Radial Cement Bond
Gamma Ray
Collar Locator Log

RELIANCE OILFIELD SERVICES

Company	TEP Rocky Mountain LLC
Well	Chevron TR 343-27-597
Field	Trail Ridge
County	Garfield
State	Colorado

Company TEP Rocky Mountain LLC
Well Chevron TR 343-27-597
Field Trail Ridge
County Garfield State Colorado

Location: API # : 05-045-23334
222' FSL 226' FEL SESE
SEC 27 TWP 5S RGE 97W

Other Services
PDN

Permanent Datum	Ground Level	Elevation	8452'
Log Measured From	Kelly Bushing	24 FT	
Drilling Measured From	Kelly Bushing		

Elevation
K.B. 8476'
D.F. 8475'
G.L. 8452'

Date	10-MAY-2017		
Run Number	One		
Depth Driller	10106 FT		
Depth Logger	10006 FT		
Bottom Logged Interval	10006 FT		
Top Log Interval	Surface		
Open Hole Size	8.750"		
Type Fluid	Fresh Water		
Density / Viscosity	8.34 lb/gal		
Max. Recorded Temp.	260 °F		
Estimated Cement Top	See Log		
Time Well Ready	ROA		
Time Logger on Bottom	07:20		
Equipment Number	HD 359		
Location	Grand Junction		
Recorded By	A. Ellsworth		
Witnessed By	D. Welsh		

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	9 5/8	36	J-55	Surface	2972 FT
Intermediate #1	4 1/2	11.6	P-110	Surface	10106 FT
Intermediate #2					
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 24 FT
Ground Level 1 FT below the top of cut pipe
Marker Joint logged at 6527 FT - 6548 FT
Log ran from 10006 FT to surface
Recorded with 0 PSI surface induced pressure

Thank you for choosing Reliance Oilfield Services, LLC!!

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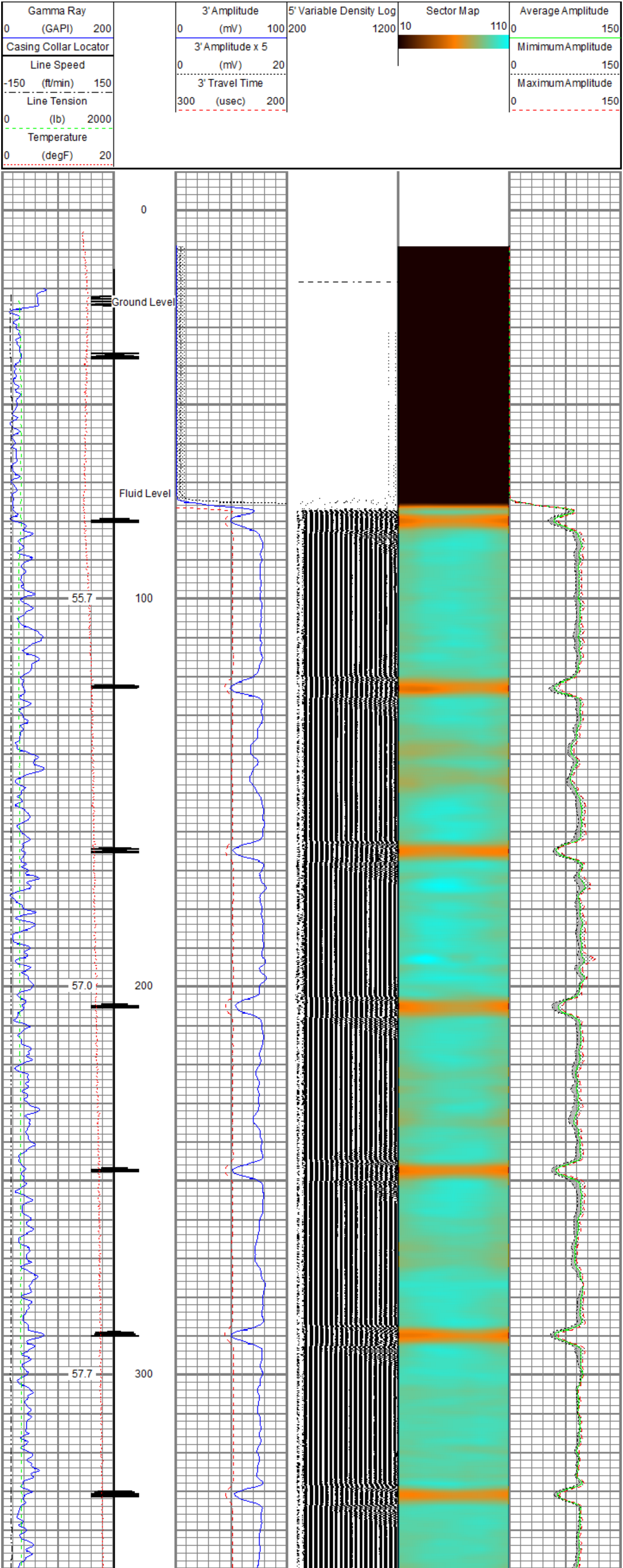
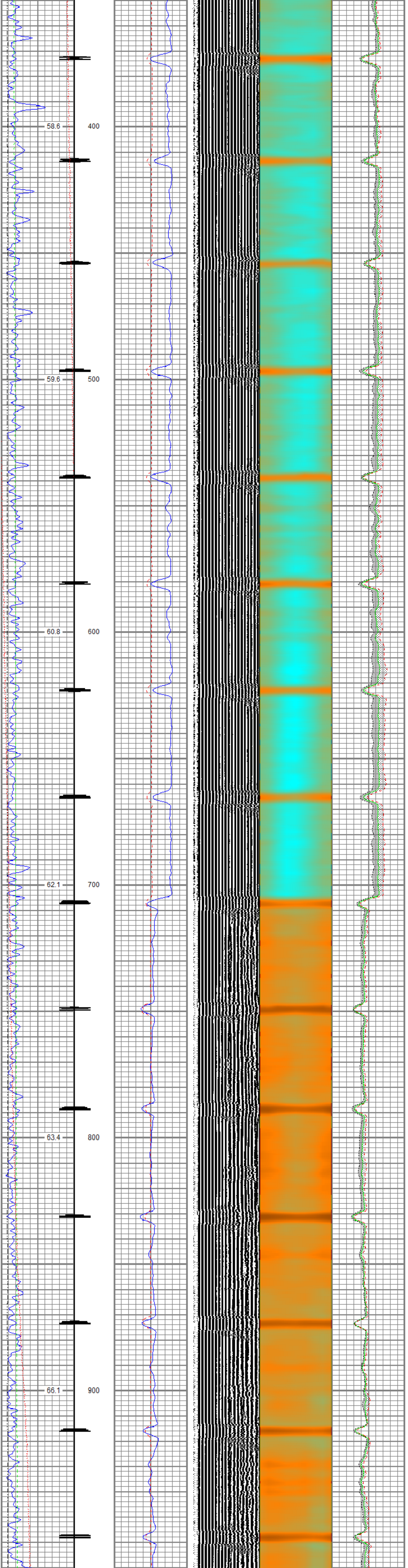
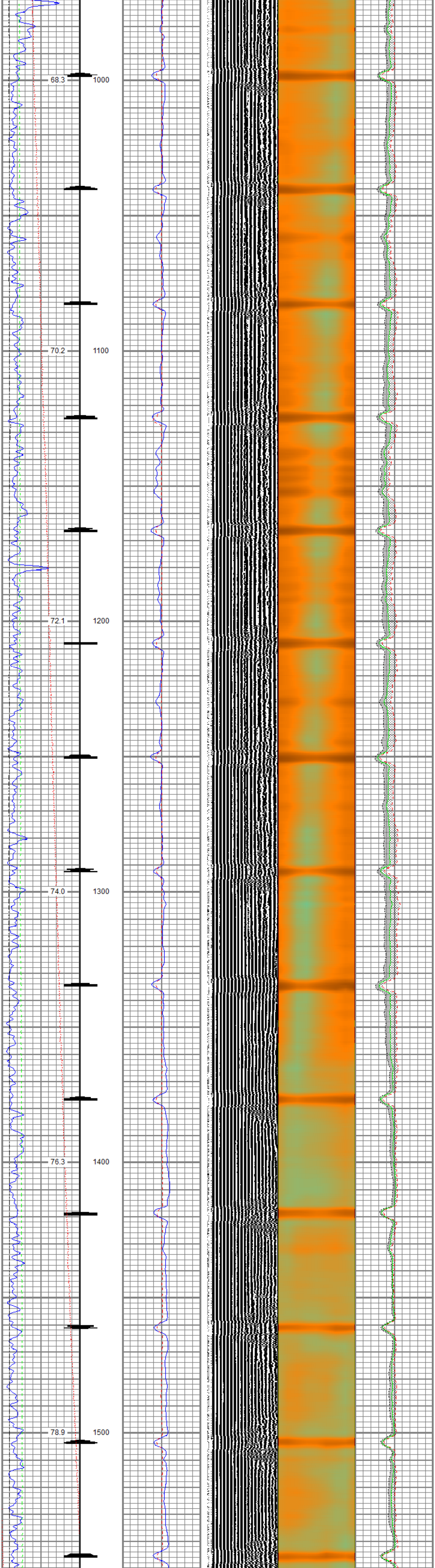
Main Pass

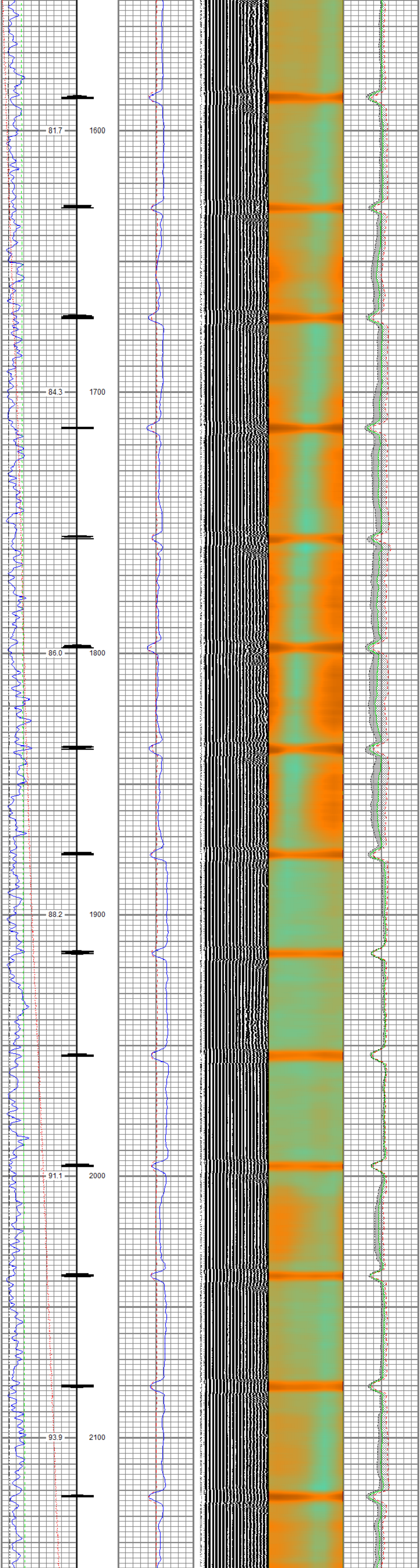
Recorded With 0 PSI Surface Induced Pressure

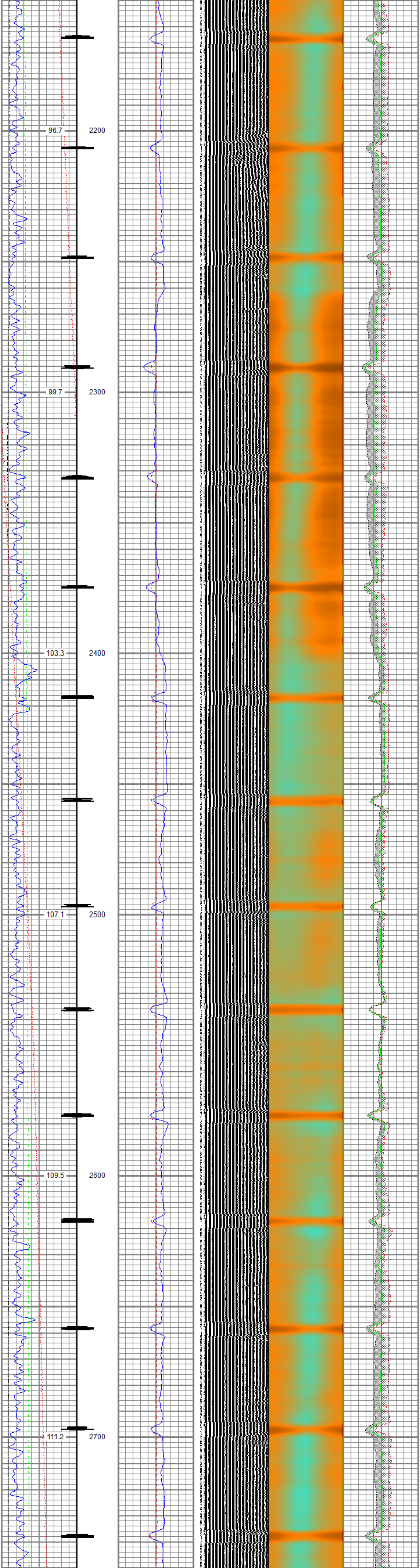
Database File	chevron tr 343-27-597\tep_chevron tr 343-27-597_05-10-17_rbl.db
Dataset Pathname	pass3.1
Presentation Format	ros_rbt004_tep
Dataset Creation	Wed May 10 10:59:41 2017
Charted by	Depth in Feet scaled 1:240

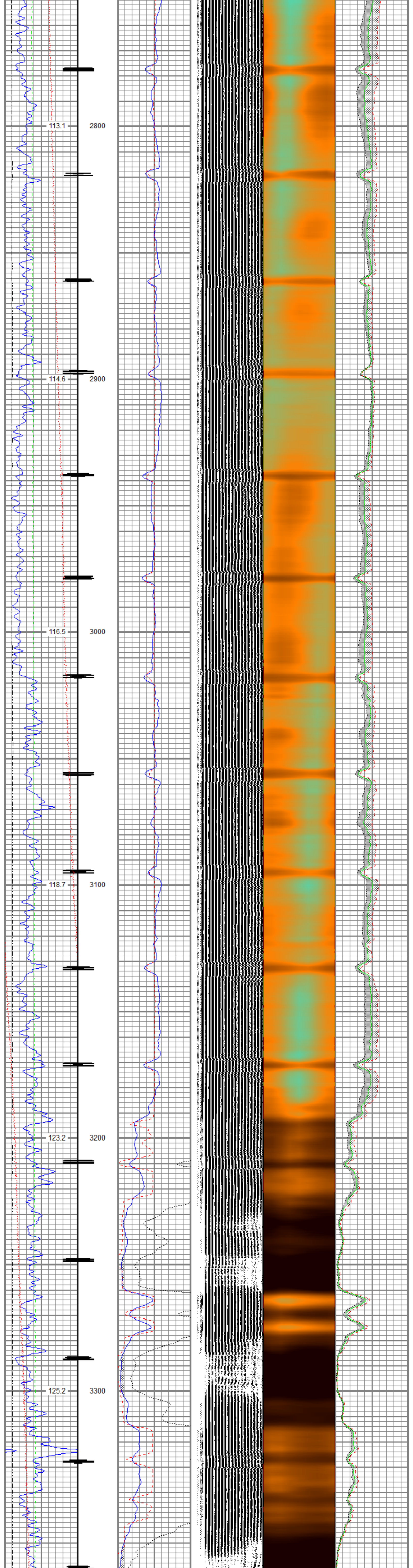


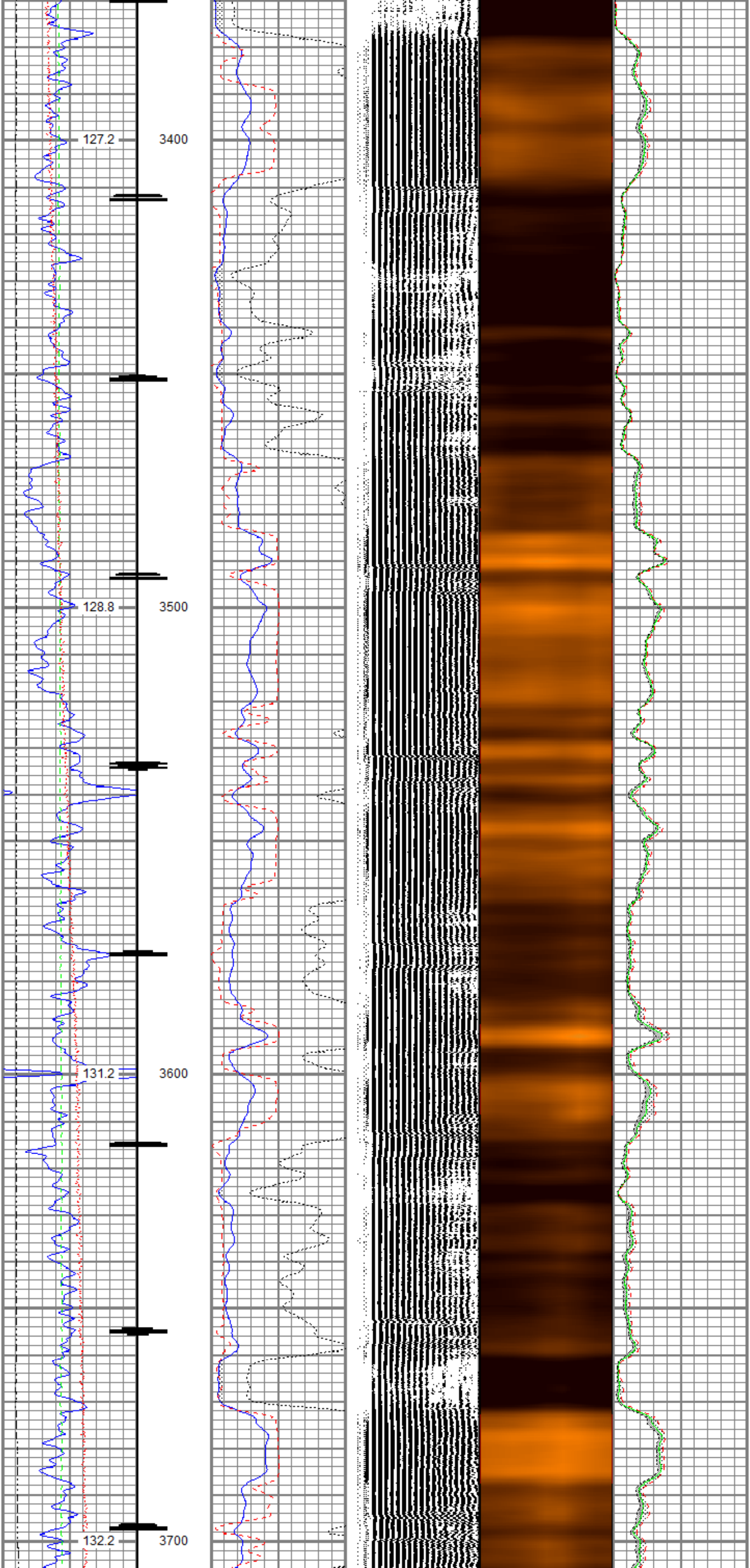


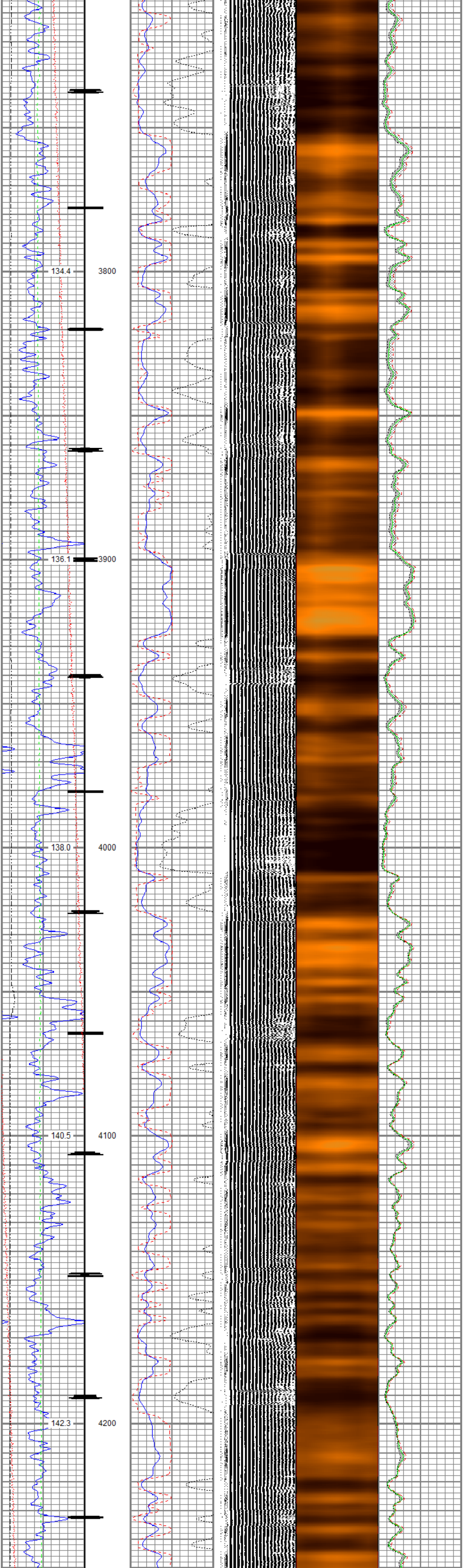








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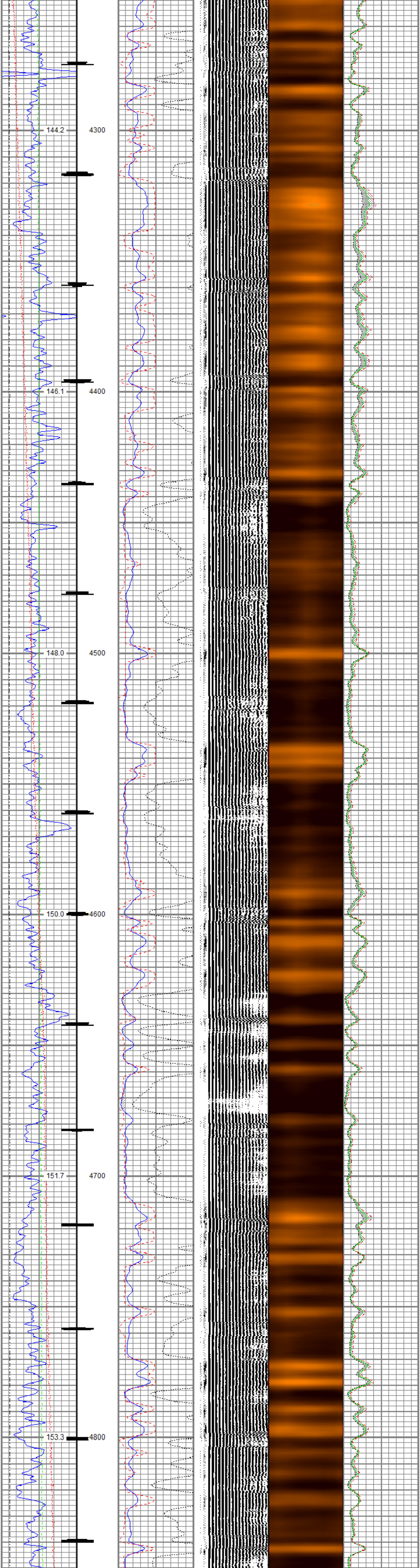
142.3
4200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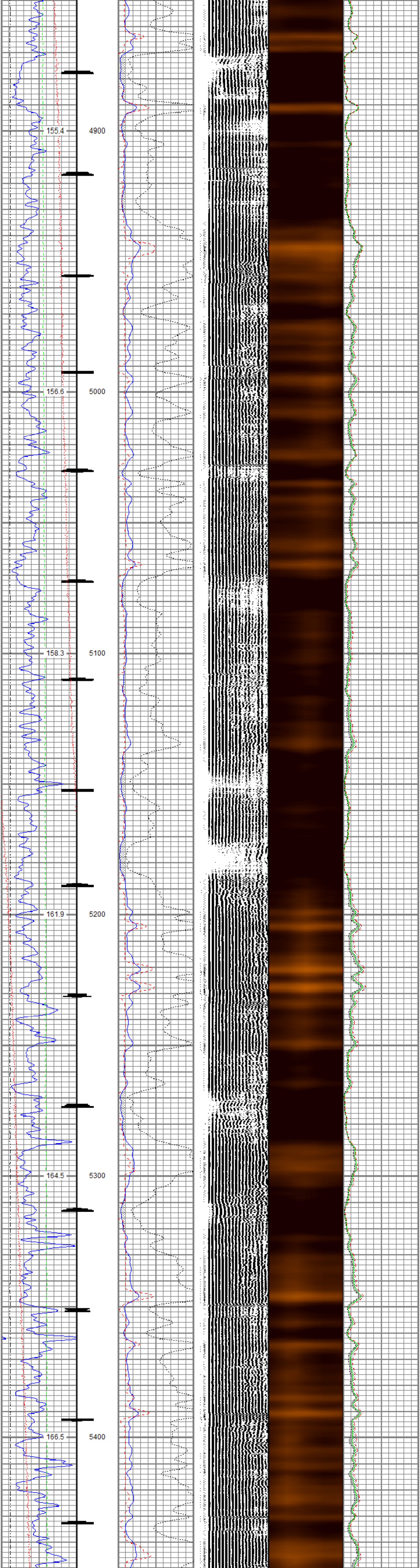
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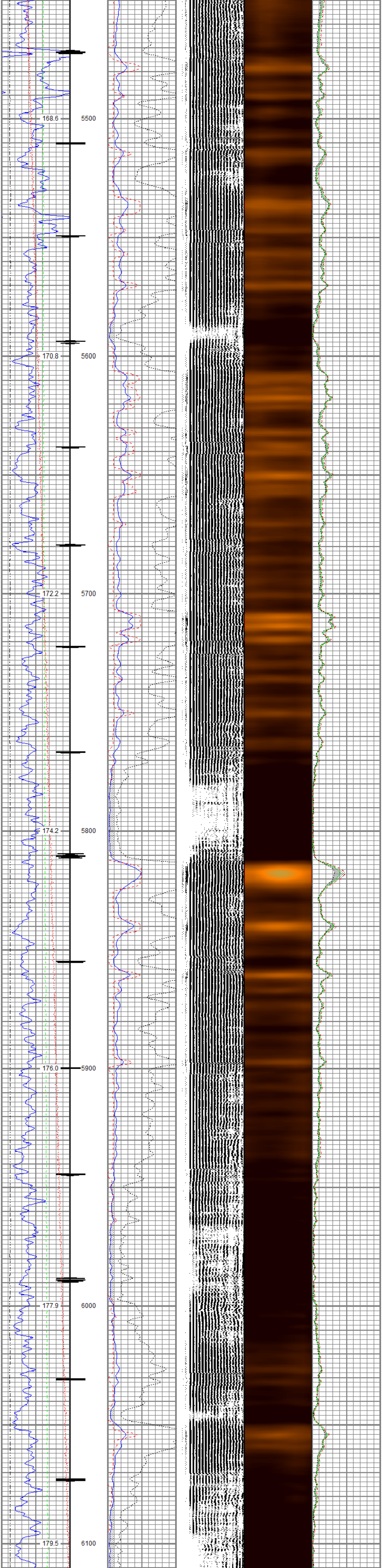
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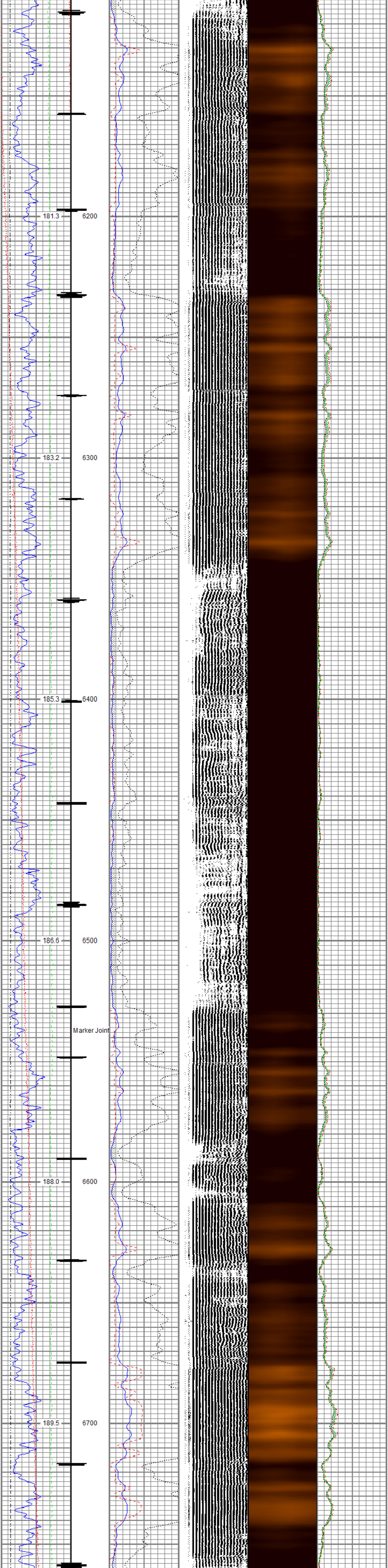
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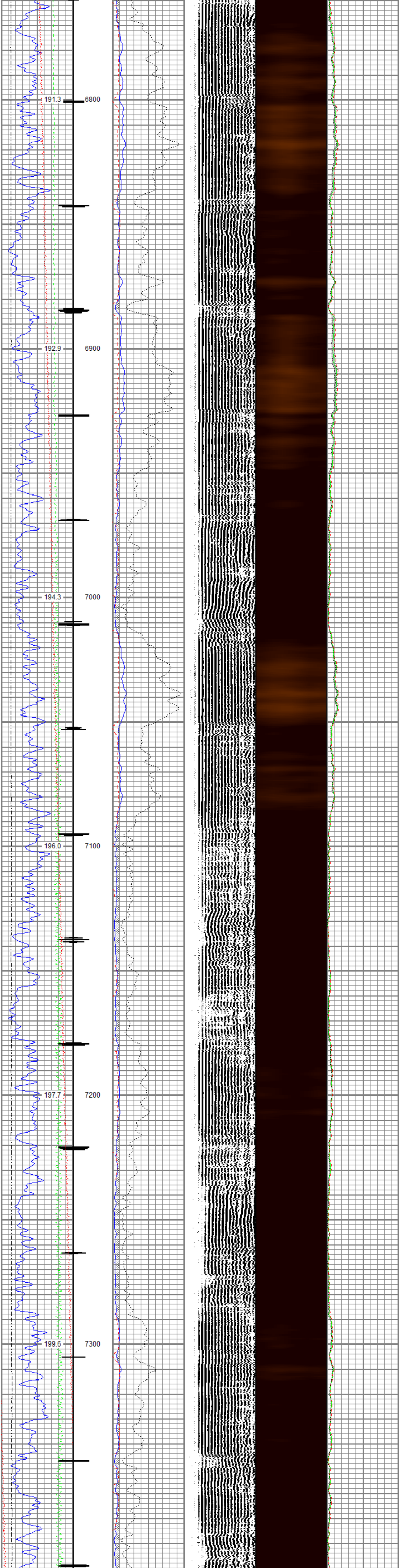
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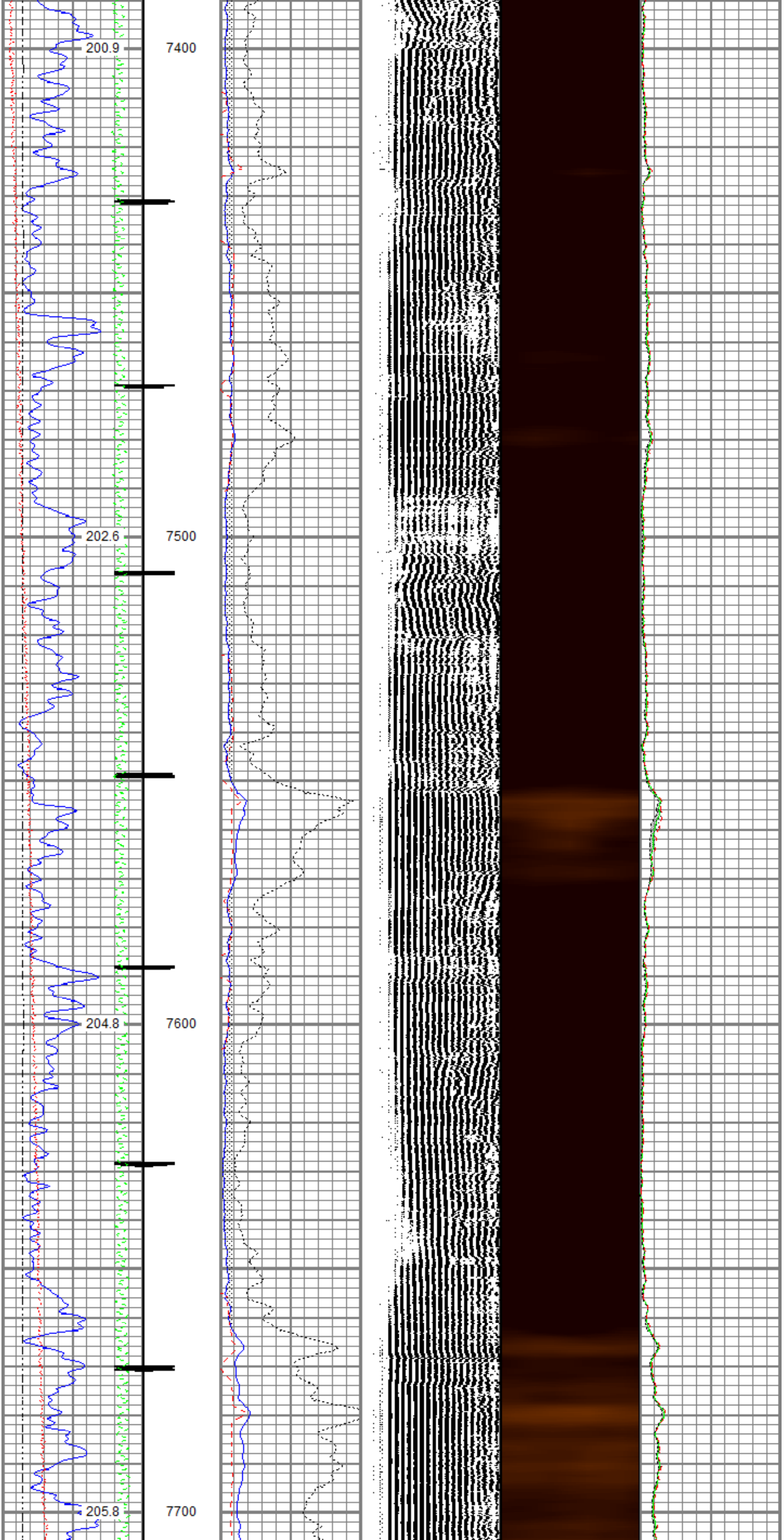
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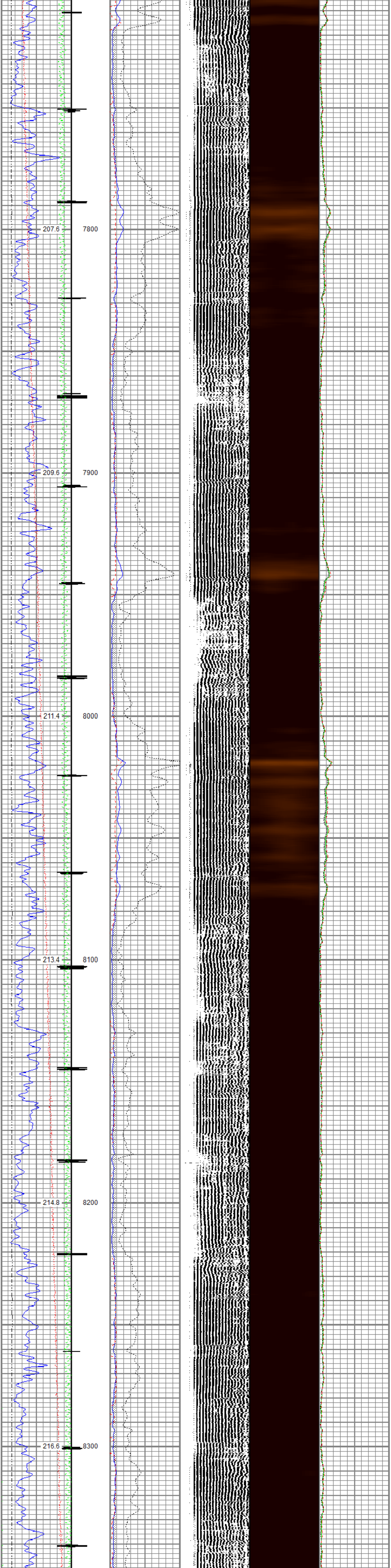

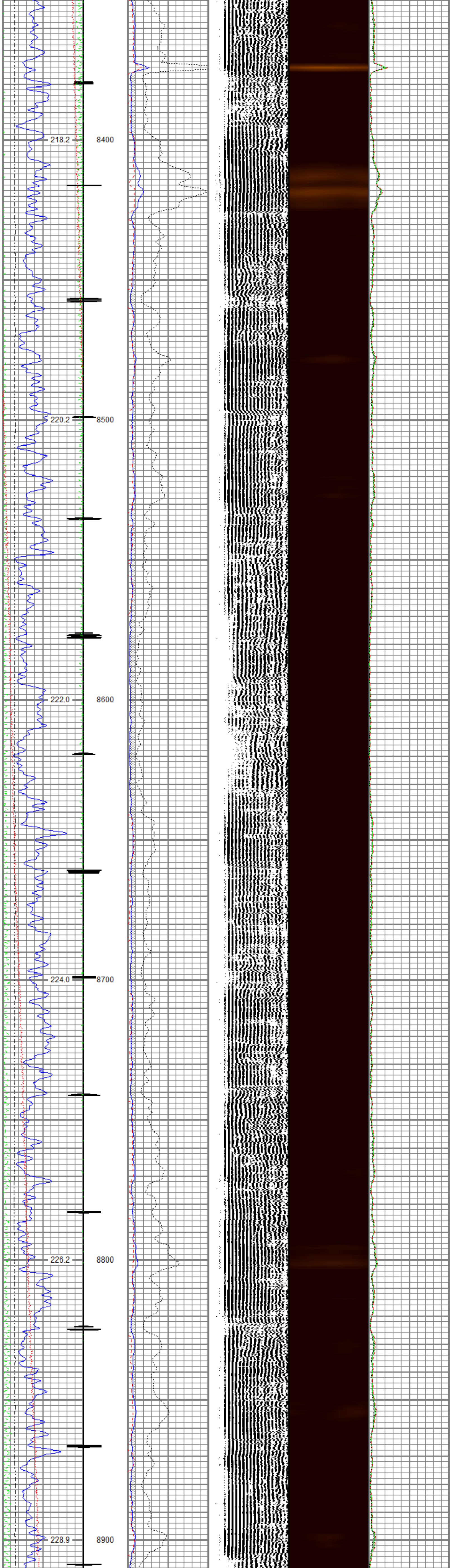

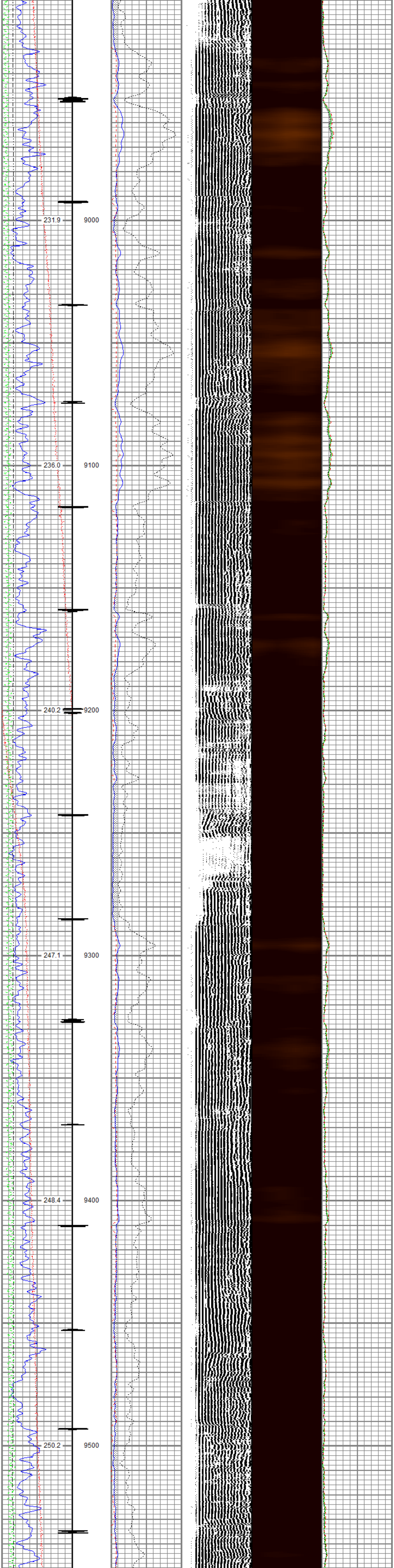

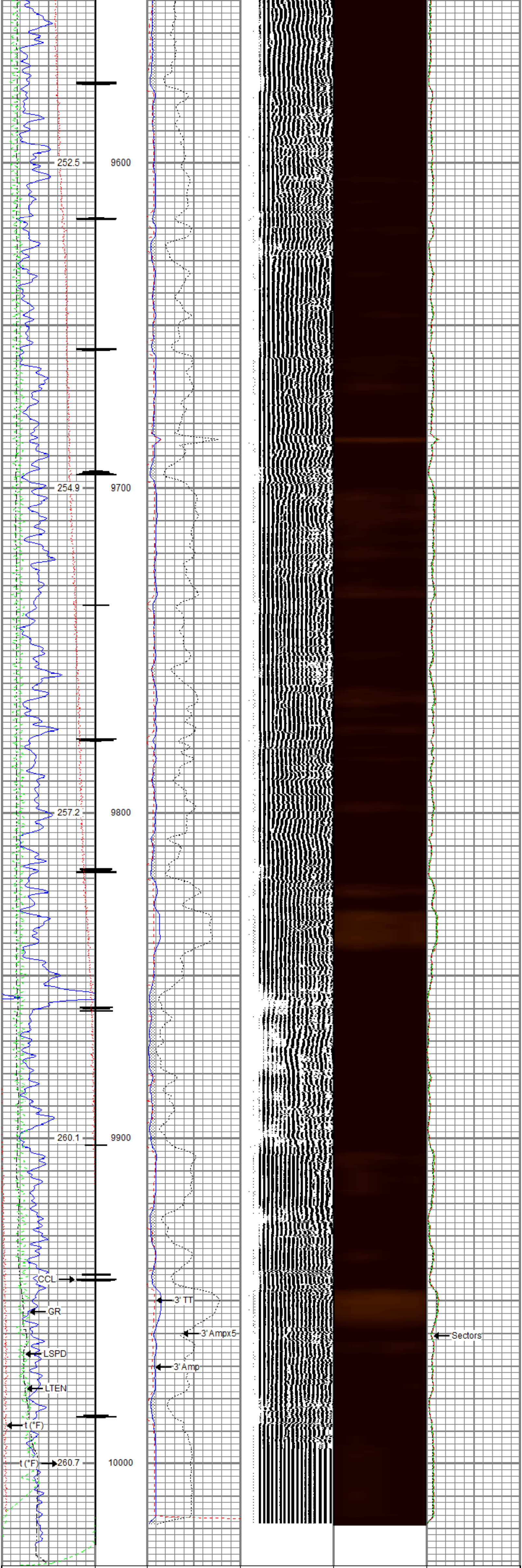

Gamma Ray 0 (GAPI) 200 Casing Collar Locator Line Speed -150 (ft/min) 150 Line Tension 0 (lb) 2000 Temperature 0 (degF) 20	3' Amplitude 0 (mV) 100 3' Amplitude x 5 0 (mV) 20 3' Travel Time 300 (usec) 200	5' Variable Density Log 200 1200	Sector Map 10 110	Average Amplitude 0 150 Mimimum Amplitude 0 150 Maximum Amplitude 0 150

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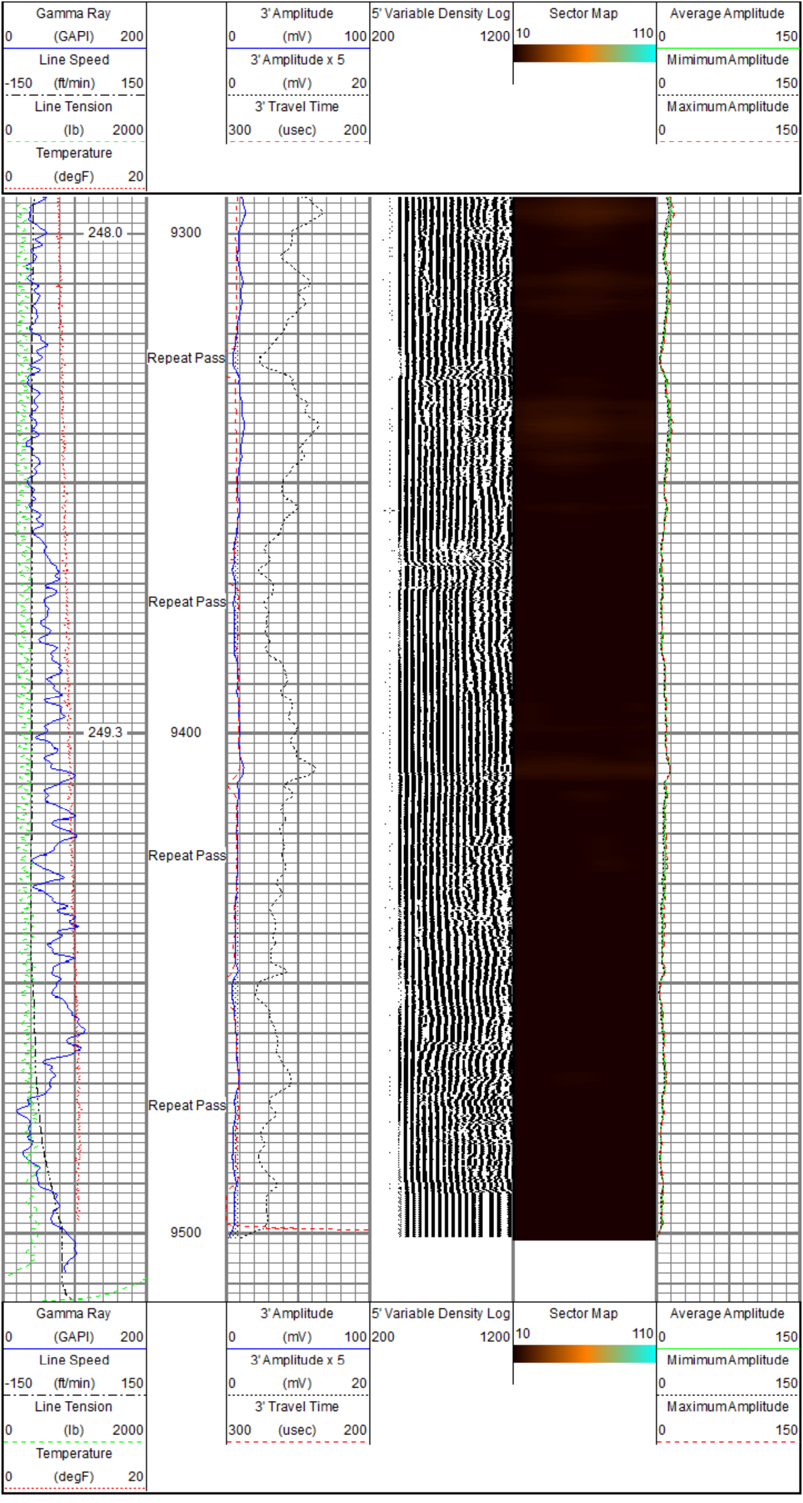
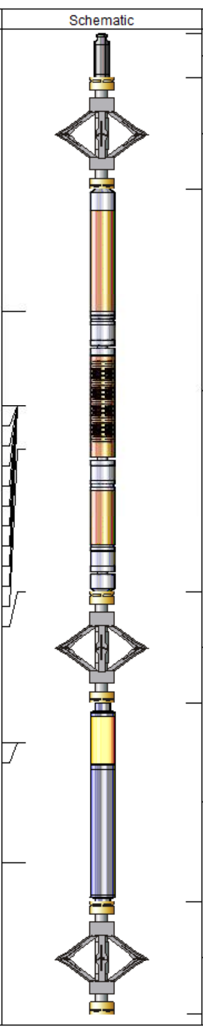
Repeat Pass

Recorded With 0 PSI Surface Induced Pressure

Database File	chevron tr 343-27-597\tep_chevron tr 343-27-597_05-10-17_rbl.db
Dataset Pathname	pass1.4
Presentation Format	ros_rbt004_tep
Dataset Creation	Thu May 11 07:56:29 2017
Charted by	Depth in Feet scaled 1:240



Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
			Titan_Electric_Cable_Heads-Titan_1-11/11.03 Electric Cable Head with 1" Fishing Neck		1.69	5.40
			DSS_RAC-RAC_5-Arm 5 Arm 2-3/4" Roller Centralizer	2.55	2.75	32.00
Temp WVFS8 WVFS7 WVFS6 WVFS5 WVFS4 WVFS3 WVFS2 WVFS1 WVFCAL WVF3FT WVF5FT HeadVolt	16.05 13.88 13.88 13.88 13.88 13.88 13.88 13.88 13.88 13.88 13.88 12.88 9.63		Probe_RADII-C-P_RBT_2750 (FW1305-099.19 Probe 2-3/4" Sector Cement Bond Tool with Temperature Probe		2.75	105.00
			DSS_RAC-RAC_5-Arm 5 Arm 2-3/4" Roller Centralizer	2.55	2.75	32.00
DCCL CCL GR	6.18 6.18 3.44		Probe_GR_CCL-P_CGR_2750_S (FW1214.546) Probe 2-3/4" Digital CCL / Gamma Ray Combined		2.75	55.00
			DSS_RAC-RAC_5-Arm 5 Arm 2-3/4" Roller Centralizer	2.55	2.75	32.00

Dataset:	tep_chevron tr 343-27-597_05-10-17_rbl.db: field/well/run1/pass3.1
Total length:	22.40 ft
Total weight:	261.40 lb
O.D.:	2.75 in

Calibration Report

Database File	c:\programdata\warrior\data\chevron tr 343-27-597\tep_chevron tr 343-27-597_05-10-17_rbl.db
Dataset Pathname	pass3.1
Dataset Creation	Wed May 10 10:59:41 2017

Gamma Ray Calibration Report

Serial Number:	FW1211-026	
Tool Model:	P_CGR_2750_S	
Performed:	Sat Feb 06 11:14:28 2016	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.6	cps
Sensitivity:	0.6061	GAPI/cps

Segmented Cement Bond Log Calibration Report

Serial Number:	FW1305-098	
Tool Model:	P_RBT_2750	
Calibration Casing Diameter:	4.500	in
Calibration Depth:	30.433	ft

Master Calibration, performed (Derived):

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	-0.007	0.503	0.800	81.196	157.615	1.962
CAL	-0.006	0.533				
5'	-0.006	0.358	0.800	81.196	221.372	2.051
SUM						
S1	-0.008	0.551	0.000	100.000	178.809	1.436
S2	-0.007	0.532	0.000	100.000	185.742	1.264
S3	-0.007	0.506	0.000	100.000	194.934	1.366
S4	-0.006	0.495	0.000	100.000	199.646	1.178
S5	-0.006	0.493	0.000	100.000	200.584	1.152
S6	-0.007	0.496	0.000	100.000	199.003	1.307
S7	-0.006	0.502	0.000	100.000	196.855	1.146
S8	-0.007	0.524	0.000	100.000	188.207	1.289

Internal Reference Calibration, performed Fri May 05 10:29:14 2017:

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	-0.006	0.533	1.000	0.000

Air Zero Calibration, performed Wed May 10 06:17:04 2017:

	Raw (v)	Calibrated (v)	Results
	Zero	Zero	Offset
3'	-0.006	0.000	-0.000
5'	-0.004	0.000	0.000
SUM			
S1	-0.008	0.000	0.001
S2	-0.006	0.000	0.000
S3	-0.006	0.000	-0.000
S4	-0.006	0.000	-0.000
S5	-0.006	0.000	-0.000
S6	-0.006	0.000	-0.000
S7	-0.006	0.000	-0.000
S8	-0.006	0.000	-0.000

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