



**RADIAL CEMENT BOND
GAMMA RAY
CCL
TEMP**

**Company OCCIDENTAL PETROLUEM CORP.
Well DAMORE 18-5HZ
Field WATTENBERG
County WELD State COLORADO**

Location: API # : 05-123-50772 Other Services

SW NW

NONE

SEC 18 TWP 5N RGE 67W

Permanent Datum GROUND LEVEL Elevation 4922'
Log Measured From KELLY BUSHING = 26'
Drilling Measured From KELLY BUSHING

Elevation
K.B. 4948'
D.F. 4947'
G.L. 4922'

Date 18 MAY 2020

Run Number	ONE		
Depth Driller	20415'		
Depth Logger	6380'		
Bottom Logged Interval	6380'		
Top Log Interval	SURFACE		
Open Hole Size	8.50"		
Type Fluid	WATER		
Density / Viscosity	~8.3#		
Max. Recorded Temp.	207 DEG F		
Estimated Cement Top	2882'		
Time Well Ready	ROA		
Time Logger on Bottom	07.40		
Equipment Number	W-205		
location	WINDSOR, CO		
Recorded By	Z. EMICK		
Witnessed By	R. PEVLER		

Borehole Record				Tubing Record			
Run Number	Bit	From	To	Size	Weight	From	To
ONE	13.50"	0'	1870'				
TWO	8.50"	1870'	20415'				
Casing Record	Size		Wgt/Ft		Top		Bottom
Surface String	9-5/8"		36# J-55		0'		1860'
Prot. String							
Production String	5-1/2"		17# HCP110		0'		20408'
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 CORRELATED TO SHORT JOINT AT 6343' - 6365'

LOG RAN WITH 2800 PSI ON CASING.

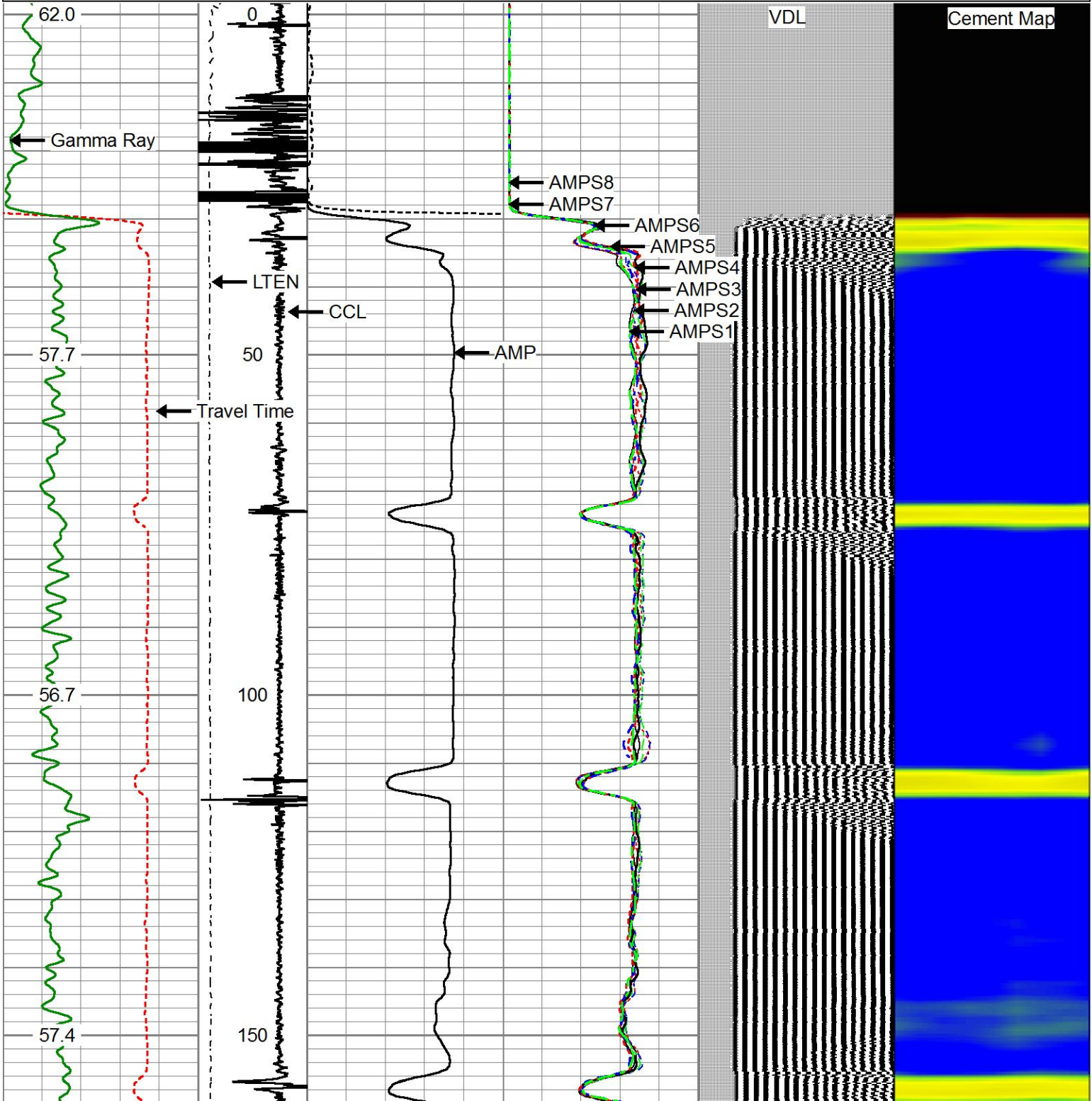
THANK YOU FOR CHOOSING CUTTERS WIRELINE SERVICE.

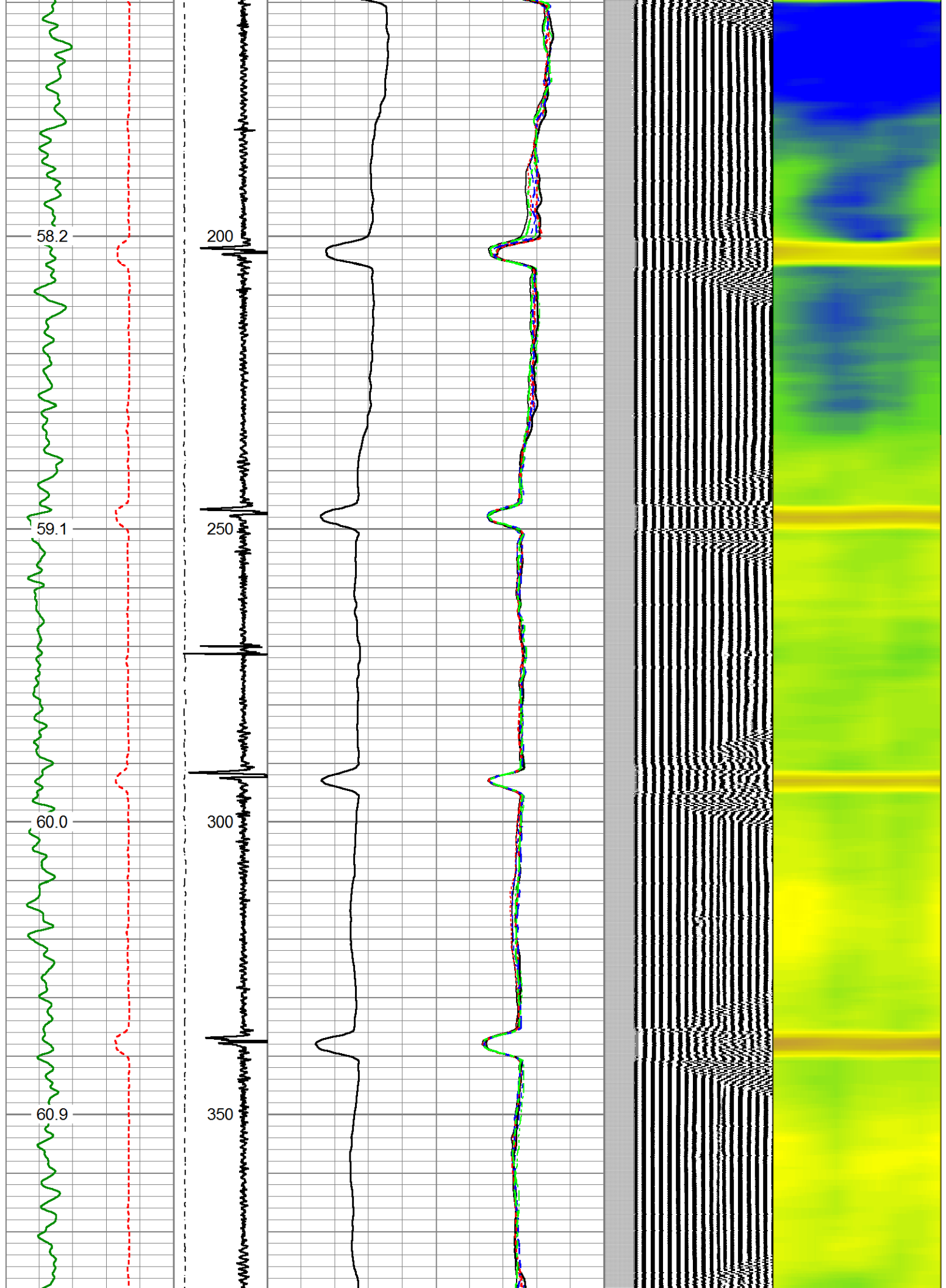


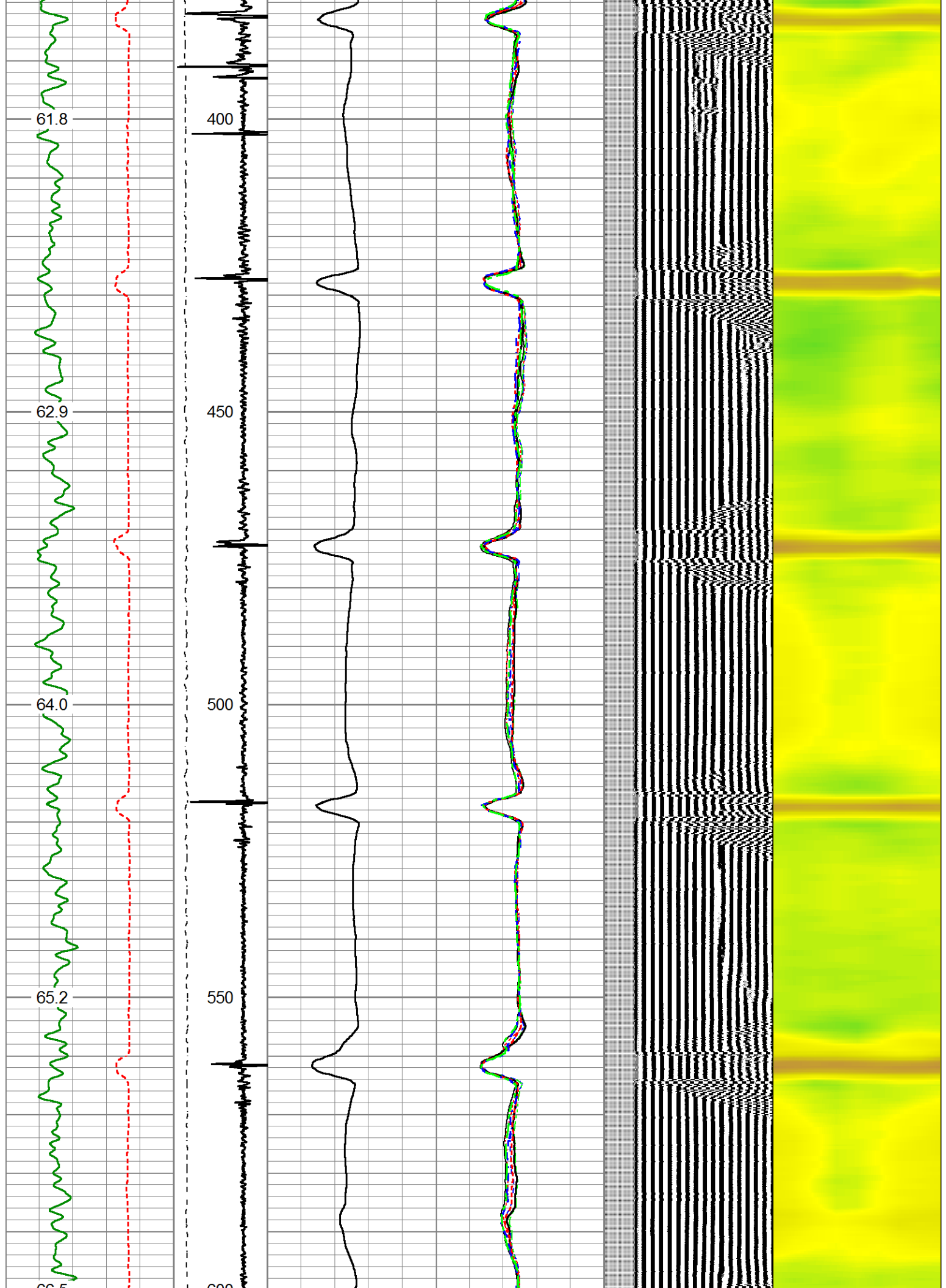
MAIN PASS, 2800 PSI

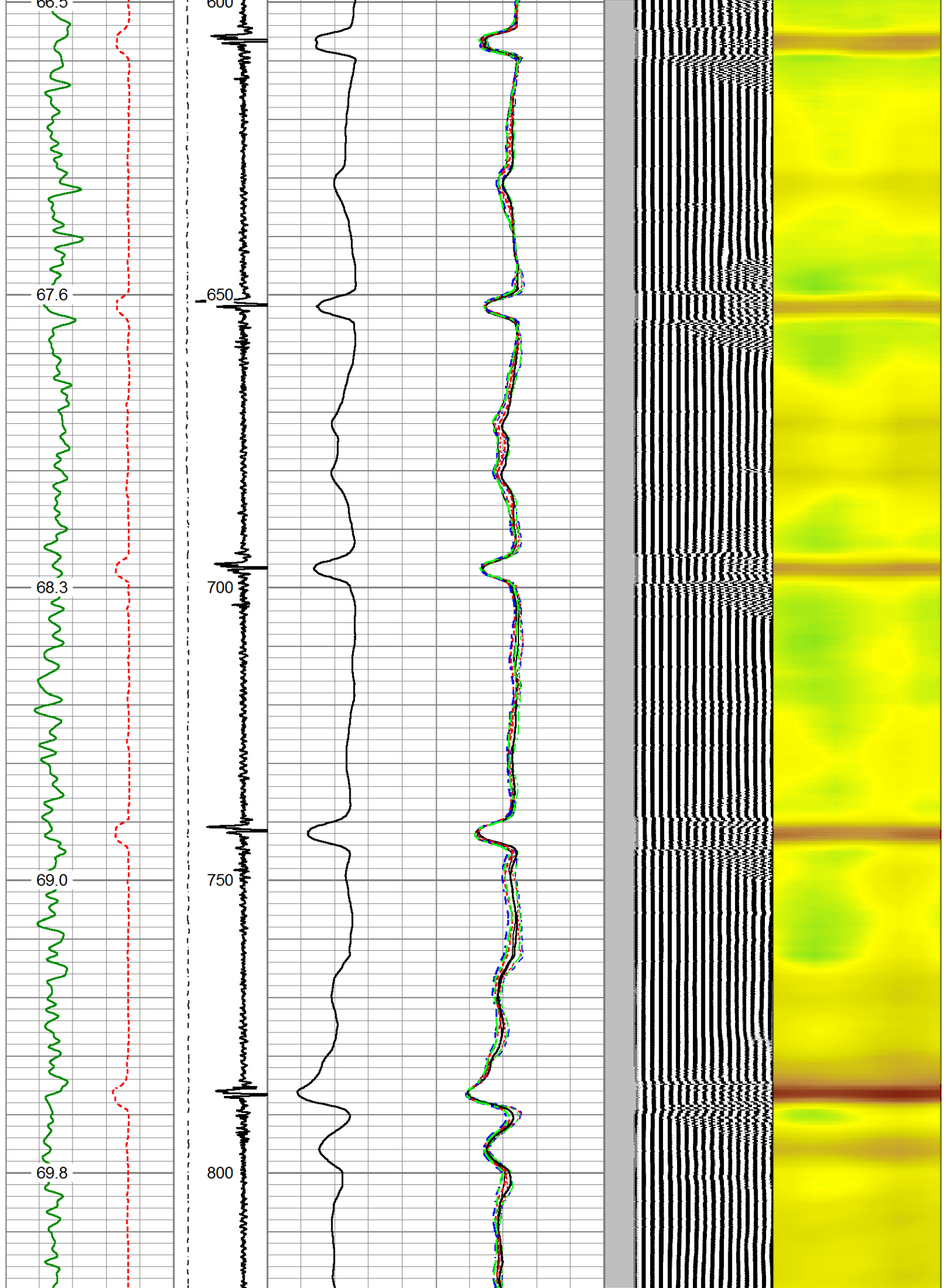
5" = 100'

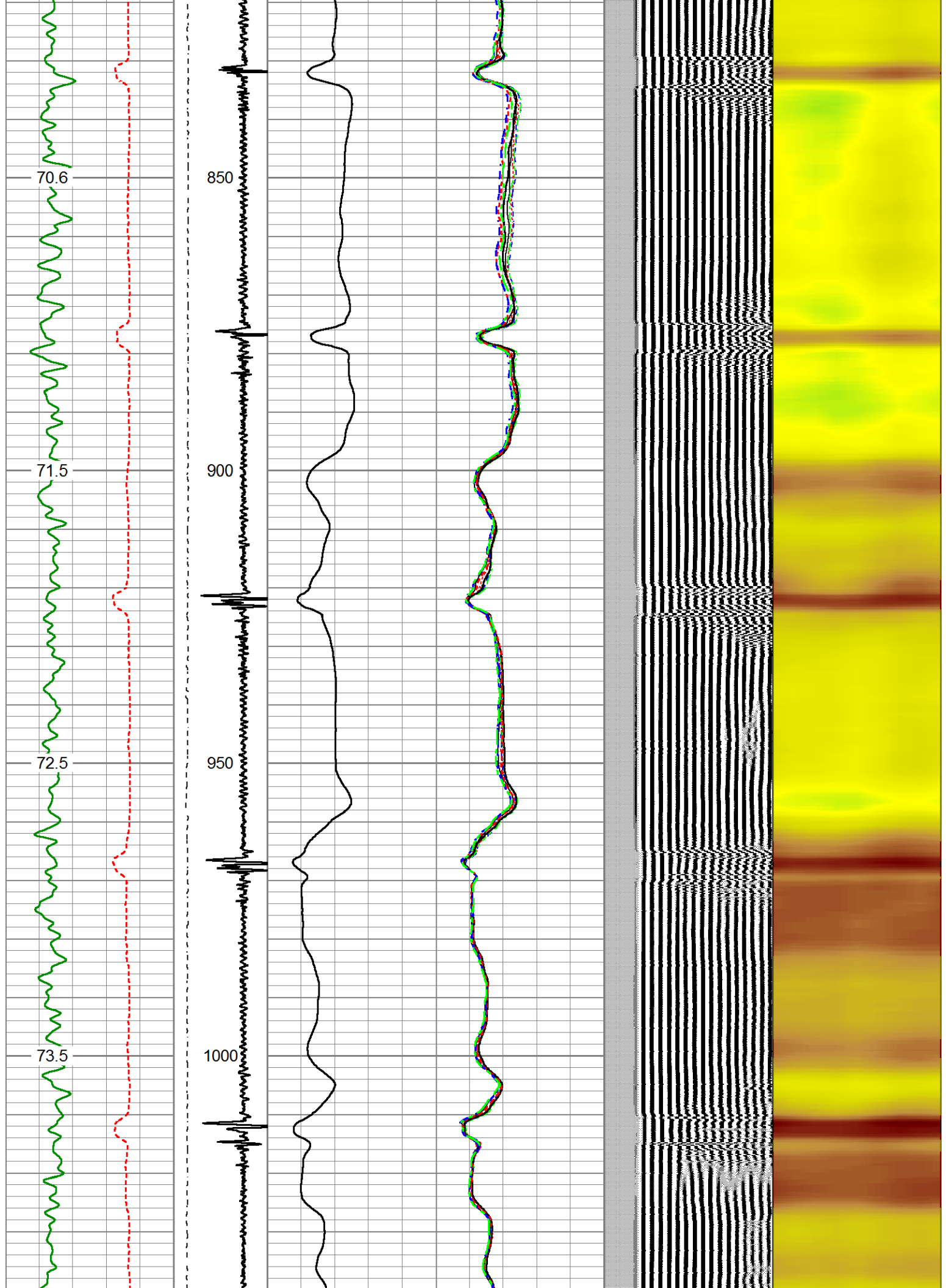
Travel Time	-3	CCL	1	0	AMP (mV)	100	-5	AMPS1	150	200	VDL (usec)	1200	1	Cement Map	8
343 (usec)	243	LTEN	0	AMPx10 (mV)	10	-5	AMPS2	150							
Gamma Ray	0	(lb/3000)				-5	AMPS3	150							
0 (GAPI)	200					-5	AMPS4	150							
TEMP						-5	AMPS5	150							
(degF)						-5	AMPS6	150							
						-5	AMPS7	150							
						-5	AMPS8	150							

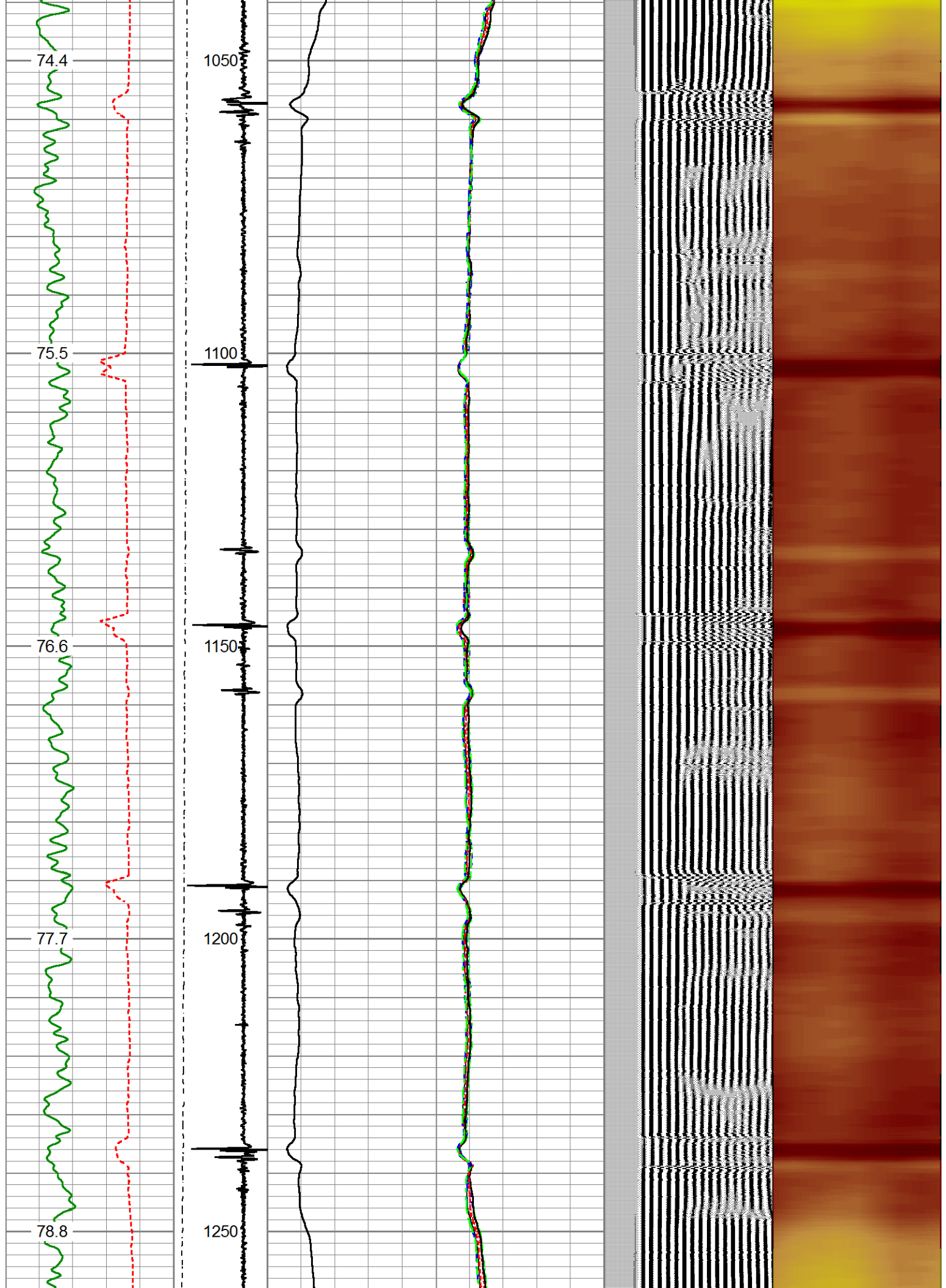


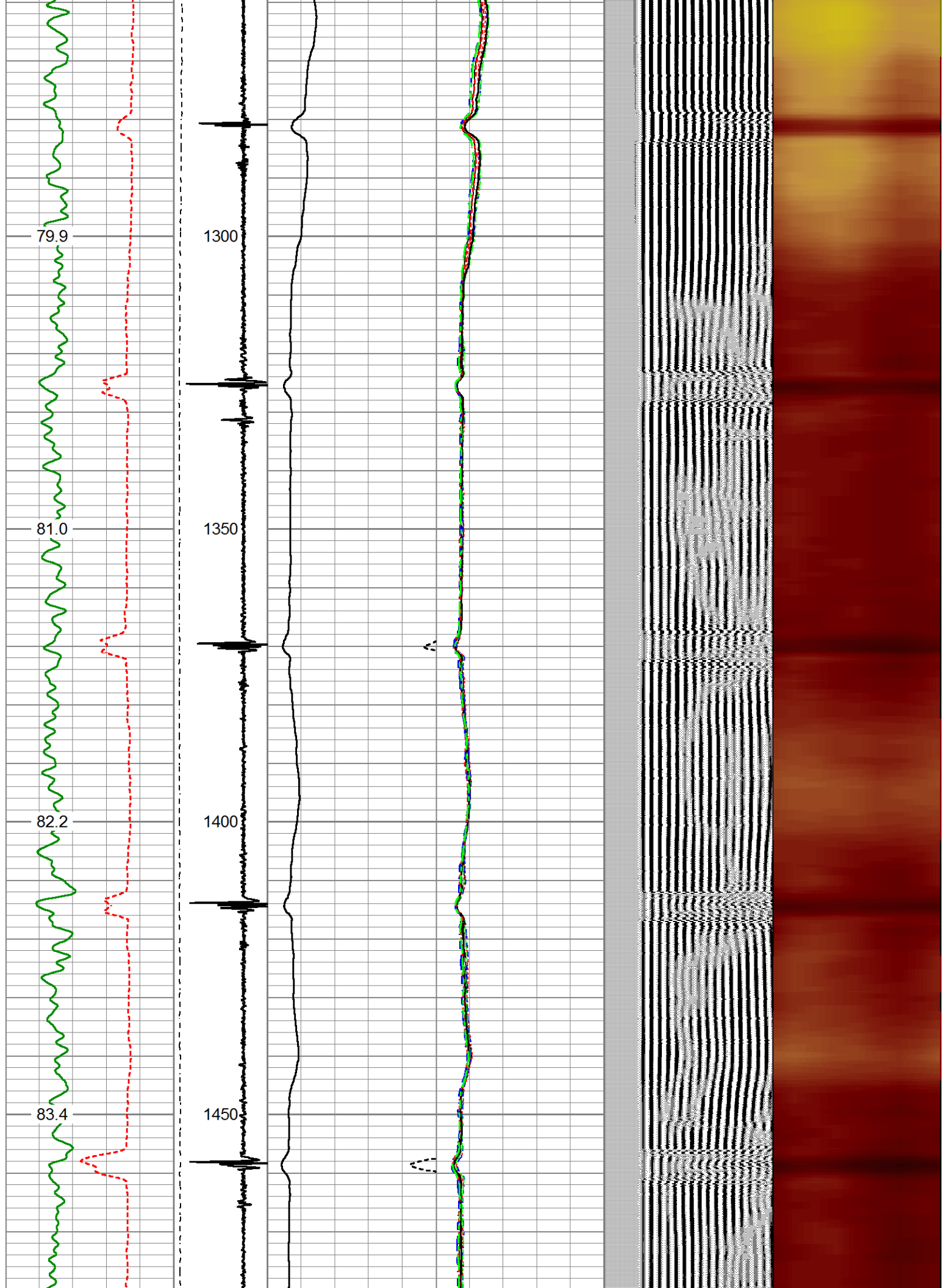


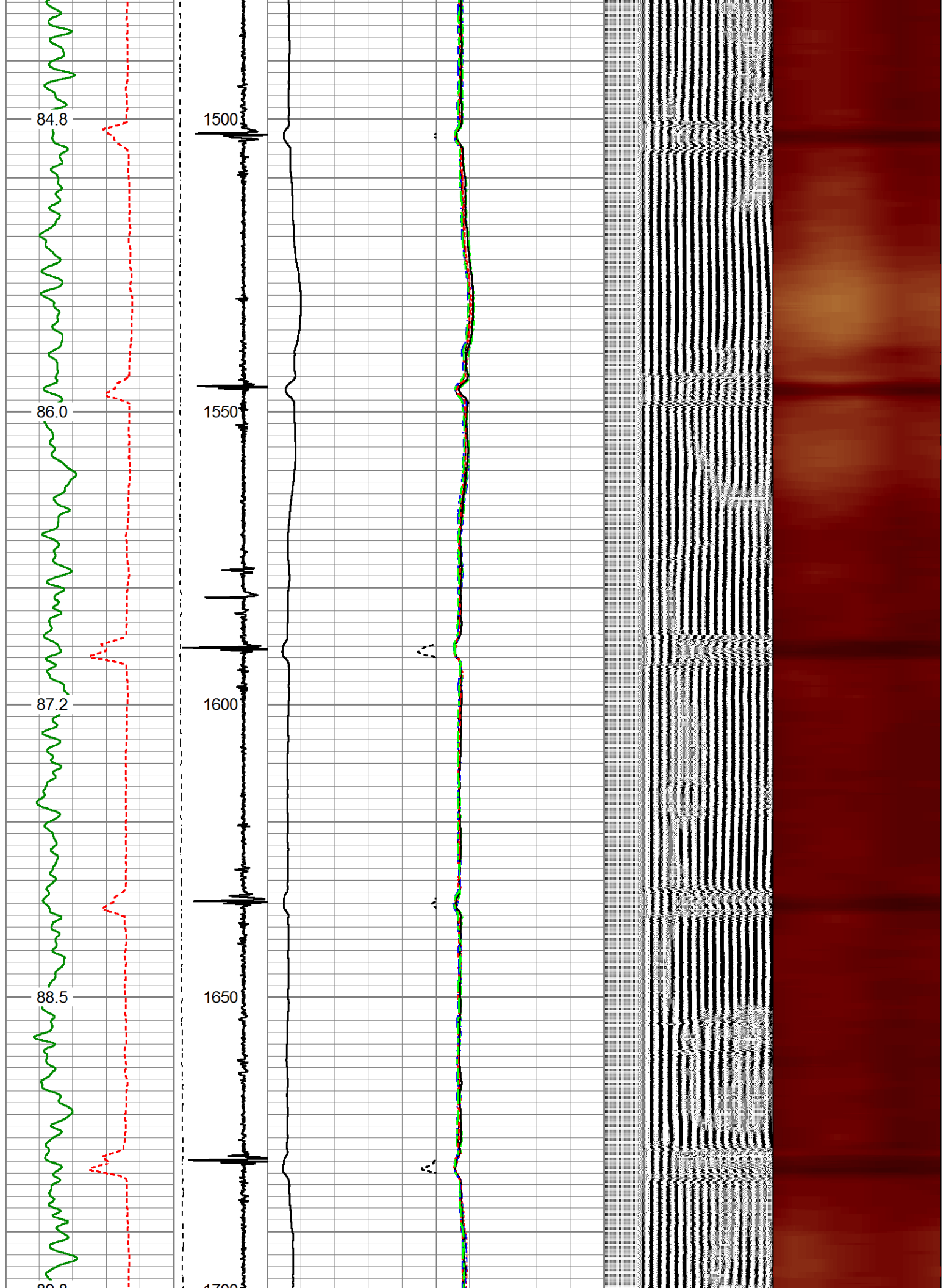


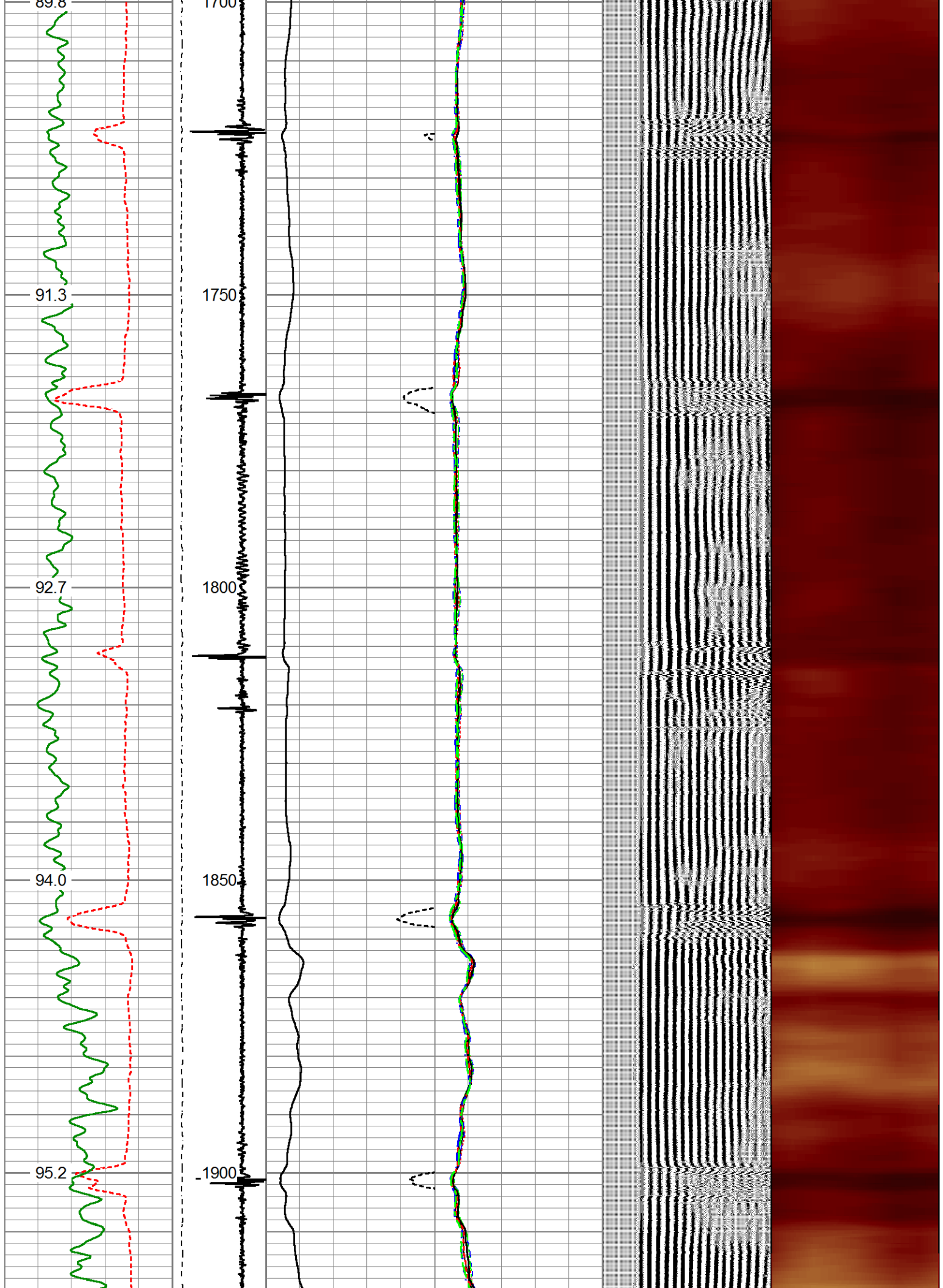


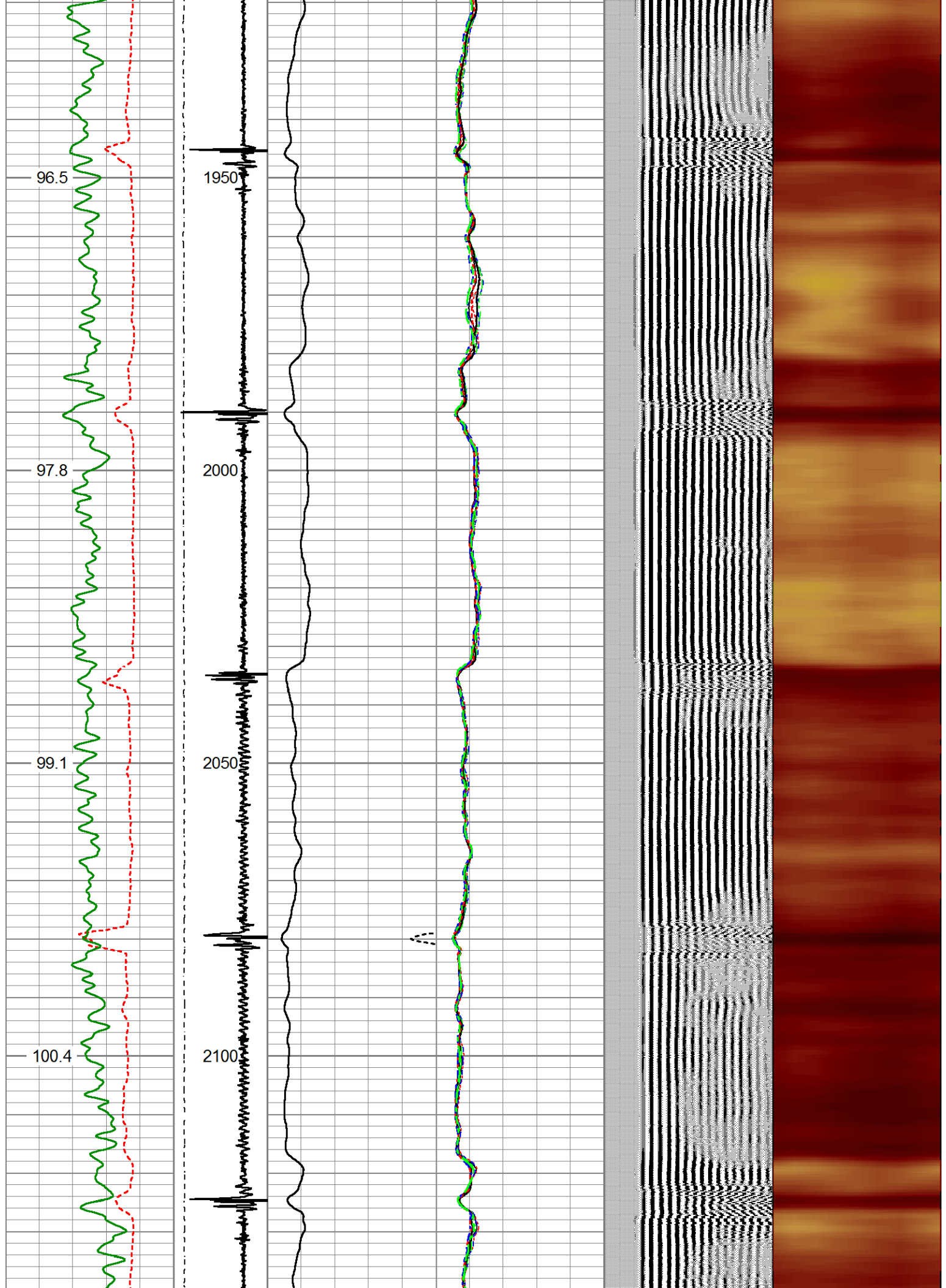


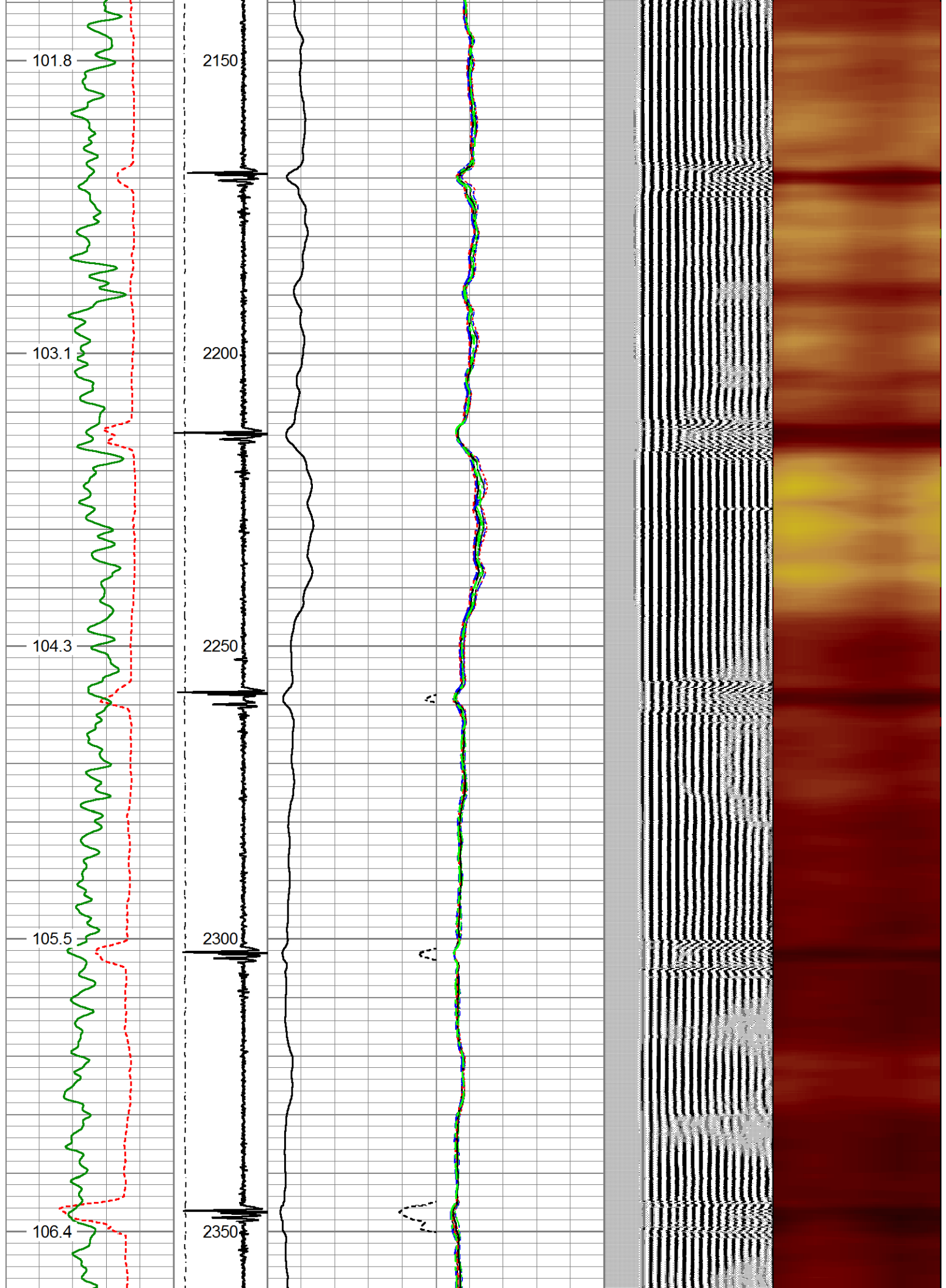


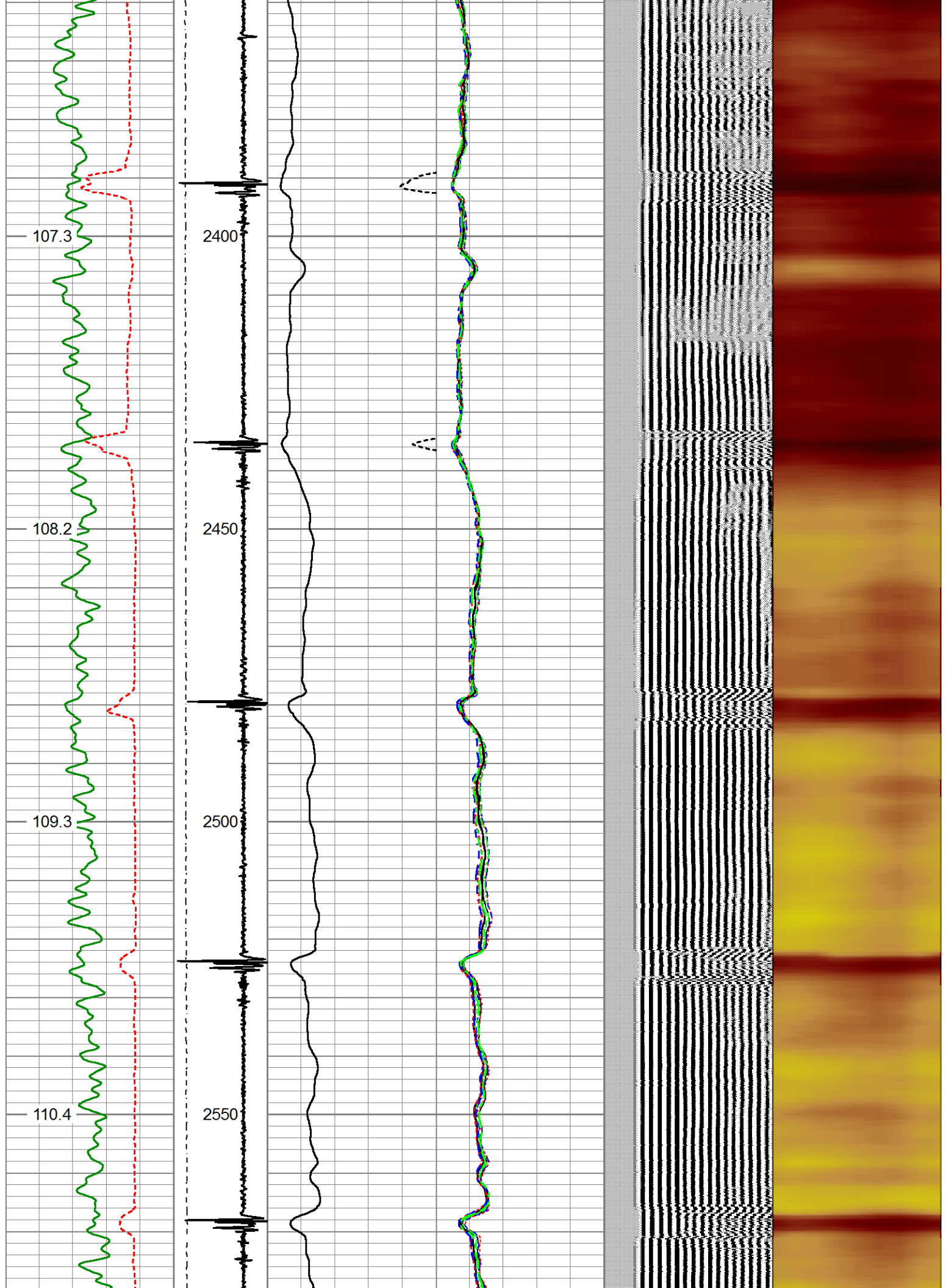


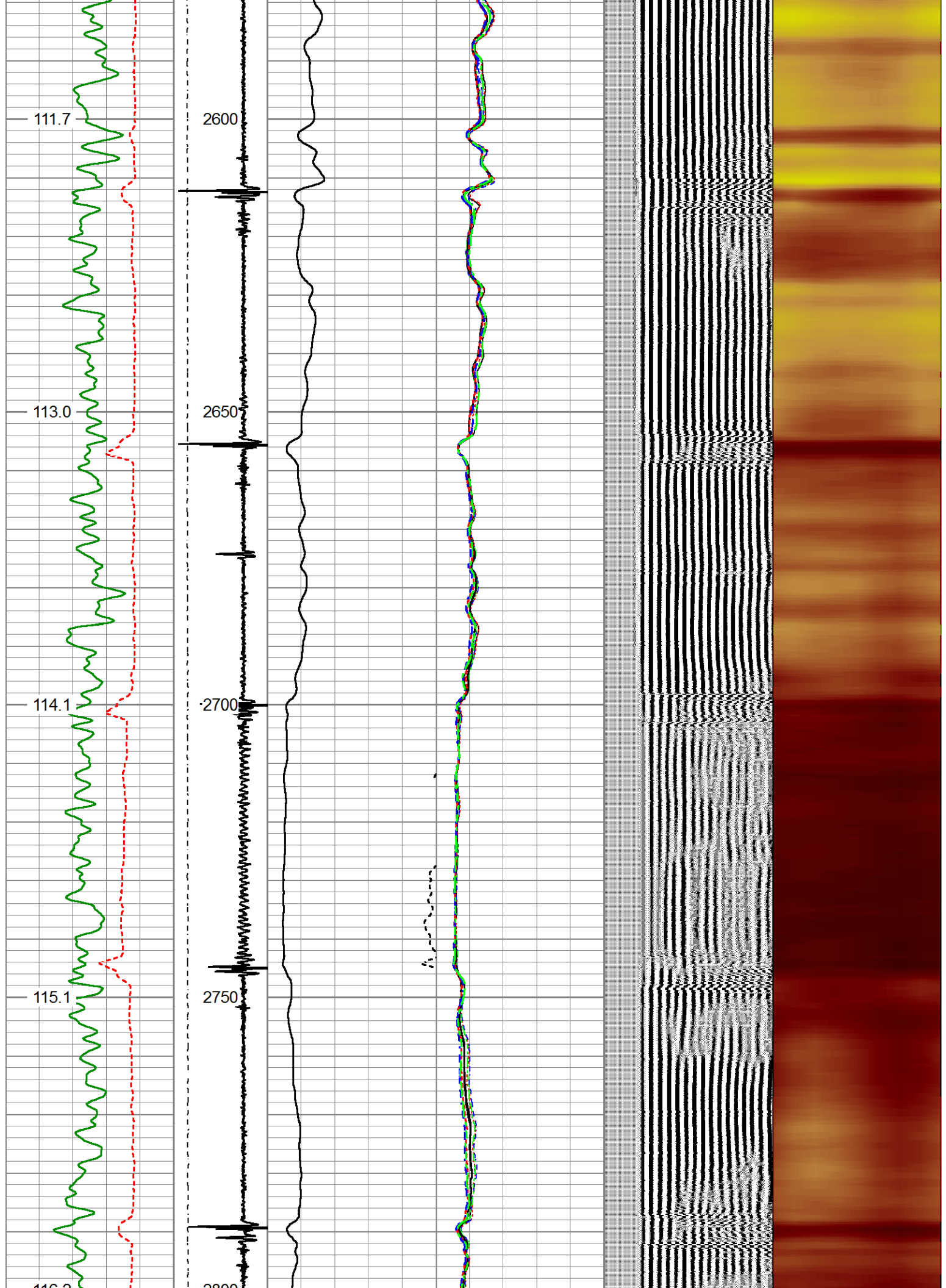


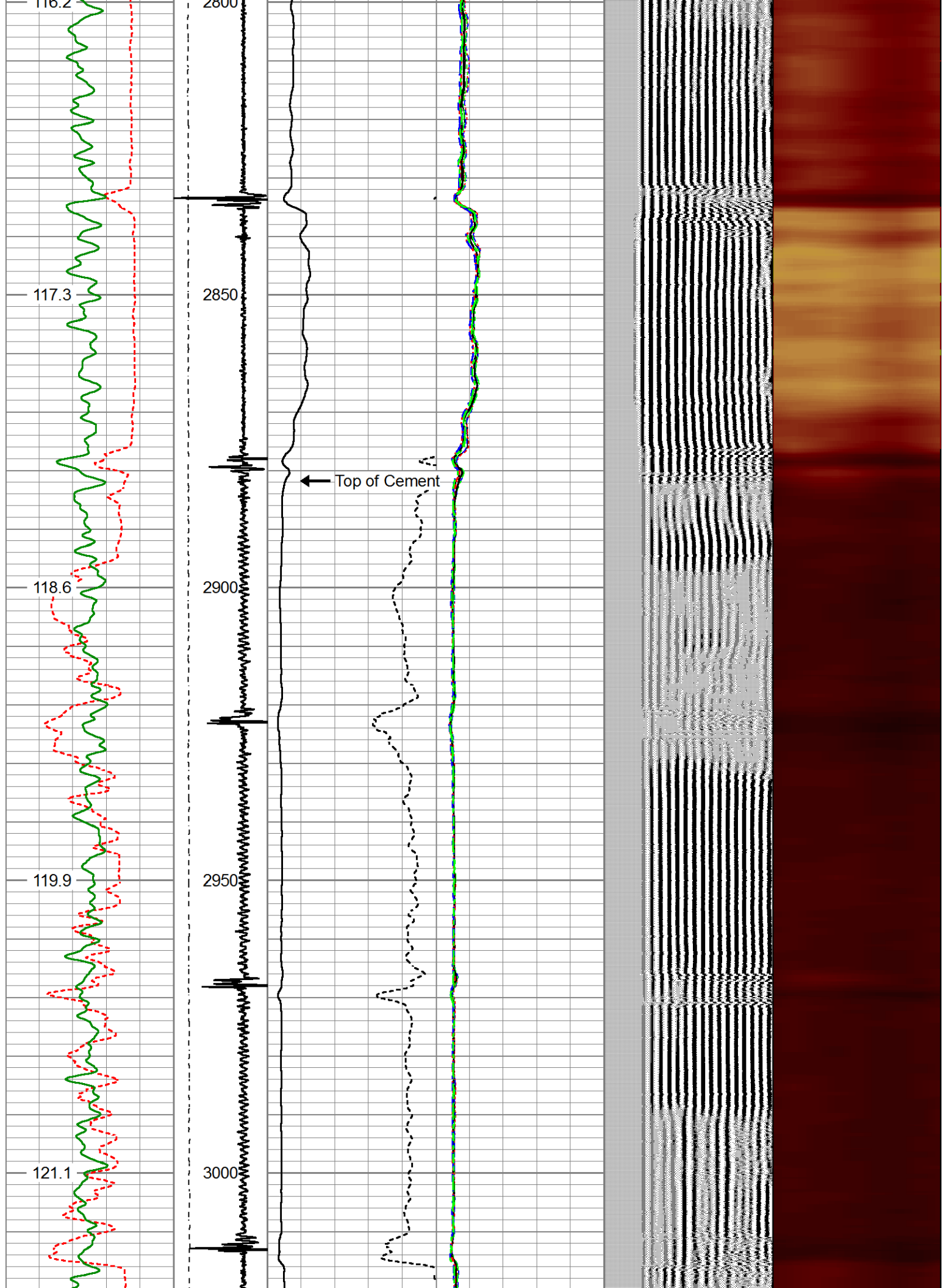


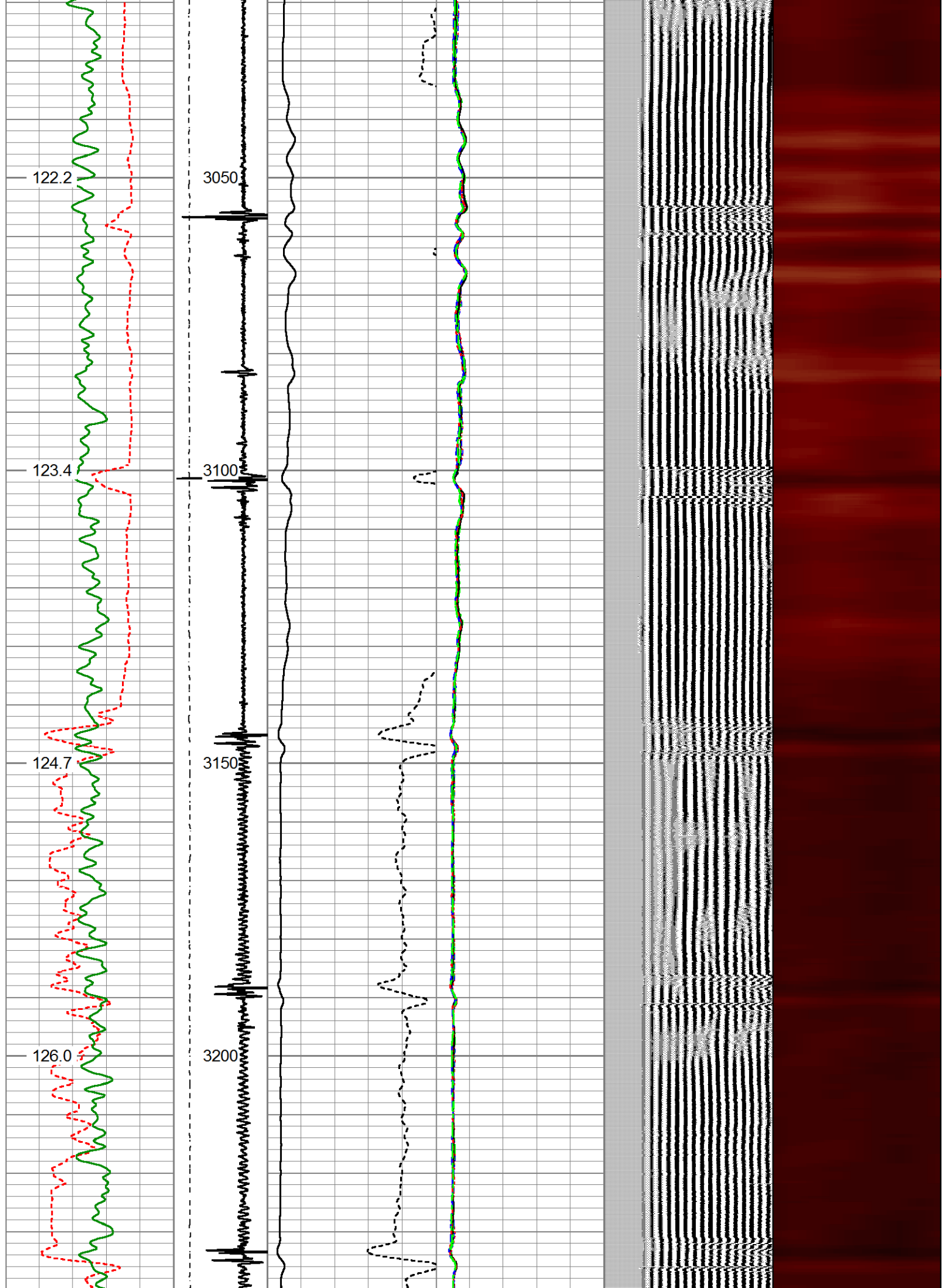


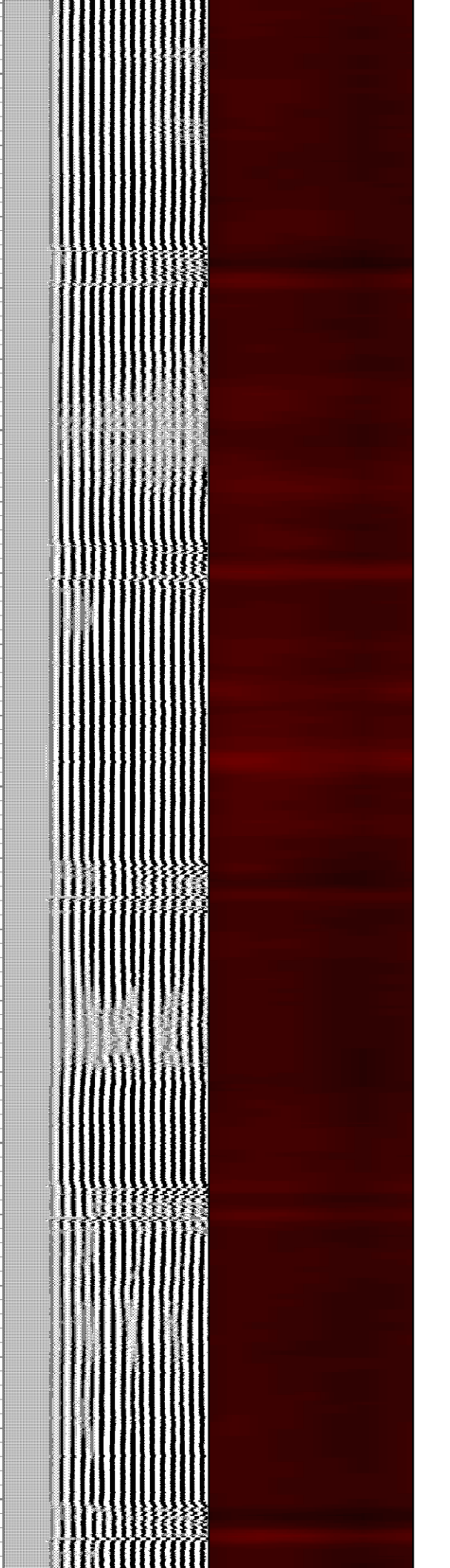
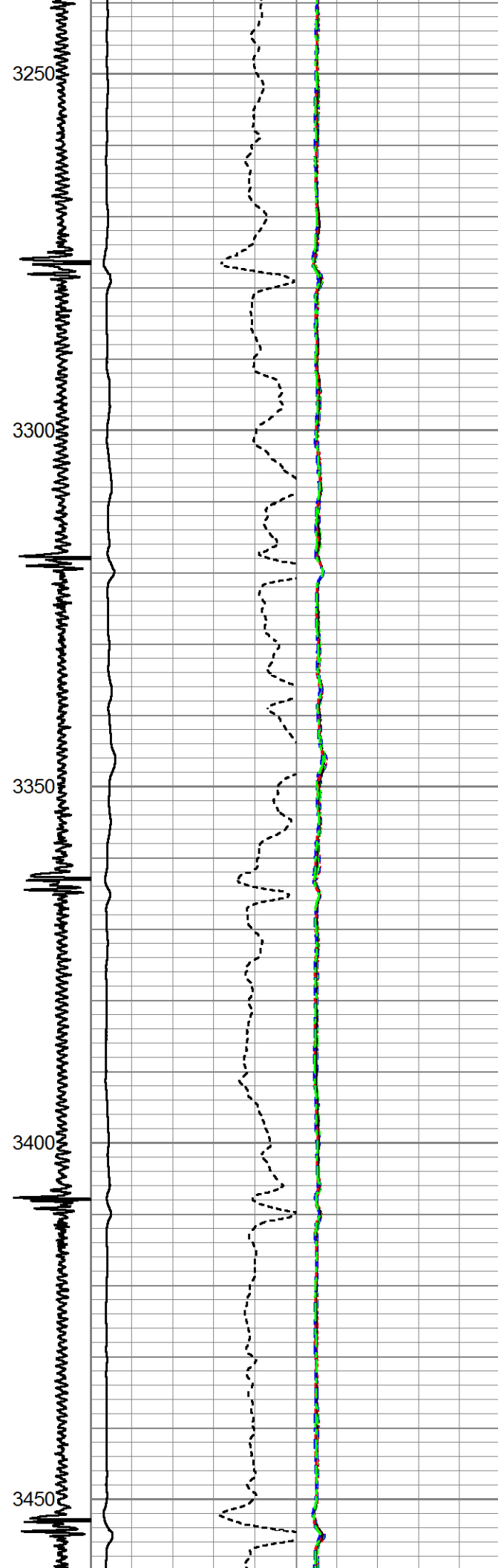
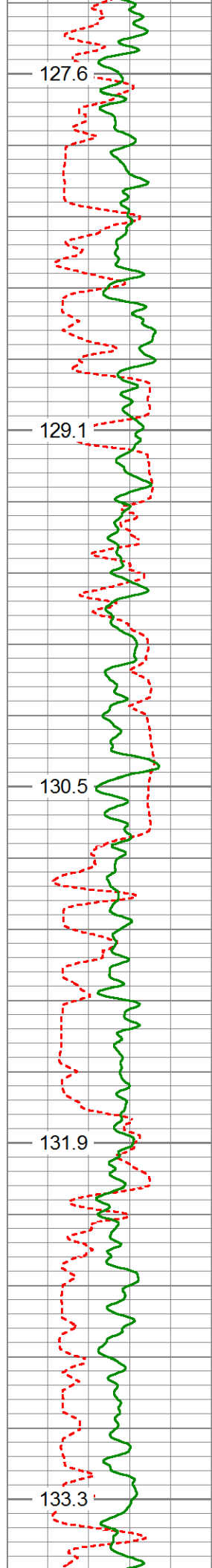


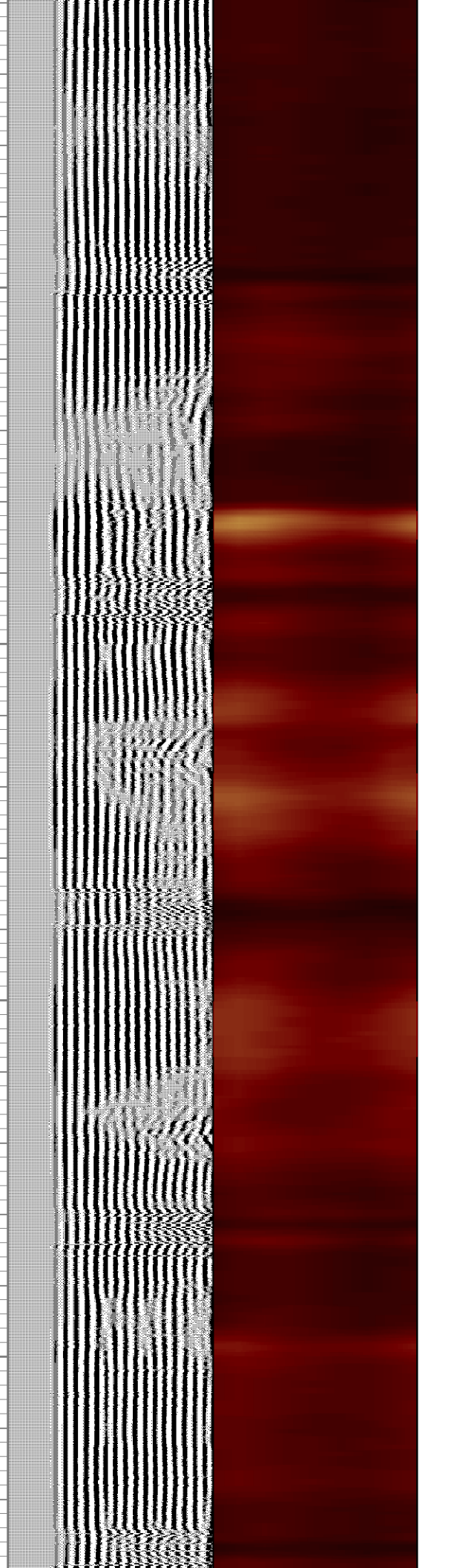
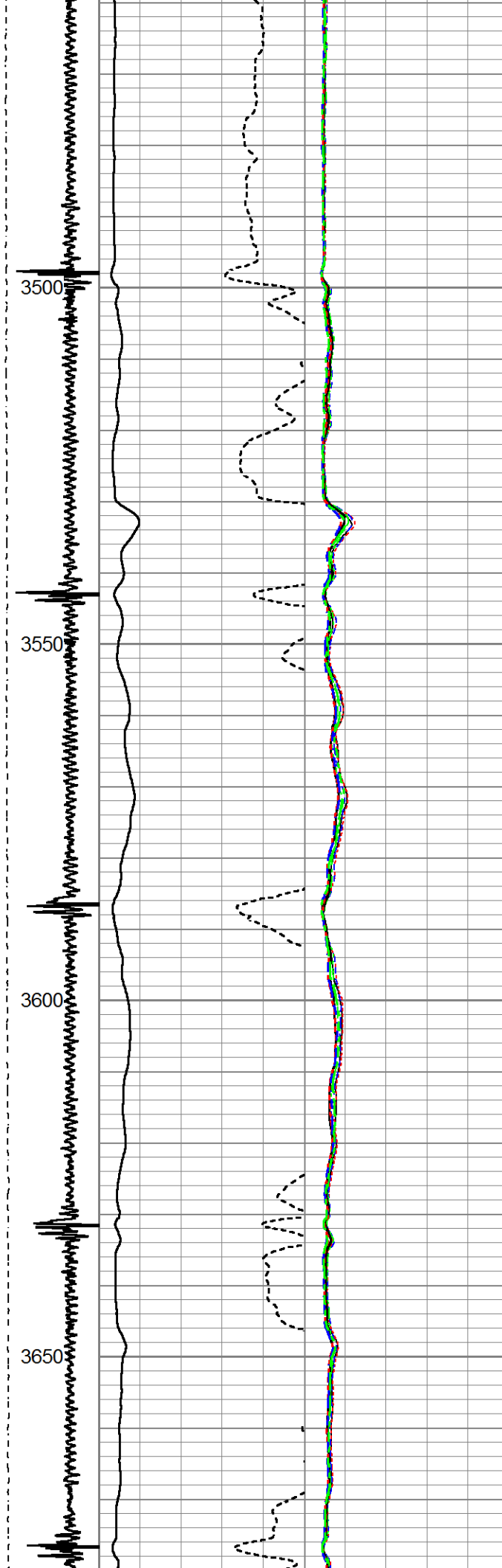
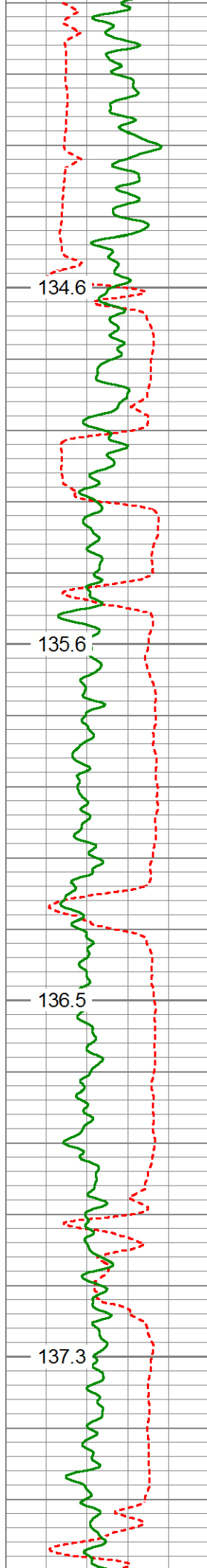


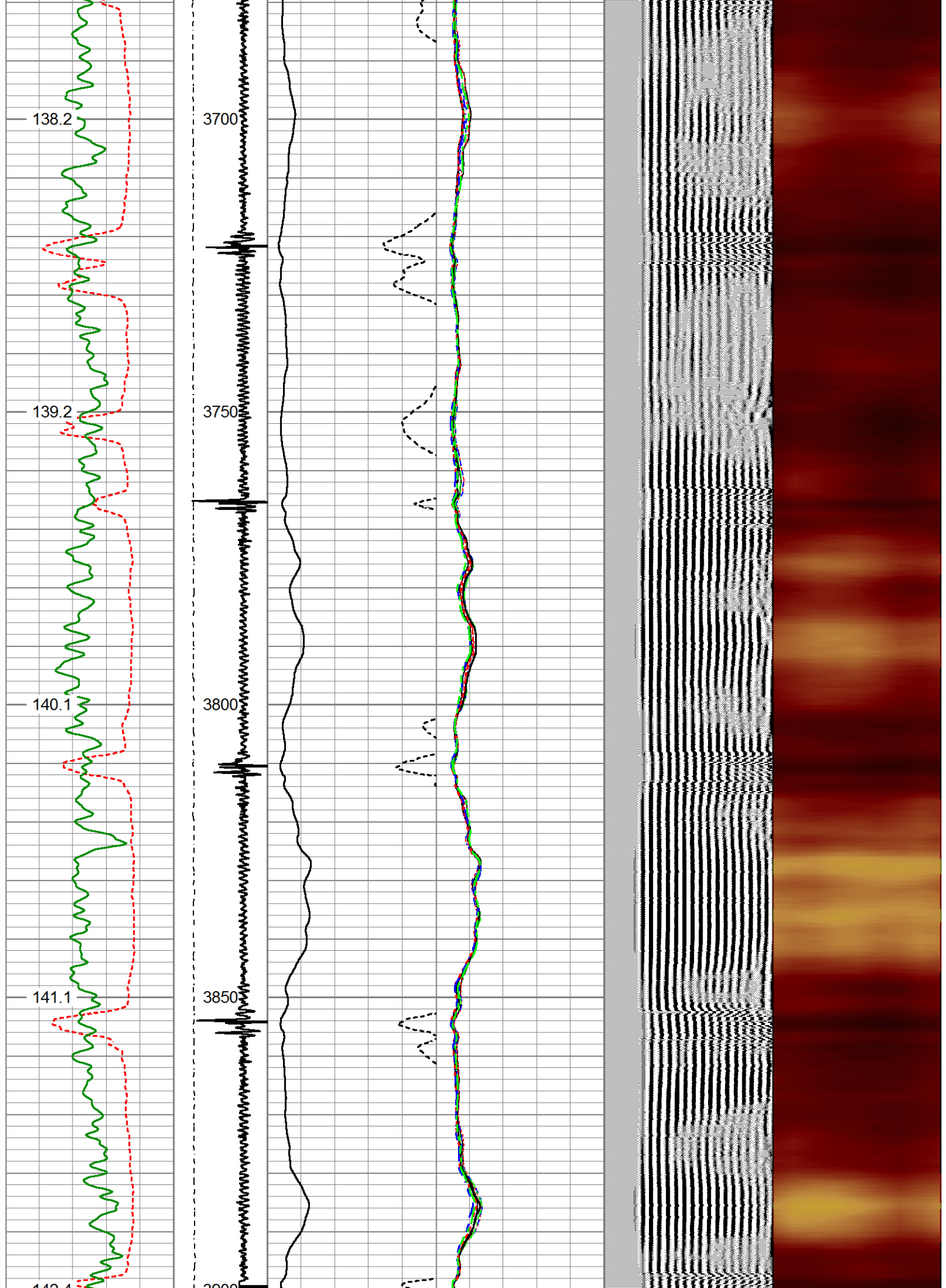


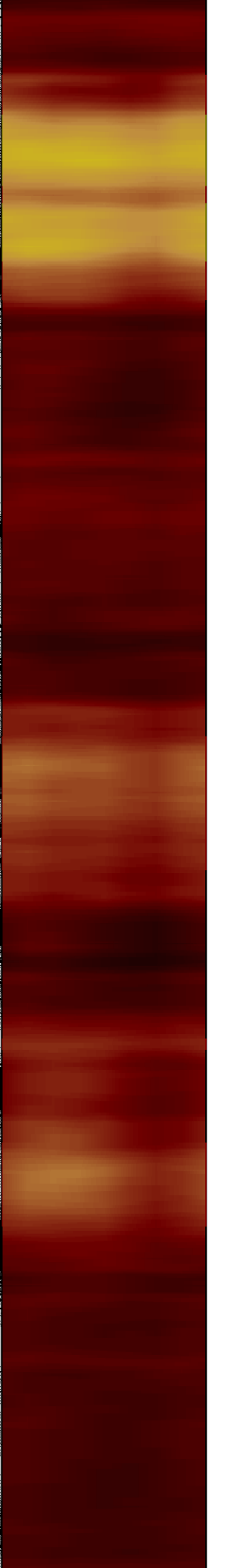
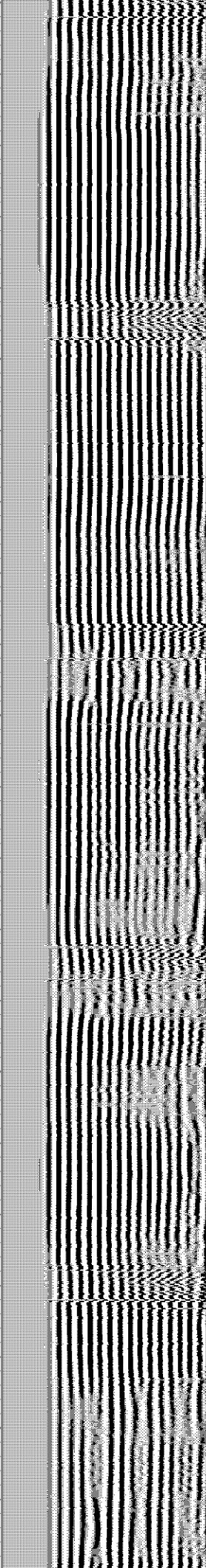
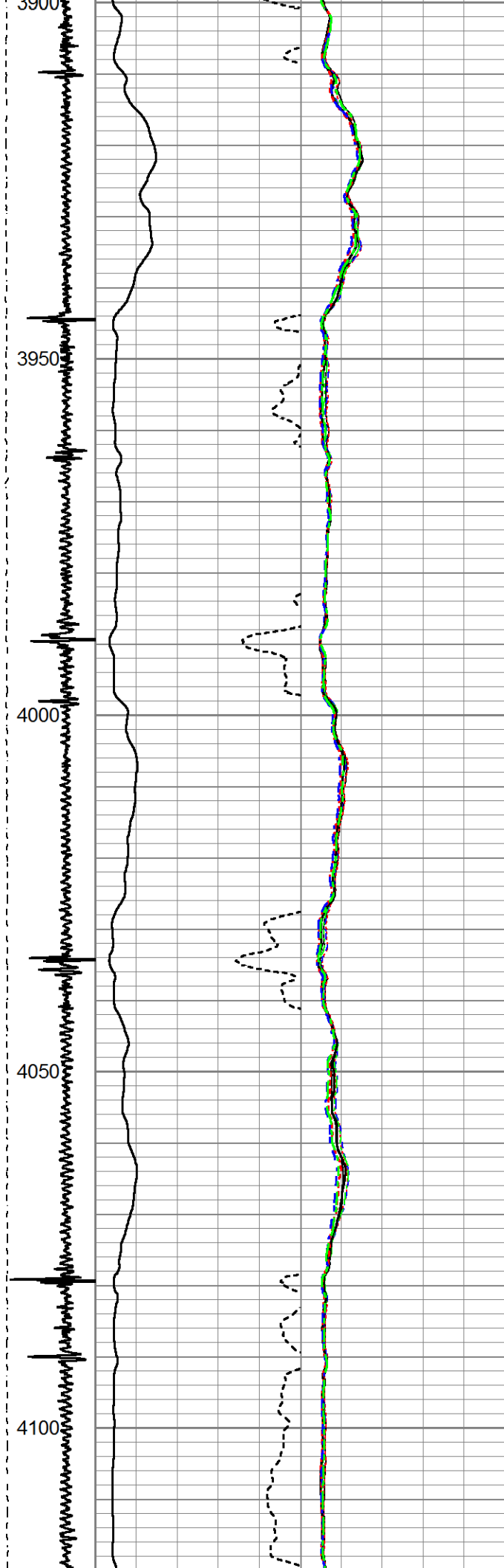
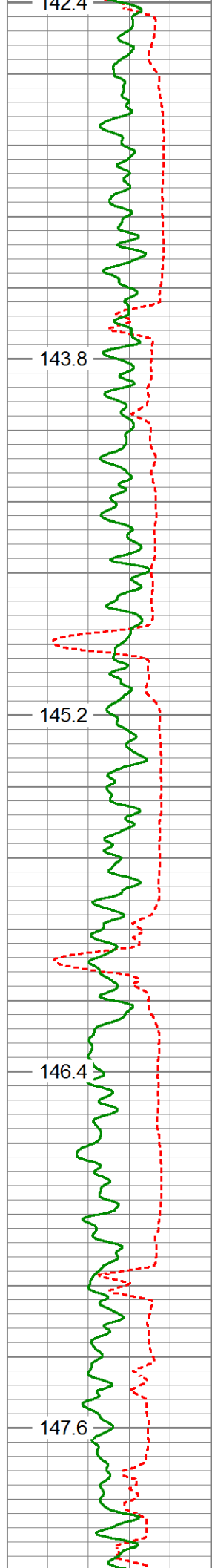


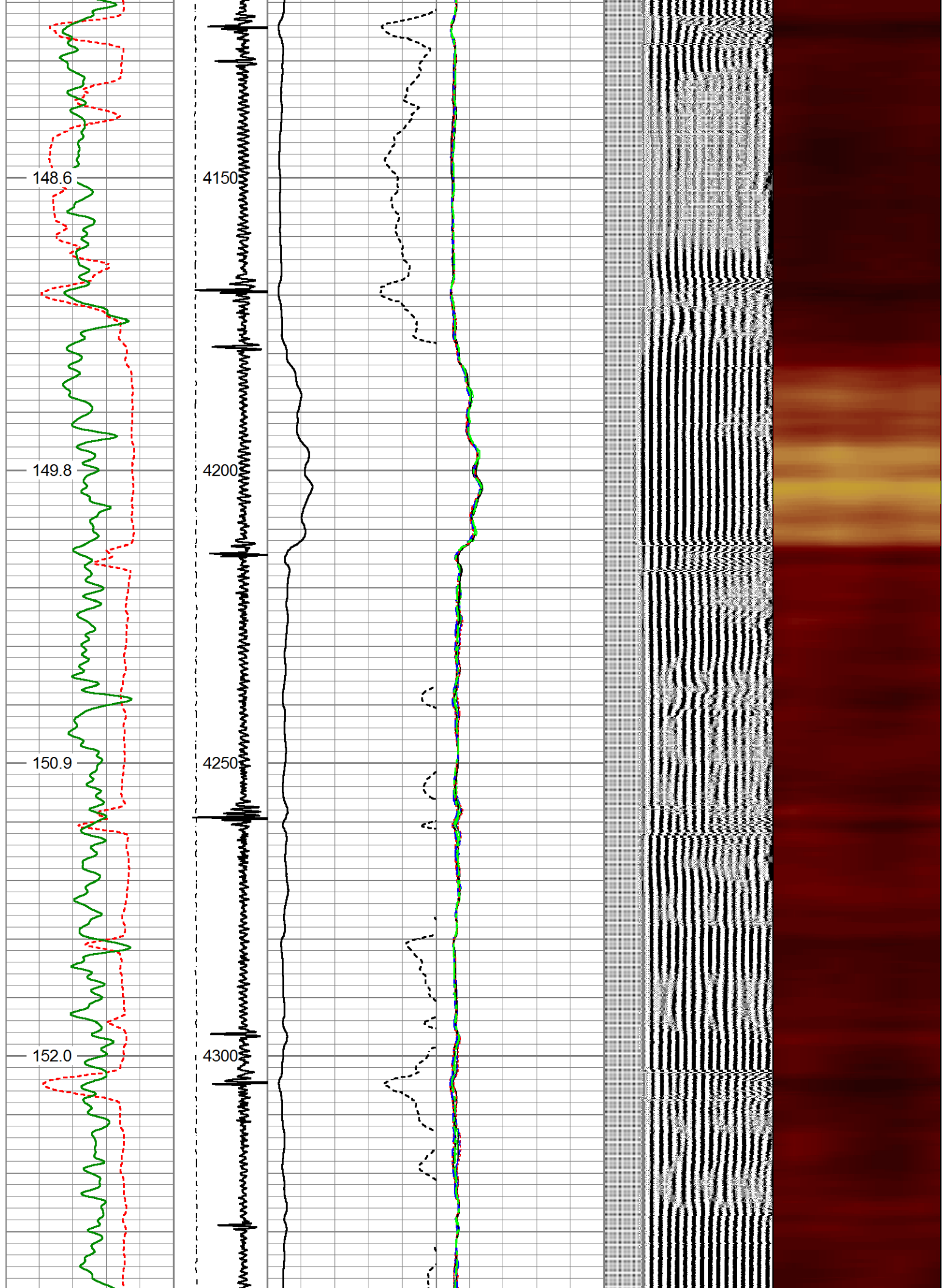


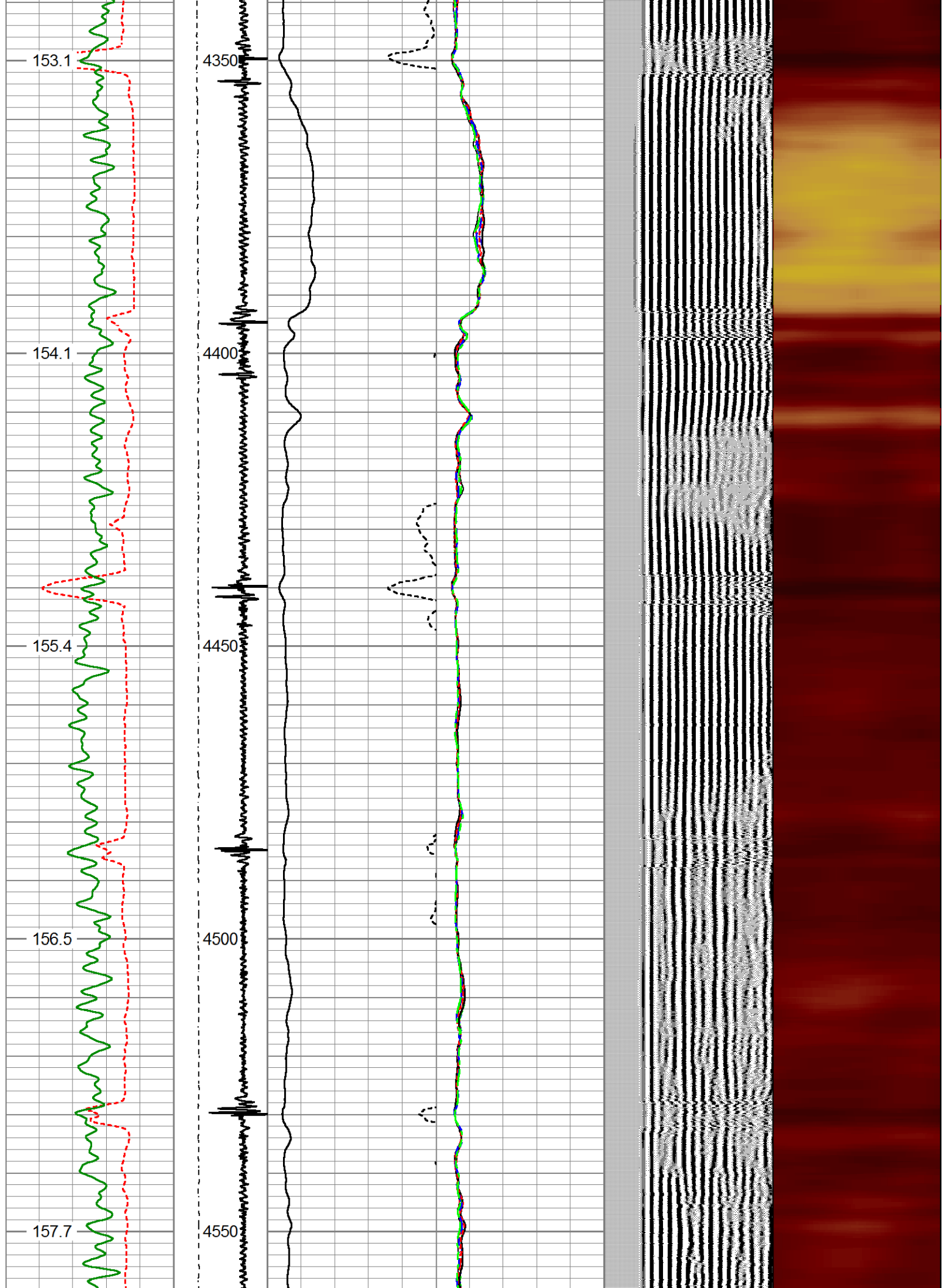


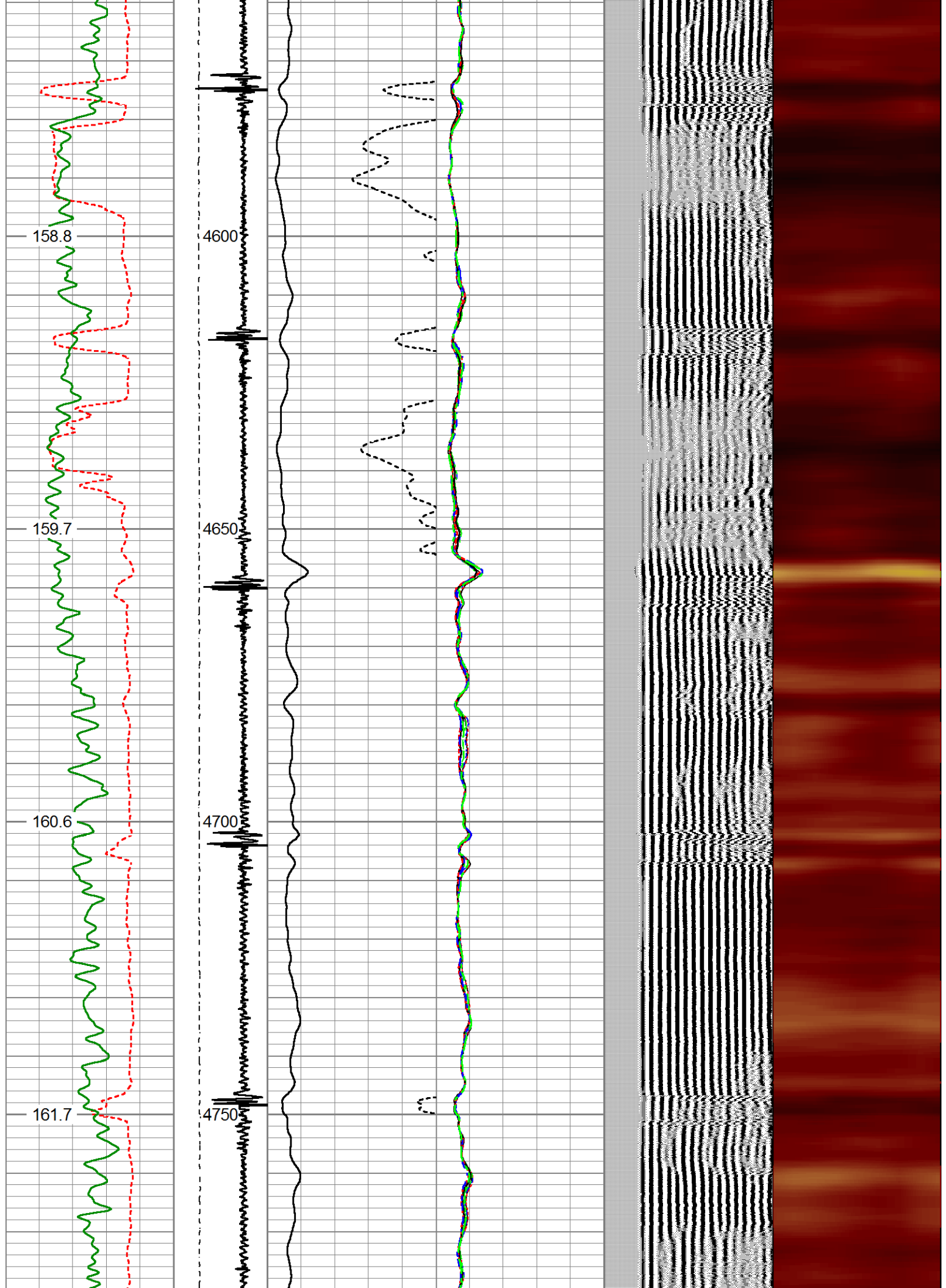


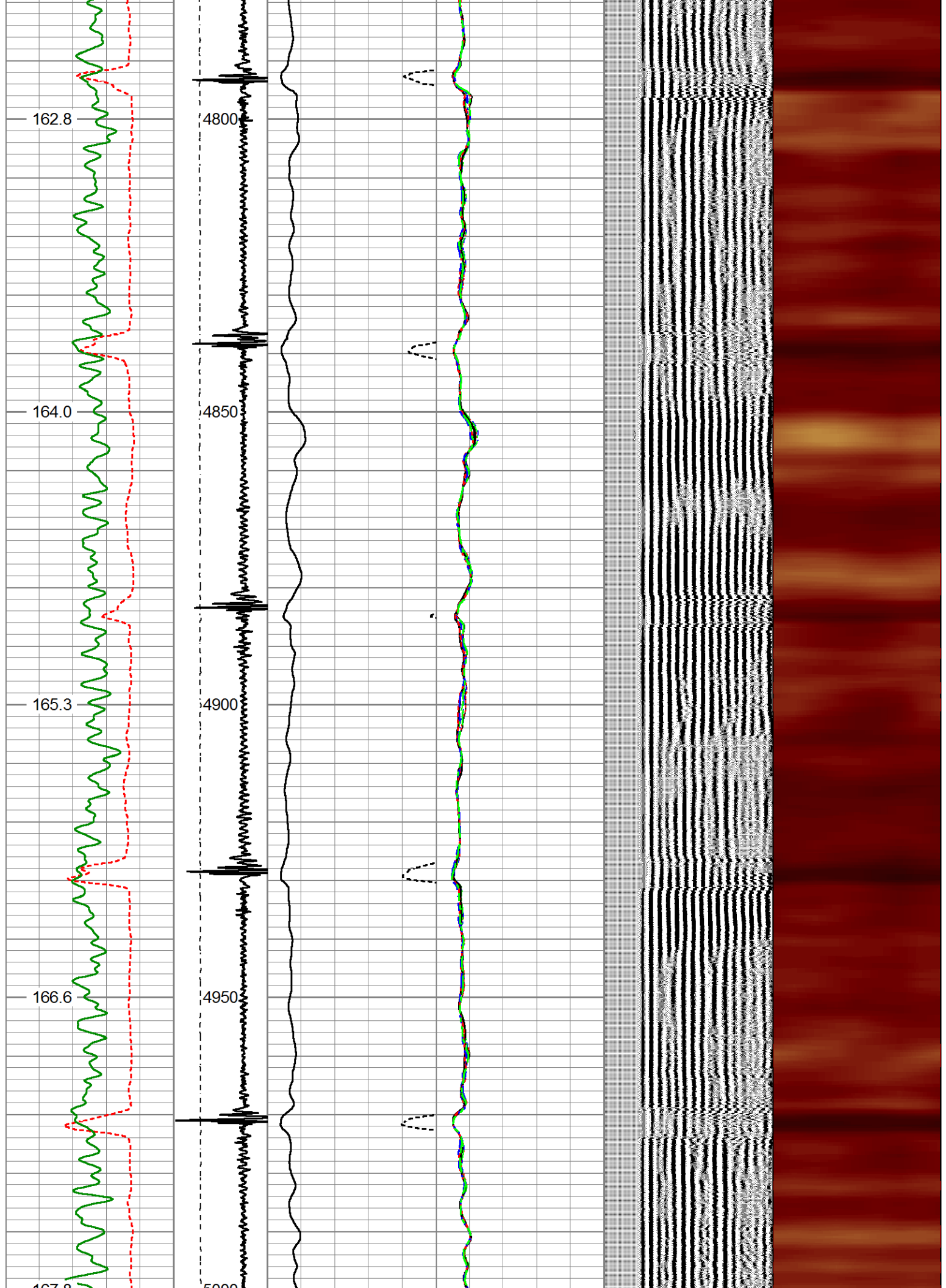


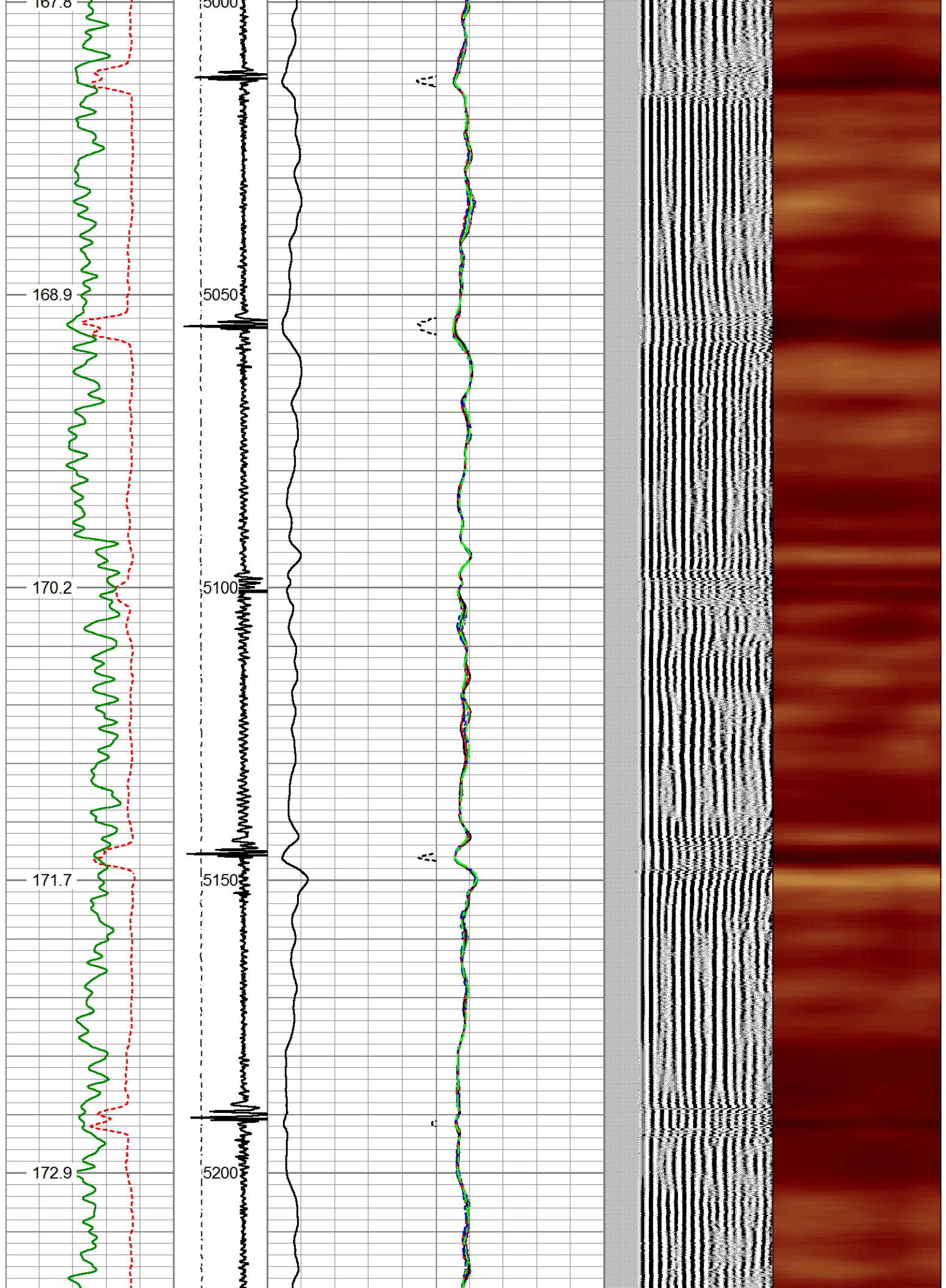


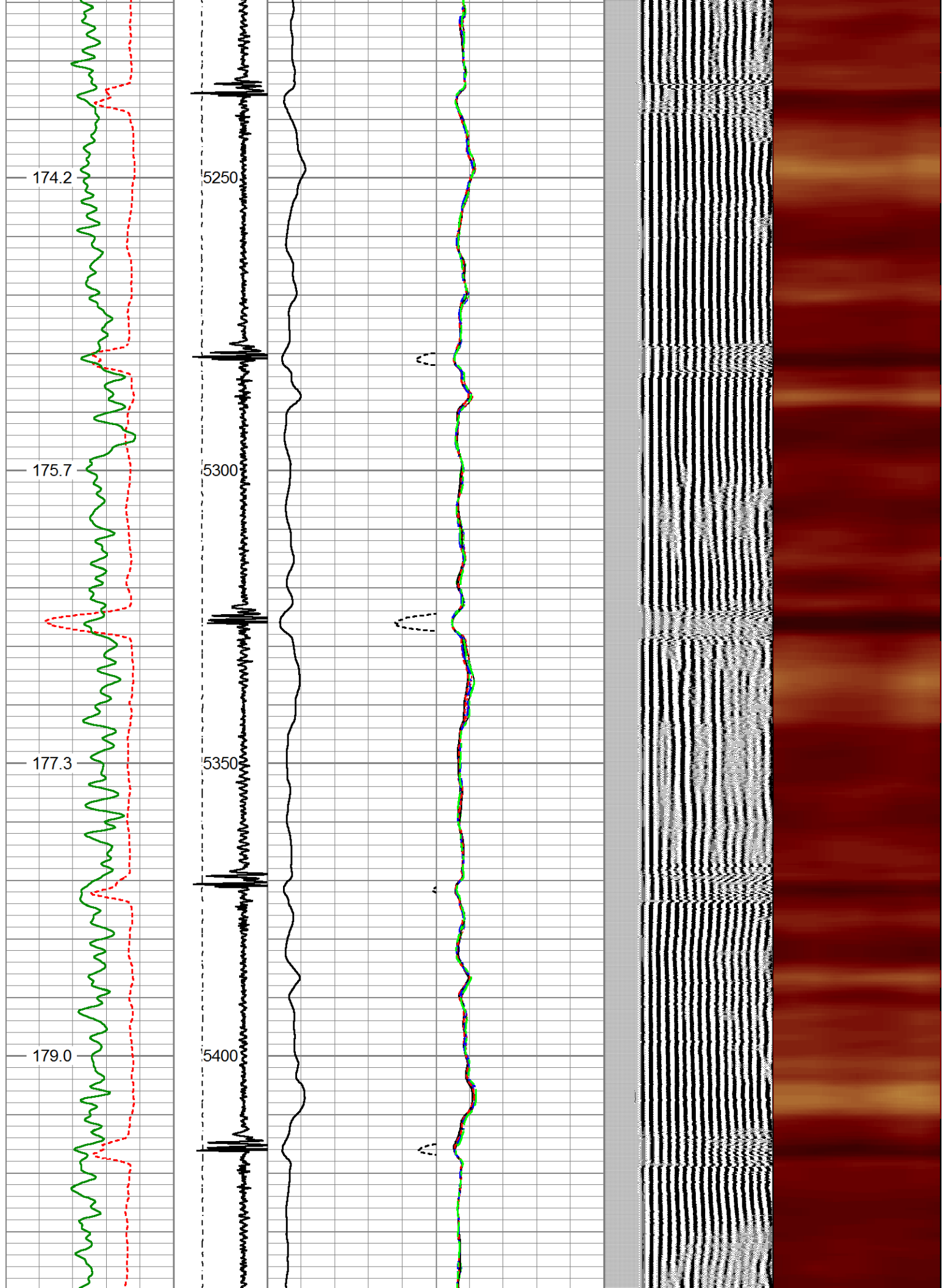


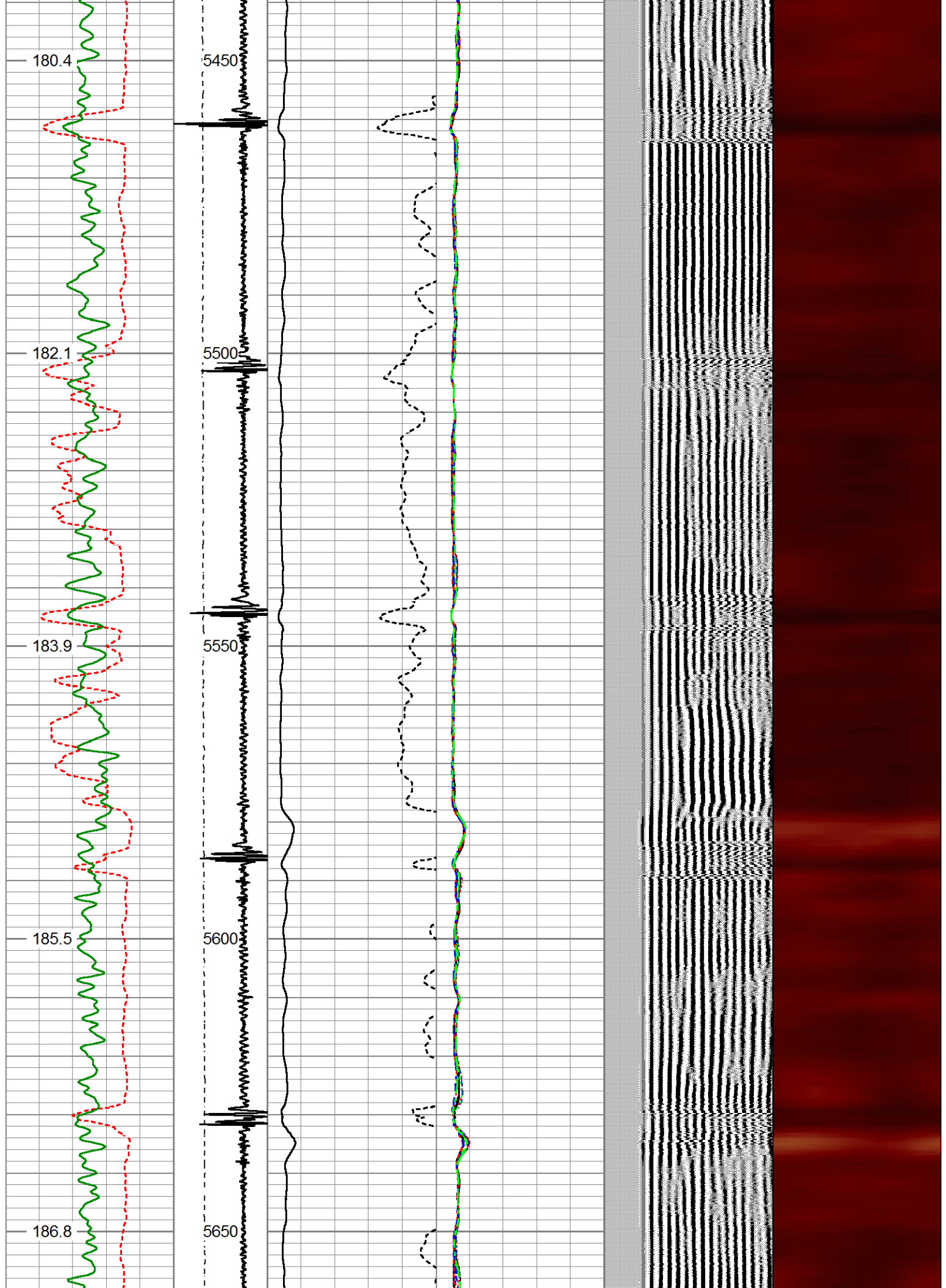


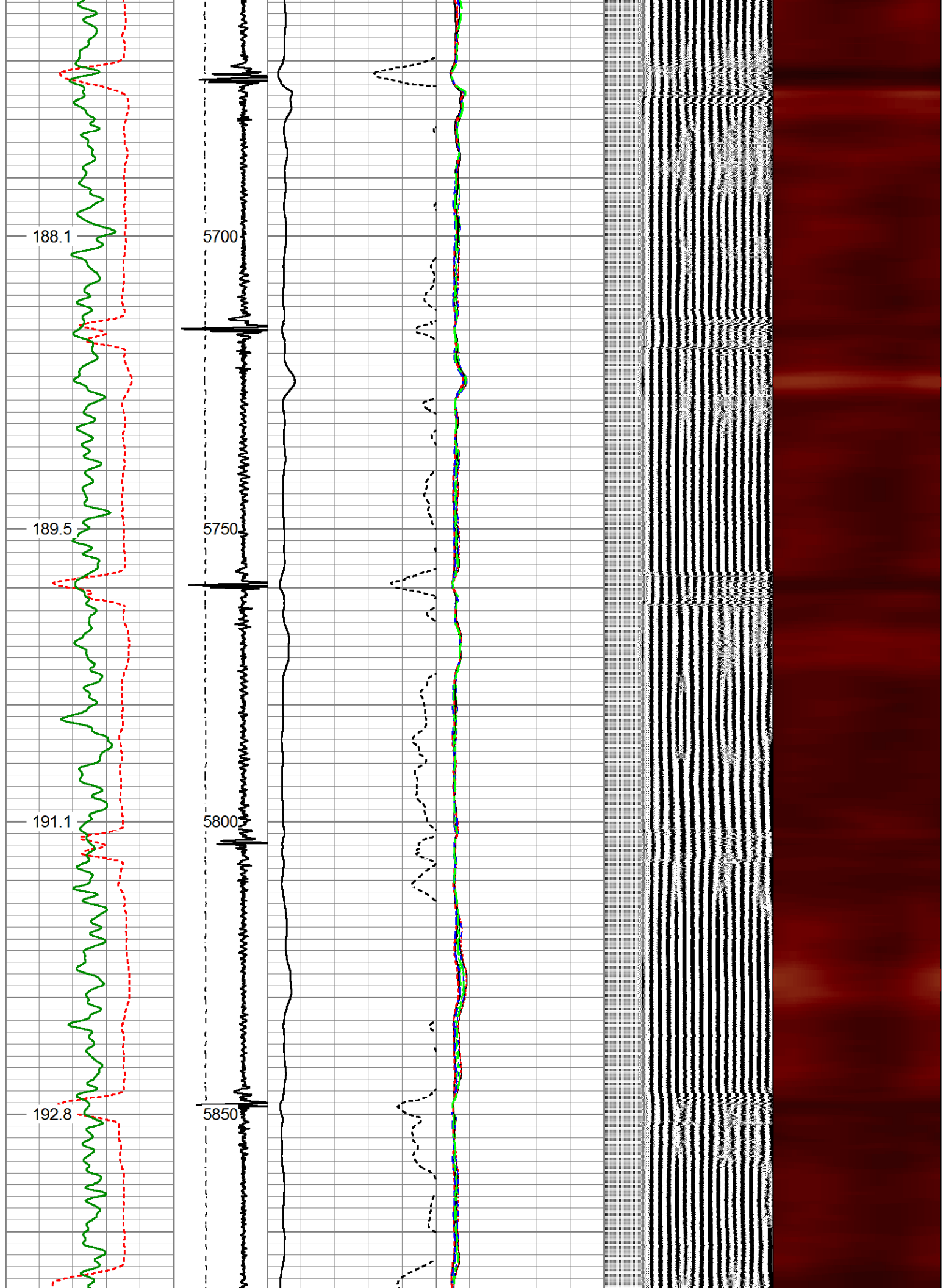


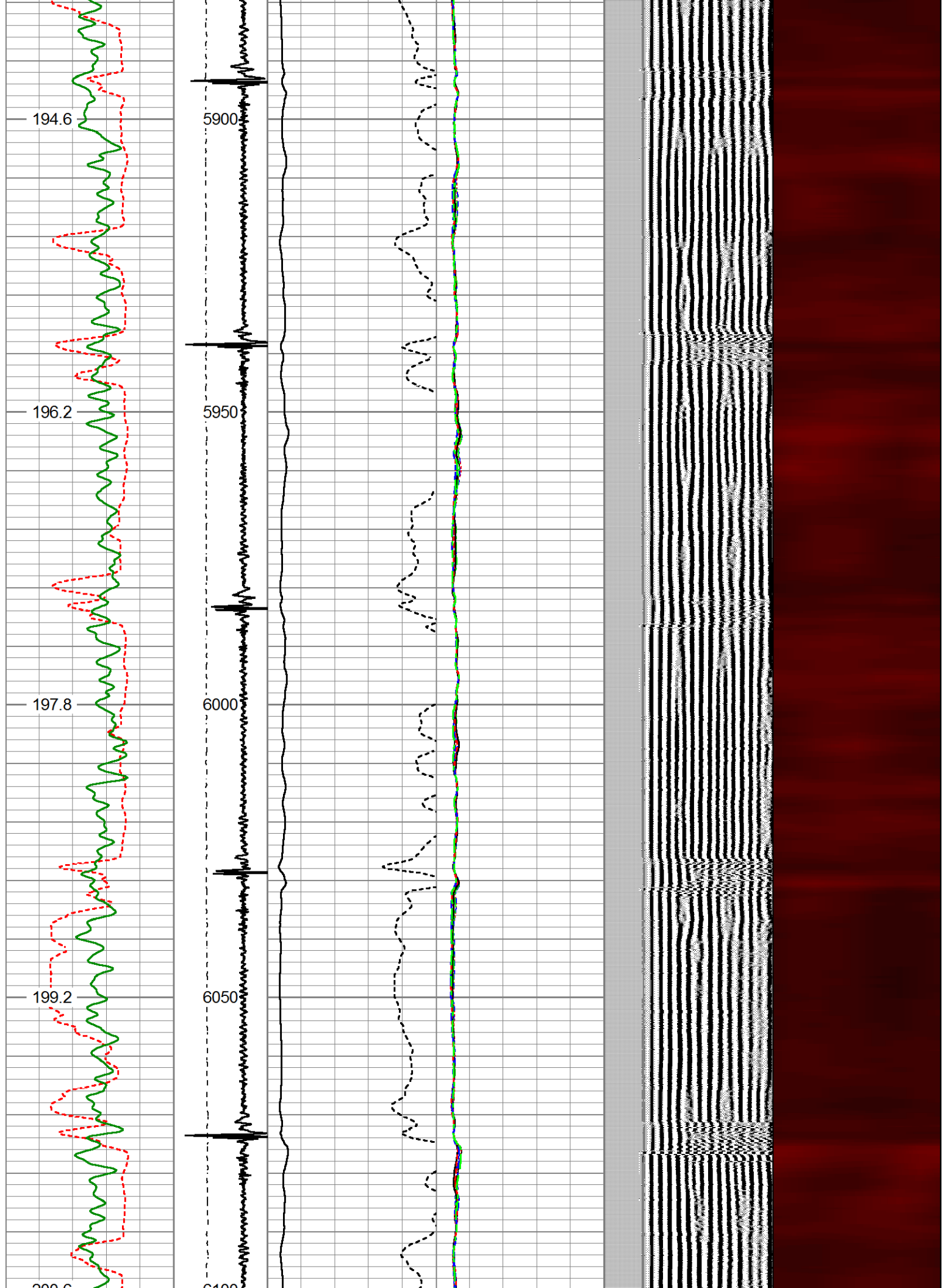


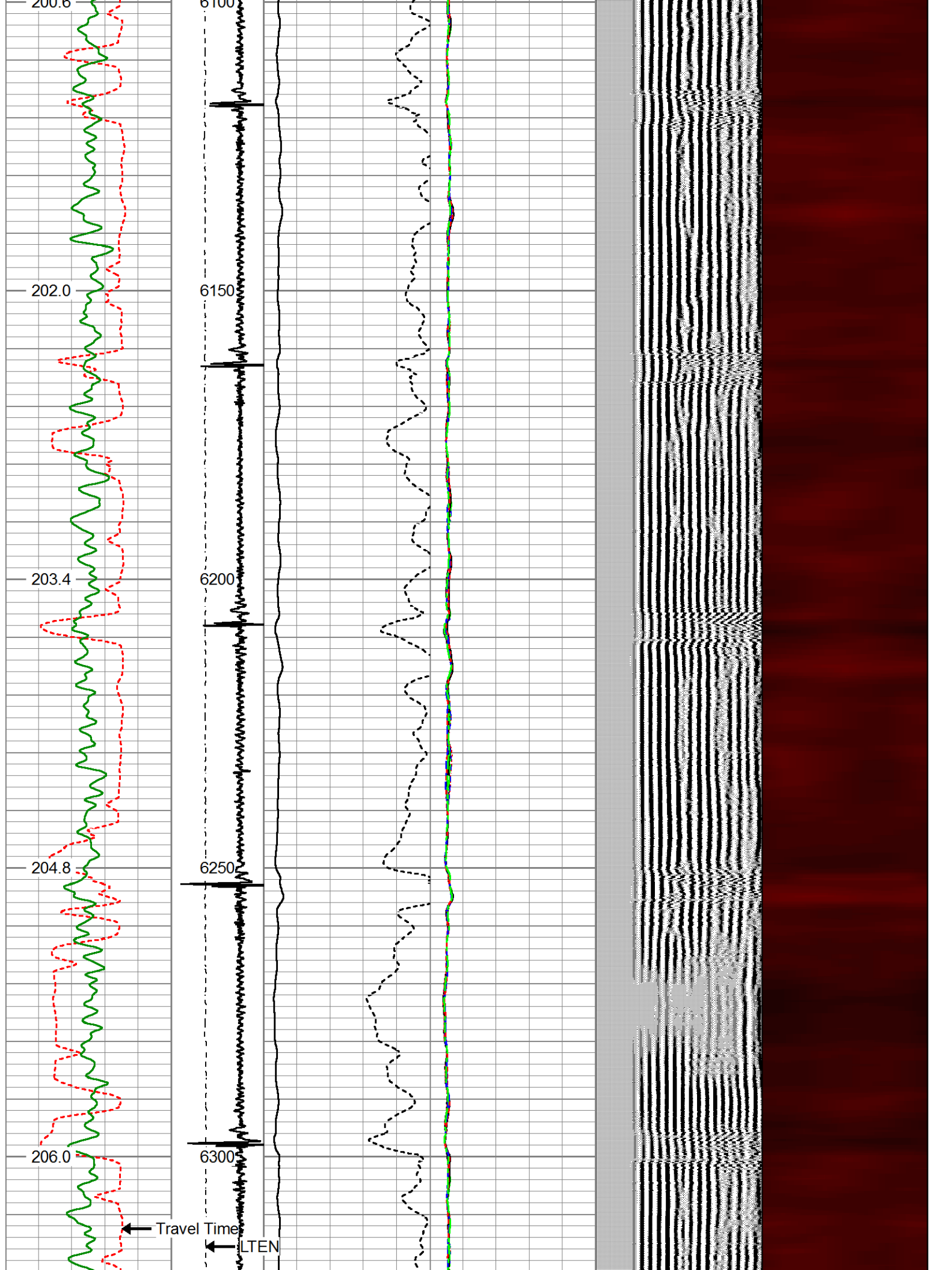


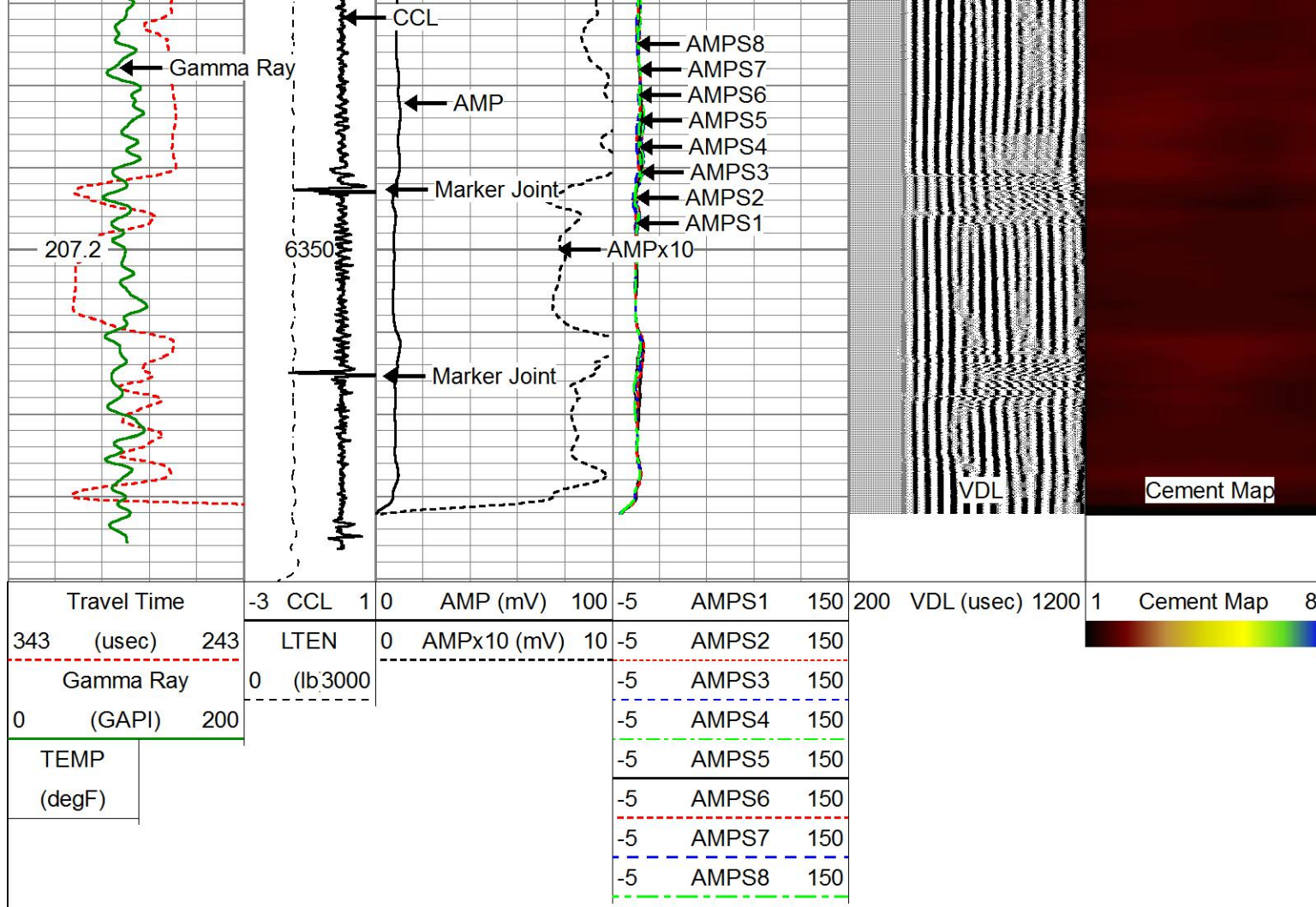








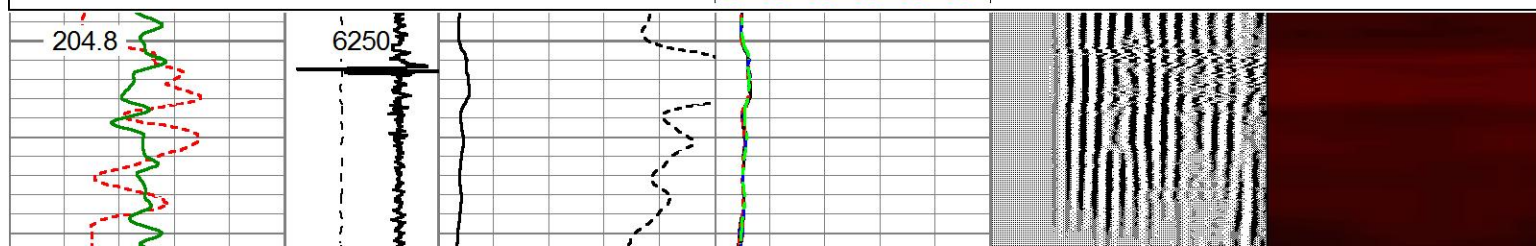
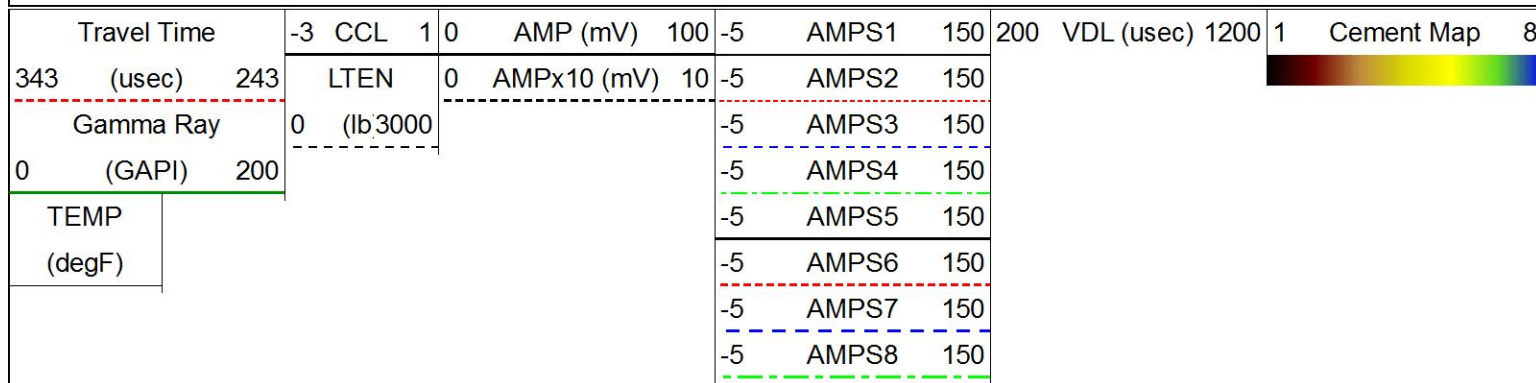


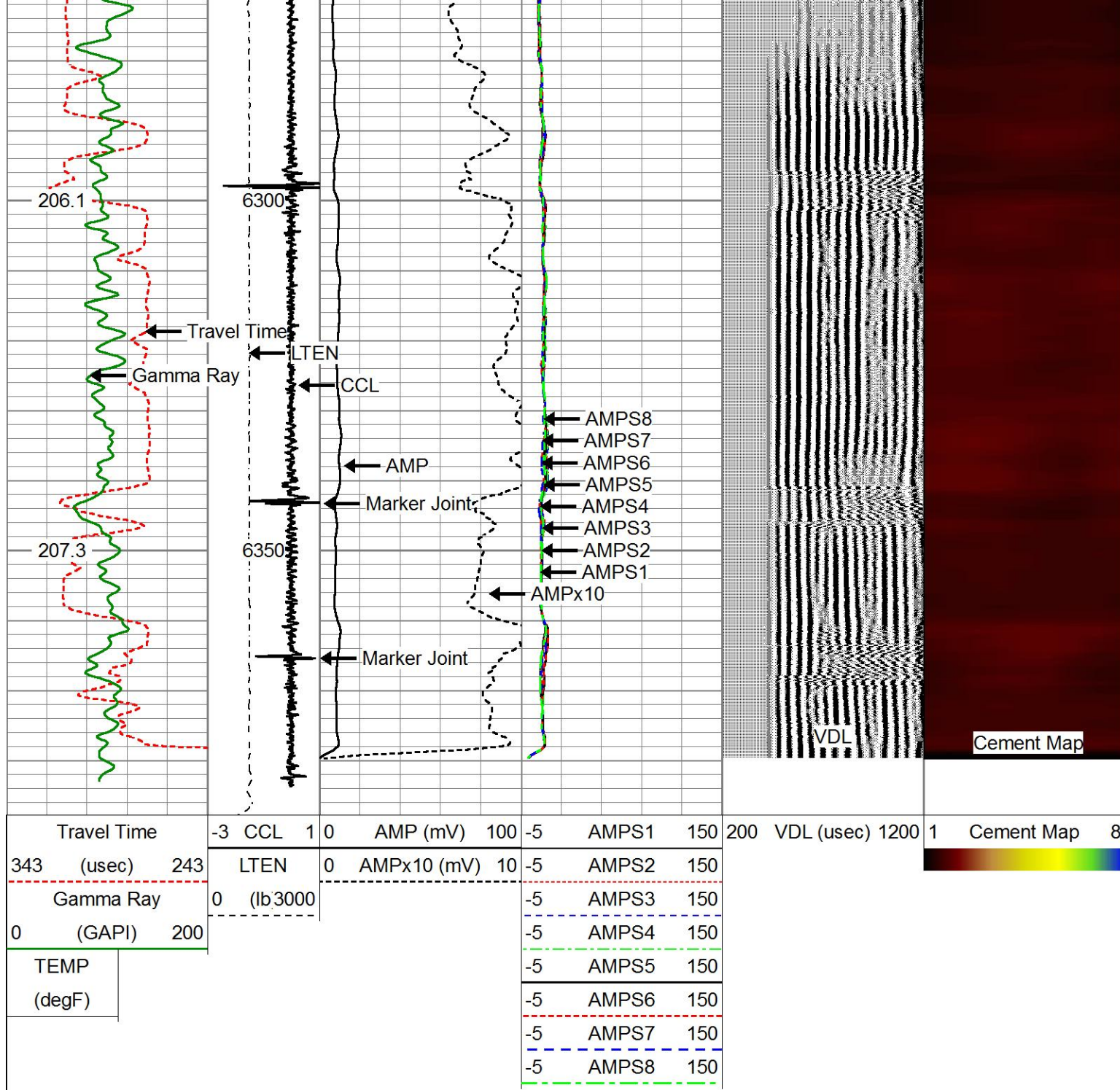


REPEAT PASS, 2800 PSI

5" = 100'

Database File damore 18-5hz.db
 Dataset Pathname LOG1/pass3
 Presentation Format rbt-gct8acc
 Dataset Creation Mon May 18 07:41:47 2020
 Charted by Depth in Feet scaled 1:240





Calibration Report

Database File: damore 18-5hz.db
 Dataset Pathname: LOG1/pass4
 Dataset Creation: Mon May 18 07:45:20 2020

Gamma Ray Calibration Report

Serial Number: FW1304-53
 Tool Model: Probe275
 Performed: (Not Performed)

Calibrator Value: 1.0 GAPI

Background Reading: 0.0 cps
 Calibrator Reading: 1.0 cps

Sensitivity: 1.0000 GAPI/cps

Temperature Calibration Report

Serial Number: FW1304-53
Tool Model: Probe275
Performed: Sun Jan 05 18:47:35 2020

	Reference	Reading
Low Reference:	100.00 degF	6258.73
High Reference:	350.00 degF	26472.00
Gain:	0.01	
Offset:	22.59	
Delta Spacing	2	

Segmented Cement Bond Log Calibration Report

Serial Number: FW1905-150
Tool Model: RBTC3

Calibration Casing Diameter: 5.500 in
Calibration Depth: 1155.304 ft

Master Calibration, performed (Derived):

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.001	0.560	0.000	71.921	128.709	-0.157
CAL	0.004	0.629				
5'	0.002	0.502	0.000	71.921	143.618	-0.217
SUM						
S1	-0.003	0.583	0.000	100.000	170.781	0.434
S2	0.001	0.544	0.000	100.000	184.106	-0.216
S3	0.001	0.521	0.000	100.000	192.210	-0.197
S4	0.001	0.531	0.000	100.000	188.582	-0.166
S5	0.002	0.563	0.000	100.000	178.257	-0.270
S6	0.001	0.609	0.000	100.000	164.617	-0.217
S7	0.002	0.637	0.000	100.000	157.551	-0.315
S8	0.001	0.614	0.000	100.000	163.148	-0.207

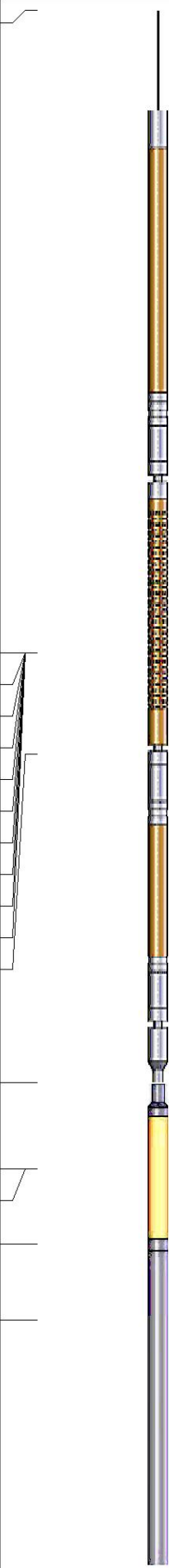
Internal Reference Calibration, performed (Not Performed):

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	0.004	0.629	1.000	0.000

Air Zero Calibration, performed Mon Feb 17 07:02:20 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)
ErrCt	15.39		Cable_Head-Standard Standard Cable Head	1.00	1.69	1.00
			RBT-RBTC3 (FW1905-150)	9.62	2.75	90.00
WVFS8	9.02					
WVFS7	9.02					
WVFS6	9.02					
WVFS5	9.02					
WVFS4	9.02					
WVFS3	9.02					
WVFS2	9.02					
WVFS1	9.02					
WVFCAL	9.02					
WVF3FT	9.02					
WVF5FT	8.02					
WVFSYNC	4.77					
DCCL	3.92					
CCL	3.92					
TEMP	3.17					
GR	2.42		GCT-Probe275 (FW1304-53) Probe 2 3/4" Gamma Ray CCL w/Temperature	4.77	2.75	40.00

Dataset:	damore 18-5HZ:db: field/well/EOG 17/pass4
Total length:	15.39 ft
Total weight:	131.00 lb
O.D.:	2.75 in



Company	OCCIDENTAL PETROLUEM CORP.
Well	DAMORE 18-5HZ
Field	WATTENBERG
County	WELD
State	COLORADO