RADIAL CEMENT BOND LOG
GAMMA RAY/CCL

Company TEP ROCKY MOUNTAIN LLC
Well FEDERAL RWF 31-9
Field RULISON
County GARFIELD
State CO
CountryUSA

Company	TEP ROCKY MOUNTAIN LLC
Well	FEDERAL RWF 31-9
Field	RULISON
County	GARFIELD
State	CO
Country	USA

Location: API # : 05-045-24398

2541' FSL & 523' FEL
LAT/LONG: 39.539414 / -107.885304
SEC 9 TWP 6S RGE 94W

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

Other Services
NONE

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

Date	6 MARCH 2022		
Run Number	ONE		
Depth Driller	10176'		
Depth Logger	10,143'		
Bottom Logged Interval	10,141'		
Top Log Interval	SURFACE		
Open Hole Size	8.75"		
Type Fluid	WATER		
Density / Viscosity	8.3#		
Max. Recorded Temp.	248 F		
Estimated Cement Top	SEE LOG		
Time Well Ready	ROA		
Time Logger on Bottom	18:30		
Equipment Number	8048		
Location	WINDSOR, CO		
Recorded By	D.GIRODO		
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"	38#	SURFACE	1114'
Prot. String				
Production String	4.5"	11.6#	SURFACE	10,219'
Liner				

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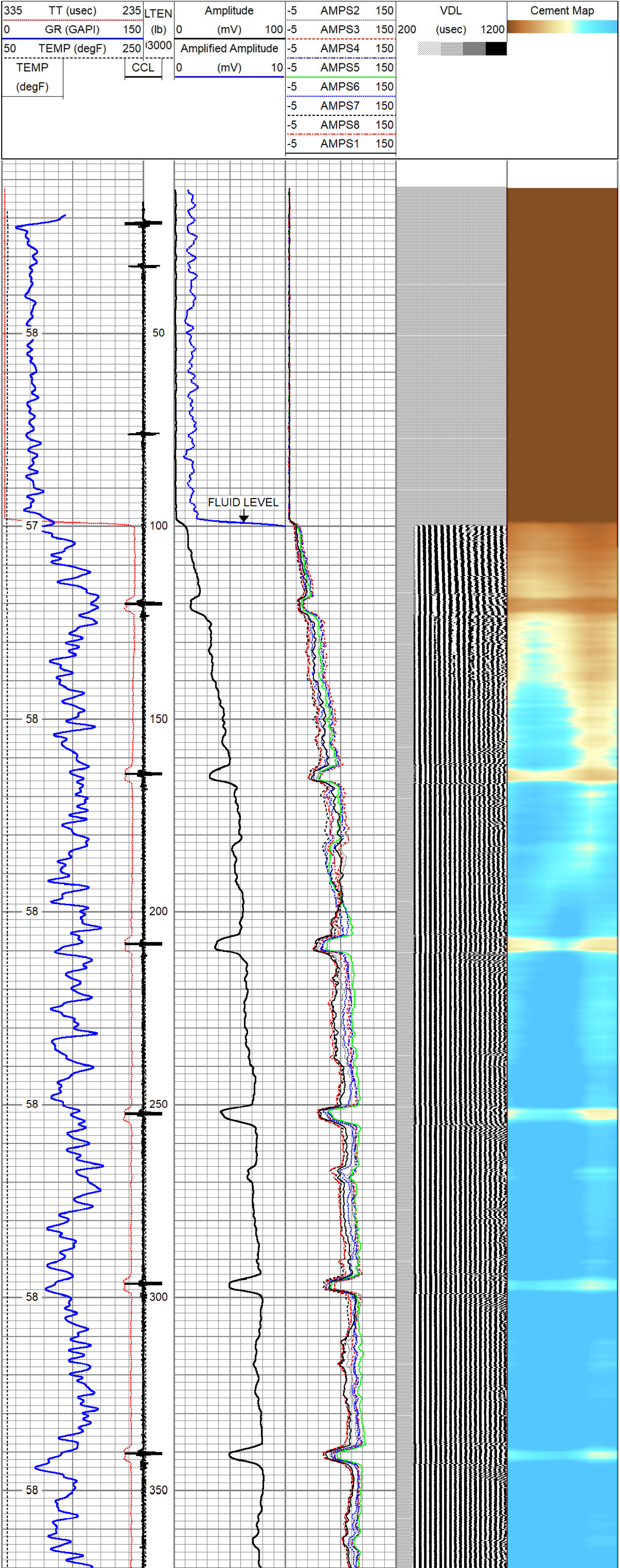
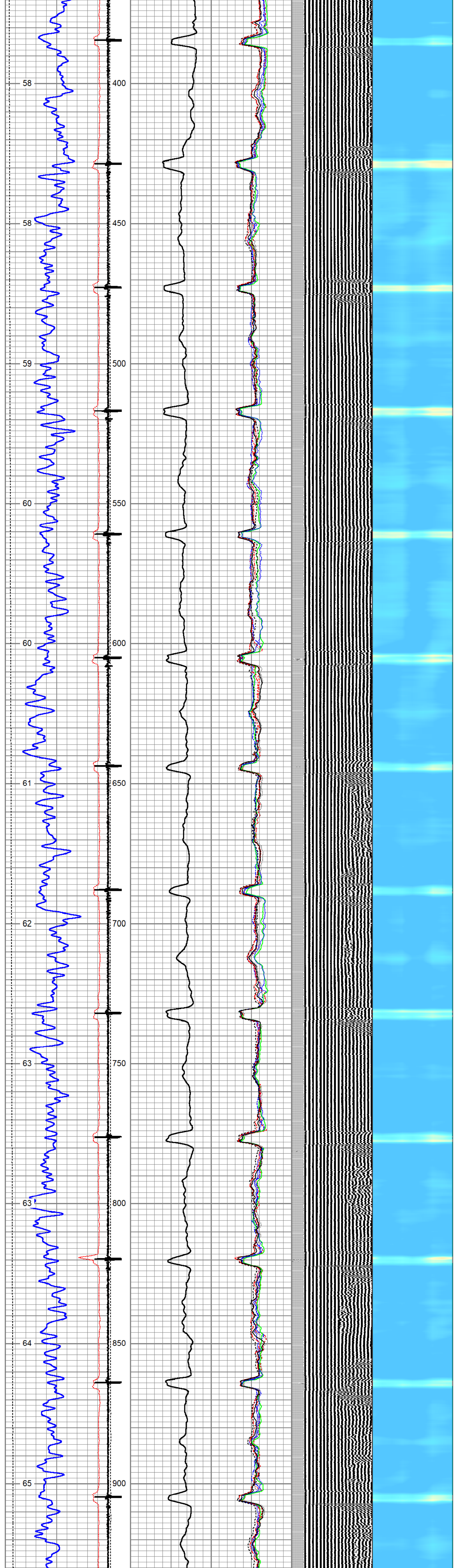
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, 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.

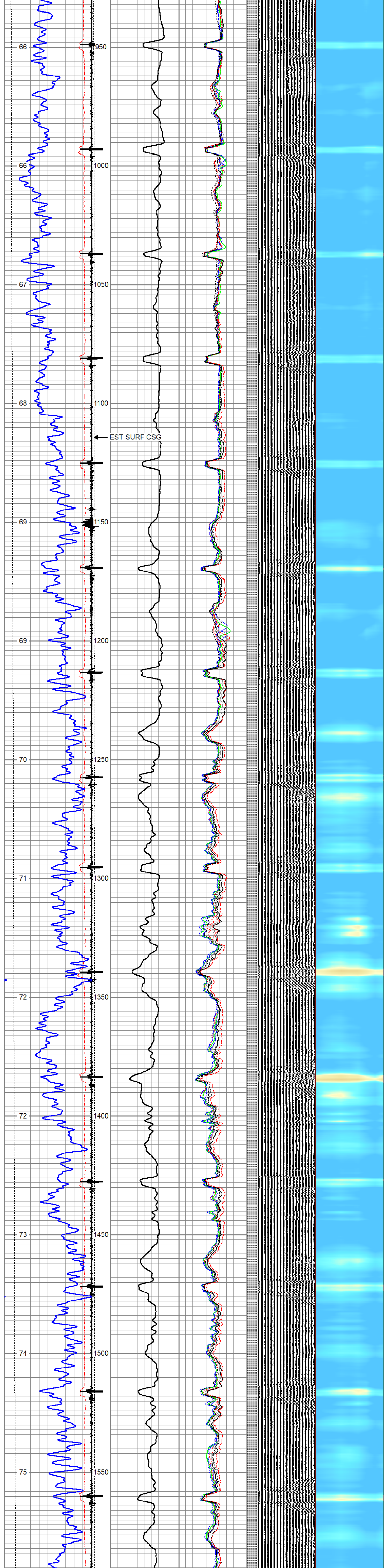
Comments

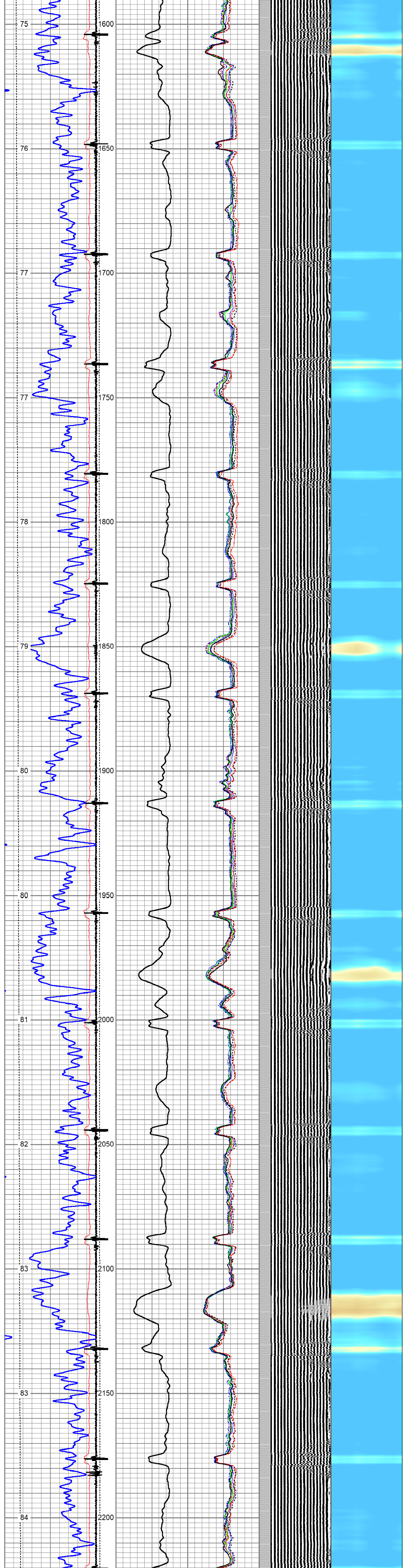
CORRELATED TO CASING TALLY MARKER JOINT TOP @ 5988'
MAIN PASS RAN WITH ZERO PSI @ SURFACE
THANK YOU FOR USING THE WIRELINE GROUP

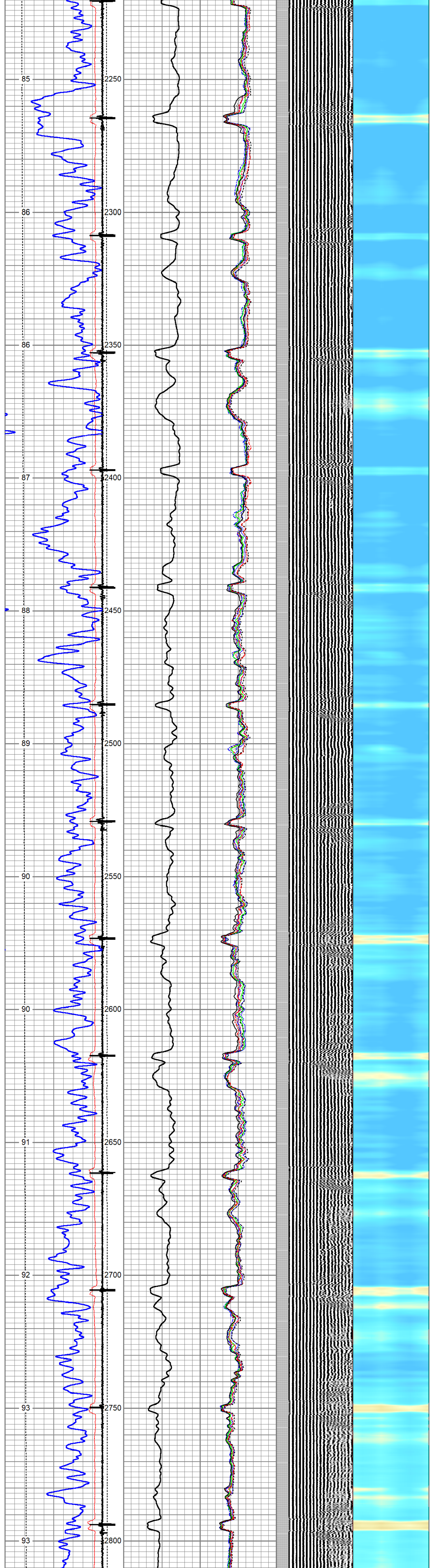
Database File	federal rwf 31-9.db
Dataset Pathname	cbl/merge1
Presentation Format	rbl7
Dataset Creation	Sun Mar 06 21:20:37 2022
Charted by	Depth in Feet scaled 1:240

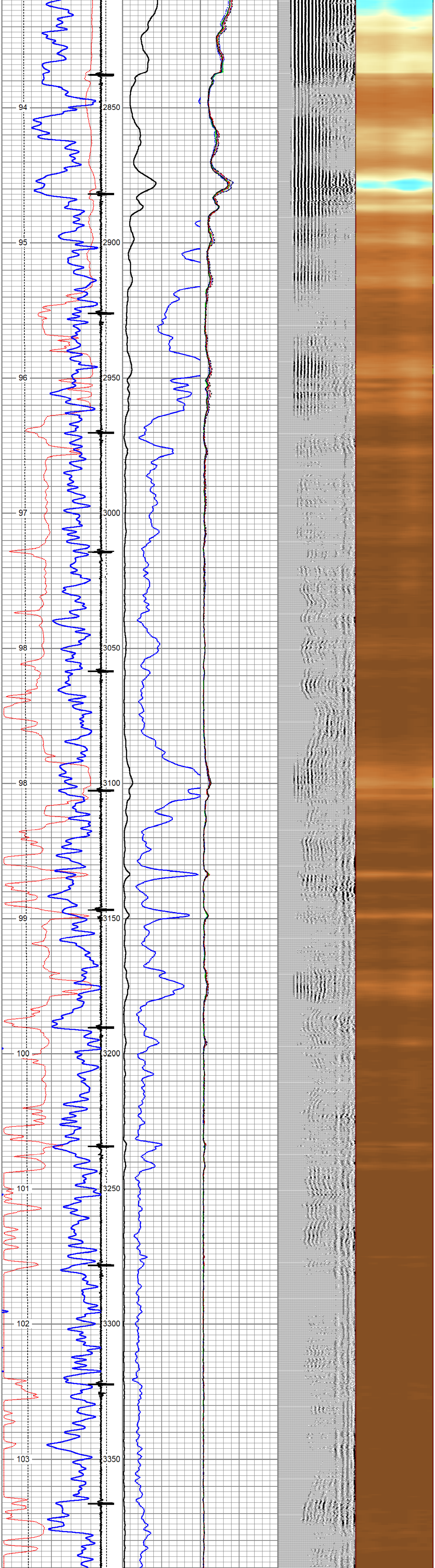


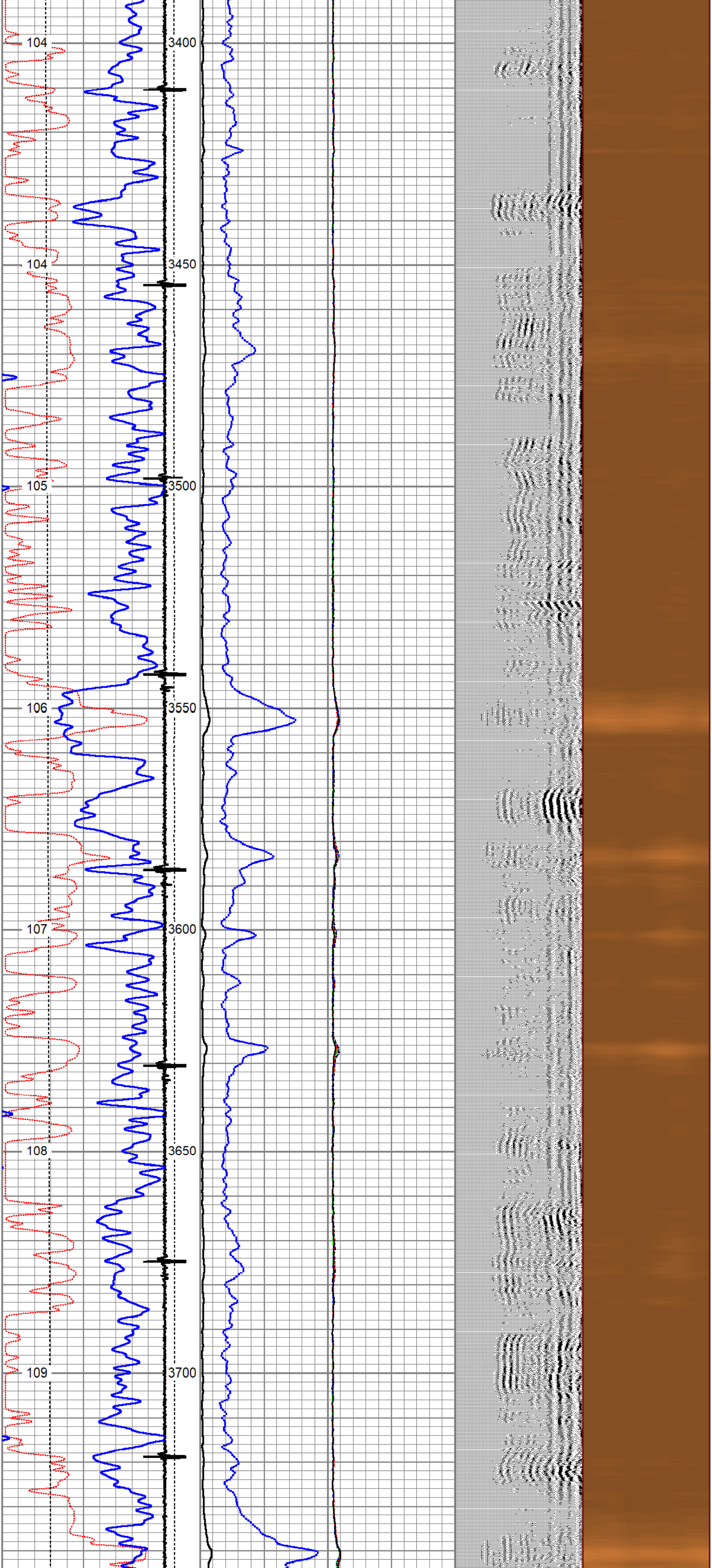


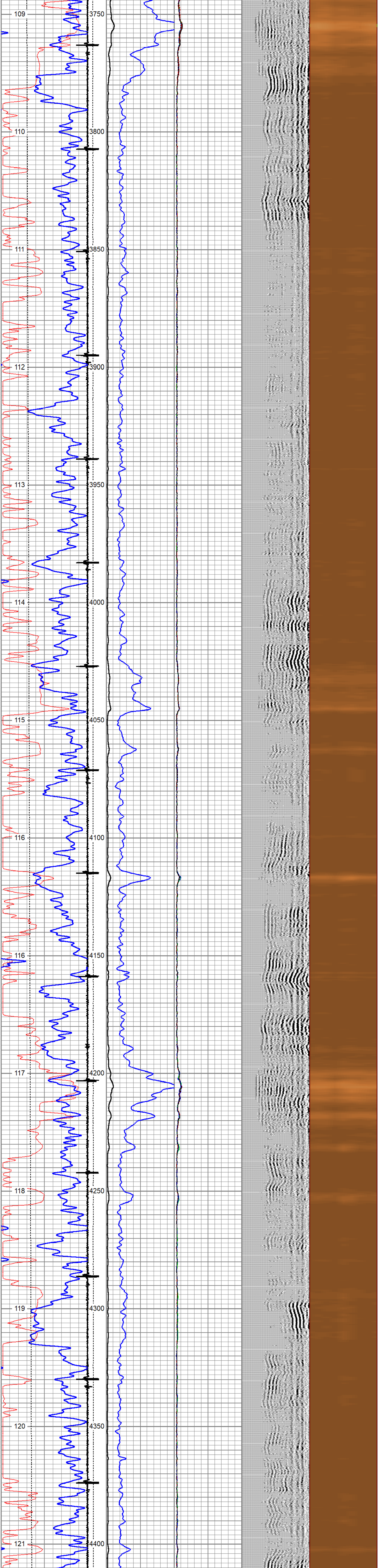








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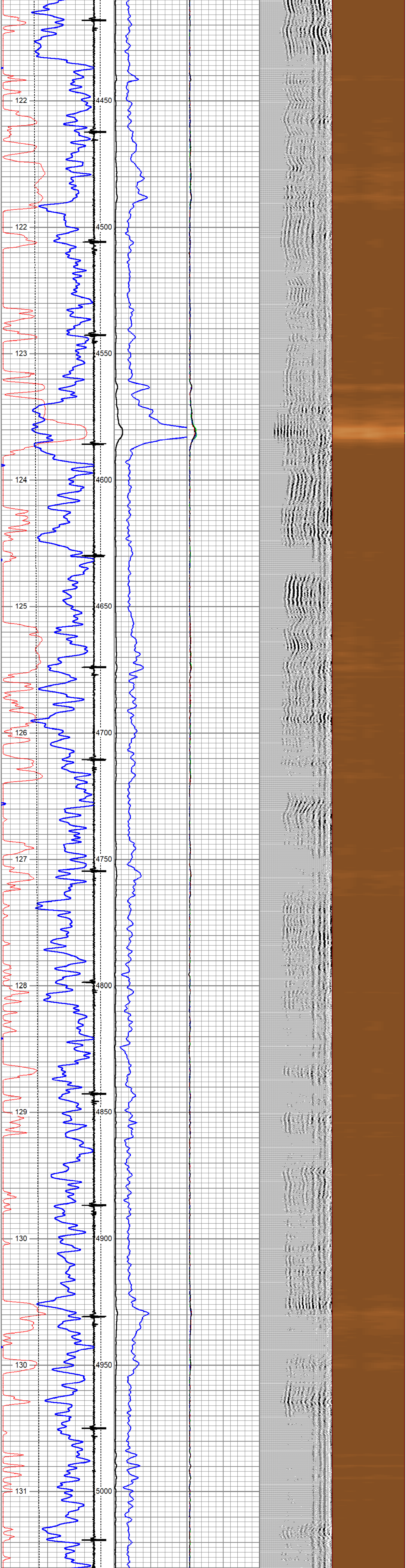
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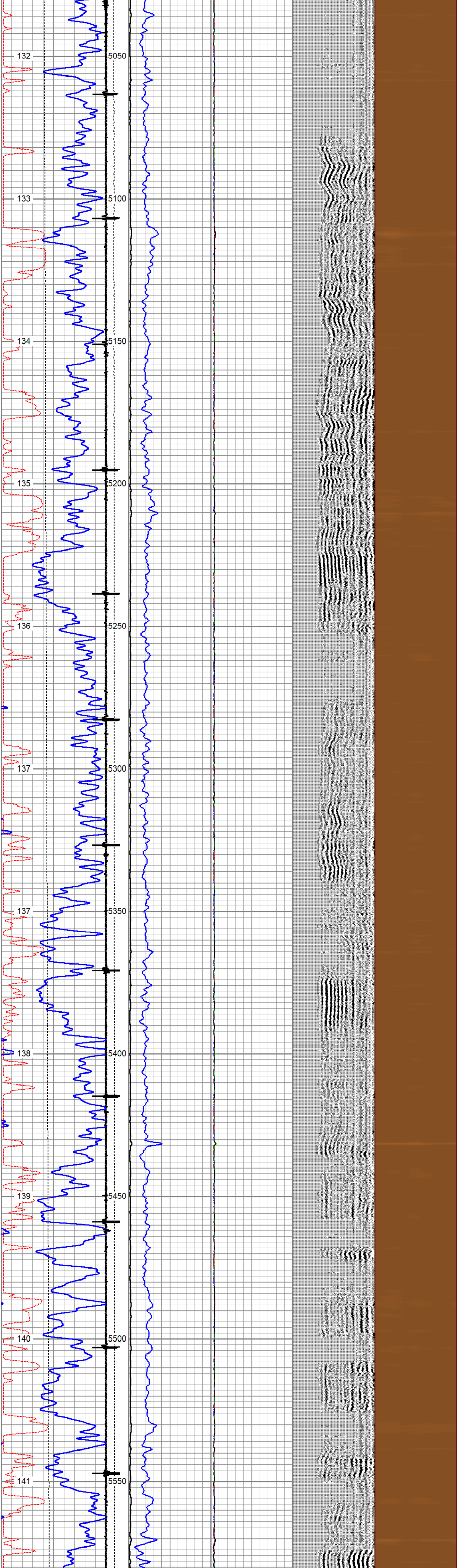
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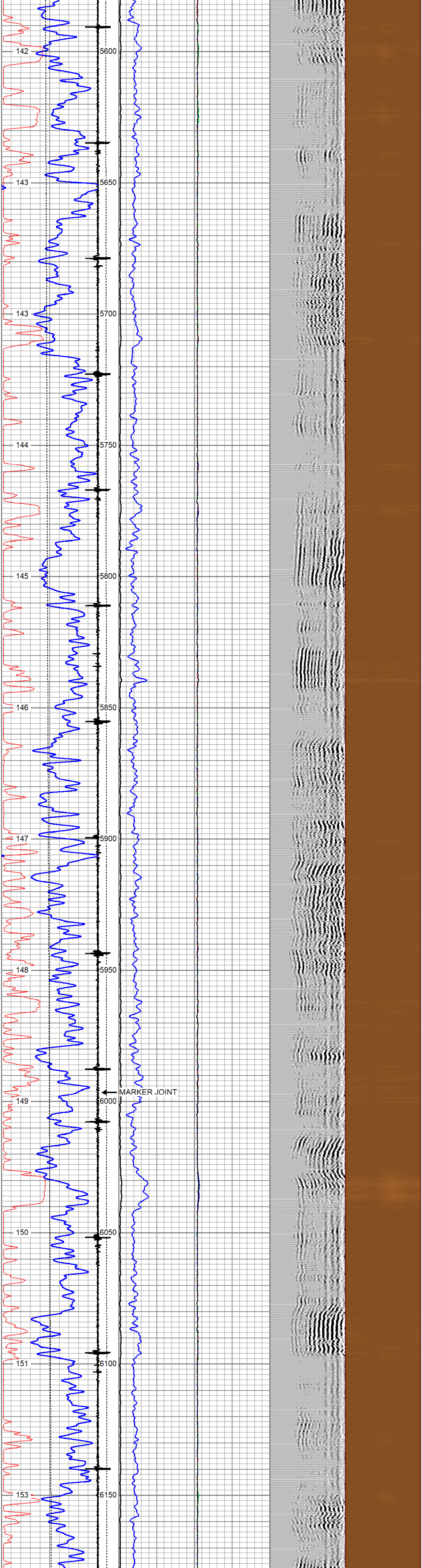
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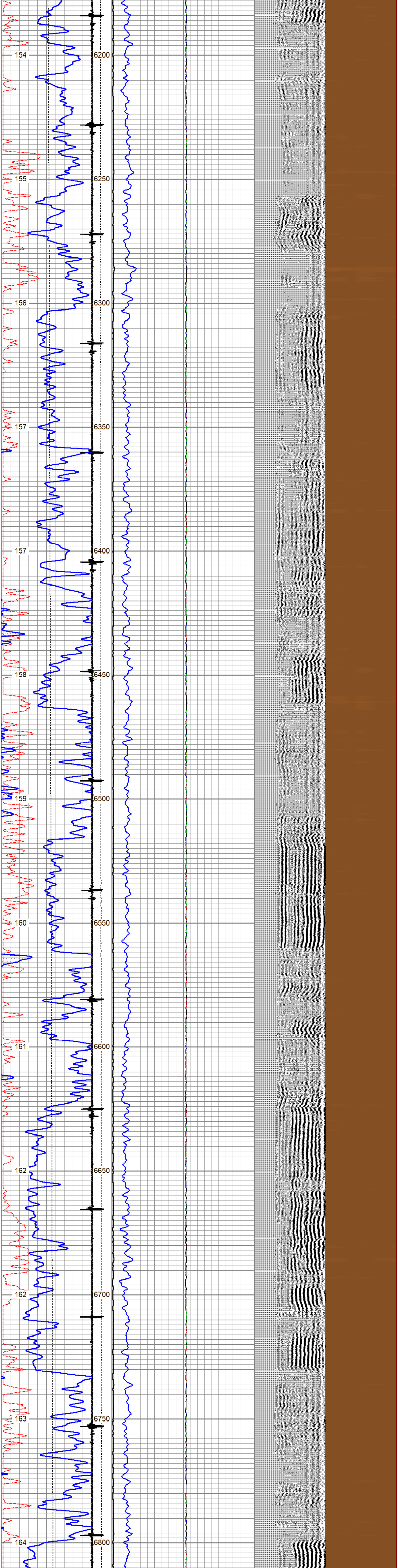
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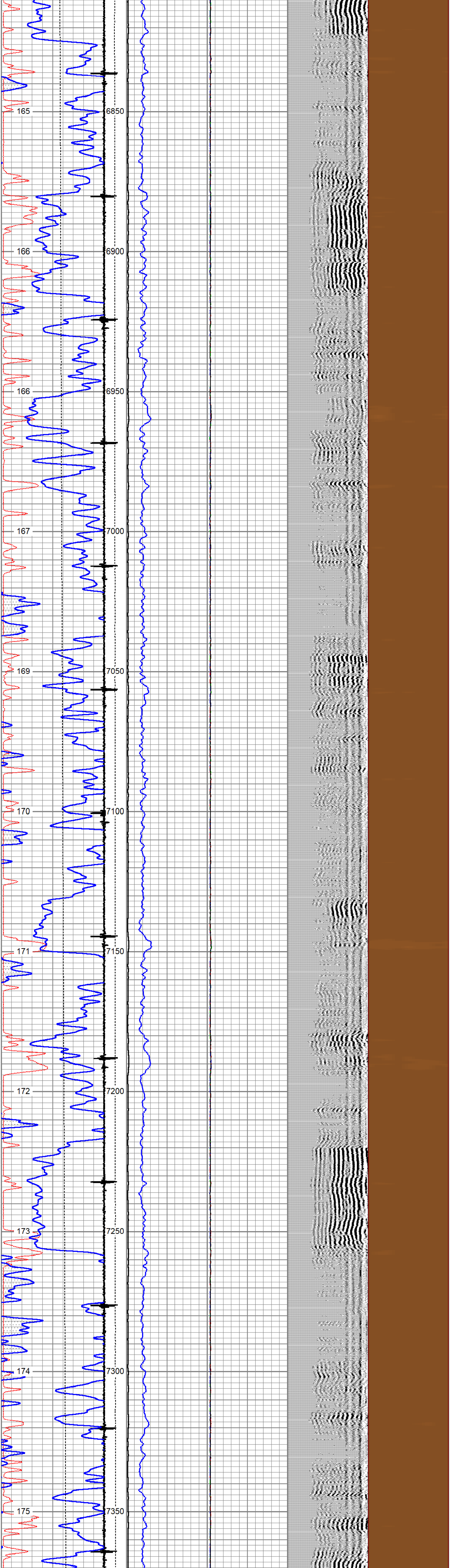
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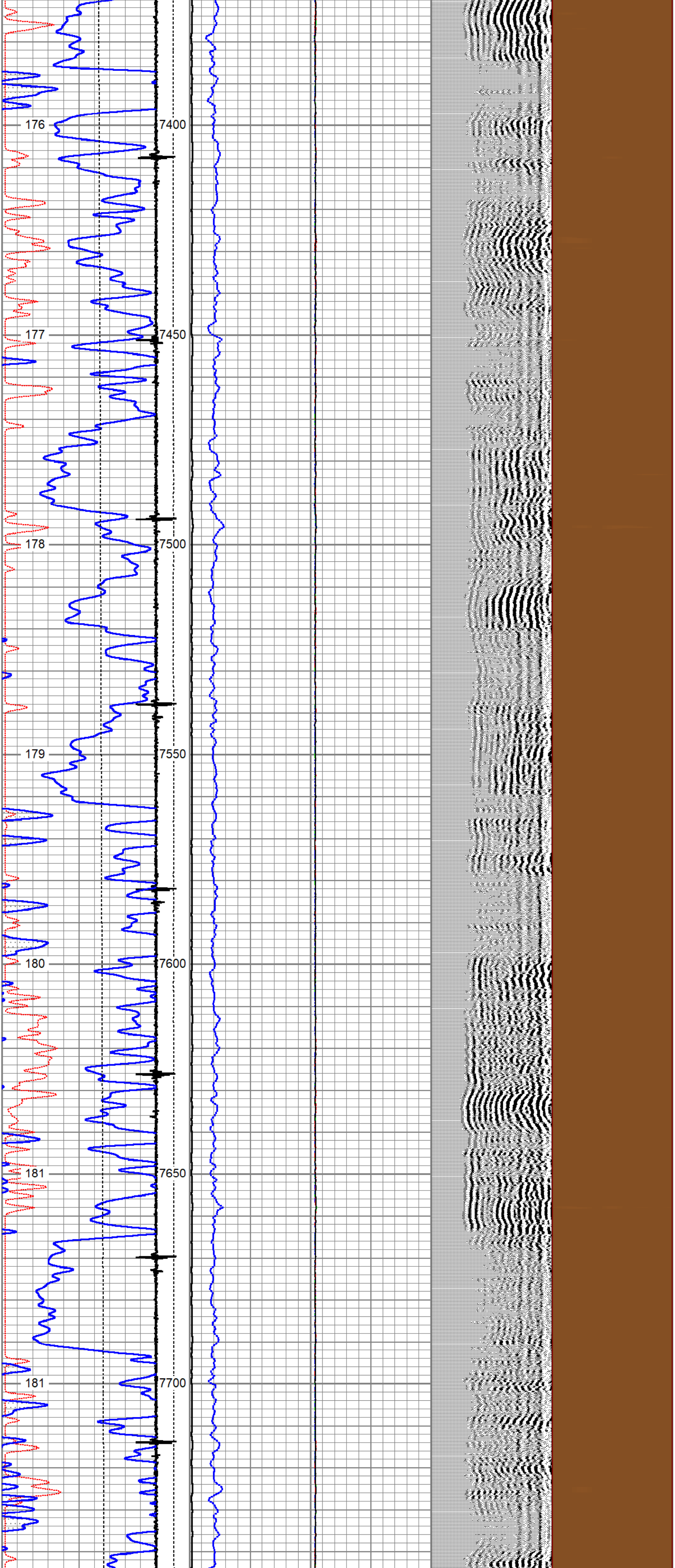
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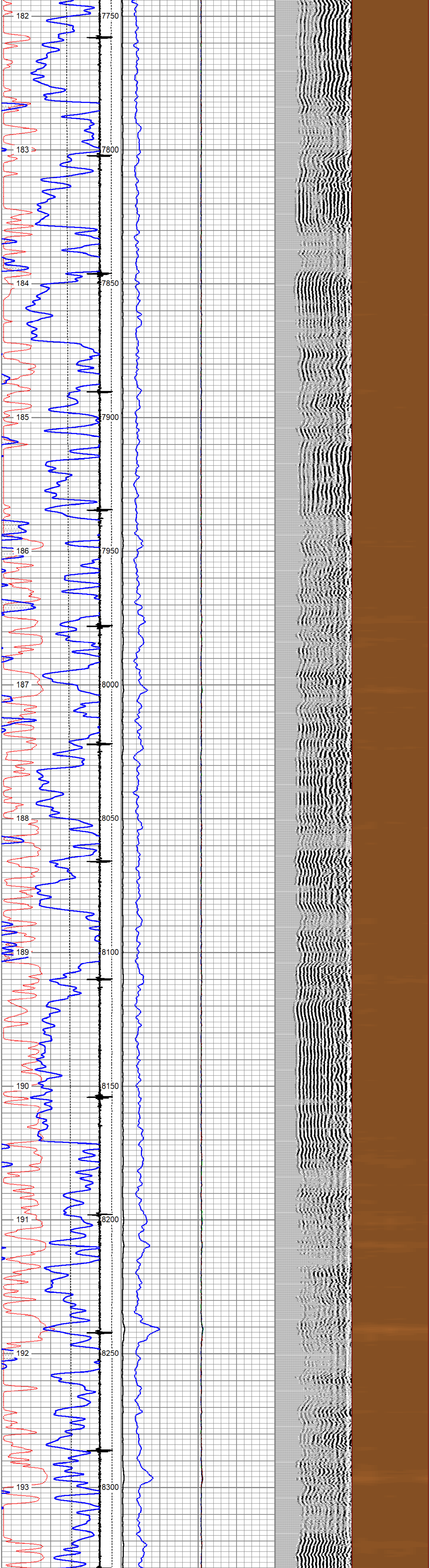
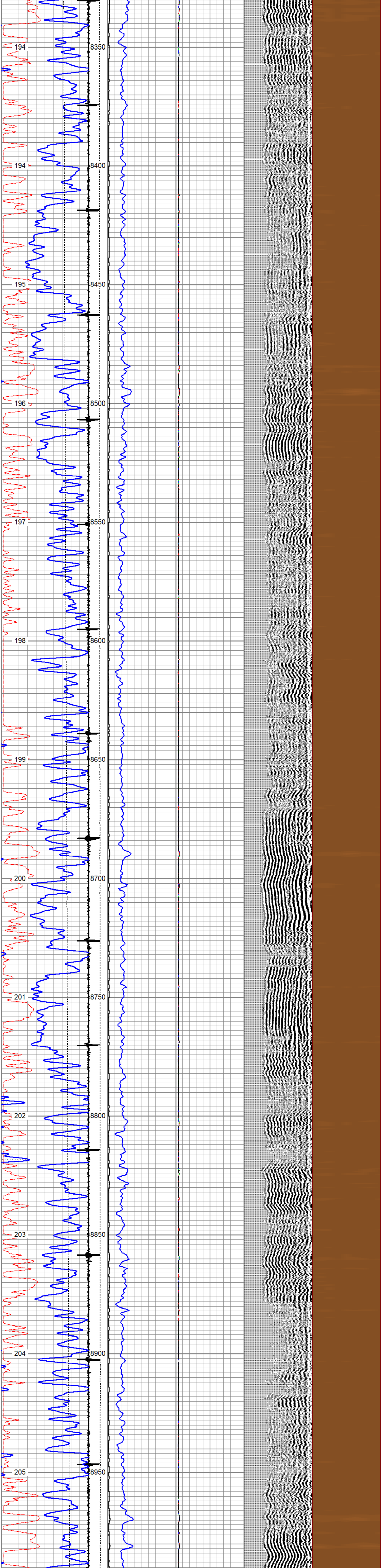
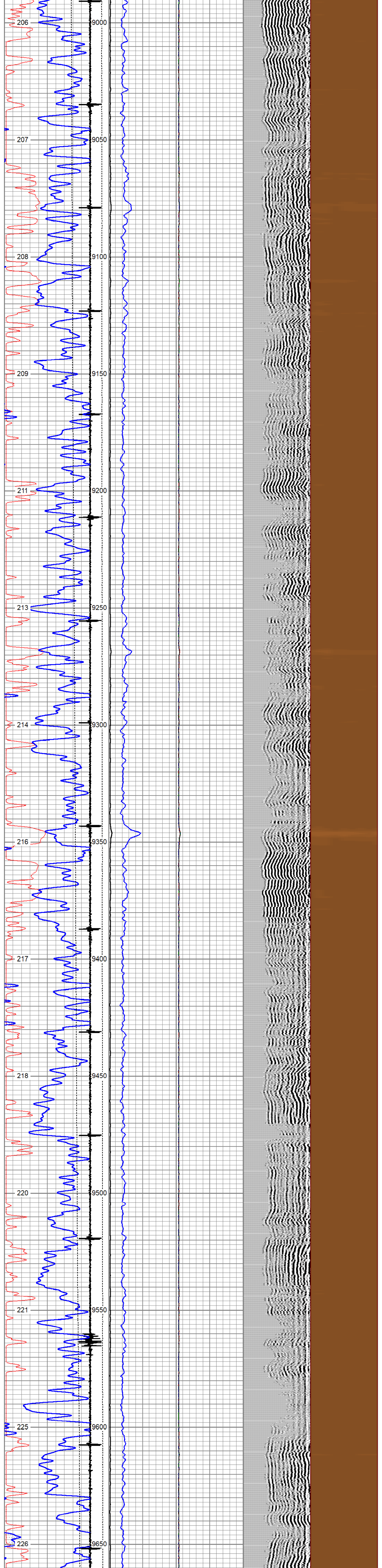
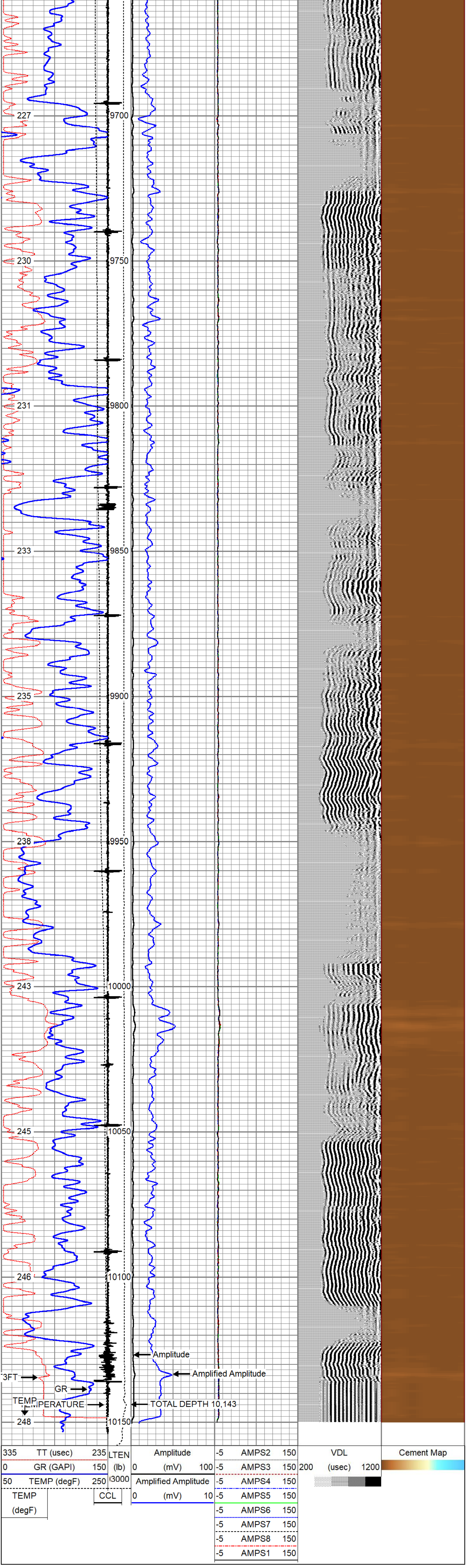




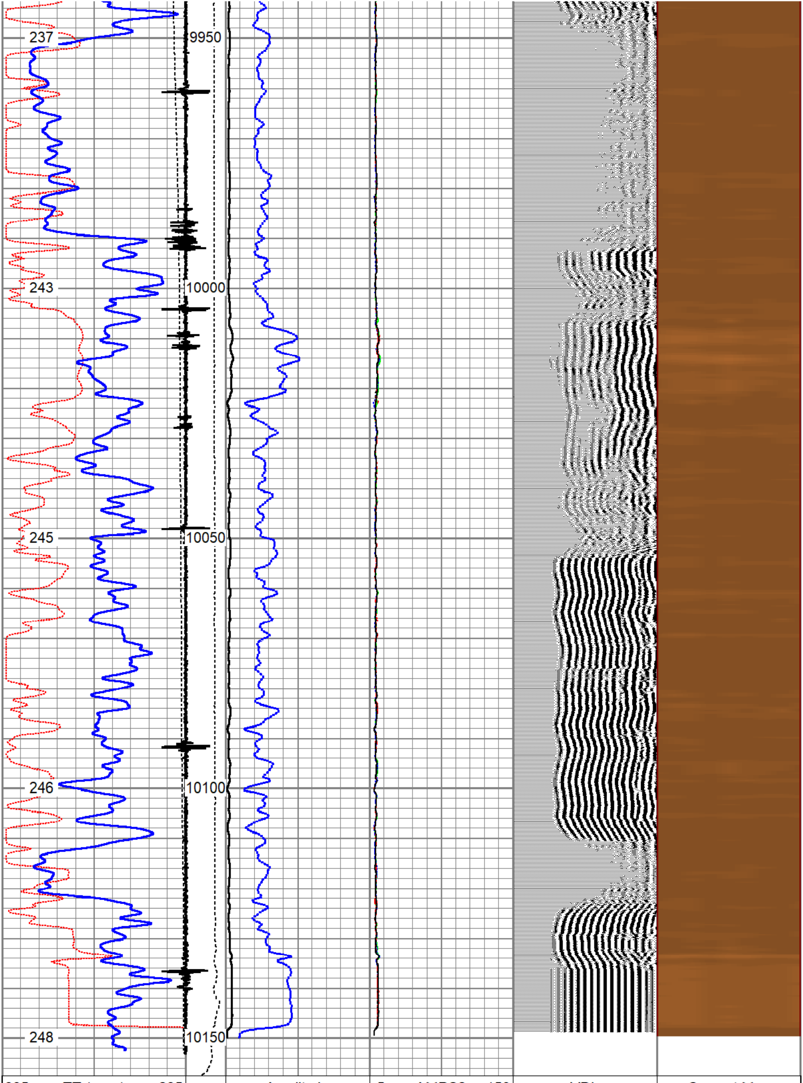




REPEAT PASS 5"=100'

Database File	federal rwf 31-9.db
Dataset Pathname	cbl/pass1
Presentation Format	rbl7
Dataset Creation	Sun Mar 06 18:37:21 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 (degF)	CCL	0 (mV) 10	-5 AMPS5 150		
			-5 AMPS6 150		
			-5 AMPS7 150		
			-5 AMPS8 150		
			-5 AMPS1 150		



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 (degF)	CCL	0 (mV) 10	-5 AMPS5 150		
			-5 AMPS6 150		
			-5 AMPS7 150		
			-5 AMPS8 150		
			-5 AMPS1 150		

Calibration Report

Database File	federal rwf 31-9.db
Dataset Pathname	cbl/merge1
Dataset Creation	Sun Mar 06 21:20:37 2022

Gamma Ray Calibration Report

Serial Number:	1401-17	
Tool Model:	GCT275-0000	
Performed:	Fri Jan 28 14:50:15 2022	
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:	120663-4.5	
Tool Model:	RADII-275C	
Calibration Casing Diameter:	4.500	in
Calibration Depth:	2640.701	ft

Master Calibration, performed Sat Mar 5 19:17:10 2022:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.005	0.856	0.700	81.196	94.675	0.972
CAL	0.003	1.016				
5'	0.006	0.514	0.700	81.196	158.439	-0.190
SUM						
S1	0.006	0.815	0.000	100.000	110.694	-0.379
S2	0.002	0.767	0.000	100.000	125.698	-0.292
S3	0.004	0.751	0.000	100.000	127.850	-0.247
S4	0.005	0.831	0.000	100.000	121.054	-0.650
S5	0.005	0.964	0.000	100.000	119.724	-0.494
S6	0.004	1.045	0.000	100.000	104.069	-0.365
S7	0.001	0.982	0.000	100.000	90.395	-0.113
S8	0.002	0.904	0.000	100.000	96.582	-0.212

Internal Reference Calibration, performed (Not Performed):

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	0.003	1.016	1.000	0.000

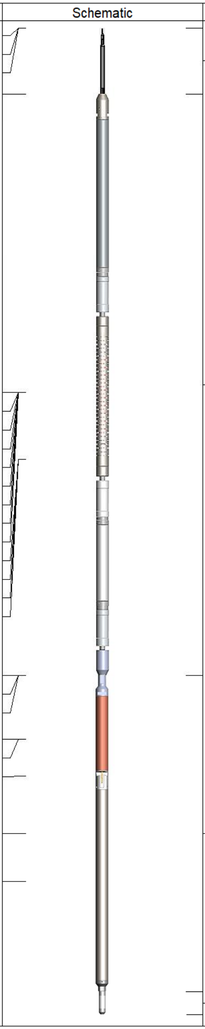
Air Zero Calibration, performed (Not Performed):

	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

Inclinometer Calibration Report

Performed: (Not Performed)

	Low Read.	High Read.	Low Ref.	High Ref.	
X Accelerometer	0.00	1.00	0.00	1.00	gee
Y Accelerometer	0.00	1.00	0.00	1.00	gee
Z Accelerometer	0.00	1.00	0.00	1.00	gee



Sensor	Offset (ft)
mSec_Count	14.85
RBT_Status	14.85
Error_Ct	14.85
RBT_HV	13.85
WVFS8	9.35
WVFS7	9.35
WVFS6	9.35
WVFS5	9.35
WVFS4	9.35
WVFS3	9.35
WVFS2	9.35
WVFS1	9.35
WVF3FT	9.35
RBT_ACCZ	8.35
RBT_ACCY	8.35
RBT_ACCX	8.35
WVF5FT	8.35
GCT_HV	5.10
WVFSYNC	5.10
WVFCAL	5.10
CCL$2	4.14
CCL$1	4.14
GCT_Temp	3.59
GR	2.72
GCT_IntTemp	2.00

Description	Length (ft)	O.D. (in)	Weight (lb)
Cable-Head-Titan 1 7/16" Cable Head	1.00	1.44	1.00
RBT8-RADII-275C (120663-4.5) Probe 2.75" RADII 8 Sector Bond Tool	8.75	2.75	
GC-GCT275-0000 (1401-17) Probe 2.75" Gamma Ray - CCL w/ Temp	4.77	2.75	55.00
Plug-FA108-0000 1.38" Bull Plug	0.33	1.38	1.00

Dataset:	federal rwf 31-9.db: field/well/cbl/merge1
Total length:	14.85 ft
Total weight:	57.00 lb
O.D.:	2.75 in

Company	**TEP ROCKY MOUNTAIN LLC**		
Well	**FEDERAL RWF 31-9**		
Field	**RULISON**		
County	**GARFIELD**	**State**	**CO**

TWG THE WIRELINE GROUP

RADIAL CEMENT
BOND LOG
GAMMA RAY/CCL