Company TEP ROCKY MOUNTAIN LLC
Well FEDERAL RWF 443-9
Field RULISON
County GARFIELD
State CO CountryUSA

RADIAL CEMENT BOND LOG GAMMA RAY/CCL

Company	TEP ROCKY MOUNTAIN LLC
Well	FEDERAL RWF 443-9
Field	RULISON
County	GARFIELD
State	CO

Country USA

Location: API #: 05-045-24394
2539' FSL & 484' FEL NESE
Lat/Long: 39.539408 / -107.885167
SEC 9 TWP 6S RGE 94W

Other Services
NONE

Permanent Datum	GL	Elevation	6369'
Log Measured From	KB		
Drilling Measured From	KB		

Elevation
K.B. 6399'
D.F. N/A
G.L. 6369'

Date	7 MARCH 2022
Run Number	ONE
Depth Driller	9480'
Depth Logger	9327'
Bottom Logged Interval	9325'
Top Log Interval	SURFACE
Open Hole Size	8.75"
Type Fluid	WATER
Density / Viscosity	8.3#
Max. Recorded Temp.	244* F
Estimated Cement Top	SEE LOG
Time Well Ready	ROA
Time Logger on Bottom	11:00
Equipment Number	8048
Location	WINDSOR, CO
Recorded By	SCHUMAN
Witnessed By	MR DUSTIN WELSH

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

Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String	9.625"	36#	SURFACE	1117'
Prot. String				
Production String	4.5"	11.6#	SURFACE	9412'
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

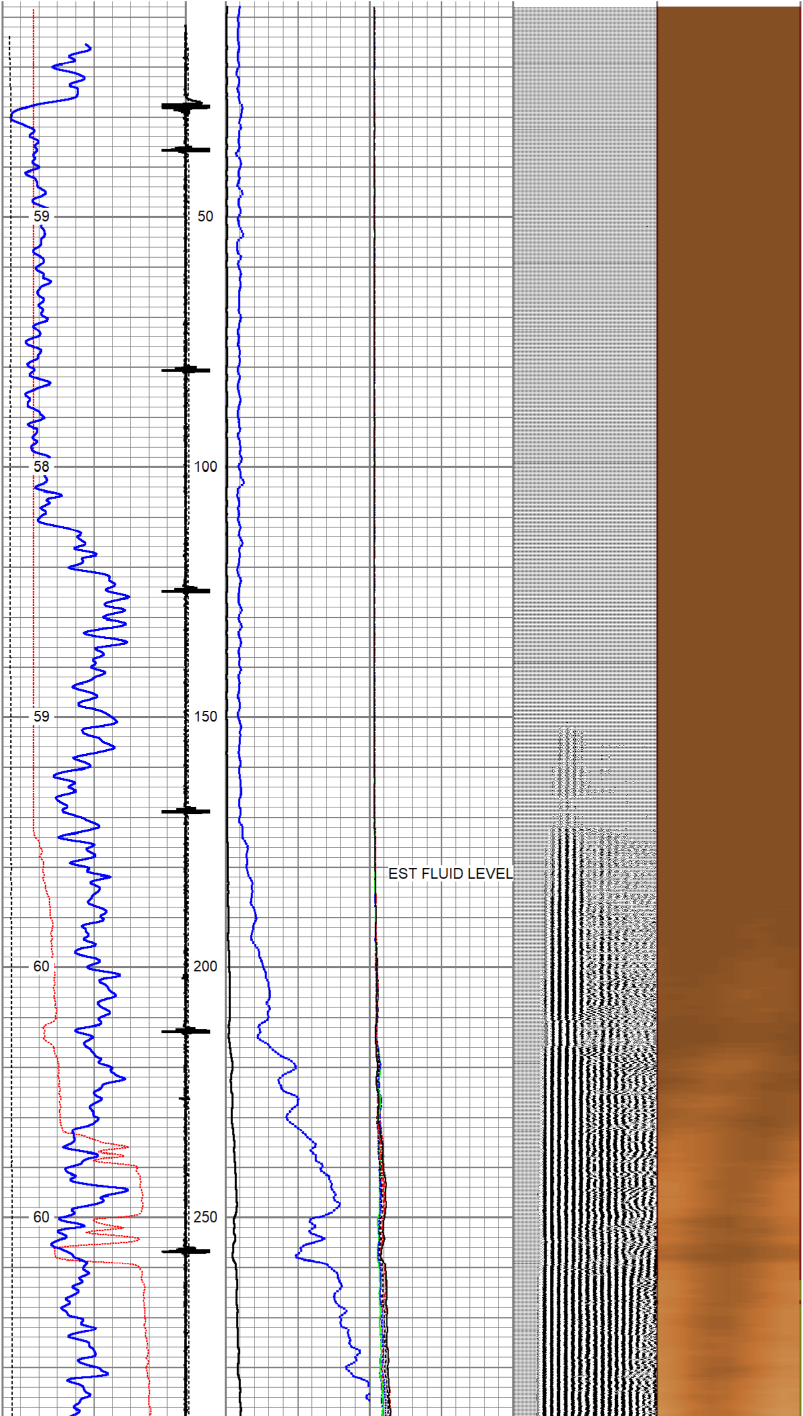
CORRELATED TO CASING TALLY MARKER JOINT 5615-5636'
MAIN PASS RAN WITH ZERO PSI @ SURFACE
LOG WAS RAN WITH 30' K.B.
THANK YOU FOR USING THE WIRELINE GROUP!

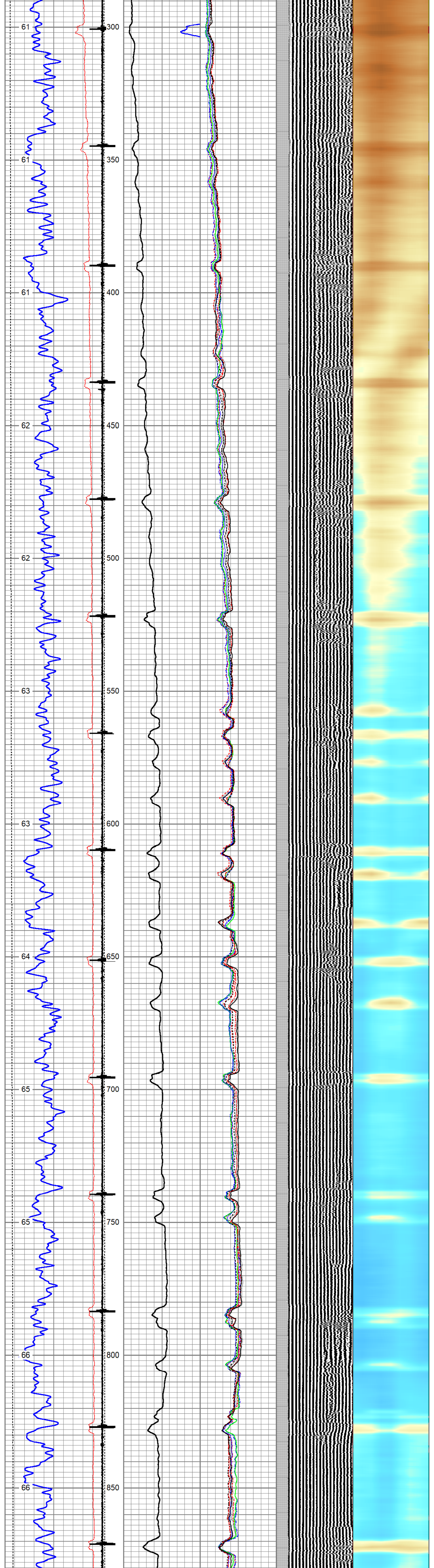
MAIN PASS

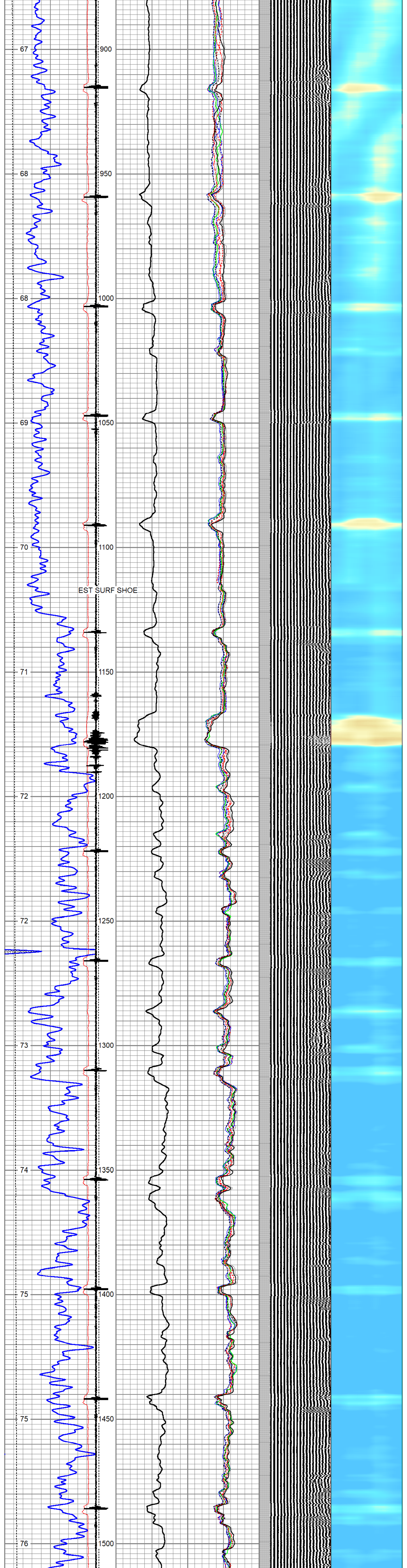
LOGGED WITH ZERO PSI AT SURFACE
5"=100'

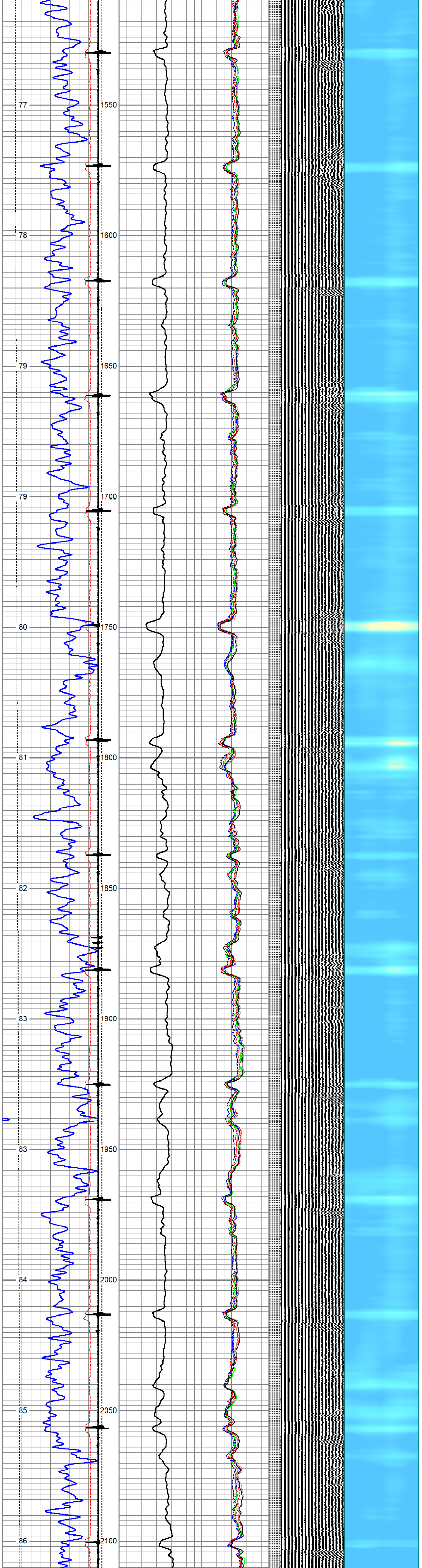
Database File	federal rwf 443-9.db
Dataset Pathname	CBL/pass7
Presentation Format	rbl7
Dataset Creation	Mon Mar 07 11:04:53 2022
Charted by	Depth in Feet scaled 1:240

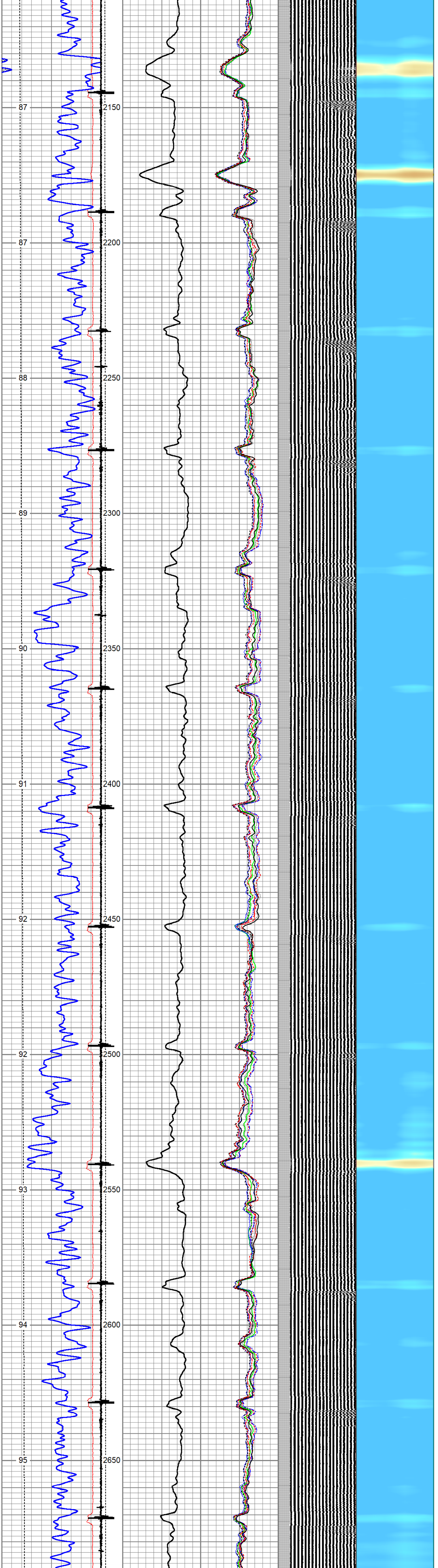
335 TT (usec) 235 0 GR (GAPI) 150 50 TEMP (degF) 250	LTEN (lb) 3000	Amplitude 0 (mV) 100	-5 AMPS2 150 -5 AMPS3 150	VDL 200 (usec) 1200	Cement Map
TEMP (degF)	CCL -1 1	Amplified Amplitude 0 (mV) 10	-5 AMPS4 150 -5 AMPS5 150 -5 AMPS6 150 -5 AMPS7 150 -5 AMPS8 150 -5 AMPS1 150		

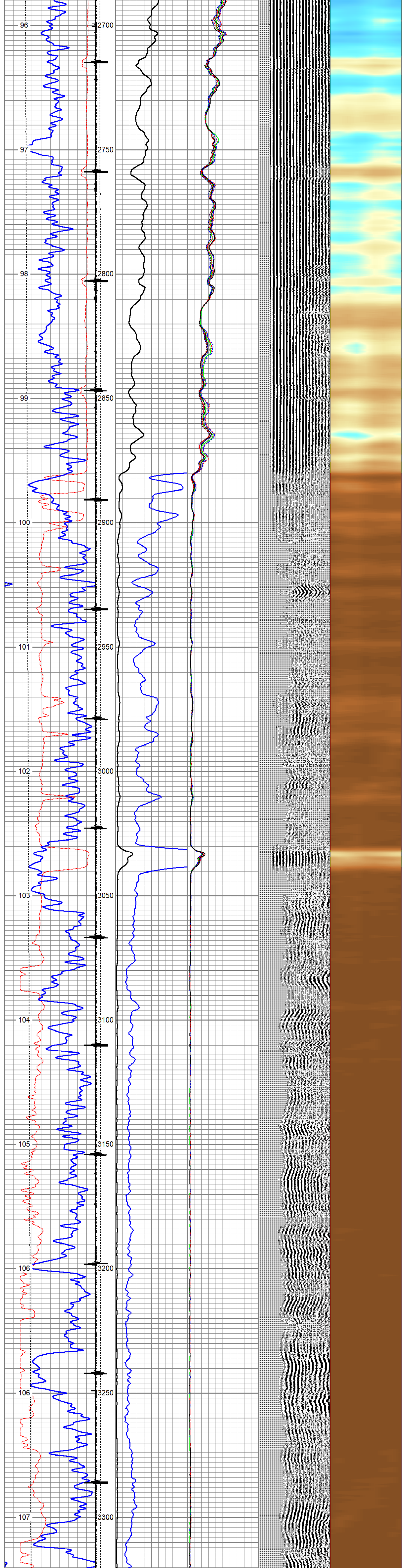


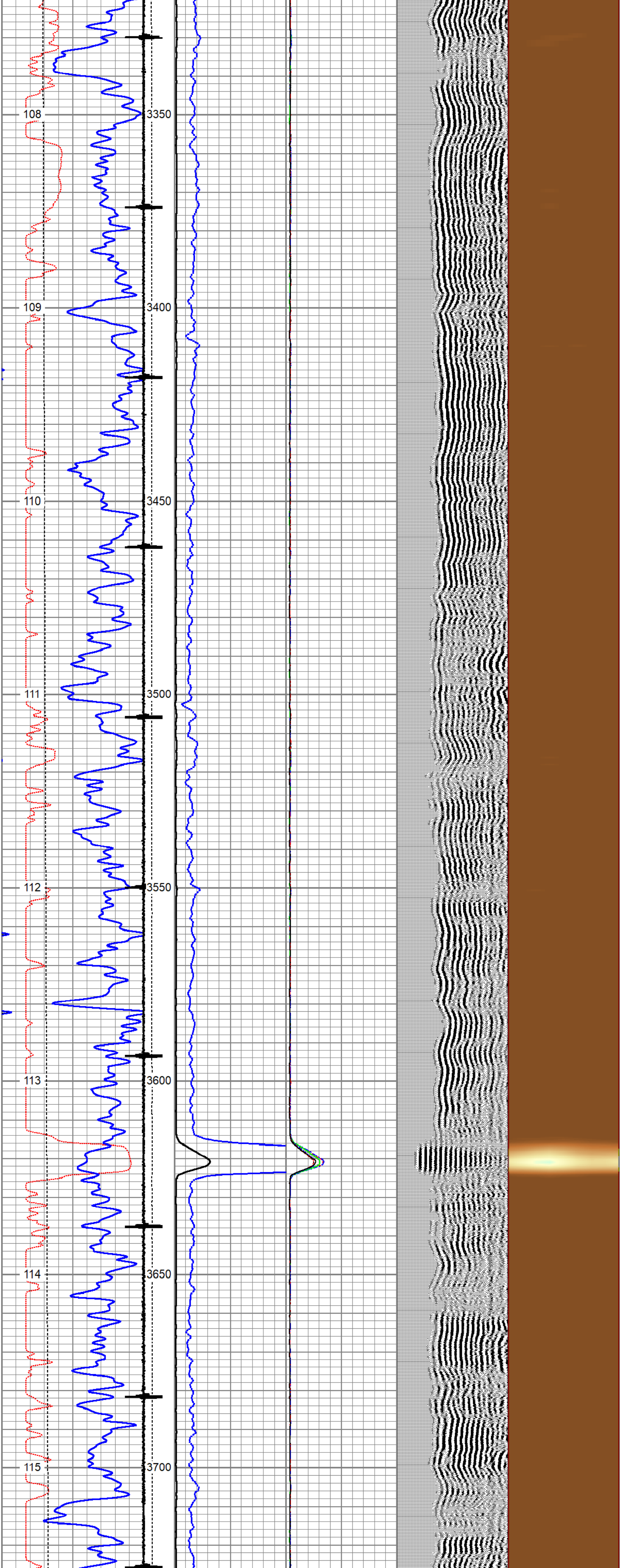


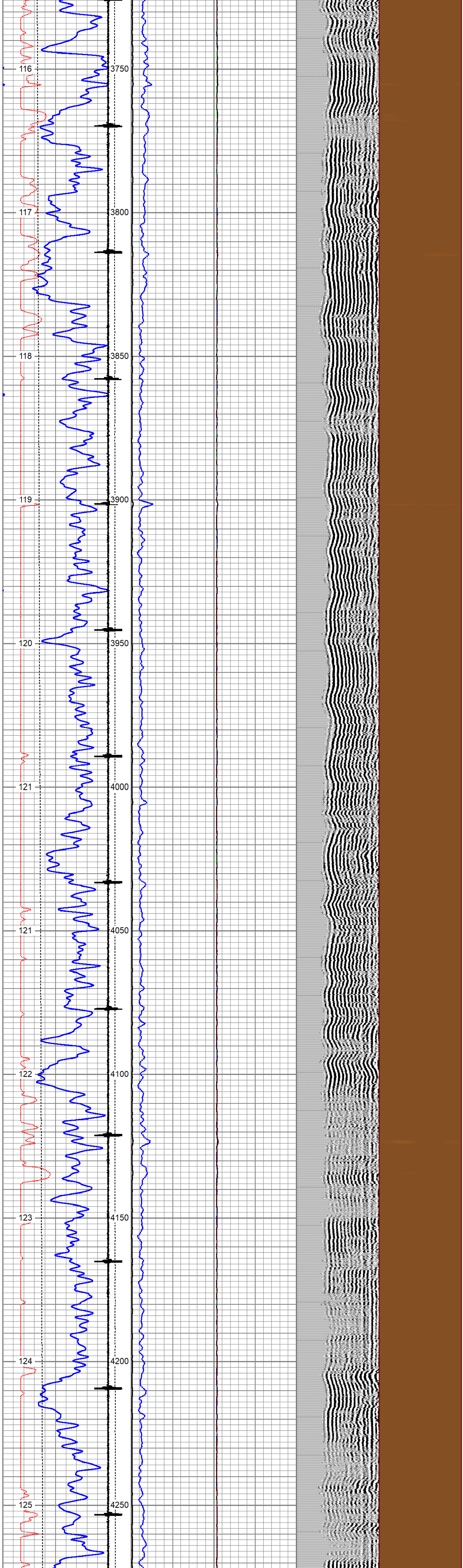








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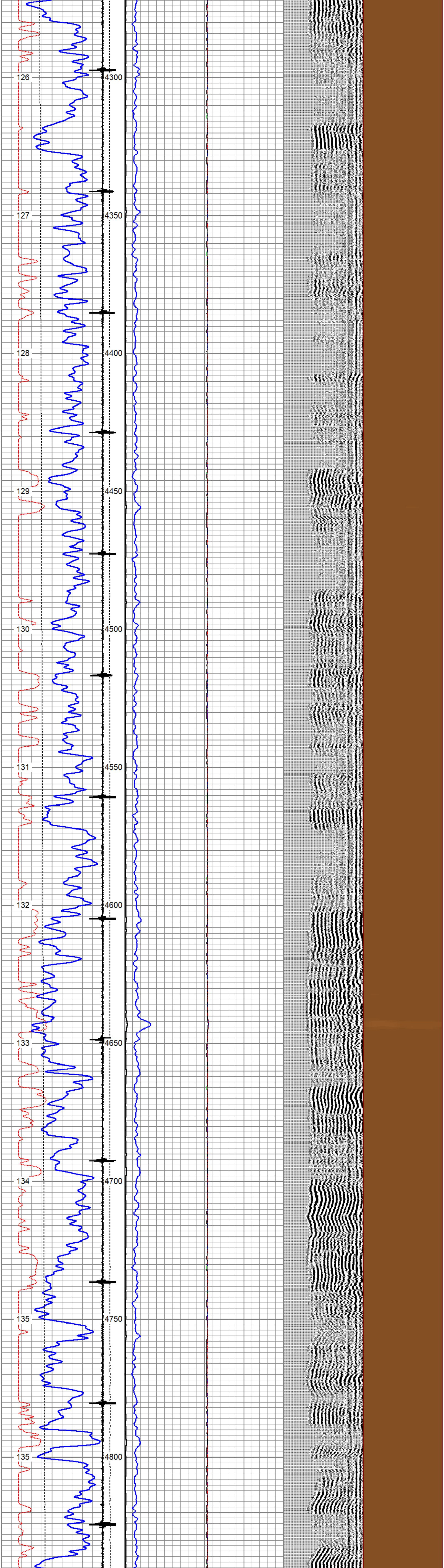
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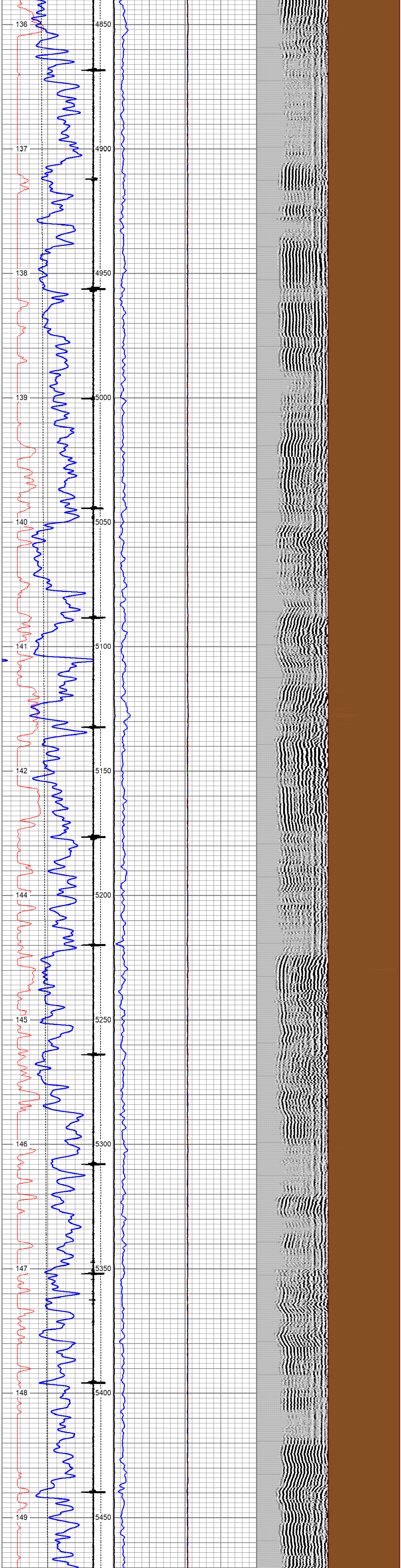
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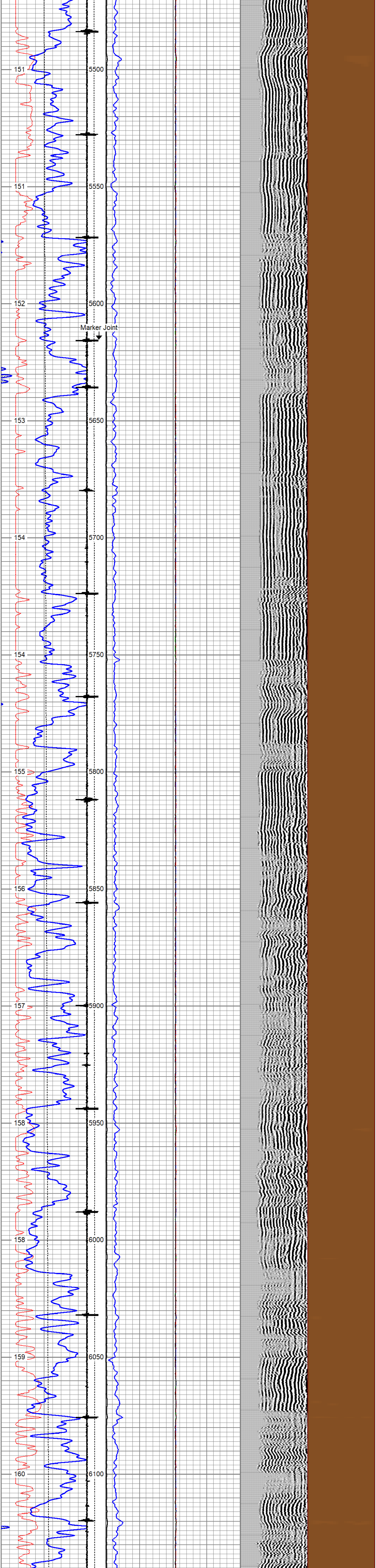
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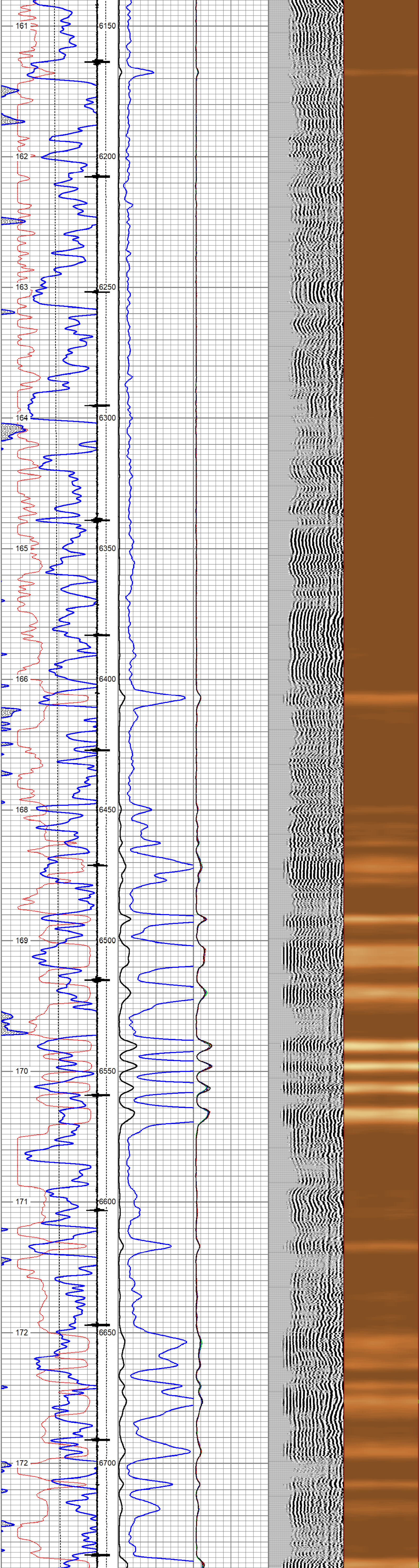
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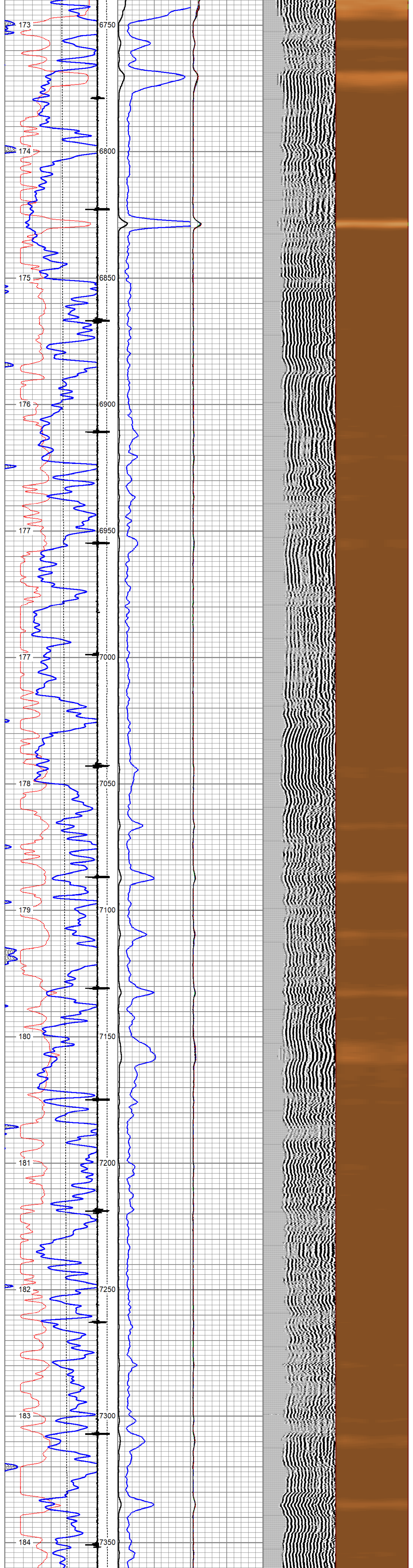
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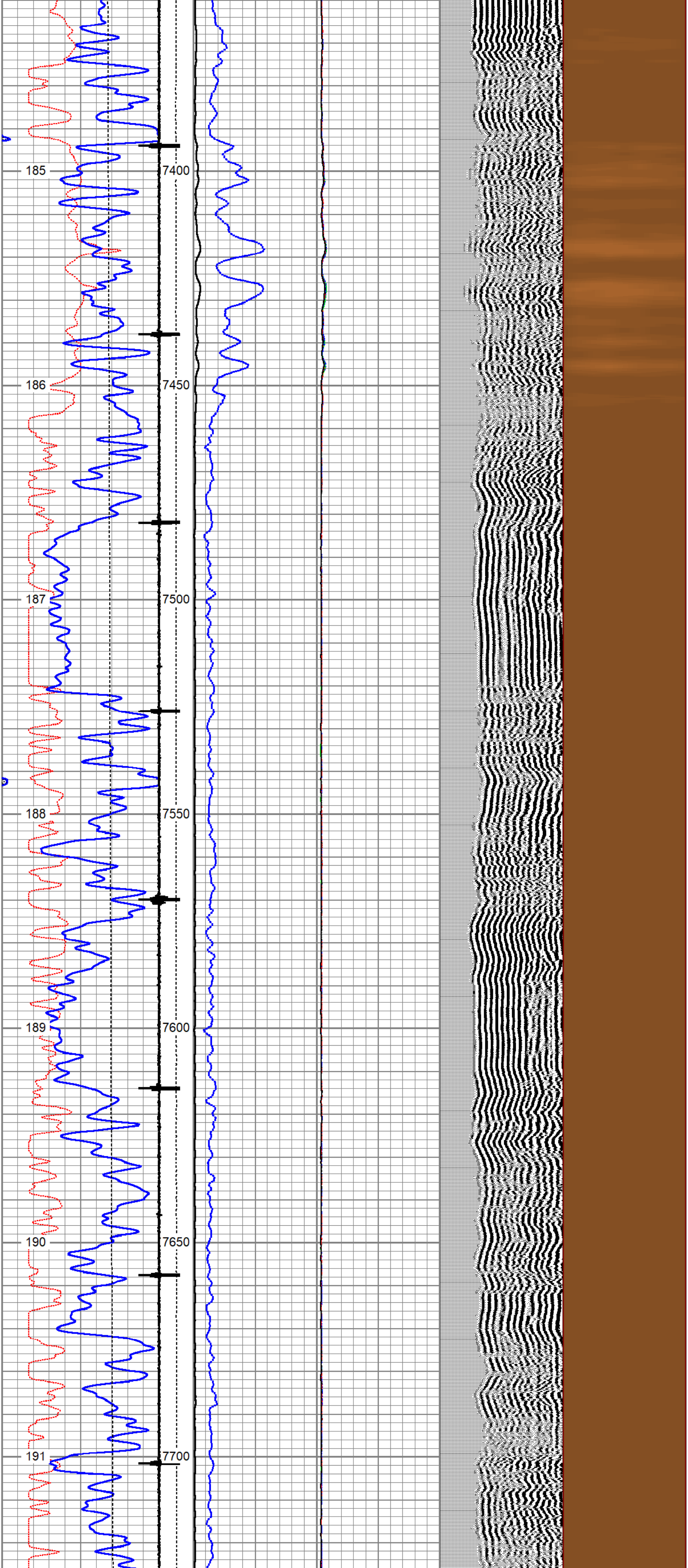
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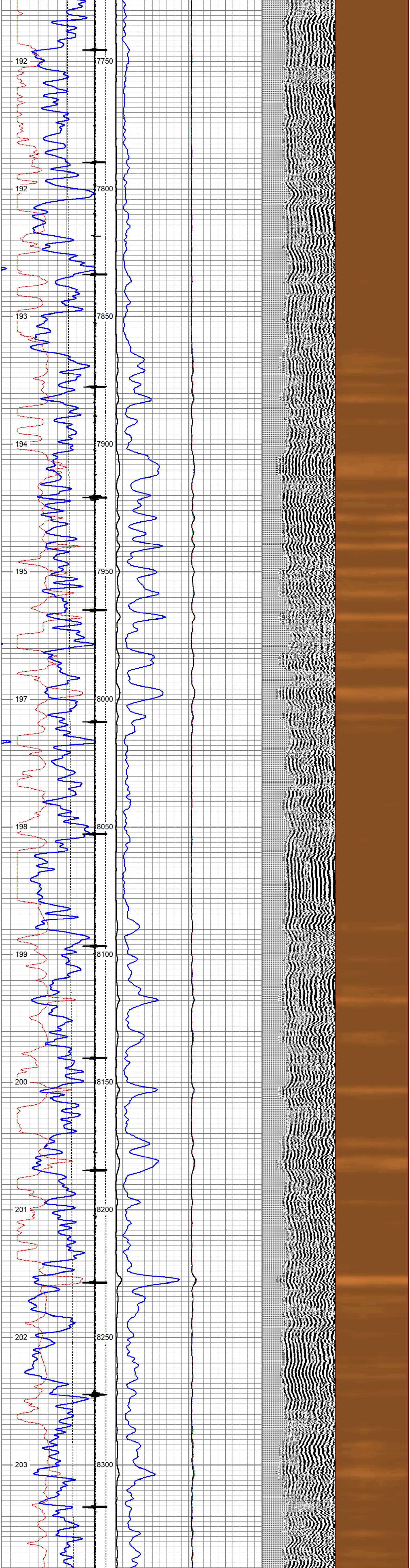

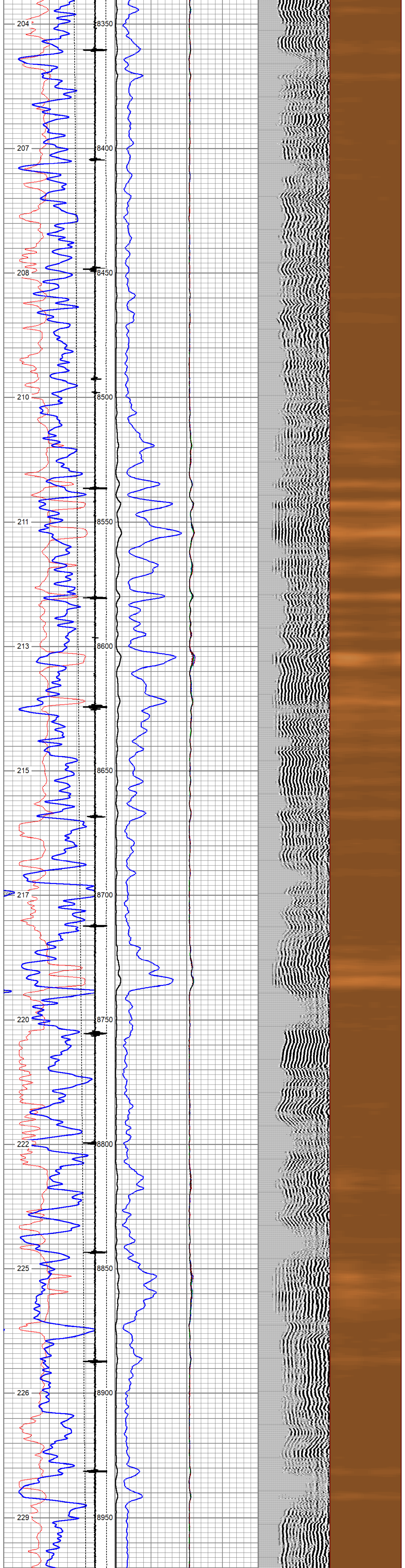

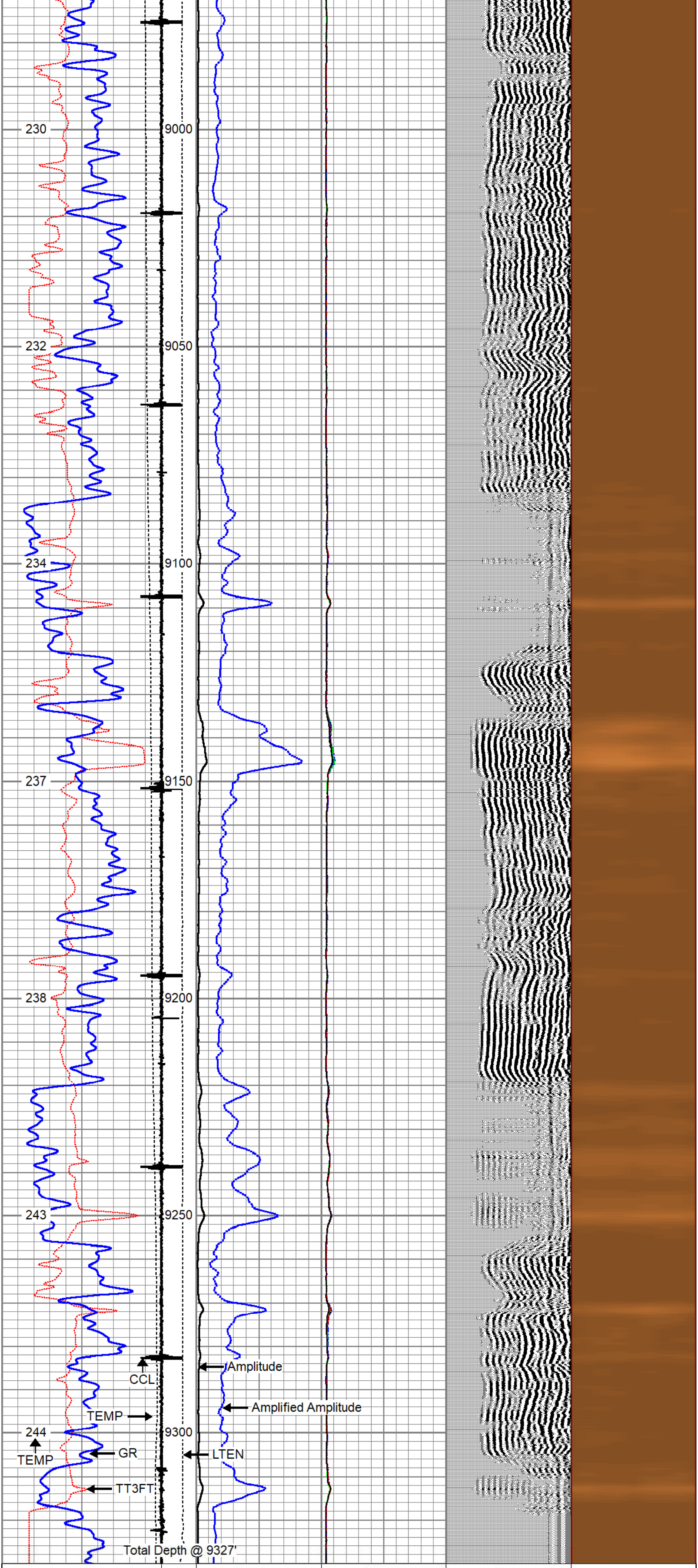

335 TT (usec) 235	LTEN	Amplitude	-5 AMPS2 150	VDL	Cement Map
0 GR (GAPI) 150	(lb)	0 (mV) 100	-5 AMPS3 150	200 (usec) 1200	
50 TEMP (degF) 250	3000	Amplified Amplitude	-5 AMPS4 150	░ ▒ ▓ █	
TEMP	CCL	0 (mV) 10	-5 AMPS5 150		
(degF)	-1 1		-5 AMPS6 150		
			-5 AMPS7 150		
			-5 AMPS8 150		
			-5 AMPS1 150		

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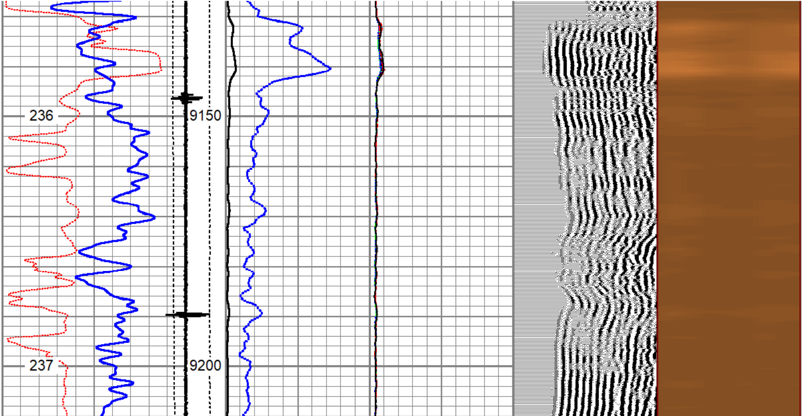
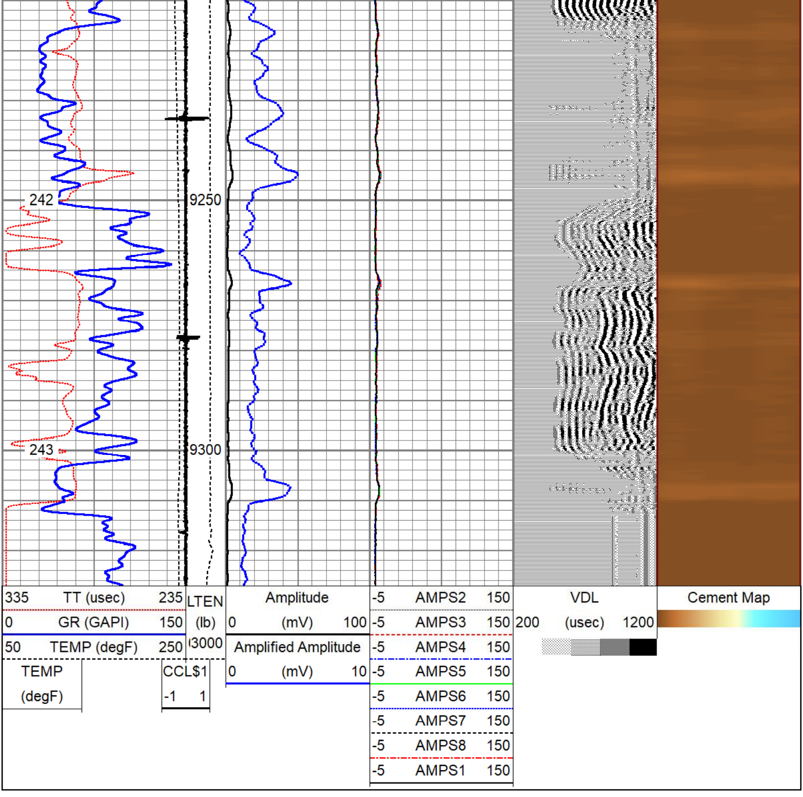
REPEAT SECTION

LOGGED WITH ZERO PSI AT SURFACE
5"=100'

Database File	federal rwf 443-9.db
Dataset Pathname	CBL/pass3
Presentation Format	rbl7
Dataset Creation	Mon Mar 07 08:56:09 2022
Charted by	Depth in Feet scaled 1:240

335 TT (usec) 235	LTEN	Amplitude	-5 AMPS2 150	VDL	Cement Map
0 GR (GAPI) 150	(lb)	0 (mV) 100	-5 AMPS3 150	200 (usec) 1200	
50 TEMP (degF) 250	3000	Amplified Amplitude	-5 AMPS4 150	░ ▒ ▓ █	
TEMP	CCL$1	0 (mV) 10	-5 AMPS5 150		
(degF)	-1 1		-5 AMPS6 150		
			-5 AMPS7 150		
			-5 AMPS8 150		
			-5 AMPS1 150		





Calibration Report

Database File	federal rwf 443-9.db
Dataset Pathname	CBL/pass6
Dataset Creation	Mon Mar 07 10:47:30 2022

Gamma Ray Calibration Report

Serial Number:	FW1905-206	
Tool Model:	Probe275	
Performed:	Fri Jan 7 14:01:56 2022	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	0.9474	GAPI/cps

Temperature Calibration Report

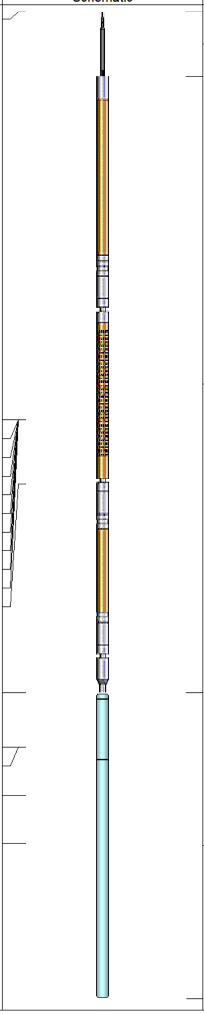
Serial Number:	FW1905-206	
Tool Model:	Probe275	
Performed:	Thu Dec 16 14:49:37 2021	
	Reference	Reading
Low Reference:	100.00 degF	6258.73
High Reference:	350.00 degF	26472.00
Gain:	0.01	
Offset:	22.59	
Delta Spacing	2	

Segmented Cement Bond Log Calibration Report

Serial Number:	FW1905150-4.5	
Tool Model:	RBTC3	
Calibration Casing Diameter:	4.500	in
Calibration Depth:	2389.112	ft

Master Calibration, performed Mon Mar 7 10:47:00 2022:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.007	0.852	0.700	81.196	92.519	0.076
CAL	0.006	1.015				
5'	0.010	0.704	0.700	81.196	115.912	-0.408
SUM						
S1	0.003	0.759	0.000	100.000	132.227	-0.412
S2	0.007	0.789	0.000	100.000	127.938	-0.931
S3	0.008	0.864	0.000	100.000	116.733	-0.899
S4	0.008	0.874	0.000	100.000	115.447	-0.884
S5	0.010	0.919	0.000	100.000	110.038	-1.076
S6	0.007	0.961	0.000	100.000	104.792	-0.704
S7	0.007	0.922	0.000	100.000	109.320	-0.797
S8	0.007	0.842	0.000	100.000	119.819	-0.828

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
ErrCt	15.39					
			Cable-Head-Titan 1 7/16" Cable Head	1.00	1.44	1.00
			RBT-RBTC3 (FW1905150-4.5)	9.62	2.75	90.00
WVFS8	9.02					
WVFS7	9.02					
WVFS6	9.02					
WVFS5	9.02					
WVFS4	9.02					
WVFS3	9.02					
WVFS2	9.02					
WVFS1	9.02					
WVFCAL	9.02					
WVF3FT	9.02					
WVF5FT	8.02					
WVFSYNC	4.77					
DCCL	3.92					
CCL	3.92					
TEMP	3.17					
GR	2.42		GCT-Probe275 (FW1905-206) Probe 2 3/4" Gamma Ray CCL w/Temperature	4.77	2.75	40.00

Dataset:	federal rwf 443-9.db: field/well/CBL/pass6
Total length:	15.39 ft
Total weight:	131.00 lb
O.D.:	2.75 in

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Company	**TEP ROCKY MOUNTAIN LLC**		
Well	**FEDERAL RWF 443-9**		
Field	**RULISON**		
County	**GARFIELD**		
State	**CO**	**Country**	**USA**