

HALLIBURTON

RADIAL CEMENT BOND LOG
GR-CCL

Company	Bayswater Eexploration and Production			
Well	Sherley D-4-9HN			
Field	Greeley			
County	Weld	State	CO	
Company Bayswater Eexploration and Production				
Well Sherley D-4-9HN				
Field Greeley				
County Weld State CO				
API No.: 05-123-409670000		Serv #: 902444982		Other Services
Location: BOTTOM HOLE: 470 FSL & 730 WFL				
Sec:4 Twp:5N Rge: 65W				

Permanent Datum	GROUND LEVEL		Elevation	4641	Elevation
Log Measured From	KB		, 22 Ft. above perm. datum		K.B. 4619
Drilling Measured From	KB				D.F. G.L. 4641
Date @ Time Logged	MAY-27-2015	Type Fluid in Hole	WATER		
Run No.	ONE	Density of Fluid	8.4 PPG		
Depth - Driller	16500 ft	Fluid Level	50 ft		
Depth - Logger	9220 ft	Cement Top Est. Logged	n/a		
Bottom - Logged Interval	9198 ft	Equipment / Location	11808537 / RS		
Top - Log Interval	surface	Recorded by	Pedro Gonzalez Baqueroiro		
Max. Recorded Temp.	n/a	Witnessed by	Joe Richardson		
CEMENTING DATA		Surface	Protection	Production	Liner
		String	String	String	
Date / Time Cemented					
Primary / Squeeze					
Expected					
Compressive Strength	psi@	hrs	psi@	hrs	psi@
Cement Volume					
Cement Type / Weight	/		/		/
Formulation					
Mud Type / Mud Wgt.	/		/		/
Borehole Record			Casing & Tubing Record		
Run Number	Bit	From	To	Size	Weight
				7"	29#
				4.5"	13.5#
					surface
					16566

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HALLIBURTON DOES NOT GUARANTEE THE ACCURACY OF ANY INTERPRETATION OF THE LOG DATA, CONVERSION OF LOG DATA TO PHYSICAL ROCK PARAMETERS OR RECOMMENDATIONS WHICH MAY BE GIVEN BY HALLIBURTON PERSONNEL OR WHICH APPEAR ON THE LOG OR IN ANY OTHER FORM. ANY USER OF SUCH DATA, INTERPRETATIONS, CONVERSIONS, OR RECOMMENDATIONS AGREES THAT HALLIBURTON IS NOT RESPONSIBLE EXCEPT WHERE DUE TO GROSS NEGLIGENCE OR WILLFUL MISCONDUCT, FOR ANY LOSS, DAMAGES, OR EXPENSES RESULTING FROM THE USE THEREOF.

Comments

HES RADIAL CEMENT BOND LOG CORRELATED BY KB 22 FT
LOG INTERVAL PER CUSTOMER REQUEST
LOG IN TWO DIFERENT ZISE OF CASING 4.5" 13.5 # FROM 9220' TO 6400'
7' 29# CASING FROM 6400' TO SURFACE

Thank you for choosing Halliburton Energy Rock Spring WY

Service Ticket No.	902444982	API No.	05-123-409670000	PGM Ver	warriror 8
The Well Name, Location, Borehole Description, and / or Cementing Data Furnished by Client					
EQUIPMENT DATA					
TELEMETRY		RADIAL BOND TOOL			
Run No.	ONE	Run No.	ONE	Run No.	
Serial No.	10001449	Serial No.	11002212	Serial No.	
Model No.	TTTCU002	Model No.	RBT004	Model No.	
Diameter	1.69"	Diameter	3.125"	Diameter	
LOGGING DATA					
General Data					
Pass	Depths		Well Head	Speed	Logging Run Comments
No.	From	To	Pressure	Ft/Min	
ONE	9198	SURFACE	0	60	
	GAMMA RAY		AMP 3FT (mV)		TT 3FT
Pass	Scale		Scale		Scale
No.	L	R	L	R	L
ONE	0	150	0	100	400
DIRECTIONAL INFORMATION					
Maximum Deviation	90	deg. @	6413 FT	KOP	

HALLIBURTON

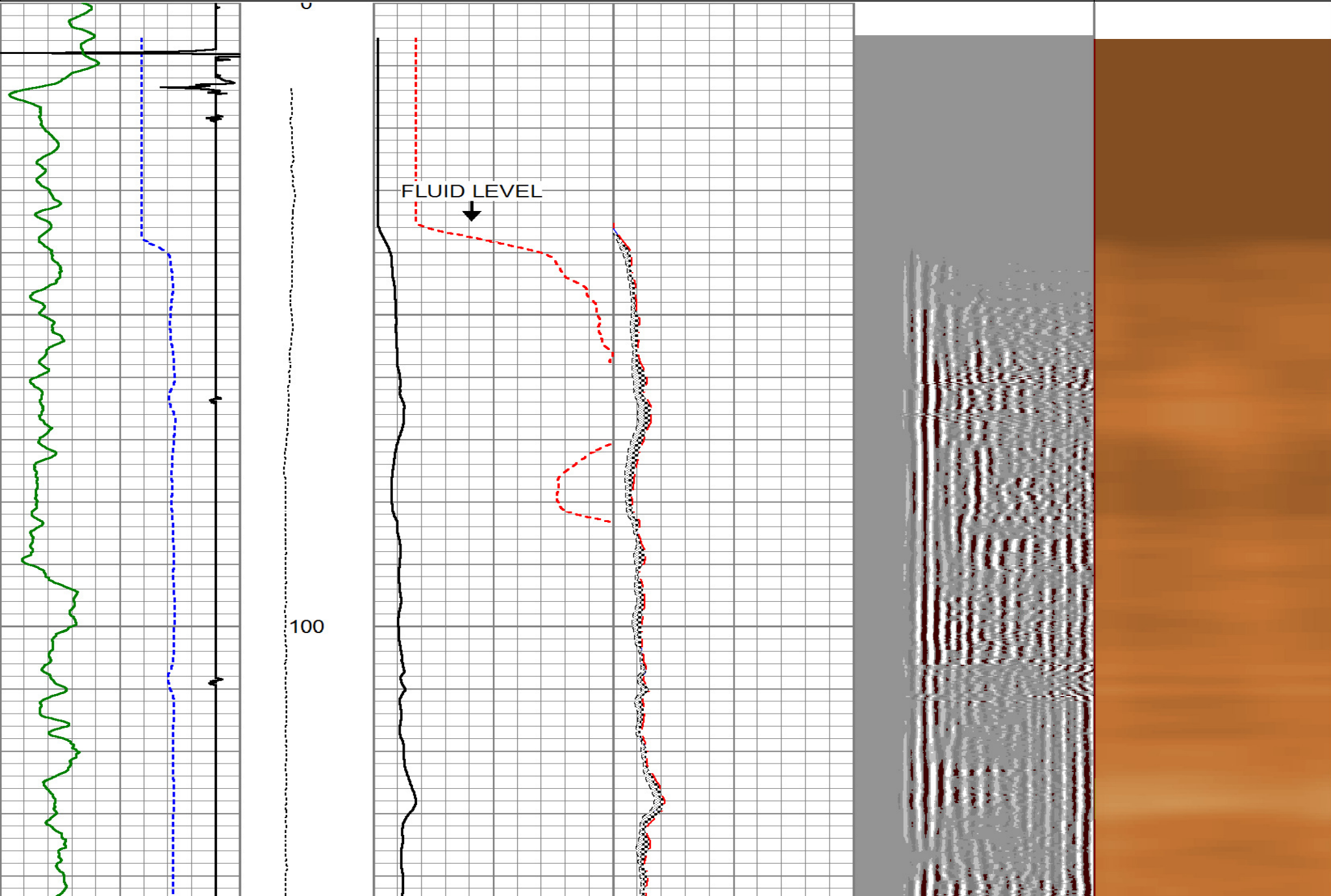
MAIN PASS

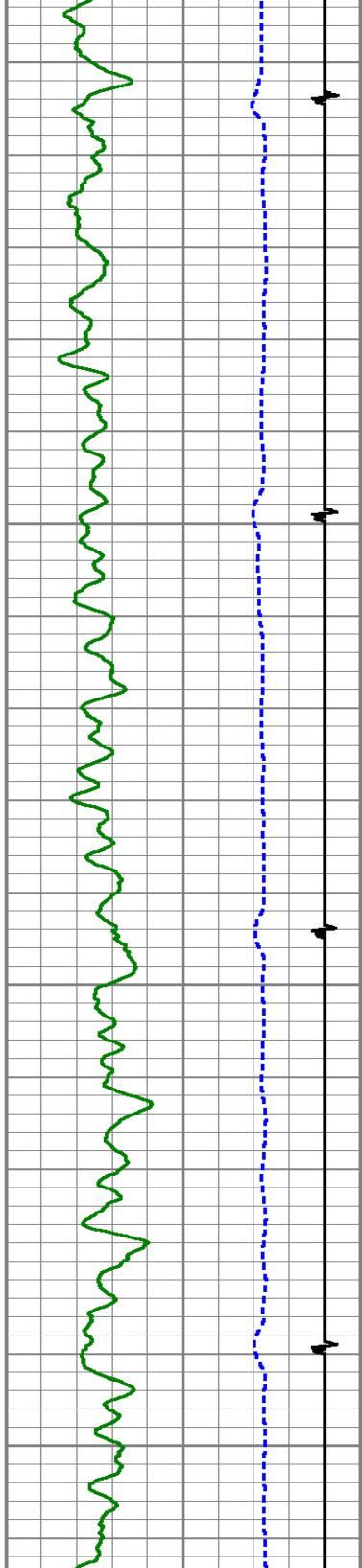
5"=100'

4.5" casing from 9220 ft to 6400 ft and 7" casing from 6400 ft to surface

Database File sherley d-4-9hn.db
Dataset Pathname GR/Sh_D_4_9HN/run1/MAIN3
Presentation Format radial

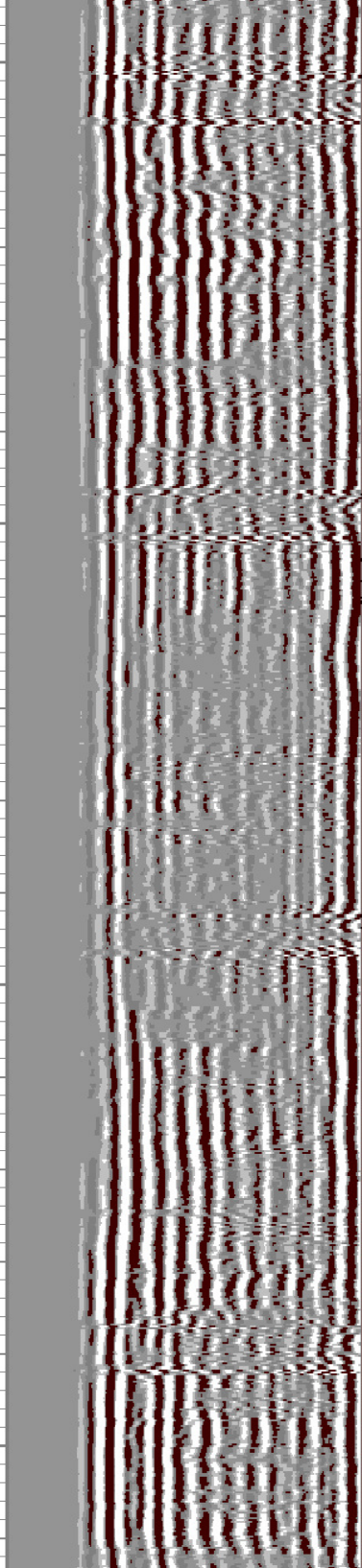
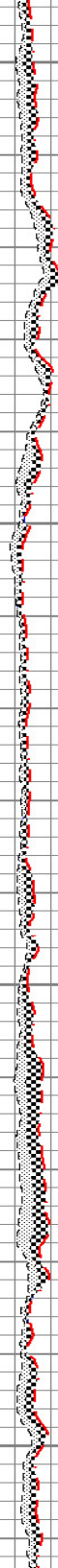
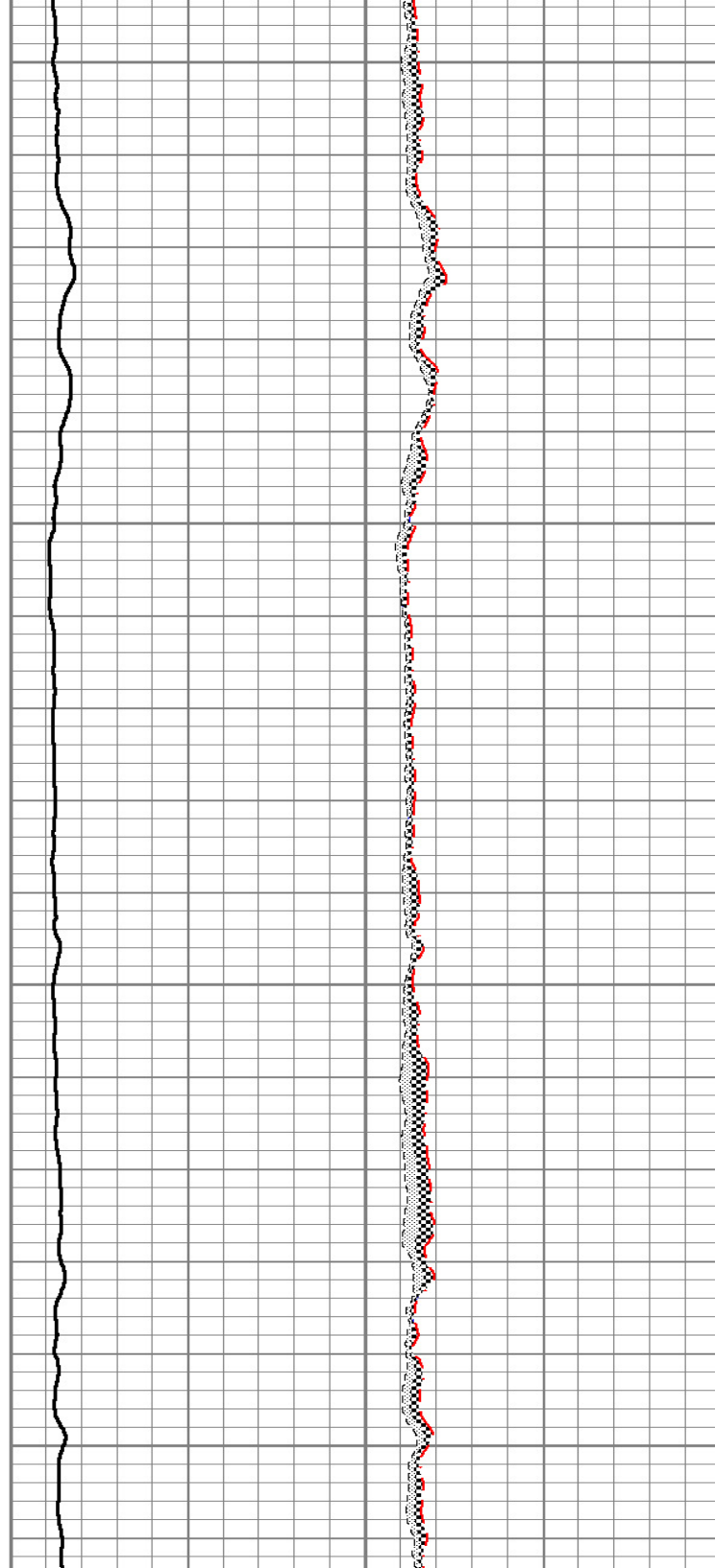
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-2250	CCL	250	0 (lb)1800	0	AMPx5 (mV)	10	0	AMPMAX	100				1		100
0	GR (GAPI)	150					0	AMPMIN	100						

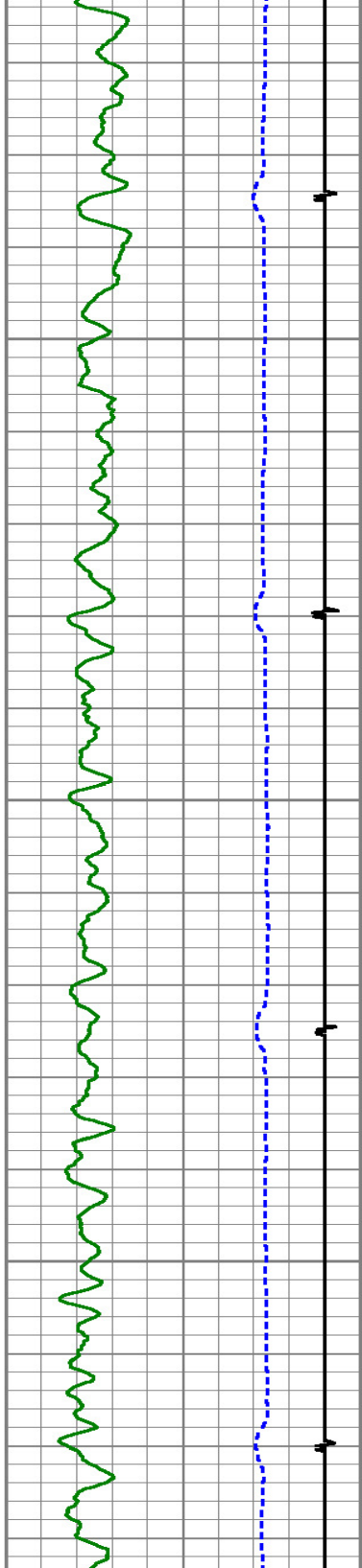




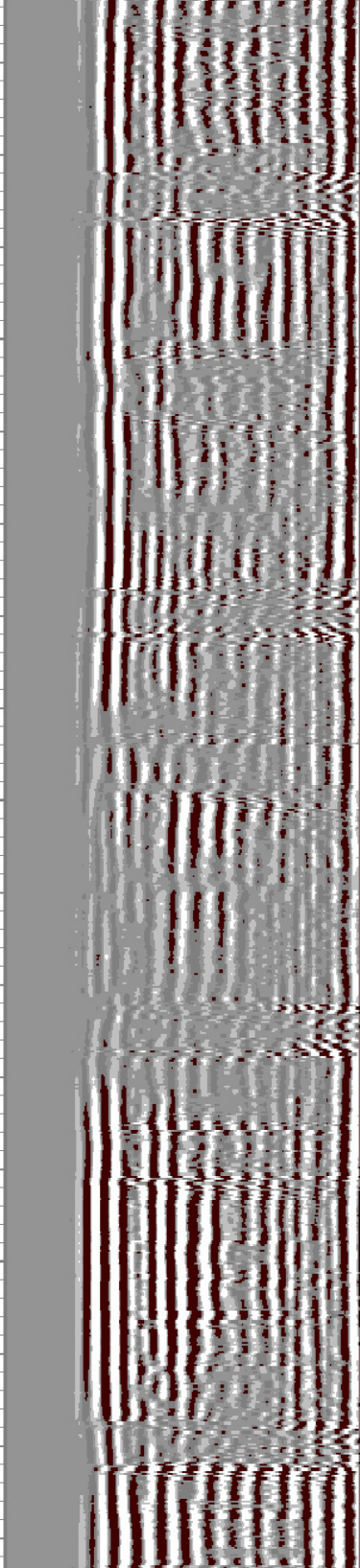
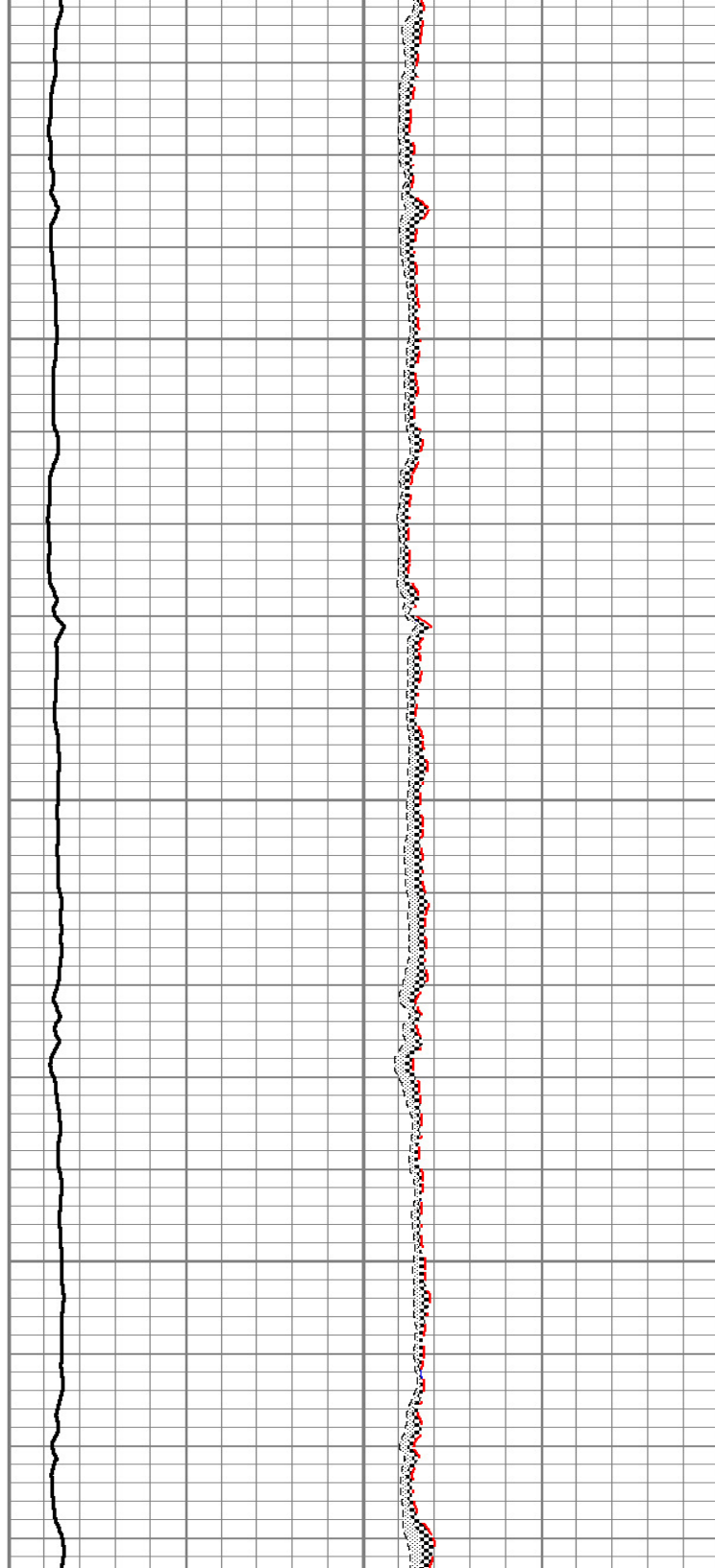
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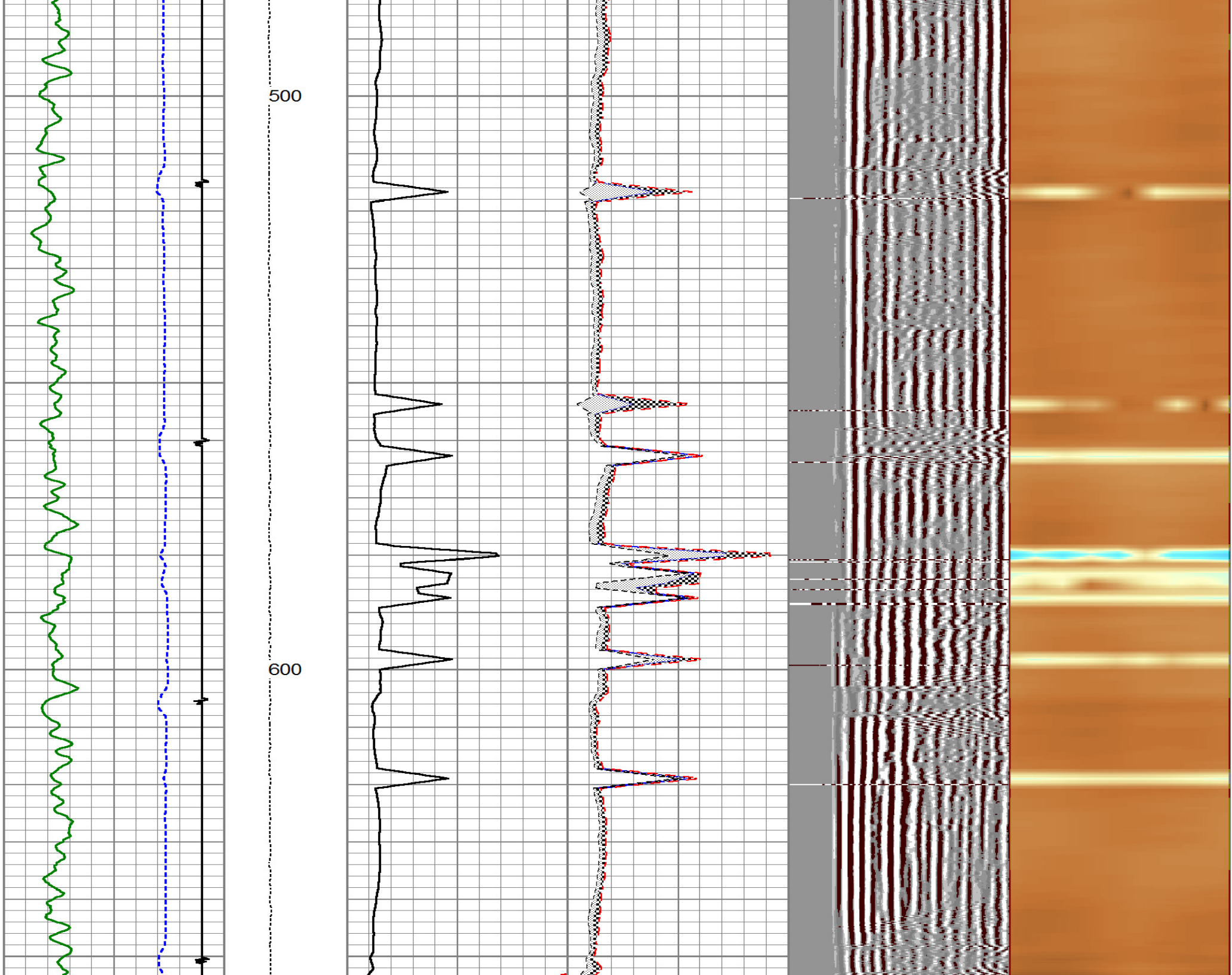
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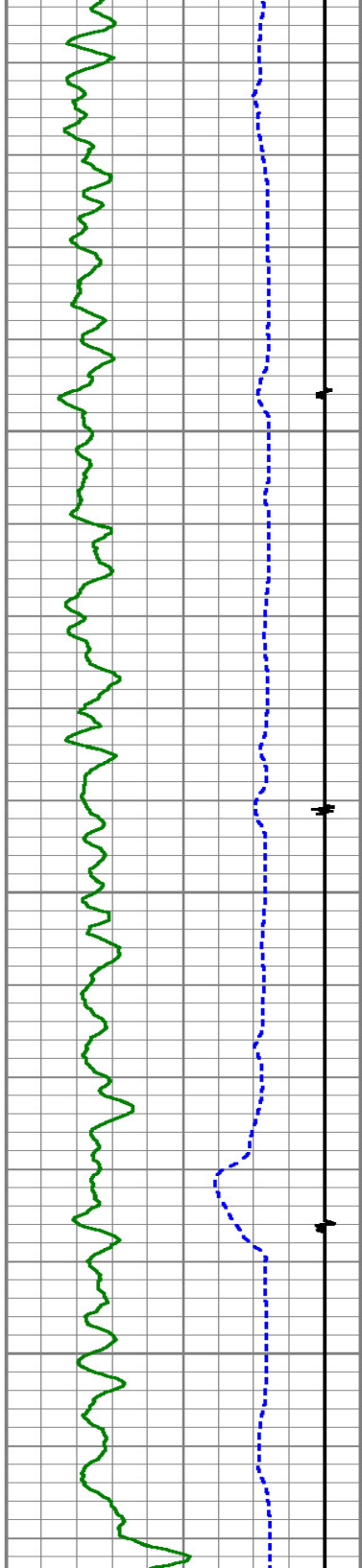




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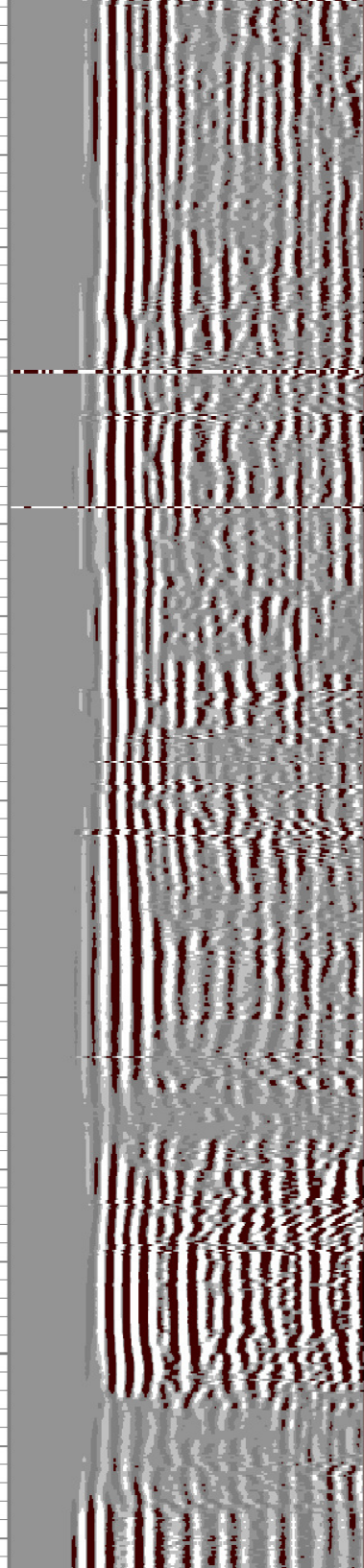
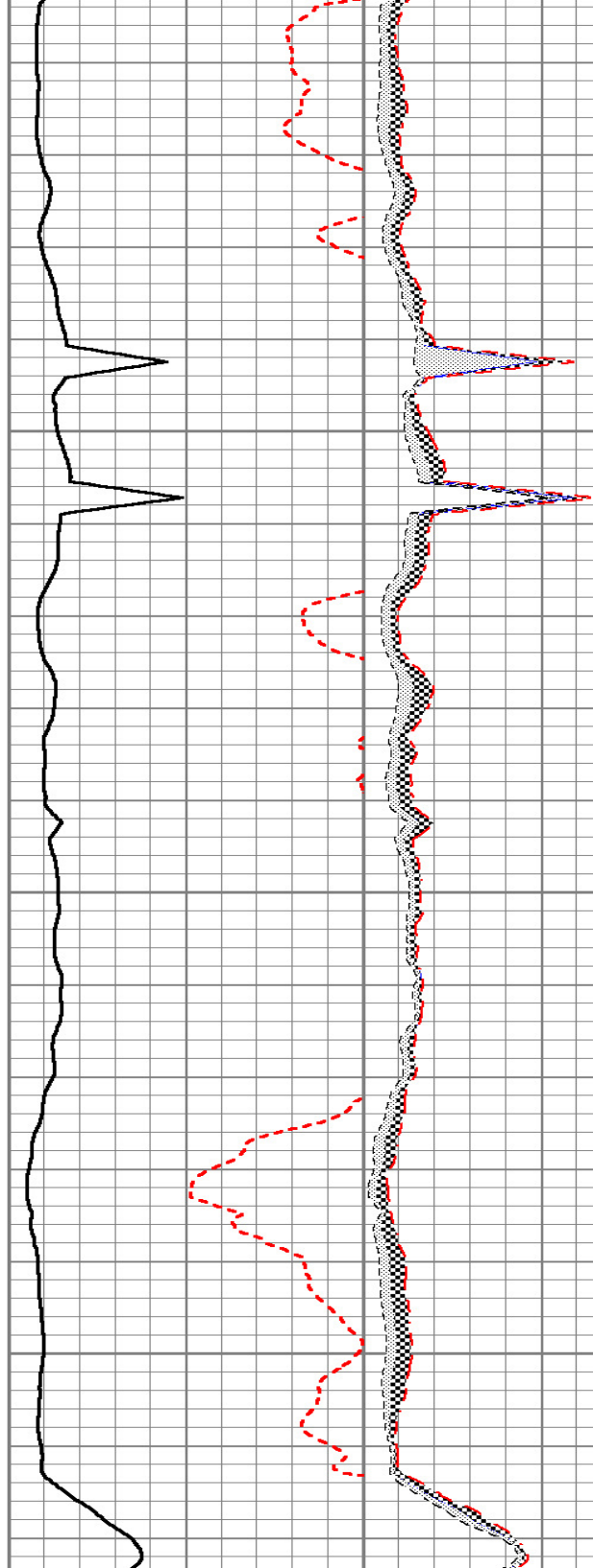


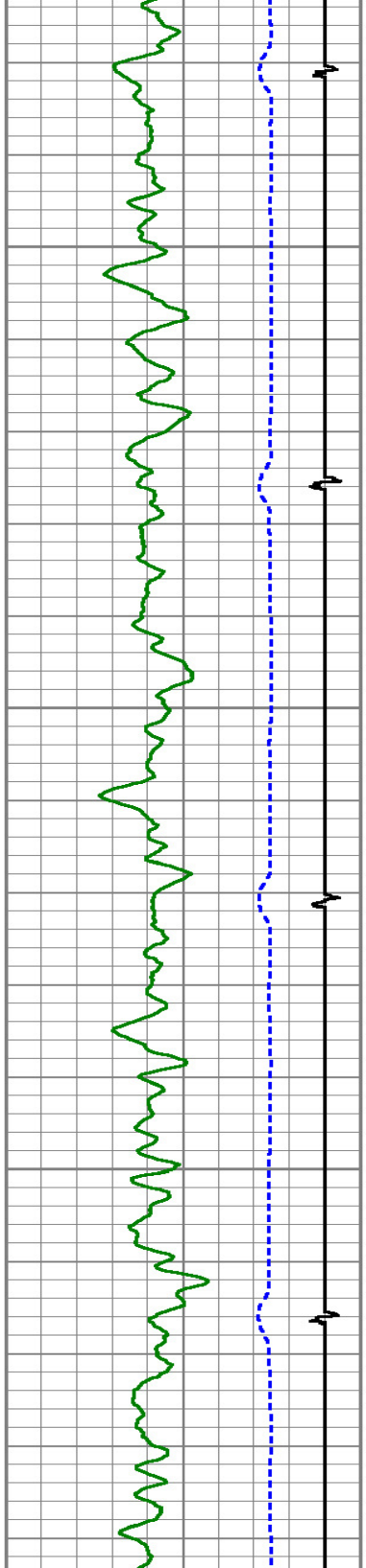




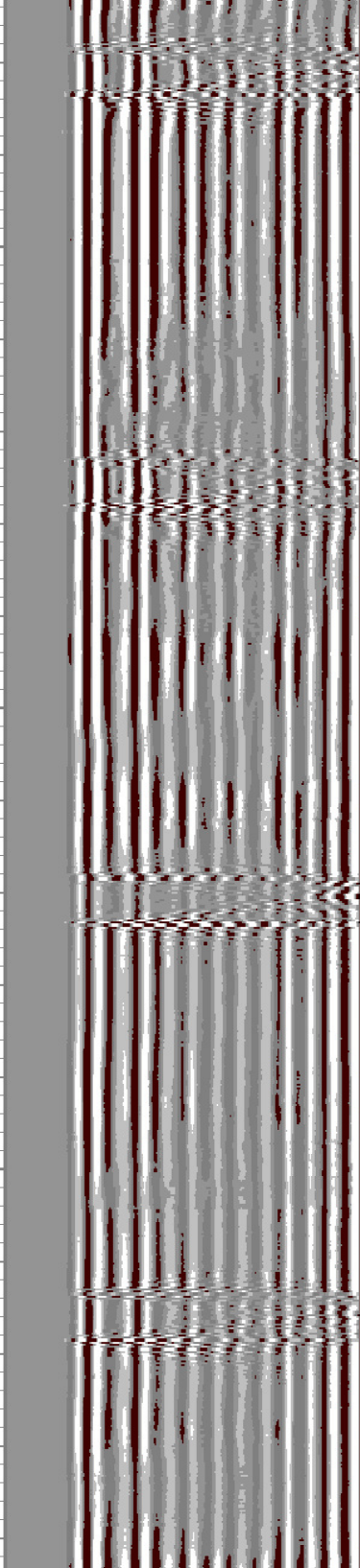
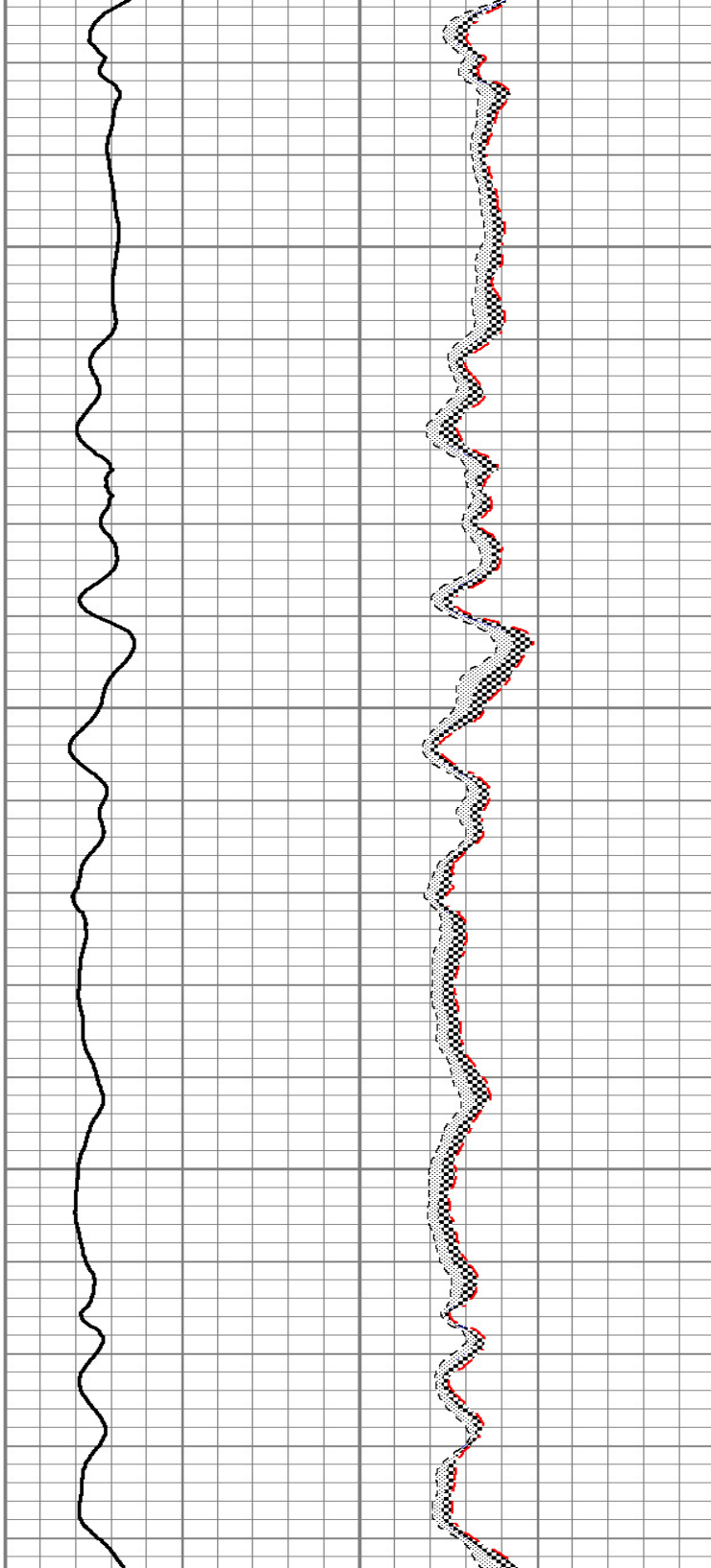
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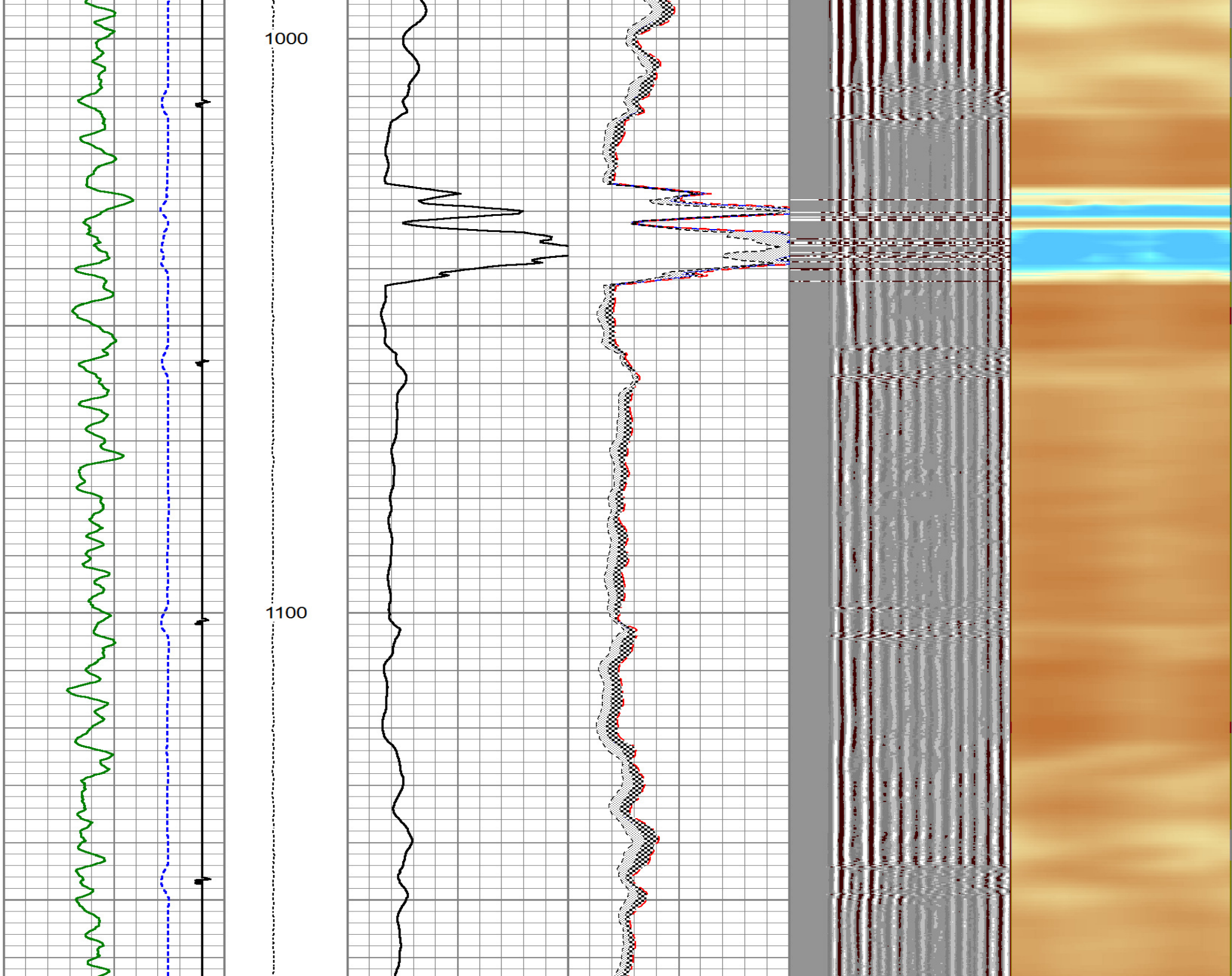
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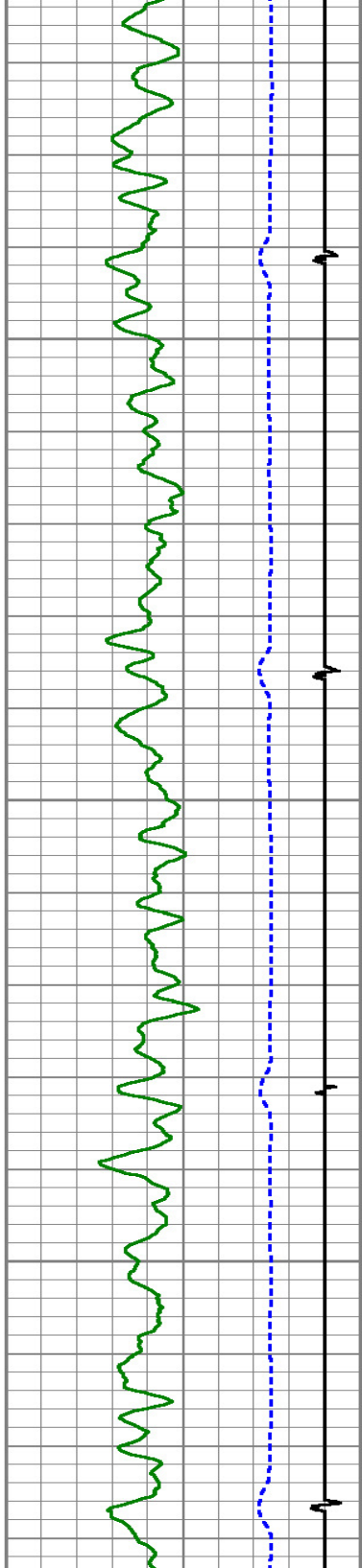




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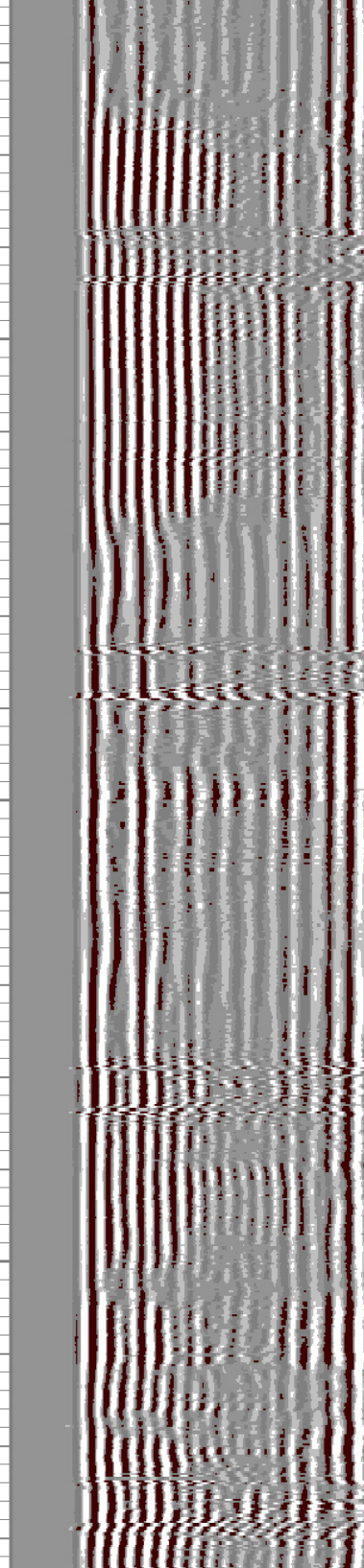
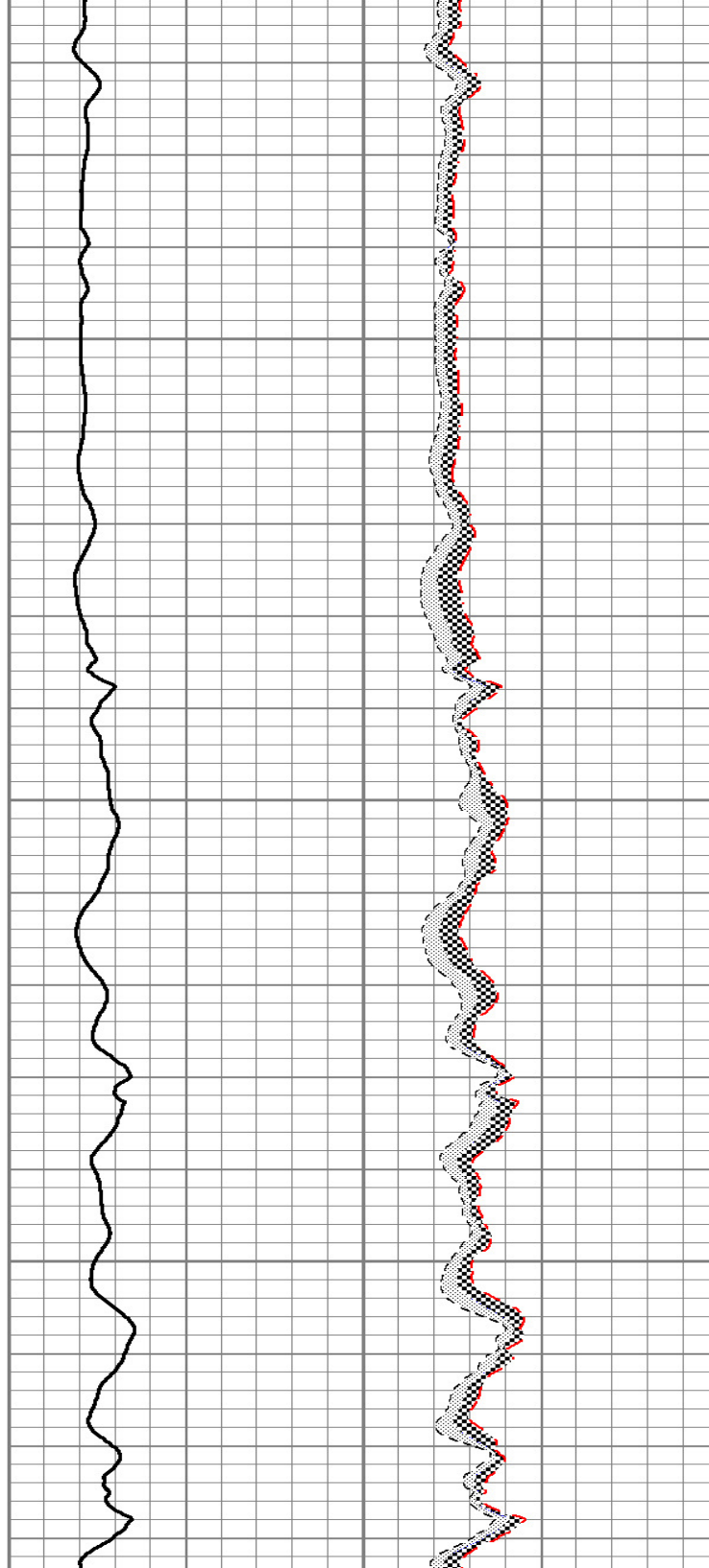


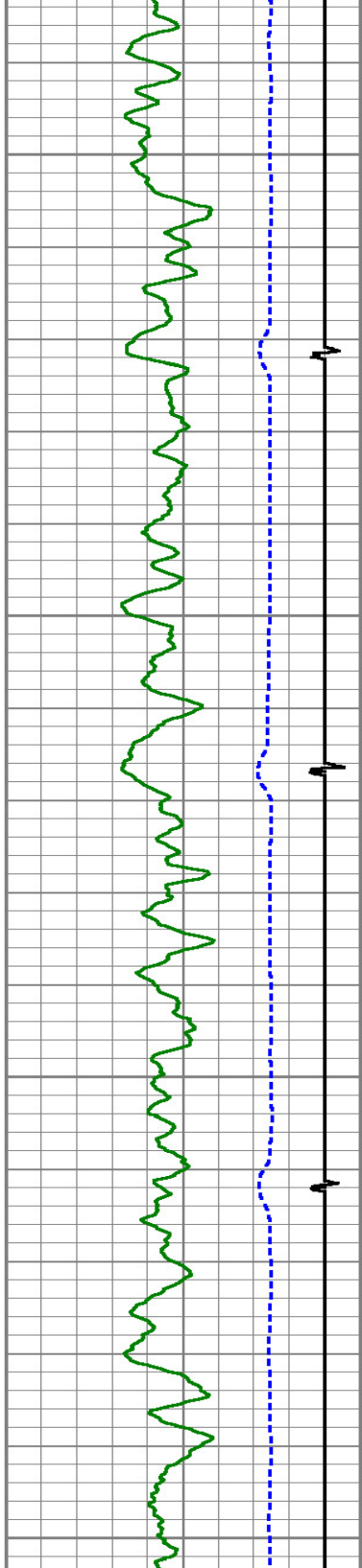




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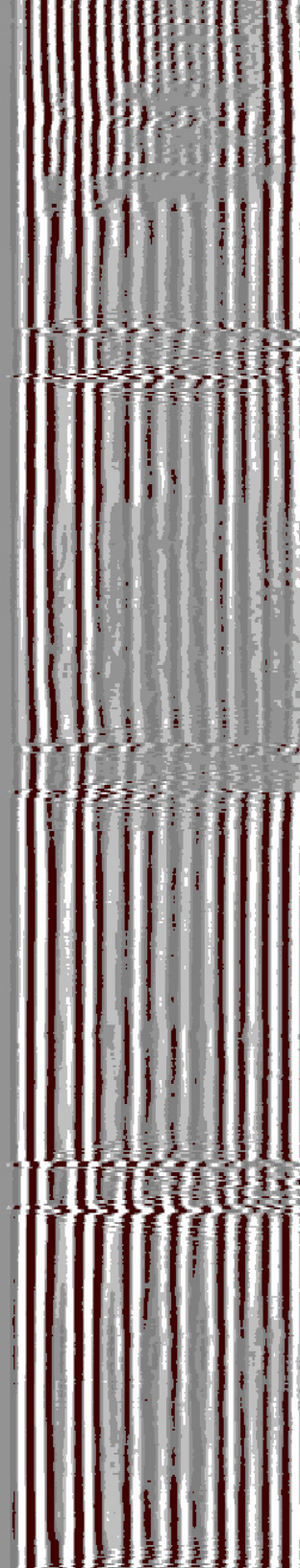
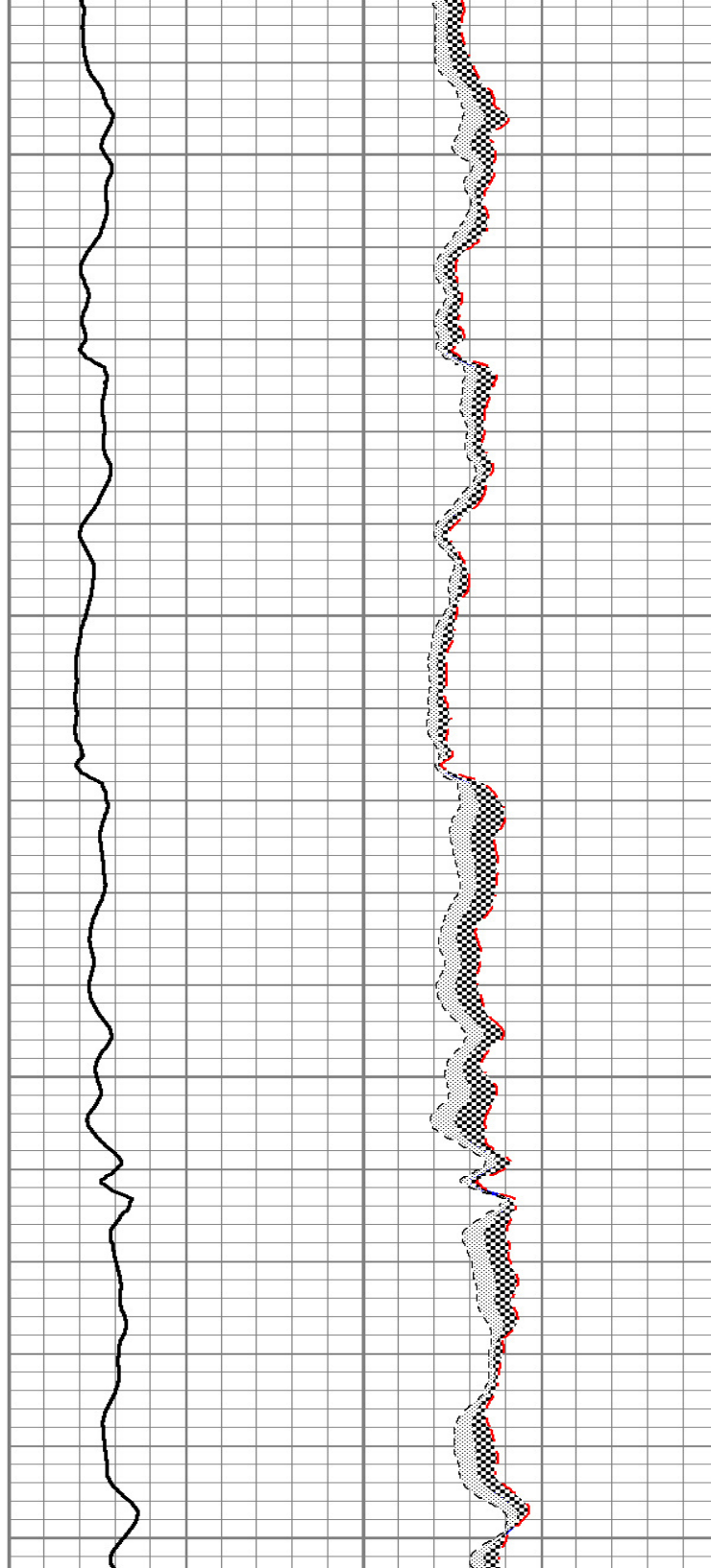
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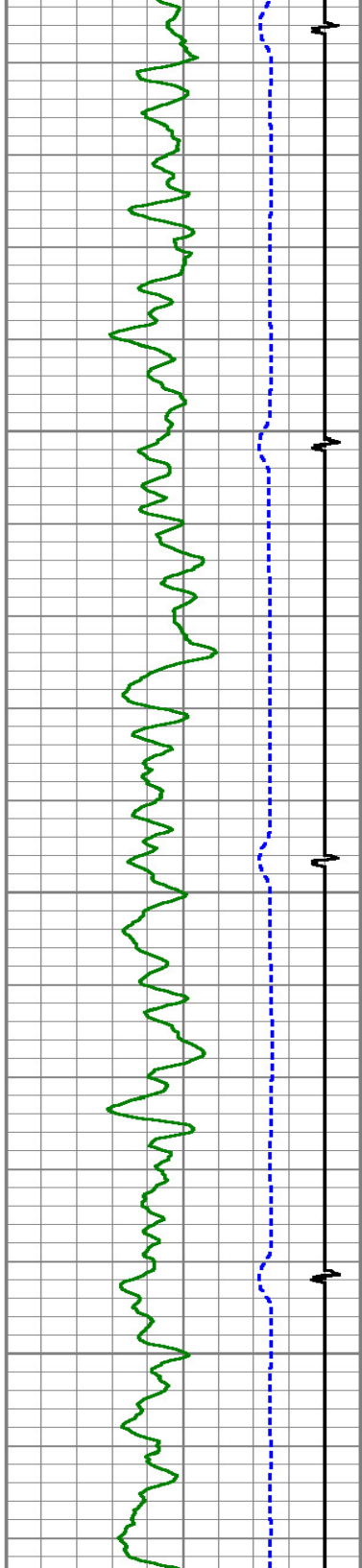




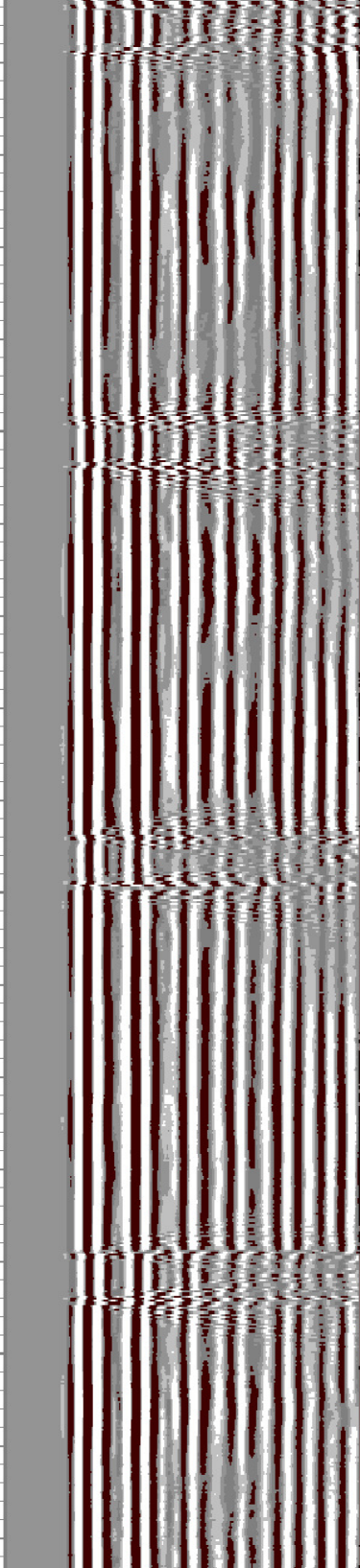
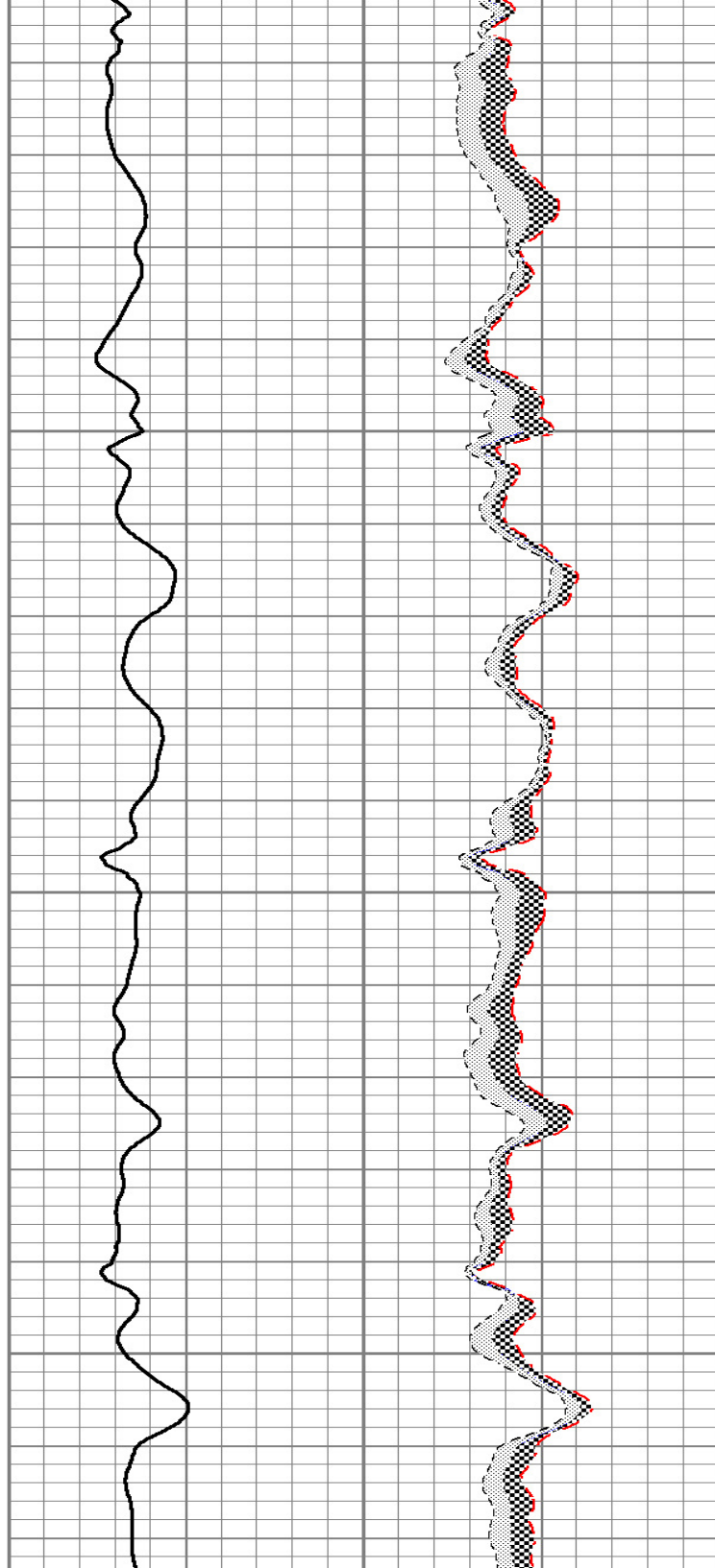
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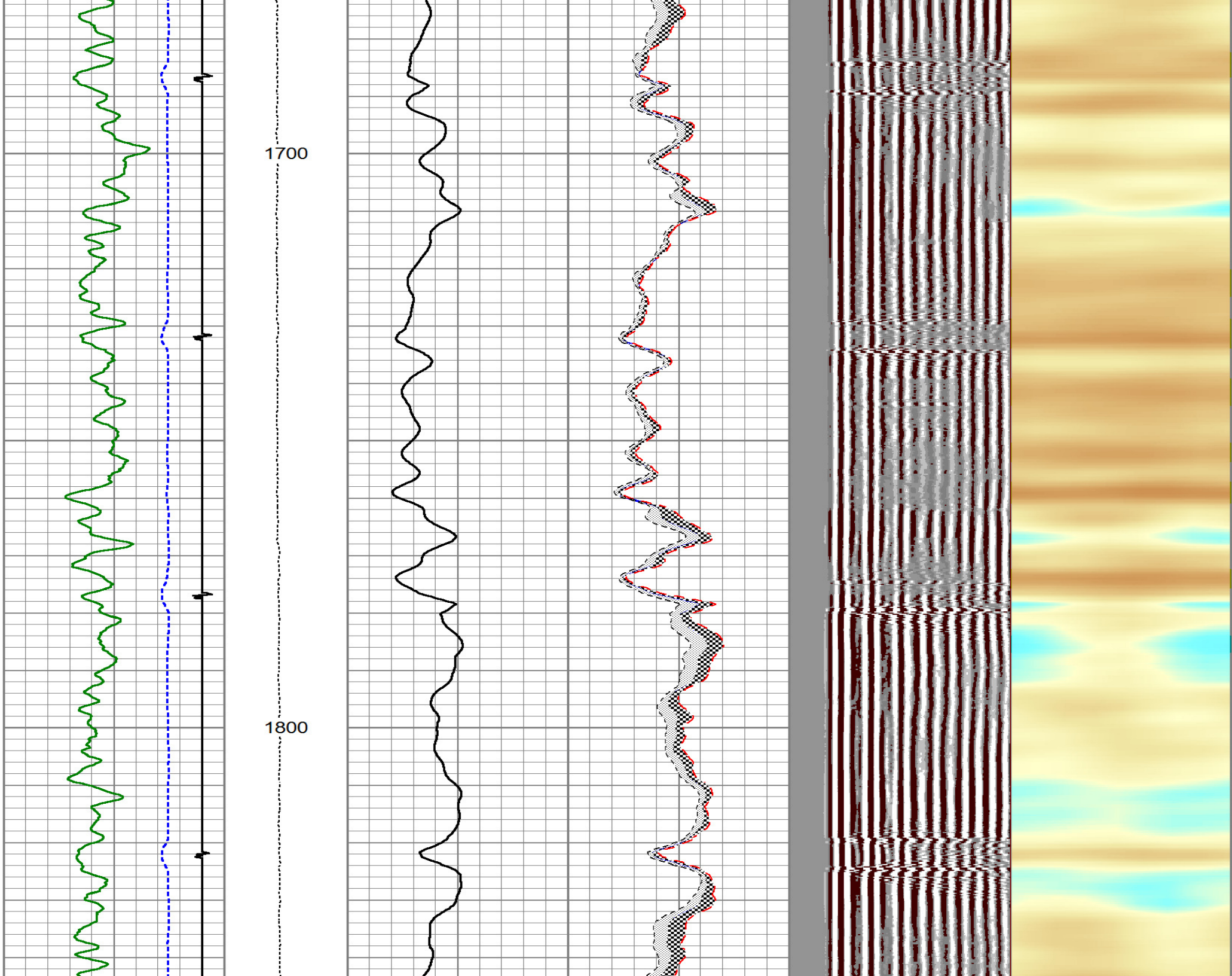
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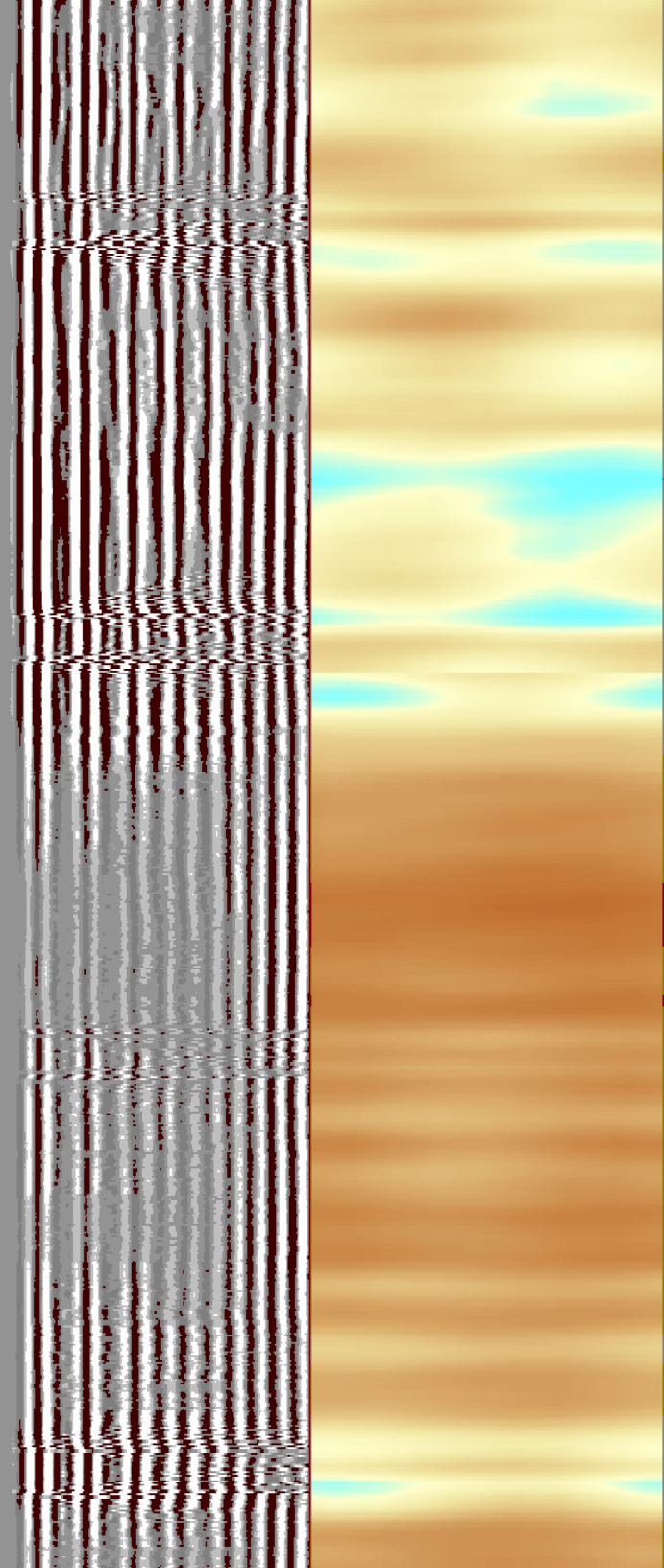
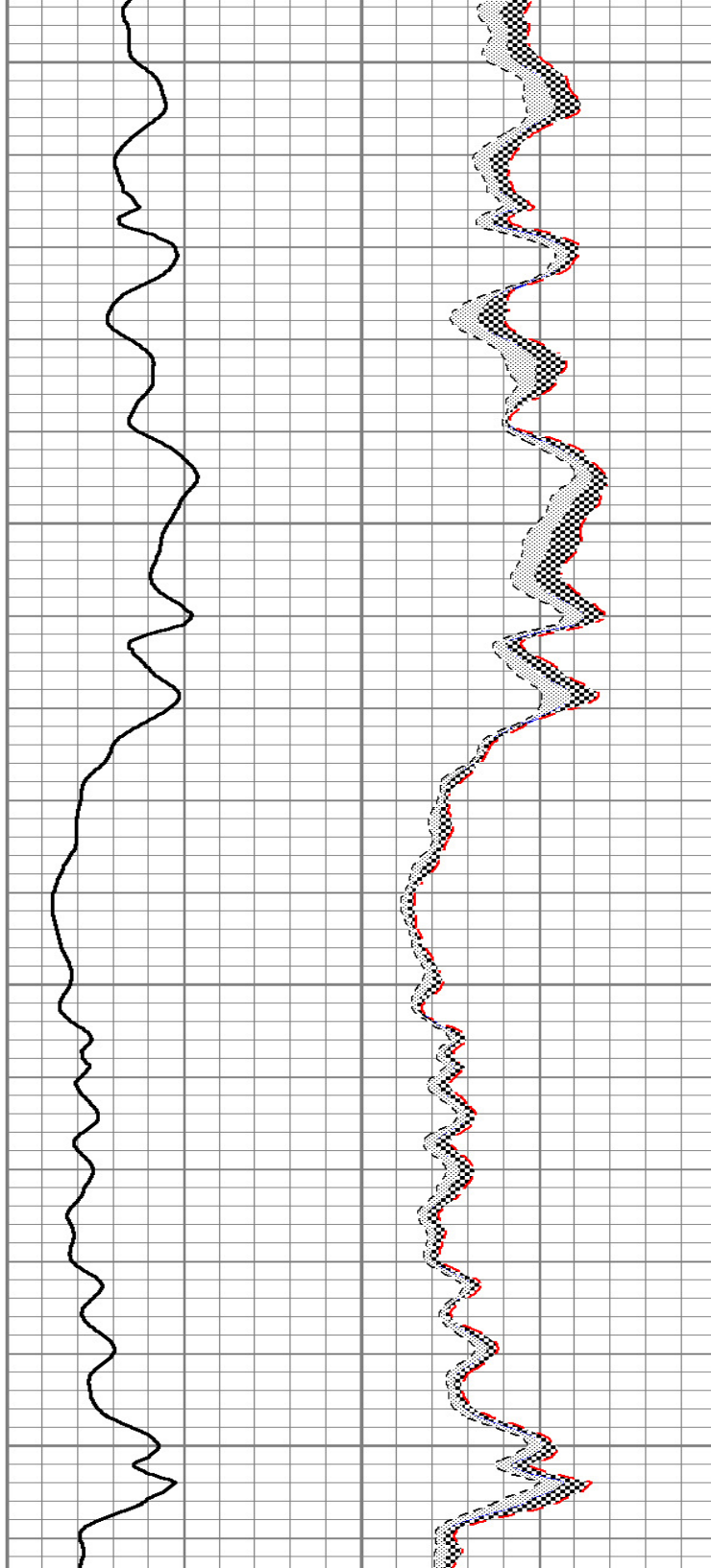
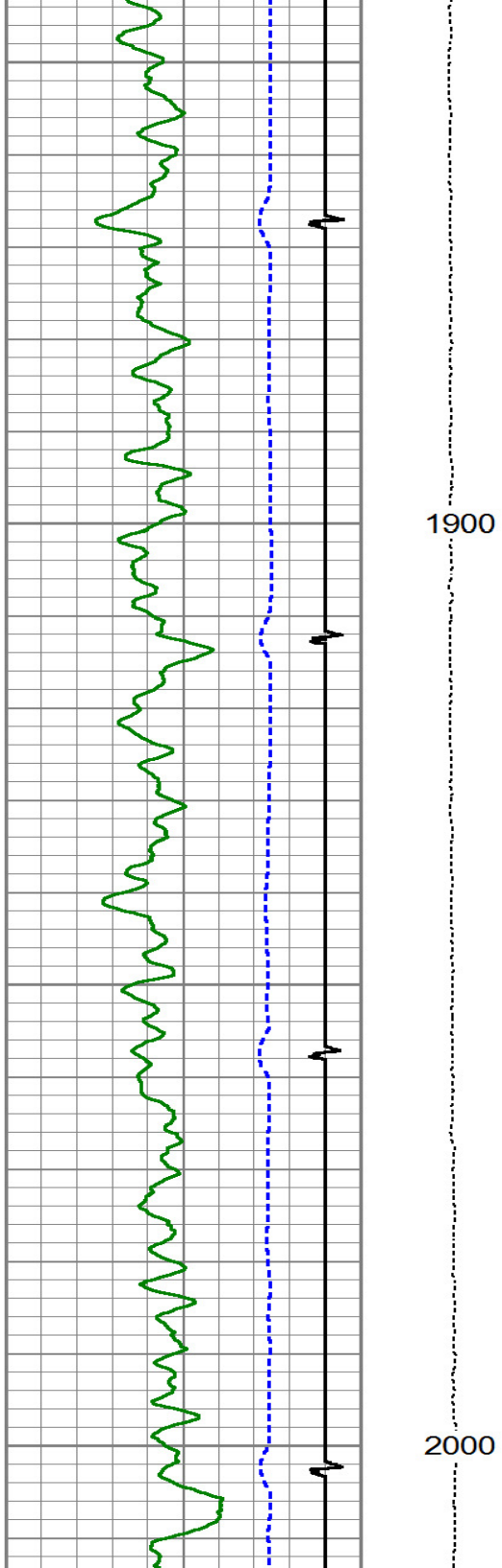


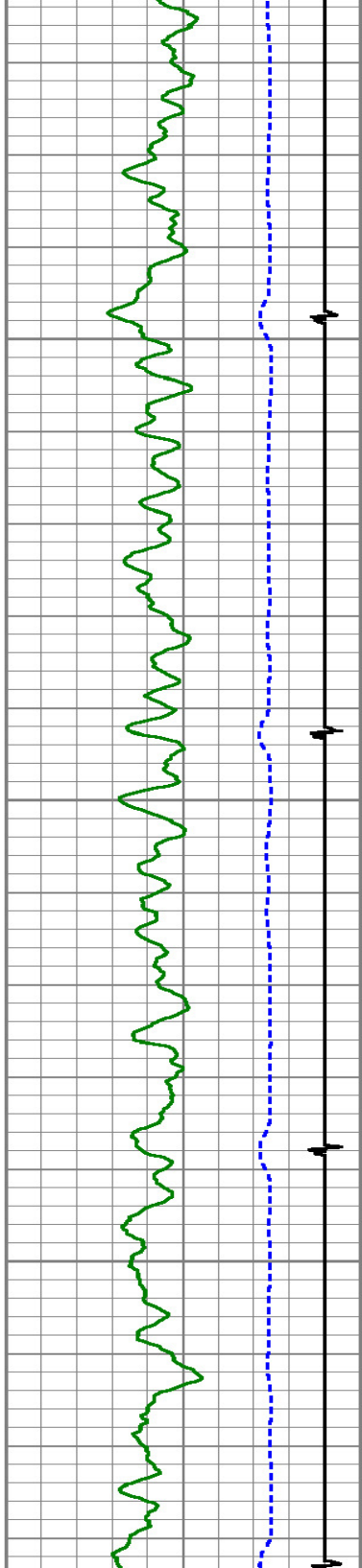


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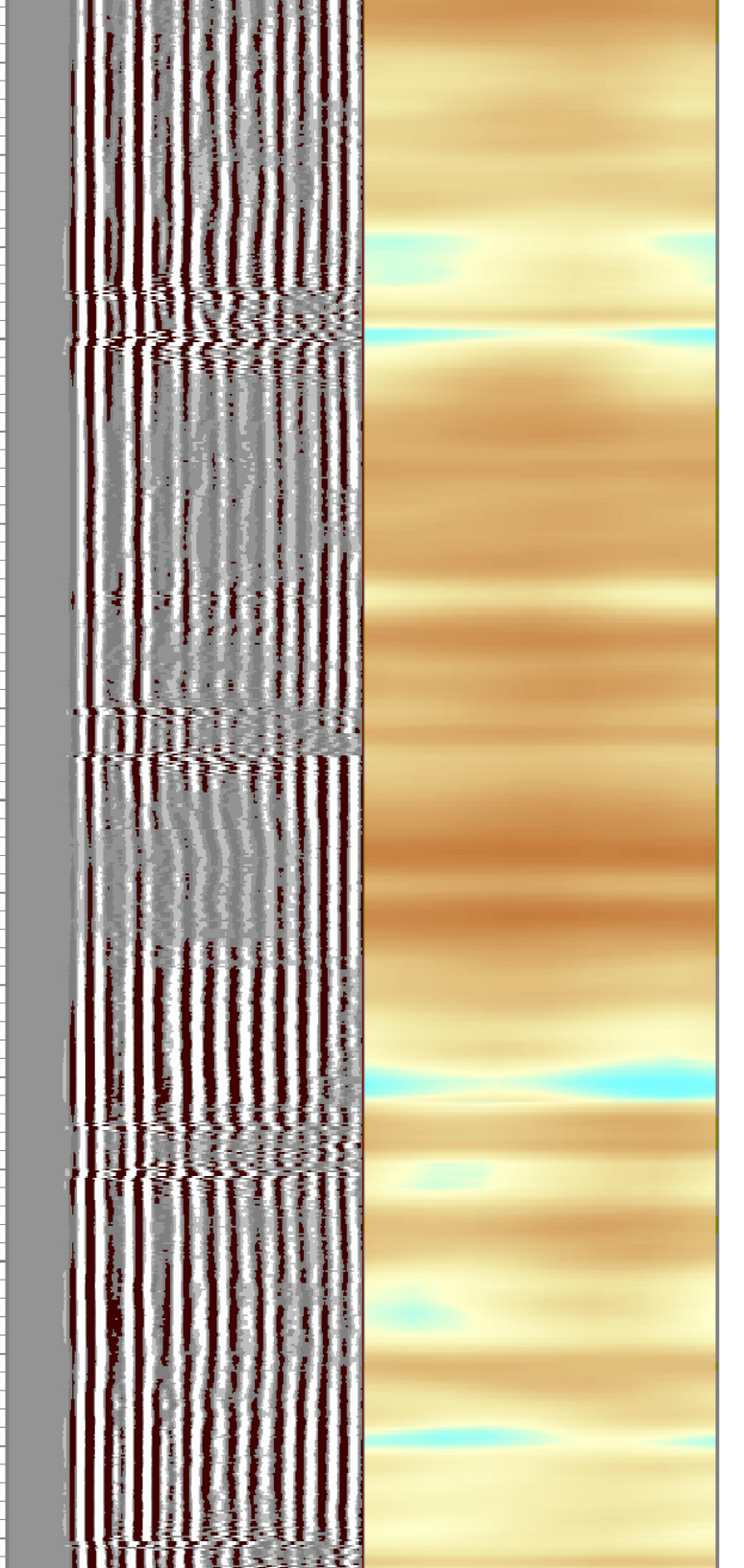
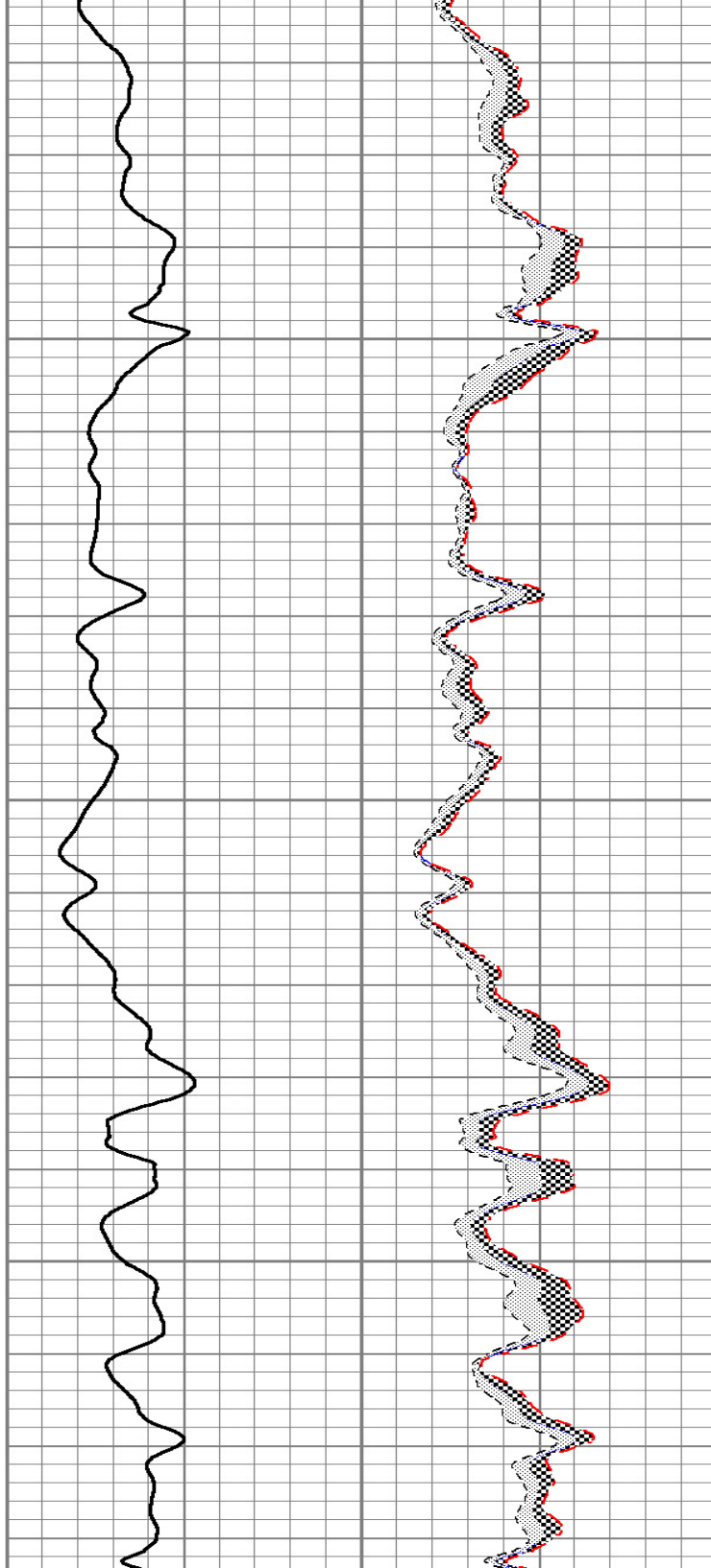


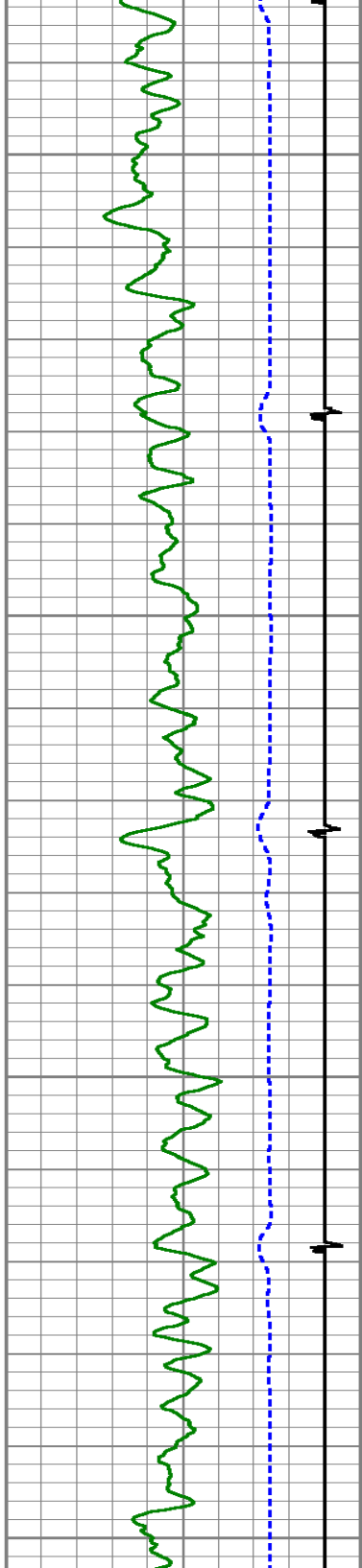






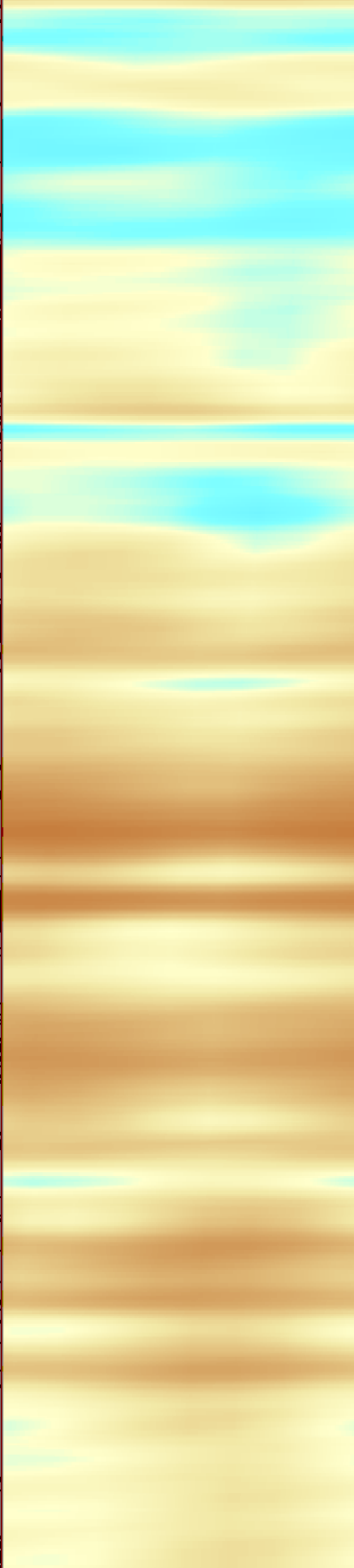
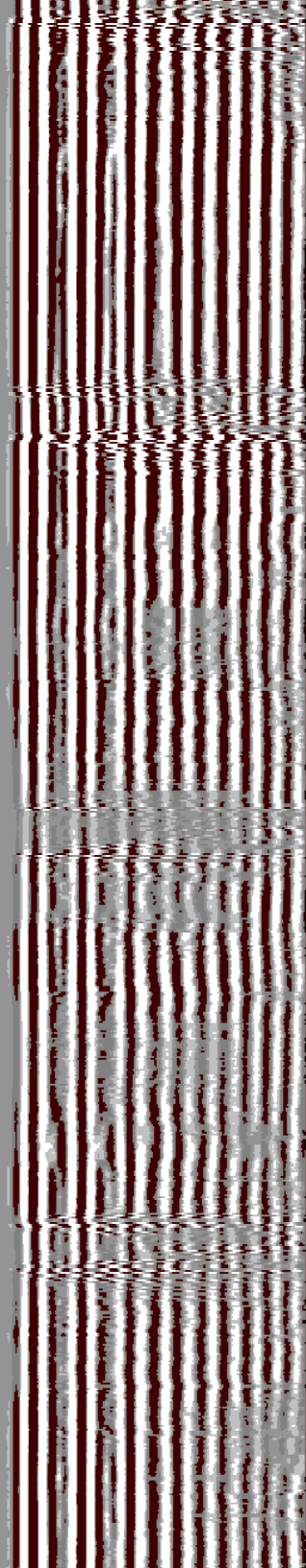
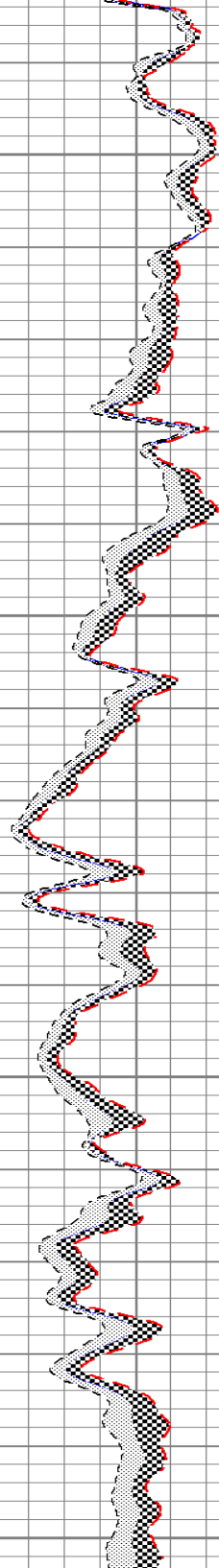
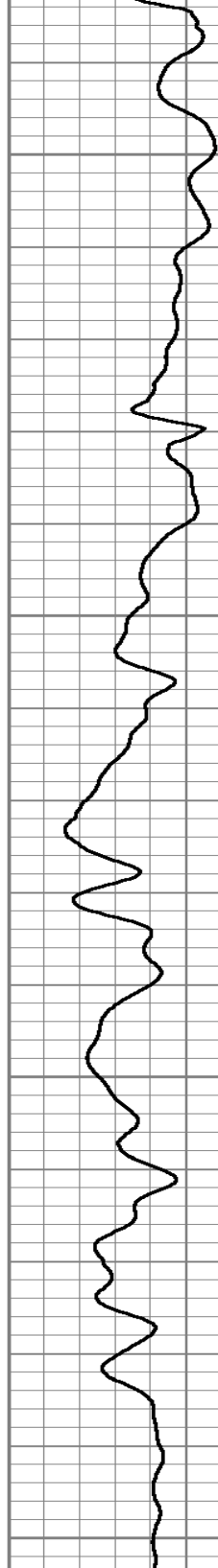
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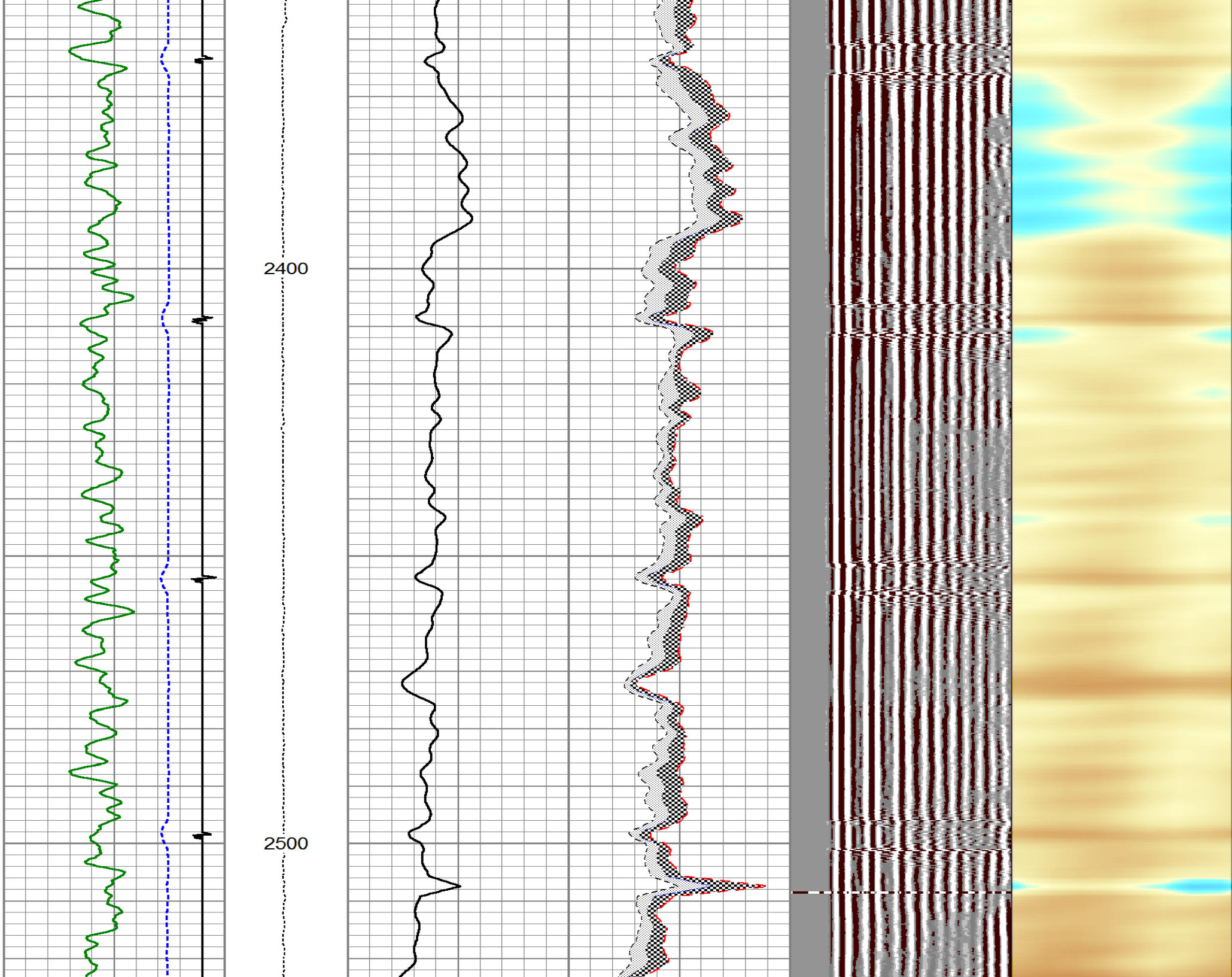


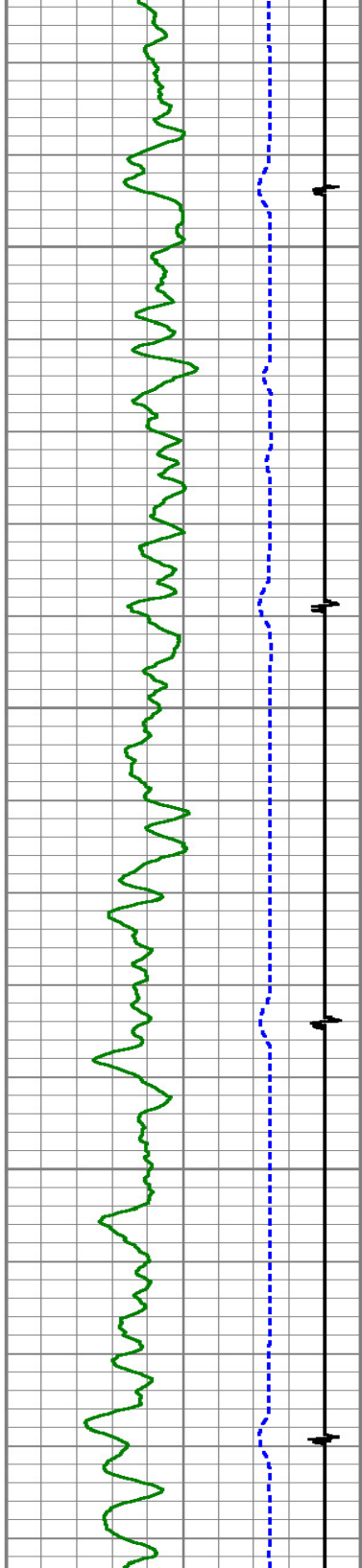


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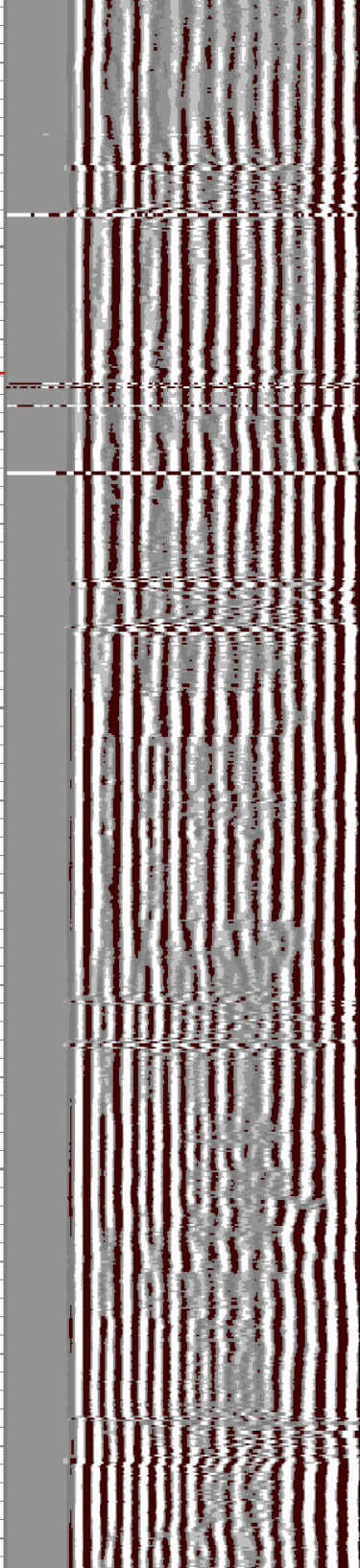
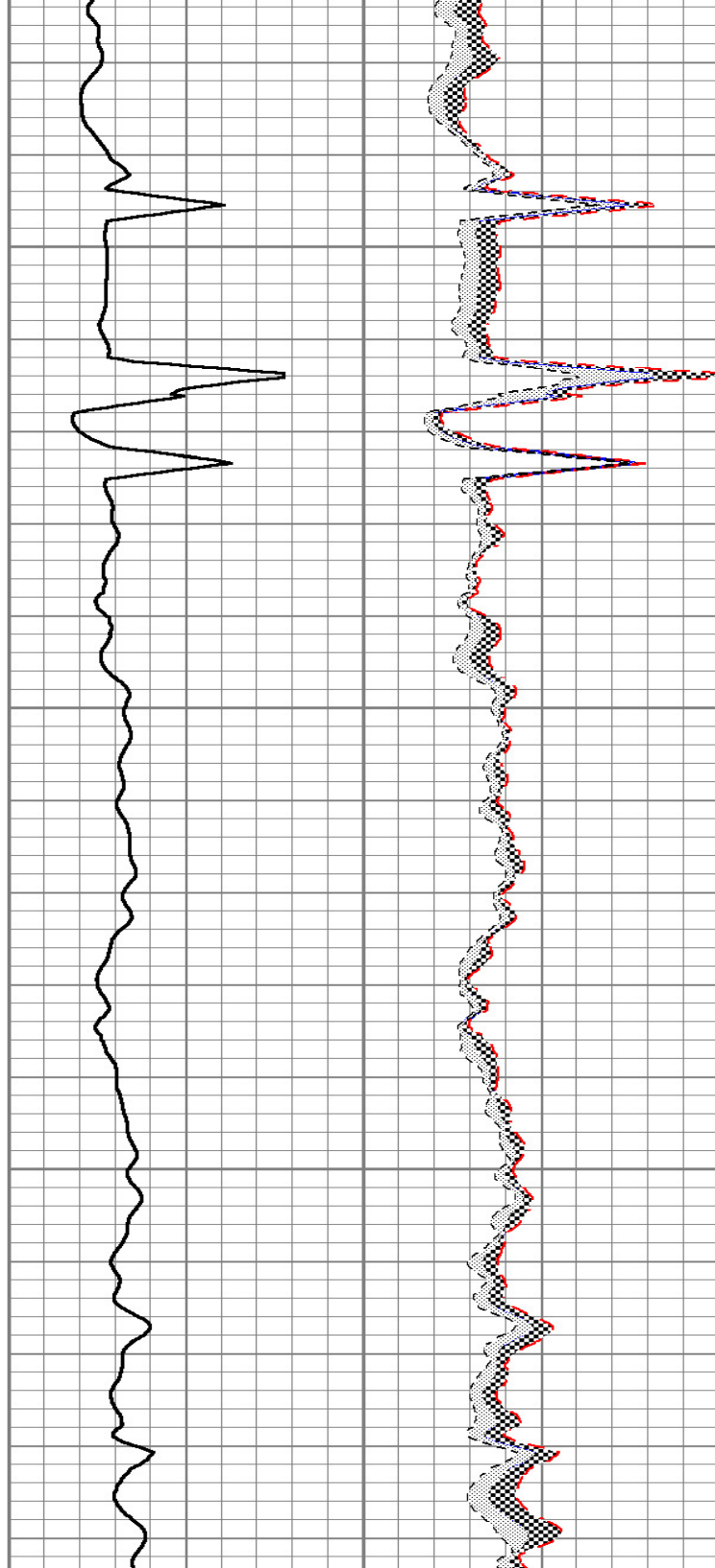
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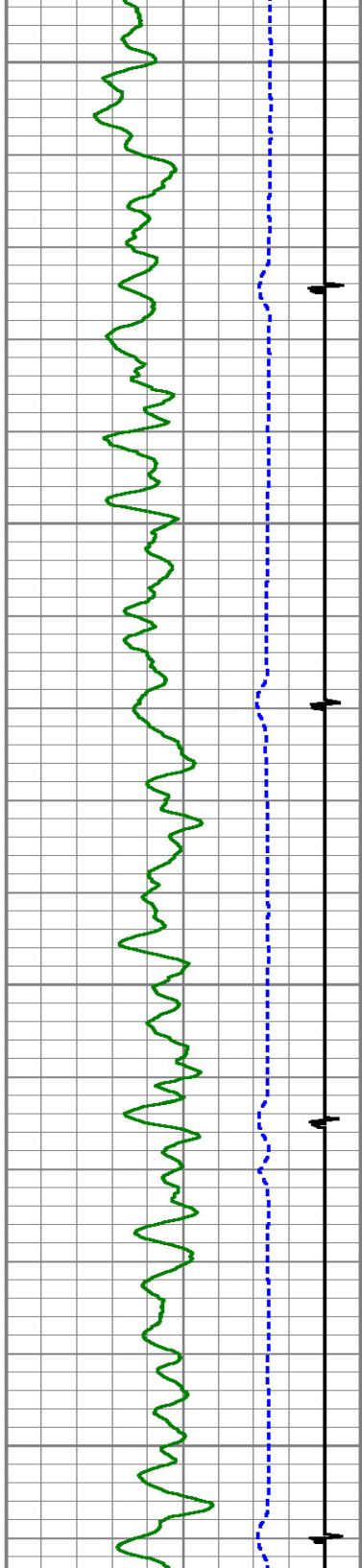






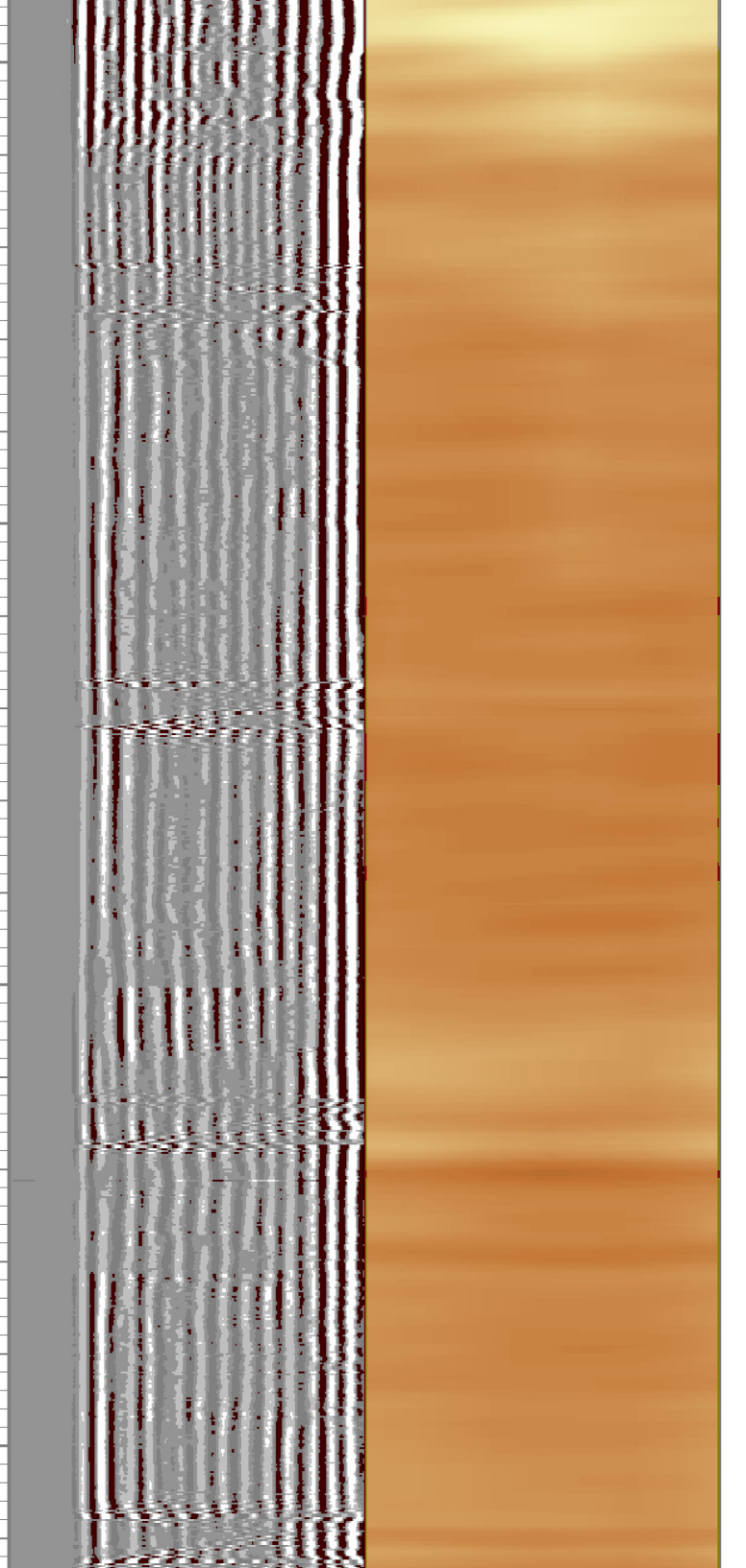
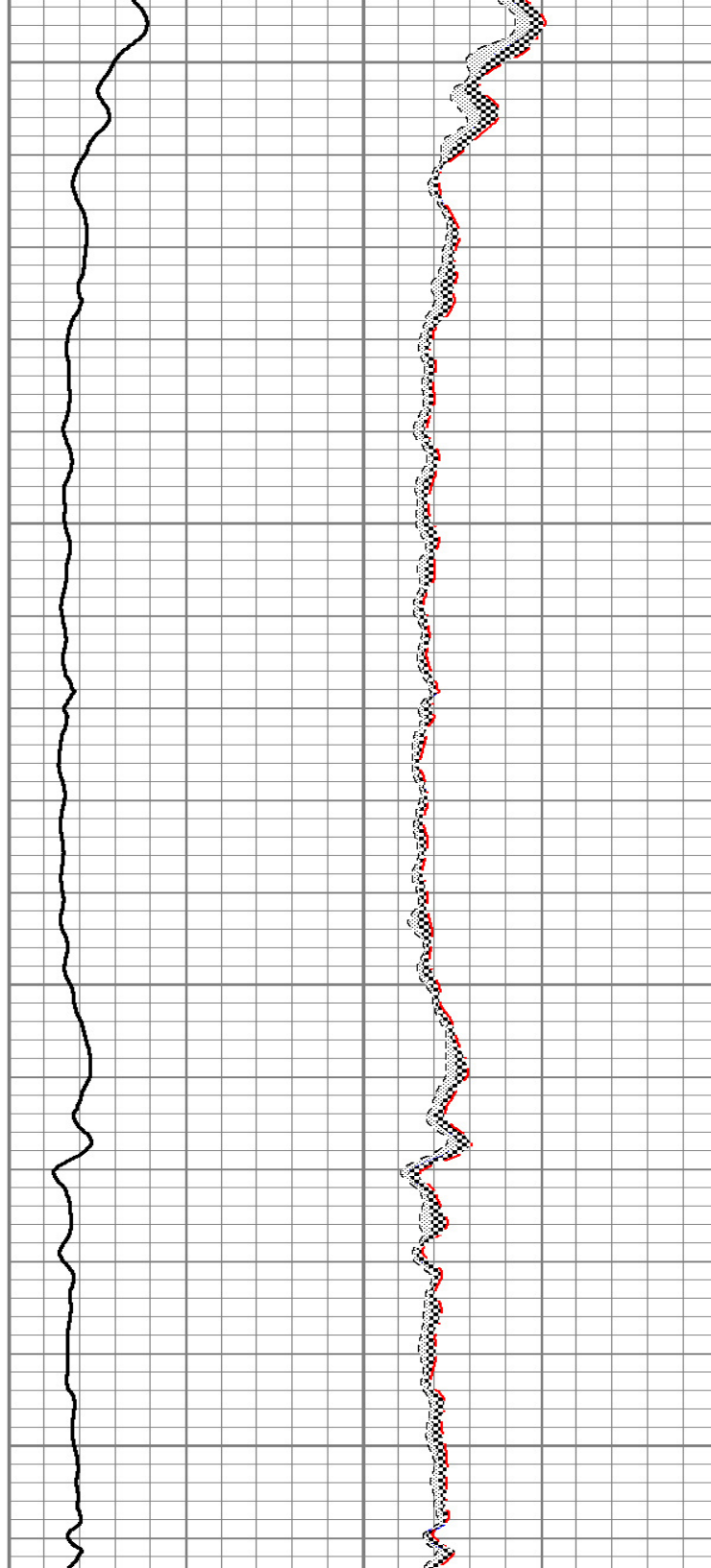
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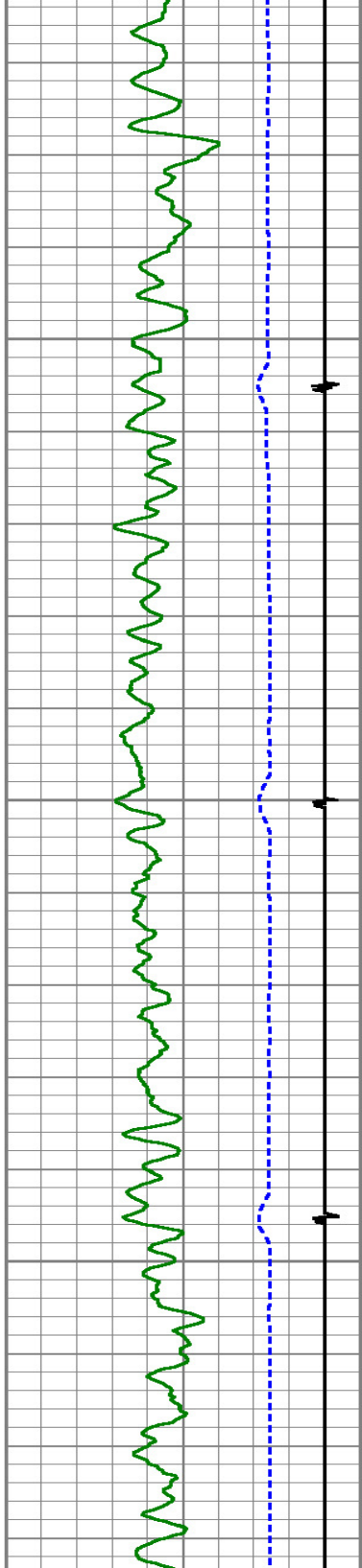




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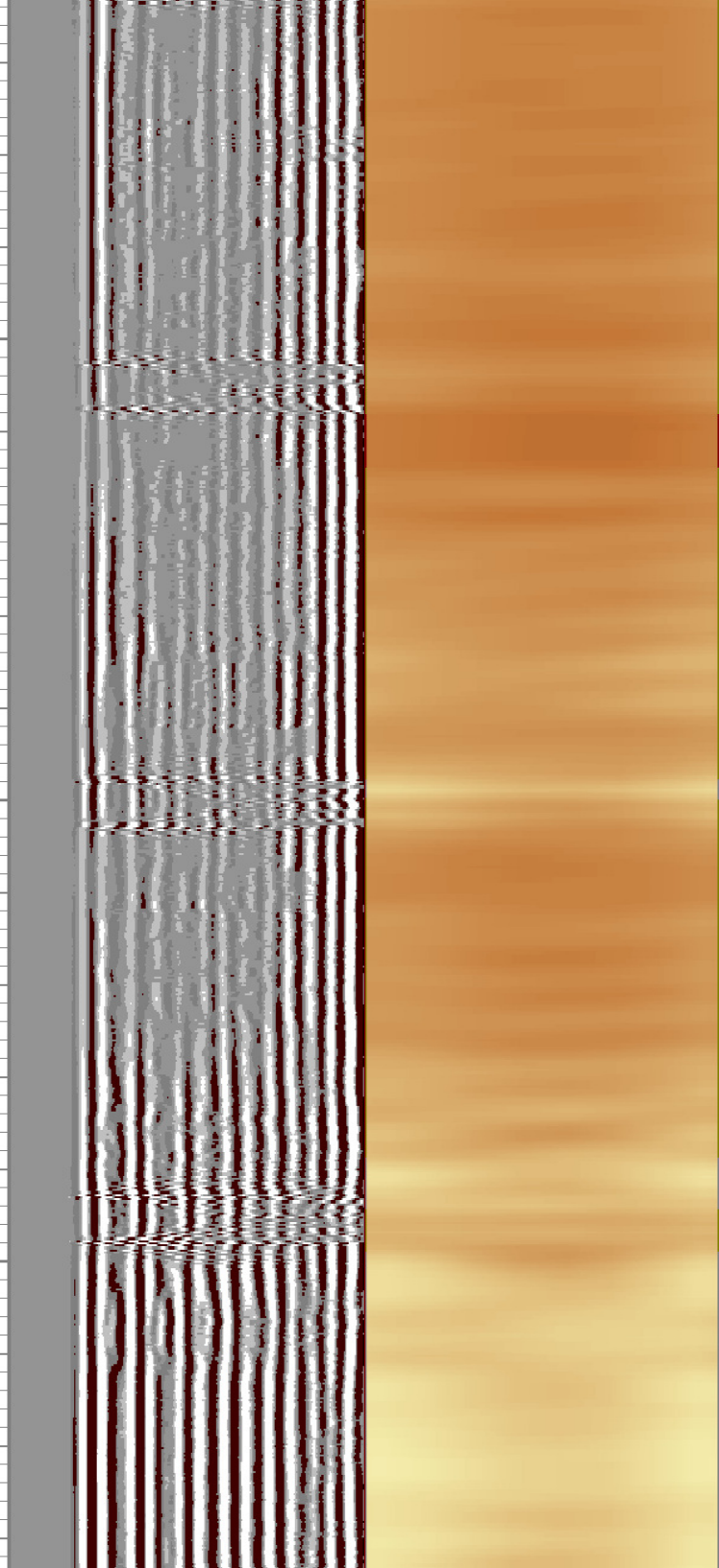
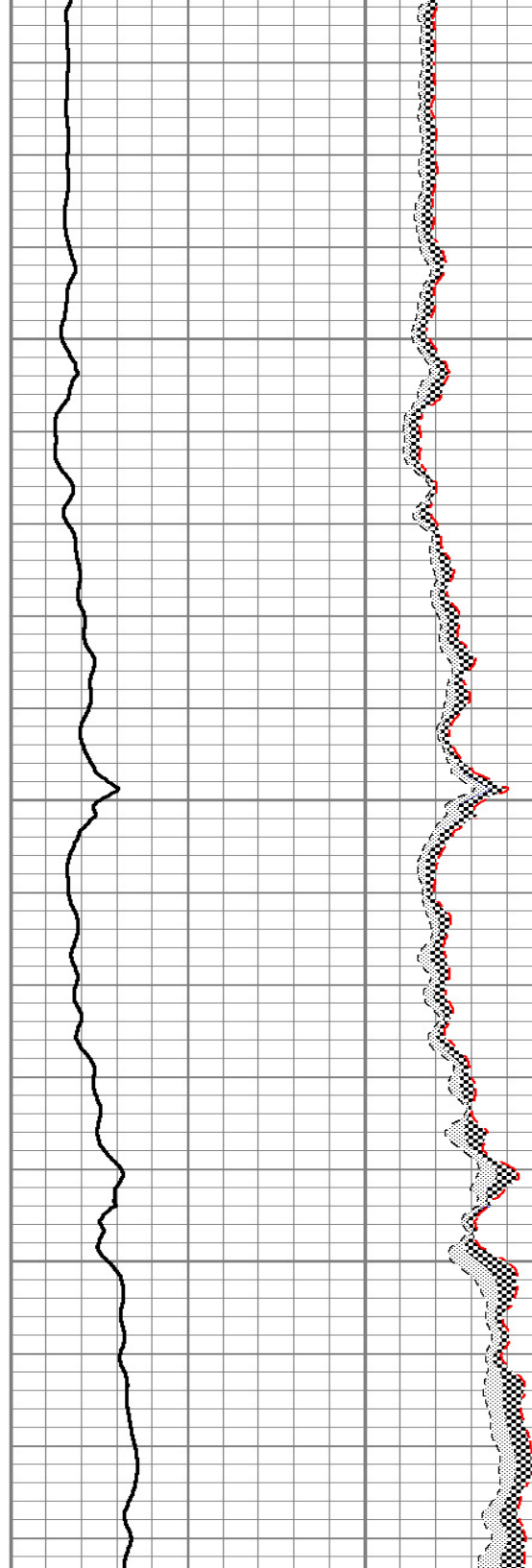
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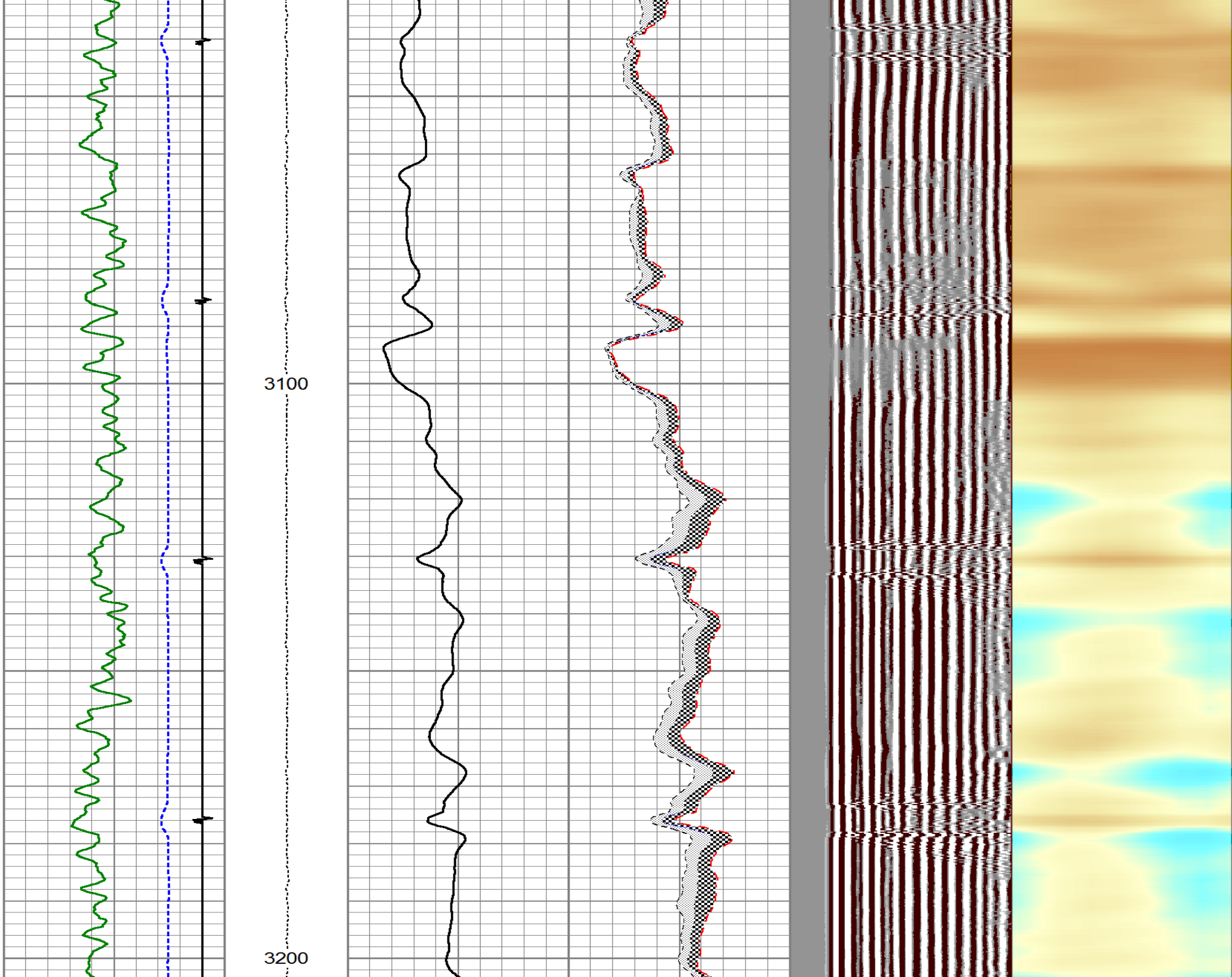


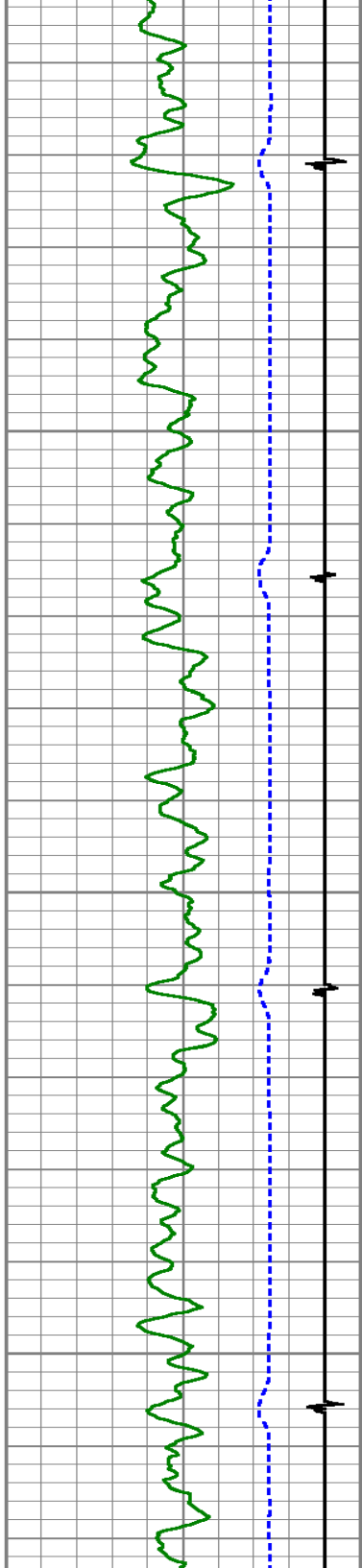


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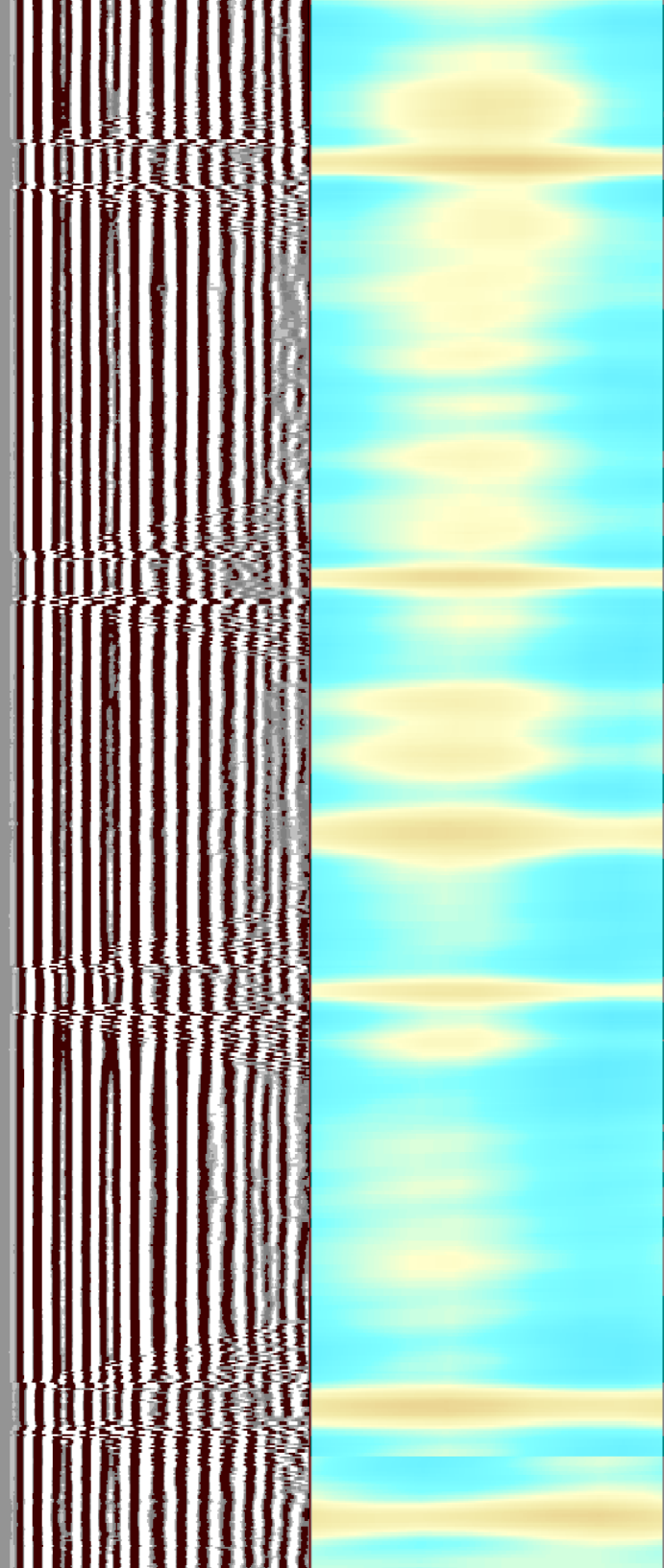
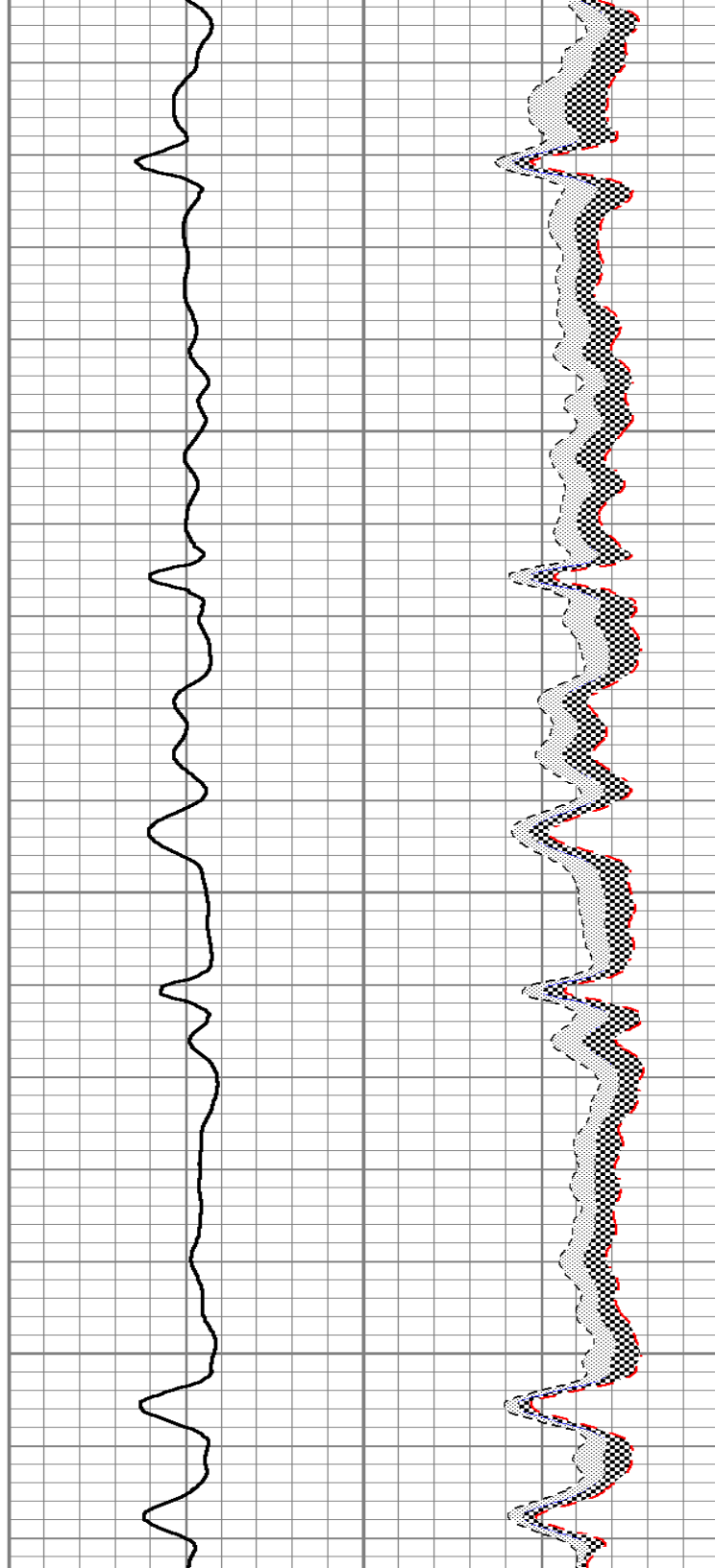
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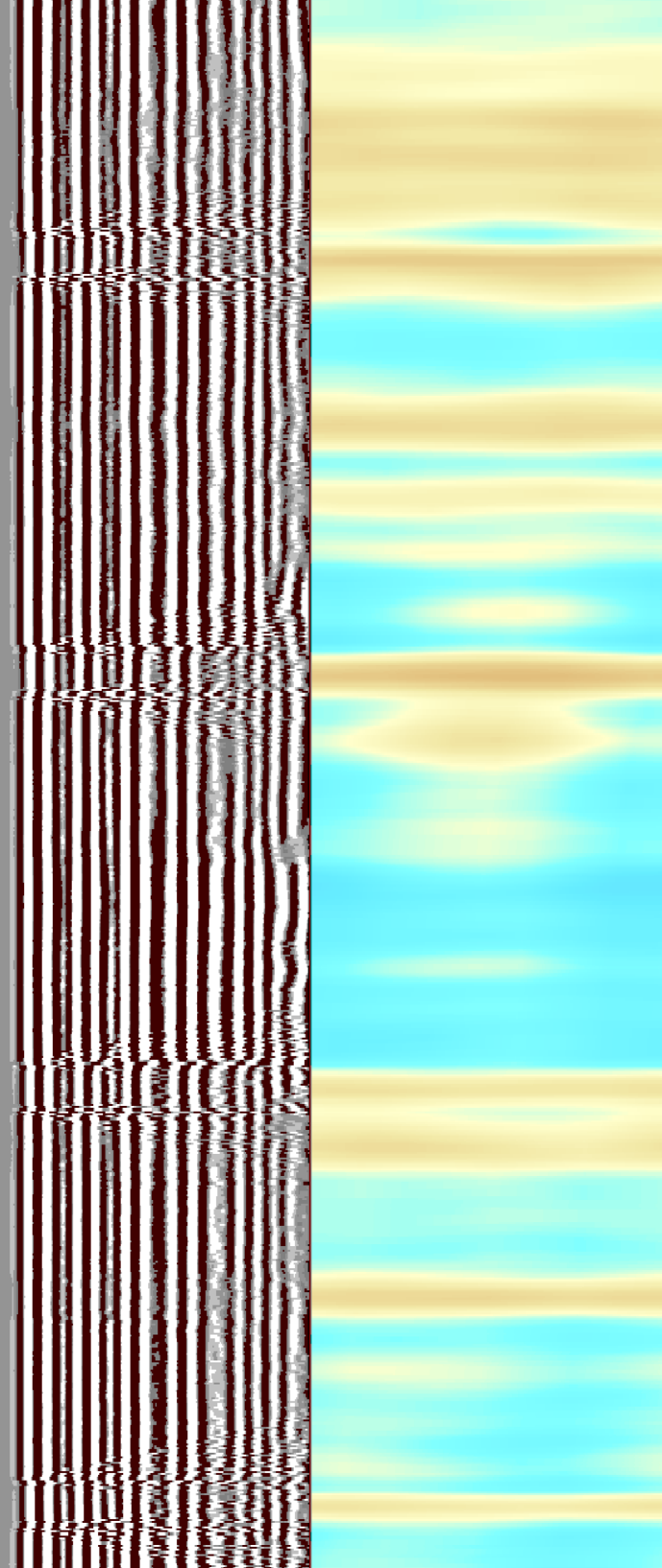
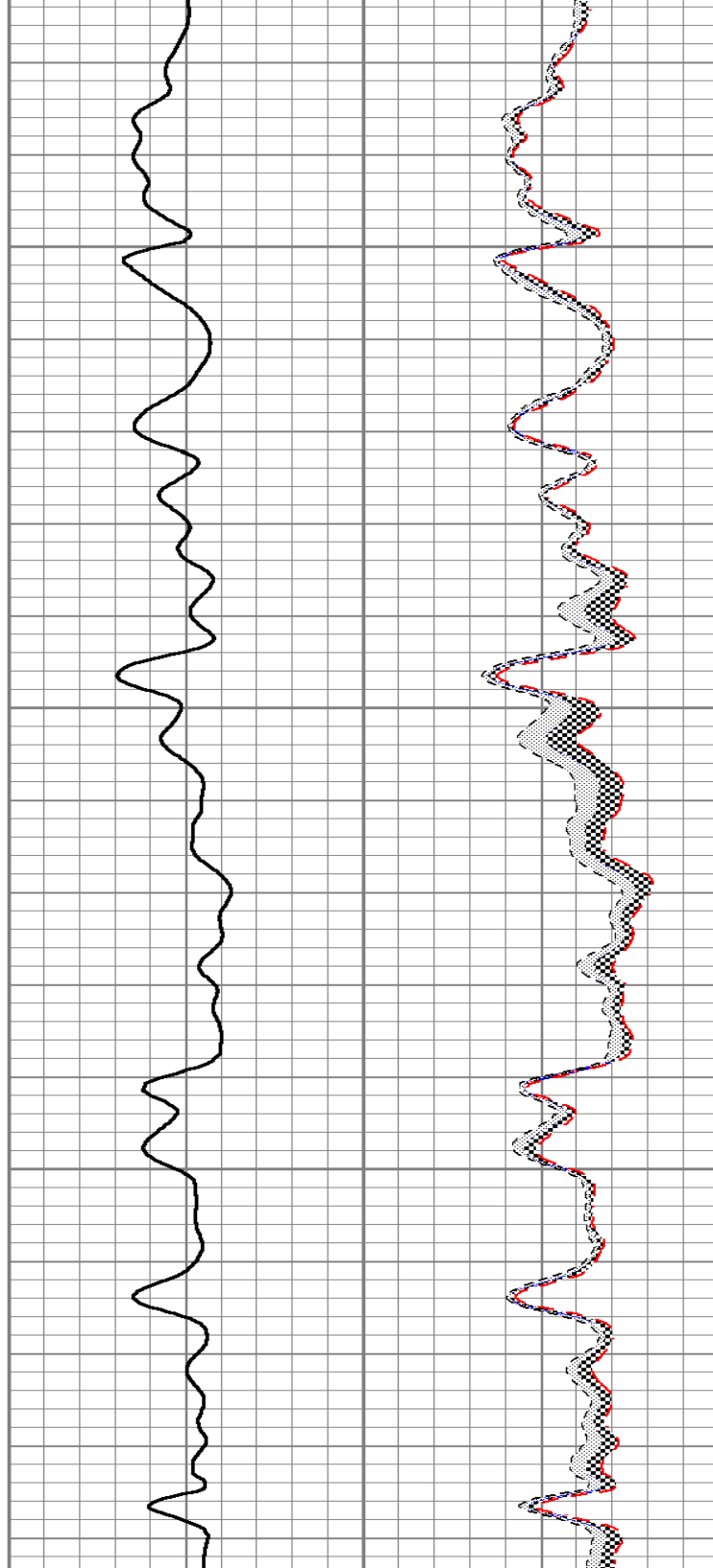
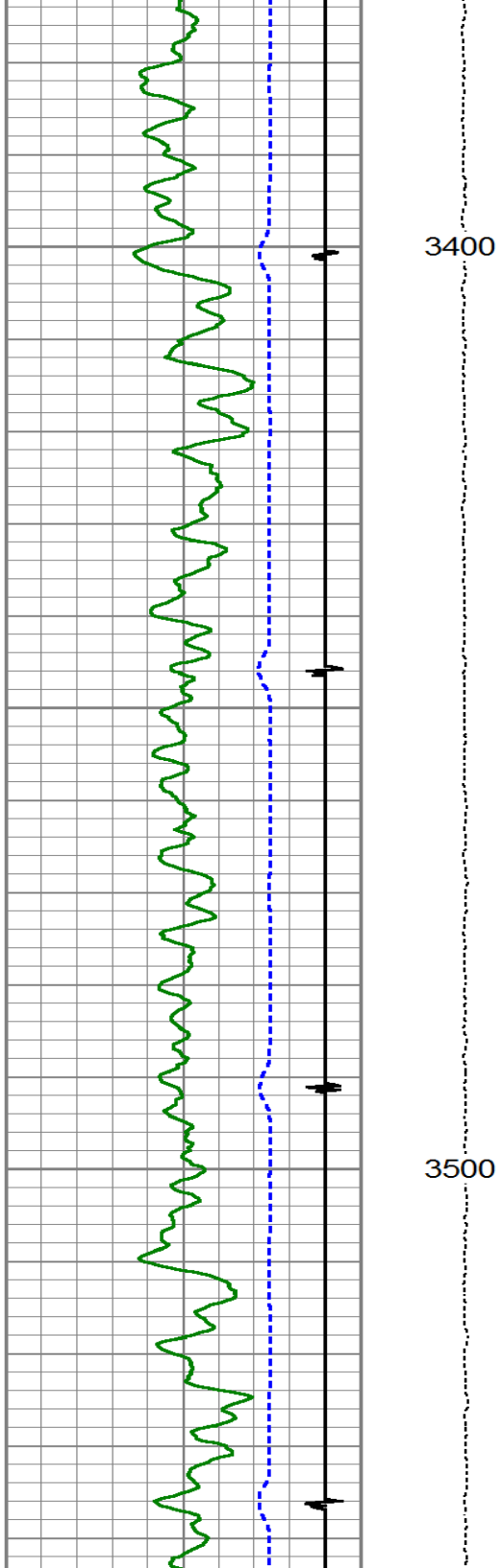


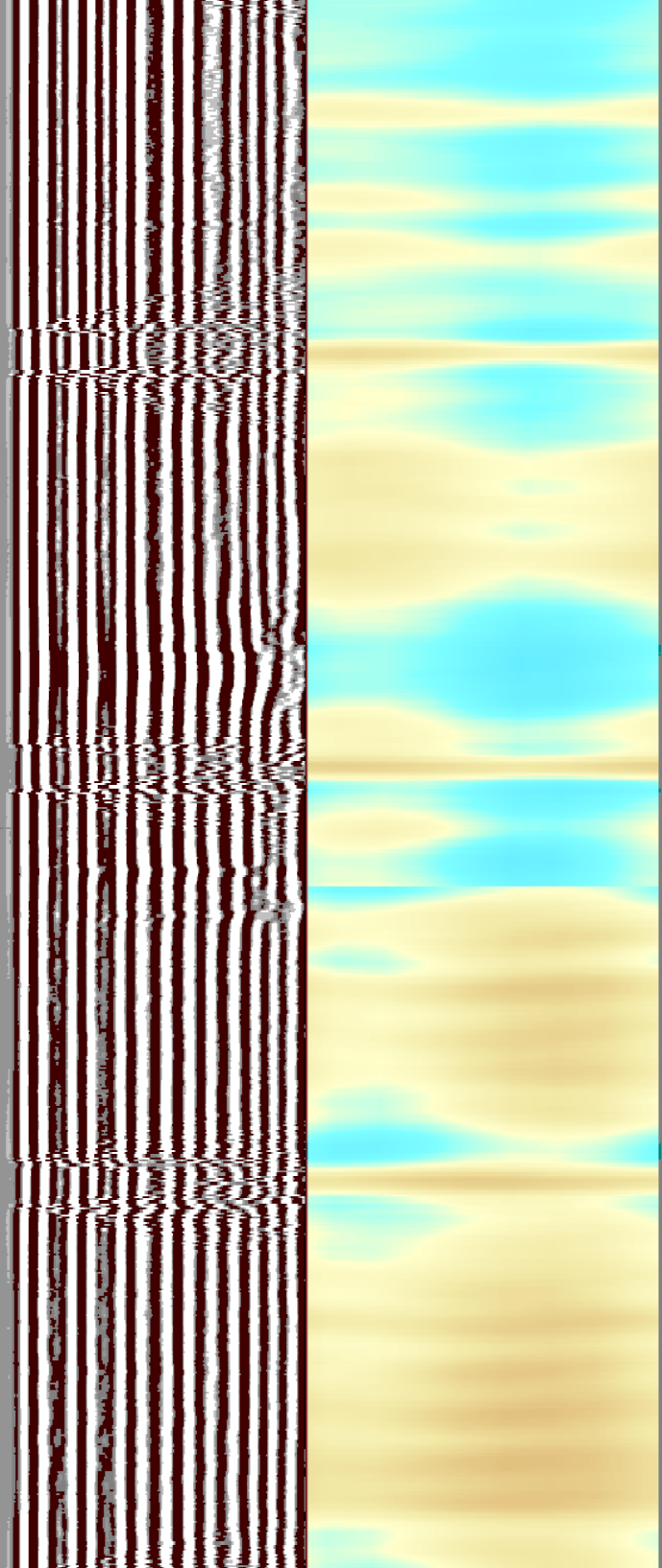
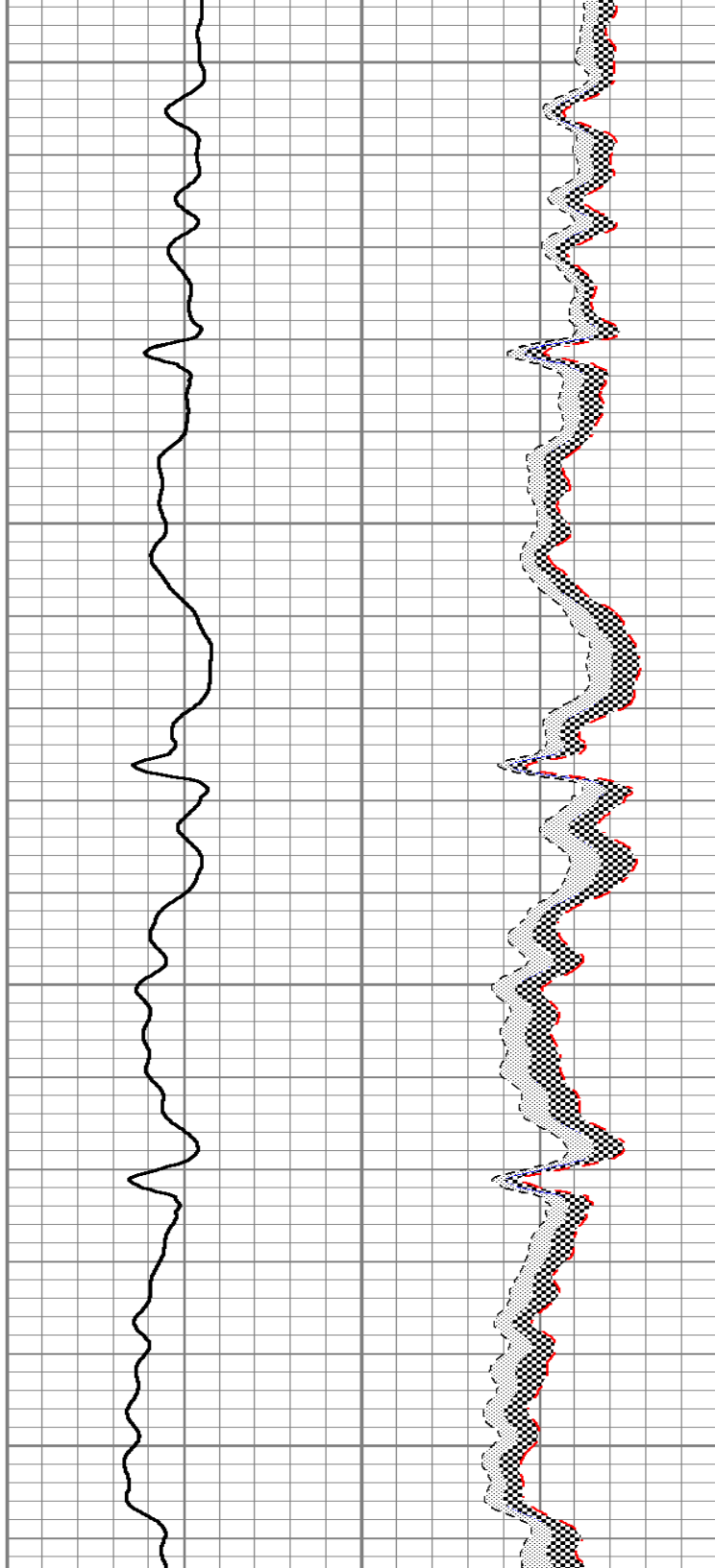
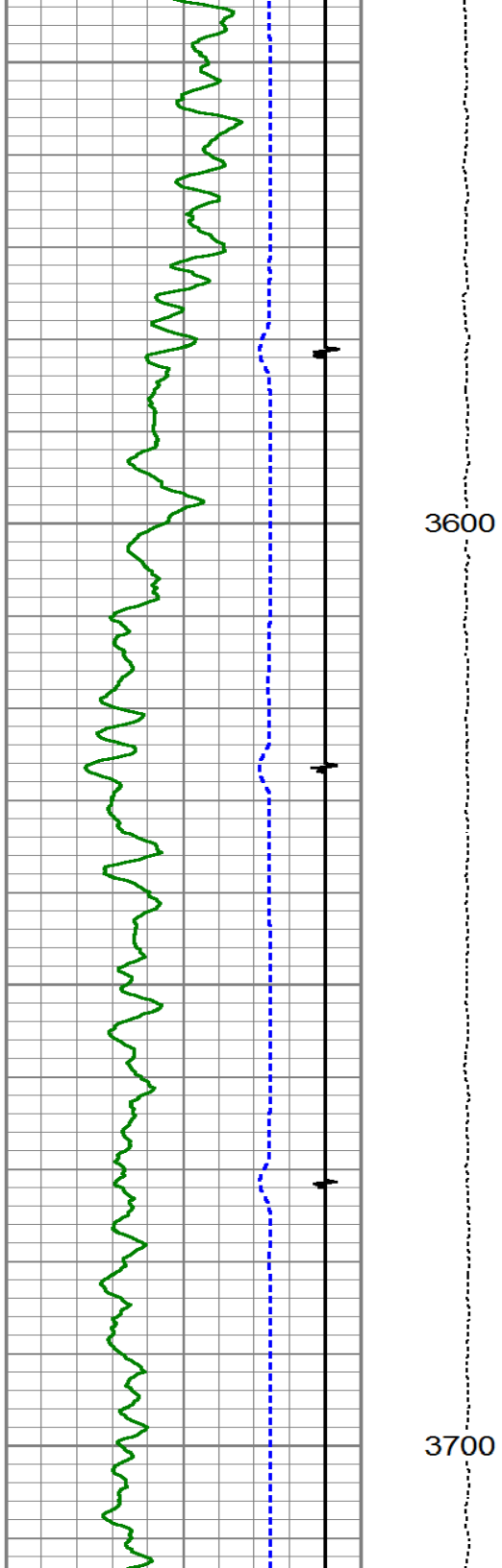


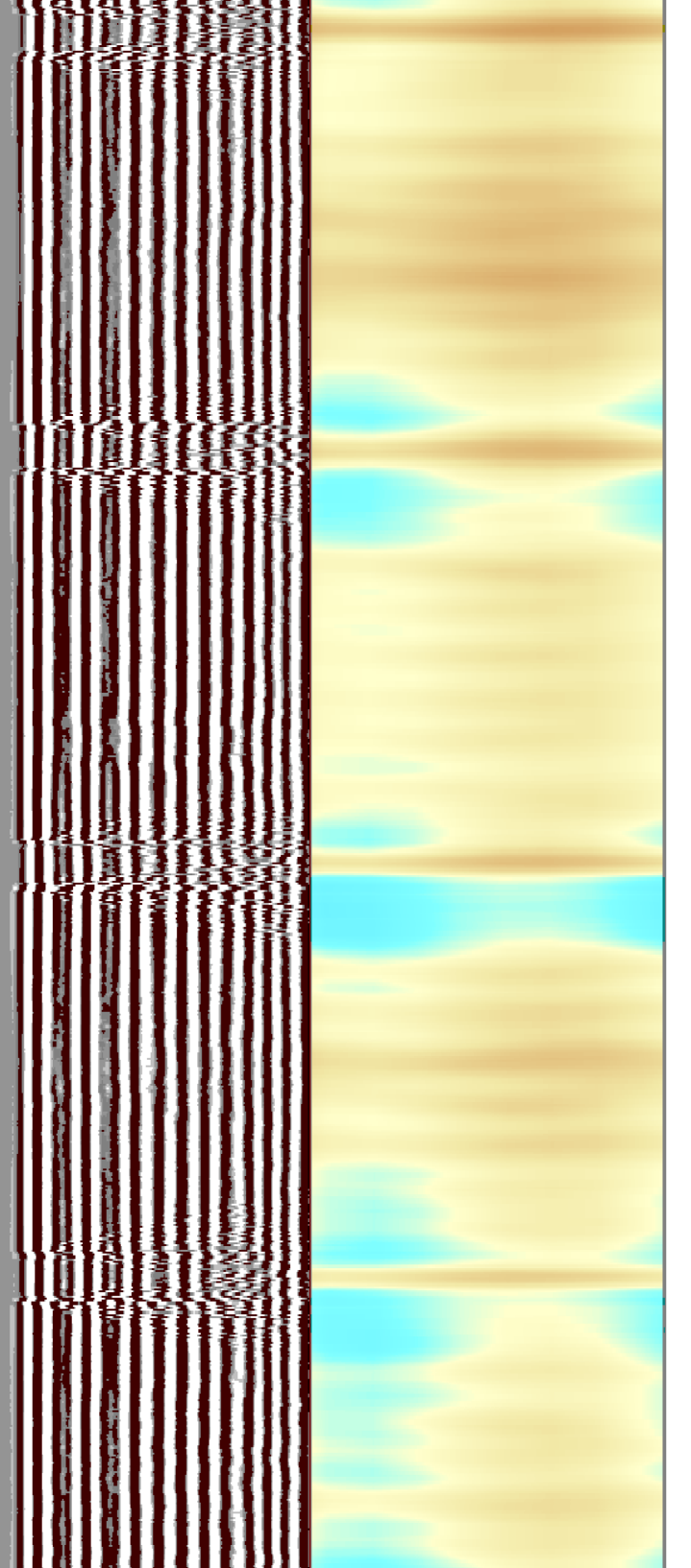
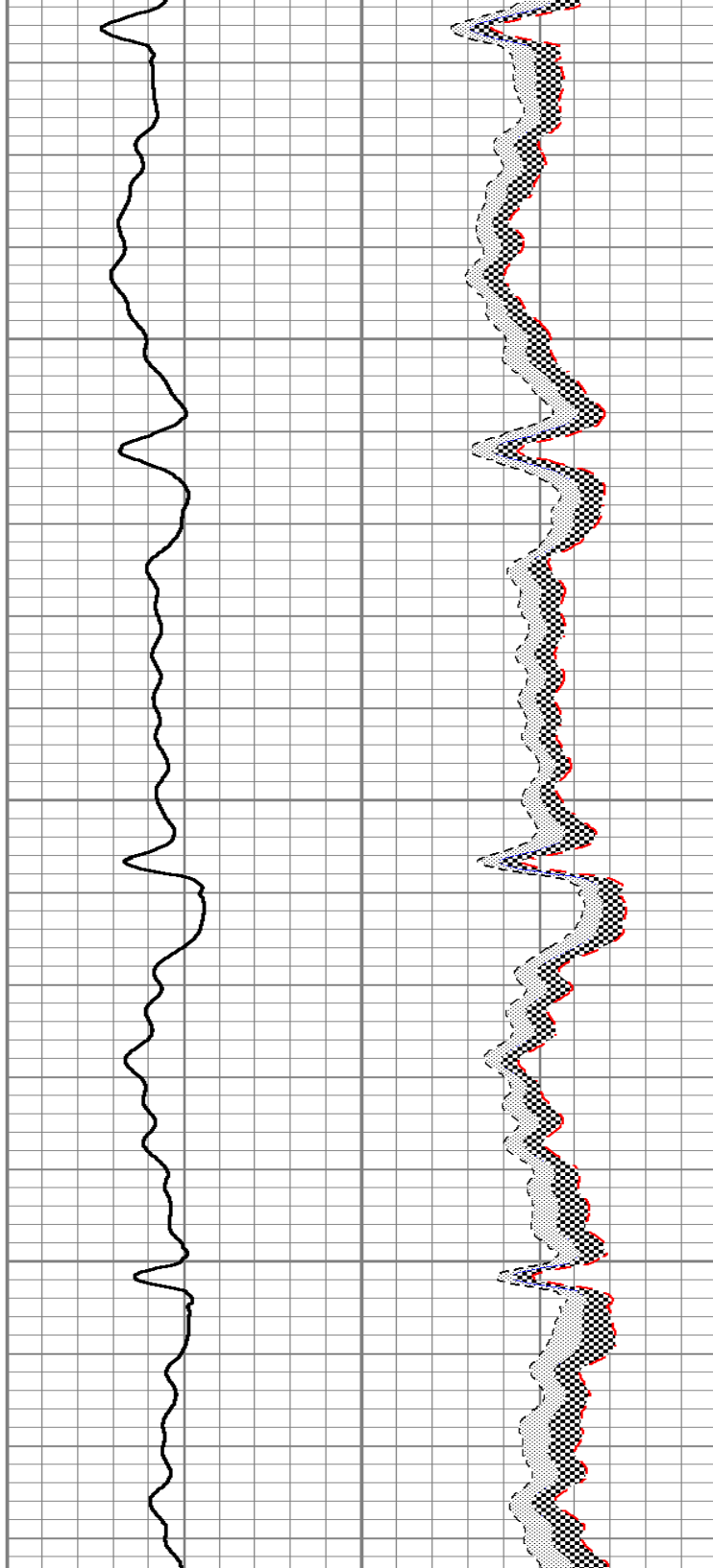
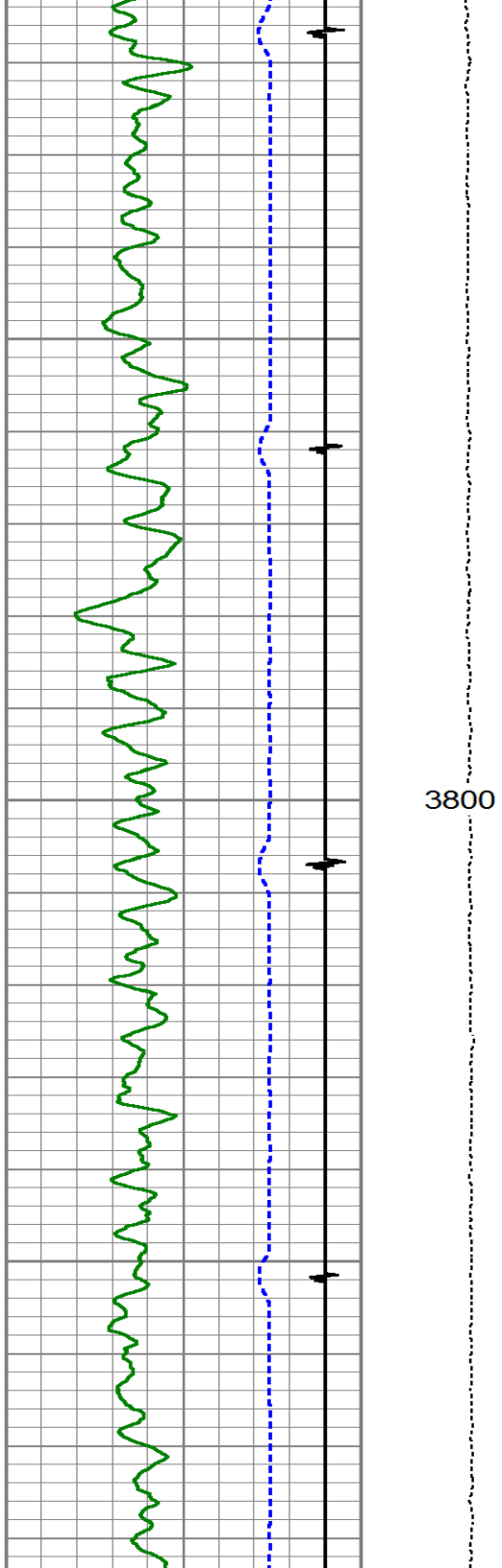


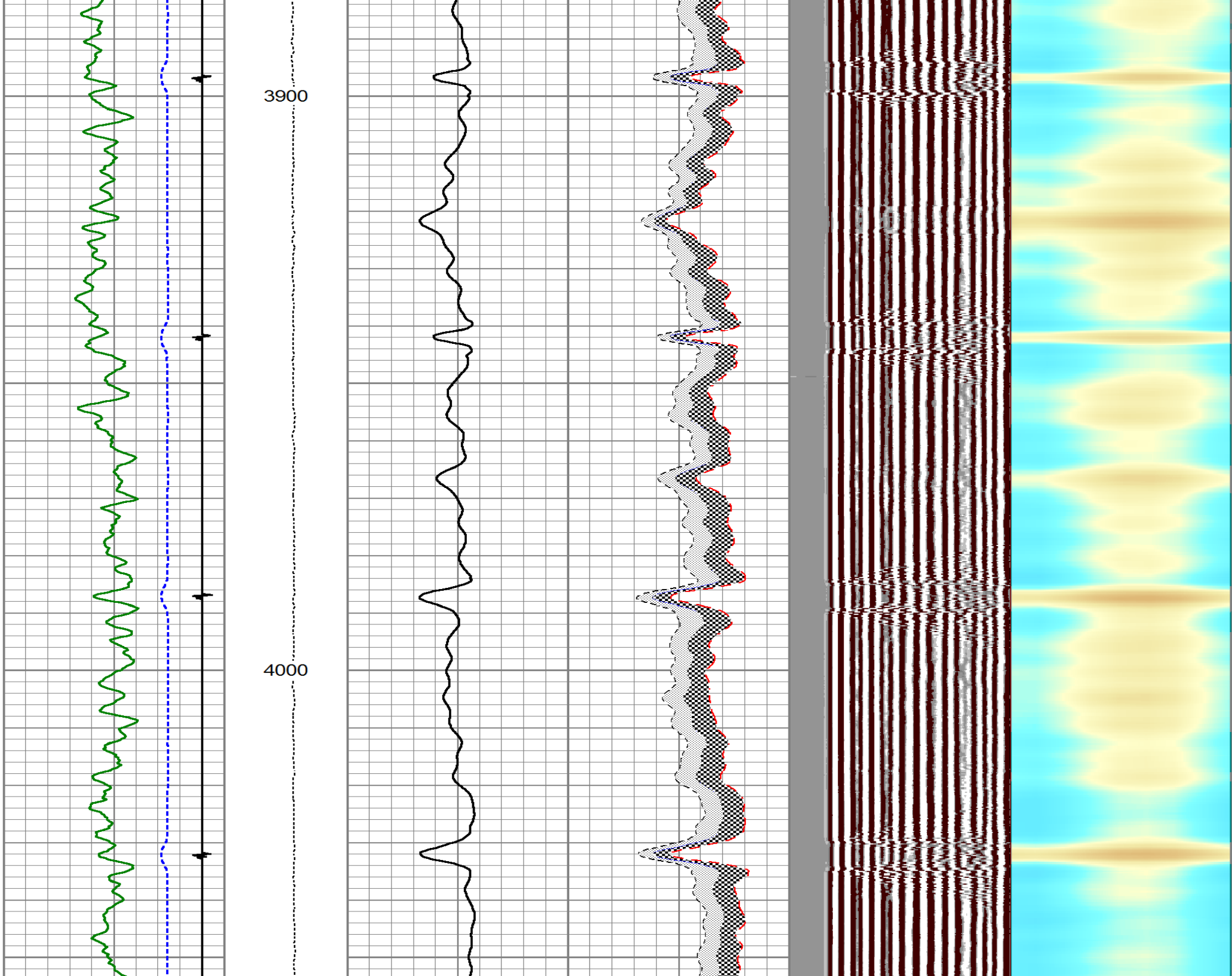
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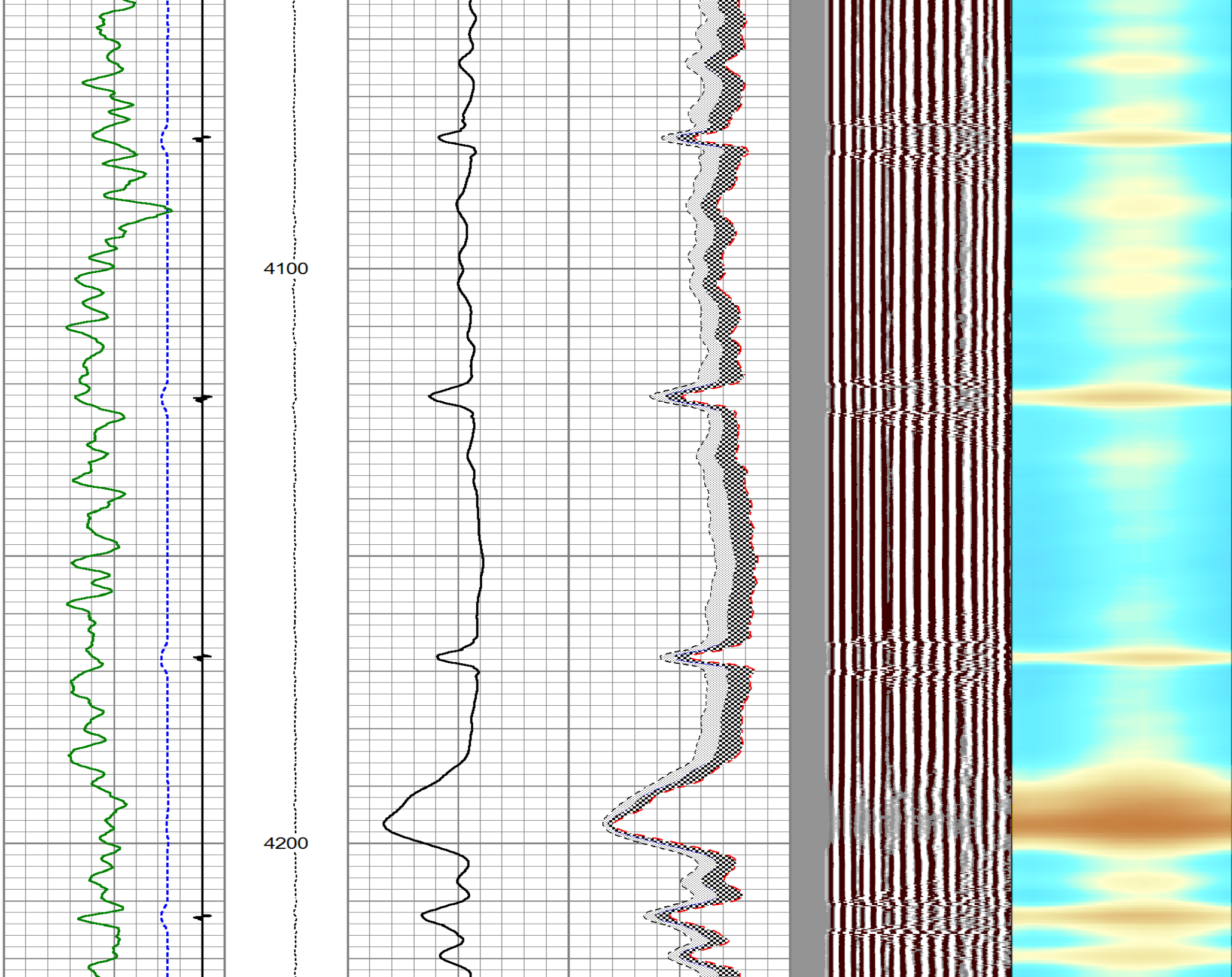


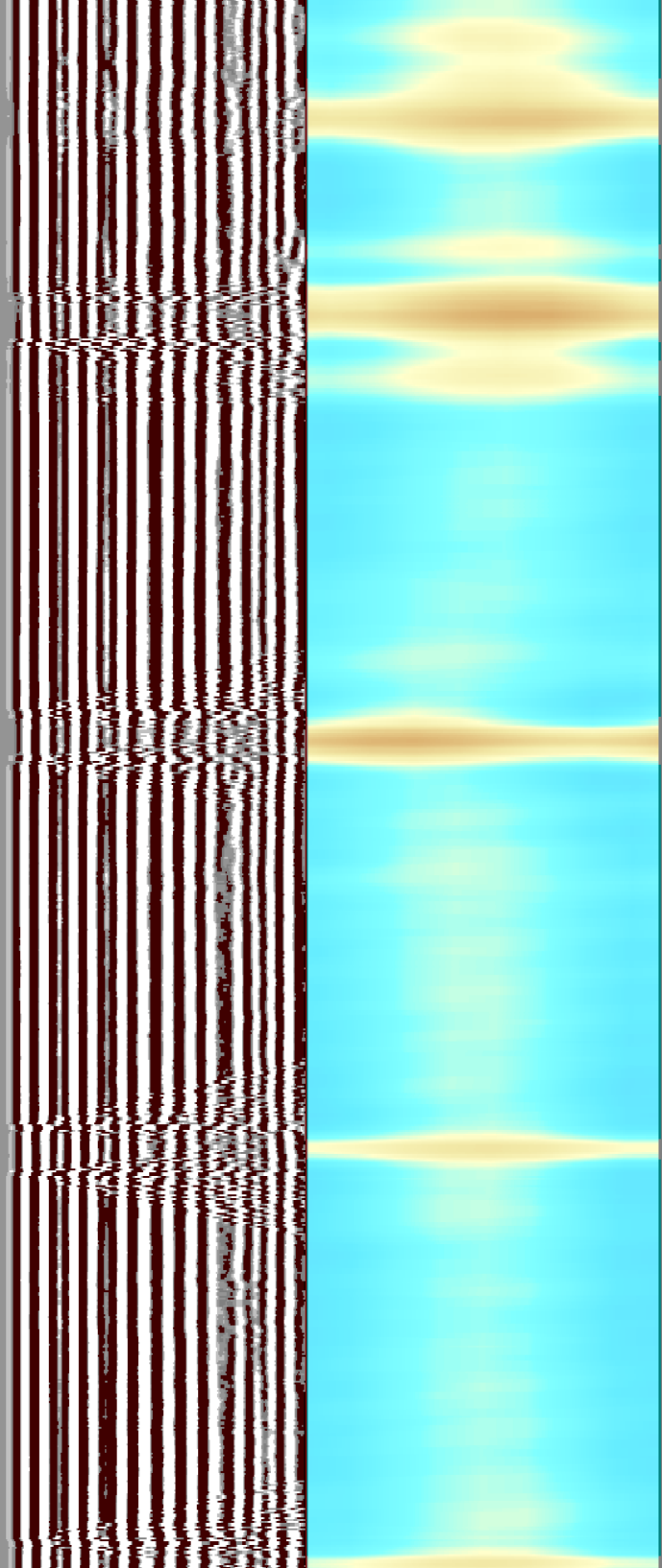
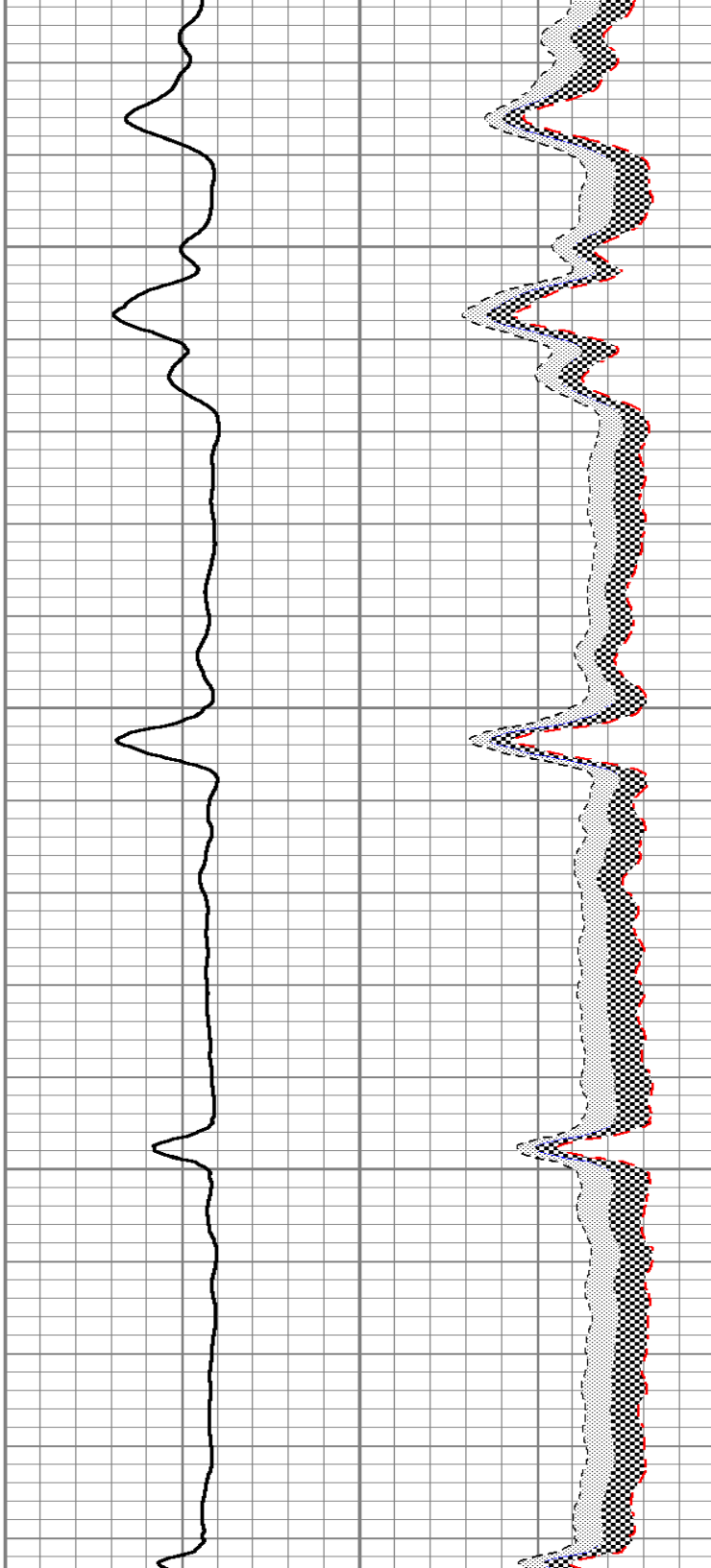
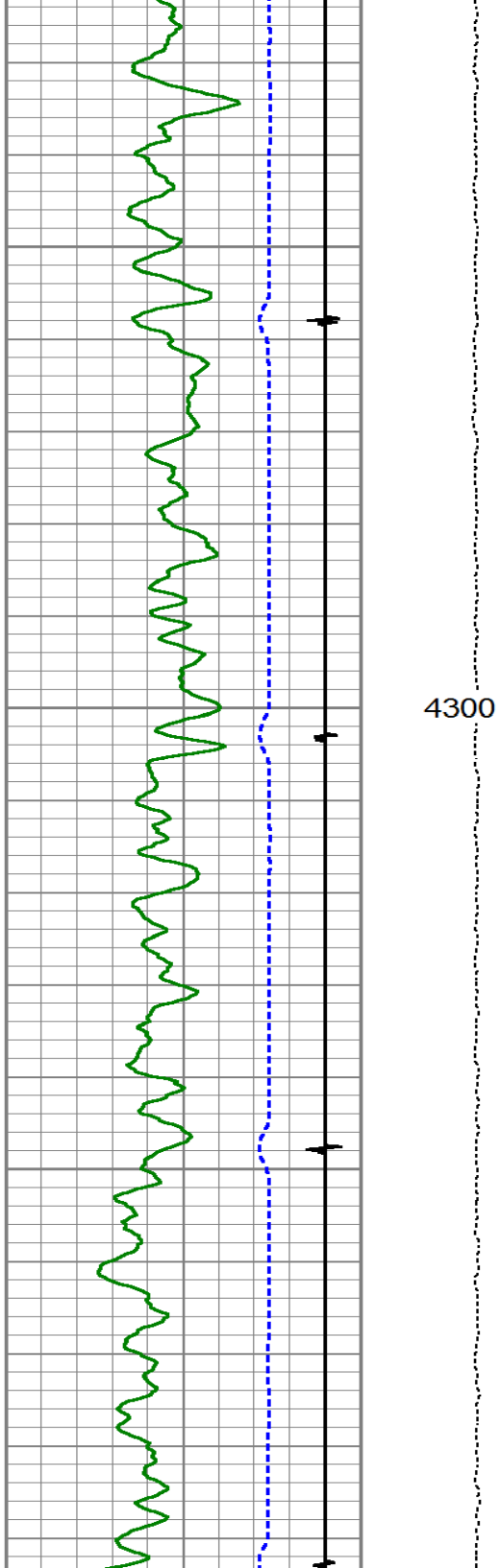


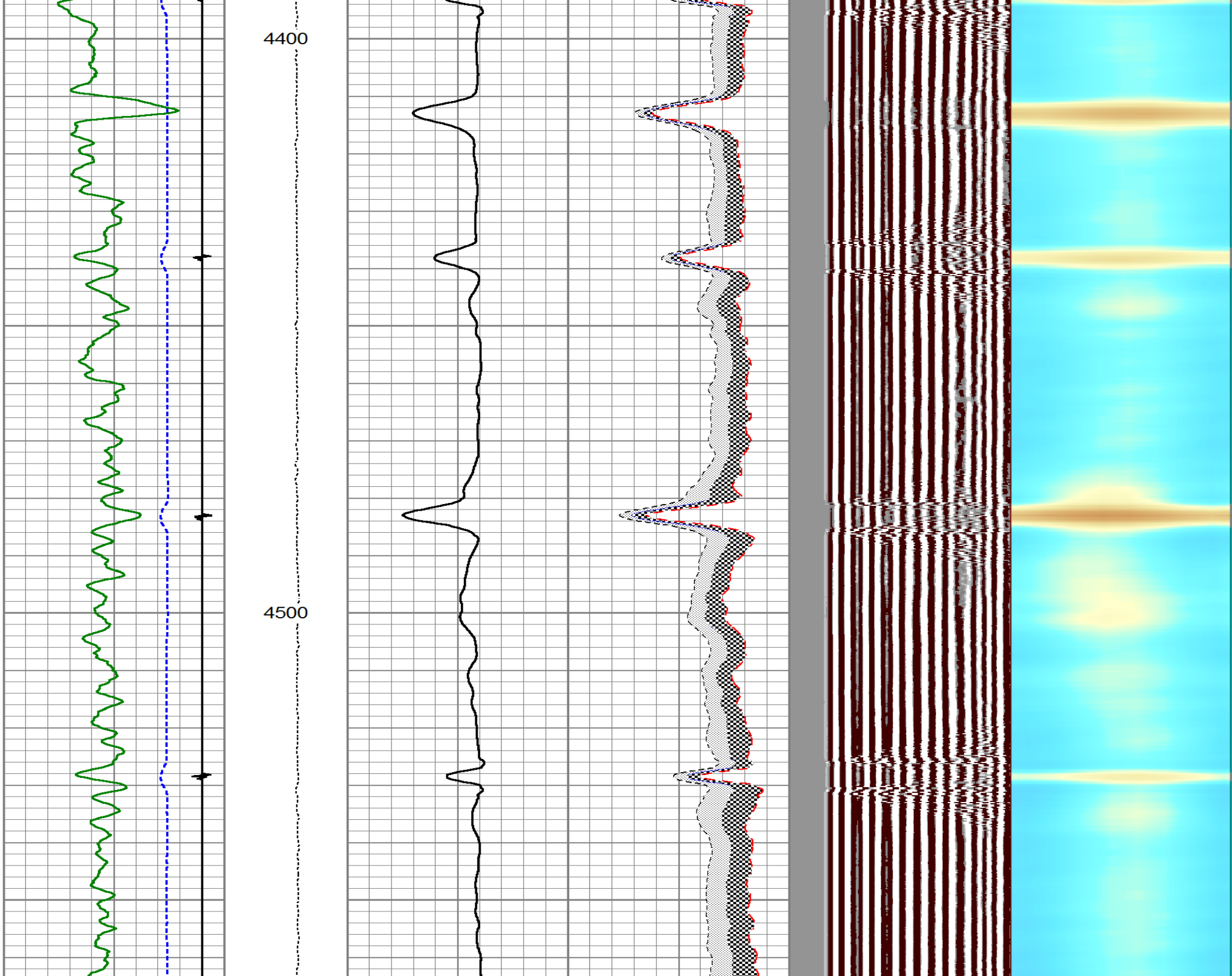


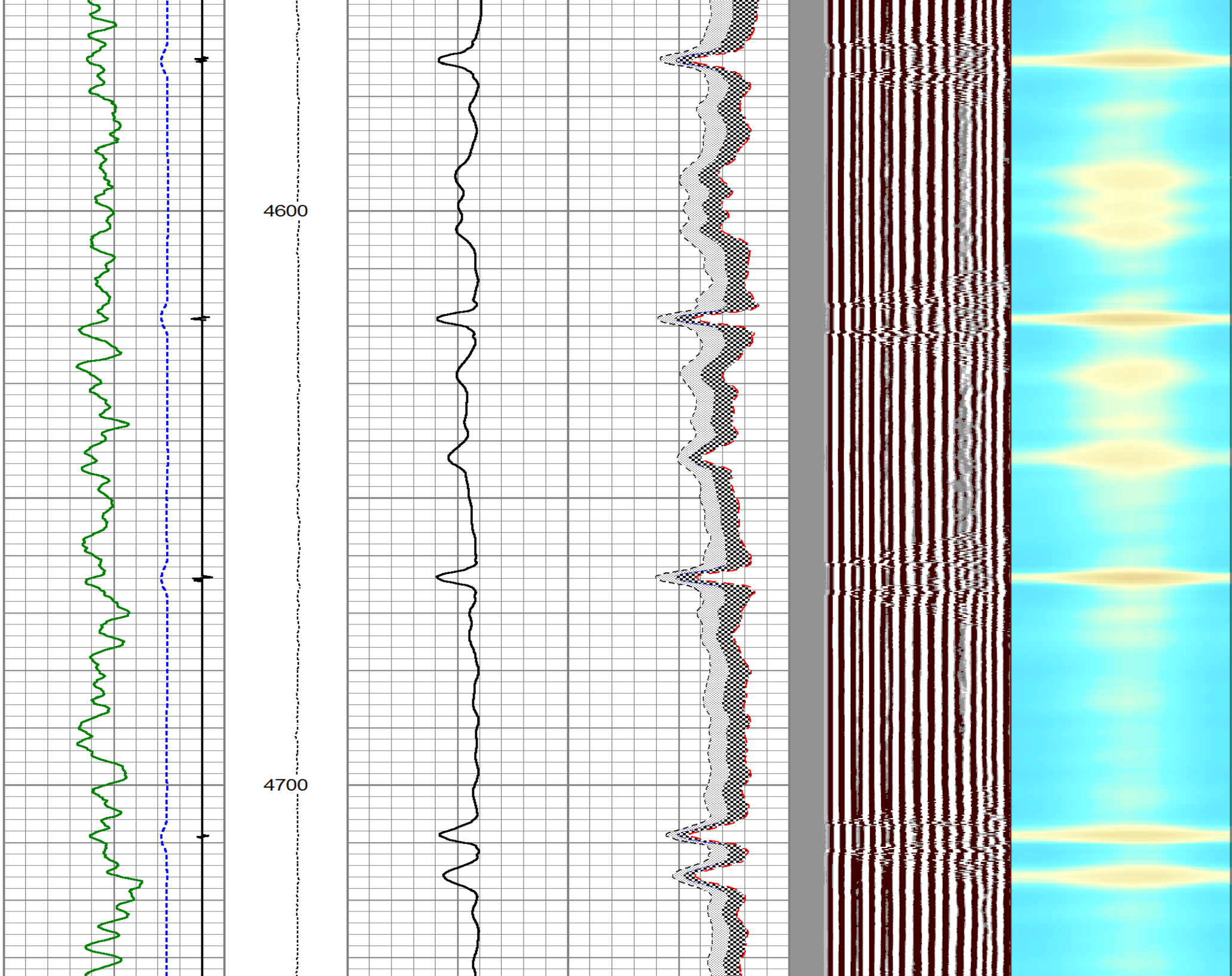


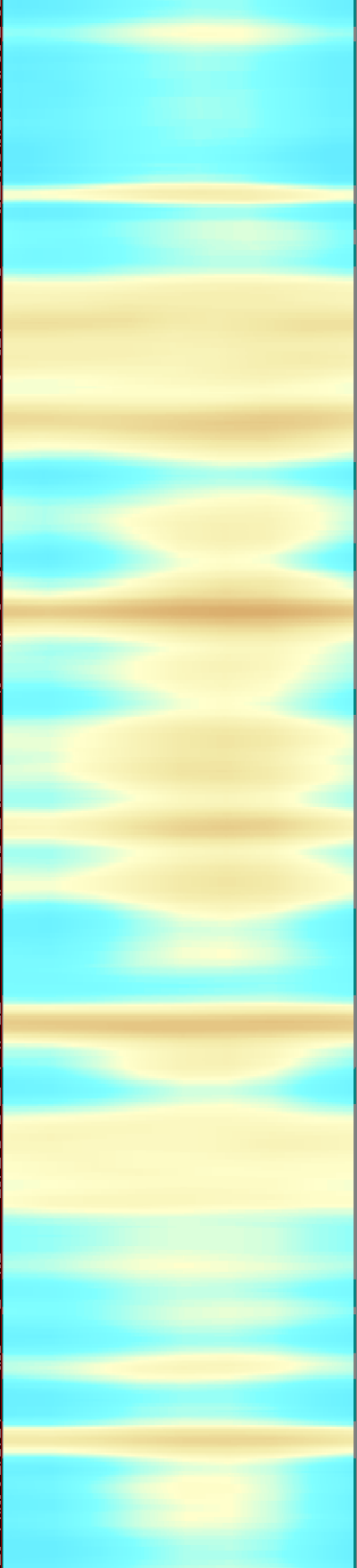
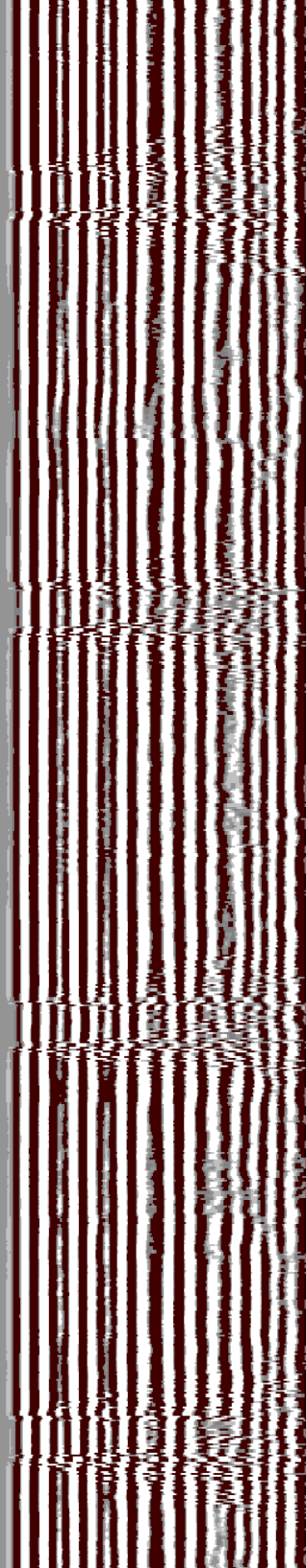
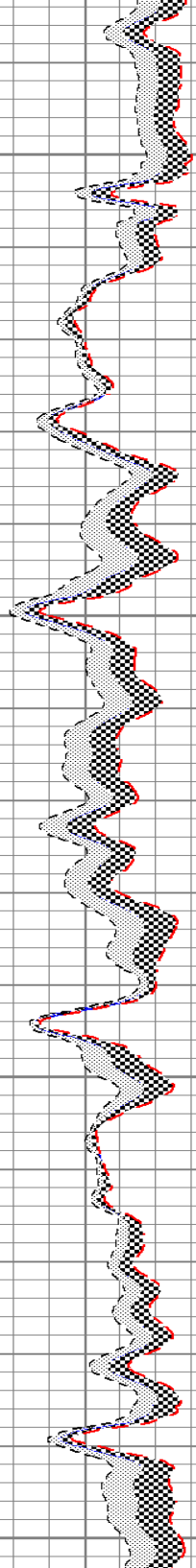
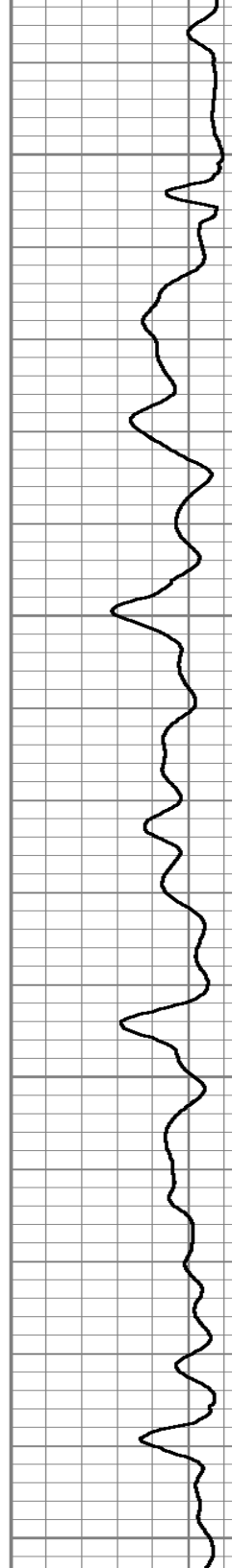
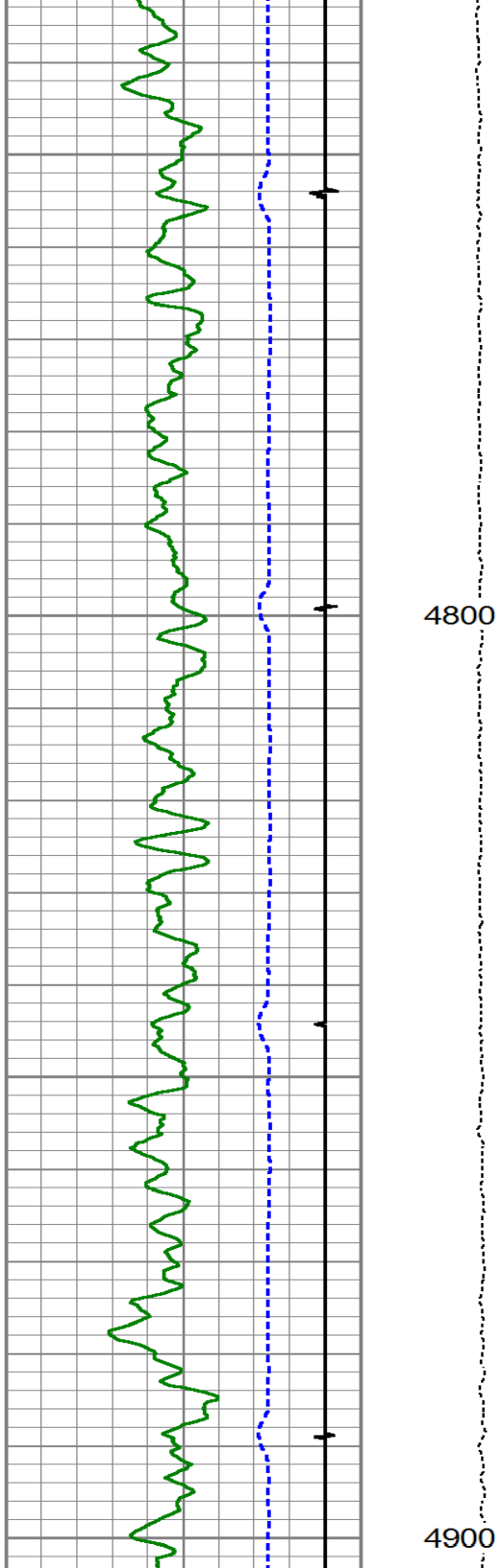


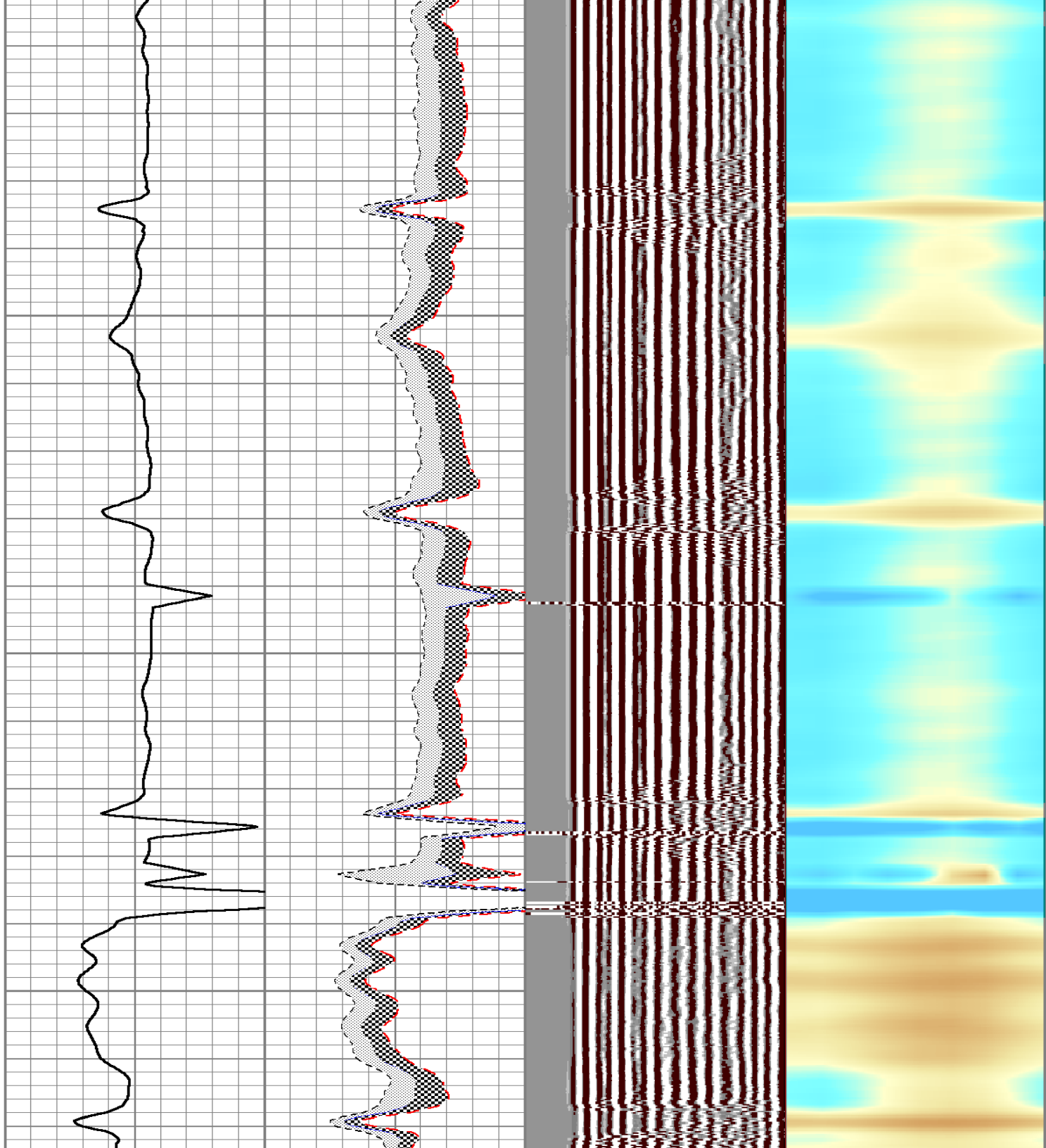
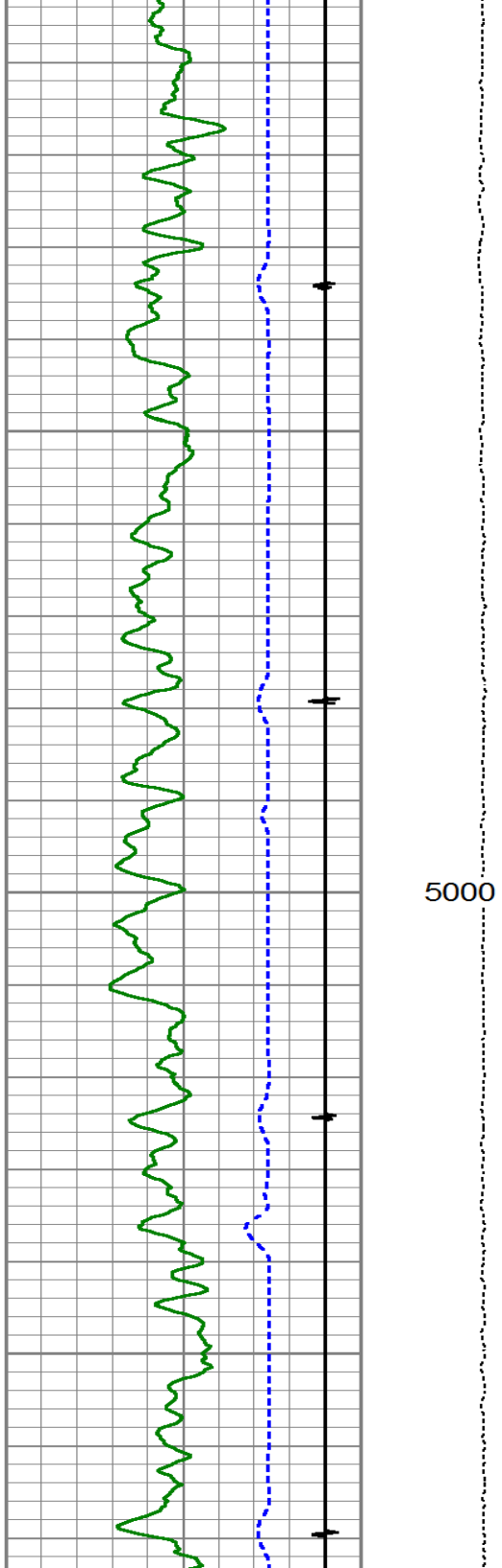


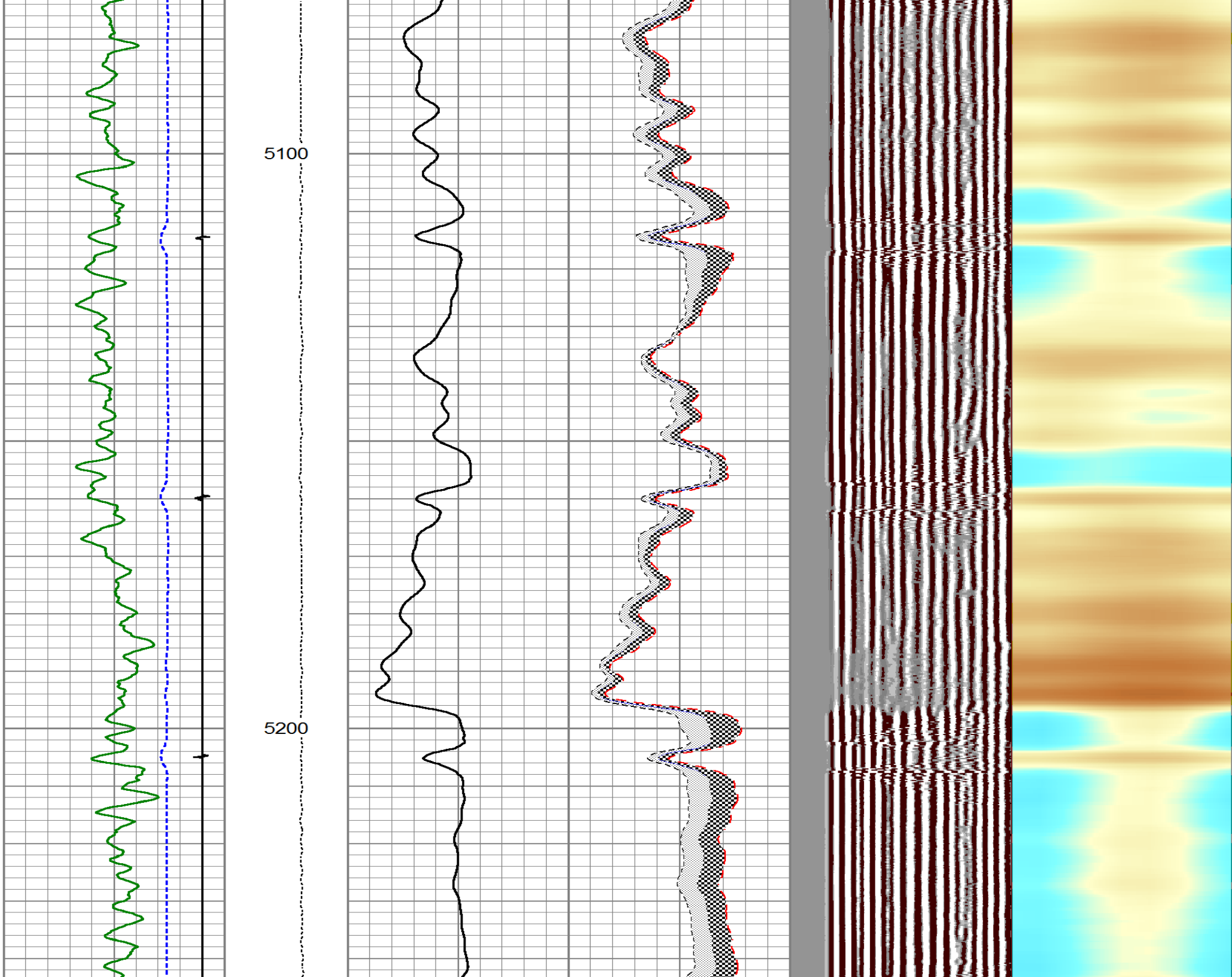


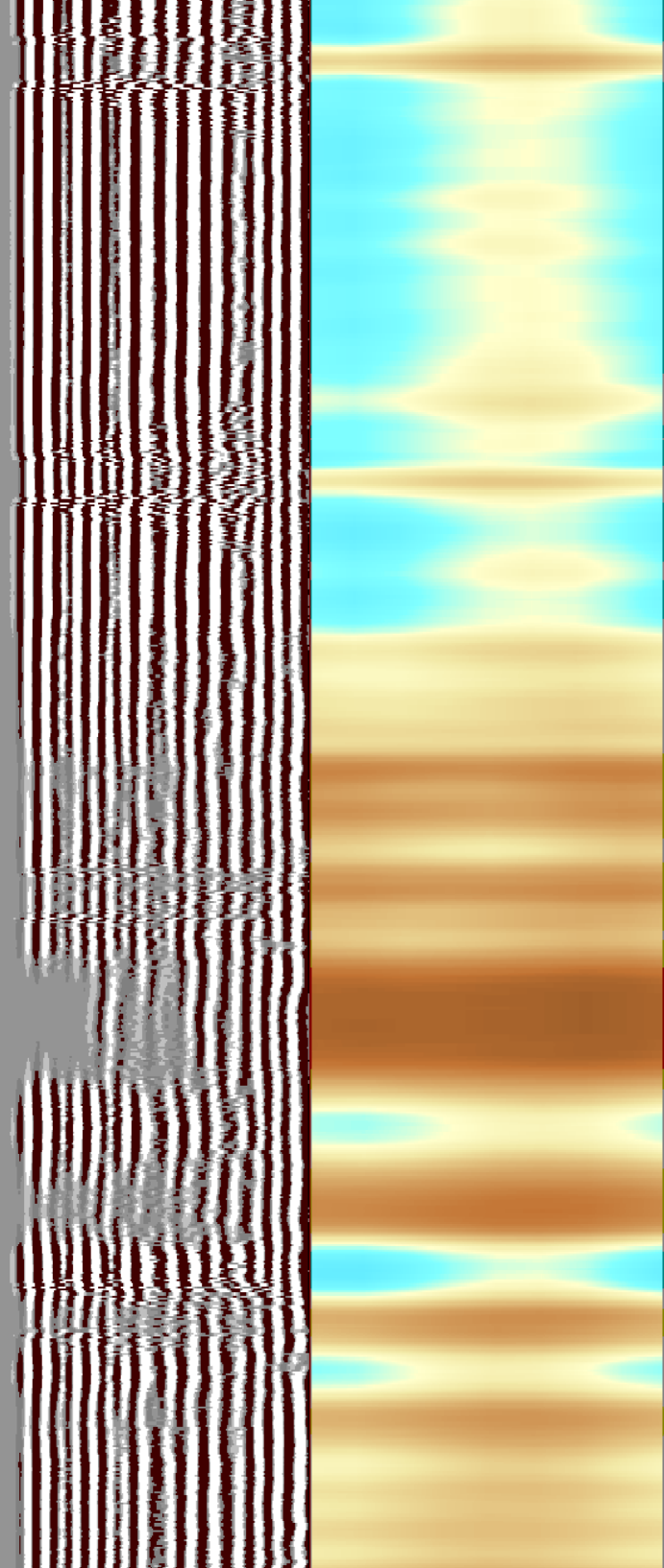
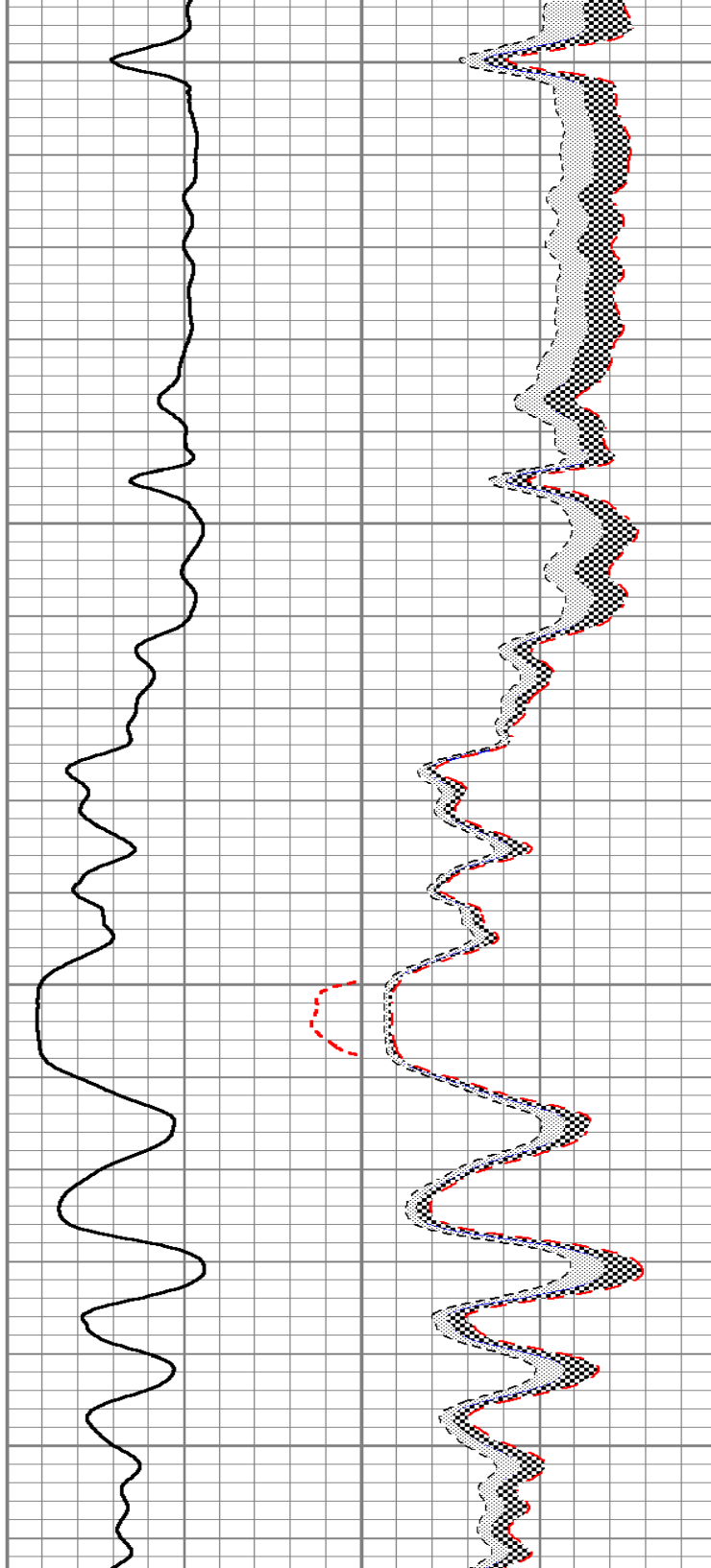
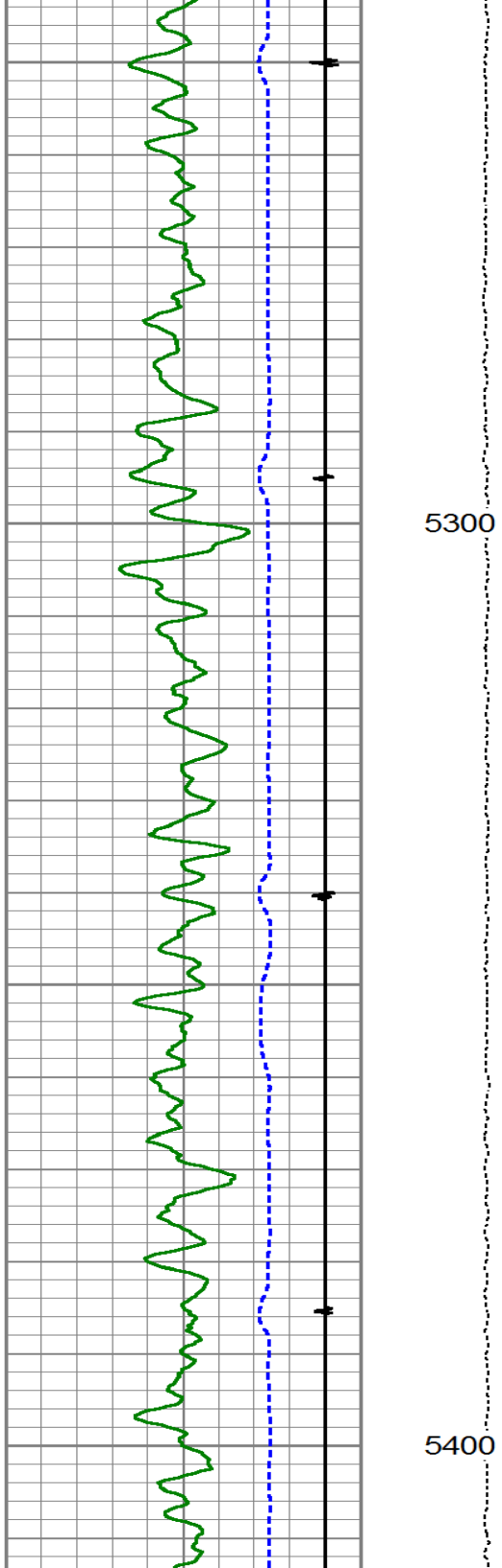


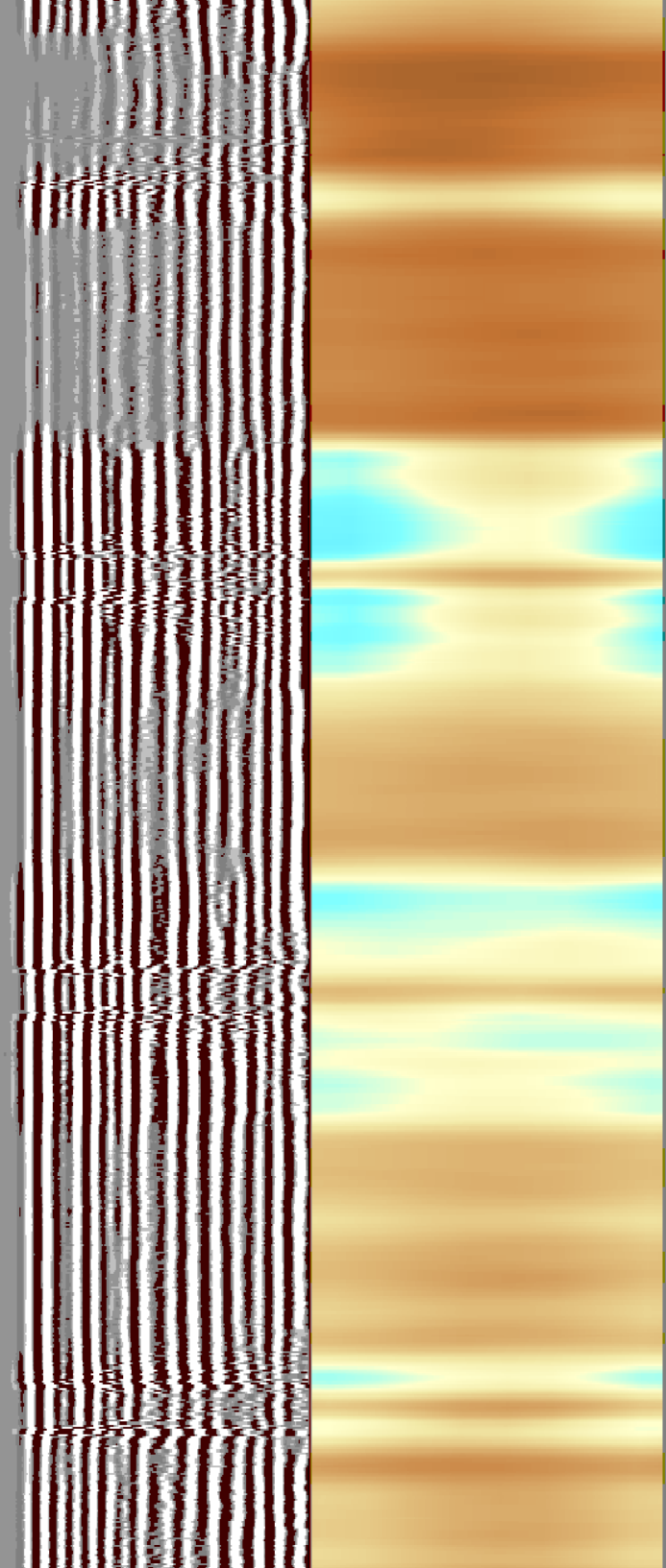
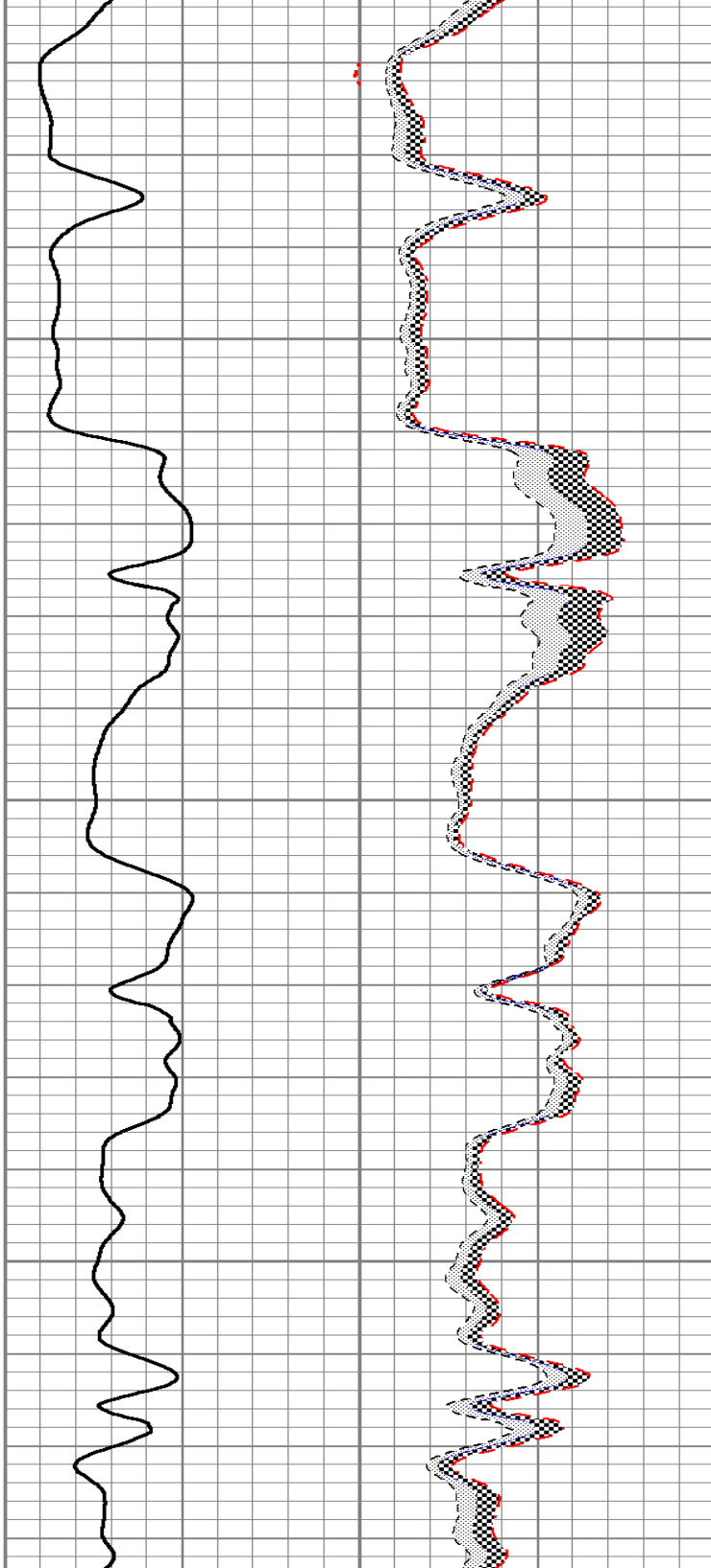
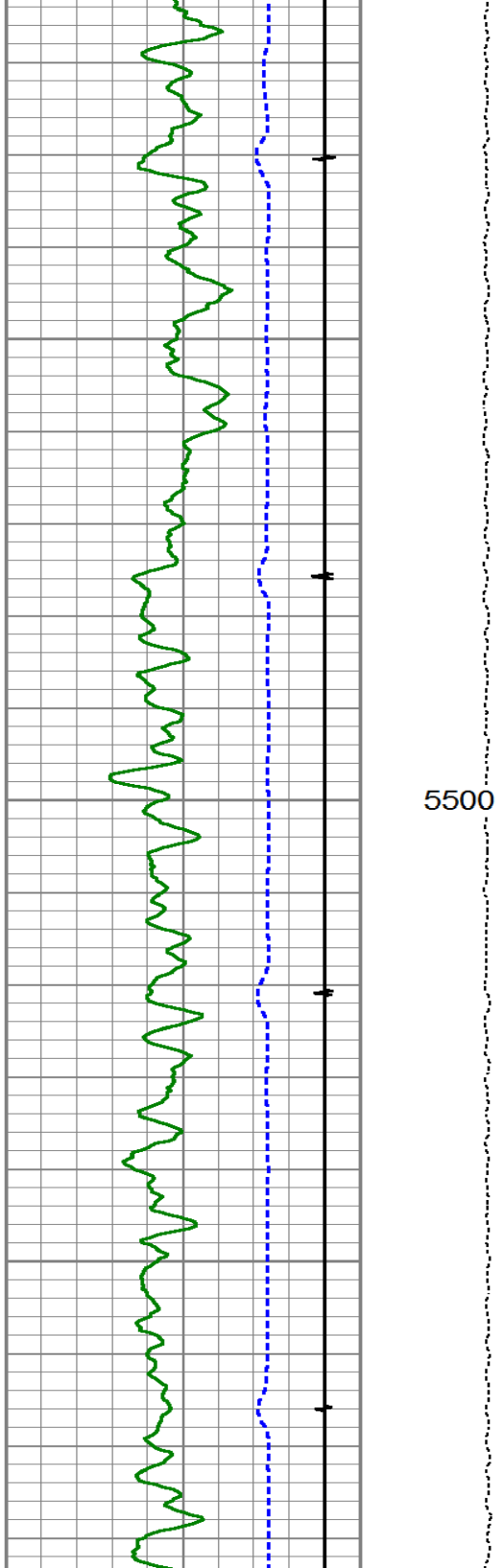


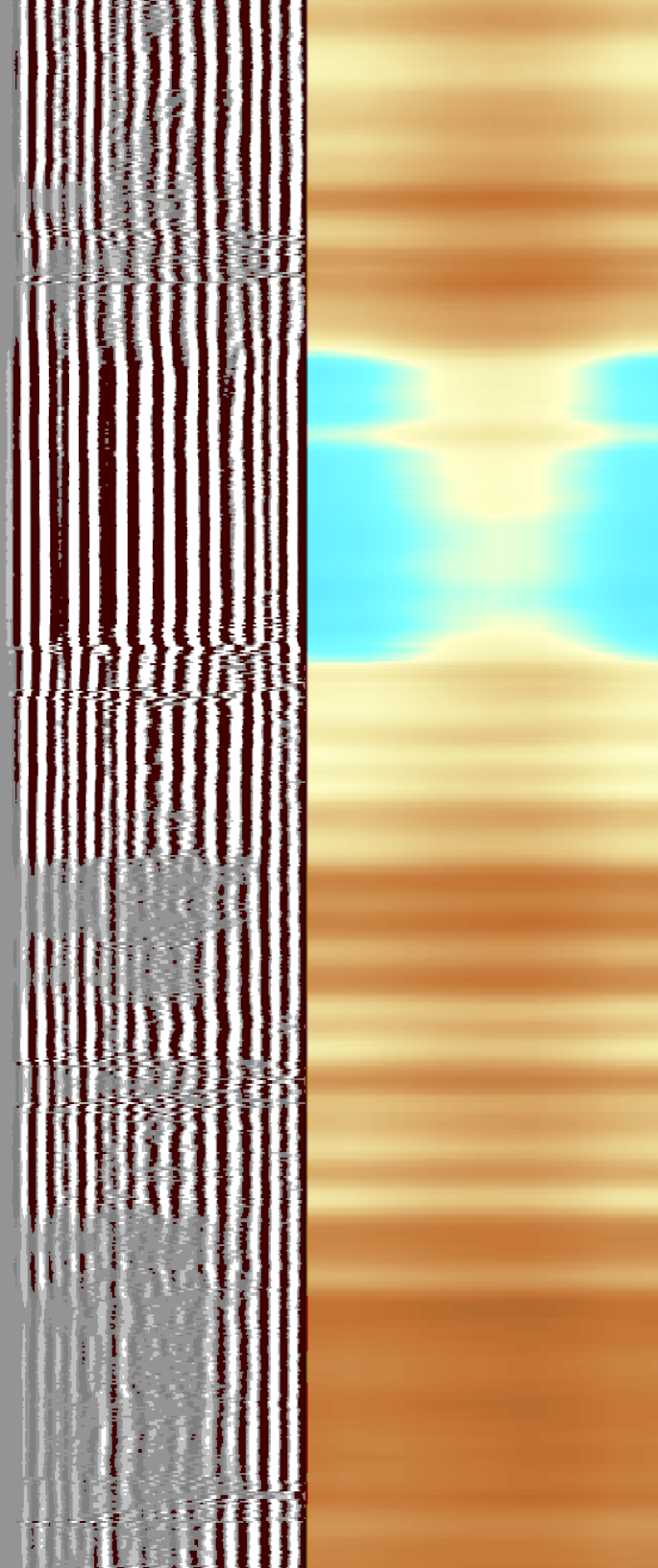
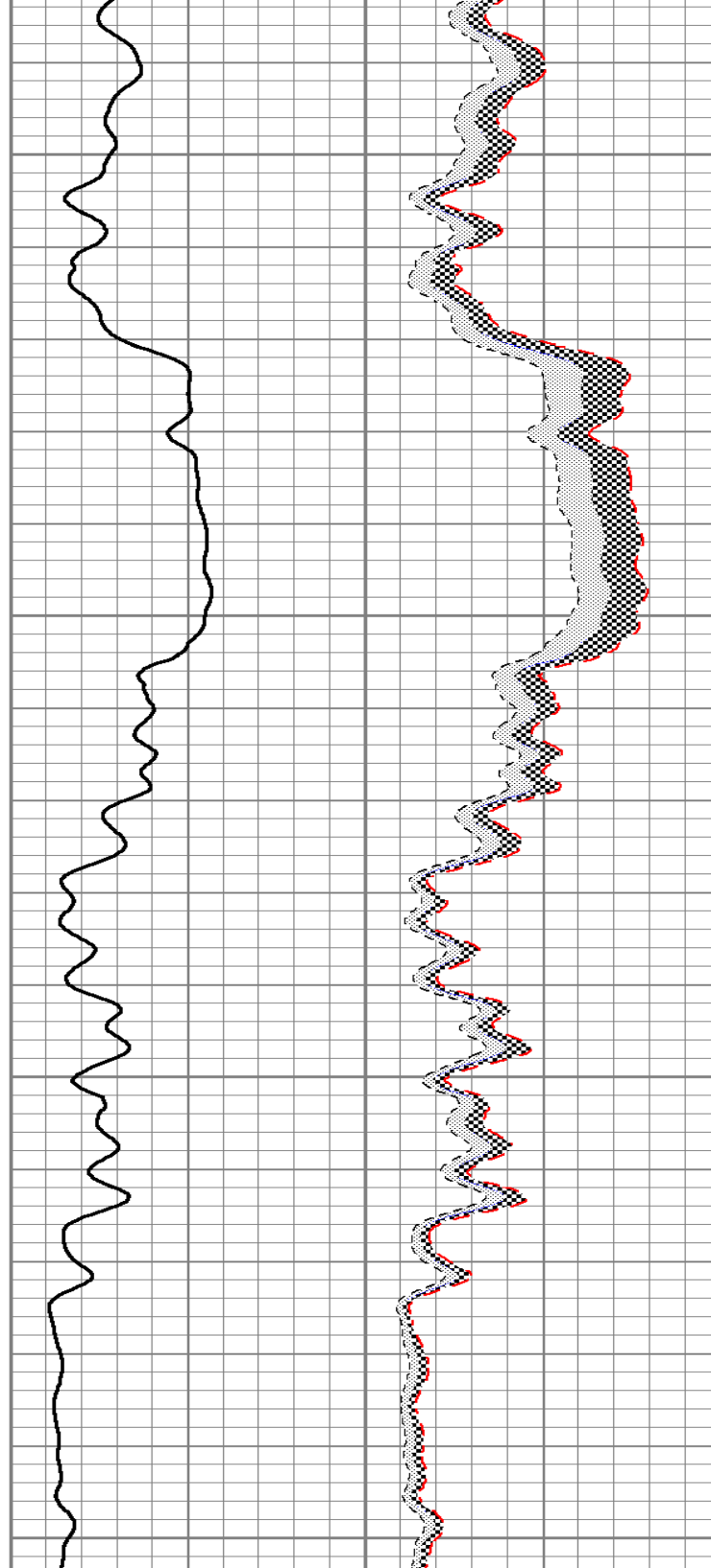
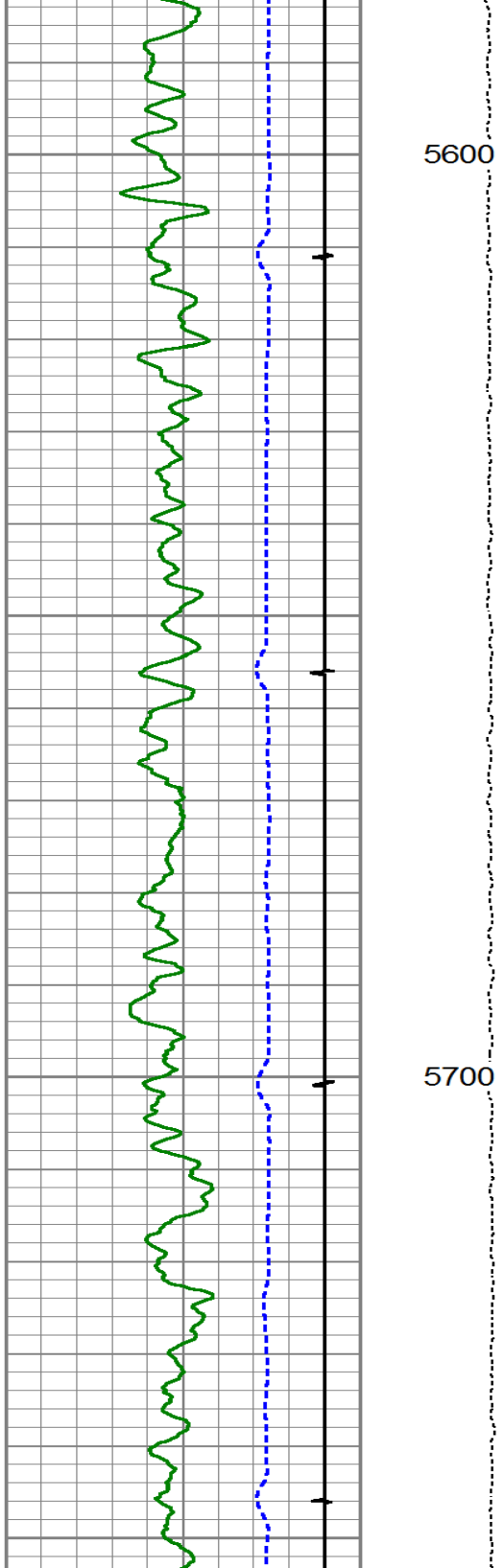


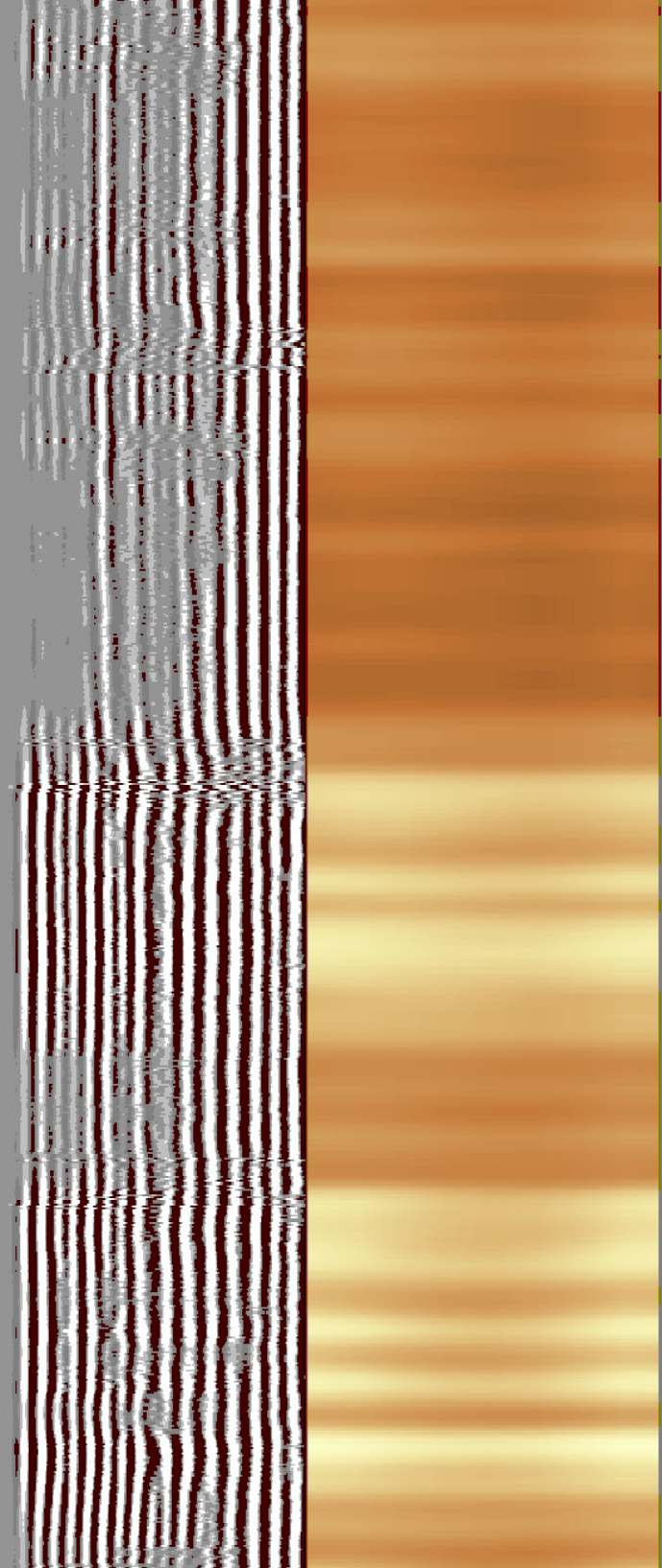
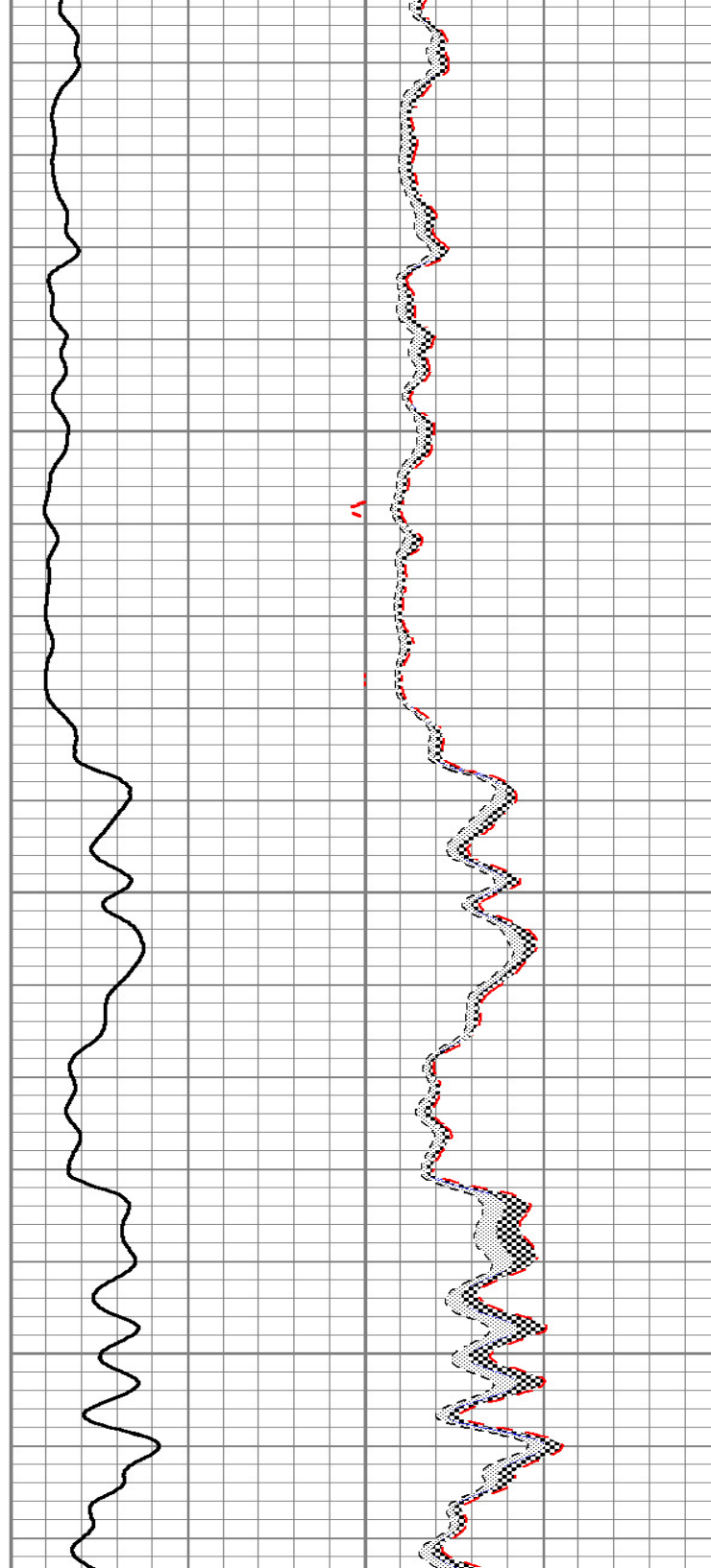
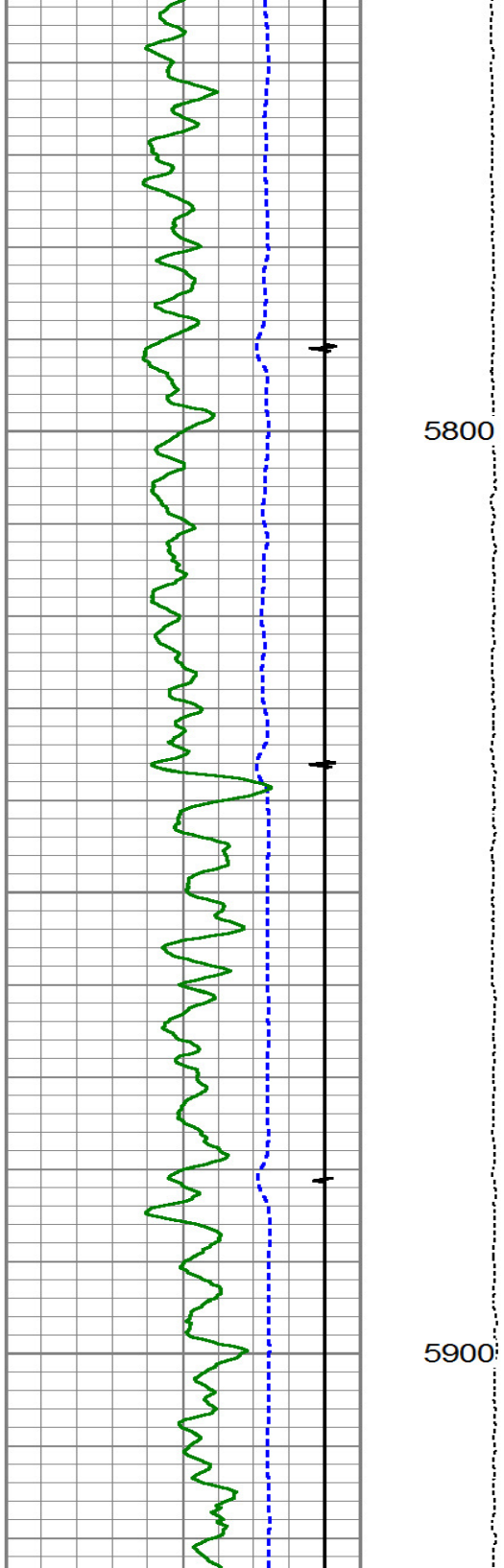


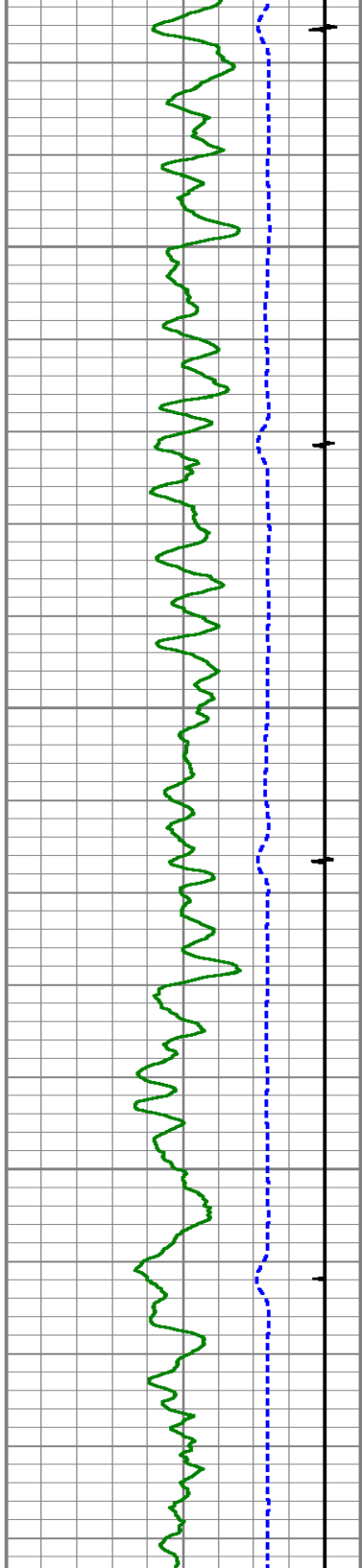




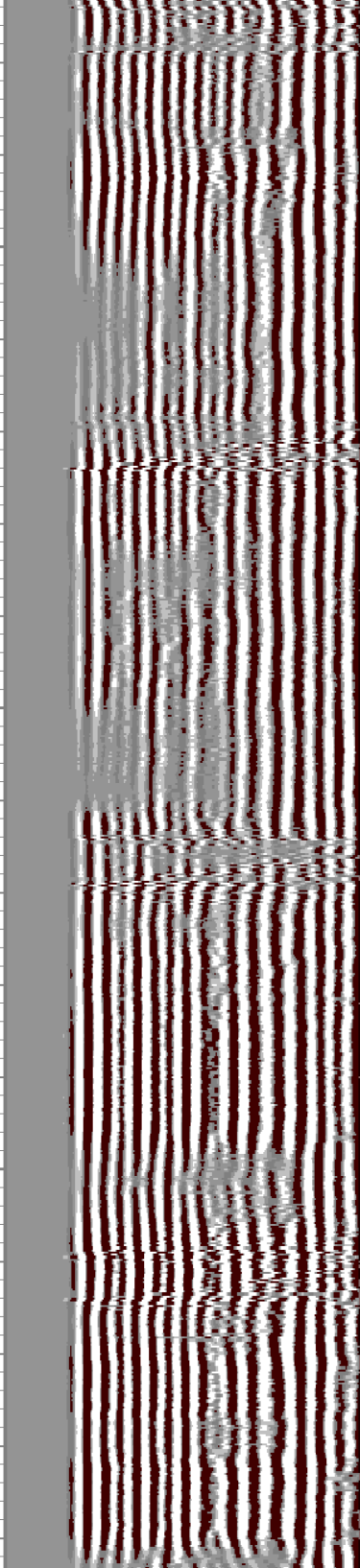
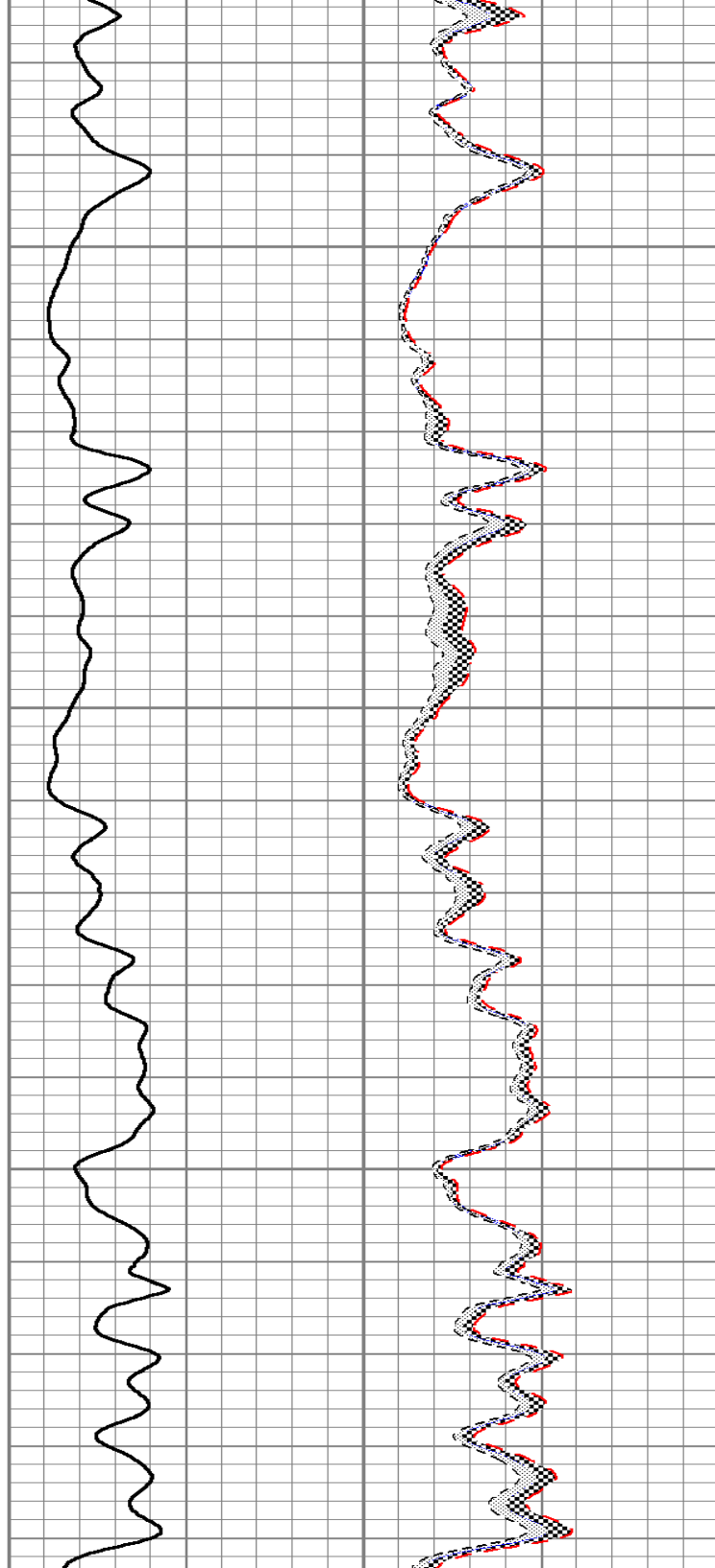


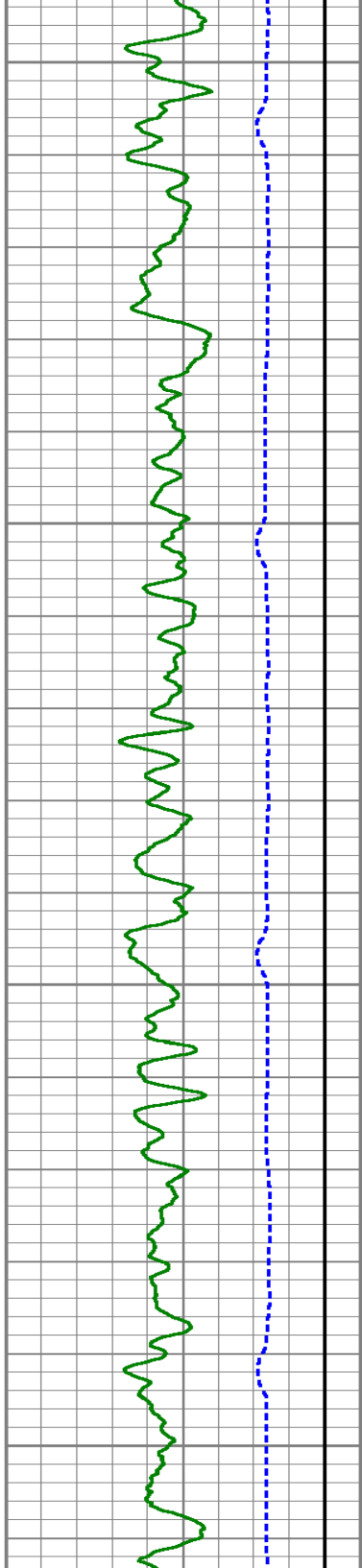






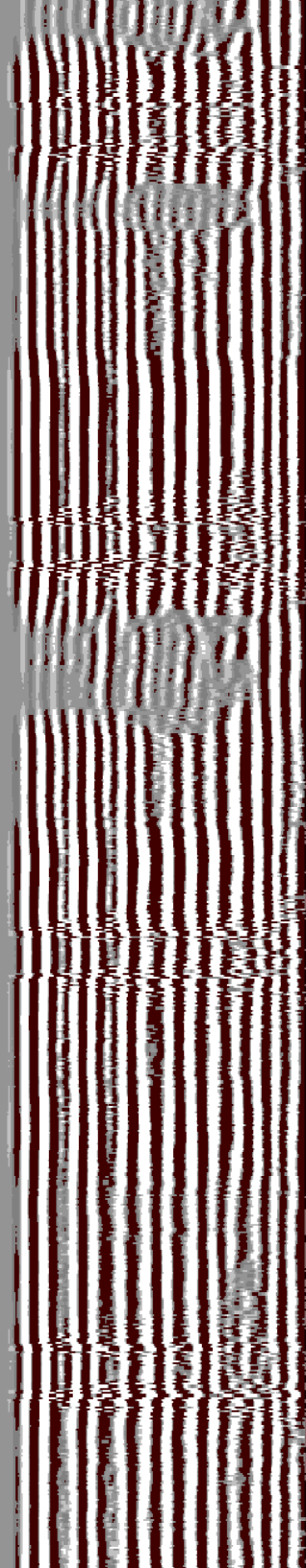
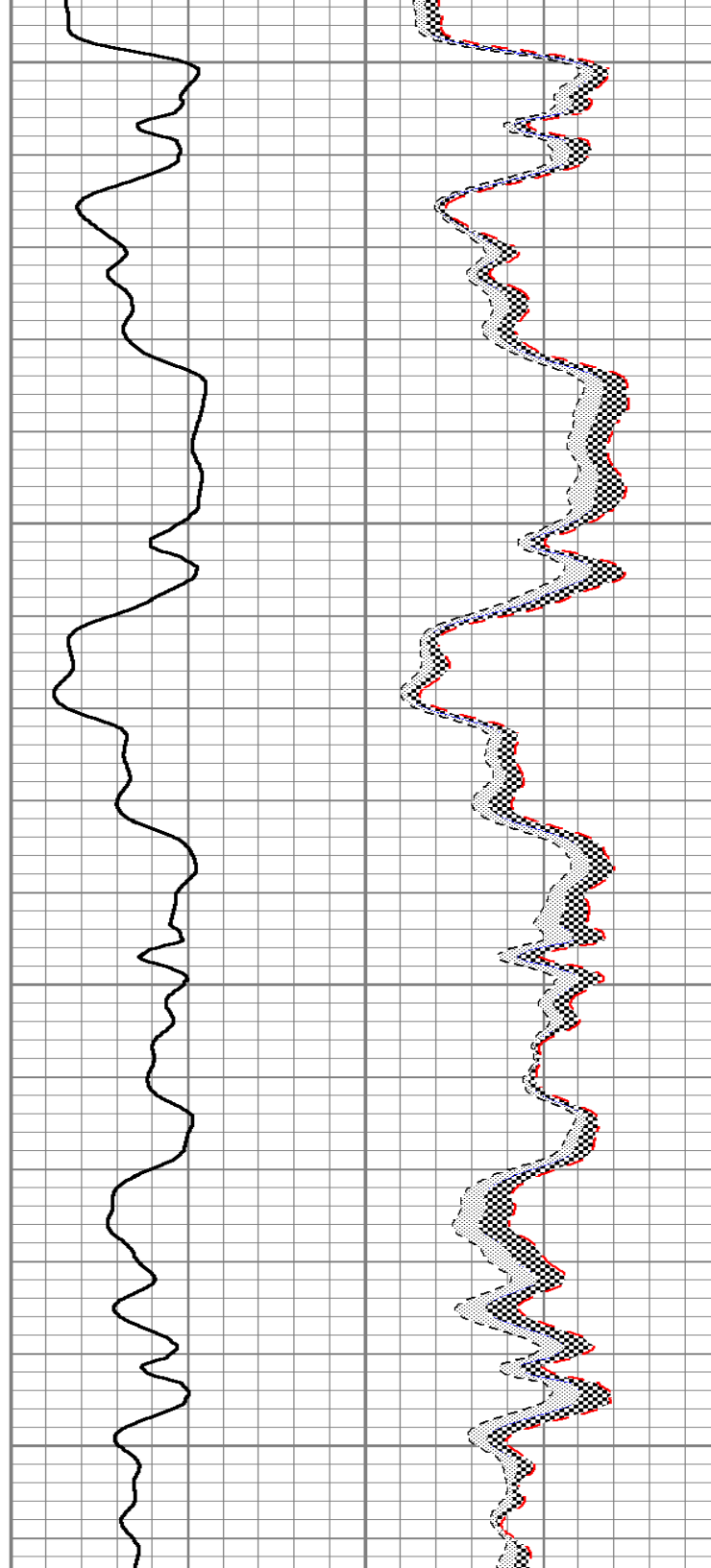
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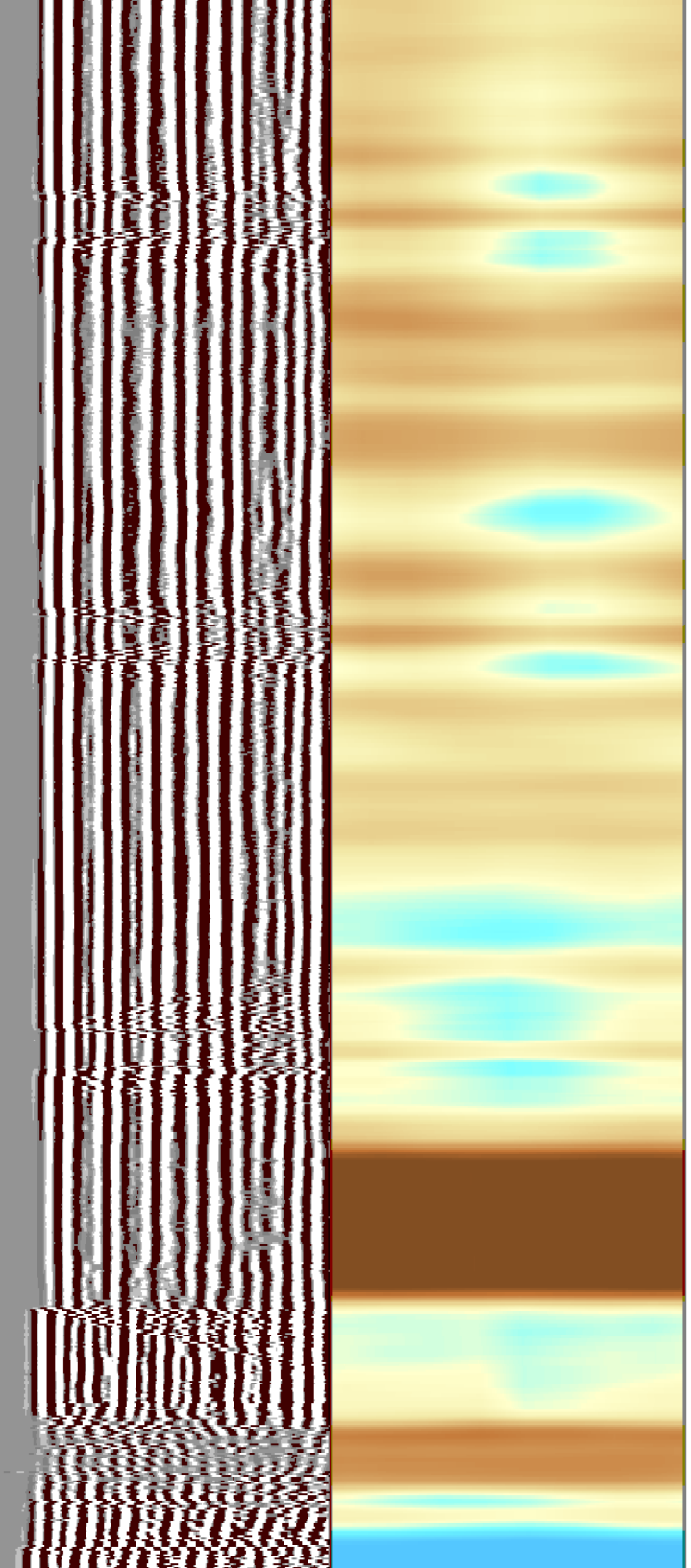
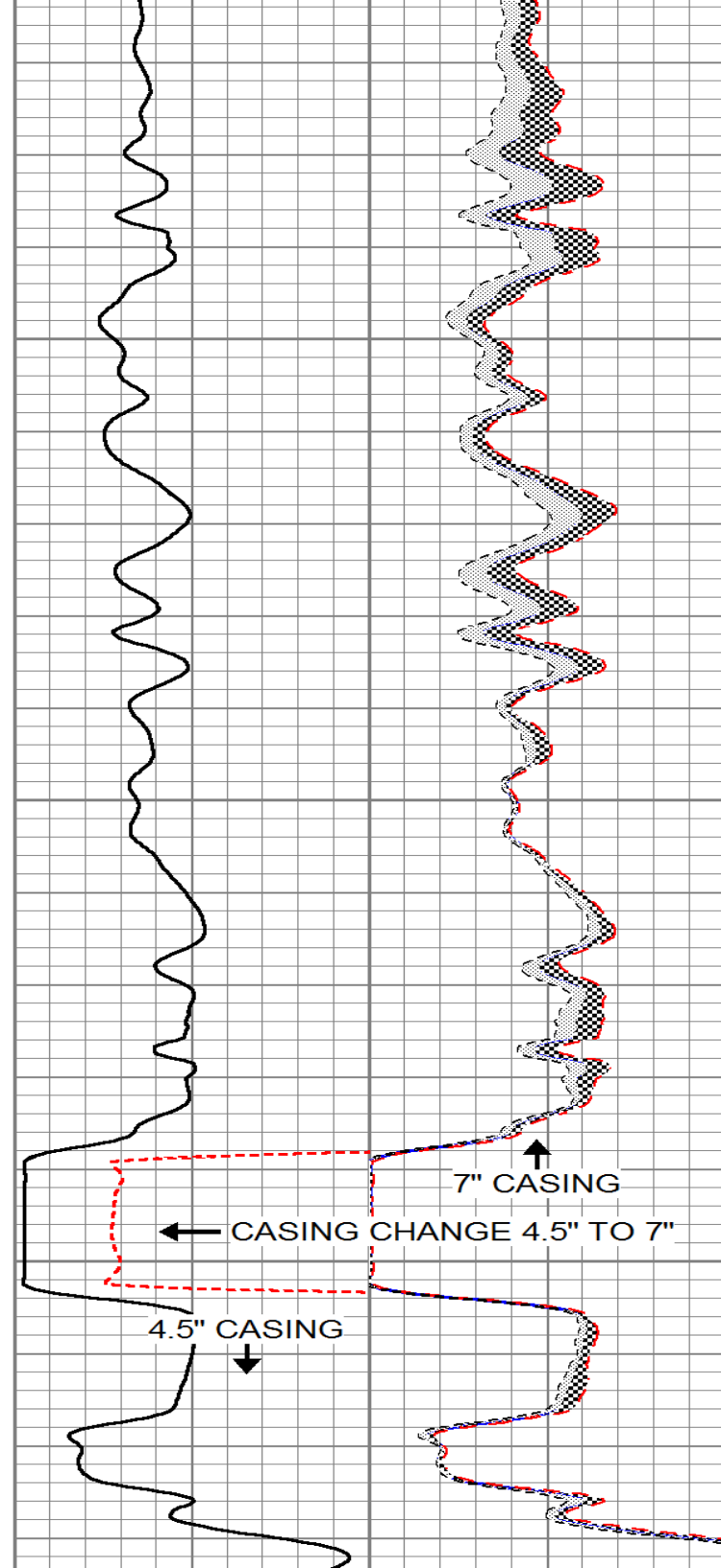
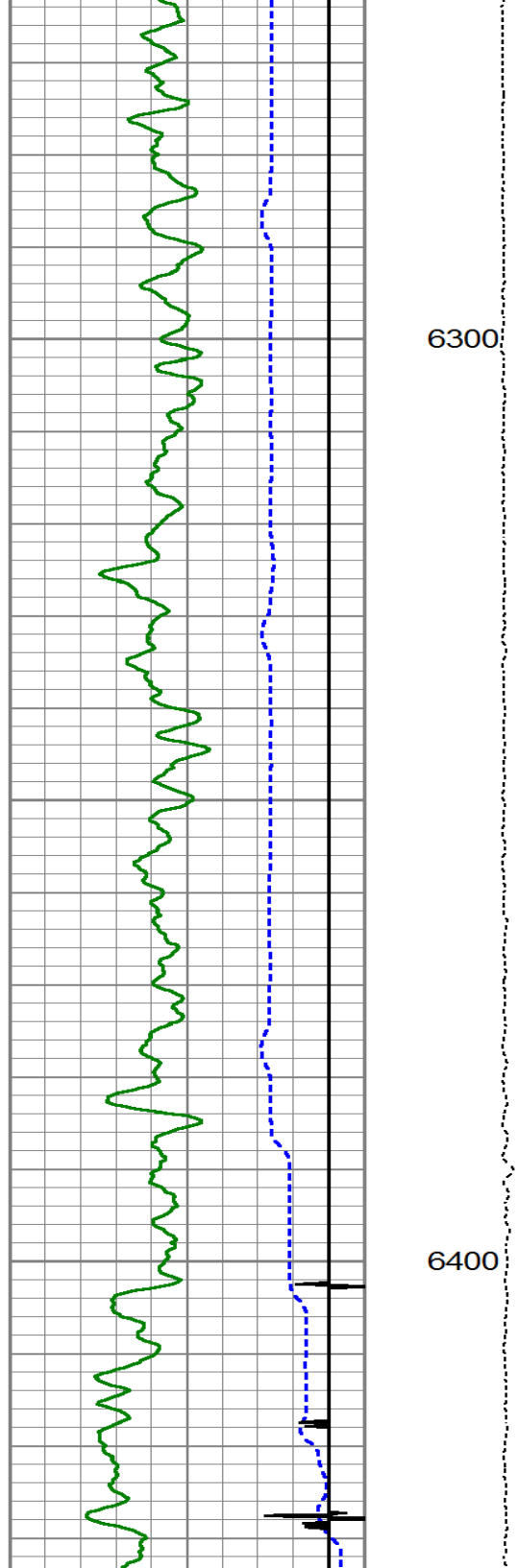


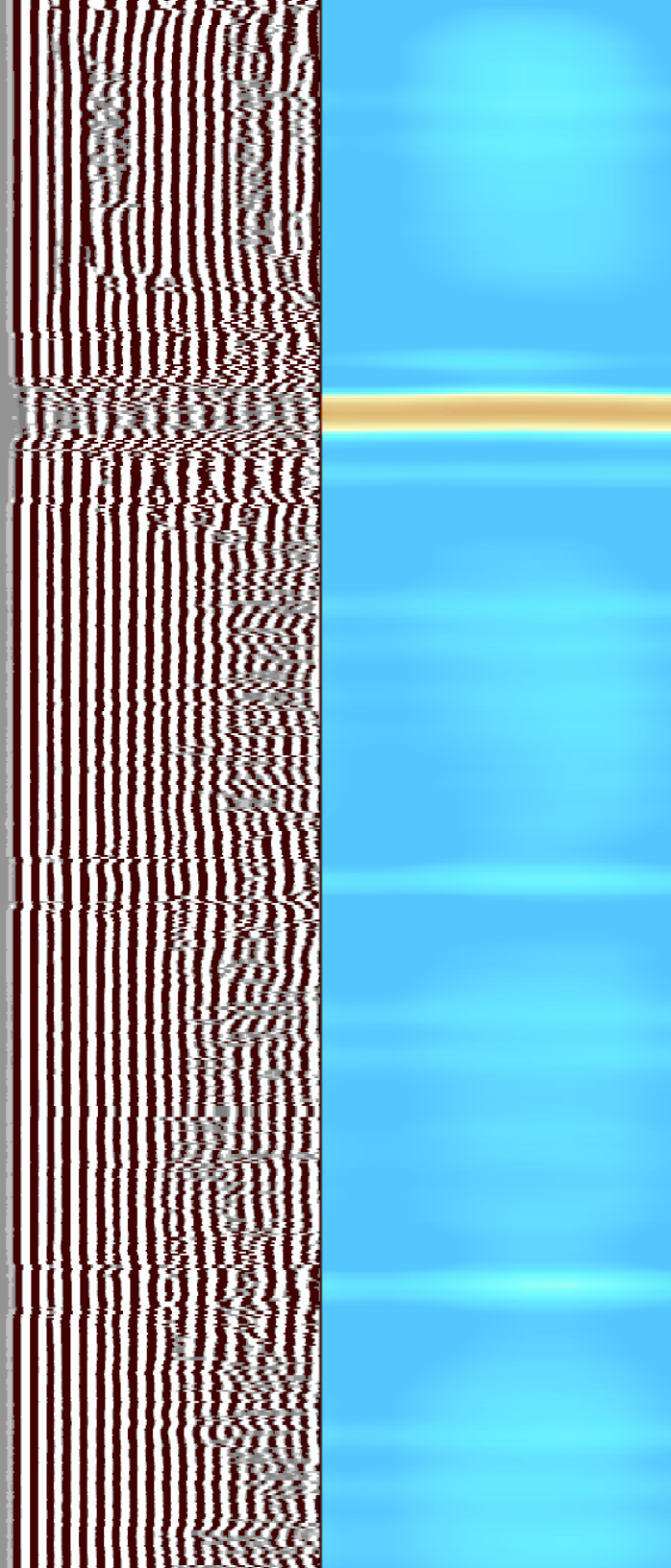
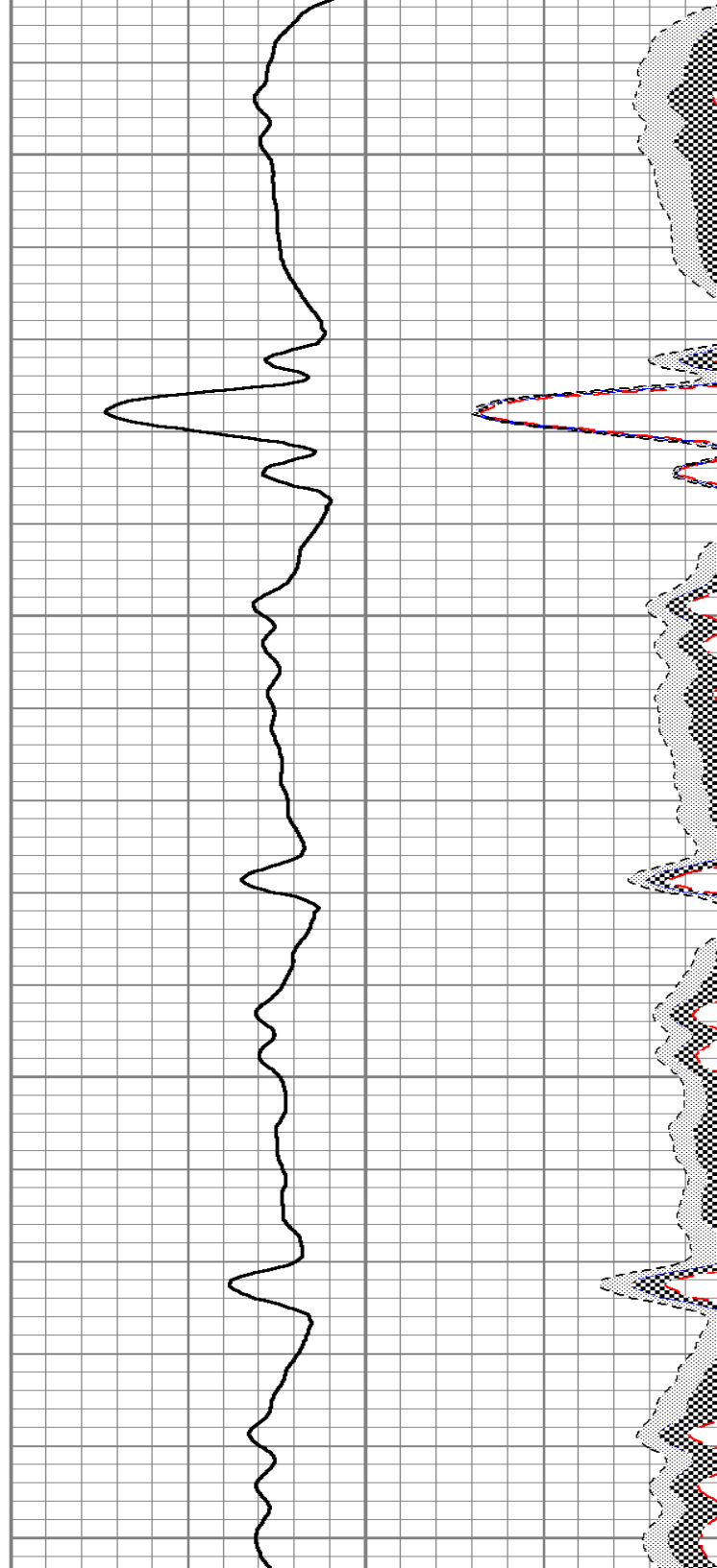
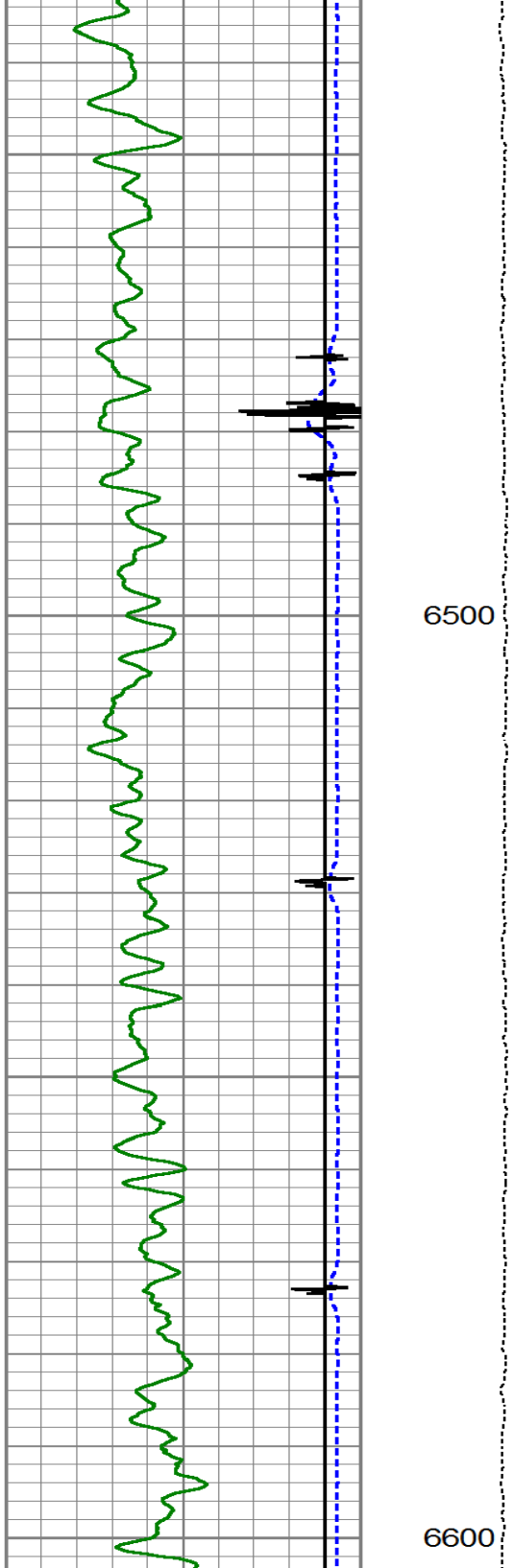


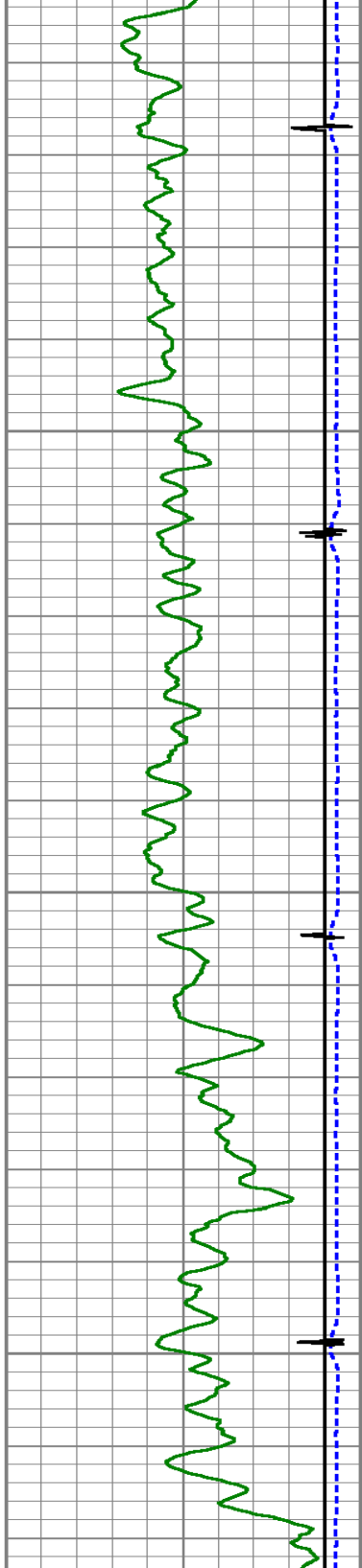
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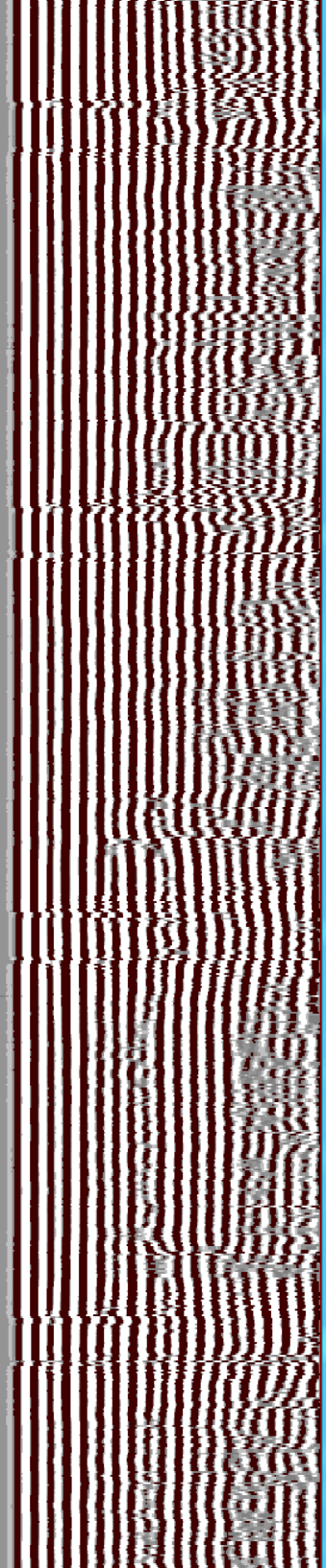
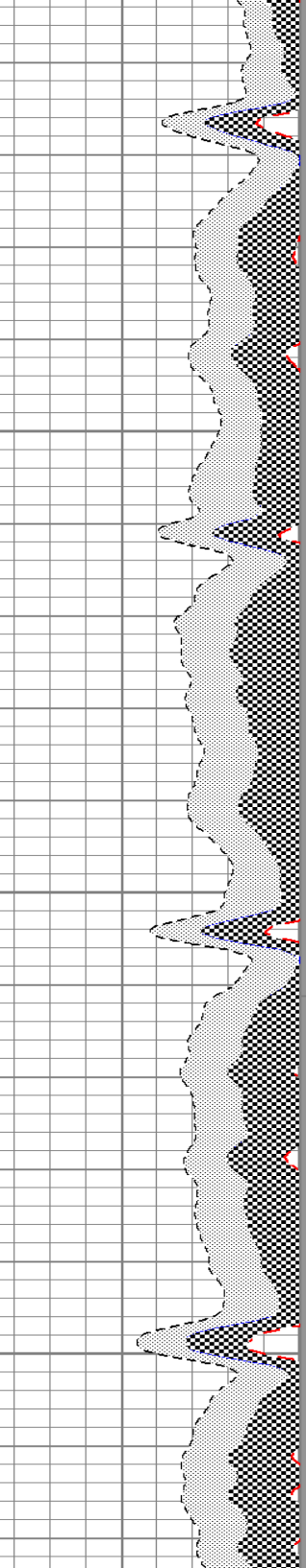
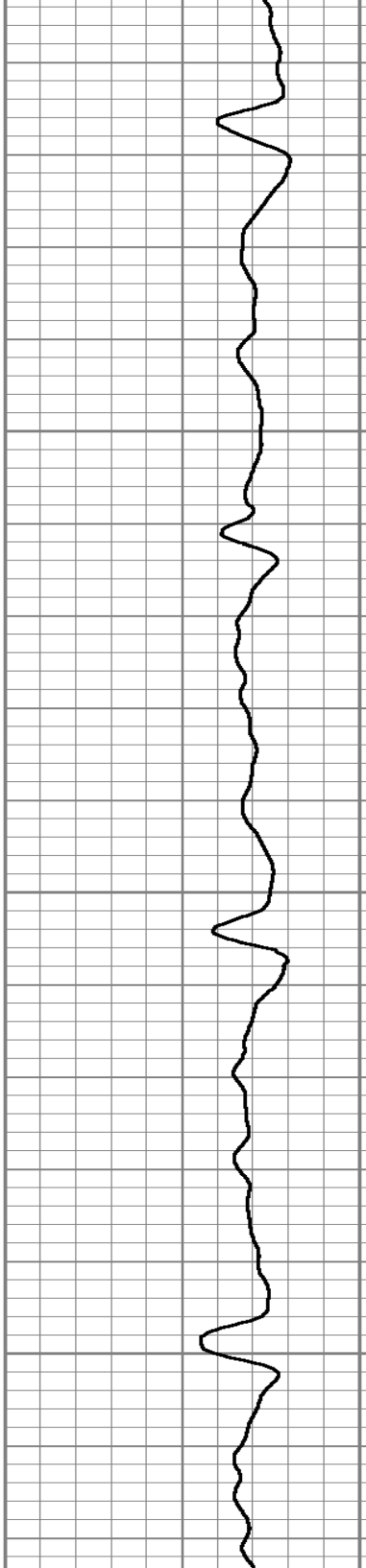


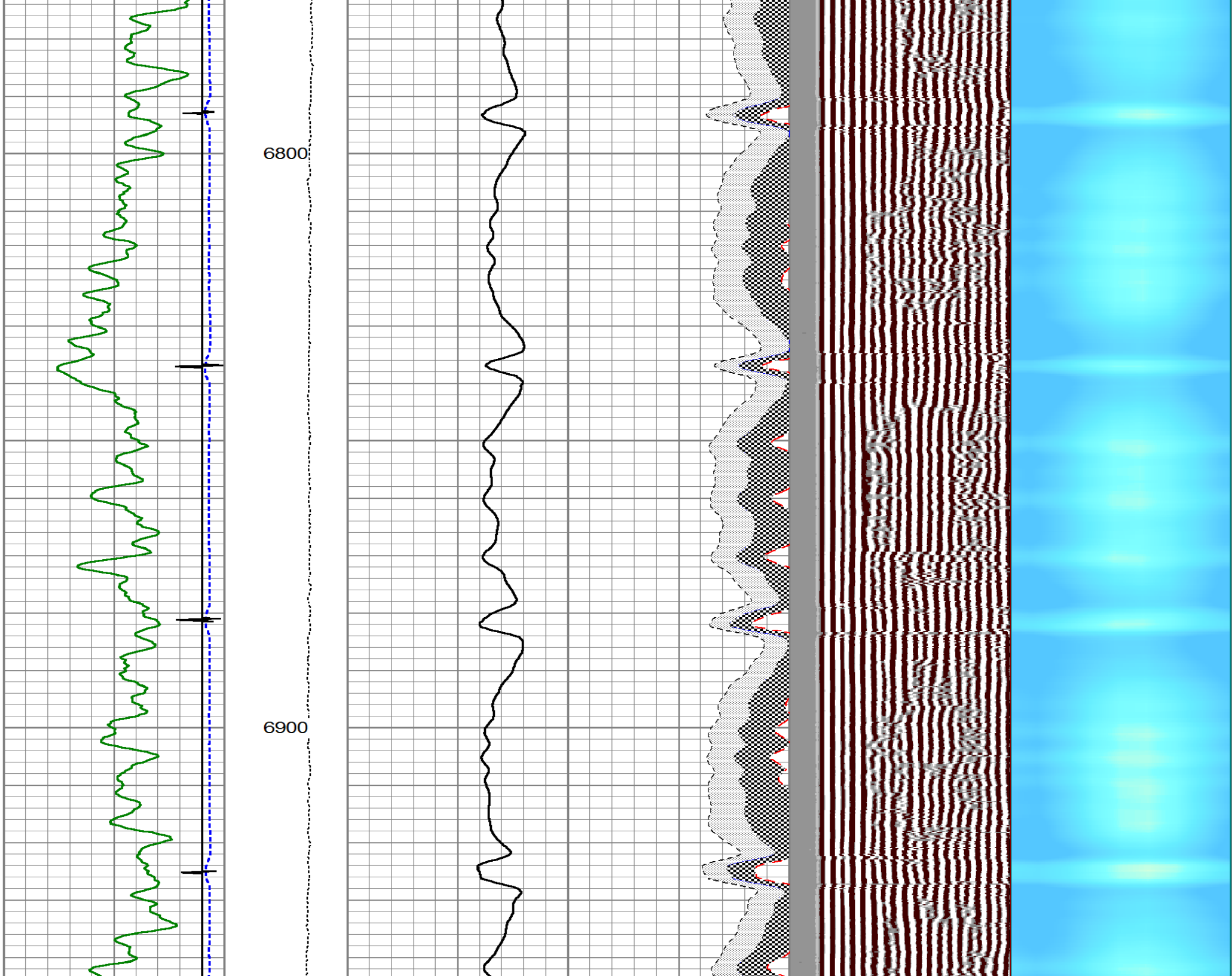


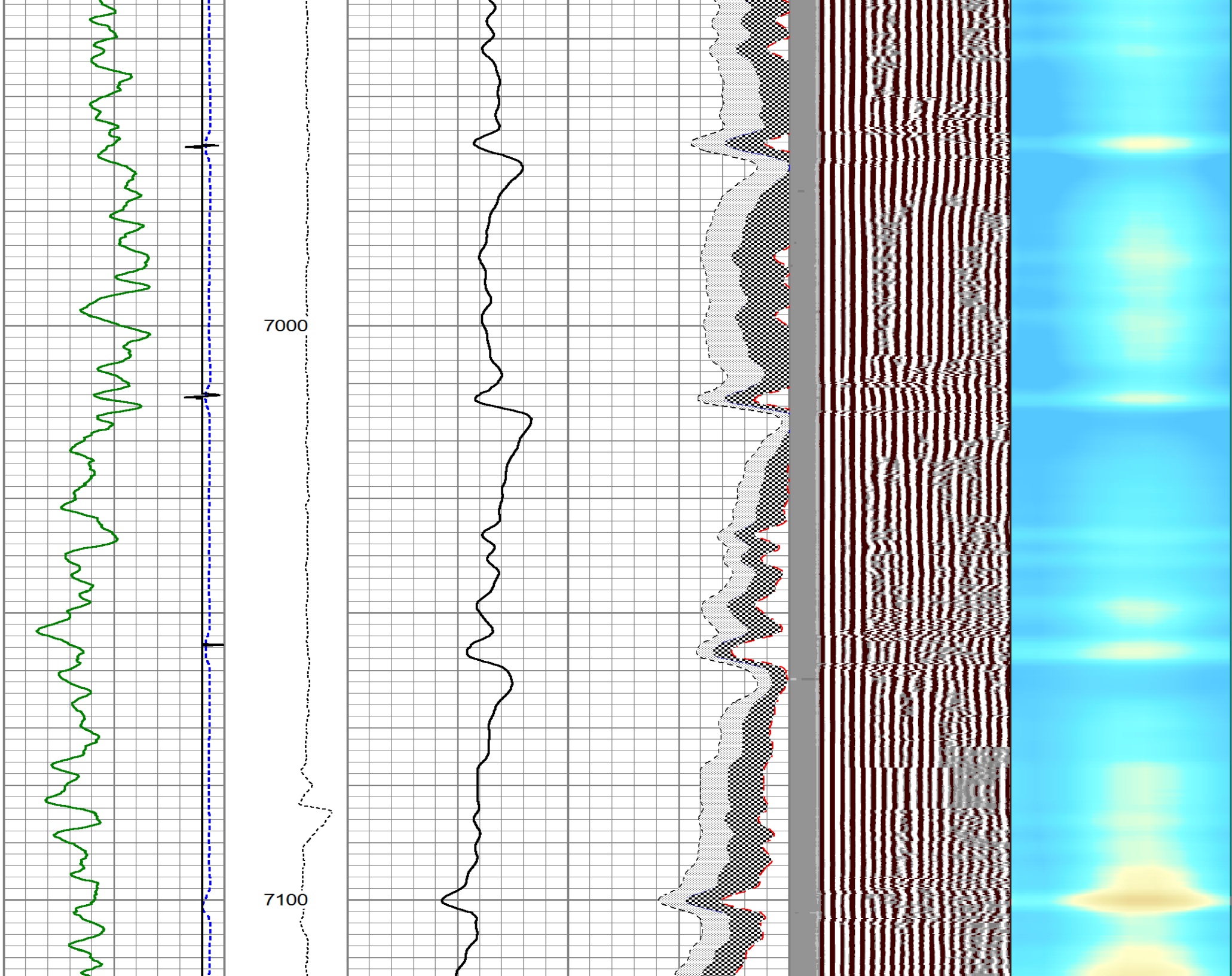


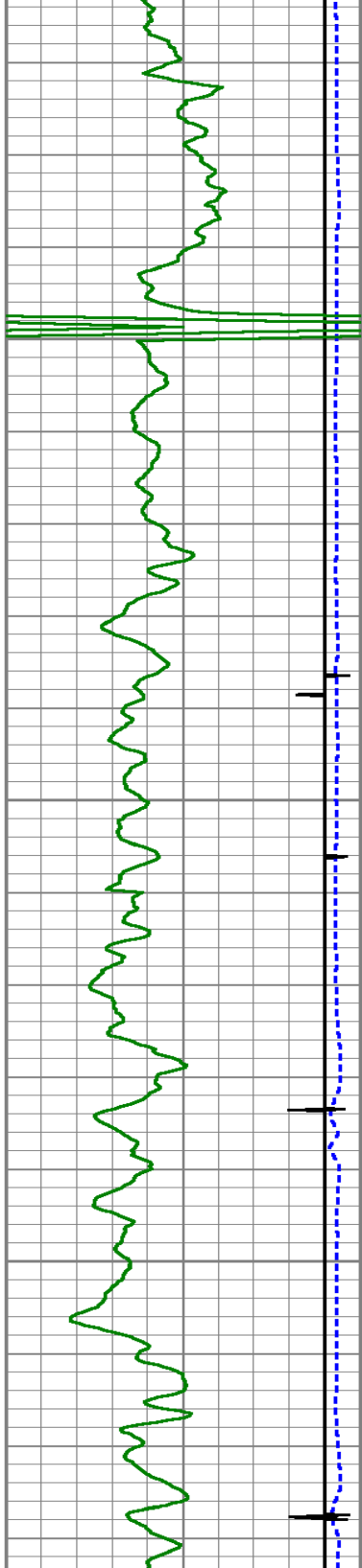


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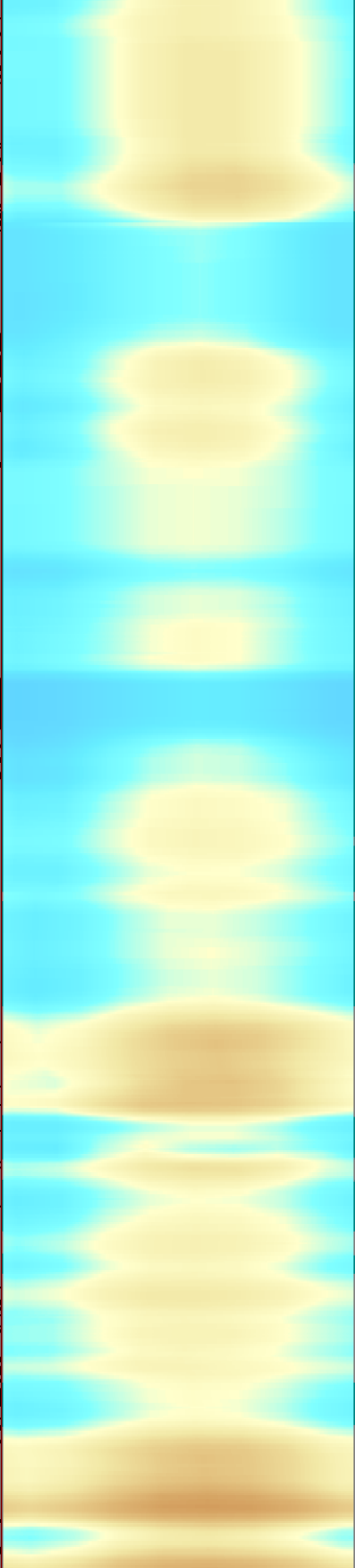
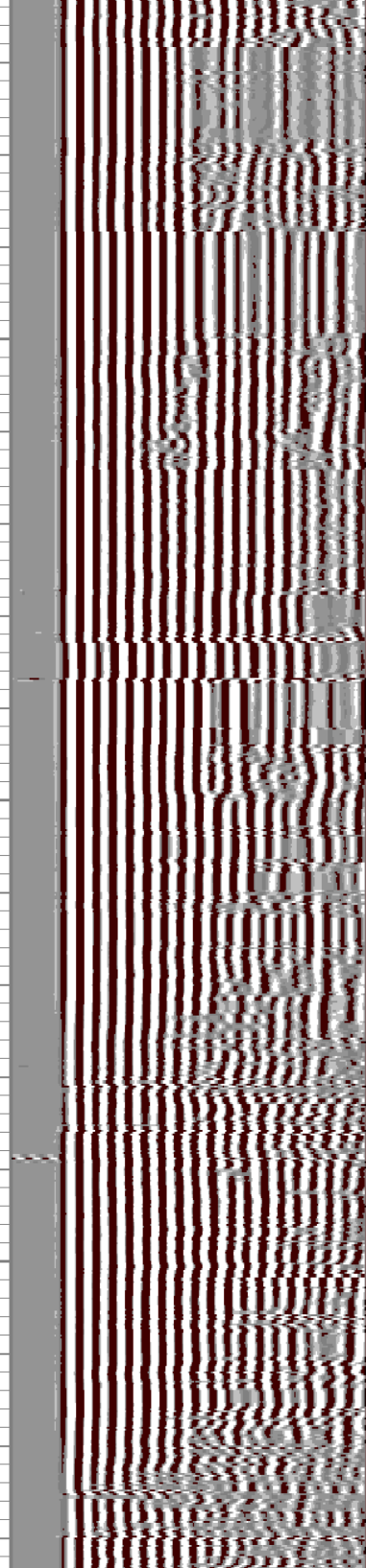
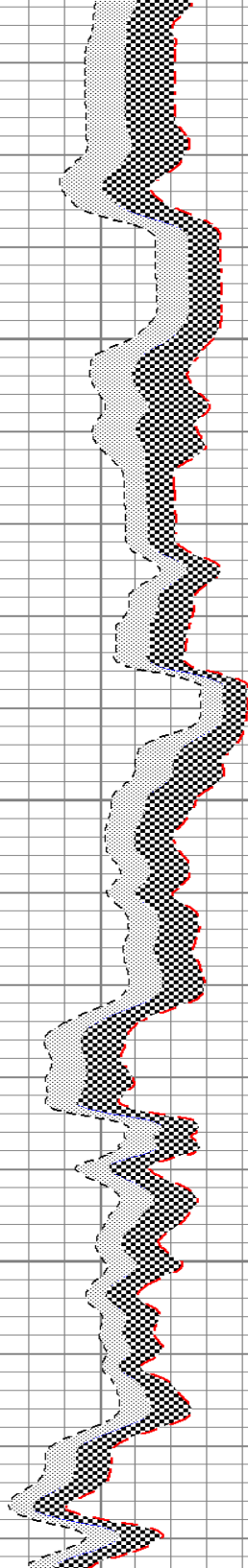
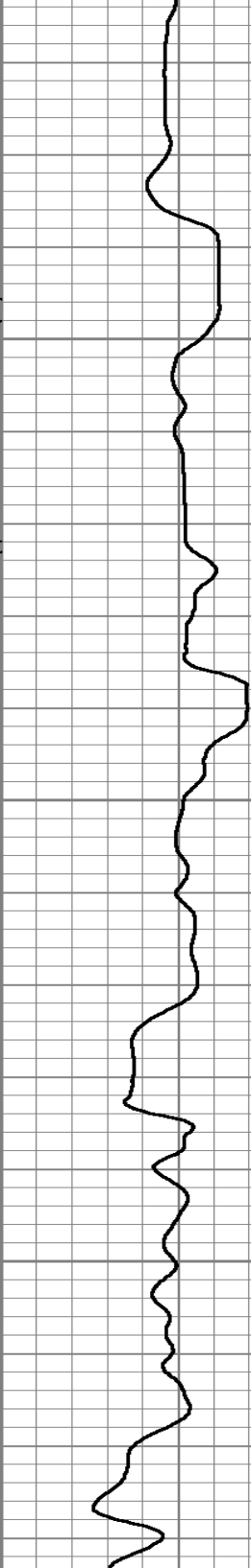
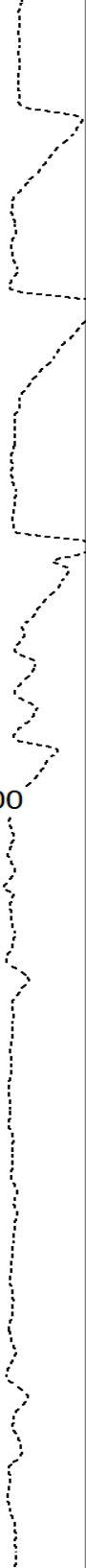


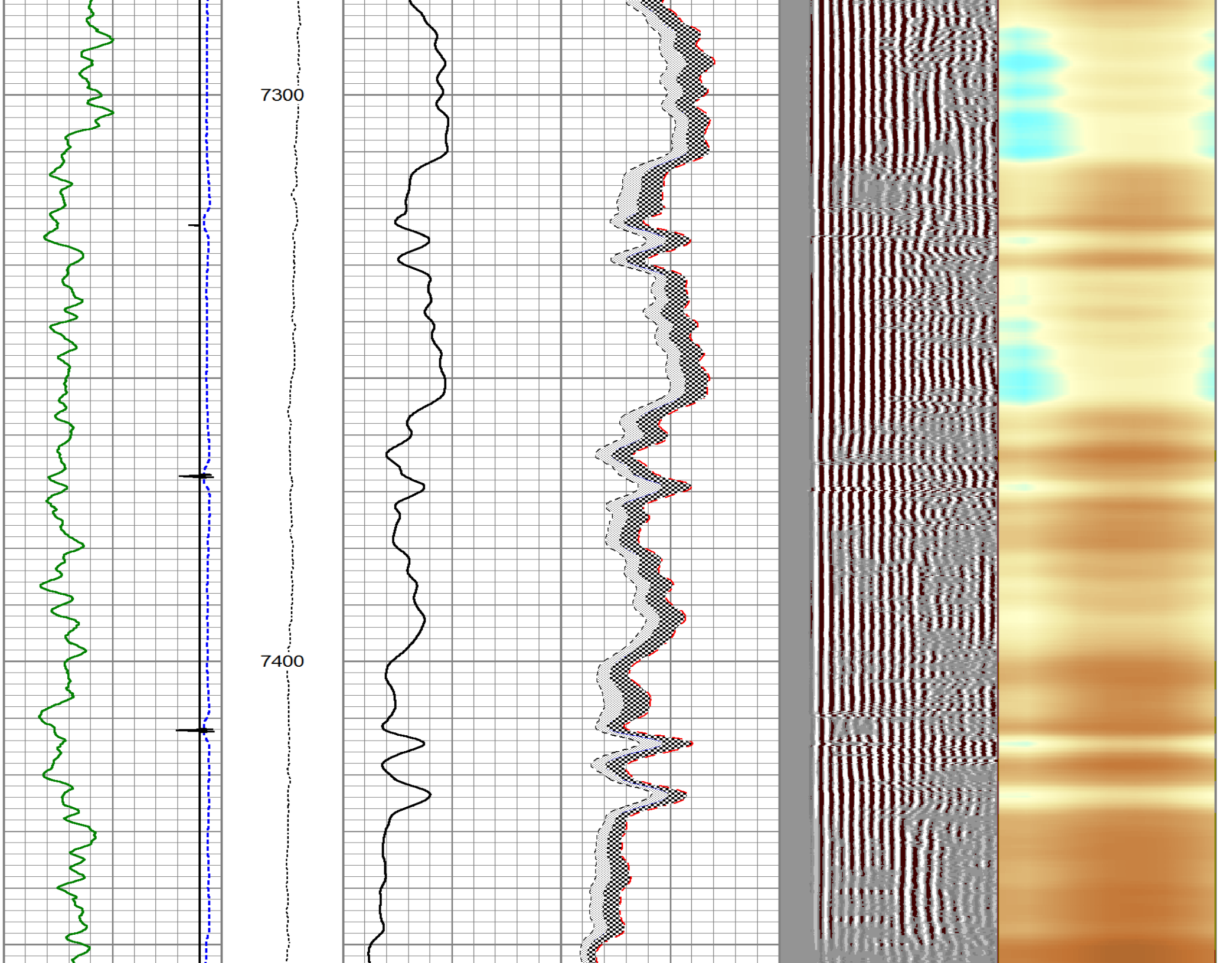


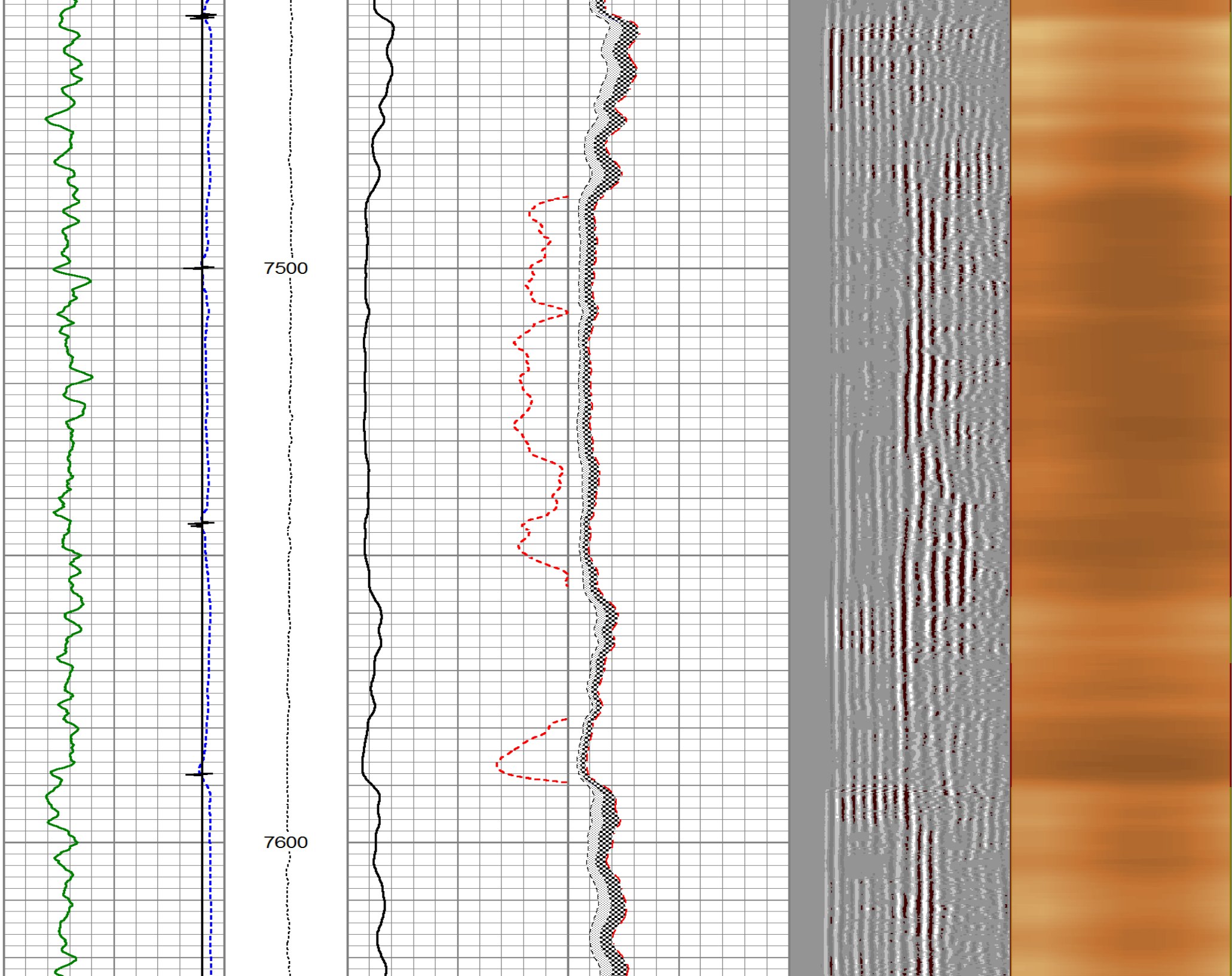


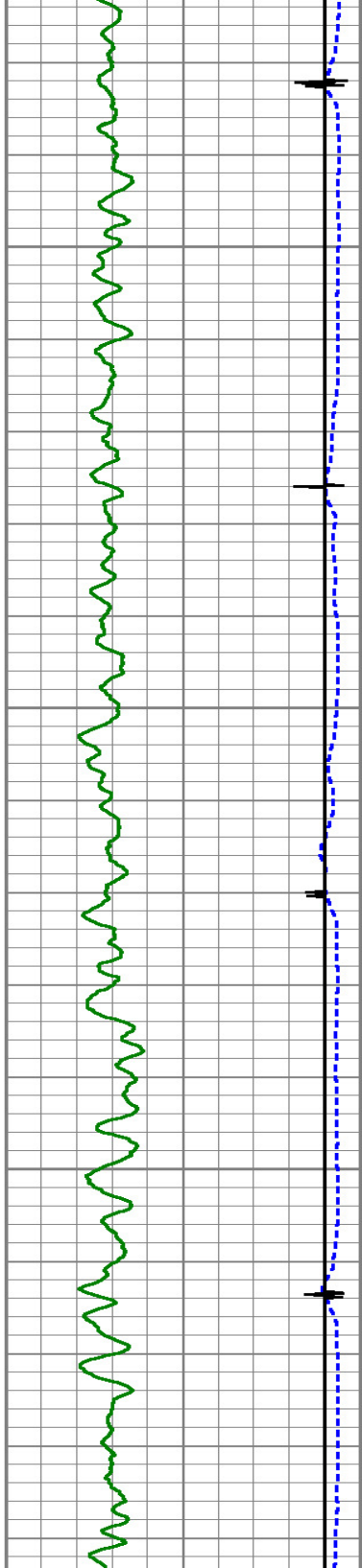


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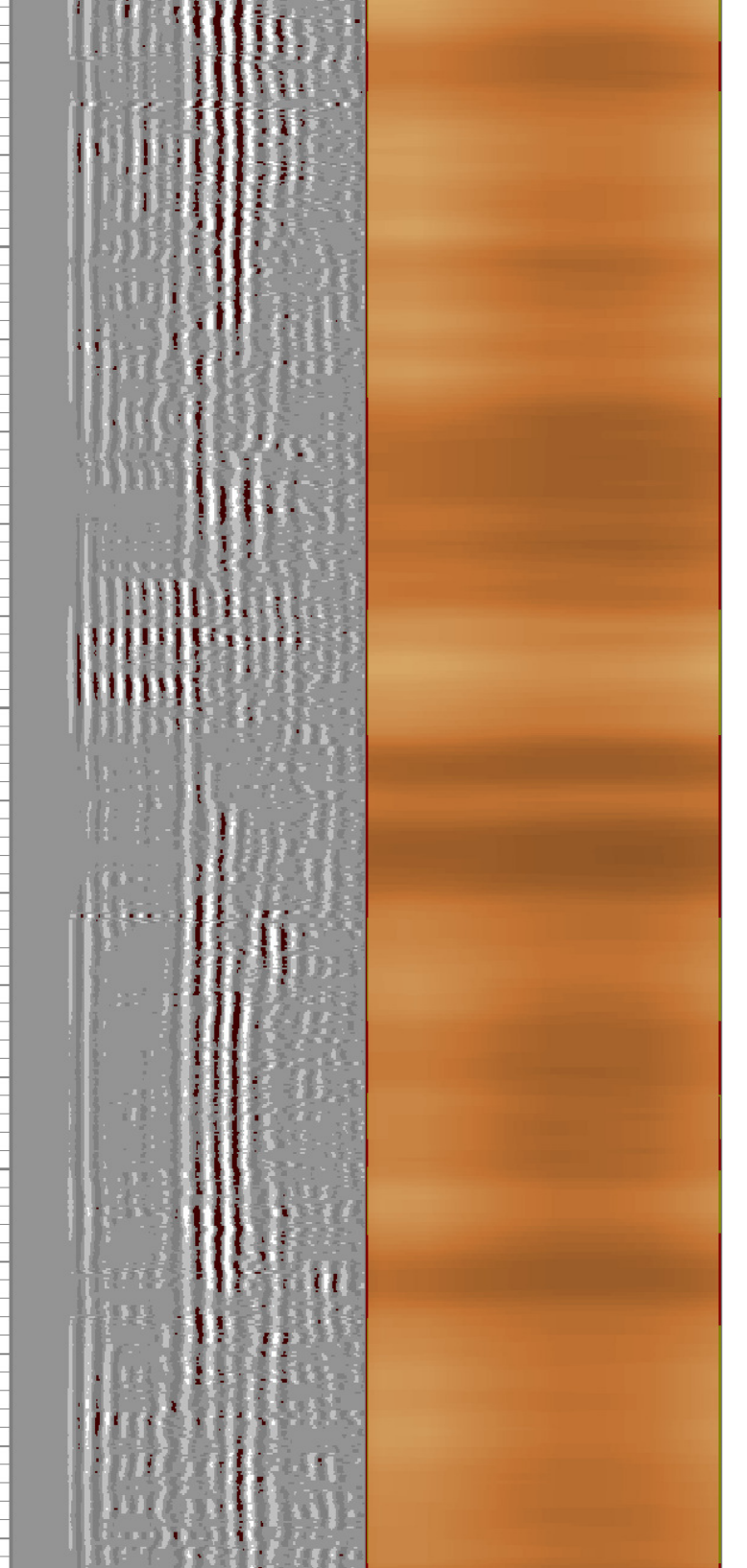
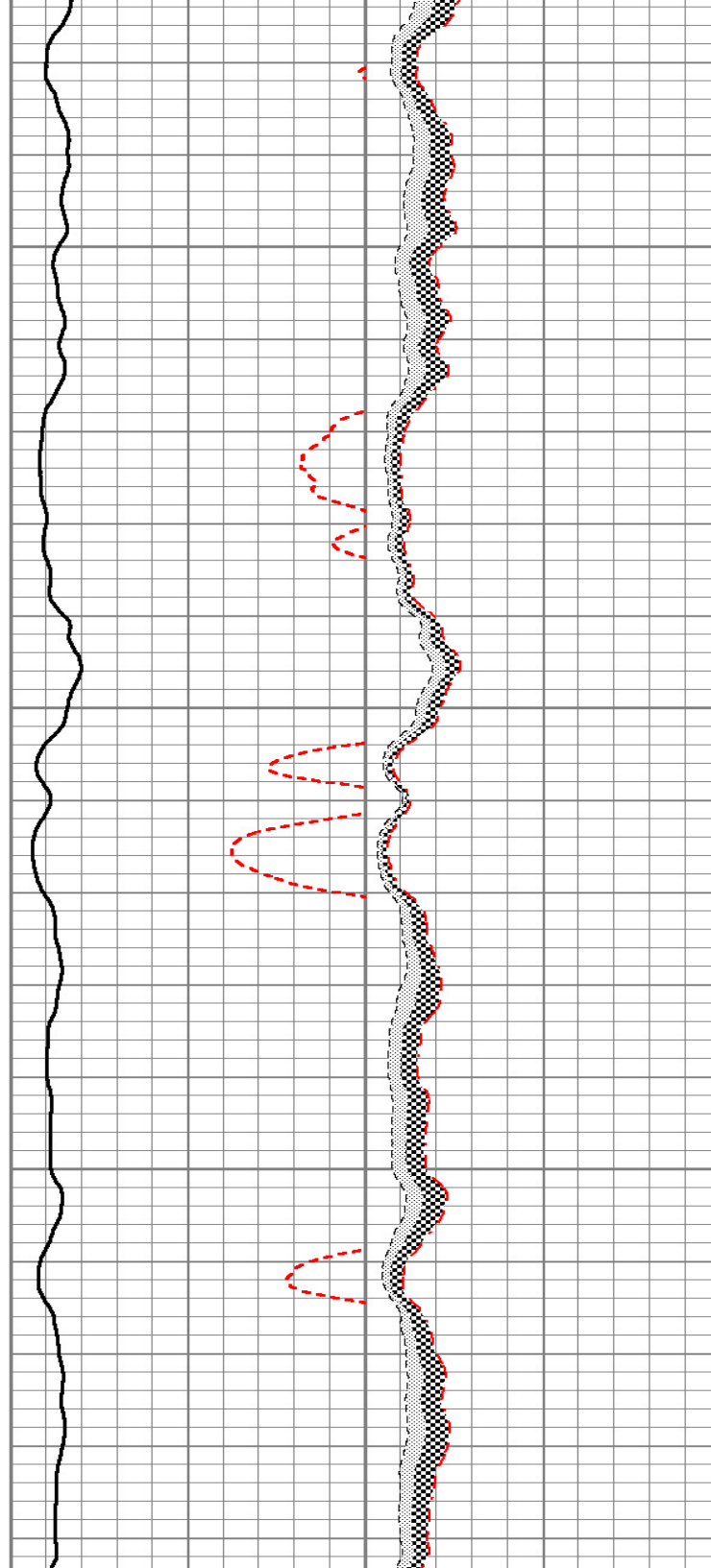


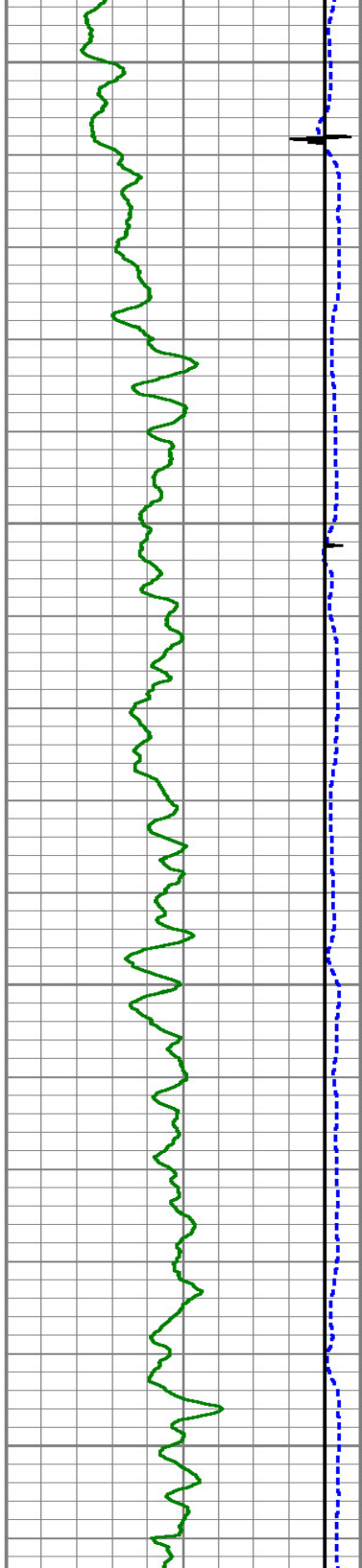






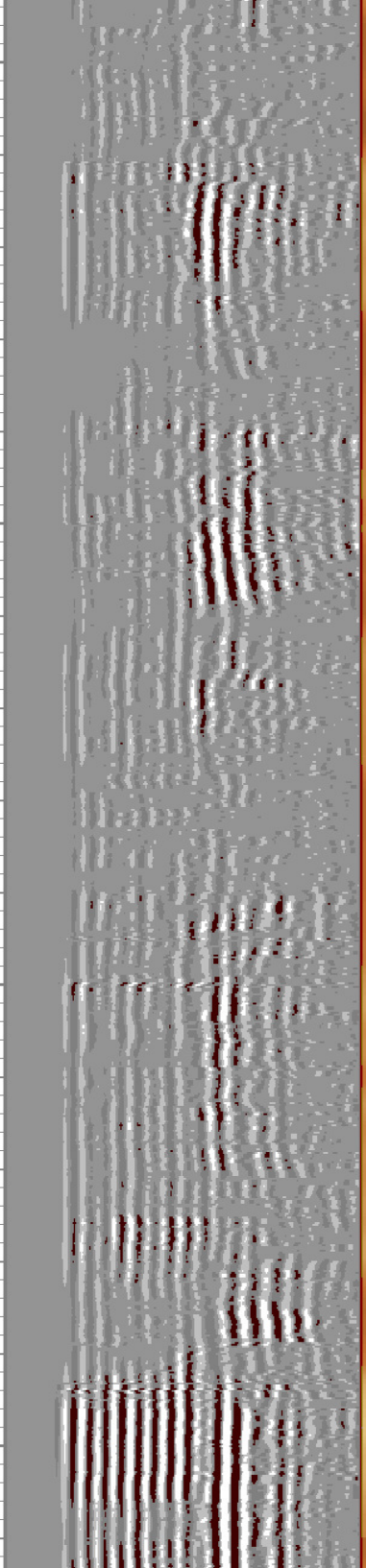
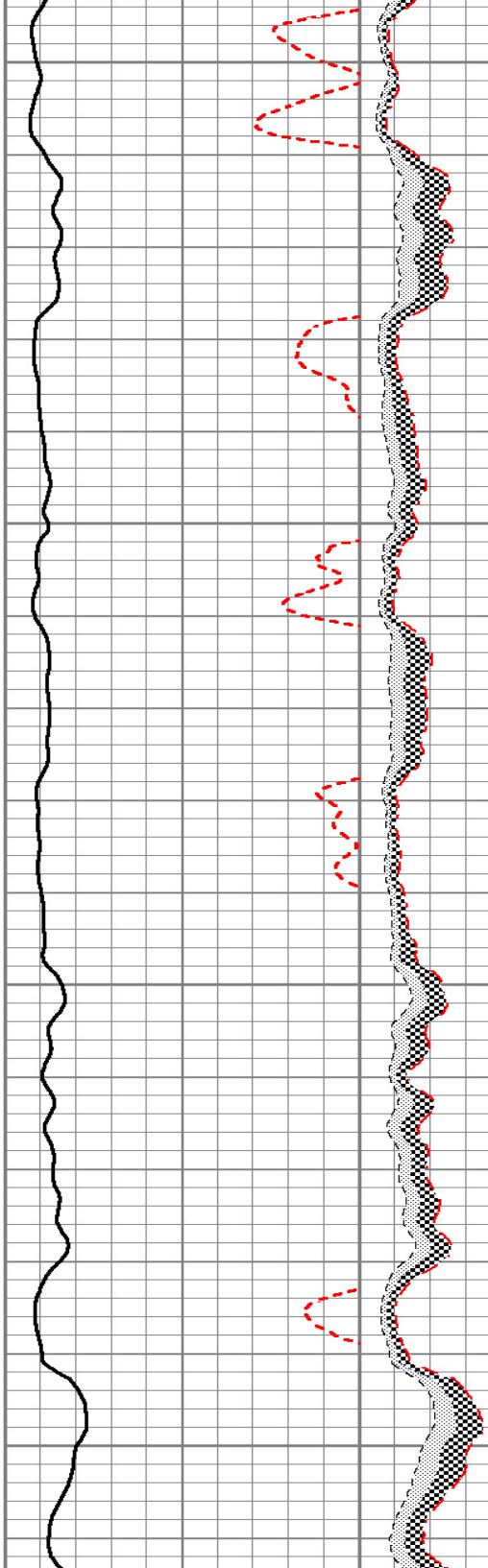
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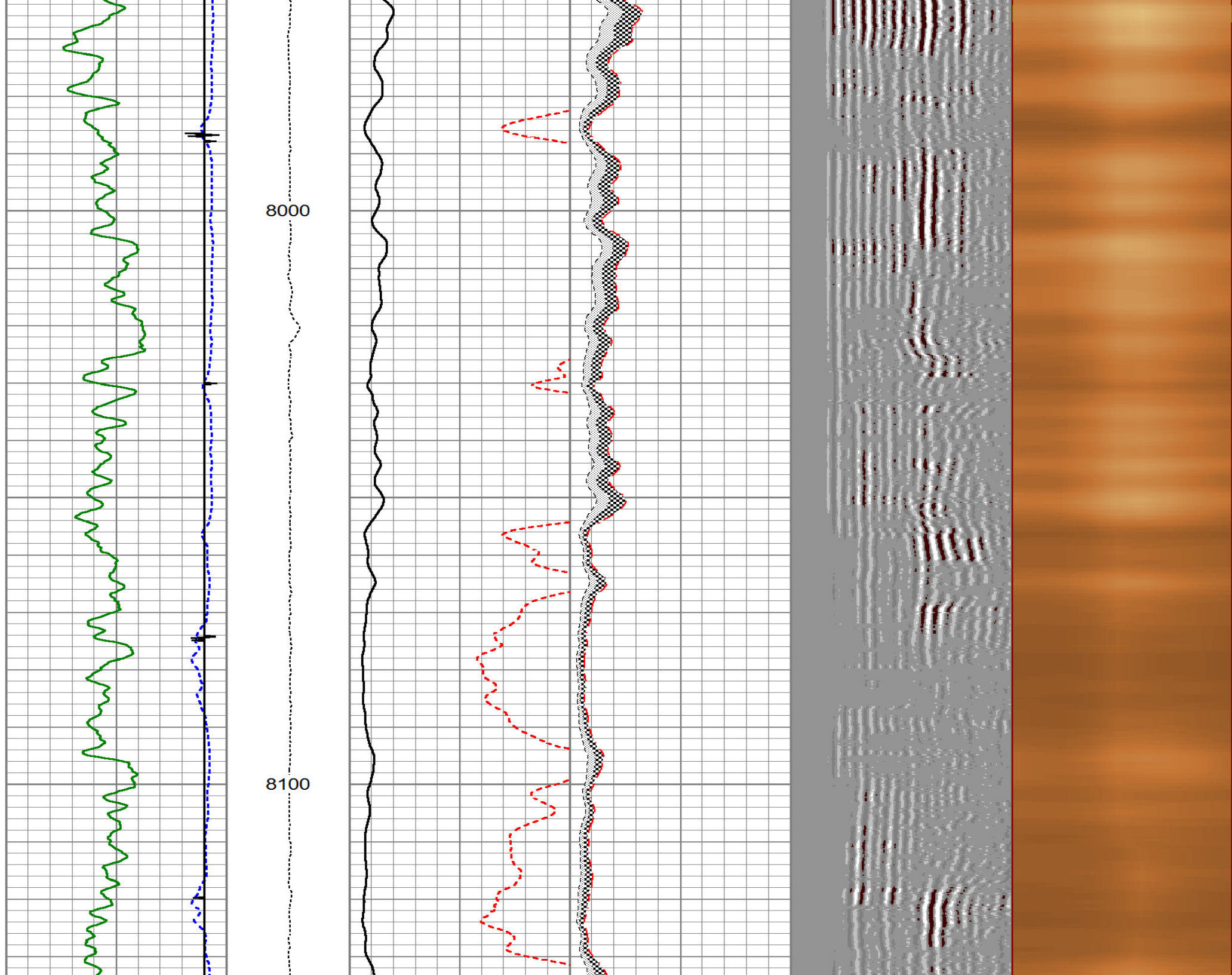


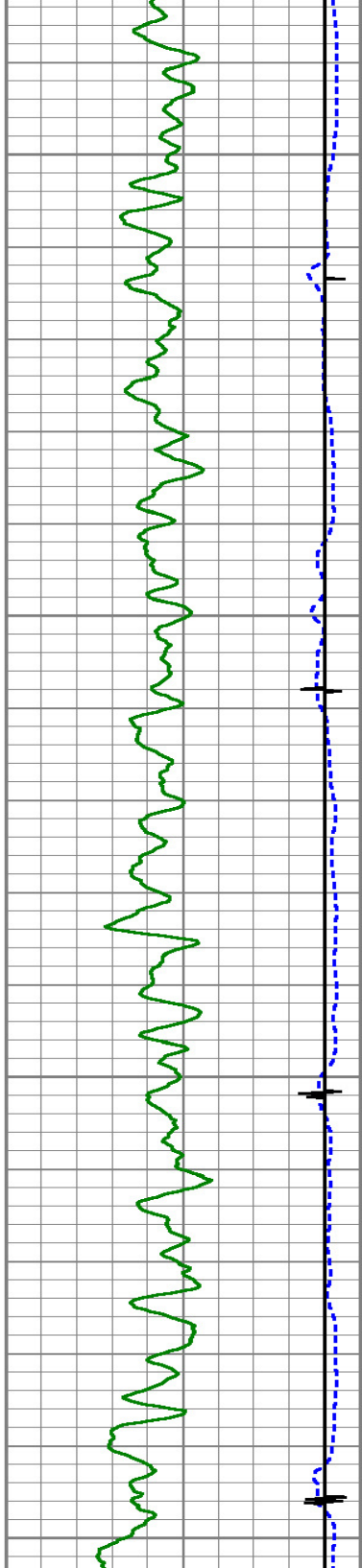


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7900

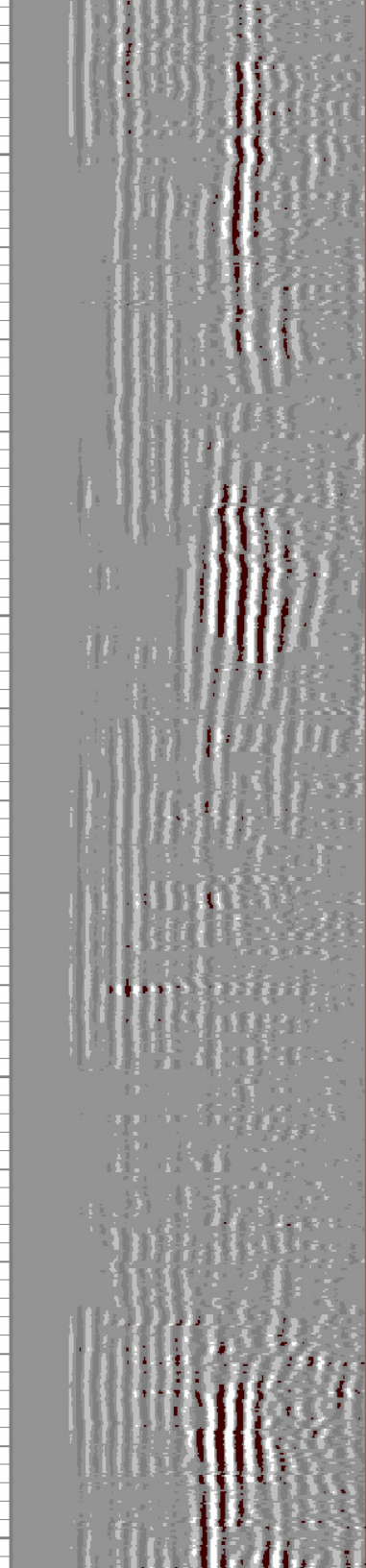
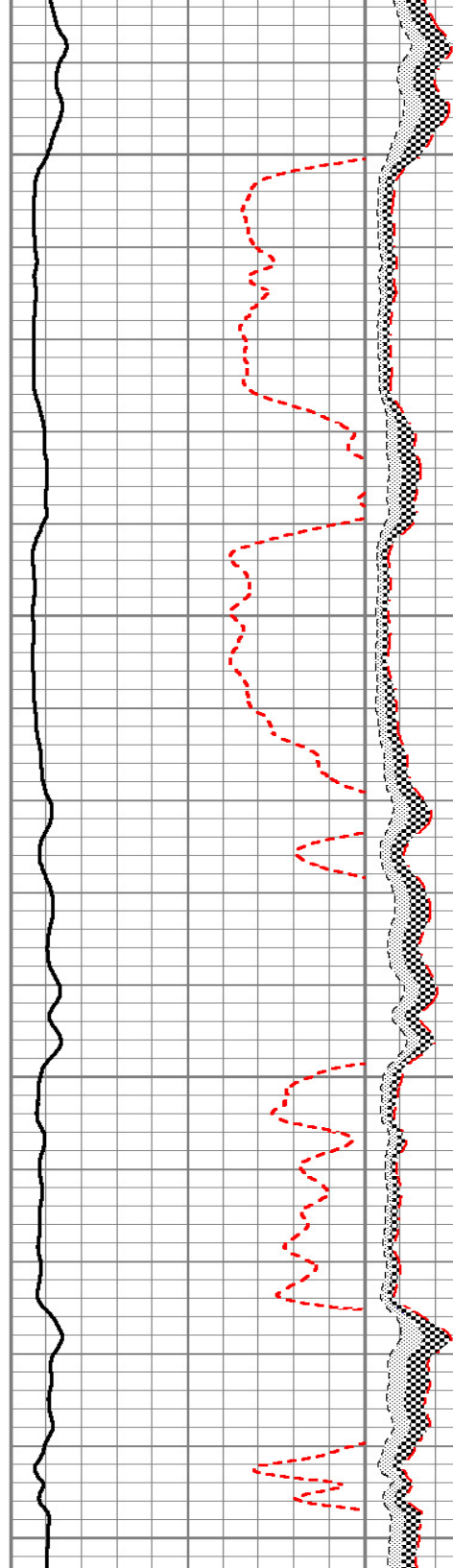


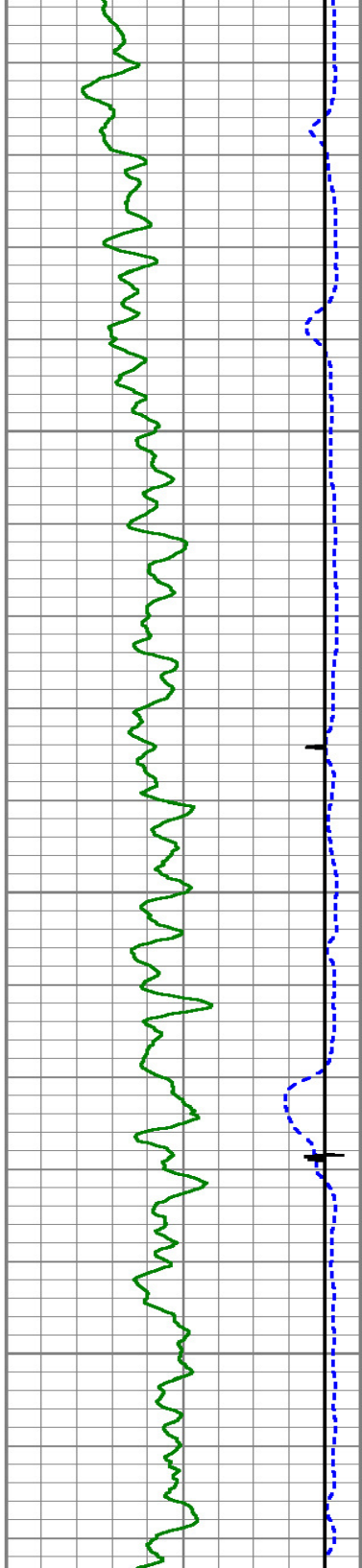




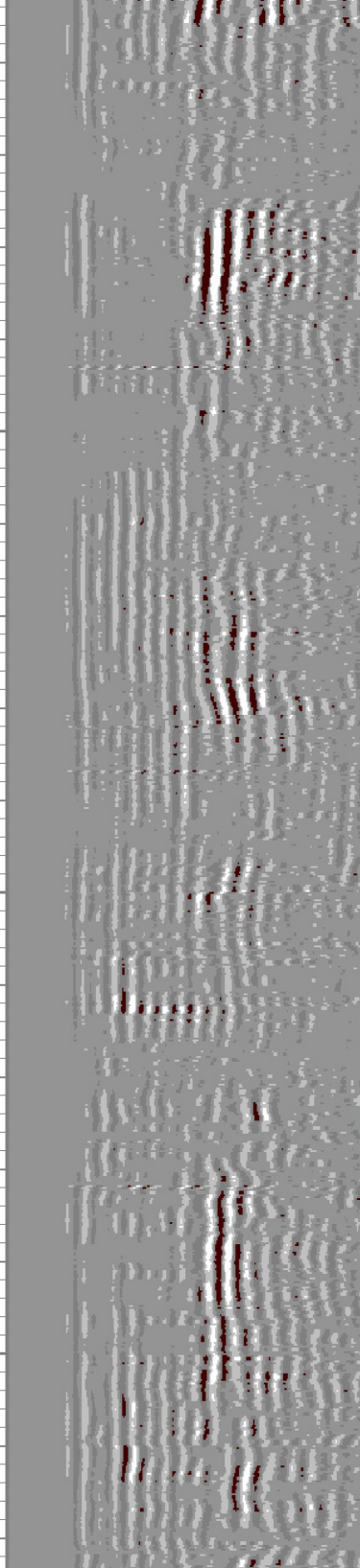
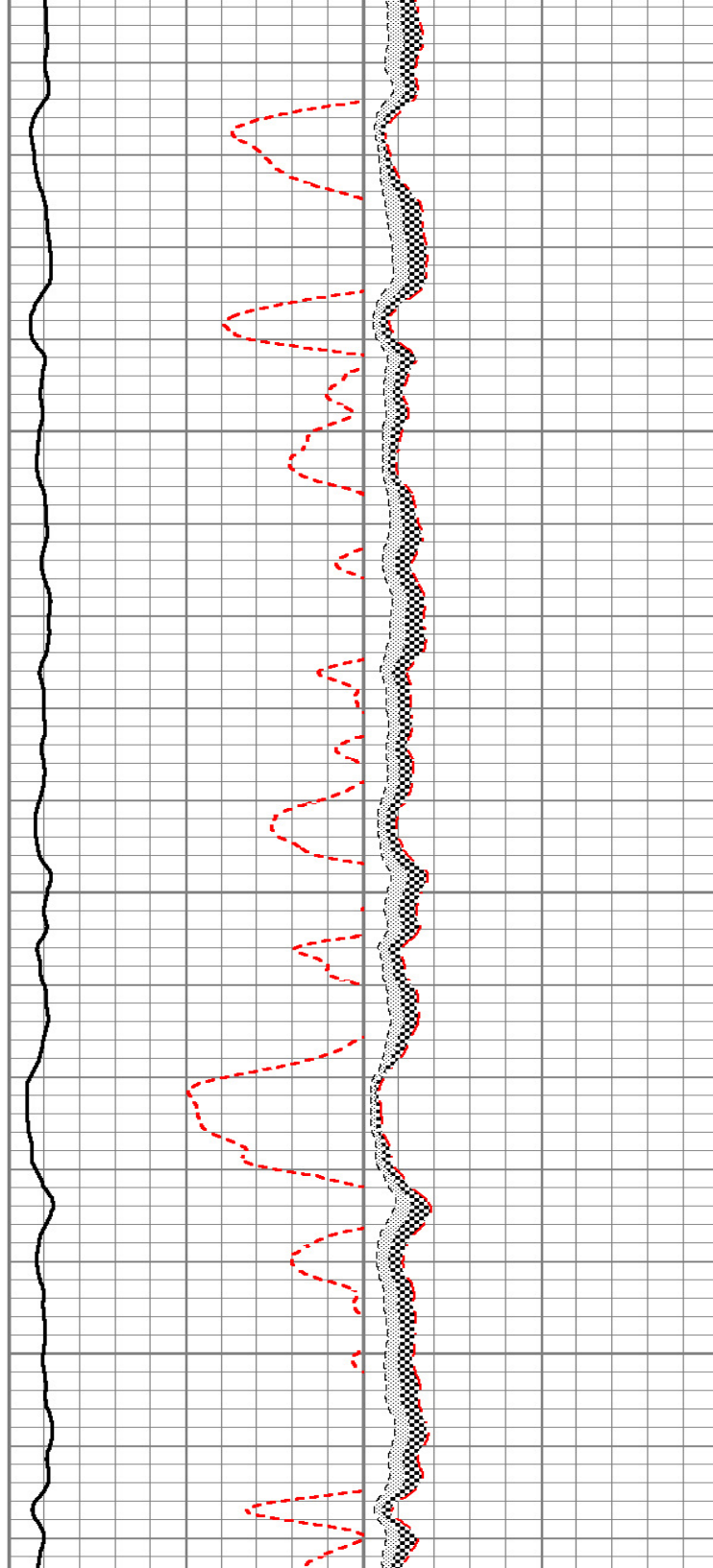
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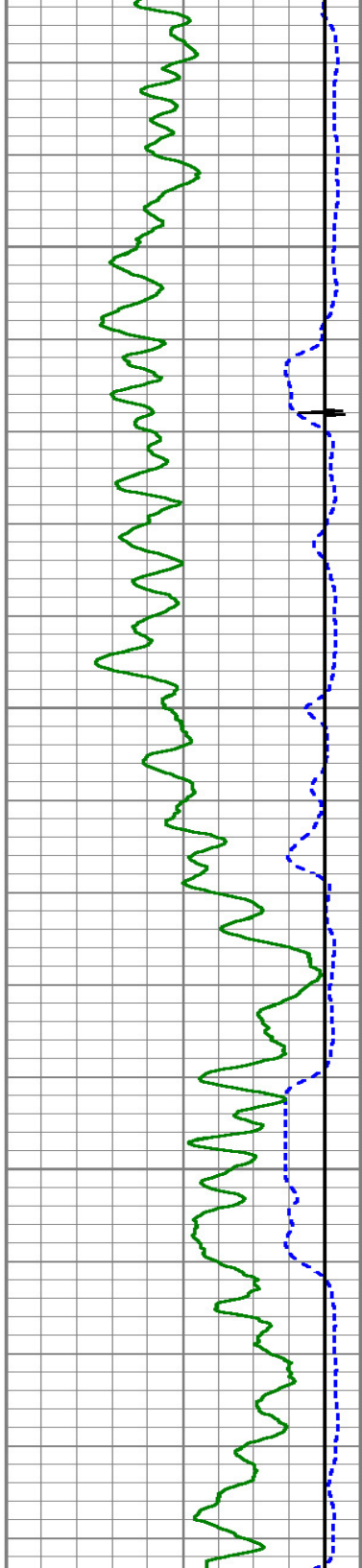
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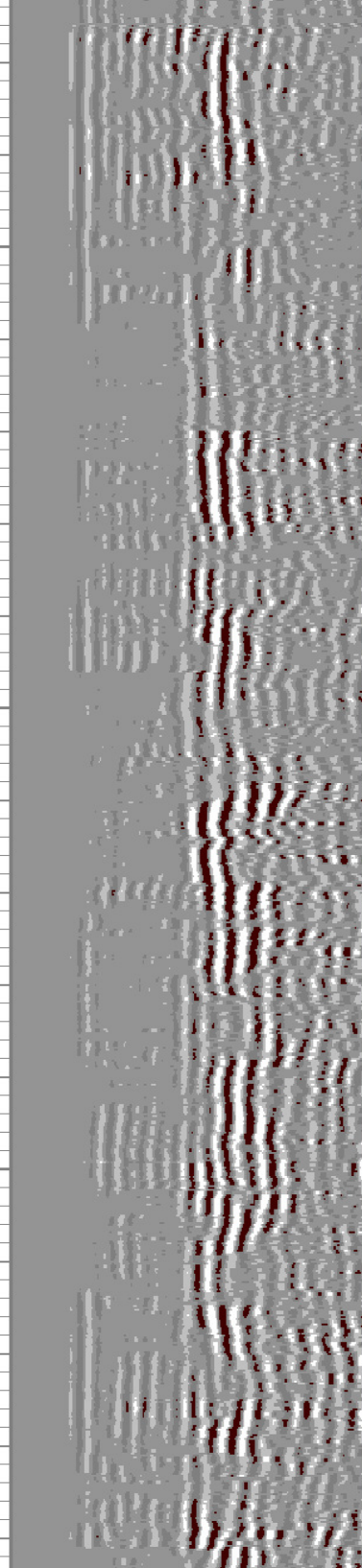
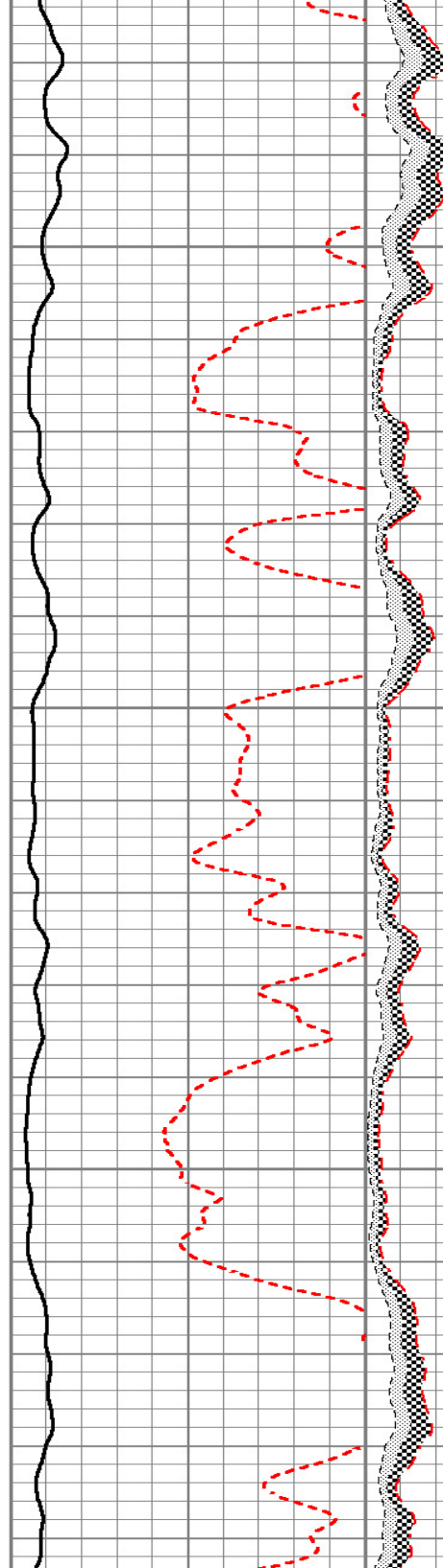
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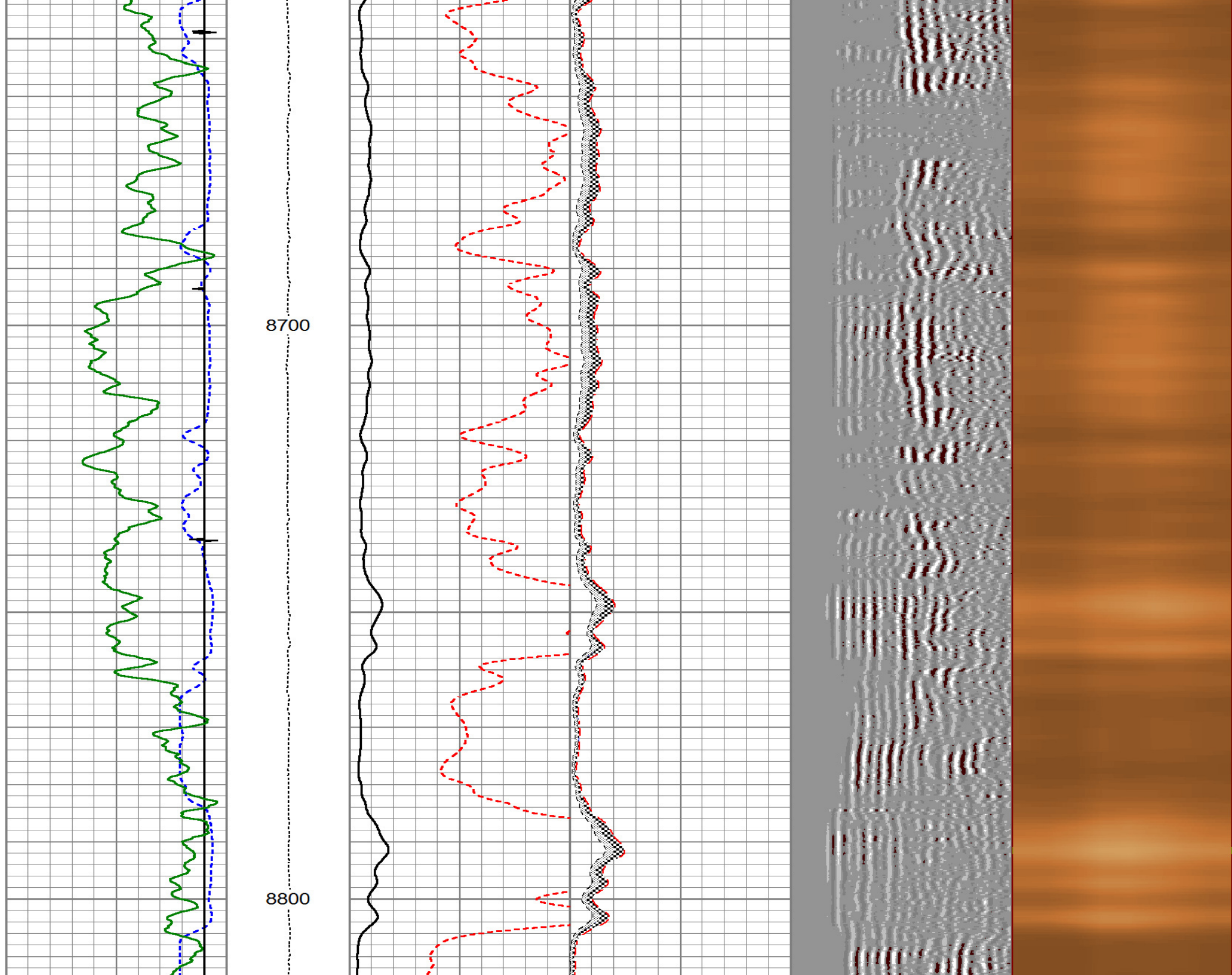


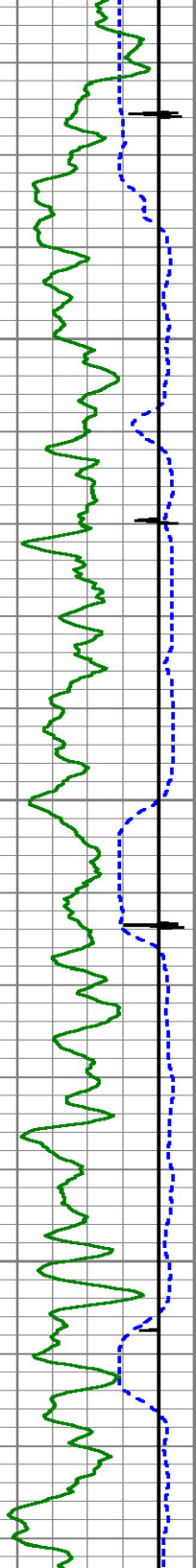


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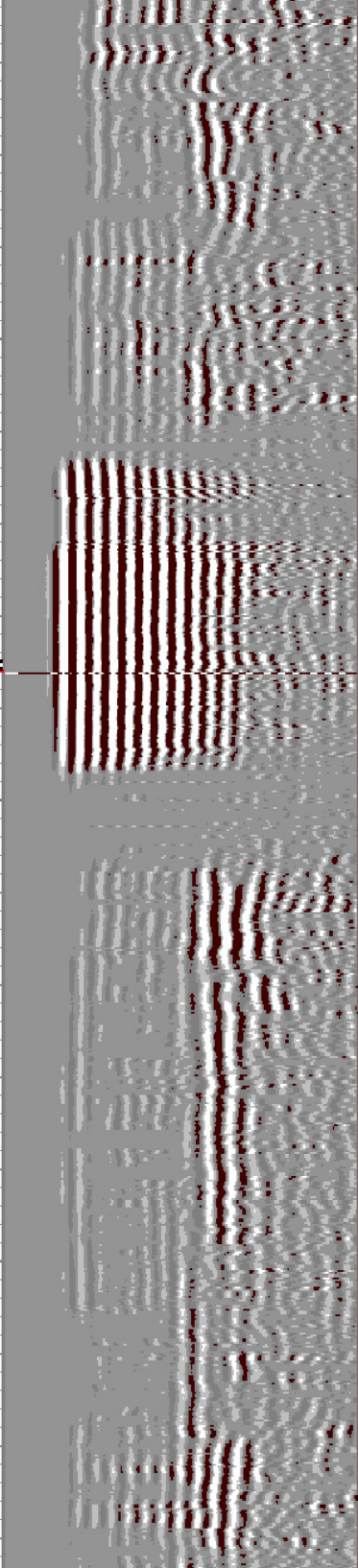
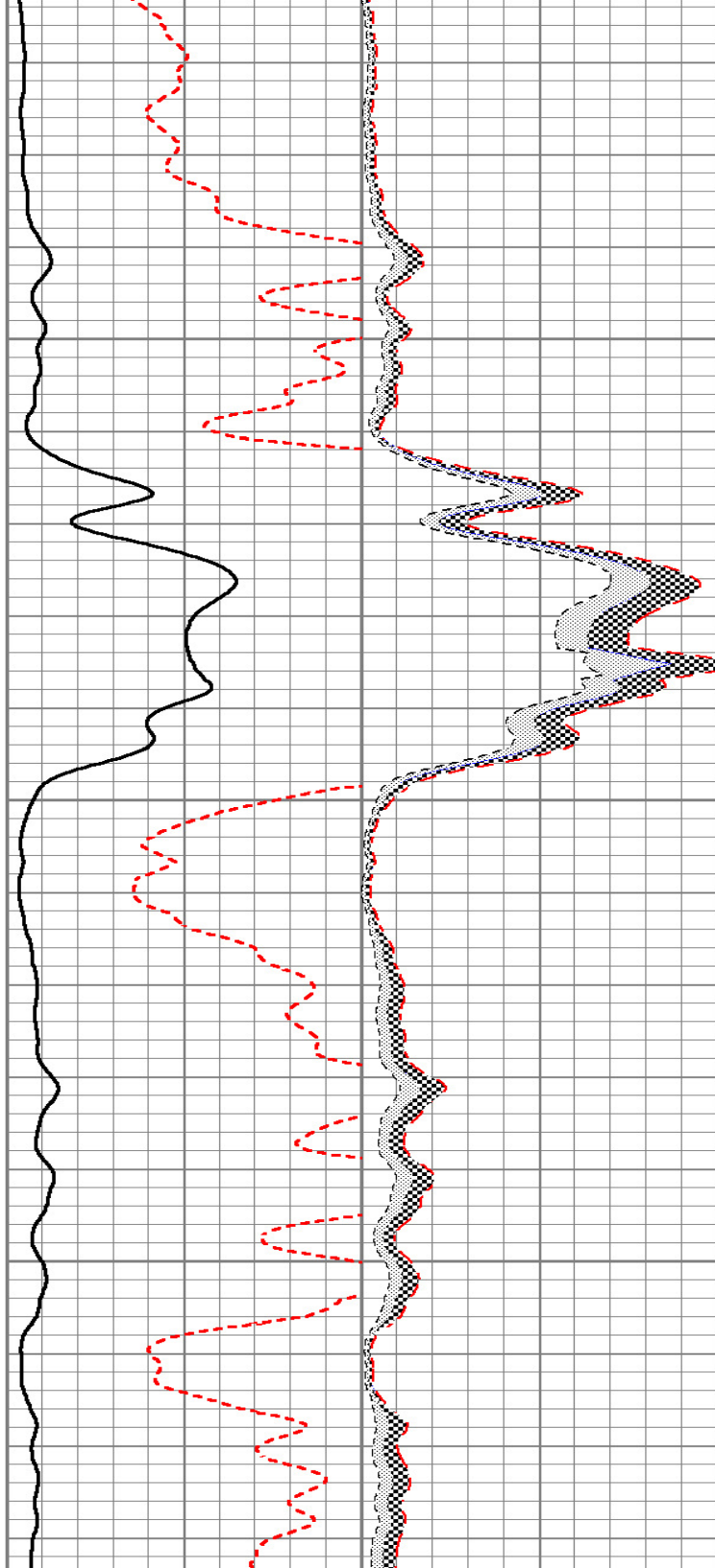
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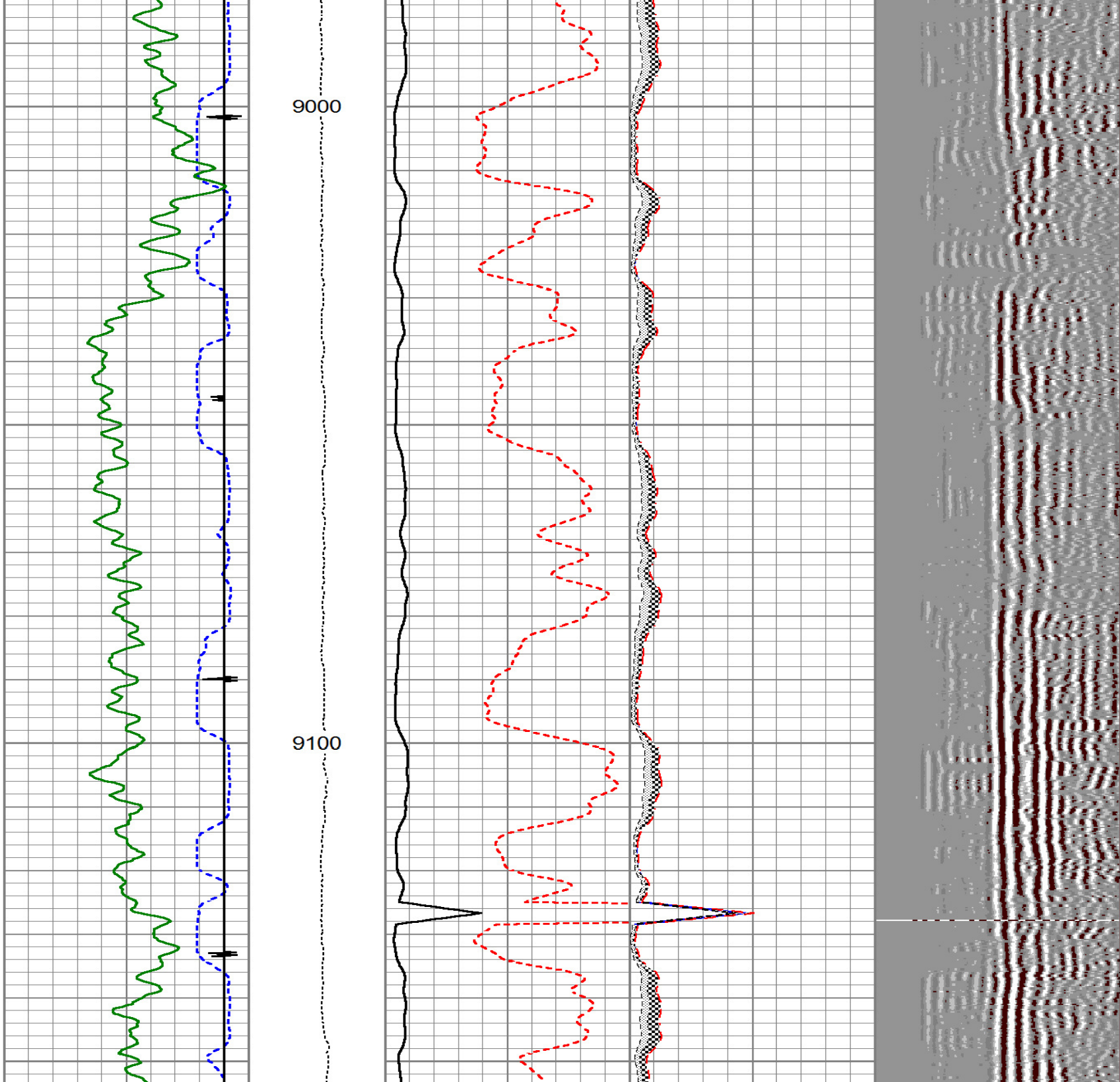


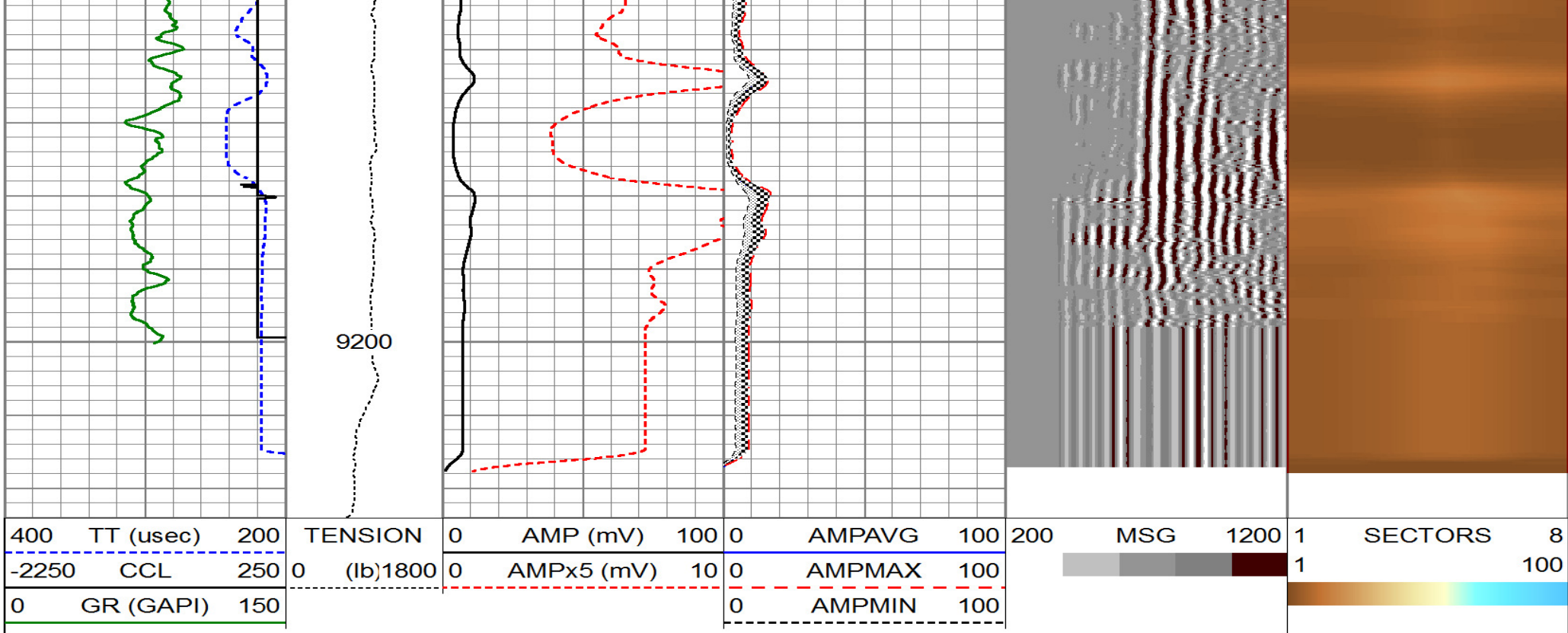




8900







MAIN PASS

HALLIBURTON

5"=100'

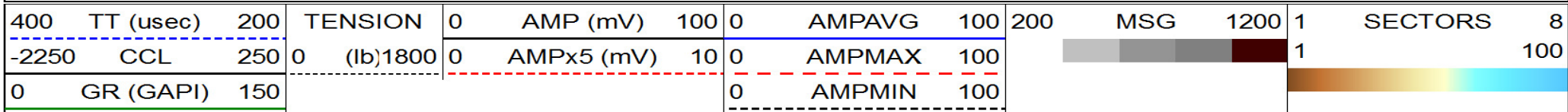
4.5" casing from 9220 ft to 6400 ft and 7" casing from 6400 ft to surface

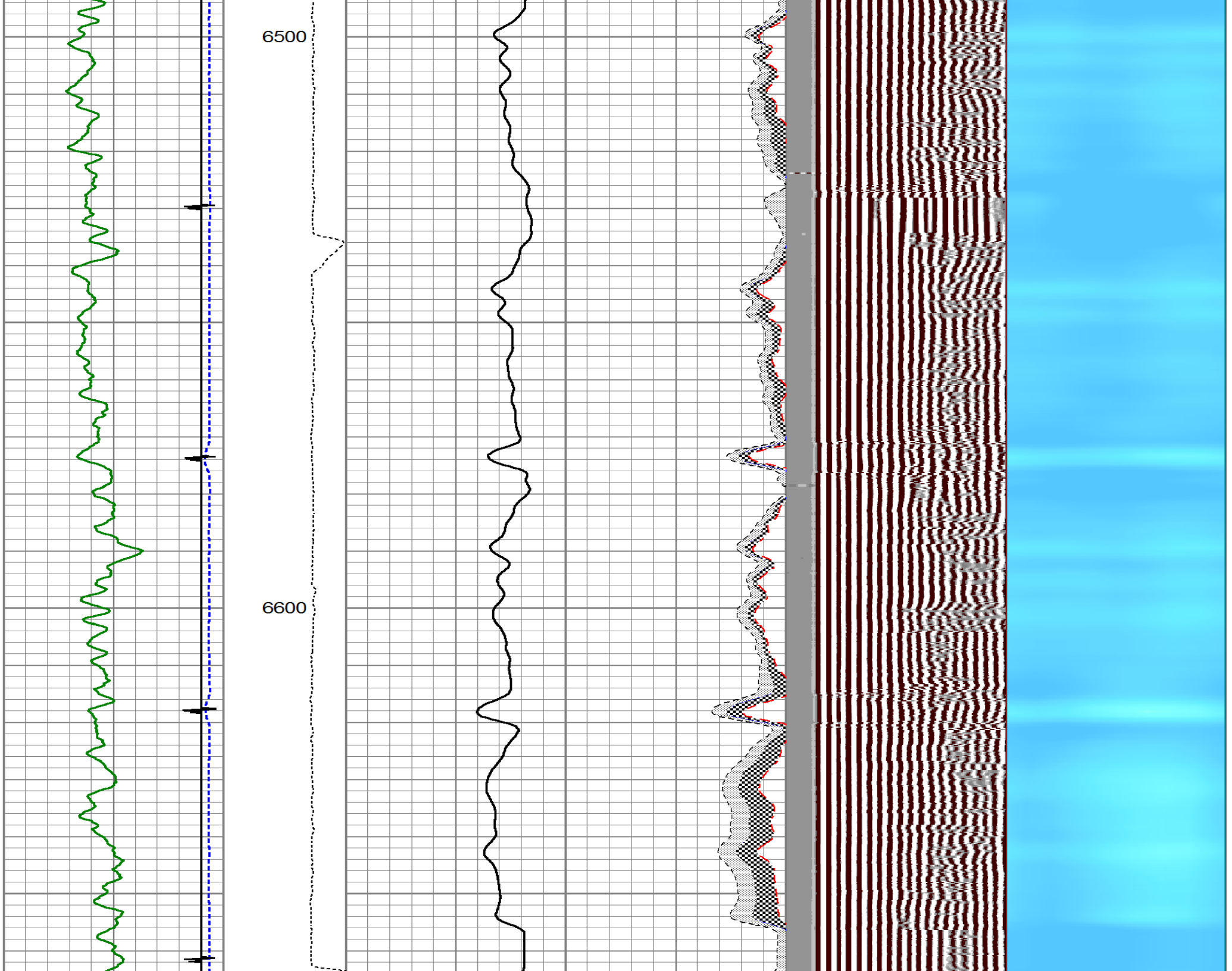
REPEAT PASS

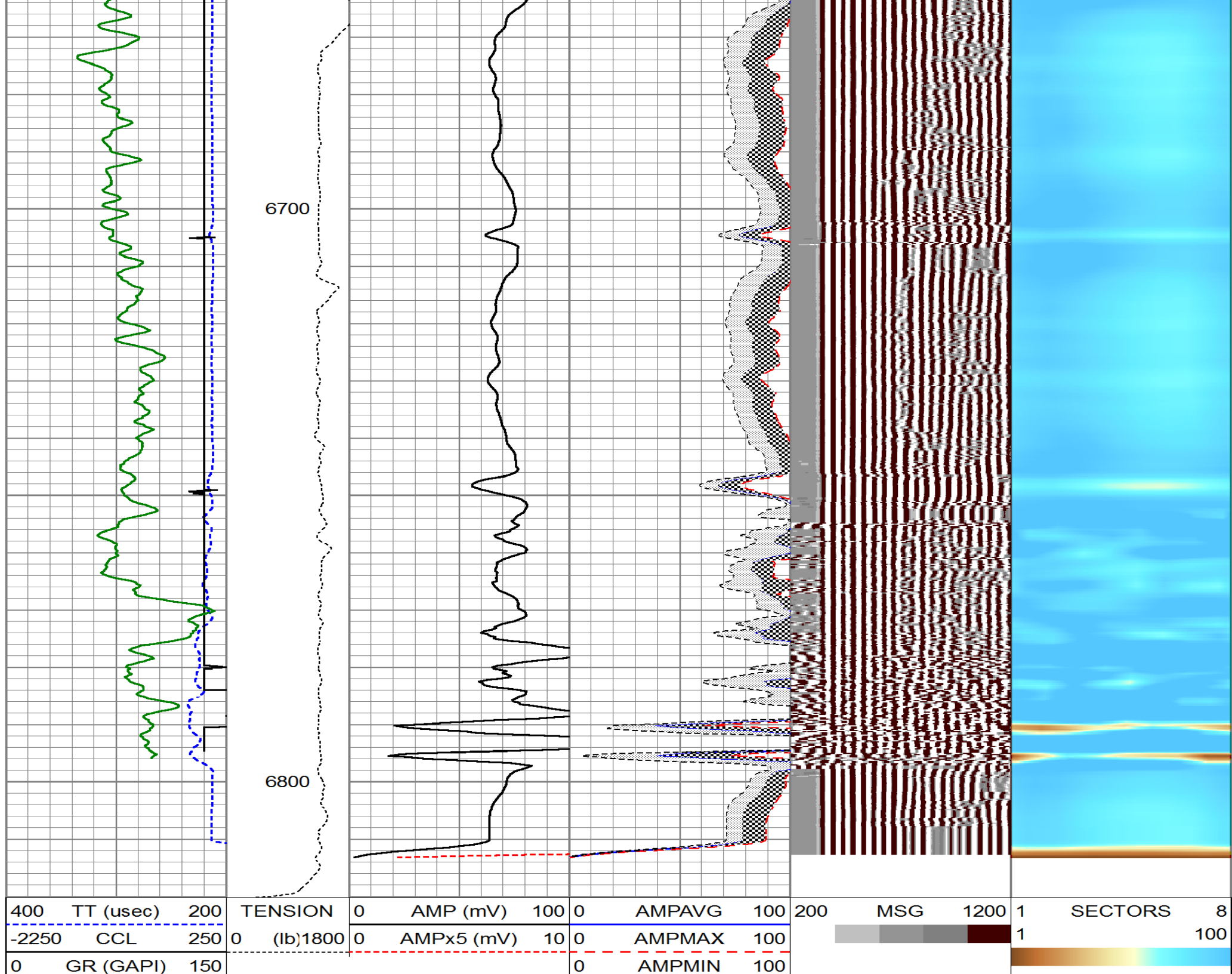
HALLIBURTON

5"=100'

Database File sherley d-4-9hn.db
Dataset Pathname GR/Sh_D_4_9HN/run1/REPEAT
Presentation Format radial
Dataset Creation Wed May 27 15:49:51 2015
Charted by Depth in Feet scaled 1:240







HALLIBURTON

REPEAT PASS

5"=100'

Calibration Report

Database File sherley d-4-9hn.db
Dataset Pathname GR/Sh_D_4_9HN/run1/MAIN
Dataset Creation Wed May 27 17:34:50 2015

Segmented Cement Bond Log Calibration Report

Serial Number: 11002212
Tool Model: 004
Calibration Casing Diameter: 4.500 in
Calibration Depth: 6446.508 ft

Master Calibration, performed Wed May 27 15:42:47 2015:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3FT	0.011	0.825	2.000	81.196	97.233	0.932
5FT	0.011	1.051	2.000	81.196	76.164	1.180
S1	0.018	0.843	0.000	100.000	121.243	-2.196
S2	0.018	0.795	0.000	100.000	128.696	-2.355
S3	0.012	0.768	0.000	100.000	132.225	-1.559
S4	0.018	0.767	0.000	100.000	133.586	-2.446
S5	0.016	0.804	0.000	100.000	126.831	-2.013
S6	0.011	0.843	0.000	100.000	120.199	-1.321
S7	0.012	0.870	0.000	100.000	116.586	-1.423
S8	0.011	0.876	0.000	100.000	115.615	-1.280

Calibration Report

Serial Number: 11002212
Tool Model: 004
Performed:
Reference (degF) Reading ()
Low: 0.000 0.000
High: 1.000 1.000
Gain = 1.000 Offset = 0.000

Type / Serial:

002 / 11527445

SHOP CALIBRATION

Fri Apr 17 09:41:40 2015

Background	Counts/Sec.	Gain	Offset	Jig	Units
Calibrator	28.9				cps
	177.3				cps
		1.6368			GAPI/cps

PRIMARY VERIFICATION

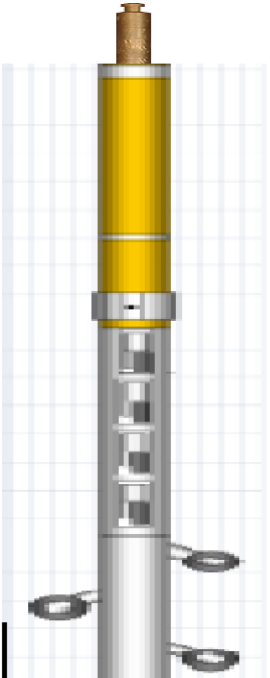
Background	46.8				cps
Calibrator	288.8				cps
Difference				242.0	GAPI

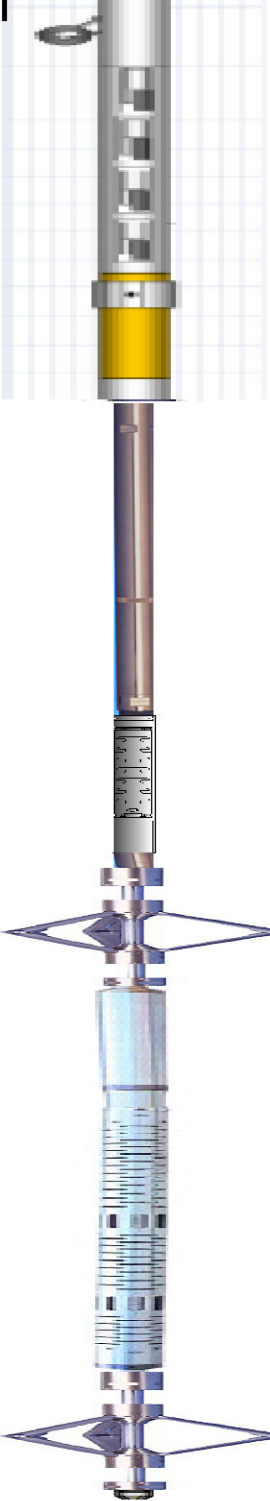
BEFORE SURVEY VERIFICATION

Background	0.0				cps
Calibrator	0.0				cps
Difference				0.0	GAPI

AFTER SURVEY VERIFICATION

Background	0.0				cps
Calibrator	0.0				cps
Difference				0.0	GAPI

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
			STNDCH-STND_CH 1.4375 IN CABLE HEAD	1.50	1.44	1.00
			WELL_TEC-318_TRACTOR WELTEC 3.125" TRACTOR	25.00	3.13	365.00

								
CCL	24.85							
GR	22.59			TTTCU-002 (11527445) Through Tubing Telemetry Cartridge - Ultrawire	7.65	1.69	100.00	
				TMDL_FLEX-FLEX TMDL FLEX	3.38	1.69	25.00	
				AUH-001 (11703518) Adaptor Ultrawire/Halliburton	0.38	1.69	3.00	
				PRC-057 (000007) Production Roller Centraliser (4 Arm)	2.91	2.75	32.00	
CBLTEMP	8.26							
WVF3FT	8.26							
WVF5FT	7.26							
				RBT-004 (11002212) Radial Bond Tool (UW 3 1/8) 20K Rated	9.48	3.13	140.00	
				PRC-057 (000008) Production Roller Centraliser (4 Arm)	2.91	2.75	32.00	
LLMTEN	0.00			BUL-006 (000002) Bullnose Terminator	0.22	1.69	1.20	

Dataset: sherley d-4-9hn.db: GR/Sh_D_4_9HN/run1/MAIN
 Total length: 53.42 ft
 Total weight: 699.20 lb

O.D.:

3.13 in

Company	Bayswater Eexploration and Production		
Well	Sherley D-4-9HN		
Field	Greeley		
County	Weld	State	CO

HALLIBURTON

RADIAL CEMENT BOND LOG
GR-CCL