



RADIAL CEMENT BOND
GAMMA RAY
CCL

Company KERR McGEE OIL AND GAS
Well FRANK 14-31
Field WATTENBERG
County WELD State CO

Location: API # : 05-123-27400
SHL: 643' FSL & 2046' FWL SE/SW
SEC 31 TWP 4N RGE 67W
Permanent Datum GL Elevation 4930'
Log Measured From KB 12'
Drilling Measured From KB
Other Services
K.B. 4942'
D.F. 4941'
G.L. 4930'

Date	1-12-15
Run Number	ONE
Depth Driller	7430'
Depth Logger	2755'
Bottom Logged Interval	2746'
Top Log Interval	SURFACE
Open Hole Size	7.875
Type Fluid	WATER
Density / Viscosity	1.0
Max. Recorded Temp.	91 DEG F
Estimated Cement Top	358'
Time Well Ready	N/A
Time Logger on Bottom	N/A
Equipment Number	4310
Location	GREELEY
Recorded By	N. BREHMER
Witnessed By	D. OLMEDA


Borehole Record				Tubing Record			
Run Number	Bit	From	To	Size	Weight	From	To
ONE	12.25"	SURFACE	782'				
TWO	7.88"	782'	7430'				
Casing Record	Size		Wgt/Ft	Top	Bottom		
Surface String	8.63		24#	SURFACE	771'		
Prot. String							
Production String	4.5		11.6#	SURFACE	7420'		
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

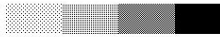

RAN CBL TO VERIFY CEMENT BOND
THANK YOU FOR USING WARRIOR !!!!!!!

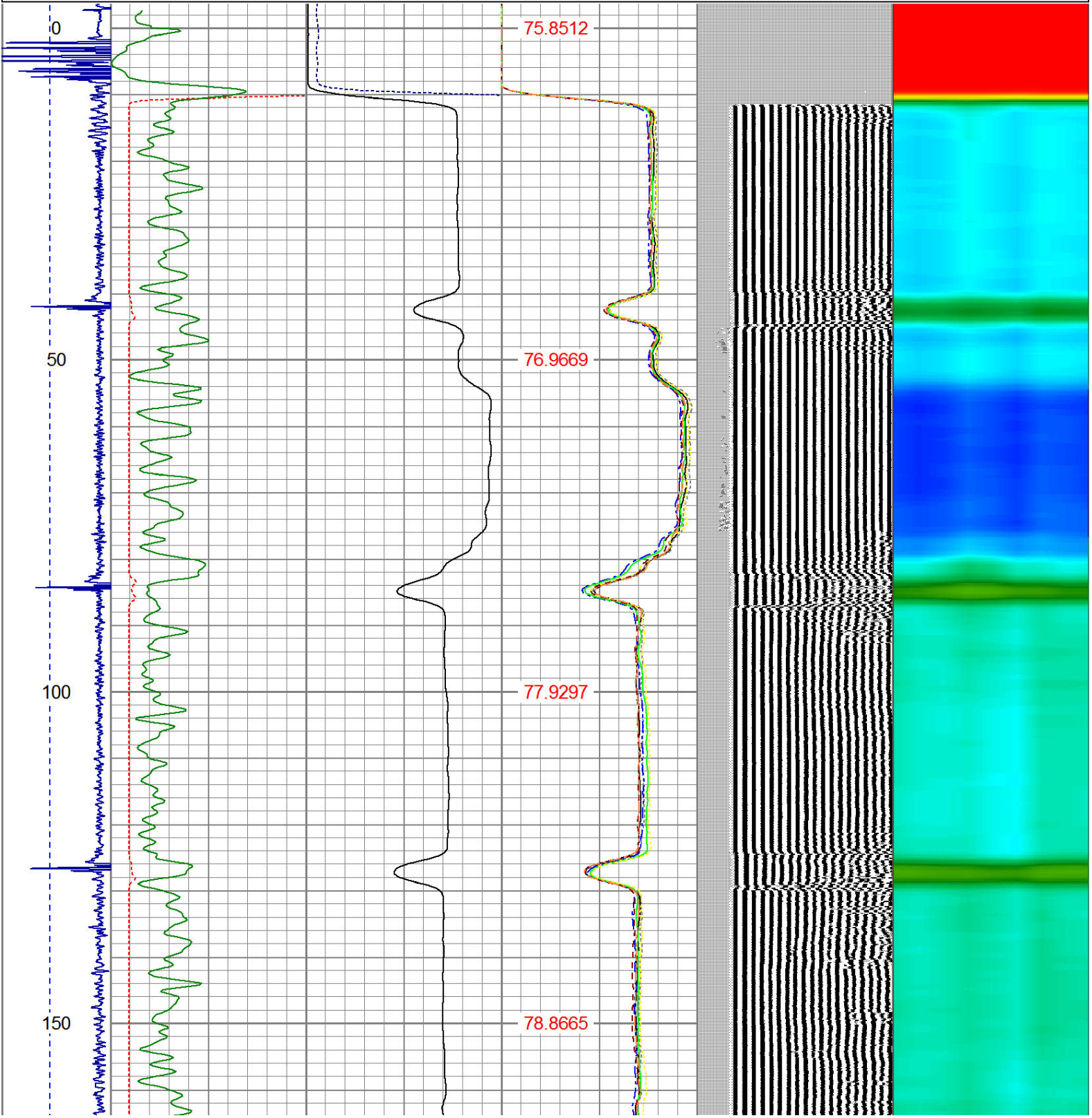
Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
			1_4	1.00	1.36	5.00

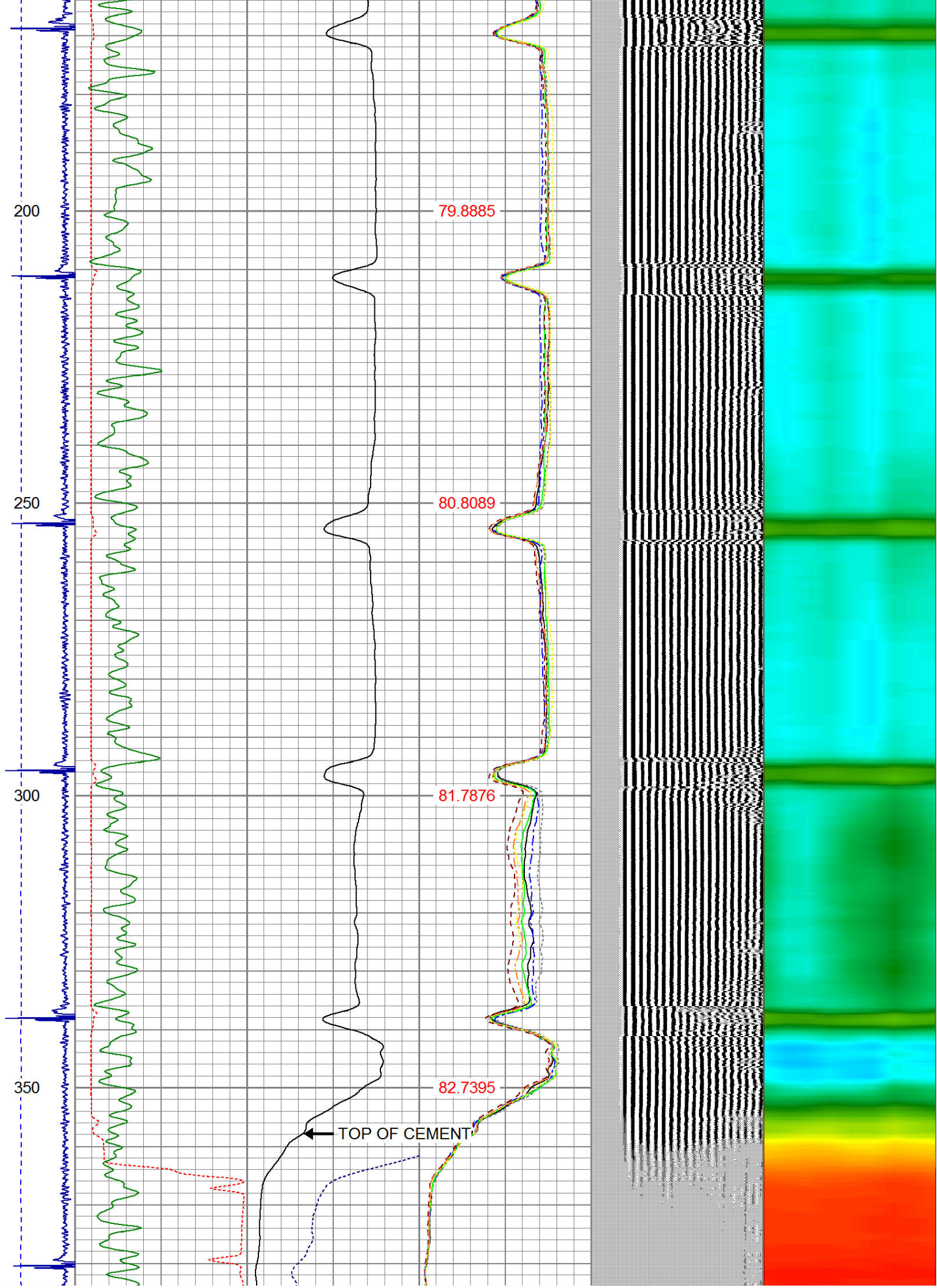
Tool Joint	Tool Joint Depth (ft)	Tool Joint Description	Tool Joint Weight (lb)	Tool Joint O.D. (in)	Tool Joint Length (ft)
HEADVOLT	16.13	PTS275	2.83	2.75	
IntTemp	14.71				
WVFS3FT	11.46	RBT-Probe (Base) Probe Radii Bond Tool with Digital Telemetry	8.92	2.75	90.00
WVFCAL	11.46				
WVFS1	11.46				
WVFS2	11.46				
WVFS3	11.46				
WVFS4	11.46				
WVFS5	11.46				
WVFS6	11.46				
WVFS7	11.46				
WVFS8	11.46				
WVFS5FT	10.46				
CNLSC	6.00	CNT-Probe_B (275) 6 bow centralizer	2.88	2.75	40.00
CNSSC	5.17				
CCL	3.64	GR-Probe (275) Probe 2.75"	4.33	2.75	30.00
GR	0.90				

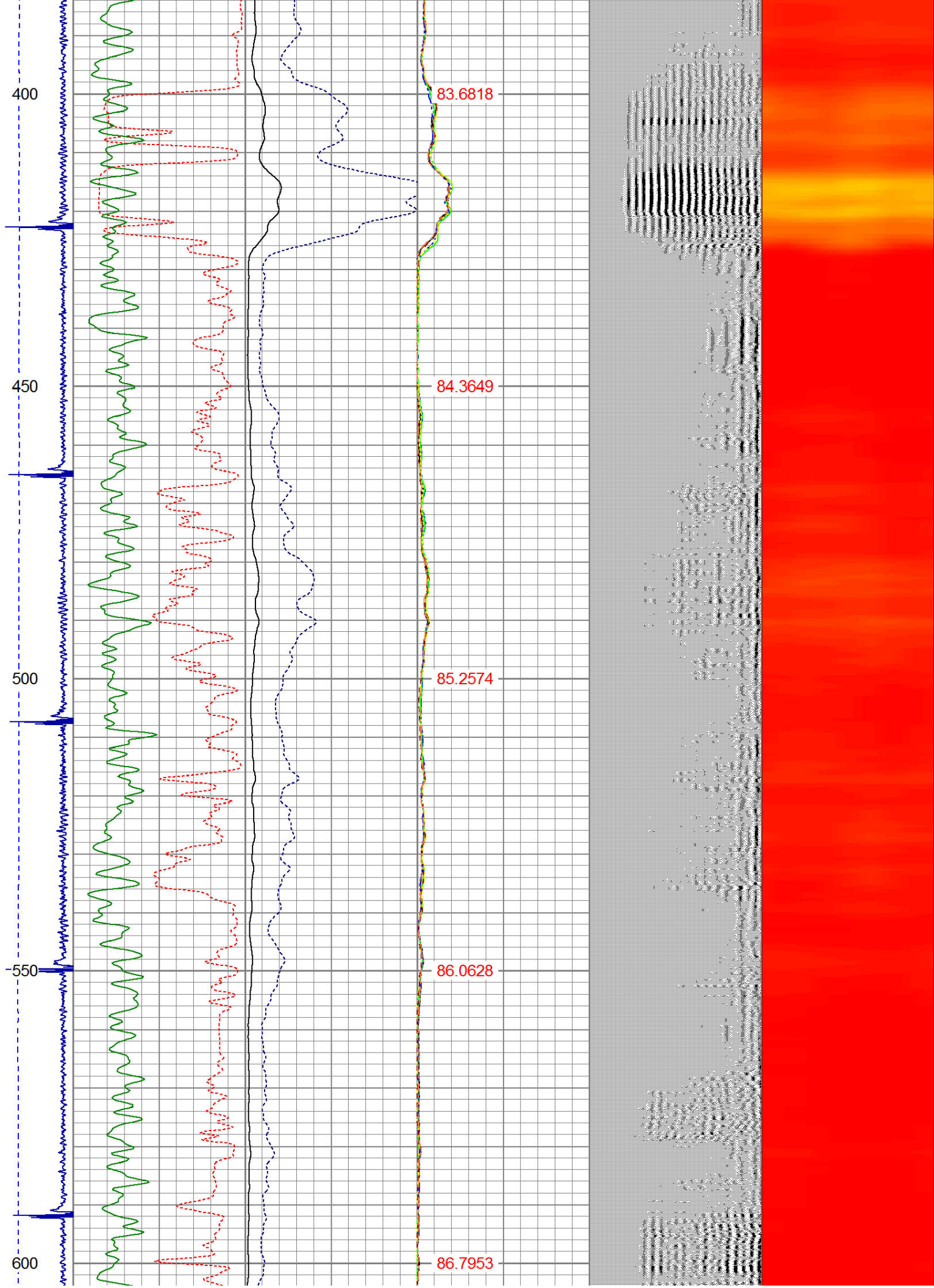
Dataset:
Total Length:
Total Weight:
O.D.

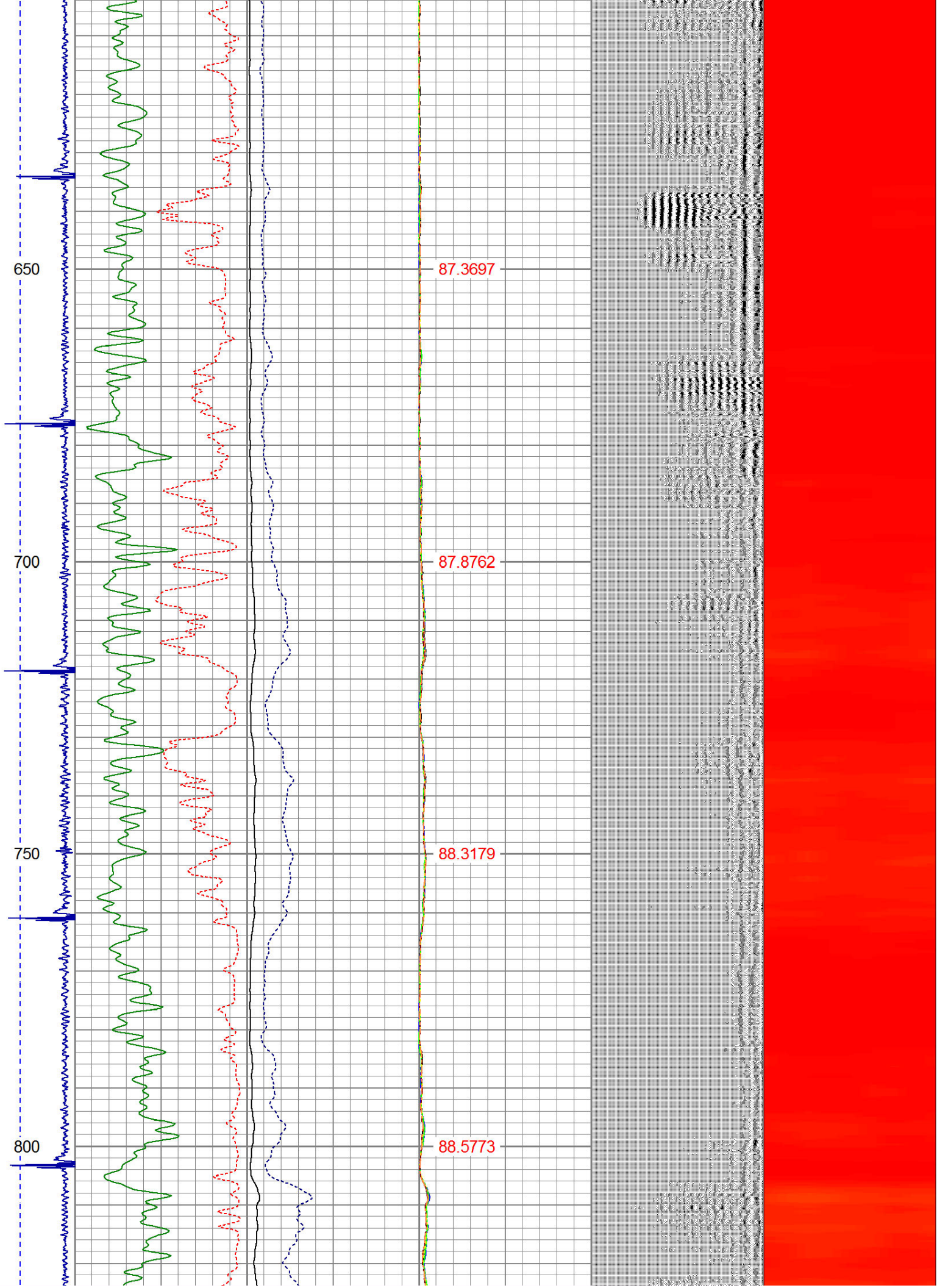
frank 14-31.db: field/well/run1/pass2
19.96 ft
165.00 lb
2.75 in

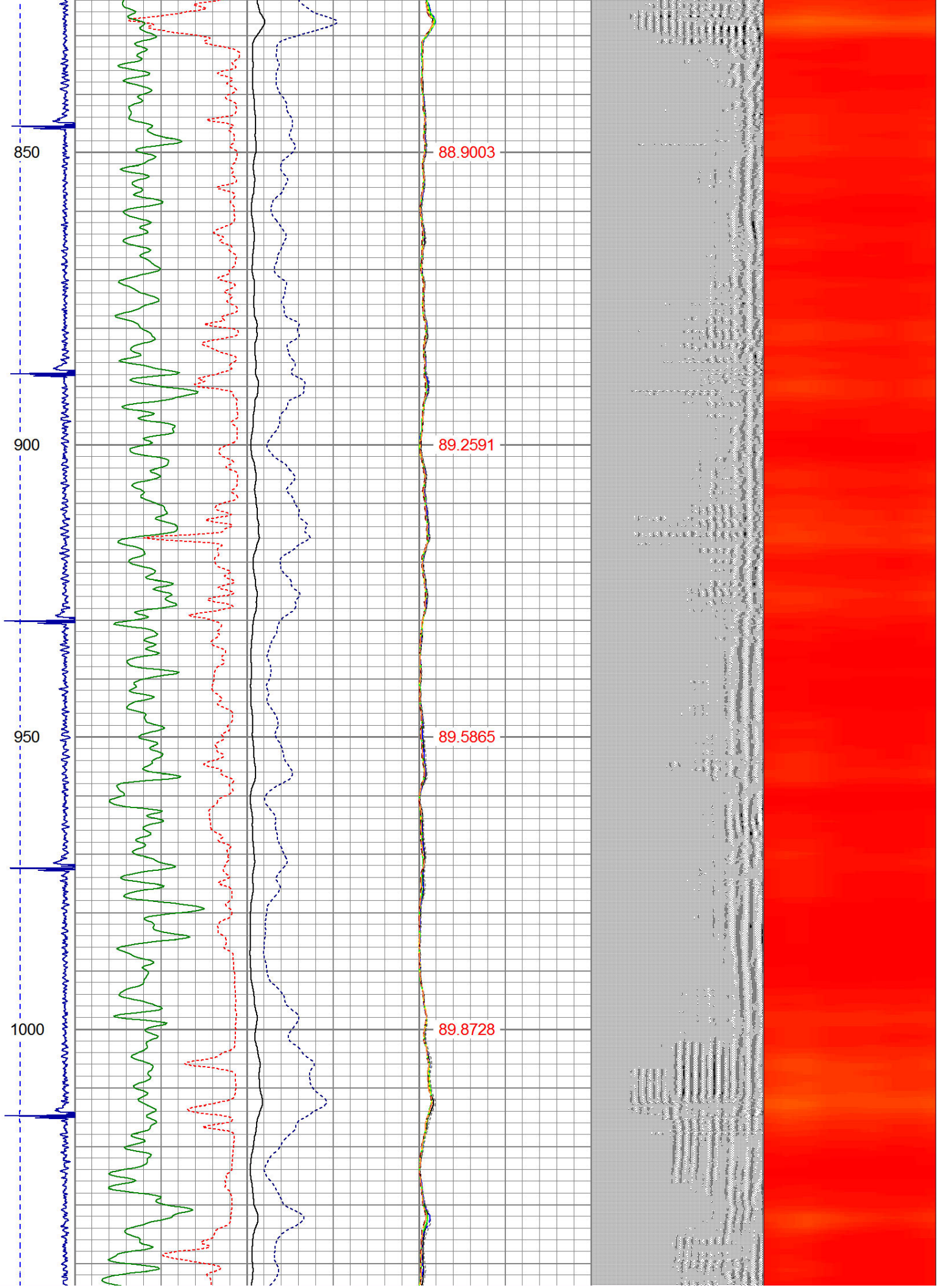
Dataset Creation: Mon Jan 12 09:03:07 2015 by Log 7.0 B1																				
Charted by: Depth in Feet scaled 1:240																				
-9	CCL	1	200	TT (usec)	900	0	AMP (mV)	100	0	AMPS1	100	200	VDL	1200	1	Cement Map	8			
LSPD (ft/min)	0		0	GR (GAPI)	200	0	AMPx5 (mV)	20	0	AMPS2	100			1				100		
	200		200	GR (GAPI)	400															
0		250																		
										0	AMPS4	100								
										0	AMPS5	100								
										0	AMPS6	100								
										0	AMPS7	100								
										0	AMPS8	100								
										IntTemp										
										(degF)										

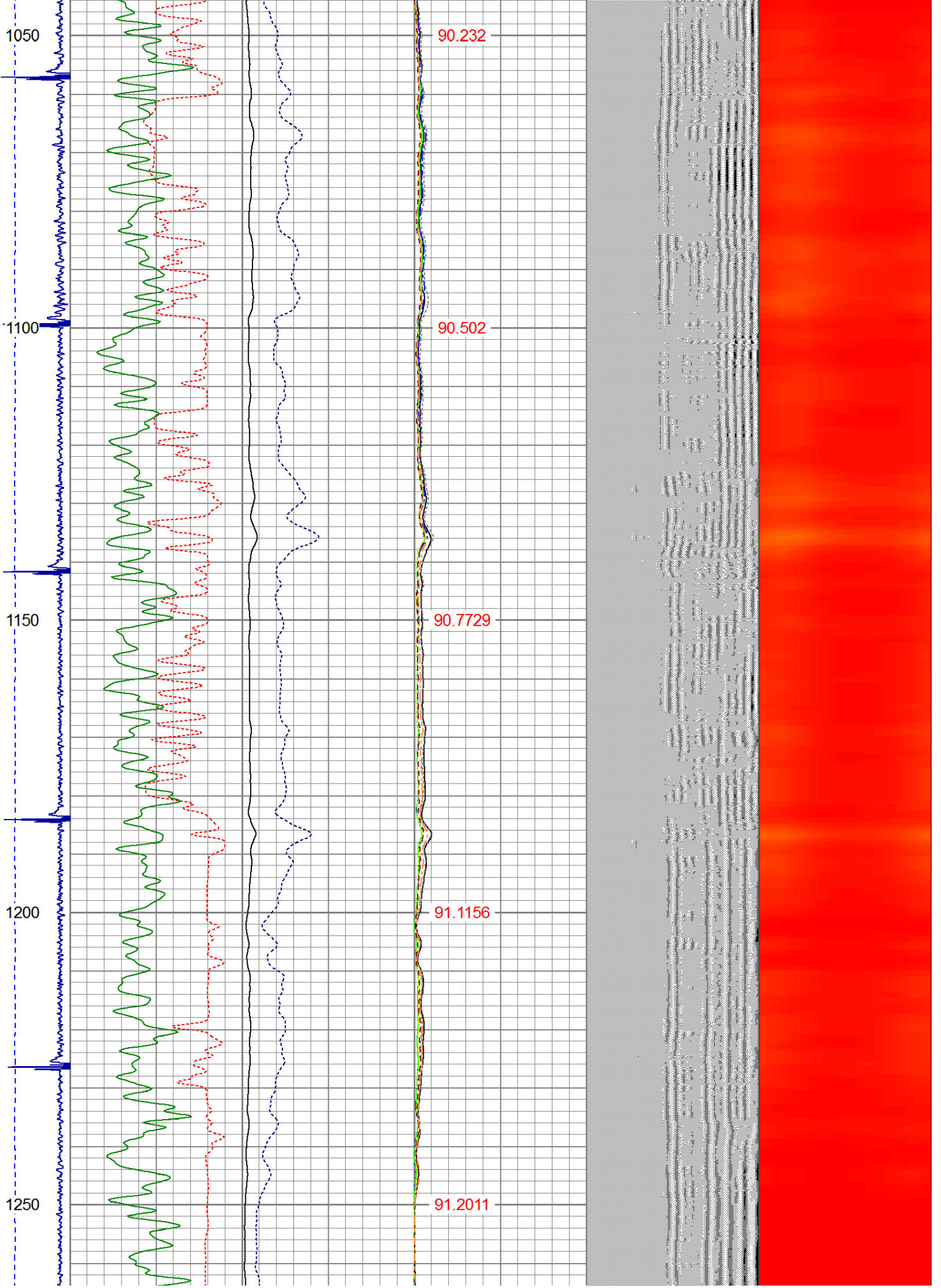












1300

1350

1400

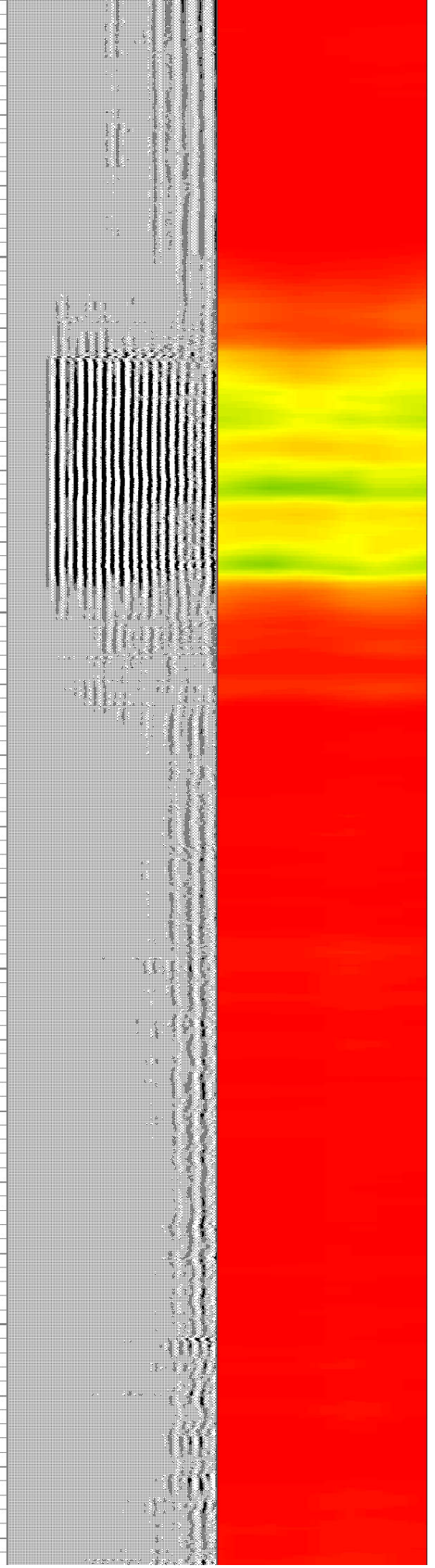
1450

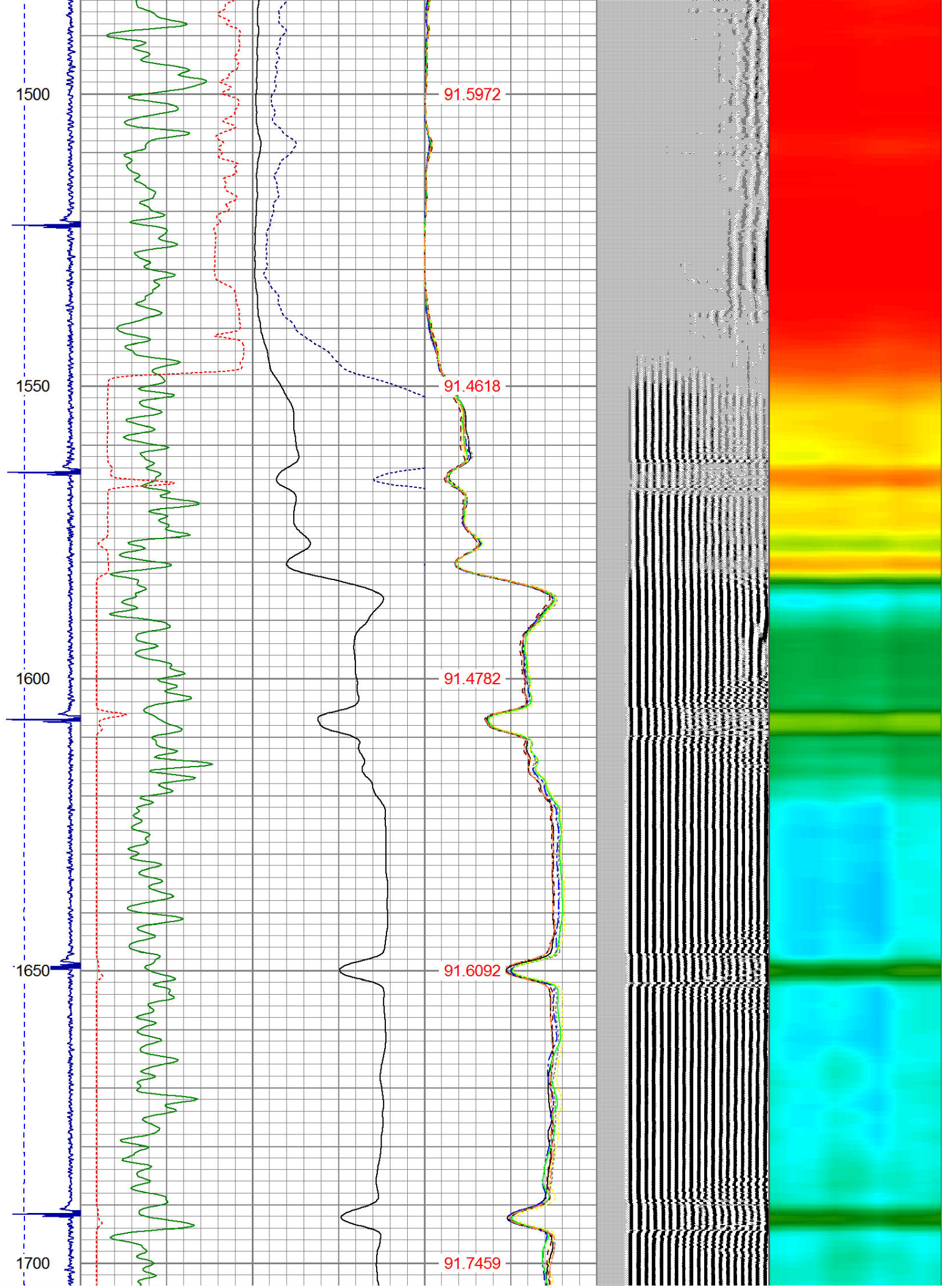
91.4854

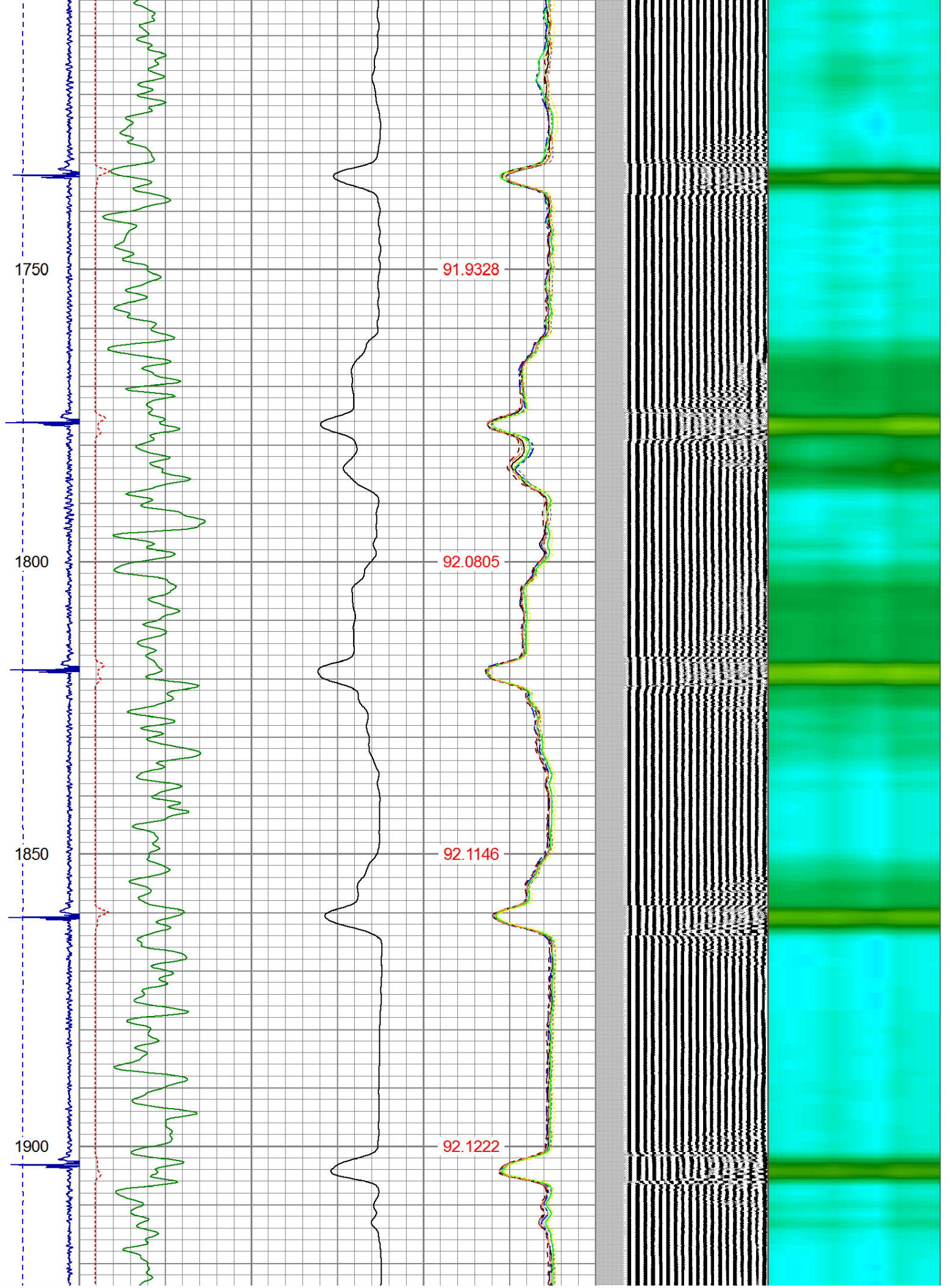
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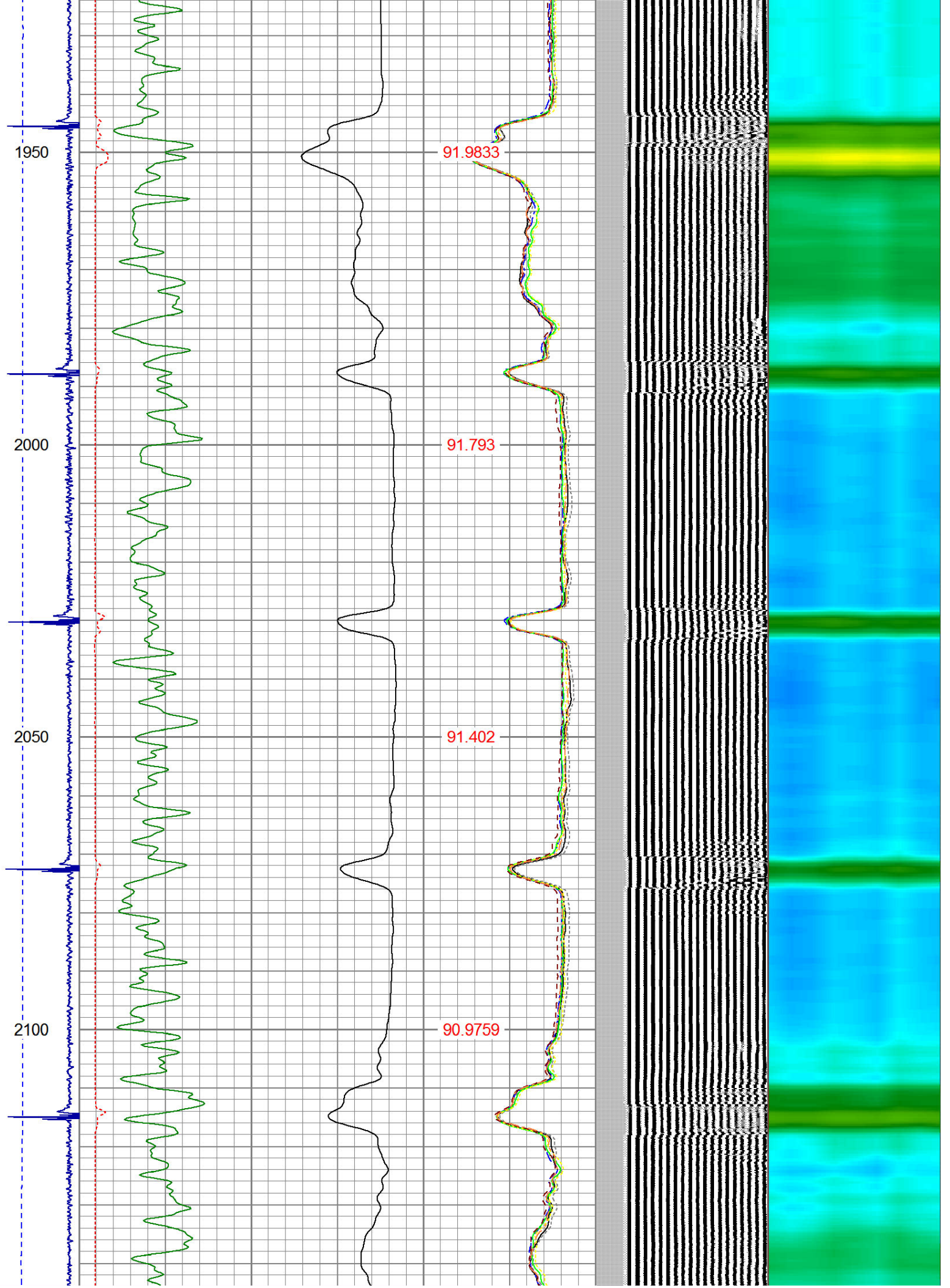
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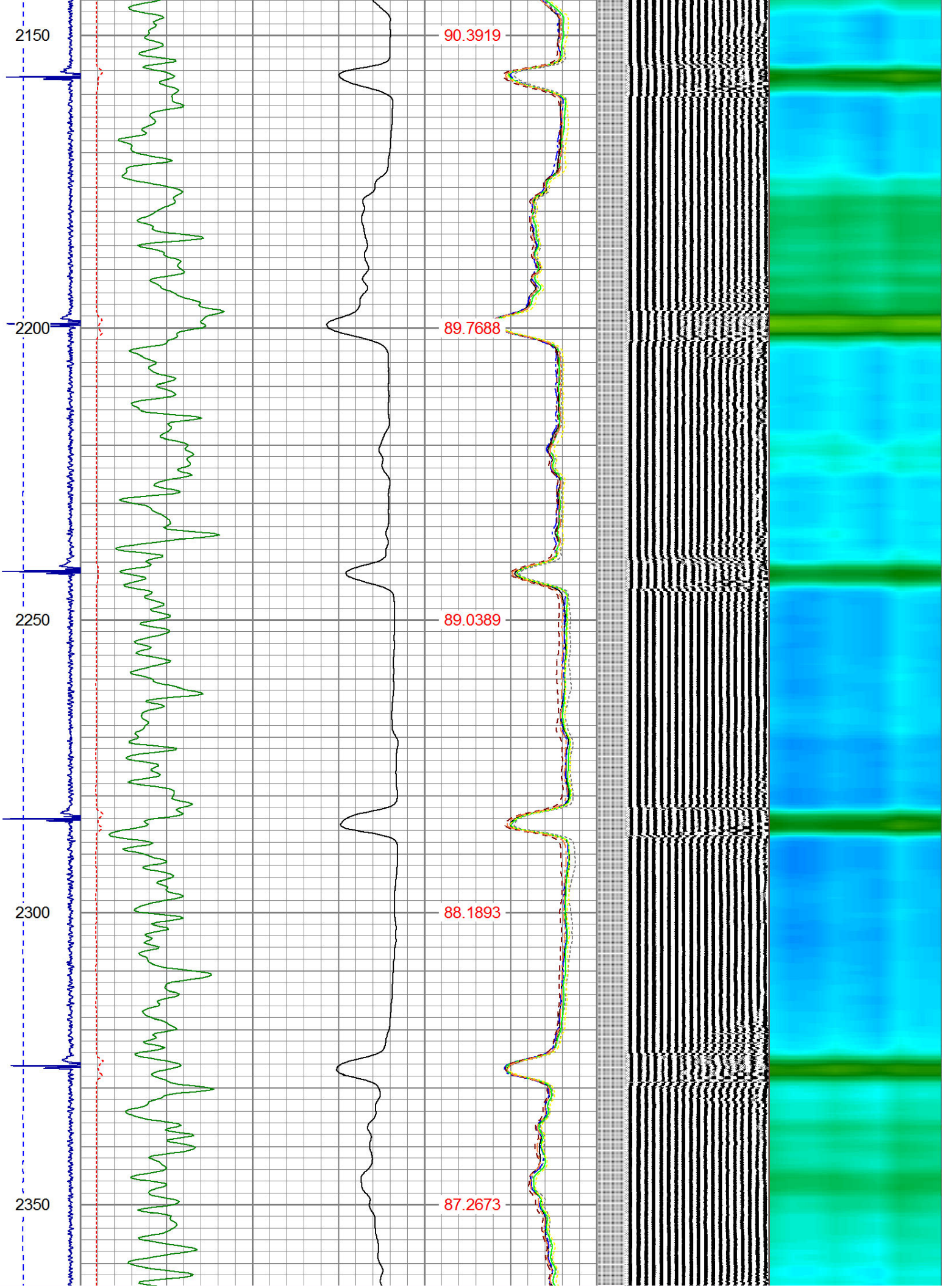
91.7173

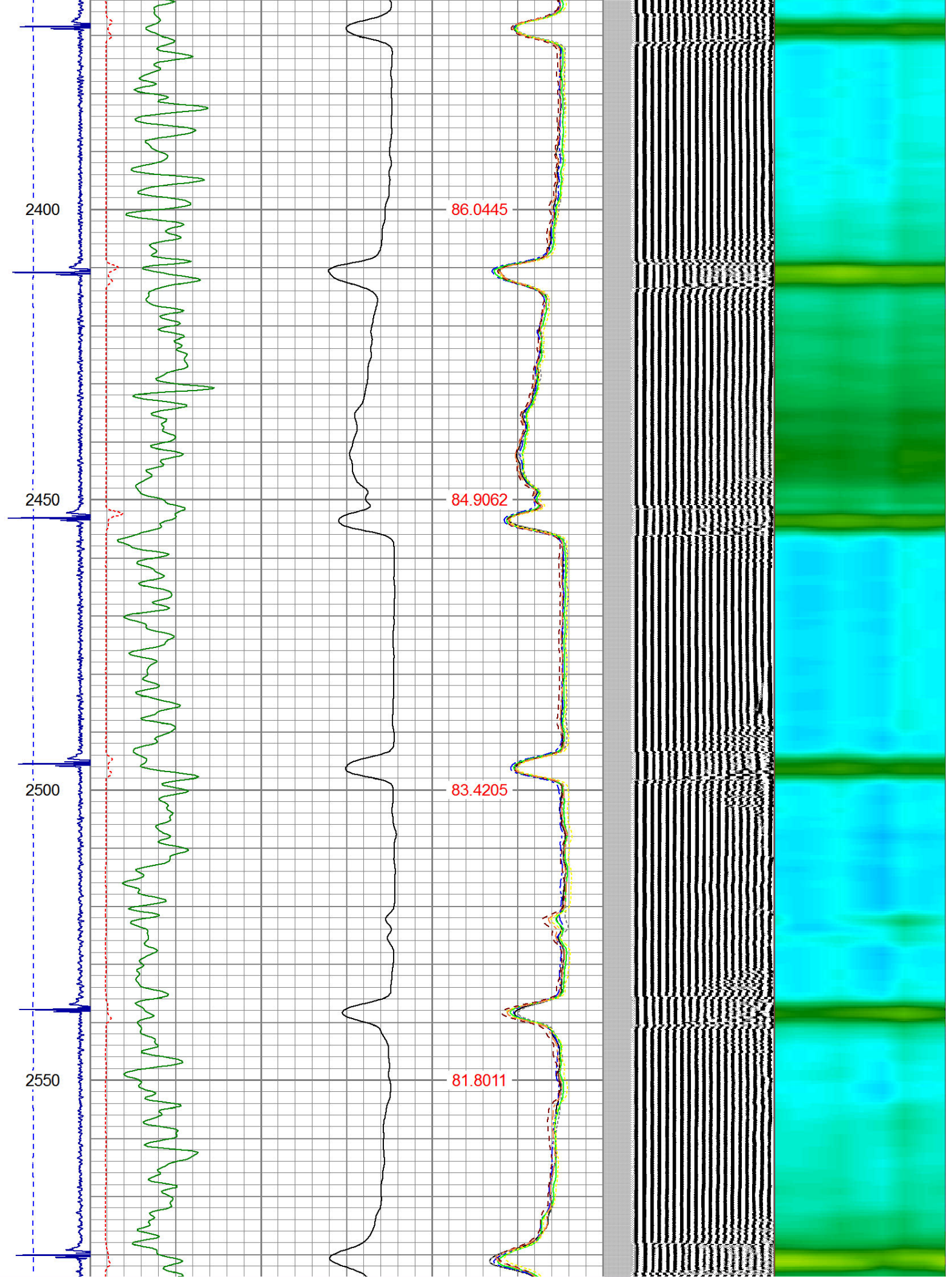


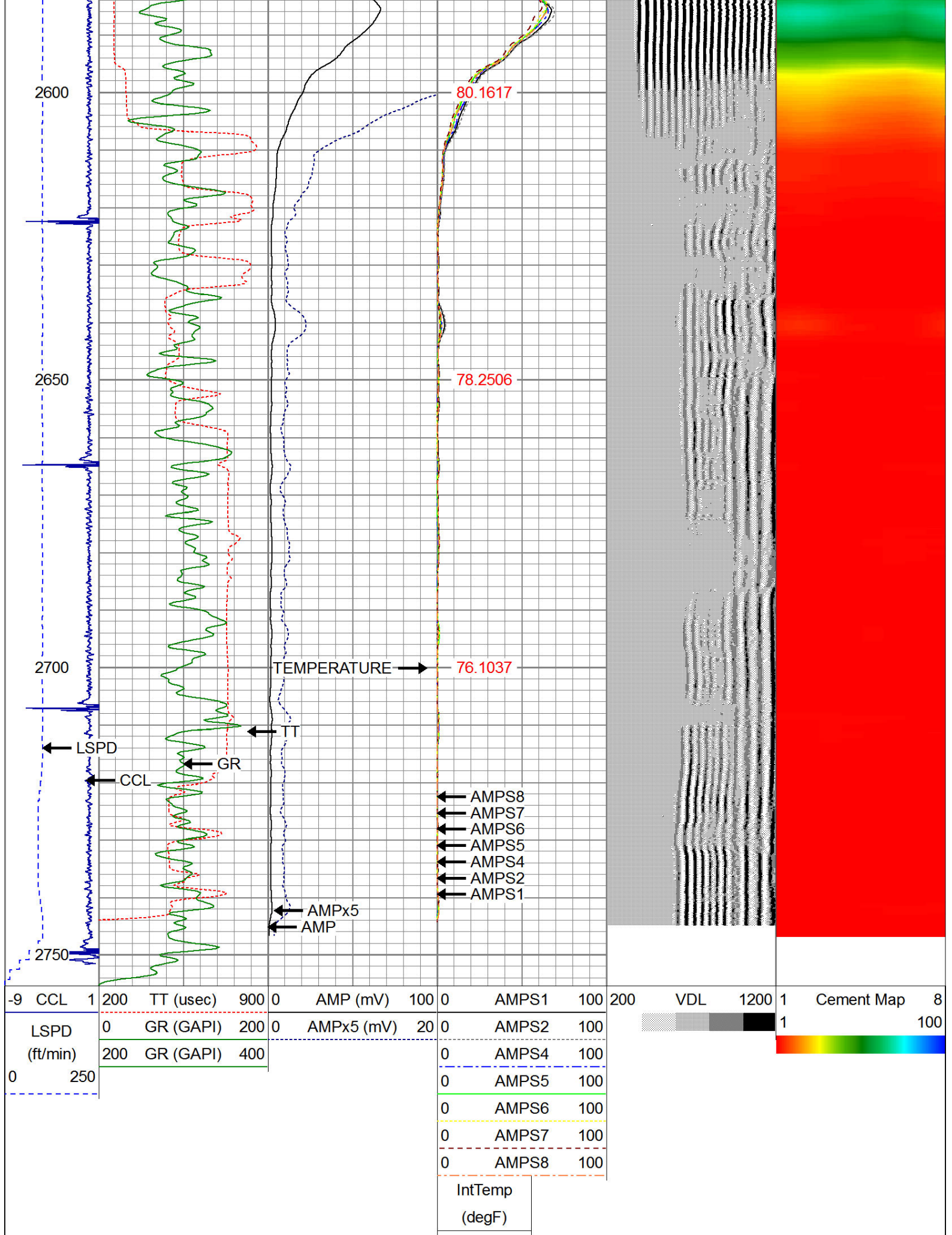














WARRIOR

ENERGY SERVICES

Company KERR MCGEE OIL AND GAS

Well FRANK 14-31

Field WATTENBERG

County WELD

State CO