



PIONEER

Pioneer Energy Services

RADIAL BOND LOG WITH GAMMA RAY

Company **HIGH POINT RESOURCES**
Well **RSU ANSCHUTZ 4-62-11-1609CN**
Field **WATTENBERG**
County **WELD** State **CO**

Comp. HIGH POINT RESOURCES
Well RSU ANSCHUTZ 4-62-11-1609CN
Field WATTENBERG
Co. WELD
State CO

Location: SESE SEC 3 T4N R62W
LAT: 40.334917
LONG: -104.304653
SEC 3 TWP 4N RGE 32W
Permanent Datum GL Elevation 4523
Log Measured From KB Above Perm. Datum
Drilling Measured From KB
Other Services
CCL
K.B. N/A
D.F. 4540
G.L. 4523

Date of Service 18-SEP-2018

Run Number

Depth Driller or PBTD

Depth Logger

Bottom Log Interval

Top Log Interval

Open Hole Size

Type Fluid

Fluid Level

Fluid Density

Max. Recorded Temperature

Max. Wellhead Pressure

Wellhead Connection

Estimated Cement Top

Unit Number

Wireline Size

Location

Recorded By

Witnessed By

Size

Wt/Ft

Top

Bottom

9-5/8"

36#

SURFACE

832'

7"

23#

SURFACE

6543'

Liner Record

<<< Fold Here >>>

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.
CORRELATED TO SURFACE

THANK YOU FOR USING PIONEER ENERGY SERVICES!

Your Pioneer Energy Services Crew

Engineer: E. HESSLER
Operator: A. SPILLMAN
Operator: G. PEREA
Operator: G. FARQUHAR

Tool Data - Services

SCBL
GR CCL

Serial Number

130433
070237


Top - Bottom

BHTEMP_Src	BOREID	BOTTEMP	CASEOD	CASETHCK	CASEWGHT	MAXAMPL	MINAMPL
TEMP	in 7.875	degF 100	in 7	in 0	lb/ft 23	mV 62.2	mV 1
MINATTN	PERFS	PPT	SRFTEMP	TDEPTH			
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)
TEMP	14.23		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-DCT (PROBE-9.21-DCT)	2.75		105.00
	11.94		Probe 2 3/4" Radii Bond with Temp-Corrosion Package			
	11.94					
	11.94					
	11.94					
	11.94					
	11.94					
	11.94					
	11.94					
	11.94					
	11.94					
	10.94					
HEADVOLT	7.75					

			Centralizer-275 Probe 2 3/4" Probe Adjustable Spring Centralizer	2.88	2.75	15.00
CCL	3.97					
GR	2.67		PROBE-GR/CCL-DIGITAL-275 Probe Probe 2 3/4" Gamma Ray / CCL DIGITAL	GR-4.54 (Prob2.755-GR-60.00		
			Bullnose-PROBE Probe Go Pin Pressure Cap	0.33	1.38	1.00
Dataset: highpointresources_rsuanchutzfed4-62-11-1609cn_20180918_scbl_grccl.db: field/well/run1/pass7 Total length: 20.86 ft Total weight: 198.00 lb O.D.: 2.75 in						



PIONEER

Pioneer Energy Services

MAIN LOG

ZERO PSI APPLIED AT SURFACE

Database File

highpointresources_rsuanschutzed4-62-11-1609cn_20180918_scbl_grccl.db

Dataset Pathname

pass7

Presentation Format

pinr_scbl

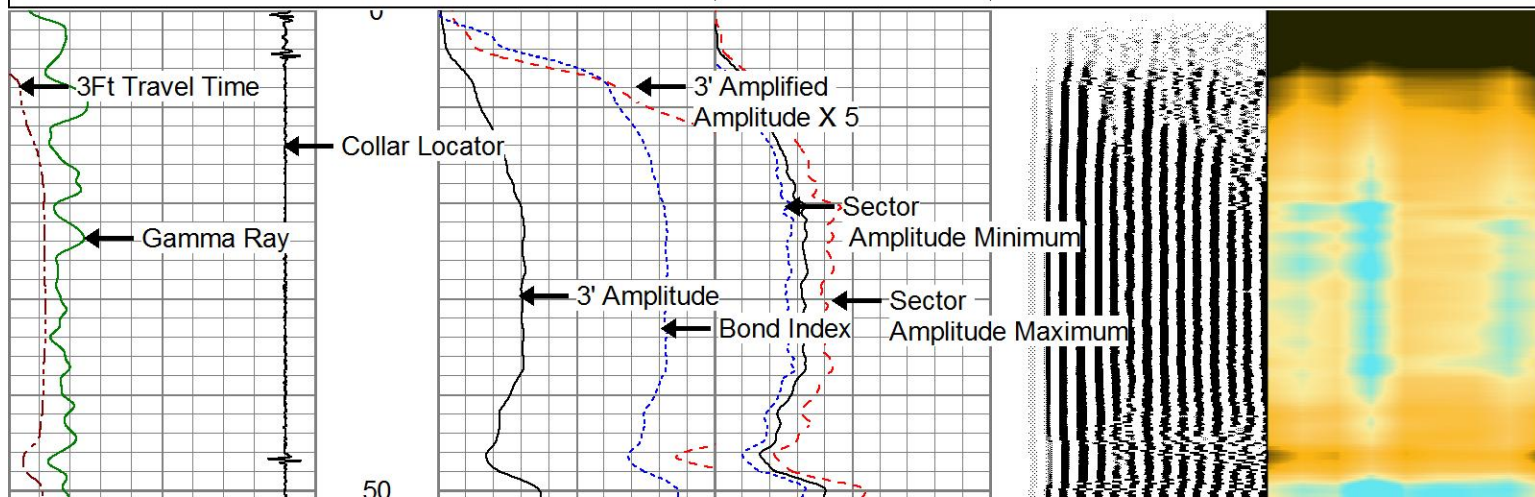
Dataset Creation

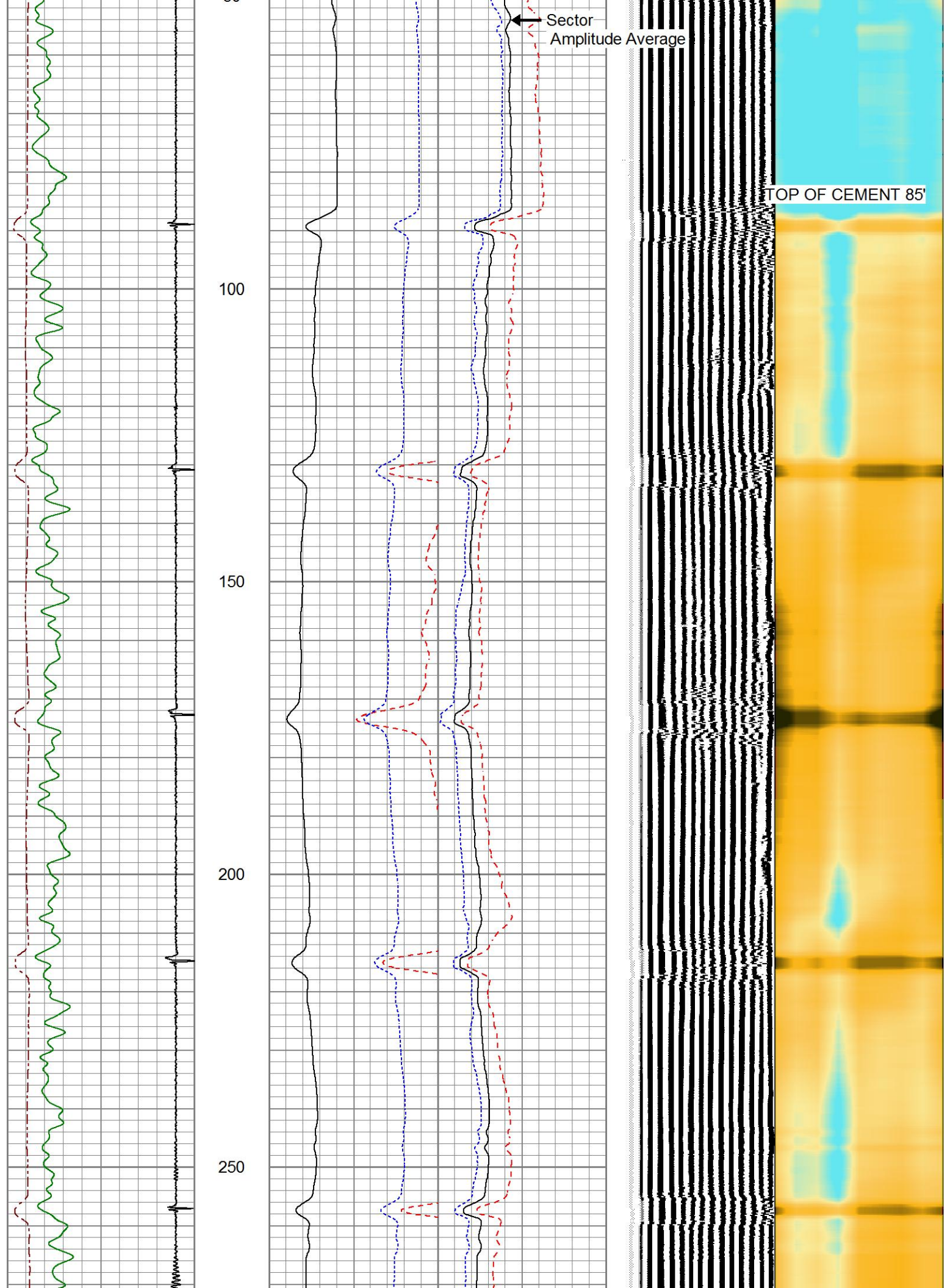
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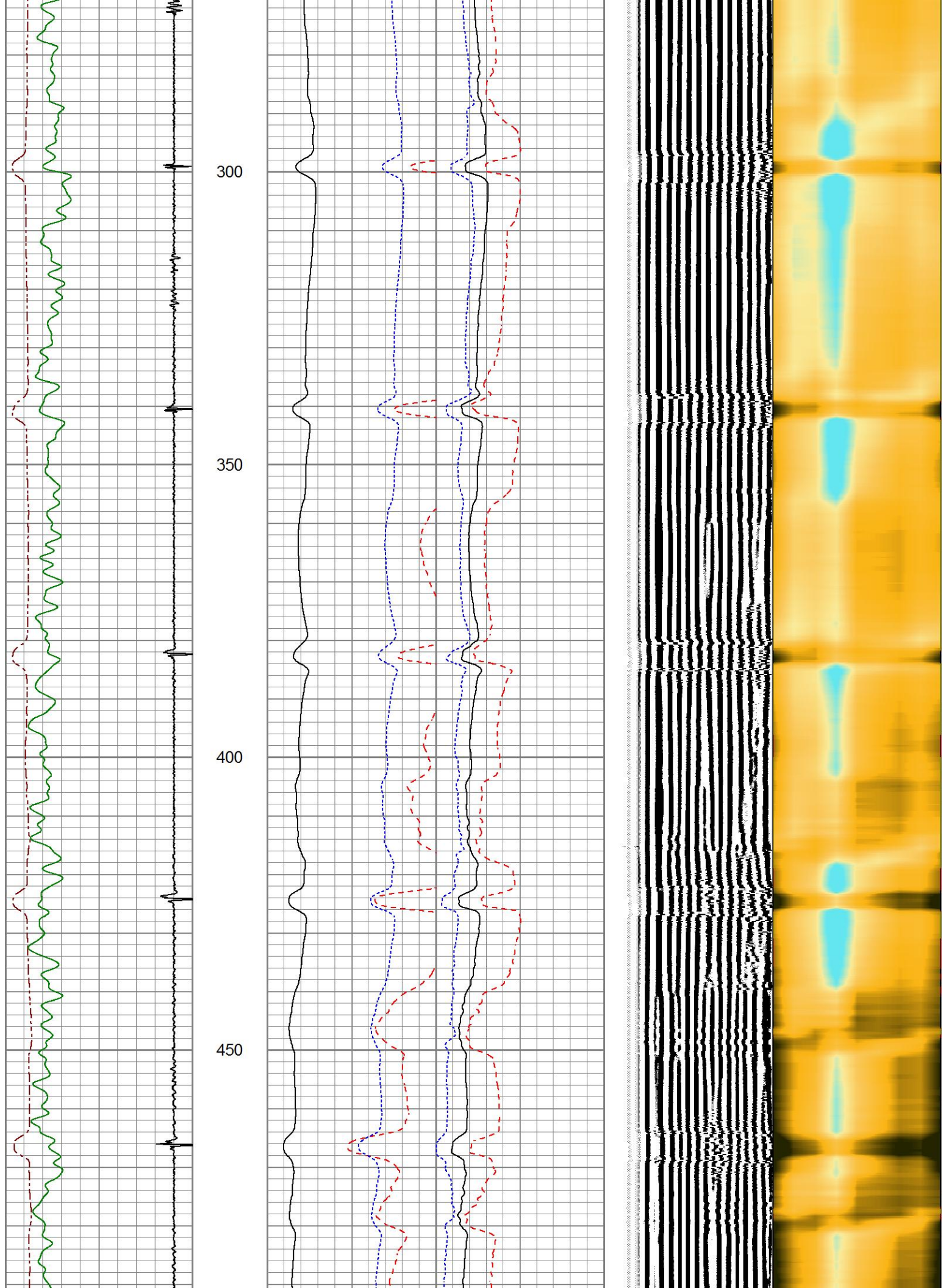
Charted by

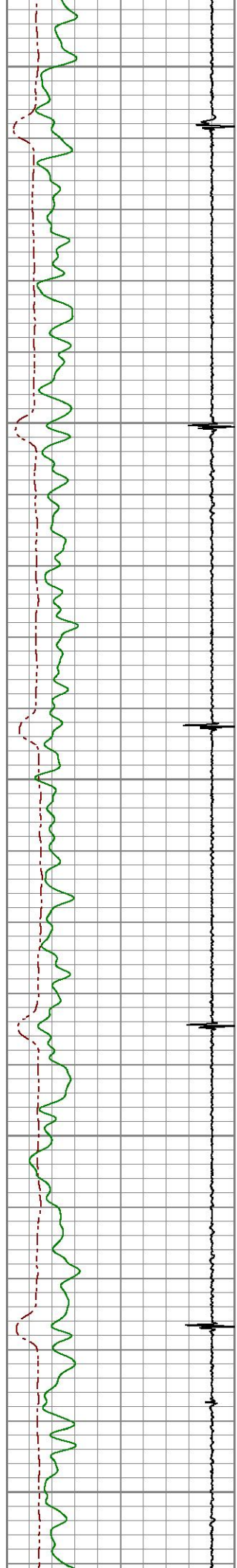
Depth in Feet scaled 1:240

3Ft Travel Time		3' Amplitude		Sector	200	VDL (usec)	1200	1	Sector Map	8
297 (usec)	197	0 (mV)	100	Amplitude Average						
-9 Collar Locator	1	3' Amplified Amplitude X 5		0	150					
Gamma Ray		0 (mV)	20	Sector Amplitude Maximum						
0 (GAPI)	150	1 Bond Index	0	0	150					
				Sector Amplitude Minimum						
				0	150					









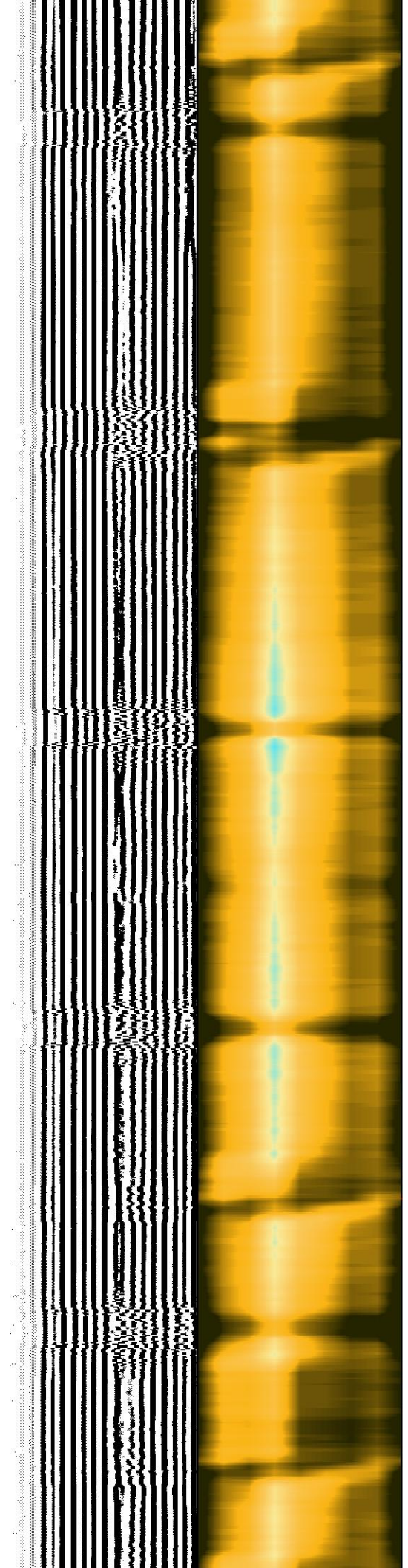
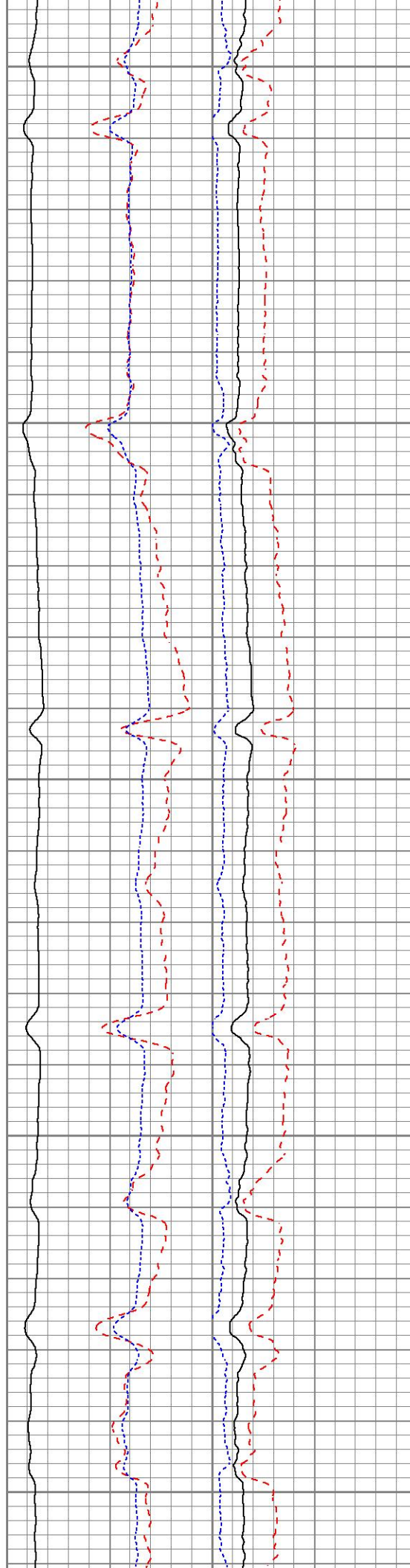
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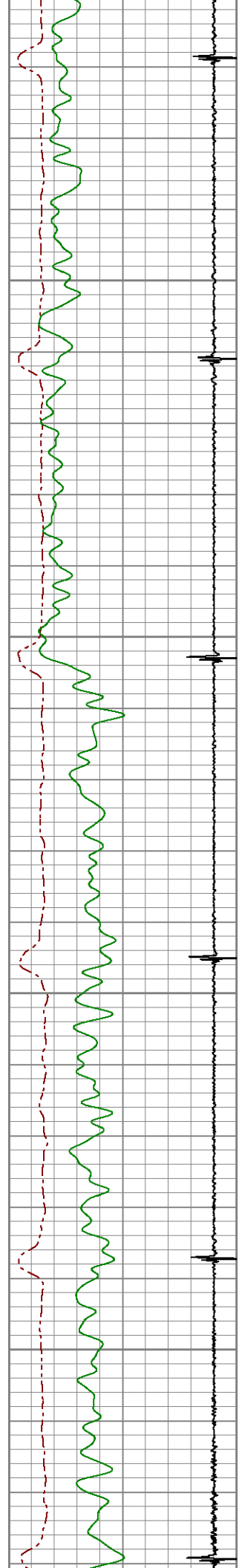
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600

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700



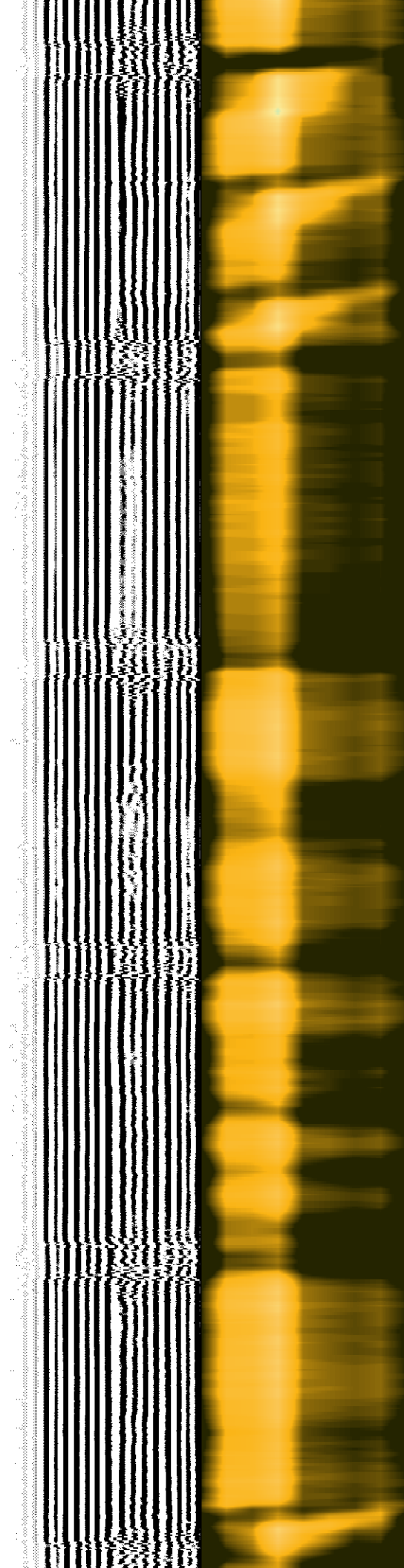
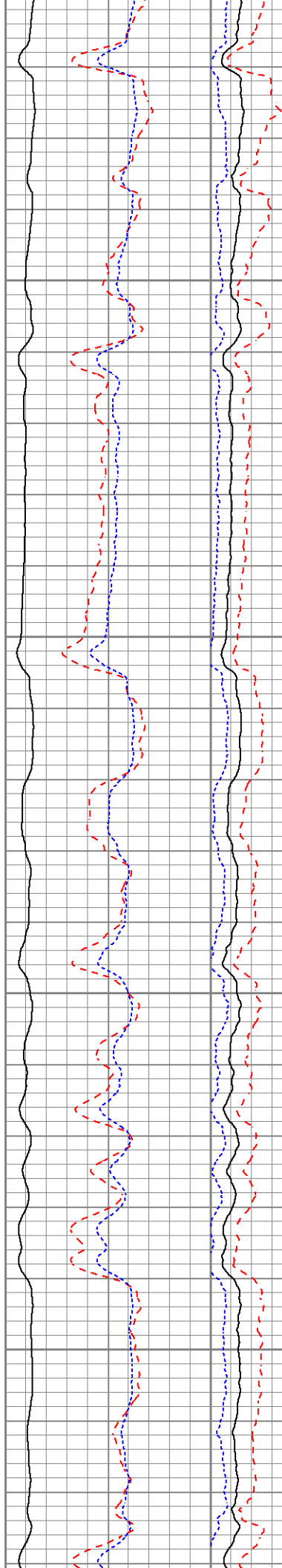


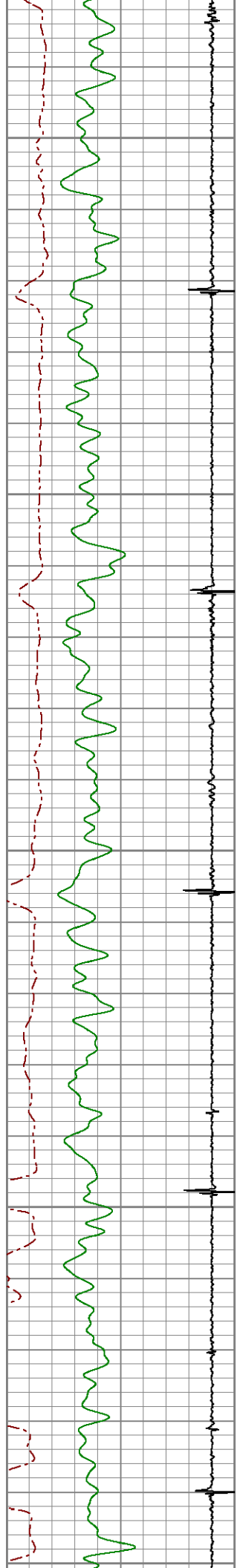
750

800

850

900





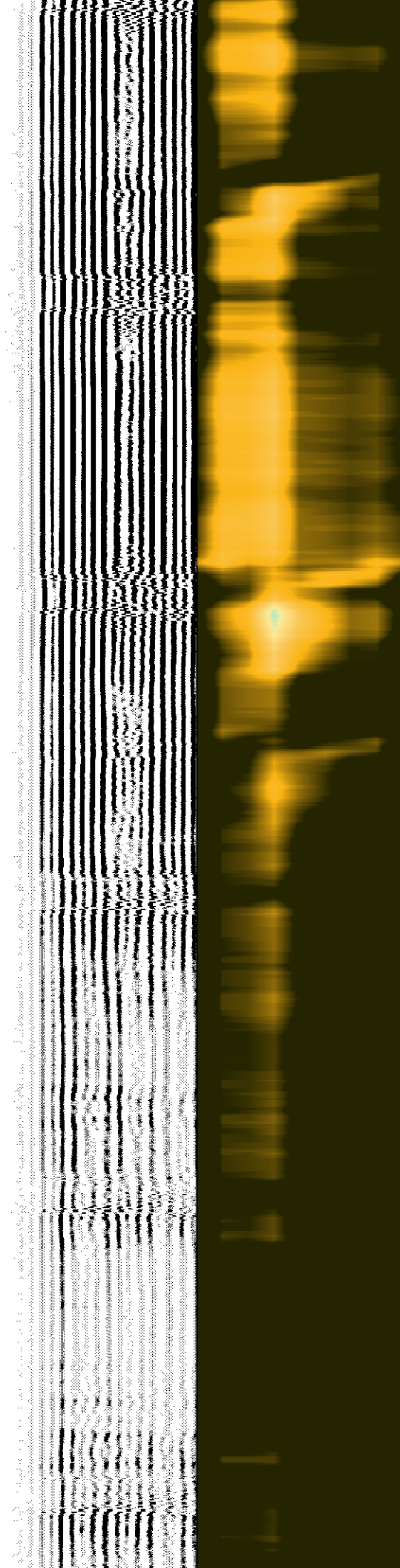
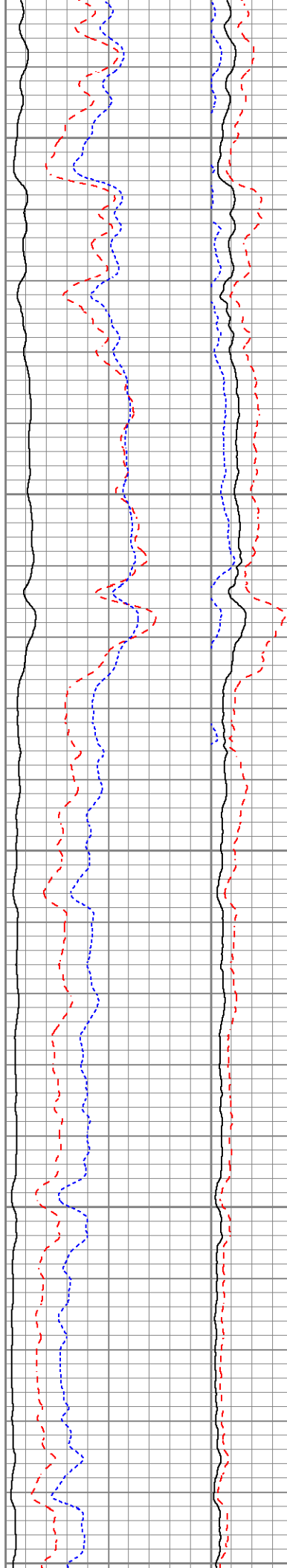
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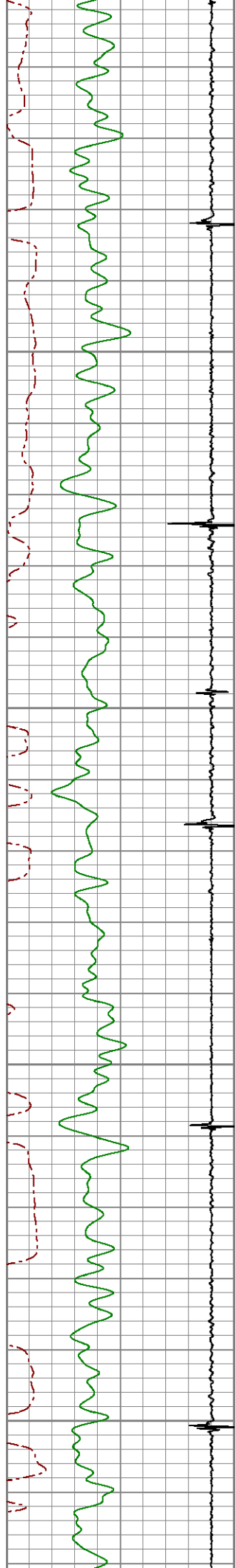
1000

1050

1100

1150



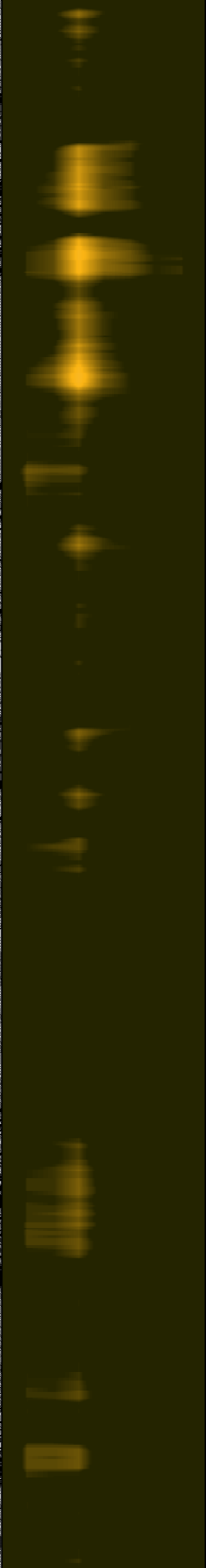
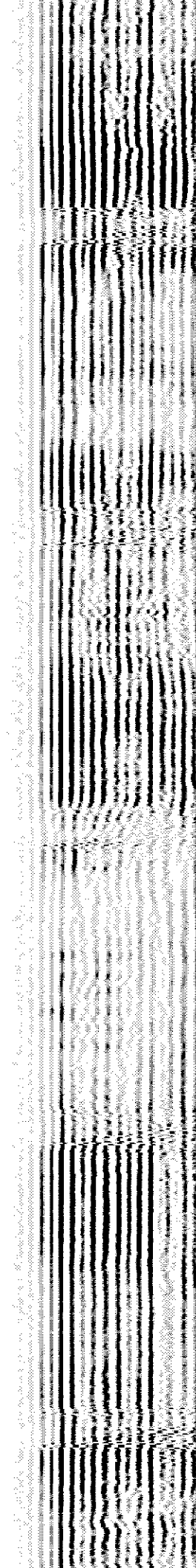
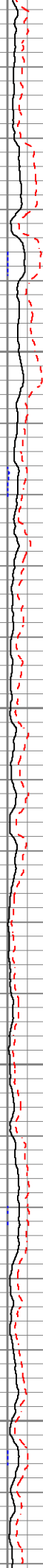
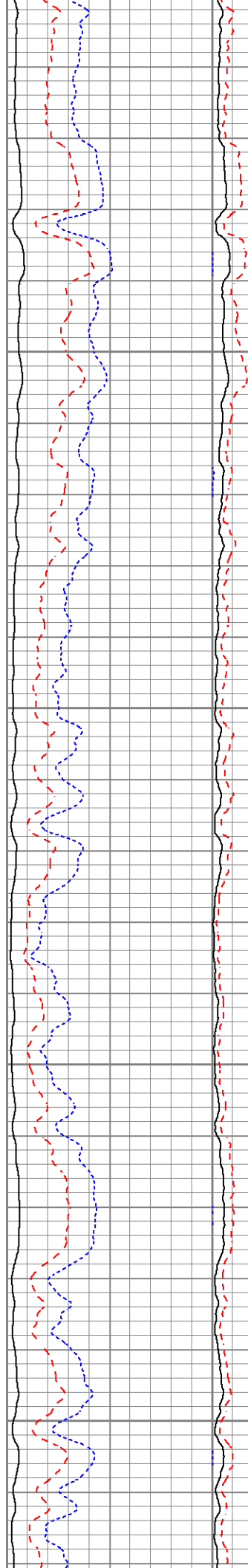


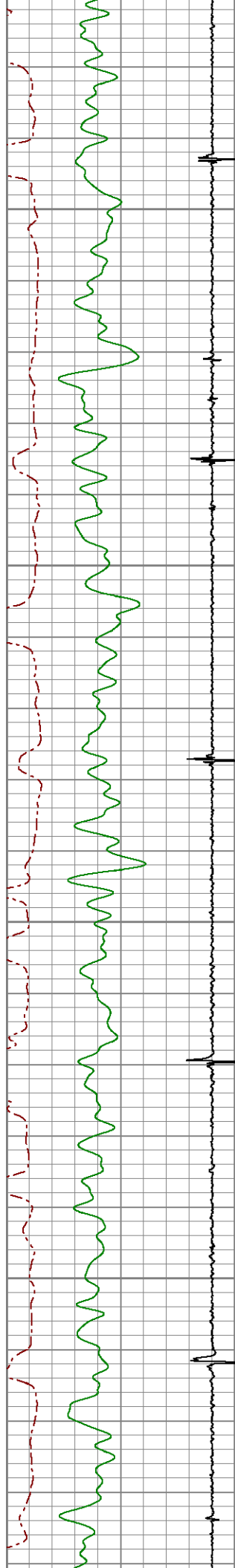
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1250

1300

1350



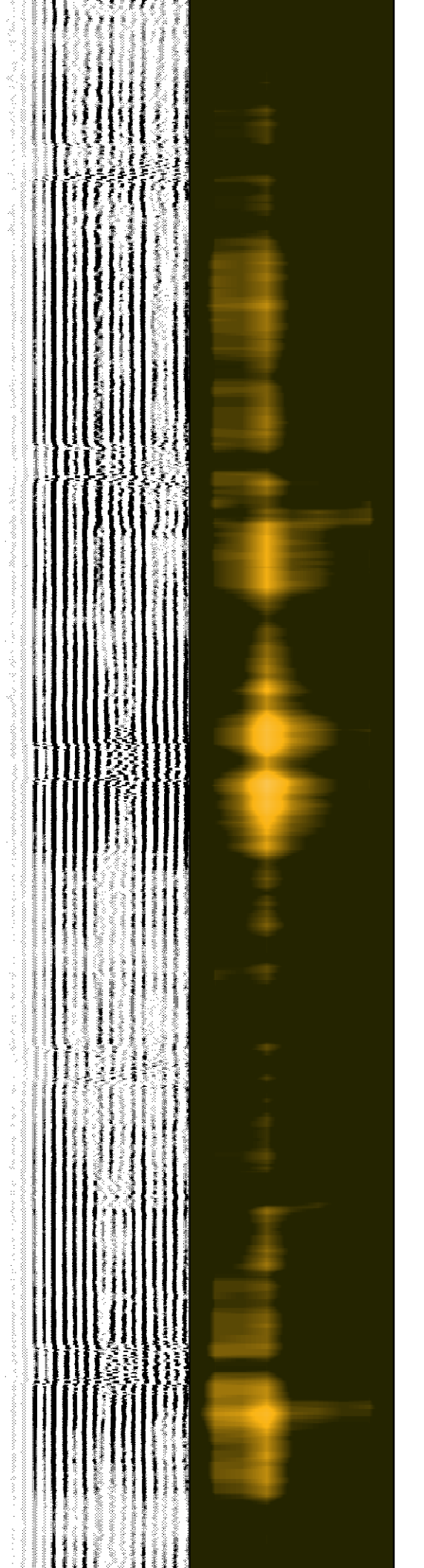
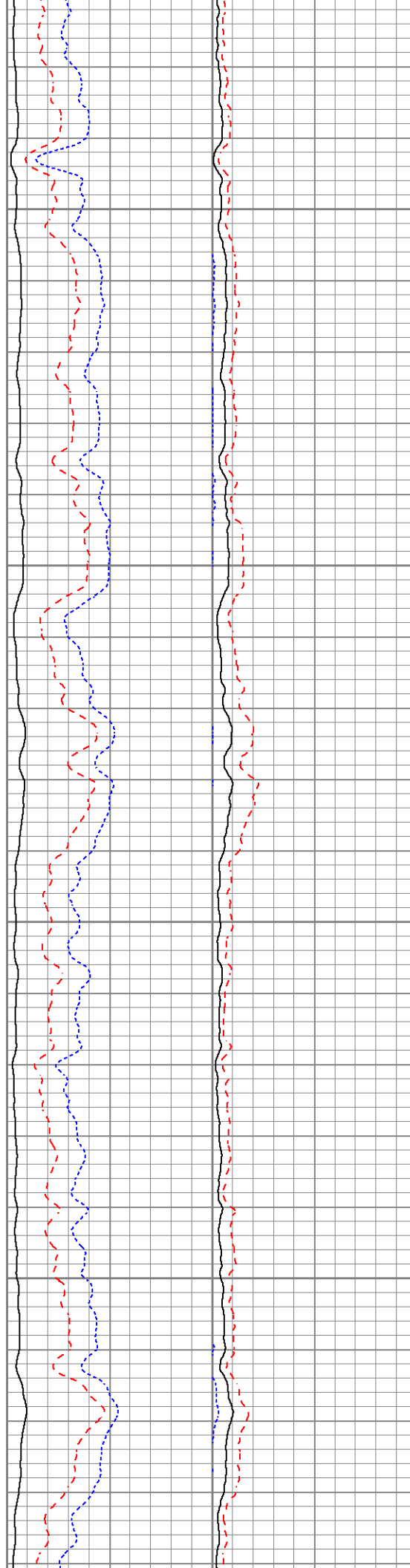


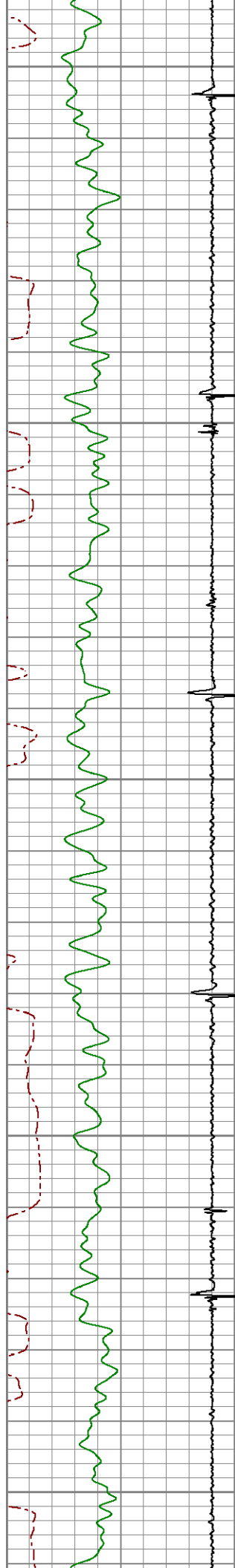
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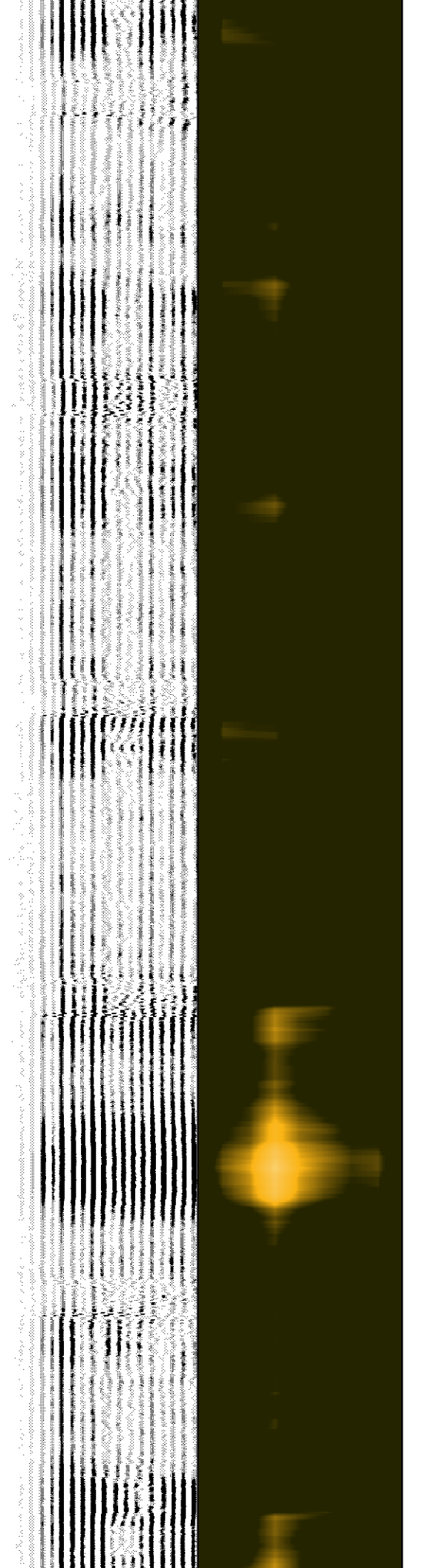
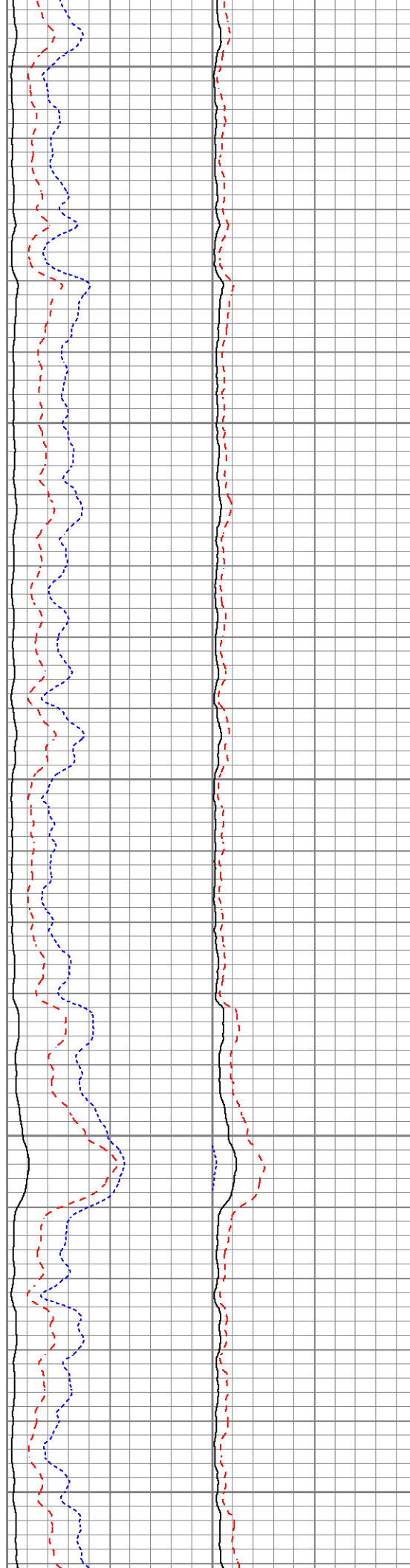
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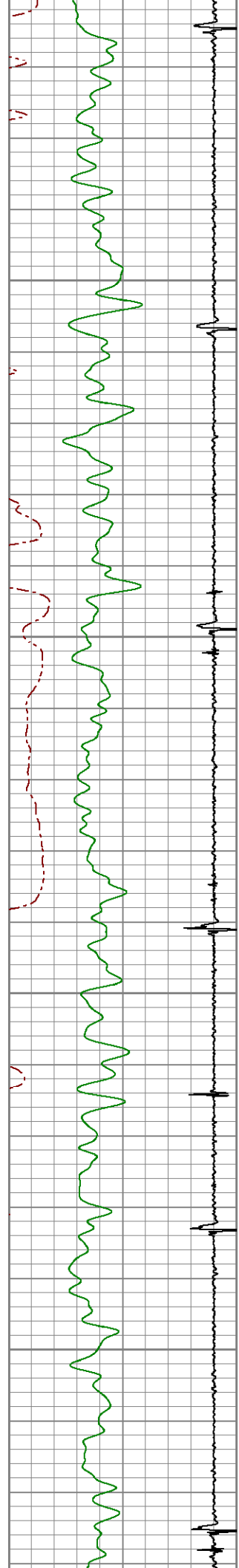
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1750

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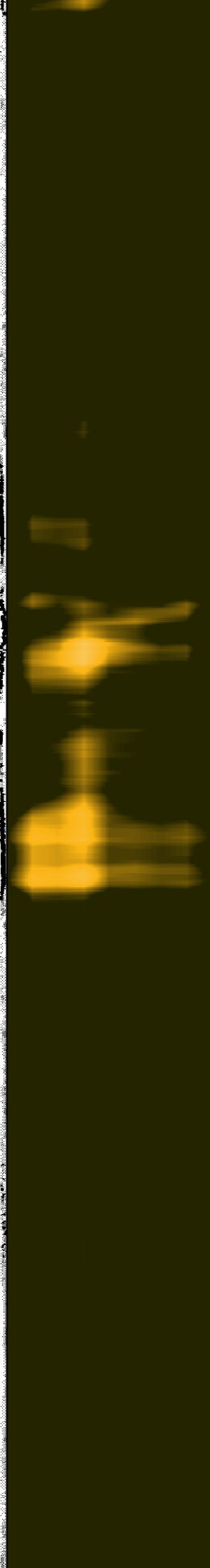
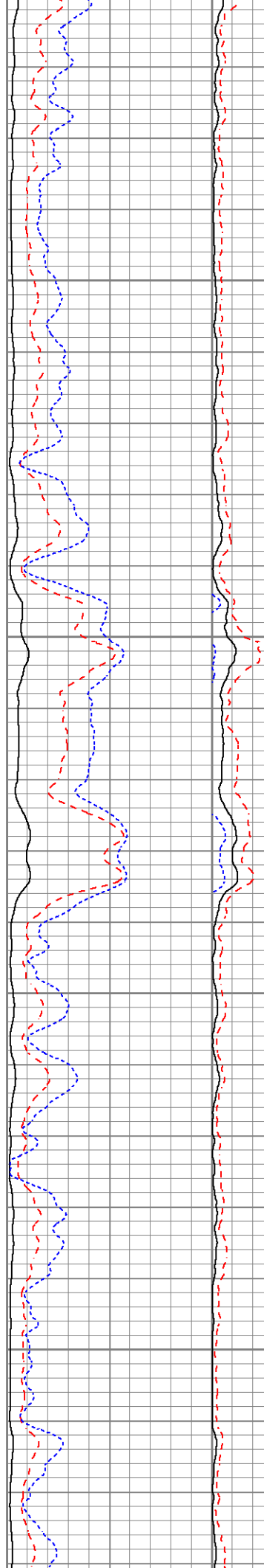


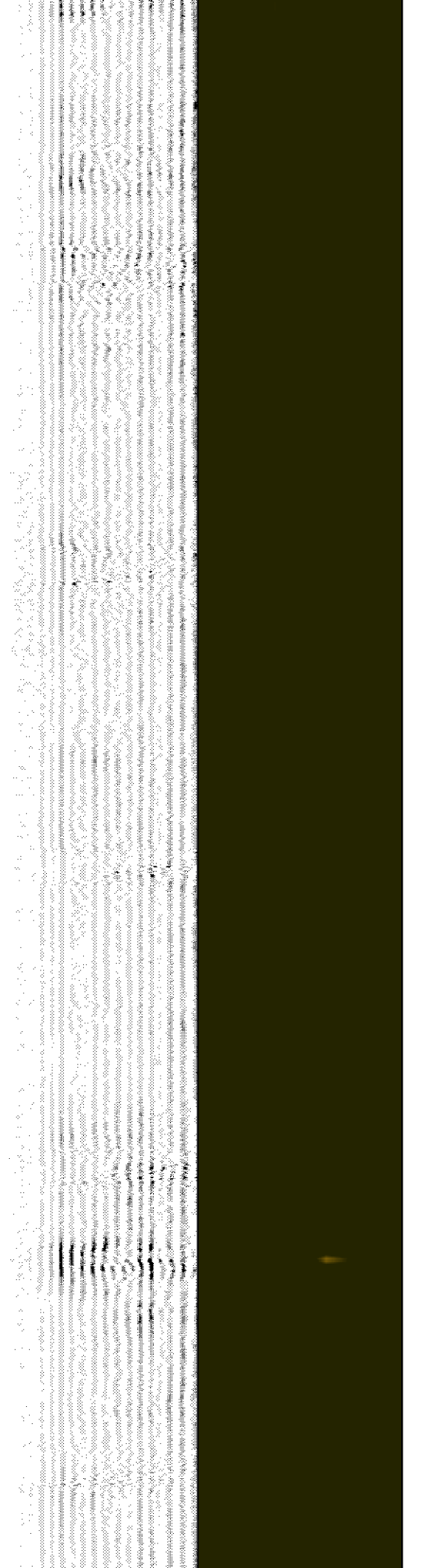
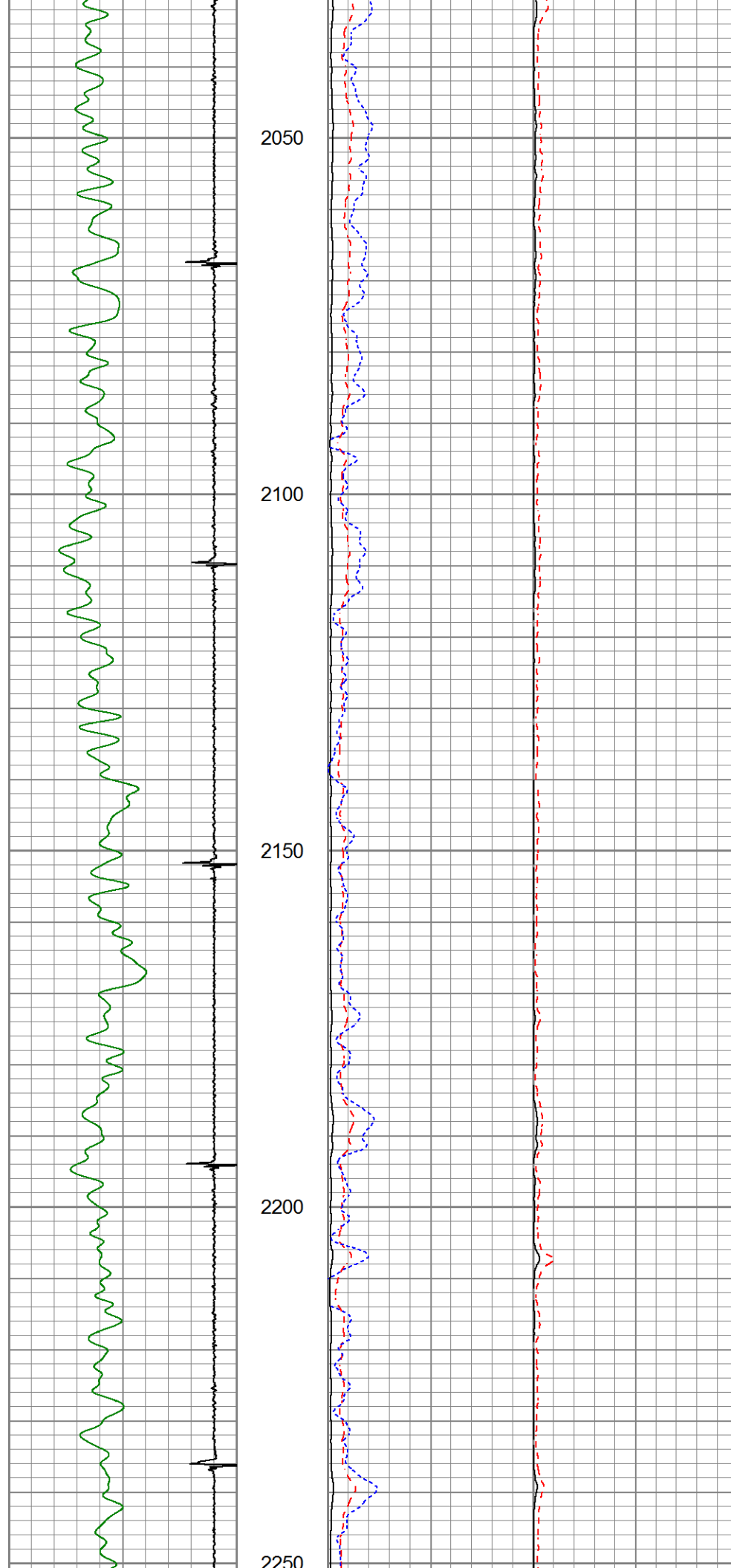
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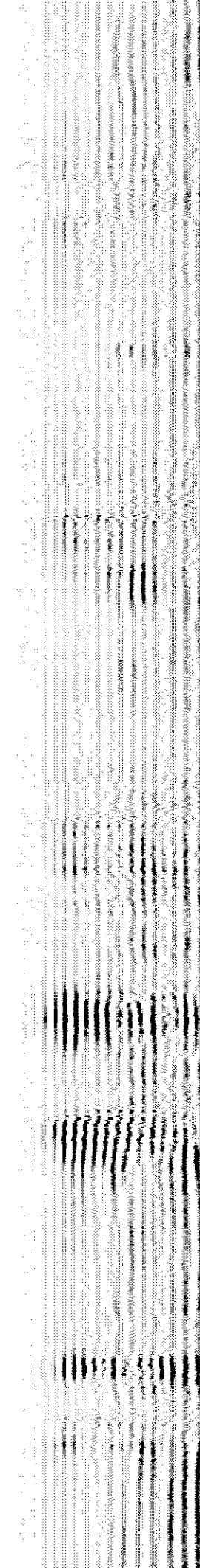
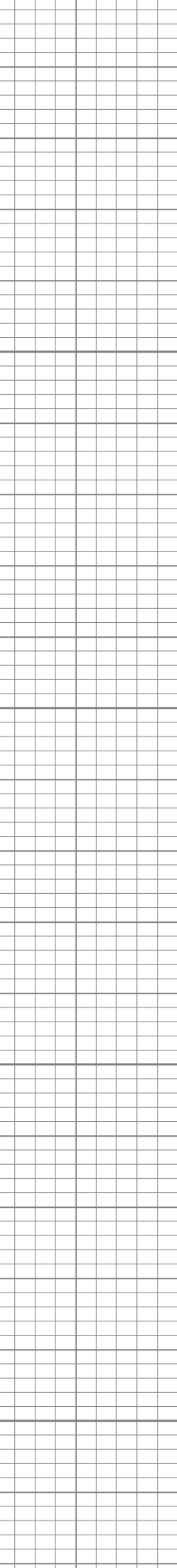
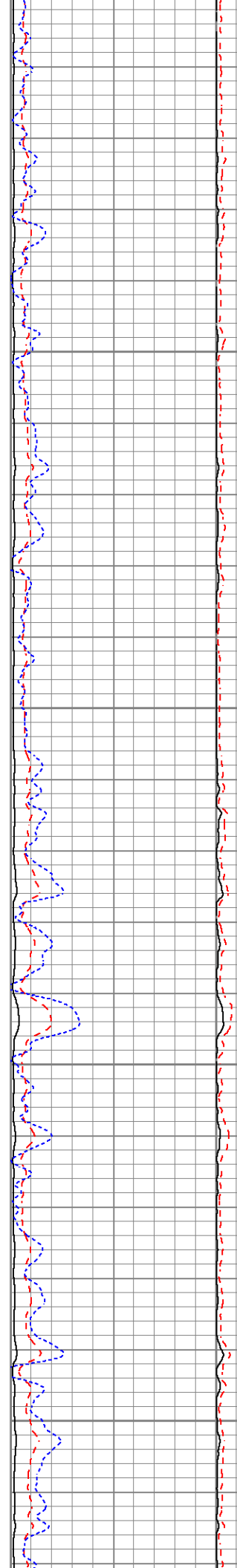
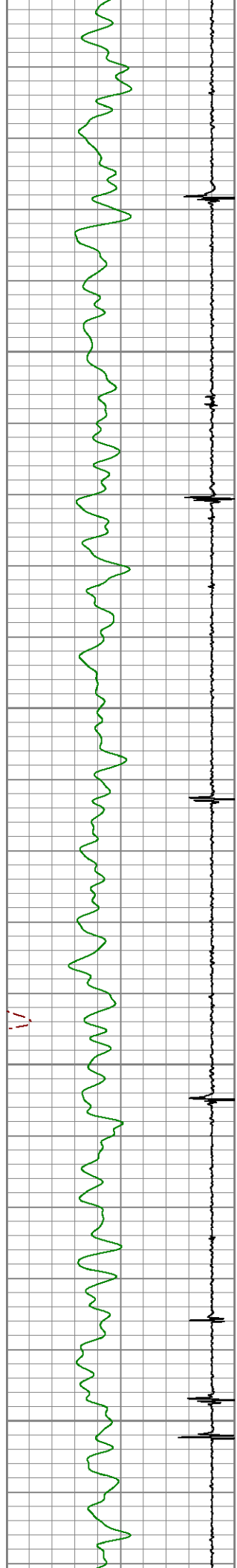
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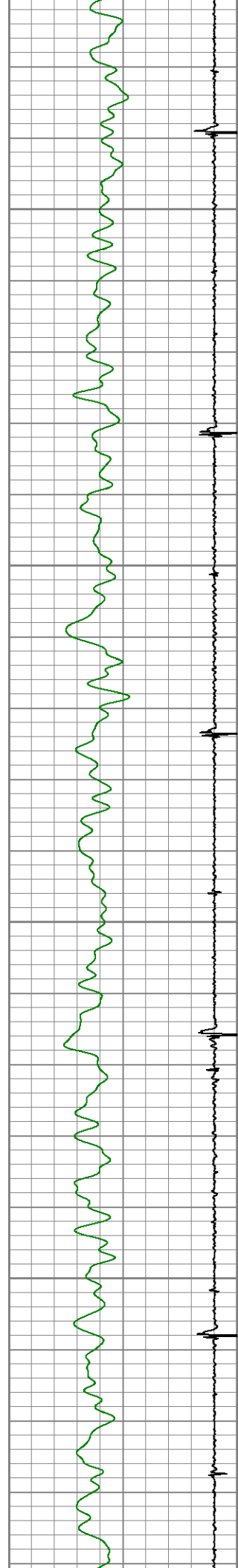
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2450



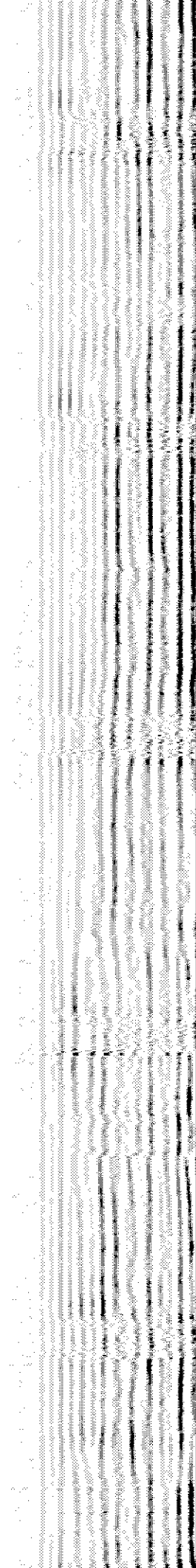
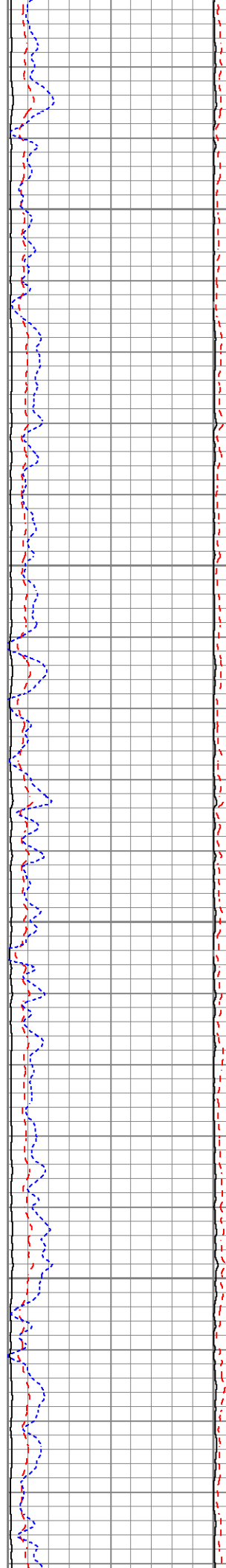


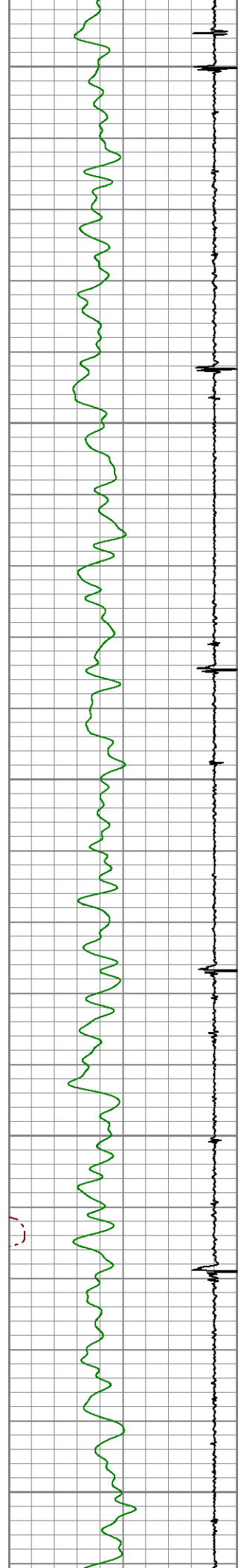
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2550

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2650





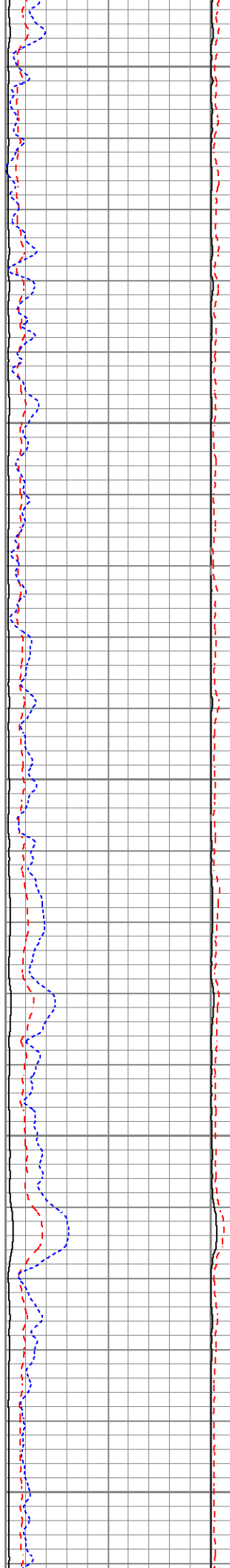
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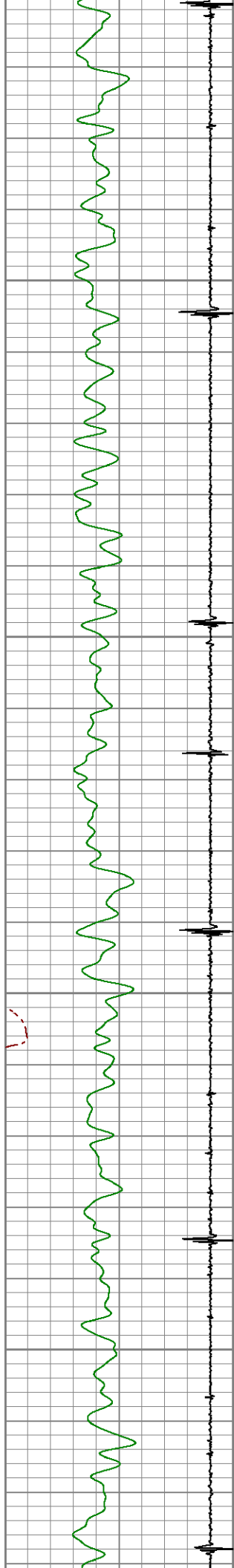
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2850

2900



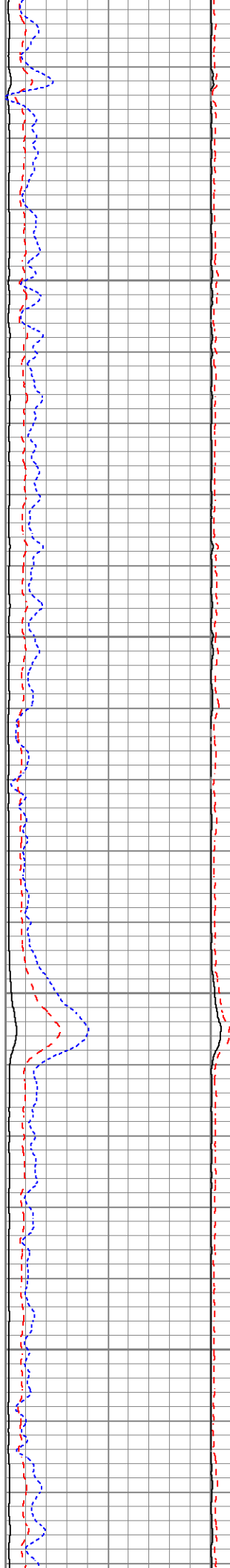


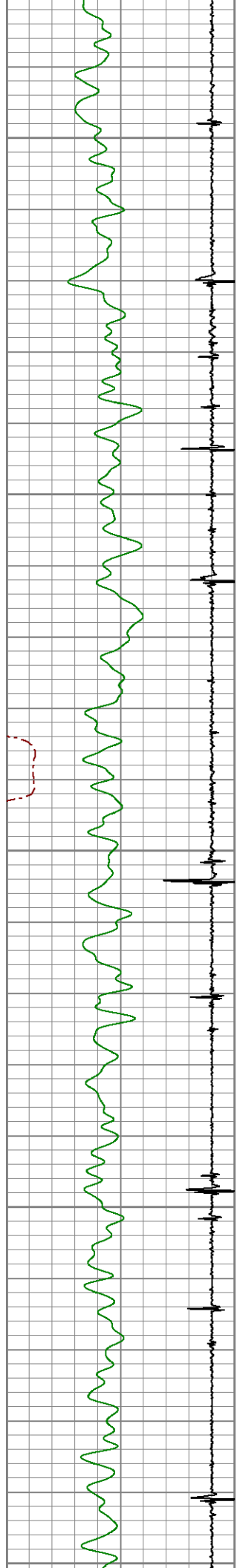
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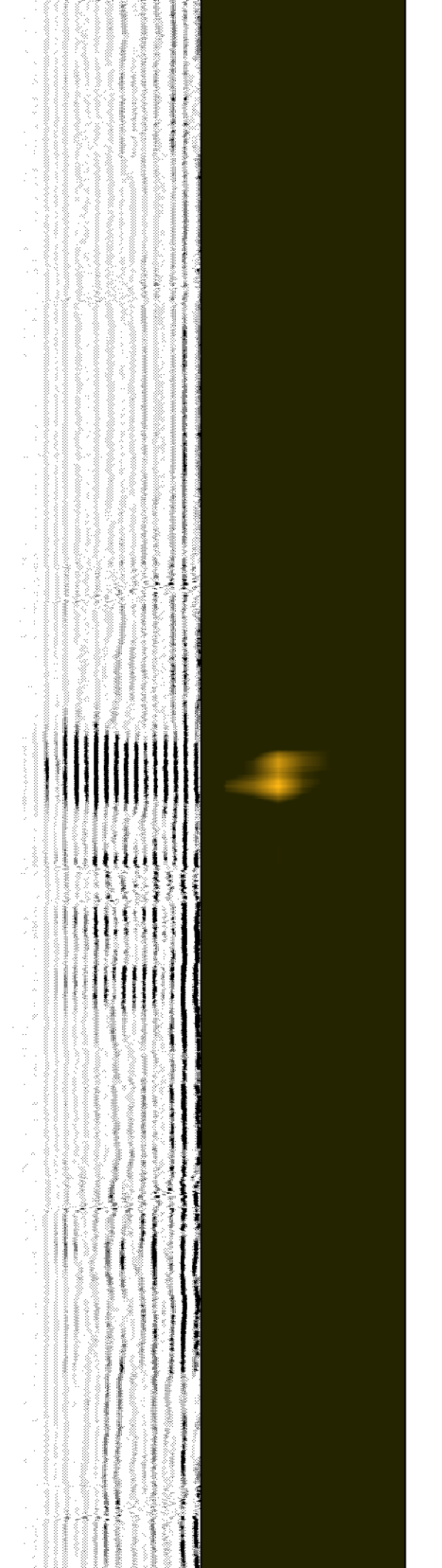
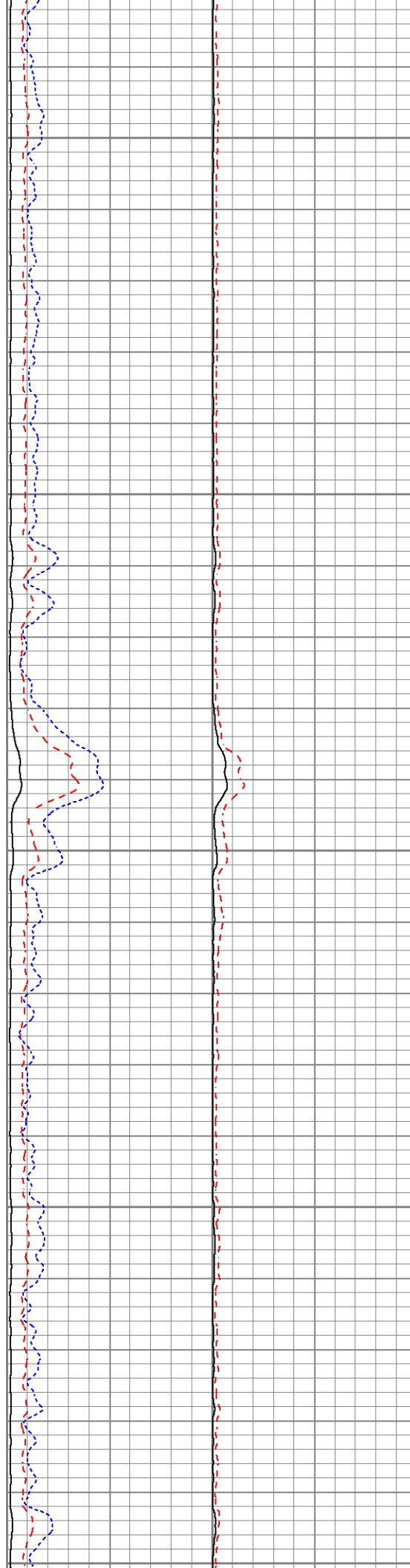
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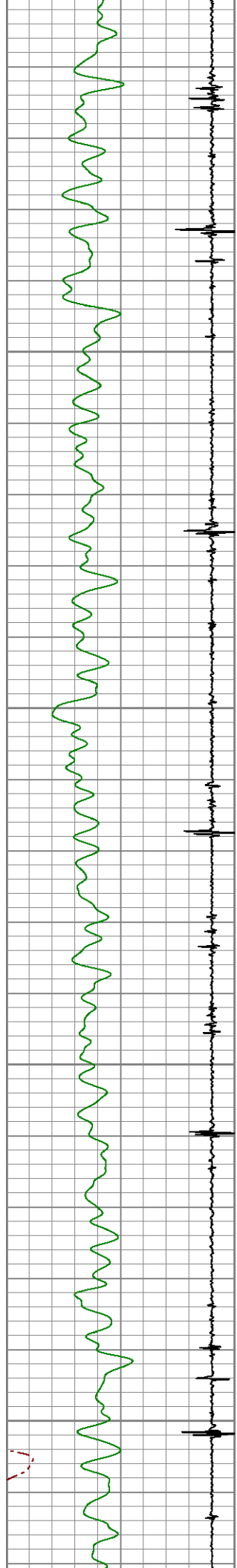
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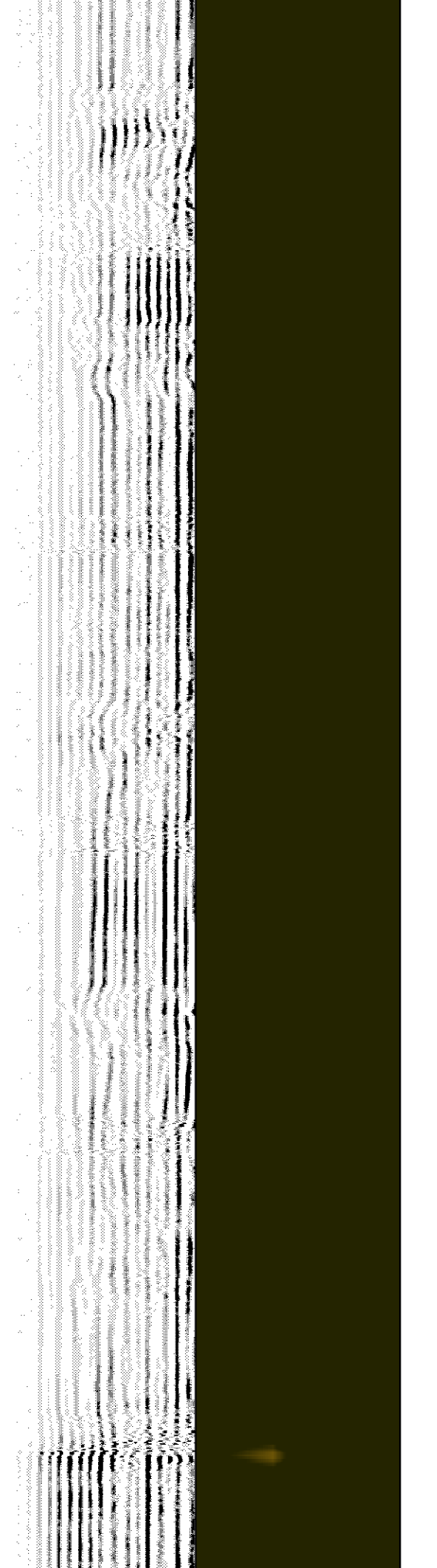
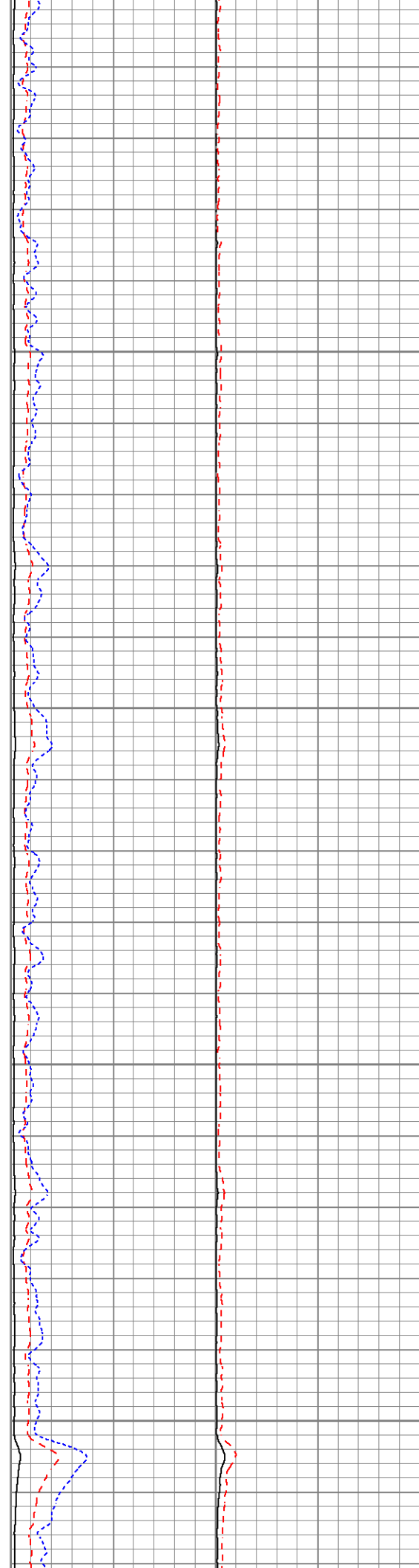


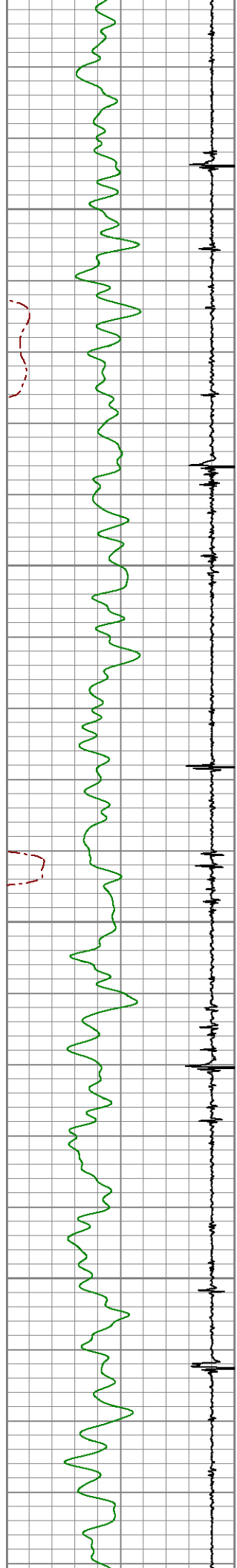
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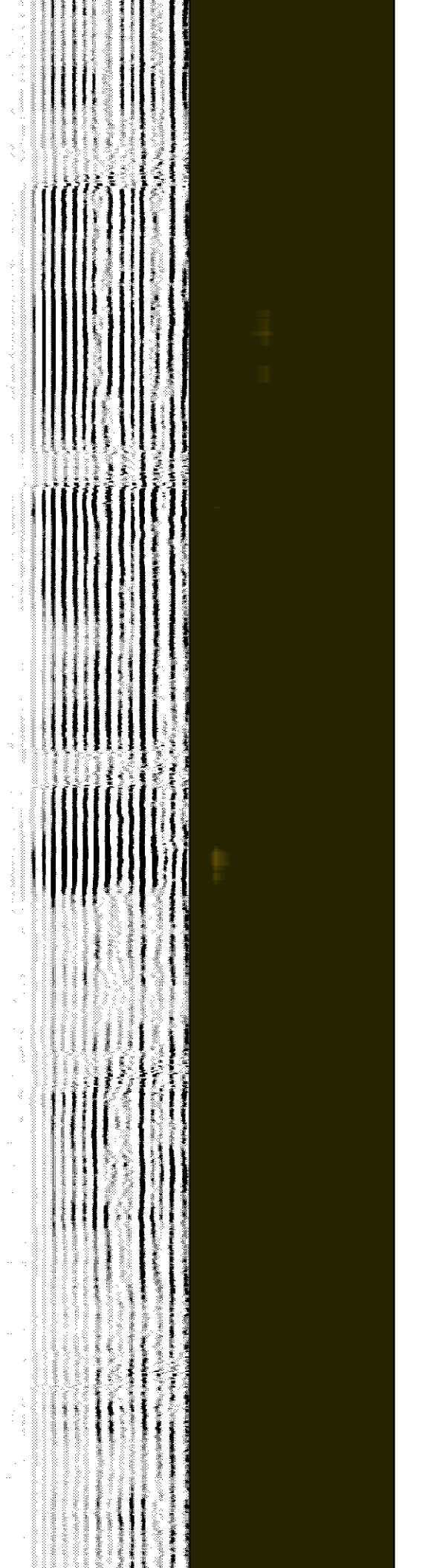
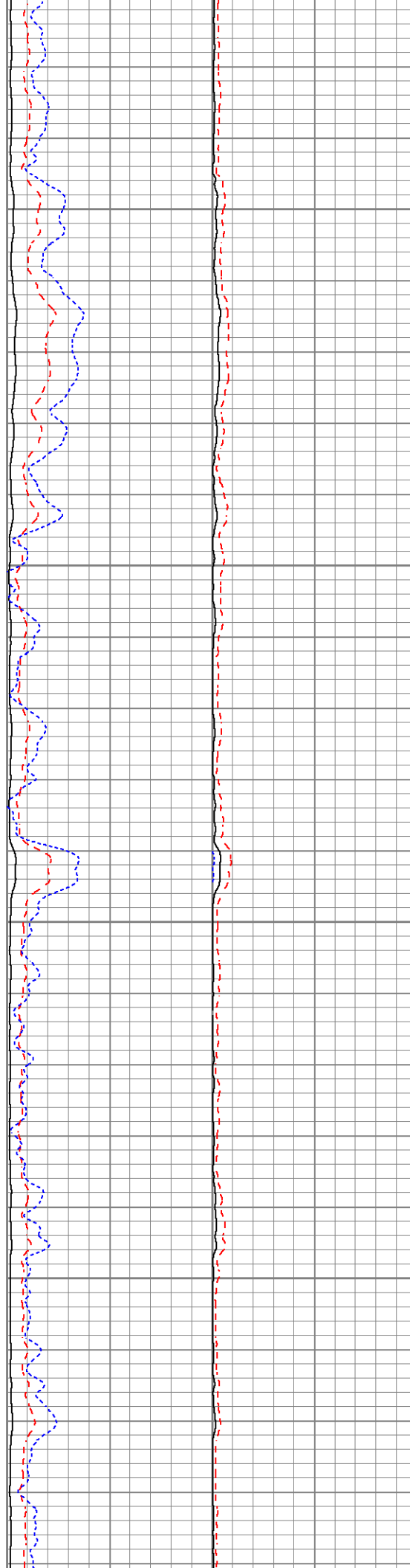


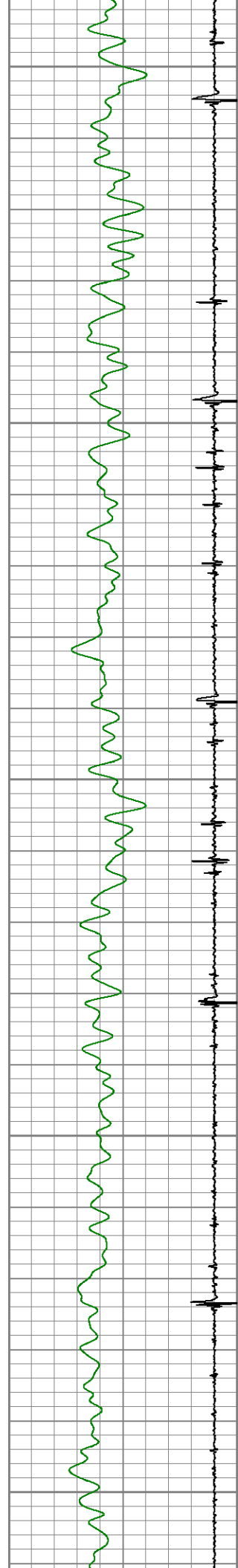
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3750





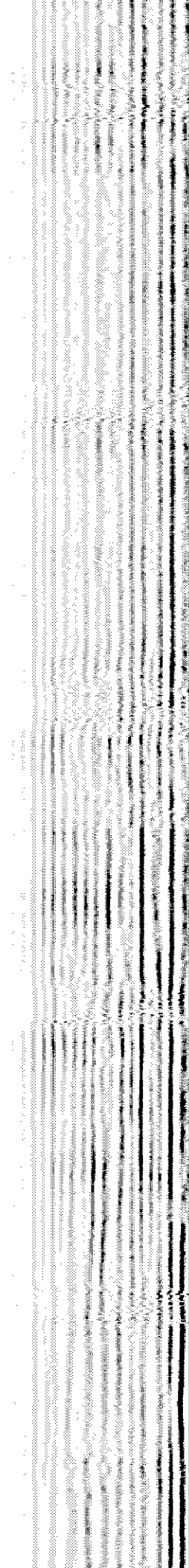
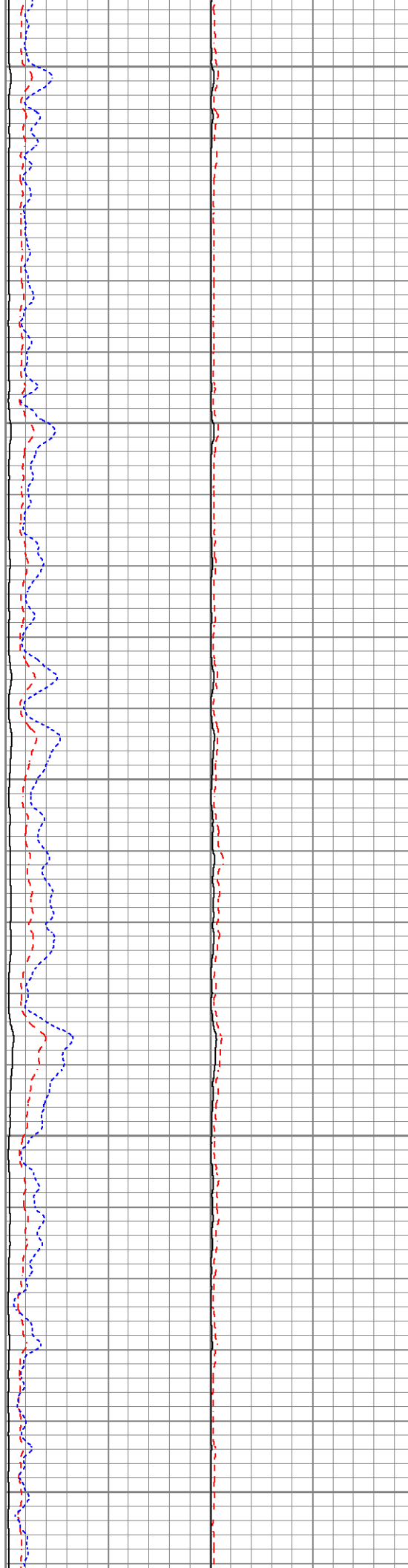
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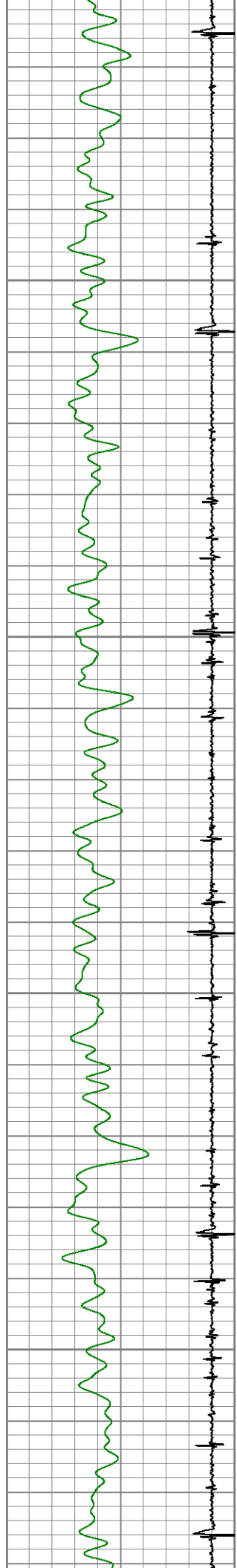
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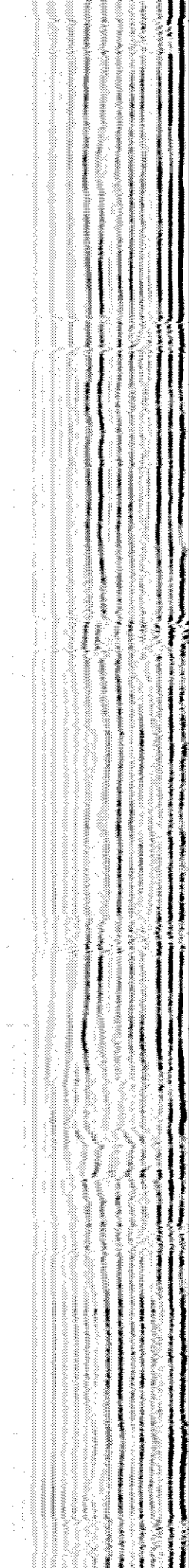
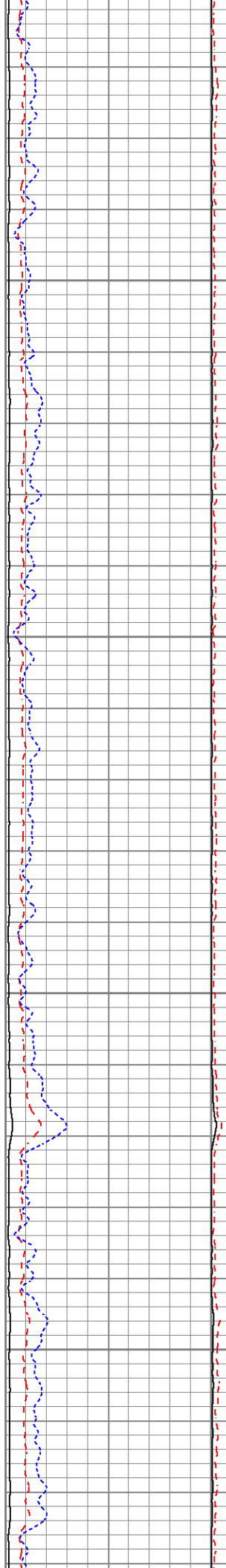


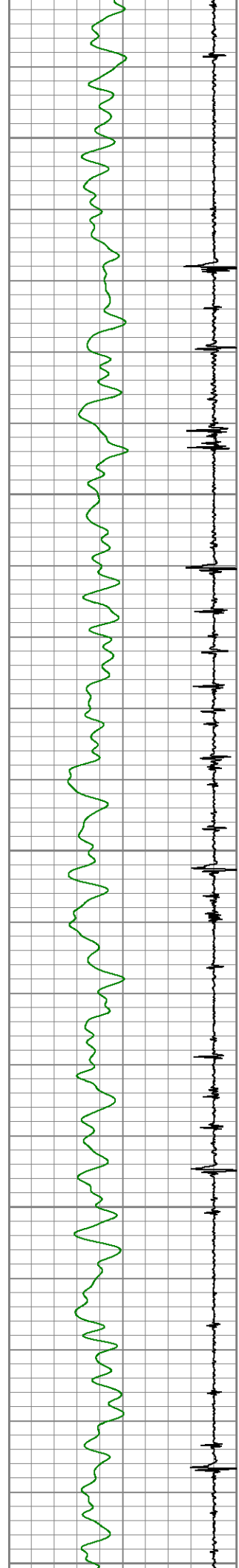
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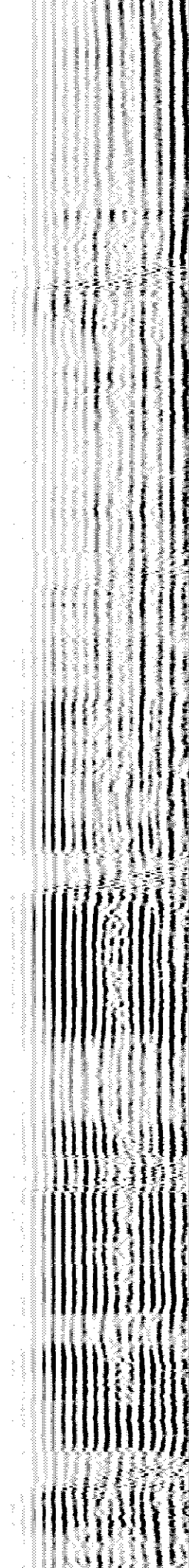
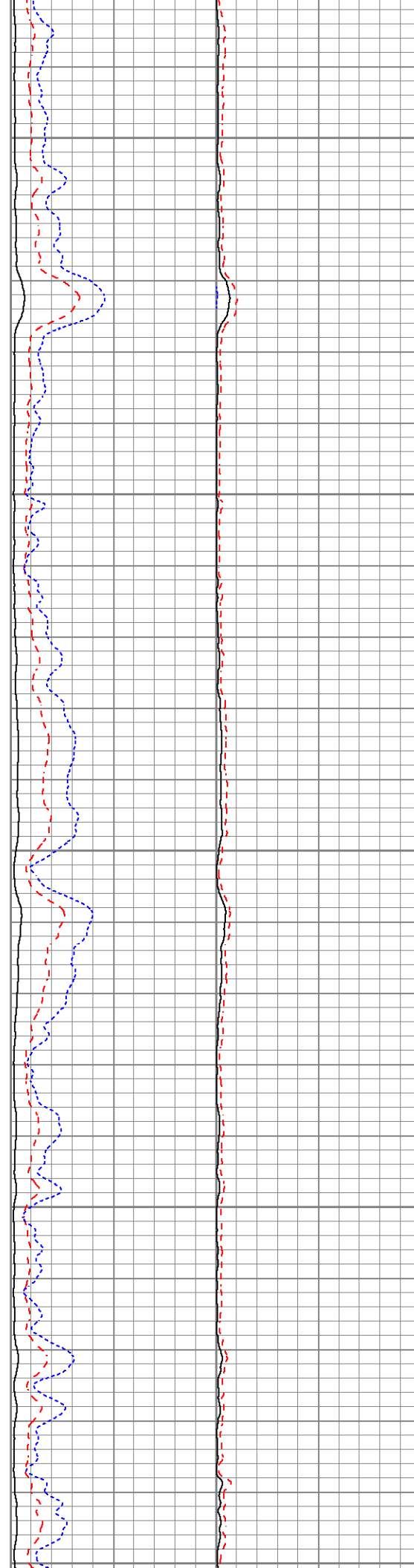
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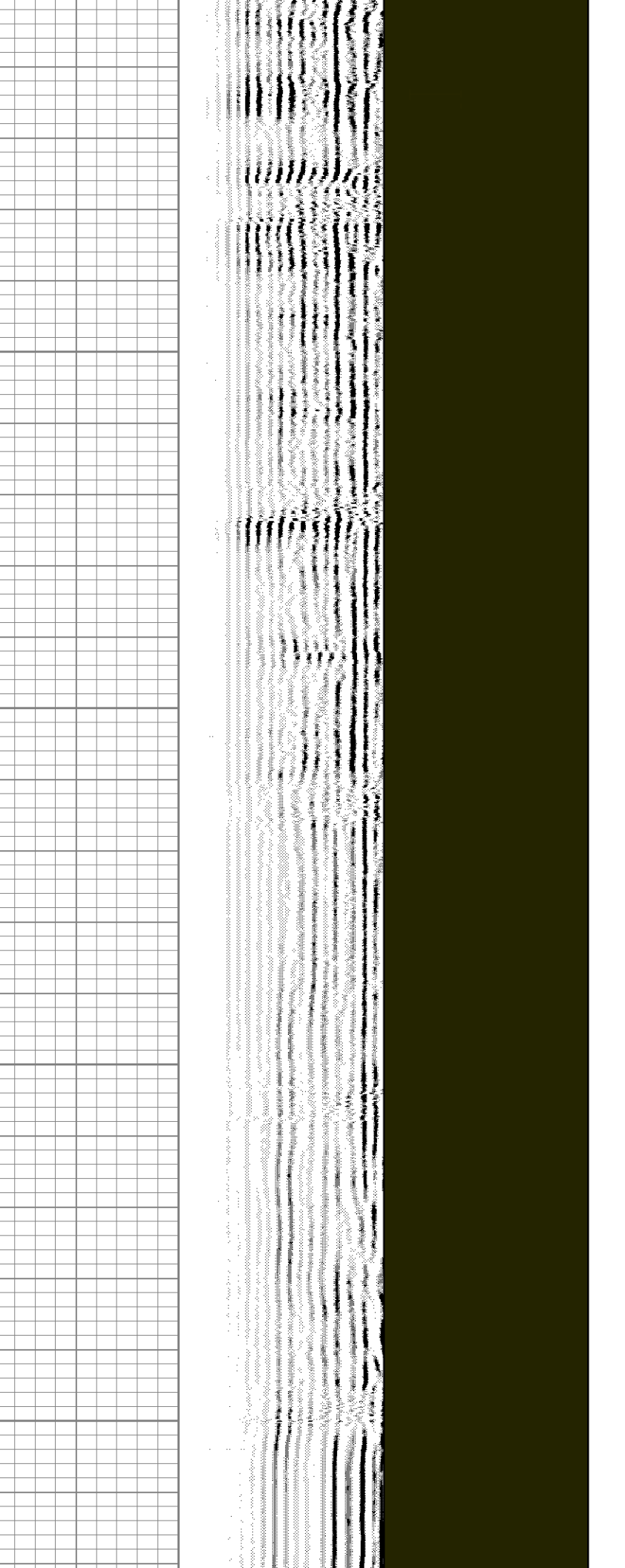
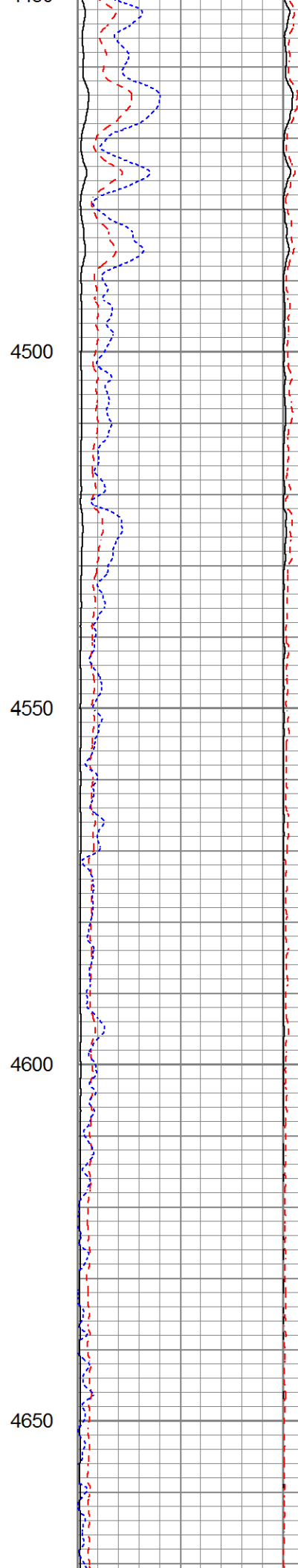
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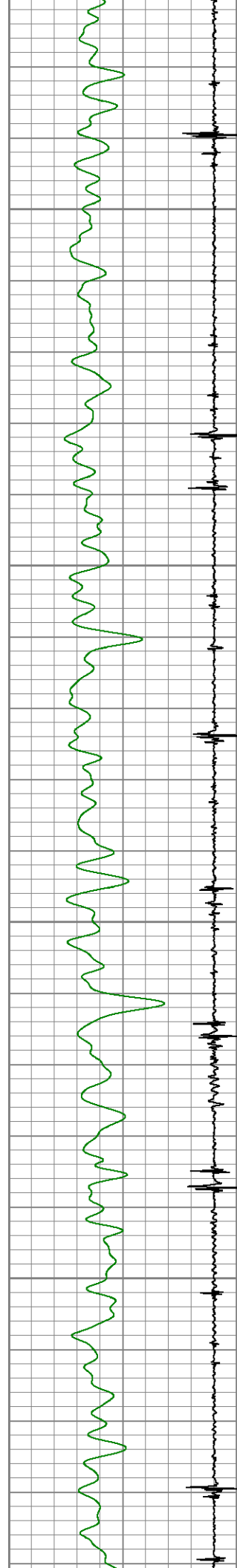
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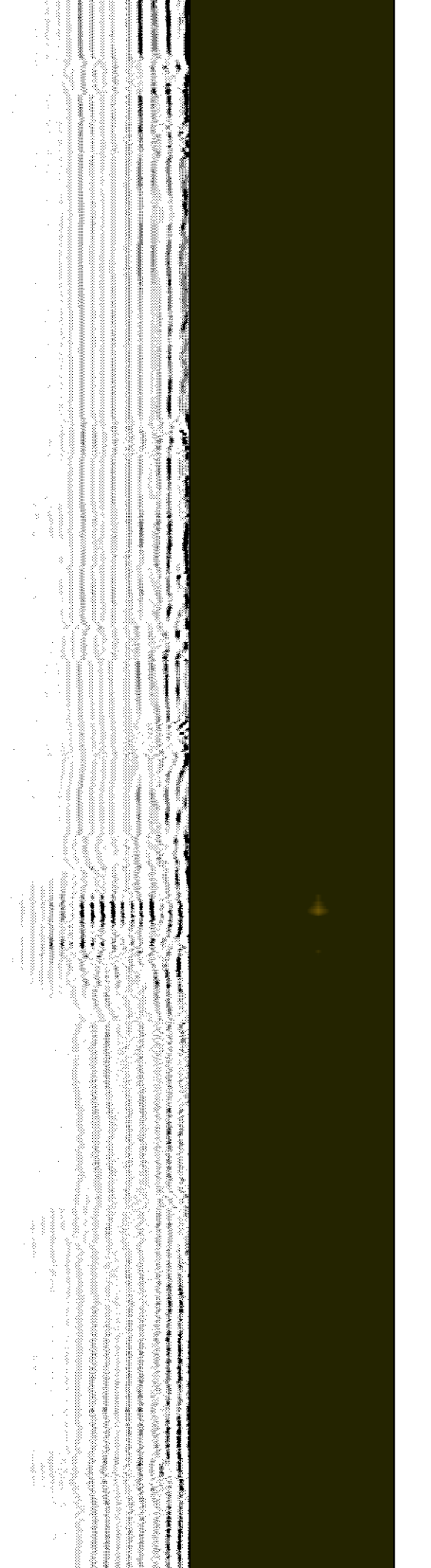
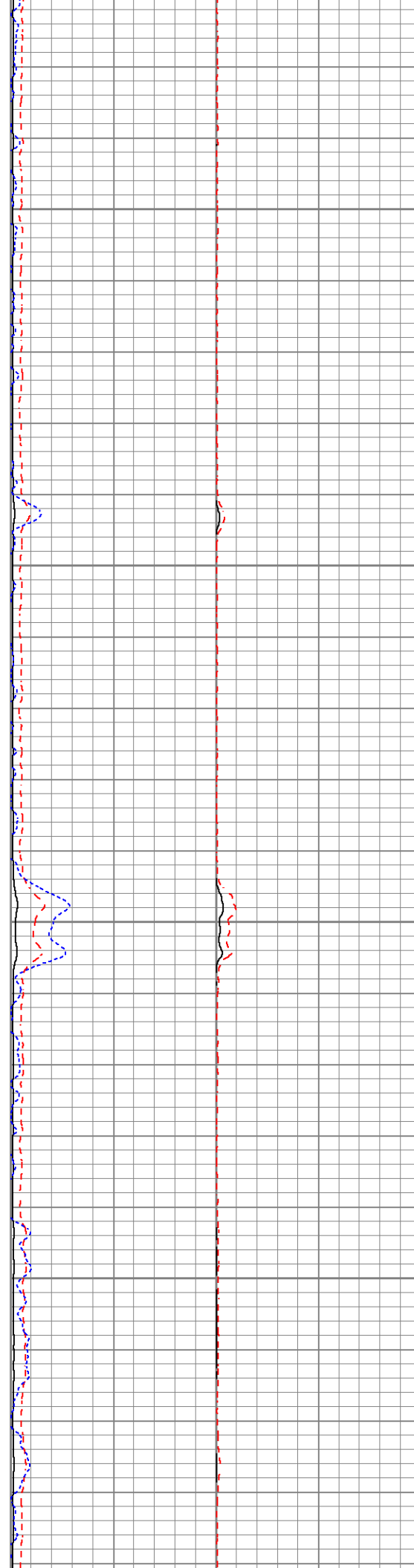


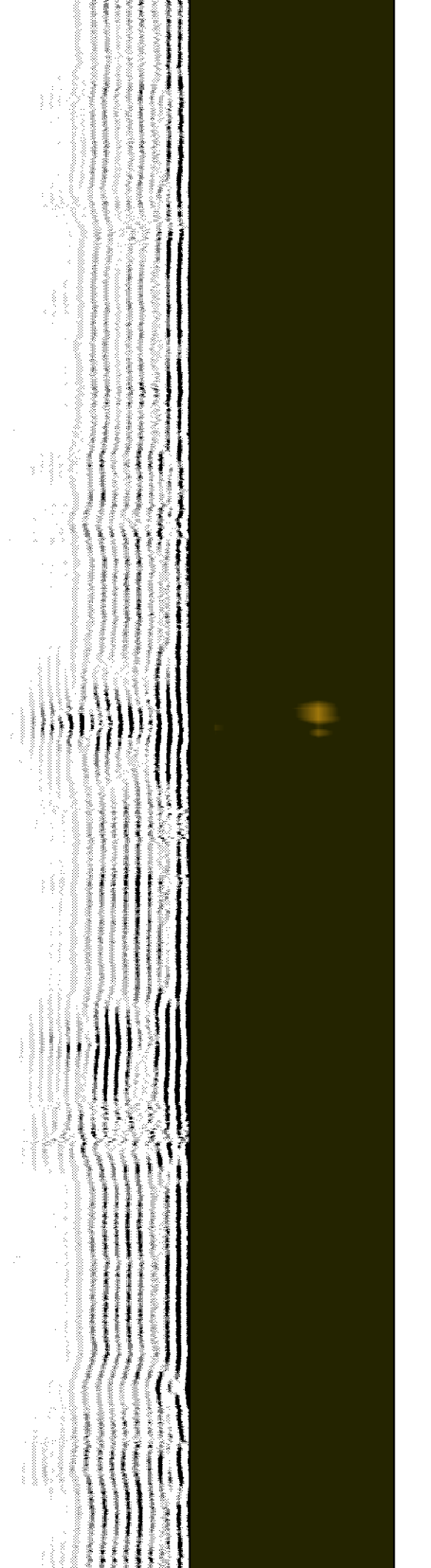
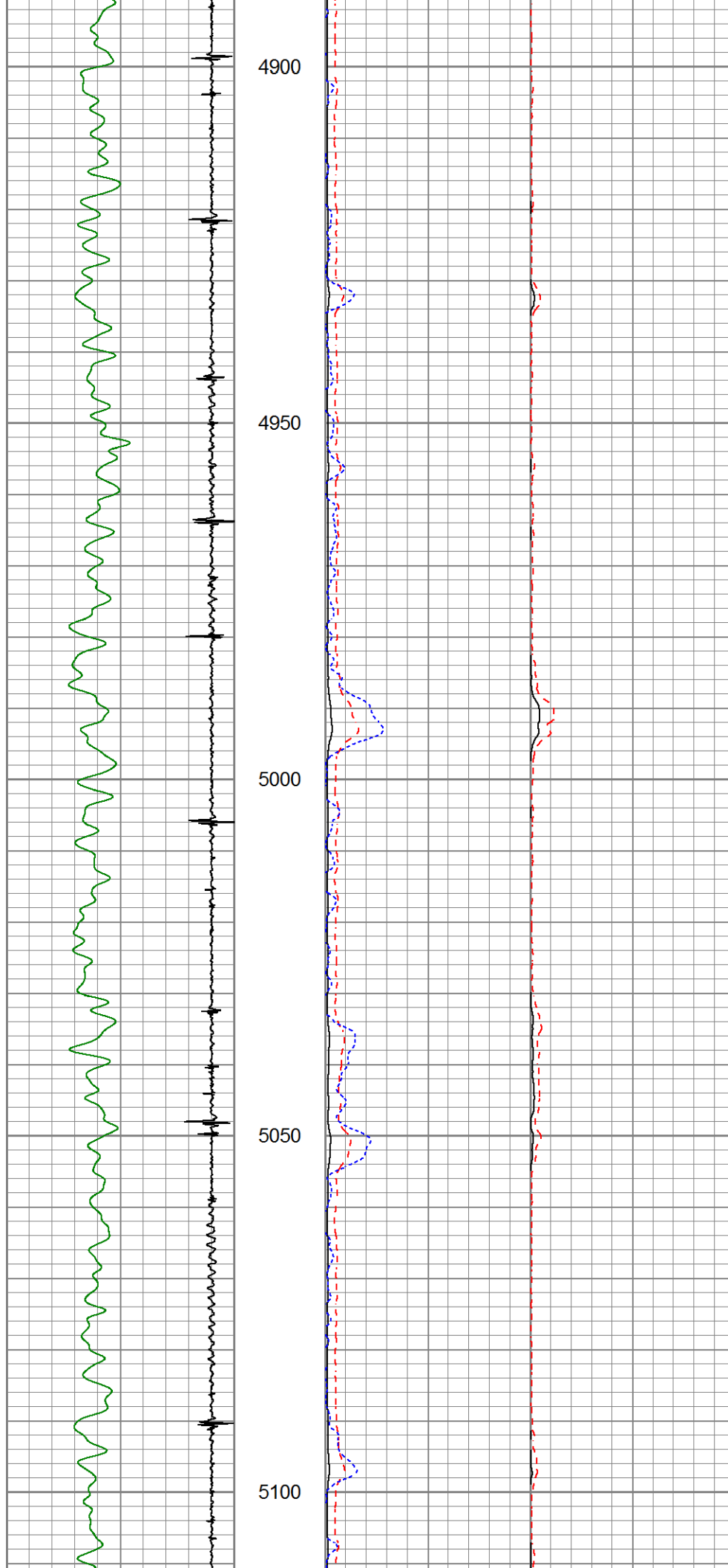
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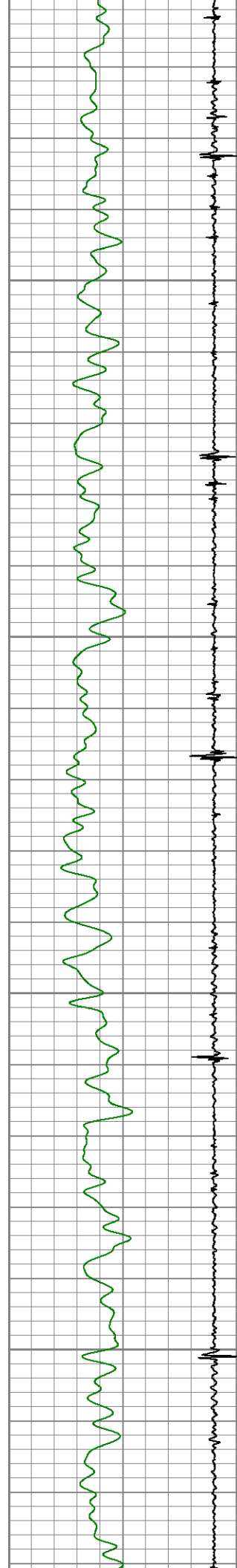
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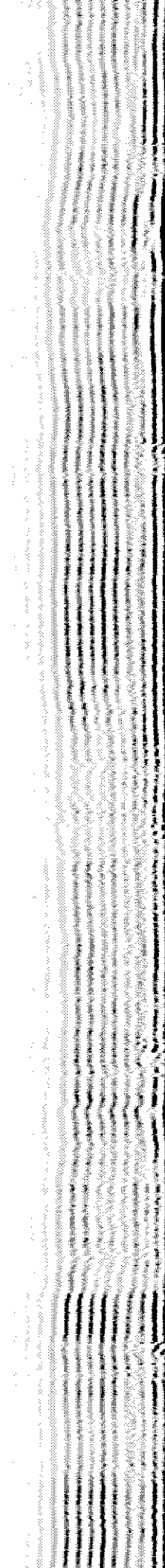
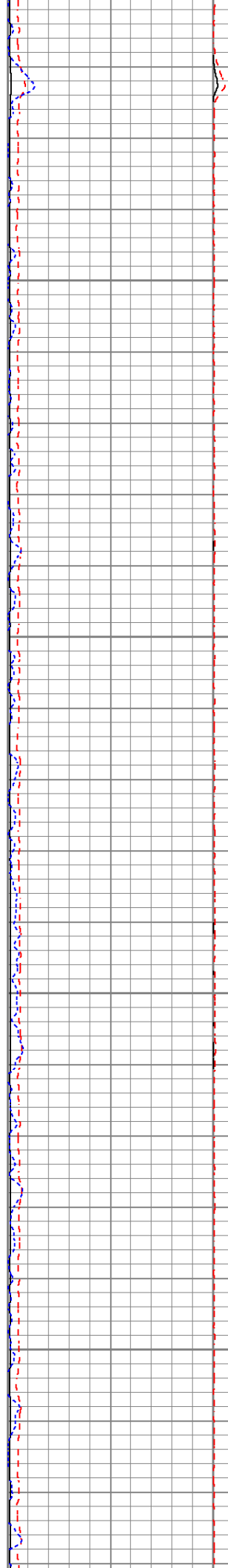


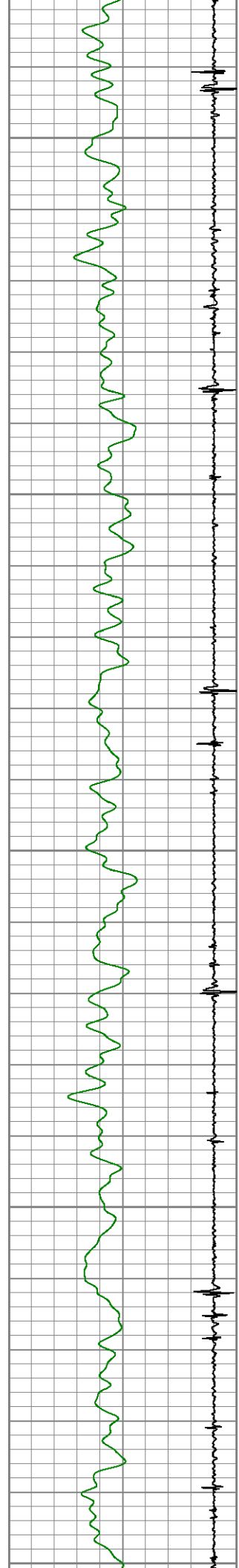
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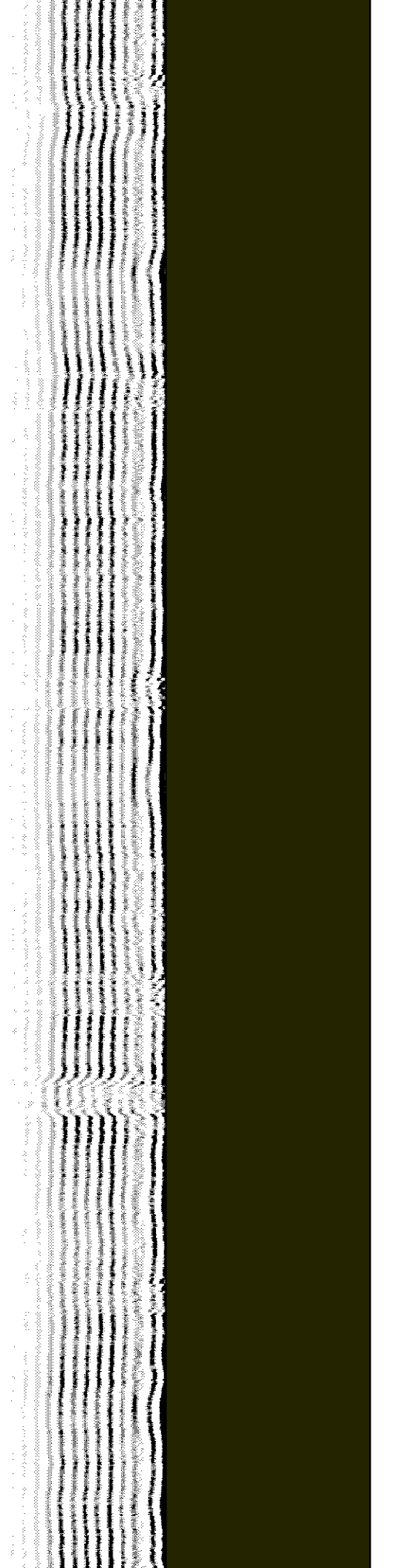
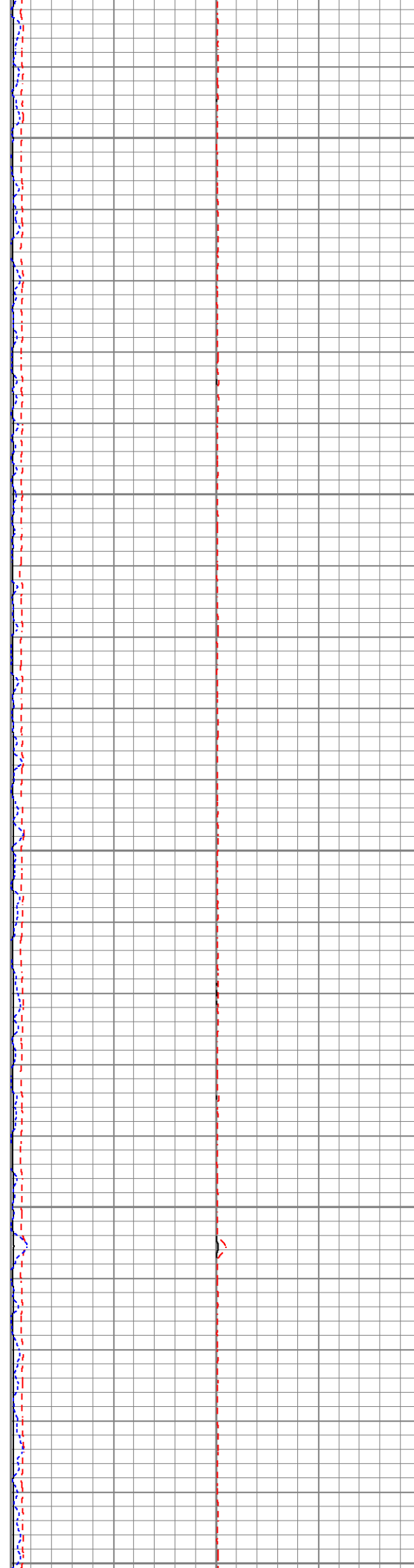
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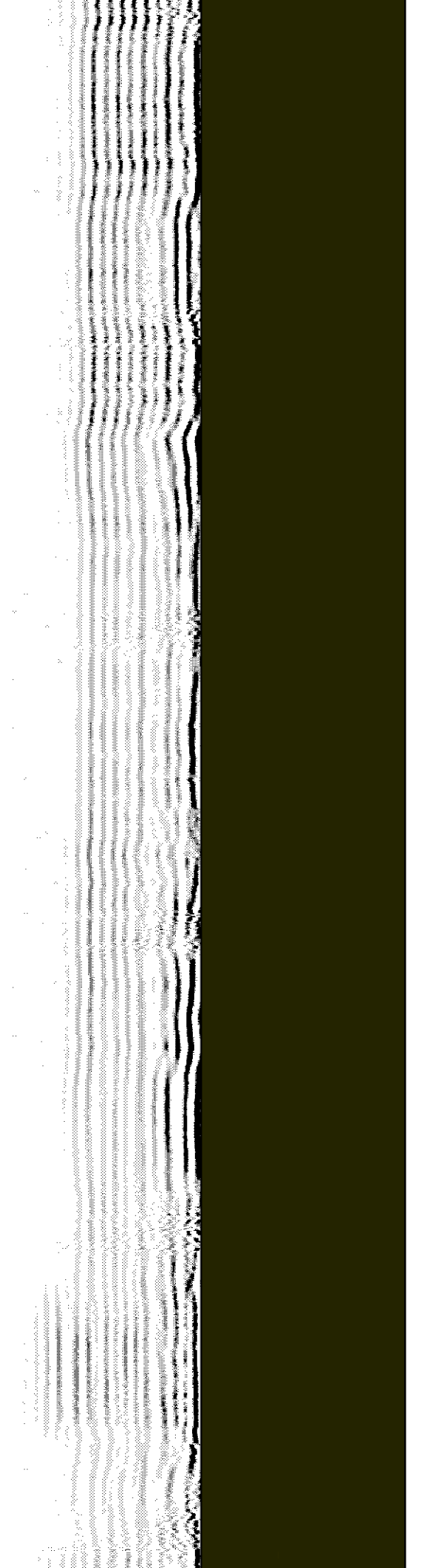
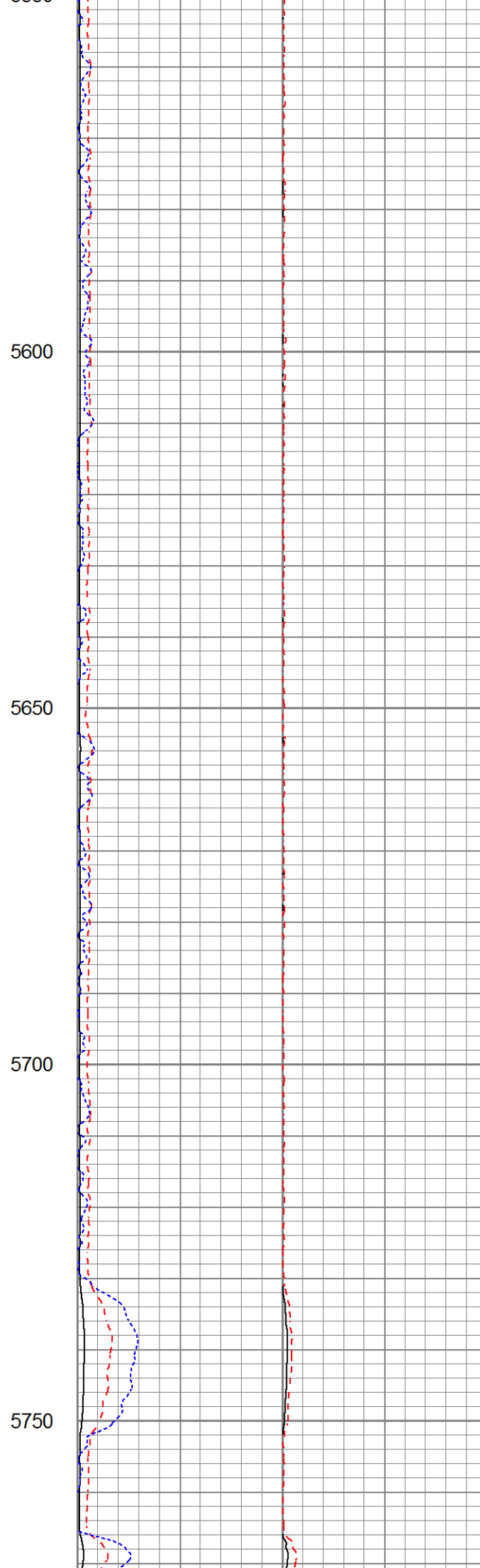
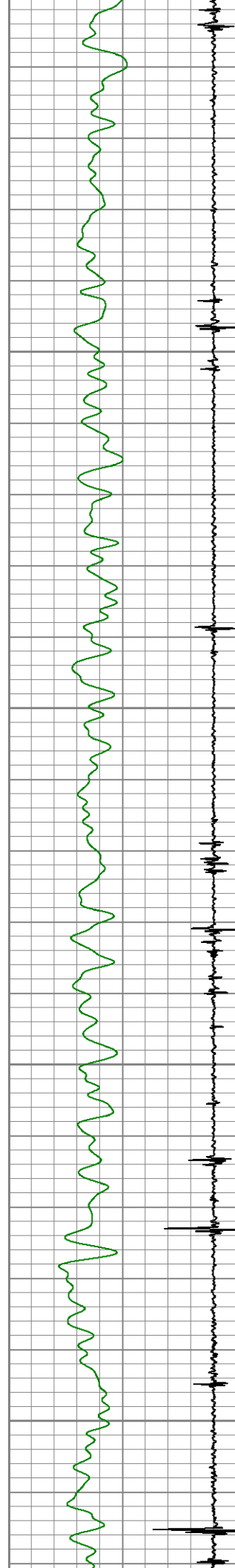
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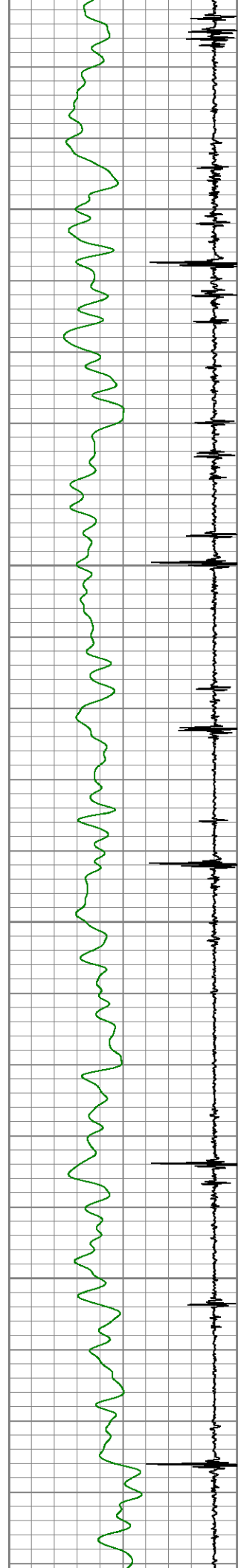
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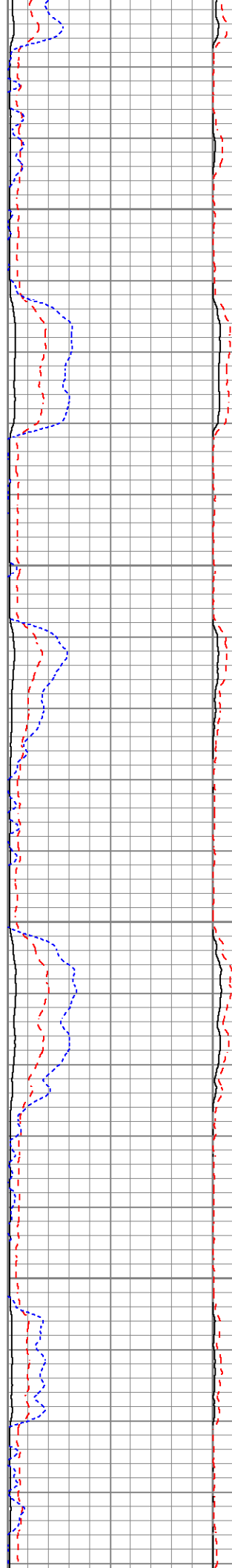


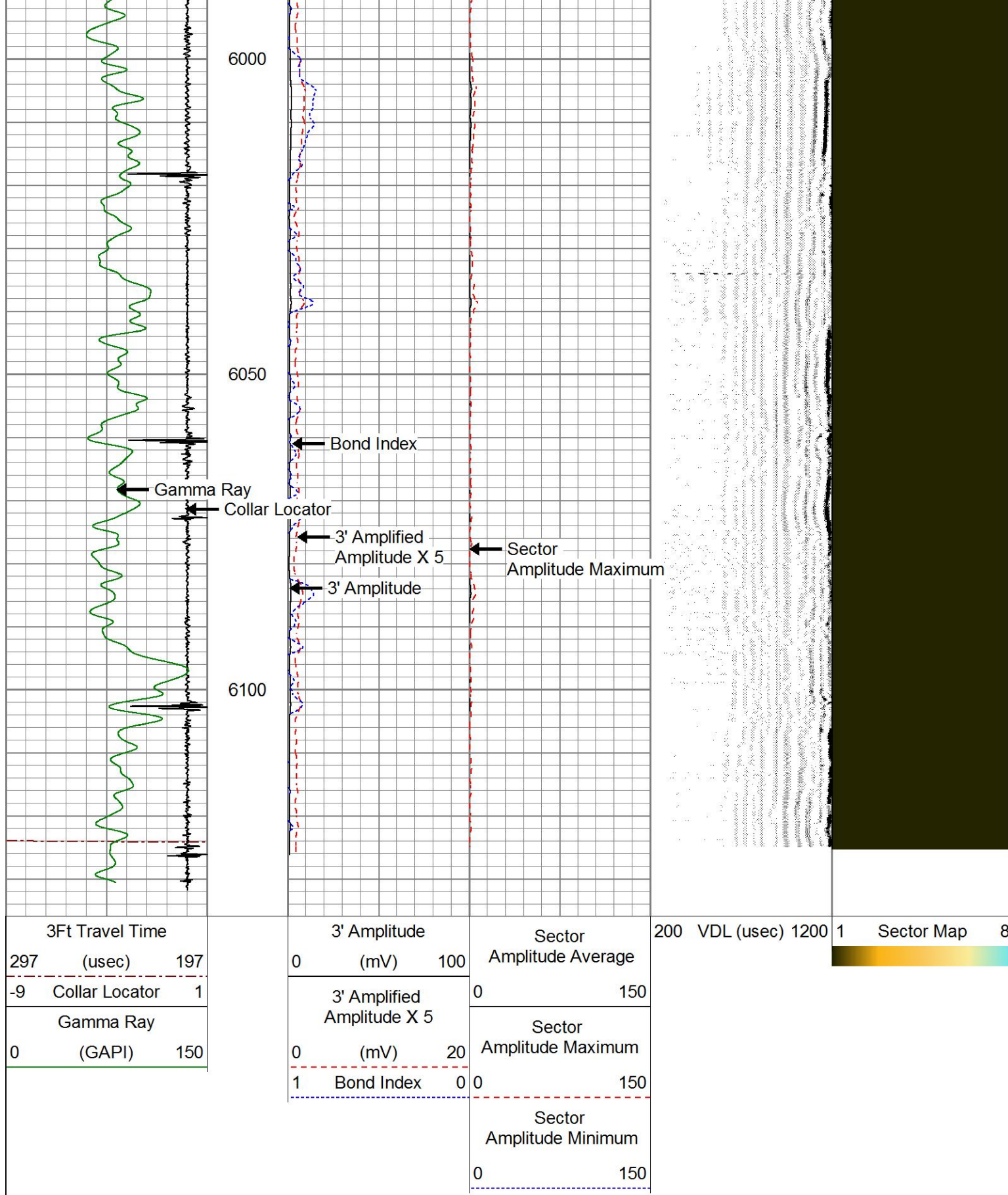
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5850

5900

5950





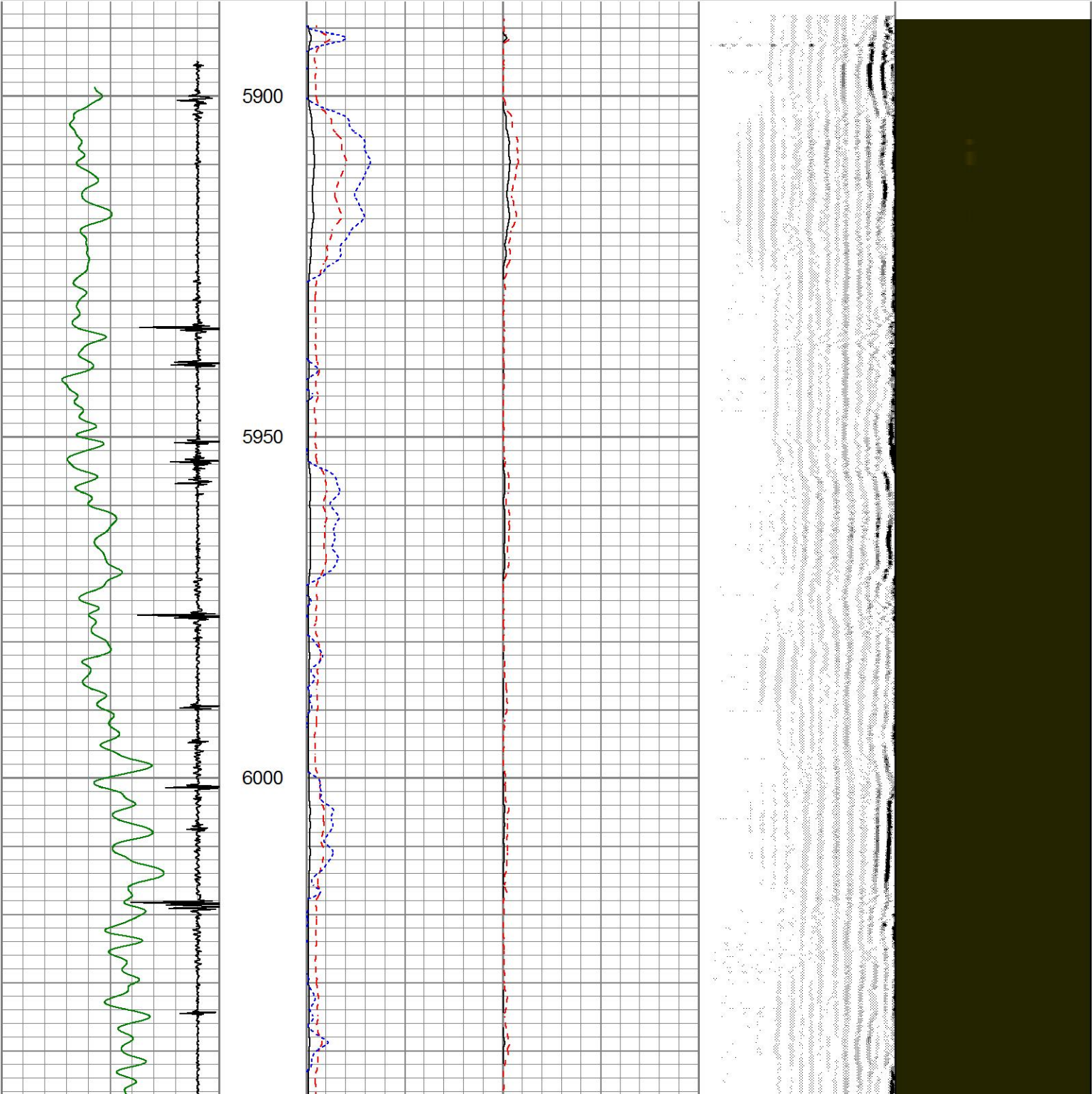


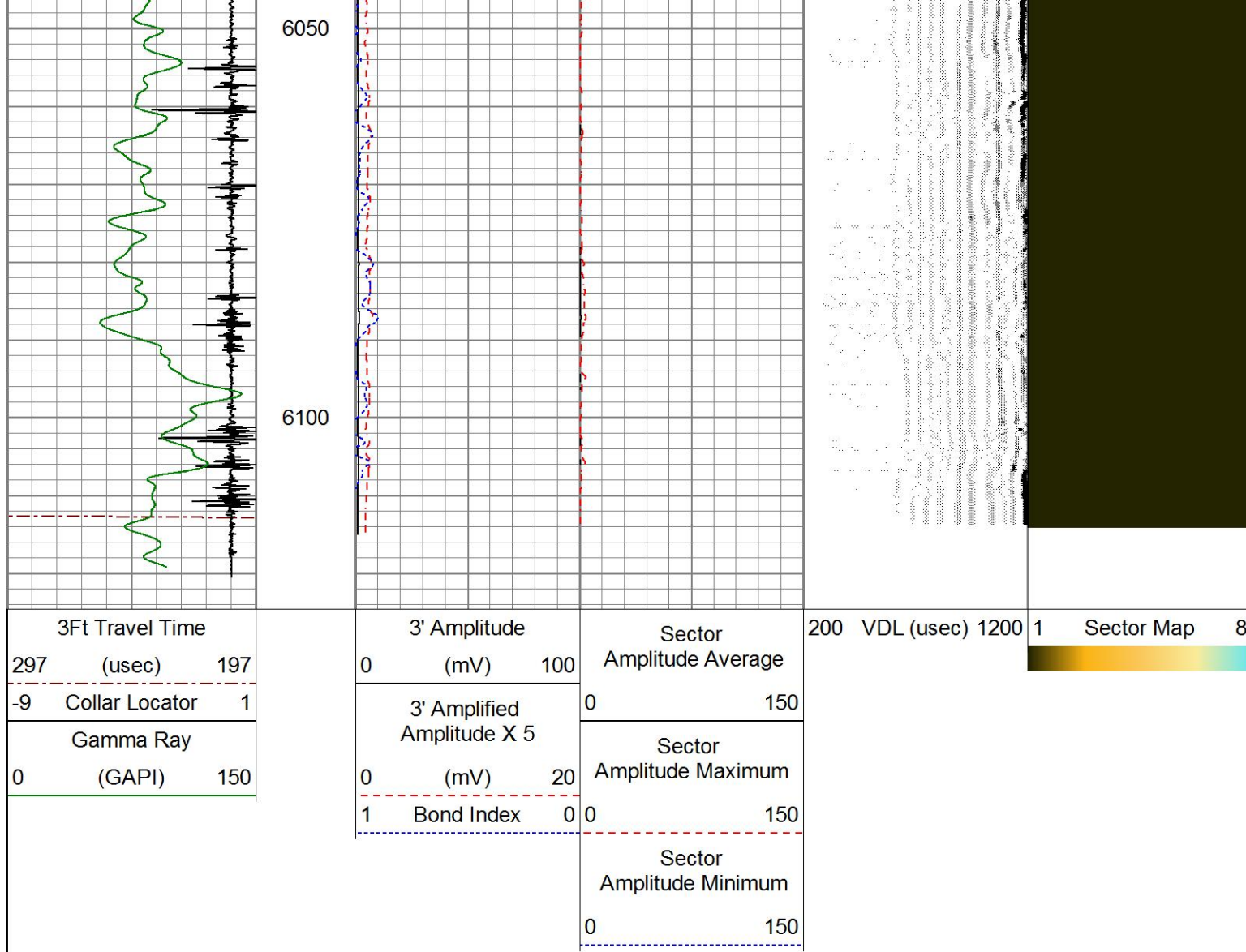
PIONEER
Pioneer Energy Services

REPEAT SECTION

ZERO PSI APPLIED AT SURFACE

3Ft Travel Time			3' Amplitude			200 VDL (usec) 1200	<div><div></div></div> 1 Sector Map 8
297	(usec)	197	0	(mV)	100		
-9 Collar Locator 1			3' Amplified Amplitude X 5				
Gamma Ray			0 150				
0	(GAPI)	150	0	(mV)	20	Sector Amplitude Maximum	
			1	Bond Index	0	0 150	
						Sector Amplitude Minimum	
						0 150	





Calibration Report		
Database File	highpointresources_rsuanstutzfed4-62-11-1609cn_20180918_scbl_grccl.db	
Dataset Pathname	pass8	
Dataset Creation	Tue Sep 18 21:09:06 2018	
Gamma Ray Calibration Report		
Serial Number:	Probe-275-GR-CCL	
Tool Model:	275 Probe GR-CCL	
Performed:	Tue Sep 18 21:09:00 2018	
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:	PROBE-RBL-DCT	
Tool Model:	RBL-DCT	
Calibration Casing Diameter:	5.500	in
Calibration Depth:	6150.675	ft
Master Calibration, performed Tue Sep 18 19:57:01 2018:		

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.006	2.499	1.000	71.921	28.446	0.841
CAL	0.006	1.514				
5'	0.005	2.499	1.000	71.921	28.441	0.853
SUM						
S1	0.235	2.499	0.000	100.000	44.183	-10.403
S2	0.005	2.499	0.000	100.000	40.098	-0.196
S3	0.006	2.499	0.000	100.000	40.115	-0.237
S4	0.005	1.699	0.000	100.000	59.061	-0.319
S5	0.005	2.499	0.000	100.000	40.102	-0.207
S6	0.006	2.499	0.000	100.000	40.109	-0.224
S7	0.006	2.499	0.000	100.000	40.111	-0.229
S8	0.005	2.499	0.000	100.000	40.106	-0.216

Air Zero Calibration, performed (Not Performed):

	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	

Temperature Calibration Report

Serial Number: PROBE-RBL-DCT
Tool Model: RBL-DCT
Performed: Tue Sep 18 19:40:09 2018

	Reference		Reading	
Low Reference:	0.00	degF	0.00	degF
High Reference:	1.00	degF	1.00	degF

Gain: 1.00
Offset: 0.00
Delta Spacing: 1



Company	HIGH POINT RESOURCES
Well	RSU ANSCHUTZ 4-62-11-1609CN
Field	WATTENBERG
County	WELD
State	CO
Country	