



PIONEER

Pioneer Energy Services

**CEMENT BOND LOG
WITH GAMMA RAY**

Comp. HIGHPOINT OPERATING CORP.
Well RSU AWNSCHUTZ FED 4-62-2-49566
Field WATTENBERG
Co. WELD
State COLORADO

Company **HIGHPOINT OPERATING CORP.**
Well **RSU AWNSCHUTZ FED 4-62-2-49566**
Field **WATTENBERG**
County **WELD** State **COLORADO**

Location: API #: 05-123-46840 Other Services
SHL: 814 FSL & 200 FWL
BHL: 875 FSL & 125 FEL
SEC 2 TWP N4 RGE W62
Permanent Datum G.L. Elevation 4527'
Log Measured From K.B. 10' Above Perm. Datum
Drilling Measured From K.B. G.L. 4527'

Date of Service	08-15-2018		
Run Number	ONE		
Depth Driller or PBTD	6477'		
Depth Logger	6330'		
Bottom Log Interval	6328'		
Top Log Interval	SURFACE		
Open Hole Size	N/A		
Type Fluid	WATER		
Fluid Level	SURFACE		
Fluid Density	N/A		
Max. Recorded Temperature	N/A		
Max. Wellhead Pressure	0 PSI		
Wellhead Connection	OPEN		
Estimated Cement Top	1070'		
Unit Number	P-129		
Wireline Size	.288"		
Location	FOTY MORGAN		
Recorded By	KYLE HARRIS		
Witnessed By	CHRIS BEKSTEAD		
Size	W/Ft	Top	Bottom
Tubing Record	N/A	N/A	N/A
Surface Casing	9.625"	36#	SURFACE 830'
Production Casing	7"	23#	SURFACE 6477'
Liner Record	N/A	N/A	N/A

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All interpretations are opinions based on inferences from electrical or other measurements and Pioneer Wireline Services, LLC cannot and does not guarantee the accuracy or correctness of any interpretation, and Pioneer Wireline Services, LLC will not be liable or responsible for any loss, costs, damages, or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees.

Comments

N/A DENOTES NOT AVAILABLE OR NON-APPLICABLE.

THANK YOU FOR USING PIONEER ENERGY SERVICES!

Your Pioneer Energy Services Crew

Engineer: KYLE HARRIS
Operator: TYSON DOBBINS
Operator: MANUEL BATREZ
Operator:

Tool Data - Services

CBL 070151
GR 090702

Serial Number

Top - Bottom

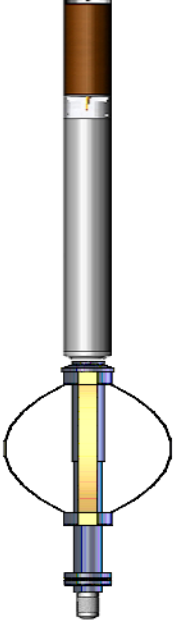
BHTEMP_Src	BOREID	BOTTEMP	CASEOD	CASETHCK	CASEWGHT	MAXAMPL
TEMP	in 7.875	degF 100	in 7	in 0.317	lb/ft 23	mV 0
MINAMPL	MINATTN	PERFS	PPT	SRFTEMP	TDEPTH	
mV 1	db/ft 0.08	0	usec 0	degF 0	ft 0	


Variable Description

BHTEMP_Src : BHTEMP Input Source Selector
BOREID : Borehole I.D.
BOTTEMP : Bottom Hole Temperature
CASEOD : Casing O.D.
CASETHCK : Casing Thickness
CASEWGHT : Casing Weight
MAXAMPL : Maximum Amplitude

MINAMPL : Minimum Amplitude
MINATTN : Minimum Attenuation
PERFS : Perforation Flag
PPT : Predicted Pipe Time
SRFTEMP : Surface Temperature
TDEPTH : Total Depth

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
			Cable Head-Titan_144 1 7/16" Titan Cable Head	1.03	1.44	2.00
			Centralizer-275 Probe 2 3/4" Probe Adjustable Spring Centralizer	2.88	2.75	15.00
			PROBE-RBT-DIGITAL-RBL-D (070151) Probe 2 3/4" Radii Bond-Digital	8.75	2.75	100.00
WVFS8	15.03					
WVFS7	15.03					
WVFS6	15.03					
WVFS5	15.03					
WVFS4	15.03					
WVFS3	15.03					
WVFS2	15.03					
WVFS1	15.03					
WVFCAL	15.03					
WVF3FT	15.03					
WVF5FT	14.03		Centralizer-275 Probe 2 3/4" Probe Adjustable Spring Centralizer	2.88	2.75	15.00

CCL	7.09				
GCT_TEMP	6.29				
GR	5.71				
PROBE-GR/CCL-DIGITAL-275 Probe GCT 4.75672) Probe 2 3/4" Gamma Ray/Temp/CCL			2.75	60.00	
Centralizer-275 Probe 2 3/4" Probe Adjustable Spring Centralizer			2.88	2.75	15.00
Bullnose-PROBE Probe Go Pin Pressure Cap			0.33	1.38	1.00
Dataset: highpionr_rsu anschutz 4-62-49566_0512346840_20180815_cbl.db: field/well/run1/MAIN3					
Total length: 23.50 ft					
Total weight: 208.00 lb					
O.D.: 2.75 in					


PIONEER

Pioneer Energy Services

FREE PIPE SECTION

Database File highpionr_rsu anschutz 4-62-49566_0512346840_20180815_cbl.db
Dataset Pathname FREE
Presentation Format pinr_scbl
Dataset Creation Wed Aug 15 21:24:41 2018
Charted by Depth in Feet scaled 1:240

3Ft Travel Time

LTEN

3' Amplitude

Sector

VDL

1 Sector Map 8

310 (usec) 210

(lb)

0 (mV) 100

Amplitude Average

200 (usec) 1200

-9 Collar Locator 1

0 1000

3' Amplified
Amplitude X 5

0 150

Gamma Ray

0 (GAPI) 150

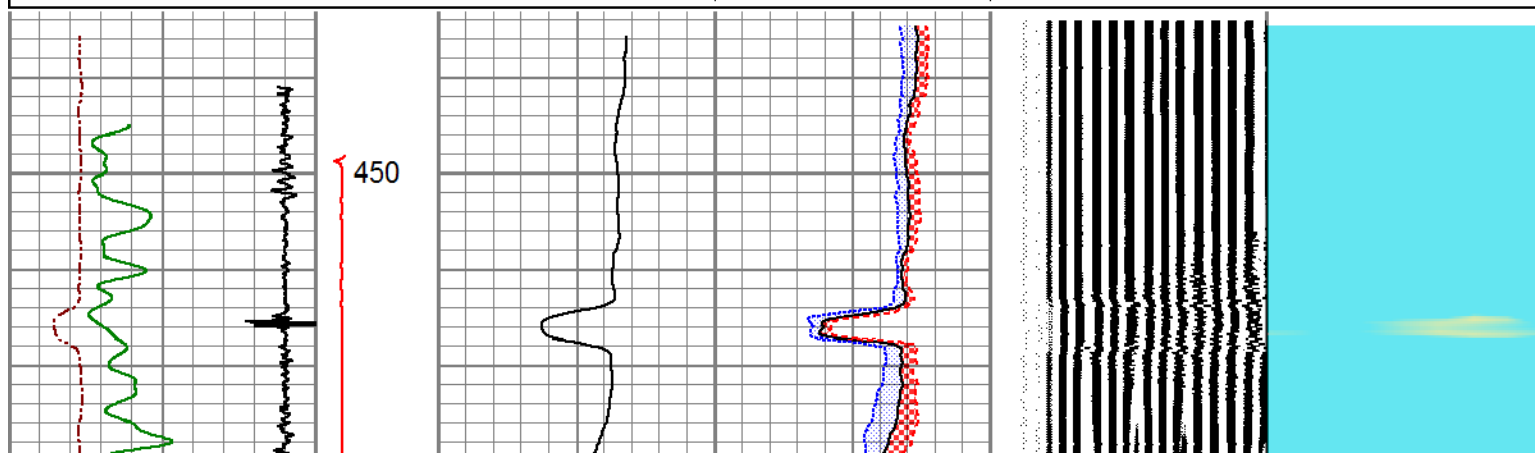
0 (mV) 20

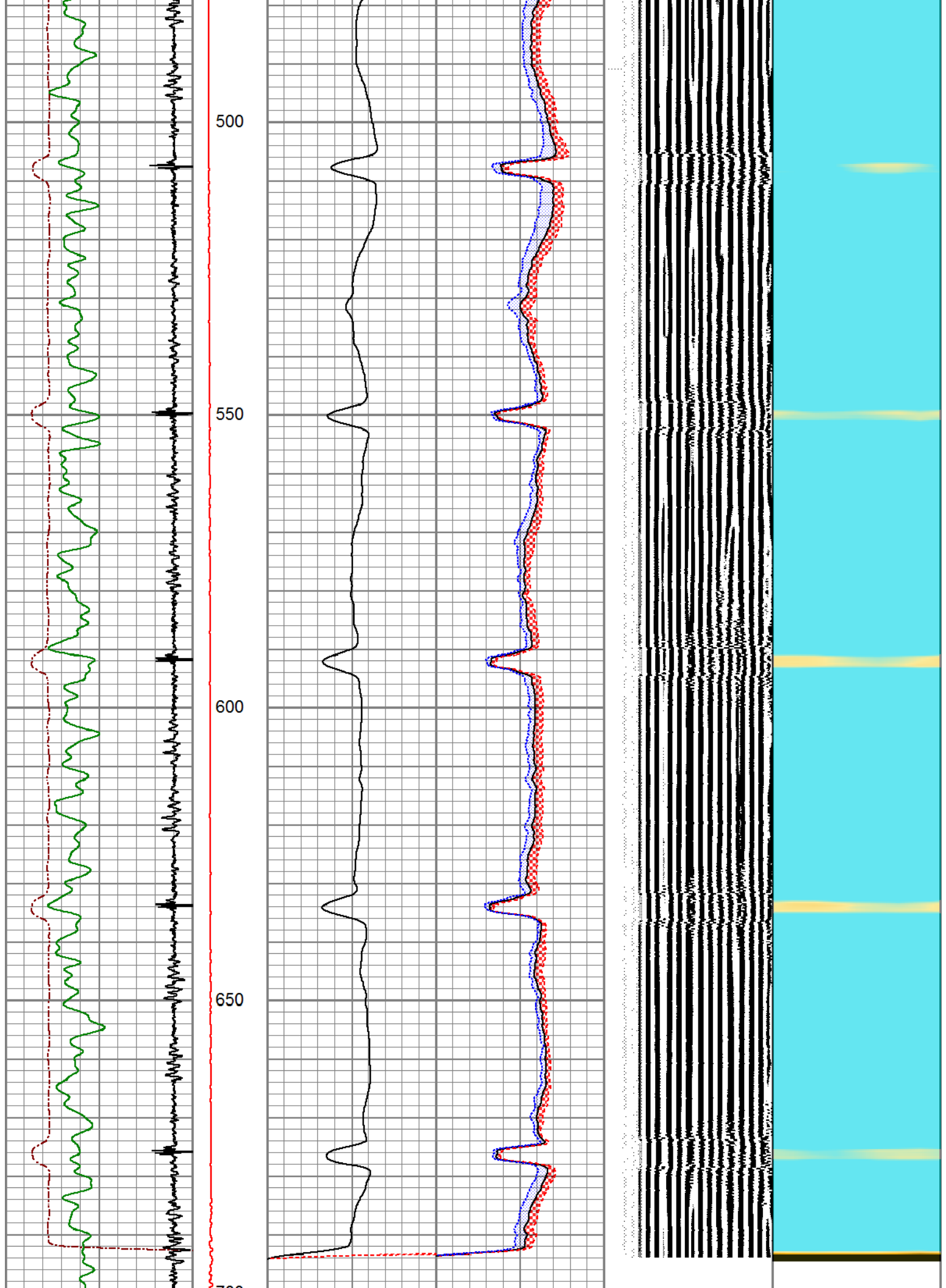
Sector
Amplitude Maximum

0 150


Sector
Amplitude Minimum

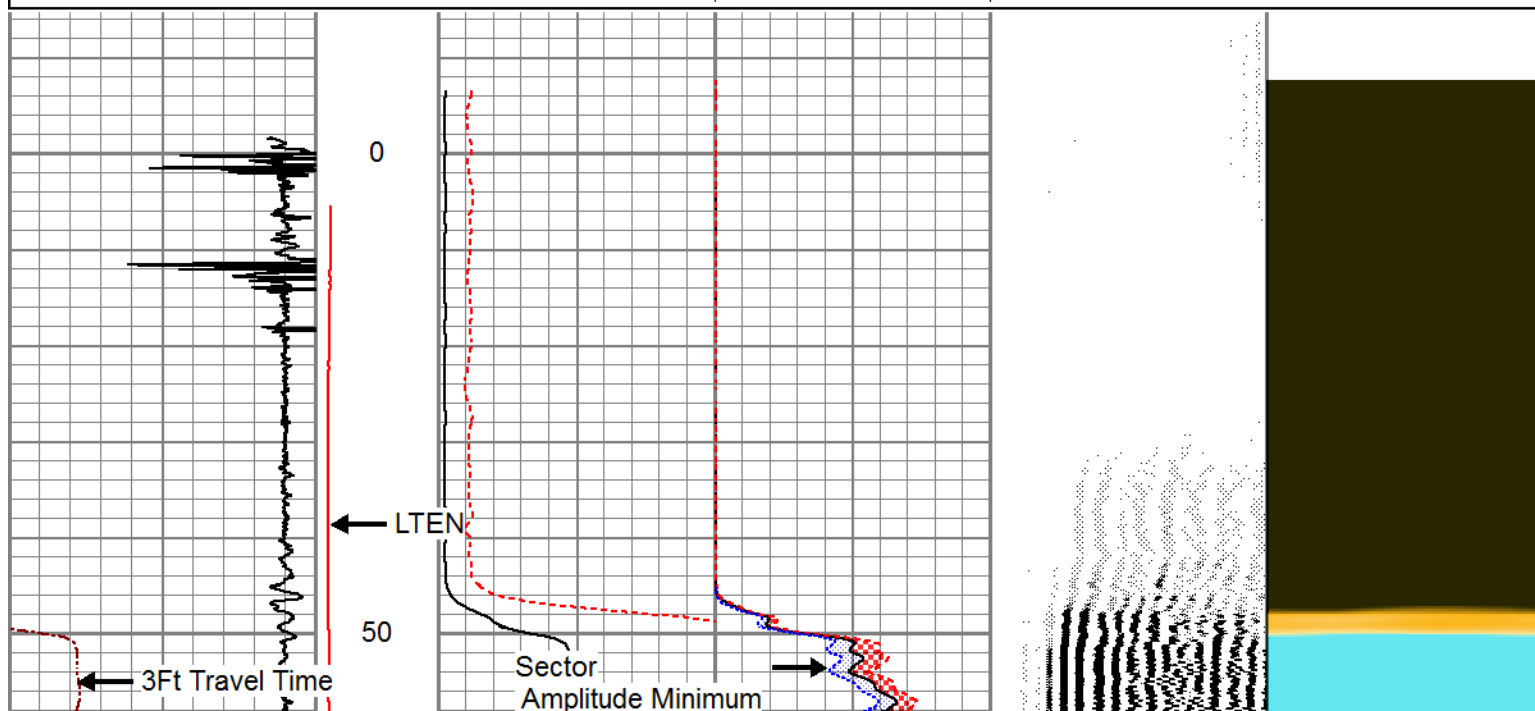
0 150

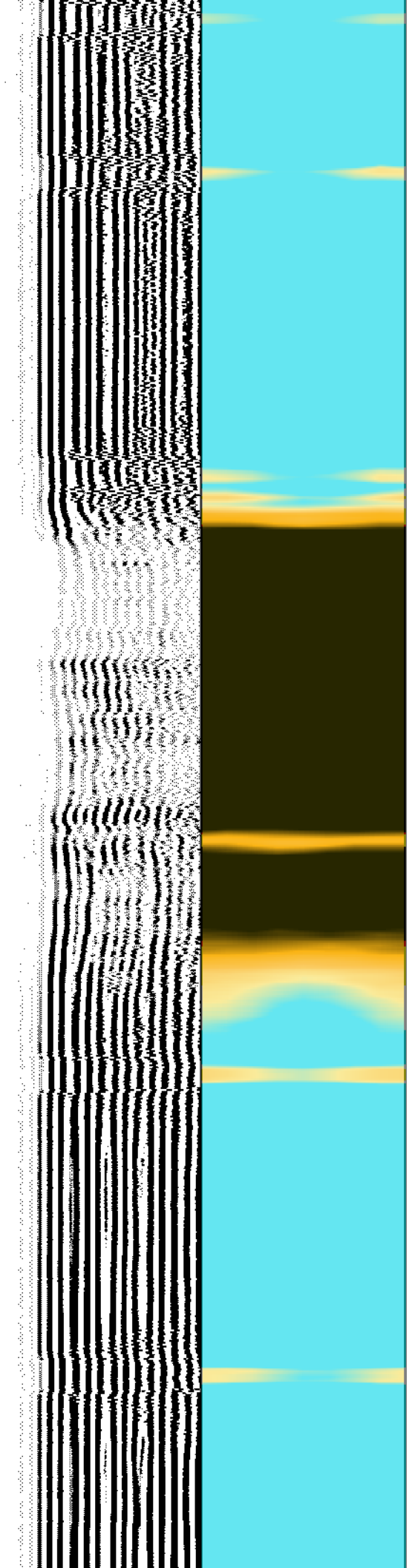
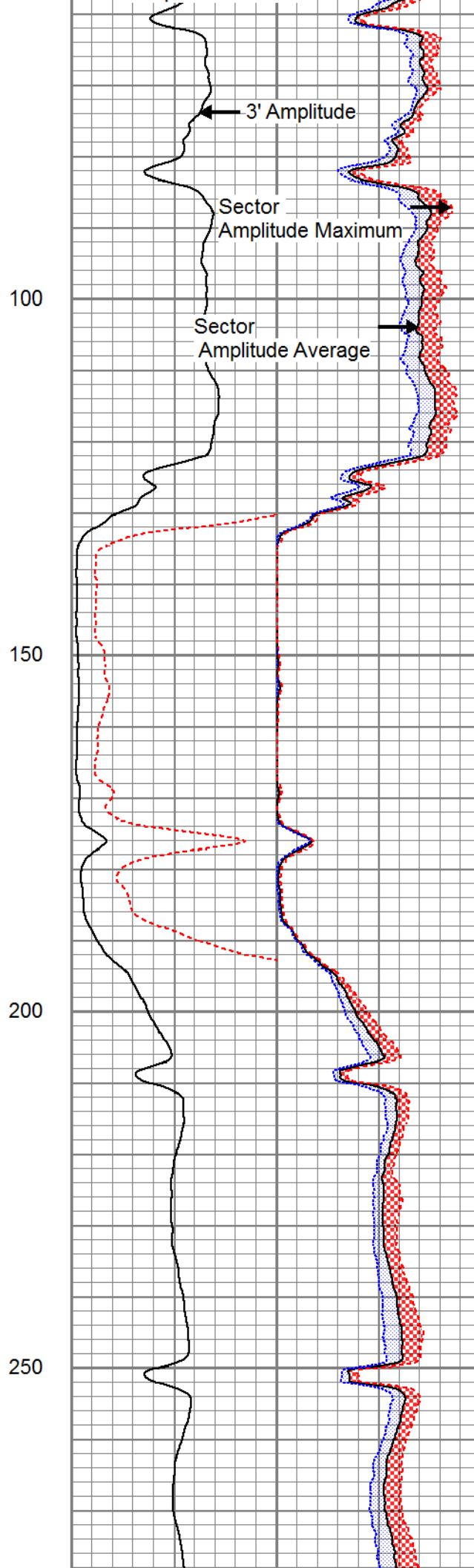
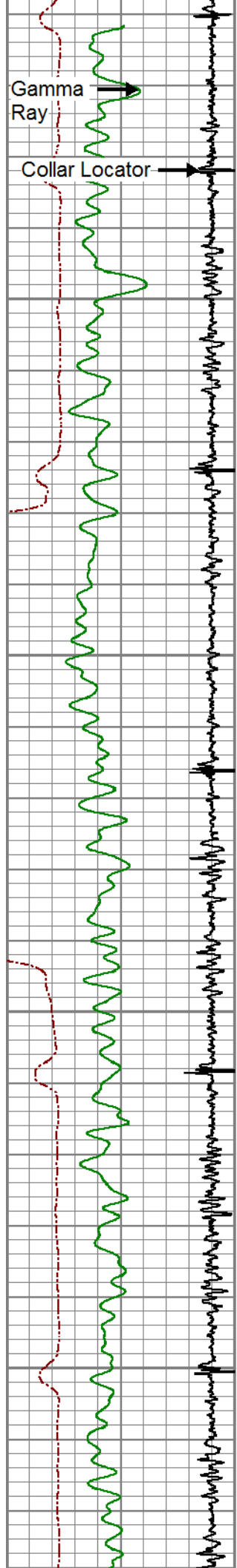


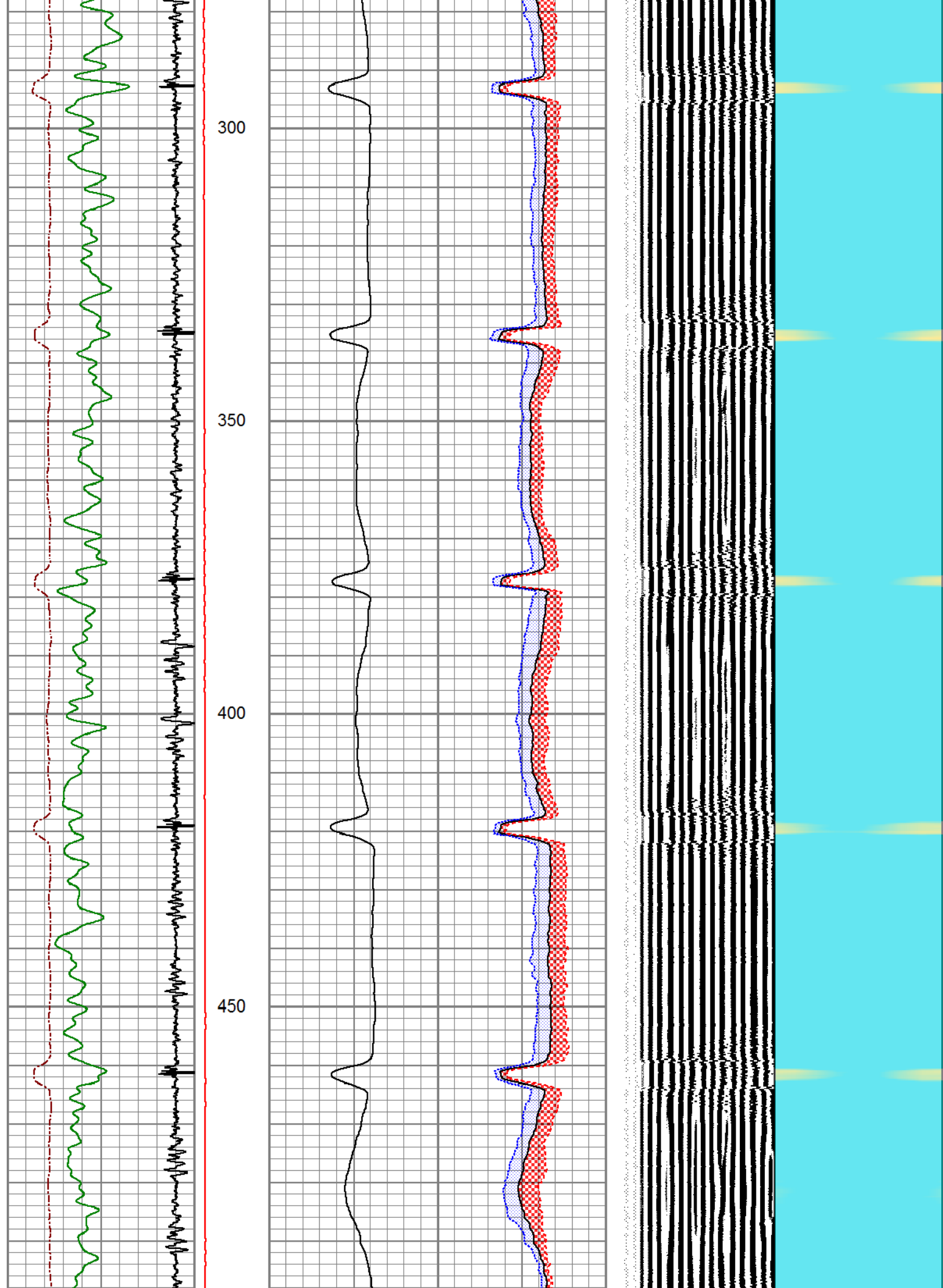


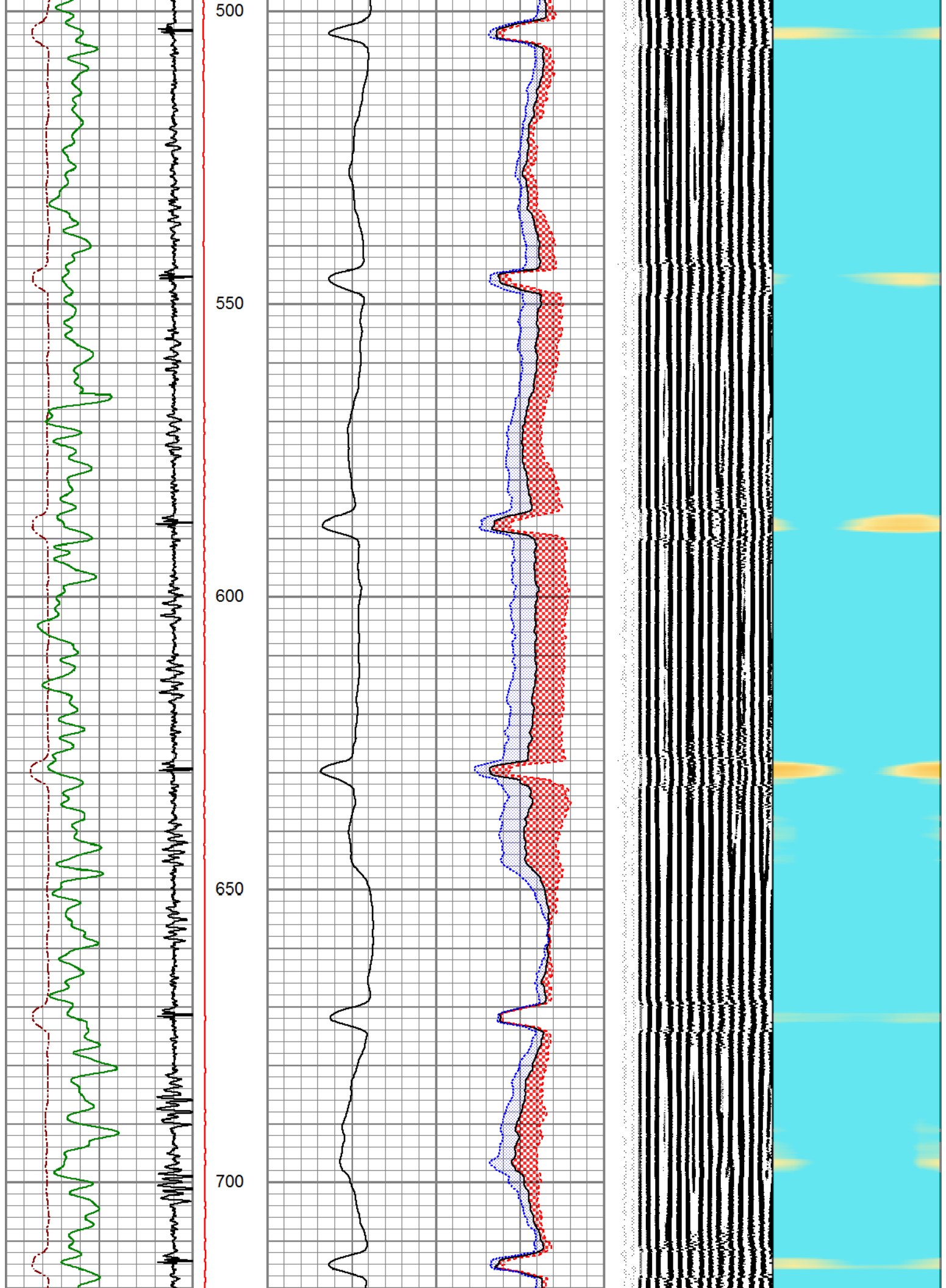
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310	(usec)	210	(lb)	0	(mV)	100	Amplitude Average	200	(usec)	1200	
-9	Collar Locator	1	0	1000	3' Amplified Amplitude X 5		0	150			
Gamma Ray					Sector Amplitude Maximum		0	150			
0	(GAPI)	150	0	(mV)	20	Sector Amplitude Minimum		0	150		

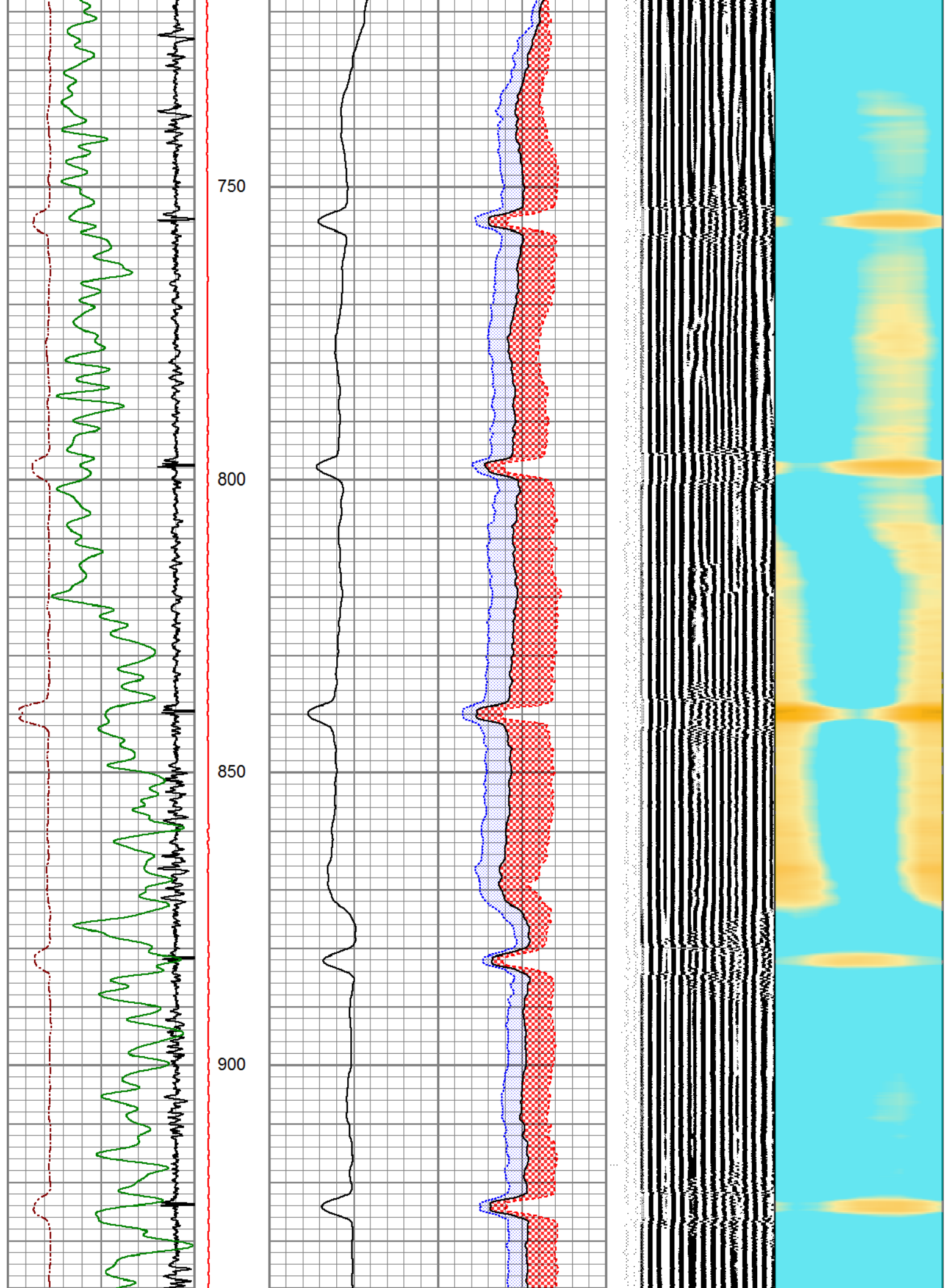
		MAIN LOG									
Database File		highpionr_rsu anschutz 4-62-49566_0512346840_20180815_cbl.db									
Dataset Pathname		MAIN3									
Presentation Format		pinr_scbl									
Dataset Creation		Wed Aug 15 23:17:21 2018									
Charted by		Depth in Feet scaled 1:240									
3Ft Travel Time		LTEN	3' Amplitude		Sector		VDL		1	Sector Map	8
310	(usec)	210	(lb)	0	(mV)	100	Amplitude Average	200	(usec)	1200	
-9	Collar Locator	1	0	1500	3' Amplified Amplitude X 5		0	150			
Gamma Ray					Sector Amplitude Maximum		0	150			
0	(GAPI)	150	0	(mV)	20	Sector Amplitude Minimum		0	150		

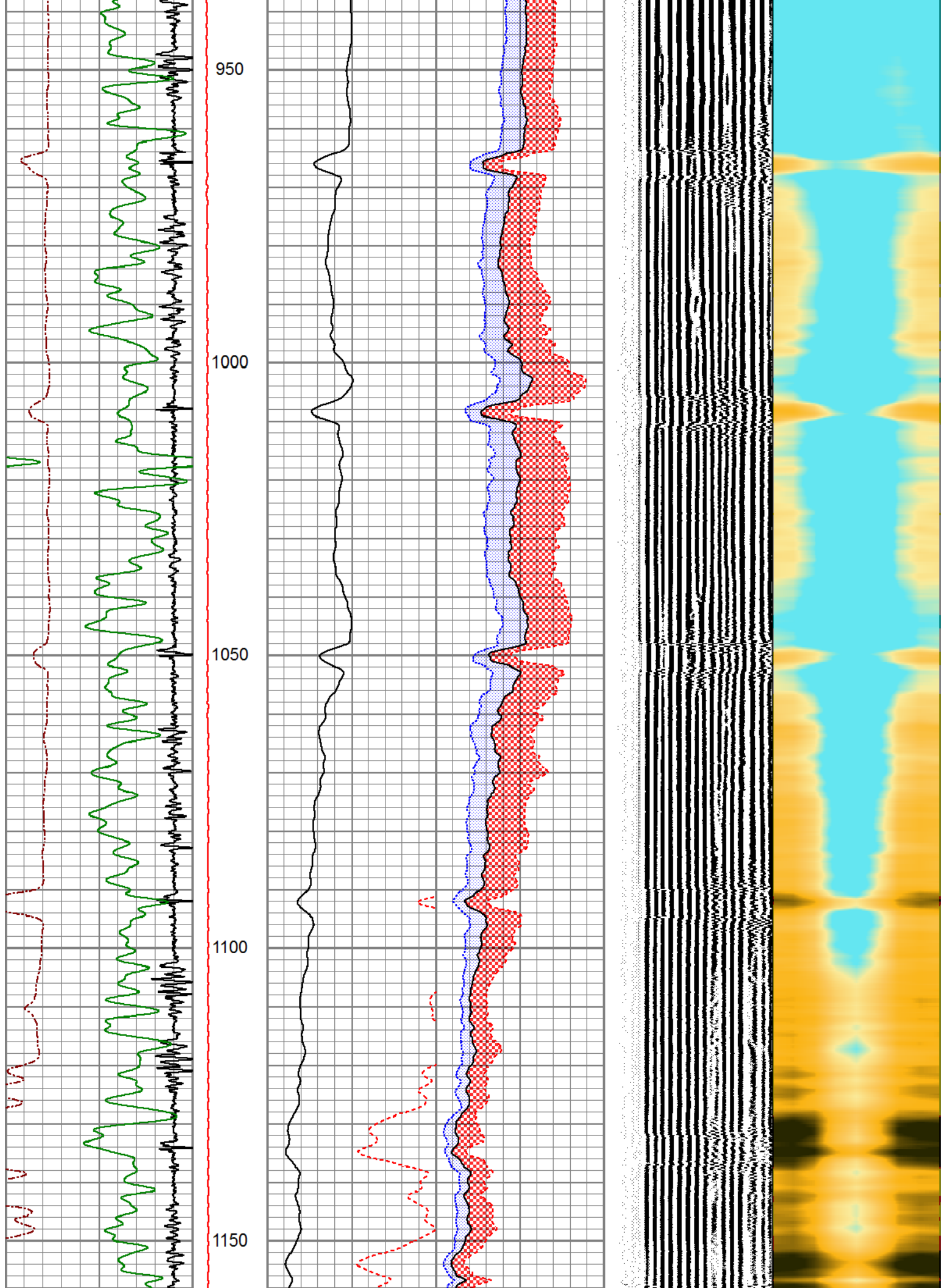


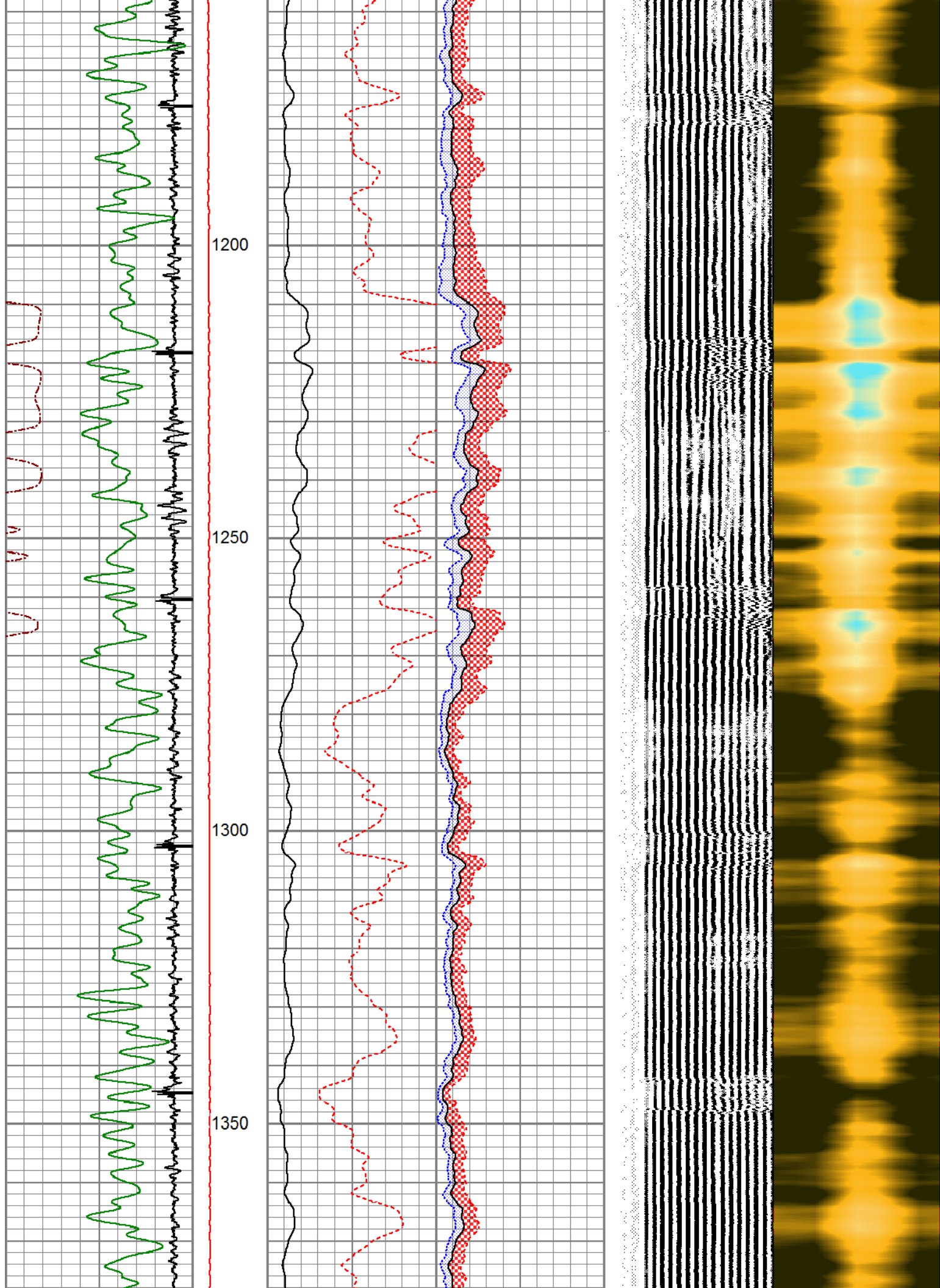


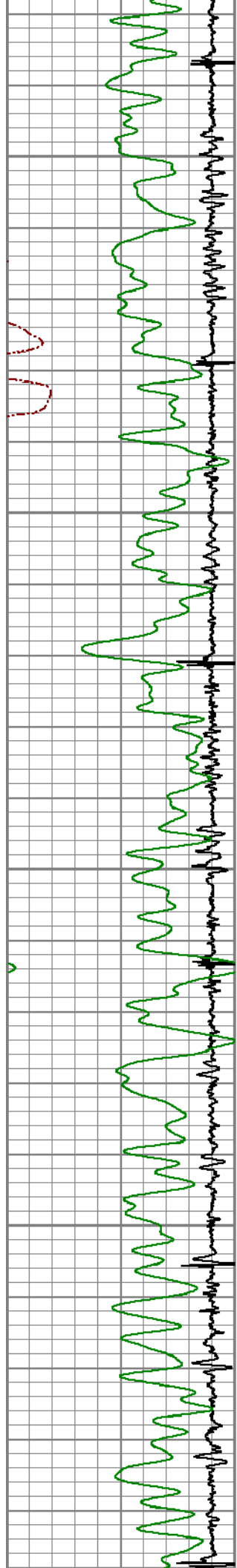










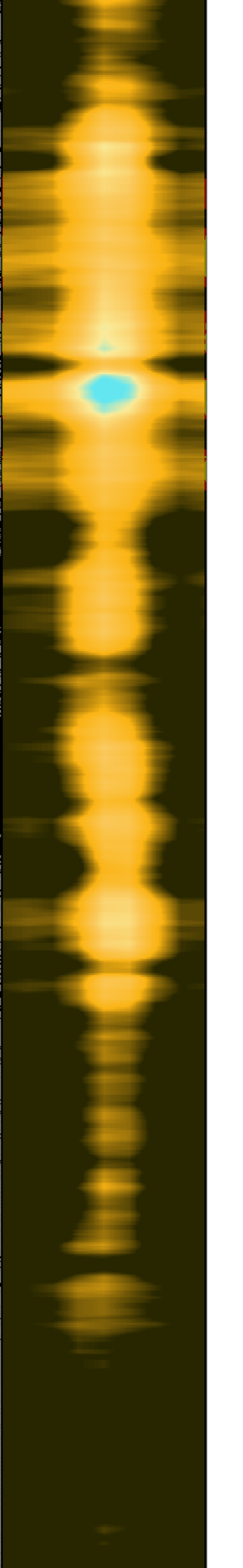
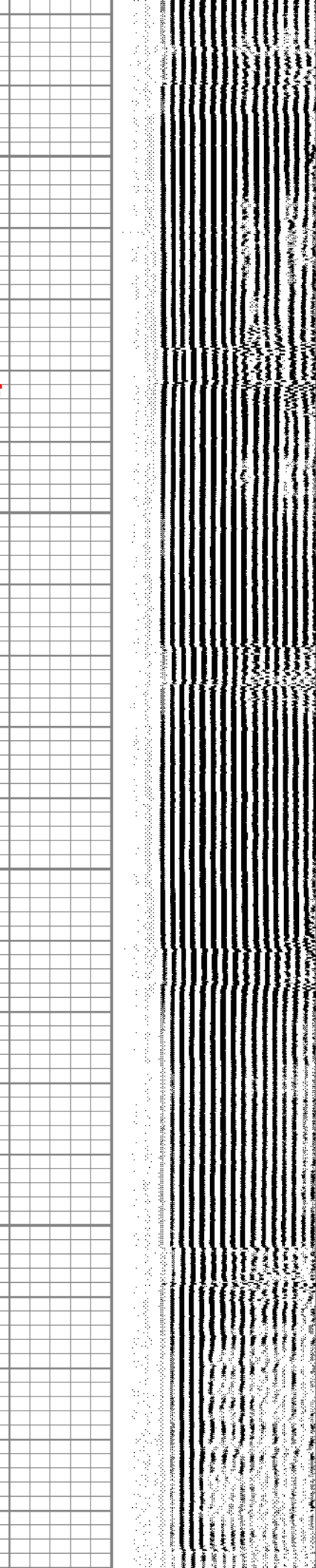
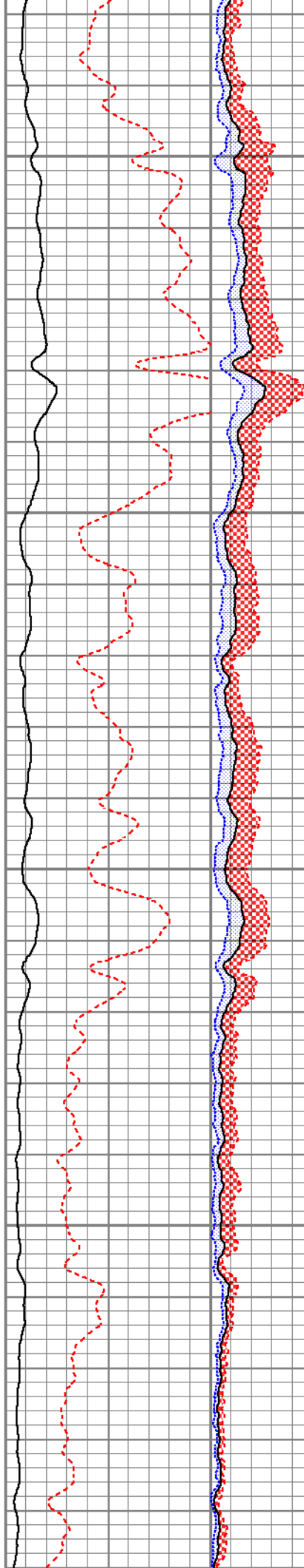


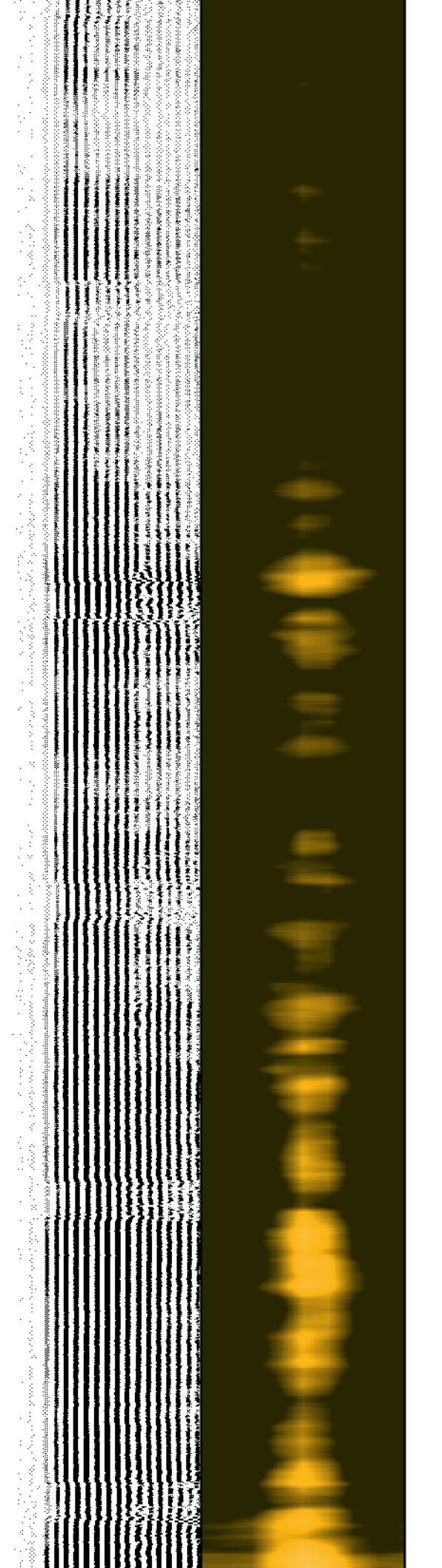
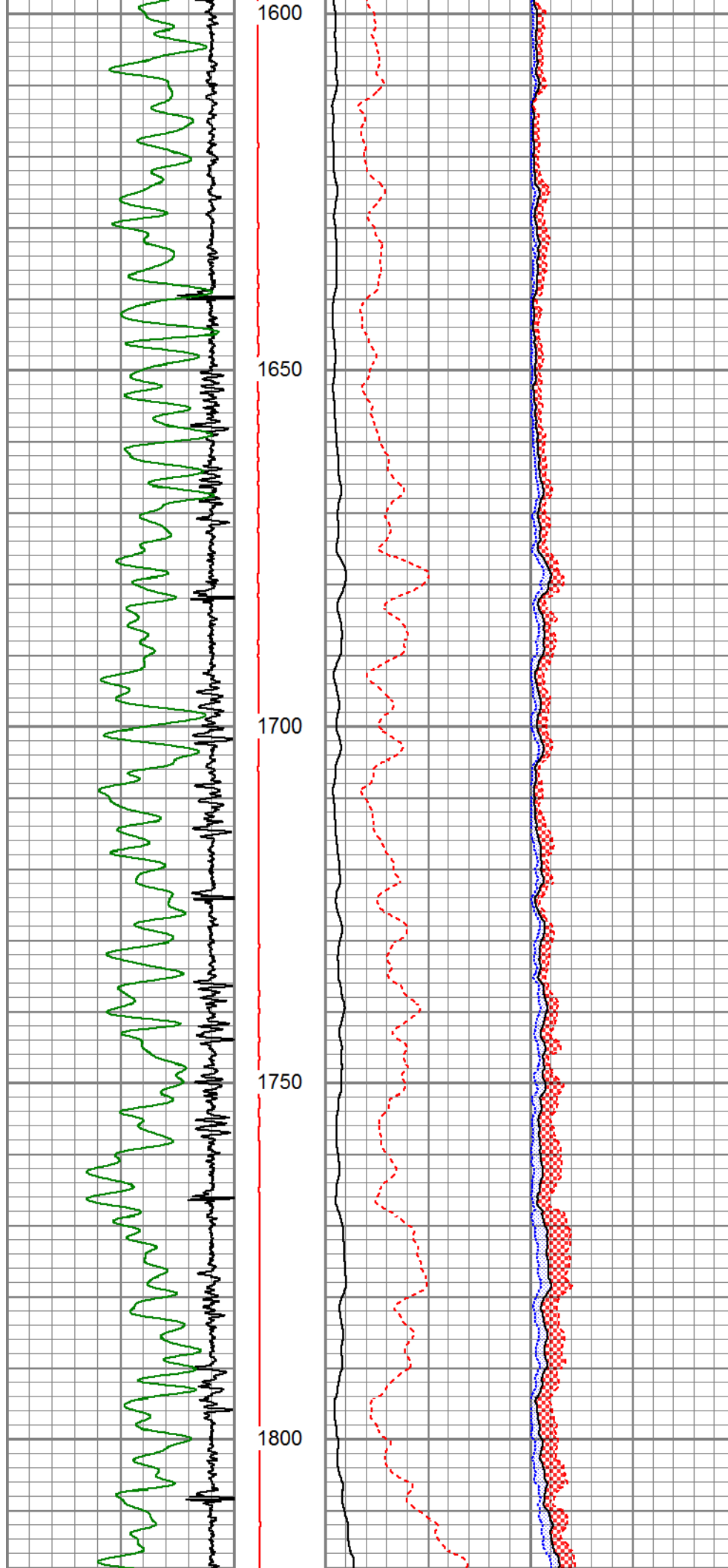
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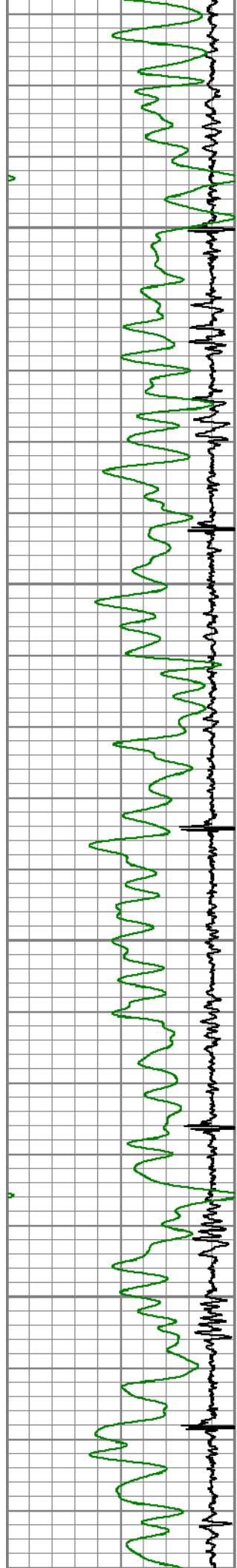
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1500

1550





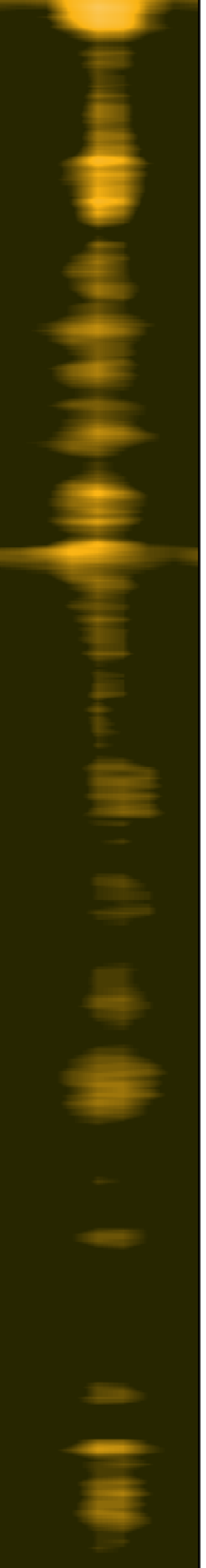
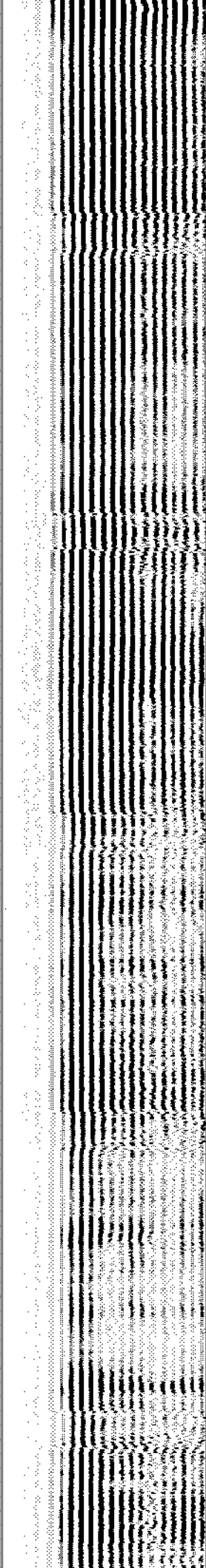
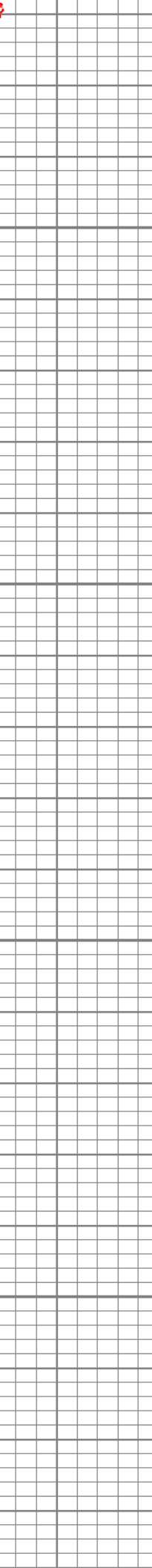
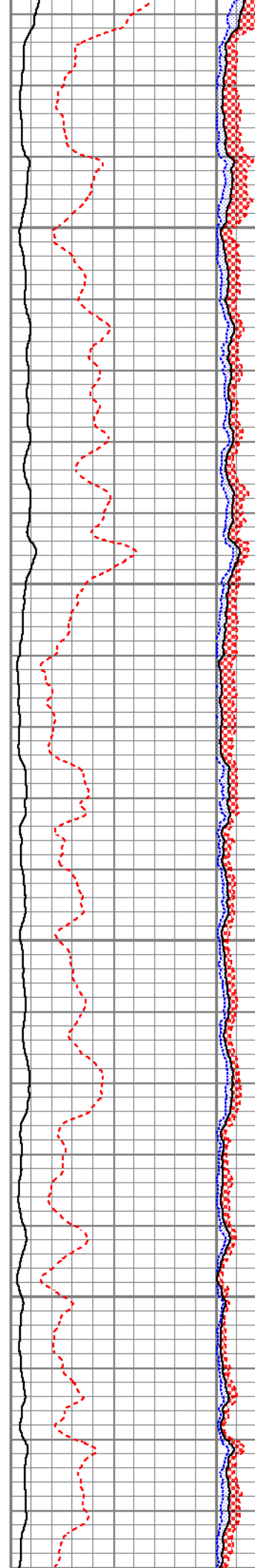


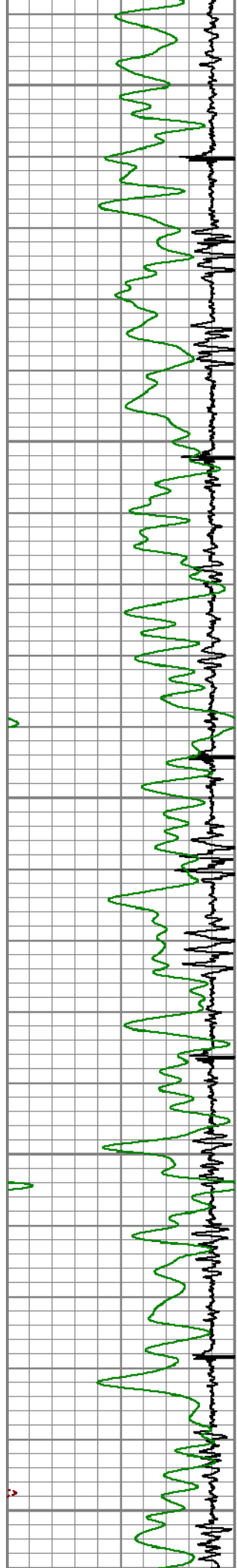
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1900

1950

2000





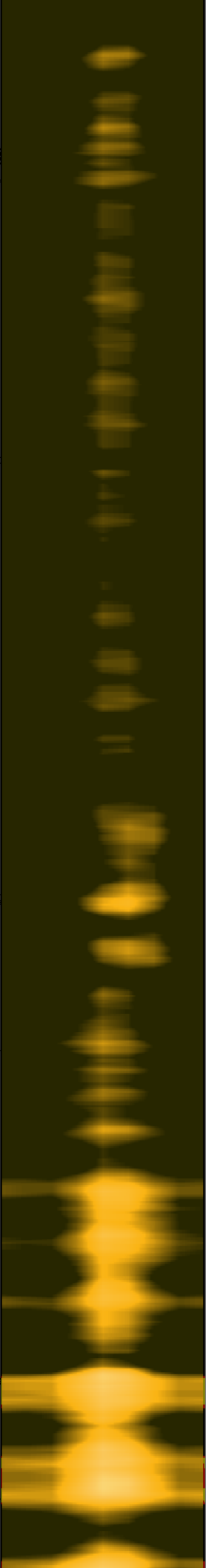
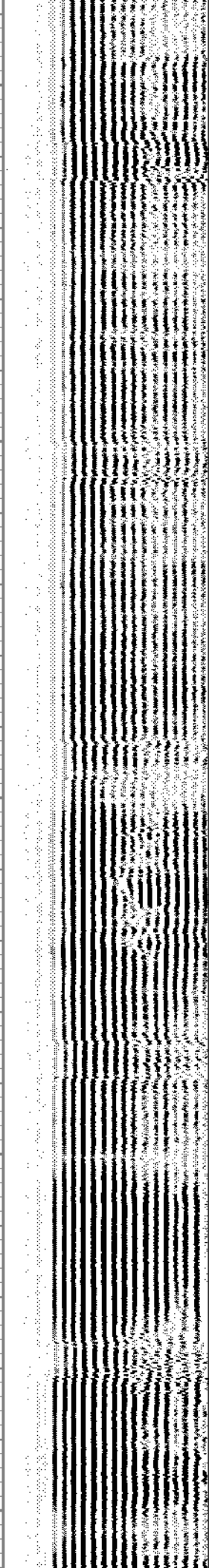
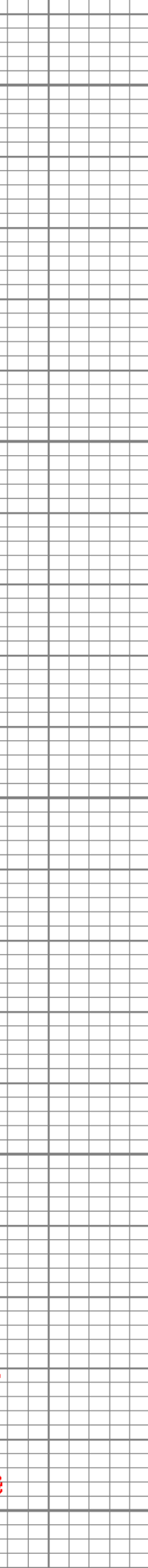
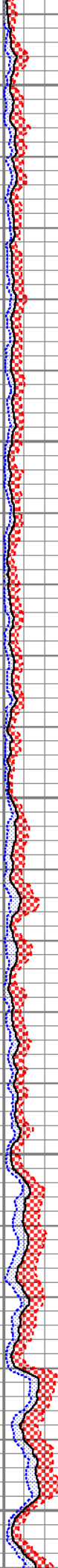
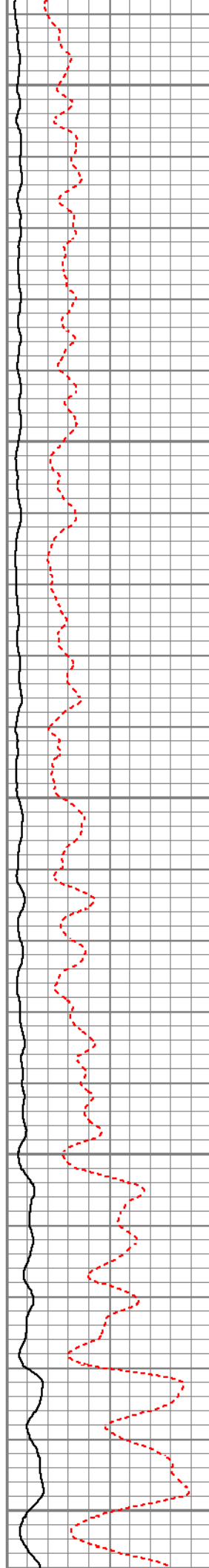
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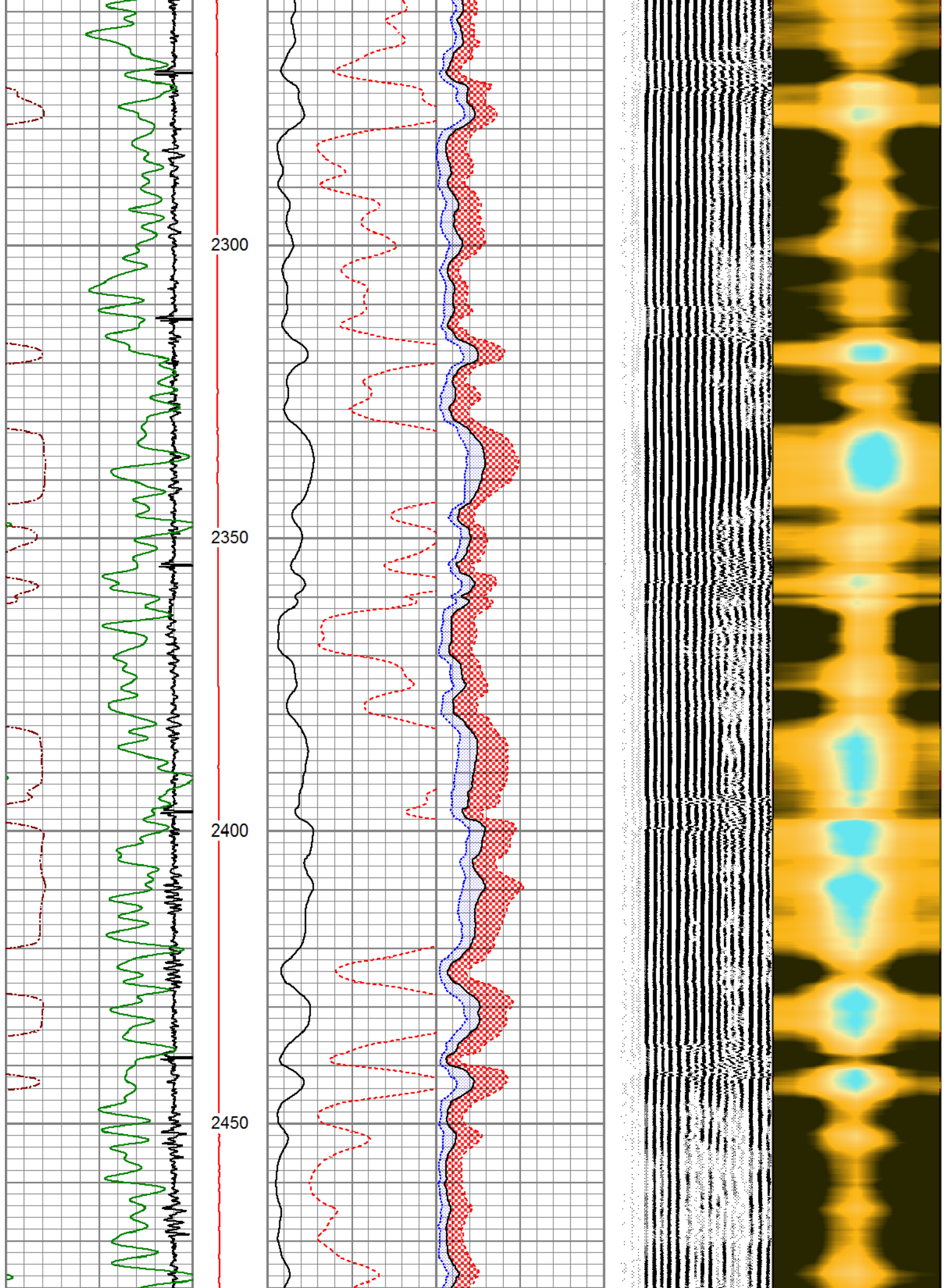
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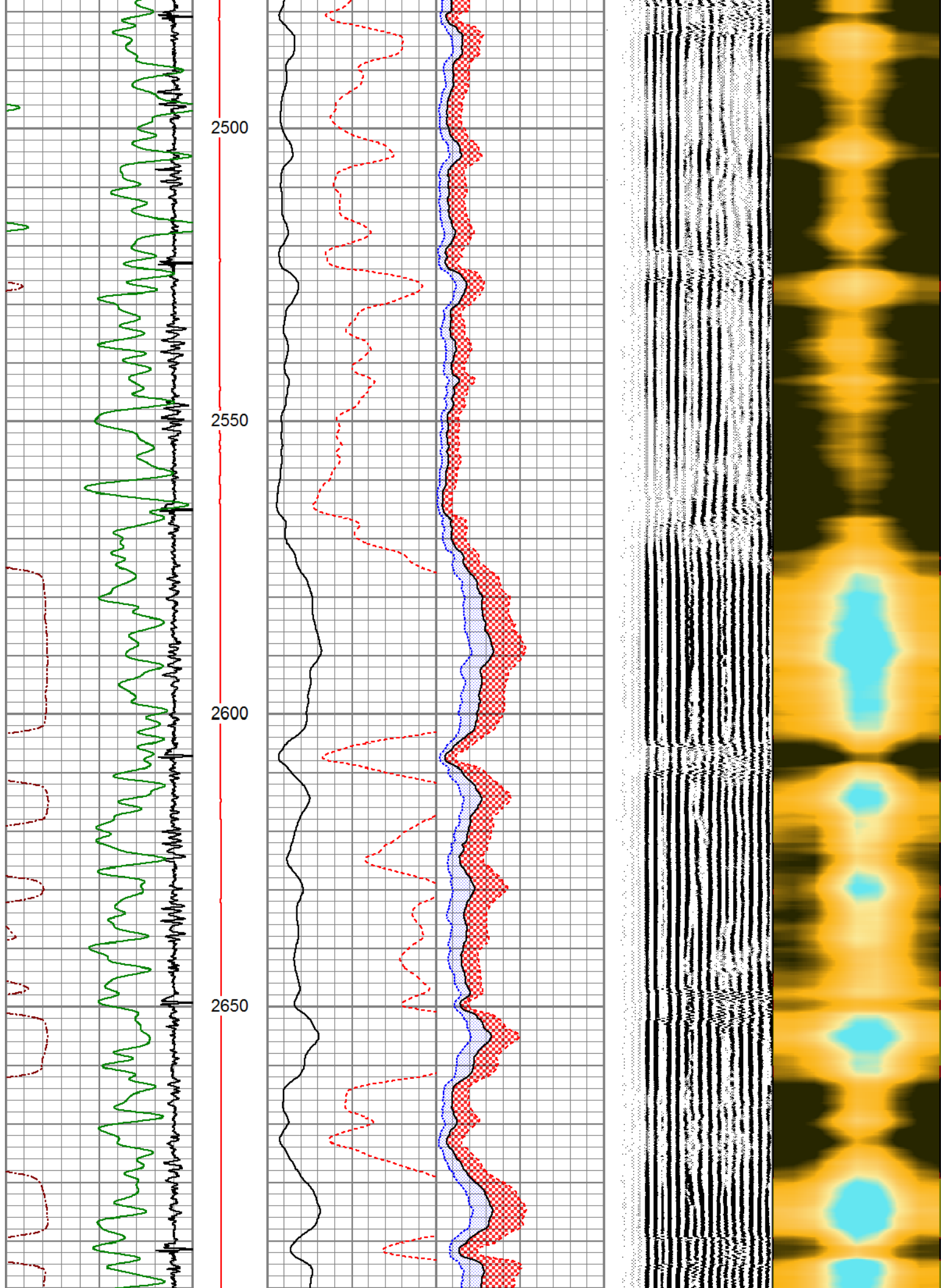
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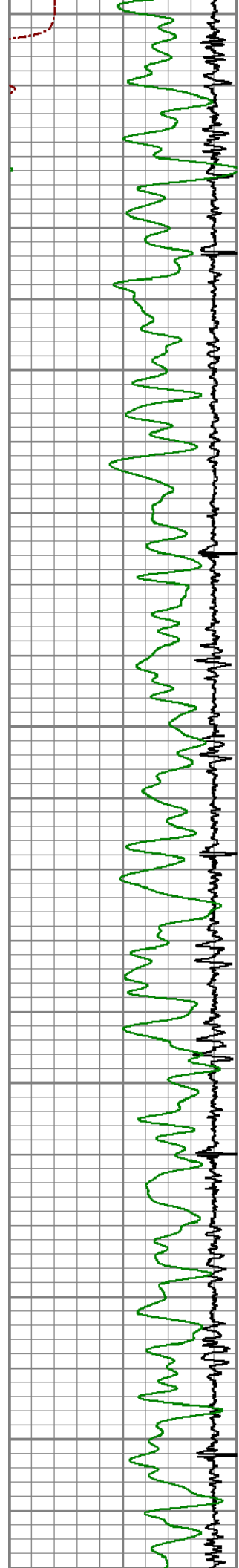
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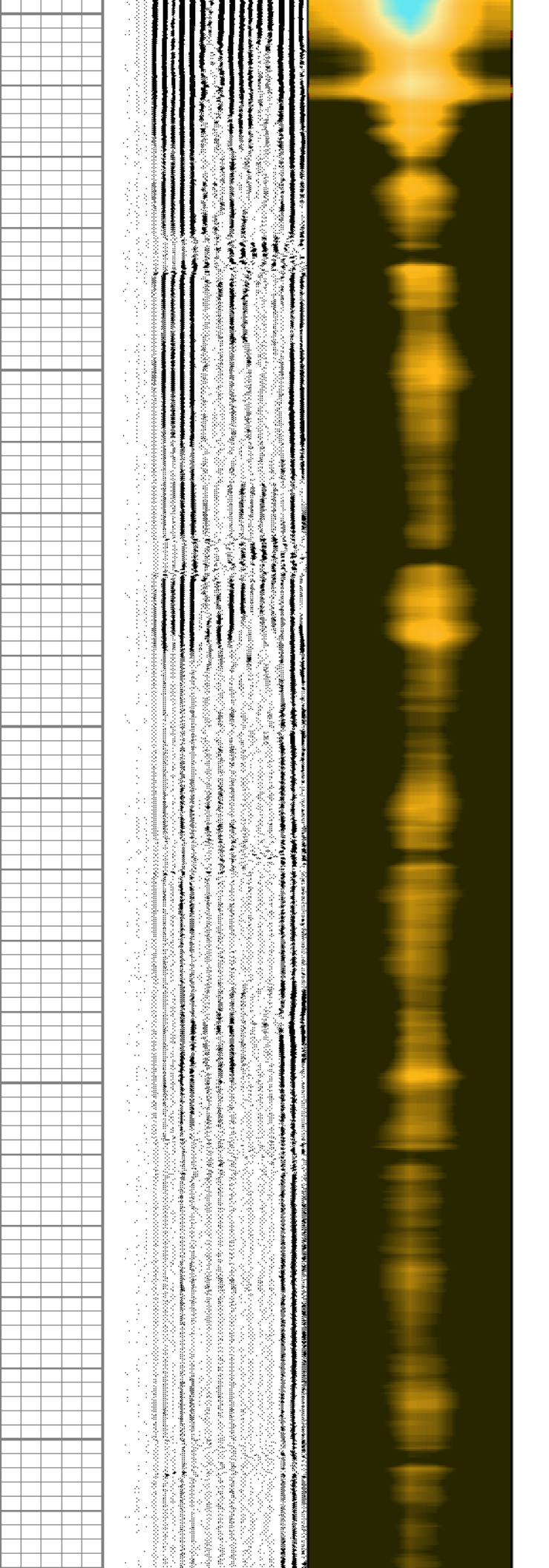
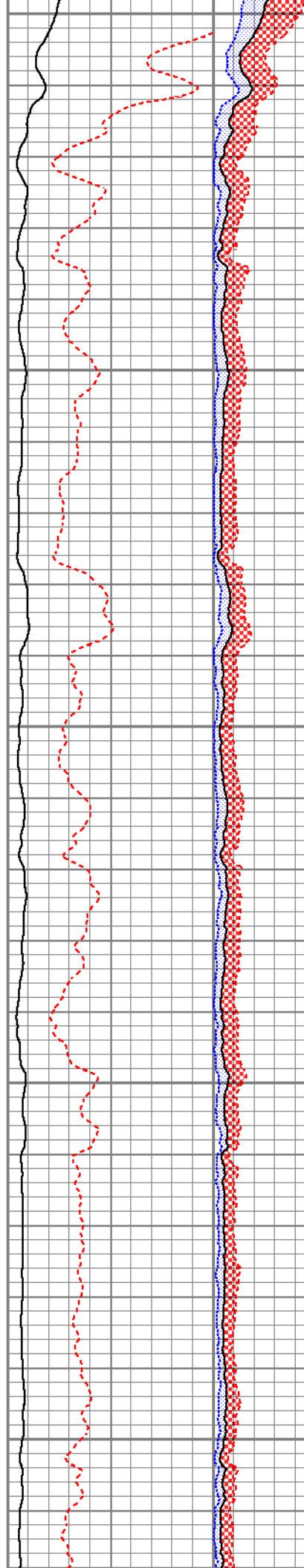


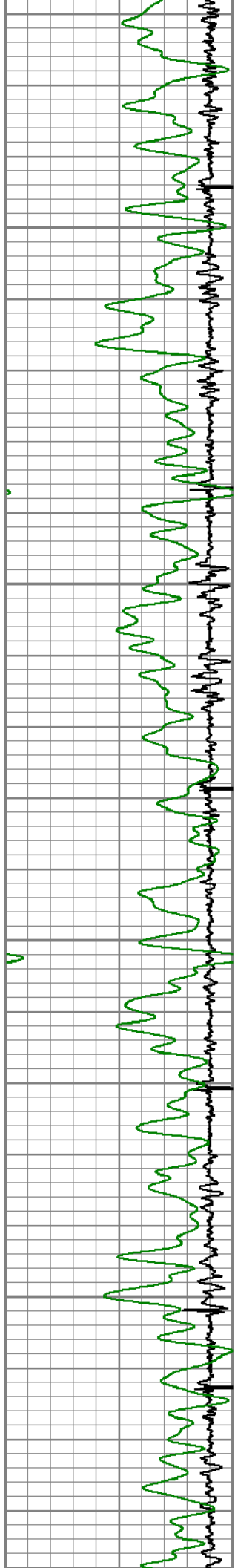






2700
2750
2800
2850
2900



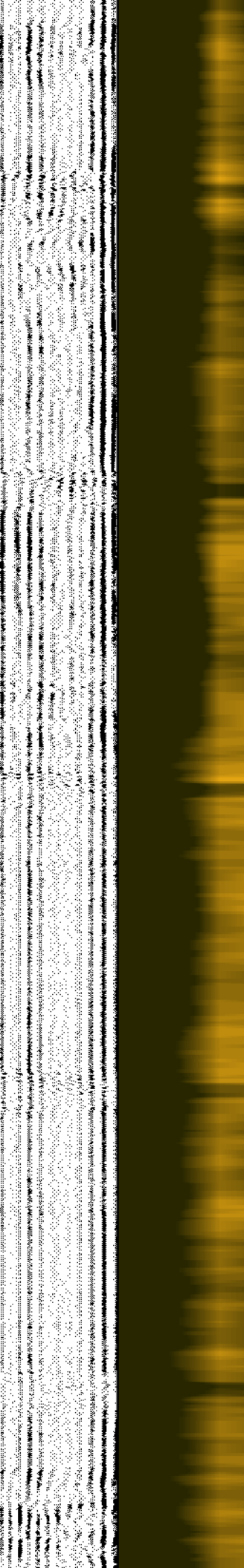
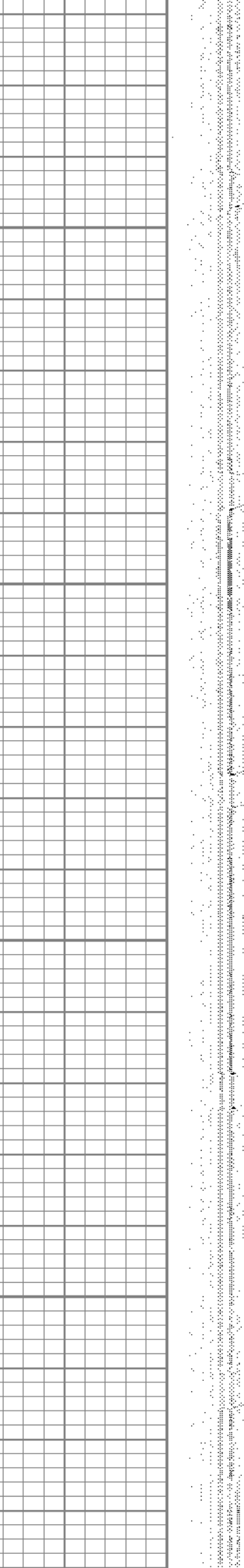
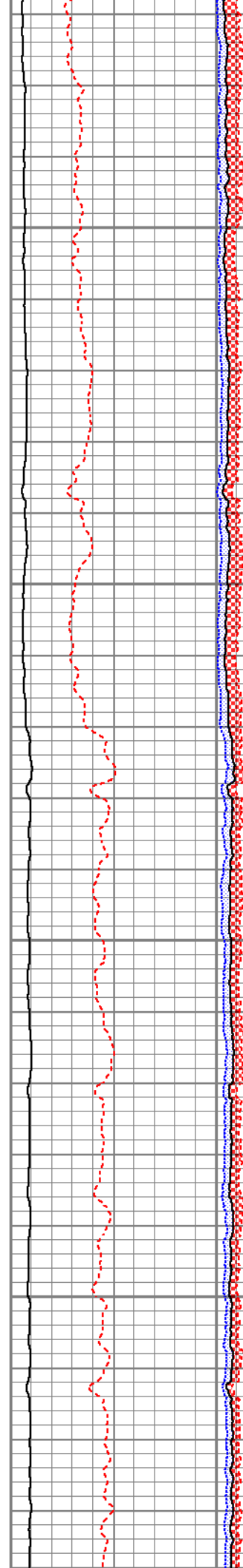


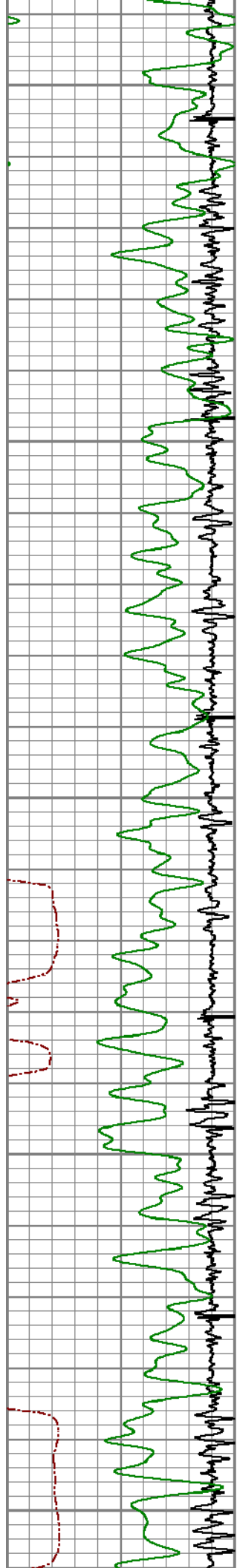
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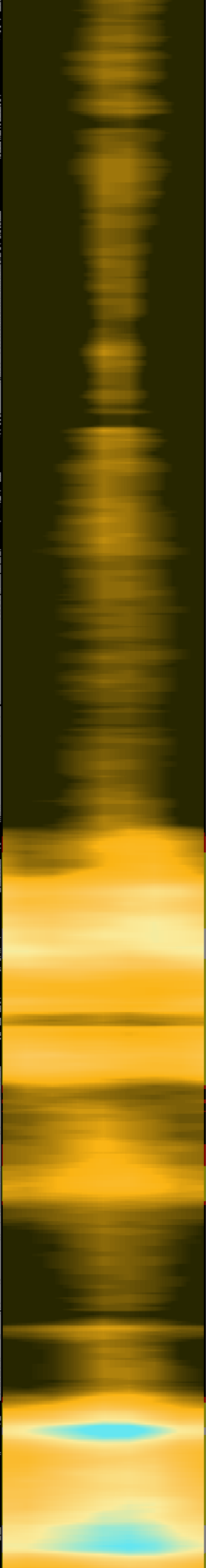
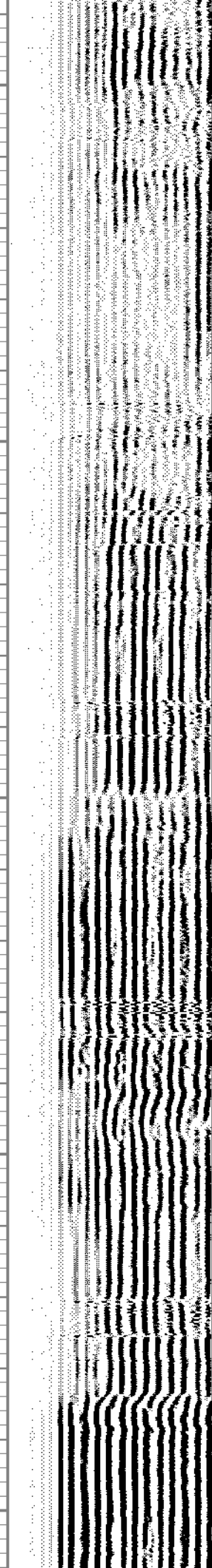
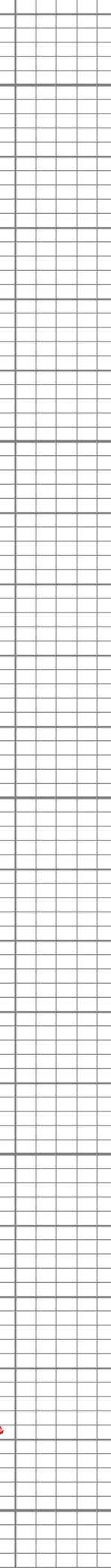
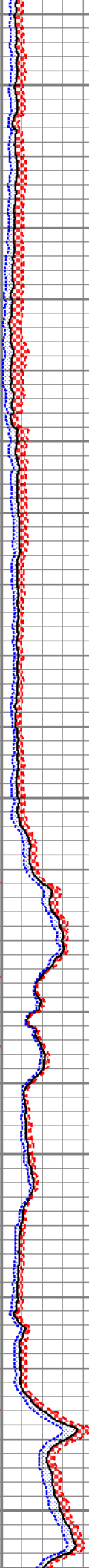
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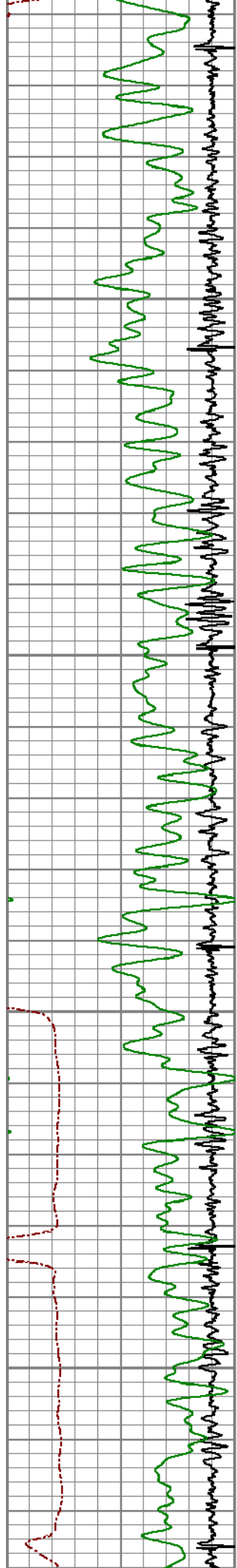
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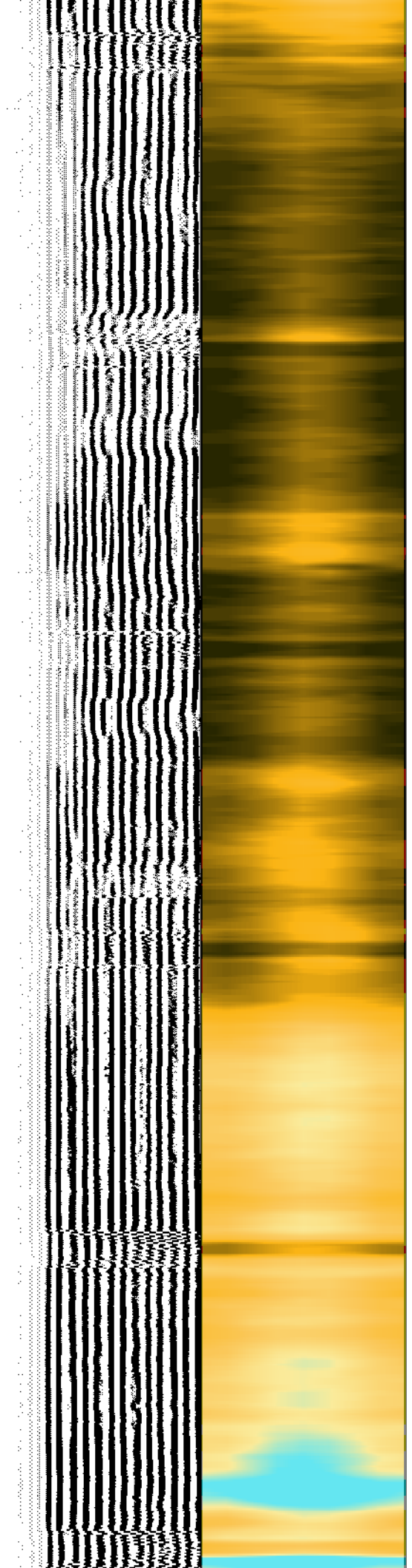
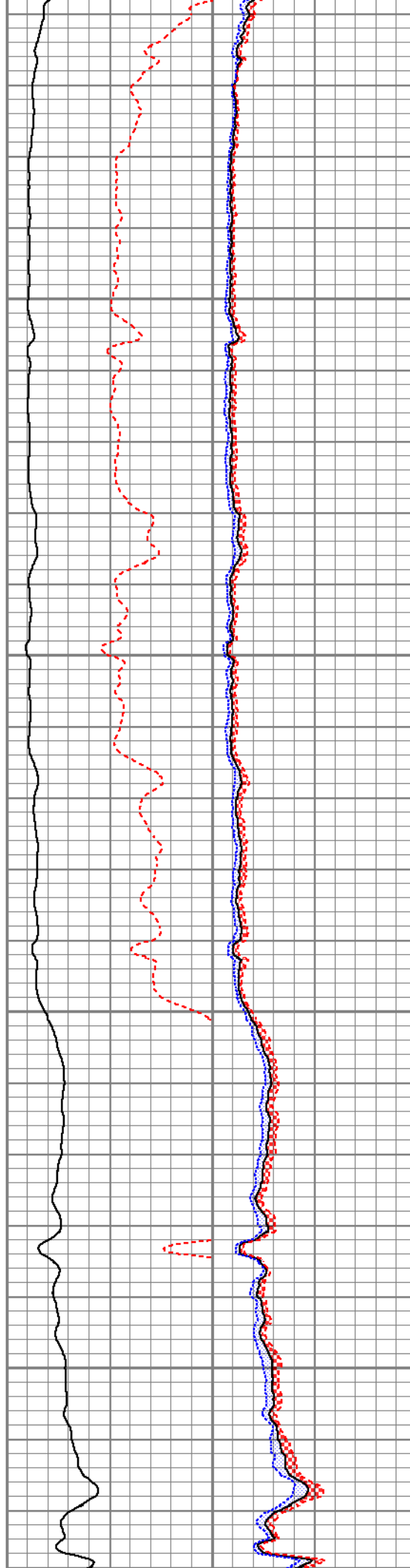


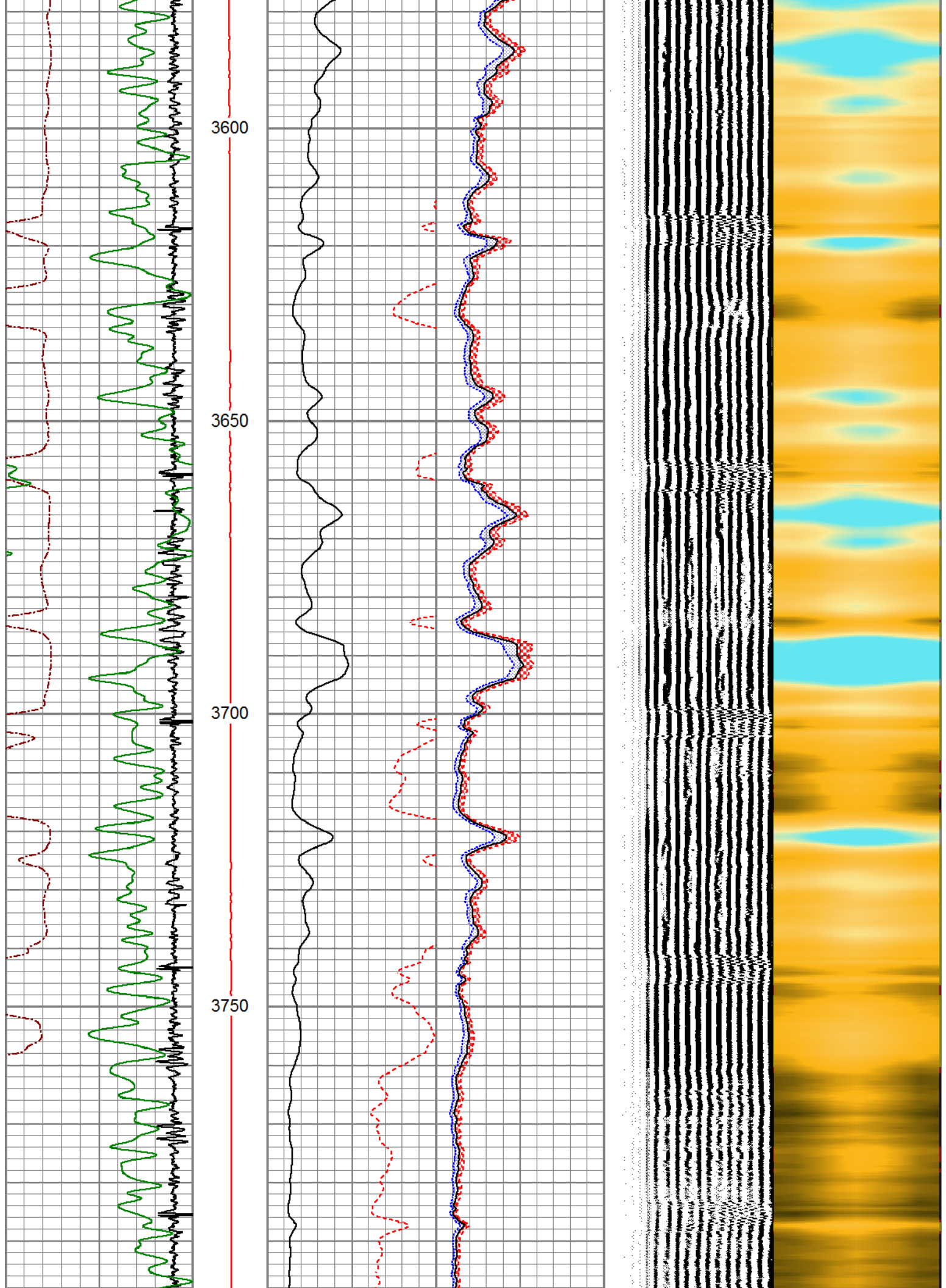
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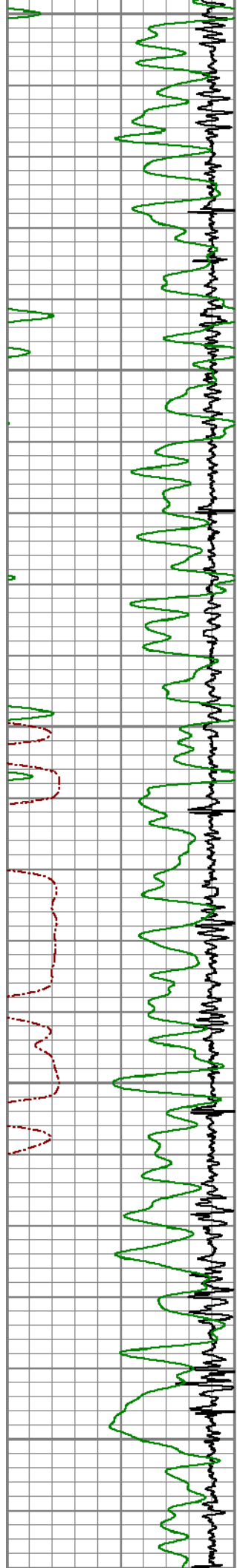
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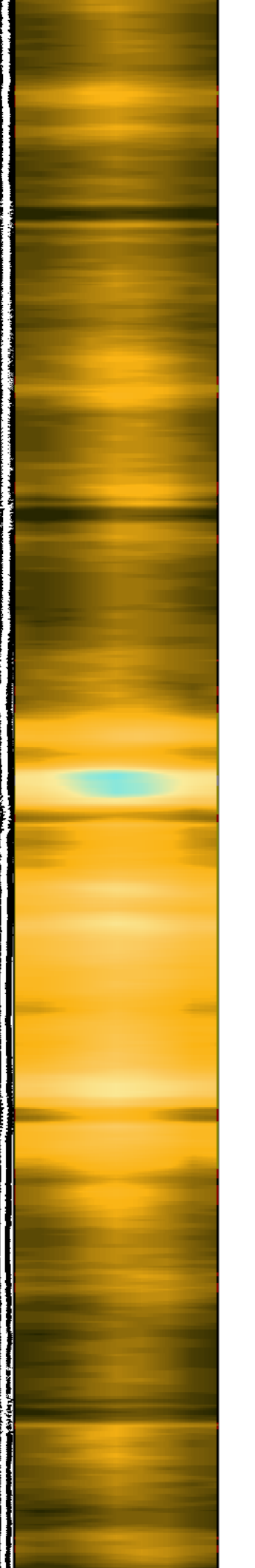
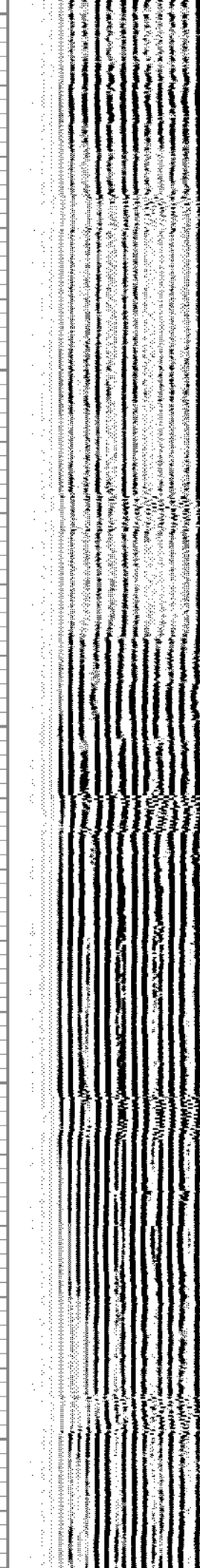
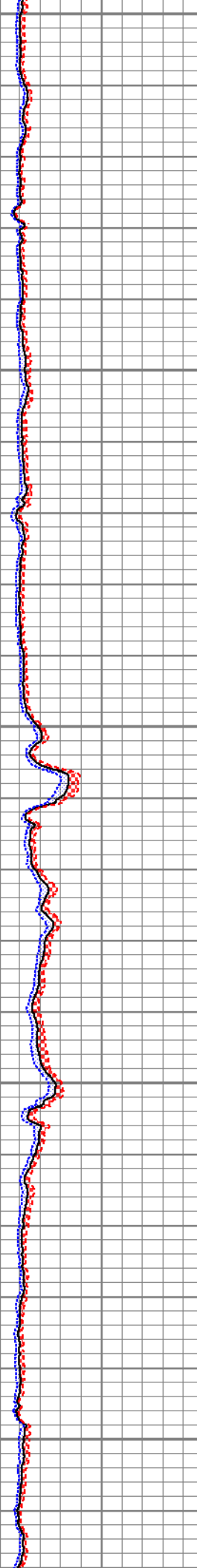
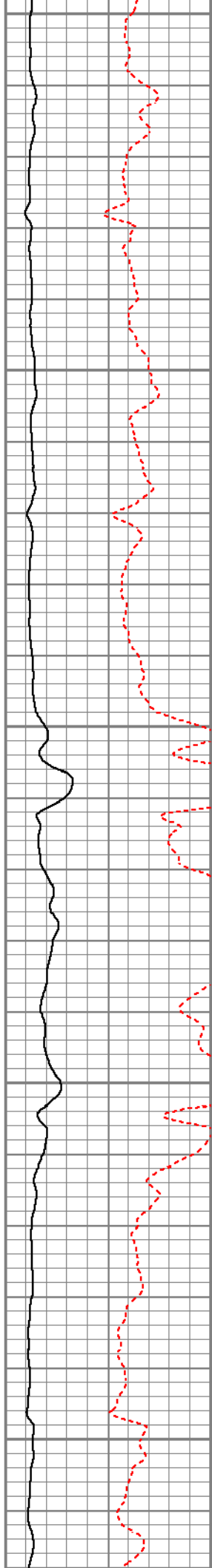
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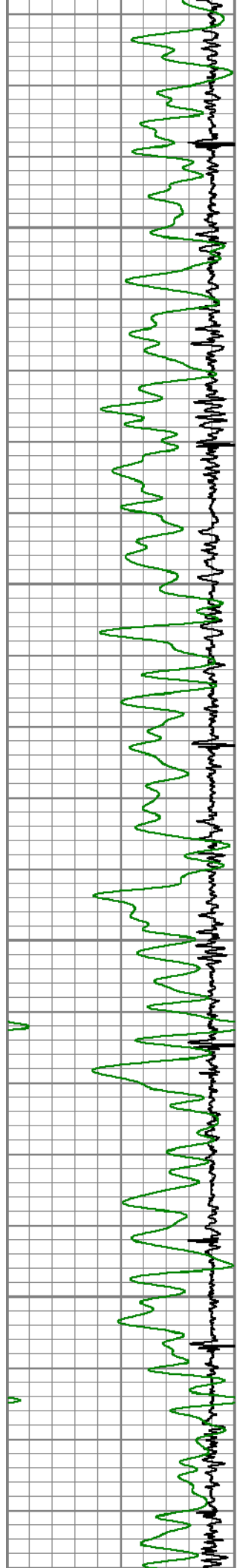






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3900
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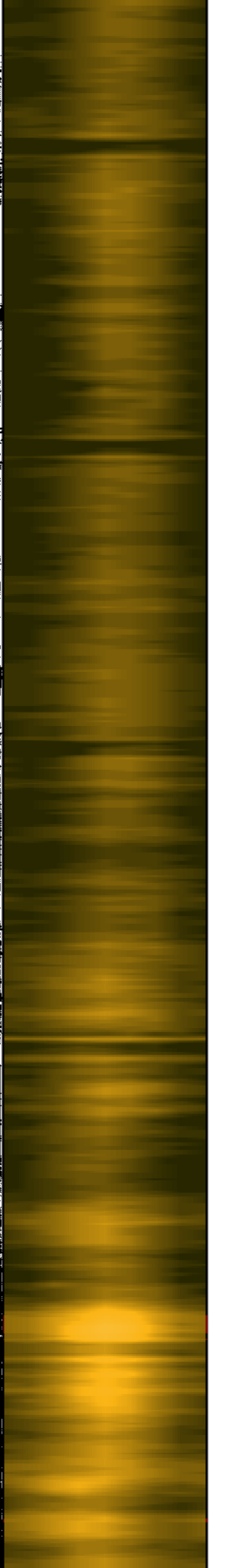
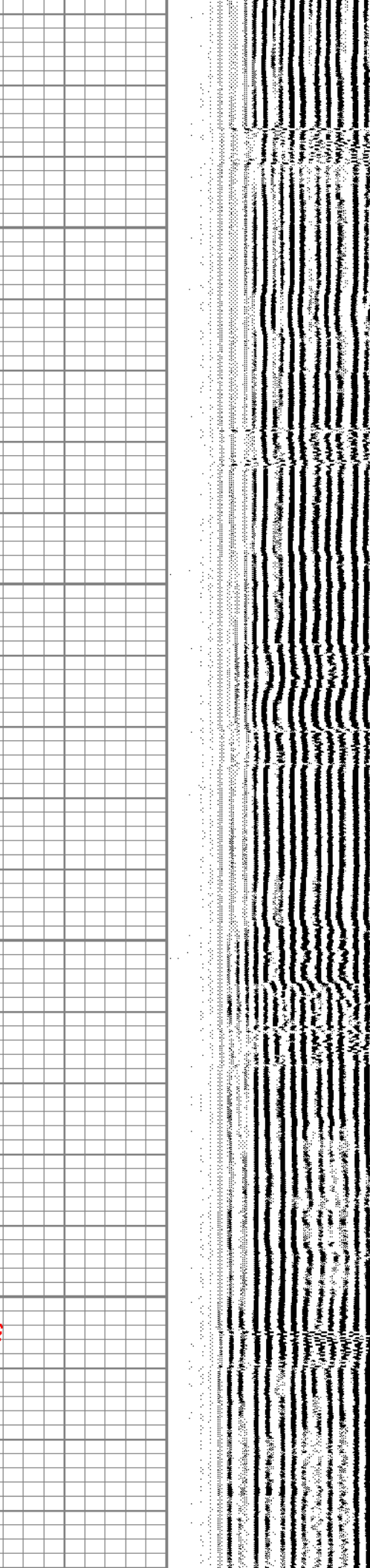
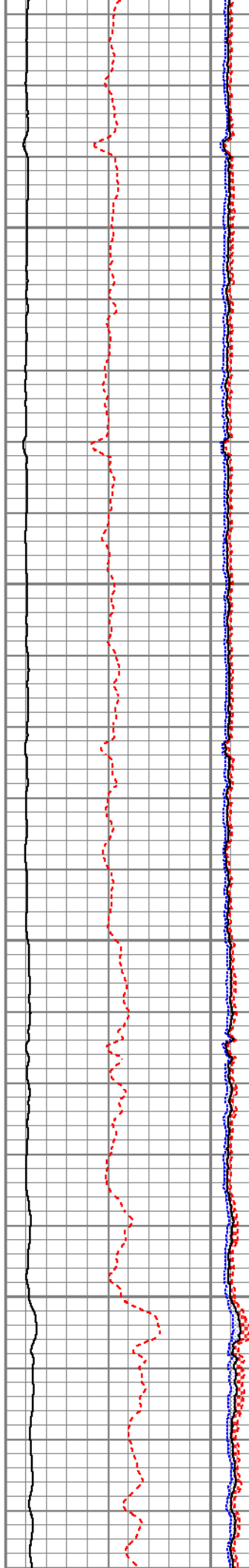


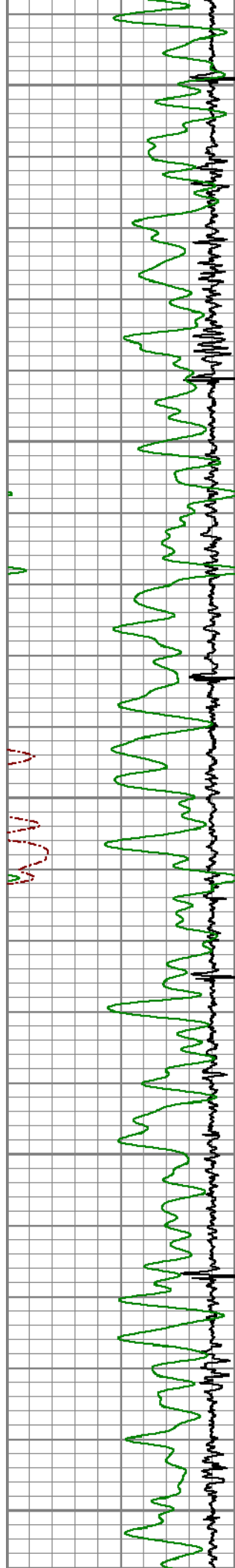
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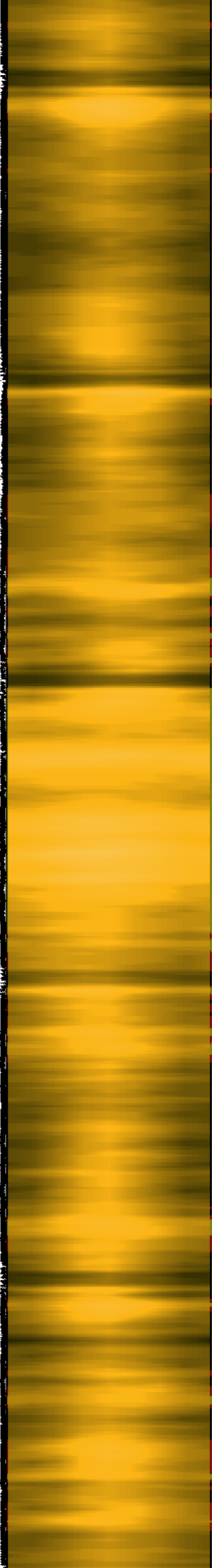
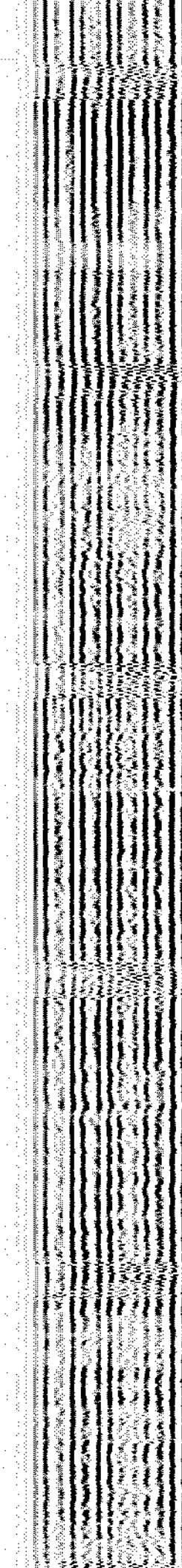
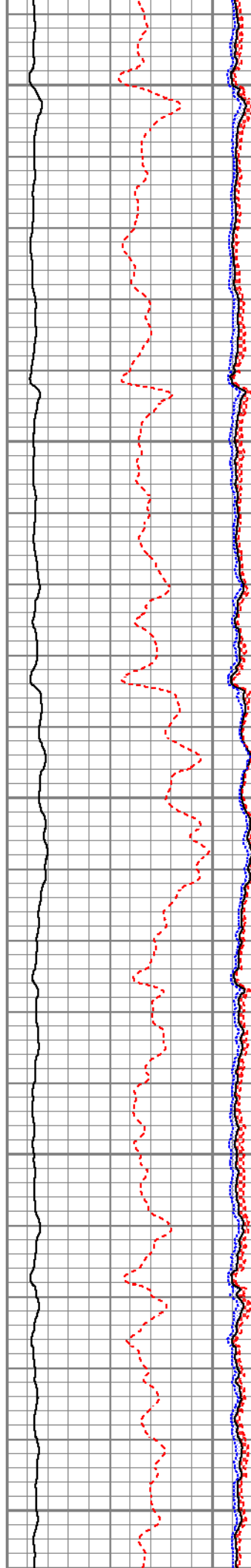
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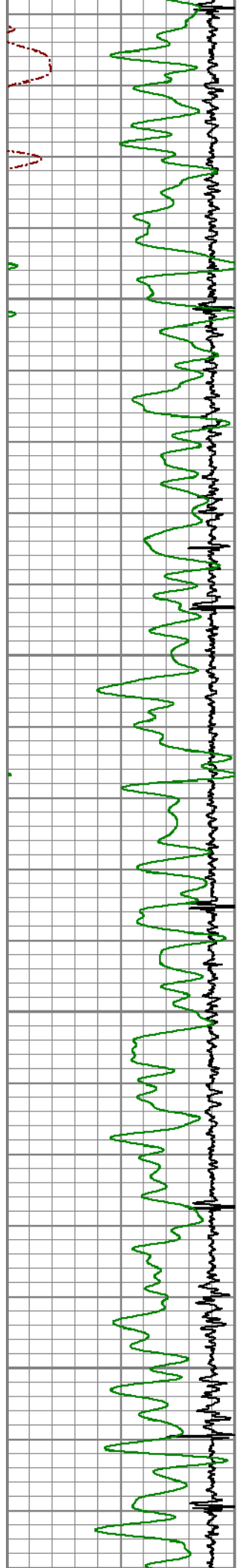
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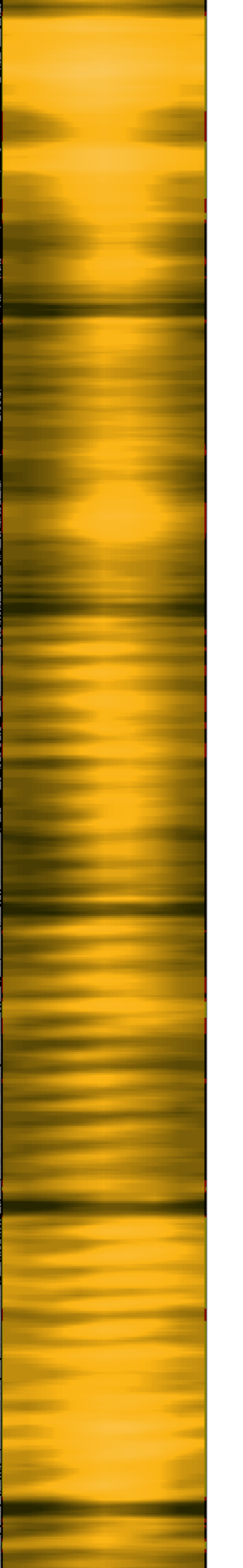
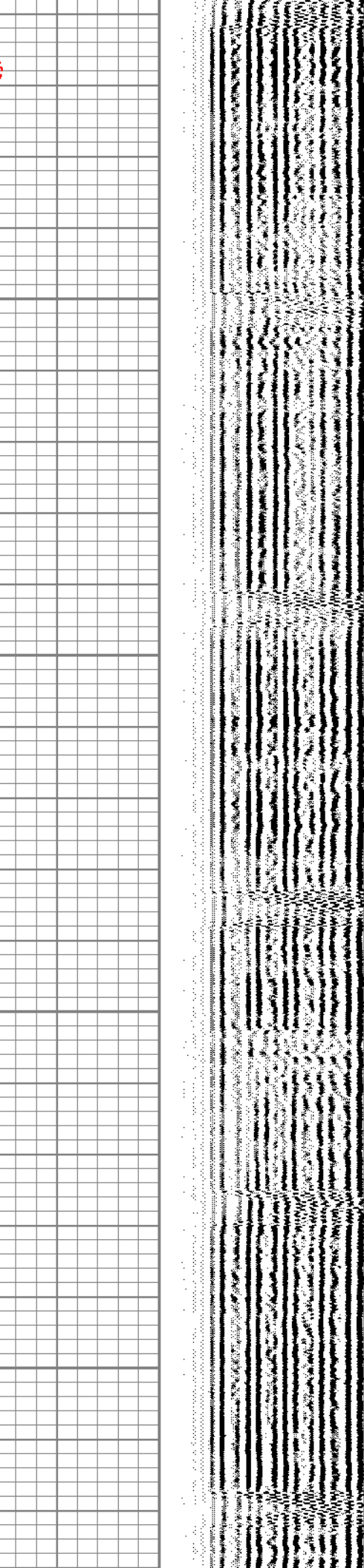
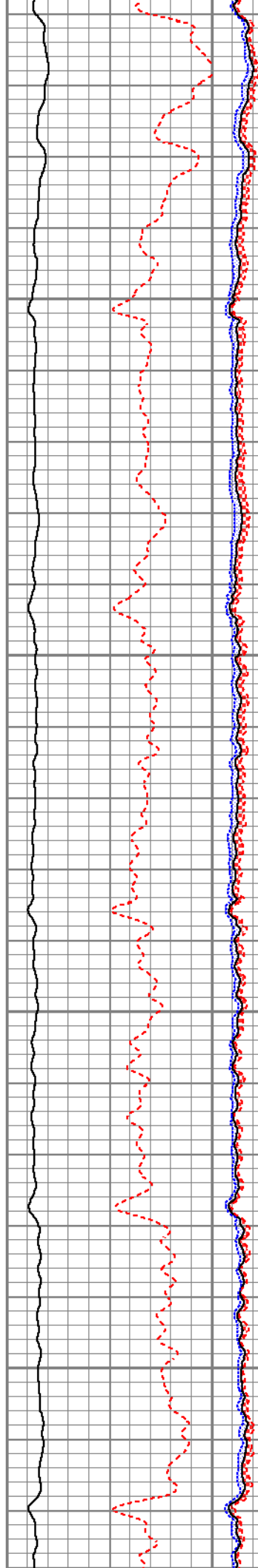


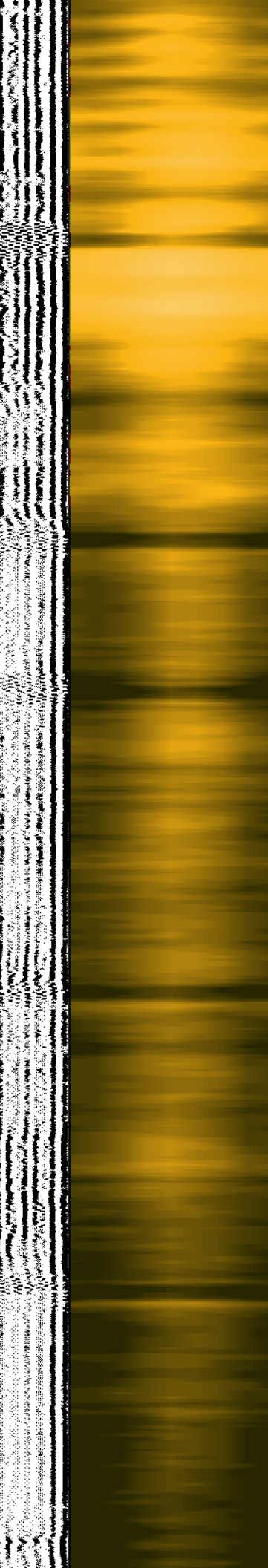
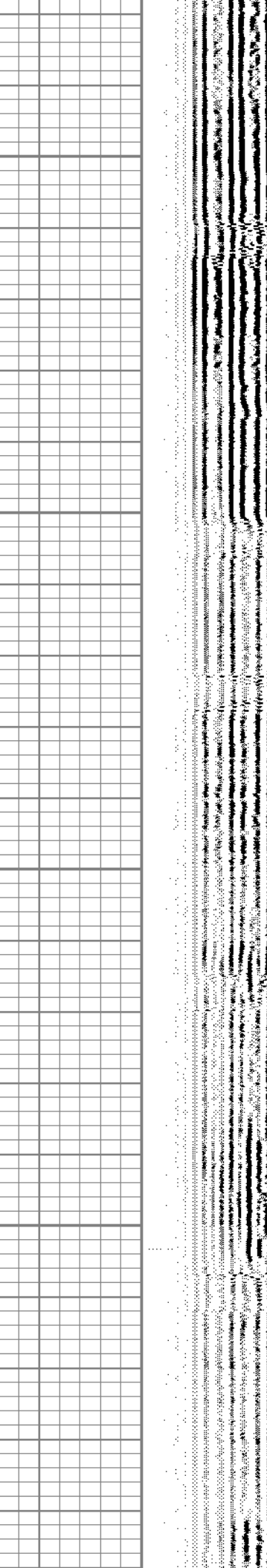
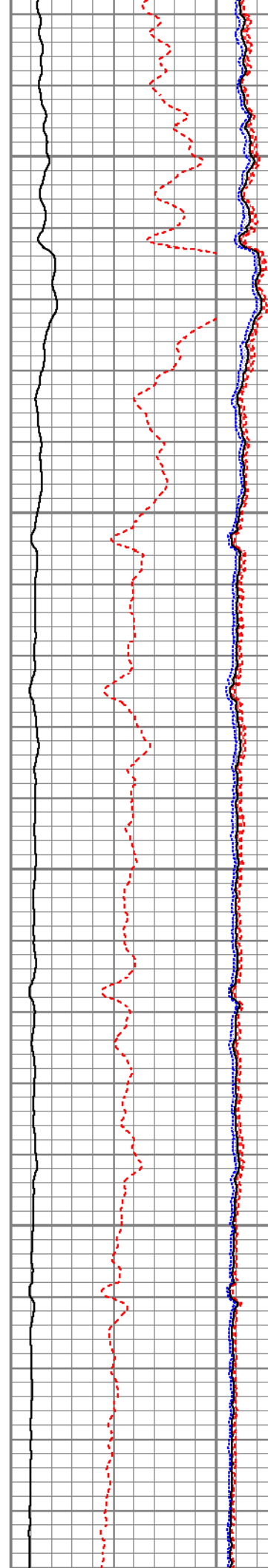
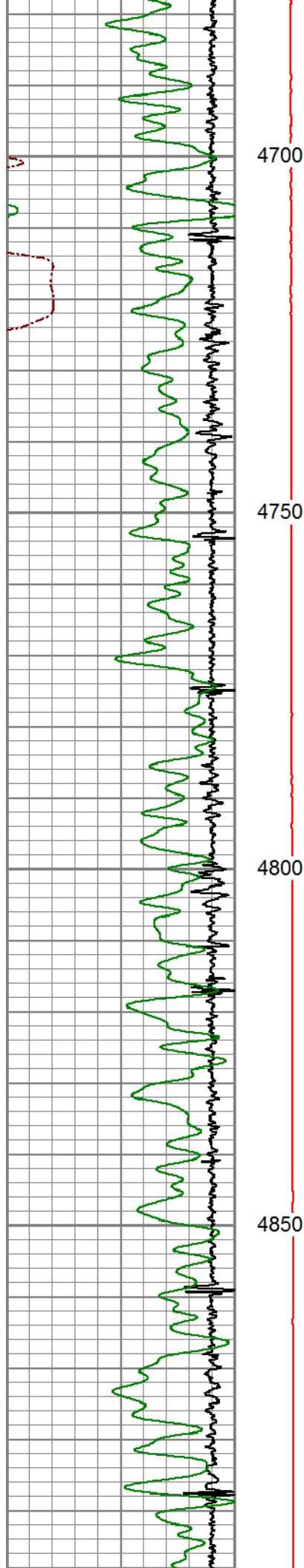
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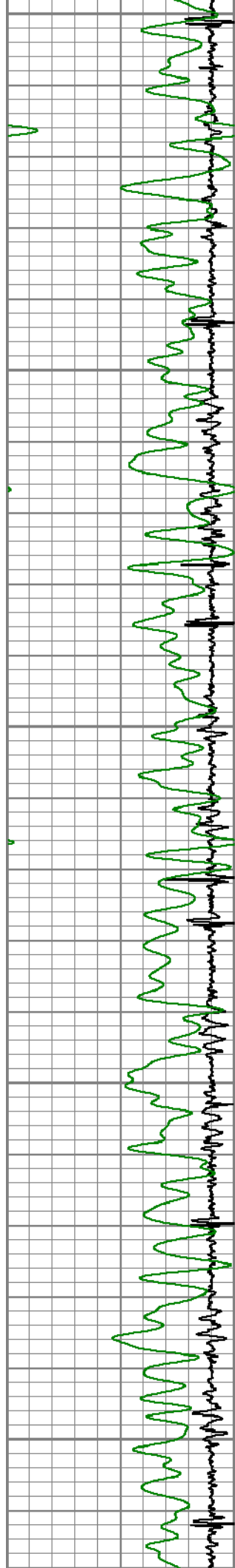
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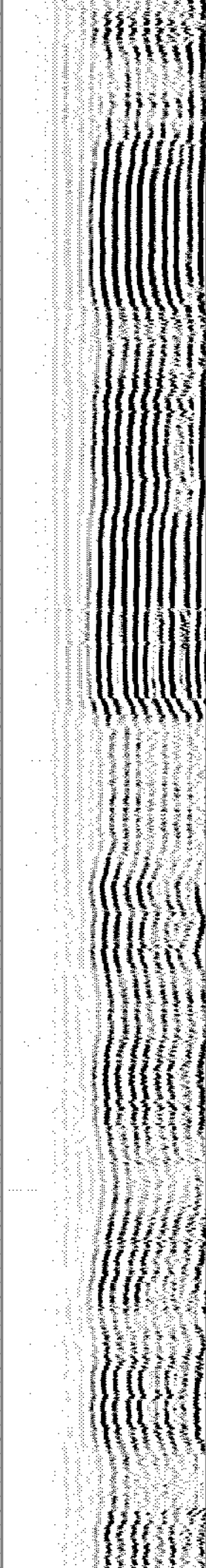
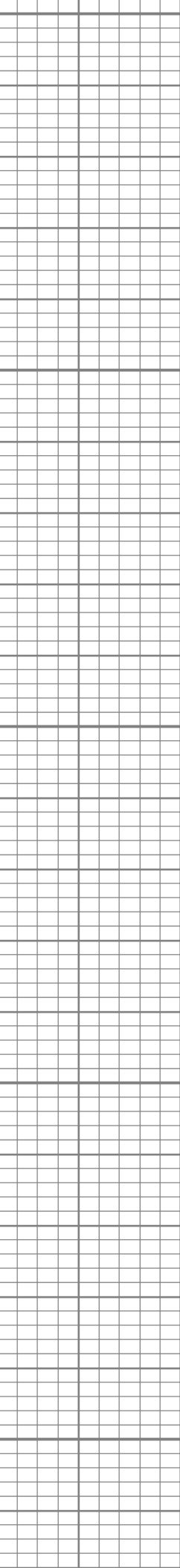
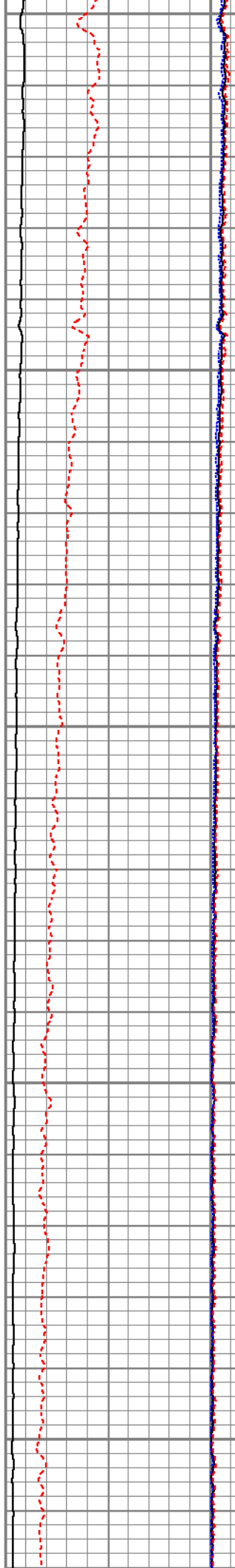
4650

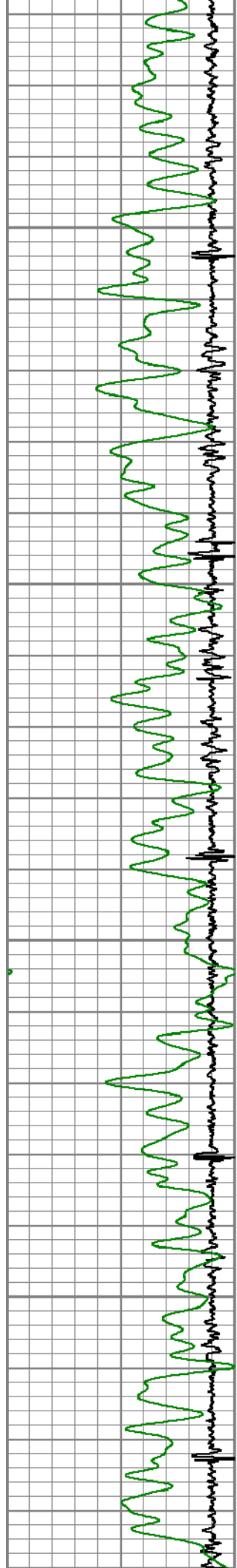






4900
4950
5000
5050
5100



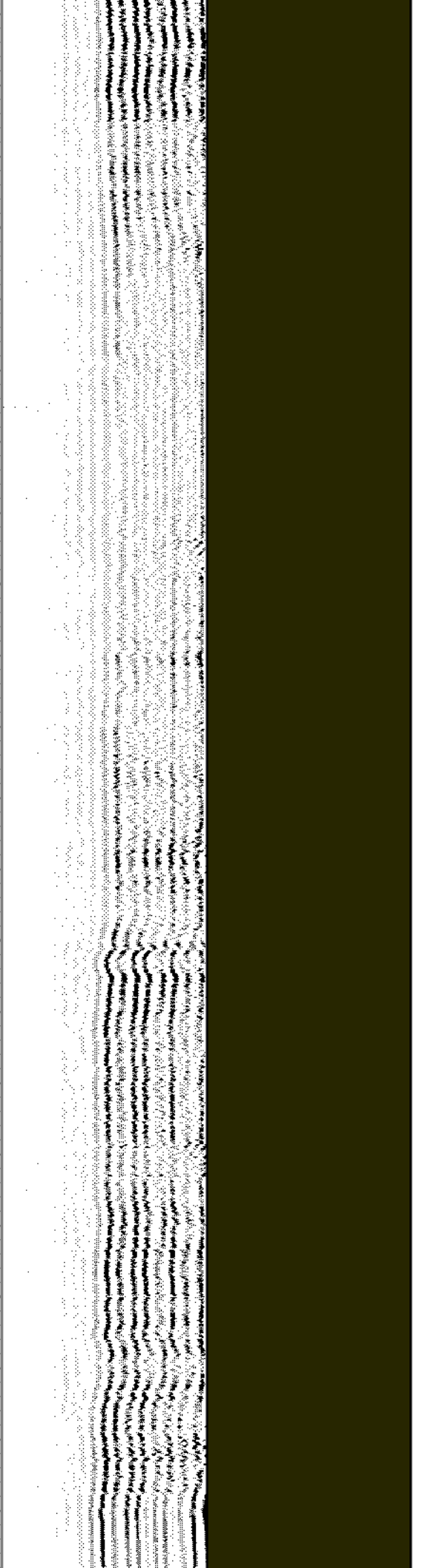
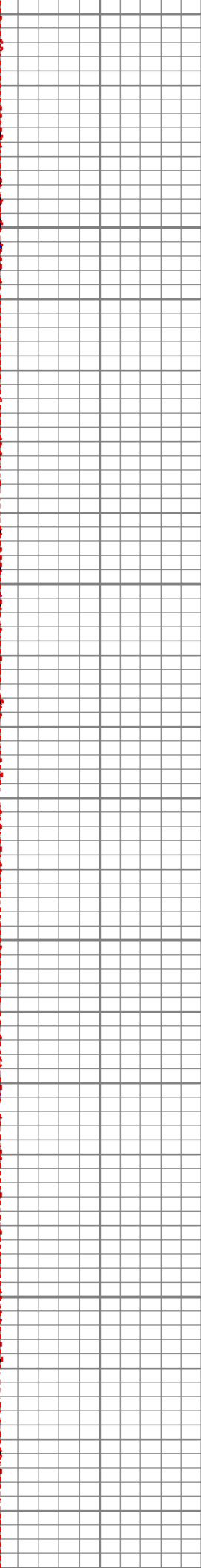
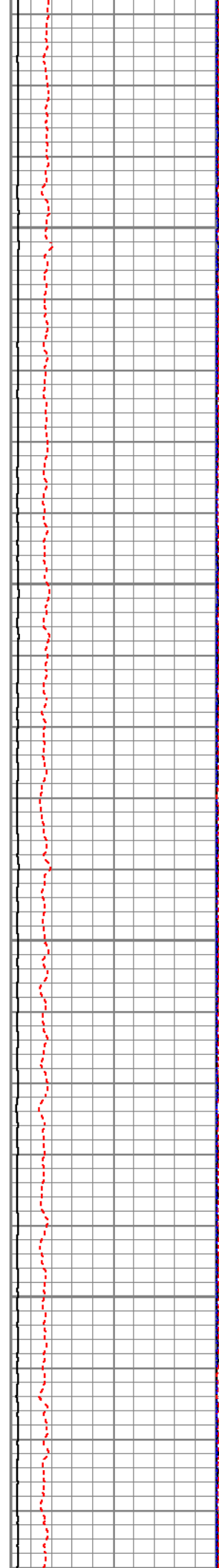


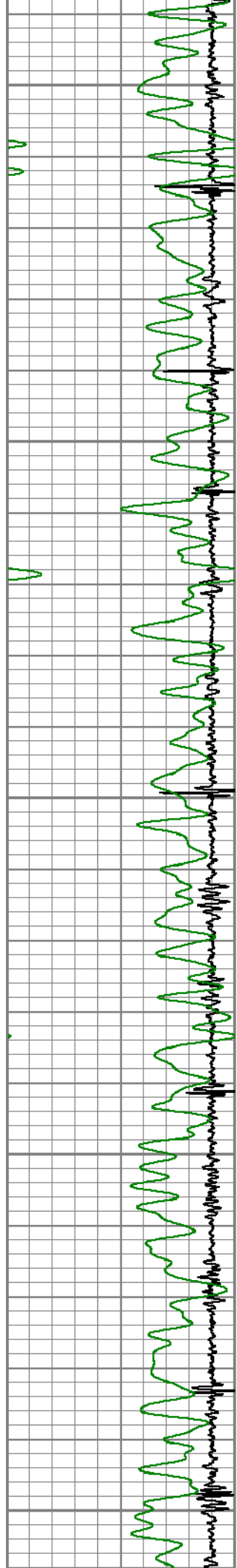
5150

5200

5250

5300





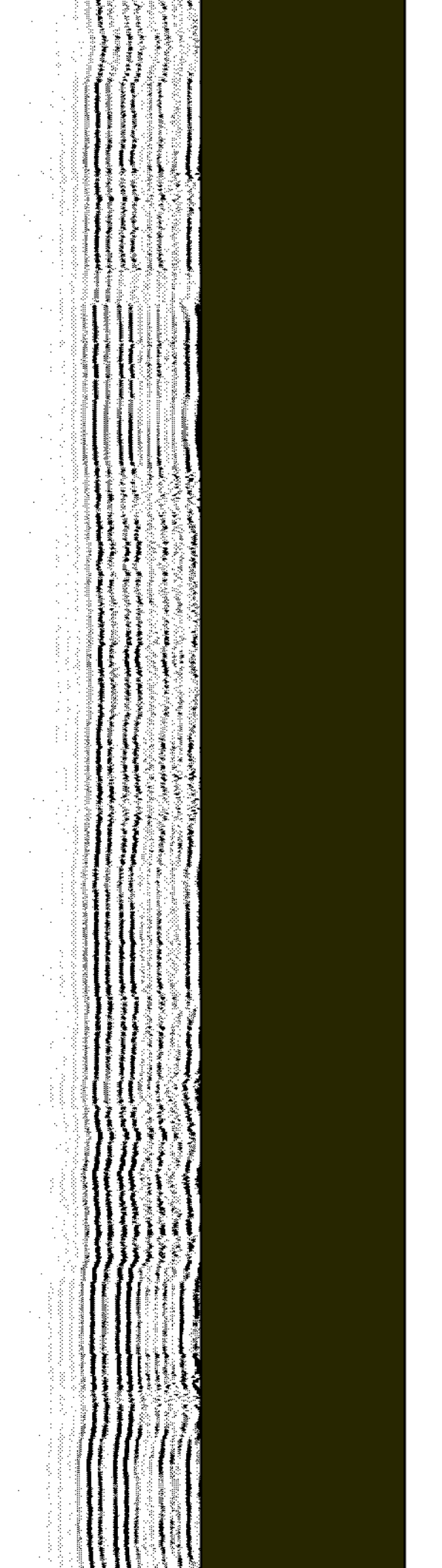
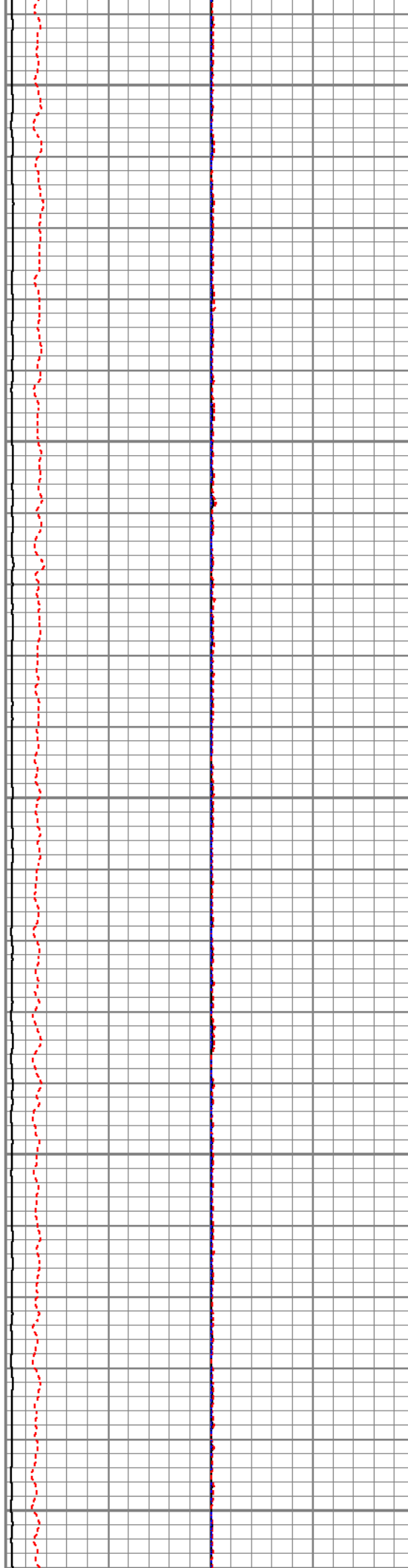
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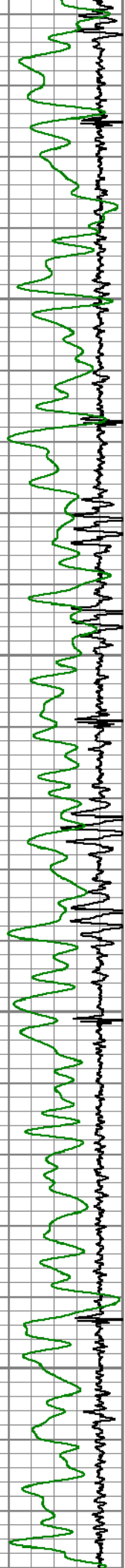
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5450

5500

5550



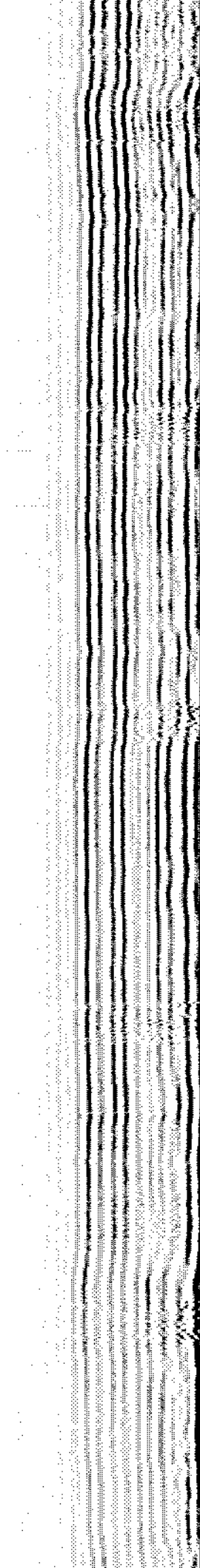
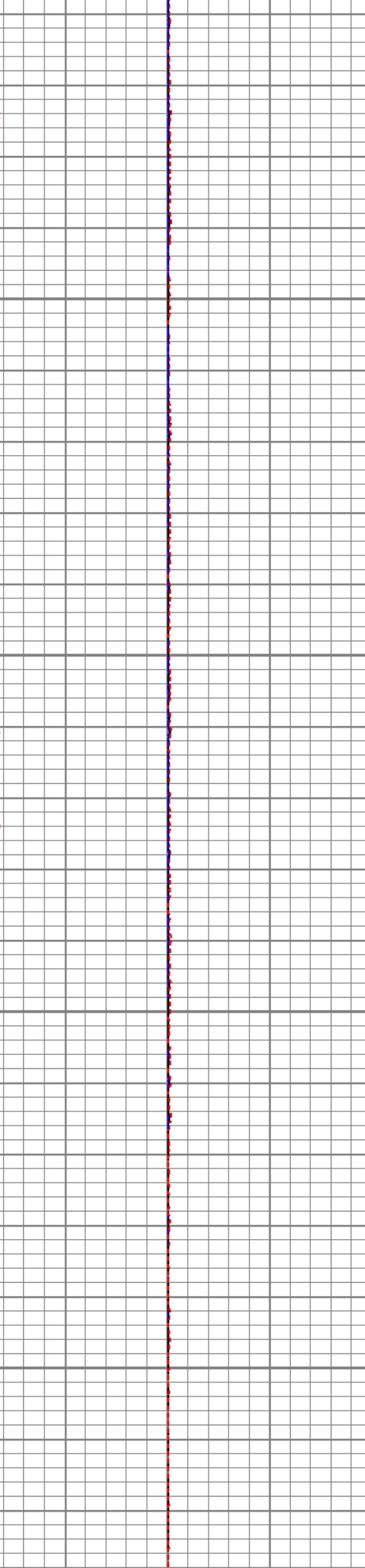
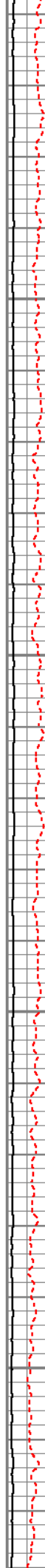


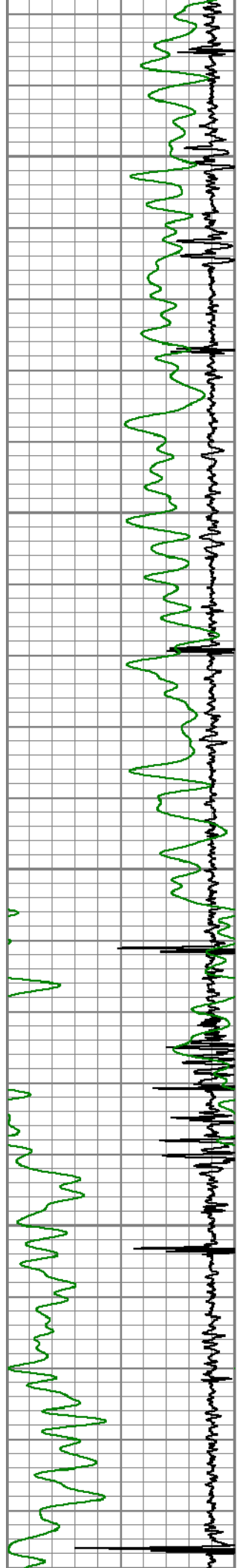
5600

5650

5700

5750



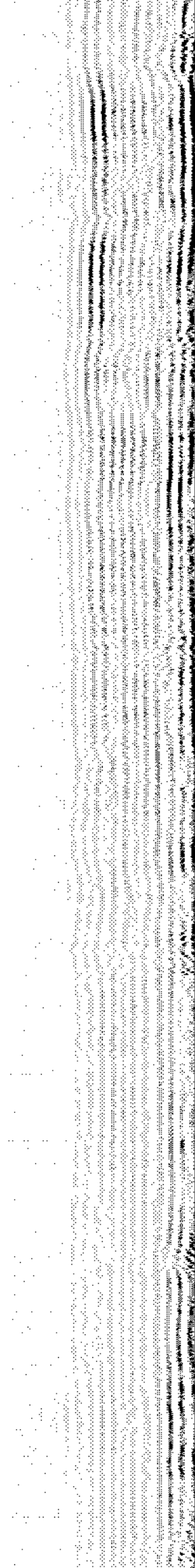
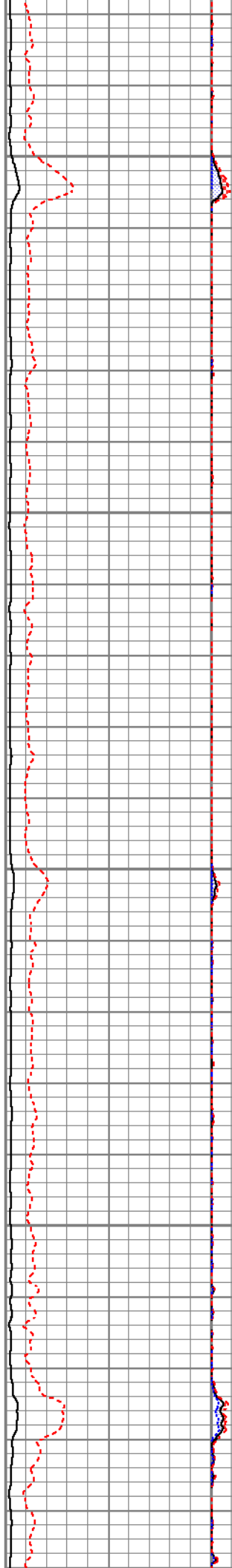


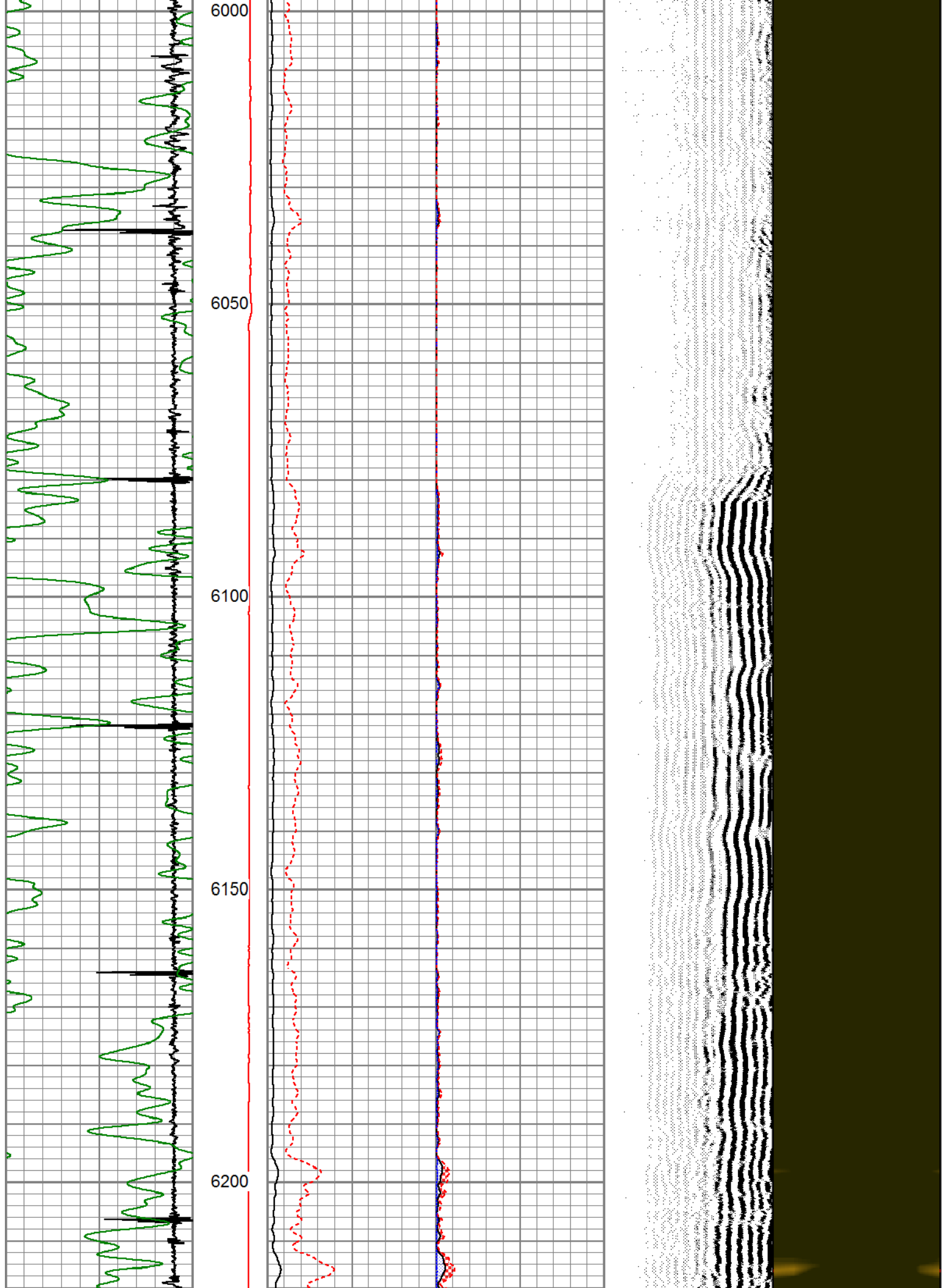
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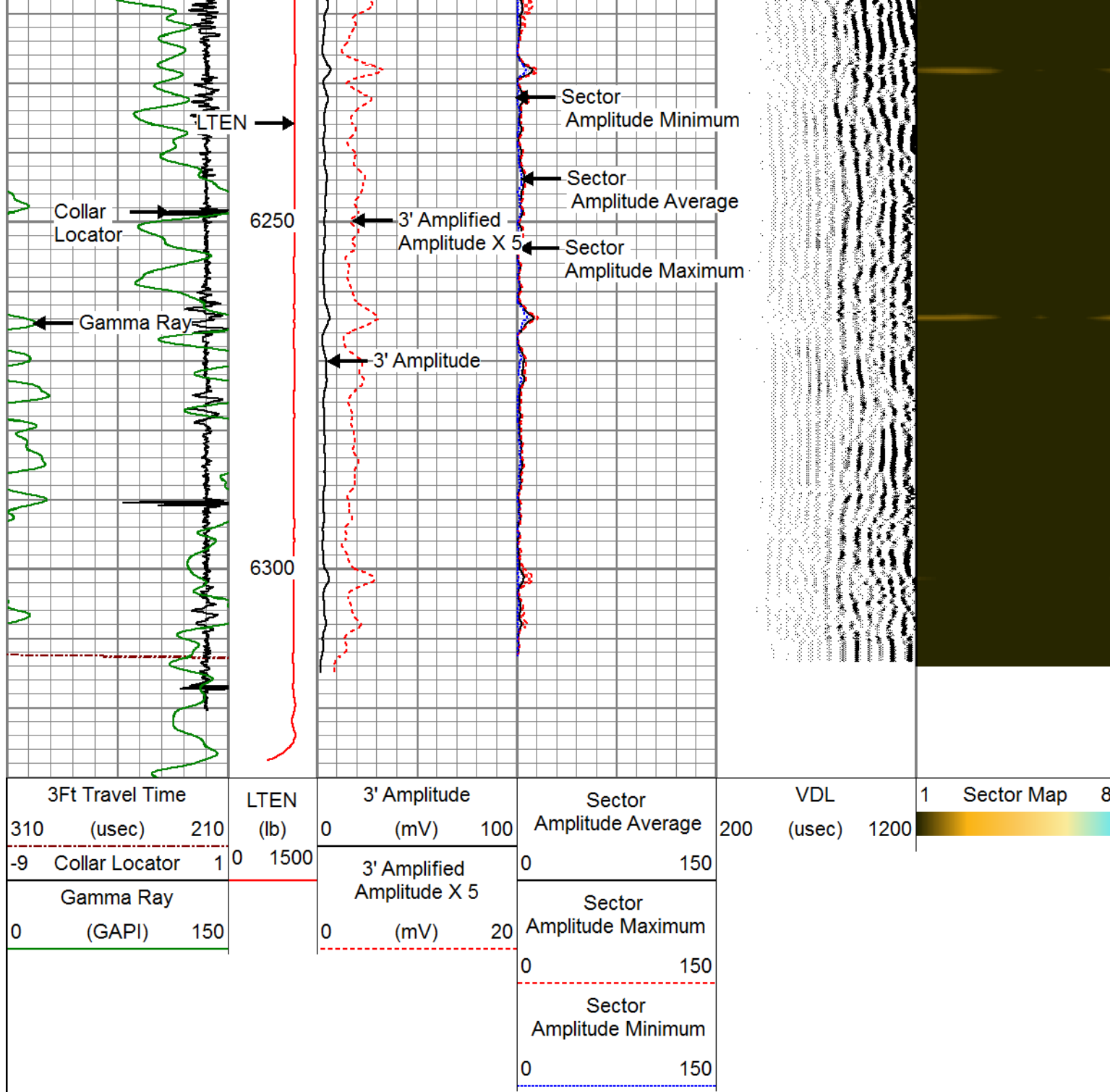
5850


5900

5950









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Pioneer Energy Services

REPEAT SECTION

Database File highpiont_rsu anschutz 4-62-49566_0512346840_20180815_cbl.db

Dataset Pathname REPEAT2

Presentation Format pinr_scbl

Dataset Creation Wed Aug 15 23:30:02 2018

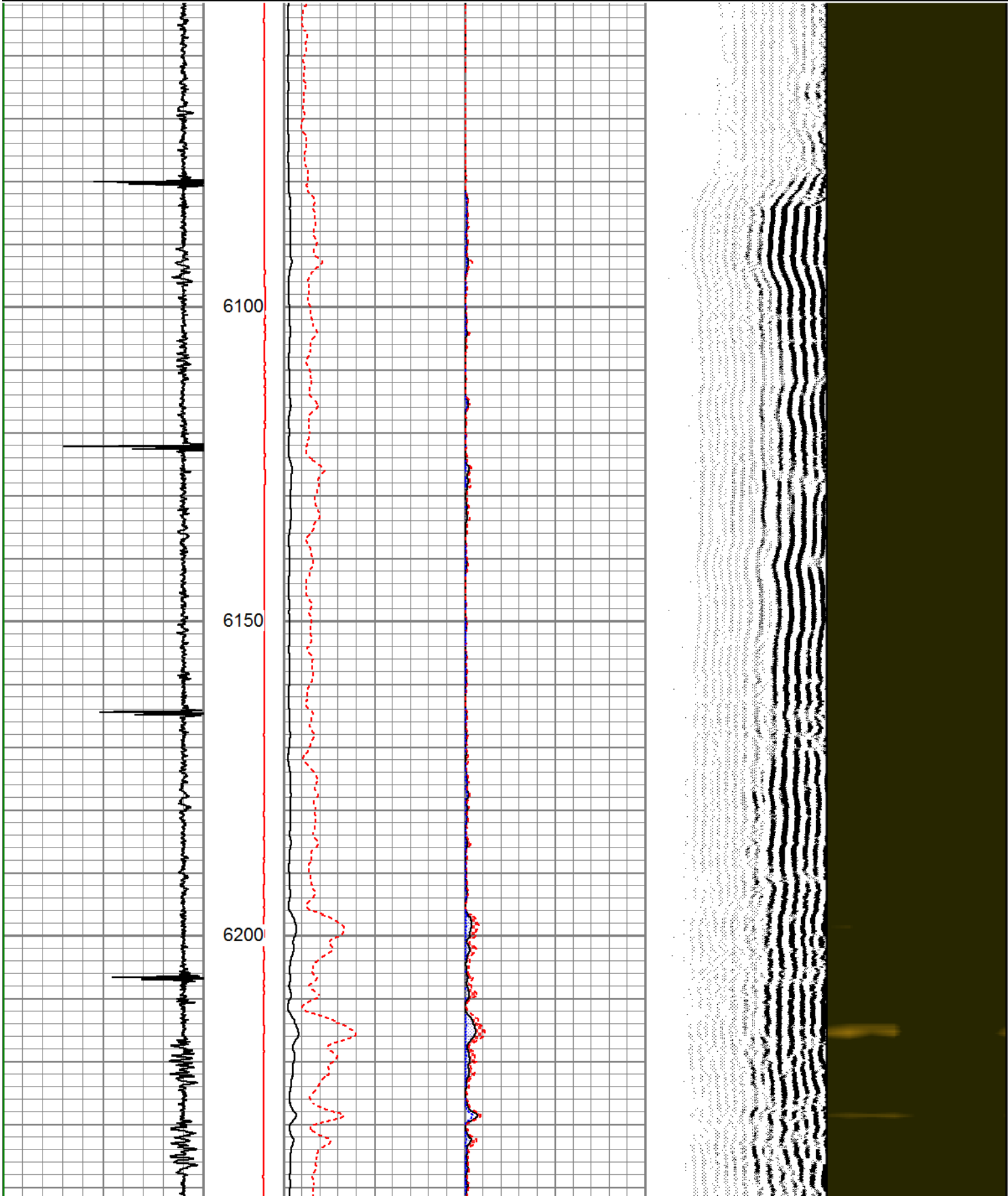
Charted by Depth in Feet scaled 1:240

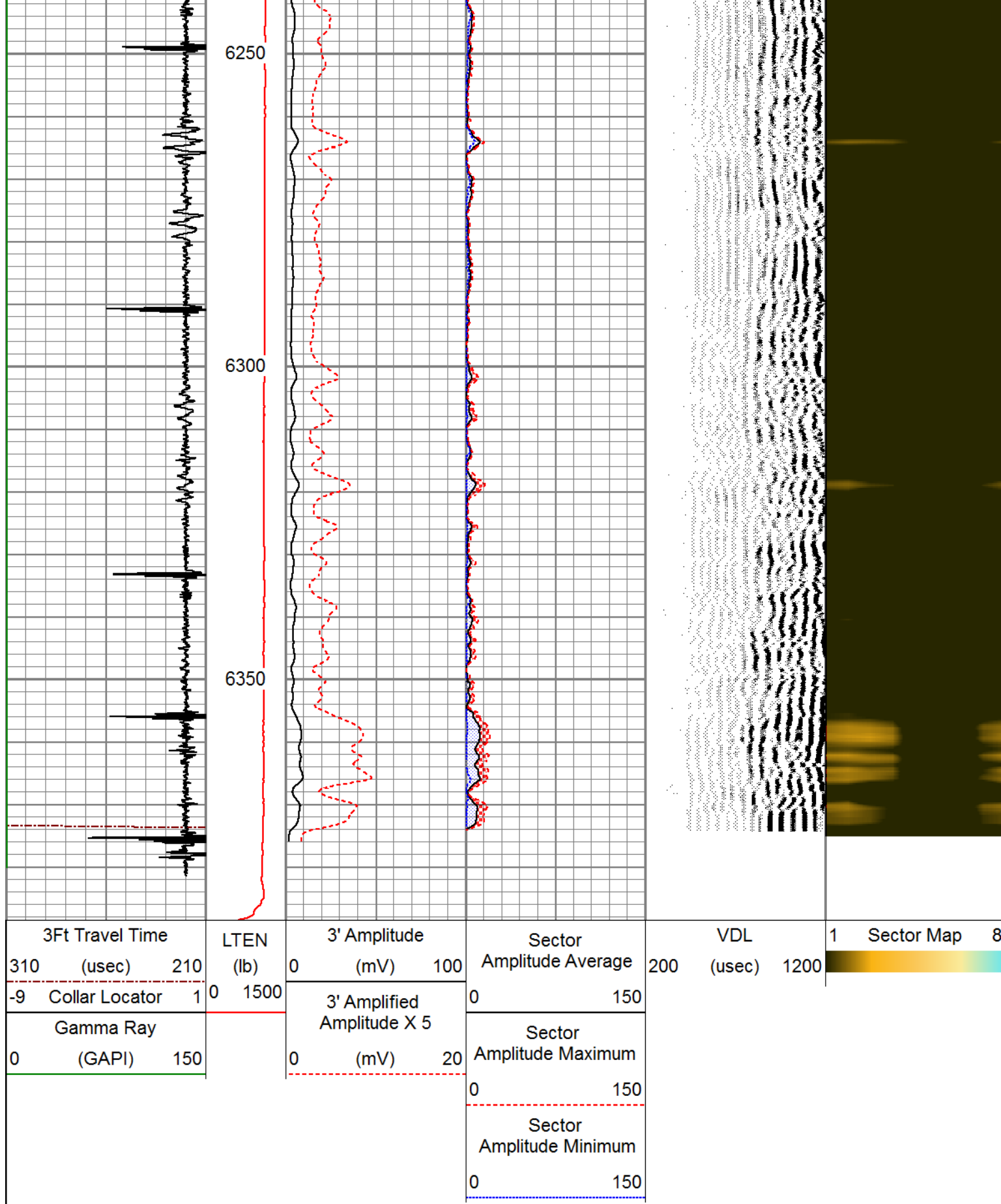
3Ft Travel Time	LTEN	3' Amplitude	Sector	VDL	1 Sector Map 8
310 (usec) 210	(lb)	(mV) 100	Amplitude Average	(usec) 1200	
-9 Collar Locator 1	0 1500	0 150	0 150		
		3' Amplified			
		Amplitude X 5			

Gamma Ray
(GAPI) 0 150

Amplitude X 5
(mV) 0 20

Sector
Amplitude Maximum
0 150
Sector
Amplitude Minimum
0 150





Calibration Report

Database File highpionr_rsu anschutz 4-62-49566_0512346840_20180815_cbl.db
 Dataset Pathname MAIN3
 Dataset Creation Wed Aug 15 23:17:21 2018

Gamma Ray Calibration Report

Serial Number: 120672
Tool Model: 275 Probe GCT
Performed: (Not Performed)

Calibrator Value: 1.0 GAPI

Background Reading: 0.0 cps
Calibrator Reading: 1.0 cps

Sensitivity: 1.0000 GAPI/cps

Segmented Cement Bond Log Calibration Report

Serial Number: 070151
Tool Model: RBL-D

Calibration Casing Diameter: 7.000 in
Calibration Depth: 676.544 ft

Master Calibration, performed (Derived):

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.014	1.074	2.500	62.165	56.305	1.690
CAL	0.069	1.546				
5'	0.020	1.068	2.500	62.165	56.939	1.342
SUM						
S1	0.018	1.044	0.000	100.000	97.555	-1.803
S2	0.021	1.032	0.000	100.000	98.923	-2.088
S3	0.022	1.042	0.000	100.000	98.055	-2.180
S4	0.019	1.044	0.000	100.000	97.482	-1.808
S5	0.015	1.077	0.000	100.000	94.090	-1.367
S6	0.020	1.117	0.000	100.000	91.166	-1.808
S7	0.015	1.132	0.000	100.000	89.502	-1.323
S8	0.018	1.069	0.000	100.000	95.124	-1.706

Air Zero Calibration, performed Wed Aug 15 20:54:00 2018:

	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



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Company HIGHPOINT OPERATING CORP.
Well RSU AWNSCHUTZ FED 4-62-2-49566
Field WATTENBERG

