



PATRIOT
WELL SOLUTIONS

**RADIAL CEMENT BOND LOG
GAMMA RAY
CCL**

Company		SRC ENERGY INC		Country USA			
Well		LEFFLER 1C-23-L					
Field		WATTENBERG					
County		WELD					
State		COLORADO		Country USA			
Location:		APL # : 05123448330000		Other Services			
SHL: 1881' FNL & 275' FEL SENE				JBGR WRP			
Permanent Datum		GL	Elevation	4748'			
Log Measured From		GL					
Drilling Measured From		GL					
SEC 21 TWP 6N RGE 66W							
Date		SEPTEMBER 27, 2017					
Run Number		ONE					
Depth Driller		17850'					
Depth Logger		6718'					
Bottom Logged Interval		6716'					
Top Log Interval		SURFACE					
Open Hole Size		8.5"					
Type Fluid		WATER					
Density / Viscosity		UNK					
Max. Recorded Temp.		UNK					
Estimated Cement Top		SEE LOG					
Time Well Ready		ROA					
Time Logger on Bottom		15:36					
Equipment Number		1008					
Location		BRIGHTON, CO					
Recorded By		JAMES ZLOMKE					
Witnessed By		TOM FLYNN					
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		17830'
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 @ 6,500'

LOG RAN WITH 2,500 PSI APPLIED AT SURFACE

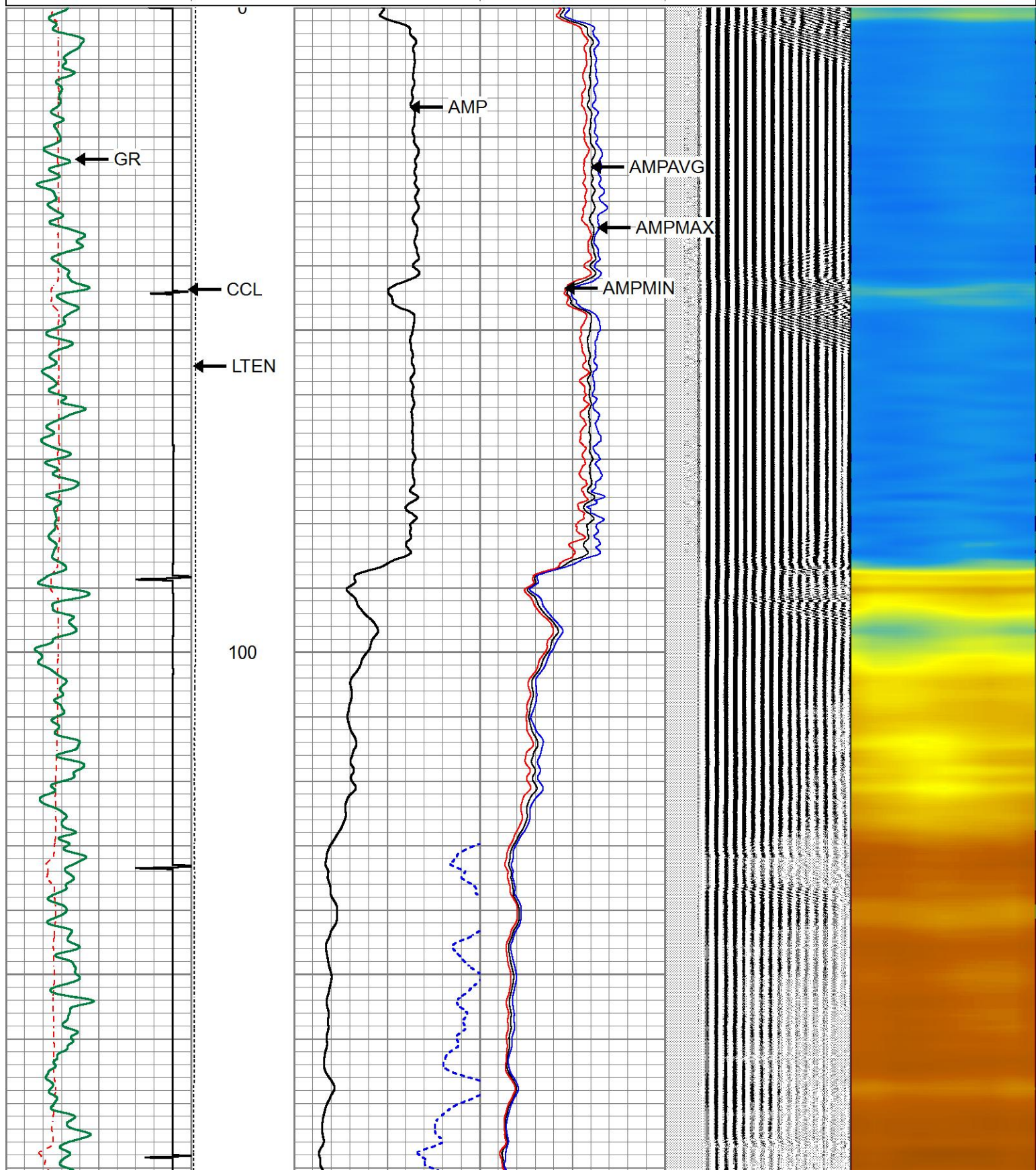
THANK YOU FOR CHOOSING PATRIOT WELL SOLUTIONS!

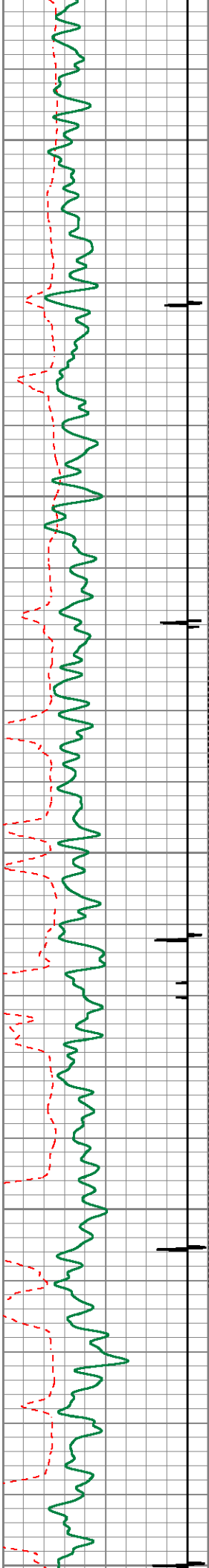
Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
Cable_Head	20.17		Cable_Head-1_7/16 Titan 1 7/16" Cable Head	1.02	1.44	3.31
ErrCt	20.17					
CENT	19.15					

			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_1c-23-l_cbl.db: field/well/rcbl/pass1 Total length: 20.17 ft Total weight: 148.31 lb O.D.: 2.75 in						

Database File leffler_1c-23-l_cbl.db
Dataset Pathname rcbl/MAIN
Presentation Format 1patriotradi
Dataset Creation Wed Sep 27 17:42:28 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						

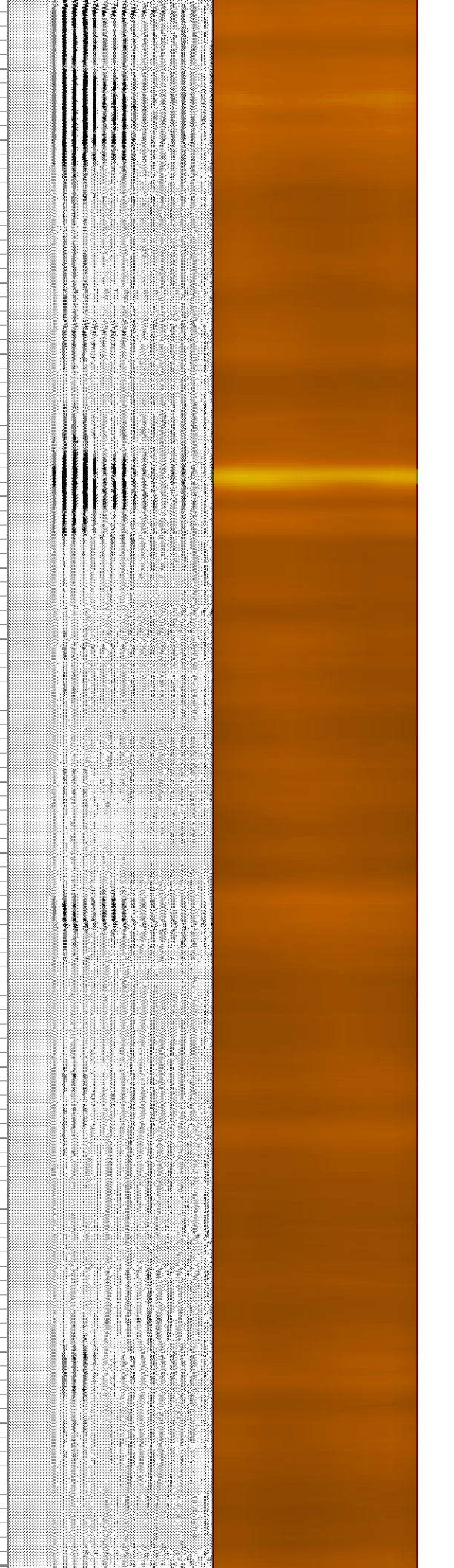
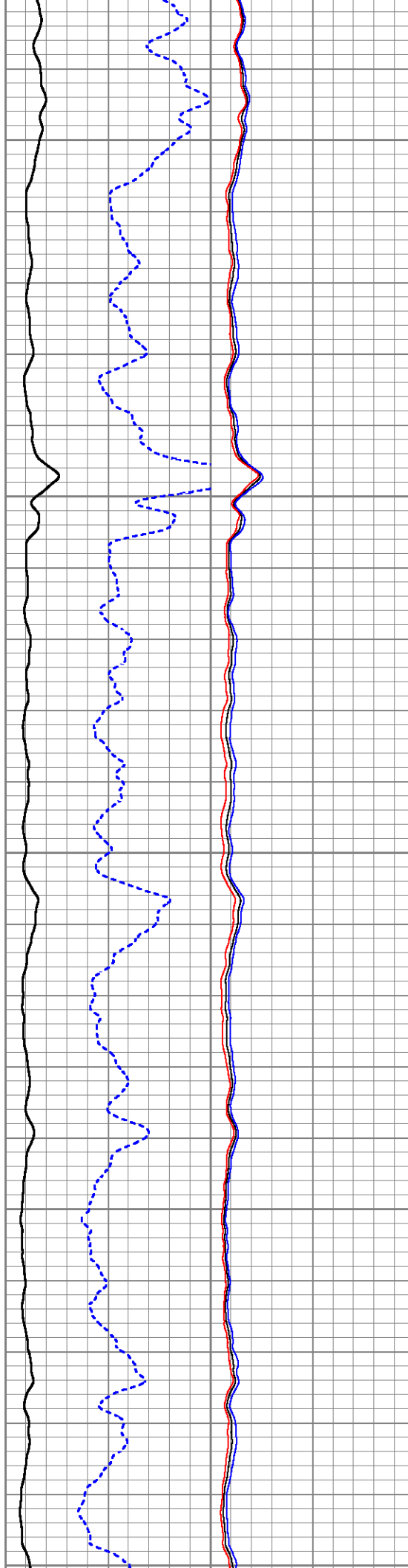


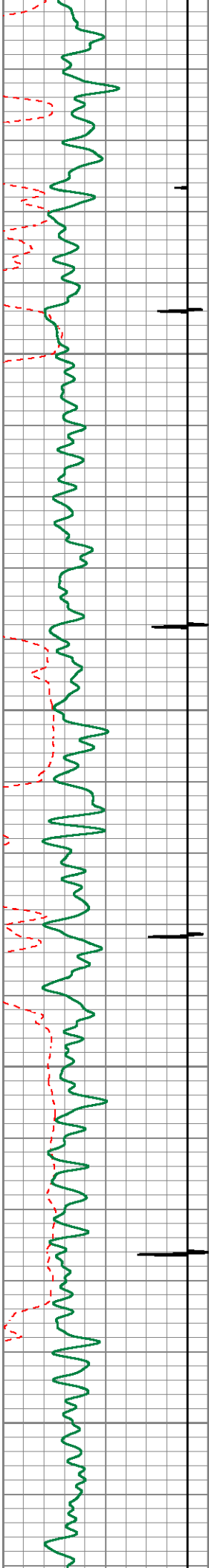


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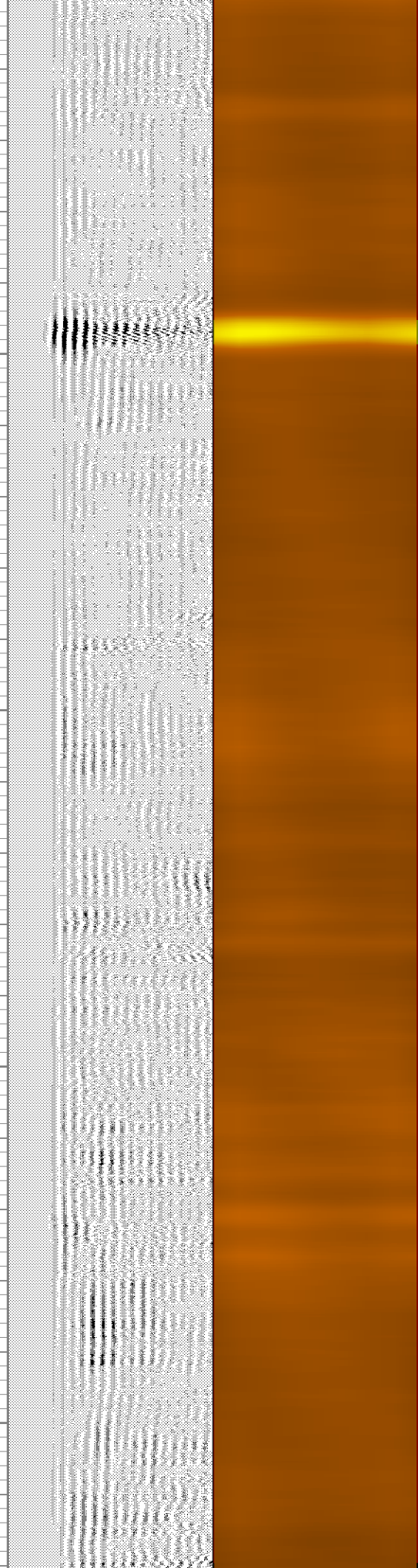
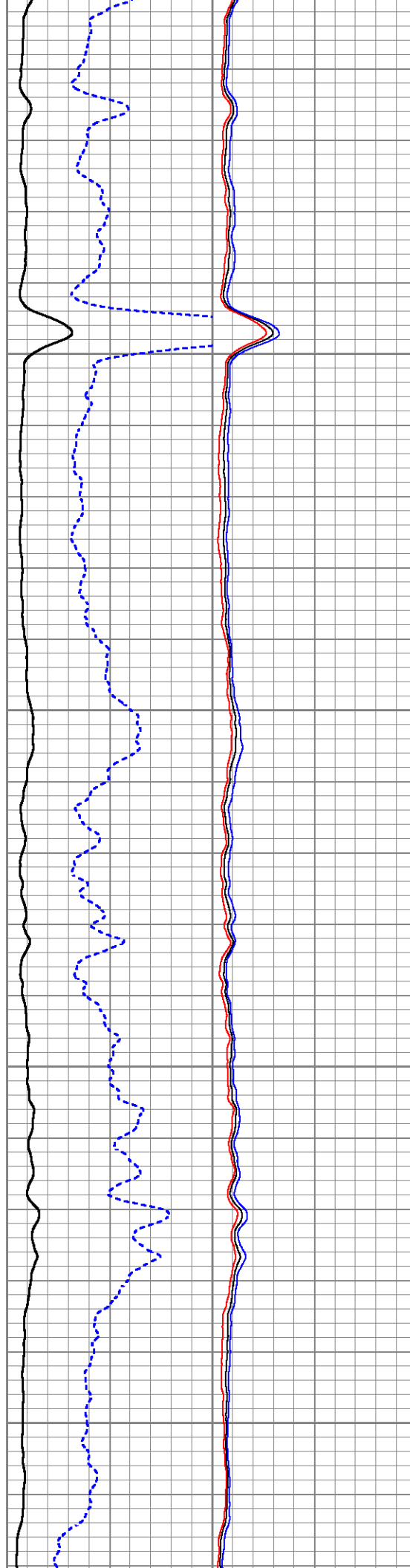
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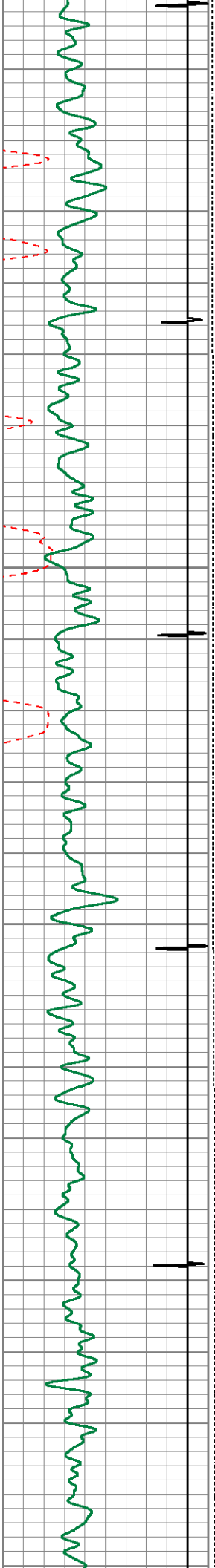
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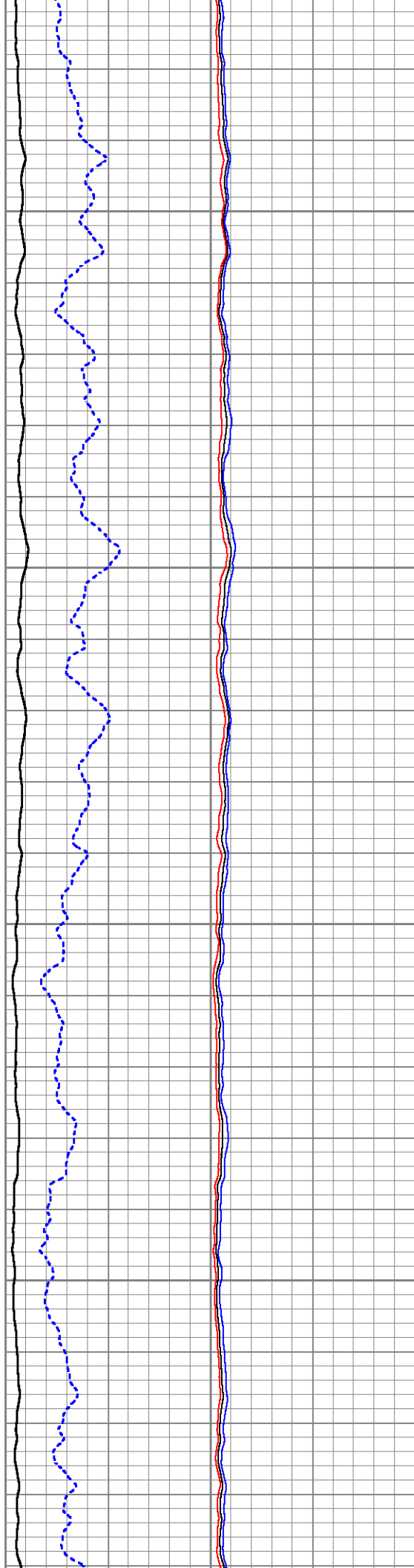
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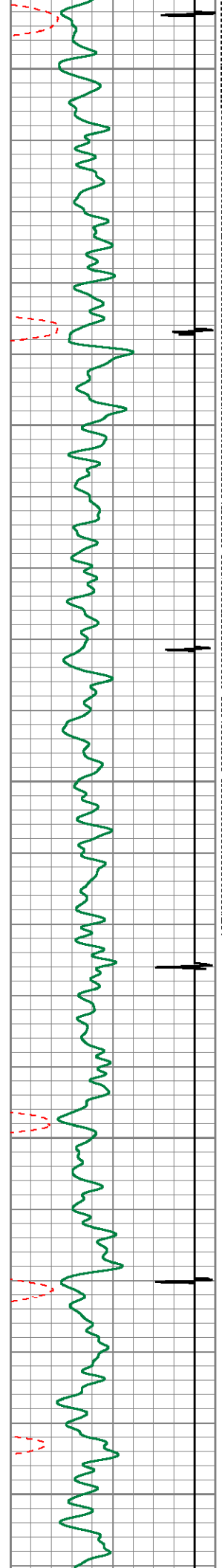




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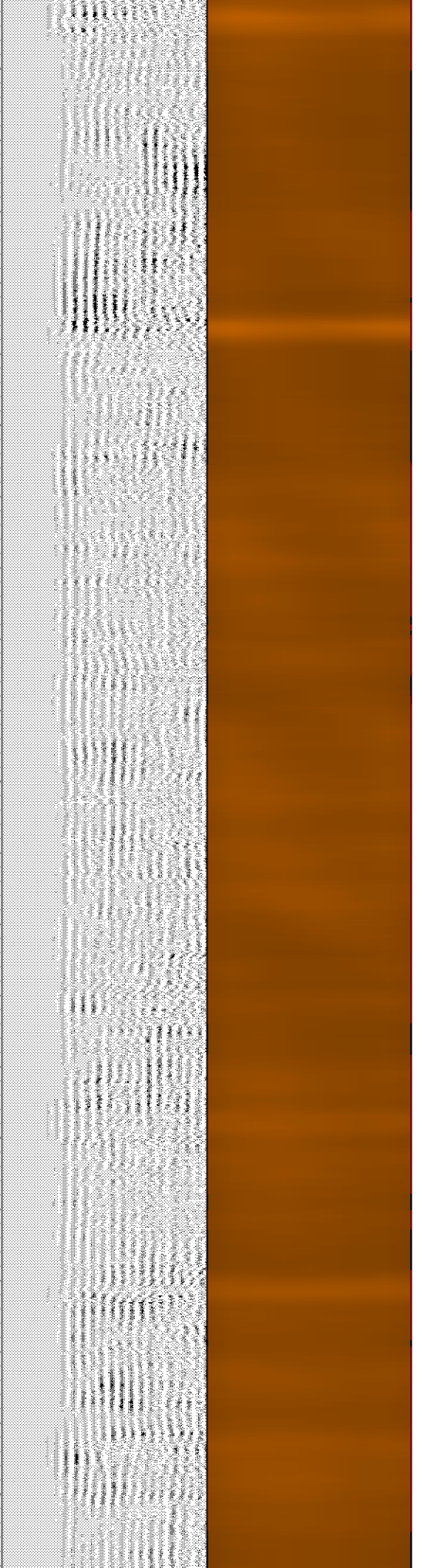
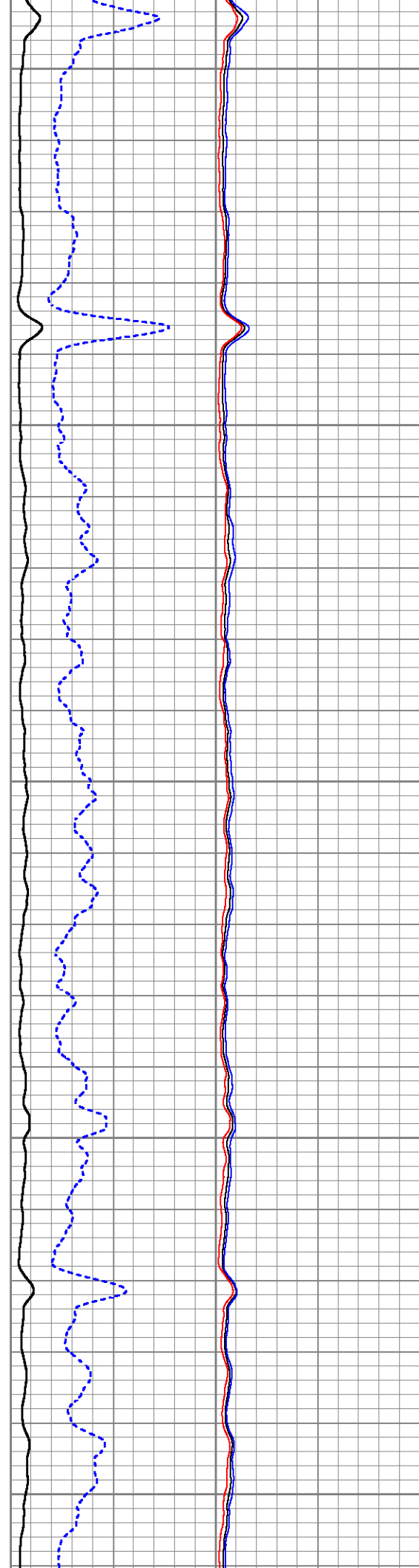
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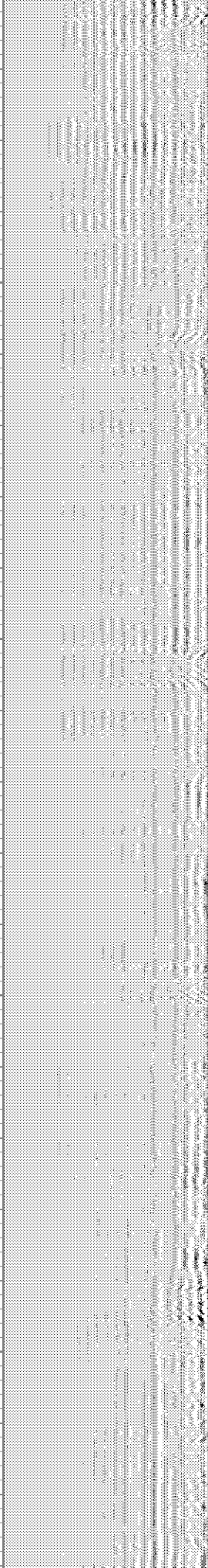
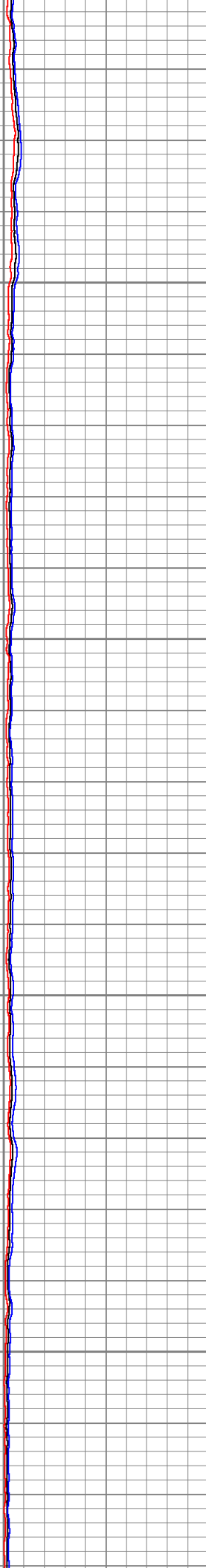
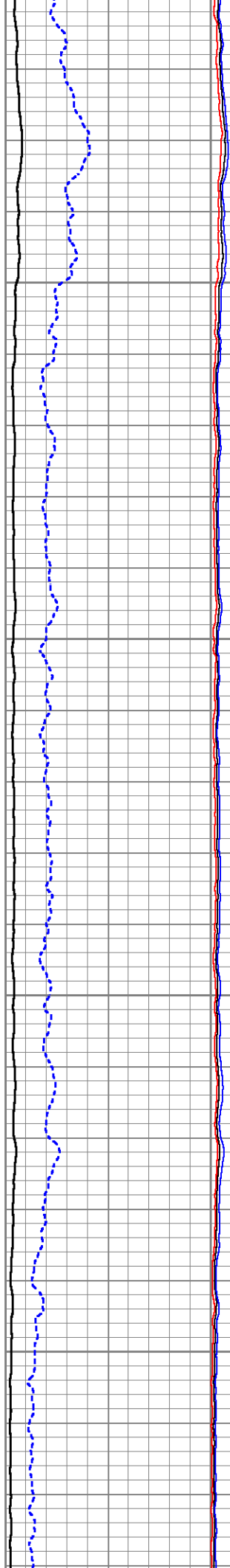
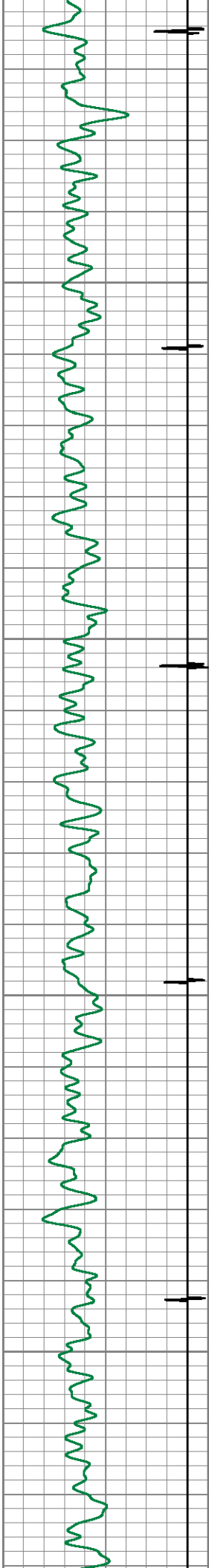
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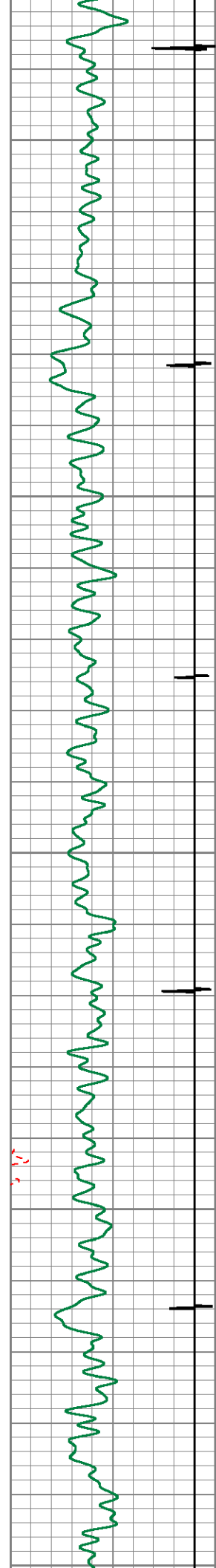
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1100

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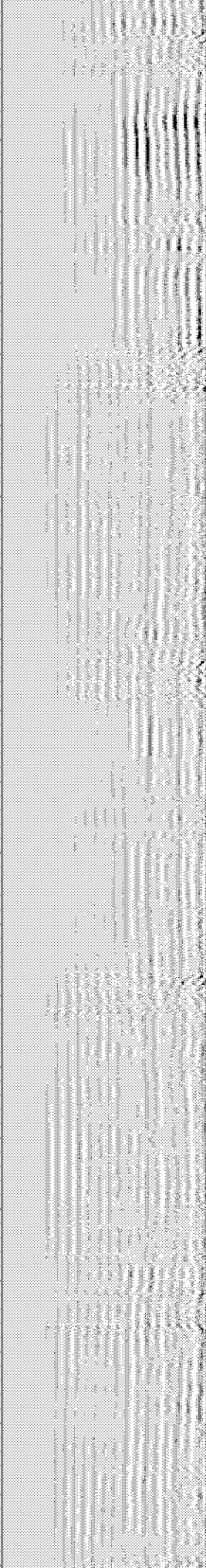
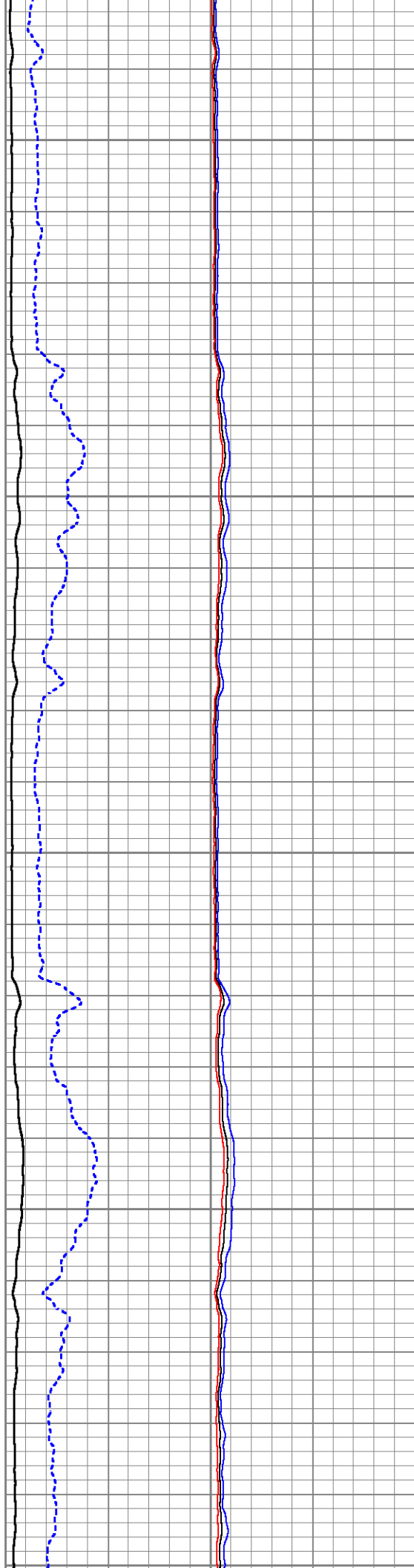


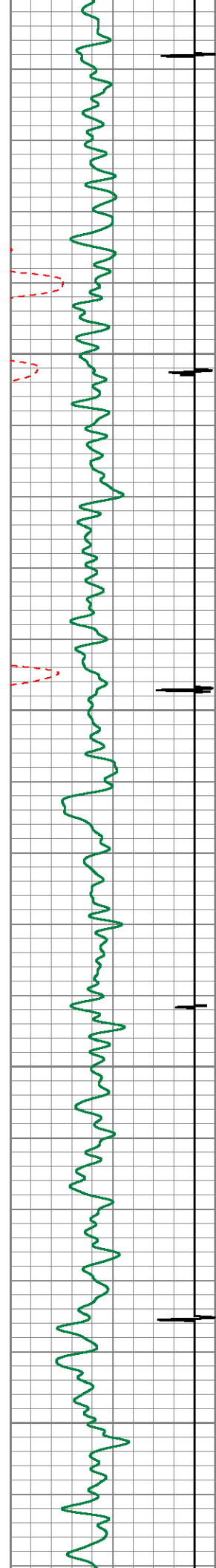


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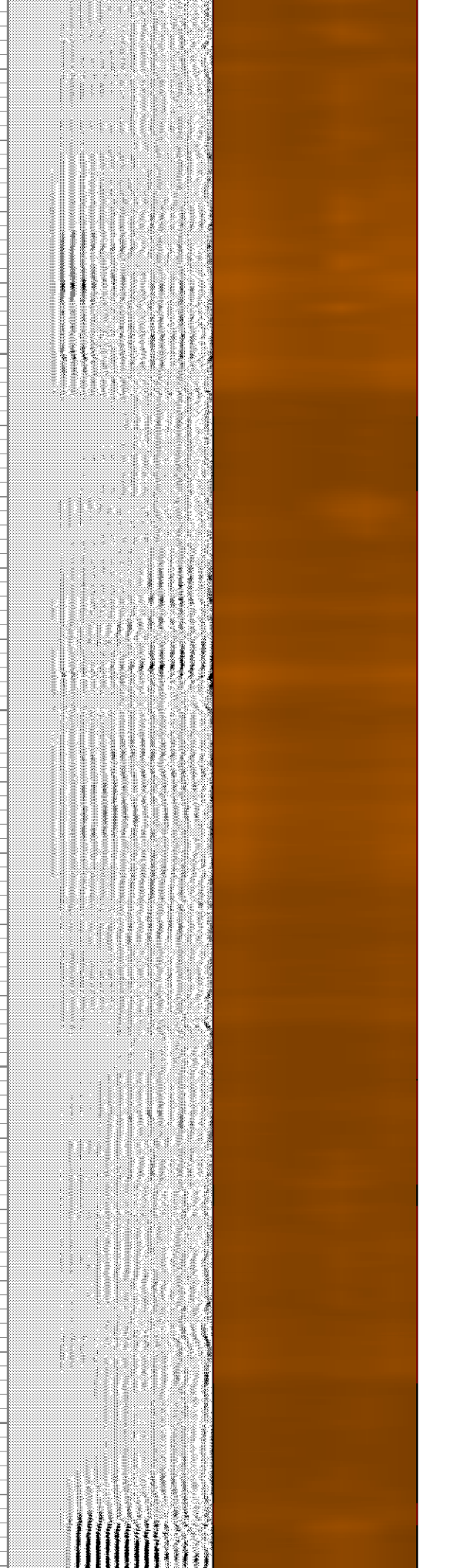
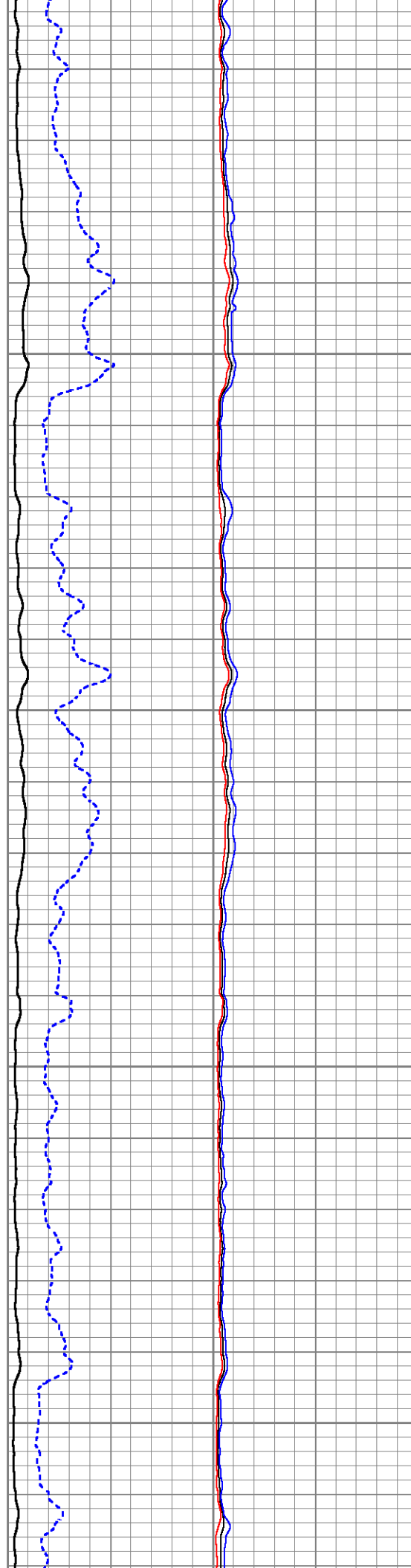


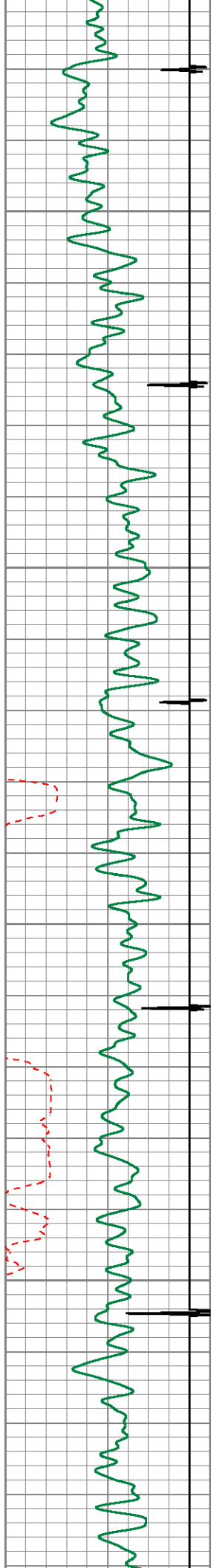


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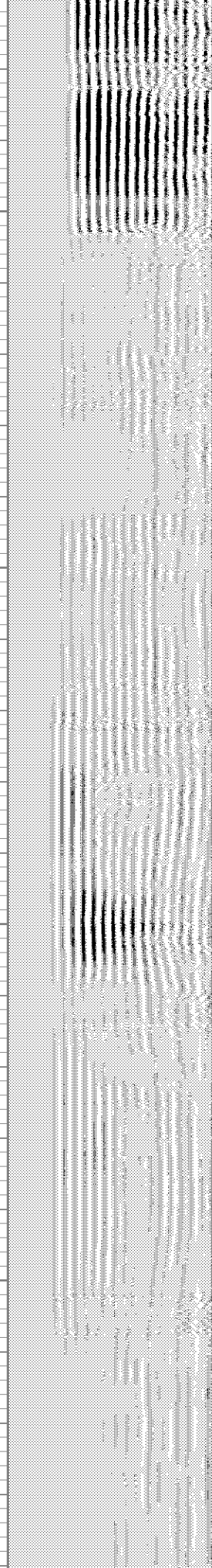
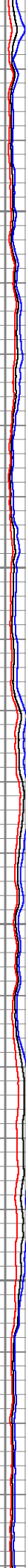
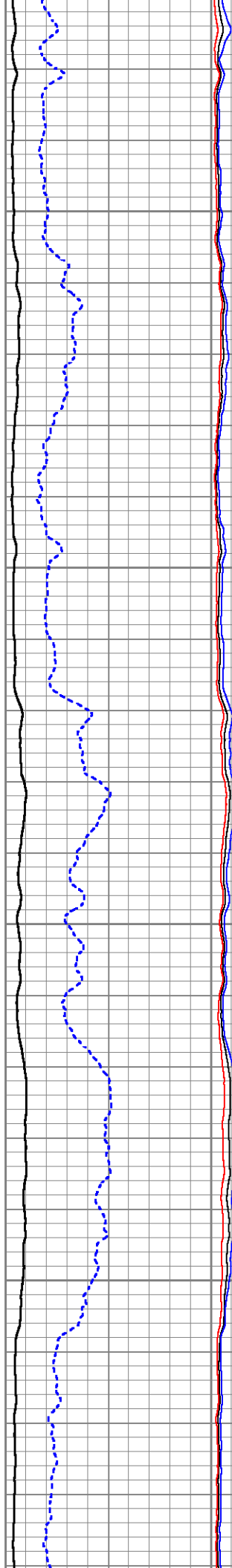
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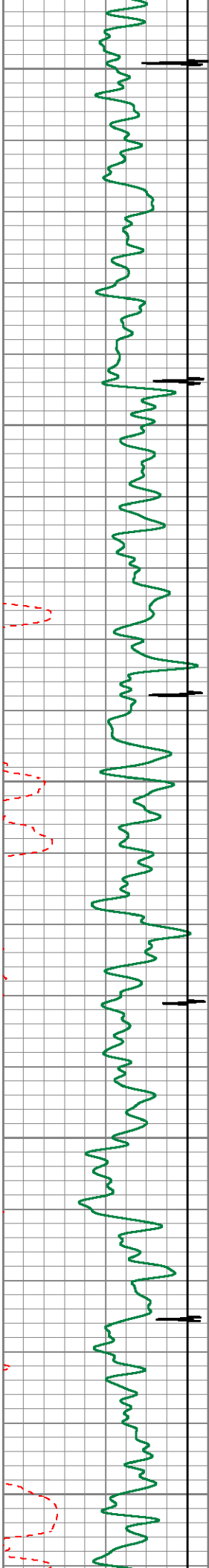




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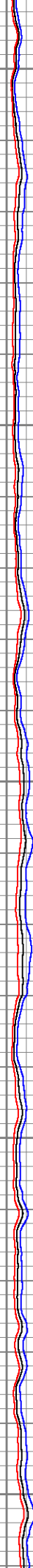
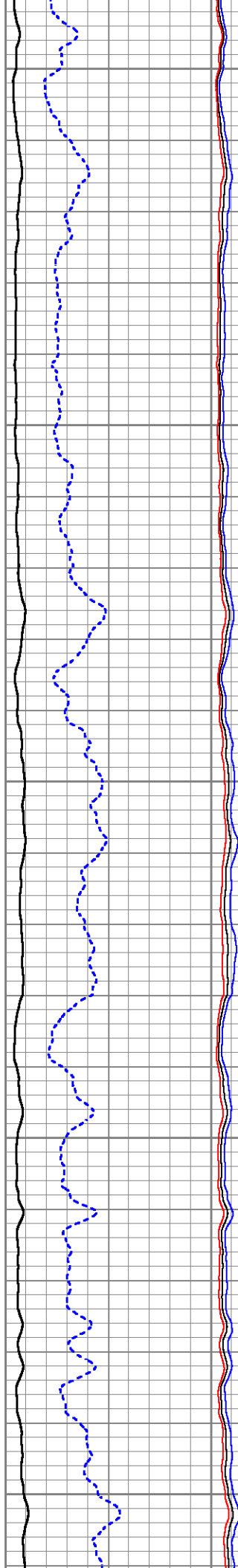
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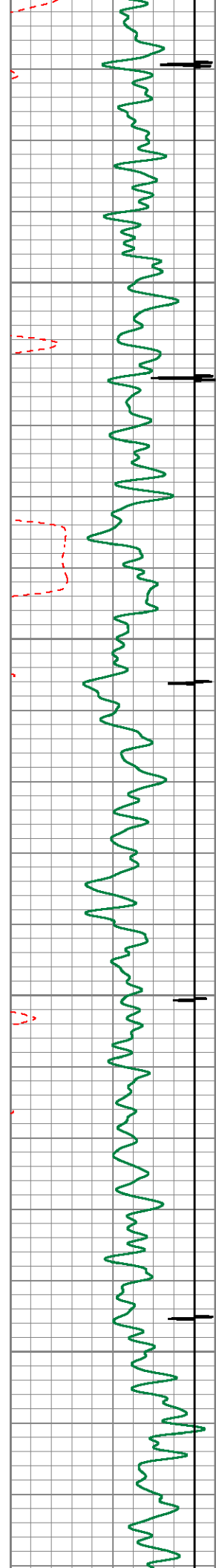




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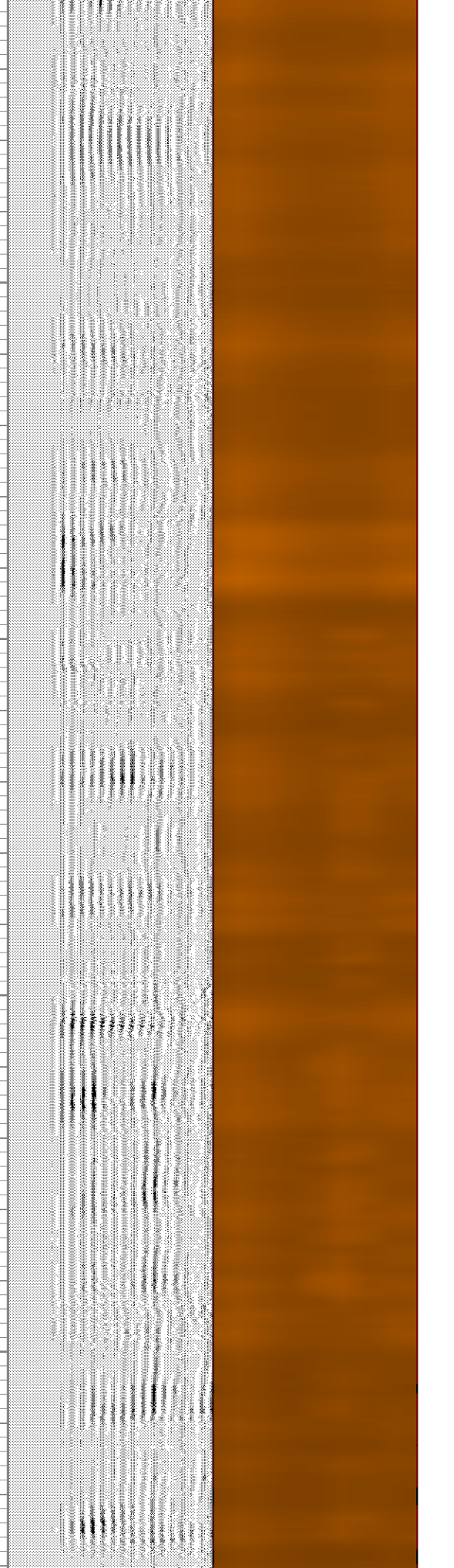
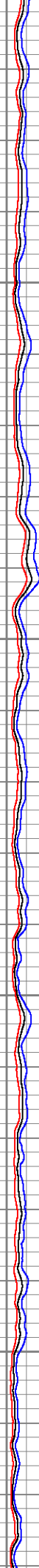
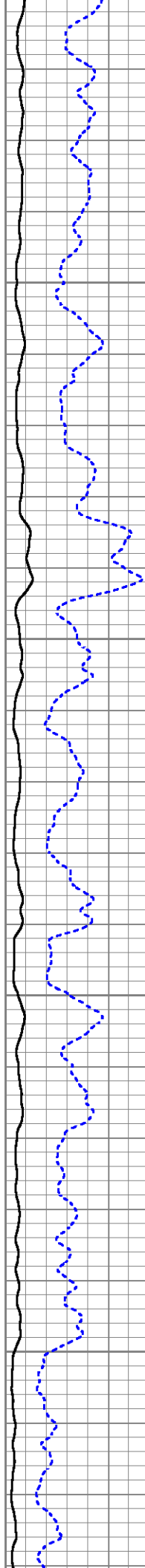
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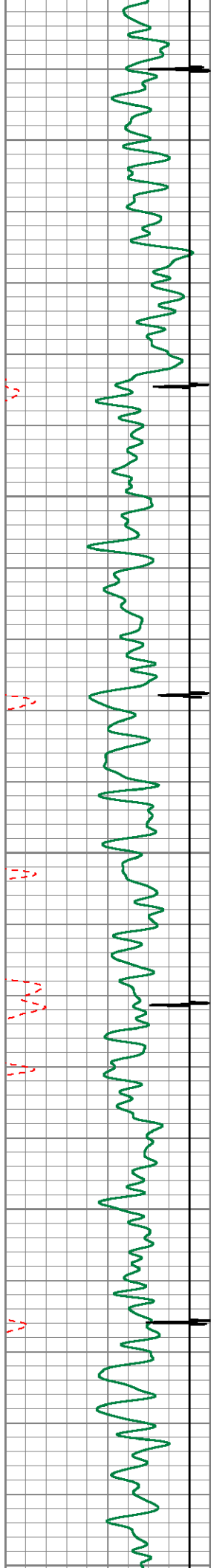




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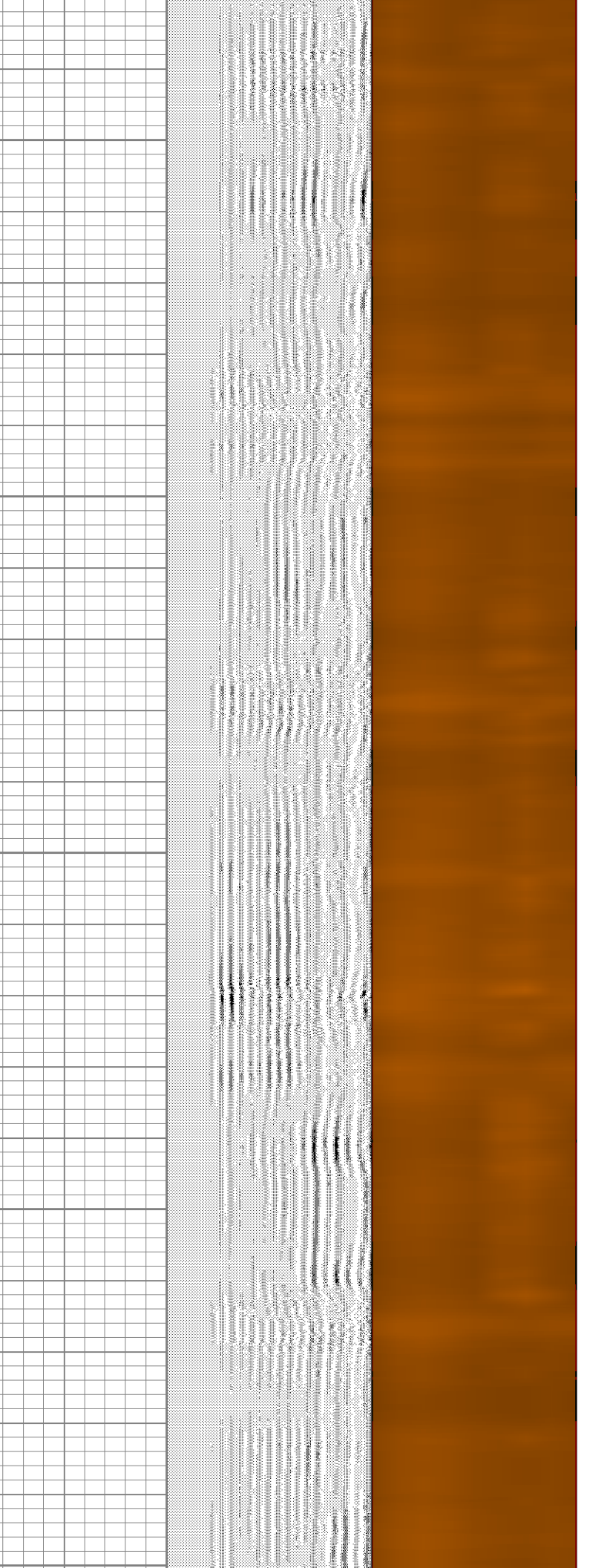
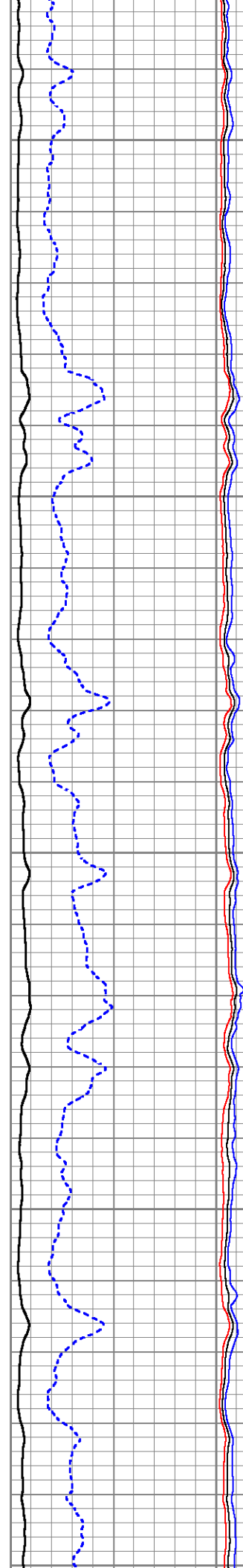




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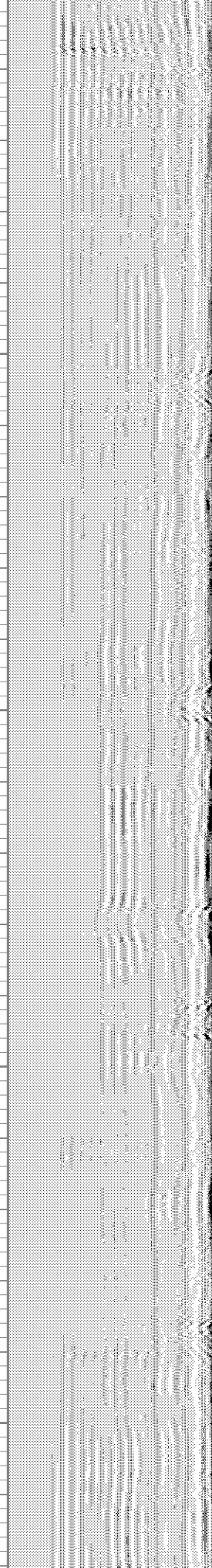
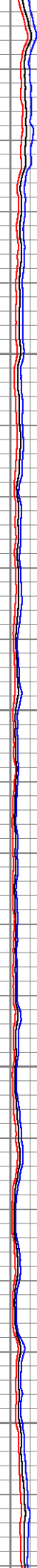
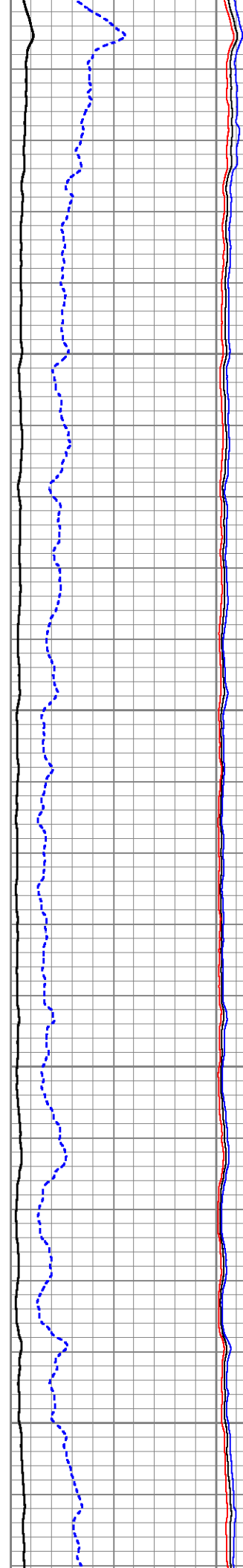
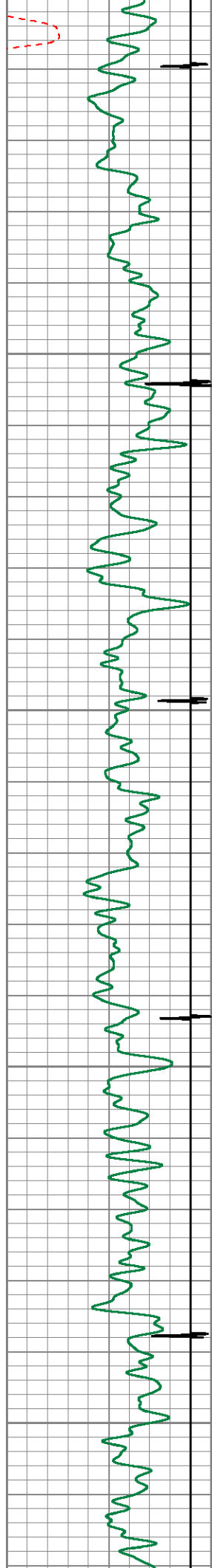
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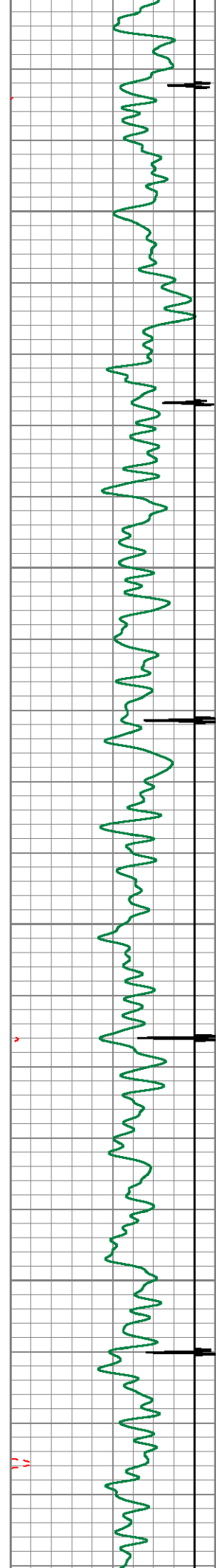


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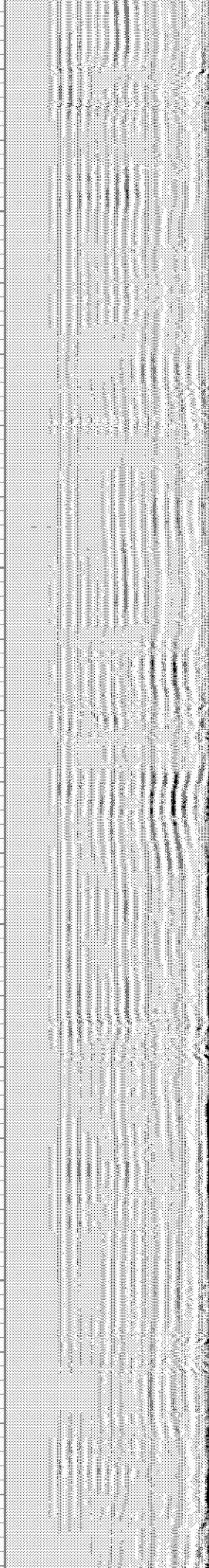
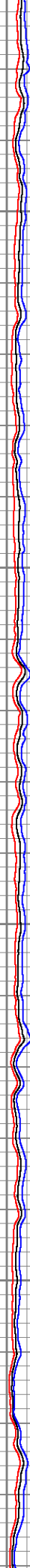
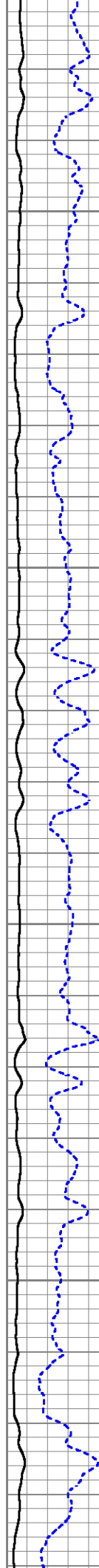
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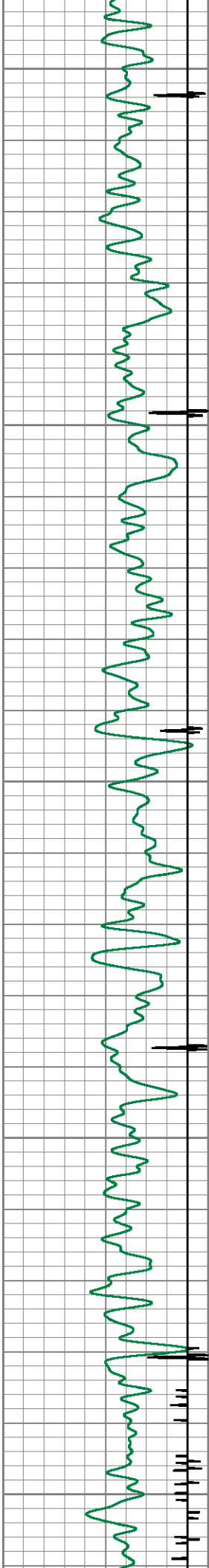




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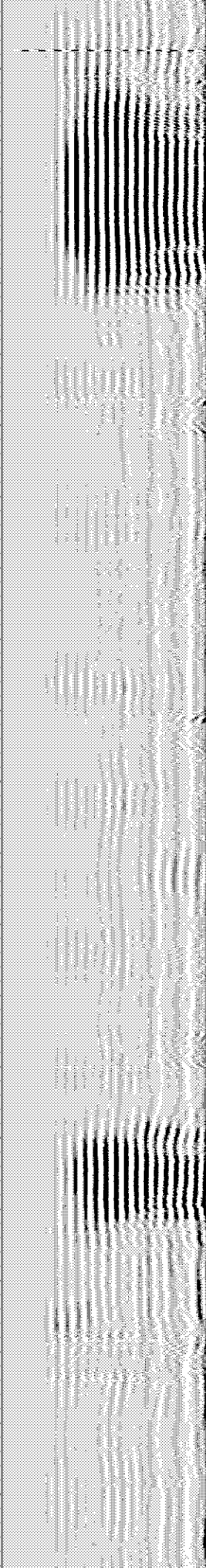
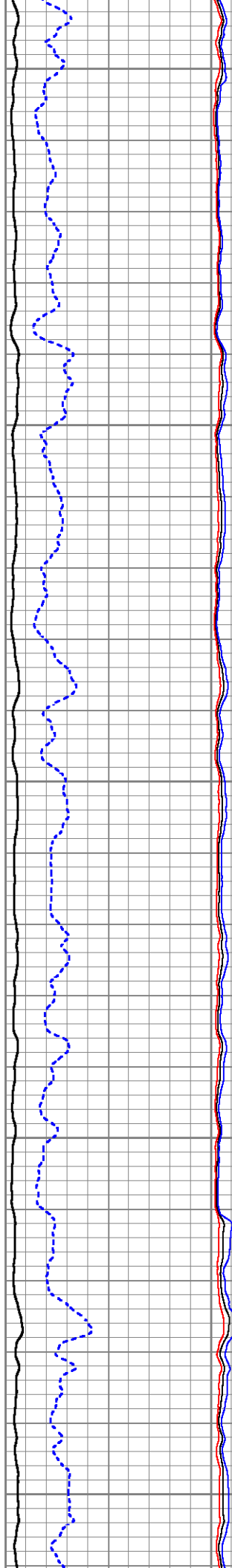
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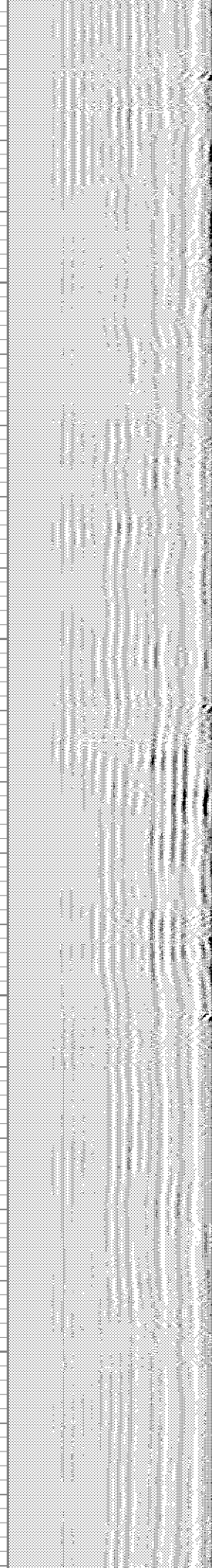
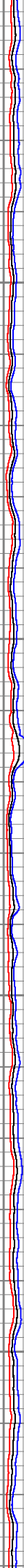
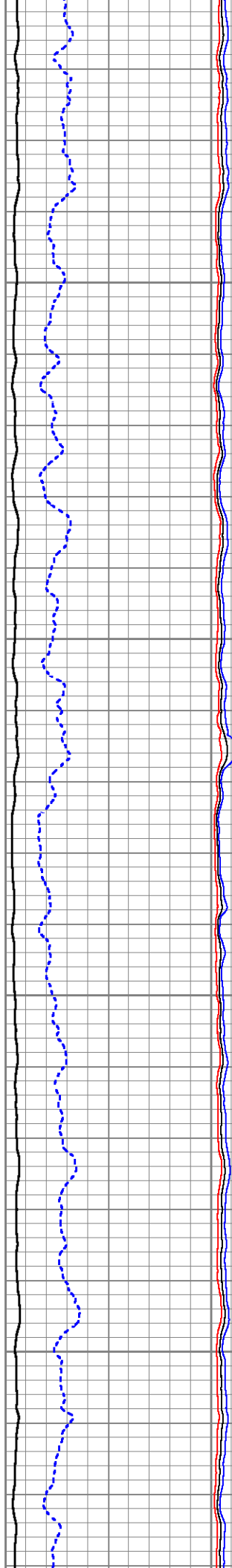
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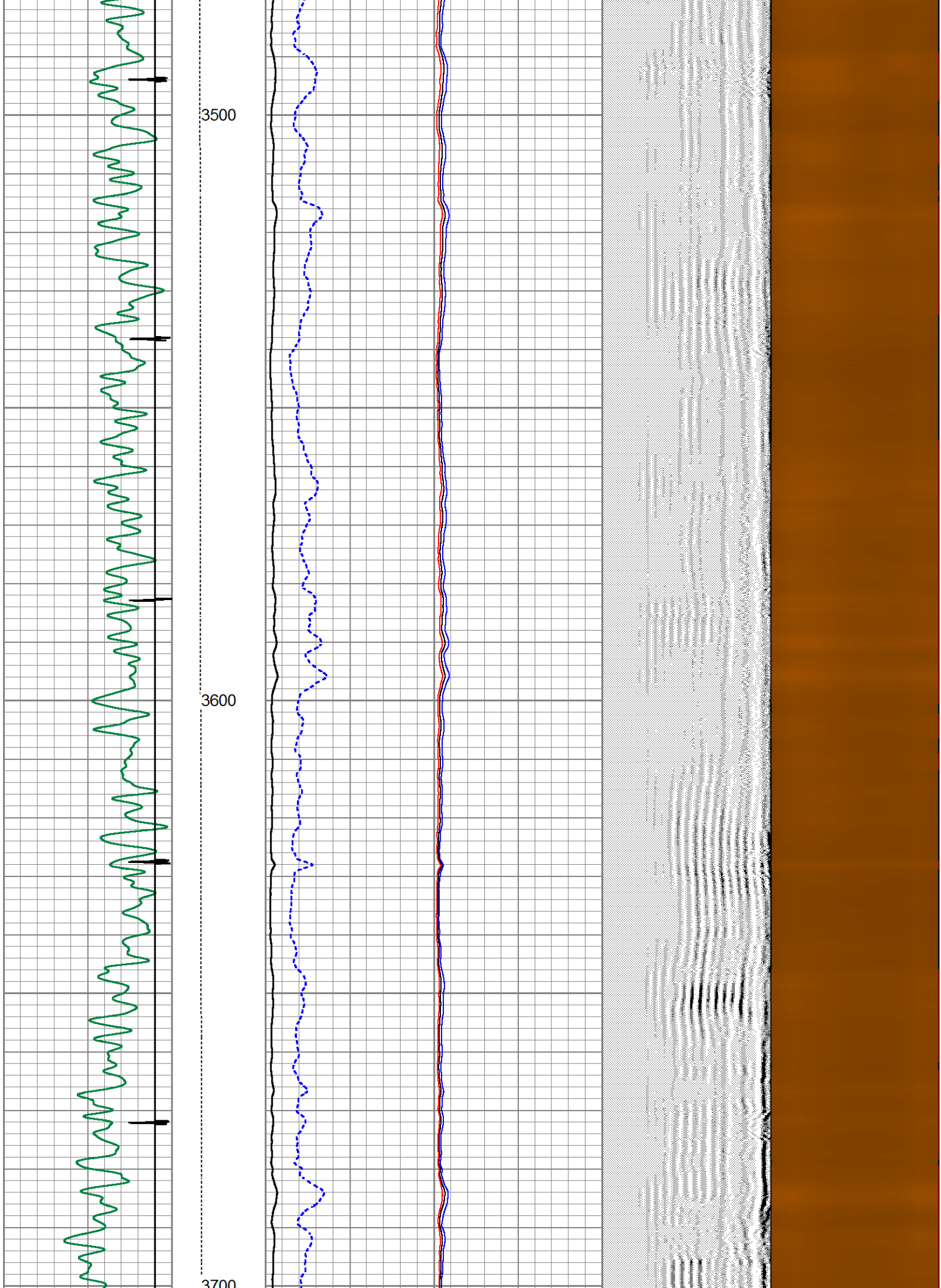


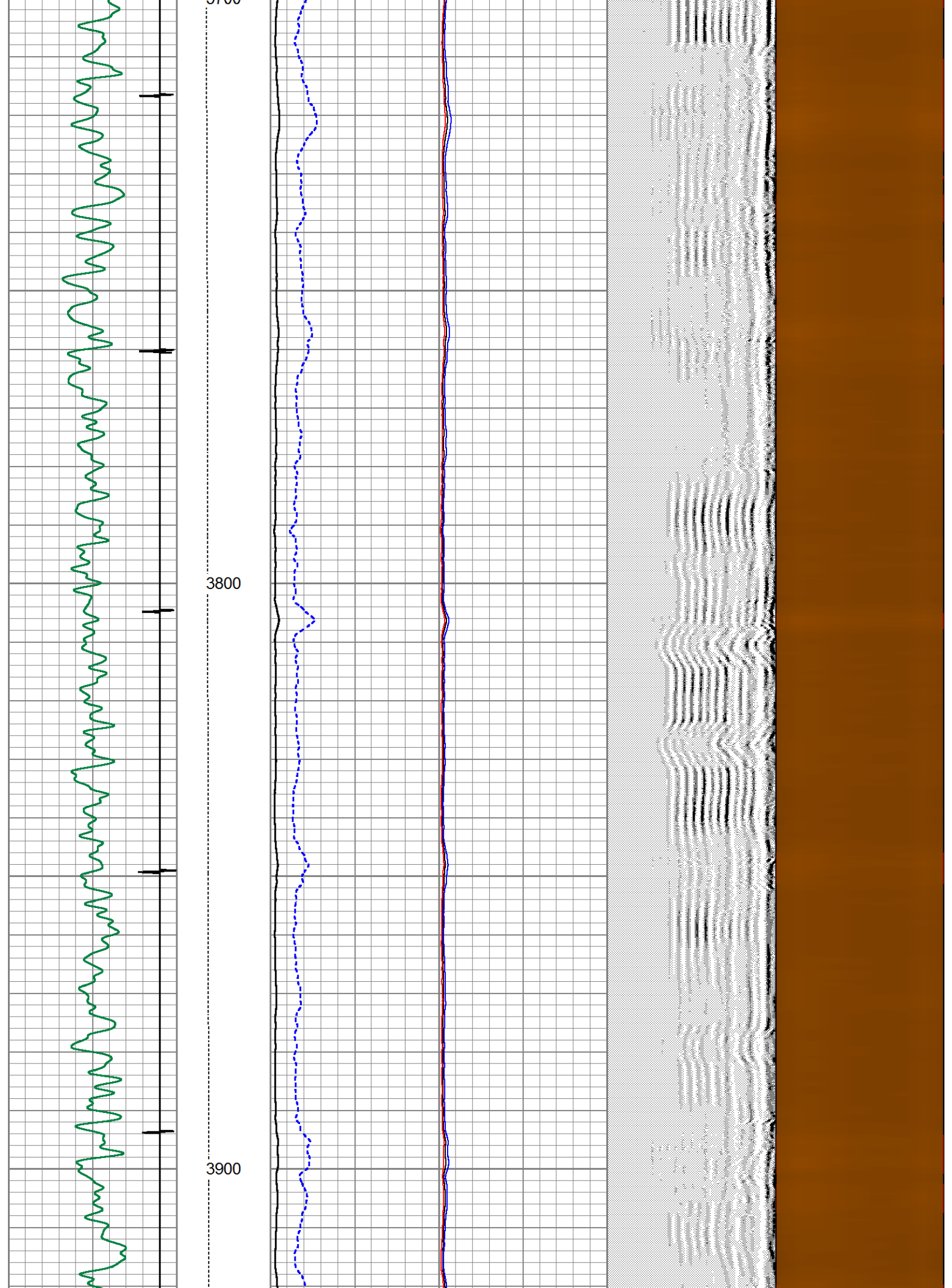


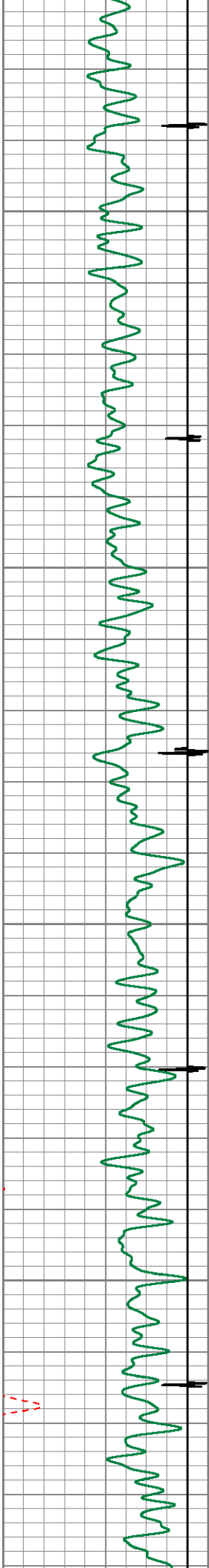
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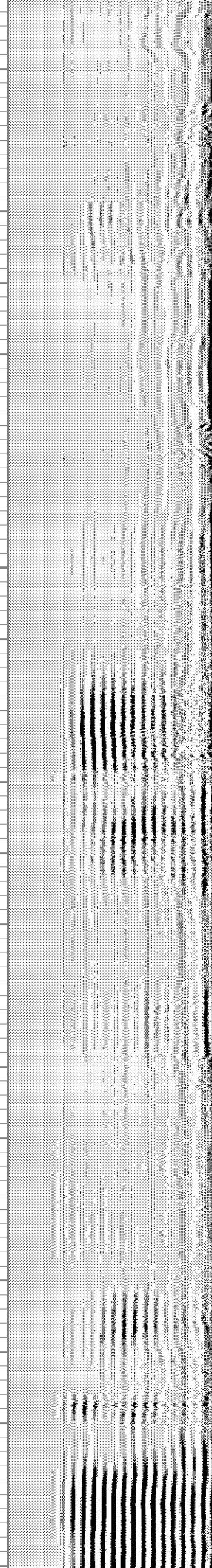
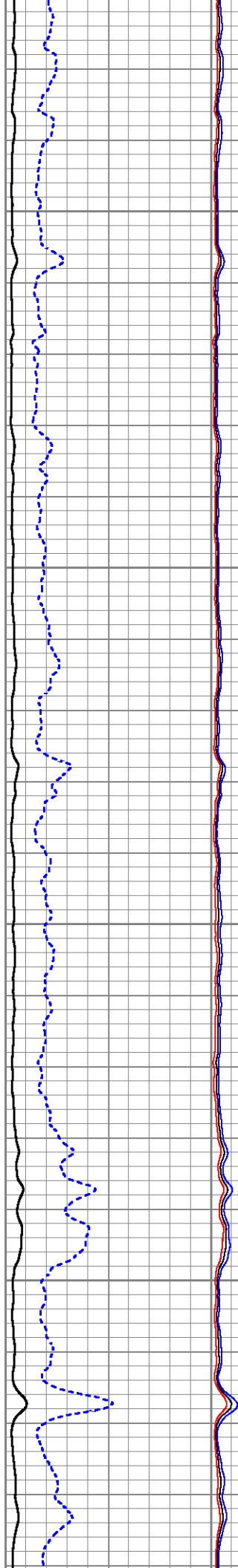


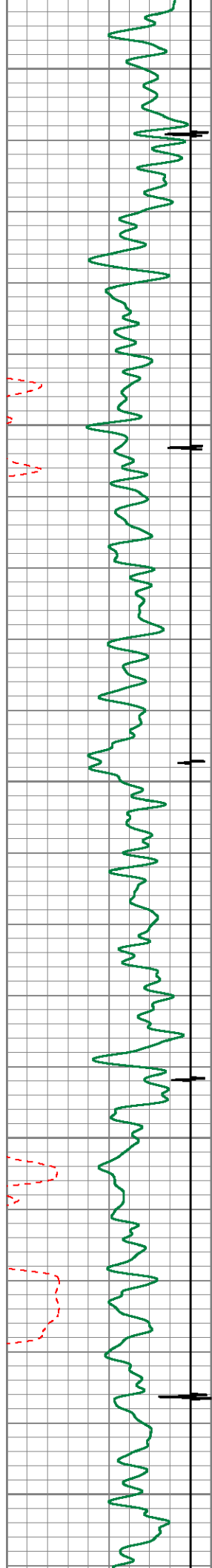




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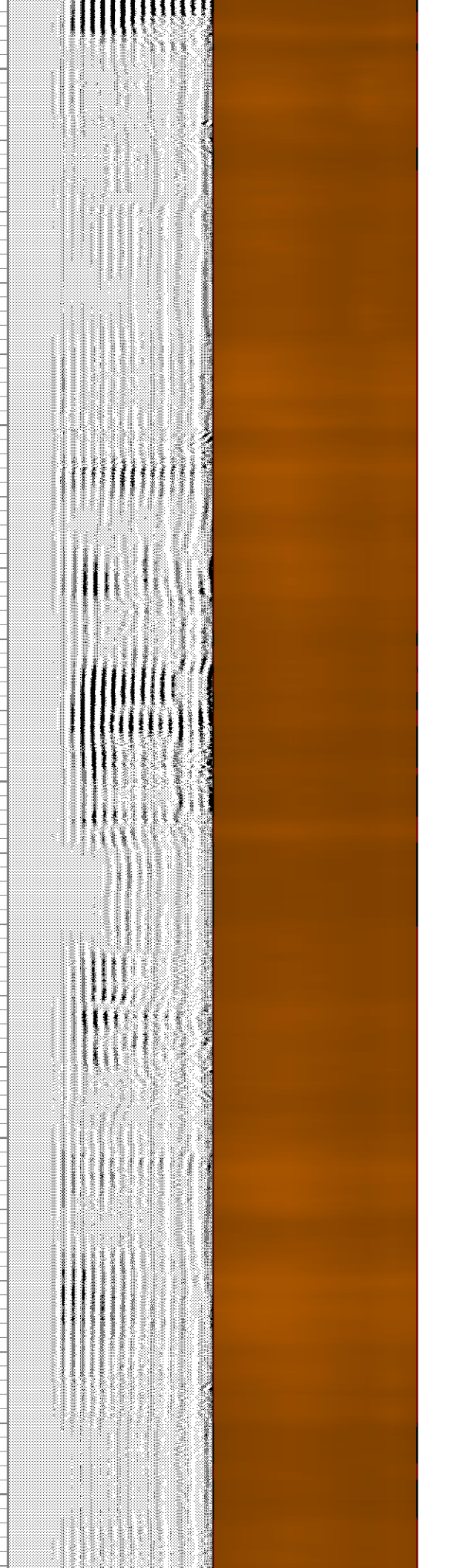
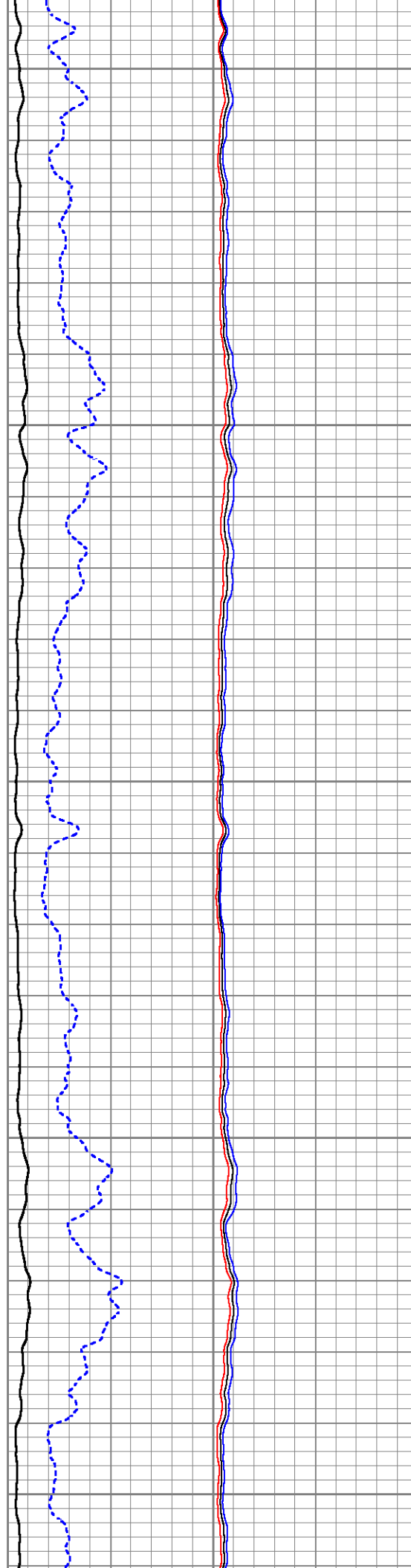
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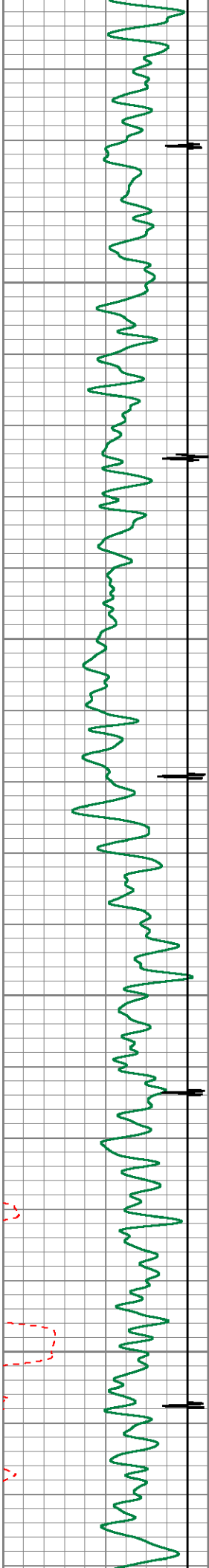




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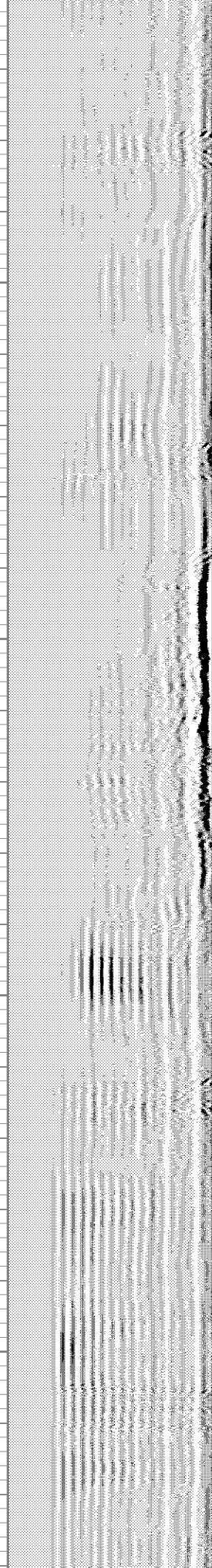
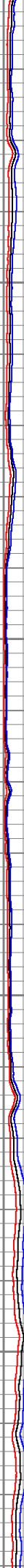
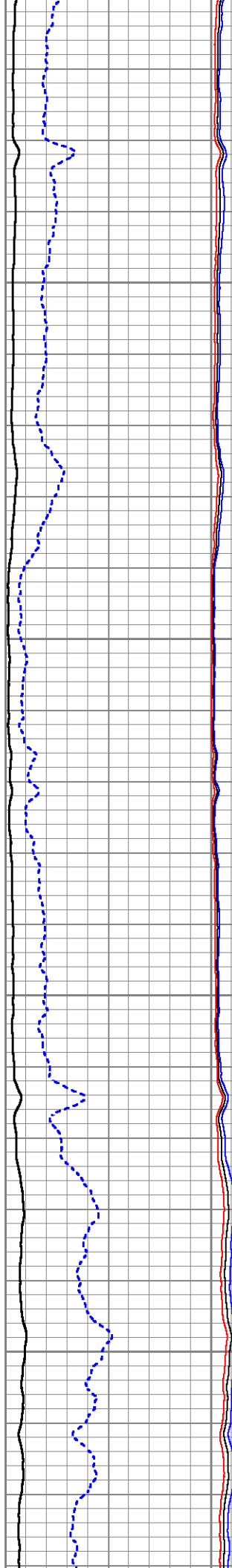
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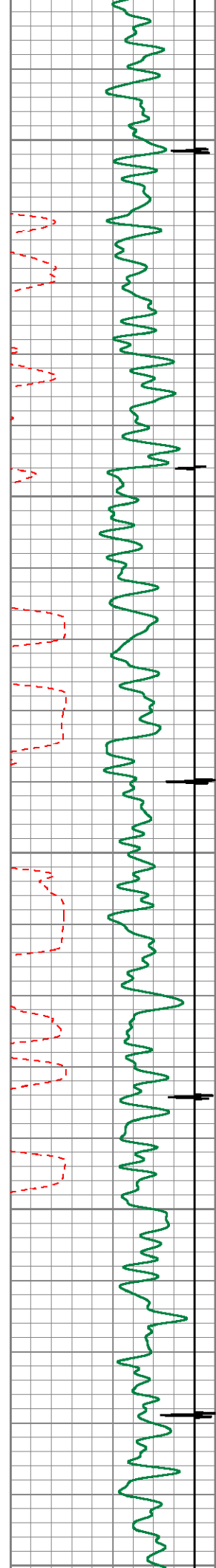




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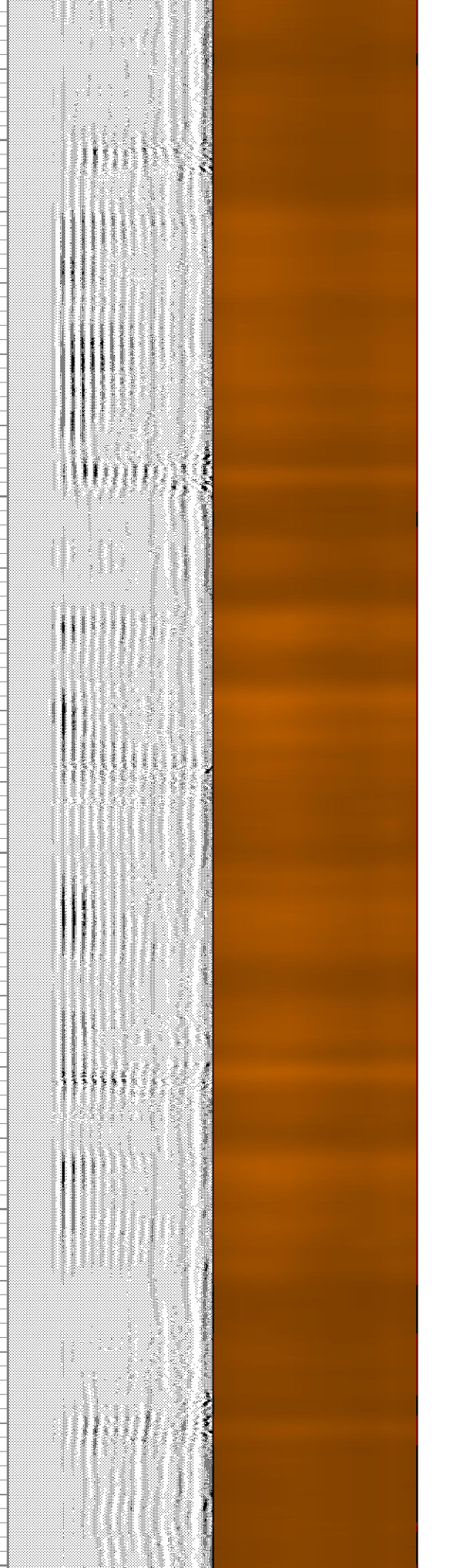
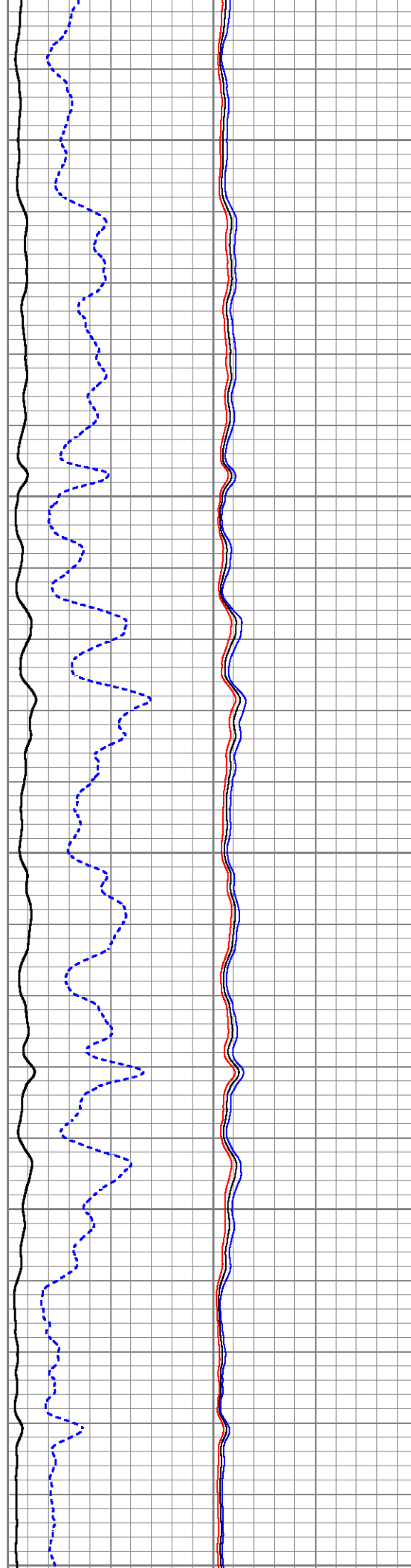


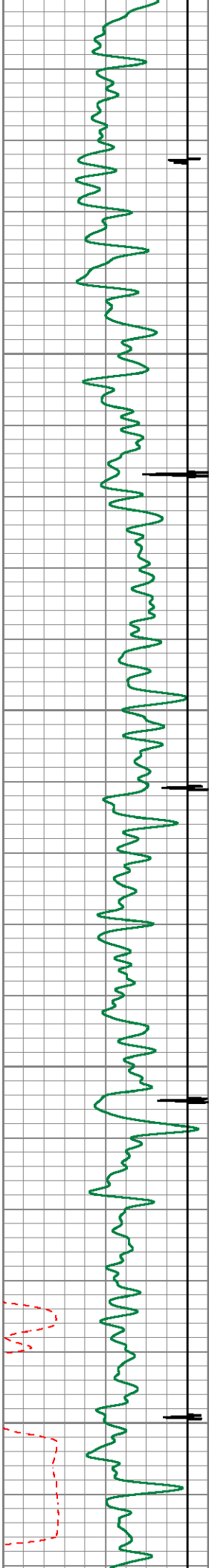


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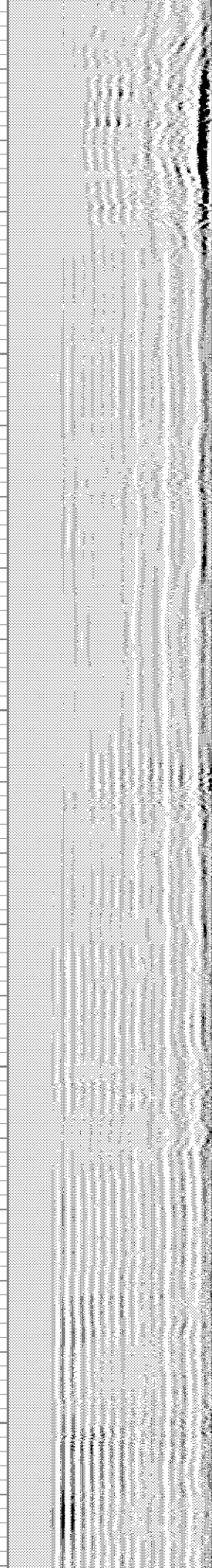
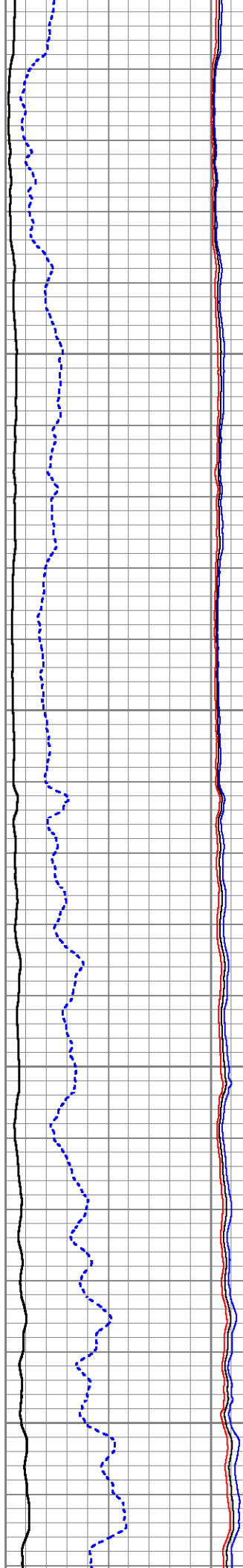
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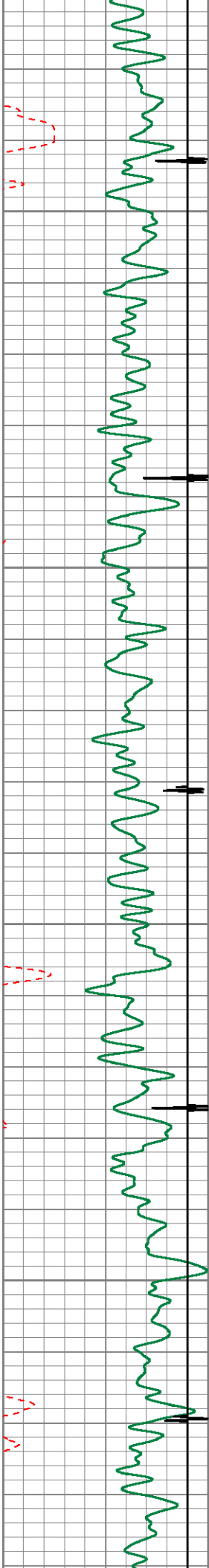




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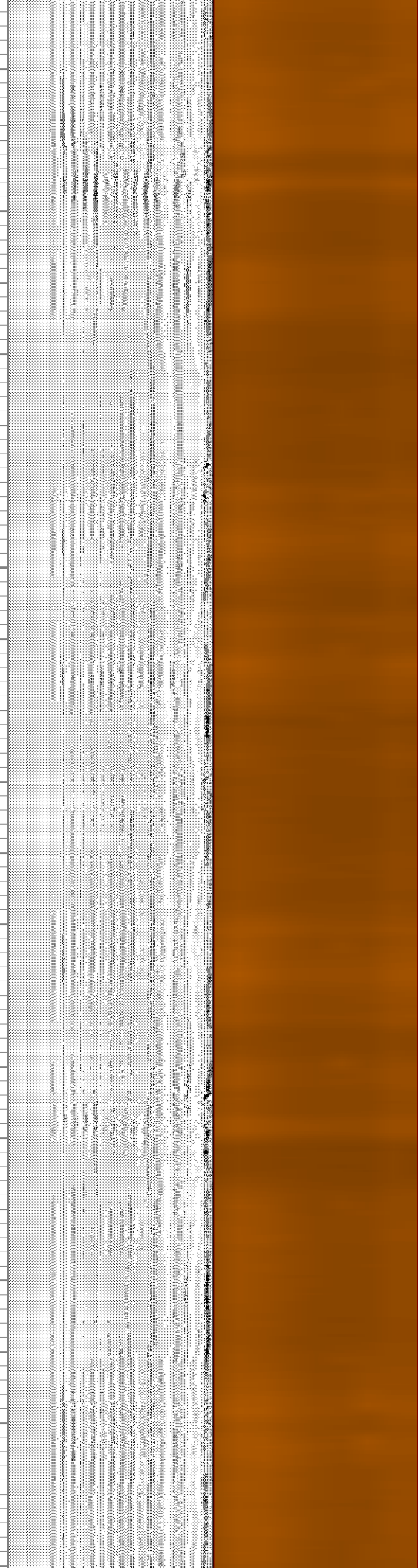
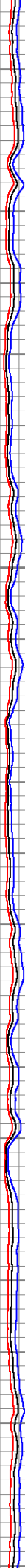
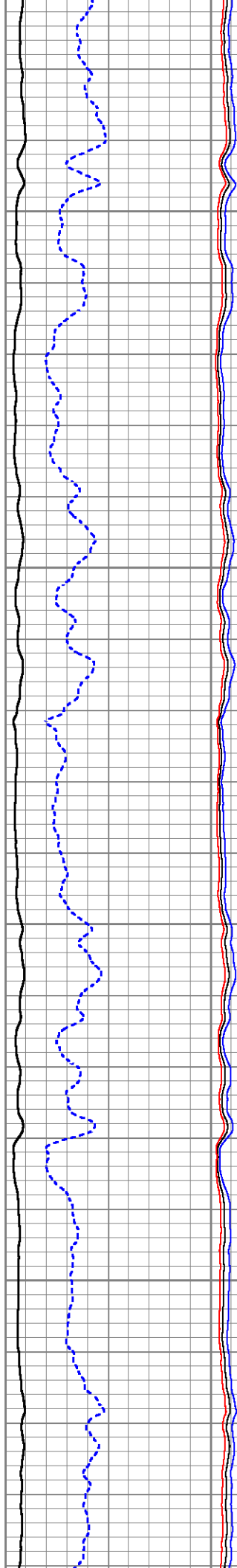
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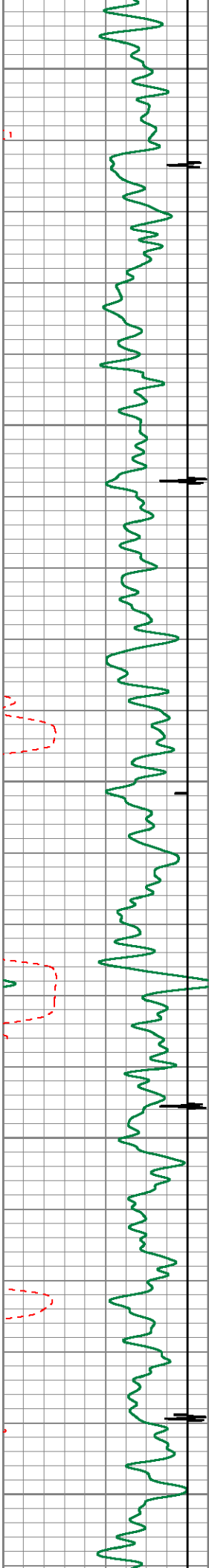




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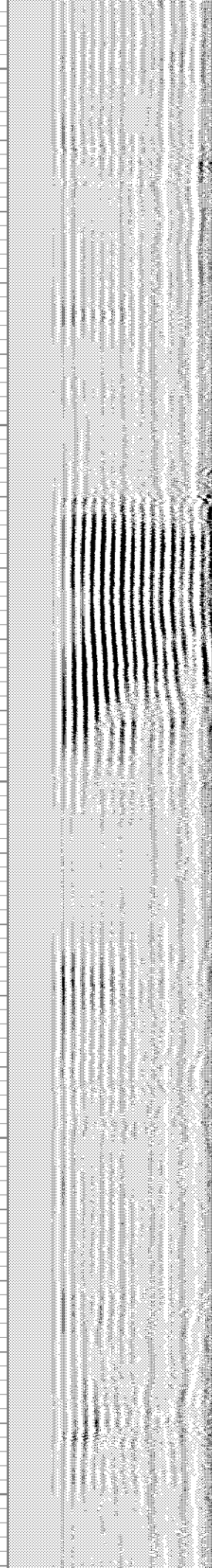
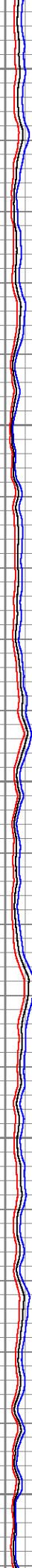
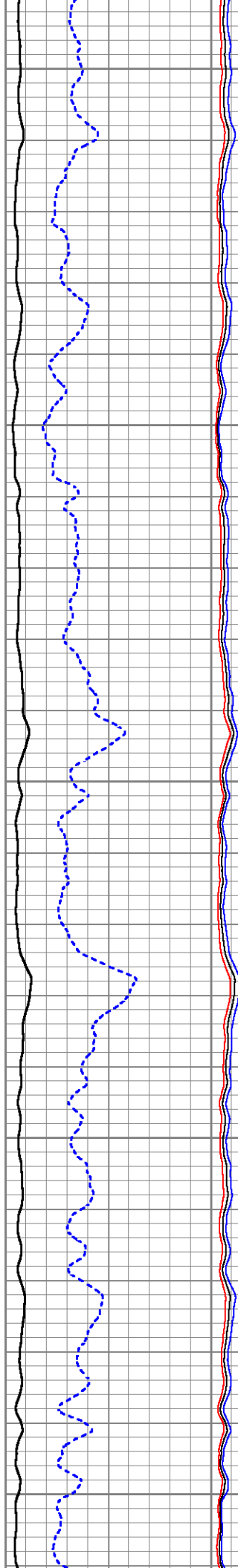
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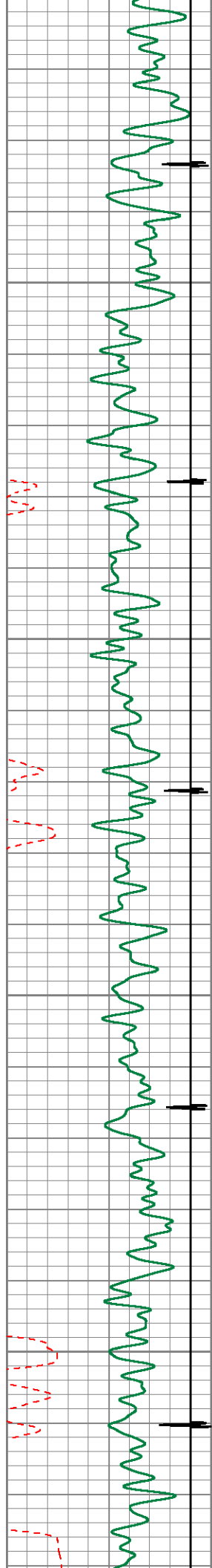




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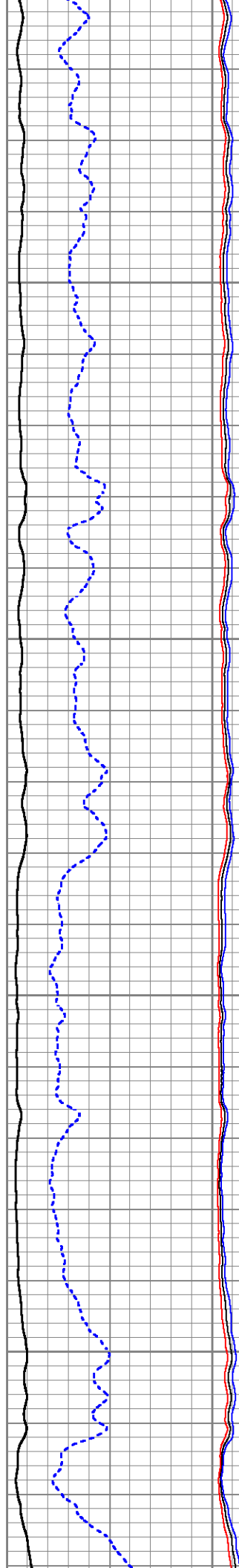
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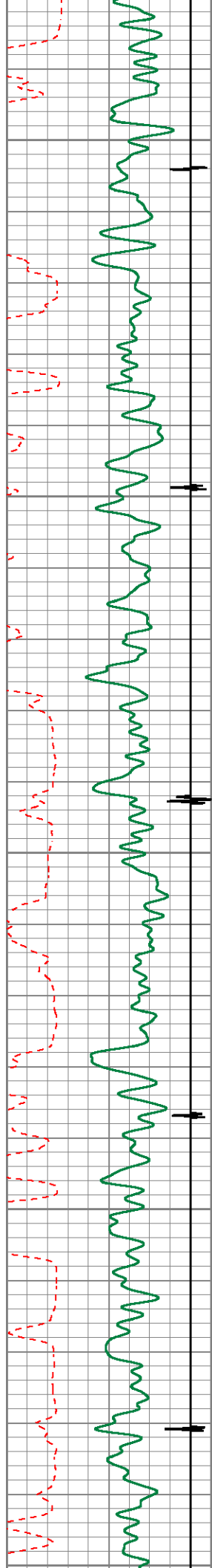




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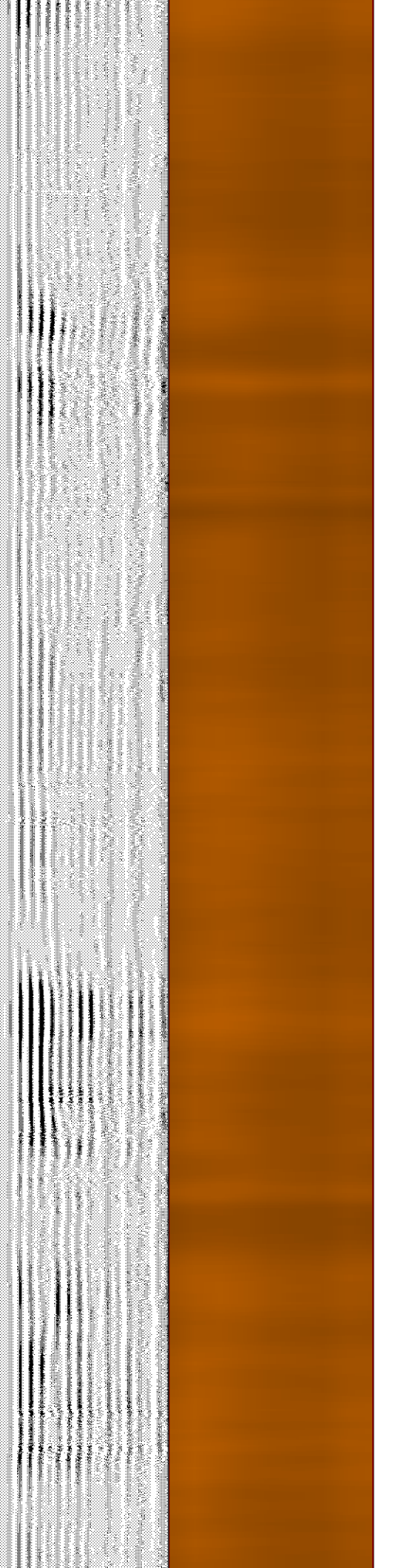
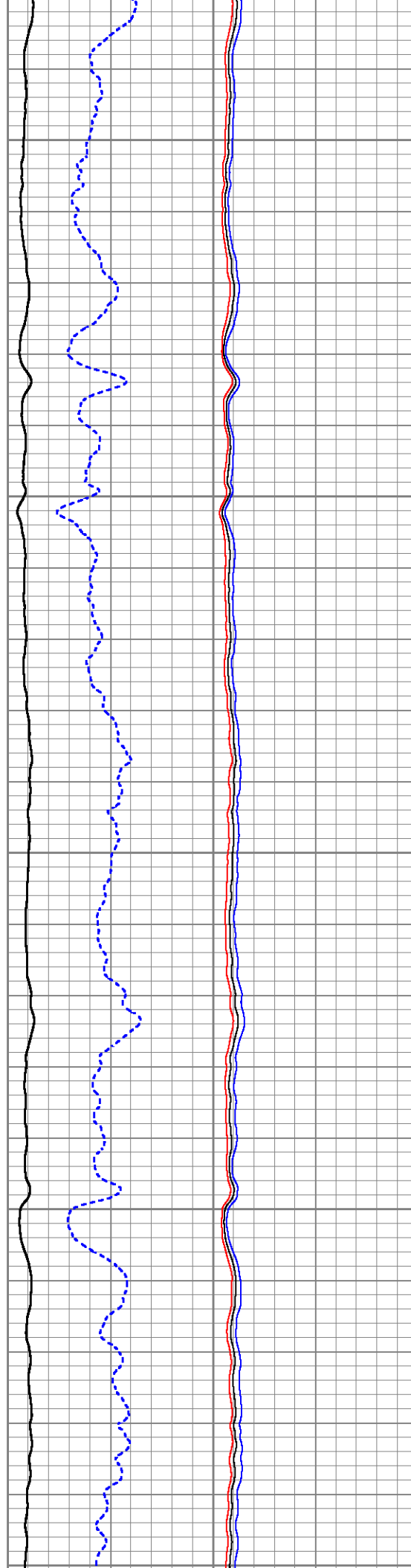


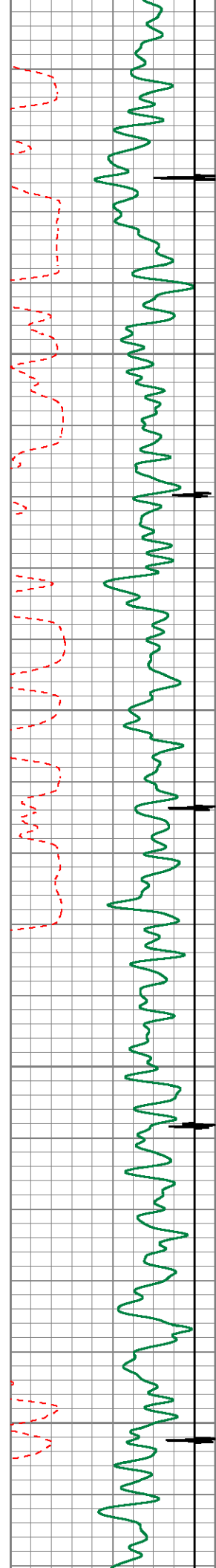


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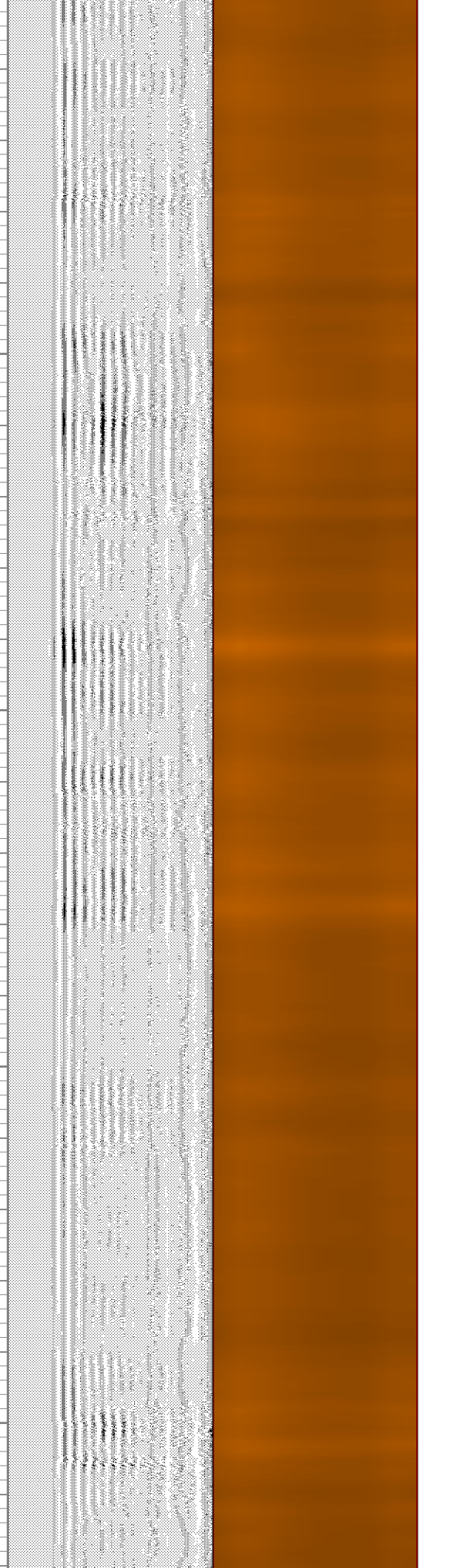
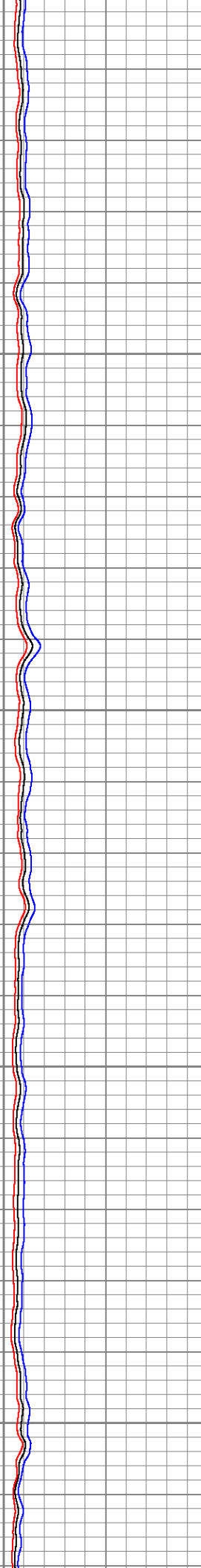
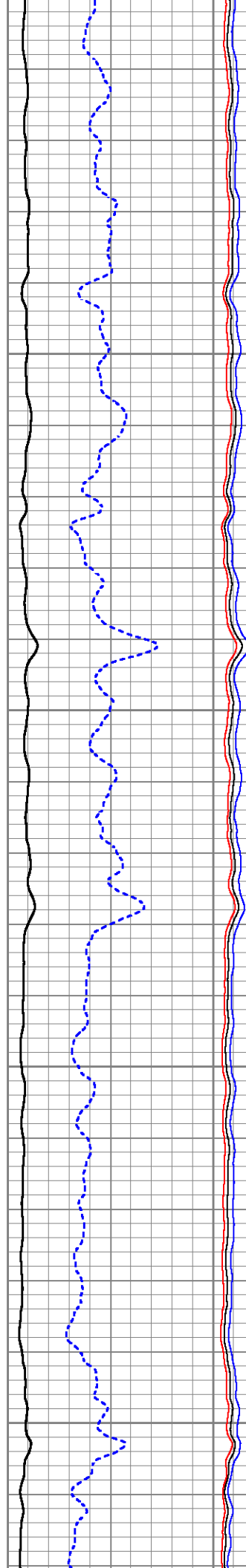
5800

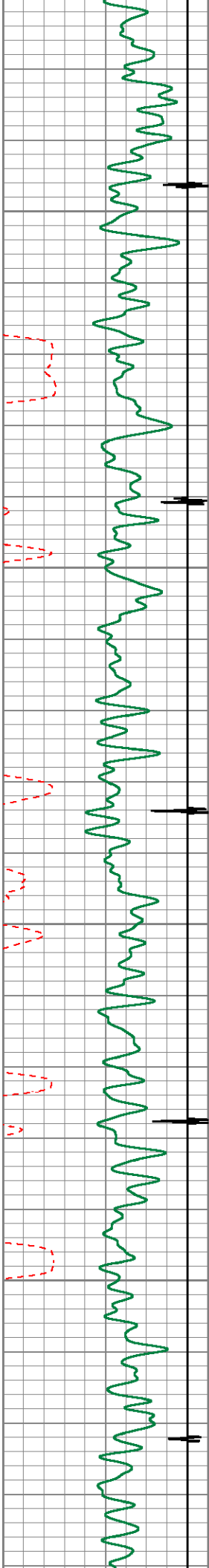
5900





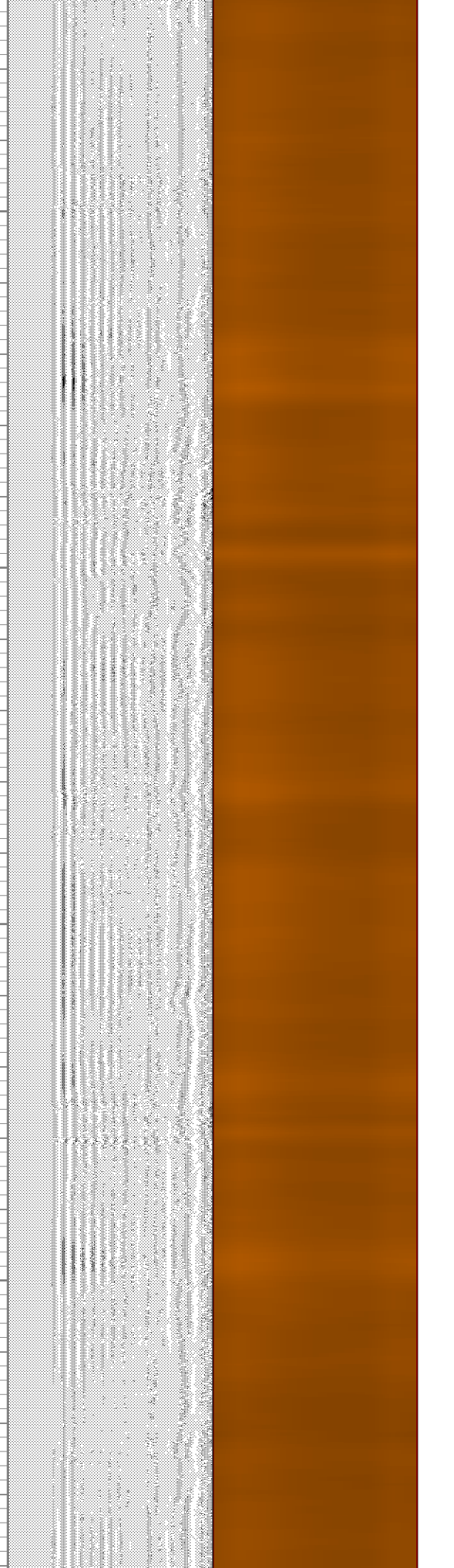
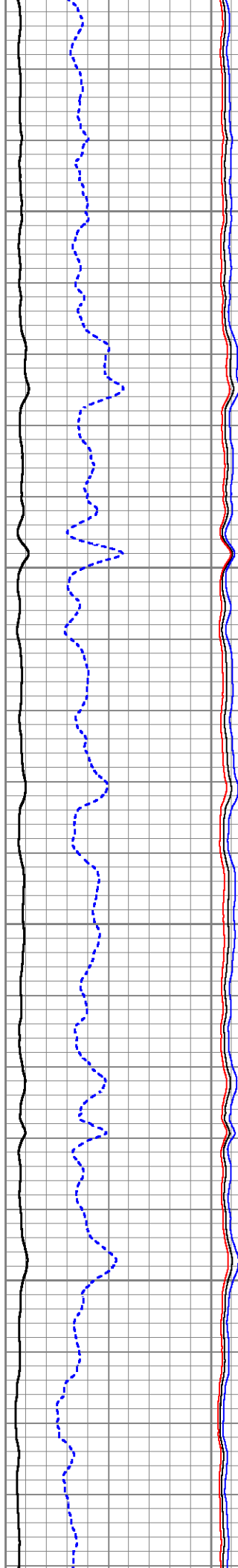
5500
6000
6100

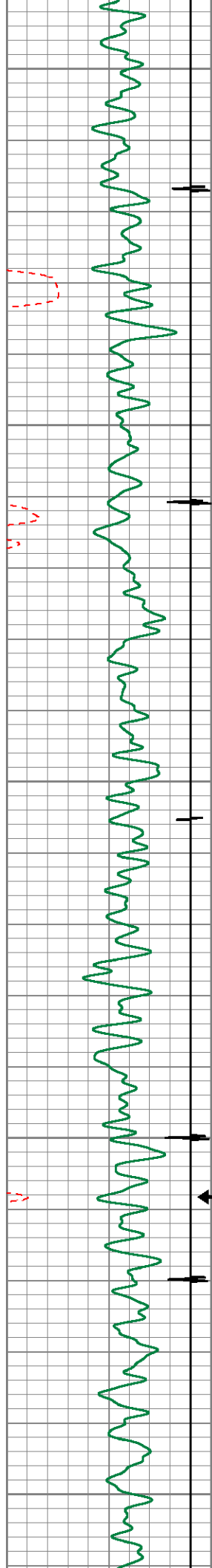




6200

6300

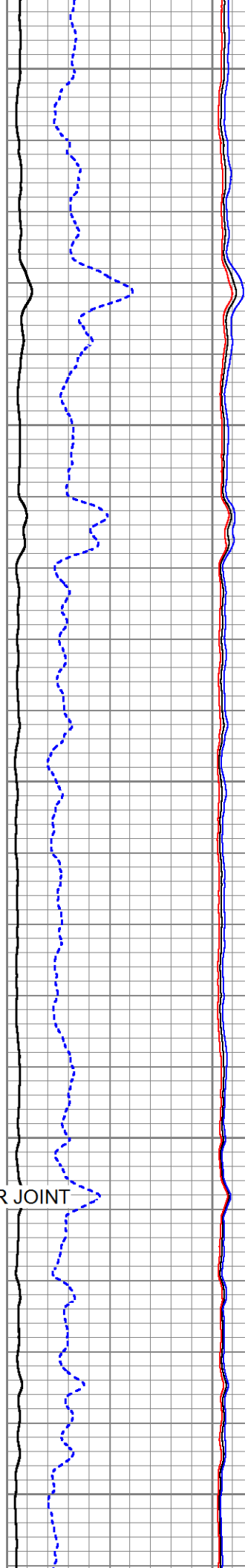


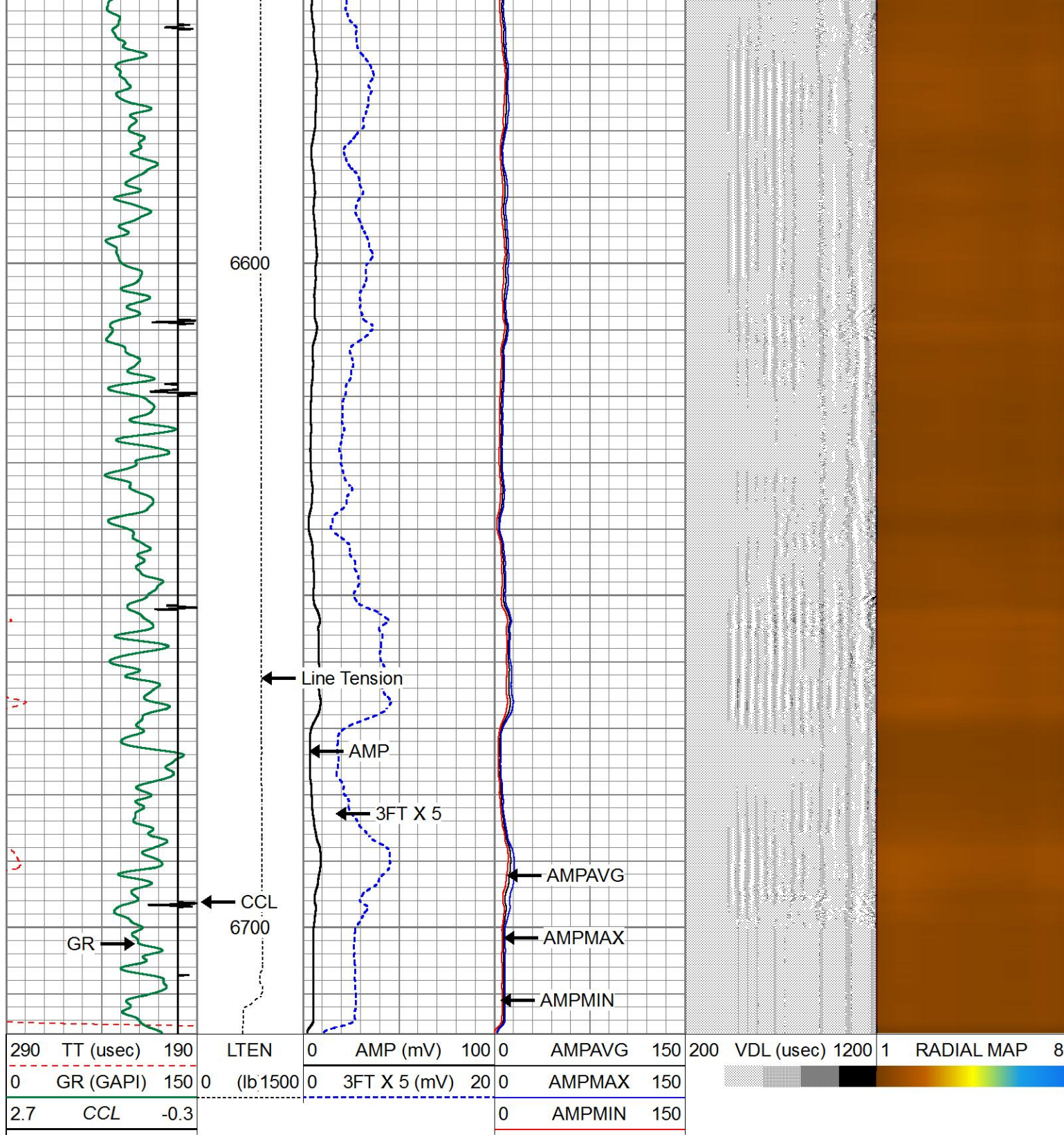



6400

6500

MARKER JOINT







REPEAT PASS

LOGGED WITH 2500 PSI APPLIED AT SURFACE

Database File	leffler_1c-23-l_cbl.db
Dataset Pathname	rcbl/pass2
Presentation Format	1patriotradii
Dataset Creation	Wed Sep 27 15:35:58 2017
Charted by	Depth in Feet scaled 1:240

290	TT (u sec)	190	LTEN	0	AMP (mV)	100	0	AMPAVG	150	200	VDL (u sec)	1200	1	RADIAL MAP	8
-----	------------	-----	------	---	----------	-----	---	--------	-----	-----	-------------	------	---	------------	---

0	GR (GAP)	150	0	(lb) 1500	0	SF1 X 5 (IIIv)	20	0	AMPMAX	150
2.7	CCL	-0.3						0	AMPMIN	150

Calibration Report

Database File	leffler_41n_23c_l.db
Dataset Pathname	rcbl/pass1
Dataset Creation	Wed Sep 27 06:55:33 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	GAP

BEFORE SURVEY VERIFICATION

Background	0.0		cps
Calibrator	0.0		cps
Difference		0.0	GAP

AFTER SURVEY VERIFICATION

Background	0.0		cps
Calibrator	0.0		cps
Difference		0.0	GAP

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:

Internal Reference Calibration, performed Mon Sep 11 00:00:20 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 1C-23-L
 Field WATTENBERG
 County WELD
 State COLORADO

Country USA