



**RADIAL CEMENT BOND
GAMMA RAY
CCL**

1/4" S	Well	OSH D22-12
SEC.	Field	WATTENBERG
TWP.	County	WELD
RGE.	State	CO
	API#:	5-123-17313
	WBS:	
	1/4" S:	
	SEC:	
	TWP:	
	RGE:	

Permanent Datum	Ground Level	Elevation	Elev K.B.
Log Measured From	Ground Level		Elev D.F.
Drill Measured From	Kelly Bushing	Feet Above Datum	Elev G.L.

Date	4-1-10	Gun Type		Gun Size
Run Number	1	Charge Type		Gram Wt.
Ranger Depth	3500	Shots / Foot		To
Driller Depth		Shots Fired		
First Reading	3500			
Last Reading	SURFACE			
Max Temperature	NA			
Est. Cement Top	NA			
Fluid Type	WATER			
Fluid density	8.3			
Est. fluid level	50'			
Service Order	30001975			
Truck No	222			

Recorded By	J. JOHNSON	Casing Data	
Witnessed By	MR. ERIC PETERSON	Size Inches	Weight Lb/Ft
Ranger Contact	JOEL JOHNSON 307-680-6021	From	To

Other Services	Type	Size	Depth	Comments
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Remarks: CREE PIPE CALIBRATION COMPLETED AT 2710'

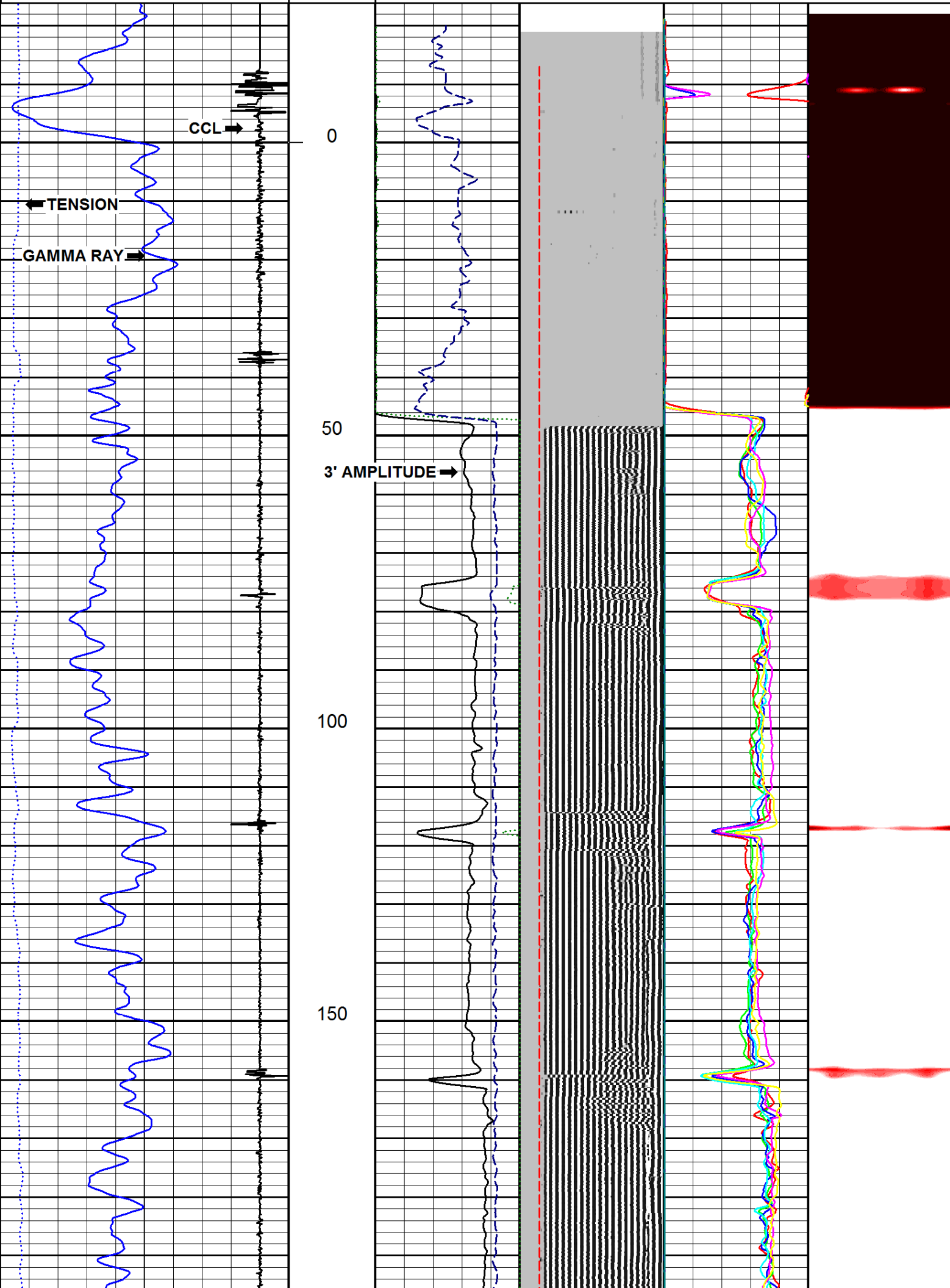
Previous Well Information
Depth Control Log
Perforated
Bridge Plug Set At
Cement Retainer Set At
Production Packer Set At

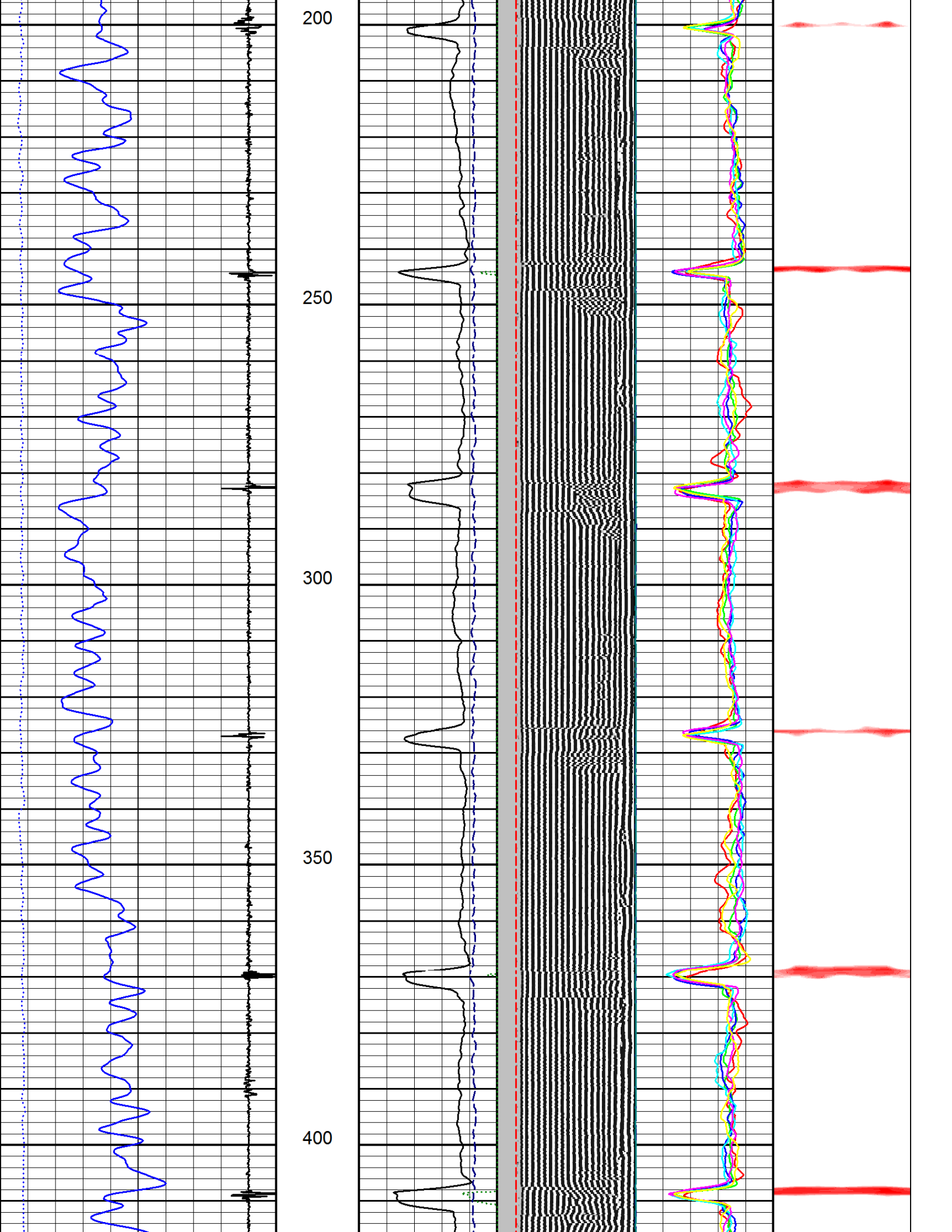
All interpretations are opinions based on inferences from electrical or other measurements and we cannot, and do not guarantee the accuracy or correctness of any interpretations, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, 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 as set out in our current price schedule.

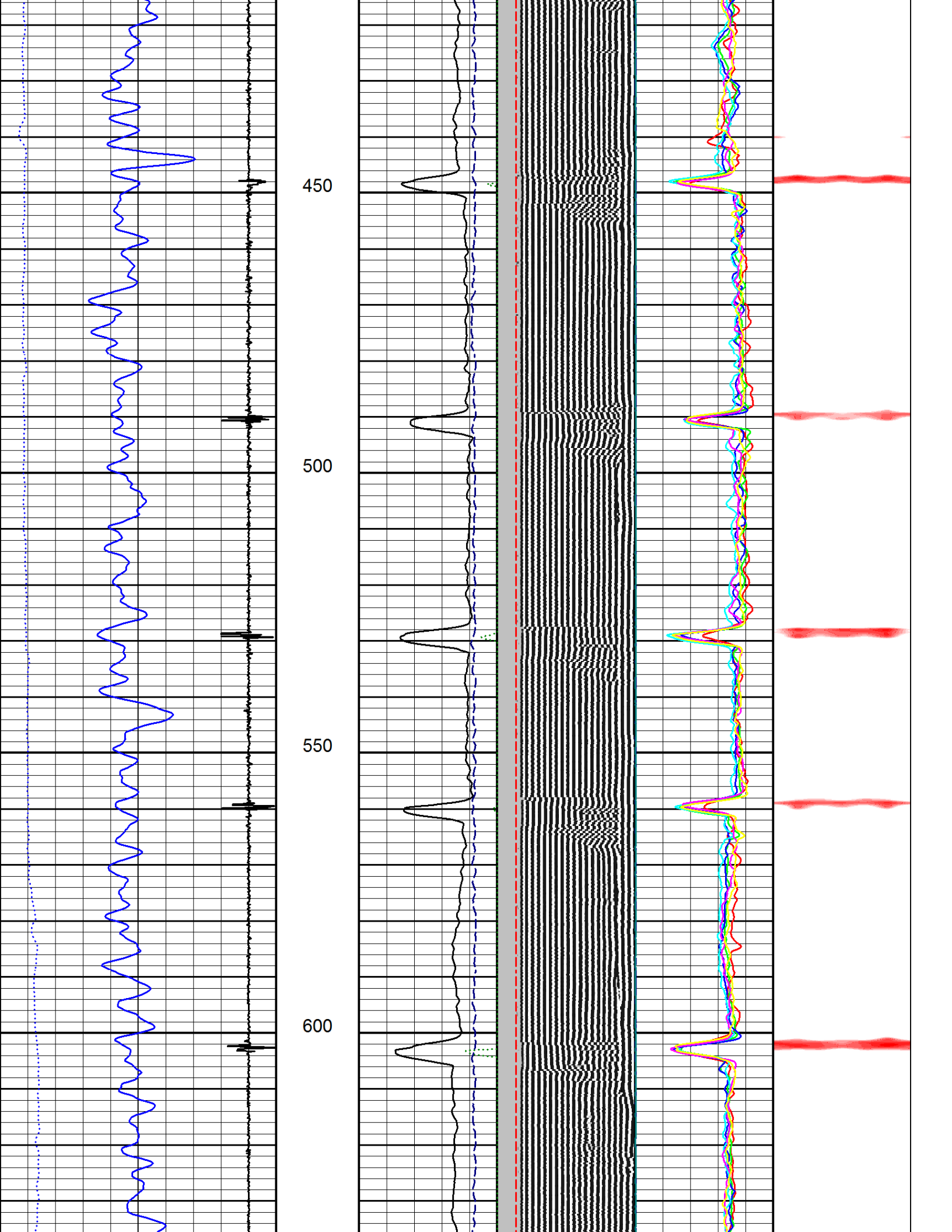
2016-05-04 08:53	
Tension U16 (lbF)	1650.00
COLLAR LOCATOR U15	10.0
GAMMA RAY U15	120.0
Pass No. 15	

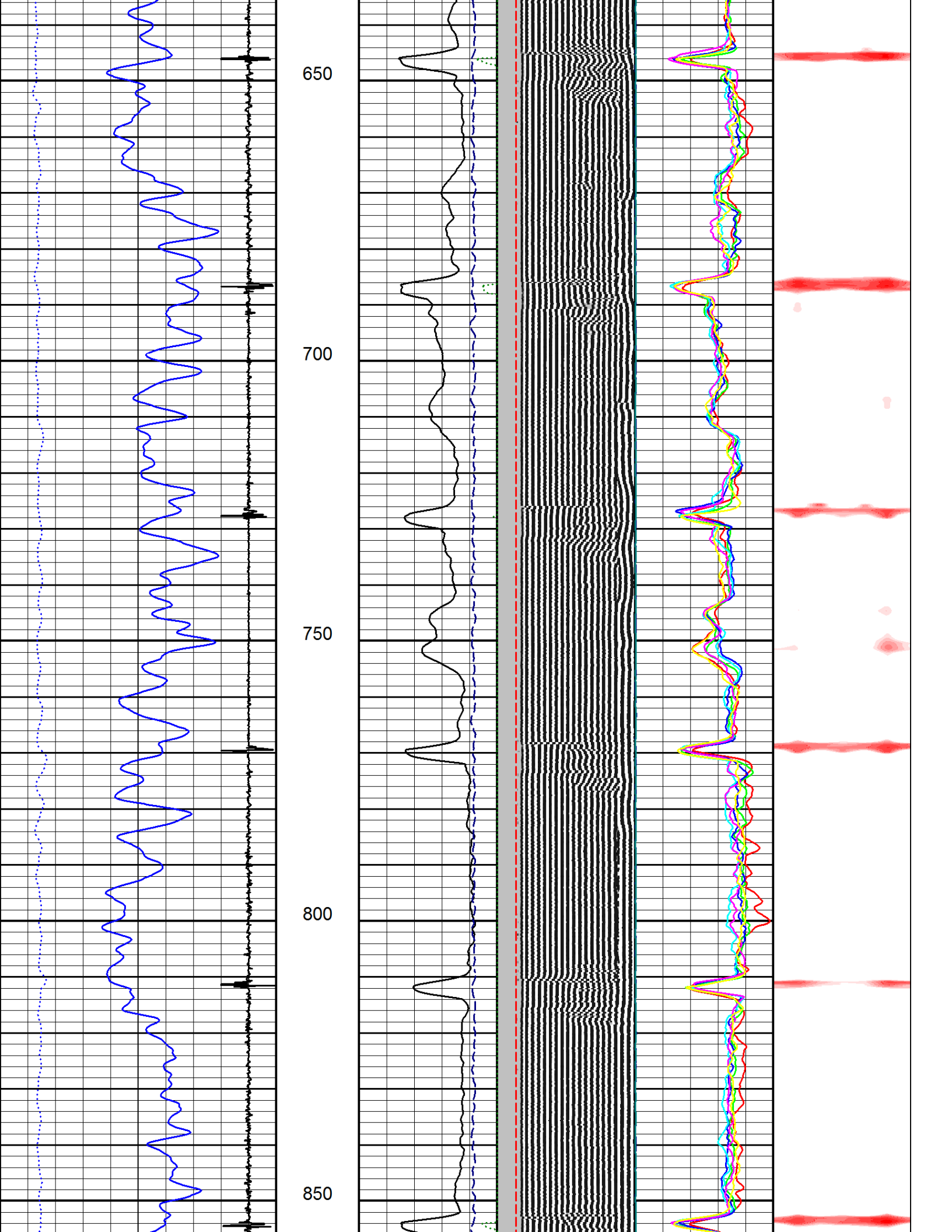
FEET	3'	<u>AMPLITUDE U17 (mV)</u>	<u>FREE PIPE TIME U16 (μs)</u>	<u>Map1 Amplitude U15 (mV)</u>	<u>RADIAL MAPPING (mV)</u>
1:240	0.0	100.0	200.0	1200.0	0.00 100.00 0.00 10.00
		<u>AMPLITUDE X 5 U17 (mV)</u>	<u>VARIABLE DENSITY (μs)</u>	<u>Map2 Amplitude U15 (mV)</u>	<u>RADIAL MAPPING (mV)</u>
	0.0	20.0	200.00	1200.00	0.00 100.00 0.00 12.00
	3'	<u>TRAVEL TIME U17 (μs)</u>	<u>VARIABLE DENSITY (μs)</u>	<u>Map3 Amplitude U15 (mV)</u>	<u>RADIAL MAPPING (mV)</u>
	800.0	150.0	200.00	1200.00	0.00 100.00 0.00 12.00
			<u>5' VARIABLE DENSITY (μs)</u>	<u>Map4 Amplitude U15 (mV)</u>	
			200.00	1200.00	0.00 100.00
				<u>Map5 Amplitude U15 (mV)</u>	0.00 100.00
				<u>Map6 Amplitude U15 (mV)</u>	0.00 100.00

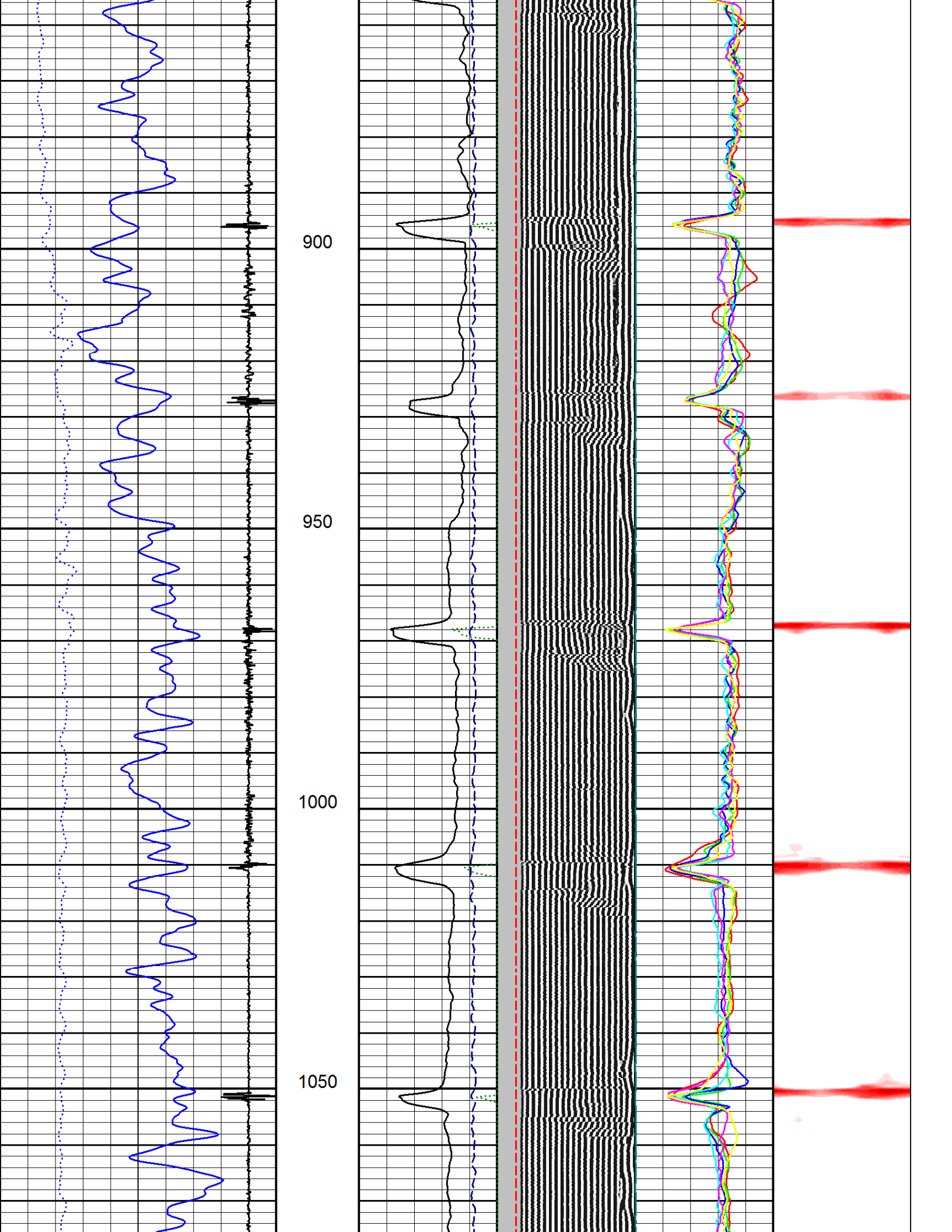
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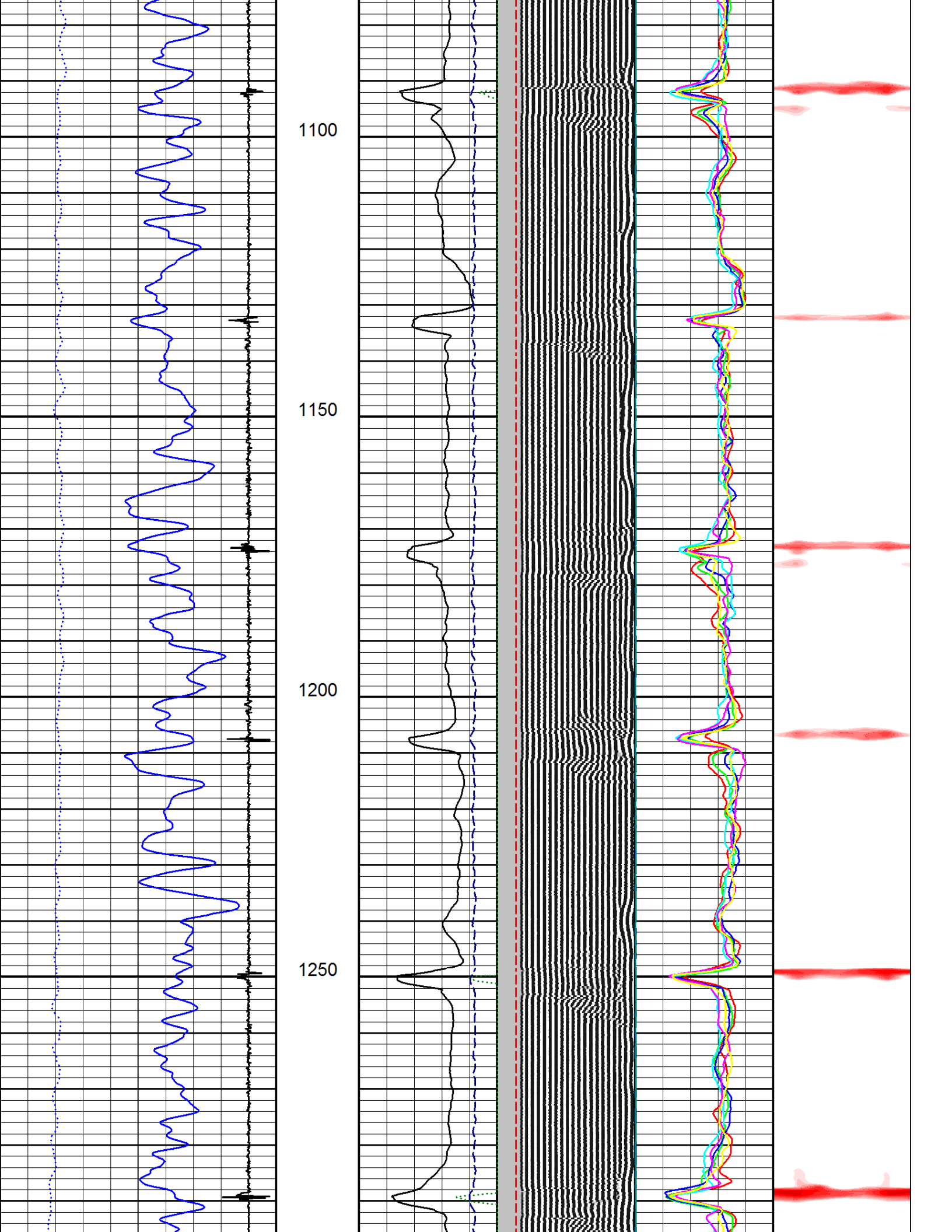


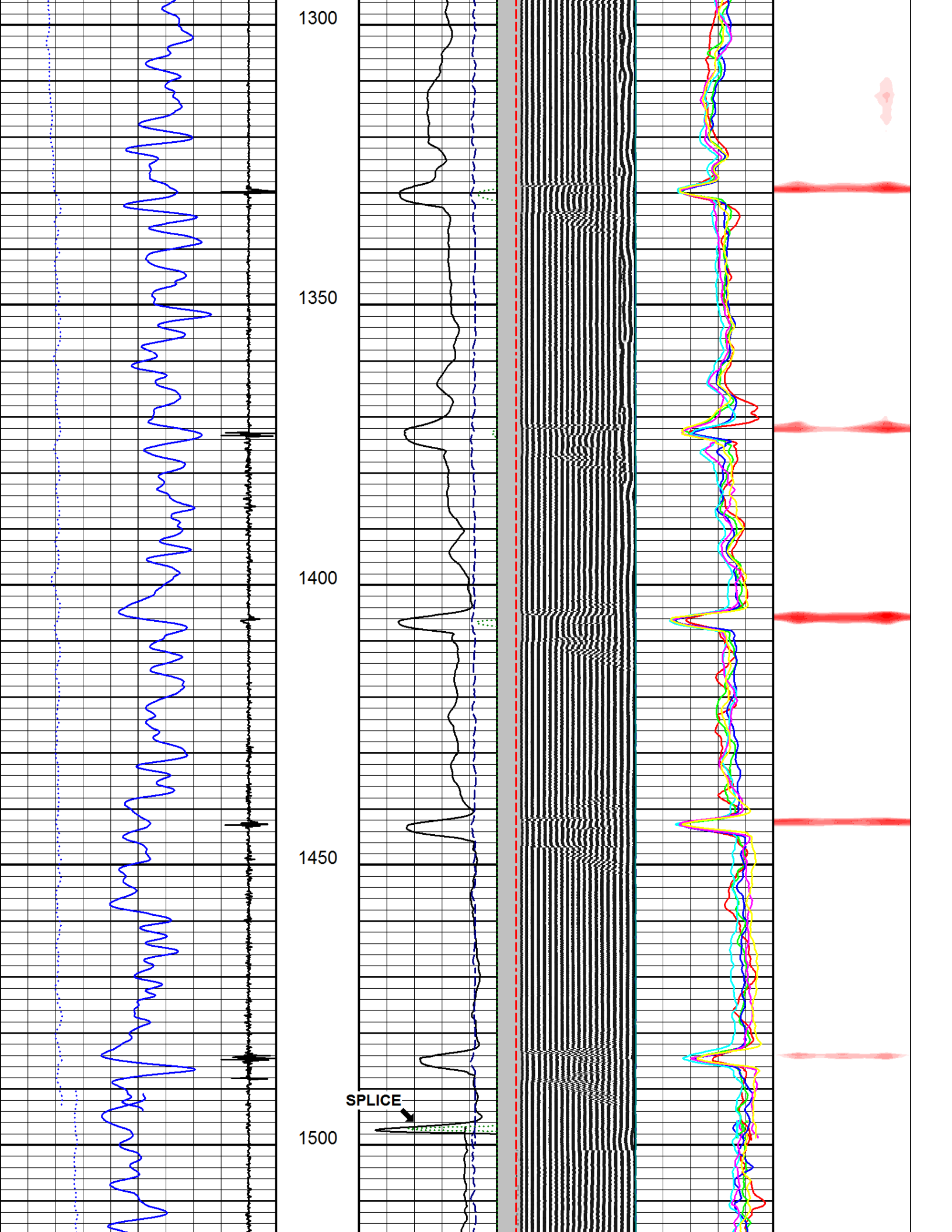


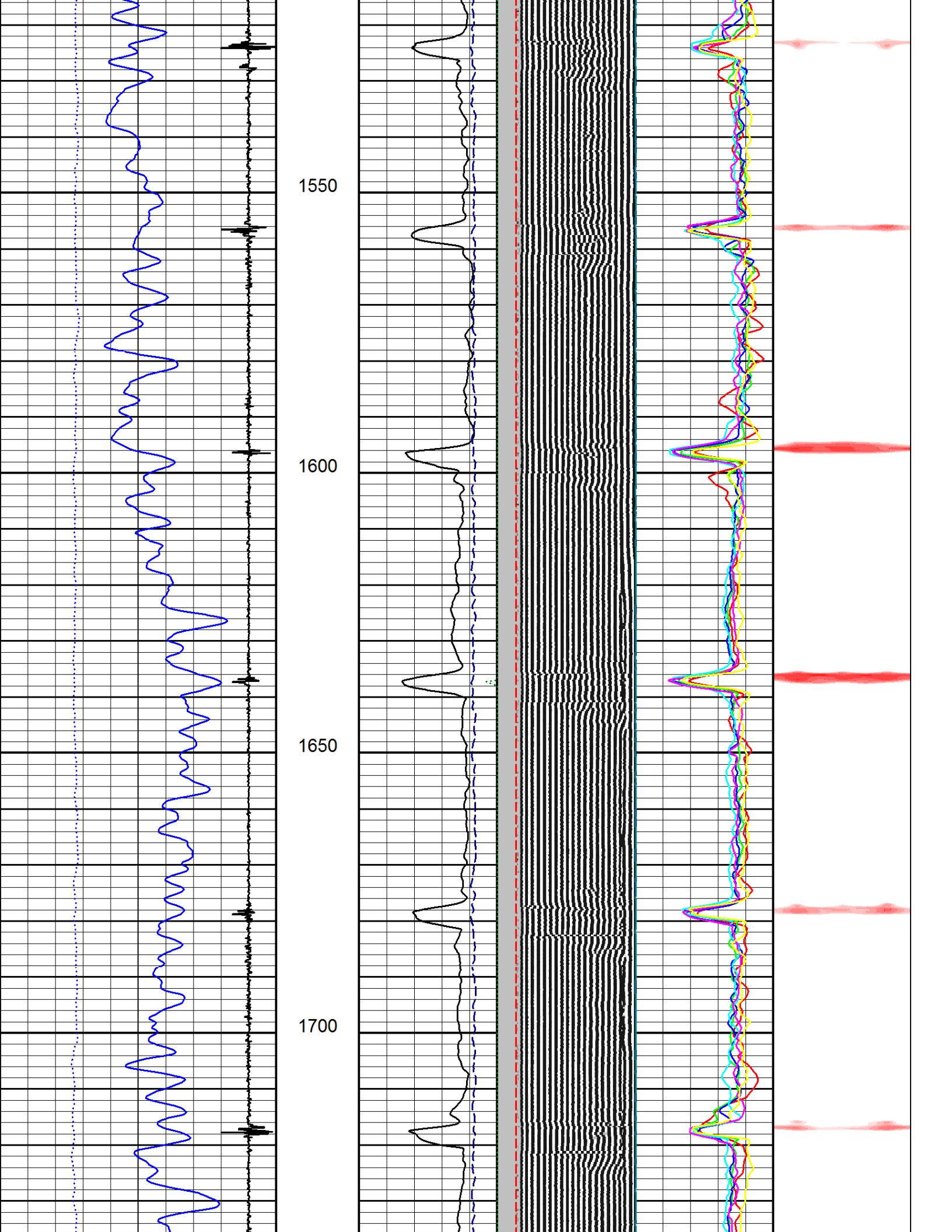


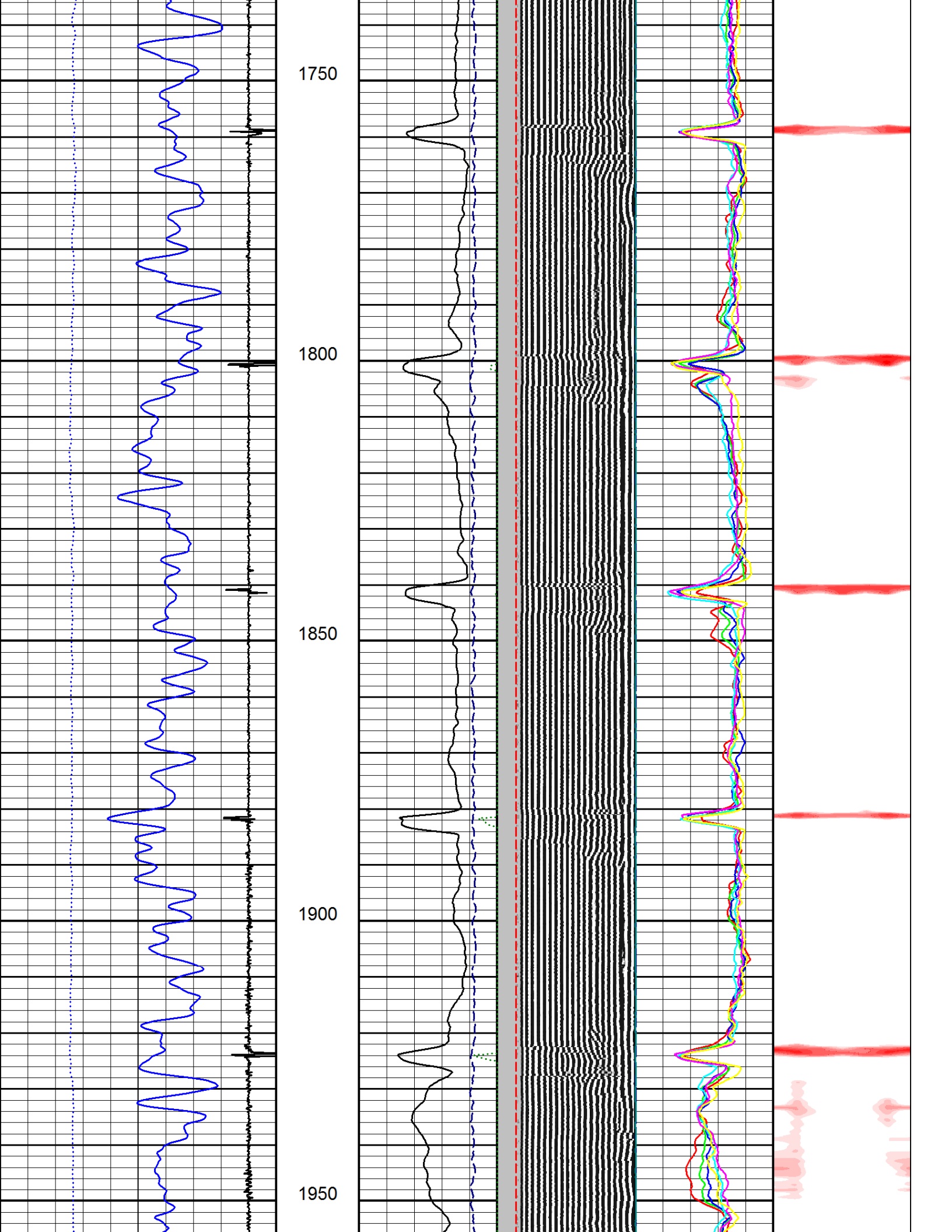


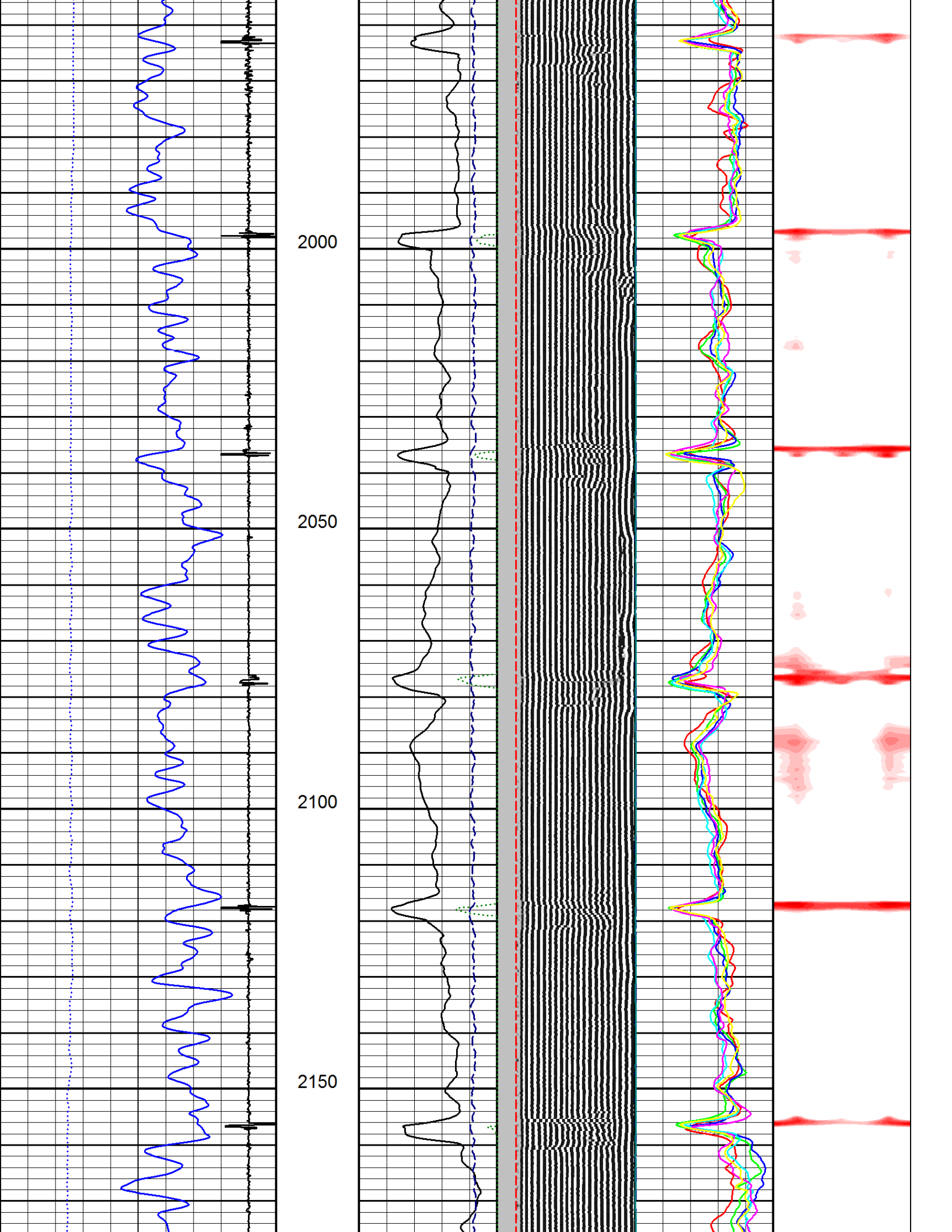


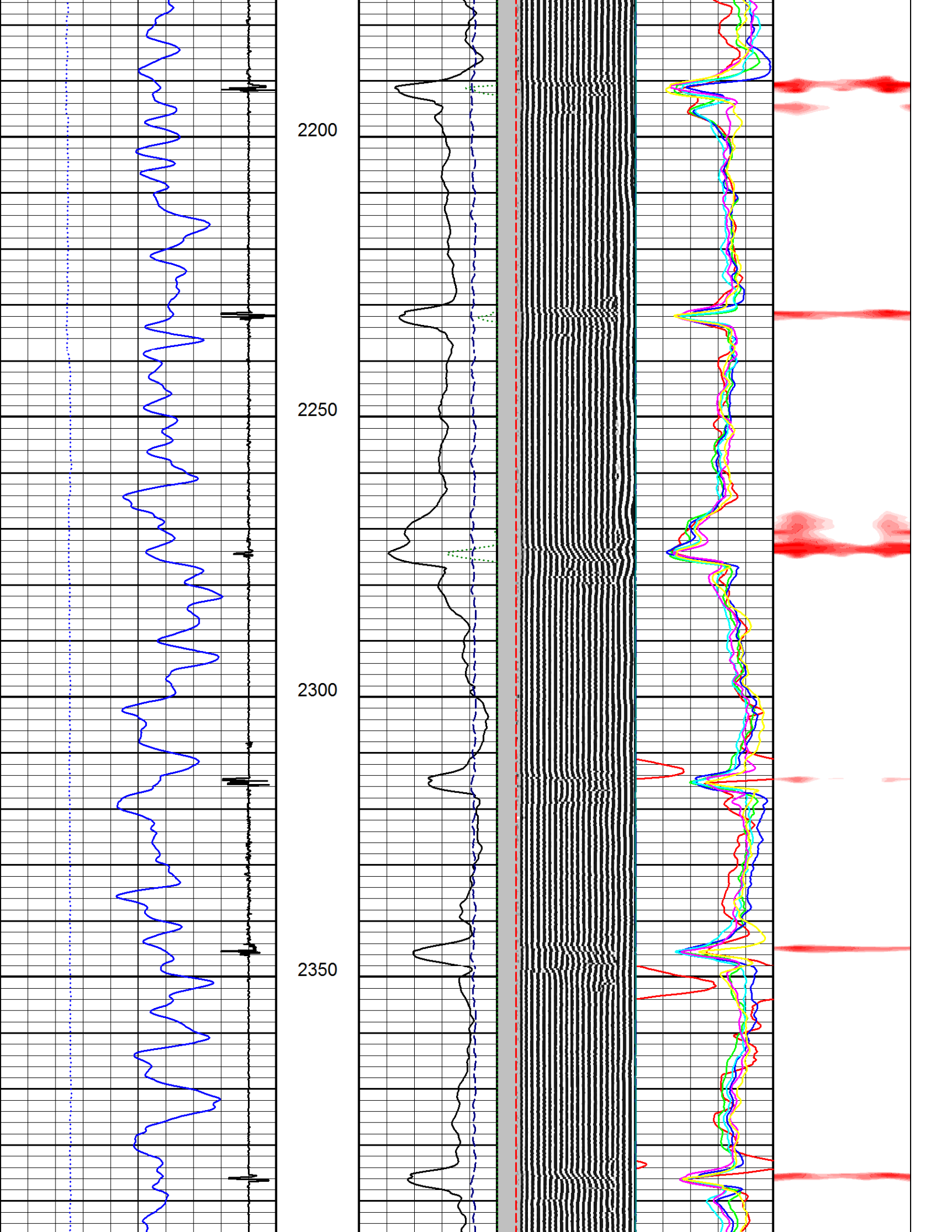


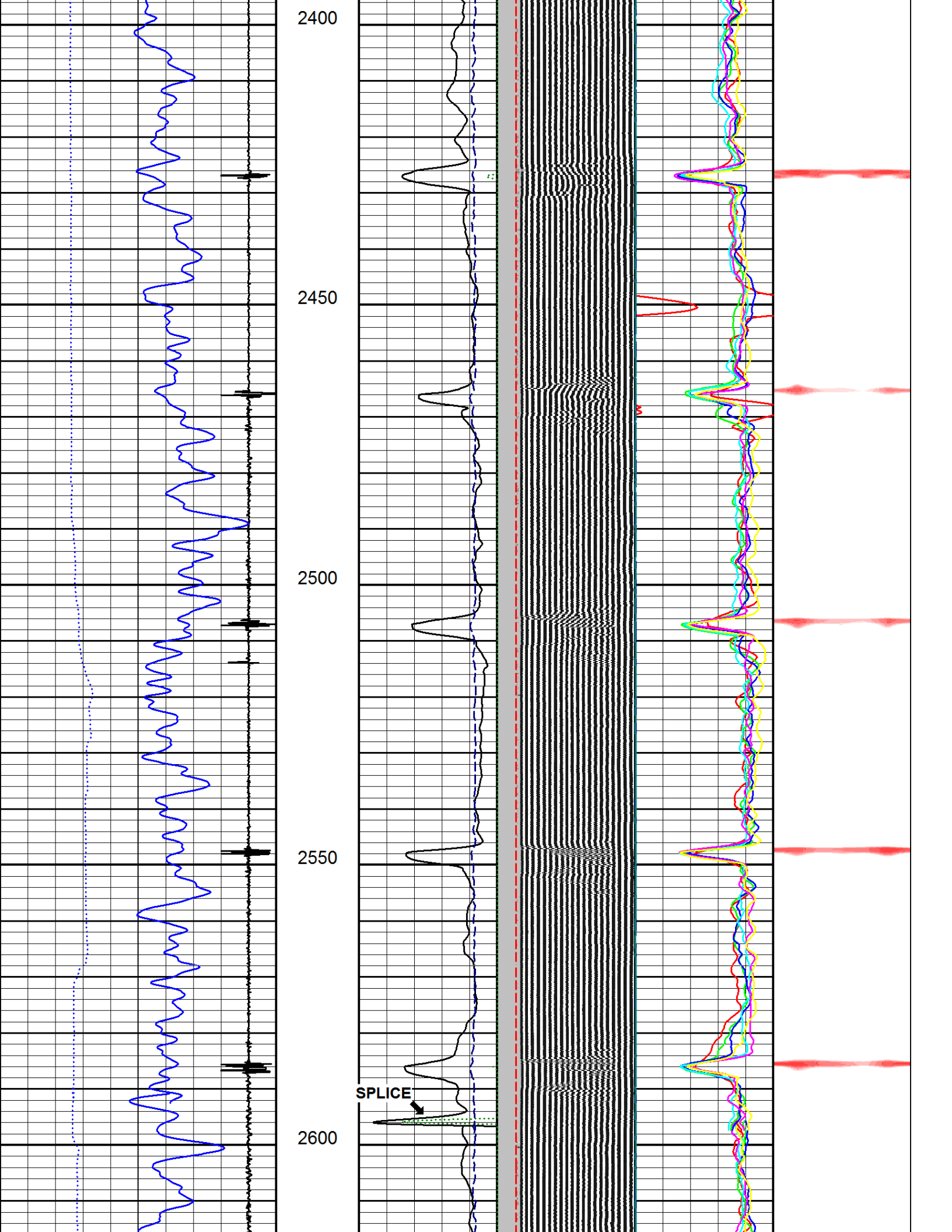


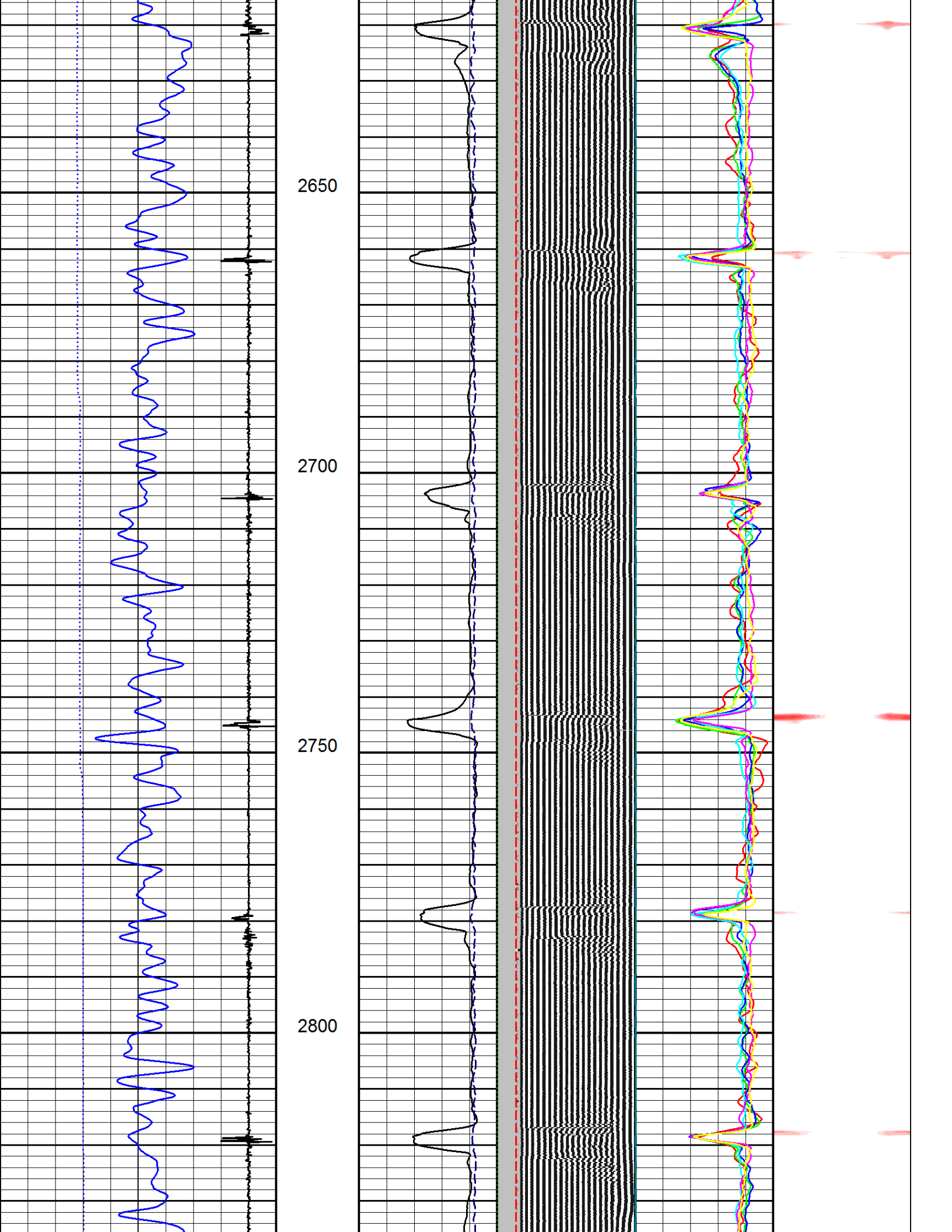


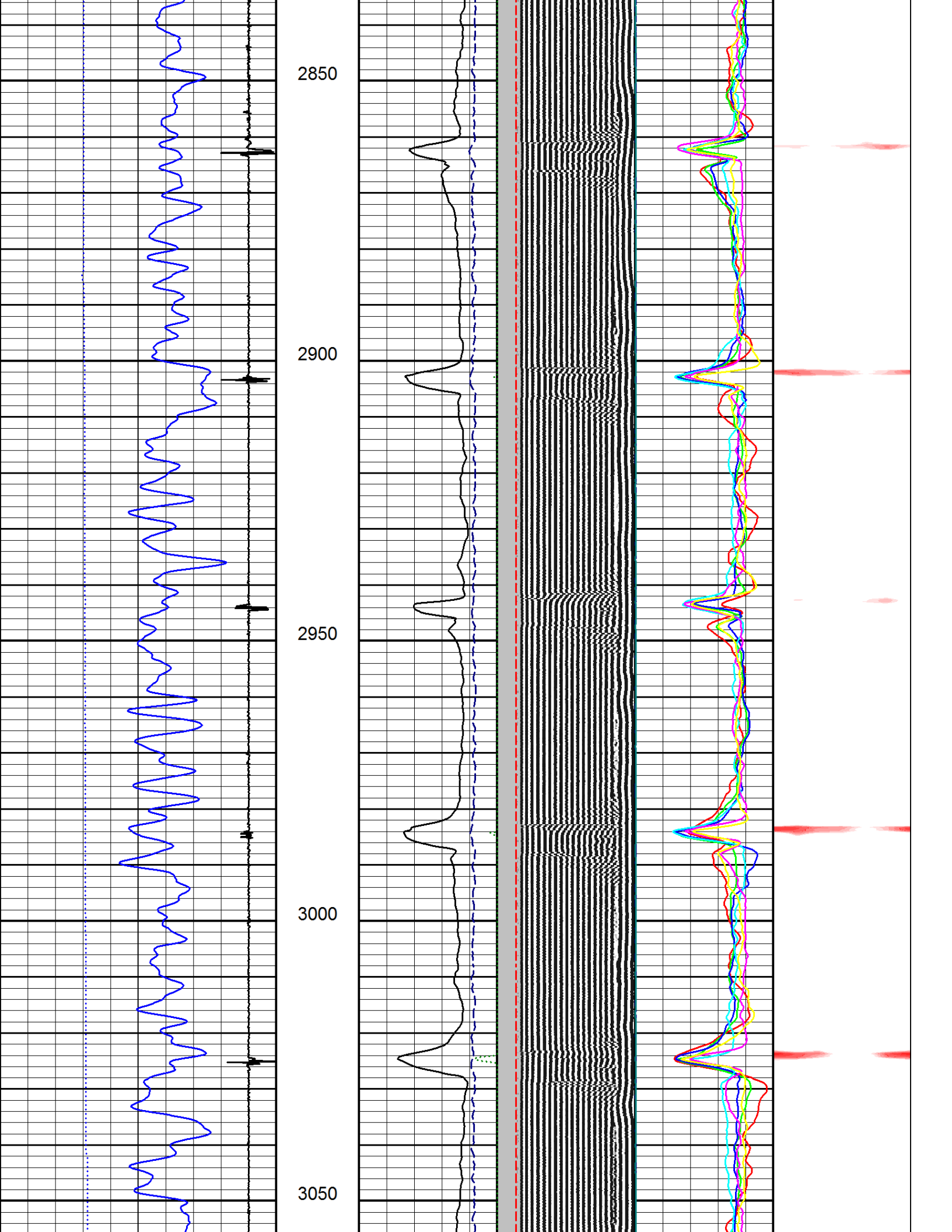


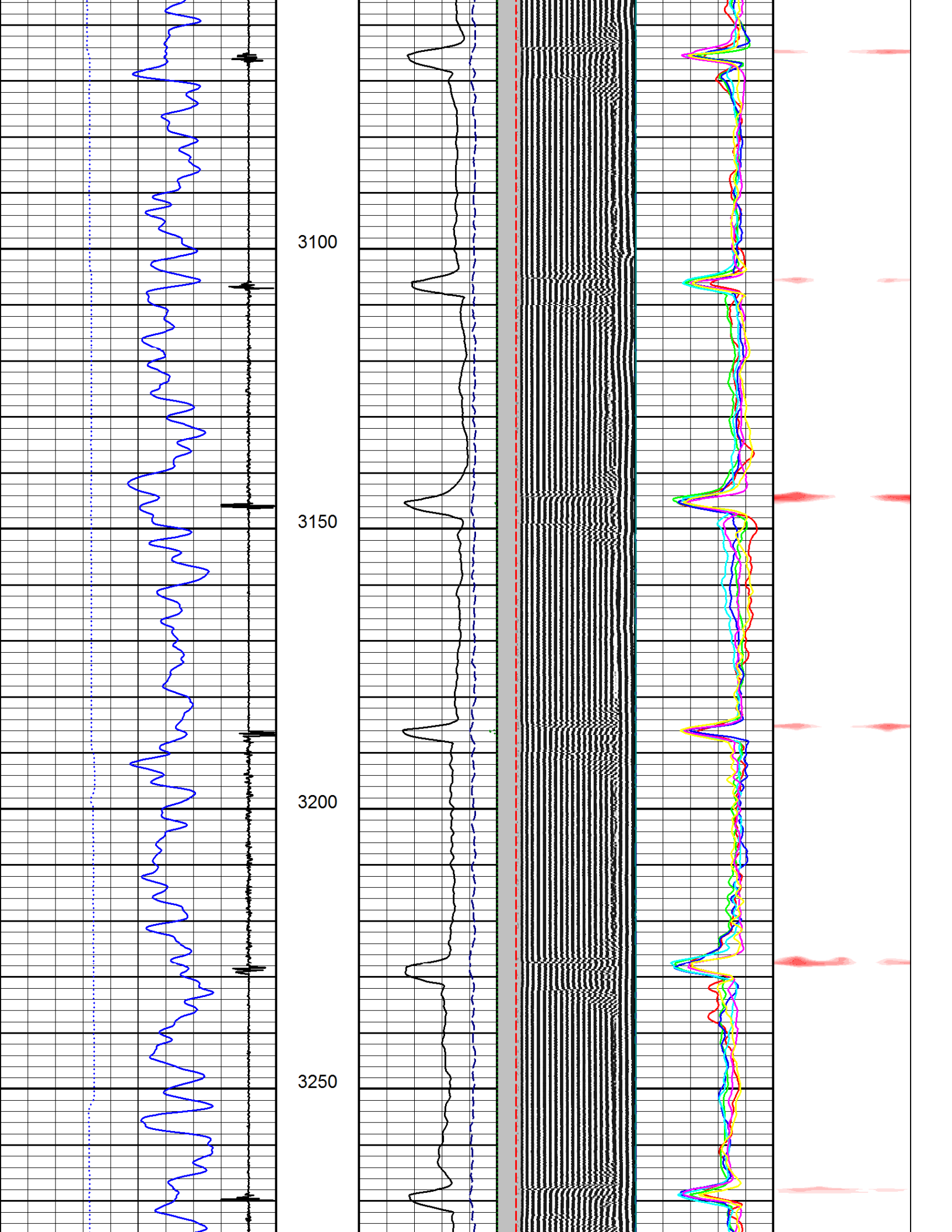


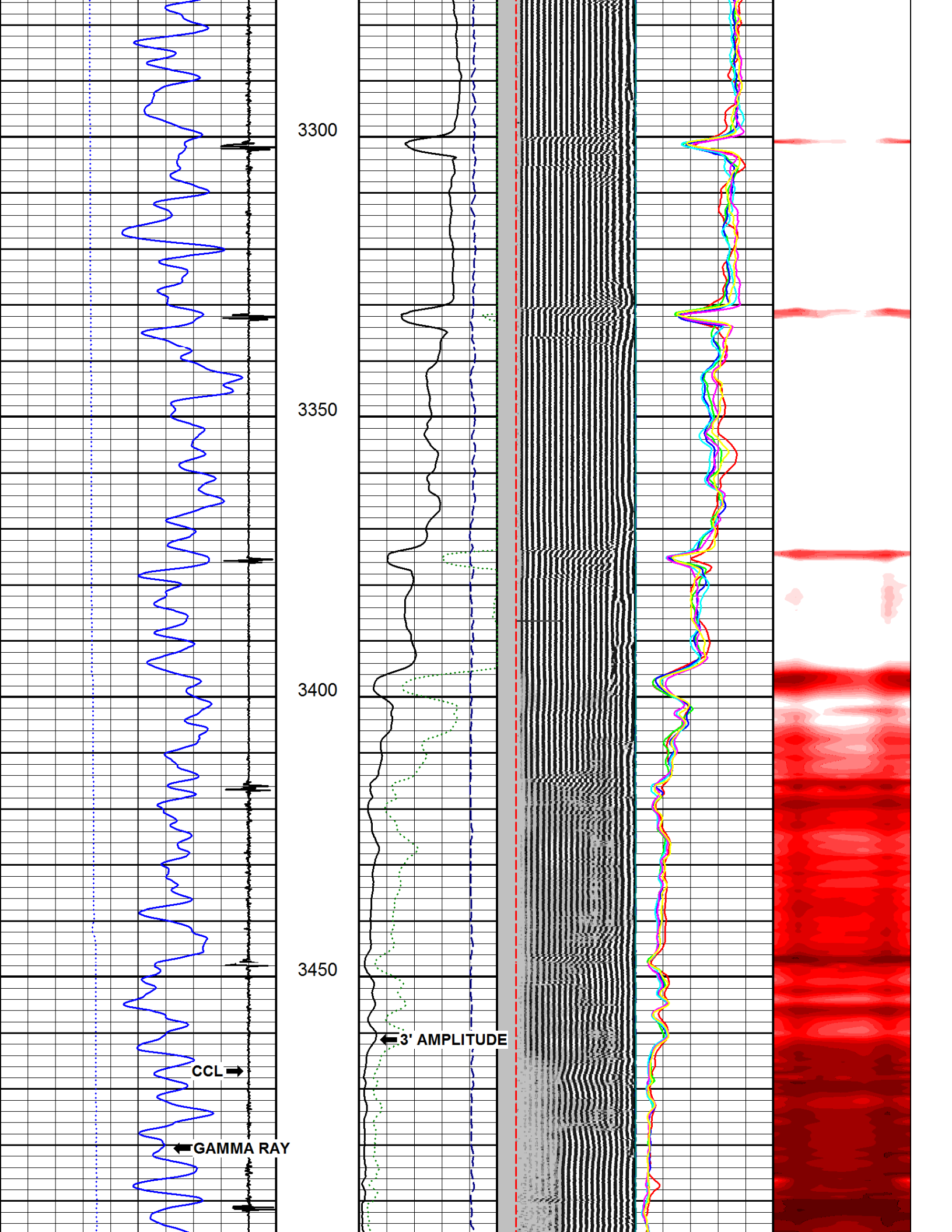


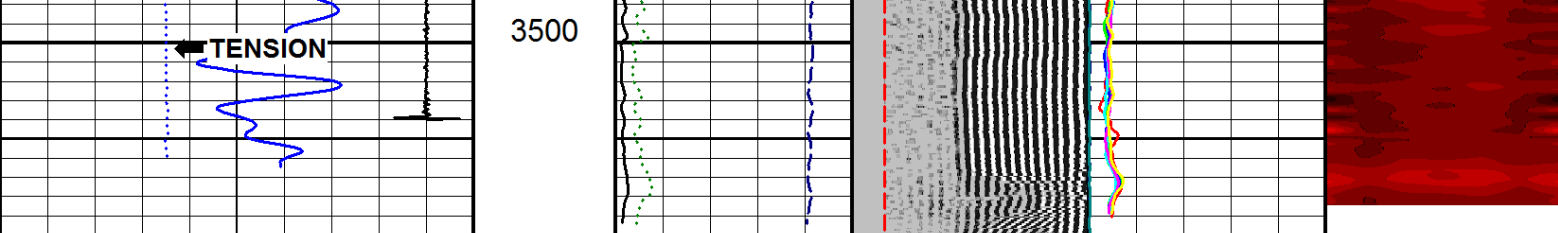












2016-05-04 08:53
Tension_U16 (lbF)

0.00	1650.00
COLLAR LOCATOR_U15	
0.0	10.0
GAMMA RAY_U15	
0.0	120.0
Pass No. 15	

3520.36

FEET
1:240

3'	AMPLITUDE_U17 (mV)	FREE PIPE TIME_U16 (μs)	Map1 Amplitude_U15 (mV)	RADIAL MAPPING (mV)
0.0	100.0	200.0	1200.0	0.00 100.00 0.00 10.00
AMPLITUDE X 5_U17 (mV)	VARIABLE DENSITY (μs)	Map2 Amplitude_U15 (mV)	RADIAL MAPPING (mV)	
0.0	20.0	200.00	1200.00	0.00 100.00 0.00 12.00
3'	TRAVEL TIME_U17 (μs)	VARIABLE DENSITY (μs)	Map3 Amplitude_U15 (mV)	RADIAL MAPPING (mV)
800.0	150.0	200.00	1200.00	0.00 100.00 0.00 12.00
	5' VARIABLE DENSITY (μs)	Map4 Amplitude_U15 (mV)		
	200.00	1200.00	0.00	100.00
			Map5 Amplitude_U15 (mV)	
			0.00	100.00
			Map6 Amplitude_U15 (mV)	
			0.00	100.00

File FINAL.pre

130503



Company NOBLE ENERGY

Well OSH D22-12

Field WATTENBERG

County WELD State CO

1/4'S SEC TWP. RGE.