

Company: Caerus Piceance LLC

Well: Puckett 43A-2

Field: Wildcat

County: Garfield State: Colorado

Slim Cement Mapping Tool

CBL-VDL

County:	Garfield	Location:	Sec.2, T7S, R97W	Elev.:	K.B.	8507.00 ft
Field:	Wildcat		Lat: 39.475722/Long: -108.179636		G.L.	8477.00 ft
Location:	Sec.2, T7S, R97W				D.F.	8506.00 ft
Well:	Puckett 43A-2	Permanent Datum:	Ground Level	Elev.:	8477.00 f	
Company:	Caerus Piceance LLC	Log Measured From:	Kelly Bushing	30.00 ft	above Perm.Datum	
		Drilling Measured From:	Kelly Bushing			
		API Serial No.	Section:	Township:	Range:	
		0504522635	2	7S	97W	

Logging Date	20-May-2015	Run Number	Run 1
Depth Driller	8940.00 ft	Schlumberger Depth	8940.00 ft
Bottom Log Interval	8799.00 ft	Top Log Interval	2500.00 ft
Casing Fluid Type	3% KCl	Salinity	
Density	9.1 lbm/gal	Fluid Level	0.00 ft
BIT/CASING/TUBING STRING		Bit Size	8.75 in
		From	2550.00 ft
		To	8940.00 ft
Casing/Tubing Size	4.5 in	Weight	11.6 lbm/ft
Grade	P110	From	0.00 ft
To	8940.00 ft	Max Recorded Temperatures	226 degF
Logger on Bottom	20-May-2015	Time	21:10:00
Unit Number	3022	Location:	Ft. Morgan, CO
Recorded By	Aleksei Bekhterev/Modhar Khan		
Witnessed By	Natalie Naeve		

Disclaimer

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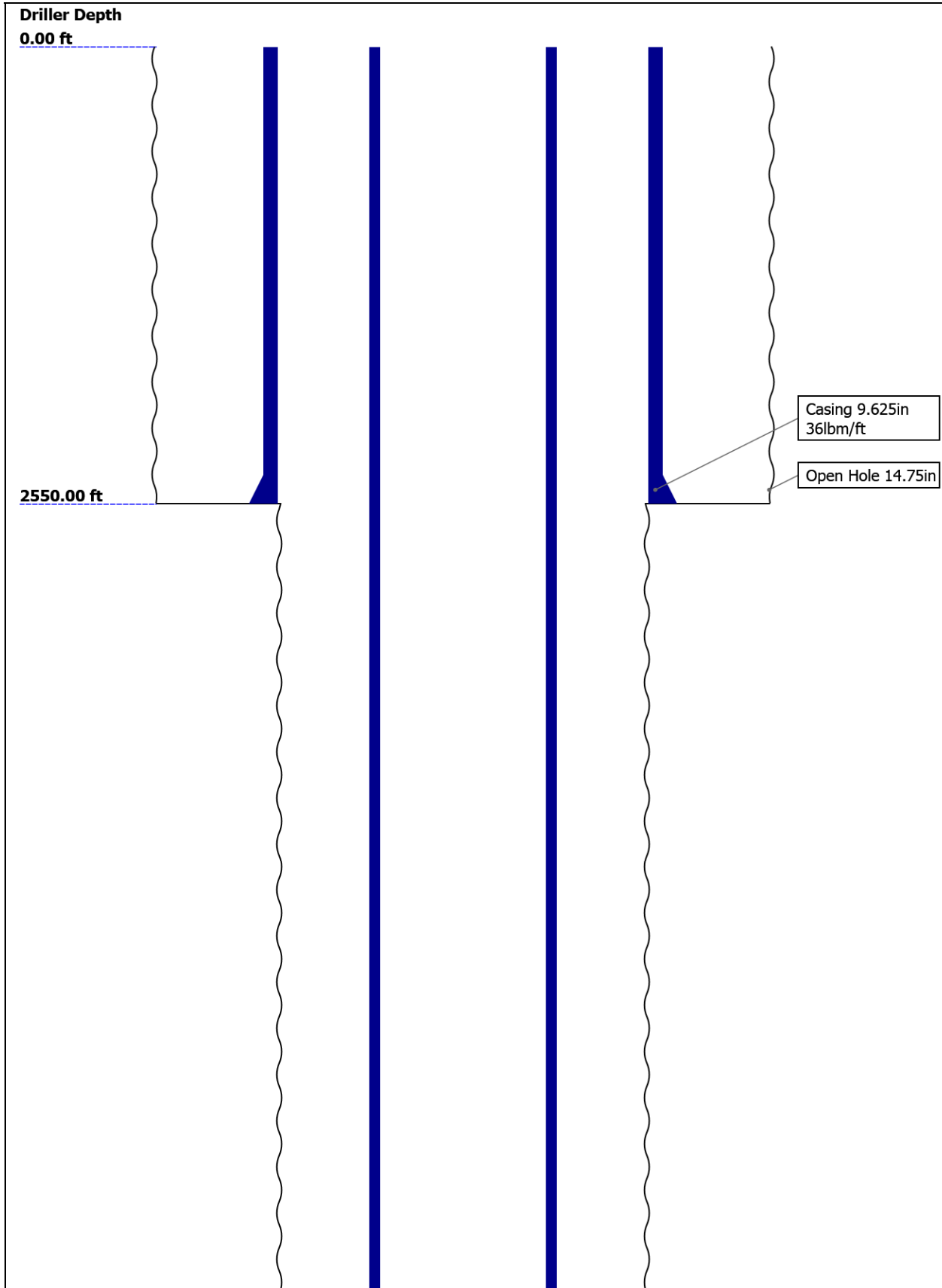
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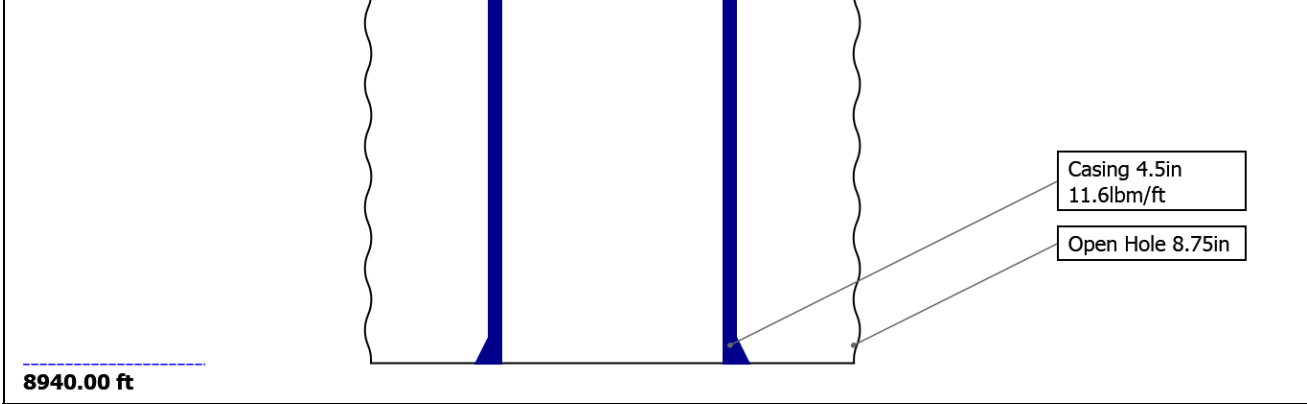
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Well Sketch





Borehole Size/Casing/Tubing Record

Bit						
Bit Size (in)	14.75	8.75				
Top Driller (ft)	0	2550				
Top Logger (ft)	0	2550				
Bottom Driller (ft)	2550	8940				
Bottom Logger (ft)	2550	8940				
Casing						
Size (in)	9.625	4.5				
Weight (lbm/ft)	36	11.6				
Inner Diameter (in)	8.921	4				
Grade	J55	P110				
Top Driller (ft)	0	0				
Top Logger (ft)	0	0				
Bottom Driller (ft)	2550	8940				
Bottom Logger (ft)	2550	8940				

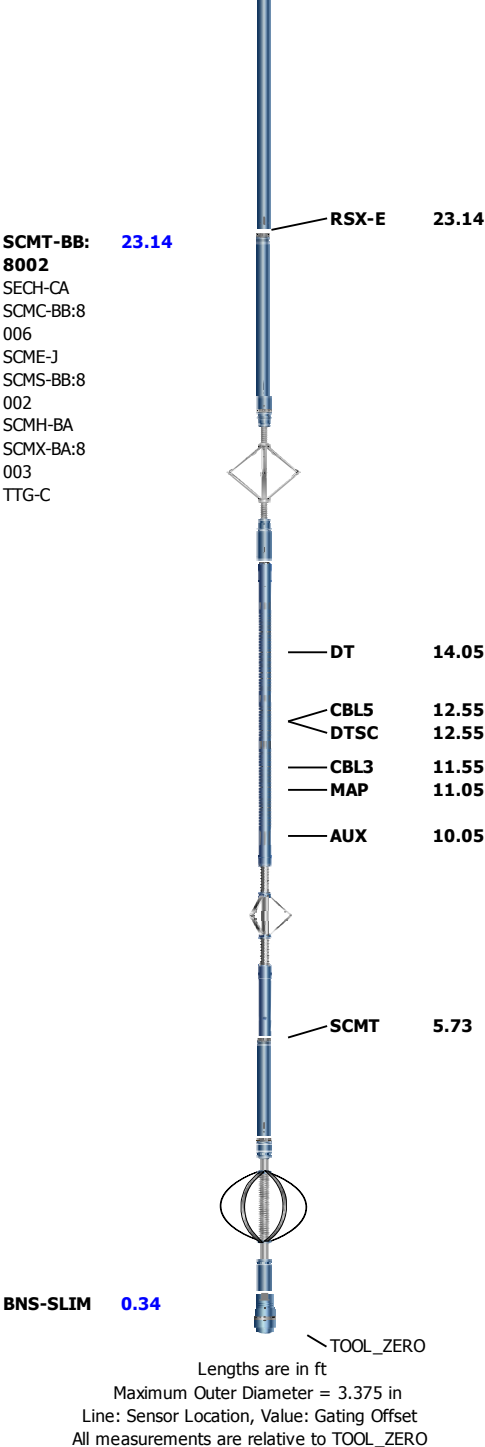
Operational Run Summary

Parameter (unit)	Run 1					
Date Log Started	20-May-2015					
Time Log Started	19:56:35					
Date Log Finished	21-May-2015					
Time Log Finished	00:54:11					
Top Log Interval (ft)	2500.00					
Bottom Log Interval (ft)	8799.00					
Total Depth (ft)	8940.00					
Max Hole Deviation (deg)	0.00					
Azimuth of Max Deviation (deg)	0.00					
Bit Size (in)	8.750					
Logging Unit Number	3022					
Logging Unit Location	Ft. Morgan, CO					
Recorded By	Aleksei Bekhterev/Modh					

Borehole Fluids						
Parameter(unit)	Run 1					
Fluid Type	Water					
Fluid Name	3% KCl					
Max Recorded Temperatures (degF)	226					
Salinity (ppm)	0					
Density (lbm/gal)	9.1					
Date Logger on Bottom	20-May-2015					
Time Logger on Bottom	21:10:00					
Total Solid (%)						
High Gravity Solids (%)						

Run 1: Toolstring	Run 1: Remarks	
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Equip name	Length		MP name	Offset	
LEH-QT	58.5				Toolstring ran as per tool sketch
LEH-QT					This is first run in hole
					Main and repeat passes are correlated to down log
AH-63	55.58				RST ran in Sigma mode
AH-79	55.26				Matrix: Sandstone, 2.68 g/cc
PSTP-A:3869	54.43		GR	50.72	Repeat pass is done from 5000' to 4000' as per client request
PSC-A			PSTC	50.43	Repeat pass is done with no pressure
PSTC-A:3747			PSTC To ol String Bottom	0.00	Main Pass is done under 2500 psi
PBMS-A:3869			Temperature	47.64	Float Collar tagged at 8799 ft
Sapphire 10 kPSI			Sapphire Pressure	47.53	Log stopped at 2500 ft as per client request
			CCL	46.92	Crew: Tim Ludgate, Troy Ocanas
			PBMS	46.17	Thank you for choosing Schlumberger Wireline!
RST-C:282	46.17				
RSCH-A					
RSC-E:279					
RSS-A:21075					
MNTR-F:109					
RSXH-A					
RSX-E:282					
			RSC-E	39.81	
			Far	37.05	
			Near	36.55	



Depth Summary

	Run 1		
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Depth Measuring Device

Type	IDW-JA		
Serial Number	7234		
Calibration Date	13-Feb-2015		
Calibrator Serial Number			
Calibration Cable Type	7-39P-LXS		
Wheel Correction 1	-4		
Wheel Correction 2	-2		

Tension Device

Type	CMTD-B/A		
Serial Number			

Calibration Date

Calibrator Serial Number

Number of Calibration Points

0

Logging Cable

Type

Serial Number

Length

Conveyance Type

Rig Type

7-39P-LXS

17000.00 ft

Wireline

Crane

Run 1:Depth Control Parameters

Depth Control Remarks

Log Sequence

First Log In the Well

All Schlumberger depth policies followed

Rig Up Length At Surface

IDW used as primary depth device

Rig Up Length At Bottom

Z-chart used as secondary depth reference

Rig Up Length Correction

Stretch Correction

Tool Zero Check At Surface

Run 1

Amplitude-Image

Software Version

Acquisition System

Version

Maxwell 2016

6.0.47569.3100

Pass Summary

Run Name

Pass Objective

Direction

Top

Bottom

Start

Stop

DSC Mode

Depth Shift

Include Parallel Data

Run 1

Main[4]:Up

Up

2408.03 ft

8821.13 ft

20-May-2015 9:14:47 PM

21-May-2015 12:51:44 AM

ON

0.00 ft

Yes

All depths are referenced to toolstring zero

Log

Company:Caerus Piceance LLC Well:Puckett 43A-2

Run 1: Main[4]:Up:S008

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: 03-Aug-2015 19:33:58

TIME_1900 - Time Marked every 60.00 (s)

CCL Discriminated Amplitude (CCLD) PSTP-A

3 V -1

Gamma Ray (GR) PSTP-A

0 gAPI 150

Relative Bearing (RB_SCMT) SCMT-BB

0 deg 360

Transit Time for CBL (TT) SCMT-BB

200 us 400

Well Temperature (WTEP) PSTP-A

0 degF 300

Stuck Tool Indicator, Total (STIT)

0 ft 50

Cable Drag

2420

Tool_Tot. Drag

CBL Amplitude (CBL) SCMT-BB

0 mV 10

CBL Amplitude (CBL) SCMT-BB

0 mV 100

Good Bond (GOBO)

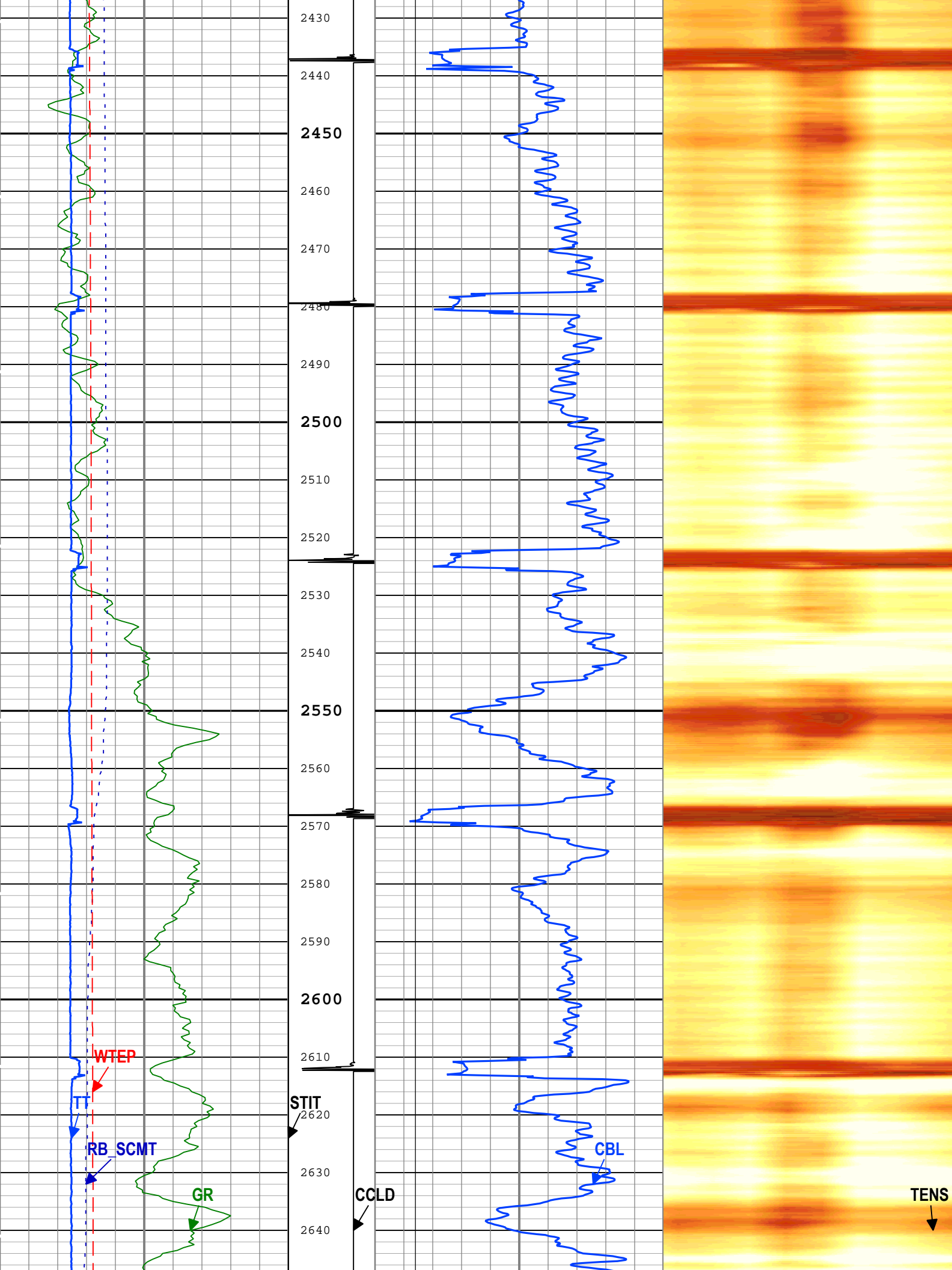
0 mV 10

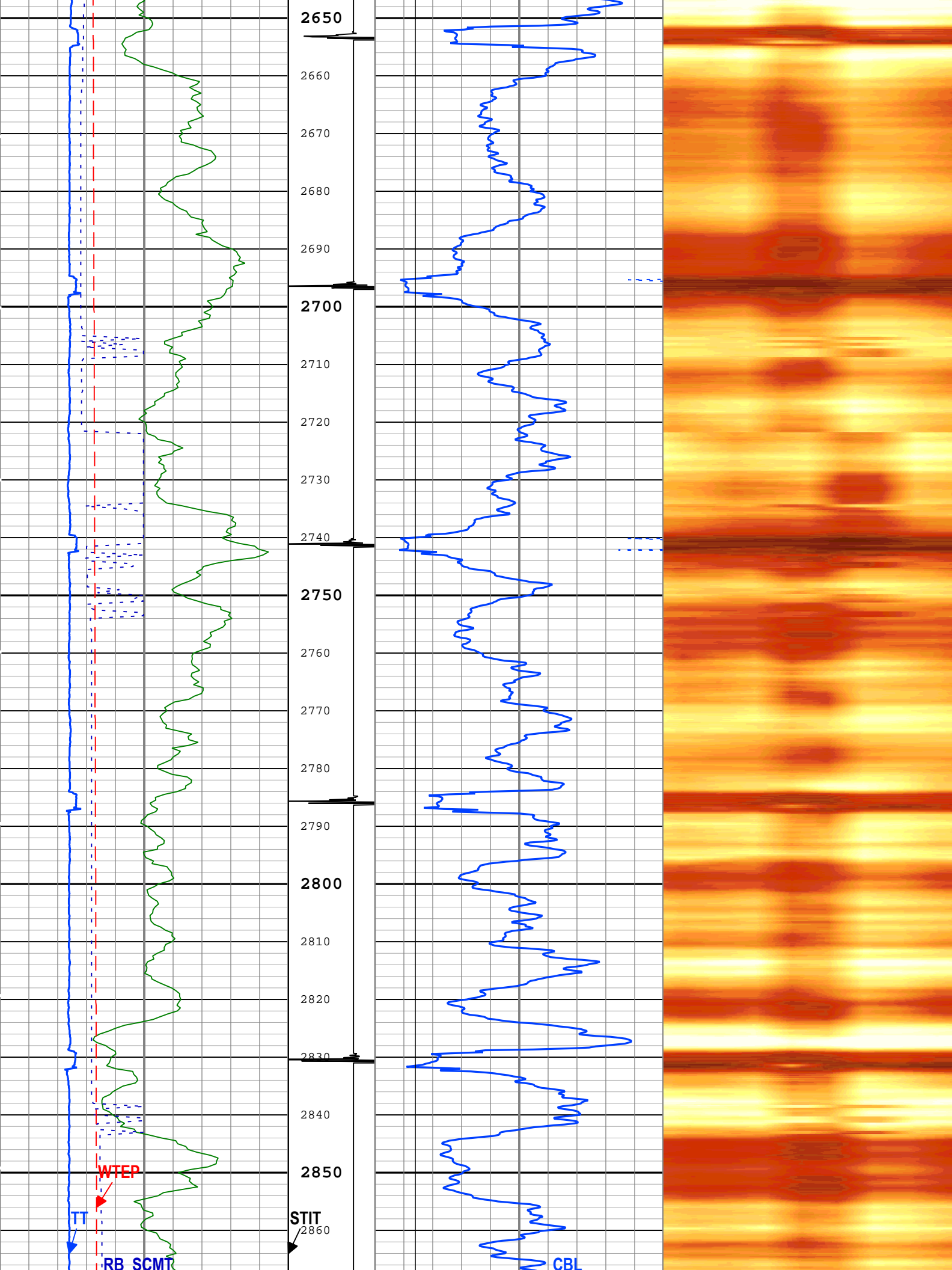
GoodBond From CBL to GOBO

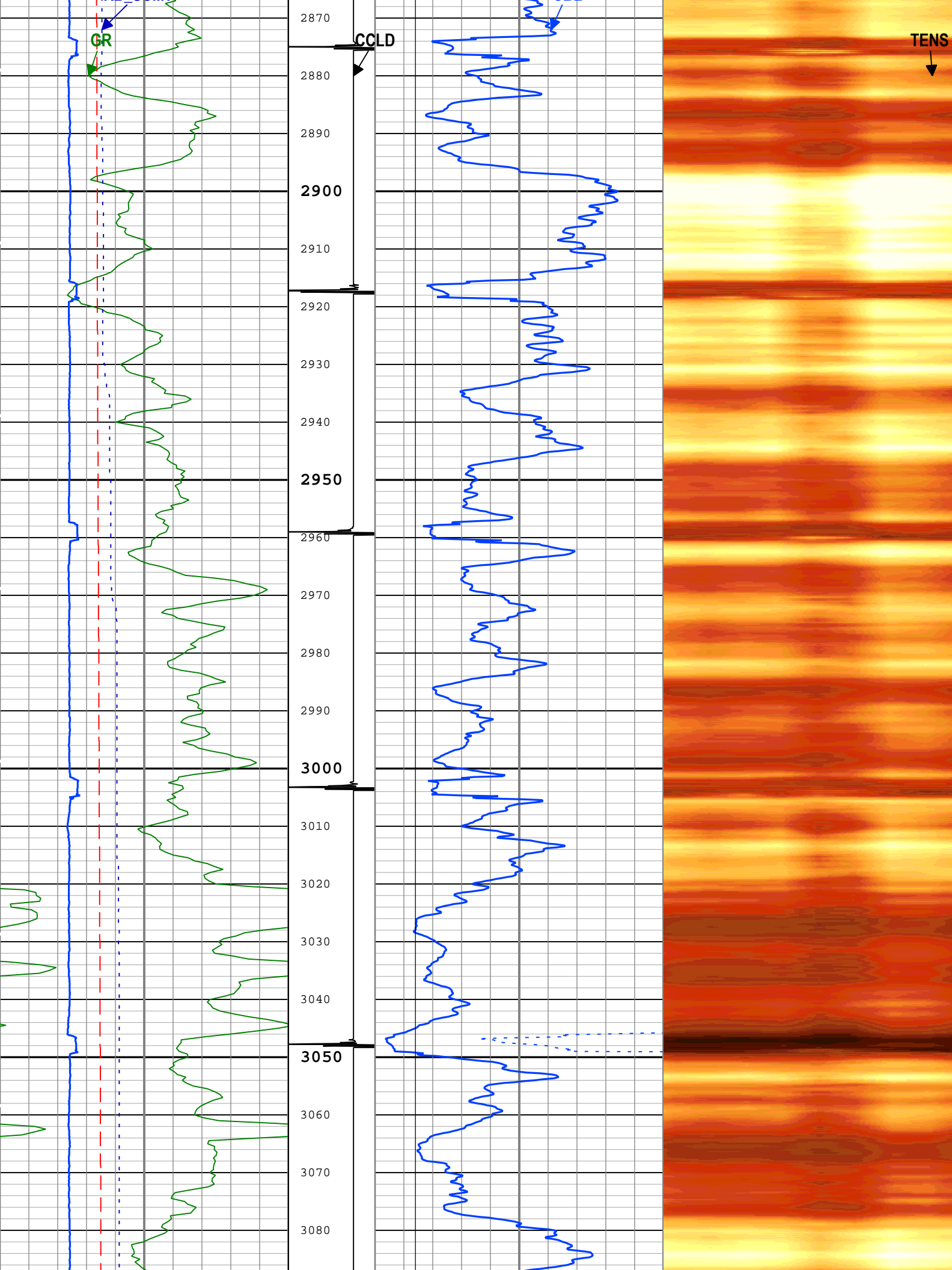
Cable Tension (TENS)

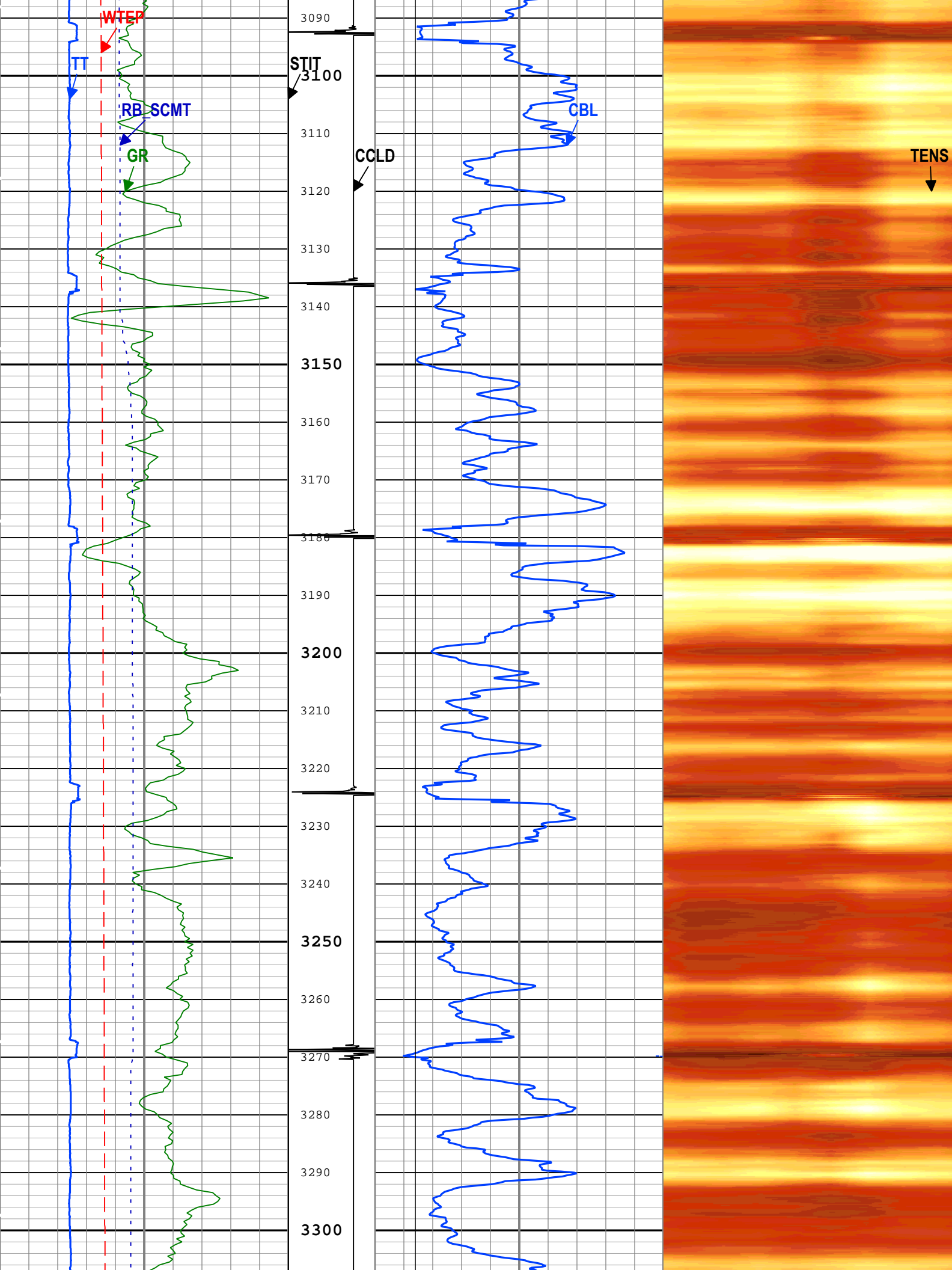
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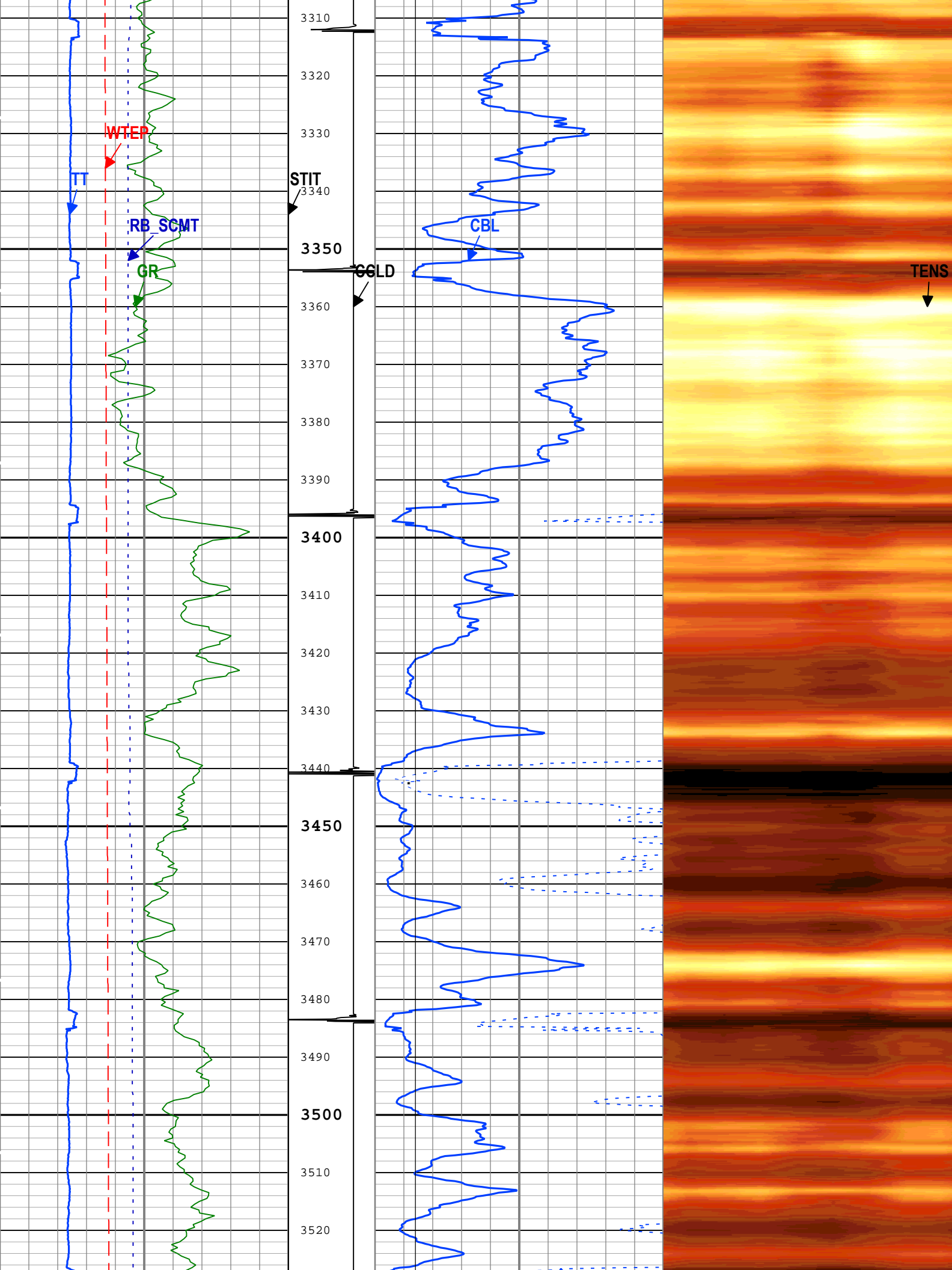
CBL Amplitude Mapping Image (0 - 100) SCMT-BB

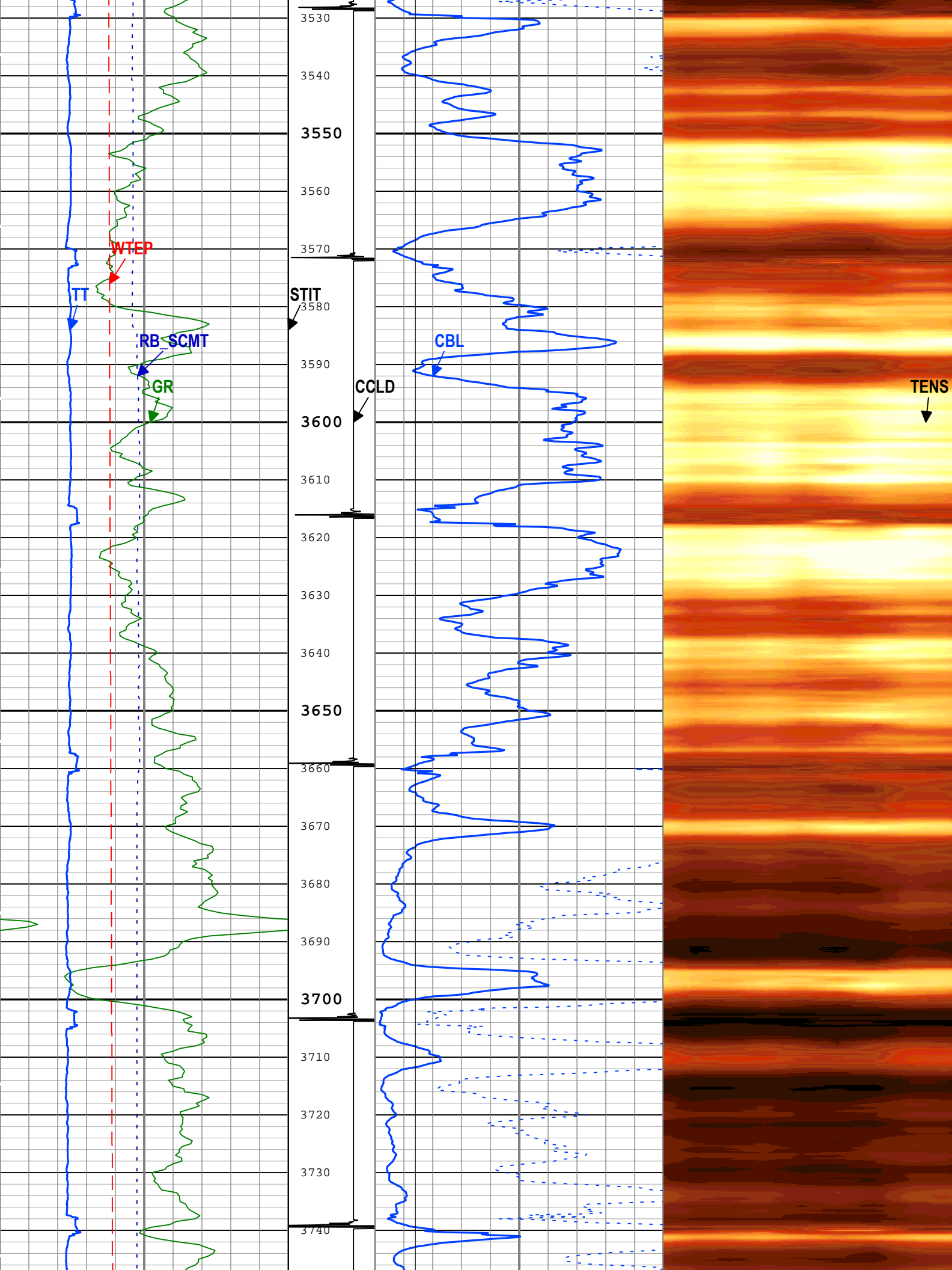


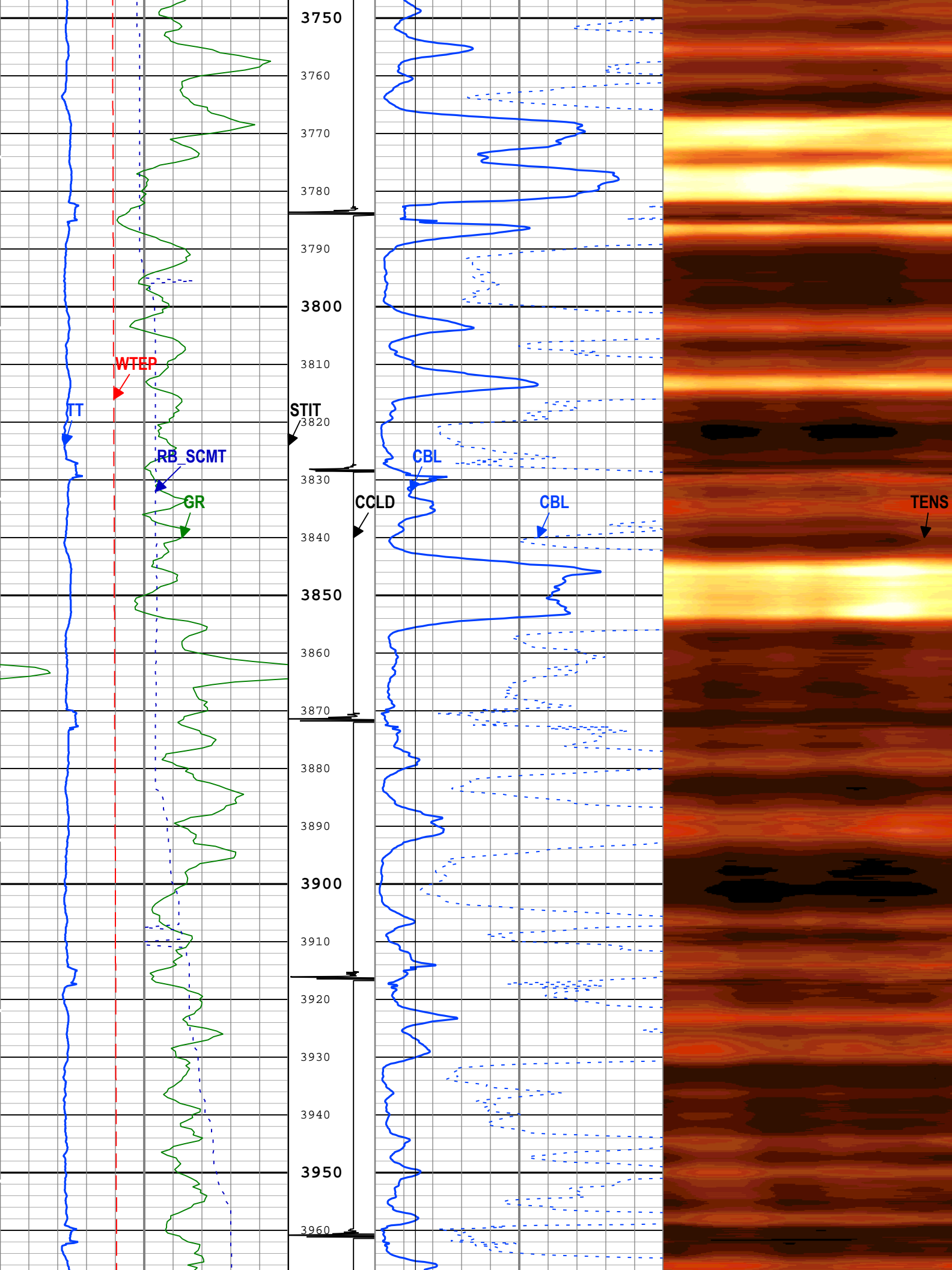


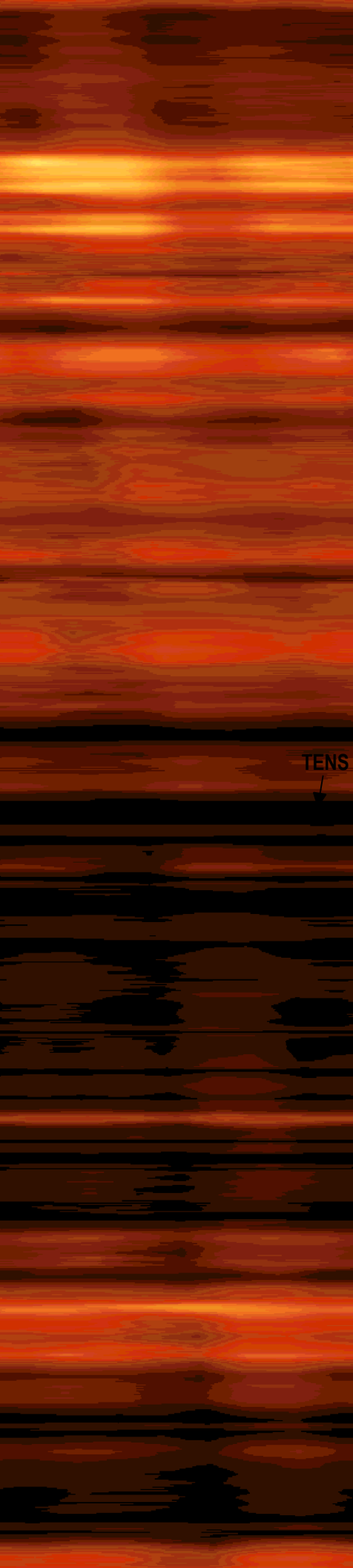
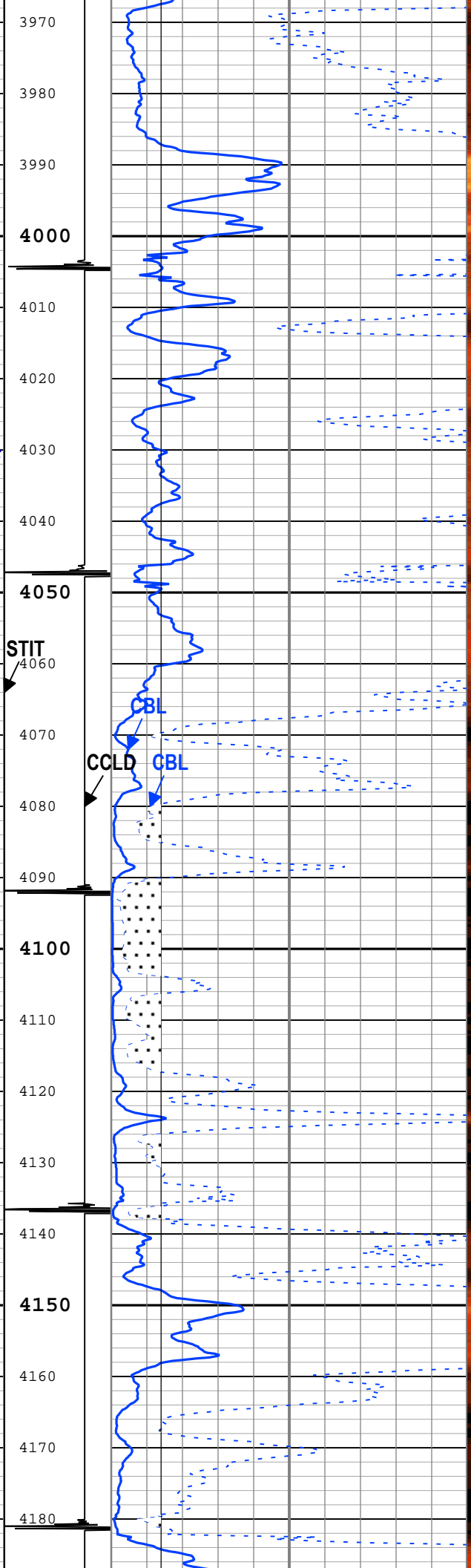
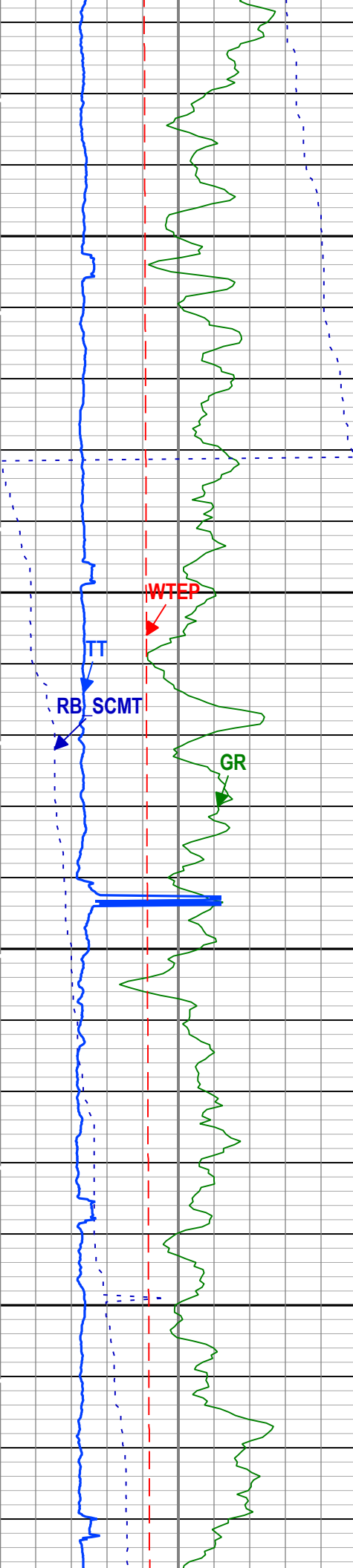


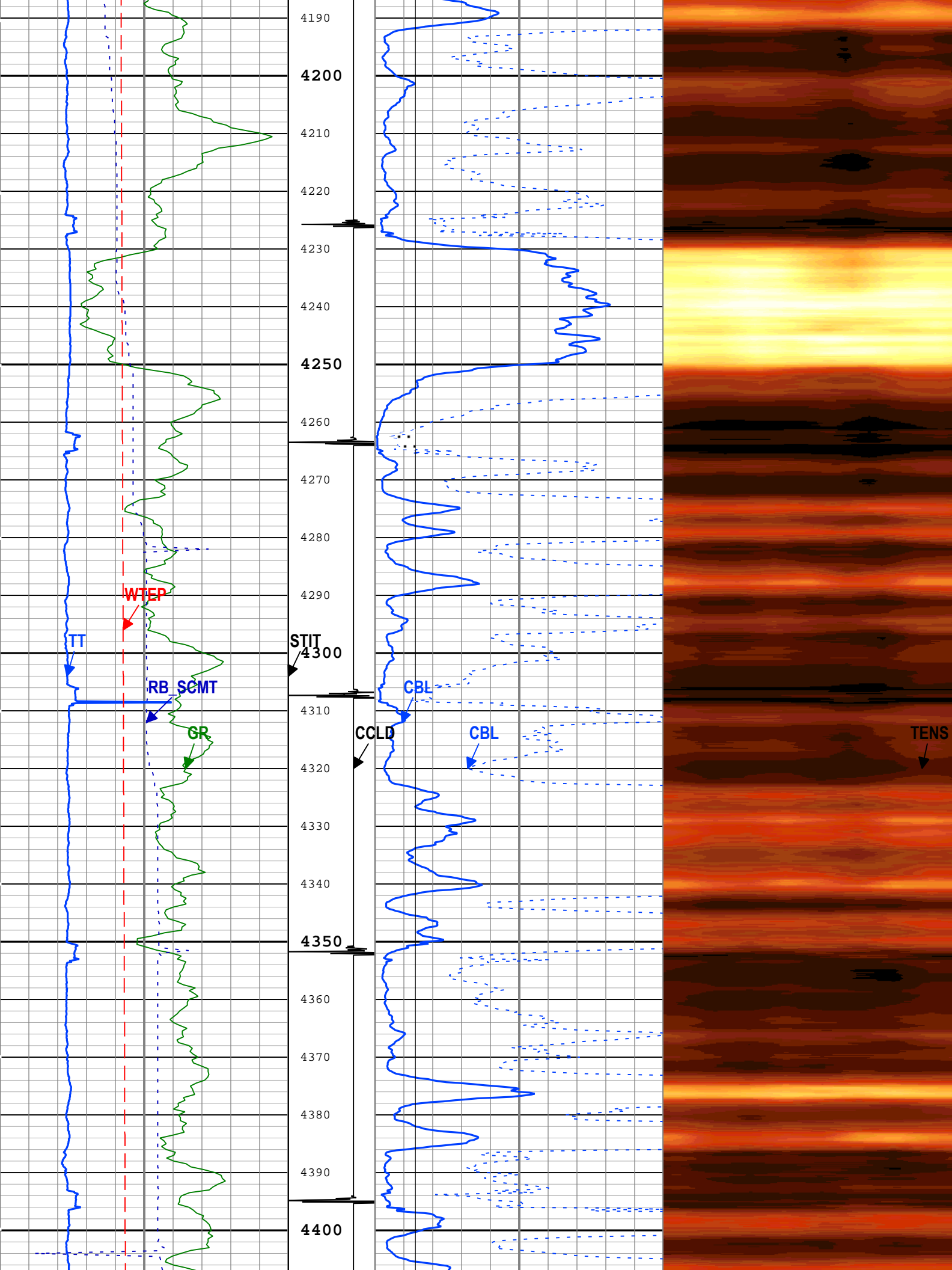


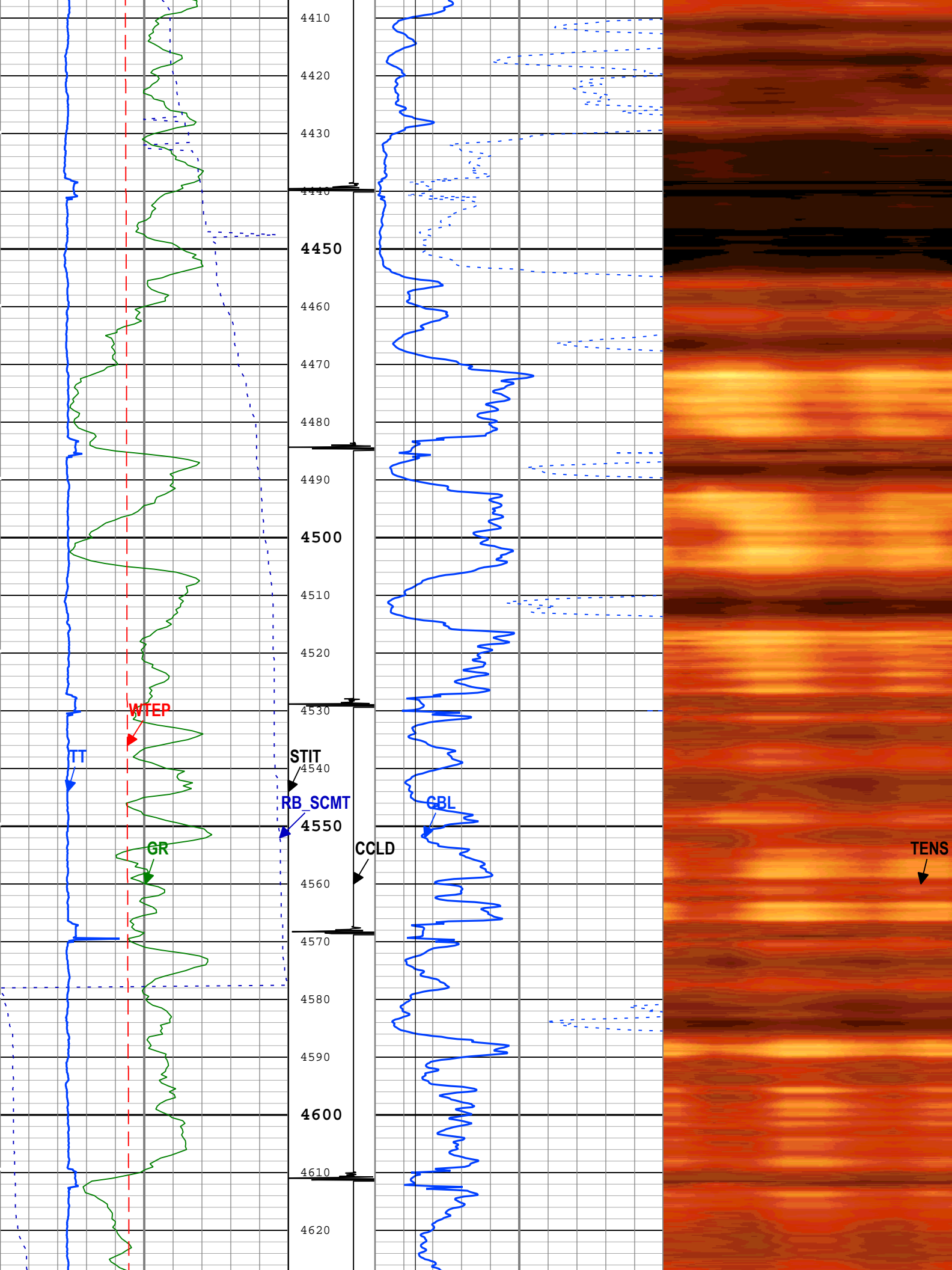


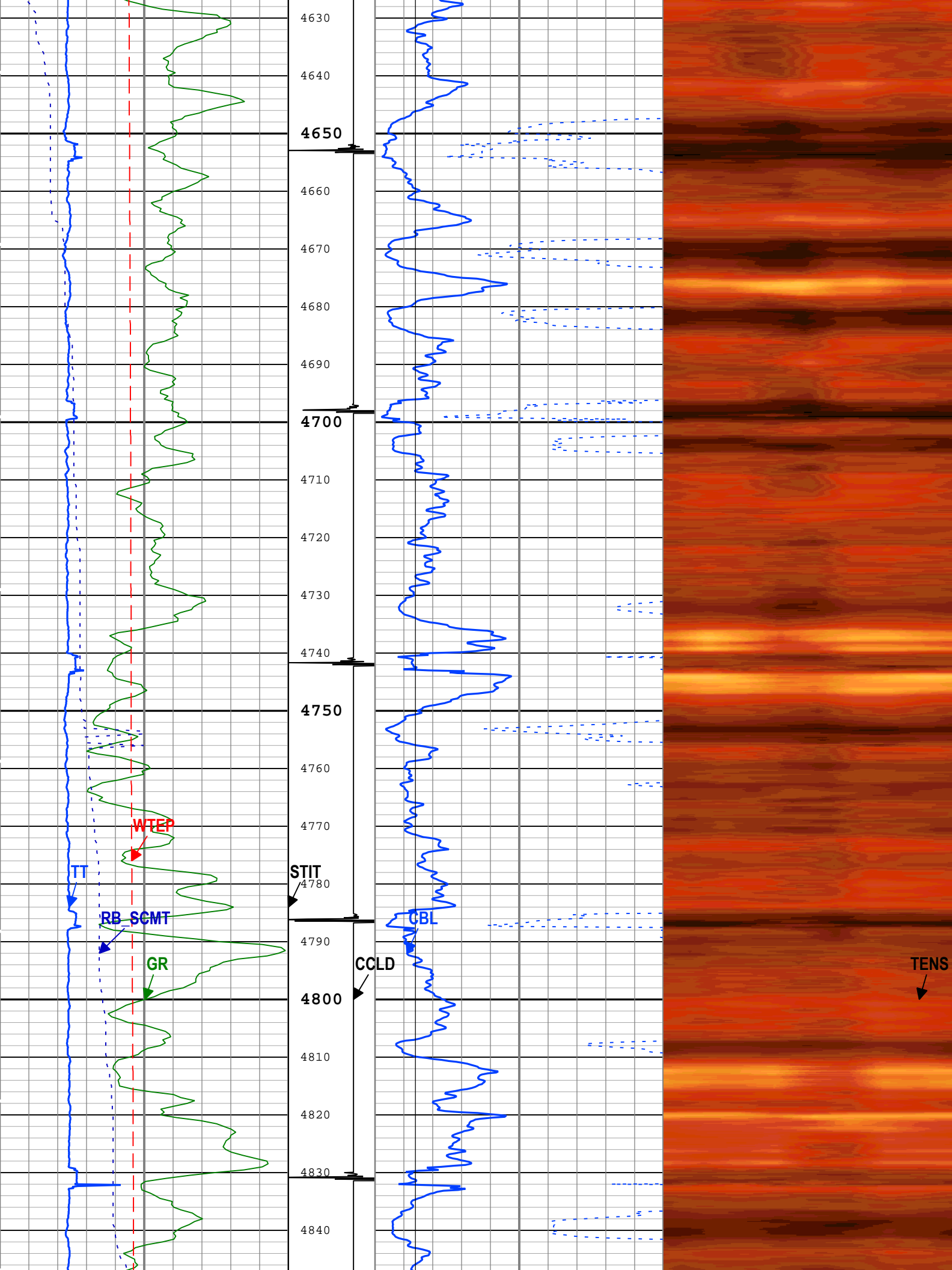


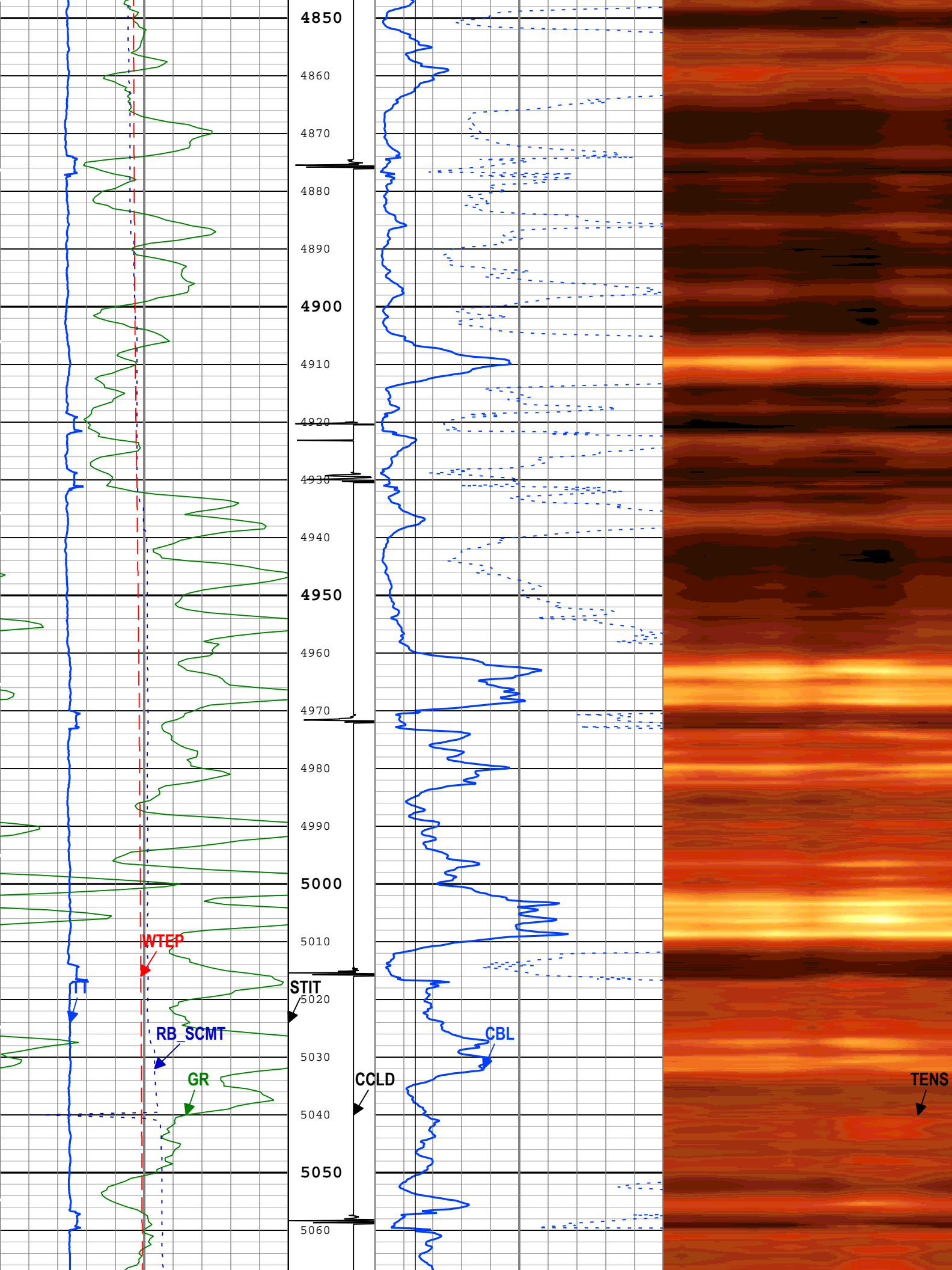


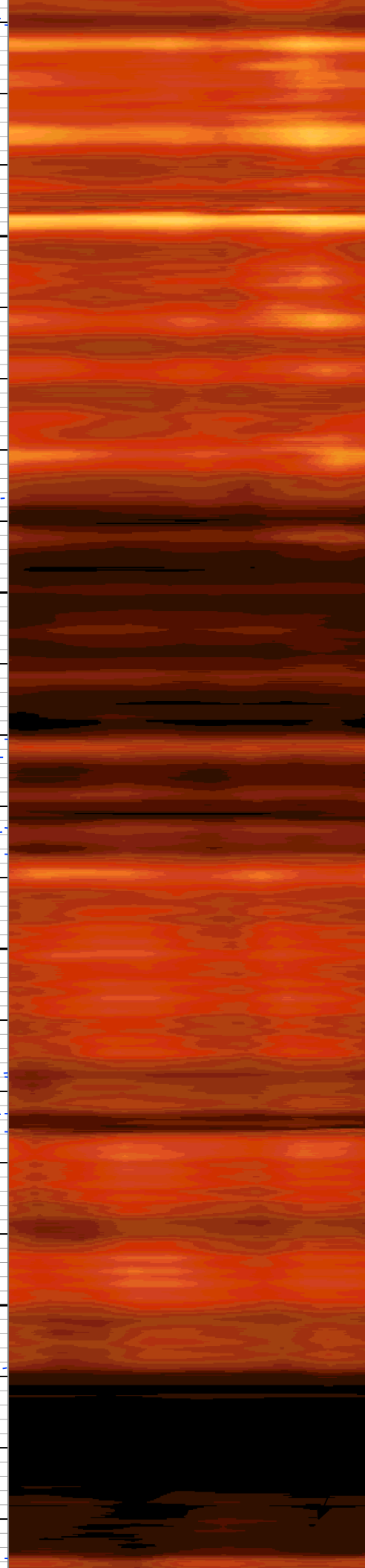
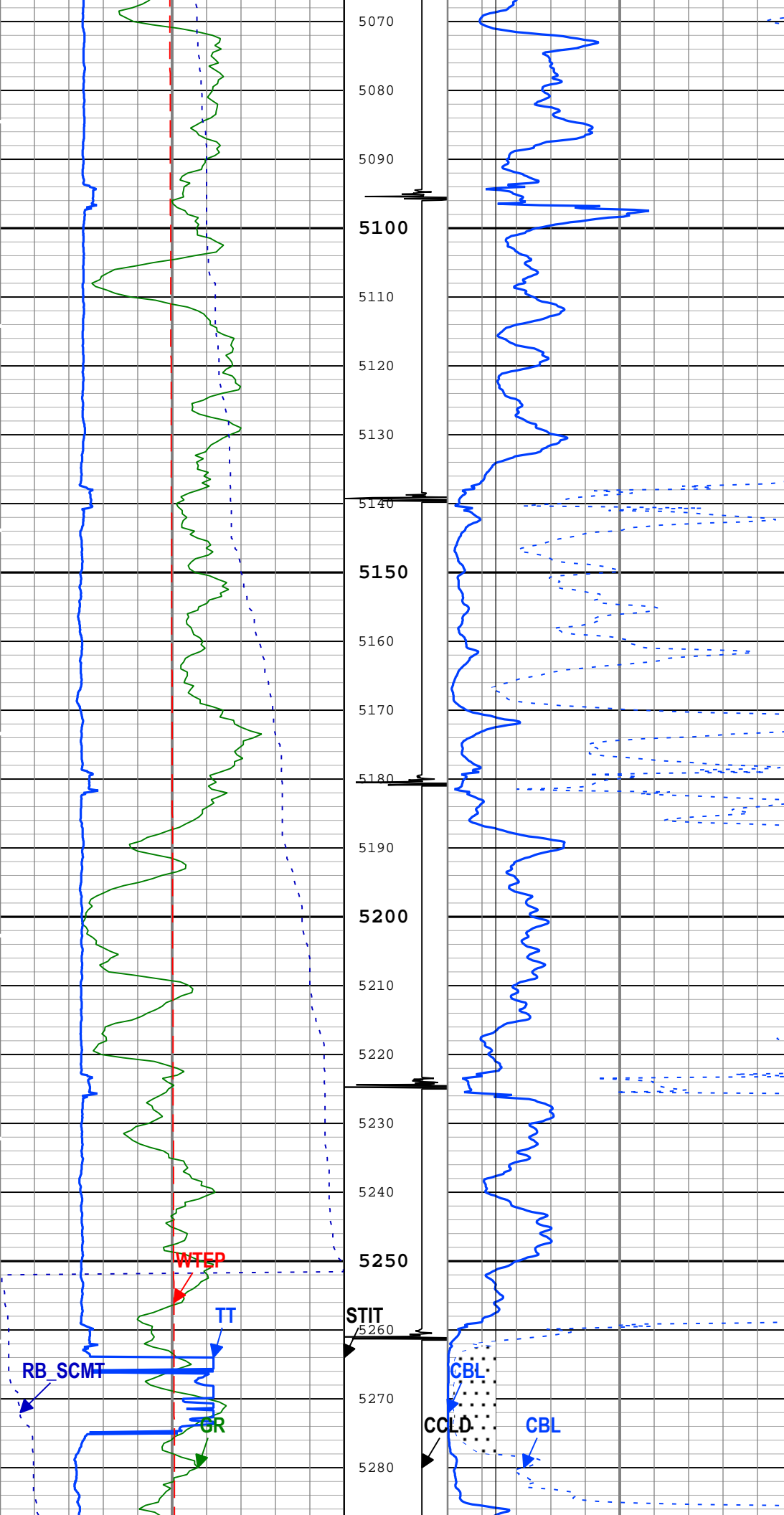


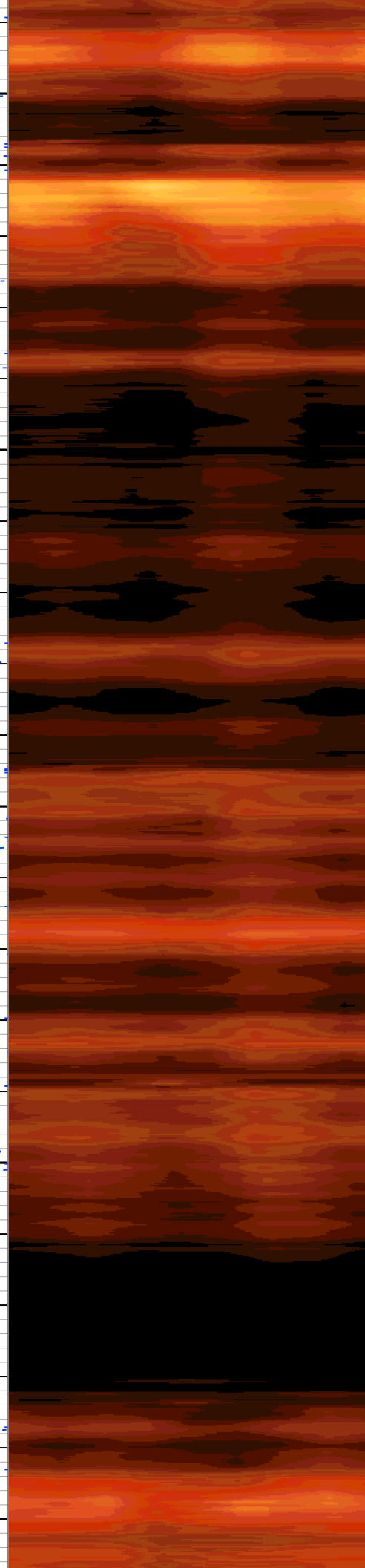
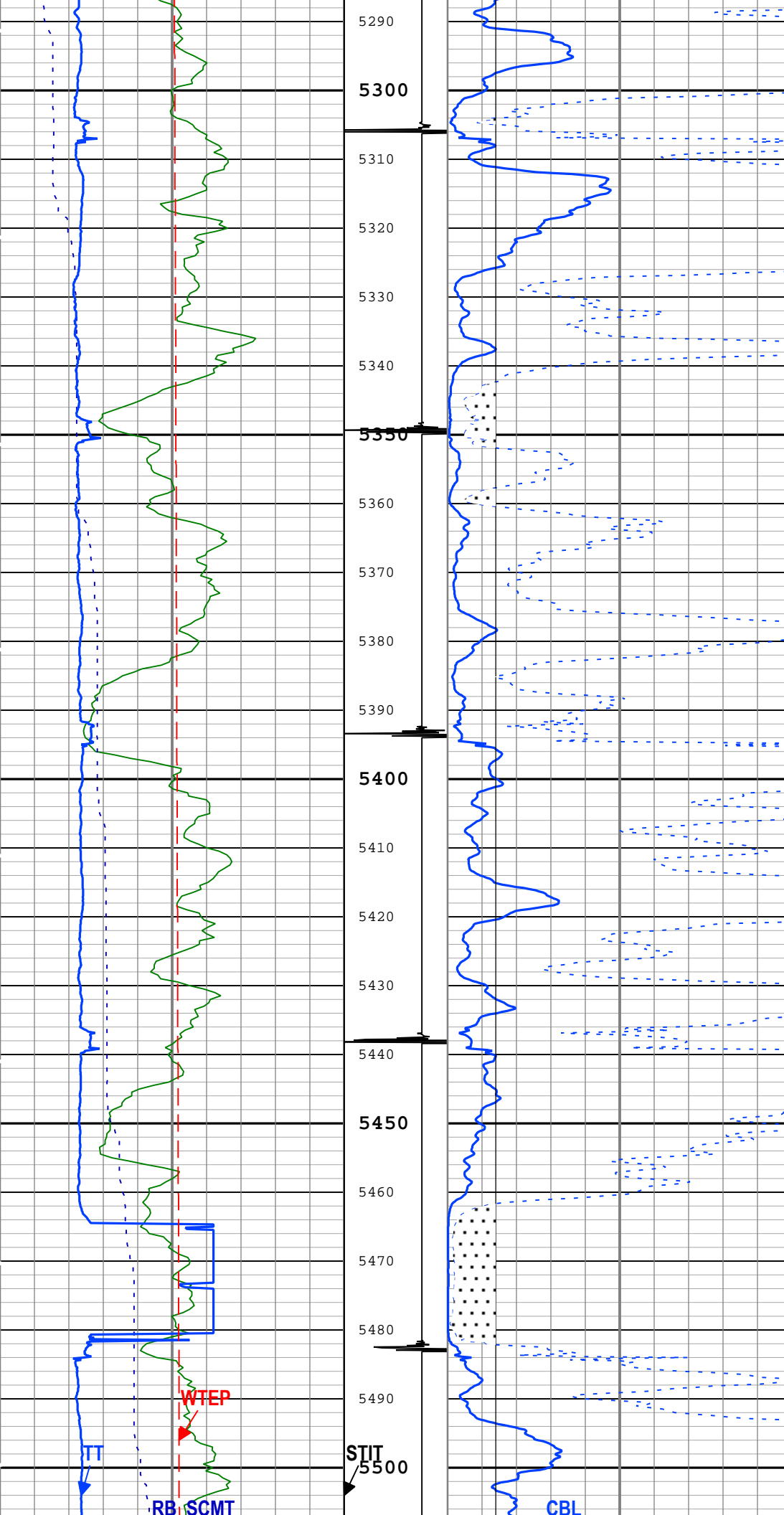


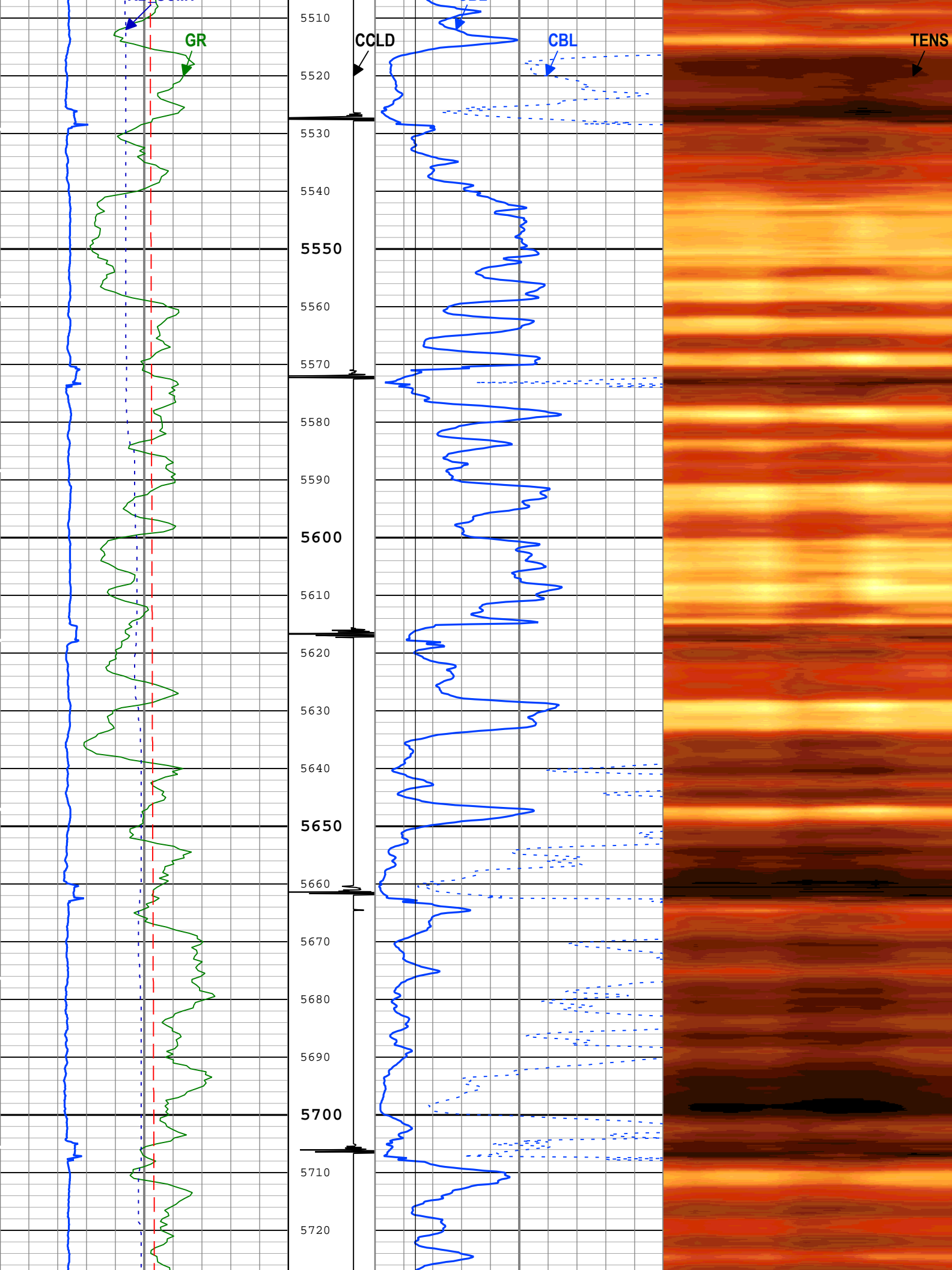


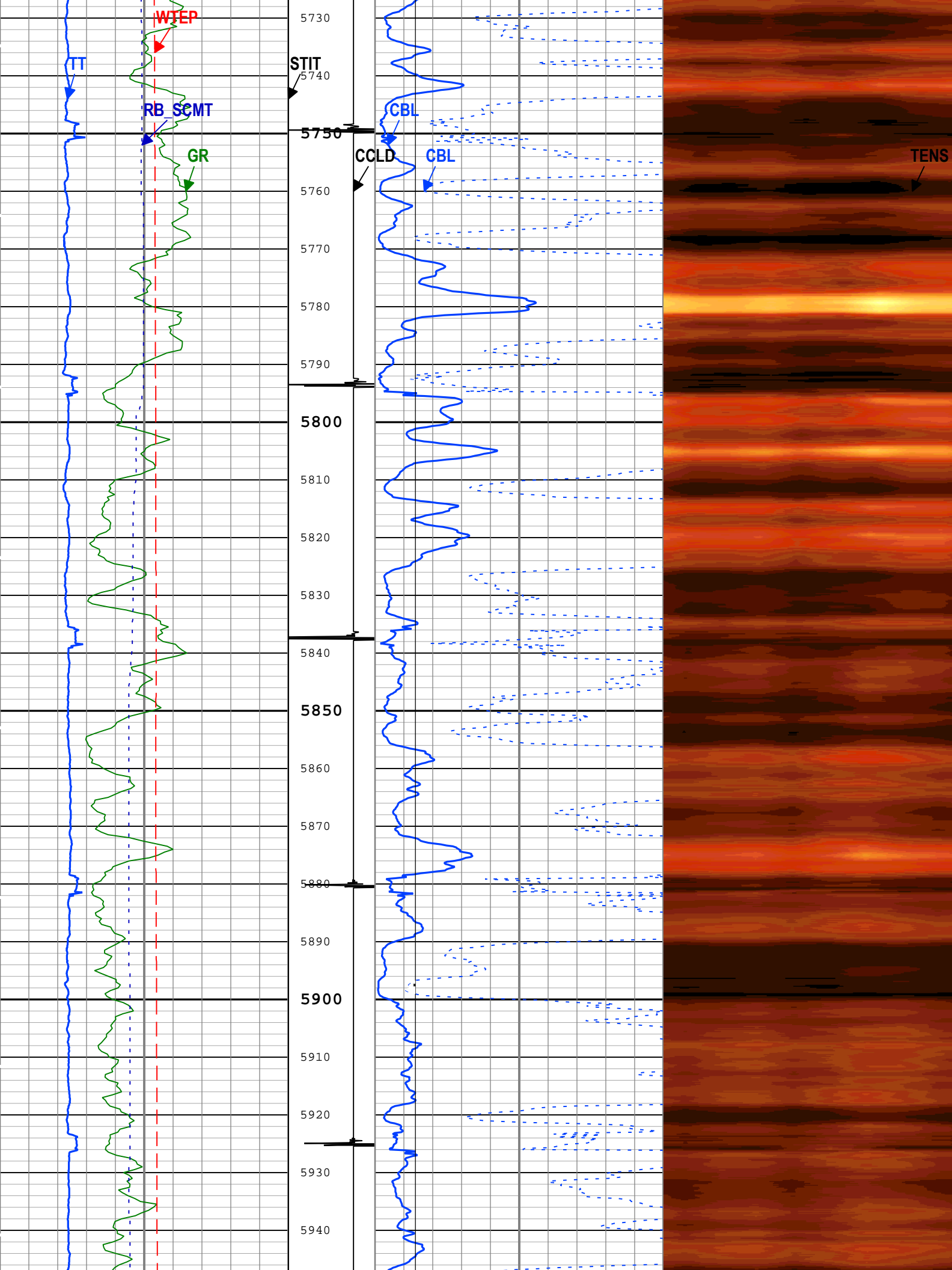


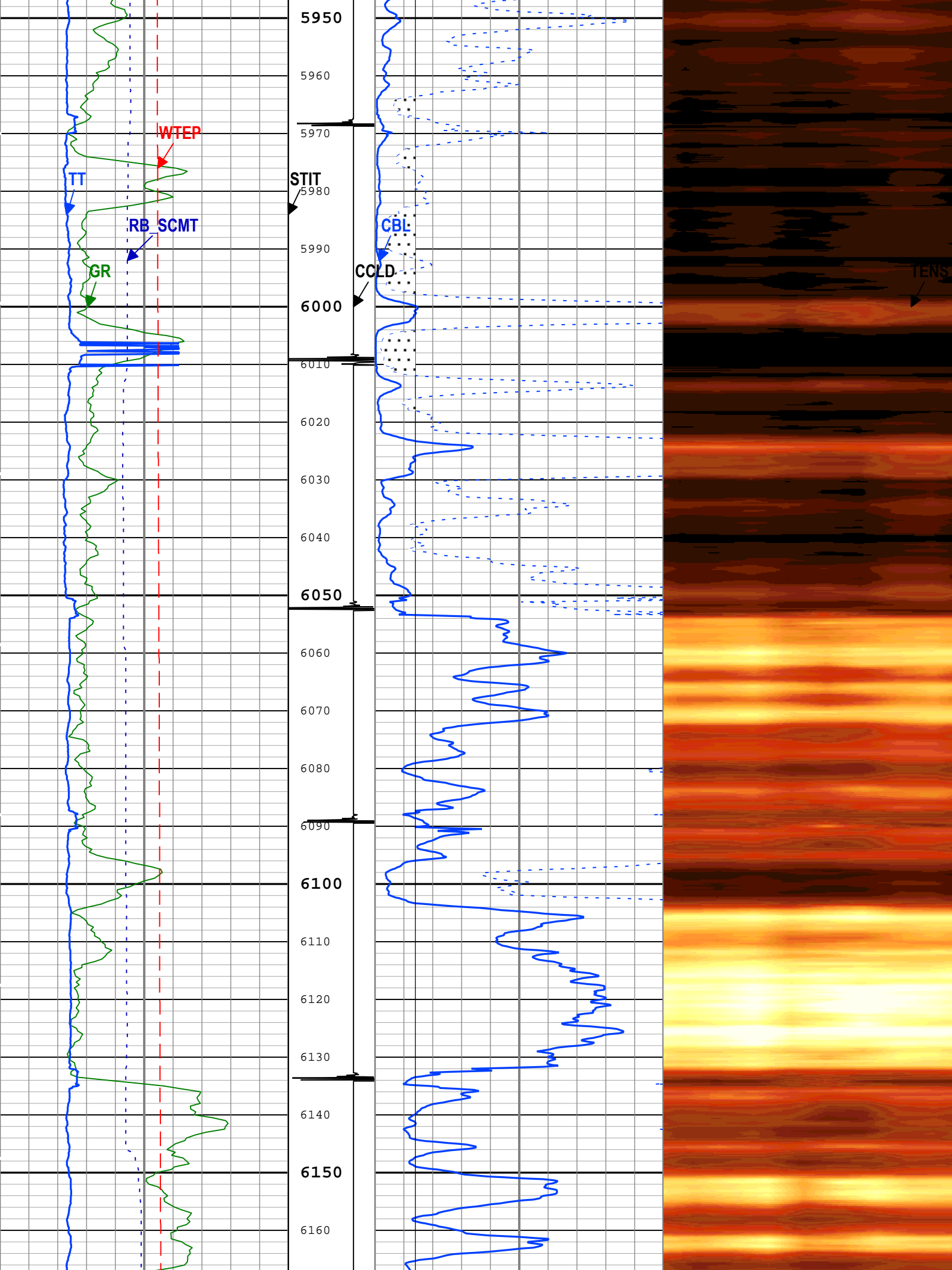


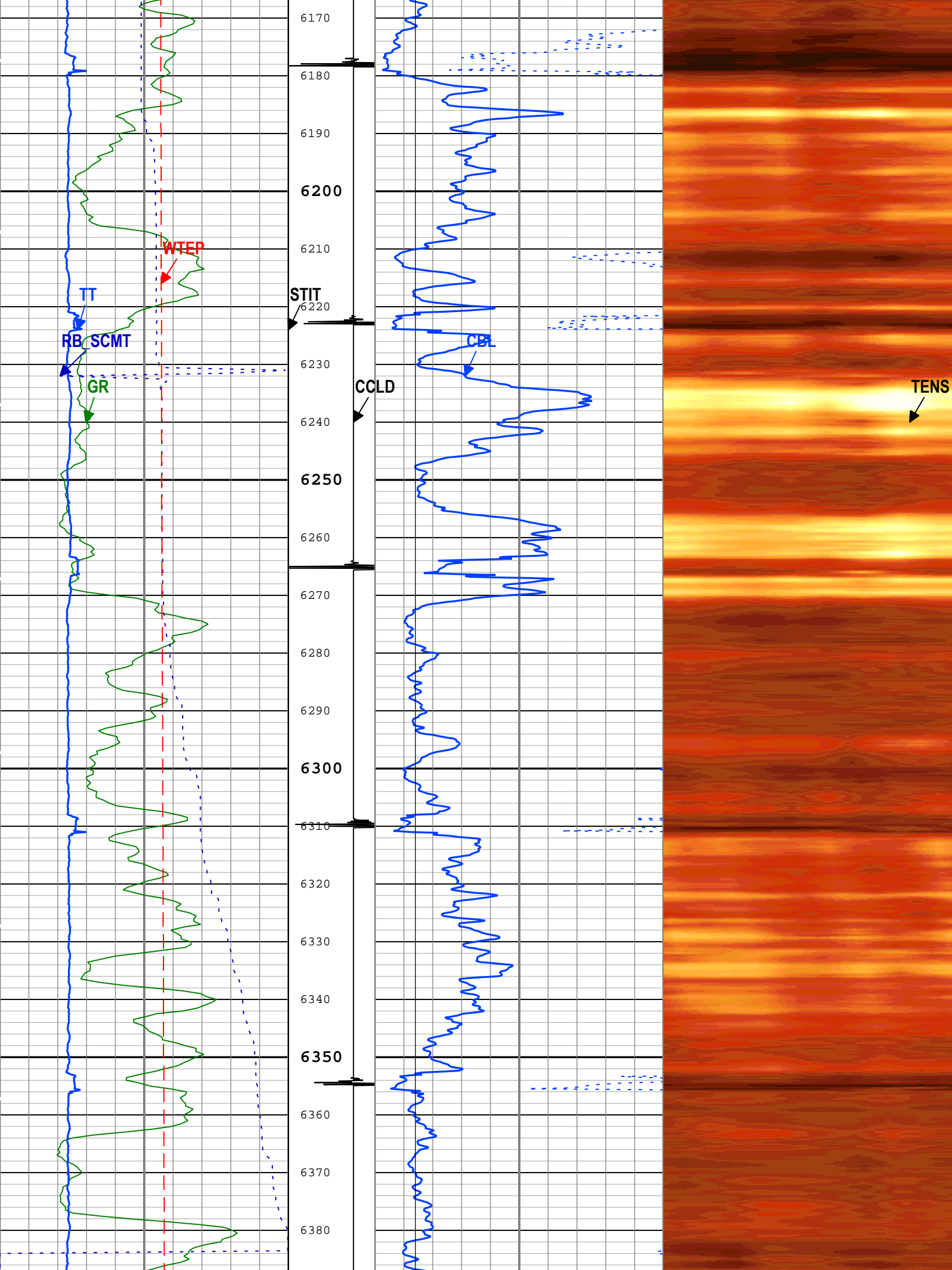


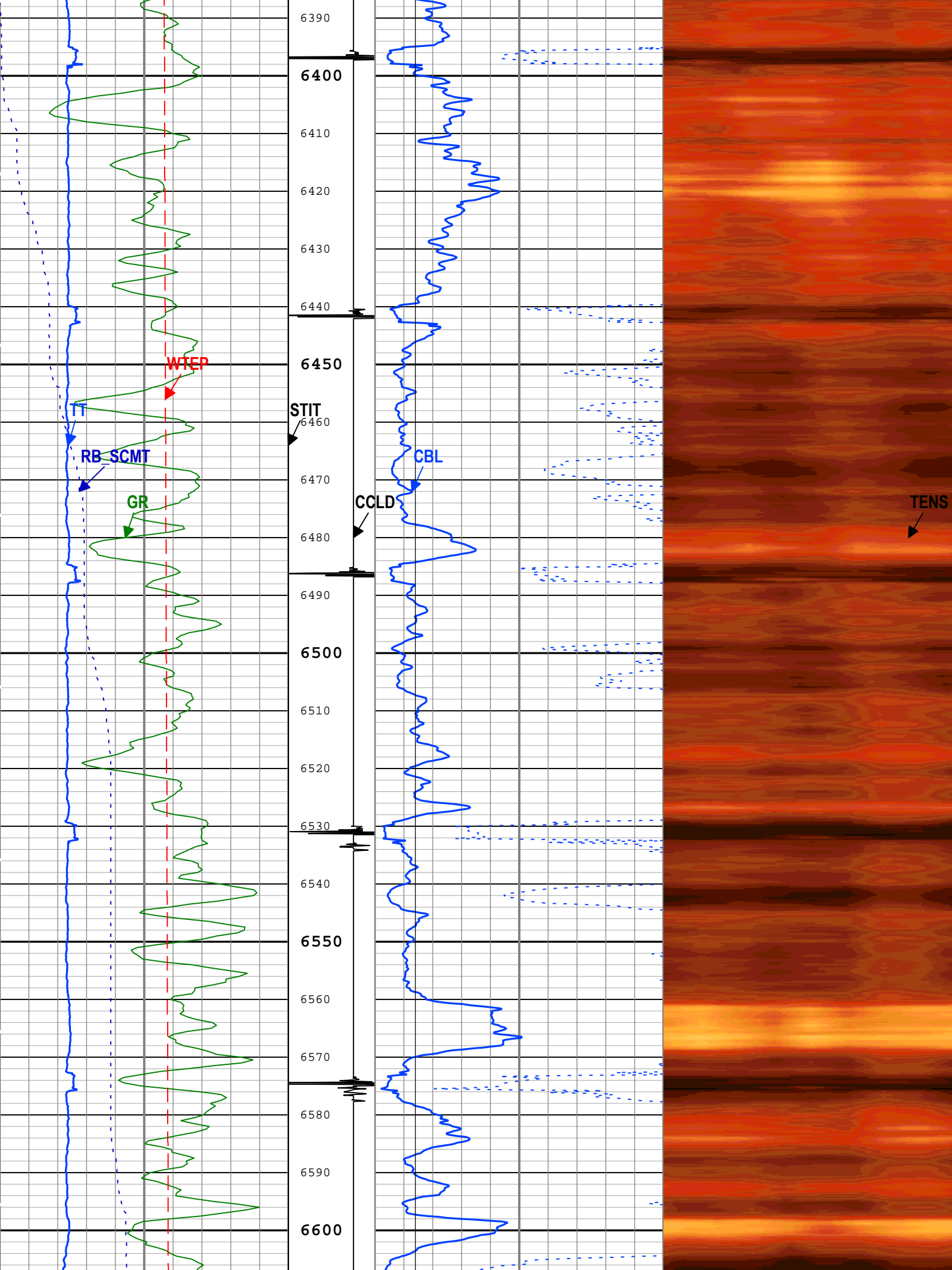


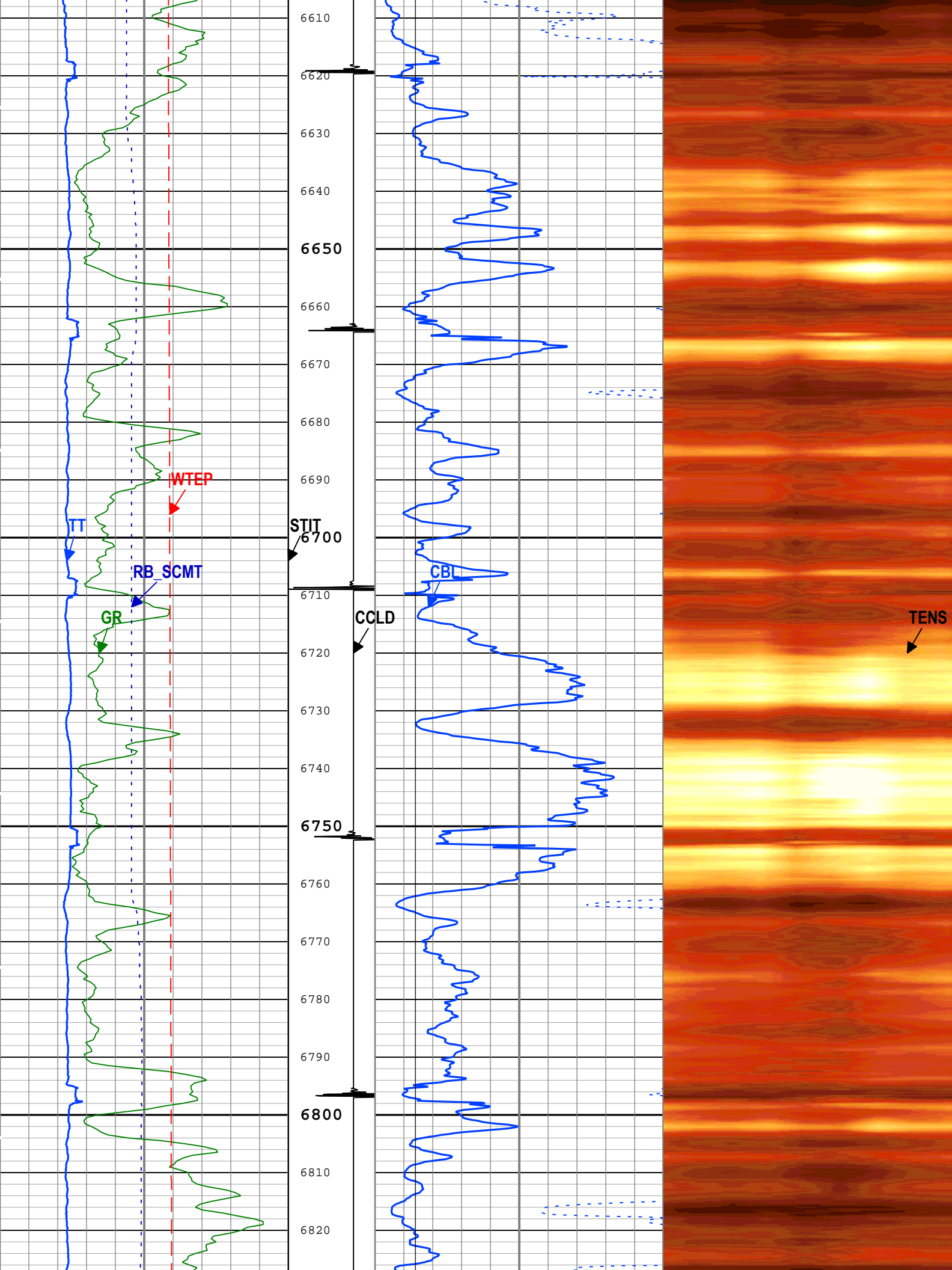


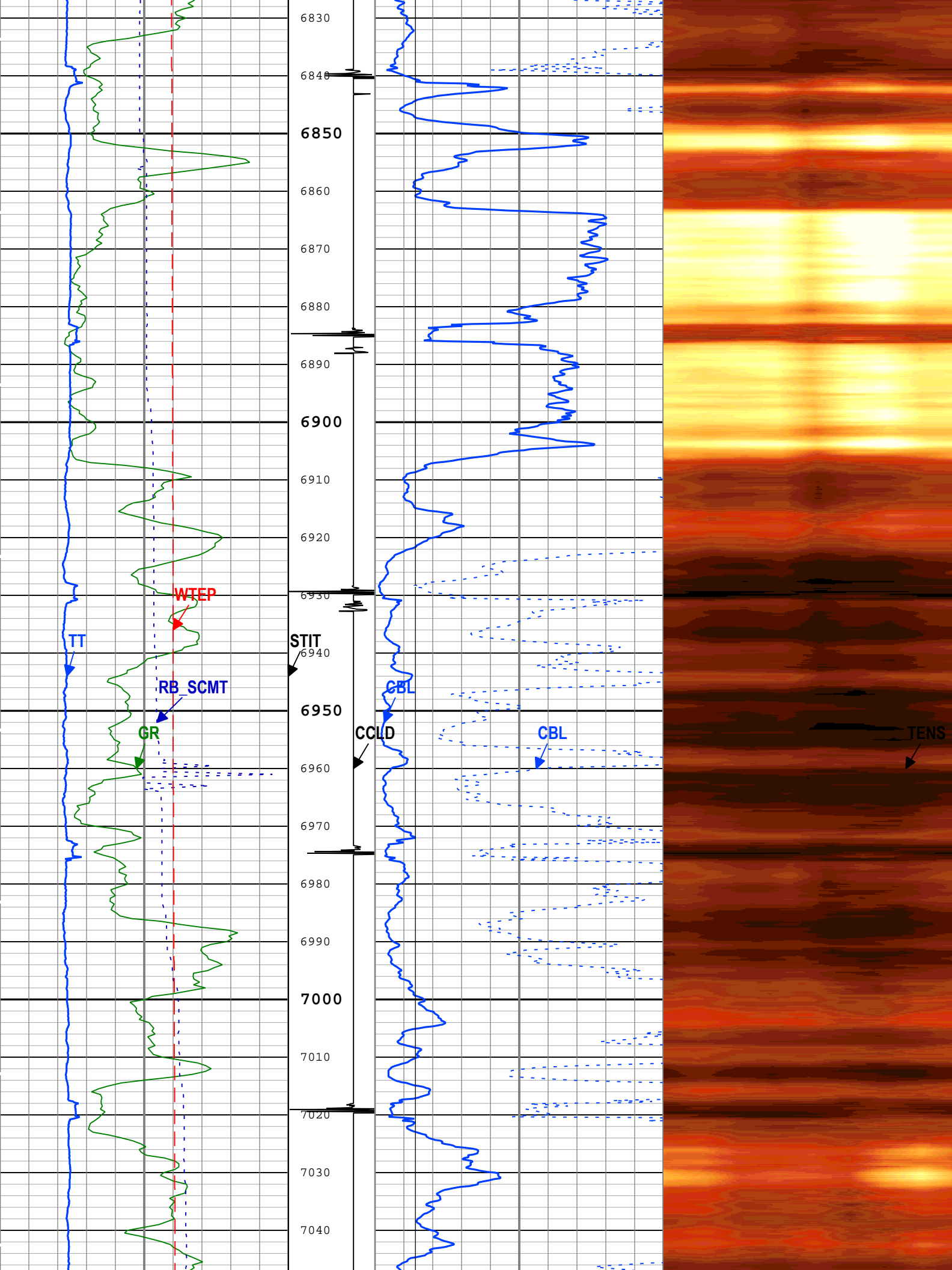


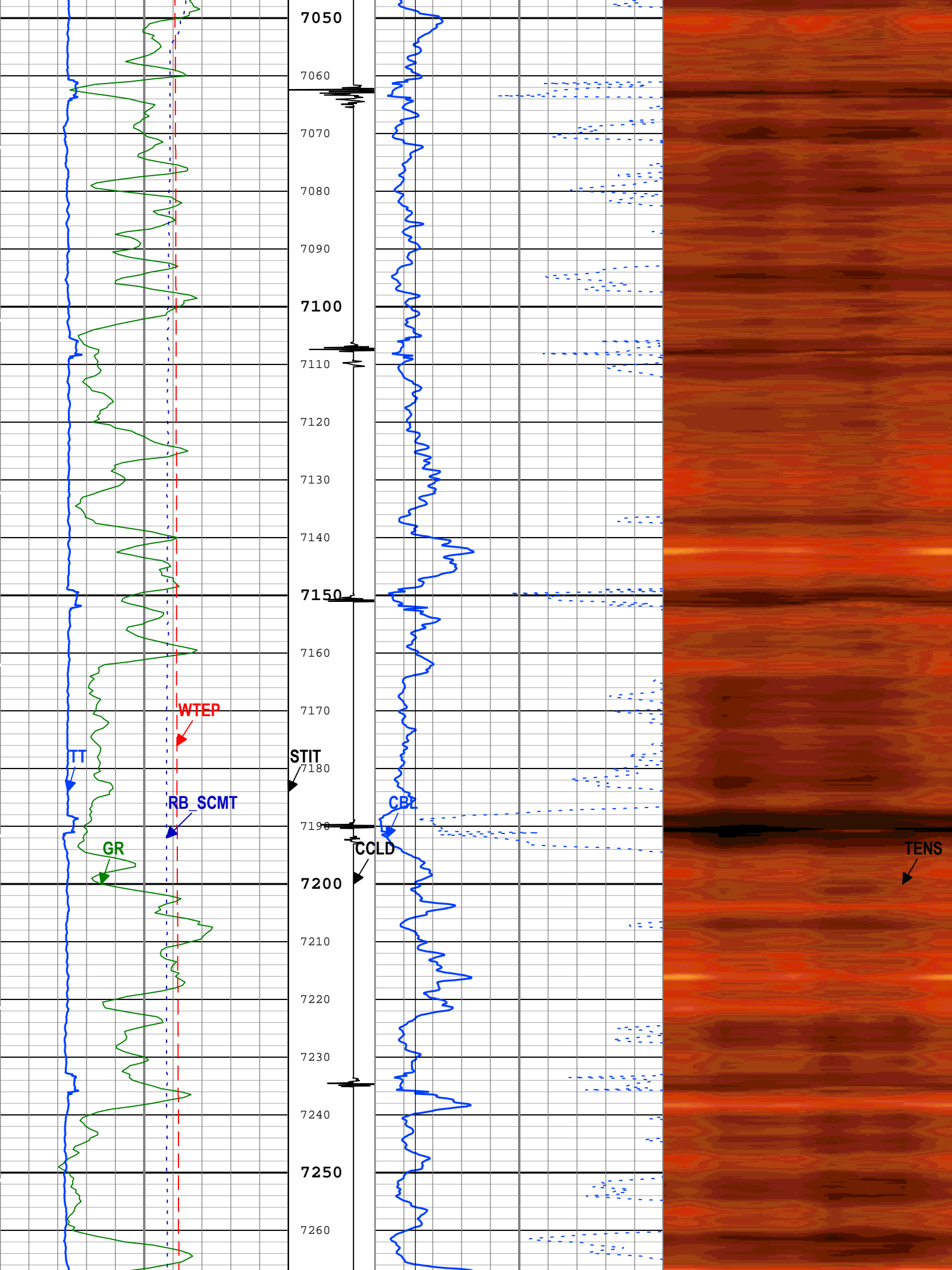


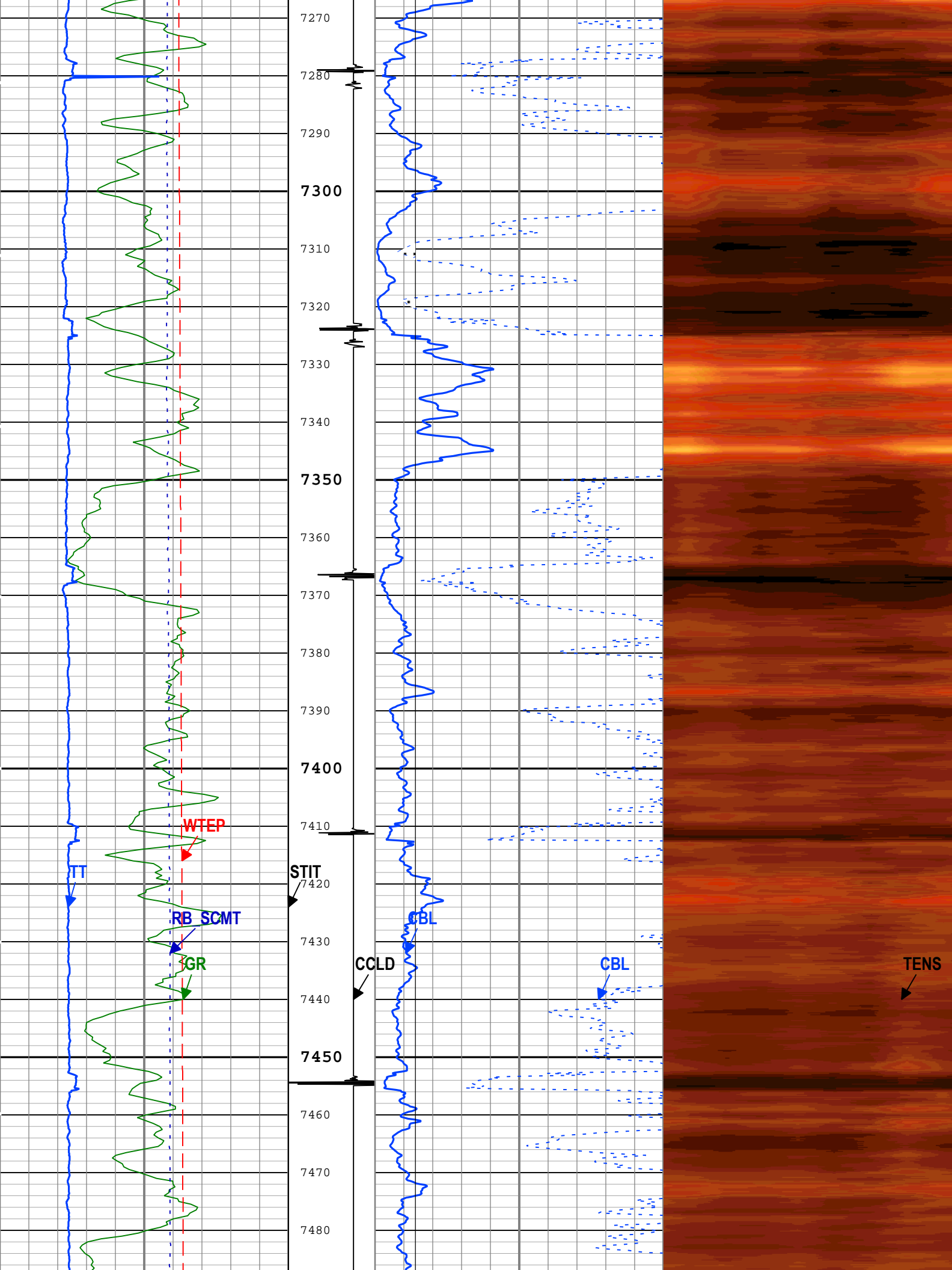


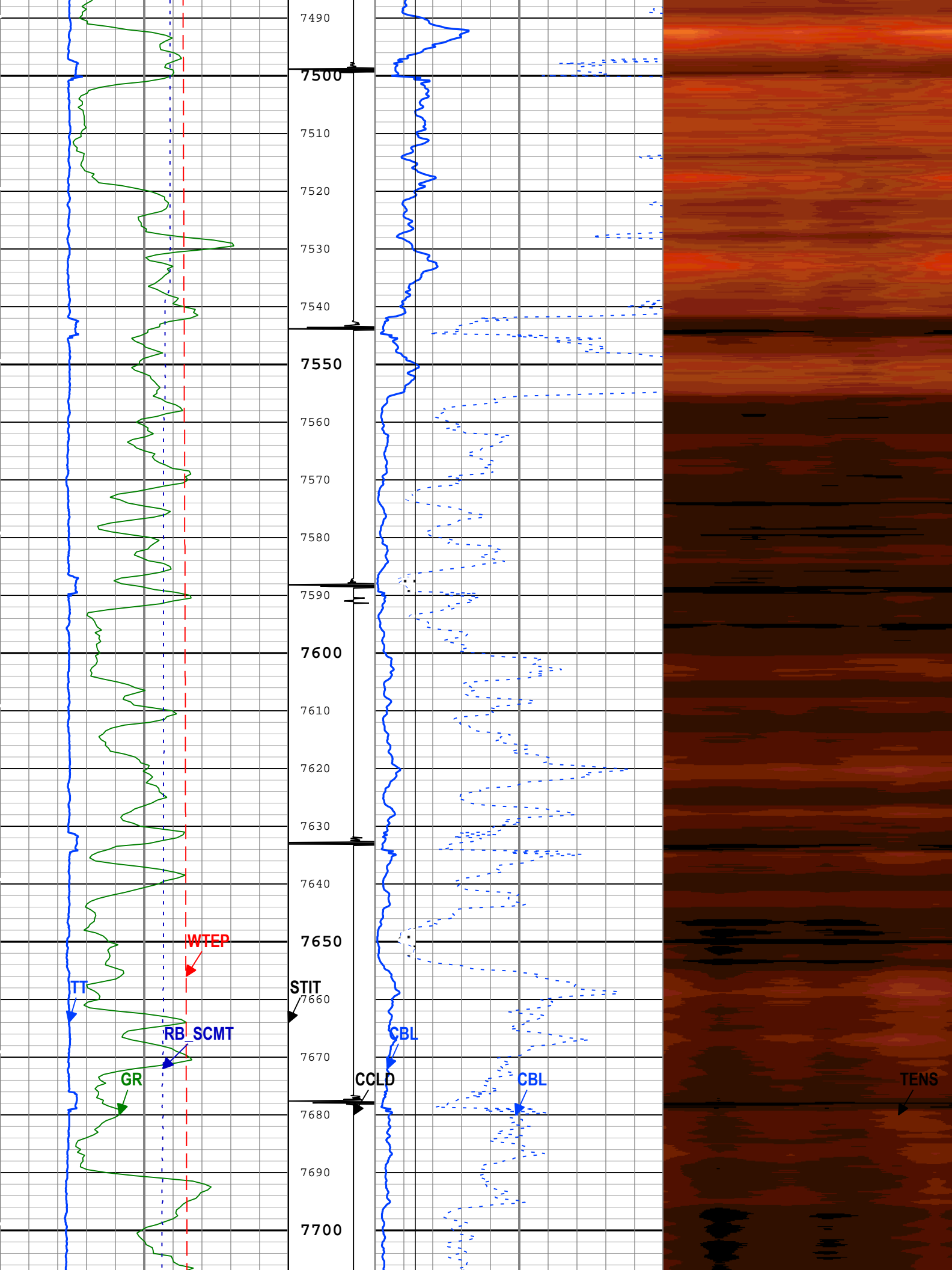


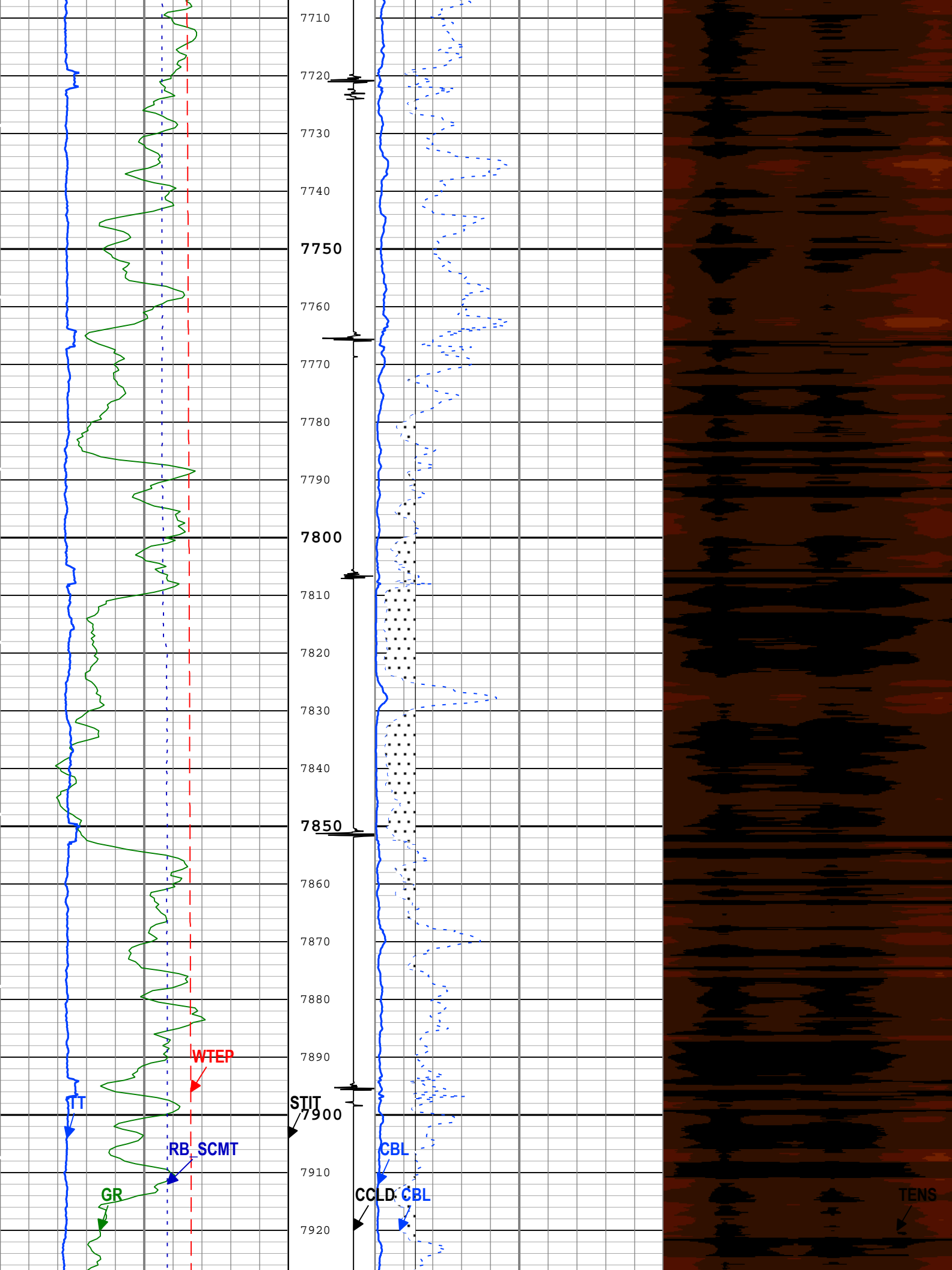


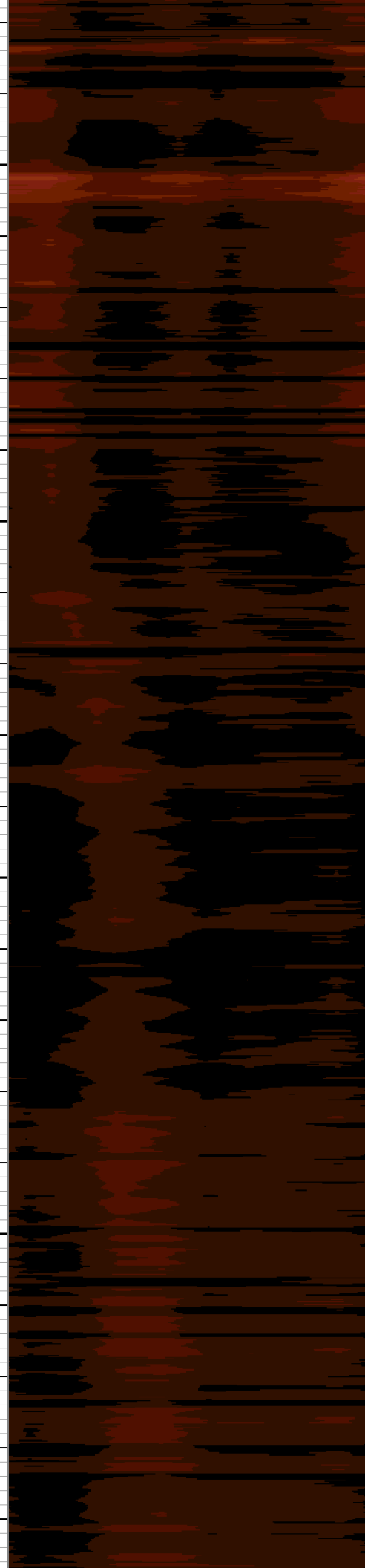
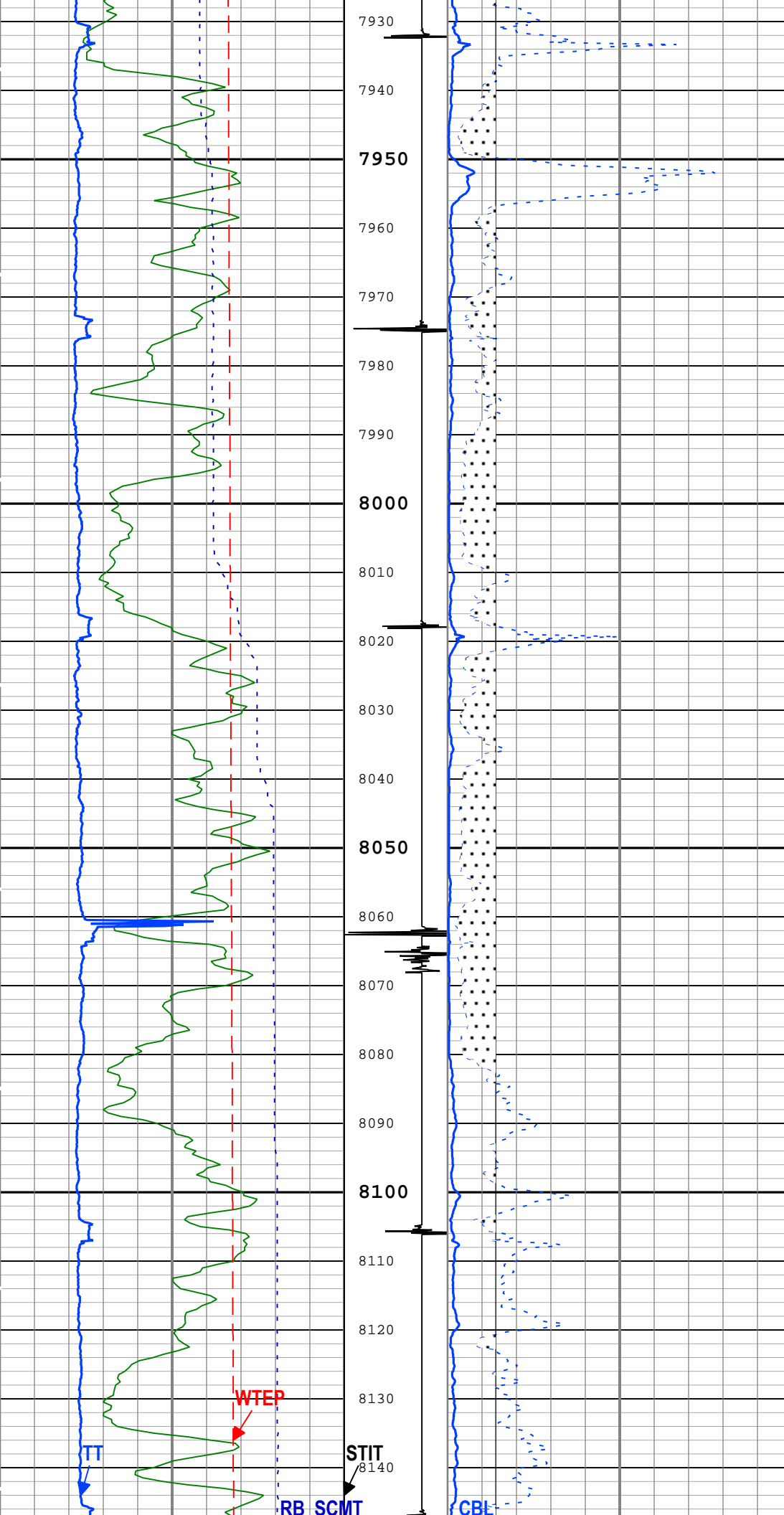


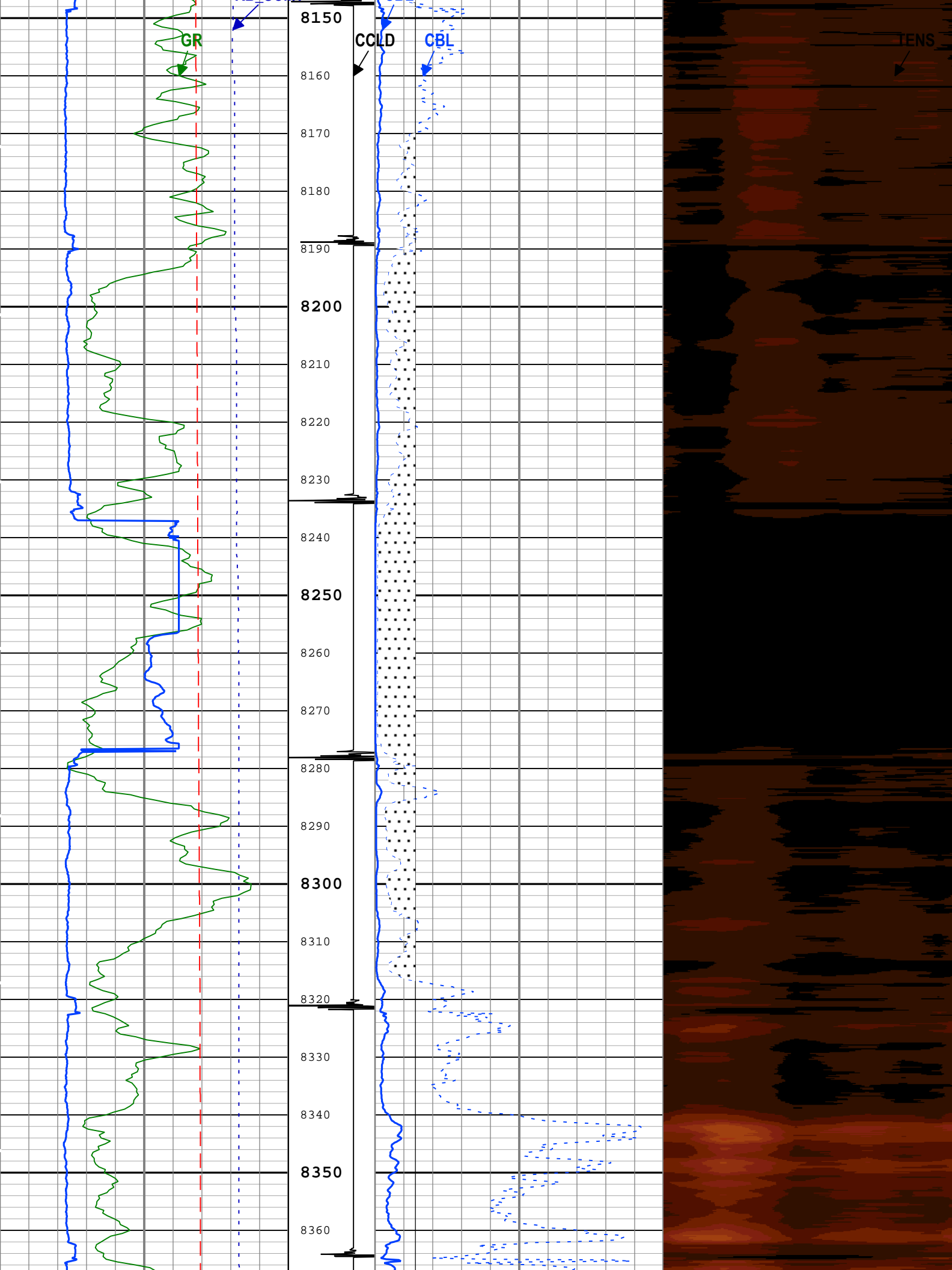


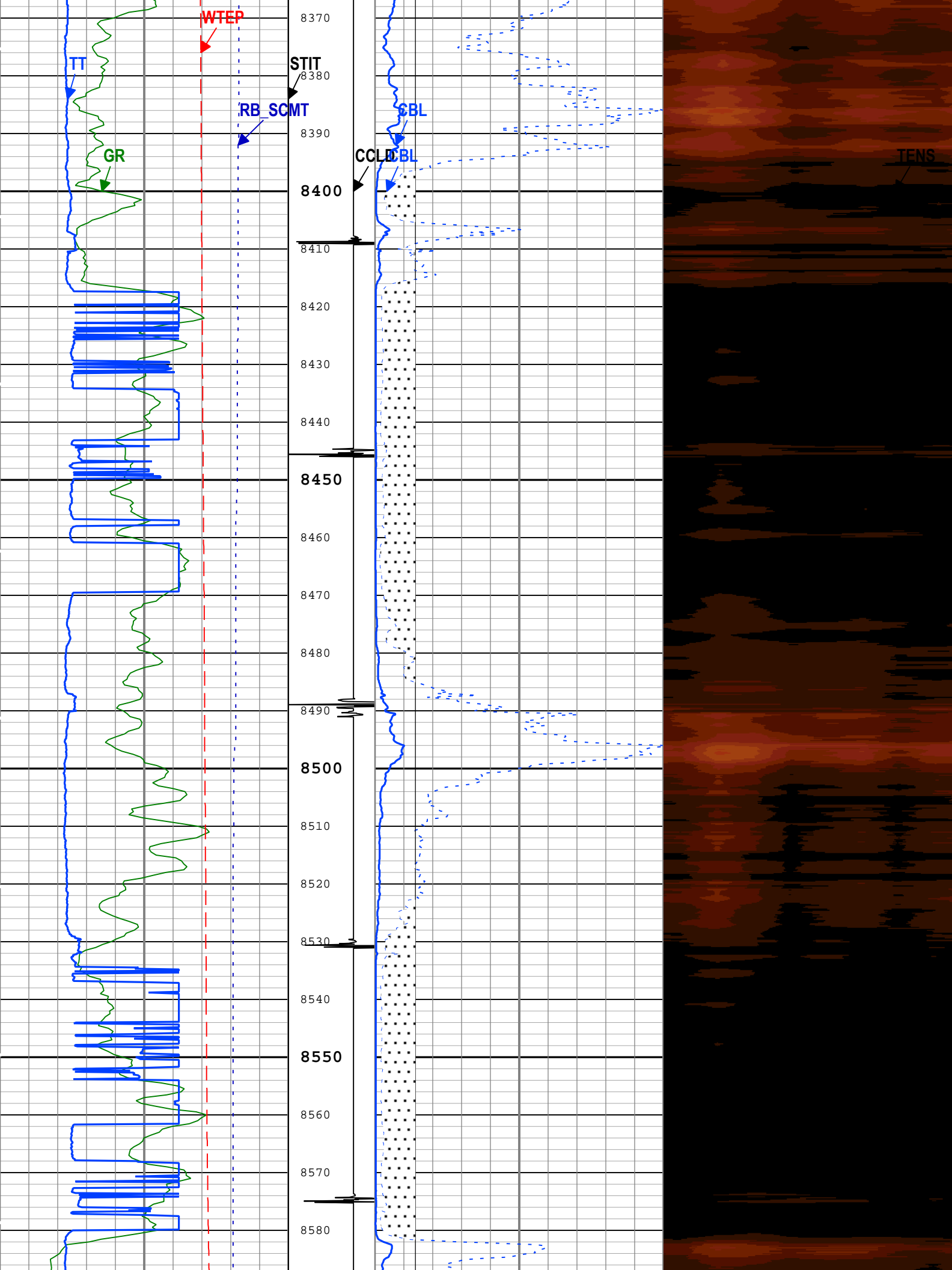


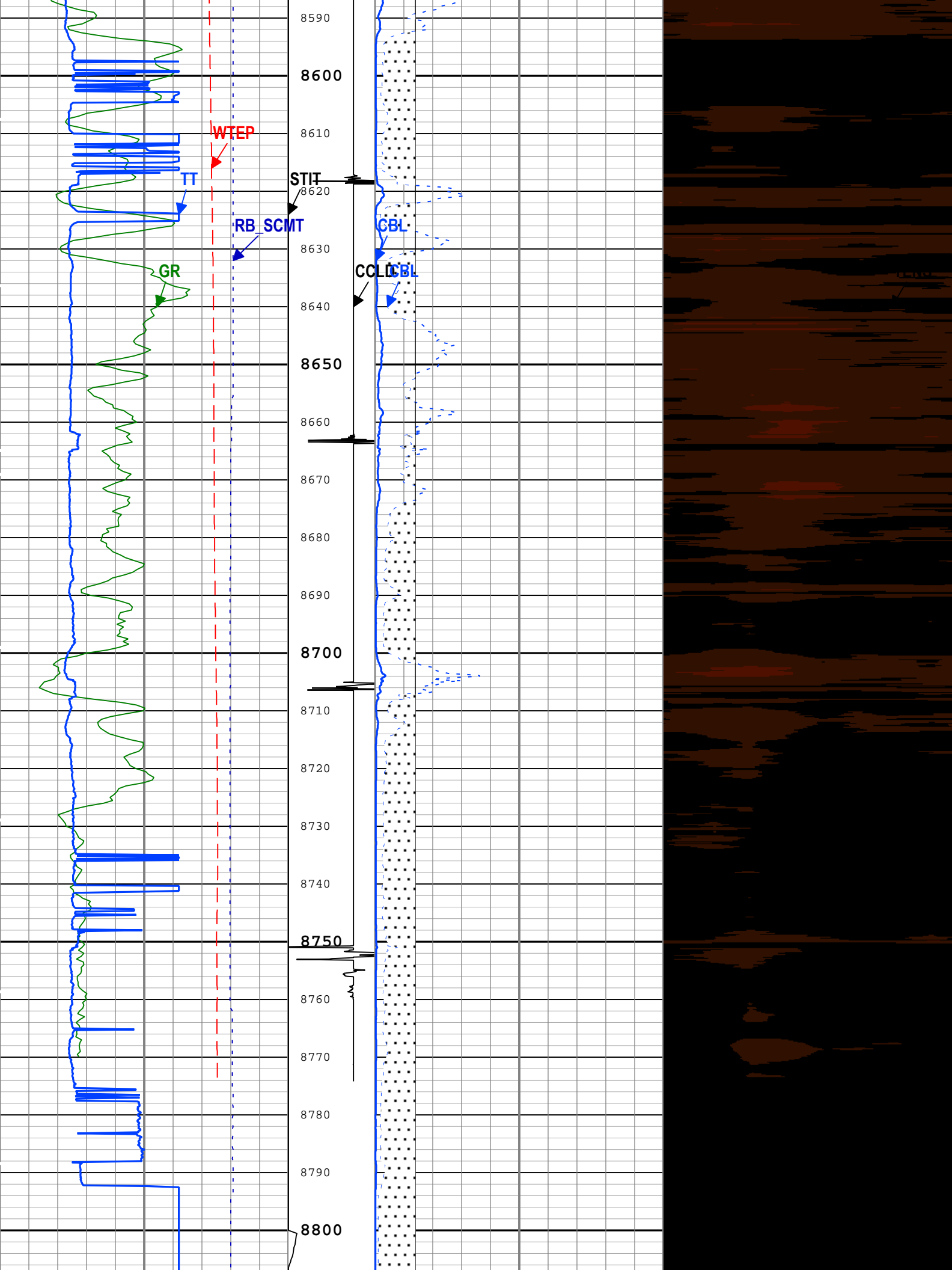












TIME_1900 - Time Marked every 60.00 (s)				
Description: SCMT Amplitudes and MAP Image		Format: Log (SCMT_Amp_Image_1)	Index Scale: 5 in per 100 ft	Index Unit: ft Index Type: Measured
Depth	Creation Date: 03-Aug-2015 19:33:58			

Channel Processing Parameters	
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Run 1: Parameters

Parameter	Description	Tool	Value	Unit
BHT	Bottom Hole Temperature	Borehole	226	degF
BILI	Bond Index Level for Zone Isolation	SCMT-BB	0.8	
CB3D	SCMT CBL 3 ft Peak Detection Mode	SCMT-BB	Peak	
CB3G	SCMT CBL 3 ft Peak Detection T0_Delay and Noise Gate	SCMT-BB	224	us
CB3T	SCMT CBL 3 ft Fixed Threshold Level	SCMT-BB	20	mV
CBLG	CBL Gate Width	SCMT-BB	40	us
CBRA	CBL LQC Reference Amplitude in Free Pipe	SCMT-BB	80	mV
CMCF	CBL Cement Type Compensation Factor	SCMT-BB	0.12	
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	9.1	lbm/gal
DFT	Drilling Fluid Type	Borehole	Water	
DTMD	Borehole Fluid Slowness	Borehole	196	us/ft
ETEM	HP Estimated Temperature	PSTP-A	212	degF
FCF	CBL Fluid Compensation Factor	SCMT-BB	1	
GOBO_CURR	Good Bond in Arbitrary Cement	SCMT-BB	7.87	mV
GTSE	Generalized Temperature Selection, from Measured or Computed Temperature	Borehole	WTEP	
MAPD	SCMT MAP Peak Detection Mode	SCMT-BB	Peak	
MAPG	SCMT MAP Peak Detection T0_Delay and Noise Gate	SCMT-BB	167	us
MAPT	SCMT MAP Fixed Threshold Level	SCMT-BB	30	mV
MATT_CURR	Maximum Attenuation in Arbitrary Cement	SCMT-BB	10.14	dB/ft
MCCF	MAP Cement Type Compensation Factor	SCMT-BB	0.25	
MCI	Minimum Cemented Interval for Isolation	SCMT-BB	Depth Zoned	ft
MMSA	MAP Minimum Sonic Amplitude	SCMT-BB	3.98	mV
MSA	Minimum Sonic Amplitude	SCMT-BB	0.51	mV
MSA_CURR	Minimum Sonic Amplitude in Arbitrary Cement	SCMT-BB	4.41	mV
PTCO	PBMS Pressure Temperature Correction Option	PSTP-A	Gauge Temperature	

RBC	Relative Bearing Correction Allow/Disallow	SCMT-BB	Allow	
RUN_SNUM	Run Sequence Number	WSDRUN	1	
TD	Total Measured Depth	Borehole	8940	ft
ZCMT	Acoustic Impedance of Cement	SCMT-BB	3.4	Mrayl
ZCMT_NEAT	Acoustic Impedance of Cement in Neat Cement	SCMT-BB	6.8	Mrayl

Depth Zone Parameters

Parameter	Value	Start (ft)	Stop (ft)
MCI	14.81	2420	2550
MCI	1.25	2550	8821.08

All depths are actual.

Tool Control Parameters

Run 1: Parameters

Parameter	Description	Tool	Value	Unit
CMTM	SCMT Operating Mode	SCMT-BB	Log	
MAX_LOG_SPEED	Toolstring Maximum Logging Speed	WLSESSION	150	ft/h
PCCG	PSP Downhole CCL Gain	PSTP-A	36 dB	

Run 1

VDL-Image

Software Version

Acquisition System	Version
Maxwell 2016	6.0.47569.3100

Pass Summary

Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	DSC Mode	Depth Shift	Include Parallel Data
Run 1	Main[4]:Up	Up	2408.03 ft	8821.13 ft	20-May-2015 9:14:47 PM	21-May-2015 12:51:44 AM	ON	0.00 ft	Yes

All depths are referenced to toolstring zero

Log

Company:Caerus Piceance LLC Well:Puckett 43A-2
Run 1: Main[4]:Up:S008

Description: SCMT VDL Image Format: Log (SCMT_VDL_Image_1) Index Scale: 5 in per 100 ft Index Unit: ft Index Type: Measured Depth Creation Date: 03-Aug-2015 19:34:04

TIME_1900 - Time Marked every 60.00 (s)

CCL Discriminated Amplitude (CCLD) PSTP-A	Gamma Ray (GR) PSTP-A		gAPI		0		150	
3 V -1	Relative Bearing (RB_SCMT) SCMT-BB		deg		0		360	
Stuck Tool Indicator, Total (STIT)	Transit Time for CBL (TT) SCMT-BB		us		0		100	
0 ft 50	Cable Drag		us		200		400	
Cable Drag	Well Temperature (WTEP) PSTP-A		degF		0		300	
Tool_Tot. Drag	GoodBond From CBL to GOBO		us		200		1200	
2420								
2430								

Min

Amplitude

Max

200

us

1200

VDL VariableDensity (VDL) SCMT-BB

Absent

7.500

17.500

27.500

37.500

47.500

57.500

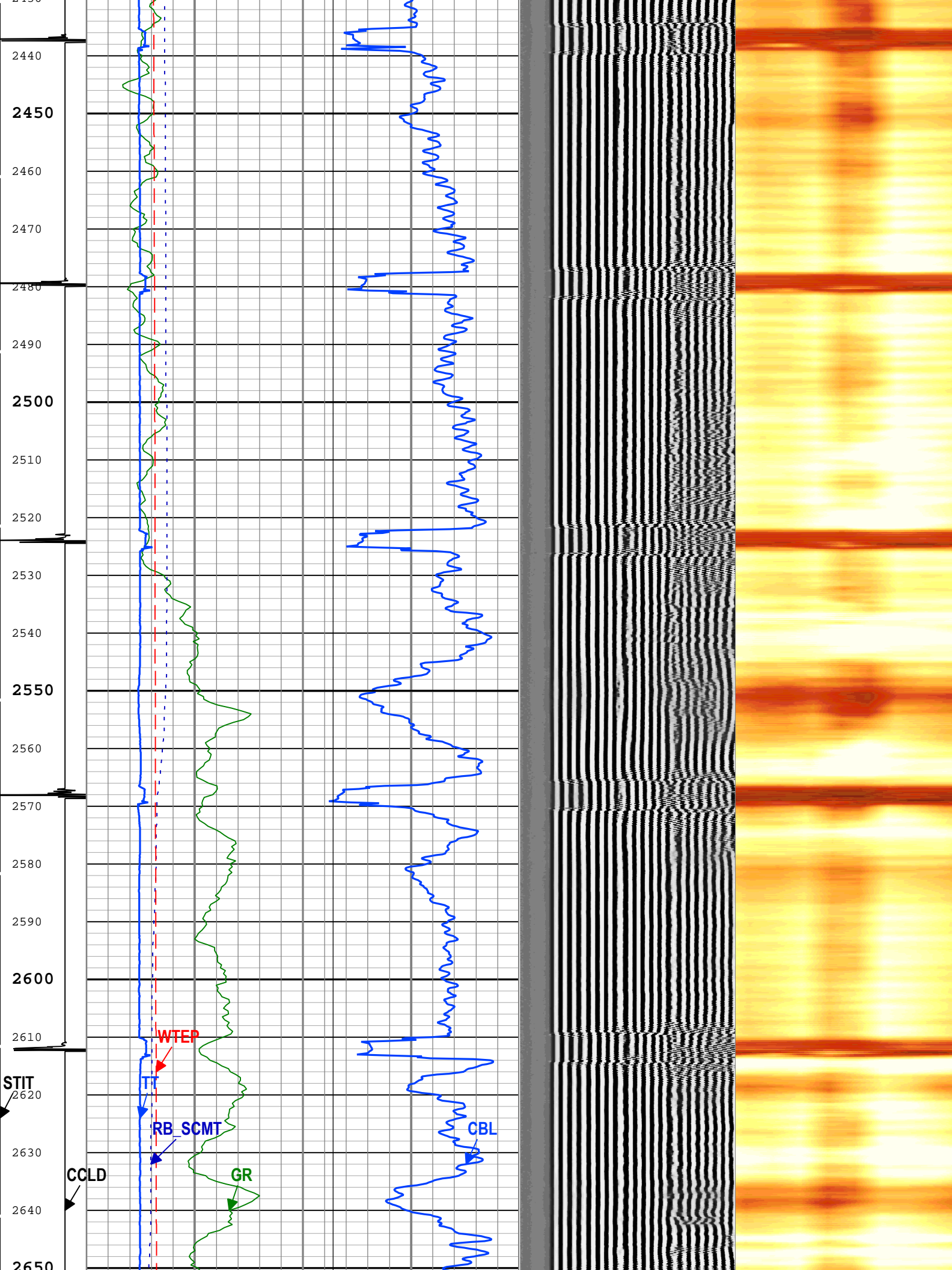
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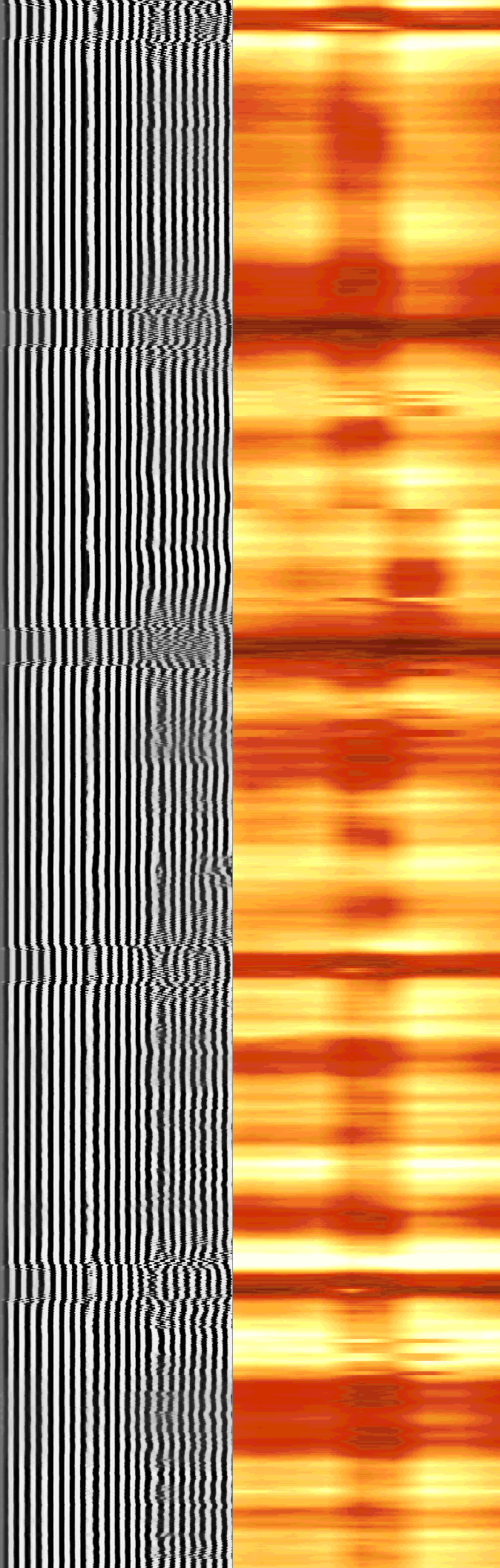
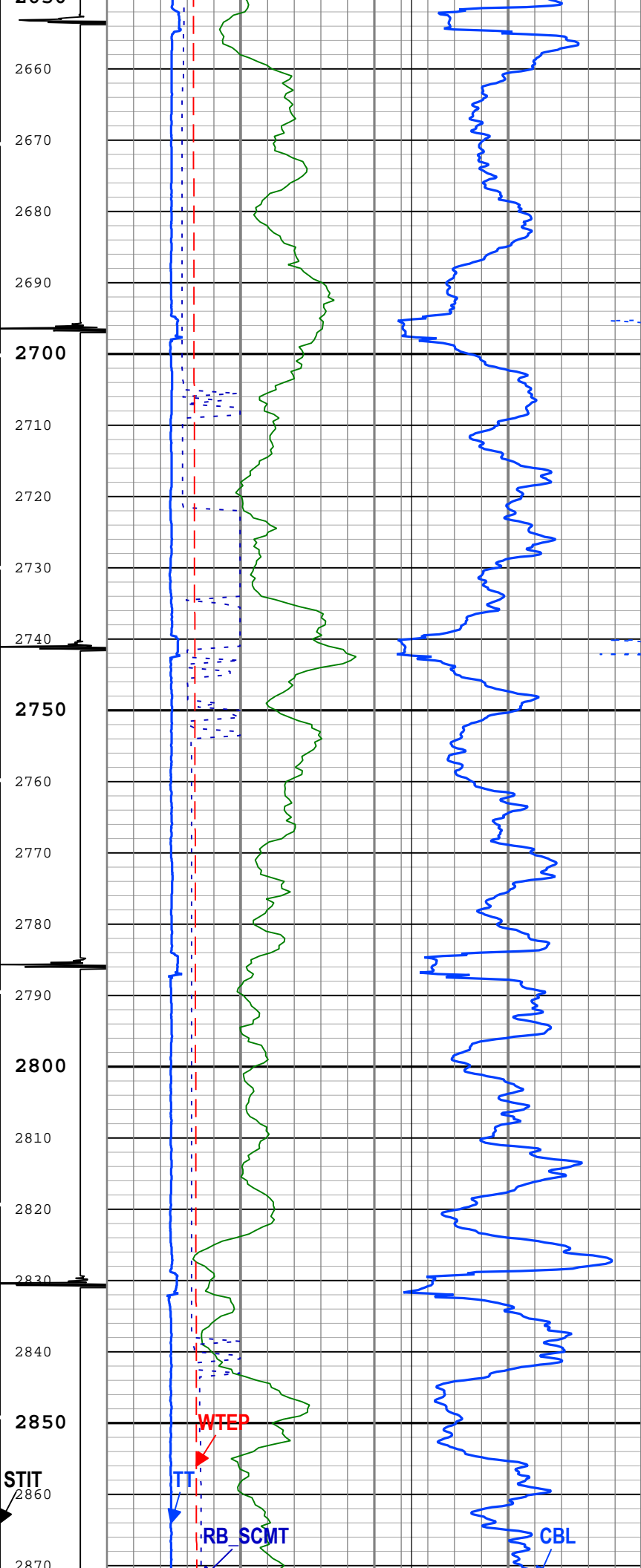
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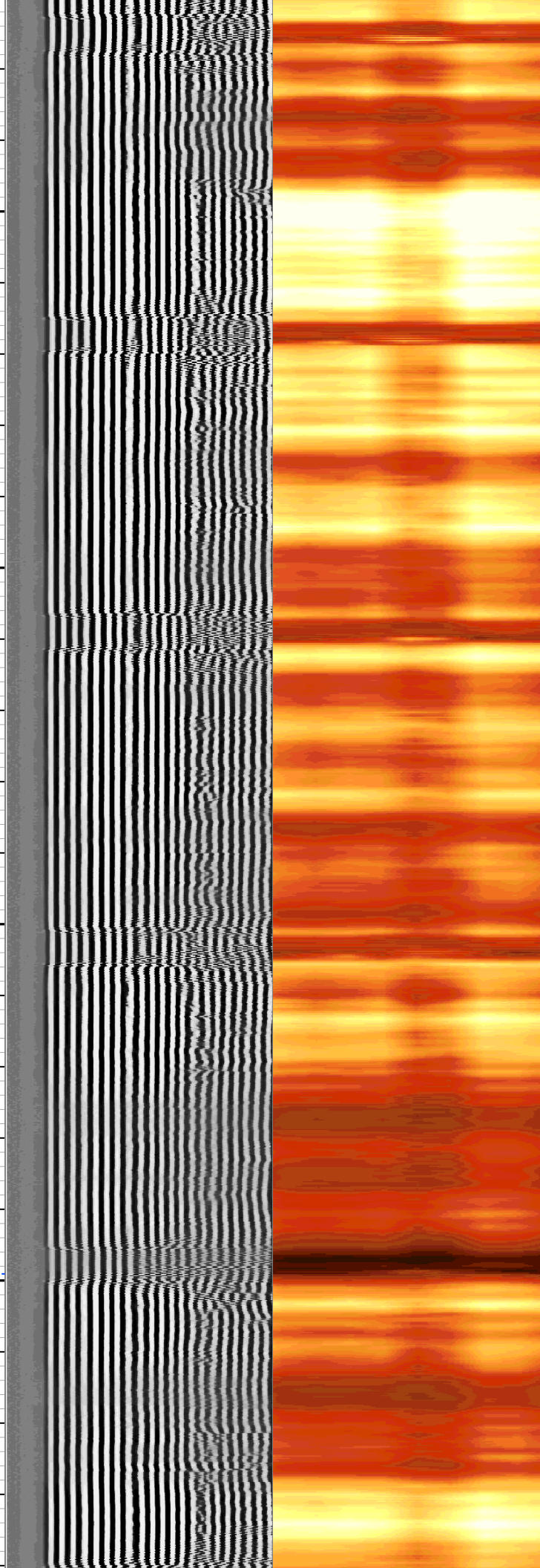
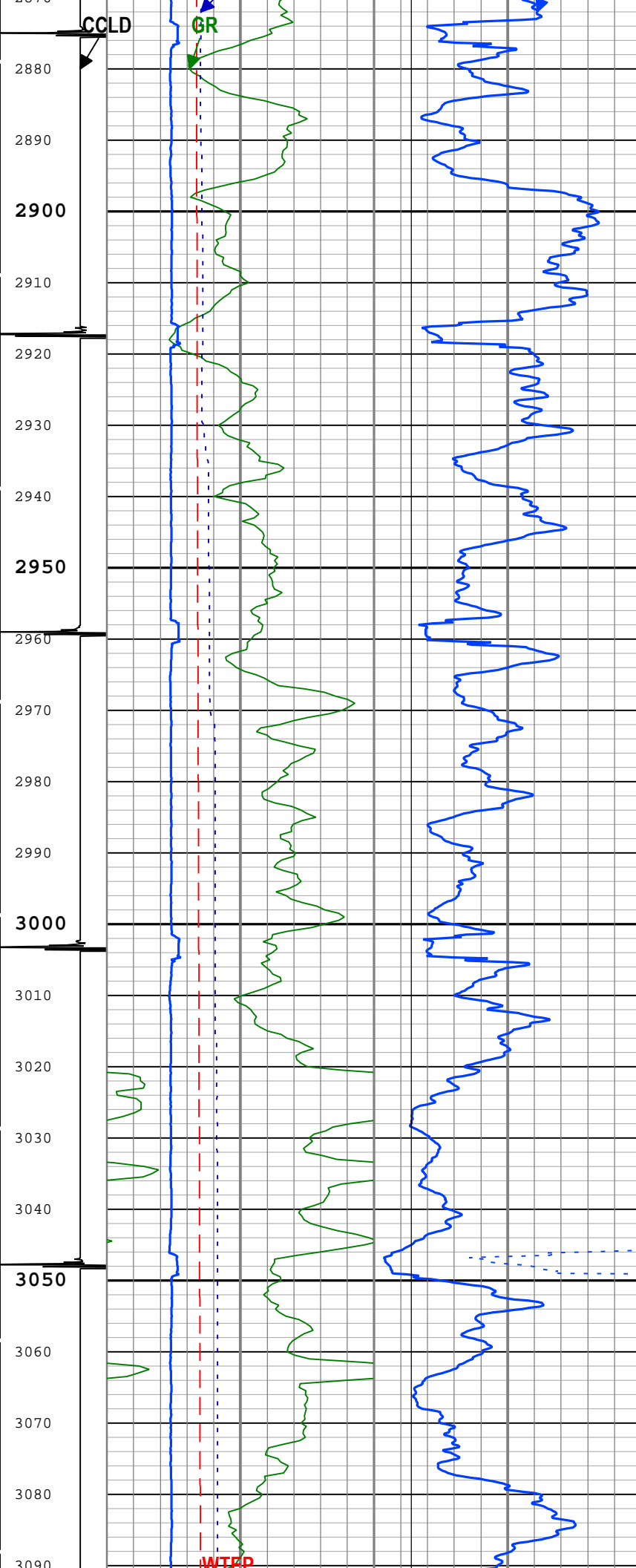
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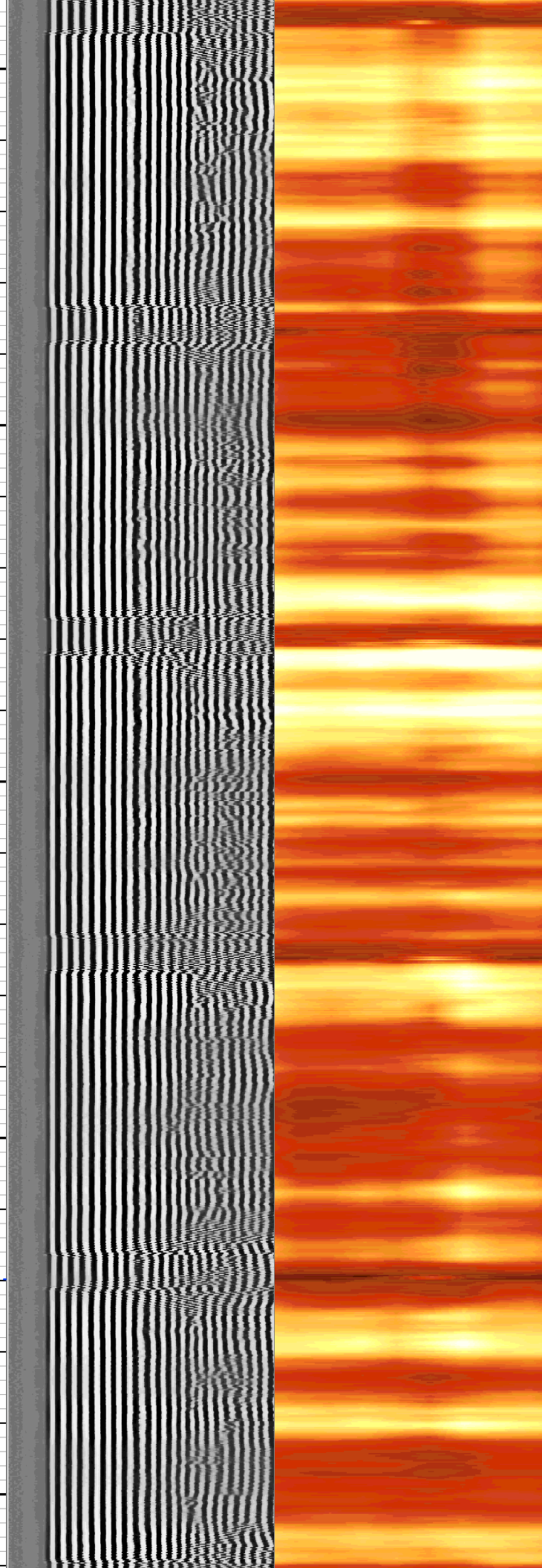
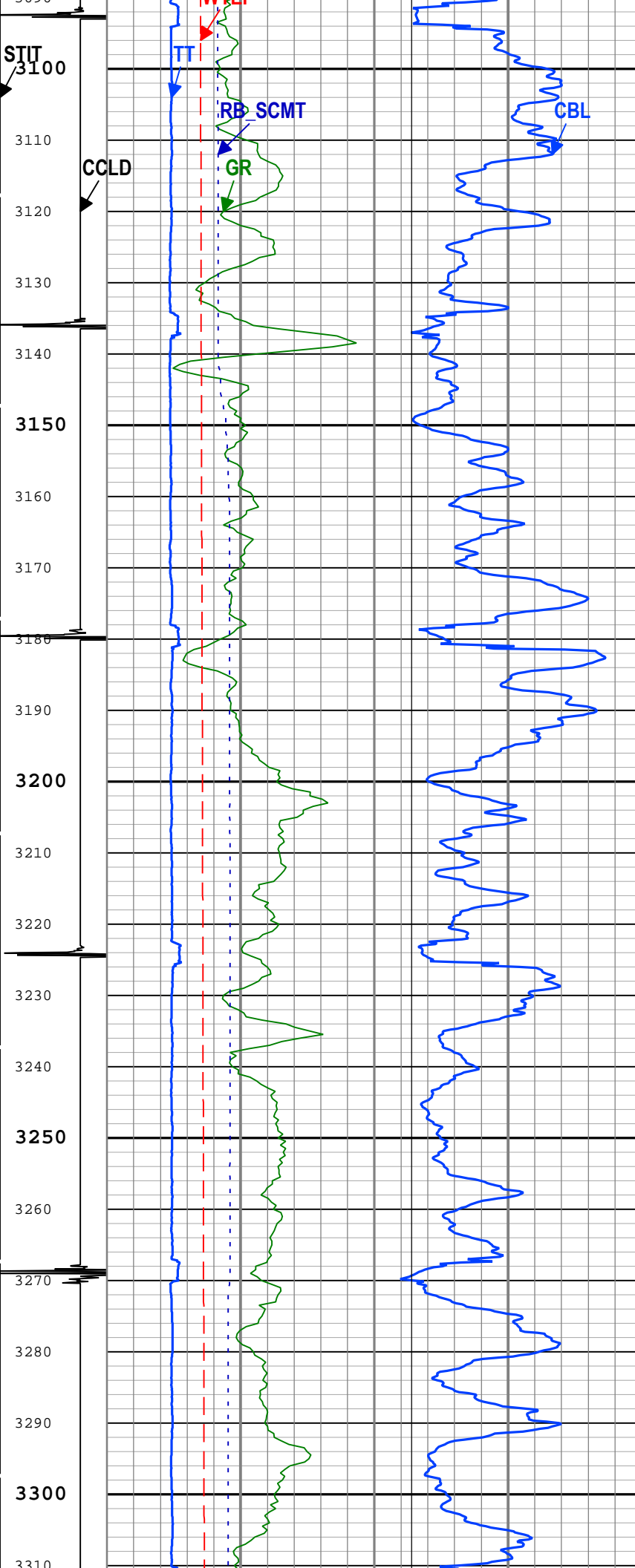
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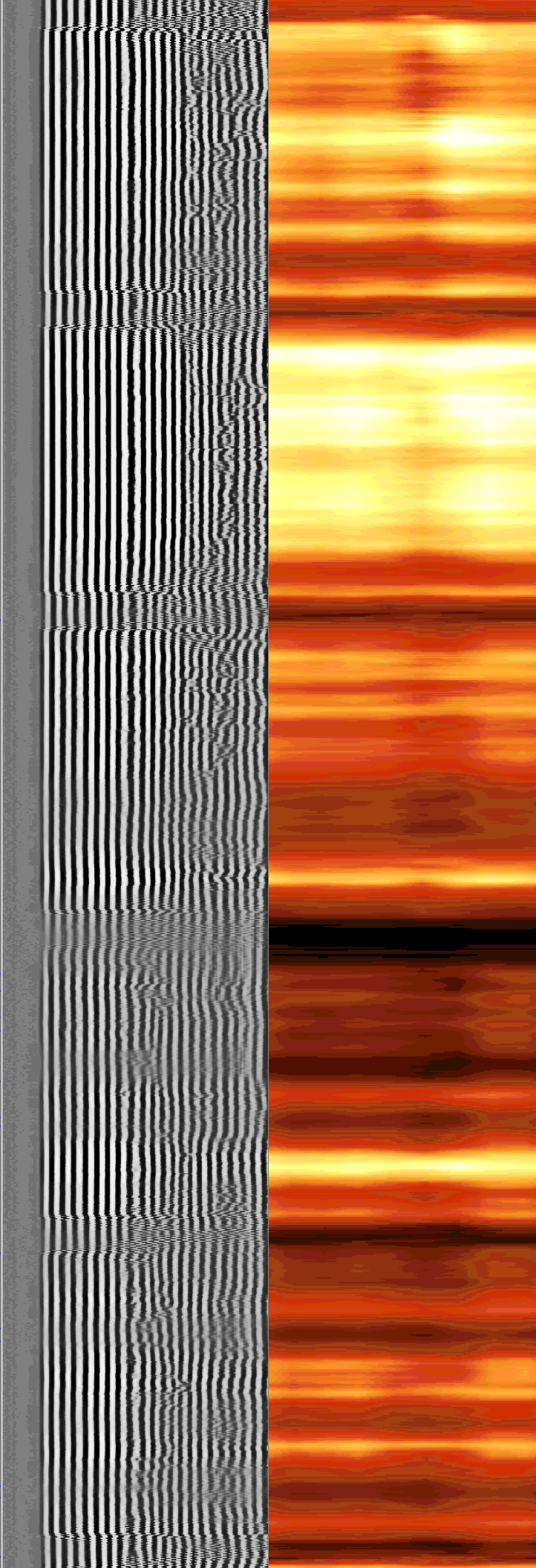
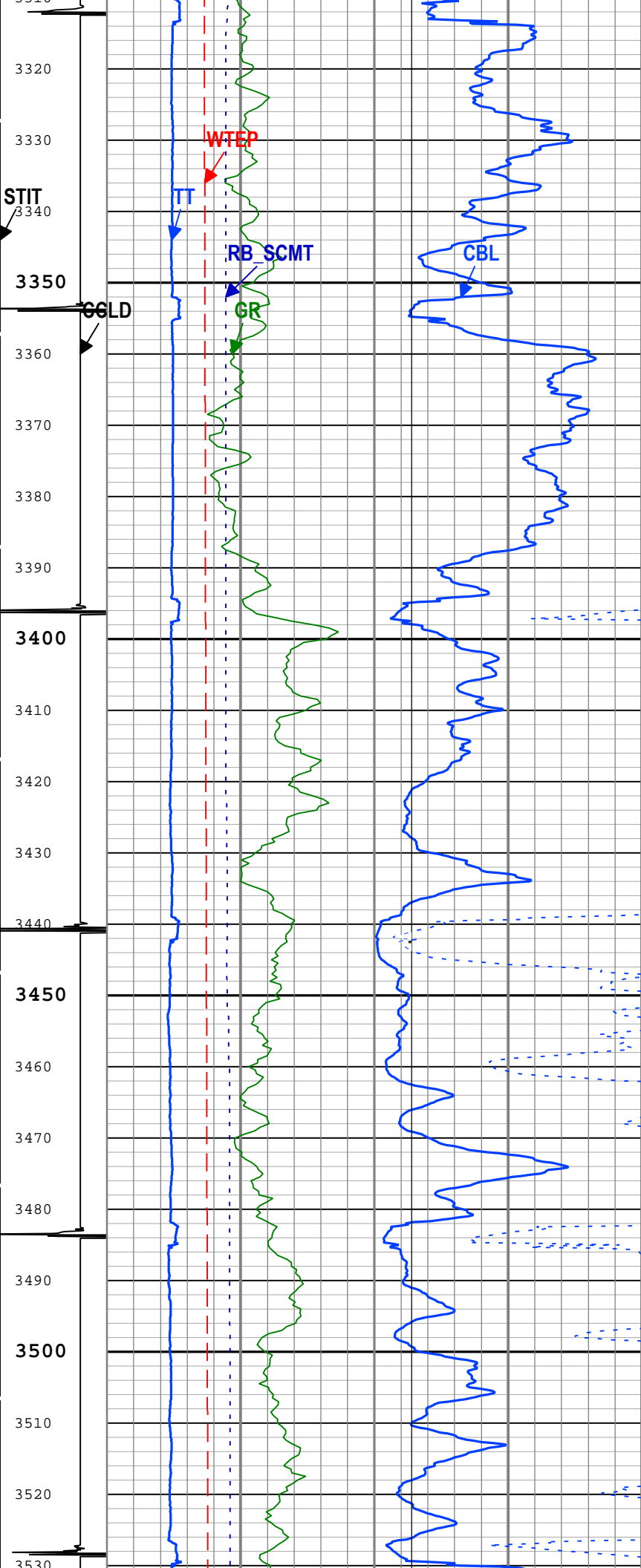
CBL Amplitude Mapping Image (0 - 100) SCMT-BB

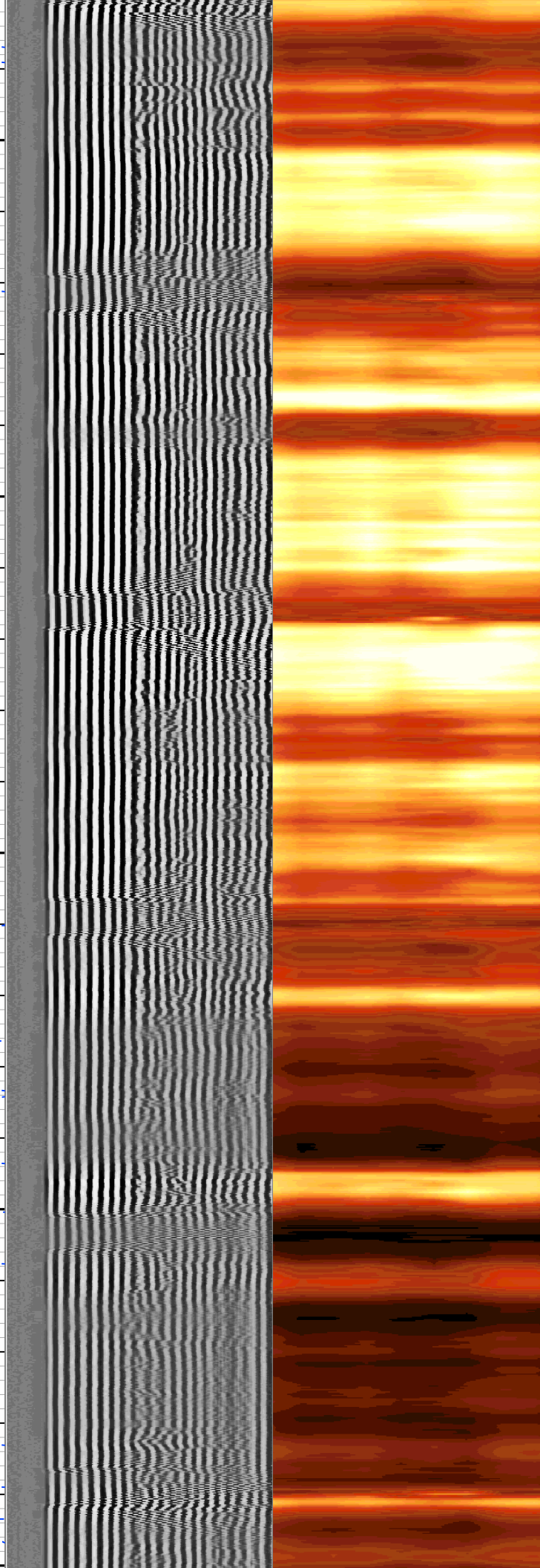
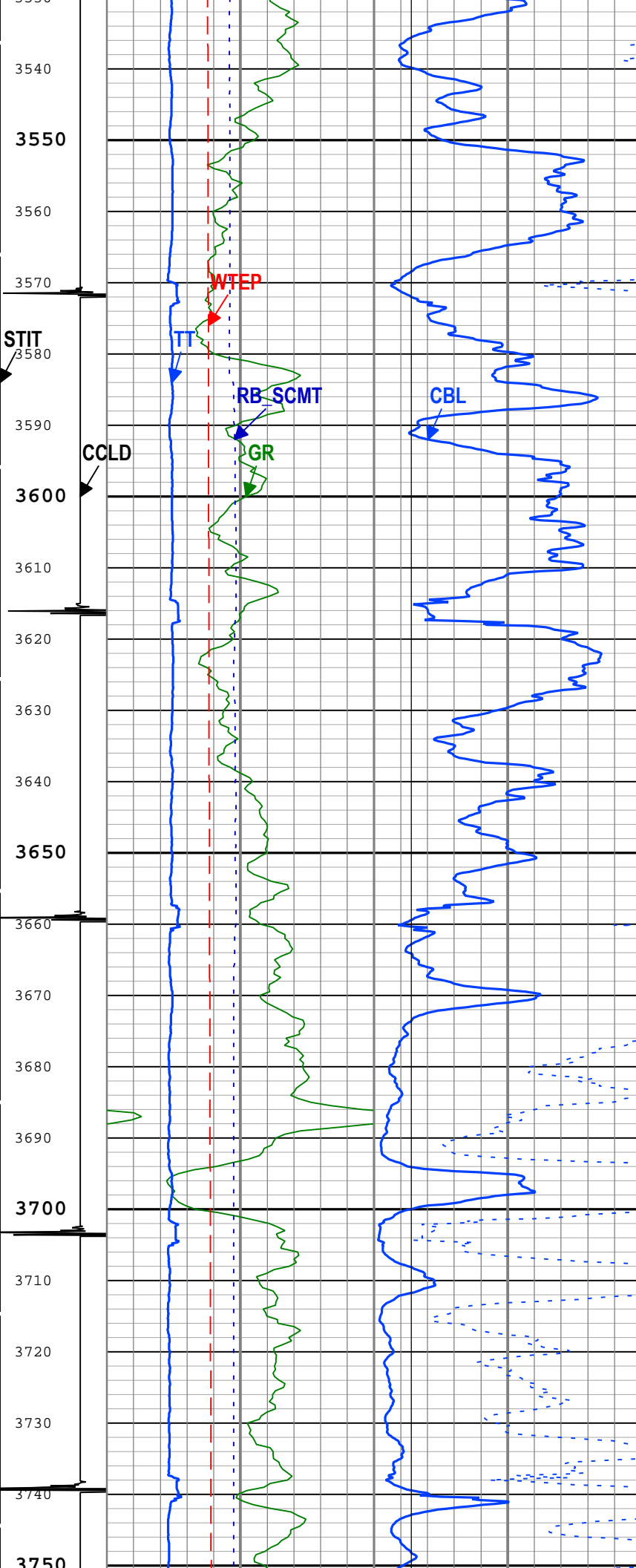


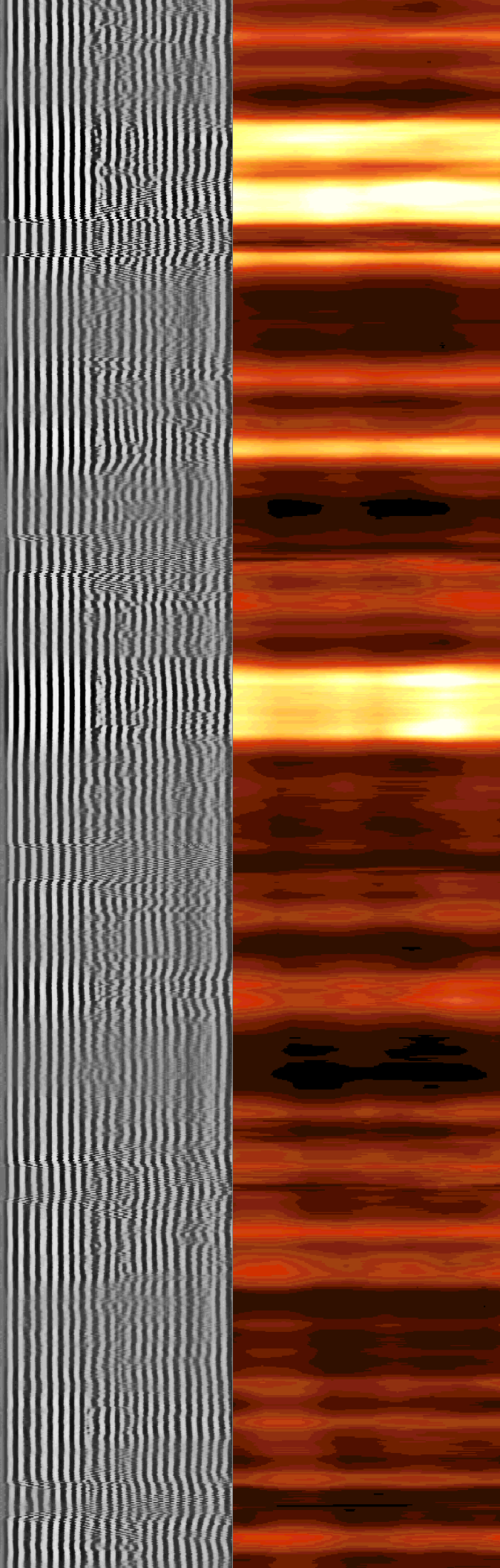
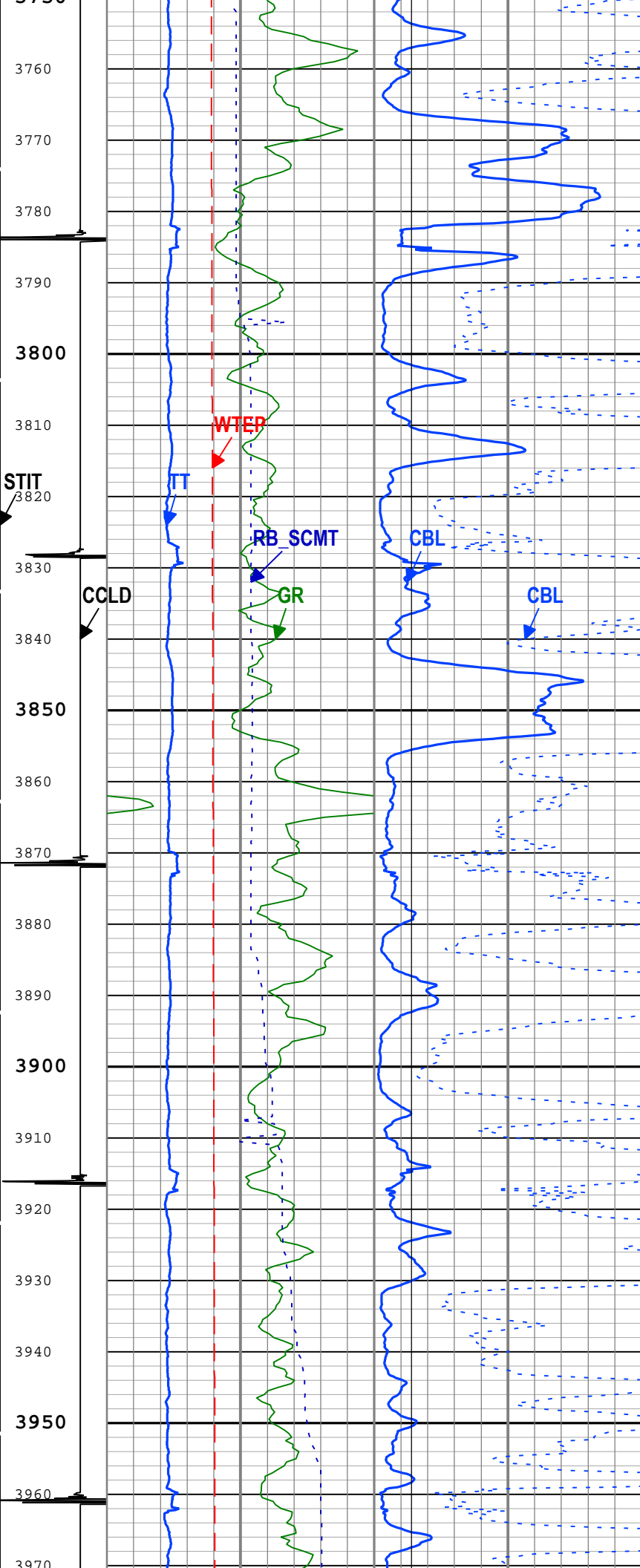


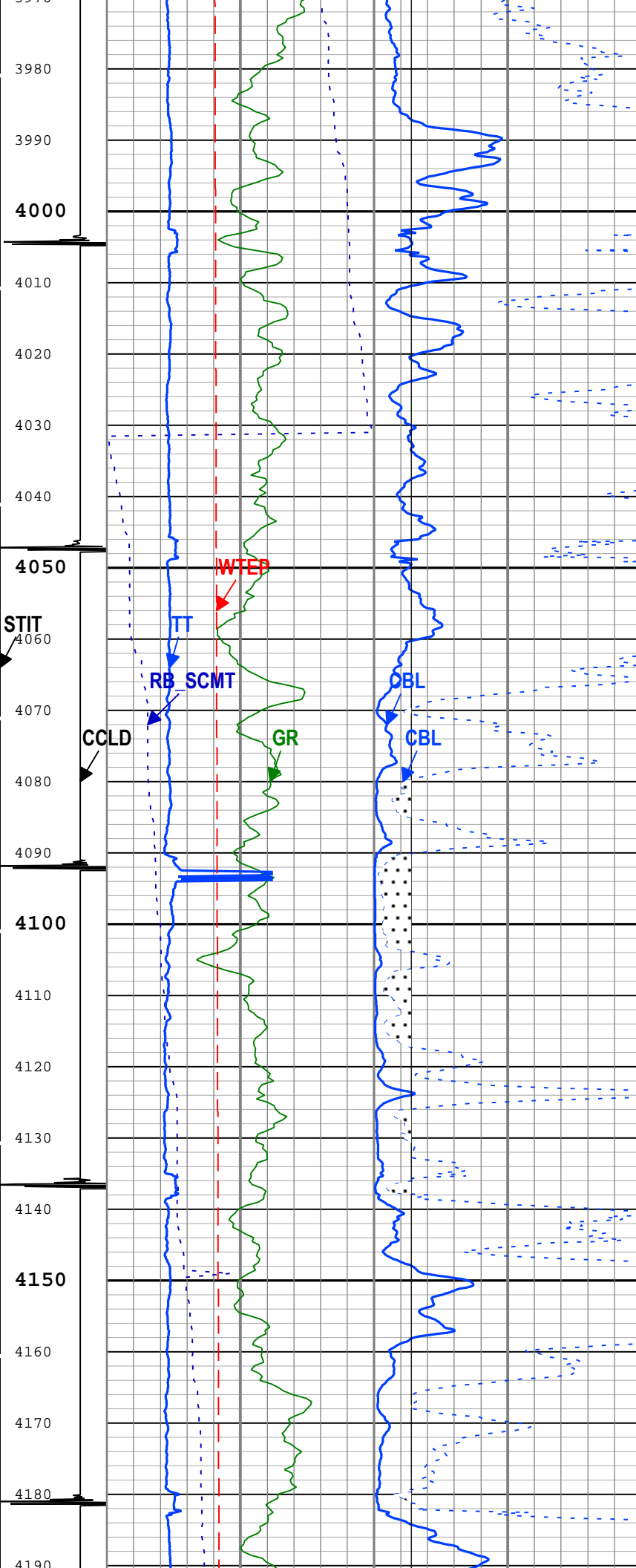


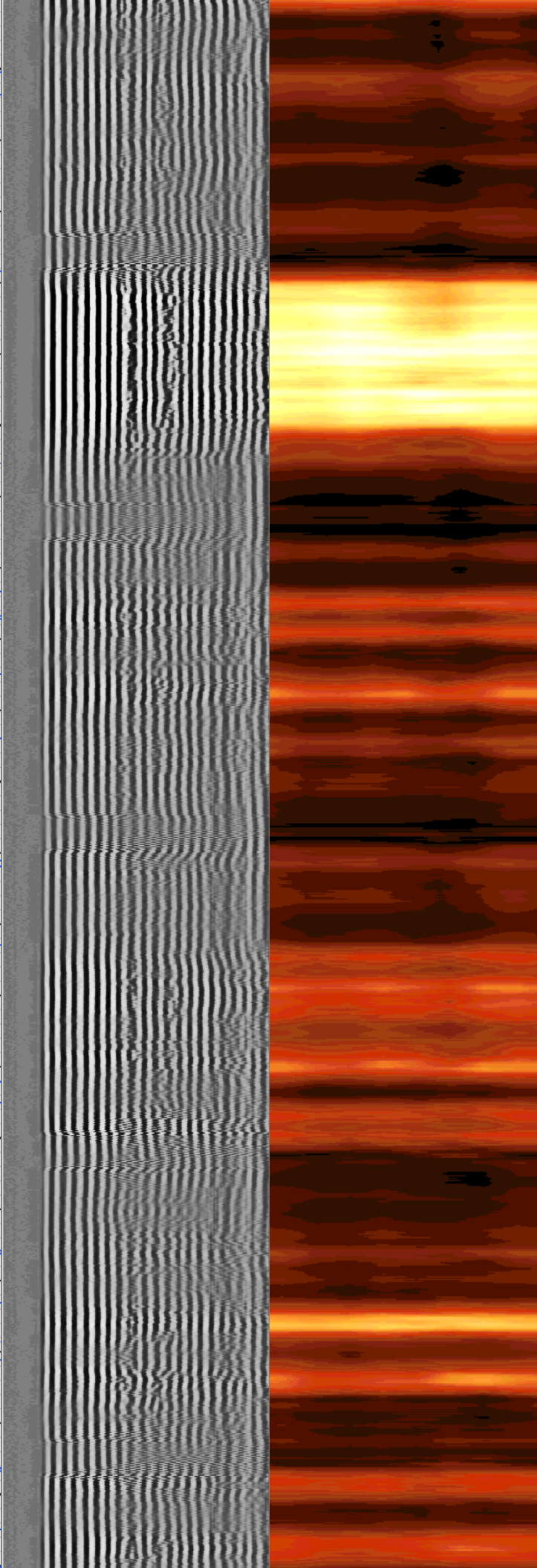
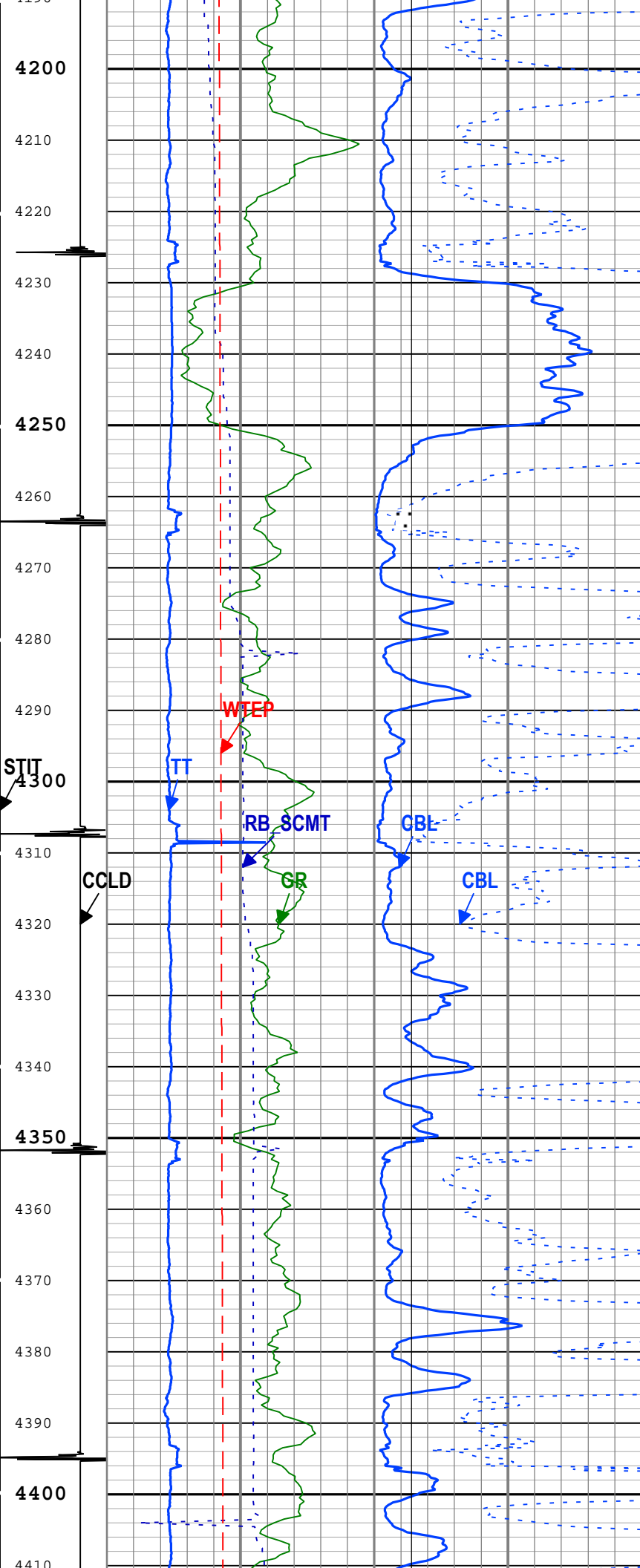


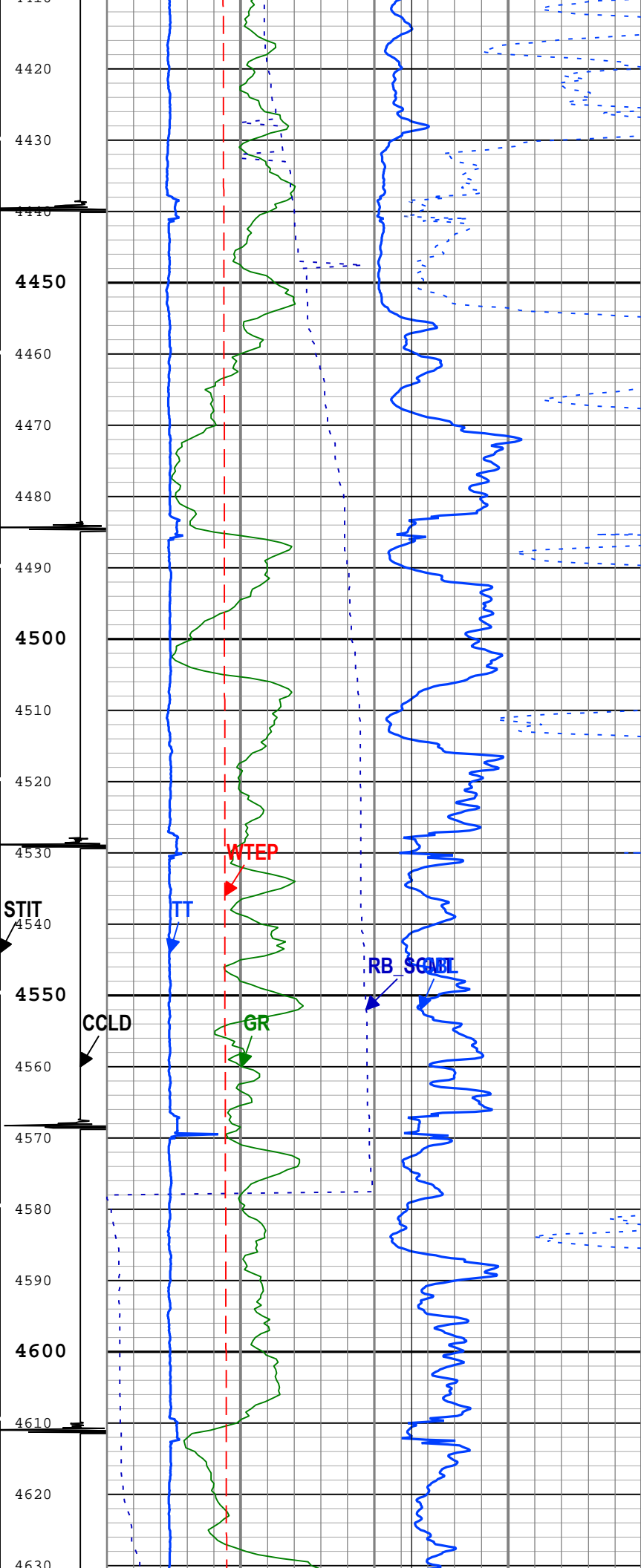


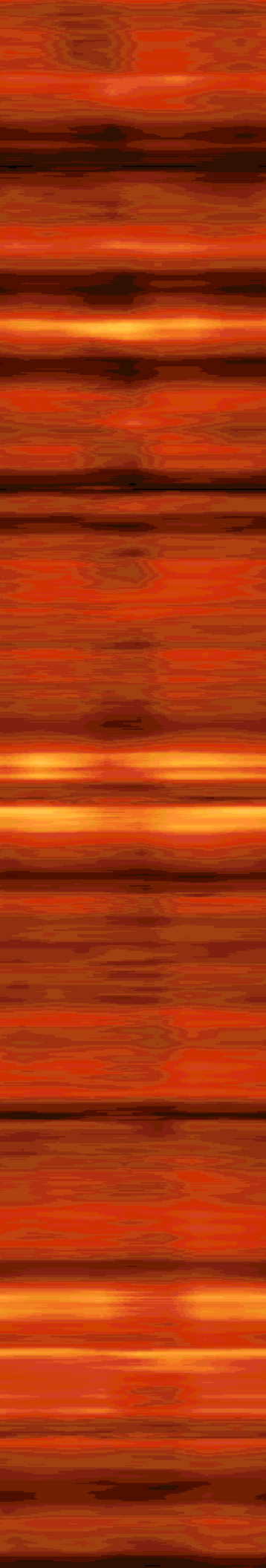
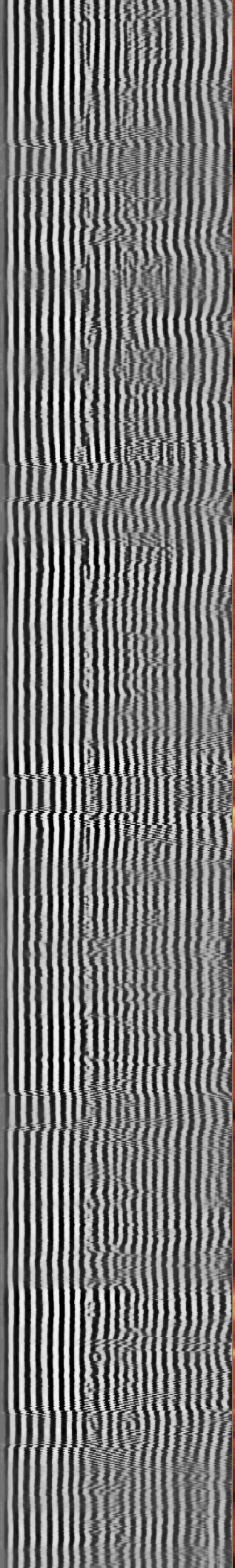
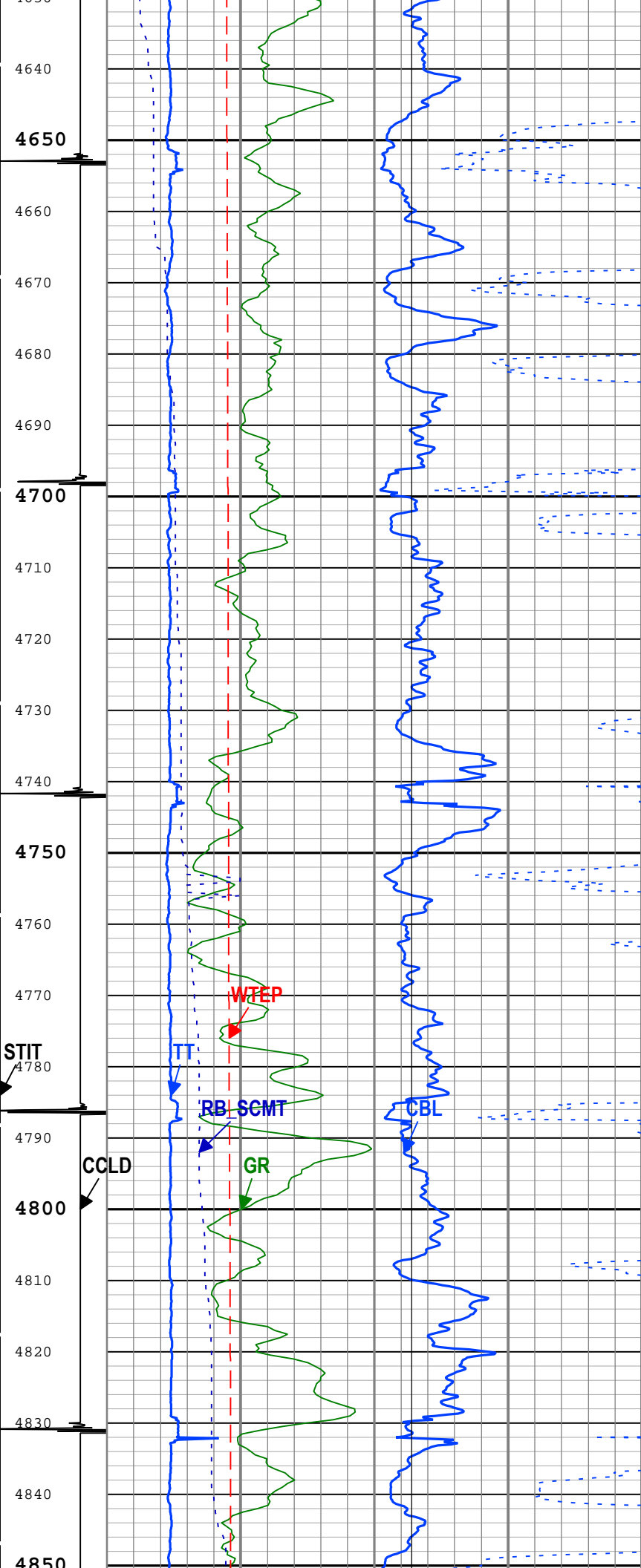


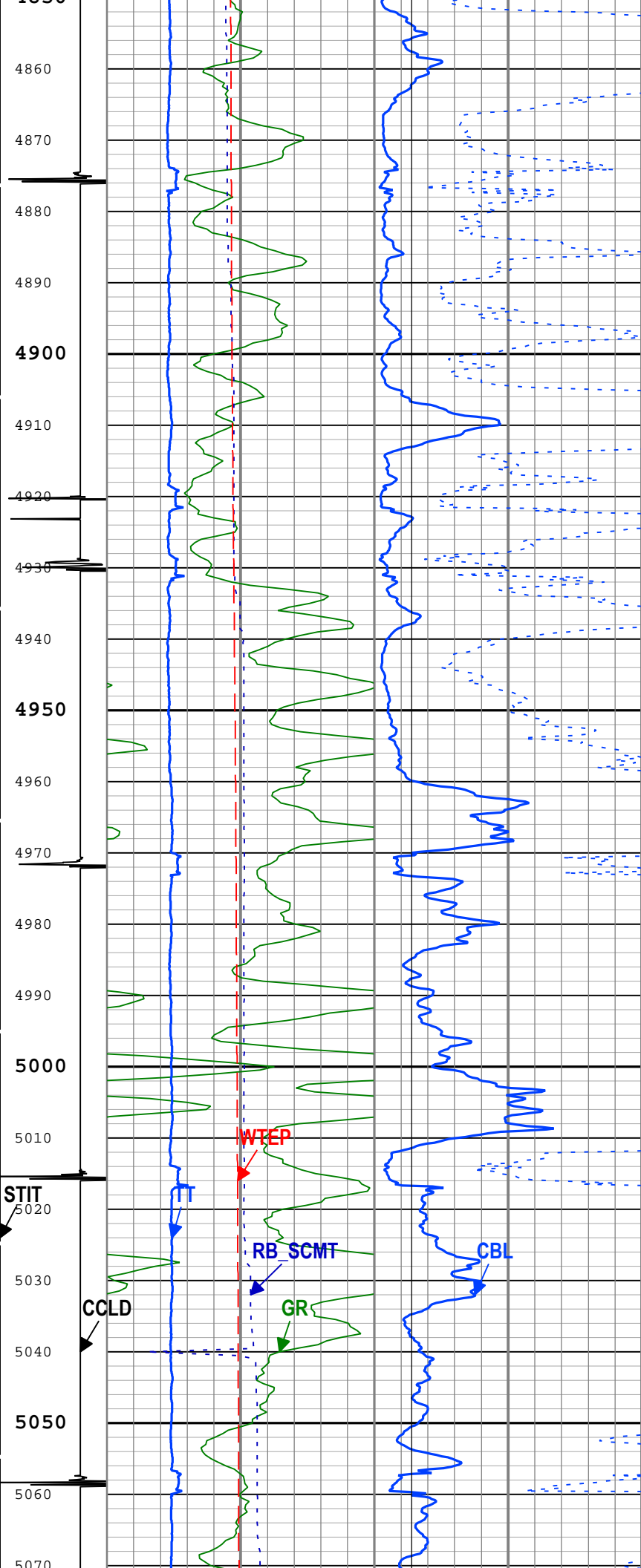


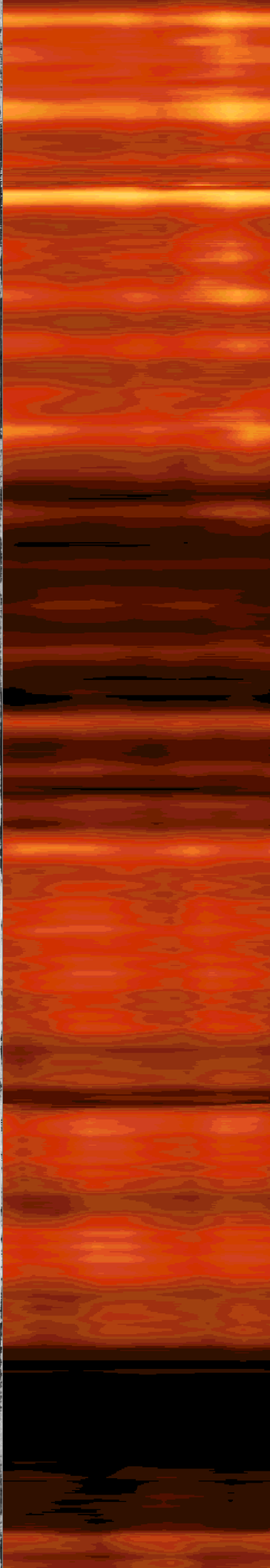
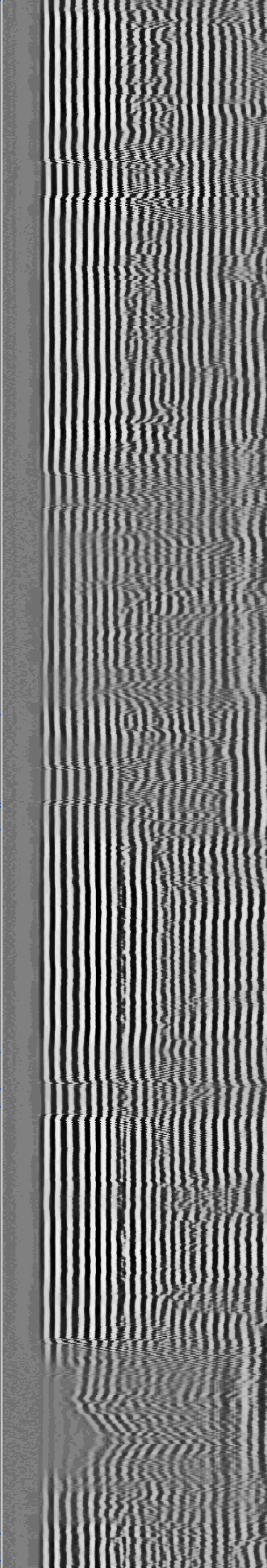
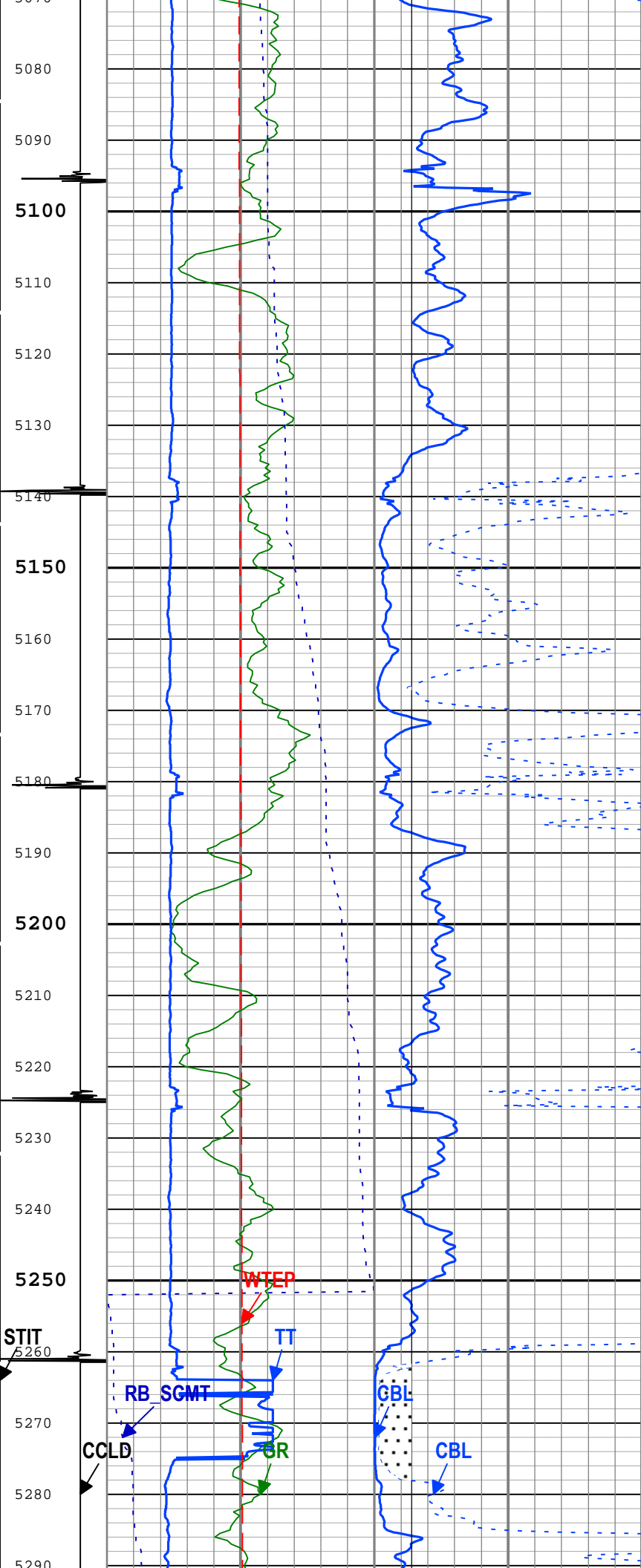


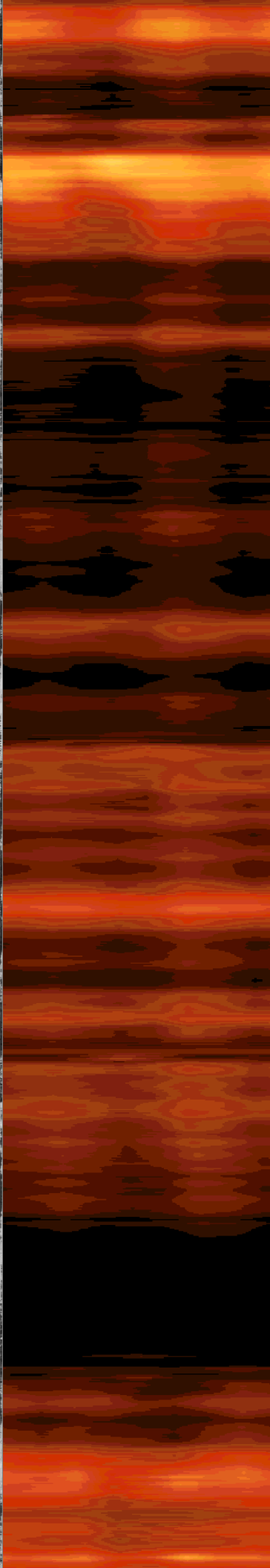
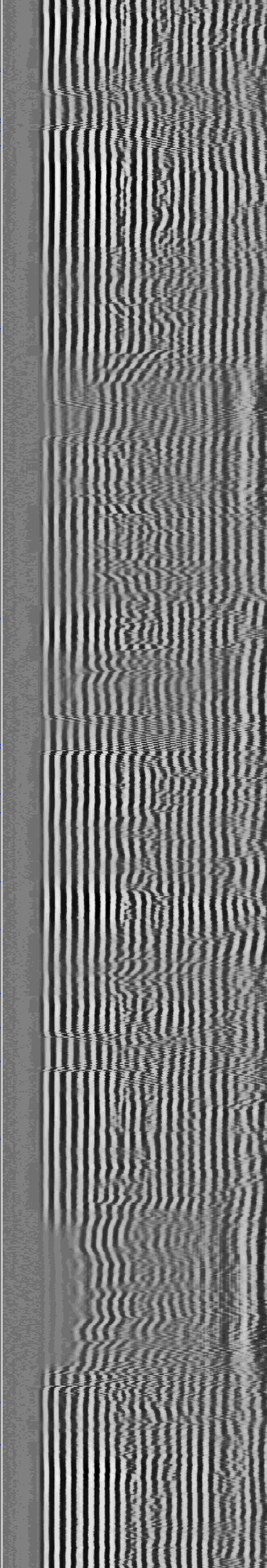
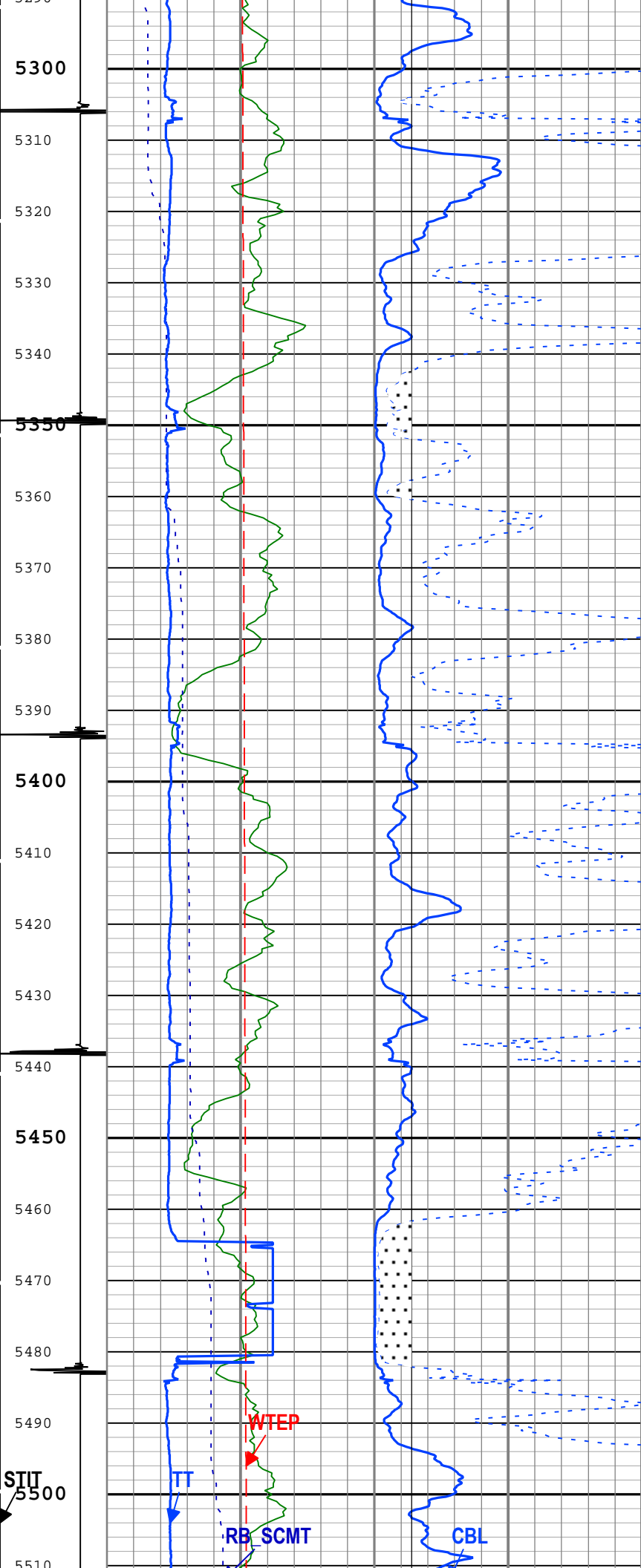


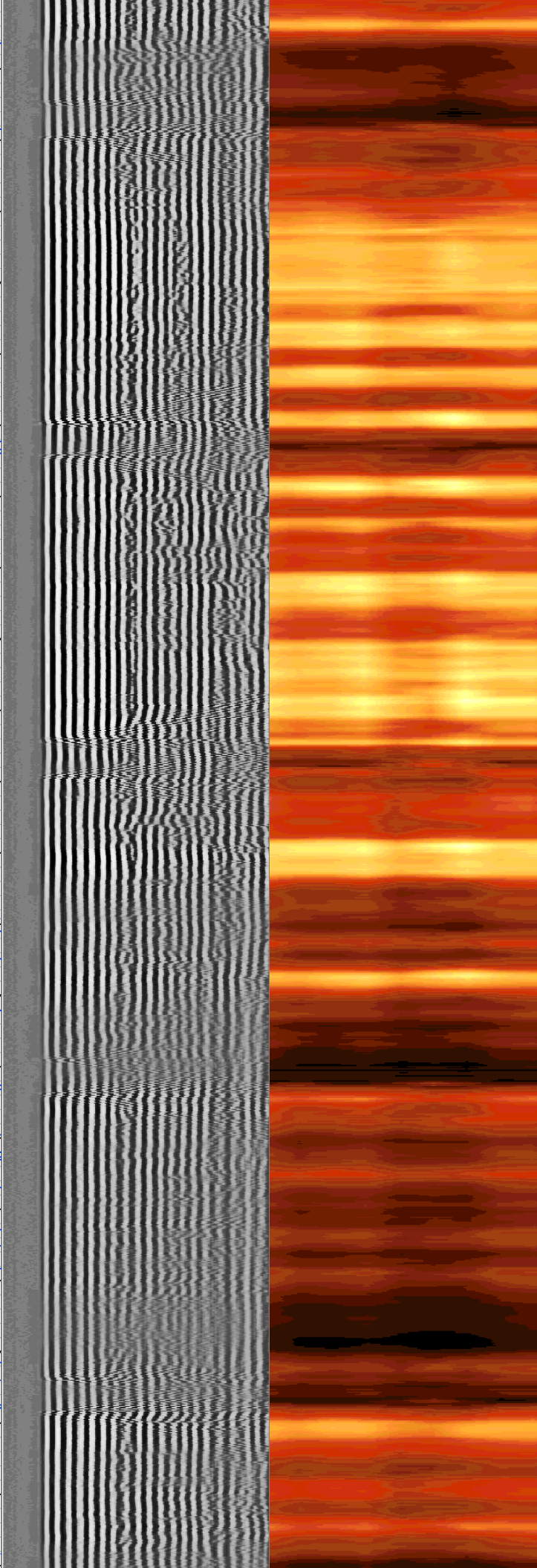
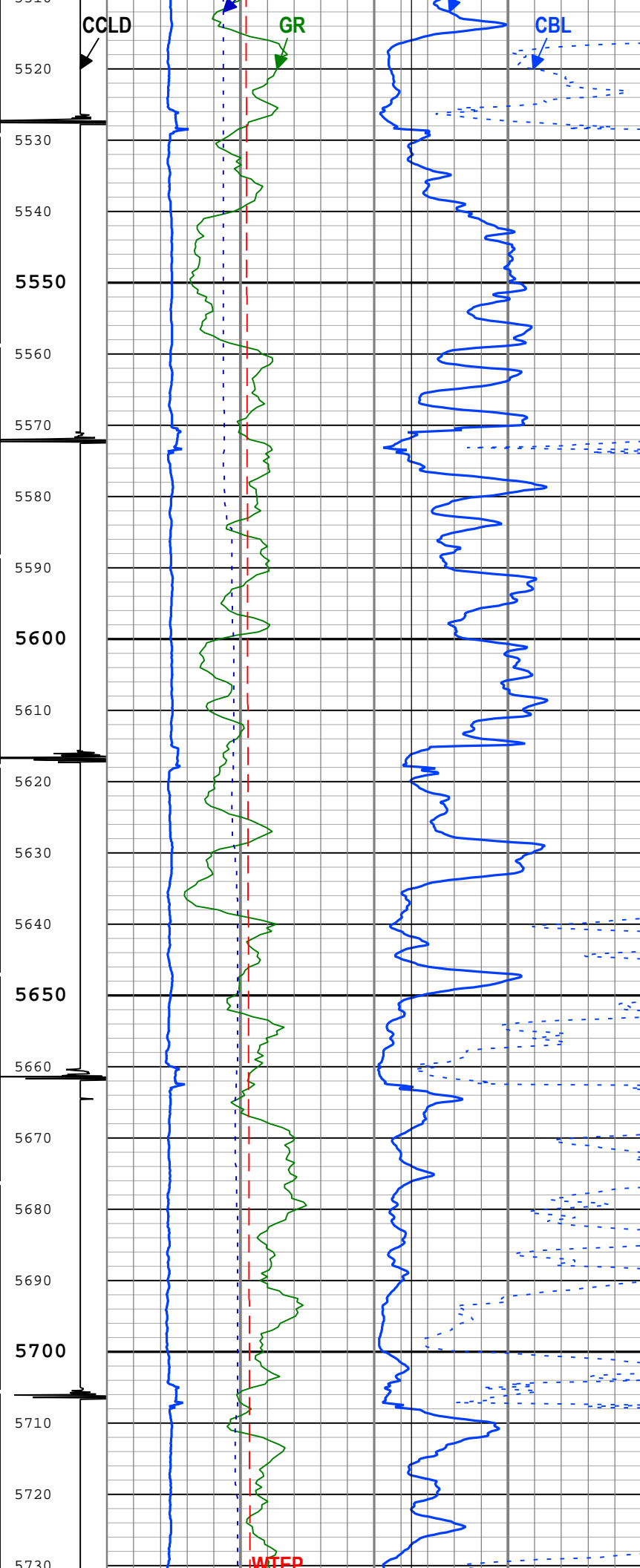


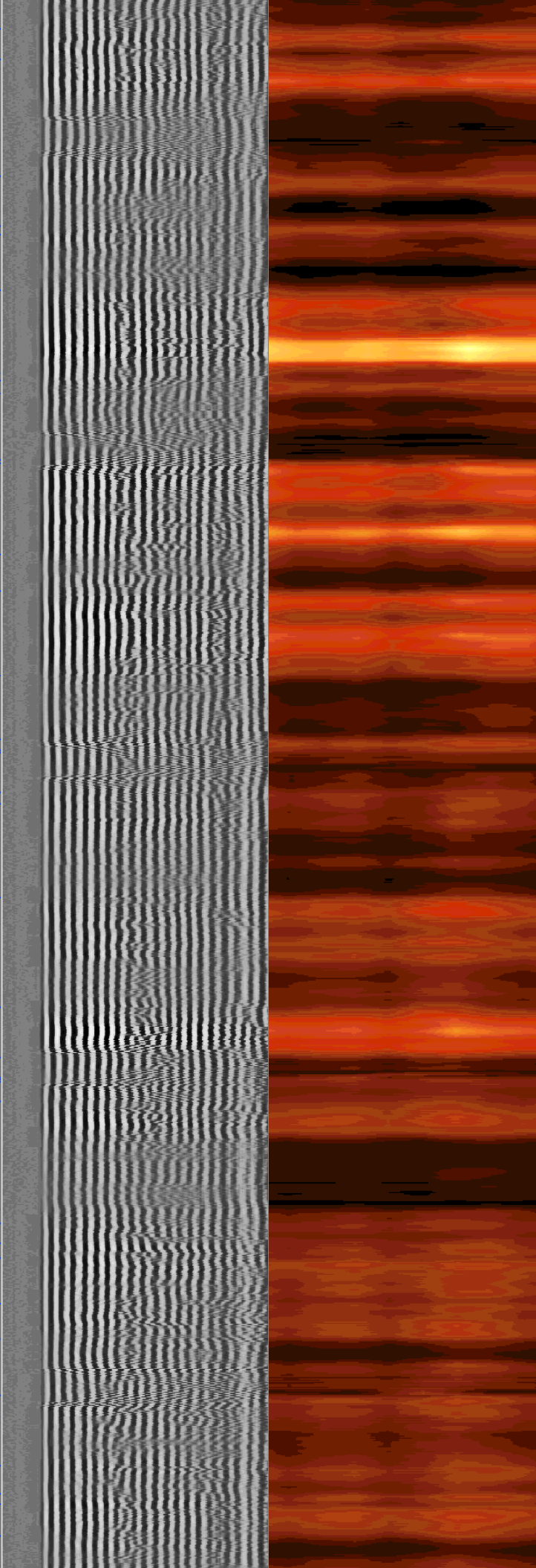
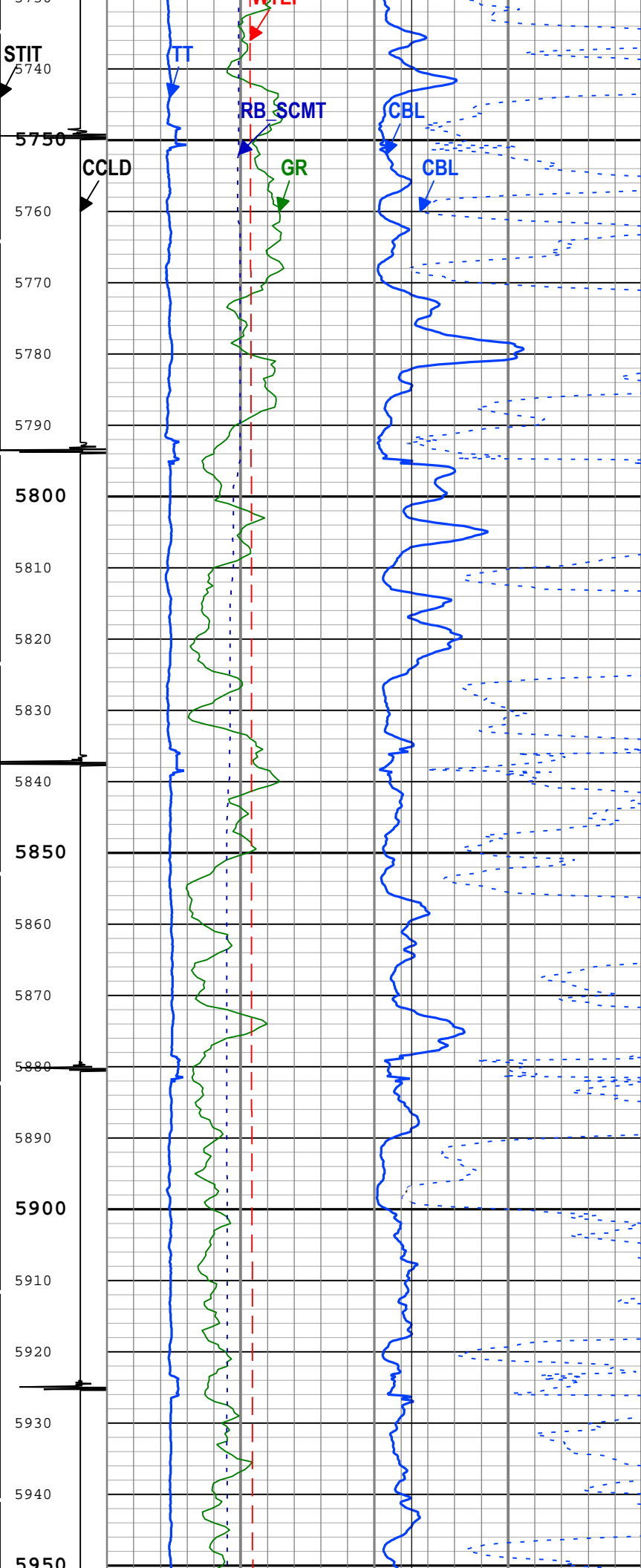


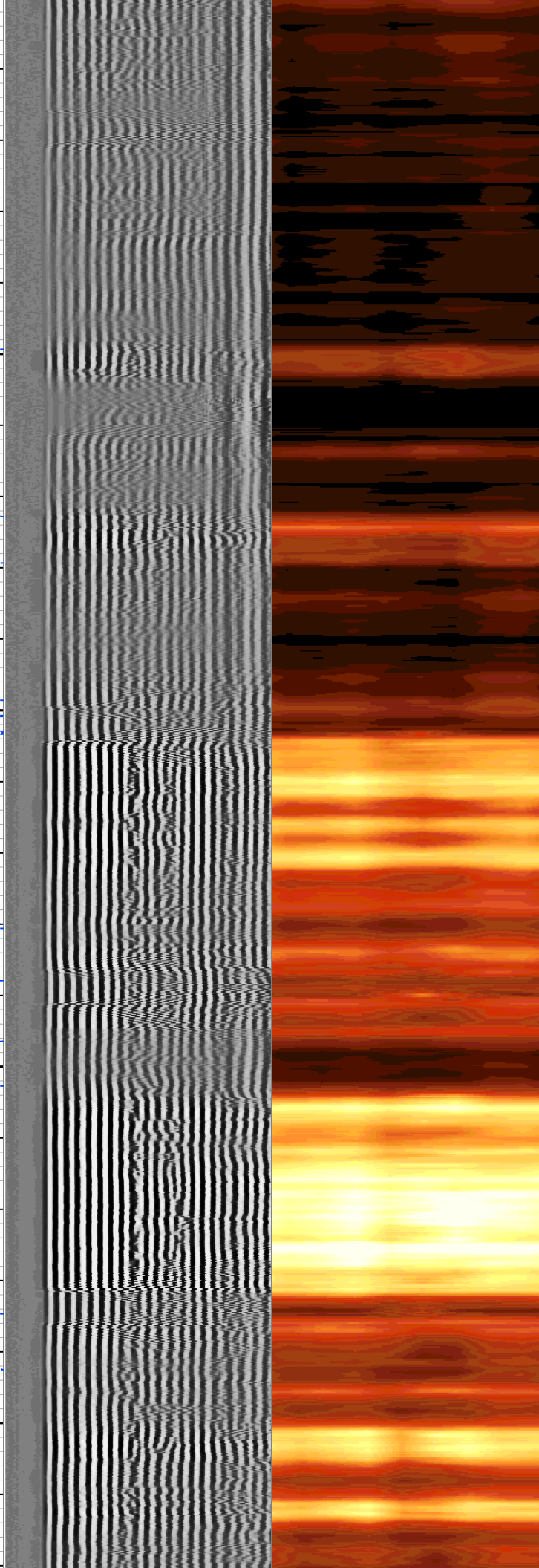
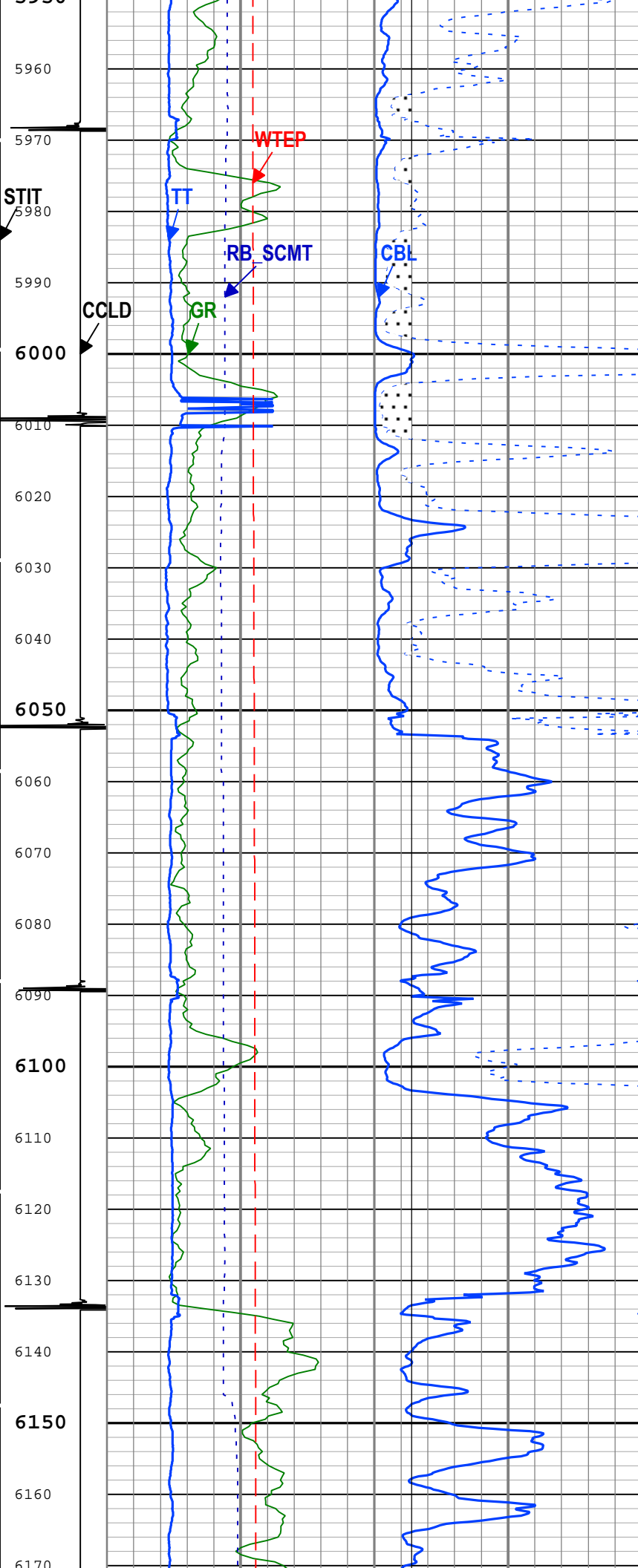


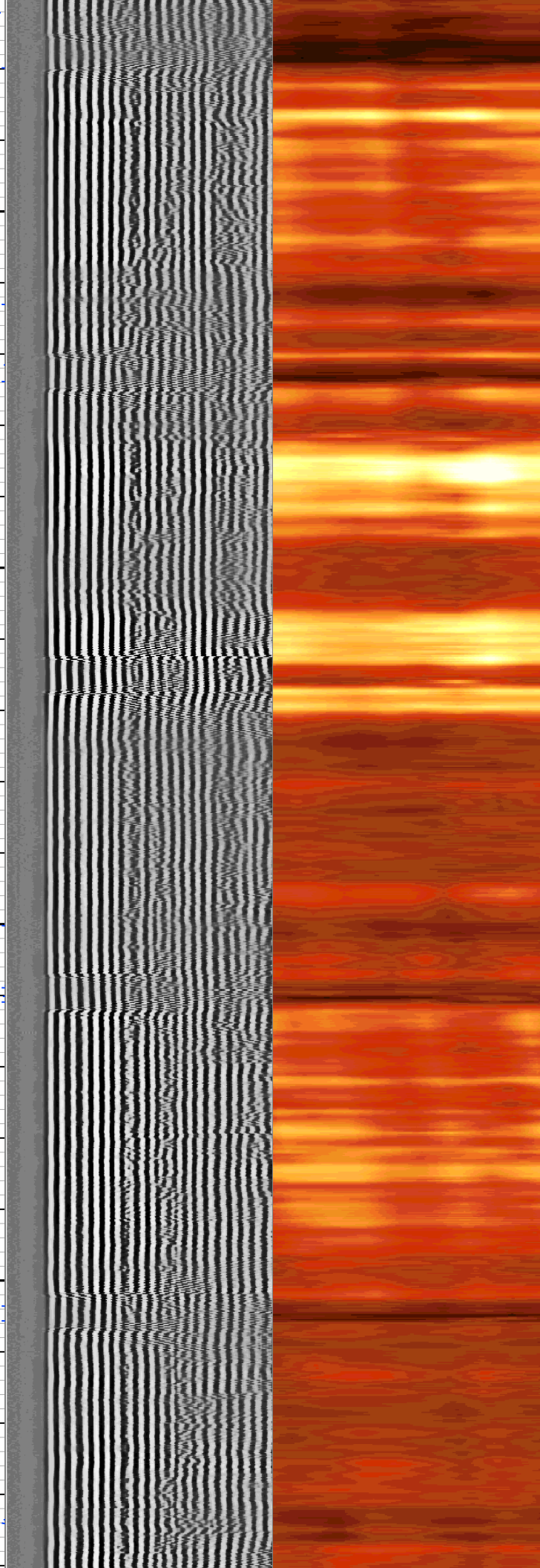
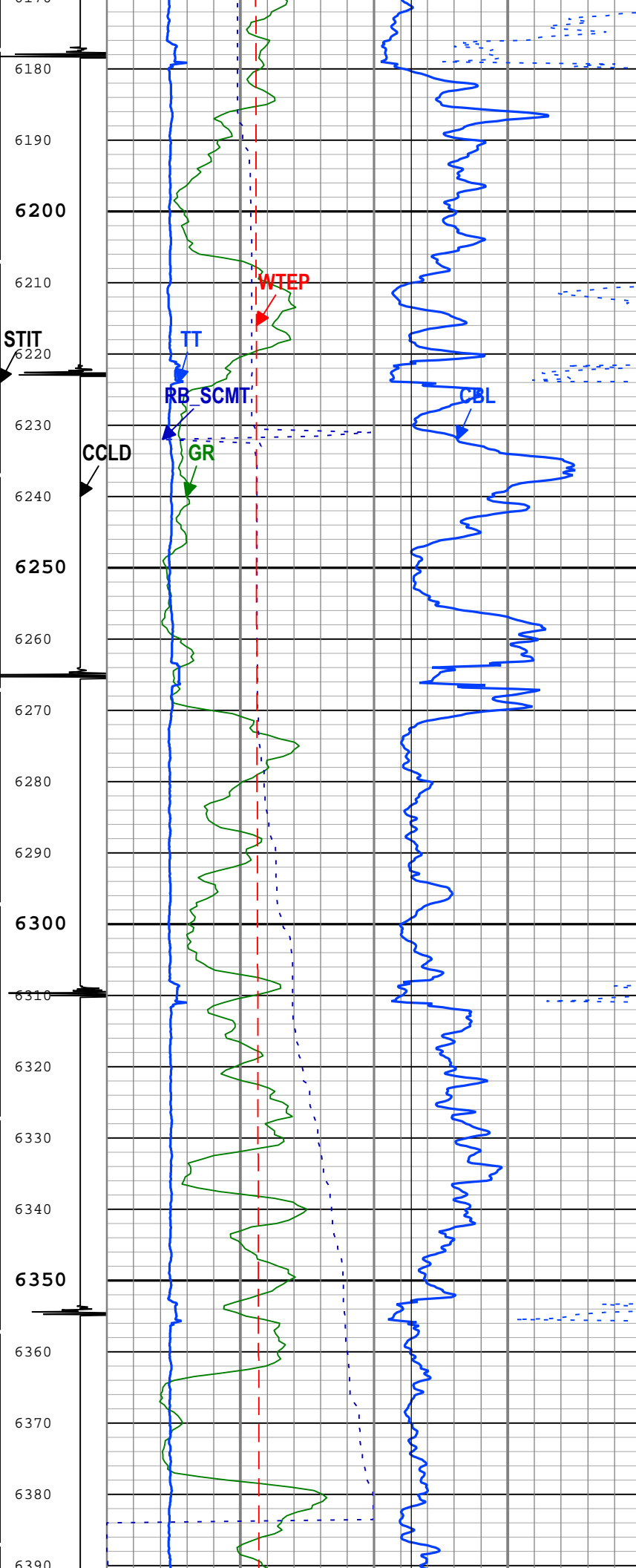


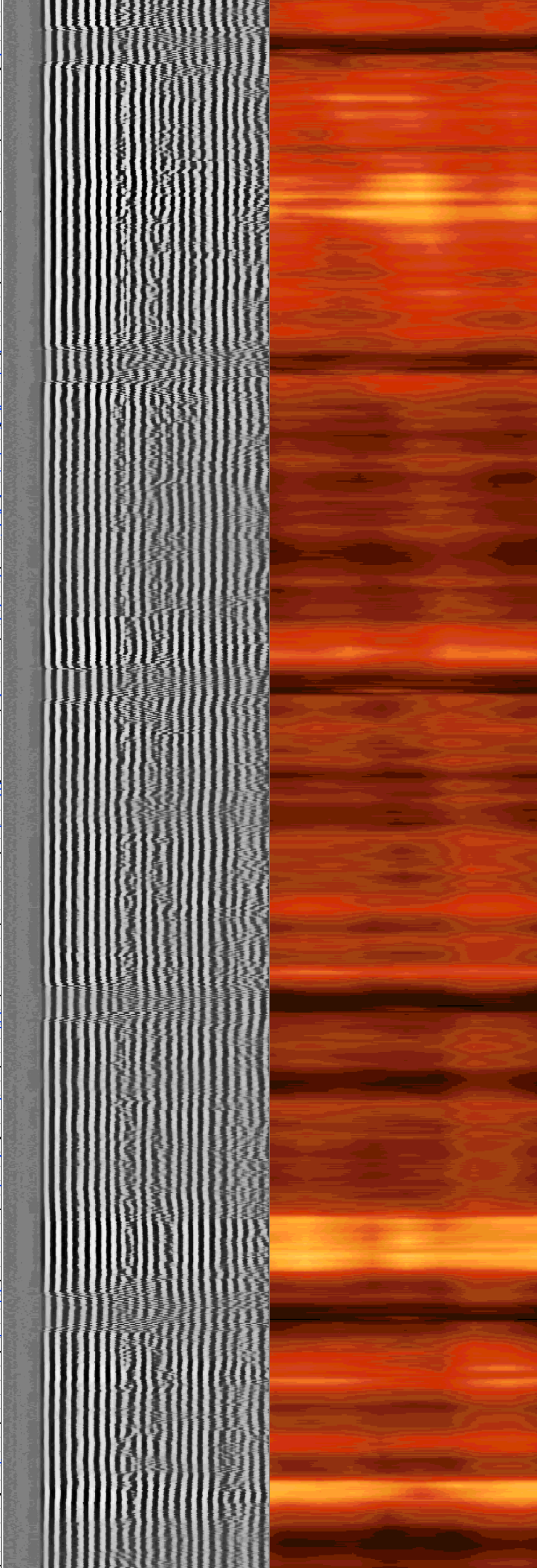
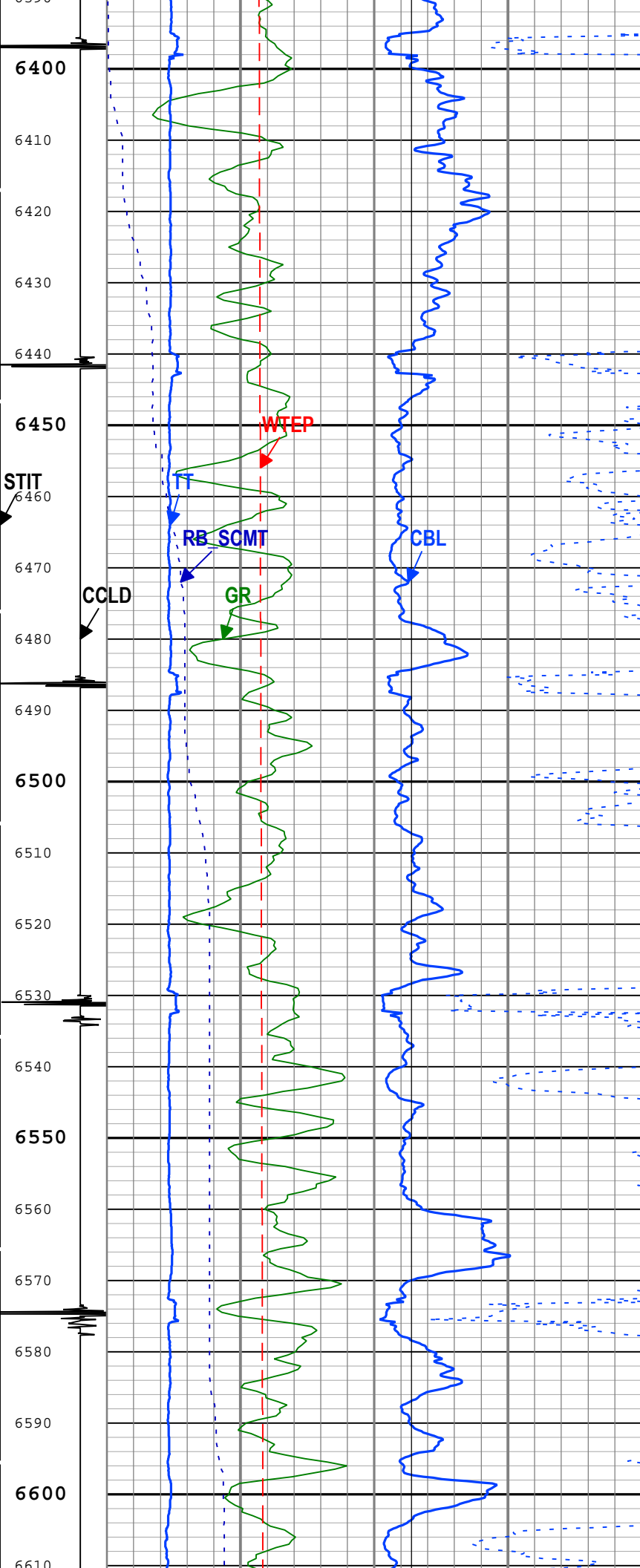


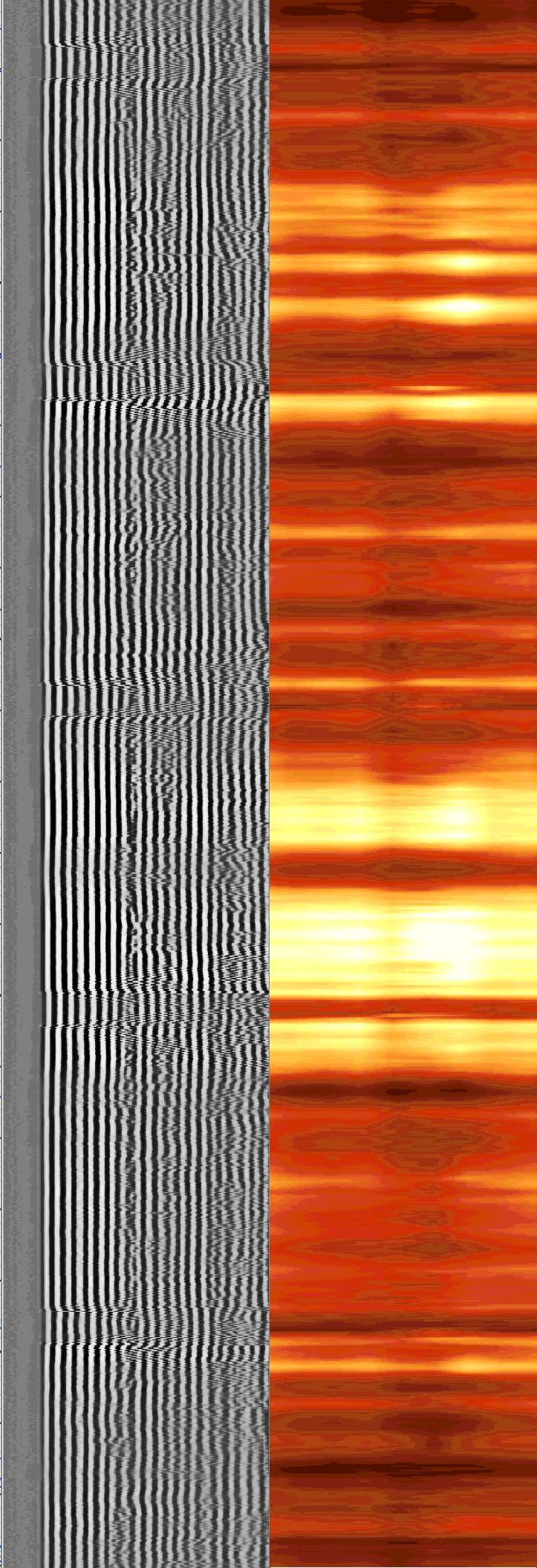
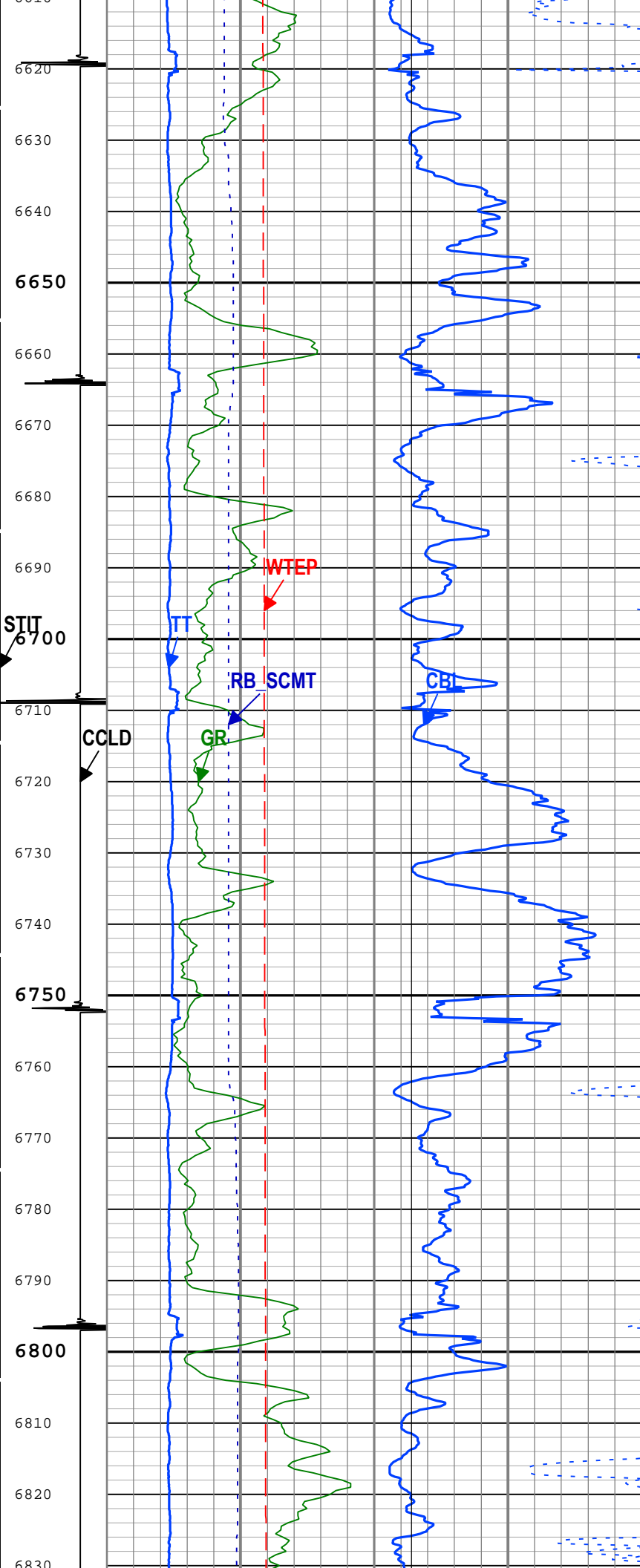


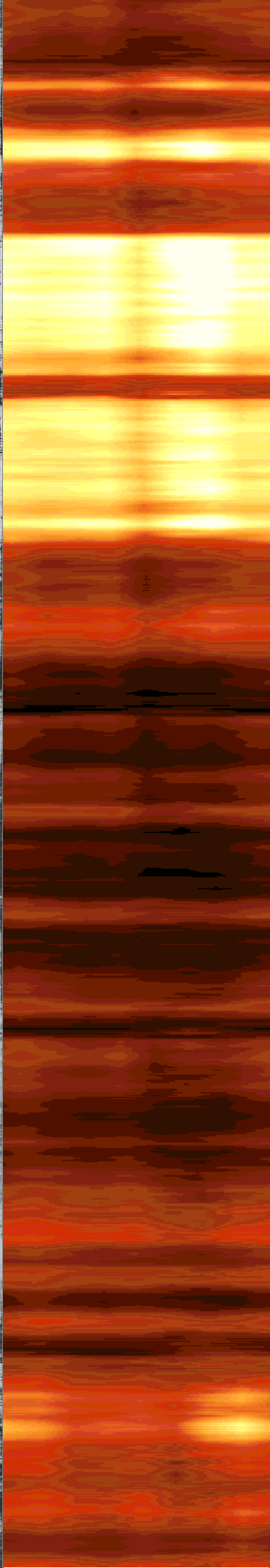
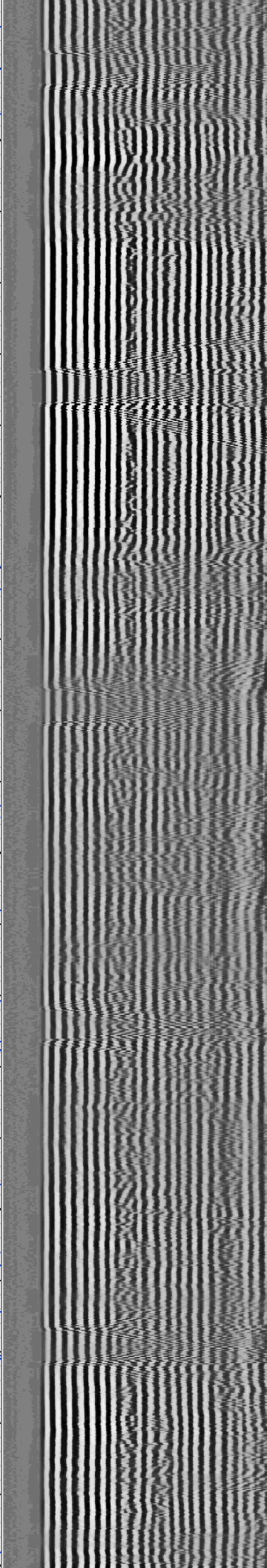
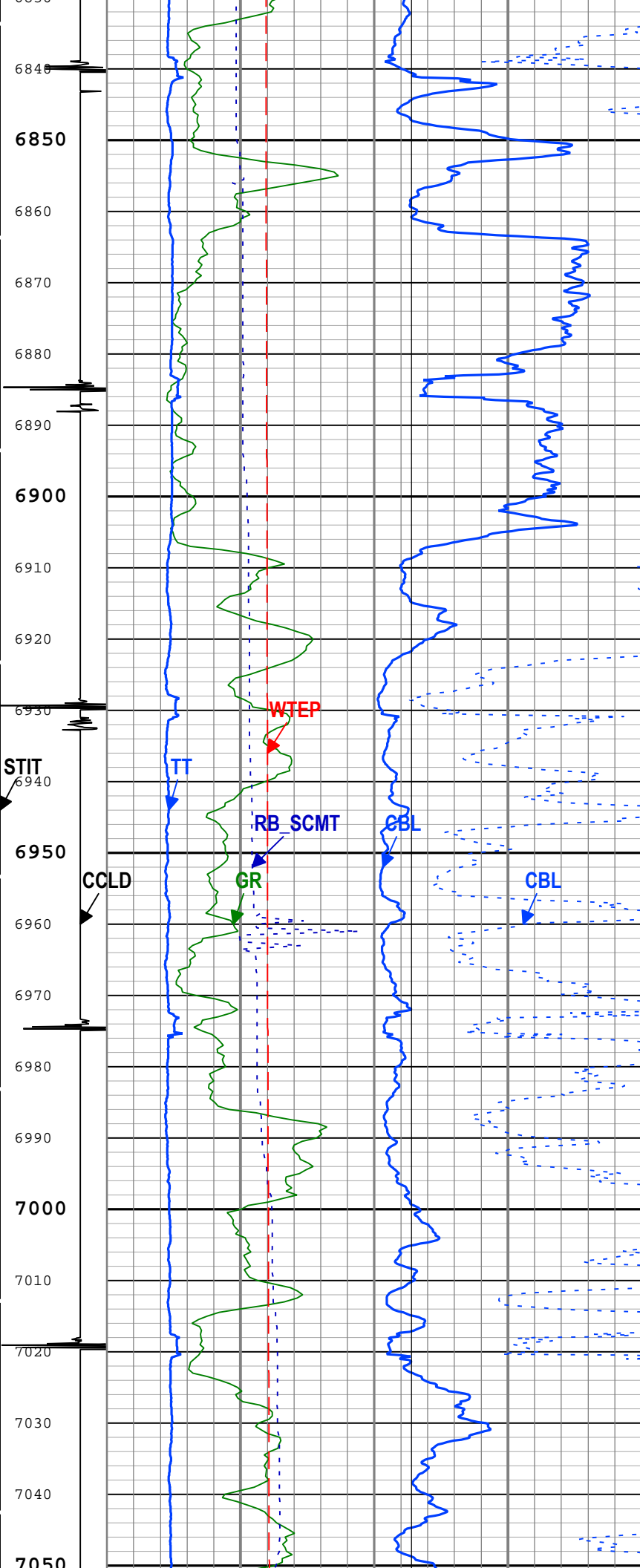


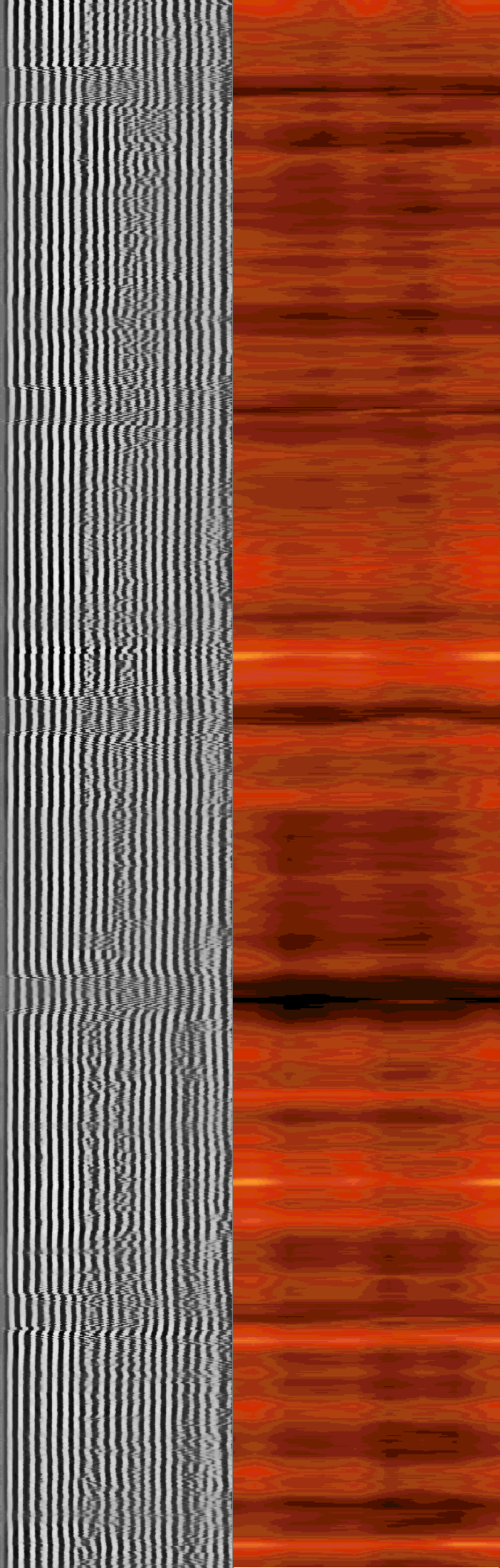
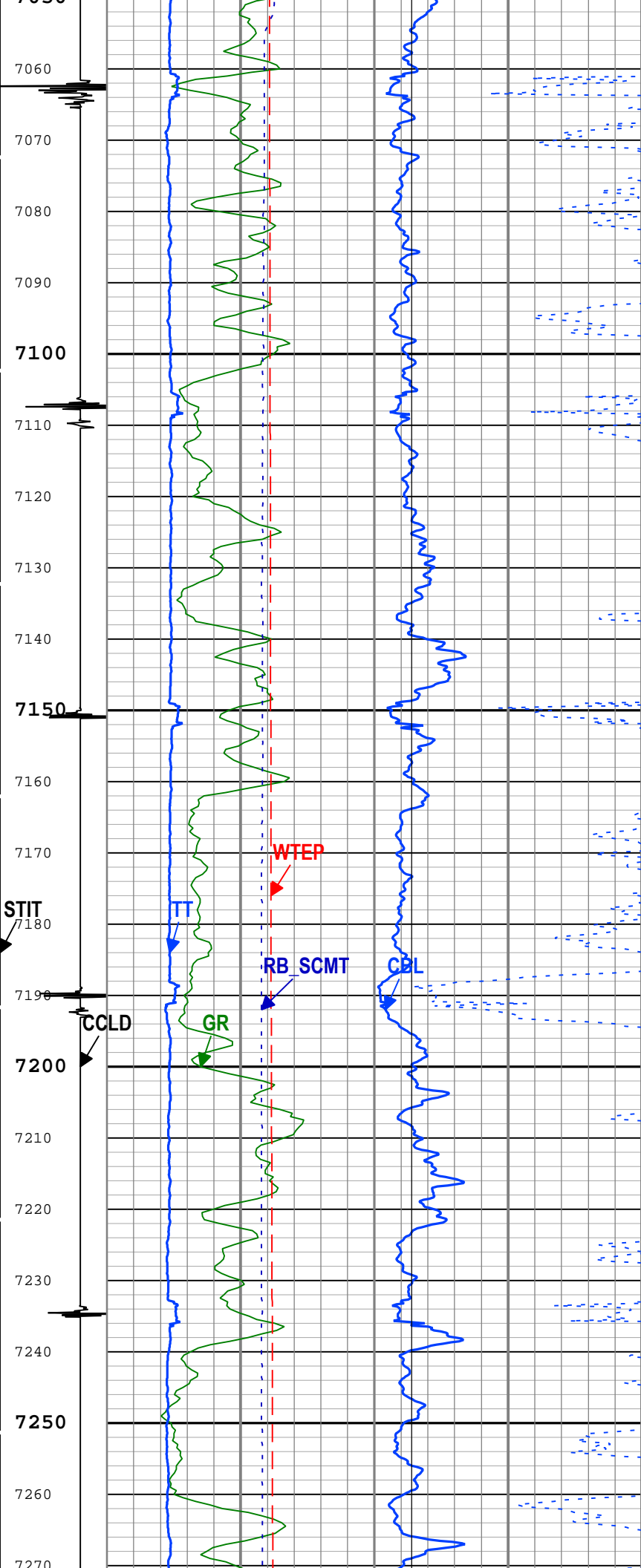


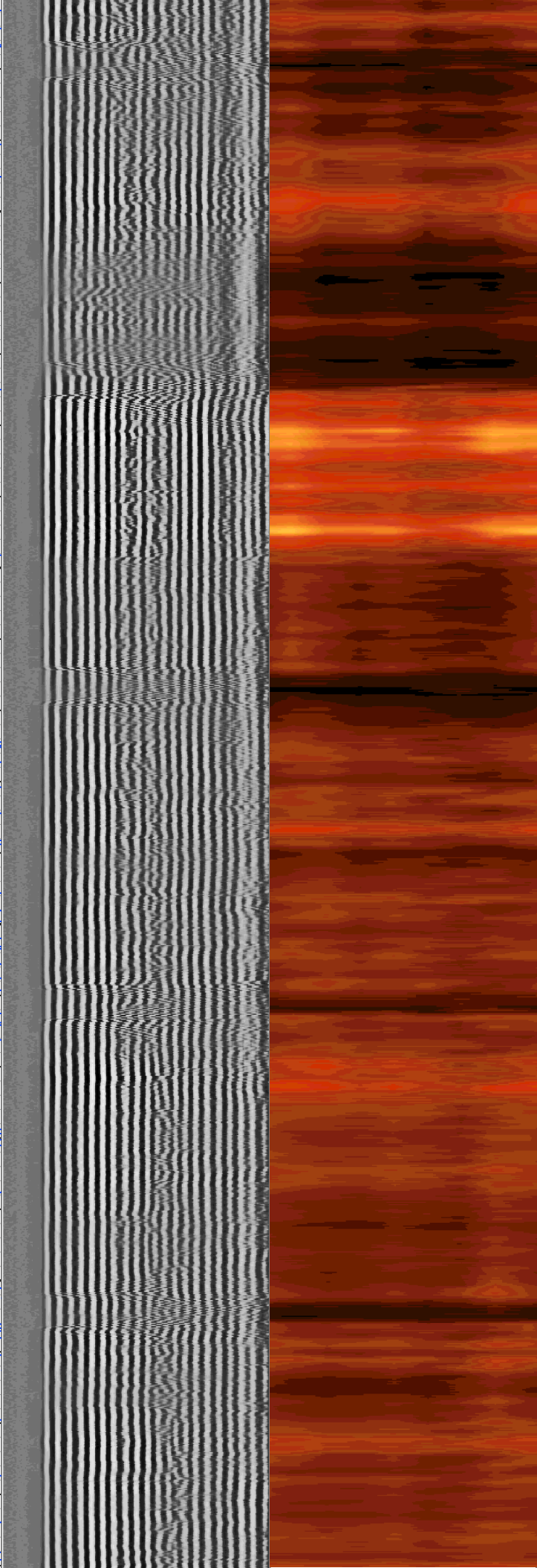
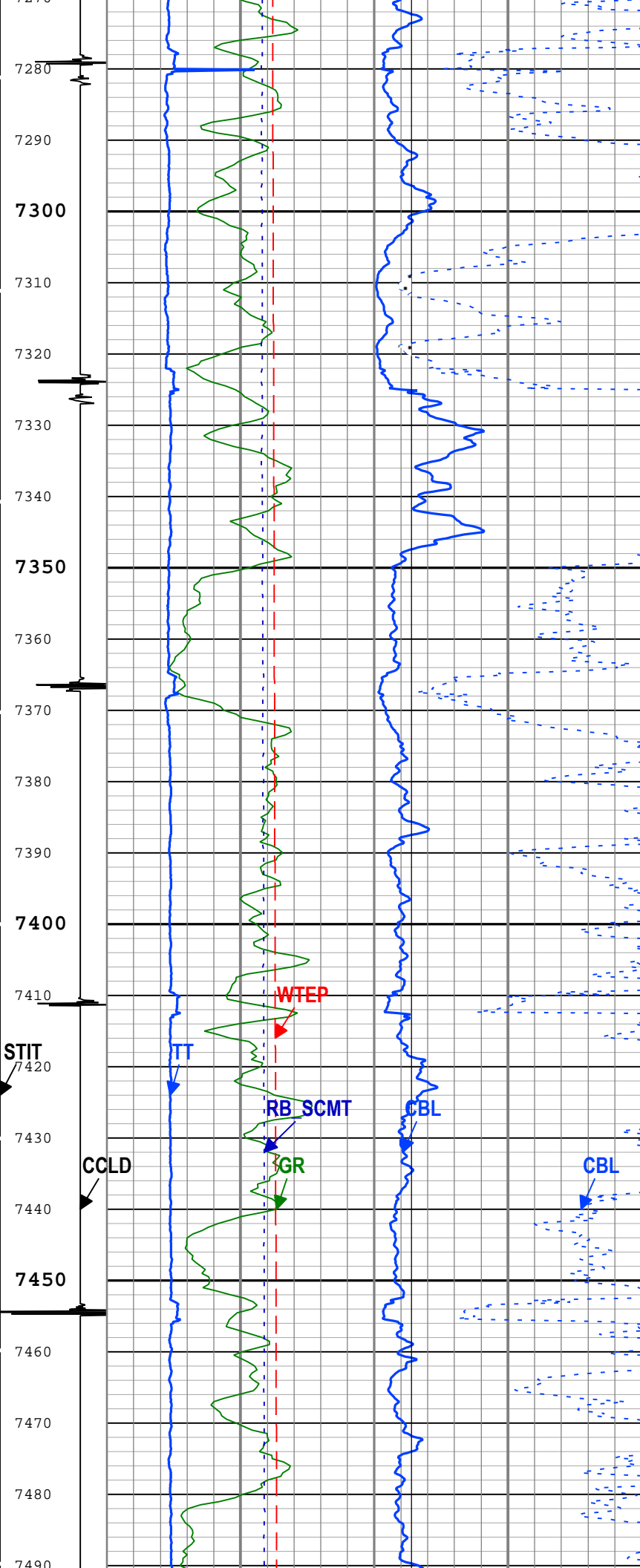


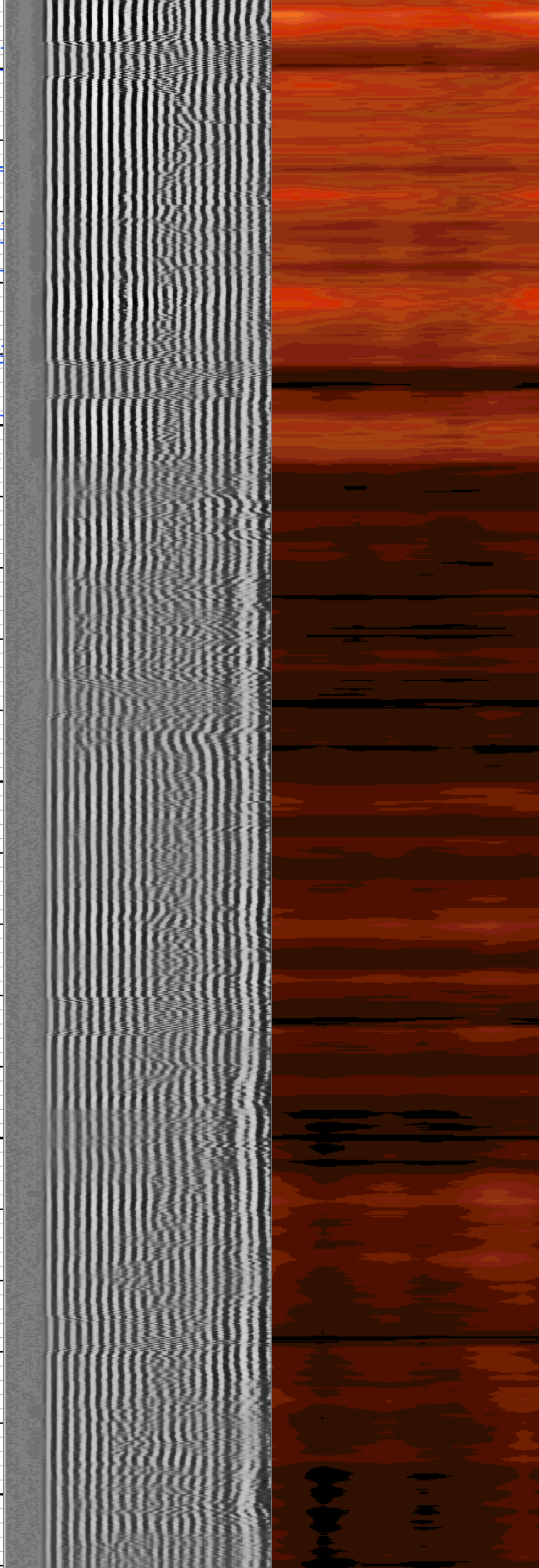
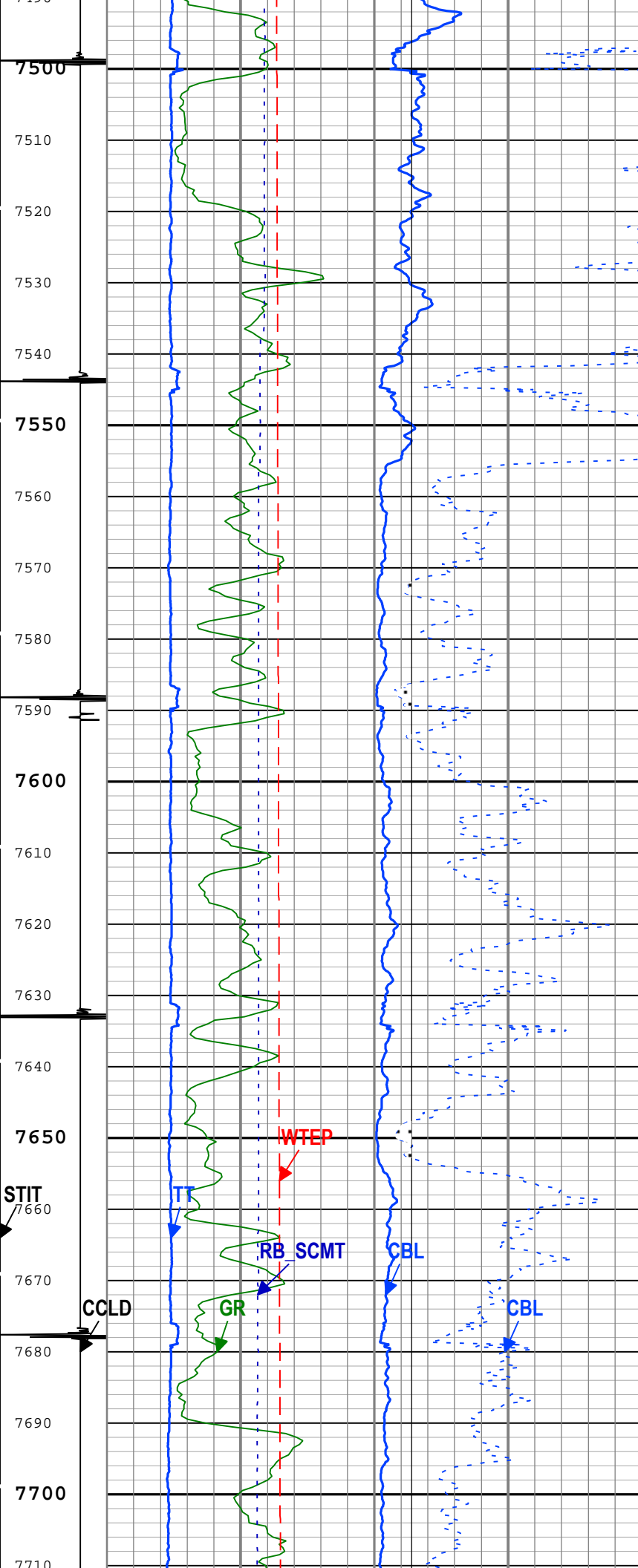


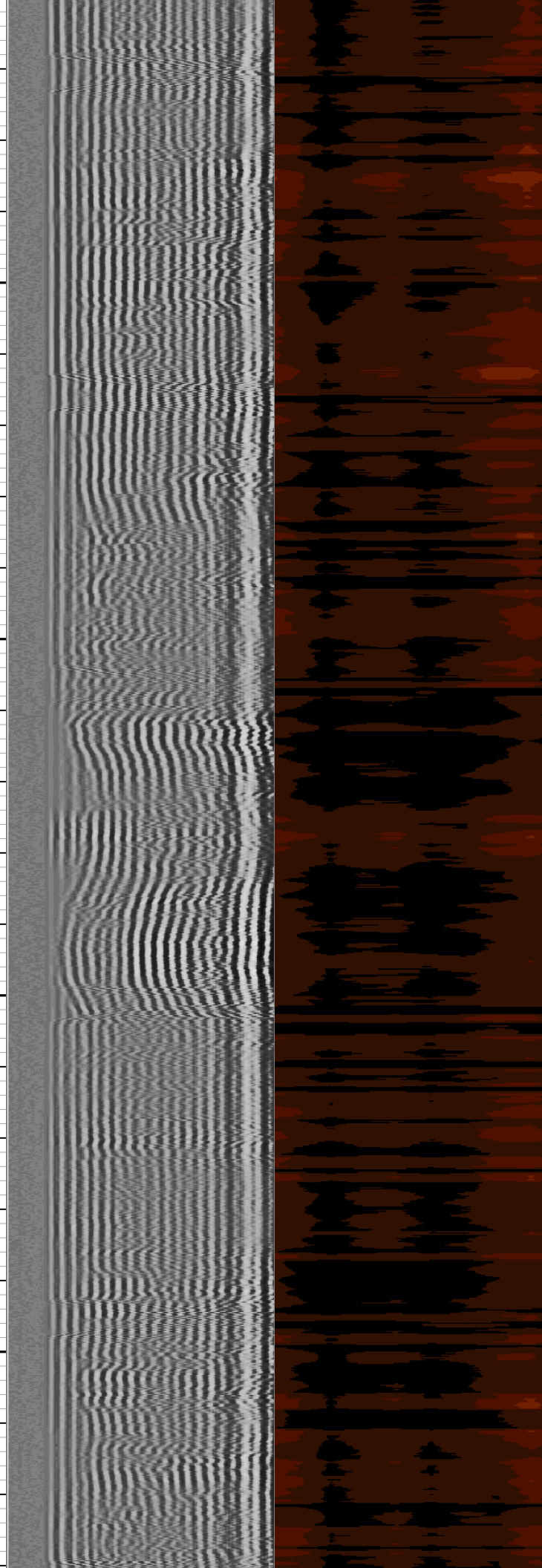
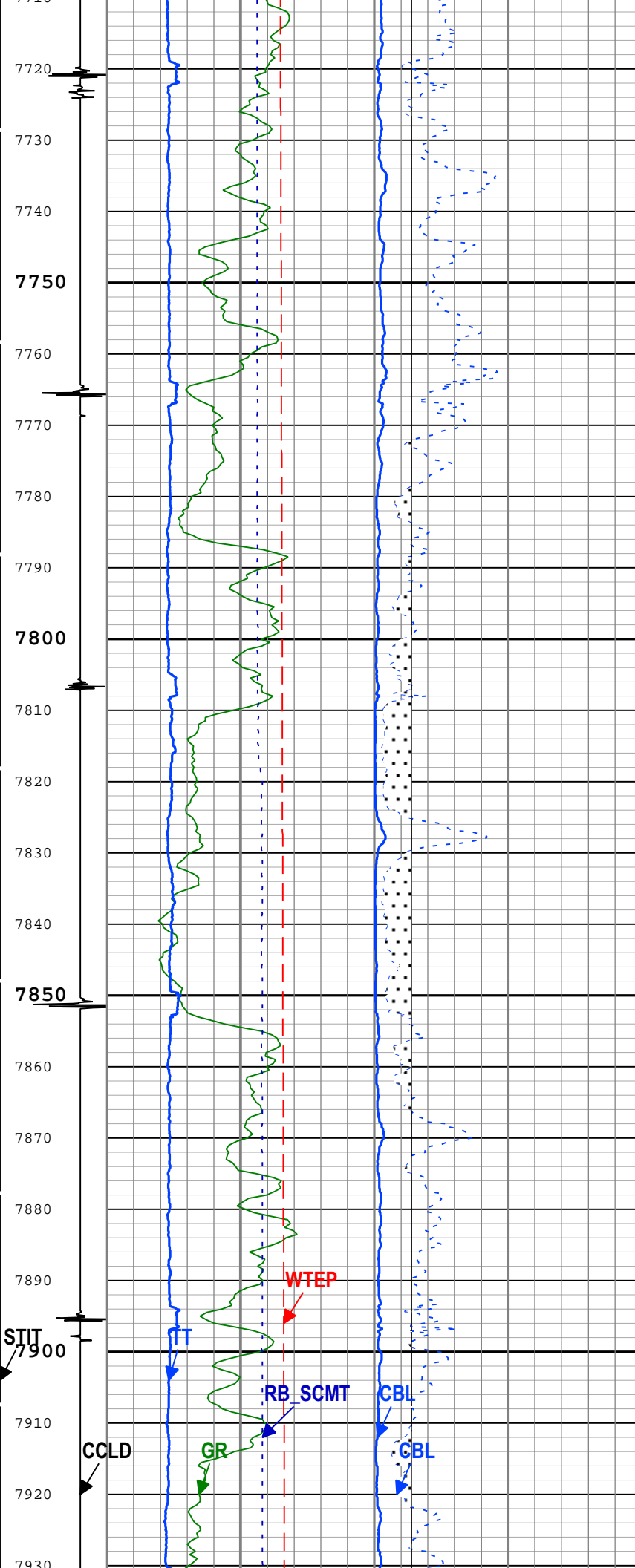


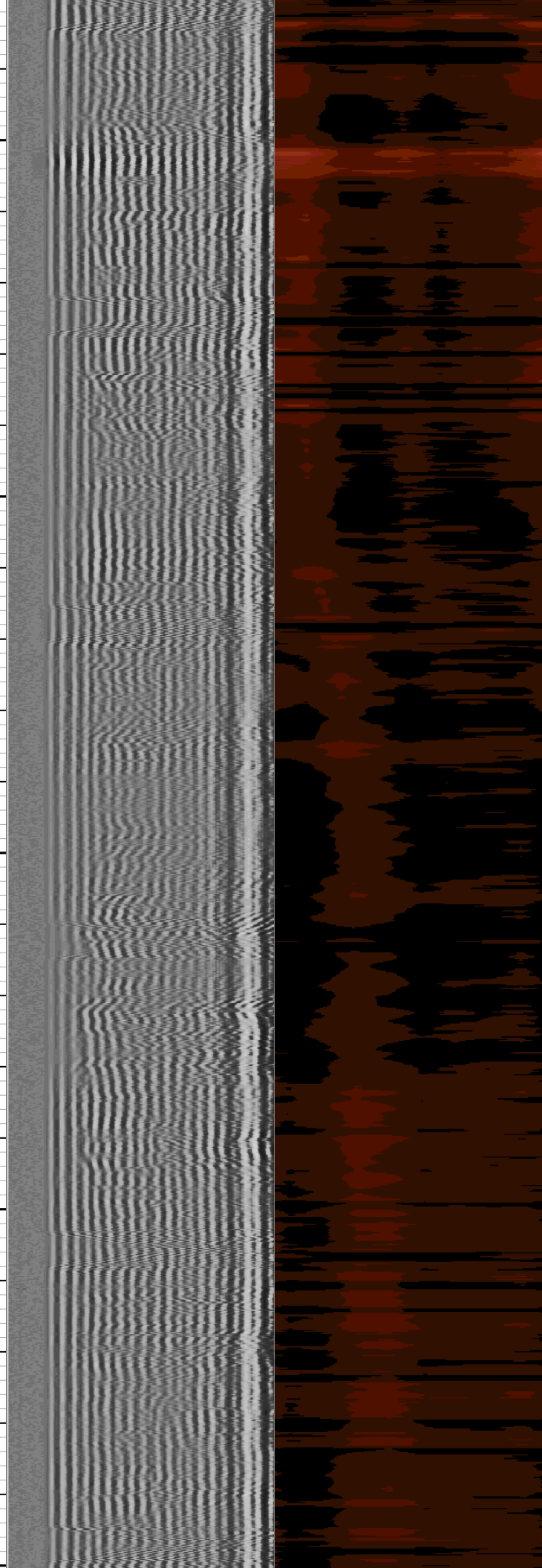
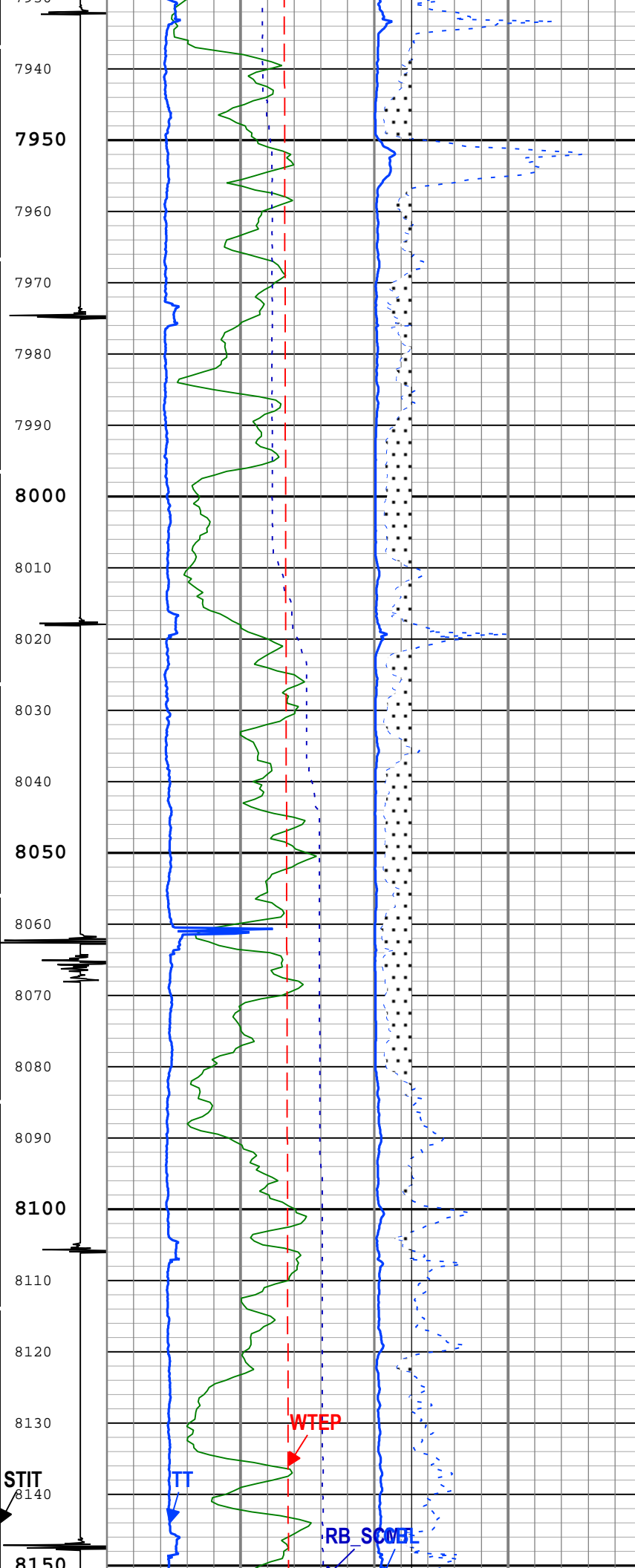


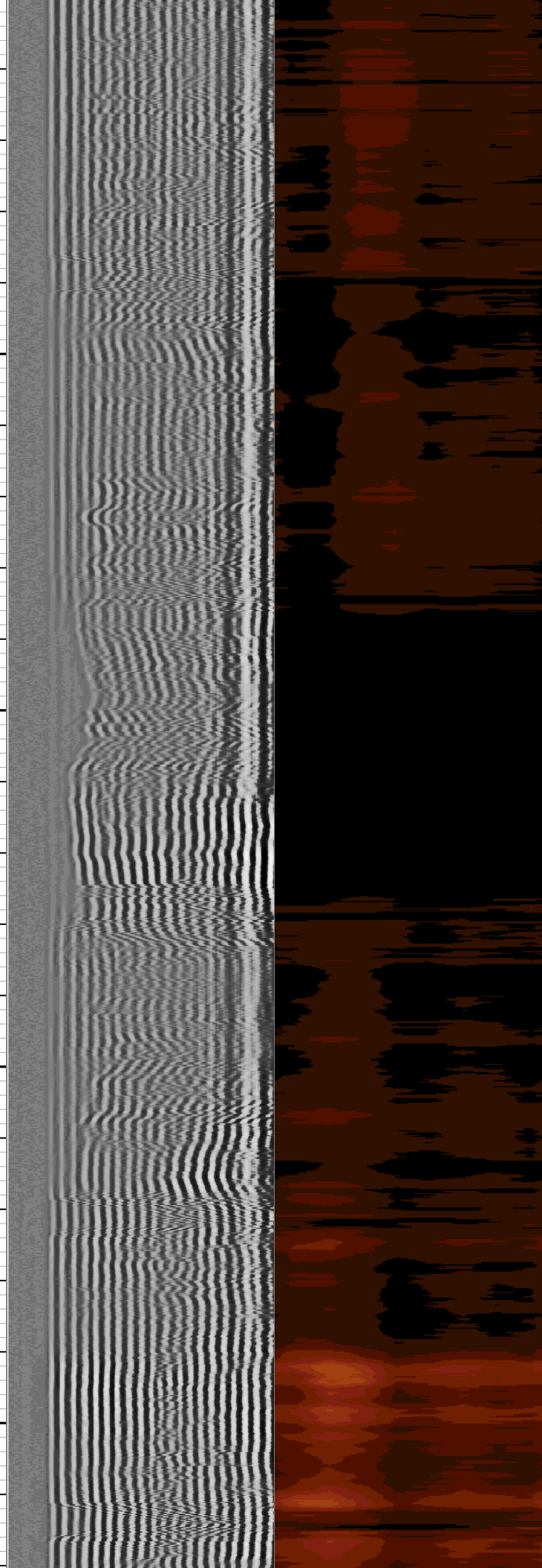
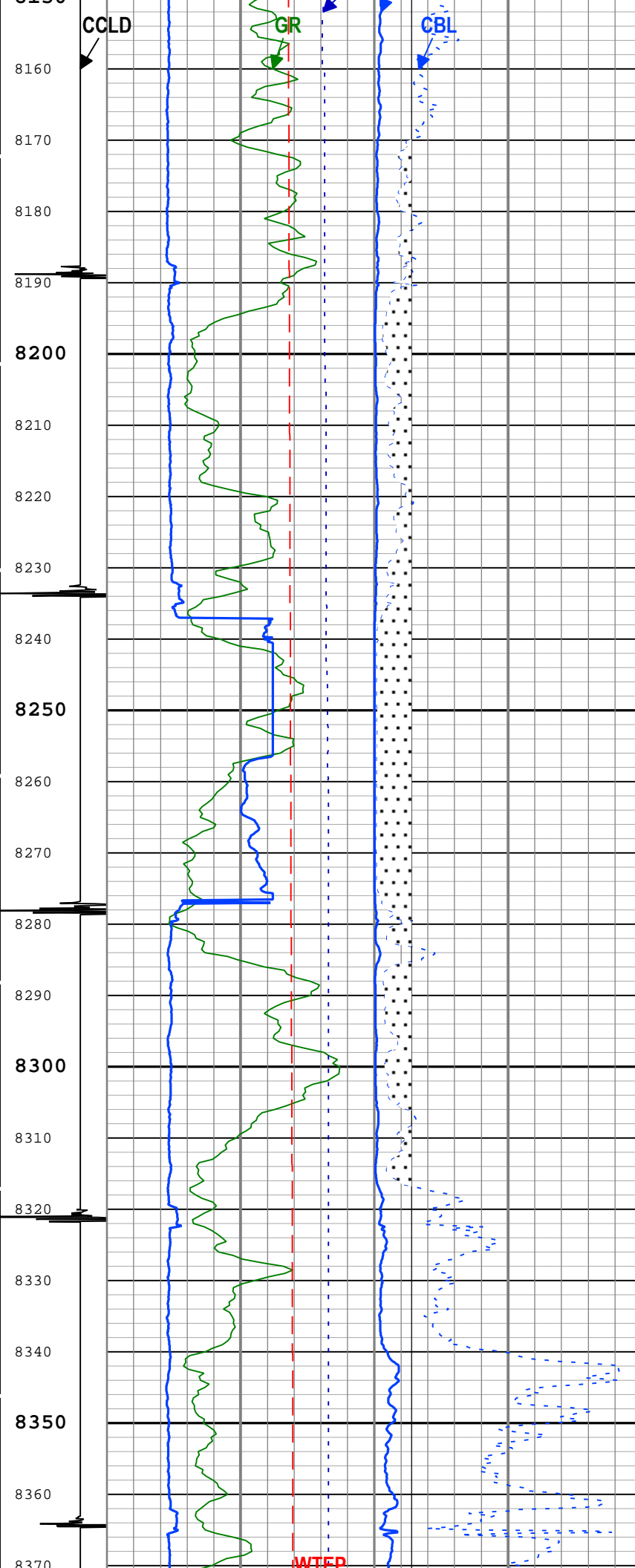


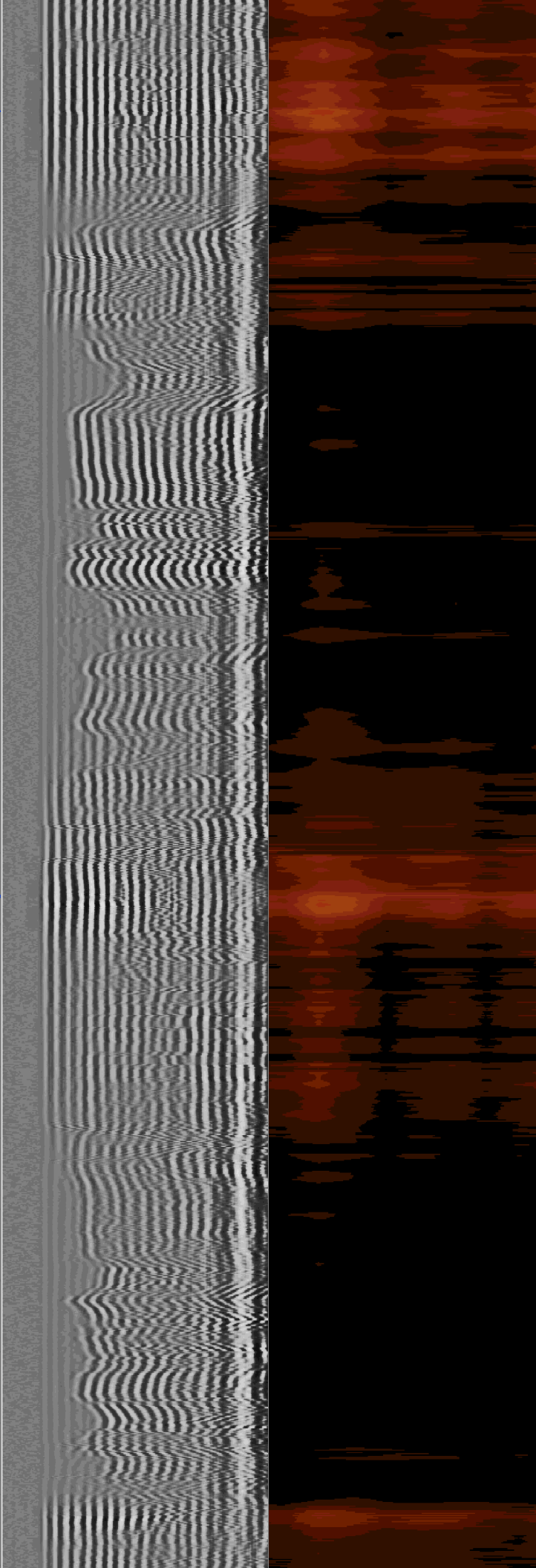
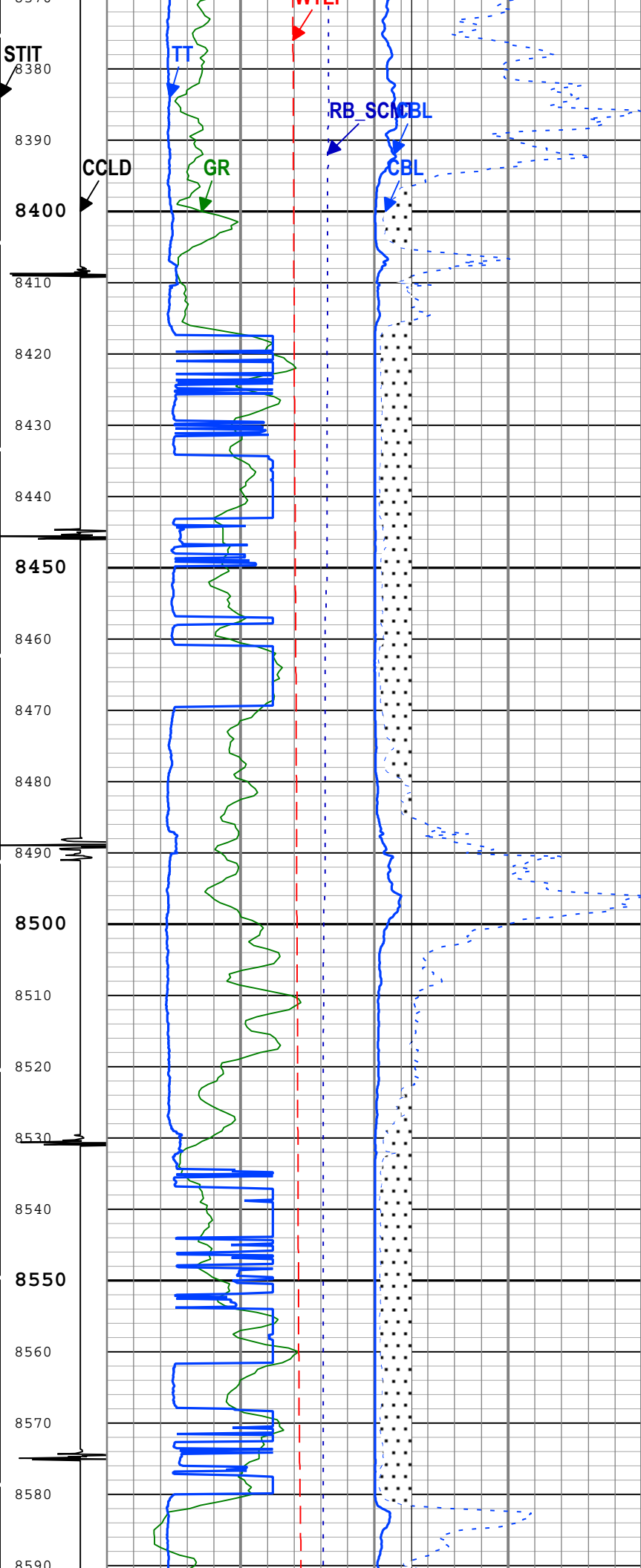


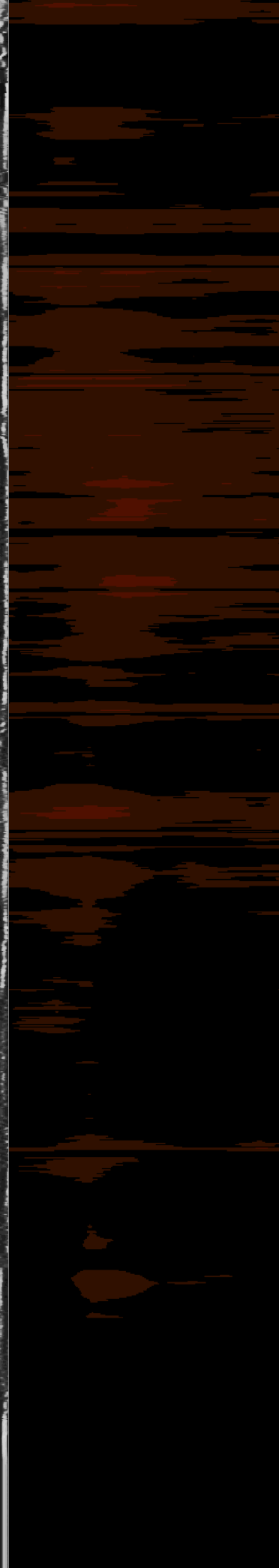
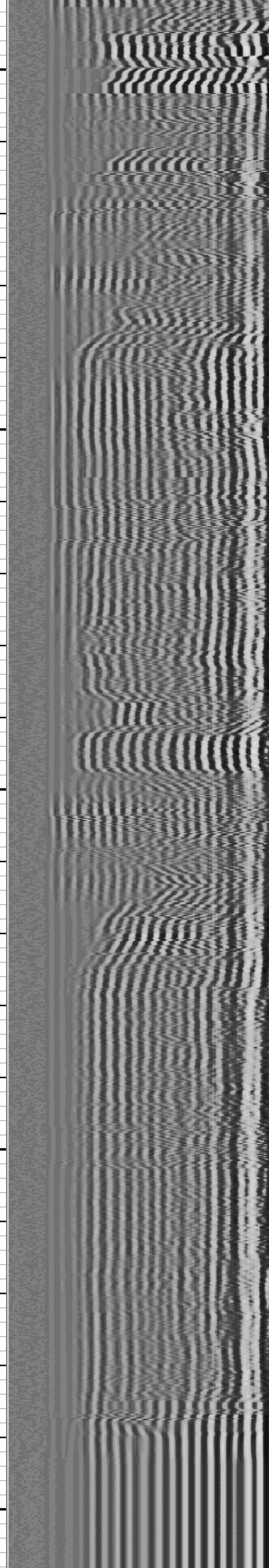
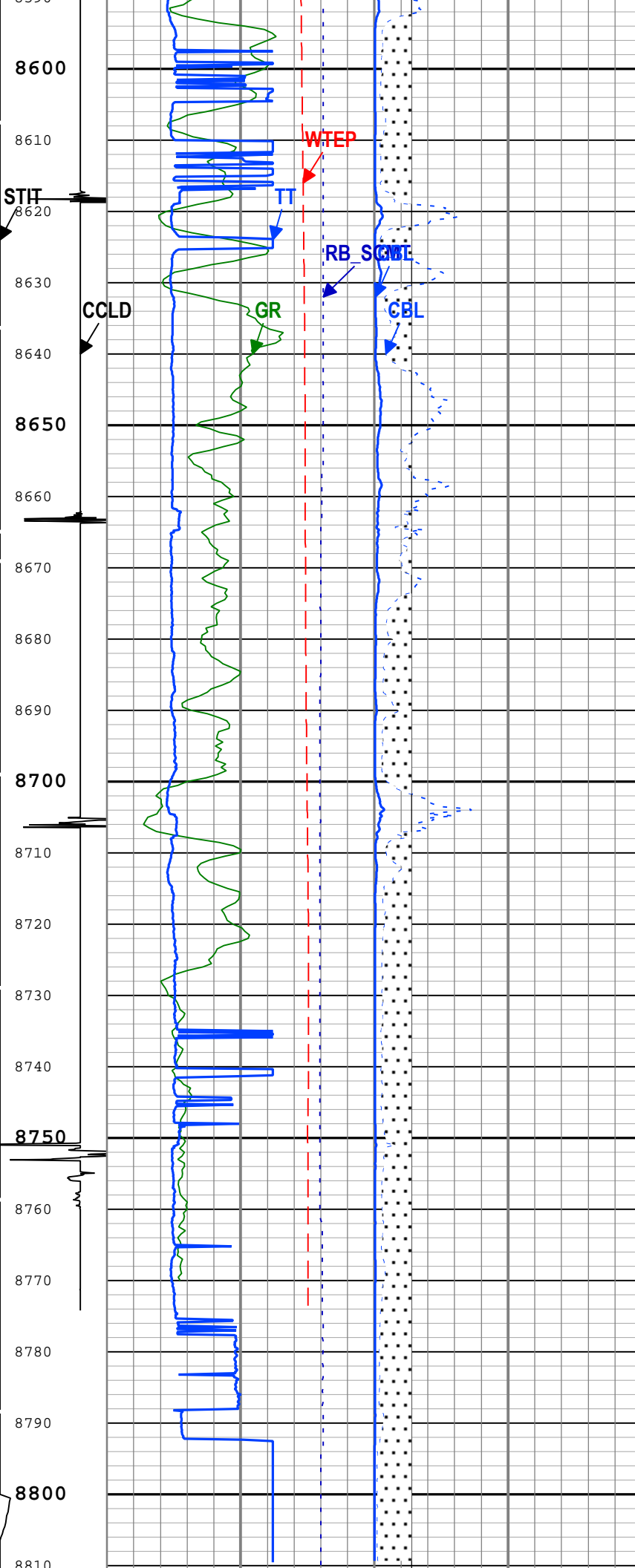


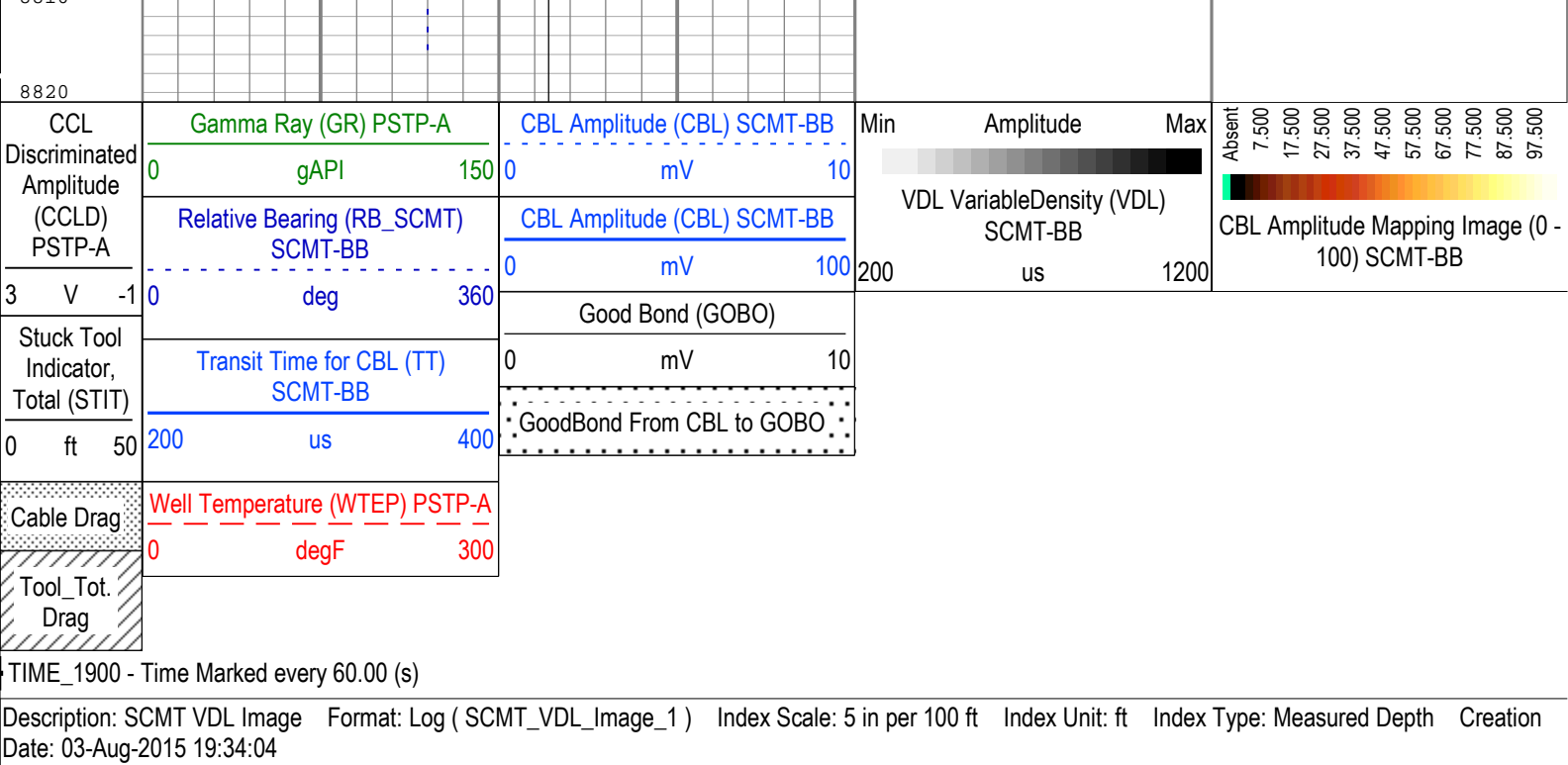












Channel Processing Parameters				
Run 1: Parameters				
Parameter	Description	Tool	Value	Unit
BHT	Bottom Hole Temperature	Borehole	226	degF
CB3G	SCMT CBL 3 ft Peak Detection T0_Delay and Noise Gate	SCMT-BB	224	us
CBLG	CBL Gate Width	SCMT-BB	40	us
CBRA	CBL LQC Reference Amplitude in Free Pipe	SCMT-BB	80	mV
CMCF	CBL Cement Type Compensation Factor	SCMT-BB	0.12	
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	9.1	lbm/gal
DFT	Drilling Fluid Type	Borehole	Water	
DTMD	Borehole Fluid Slowness	Borehole	196	us/ft
GOBO_CURR	Good Bond in Arbitrary Cement	SCMT-BB	7.87	mV
GTSE	Generalized Temperature Selection, from Measured or Computed Temperature	Borehole	WTEP	
MAPG	SCMT MAP Peak Detection T0_Delay and Noise Gate	SCMT-BB	167	us
MATT_CURR	Maximum Attenuation in Arbitrary Cement	SCMT-BB	10.14	dB/ft
MCCF	MAP Cement Type Compensation Factor	SCMT-BB	0.25	
MCI	Minimum Cemented Interval for Isolation	SCMT-BB	Depth Zoned	ft
MMSA	MAP Minimum Sonic Amplitude	SCMT-BB	3.98	mV
MSA	Minimum Sonic Amplitude	SCMT-BB	0.51	mV
MSA_CURR	Minimum Sonic Amplitude in Arbitrary Cement	SCMT-BB	4.41	mV
RUN_SNUM	Run Sequence Number	WSDRUN	1	
TD	Total Measured Depth	Borehole	8940	ft
ZCMT	Acoustic Impedance of Cement	SCMT-BB	3.4	Mrayl
Depth Zone Parameters				
Parameter	Value	Start (ft)	Stop (ft)	
MCI	14.81	2420	2550	
MCI	1.25	2550	8821	
All depth are actual.				

Tool Control Parameters

Run 1: Parameters

Parameter	Description	Tool	Value	Unit
CMTM	SCMT Operating Mode	SCMT-BB	Log	
MAX_LOG_SPEED	Toolstring Maximum Logging Speed	WLSESSION	150	ft/h

Run 1

Amplitude-Image Repeat

Software Version

Acquisition System	Version
Maxwell 2016	6.0.47569.3100

Pass Summary

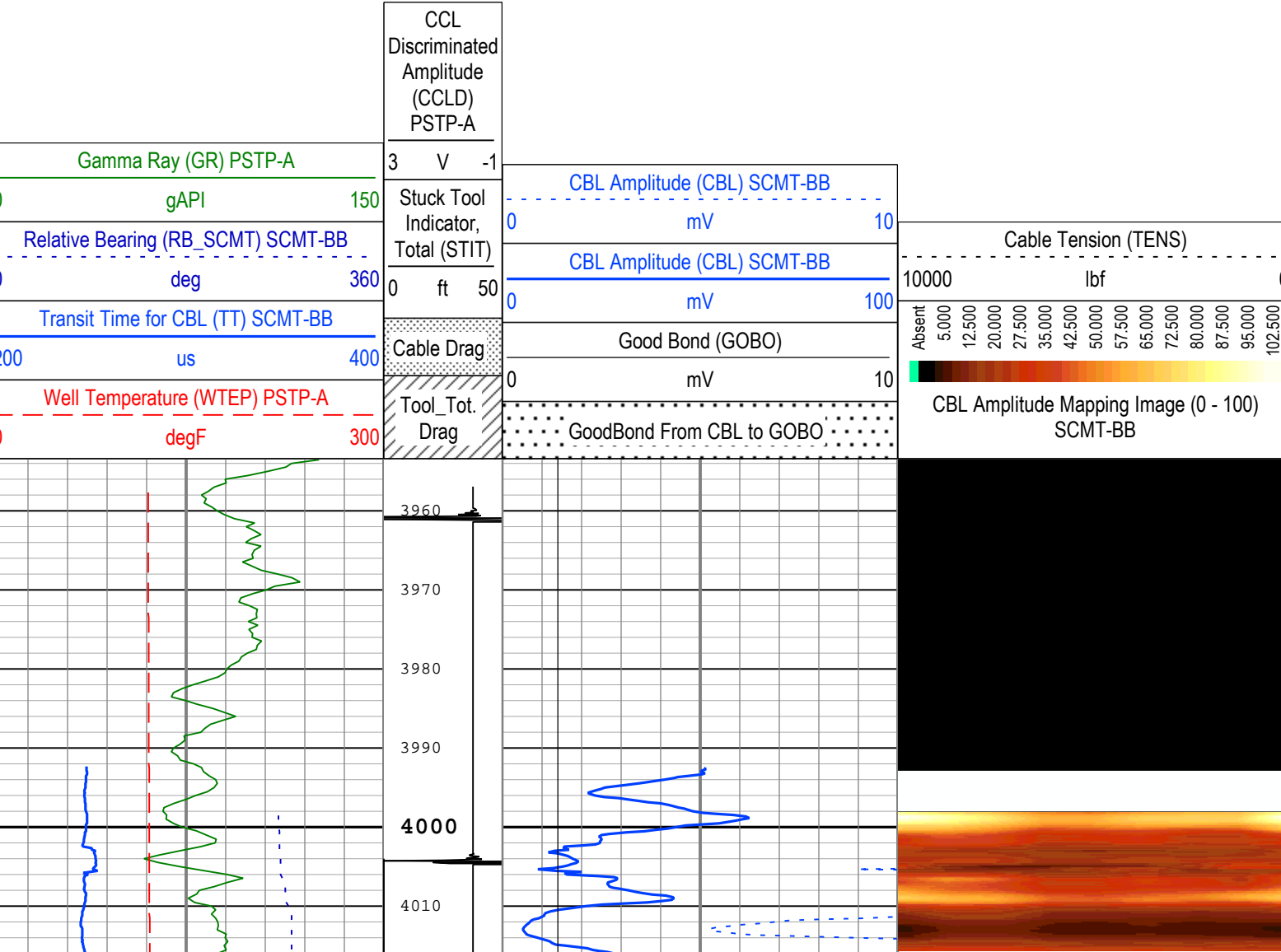
Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	DSC Mode	Depth Shift	Include Parallel Data
Run 1	Log[2]:Up	Up	4003.80 ft	5004.45 ft	20-May-2015 8:07:20 PM	20-May-2015 8:40:40 PM	ON	2.44 ft	Yes

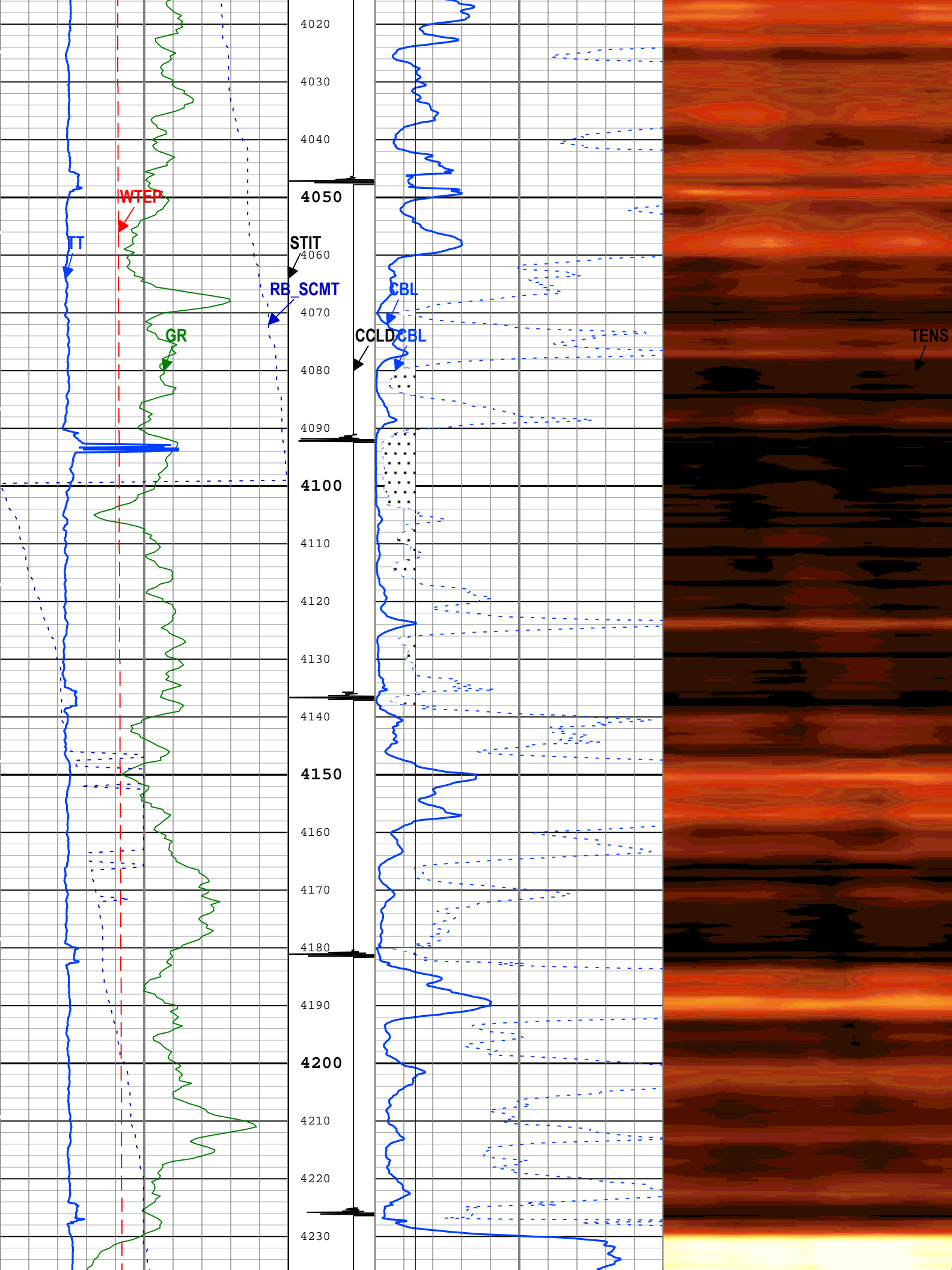
All depths are referenced to toolstring zero

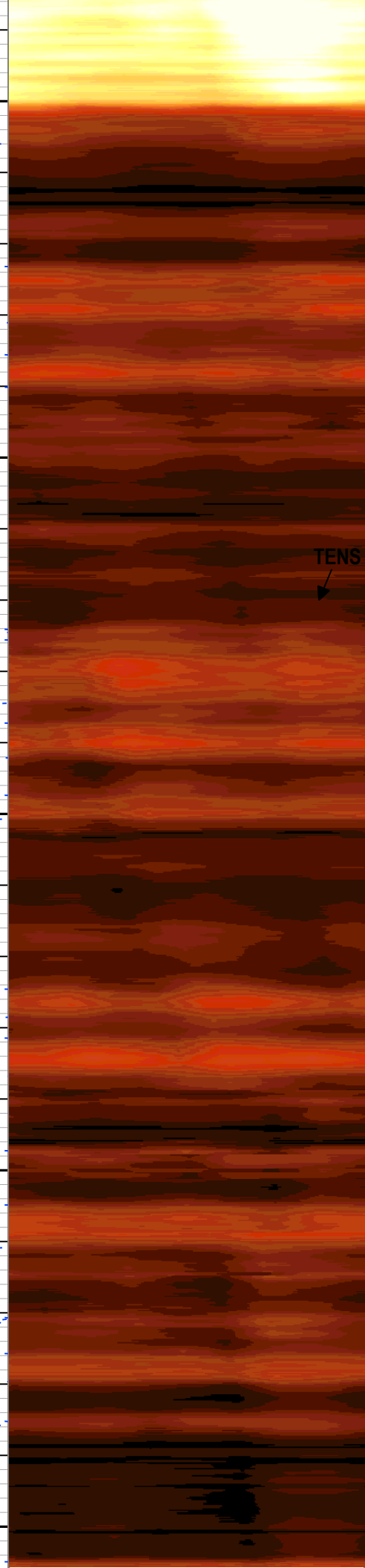
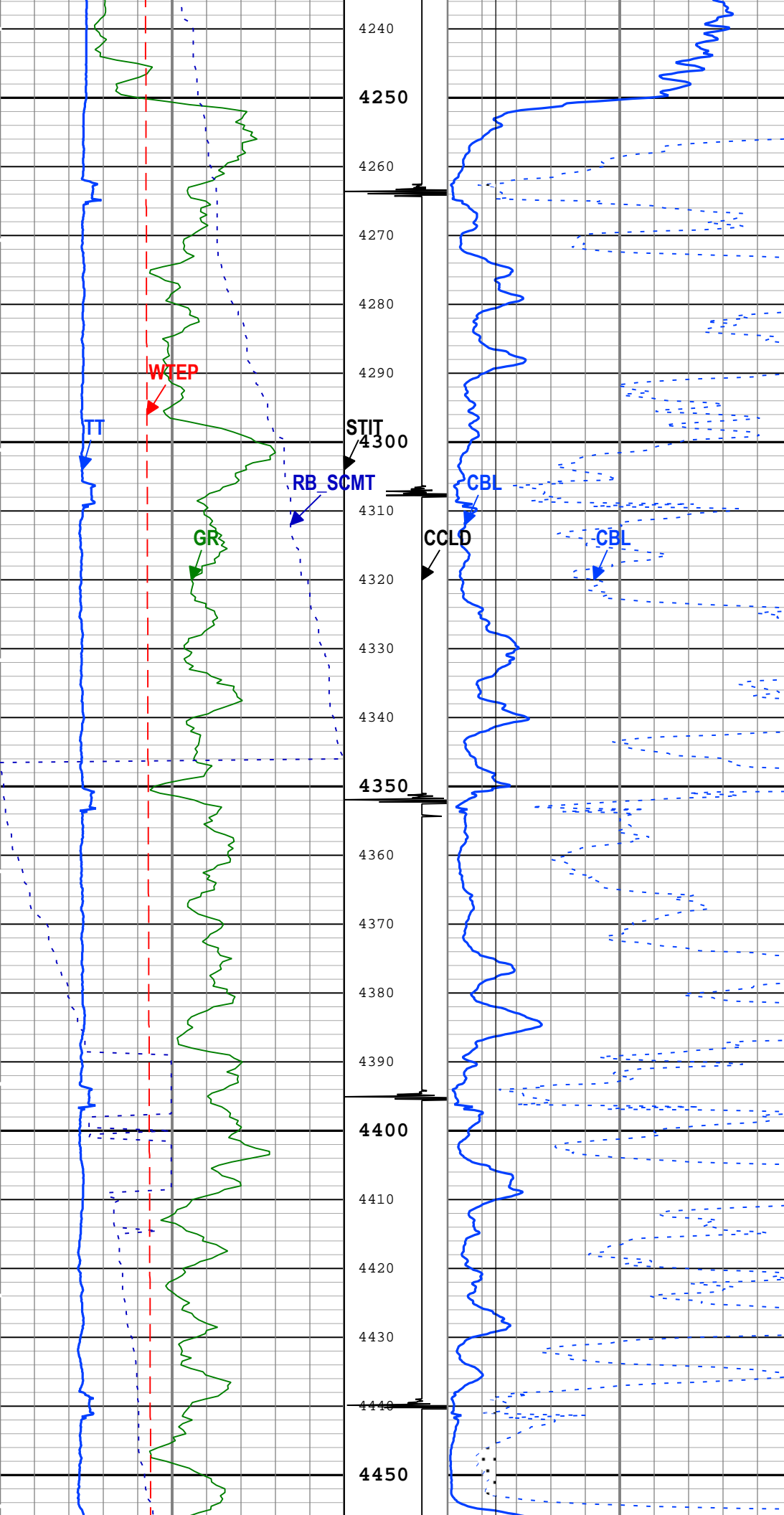
Log	Company:Caerus Piceance LLC Well:Puckett 43A-2 Run 1: Log[2]:Up:S008
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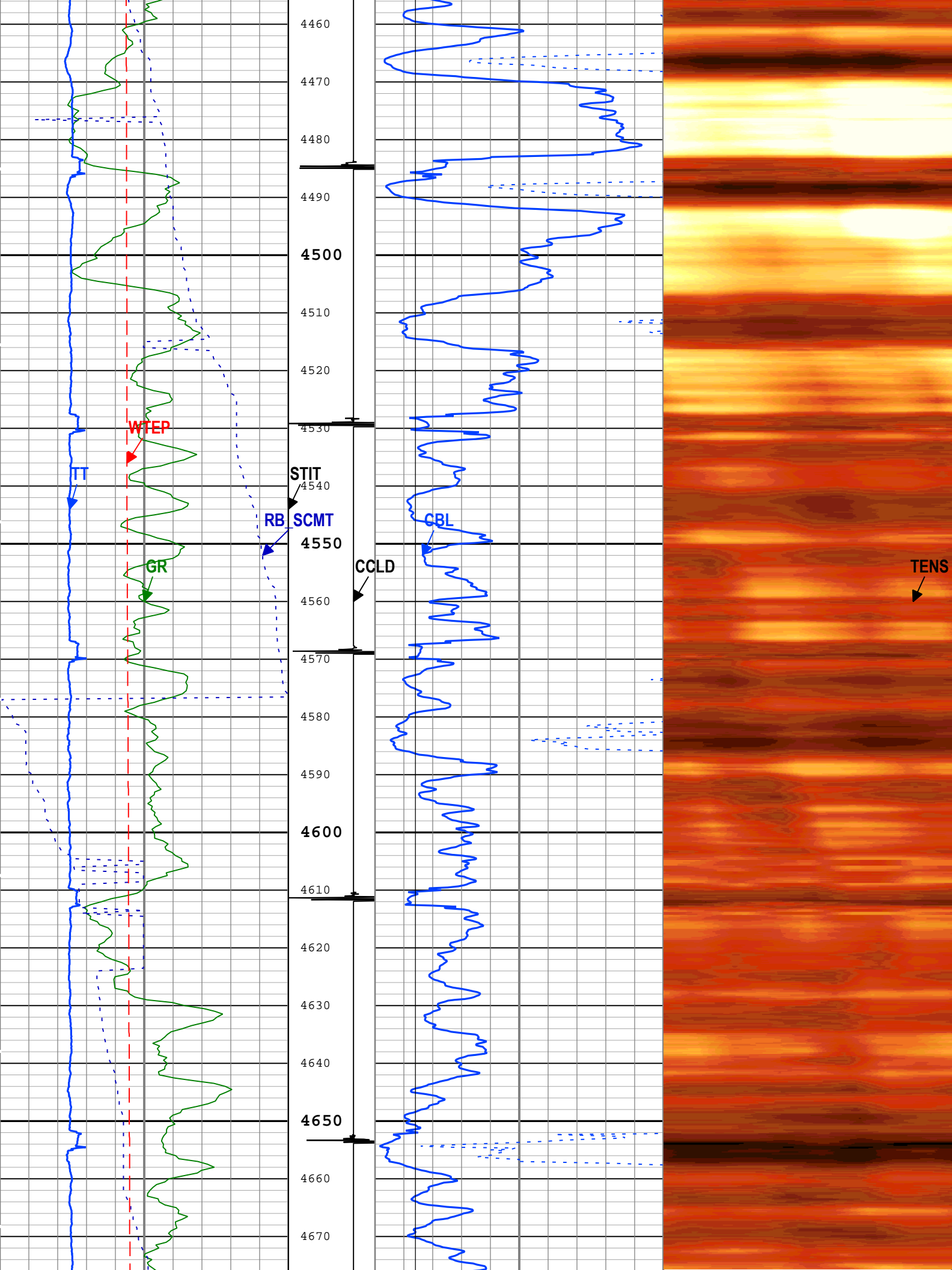
Description: SCMT Amplitudes and MAP Image Format: Log (SCMT_Amp_Image_1) Index Scale: 5 in per 100 ft Index Unit: ft Index Type: Measured
Depth Creation Date: 03-Aug-2015 19:34:12

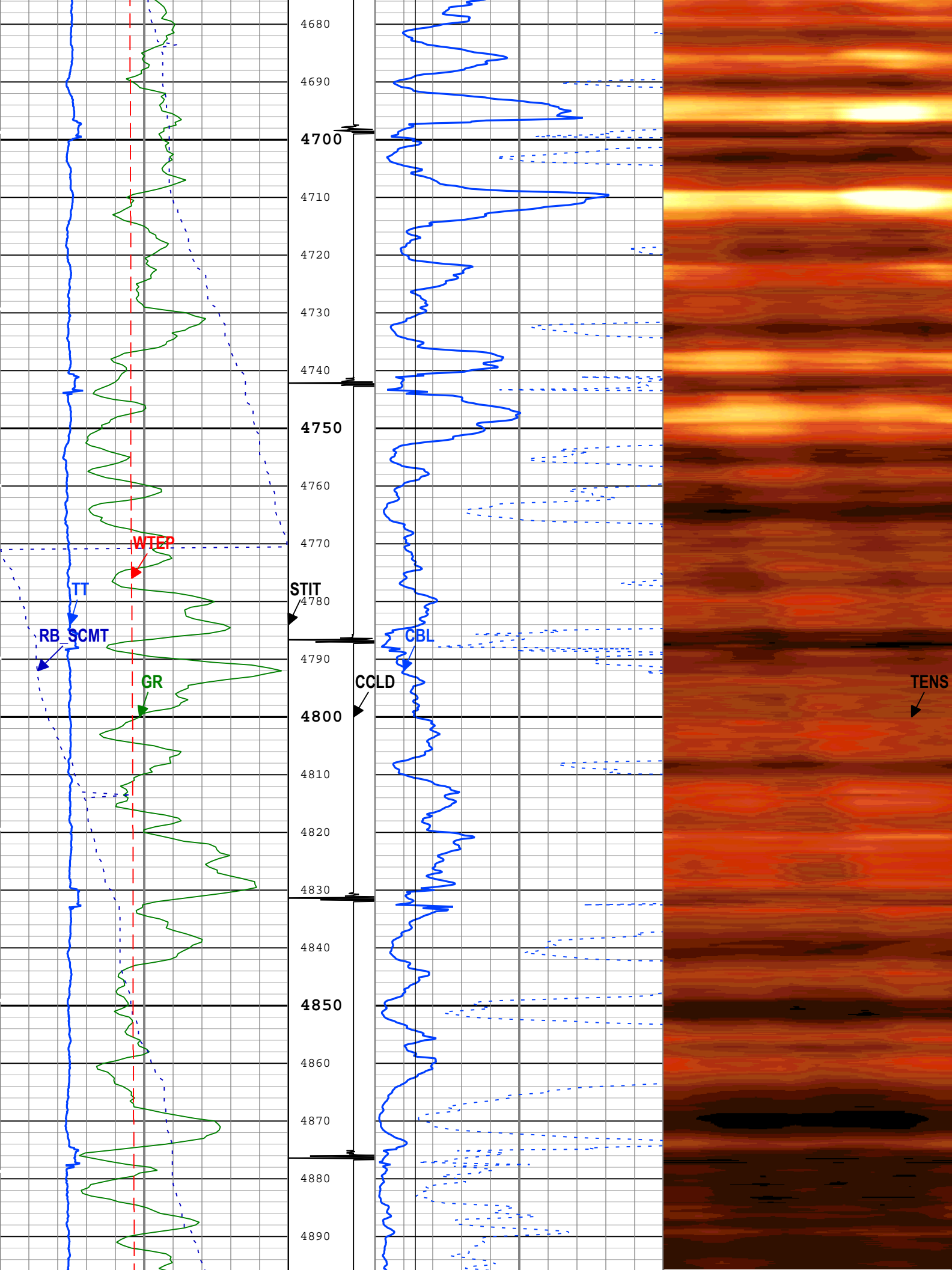
TIME_1900 - Time Marked every 60.00 (s)

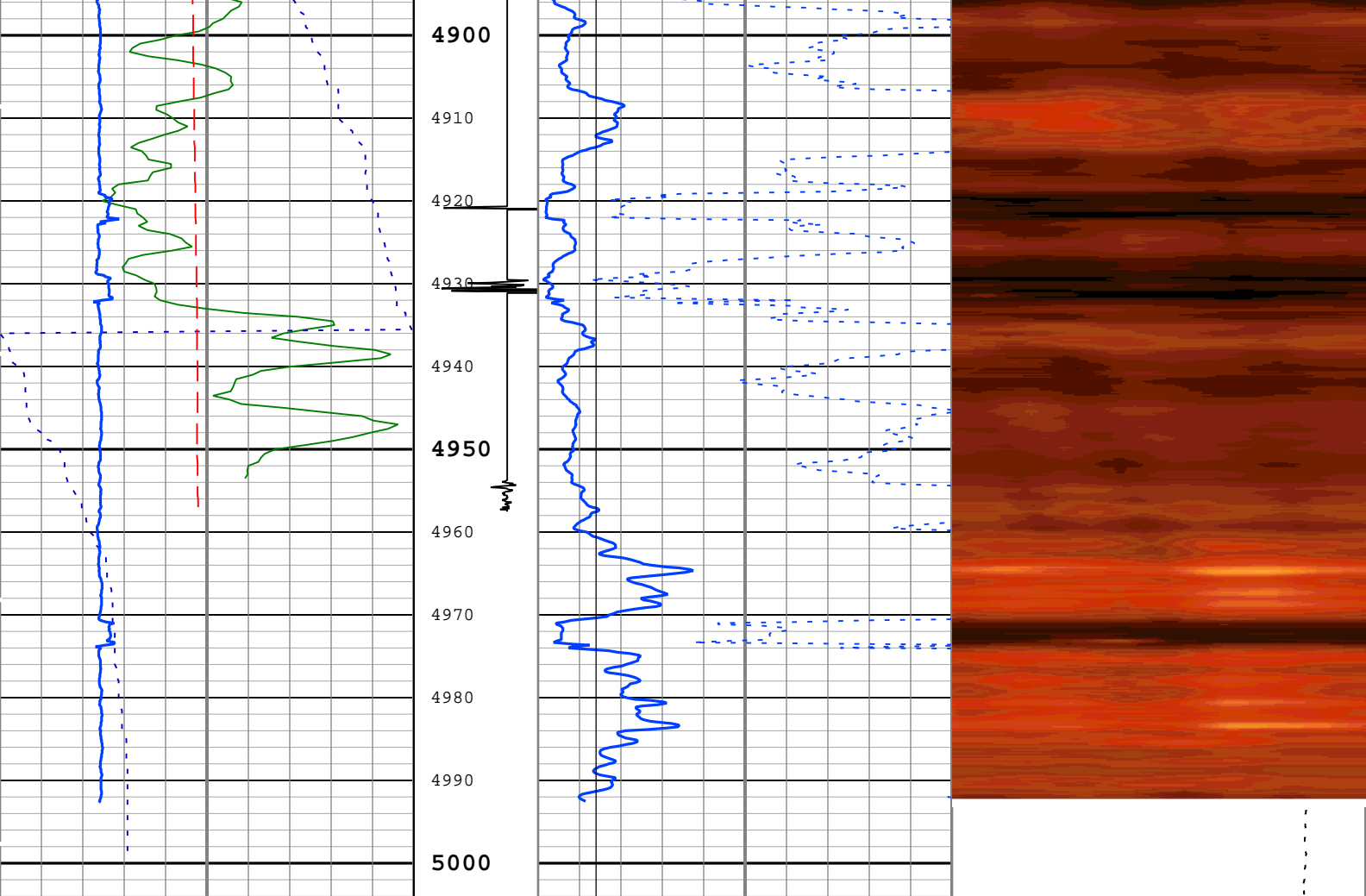












Gamma Ray (GR) PSTP-A	CCL	CBL Amplitude (CBL) SCMT-BB	Cable Tension (TENS)
0 gAPI 150	Discriminated Amplitude (CCLD) PSTP-A	0 mV 10	10000 lbf 0
Relative Bearing (RB_SCMT) SCMT-BB	3 V -1	CBL Amplitude (CBL) SCMT-BB	Absent 5,000 12,500 20,000 27,500 35,000 42,500 50,000 57,500 65,000 72,500 80,000 87,500 95,000 102,500
0 deg 360	Stuck Tool Indicator, Total (STIT)	0 mV 100	CBL Amplitude Mapping Image (0 - 100) SCMT-BB
Transit Time for CBL (TT) SCMT-BB	0 ft 50	Good Bond (GOBO)	
200 us 400	Cable Drag	0 mV 10	
Well Temperature (WTEP) PSTP-A	Tool_Tot. Drag	GoodBond From CBL to GOBO	
0 degF 300			

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: 03-Aug-2015 19:34:12

Channel Processing Parameters				
Run 1: Parameters				
Parameter	Description	Tool	Value	Unit
BHT	Bottom Hole Temperature	Borehole	226	degF
CB3G	SCMT CBL 3 ft Peak Detection T0_Delay and Noise Gate	SCMT-BB	224	us
CBLG	CBL Gate Width	SCMT-BB	40	us
CBRA	CBL LQC Reference Amplitude in Free Pipe	SCMT-BB	80	mV
CMCF	CBL Cement Type Compensation Factor	SCMT-BB	0.12	
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	9.1	lbm/gal
DFT	Drilling Fluid Type	Borehole	Water	
DTMD	Borehole Fluid Slowness	Borehole	196	us/ft
GOBO_CURR	Good Bond in Arbitrary Cement	SCMT-BB	7.87	mV
GTSE	Generalized Temperature Selection, from Measured or Computed Temperature	Borehole	WTEP	
MAPG	SCMT MAP Peak Detection T0_Delay and Noise Gate	SCMT-BB	167	us
MATT_CURR	Maximum Attenuation in Arbitrary Cement	SCMT-BB	10.14	dB/ft
MCCF	MAP Cement Type Compensation Factor	SCMT-BB	0.25	
MCI	Minimum Cemented Interval for Isolation	SCMT-BB	1.25	ft
MMSA	MAP Minimum Sonic Amplitude	SCMT-BB	3.98	mV
MSA	Minimum Sonic Amplitude	SCMT-BB	0.51	mV
MSA_CURR	Minimum Sonic Amplitude in Arbitrary Cement	SCMT-BB	4.41	mV
RUN_SNUM	Run Sequence Number	WSDRUN	1	
TD	Total Measured Depth	Borehole	8940	ft
ZCMT	Acoustic Impedance of Cement	SCMT-BB	3.4	Mrayl

Tool Control Parameters

Run 1: Parameters

Parameter	Description	Tool	Value	Unit
CMTM	SCMT Operating Mode	SCMT-BB	Log	
MAX_LOG_SPEED	Toolstring Maximum Logging Speed	WLSESSION	150	ft/h

Run 1

VDL-Image Repeat

Software Version

Acquisition System	Version
Maxwell 2016	6.0.47569.3100

Pass Summary

Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	DSC Mode	Depth Shift	Include Parallel Data
Run 1	Log[2]:Up	Up	4003.80 ft	5004.45 ft	20-May-2015 8:07:20 PM	20-May-2015 8:40:40 PM	ON	2.44 ft	Yes

All depths are referenced to toolstring zero

Log

Company:Caerus Piceance LLC Well:Puckett 43A-2
Run 1: Log[2]:Up:S008

Description: SCMT VDL Image Format: Log (SCMT_VDL_Image_1) Index Scale: 5 in per 100 ft Index Unit: ft Index Type: Measured Depth Creation Date: 03-Aug-2015 19:34:14

TIME_1900 - Time Marked every 60.00 (s)

CCL Discriminated Amplitude (CCLD) PSTP-A

3 V -1

Stuck Tool Indicator, Total (STIT)

0 ft 50

Cable Drag

Gamma Ray (GR) PSTP-A

gAPI

Relative Bearing (RB_SCMT) SCMT-BB

deg

Transit Time for CBL (TT) SCMT-BB

us

Good Bond (GOBO)

CBL Amplitude (CBL) SCMT-BB

mV

CBL Amplitude (CBL) SCMT-BB

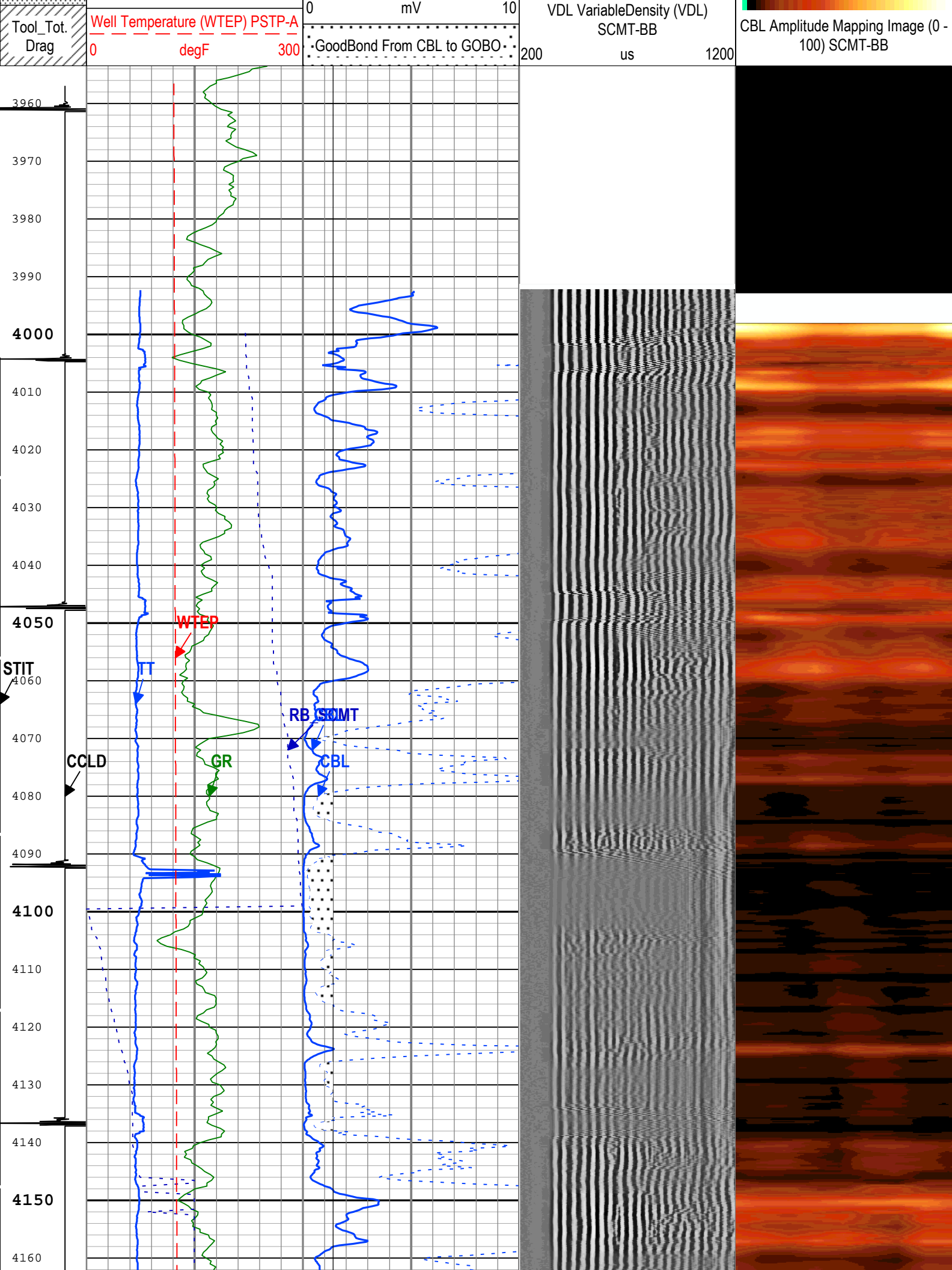
mV

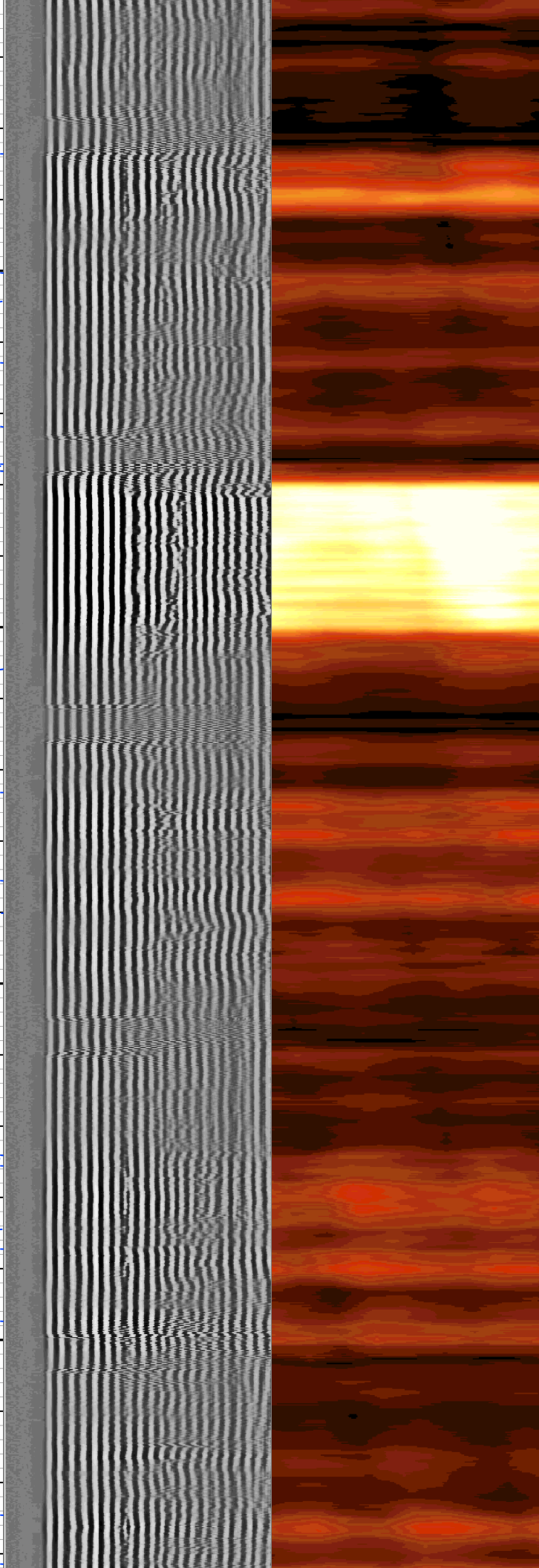
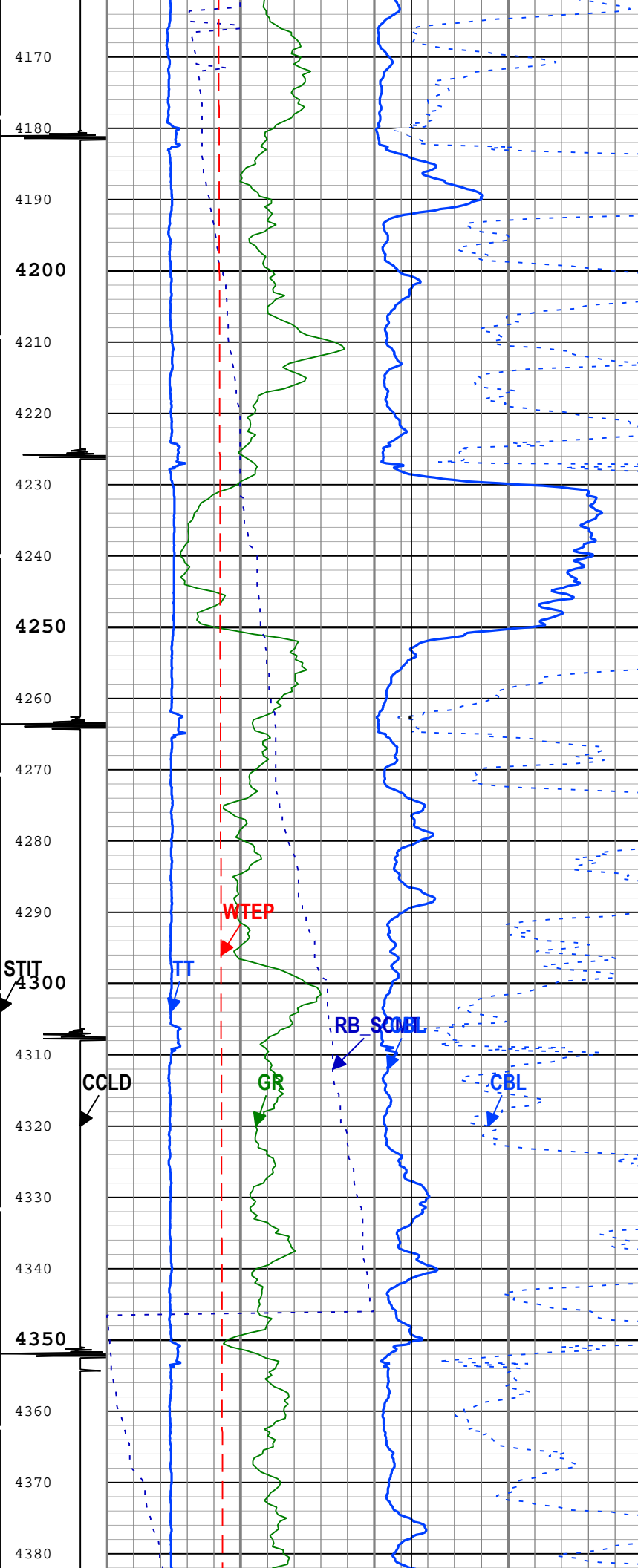
Min

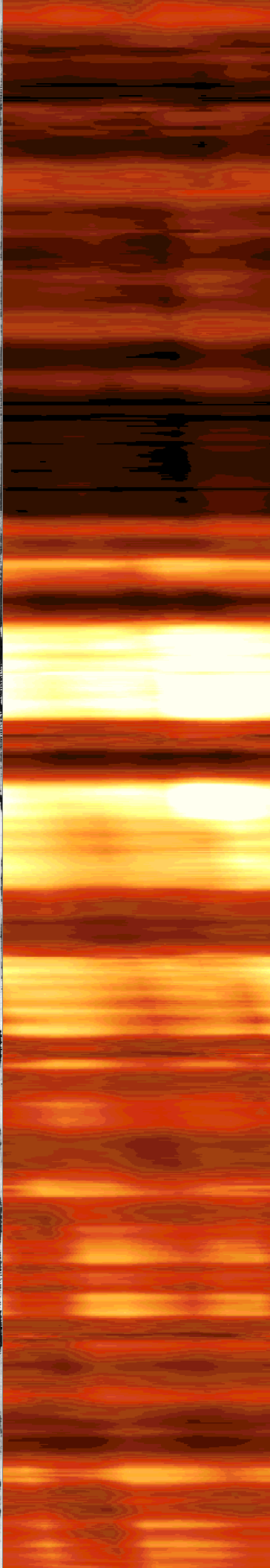
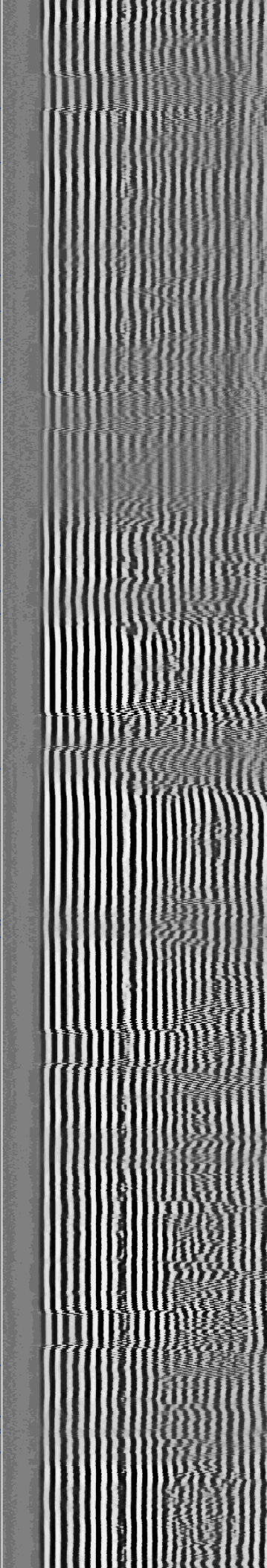
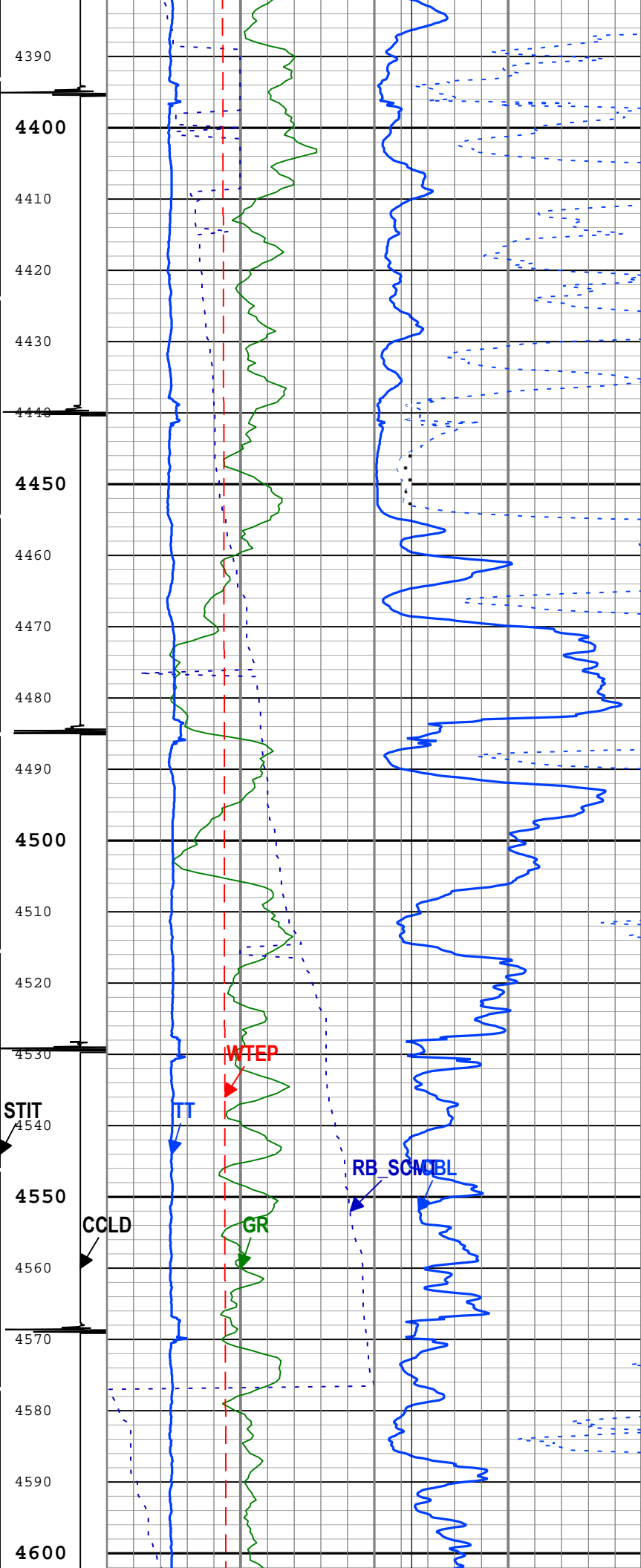
Amplitude

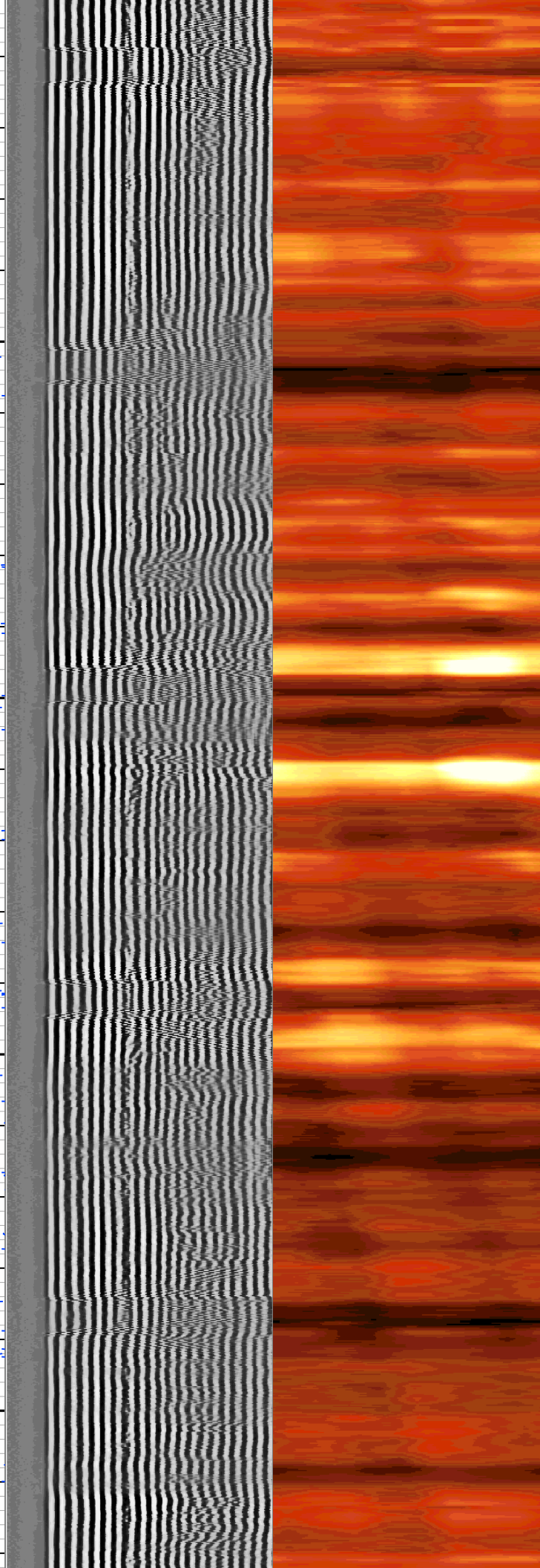
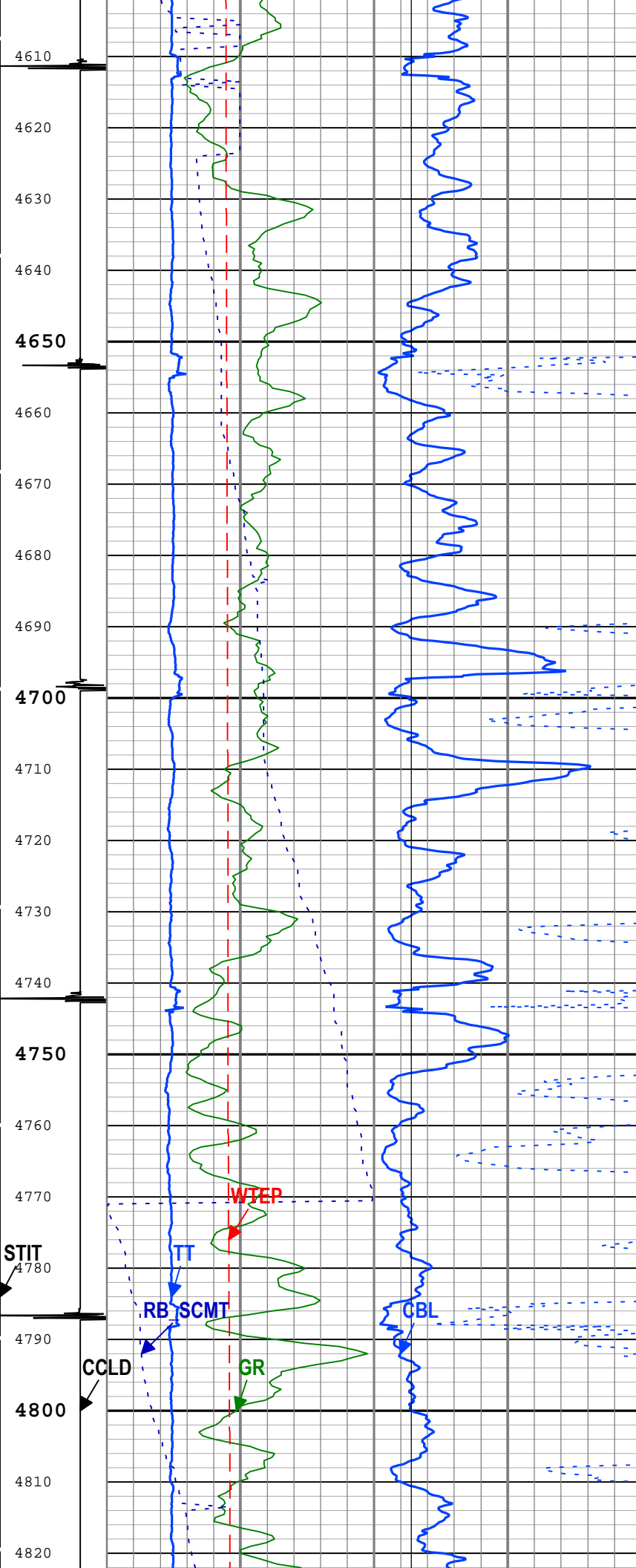
Max

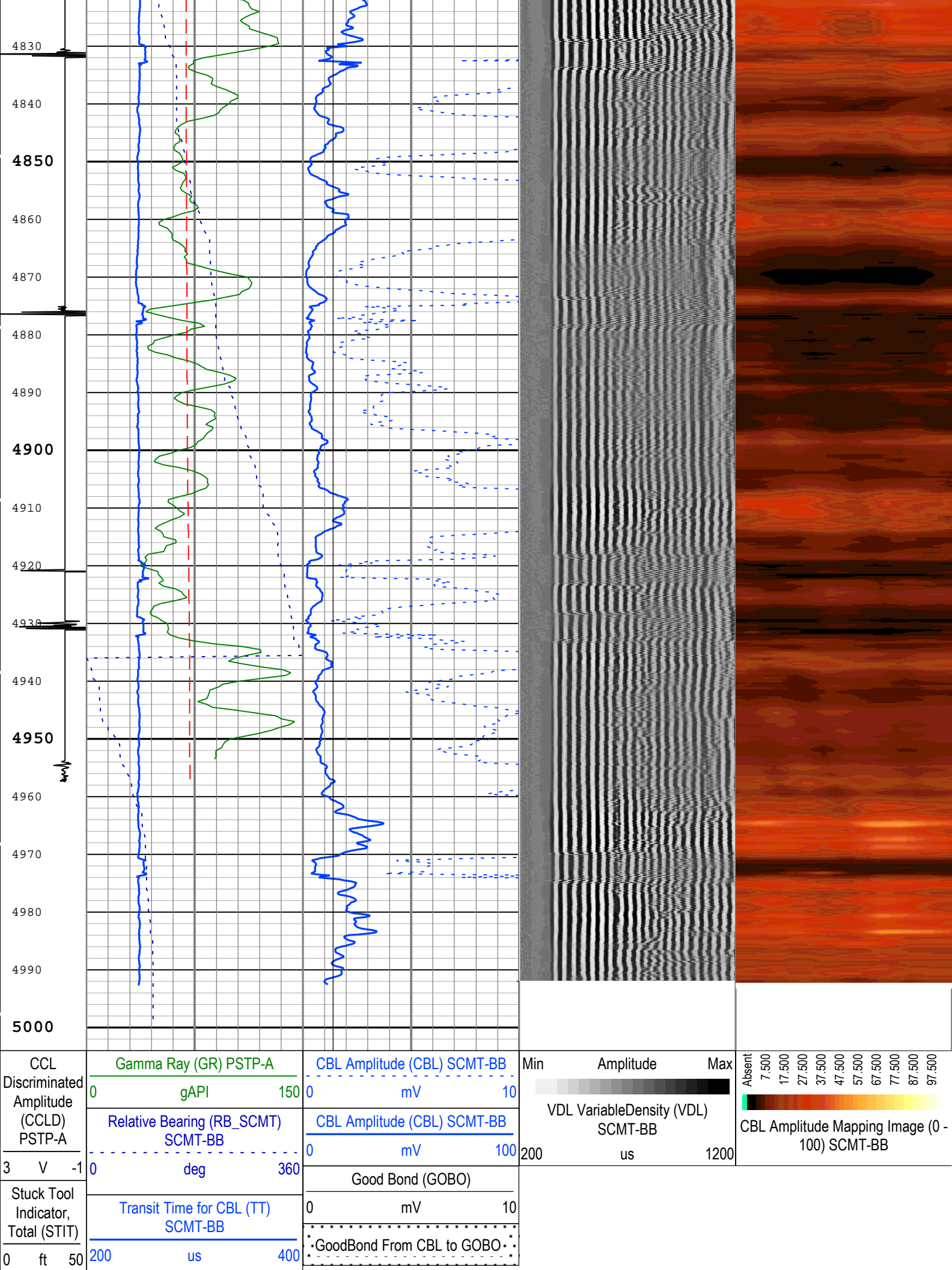
Absent 7.500 17.500 27.500 37.500 47.500 57.500 67.500 77.500 87.500 97.500











Cable Drag	Well Temperature (WTEP) PSTP-A
Tool_Tot. Drag	0 degF 300

TIME_1900 - Time Marked every 60.00 (s)

Description: SCMT VDL Image Format: Log (SCMT_VDL_Image_1) Index Scale: 5 in per 100 ft Index Unit: ft Index Type: Measured Depth Creation Date: 03-Aug-2015 19:34:14

Channel Processing Parameters

Run 1: Parameters

Parameter	Description	Tool	Value	Unit
BHT	Bottom Hole Temperature	Borehole	226	degF
CB3G	SCMT CBL 3 ft Peak Detection T0_Delay and Noise Gate	SCMT-BB	224	us
CBLG	CBL Gate Width	SCMT-BB	40	us
CBRA	CBL LQC Reference Amplitude in Free Pipe	SCMT-BB	80	mV
CMCF	CBL Cement Type Compensation Factor	SCMT-BB	0.12	
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	9.1	lbm/gal
DFT	Drilling Fluid Type	Borehole	Water	
DTMD	Borehole Fluid Slowness	Borehole	196	us/ft
GOBO_CURR	Good Bond in Arbitrary Cement	SCMT-BB	7.87	mV
GTSE	Generalized Temperature Selection, from Measured or Computed Temperature	Borehole	WTEP	
MAPG	SCMT MAP Peak Detection T0_Delay and Noise Gate	SCMT-BB	167	us
MATT_CURR	Maximum Attenuation in Arbitrary Cement	SCMT-BB	10.14	dB/ft
MCCF	MAP Cement Type Compensation Factor	SCMT-BB	0.25	
MCI	Minimum Cemented Interval for Isolation	SCMT-BB	1.25	ft
MMSA	MAP Minimum Sonic Amplitude	SCMT-BB	3.98	mV
MSA	Minimum Sonic Amplitude	SCMT-BB	0.51	mV
MSA_CURR	Minimum Sonic Amplitude in Arbitrary Cement	SCMT-BB	4.41	mV
RUN_SNUM	Run Sequence Number	WSDRUN	1	
TD	Total Measured Depth	Borehole	8940	ft
ZCMT	Acoustic Impedance of Cement	SCMT-BB	3.4	Mrayl

Tool Control Parameters

Run 1: Parameters

Parameter	Description	Tool	Value	Unit
CMTM	SCMT Operating Mode	SCMT-BB	Log	
MAX_LOG_SPEED	Toolstring Maximum Logging Speed	WLSESSION	150	ft/h

Calibration Report

SCMT-BB (Slim Cement Mapping Tool, 1-11/16 OD) Calibration - Run 1

Primary Equipment : Slim Cement Mapping Sonde SCMS-BB 8002

CBL and MAP Amplitude Adjustment - Measurements

Before (Manual Entry): 17:32:04 03-Aug-2015

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
CBL Amplitude - 0	mV	Before	-----	-----	-----	-----	
Average MAP Amplitude (Fluid Compensated) - 0	mV	Before	-----	-----	-----	-----	
Measurement Depth - 0	ft	Before	-----	-----	-----	-----	

CBL and MAP Amplitude Adjustment Coefficient

CBL and MAP Amplitude Adjustment - Coefficients

Before (Manual Entry): 17:32:04 03-Aug-2015

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit		
CBL Adjustment Factor		Before			1.078			
CBL LQC Reference Amplitude in Free Pipe	mV	Before			80.00			
MAP Adjustment Factor		Before			1.045			
Depth of Before Calibration	ft	Before			1664.34			

PSTP-A (PSP Telemetry Platform A - Sapphire) Calibration - Run 1

Primary Equipment :

PBMS-A

PBMS-A

3869

Calibration Parameter :

JIG-BKGD

PBMS Well Temp Master Calibration

Master (EEPROM): 00:00:00 18-Jul-2007

PBMS_RTD_THERM RTD Coefficients
(Master)

	Tt**0	Tt**1	Tt**2	Tt**3	Tt**4	Tt**5
Tt**0	-756.3505	527.1629	-155.9385	25.88661	-1.571709	0

PBMS Gamma Ray Master Calibration

Master (EEPROM): 00:00:00 18-Jan-2007

PBMS_GR_MODEL GR Coefficients
(Master)

	Rt**0	Rt**1
Rt**0	2000	2000

PBMS A Reference Clock Master Calibration

Master (EEPROM): 00:00:00 18-Jul-2007

PBMS_REF_CLOCK PBMS A Clock Coefficients
(Master)

	Temp**0	Temp**1	Temp**2	Temp**3	Temp**4	Temp**5
Temp**0	-192.7617	-5.343637	-0.09015581	0.000751289	2.272868E-06	0

PBMS A Sapphire Master Calibration

Master (EEPROM): 00:00:00 18-Jul-2007

PBMS_P_GAUGE_PRES Sapphire Pressure Model Coefficients
(Master)

	Tt**0	Tt**1	Tt**2	Tt**3	Tt**4	Tt**5
Tp**0	-10607.24	9983.964	-4422.383	811.7886	-55.39267	0
Tp**1	7317.382	-6510.243	3075.83	-562.8201	38.05563	0
Tp**2	27.61189	-4.173877	-2.572291	0	0	0
Tp**3	-4.186021	1.156646	0	0	0	0
Tp**4	0	0	0	0	0	0
Tp**5	0	0	0	0	0	0

PBMS_P_GAUGE_TEMP Sapphire Temperature Model Coefficients
(Master)

	Tp**0	Tp**1	Tp**2	Tp**3	Tp**4	Tp**5
Tt**0	-413.3419	3.522647	0.6707032	-0.5251858	0.07300035	0

Tt**1	168.969	-2.795898	-0.08934408	0.1774101	-0.0245917	0
Tt**2	-15.60143	0.6837218	-0.04823068	0	0	0
Tt**3	1.587509	-0.04120504	0	0	0	0
Tt**4	0	0	0	0	0	0
Tt**5	0	0	0	0	0	0

Company: Caerus Piceance LLC

Schlumberger

Well: Puckett 43A-2

Field: Wildcat

County: Garfield

State: Colorado

Slim Cement Mapping Tool

CBL-VDL