



PATRIOT
WELL SOLUTIONS

**RADIAL CEMENT BOND LOG
GAMMA RAY
CCL**

Company		SRC ENERGY INC		Country USA			
Well		LEFFLER 41C-23-L					
Field		WATTENBERG					
County		WELD					
State		COLORADO		Country USA			
Location:		APL # : 05123448280000		Other Services			
SHL: 1921' FNL & 275' FEL SENE				JBGR WRP			
Permanent Datum		GL		Elevation 4748'			
Log Measured From		GL					
Drilling Measured From		GL		Elevation K.B. N/A D.F. N/A G.L. 4748'			
SEC 21 TWP 6N RGE 66W							
Date		SEPTEMBER 26, 2017					
Run Number		ONE					
Depth Driller		17812'					
Depth Logger		6790'					
Bottom Logged Interval		6788'					
Top Log Interval		SURFACE					
Open Hole Size		8.5"					
Type Fluid		WATER					
Density / Viscosity		UNK					
Max. Recorded Temp.		220 F					
Estimated Cement Top		SEE LOG					
Time Well Ready		ROA					
Time Logger on Bottom		23:30					
Equipment Number		1008					
Location		BRIGHTON, CO					
Recorded By		SCHUMAN					
Witnessed By		MR JORDAN					
Borehole Record		Tubing Record					
Run Number	Bit	From	To	Size	Weight	From	To
Casing Record	Size			Wgt/Ft	Top		Bottom
Surface String	9.625"			36#	SURFACE		N/A
Prot. String							
Production String	5.5"			20#	SURFACE		17782'
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

LOG MEASURED FROM GROUND LEVEL

LOG CORRELATED TO MARKER JOINT @ 6345'

LOG RAN WITH 2500 PSI APPLIED AT SURFACE

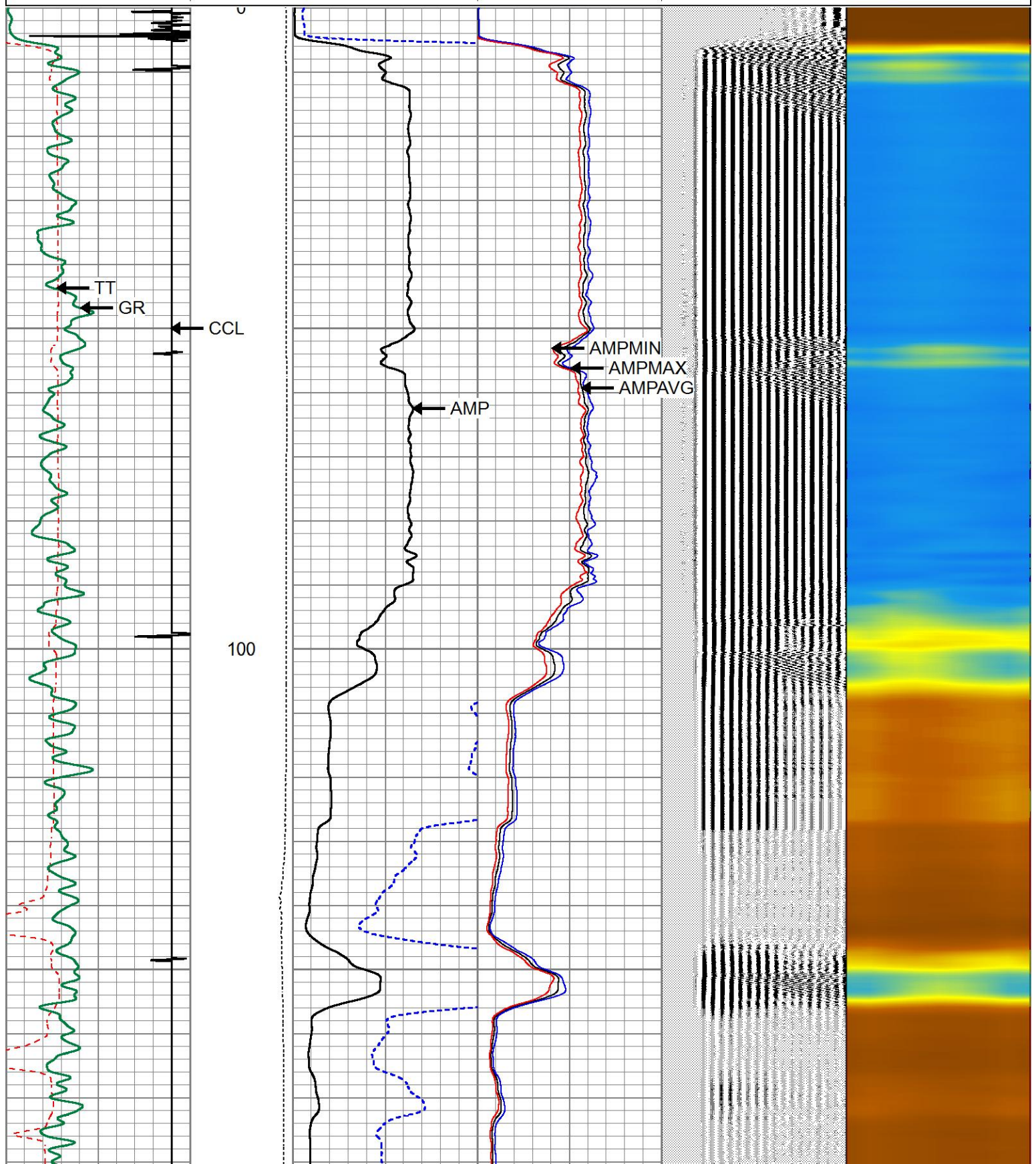
THANK YOU FOR CHOOSING PATRIOT WELL SOLUTIONS!

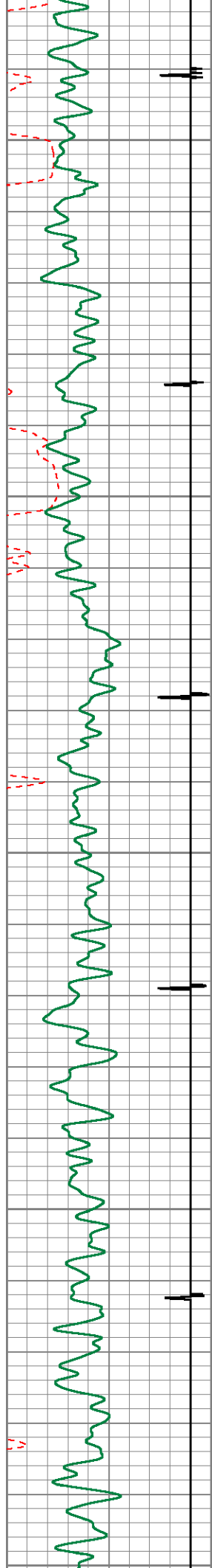
Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
Cable_Head	20.17		Cable_Head-1_7/16 Titan 1 7/16" Cable Head	1.02	1.44	3.31
ErrCt	20.17					
CENT	19.15					

			CENT-PTS275	2.83	2.75	
RBT	16.32					
WVFS8	11.65		RBT-RBTC3 (FW1704-53) RADIAL BOND TOOL	8.92	2.75	90.00
WVFS7	11.65					
WVFS6	11.65					
WVFS5	11.65					
WVFS4	11.65					
WVFS3	11.65					
WVFS2	11.65					
WVFS1	11.65					
WVFCAL	11.65					
WVF3FT	11.65					
WVF5FT	10.65					
CENT	7.40					
			CENT-PTS275	2.83	2.75	
GR	4.57					
CCL\$2	3.63					
CCL\$1	3.63					
GR	2.38		GR-GC275 rev.2 (FW1607-001) Probe GC275-0000 rev.2	4.57	2.75	55.00
Dataset: leffler 41c-23-l_cbl.db: field/well/cbl/pass6 Total length: 20.17 ft Total weight: 148.31 lb O.D.: 2.75 in						

Database File leffler 41c-23-l_cbl.db
 Dataset Pathname cbl/pass6
 Presentation Format 1PATRI~2
 Dataset Creation Tue Sep 26 23:47:47 2017
 Charted by Depth in Feet scaled 1:240

290	TT (usec)	190	LTEN	0	AMP (mV)	100	0	AMPAVG	150	200	VDL (usec)	1200	1	RADIAL MAP	8
0	GR (GAPI)	150	0 (lb 1500)	0	3FT X 5 (mV)	20	0	AMPMAX	150						
2.7	CCL	-0.3					0	AMPMIN	150						

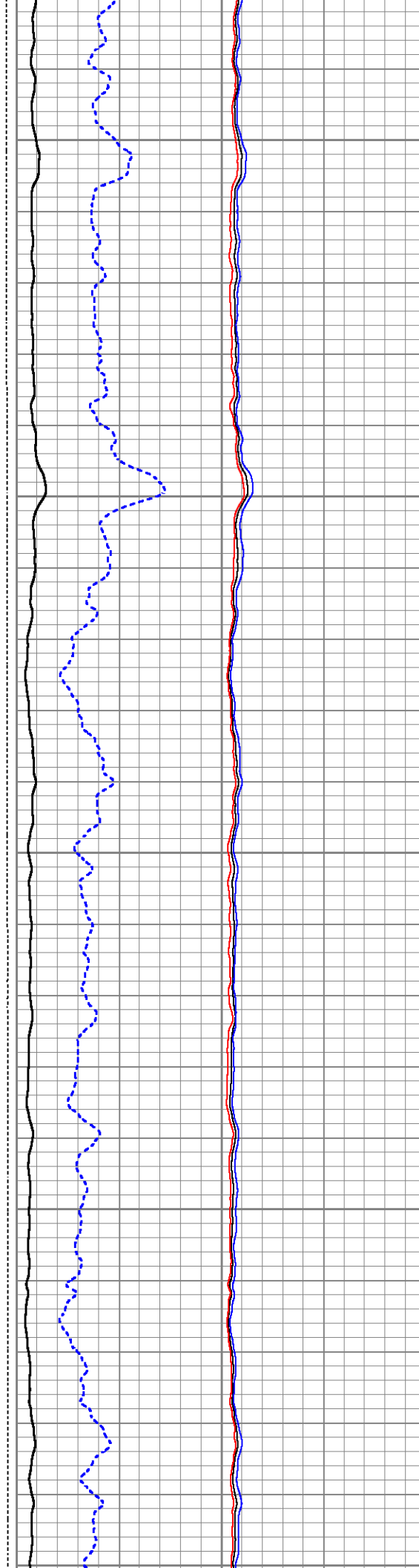


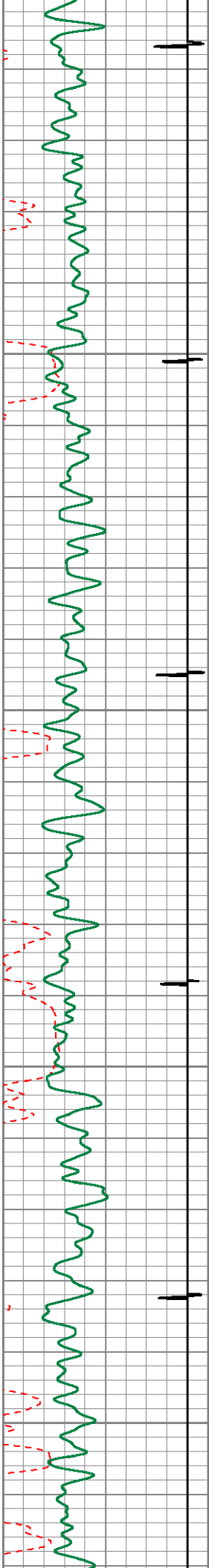


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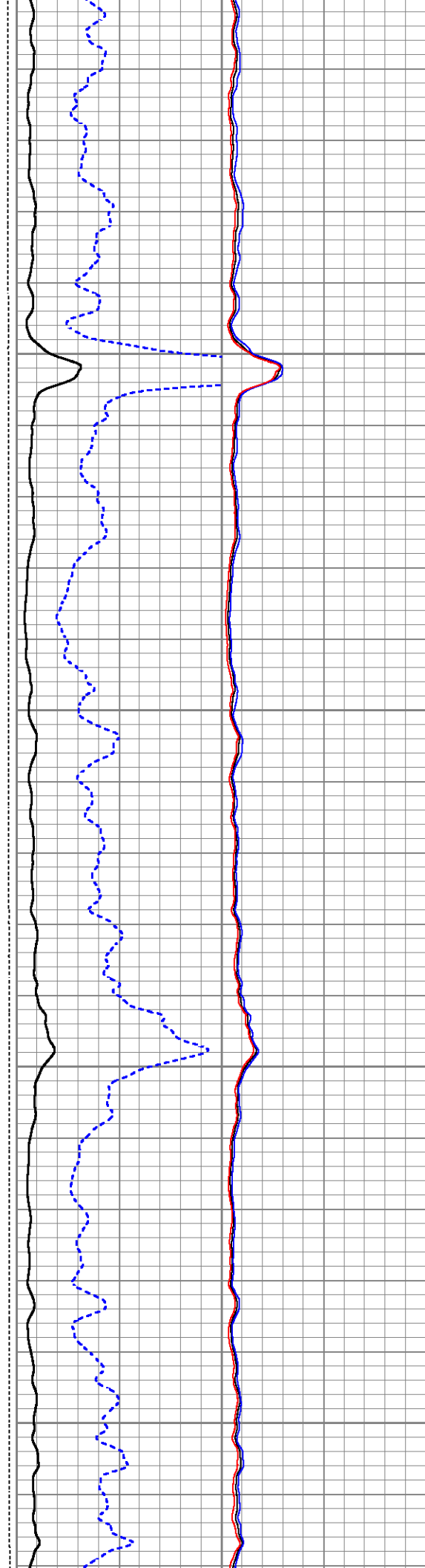
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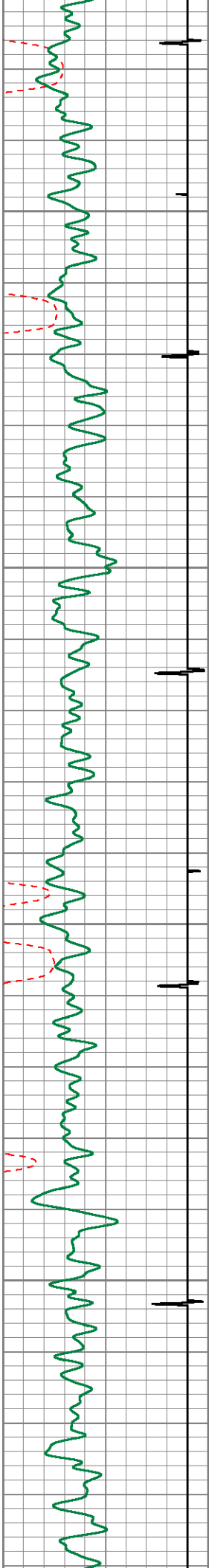
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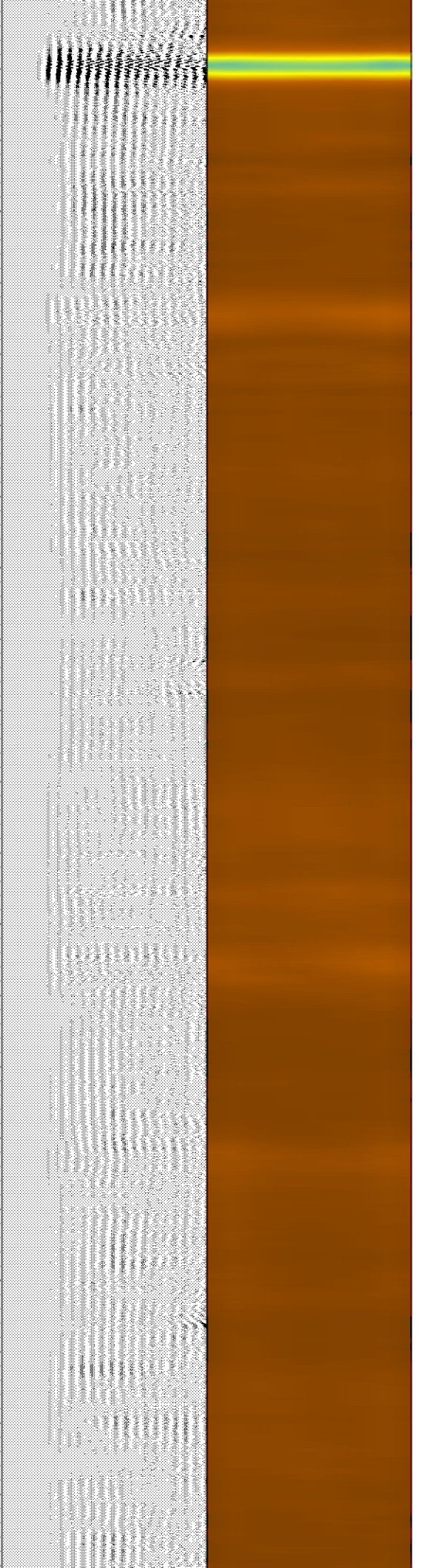
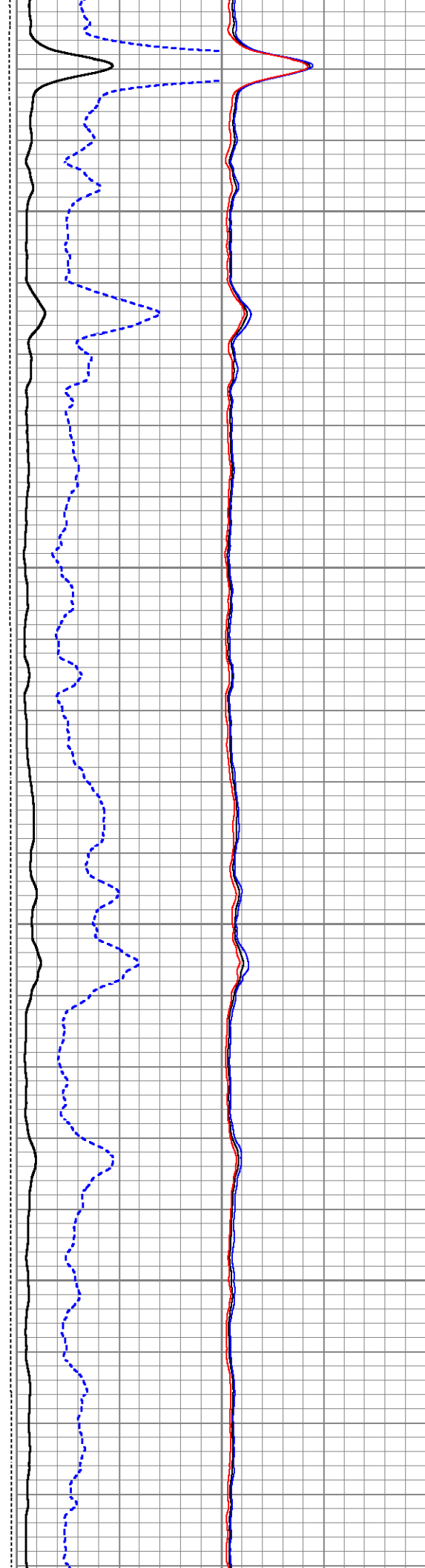
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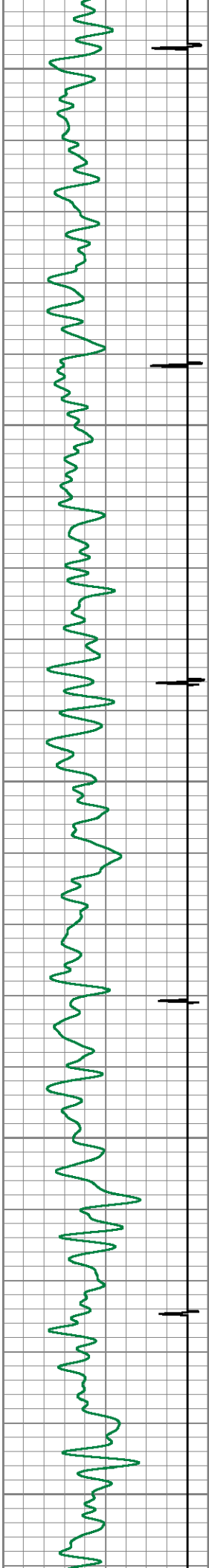




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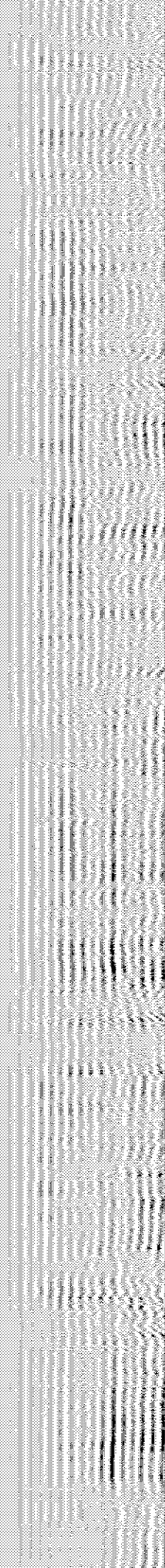
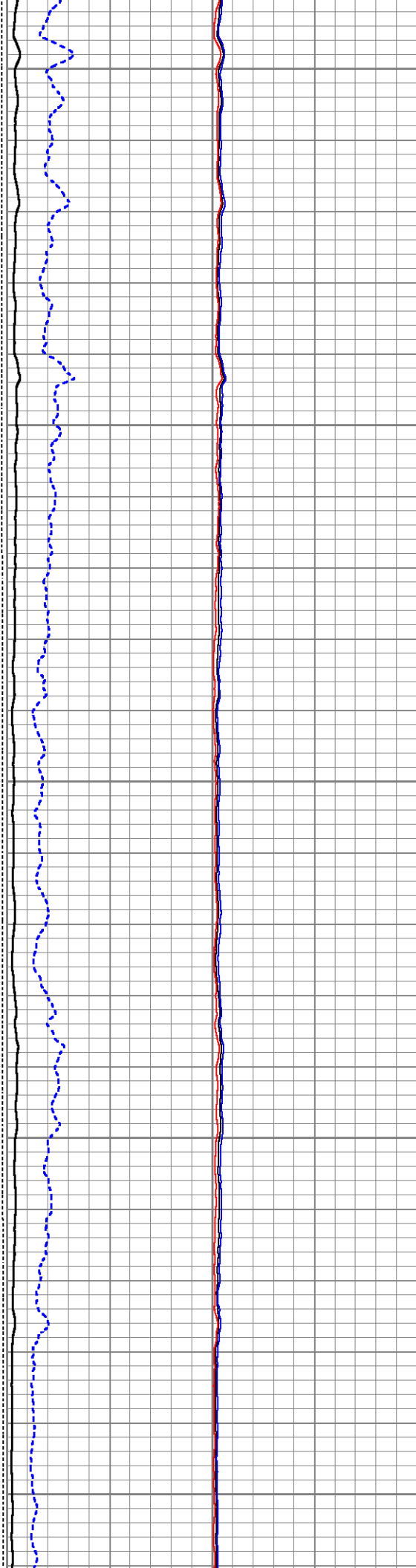
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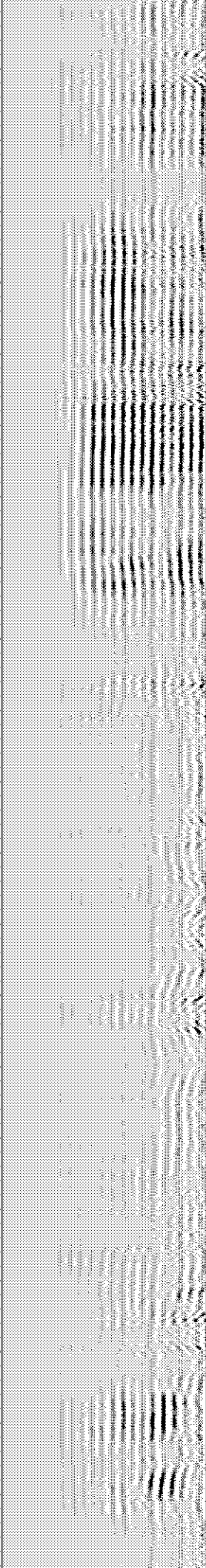
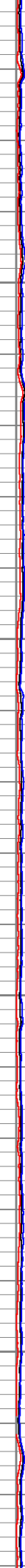
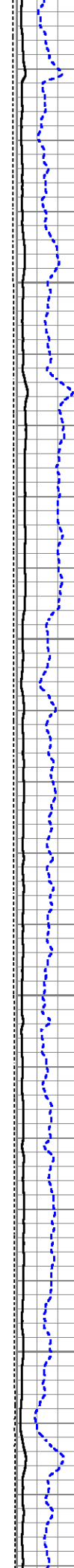
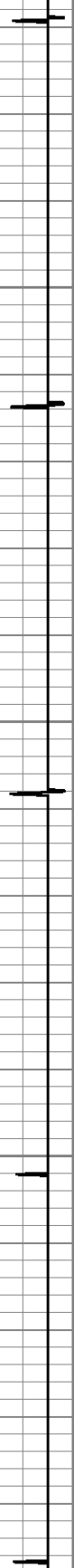
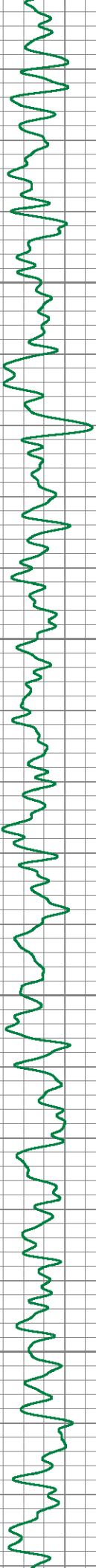
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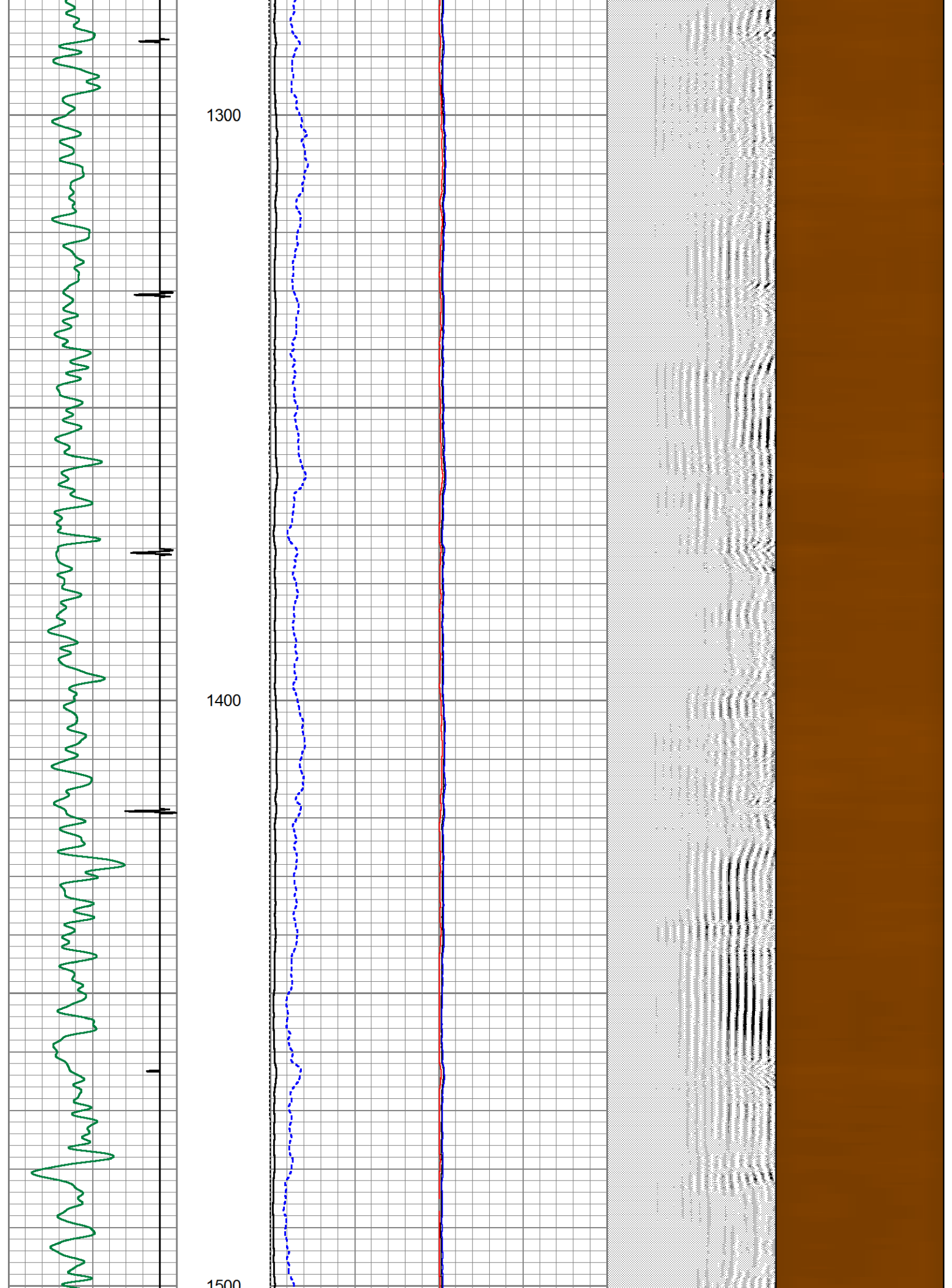
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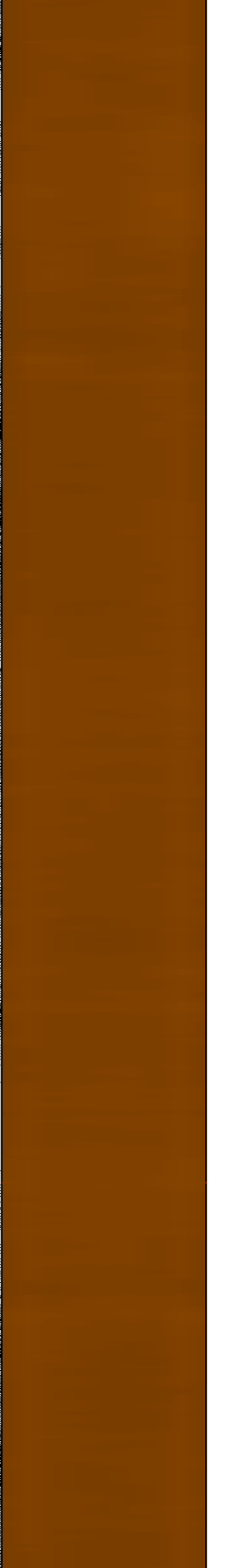
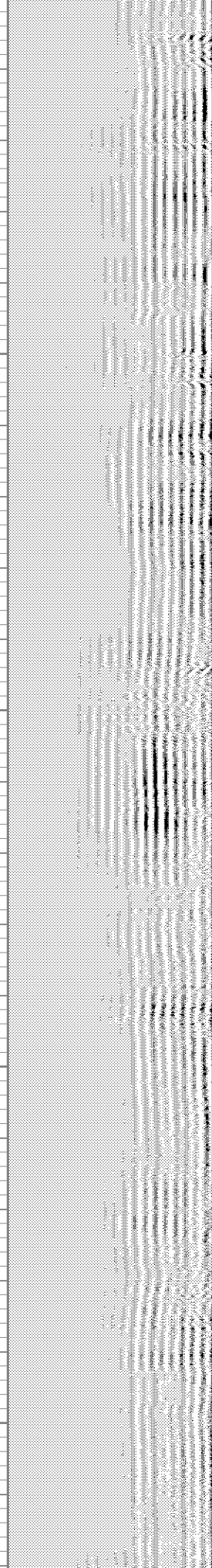
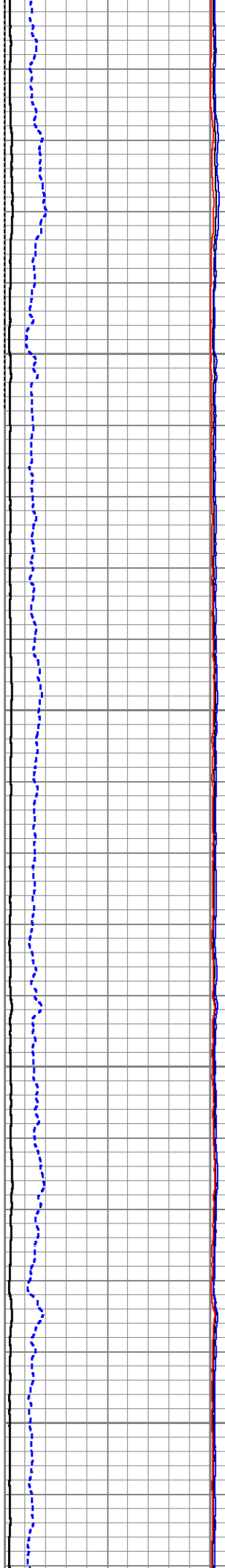
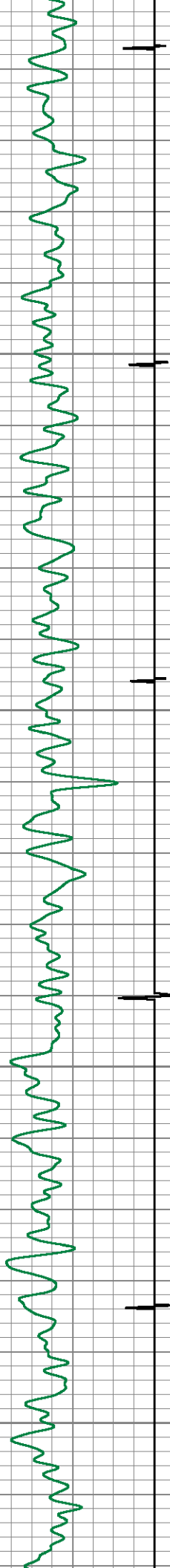


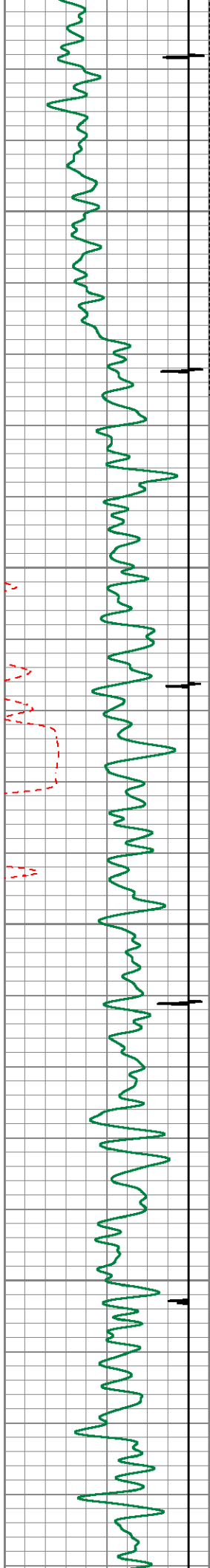


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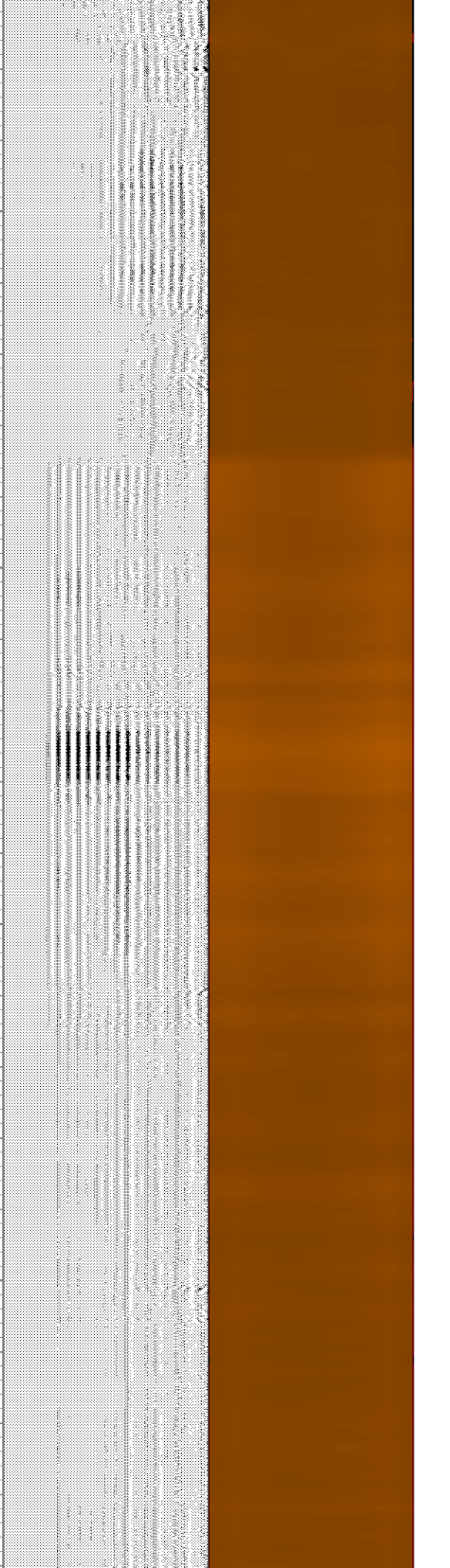
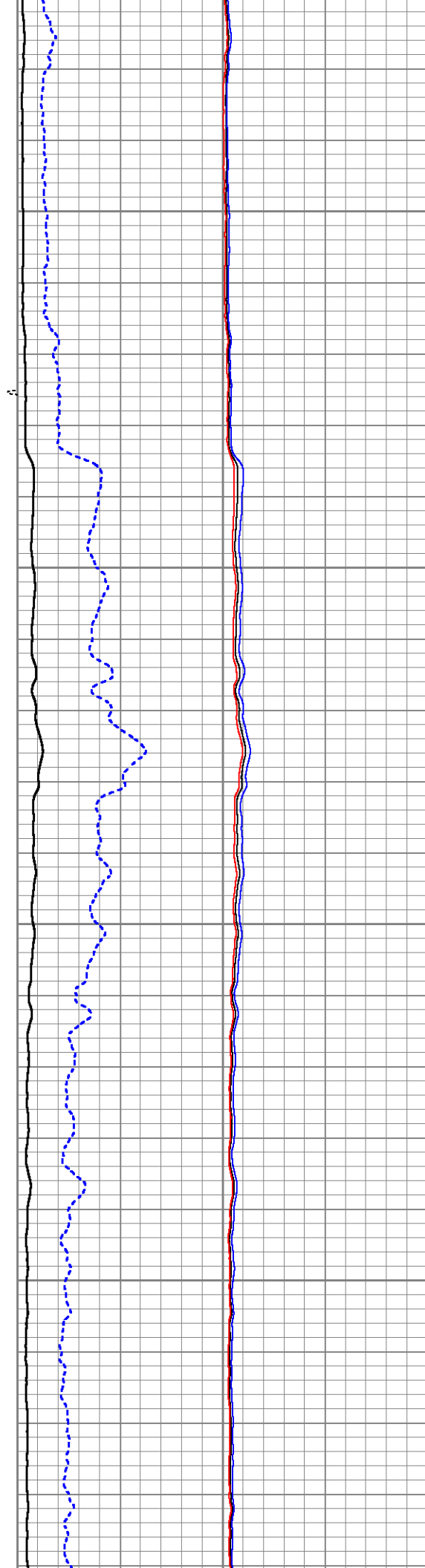
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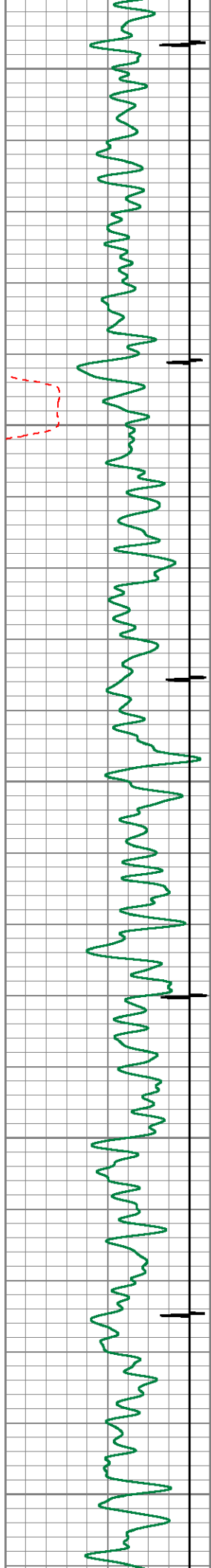




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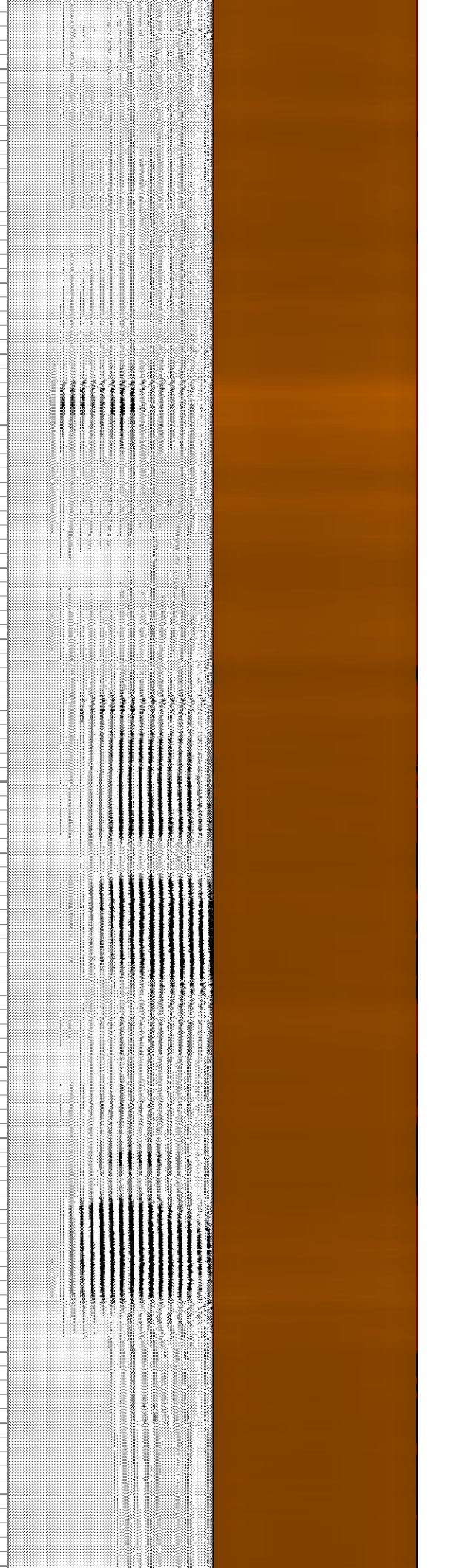
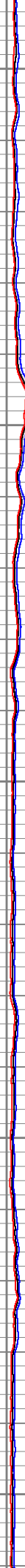
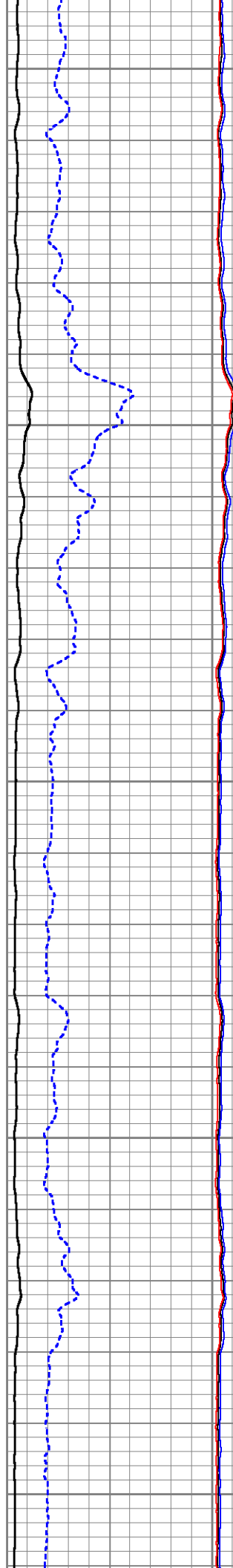
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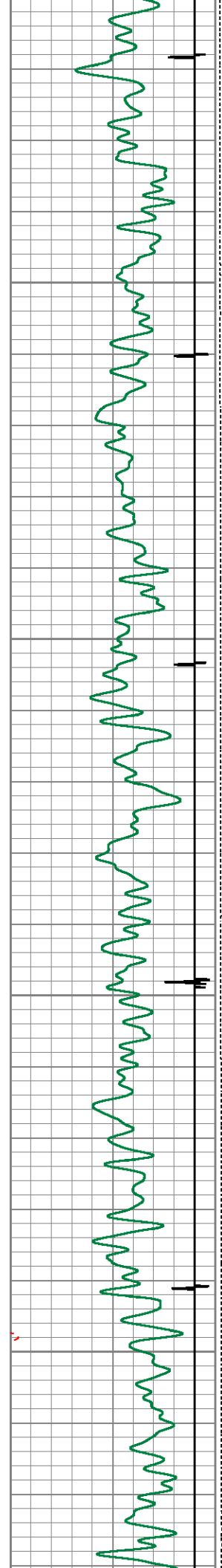




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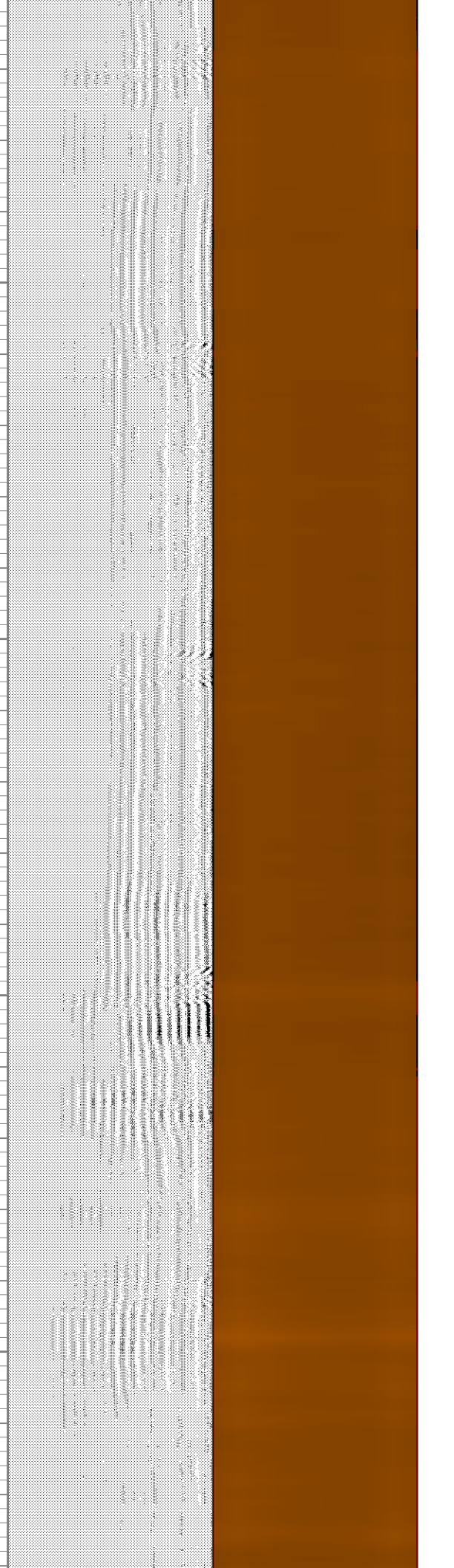
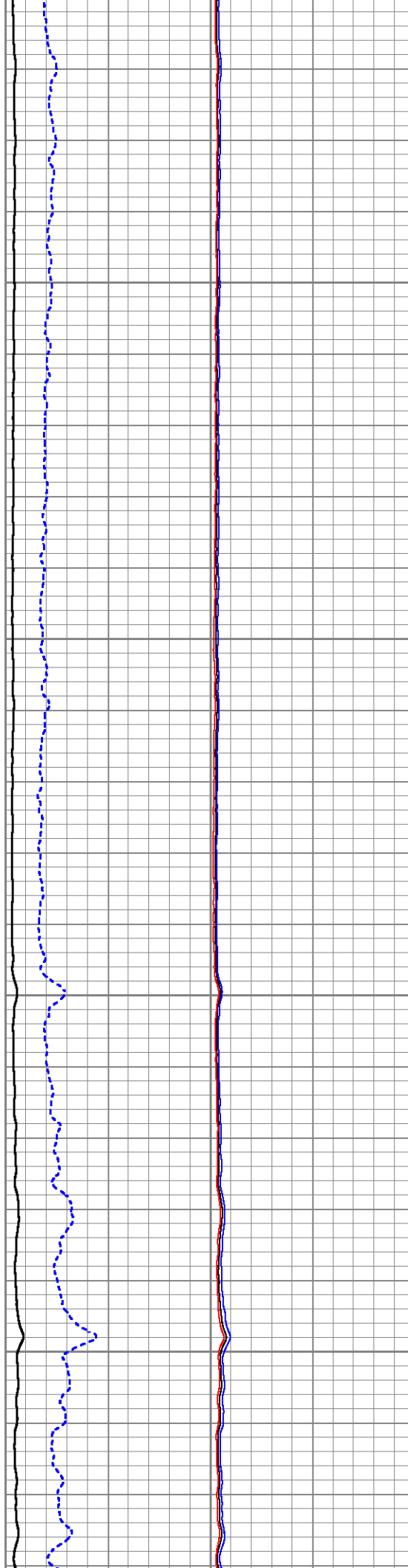
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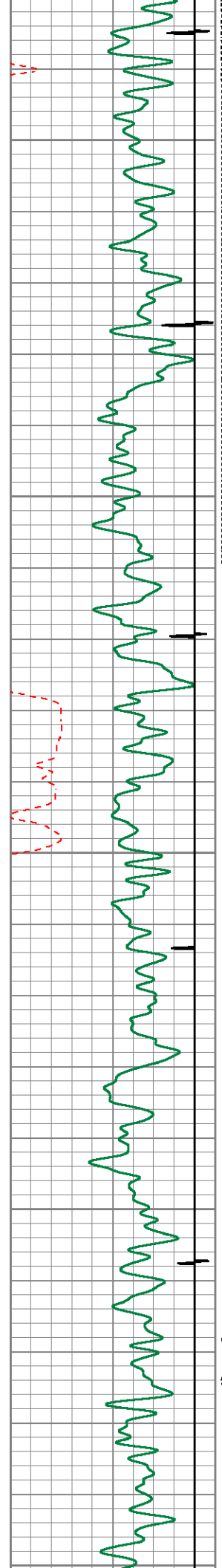




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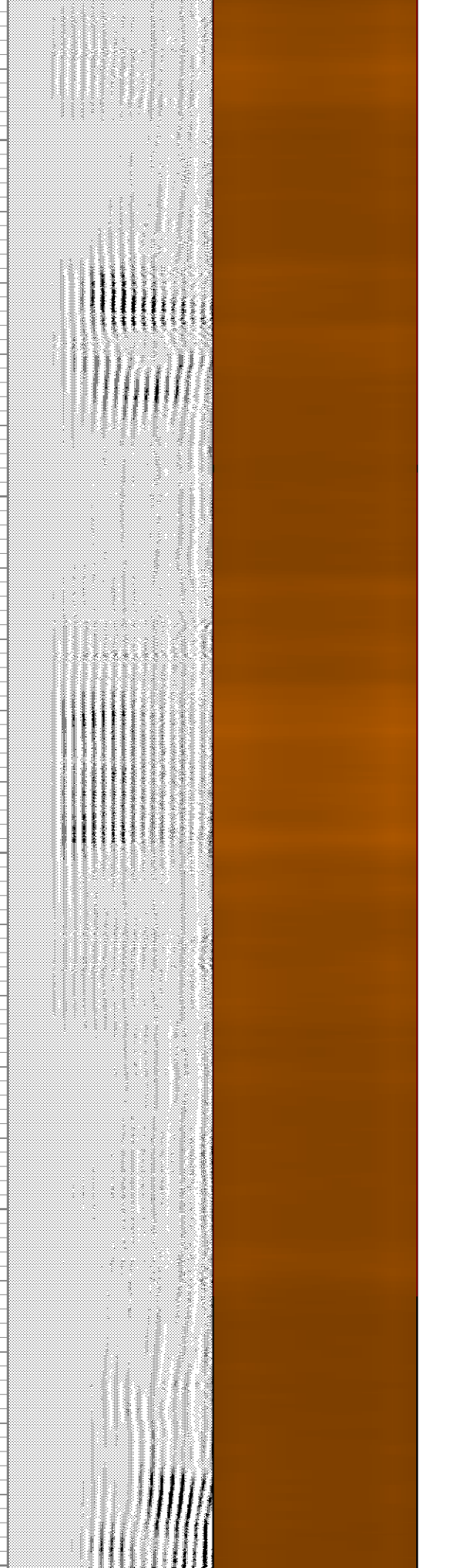
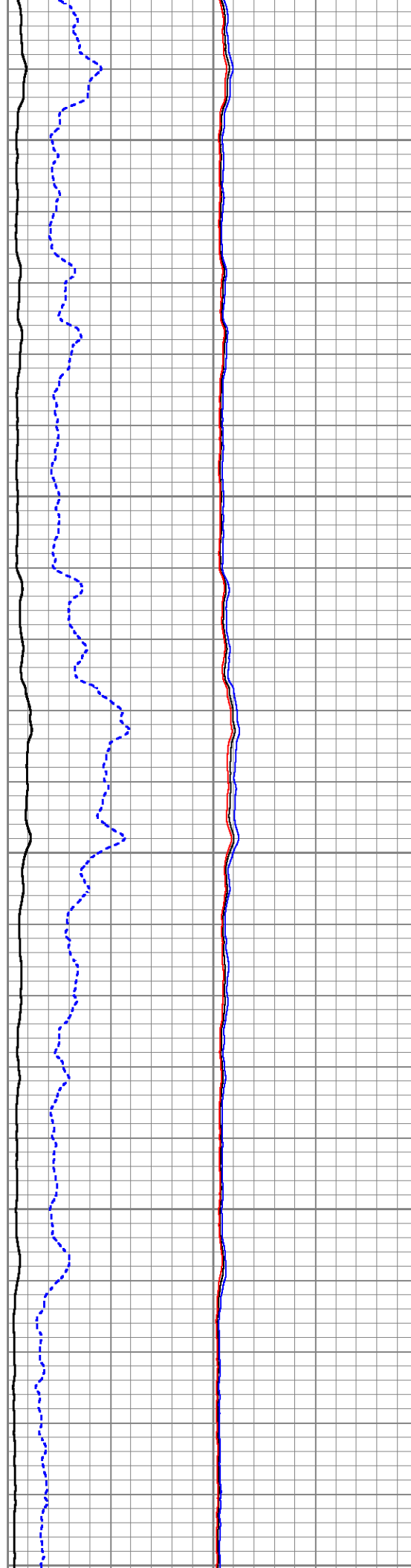




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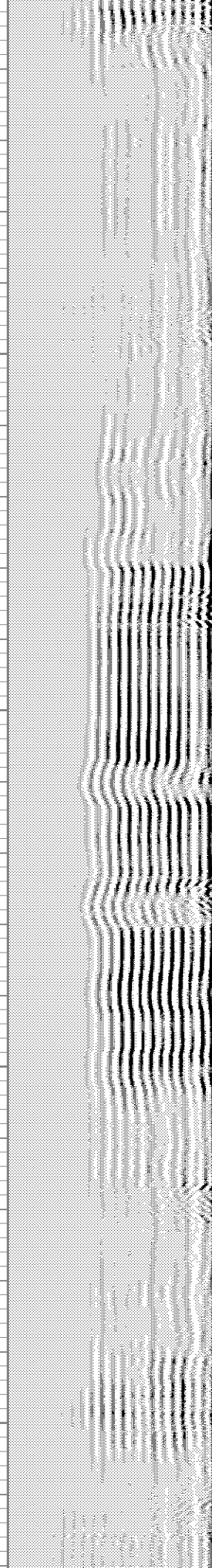
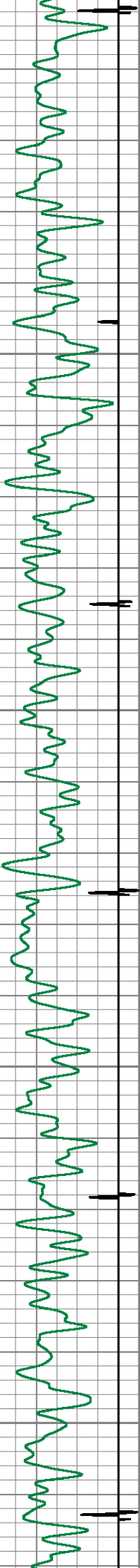
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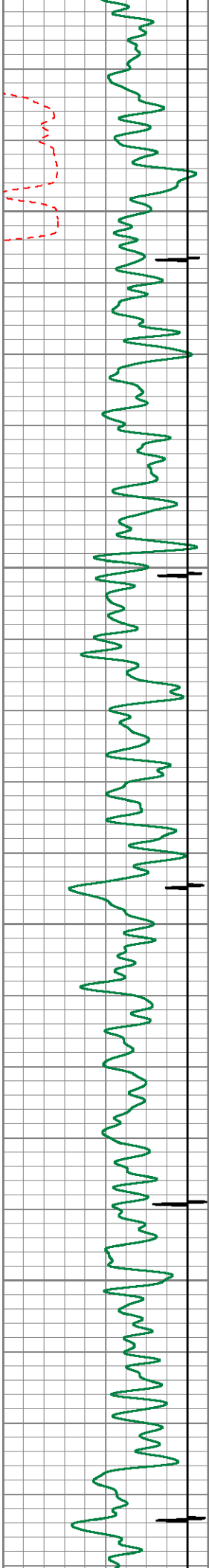


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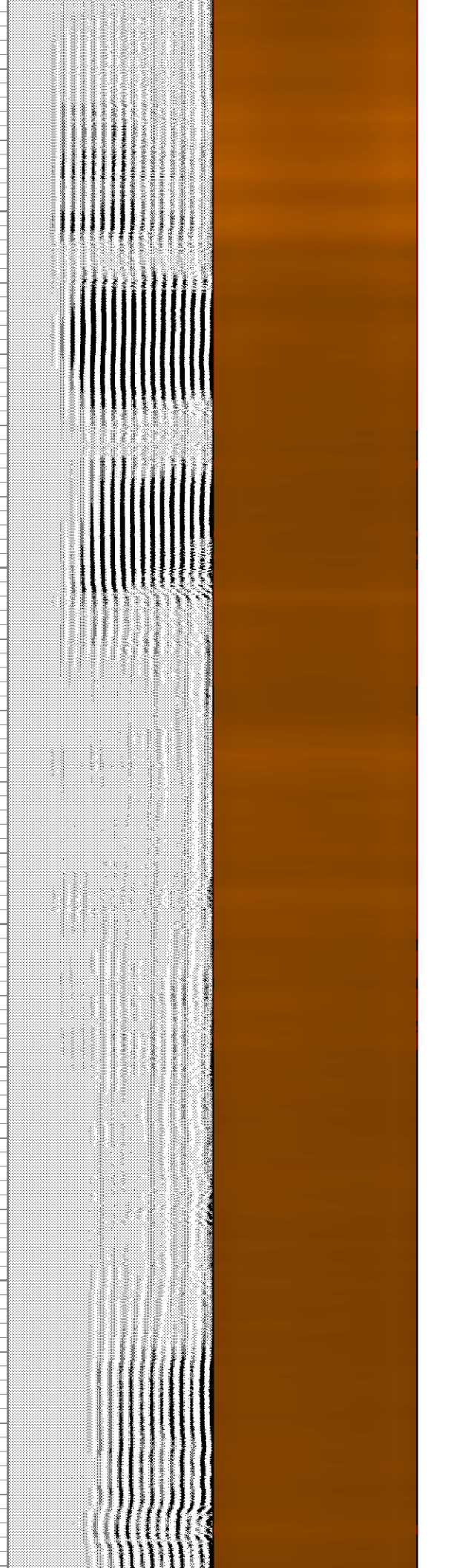
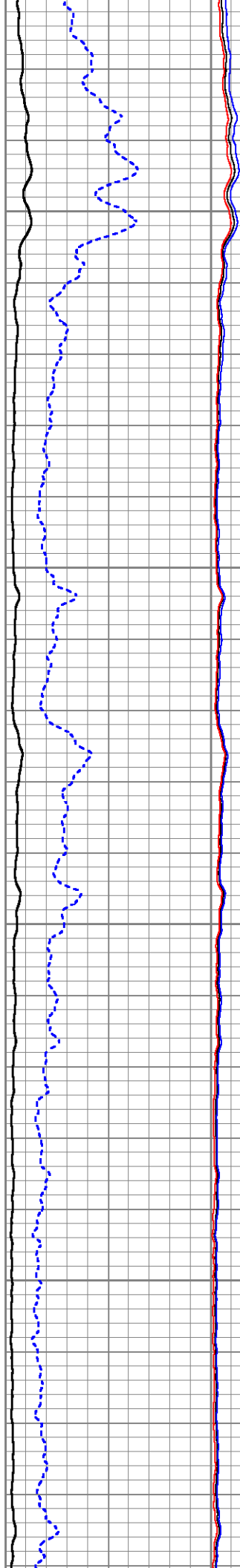
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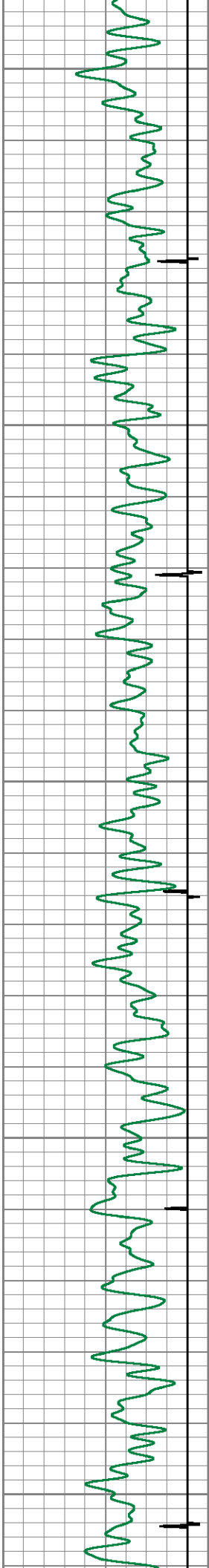




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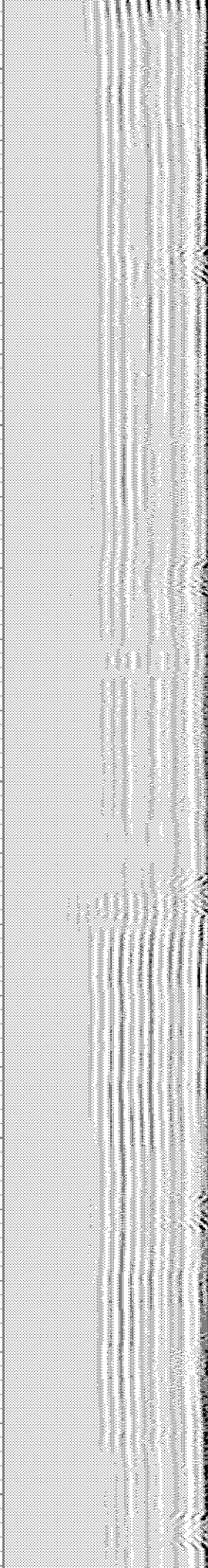
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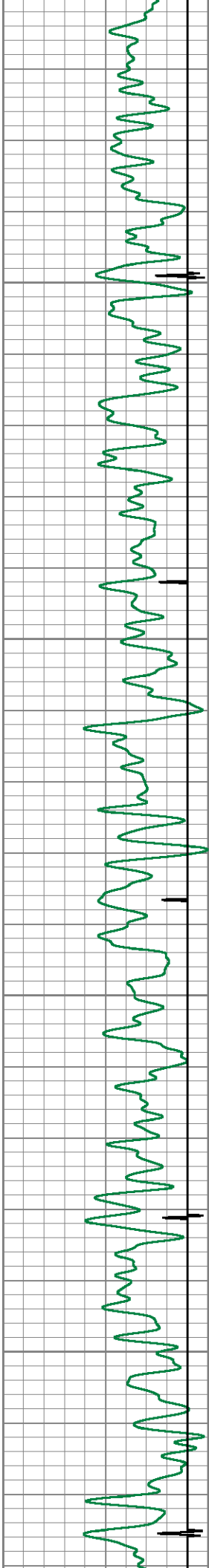




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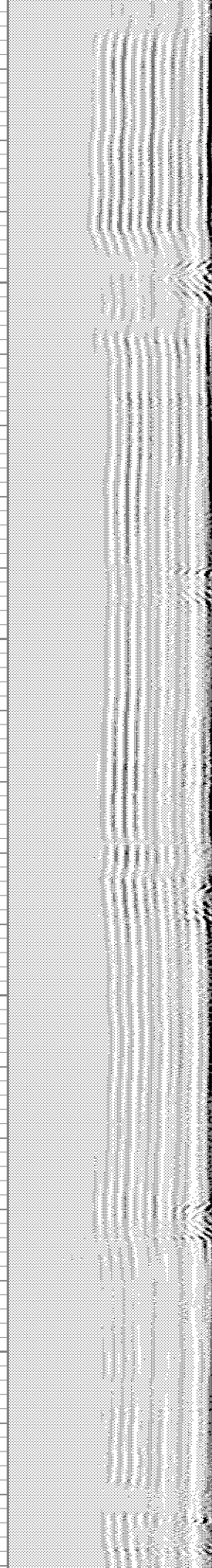
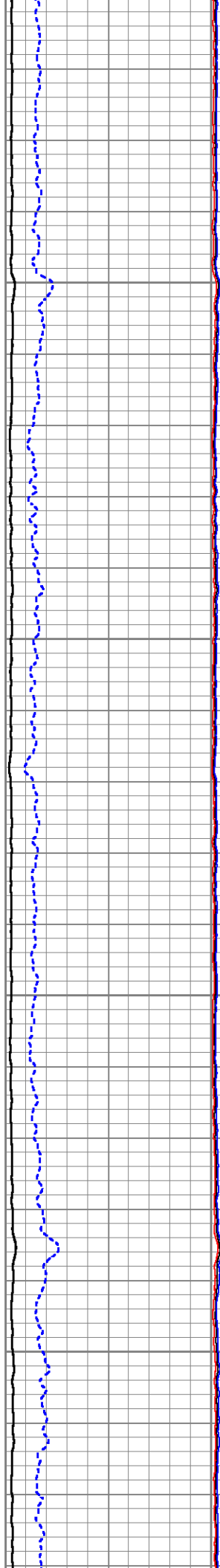
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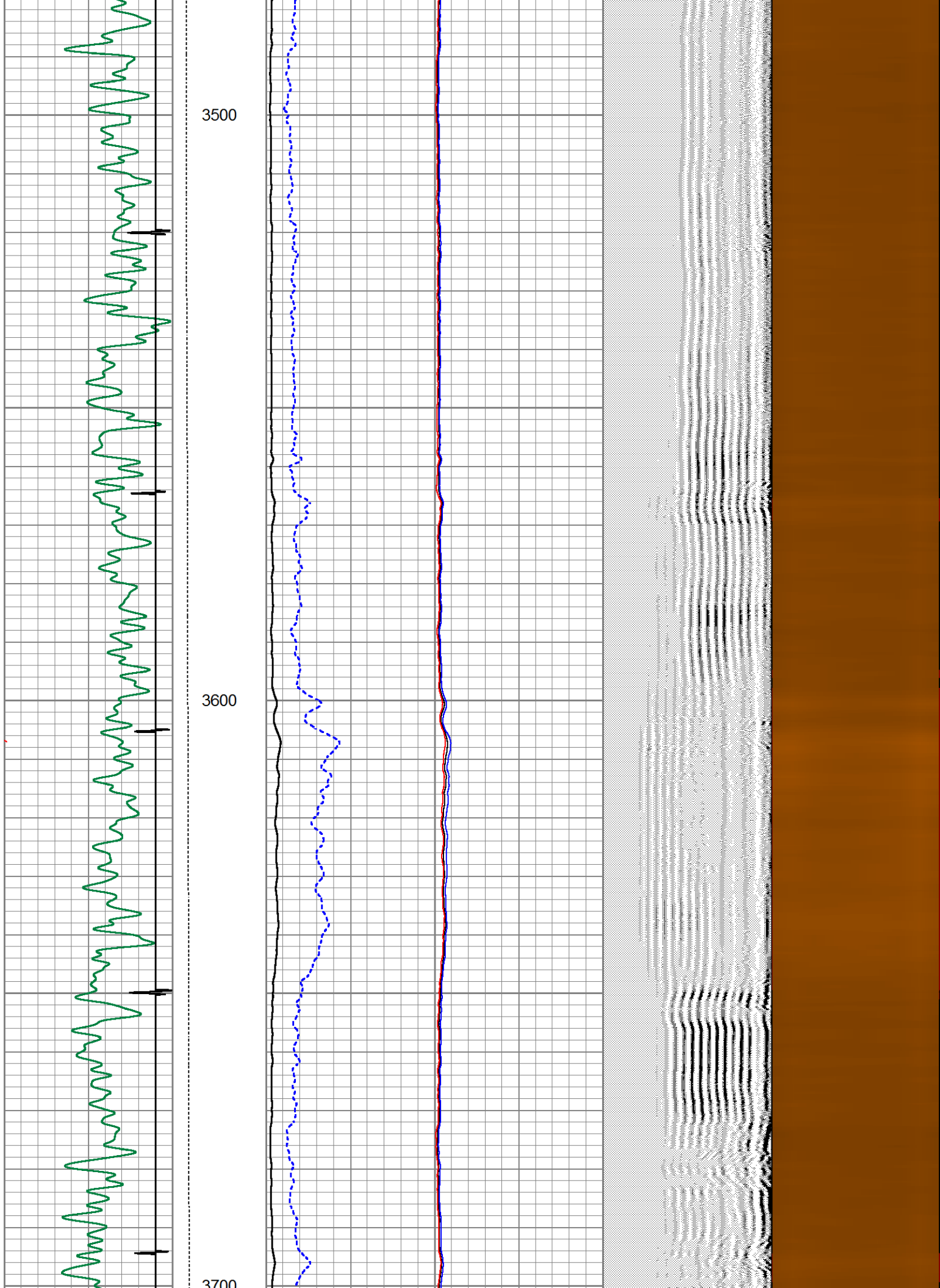


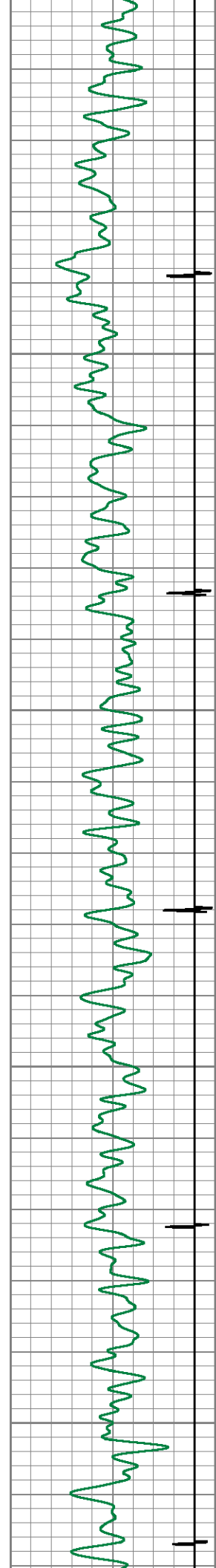


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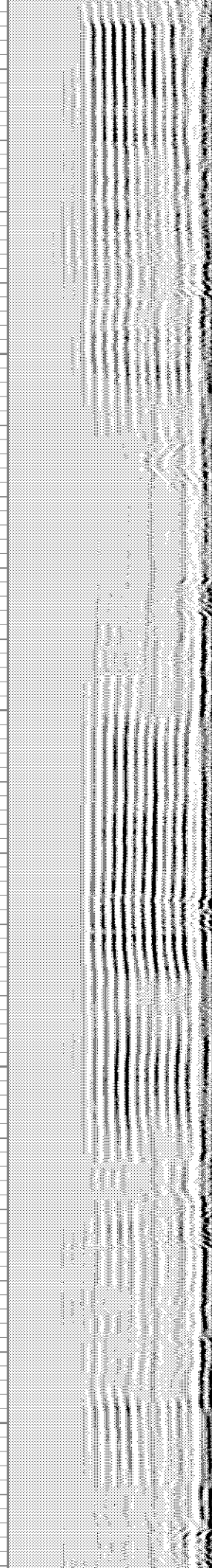
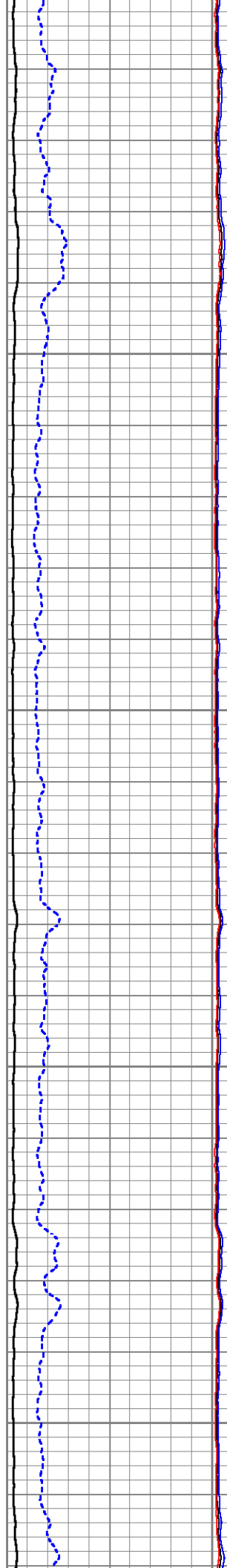
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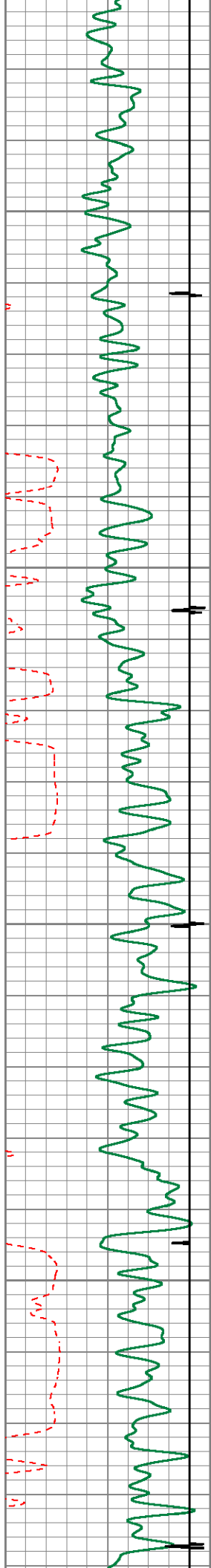






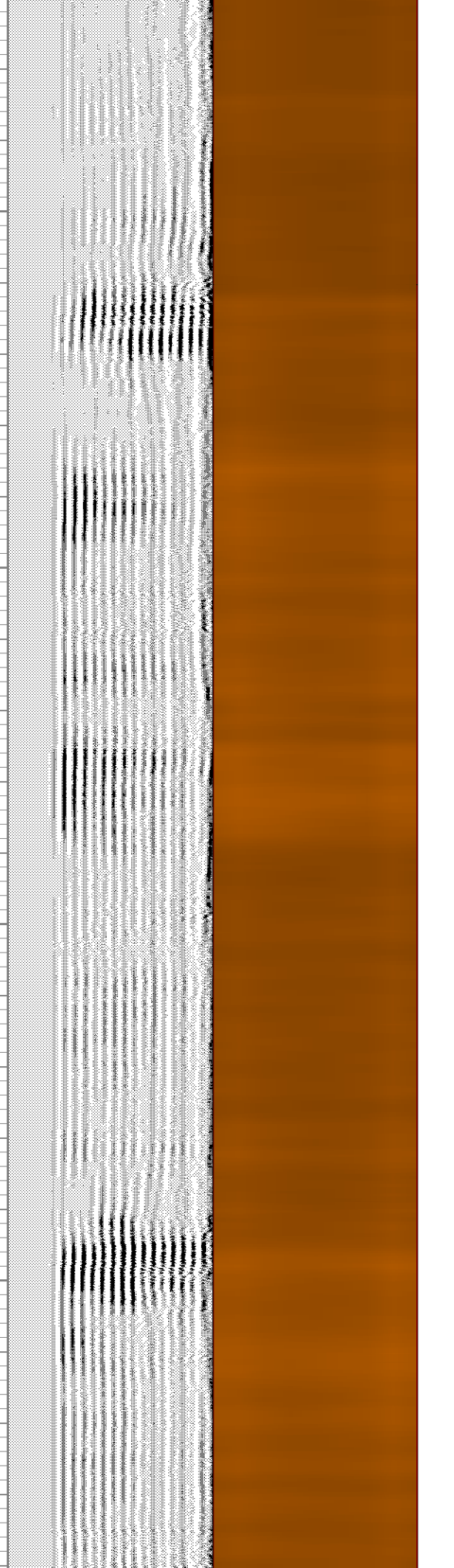
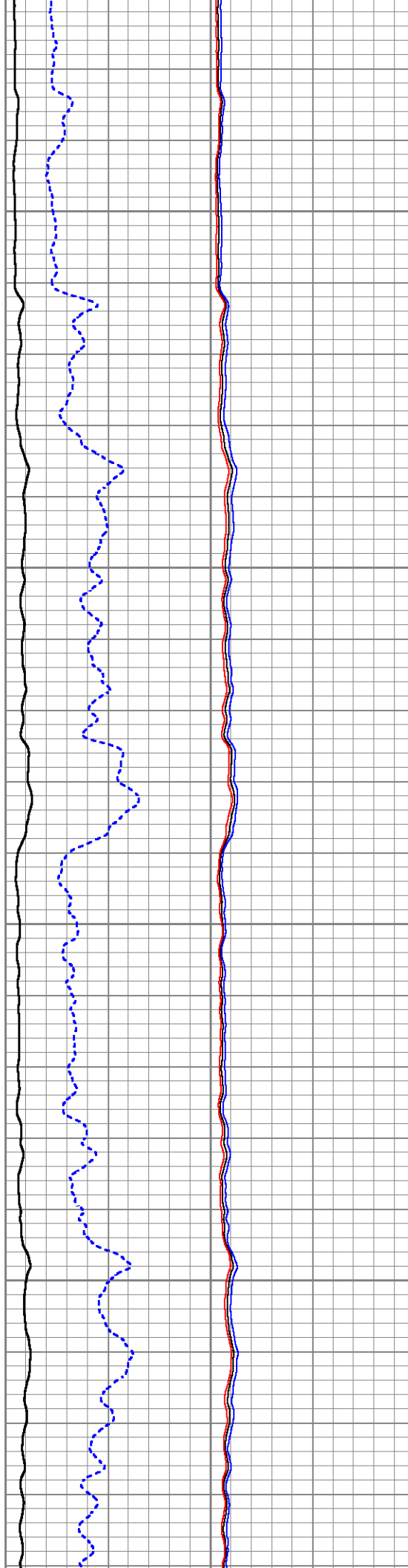
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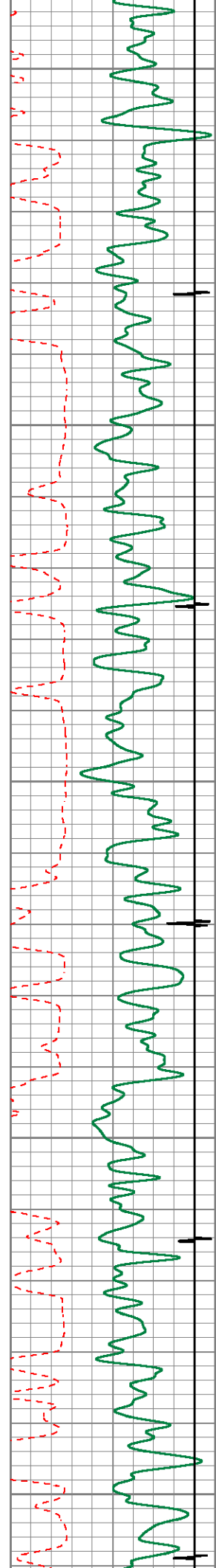




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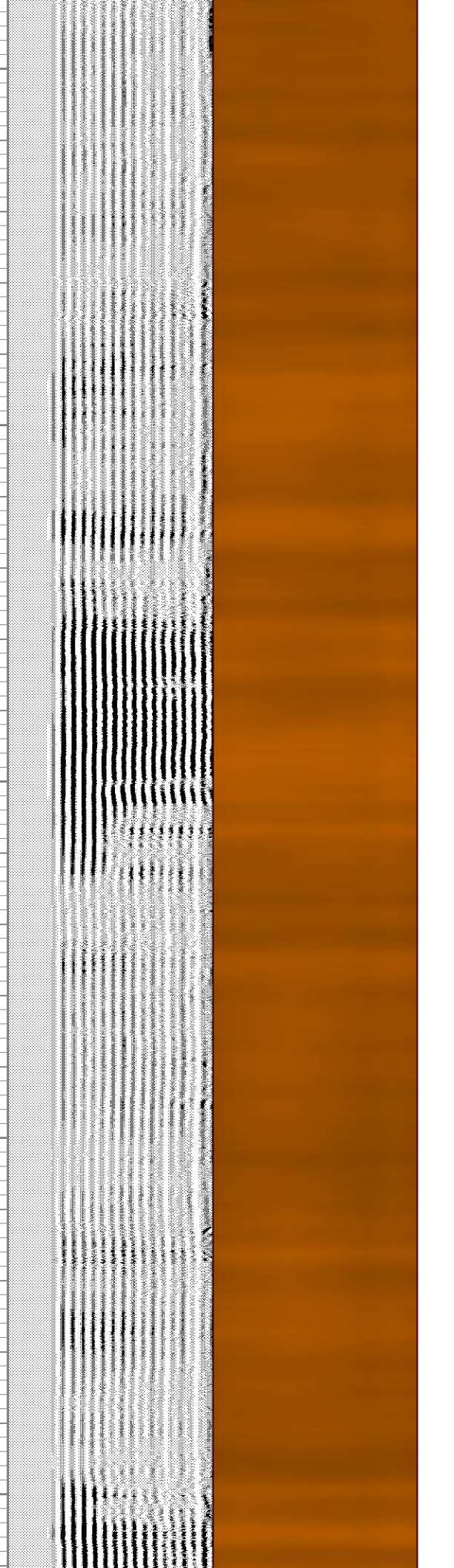
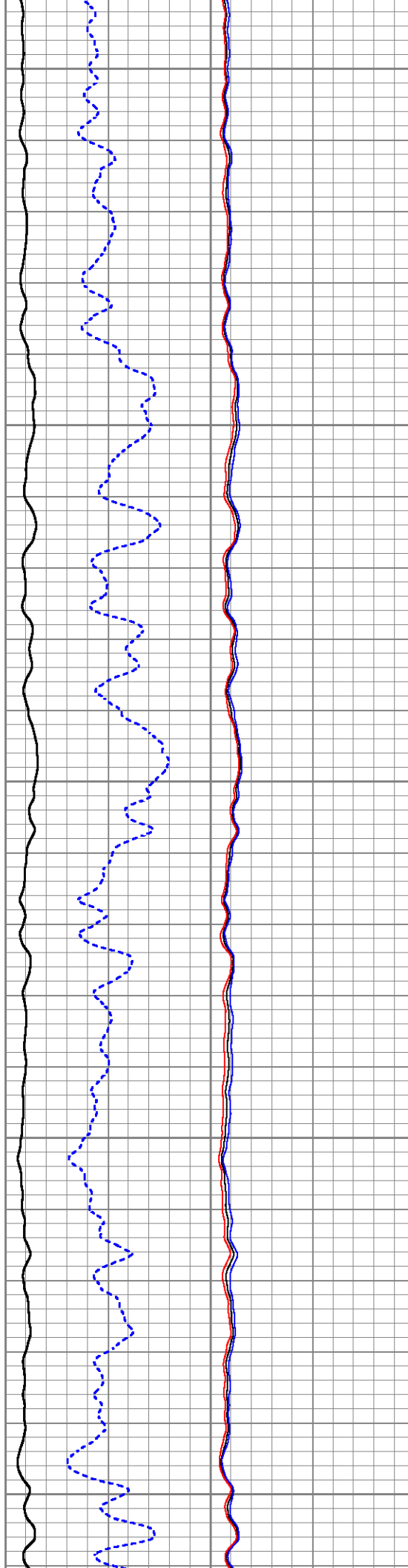
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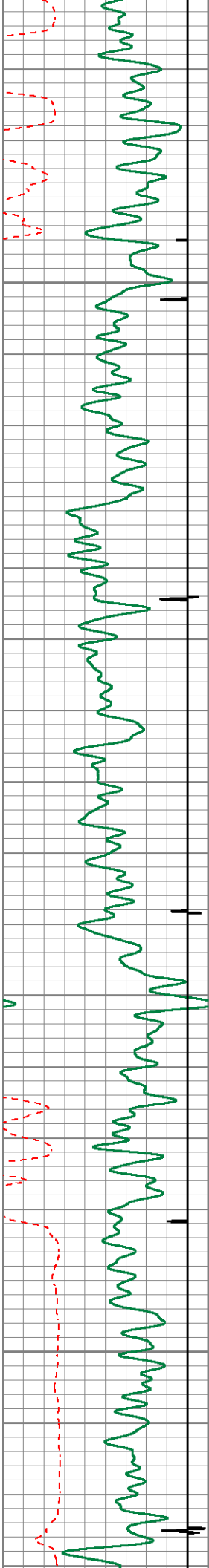




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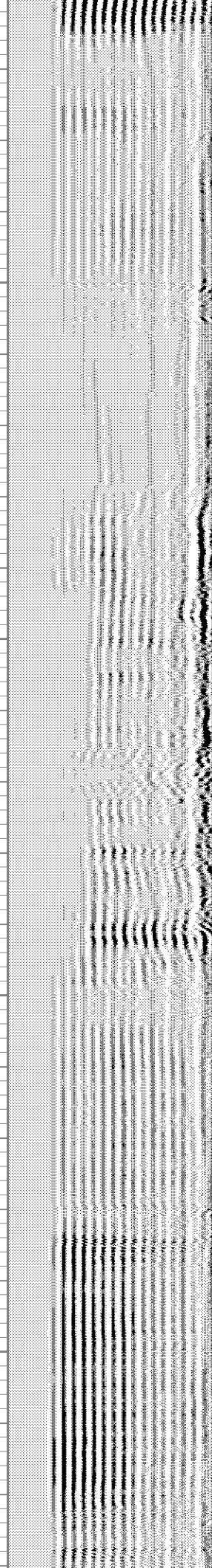
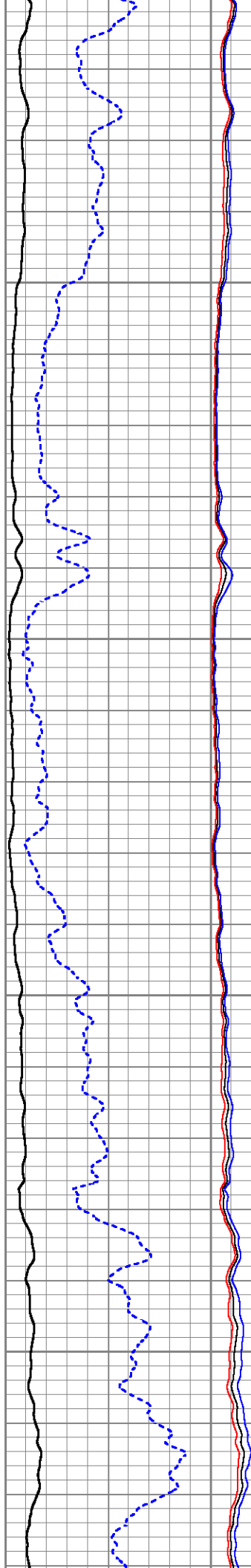
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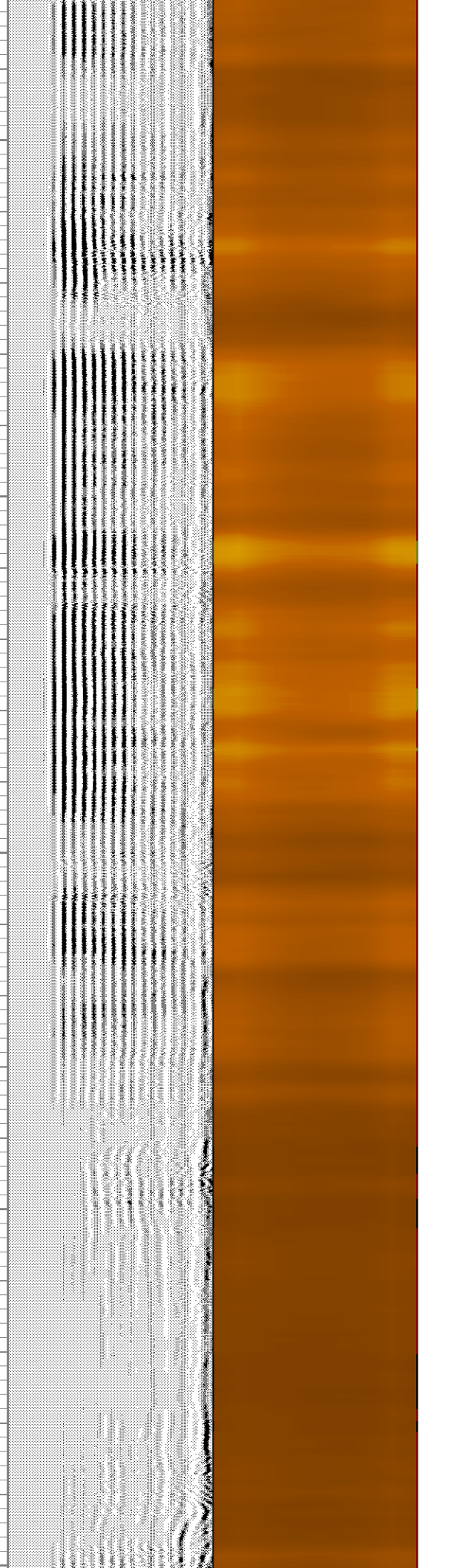
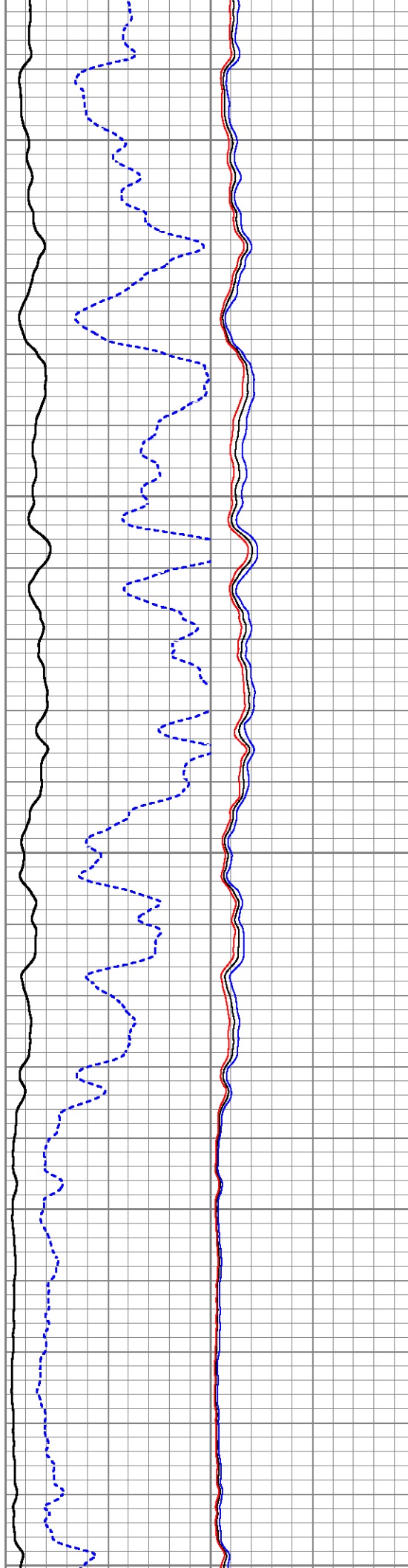
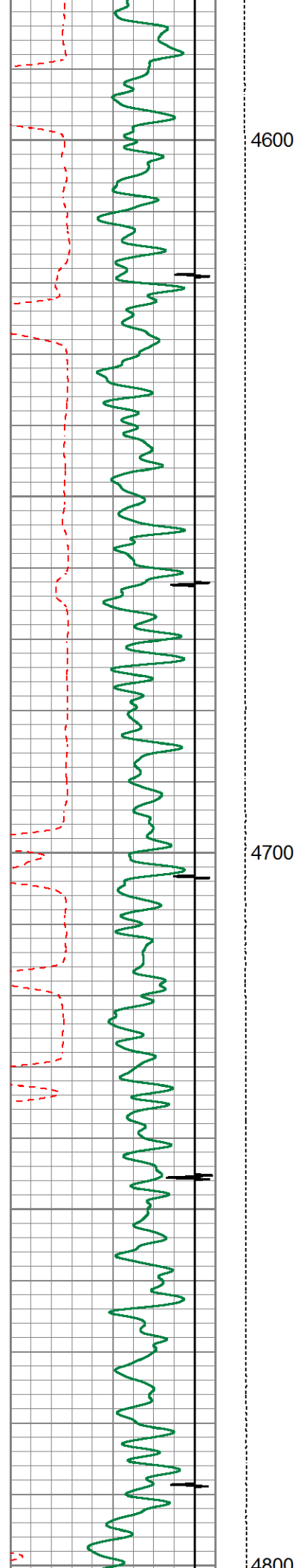


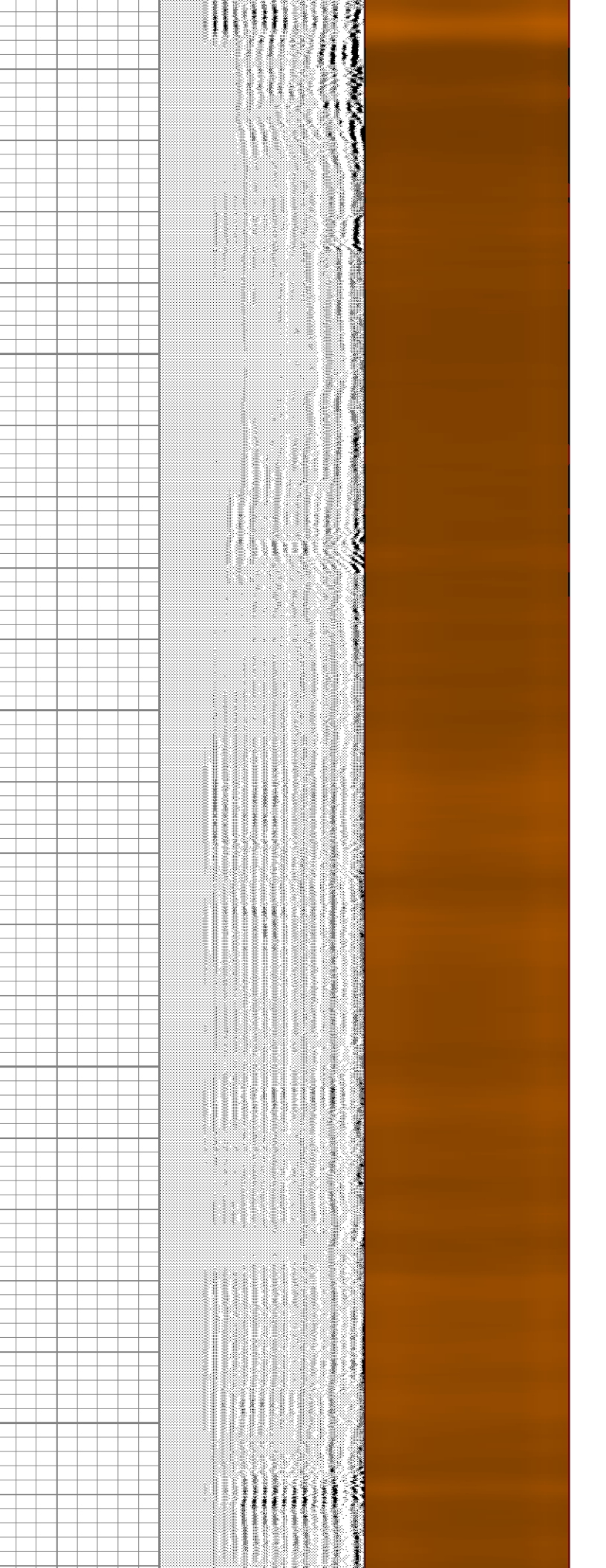
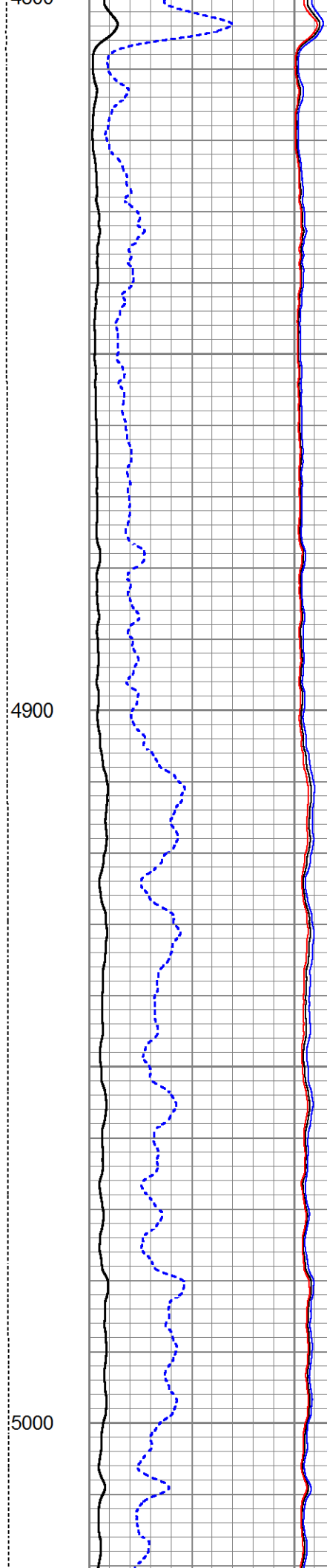
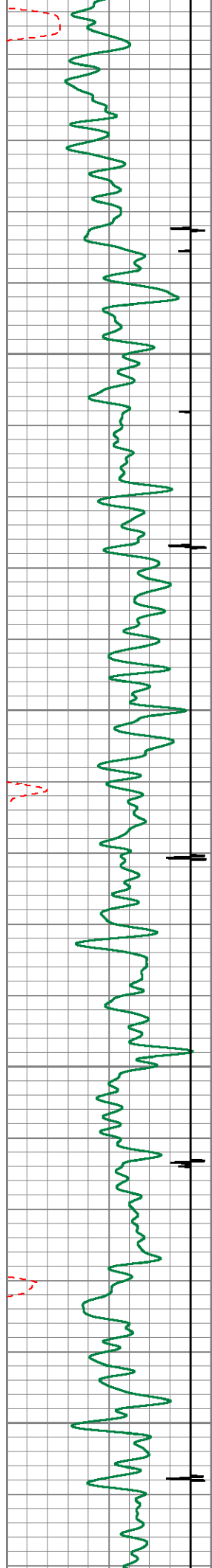


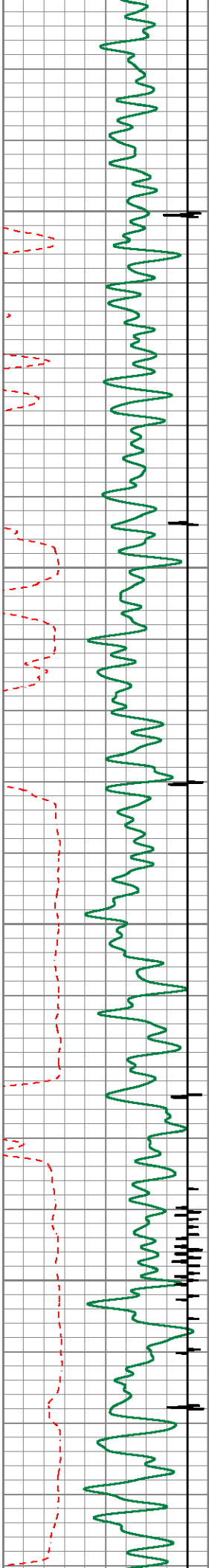
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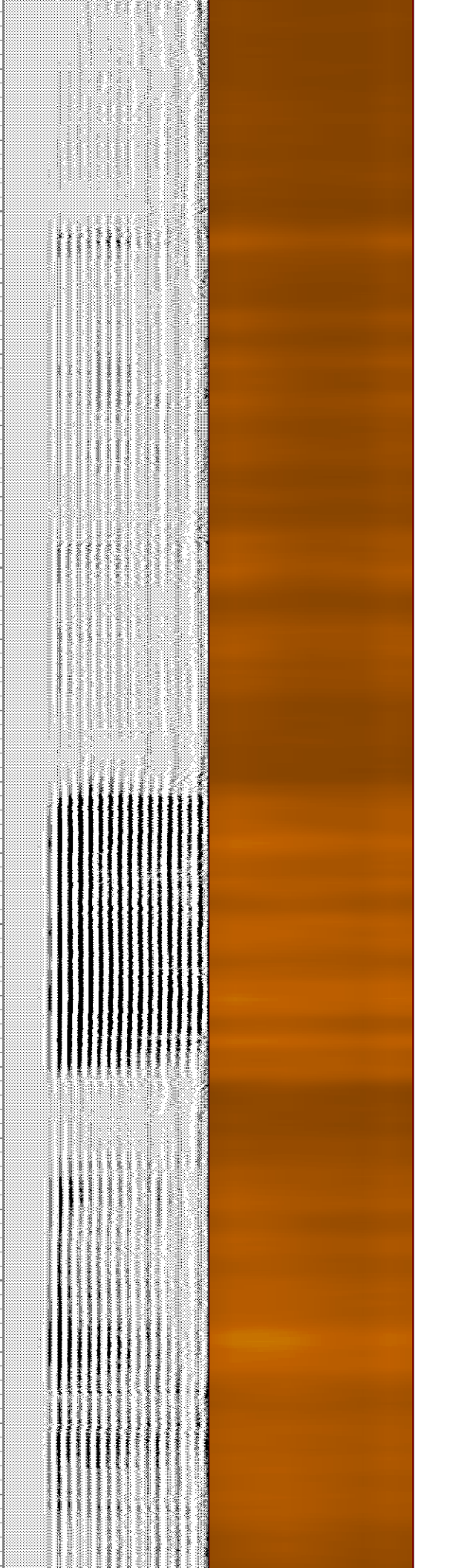
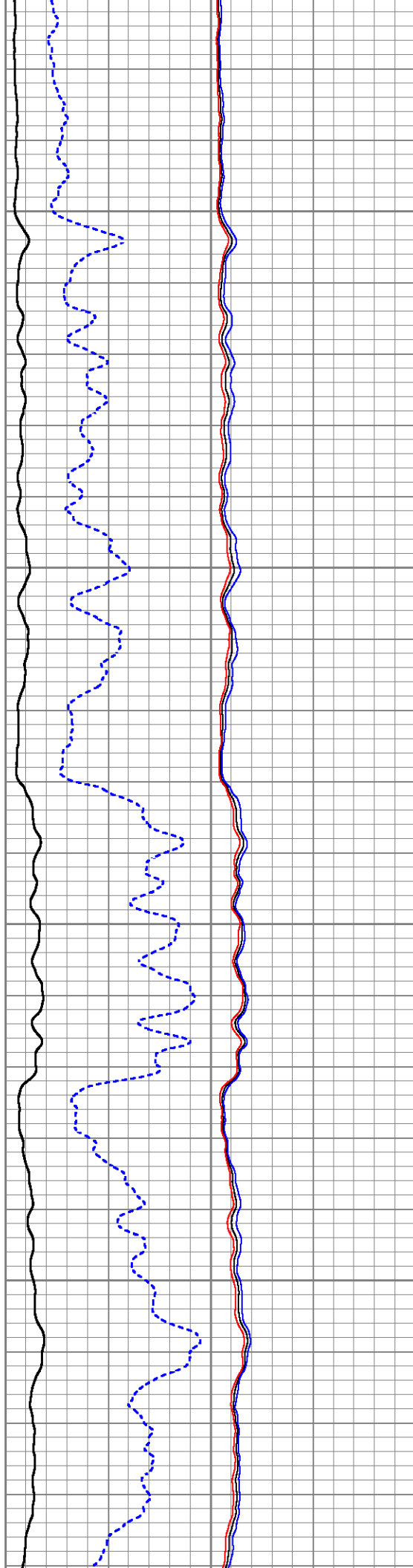


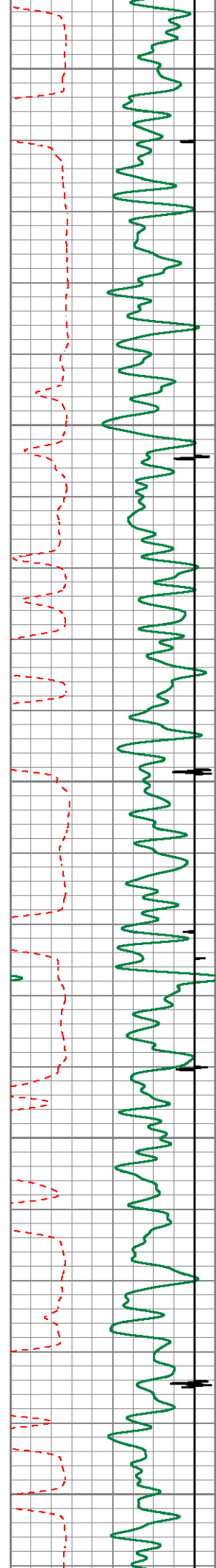




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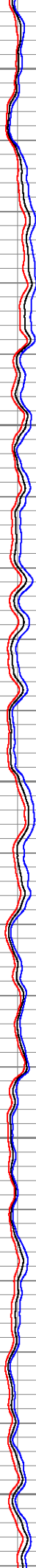
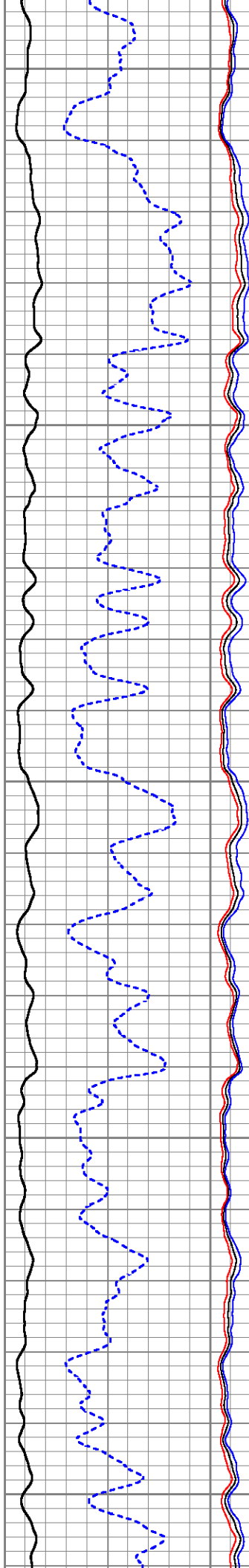
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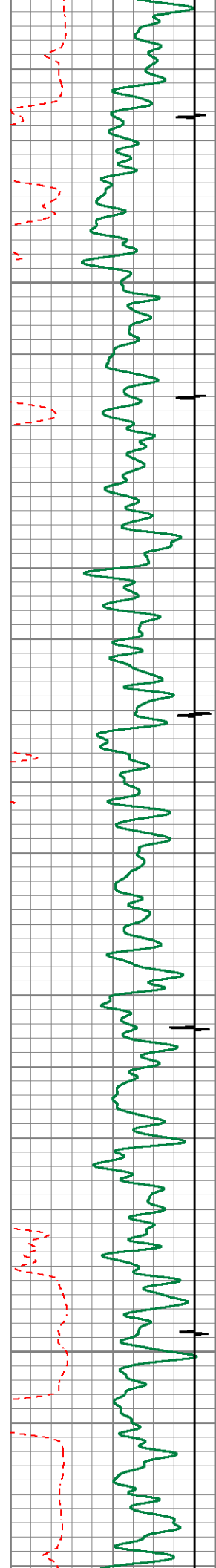




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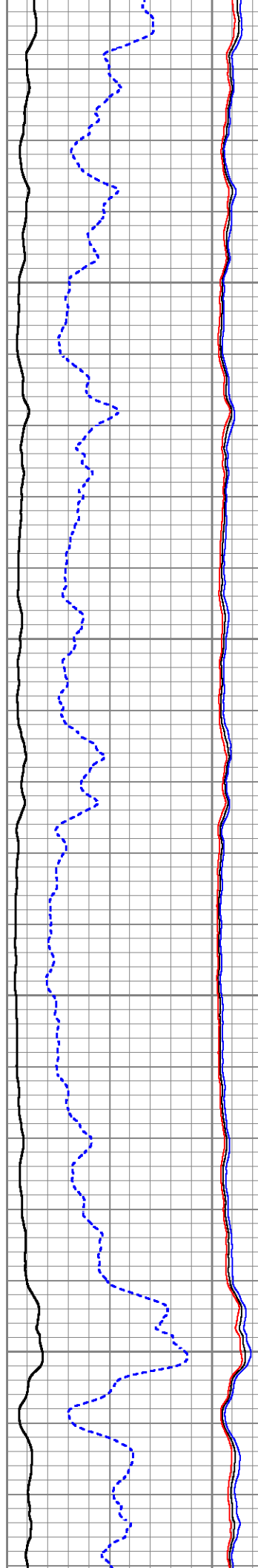
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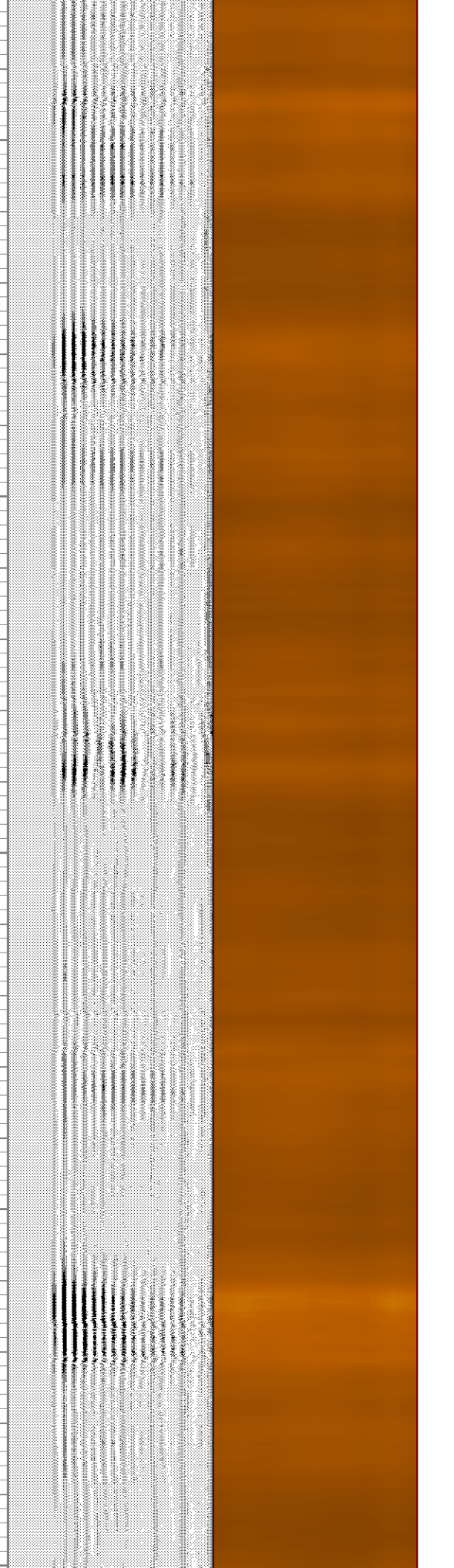
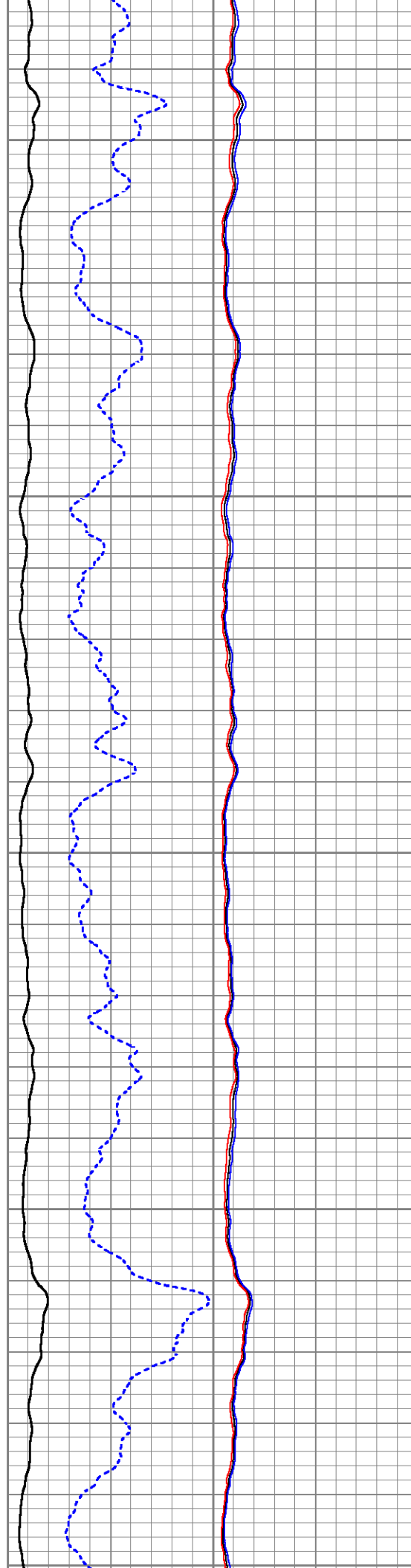
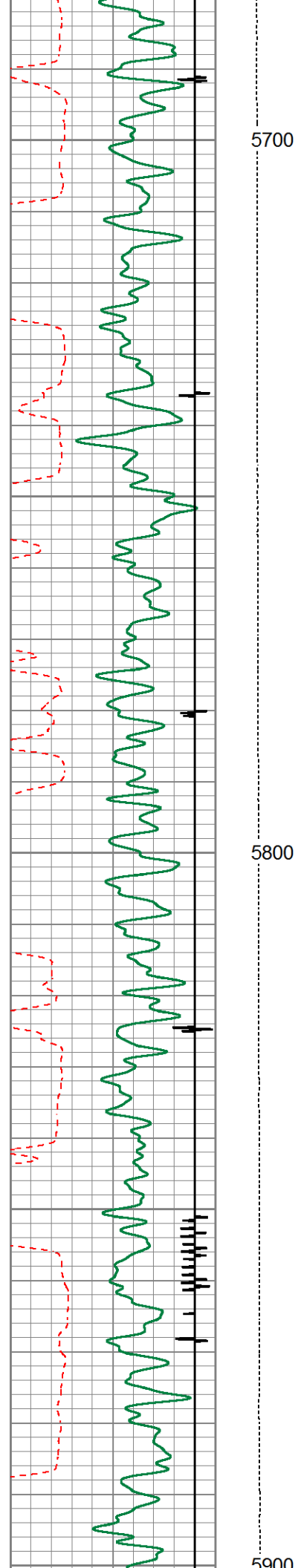


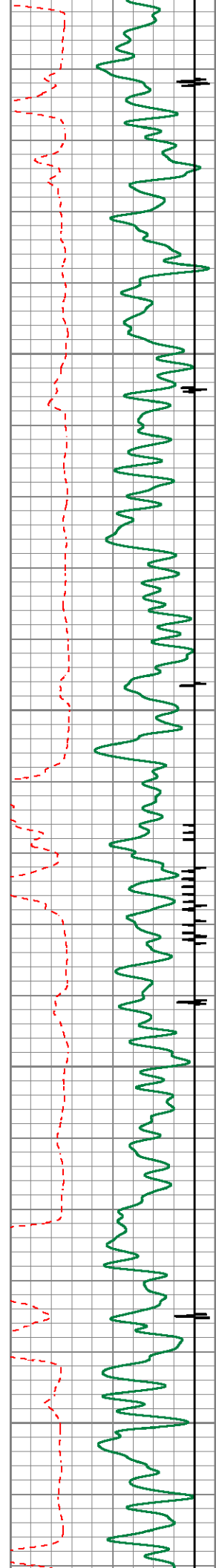


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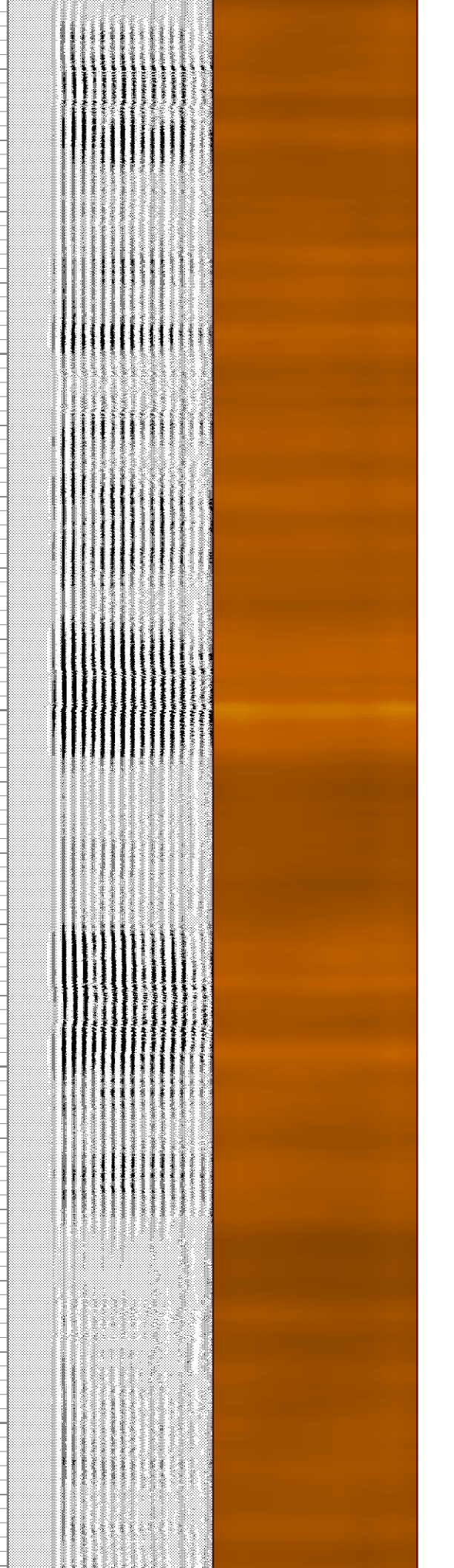
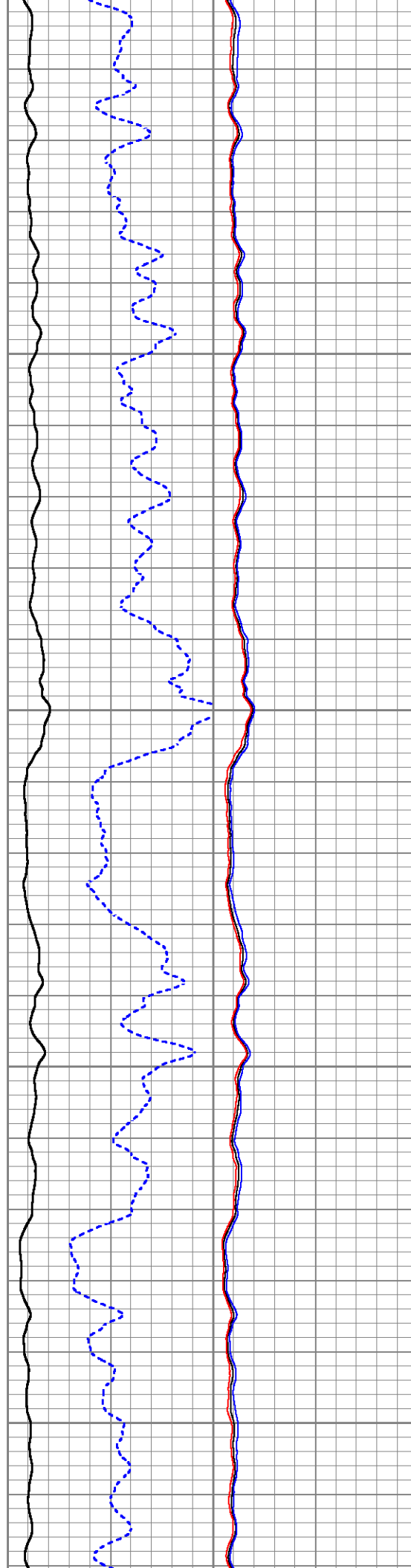


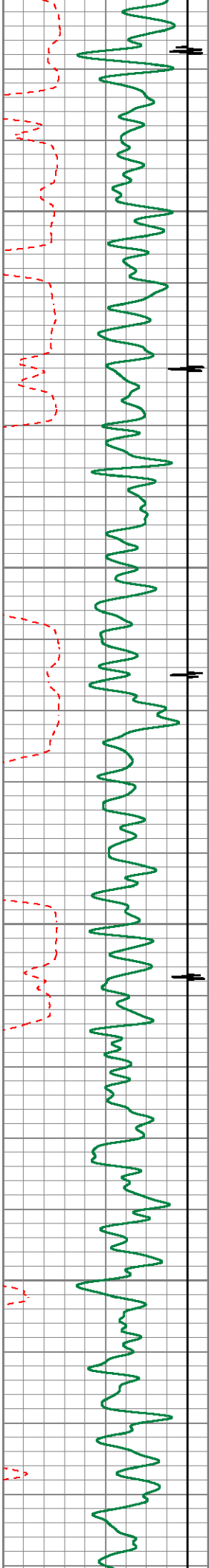




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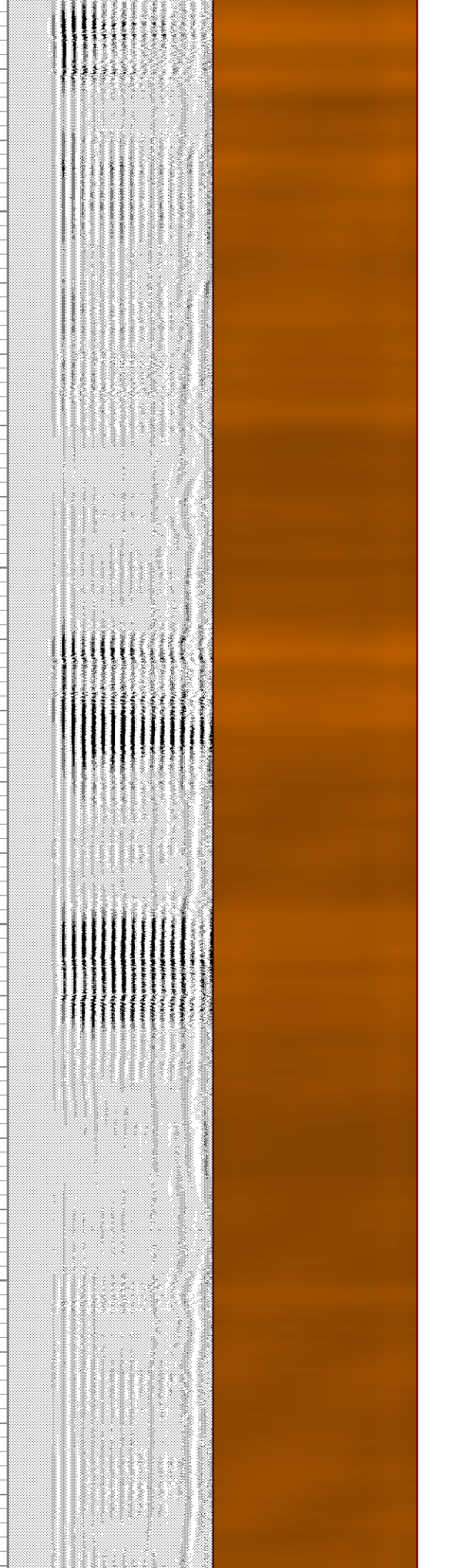
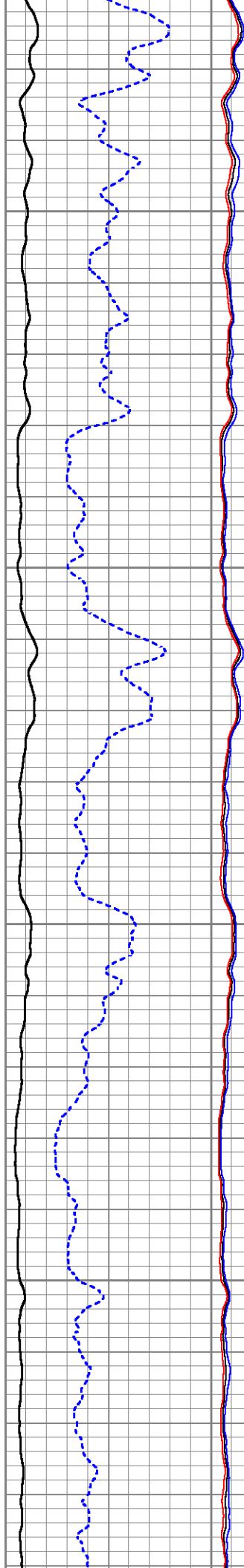
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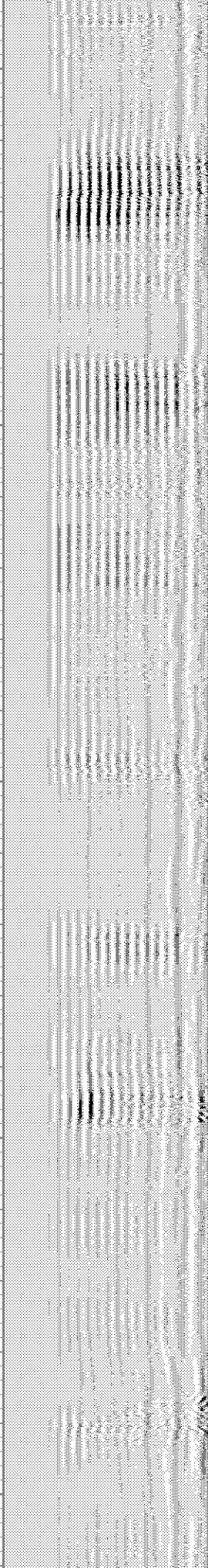
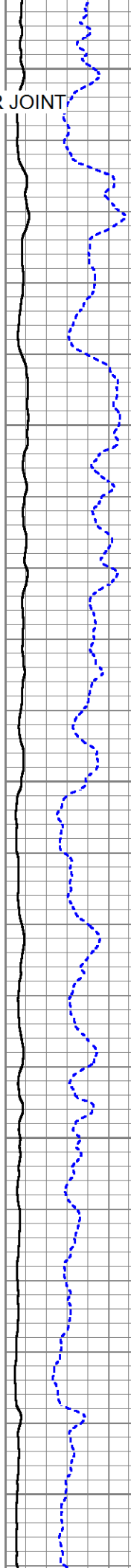
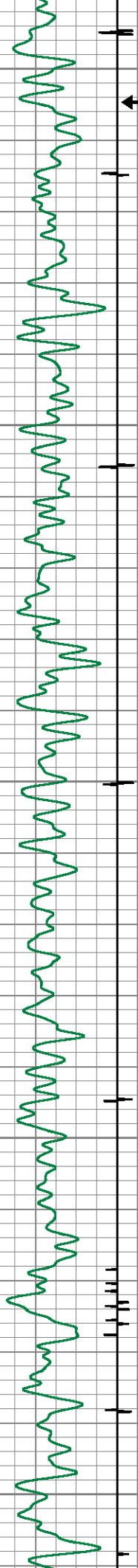
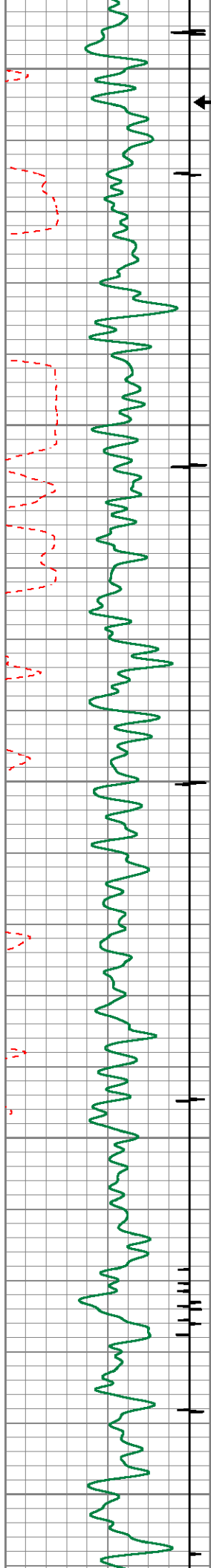
6300

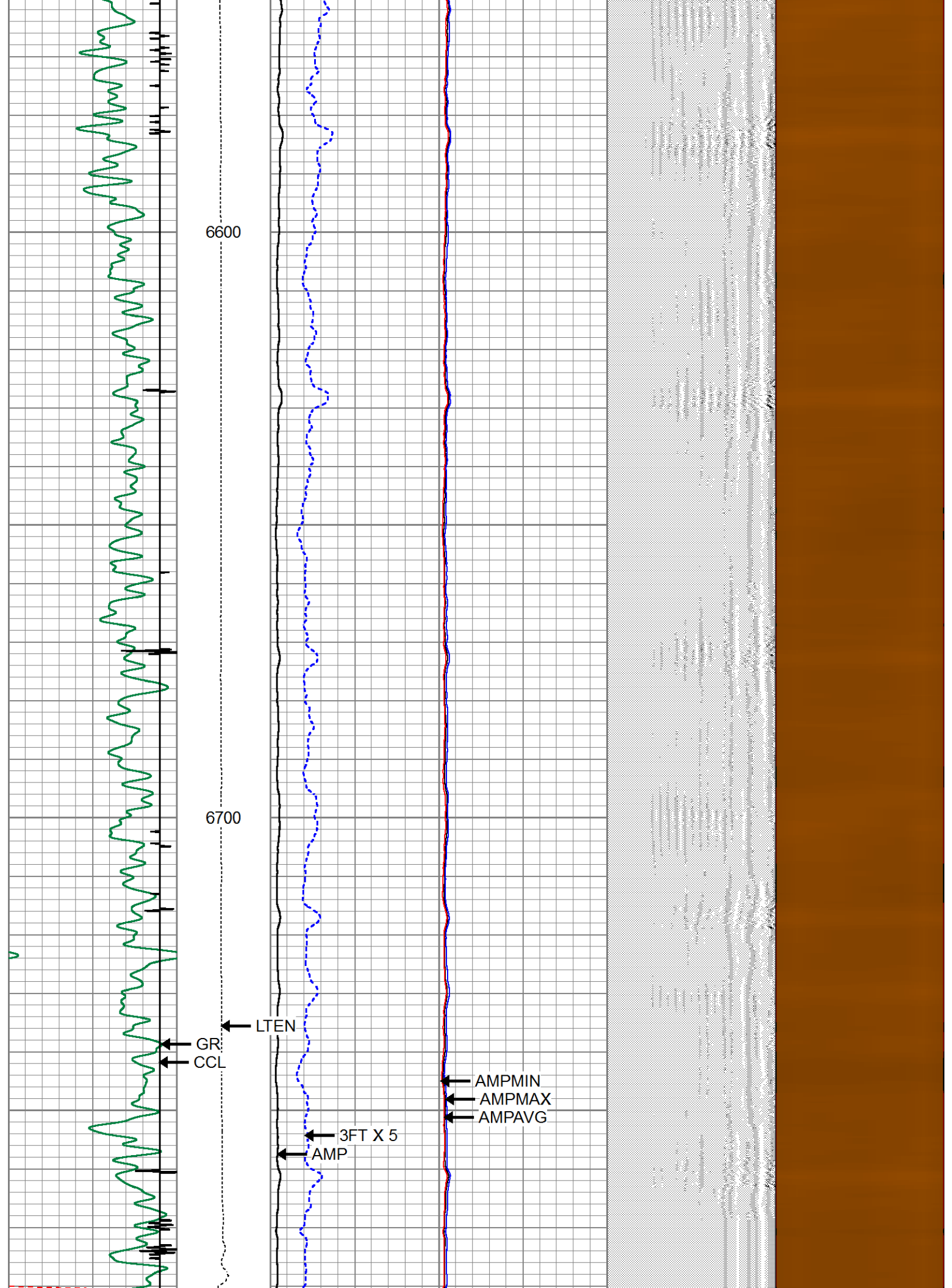


MARKER JOINT


6400

6500





290	TT (usec)	190	LTEN	0	AMP (mV)	100	0	AMPAVG	150	200	VDL (usec)	1200	1	RADIAL MAP	8
0	GR (GAPI)	150	0	(lb 1500)	0	3FT X 5 (mV)	20	0	AMPMAX	150					
2.7	CCL	-0.3						0	AMPMIN	150					

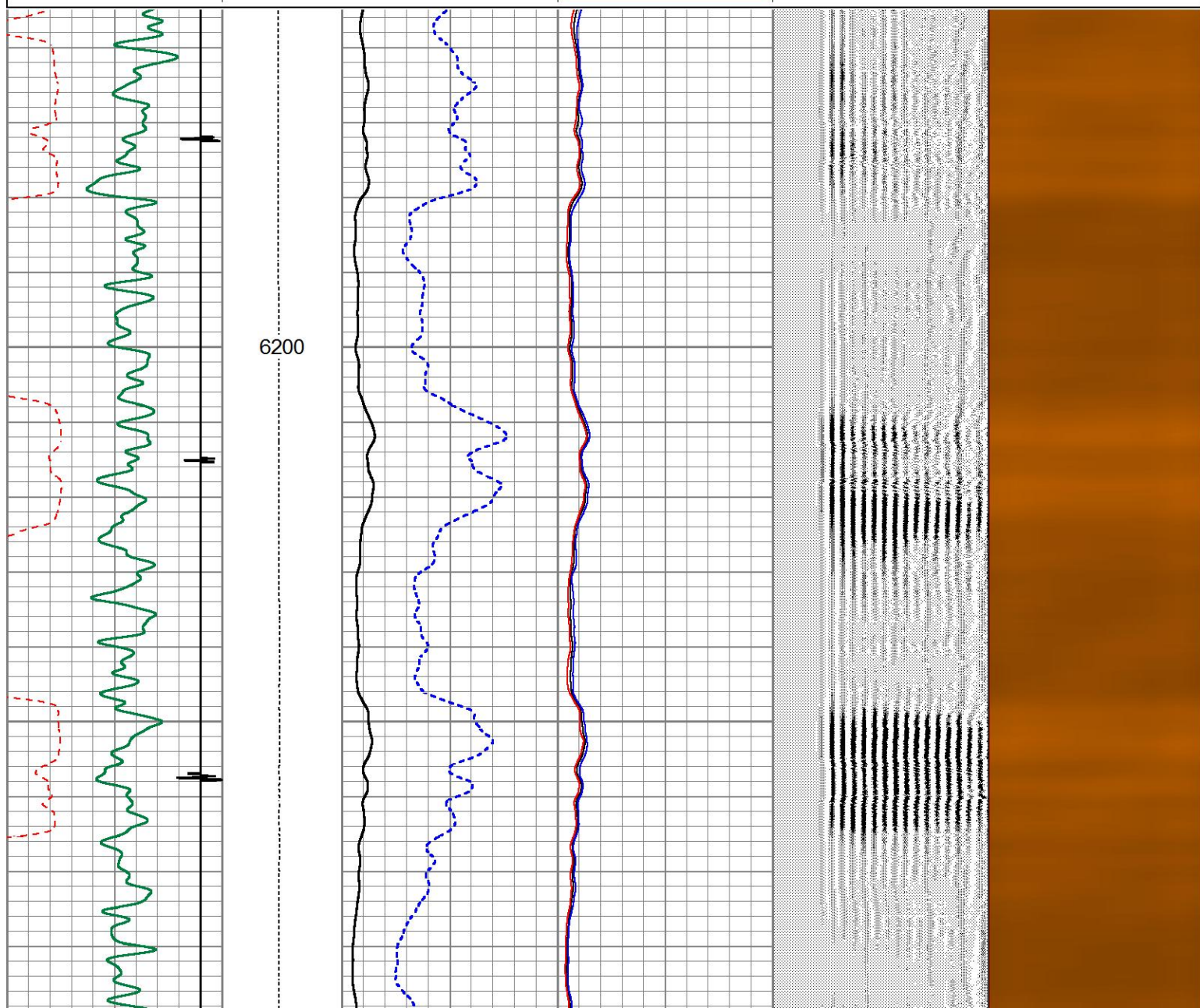


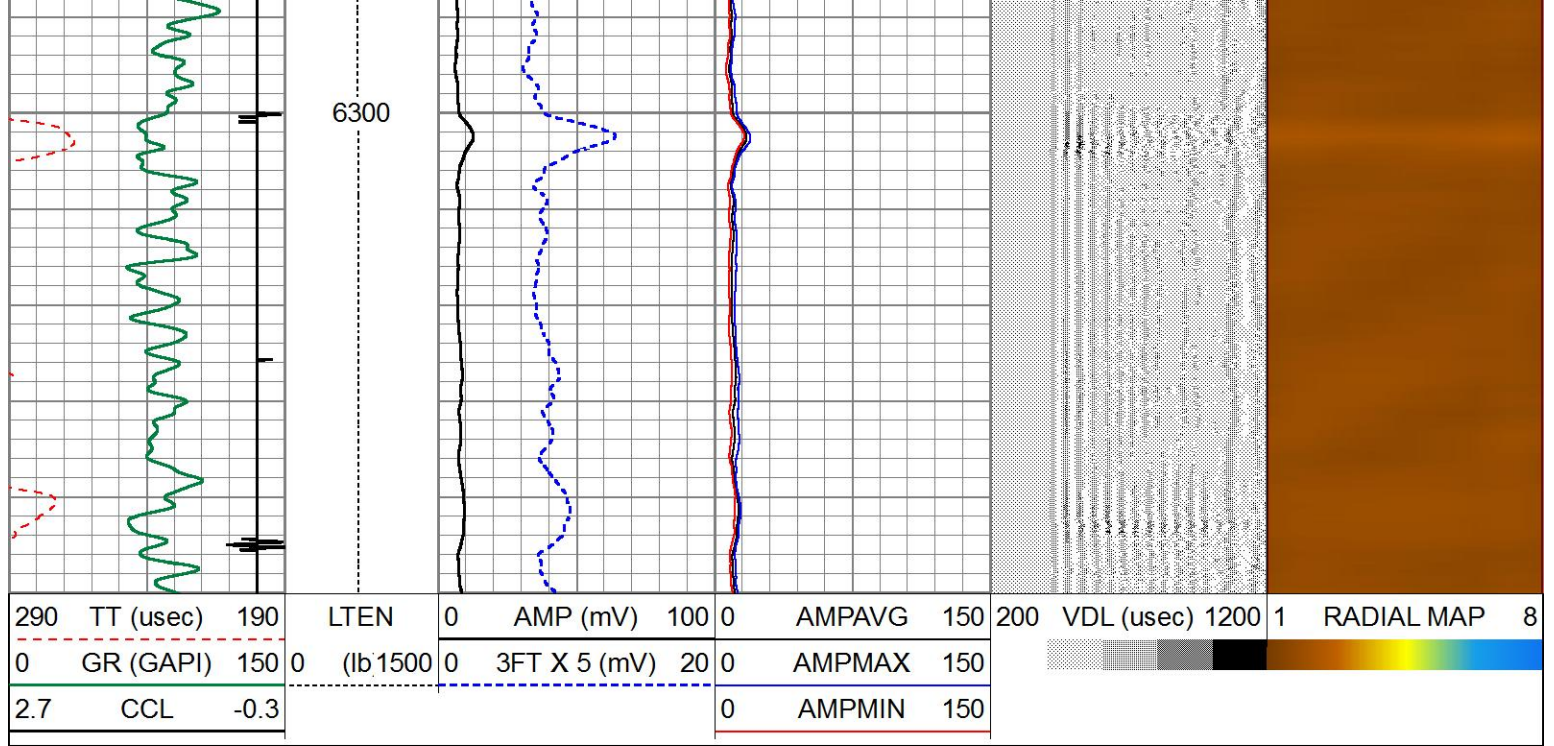
REPEAT PASS

LOGGED WITH 0 PSI APPLIED AT SURFACE

Database File	leffler 41c-23-l_cbl.db
Dataset Pathname	cbl/pass2
Presentation Format	1PATRI~2
Dataset Creation	Tue Sep 26 23:19:13 2017
Charted by	Depth in Feet scaled 1:240

290	TT (usec)	190	LTEN	0	AMP (mV)	100	0	AMPAVG	150	200	VDL (usec)	1200	1	RADIAL MAP	8
0	GR (GAPI)	150	0	(lb 1500)	0	3FT X 5 (mV)	20	0	AMPMAX	150					
2.7	CCL	-0.3						0	AMPMIN	150					





Calibration Report

Database File: leffler 41c-23-l_cbl.db
 Dataset Pathname: cbl/pass2
 Dataset Creation: Tue Sep 26 23:19:13 2017

Gamma Ray Calibration Report

Type / Serial: GC275 rev.2 / FW1607-001

SHOP CALIBRATION

Tue Sep 26 04:21:02 2017

	Counts/Sec.	Gain	Offset	Jig	Units
Background	95.7				cps
Calibrator	335.4				cps
		0.8500			GAPI/cps

PRIMARY VERIFICATION

Sun Sep 24 14:37:43 2017

Background	117.3				cps
Calibrator	410.1				cps
Difference				292.8	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

Segmented Cement Bond Log Calibration Report

Serial Number:	FW1704-53
Tool Model:	RBTC3
Calibration Casing Diameter:	5.500 in
Calibration Depth:	1935.172 ft

Master Calibration, performed Tue Sep 26 06:54:50 2017:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	-0.009	0.555	1.000	72.000	125.922	2.117
CAL	-0.011	0.615				
5'	-0.011	0.536	1.000	72.000	129.968	2.374
SUM						
S1	0.006	0.565	0.500	100.000	177.893	-0.566
S2	-0.009	0.571	0.500	100.000	171.684	1.988
S3	-0.010	0.567	0.500	100.000	172.494	2.180
S4	-0.009	0.565	0.500	100.000	173.180	2.111
S5	-0.009	0.561	0.500	100.000	174.567	2.073
S6	-0.009	0.563	0.500	100.000	174.127	1.996
S7	-0.009	0.561	0.500	100.000	174.829	2.000
S8	-0.009	0.553	0.500	100.000	177.112	2.042

Internal Reference Calibration, performed Mon Sep 11 06:58:25 2017:

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	-0.011	0.615	1.000	0.000

Air Zero Calibration, performed Sun Sep 24 12:34:32 2017:

	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	



Company SRC ENERGY INC
 Well LEFFLER 41C-23-L
 Field WATTENBERG
 County WELD
 State COLORADO

Country USA