



RADIAL BOND LOG WITH GAMMA RAY

Comp. HIGHPOINT OPERATING CORP. Well CRITTER CREEK 15-6302B Field HEREFORD Co. WELD State COLORADO	Company	HIGHPOINT OPERATING CORP.			
	Well	CRITTER CREEK 15-6302B			
	Field	HEREFORD			
	County	WELD		State	COLORADO
	Location:	API # : 05-123-47303		Other Services	
	400' FSL & 1130' FWL SW SW		NONE		
	SEC 15	TWP 11N	RGE 63W		
	Permanent Datum	GL	Elevation	5242'	
	Log Measured From	KB	16'	Above Perm. Datum	
	Drilling Measured From	KB			
			Elevation	K.B. 5259' D.F. N/A G.L. 5242'	
Date of Service	09 NOVEMBER 2018				
Run Number	ONE				
Depth Driller or PBTD	17722'				
Depth Logger	7350'				
Bottom Log Interval	7342'				
Top Log Interval	SURFACE				
Open Hole Size	8.75"				
Type Fluid	WATER				
Fluid Level	70'				
Fluid Density	N/A				
Max. Recorded Temperature	N/A				
Max. Wellhead Pressure	ZERO				
Wellhead Connection	PACKOFF				
Estimated Cement Top	1832'				
Unit Number	P-57				
Wireline Size	9/32"				
Location	FORT MORGAN				
Recorded By	P. LOPEZ				
Witnessed By	MR. BRUCE KELSCH				
	Size	Wt/Ft	Top	Bottom	
Tubing Record					
Surface Casing	9.625"	36#	SURFACE	1549.5'	
Production Casing	7"	23#	SURFACE	7770'	
Liner Record	4.5"	11.6#	7296.2'	17780'	

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All interpretations are opinions based on inferences from electrical or other measurements and Pioneer Wireline Services, LLC cannot and does not guarantee the accuracy or correctness of any interpretation, and Pioneer Wireline Services, LLC will not 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.

Comments

N/A DENOTES NOT AVAILABLE OR NON-APPLICABLE.
CORRELATED TO PBR

THANK YOU FOR USING PIONEER ENERGY SERVICES!

Your Pioneer Energy Services Crew	Tool Data - Services	Serial Number
Engineer: LOPEZ	RBL-D	070151
Operator: MARSHALL	GR CCL	070237
Operator: ESTRADA		
Operator: GARCIA		

Log Variables

DatabaseE:\highpoint_crtter creek 15-6302b_0512347303_20181109_scbl.db
Dataset field/well/run1/pass1.7/_vars_

Top - Bottom


BOREID in 7.875	BOTTEMP degF 180	CASEOD in 7	CASETHCK in 0	CASEWGHT lb/ft 23	MAXAMPL mV 0	MINAMPL mV 1
MINATTN db/ft 0.08	PERFS 0	PPT usec 0	SRFTEMP degF 0	TDEPTH ft 0		


Variable Description

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

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
			Cable Head-Titan_144 1 7/16" Titan Cable Head	1.03	1.44	2.00
			Centralizer-275 Probe 2 3/4" Probe Adjustable Spring Centralizer	2.88	2.75	15.00
WVFS8	15.11		PROBE-RBT-DIGITAL-RBL-D (070151) Probe 2 3/4" Radii Bond-Digital	8.75	2.75	100.00
WVFS7	15.11					
WVFS6	15.11					
WVFS5	15.11					
WVFS4	15.11					
WVFS3	15.11					
WVFS2	15.11					
WVFS1	15.11					
WVFCAL	15.11					
WVF3FT	15.11					
WVF5FT	14.11					
HEADVOLT	10.93					
			Centralizer-275 Probe 2 3/4" Probe Adjustable Spring Centralizer	2.88	2.75	15.00

CCL	7.13					
GR	5.80		PROBE-GR/CCL-DIGITAL-275_6-PIN (120) Probe 2 3/4" Gamma CCL 6-pin Bottom for CNT	4.83	2.75	50.00
			Centralizer-275 Probe 2 3/4" Probe Adjustable Spring Centralizer	2.88	2.75	15.00
			Bullnose-PROBE Probe Go Pin Pressure Cap	0.33	1.38	1.00
Dataset:		highpoint_critter creek 15-6302b_0512347303_20181109_scbl.db: field/well/run1/pass1.7				
Total length:		23.59 ft				
Total weight:		198.00 lb				
O.D.:		2.75 in				



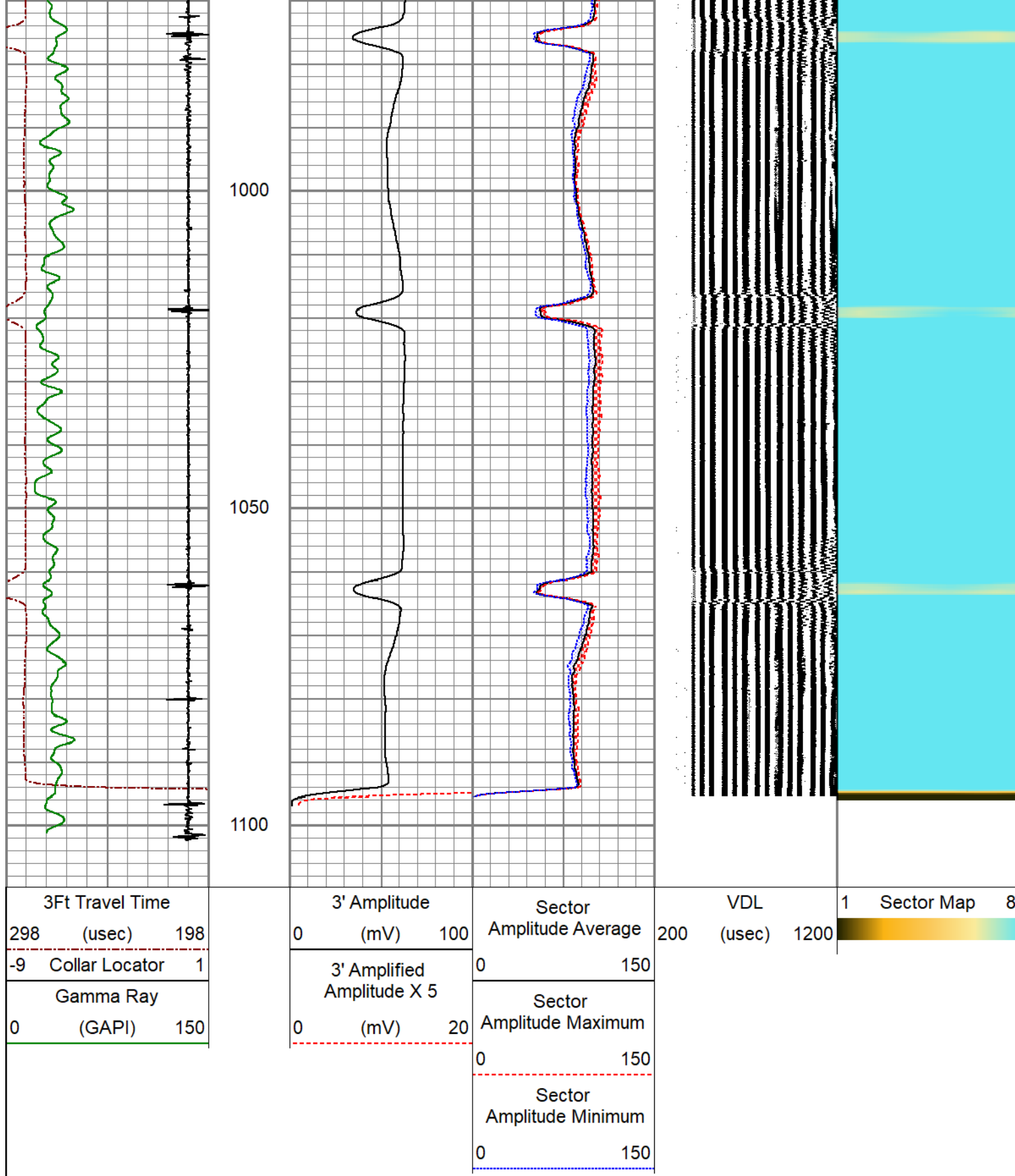
FREE PIPE SECTION


ZERO PSI APPLIED AT SURFACE

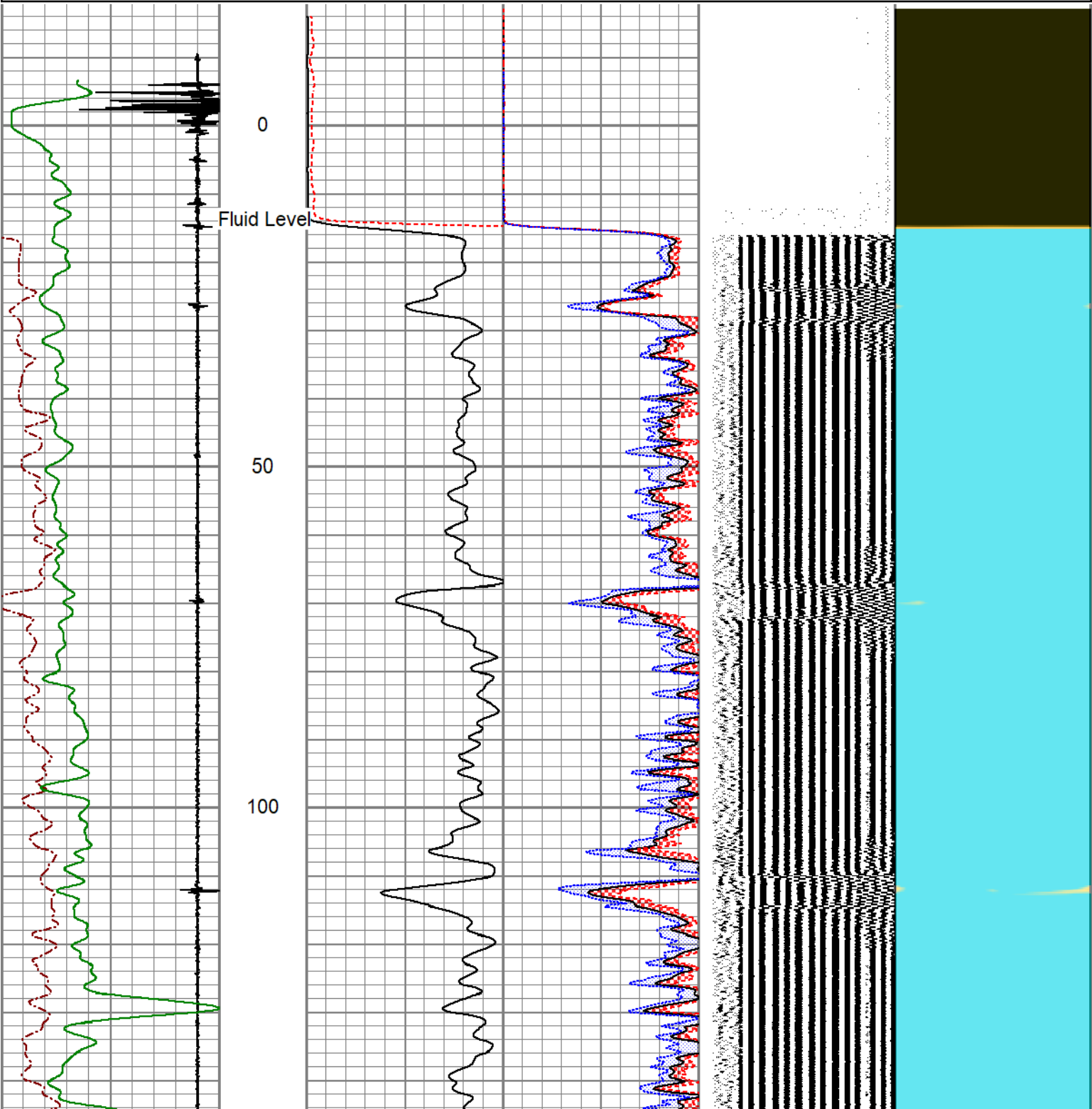
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Dataset Pathname	pass1.3
Presentation Format	pinr_scbl
Dataset Creation	Fri Nov 09 14:52:02 2018
Charted by	Depth in Feet scaled 1:240

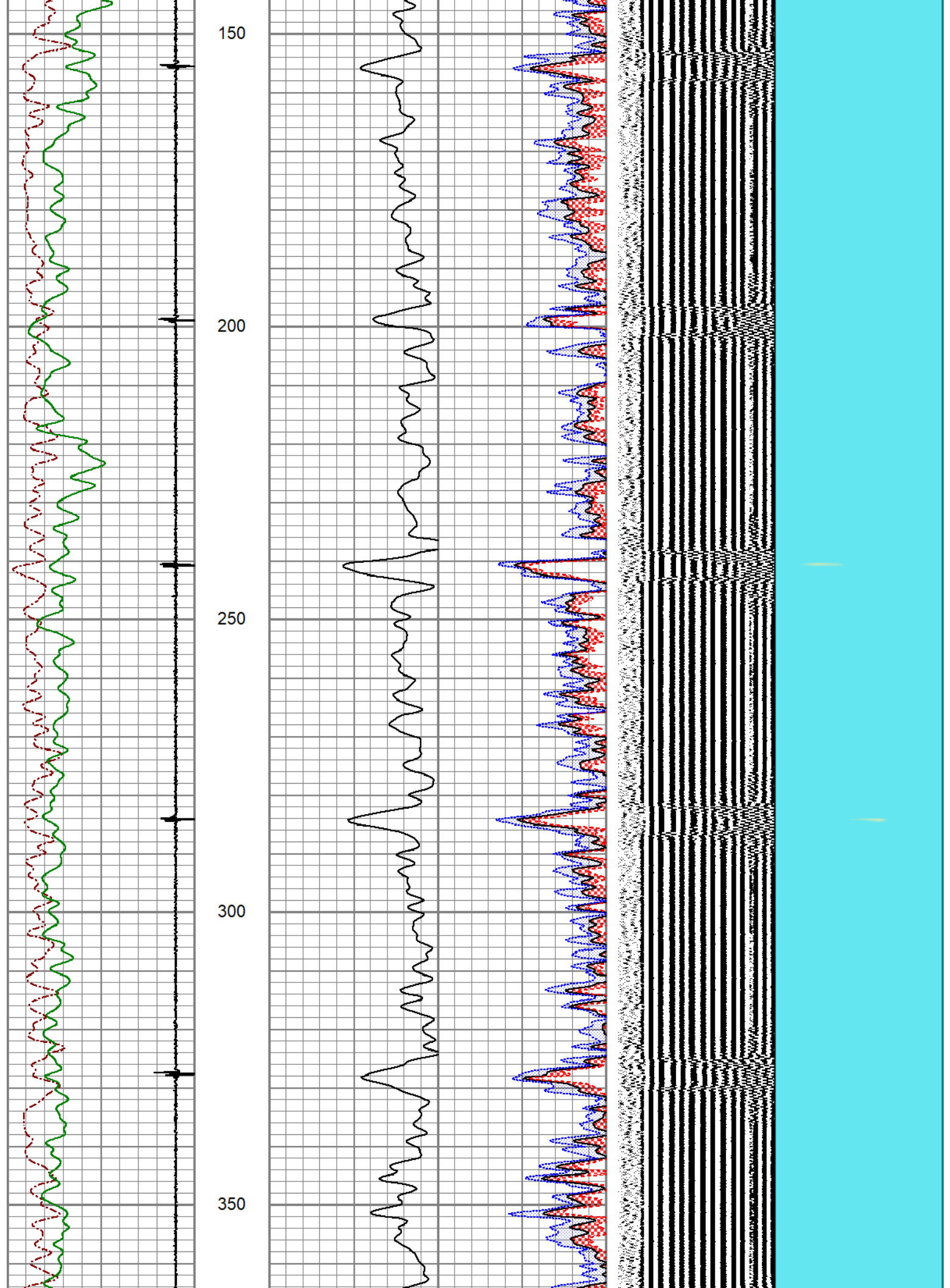
3Ft Travel Time	3' Amplitude	Sector Amplitude Average	VDL	Sector Map
298 (usec) 198	0 (mV) 100	0 150	200 (usec) 1200	1 8
-9 Collar Locator 1	3' Amplified Amplitude X 5	Sector Amplitude Maximum		
Gamma Ray	0 (mV) 20	0 150		
0 (GAPI) 150		Sector Amplitude Minimum		
		0 150		

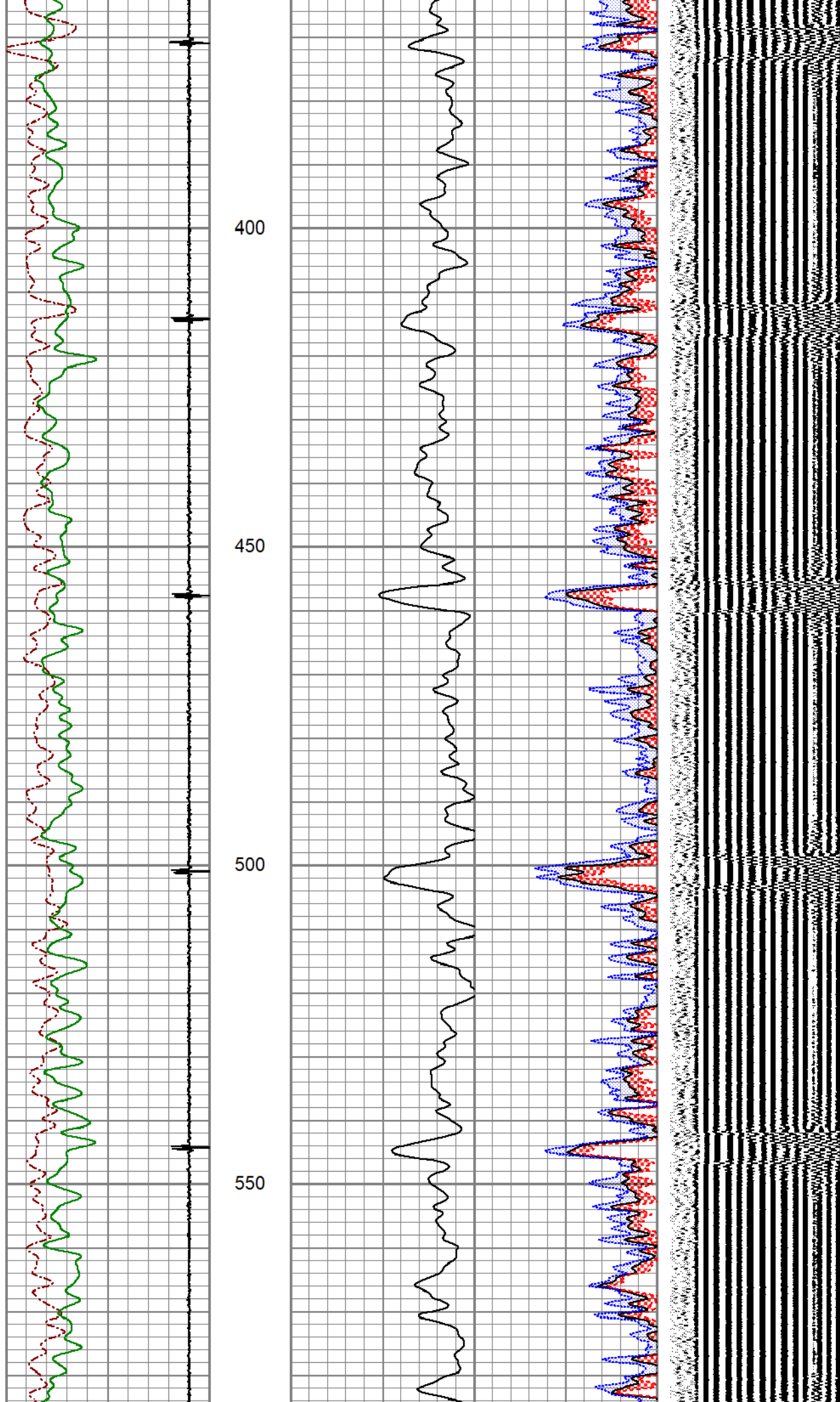


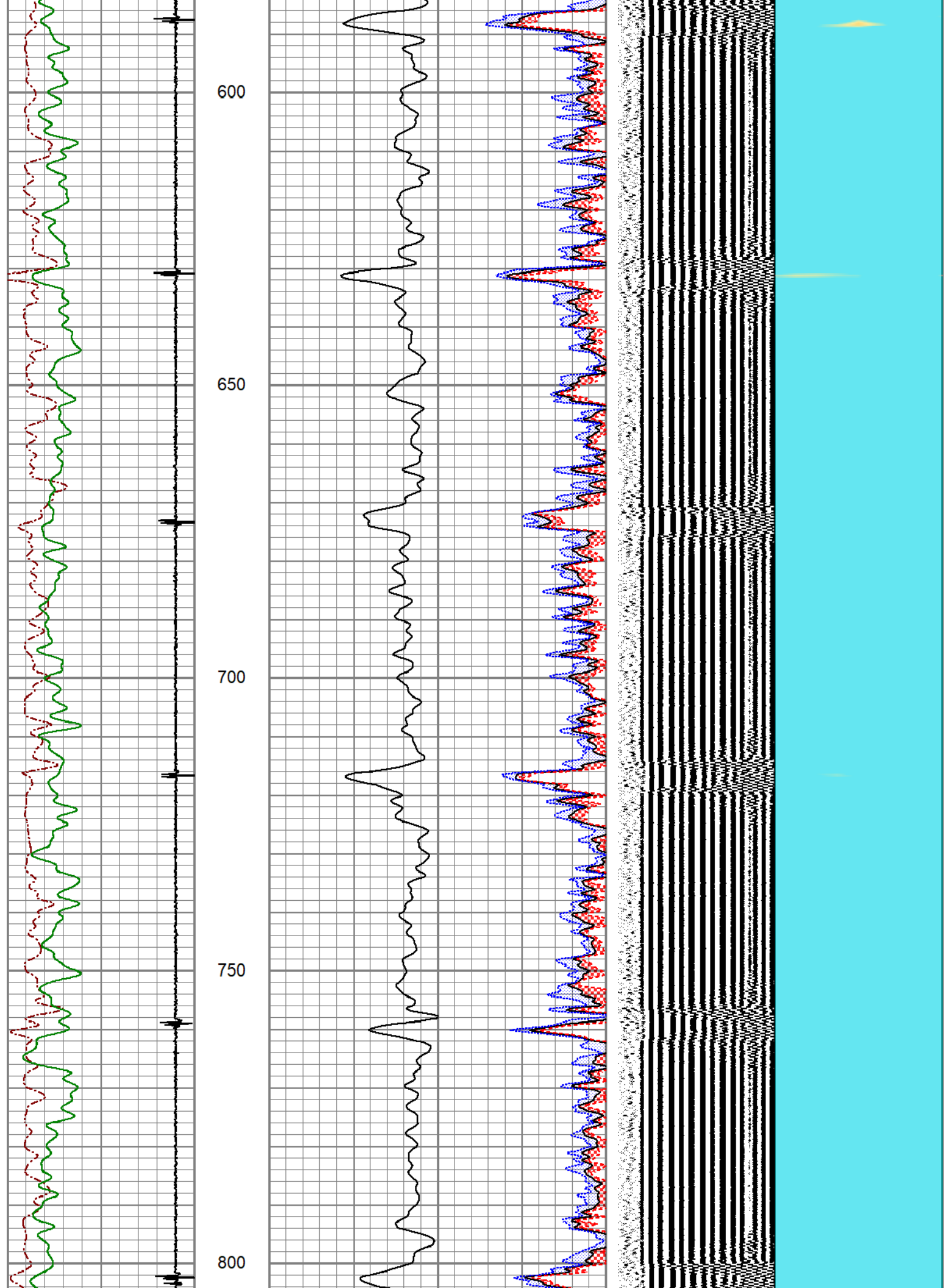


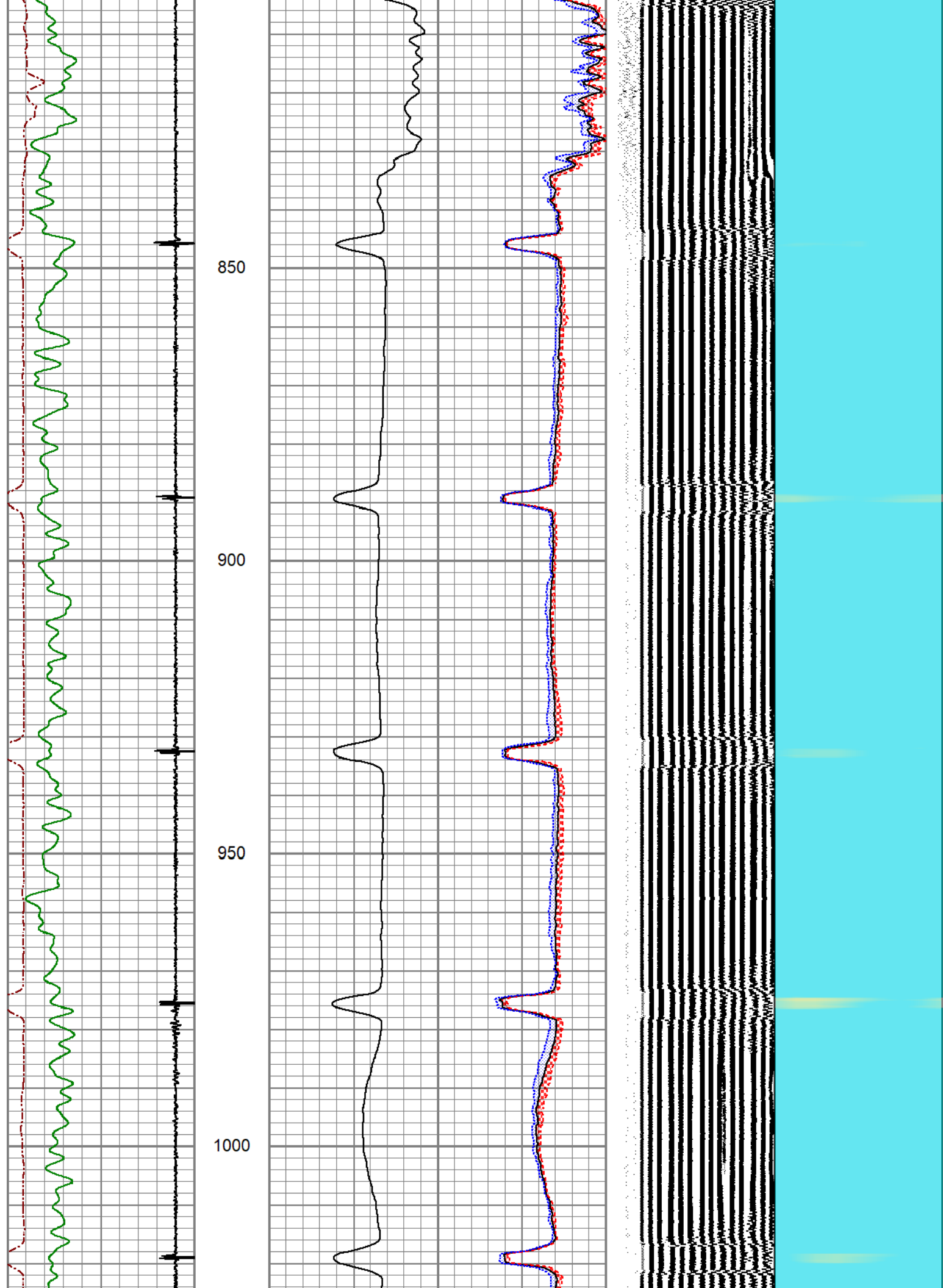
3Ft Travel Time			3' Amplitude			Sector			VDL			1 Sector Map 8		
298	(usec)	198	0	(mV)	100	Amplitude Average			200	(usec)	1200			
-9 Collar Locator 1			3' Amplified Amplitude X 5			0 150								
Gamma Ray						Sector Amplitude Maximum								
0	(GAPI)	150	0 (mV) 20			0 150								
						Sector Amplitude Minimum								
						0 150								

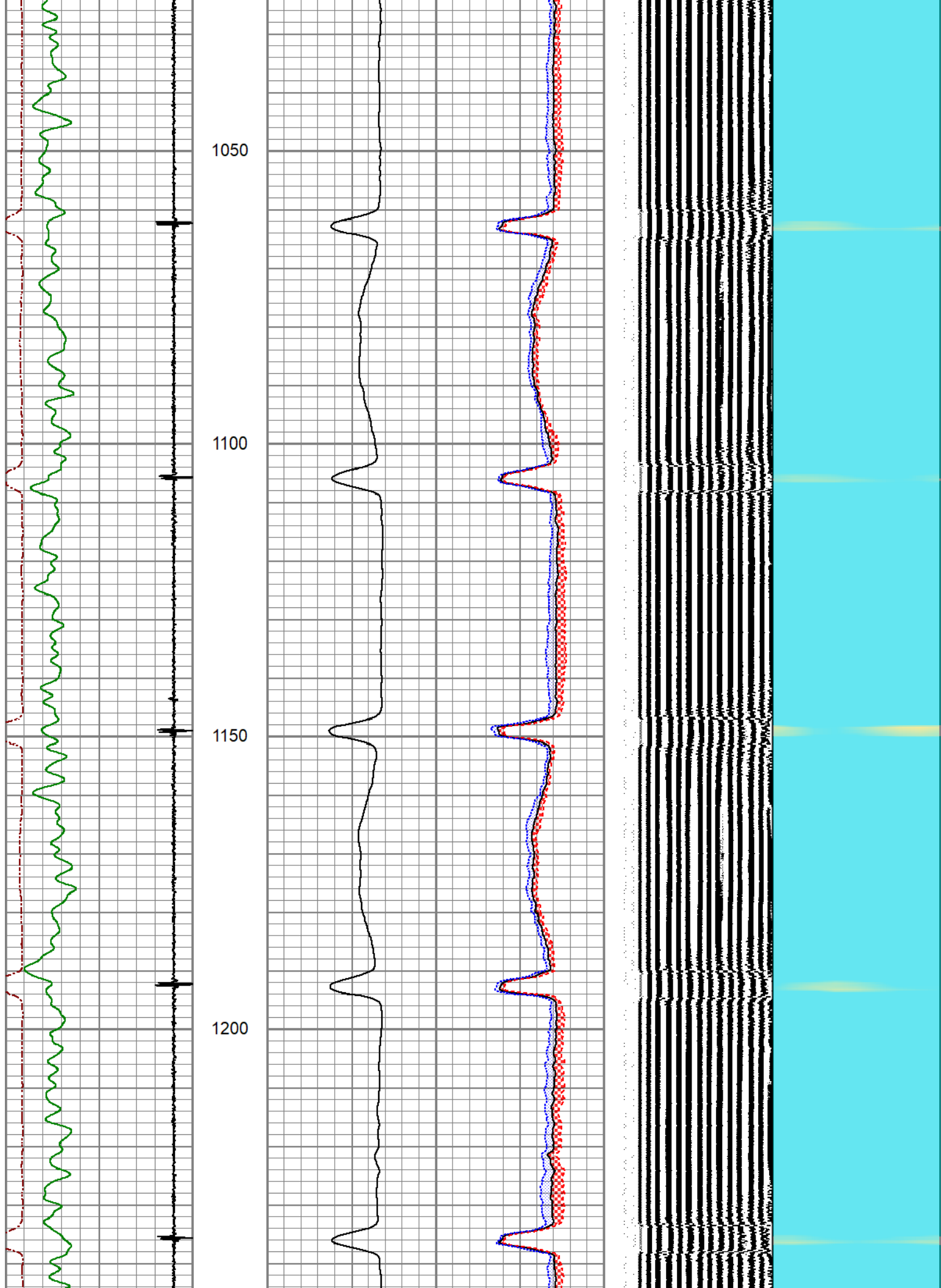


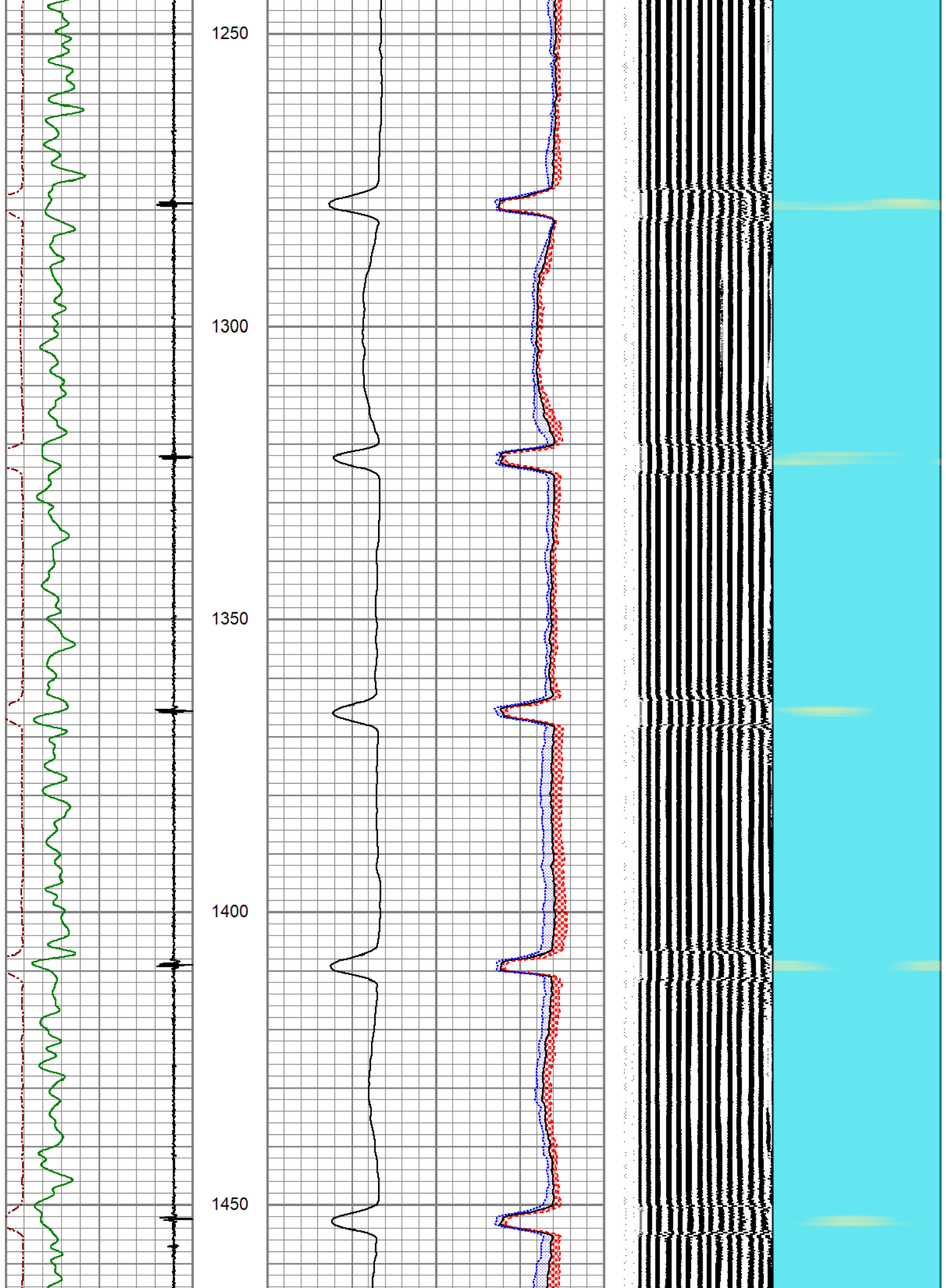


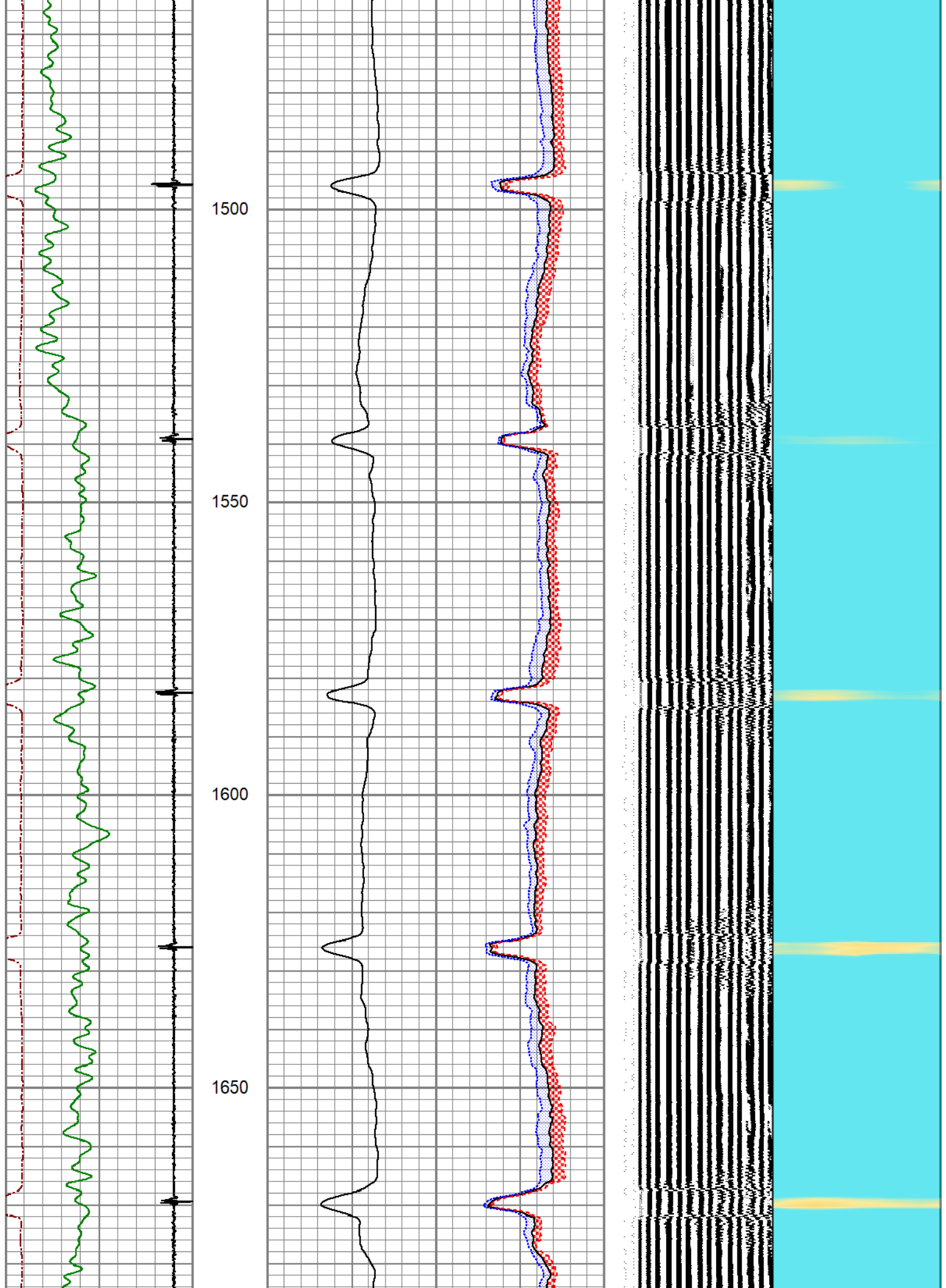


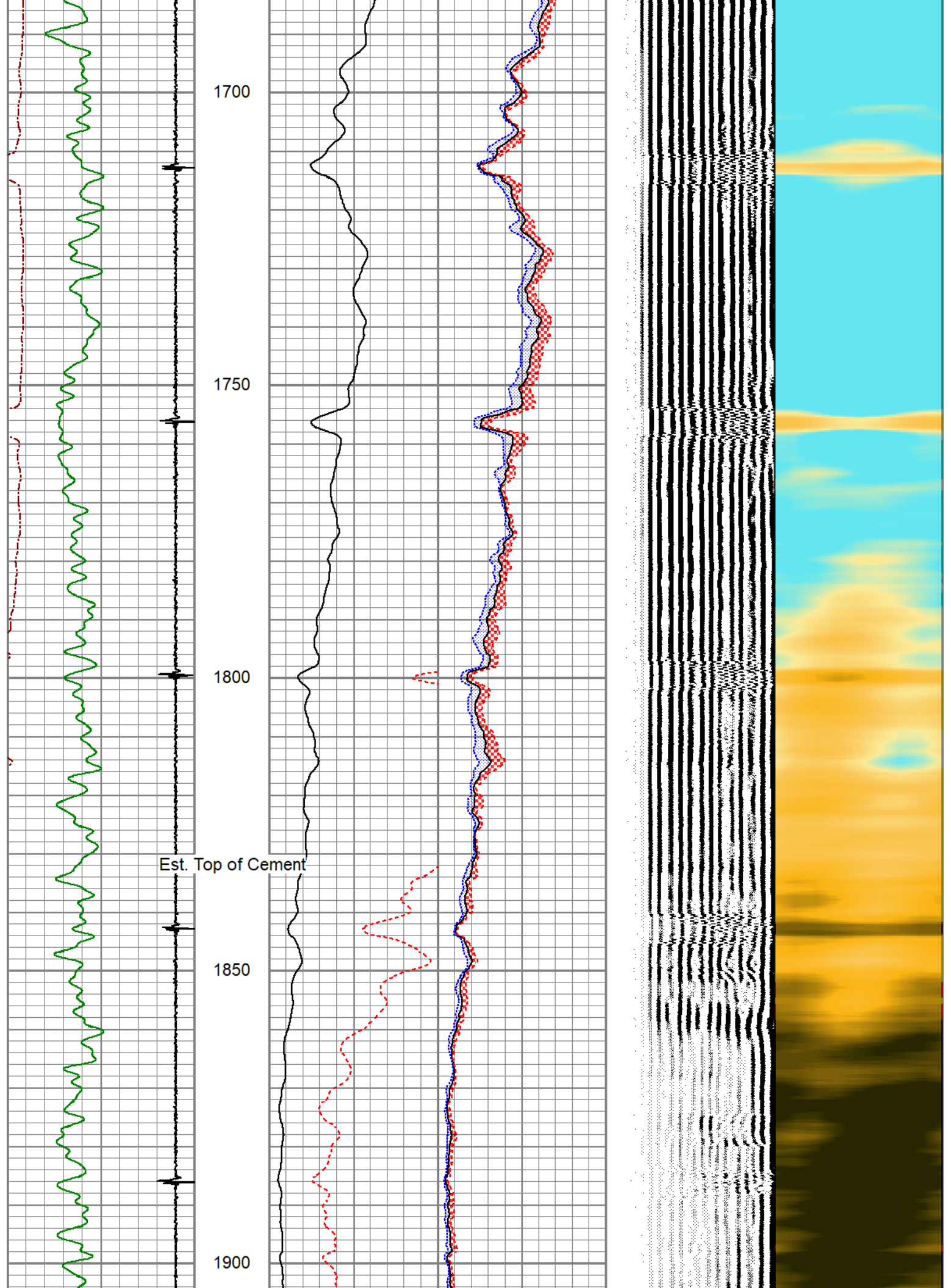


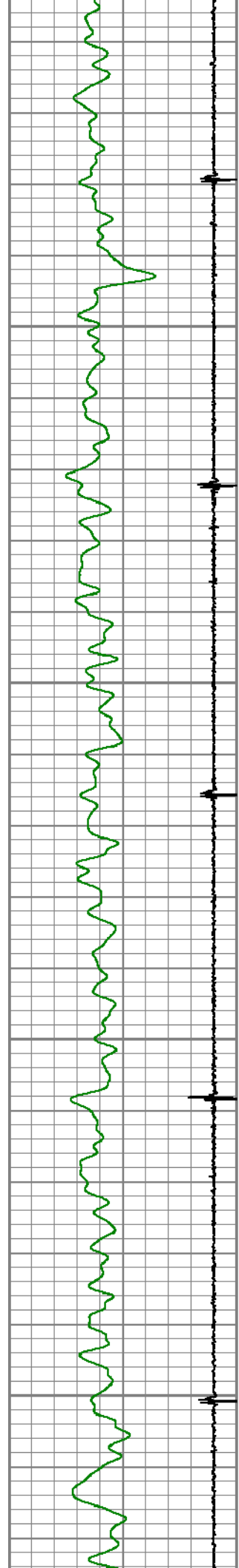










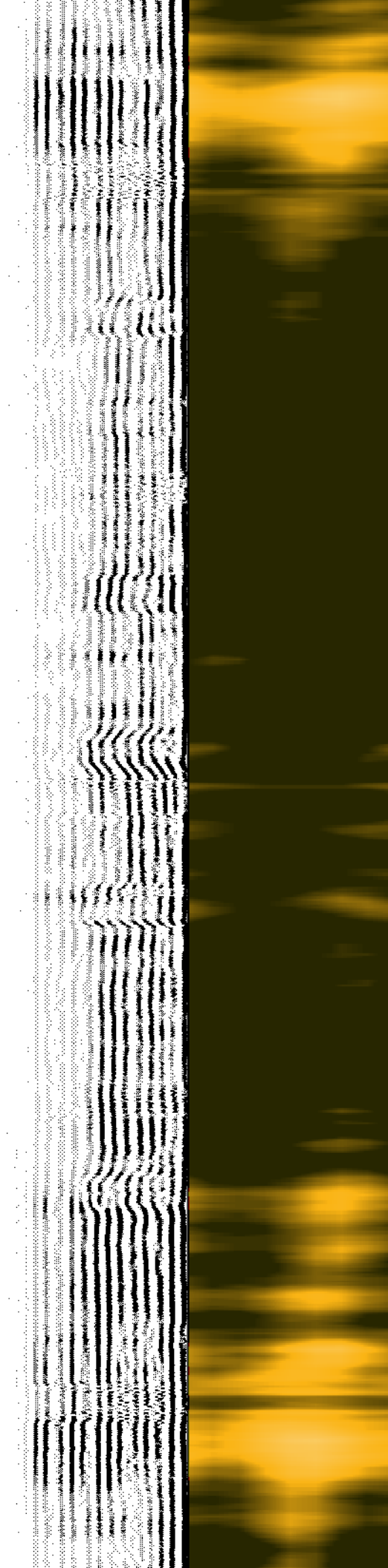
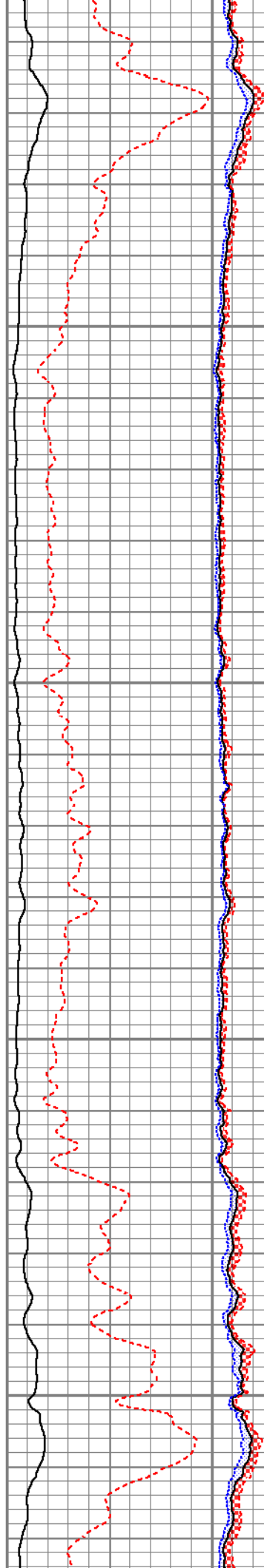


1950

2000

2050

2100

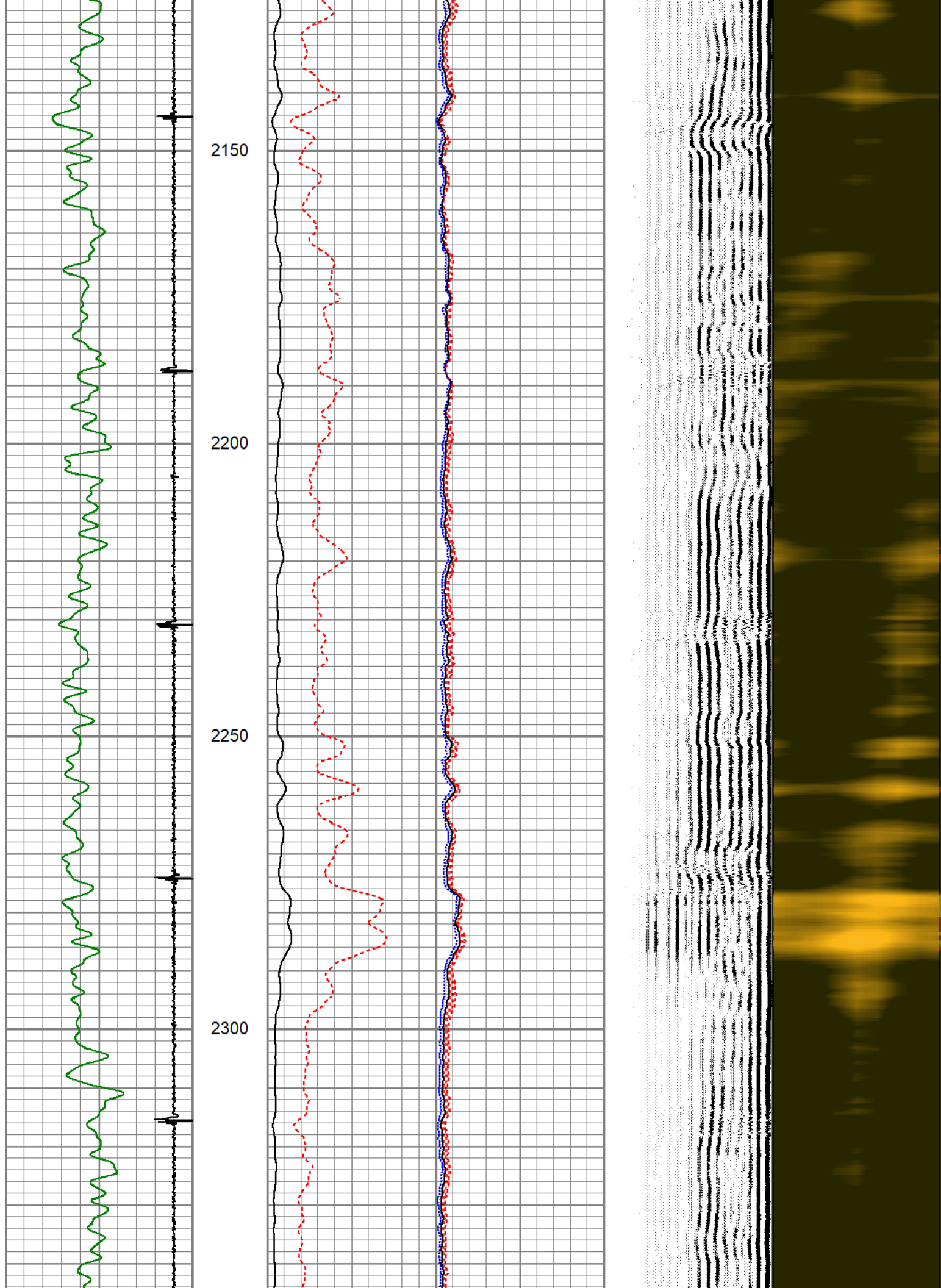


2150

2200

2250

2300



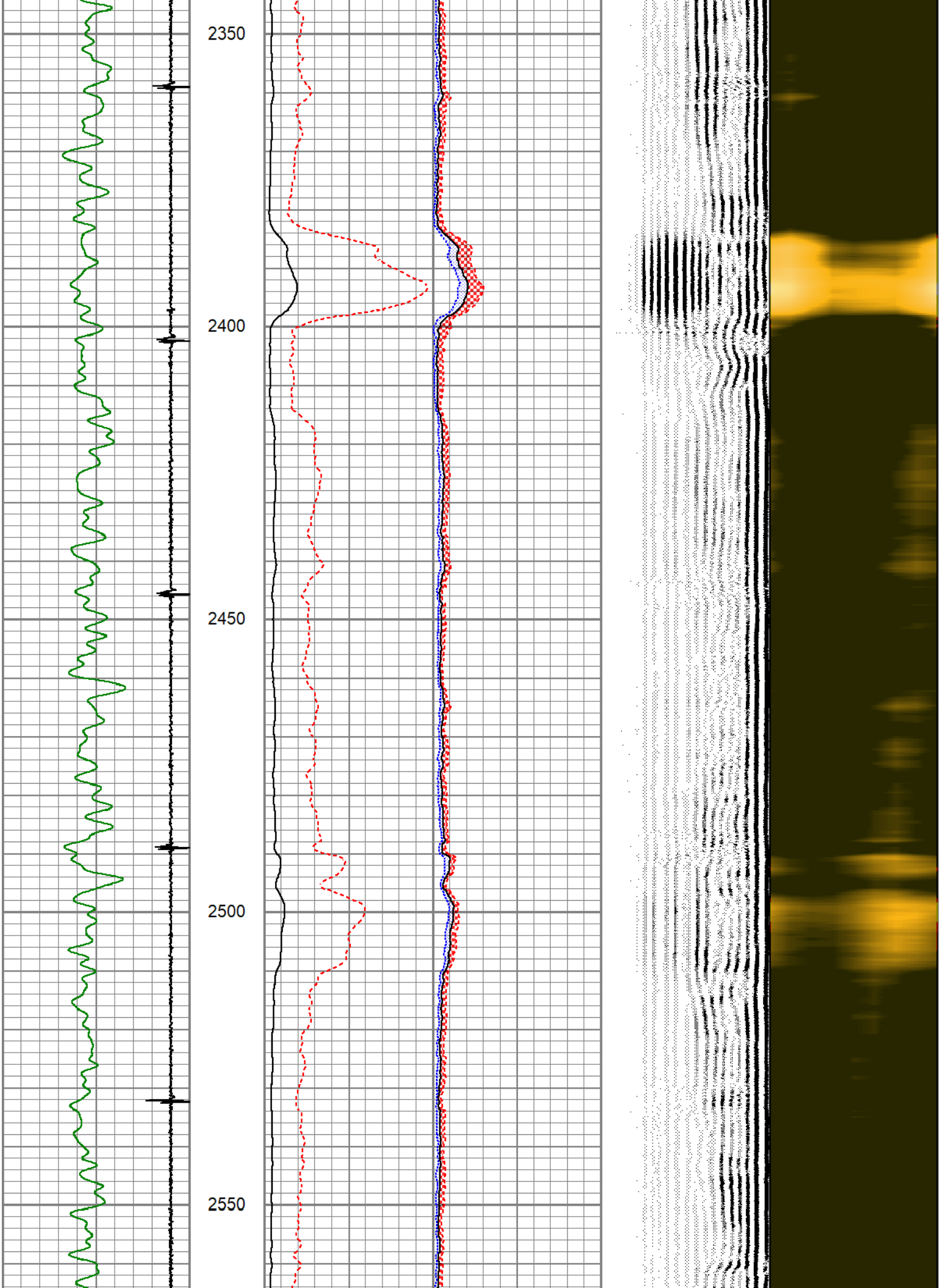
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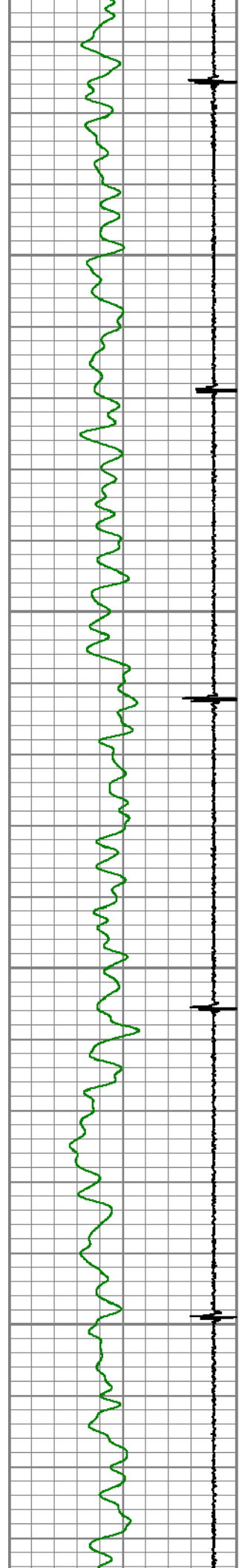
2400

2450

2500

2550



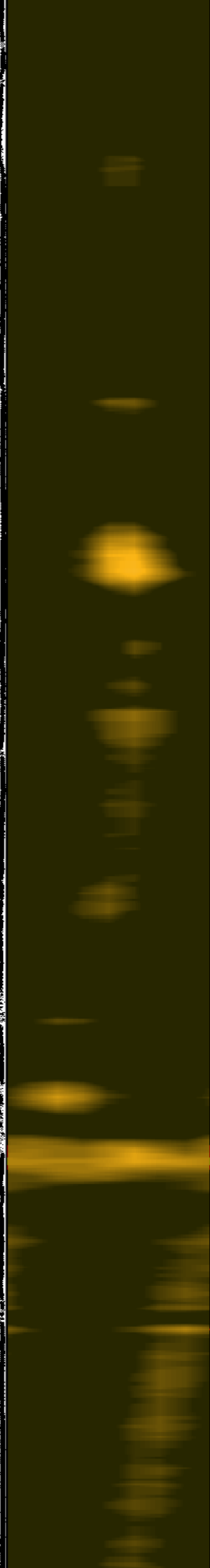
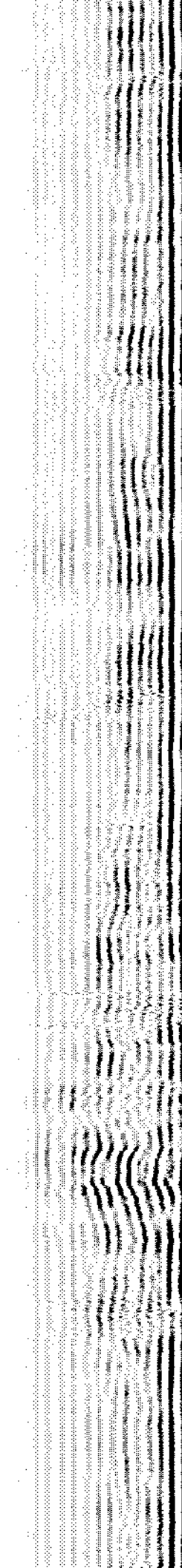
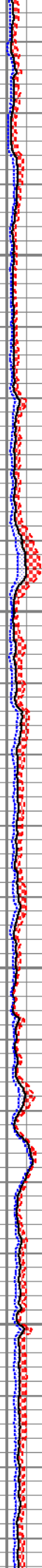
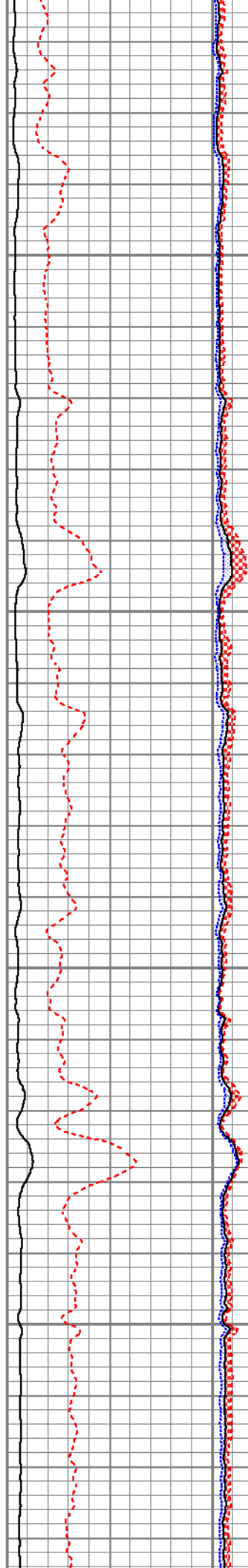


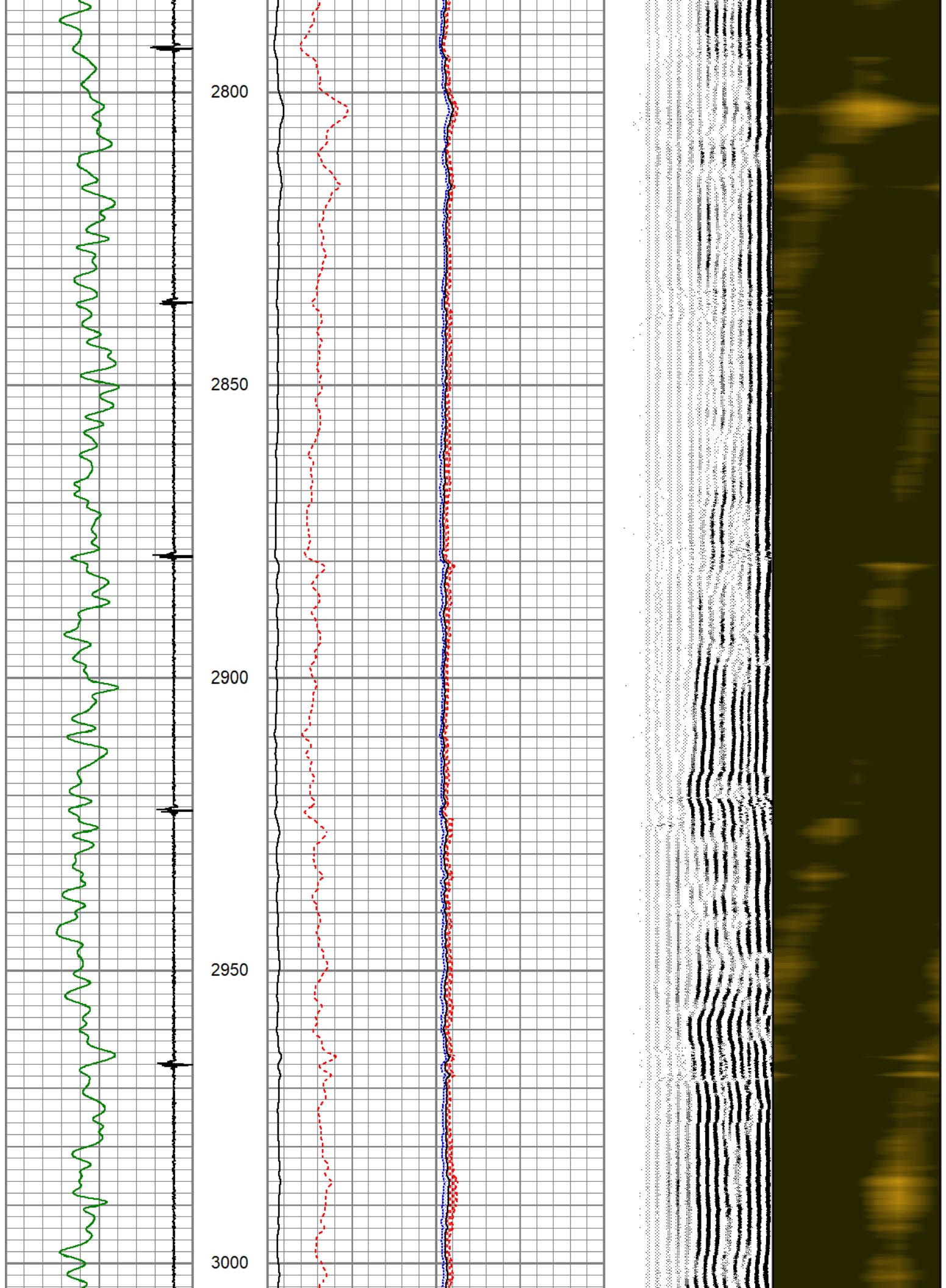
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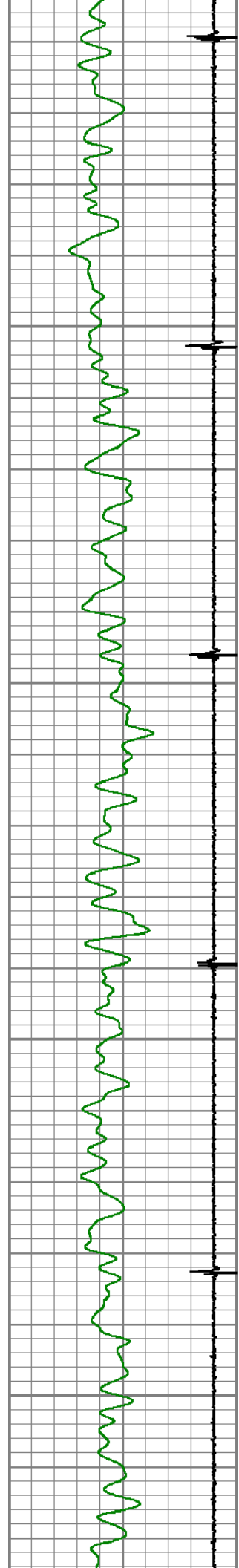
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2700

2750





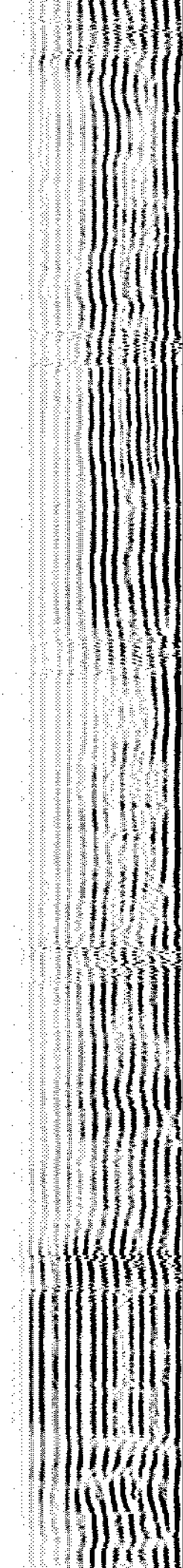
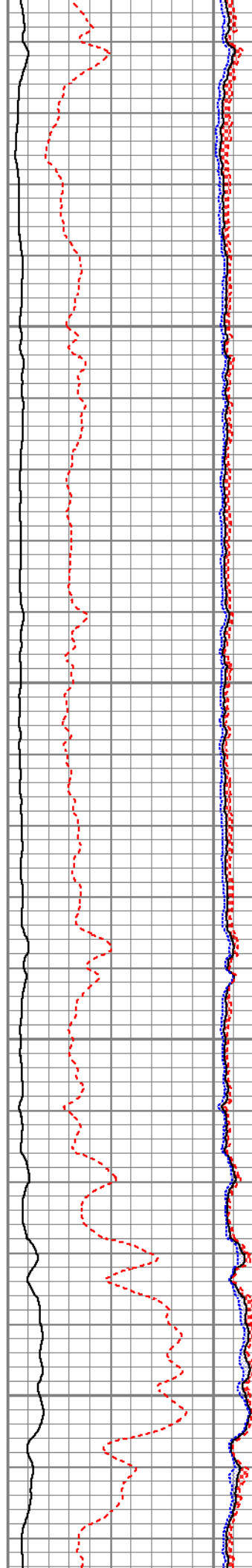


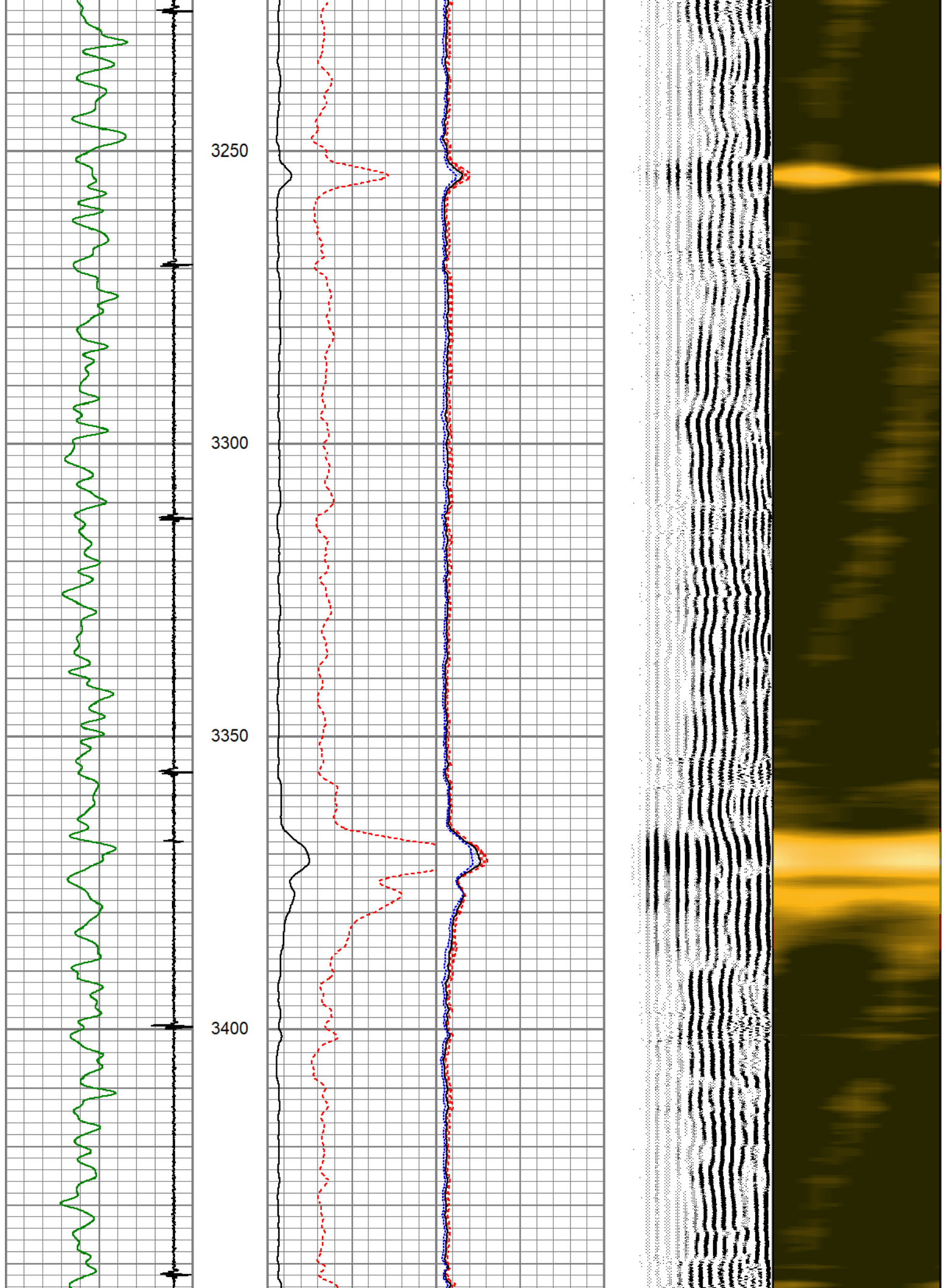
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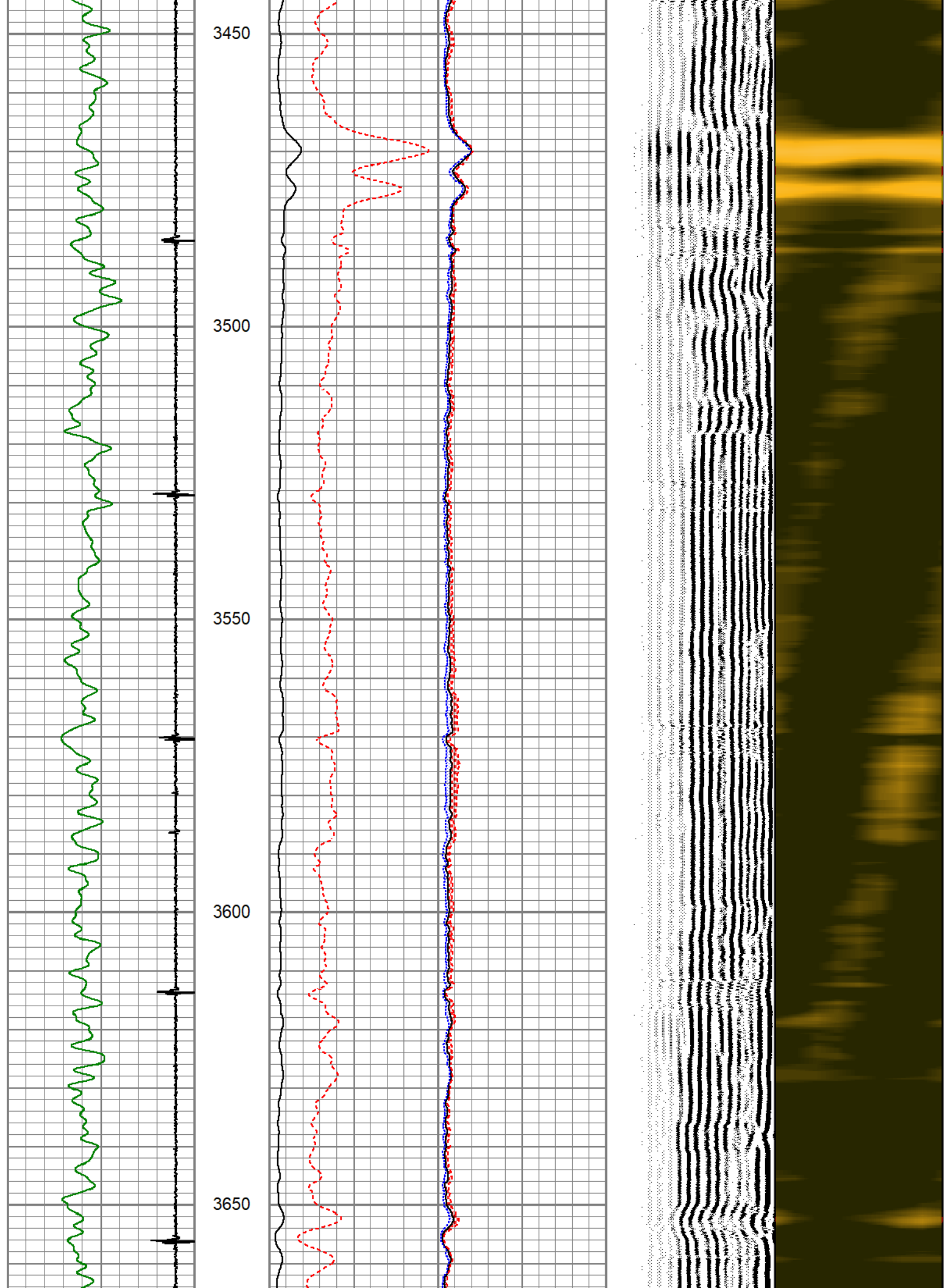
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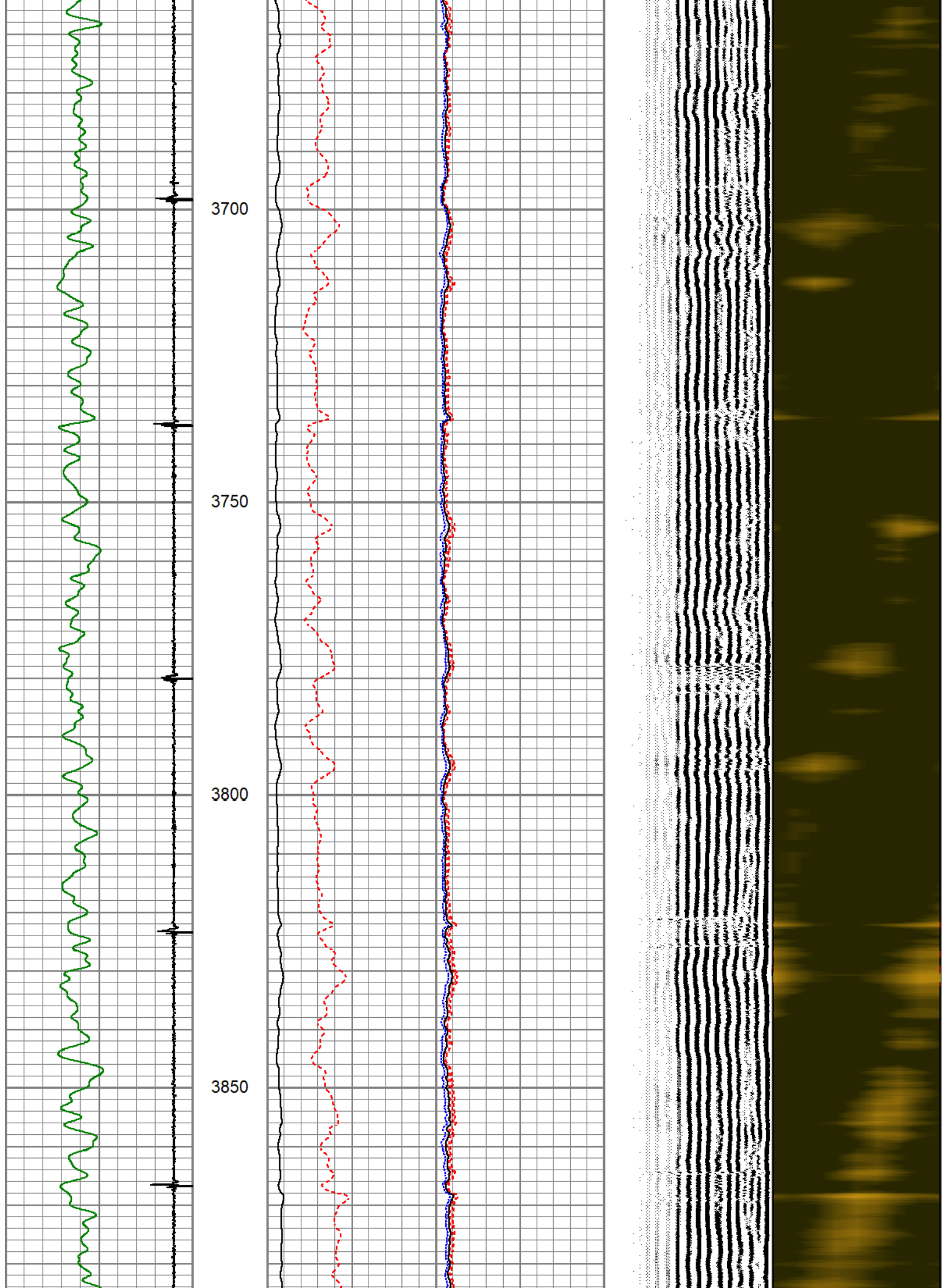
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3200









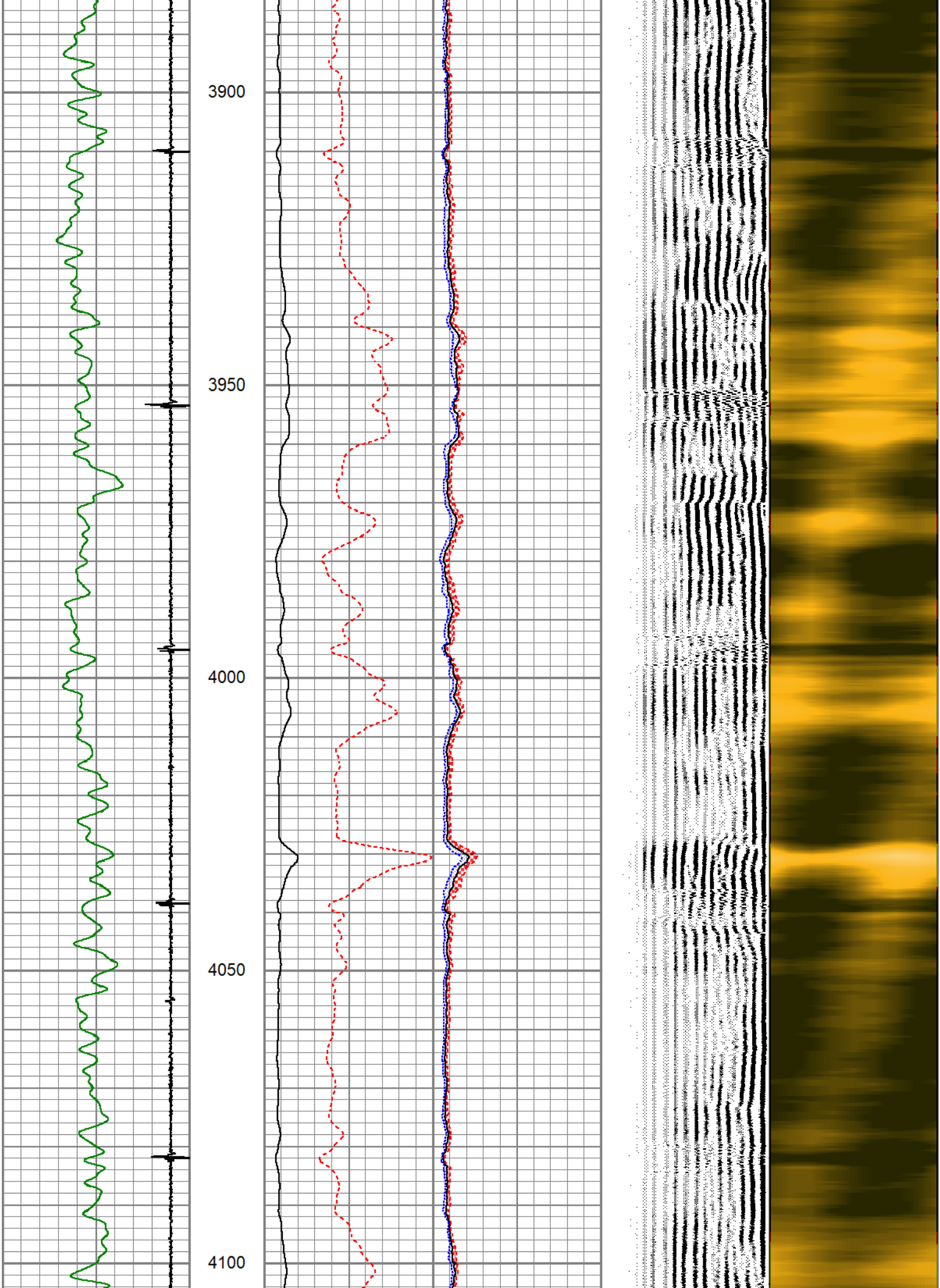
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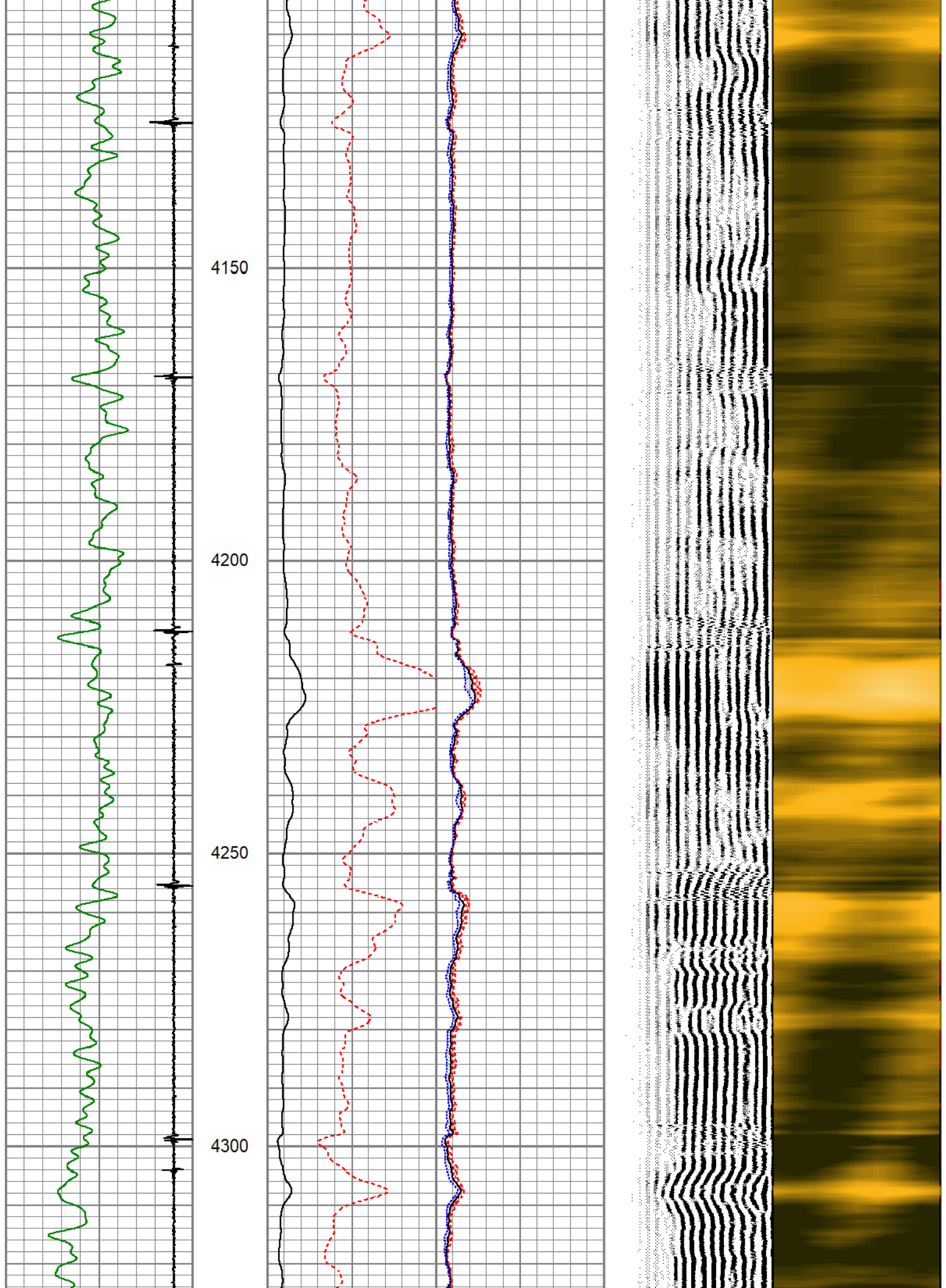
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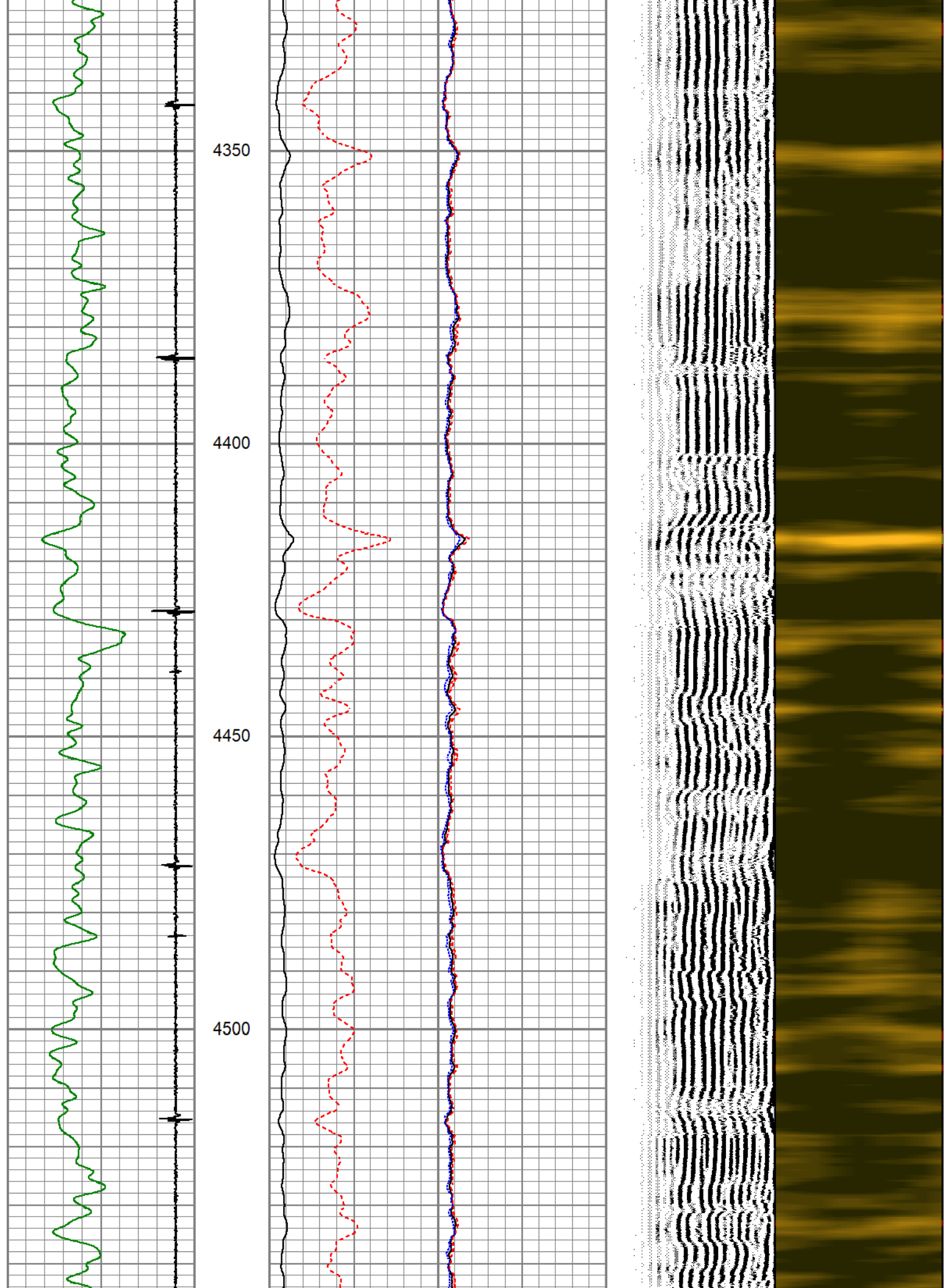
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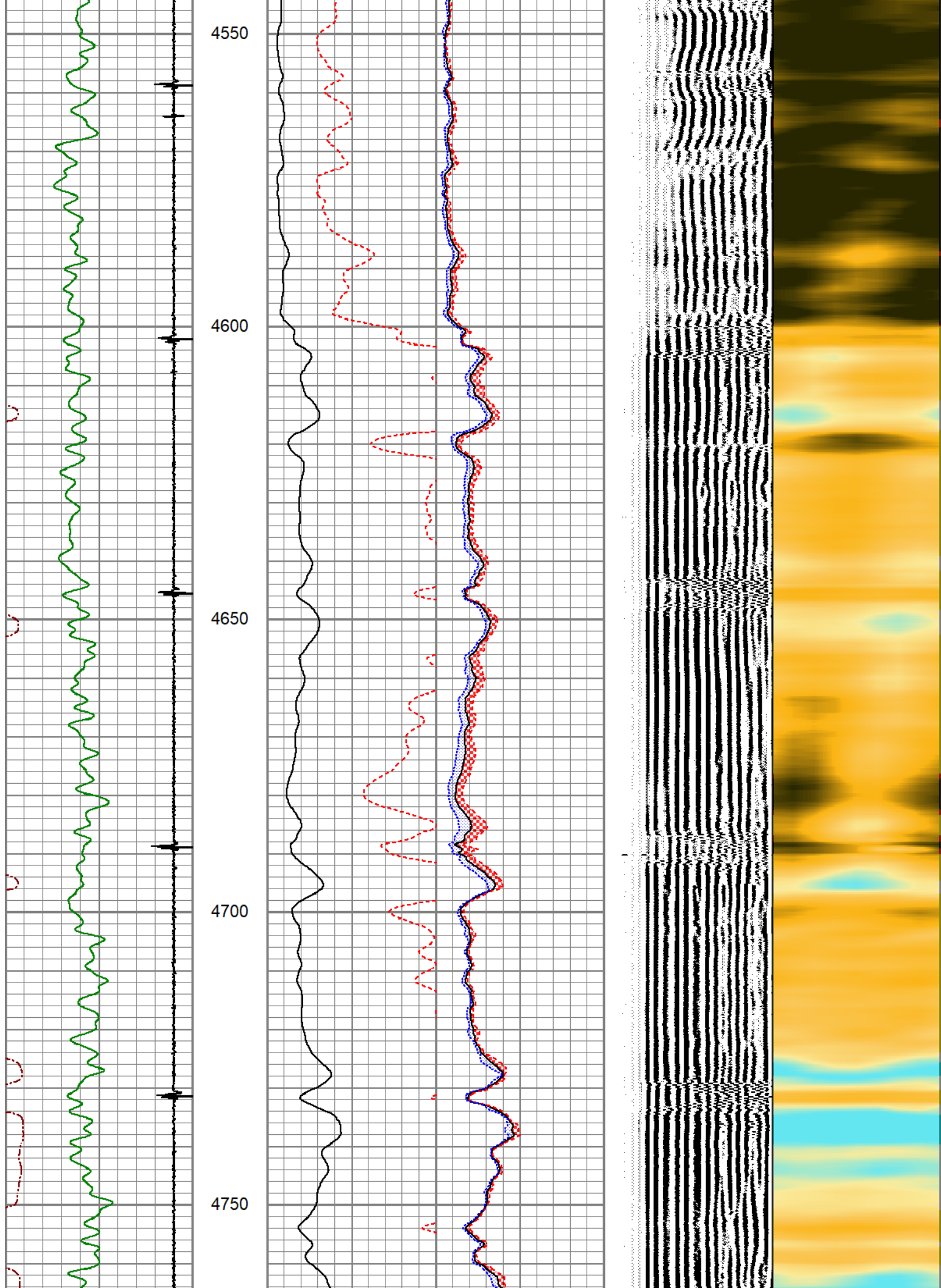
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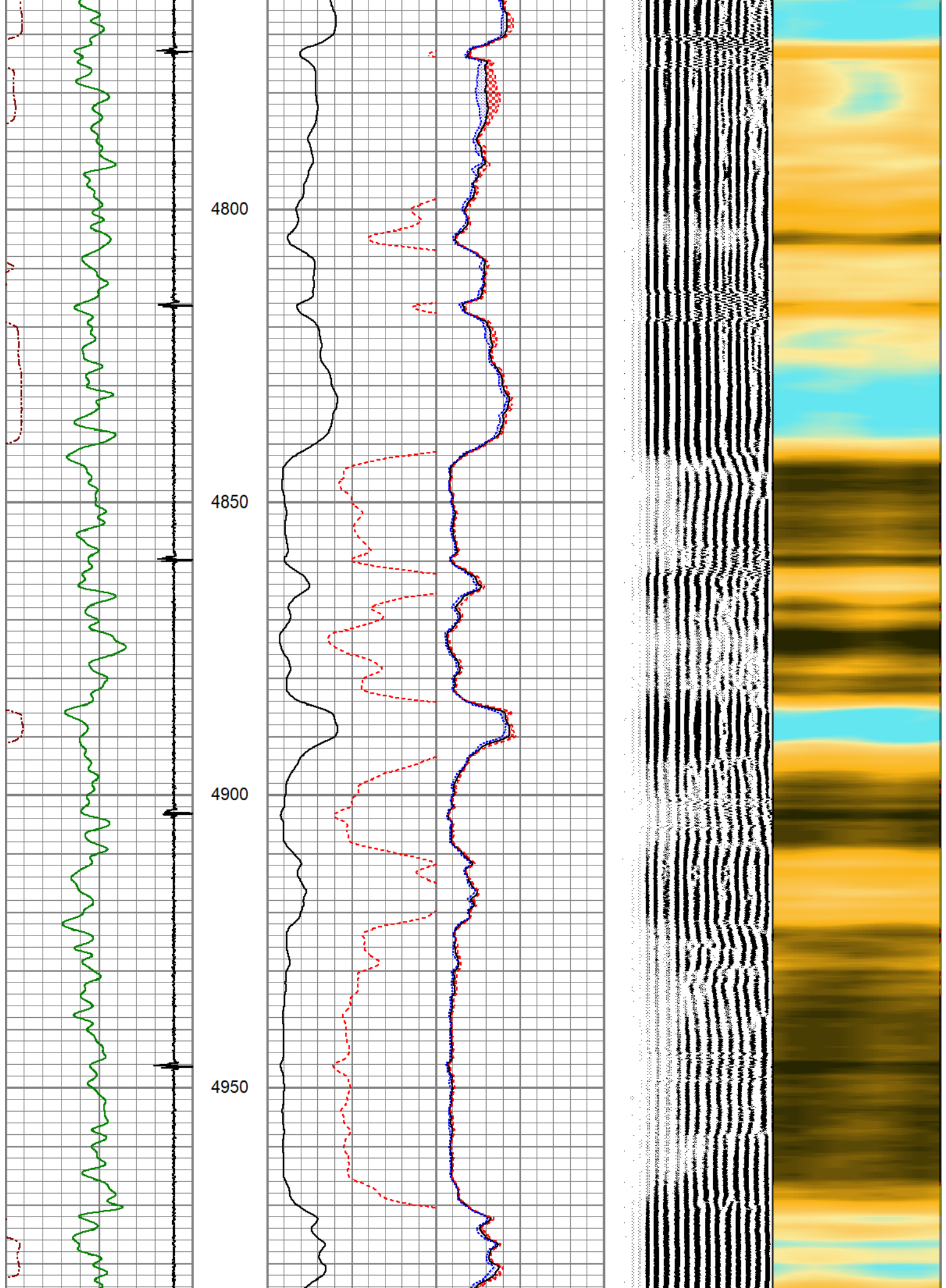
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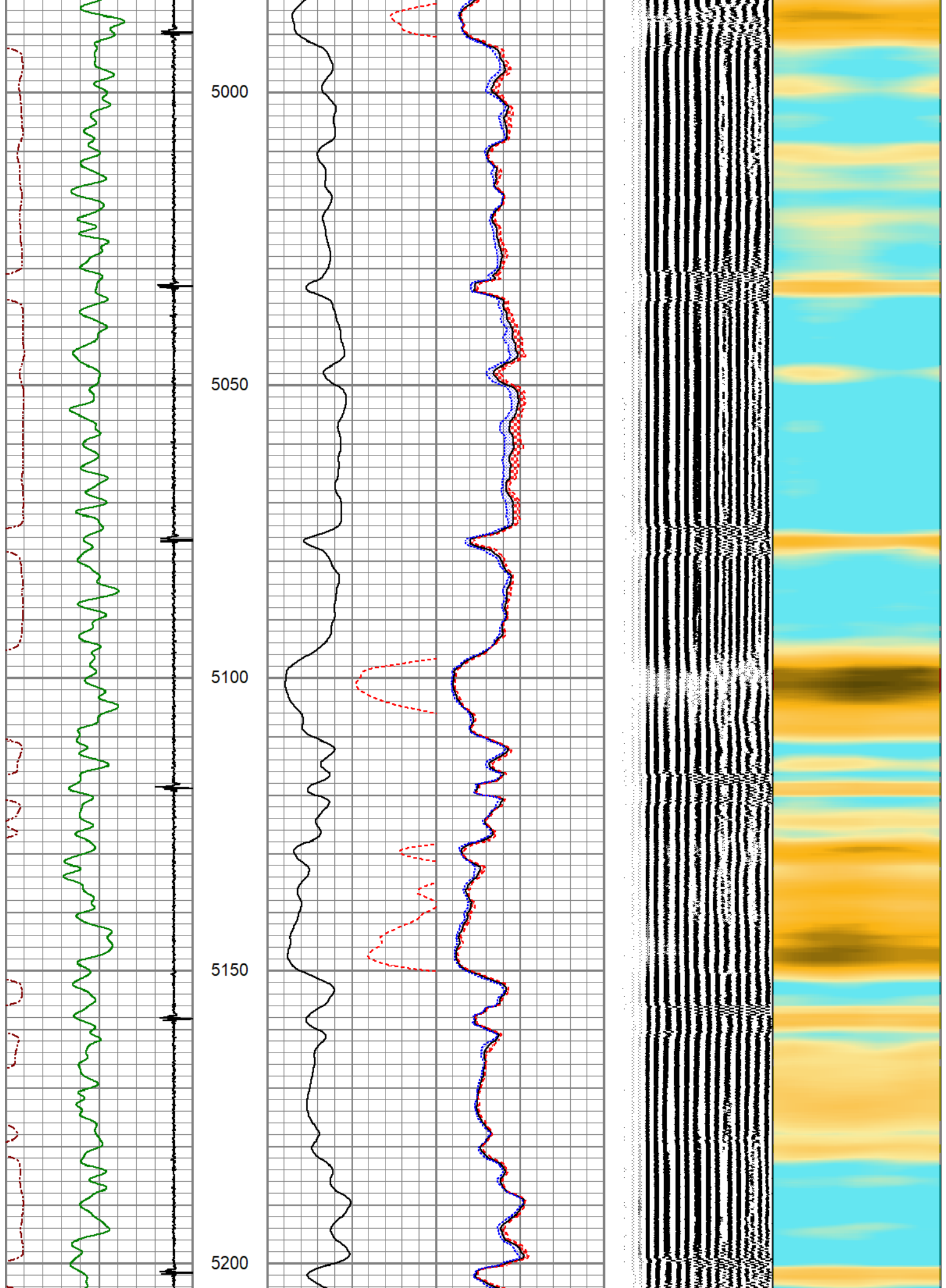


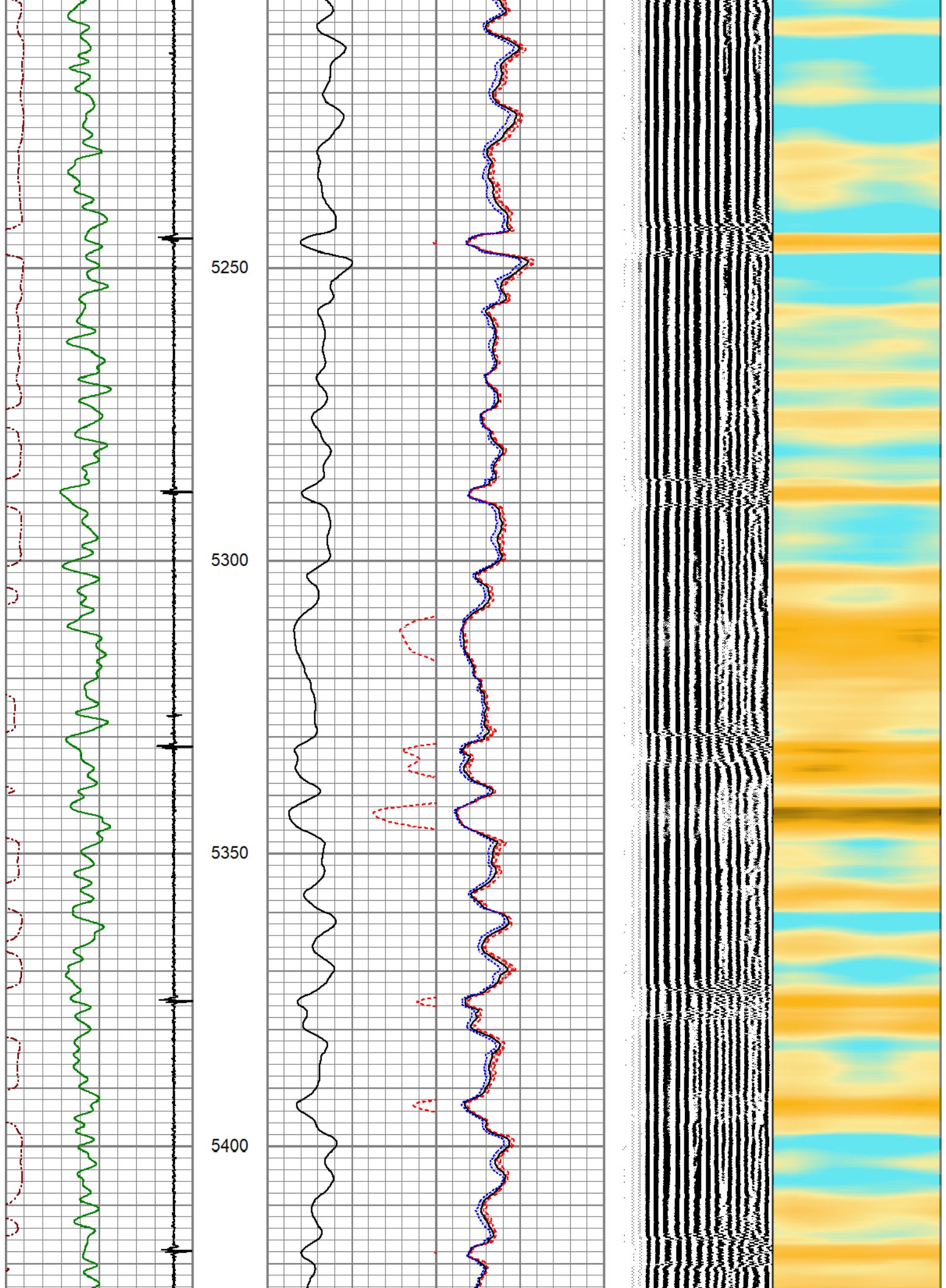


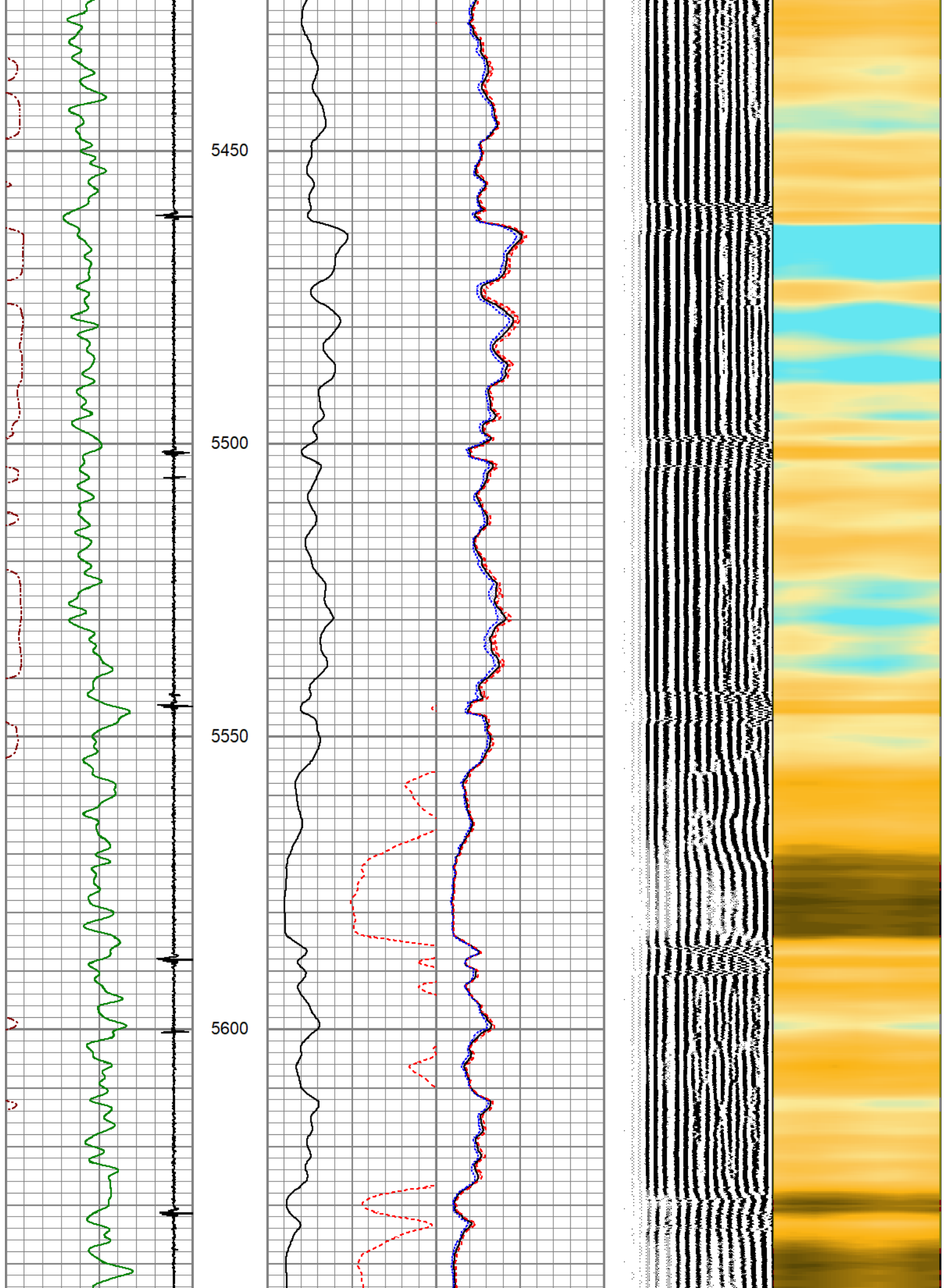


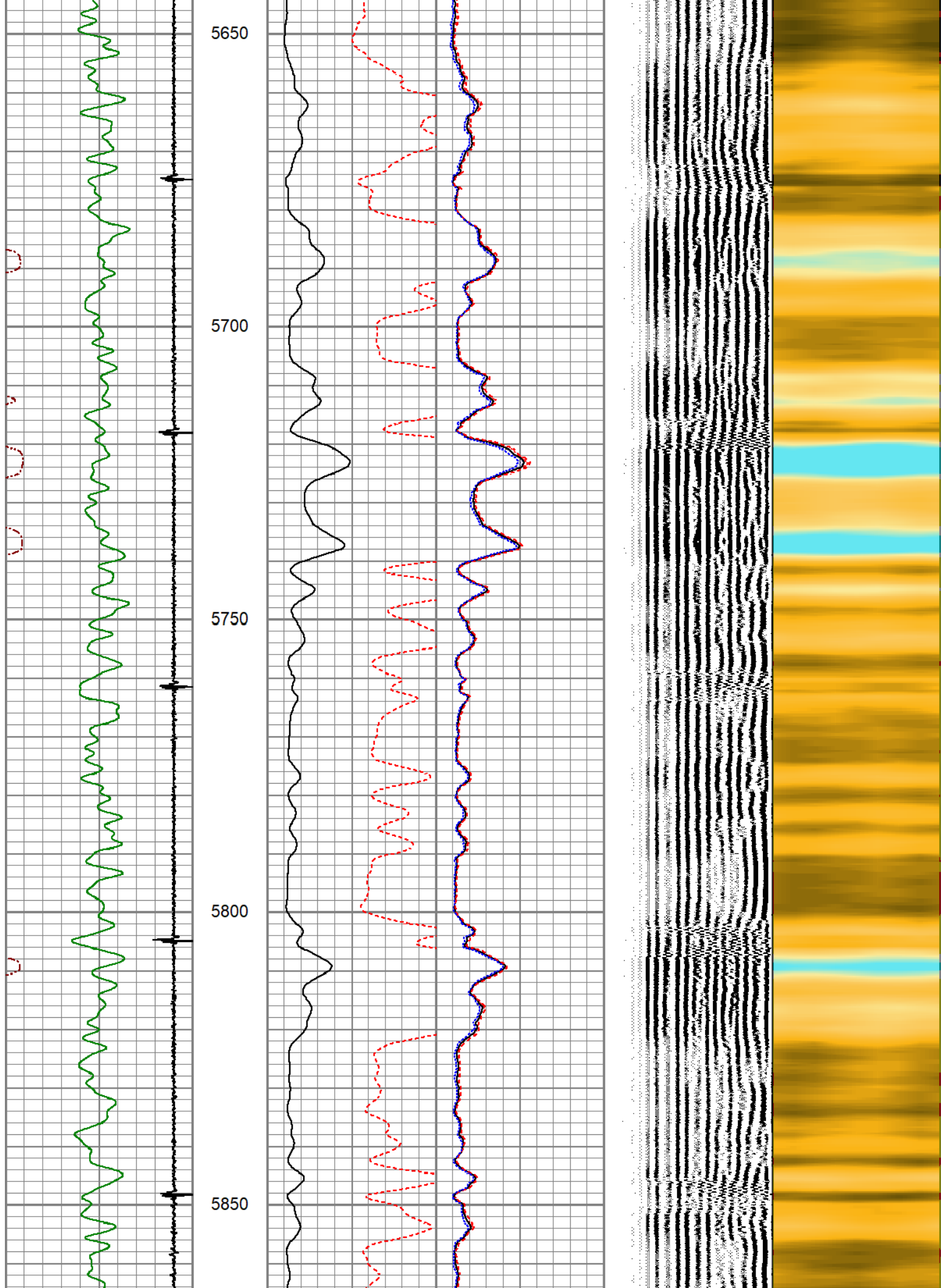


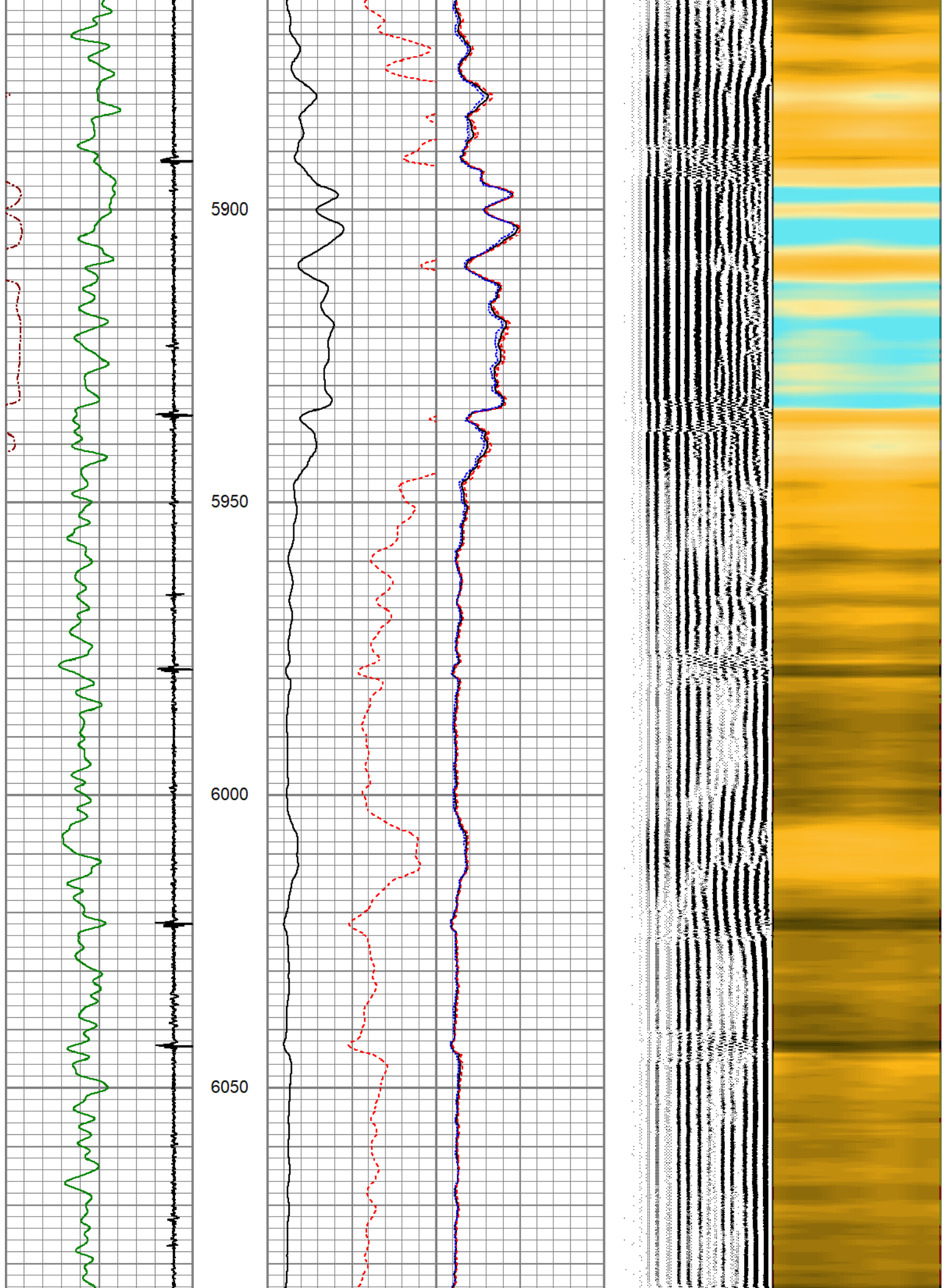


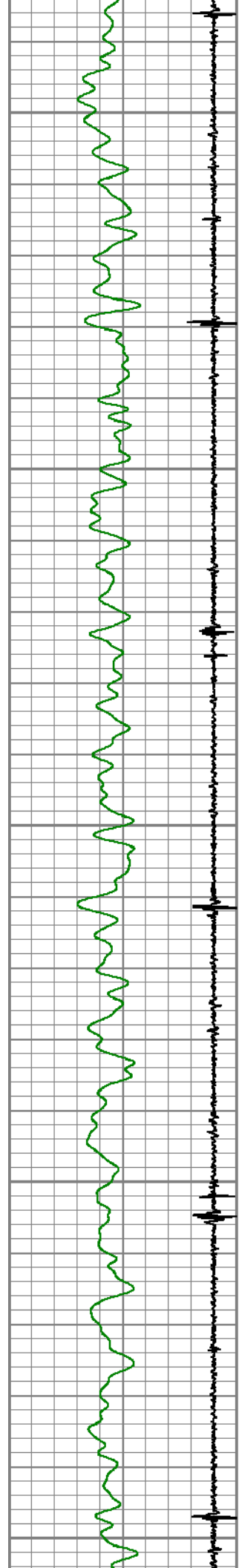












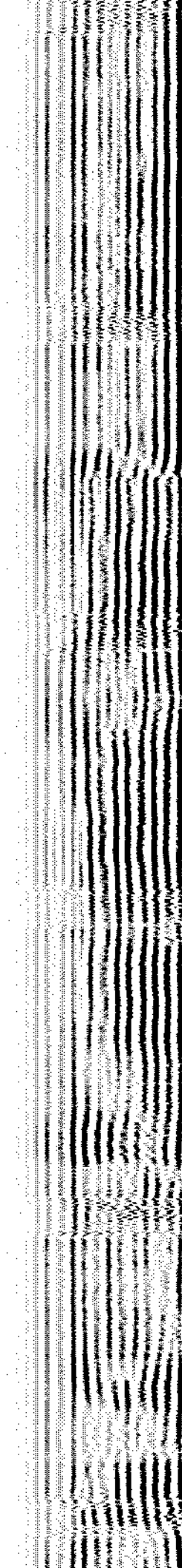
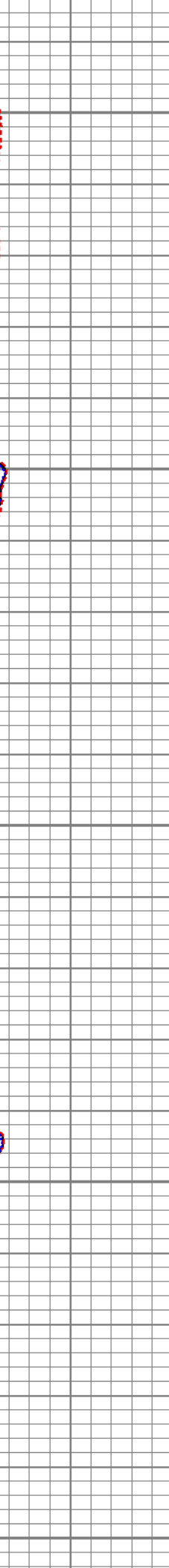
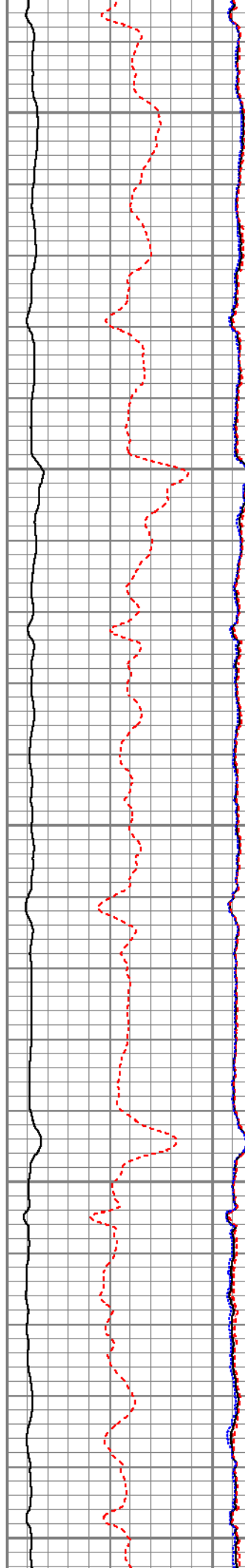
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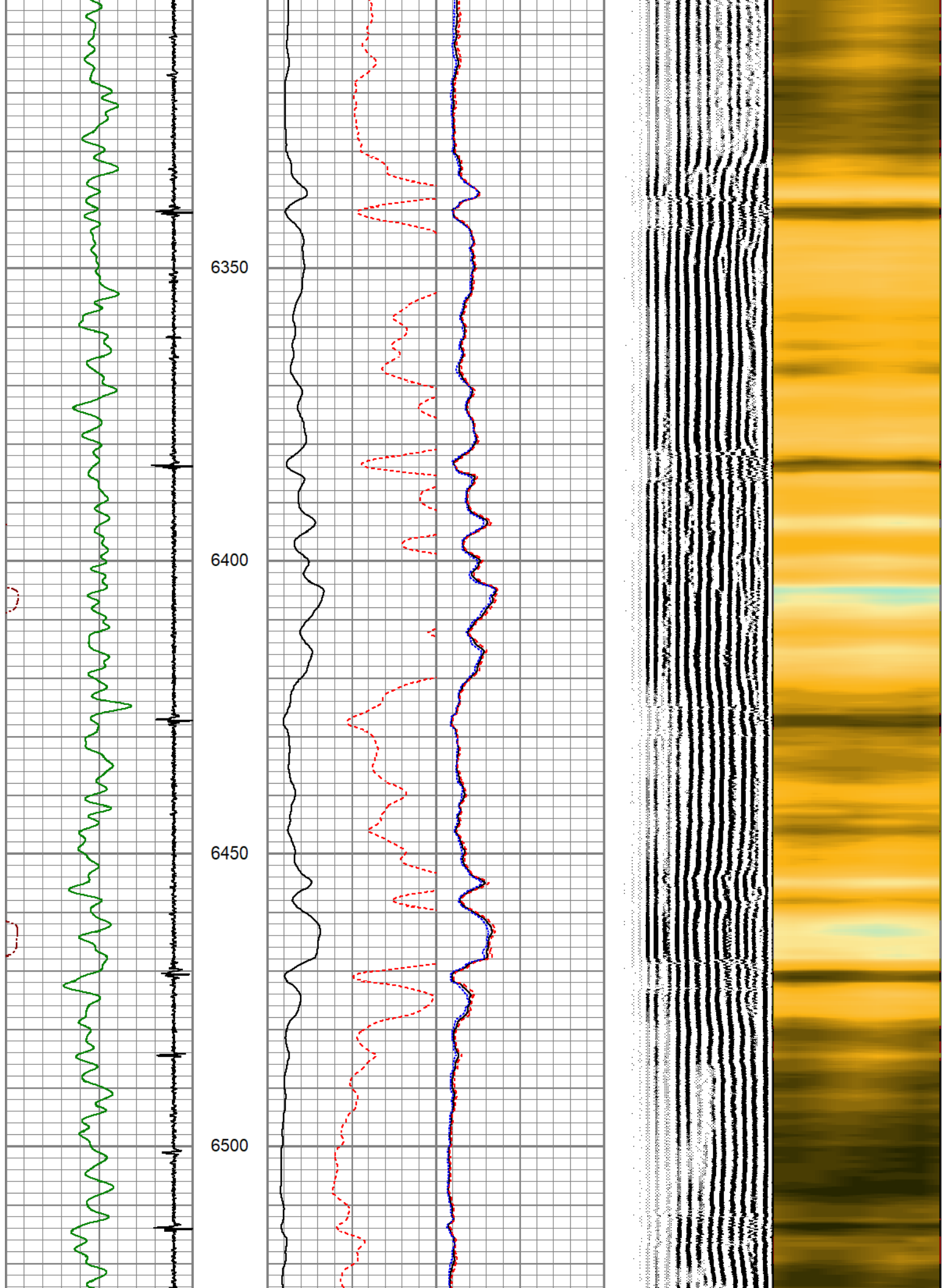
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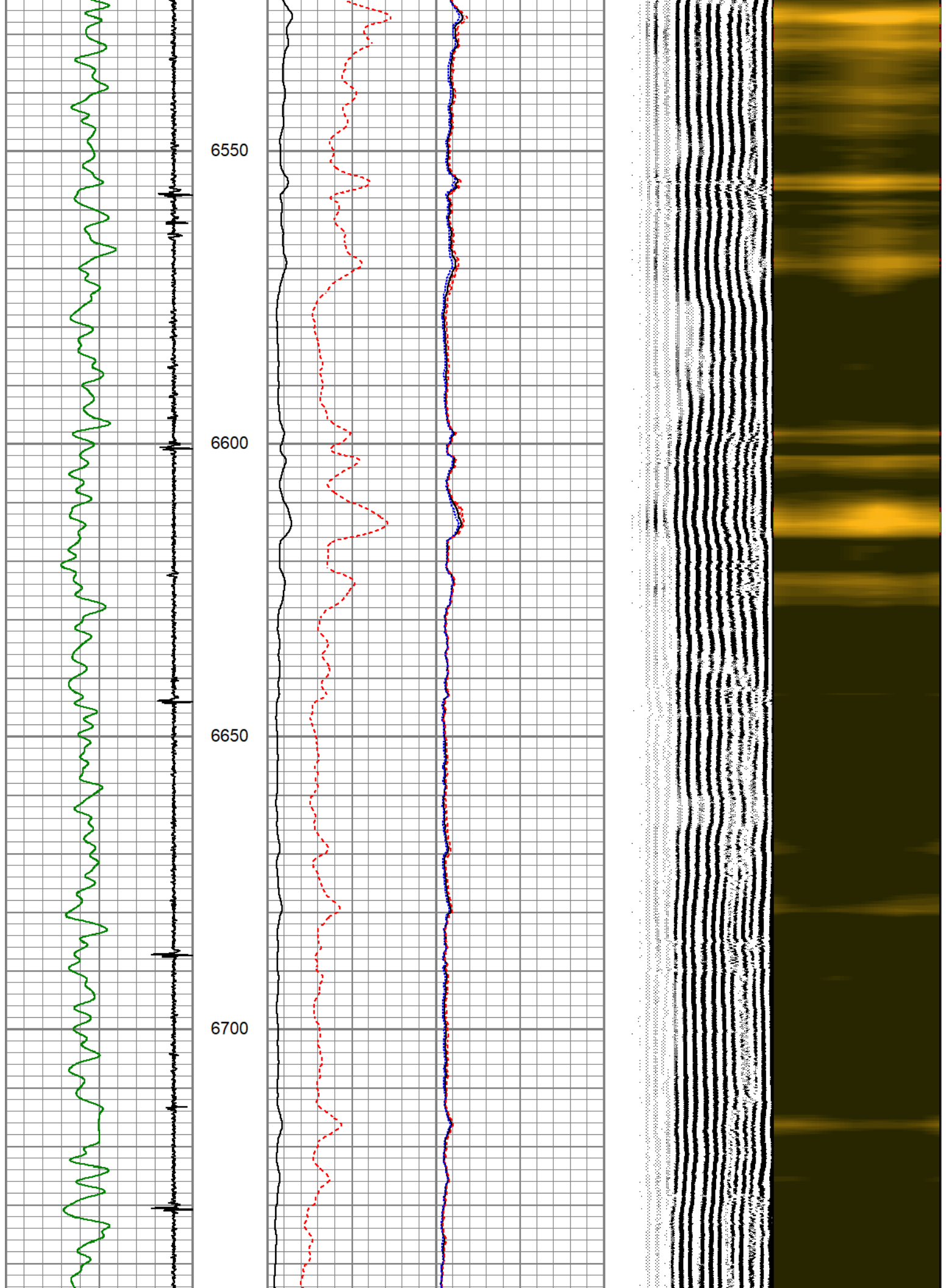
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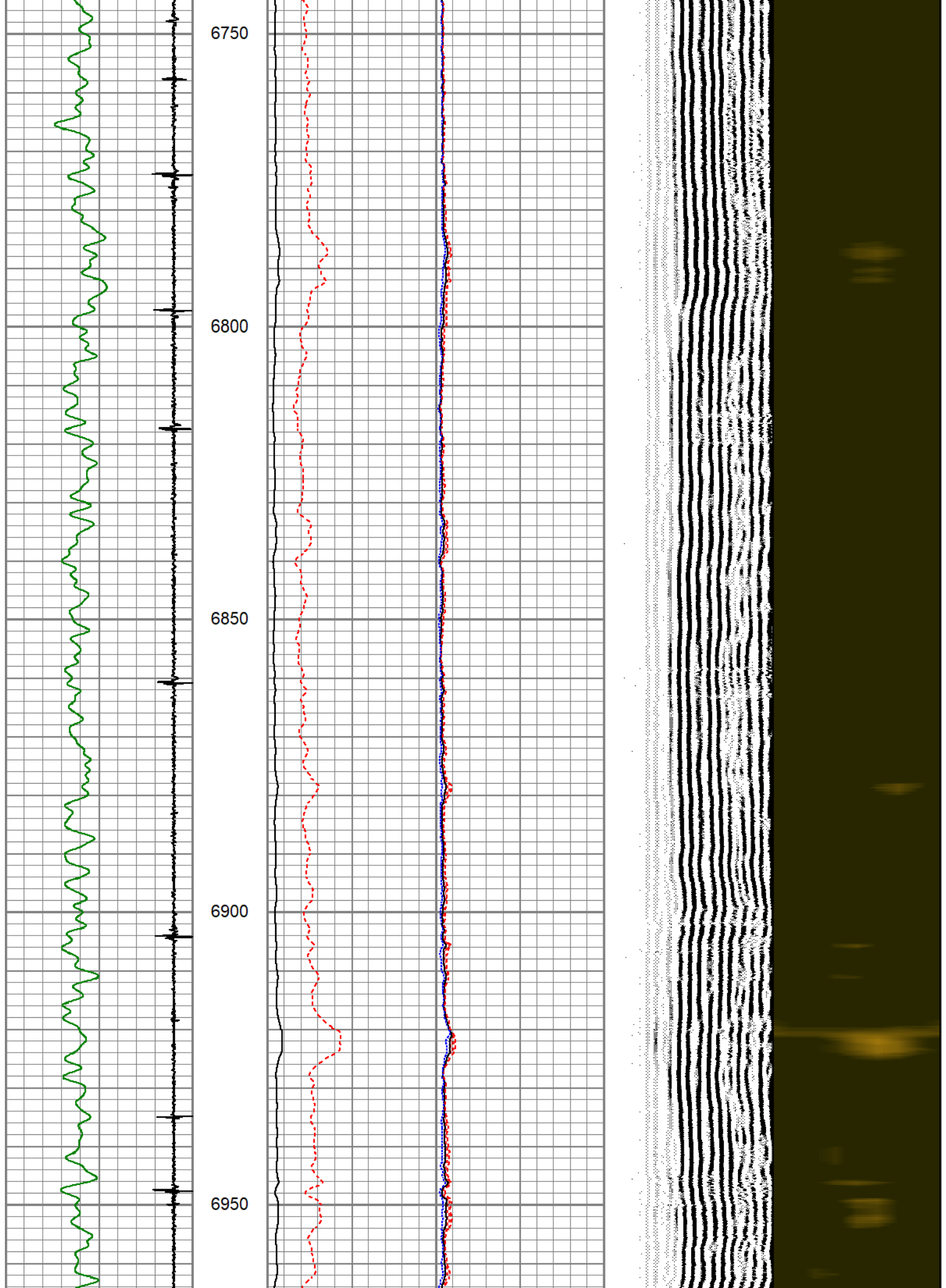
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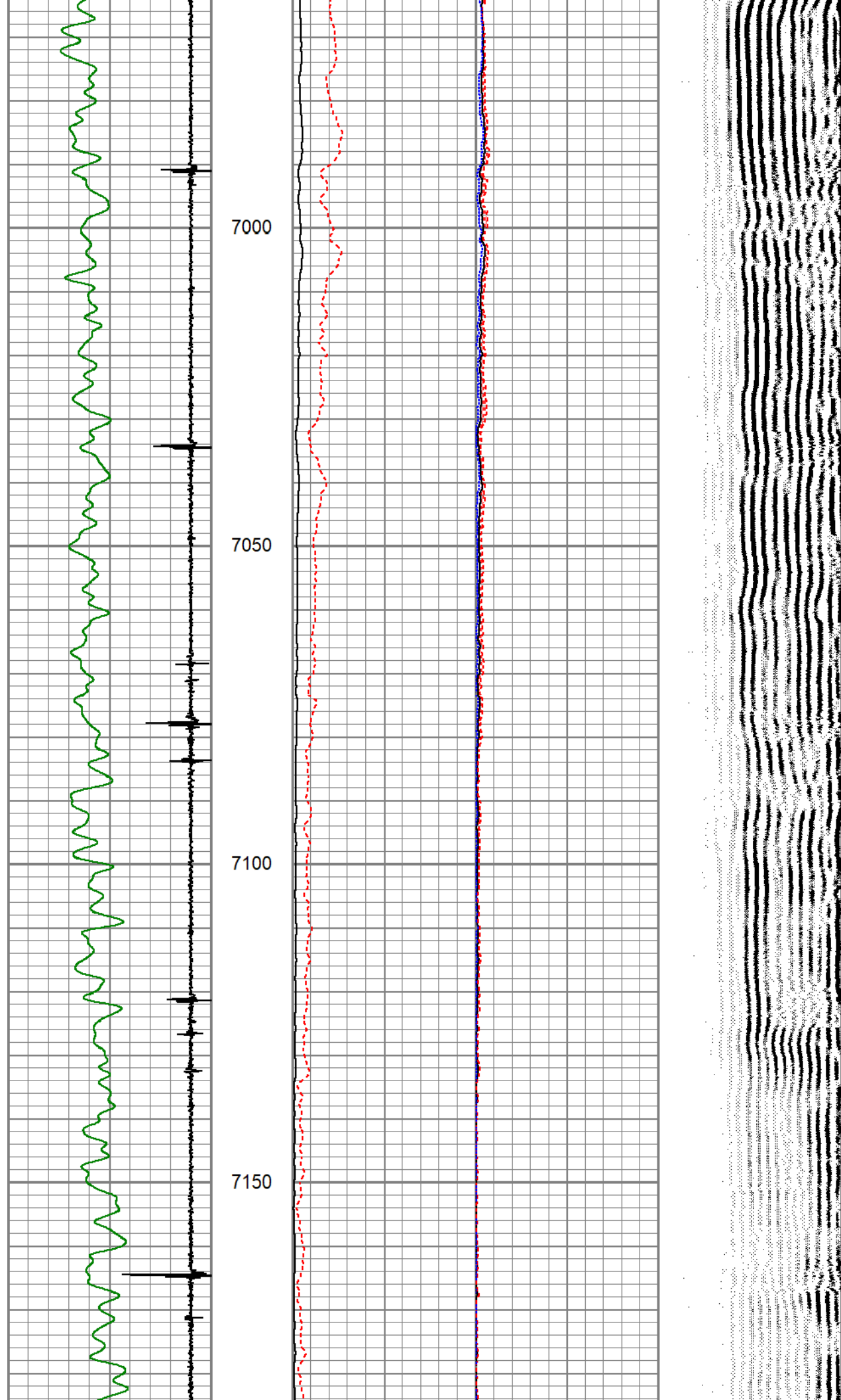
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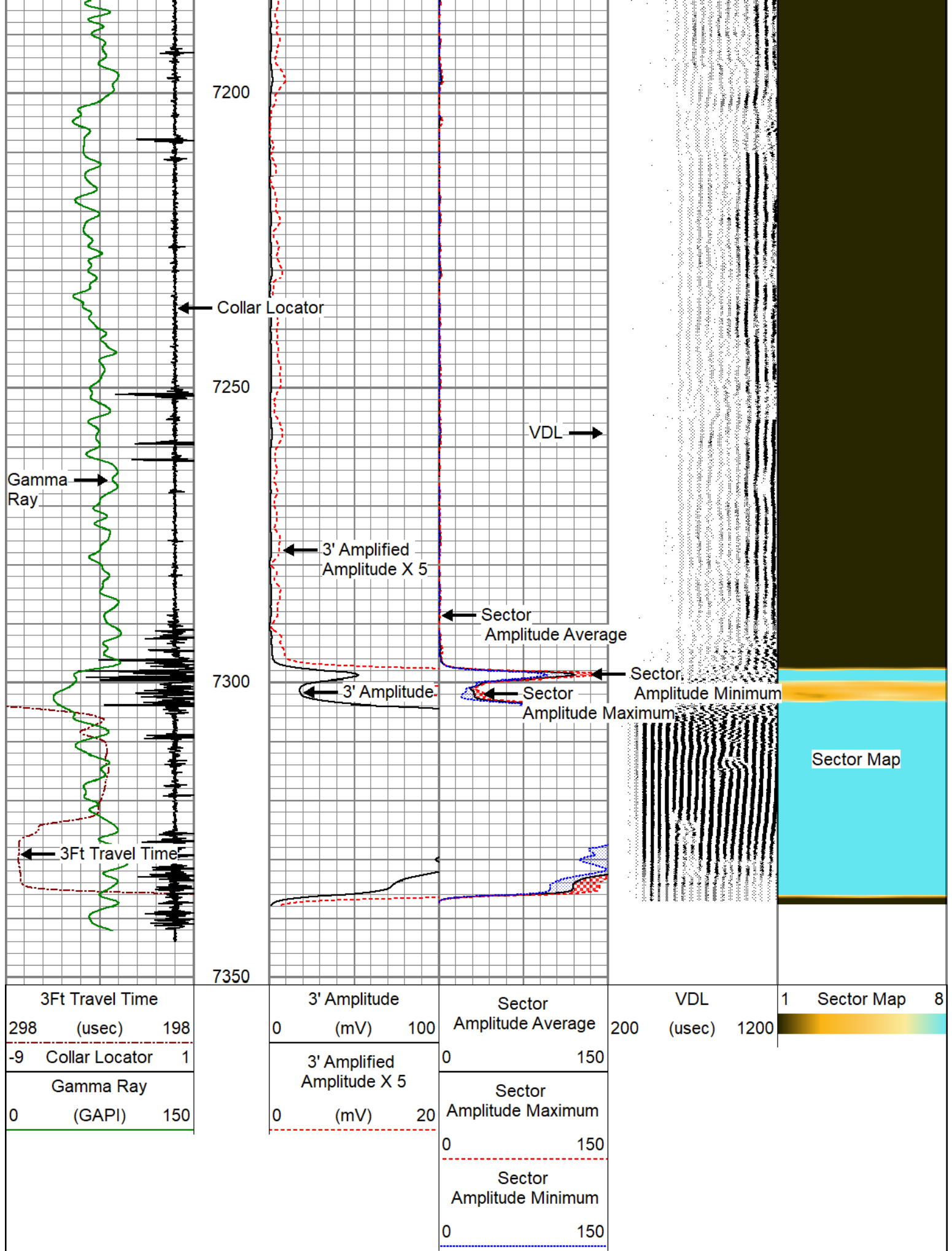













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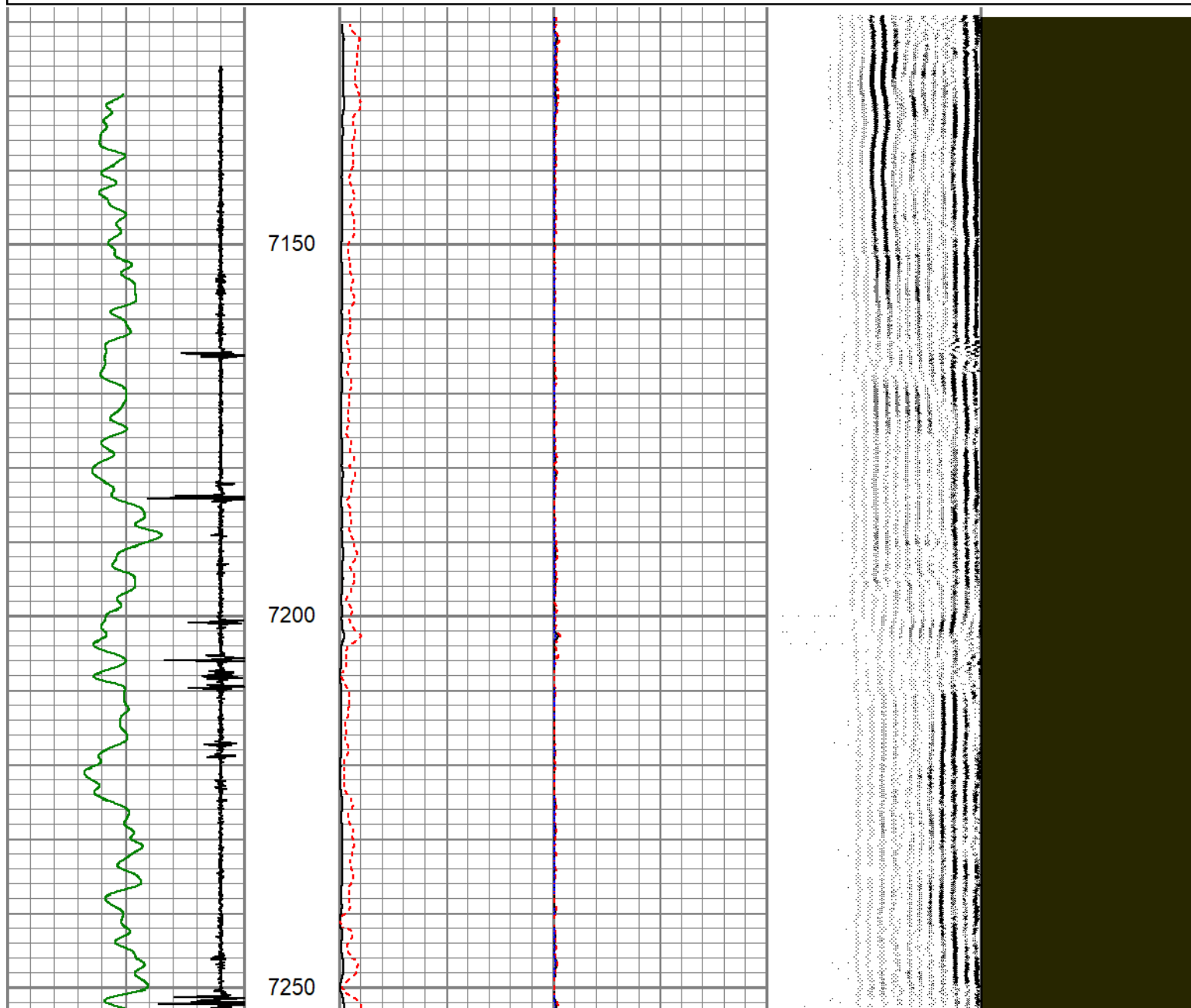
Pioneer Energy Services

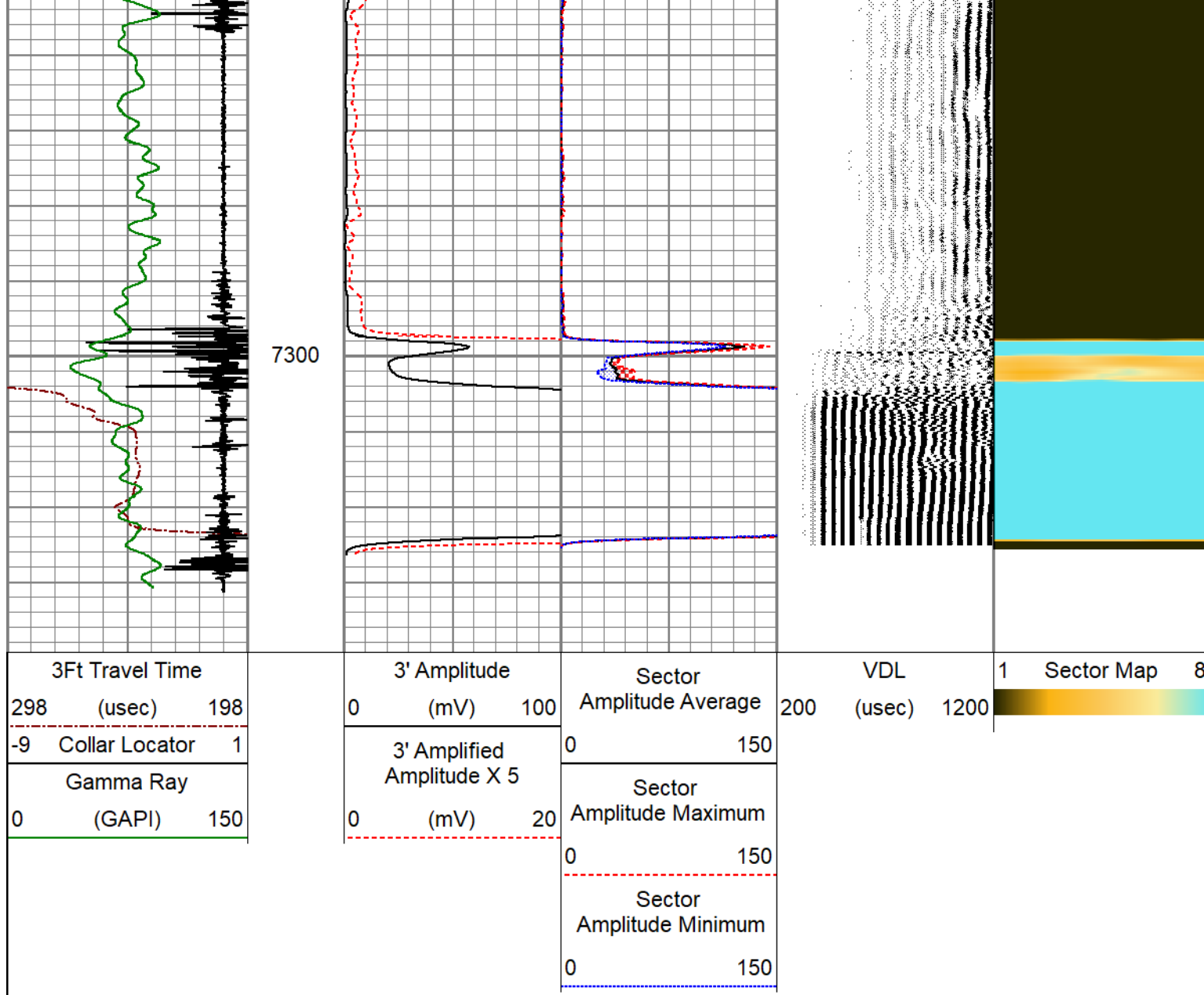
REPEAT SECTION

ZERO PSI APPLIED AT SURFACE

Database File e:\highpoint_critter creek 15-6302b_0512347303_20181109_scbl.db
Dataset Pathname pass1.5
Presentation Format pinr_scbl
Dataset Creation Fri Nov 09 15:16:51 2018
Charted by Depth in Feet scaled 1:240

3Ft Travel Time				3' Amplitude		Sector		VDL			1 Sector Map 8	
298	(usec)	198		0	(mV)	100	Amplitude Average		200	(usec)	1200	
-9 Collar Locator 1				3' Amplified Amplitude X 5		0	150					
Gamma Ray						Sector						
0	(GAPI)	150		0 (mV) 20		Amplitude Maximum						
						0	150					
						Sector Amplitude Minimum						
					0	150						





Calibration Report			
Database File	E:\highpoint_critter creek 15-6302b_0512347303_20181109_scbl.db		
Dataset Pathname	pass1.7		
Dataset Creation	Fri Nov 09 15:22:13 2018		
Gamma Ray Calibration Report			
Serial Number:	120926		
Tool Model:	275_6-PIN		
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:	070151		
Tool Model:	RBL-D		
Calibration Casing Diameter:	7.000	in	

Master Calibration, performed Fri Nov 09 11:51:10 2018:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.000	1.027	1.000	62.165	59.548	1.000
CAL	0.000	1.783				
5'	0.000	1.153	1.000	62.165	53.028	1.000
SUM						
S1	0.000	0.951	0.000	100.000	105.142	0.000
S2	0.000	1.021	0.000	100.000	97.906	0.000
S3	0.000	1.102	0.000	100.000	90.717	0.000
S4	0.000	1.138	0.000	100.000	87.909	0.000
S5	0.000	1.132	0.000	100.000	88.315	0.000
S6	0.000	1.078	0.000	100.000	92.783	0.000
S7	0.000	1.008	0.000	100.000	99.231	0.000
S8	0.000	0.923	0.000	100.000	108.363	0.000

Air Zero Calibration, performed (Not Performed):

	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


PIONEER

Pioneer Energy Services

Company	HIGHPOINT OPERATING CORP.
Well	CRITTER CREEK 15-6302B
Field	HEREFORD
County	WELD
State	COLORADO