C&J ENERGY SERVICES

GAMMA RAY C.C.L.
CEMENT BOND V.D.L.

Company	PDC Energy
Well	Ottenhoff 29R - 323
Field	Wattenberg
County	Weld
State	CO

Company PDC Energy
Well Ottenhoff 29R - 323
Field Wattenberg
County Weld **State** CO

Location: API #: 05-123-43645
560' FNL & 960' FEL
NE / NE
SEC 29 TWP 5N RGE 64W

Other Services

Permanent Datum	GL	Elevation	4663'
Log Measured From	GL		
Drilling Measured From	KB		

Elevation
K.B.
D.F.
G.L. 4663'

Date	September 27, 2018		
Run Number	1		
Depth Driller	14,068'		
Depth Logger	6800'		
Bottom Logged Interval	6800'-0'		
Top Log Interval			
Casing Size			
Type Fluid	WATER		
Estimated Cement Top			
Max. Recorded Temp.	235°		
Time Well Ready			
Time Logger On Bottom			
Unit Number	923856		
Tool Size / ID Number	2-3/4" Probe Radii		
Location	WCRs52+53,N9/10,Winto		
Recorded By	Meisner		
Witnessed By	Gardella		

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

Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String				
Prot. String				
Production String	5.5"			
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.

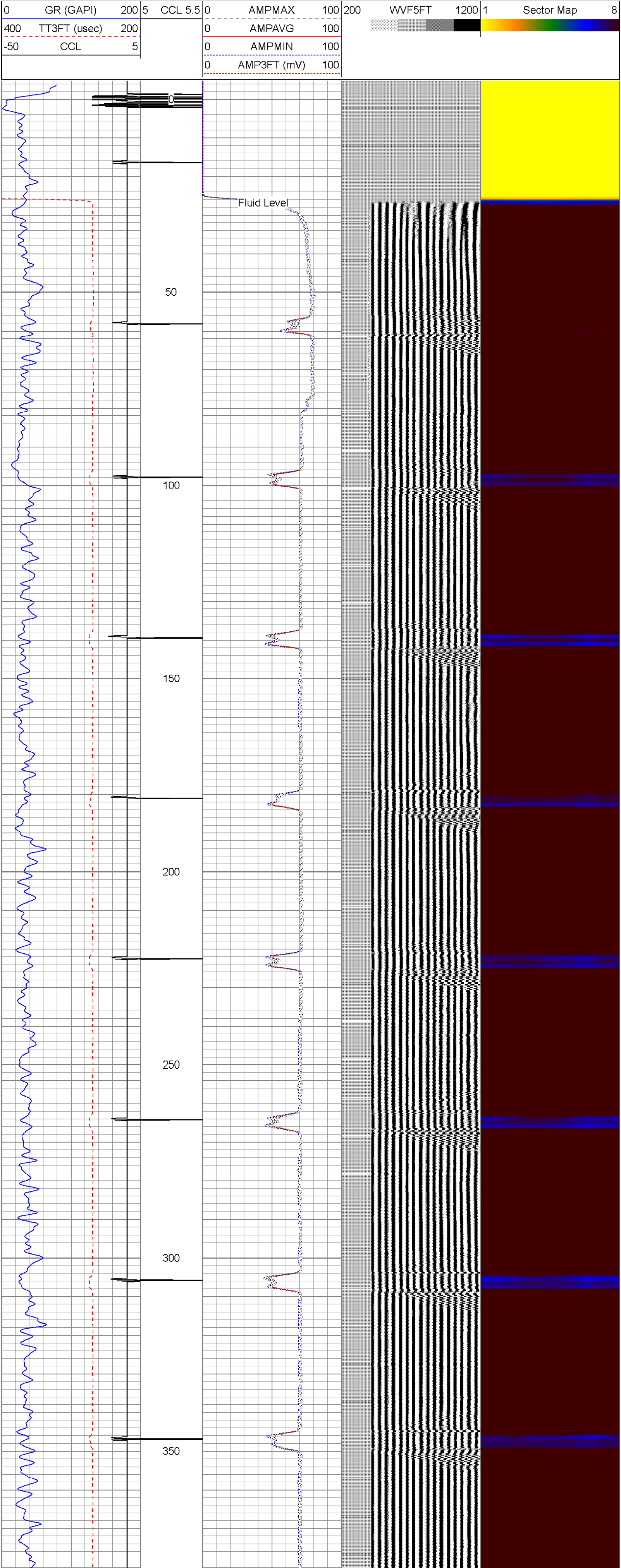
Comments

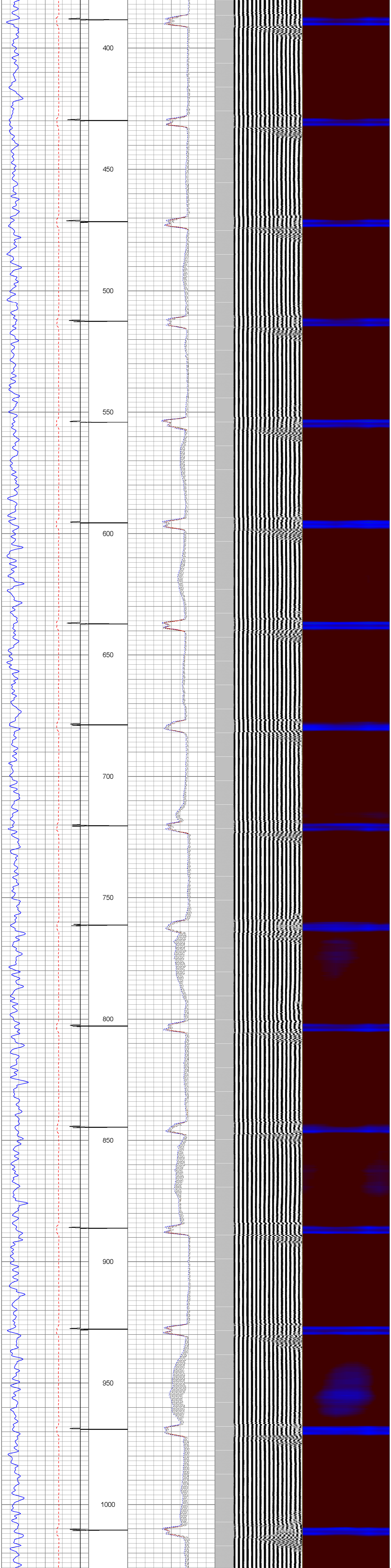
Ottenhoff 10 Well Pad

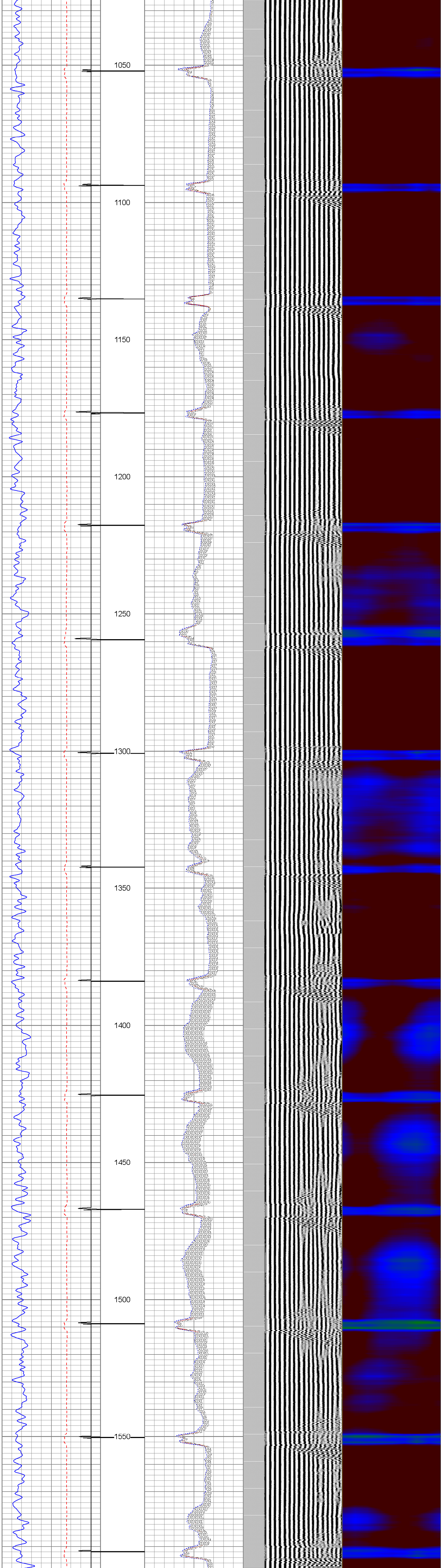
<WEST> O O O O O O O X O O <EAST>

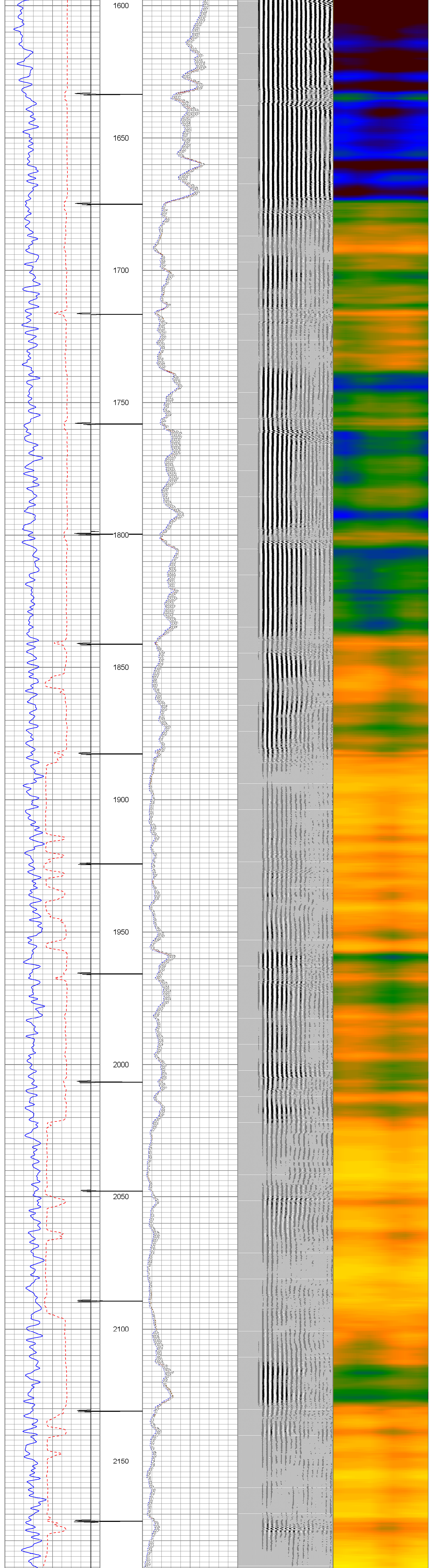
X = Ottenhoff 29R - 323

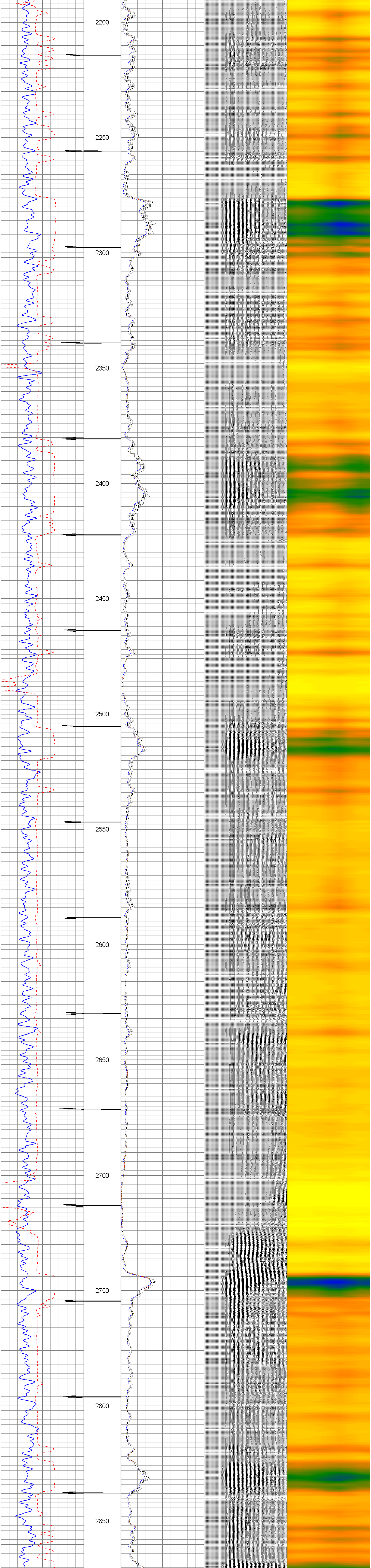
Database File:	pdco29r323.db
Dataset Pathname:	pass2
Presentation Format:	sector2
Dataset Creation:	Thu Sep 27 11:02:02 2018 by Log 7.0 B1
Charted by:	Depth in Feet scaled 1:240

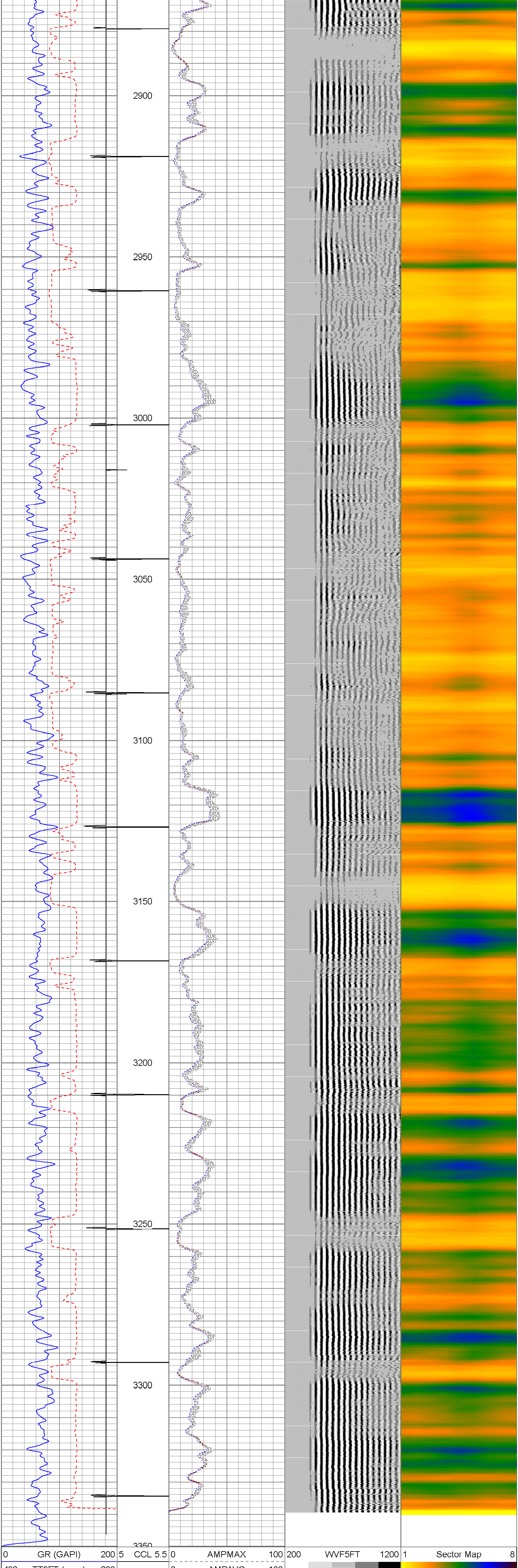












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400 TT3FT (usec) 200		0 AMPAVG 100		
-50 CCL 5		0 AMPMIN 100		
		0 AMP3FT (mV) 100		

Database File:	pdco29r323.db
Dataset Pathname:	pass1
Presentation Format:	sector2
Dataset Creation:	Thu Sep 27 10:30:51 2018 by Log 7.0 B1
Charted by:	Depth in Feet scaled 1:240

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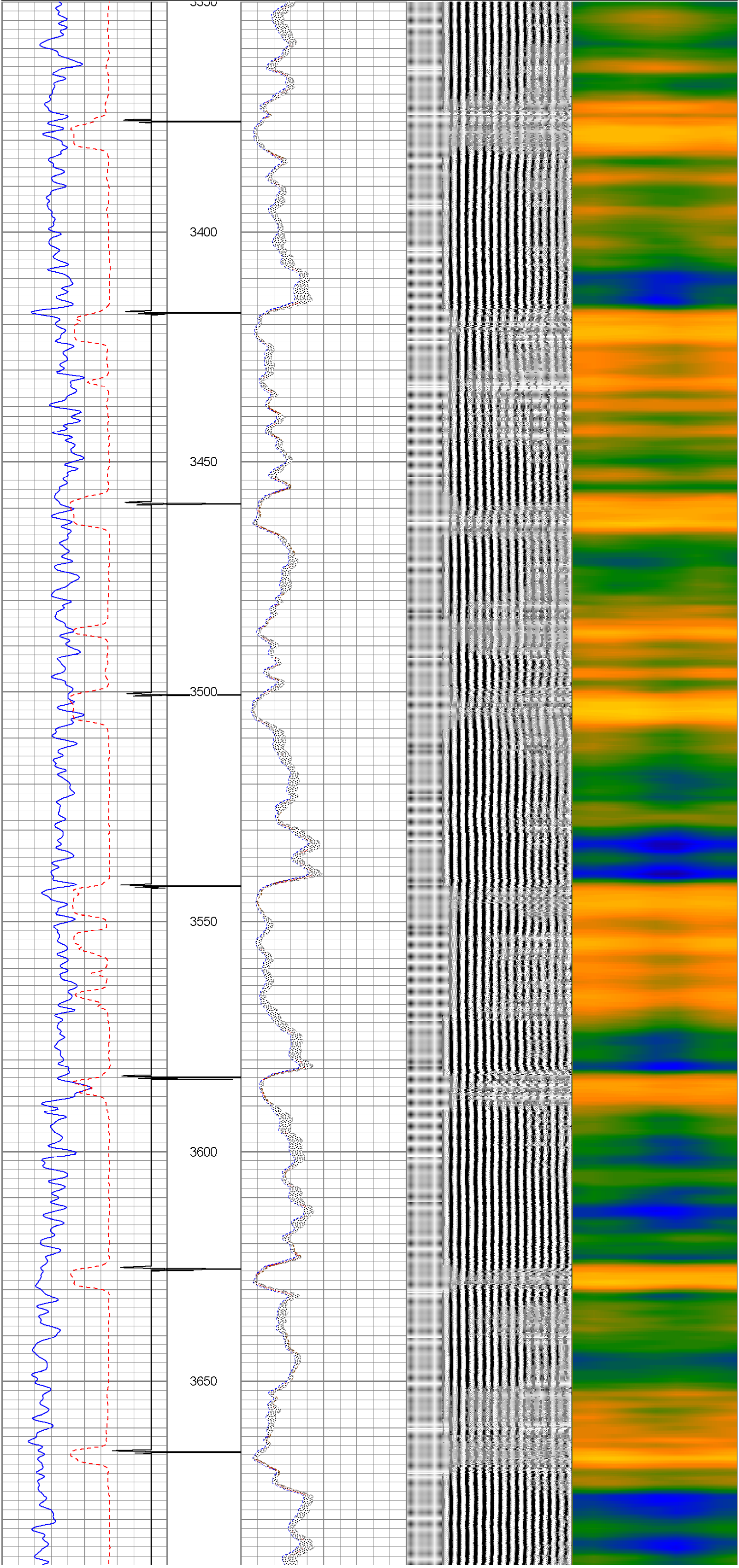
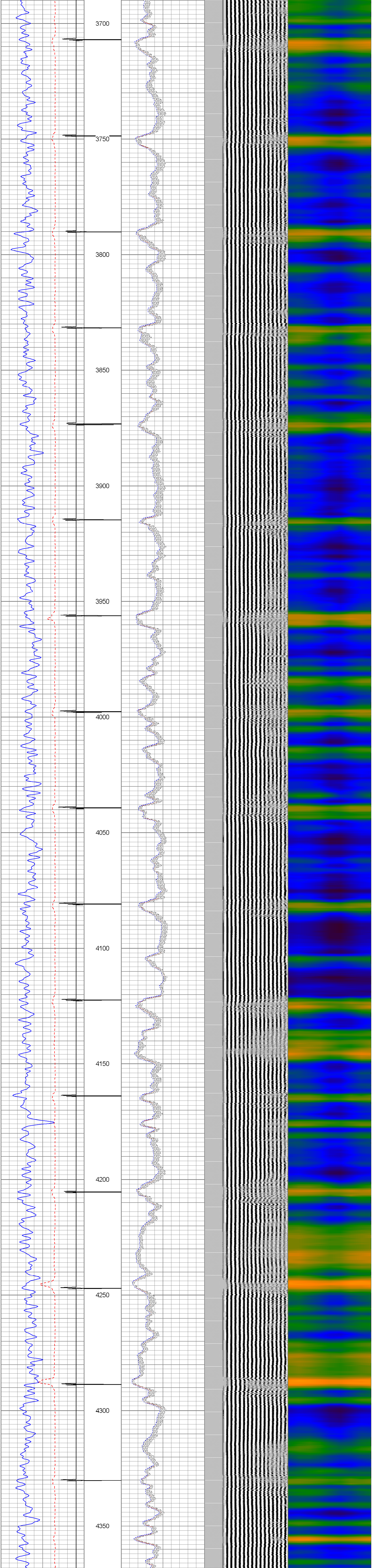
400 TT3FT (usec) 200		0 AMPAVG 100		
-50 CCL 5		0 AMPMIN 100		
		0 AMP3FT (mV) 100		

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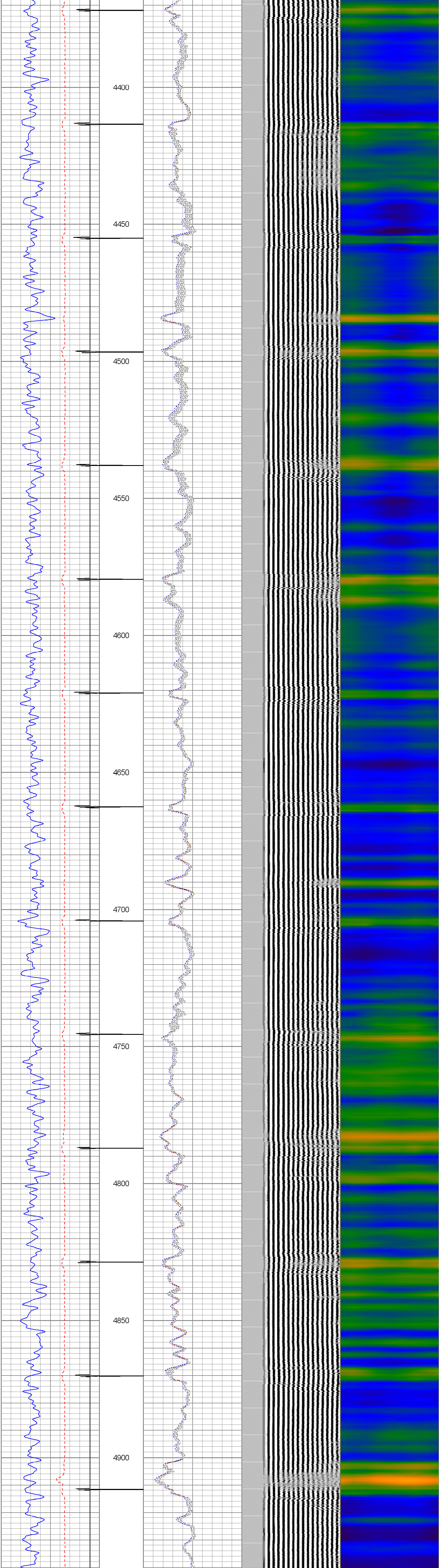
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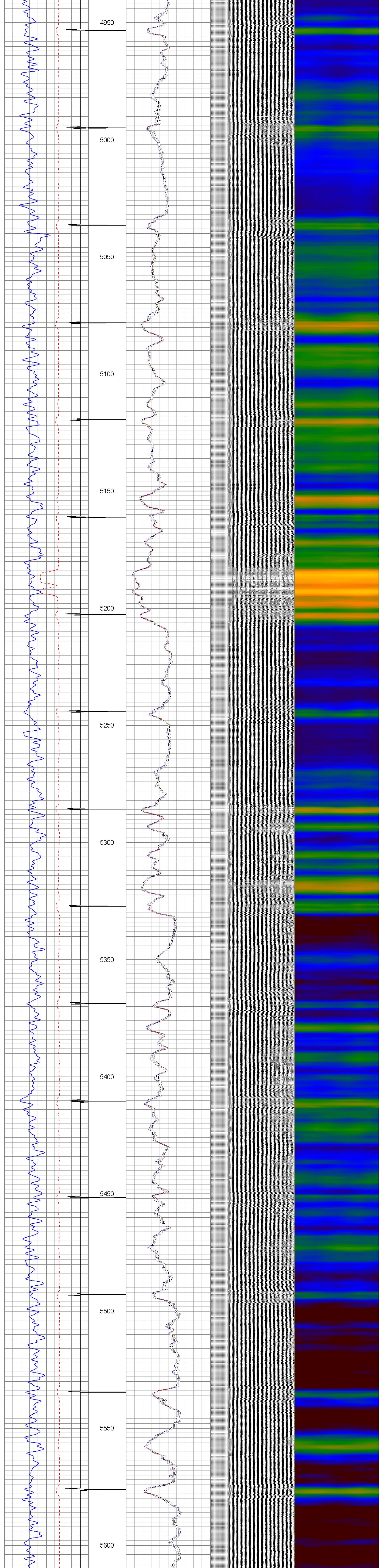
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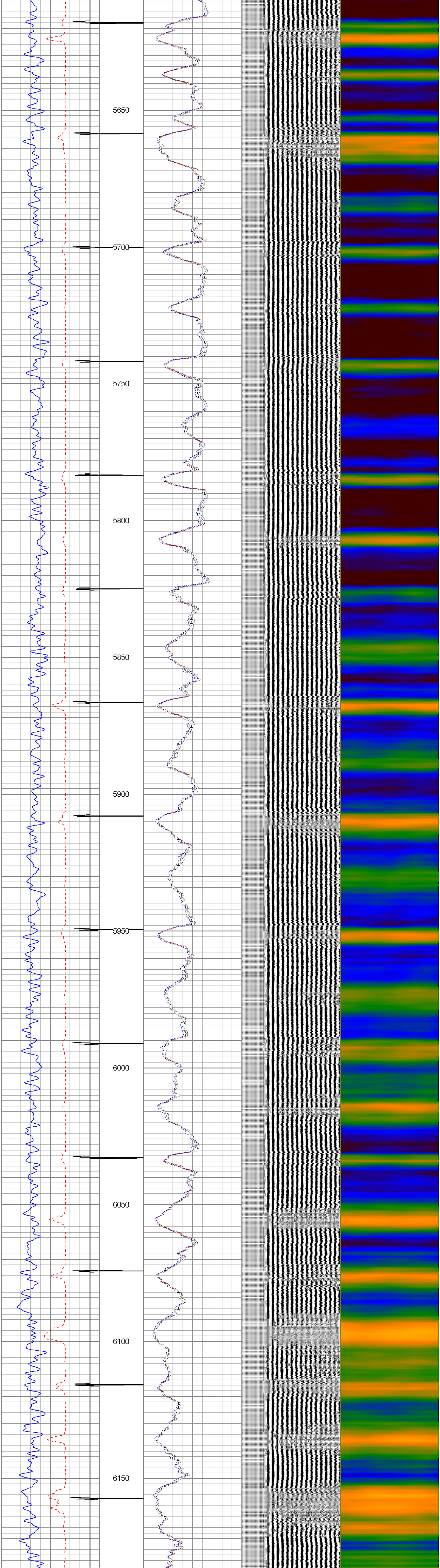
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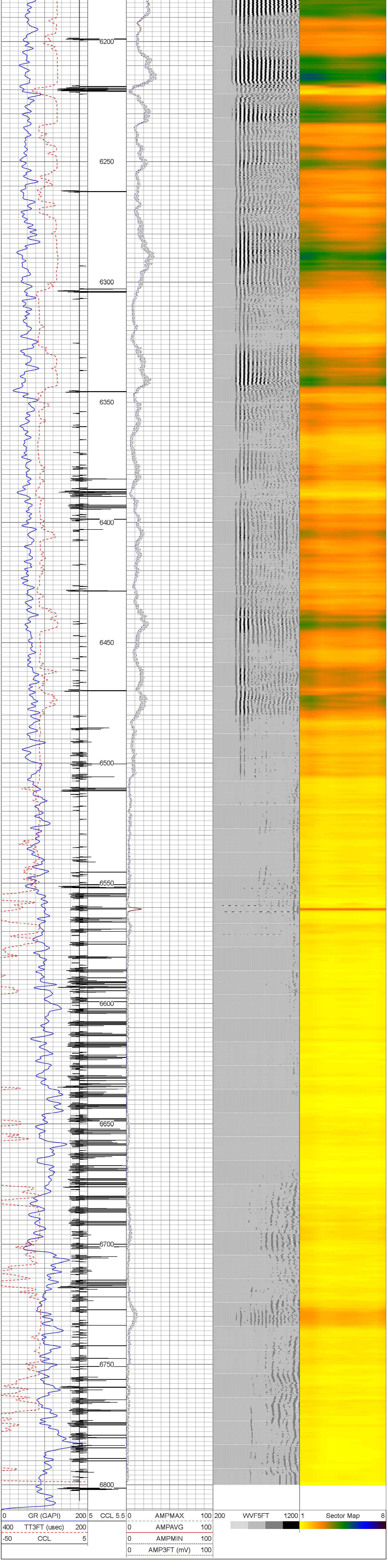
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0 GR (GAPI) 200
400 TT3FT (usec) 200
-50 CCL 5
5 CCL 5.5
0 AMPMAX 100
0 AMPAVG 100
0 AMPMIN 100
0 AMP3FT (mV) 100
200 WVF5FT 1200
1 Sector Map 8