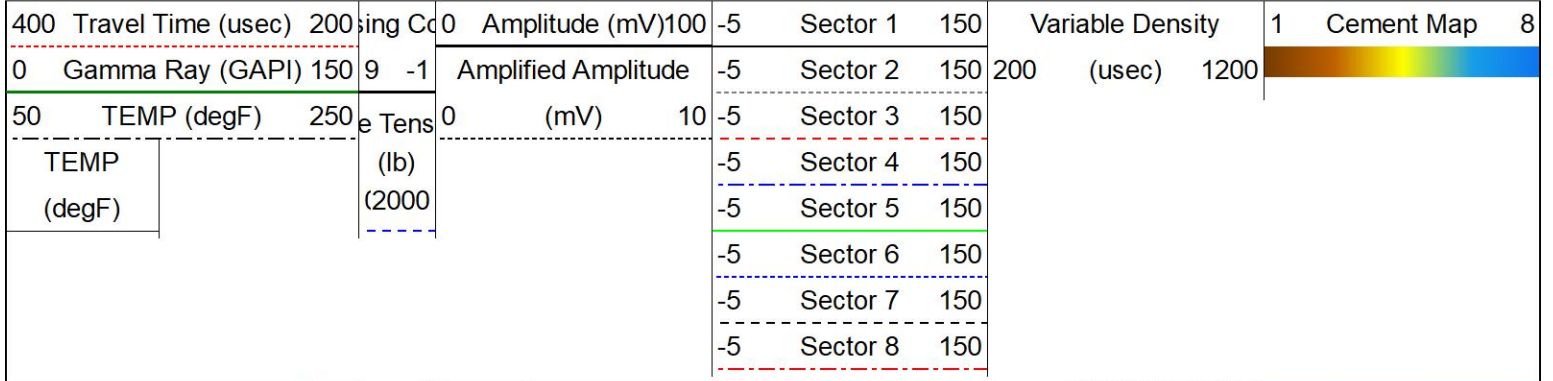


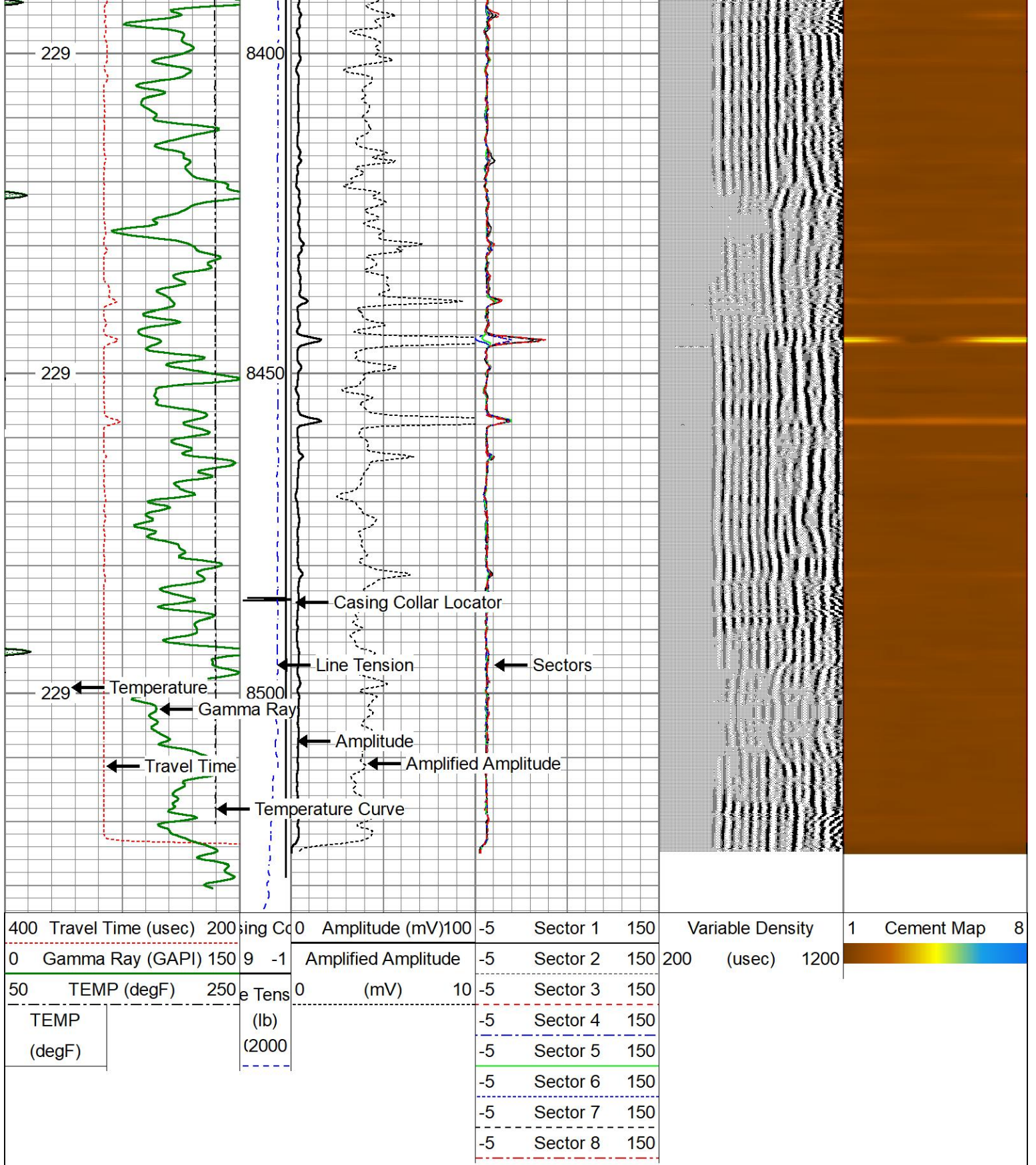


REPEAT PASS

0 PSI

Database File: gw_seltzer_376hn_rcbl_072921.db
 Dataset Pathname: pass5
 Presentation Format: rcbl_hh
 Dataset Creation: Thu Jul 29 09:57:28 2021
 Charted by: Depth in Feet scaled 1:240





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

Calibration Report

Database File gw_seltzer_376hn_rcbl_072921.db
 Dataset Pathname pass7
 Dataset Creation Thu Jul 29 10:02:29 2021

Gamma Ray Calibration Report

Type / Serial: Probe275dig / 080829

Background	Counts/Sec.	Gain	Offset	Jig	Units
Calibrator	0.0				cps
	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:	1464.733	ft	

Master Calibration, performed Thu Jul 29 09:31:43 2021:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.003	0.409	1.000	71.921	174.811	0.460
CAL	0.002	0.554				
5'	0.003	0.350	1.000	71.921	204.241	0.486
SUM						
S1	0.005	0.410	0.000	100.000	247.067	-1.300
S2	0.001	0.423	0.000	100.000	236.804	-0.260
S3	0.003	0.436	0.000	100.000	231.334	-0.754
S4	0.002	0.434	0.000	100.000	231.491	-0.446
S5	0.001	0.416	0.000	100.000	240.849	-0.282
S6	0.001	0.415	0.000	100.000	241.816	-0.351
S7	0.002	0.414	0.000	100.000	242.467	-0.364
S8	0.001	0.404	0.000	100.000	248.385	-0.309

Internal Reference Calibration, performed (Not Performed):

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	0.002	0.554	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-Probe275dig (080829) HT Probe 2 3/4" Gamma CCL	6.40	2.75

GR

1.42



Dataset: gw_seltzer_376hn_rcbl_072921.db: field/well/run1/pass7
Total length: 16.60 ft
Total weight: 152.00 lb
O.D.: 2.75 in



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