RELIANCE
OILFIELD SERVICES

Radial Cement Bond
Gamma Ray
Collar Locator Log

Company	TEP Rocky Mountain LLC
Well	Chervron TR 634-27-597
Field	Trail Ridge
County	Garfield
State	Colorado

Company TEP Rocky Mountain LLC
Well Chervron TR 634-27-597
Field Trail Ridge
County Garfield State Colorado

Location: API # : 05-045-23502
176' FSL 276' FEL SESE
SEC 27 TWP 5S RGE 97W

Other Services

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	08-MAY-2017		
Run Number	One		
Depth Driller	10037 FT		
Depth Logger	9966 FT		
Bottom Logged Interval	9966 FT		
Top Log Interval	Surface		
Open Hole Size	8.750"		
Type Fluid	Fresh Water		
Density / Viscosity	8.34 lb/gal		
Max. Recorded Temp.	255 °F		
Estimated Cement Top	See Log		
Time Well Ready	ROA		
Time Logger on Bottom	20:00		
Equipment Number	HD 359		
Location	Grand Junction		
Recorded By	J. Donelley		
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	2784 FT
Intermediate #1	4 1/2	11.6	P-110	Surface	10037 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
Log ran from 9966 FT to surface
Recorded with 0 PSI surface induced pressure

Thank you for choosing Reliance Oilfield Services, LLC!!

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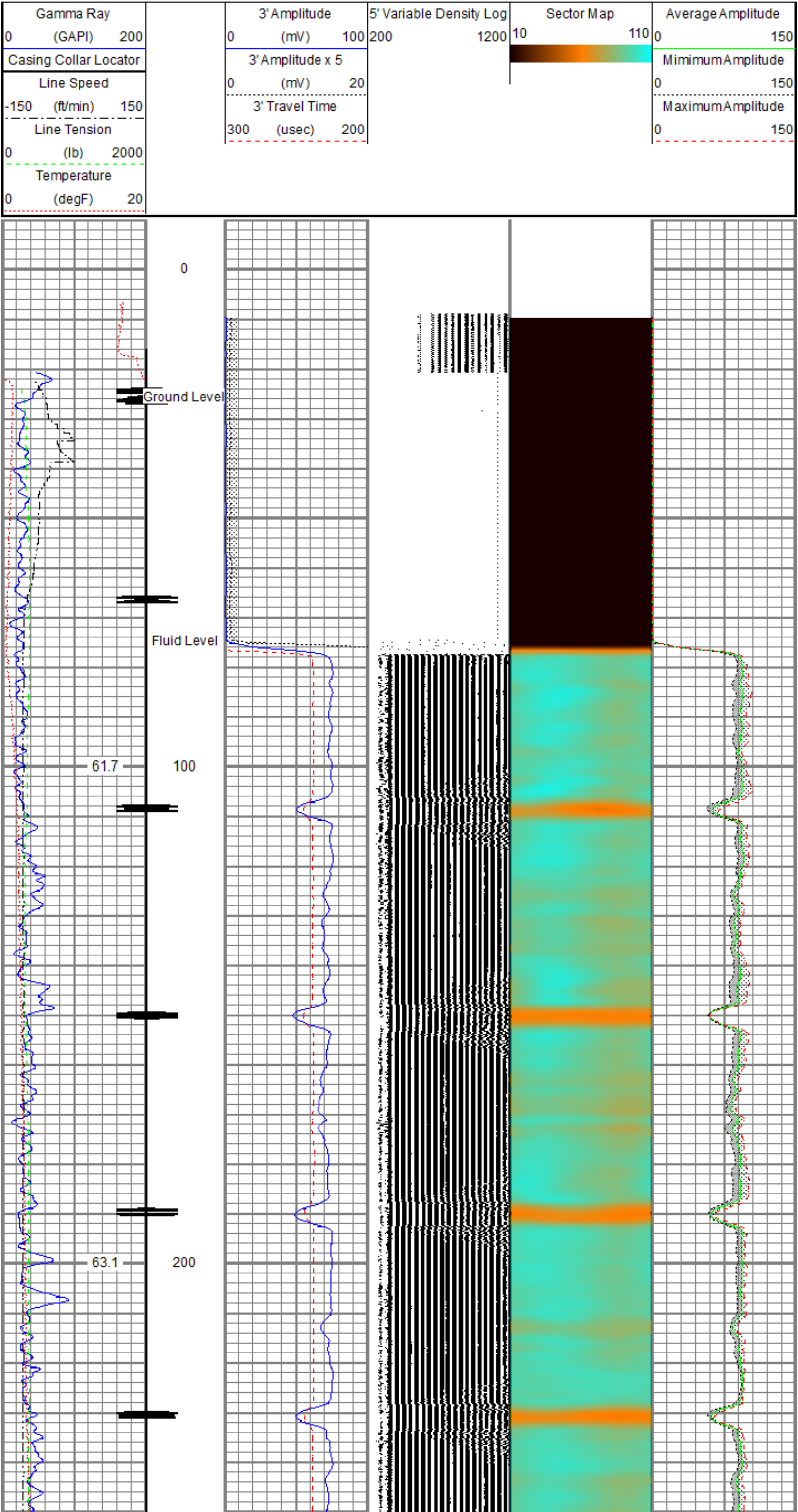
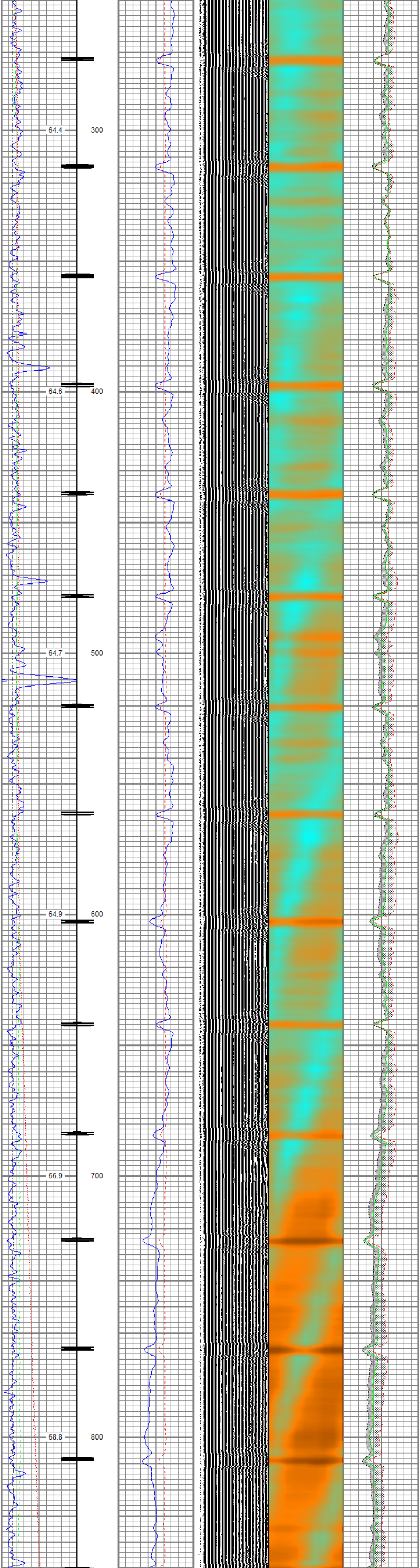
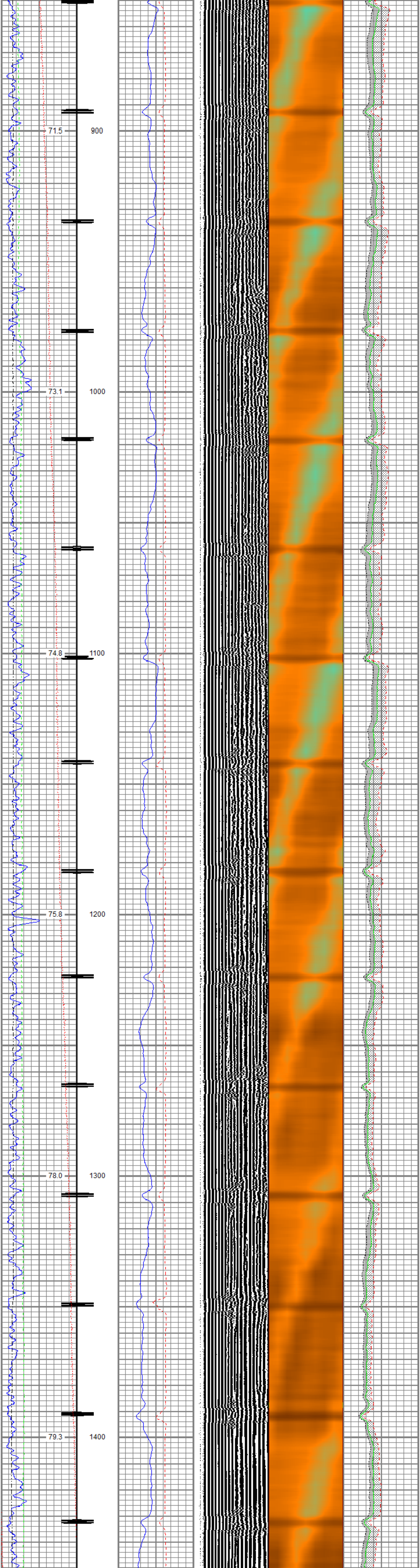
Main Pass

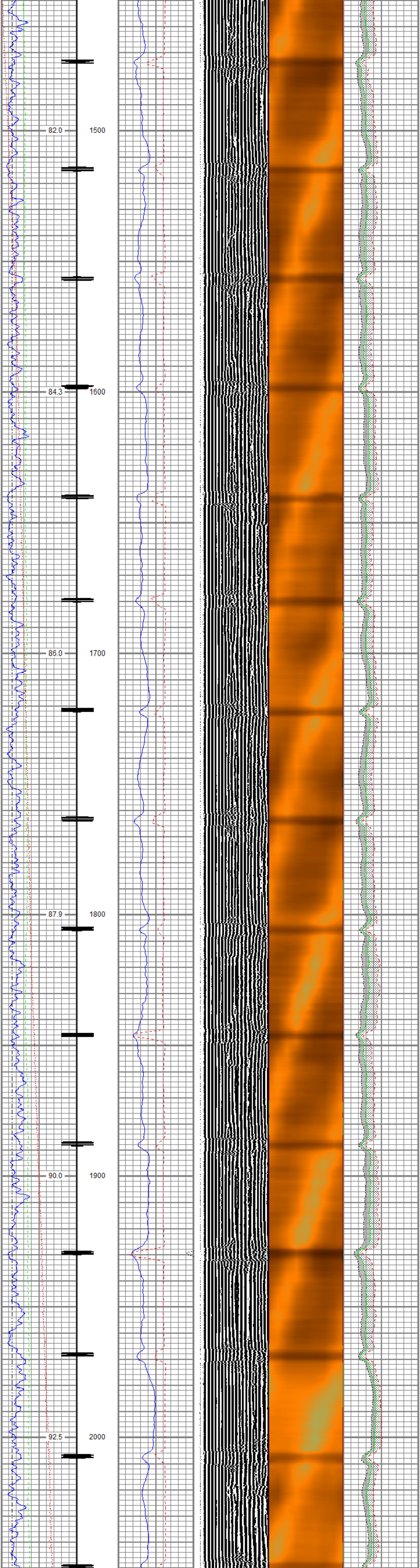
Recorded With 0 PSI Surface Induced Pressure

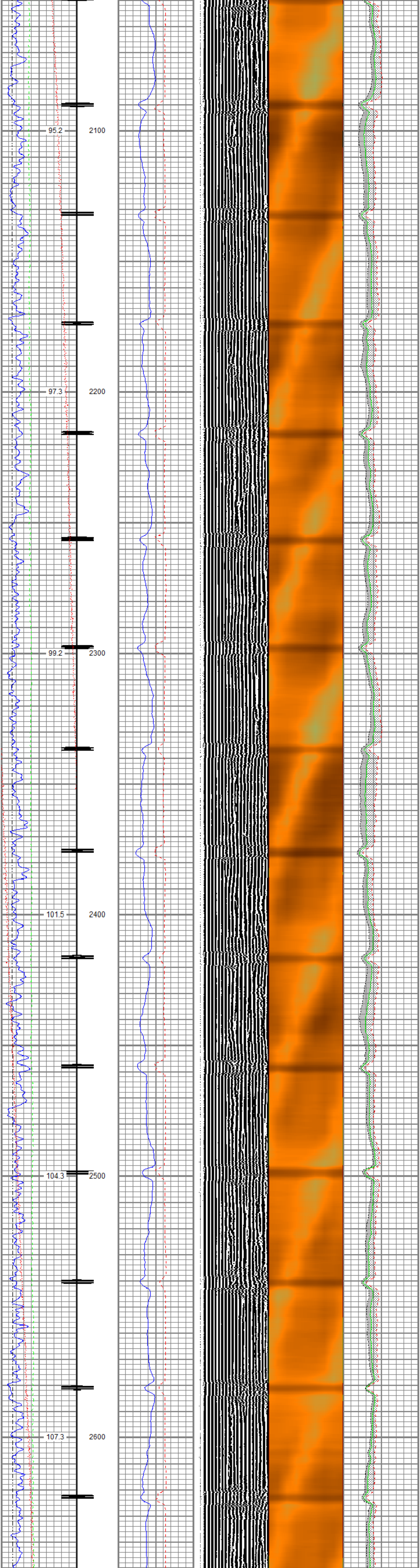
Database File	new folder\tep_chevron tr 634-27-597_05-08-17_rbl.db
Dataset Pathname	pass11.1
Presentation Format	ros_rbt004_tep
Dataset Creation	Tue May 09 12:46:30 2017
Charted by	Depth in Feet scaled 1:240

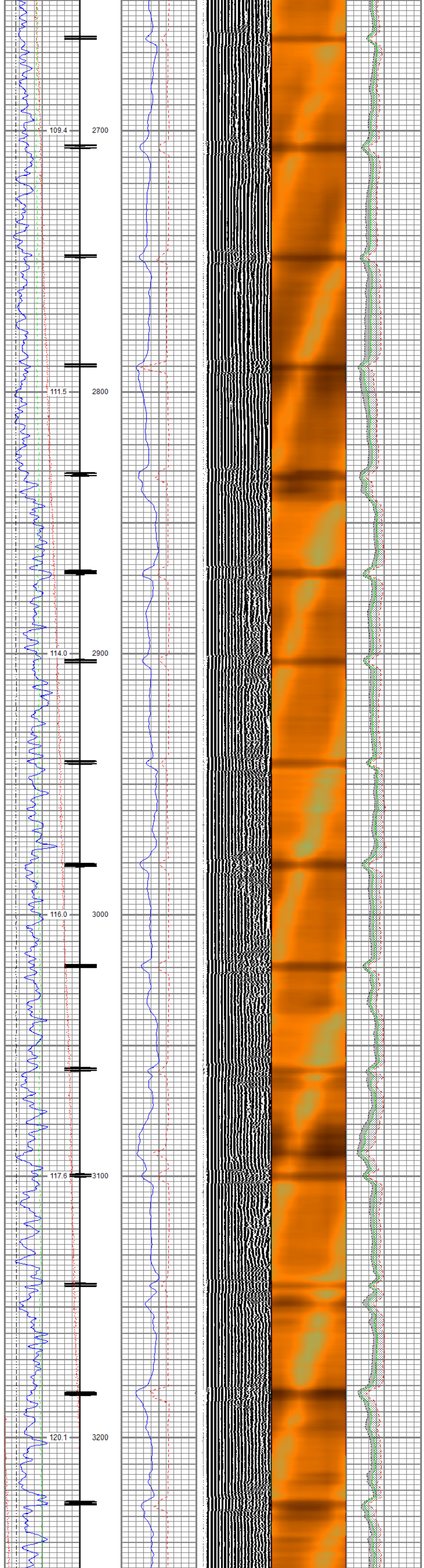


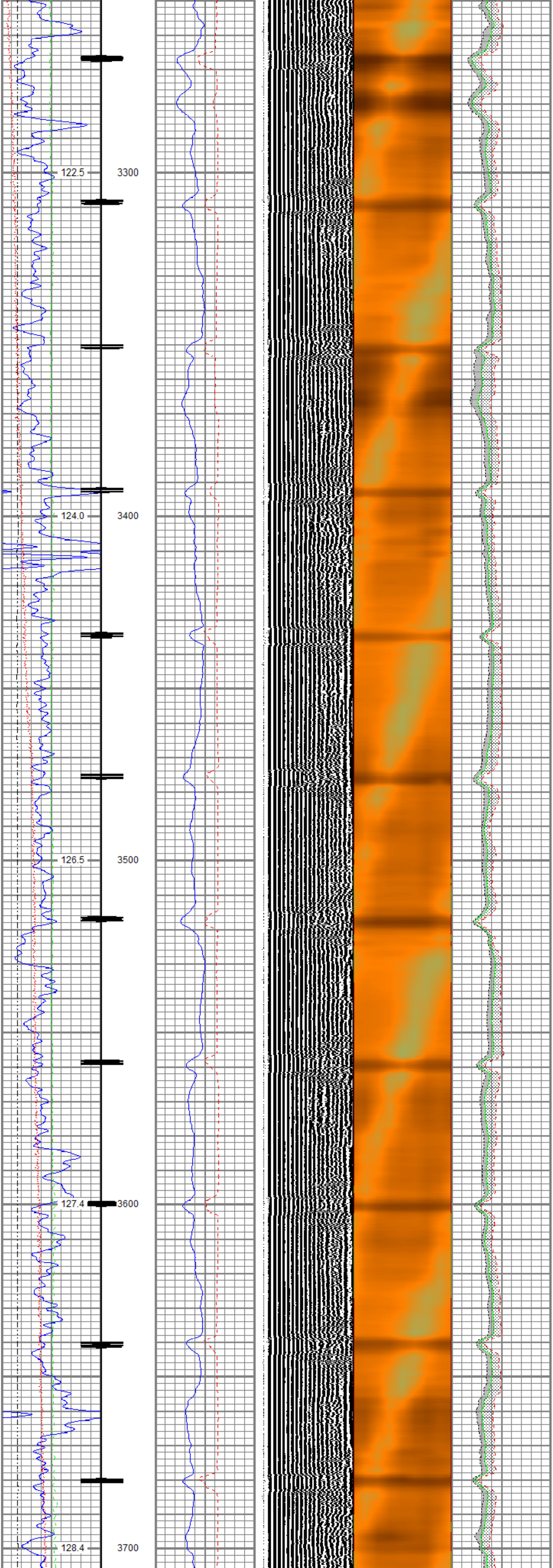


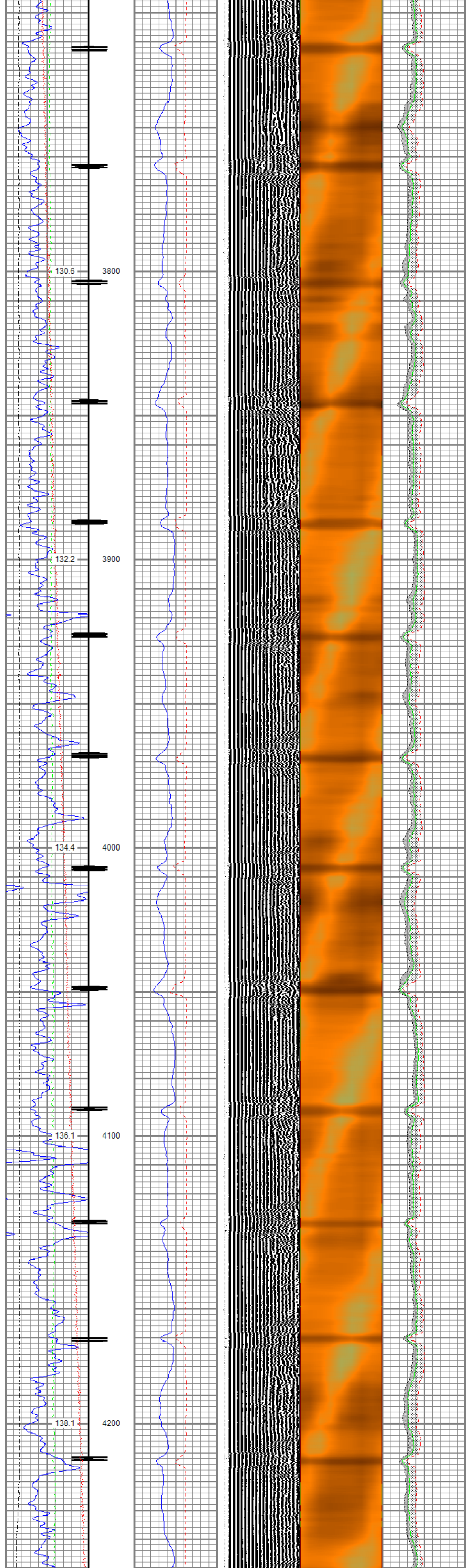








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134.4
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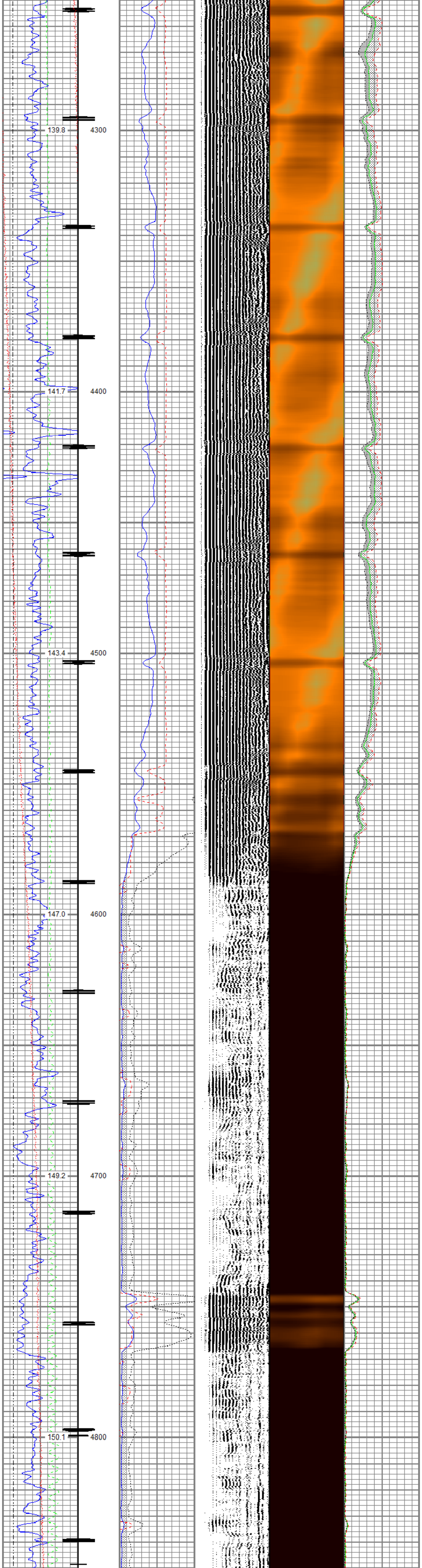
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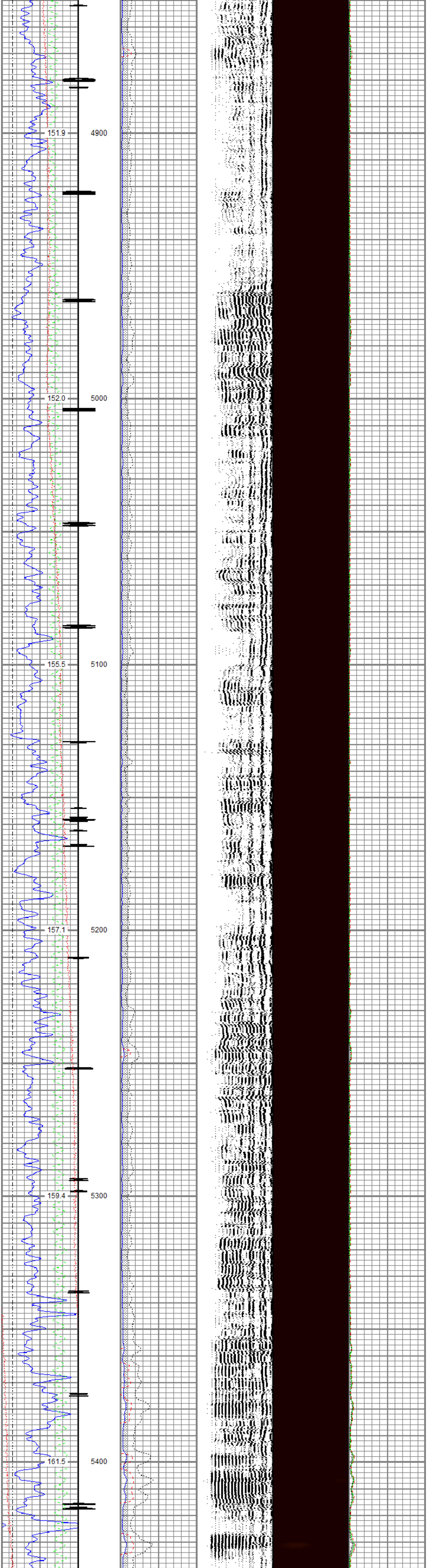
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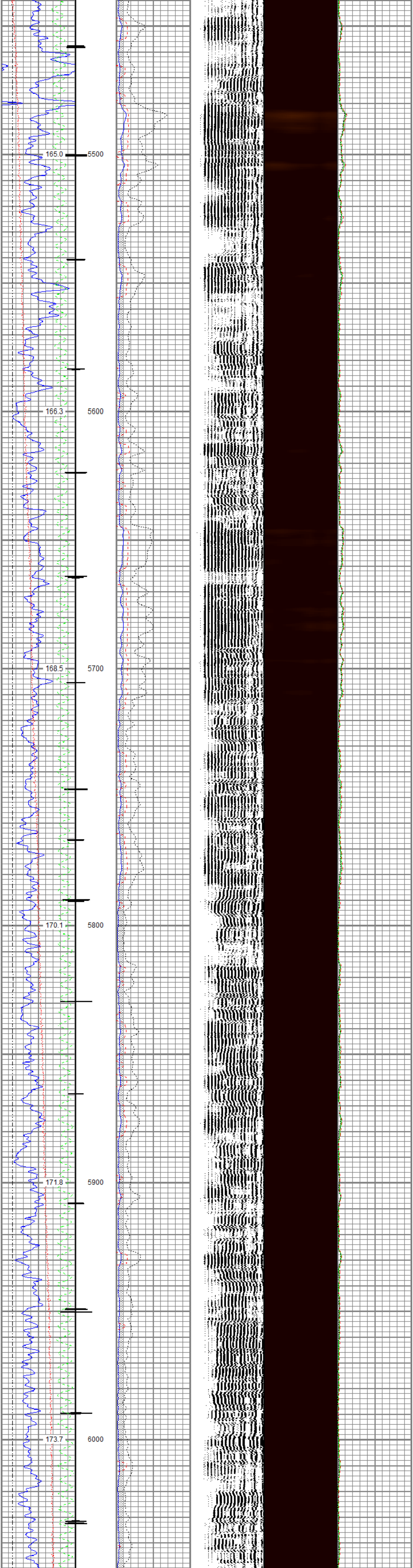
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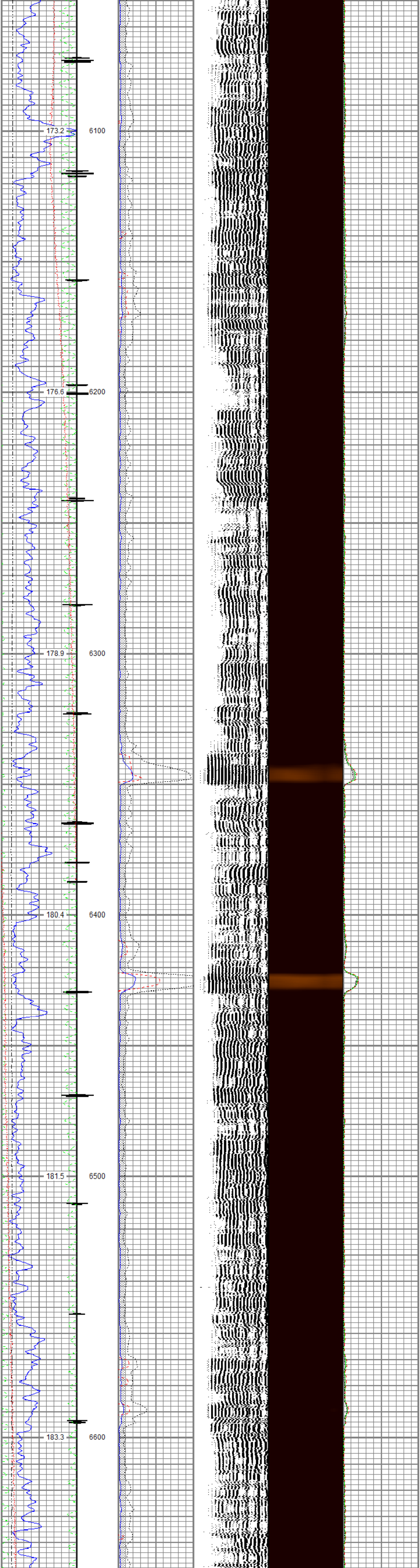
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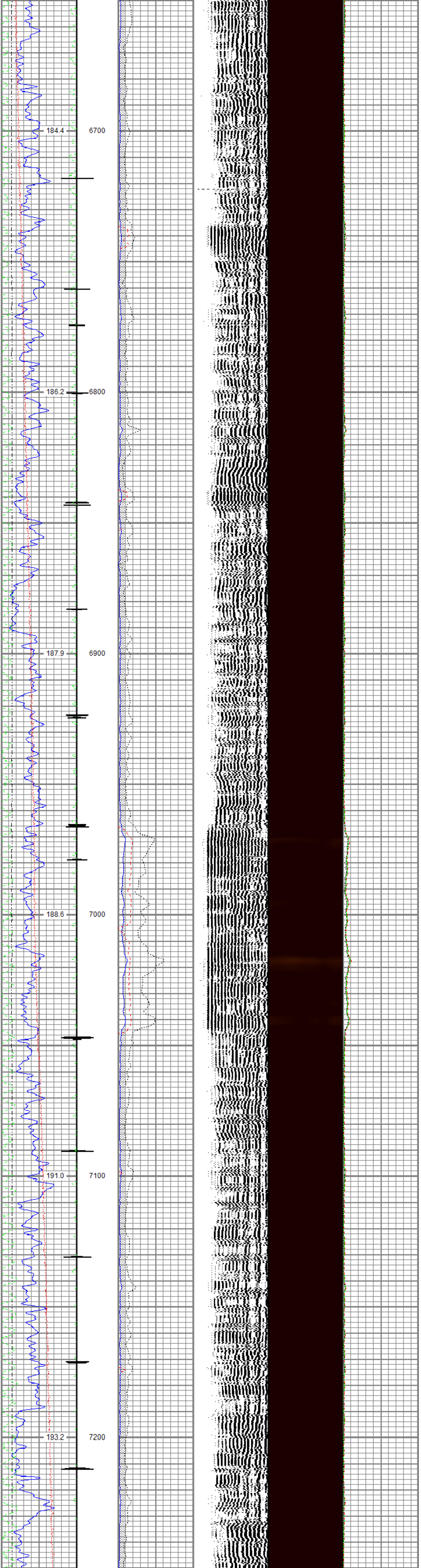
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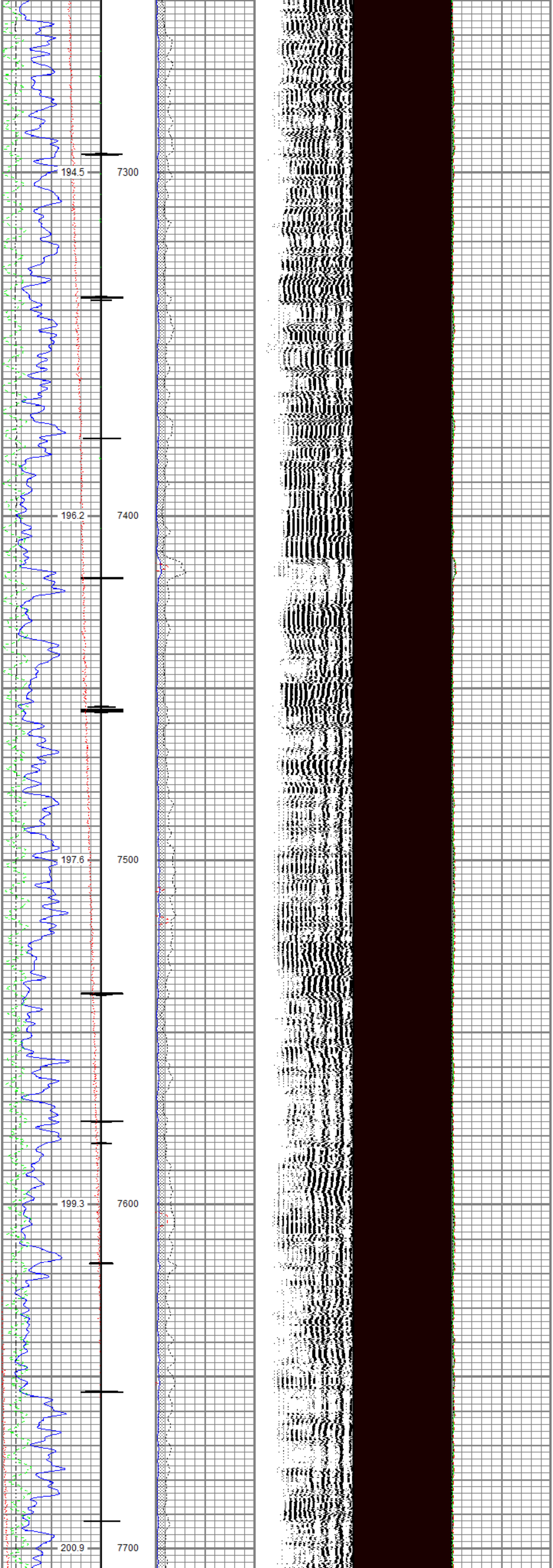
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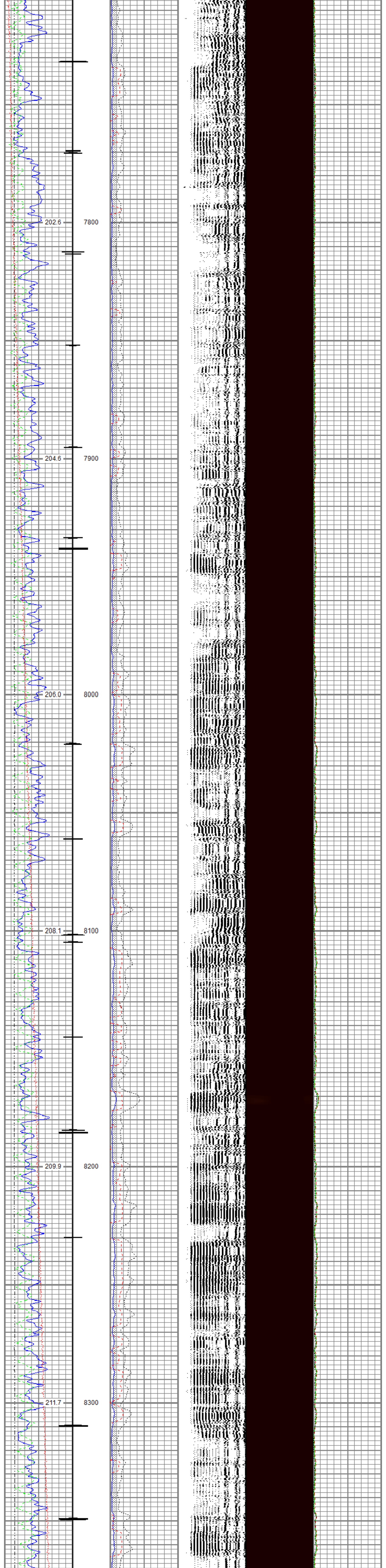

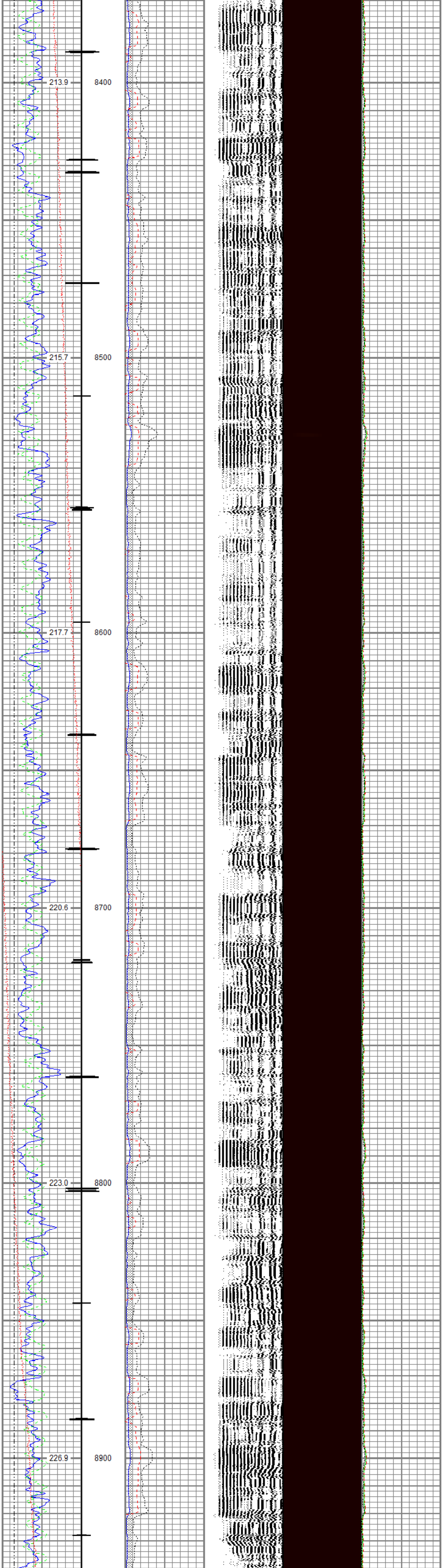

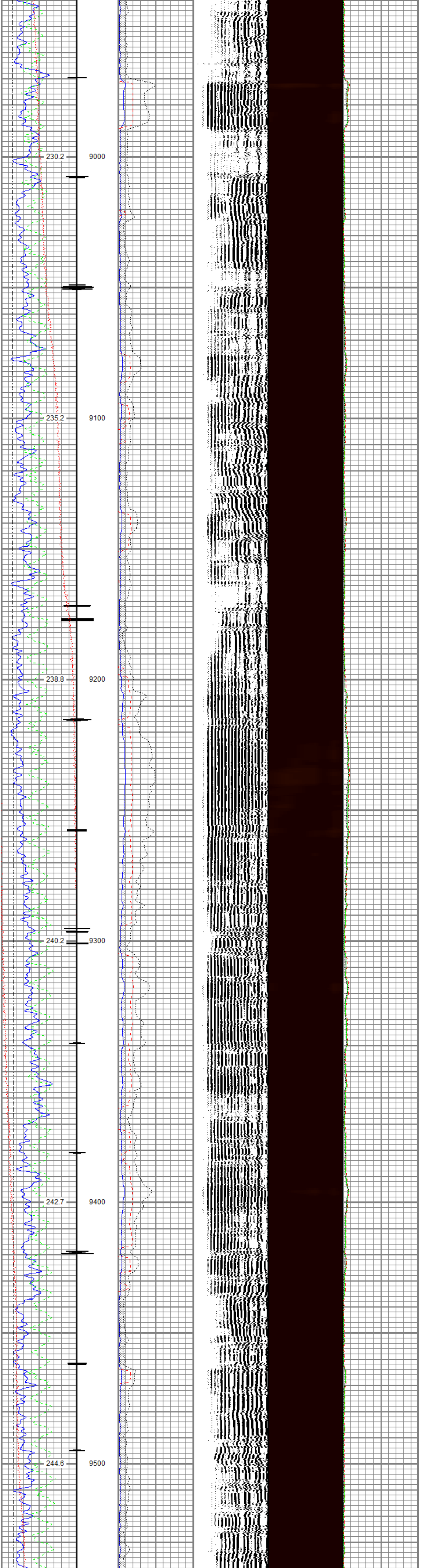

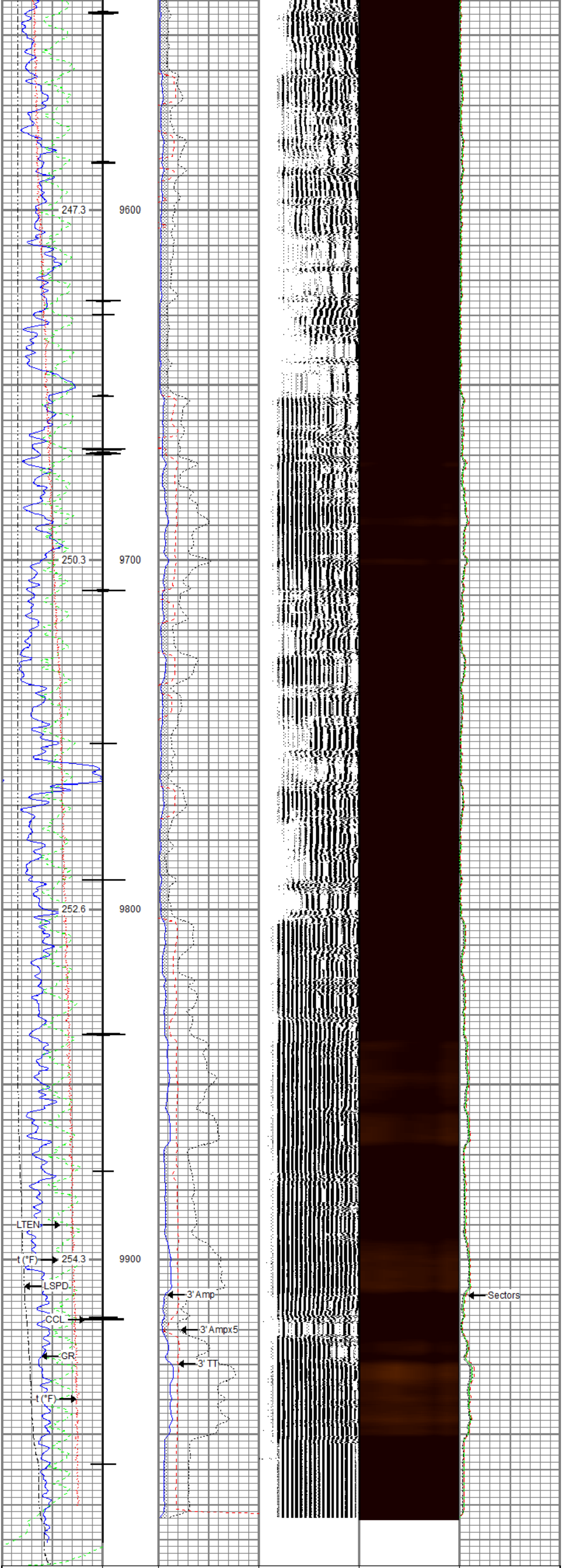

Gamma Ray 0 (GAPI) 200 Casing Collar Locator Line Speed -150 (ft/min) 150 Line Tension 0 (lb) 2000 Temperature 0 (degF) 20	3' Amplitude 0 (mV) 100 3' Amplitude x 5 0 (mV) 20 3' Travel Time 300 (usec) 200	5' Variable Density Log 200 1200	Sector Map 10 110	Average Amplitude 0 150 Mimimum Amplitude 0 150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

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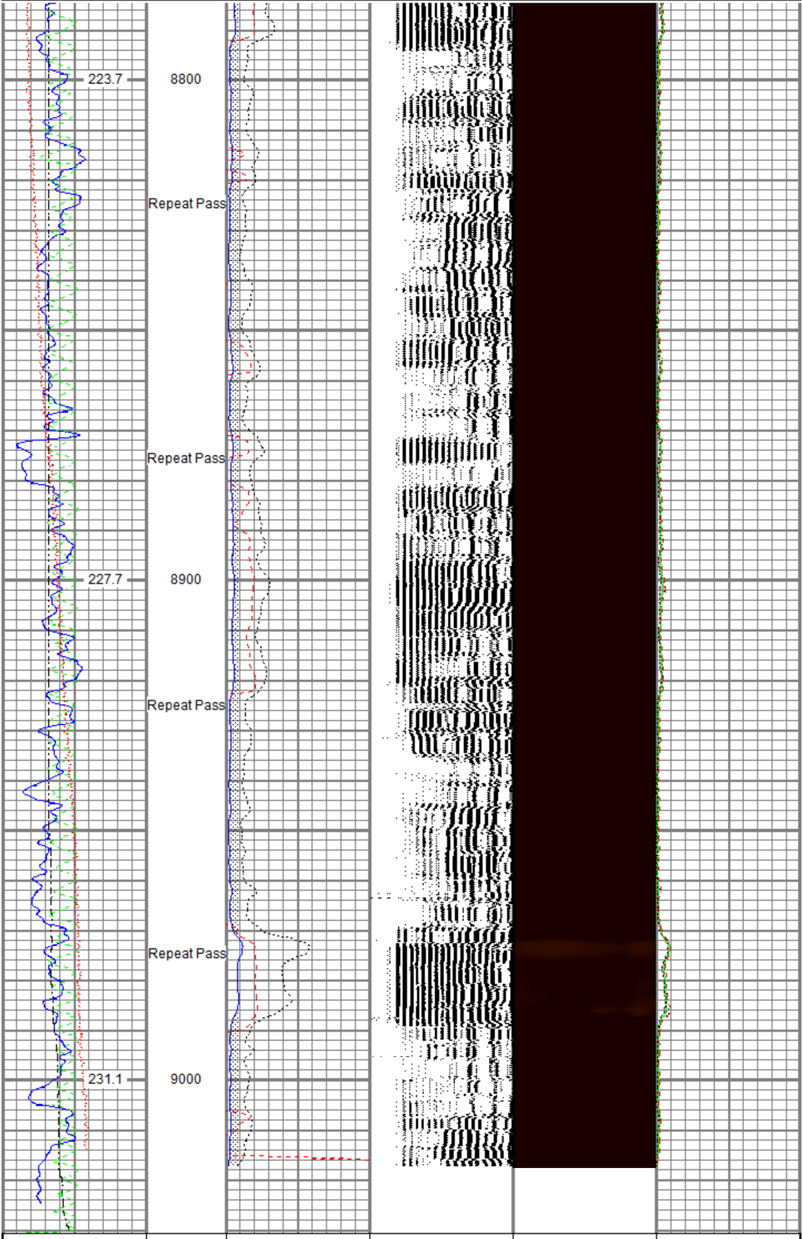
Repeat Pass

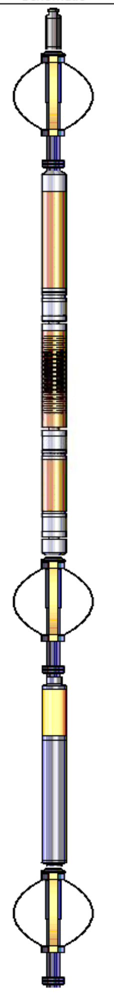
Recorded With 0 PSI Surface Induced Pressure

Database File	new folder\tep_chevron tr 634-27-597_05-08-17_rbl.db
Dataset Pathname	pass6
Presentation Format	ros_rbt004_tep
Dataset Creation	Tue May 09 12:46:46 2017
Charted by	Depth in Feet scaled 1:240

Gamma Ray 0 (GAPI) 200 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



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



Sensor	Offset (ft)
Temp	16.72
WVFS8	14.55
WVFS7	14.55
WVFS6	14.55
WVFS5	14.55
WVFS4	14.55
WVFS3	14.55
WVFS2	14.55
WVFS1	14.55
WVFCAL	14.55
WVF3FT	14.55
WVF5FT	13.55
HeadVolt	10.30
DCCL	6.51
CCL	6.51
GR	3.77

Description	Length (ft)	O.D. (in)	Weight (lb
Titan_Electric_Cable_Heads-Titan_1-1 Electric Cable Head with 1" Fishing Neck	1/11.03	1.69	5.40
Probe_ELine_BowSpring_Centralizer-P Probe 2-3/4" Electric Inline Bowspring Centralizer	_E2.88_275	2.75	20.00
Probe_RADII-C-P_RBT_2750 (FW1305- Probe 2-3/4" Sector Cement Bond Tool with Temperature Probe	09.19	2.75	105.00
Probe_ELine_BowSpring_Centralizer-P Probe 2-3/4" Electric Inline Bowspring Centralizer	_E2.88_275	2.75	20.00
Probe_GR_CCL-P_CGR_2750_S (FW1 Probe 2-3/4" Digital CCL / Gamma Ray Combined	214.546)	2.75	55.00
Probe_ELine_BowSpring_Centralizer-P Probe 2-3/4" Electric Inline Bowspring Centralizer	_E2.88_275	2.75	20.00

Dataset:	TEP_Chevron TR 634-27-597_05-08-17_RBL.db: field/well/run1/pass11.1
Total length:	23.40 ft
Total weight:	225.40 lb
O.D.:	2.75 in

Calibration Report

Database File	C:\ProgramData\Warrior\Data\New folder\TEP_Chevron TR 634-27-597_05-08-17_RBL.db
Dataset Pathname	pass11.1
Dataset Creation	Tue May 09 12:46:30 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:	24.002	ft

Master Calibration, performed Mon May 08 19:08:48 2017:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	-0.005	0.558	0.800	81.196	142.660	1.538
CAL	-0.006	0.595				
5'	-0.002	0.517	0.800	81.196	154.697	1.180
SUM						
S1	-0.006	0.561	0.000	100.000	176.381	1.089
S2	-0.005	0.556	0.000	100.000	178.071	0.950
S3	-0.006	0.556	0.000	100.000	178.118	1.028
S4	-0.005	0.560	0.000	100.000	176.945	0.924
S5	-0.005	0.558	0.000	100.000	177.697	0.926
S6	-0.005	0.557	0.000	100.000	177.816	0.955
S7	-0.006	0.556	0.000	100.000	178.215	0.994
S8	-0.005	0.553	0.000	100.000	179.229	0.976

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	0.595	1.000	0.000

Air Zero Calibration, performed Mon May 08 19:10:15 2017:

	Raw (v)	Calibrated (v)	Results
	Zero	Zero	Offset
3'	-0.006	0.000	0.000
5'	-0.003	0.000	0.000
SUM			
S1	-0.006	0.000	-0.000
S2	-0.005	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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Company	TEP Rocky Mountain LLC
Well	Chervron TR 634-27-597
Field	Trail Ridge
County	Garfield
State	Colorado