RADIAL BOND GAMMA RAY
CCL-TEMP

Company	ANTERO RESOURCES
Well	GAINS KOCH 1H
Field	CANTON
County	DODDRIDGE
State	WV. Country USA.

Location: API # : 47017062180000

SEC TWP RGE

Other Services

Permanent Datum	G.L.	Elevation	1306'
Log Measured From	K.B.23'		
Drilling Measured From	K.B.23'		

Elevation
K.B. 1329'
D.F. 1328'
G.L. 1306'

Company ANTERO RESOURCES
Well GAINS KOCH 1H
Field CANTON
County DODDRIDGE
State WV. Country USA.

Date	11-8-15		
Run Number	ONE		
Depth Driller			
Depth Logger	7560'		
Bottom Logged Interval	7559'		
Top Log Interval	SURFACE		
Open Hole Size			
Type Fluid	WATER		
Density / Viscosity			
Max. Recorded Temp.	125		
Estimated Cement Top	1218'		
Time Well Ready	8:00		
Time Logger on Bottom	8:45		
Equipment Number	5982		
Location	CLARKSBURG WV.		
Recorded By	E.BUTCHER		
Witnessed By	W. MARTINEZ		

Borehole Record				Tubing Record			
Run Number	Bit	From	To	Size	Weight	From	To

Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String				
Prot. String				
Production String	5.5"	20 LBS.	SURFACE	14,452'
Liner				

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All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages, or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to our general terms and conditions set out in our current Price Schedule.

Comments

THANK YOU FOR USING STRC OILFIELD TECHNOLIGIES
LOG MEASURED FROM K.B.23'

Calibration Report

Database File:	gains koch 1h.db
Dataset Pathname:	pass4
Dataset Creation:	Sat Nov 08 08:50:08 2014 by Log 7.0 B1

Gamma Ray Calibration Report

Serial Number:	275	
Tool Model:	Probe	
Performed:	Wed Aug 27 17:14:40 2014	
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:	FW1404-143_5.5INCH	
Tool Model:	Probe275T	
Calibration Casing Diameter:	5.500	in
Calibration Depth:	2787.000	ft

Master Calibration, performed Sat Nov 08 10:01:57 2014:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.013	0.974	1.000	71.921	71.795	0.046
CAL	0.011	0.010				
5'	0.012	0.927	1.000	71.921	77.469	0.099
SUM						
S1	0.016	1.074	0.000	100.000	94.518	-1.556
S2	0.010	1.067	0.000	100.000	94.644	-0.980
S3	0.010	0.246	0.000	100.000	423.534	-4.100
S4	0.010	1.021	0.000	100.000	98.977	-1.028
S5	0.009	1.079	0.000	100.000	93.485	-0.839
S6	0.009	1.148	0.000	100.000	87.753	-0.762
S7	0.008	1.193	0.000	100.000	84.445	-0.709
S8	0.010	1.174	0.000	100.000	85.926	-0.892

Internal Reference Calibration, performed Fri Aug 15 18:12:35 2014:

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	0.011	0.010	1.000	0.000

Air Zero Calibration, performed Wed Aug 27 17:44:29 2014:

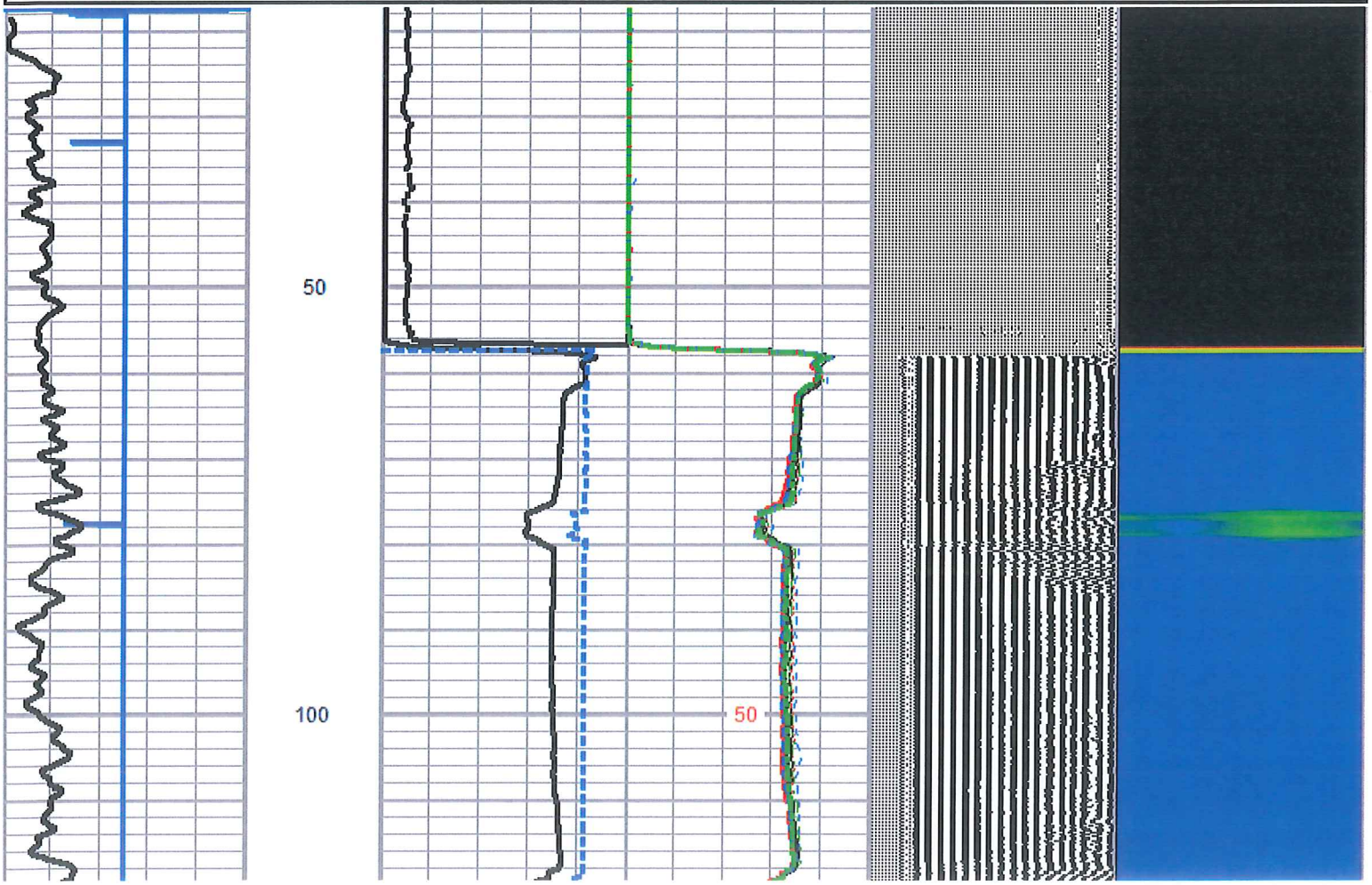
	Raw (v)	Calibrated (v)	Results
	Zero	Zero	Offset
3'	0.000	0.000	0.000
5'	0.000	0.000	0.000
SUM			
S1	0.000	0.000	0.000
S2	0.000	0.000	0.000
S3	0.000	0.000	0.000
S4	0.000	0.000	0.000
S5	0.000	0.000	0.000
S6	0.000	0.000	0.000
S7	0.000	0.000	0.000
S8	0.000	0.000	0.000

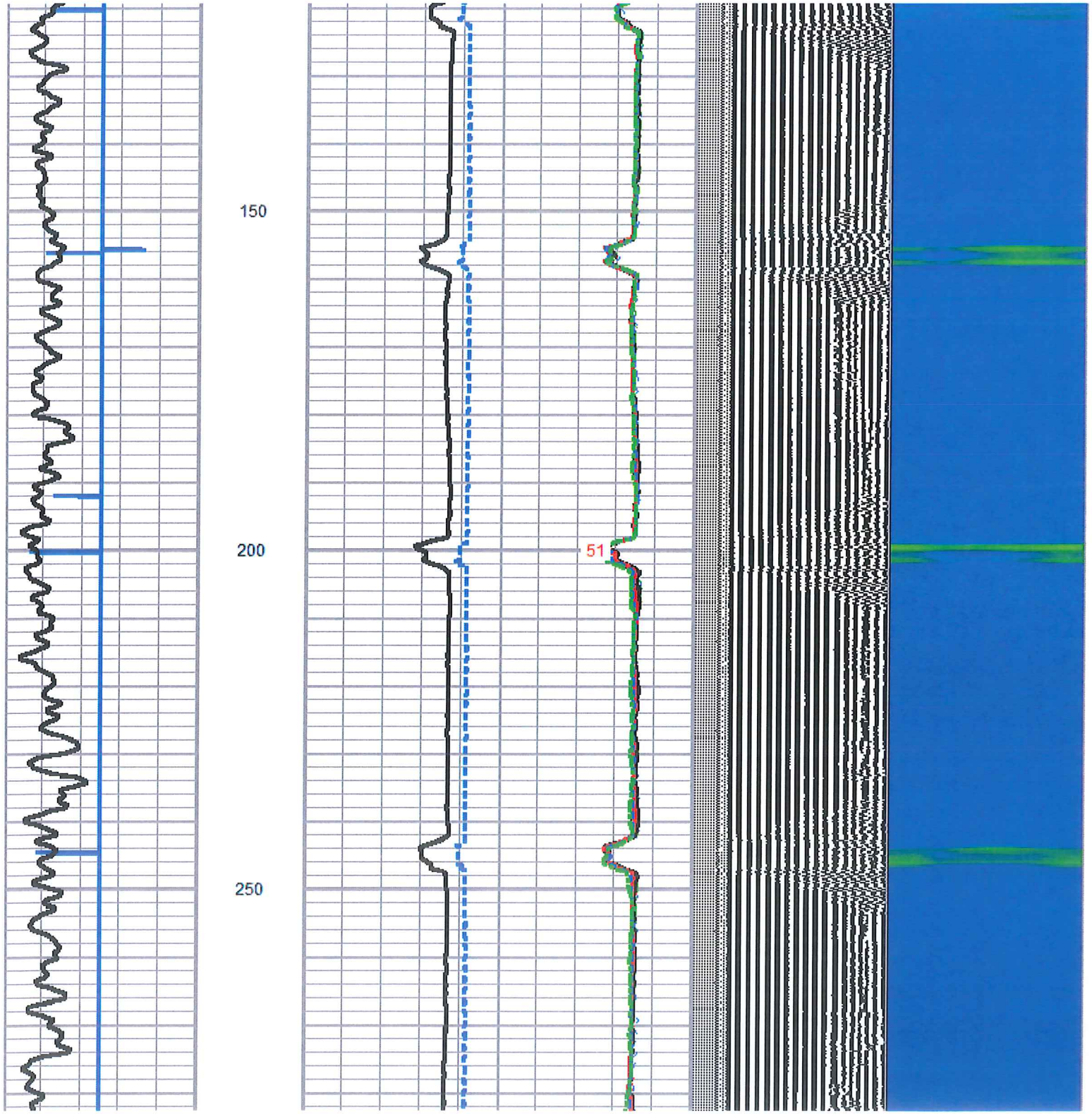
STRC OILFIELD TECHNOLOGY, LLC

MAIN LOG

Database File:	gains koch 1h.db
Dataset Pathname:	pass4
Presentation Format:	scbl02
Dataset Creation:	Sat Nov 08 08:50:08 2014 by Log 7.0 B1
Charted by:	Depth in Feet scaled 1:240

-2	CCL	2
0	GR (GAPI)	200
200	GR (GAPI)	400
0	AMP (mV)	100
0	AMPx10 (mV)	10
350	TT (usec)	250
0	AMPS1	150
0	AMPS2	150
0	AMPS3	150
0	AMPS4	150
0	AMPS5	150
0	AMPS6	150
0	AMPS7	150
0	AMPS8	150
	TEMP (degF)	
200	VDL	1200
1	Cement Map	8
3		95

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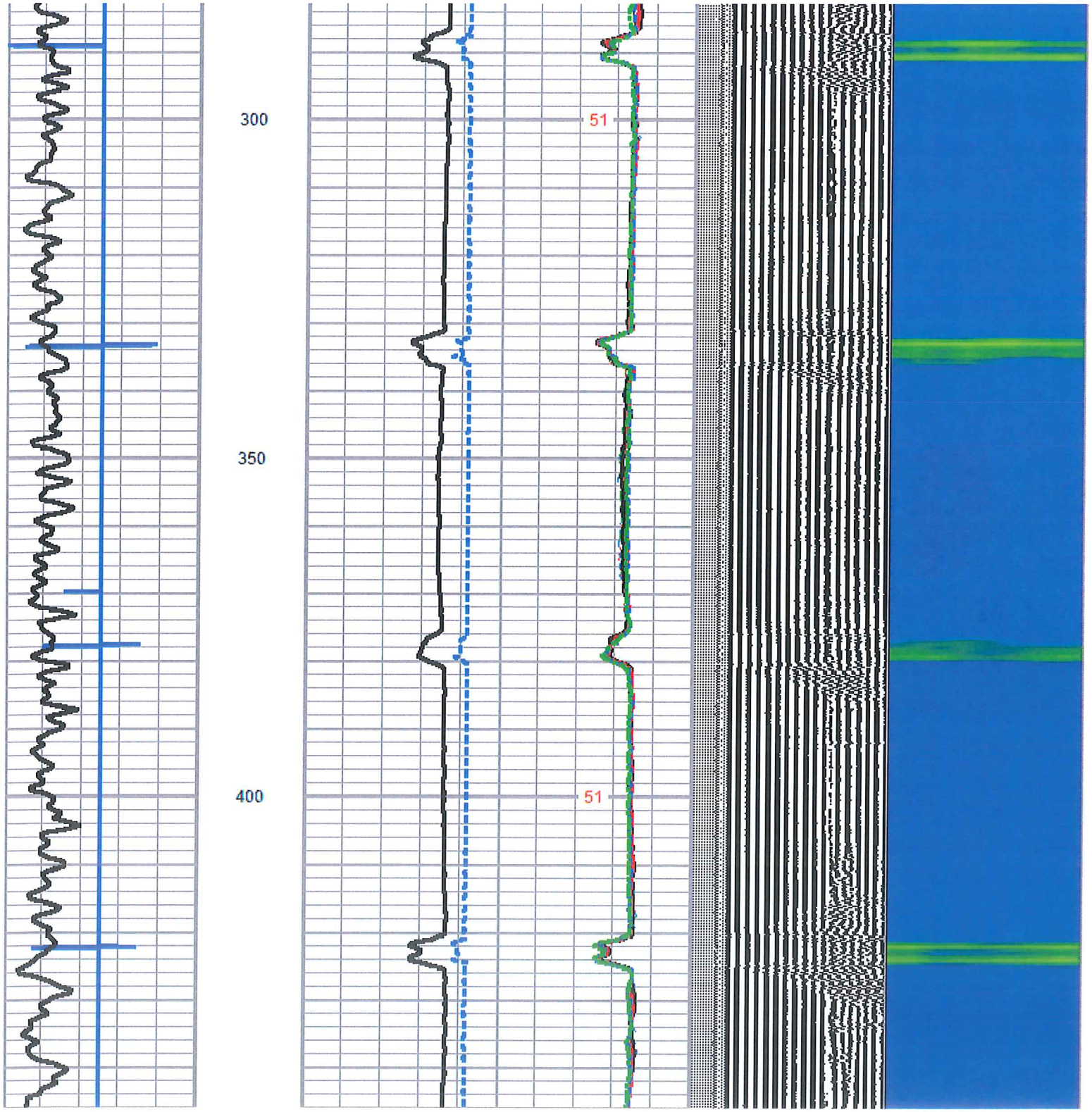
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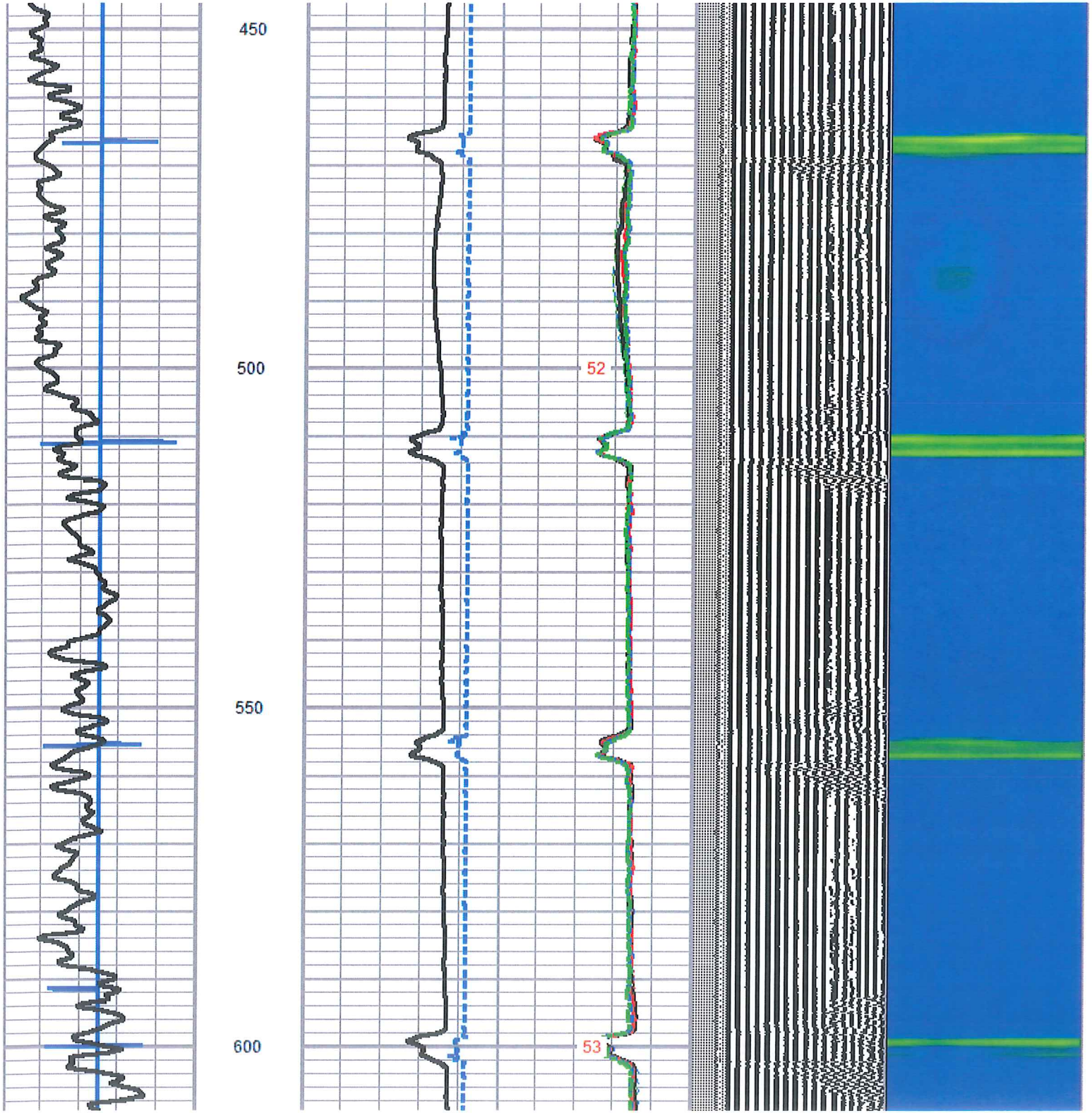
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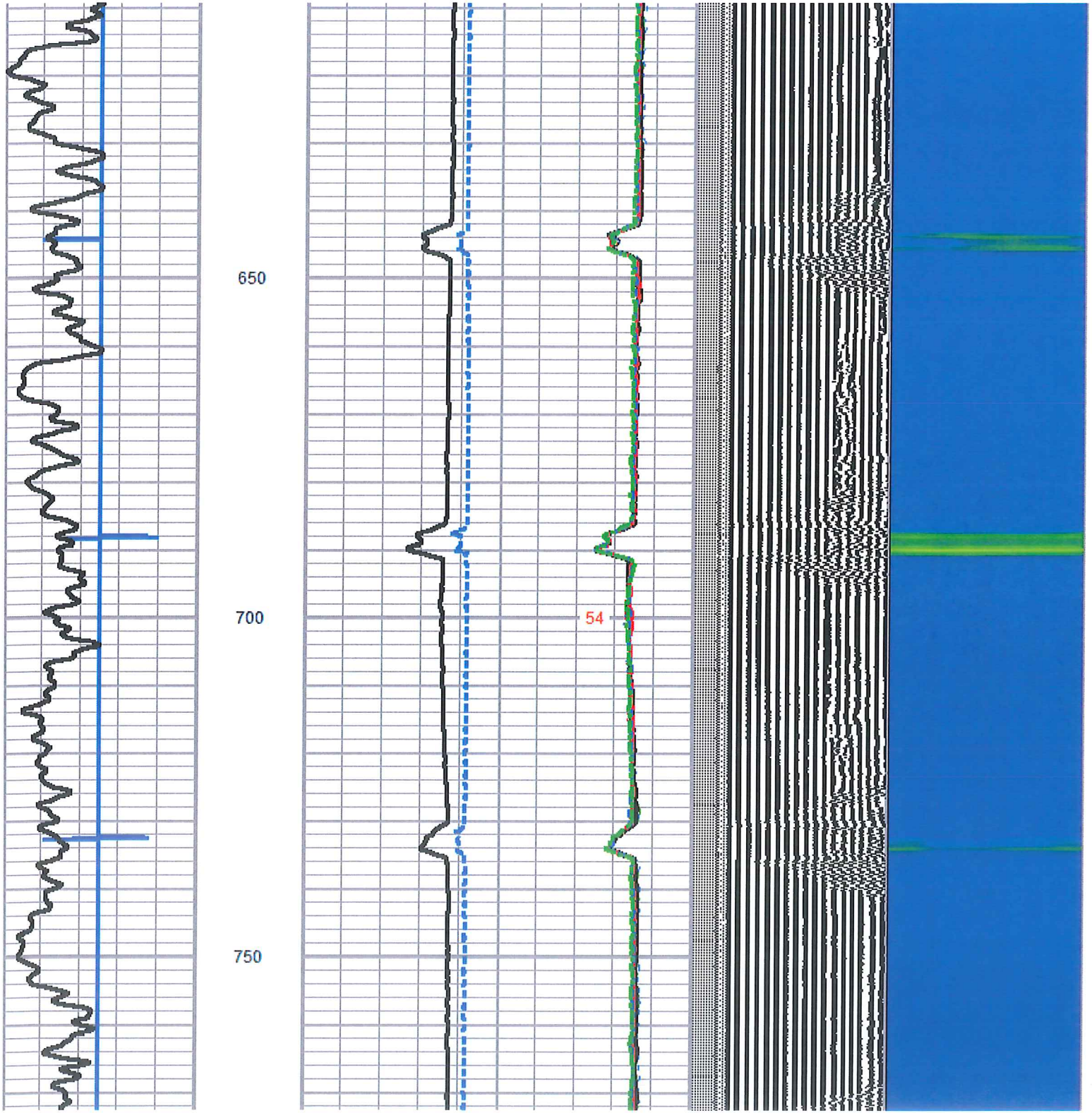
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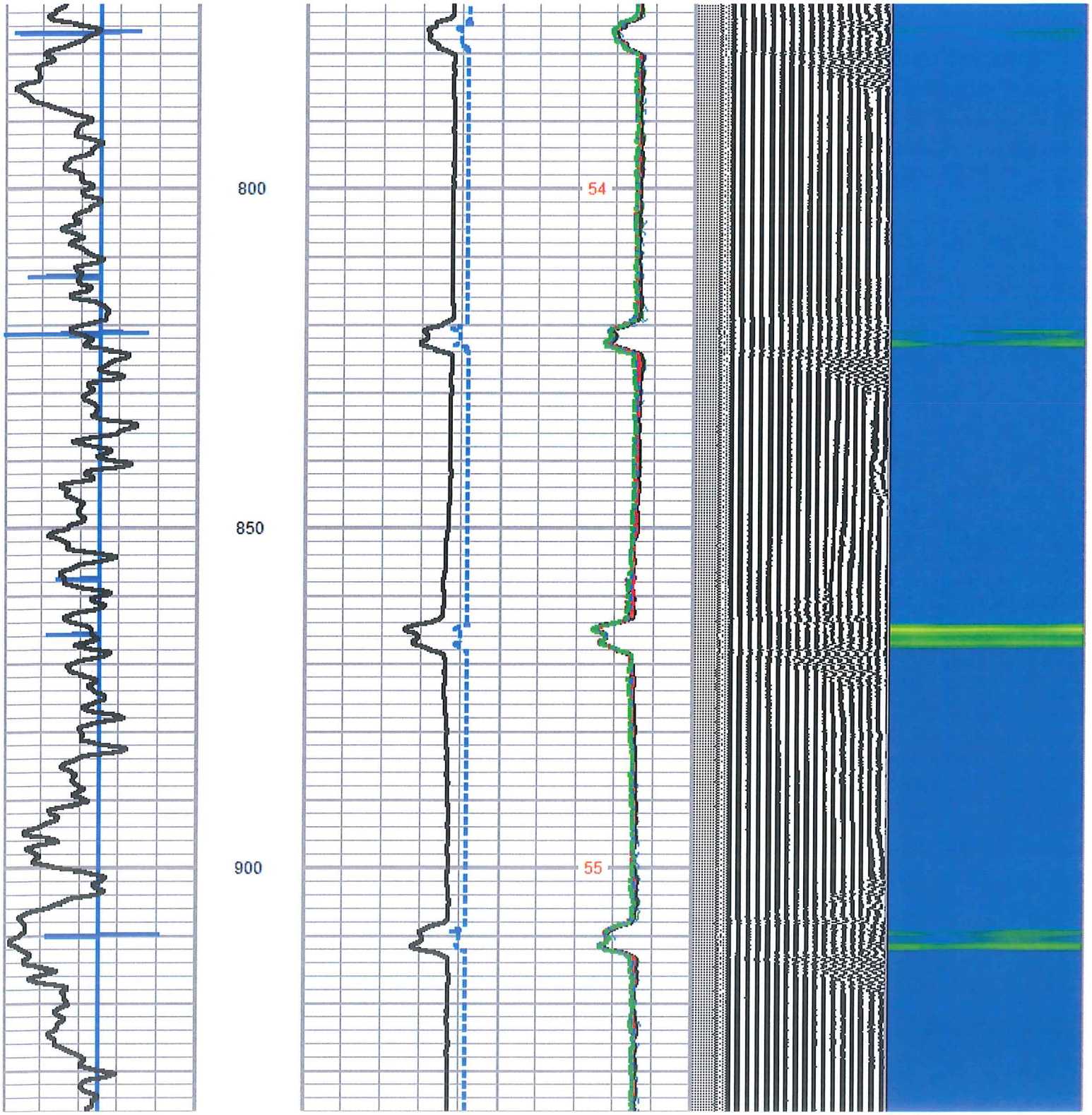
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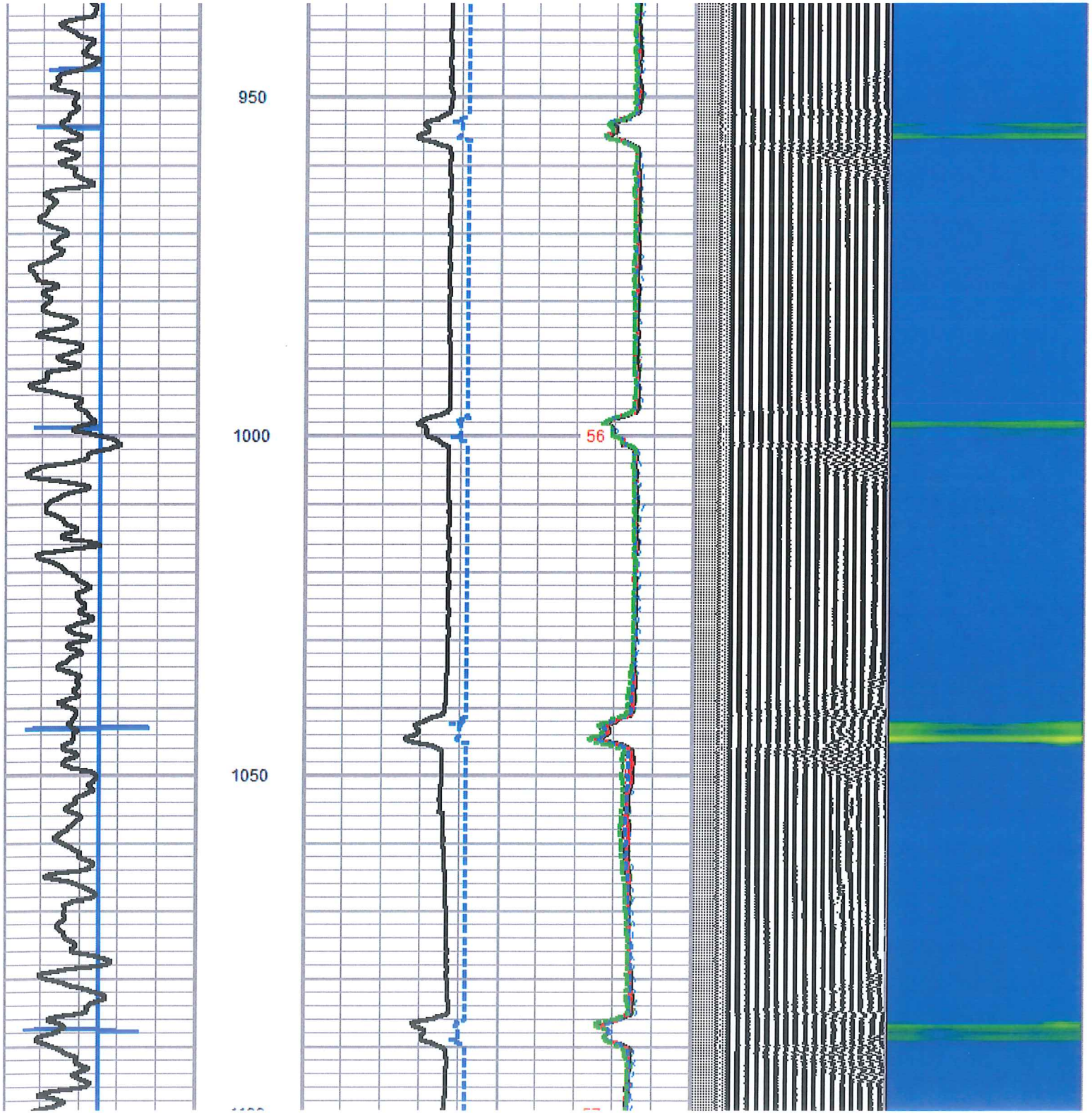
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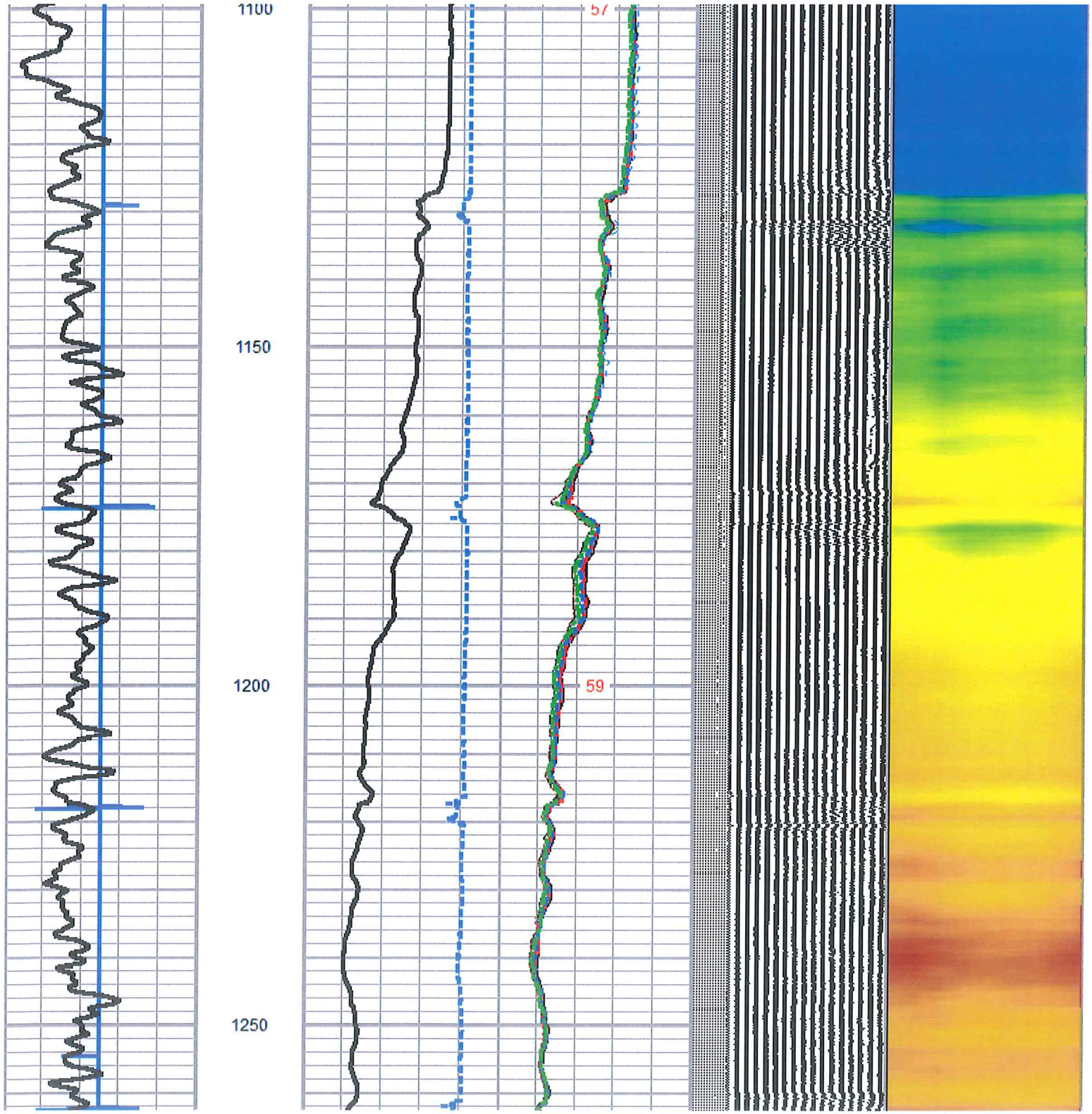
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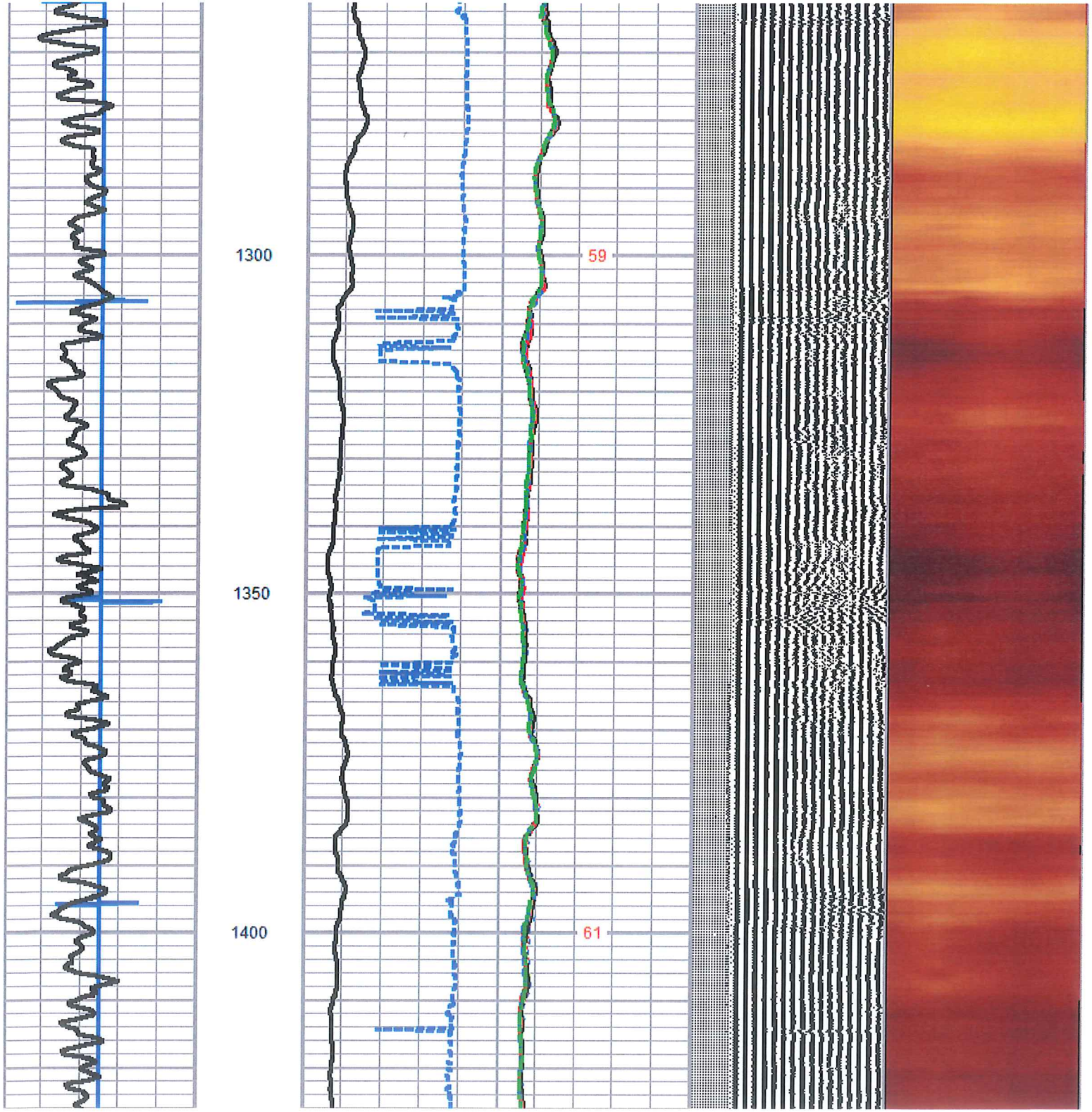
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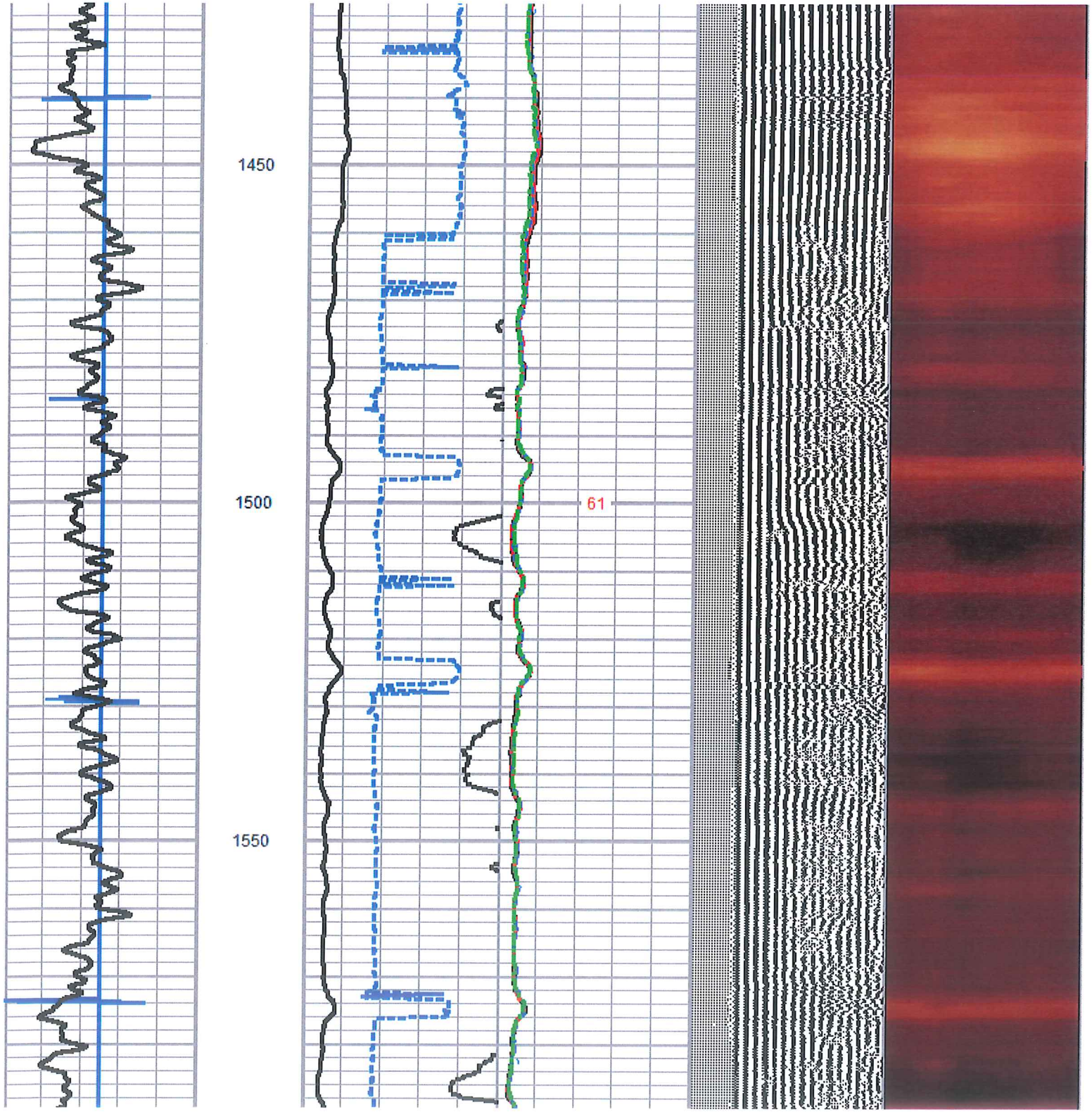
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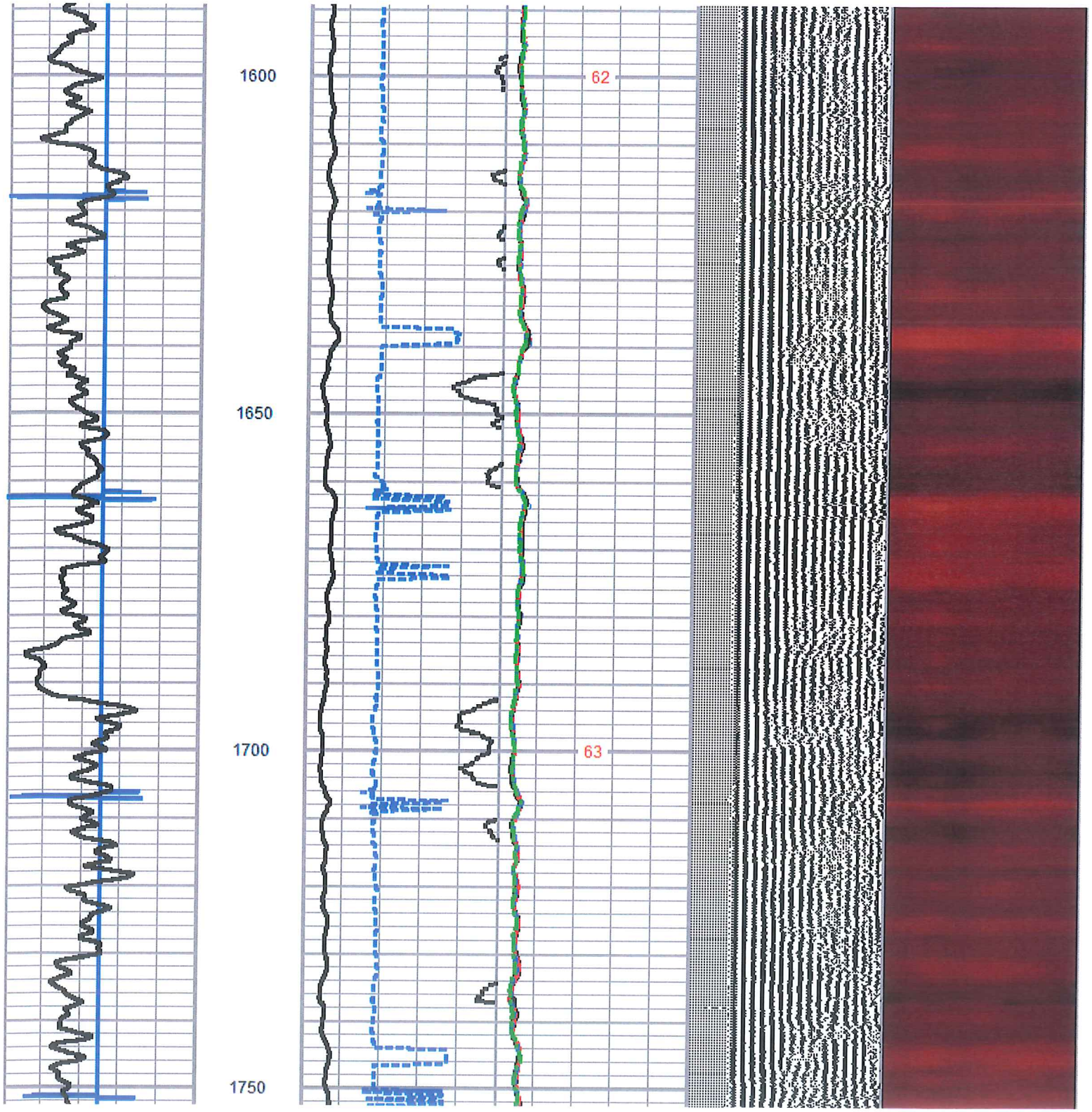
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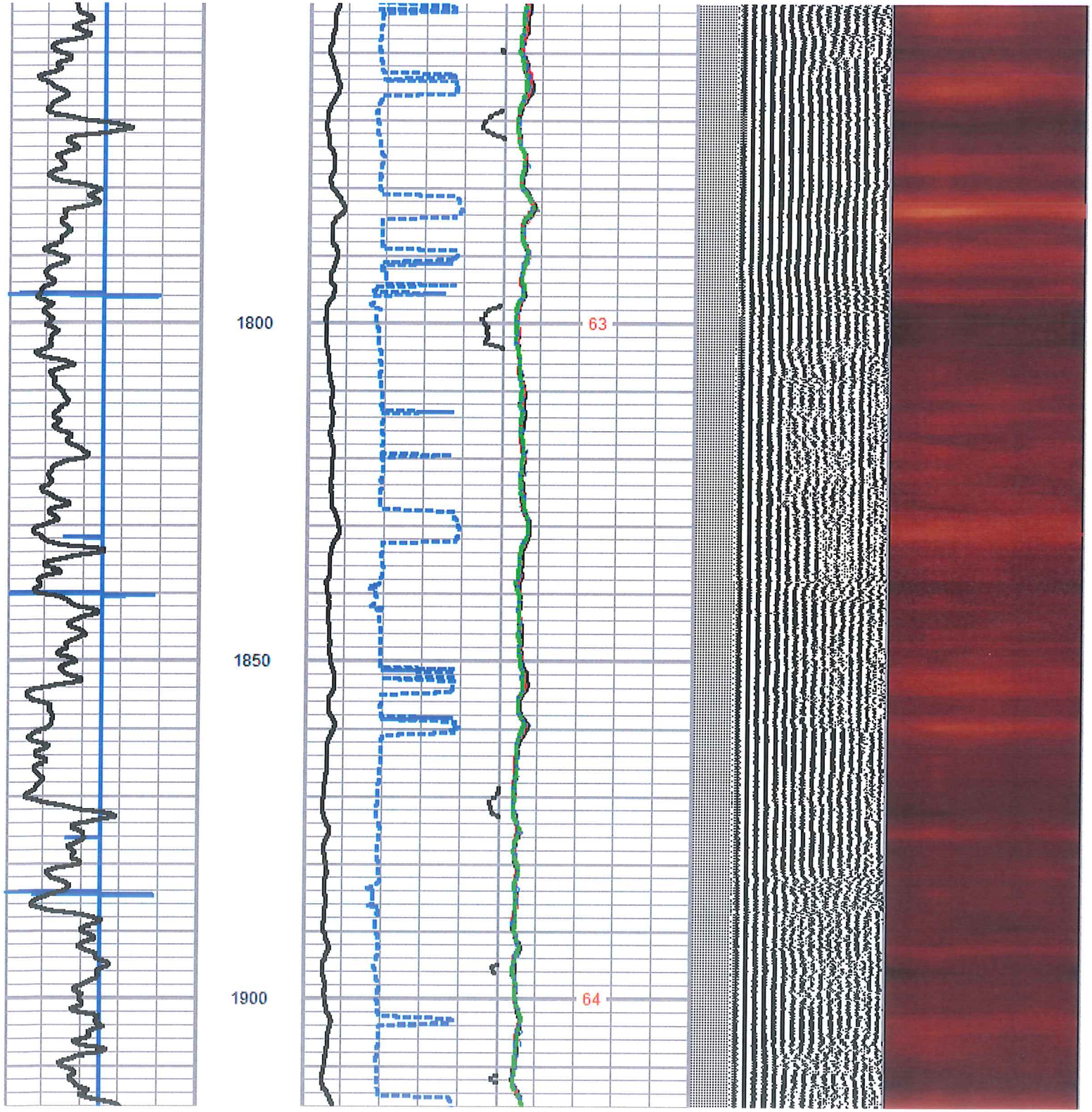
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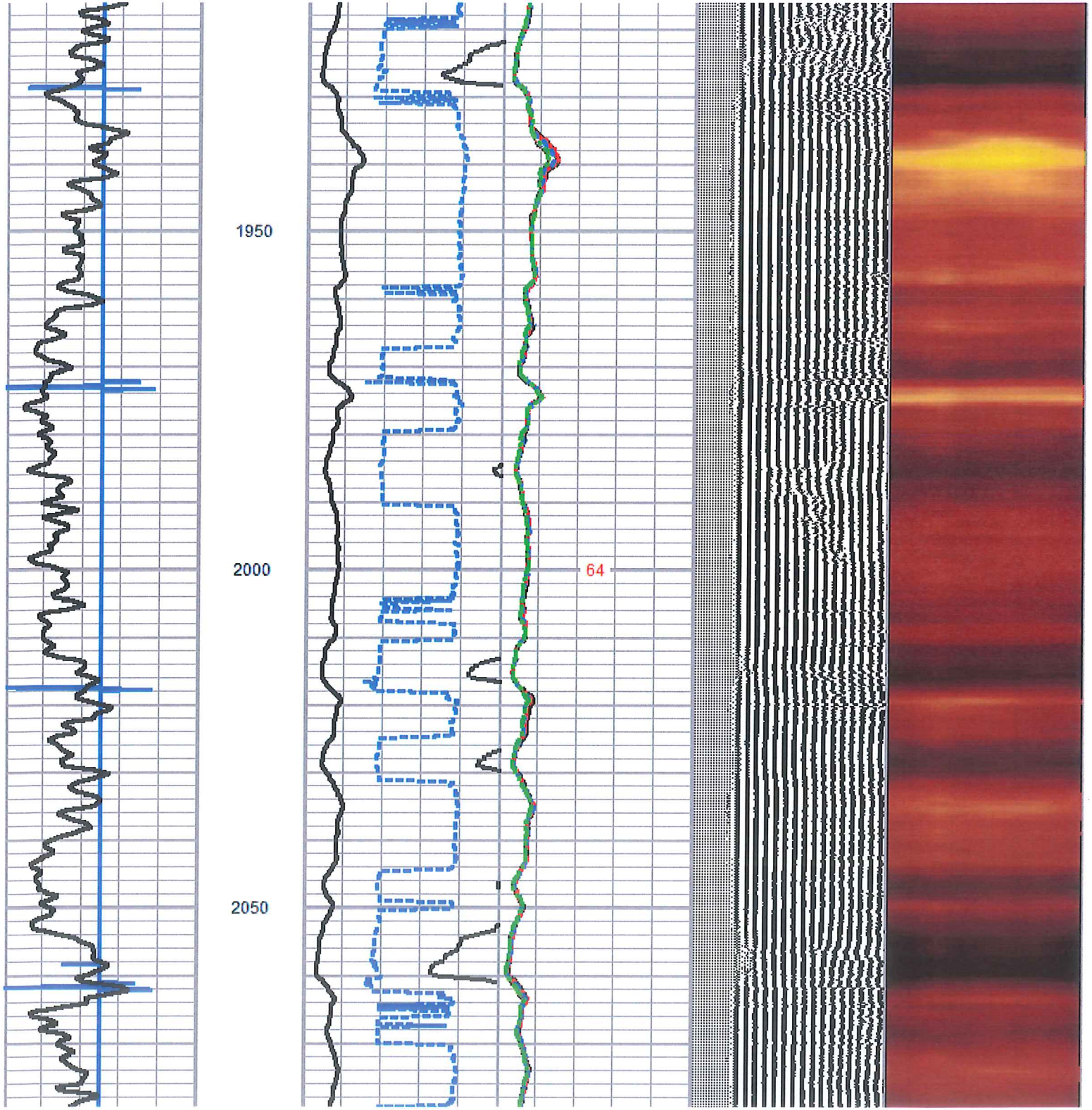
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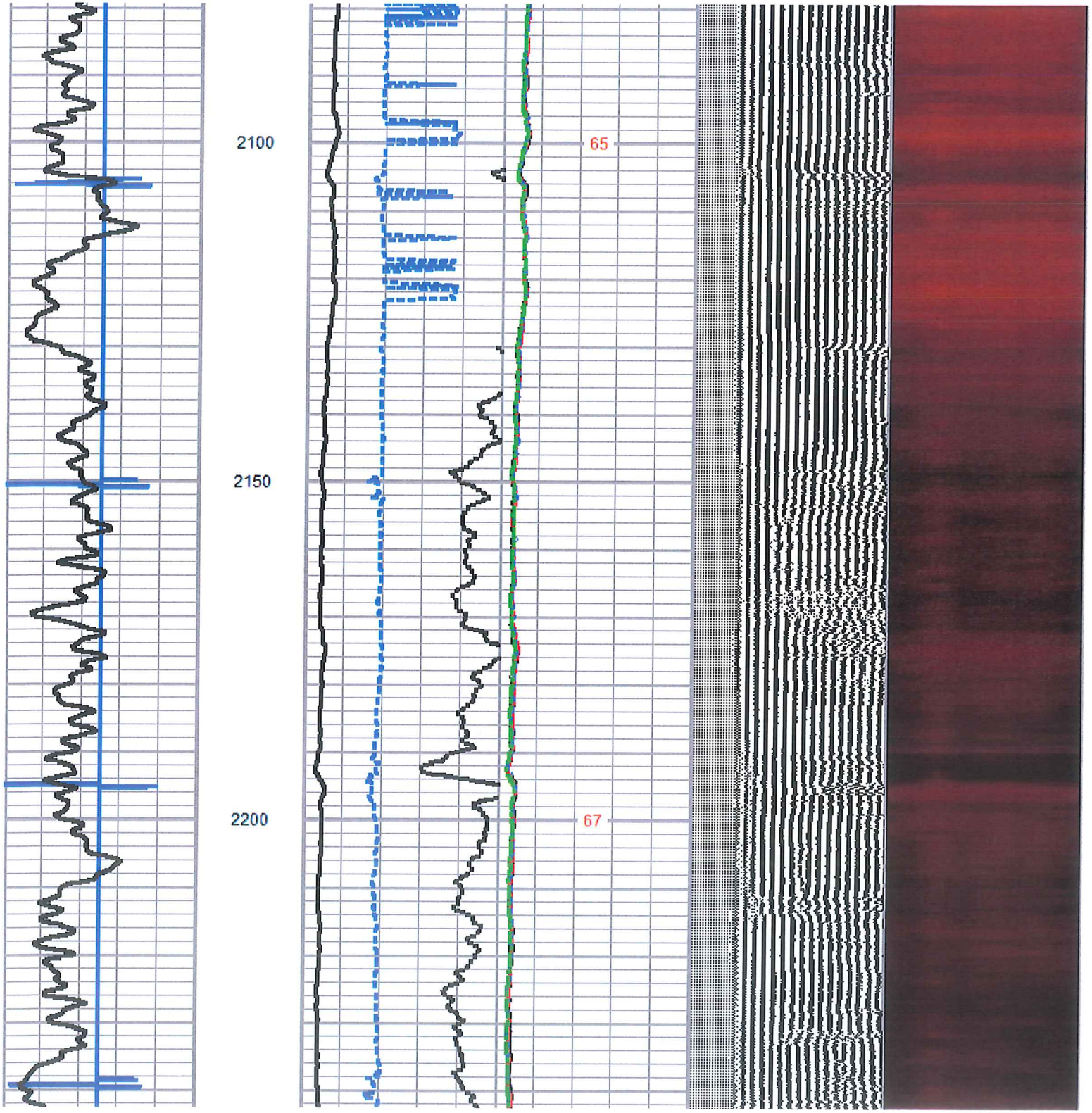
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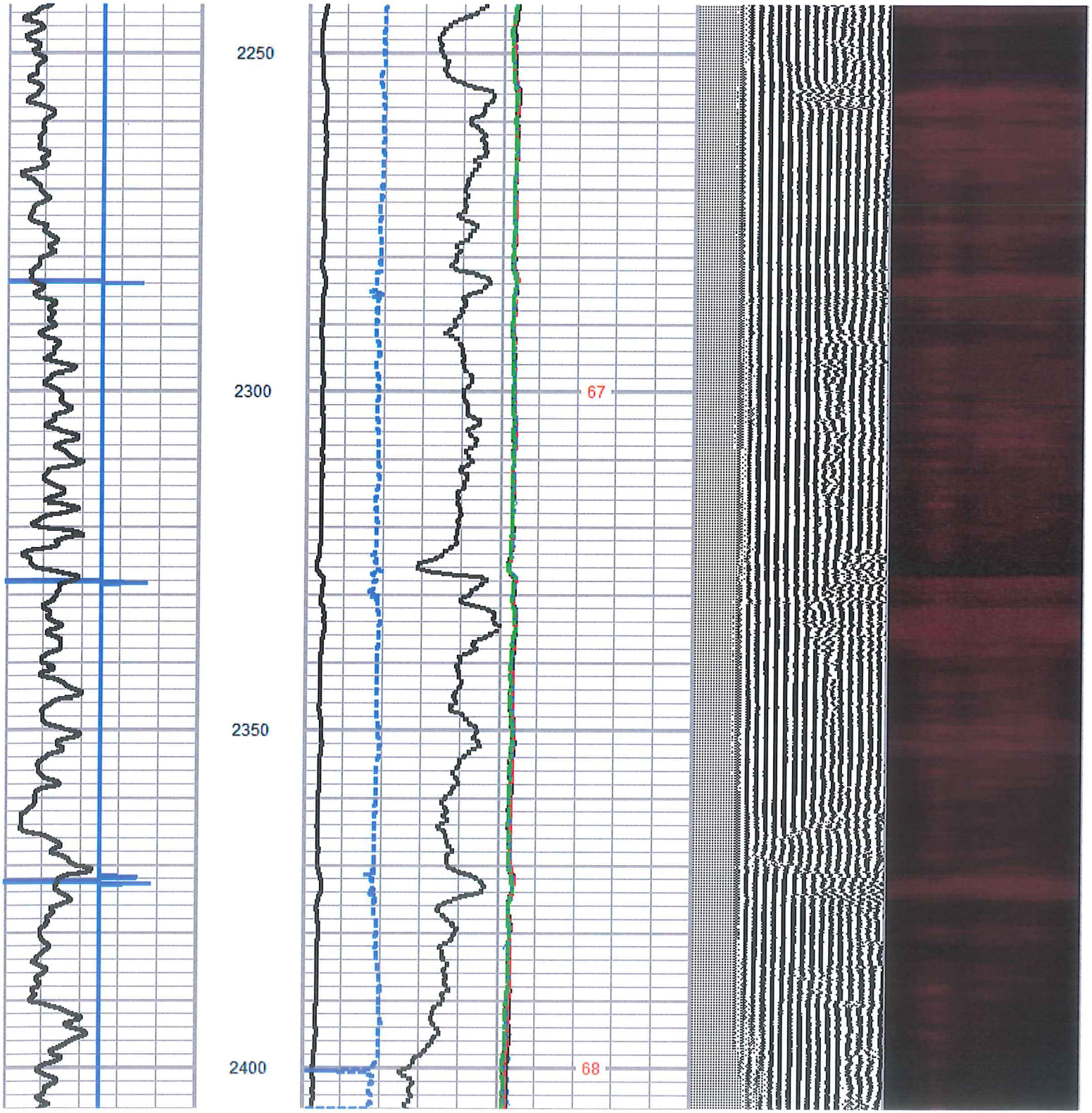
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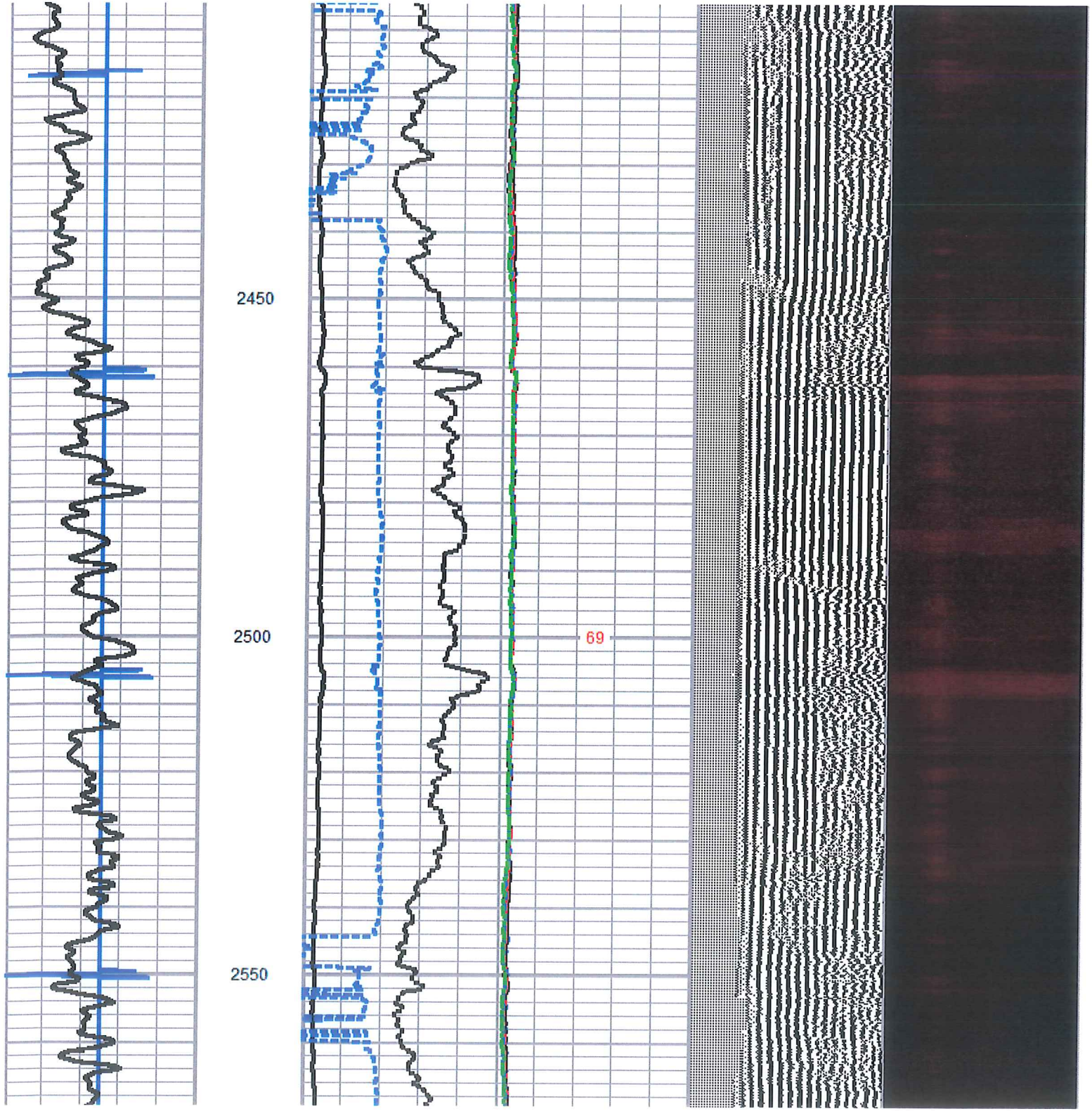
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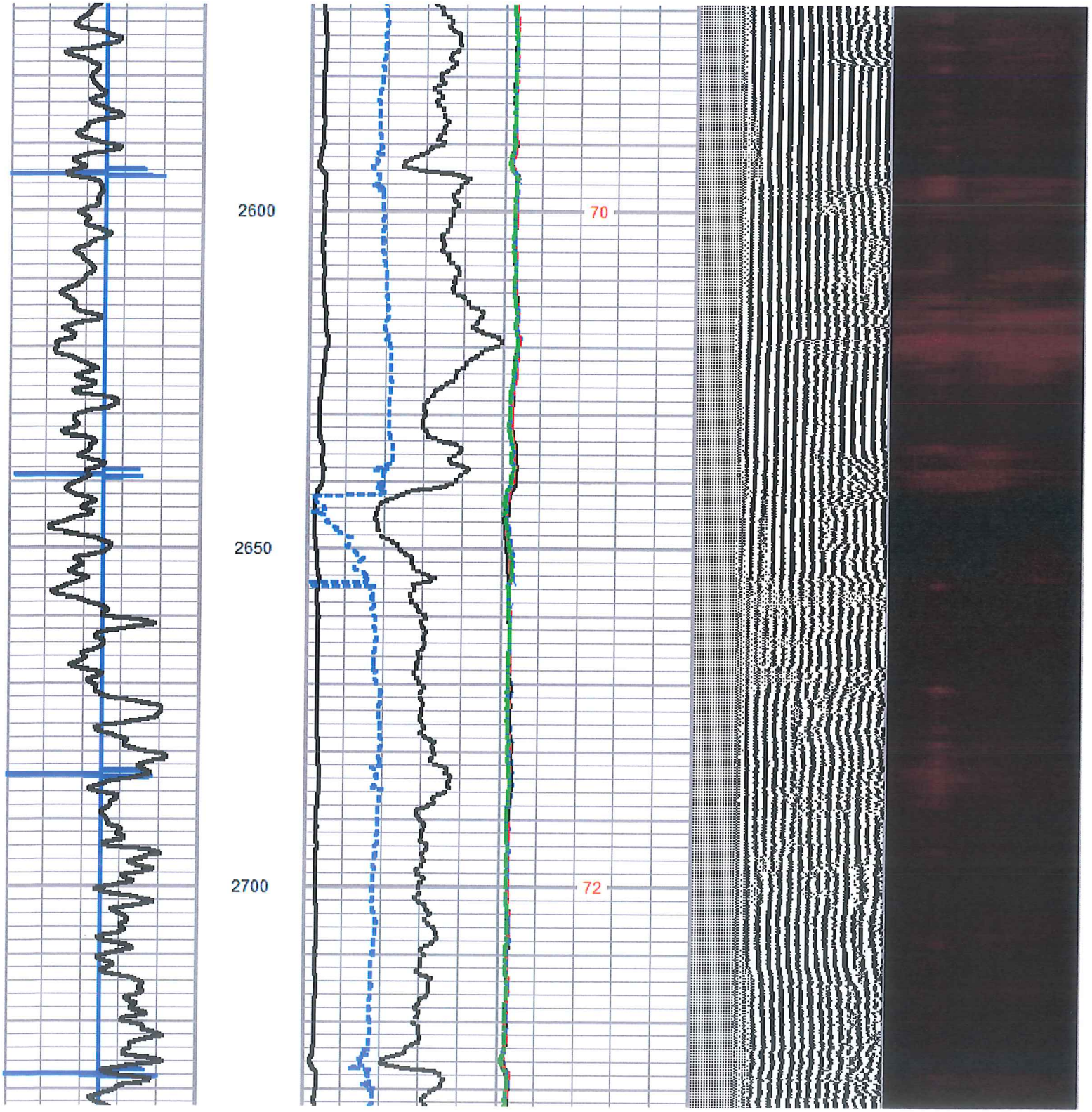
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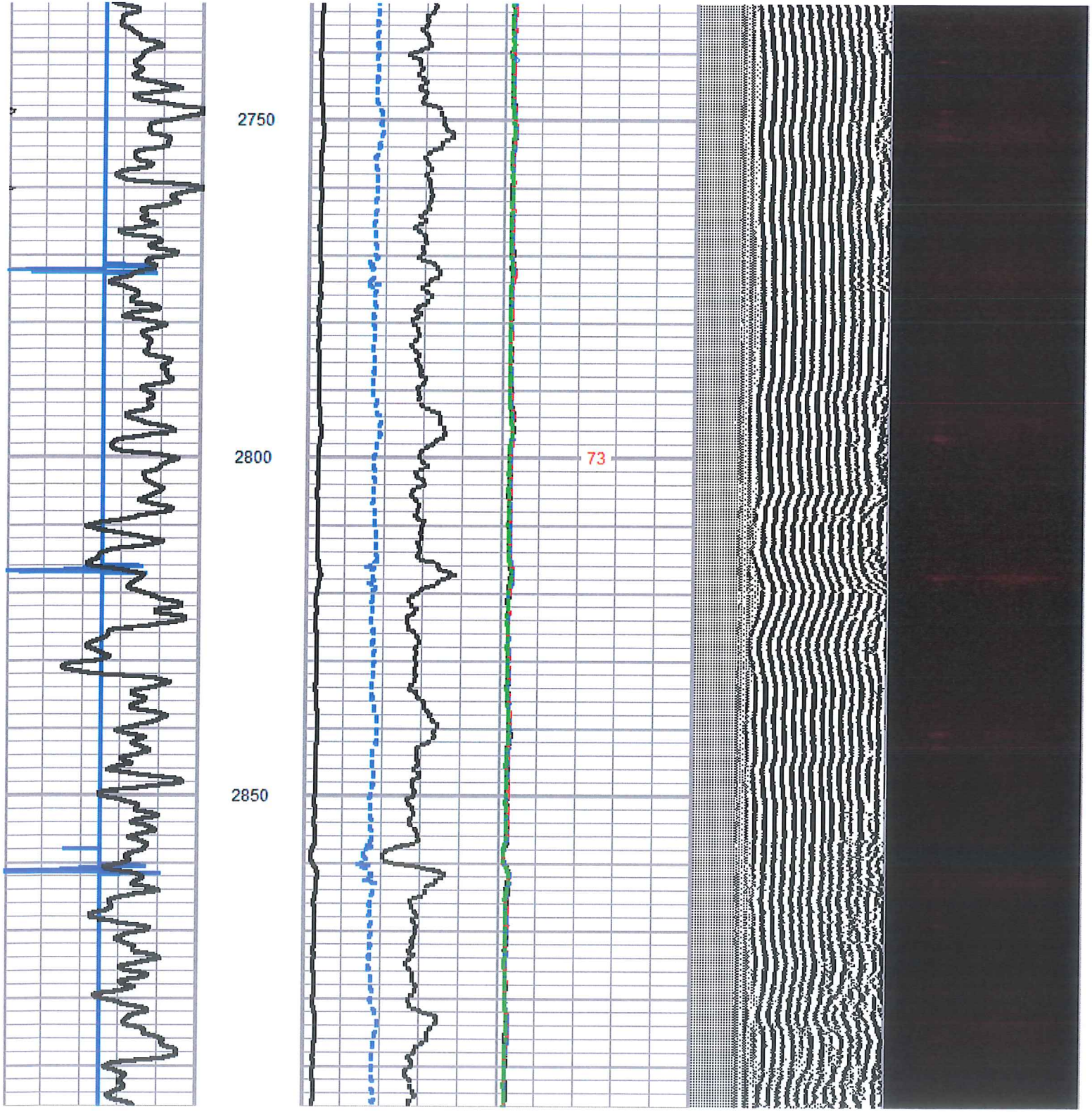
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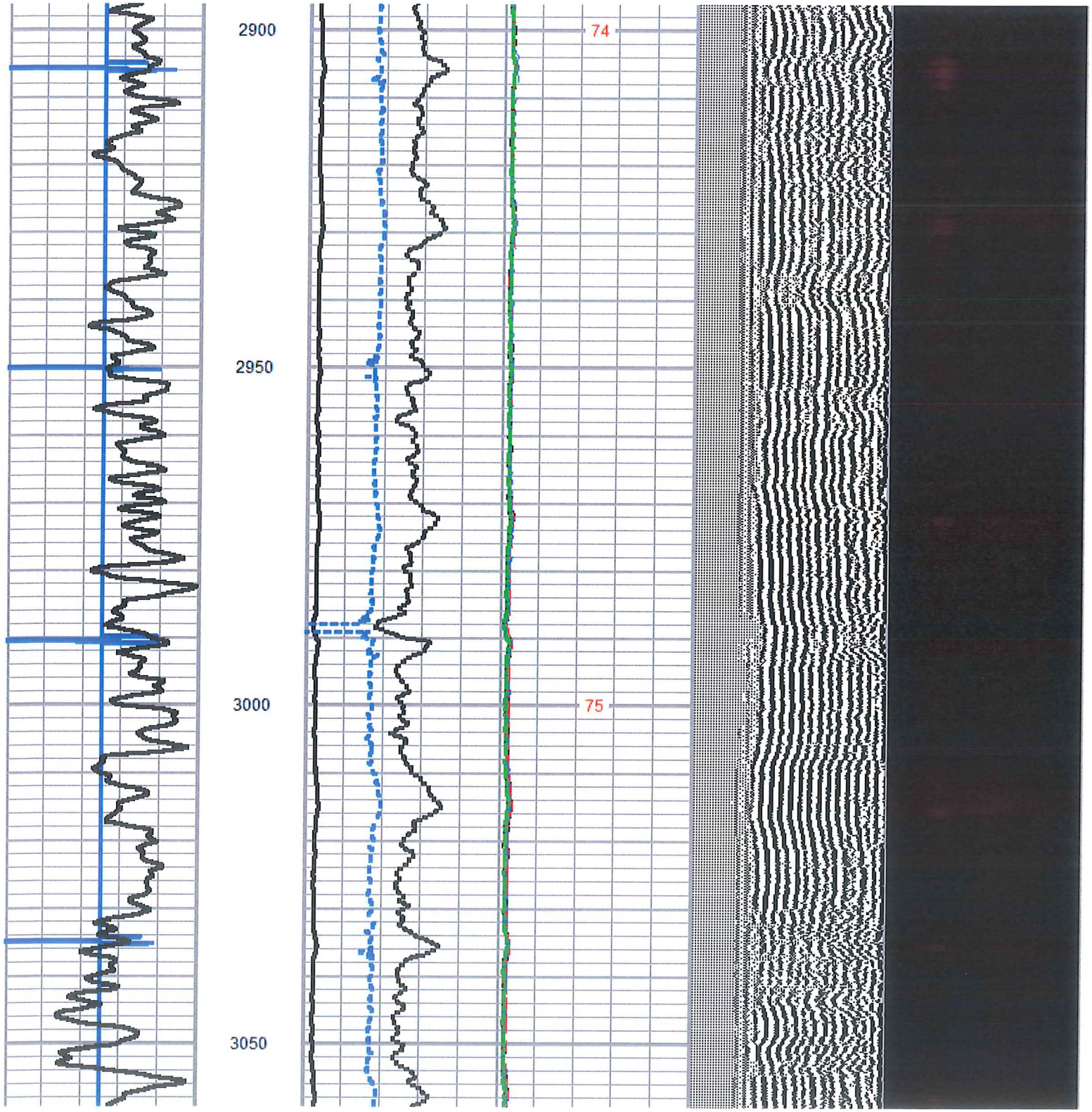
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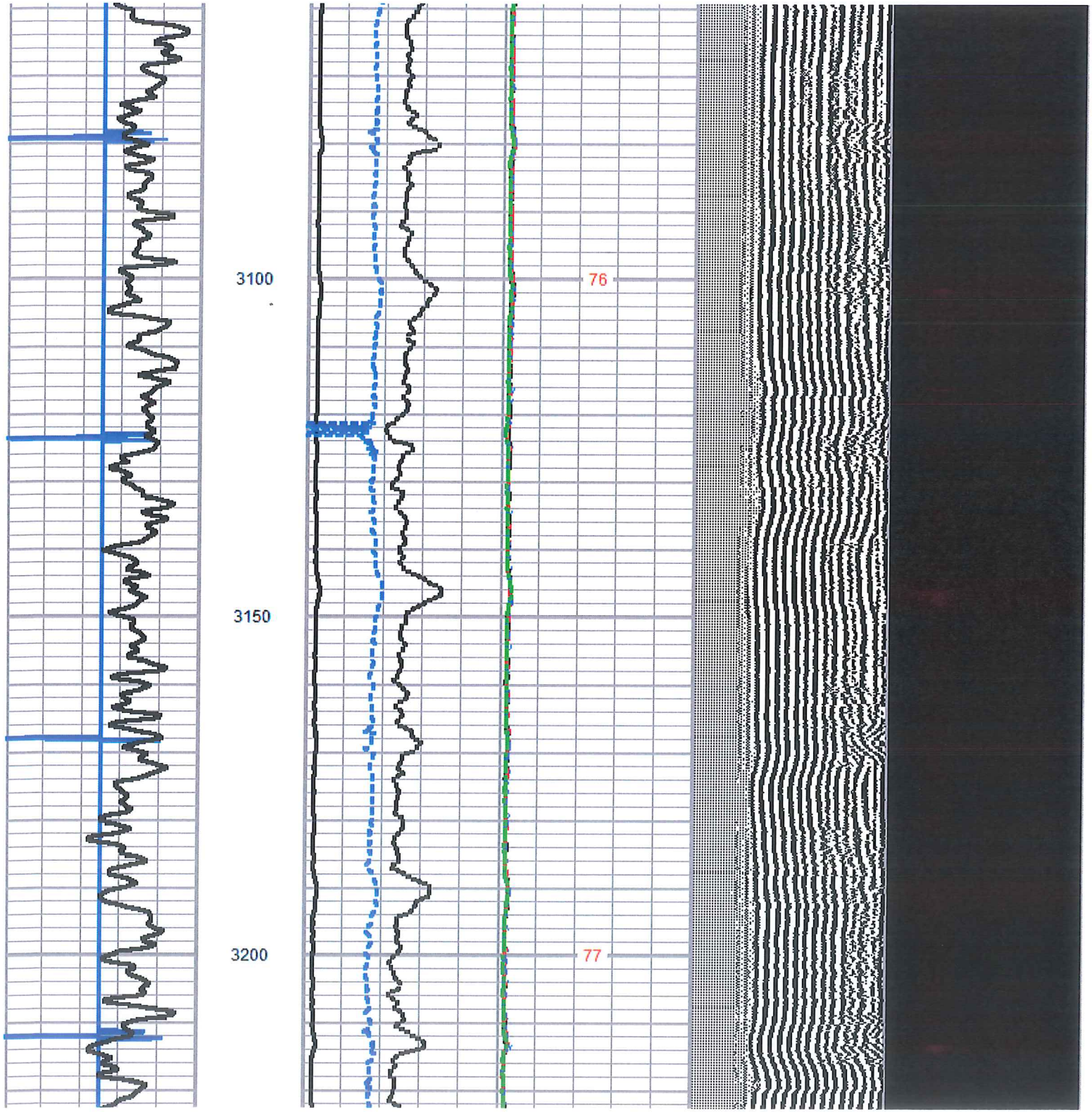
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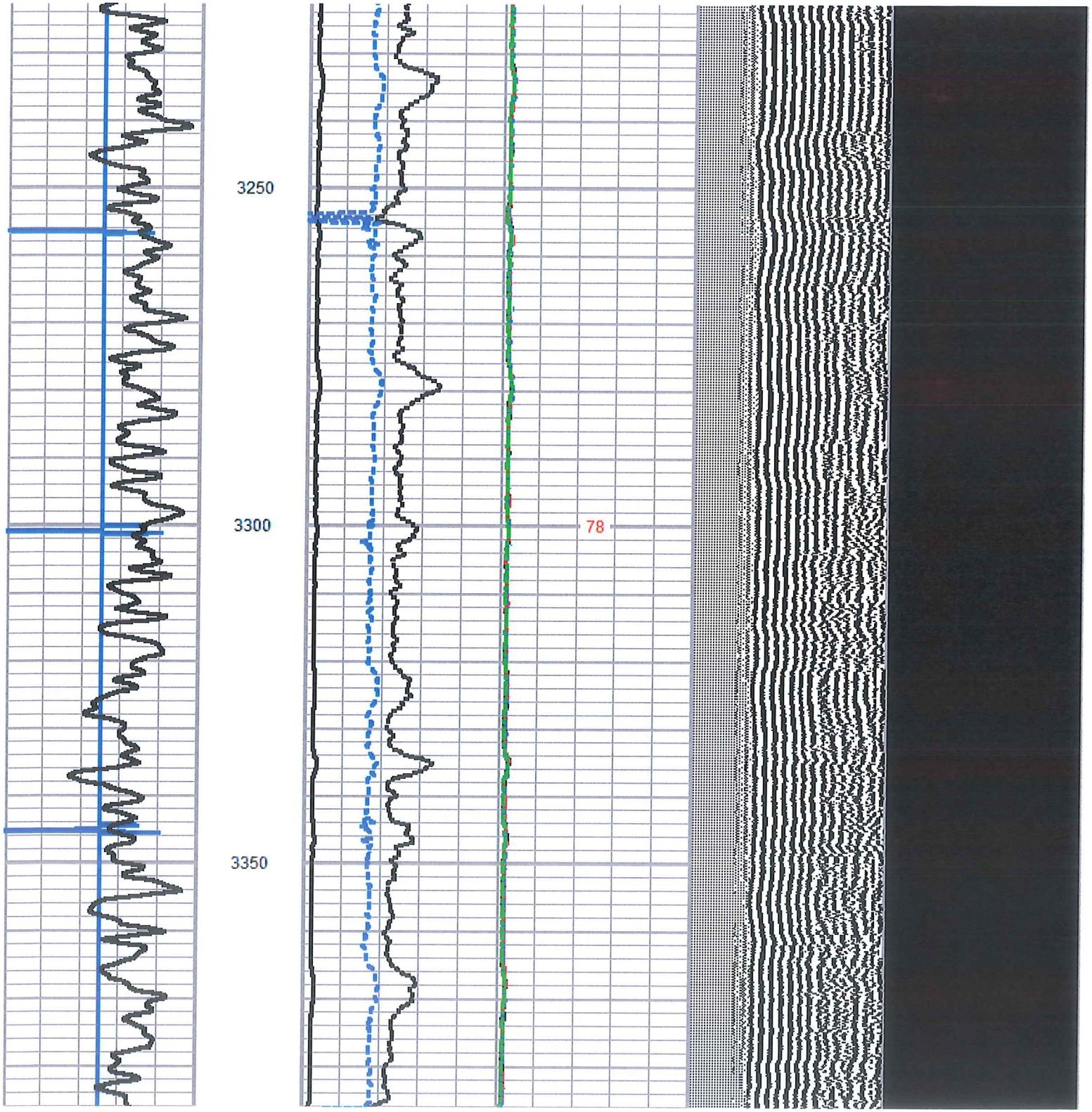
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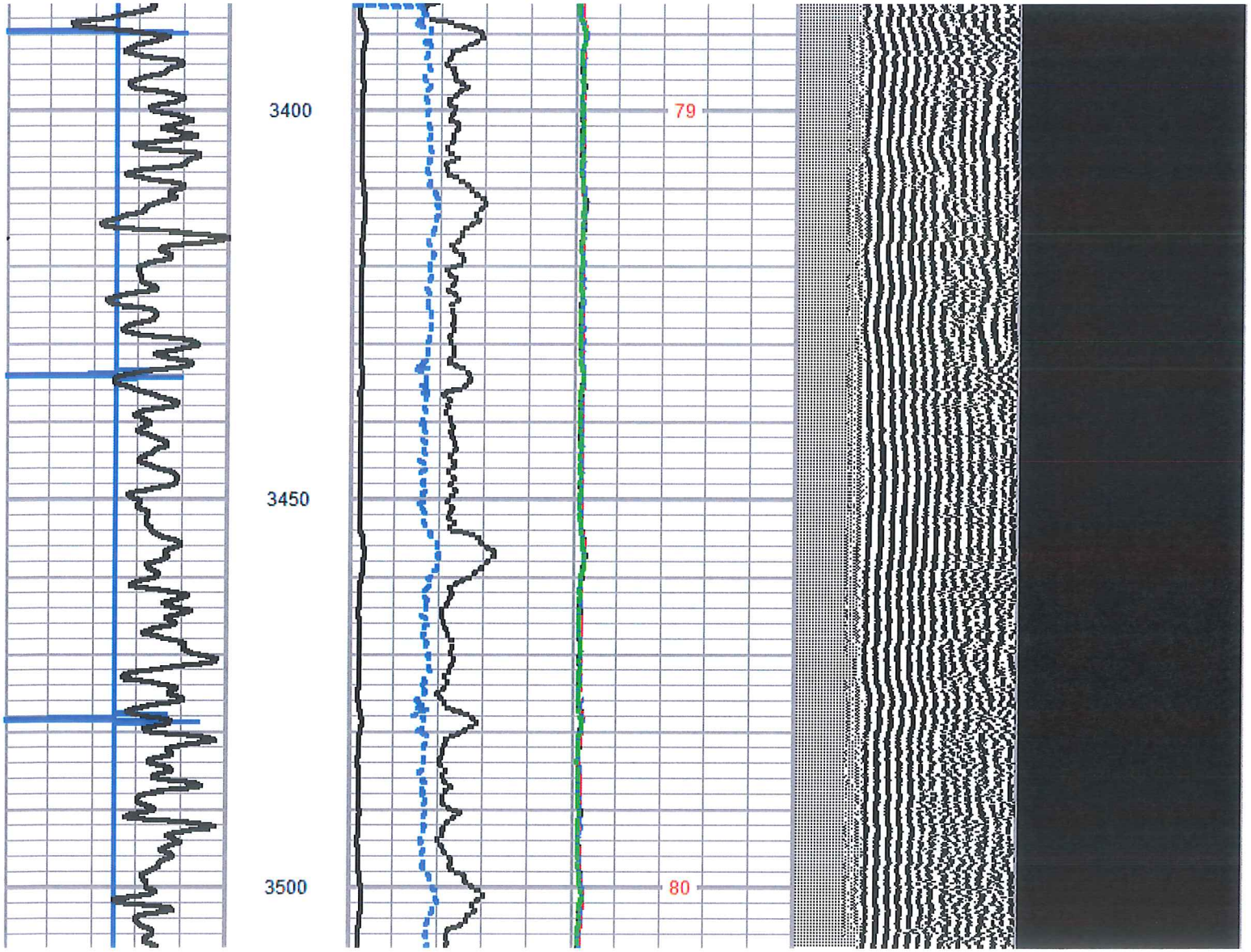
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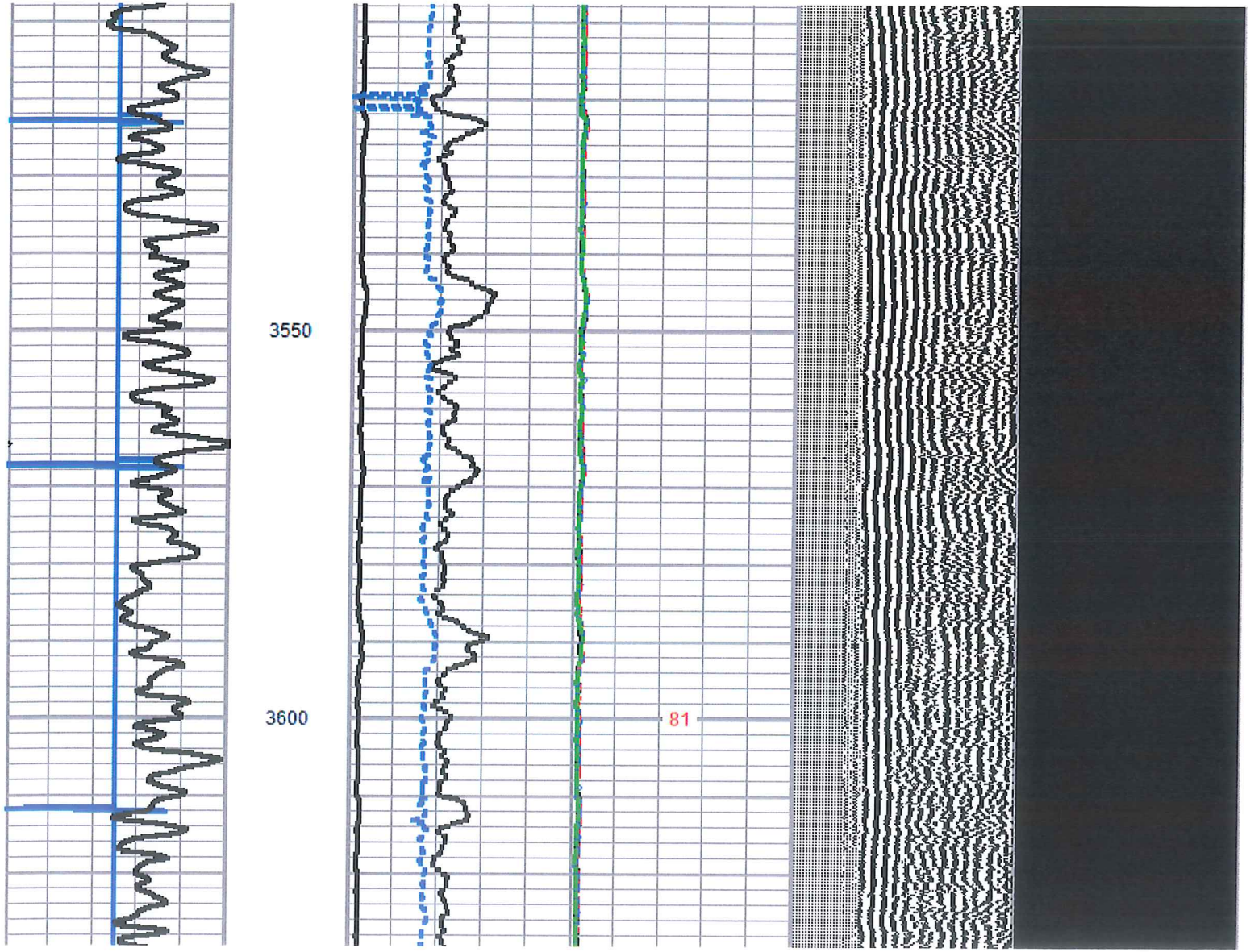
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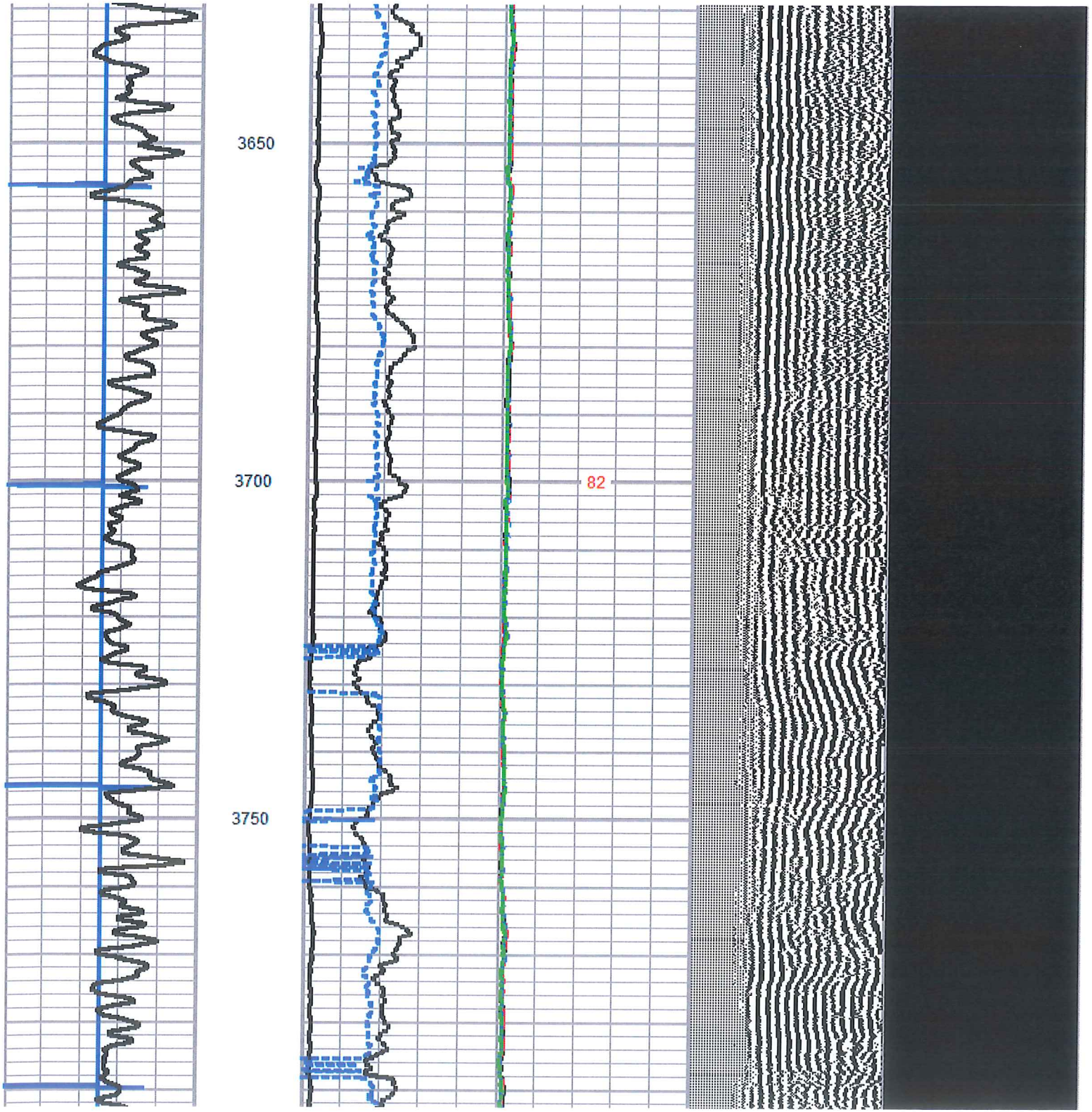
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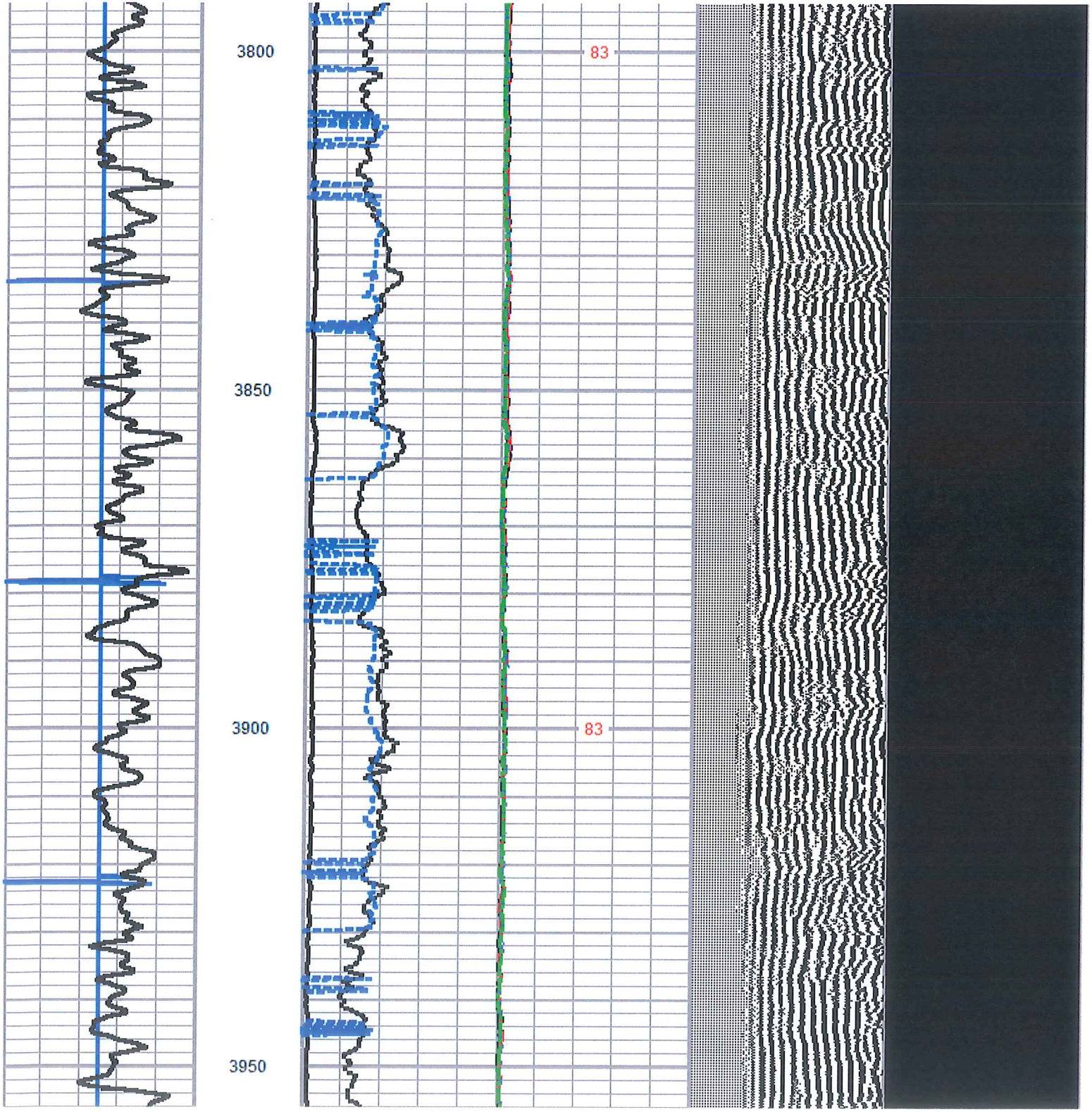
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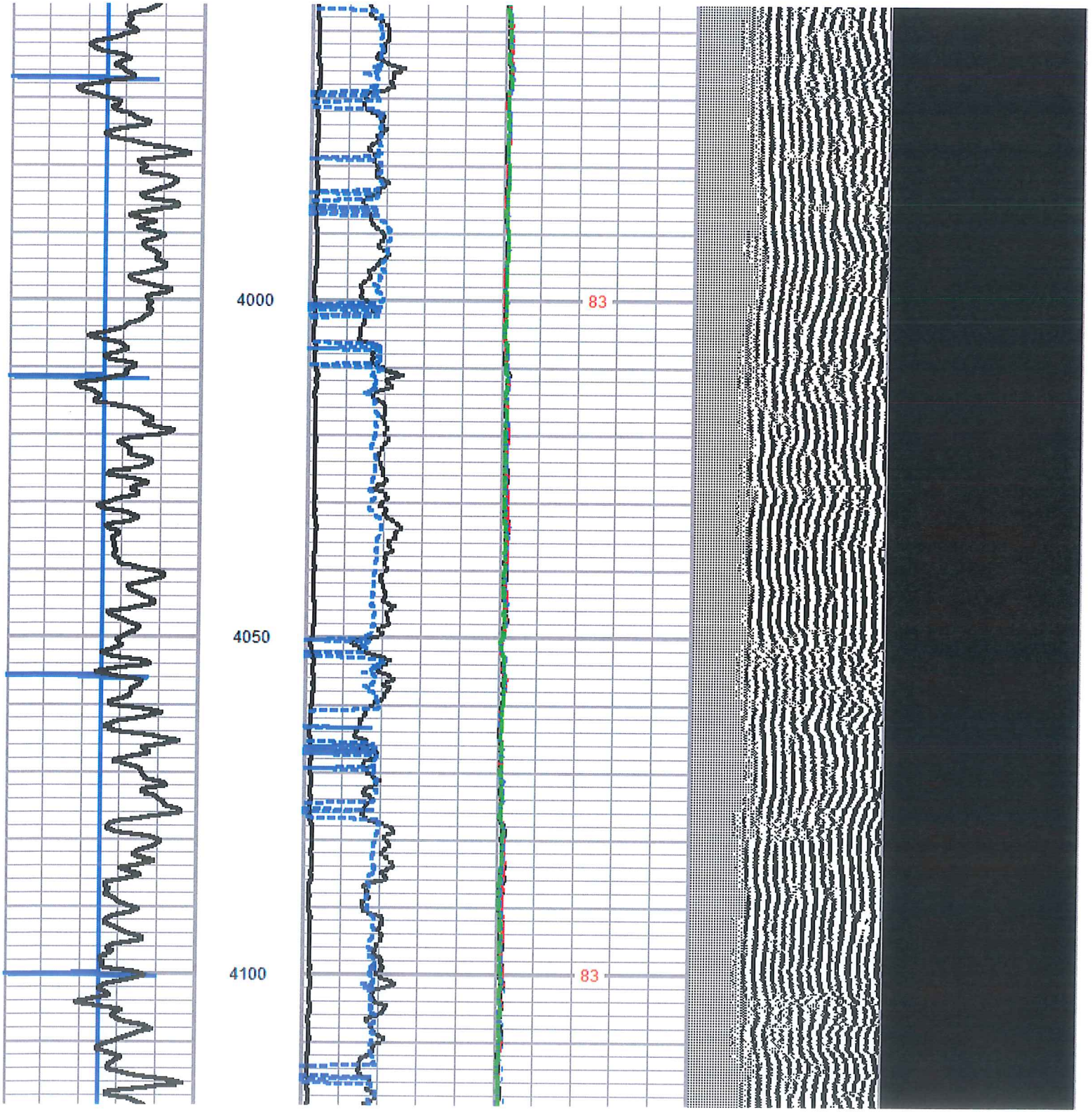
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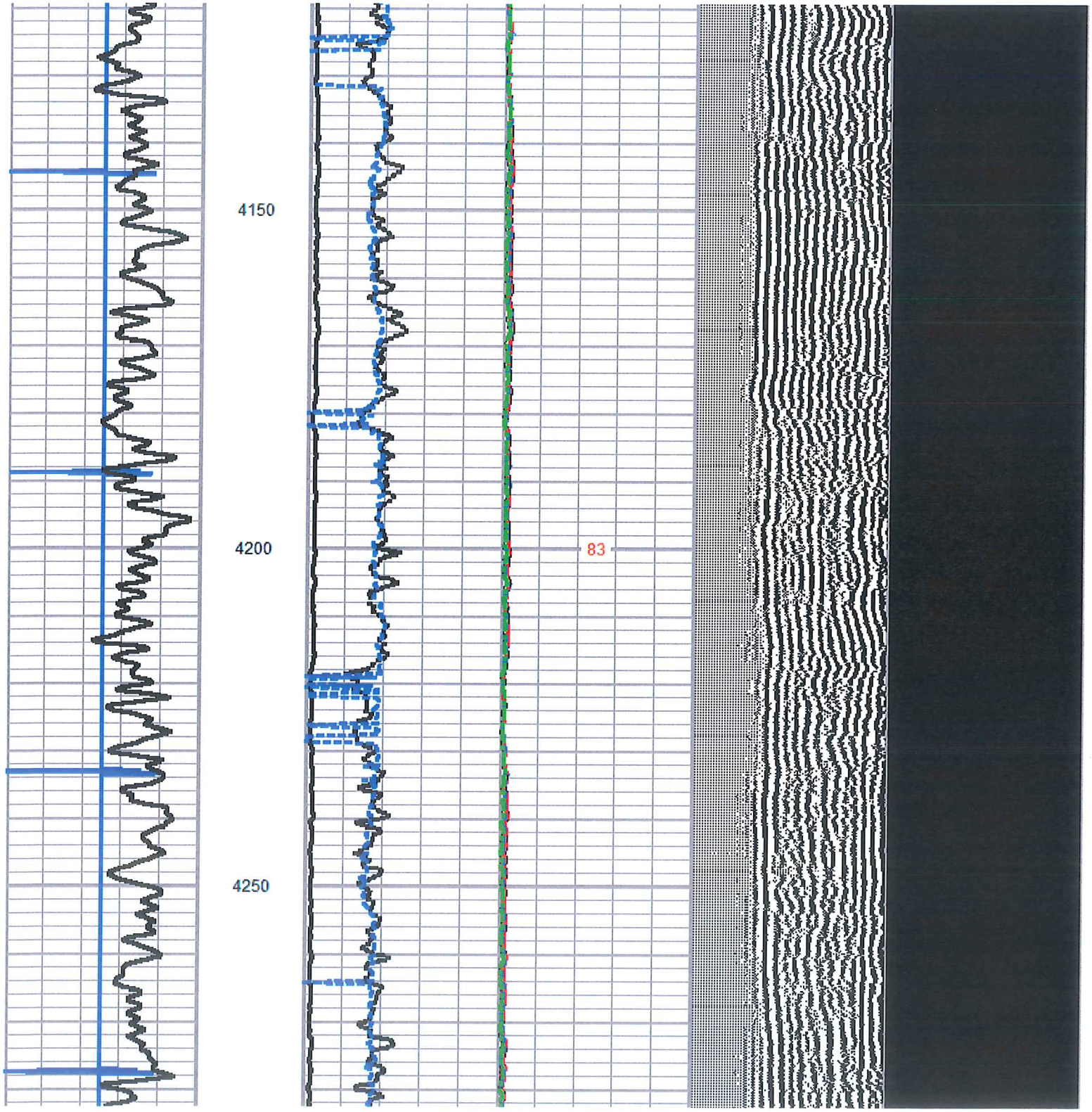
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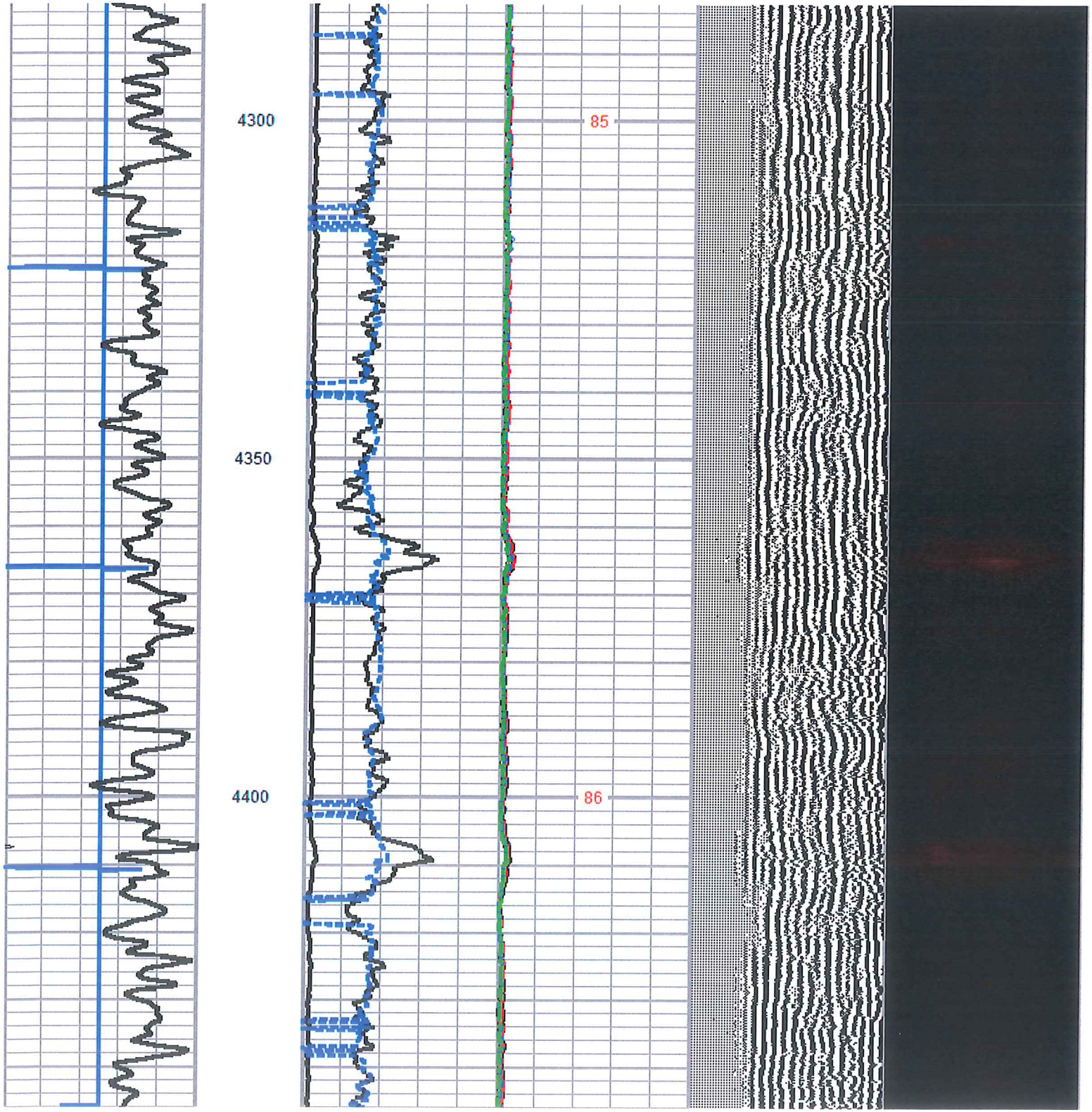
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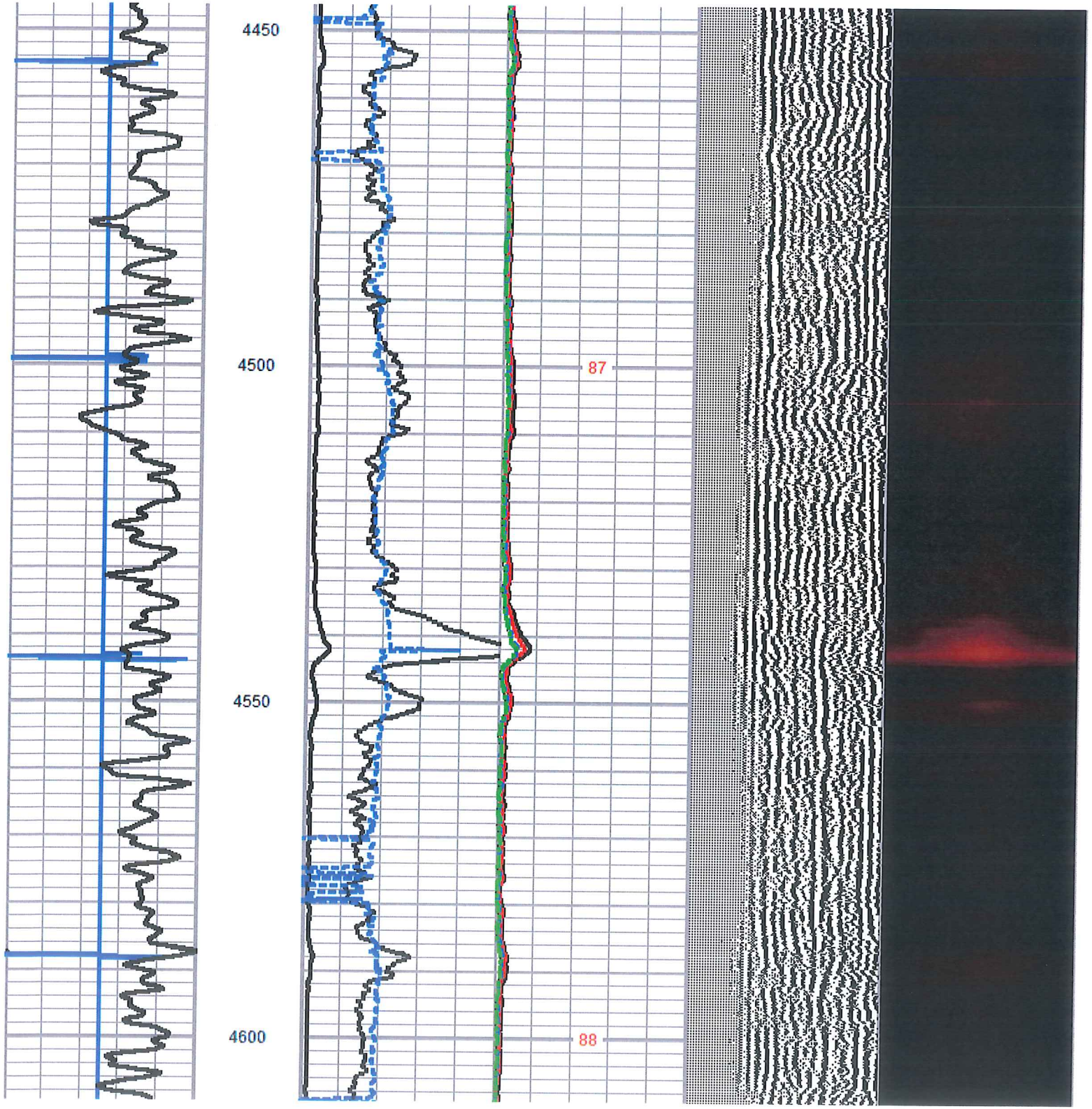
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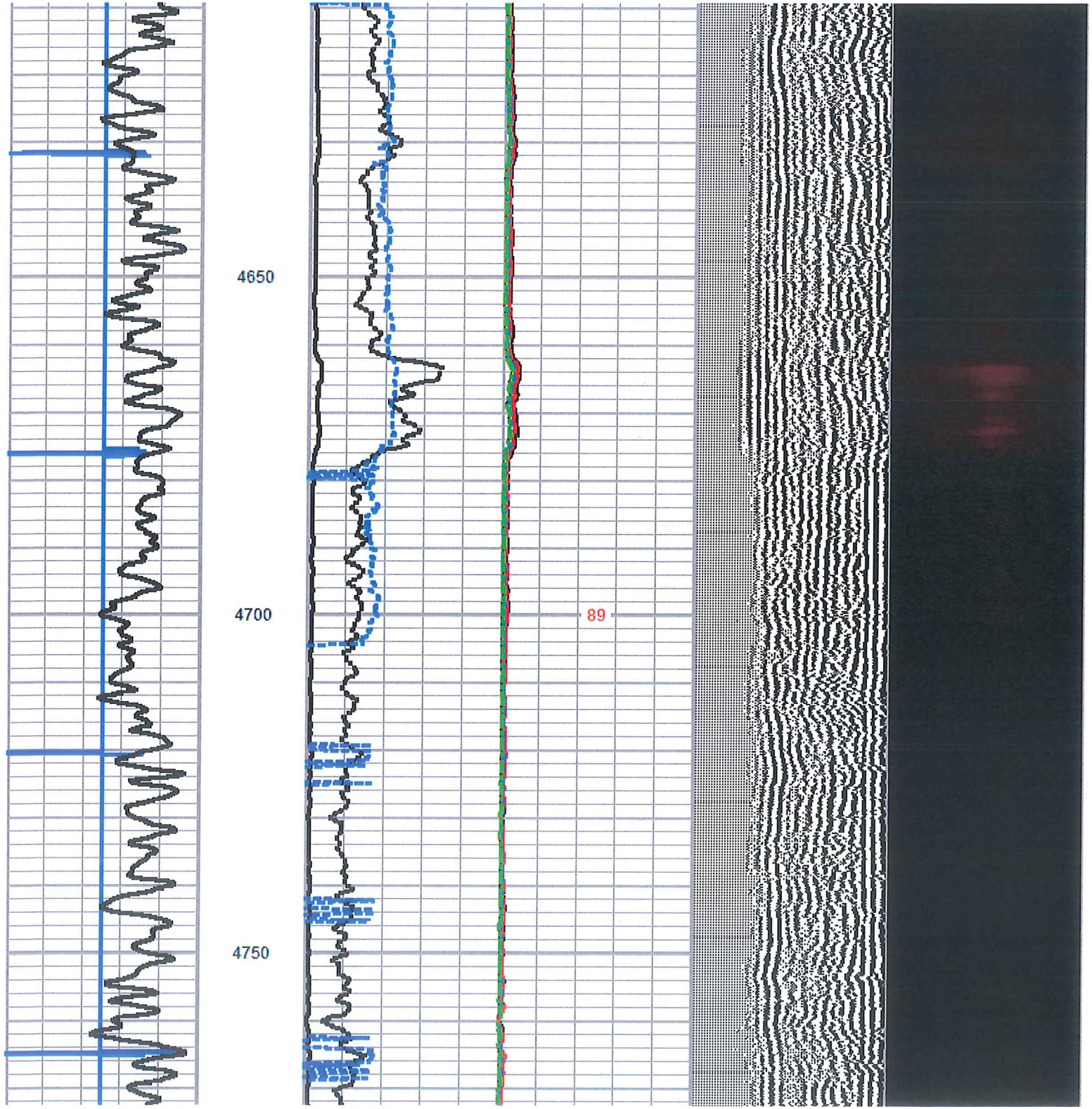
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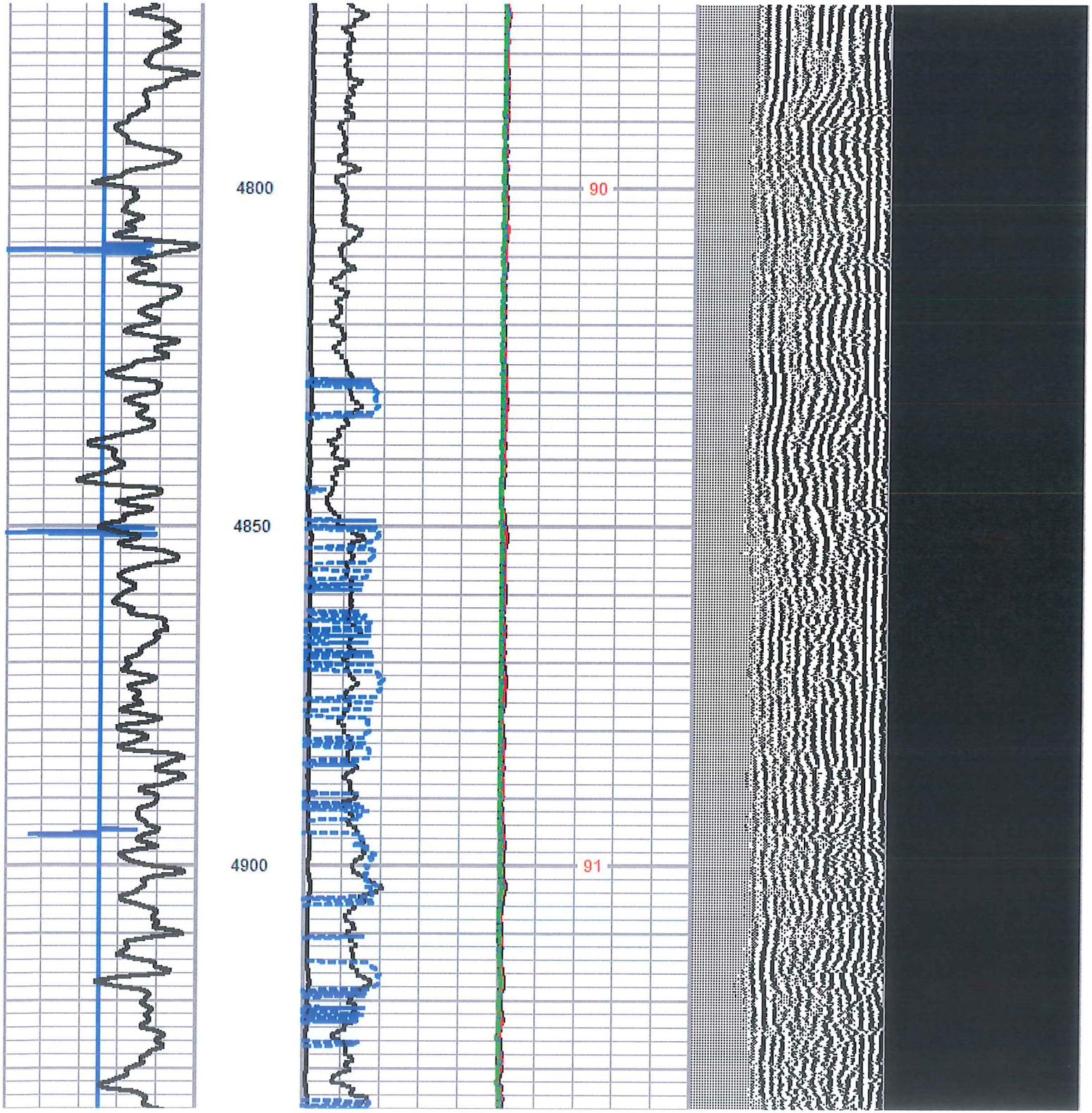
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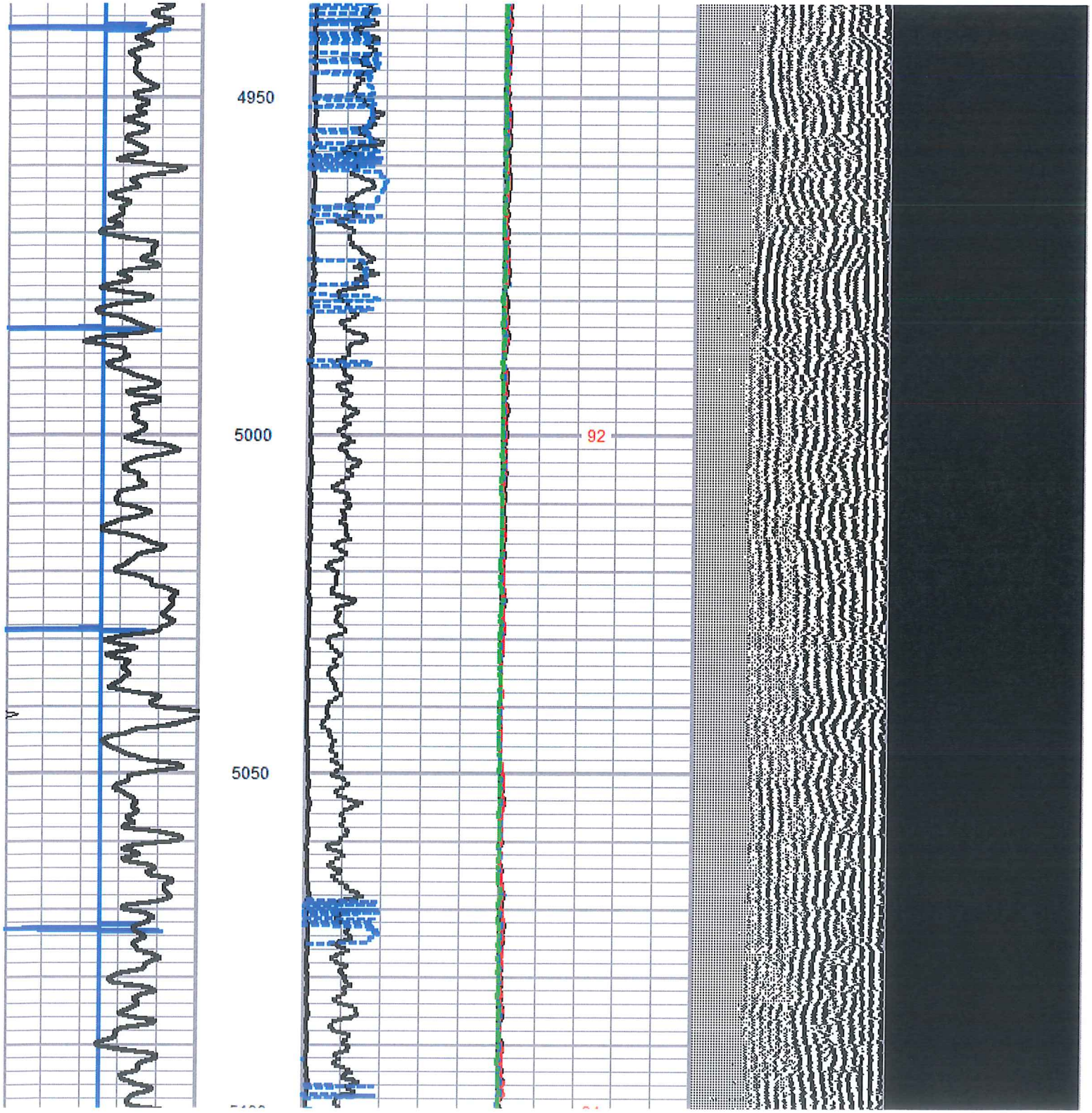
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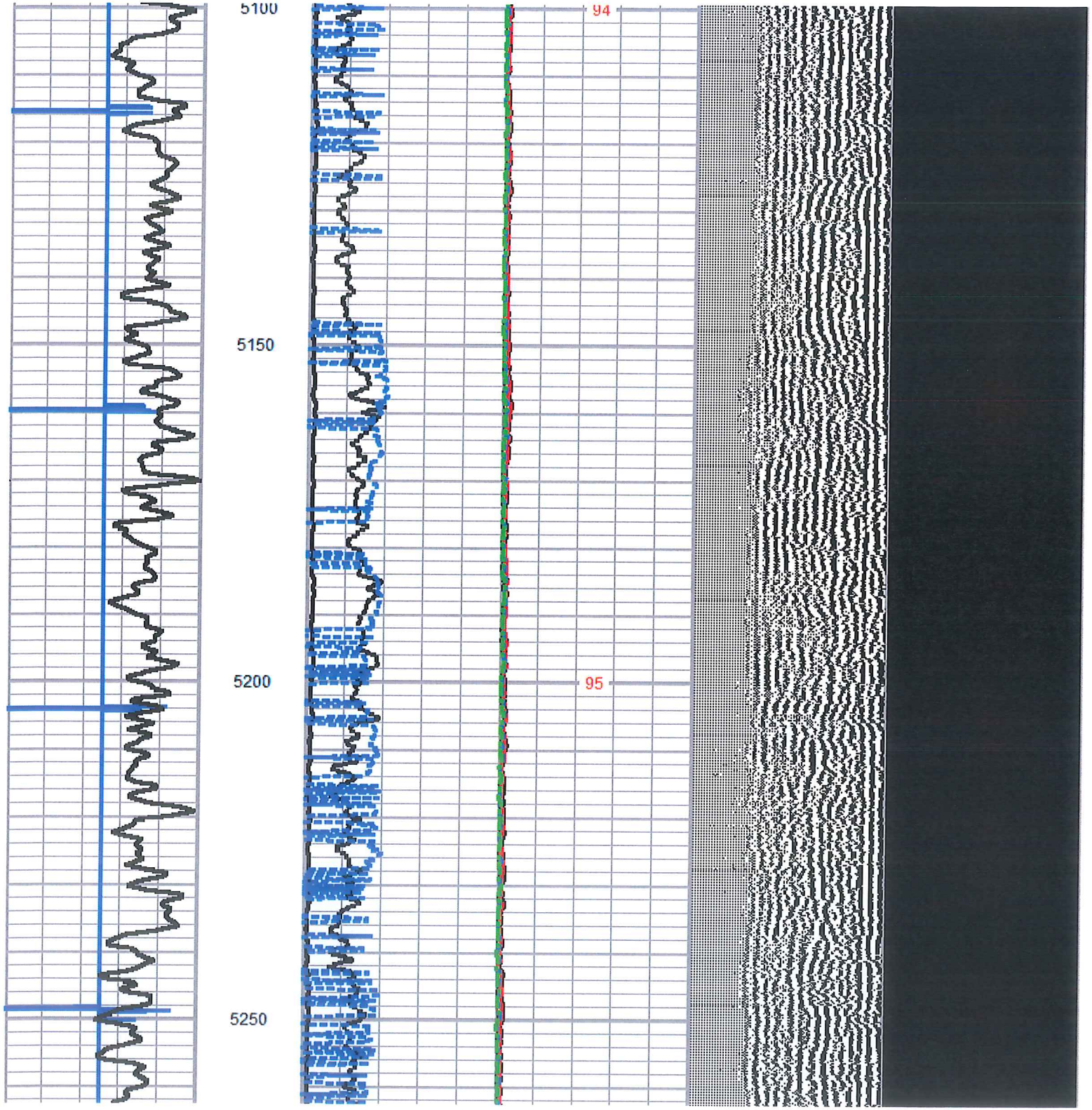
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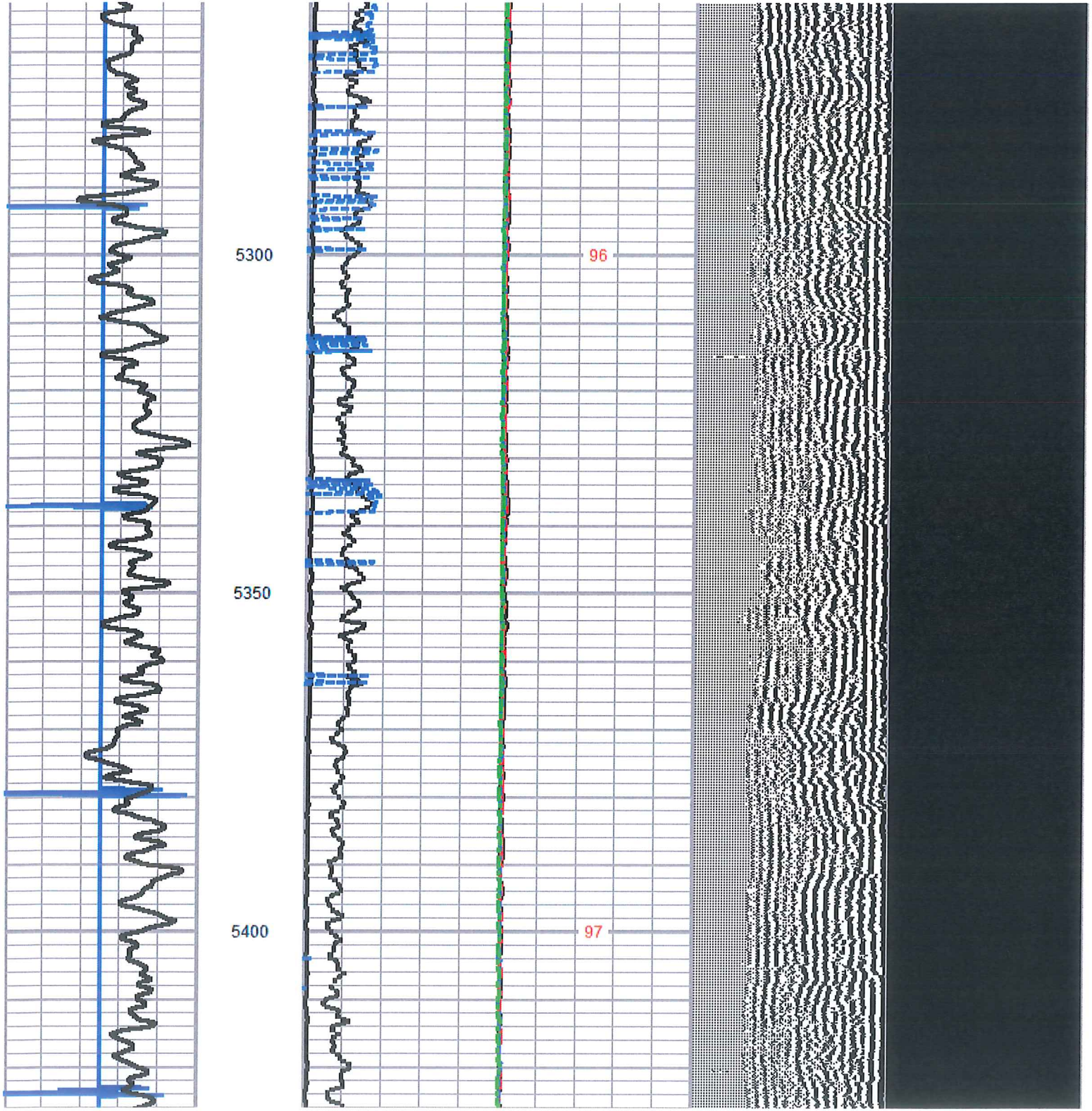
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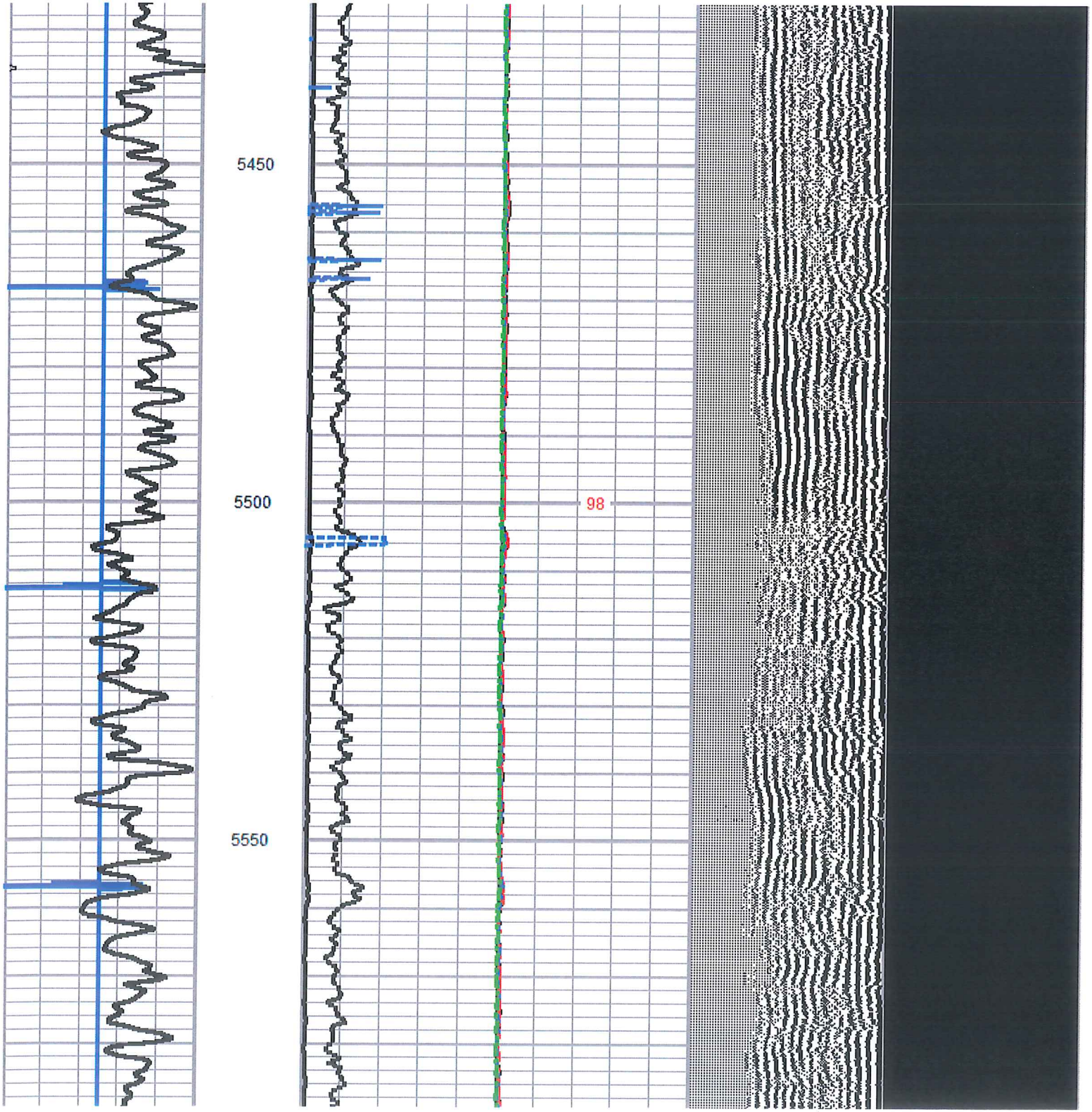
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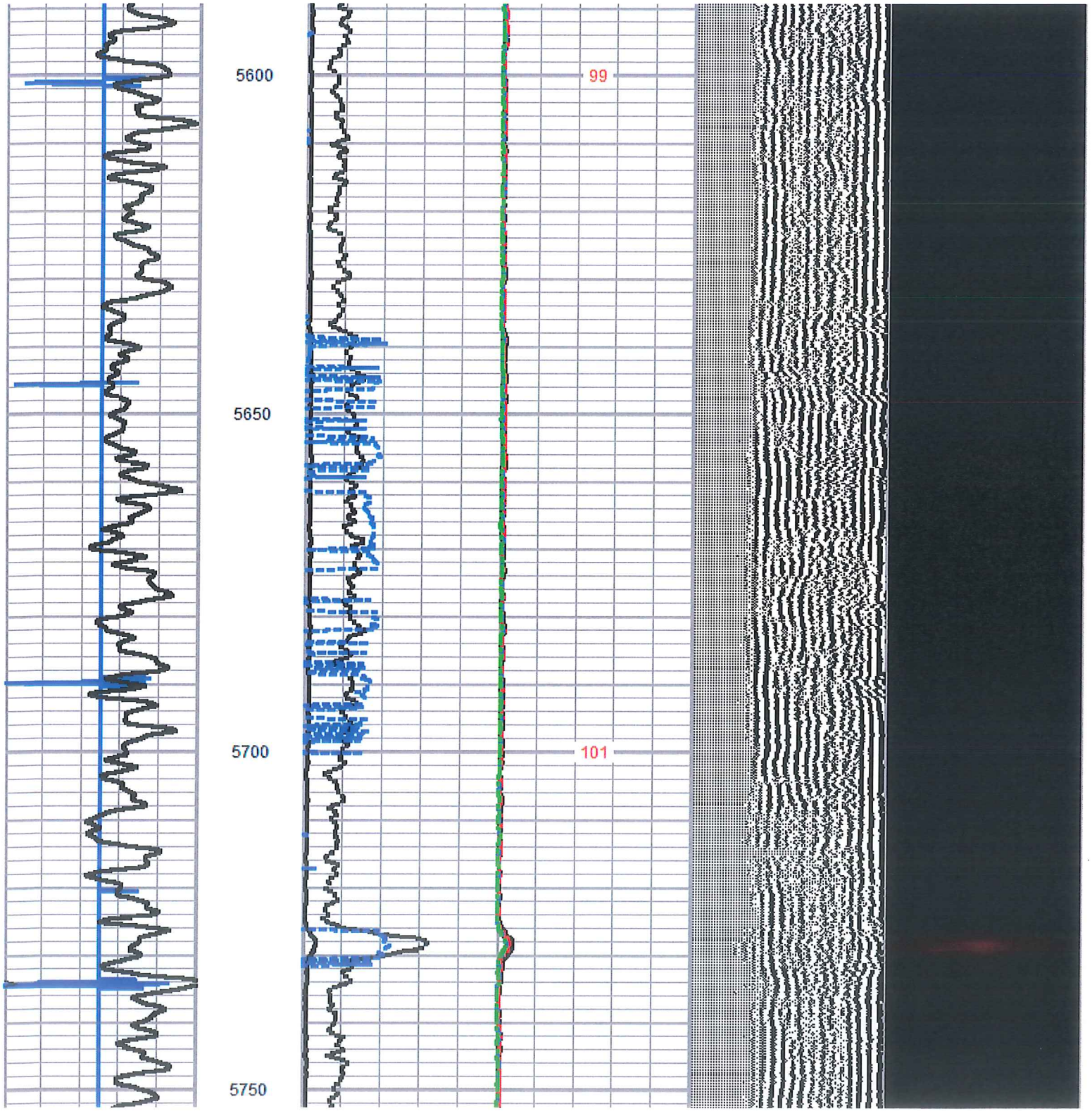
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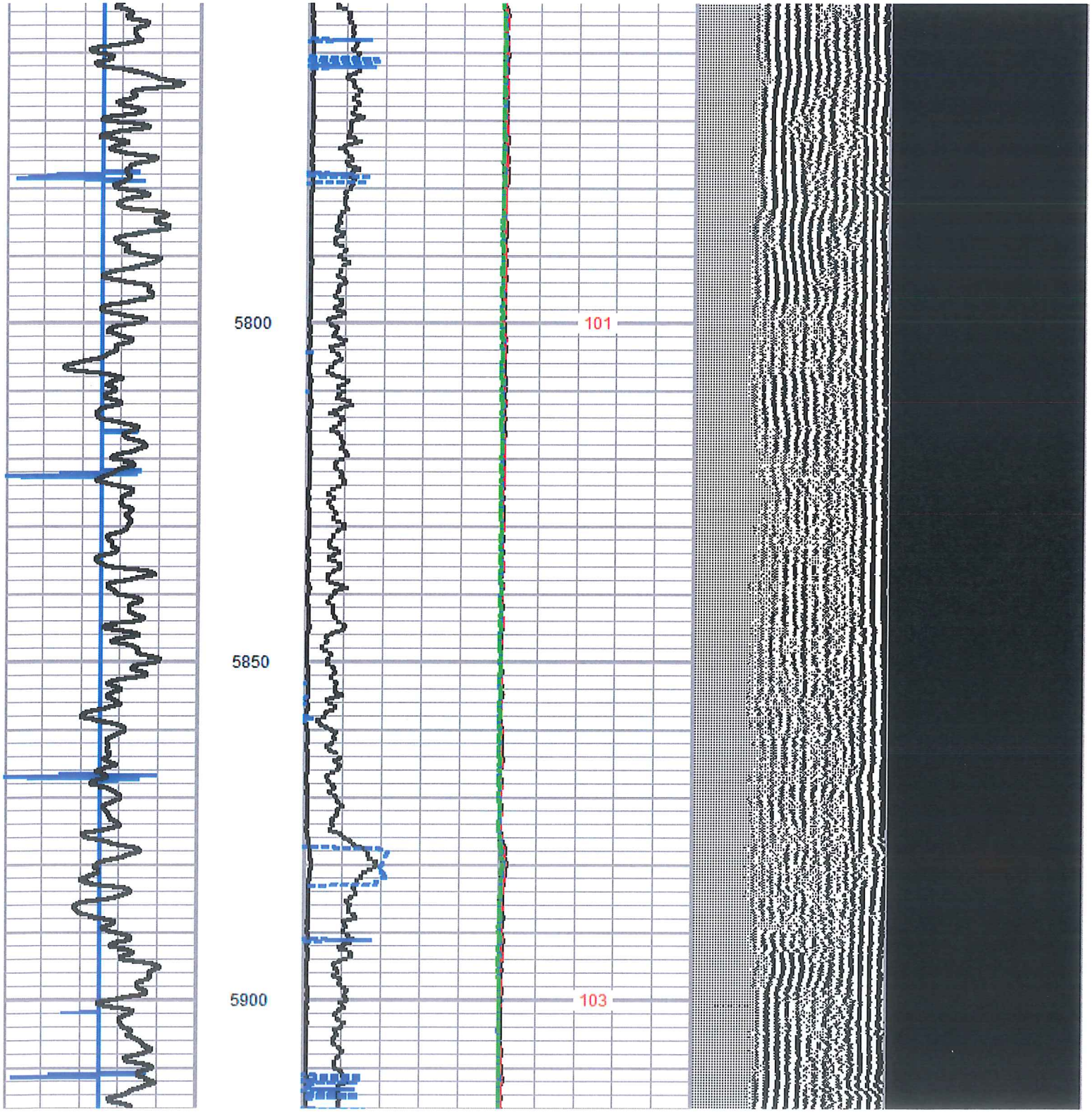
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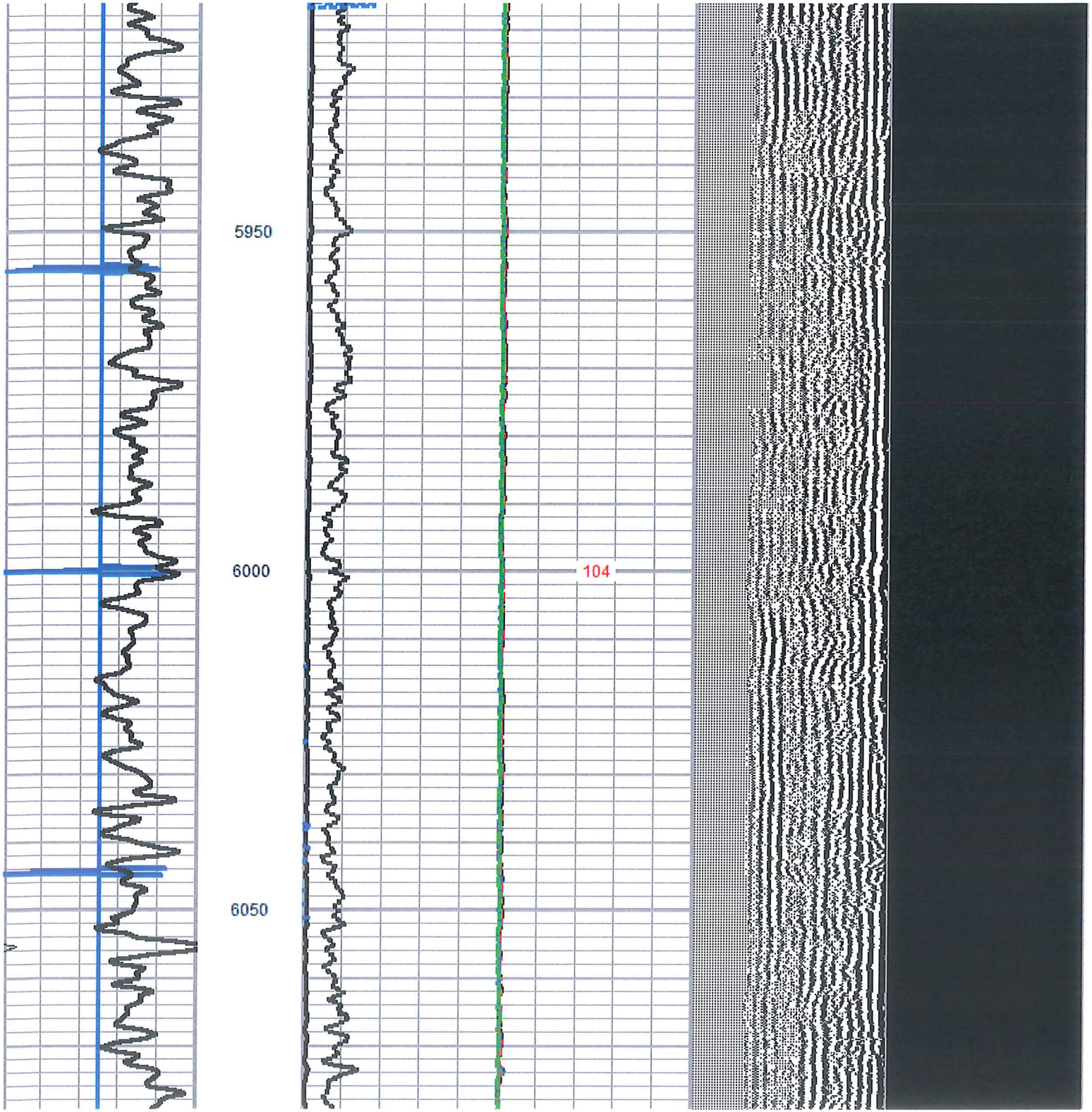
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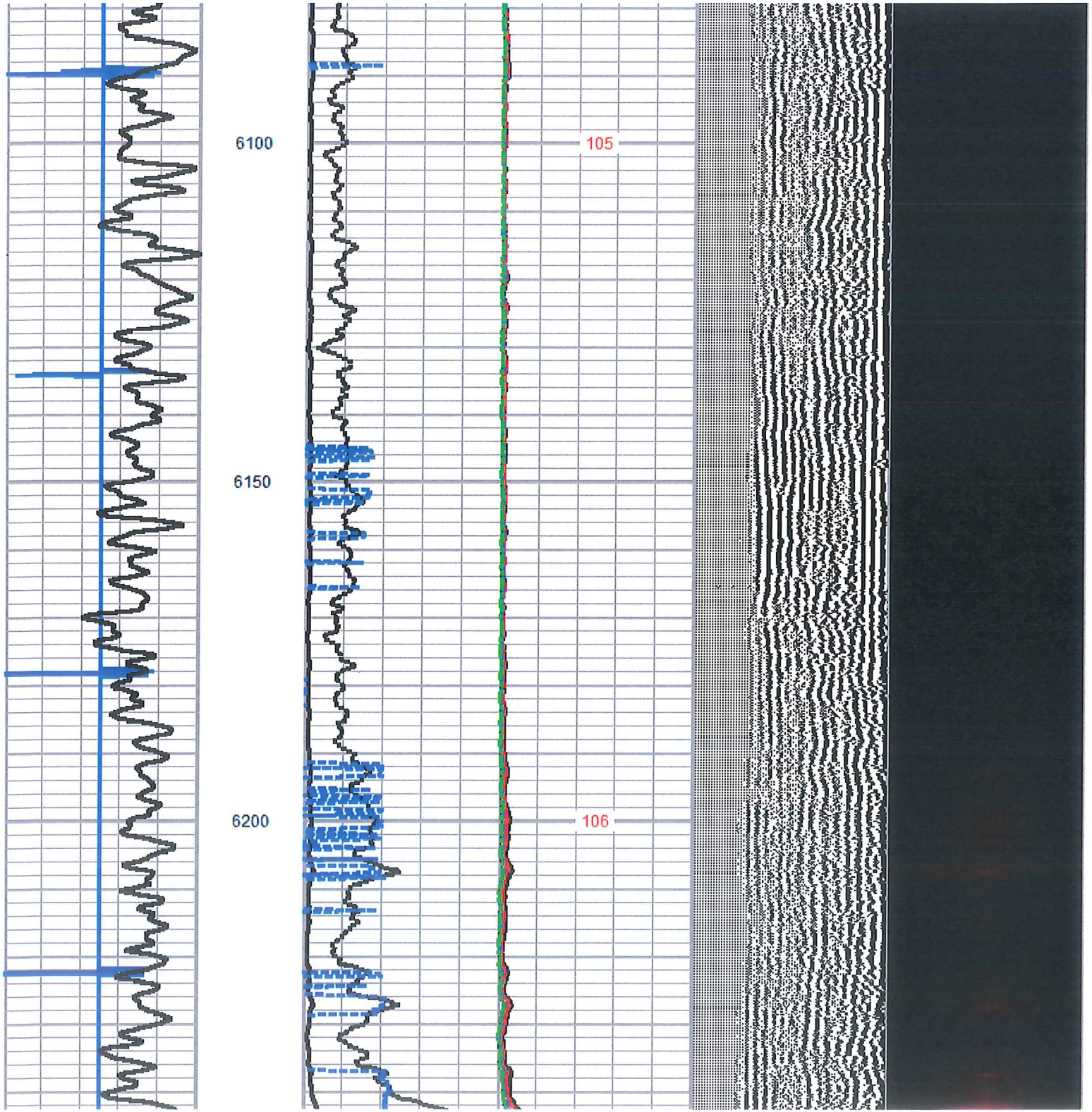
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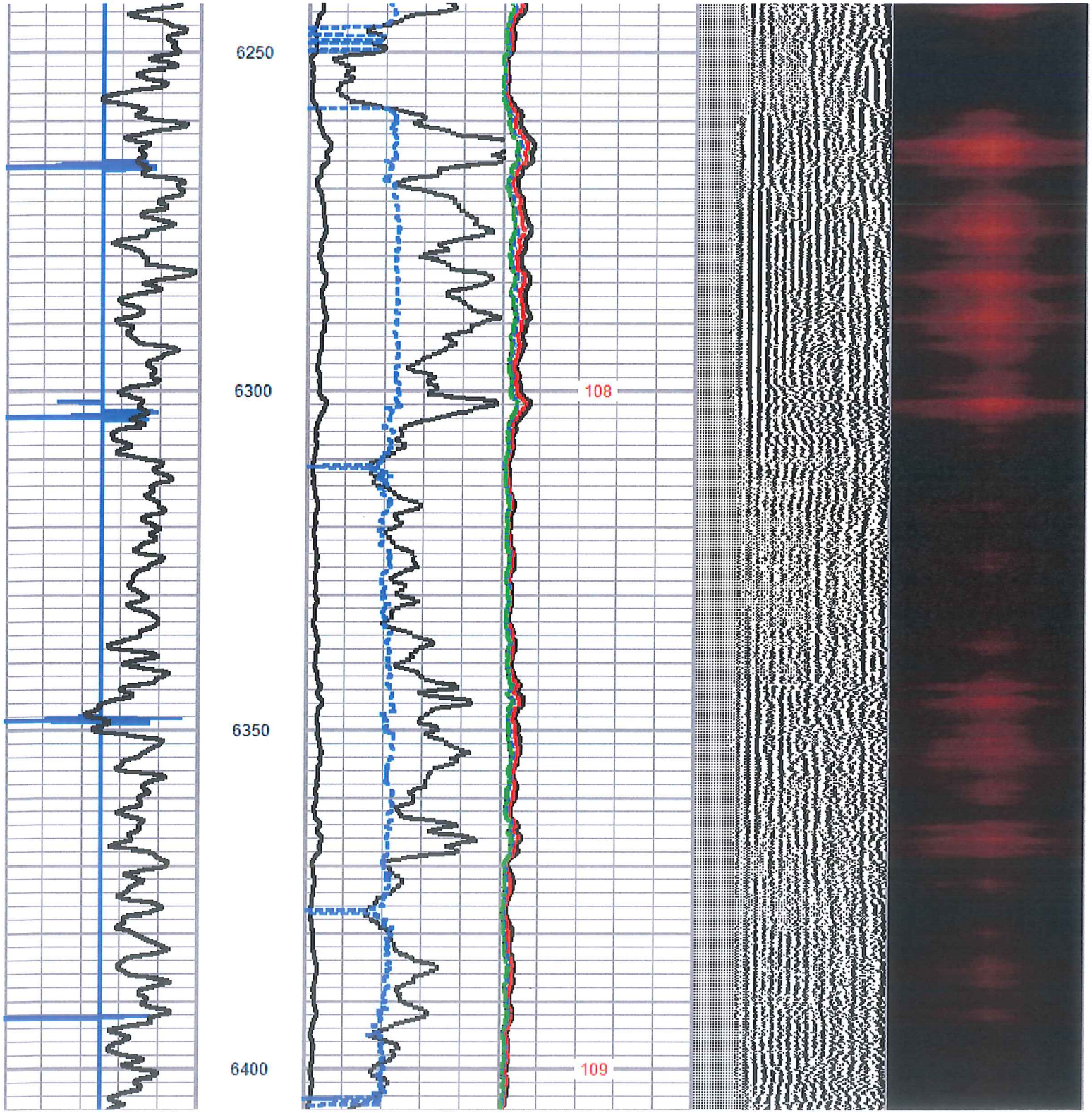
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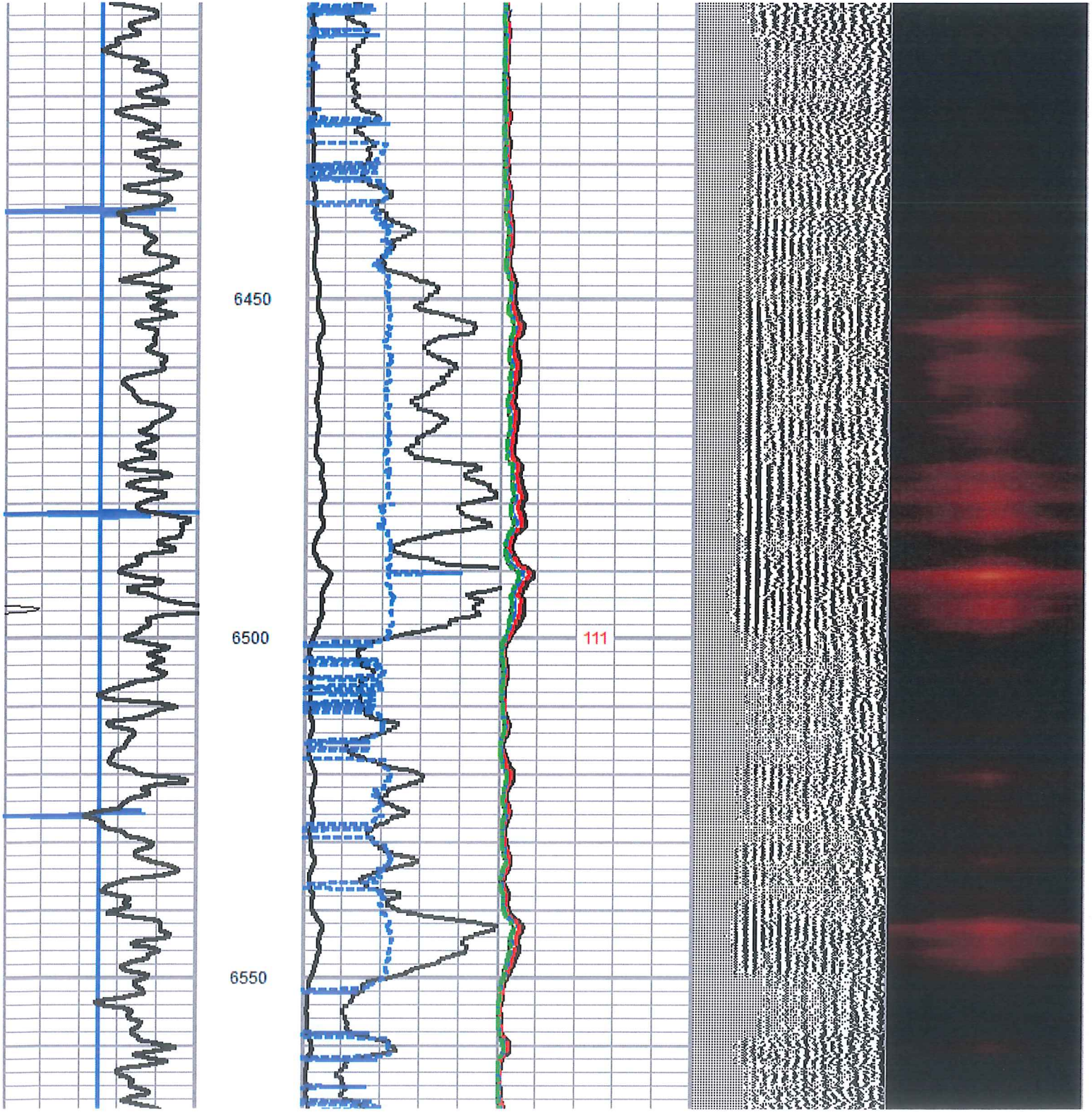
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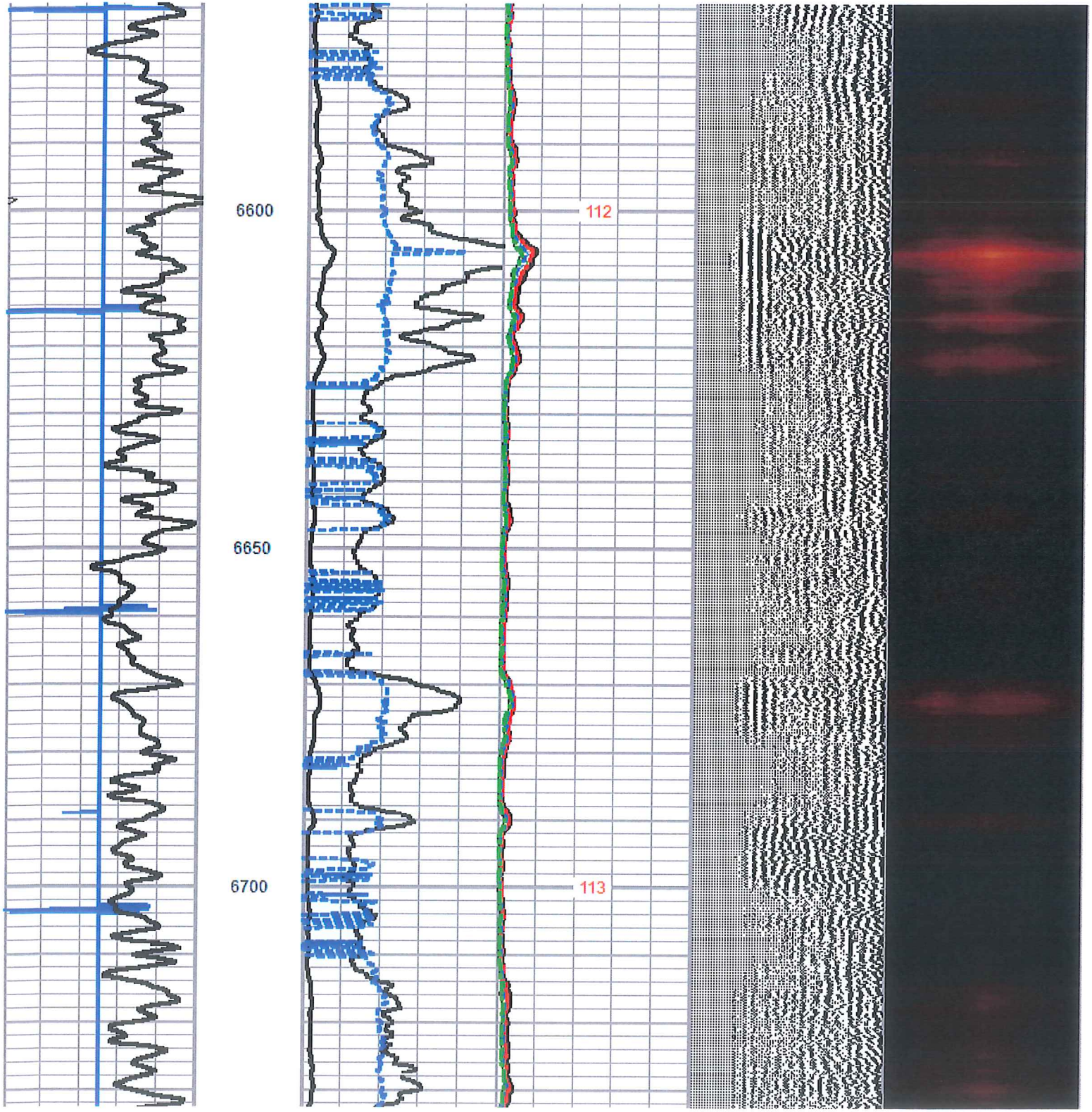
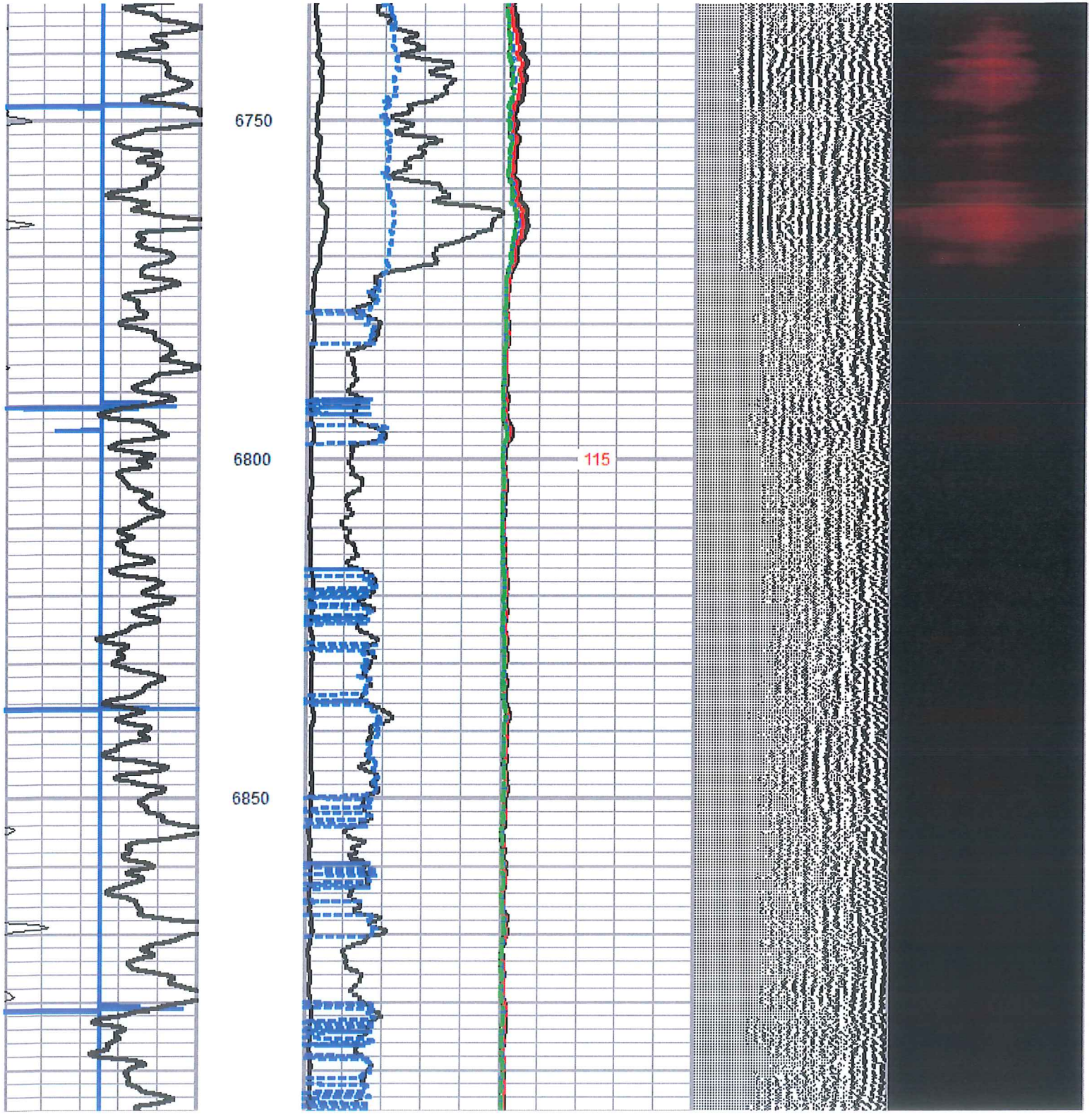
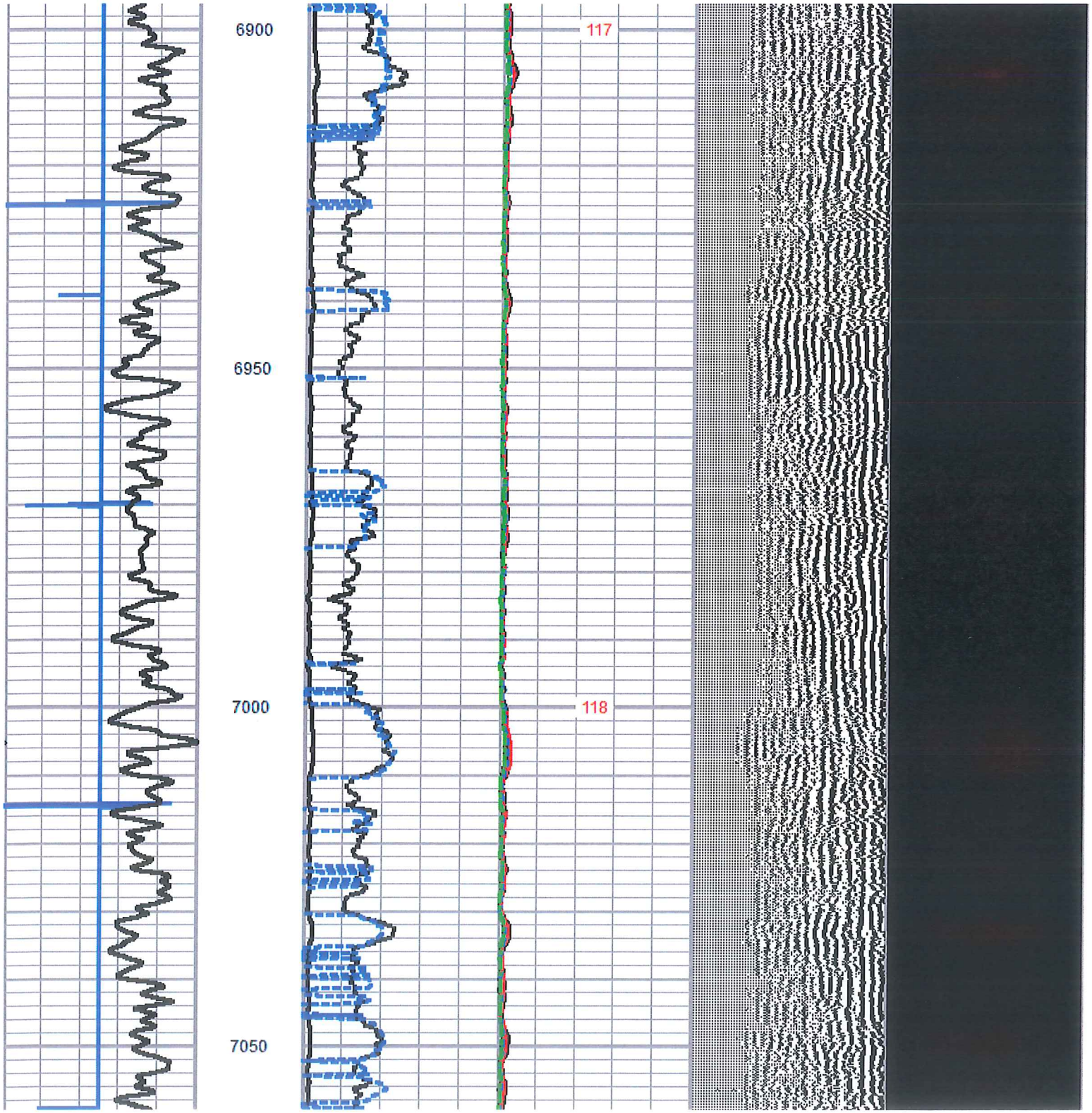
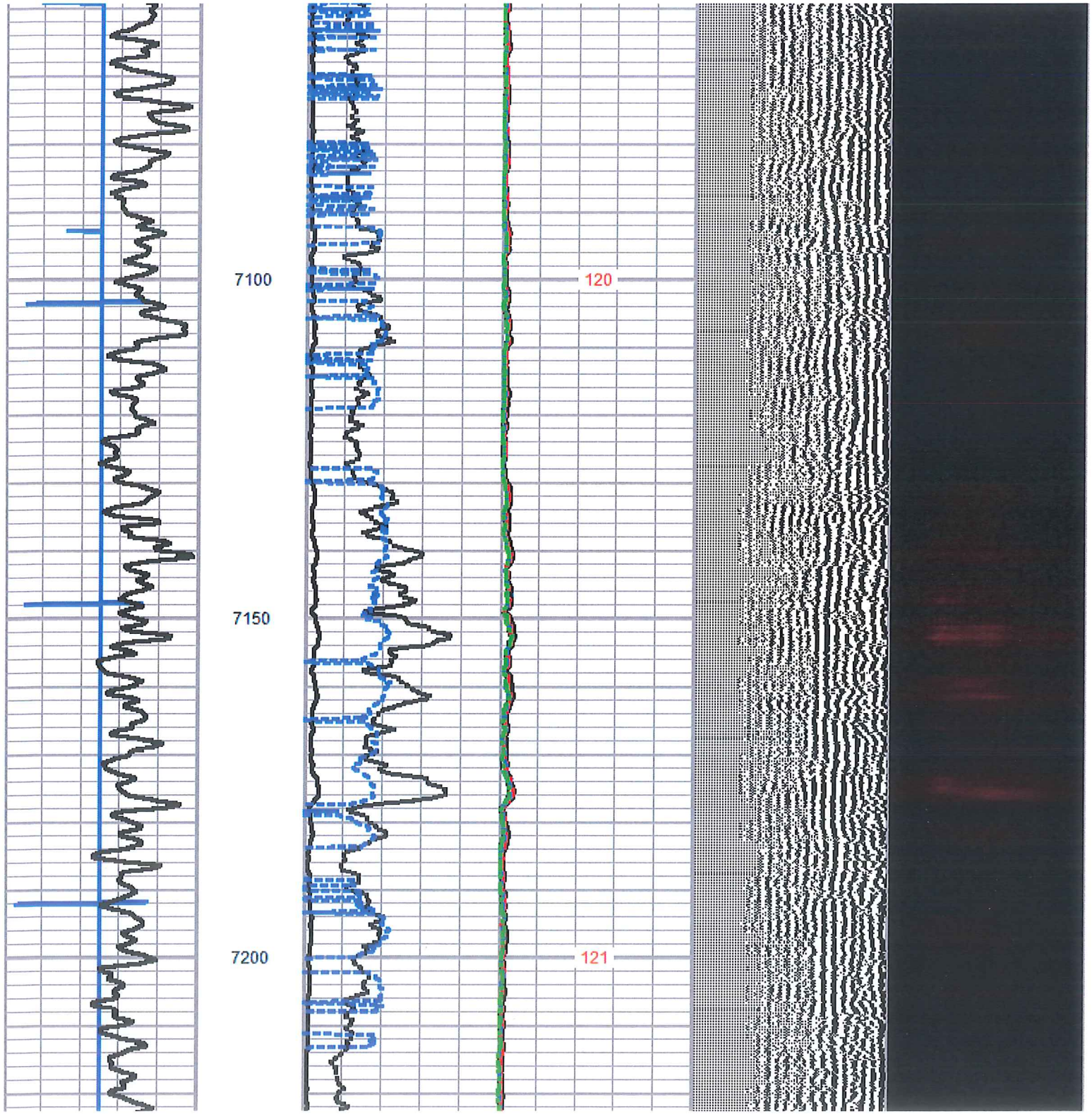
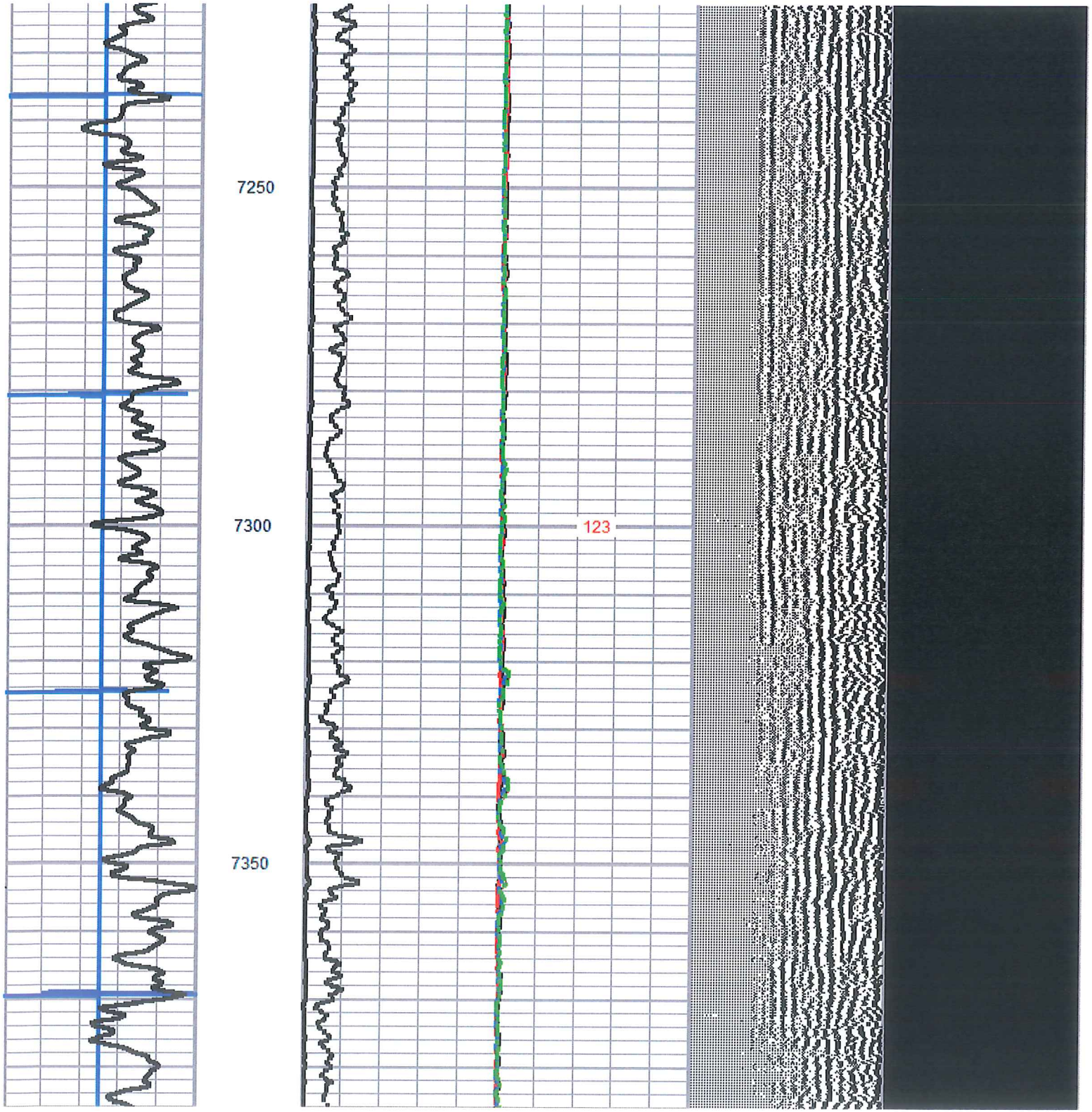
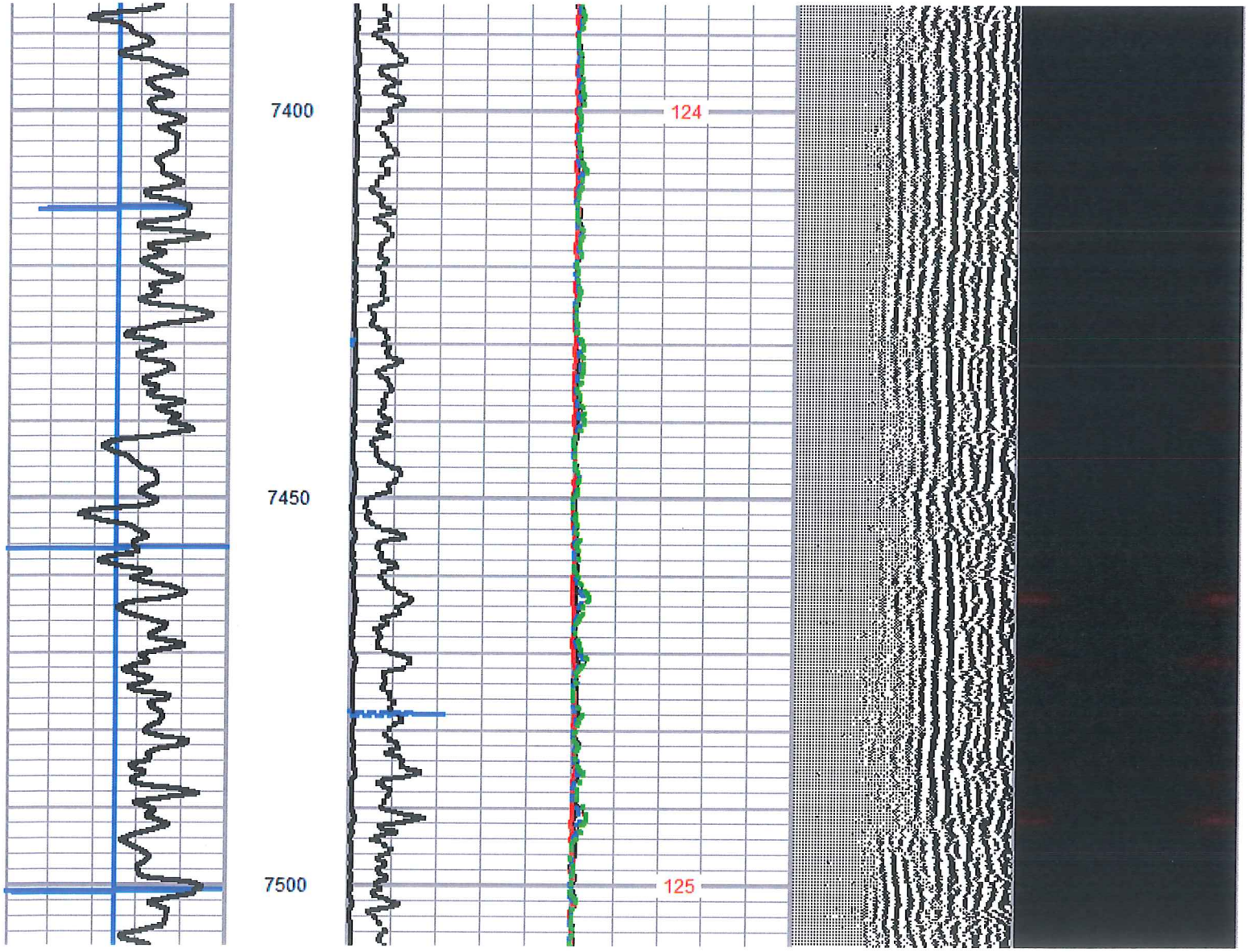

6600
6650
6700
112
113

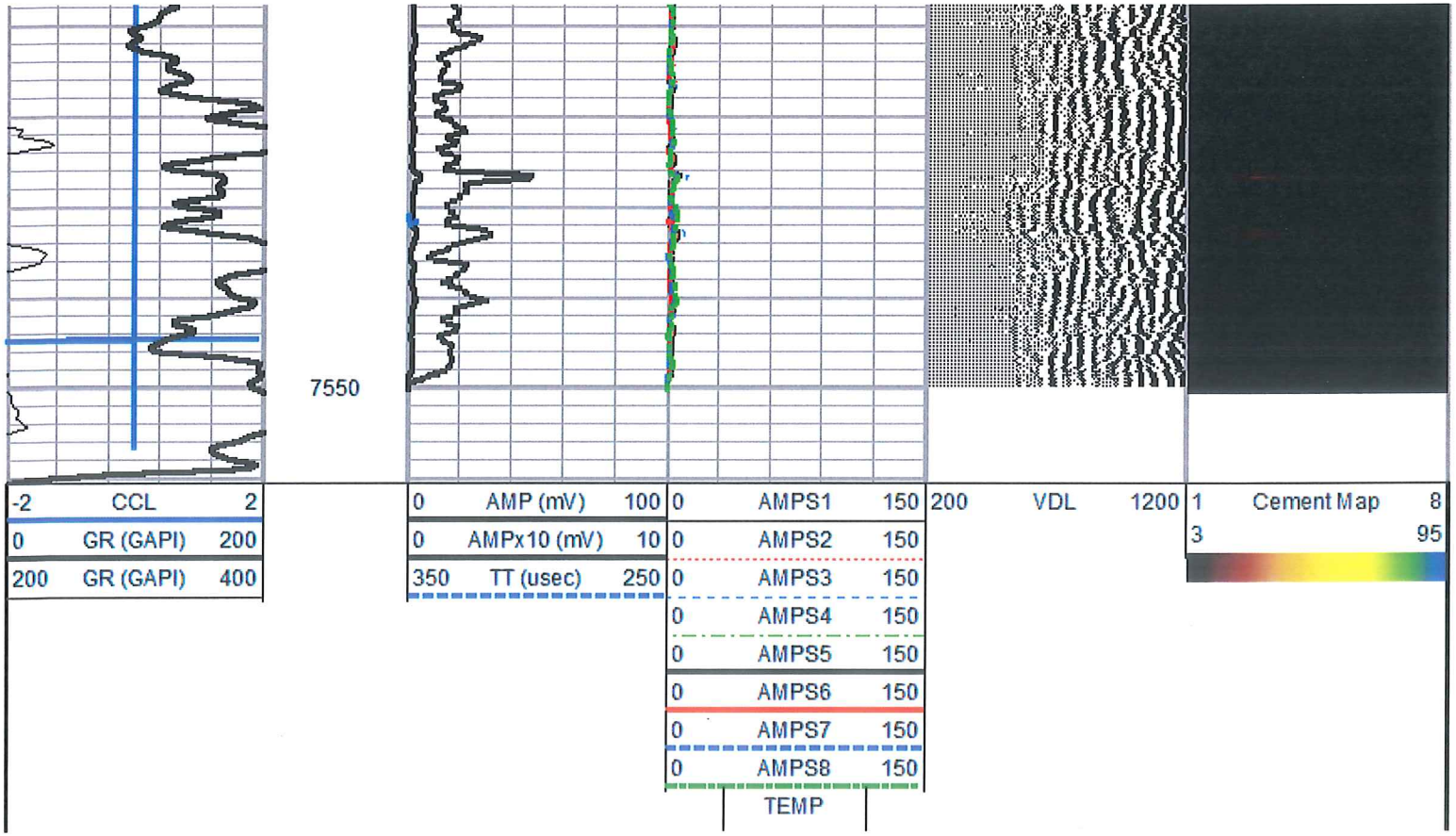

6750
6800
6850
115


6900
6950
7000
7050
117
118


7100
7150
7200
120
121


7250
7300
7350
123


7400
7450
7500
124
125


7550
-2 CCL 2
0 GR (GAPI) 200
200 GR (GAPI) 400
0 AMP (mV) 100
0 AMPx10 (mV) 10
350 TT (usec) 250
0 AMPS1 150
0 AMPS2 150
0 AMPS3 150
0 AMPS4 150
0 AMPS5 150
0 AMPS6 150
0 AMPS7 150
0 AMPS8 150
TEMP
200 VDL 1200
1 Cement Map 8
3 95

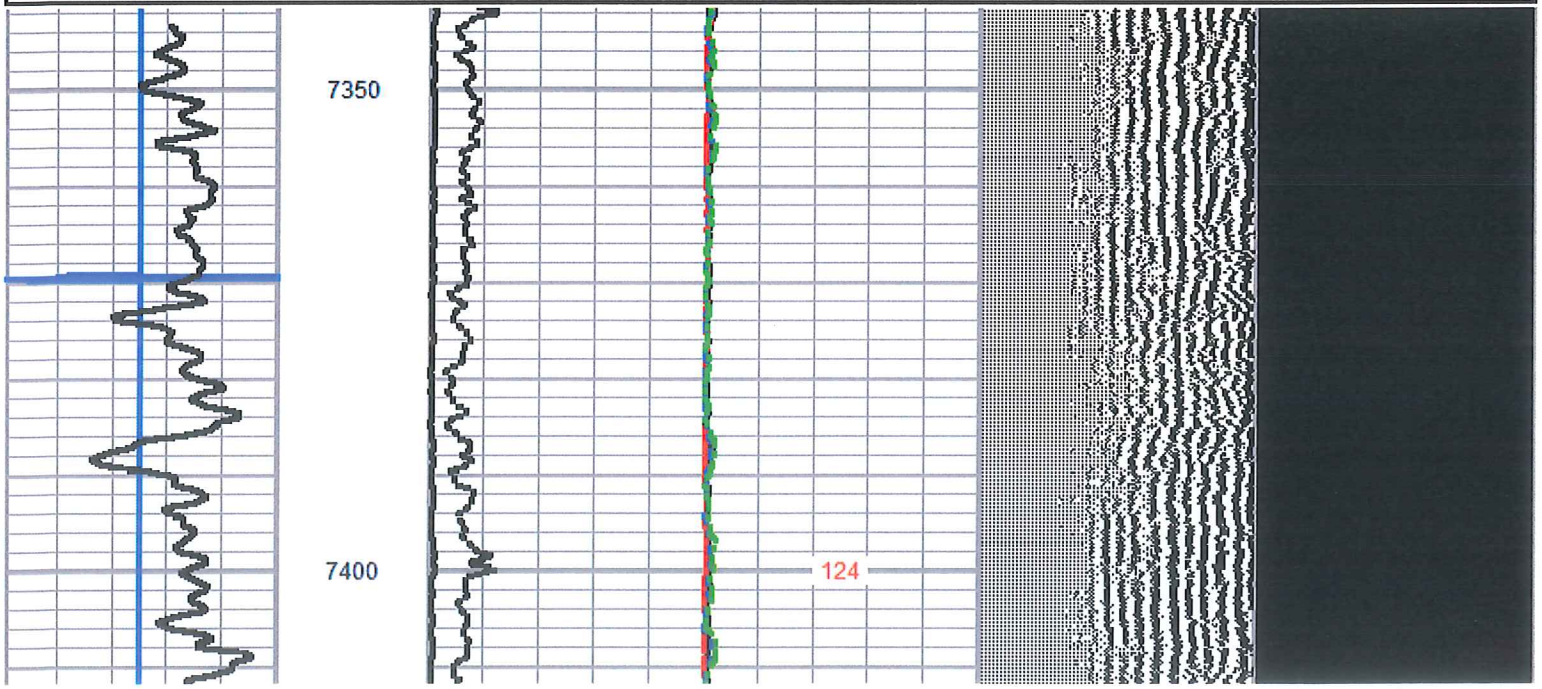
(degF)

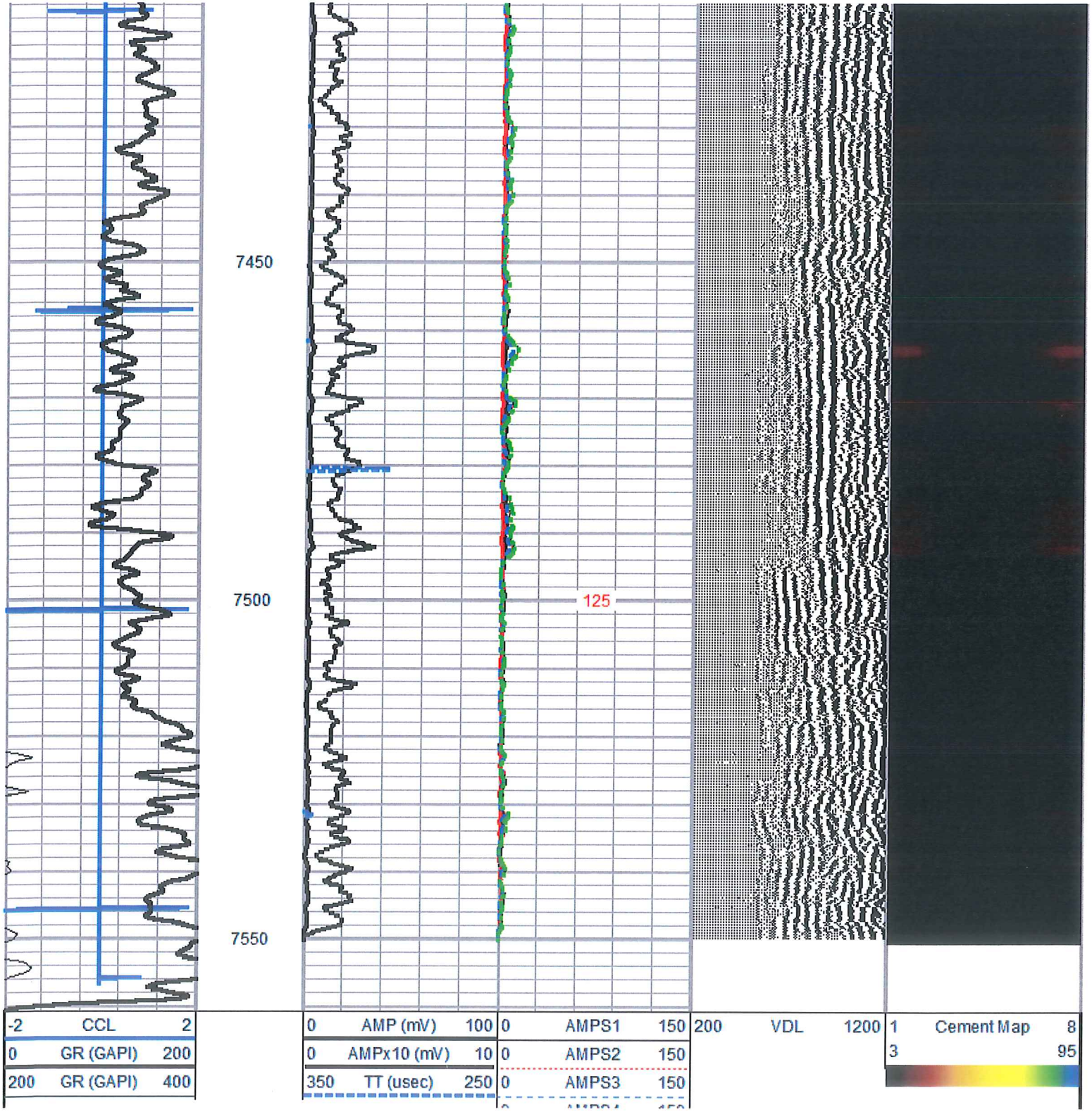
REPEAT SECTION

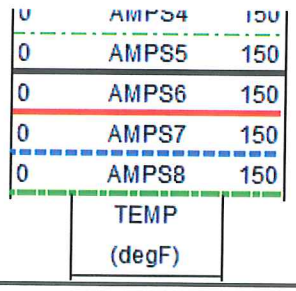
Database File:	gains koch 1h.db
Dataset Pathname:	pass3
Presentation Format:	scbl02
Dataset Creation:	Sat Nov 08 08:44:13 2014 by Log 7.0 B1
Charted by:	Depth in Feet scaled 1:240

-2	CCL	2
0	GR (GAPI)	200
200	GR (GAPI)	400
0	AMP (mV)	100
0	AMPx10 (mV)	10
350	TT (usec)	250
0	AMPS1	150
0	AMPS2	150
0	AMPS3	150
0	AMPS4	150
0	AMPS5	150
0	AMPS6	150
0	AMPS7	150
0	AMPS8	150
200	VDL	1200
1	Cement Map	8
3		95

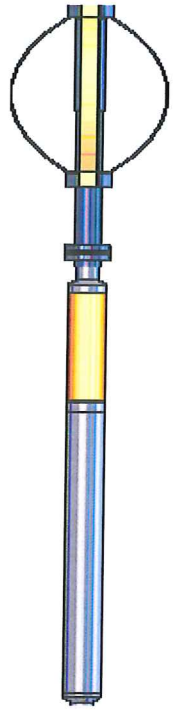
TEMP (degF)




7450
7500
7550
125
-2 CCL 2
0 GR (GAPI) 200
200 GR (GAPI) 400
0 AMP (mV) 100
0 AMPx10 (mV) 10
350 TT (usec) 250
0 AMPS1 150
0 AMPS2 150
0 AMPS3 150
200 VDL 1200
1 Cement Map 8
3 95



Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
			PTS275	2.88	2.75	24.00
HeadVolt	16.76					
Temp	13.91					
			RBT-Probe275T (FW1404-143_5.5INCH) Probe 2.75" Radial with Integral Temperature Sub	9.39	2.75	100.00
WVF3FT	11.68					
WVFS1	11.68					
WVFS2	11.68					
WVFS3	11.68					
WVFS4	11.68					
WVFS5	11.68					
WVFS6	11.68					
WVFS7	11.68					
WVFS8	11.68					
WVF5FT	10.68					
WVFCAL	7.42					

			PTS275	2.88	2.75	24.00
CCL	3.63					
			GR-Probe (275) Probe 2.75" 4 Channel Pulse	4.54	2.75	30.00
GR	0.89					

Dataset:	gains koch 1h.db: field/well/run1/pass4
Total Length:	19.70 ft
Total Weight:	178.00 lb
O.D.	2.75 in