

Company: Caerus Piceance LLC

Well: Puckett 12C-1

Field: Wildcat

County: Garfield State: Colorado

Slim Cement Mapping Tool

CBL-VDL

County: Garfield  
Field: Wildcat  
Location: SHL: S2, T7S, R97W  
Well: Puckett 12C-1  
Company: Caerus Piceance LLC

Location:		SHL: S2, T7S, R97W 2207' FNL & 635' FEL LAT: 39.475731 / LONG: -108.180253	Elev.: K.B. 8509.00 ft G.L. 8479.00 ft D.F. 8479.00 ft
Permanent Datum:	Ground Level	Kelly Bushing	Elev.: 30.00 ft above Perm.Datum
Log Measured From:	Kelly Bushing		
Drilling Measured From:	Kelly Bushing		
API Serial No.	Section:	Township:	Range:
05-045-22620	2	7S	97W

Logging Date 23-Jul-2015

Run Number ONE

Depth Driller 9010.00 ft

Schlumberger Depth 8854.00 ft

Bottom Log Interval 8849.00 ft

Top Log Interval 2500.00 ft

Casing Fluid Type 3% KCl

Salinity

Density 9 lbm/gal

Fluid Level 8.00 ft

BIT/CASING/TUBING STRING

Bit Size 8.75 in

From 2525.00 ft

To 9010.00 ft

Casing/Tubing Size 4.5 in

Weight 11.6 lbm/ft

Grade P110

From 0.00 ft

To 9005.00 ft

Max Recorded Temperatures 238 degF

Logger on Bottom 24-Jul-2015 23:41:00

Unit Number 9108 Location: FT Morgan, Co

Recorded By Benjamin Mormon/A. Mustafa

Witnessed By Natalie Naeve

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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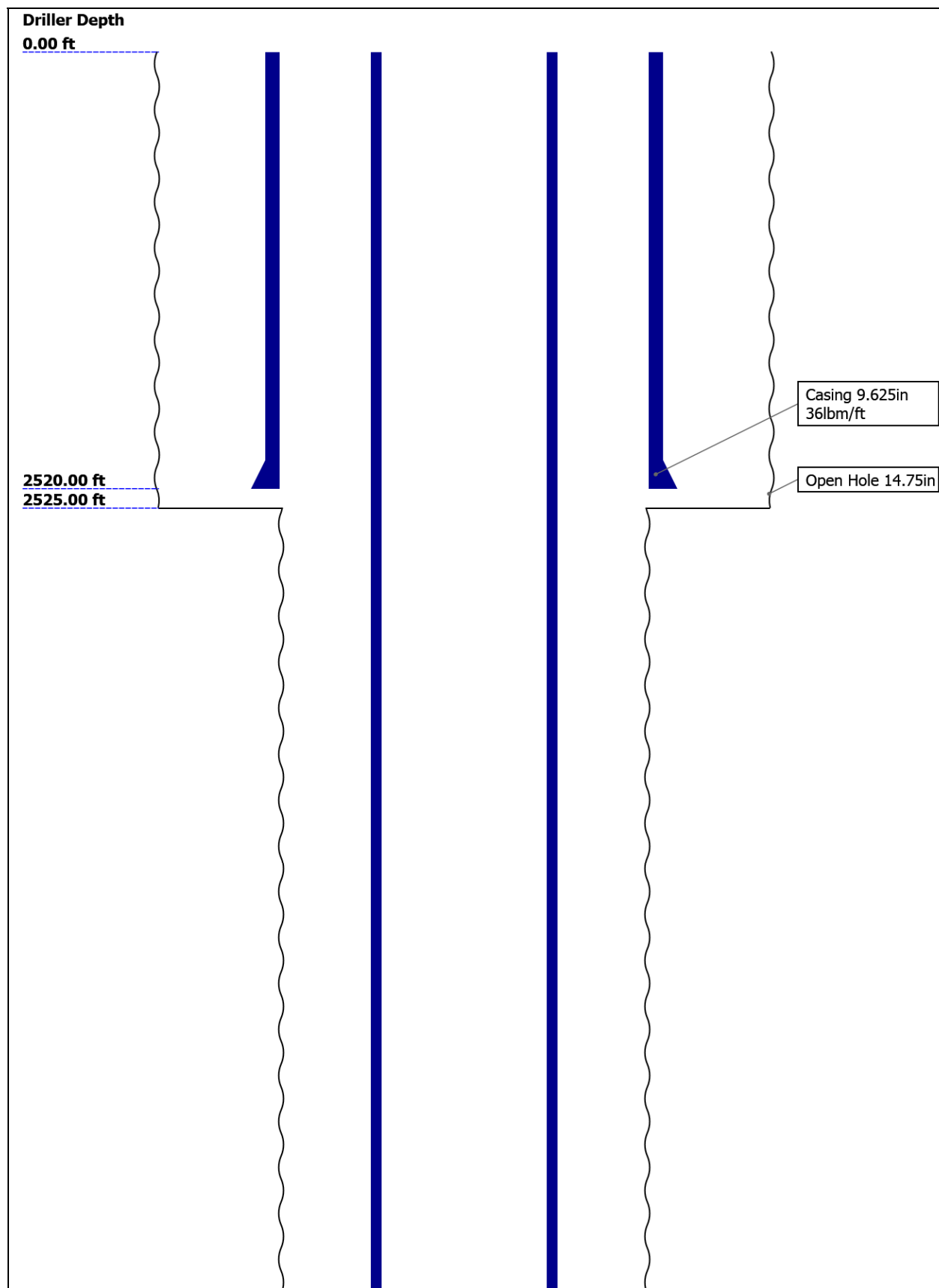
12.4 Log ( SCMT\_Amp\_Image\_1 )

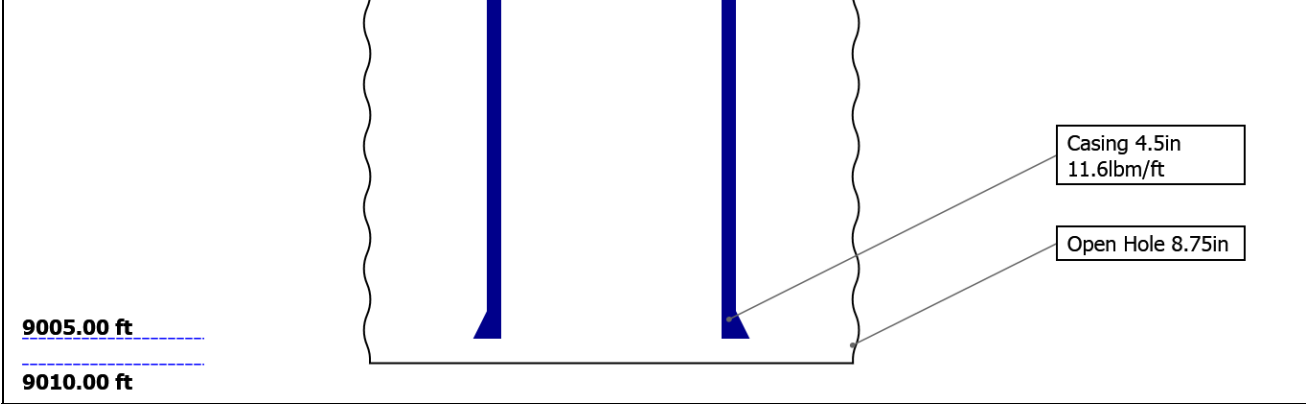
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- ## Well Sketch





Borehole Size/Casing/Tubing Record

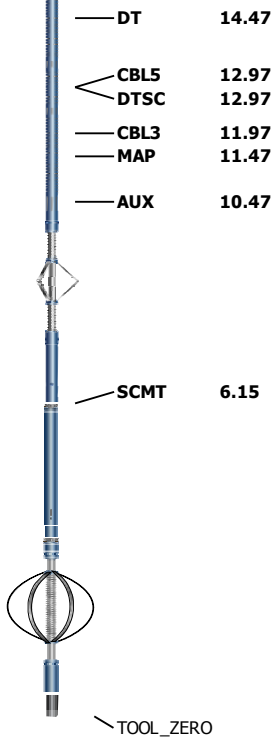
Bit						
Bit Size ( in )	14.75	8.75				
Top Driller ( ft )	0	2525				
Top Logger ( ft )	0	2525				
Bottom Driller ( ft )	2525	9010				
Bottom Logger ( ft )	2525	9010				
Casing						
Size ( in )	9.625	4.5				
Weight ( lbm/ft )	36	11.6				
Inner Diameter ( in )	8.921	4				
Grade	J55	P110				
Top Driller ( ft )	0	0				
Top Logger ( ft )	36	0				
Bottom Driller ( ft )	2520	9005				
Bottom Logger ( ft )	2520	9005				

Operational Run Summary

Parameter ( unit )	ONE					
Date Log Started	23-Jul-2015					
Time Log Started	21:32:33					
Date Log Finished	24-Jul-2015					
Time Log Finished	05:51:20					
Top Log Interval ( ft )	2500.00					
Bottom Log Interval ( ft )	29032.15					
Total Depth ( ft )						
Max Hole Deviation ( deg )	0.00					
Azimuth of Max Deviation ( deg )	0.00					
Bit Size ( in )	8.750					
Logging Unit Number	9108					
Logging Unit Location	FT Morgan, Co					
Recorded By	Benjamin Mormon/A.					

ONE: Toolstring				ONE: Remarks	
<div><div><div>Equip nameLengthMP nameOffset</div><div>LEH-QT58.91LEH-QT</div><div>AH-6356.00AH-7955.68</div><div>PSTP-A:1854.8514PSC-APSTC-APBMS-A:1814Sapphire 10kPSI</div><div>RST-C:17846.587RSCH-A:469RSC-E:381RSS-A:461MNTR-F:1RSXH-A:275RSX-E:1787</div><div>SCMT-CB:23.568372SECH-CASCMC-CACMIR-AGSCMS-CB:8372SCMX-CAAH-278TTG-C:8295</div></div><div></div></div> <td>Tool ran as per tool sketch.</td>	Tool ran as per tool sketch.				
	This is the first run in the hole.				
	Main and Repeat passes are correlated to downlog				
	RST ran in Sigma mode.				
	Matrix: Sandstone, 2.68 g/cc				
	Tagged float collar at 8854'.				
	Repeat pass is done with 0 psi.				
	Main pass logged with 2500 psi.				
	Logged stopped at 2500' as per client request.				





**BNS-P**      **0.14**

Lengths are in ft  
Maximum Outer Diameter = 3.375 in  
Line: Sensor Location, Value: Gating Offset  
All measurements are relative to TOOL\_ZERO

## Depth Summary

	ONE		
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### Depth Measuring Device

Type	IDW-JA		
Serial Number	6510		
Calibration Date	29-Mar-2015		
Calibrator Serial Number			
Calibration Cable Type	7-46 AXS		
Wheel Correction 1	-4		
Wheel Correction 2	-2		

### Tension Device

Type	CMTD-B/A		
Serial Number	171		
Calibration Date	26-JUN-2015		
Calibrator Serial Number	123		
Number of Calibration Points	10		
Calibration Root Mean Square Error	13		
Calibration Peak Error	31		

### Logging Cable

Type	7-46A-XS		
Serial Number	U714071		
Length	17500.00 ft		
Conveyance Type	Wireline		
Dia Type			

### 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	6.70 ft
Tool Zero Check At Surface	

Schlumberger Depth Control Procedures followed
IDW used as primary depth control device
Z-Chart used as secondary depth control
Logs correlated to down log

## MainPressure

## Main Pass 2500 PSI

## Software Version

## Acquisition System

Version	
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Maxwell 2016

6 0 47569 3100
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## Composite Summary

Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	DSC Mode	Depth Shift	Include Parallel Data
ONE	Log[5]:Up	Up	2506.14 ft	8868.16 ft	23-Jul-2015 11:24:27 PM	24-Jul-2015 3:00:14 AM	ON	6.64 ft	Yes
ONE	Log[7]:Up	Up	7701.77 ft	8875.83 ft	24-Jul-2015 4:01:17 AM	24-Jul-2015 4:41:45 AM	ON	17.06 ft	Yes

All depths are referenced to toolstring zero

## Log

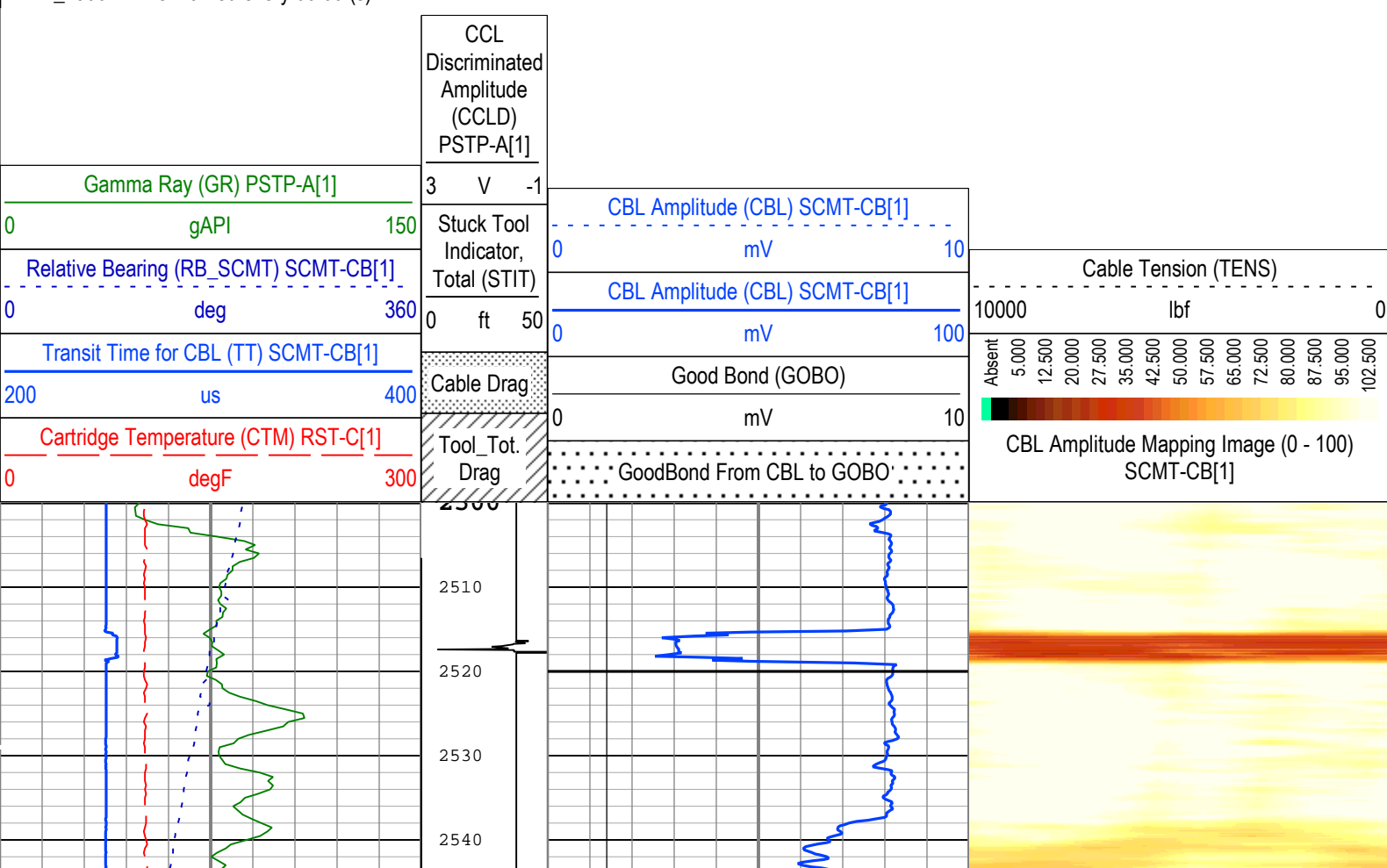
Company:Caerus Piceance LLC

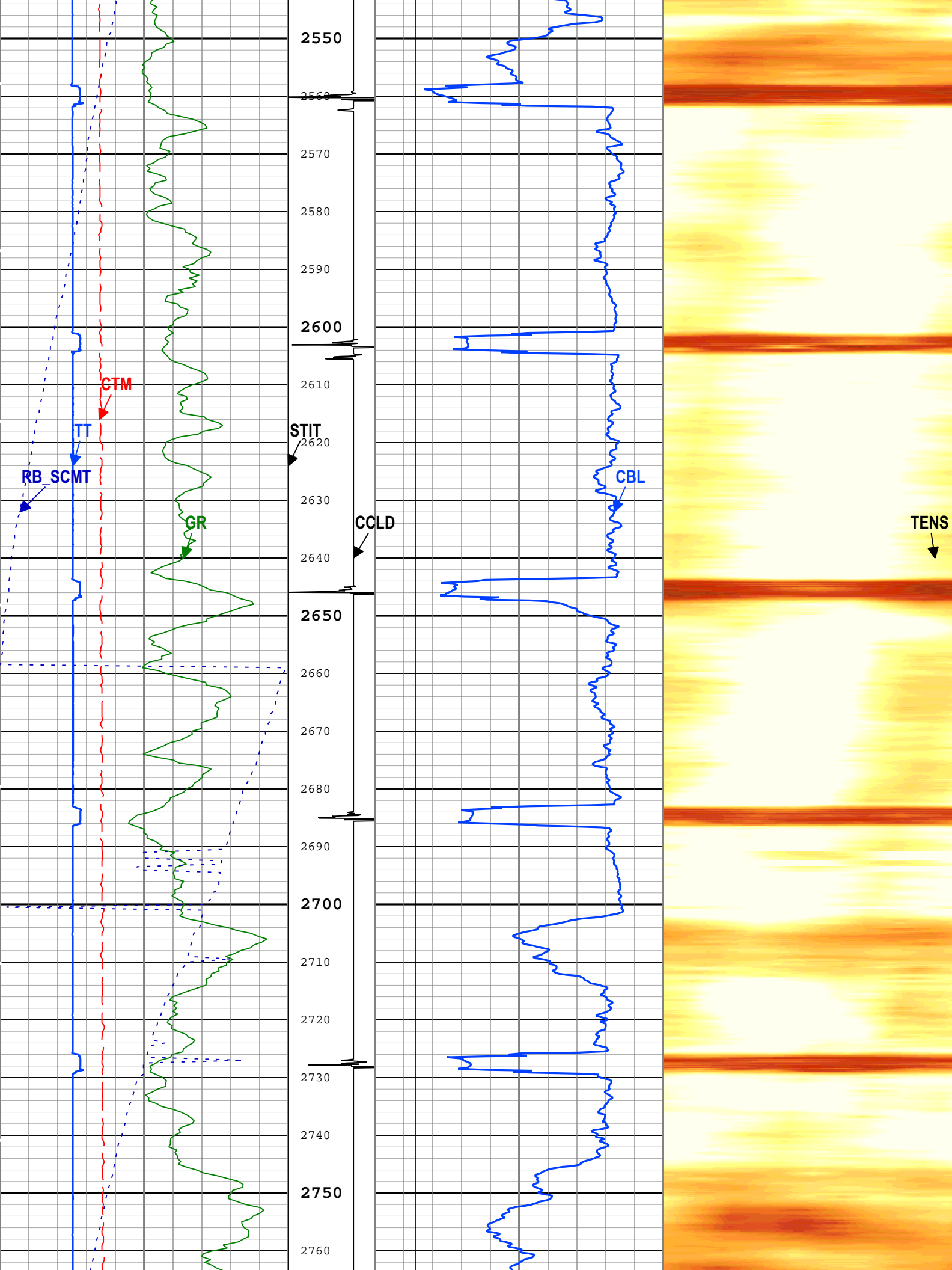
Well-Puckett 12C-1

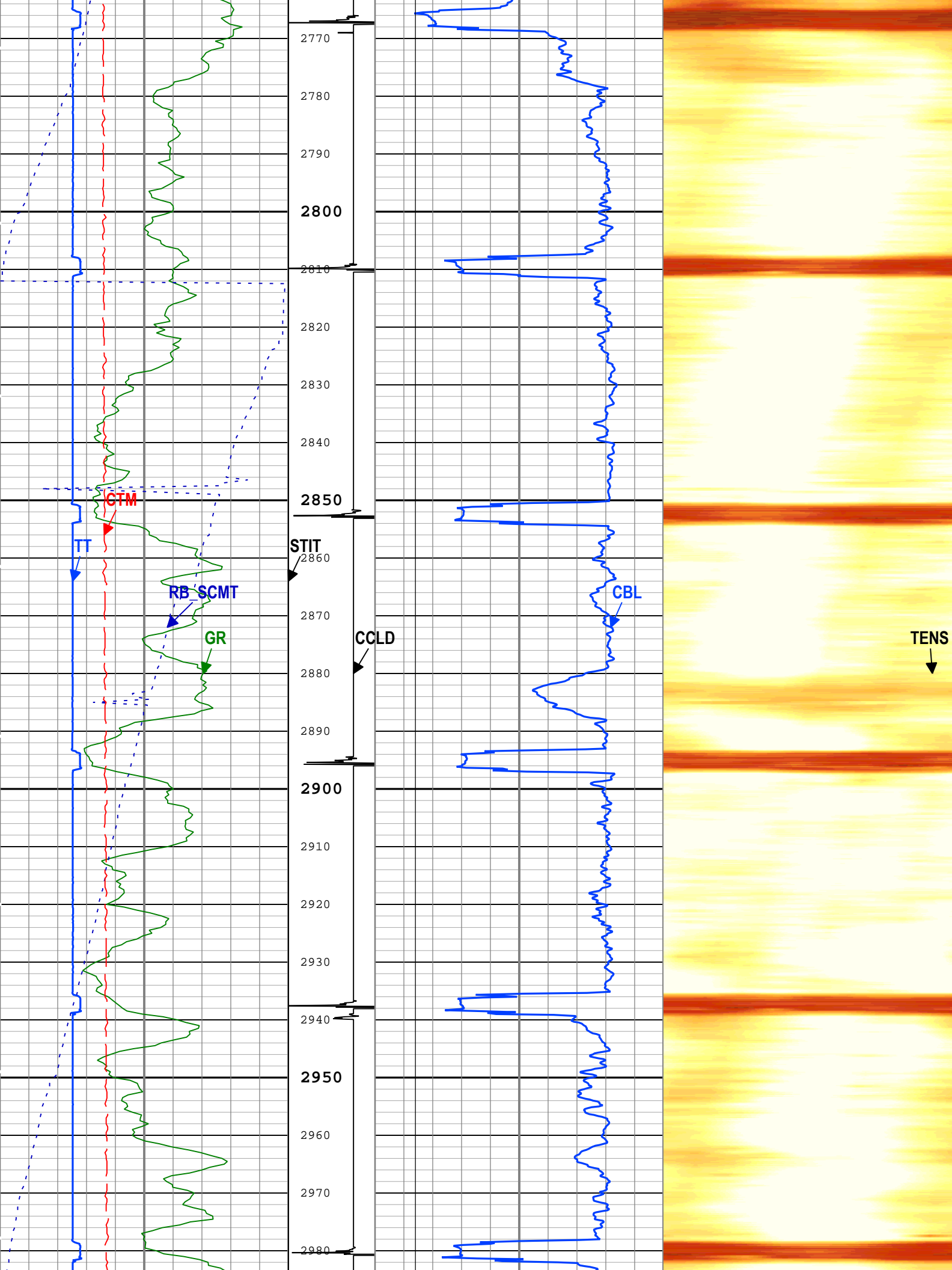
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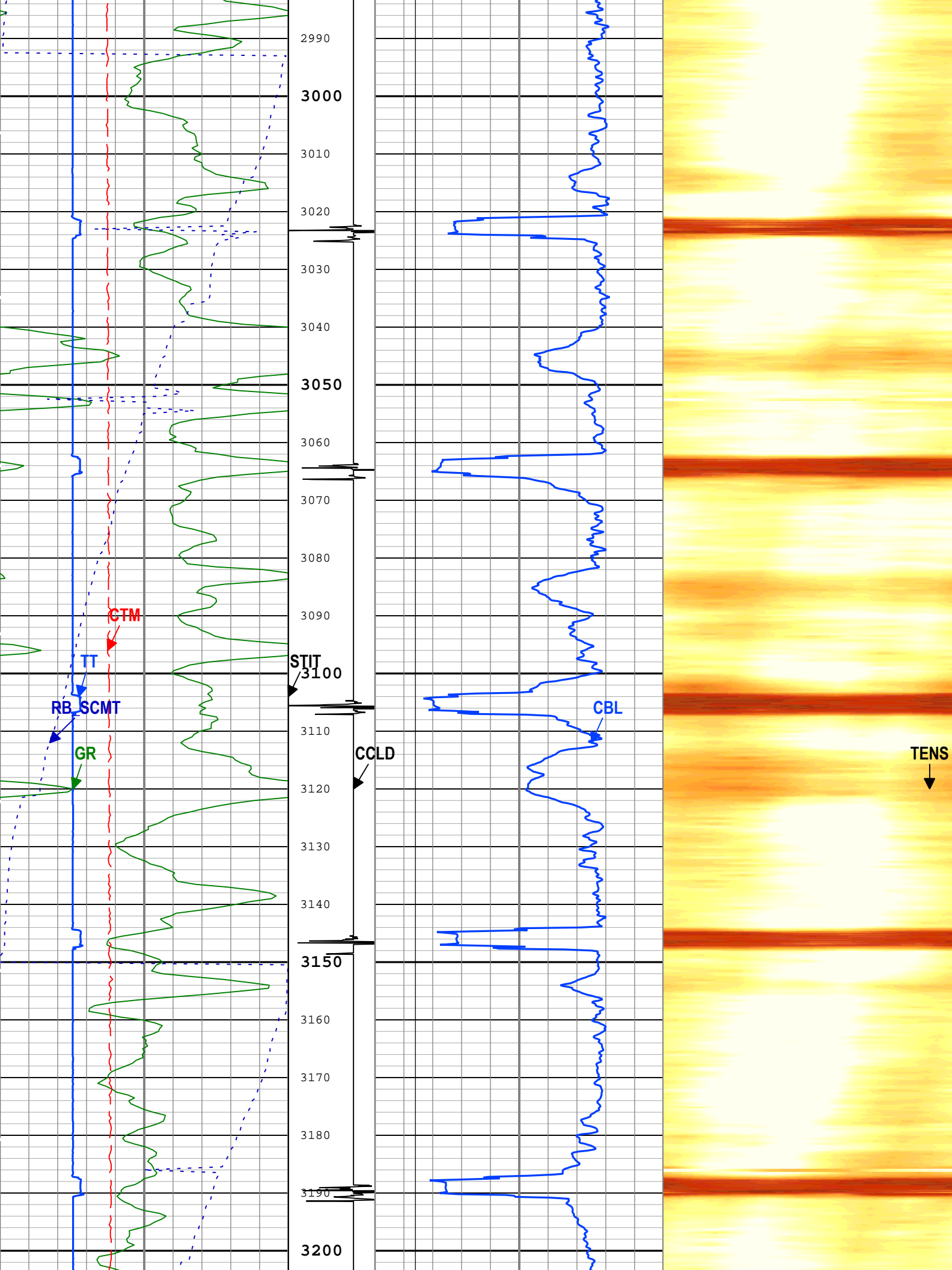
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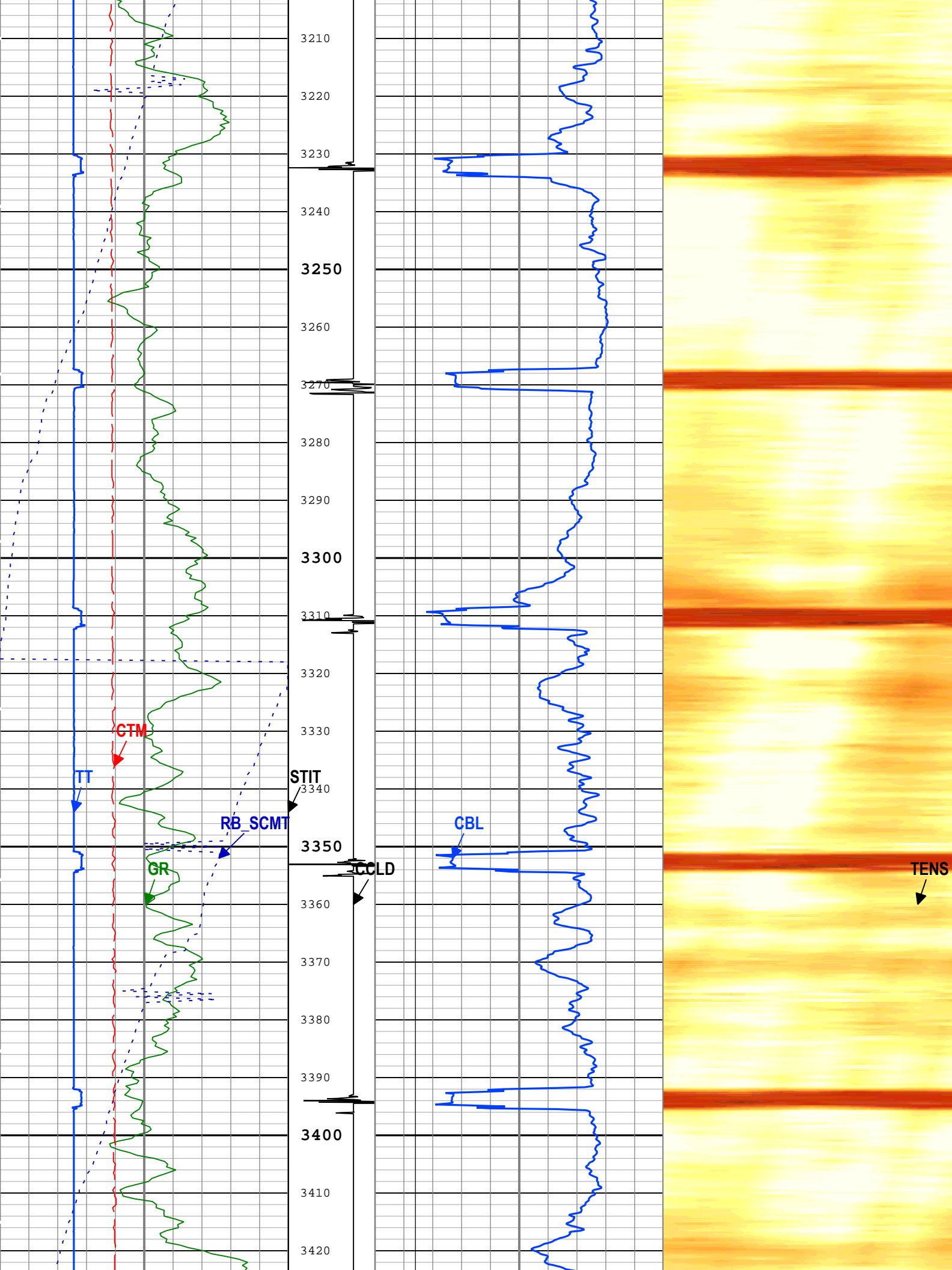
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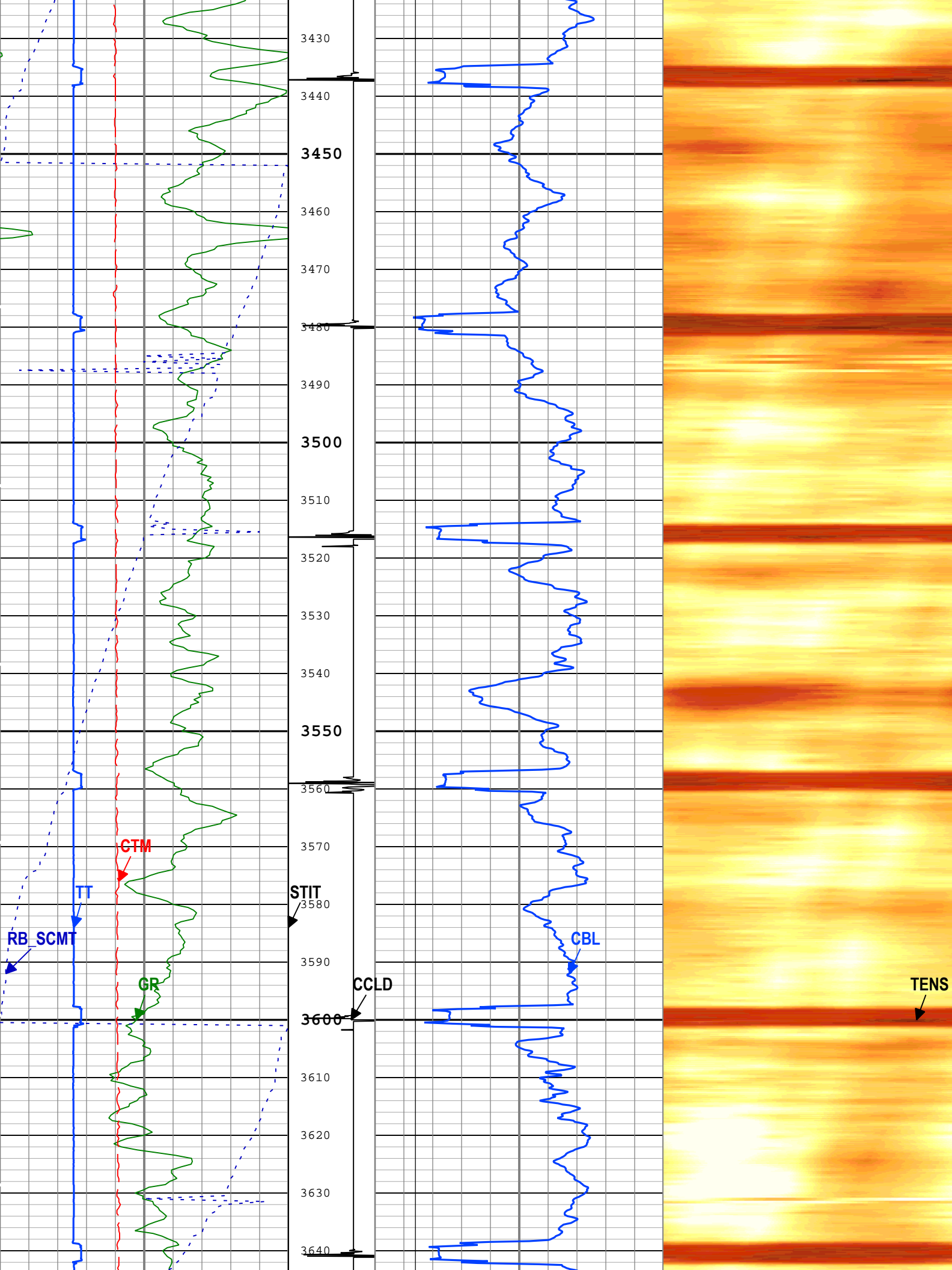


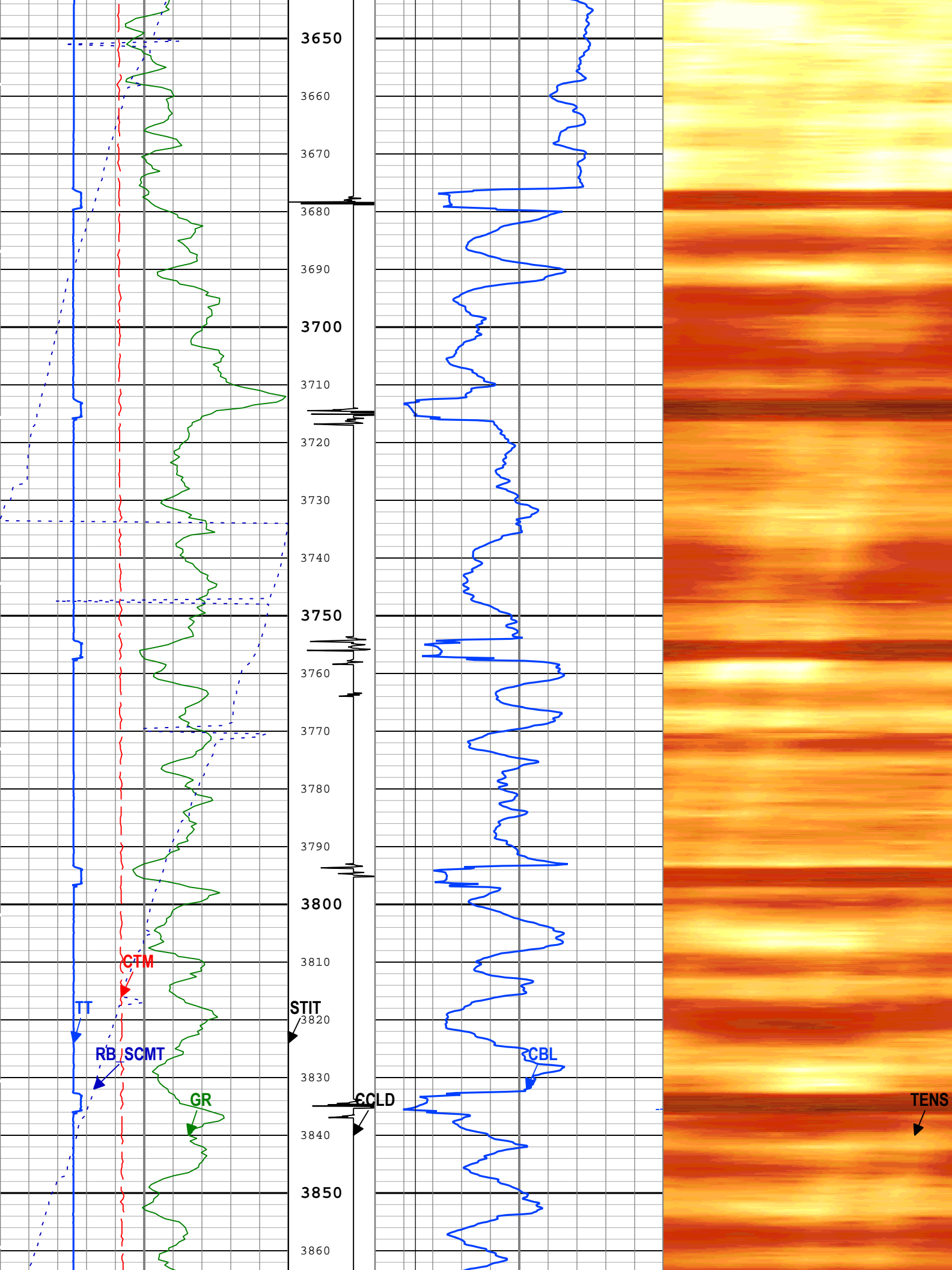




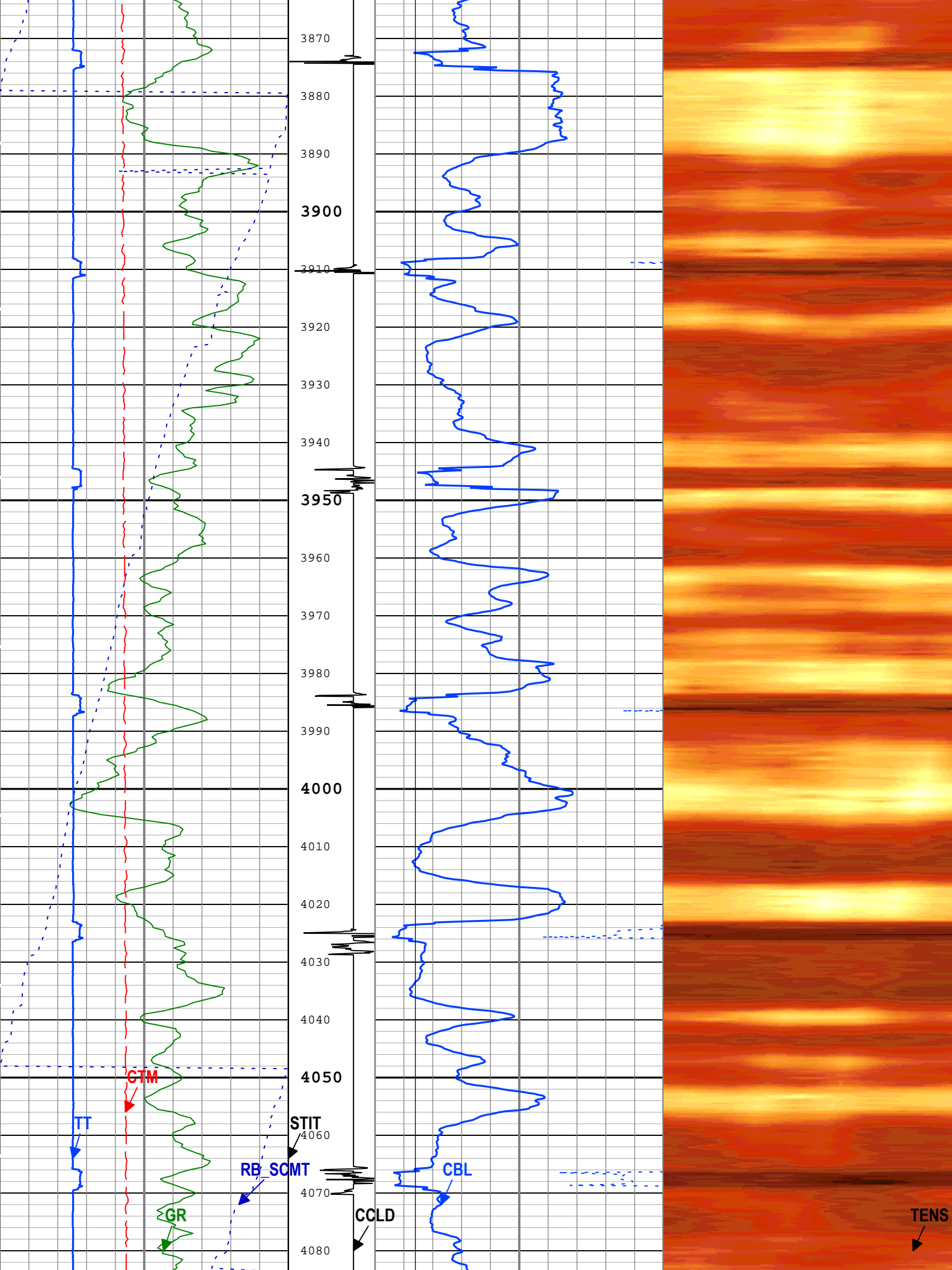


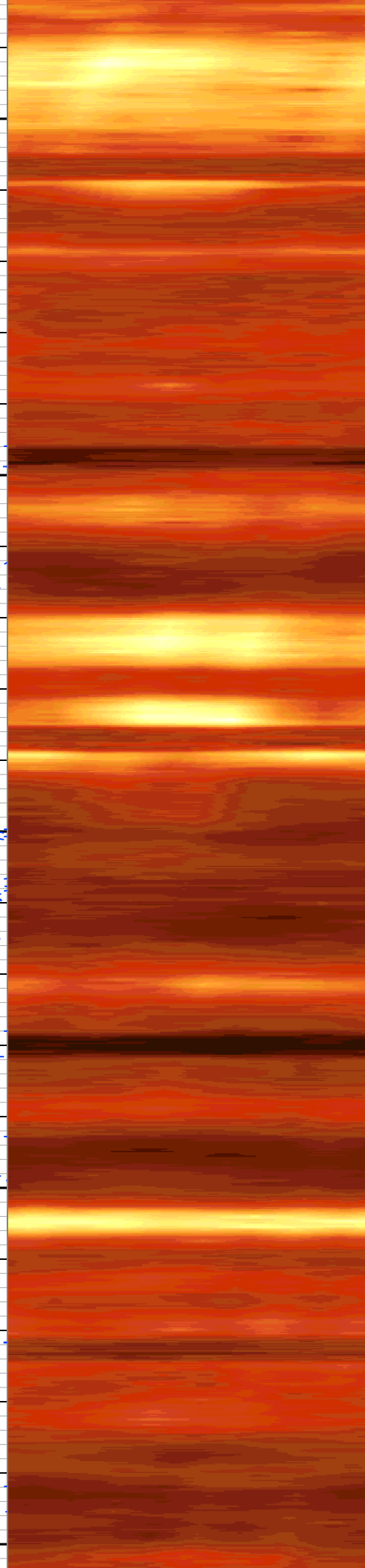
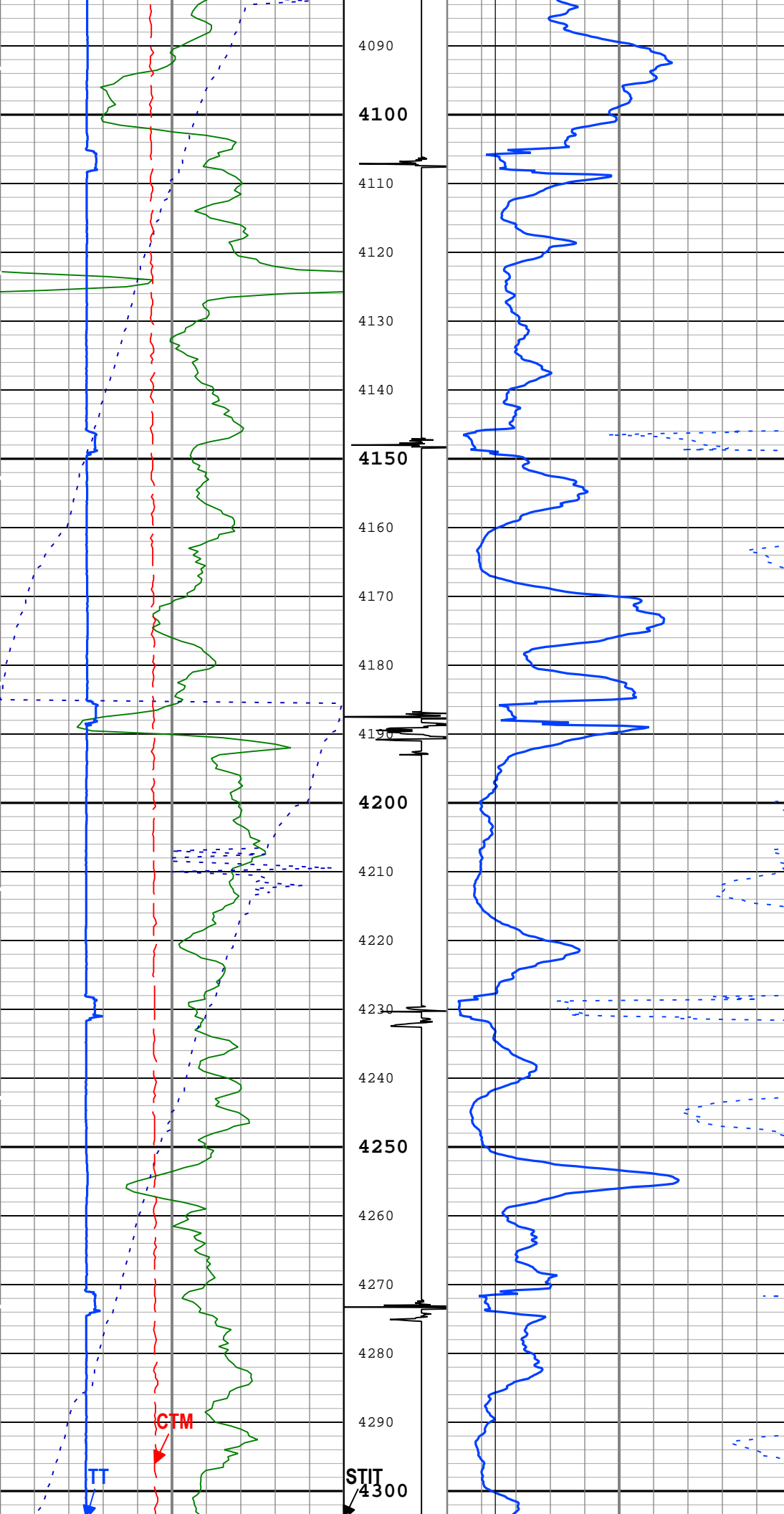


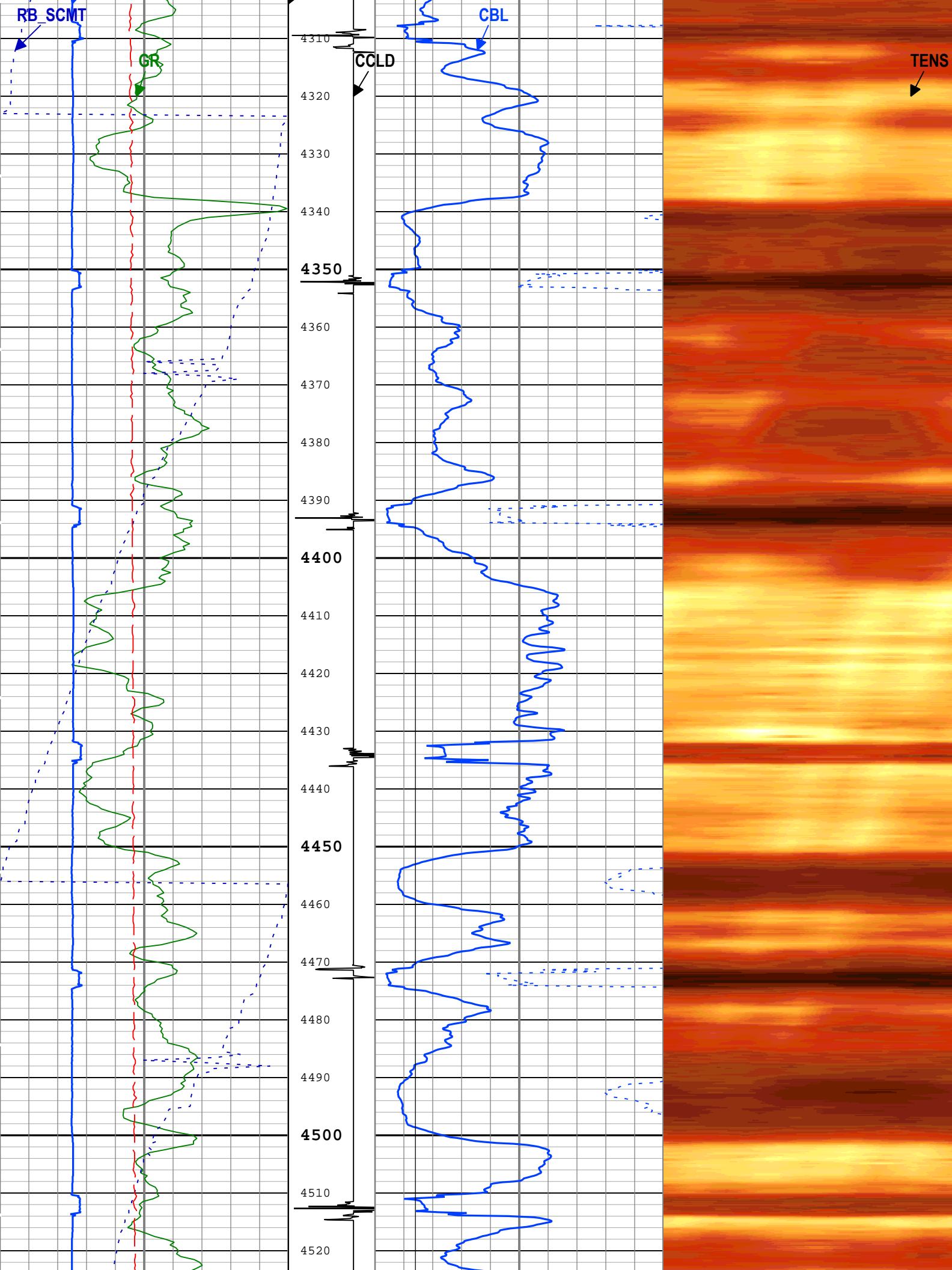


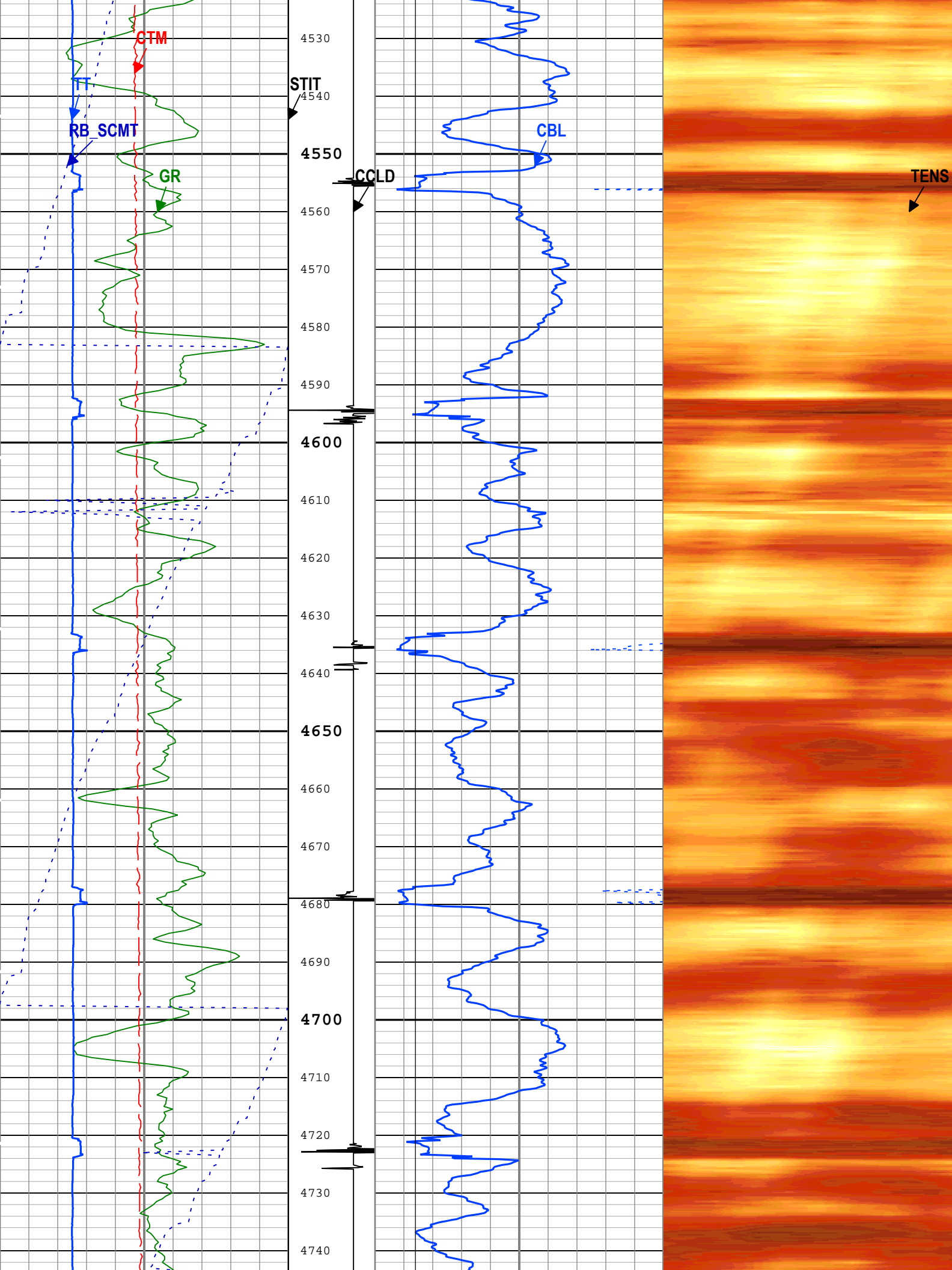


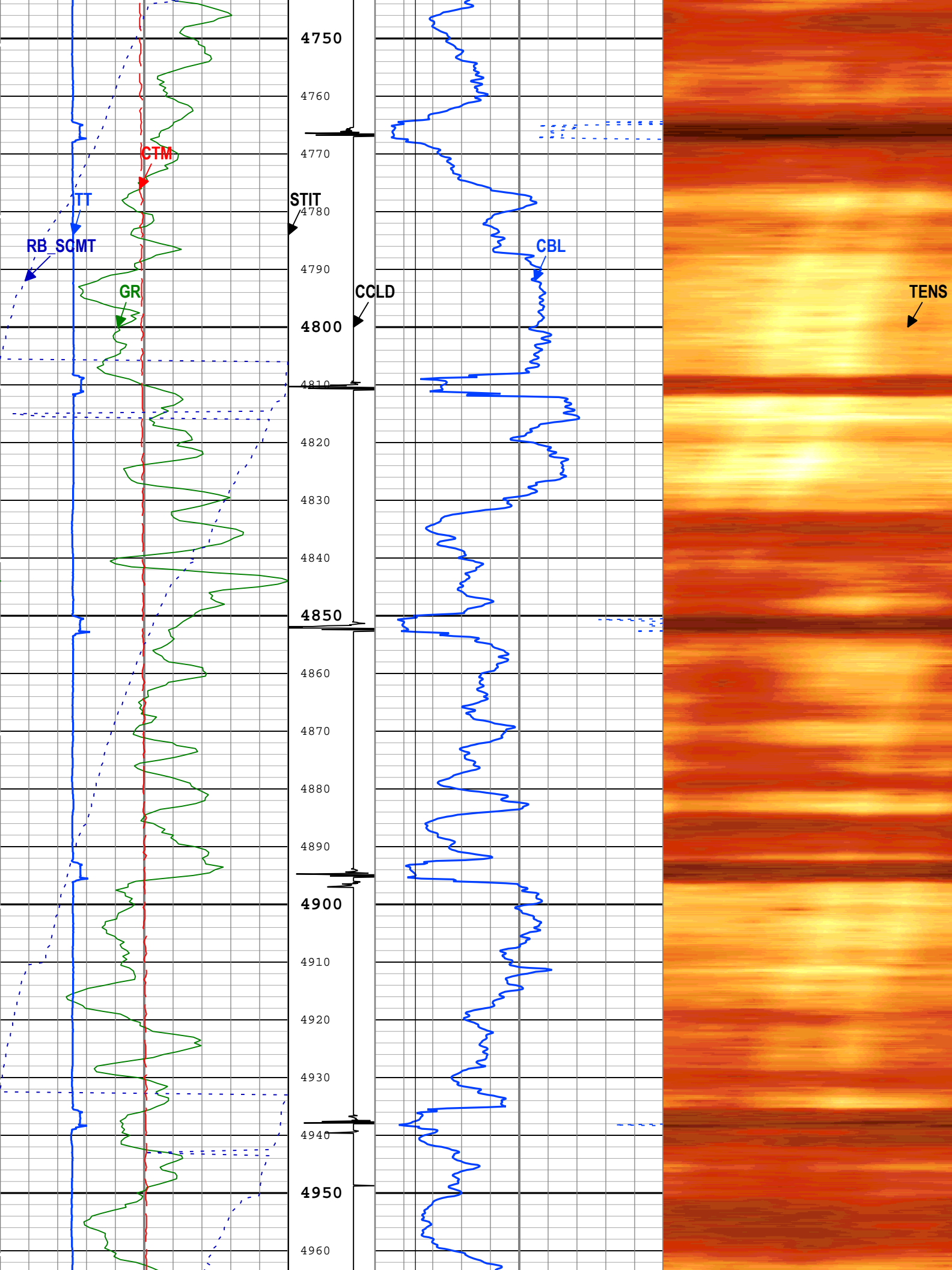


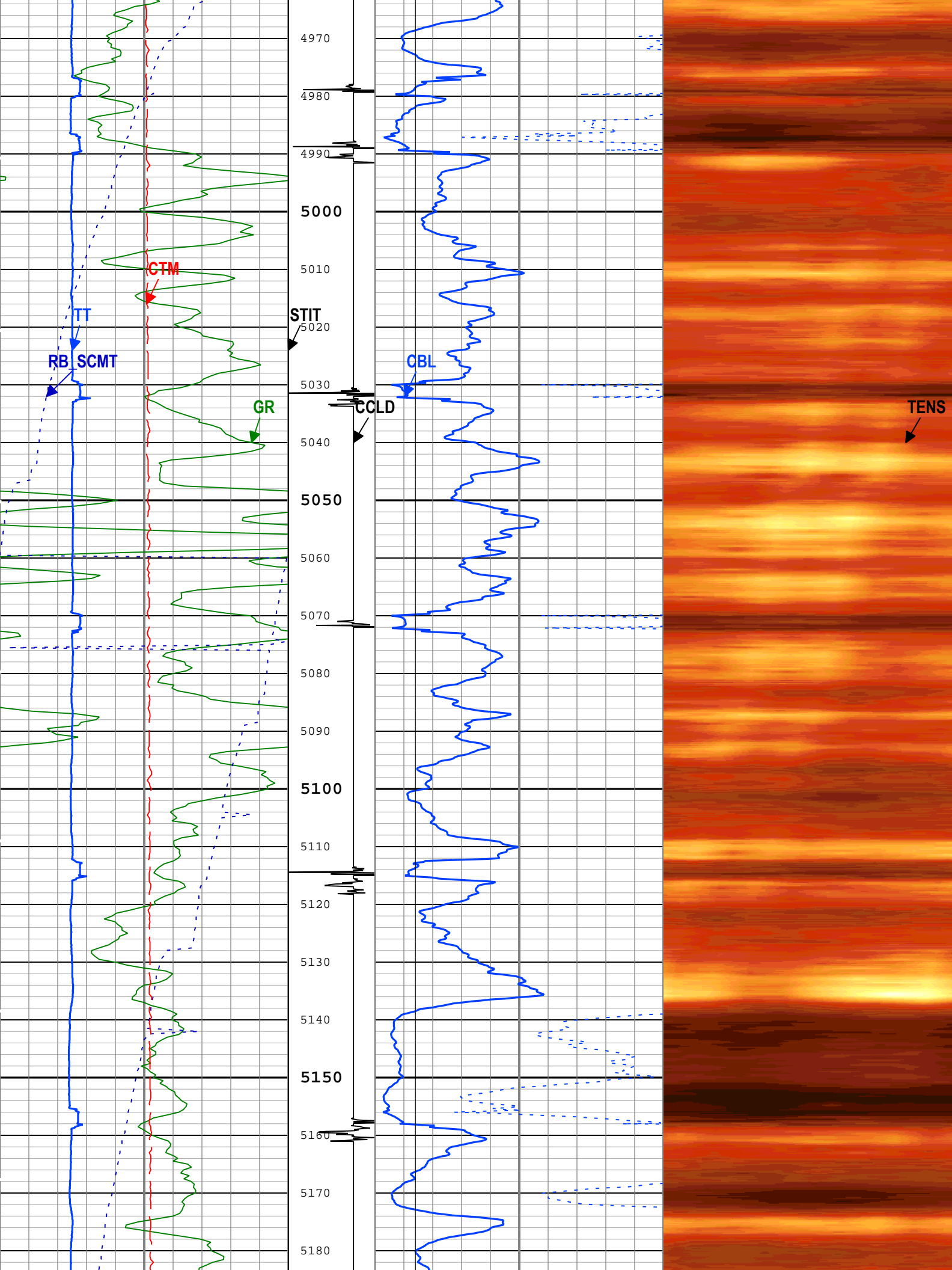


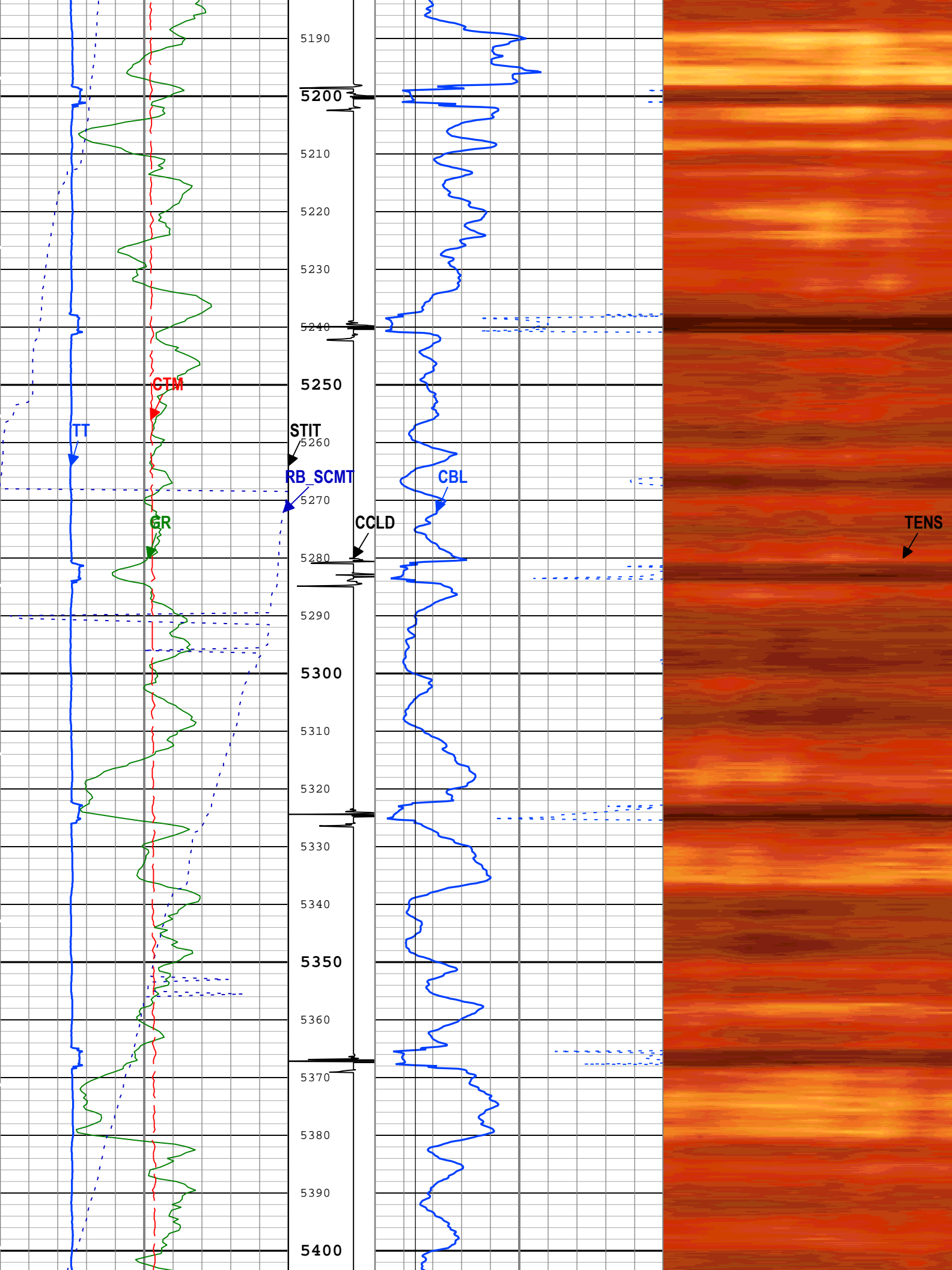


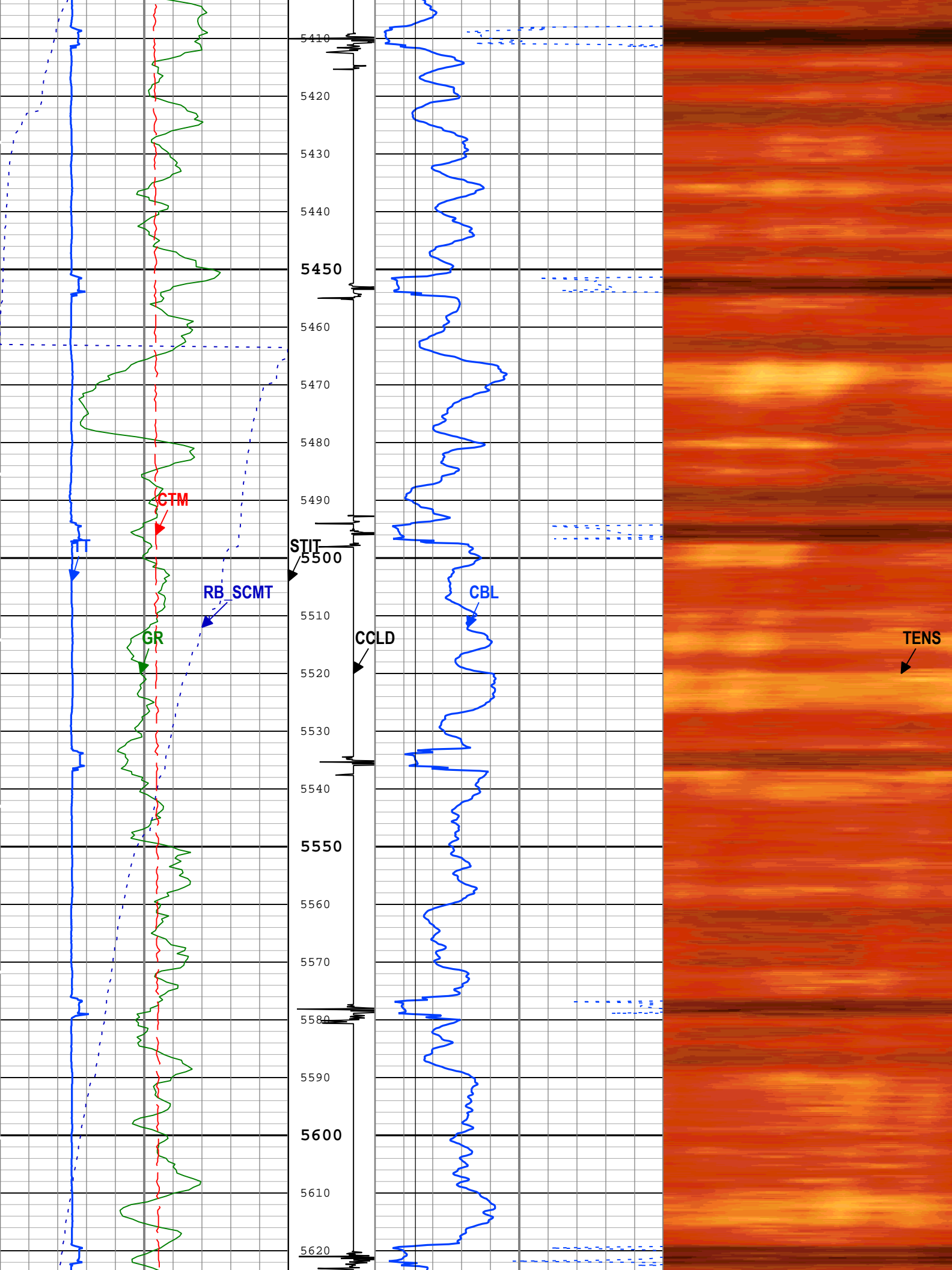




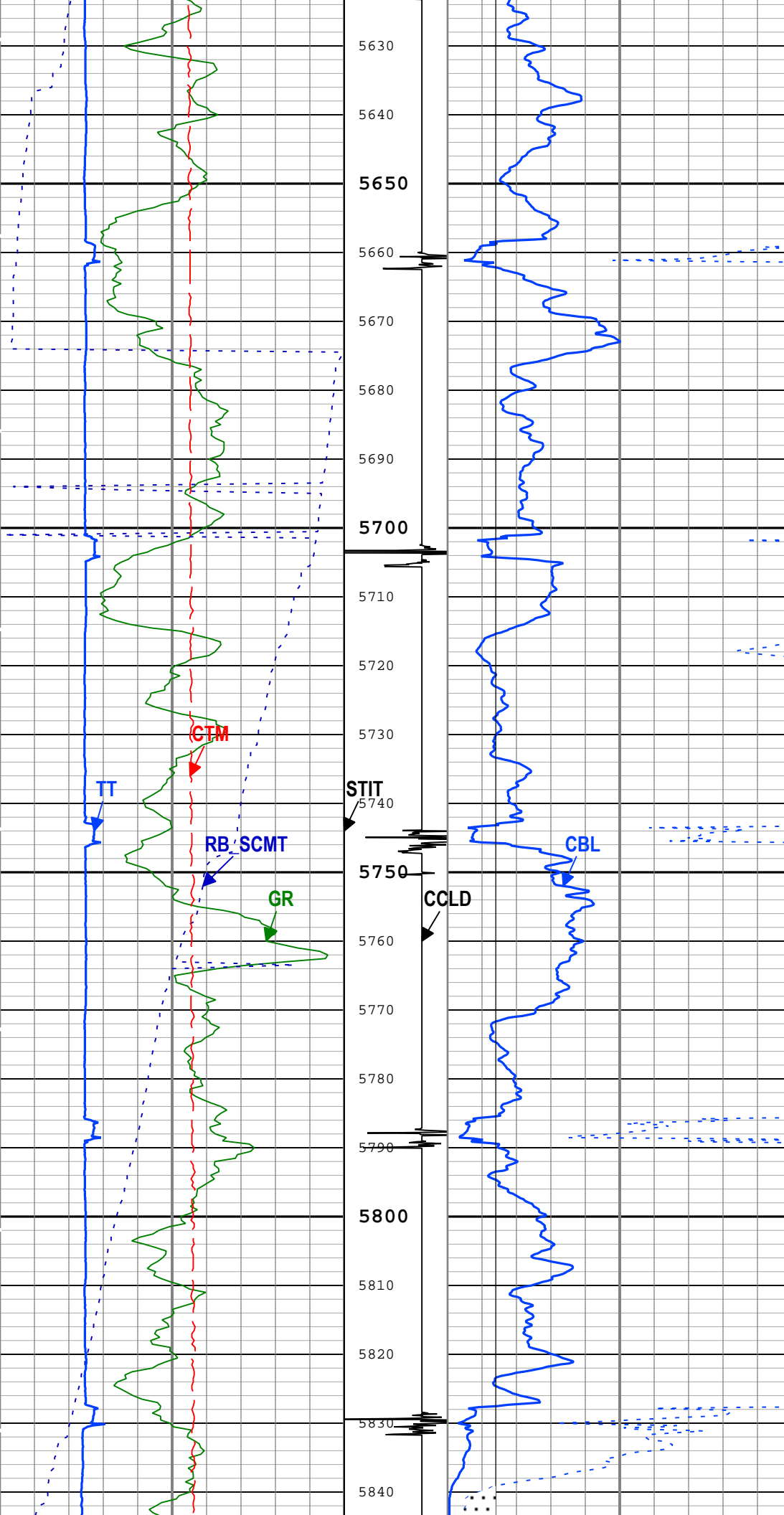


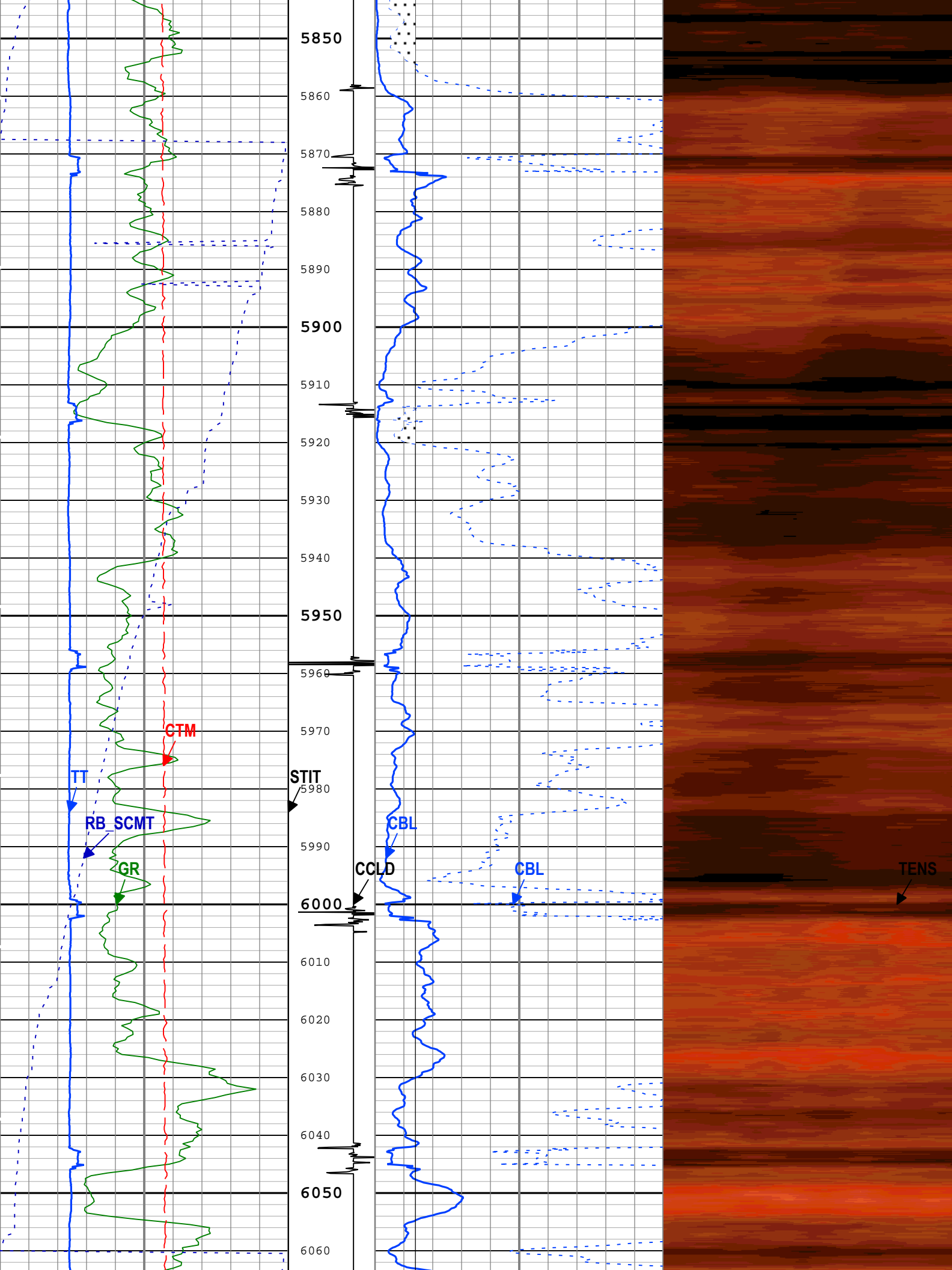


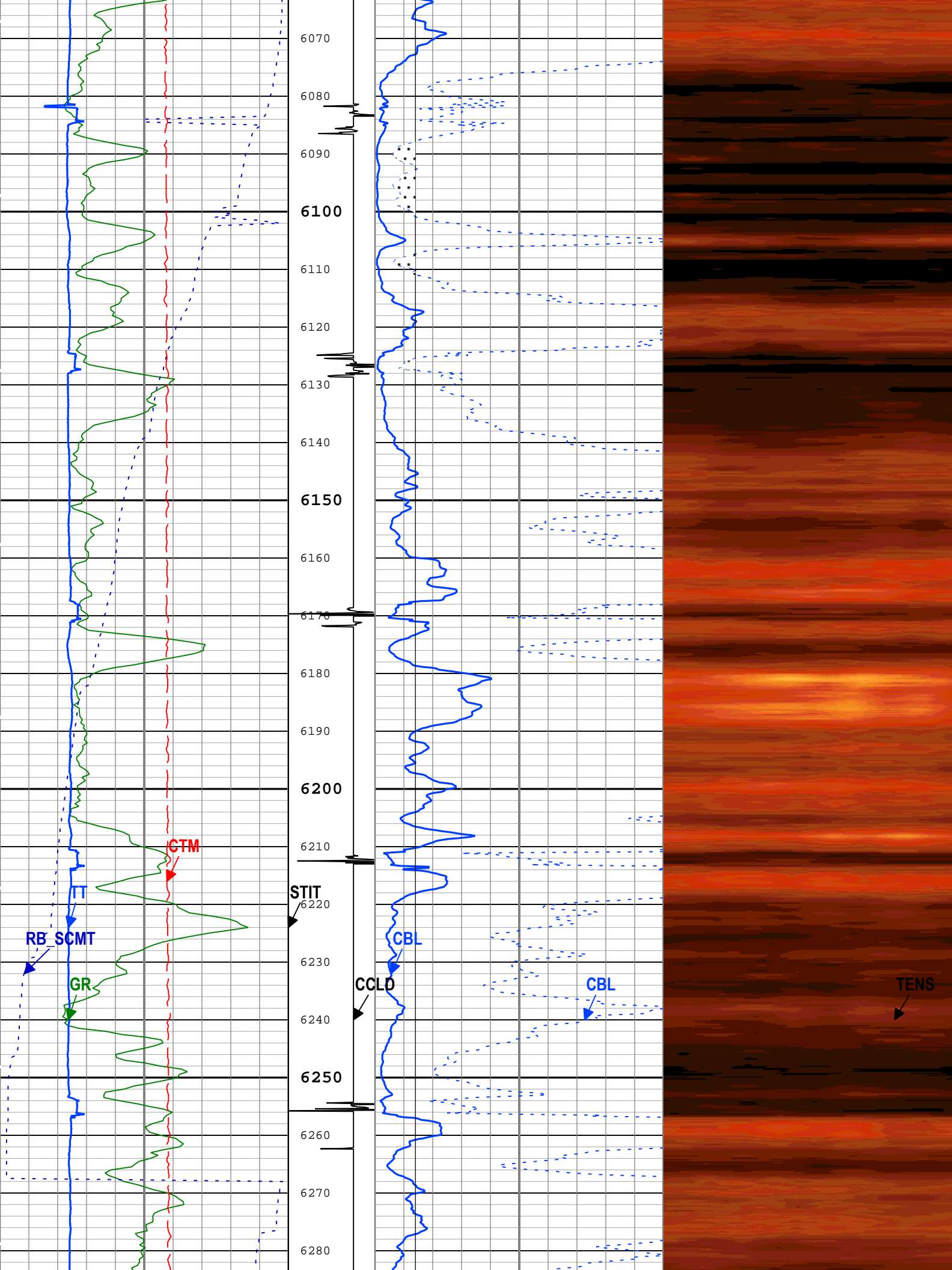


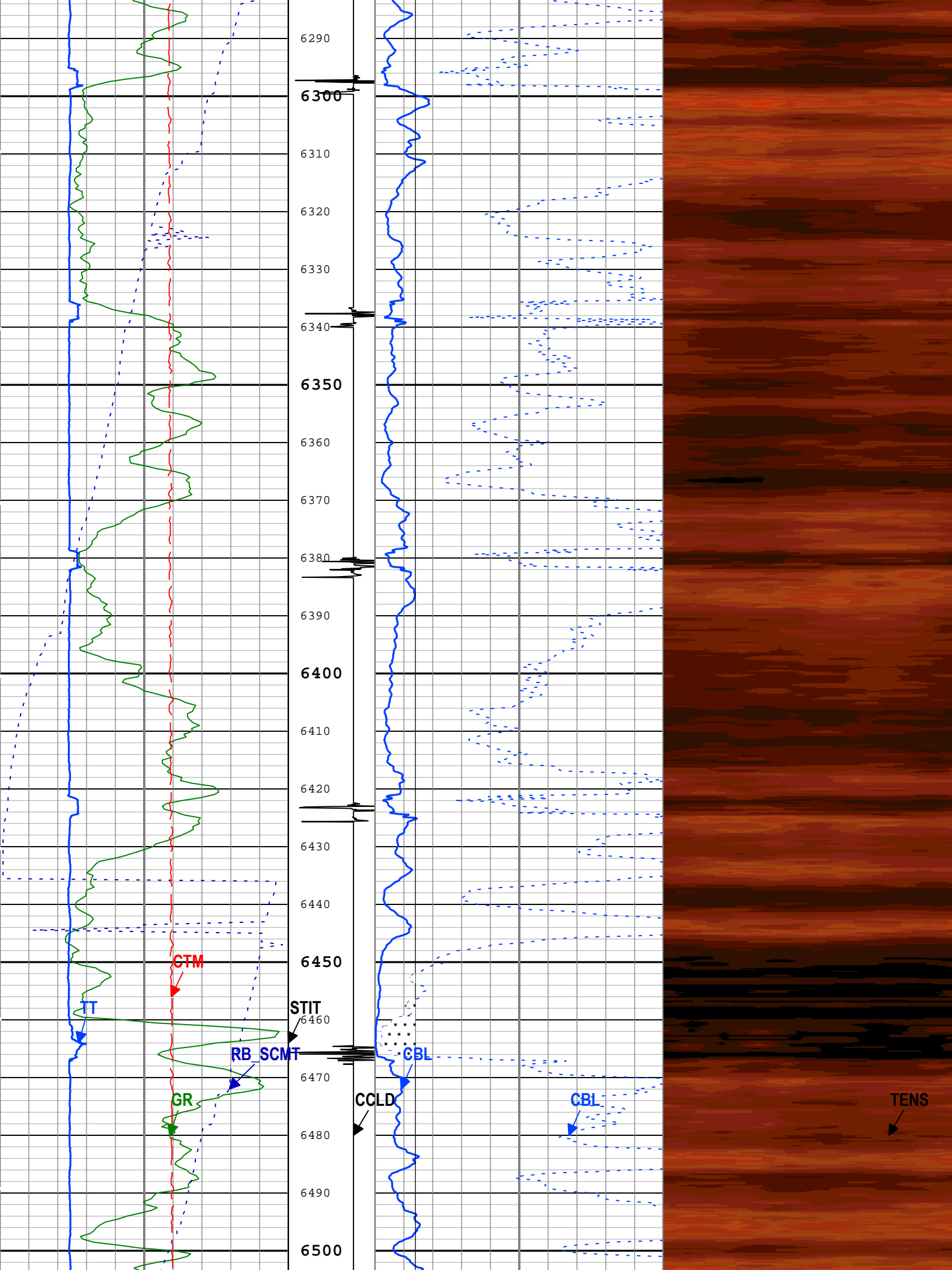


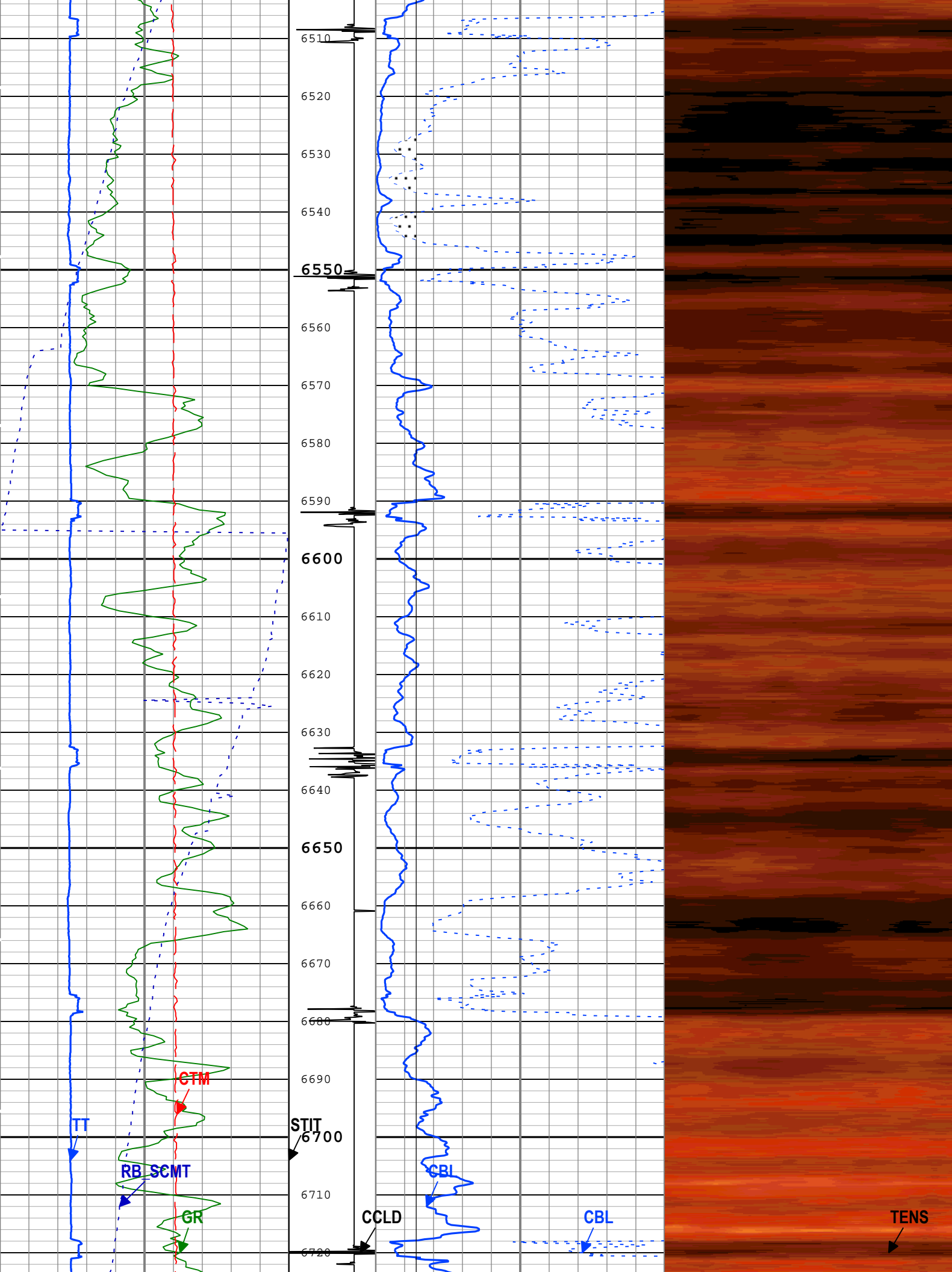


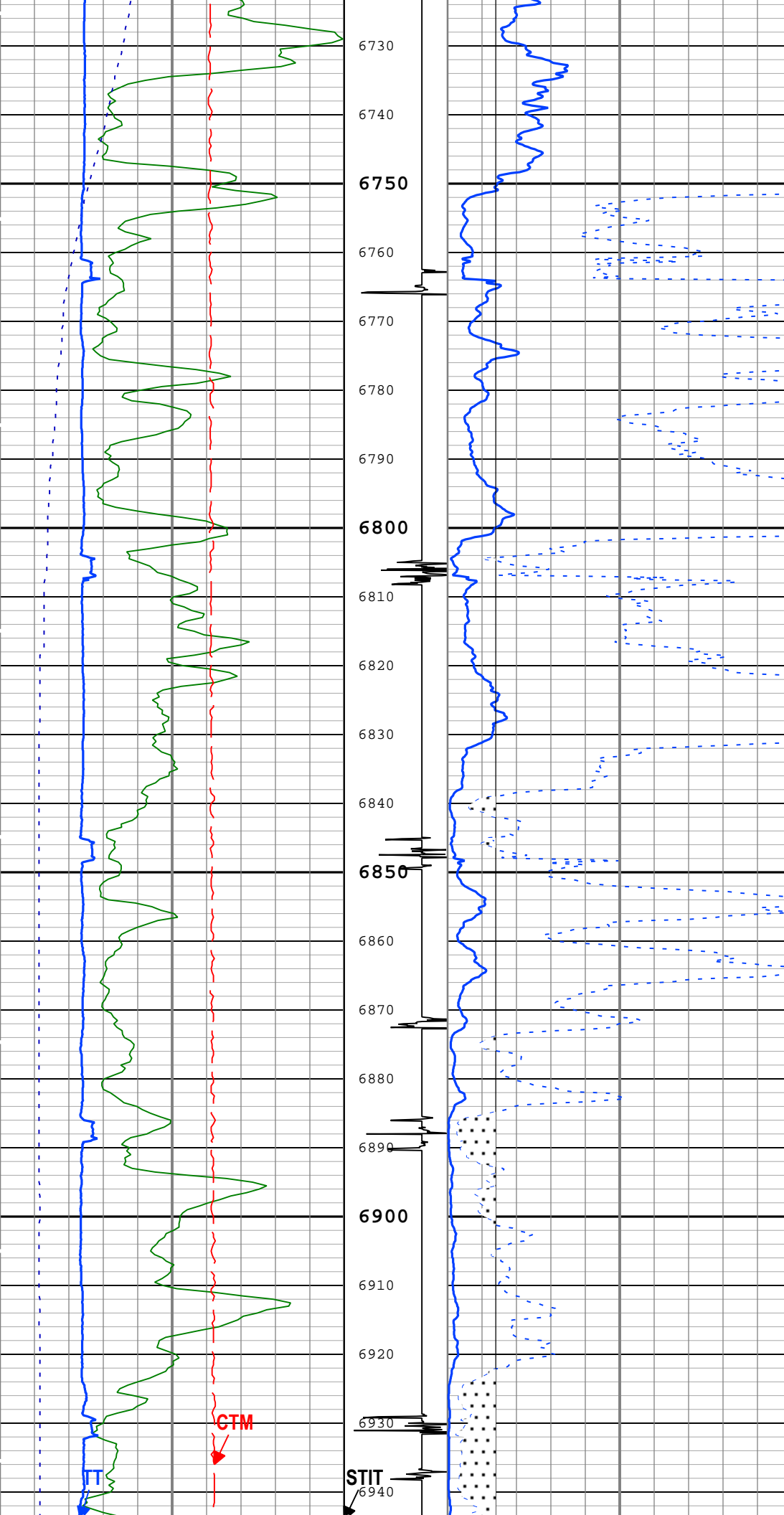


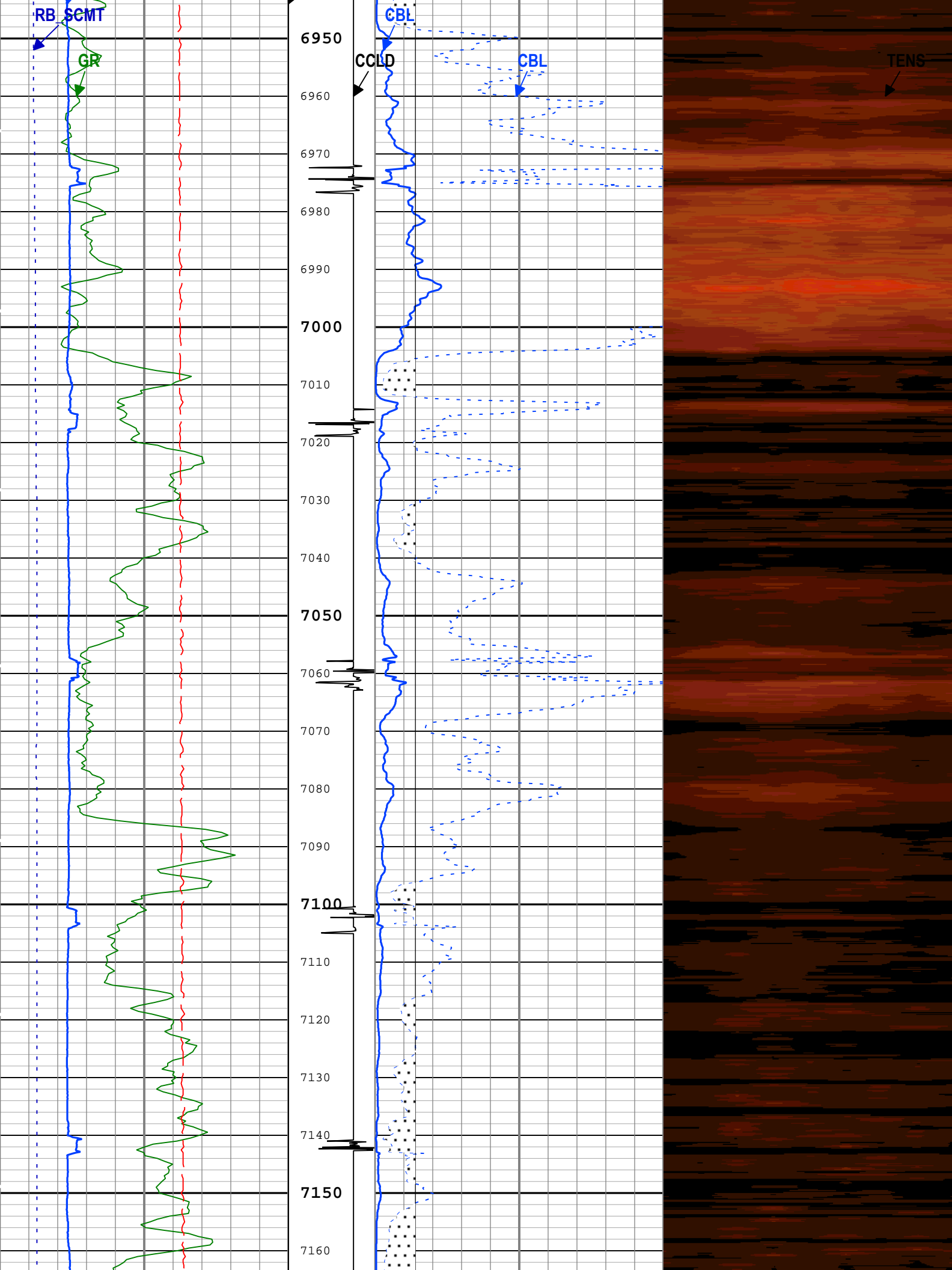


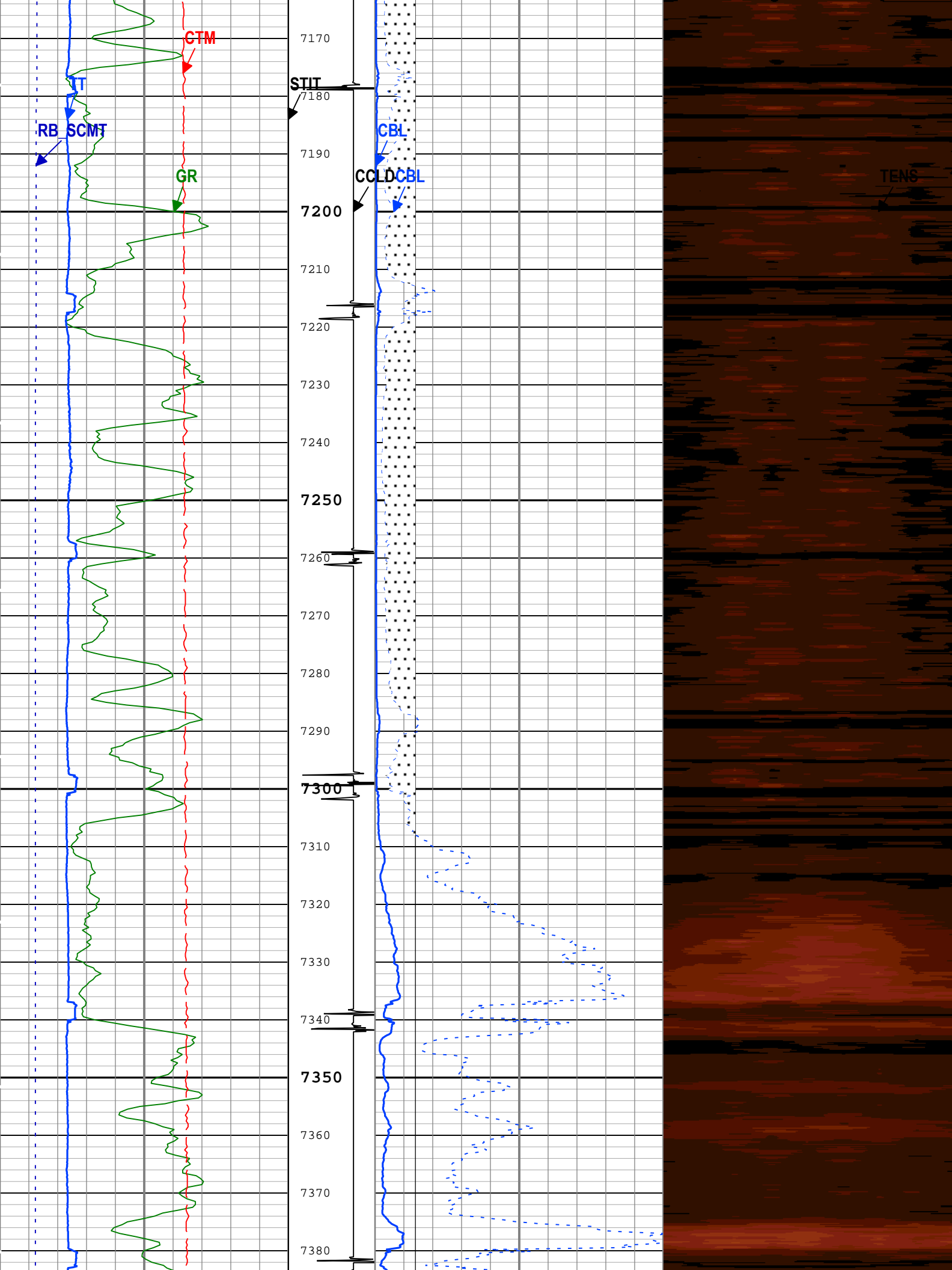




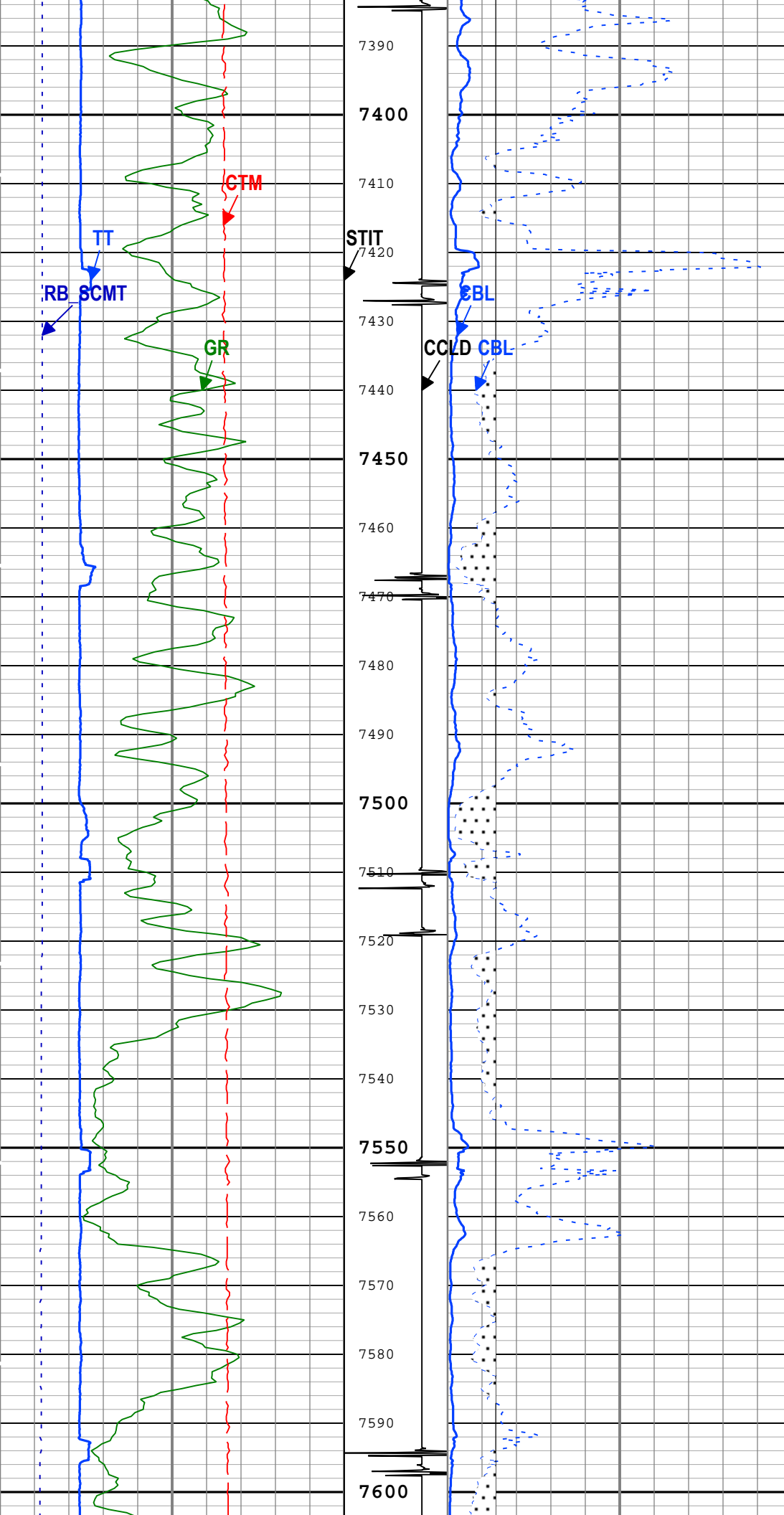


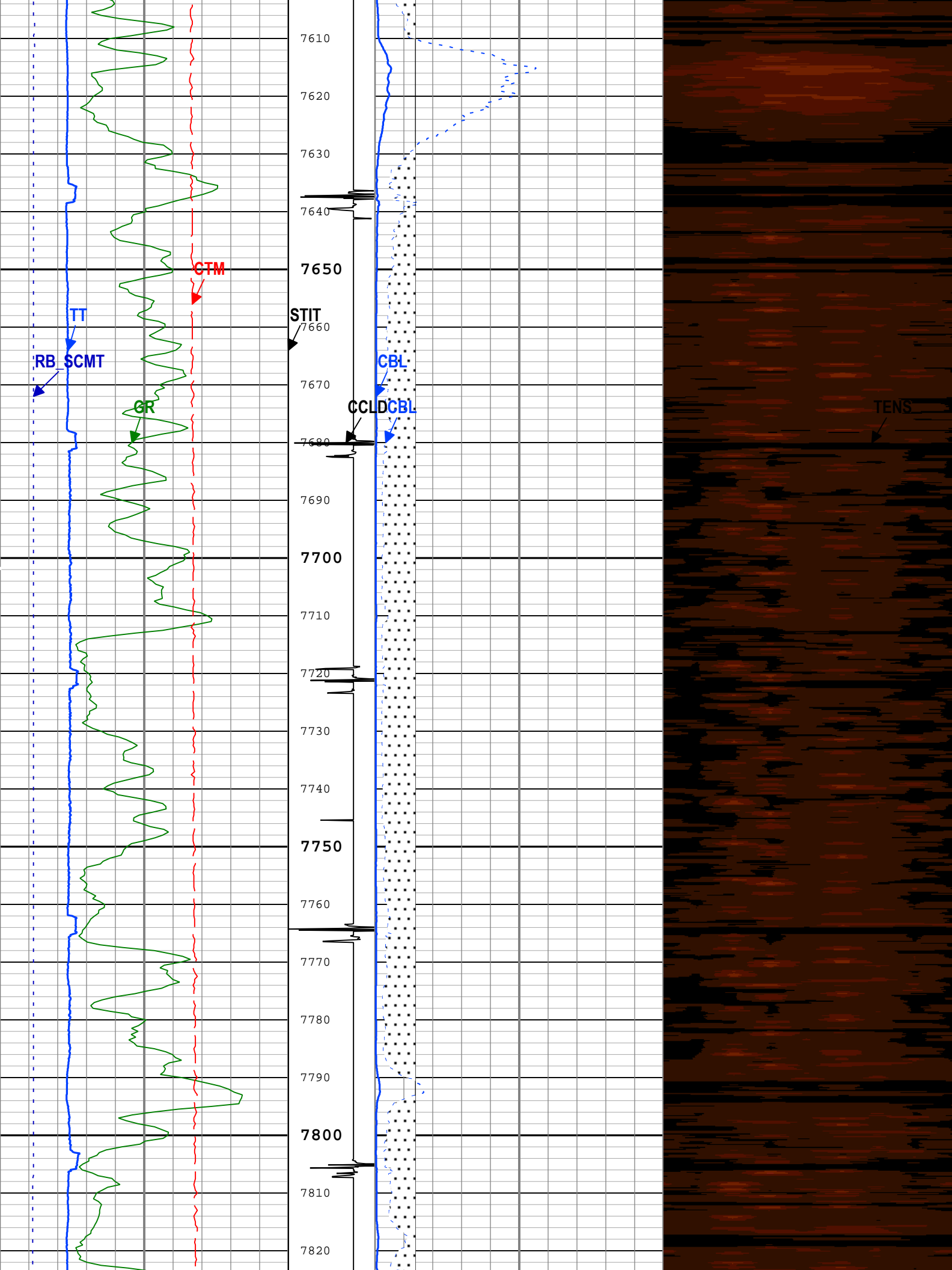


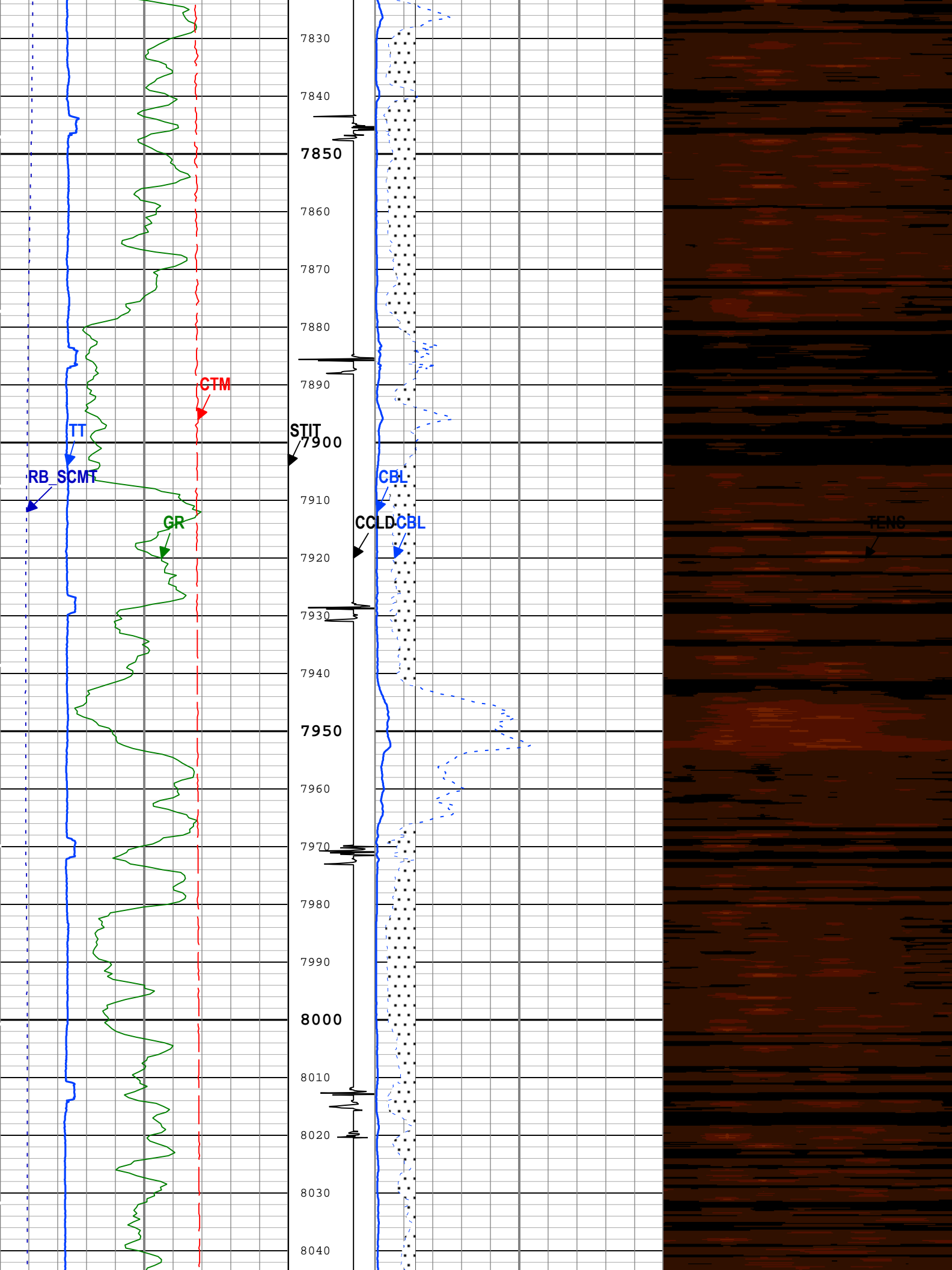


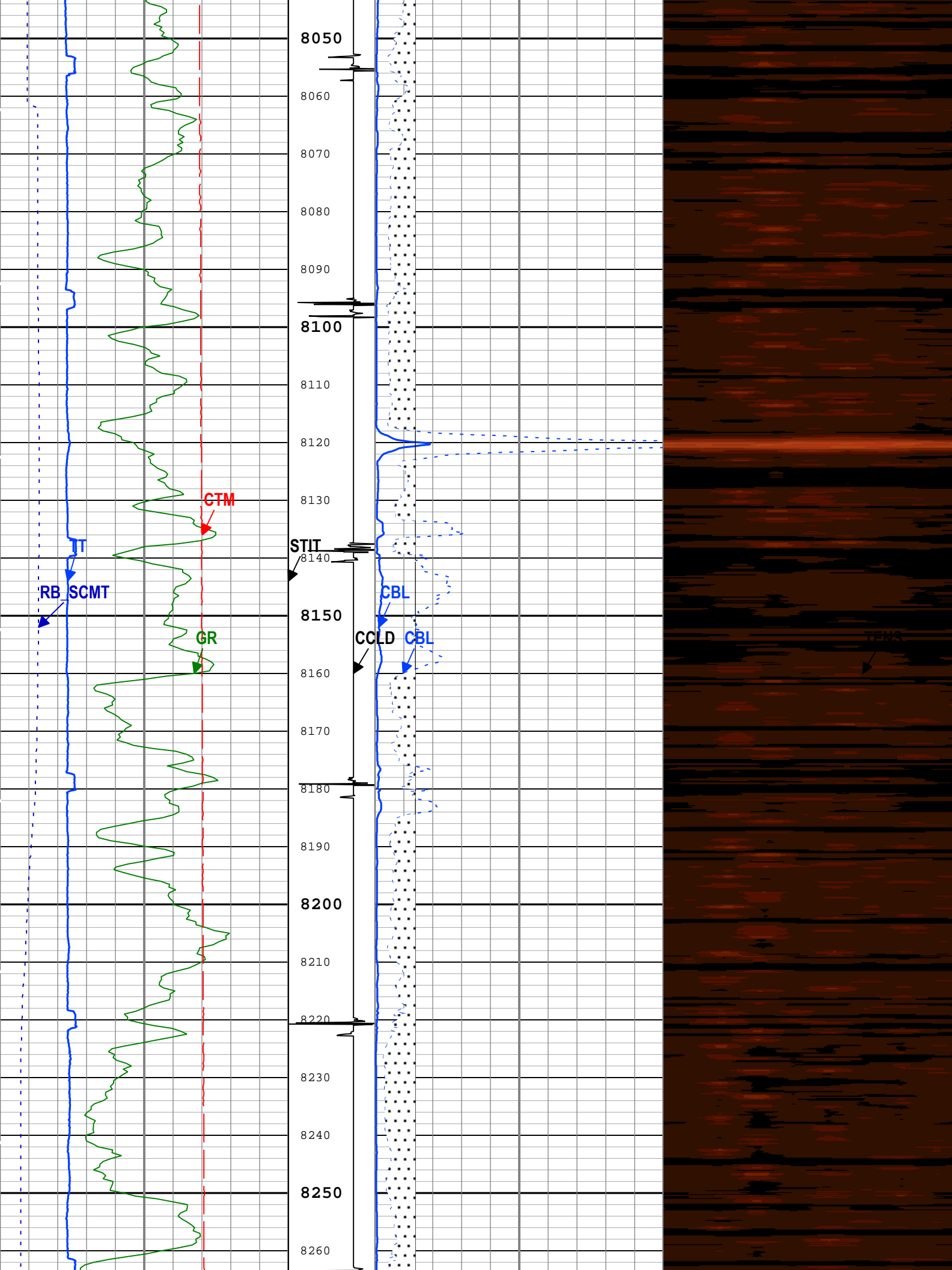


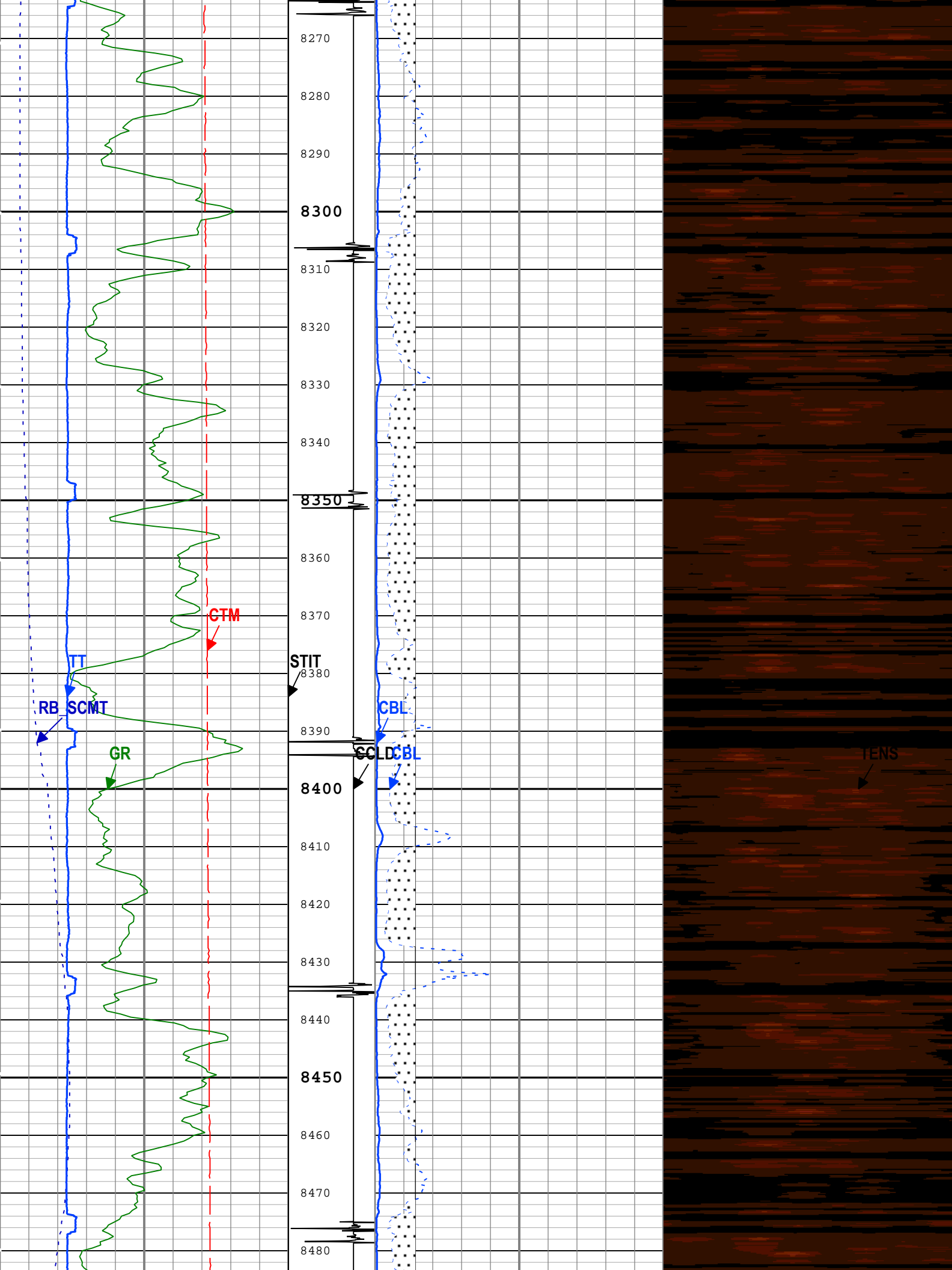


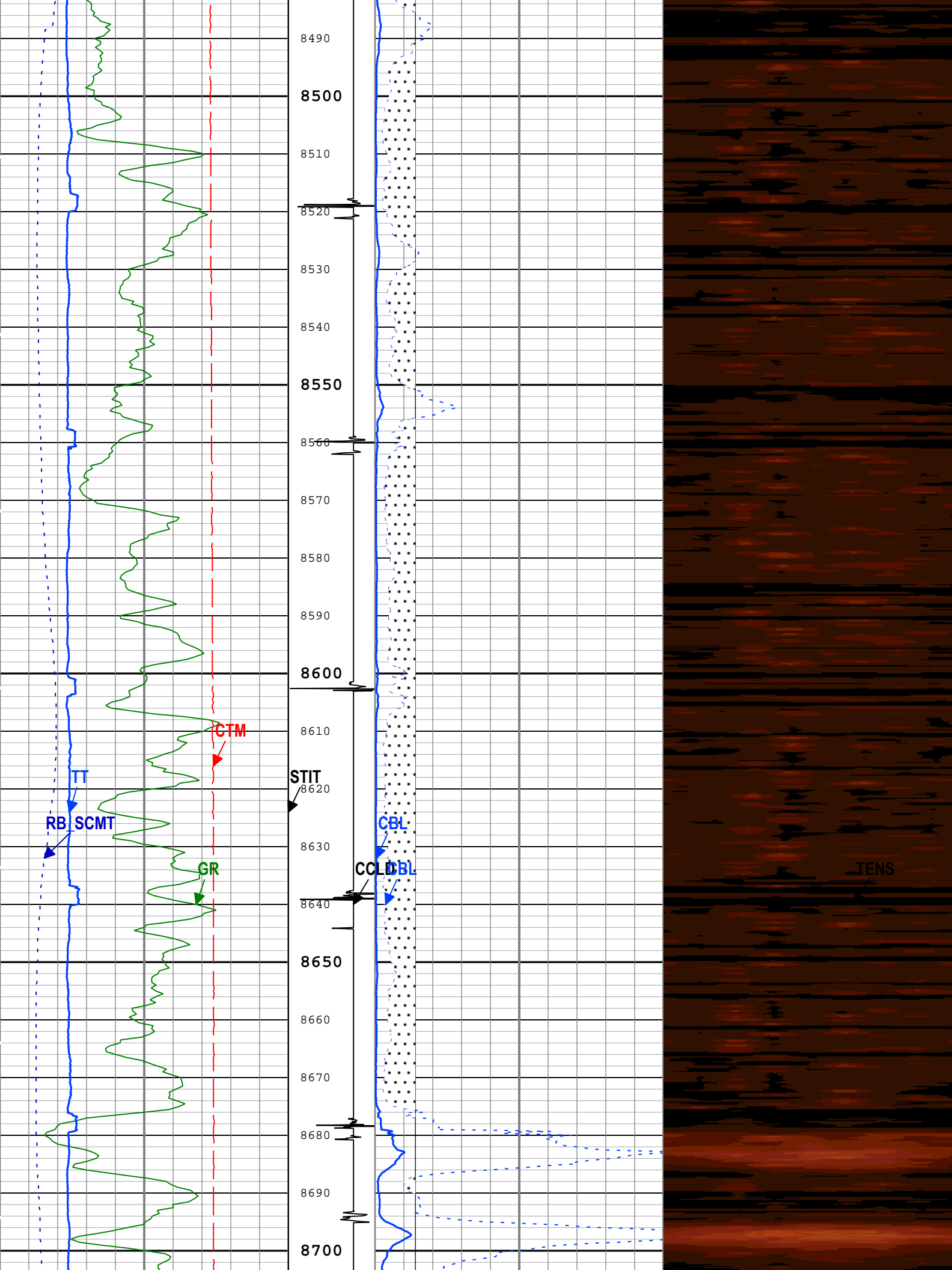


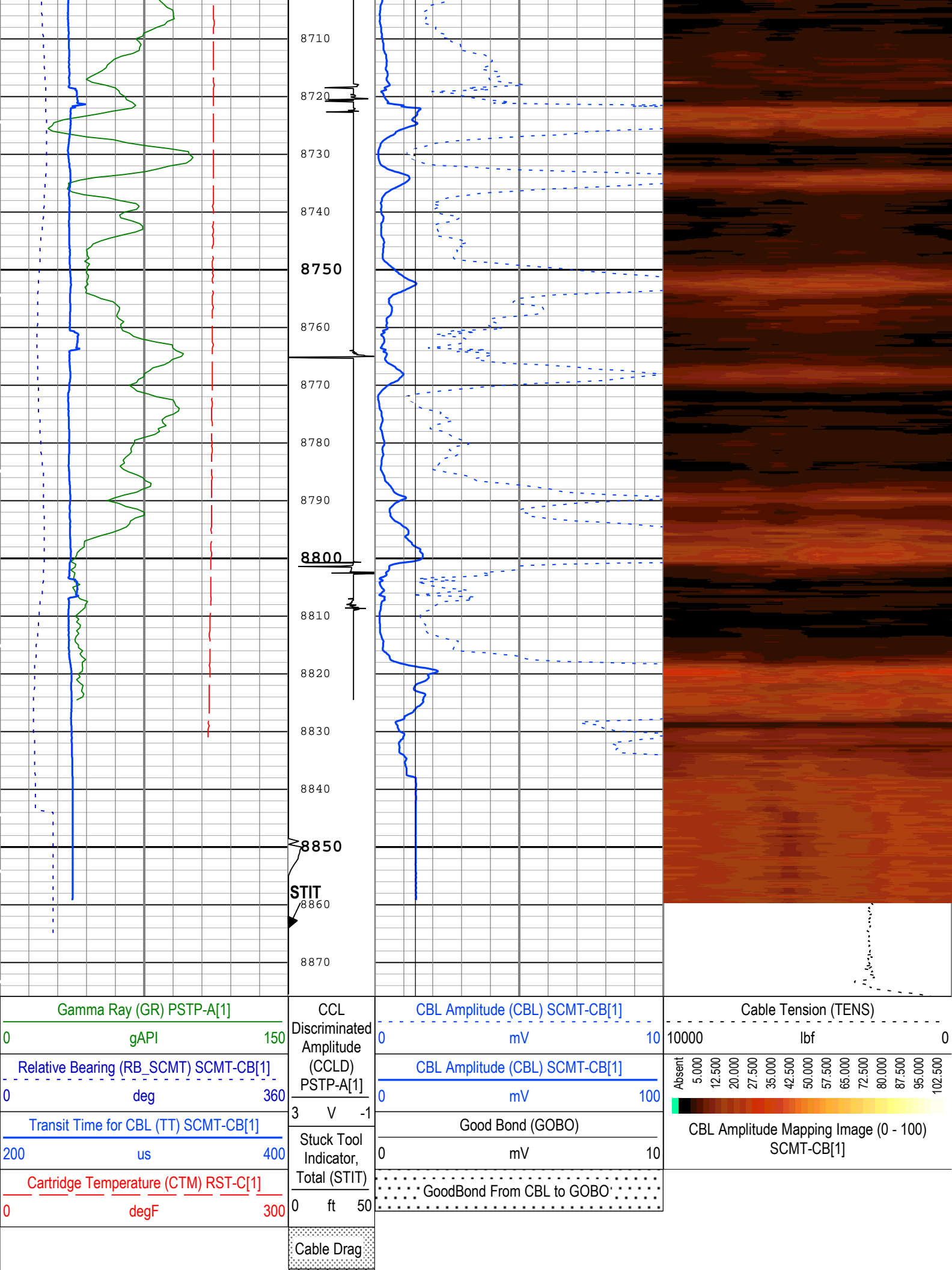














TIME\_1900 - Time Marked every 60.00 (s)

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: 07-Aug-2015 11:08:01

## Channel Processing Parameters

### ONE: Parameters

Parameter	Description	Tool	Value	Unit
BHT	Bottom Hole Temperature	Borehole	238	degF
CB3D	SCMT CBL 3 ft Peak Detection Mode	SCMT-CB	Peak	
CB3G	SCMT CBL 3 ft Peak Detection T0_Delay and Noise Gate	SCMT-CB	224	us
CB3T	SCMT CBL 3 ft Fixed Threshold Level	SCMT-CB	20	mV
CBLG	CBL Gate Width	SCMT-CB	40	us
CBRA	CBL LQC Reference Amplitude in Free Pipe	SCMT-CB	80	mV
CMCF	CBL Cement Type Compensation Factor	SCMT-CB	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	lbm/gal
DFT	Drilling Fluid Type	Borehole	Water	
DTMD	Borehole Fluid Slowness	Borehole	196	us/ft
EDF	Elevation of Derrick Floor Above Permanent Datum	WLSESSION	0	ft
EPD	Elevation of Permanent Datum (PDAT) above Mean Sea Level	WLSESSION	8479	ft
ETEM	HP Estimated Temperature	PSTP-A	212	degF
FCF	CBL Fluid Compensation Factor	SCMT-CB	1	
GGRD	Geothermal Gradient	Borehole	1	0.01 degF/ft
GTSE	Generalized Temperature Selection, from Measured or Computed Temperature	Borehole	GTEM_LINEST	
M1EF	MAP sensitivity equalization factor of receiver 1	SCMT-CB	1	
M2EF	MAP sensitivity equalization factor of receiver 2	SCMT-CB	1	
M3EF	MAP sensitivity equalization factor of receiver 3	SCMT-CB	1	
M4EF	MAP sensitivity equalization factor of receiver 4	SCMT-CB	1	
M5EF	MAP sensitivity equalization factor of receiver 5	SCMT-CB	1	
M6EF	MAP sensitivity equalization factor of receiver 6	SCMT-CB	1	
M7EF	MAP sensitivity equalization factor of receiver 7	SCMT-CB	1	
M8EF	MAP sensitivity equalization factor of receiver 8	SCMT-CB	1	
MAPD	SCMT MAP Peak Detection Mode	SCMT-CB	Peak	
MAPG	SCMT MAP Peak Detection T0_Delay and Noise Gate	SCMT-CB	167	us
MAPT	SCMT MAP Fixed Threshold Level	SCMT-CB	30	mV
MCCF	MAP Cement Type Compensation Factor	SCMT-CB	0.25	
MMSA	MAP Minimum Sonic Amplitude	SCMT-CB	3.98	mV
MSA	Minimum Sonic Amplitude	SCMT-CB	0.51	mV
PTCO	PBMS Pressure Temperature Correction Option	PSTP-A	Gauge Temperature	
PDAT	Permanent Datum	WLSESSION	GL	
RBC	Relative Bearing Correction Allow/Disallow	SCMT-CB	Allow	
RUN_SNUM	Run Sequence Number	WSDRUN	1	
SHT	Surface Hole Temperature	Borehole	68	degF

## Tool Control Parameters

### ONE: Parameters

Parameter	Description	Tool	Value	Unit
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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	36 dB	
RST_DLM	Depth Log Mode	RST-C	Sigma	
RST_SLM	Station Log Mode	RST-C	Off	
RST_WDET	RST WFL Detectors List	RST-C	[.....]	

ONE

Repeat Pass 0 PSI

Software Version

Acquisition System	Version
Maxwell 2016	6.0.47569.3100

Pass Summary

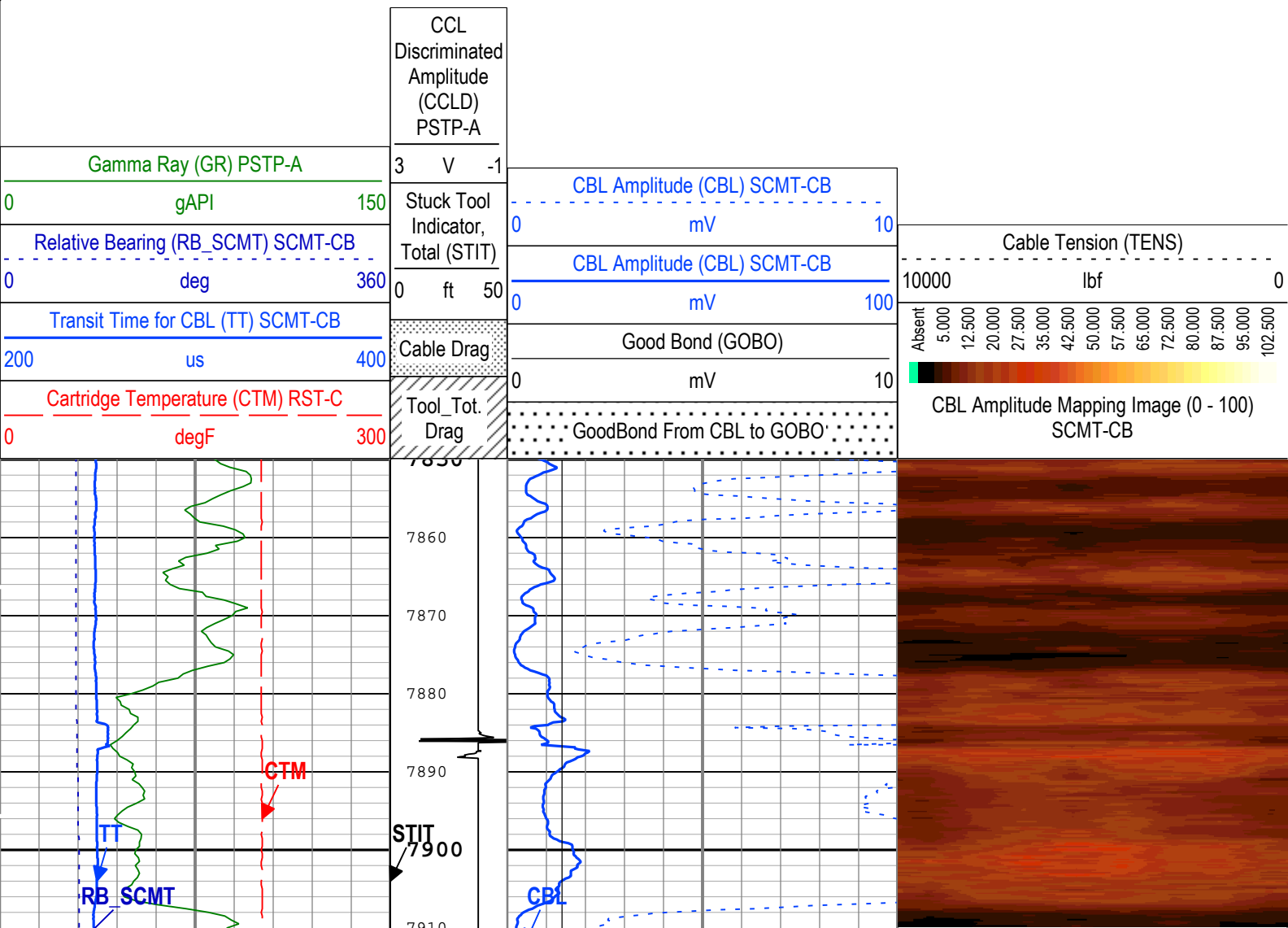
Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	DSC Mode	Depth Shift	Include Parallel Data
ONE	Log[8]:Up	Up	7741.62 ft	8215.73 ft	24-Jul-2015 4:50:35 AM	24-Jul-2015 5:14:13 AM	ON	15.36 ft	Yes

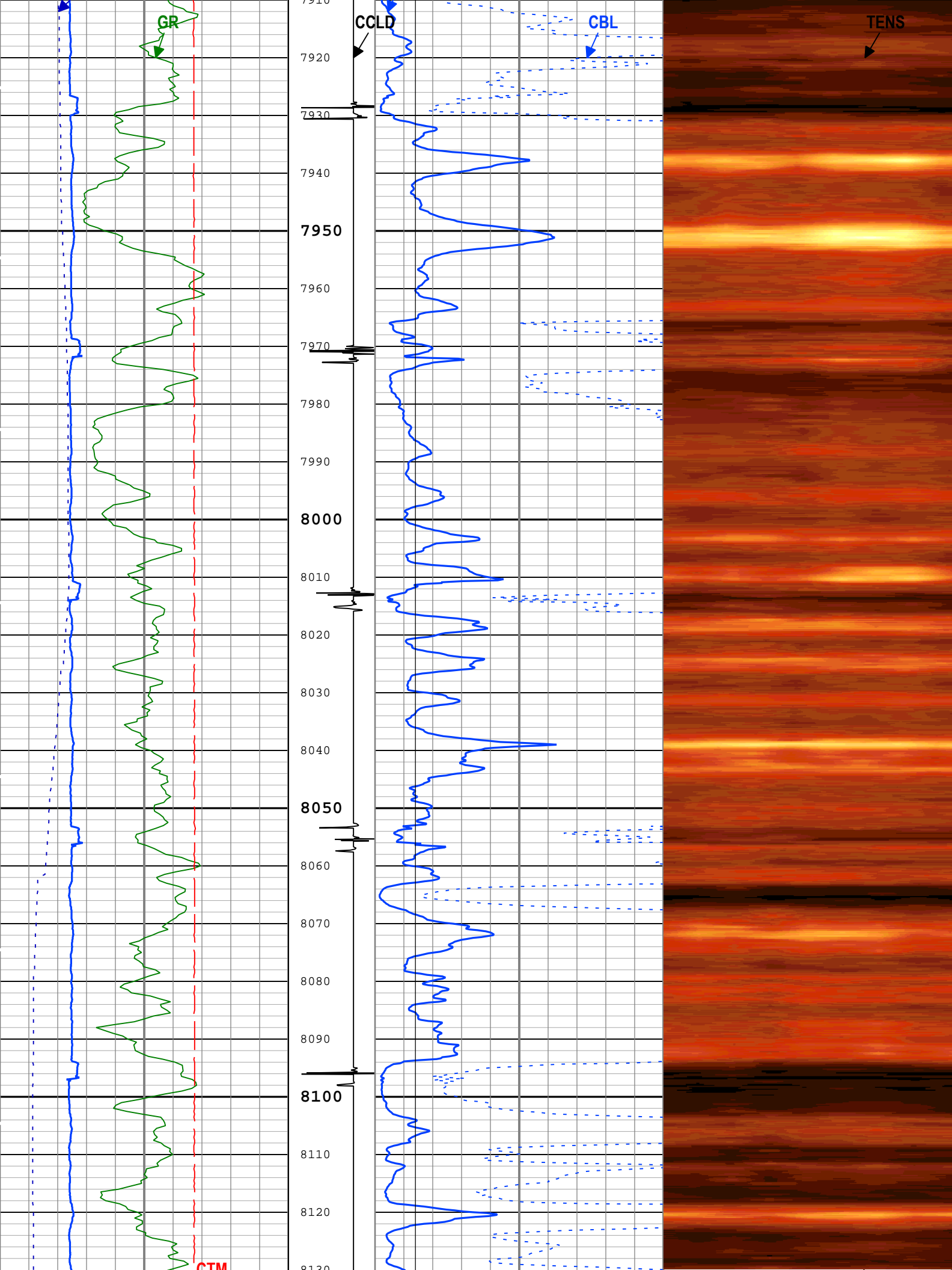
All depths are referenced to toolstring zero

Log	Company:Caerus Piceance LLC      Well:Puckett 12C-1 ONE: Log[8]:Up:S009
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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: 07-Aug-2015 11:08:06

TIME\_1900 - Time Marked every 60.00 (s)







SCMT	SCMT Operating Mode	SCMT-CB	Log	
MAX_LOG_SPEED	Toolstring Maximum Logging Speed	WLSESSION	150	ft/h
RST_DLM	Depth Log Mode	RST-C	Sigma	

MainPressure

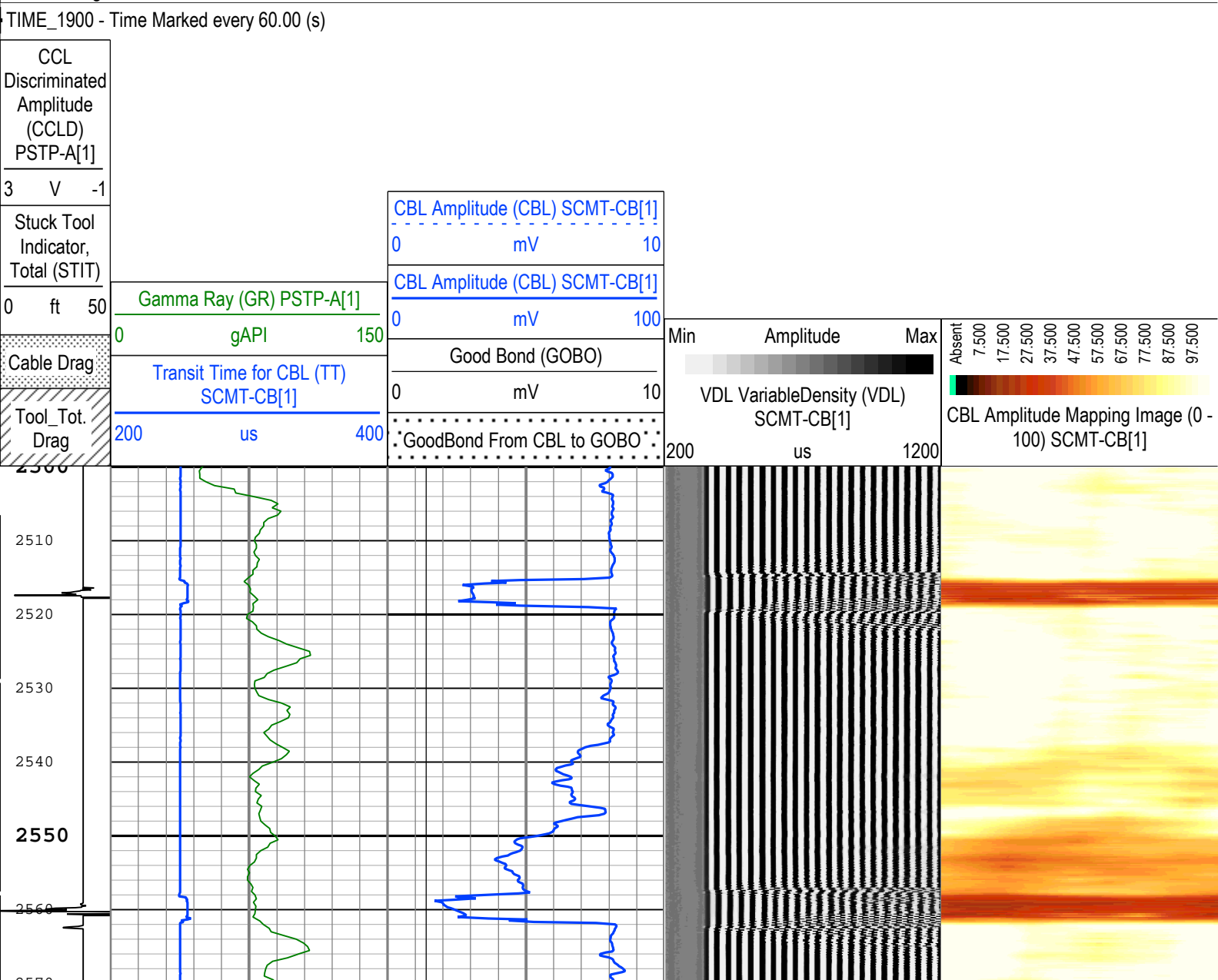
Main Pass 2500 PSI

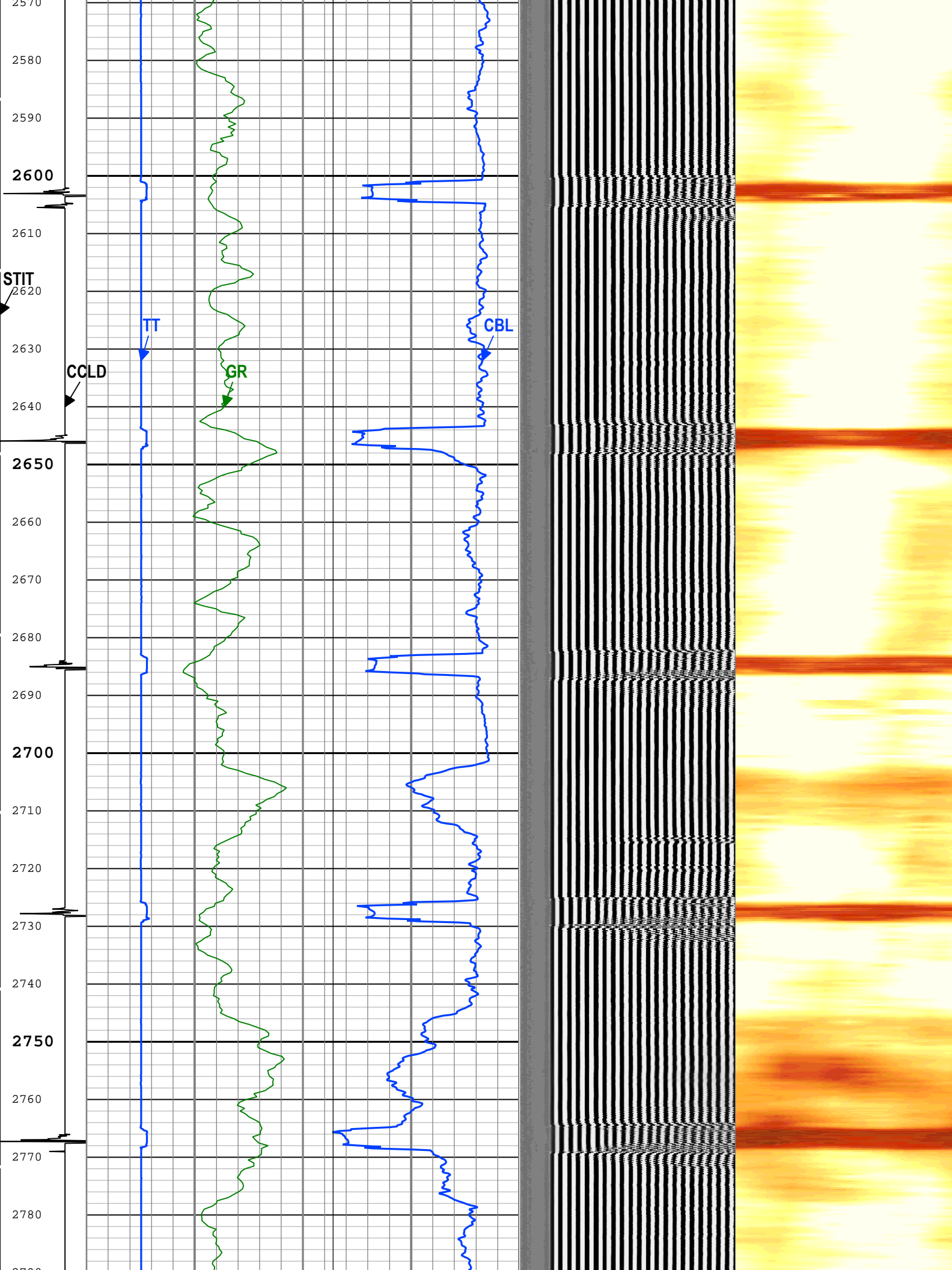
Software Version	
Acquisition System	Version
Maxwell 2016	6.0.47569.3100

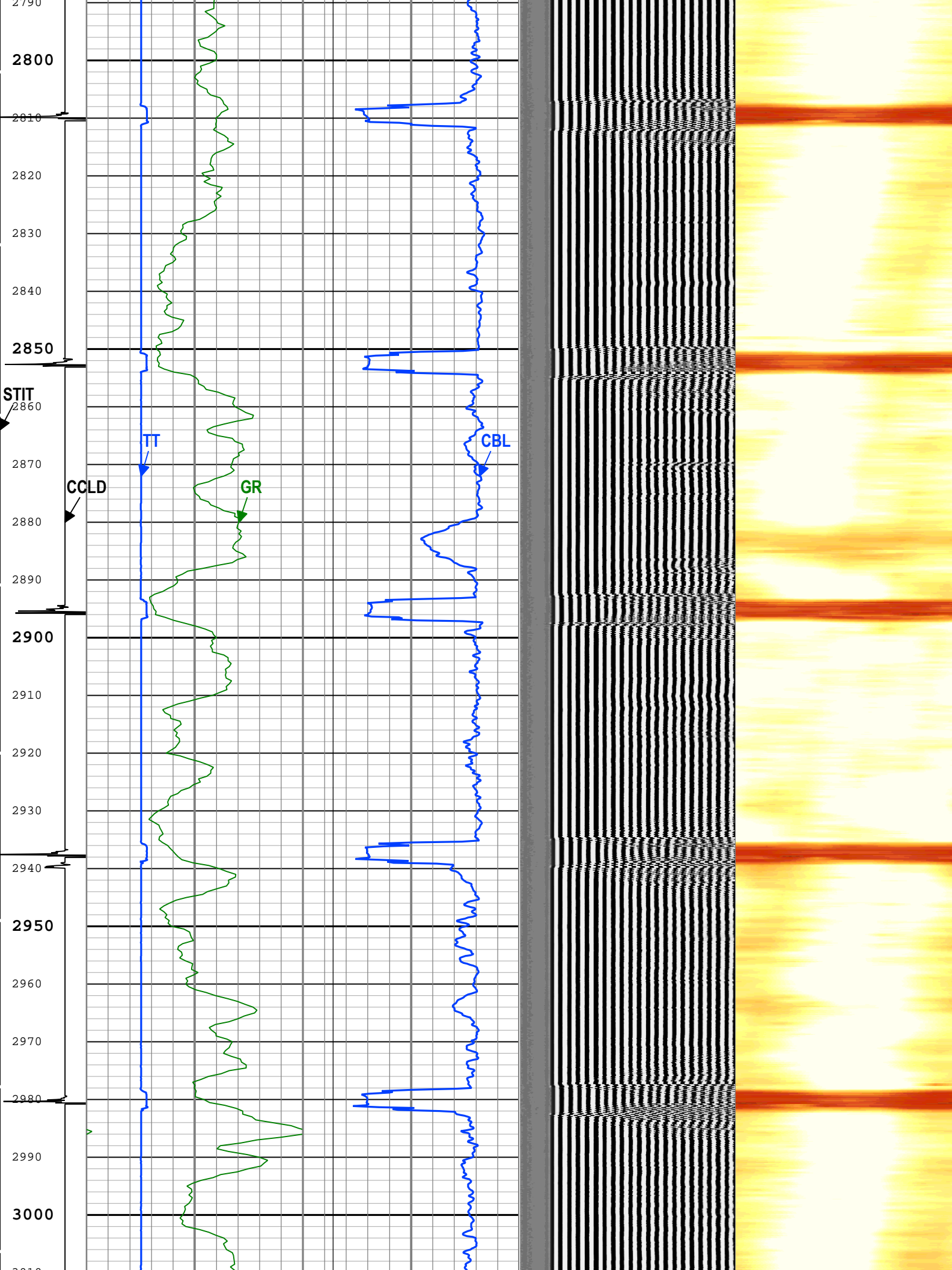
Composite Summary									
Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	DSC Mode	Depth Shift	Include Parallel Data
ONE	Log[5]:Up	Up	2506.14 ft	8868.16 ft	23-Jul-2015 11:24:27 PM	24-Jul-2015 3:00:14 AM	ON	6.64 ft	Yes
ONE	Log[7]:Up	Up	7701.77 ft	8875.83 ft	24-Jul-2015 4:01:17 AM	24-Jul-2015 4:41:45 AM	ON	17.06 ft	Yes
All depths are referenced to toolstring zero									

Log	Company:Caerus Piceance LLC      Well:Puckett 12C-1 MainPressure:S009
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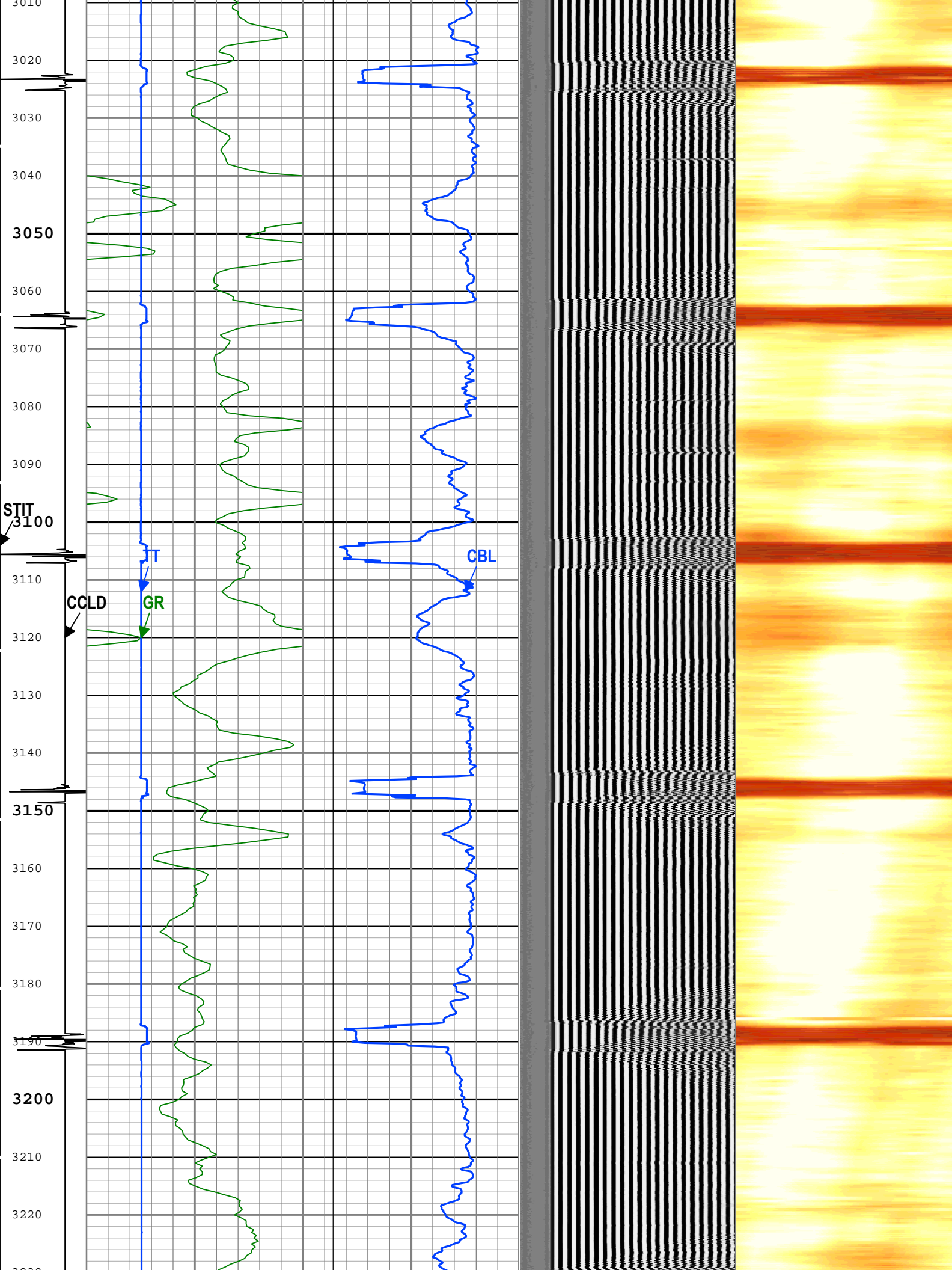
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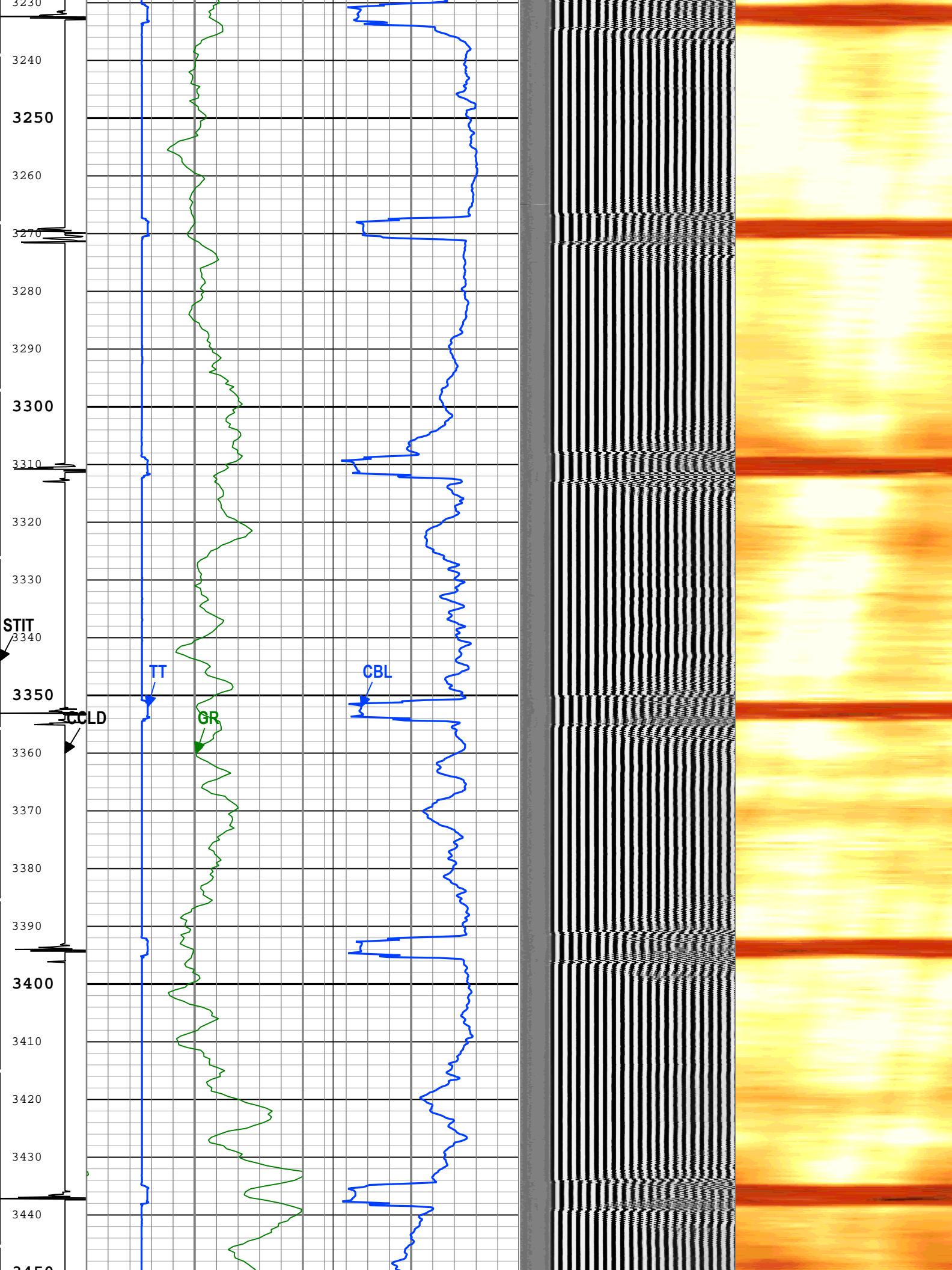




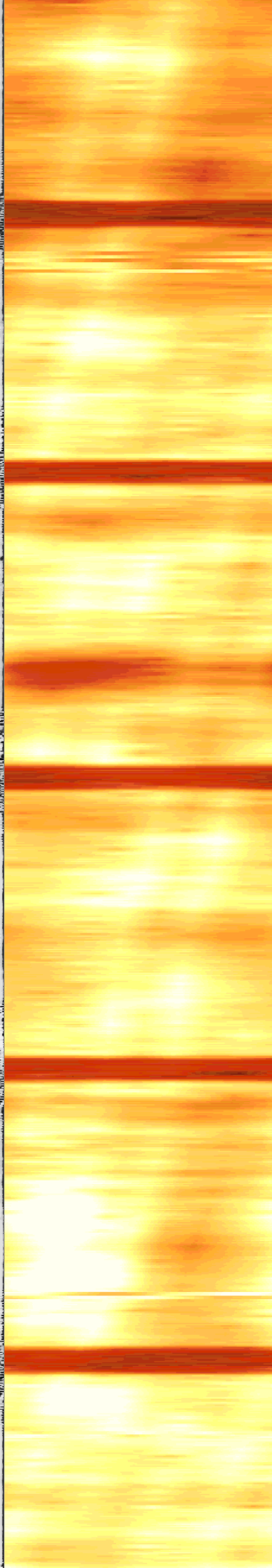
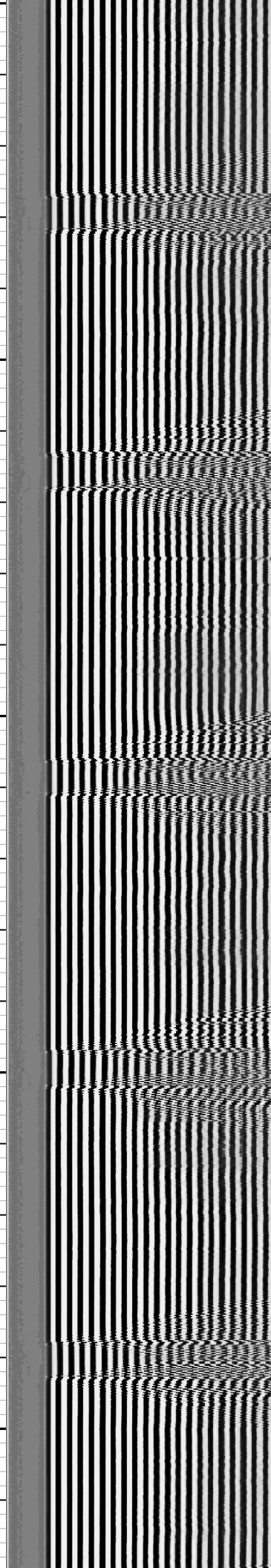
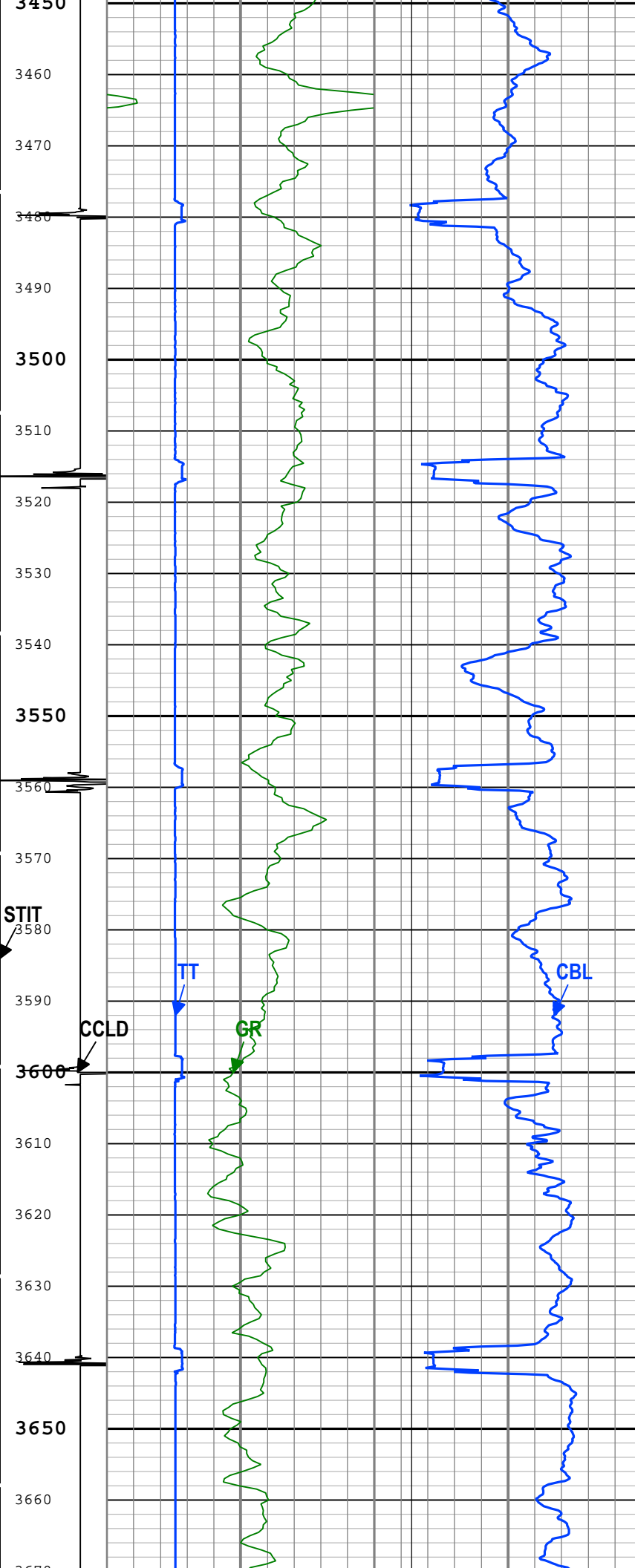


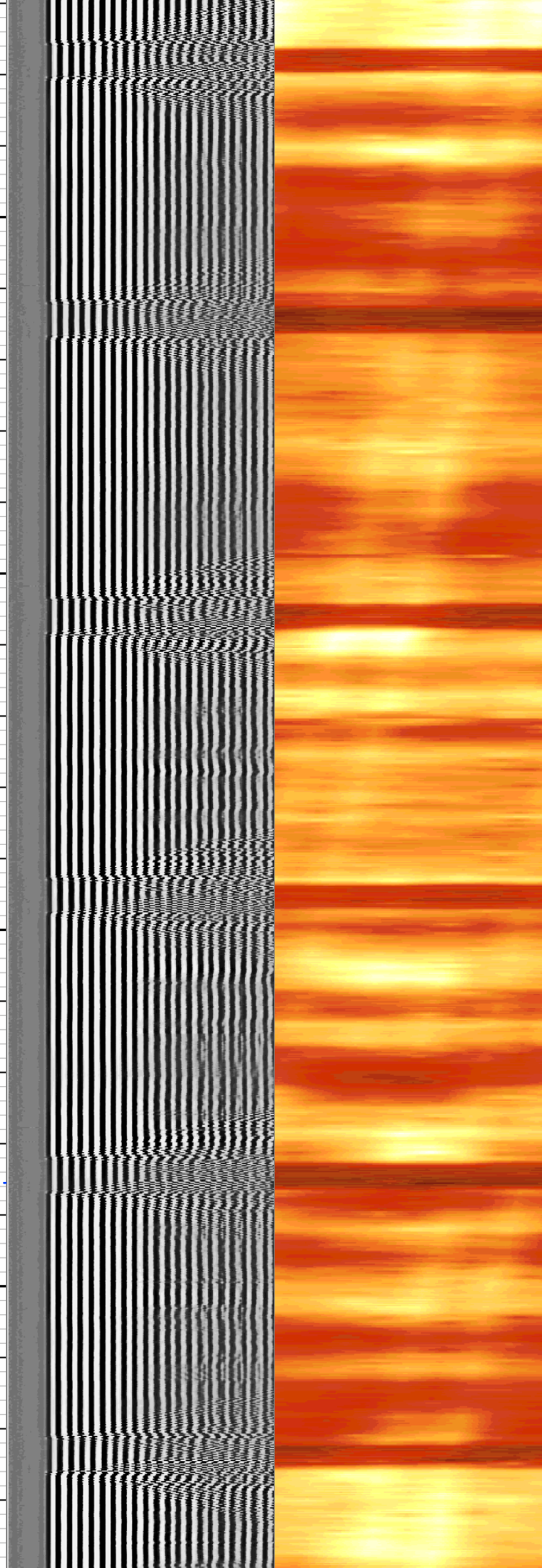
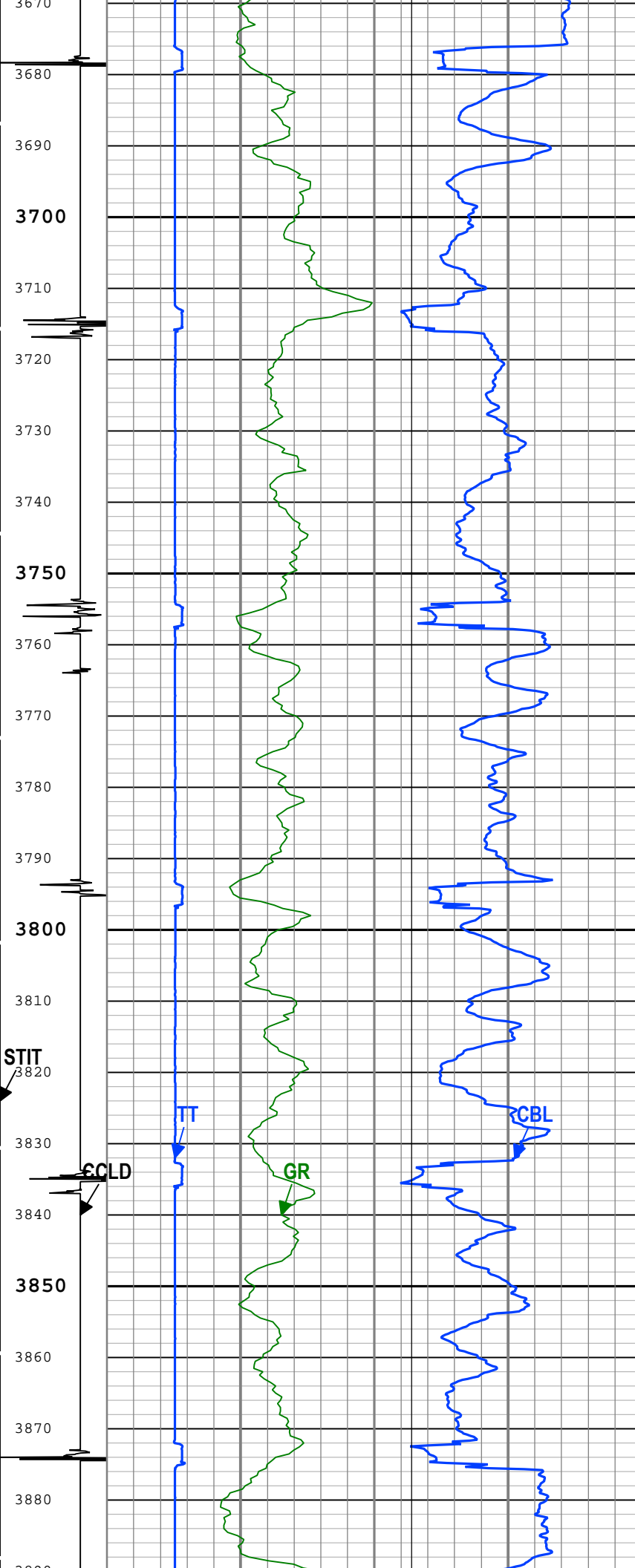


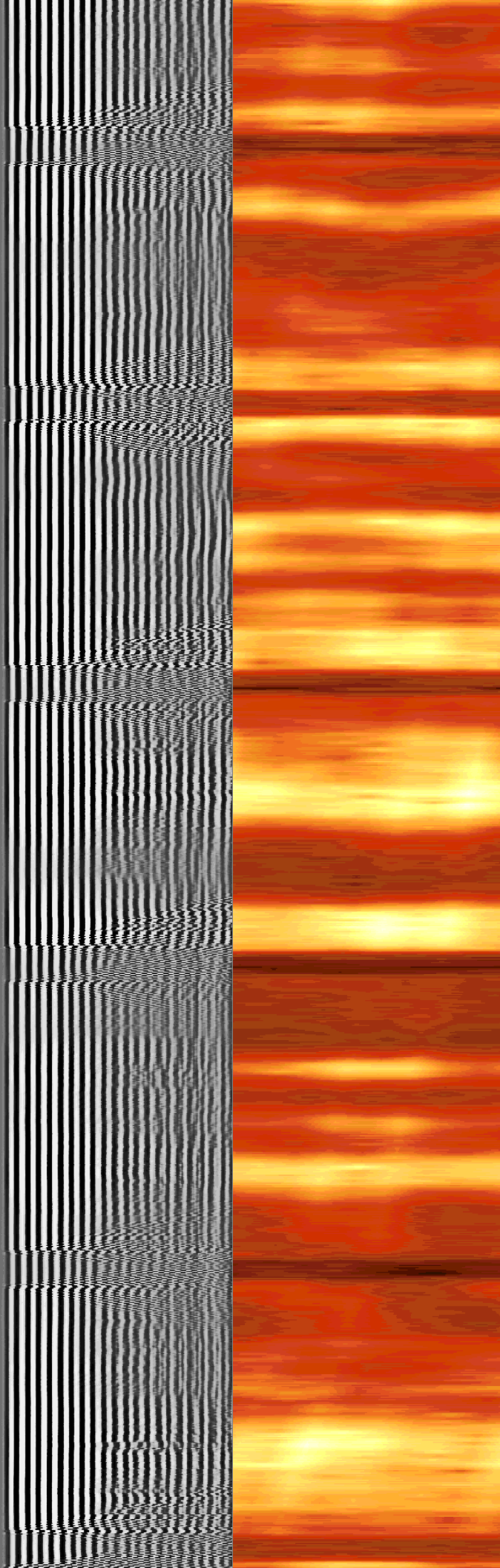
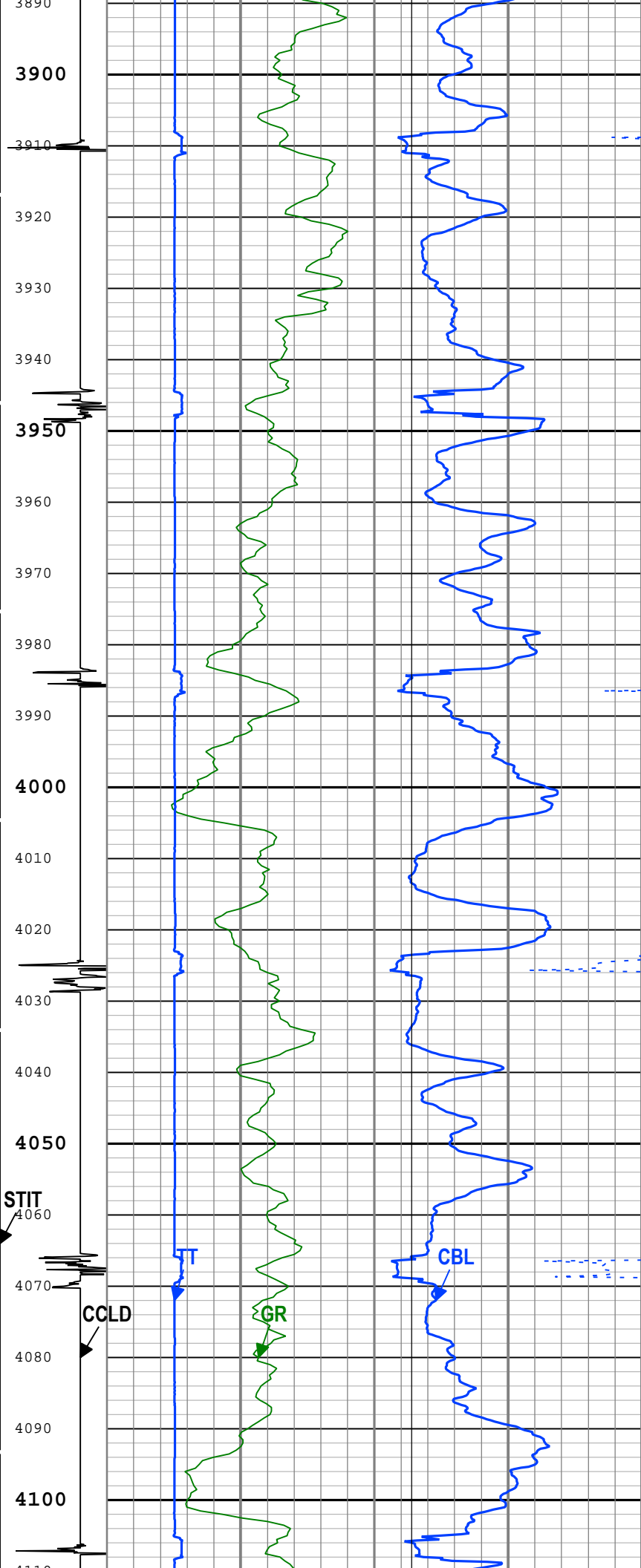




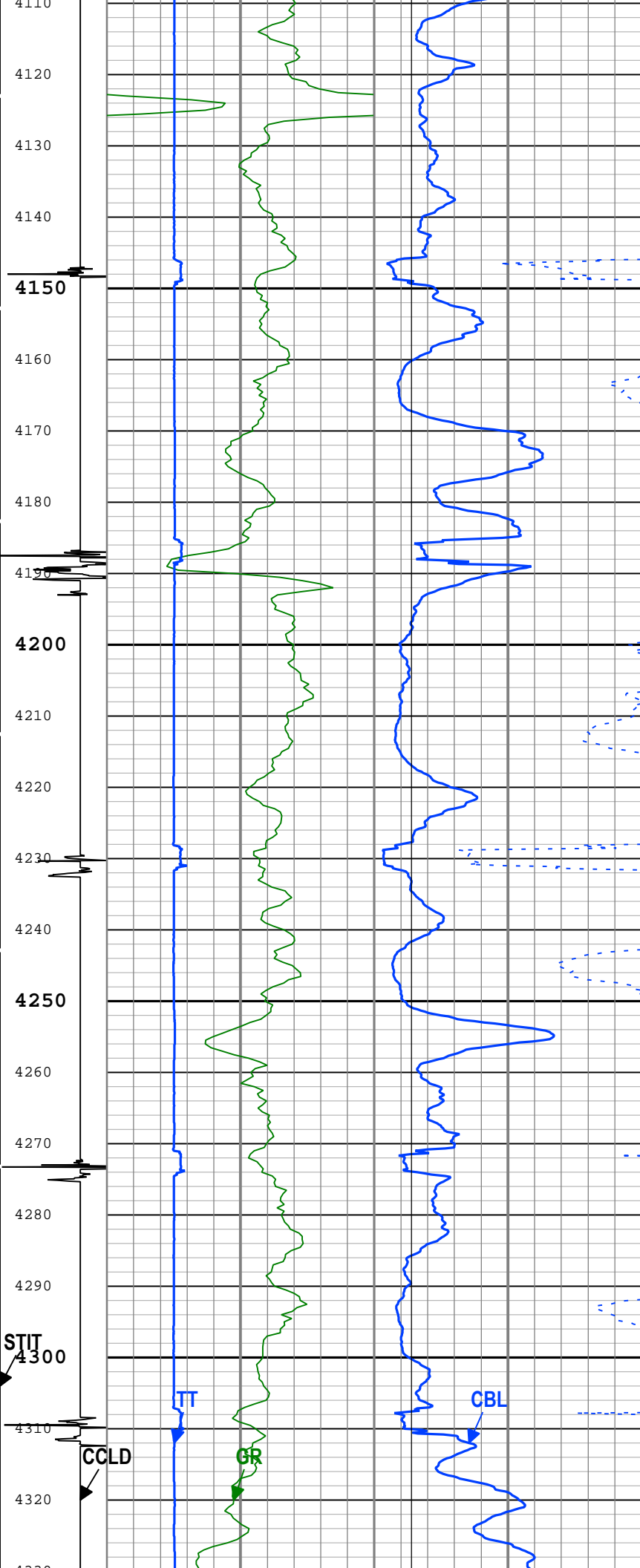


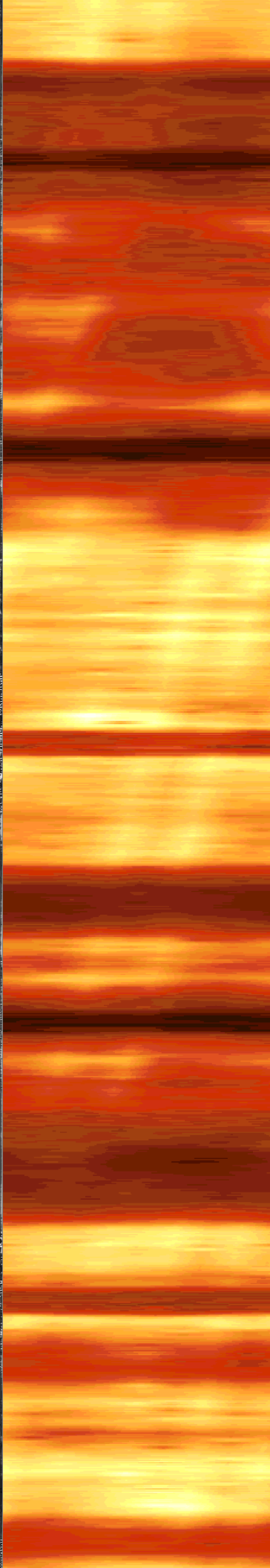
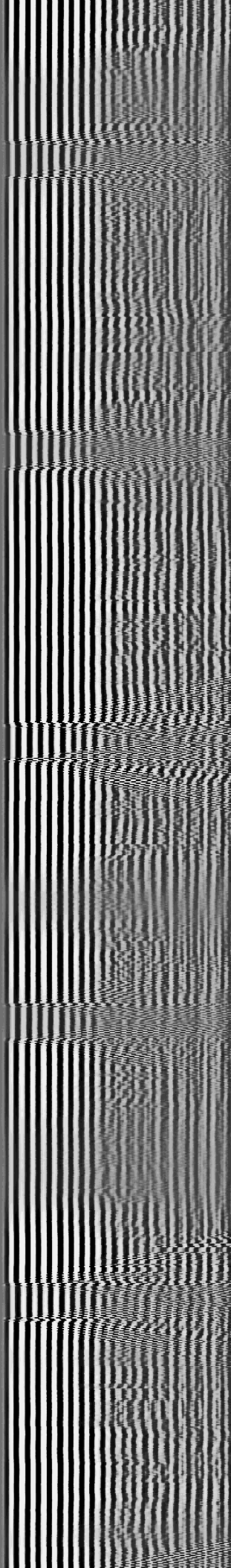
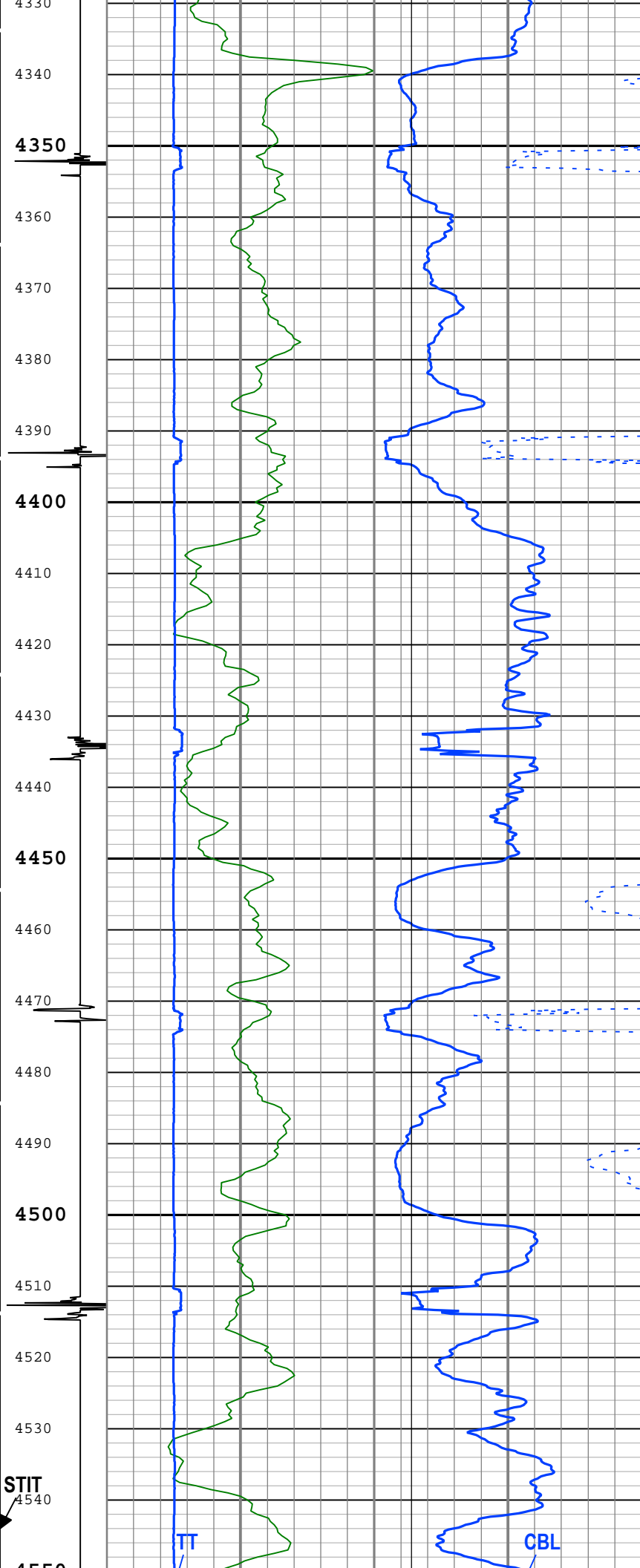


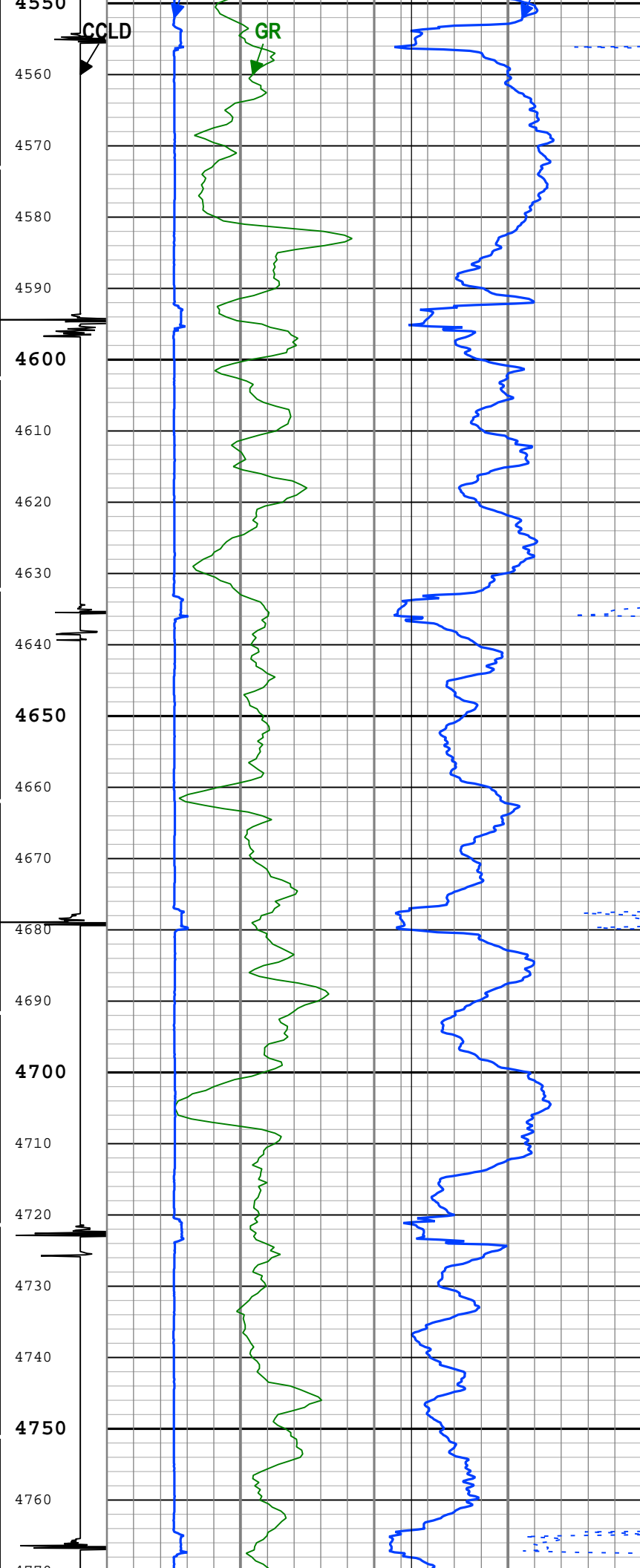




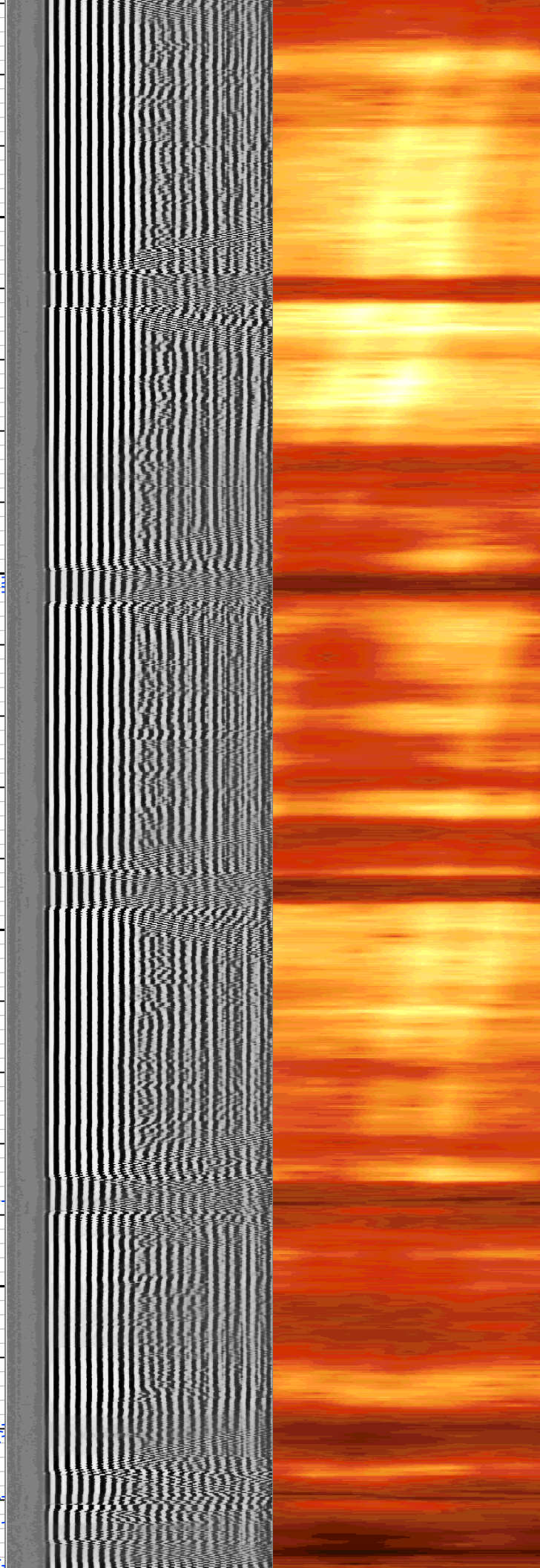
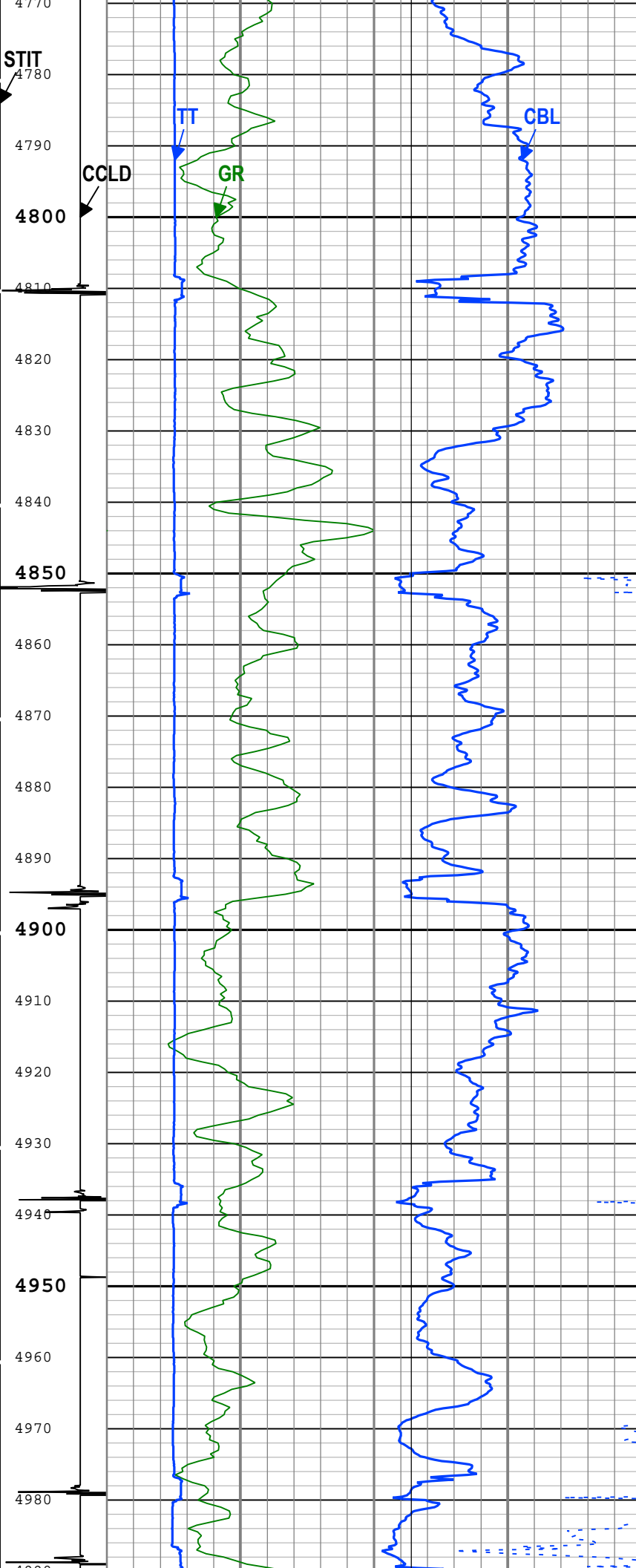


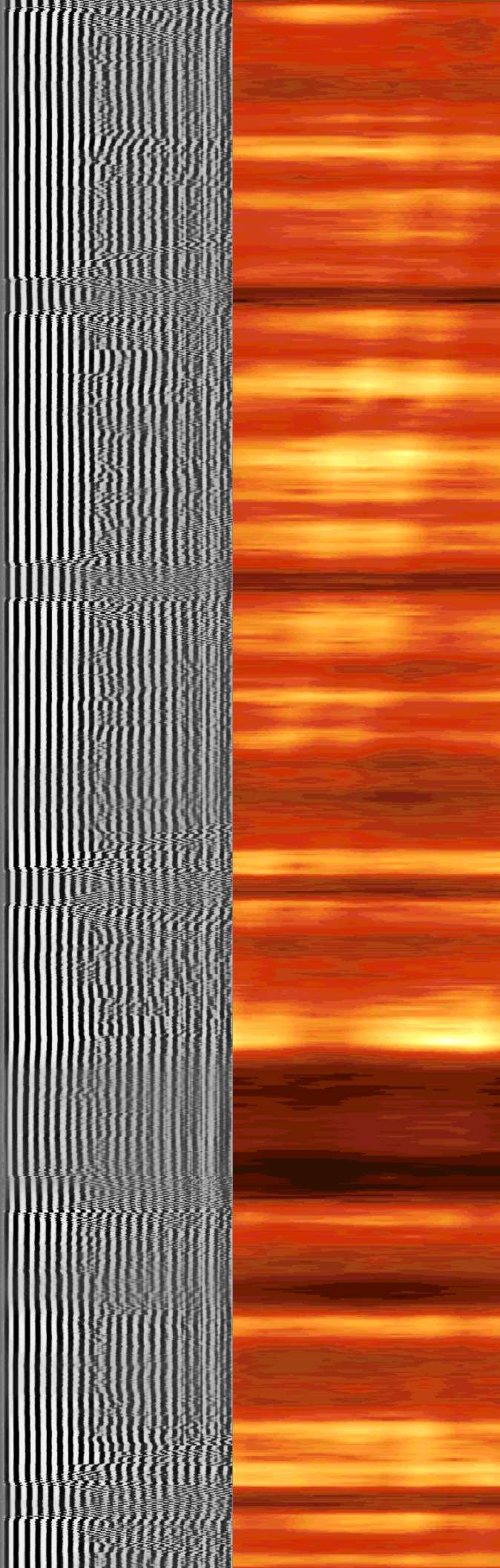
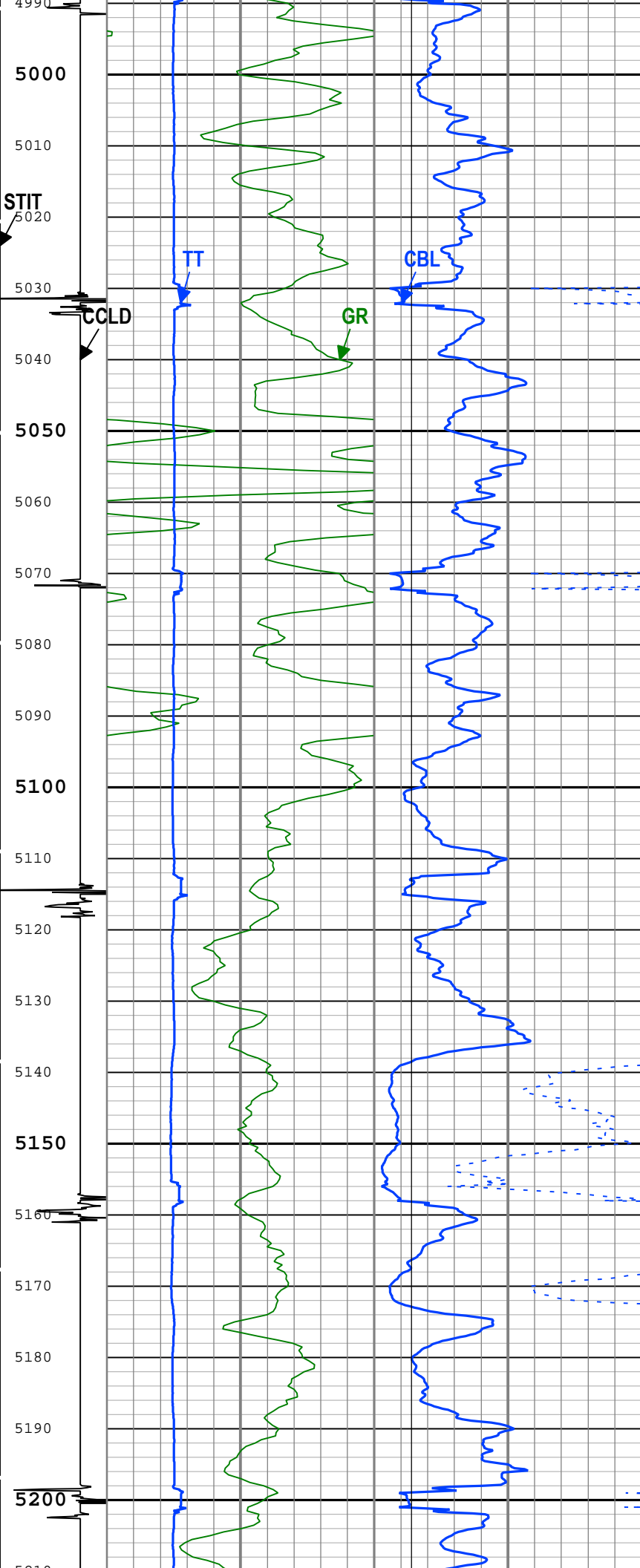




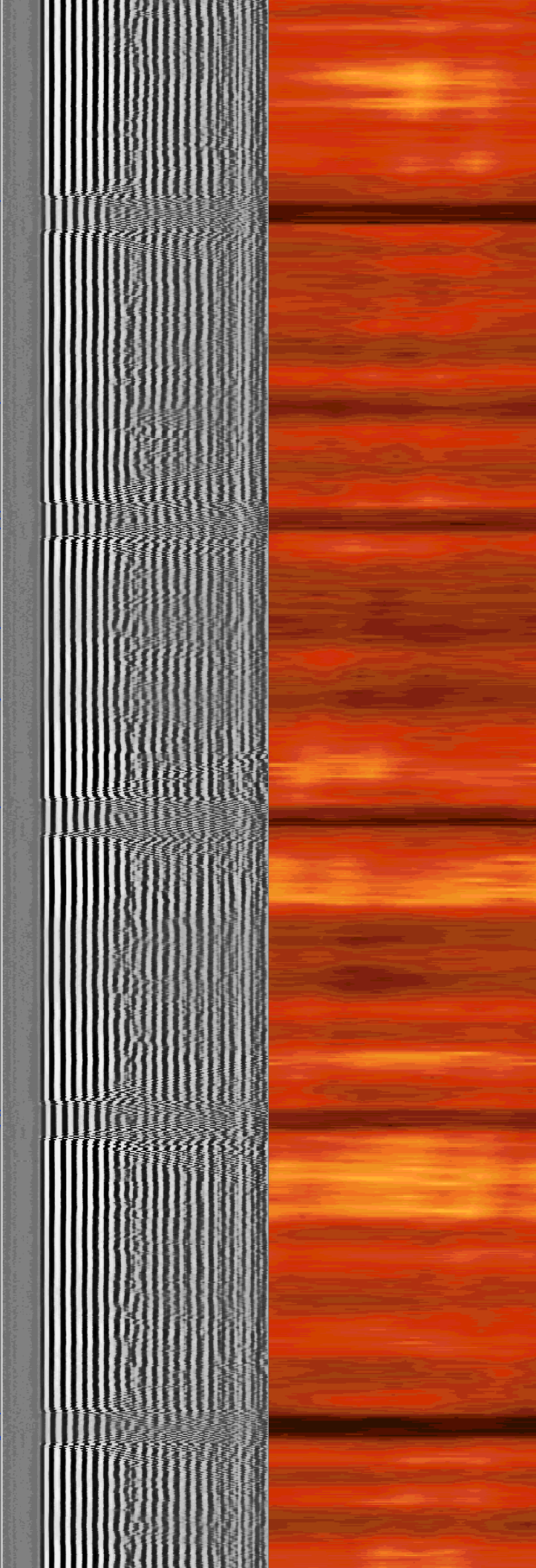
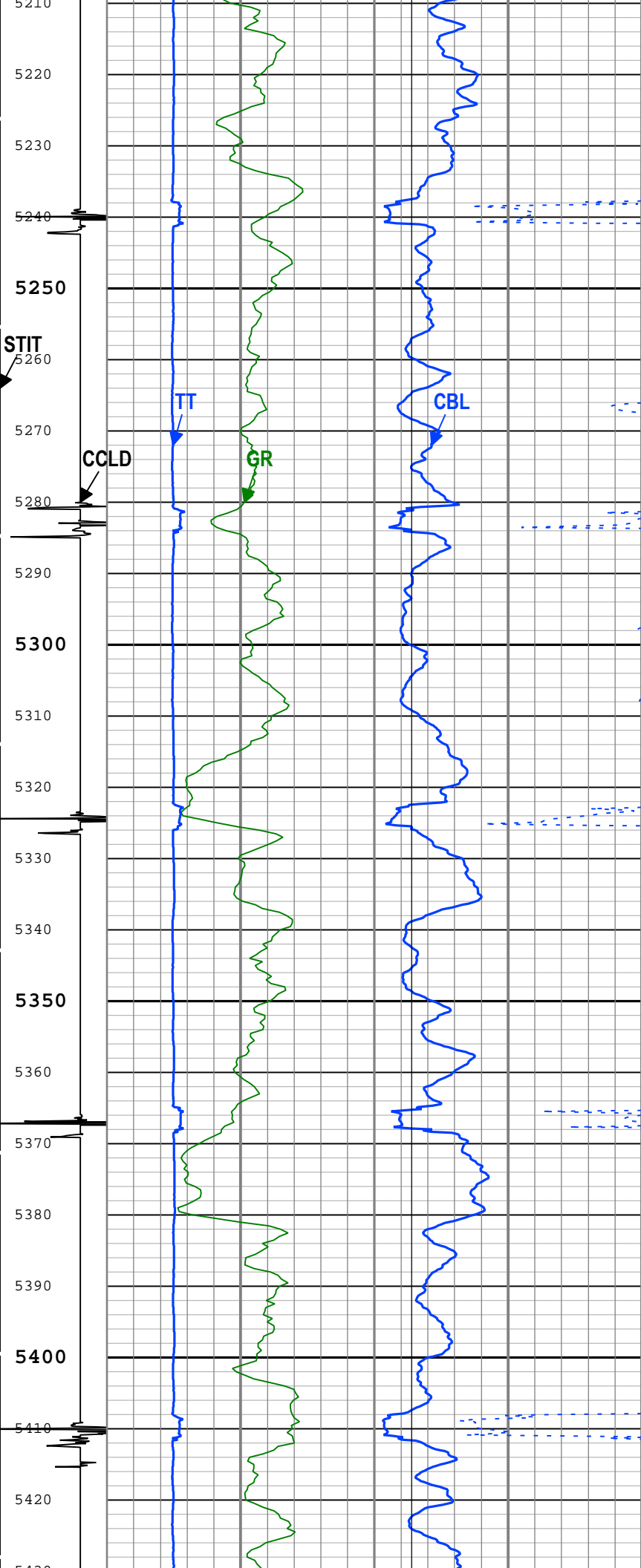


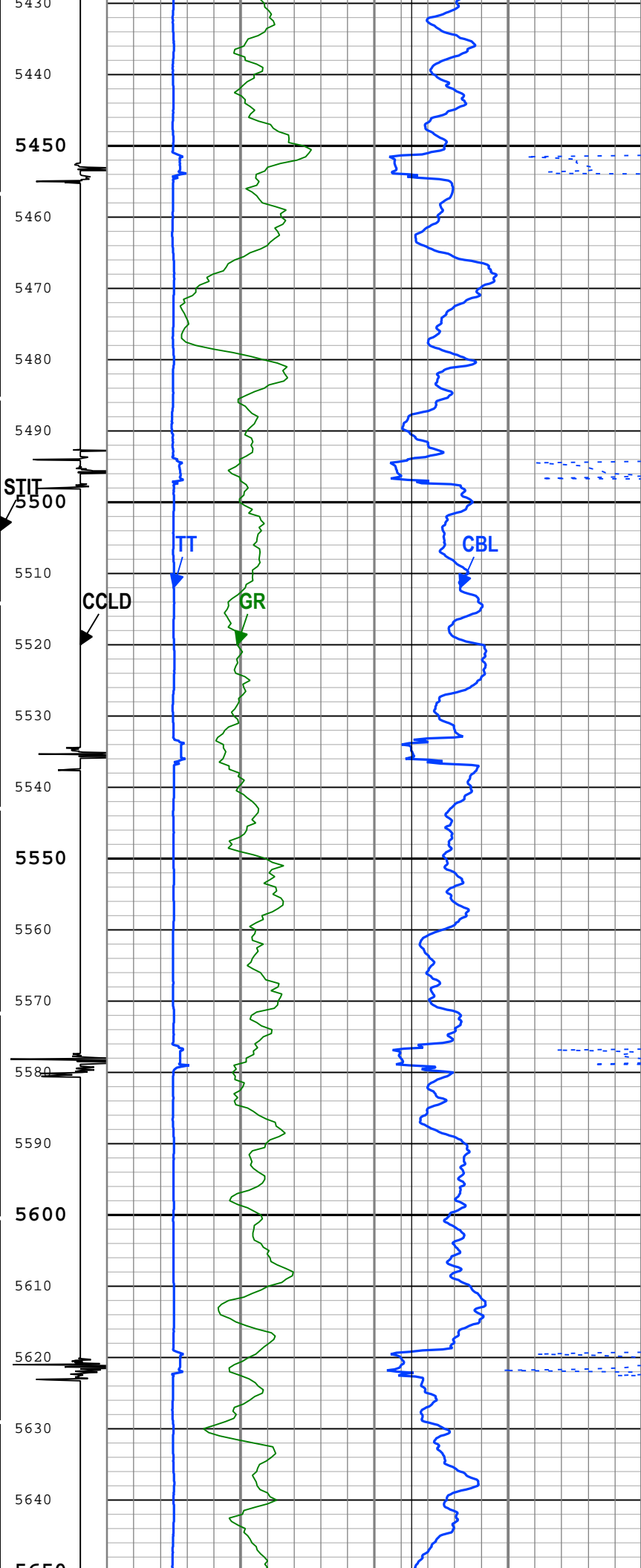


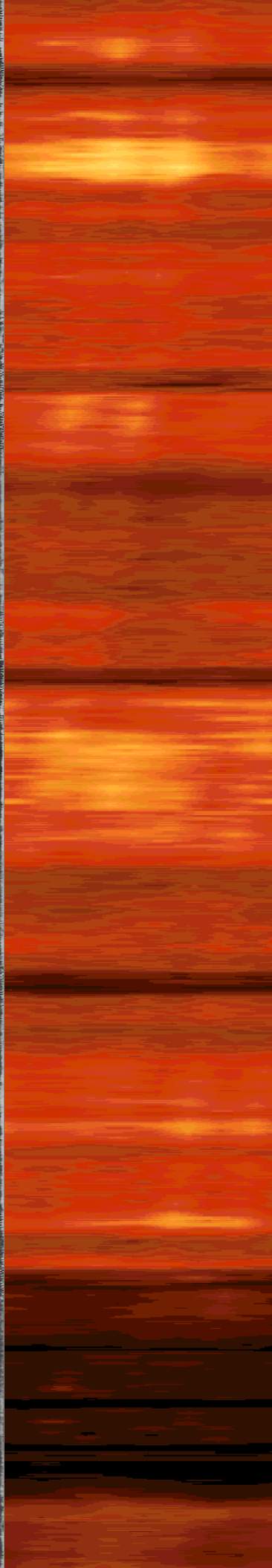
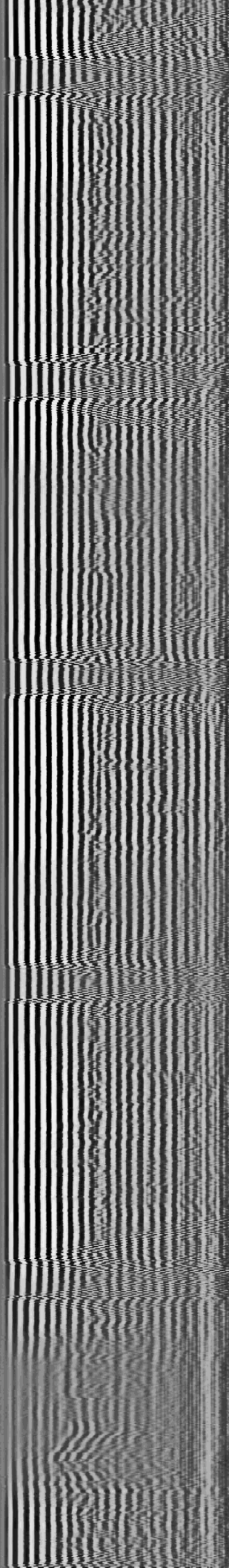
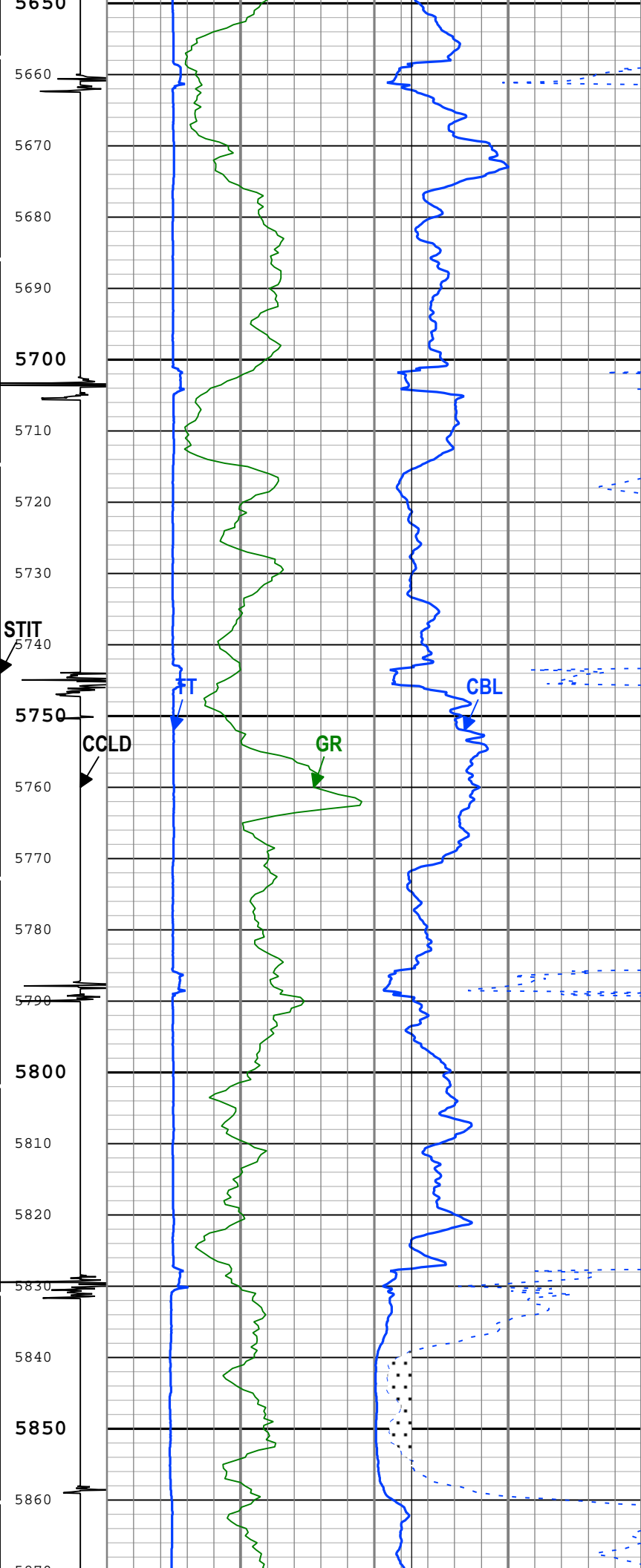




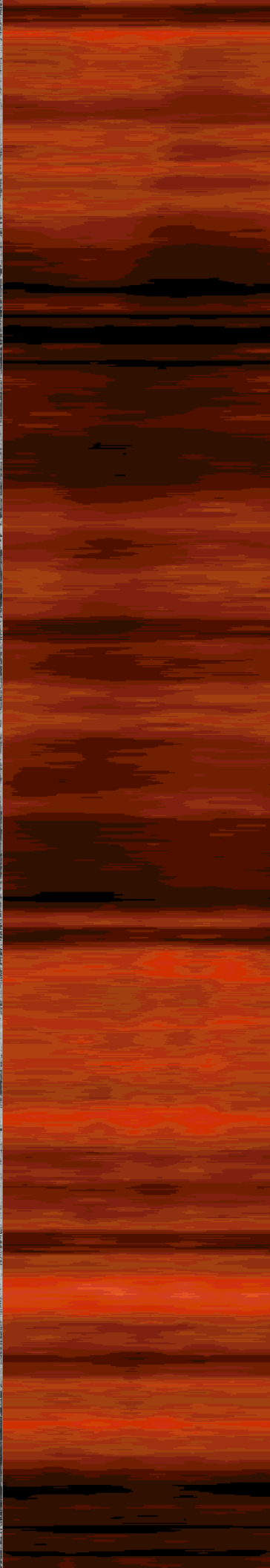
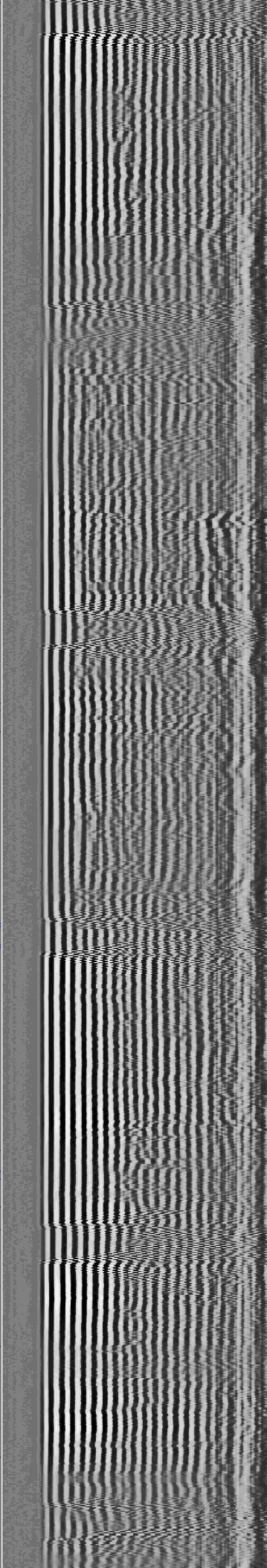
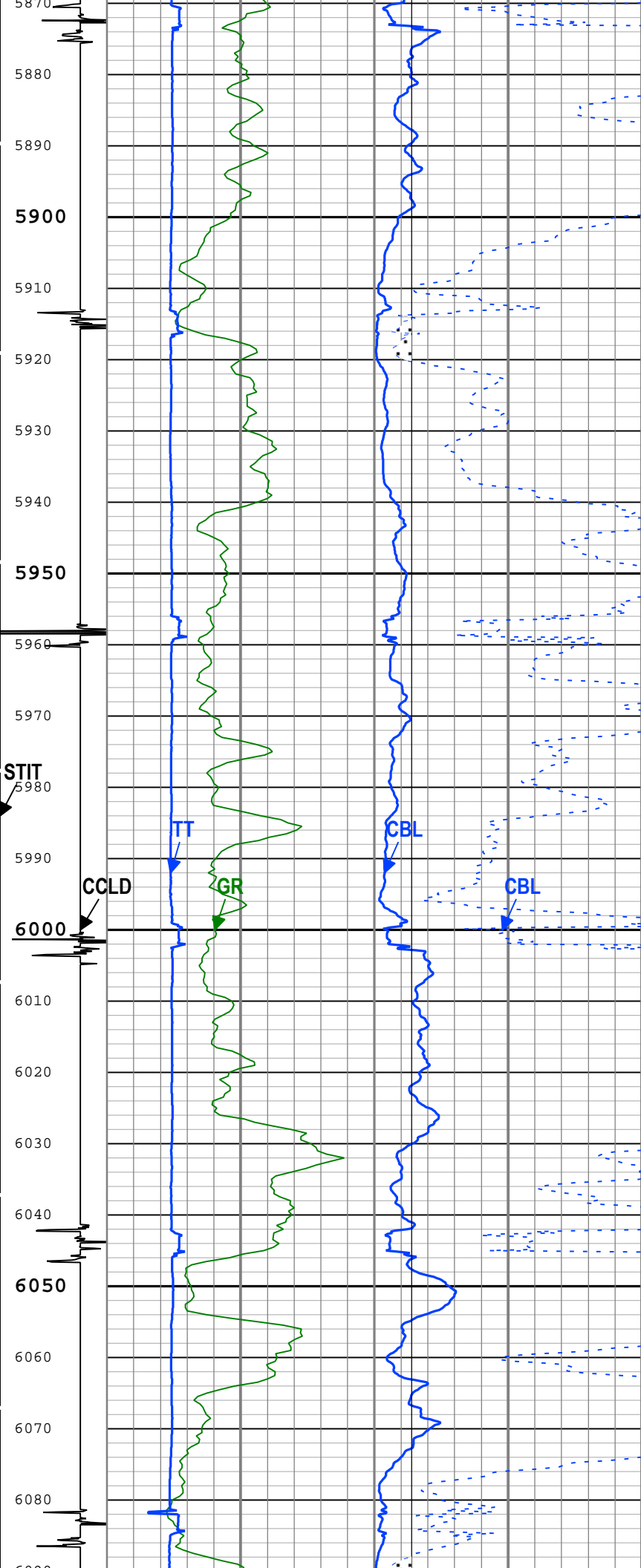


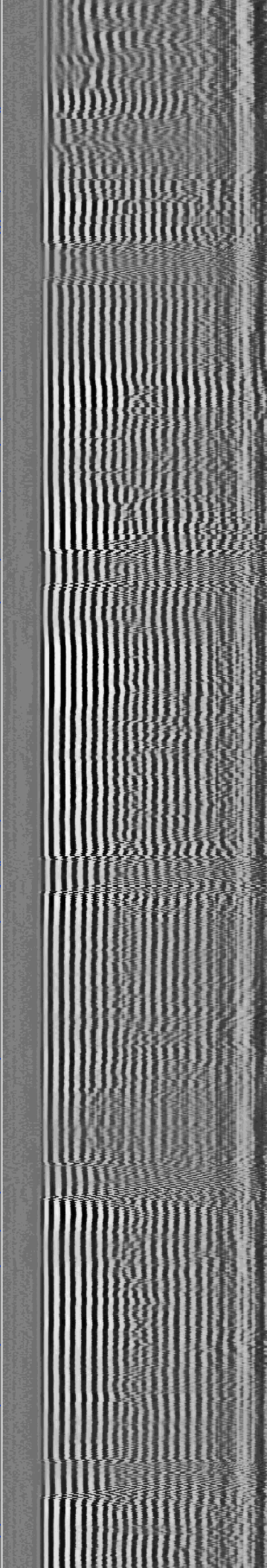
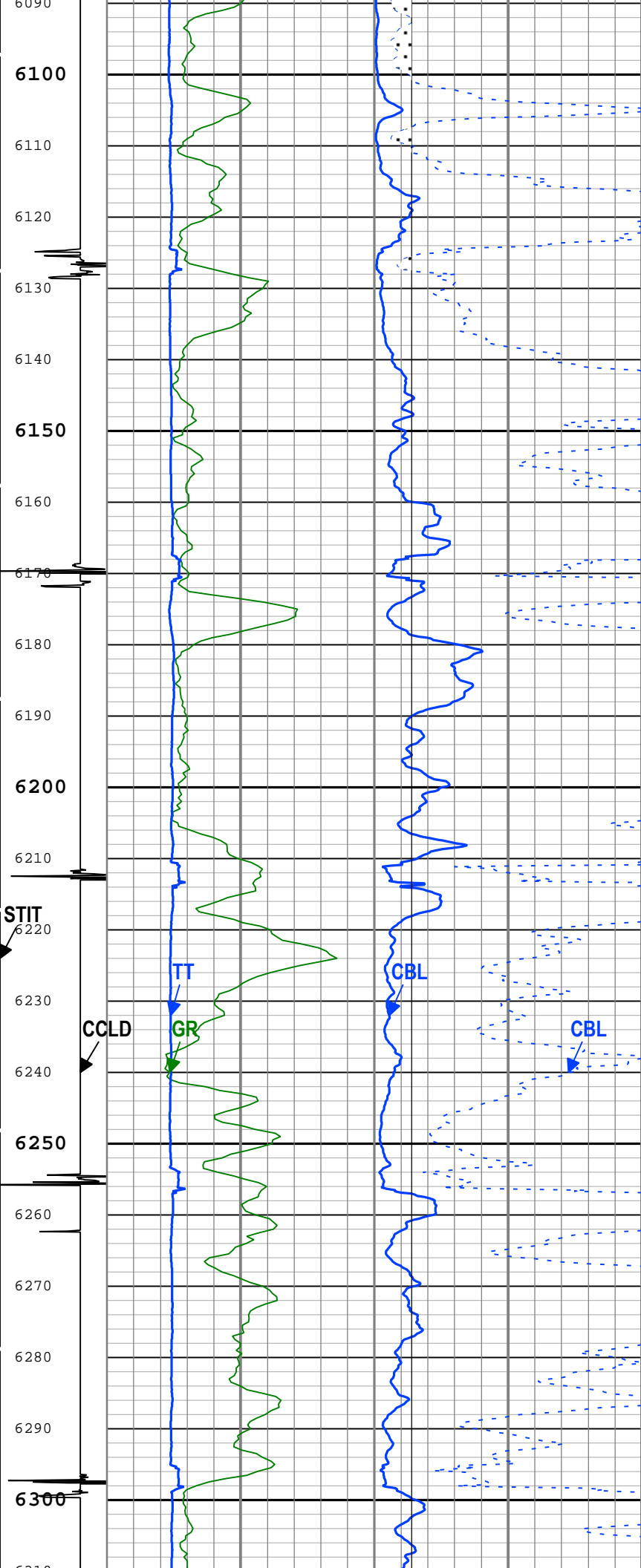


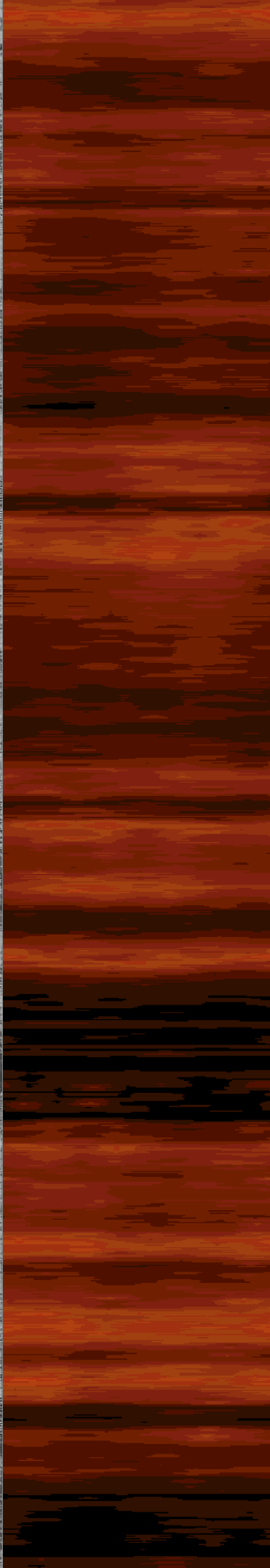
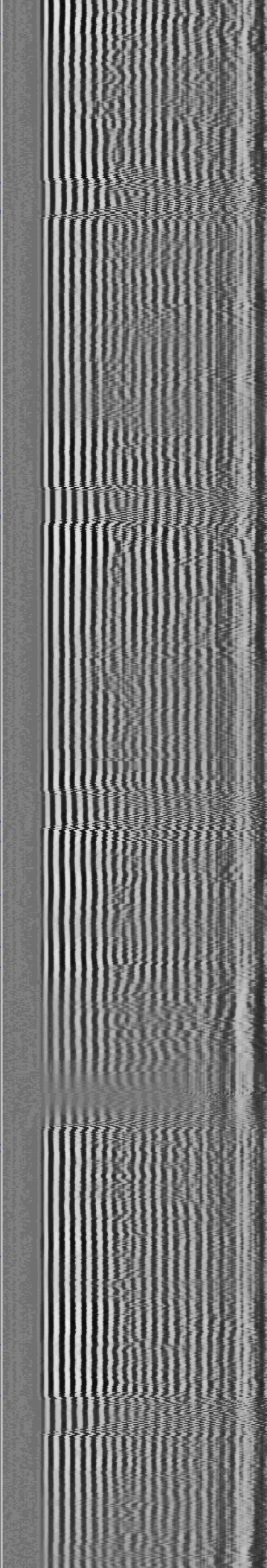
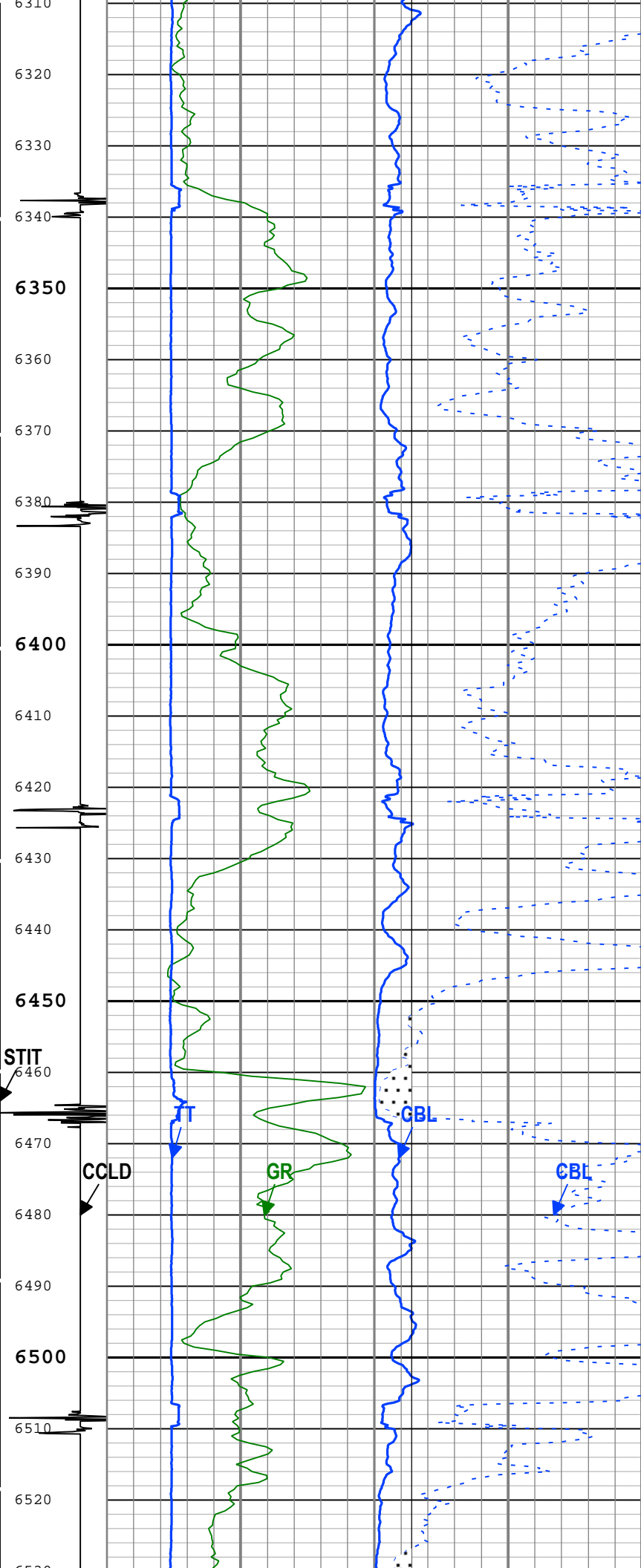




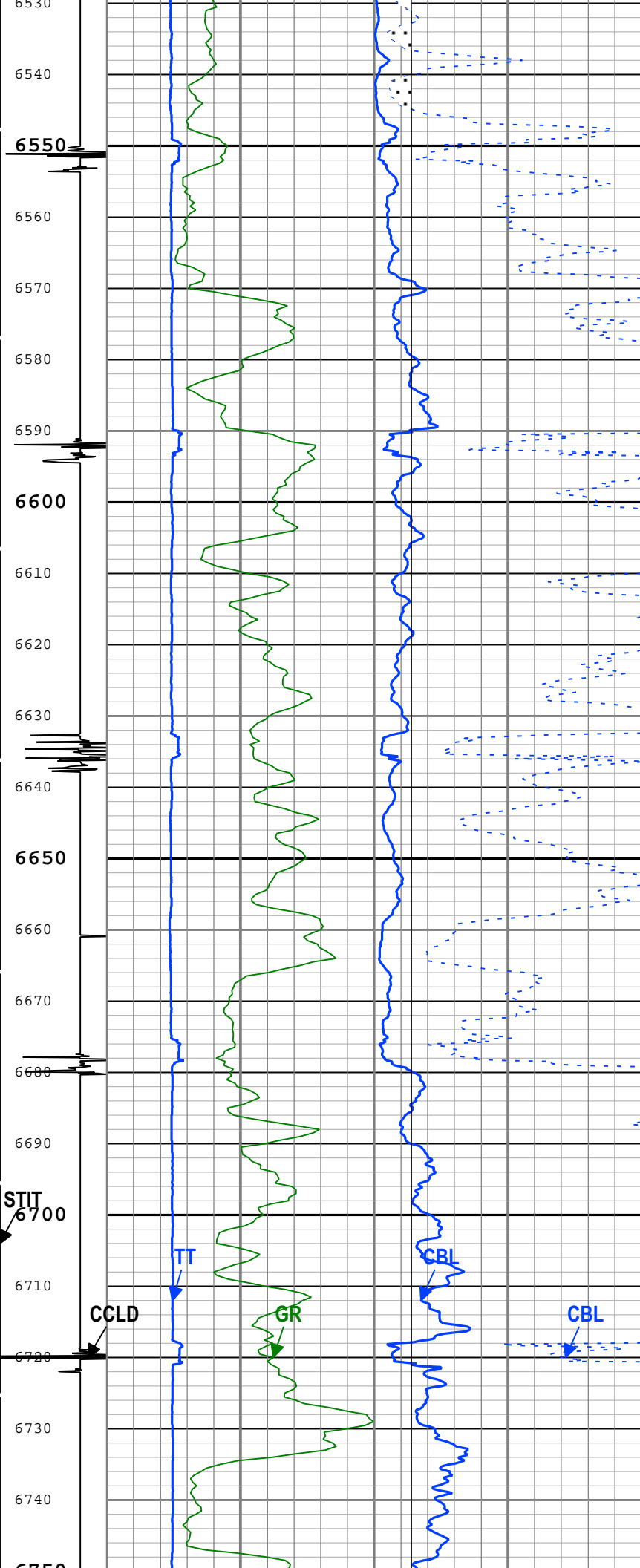


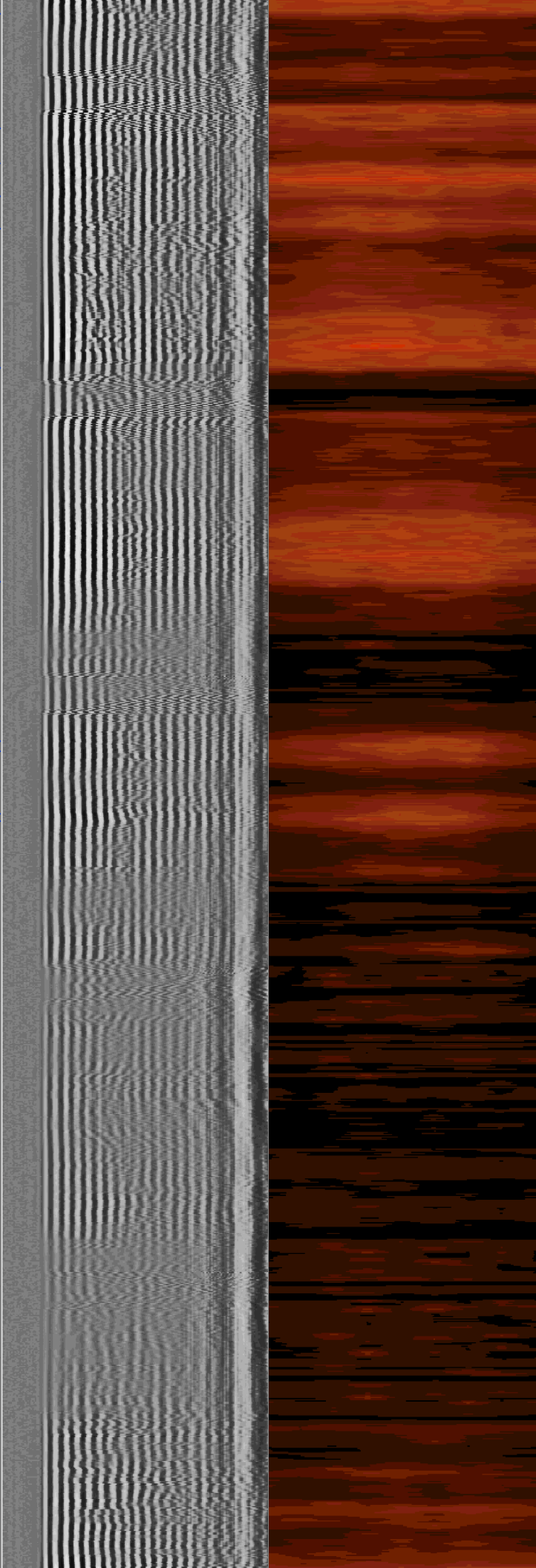
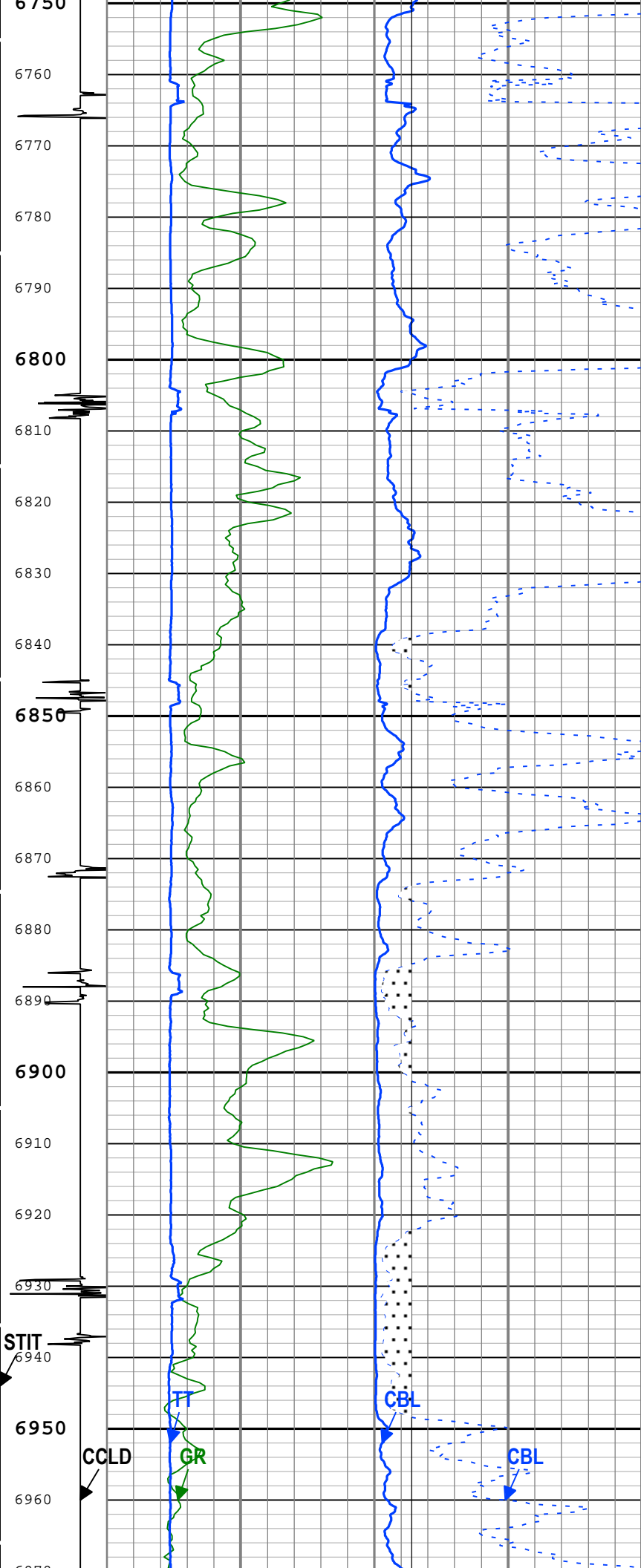




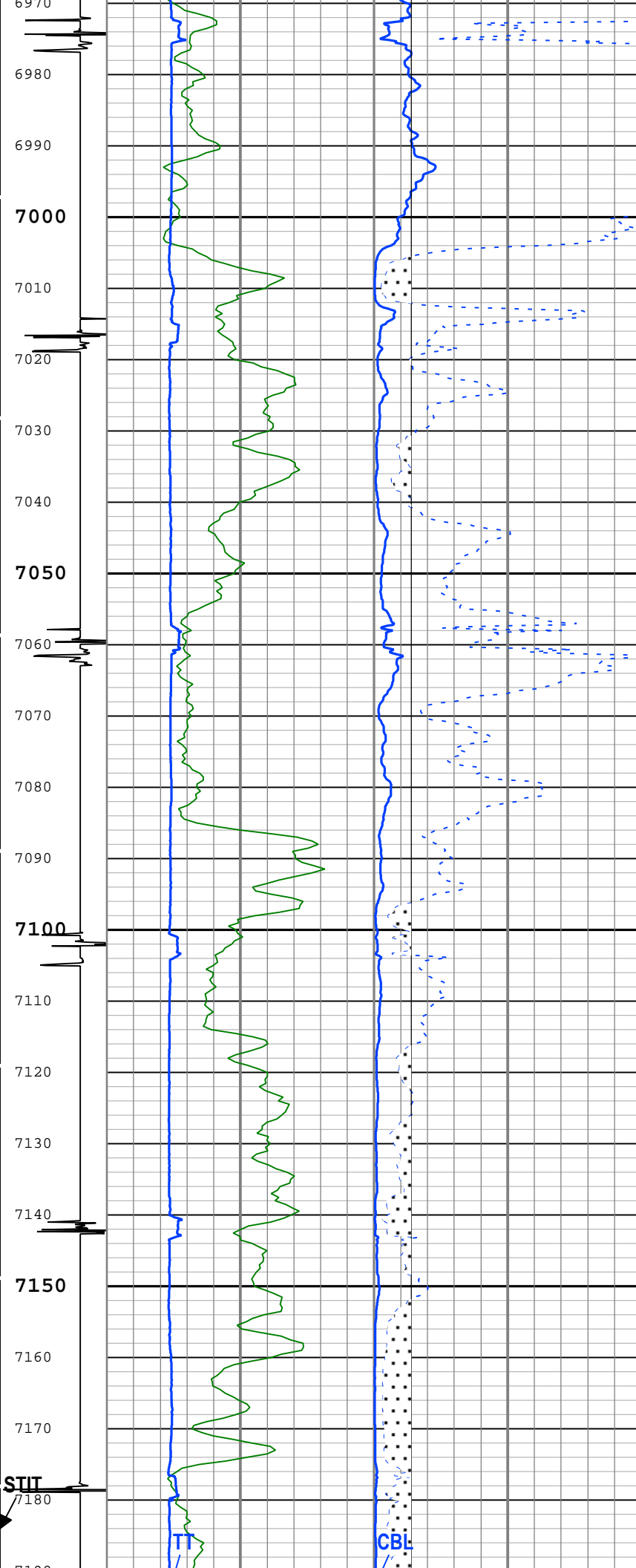


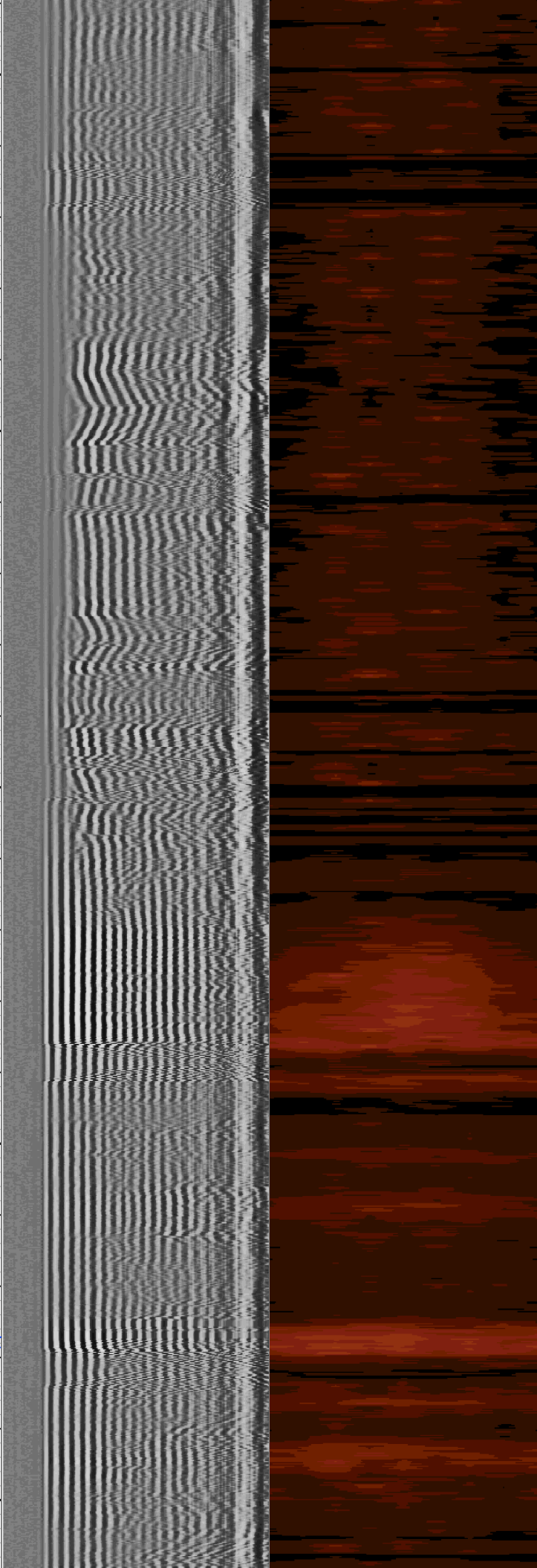
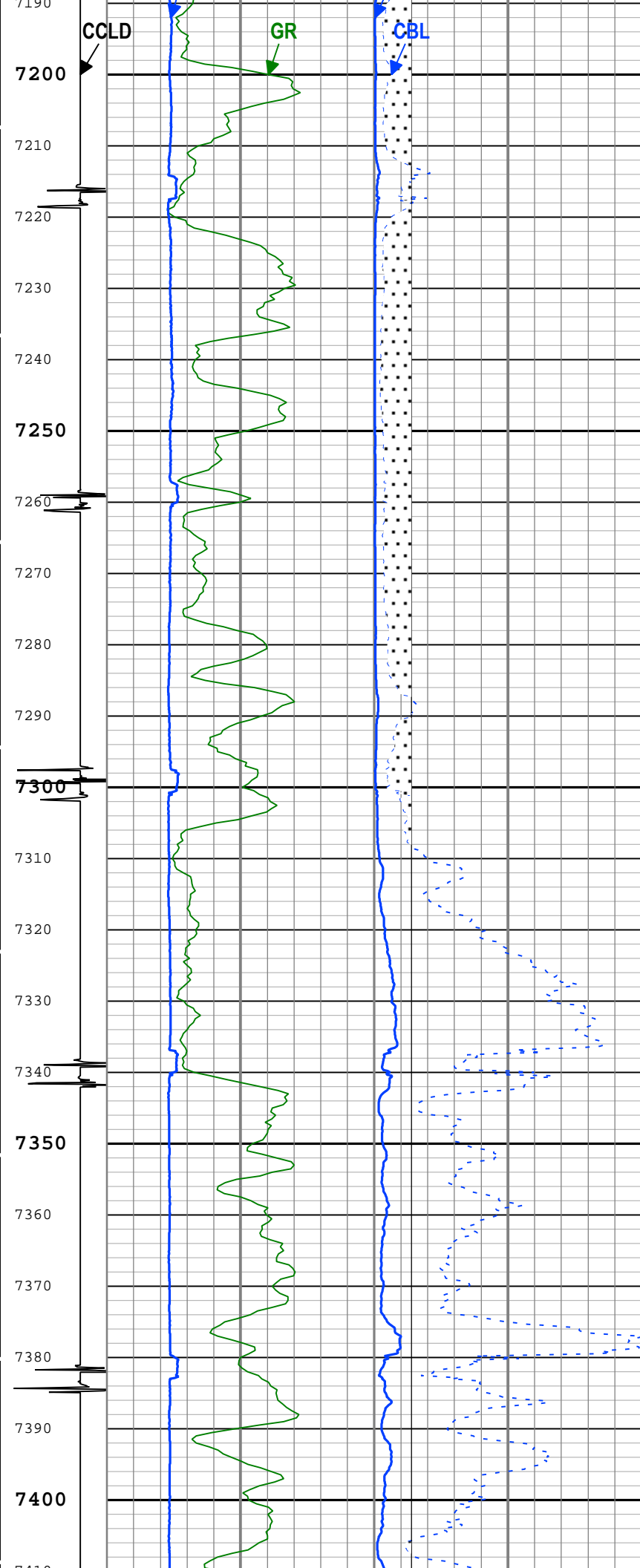


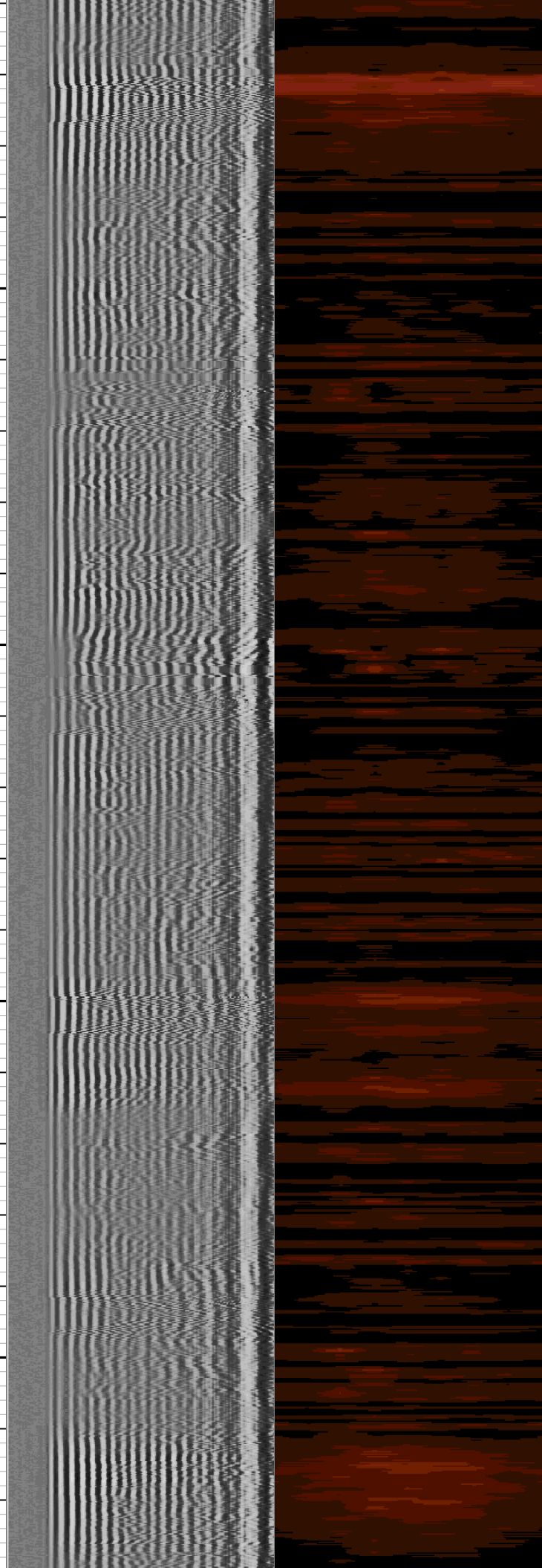
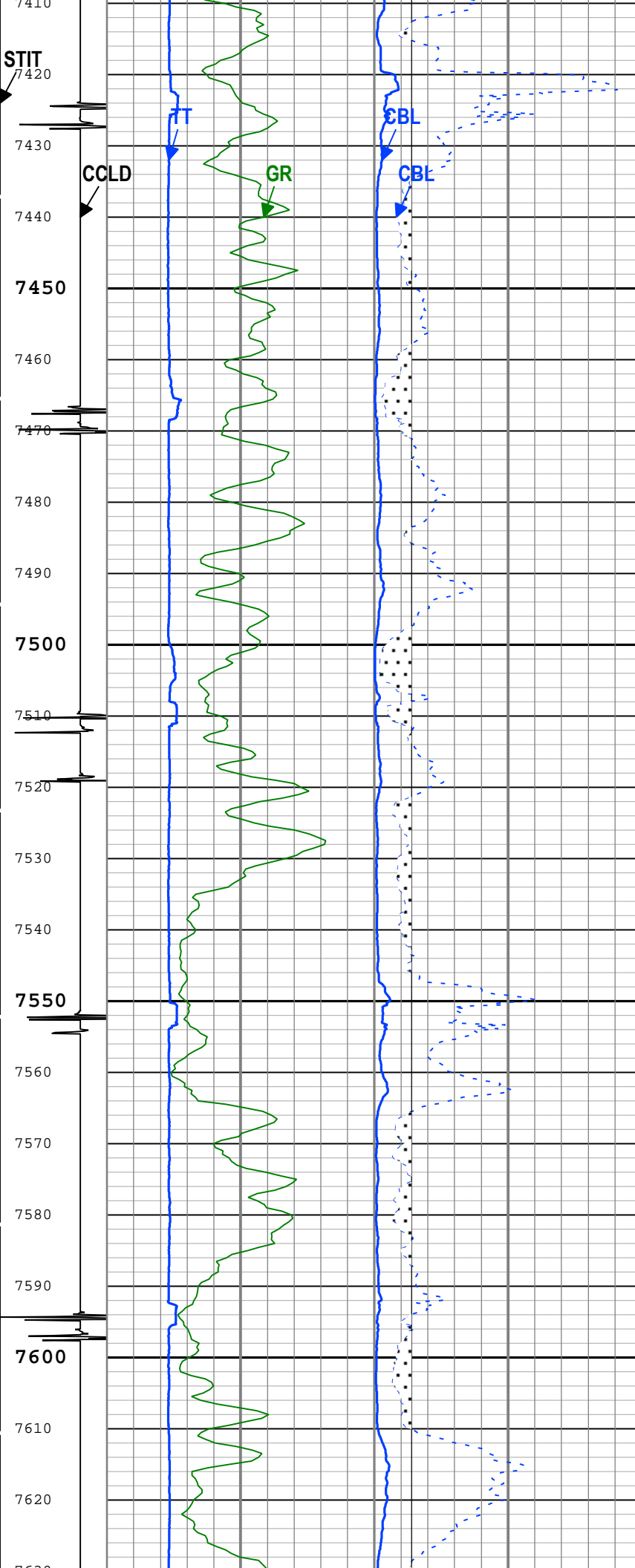




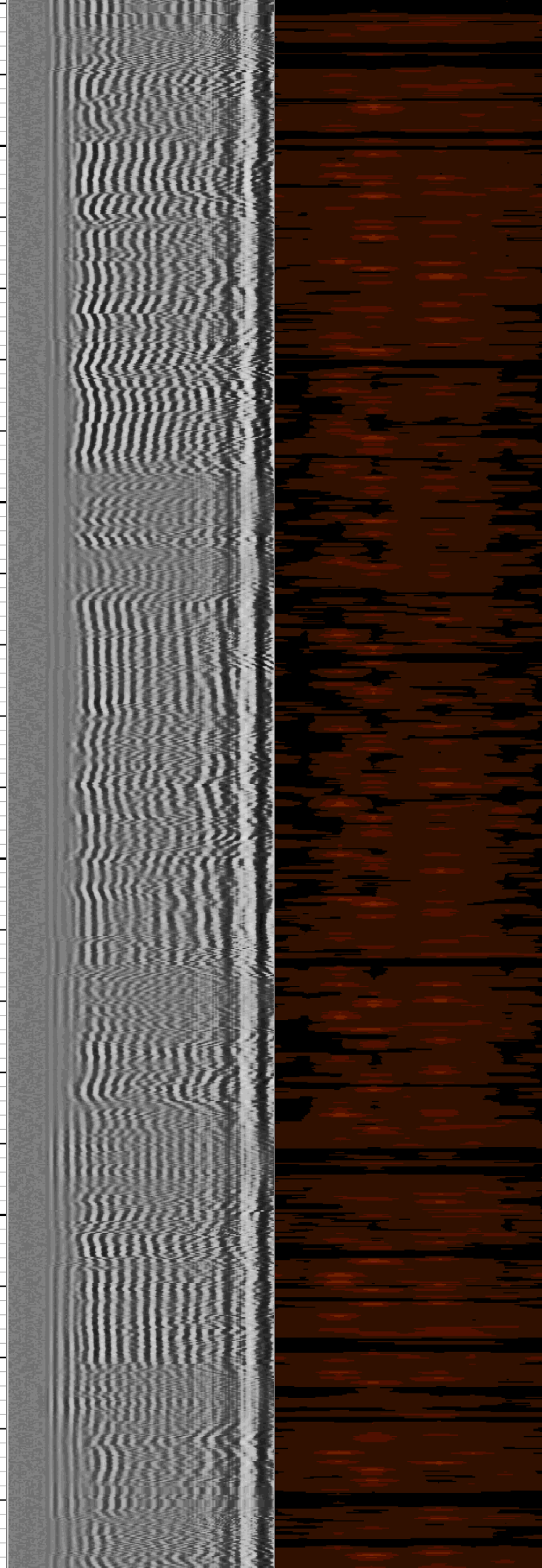
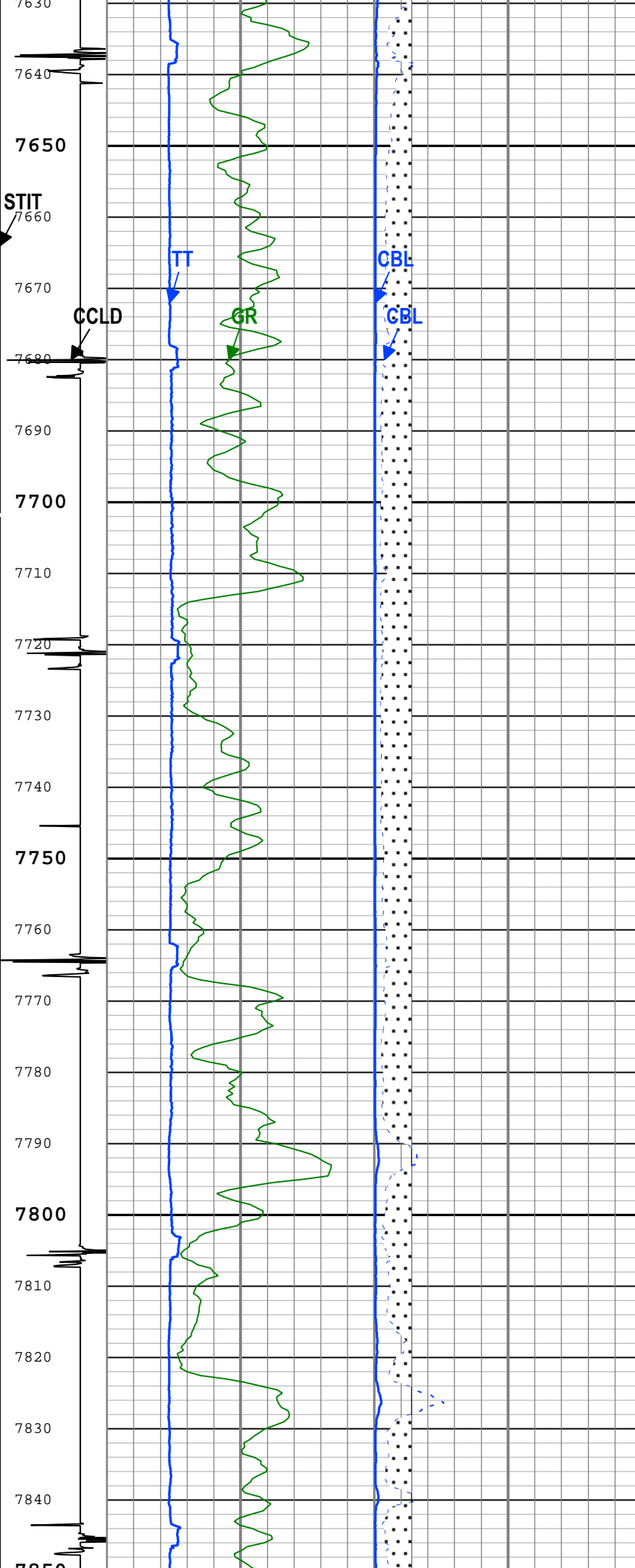


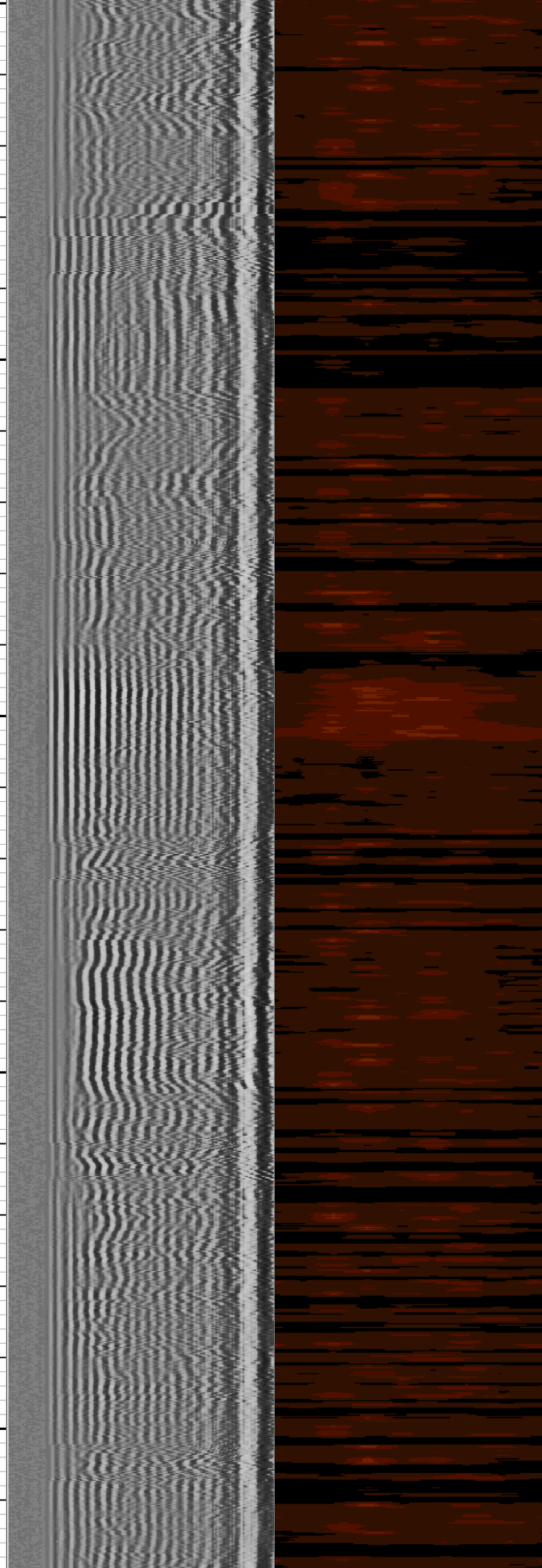
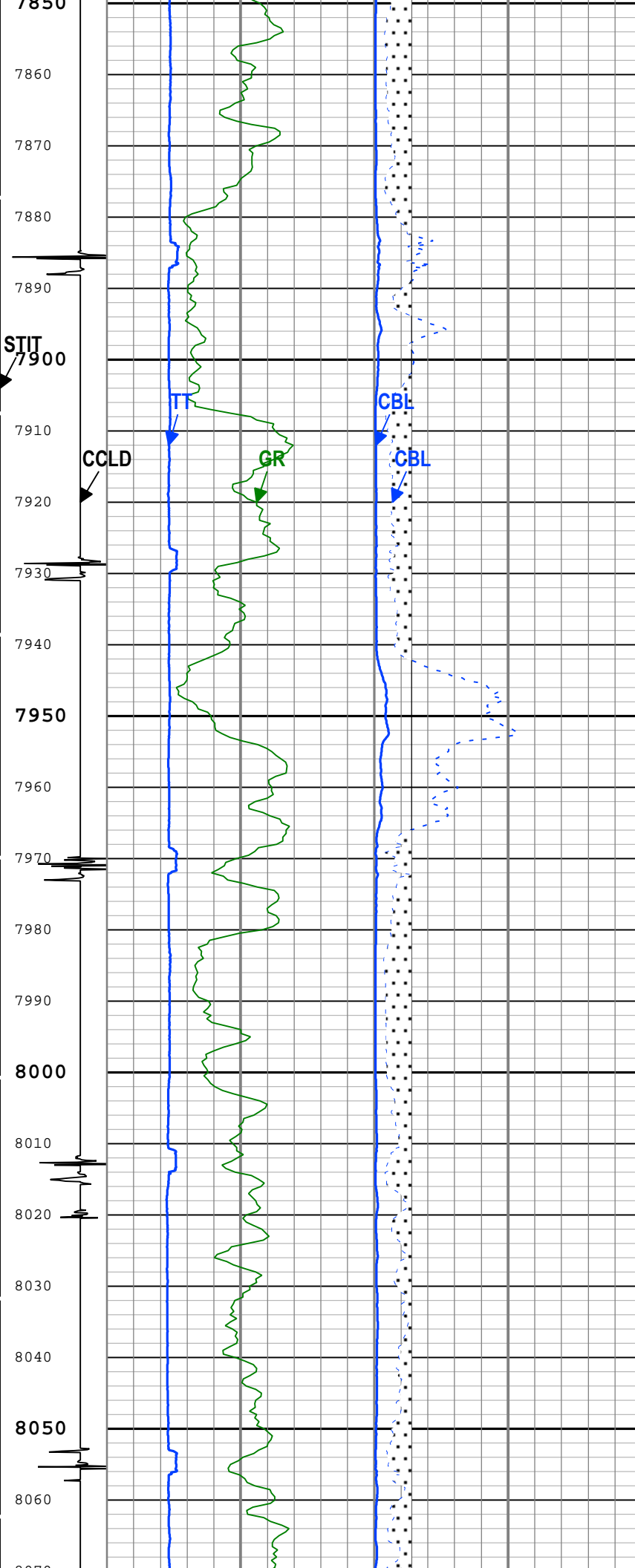


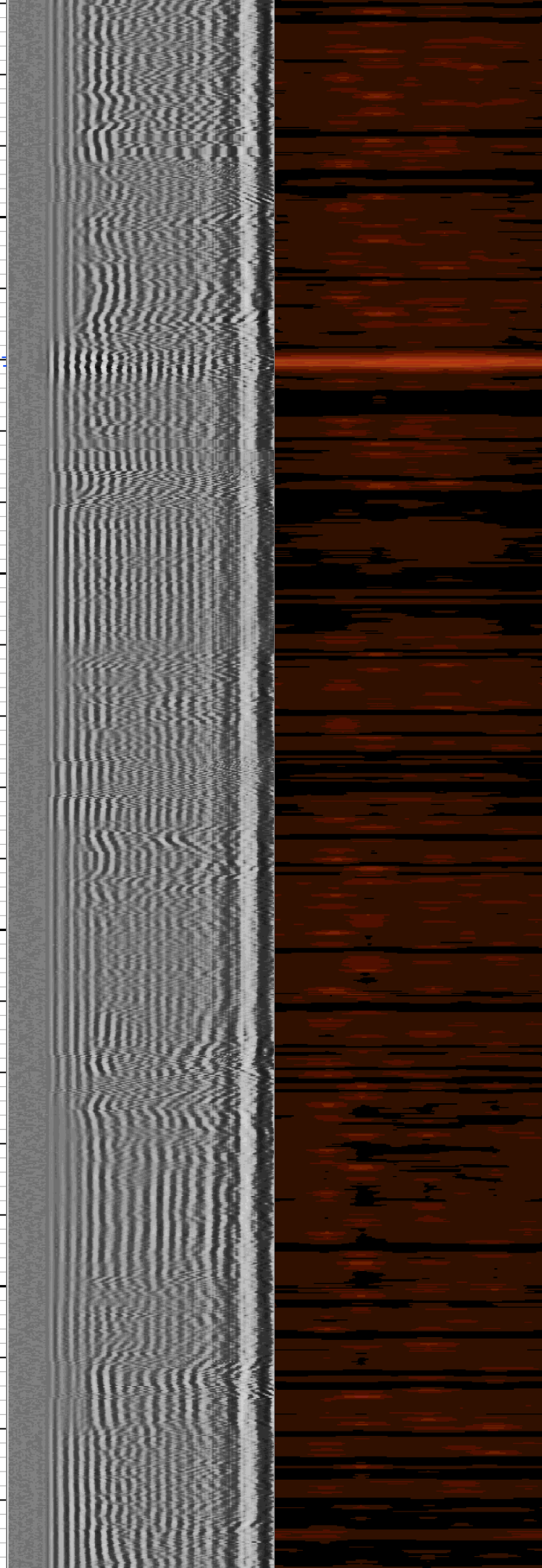
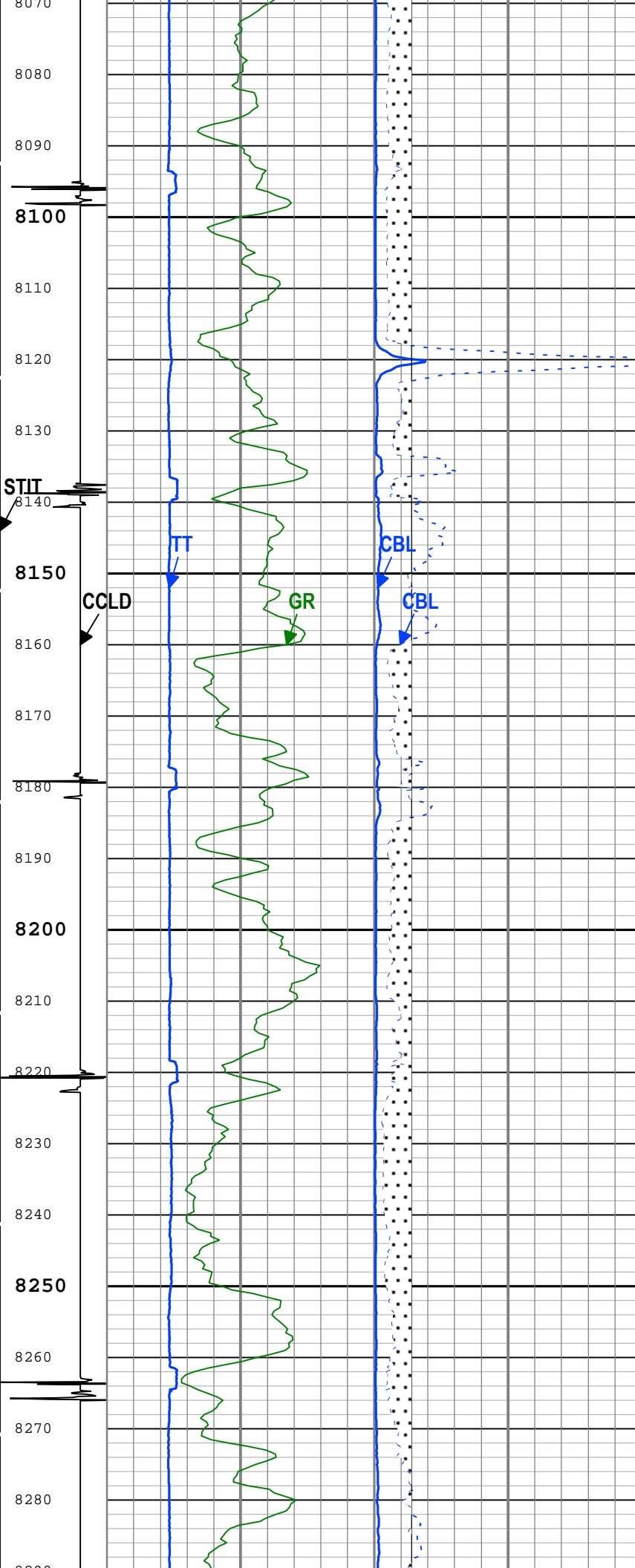




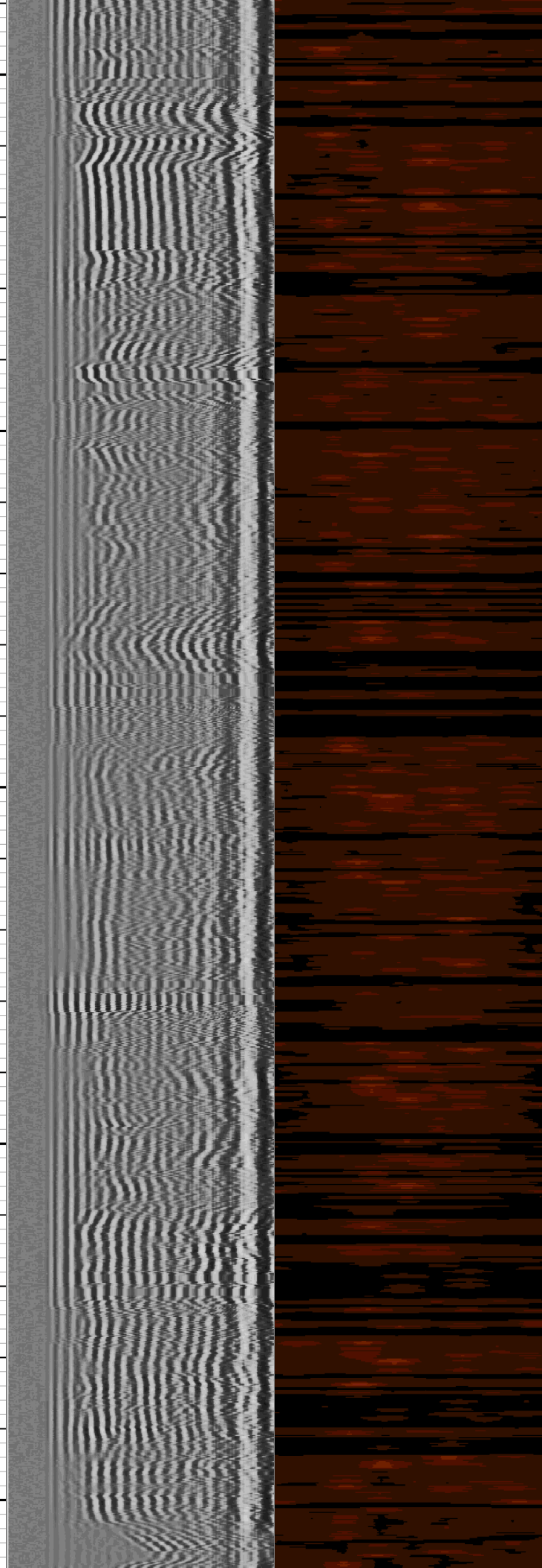
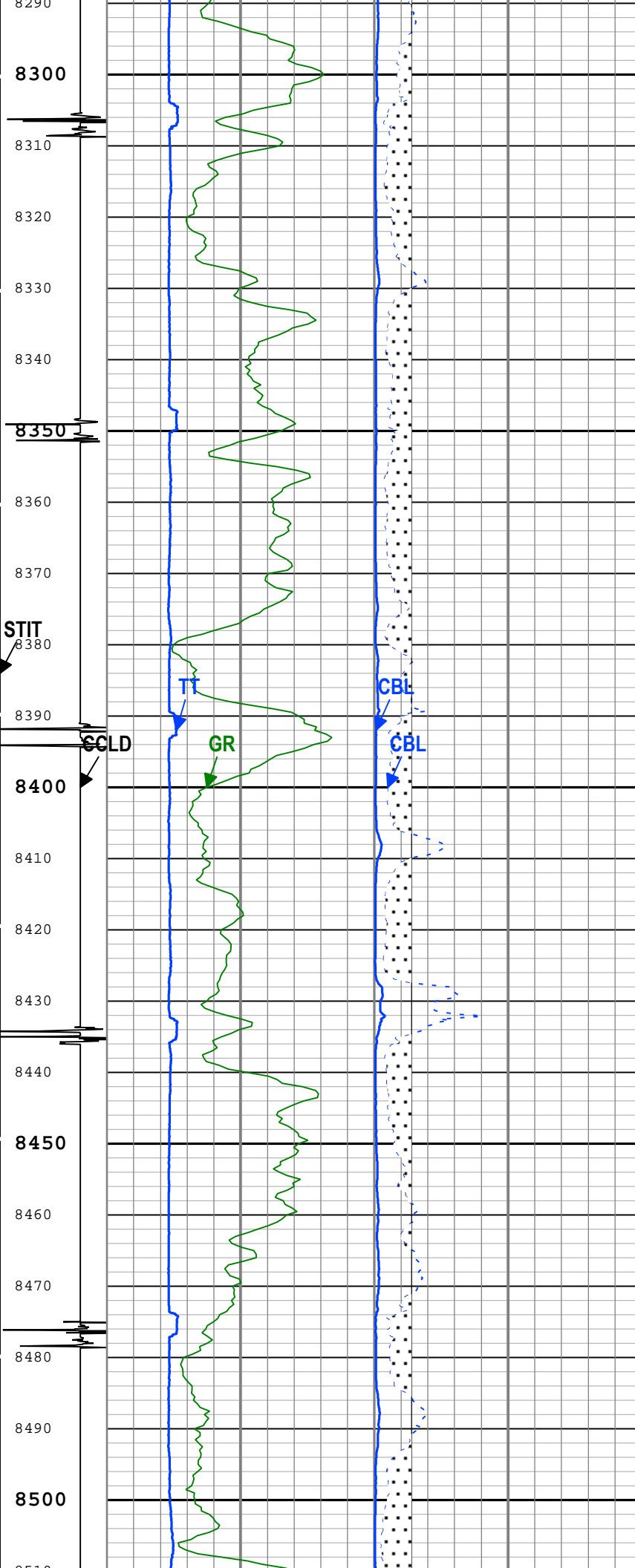


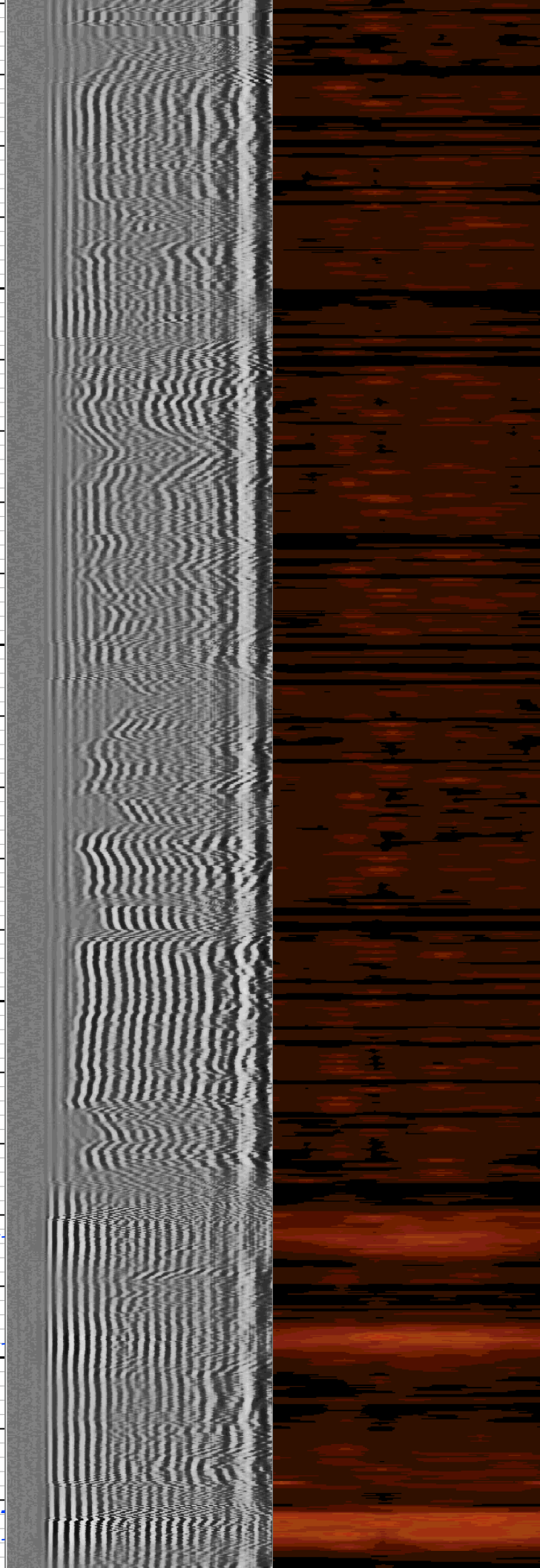
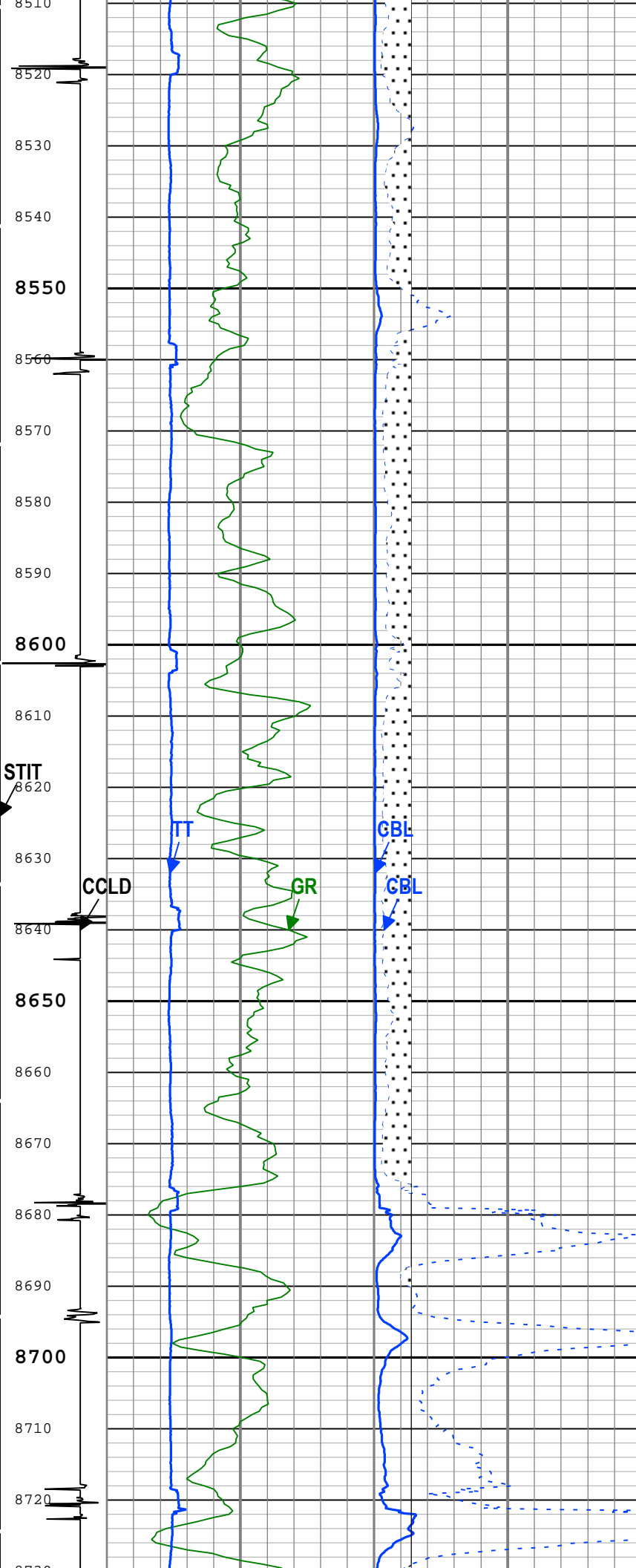




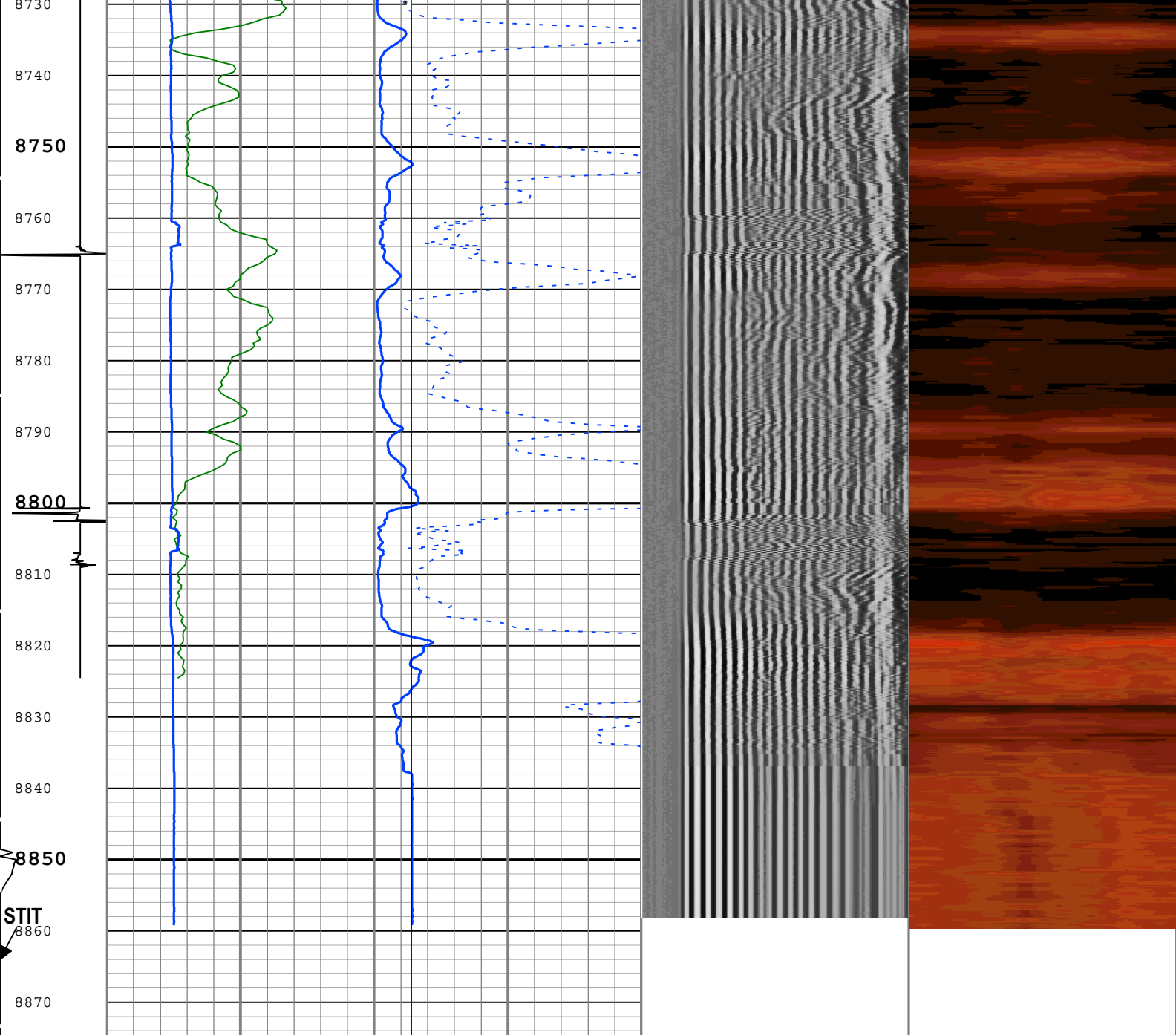












CCL	Gamma Ray (GR) PSTP-A[1]		CBL Amplitude (CBL) SCMT-CB[1]		Min	Amplitude	Max	<div>Absent 7.500 17.500 27.500 37.500 47.500 57.500 67.500 77.500 87.500 97.500</div> <div>CBL Amplitude Mapping Image (0 - 100) SCMT-CB[1]</div>	
Discriminated Amplitude (CCLD) PSTP-A[1]	0	gAPI	150	0	mV	10	<div>VDL VariableDensity (VDL) SCMT-CB[1]</div>		
	Transit Time for CBL (TT) SCMT-CB[1]		CBL Amplitude (CBL) SCMT-CB[1]						
	200	us	400	0	mV	100	200		us
3 V -1			Good Bond (GOBO)						
Stuck Tool Indicator, Total (STIT)			0		mV		10		
0 ft 50			.:GoodBond From CBL to GOBO.:						
Cable Drag									
Tool_Tot. Drag									

**ONE: Parameters**

Parameter	Description	Tool	Value	Unit
BHT	Bottom Hole Temperature	Borehole	238	degF
CB3D	SCMT CBL 3 ft Peak Detection Mode	SCMT-CB	Peak	
CB3G	SCMT CBL 3 ft Peak Detection T0_Delay and Noise Gate	SCMT-CB	224	us
CB3T	SCMT CBL 3 ft Fixed Threshold Level	SCMT-CB	20	mV
CBLG	CBL Gate Width	SCMT-CB	40	us
CBRA	CBL LQC Reference Amplitude in Free Pipe	SCMT-CB	80	mV
CMCF	CBL Cement Type Compensation Factor	SCMT-CB	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	lbm/gal
DFT	Drilling Fluid Type	Borehole	Water	
DTMD	Borehole Fluid Slowness	Borehole	196	us/ft
EDF	Elevation of Derrick Floor Above Permanent Datum	WLSESSION	0	ft
EPD	Elevation of Permanent Datum (PDAT) above Mean Sea Level	WLSESSION	8479	ft
ETEM	HP Estimated Temperature	PSTP-A	212	degF
FCF	CBL Fluid Compensation Factor	SCMT-CB	1	
GGRD	Geothermal Gradient	Borehole	1	0.01 degF/ft
GTSE	Generalized Temperature Selection, from Measured or Computed Temperature	Borehole	GTEM_LINEST	
M1EF	MAP sensitivity equalization factor of receiver 1	SCMT-CB	1	
M2EF	MAP sensitivity equalization factor of receiver 2	SCMT-CB	1	
M3EF	MAP sensitivity equalization factor of receiver 3	SCMT-CB	1	
M4EF	MAP sensitivity equalization factor of receiver 4	SCMT-CB	1	
M5EF	MAP sensitivity equalization factor of receiver 5	SCMT-CB	1	
M6EF	MAP sensitivity equalization factor of receiver 6	SCMT-CB	1	
M7EF	MAP sensitivity equalization factor of receiver 7	SCMT-CB	1	
M8EF	MAP sensitivity equalization factor of receiver 8	SCMT-CB	1	
MAPD	SCMT MAP Peak Detection Mode	SCMT-CB	Peak	
MAPG	SCMT MAP Peak Detection T0_Delay and Noise Gate	SCMT-CB	167	us
MAPT	SCMT MAP Fixed Threshold Level	SCMT-CB	30	mV
MCCF	MAP Cement Type Compensation Factor	SCMT-CB	0.25	
MMSA	MAP Minimum Sonic Amplitude	SCMT-CB	3.98	mV
MSA	Minimum Sonic Amplitude	SCMT-CB	0.51	mV
PTCO	PBMS Pressure Temperature Correction Option	PSTP-A	Gauge Temperature	
PDAT	Permanent Datum	WLSESSION	GL	
RBC	Relative Bearing Correction Allow/Disallow	SCMT-CB	Allow	
RUN_SNUM	Run Sequence Number	WSDRUN	1	
SHT	Surface Hole Temperature	Borehole	68	degF
VDLG	VDL Manual Gain	SCMT-CB	5	

**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	36 dB	

## Main Pass 2500 PSI

## Software Version

Acquisition System

Maxwell 2016

Version

6.0.47569.3100

## Pass Summary

Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	DSC Mode	Depth Shift	Include Parallel Data
ONE	Log[8]:Up	Up	7741.62 ft	8215.73 ft	24-Jul-2015 4:50:35 AM	24-Jul-2015 5:14:13 AM	ON	15.36 ft	Yes

All depths are referenced to toolstring zero

## Log

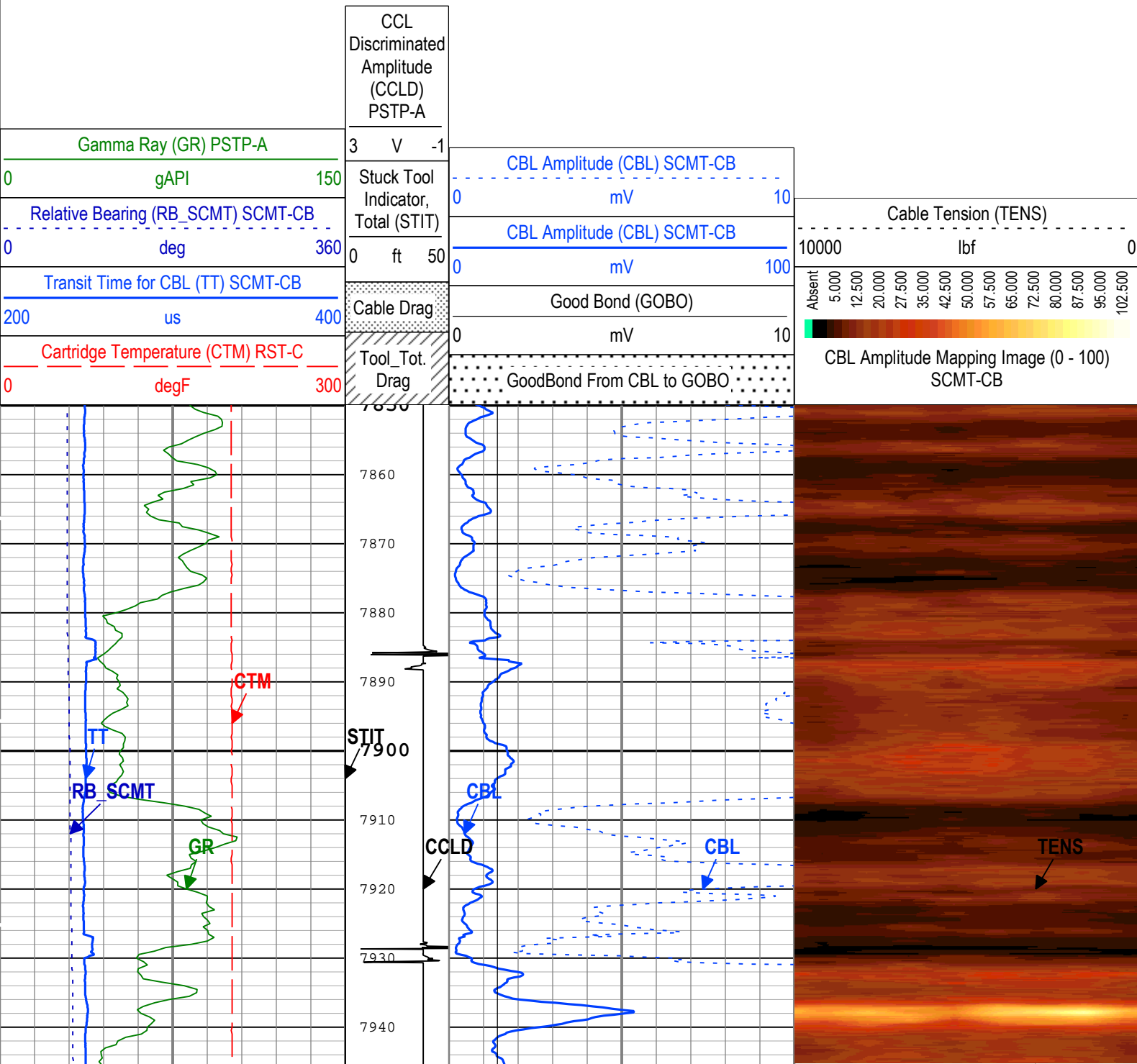
Company:Caerus Piceance LLC

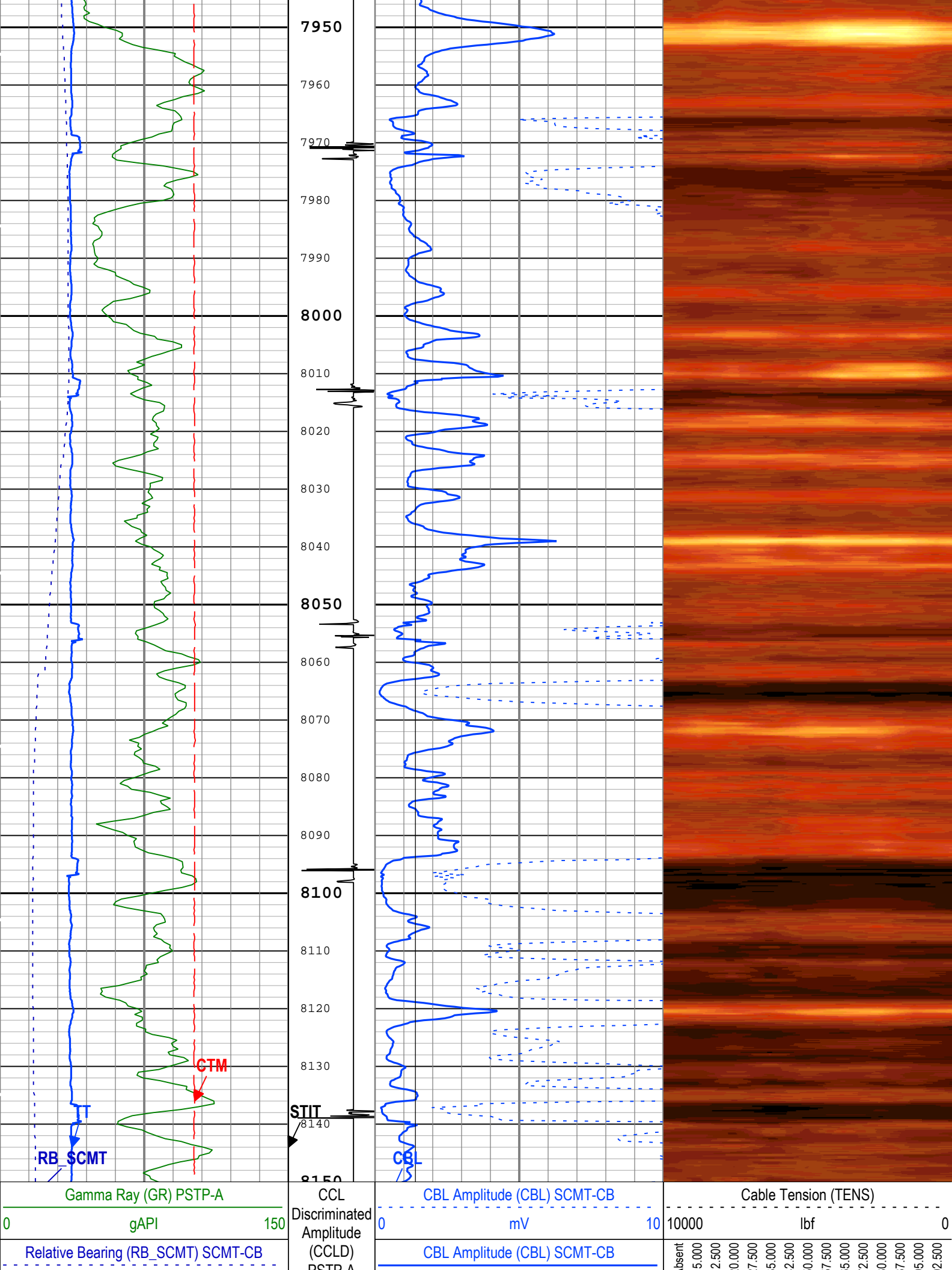
Well:Puckett 12C-1

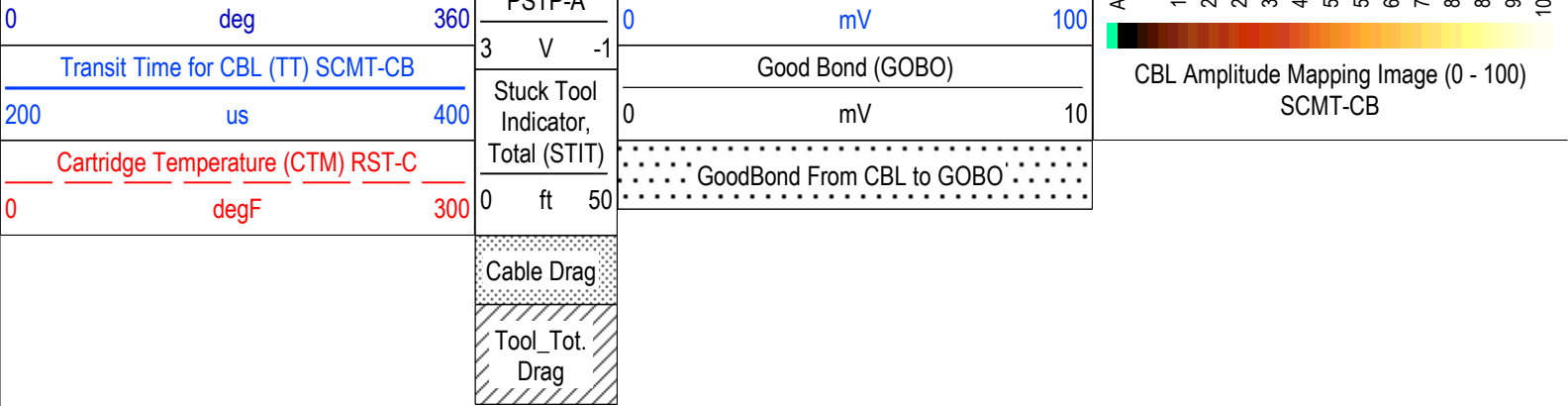
ONE: Log[8]:Up:S009

Description: SCMT Amplitudes and MAP Image  
Depth Creation Date: 07-Aug-2015 11:08:16  
Format: Log ( SCMT\_Amp\_Image\_1 ) Index Scale: 5 in per 100 ft Index Unit: ft Index Type: Measured

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: 07-Aug-2015 11:08:16

Channel Processing Parameters

ONE: Parameters				
Parameter	Description	Tool	Value	Unit
BHT	Bottom Hole Temperature	Borehole	238	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
CMCF	CBL Cement Type Compensation Factor	SCMT-CB	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	lbm/gal
DFT	Drilling Fluid Type	Borehole	Water	
DTMD	Borehole Fluid Slowness	Borehole	196	us/ft
EDF	Elevation of Derrick Floor Above Permanent Datum	WLSESSION	0	ft
EPD	Elevation of Permanent Datum (PDAT) above Mean Sea Level	WLSESSION	8479	ft
GGRD	Geothermal Gradient	Borehole	1	0.01 degF/ft
GTSE	Generalized Temperature Selection, from Measured or Computed Temperature	Borehole	GTEM_LINEST	
MAPG	SCMT MAP Peak Detection T0_Delay and Noise Gate	SCMT-CB	167	us
MCCF	MAP Cement Type Compensation Factor	SCMT-CB	0.25	
MMSA	MAP Minimum Sonic Amplitude	SCMT-CB	3.98	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

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
RST_DLM	Depth Log Mode	RST-C	Sigma	

Calibration Report

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

Primary Equipment :	Slim Cement Mapping Sonde	SCMS-CB	8372
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CBL and MAP Amplitude Adjustment - Measurements

Before (Measured):		03:03:52 24-Jul-2015					
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
CBL Amplitude	mV	Before			108.38		
Average MAP Amplitude (Fluid Compensated)	mV	Before			133.31		
Measurement Depth	ft	Before			2499.52		
CBL and MAP Amplitude Adjustment - Coefficients							
Before (Measured):		03:03:52 24-Jul-2015					
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
CBL Adjustment Factor		Before			0.738		
CBL LQC Reference Amplitude in Free Pipe	mV	Before			80.00		
MAP Adjustment Factor		Before			0.750		
Depth of Before Calibration	ft	Before			2499.52		

PSTP-A (PSP Telemetry Platform A - Sapphire) Calibration - Run ONE		
Primary Equipment :		
PBMS-A	PBMS-A	1814
Calibration Parameter :		
JIG-BKGD (Jig minus background reference)	150	

PBMS Well Temp Master Calibration						
Master (EEPROM):		00:00:00 11-Mar-2002				
PBMS_RTD_THERM (Master)		RTD Coefficients				
	Tt**0	Tt**1	Tt**2	Tt**3	Tt**4	Tt**5
Tt**0	166.2169	-442.9836	222.5367	-39.3639	2.621679	0

PBMS Gamma Ray Master Calibration		
Master (EEPROM):		00:00:00 14-Nov-2001
PBMS_GR_MODEL (Master)	GR Coefficients	
	Rt**0	Rt**1
Rt**0	1500	3840

PBMS A Reference Clock Master Calibration						
Master (EEPROM):		00:00:00 11-Mar-2002				
PBMS_REF_CLOCK (Master)		PBMS A Clock Coefficients				
	Temp**0	Temp**1	Temp**2	Temp**3	Temp**4	Temp**5
Temp**0	-278.6698	2.064625	-0.2005075	0.001553137	-2.817383E-07	0

PBMS A Sapphire Master Calibration						
Master (EEPROM):		00:00:00 11-Mar-2002				
PBMS_P_GAUGE_PRES    Sapphire   Pressure Model Coefficients (Master)						
	Tt**0	Tt**1	Tt**2	Tt**3	Tt**4	Tt**5
Tp**0	-30895.39	22304.77	-7131.54	1088.081	-64.84312	0
Tp**1	22708.98	-15815.74	5200.516	-813.7849	49.69807	0
Tp**2	-206.2166	83.83393	-9.064614	0	0	0
Tp**3	3.194887	-0.7157836	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	2222.343	-1.531535	-1.735451	0.3578298	-0.04106665	0
Tt**1	-1381.82	3.050812	0.4269152	-0.03685322	0.004793864	0
Tt**2	302.3562	-1.086123	-0.04274265	0	0	0
Tt**3	-23.36074	0.1179722	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 12C-1

Field:              Wildcat

County:            Garfield

State:              Colorado

Slim Cement Mapping Tool

CBL-VDL