

Company: CAERUS OPERATING LLC

Well: Chevron 11D-17

Field: Grand Valley

County: Garfield State: Colorado

Slim Cement Mapping Tool

CBL-VDL

County: Garfield	
Field: Grand Valley	
Location: Lot 1 Sec. 17 T6S R96W	
Well: Chevron 11D-17	
Company: CAERUS OPERATING LLC	
Location:	
Lot 1 Sec. 17 T6S R96W	Elev.: K.B. 5613.00 ft G.L. 5583.00 ft D.F. 5613.00 ft
Permanent Datum:	Ground Level 5583.00 f
Log Measured From:	Kelly Bushing 30.00 ft above Perm.Datum
Drilling Measured From:	Kelly Bushing
API Serial No. 05-045-23239	Section: 17
	Longitude: 108° 7' 44.435" W
	Latitude: 39° 31' 41.698" N

Logging Date	22-Jul-2017
Run Number	ONE
Depth Driller	7678.00 ft
Schlumberger Depth	7678.00 ft
Bottom Log Interval	7658.00 ft
Top Log Interval	500.00 ft
Casing Fluid Type	Water
Salinity	
Density	10 lbm/gal
Fluid Level	8.00 ft
BIT/CASING/TUBING STRING	
Bit Size	6.00 in
From	0.00 ft
To	7678.00 ft
Casing/Tubing Size	4.5 in
Weight	11.6 lbm/ft
Grade	N/A
From	0.00 ft
To	7678.00 ft
Max Recorded Temperatures	150 degF
Logger on Bottom	23-Jul-2017 10:45:00
Unit Number	OSL-C-AR2 2161
Recorded By	L. Await
Witnessed By	

Disclaimer

THE USE OF AND RELIANCE UPON THIS RECORDED-DATA BY THE HEREIN NAMED COMPANY (AND ANY OF ITS AFFILIATES, PARTNERS, REPRESENTATIVES, AGENTS, CONSULTANTS AND EMPLOYEES) IS SUBJECT TO THE TERMS AND CONDITIONS AGREED UPON BETWEEN SCHLUMBERGER AND THE COMPANY, INCLUDING: (a) RESTRICTIONS ON USE OF THE RECORDED-DATA; (b) DISCLAIMERS AND WAIVERS OF WARRANTIES AND REPRESENTATIONS REGARDING COMPANY'S USE AND RELIANCE UPON THE RECORDED-DATA; AND (c) CUSTOMER'S FULL AND SOLE RESPONSIBILITY FOR ANY INFERENCE DRAWN OR DECISION MADE IN CONNECTION WITH THE USE OF THIS RECORDED-DATA.

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Well Sketch

Driller Depth
0.00 ft



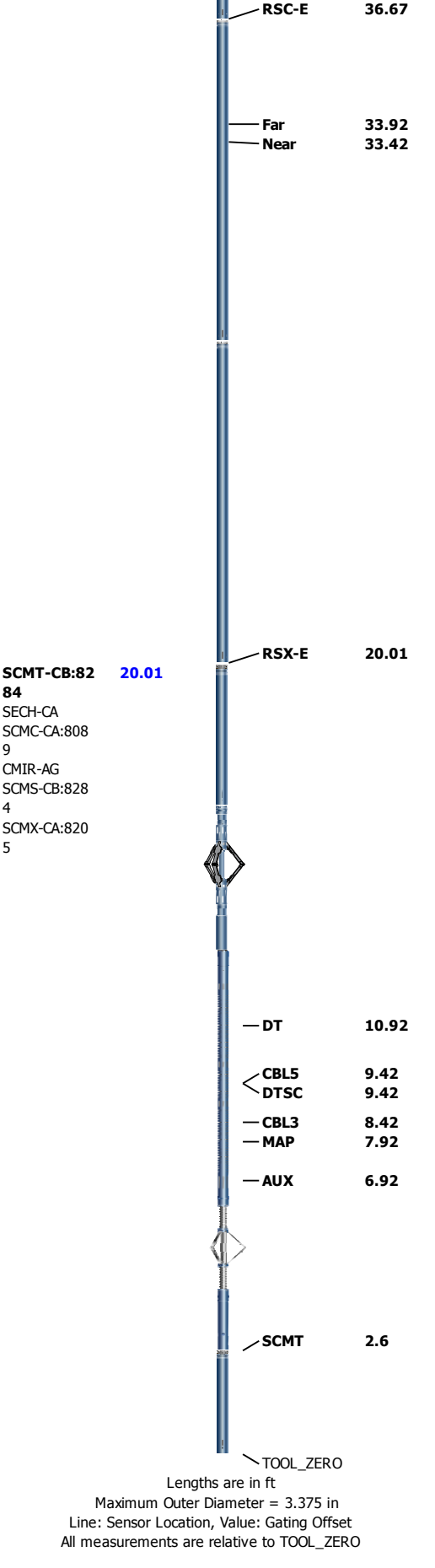


Borehole Size/Casing/Tubing Record

Bit						
Bit Size (in)	6					
Top Driller (ft)	0					
Top Logger (ft)	0					
Bottom Driller (ft)	7678					
Bottom Logger (ft)	7678					
Casing						
Size (in)	4.5					
Weight (lbm/ft)	11.6					
Inner Diameter (in)	4					
Grade	N/A					
Top Driller (ft)	0					
Top Logger (ft)	0					
Bottom Driller (ft)	7678					
Bottom Logger (ft)	7678					

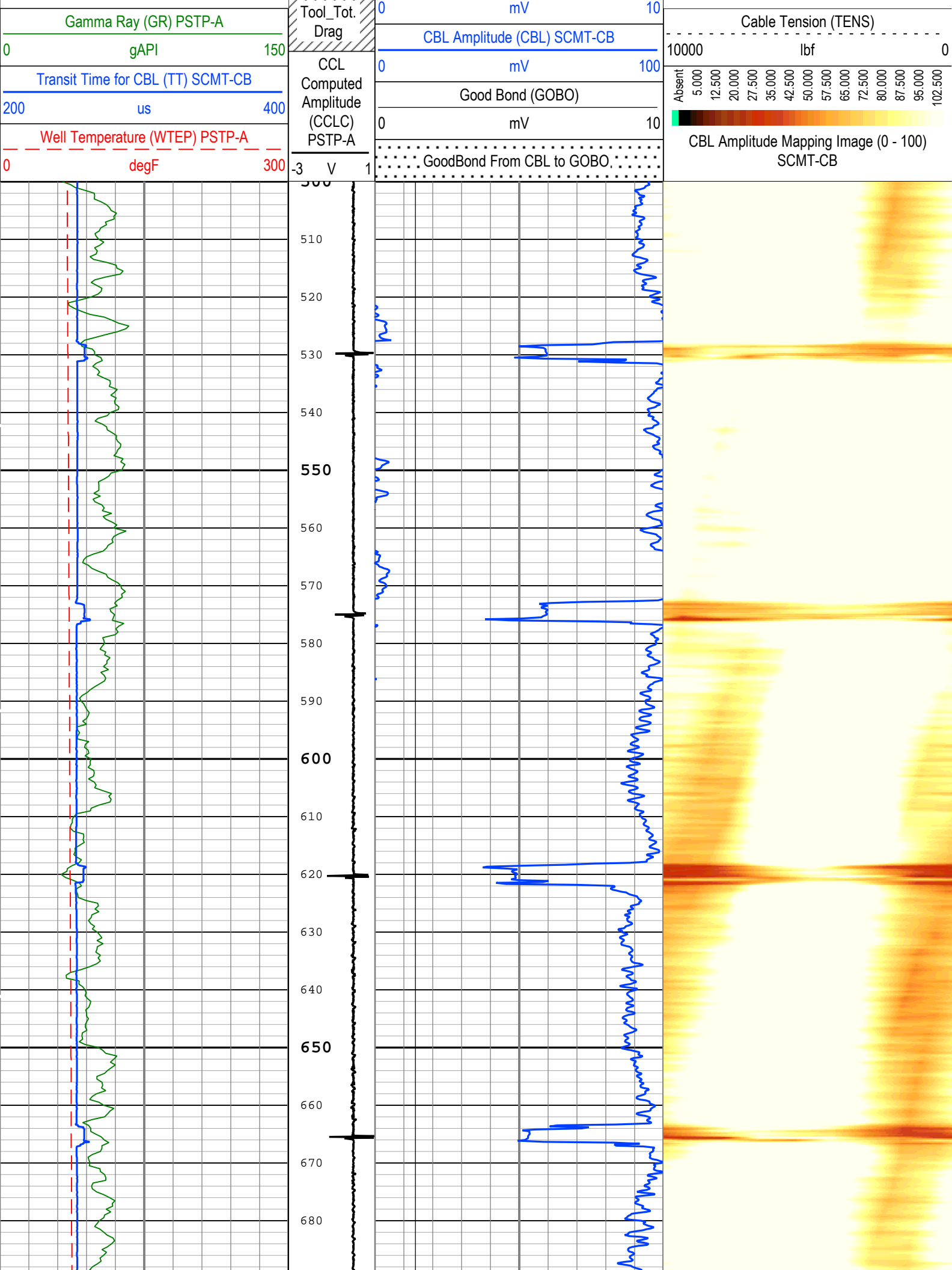
Remarks and Equipment Summary

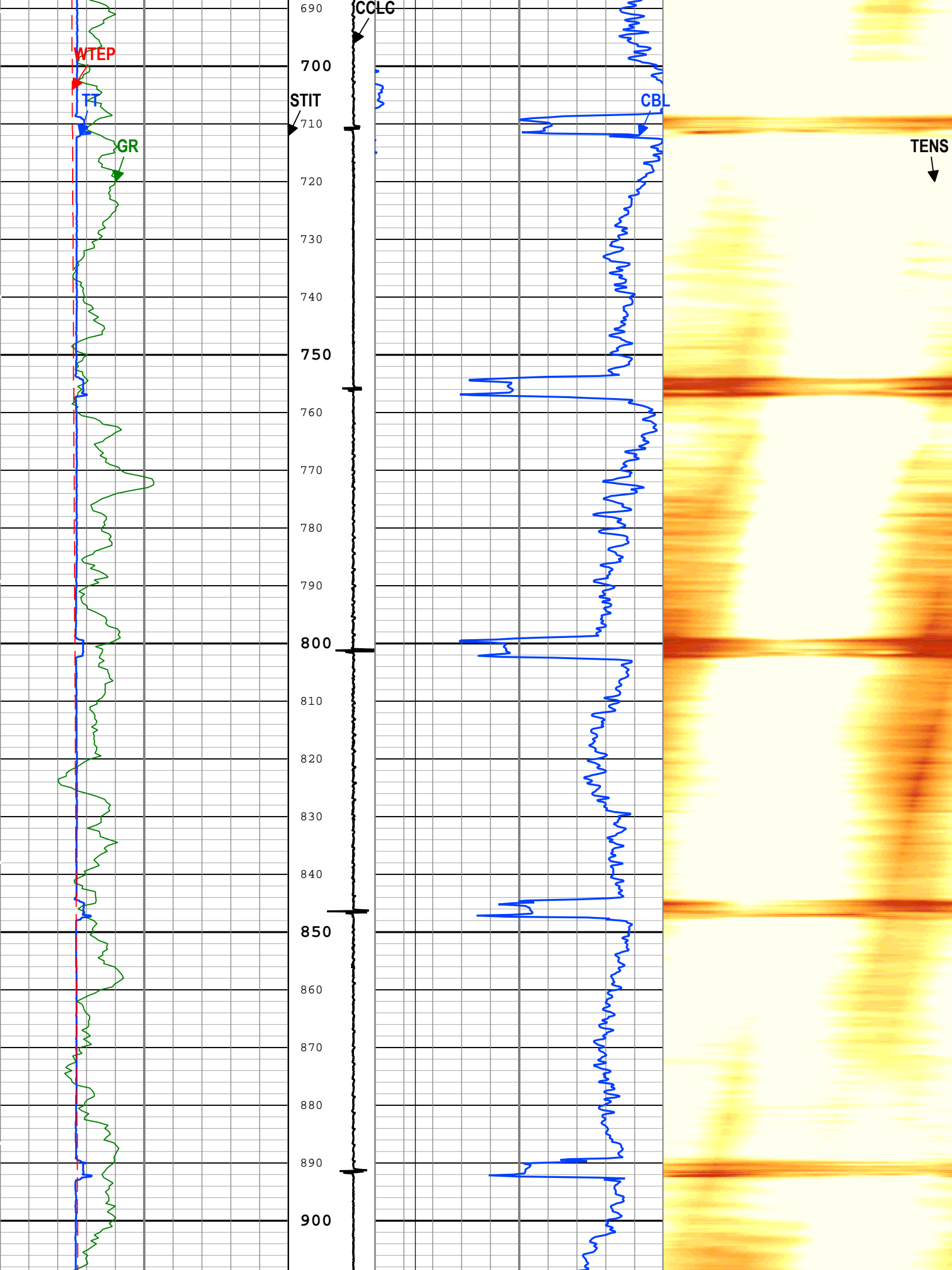
ONE: Toolstring				ONE: Remarks		
Equip name	Length	MP name	Offset	Thank you for choosing Schlumberger!		
LEH-QT	55.37			Log run for cement and formation evaluation		
LEH-QT				Tool run centralized as per tool sketch		
AH-63	52.45			Repeat section done at surface after main pass, GR expected to read high.		
AH-79	52.13			Crew: Oscar Silva, Kenneth Ellis, Gary Lapp		
PSTP-A:382	51.3					
3						
PSC-A						
PSTC-A:3733						
PBMS-A:3823						
Sapphire 10kP						
SI						
RST-C:343	43.03					
RSCH-A:412						
RSC-E:416						
RSS-A:374						
MNTR-F:1254						
RSXH-A:342						
RSX-E:343						

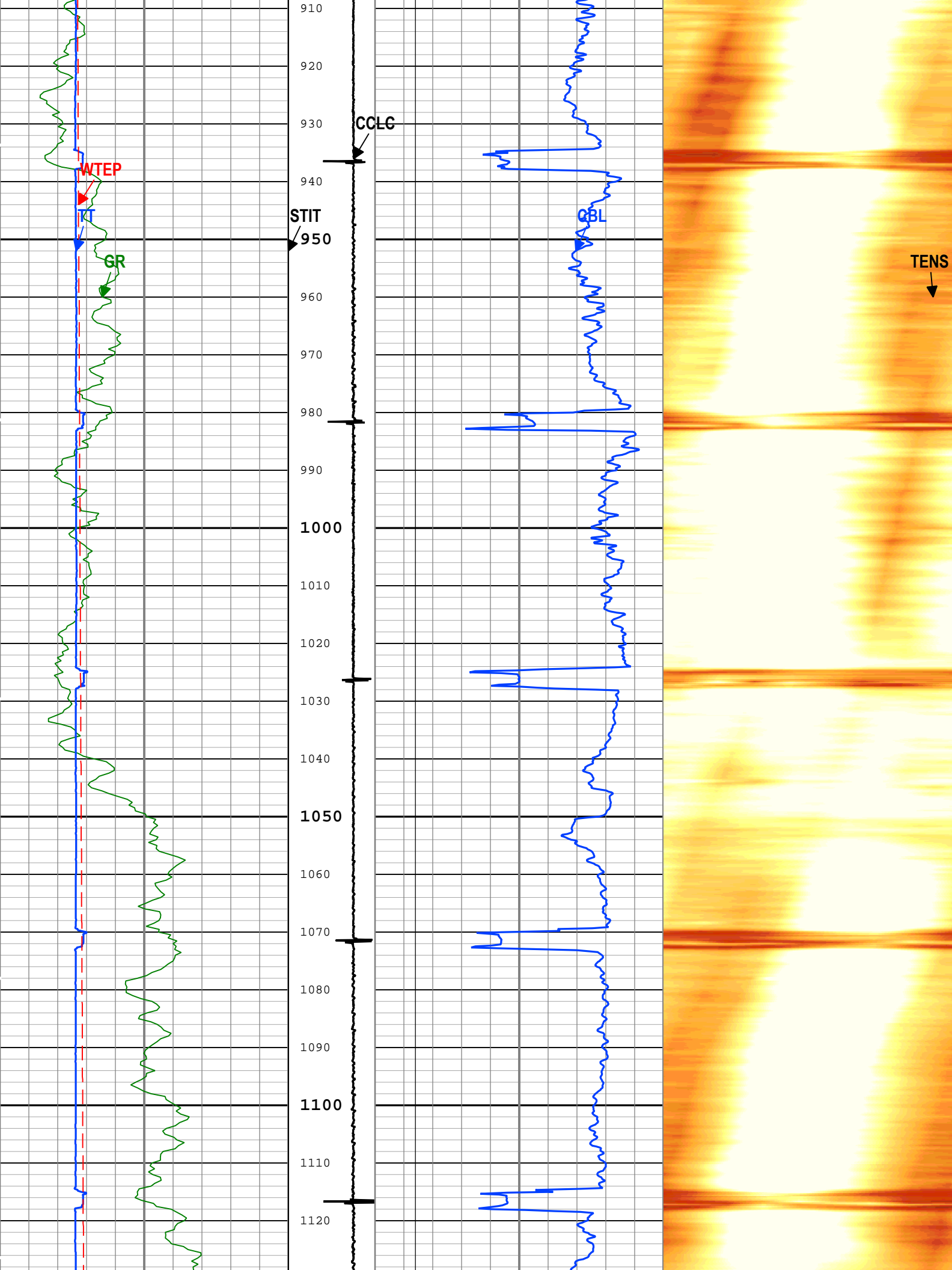


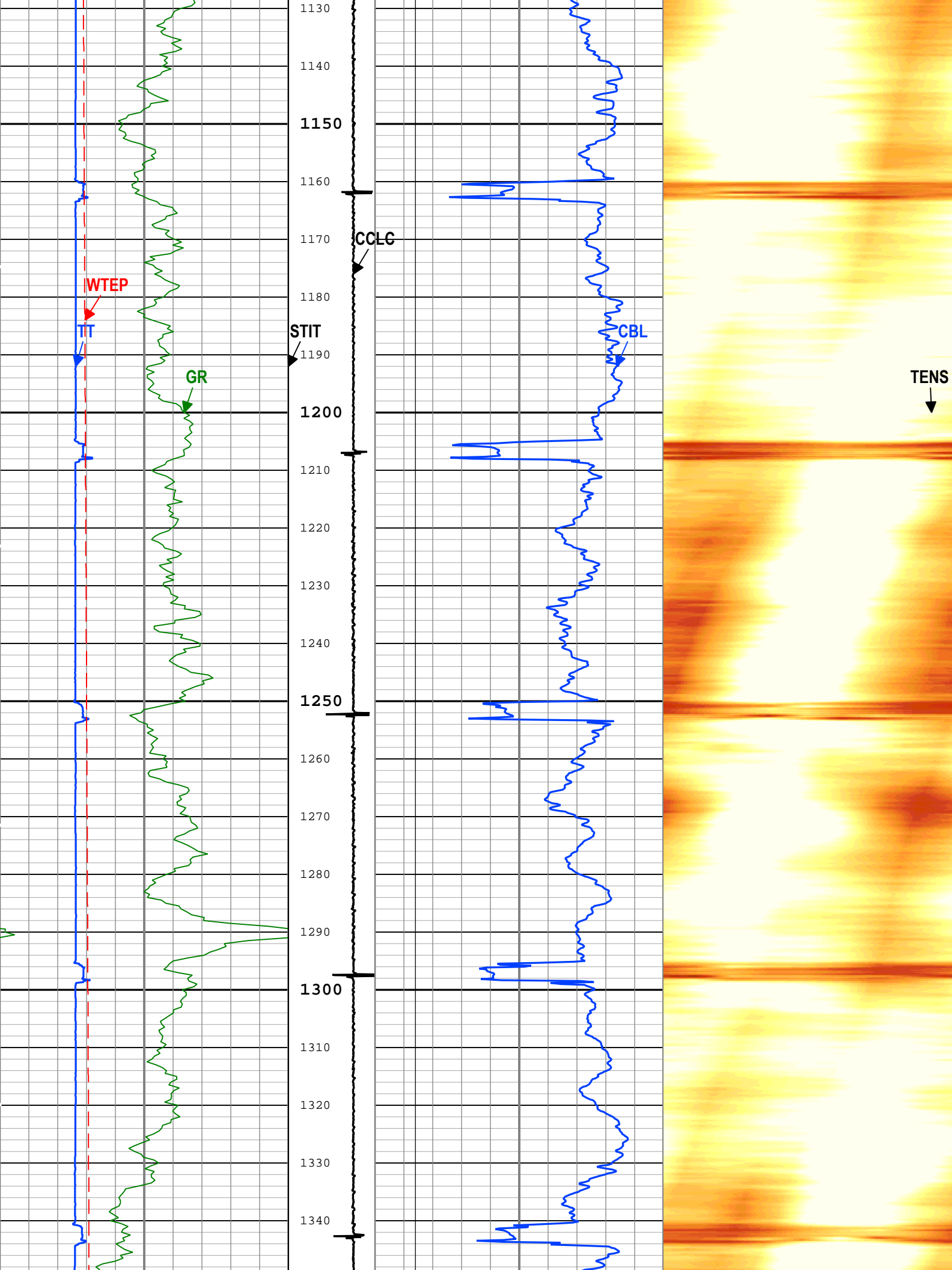
Depth Summary			
		ONE	
Depth Measuring Device			
Type	IDW-B		
Serial Number			

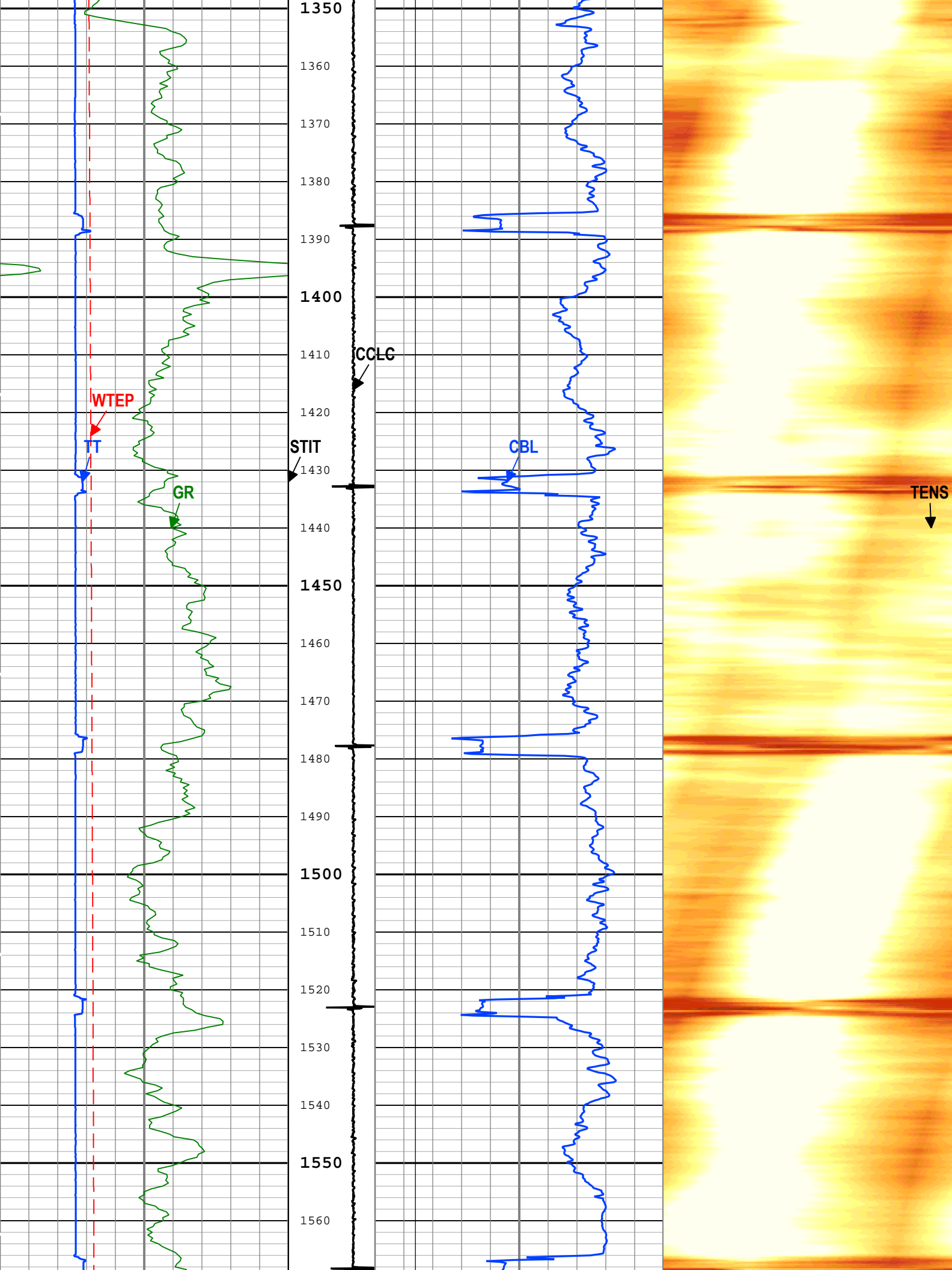
Calibration Date									
Calibrator Serial Number									
Calibration Cable Type									
Wheel Correction 1		0							
Wheel Correction 2		0							
Tension Device									
Type		CMTD-B/A							
Serial Number									
Calibration Date									
Calibrator Serial Number									
Number of Calibration Points		0							
Logging Cable									
Type		7-39P-LXS							
Serial Number									
Length		2000.00 ft							
Conveyance Type		Wireline							
Rig Type		Crane							
ONE:Depth Control Parameters					Depth Control Remarks				
Log Sequence		First Log In the Well							
Rig Up Length At Surface									
Rig Up Length At Bottom									
Rig Up Length Correction									
Stretch Correction									
Tool Zero Check At Surface									
ONE									
Main									
Software Version									
Acquisition System						Version			
Maxwell 2017 SP2						7.2.87778.3100			
Pass Summary									
Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	DSC Mode	Depth Shift	Include Parallel Data
ONE	Log[4]:Up	Up	487.72 ft	7663.93 ft	22-Jul-2017 9:54:31 PM	23-Jul-2017 12:26:07 AM	ON	5.47 ft	Yes
All depths are referenced to toolstring zero									
Log	Company:CAERUS OPERATING LLC Well:Chevron 11D-17 ONE: Log[4]:Up:S002								
Description: SCMT Amplitudes and MAP Image Format: Log (SCMT_Amp_Image_1) Index Scale: 5 in per 100 ft Index Unit: ft Index Type: Measured Depth Creation Date: 23-Jul-2017 01:09:48									
TIME_1900 - Time Marked every 60.00 (s)									
			Stuck Tool Indicator, Total (STIT)						
			0 ft 50						
			Cable Drag		CBL Amplitude (CBL) SCMT-CB				

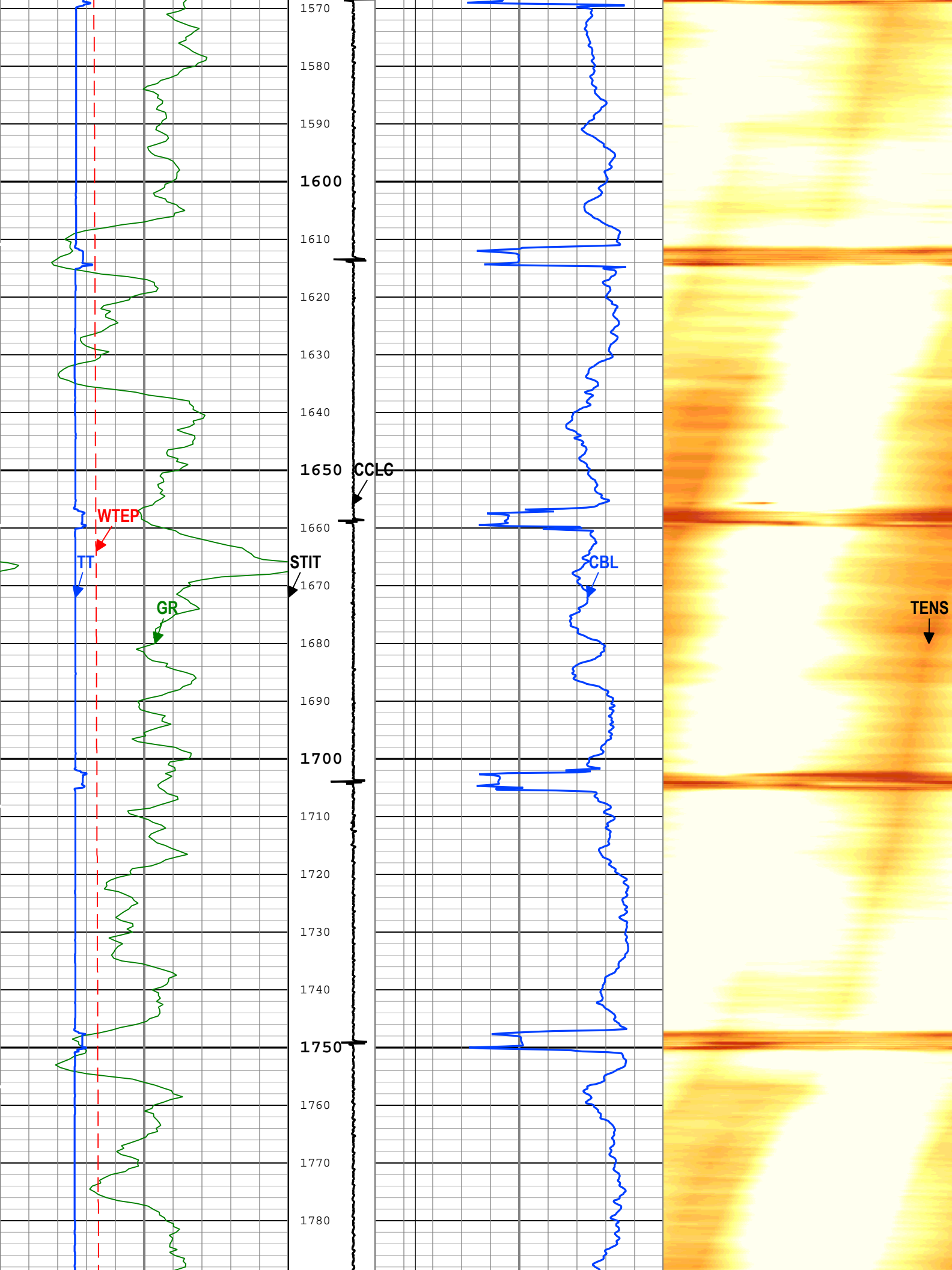


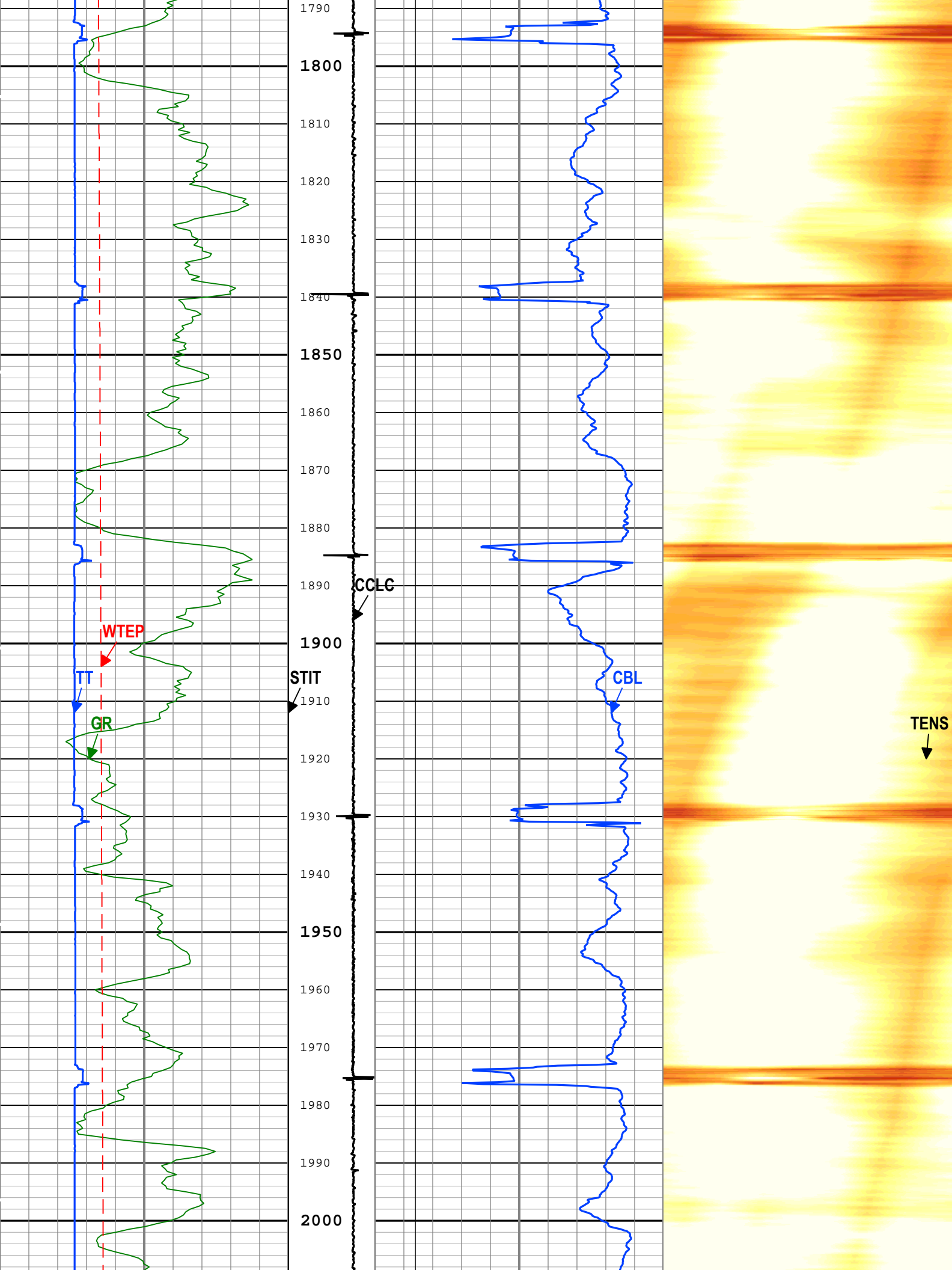


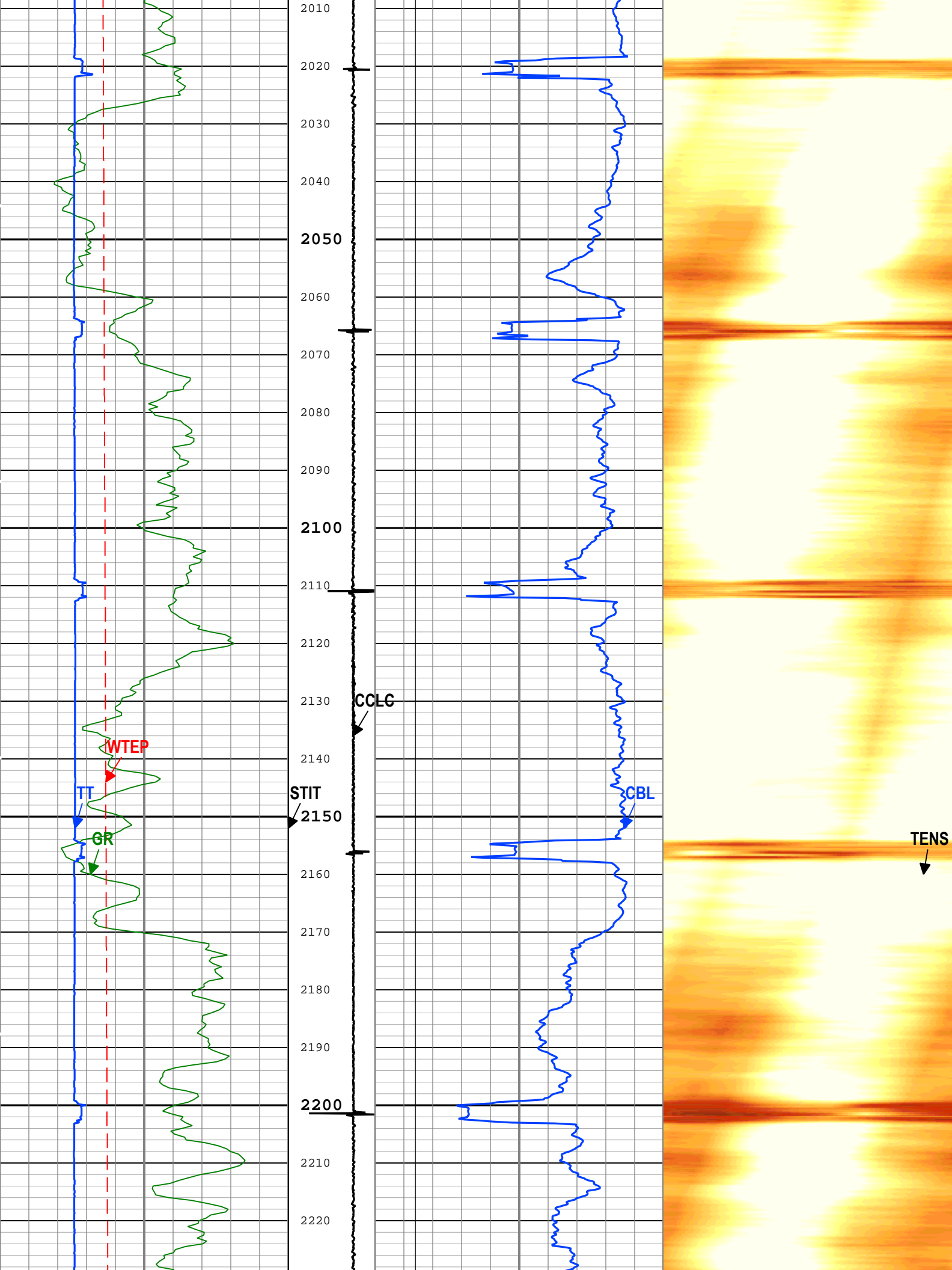


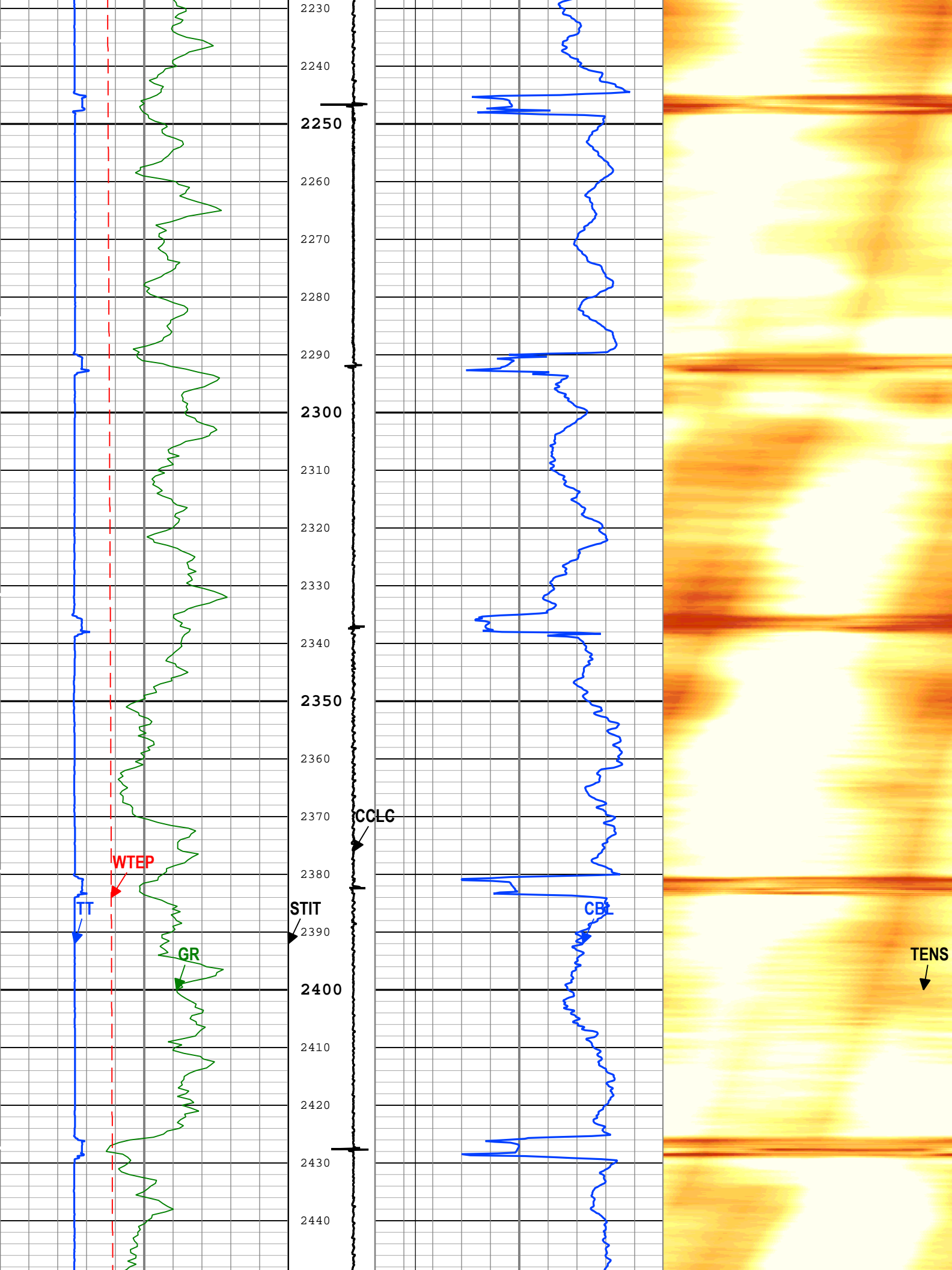


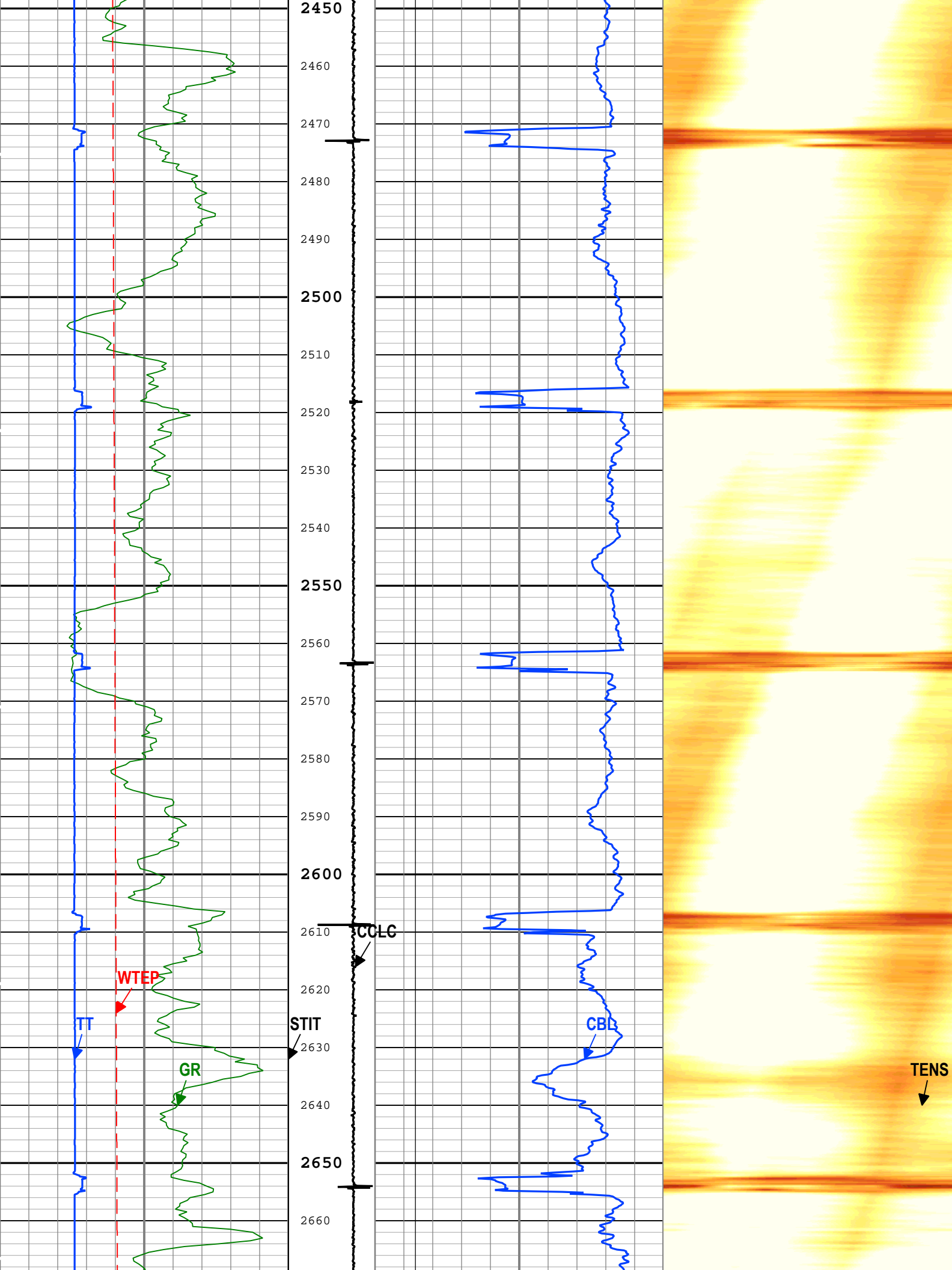


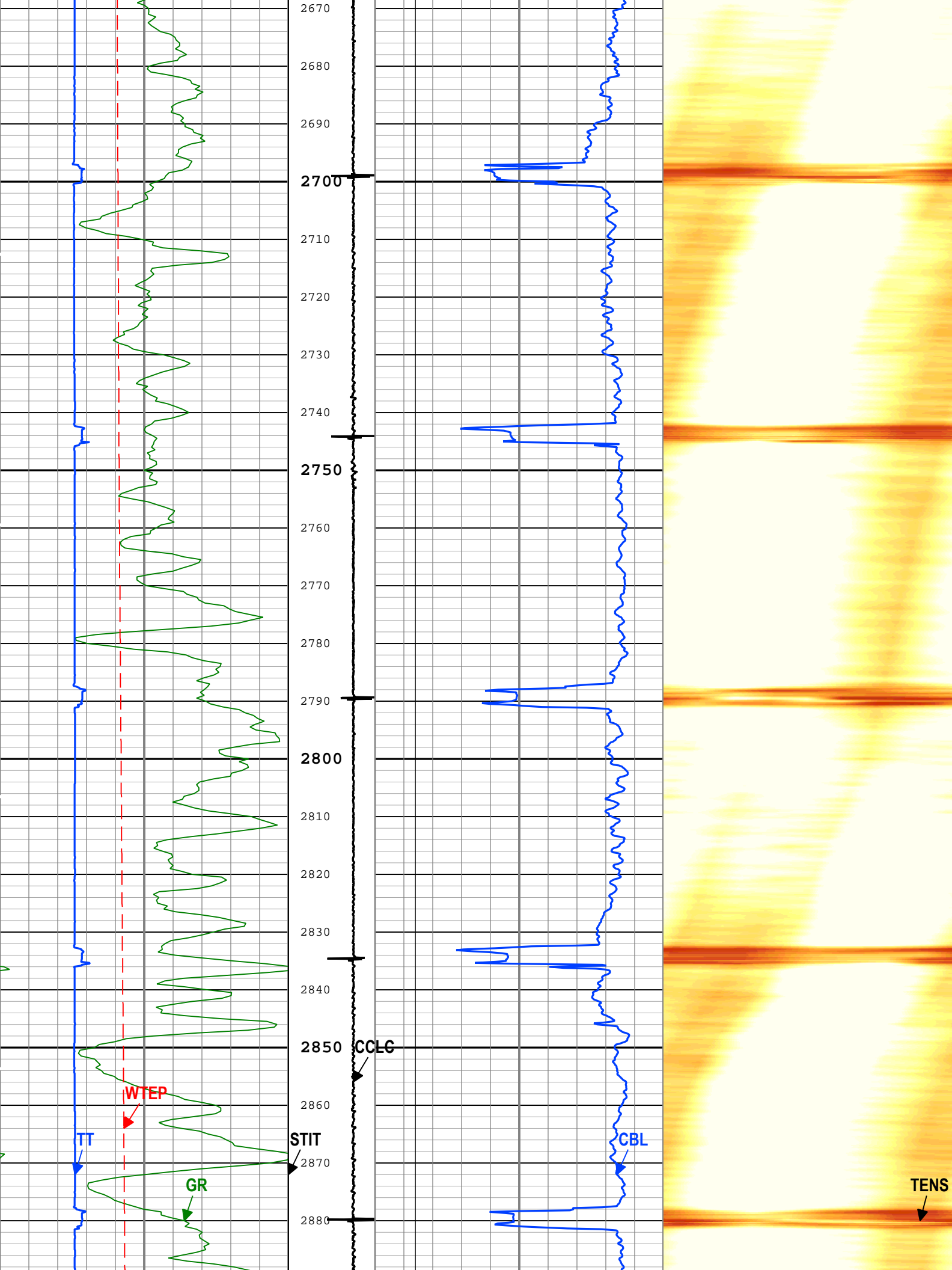


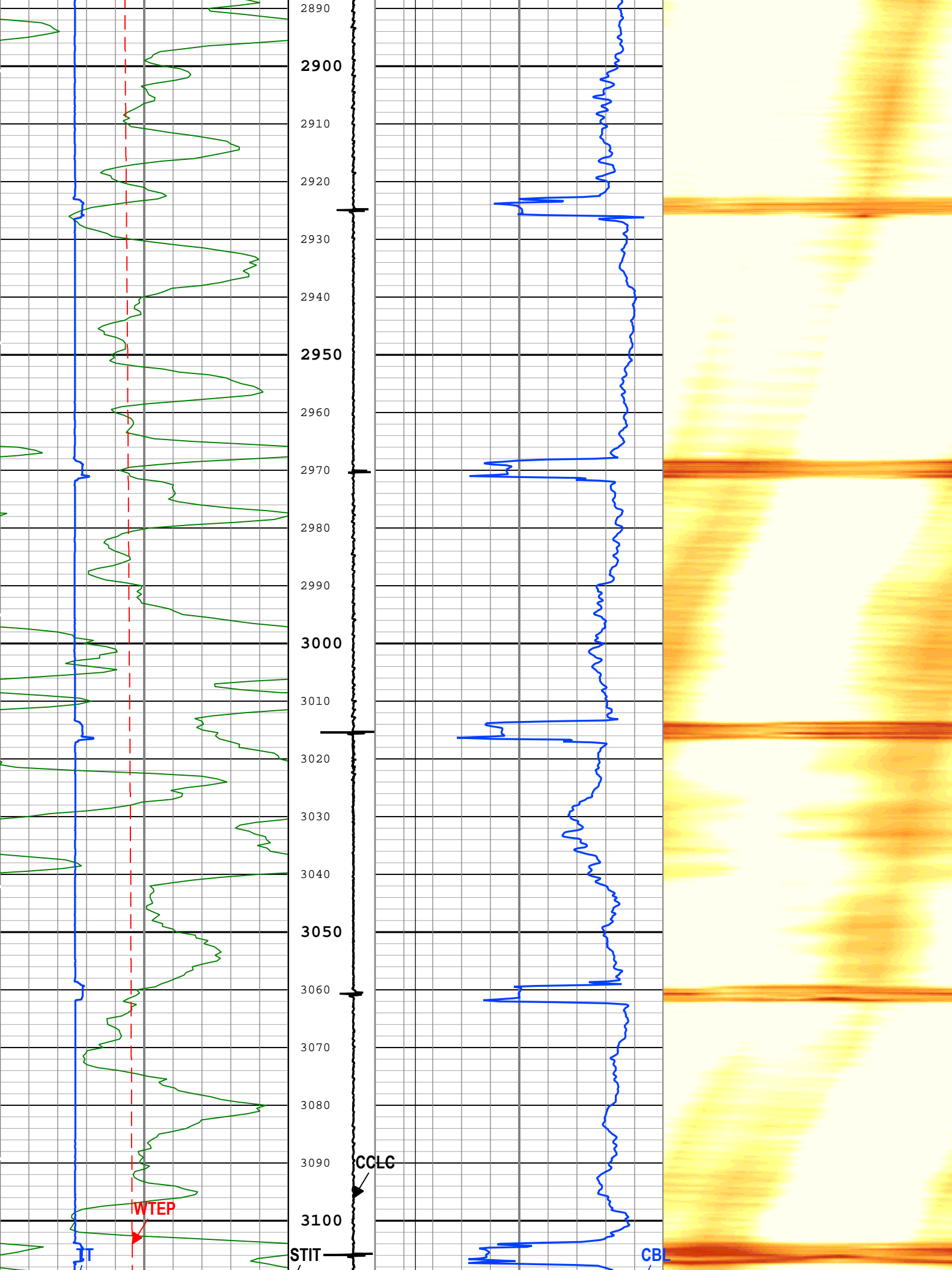


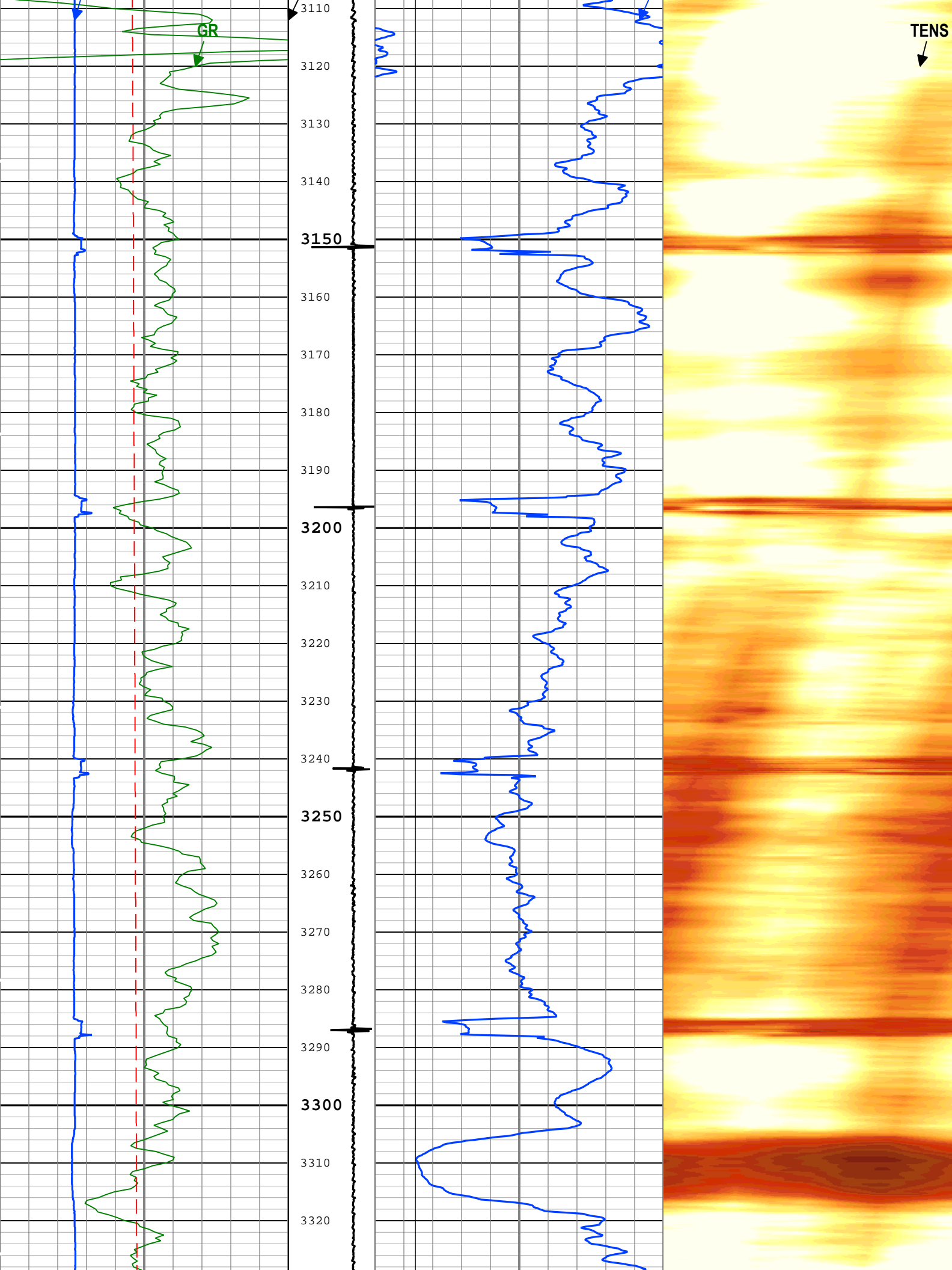


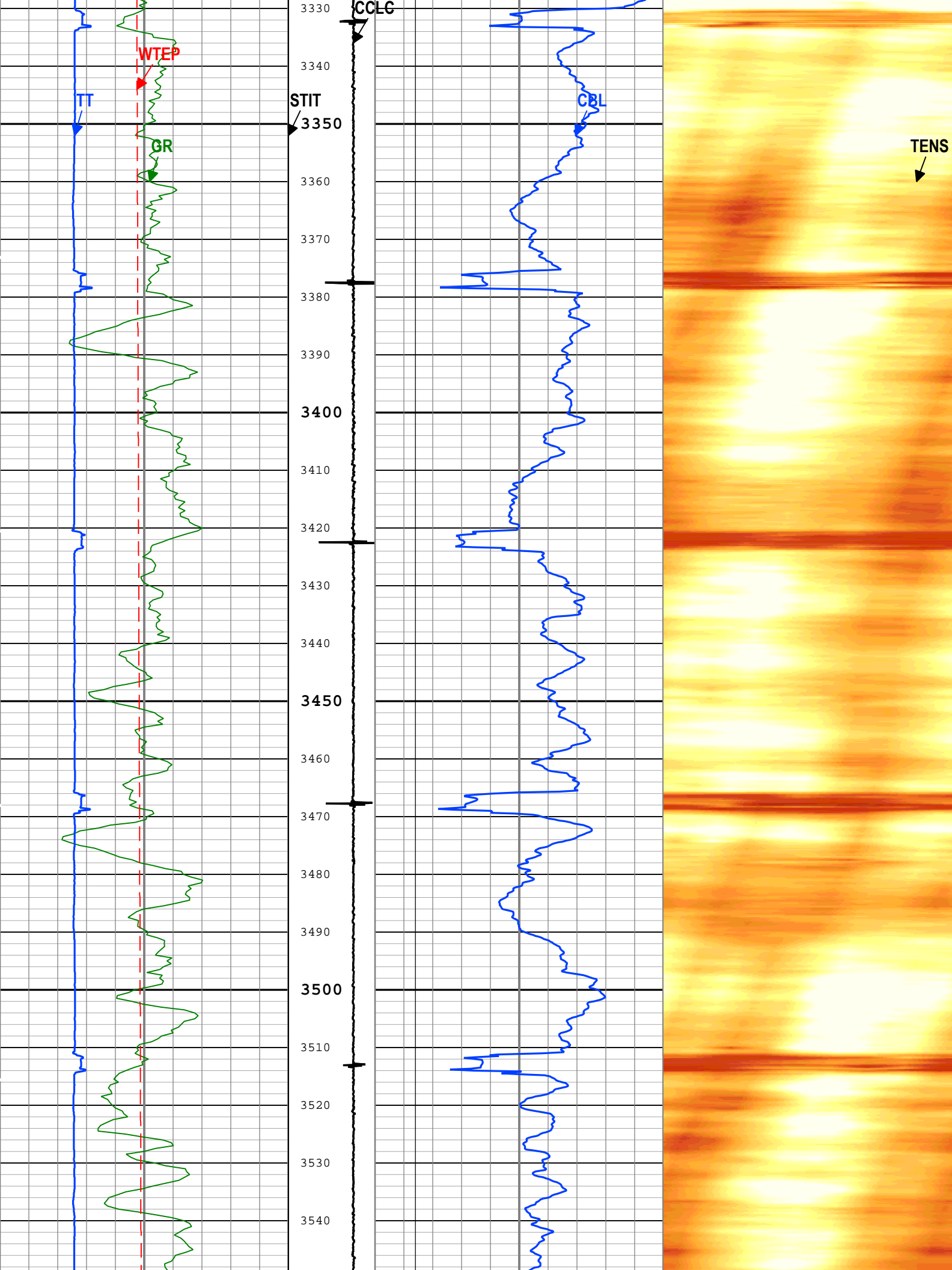


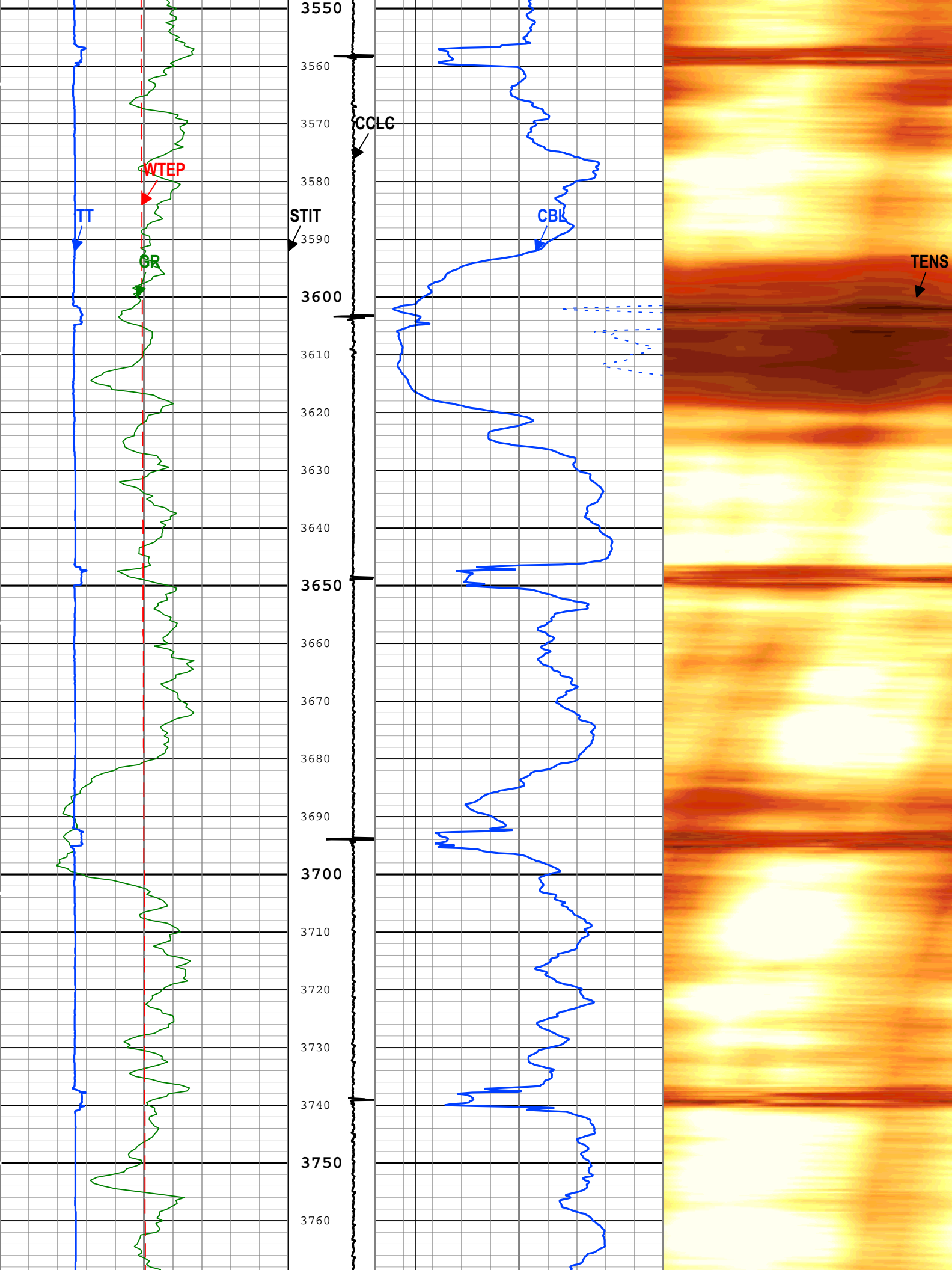


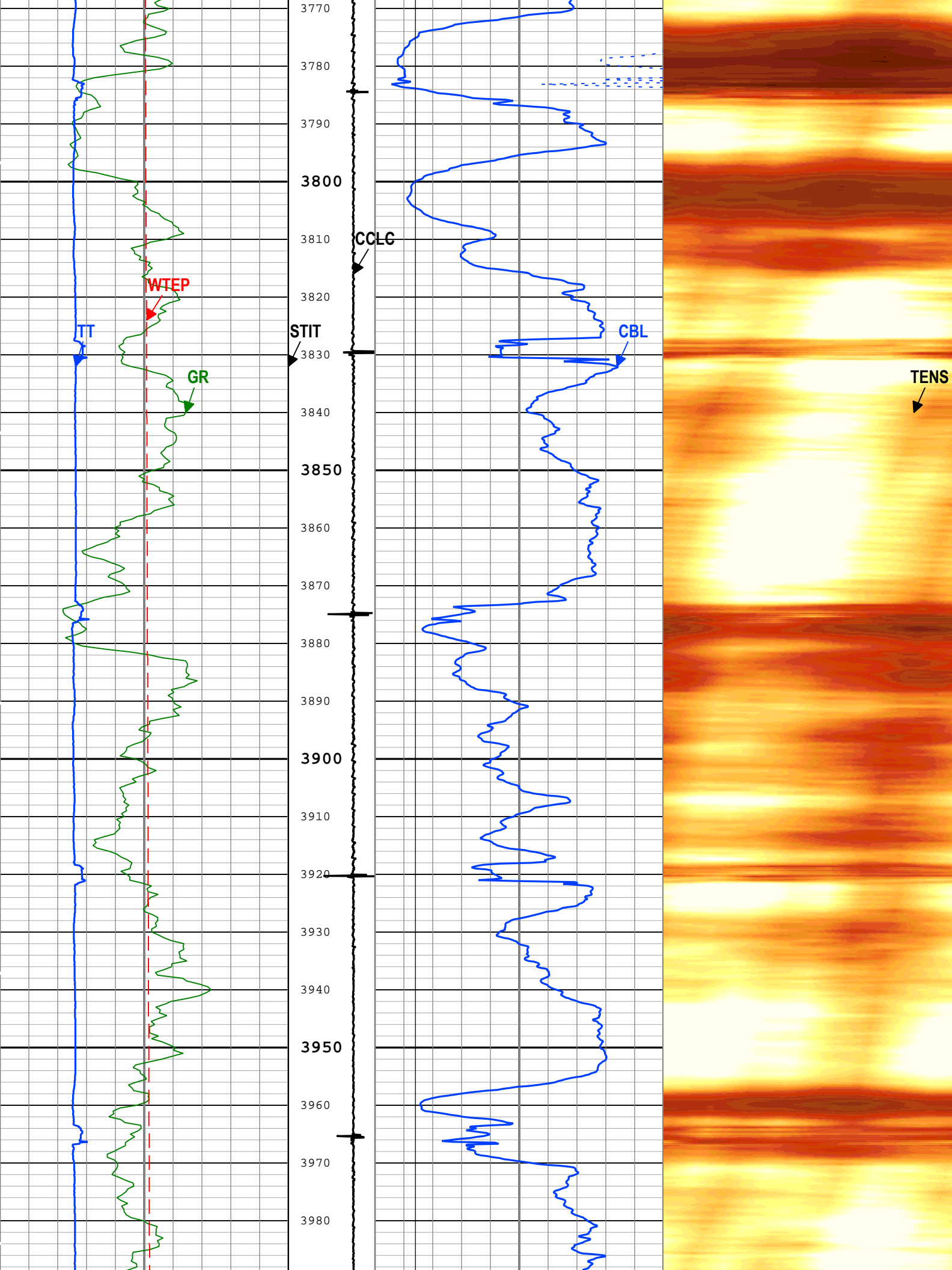


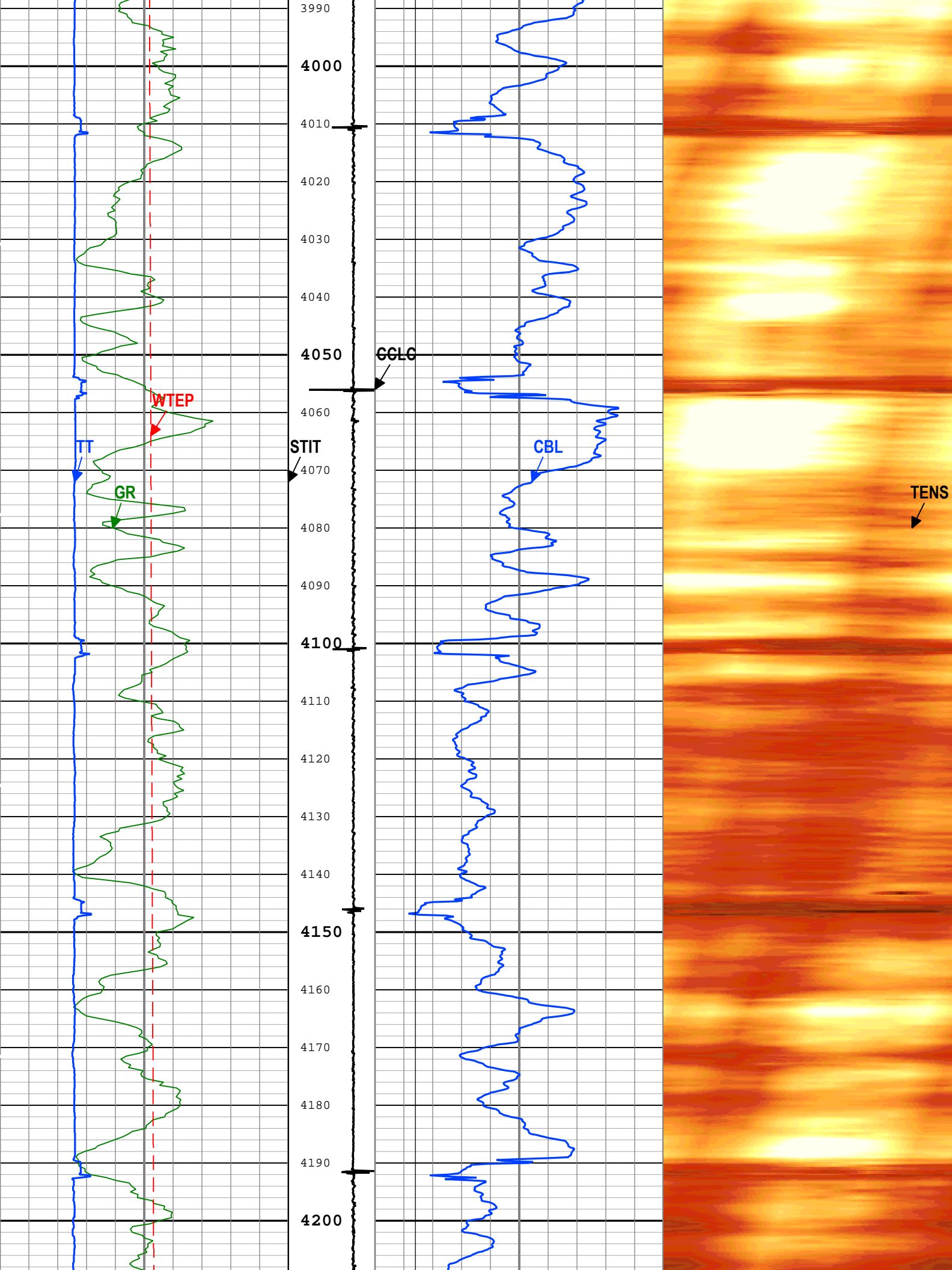


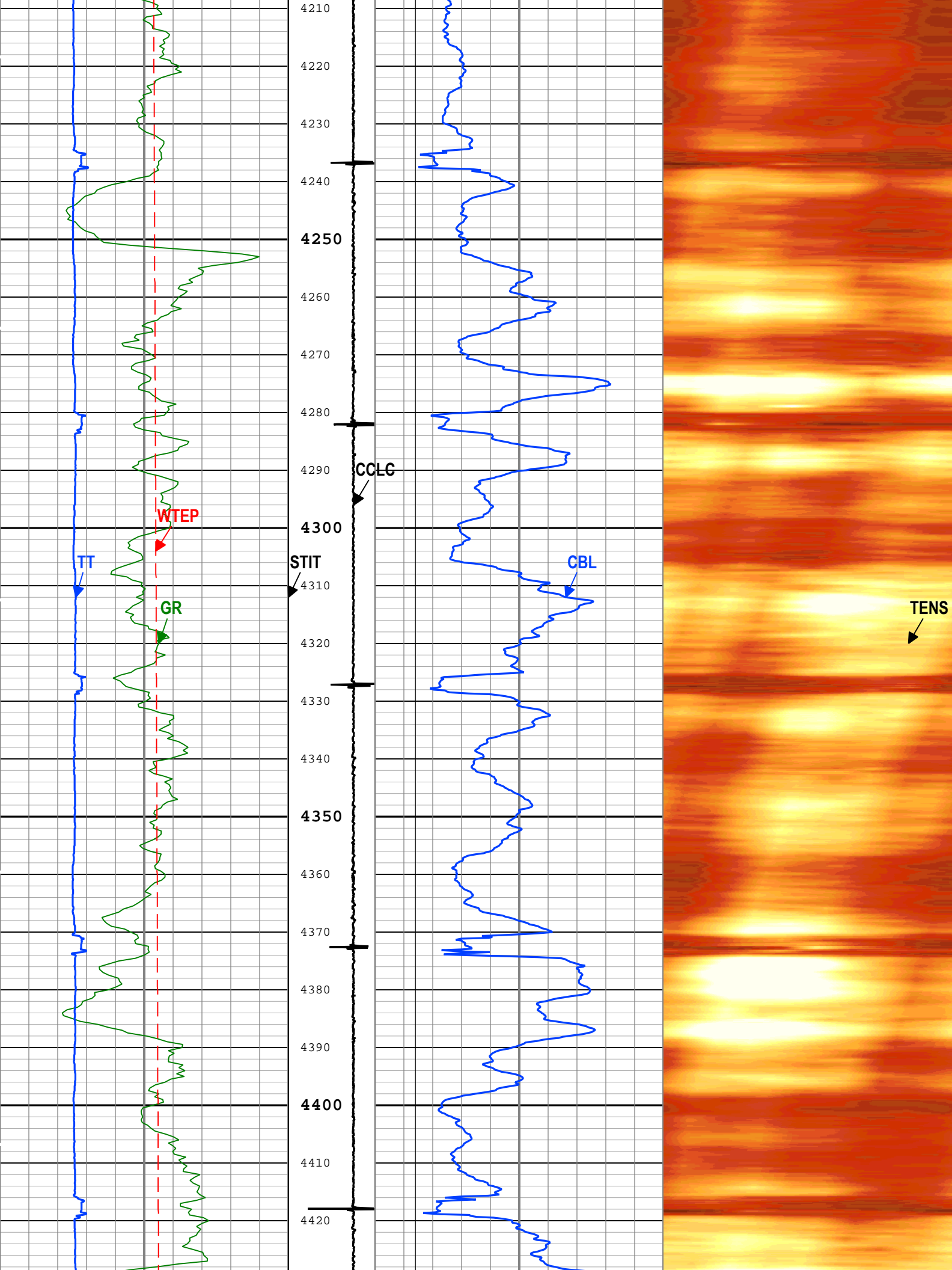


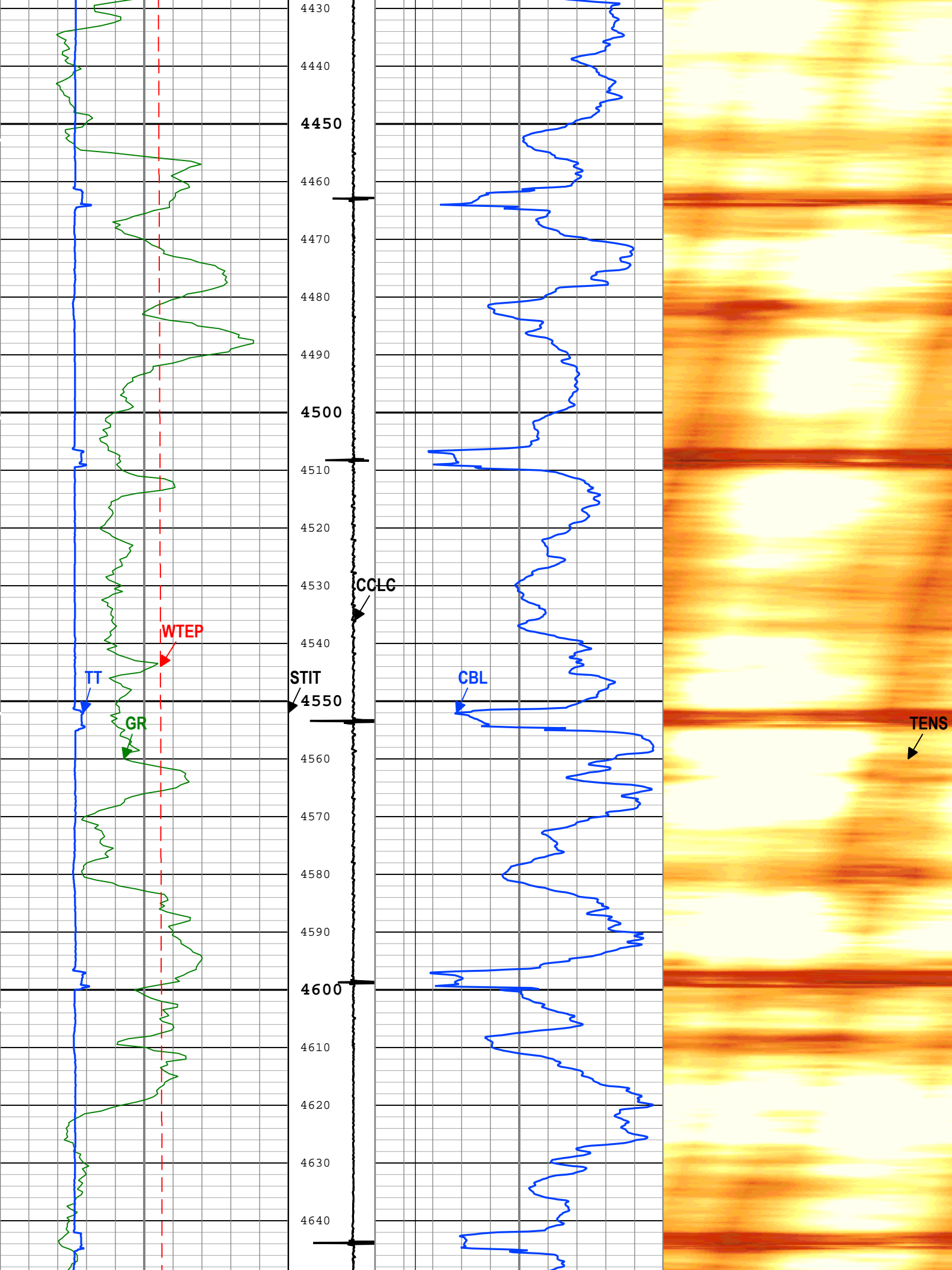


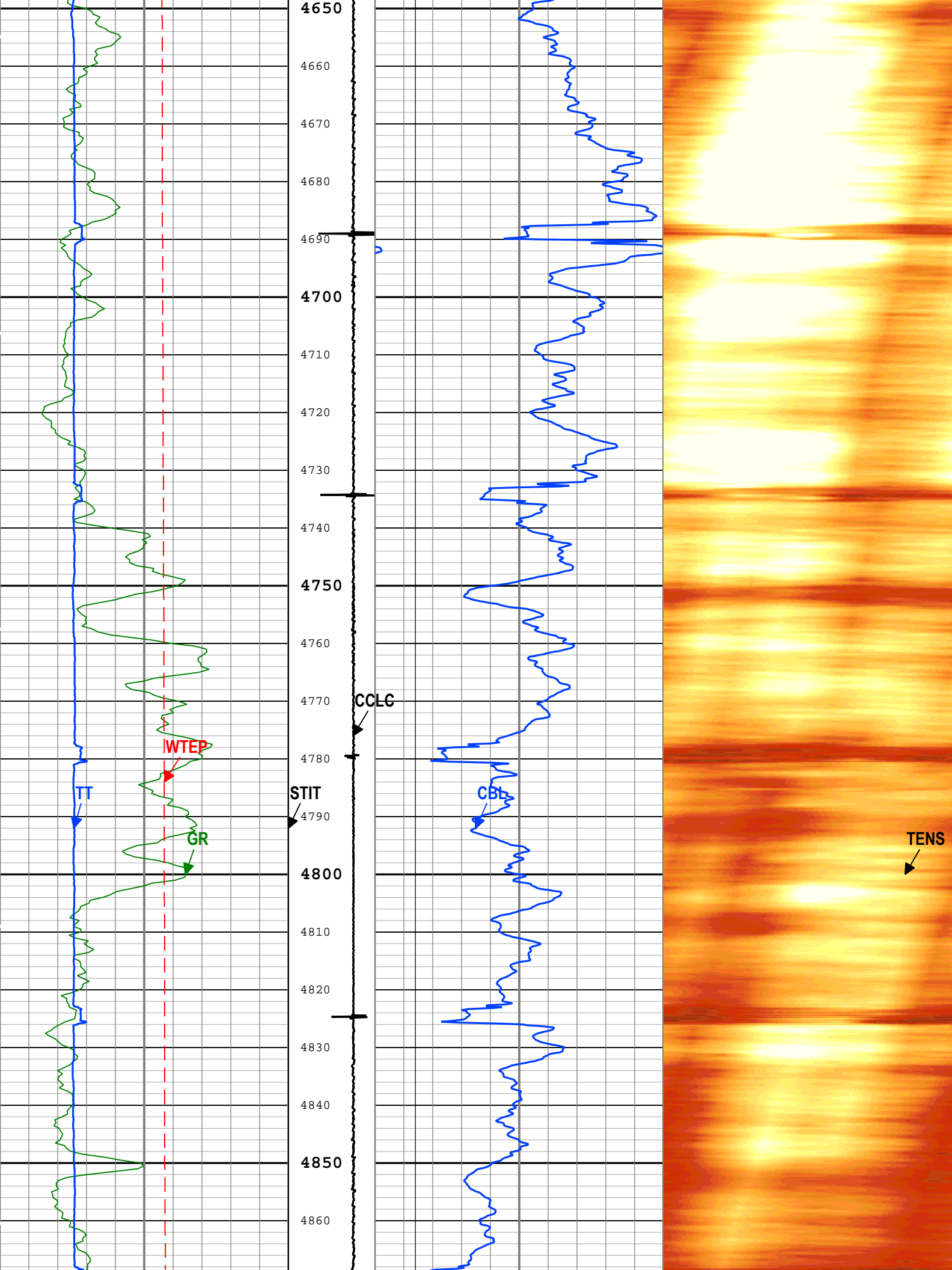


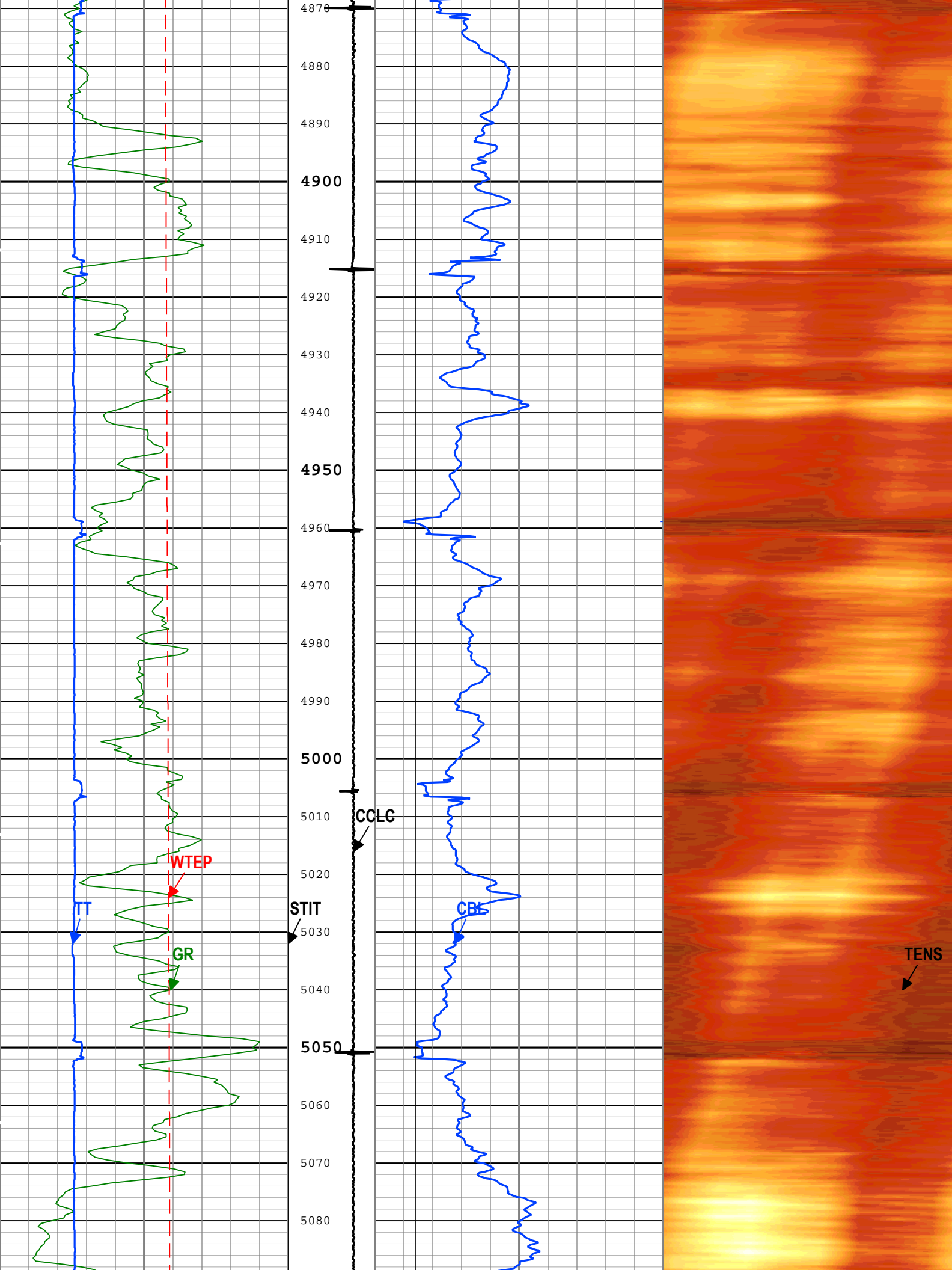


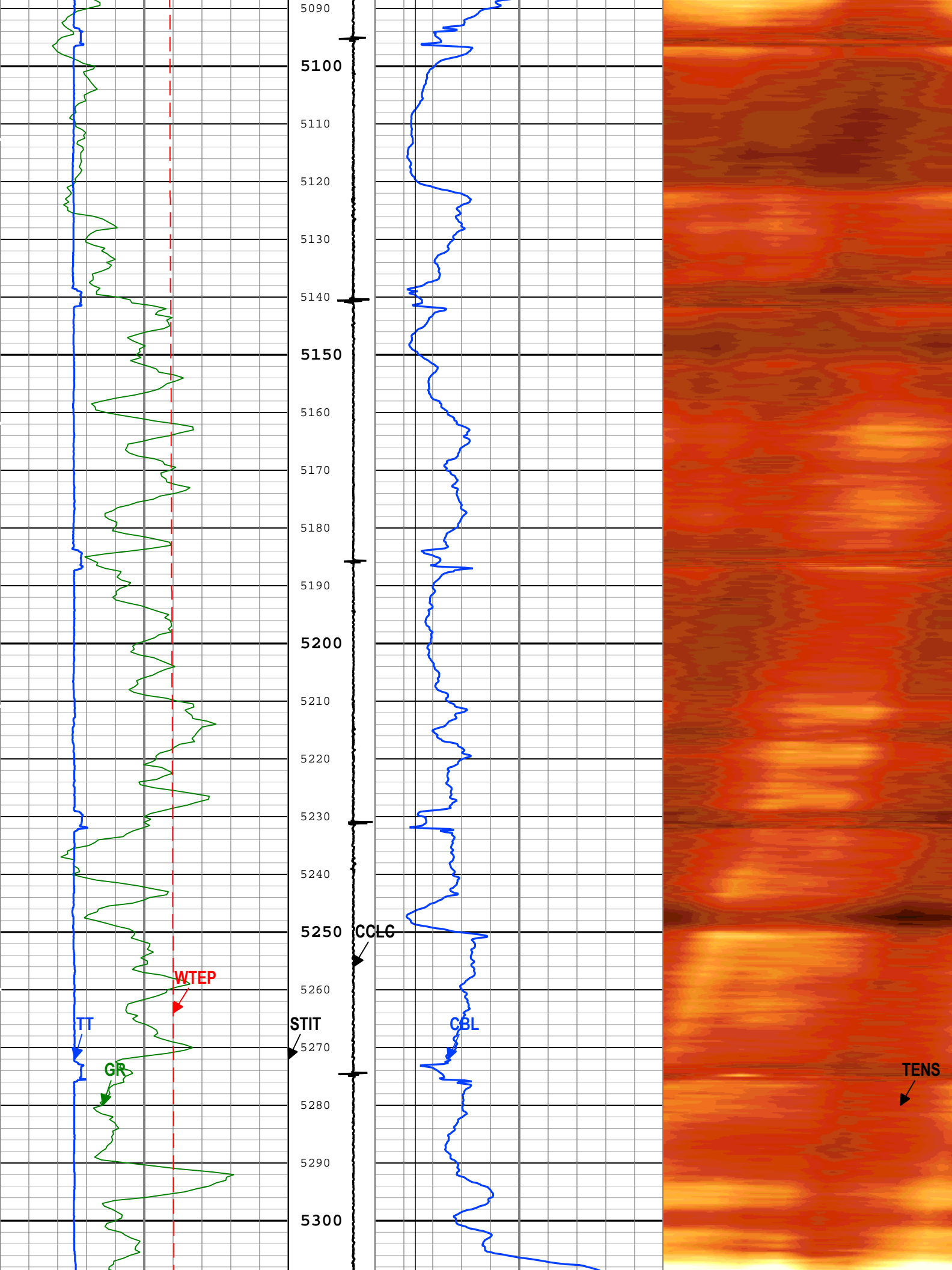


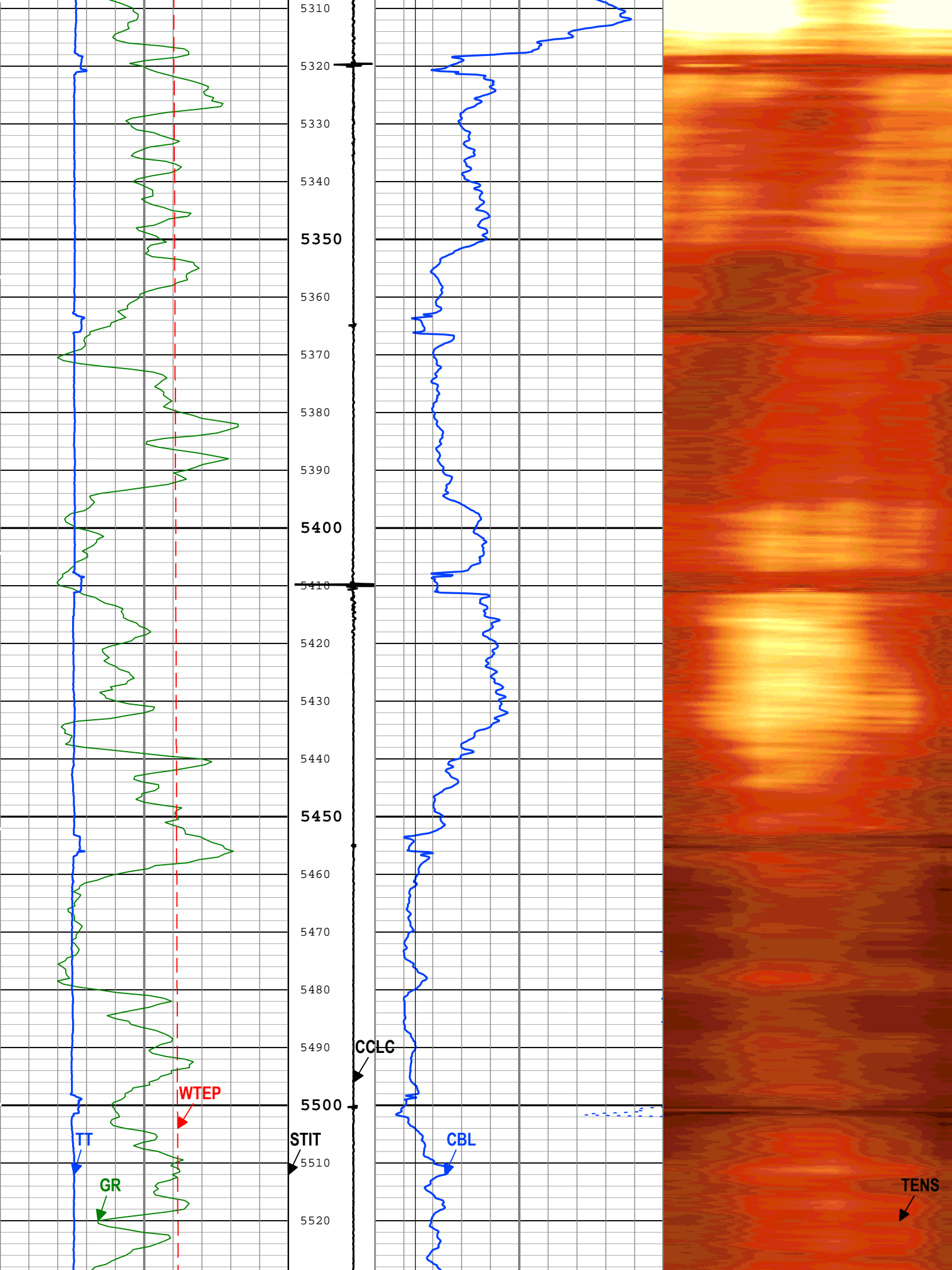


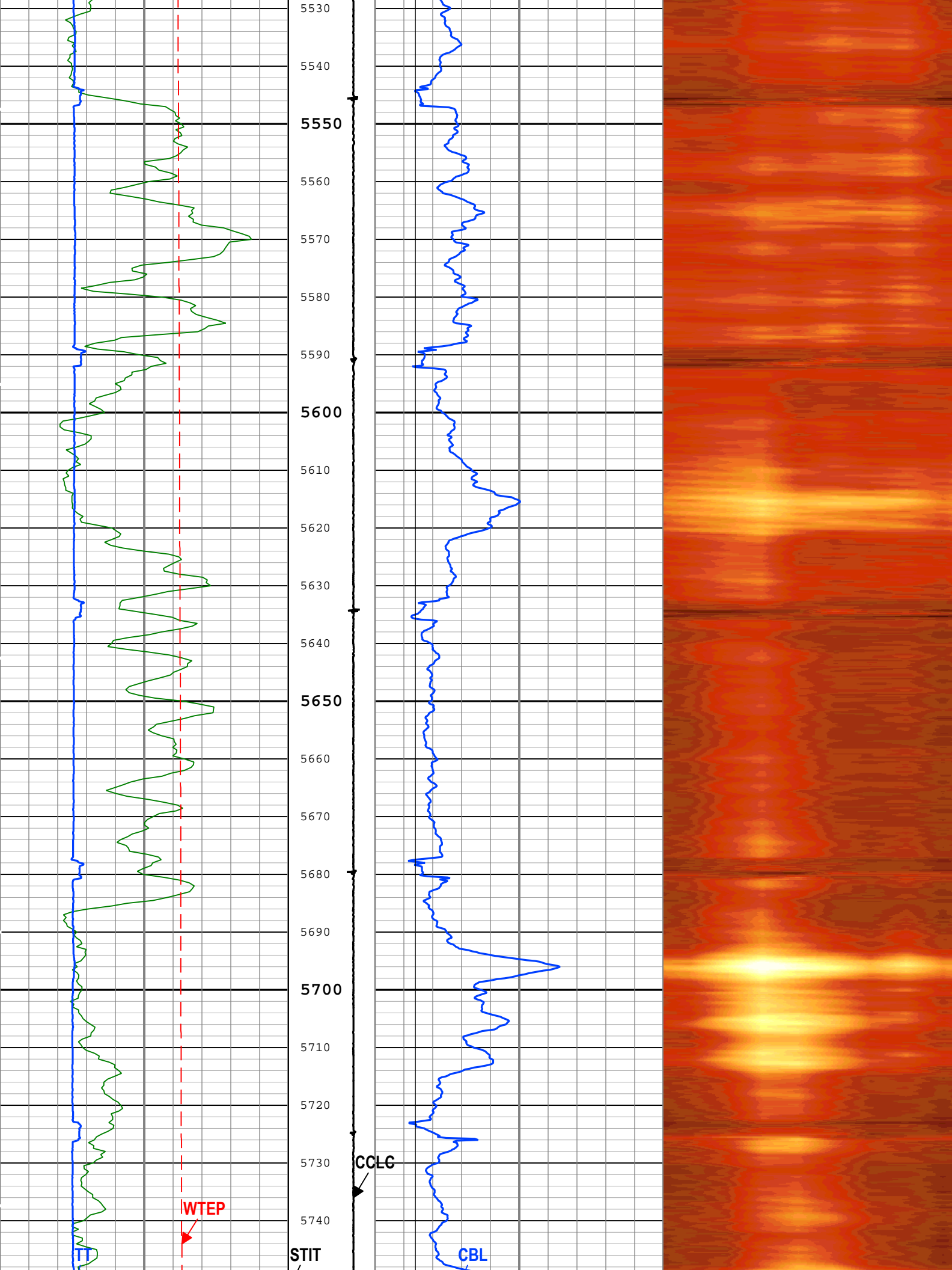


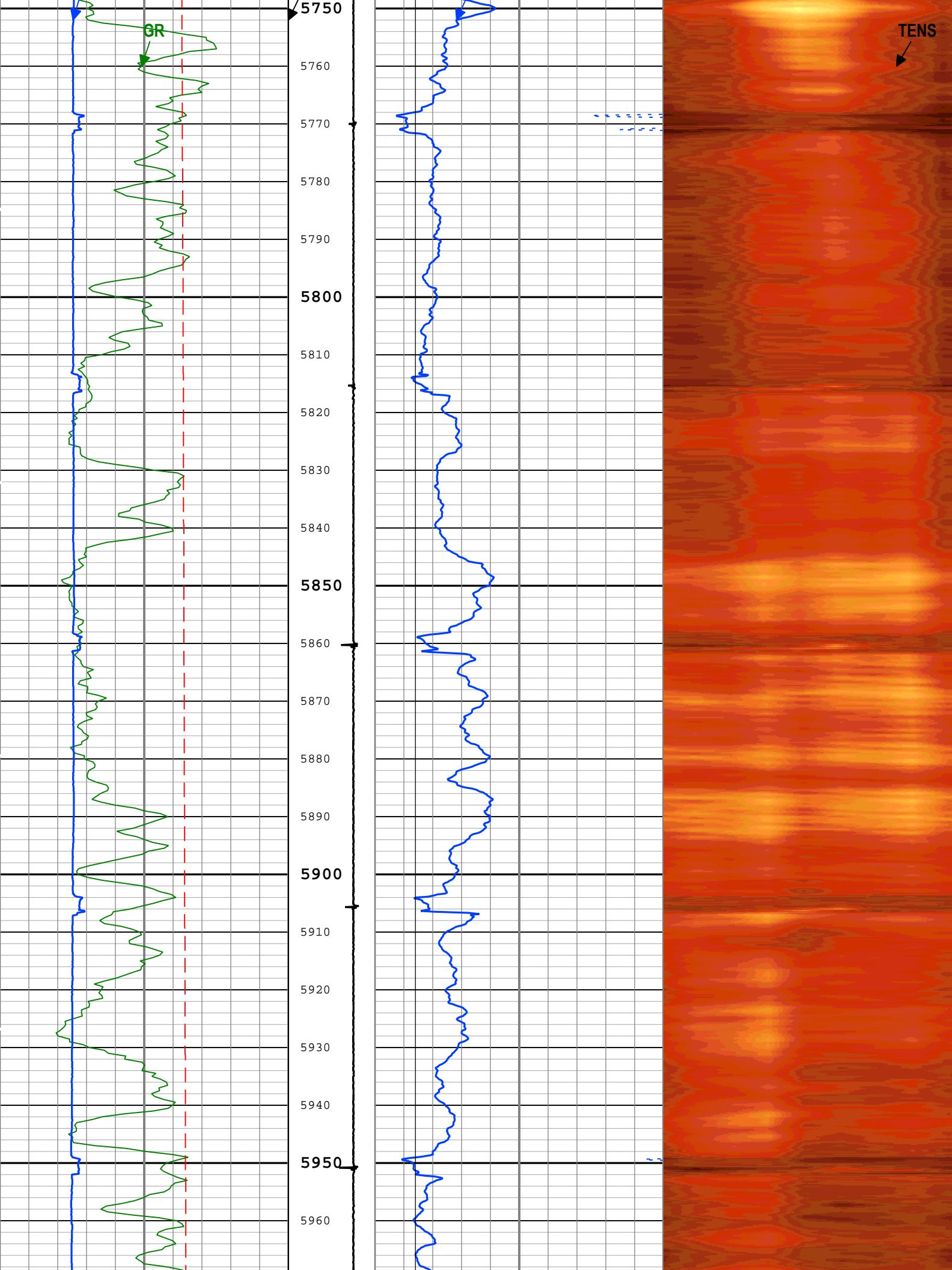


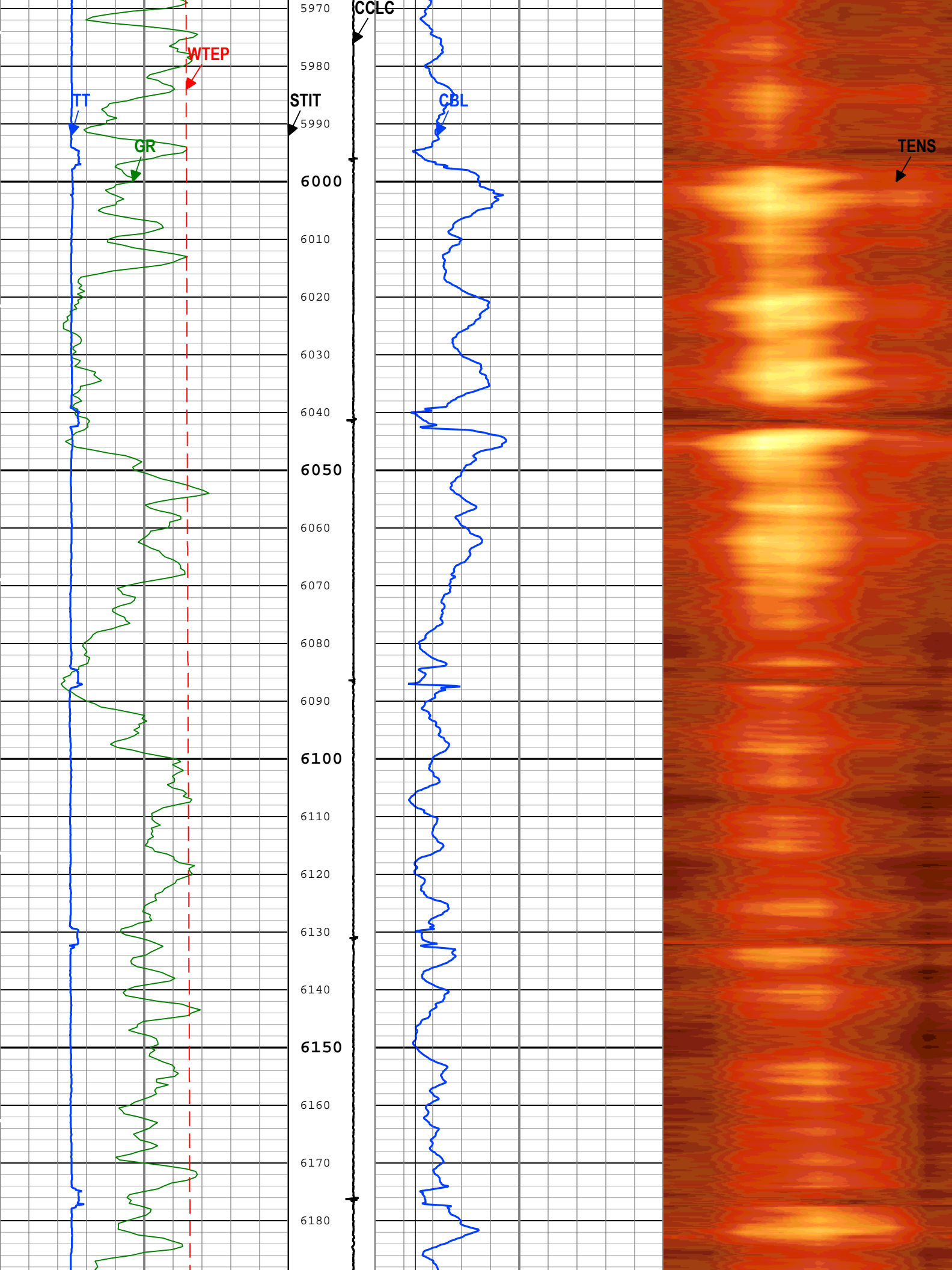


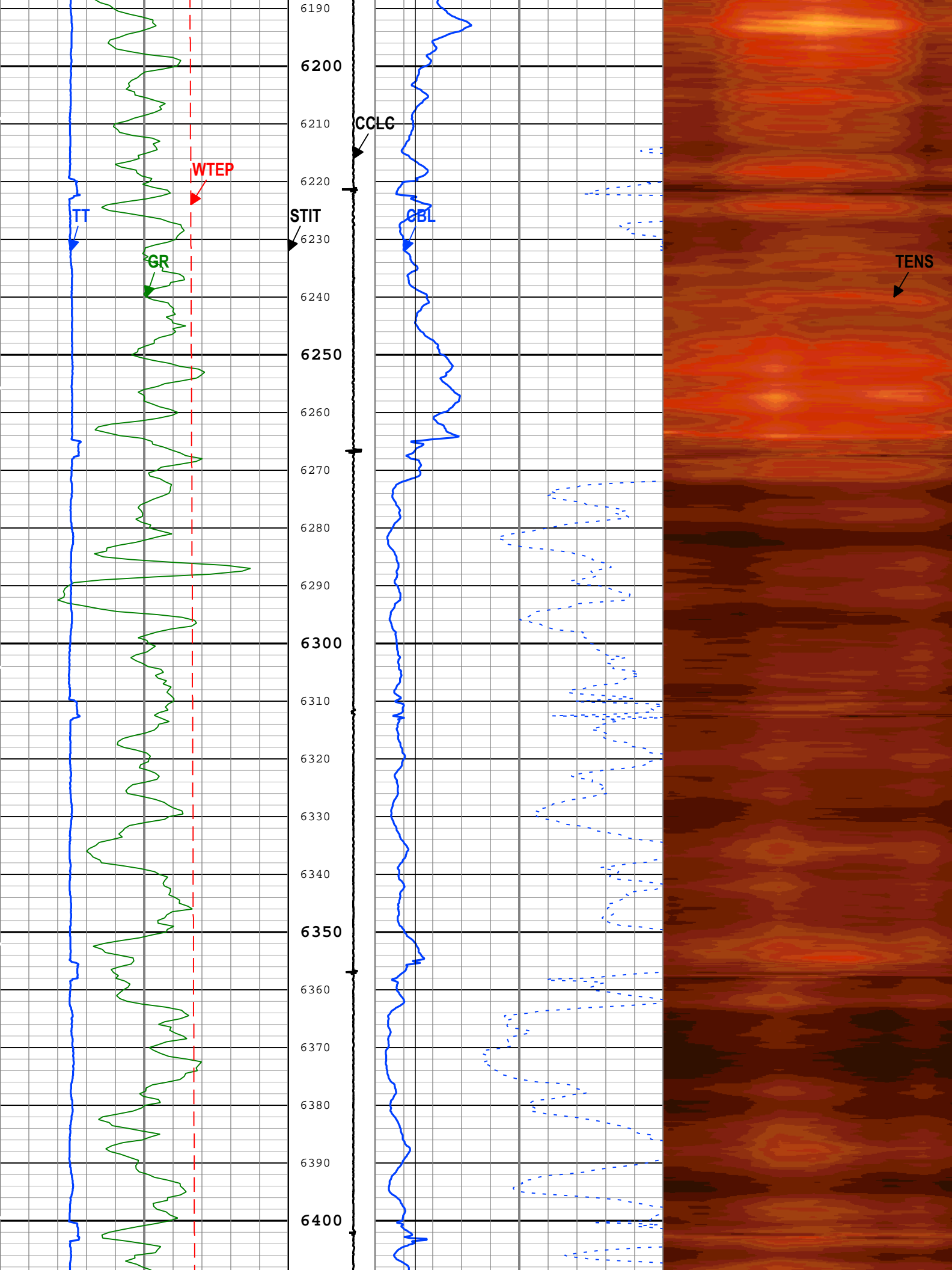


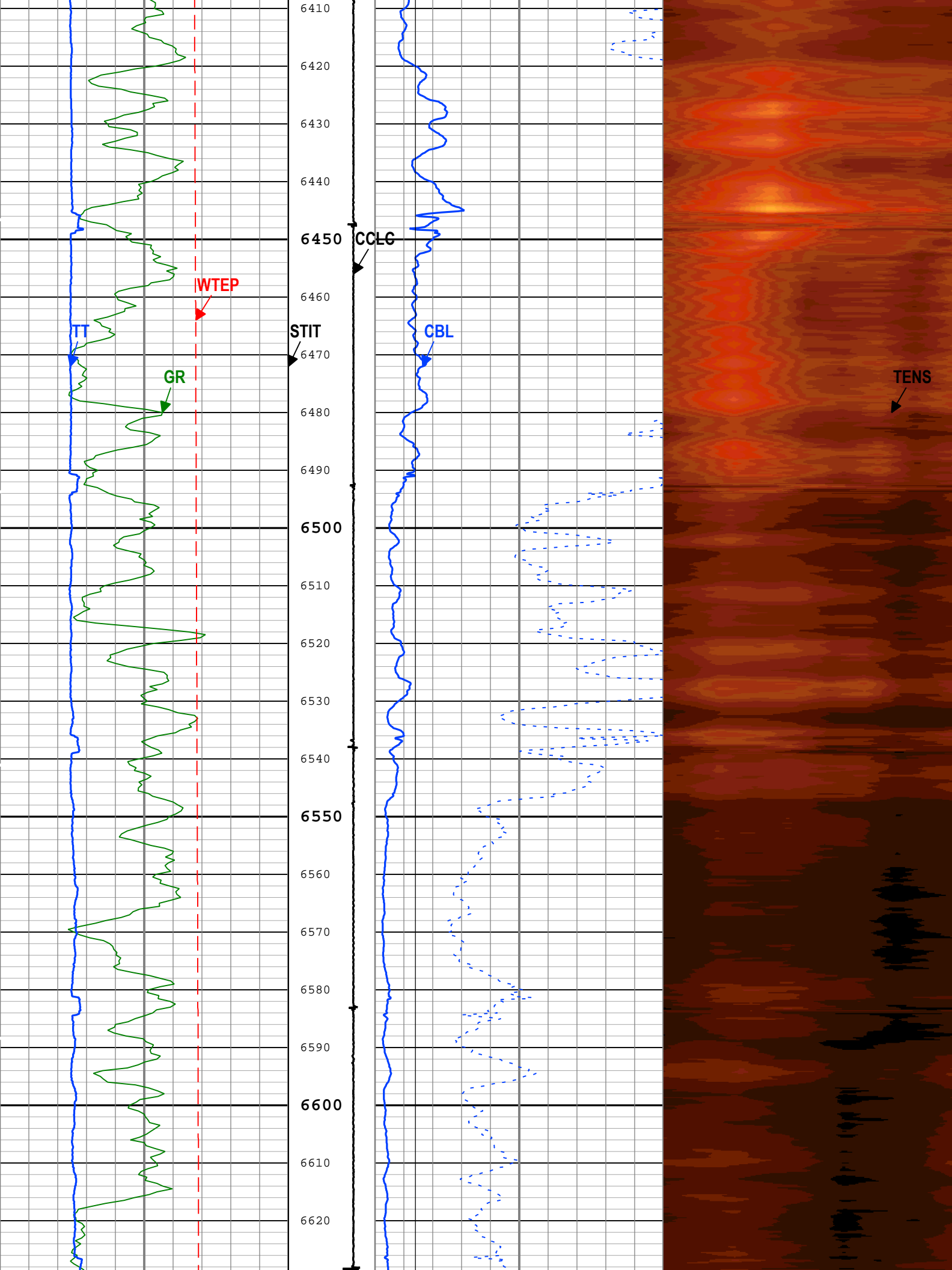


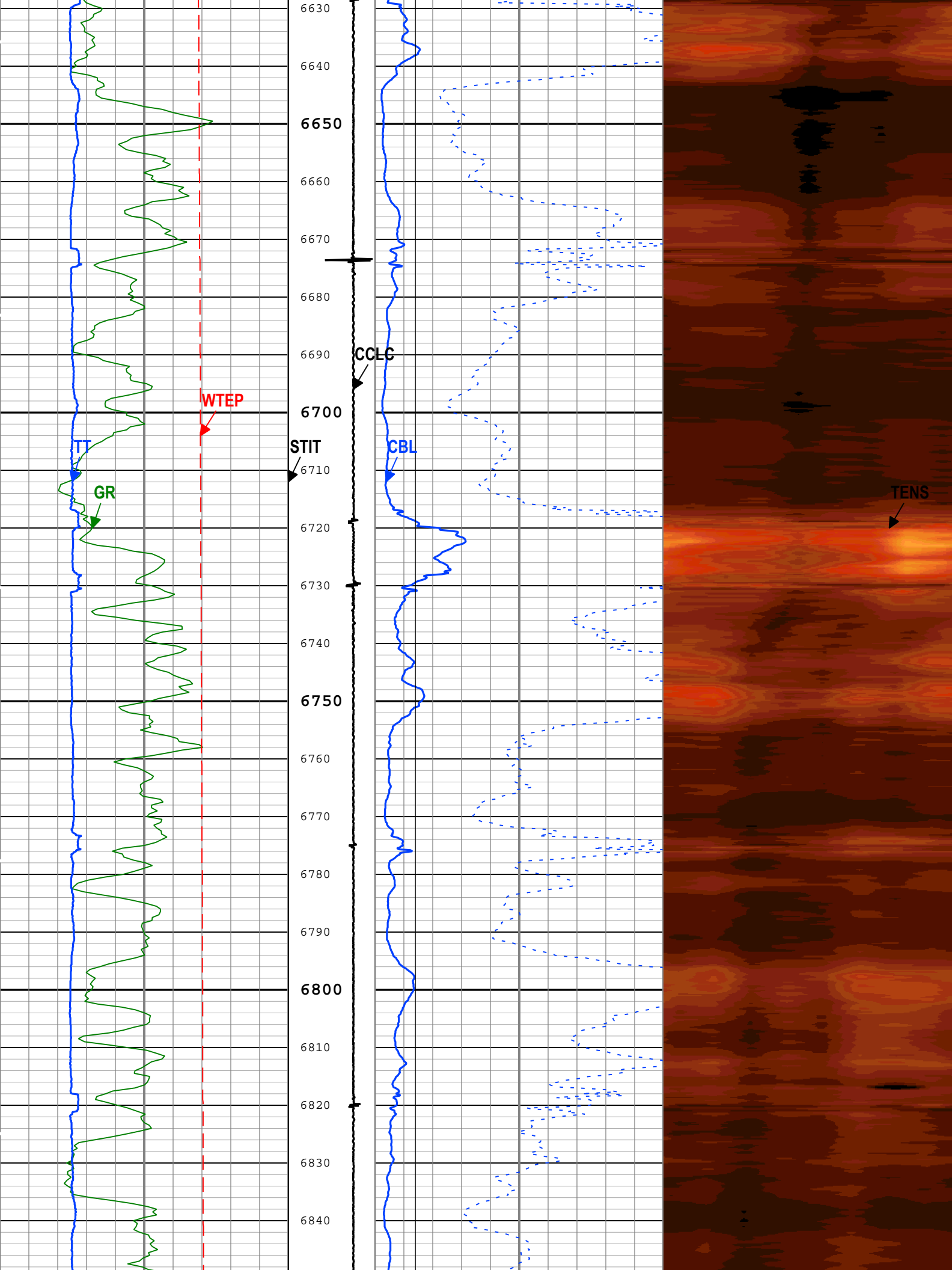


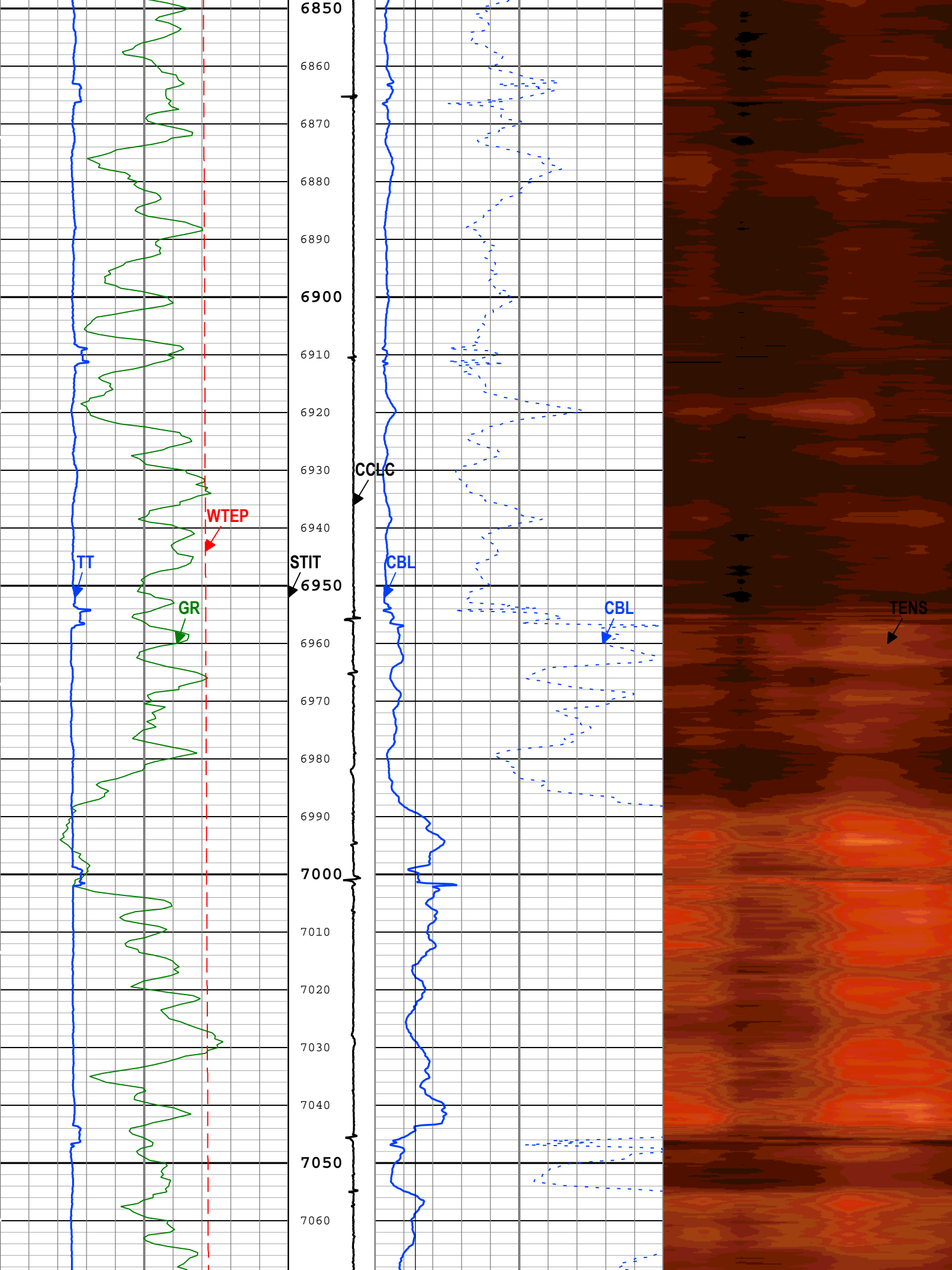


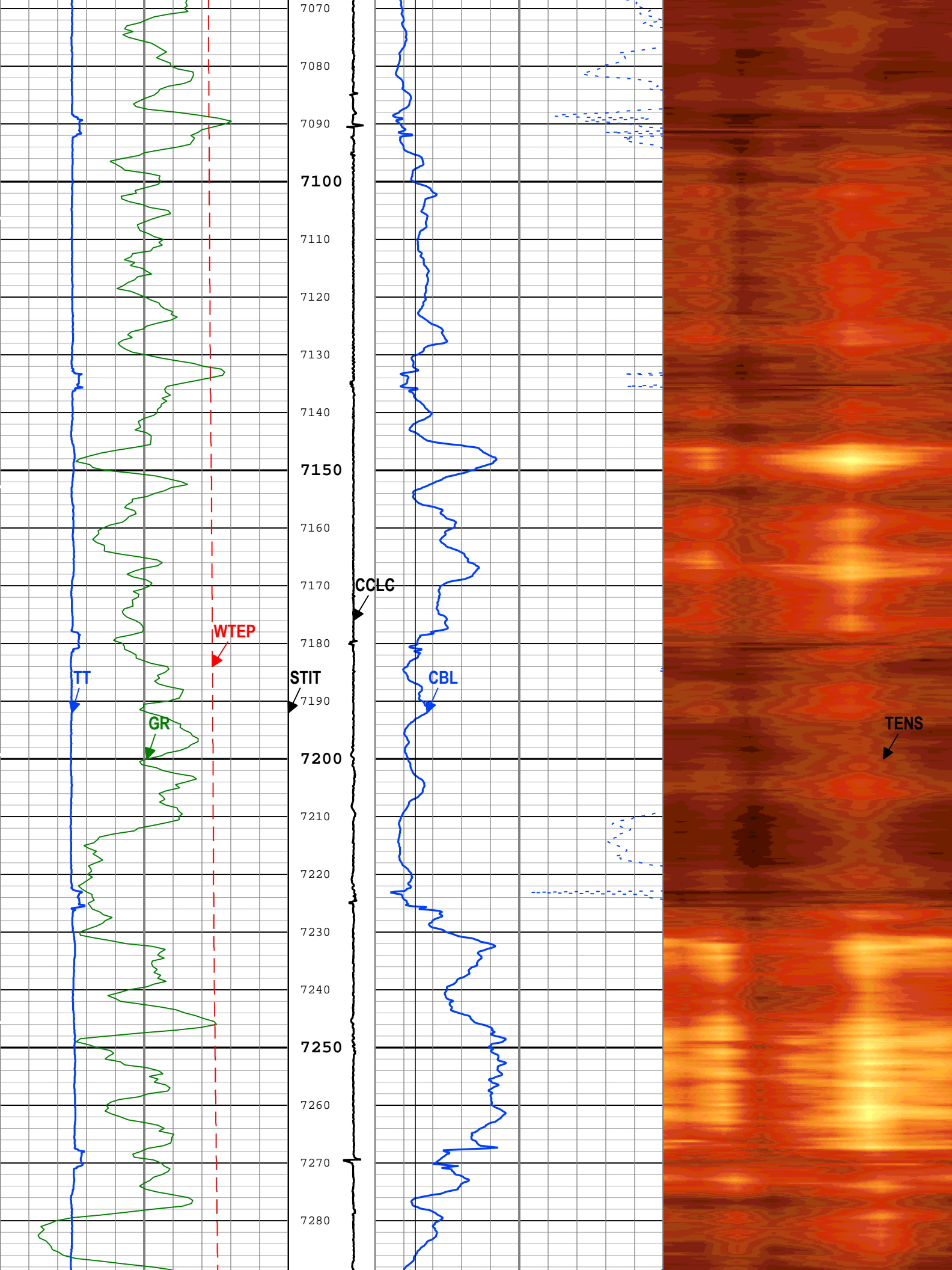


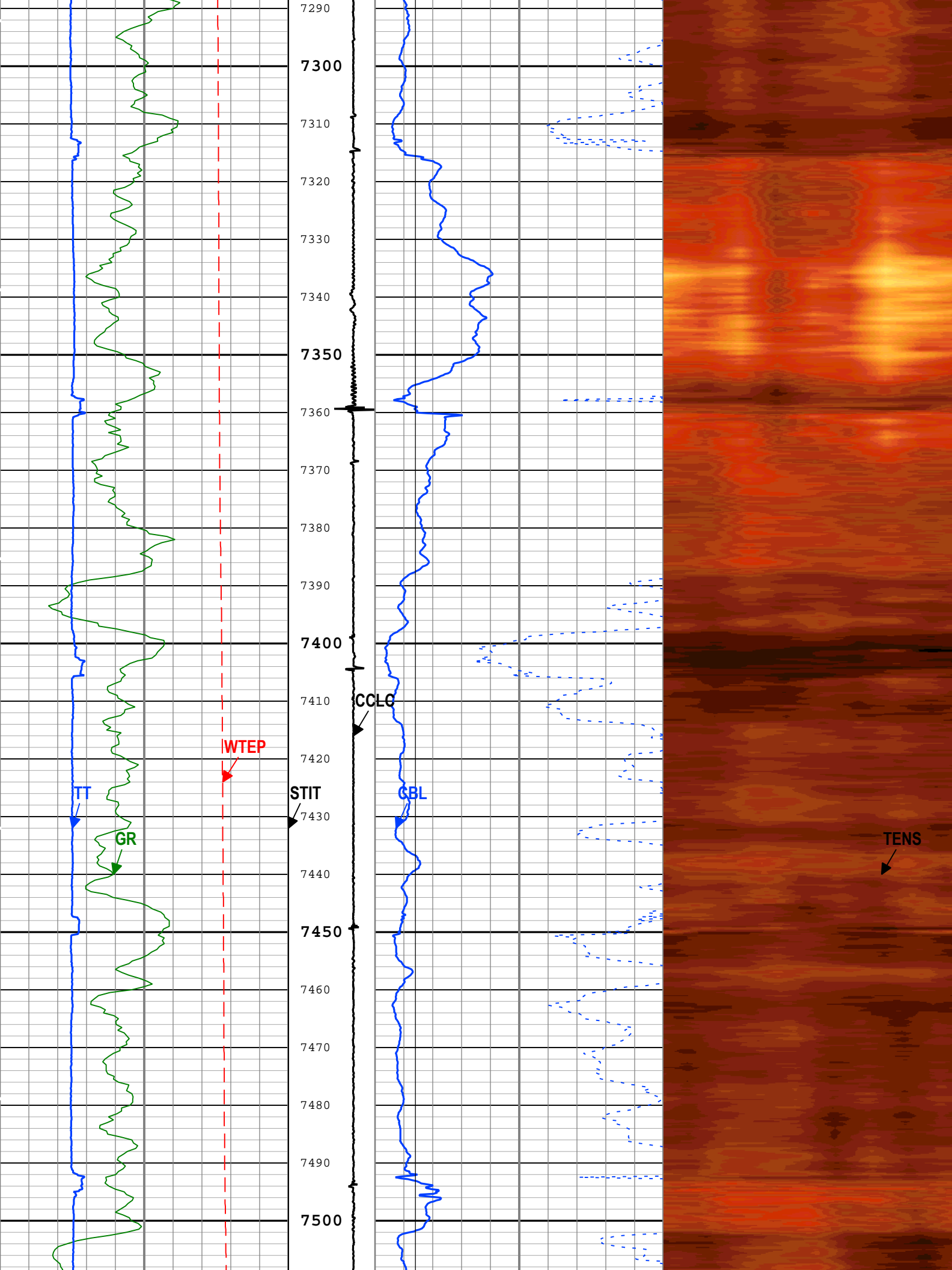


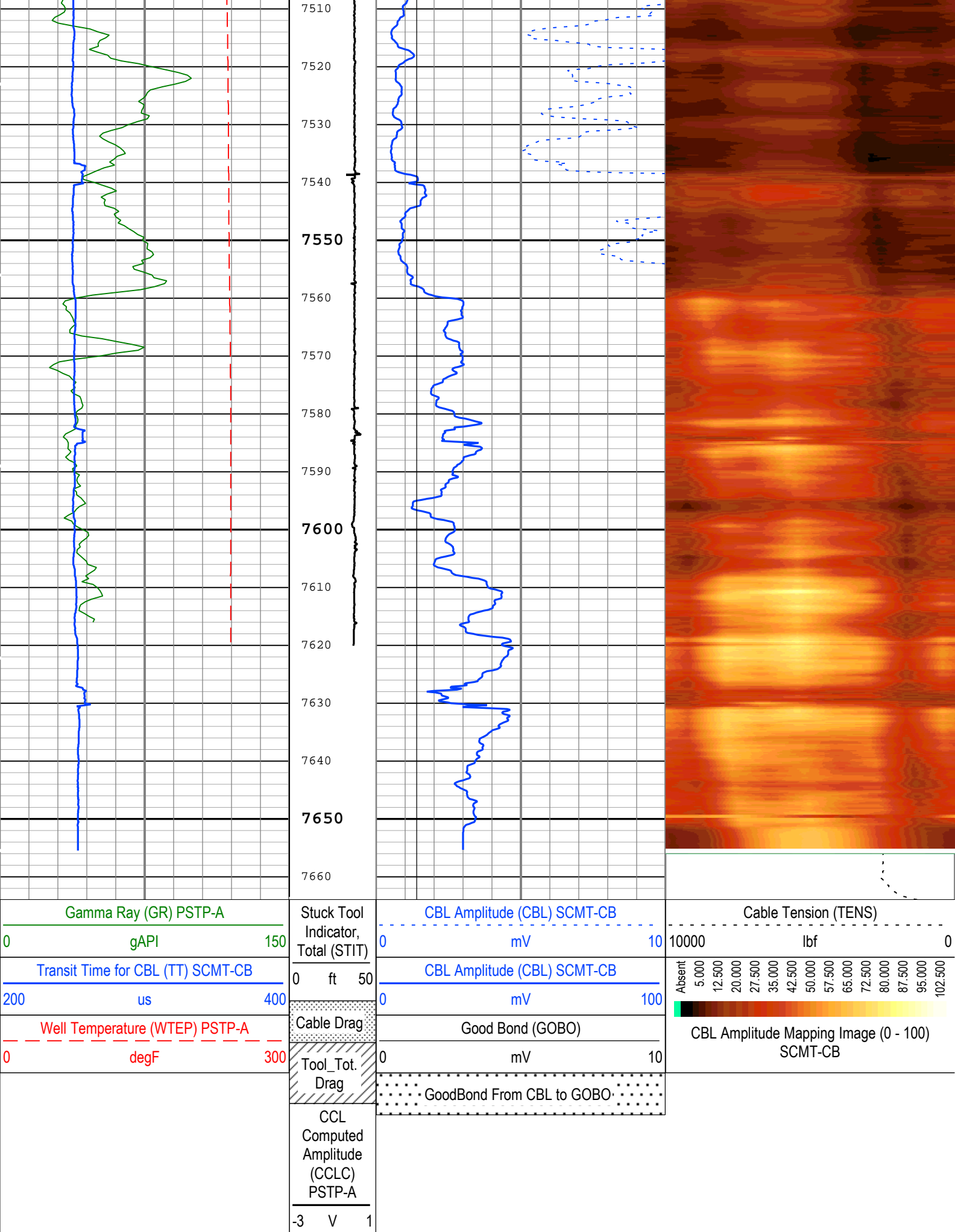












TIME_1900 - Time Marked every 60.00 (s)

Description: SCMT Amplitudes and MAP Image Format: Log (SCMT Amp. Image 1) Index Scale: 5 in per 100 ft Index Unit: ft Index Type: Measured

Channel Processing Parameters				
ONE: Parameters				
Parameter	Description	Tool	Value	Unit
BHT	Bottom Hole Temperature	Borehole	212	degF
CB3G	SCMT CBL 3 ft Peak Detection T0_Delay and Noise Gate	SCMT-CB	224	us
CBLG	CBL Gate Width	SCMT-CB	40	us
CBRA	CBL LQC Reference Amplitude in Free Pipe	SCMT-CB	80	mV
THNO	Nominal Casing Thickness - Zoned along logger depths	WLSESSION	0.25	in
DC_MODE	Depth Correction Mode	DepthCorrection	Real-time	
DFD	Drilling Fluid Density	Borehole	10	lbm/gal
DFT_CATEGORY	Drilling Fluid Type	Borehole	Water	
DTMD	Borehole Fluid Slowness	Borehole	206	us/ft
EDF	Elevation of Derrick Floor Above Permanent Datum	WLSESSION	30	ft
EPD	Elevation of Permanent Datum (PDAT) above Mean Sea Level	WLSESSION	5583	ft
GGRD	Geothermal Gradient	Borehole	1	0.01 degF/ft
GTSE	Generalized Temperature Selection, from Measured or Computed Temperature	Borehole	GTEM_LINEST(RT)	
MAPG	SCMT MAP Peak Detection T0_Delay and Noise Gate	SCMT-CB	175.62	us
MMSA	MAP Minimum Sonic Amplitude	SCMT-CB	3.95	mV
MSA	Minimum Sonic Amplitude	SCMT-CB	0.51	mV
PDAT	Permanent Datum	WLSESSION	GL	
RUN_SNUM	Run Sequence Number	WSDRUN	1	
SHT	Surface Hole Temperature	Borehole	68	degF
TD	Total Measured Depth	Borehole	7658	ft

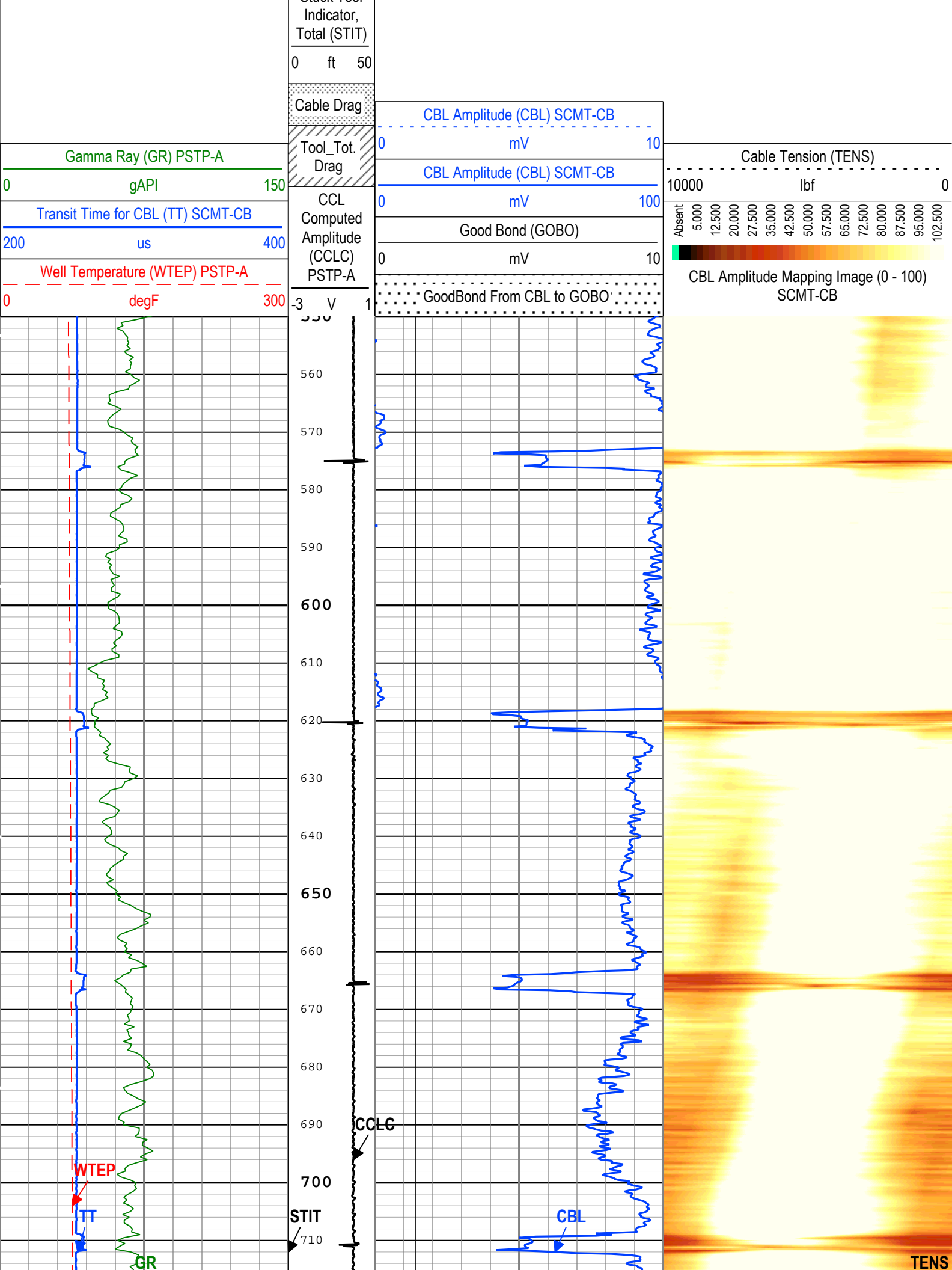
Tool Control Parameters				
ONE: Parameters				
Parameter	Description	Tool	Value	Unit
CMTM	SCMT Operating Mode	SCMT-CB	Log	
MAX_LOG_SPEED	Toolstring Maximum Logging Speed	WLSESSION	150	ft/h
PCCG	PSP Downhole CCL Gain	PSTP-A	12 dB	
ONE				
Repeat				

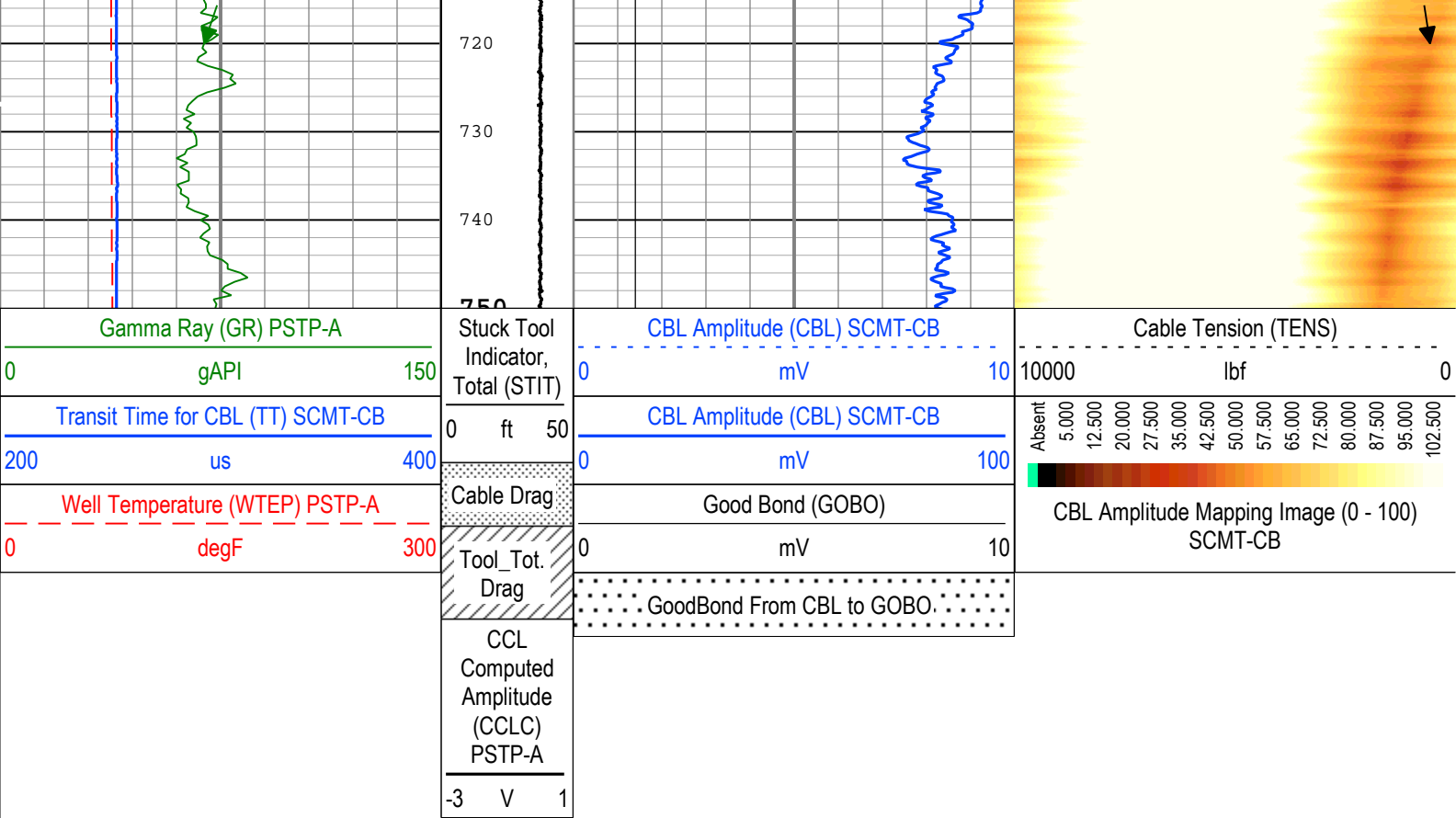
Software Version	
Acquisition System	Version
Maxwell 2017 SP2	7.2.87778.3100

Pass Summary									
Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	DSC Mode	Depth Shift	Include Parallel Data
ONE	Log[5]:Up	Up	469.09 ft	813.22 ft	23-Jul-2017 12:28:53 AM	23-Jul-2017 12:36:55 AM	ON	5.47 ft	Yes

All depths are referenced to toolstring zero		
Log	Company:CAERUS OPERATING LLC	Well:Chevron 11D-17
	ONE: Log[5]:Up:S002	

Stuck Tool





TIME_1900 - Time Marked every 60.00 (s)

Description: SCMT Amplitudes and MAP Image Format: Log (SCMT_Amp_Image_1) Index Scale: 5 in per 100 ft Index Unit: ft Index Type: Measured
Depth Creation Date: 23-Jul-2017 01:09:56

Channel Processing Parameters				
ONE: Parameters				
Parameter	Description	Tool	Value	Unit
BHT	Bottom Hole Temperature	Borehole	212	degF
CB3G	SCMT CBL 3 ft Peak Detection T0_Delay and Noise Gate	SCMT-CB	224	us
CBLG	CBL Gate Width	SCMT-CB	40	us
CBRA	CBL LQC Reference Amplitude in Free Pipe	SCMT-CB	80	mV
THNO	Nominal Casing Thickness - Zoned along logger depths	WLSESSION	0.25	in
DC_MODE	Depth Correction Mode	DepthCorrection	Real-time	
DFD	Drilling Fluid Density	Borehole	10	lbm/gal
DFT_CATEGORY	Drilling Fluid Type	Borehole	Water	
DTMD	Borehole Fluid Slowness	Borehole	206	us/ft
EDF	Elevation of Derrick Floor Above Permanent Datum	WLSESSION	30	ft
EPD	Elevation of Permanent Datum (PDAT) above Mean Sea Level	WLSESSION	5583	ft
GGRD	Geothermal Gradient	Borehole	1	0.01 degF/ft
GTSE	Generalized Temperature Selection, from Measured or Computed Temperature	Borehole	GTEM_LINEST(RT)	
MAPG	SCMT MAP Peak Detection T0_Delay and Noise Gate	SCMT-CB	175.62	us
MMSA	MAP Minimum Sonic Amplitude	SCMT-CB	3.95	mV
MSA	Minimum Sonic Amplitude	SCMT-CB	0.51	mV
PDAT	Permanent Datum	WLSESSION	GL	
RUN_SNUM	Run Sequence Number	WSDRUN	1	
SHT	Surface Hole Temperature	Borehole	68	degF
TD	Total Measured Depth	Borehole	7658	ft

Tool Control Parameters	
SCMT CBL	

ONE: Parameters

Parameter	Description	Tool	Value	Unit
CMTM	SCMT Operating Mode	SCMT-CB	Log	
MAX_LOG_SPEED	Toolstring Maximum Logging Speed	WLSESSION	150	ft/h
PCCG	PSP Downhole CCL Gain	PSTP-A	12 dB	

ONE

Main

Software Version

Acquisition System	Version
Maxwell 2017 SP2	7.2.87778.3100

Pass Summary

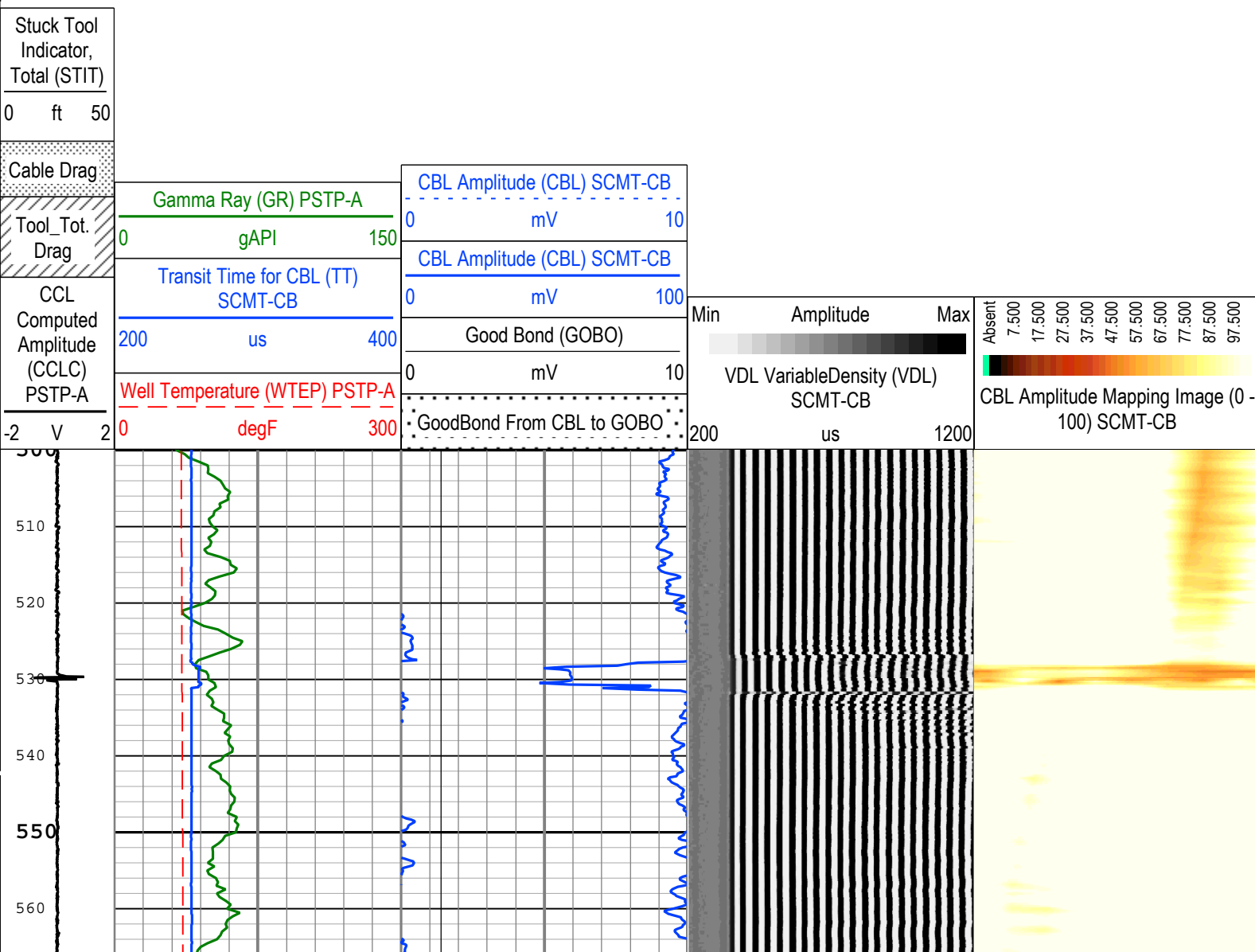
Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	DSC Mode	Depth Shift	Include Parallel Data
ONE	Log[4]:Up	Up	487.72 ft	7663.93 ft	22-Jul-2017 9:54:31 PM	23-Jul-2017 12:26:07 AM	ON	5.47 ft	Yes

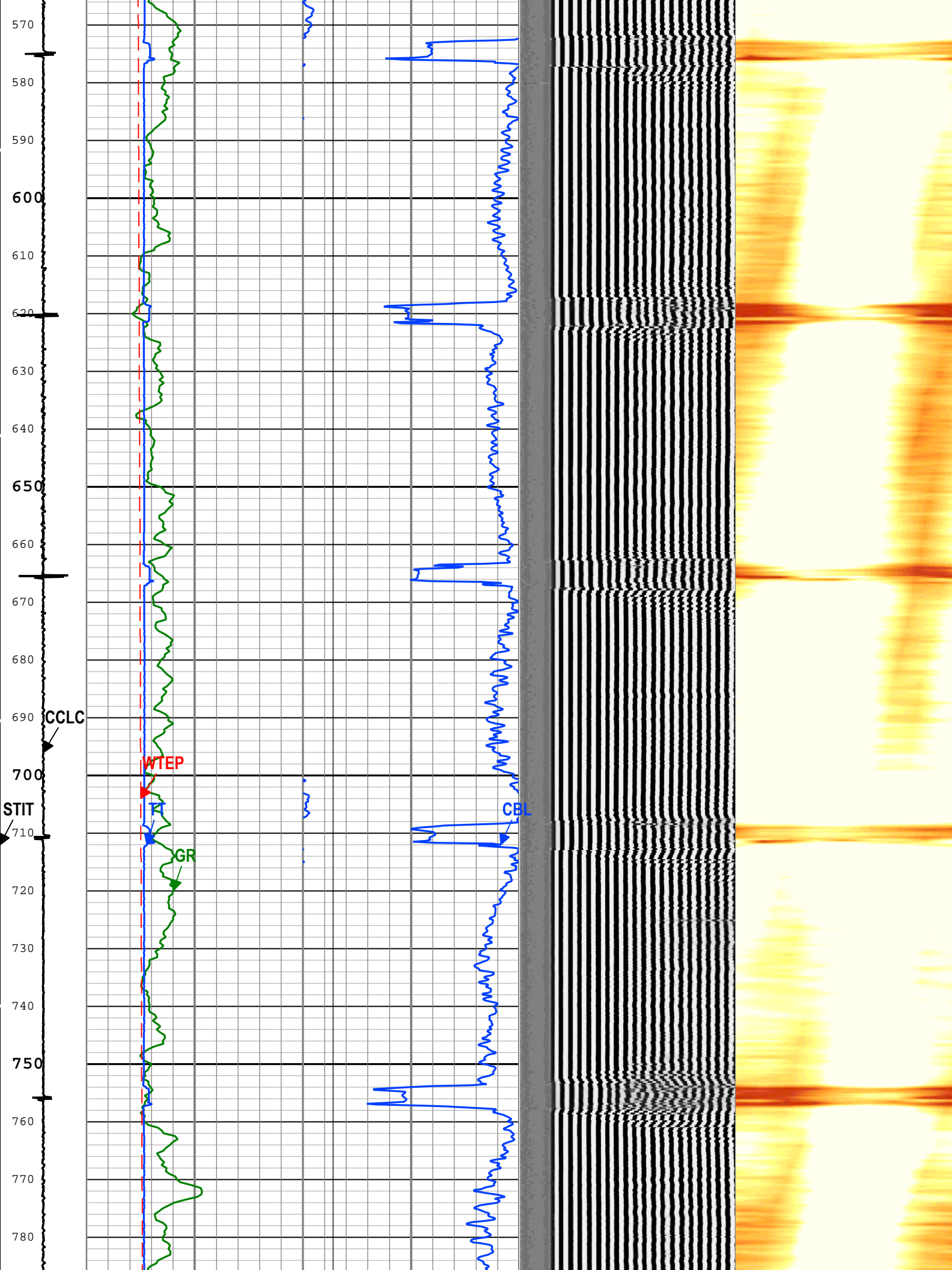
All depths are referenced to toolstring zero

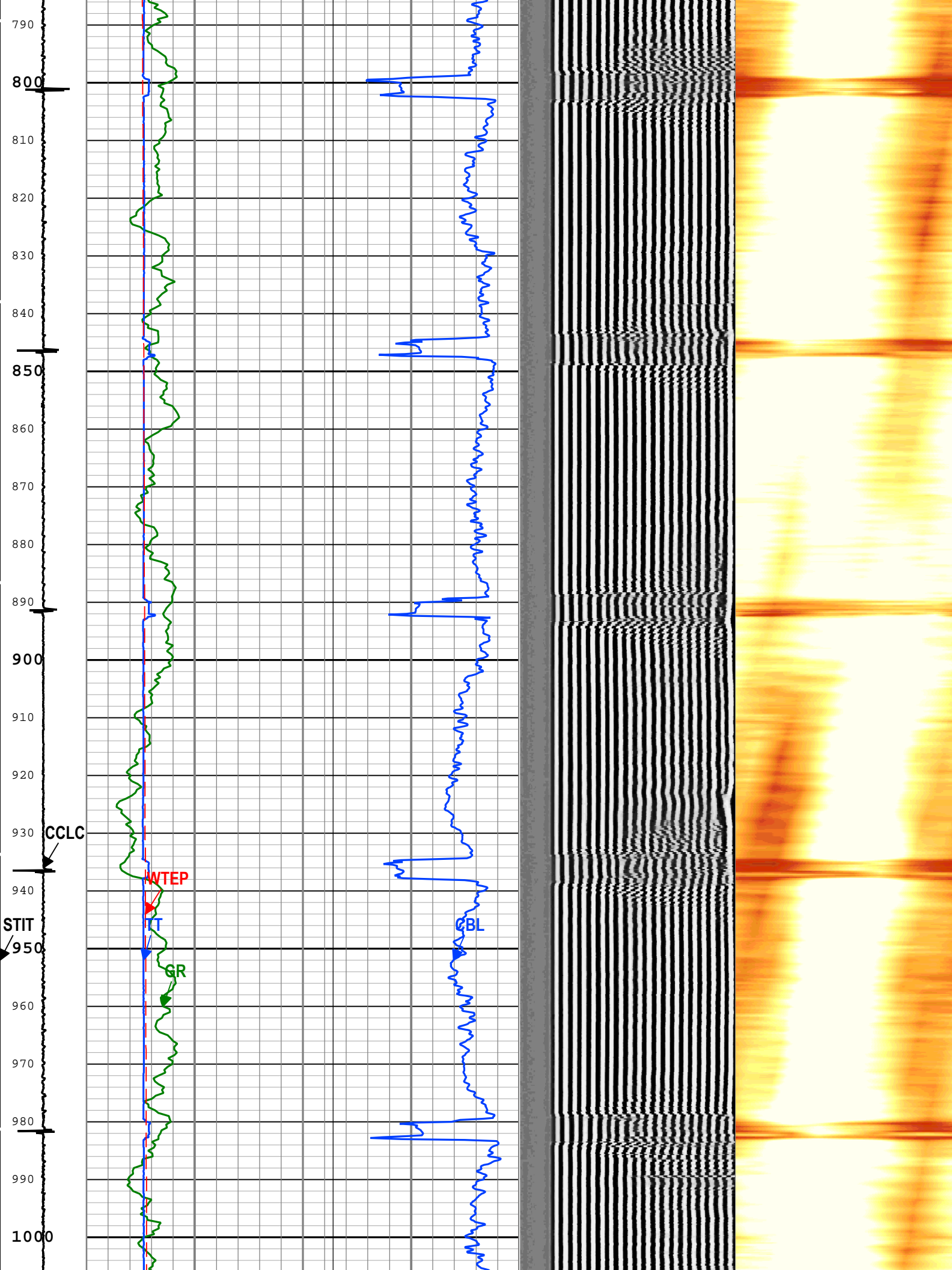
Log	Company:CAERUS OPERATING LLC	Well:Chevron 11D-17
		ONE: Log[4]:Up:S002

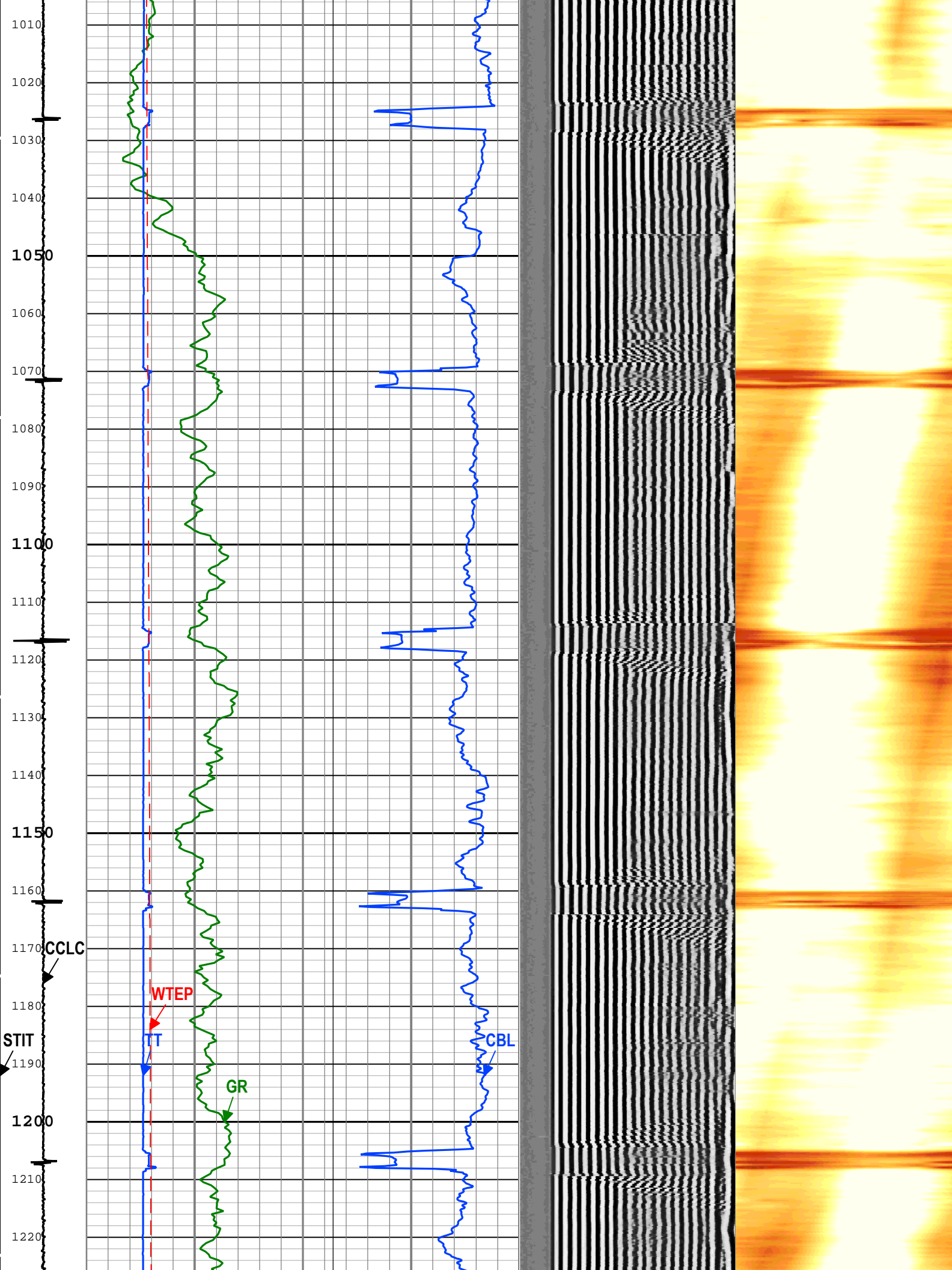
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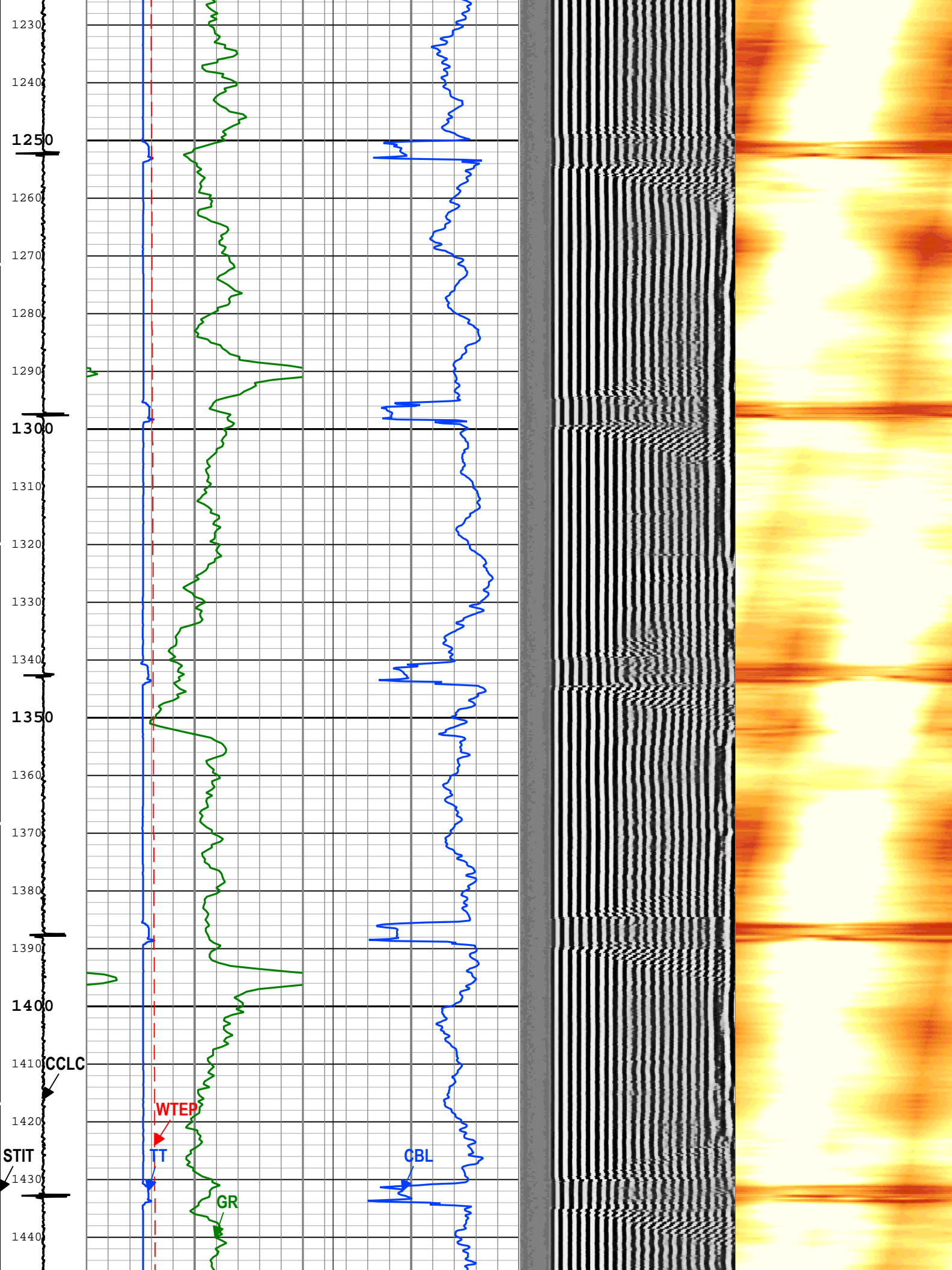
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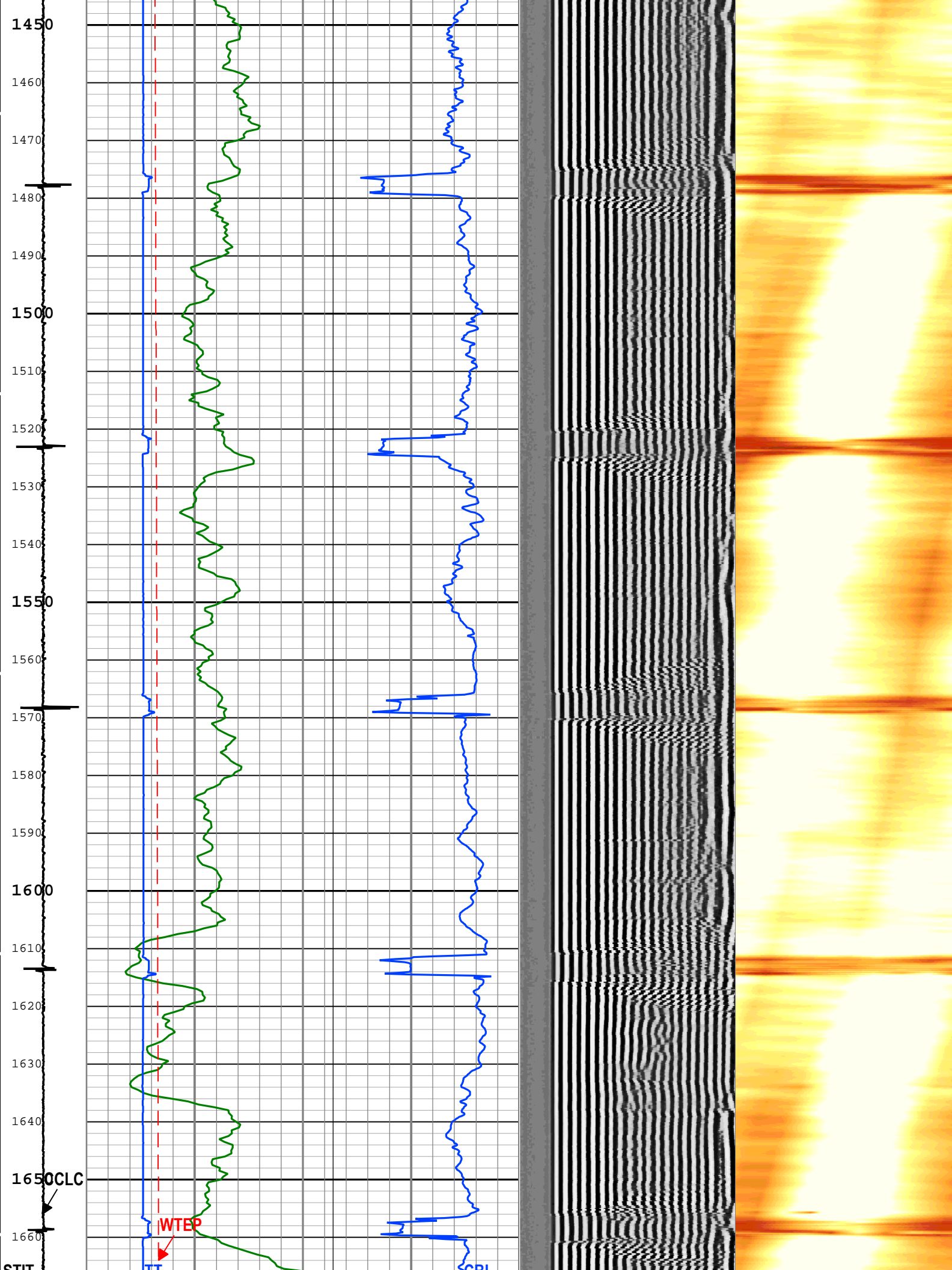


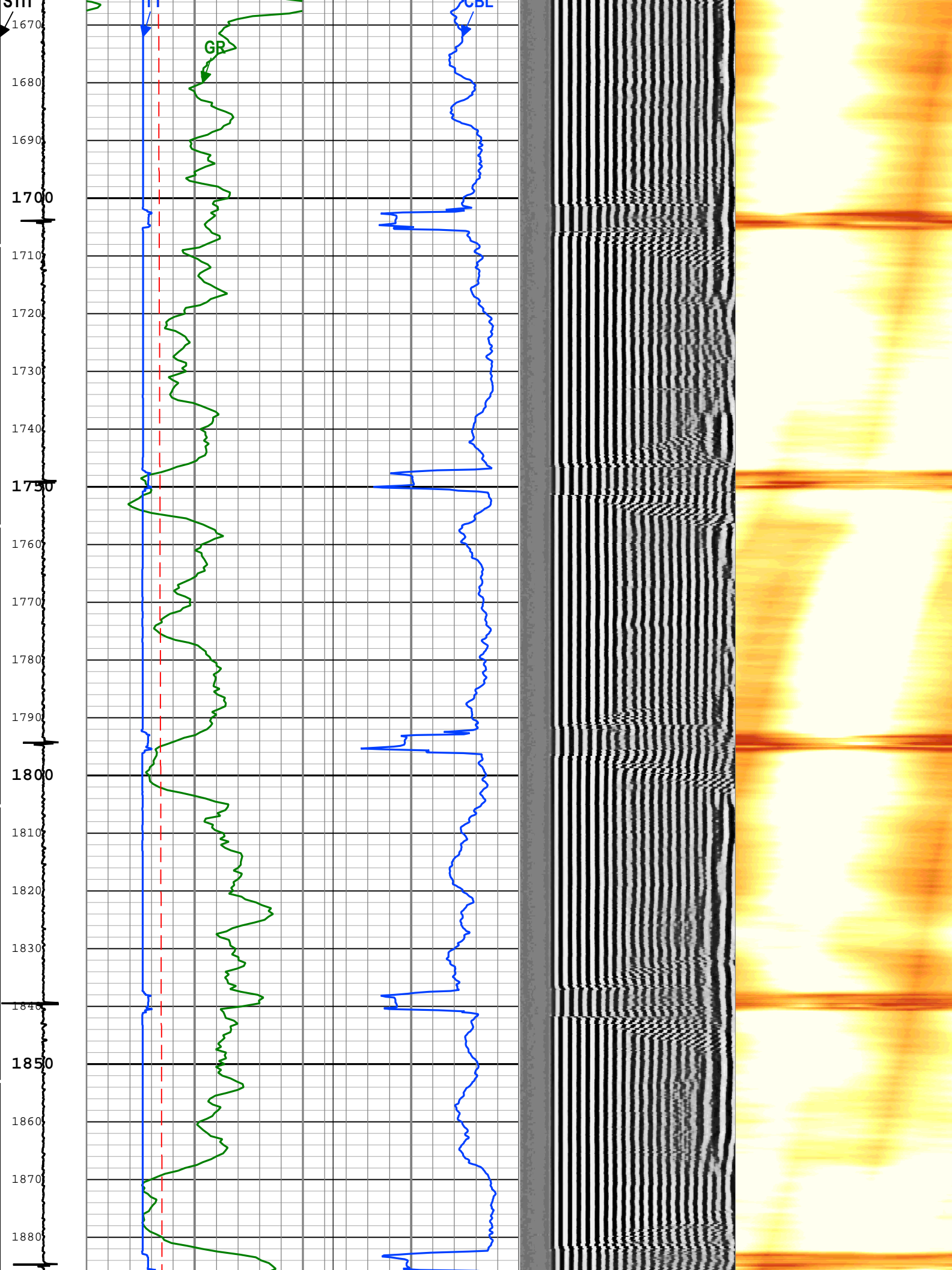


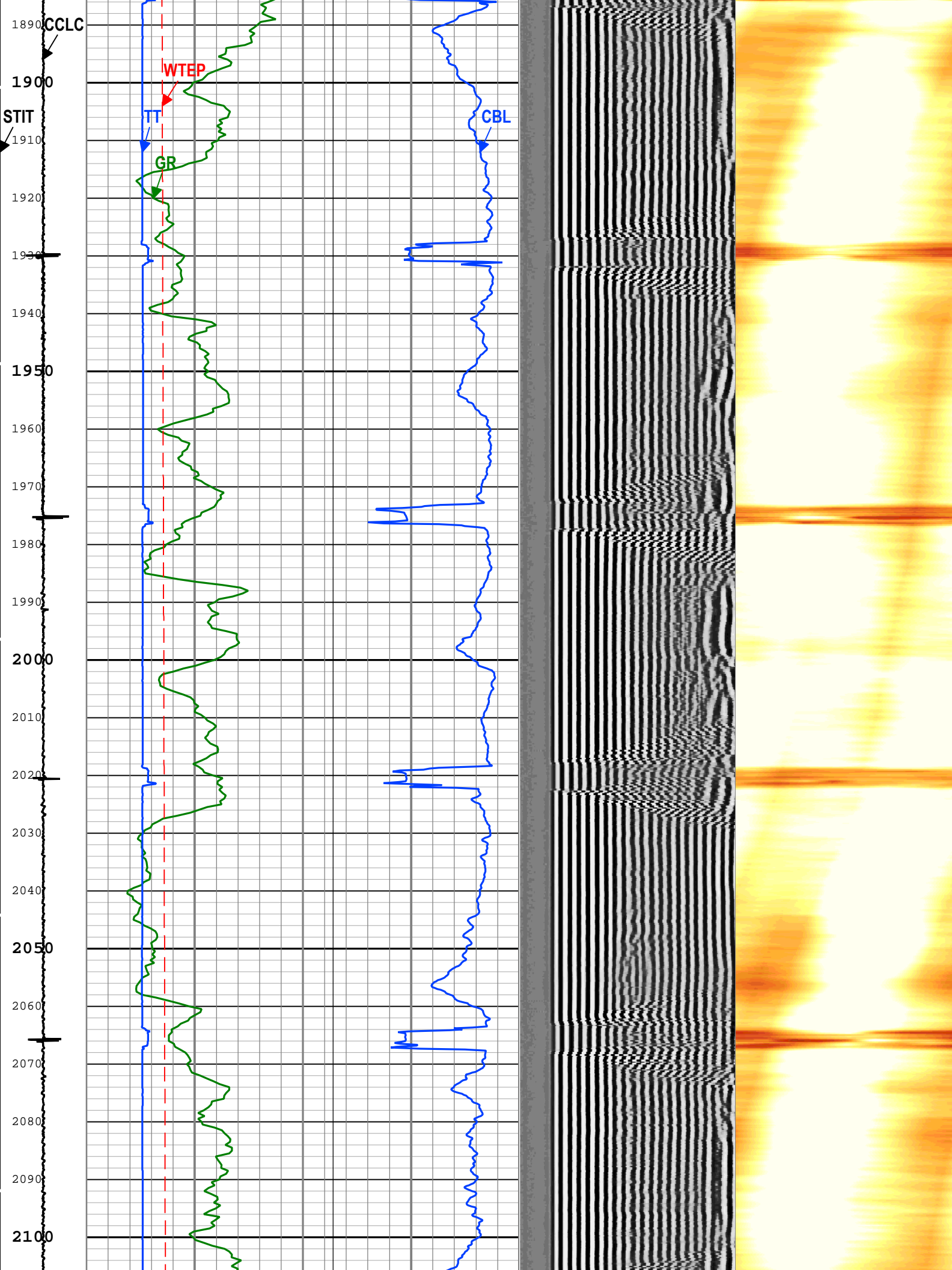


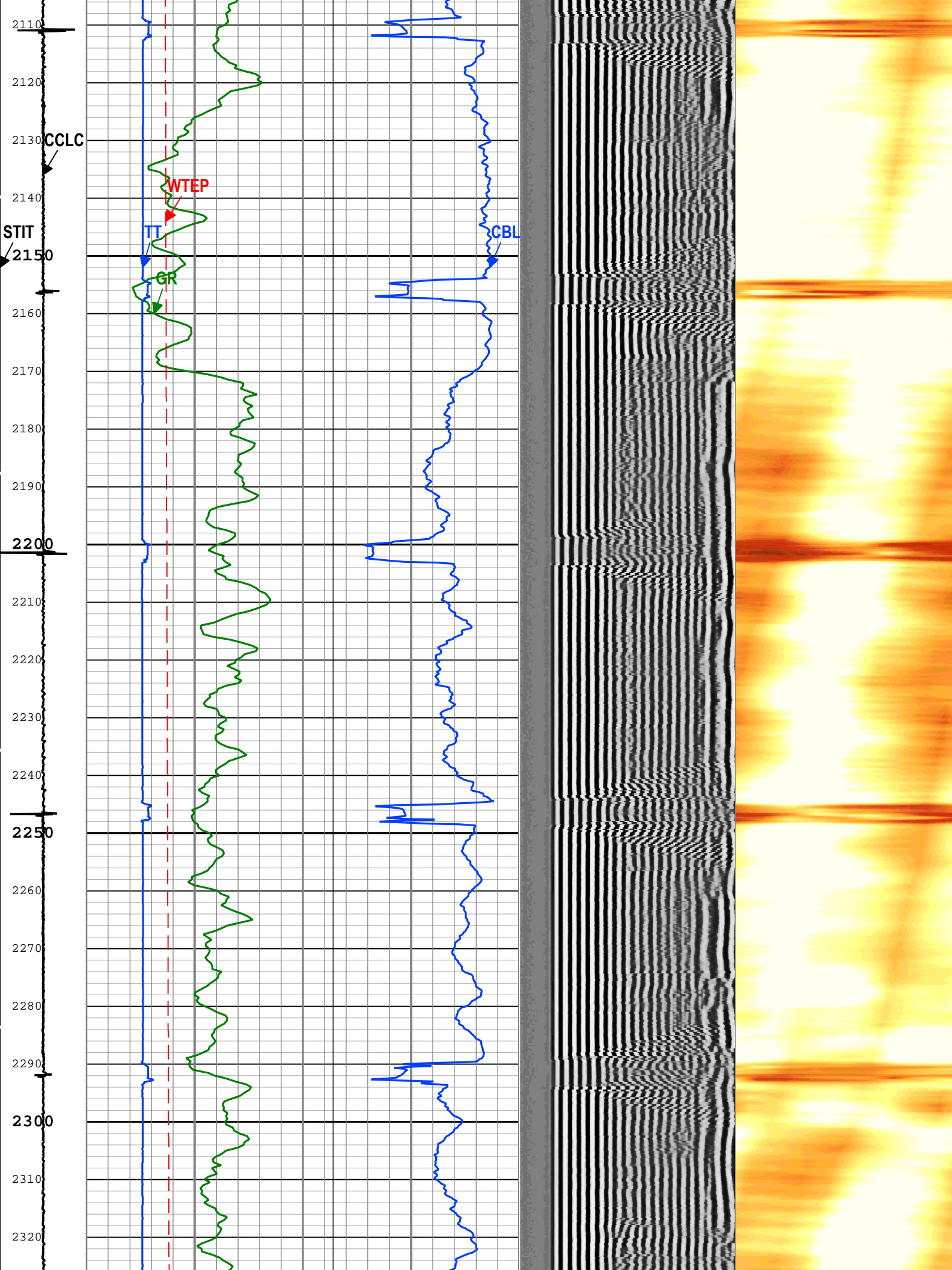


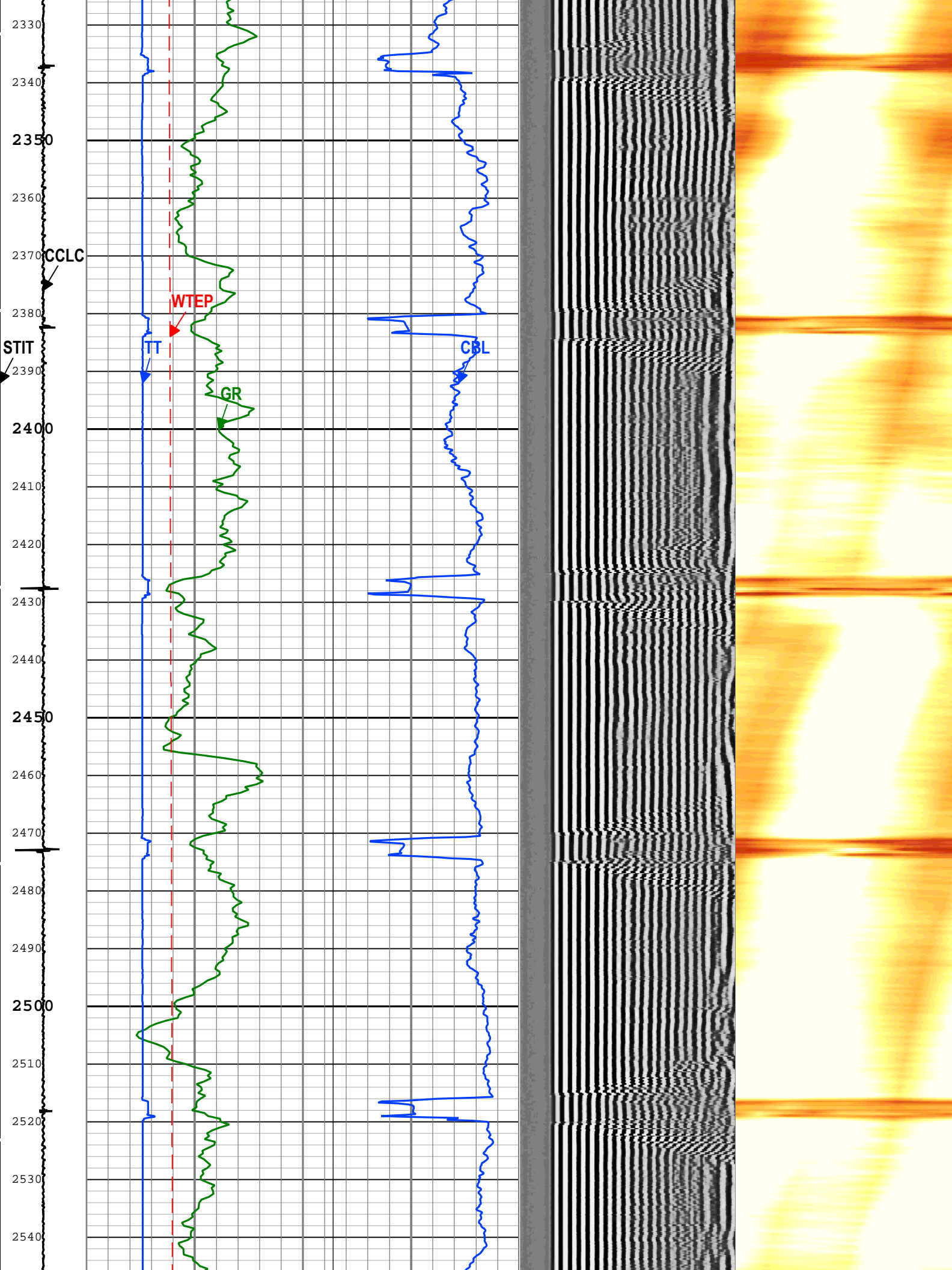


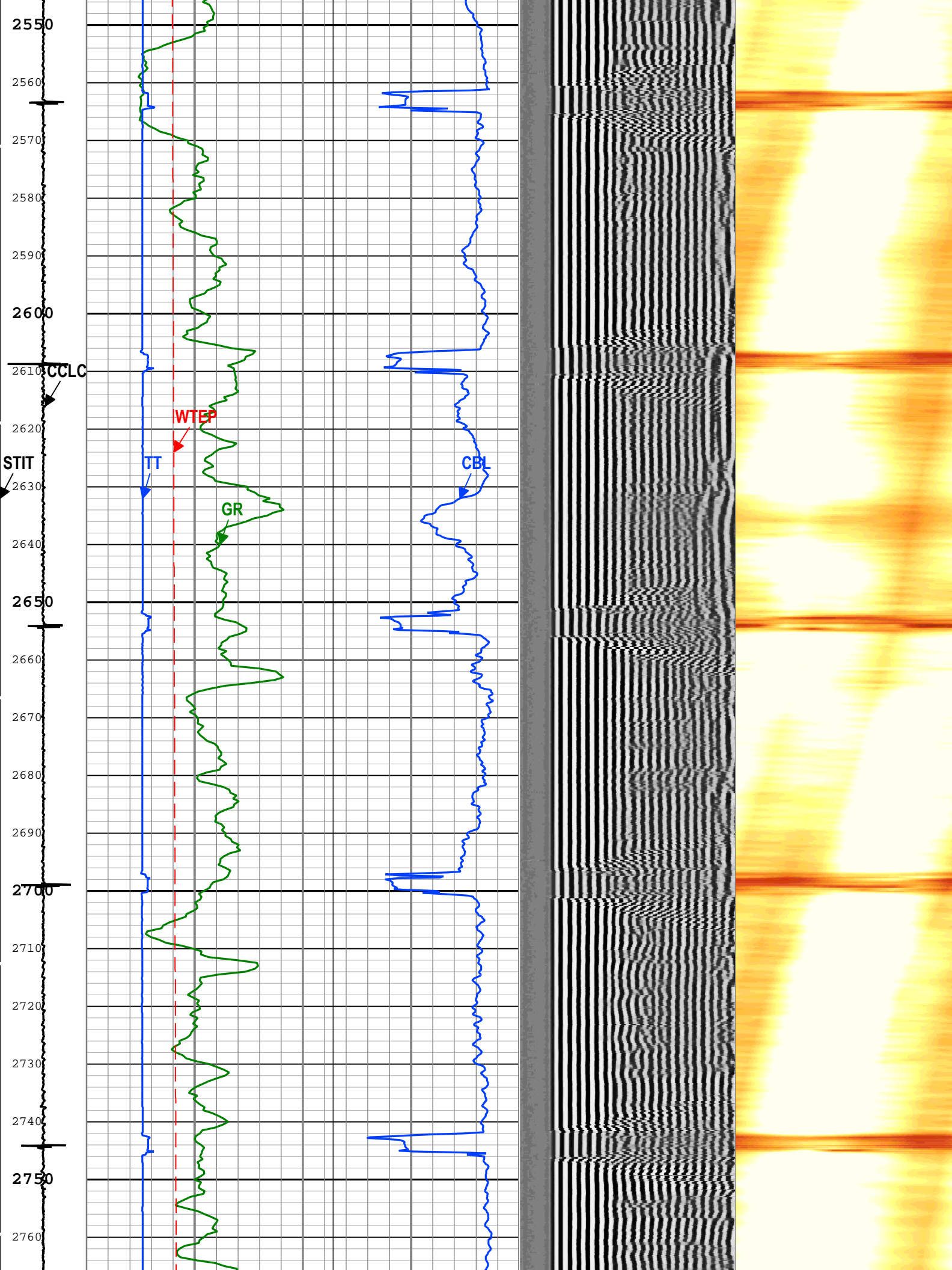


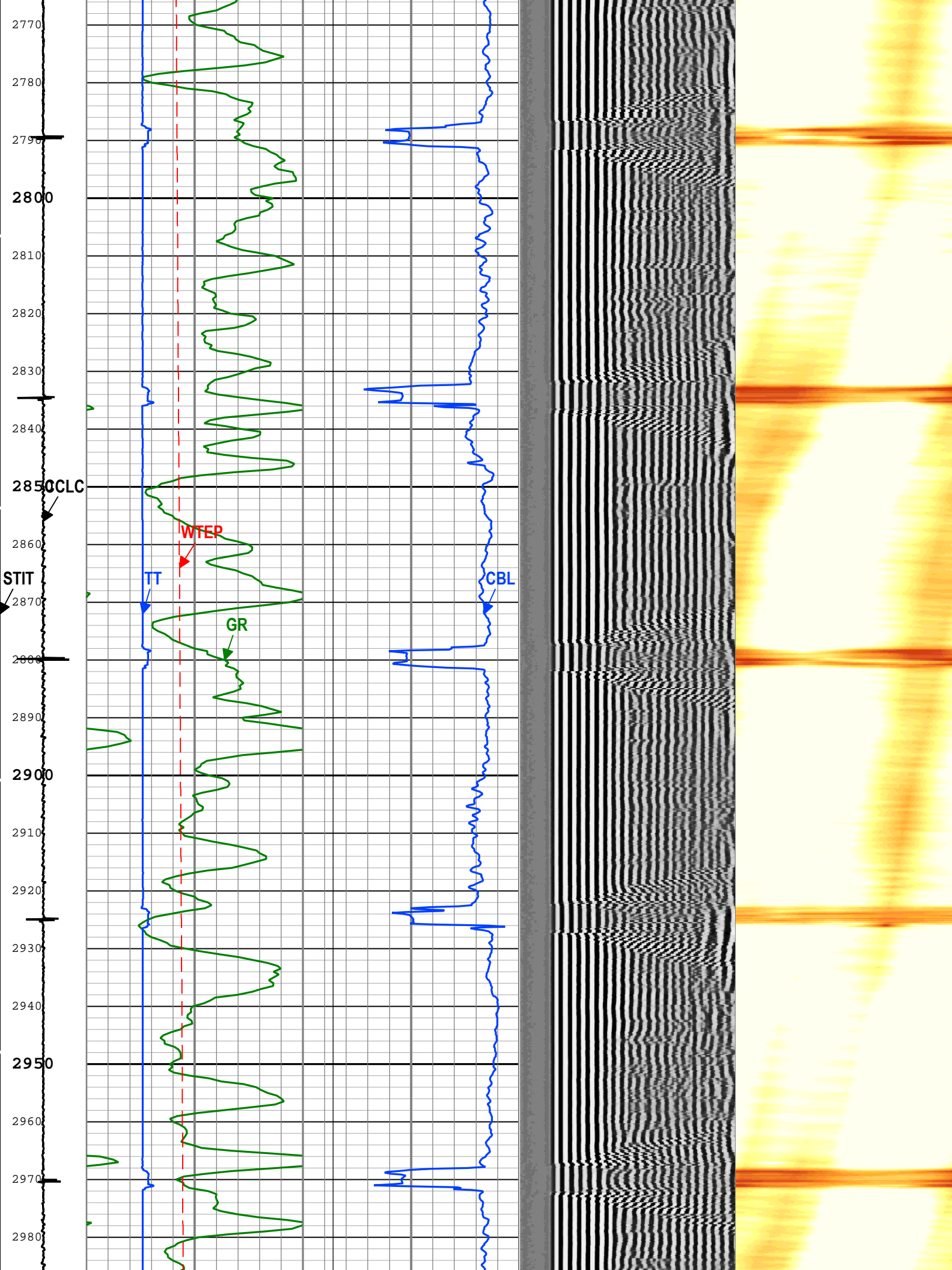


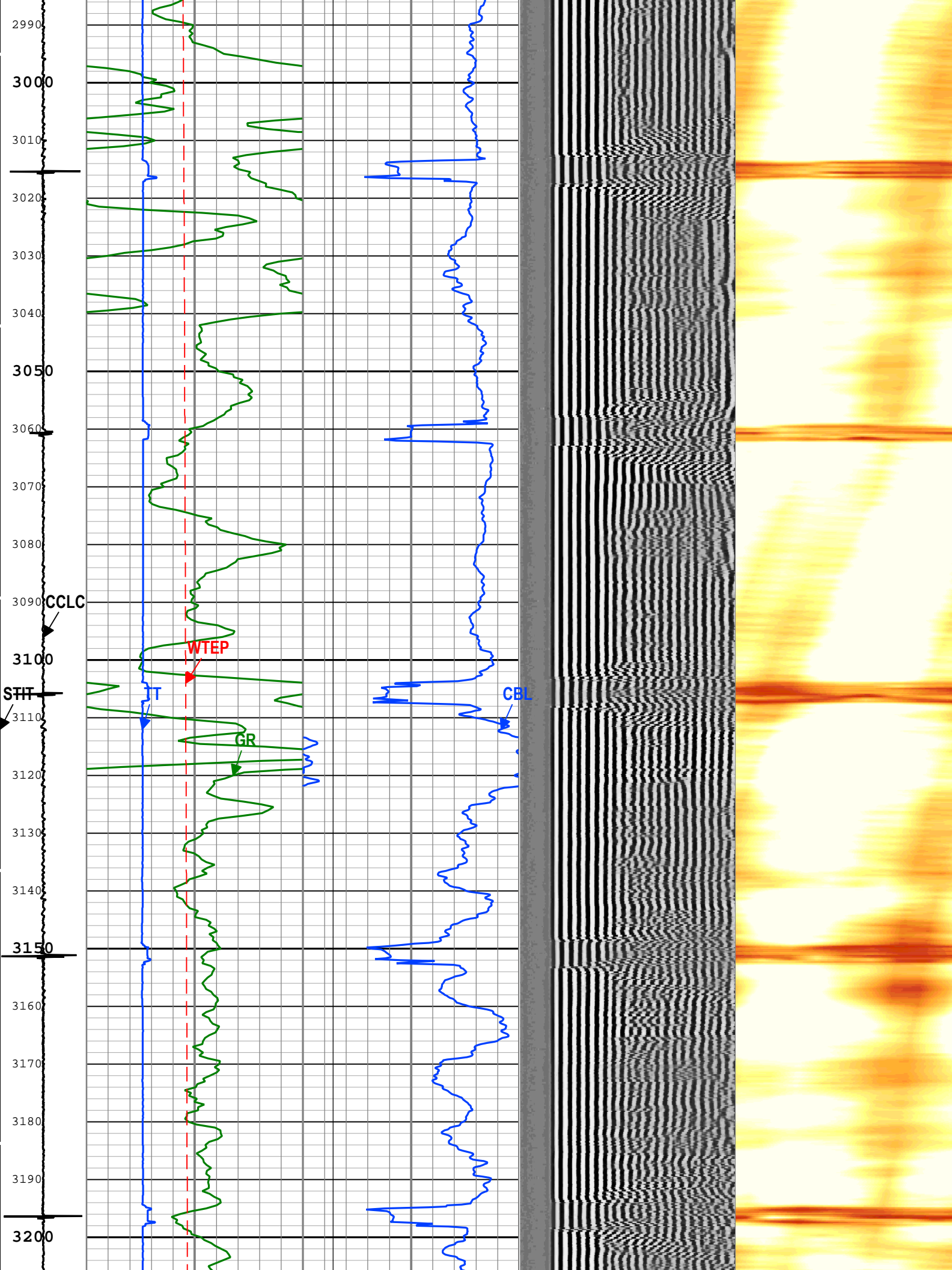


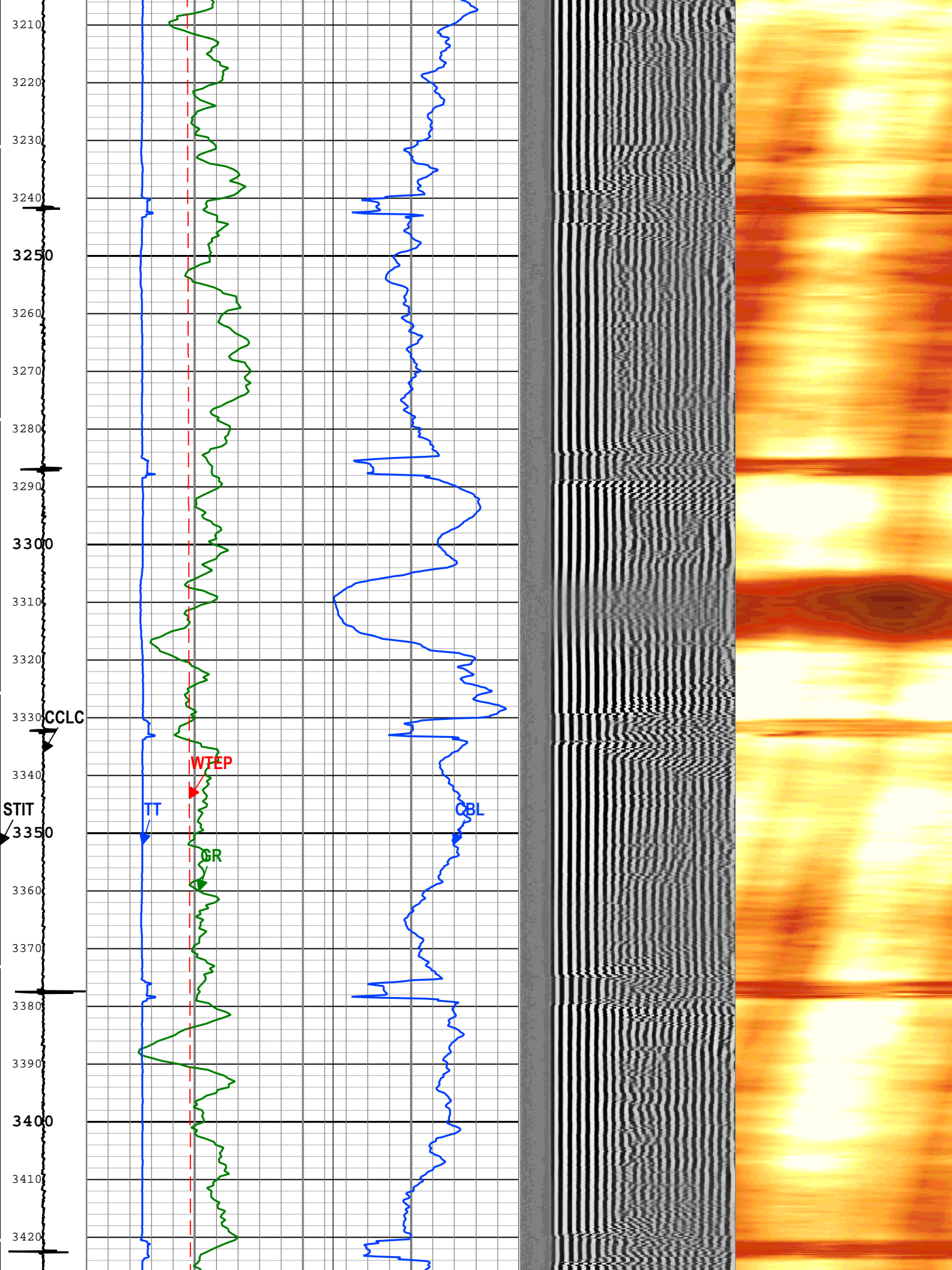


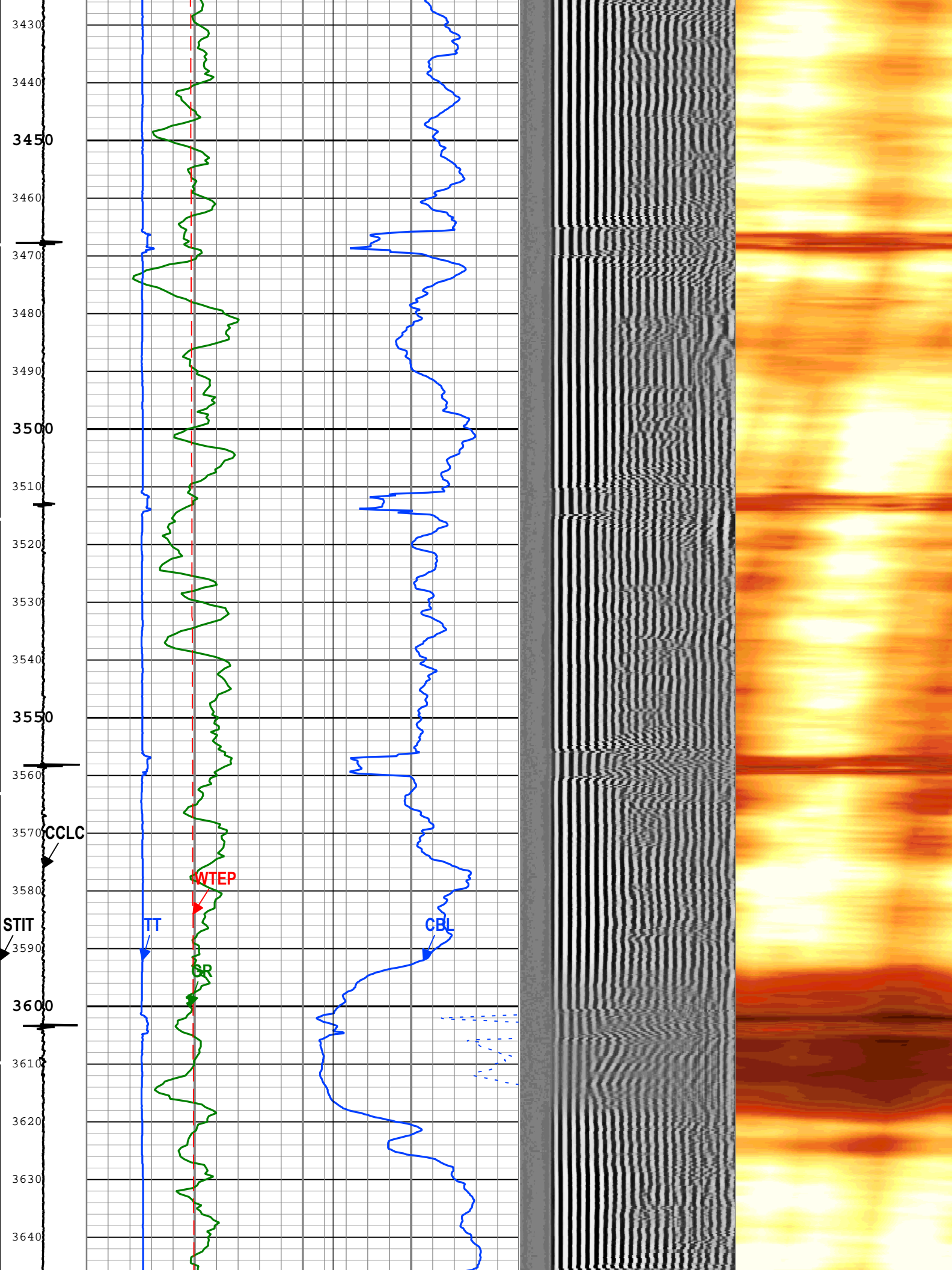


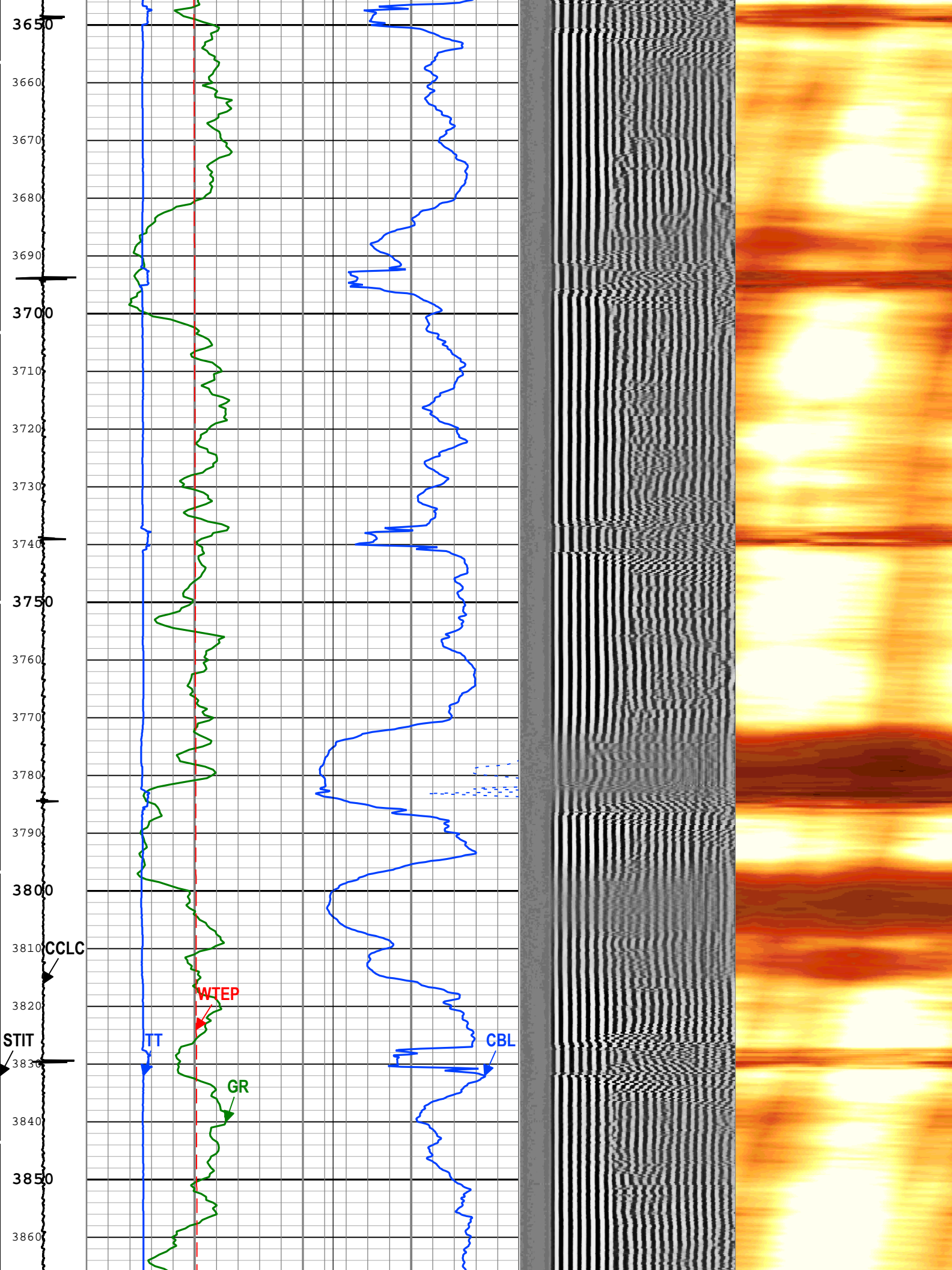


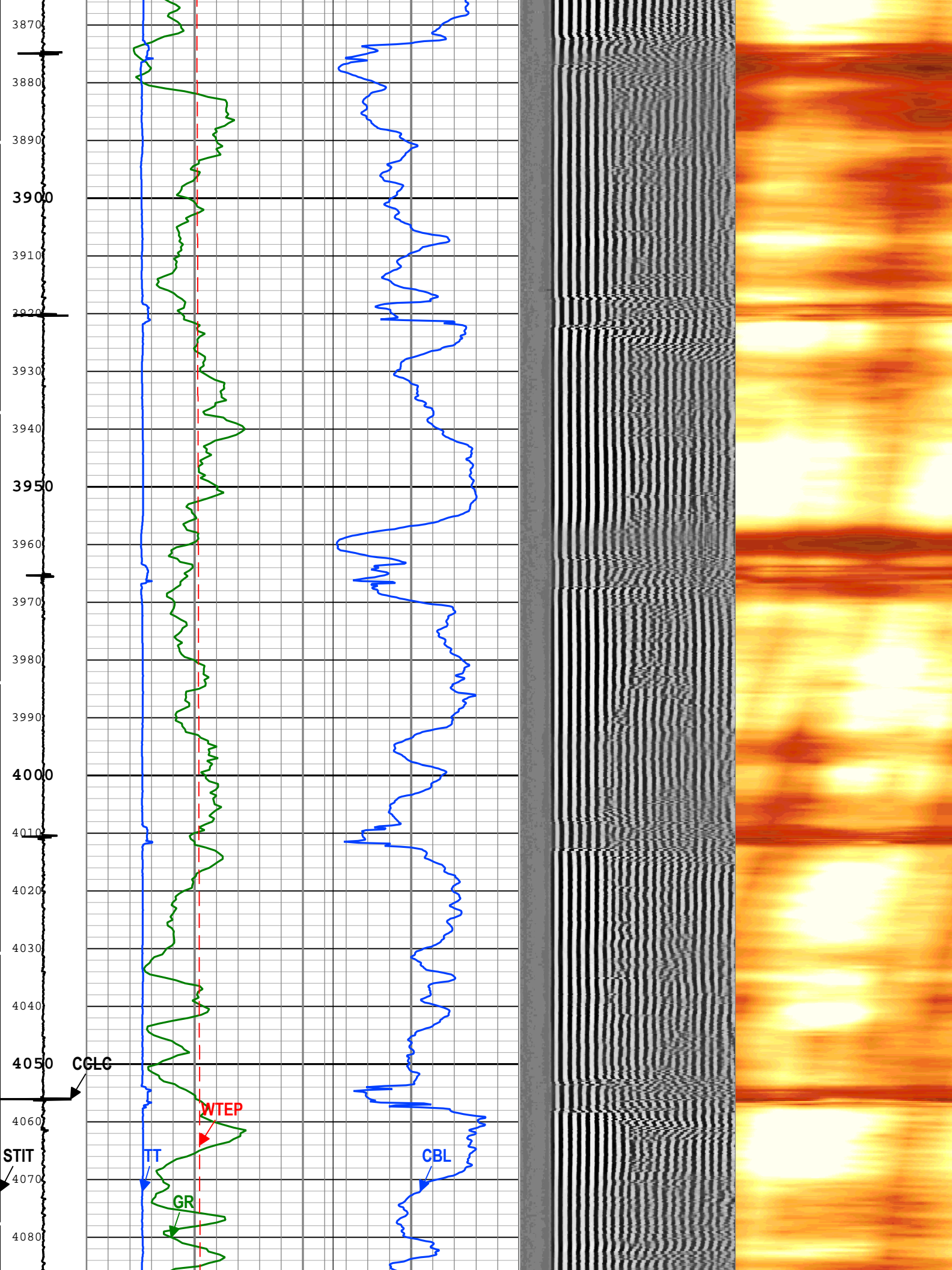


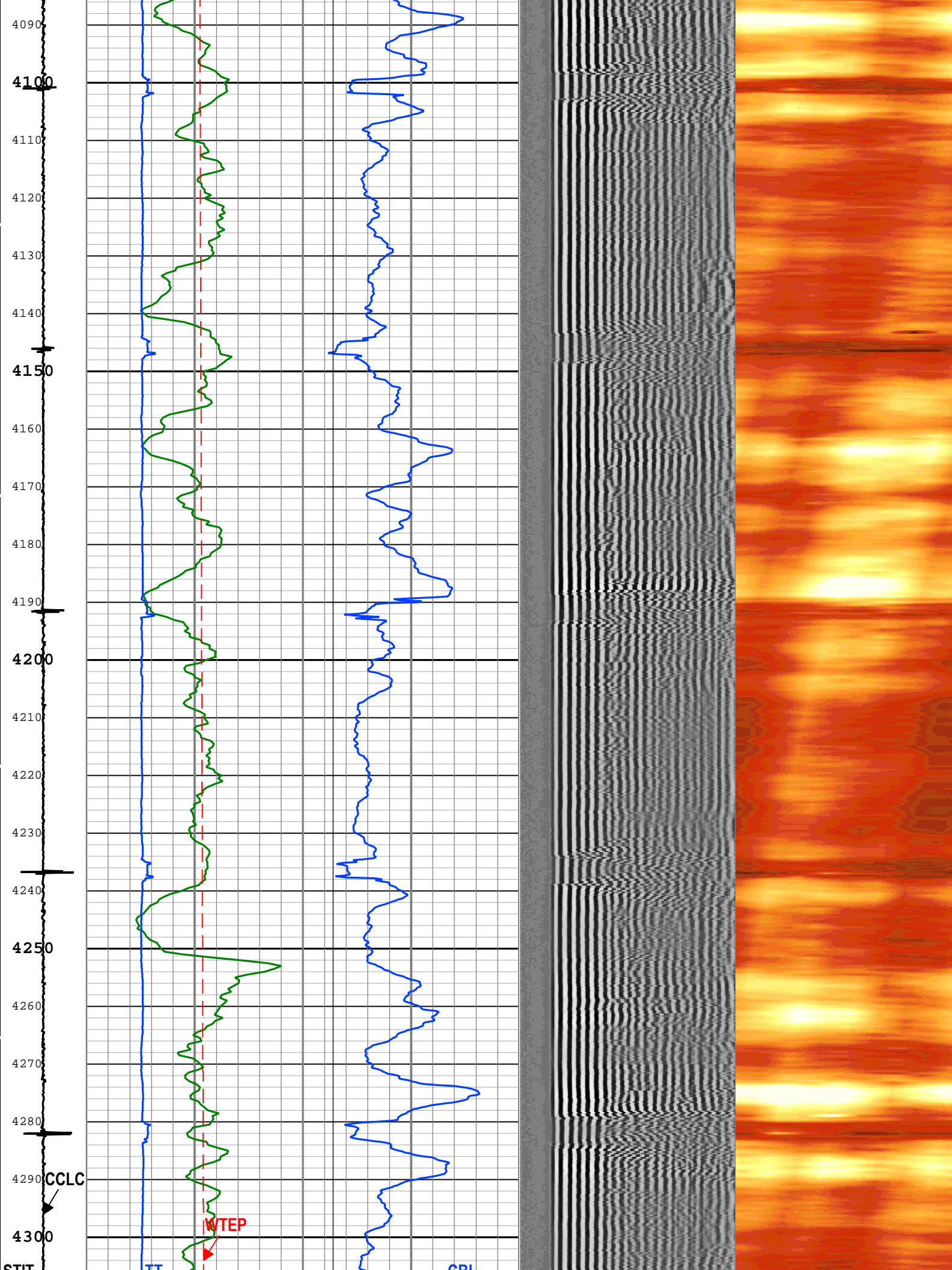


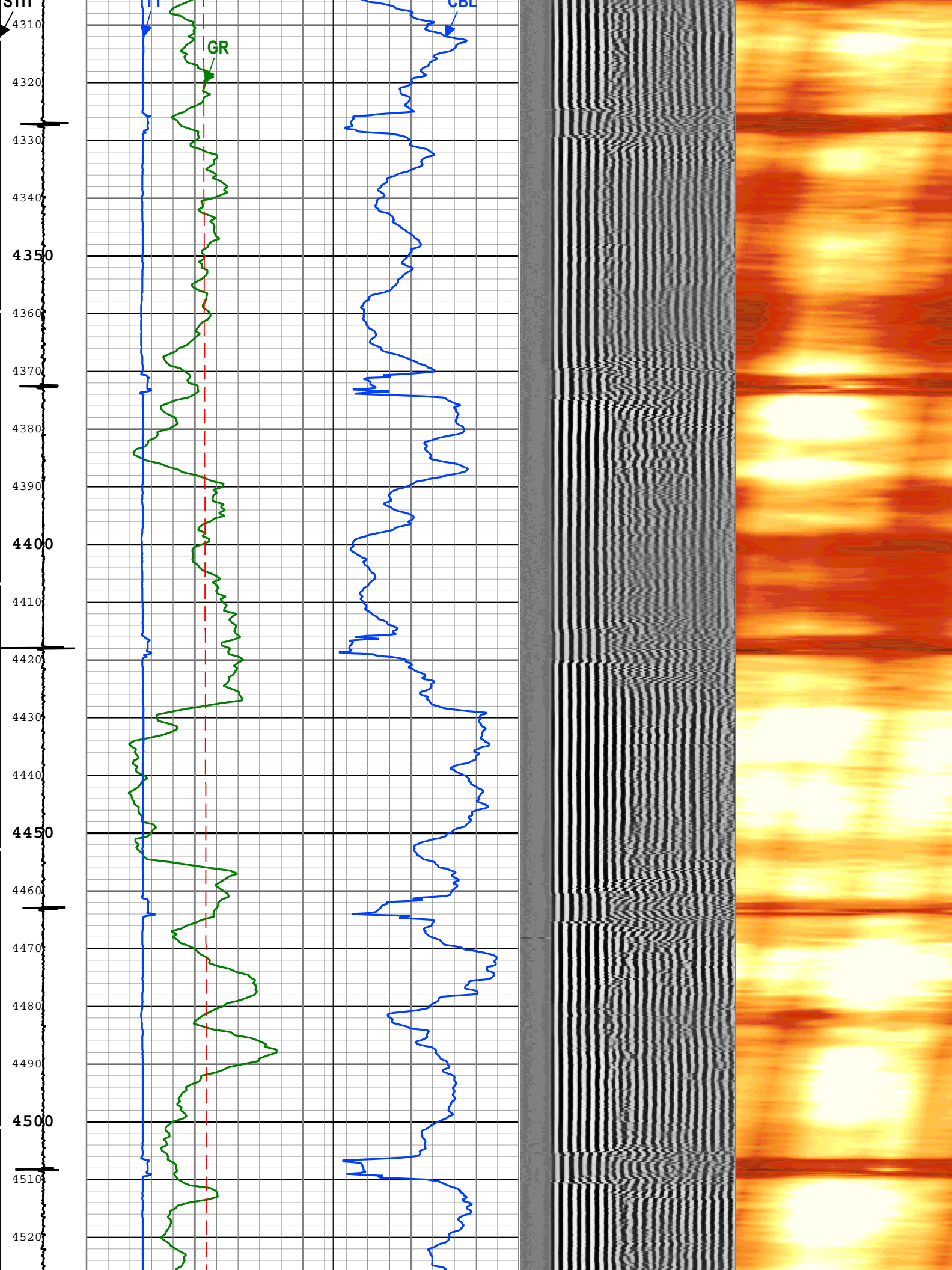


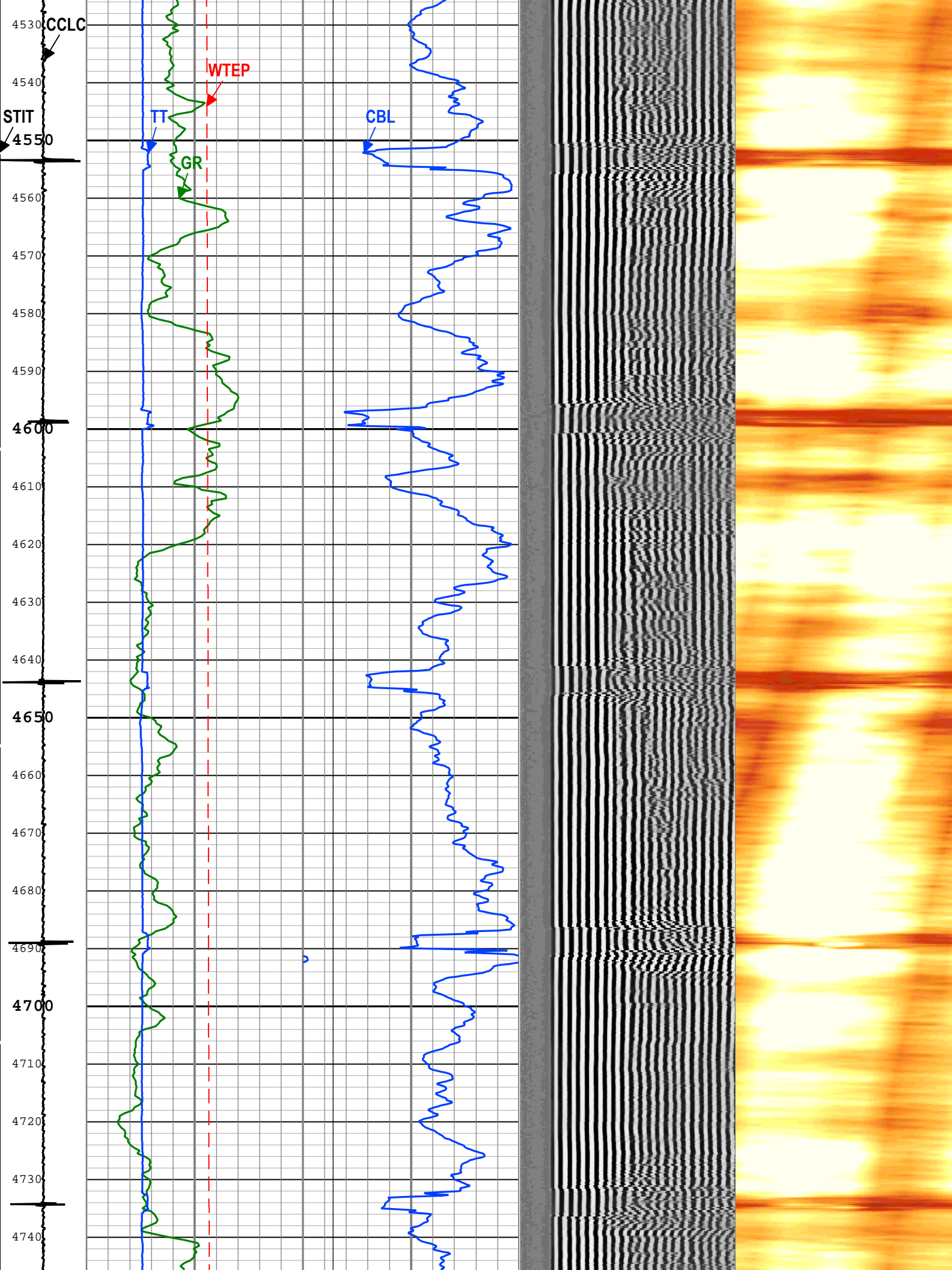


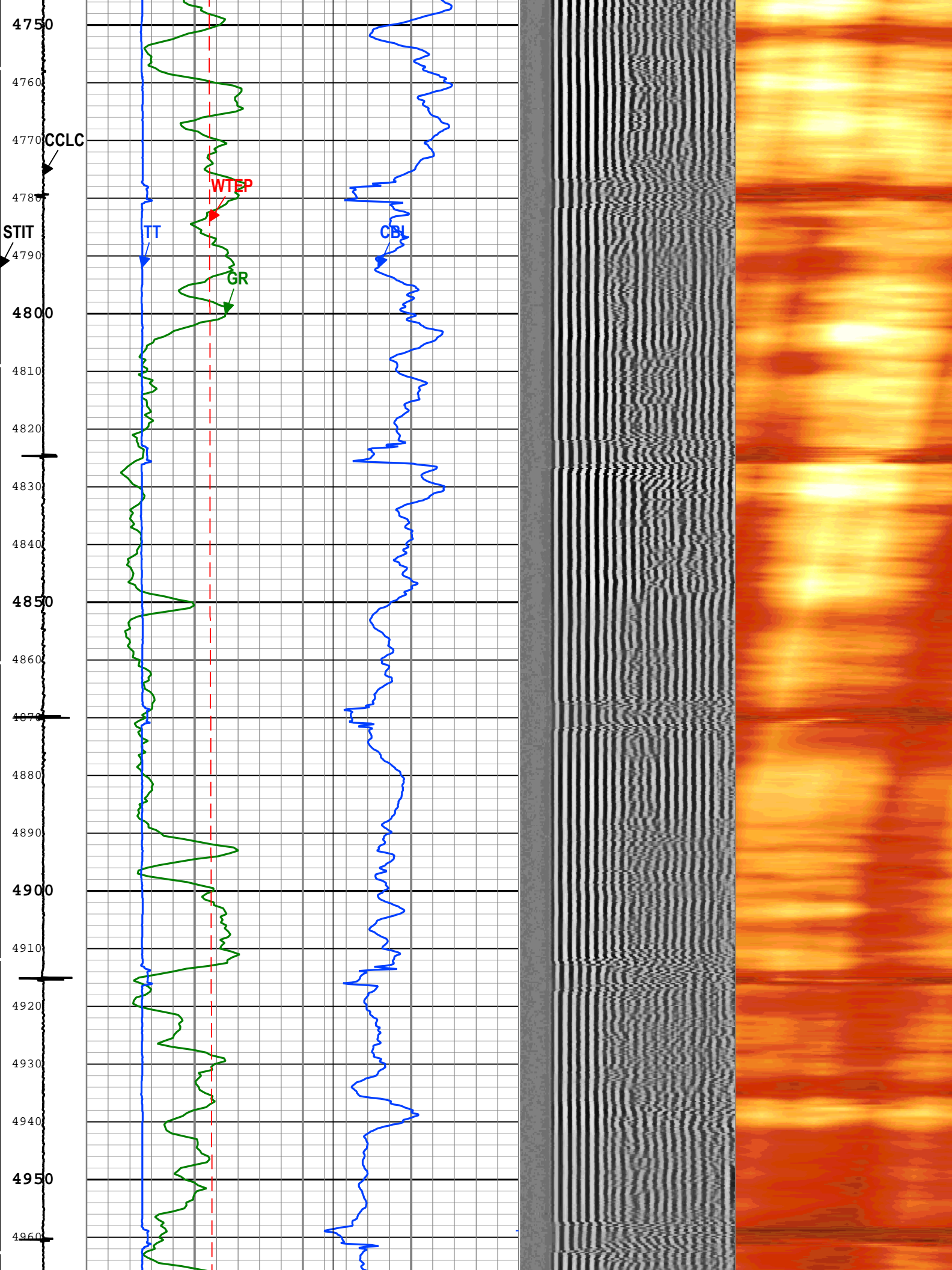


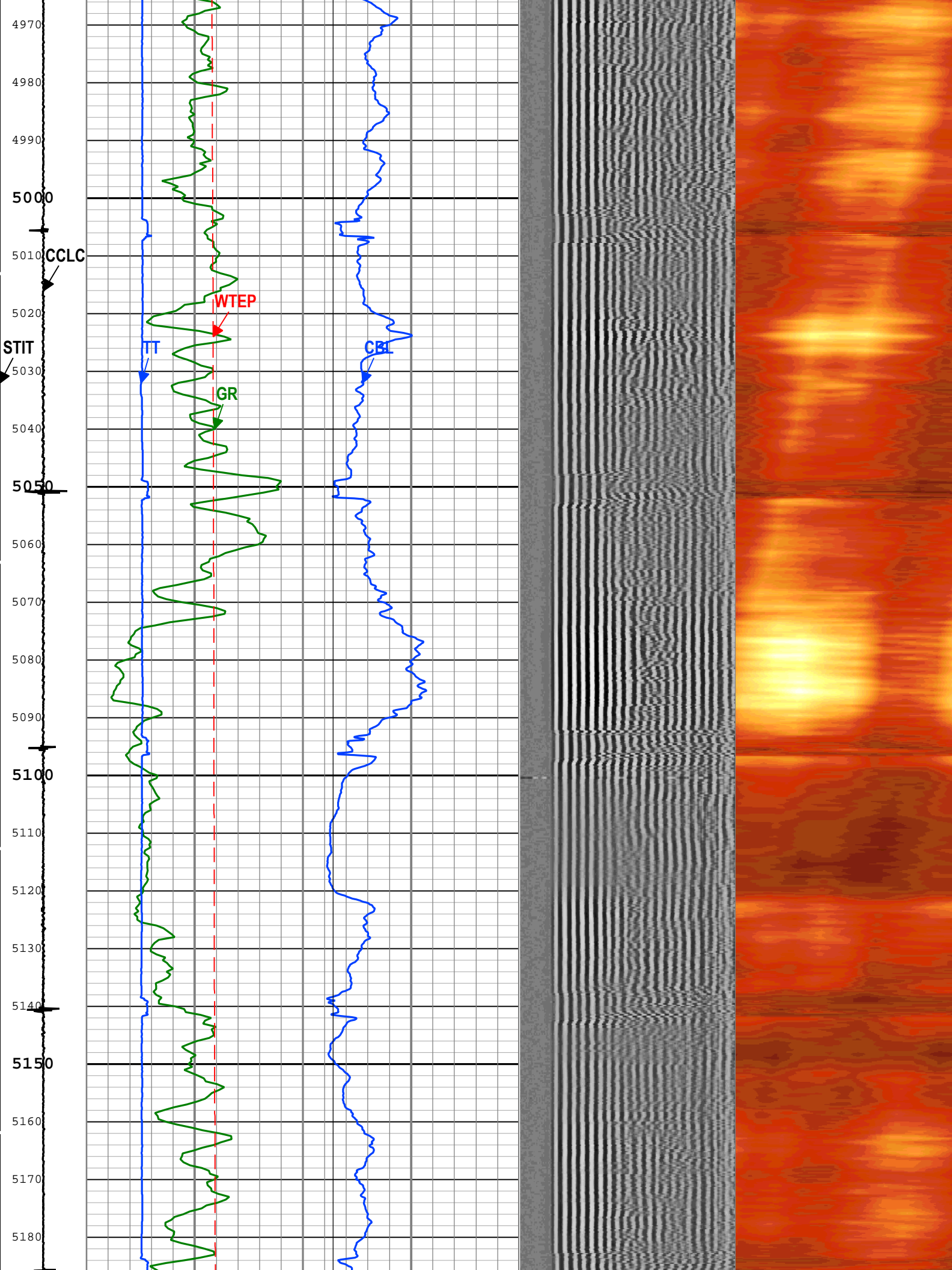


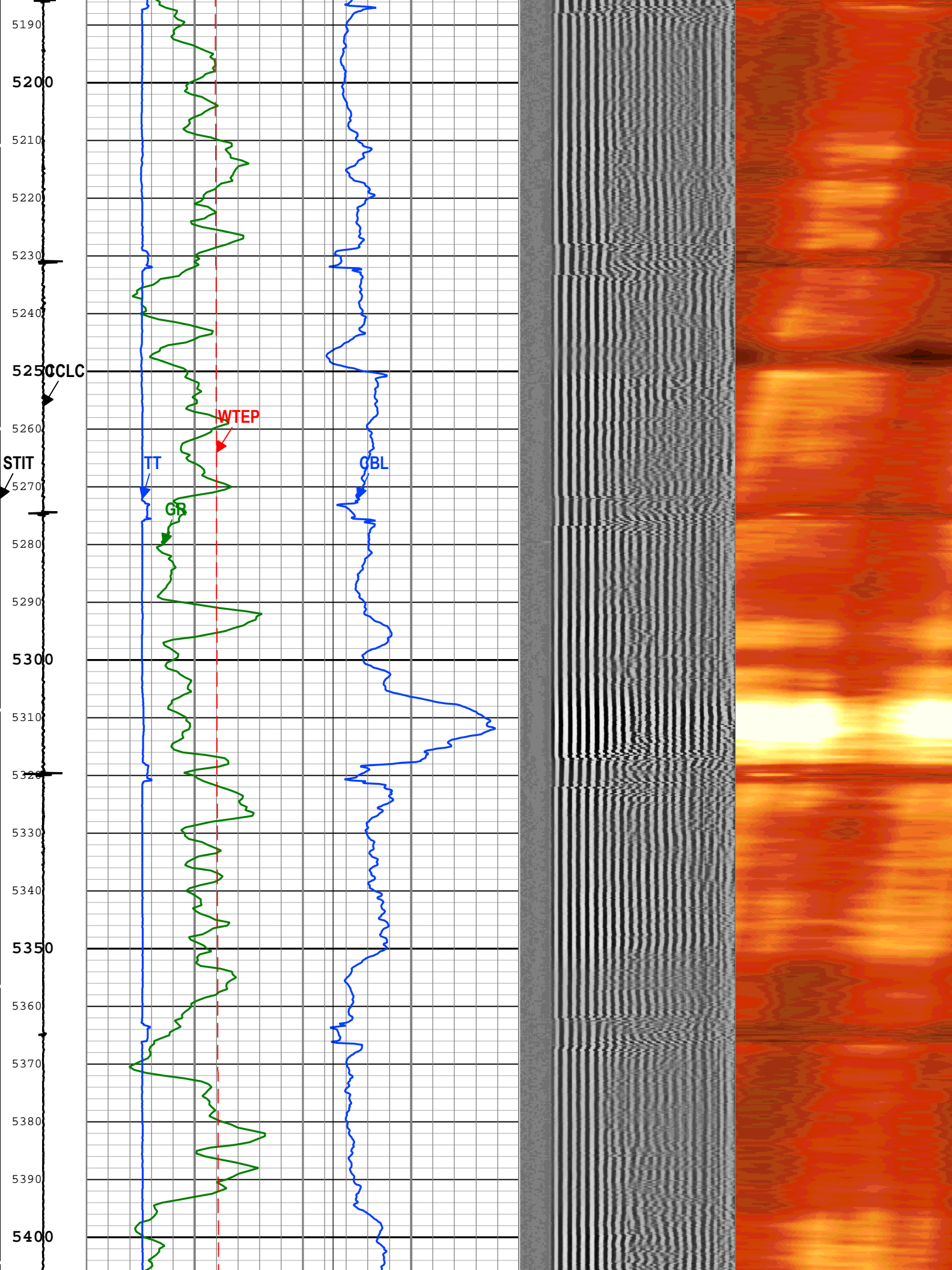


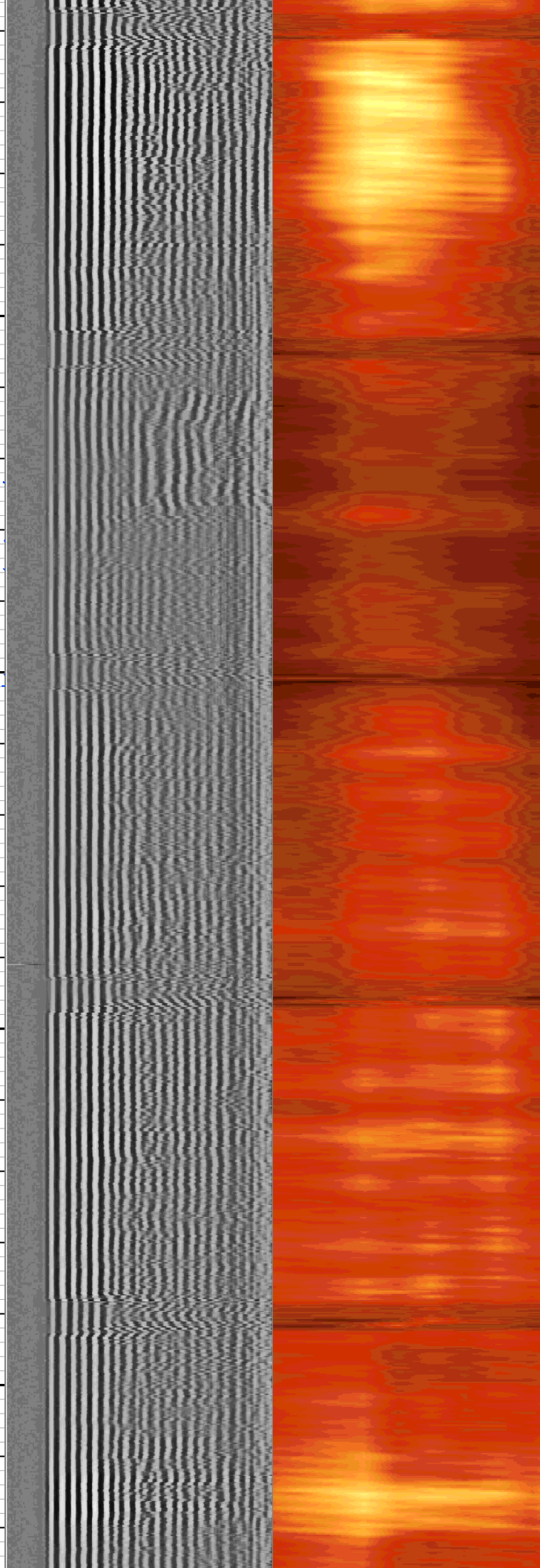
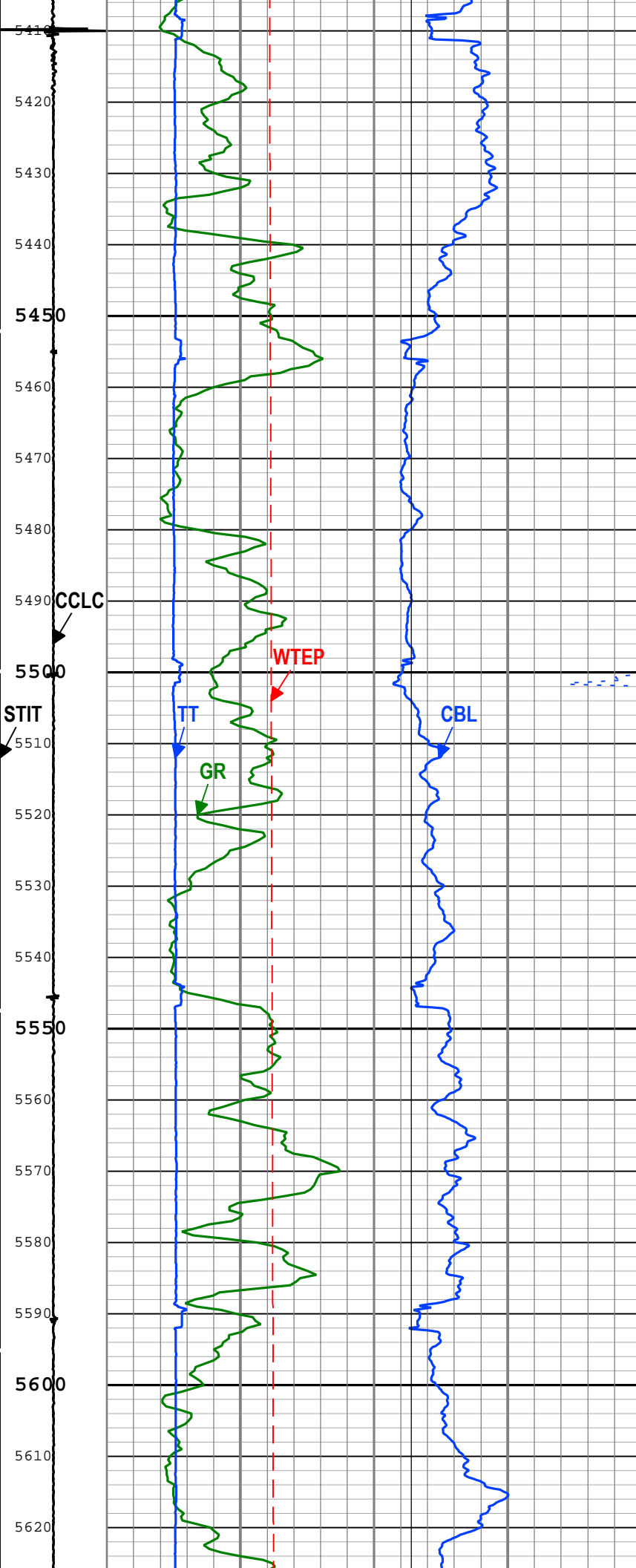


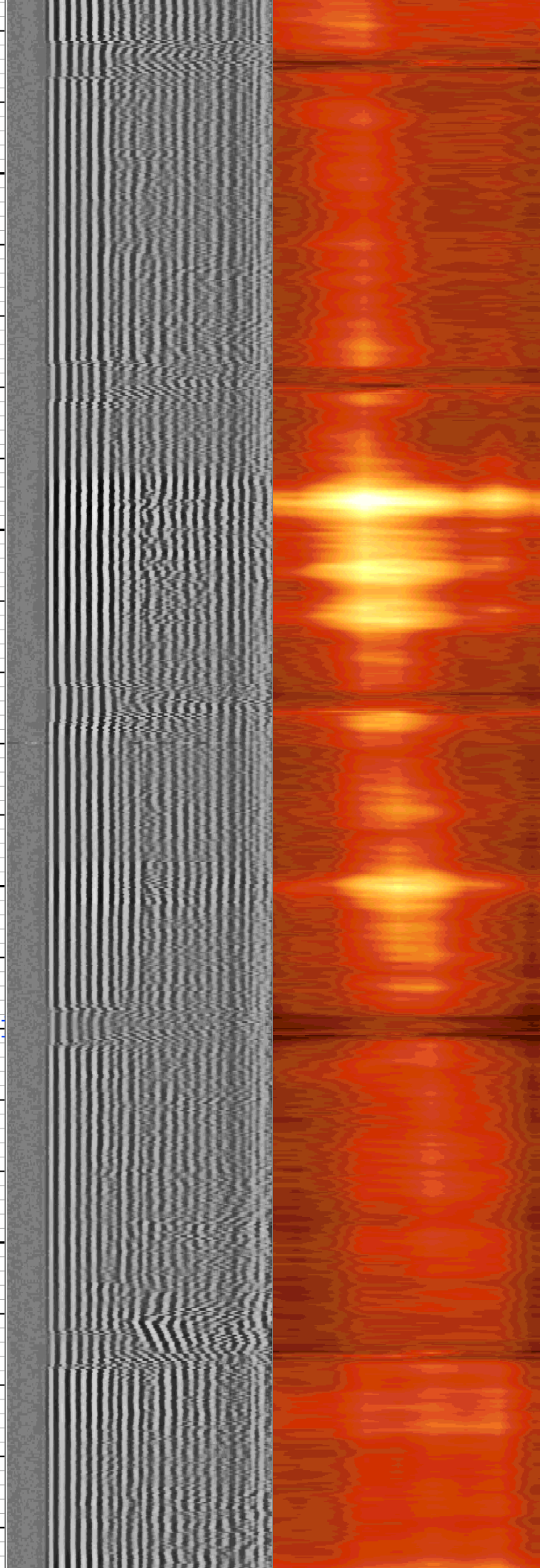
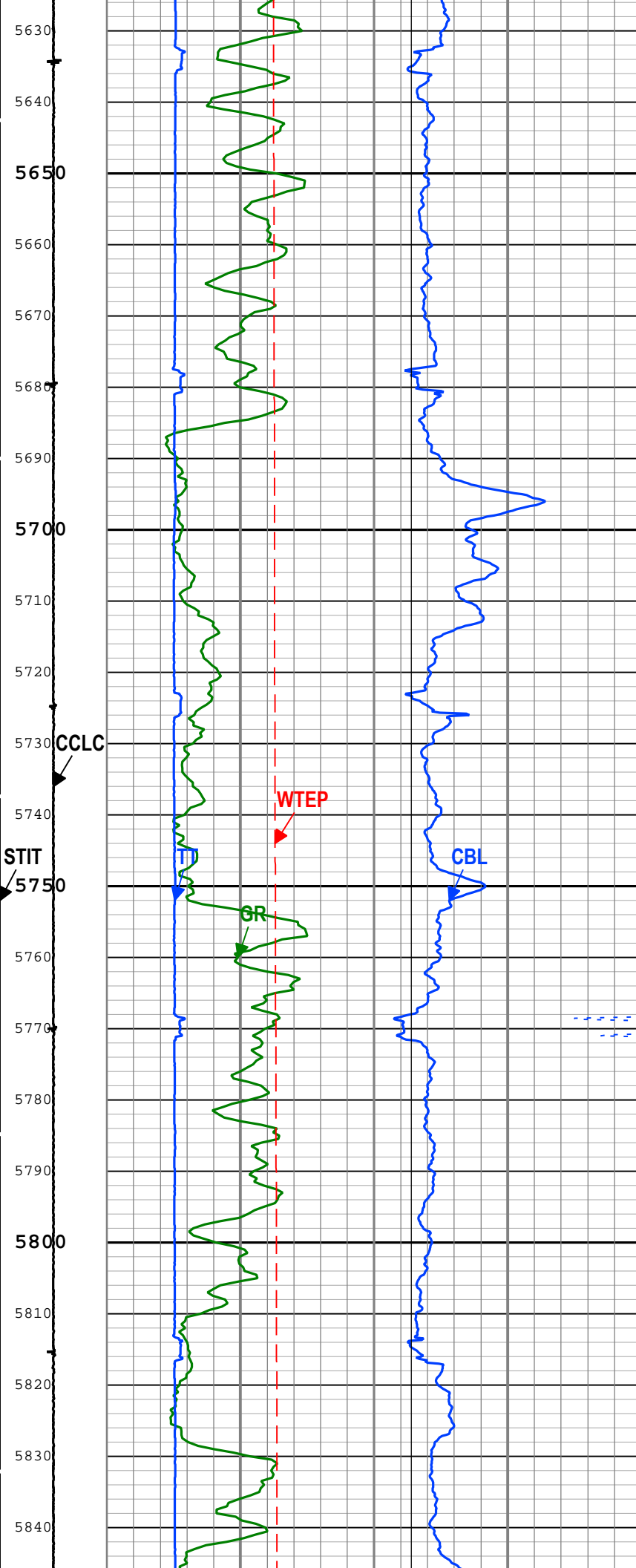


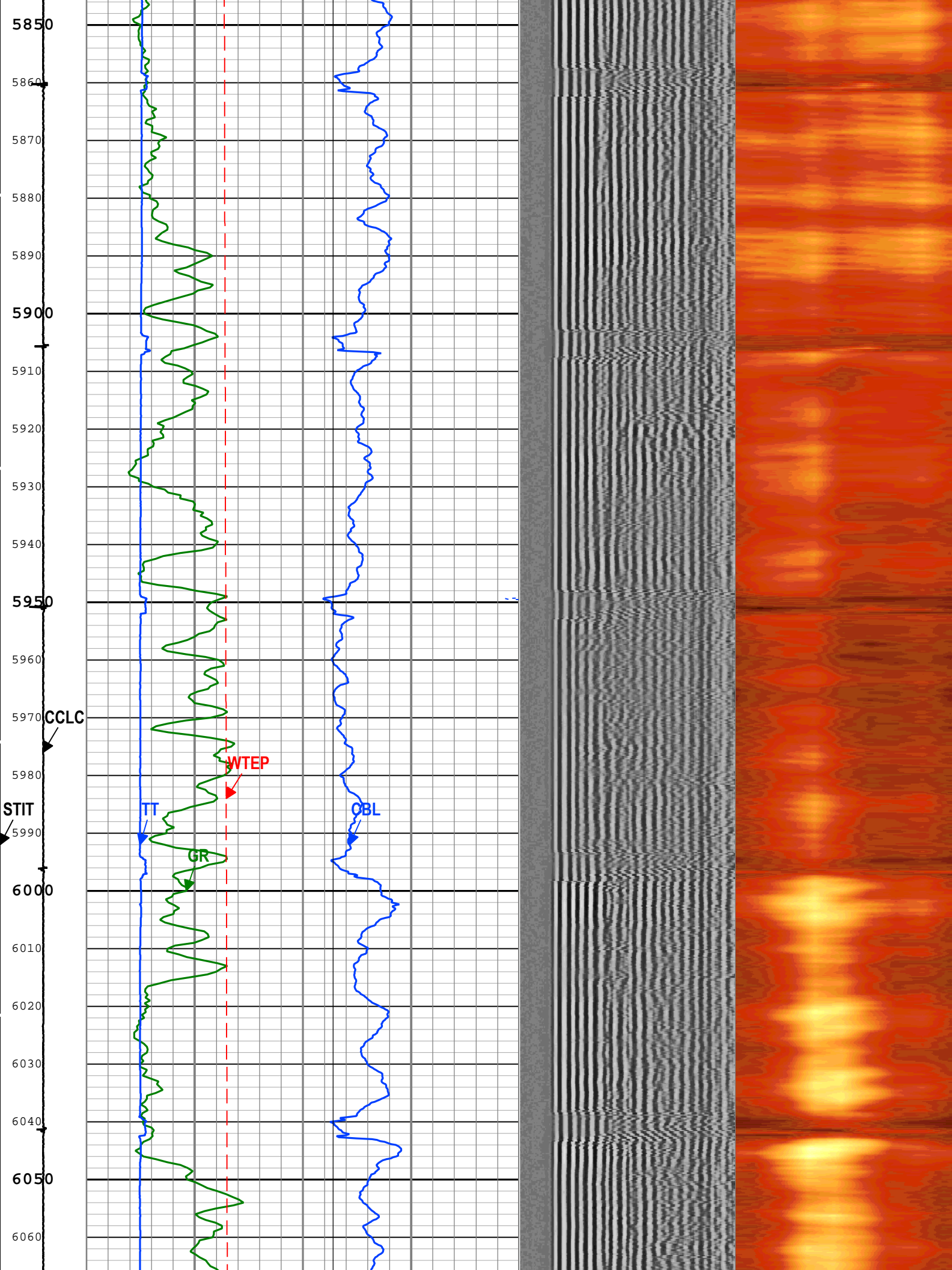


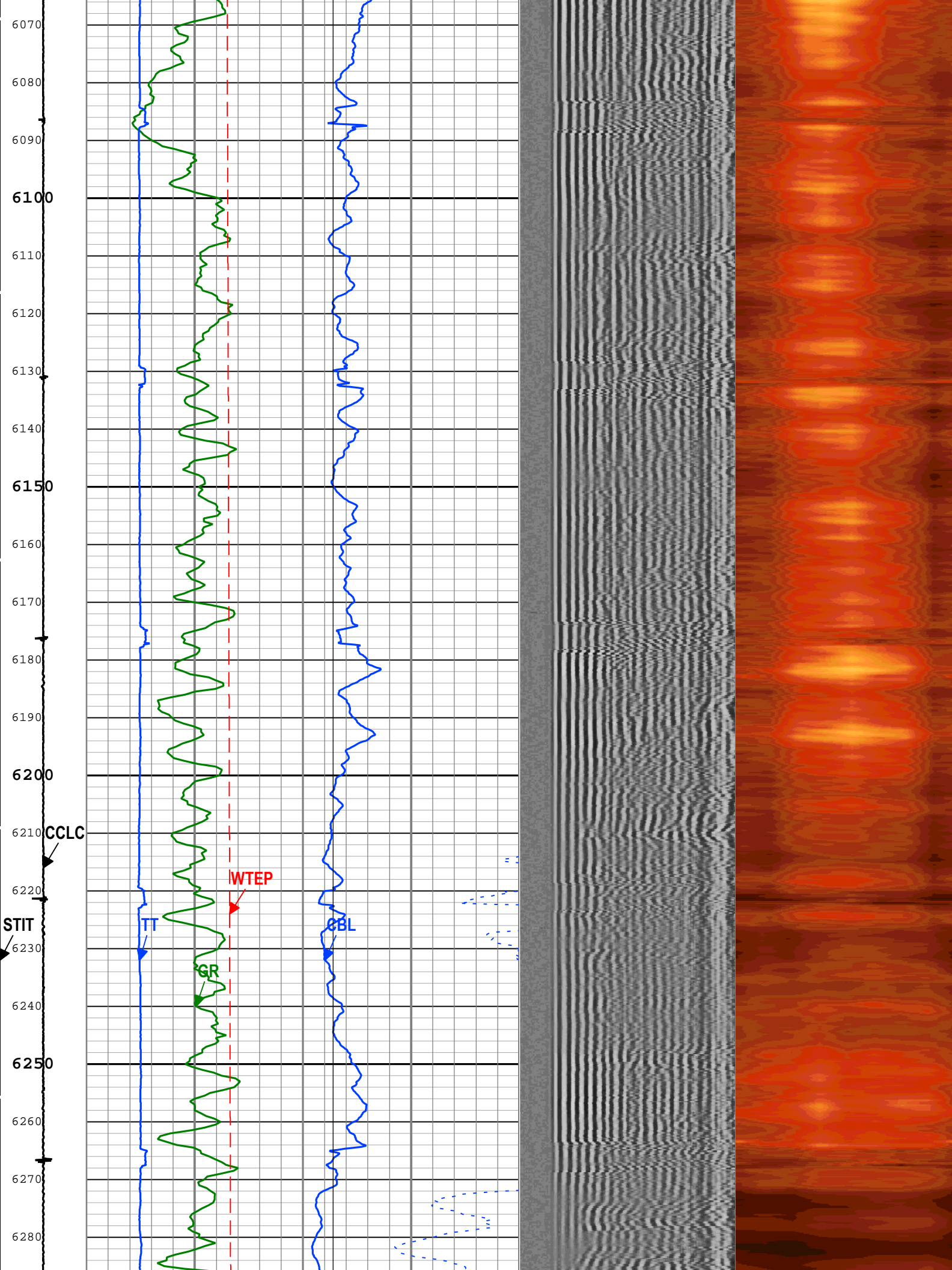


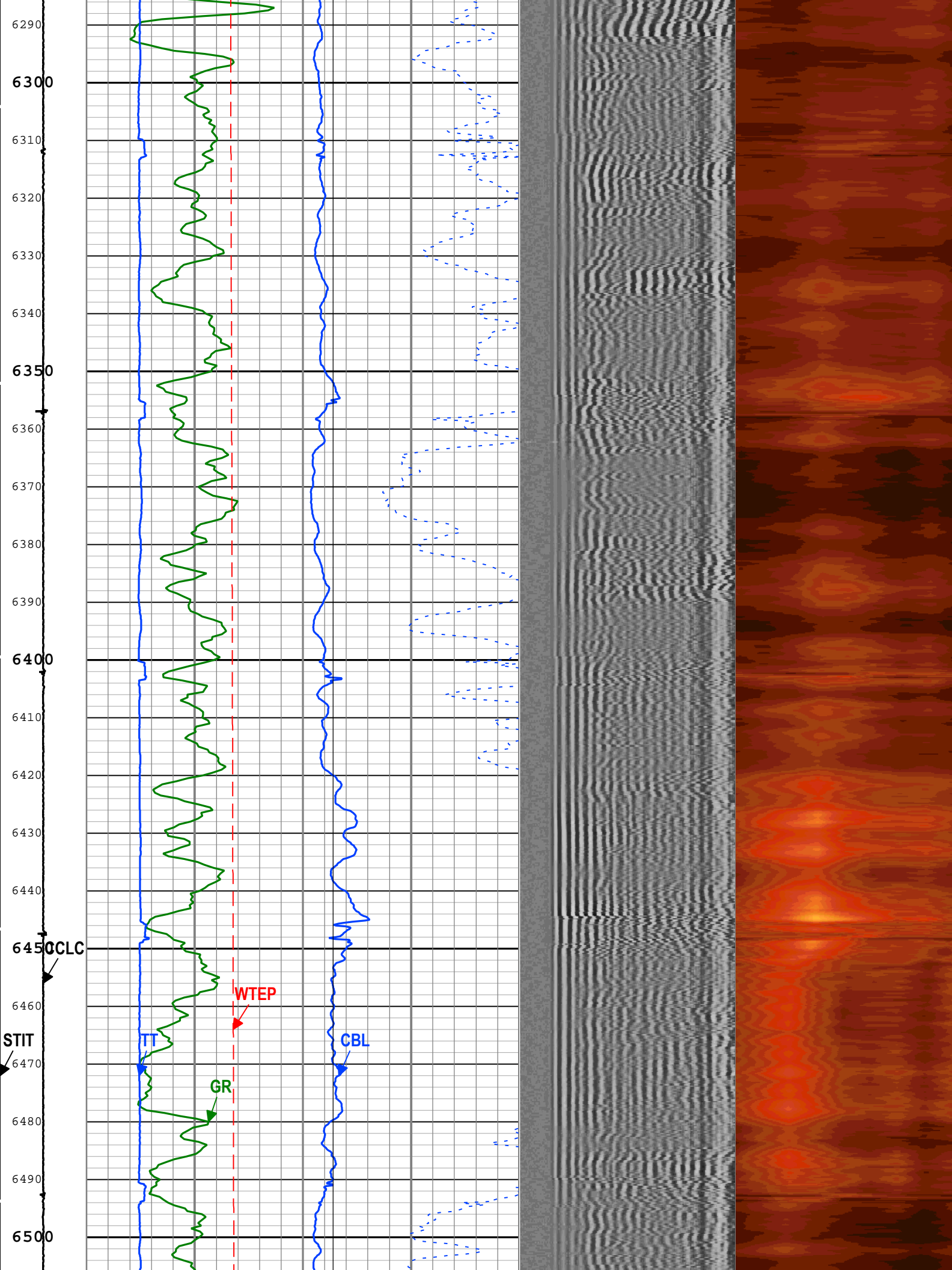


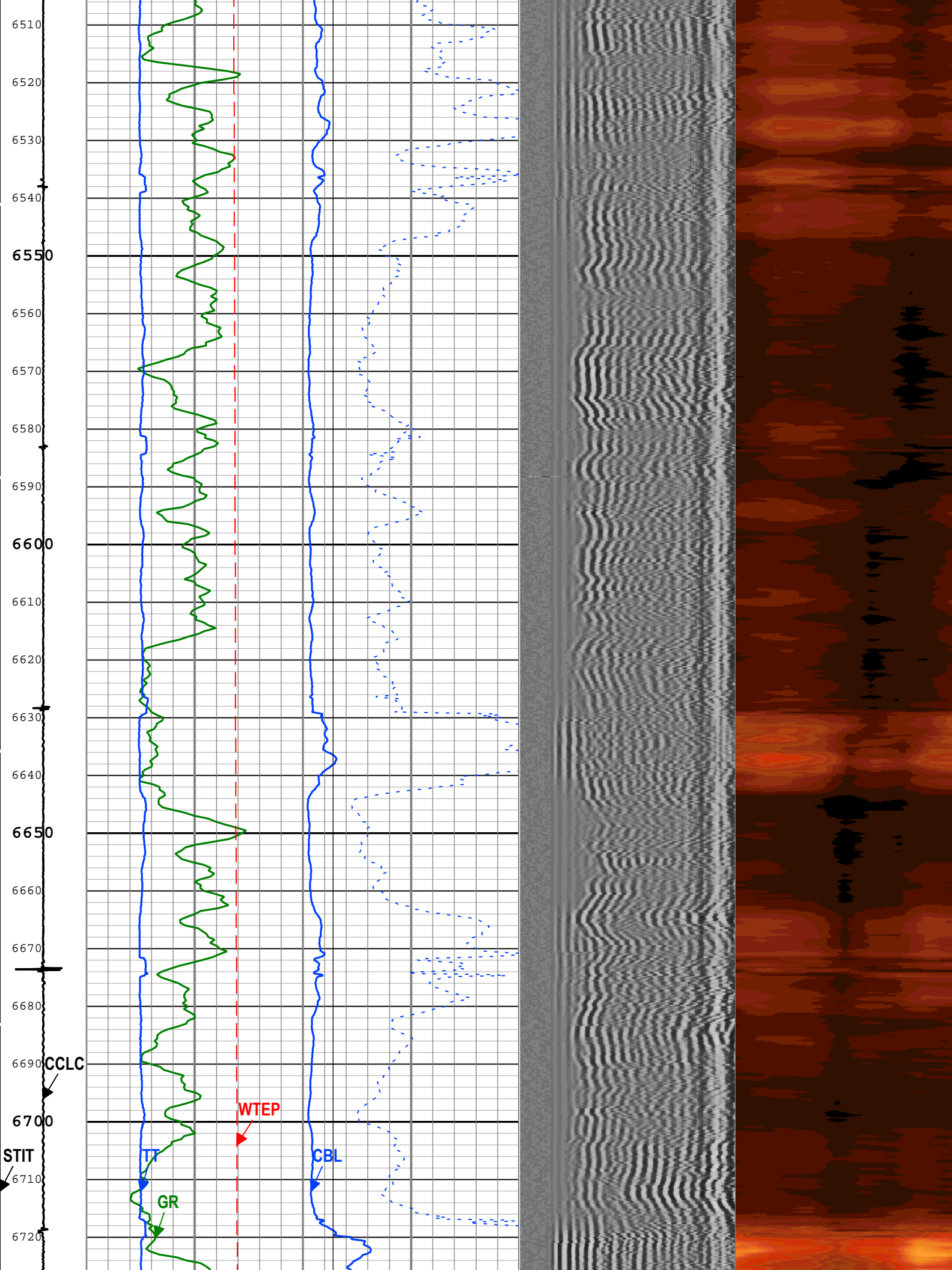


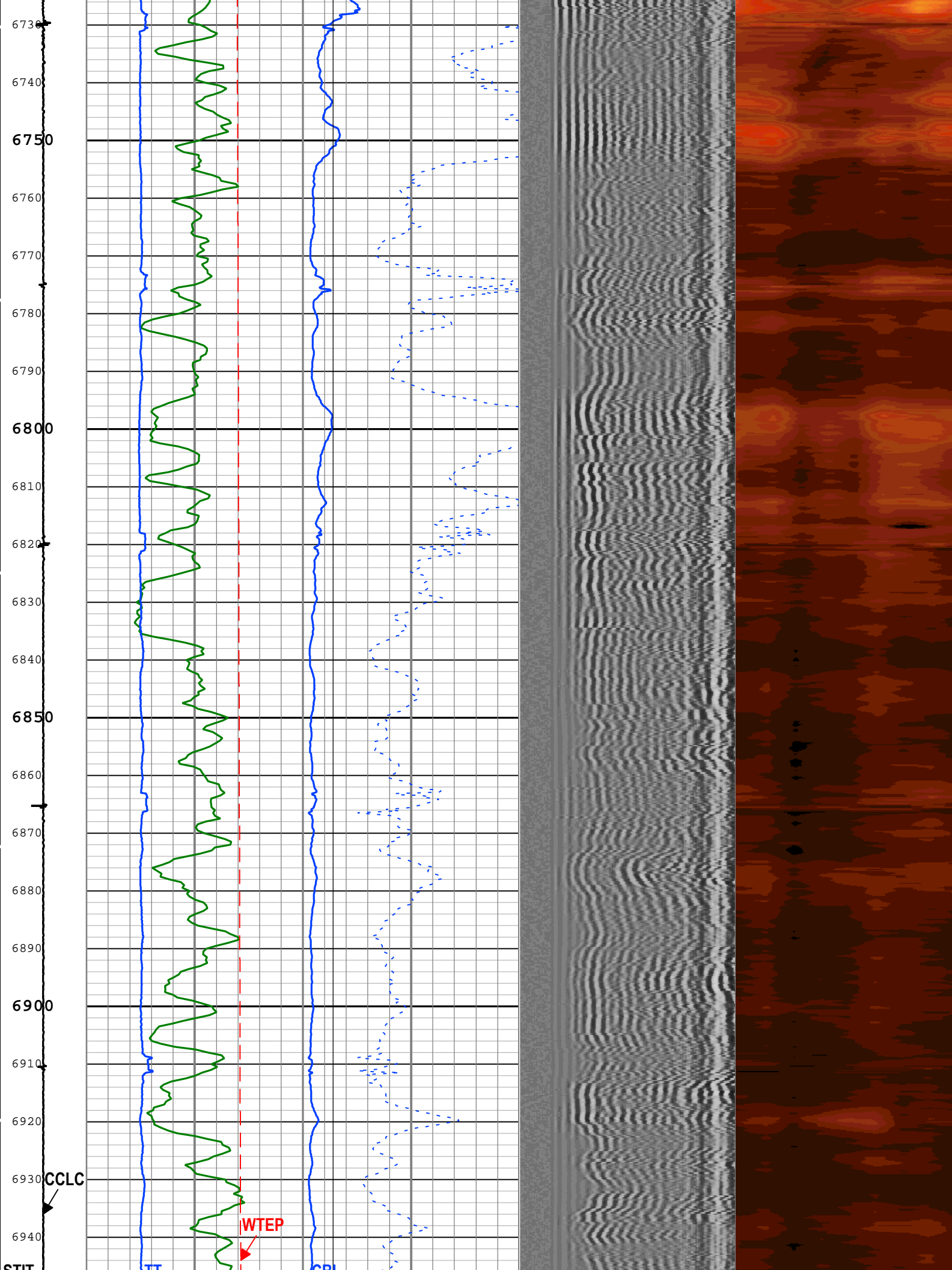


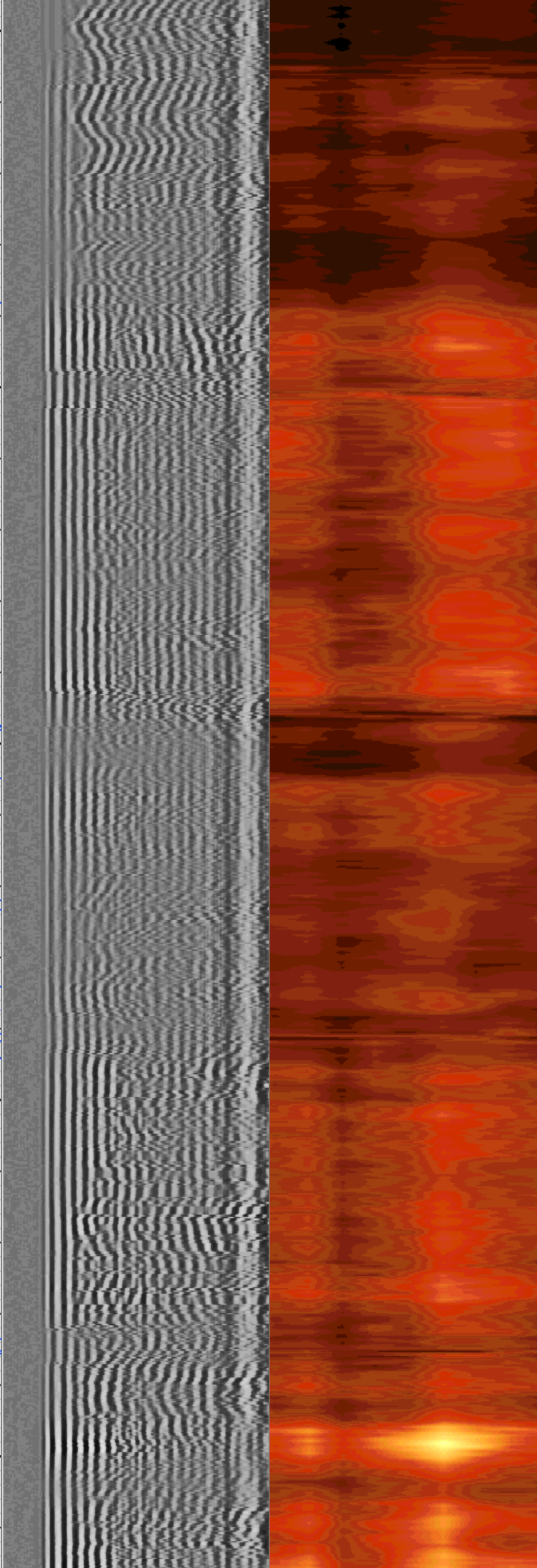
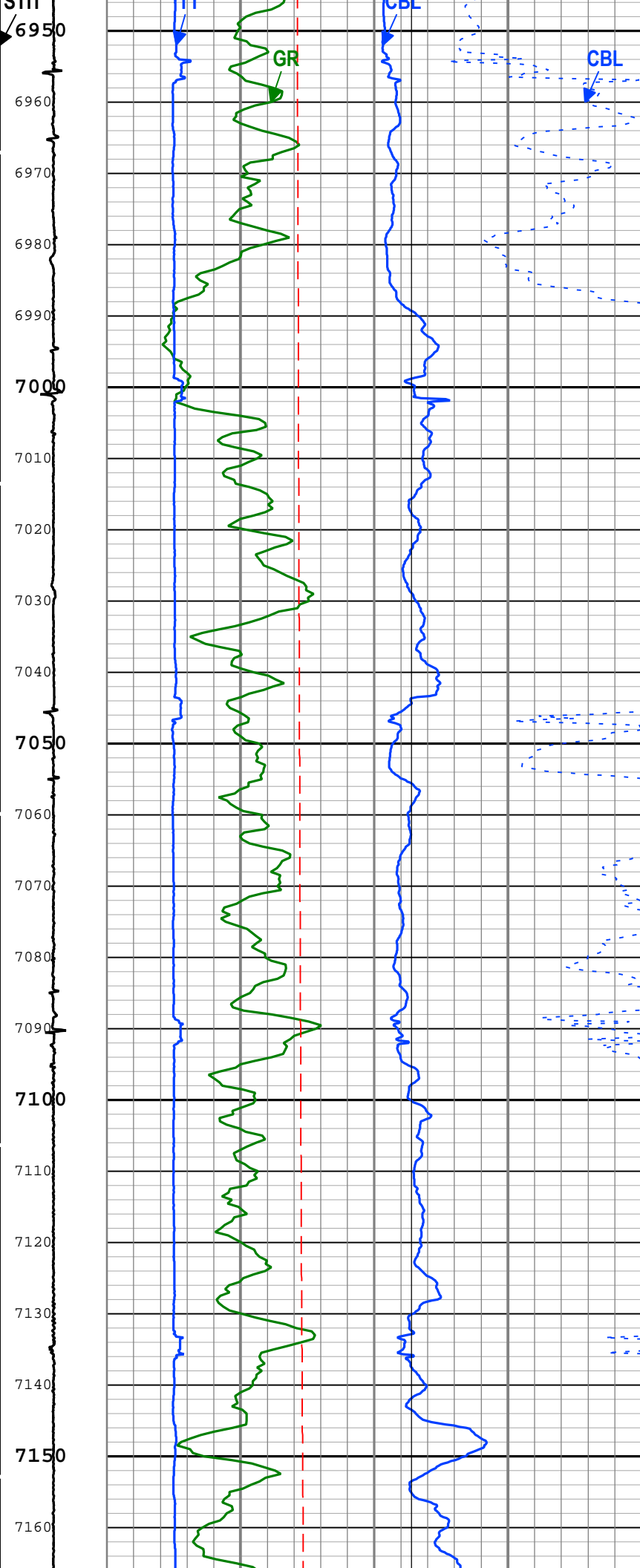


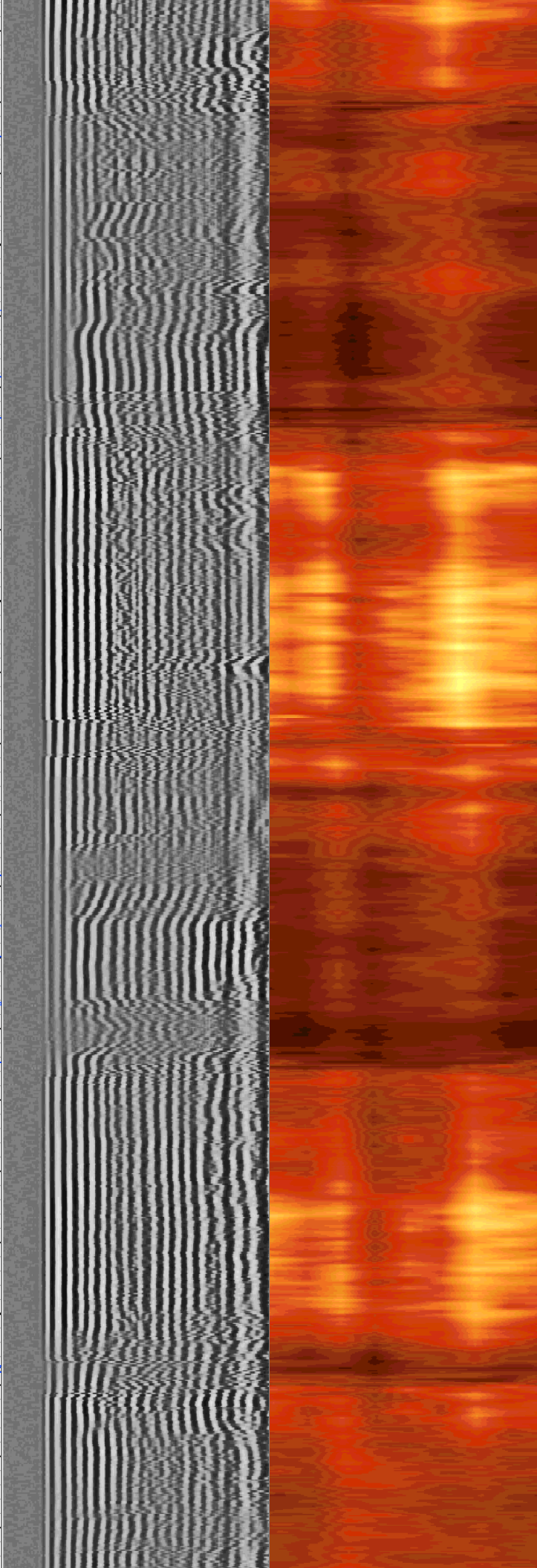
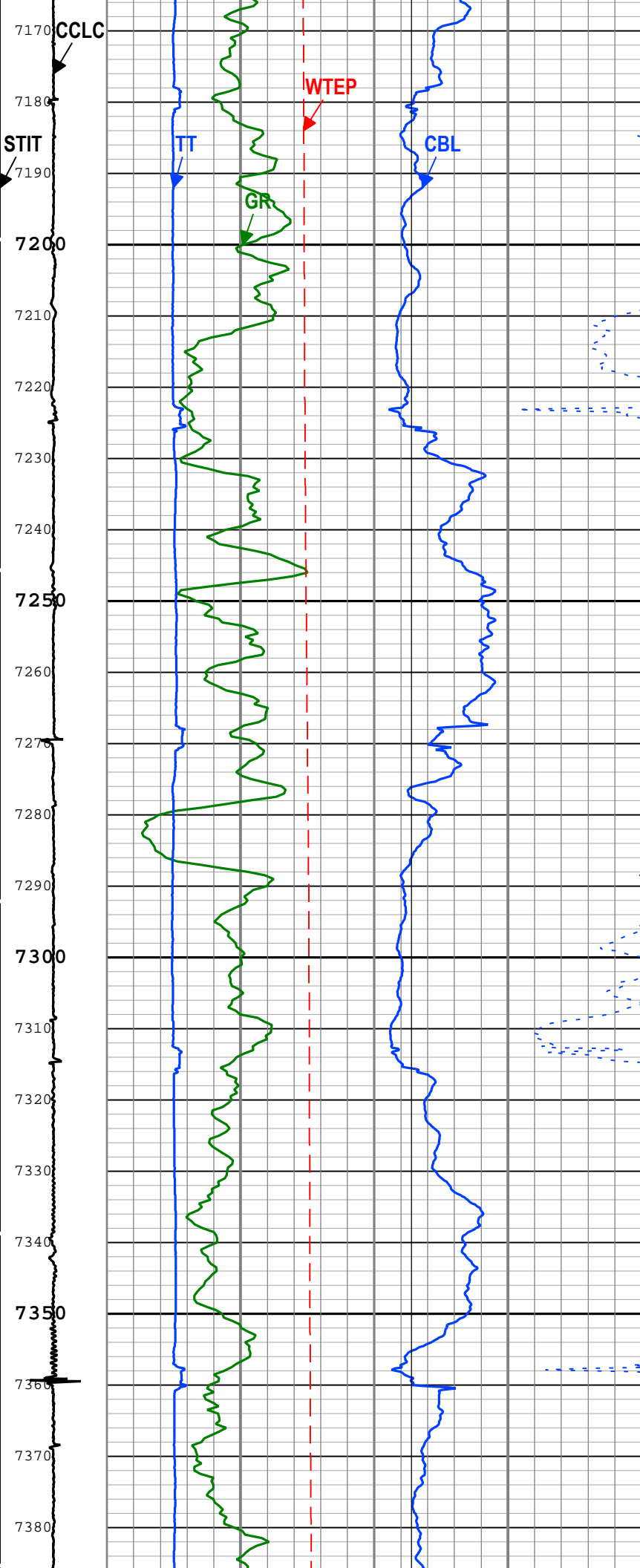


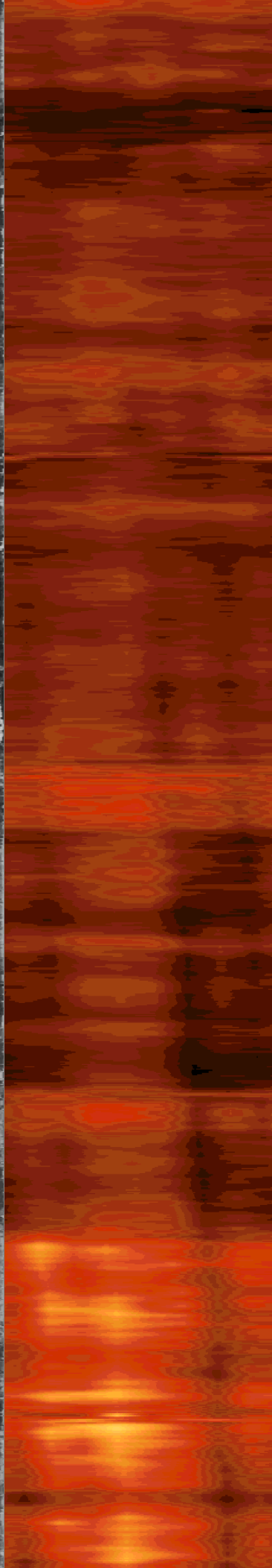
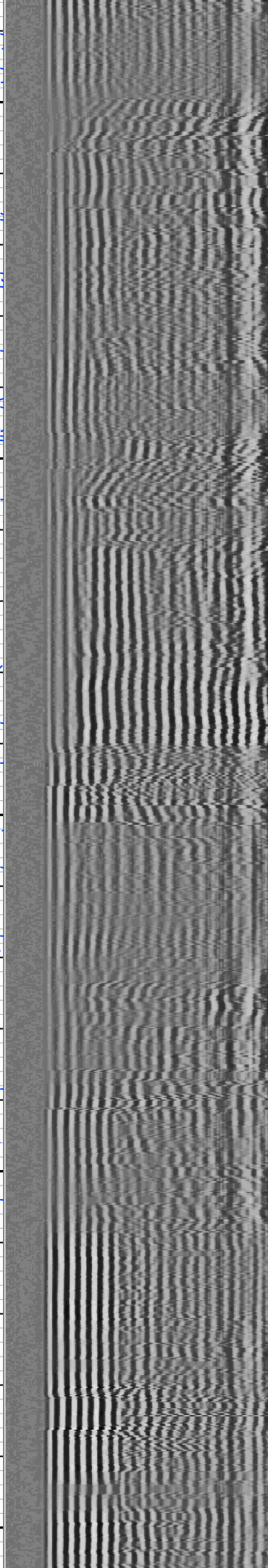
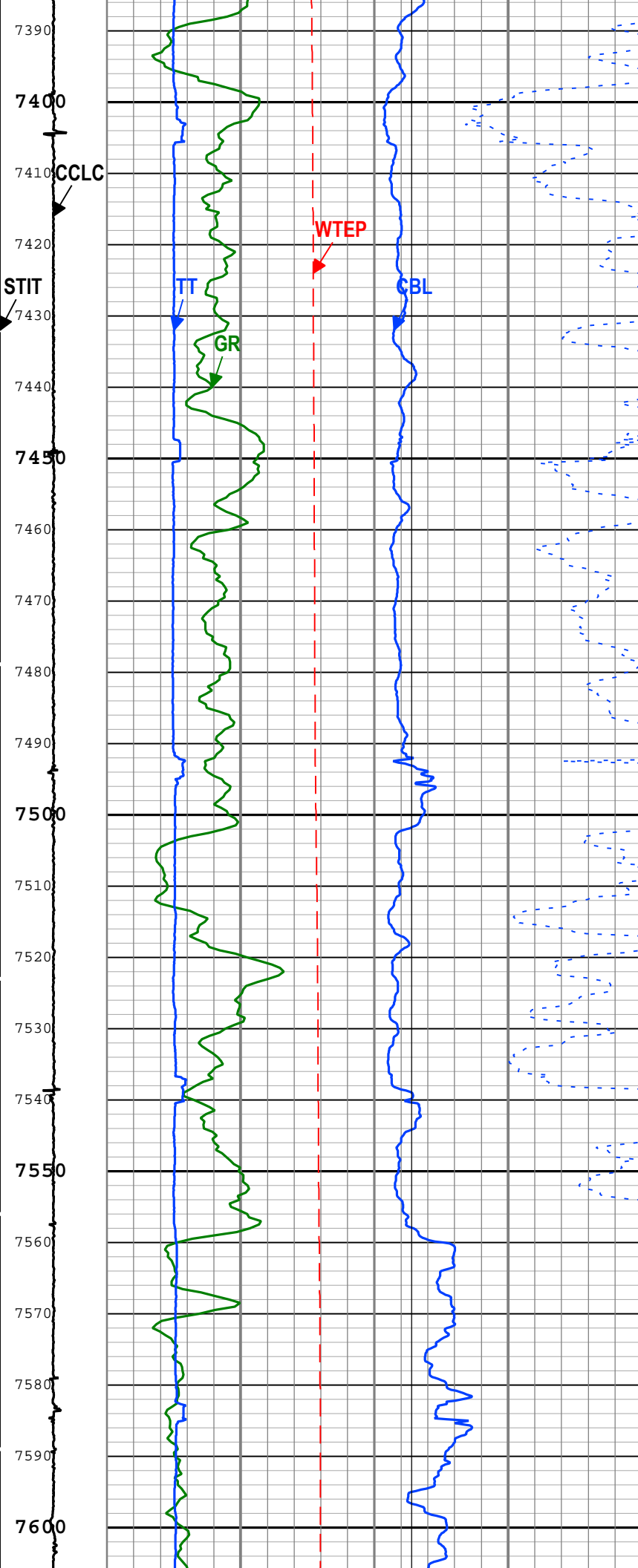


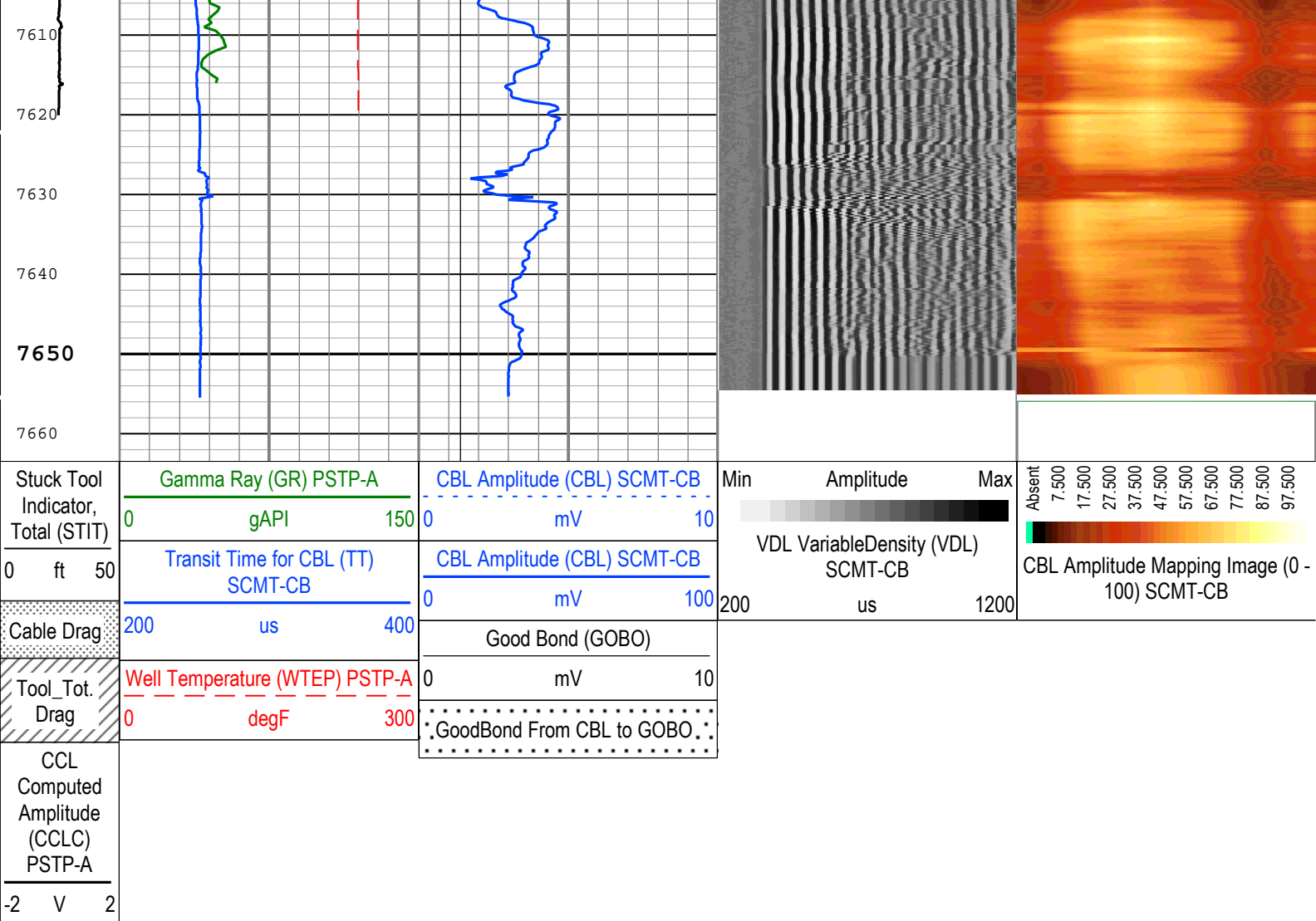












Channel Processing Parameters				
ONE: Parameters				
Parameter	Description	Tool	Value	Unit
BHT	Bottom Hole Temperature	Borehole	212	degF
CB3G	SCMT CBL 3 ft Peak Detection T0_Delay and Noise Gate	SCMT-CB	224	us
CBLG	CBL Gate Width	SCMT-CB	40	us
CBRA	CBL LQC Reference Amplitude in Free Pipe	SCMT-CB	80	mV
THNO	Nominal Casing Thickness - Zoned along logger depths	WLSESSION	0.25	in
DC_MODE	Depth Correction Mode	DepthCorrection	Real-time	
DFD	Drilling Fluid Density	Borehole	10	lbm/gal
DFT_CATEGORY	Drilling Fluid Type	Borehole	Water	
DTMD	Borehole Fluid Slowness	Borehole	206	us/ft
EDF	Elevation of Derrick Floor Above Permanent Datum	WLSESSION	30	ft
EPD	Elevation of Permanent Datum (PDAT) above Mean Sea Level	WLSESSION	5583	ft
GGRD	Geothermal Gradient	Borehole	1	0.01 degF/ft
GTSE	Generalized Temperature Selection, from Measured or Computed Temperature	Borehole	GTEM_LINEST(RT)	
MAPG	SCMT MAP Peak Detection T0_Delay and Noise Gate	SCMT-CB	175.62	us
MMSA	MAP Minimum Sonic Amplitude	SCMT-CB	3.95	mV
MSA	Minimum Sonic Amplitude	SCMT-CB	0.51	mV
PDAT	Permanent Datum	WLSESSION	GL	

RUN_SNUM	Run Sequence Number	WSDRUN	1	
SHT	Surface Hole Temperature	Borehole	68	degF
TD	Total Measured Depth	Borehole	7658	ft

Tool Control Parameters				
ONE: Parameters				
Parameter	Description	Tool	Value	Unit
CMTM	SCMT Operating Mode	SCMT-CB	Log	
MAX_LOG_SPEED	Toolstring Maximum Logging Speed	WLSESSION	150	ft/h
PCCG	PSP Downhole CCL Gain	PSTP-A	12 dB	

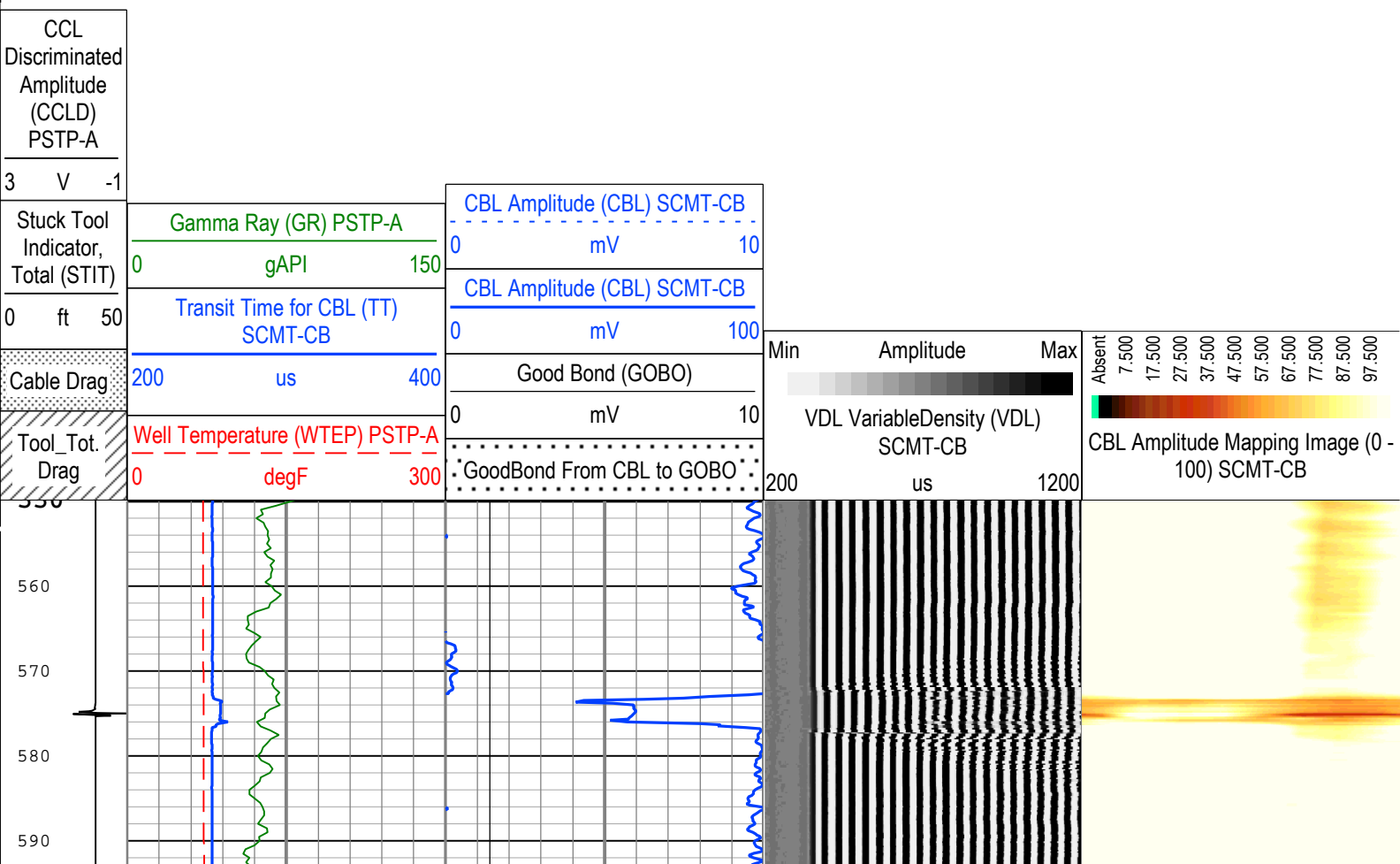
ONE				
Repeat				

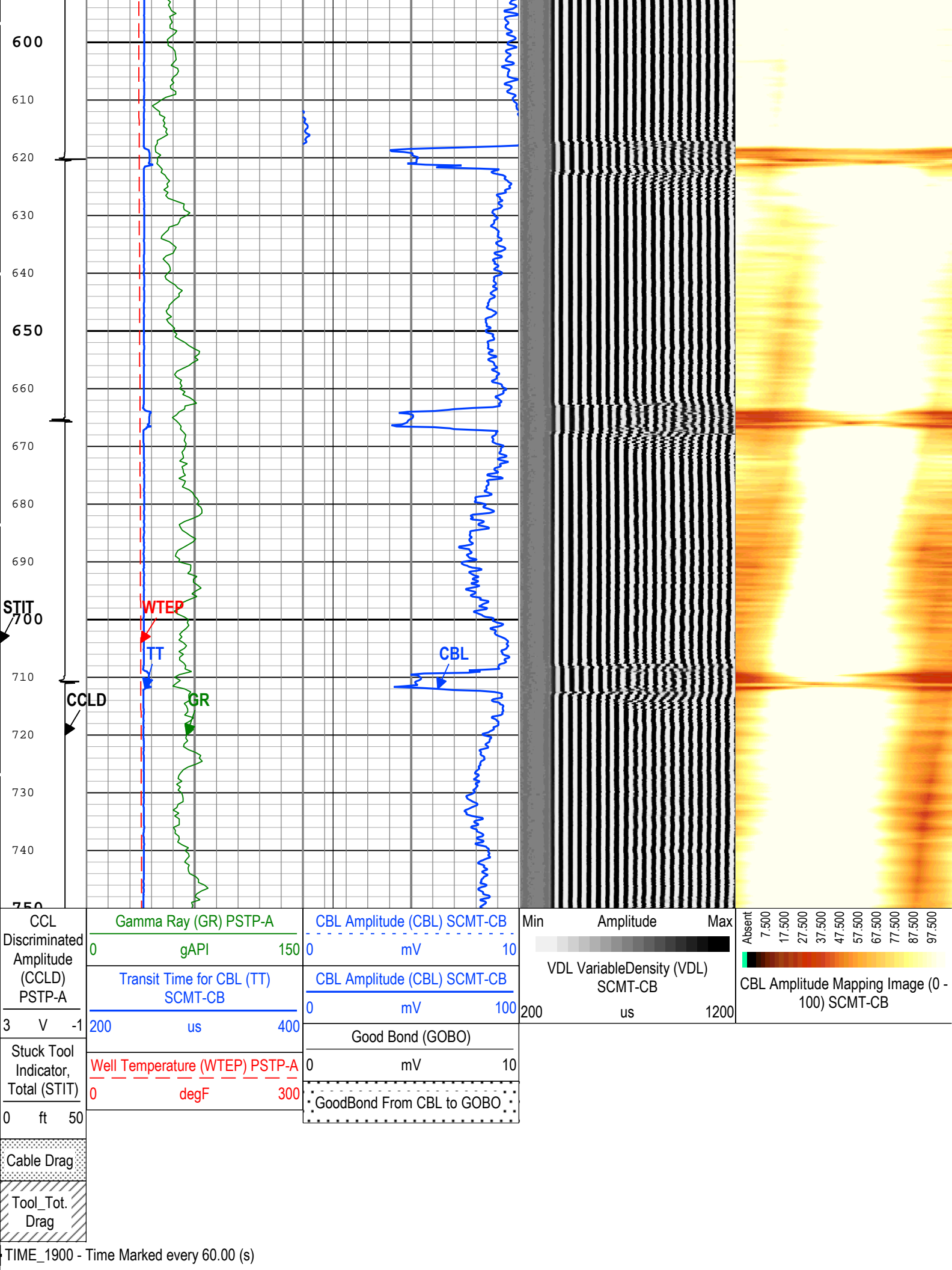
Software Version	
Acquisition System	Version
Maxwell 2017 SP2	7.2.87778.3100

Pass Summary									
Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	DSC Mode	Depth Shift	Include Parallel Data
ONE	Log[5]:Up	Up	469.09 ft	813.22 ft	23-Jul-2017 12:28:53 AM	23-Jul-2017 12:36:55 AM	ON	5.47 ft	Yes
All depths are referenced to toolstring zero									

Log	Company:CAERUS OPERATING LLC	Well:Chevron 11D-17
		ONE: Log[5]:Up:S002
Description: SCMT VDL Image Format: Log (SCMT_VDL_Image) Index Scale: 5 in per 100 ft Index Unit: ft Index Type: Measured Depth Creation Date: 23-Jul-2017 01:10:07		

TIME_1900 - Time Marked every 60.00 (s)





Channel Processing Parameters

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Parameter	Description	Tool	Value	Unit
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CBLG	CBL Gate Width	SCMT-CB	40	us
CBRA	CBL LQC Reference Amplitude in Free Pipe	SCMT-CB	80	mV
THNO	Nominal Casing Thickness - Zoned along logger depths	WLSESSION	0.25	in
DC_MODE	Depth Correction Mode	DepthCorrection	Real-time	
DFD	Drilling Fluid Density	Borehole	10	lbm/gal
DFT_CATEGORY	Drilling Fluid Type	Borehole	Water	
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EPD	Elevation of Permanent Datum (PDAT) above Mean Sea Level	WLSESSION	5583	ft
GGRD	Geothermal Gradient	Borehole	1	0.01 degF/ft
GTSE	Generalized Temperature Selection, from Measured or Computed Temperature	Borehole	GTEM_LINEST(RT)	
MAPG	SCMT MAP Peak Detection T0_Delay and Noise Gate	SCMT-CB	175.62	us
MMSA	MAP Minimum Sonic Amplitude	SCMT-CB	3.95	mV
MSA	Minimum Sonic Amplitude	SCMT-CB	0.51	mV
PDAT	Permanent Datum	WLSESSION	GL	
RUN_SNUM	Run Sequence Number	WSDRUN	1	
SHT	Surface Hole Temperature	Borehole	68	degF
TD	Total Measured Depth	Borehole	7658	ft

Tool Control Parameters

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Company:	CAERUS OPERATING LLC	Schlumberger
Well:	Chevron 11D-17	
Field:	Grand Valley	
County:	Garfield	
State:	Colorado	
Slim Cement Mapping Tool		
CBL-VDL		