



RADIAL CEMENT
BOND LOG

Company		CONFLUENCE					
Well		70 RANCH 10-4-4L					
Field		WATTENBERG					
County		WELD					
State		COLORADO					
Location:		API # : 05-123-47592					
Permanent Datum		GROUND LEVEL Elevation					
Log Measured From		KELLY BUSHING = 23'					
Drilling Measured From		KELLY BUSHING					
SEC		TWP					
NW SE		RGE					
Other Services		NONE					
Date		25 JULY 2019					
Run Number		ONE					
Depth Driller							
Depth Logger		6760'					
Bottom Logged Interval		6760'					
Top Log Interval		SURFACE					
Open Hole Size							
Type Fluid		WATER					
Density / Viscosity		~8.3#					
Max. Recorded Temp.							
Estimated Cement Top		5898'					
Time Well Ready		ROA					
Time Logger on Bottom		1200					
Equipment Number		W-060					
Location		WINDSOR, CO					
Recorded By		T. HAWLEY					
Witnessed By		JUSTIN GALE					
Borehole Record		Tubing Record					
Run Number	Bit	From	To	Size	Weight	From	To
1							
2							
Casing Record	Size	Wgt/Ft	Top	Bottom			
Surface String			0'				
Prot. String							
Production String			0'				
Liner							

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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

THANK YOU FOR USING CUTTERS WIRELINE

DATE OF SHOP CALIBRATION: 10/18

LOG RAN UNDER 0PSI

LOG ZEROED AT GROUND LEVEL, ADJUSTING +21' FOR MARKER JOINT AT 5940'-5963'

Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
			Standard Standard Cable Head	1.00	1.69	1.00

Tool Name	Start Depth (ft)	End Depth (ft)	Length (ft)	Weight (lb)	O.D. (in)
WVF3FT	11.52	11.52			
WVFCAL	11.52	11.52			
WVFS1	11.52	11.52			
WVFS2	11.52	11.52			
WVFS3	11.52	11.52			
WVFS4	11.52	11.52			
WVFS5	11.52	11.52			
WVFS6	11.52	11.52			
WVFS7	11.52	11.52			
WVFS8	11.52	11.52			
WVF5FT	10.52	11.52	1.00		
CCL	6.33	10.52	4.19		
IntTemp	4.83	6.33	1.50		
ACCX	4.67	6.33	1.66		
ACCY	4.67	6.33	1.66		
ACCZ	4.67	6.33	1.66		
GR	3.67	6.33	2.66		
Probe	2.83	4.83	2.00		
Total			17.08	131.00	2.75

Dataset: 70 ranch 10-4-4l.db: field/well/run1/pass20

Total Length: 17.08 ft

Total Weight: 131.00 lb

O.D.: 2.75 in

GR-275D_INC (DIG110254)
2-3/4" GR-CCL with Inclination

RBT-Probe (110217)
Probe 2.75" Radii Bond Tool

Gamma Ray Calibration Report

Serial Number:	DIG110254	
Tool Model:	275D_INC	
Performed:	Sun Jun 13 13:33:21 1993	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	1.0000	GAPI/cps

Inclinometer Calibration Report

Performed:	Sun Jun 13 13:33:21 1993				
	Low Read.	High Read.	Low Ref.	High Ref.	
X Accelerometer	0.00	1.00	0.00	1.00	gee
Y Accelerometer	0.00	1.00	0.00	1.00	gee
Z Accelerometer	0.00	1.00	0.00	1.00	gee

Segmented Cement Bond Log Calibration Report

Serial Number:	110217	
Tool Model:	Probe	
Calibration Casing Diameter:	5.500	in
Calibration Depth:	521.017	ft

Master Calibration, performed Fri Jul 26 01:28:54 2019:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.017	0.339	2.000	71.921	216.959	-1.726
CAL	0.015	1.003				
5'	0.015	0.601	2.000	71.921	119.242	0.230
SUM						
S1	0.001	0.171	0.000	100.000	587.366	-0.459
S2	0.013	0.537	0.000	100.000	190.716	-2.491
S3	0.014	0.338	0.000	100.000	308.887	-4.370
S4	0.015	0.345	0.000	100.000	303.250	-4.594
S5	0.016	0.351	0.000	100.000	298.477	-4.642
S6	0.014	0.423	0.000	100.000	244.297	-3.388
S7	0.015	0.226	0.000	100.000	473.389	-6.969
S8	0.014	0.332	0.000	100.000	314.436	-4.422

Internal Reference Calibration, performed Wed Dec 31 17:00:00 1969:

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	0.015	1.003	1.000	0.000

Air Zero Calibration, performed Sat Jun 01 01:39:50 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

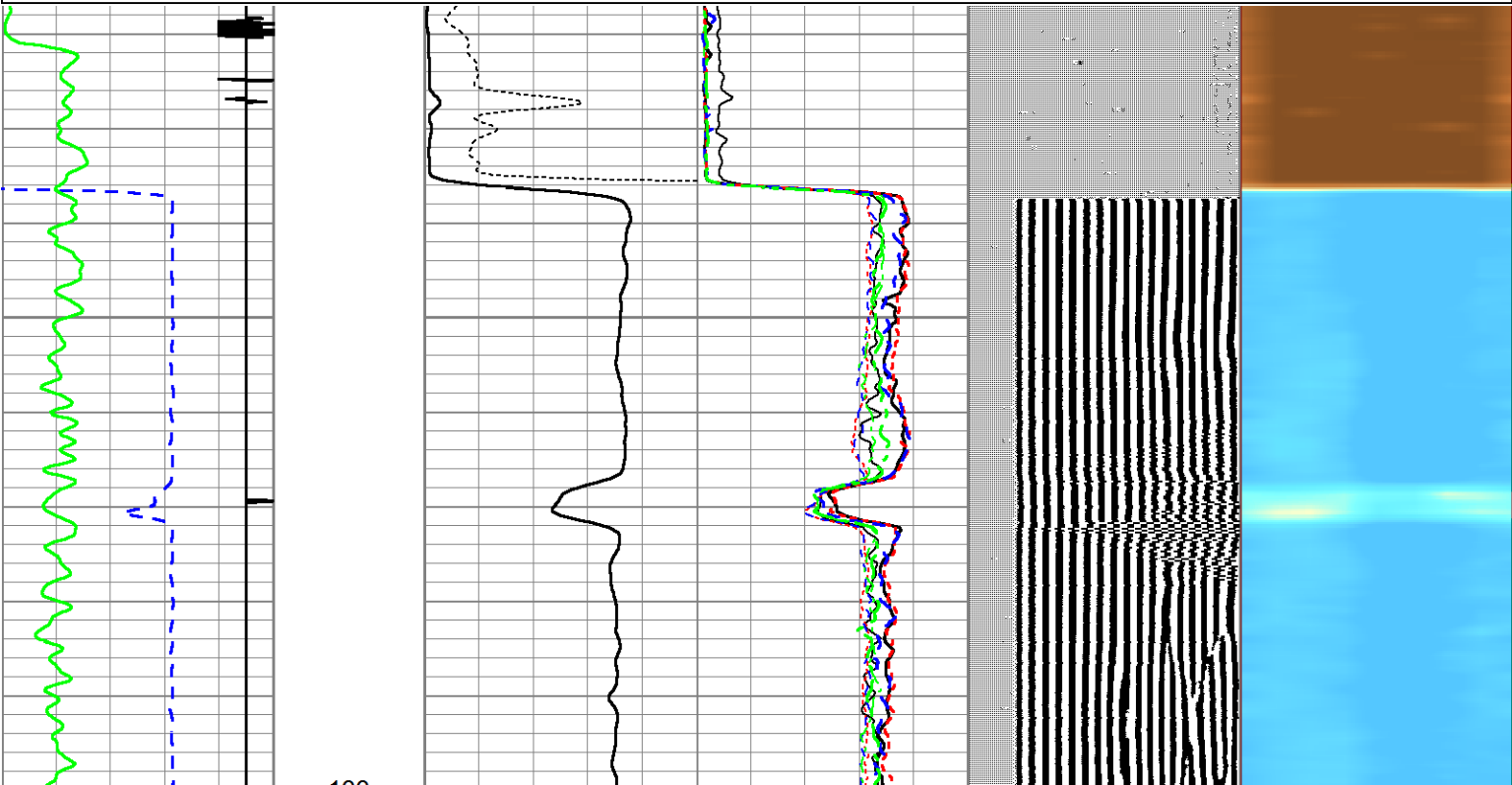


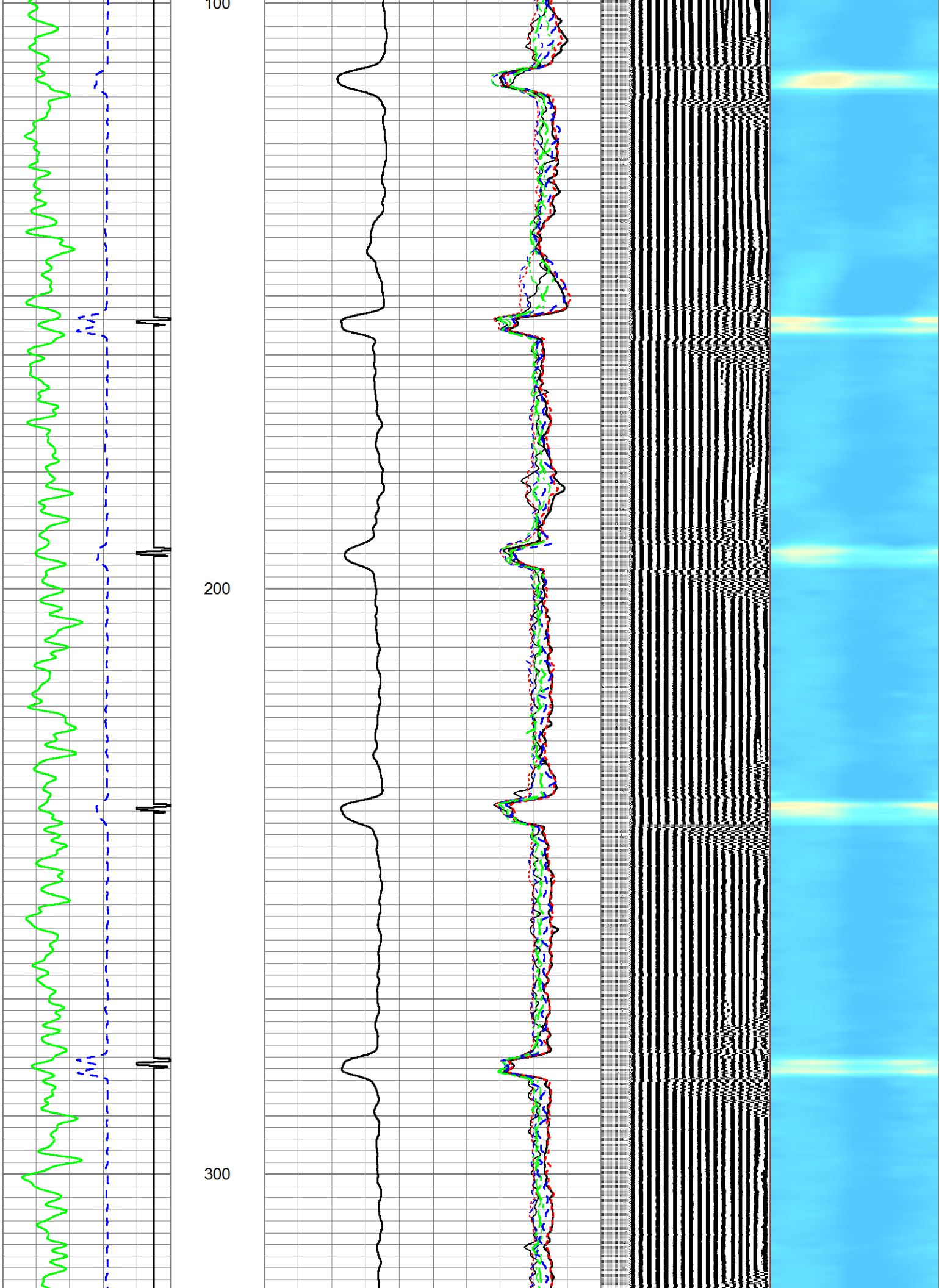
MAIN PASS

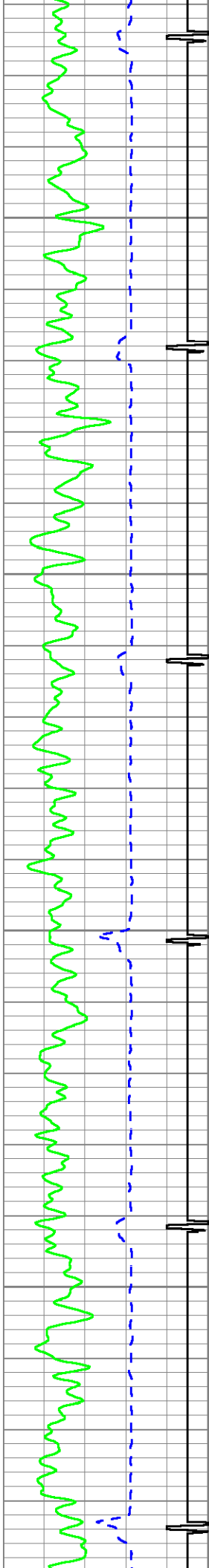
5" = 100'

Database File: 70 ranch 10-4-4l.db
 Dataset Pathname: pass20
 Presentation Format: scbl_inc
 Dataset Creation: Wed Aug 28 16:23:54 2019
 Charted by: Depth in Feet scaled 1:240

325	TT (usec)	225	0	AMP (mV)	100	-5	AMPS1	150	200	VDL	1200	1	Cement Map	8
-9	CCL	1	0	AMPx10 (mV)	10	-5	AMPS2	150				0		100
0	GR (GAPI)	200				-5	AMPS3	150						
						-5	AMPS4	150						
						-5	AMPS5	150						
						-5	AMPS6	150						
						-5	AMPS7	150						
						-5	AMPS8	150						

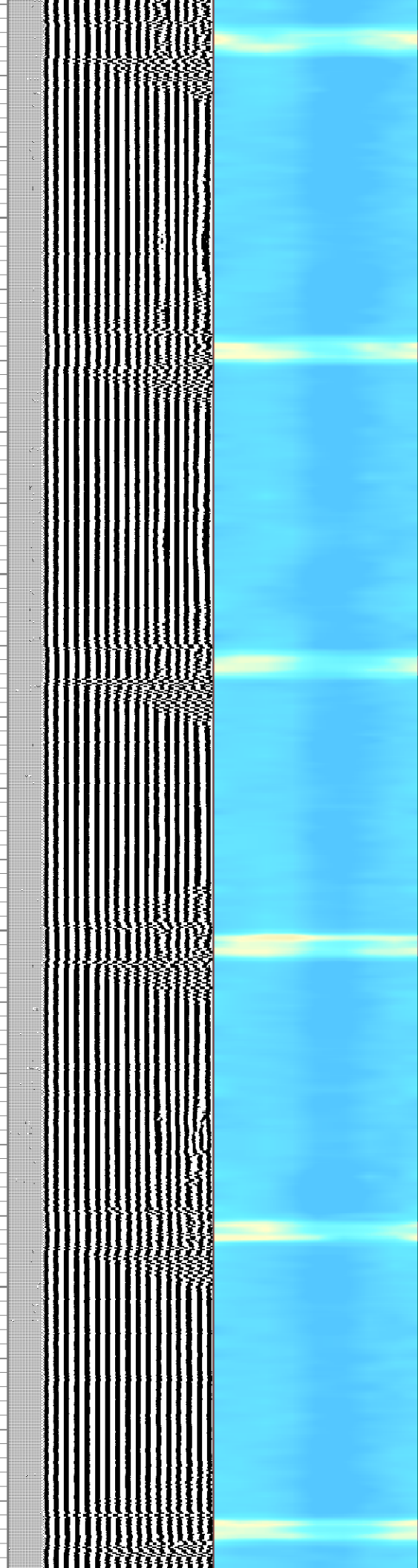
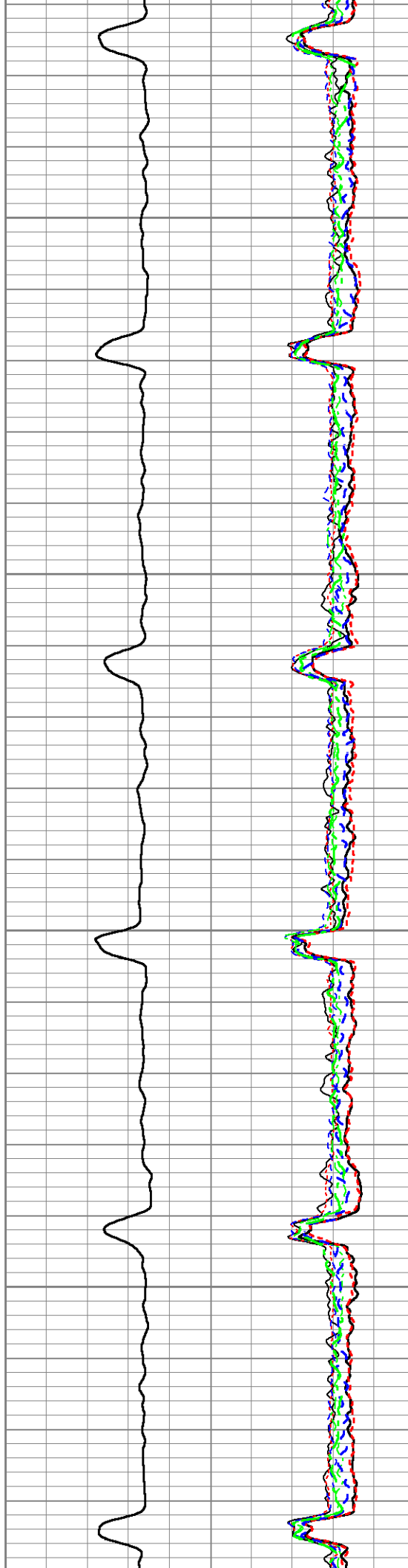


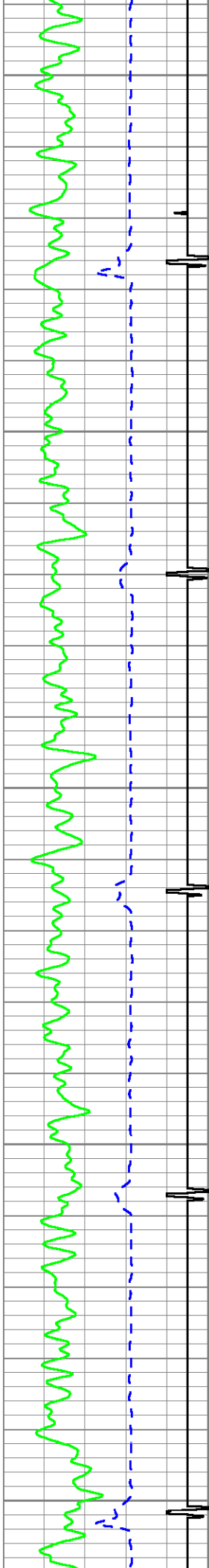




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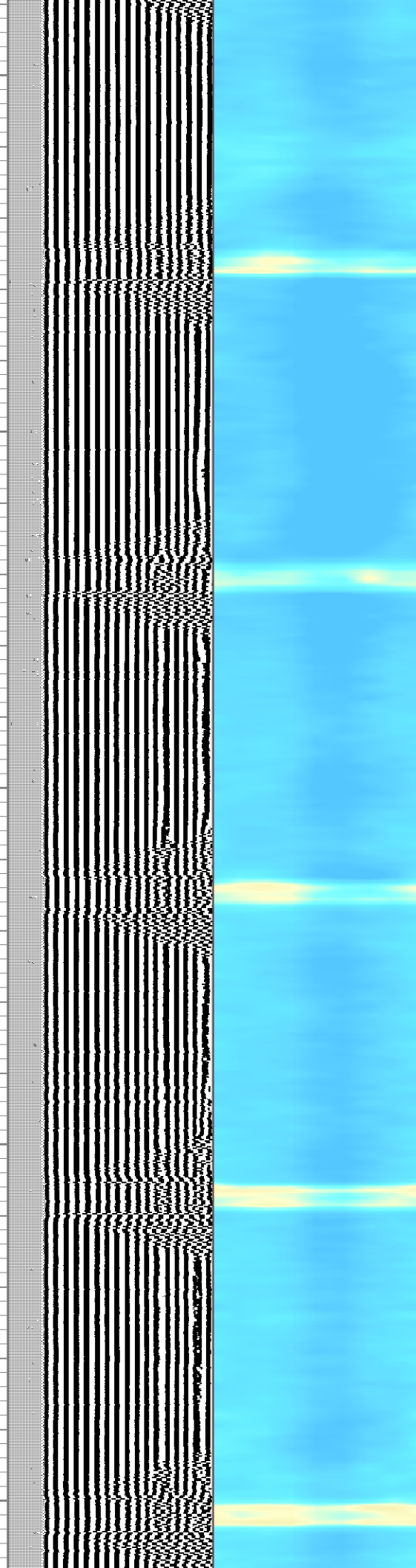
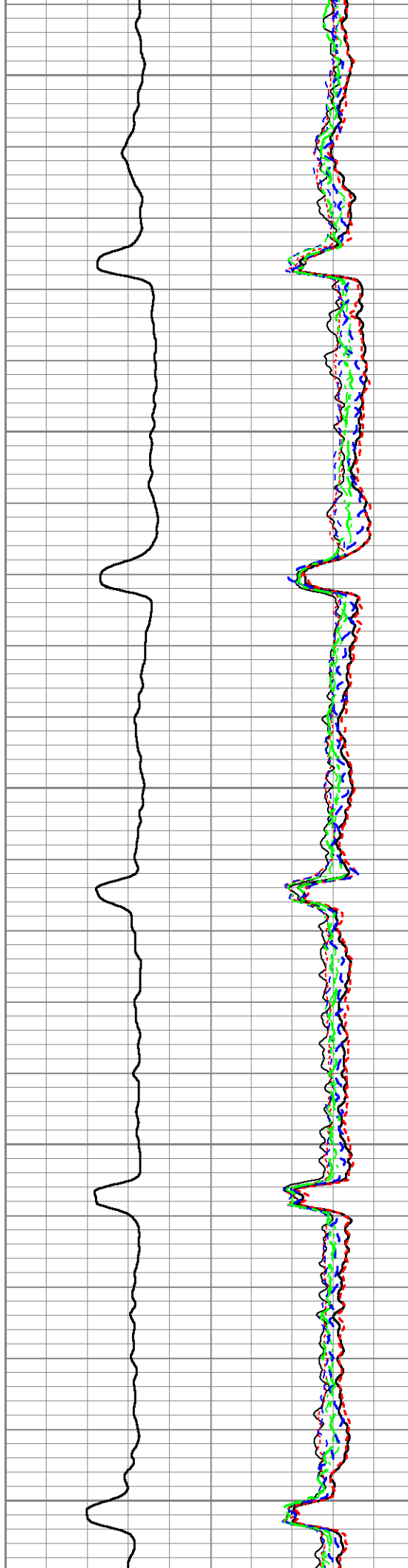
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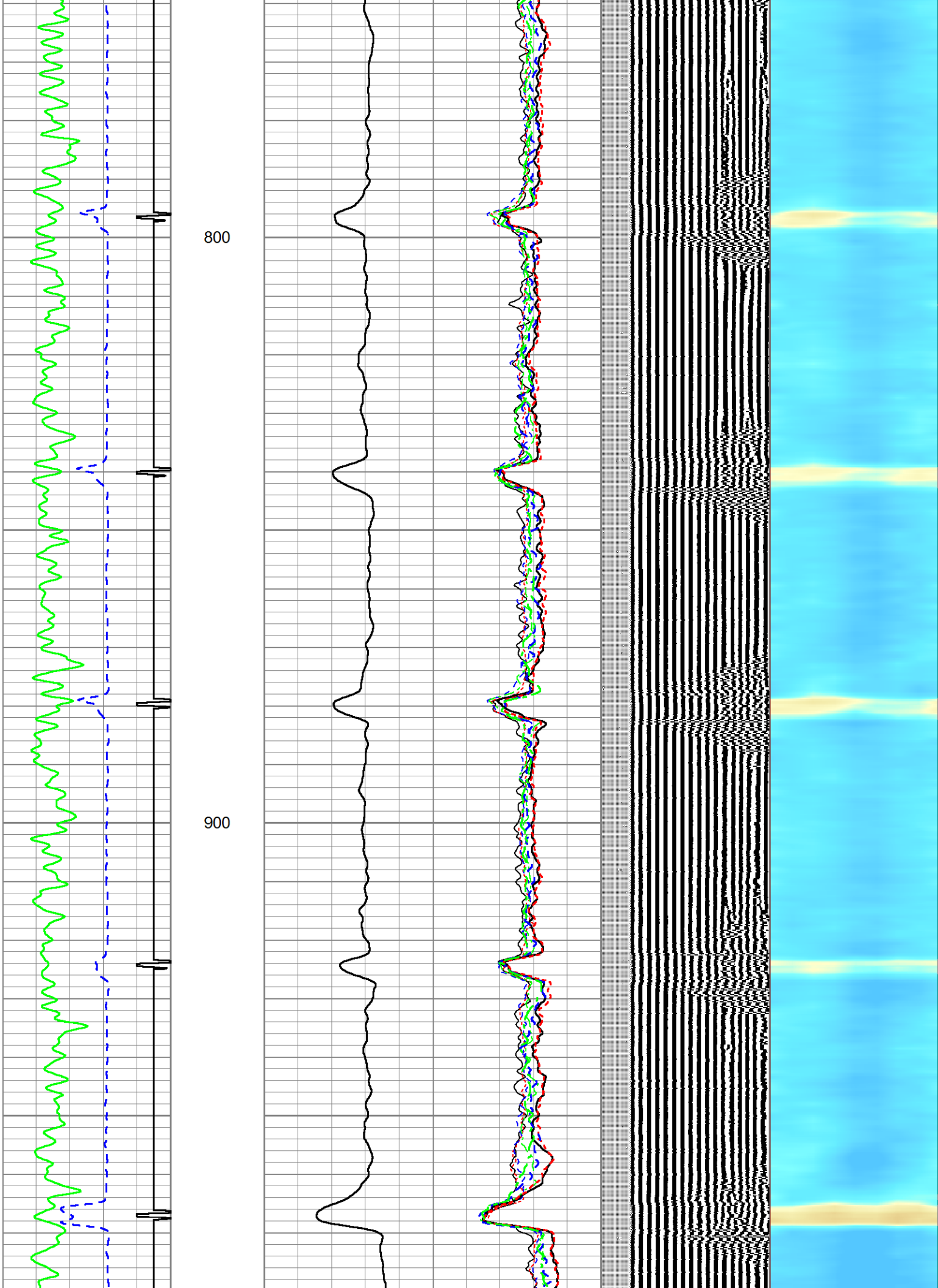


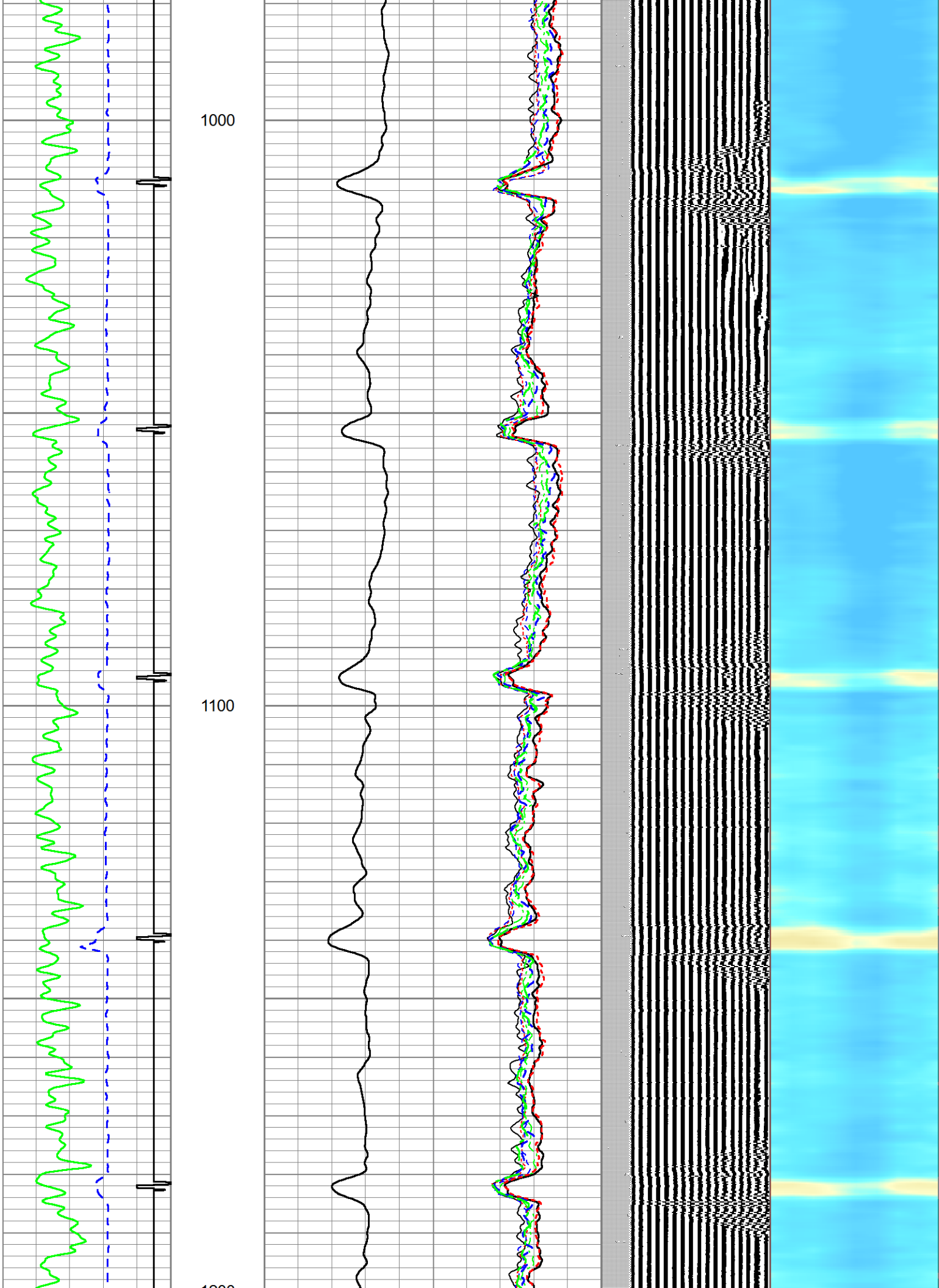


600

700



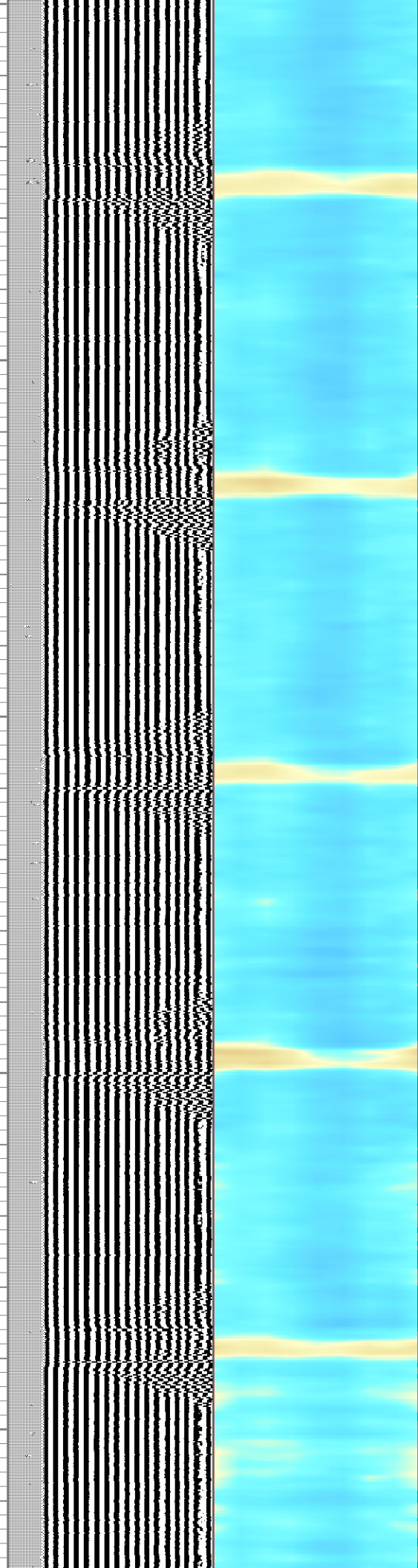
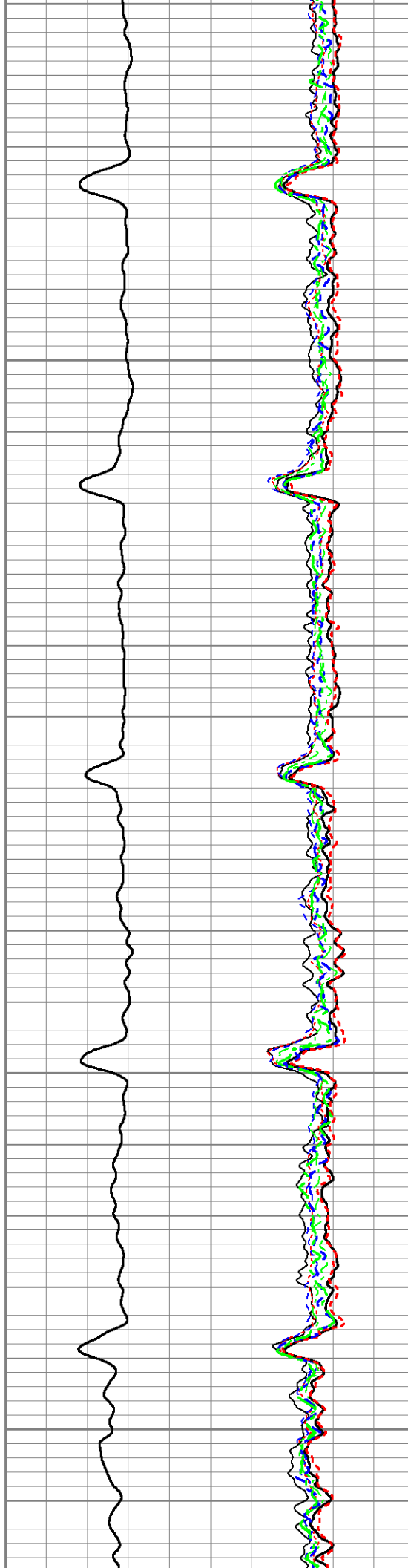
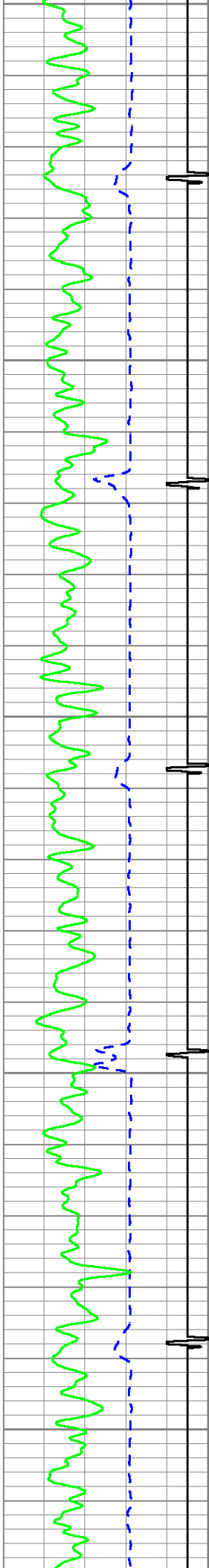


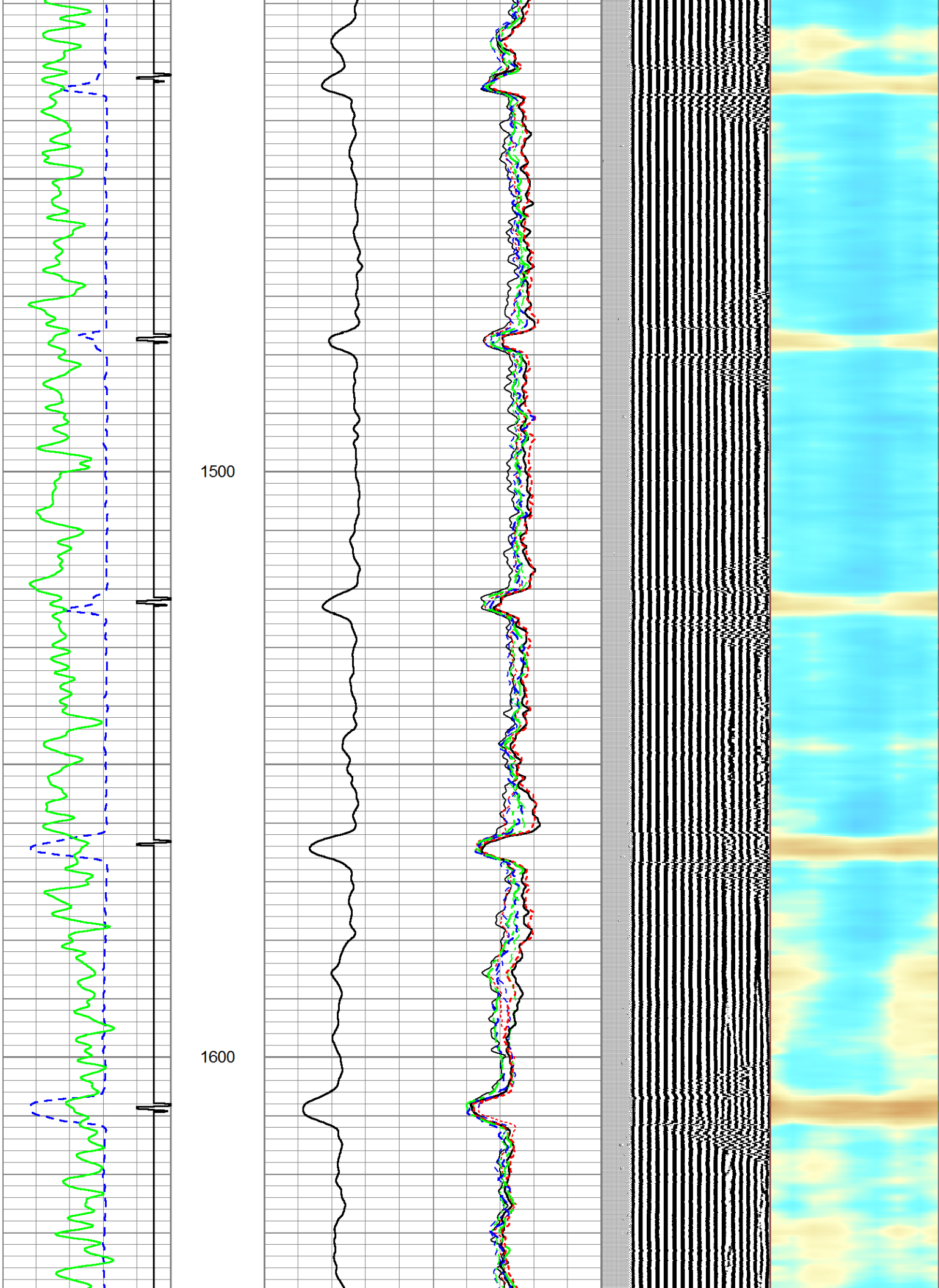


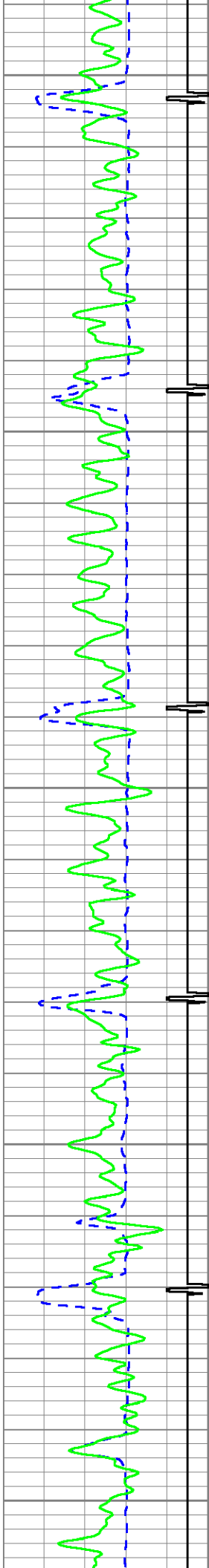
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1300

1400

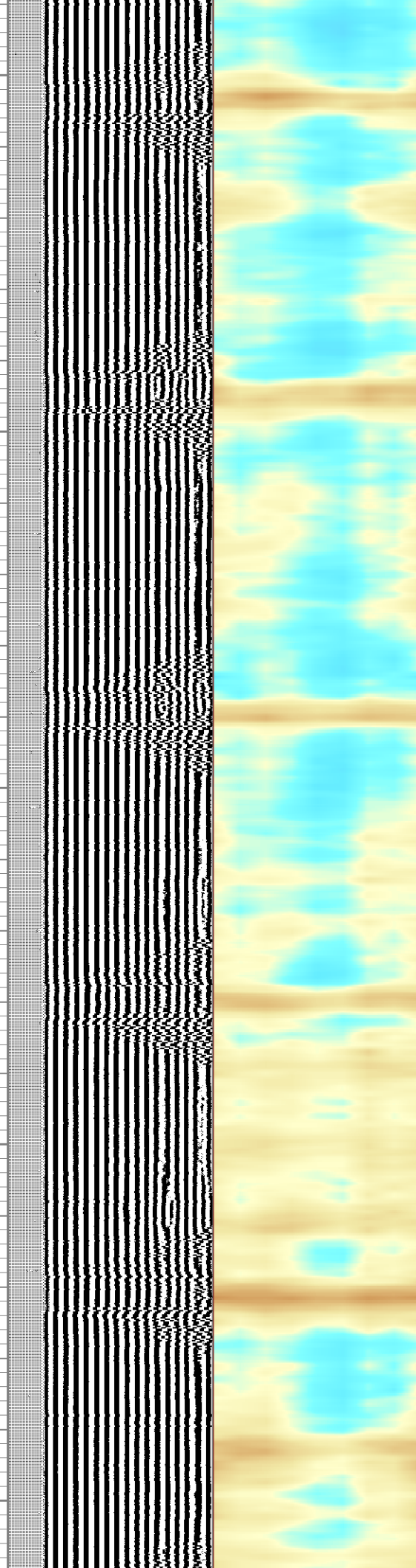
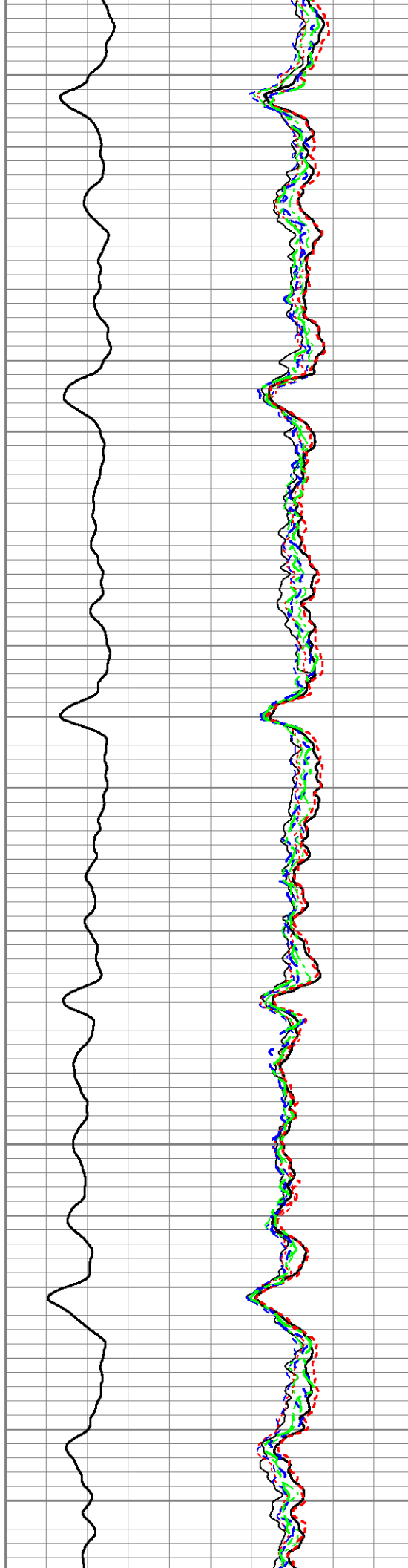


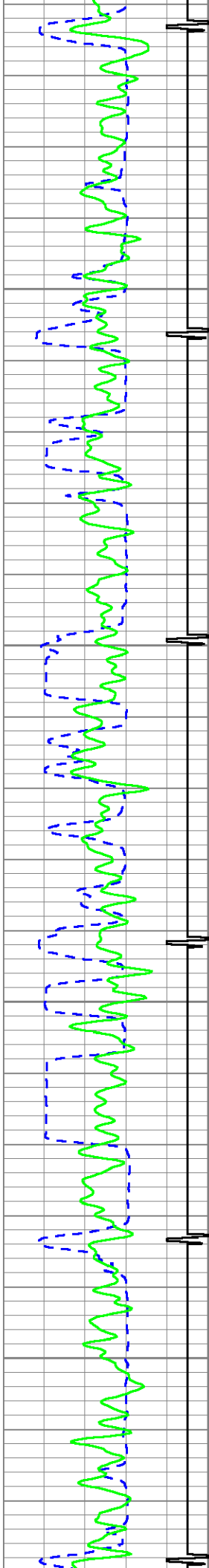




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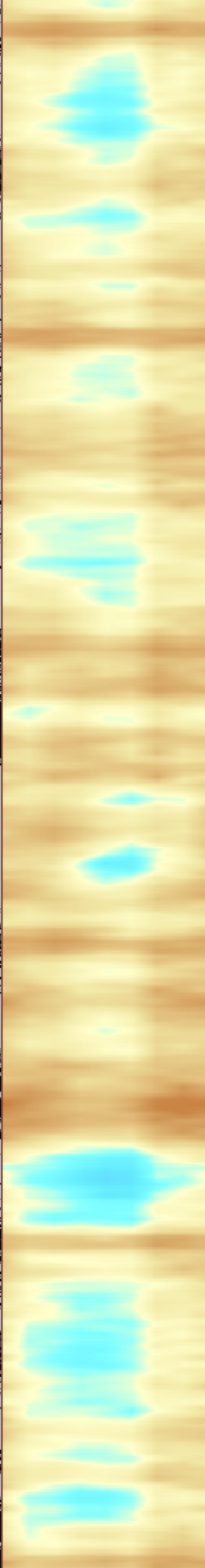
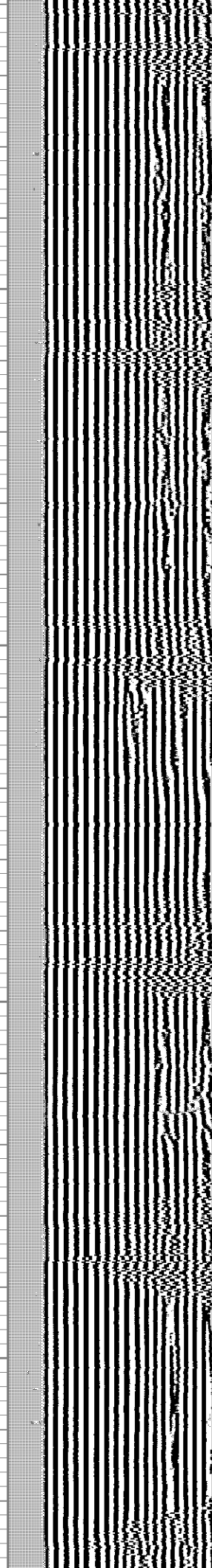
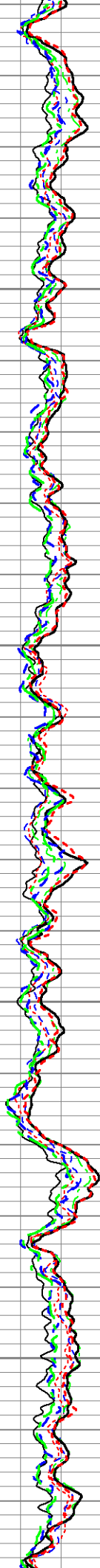
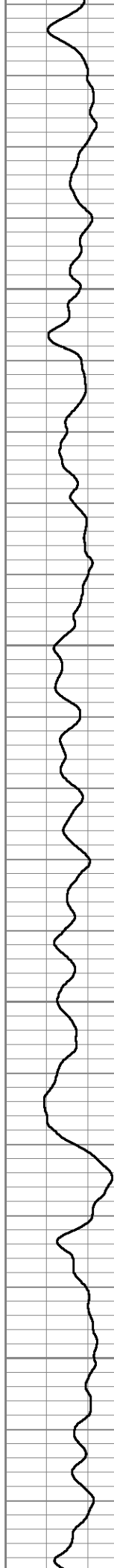
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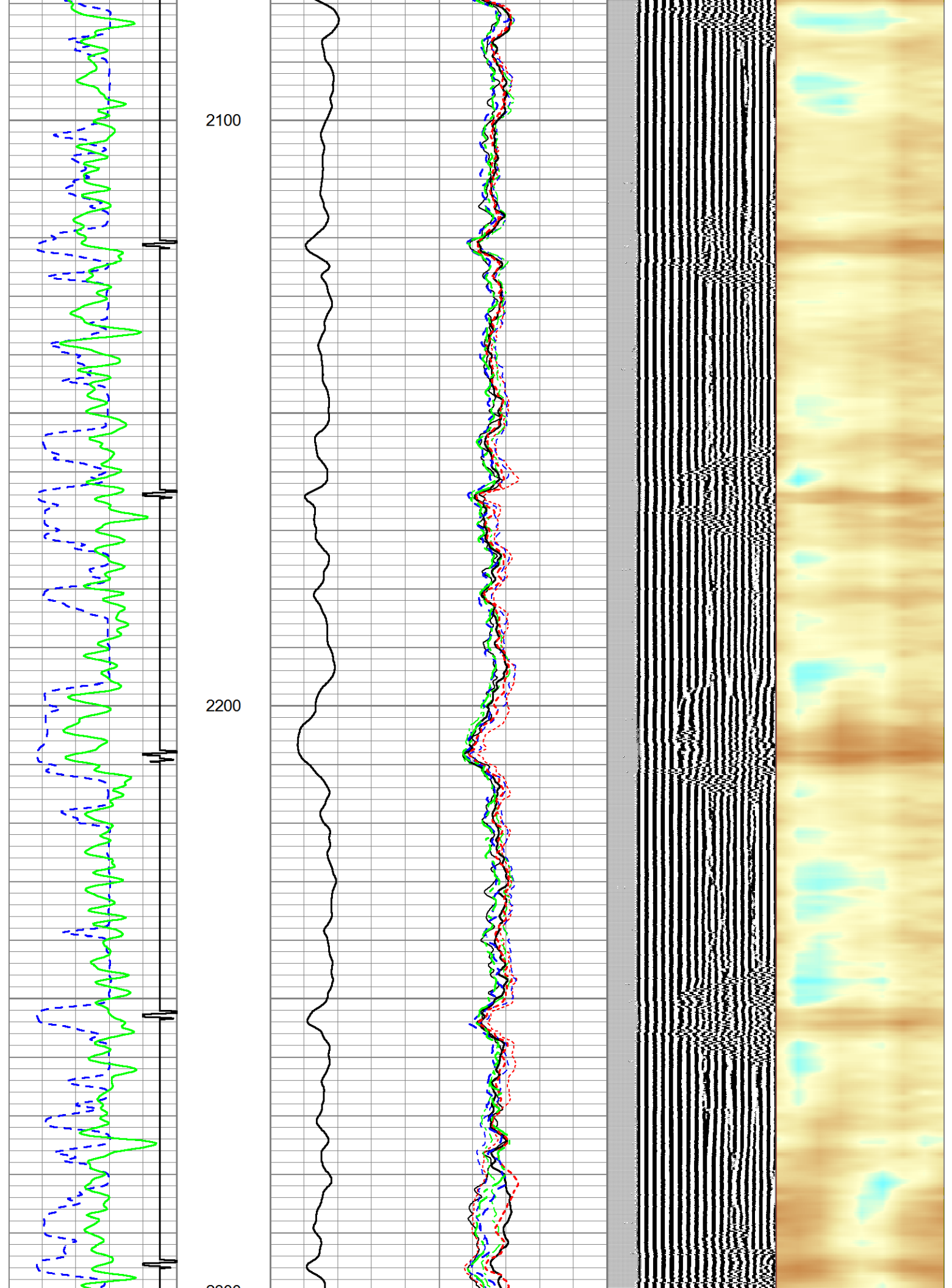




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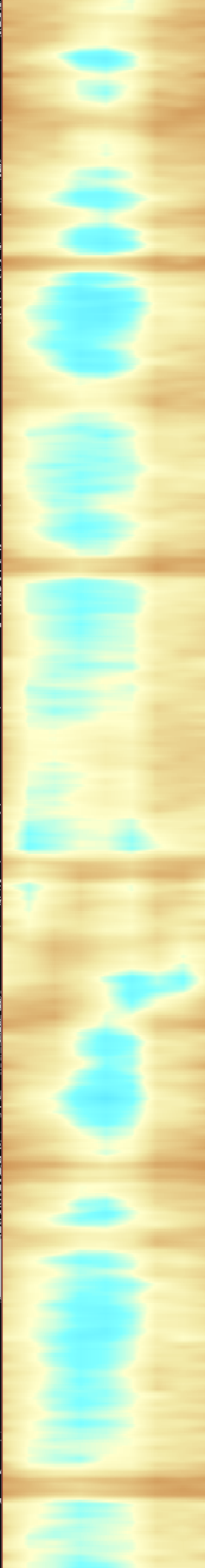
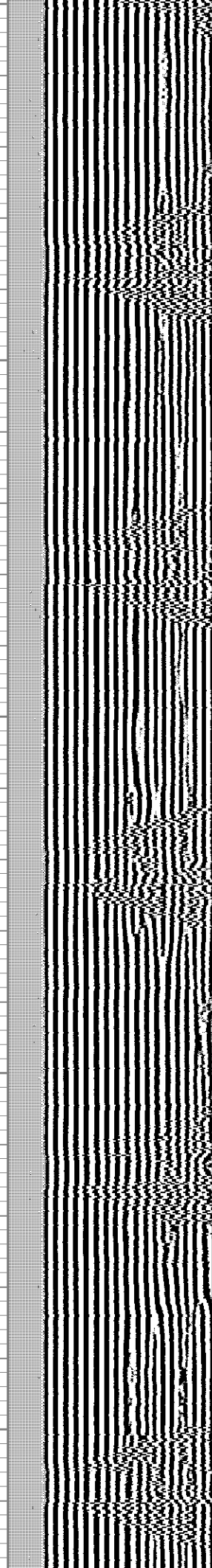
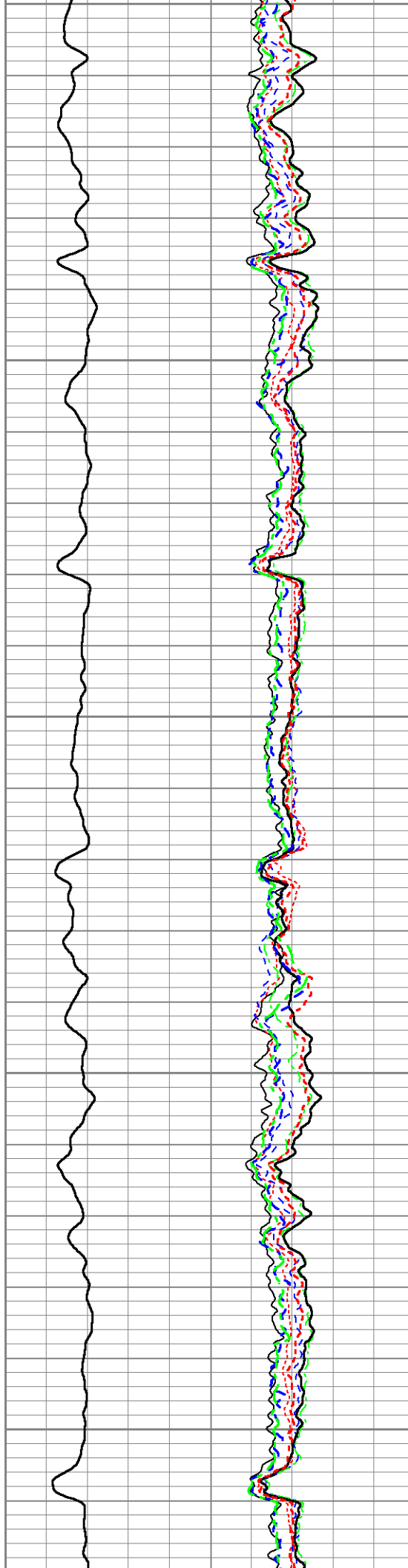
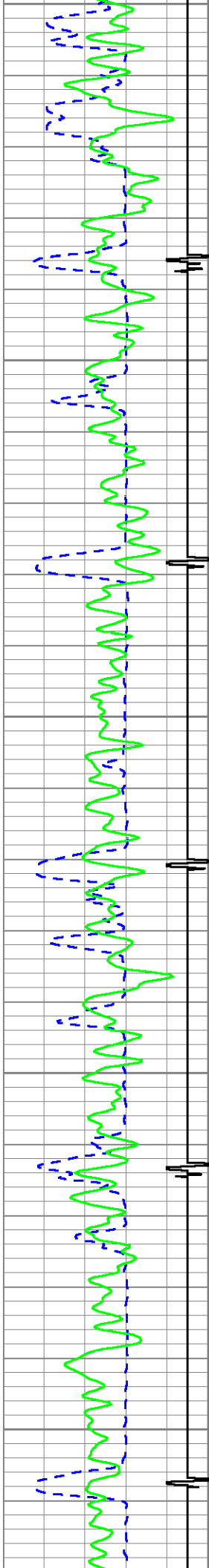


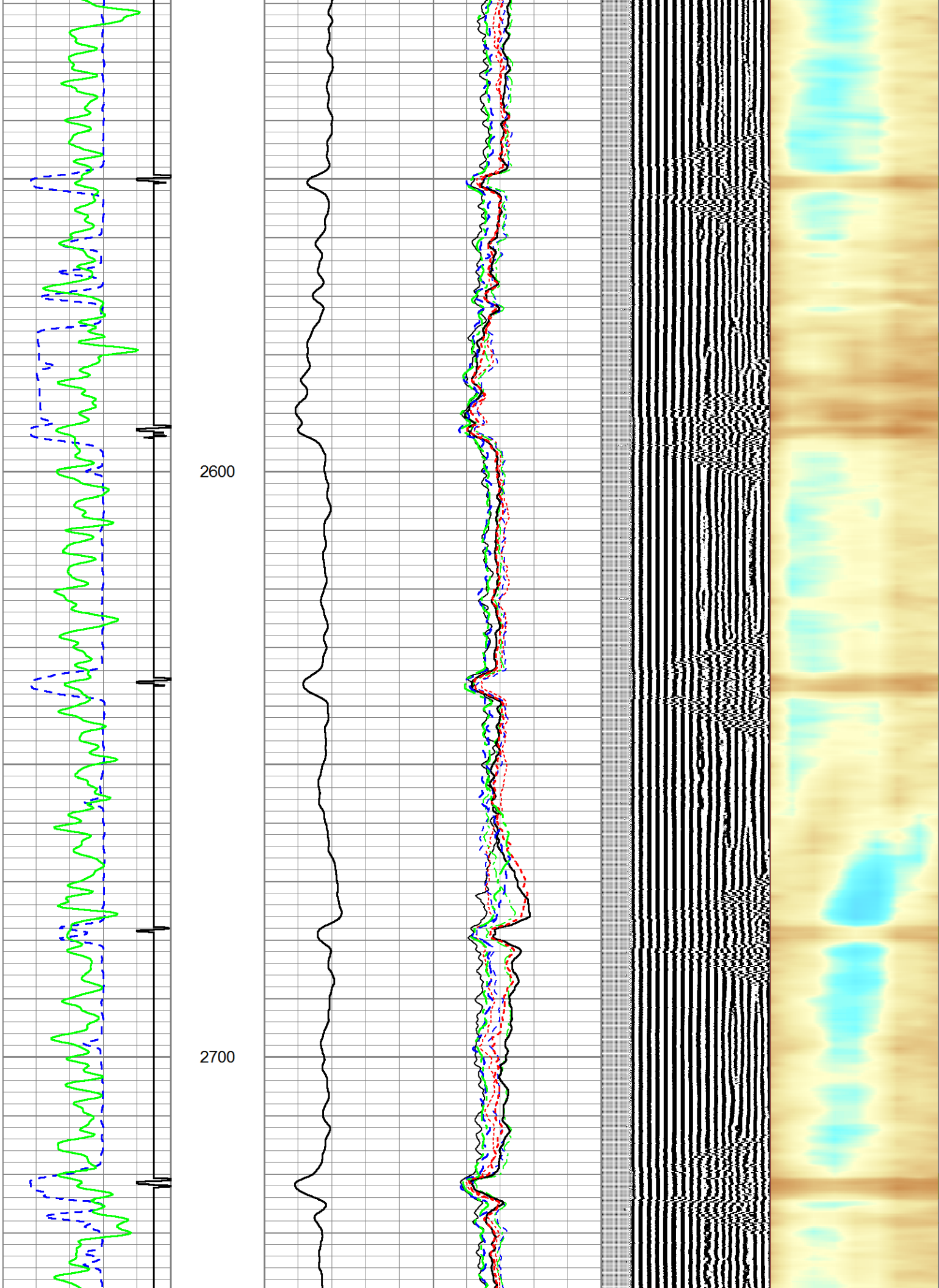


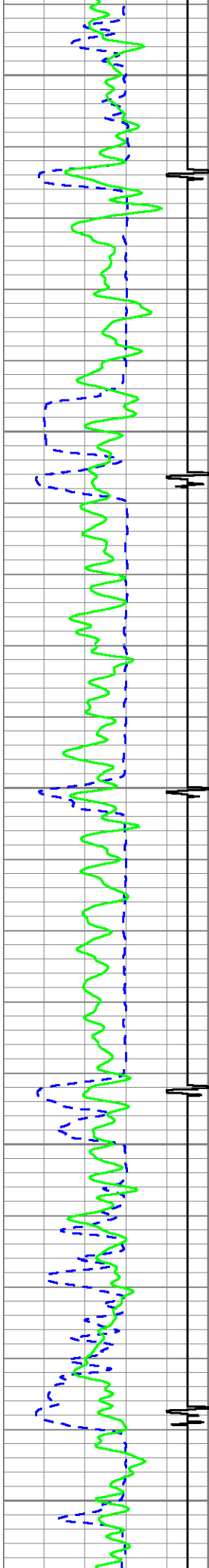
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2400

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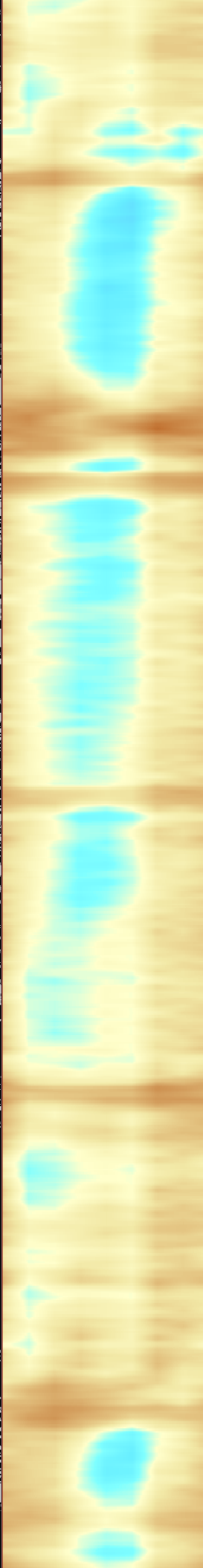
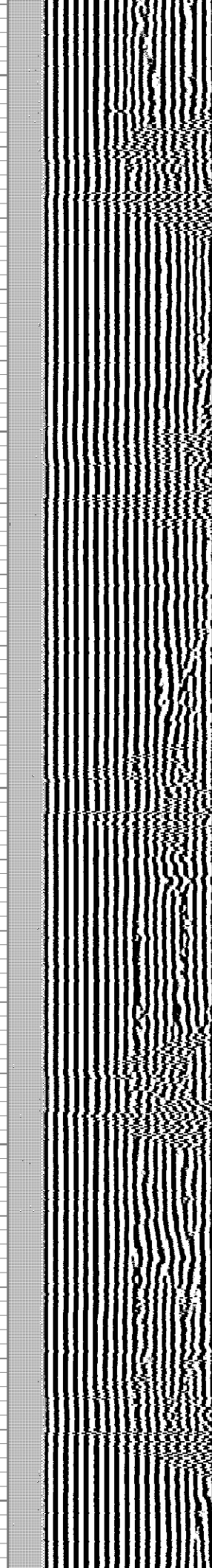
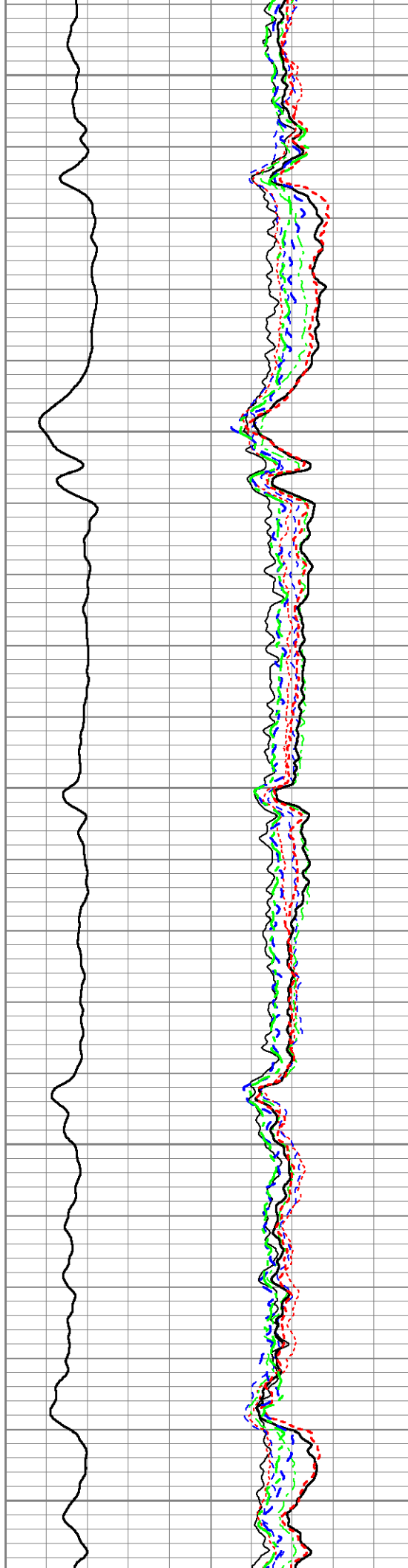


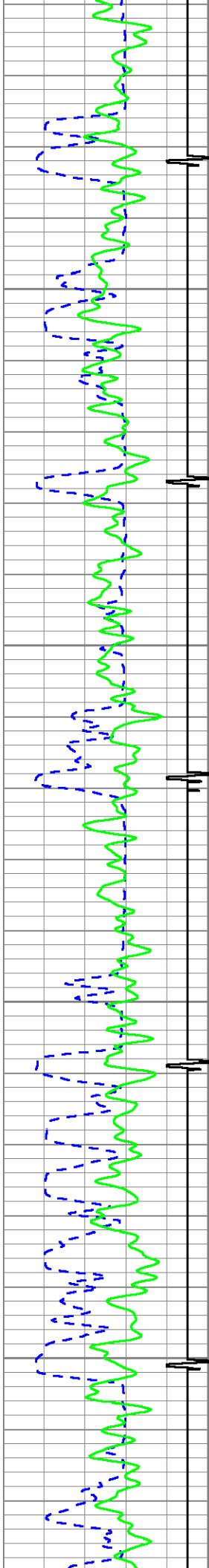




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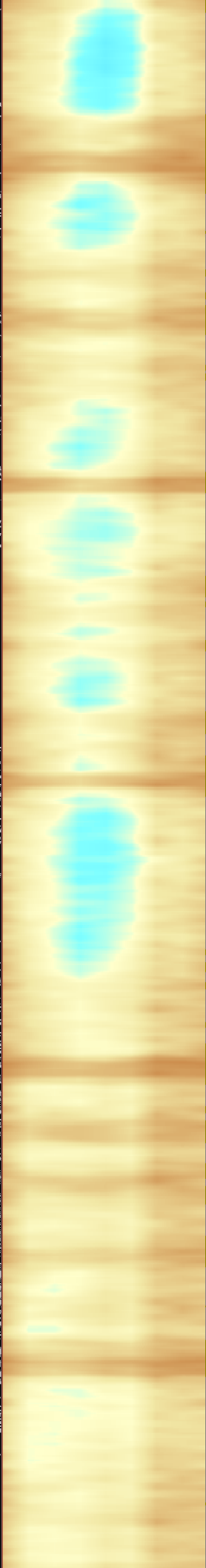
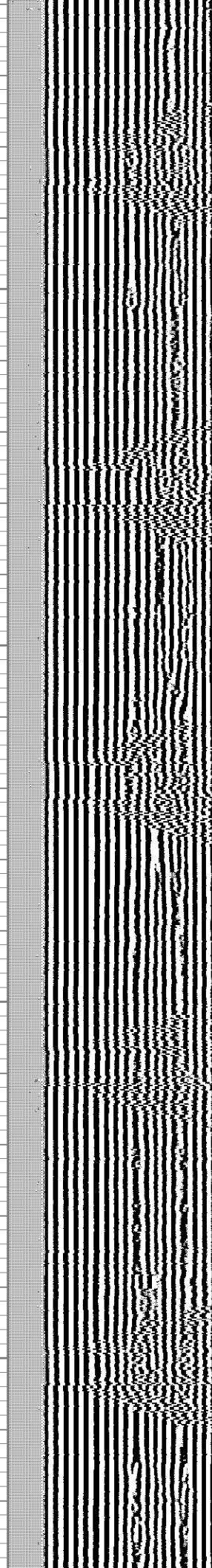
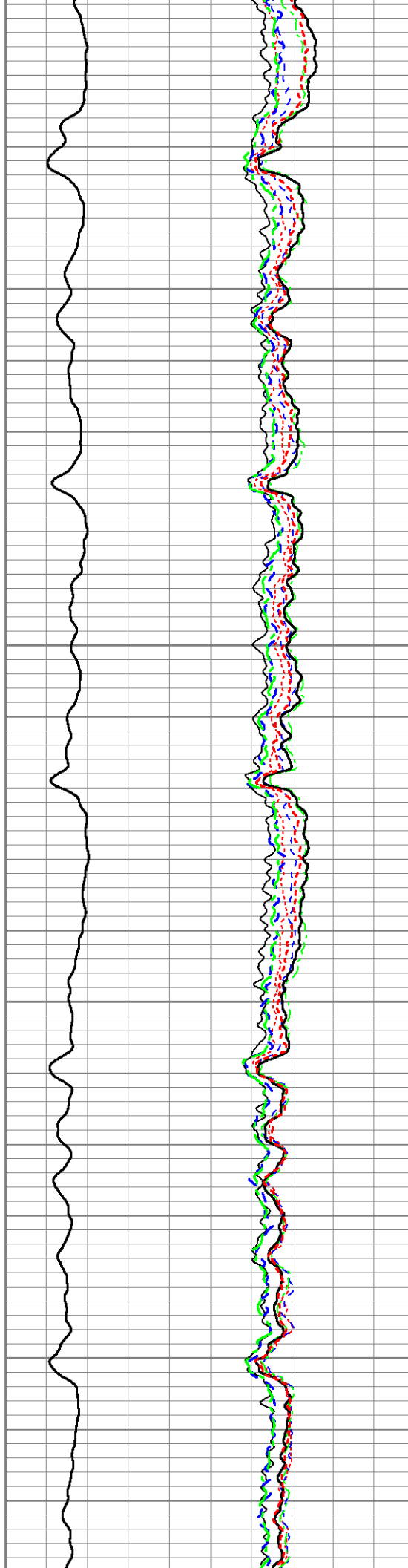
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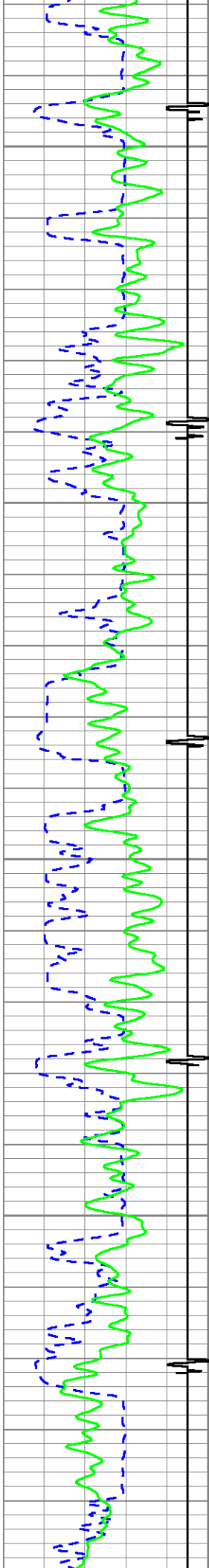




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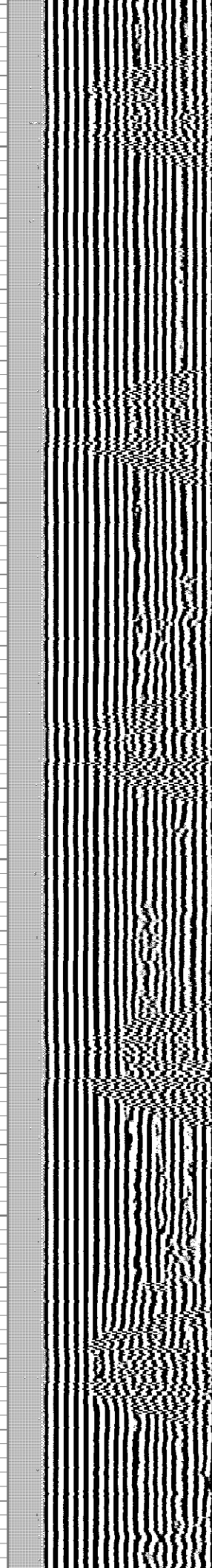
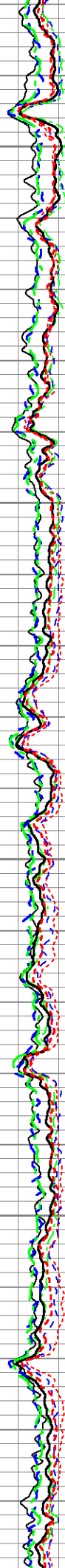
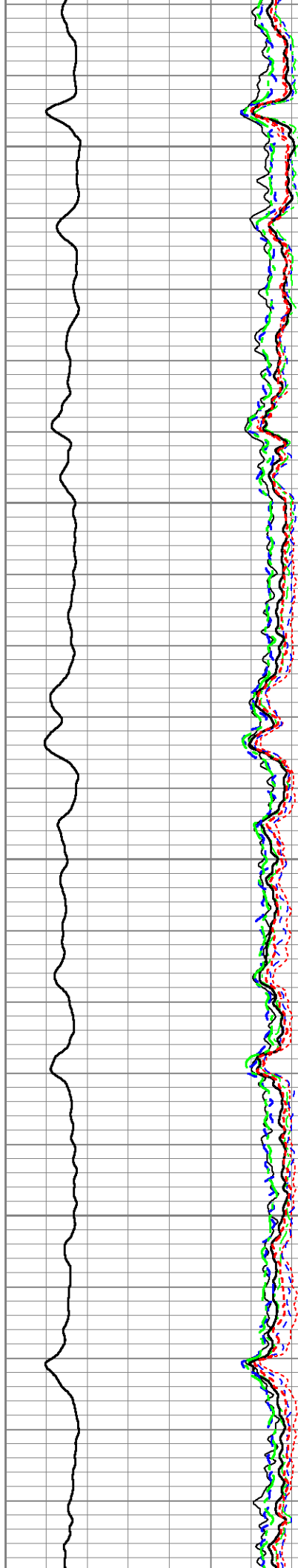




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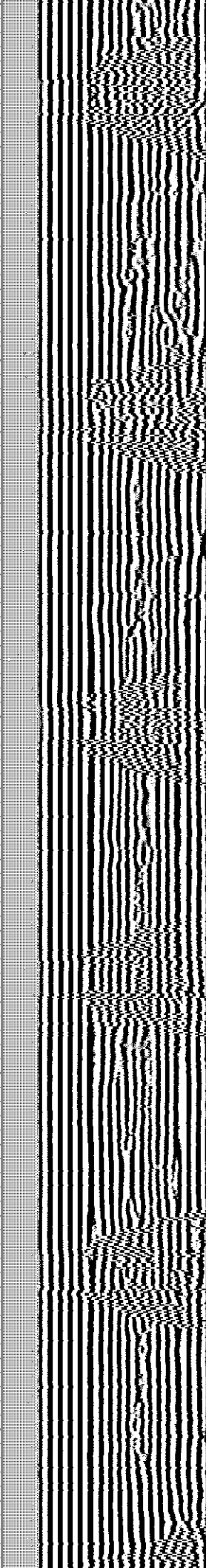
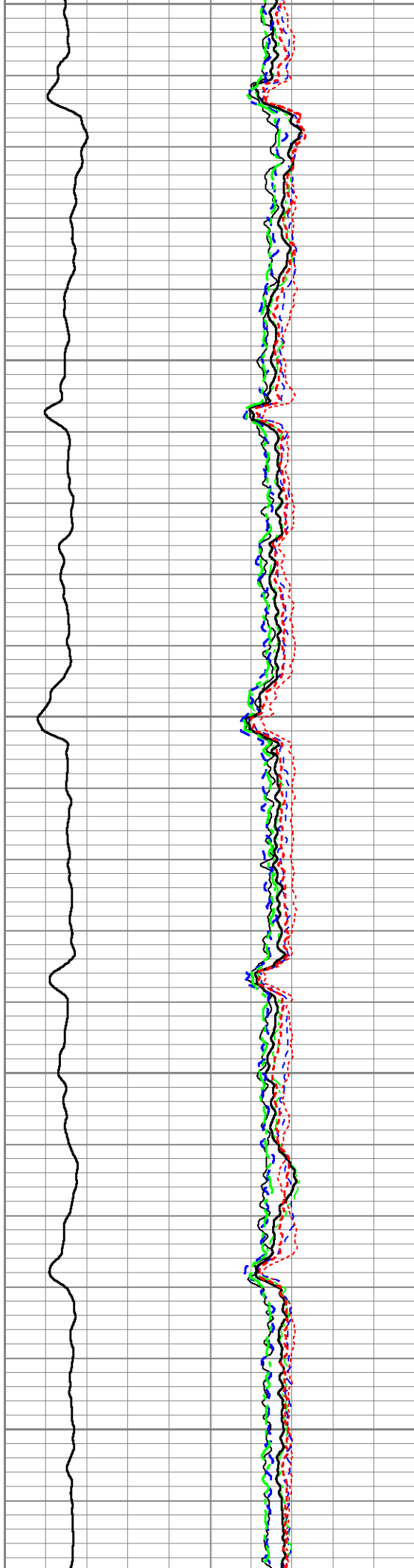
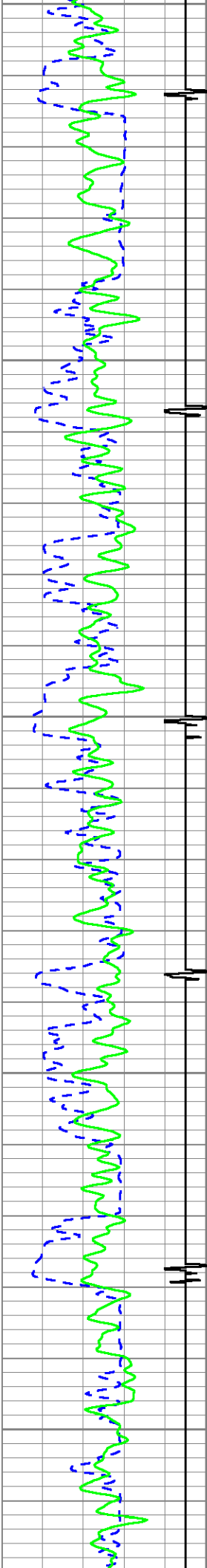
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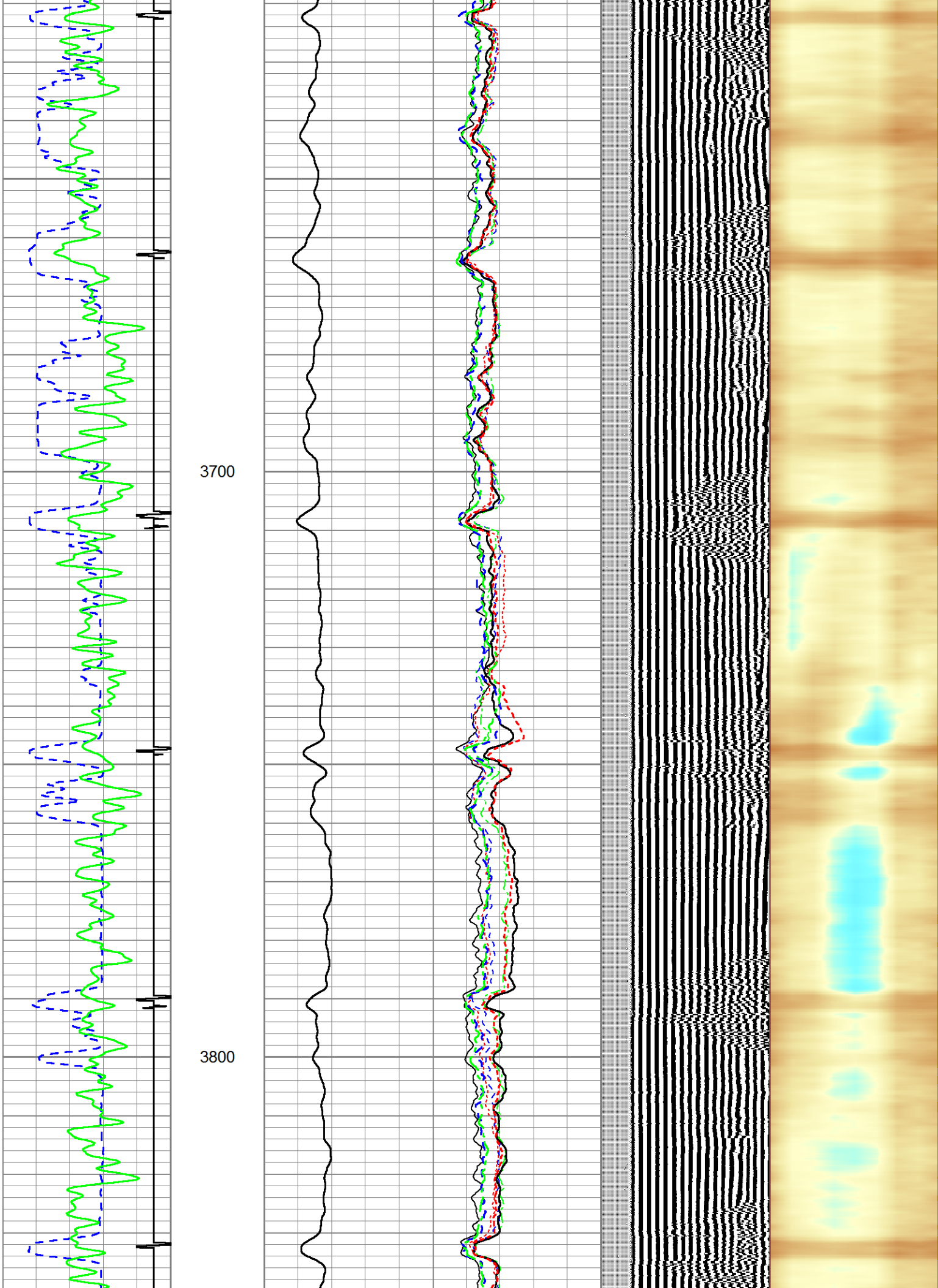


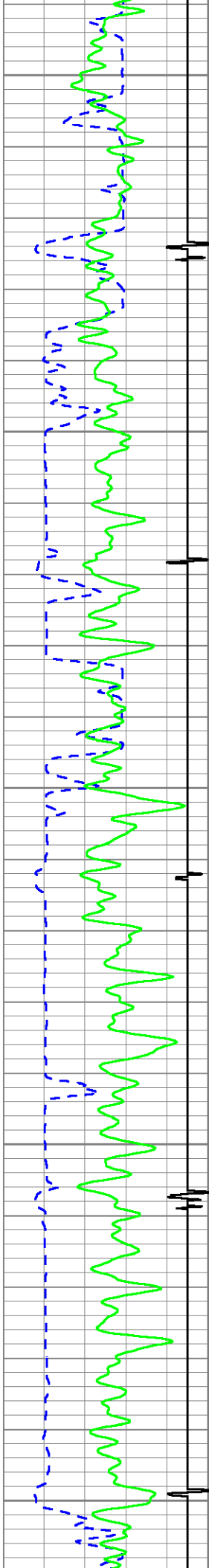
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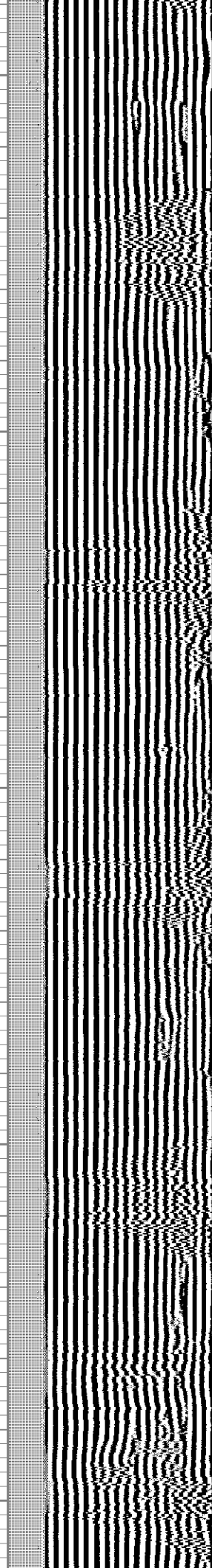
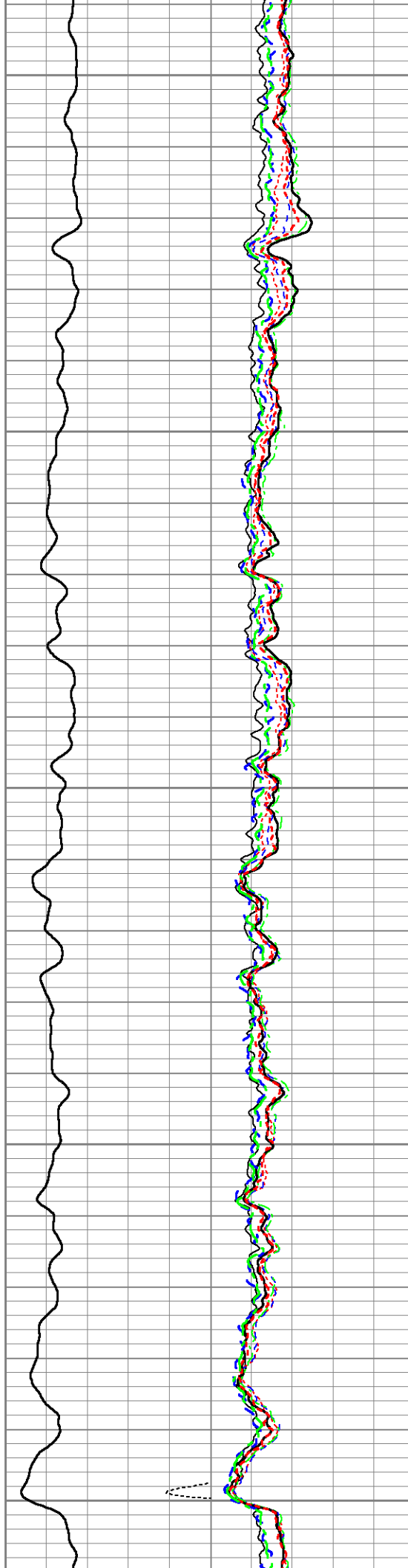


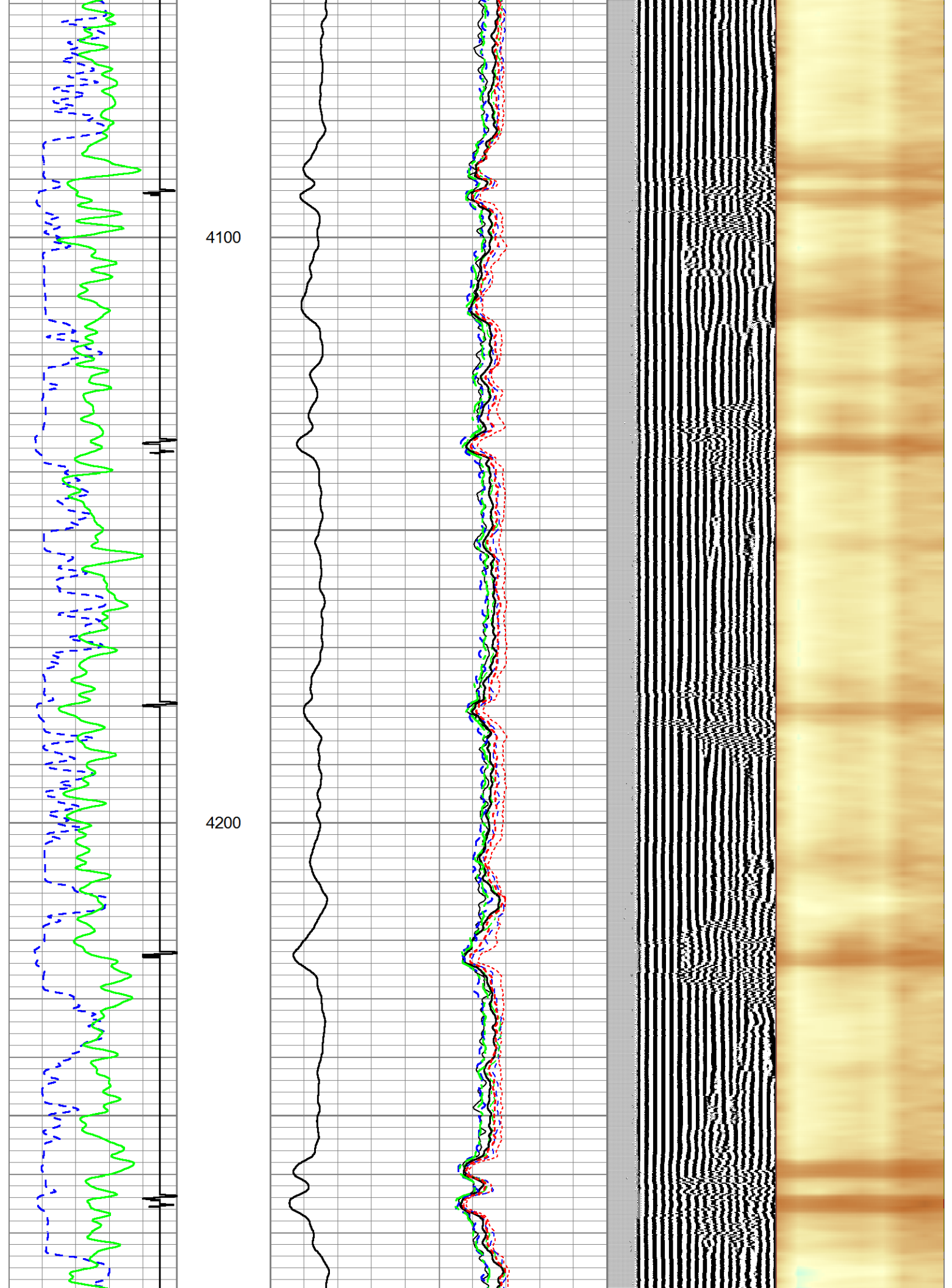


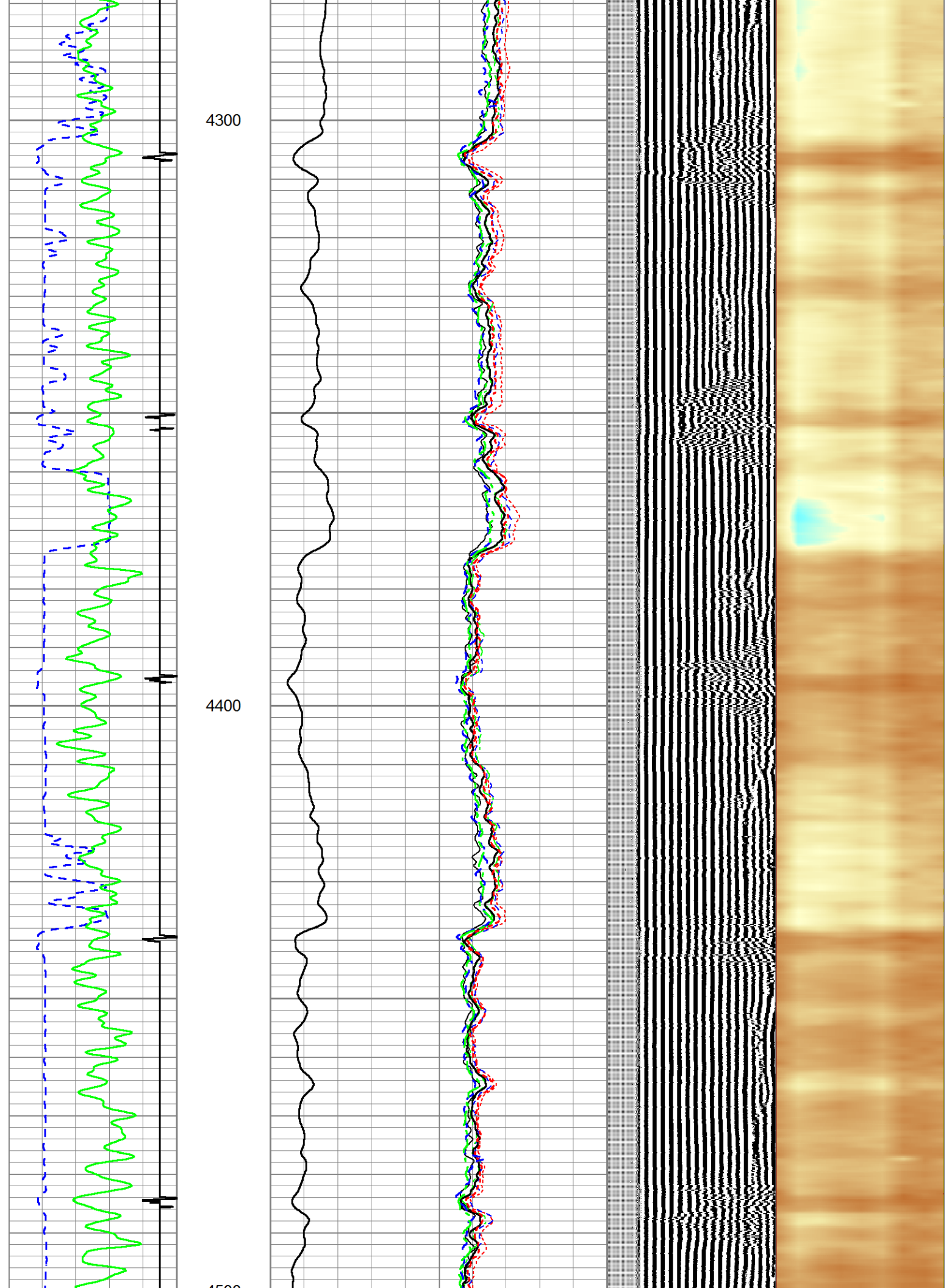


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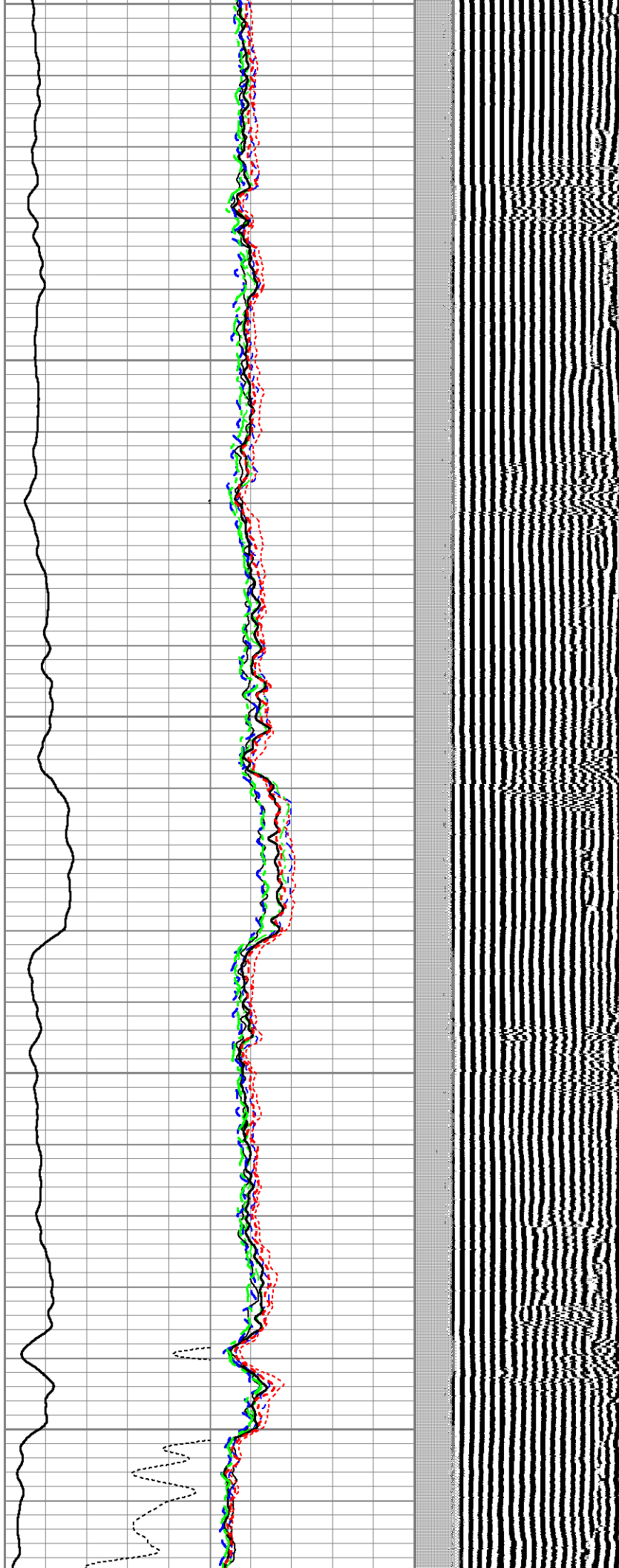


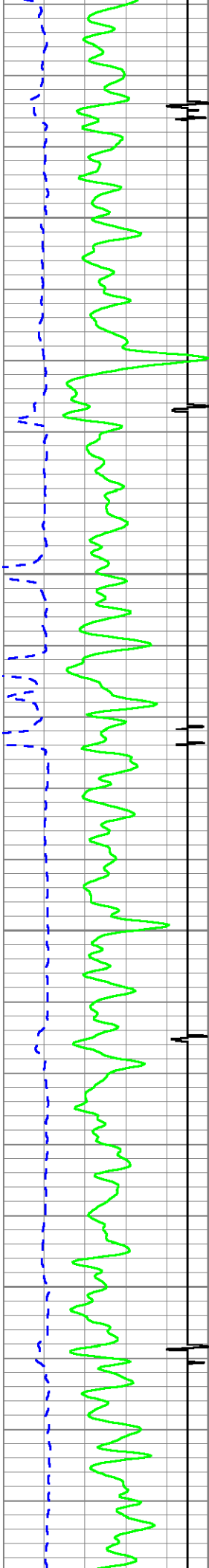


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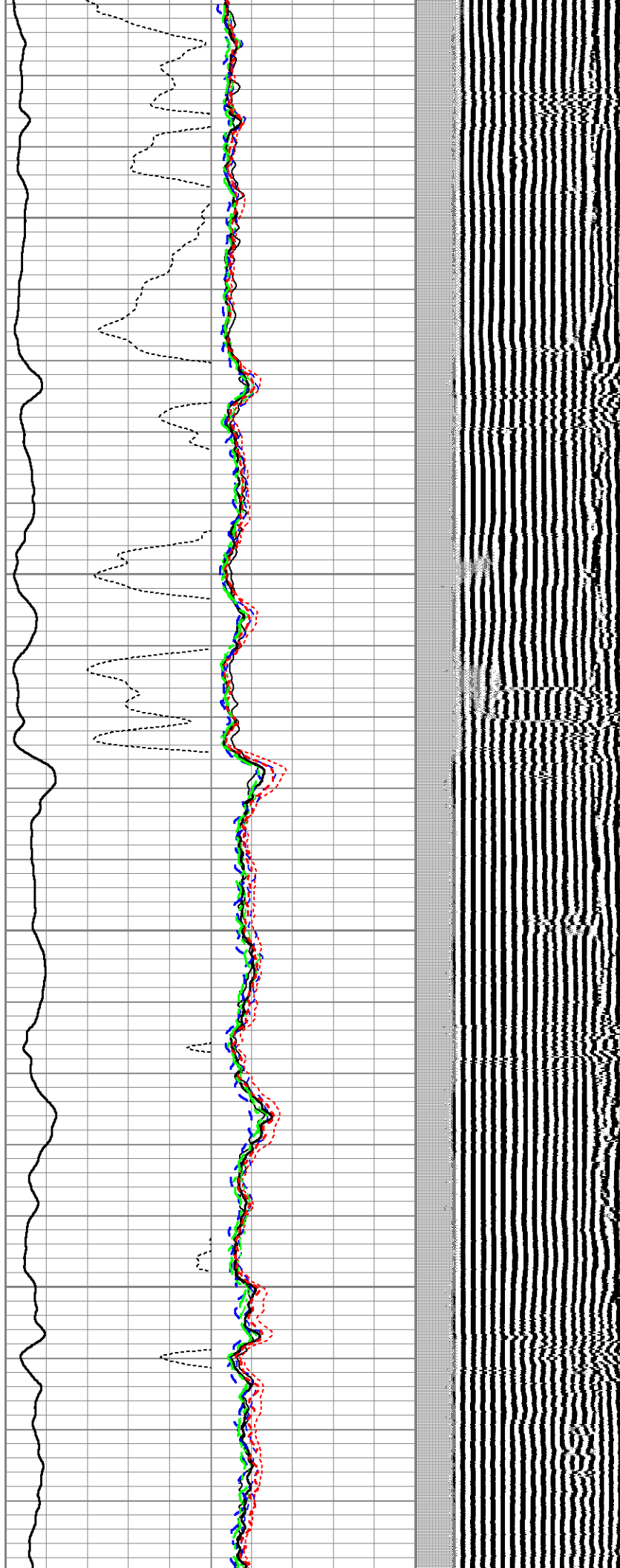
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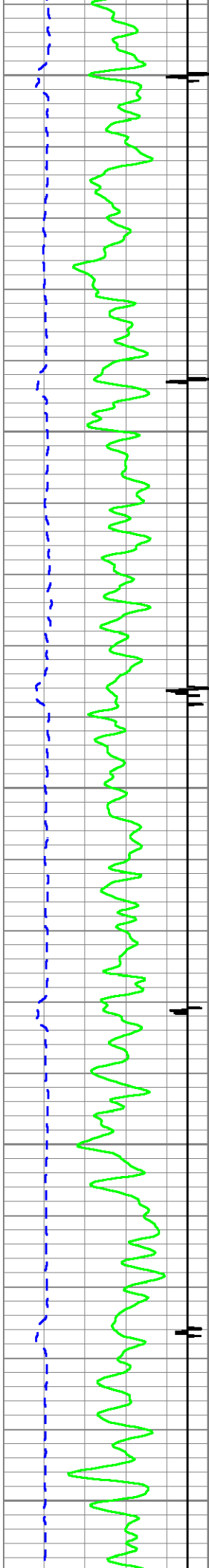




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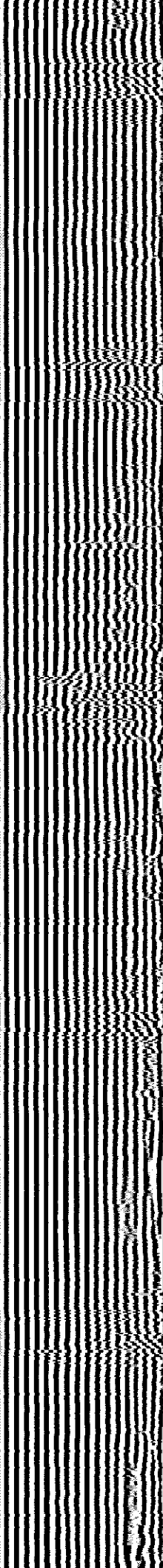
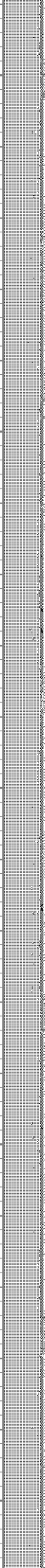
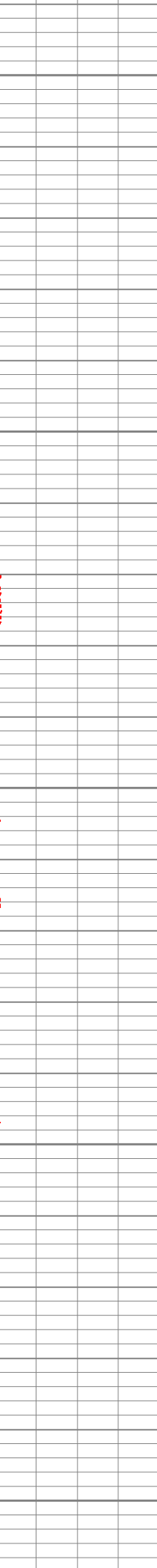
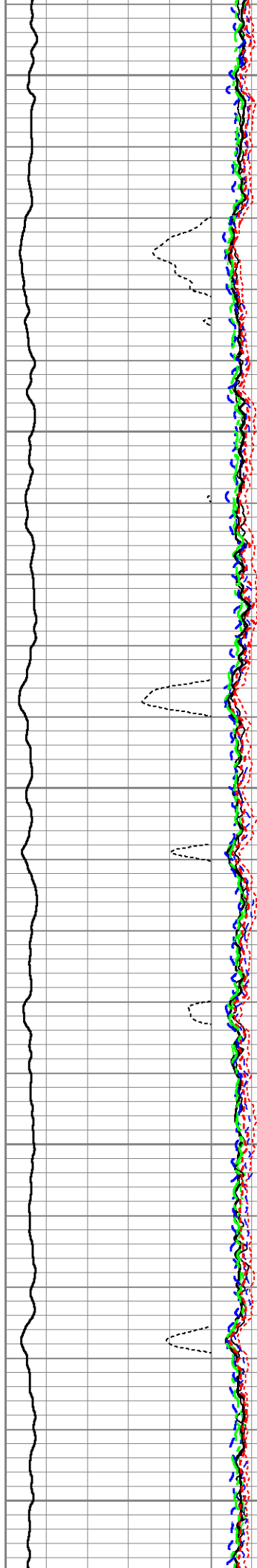
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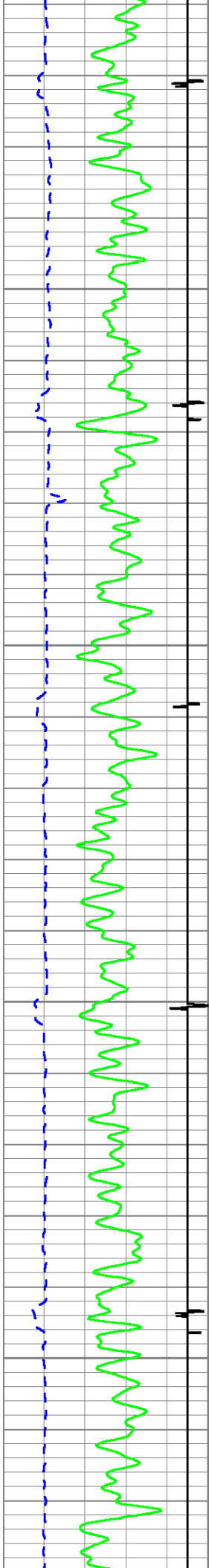




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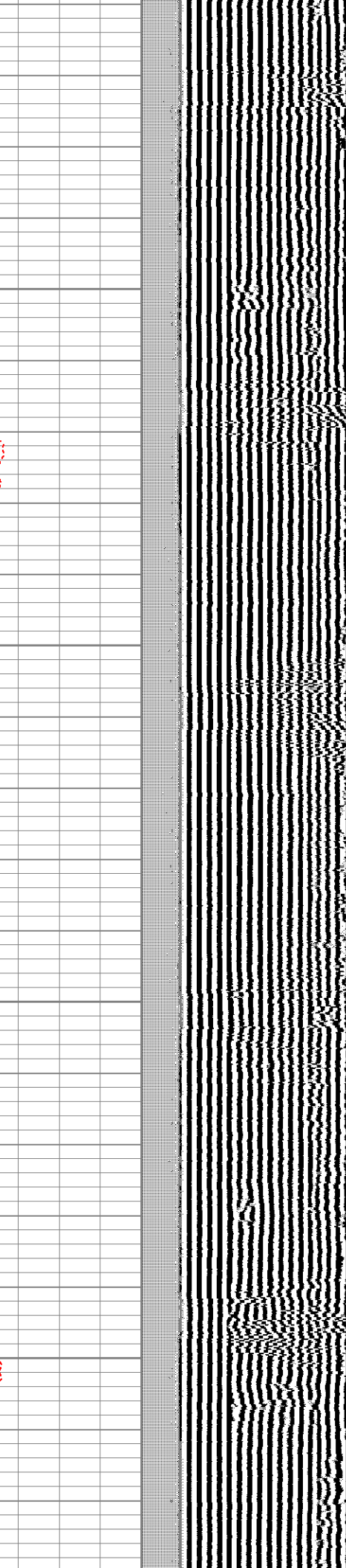
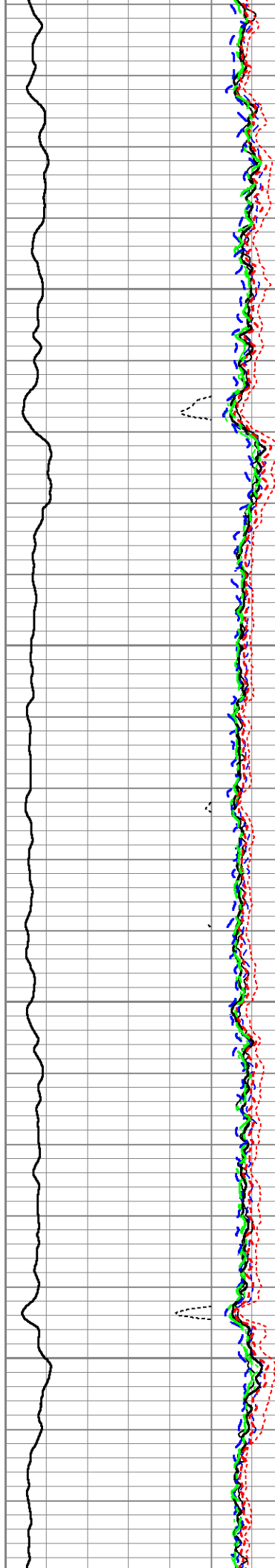
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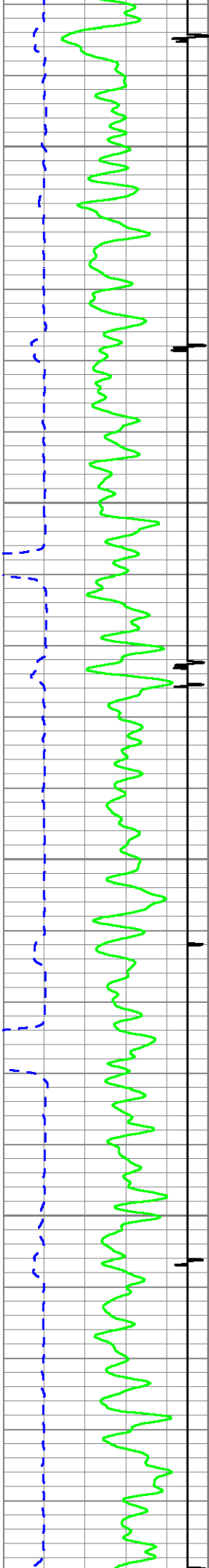




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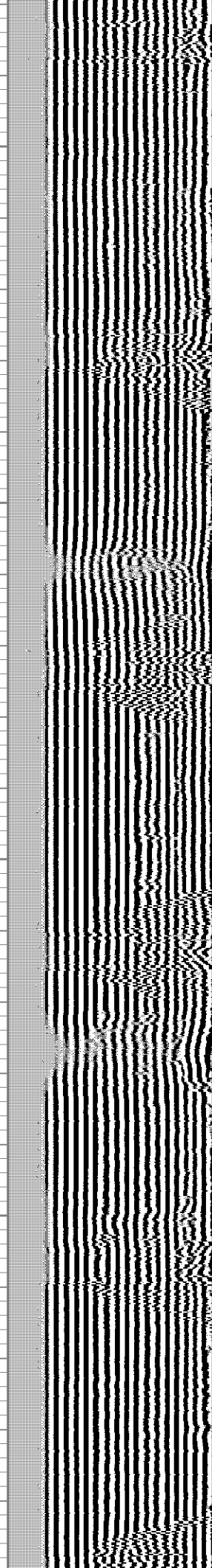
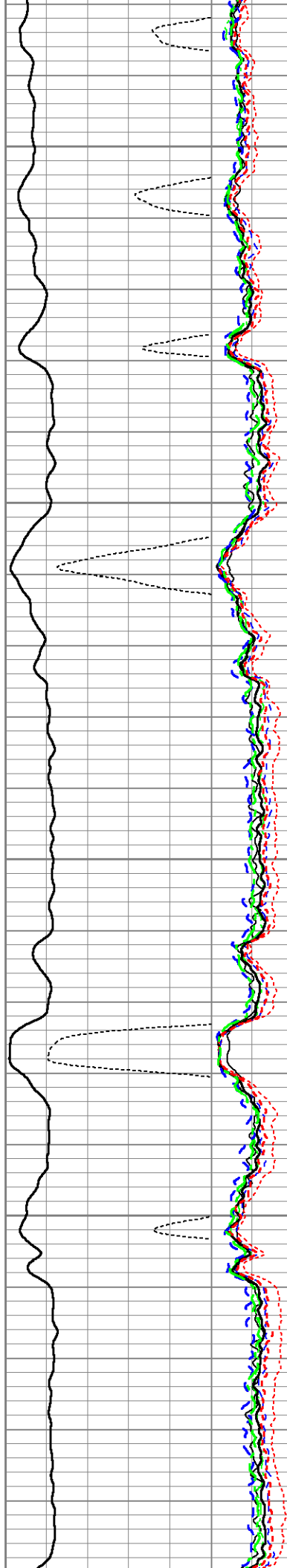


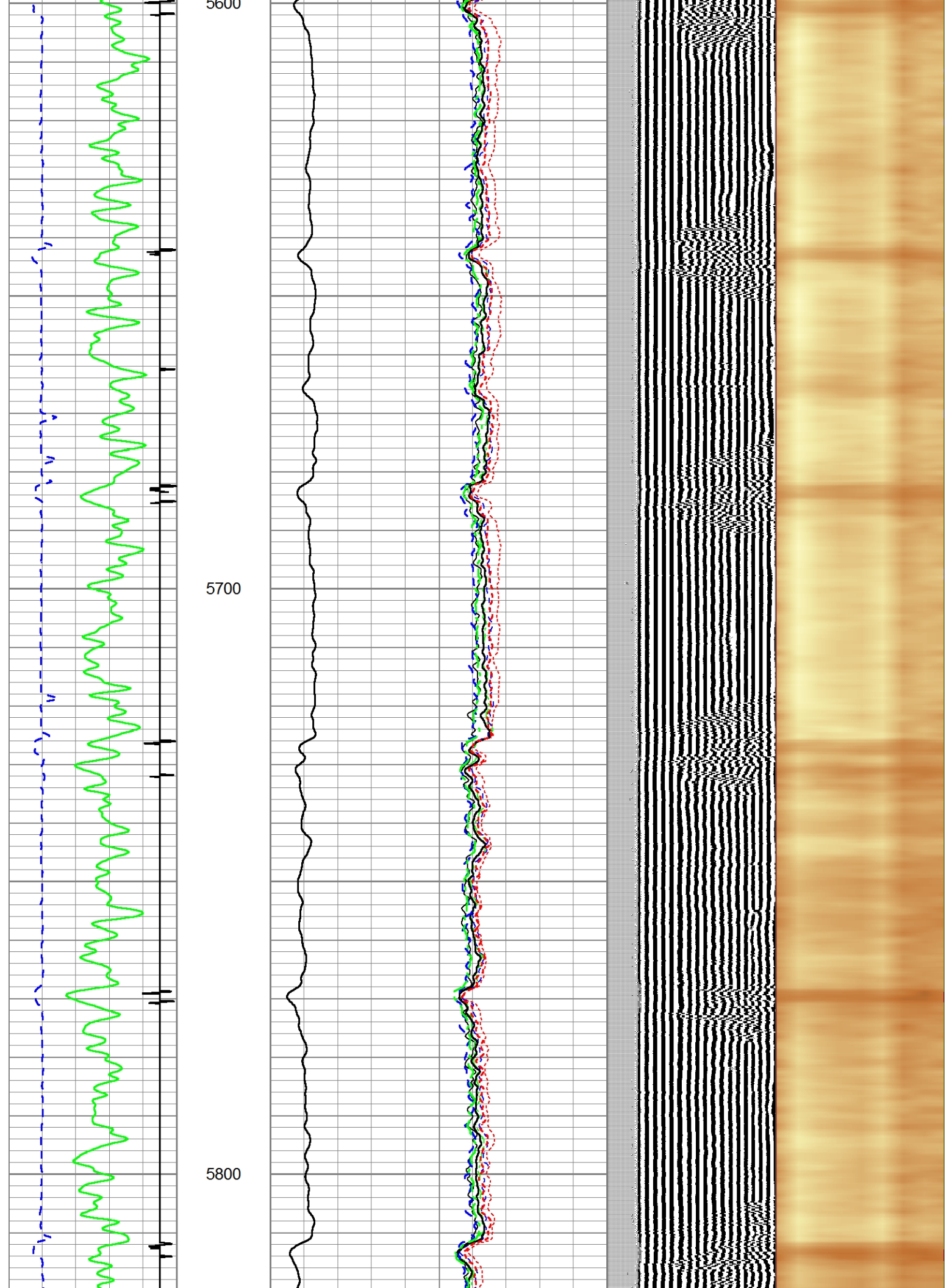


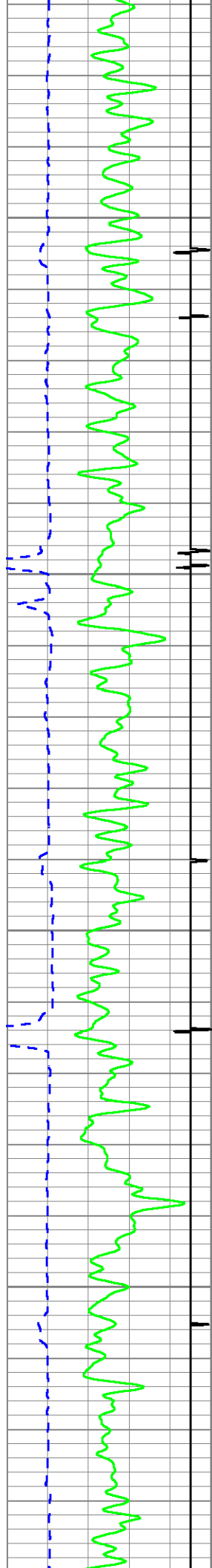
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5600

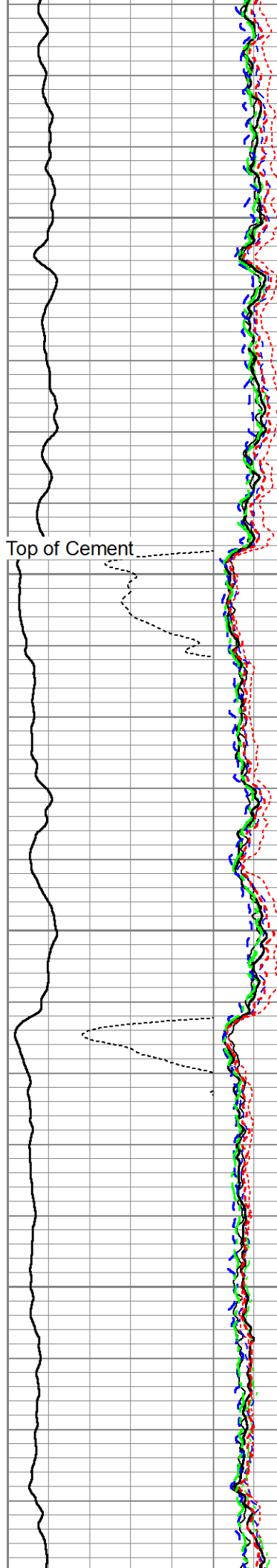




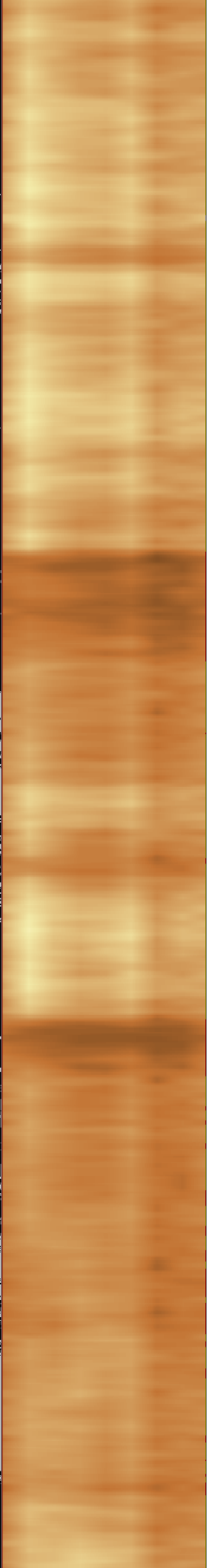
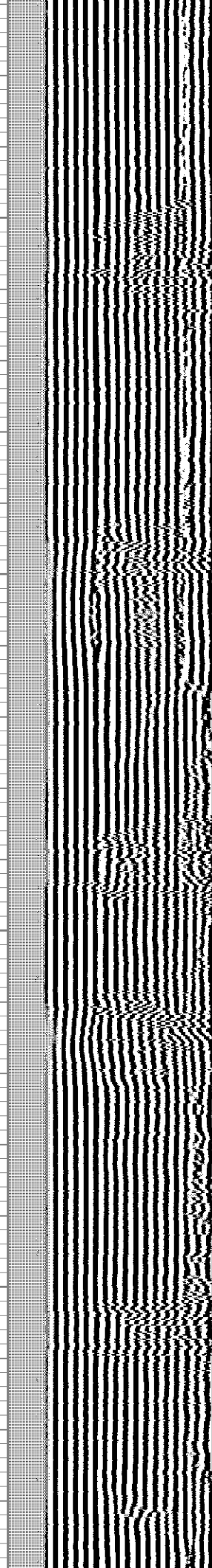


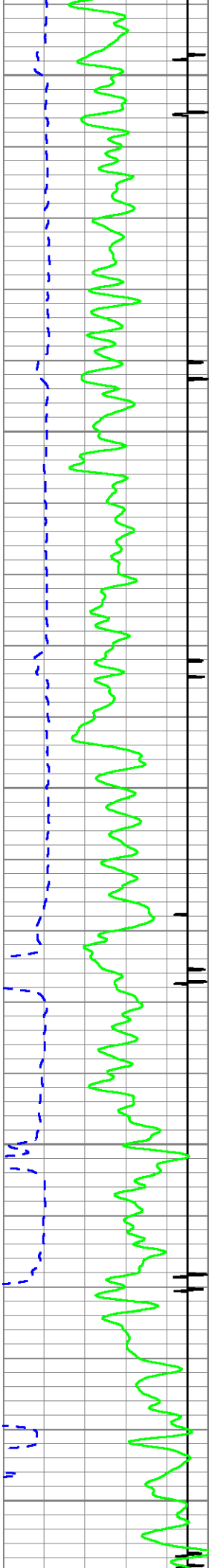
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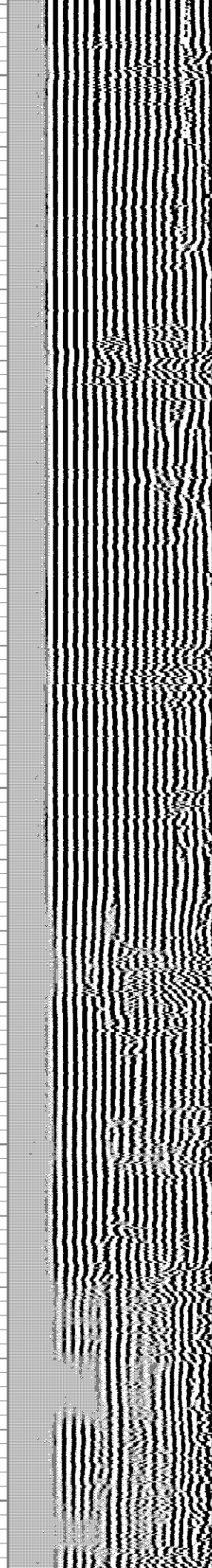
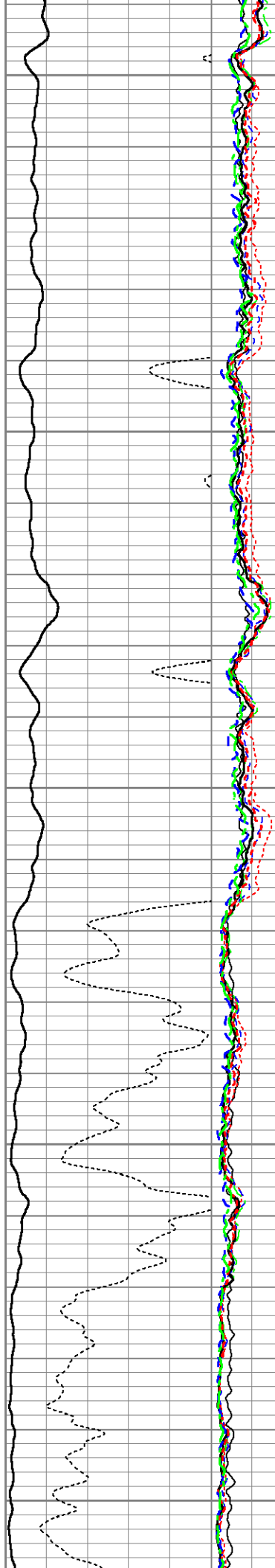
Top of Cement

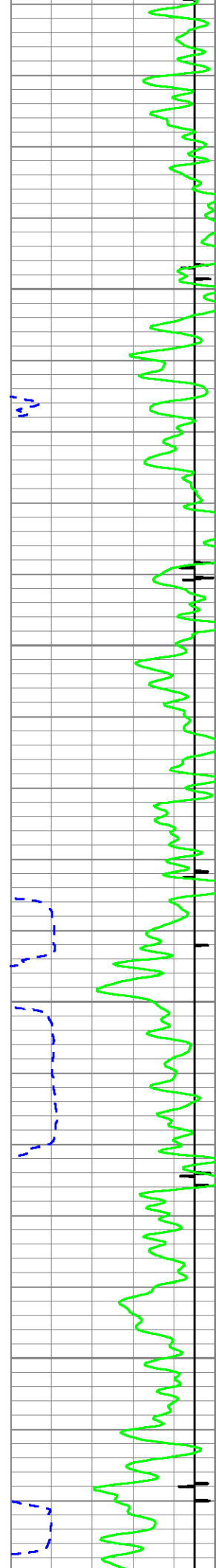




6100

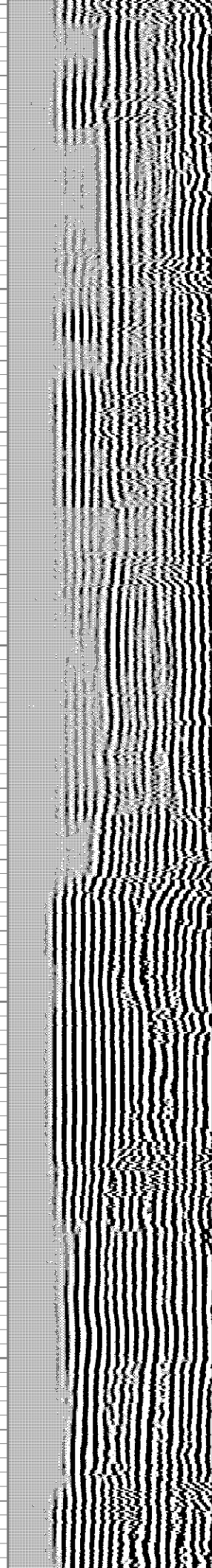
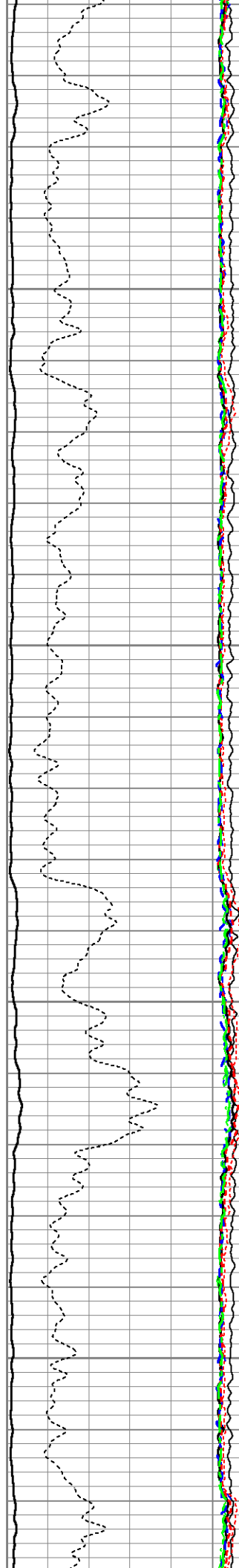
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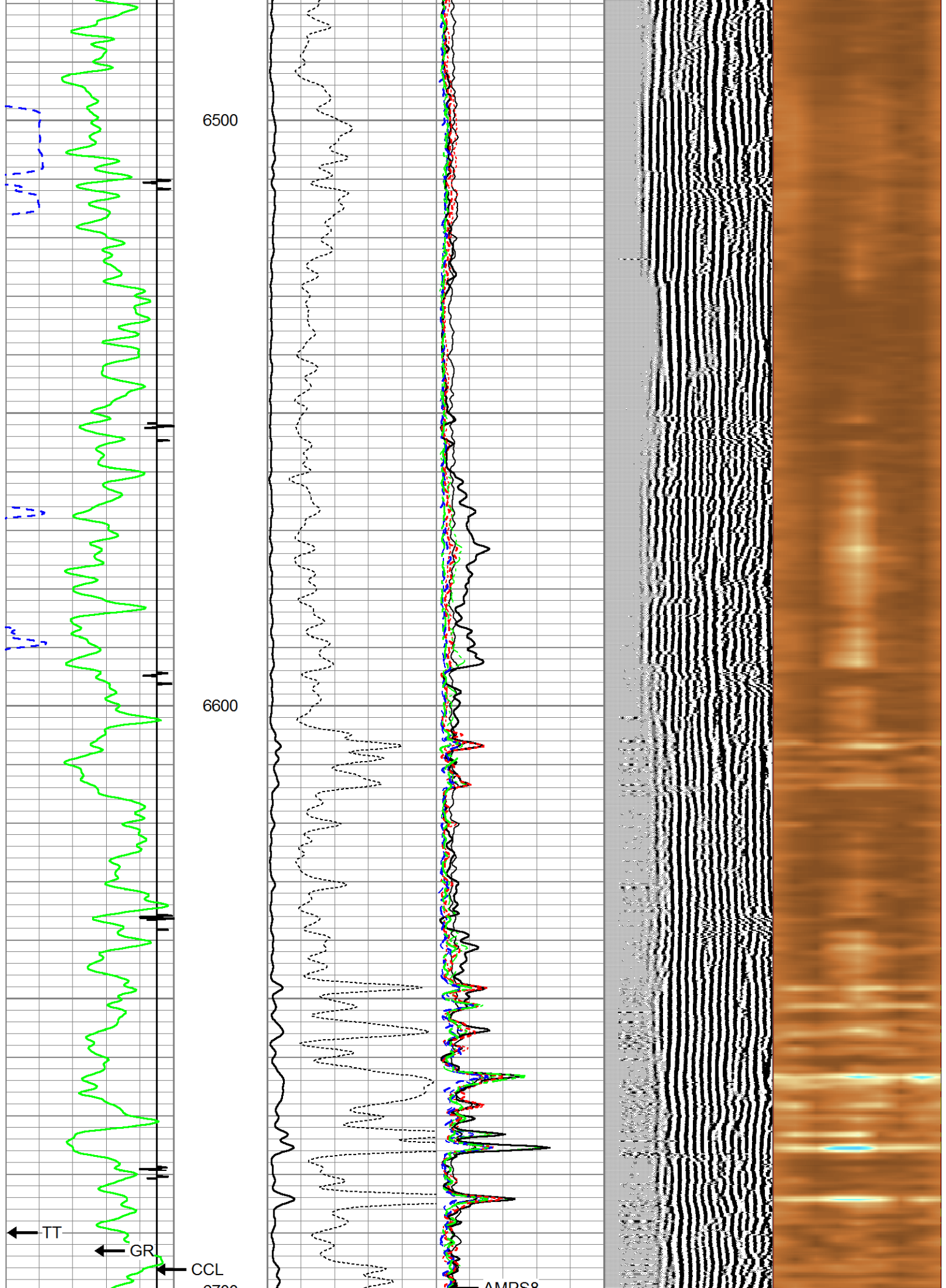


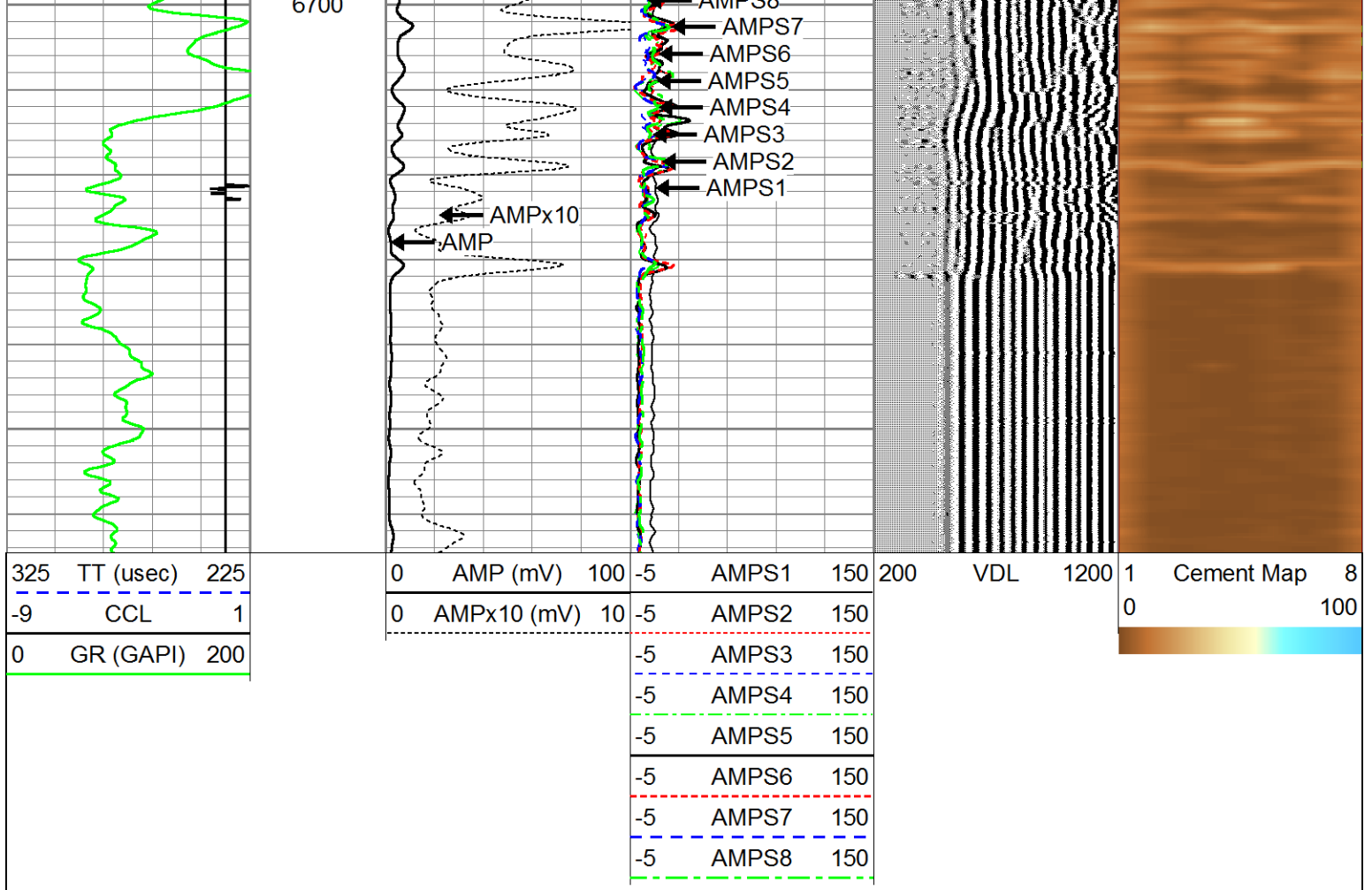


6300

6400







Company	CONFLUENCE	
Well	70 RANCH 10-4-4L	
Field	WATTENBERG	
County	WELD	
State	COLORADO	Country USA