



**Cement Bond Log
w/ Variable Density
Gamma/CCL
Temp**

Company Great Western Oil and Gas
Well B-Farms LD 18-392HN
Field Wattenberg
County Adams
State Colorado

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County Adams
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Location: API #: 05-001-10097
39.98368100 LAT
-104.93367100 LONG
SEC 7 TWP 1S RGE 67W
Permanent Datum GL
Log Measured From KB
Drilling Measured From KB
Elevation 5124.5'
Other Services 4.50" GR/JB
K.B. 5144.5'
D.F. 5142.5'
G.L. 5124.5'

Date 25-MAR-2019

Run Number Two
Depth Driller 18,377'
Depth Logger 8276'
Bottom Logged Interval 8276'
Top Log Interval Surface
Open Hole Size 8.50"
Type Fluid water
Density / Viscosity 8.4PPG
Max. Recorded Temp. 268
Estimated Cement Top See Log
Time Well Ready ROA
Time Logger on Bottom 17:30
Equipment Number 34
Location Platteville, Co
Recorded By R.Rodriguez
Witnessed By D.Pozas

Run Number **Bit** **From** **To** **Size** **Weight** **From** **To**

Casing Record **Size** **Wgt/Ft** **Top** **Bottom**
Surface String 9.625" 36# **Surface** 1750'
Prot. String **Production String** 5.5" 17# **Surface** 18,377'
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


Cement Bond Log ran as per customer request
Depth Correlation to casing tally reported marker joint @7352'
Adjusted log +8.6 to correlate with marker joint
Guage Ring/ Junk Basket ran to 8220' with no debris
log ran to 8262' to surface
Log ran with 4000 PSI surface induced pressure
Centralized with 3 over tool gemco centralizers

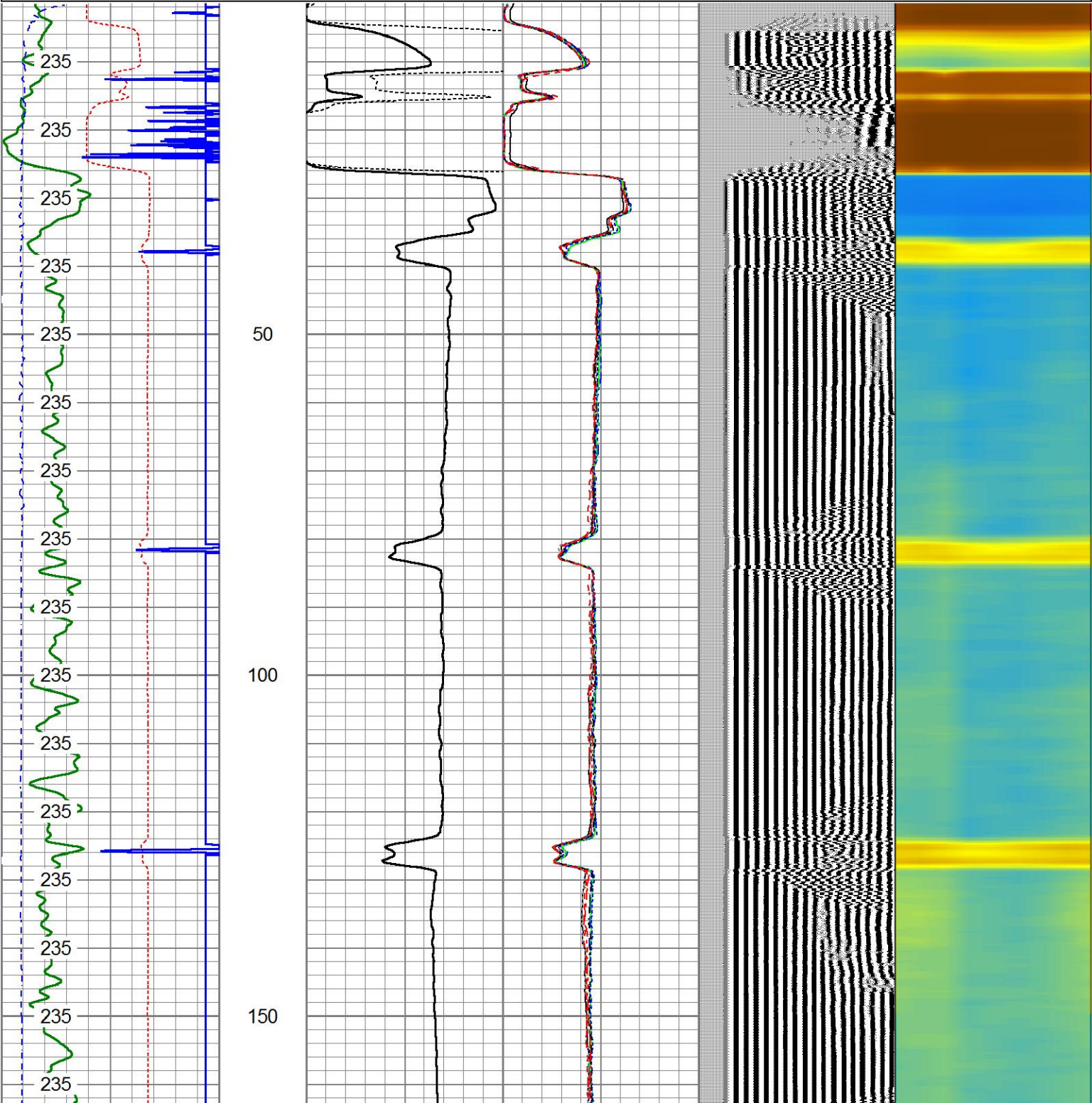
Thank you for choosing KLX Energy Services

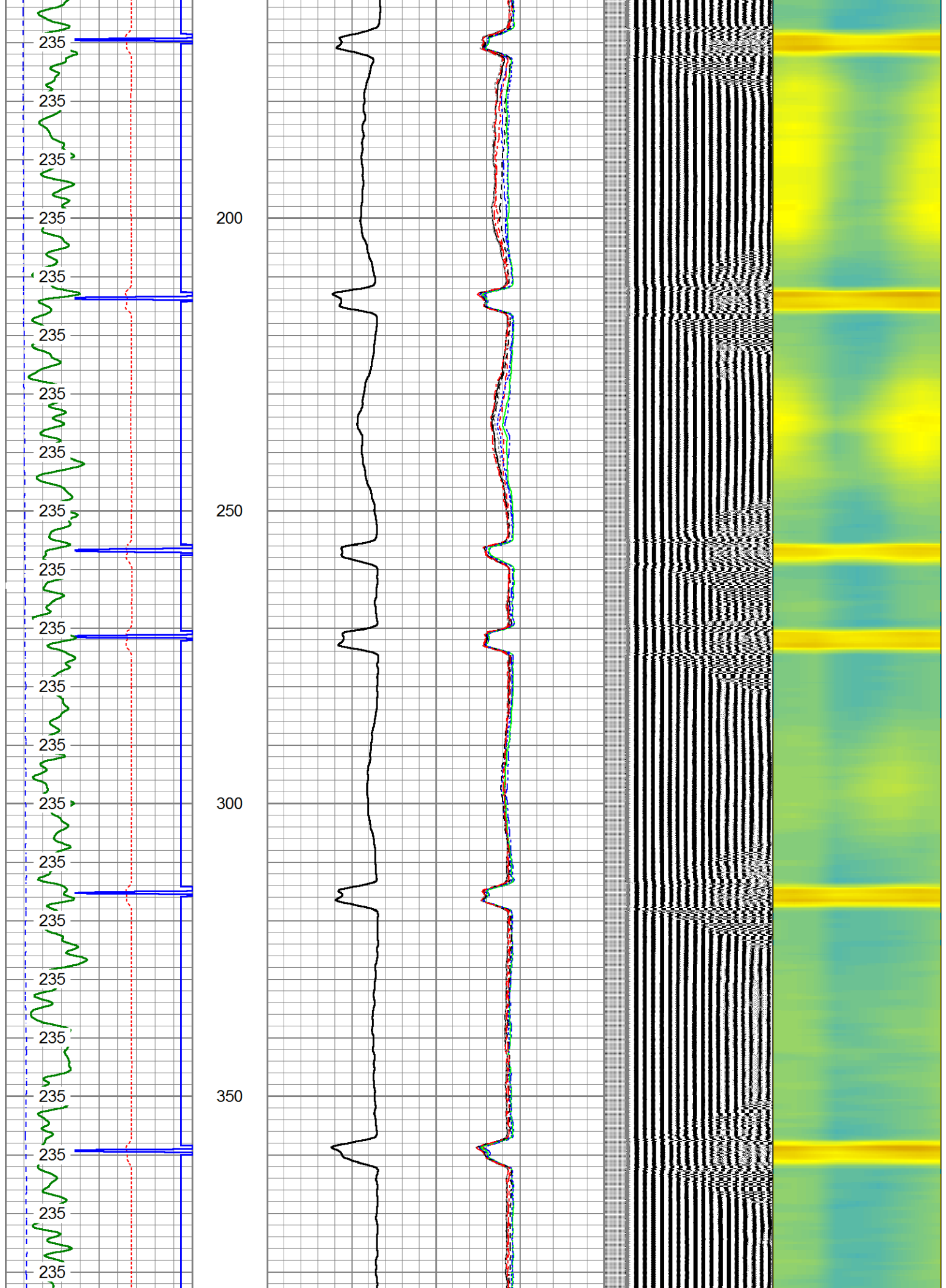


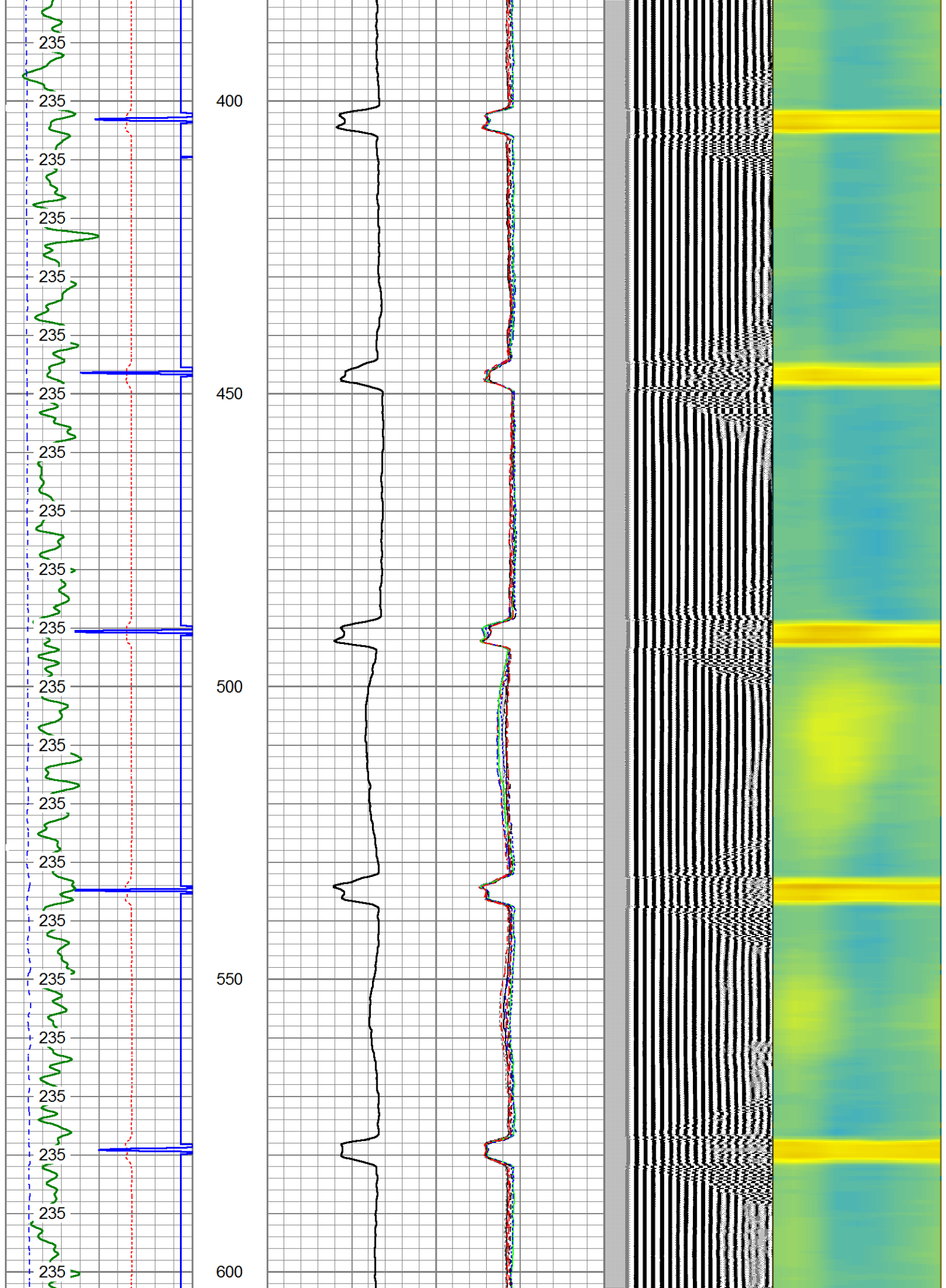
MAIN PASS 4000 PSI.

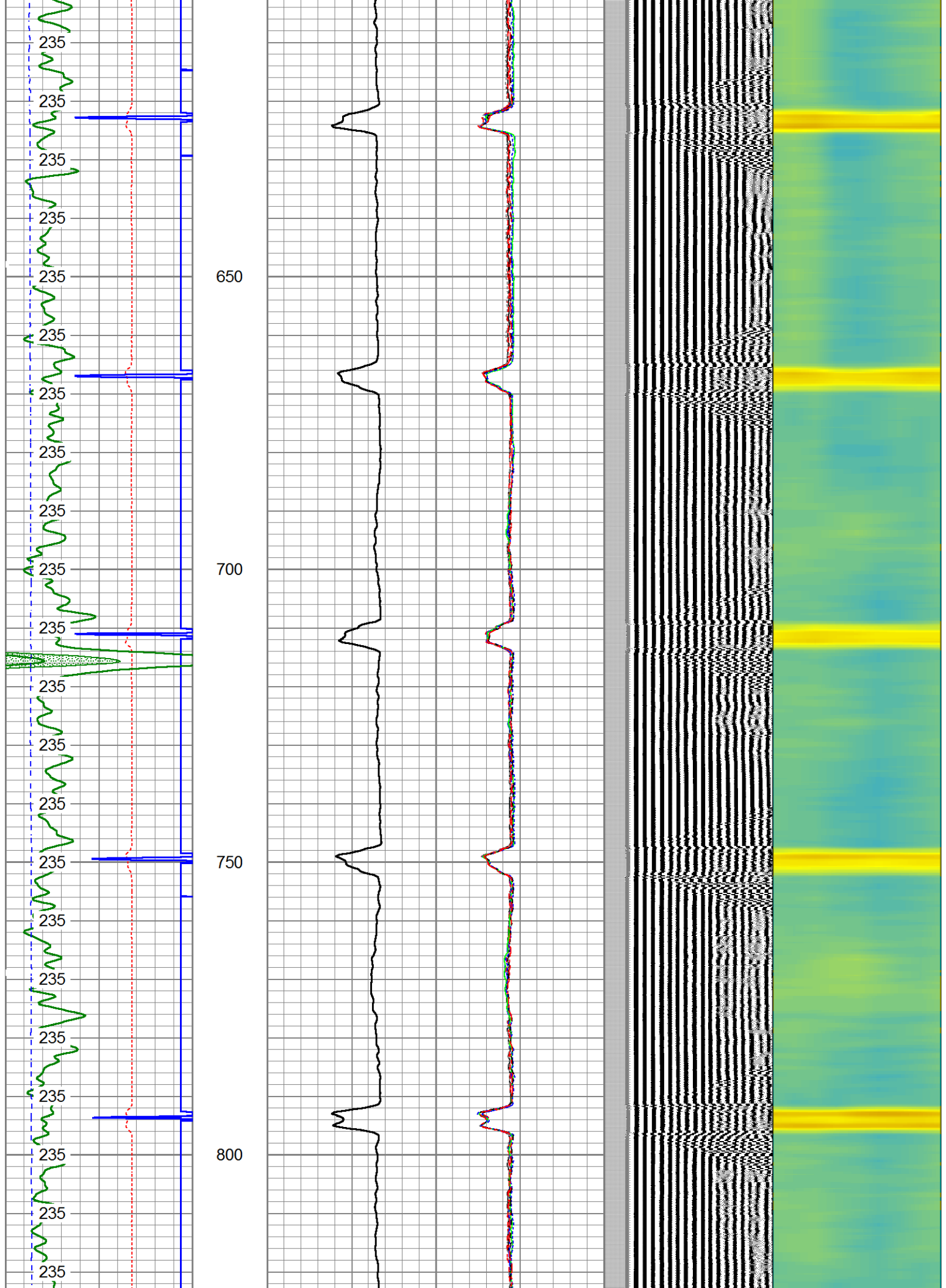
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Dataset Pathname	392hn/CBLPSI/pass7
Presentation Format	scbl_wyco
Dataset Creation	Mon Mar 25 19:55:48 2019
Charted by	Depth in Feet scaled 1:240

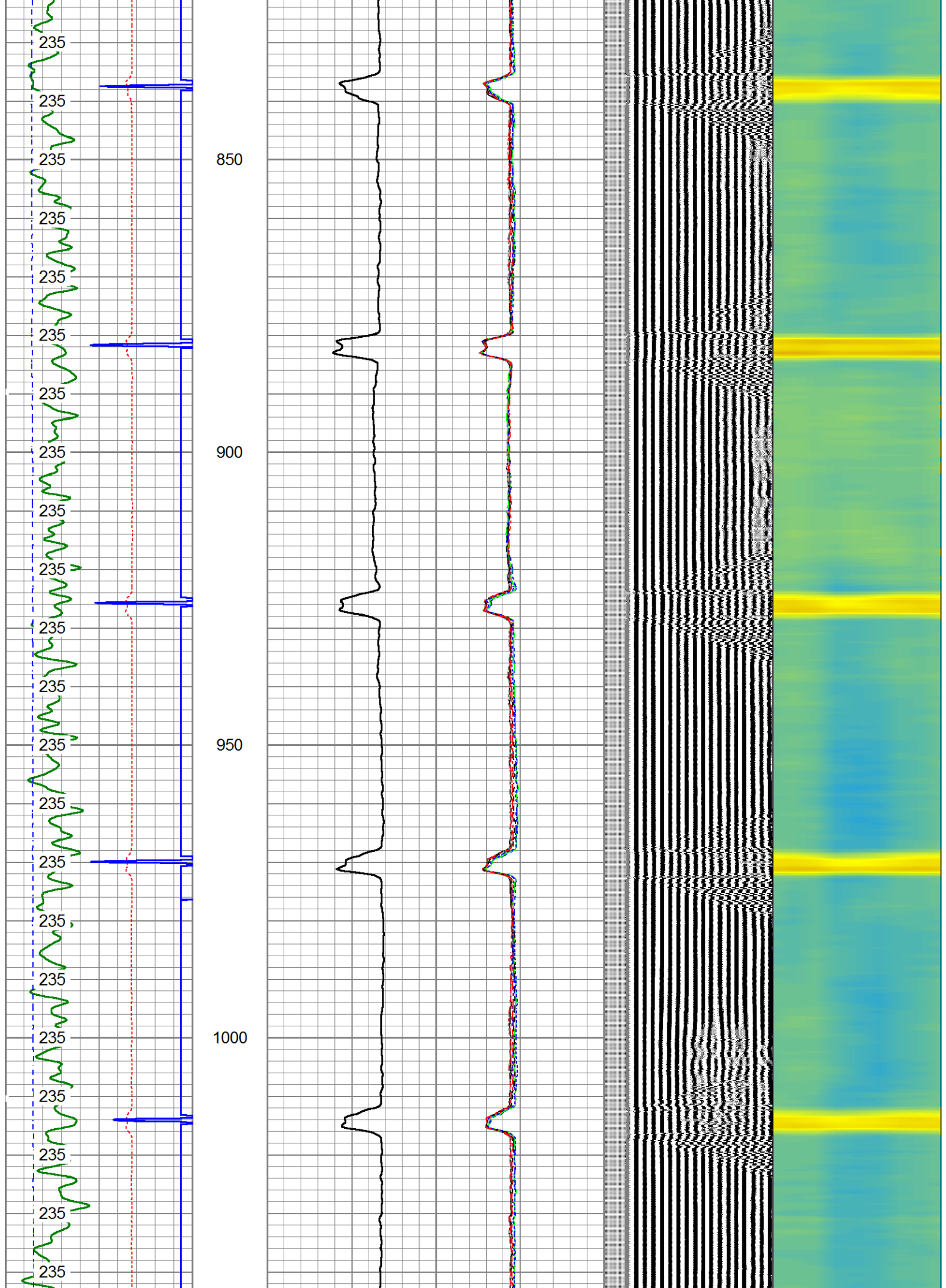
Travel Time			0	Amplitude (mV)	100	0	AMPS1	150	Variable Density		1	Cement Map	8
400	(usec)	200	Amplified Amplitude			0	AMPS2	150	200	(usec)	1200		
15	Casing Collar	-1	0	(mV)	30	0	AMPS3	150					
Gamma Ray						0	AMPS4	150					
0	(GAPI)	200				0	AMPS5	150					
0	Line Tension (lb)	2500				0	AMPS6	150		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

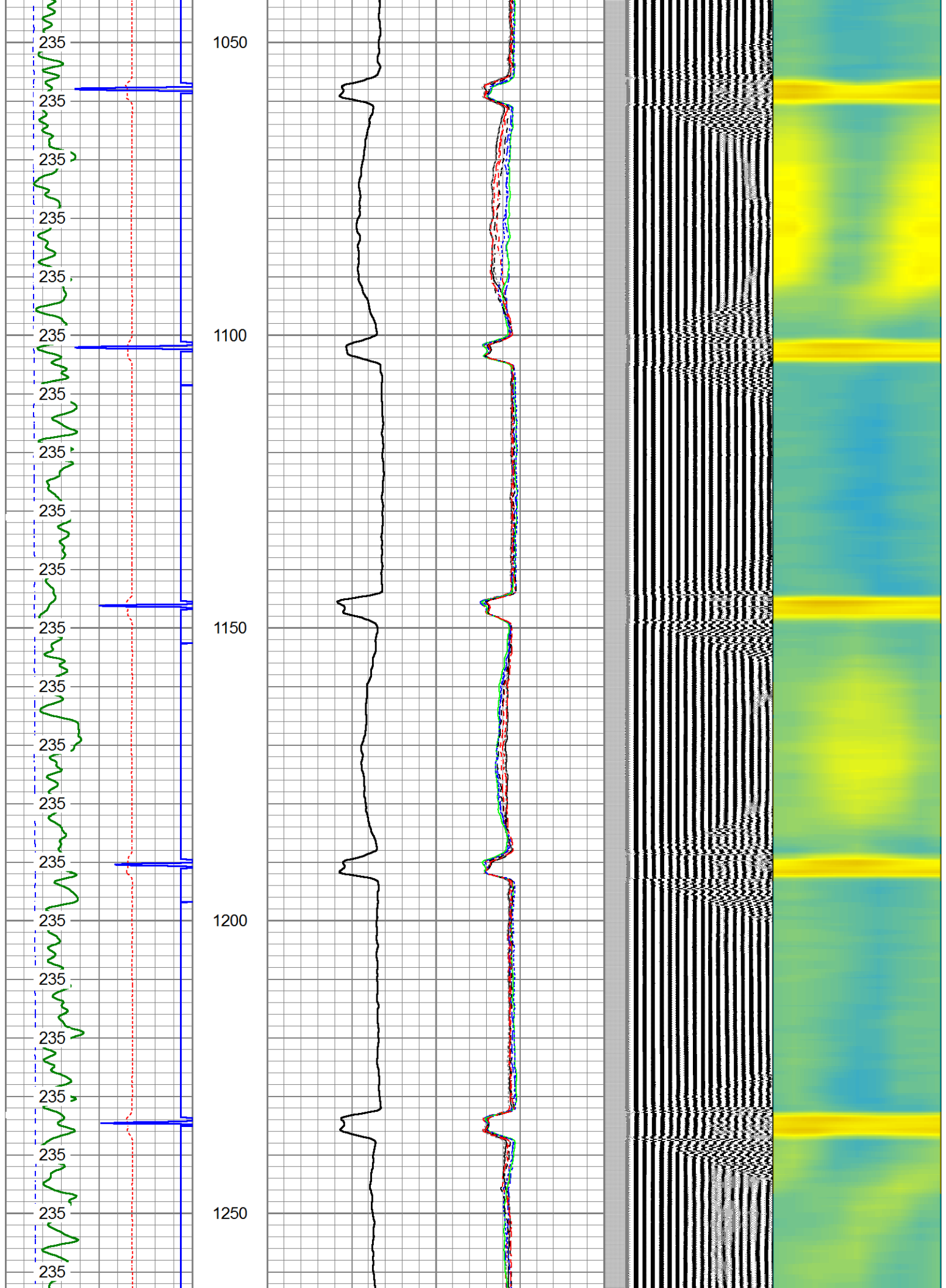


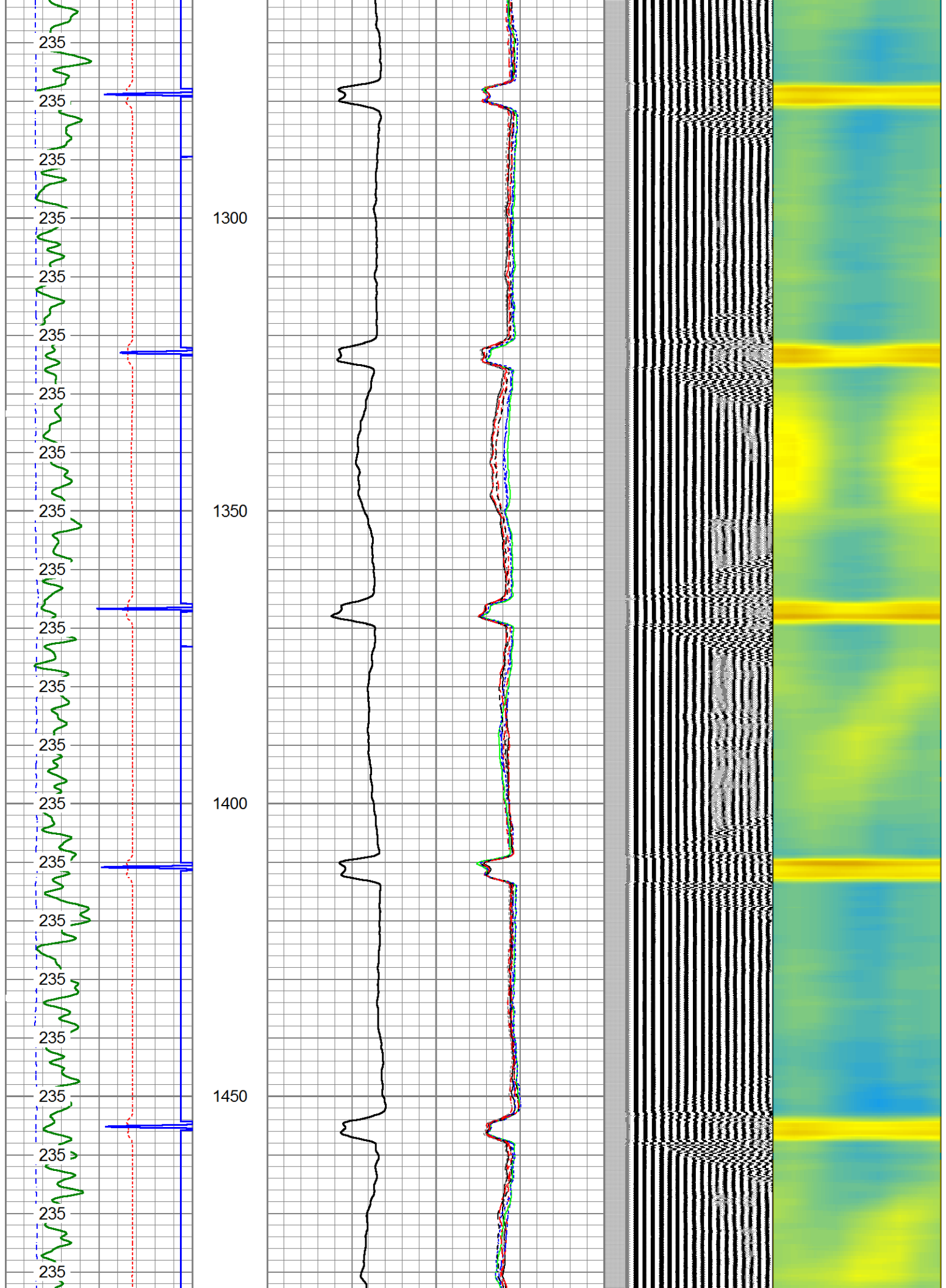


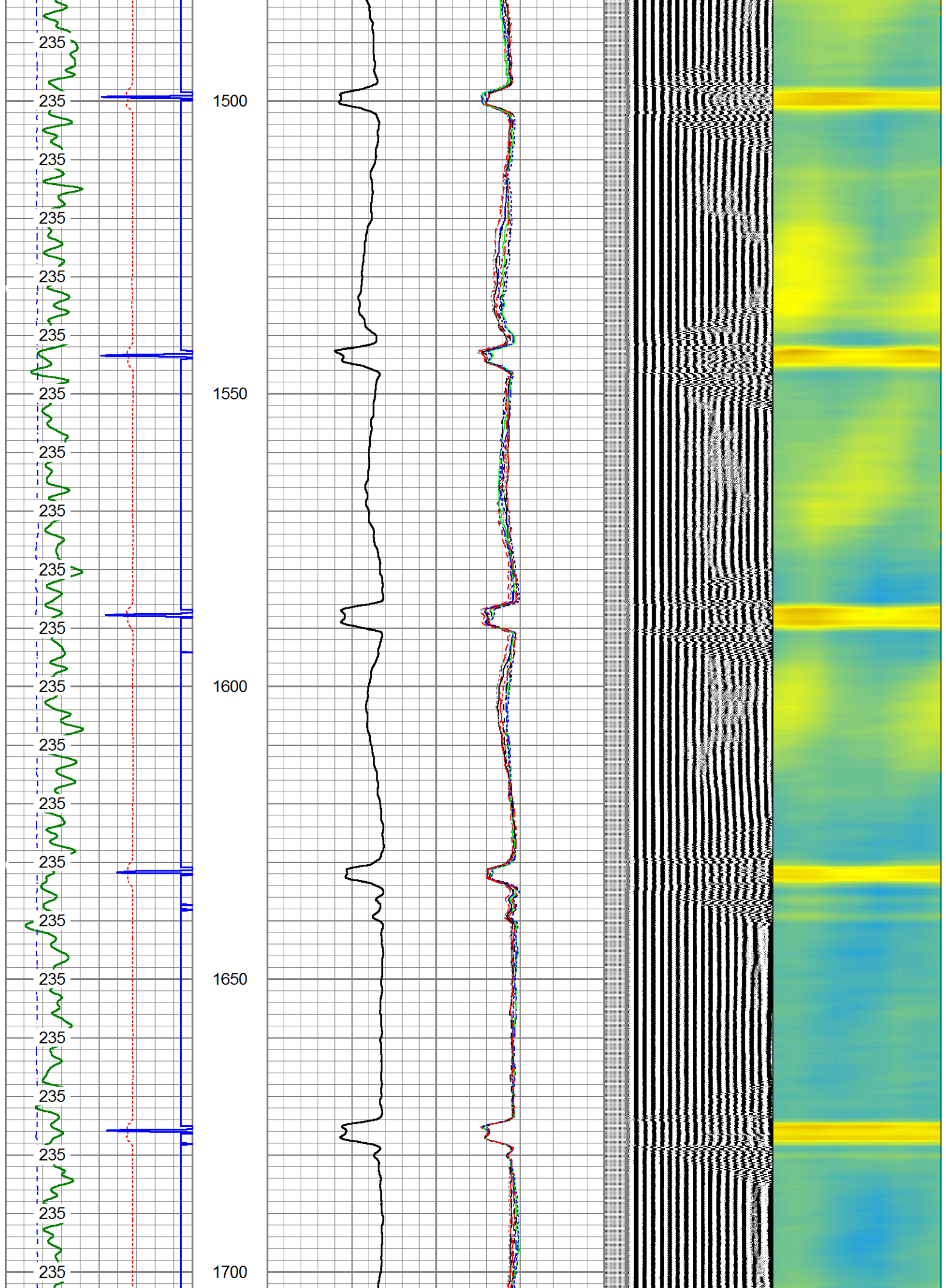


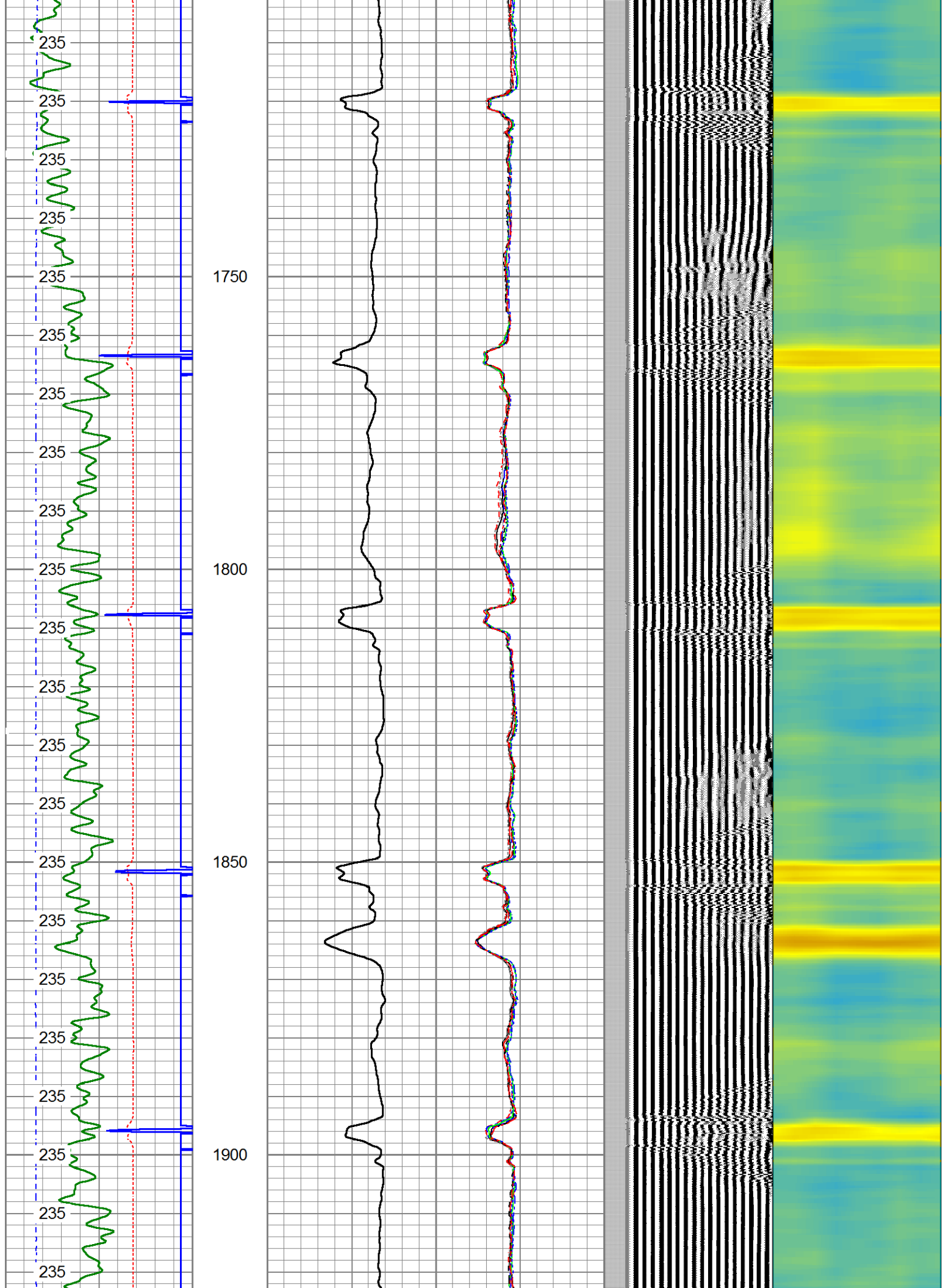


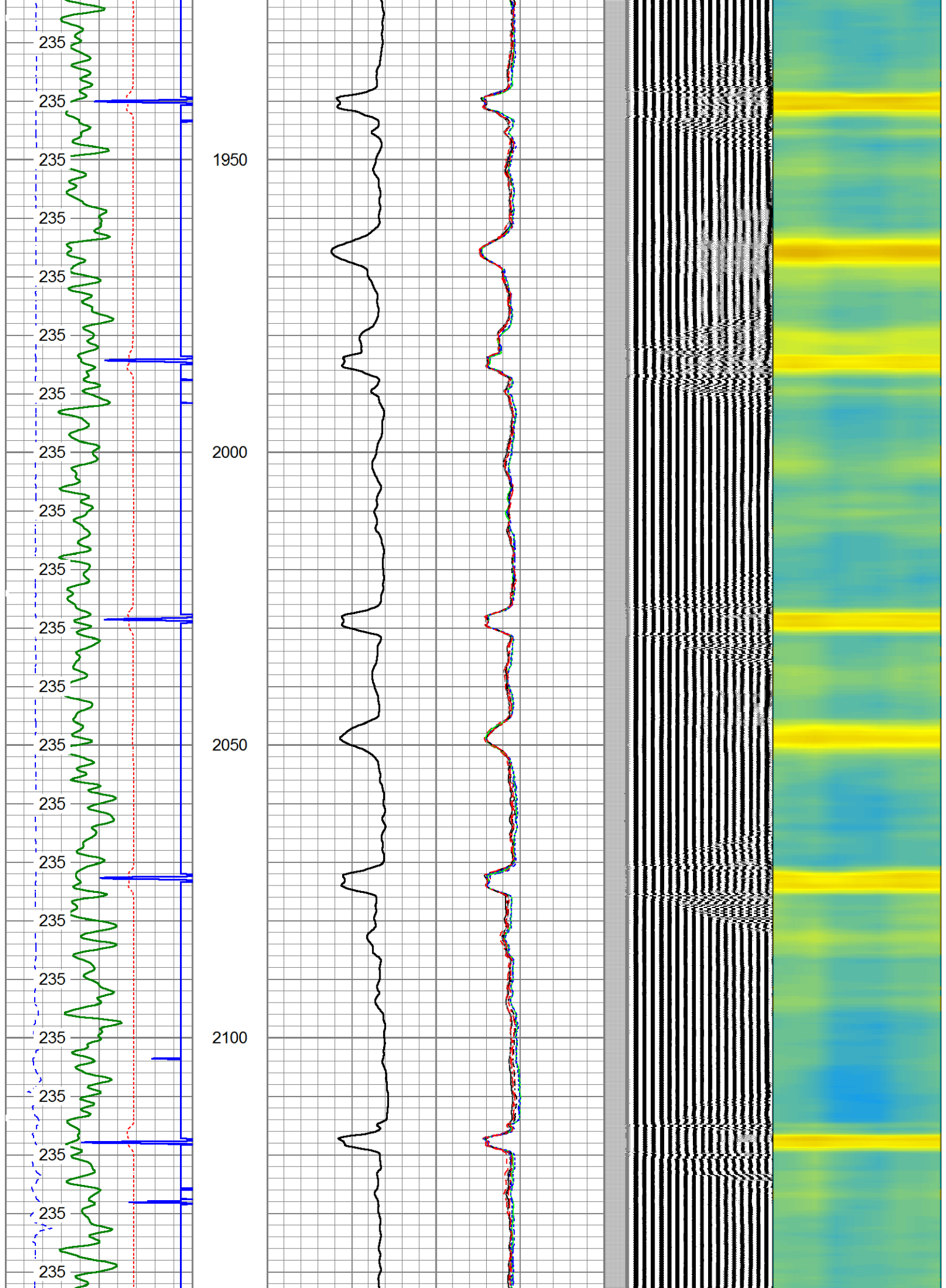


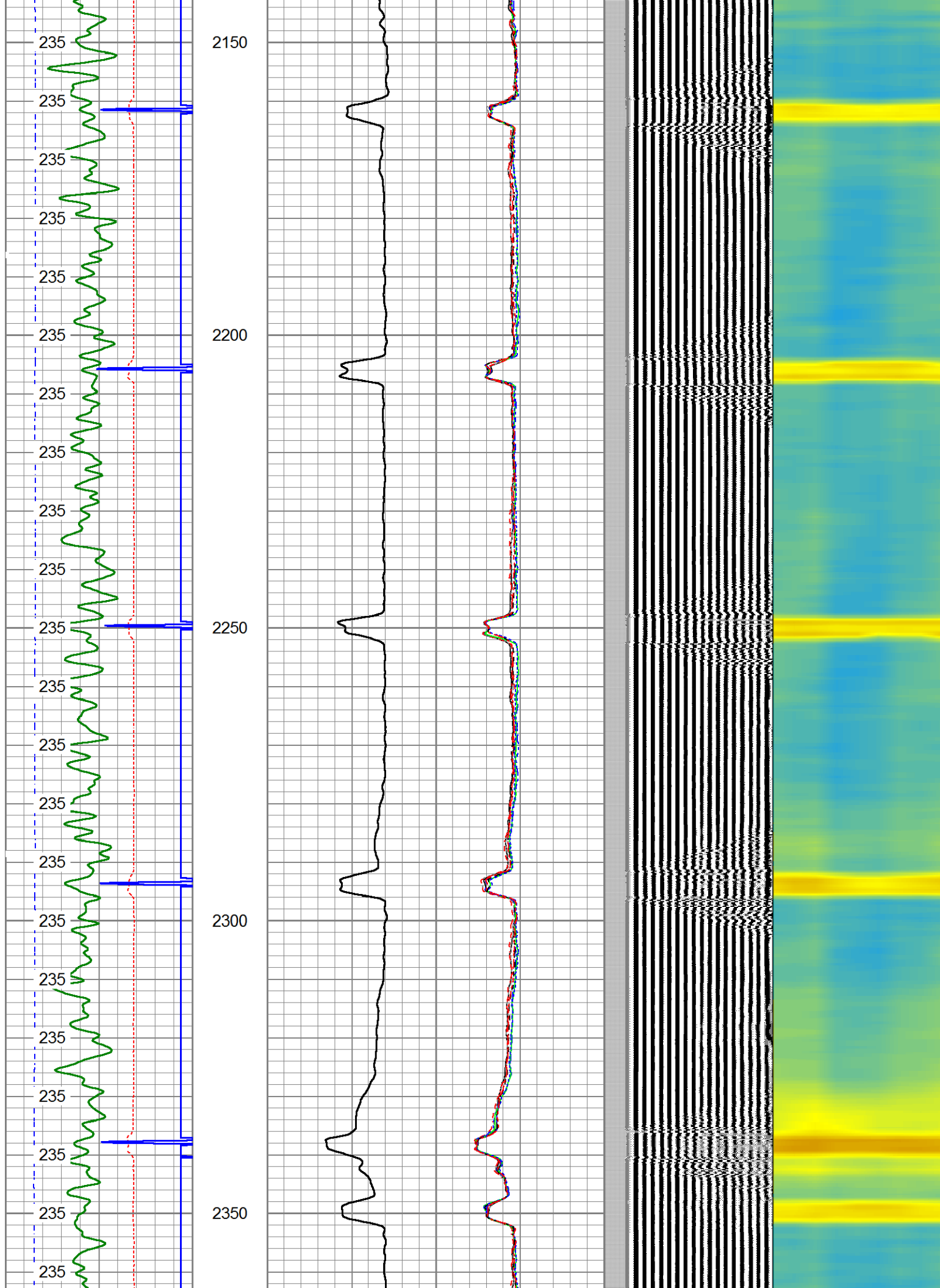


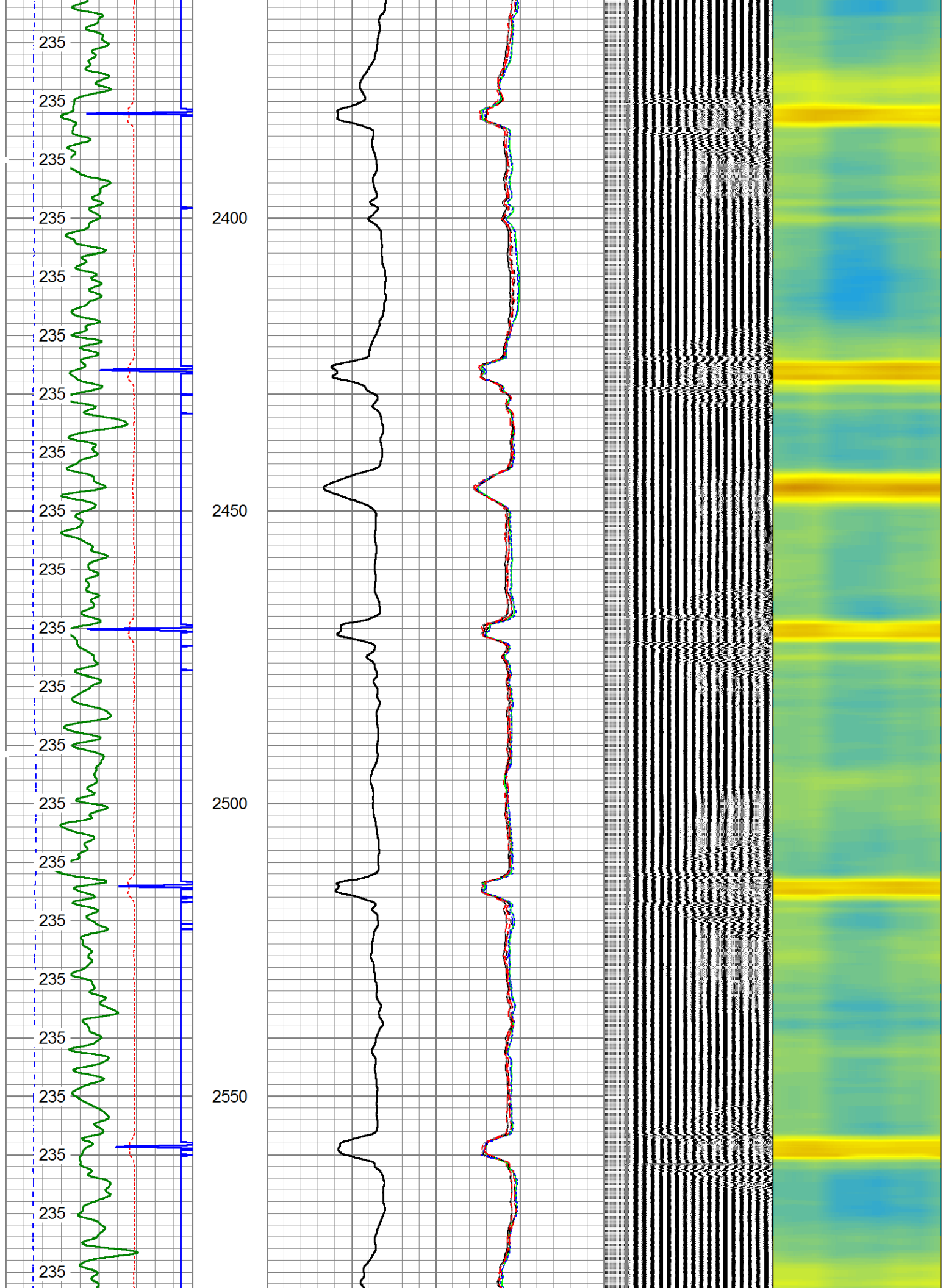


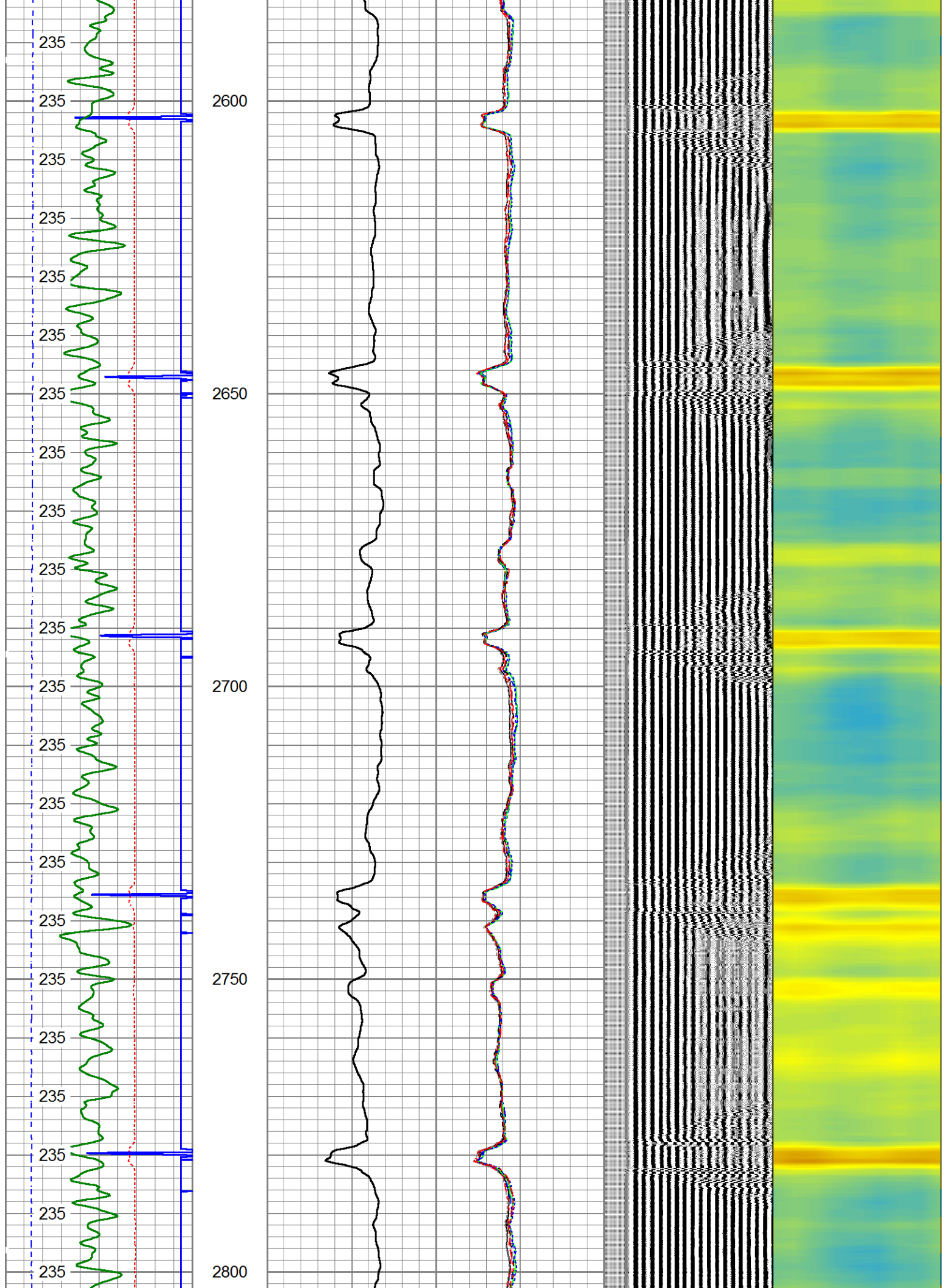


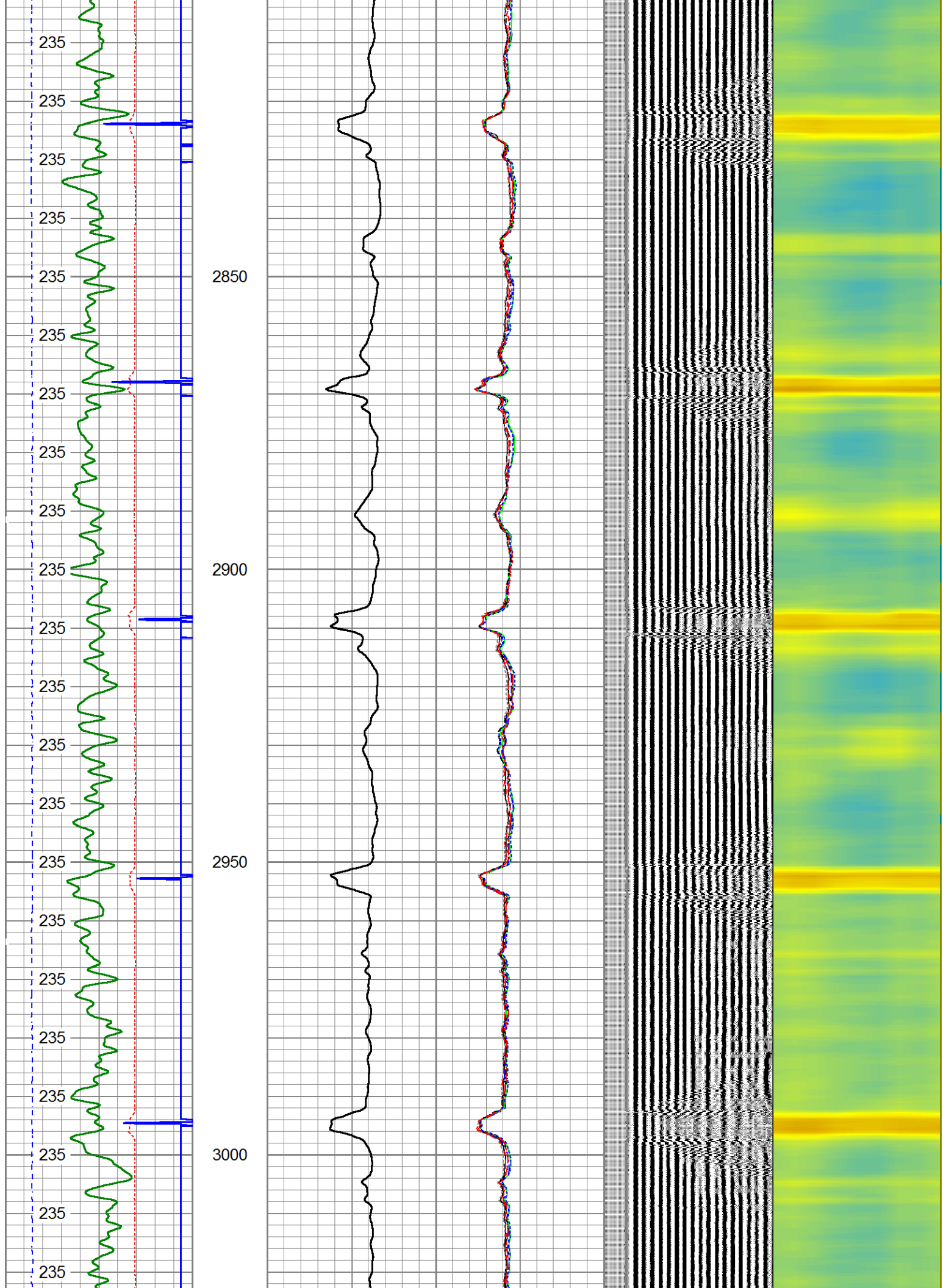


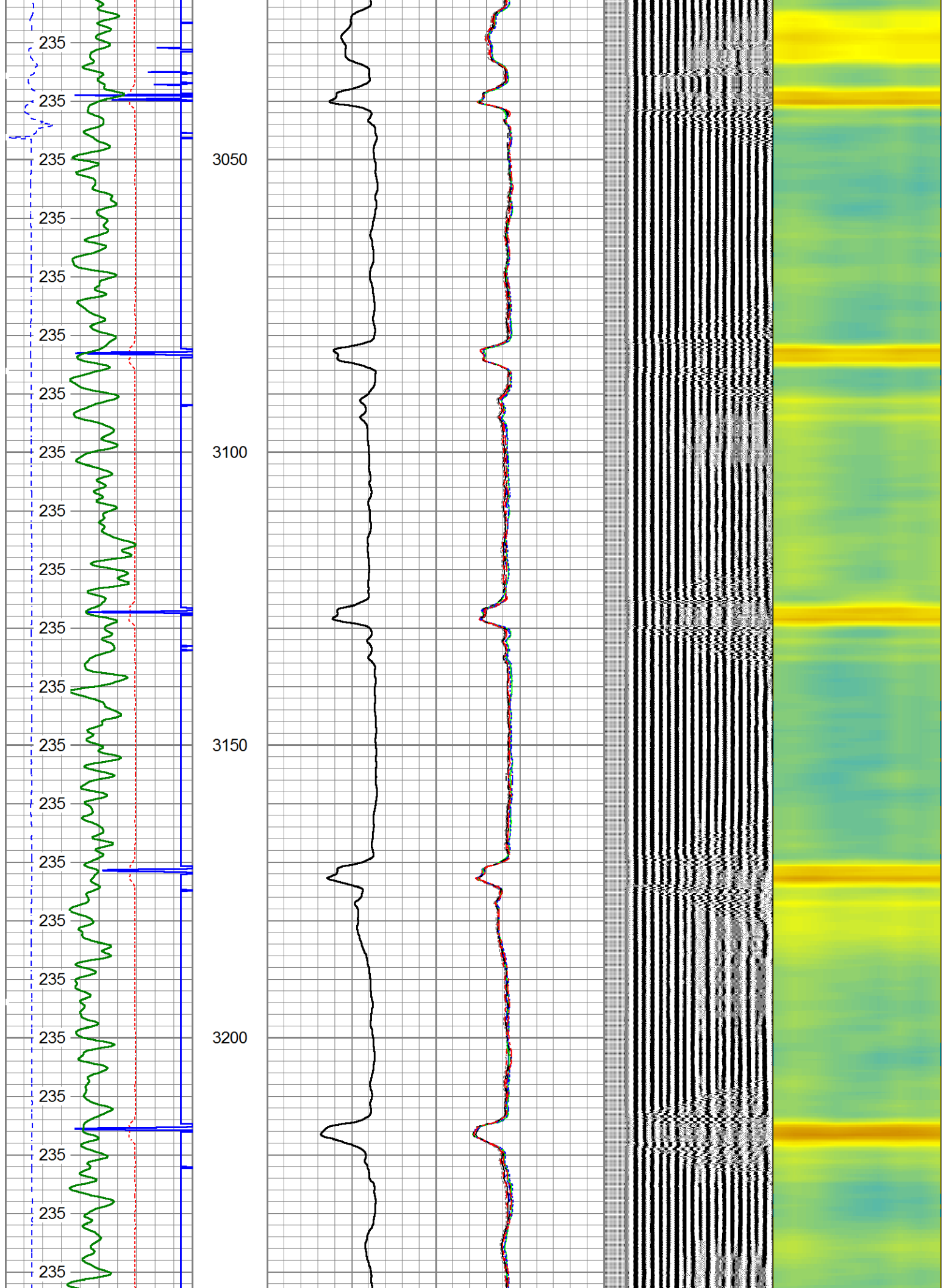


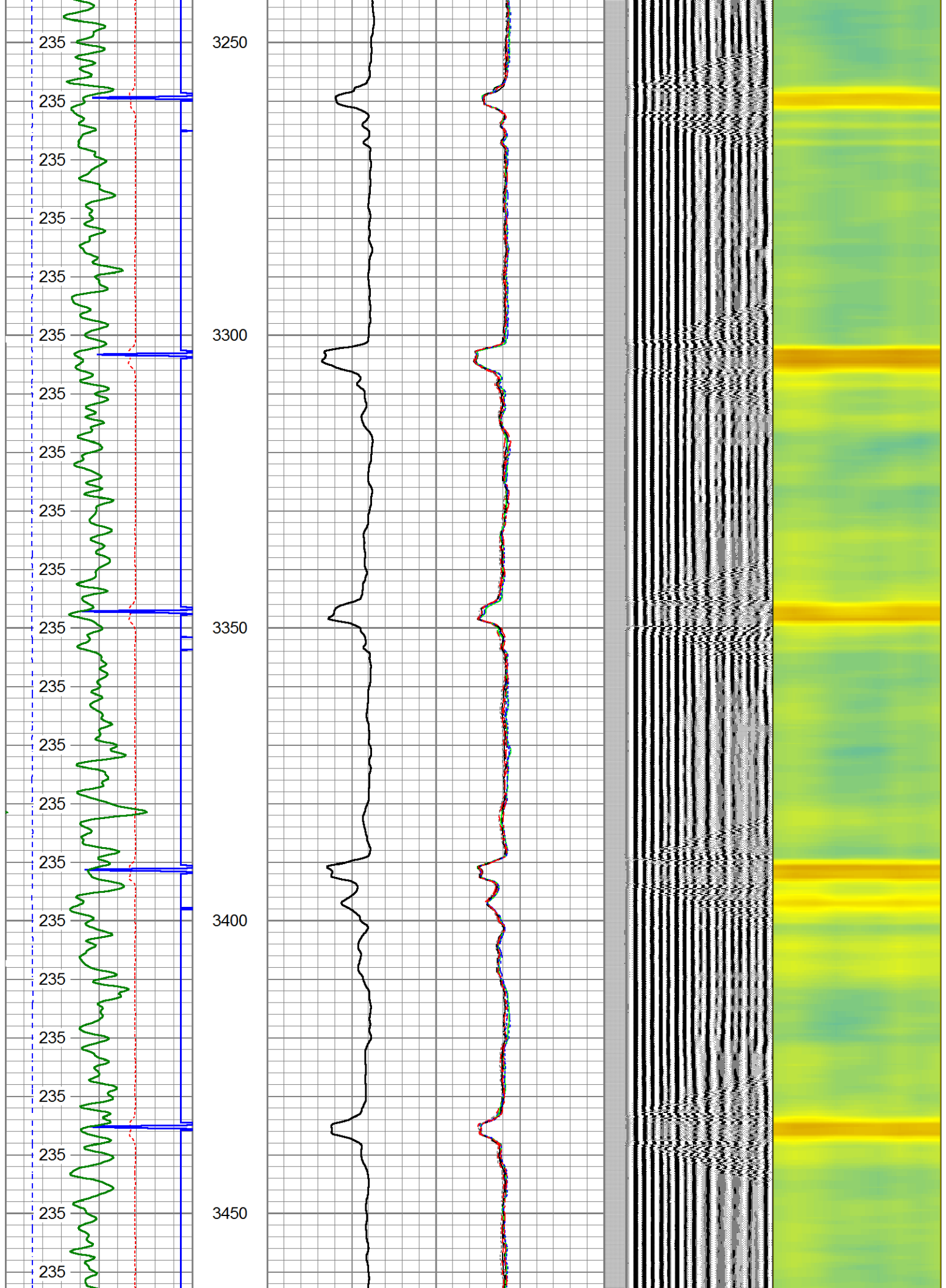


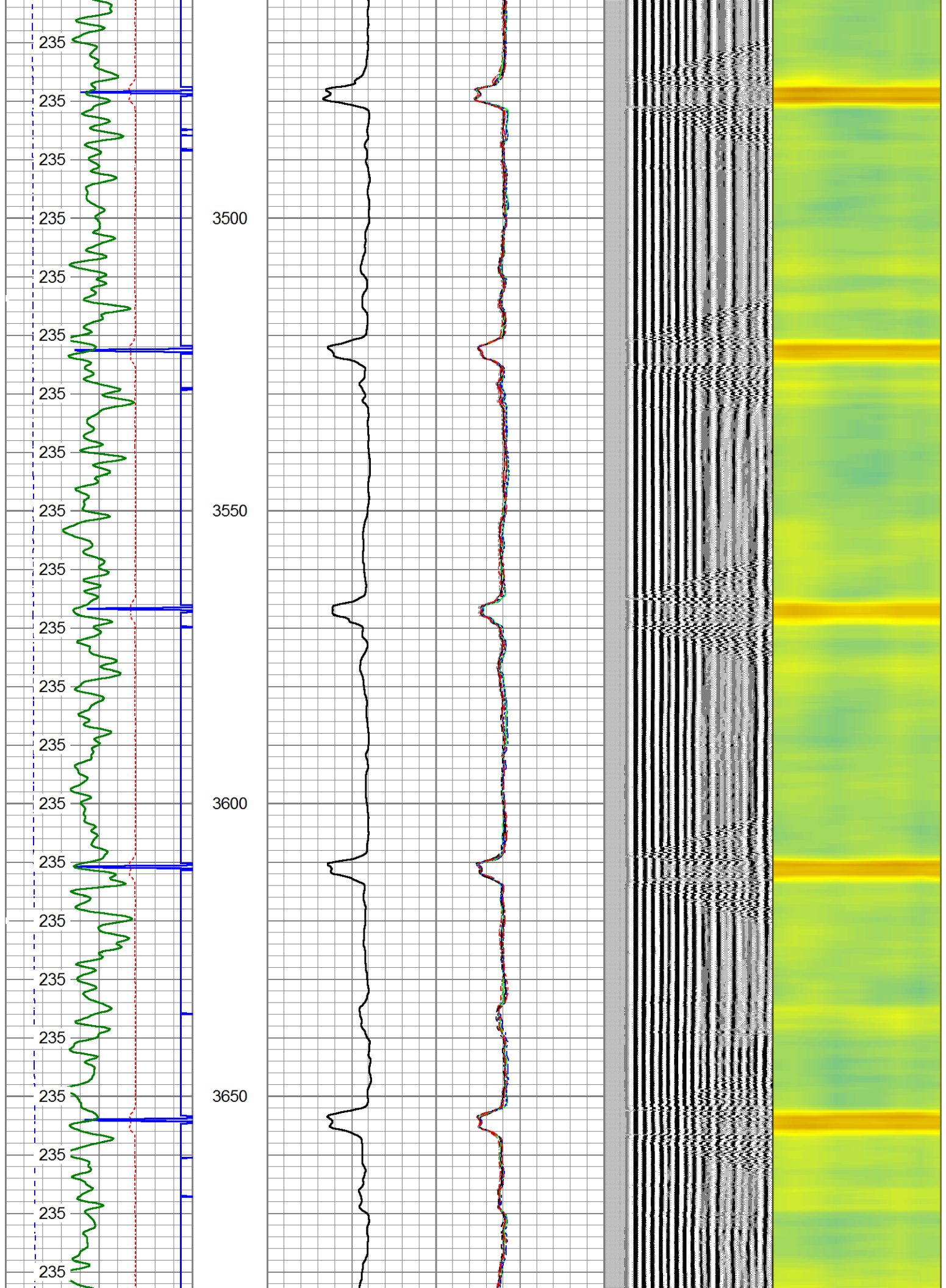


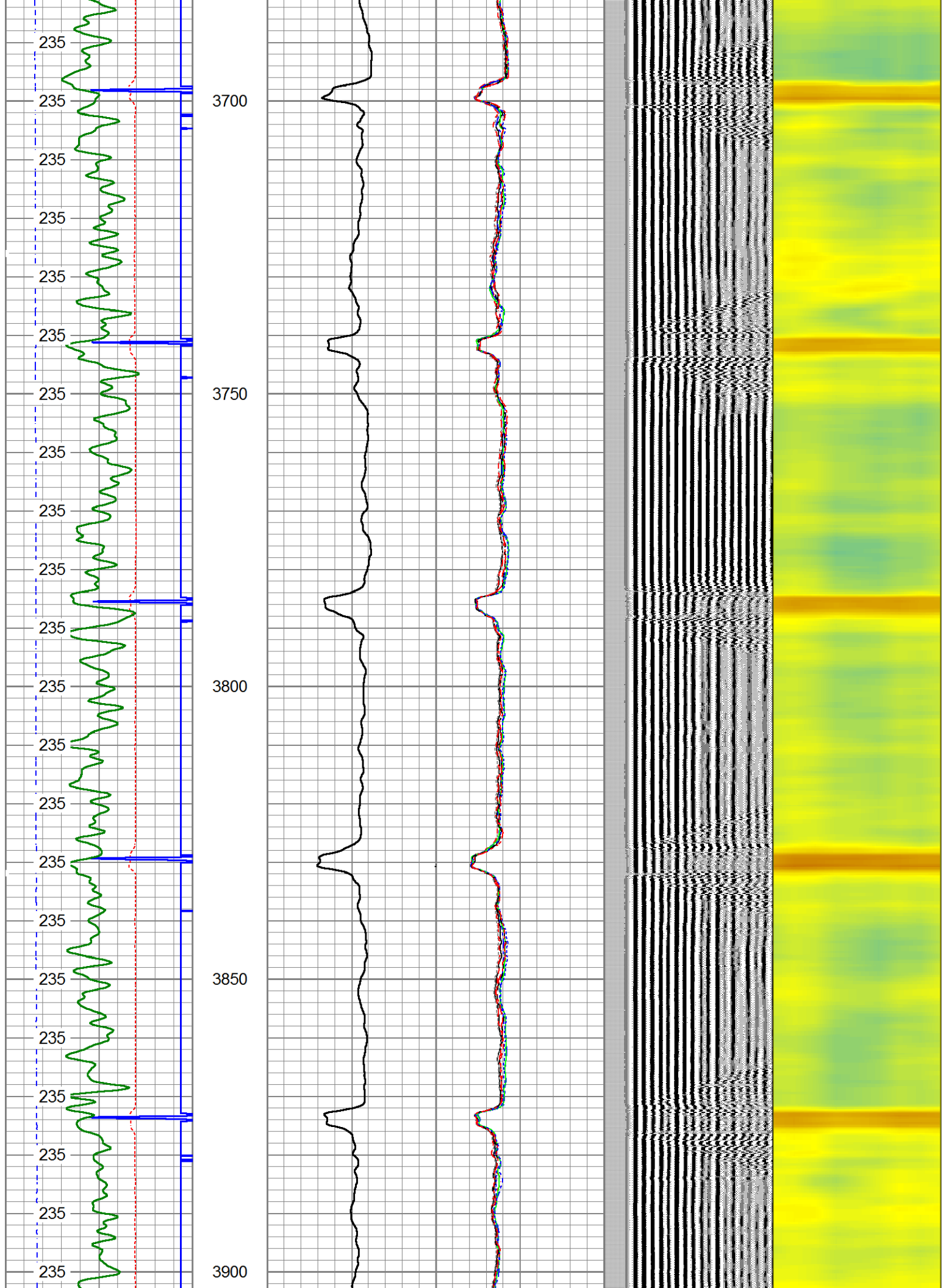


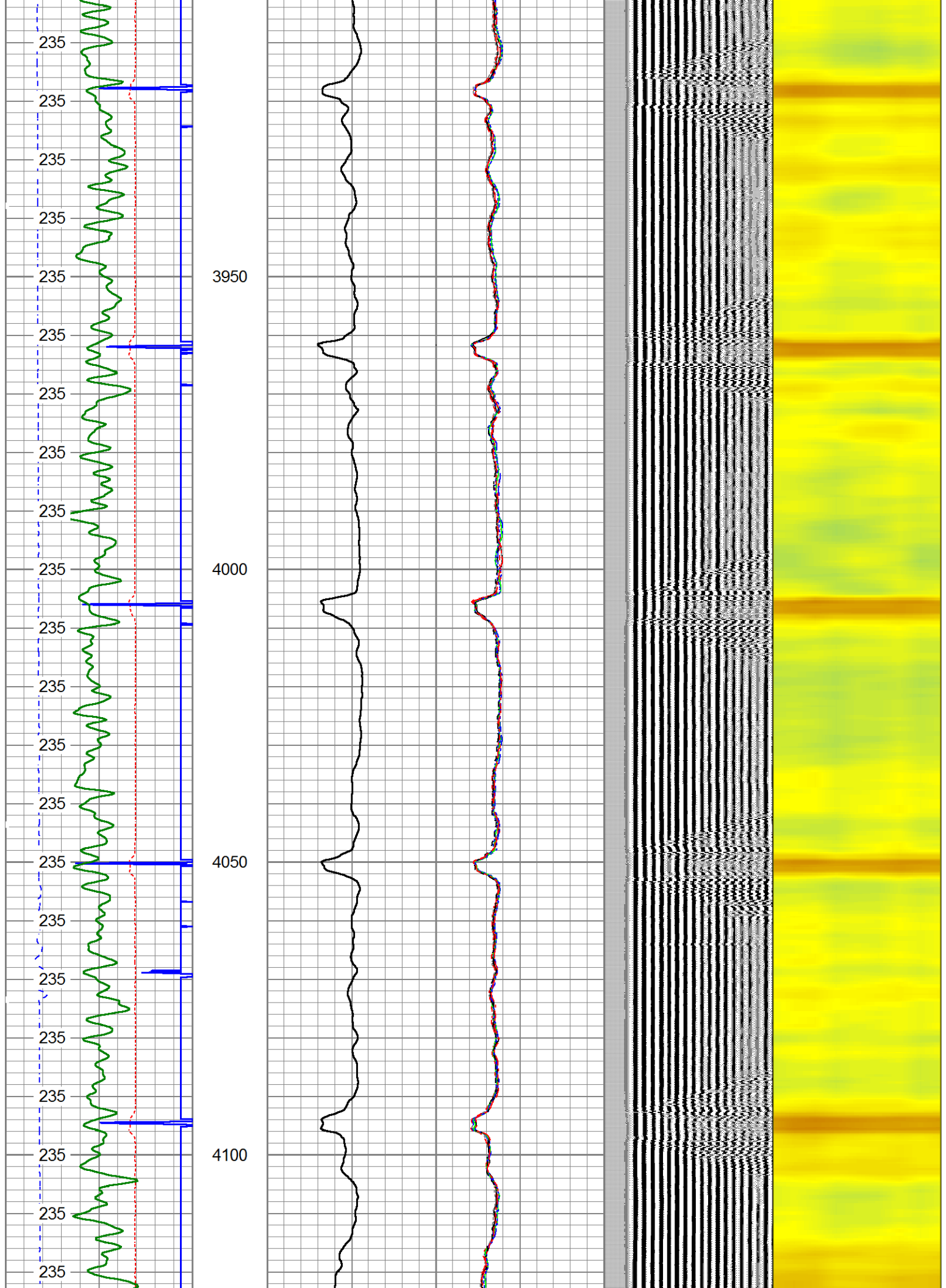


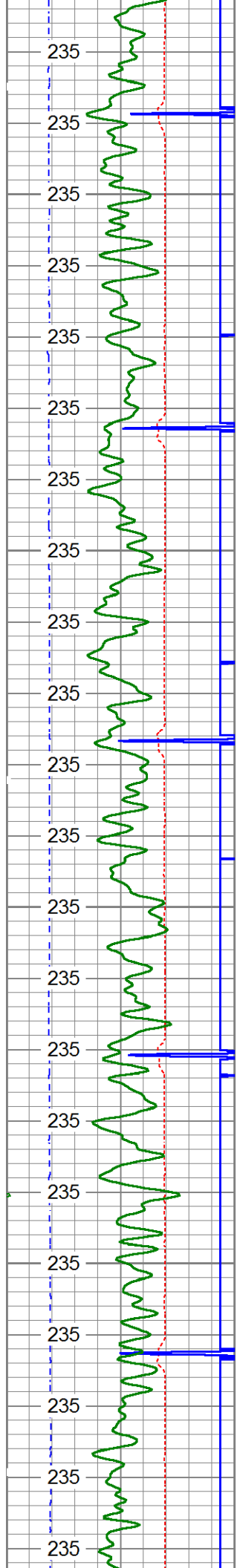










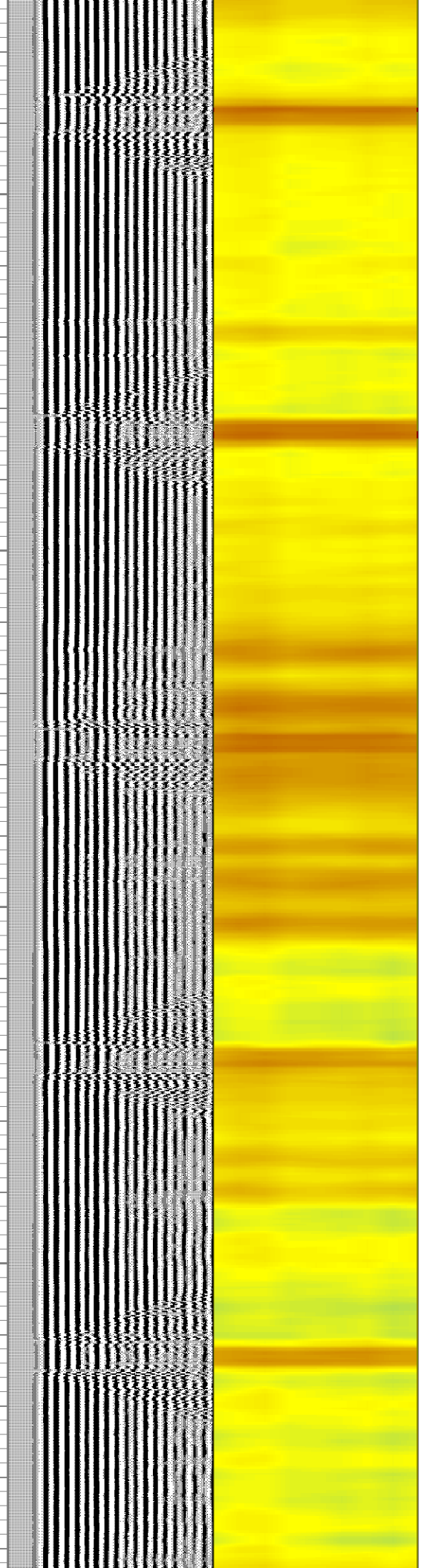
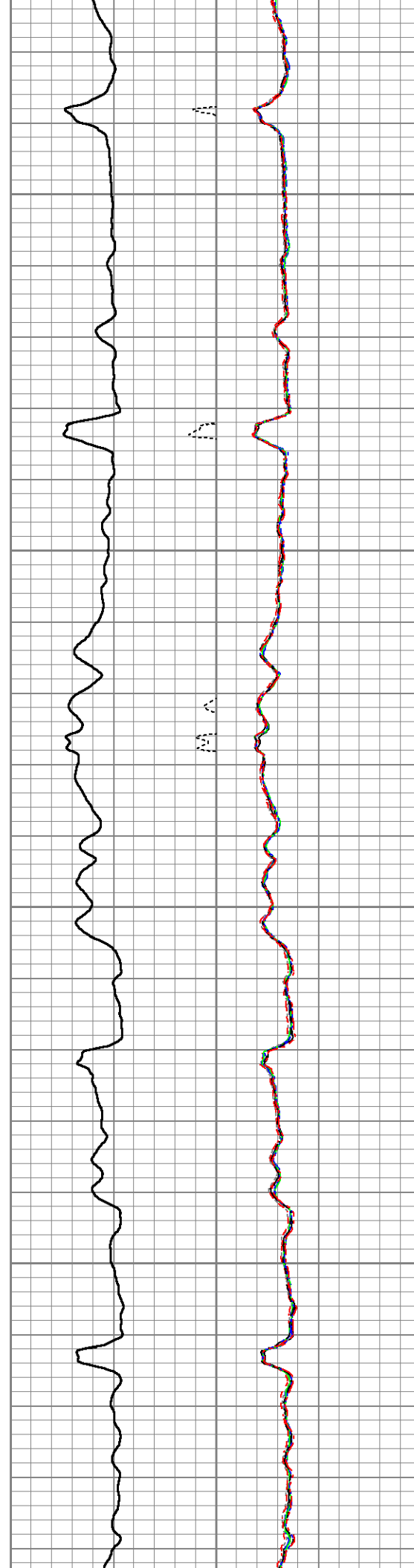


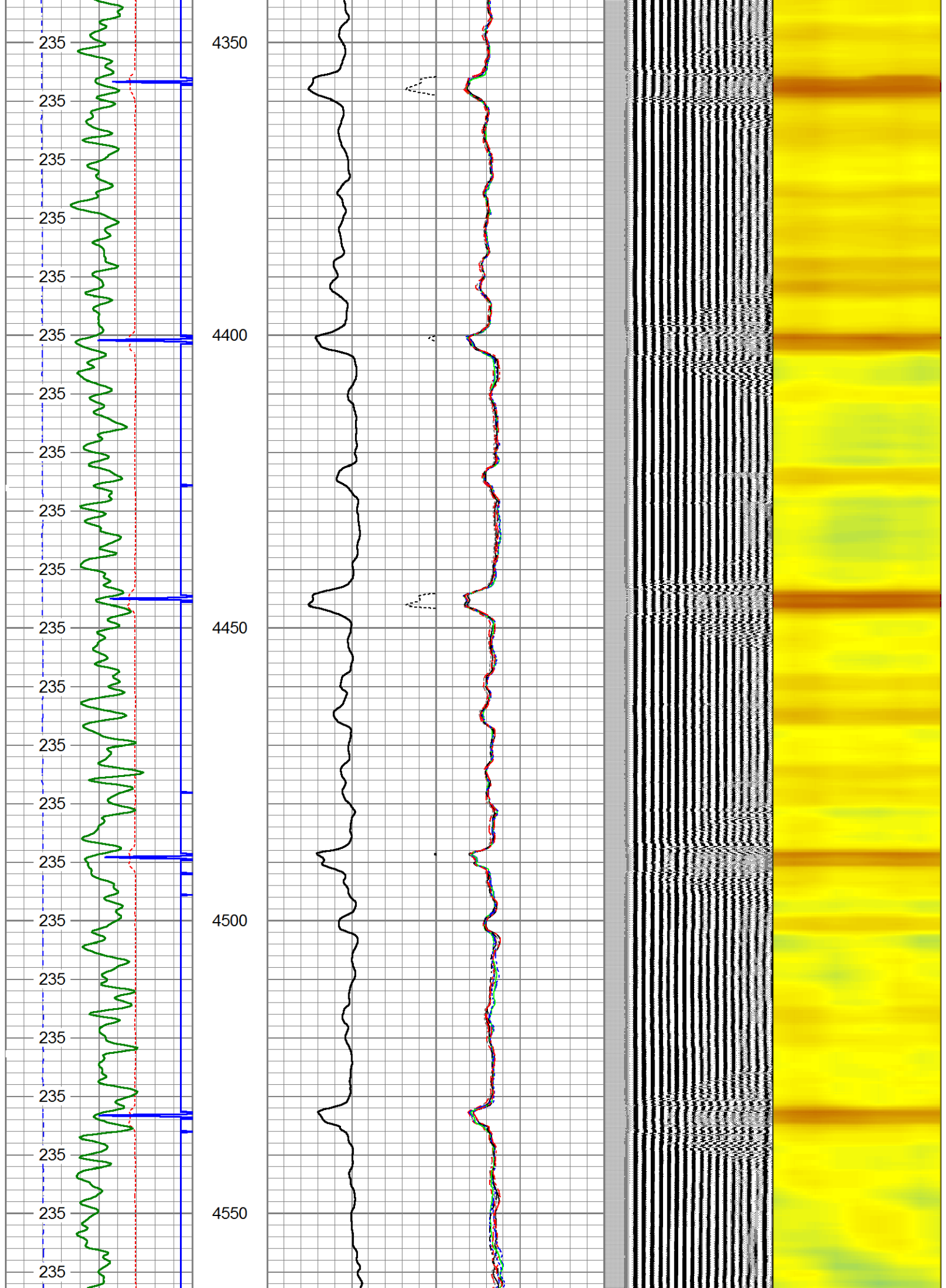
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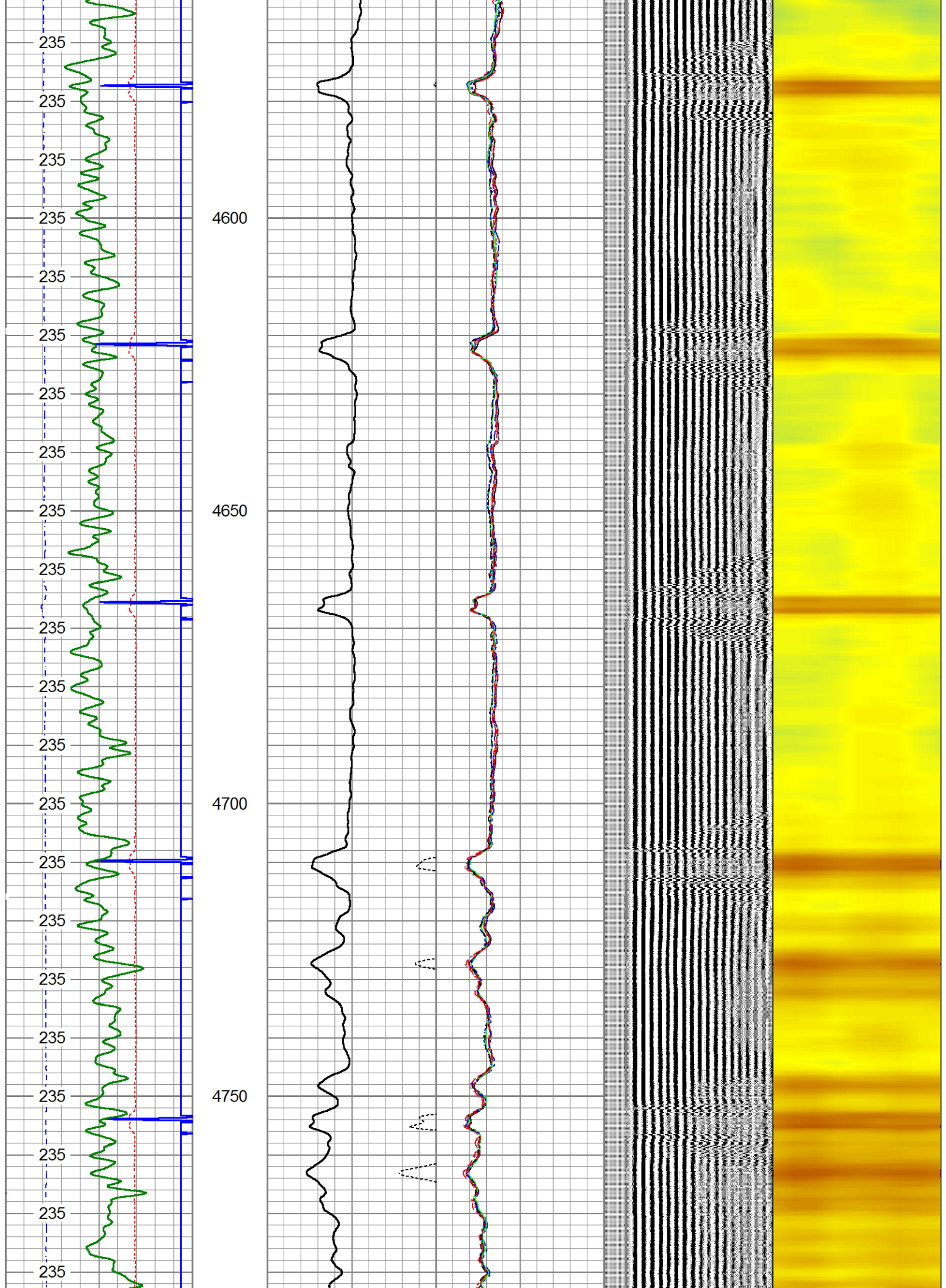
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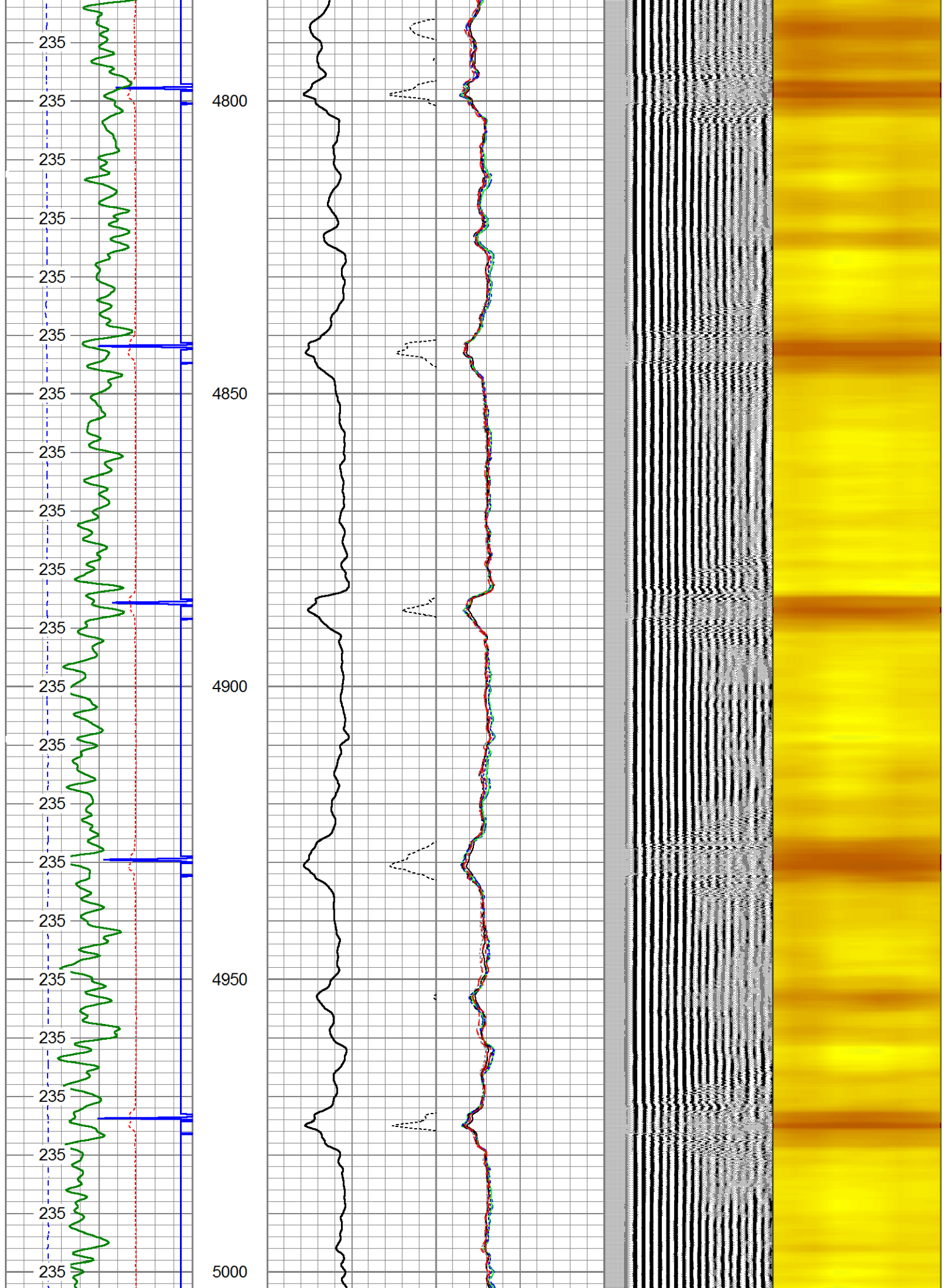
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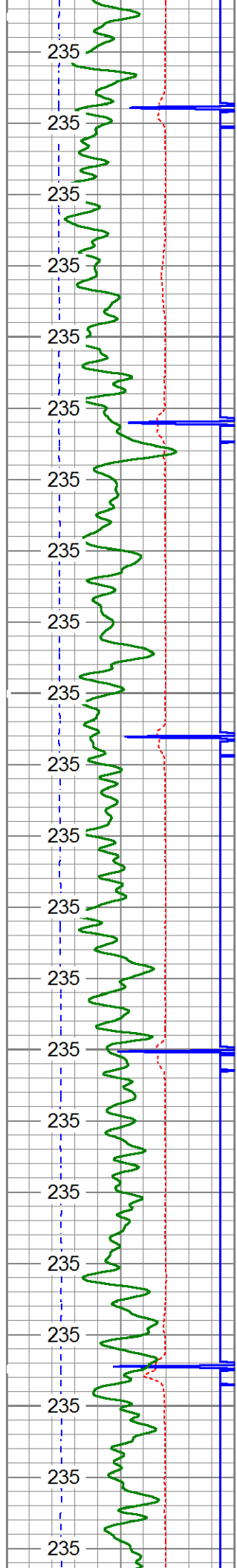
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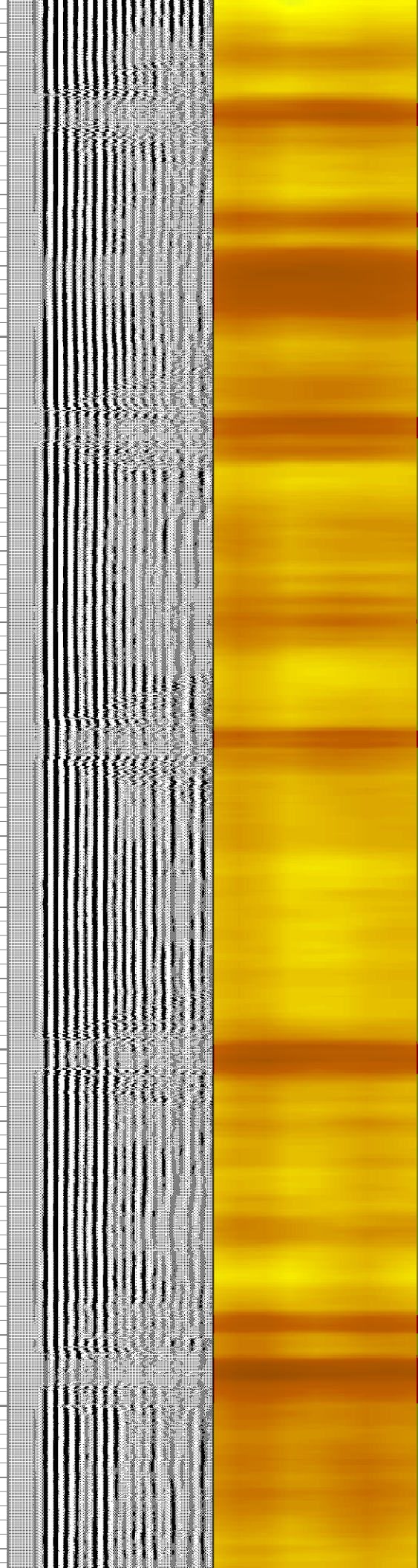
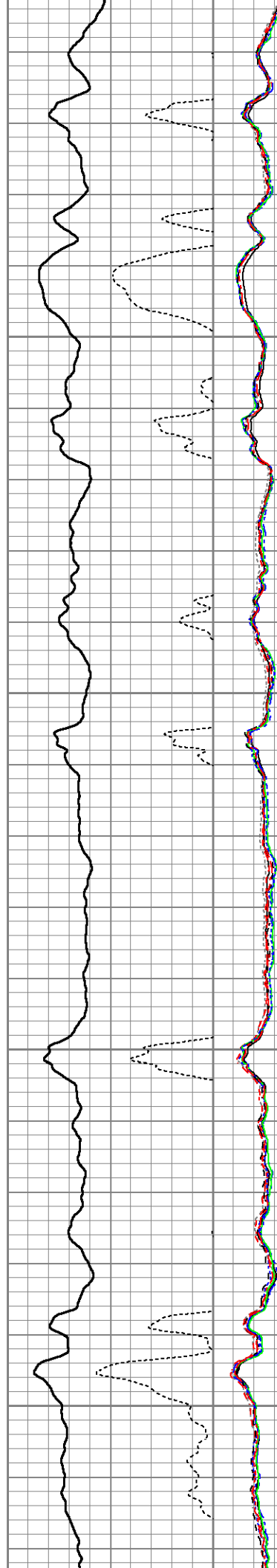


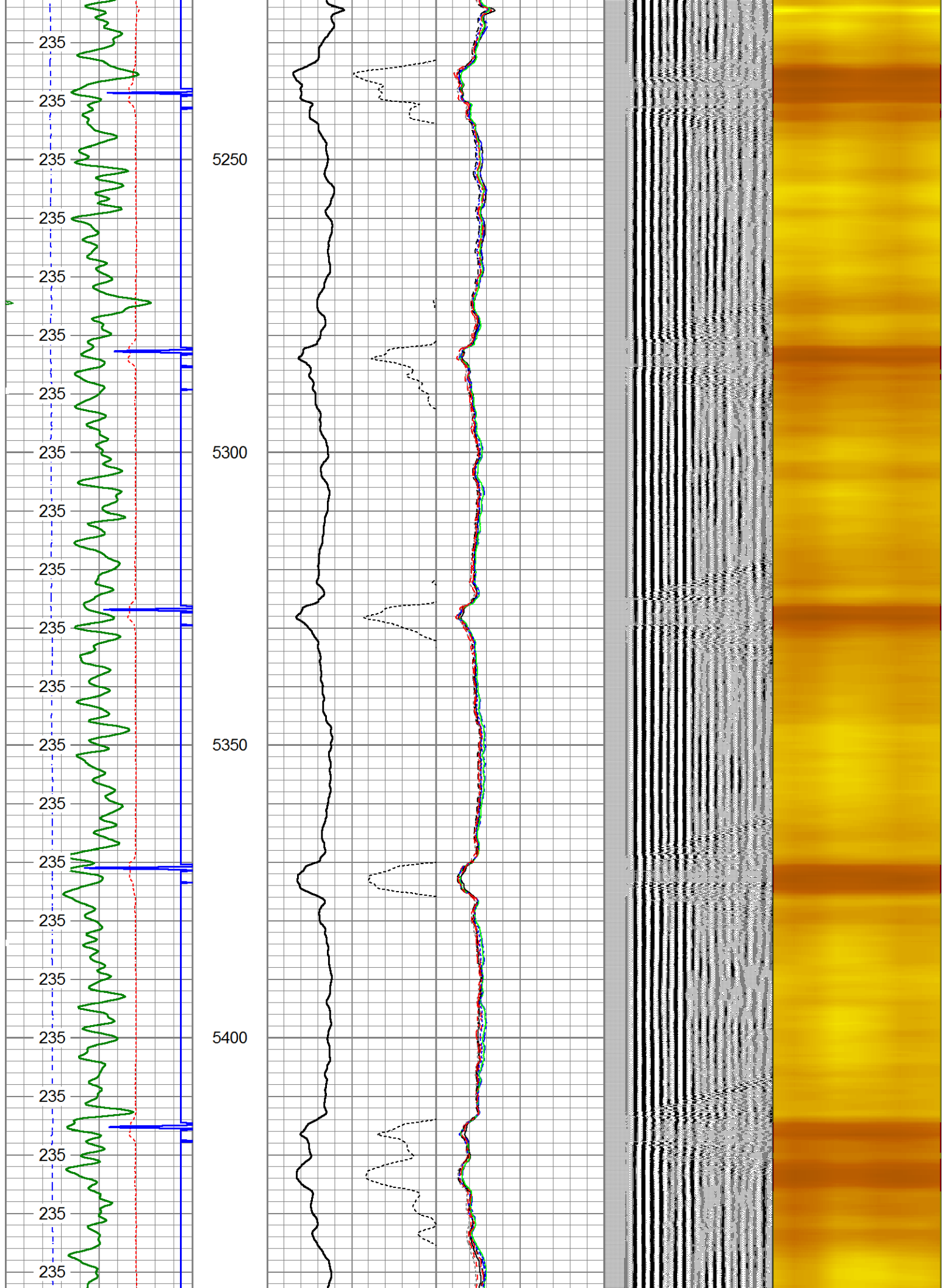
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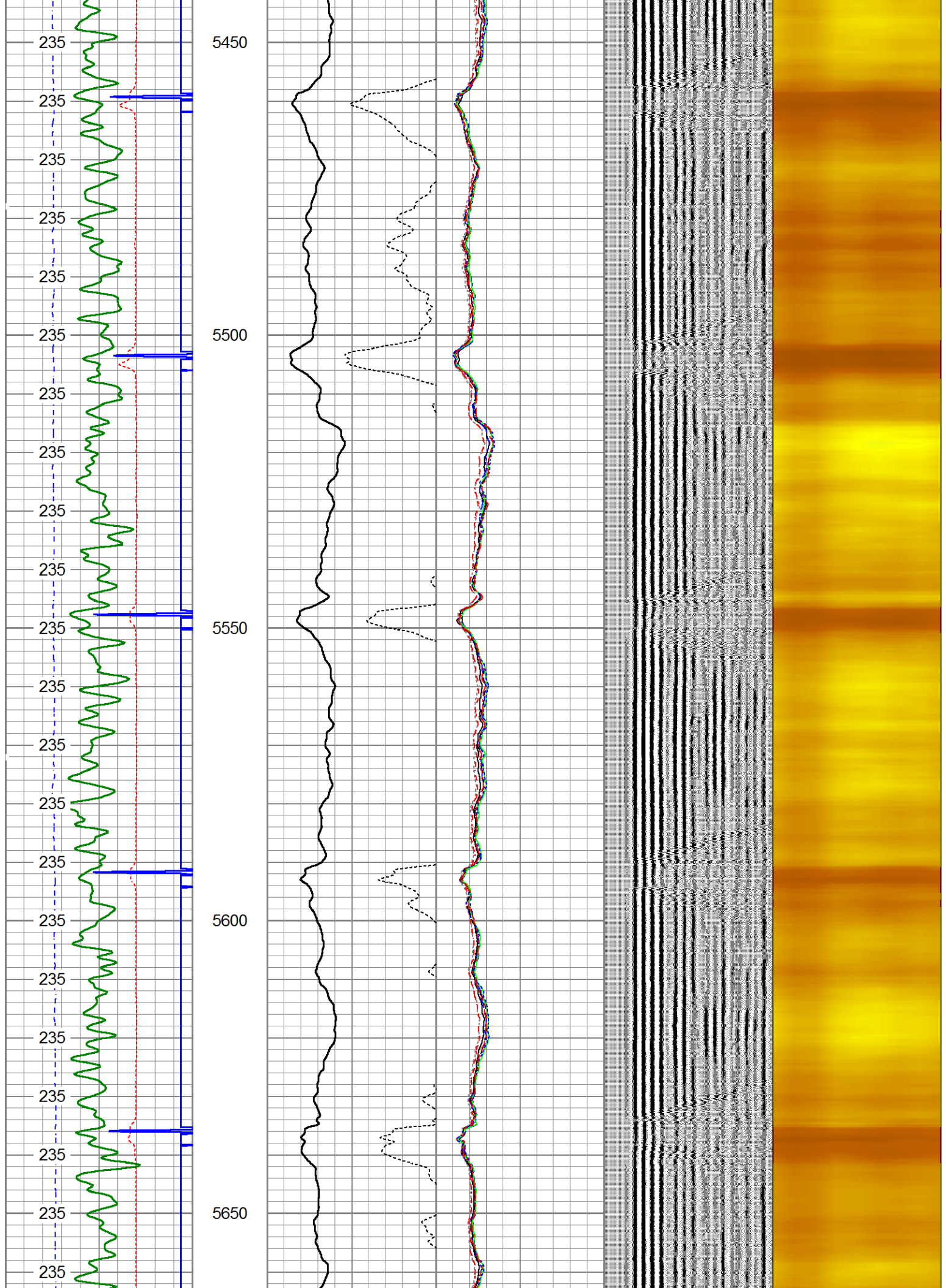
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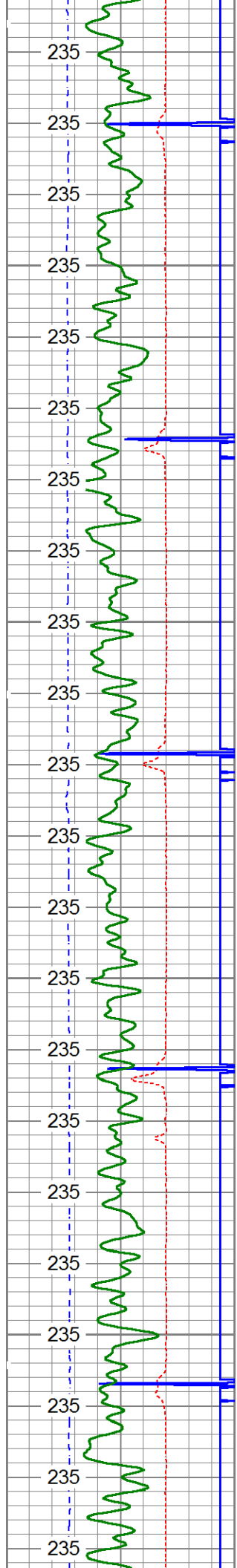
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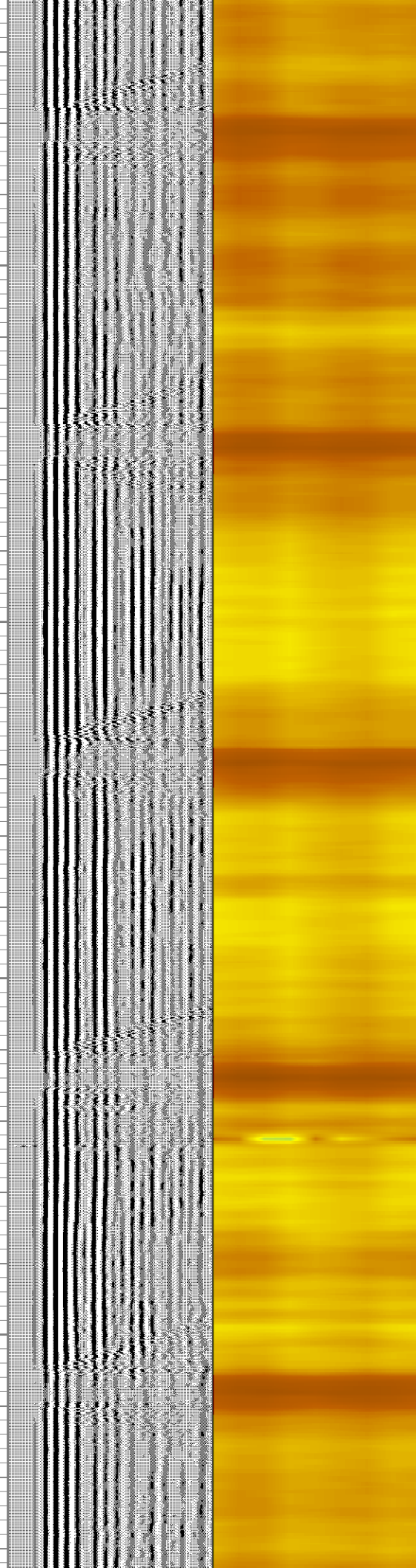
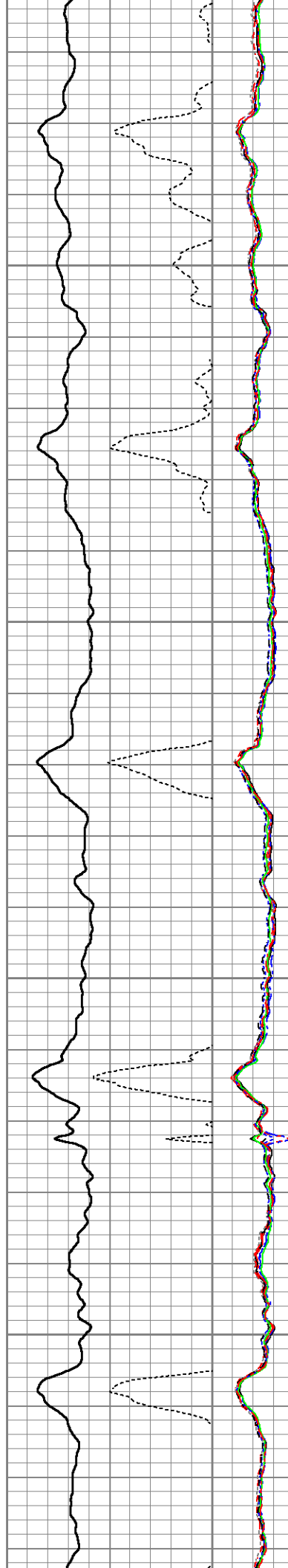


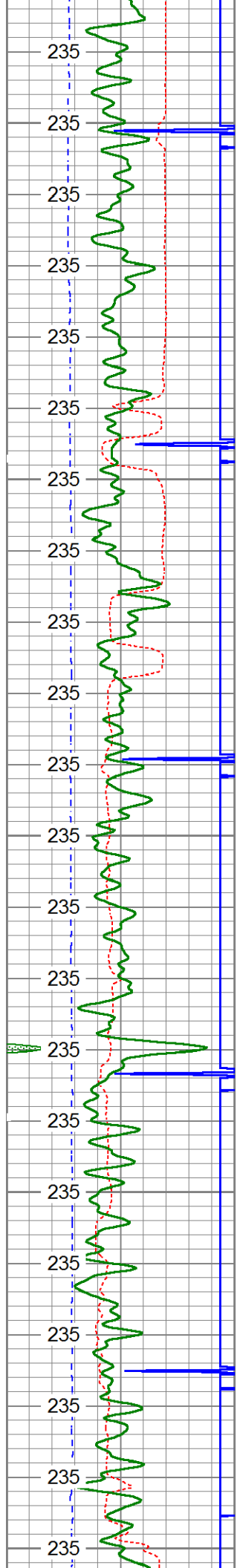
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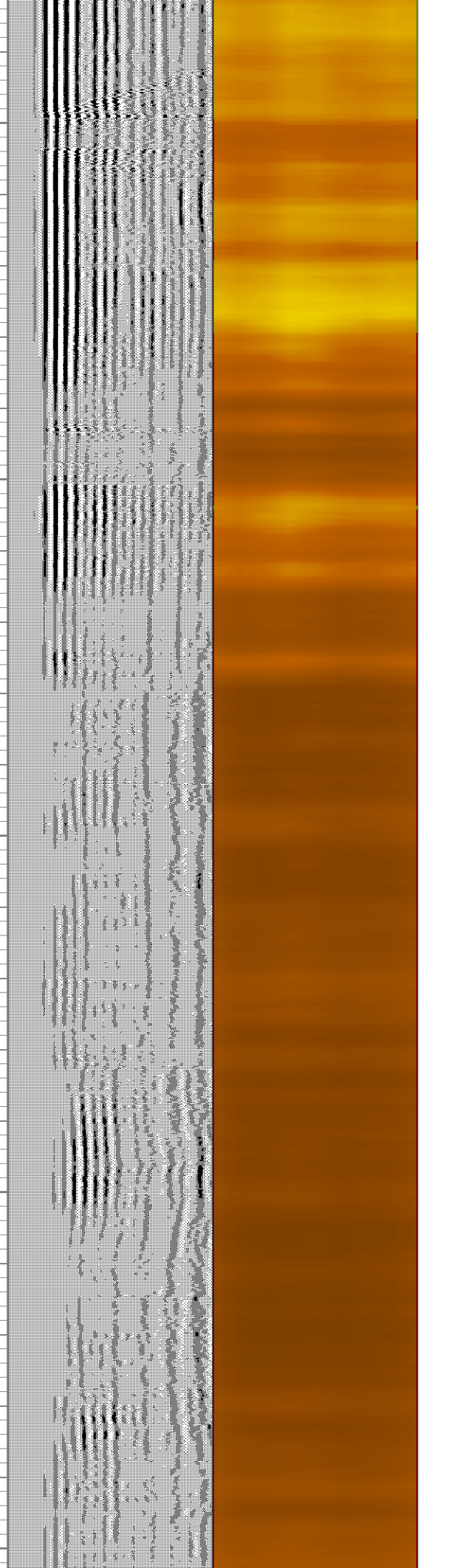
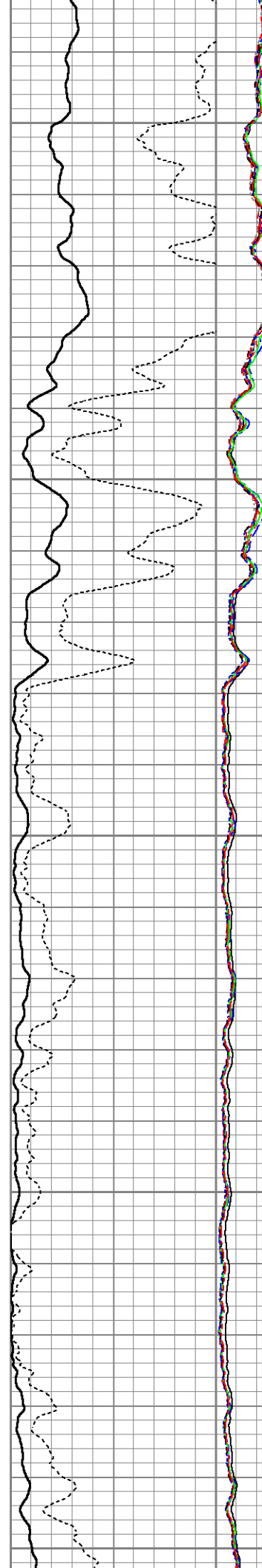
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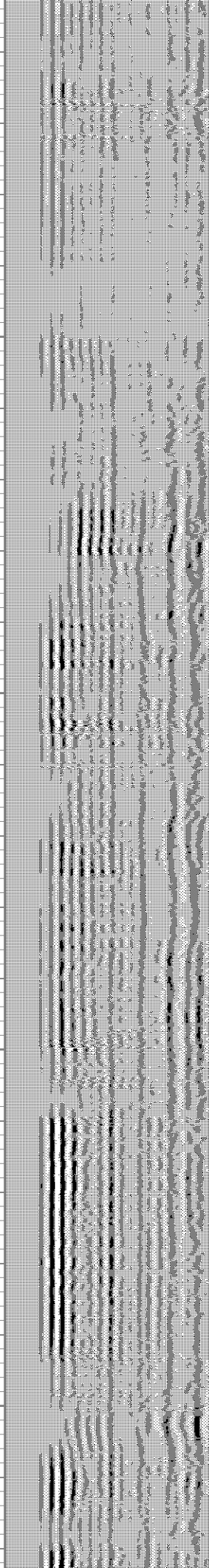
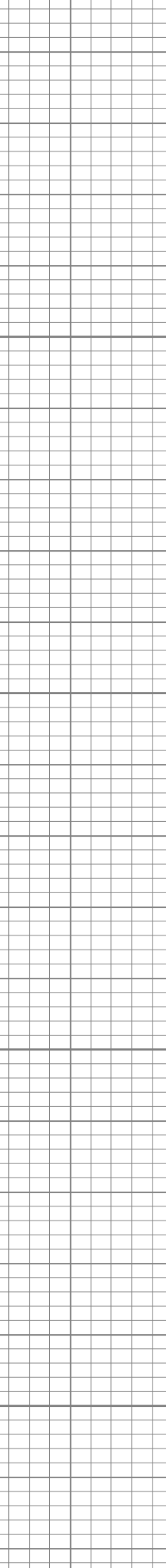
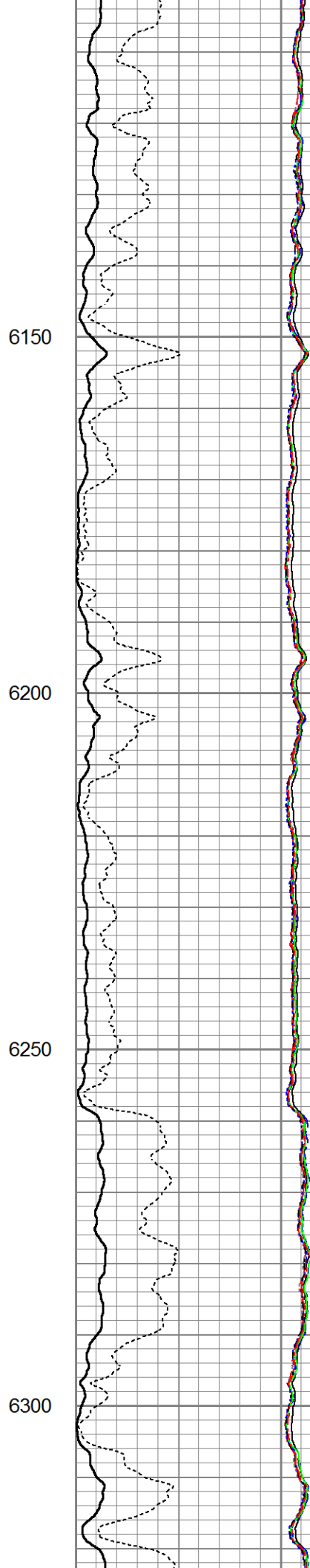
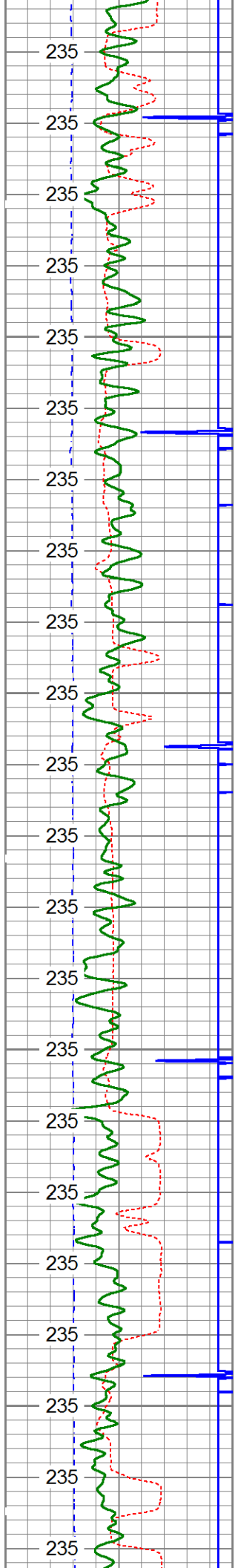
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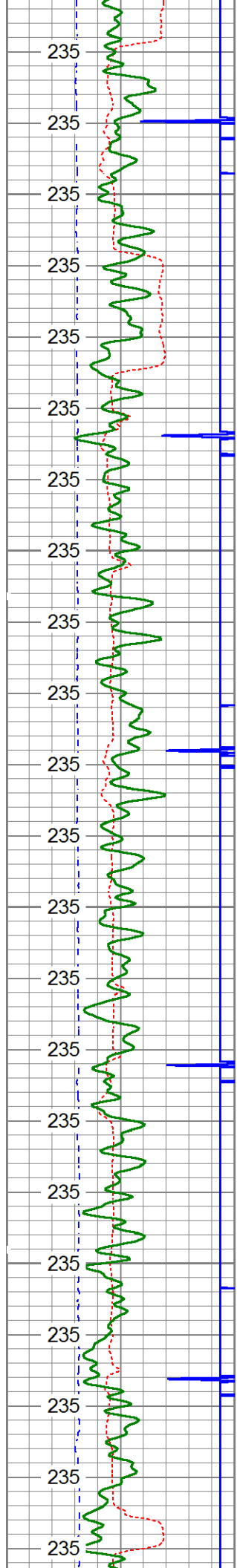
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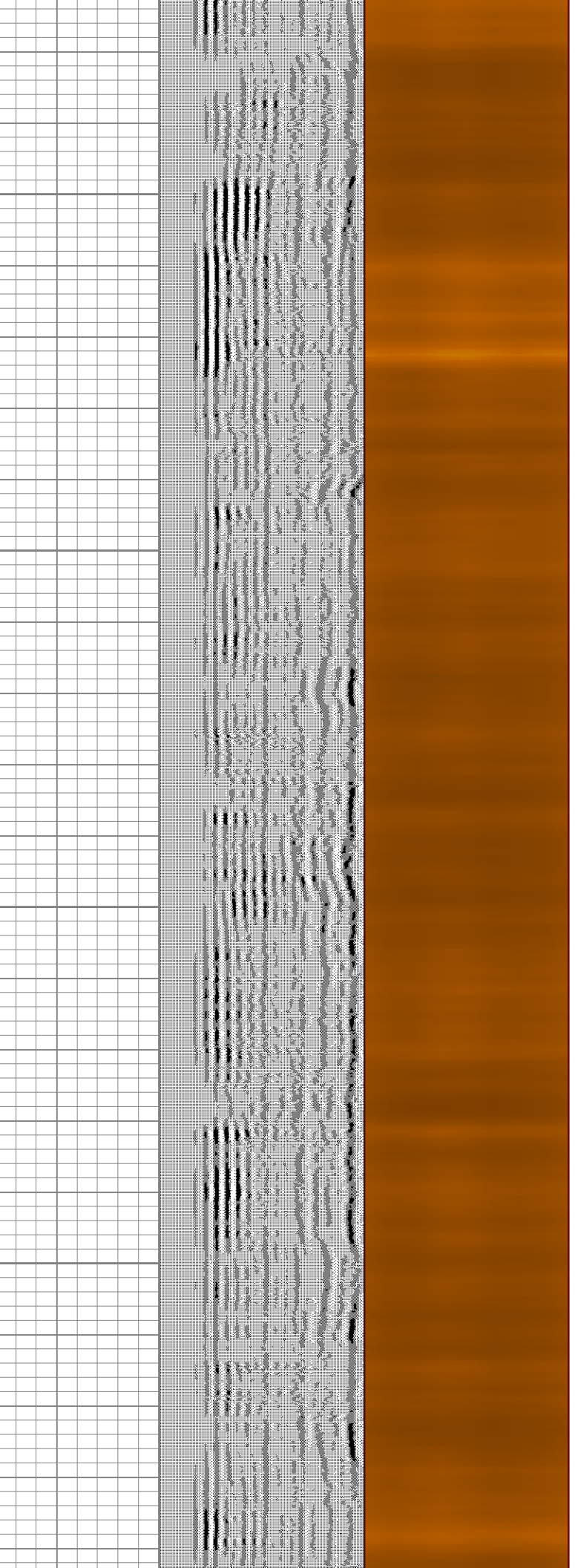
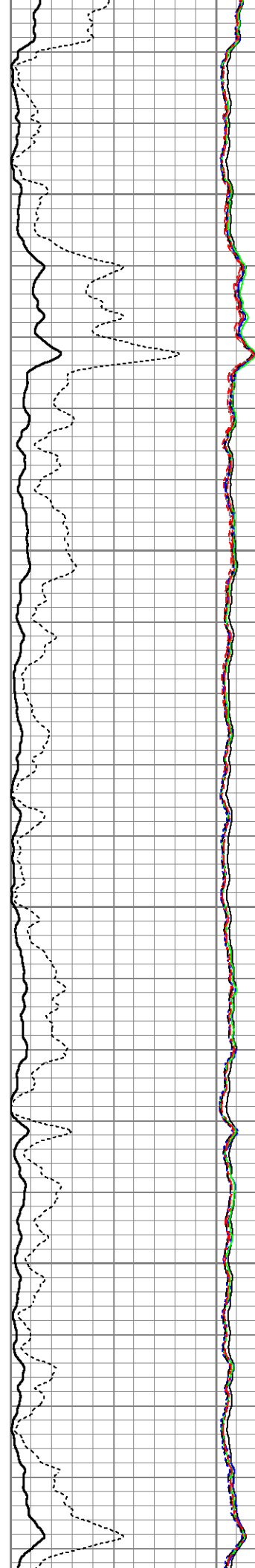


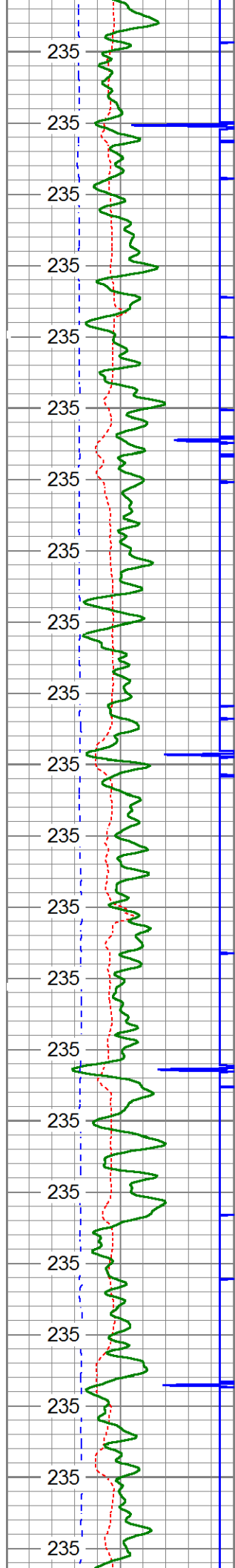
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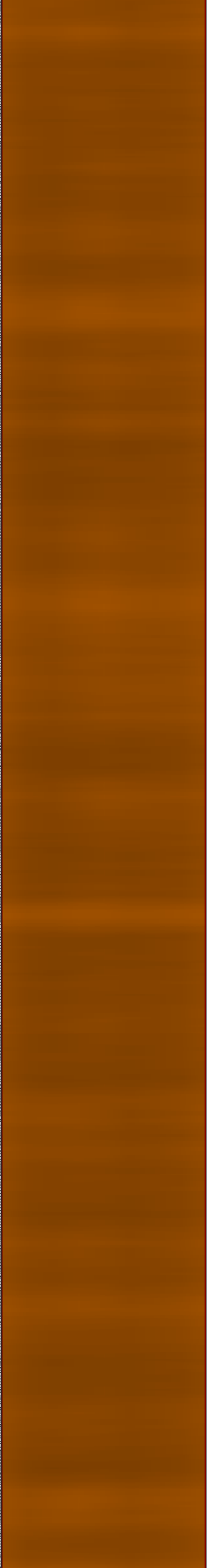
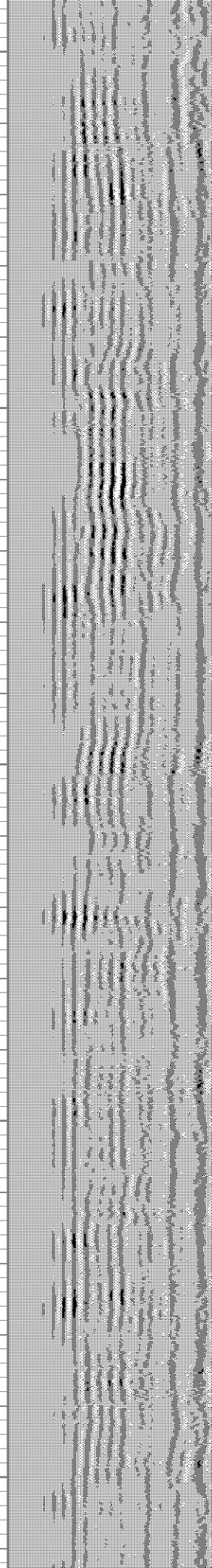
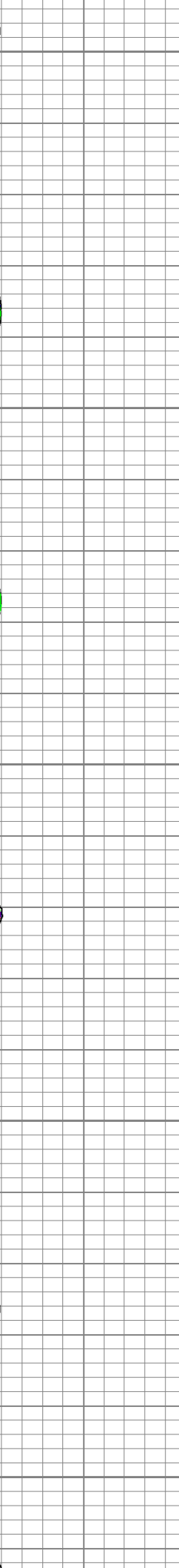
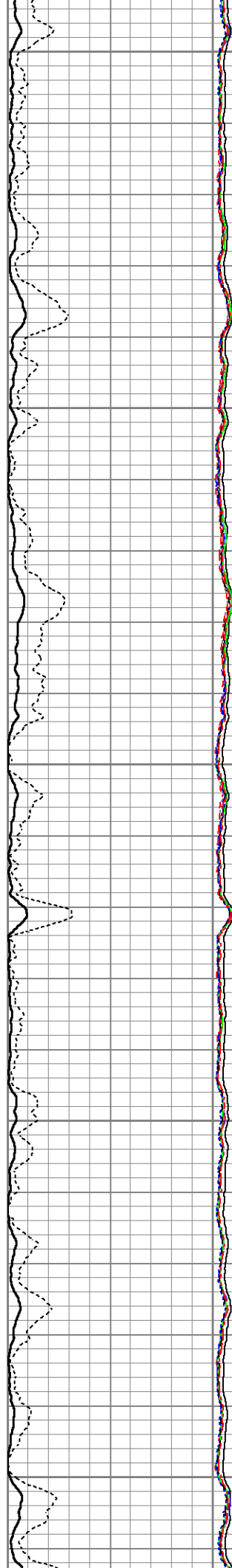
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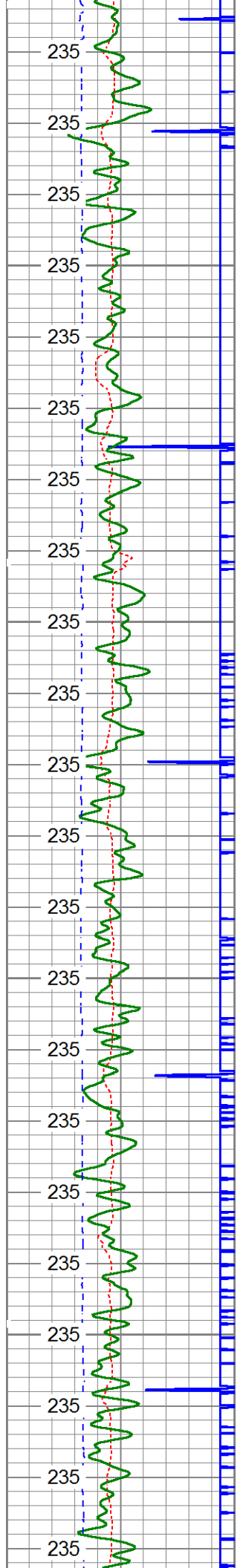
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6750



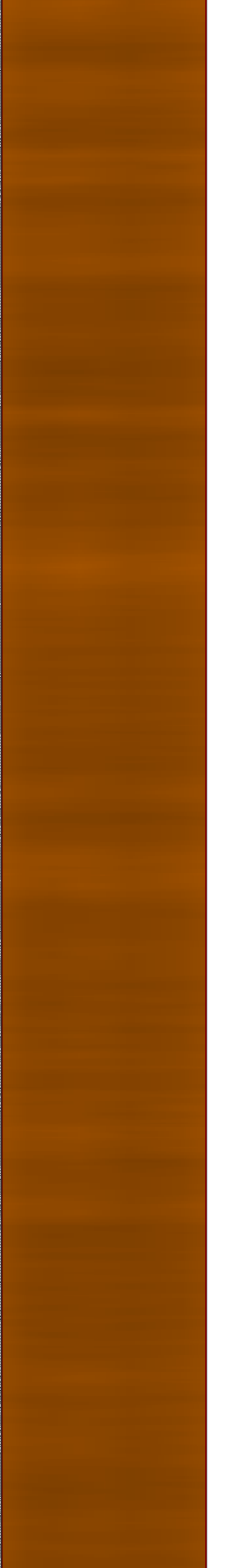
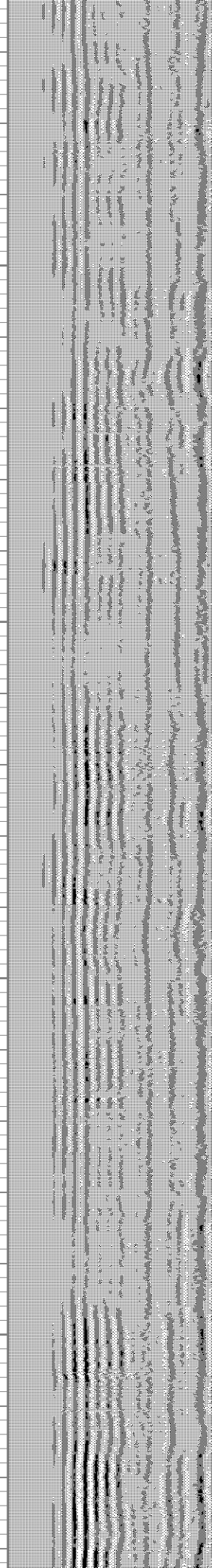
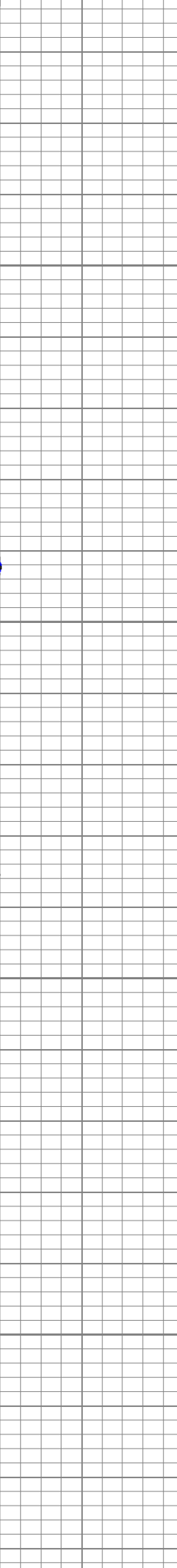
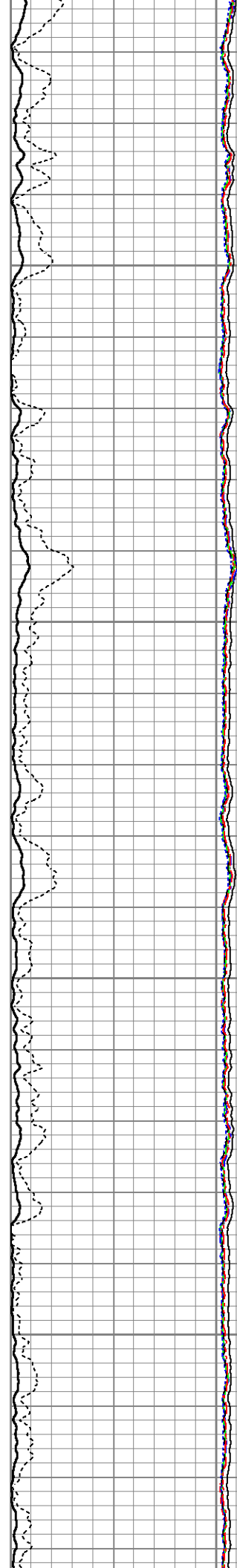


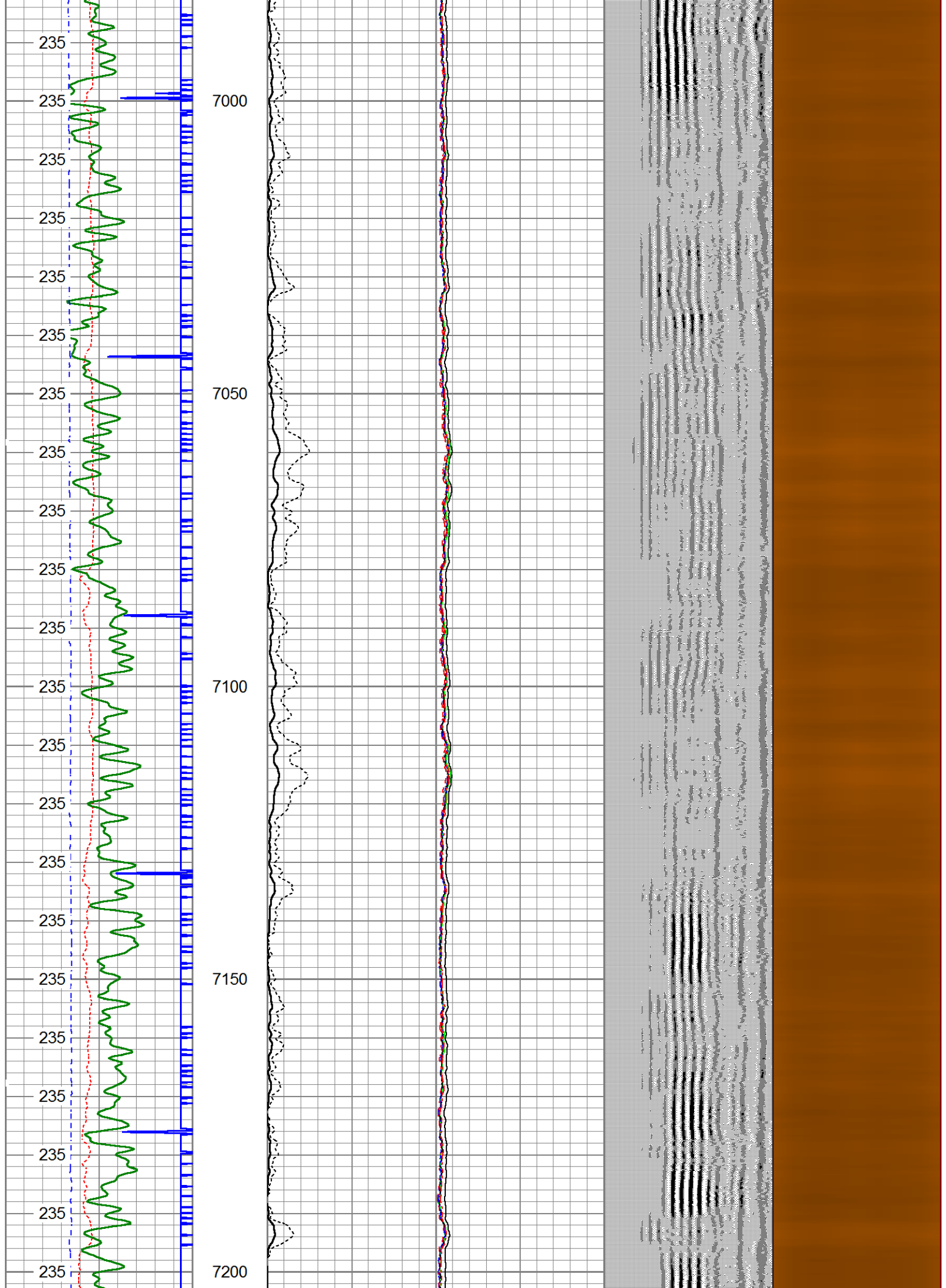
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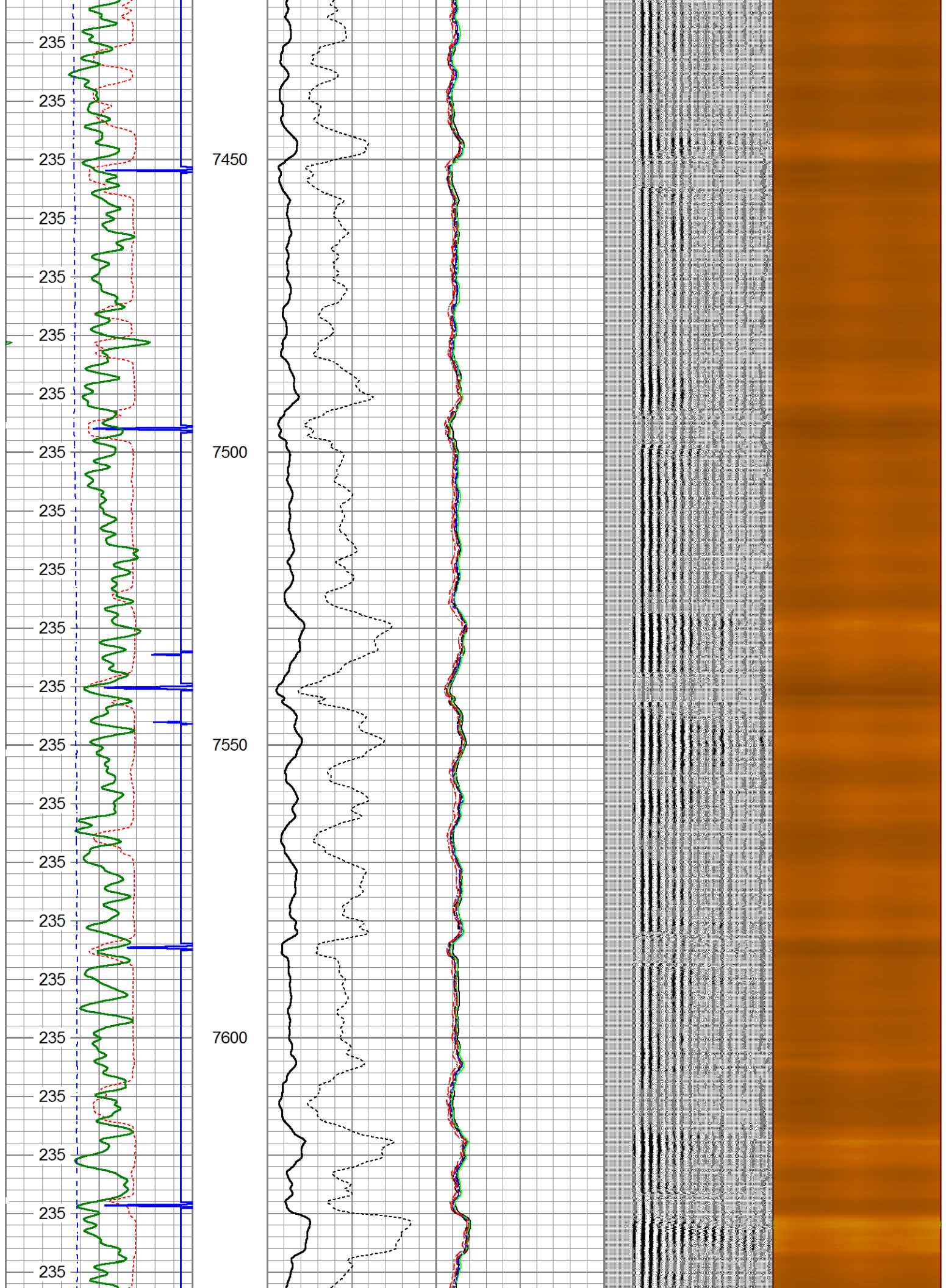
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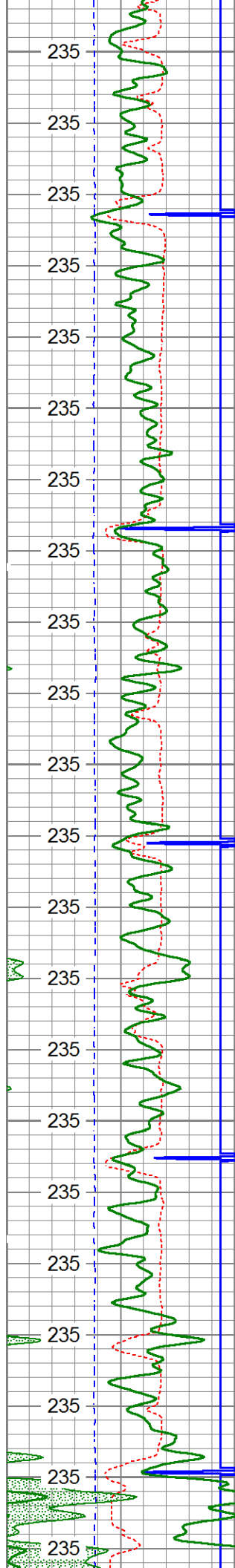
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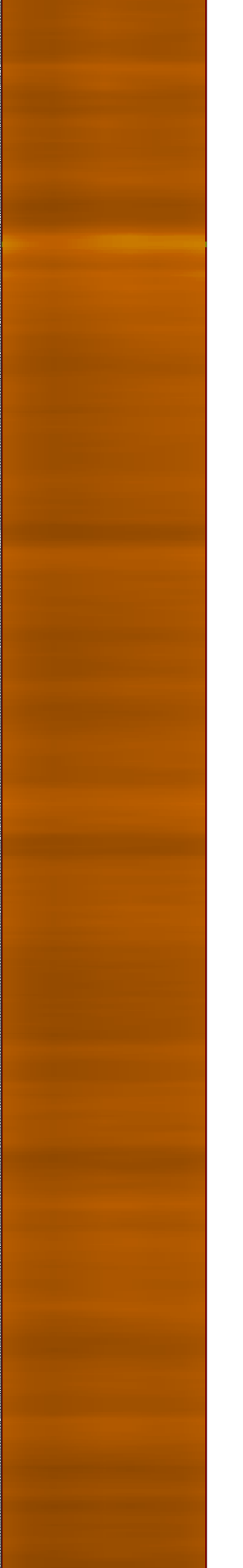
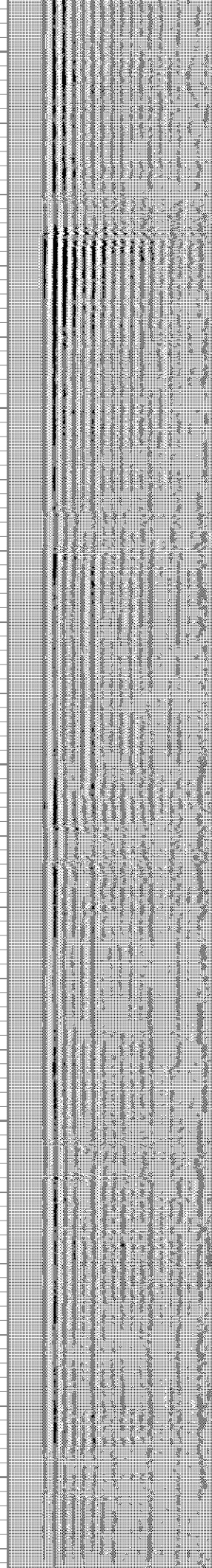
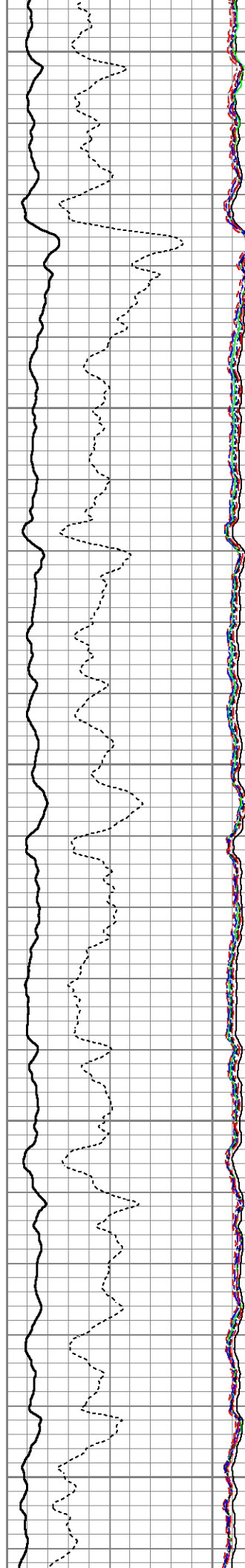
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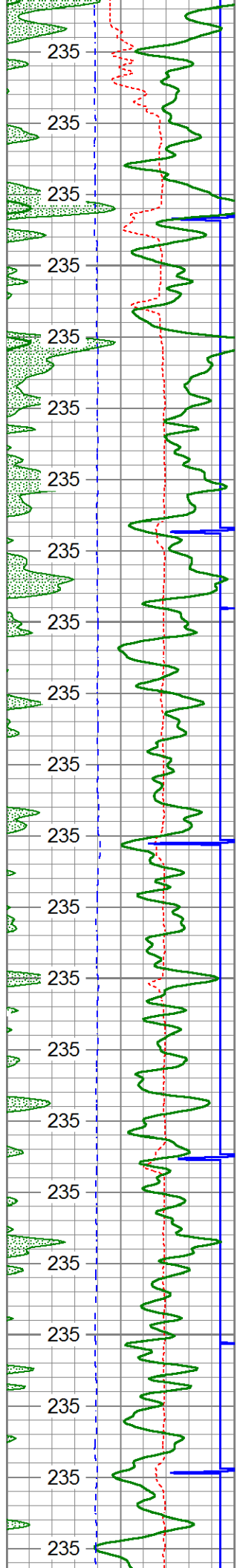
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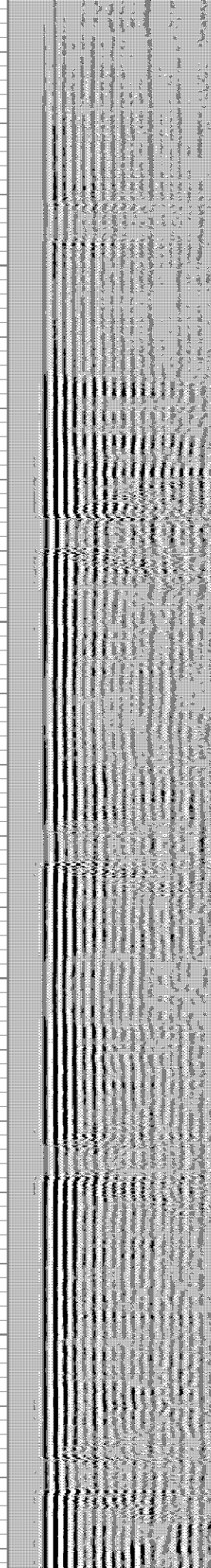
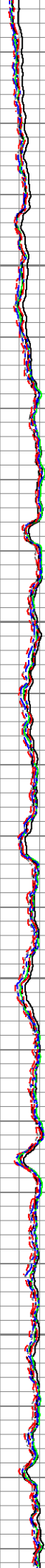
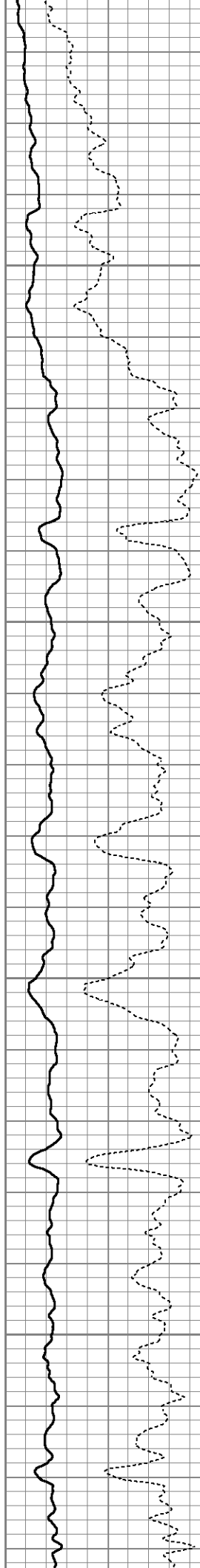


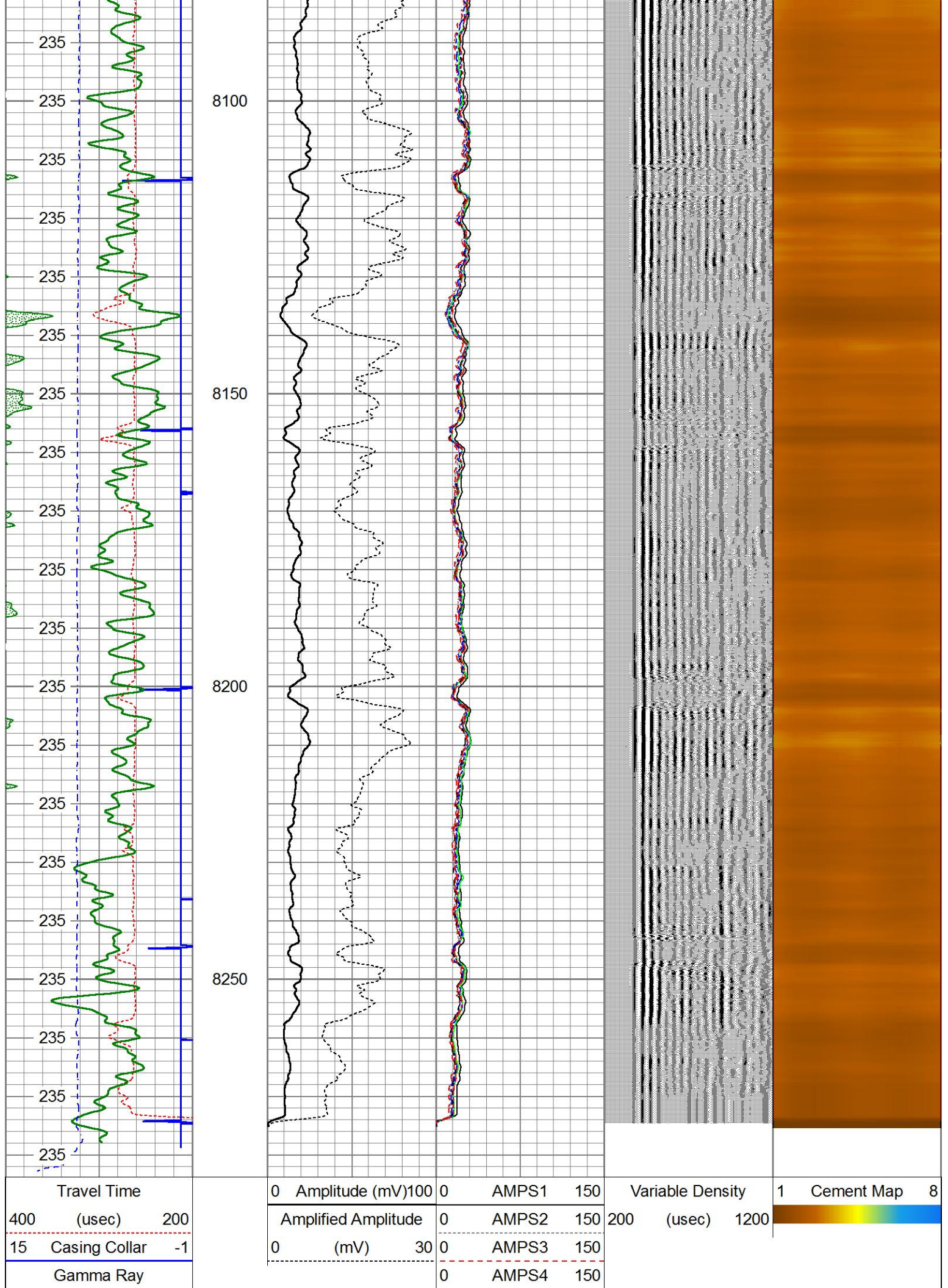
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7950

8000

8050





0	(GAPI)	200
0	Line Tension (lb)	2500
BOTTEMP		
(degF)		

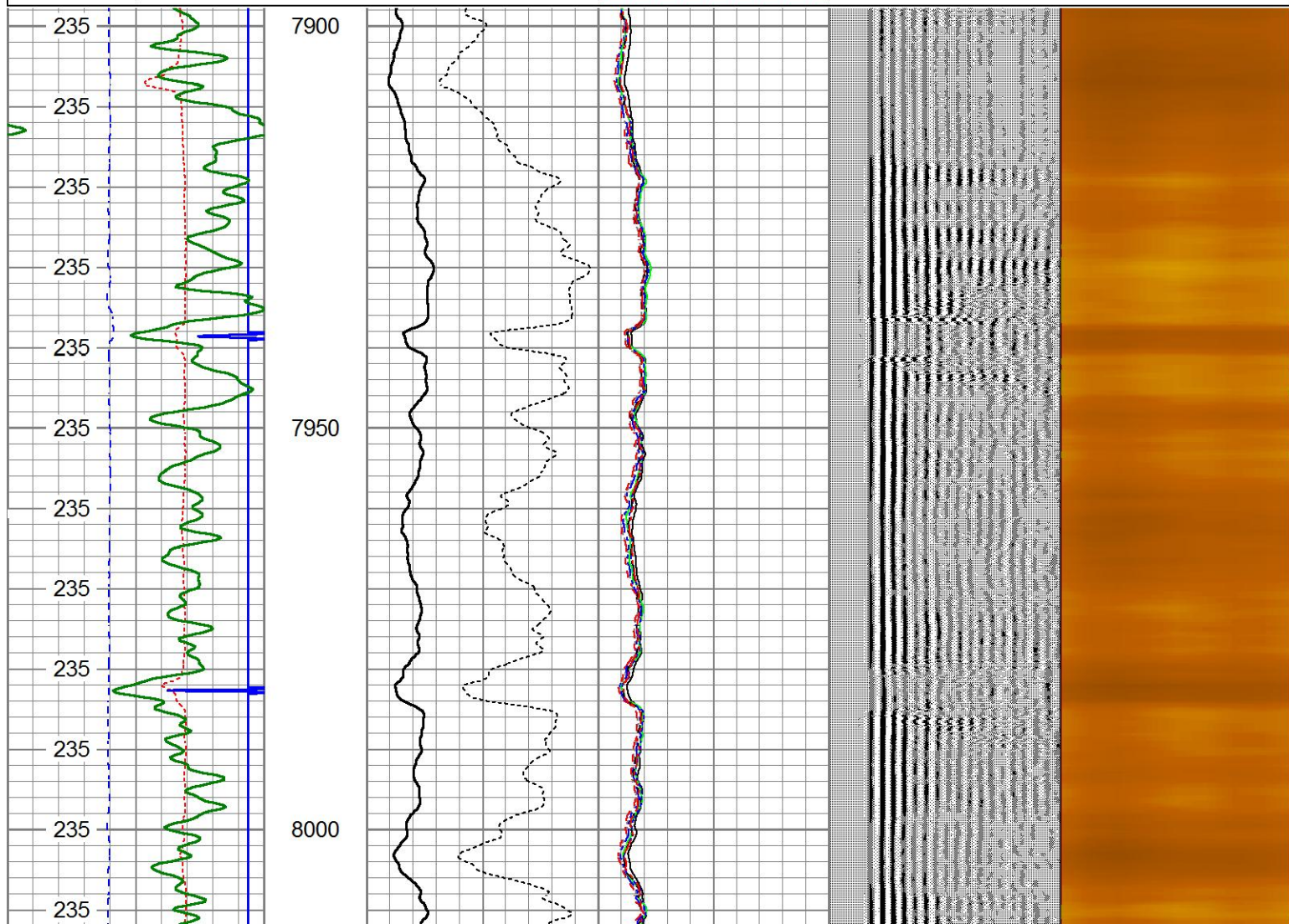
0	AMPS5	150
0	AMPS6	150
0	AMPS7	150
0	AMPS8	150

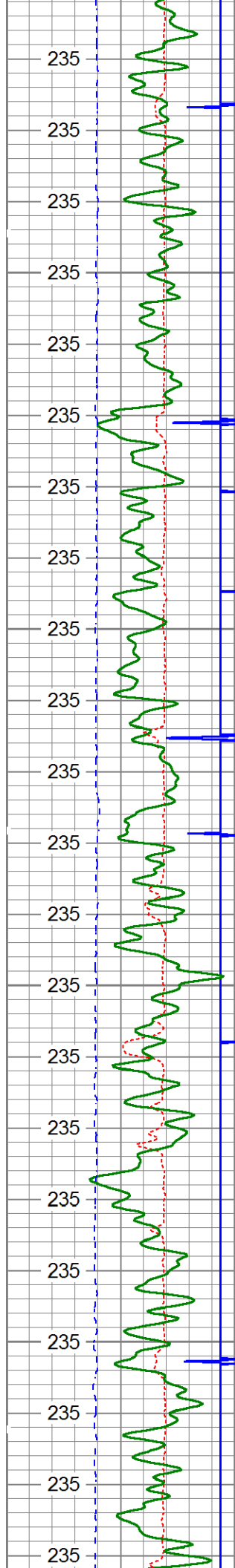


REPEAT PASS 4000 PSI.

Database File gw_bfarm_Id18-392hn.db
Dataset Pathname 392hn/CBLPSI/pass6
Presentation Format scbl_wyco
Dataset Creation Mon Mar 25 19:48:25 2019
Charted by Depth in Feet scaled 1:240

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				



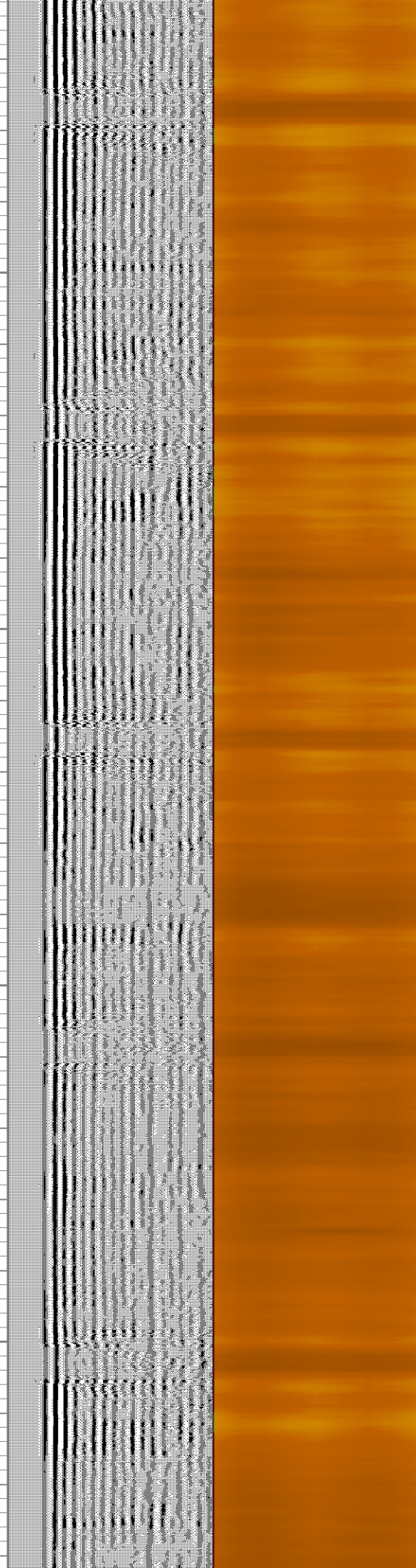
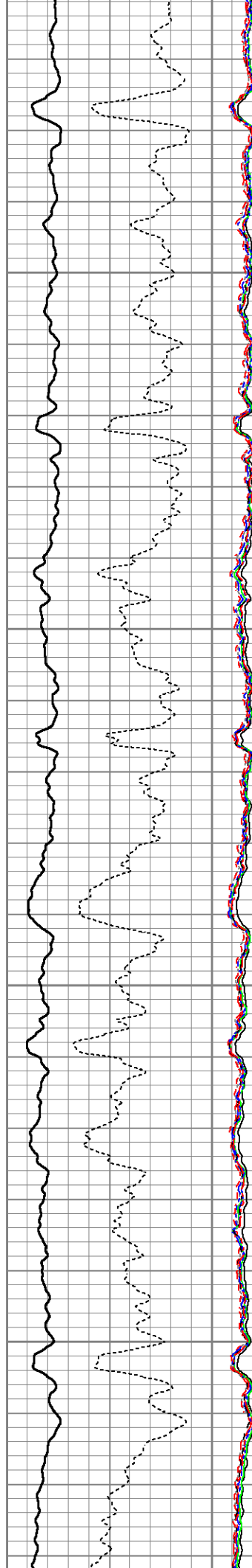


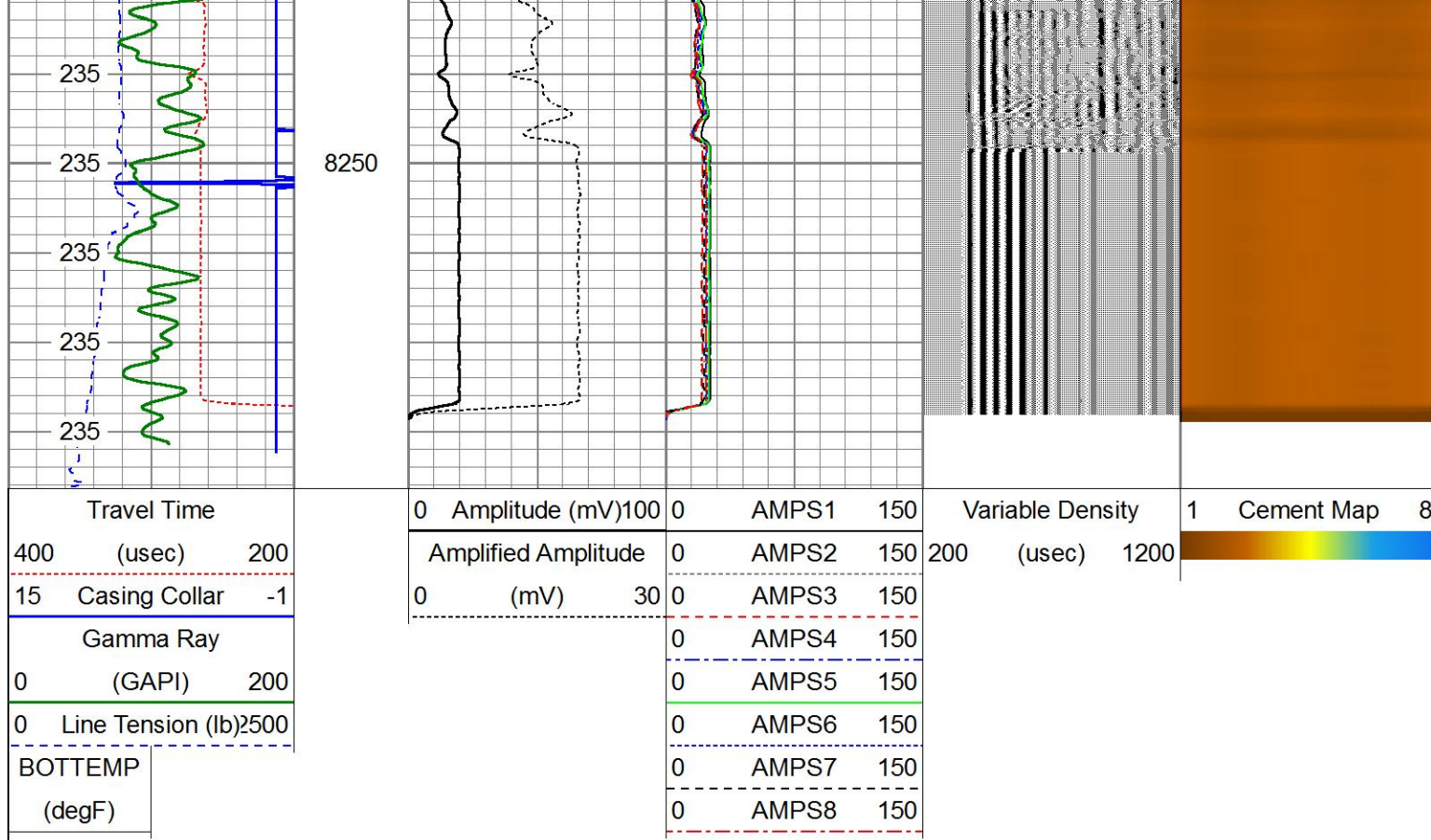
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8100

8150

8200



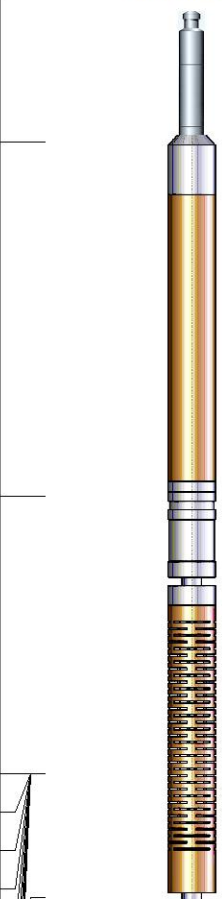


Calibration Report						
Database File	gw_bfarm_Id18-392hn.db					
Dataset Pathname	392hn/CBLPSI/pass7					
Dataset Creation	Mon Mar 25 19:55:48 2019					
Gamma Ray Calibration Report						
Serial Number:	121086					
Tool Model:	Probe275					
Performed:	Thu Mar 21 15:35:55 2019					
Calibrator Value:	1.0	GAPI				
Background Reading:	0.0	cps				
Calibrator Reading:	1.0	cps				
Sensitivity:	0.8200	GAPI/cps				
Segmented Cement Bond Log Calibration Report						
Serial Number:	FW1808-069					
Tool Model:	Probe 2.75 Radii W/Temp					
Calibration Casing Diameter:	5.500	in				
Calibration Depth:	580.592	ft				
Master Calibration, performed Mon Mar 25 08:06:04 2019:						
	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.005	0.474	1.000	72.000	151.226	0.286
CAL	0.005	0.867				
5'	0.036	0.507	1.000	72.000	150.811	-4.451
SUM						

S1	0.029	0.535	0.000	72.000	142.404	-4.200
S2	-0.005	0.493	0.000	72.000	144.480	0.716
S3	0.004	0.518	0.000	72.000	140.231	-0.611
S4	0.005	0.506	0.000	72.000	143.537	-0.689
S5	0.001	0.494	0.000	72.000	145.924	-0.155
S6	0.003	0.474	0.000	72.000	152.559	-0.385
S7	0.003	0.465	0.000	72.000	155.993	-0.537
S8	0.005	0.469	0.000	72.000	154.940	-0.728

Internal Reference Calibration, performed (Not Performed):						
CAL	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
	0.000	0.000	0.005	0.867	1.000	0.000

Air Zero Calibration, performed (Not Performed):			
	Raw (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	14.13		CHD-Titan Titan 1 7/16" GO Cablehead	1.00	1.44	5.00
Temp	11.28					
WVFS8	9.05					
WVFS7	9.05					
WVFS6	9.05					
WVFS5	9.05		RBT-Probe 2.75 Radii W/Temp (FW1808-069) Probe 2.75" Radial with Integral Temperature Sub	9.39	2.75	90.00

WVFS4	9.05				
WVFS3	9.05				
WVFS2	9.05				
WVFS1	9.05				
WVFCAL	9.05				
WVFS5FT	8.05				
HEADVOLT	4.80				
CCL	3.92				
GR	2.58	GR-Probe275 (121086) Probe 2 3/4" Logging Gamma Ray 6 Pin	4.80	2.75	57.00

Dataset: gw_bfarm_ld18-392hn.db: field/392hn/CBLPSI/pass7

Total length: 15.19 ft

Total weight: 152.00 lb

O.D.: 2.75 in

