Radial Cement Bond
Gamma Ray
Casing Collar Log

RELIANCE OILFIELD SERVICES

Company	TEP Rocky Mountain LLC
Well	Federal RG 544-7-297
Field	Sulphur Creek
County	Rio Blanco
State	Colorado

Company TEP Rocky Mountain LLC
Well Federal RG 544-7-297
Field Sulphur Creek
County Rio Blanco State Colorado

Location: API # : 05-103-12466

SEC 18 TWP 2S RGE 97W

Other Services
PN

			Elevation
Permanent Datum	Ground Level	Elevation 6621'	K.B. 6651' D.F. 6650' G.L. 6621'
Log Measured From	Kelly Bushing	30 FT	
Drilling Measured From	Kelly Bushing		

Date	10-AUG-2021		
Run Number	One		
Depth Driller	12273 FT		
Depth Logger	12174 FT		
Bottom Logged Interval	12160 FT		
Top Log Interval	Surface		
Open Hole Size	8.75"		
Type Fluid	Water		
Density / Viscosity	8.34 lb/gal		
Max. Recorded Temp.	277 °F		
Estimated Cement Top	See Log		
Time Well Ready	ROA		
Time Logger on Bottom	8:10		
Equipment Number	HD-0331		
Location	Grand Junction, CO		
Recorded By	P. Edwards		
Witnessed By	--		

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

Casing Record	Size (in)	Wgt (lbs/Ft)	Grade	Top	Bottom
Surface Casing	13 3/8	54.5	J-55	Surface	1428 FT
Intermediate #1	9 5/8	36	J-55	Surface	3315 FT
Intermediate #2	4 1/2	11.6	P-110	Surface	12232 FT
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 ran as per customer request
Depth referenced to Kelly Bushing at 30 FT
Marker Joint recorded from 6532 to 6542 FT
Recorded with 0 PSI Surface Induced Pressure

Thank you for choosing Reliance Oilfield Services, LLC!

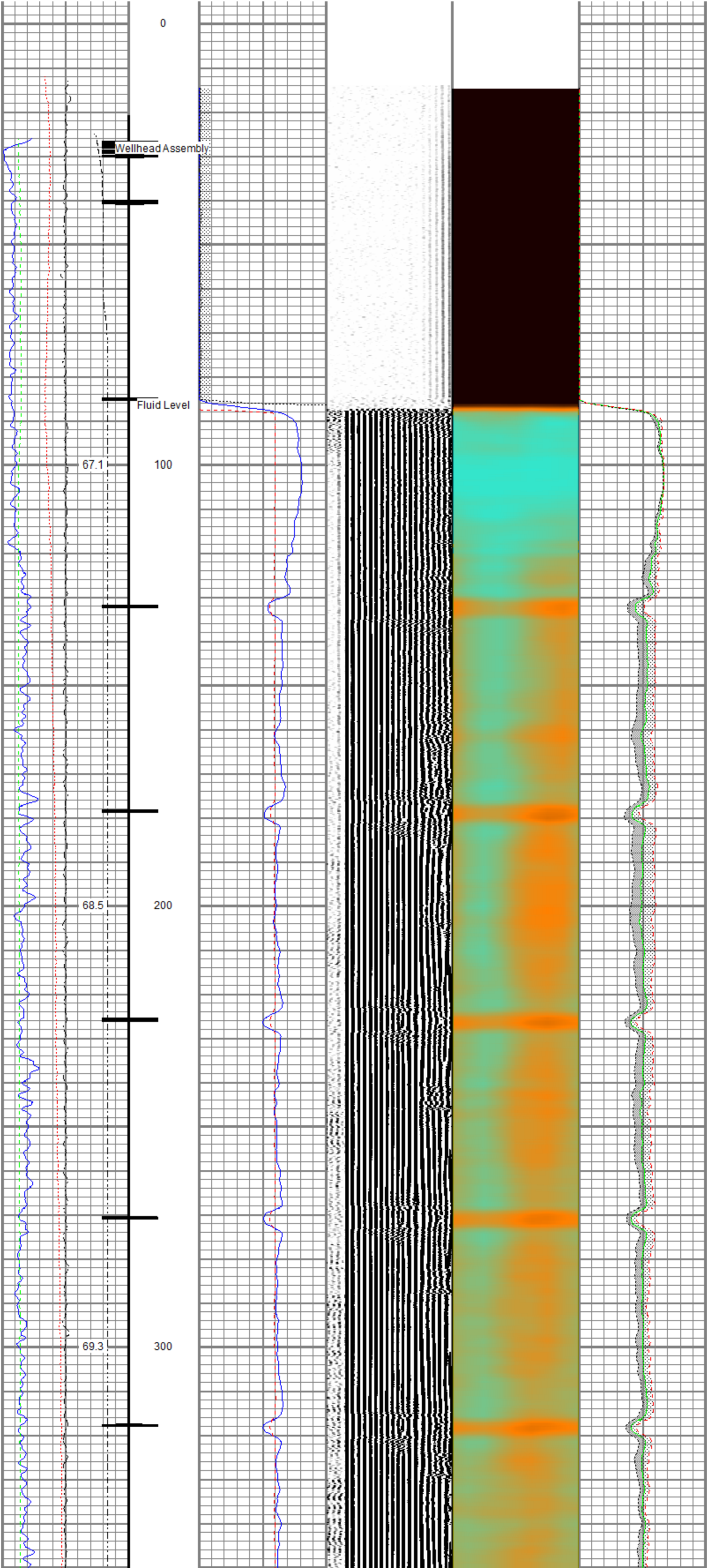
RELIANCE OILFIELD SERVICES

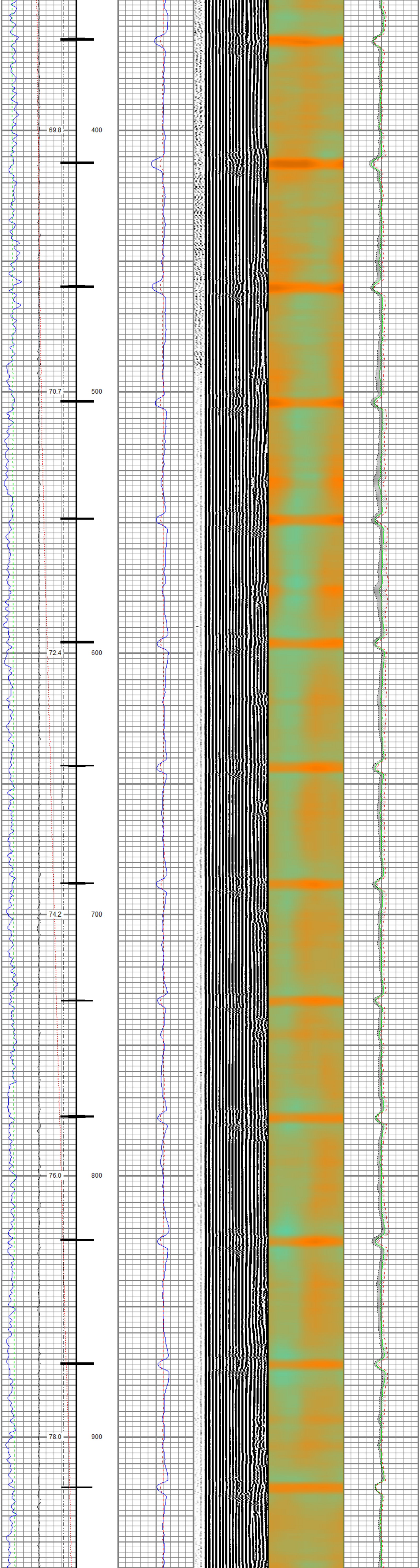
Main Pass

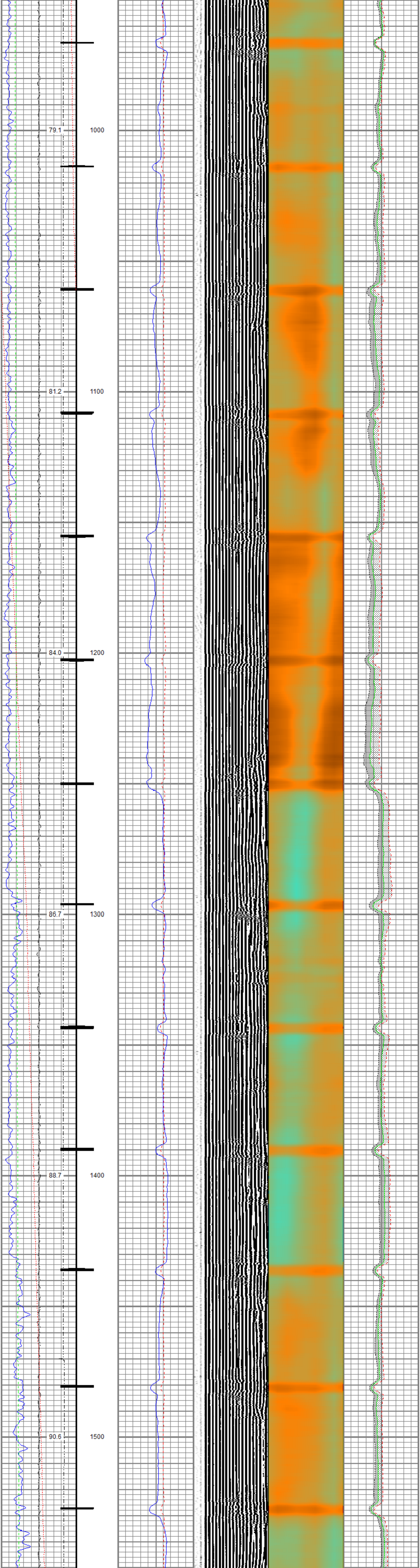
Recorded With 0 PSI Surface Induced Pressure

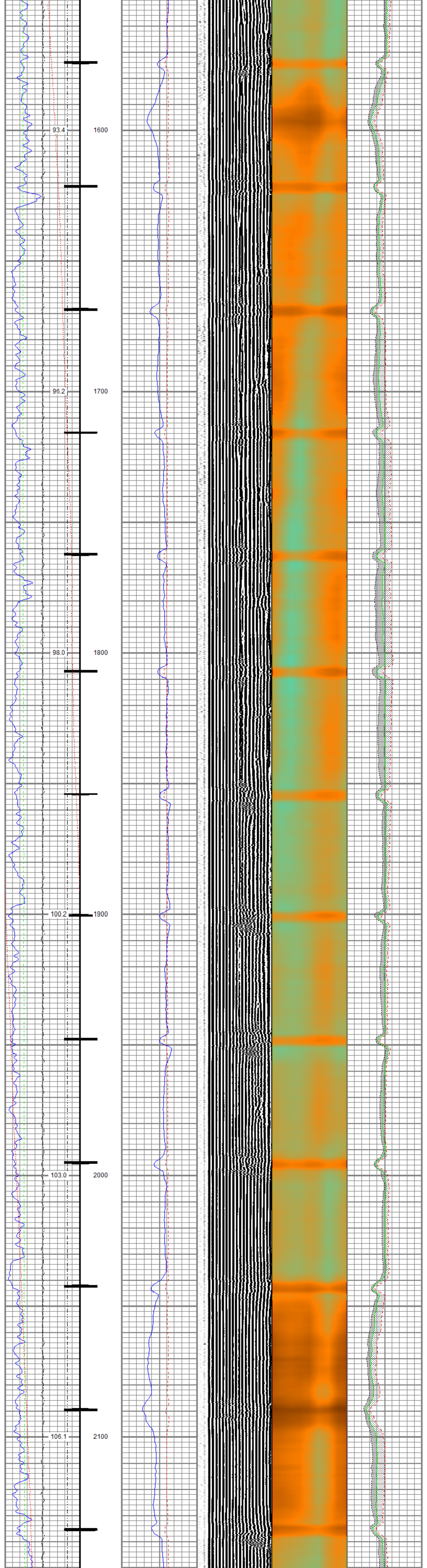
Database File	tep_federal rg 544-7-297_rbl_08-10-21\tep_federal rg 544-7-297_rbl_08-10-21.db
Dataset Pathname	mainpass.1
Presentation Format	ros_radii_tep
Dataset Creation	Mon Aug 16 13:43:04 2021
Charted by	Depth in Feet scaled 1:240

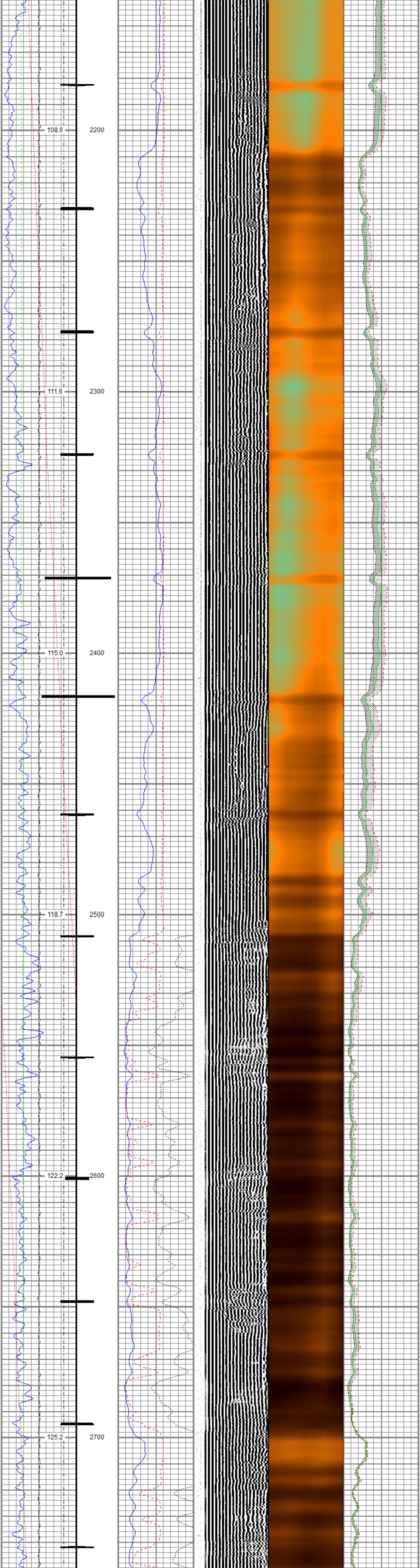
Gamma Ray 0 (GAPI) 200	0 3' Amplitude (mV) 100	5' Variable Density Log 200 (usec) 1200	Sector Map	Average Amplitude 0 150
Casing Collar Locator	3' Amplitude x 5 0 (mV) 20			Mimimum Amplitude 0 150
Line Speed -150 (ft/min) 150	3' Travel Time 300 (usec) 200			Maximum Amplitude 0 150
0 Line Tension (lb) 000				
Differential Temperature -2 2				
Temperature 0 (degF) 20				

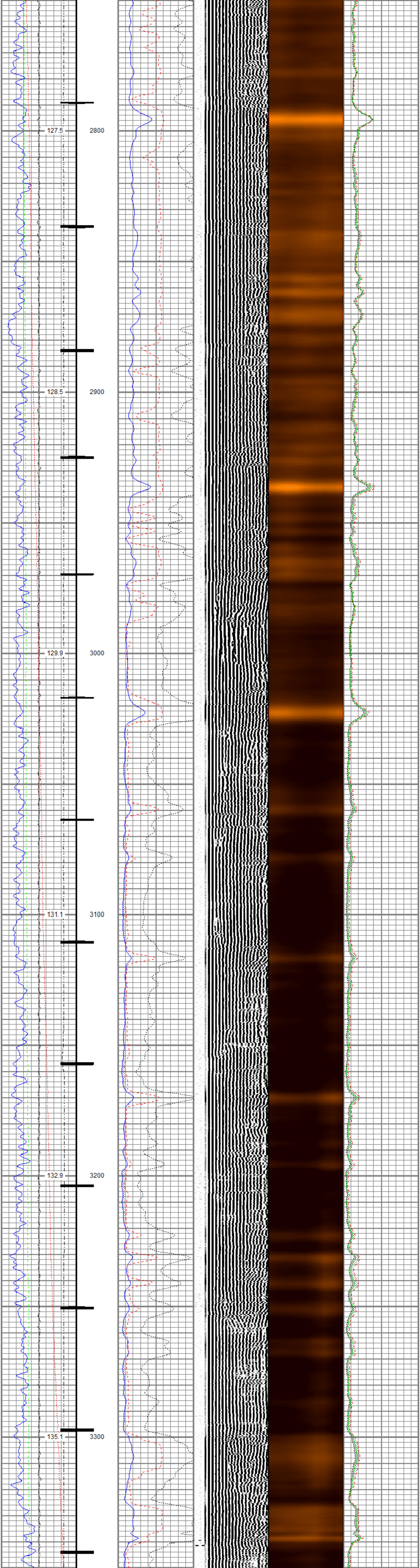


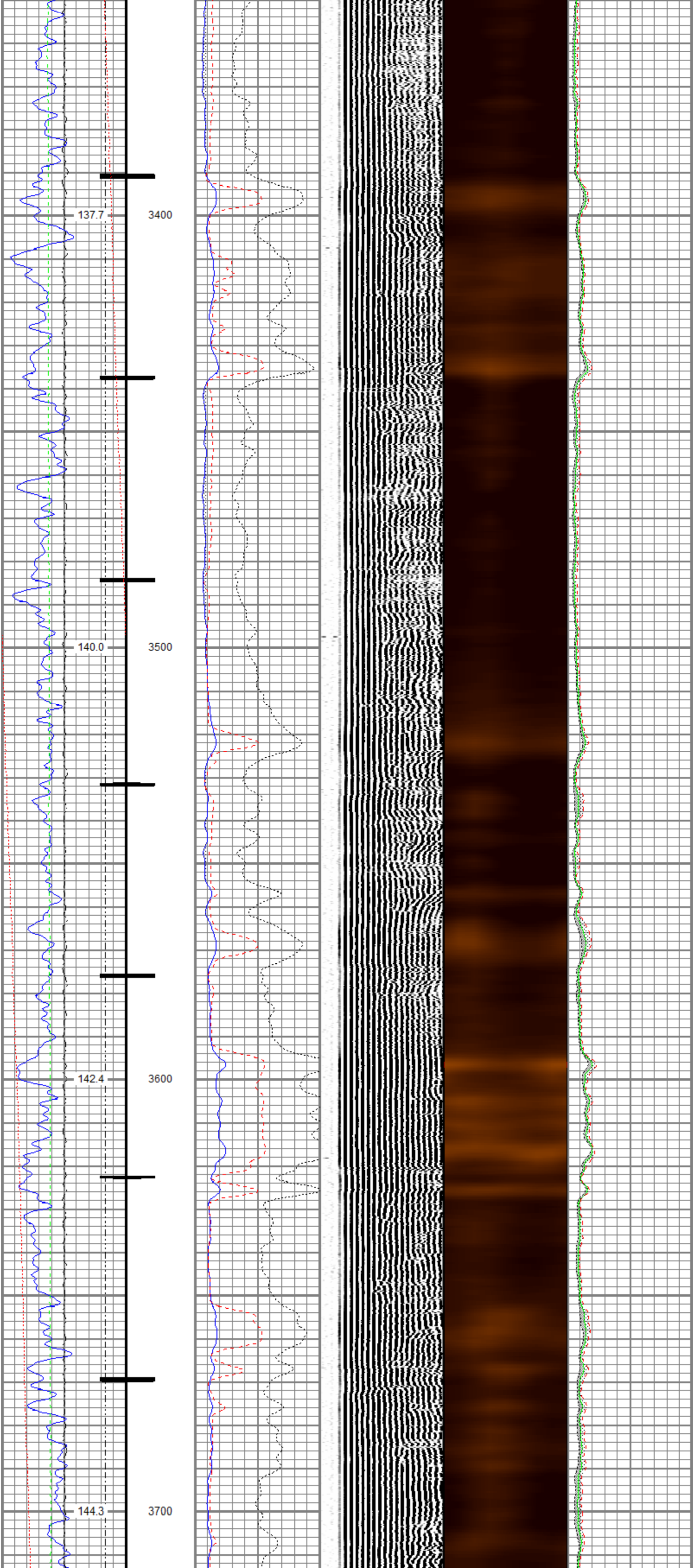


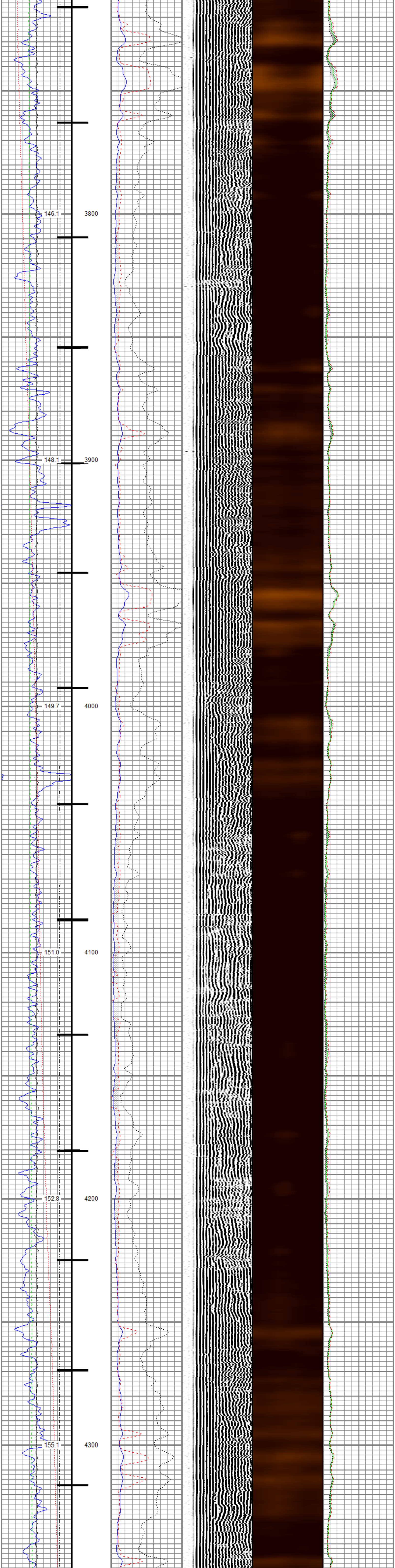








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155.1
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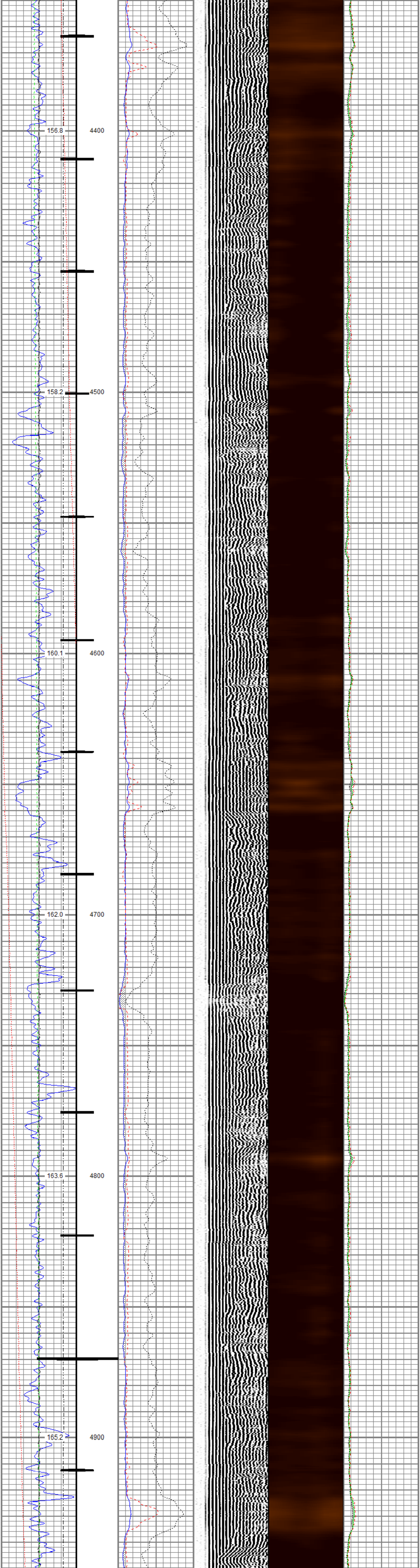
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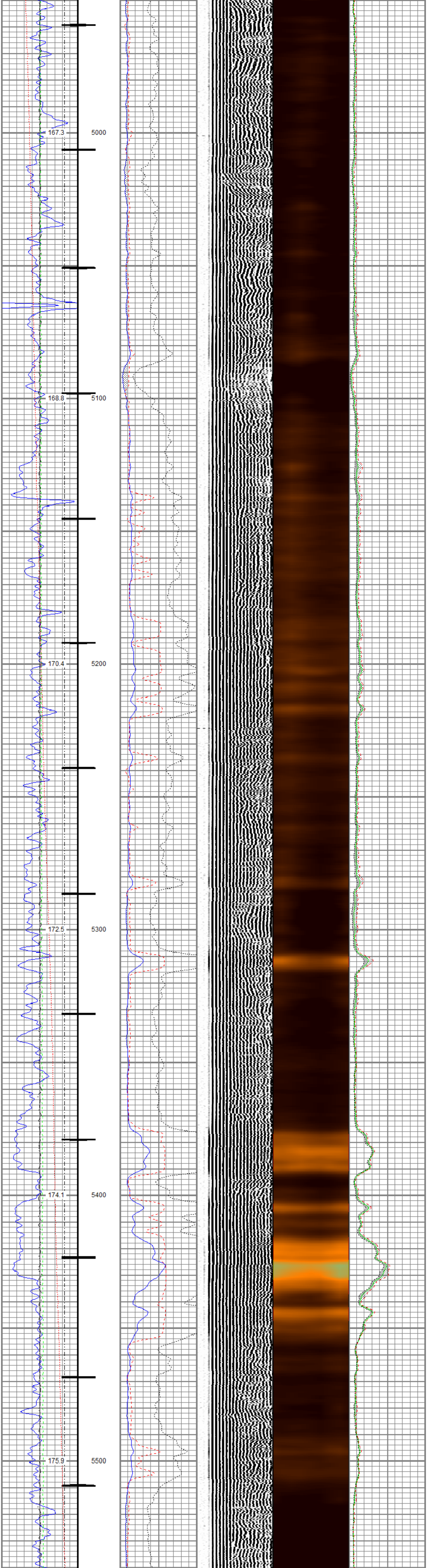
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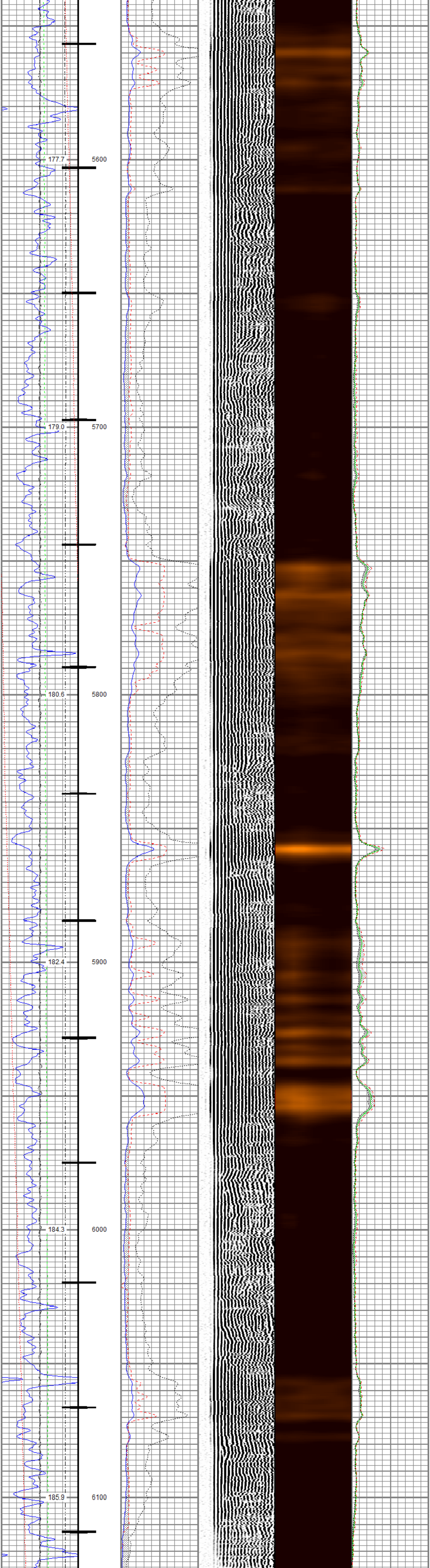
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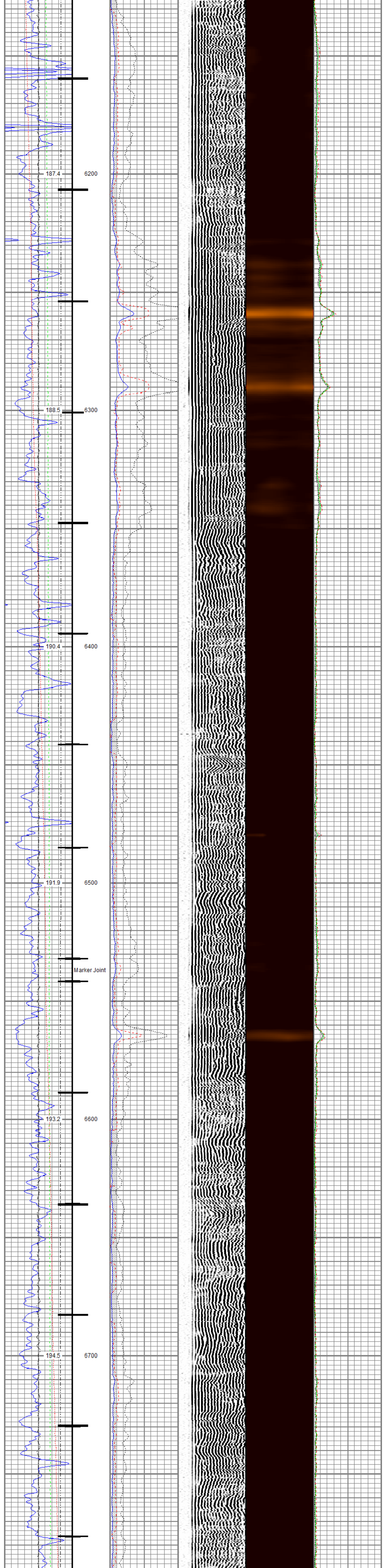
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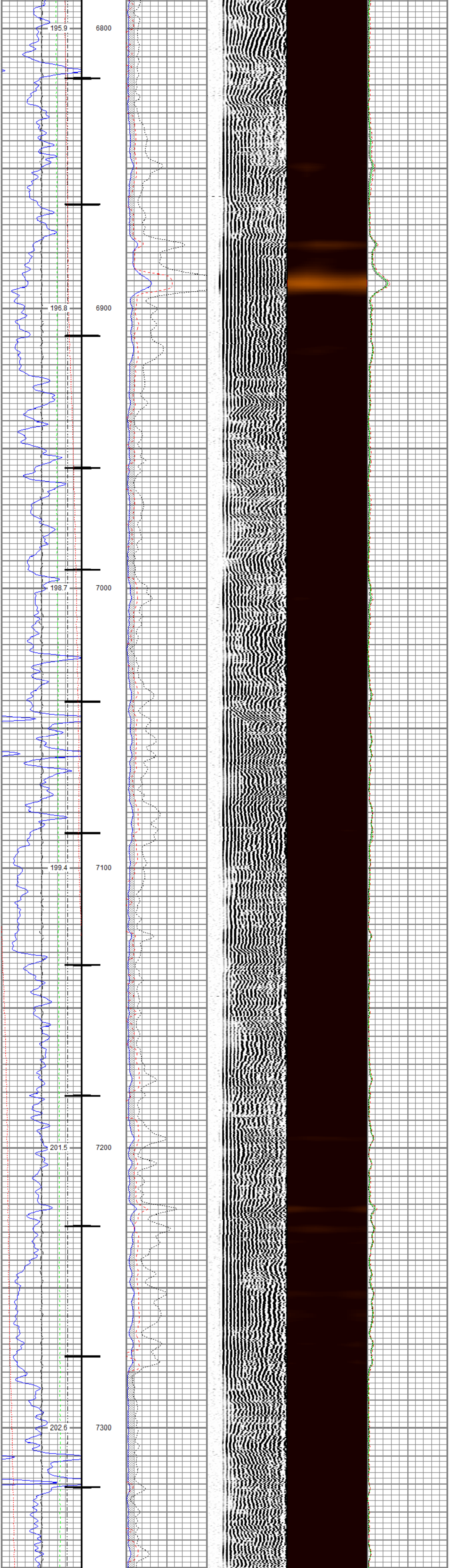
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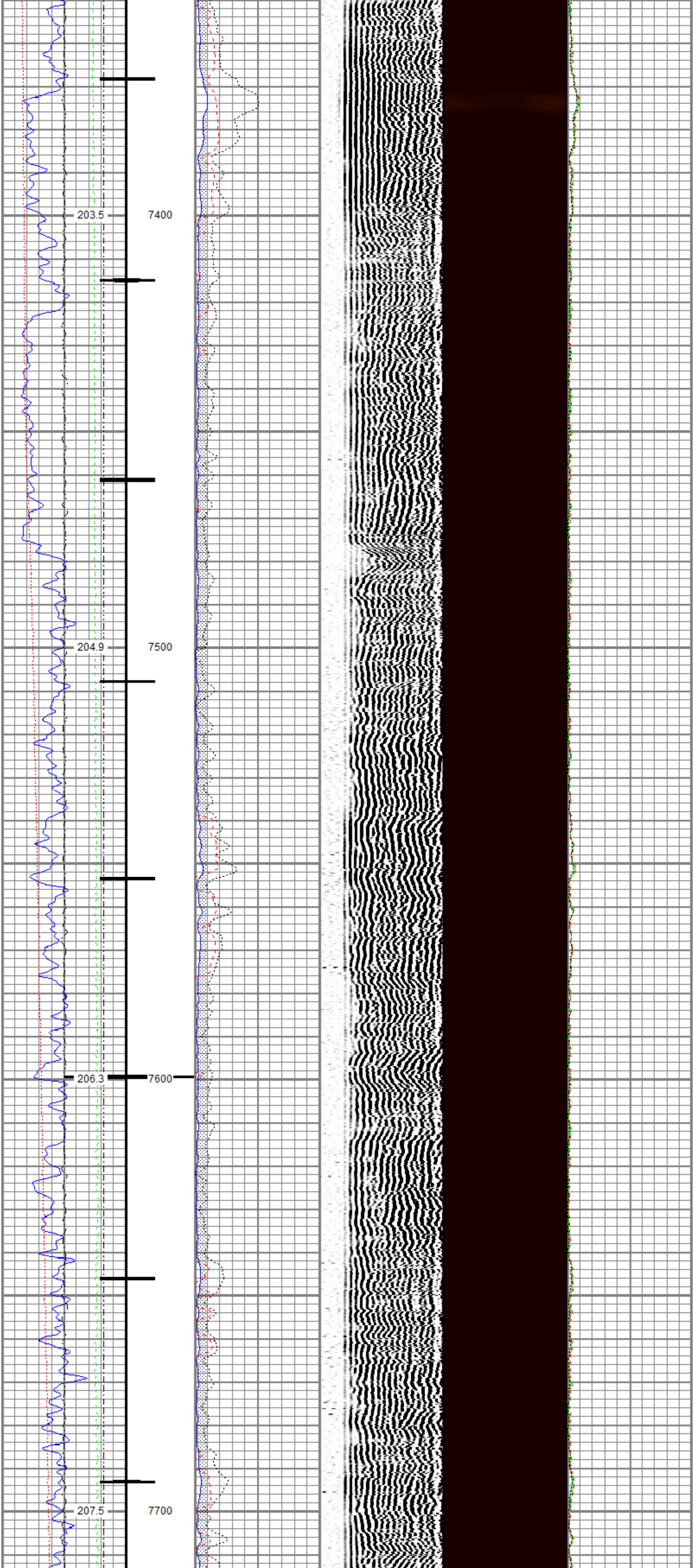
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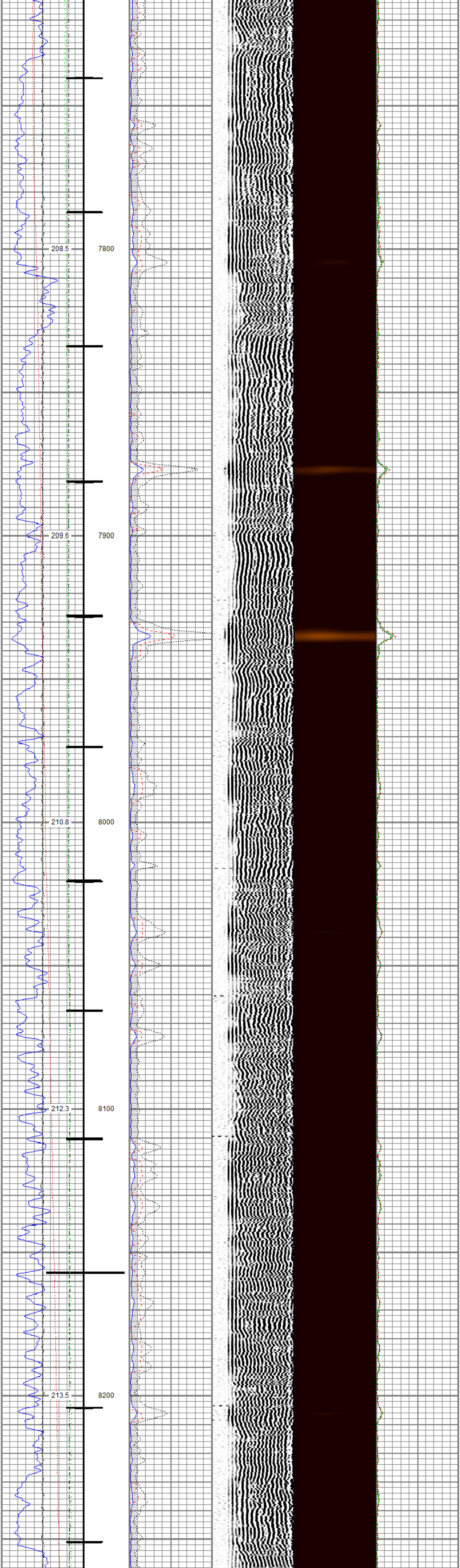
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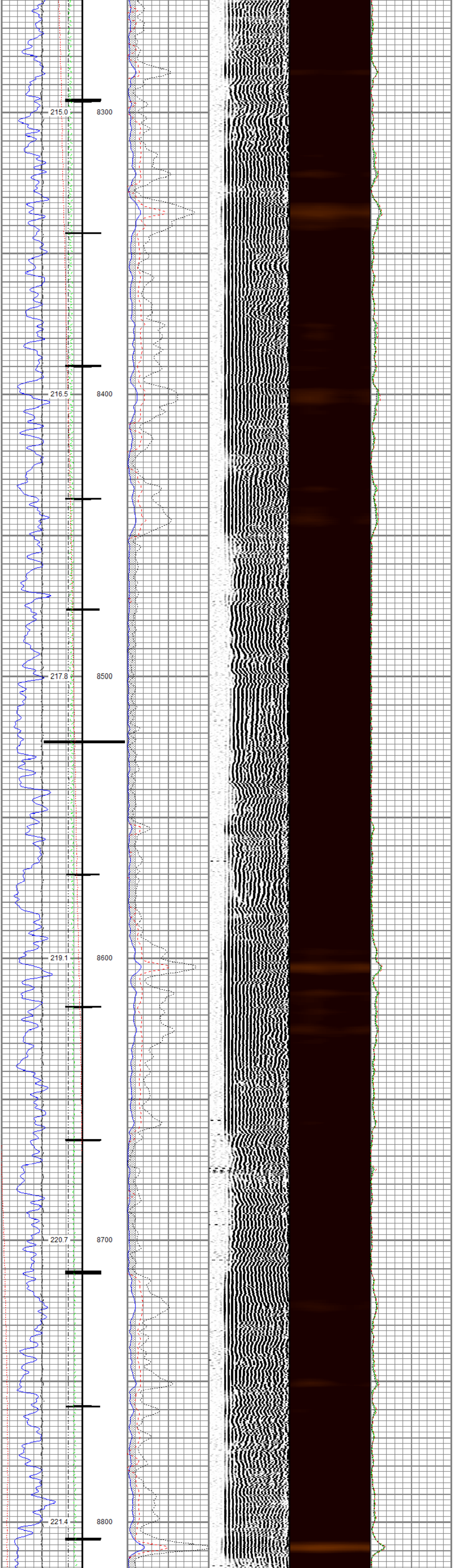

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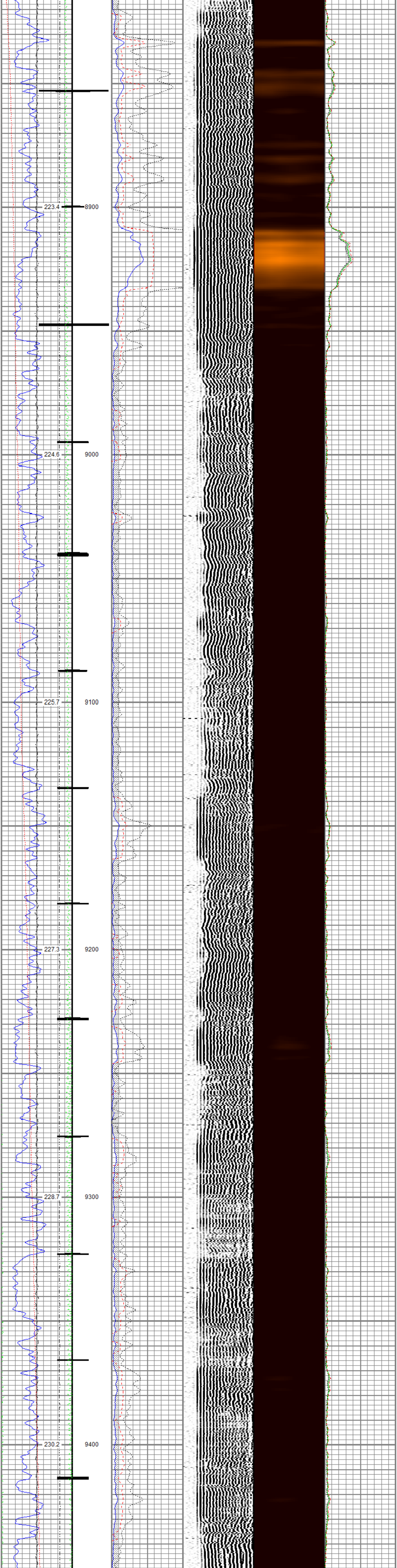
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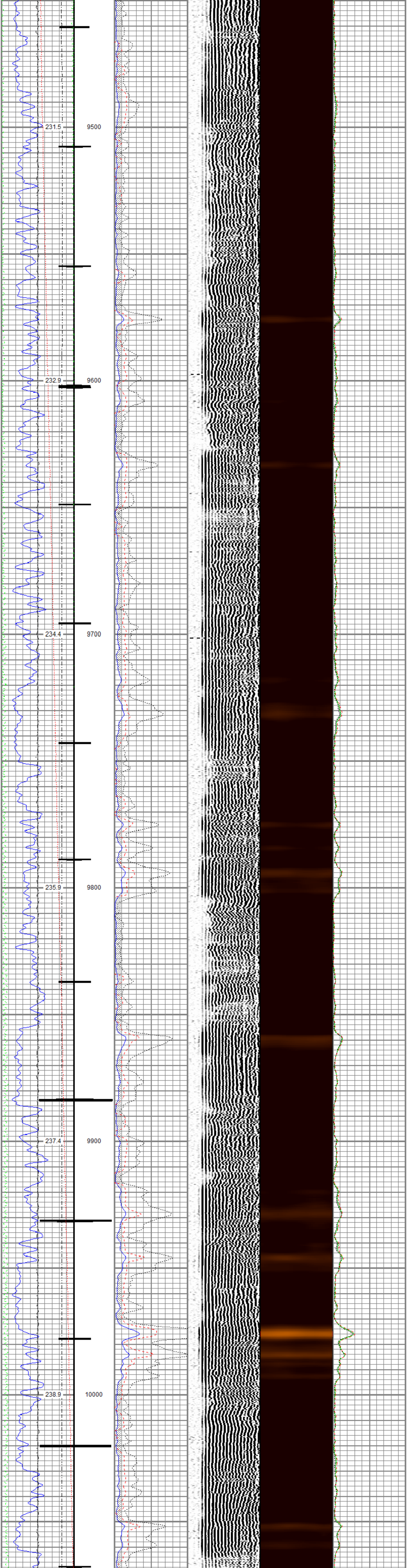
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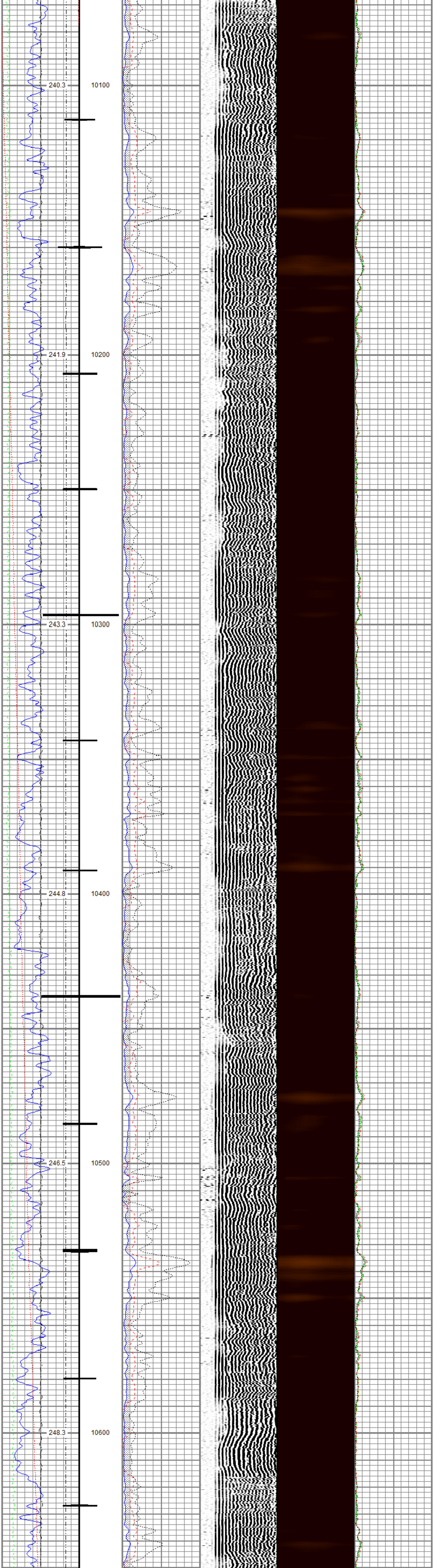
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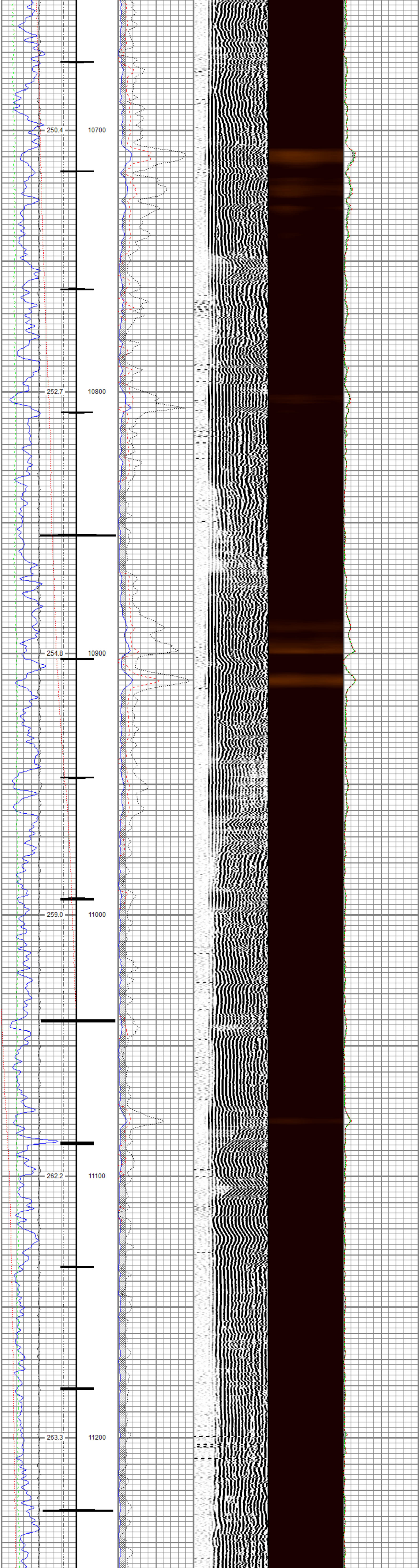
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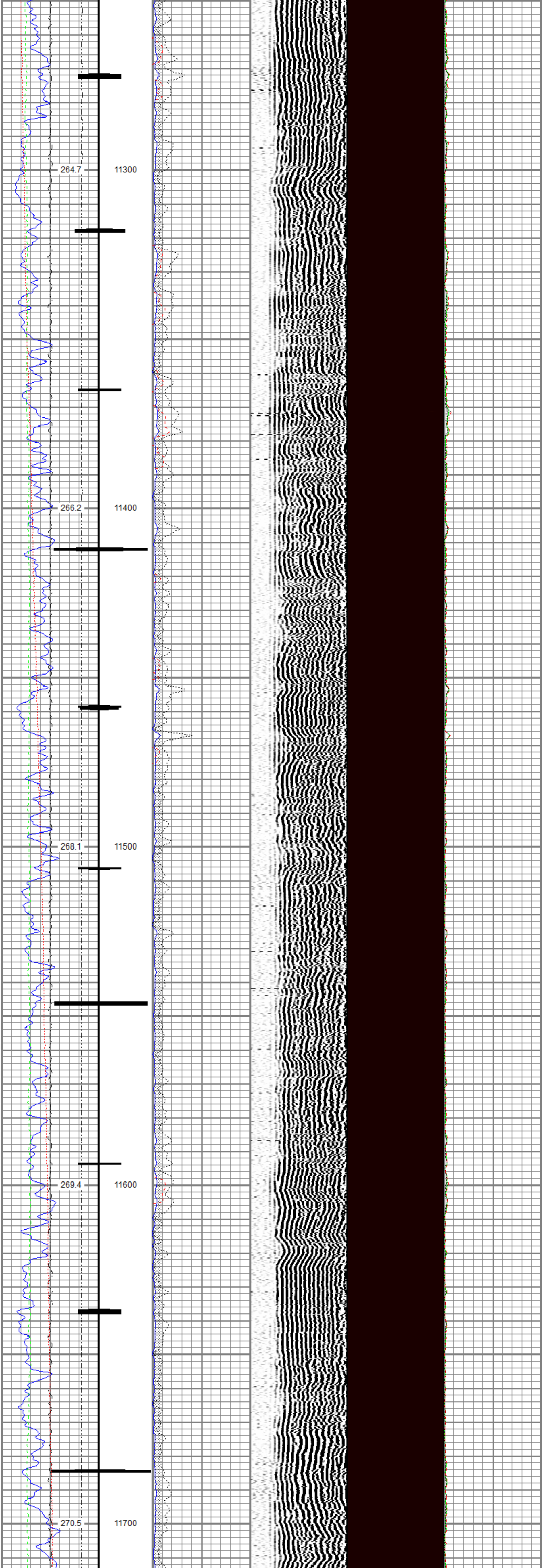
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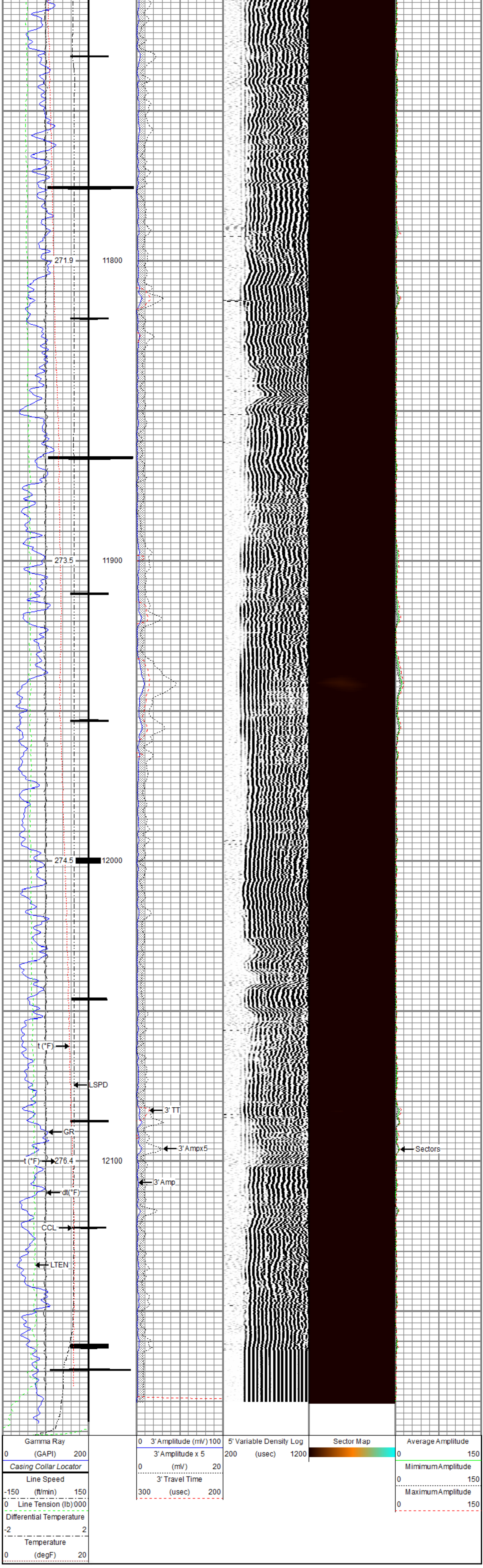

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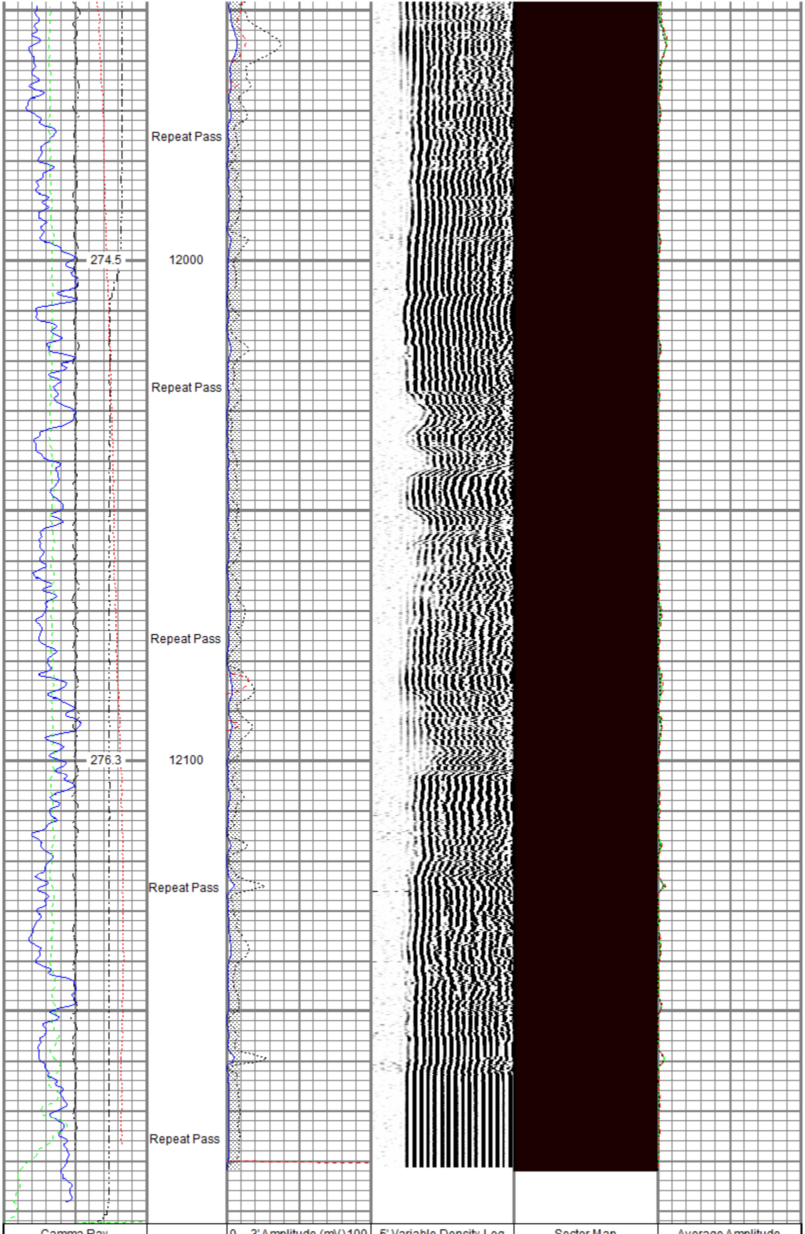
Repeat Pass

Recorded With 0 PSI Surface Induced Pressure

Database File	tep_federal rg 544-7-297_rbl_08-10-21\tep_federal rg 544-7-297_rbl_08-10-21.db
Dataset Pathname	Repeat.1
Presentation Format	ros_radii_tep
Dataset Creation	Mon Aug 16 14:46:28 2021
Charted by	Depth in Feet scaled 1:240

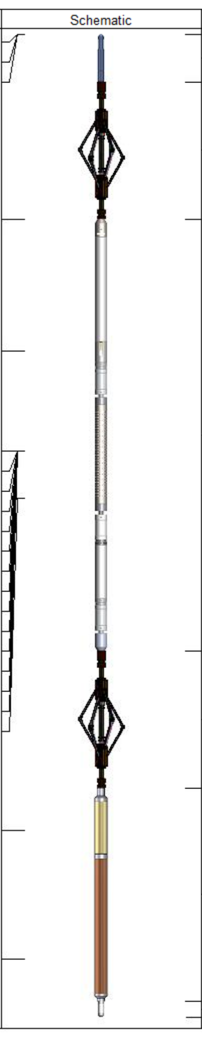
Gamma Ray 0 (GAPI) 200	0 3' Amplitude (mV) 100	5' Variable Density Log 200 (usec) 1200	Sector Map	Average Amplitude 0 150
Line Speed -150 (ft/min) 150	3' Amplitude x 5 0 (mV) 20			Mimimum Amplitude 0 150
0 Line Tension (lb):000	3' Travel Time 300 (usec) 200			Maximum Amplitude 0 150
Differential Temperature -2 2				
Temperature 0 (degF) 20				



Gamma Ray 0 (GAPI) 200	0 3' Amplitude (mV) 100	5' Variable Density Log 200 (usec) 1200	Sector Map	Average Amplitude 0 150
Line Speed -150 (ft/min) 150	3' Amplitude x 5 0 (mV) 20			Mimimum Amplitude 0 150
0 Line Tension (lb):000	3' Travel Time 300 (usec) 200			Maximum Amplitude 0 150
Differential Temperature -2 2				
Temperature 0 (degF) 20				

Sensor	Offset (ft)
mSec_Count	20.95
RBT_Status	20.95
Error_Ct	20.95
RBT_HV	16.99
RBT_TEMP	14.19
RBT_ACCZ	12.04
RBT_ACCY	12.04
RBT_ACCX	12.04
WVFSYNC	12.04
WVFS8	12.04
WVFS7	12.04
WVFS6	12.04
WVFS5	12.04
WVFS4	12.04
WVFS3	12.04
WVFS2	12.04
WVFS1	12.04
WVFCAL	12.04
WVF3FT	12.04
WVF5FT	11.04
CCL	3.97
GR	1.23

Schematic



Description	Length (ft)	O.D. (in)	Weight (lb)
STD BLCH-14375 Standard 1-7/16" Braided Line Cable Head with 1" Fishing Neck	1.04	1.44	1.00
BTA-MUD BTA 2-3/4" Roller 6 Arm Centralizer with Reversible Ends	2.92	2.72	25.00
RBT8-RADII-275T (RBT275T_Base) Probe 2.75" RADII 8 Sector Bond Tool w/ Temperature	9.20	2.75	
BTA-MUD BTA 2-3/4" Roller 6 Arm Centralizer with Reversible Ends	2.92	2.72	25.00
Probe GR-CCL ANL-2750 A (051217) Probe 2.75" Analog 4 Channel Pulse Gamma Ray/CCL Combined	4.54	2.75	55.00
Plug-FA108-0000 1.38" Bull Plug	0.33	1.38	1.00

Dataset:	tep_federal rg 544-7-297_rbl_08-10-21.db: field/well/run1/mainpass.1
Total length:	20.95 ft
Total weight:	107.00 lb
O.D.:	2.75 in

Calibration Report

Database File	c:\programdata\warrior\data\tep_federal rg 544-7-297_rbl_08-10-21\tep_federal rg 544-7-297_rbl_08-10-21.db
Dataset Pathname	mainpass.1
Dataset Creation	Mon Aug 16 13:43:04 2021

Gamma Ray Calibration Report

Serial Number:	051217	
Tool Model:	2750 A	
Performed:	Mon Oct 1 11:32:35 2018	
Calibrator Value:	637.0	GAPI
Background Reading:	115.3	cps
Calibrator Reading:	1027.7	cps
Sensitivity:	0.6982	GAPI/cps

Segmented Cement Bond Log Calibration Report

Serial Number:	RBT275T_Base	
Tool Model:	RADII-275T	
Calibration Casing Diameter:	4.500	in
Calibration Depth:	10.000	ft

Master Calibration, performed (Derived):

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.005	0.626	0.250	81.196	130.375	-0.379
CAL	0.003	0.759				
5'	0.005	0.524	0.250	81.196	155.935	-0.477
SUM						
S1	0.006	0.642	0.000	100.000	157.132	-0.864
S2	0.005	0.600	0.000	100.000	167.959	-0.794
S3	0.005	0.567	0.000	100.000	178.218	-0.961
S4	0.007	0.566	0.000	100.000	178.794	-1.176
S5	0.006	0.594	0.000	100.000	170.071	-0.984
S6	0.007	0.632	0.000	100.000	159.987	-1.046
S7	0.006	0.661	0.000	100.000	152.560	-0.885
S8	0.005	0.678	0.000	100.000	148.586	-0.808

Air Zero Calibration, performed Tue Aug 10 07:11:51 2021:

	Raw (v)	Calibrated (v)	Results
	Zero	Zero	Offset
3'	0.005	0.000	0.000
5'	0.006	0.000	-0.001
SUM			
S1	0.005	0.000	0.000
S2	0.006	0.000	-0.001
S3	0.005	0.000	0.000
S4	0.005	0.000	0.001
S5	0.006	0.000	0.000
S6	0.005	0.000	0.001
S7	0.005	0.000	0.000
S8	0.005	0.000	-0.000

Inclinometer Calibration Report

Performed: Wed May 22 09:49:34 2019

	Low Read.	High Read.	Low Ref.	High Ref.	
X Accelerometer	-923.00	912.00	-1.00	1.00	gee
Y Accelerometer	-895.00	877.00	-1.00	1.00	gee
Z Accelerometer	-0.10	860.00	0.00	1.00	gee

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