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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

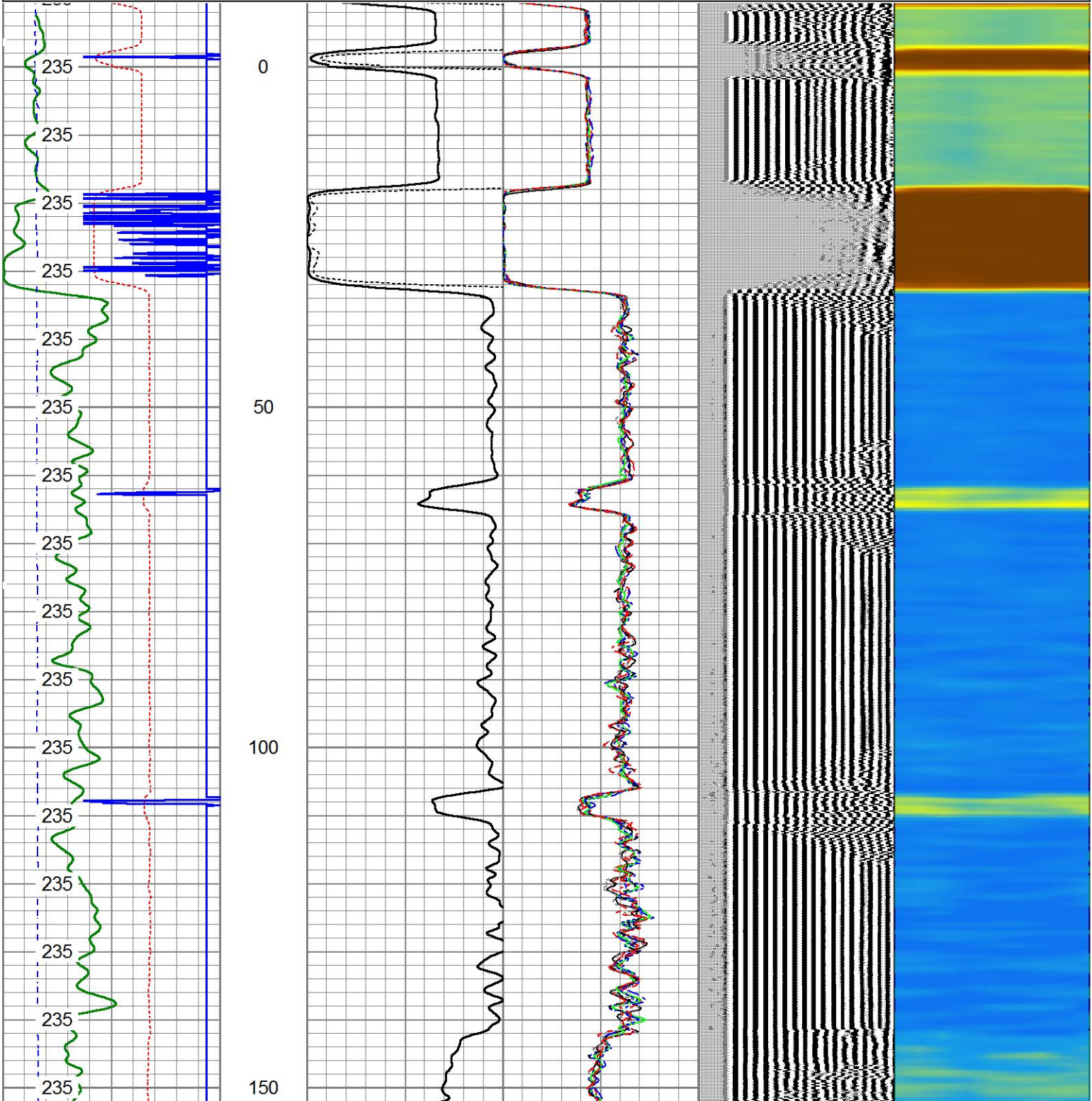
Cement Bond Log ran as per customer request
Depth Correlated to Casing Tally reported Marker Joint @ 7062 FT
Adjusted log +13 FT to correlate with Marker Joint
Retrievable Bridge Plug Set @ 7526 FT.
Log ran from 7450 FT to Surface
Log ran with 4000 PSI Surface Induced Pressure.

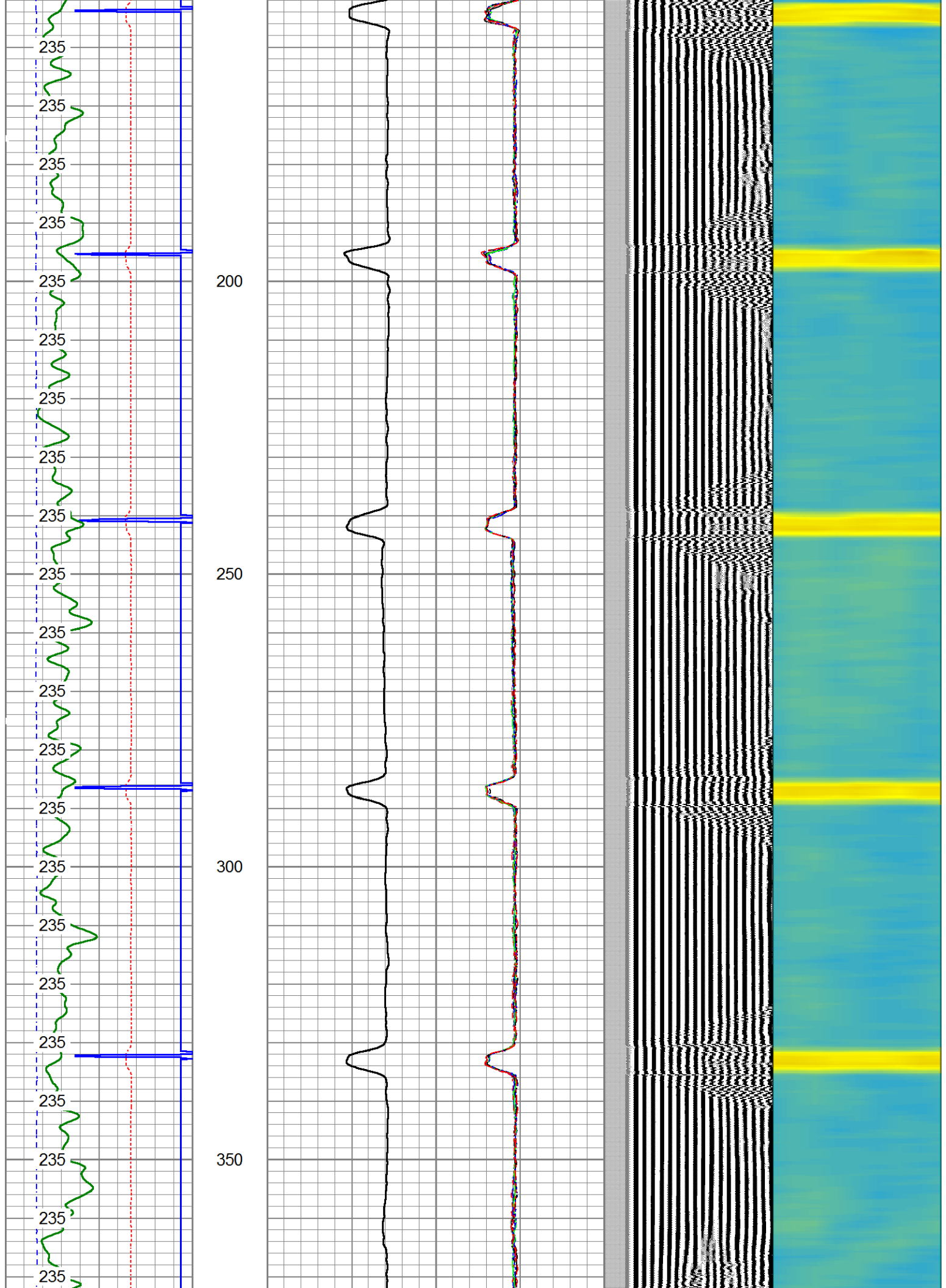
Thank you for choosing KLX Energy Services!!

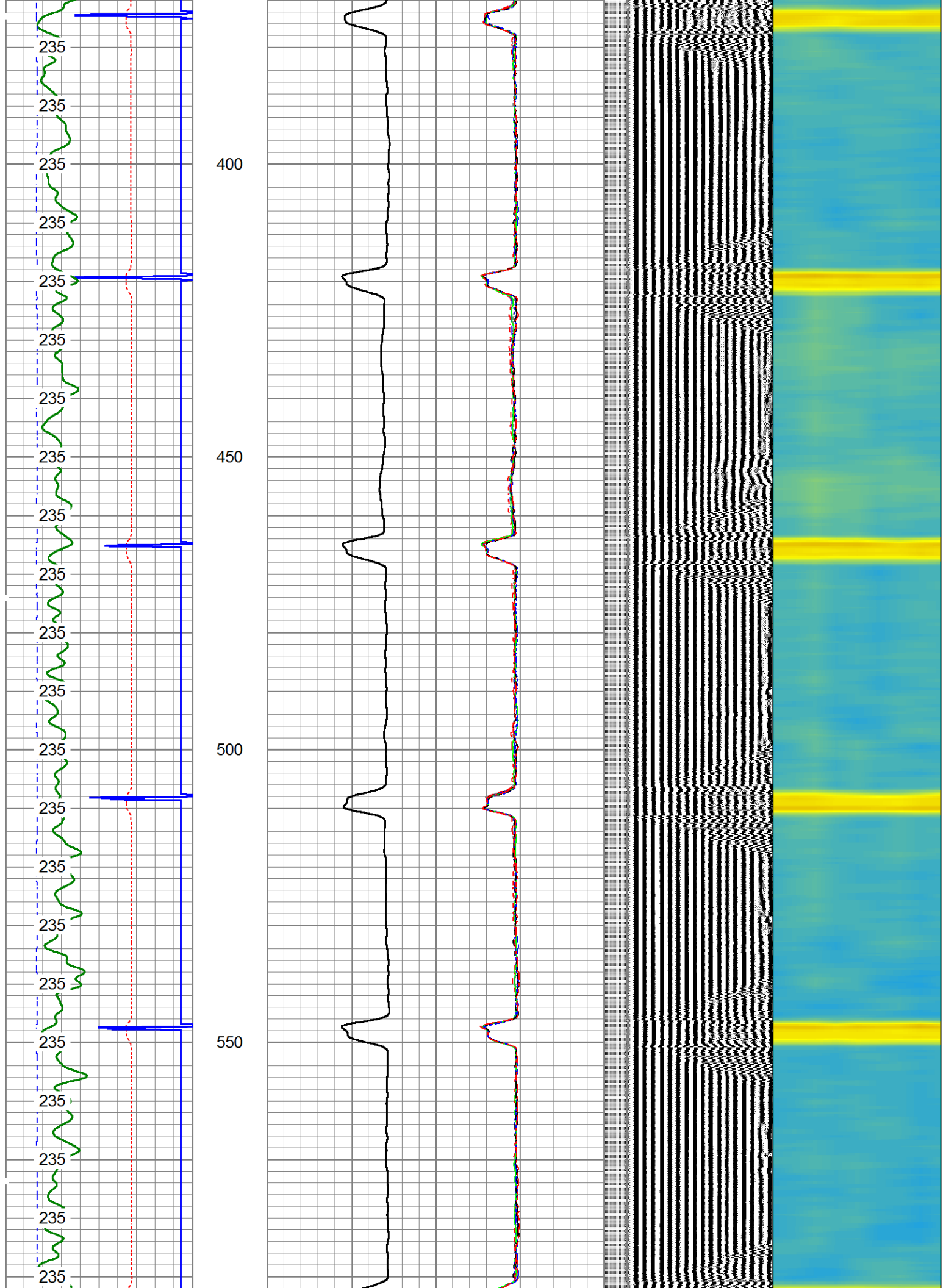


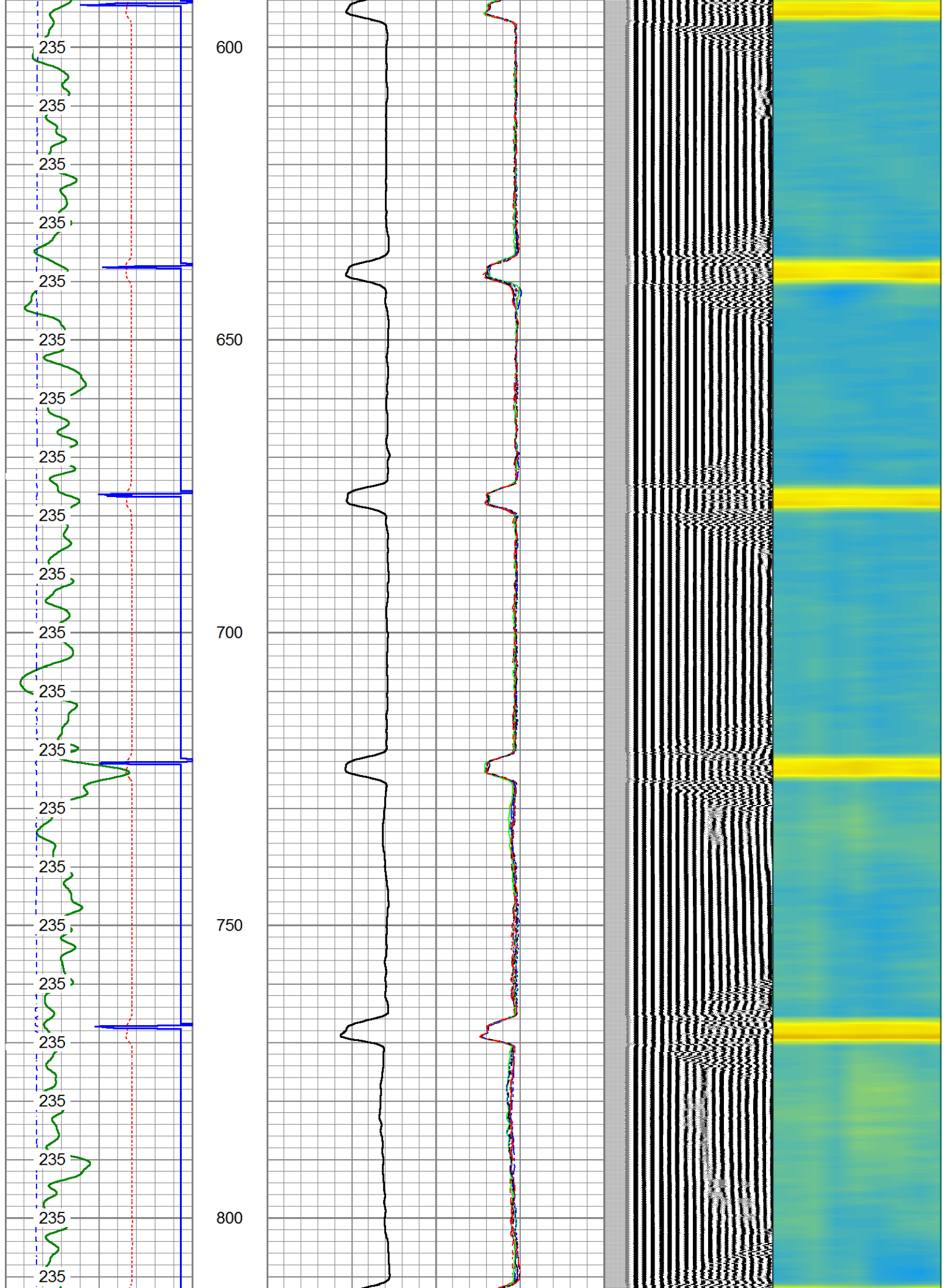
RECORDED WITH 4000 PSI SURFACE INDUCED PRESSURE.

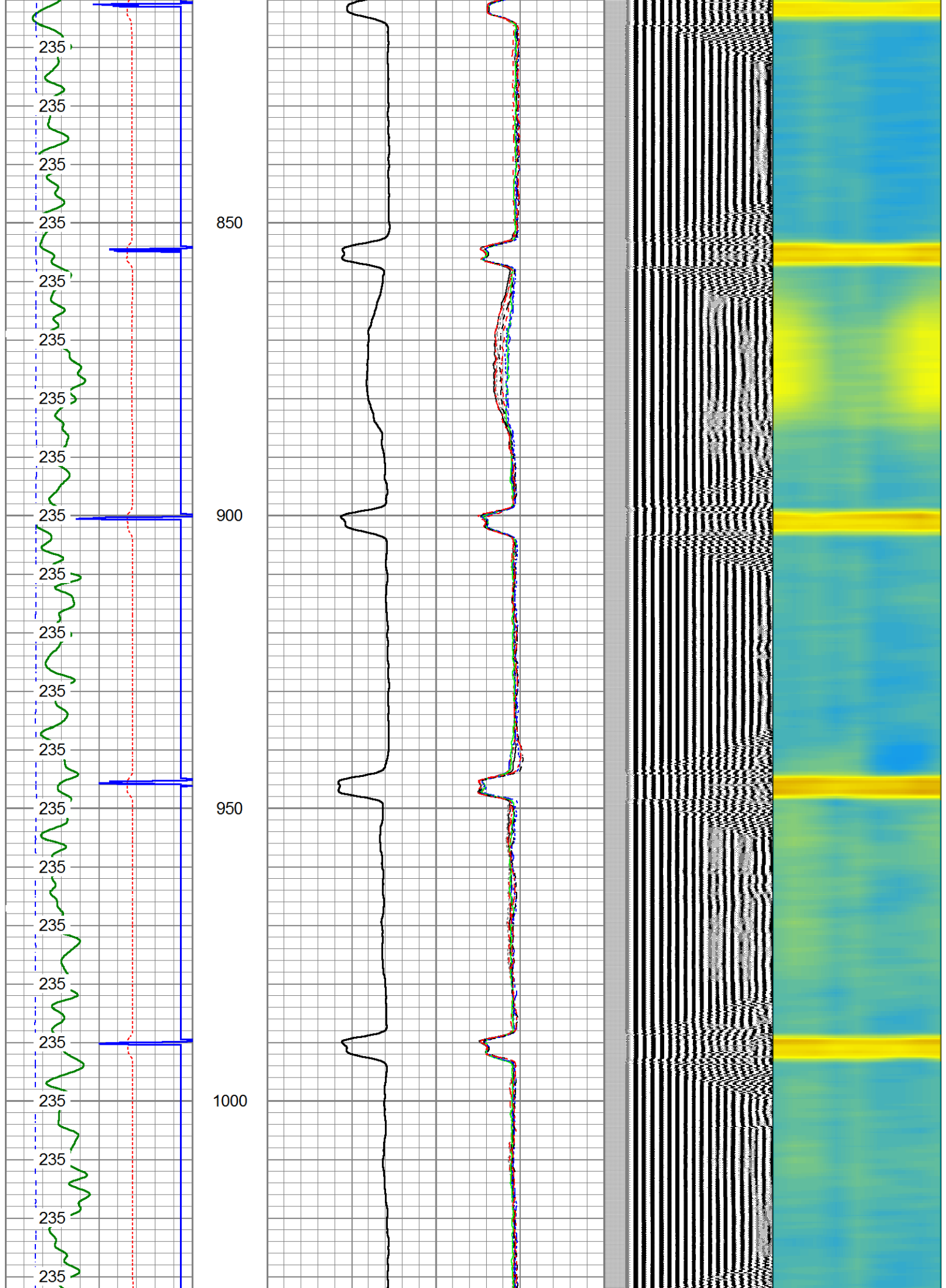
Travel Time			0	Amplitude (mV)	100	0	AMPS1	150	Variable Density			1	Cement Map	8
400	(usec)	200	Amplified Amplitude			0	AMPS2	150	200	(usec)	1200			
15	Casing Collar	-1	0	(mV)	30	0	AMPS3	150						
Gamma Ray						0	AMPS4	150						
0	(GAPI)	200				0	AMPS5	150						
0	Line Tension (lb)	2500				0	AMPS6	150						
BOTTEMP						0	AMPS7	150						
(degF)						0	AMPS8	150						

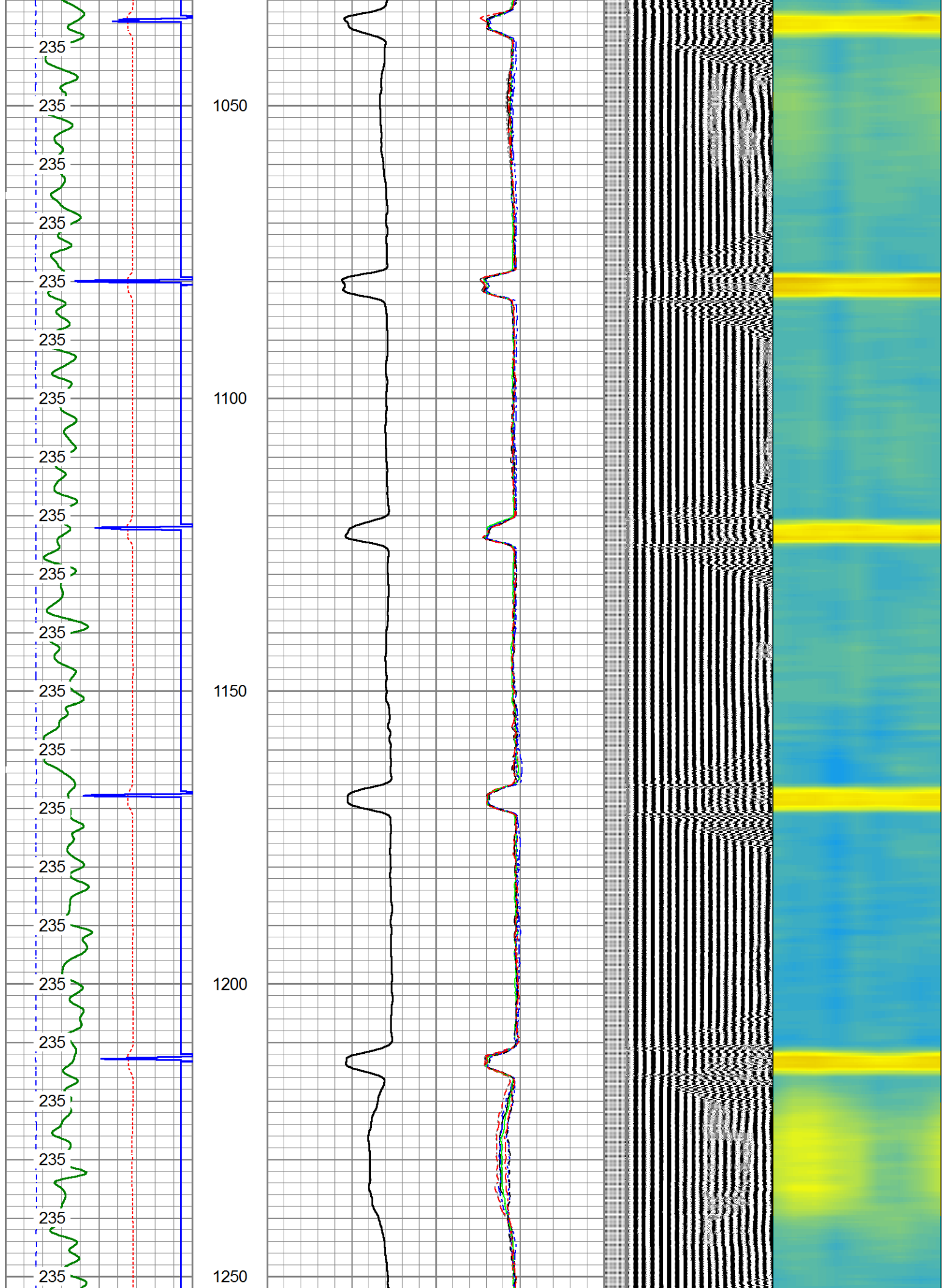


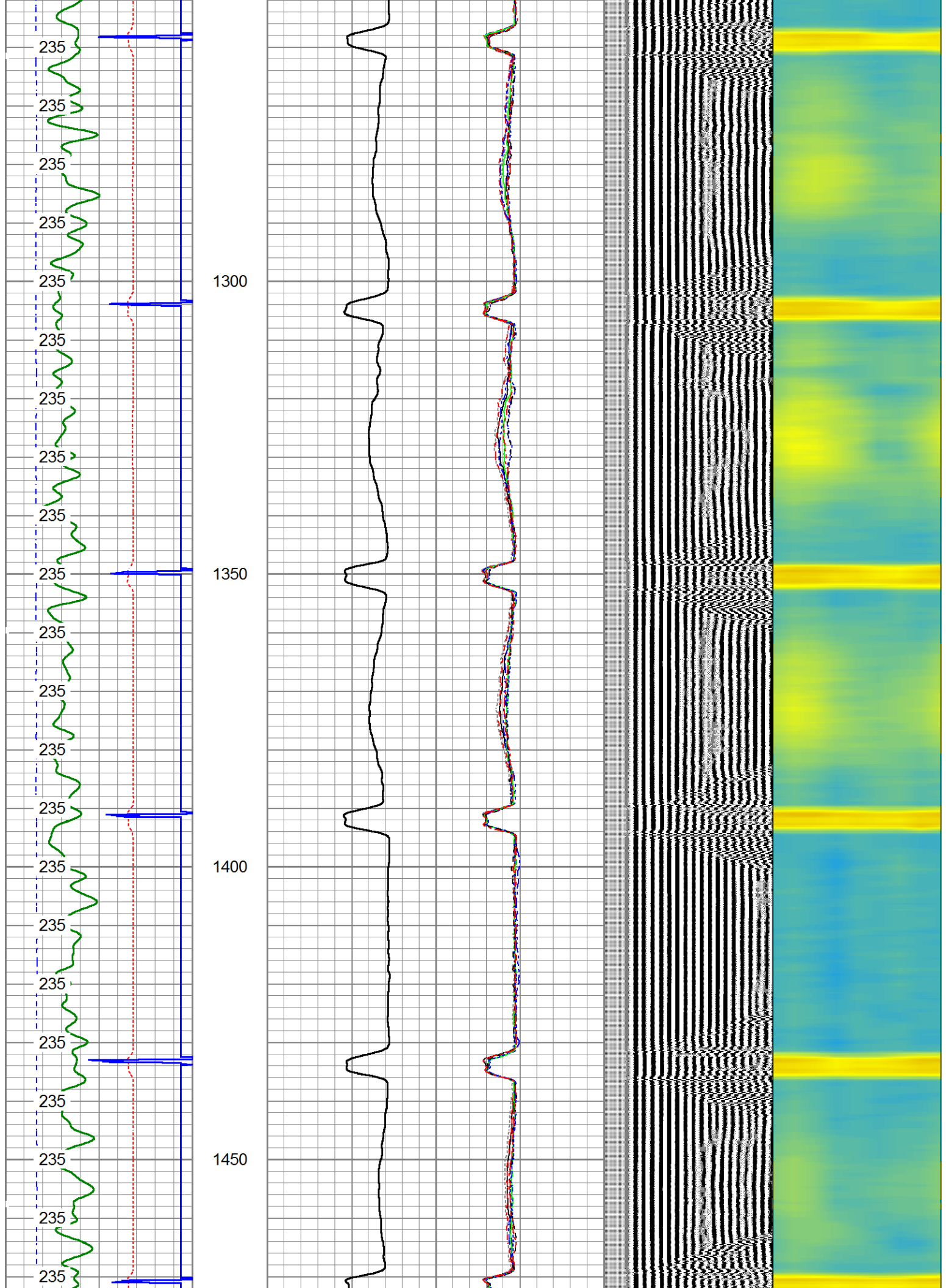


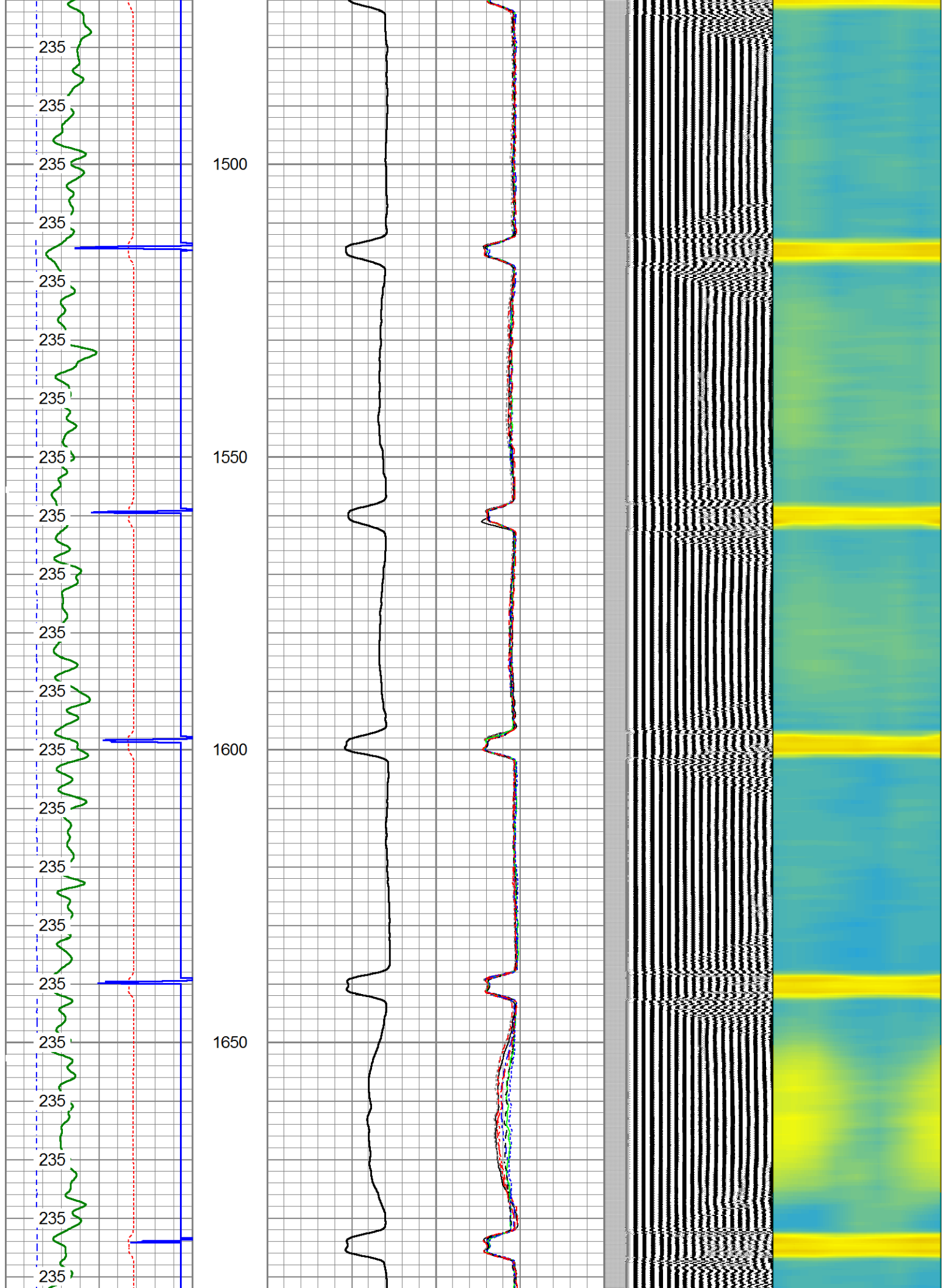


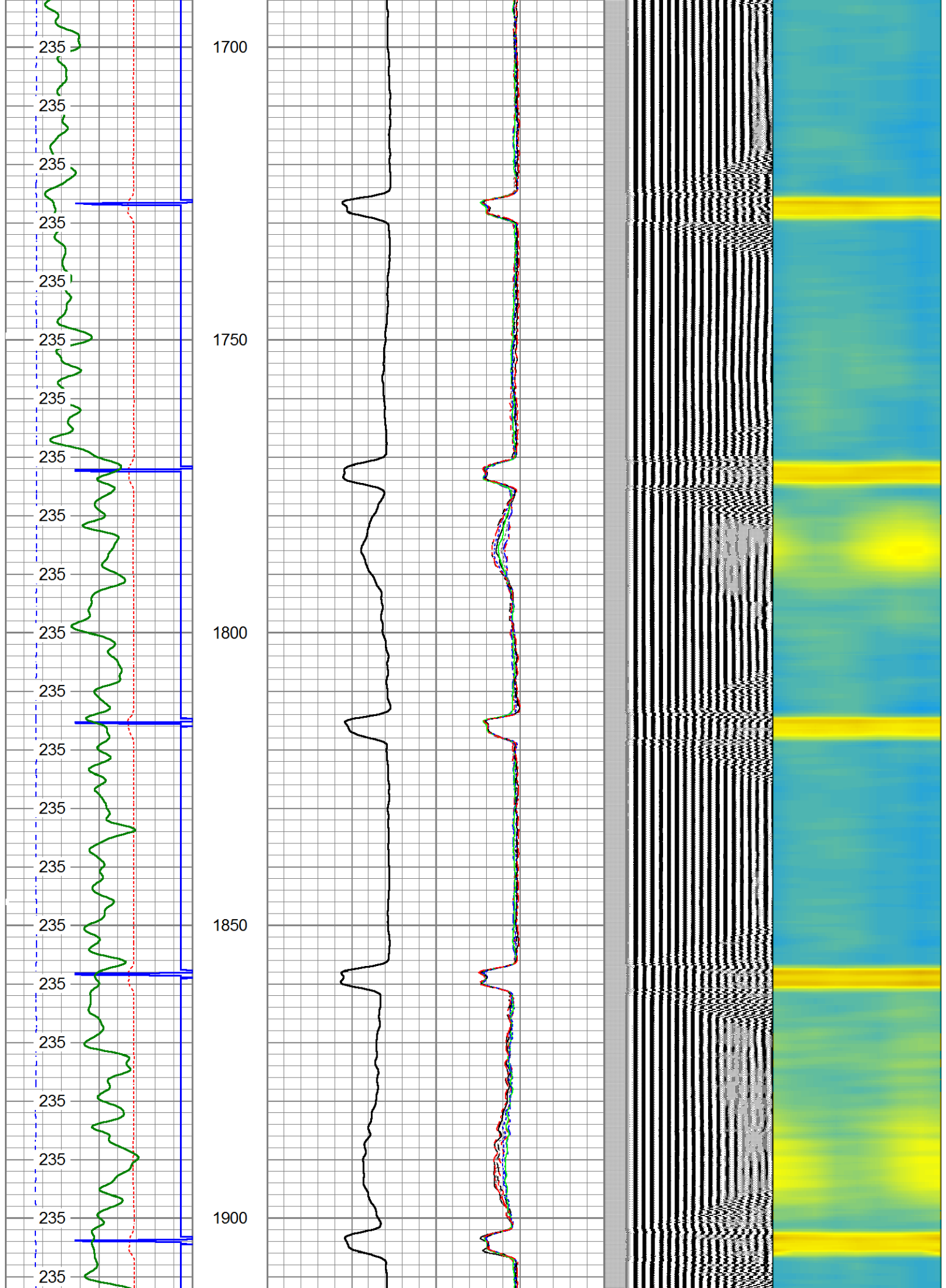


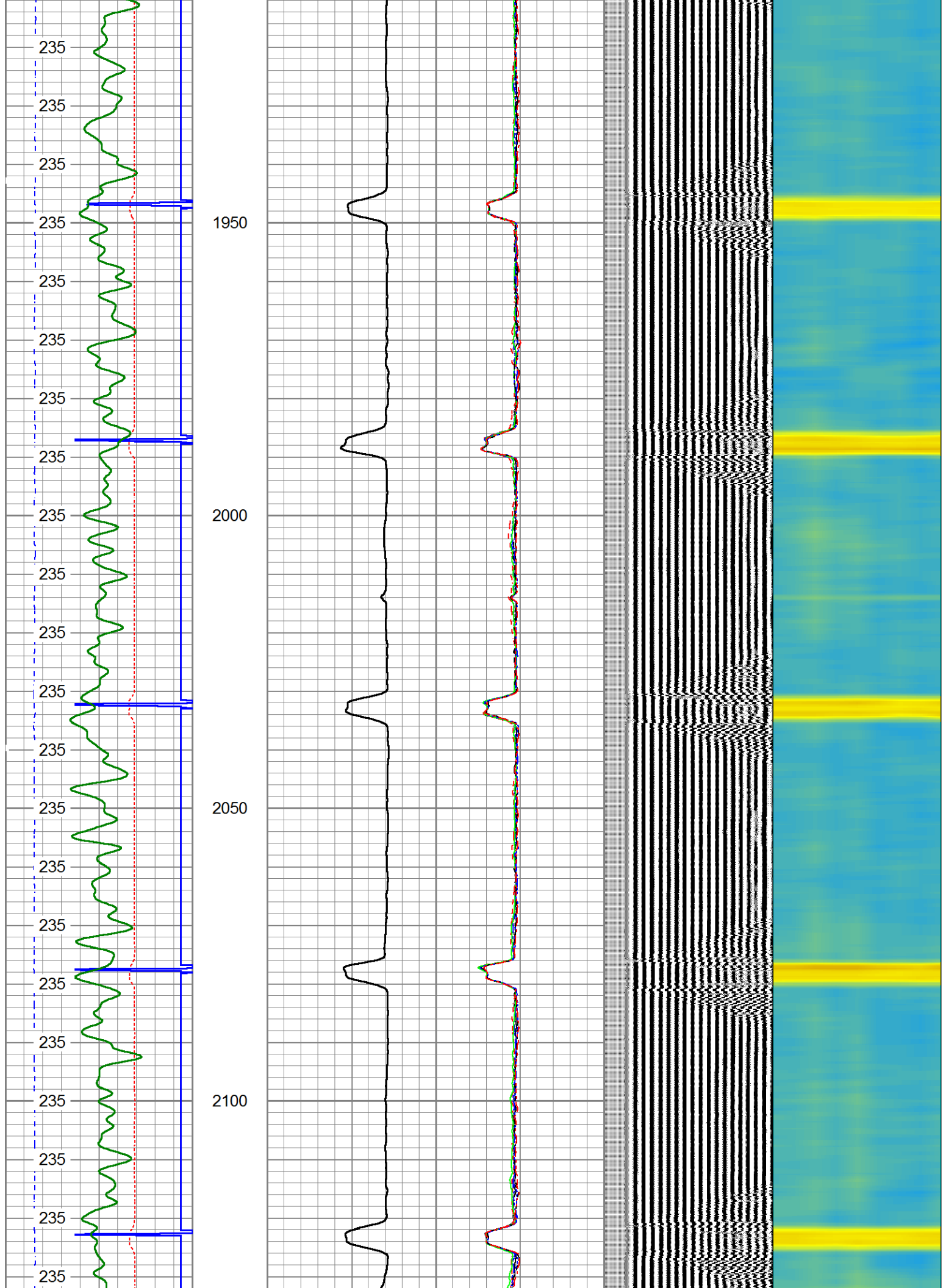


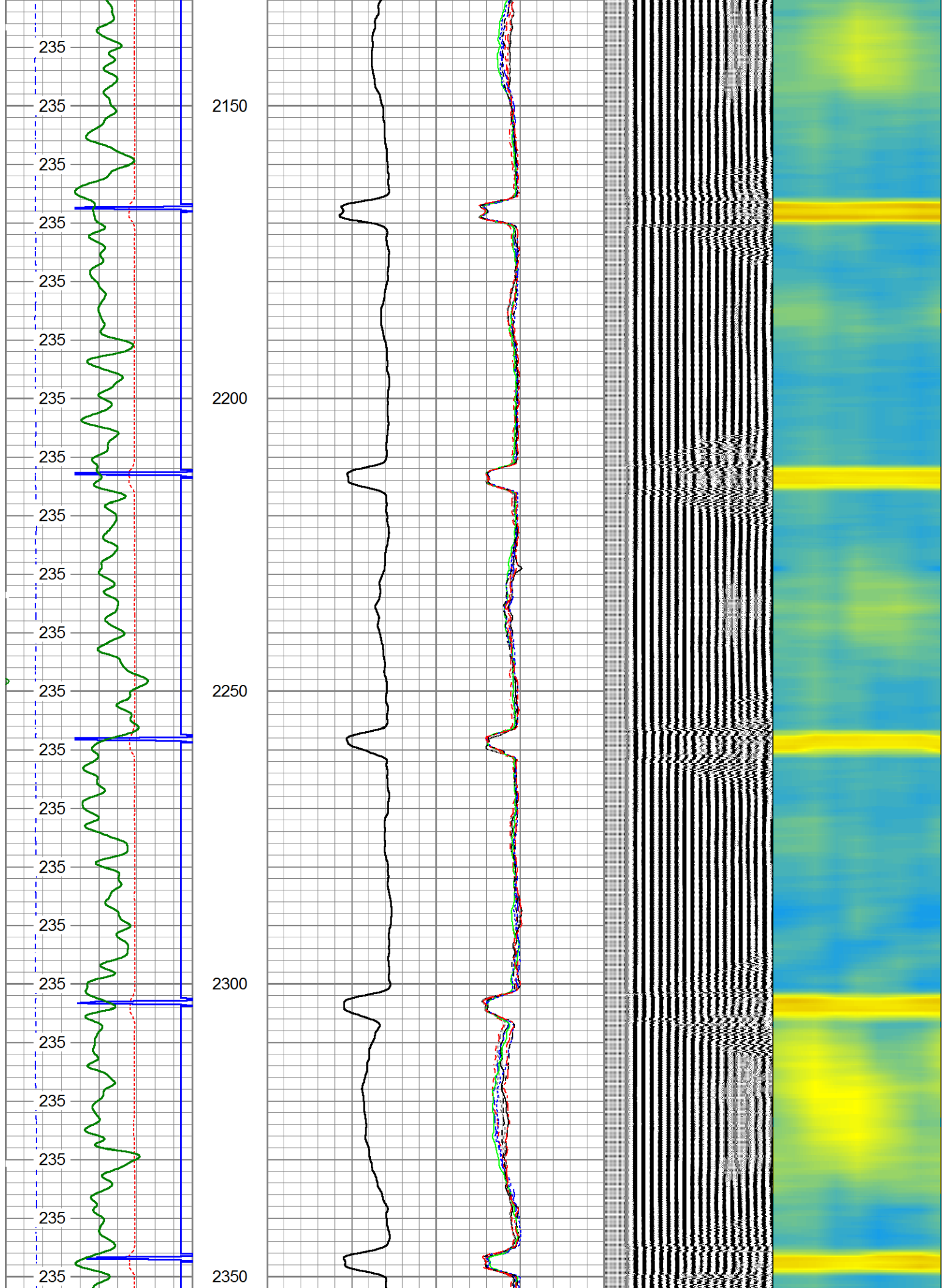


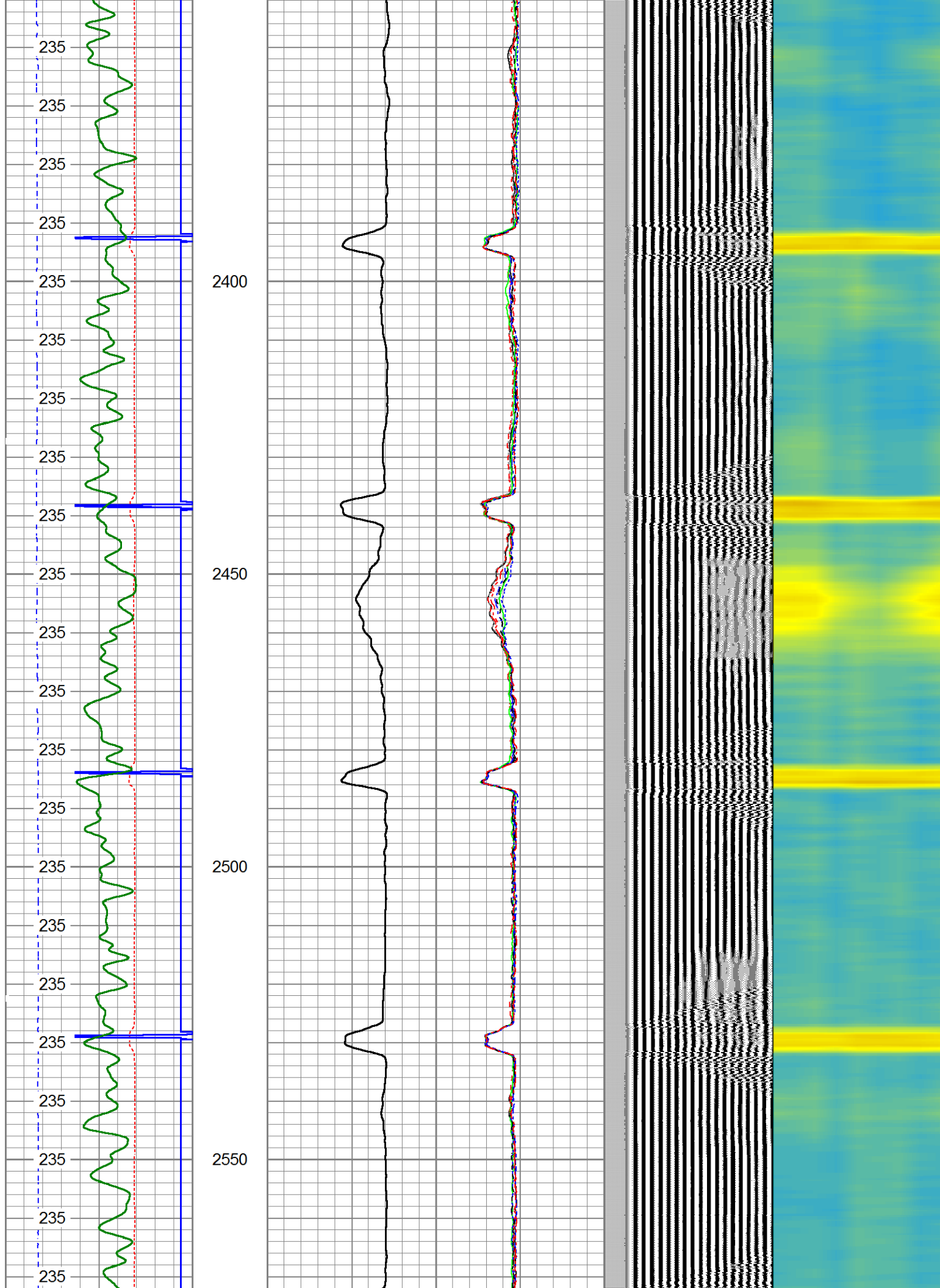


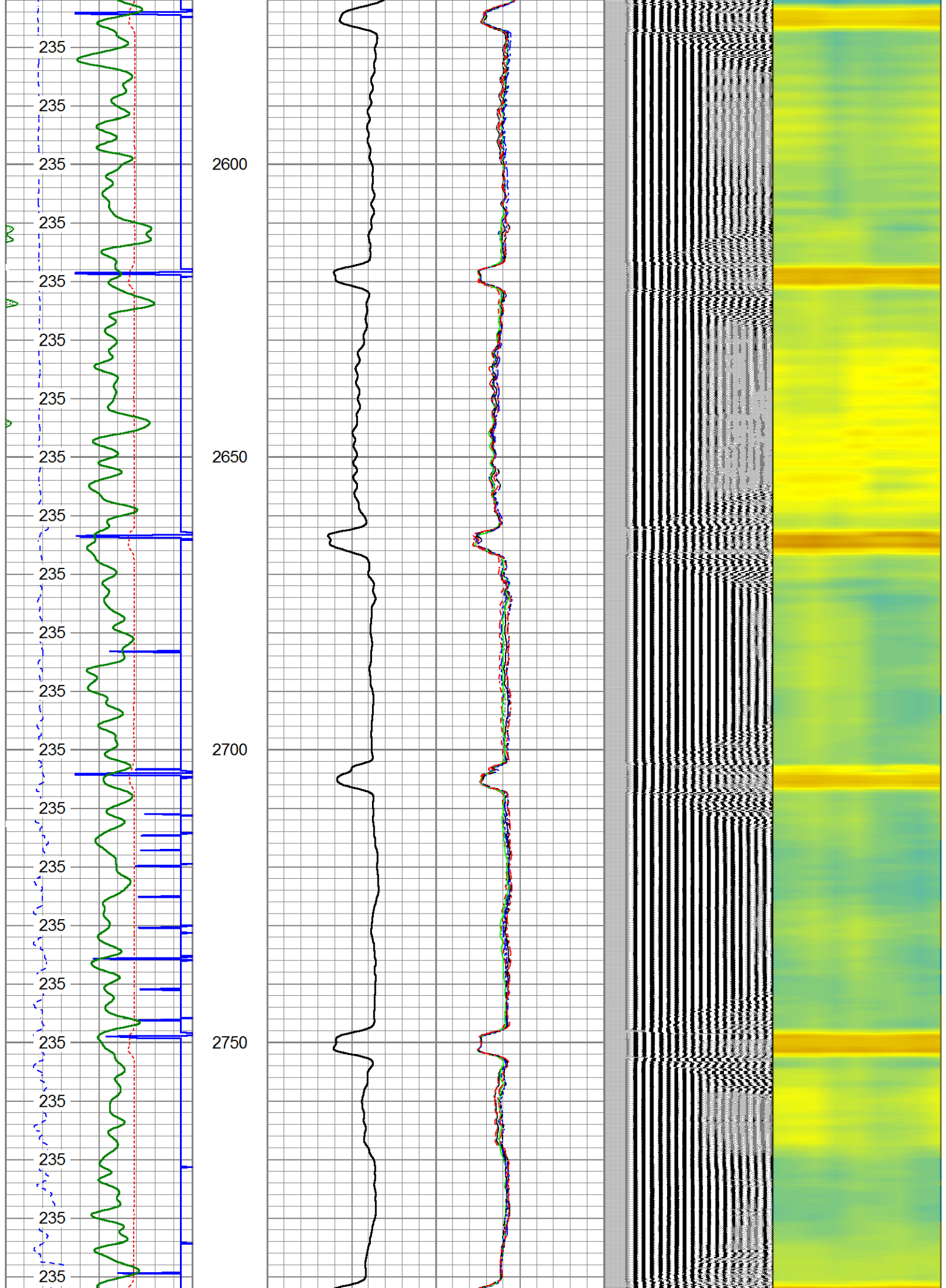


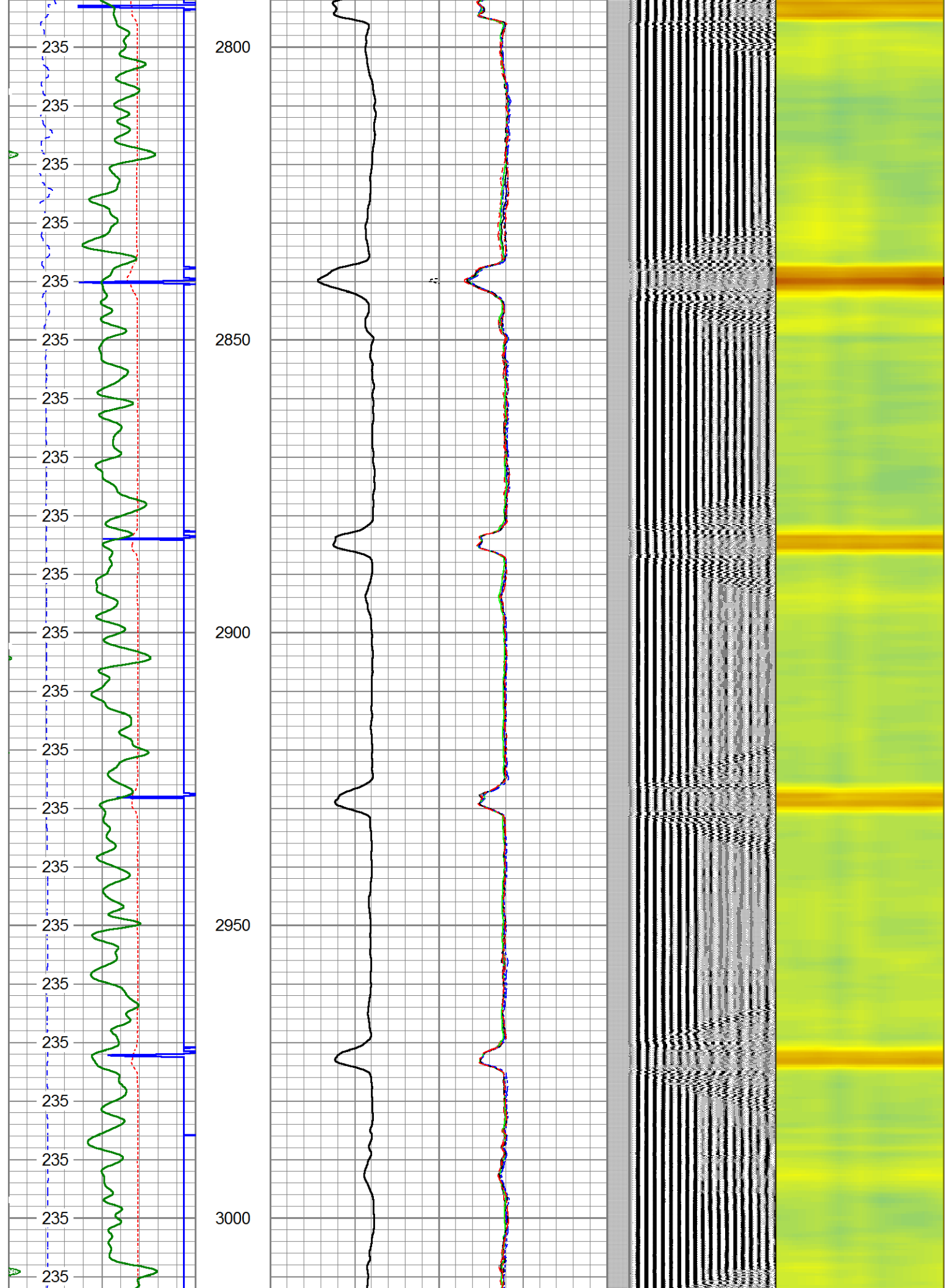


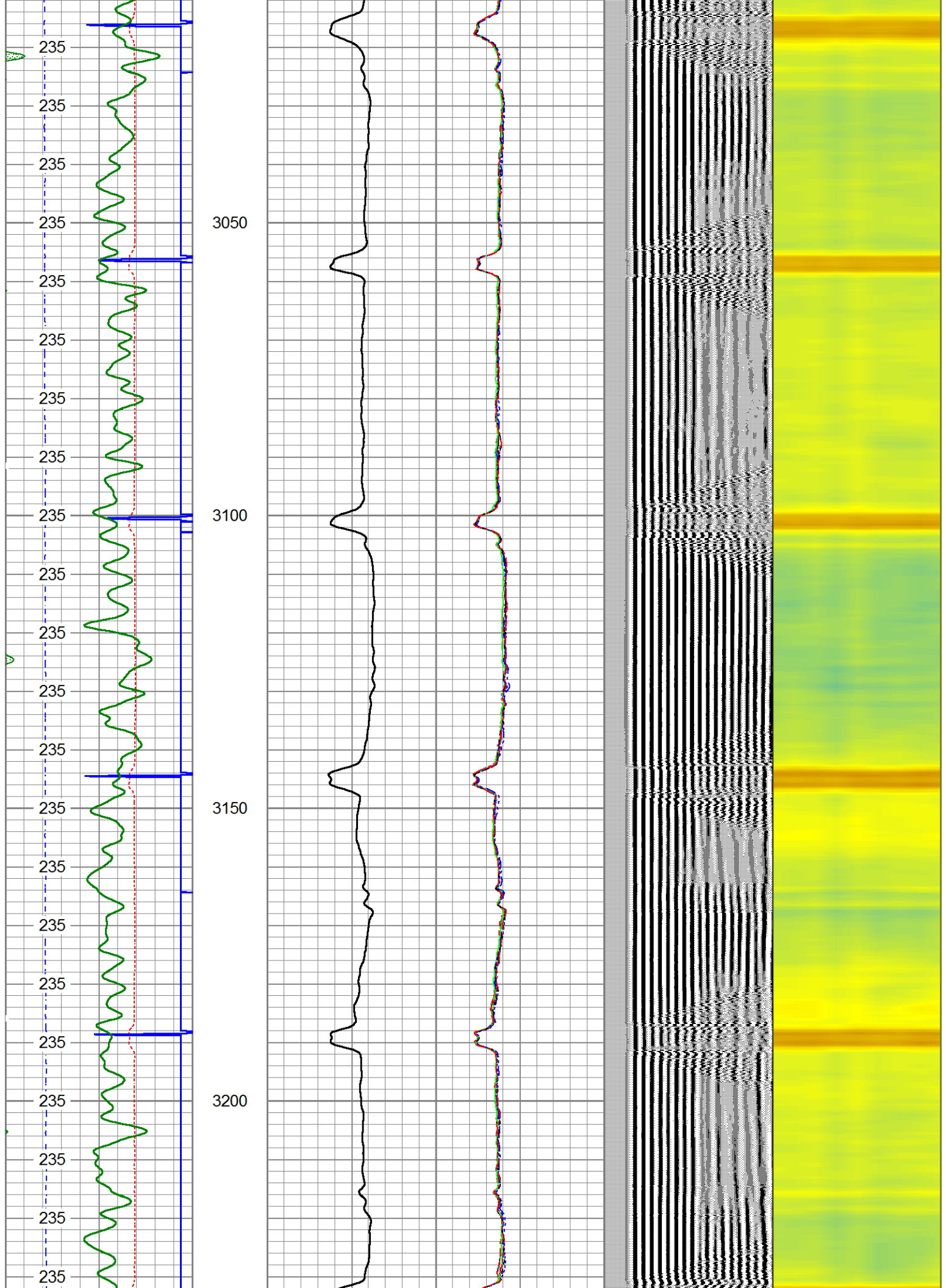


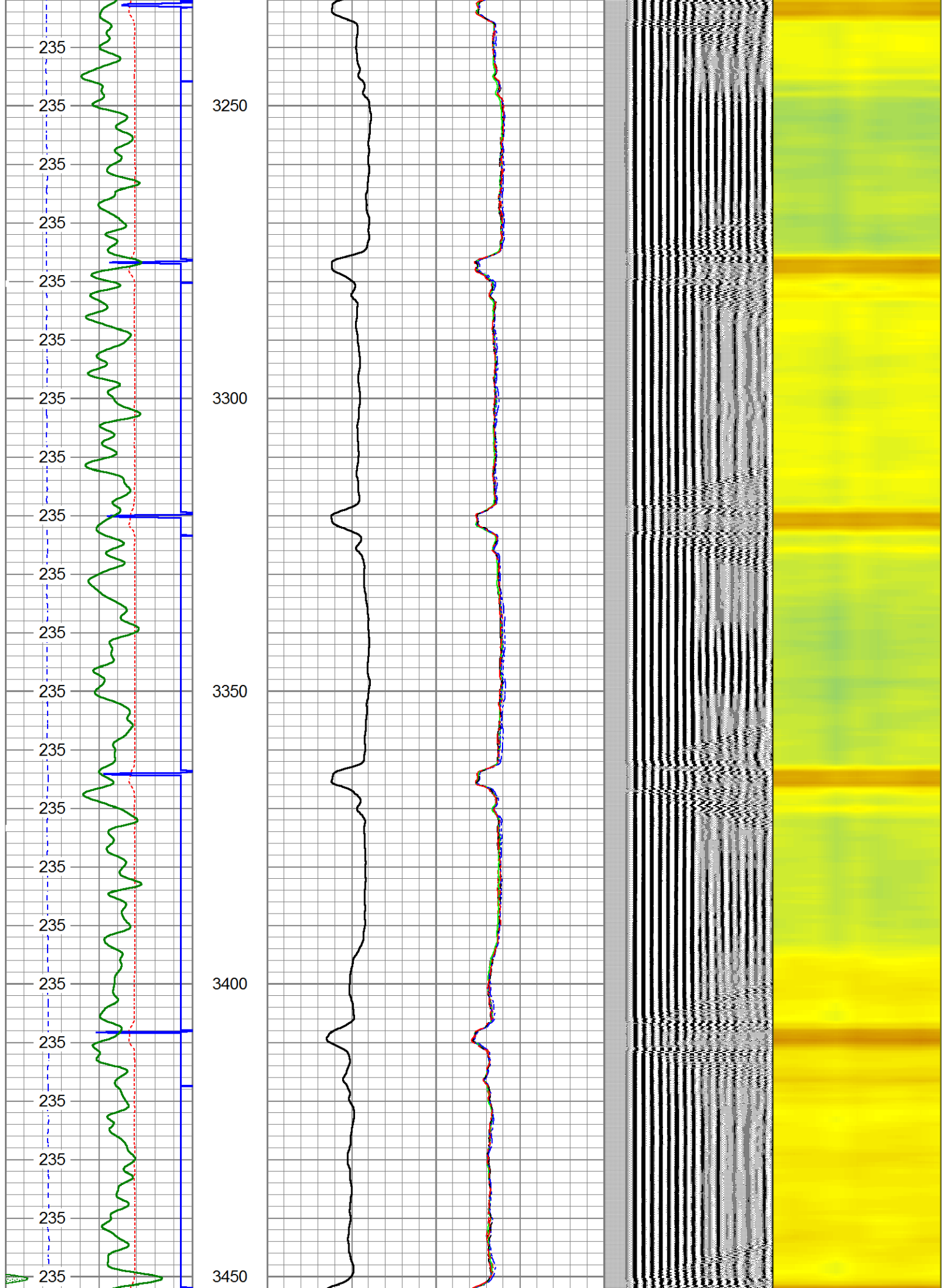


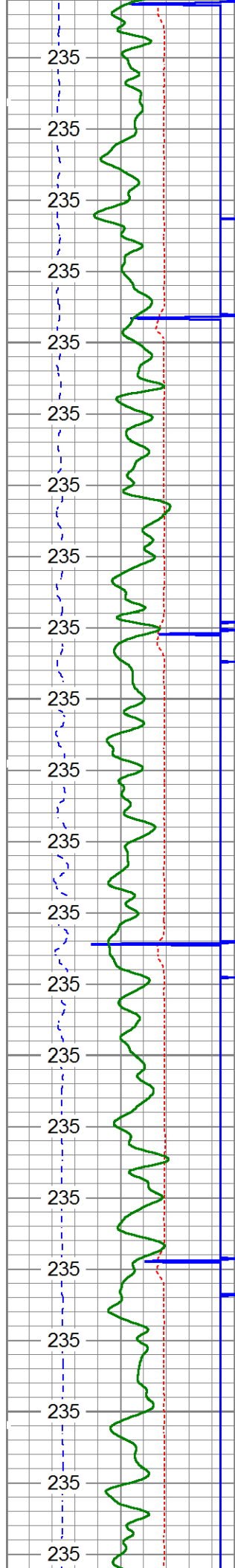










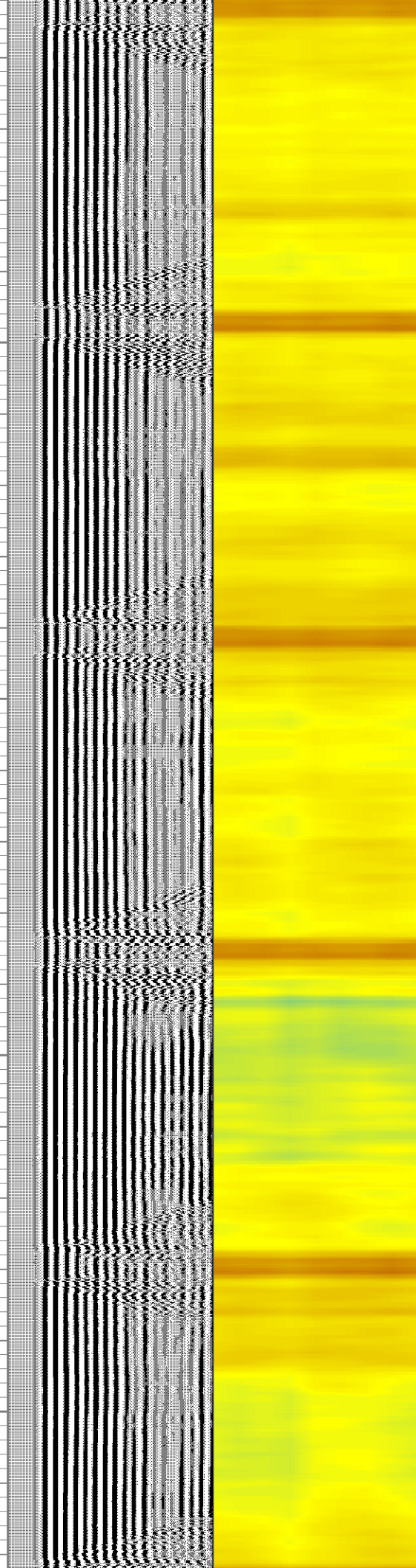
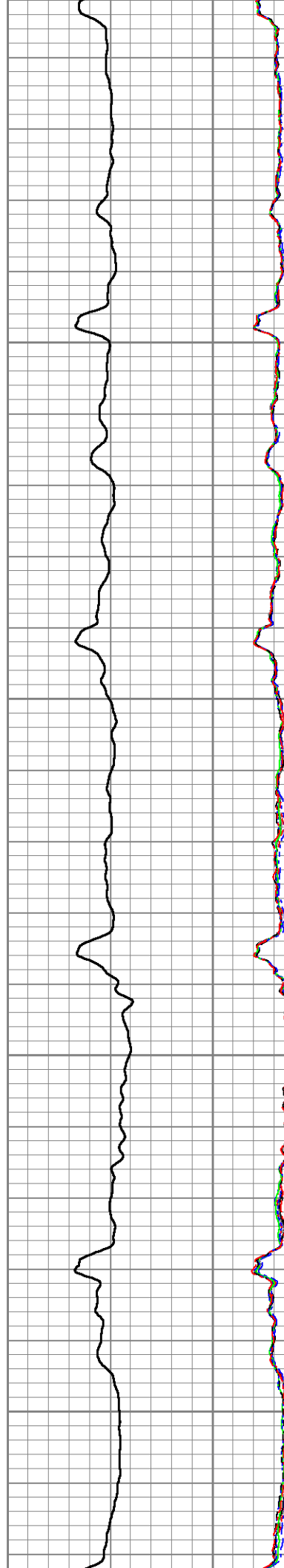


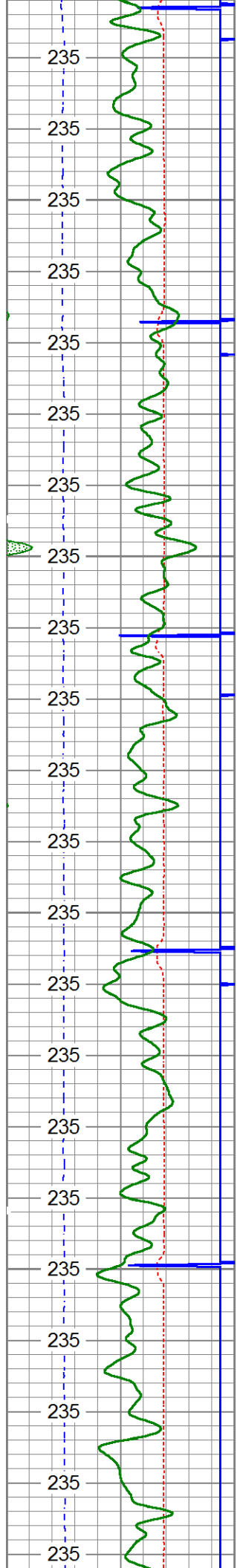
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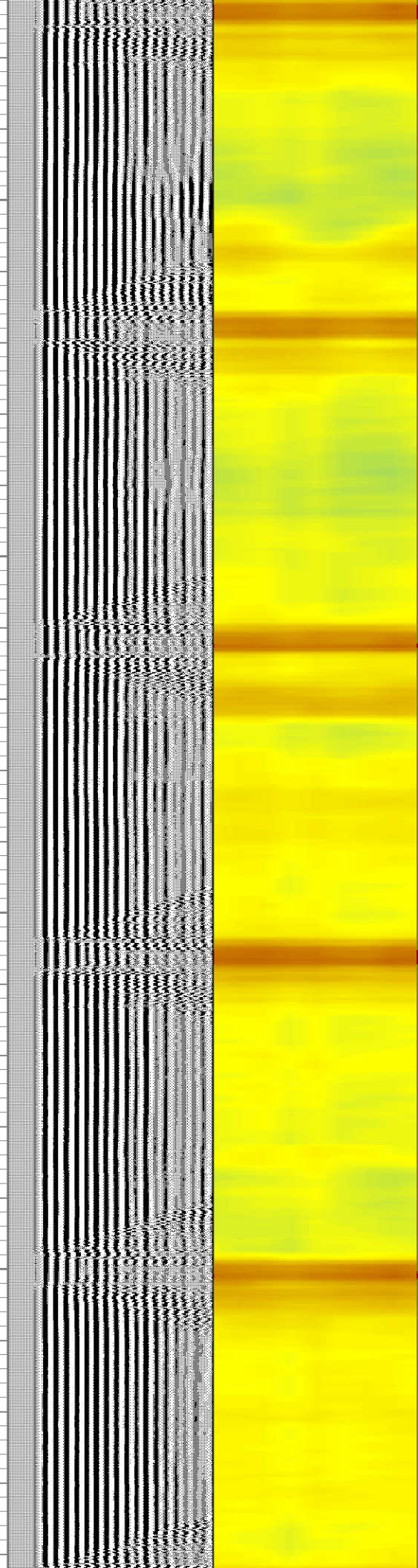
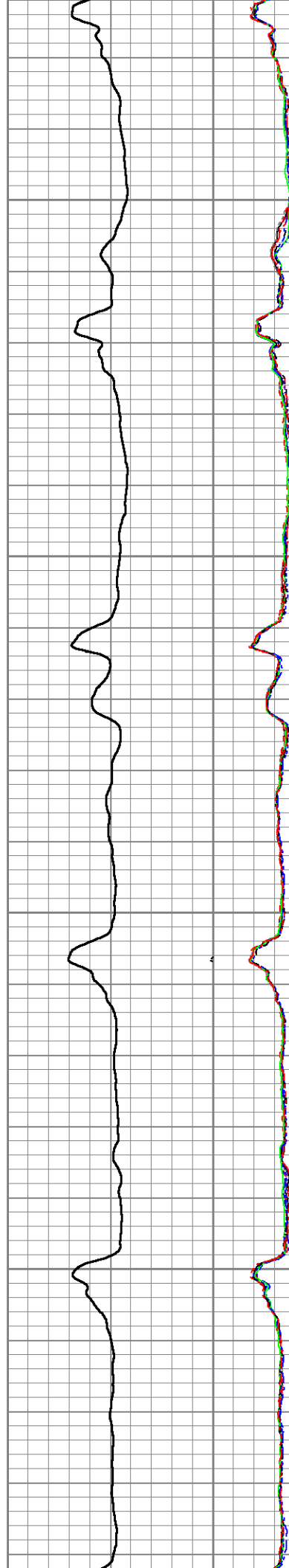


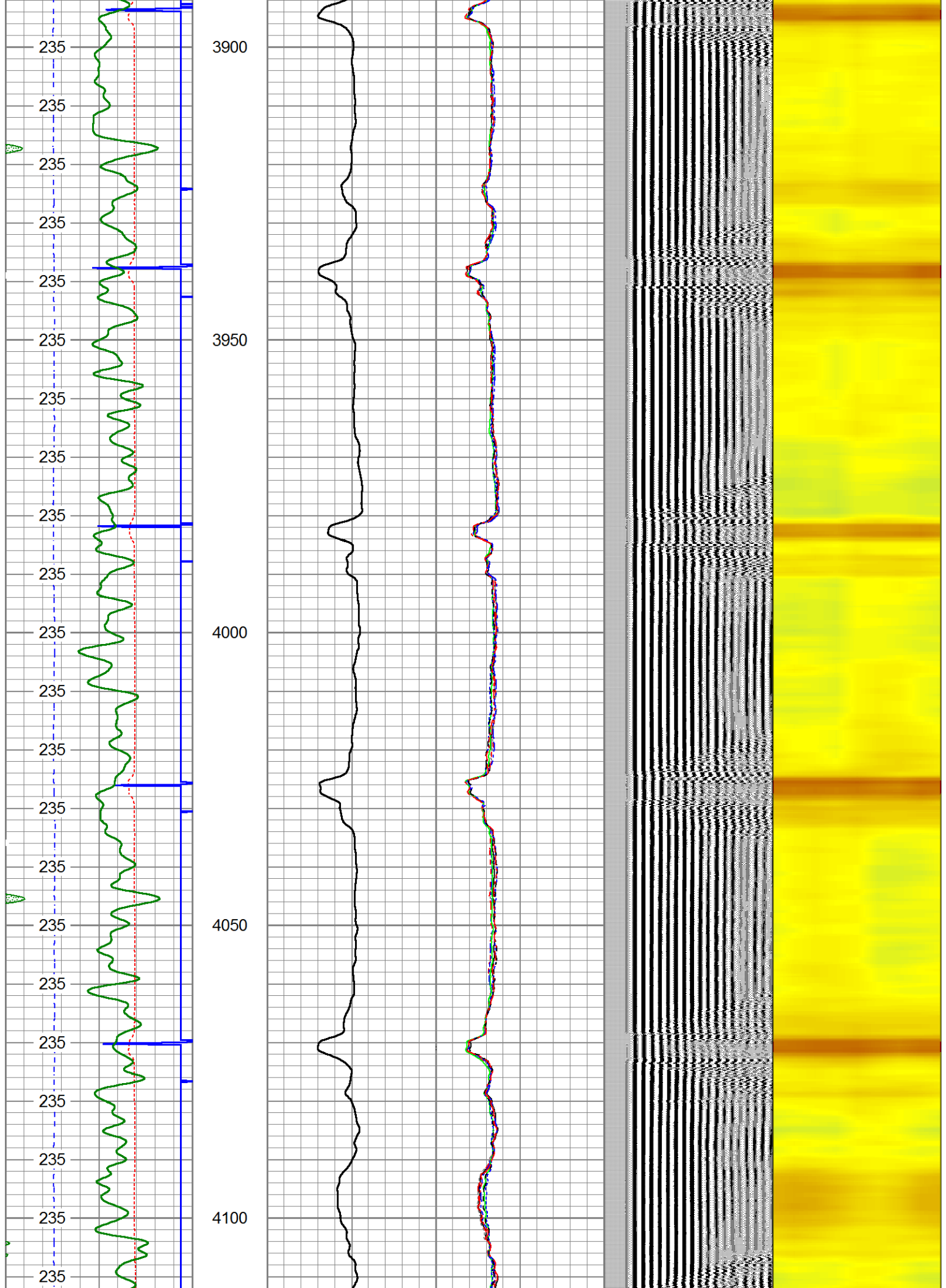
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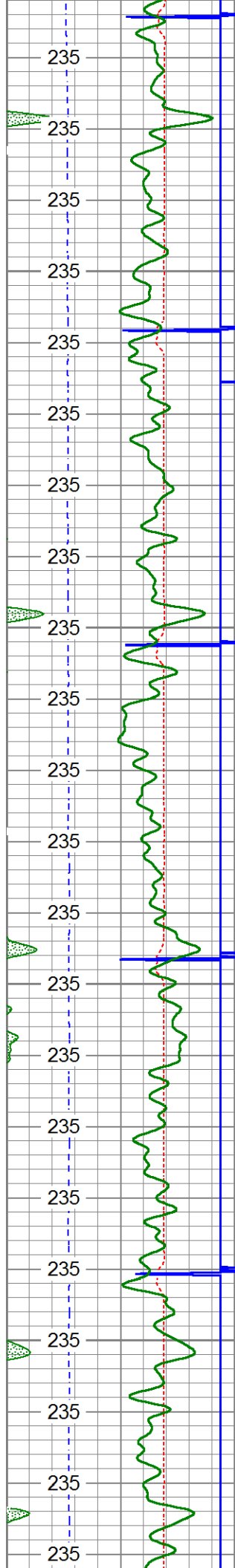
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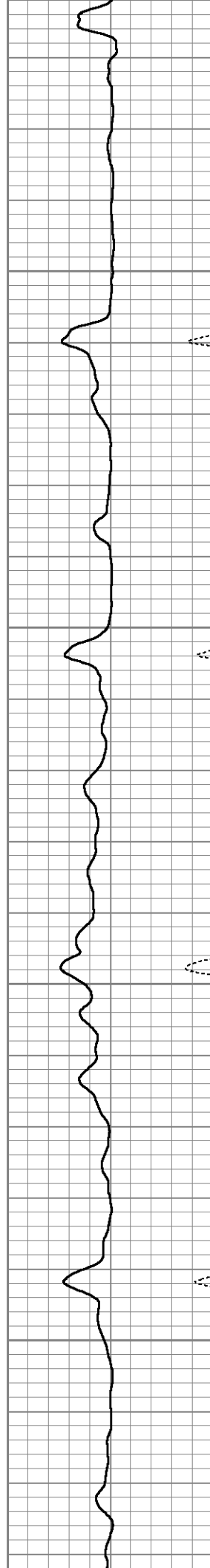


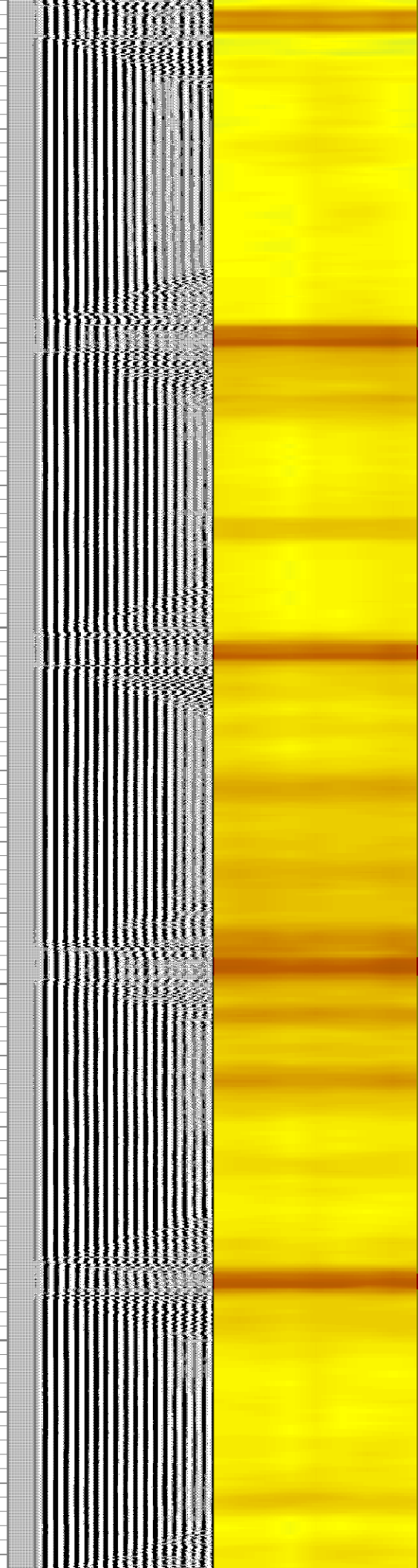
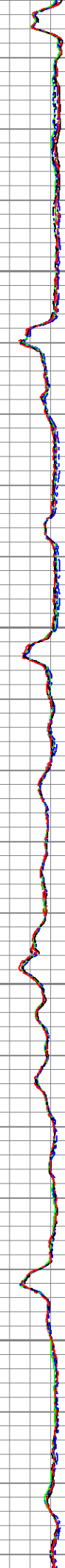
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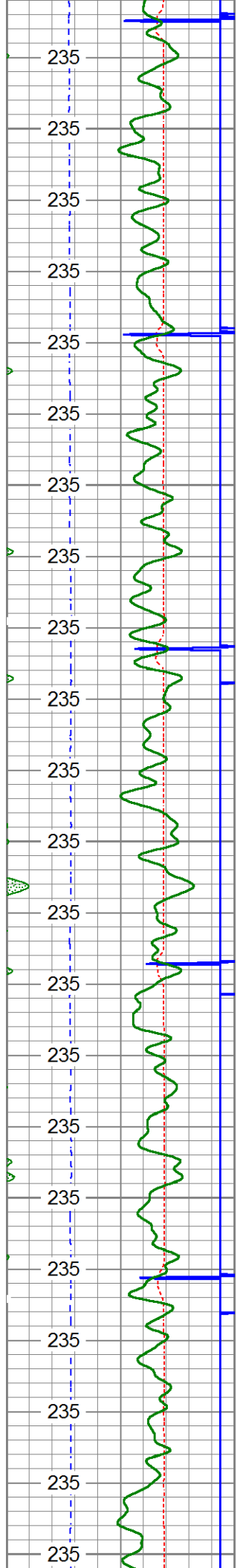
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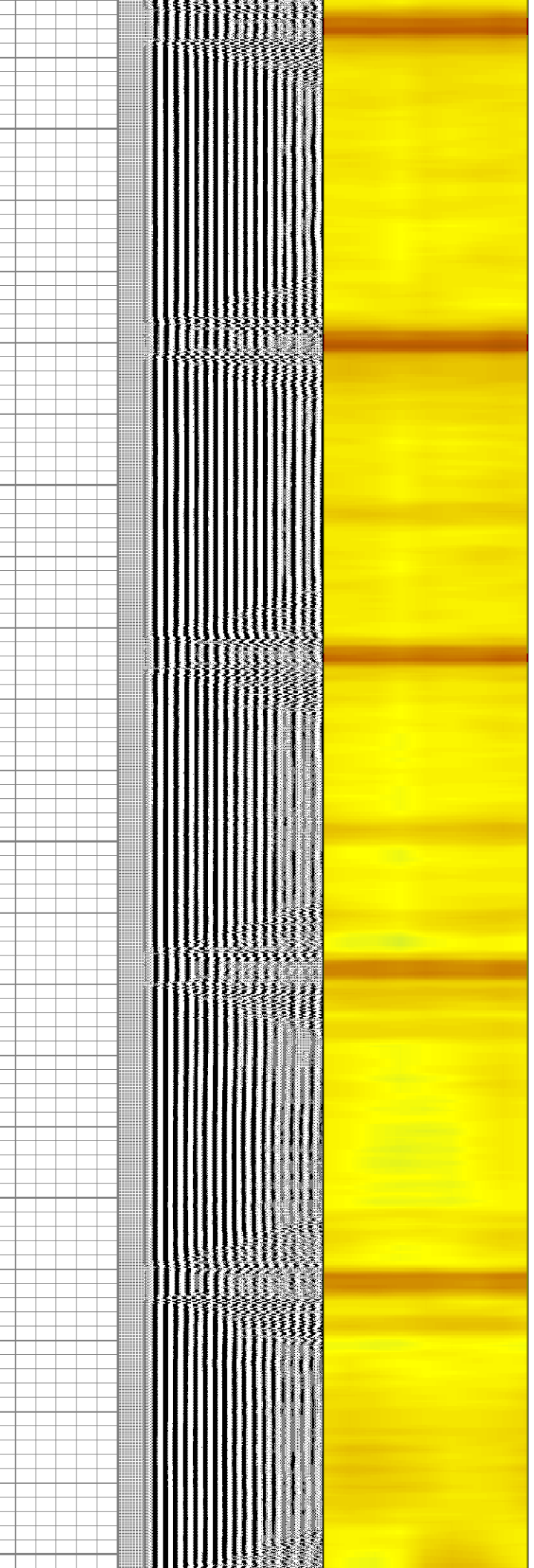
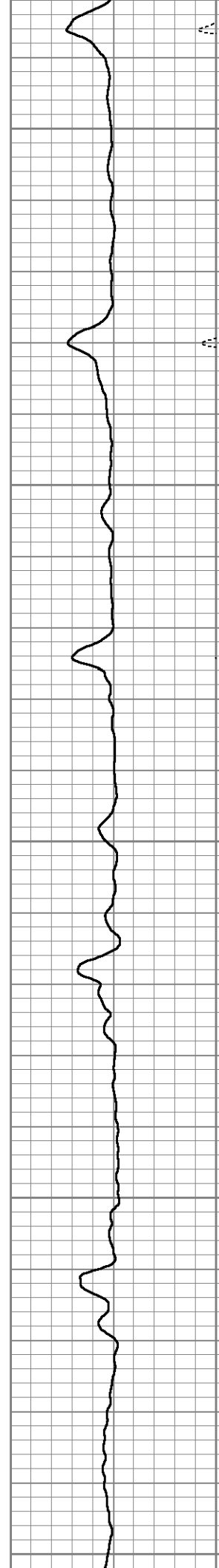
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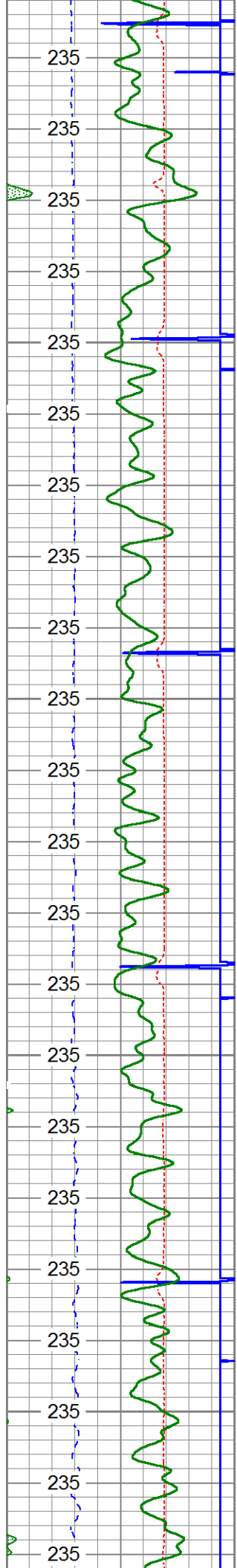






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4400
4450
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4550



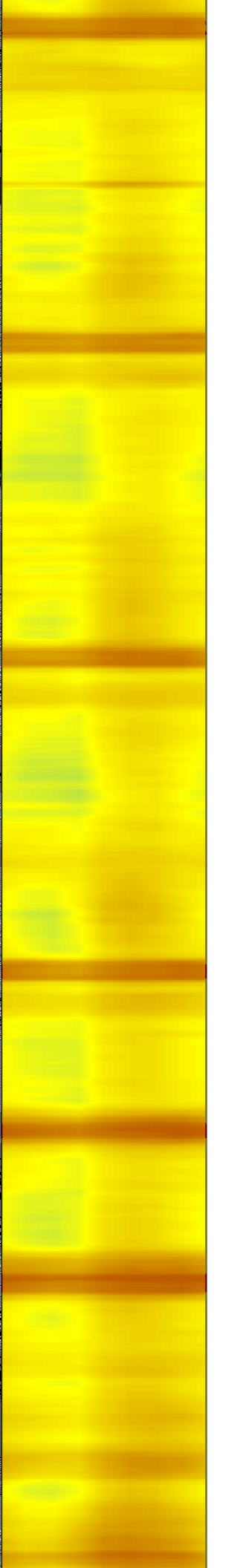
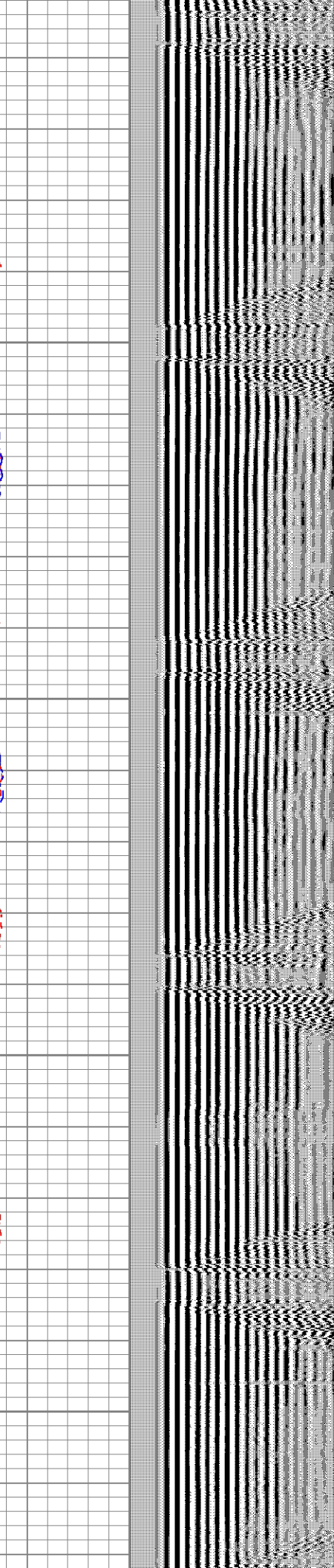
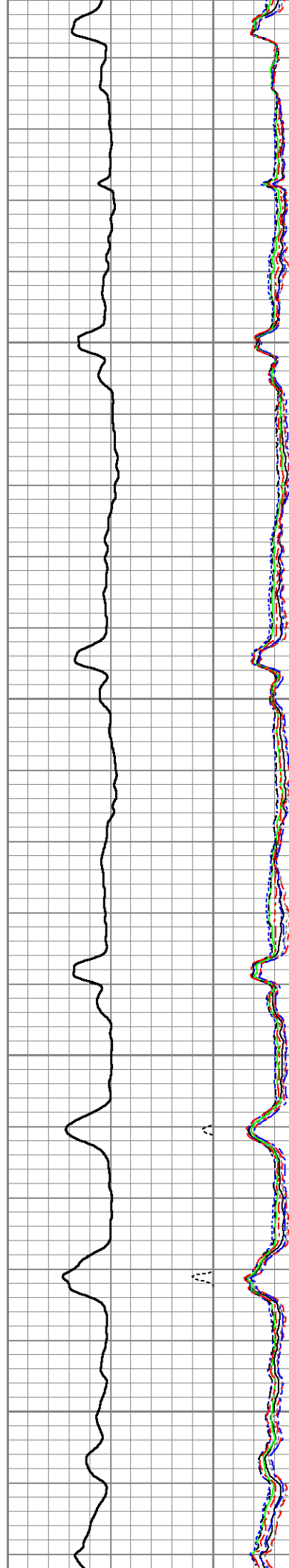


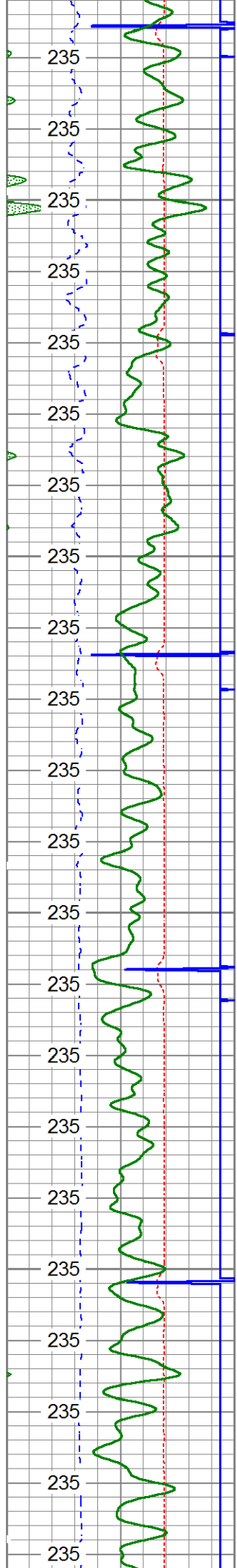
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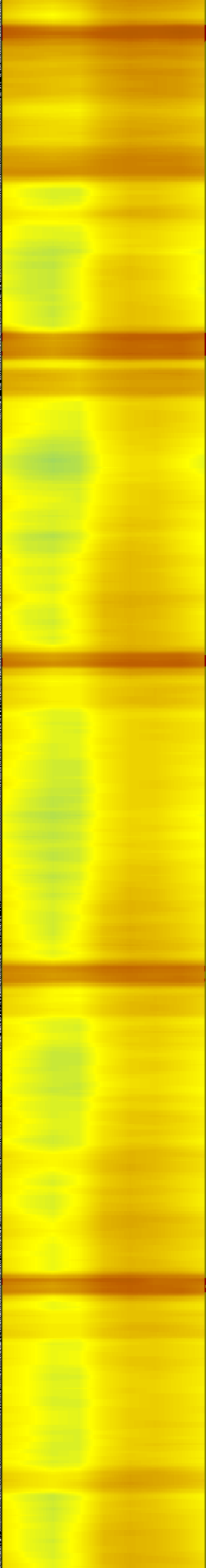
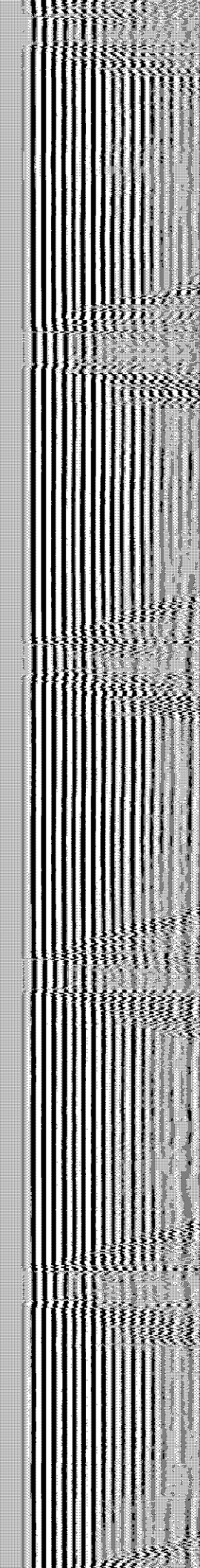
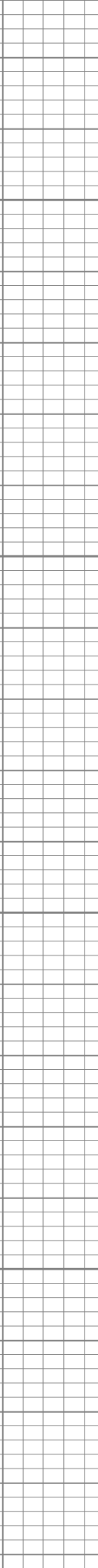
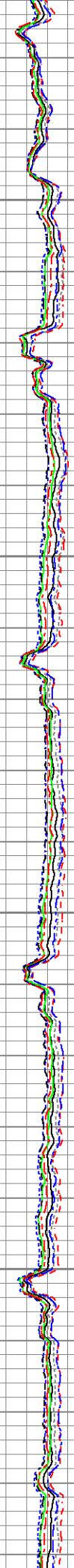
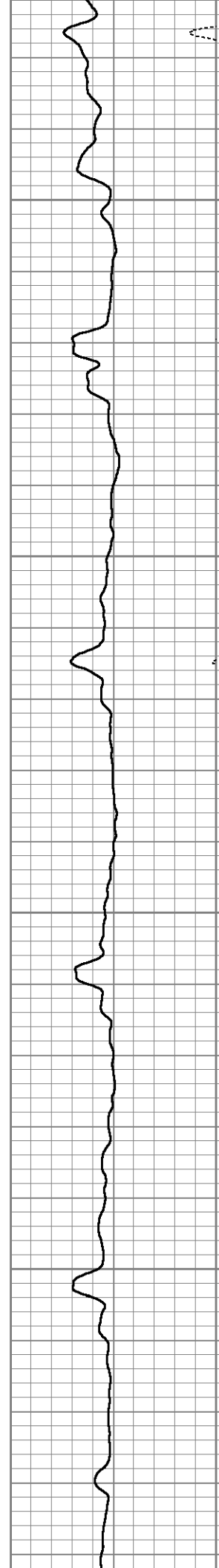


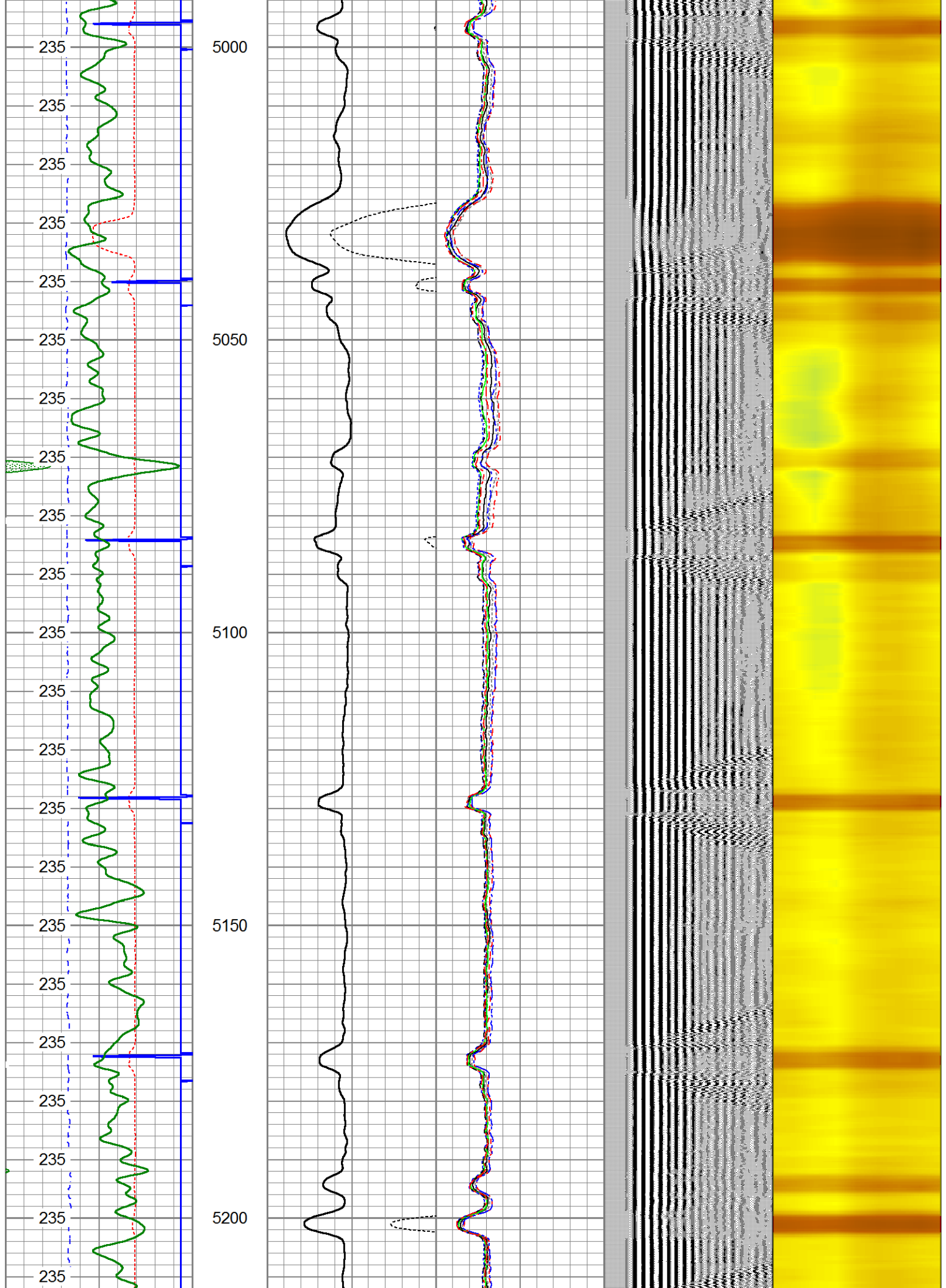
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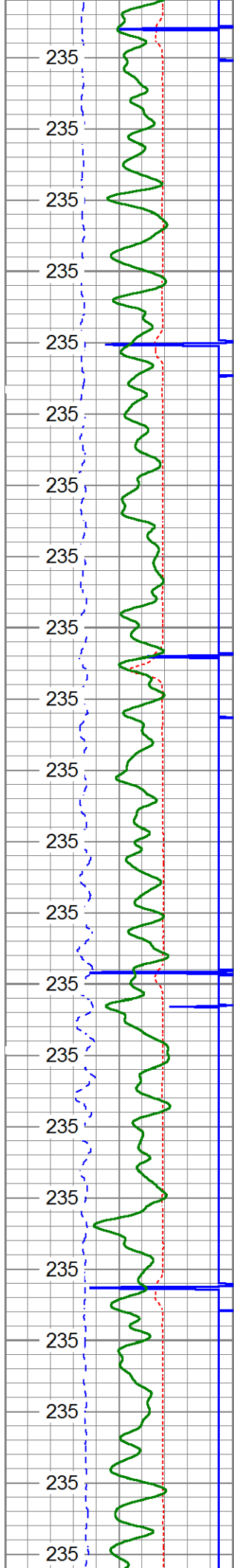
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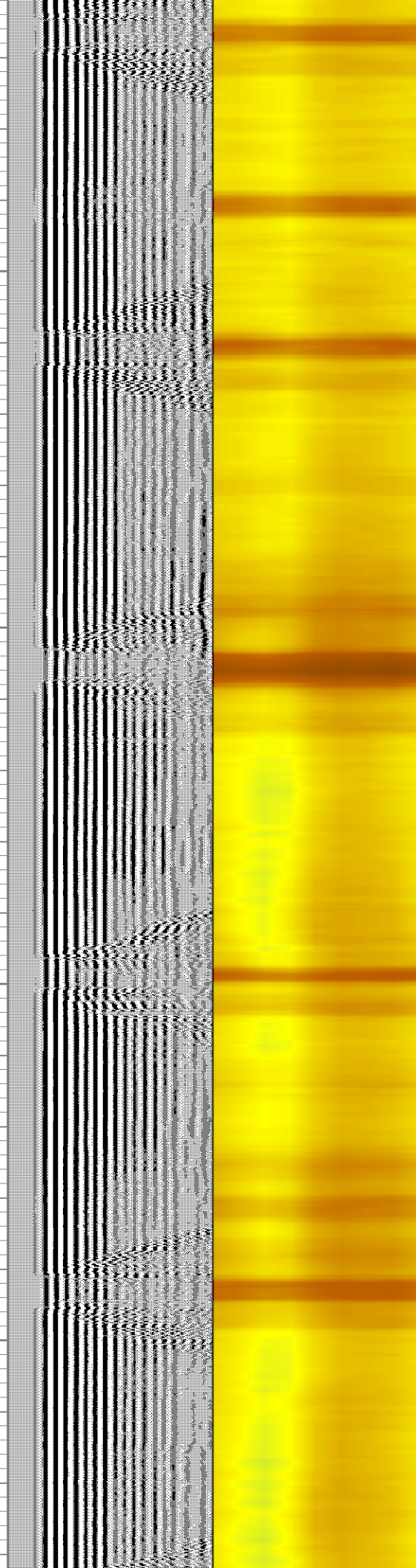
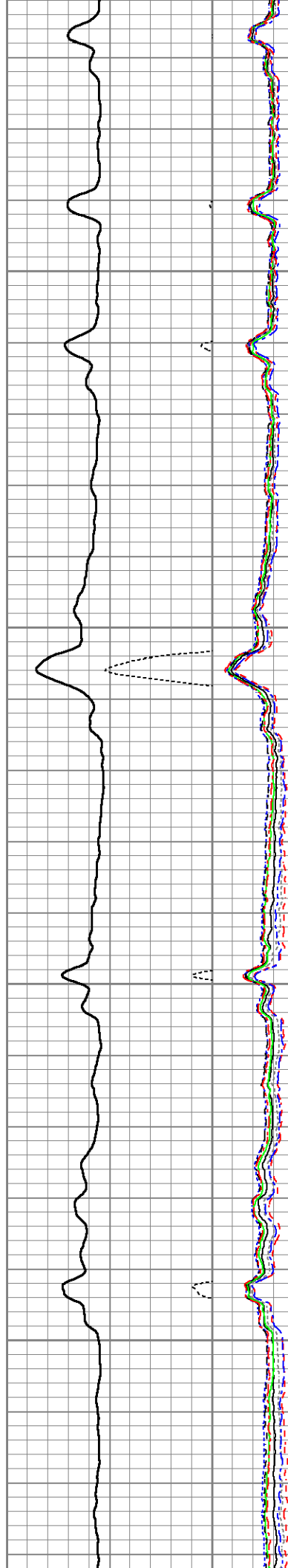


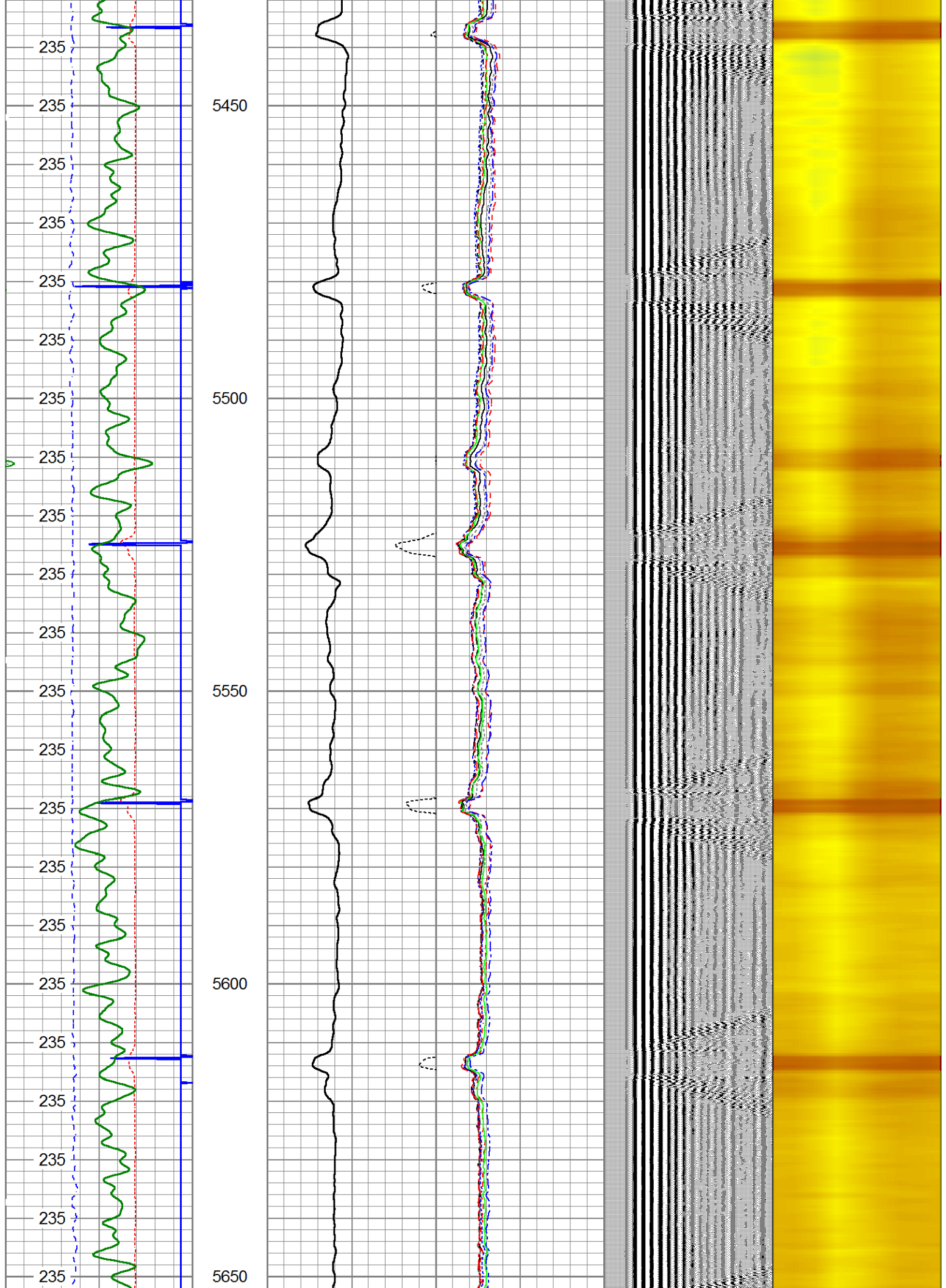
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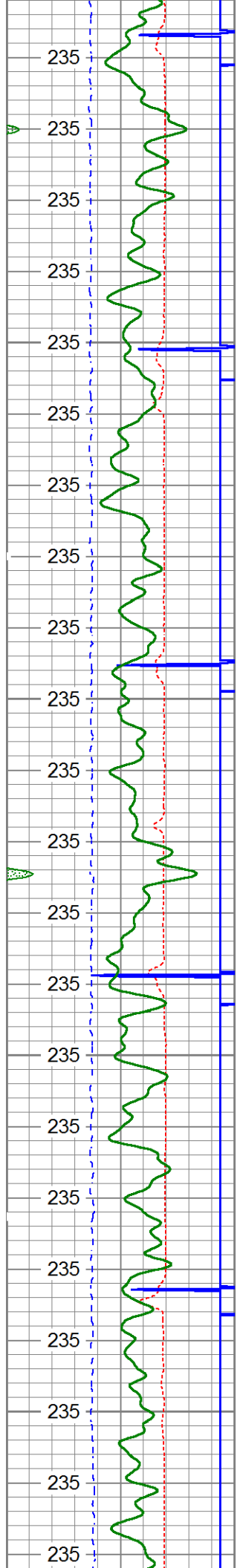
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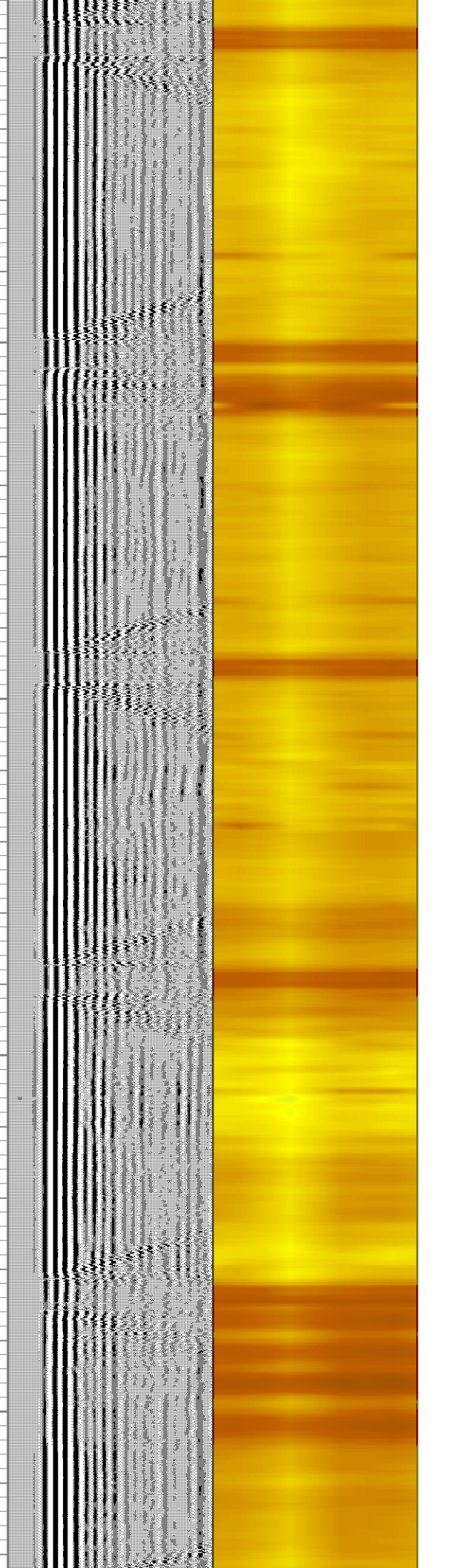
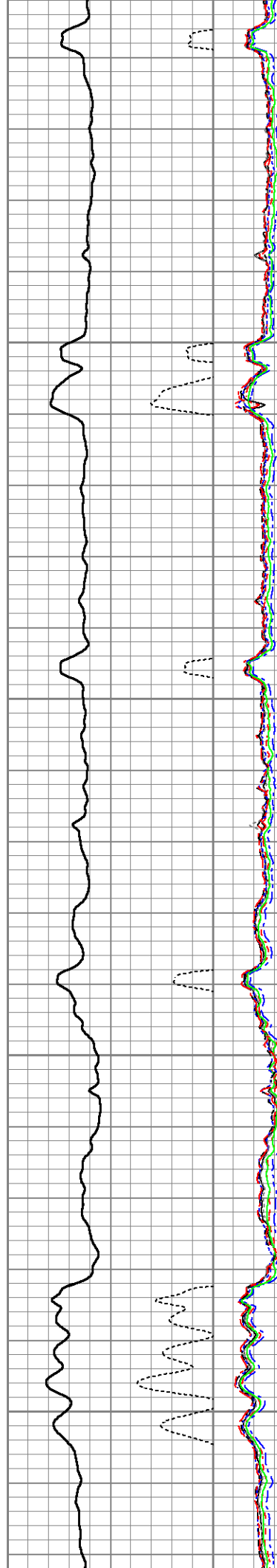


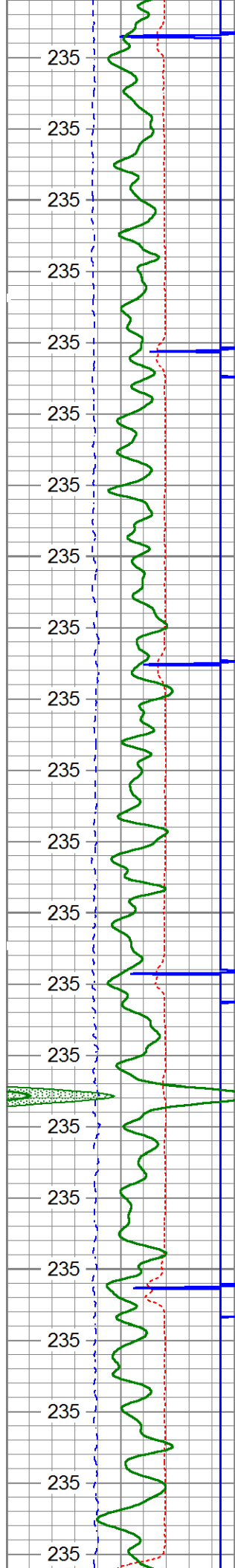
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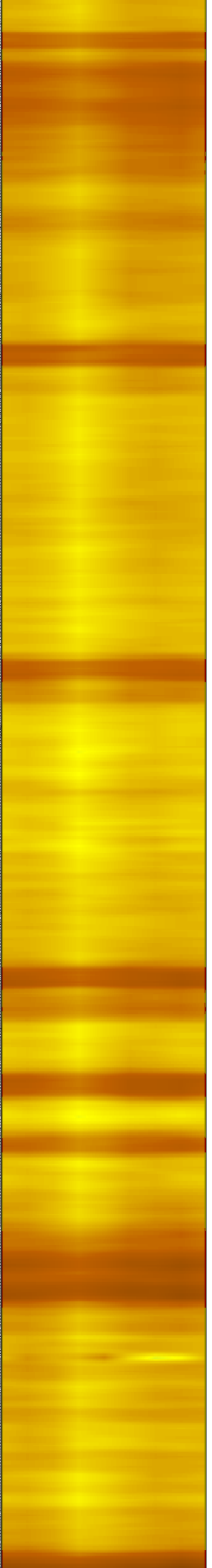
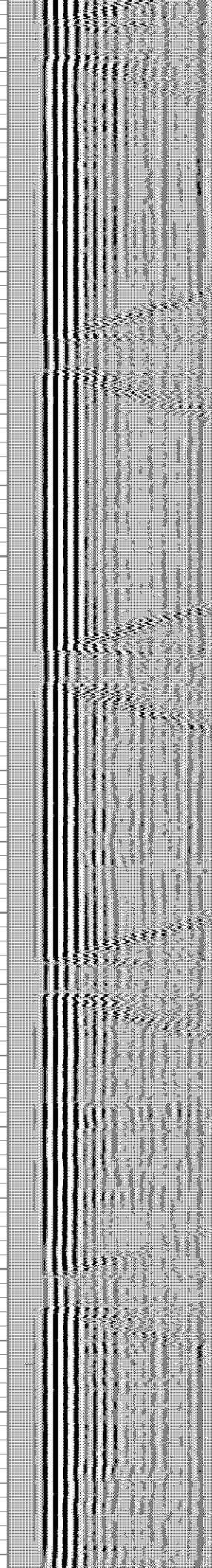
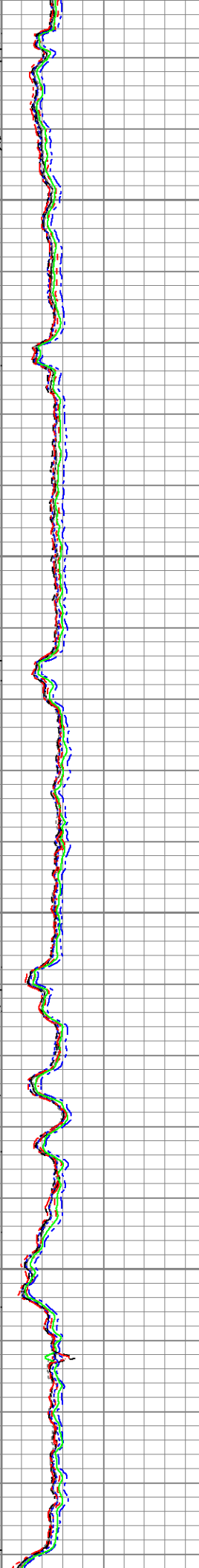
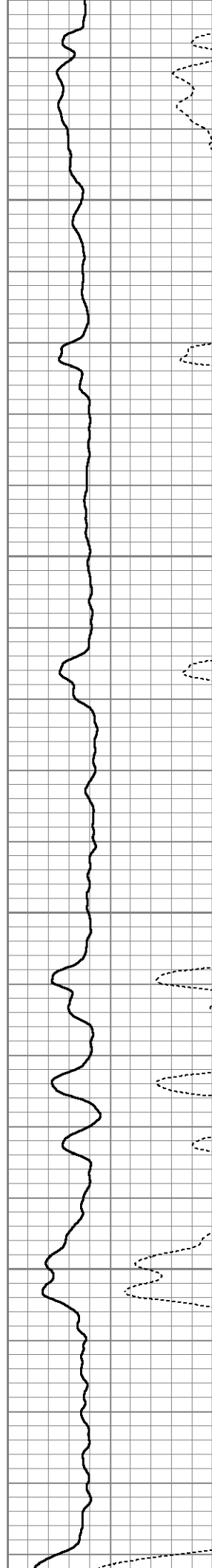


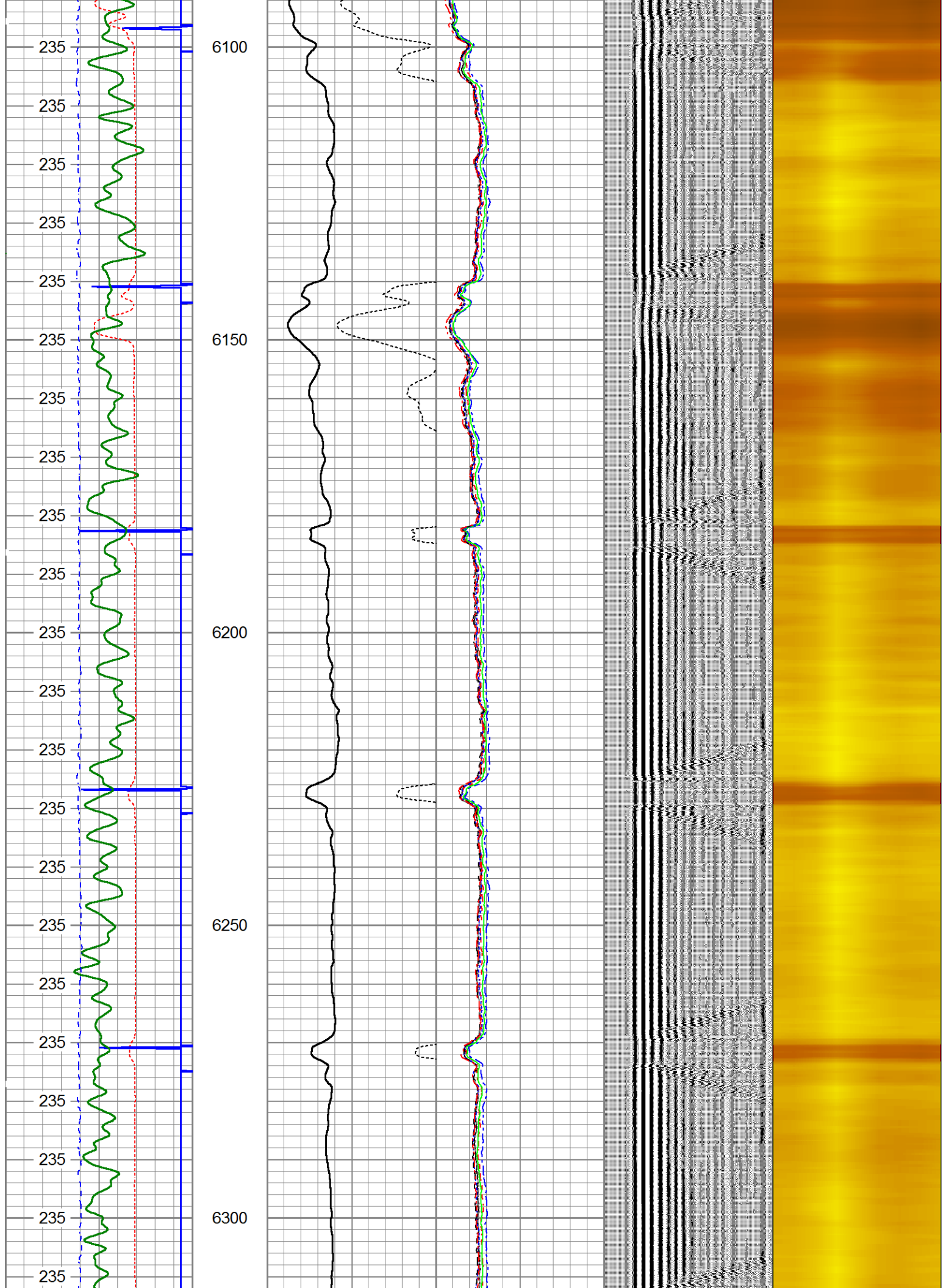
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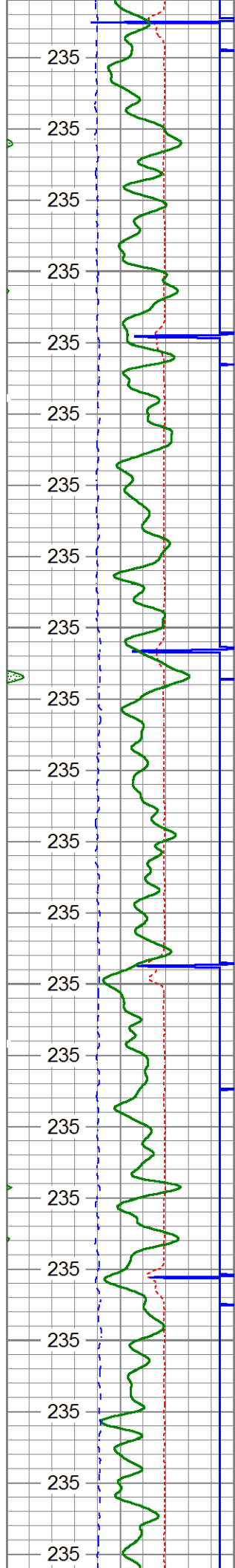
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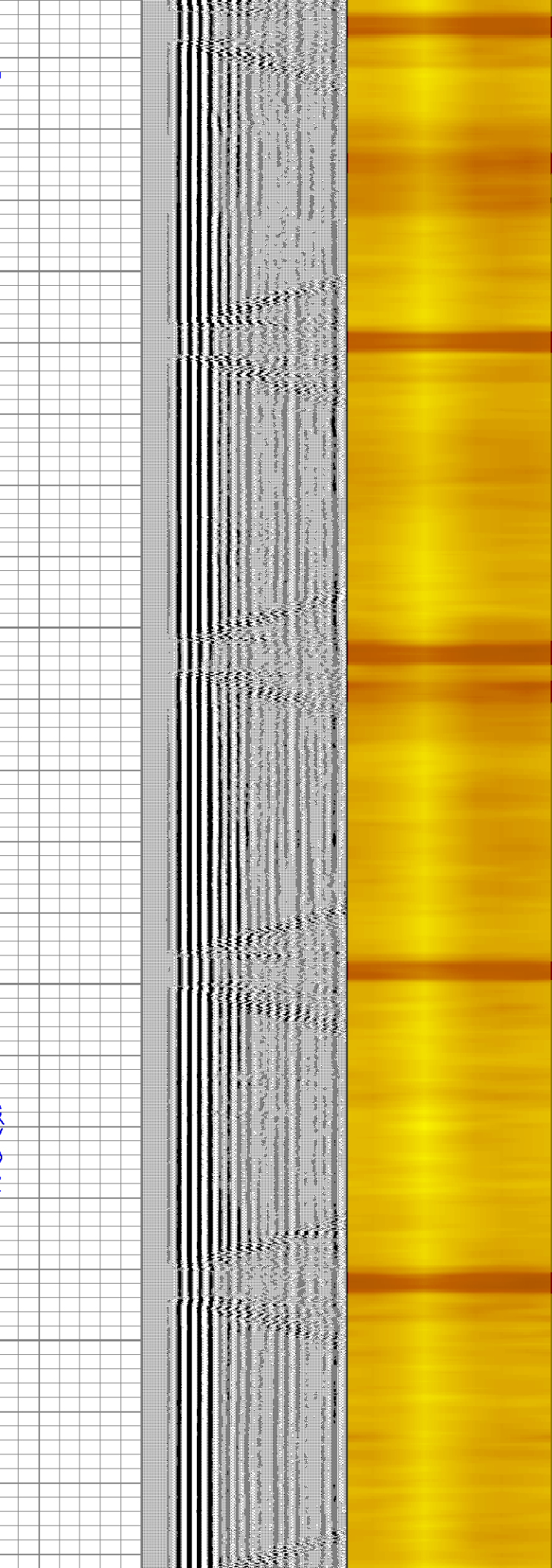
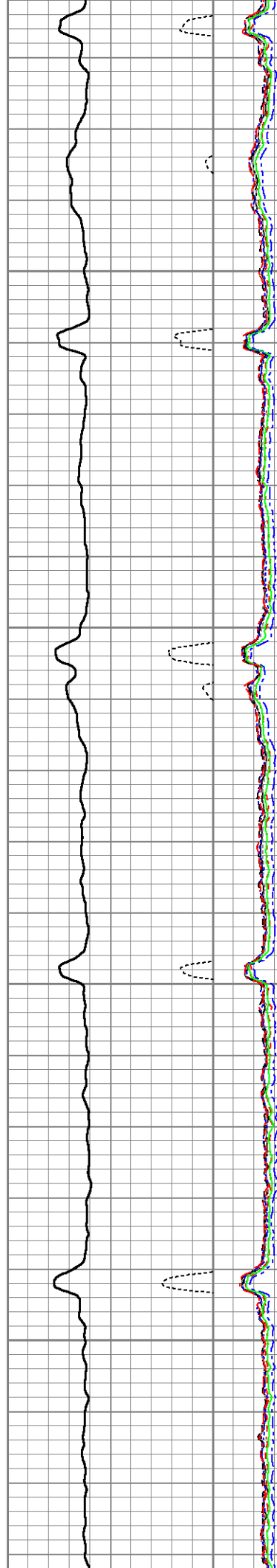


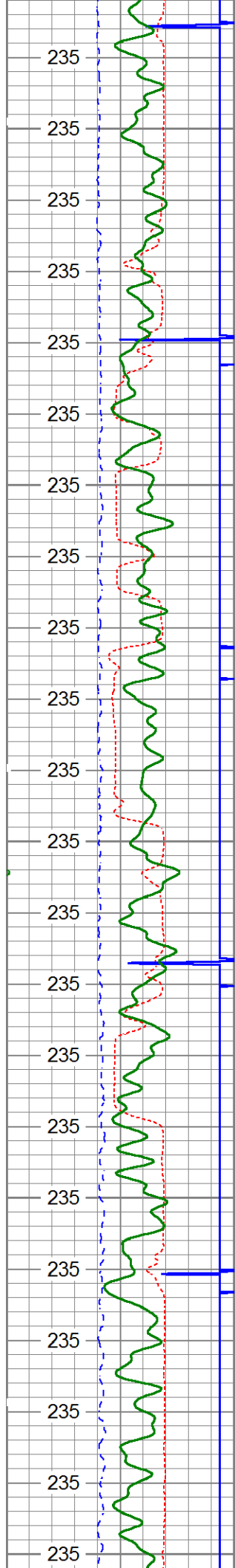
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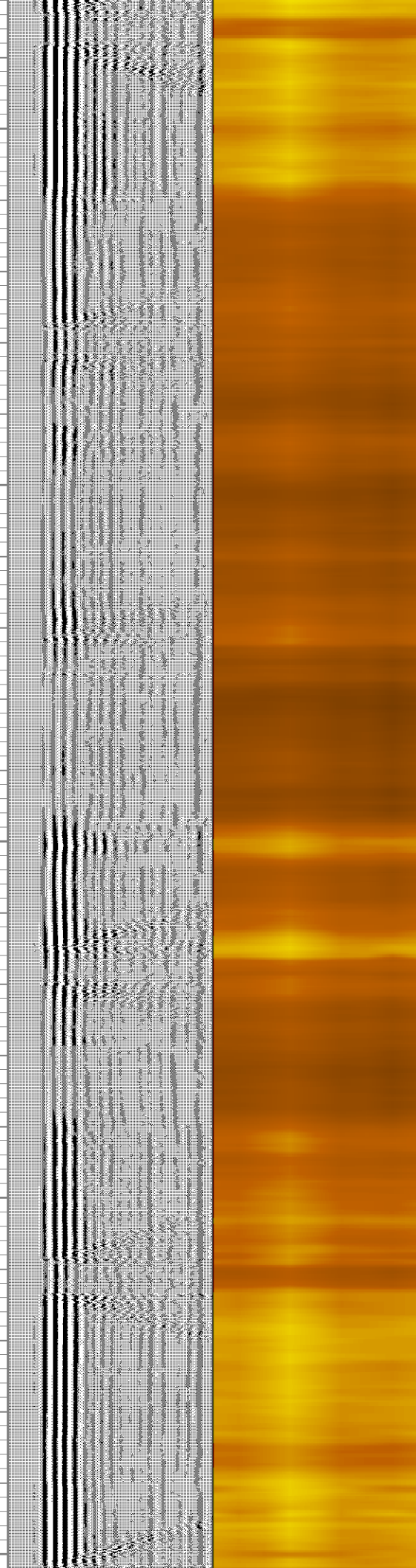
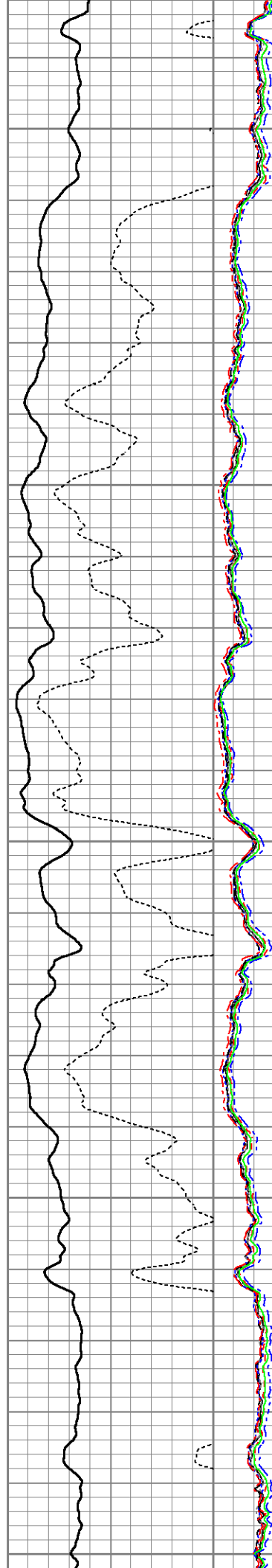
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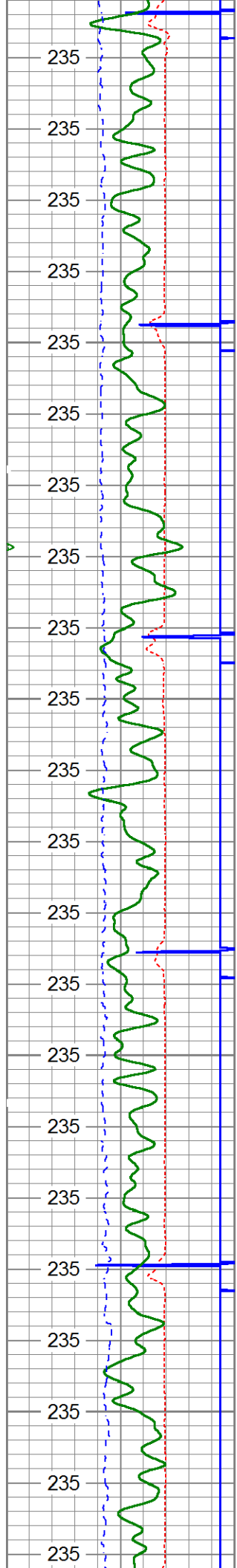
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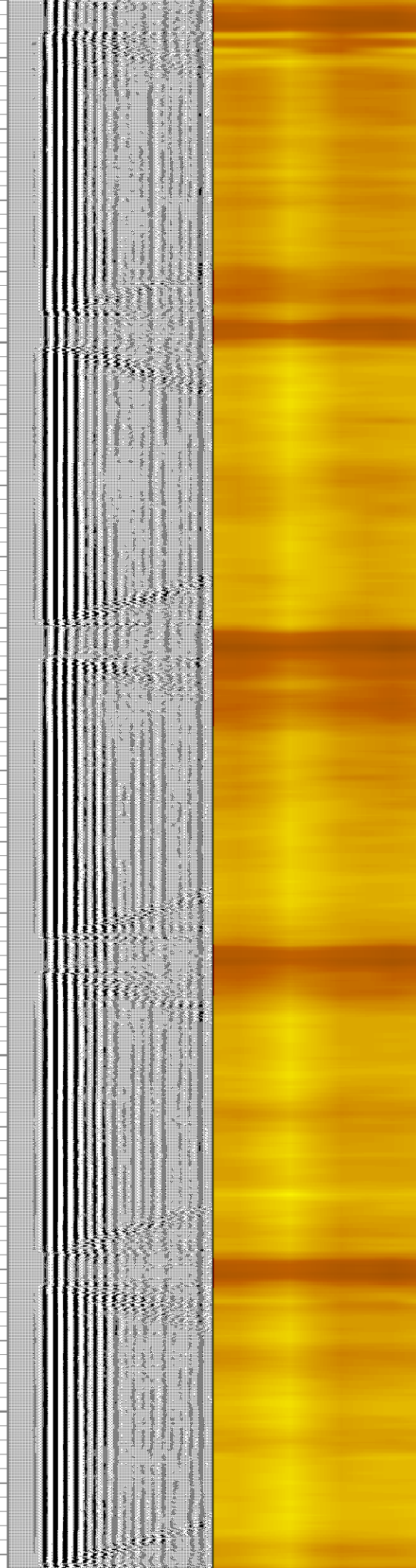
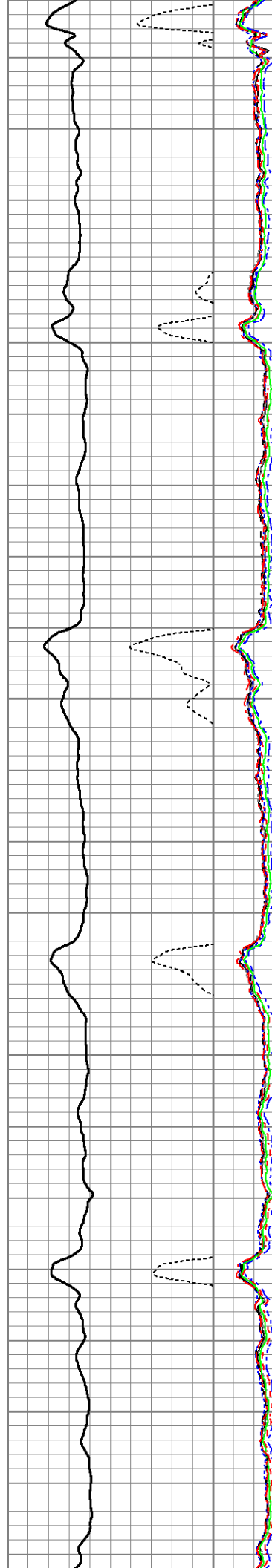


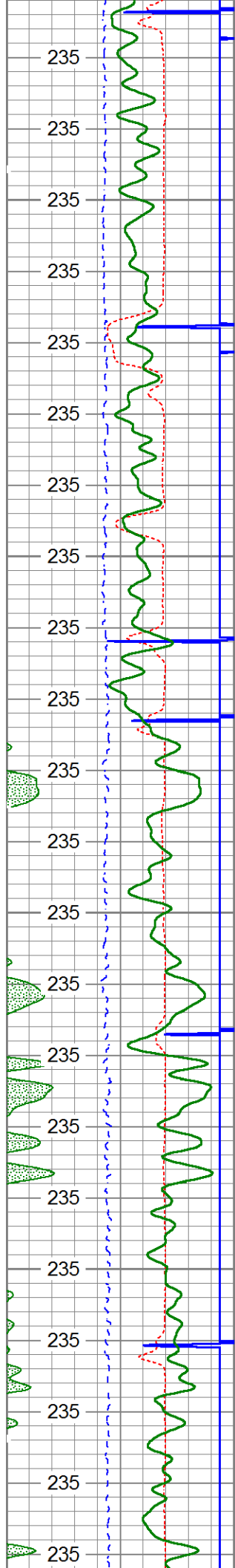
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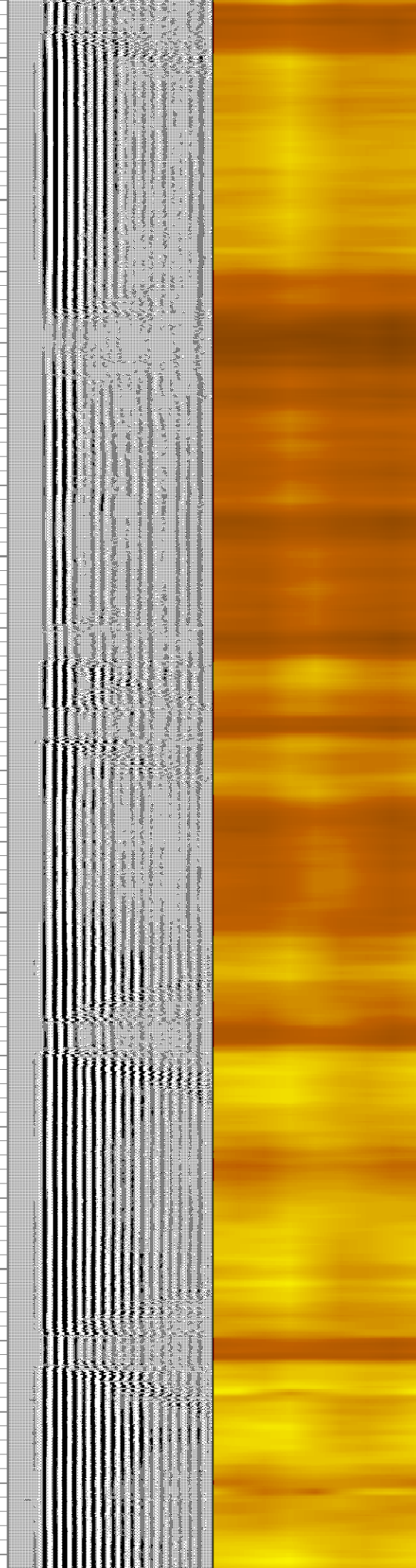
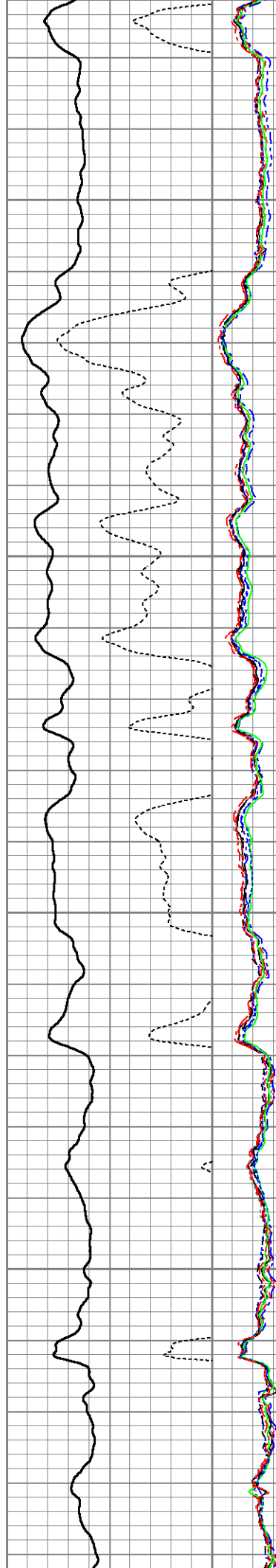


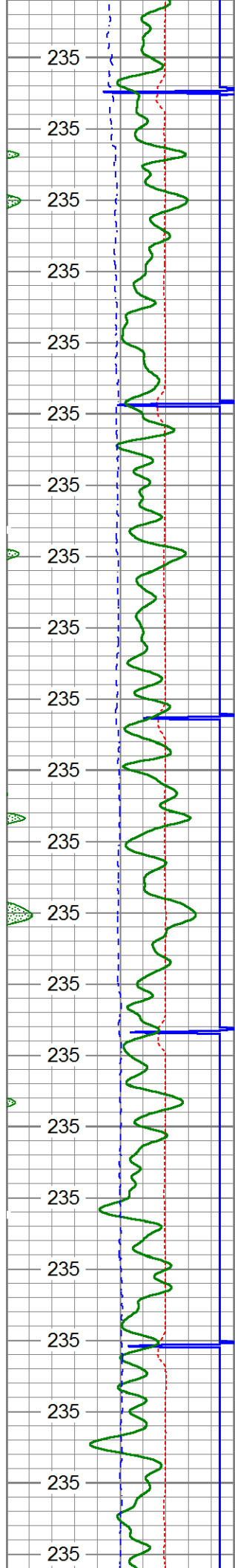
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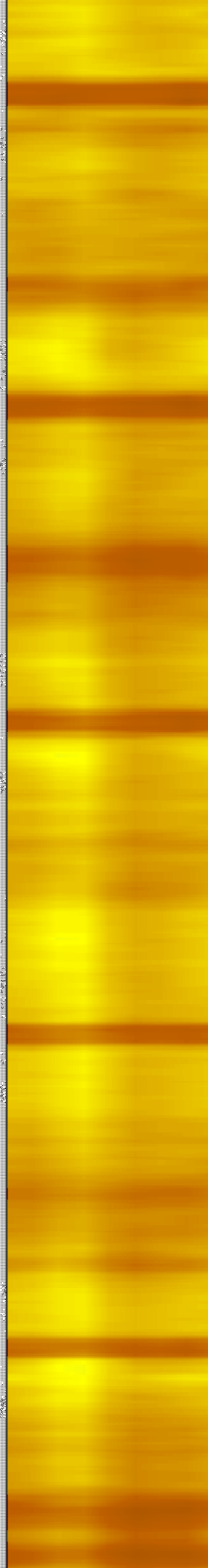
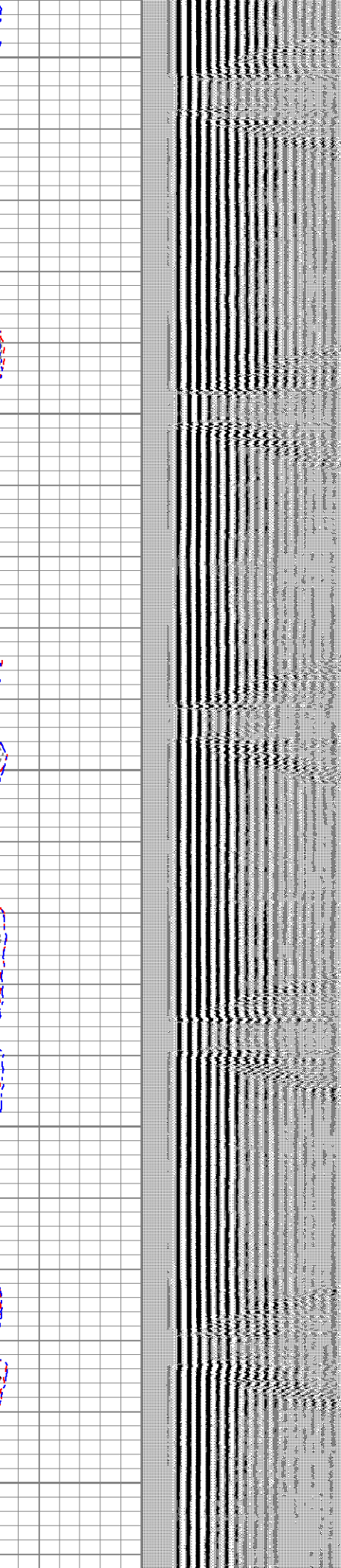
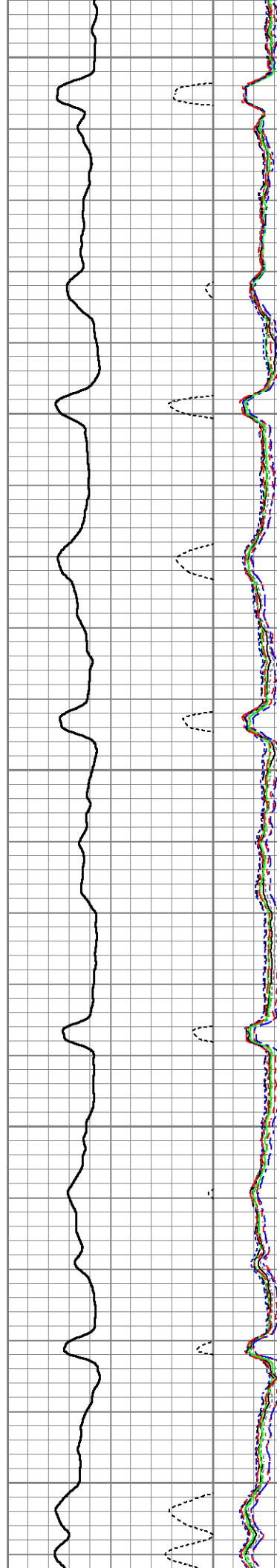
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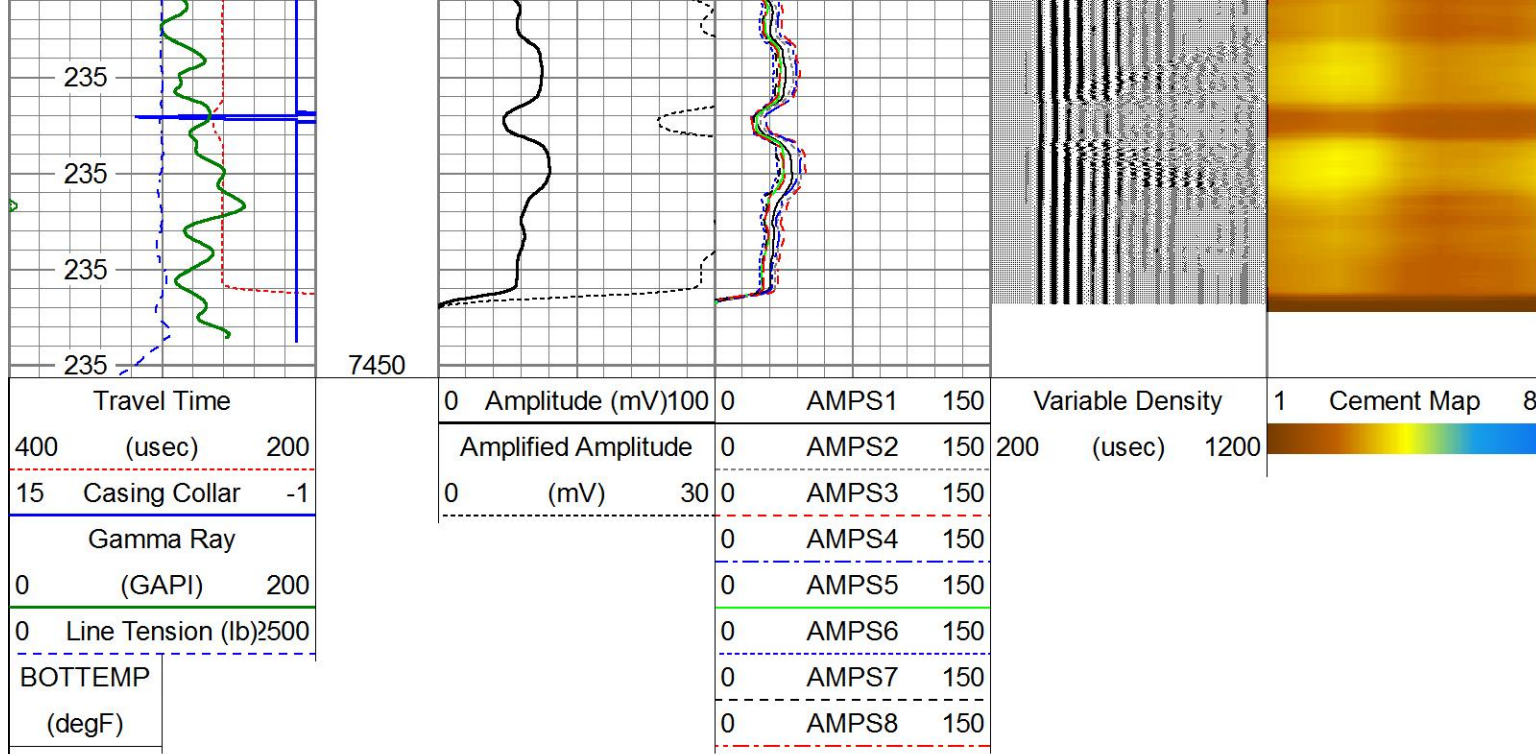
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7400

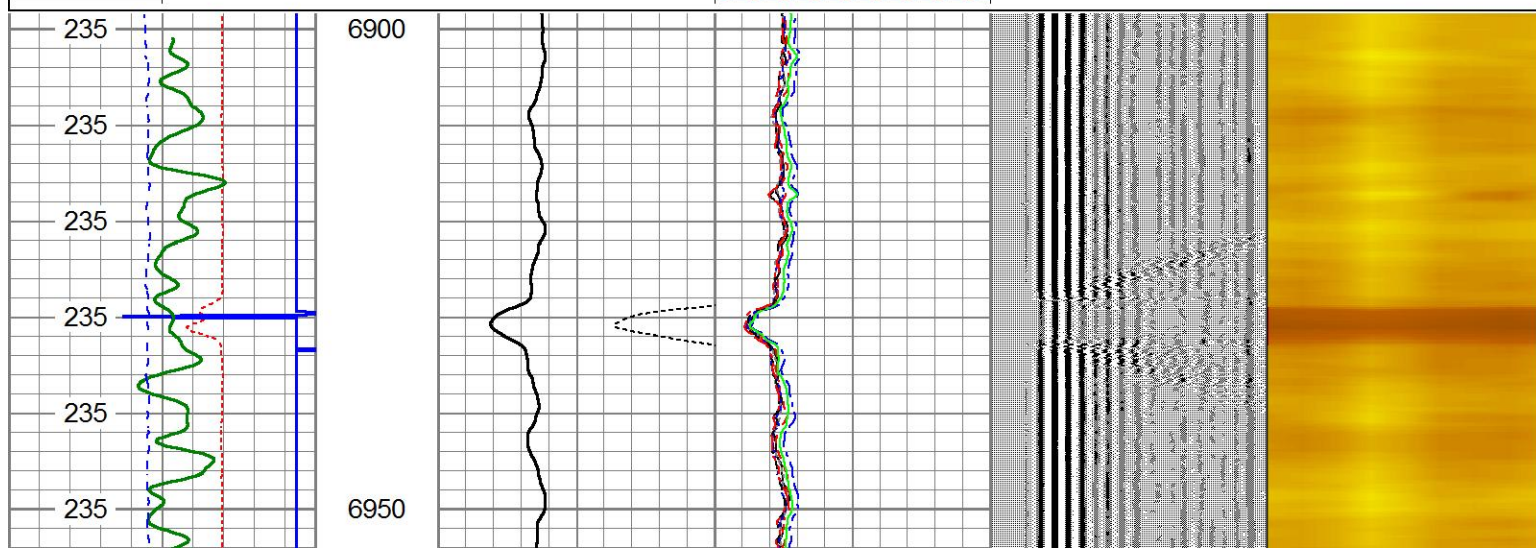
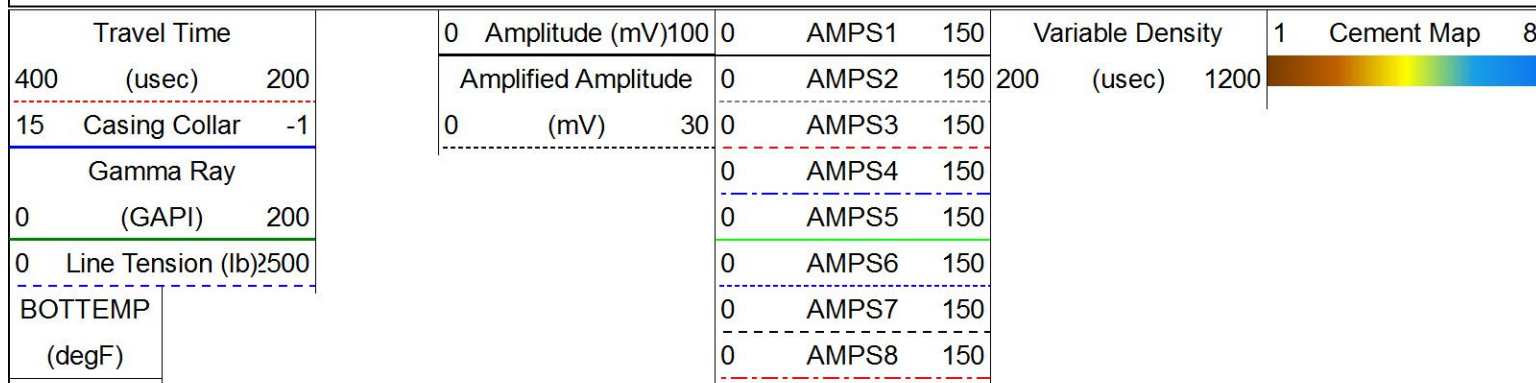


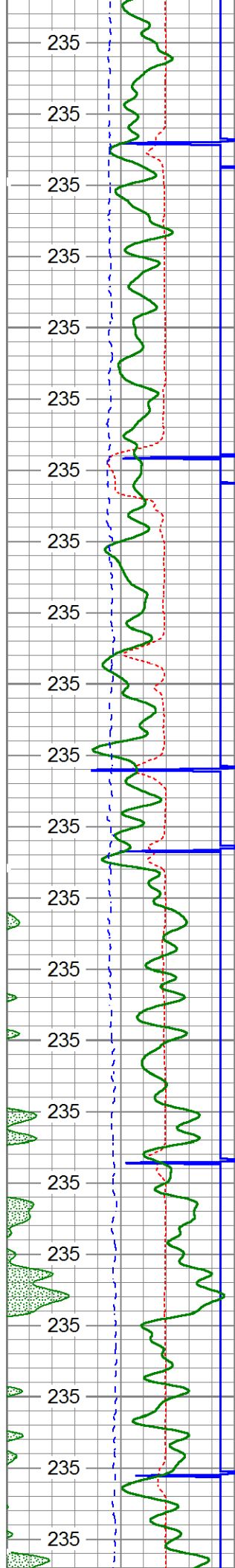


REPEAT PASS (MAIN PASS OVERLAY)

RECORDED WITH 4000 PSI SURFACE INDUCED PRESSURE.

Database File b_farm_ld_18-391hnx_6_apr_2019_4000psi_cbl.db
 Dataset Pathname 391hx/run1/pass9
 Presentation Format scbl_wyco
 Dataset Creation Sat Apr 06 22:32:40 2019
 Charted by Depth in Feet scaled 1:240



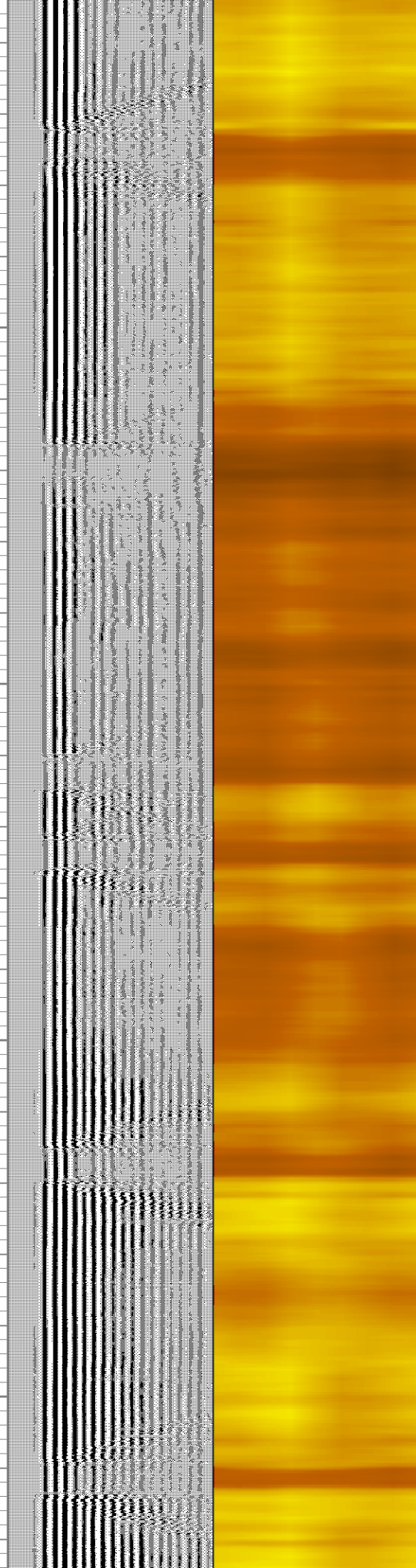
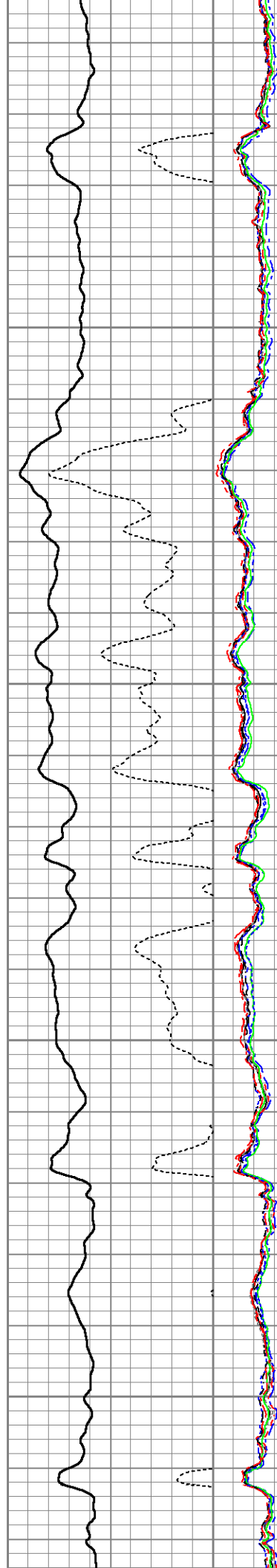


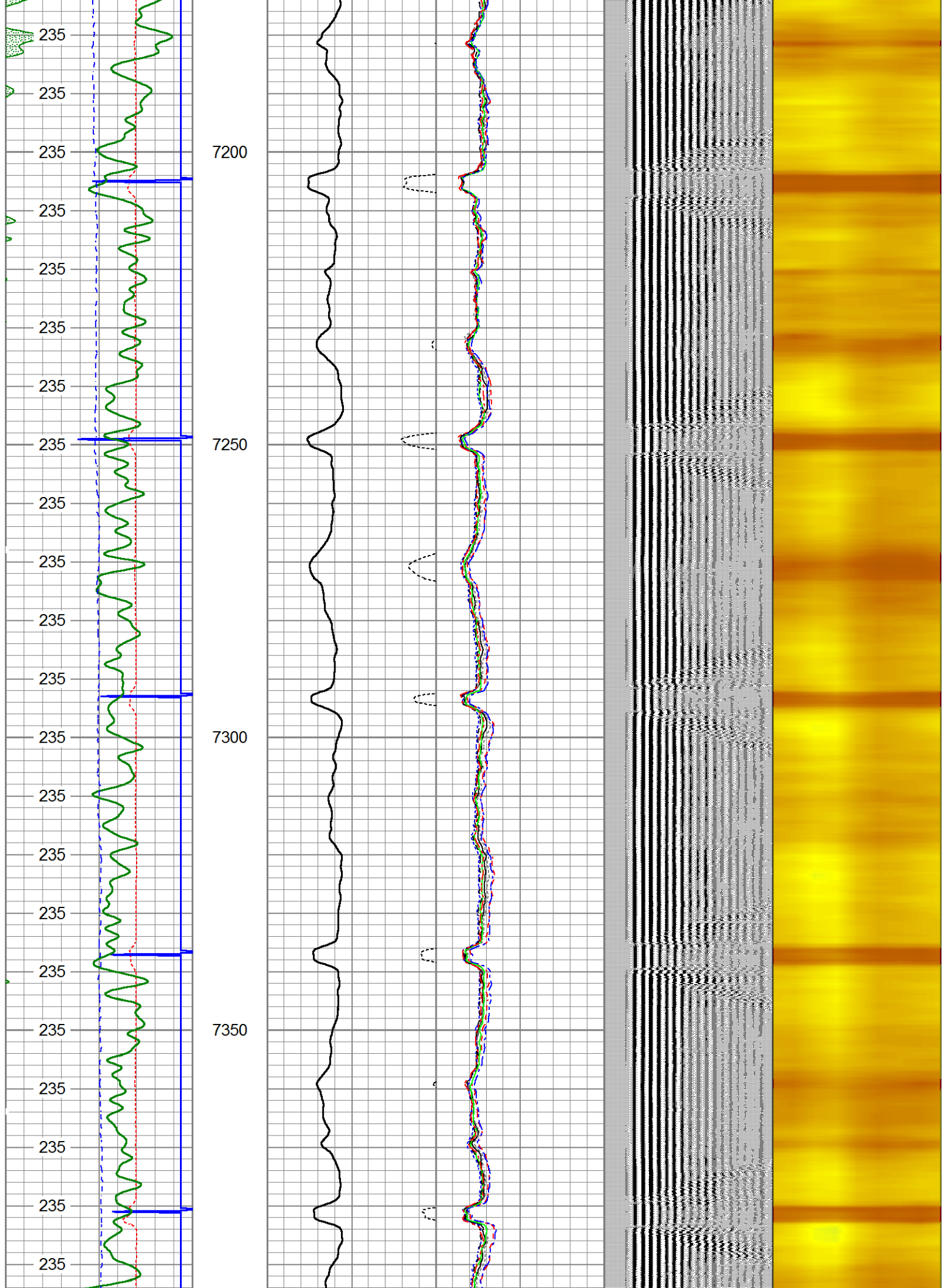
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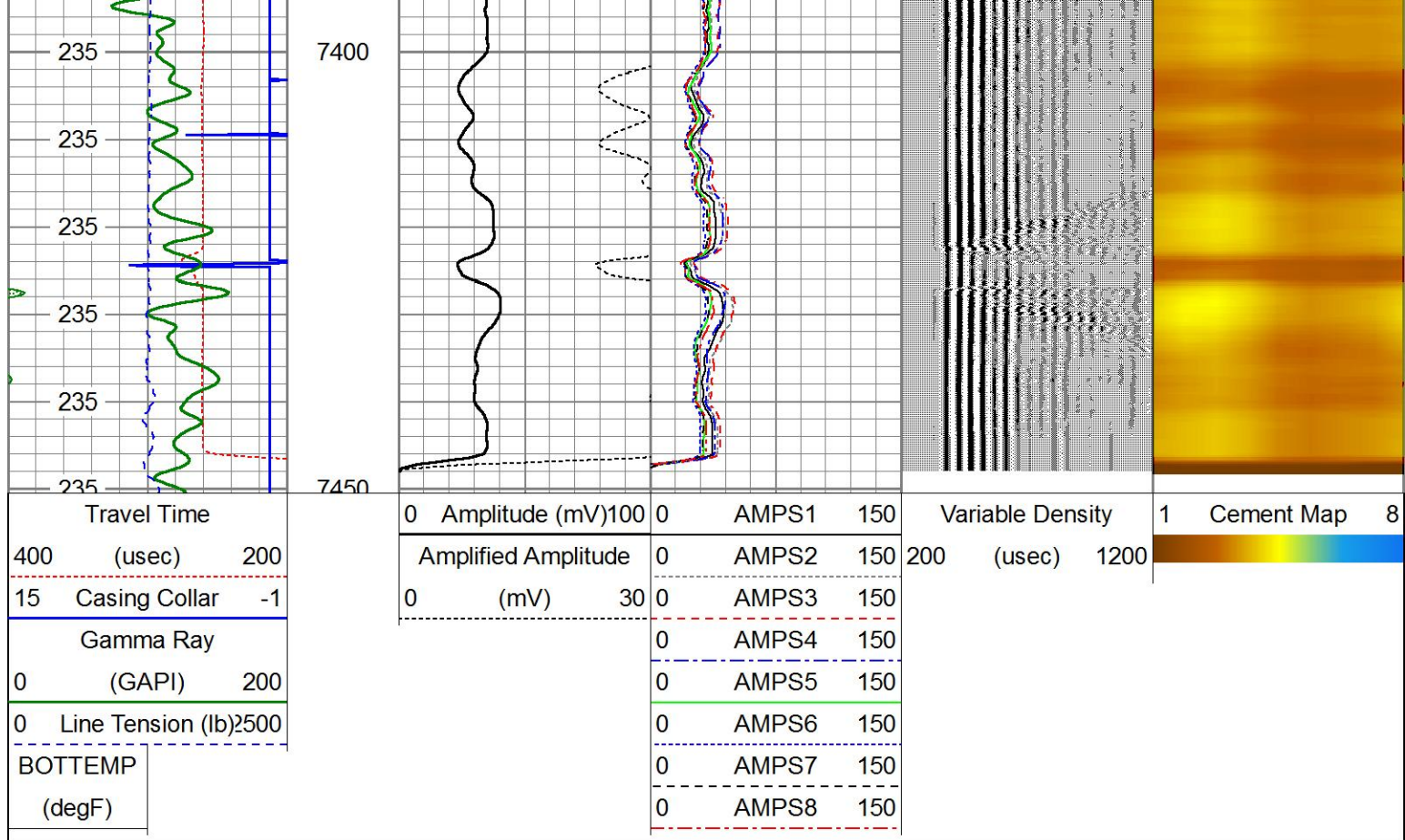
7050

7100

7150







Log Variables

Database C:\ProgramData\Warrior\Data\b_farm_ld_18-391hnx_6_apr_2019_4000psi_cbl.db
Dataset field/391hnx/run1/pass11/_vars_

Top - Bottom

BHTEMP_Src	BOREID	BOTTEMP	CASEOD	CASETHCK	CASEWGHT	MAXAMPL	MINAMPL
TEMP	in	degF	in	in	lb/ft	mV	mV
	7.875	235	5.5	0	17	71.9	1
MINATTN	PERFS	PPT	SRFTEMP	TDEPTH			
db/ft		usec	degF	ft			
0.8	No	263	0	0			

Variable Description

BHTEMP_Src : BHTEMP Input Source Selector
BOREID : Borehole I.D.
BOTTEMP : Bottom Hole Temperature
CASEOD : Casing O.D.
CASETHCK : Casing Thickness
CASEWGHT : Casing Weight
MAXAMPL : Maximum Amplitude

MINAMPL : Minimum Amplitude
MINATTN : Minimum Attenuation
PERFS : Perforation Flag
PPT : Predicted Pipe Time
SRFTEMP : Surface Temperature
TDEPTH : Total Depth

Calibration Report

Database File b_farm_ld_18-391hnx_6_apr_2019_4000psi_cbl.db
Dataset Pathname 391hnx/run1/pass11
Dataset Creation Sat Apr 06 22:42:19 2019

Gamma Ray Calibration Report

Serial Number: 081054
Tool Model: Probe
Performed: (Not Performed)

Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	1.0000	GAPI/cps

Segmented Cement Bond Log Calibration Report

Serial Number:	FW1306-47
Tool Model:	Probe 2.75 Radii W/Temp
Calibration Casing Diameter:	5.500 in
Calibration Depth:	676.908 ft

Master Calibration, performed Sat Apr 06 21:05:04 2019:


	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.007	0.368	1.000	72.000	196.830	-0.449
CAL	0.008	0.581				
5'	0.006	0.381	1.000	72.000	189.630	-0.185
SUM						
S1	0.047	0.381	0.000	72.000	215.280	-10.120
S2	0.006	0.362	0.000	72.000	202.306	-1.163
S3	0.009	0.385	0.000	72.000	191.757	-1.807
S4	0.009	0.396	0.000	72.000	186.199	-1.718
S5	0.009	0.414	0.000	72.000	178.012	-1.617
S6	0.009	0.396	0.000	72.000	186.088	-1.695
S7	0.009	0.369	0.000	72.000	199.940	-1.728
S8	0.032	0.355	0.000	72.000	222.954	-7.041

Internal Reference Calibration, performed (Not Performed):

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	0.008	0.581	1.000	0.000

Air Zero Calibration, performed Mon Mar 25 06:30:30 2019:

	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)
			CHD-Titan Titan 1 7/16" GO Cablehead	1.00	1.44	5.00

HeadVlt	13.67					
Temp	10.82					
			RBT-Probe 2.75 Radii W/Temp (FW1306-47) Probe 2.75" Radial with Integral Temperature Sub	9.39	2.75	90.00
WVFS8	8.58					
WVFS7	8.58					
WVFS6	8.58					
WVFS5	8.58					
WVFS4	8.58					
WVFS3	8.58					
WVFS2	8.58					
WVFS1	8.58					
WVFCAL	8.58					
WVF3FT	8.58					
WVF5FT	7.58					
HEADVOLT	4.33					
CCL	3.64					
			GR-Probe (081054) Probe 2.75" 4 Channel Pulse	4.33	2.75	30.00
GR	0.90					
<div>Dataset: b_farm_ld_18-391hnx_6_apr1_2019_4000psi_cbl.db: field/391hx/run1/pass11</div> <div>Total length: 14.73 ft</div> <div>Total weight: 125.00 lb</div> <div>O.D.: 2.75 in</div>						



Well	B FARM LD 18-391HNX
Field	Wattenberg
County	ADAMS
State	Colorado

Country