

Company: Caerus Operating LLC

Well: NPR 23A-10 596

Field: NPR

County: Garfield State: Colorado

Cement Bond Log
RST Sigma Log
Gamma Ray - Collar Locator

County: Garfield
Field: NPR
Location: K10-596
Well: NPR 23A-10 596
Company: Caerus Operating LLC

K10-596	Location:		Elev.: K.B. 6733.00 ft G.L. 6709.00 ft D.F. 6733.00 ft
	Permanent Datum:	Ground Level	Elev.: 6709.00 f
Log Measured From:		Kelly Bushing	24.00 ft
Drilling Measured From:		Kelly Bushing	above Perm.Datum
API Serial No.	Section:	Township:	Range:
05045237890000	10	5S	96W

Logging Date 13-Sep-2018

Run Number	One
Depth Driller	9937.00 ft
Schlumberger Depth	9838.00 ft
Bottom Log Interval	9838.00 ft
Top Log Interval	2100.00 ft
Casing Fluid Type	2% KCL Water
Salinity	
Density	8.5 lbm/gal
Fluid Level	8.00 ft
BIT/CASING/TUBING STRING	
Bit Size	8.75 in
From	2254.00 ft
To	9838.00 ft
Casing/Tubing Size	4.5 in
Weight	11.6 lbm/ft
Grade	P110
From	0.00 ft
To	9838.00 ft
Max Recorded Temperatures	274.7 degF
Logger on Bottom	13-Sep-2018
Unit Number	3007
Recorded By	Albert Ng
Witnessed By	Trent Ray

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.

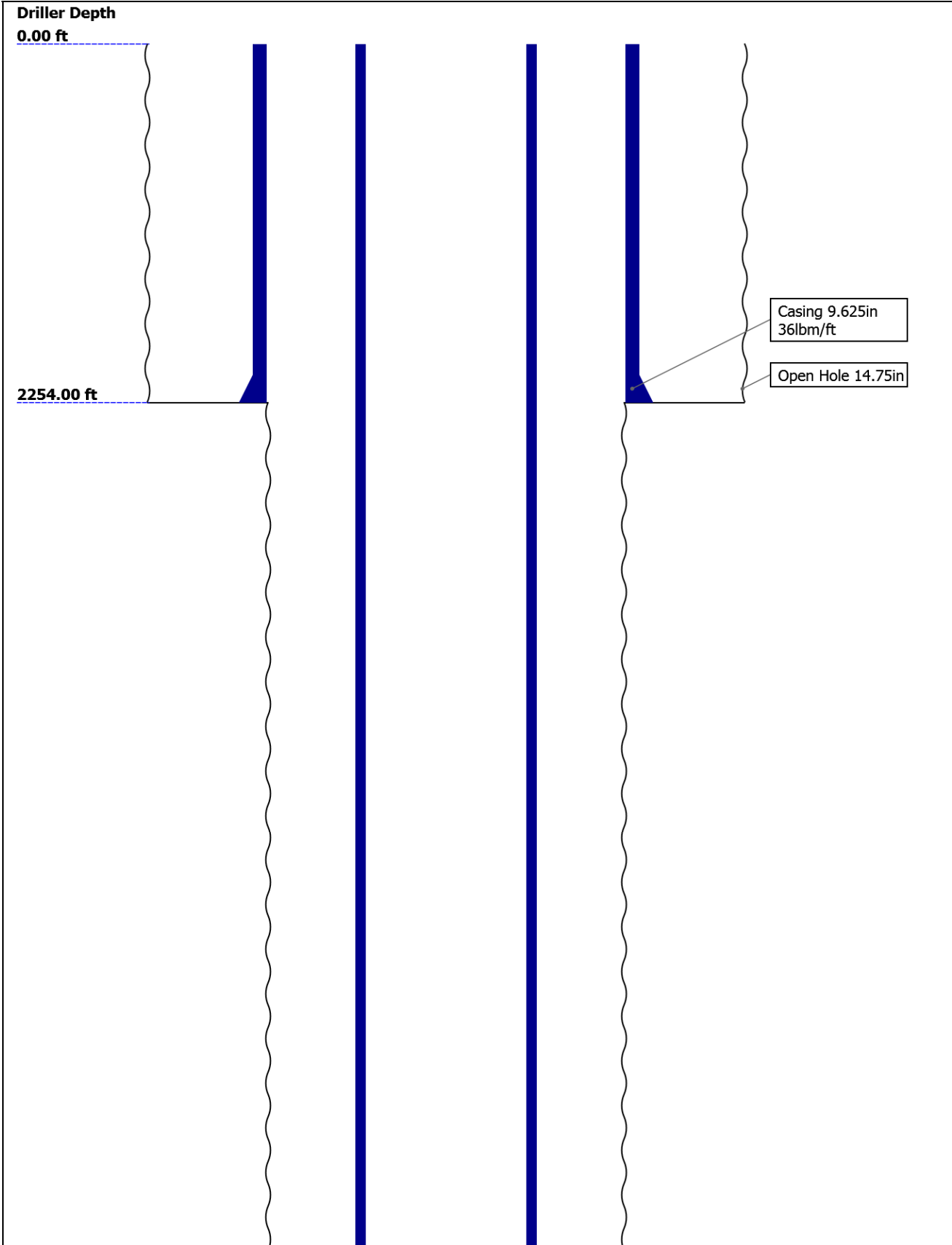
Contents

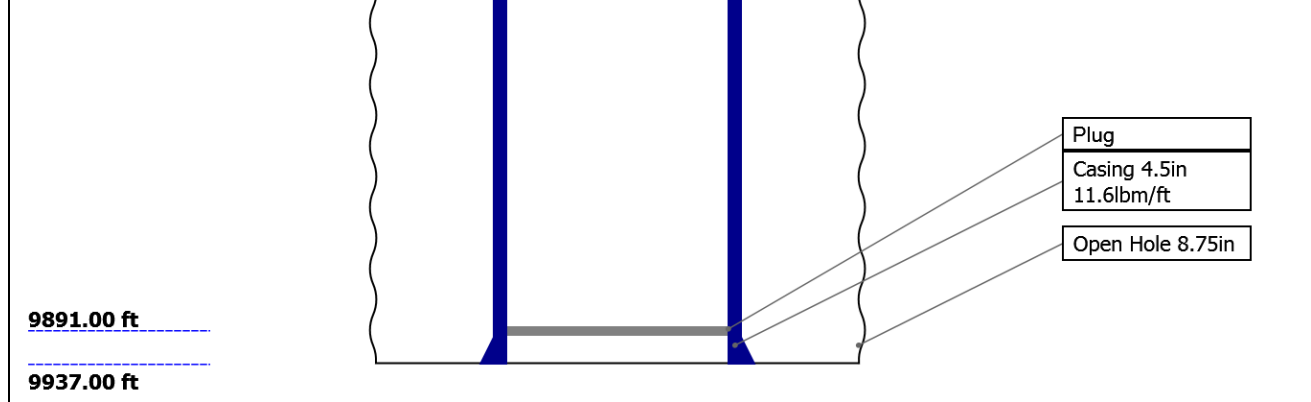
- Header
- Disclaimer
- Contents
- Well Sketch
- Borehole Size/Casing/Tubing Record
- Remarks and Equipment Summary
- Depth Summary
- One
 - Integration Summary
 - Software Version
 - Composite Summary
 - Log (Sonic CBL with VDL)
 - Parameter Listing
- One
 - Integration Summary
 - Software Version
 - Composite Summary

- Parameter Listing
- One
 - Integration Summary
 - Software Version
 - Composite Summary
 - Log (RST SIGMA Answer)
 - Parameter Listing
- Tail

- 9.4 Log (Sonic CBL with VDL)
- 9.5 Parameter Listing
- 10. One
 - 10.1 Integration Summary
 - 10.2 Software Version
 - 10.3 Composite Summary
 - 10.4 Log (RST SIGMA Answer)

Well Sketch







Borehole Size/Casing/Tubing Record

Bit						
Bit Size (in)	14.75	8.75				
Top Driller (ft)	0	2254				
Top Logger (ft)	0	2254				
Bottom Driller (ft)	2254	9937				
Bottom Logger (ft)	2254	9838				
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)	2254	9937				
Bottom Logger (ft)	2254	9838				

Remarks and Equipment Summary

One: Toolstring				One: Remarks		
Equip name	Length	MP name	Offset	Toolstring run as per toolsketch.		
PEH-E	61.66			RST mode Sigma.		
AH-38	59.98			Matrix: Sandstone		
PSTP-B:282	59.7			Max Recorded Temp 274.7		
6				SLB Depth 9838		
PSC-A				Thank You For Choosing Schlumberger		
PSC-A						
PBMS-B:2826						
		GR	55.99			
		PSTC	55.7			
		PSTC Tool	0.00			
		String Bot				
		tom				
		Temperatu	52.94			
		re				
		CQG Press	52.6			
		ure				
		CCL	52.18			
		PBMS	51.43			
RST-C:578	51.43					
RSCH-A:437						
RSC-E:551						
RSS-A:488						
MNTR-F:1352						
-51352						
RSXH-A						
RSX-E:578						
		RSC-E	45.07			

[illegible]

BNS-P **0.14**   **TOOL_ZERO**
 Lengths are in ft
 Maximum Outer Diameter = 2.065 in
 Line: Sensor Location, Value: Gating Offset
 All measurements are relative to TOOL_ZERO

	One		
--	-----	--	--

Type	IDW-JA		
------	--------	--	--

Serial Number	5979		
Calibration Date	10-JUN-2017		
Calibrator Serial Number	IDWC-C-57		
Calibration Cable Type	1-25ZA-XXS		
Wheel Correction 1	-3		
Wheel Correction 2	-3		

Type	CMTD-B/A		
------	----------	--	--

Serial Number	5036		
Calibration Date	10-Sep-2018		
Calibrator Serial Number	112544A		
Number of Calibration Points	10		
Calibration Root Mean Square Error	21		
Calibration Peak Error	10		

Type	1-25ZA		
------	--------	--	--

Serial Number	112140		
Length	16800.00 ft		
Conveyance Type	Wireline		
Rig Type	Crane		

Log Sequence	First Log In the Well
--------------	-----------------------

All Schlumberger depth control policies followed.

Rig Up Length At Surface	IDW used for primary depth control.
Rig Up Length At Bottom	Zchart used for secondary depth control.
Rig Up Length Correction	
Stretch Correction	
Tool Zero Check At Surface	

Acquisition System	Version
--------------------	---------

Maxwell 2017 SP3	7.3.92069.3100
Application Patch	Wireline_Hotfix-RTDLIS-2017SP3_7.3.92363
	Wireline_Hotfix-SML-2017SP3_7.3.101161

Pass Summary

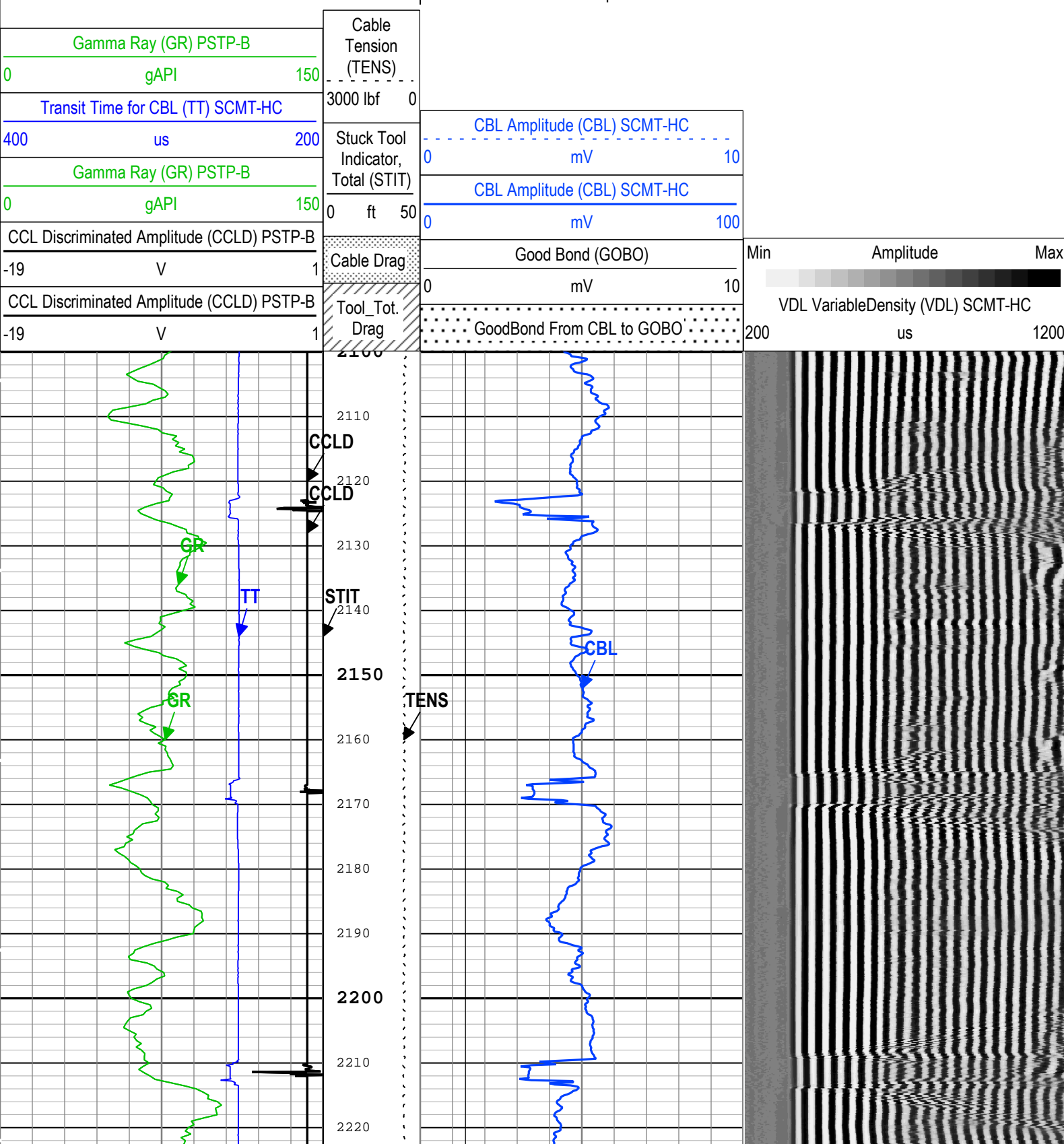
All depths are referenced to toolstring zero

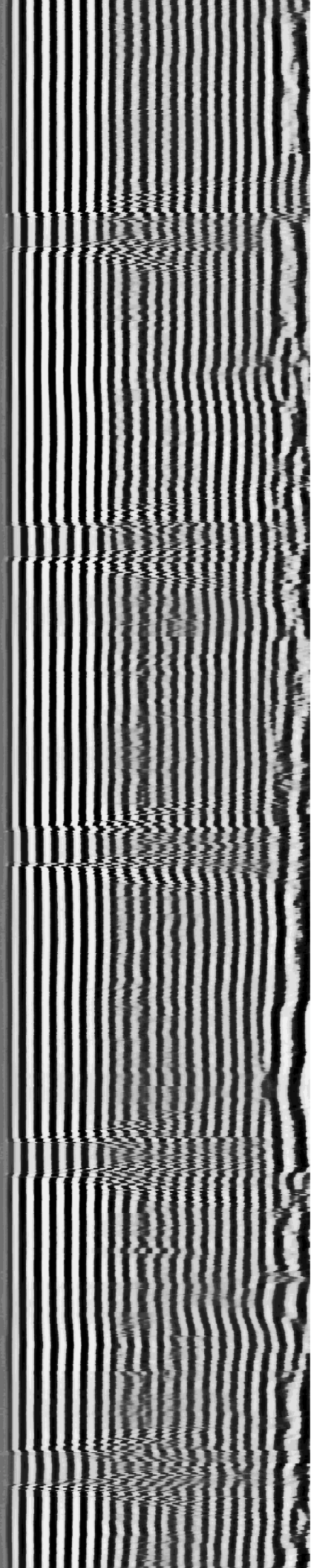
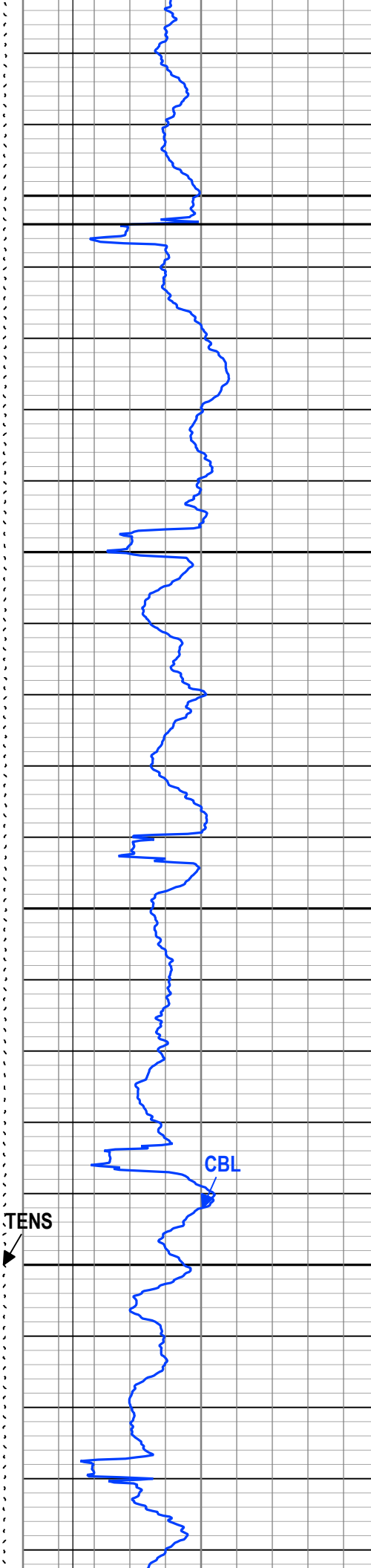
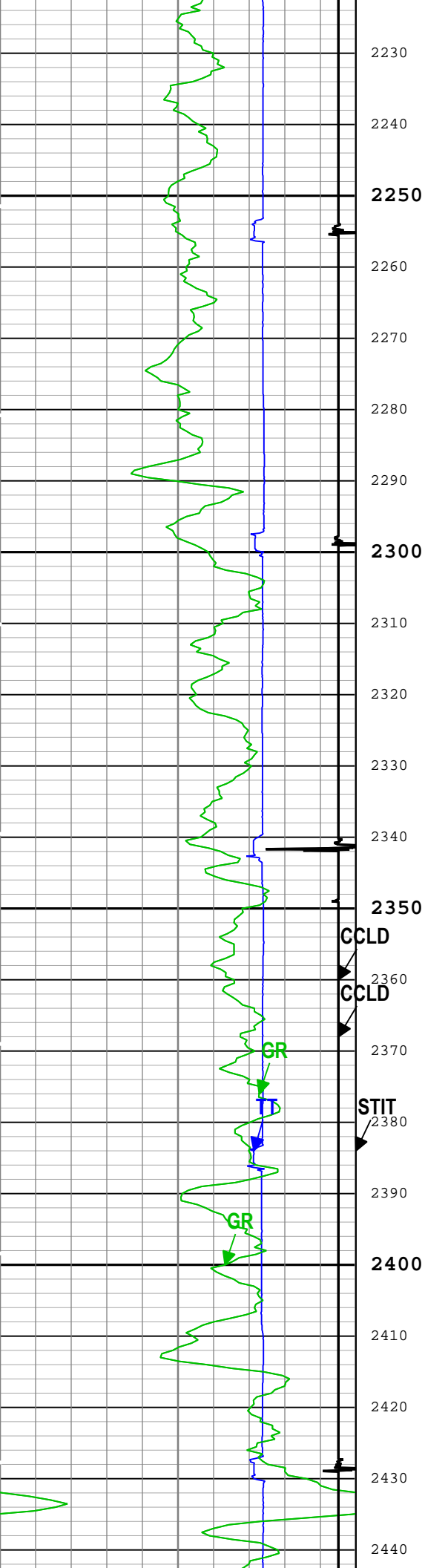
Log	Company:Caerus Operating LLC	Well:NPR 23A-10 596
		One: Log[3]:Up:S003

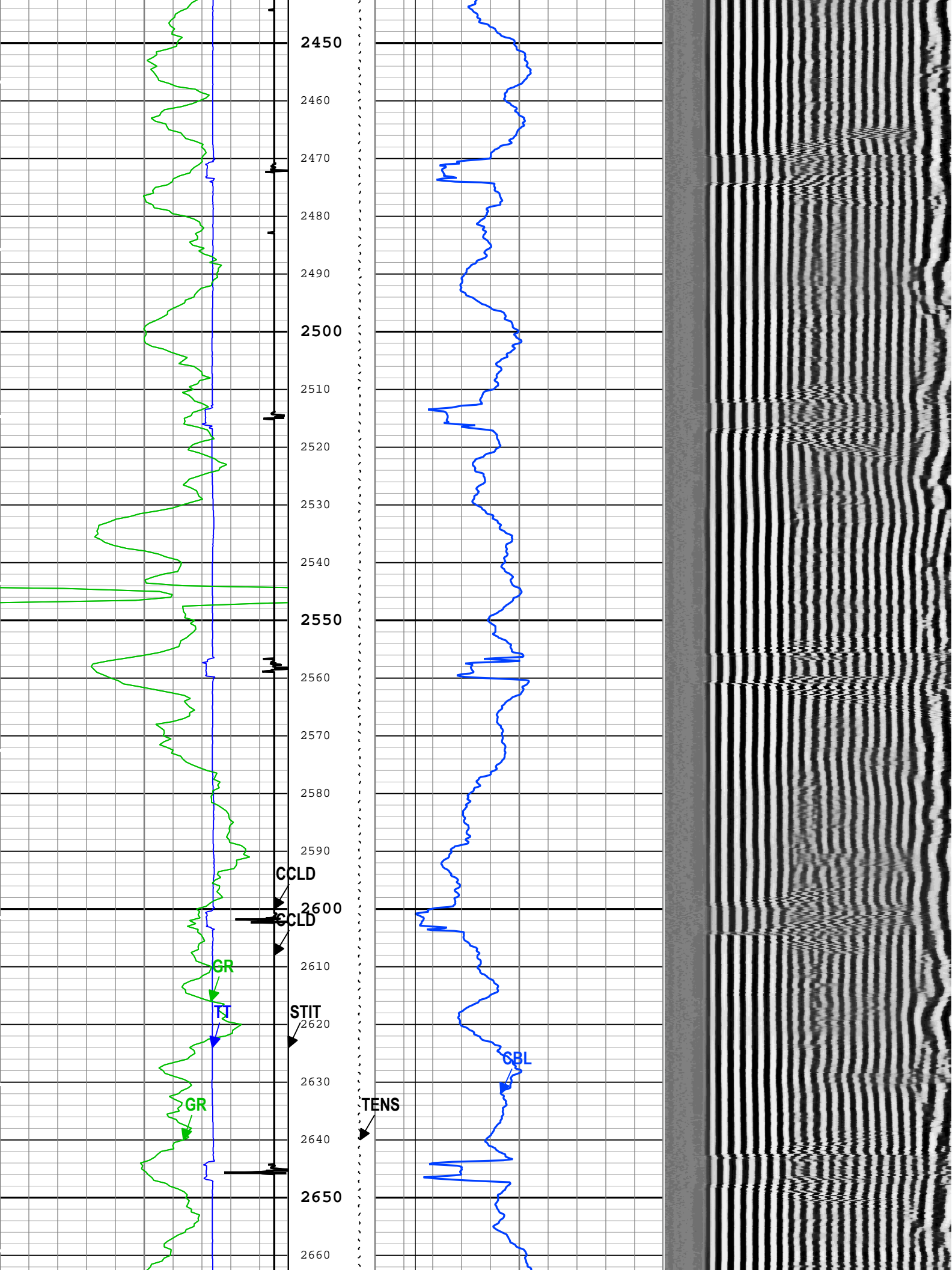
Description: Sonic CBL with VDL	Format: Log (Sonic CBL with VDL)	Index Scale: 5 in per 100 ft	Index Unit: ft	Index Type: Measured Depth	Creation Date: 14-Sep-2018 04:02:58
---------------------------------	------------------------------------	------------------------------	----------------	----------------------------	-------------------------------------

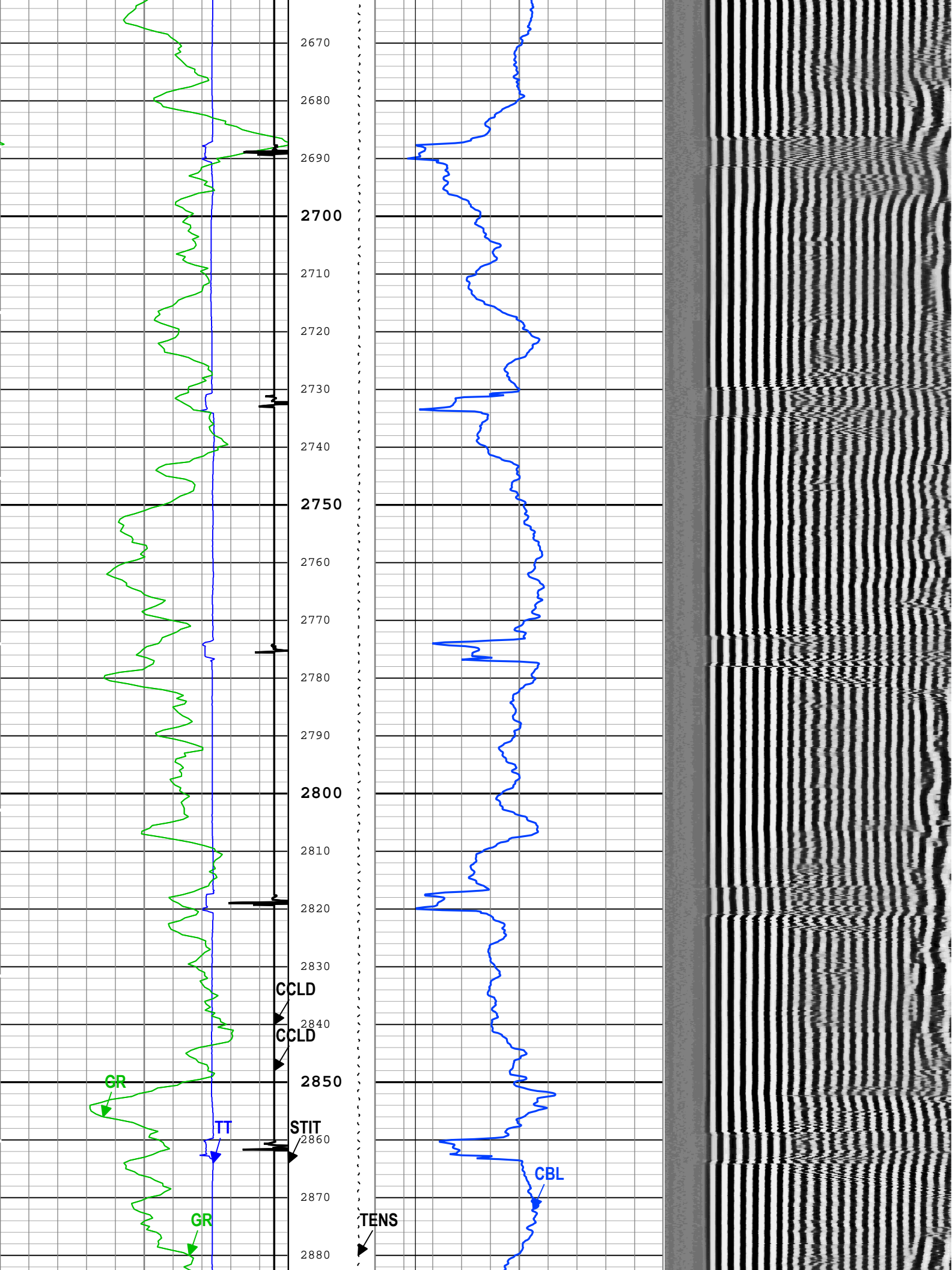
TIME_1900 - Time Marked every 60.00 (s)

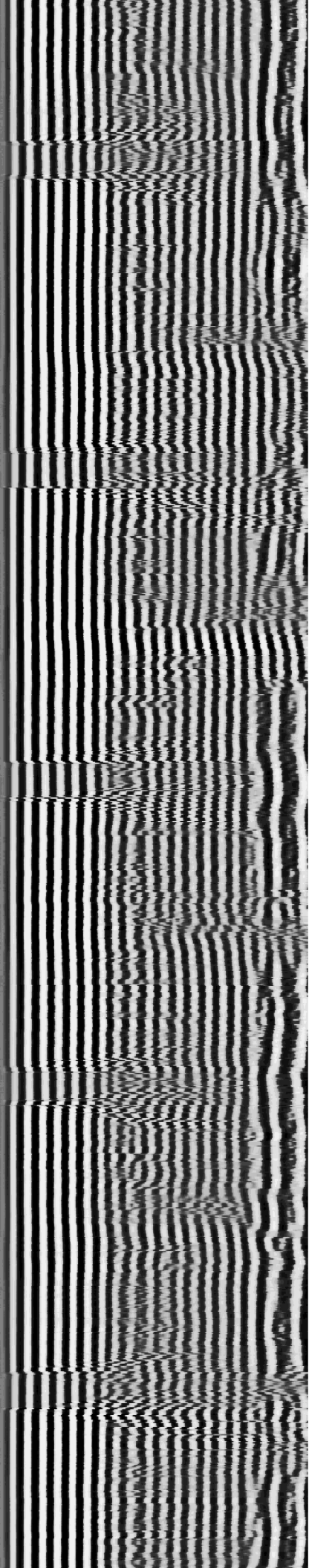
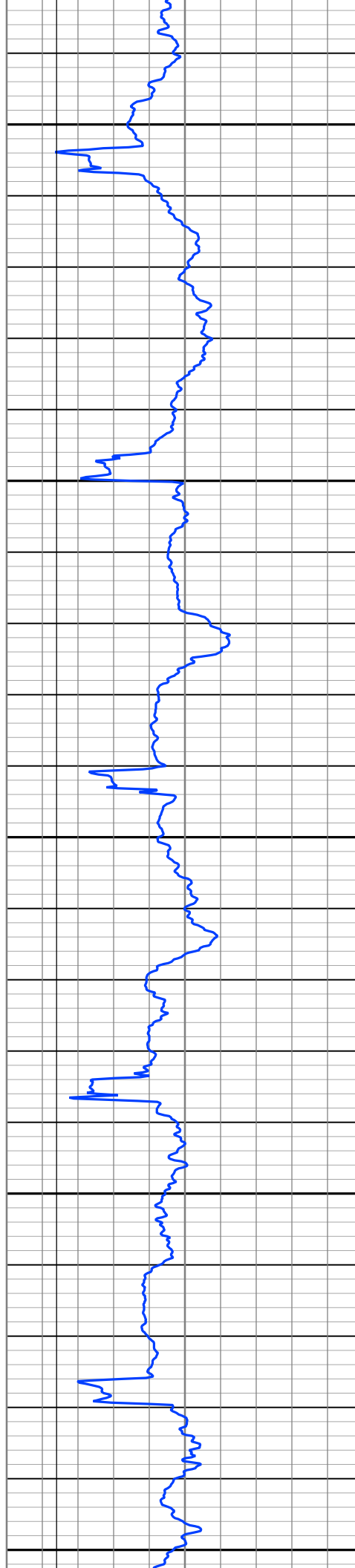
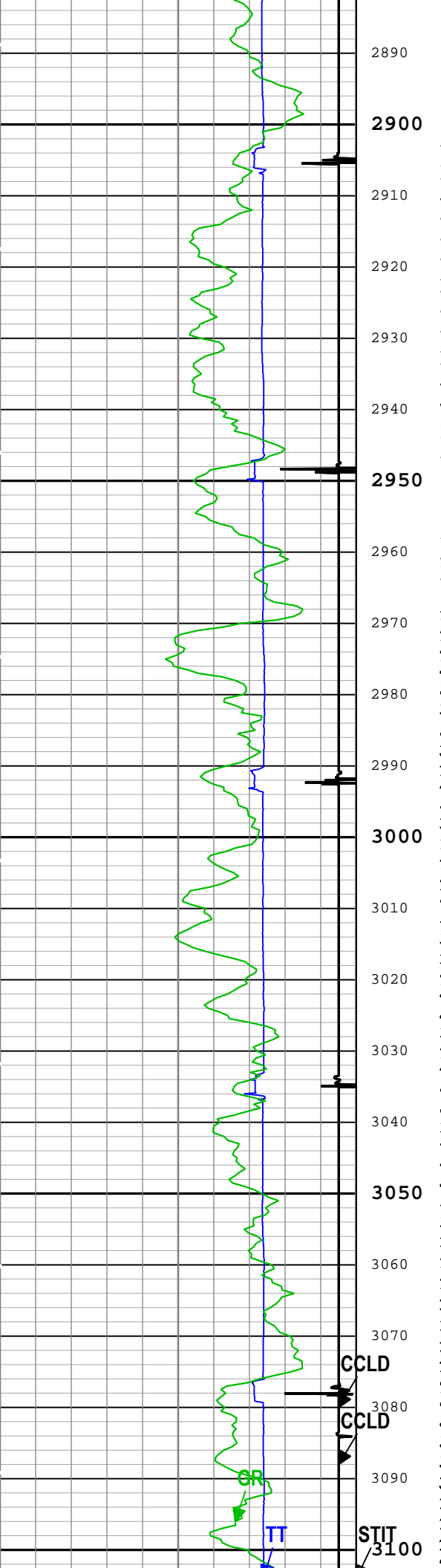
- BIEP - Bond Index Event Pips SCMT-HC

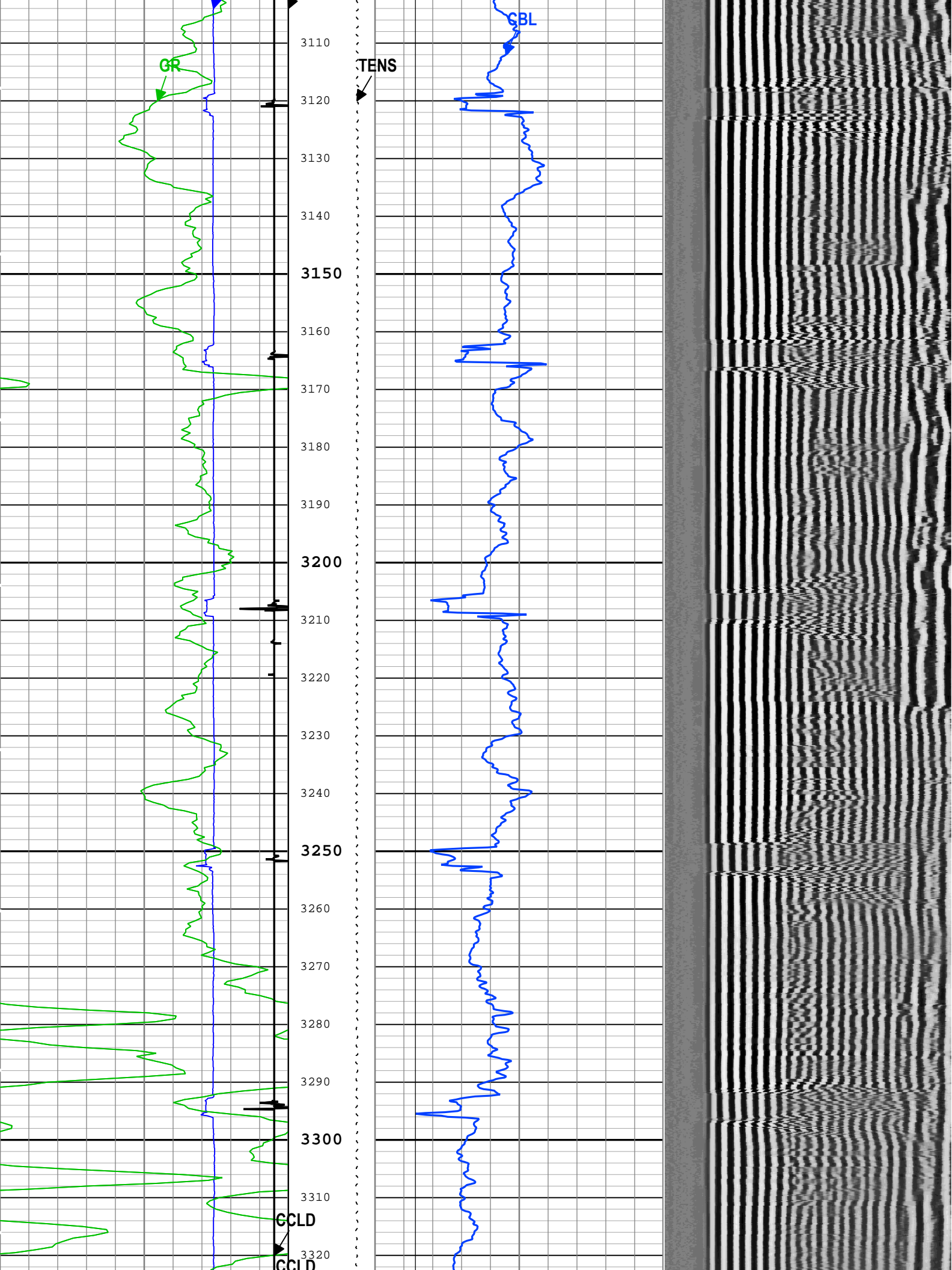


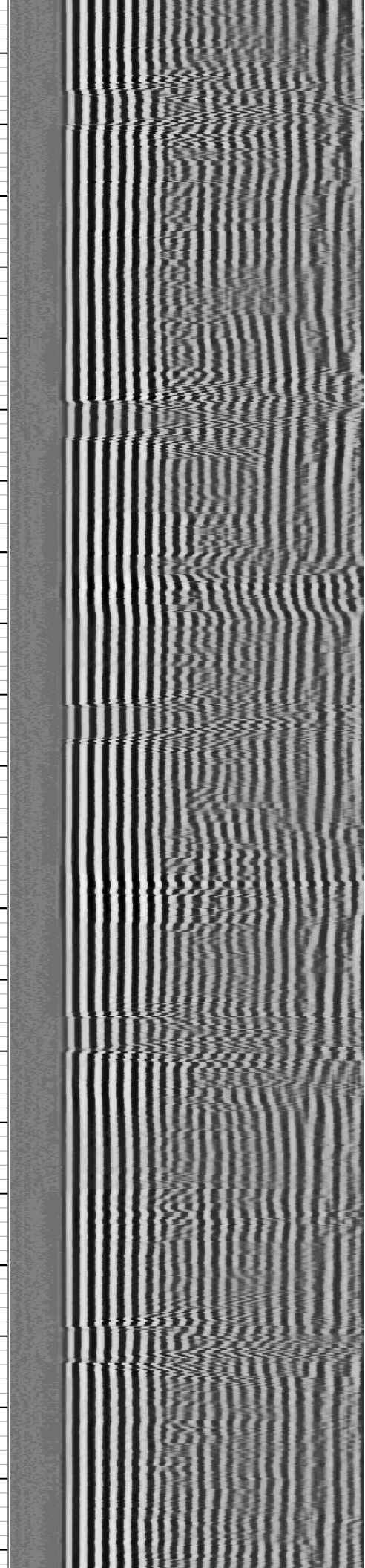
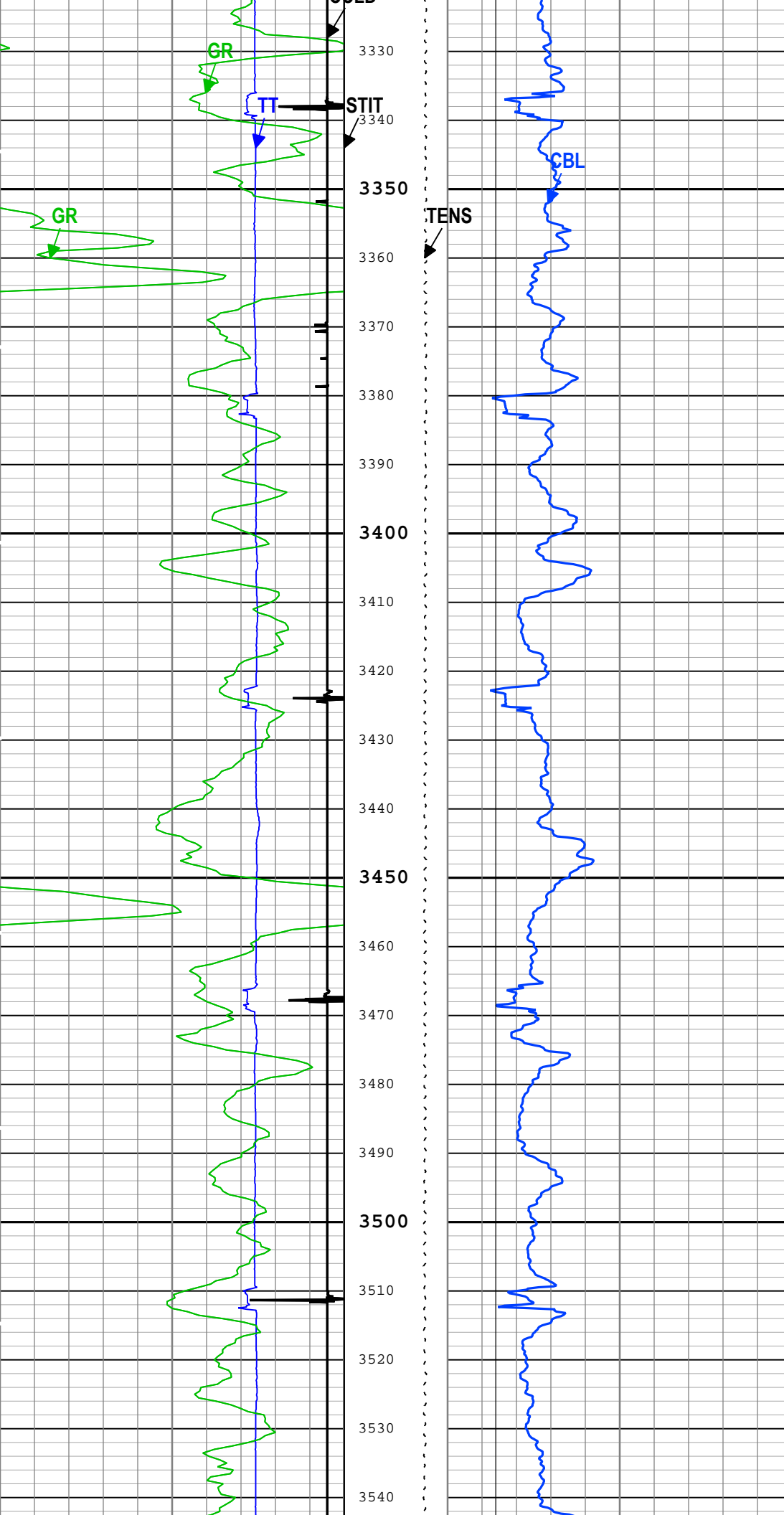


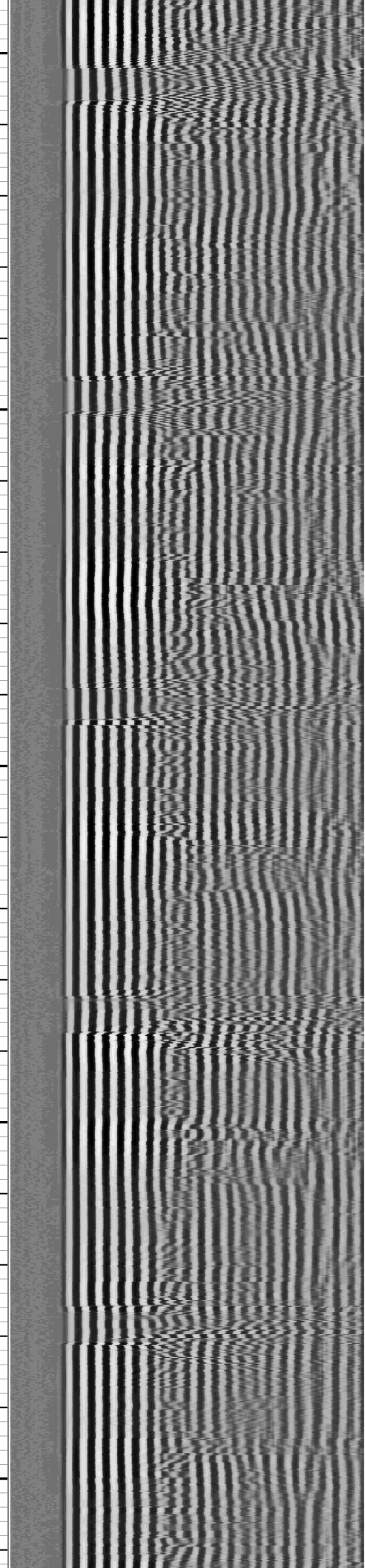
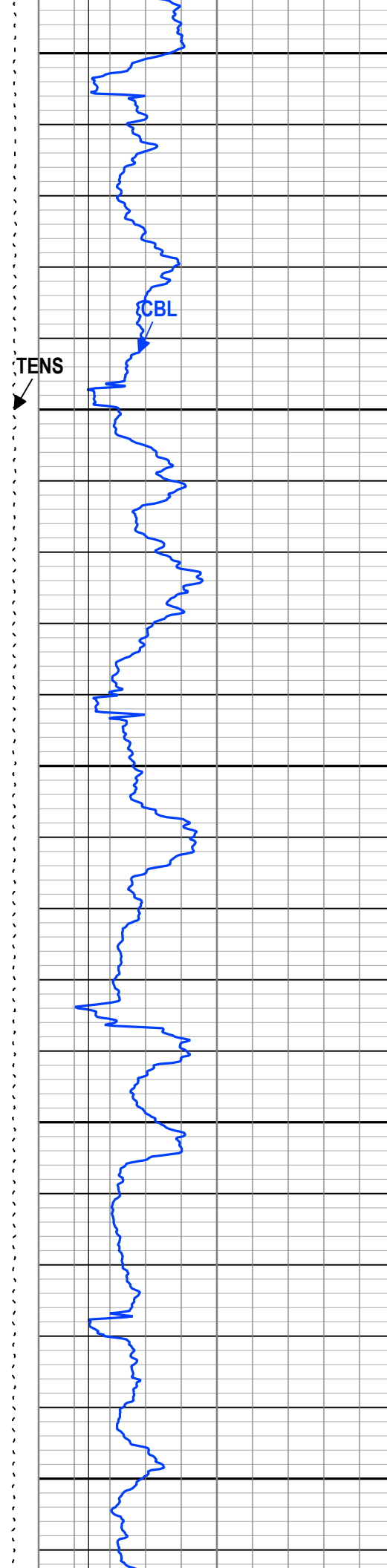
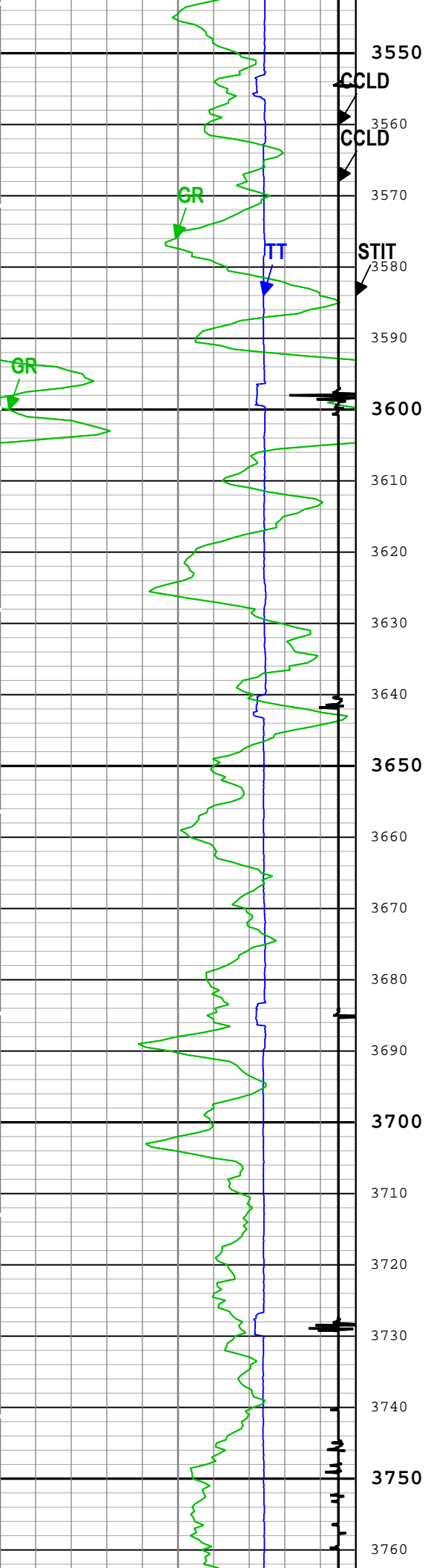


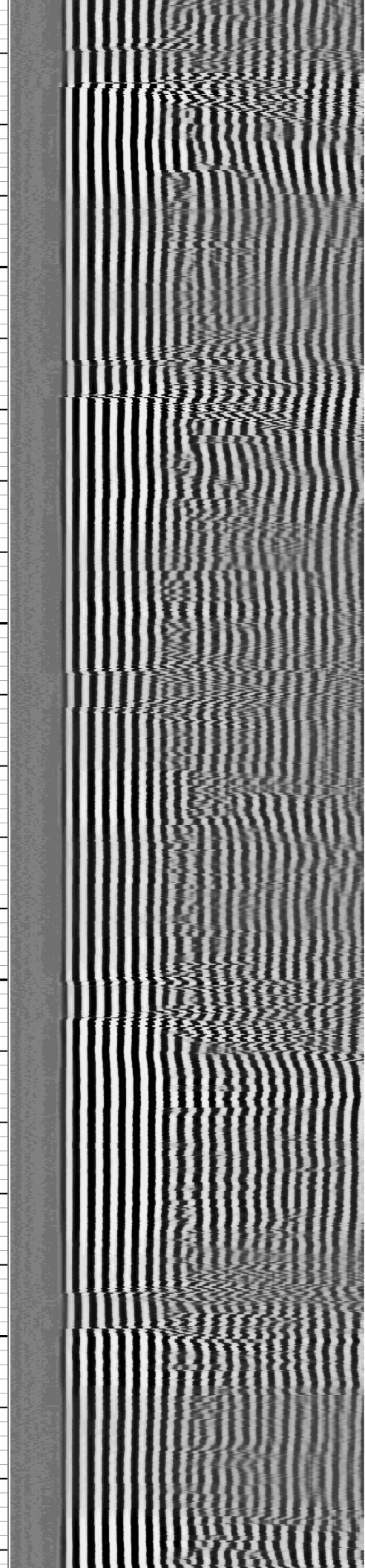
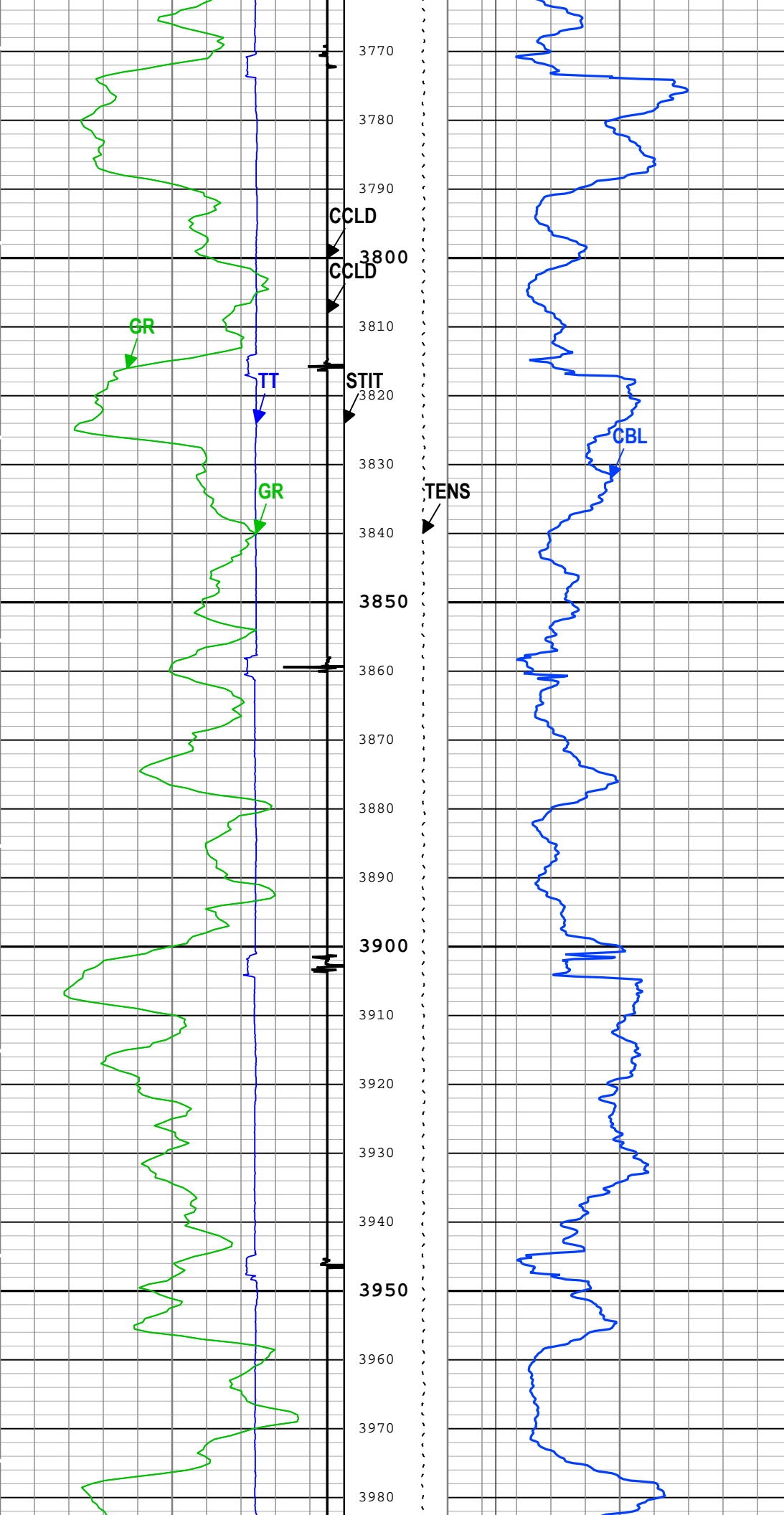


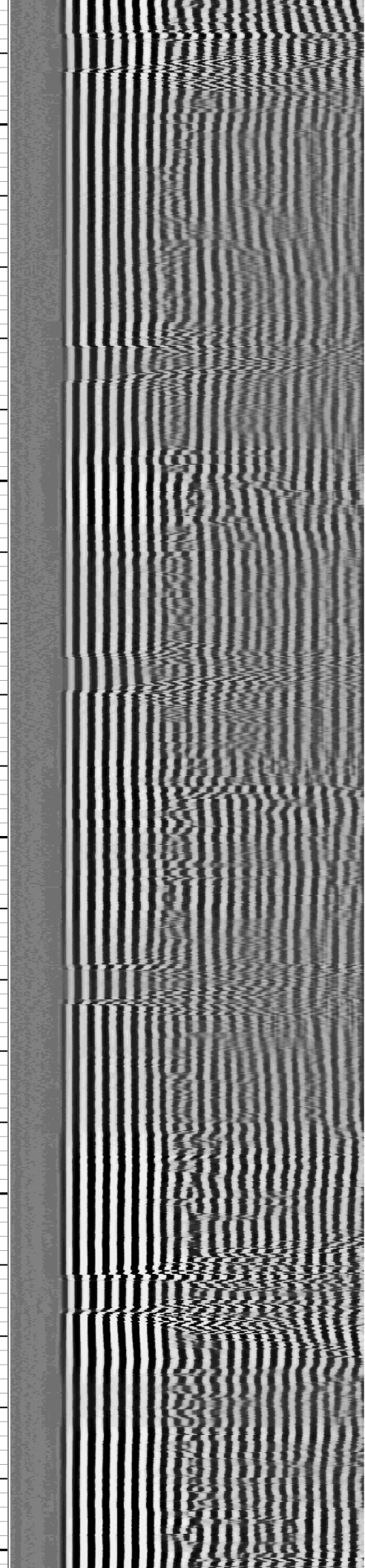
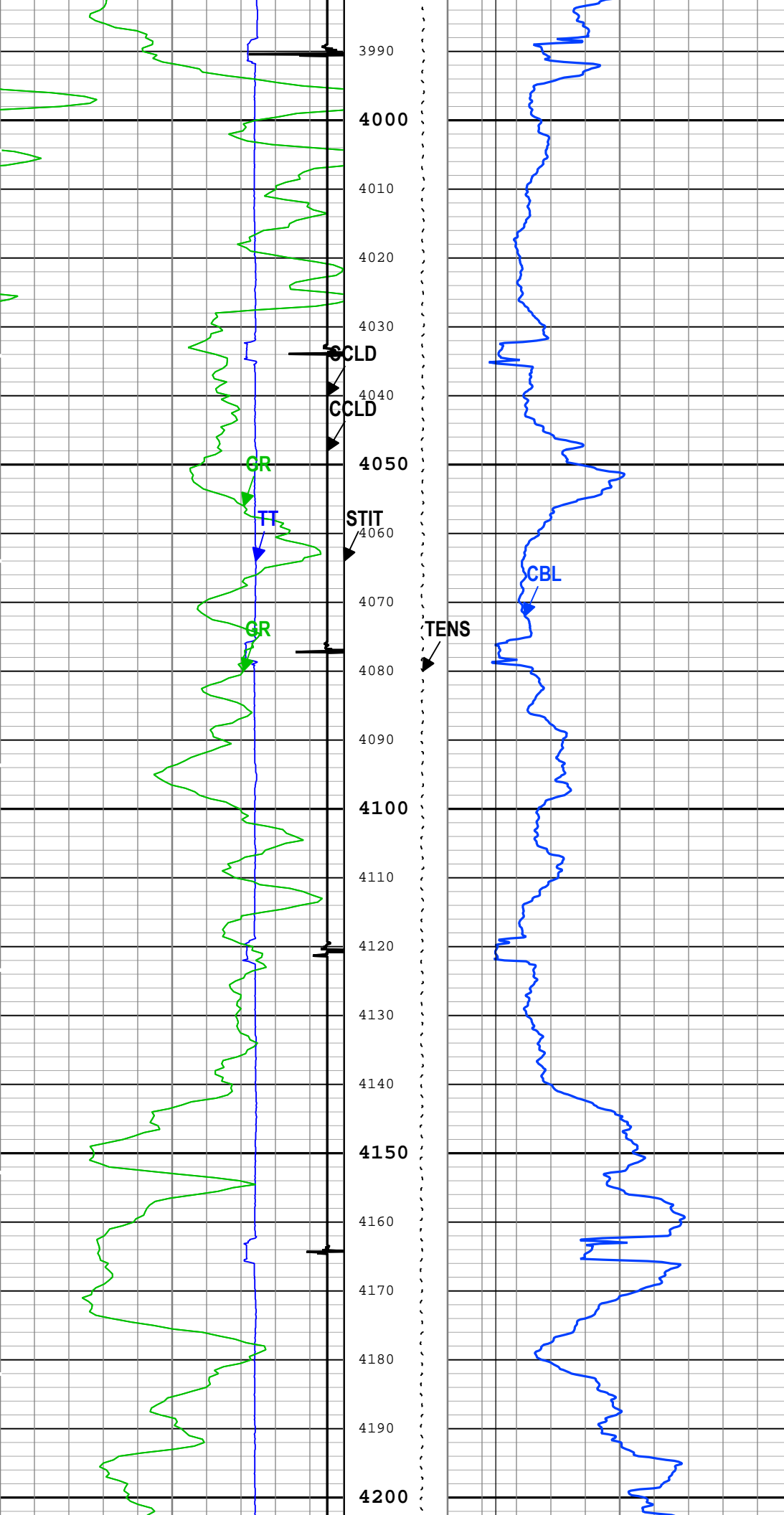


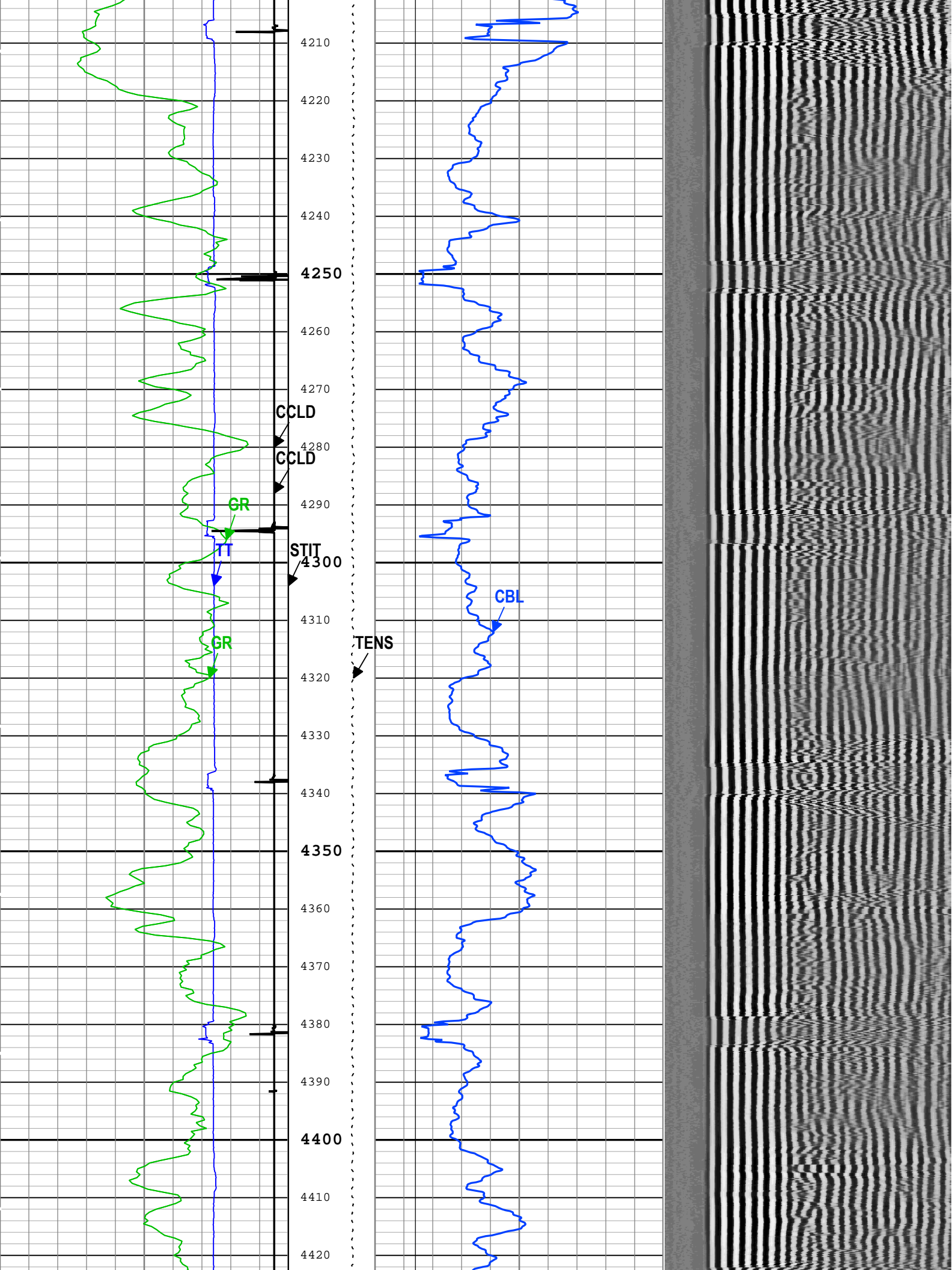


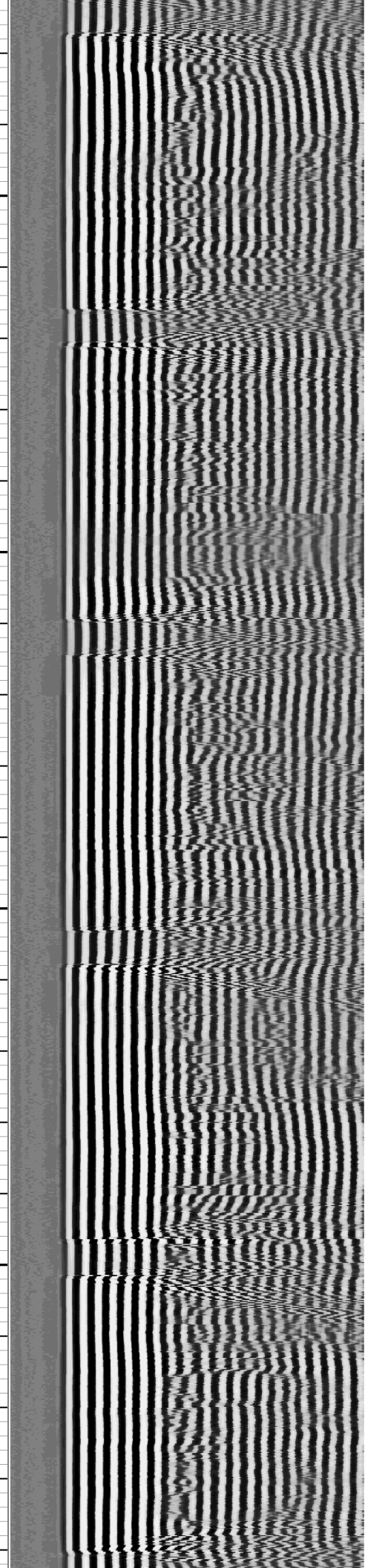
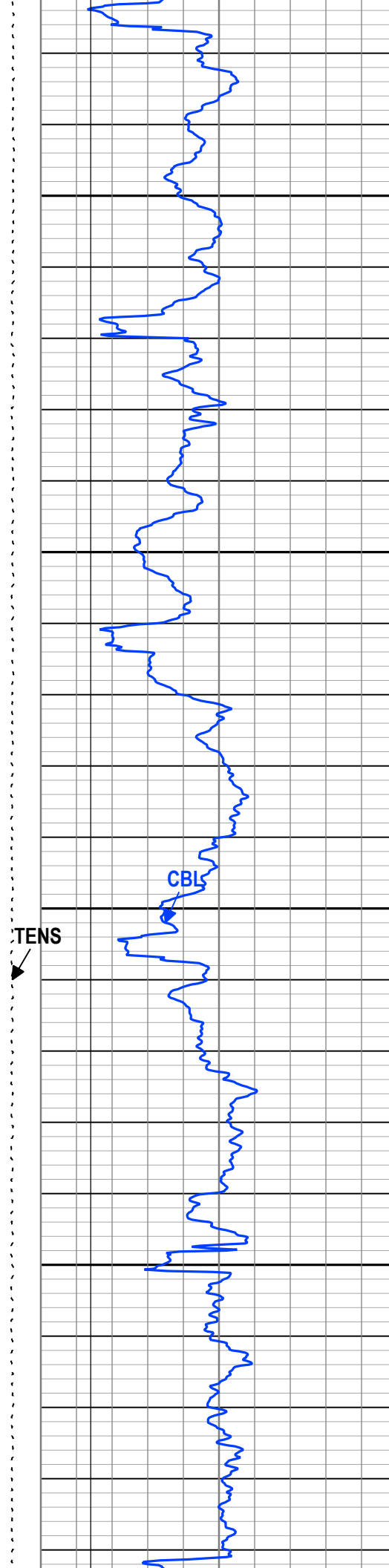
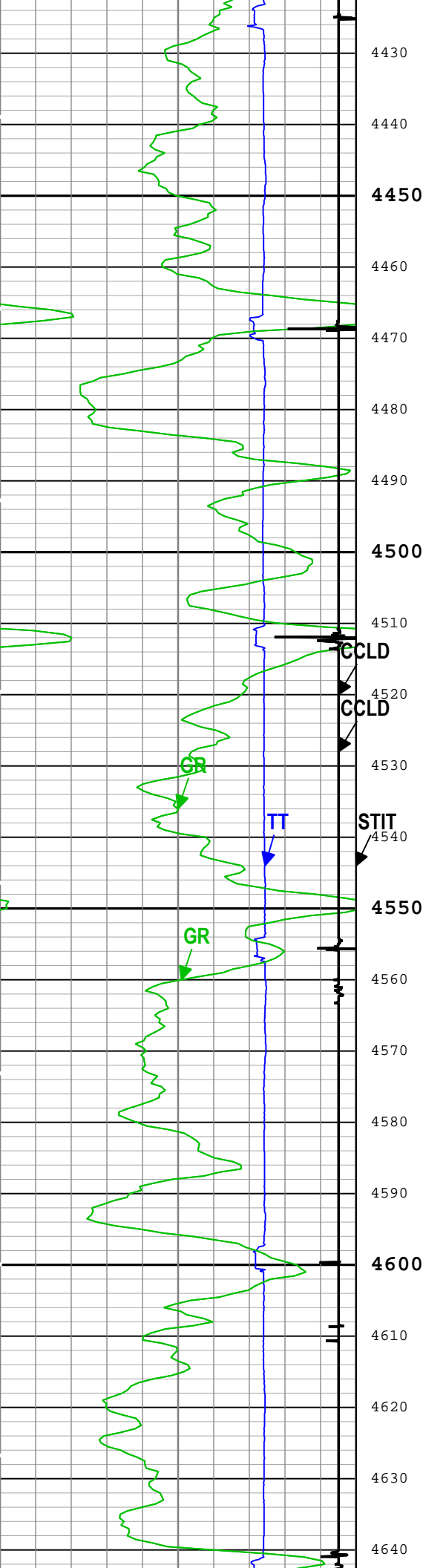


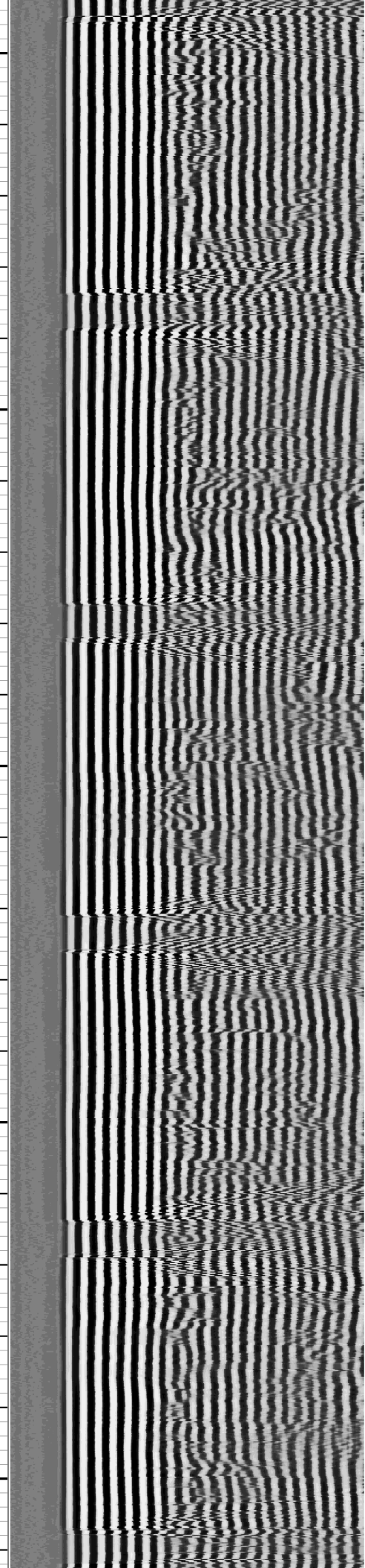
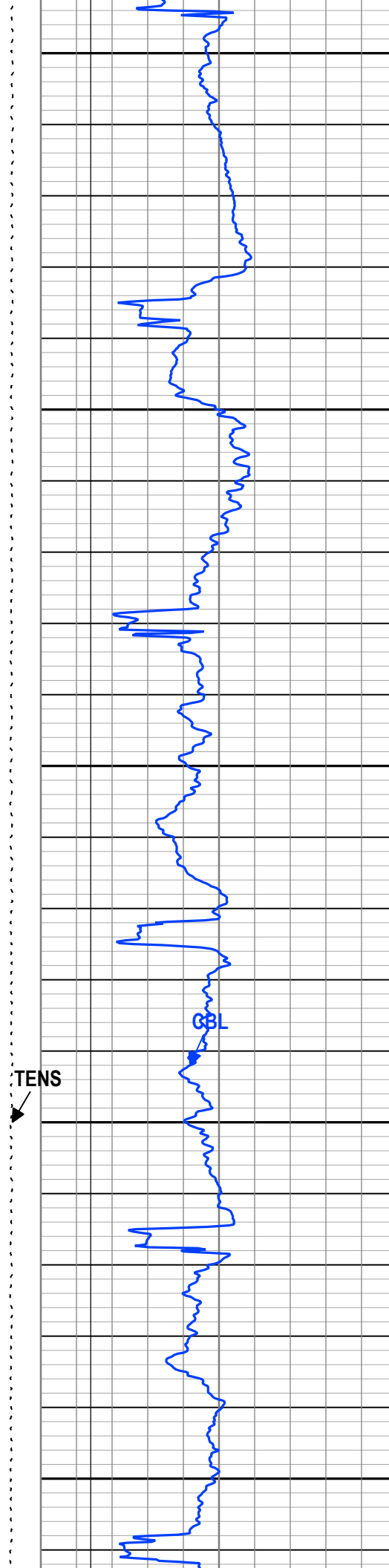
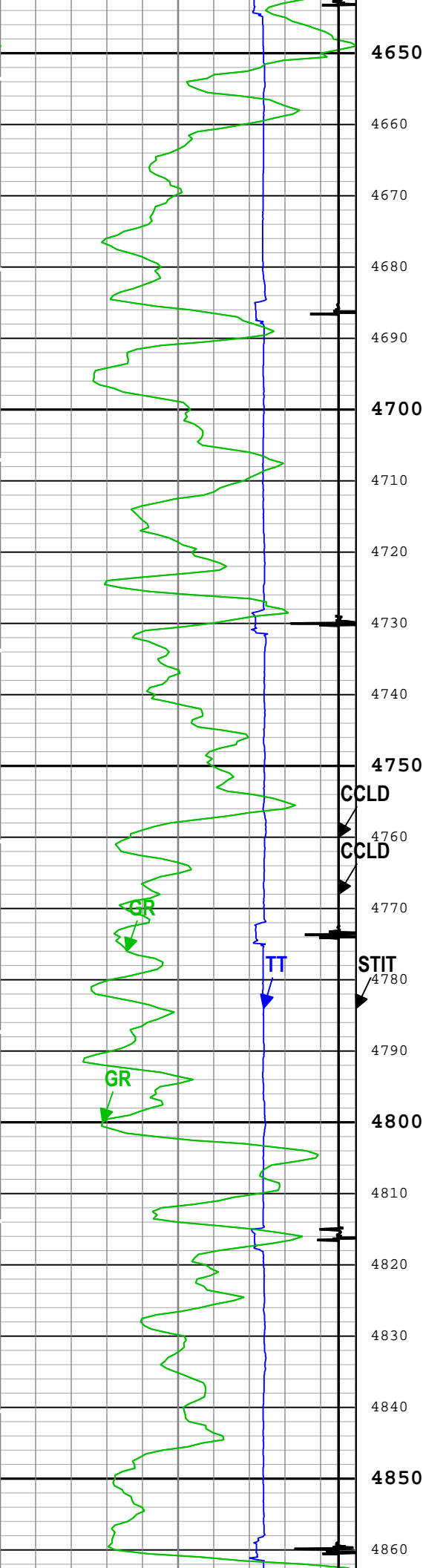


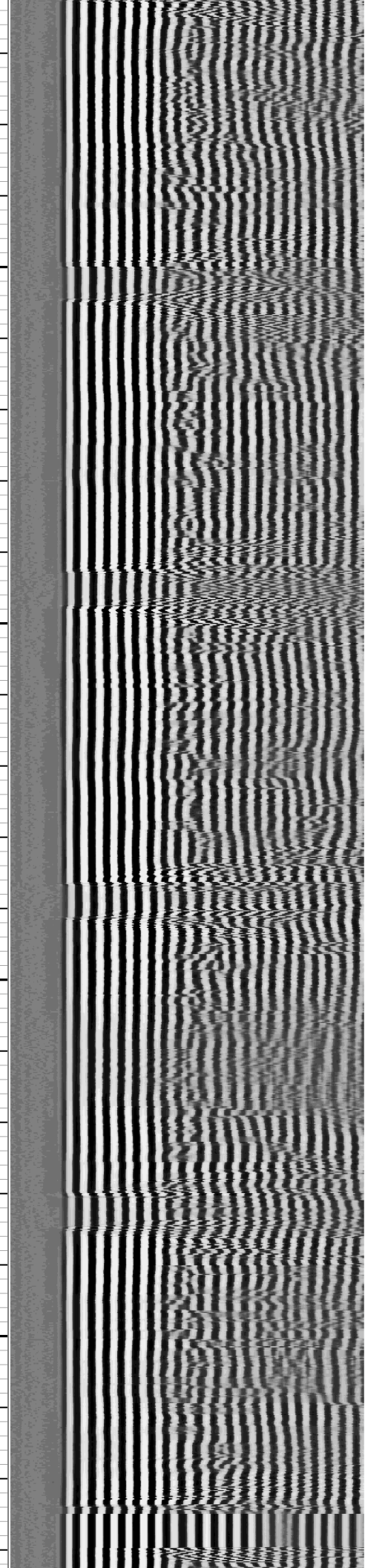
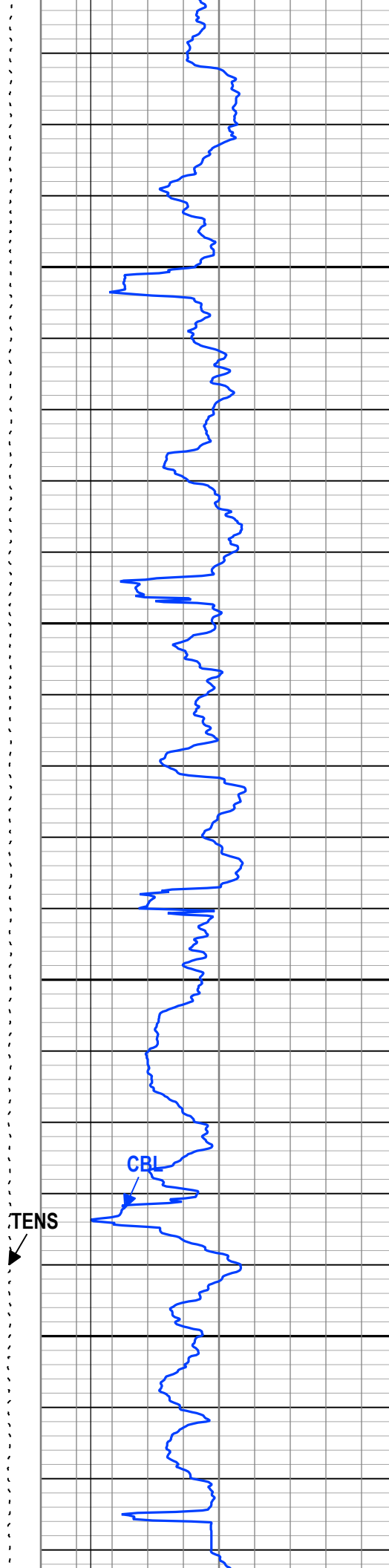
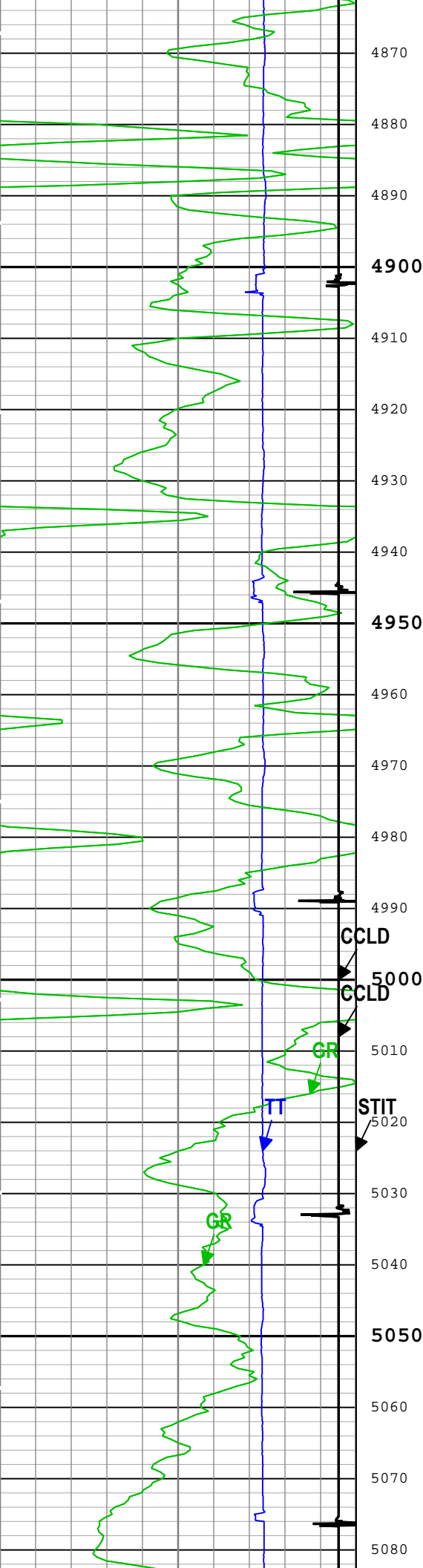


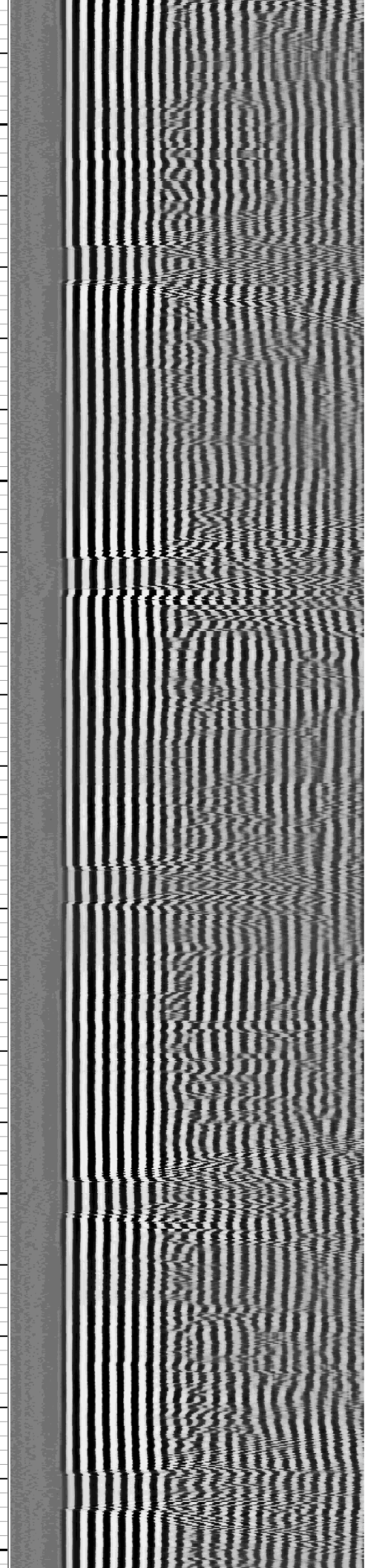
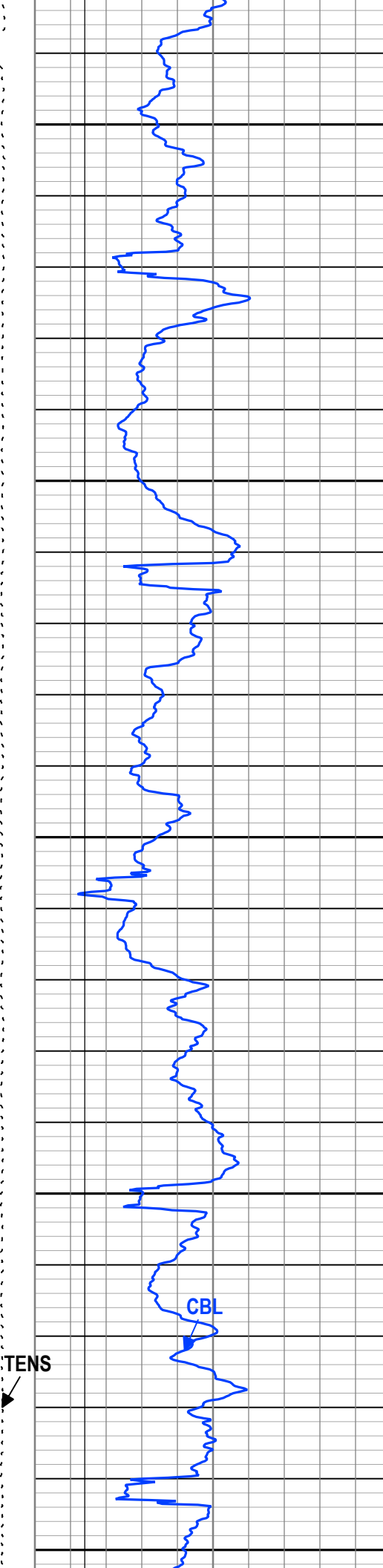
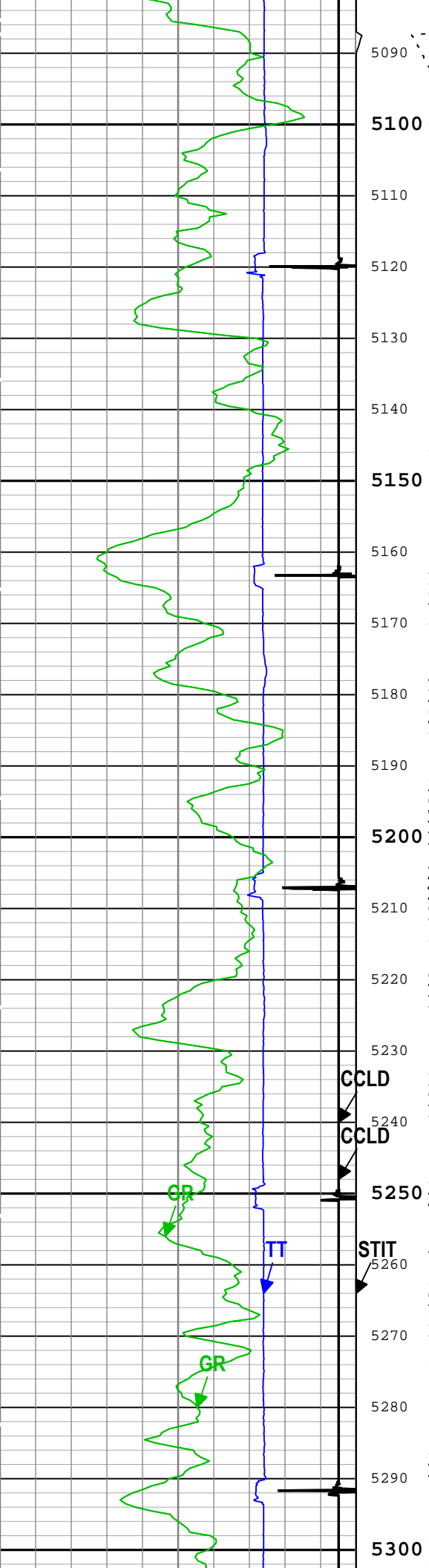


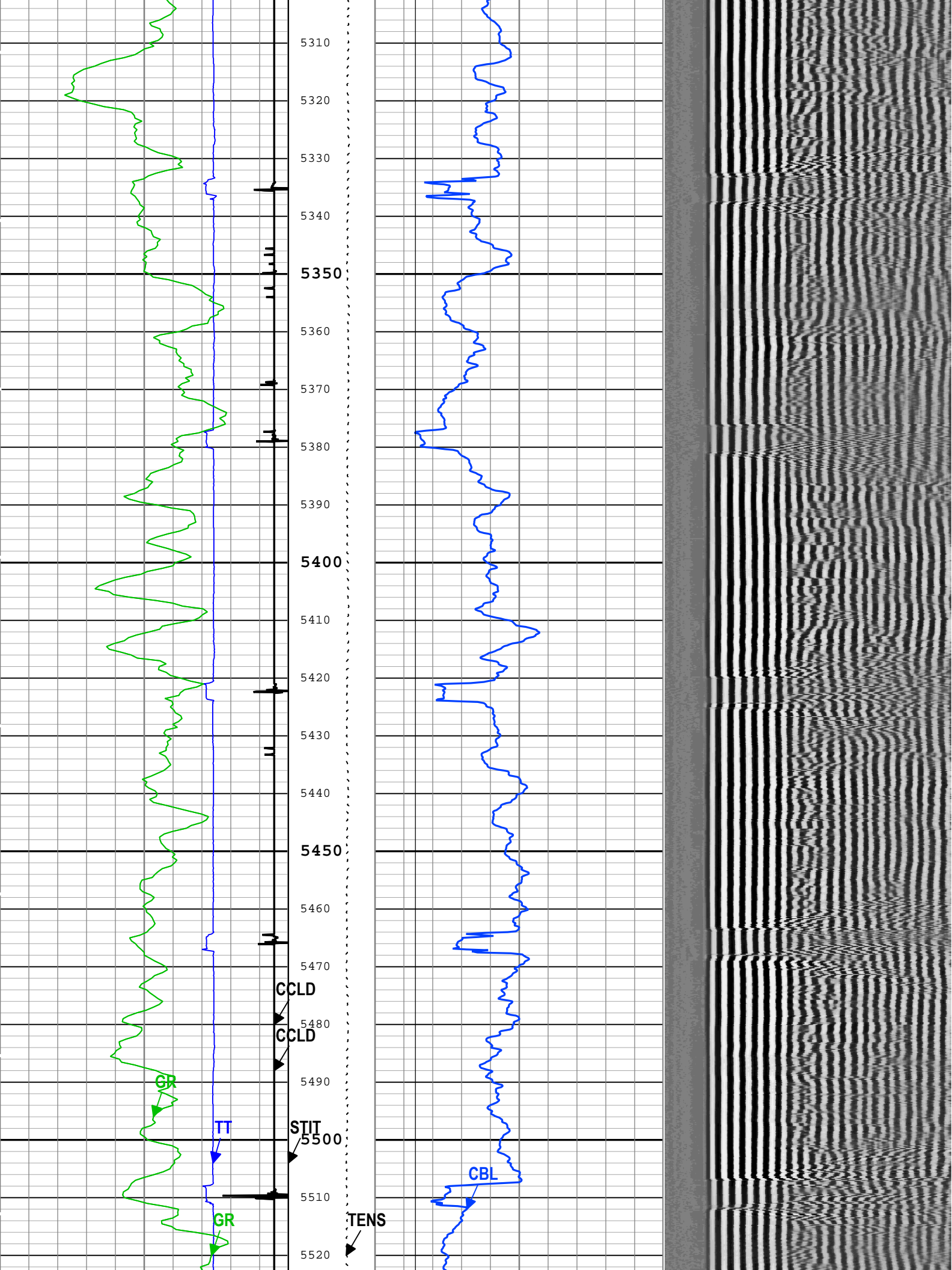


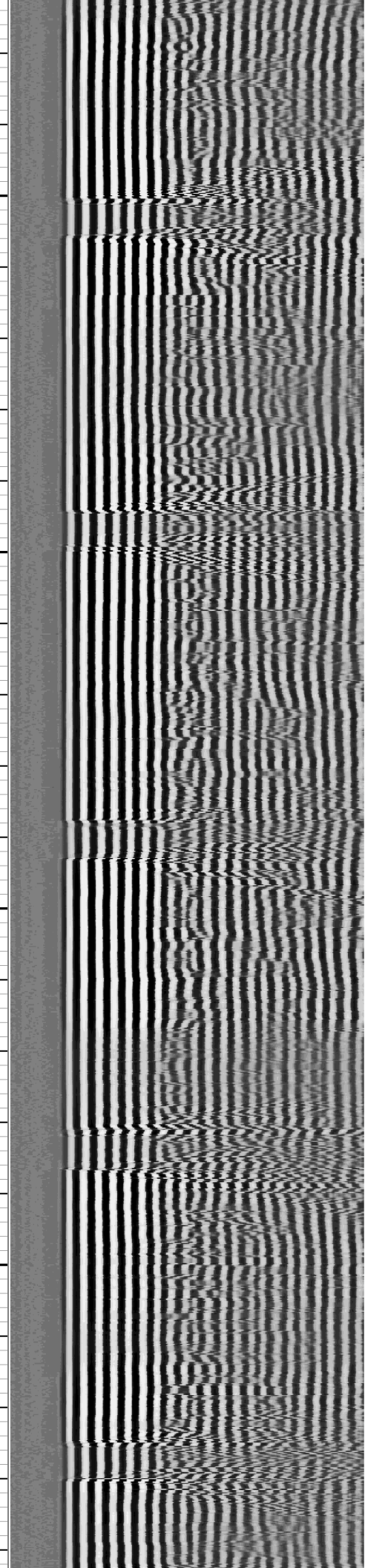
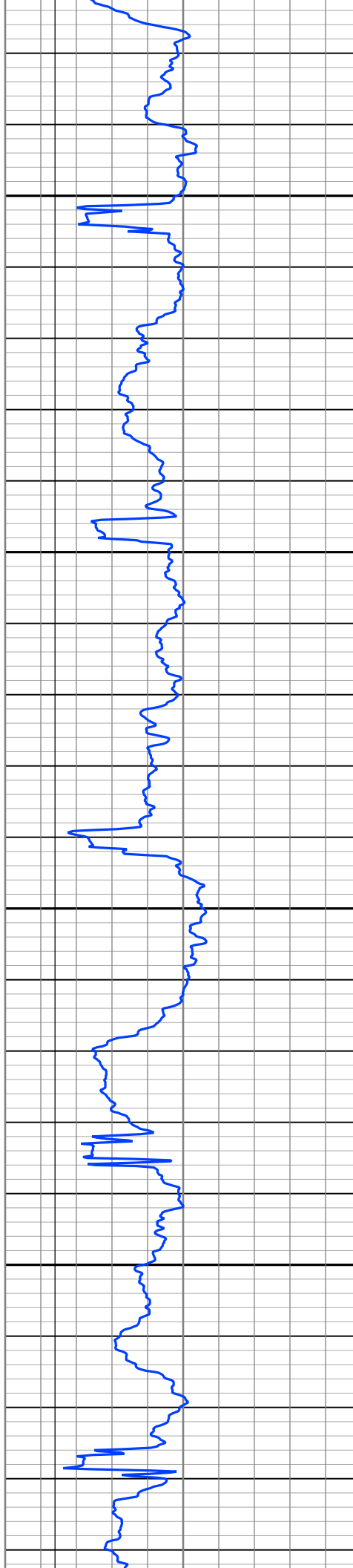
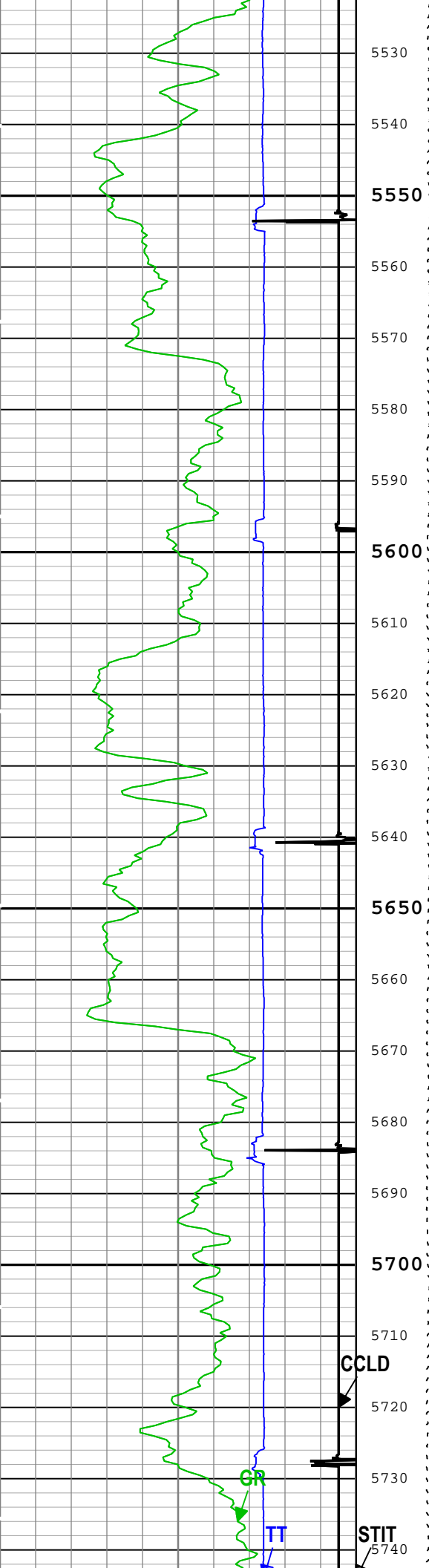


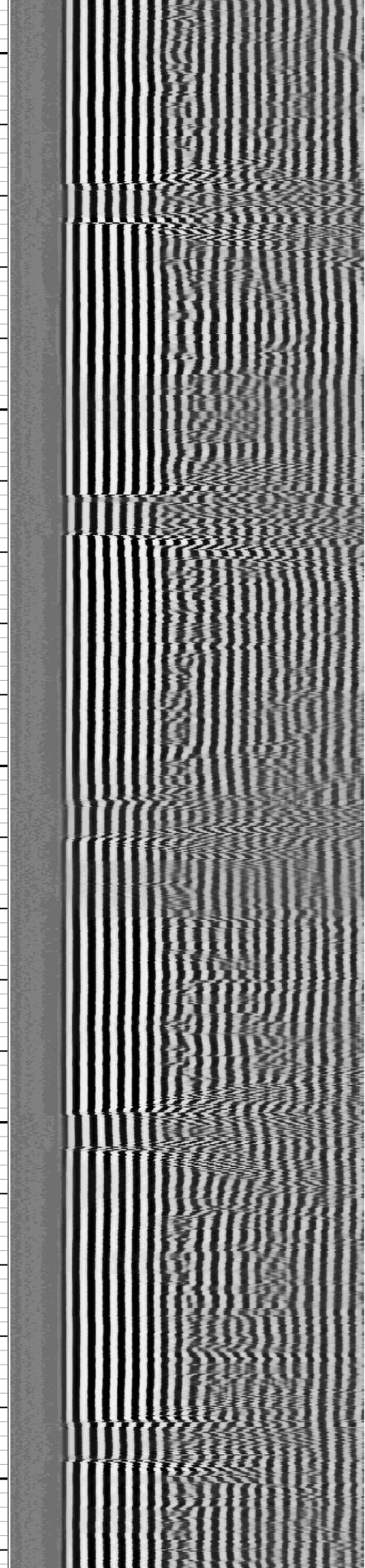
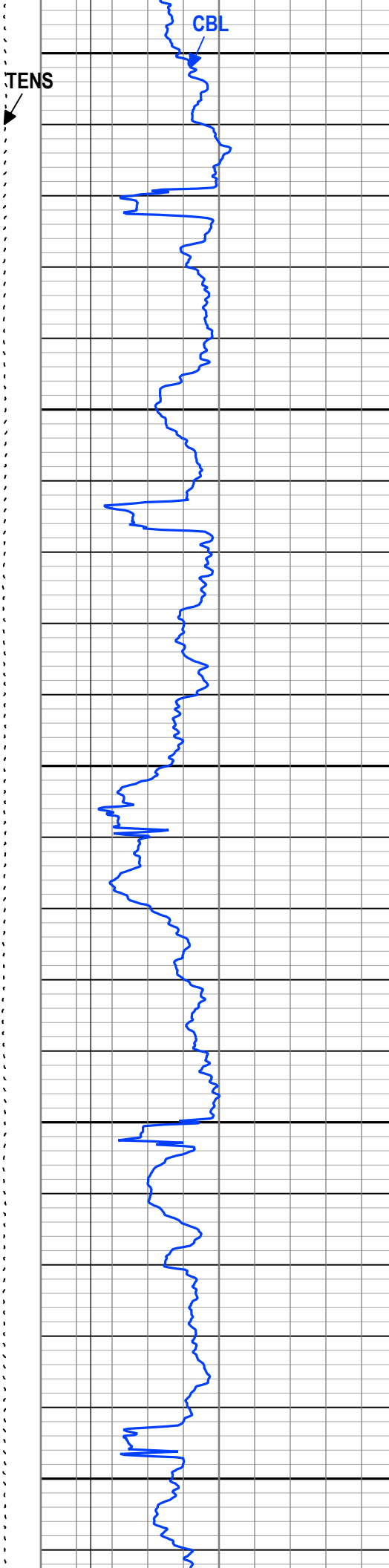
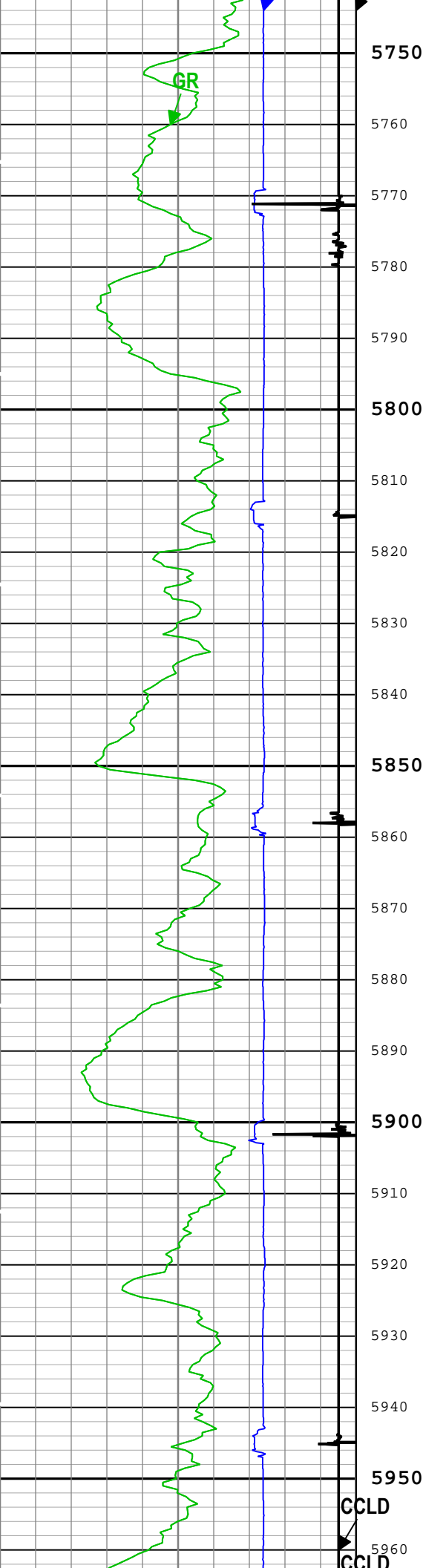


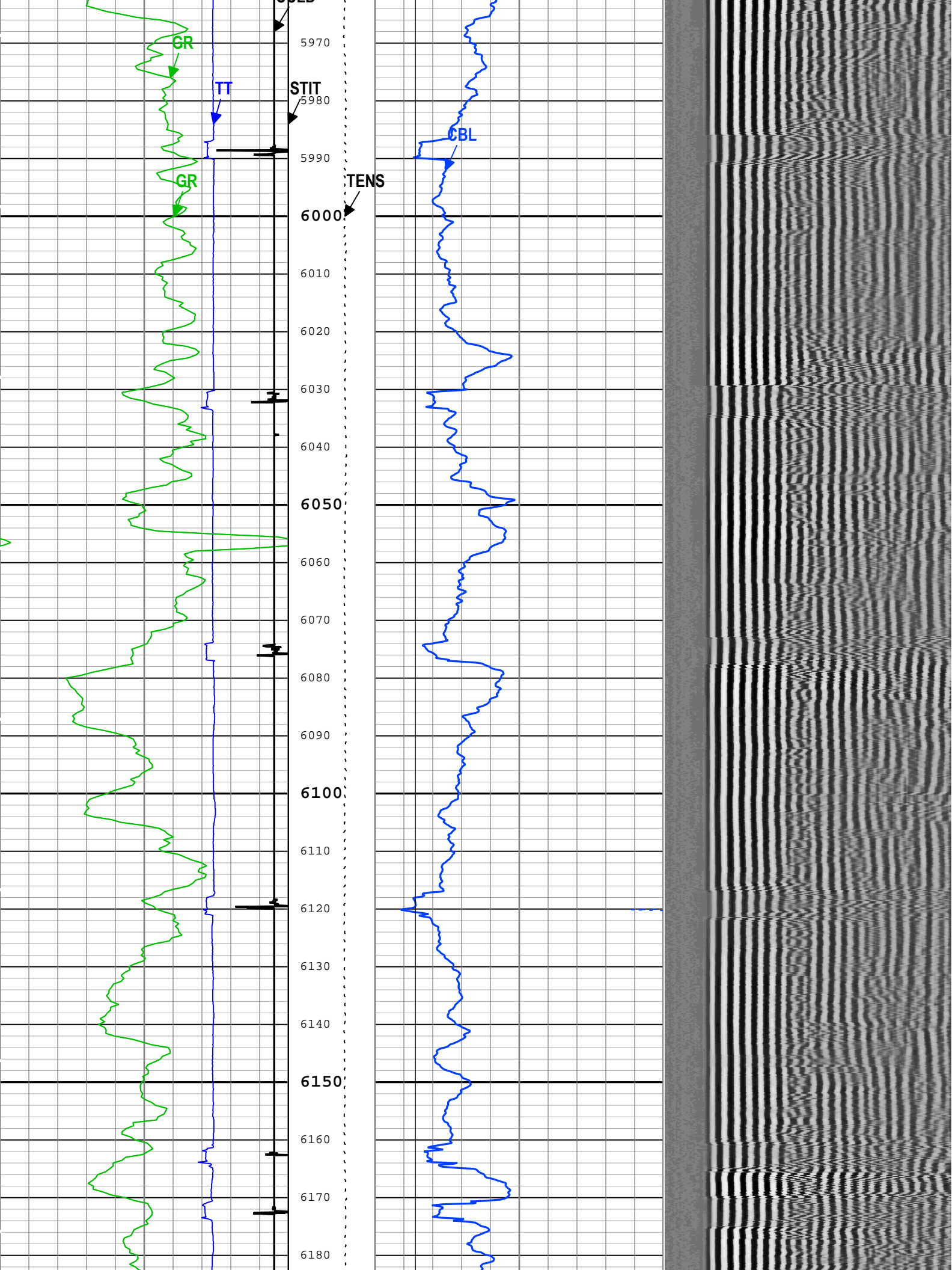


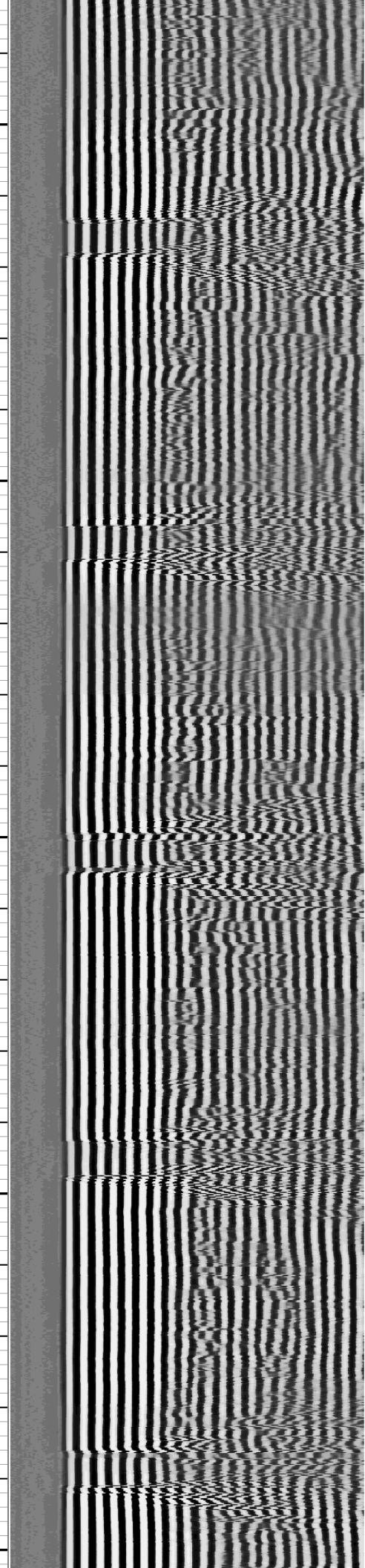
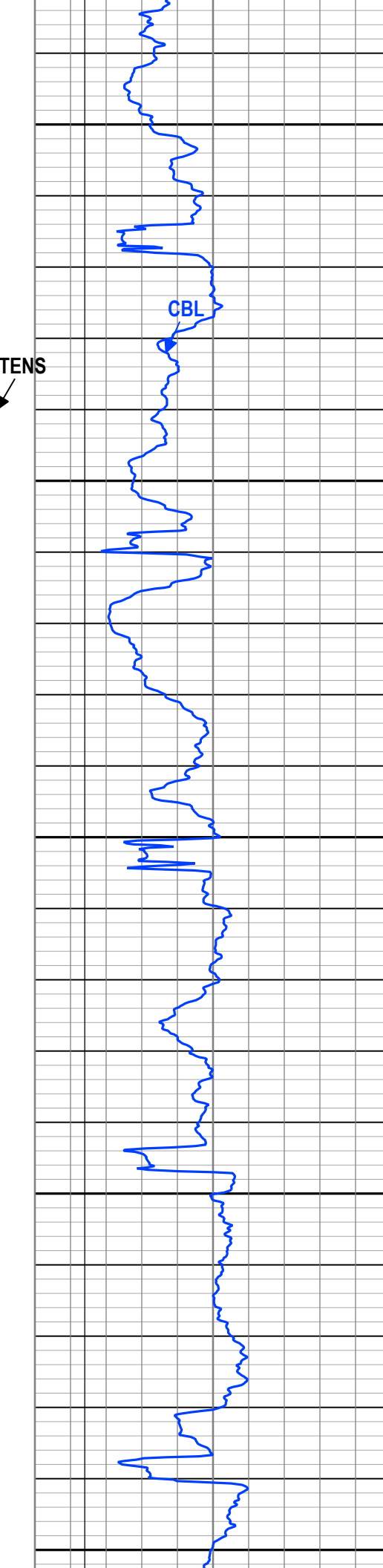
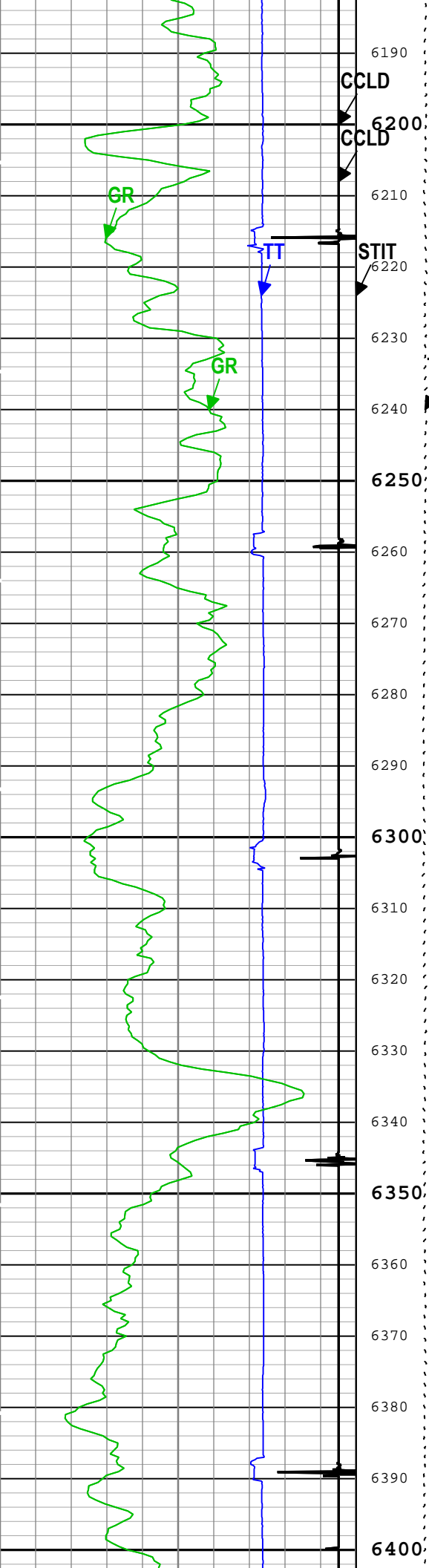


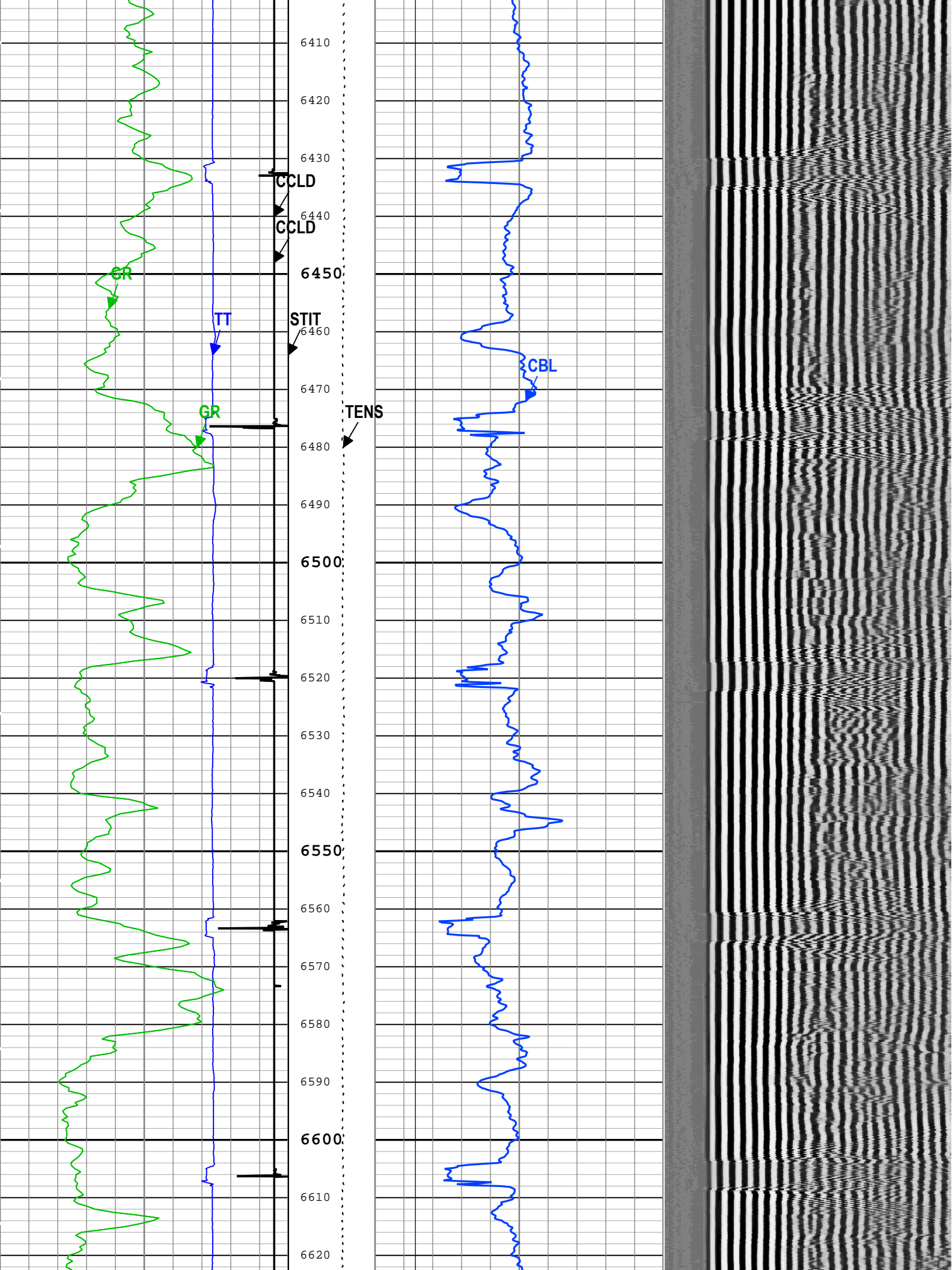


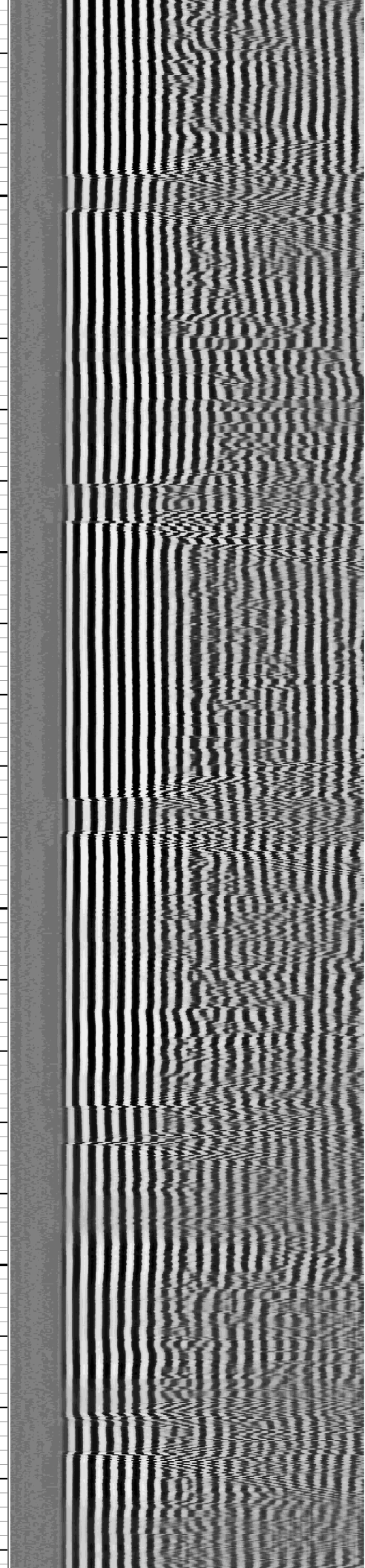
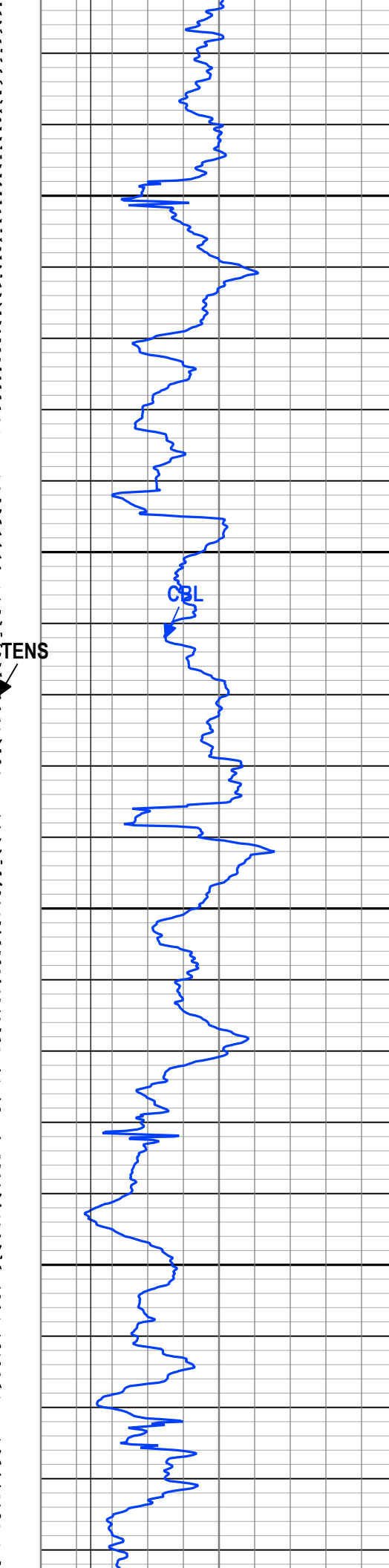
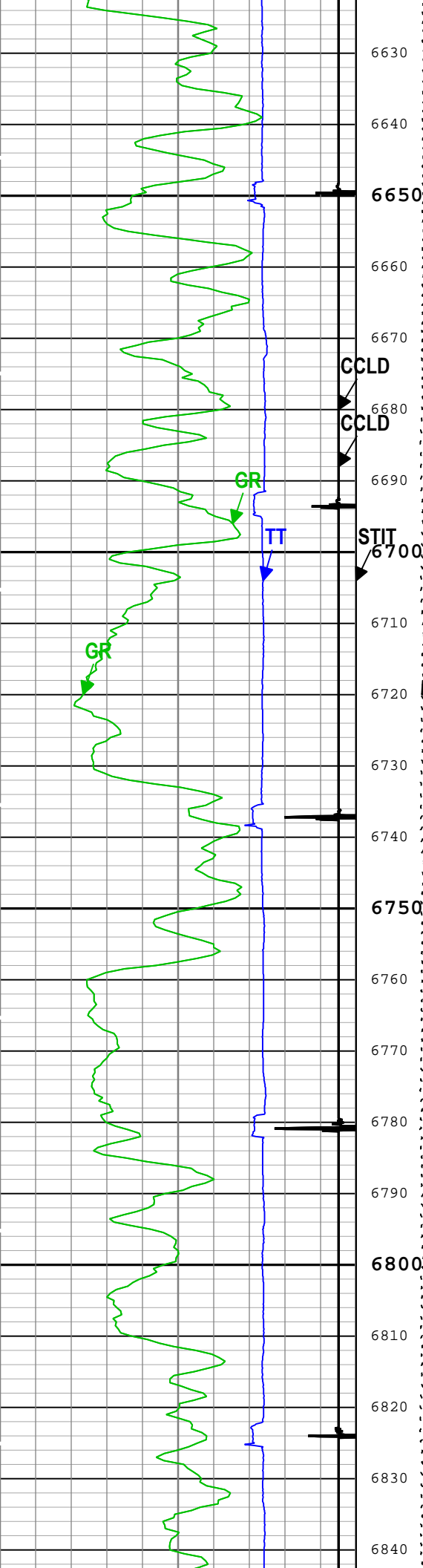


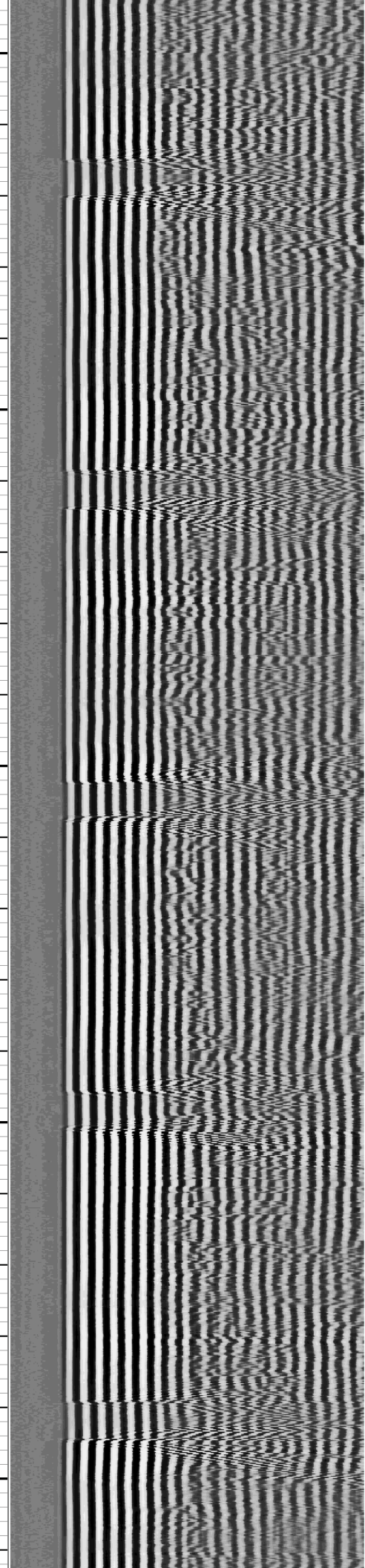
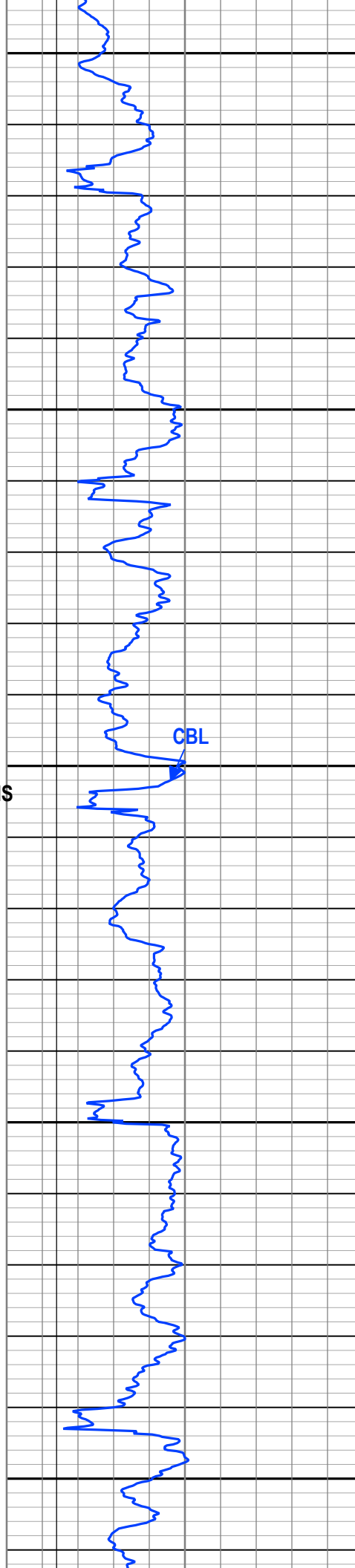
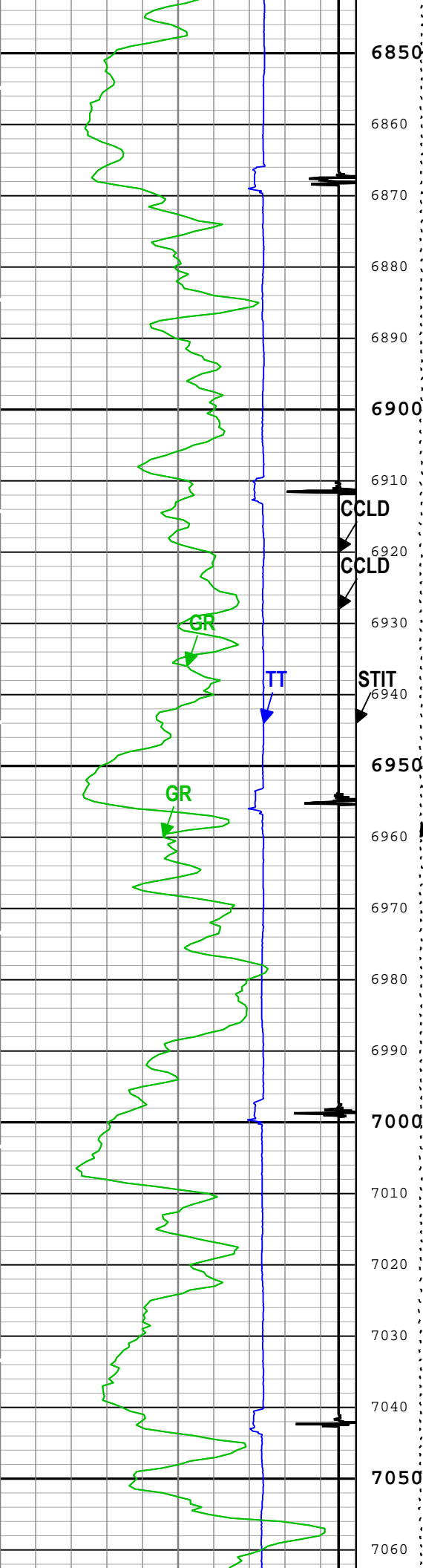


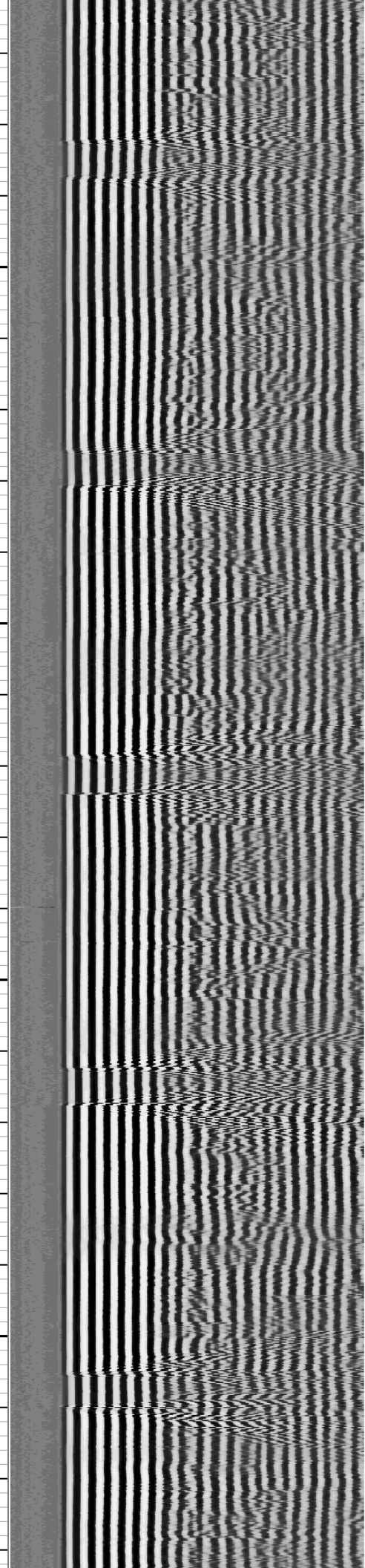
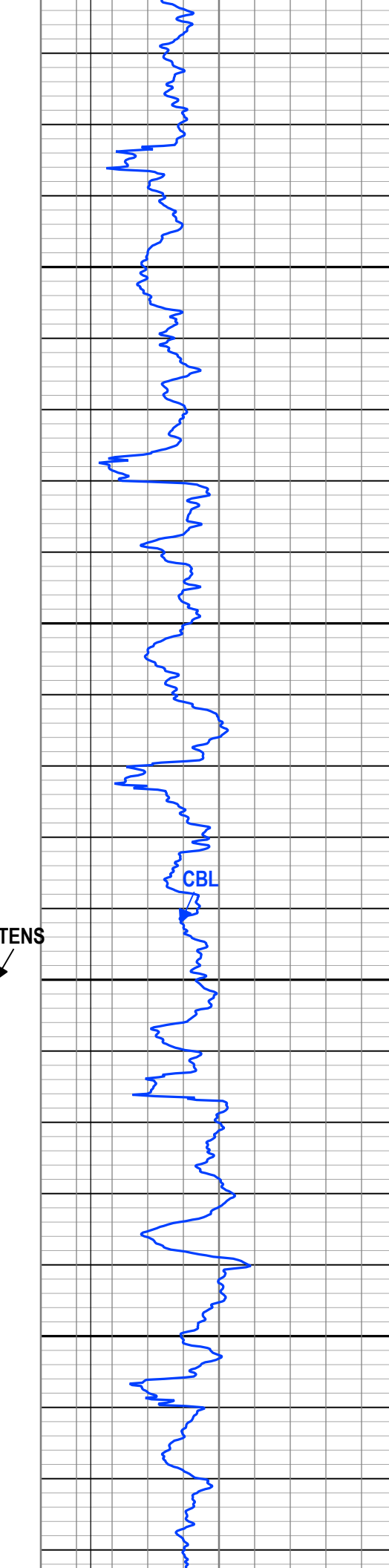
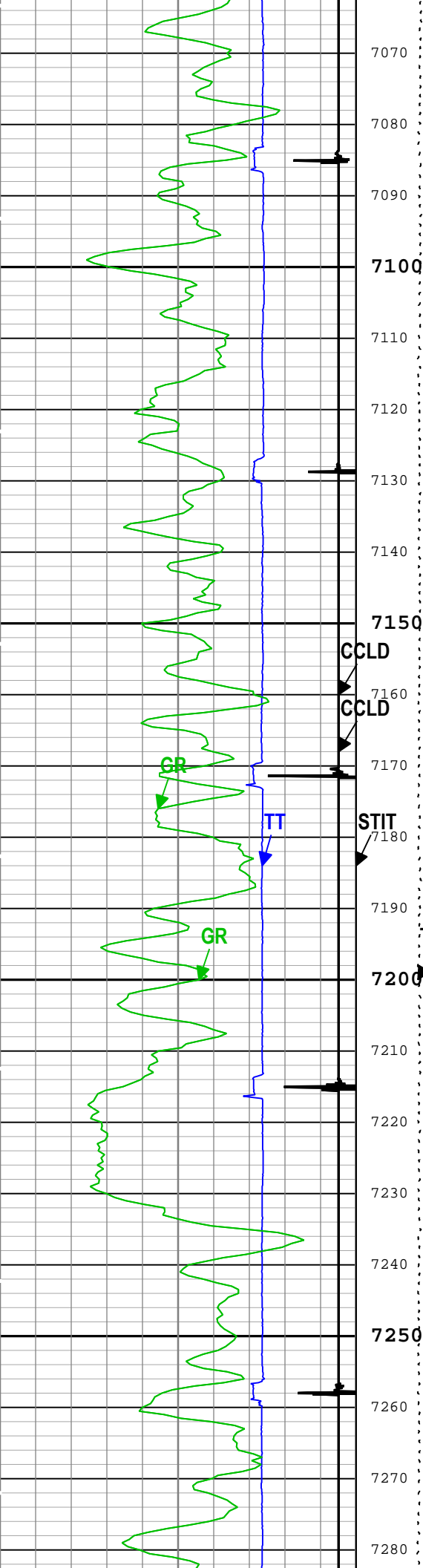


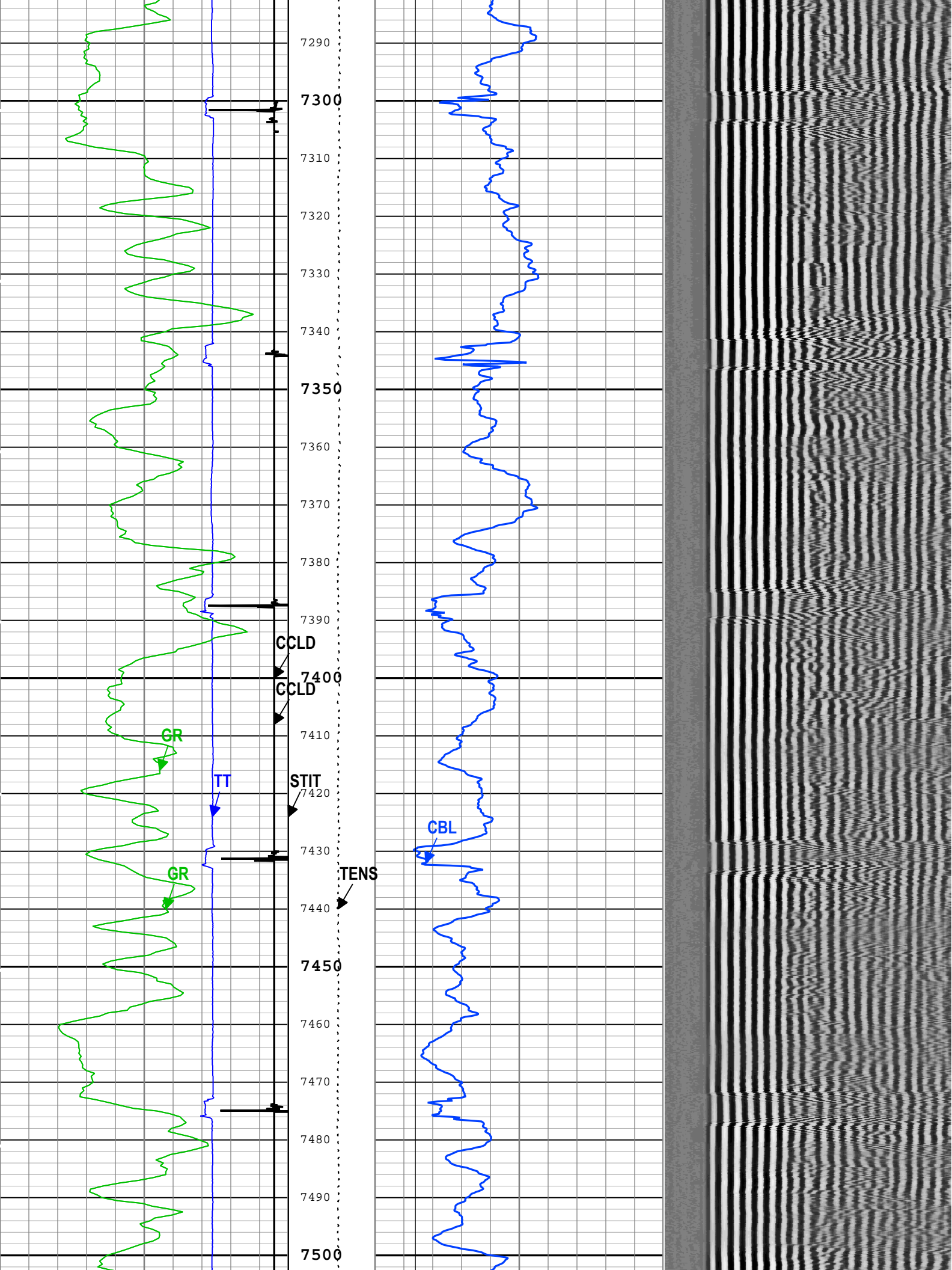


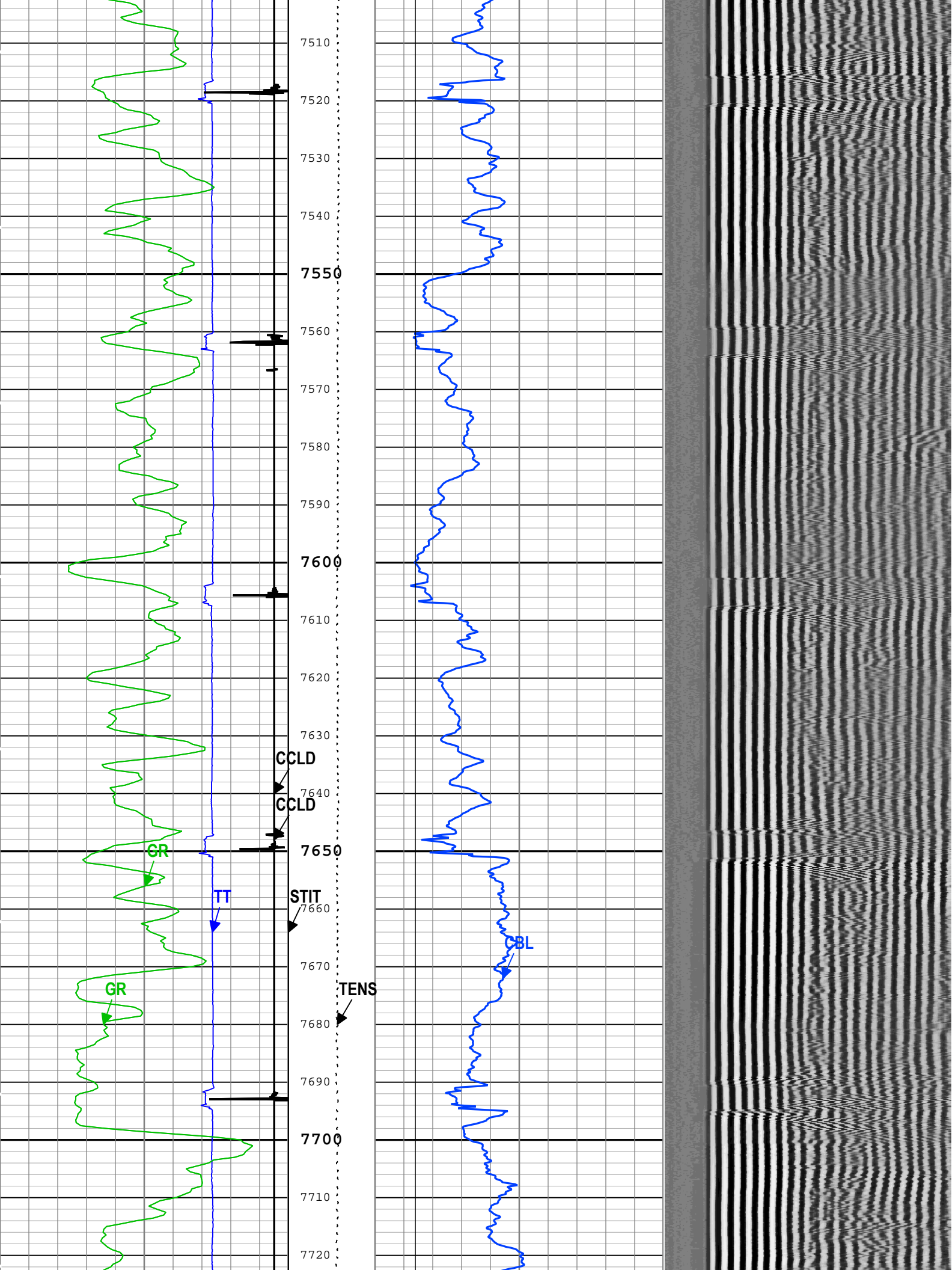


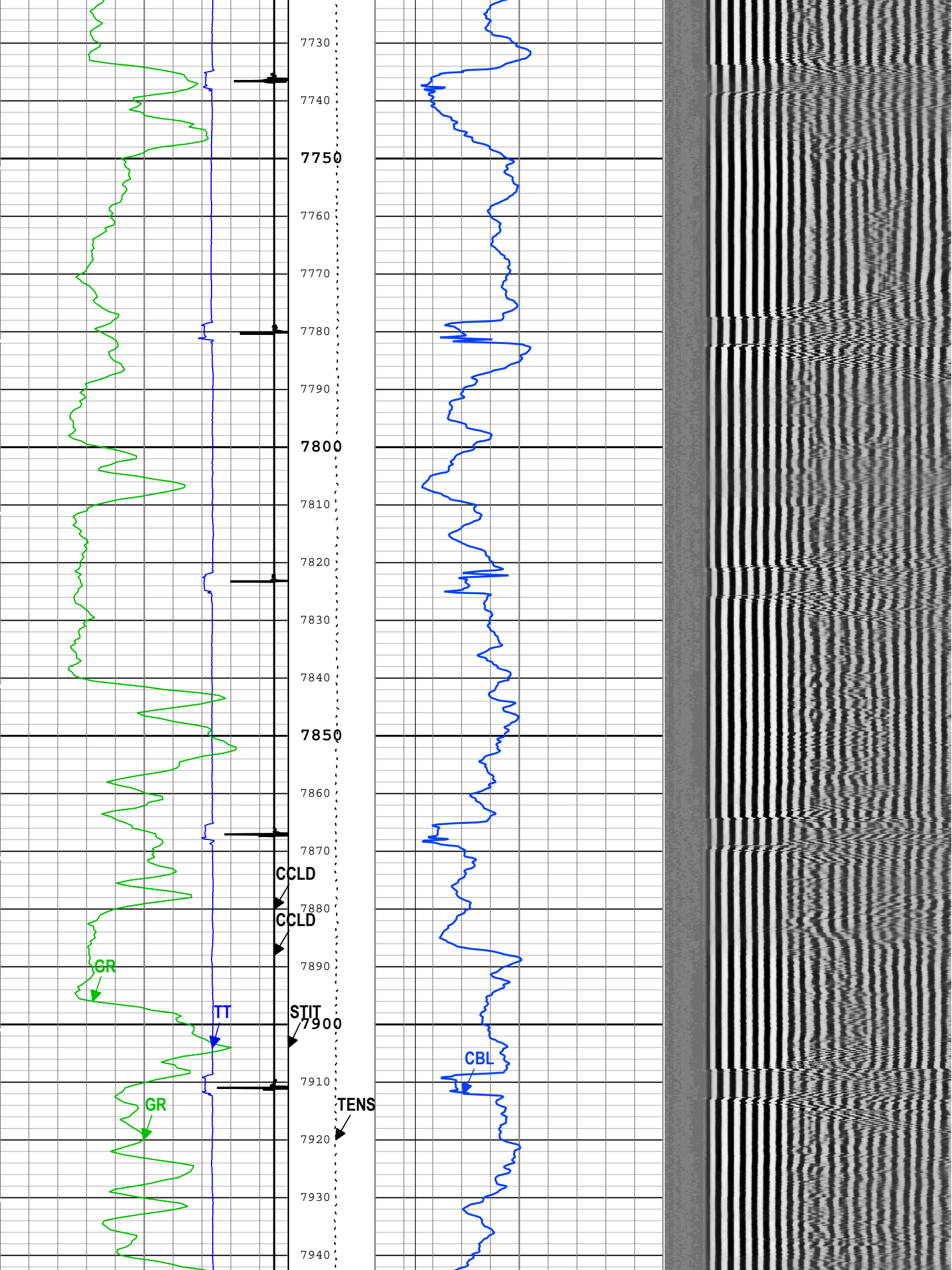


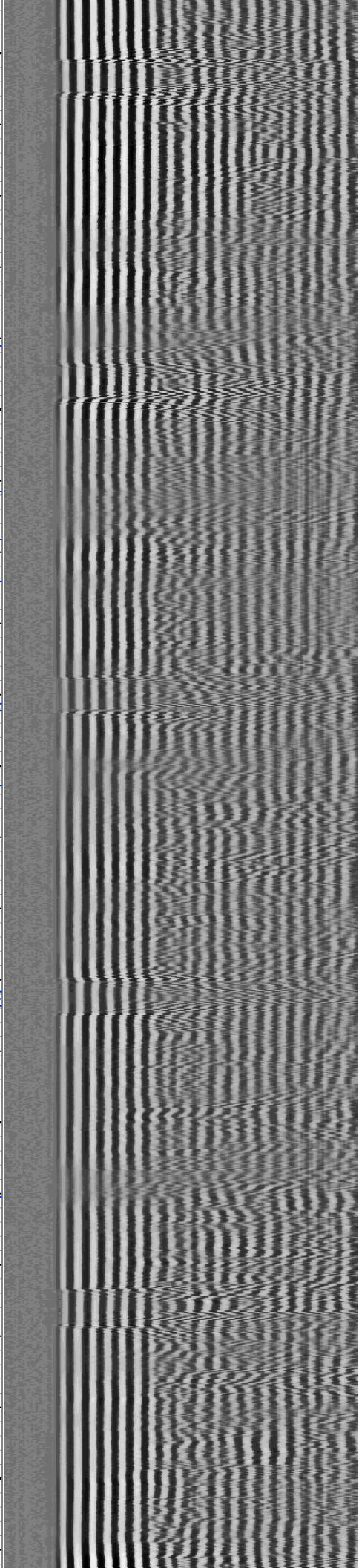
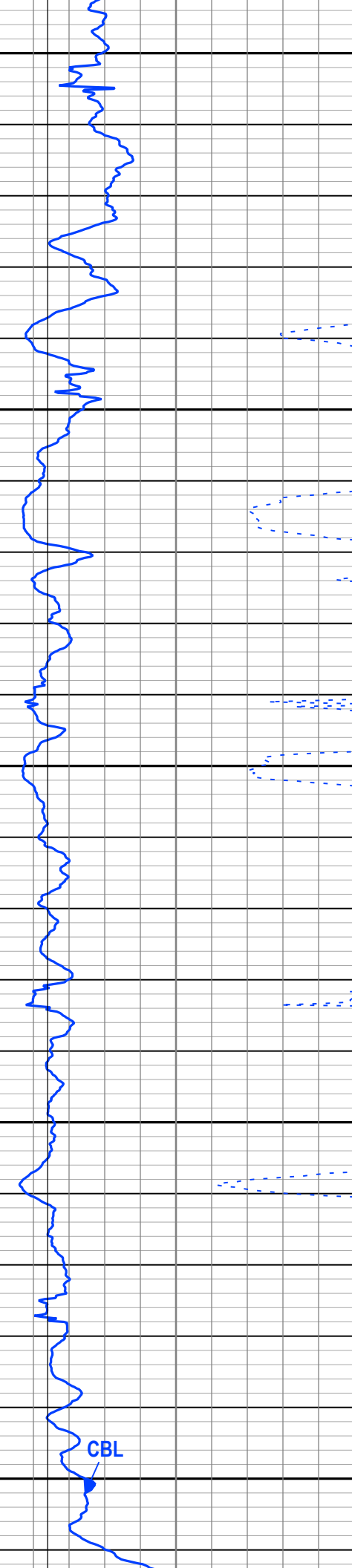
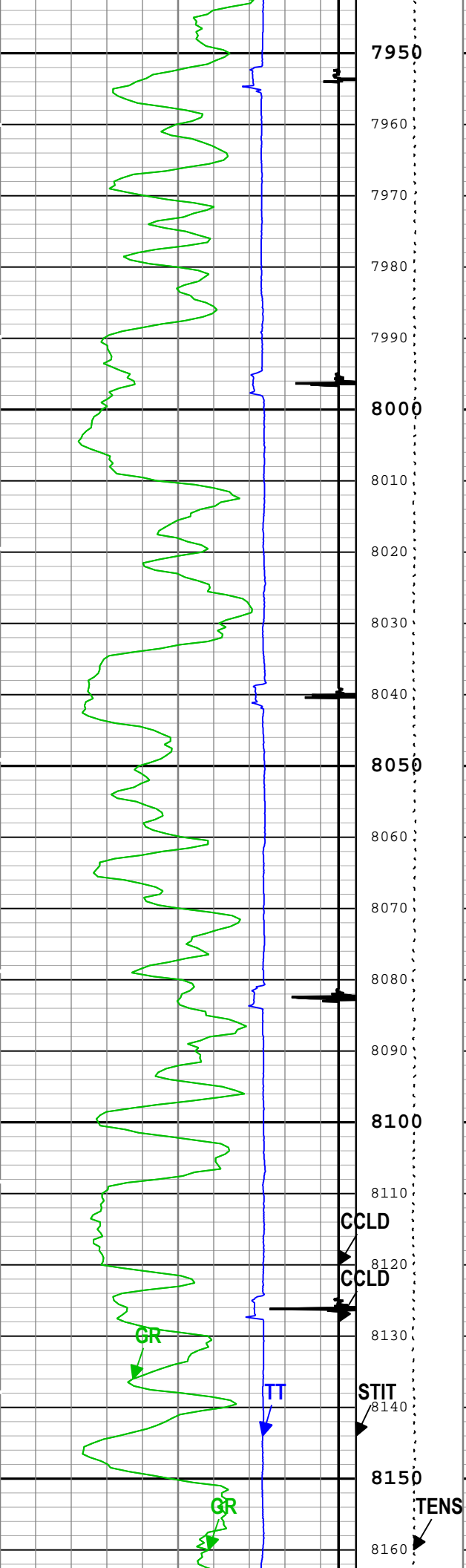


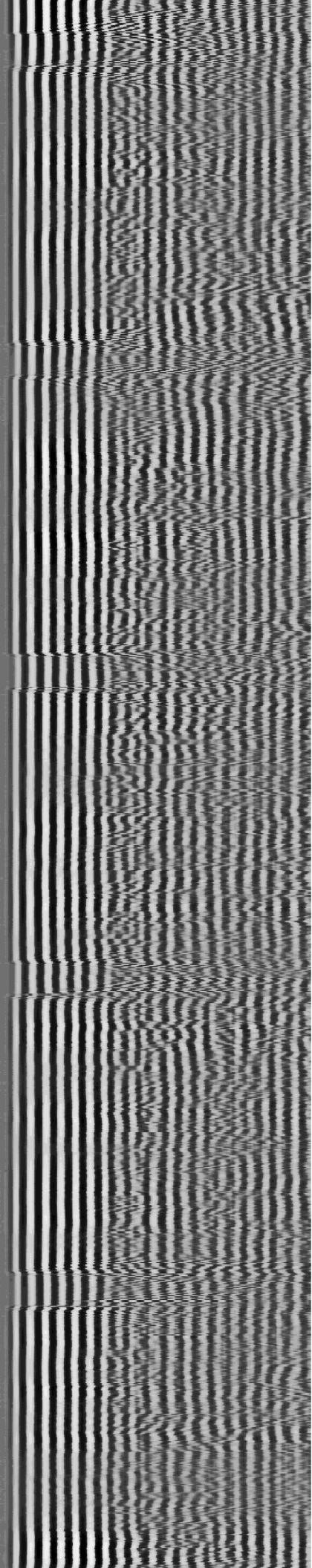
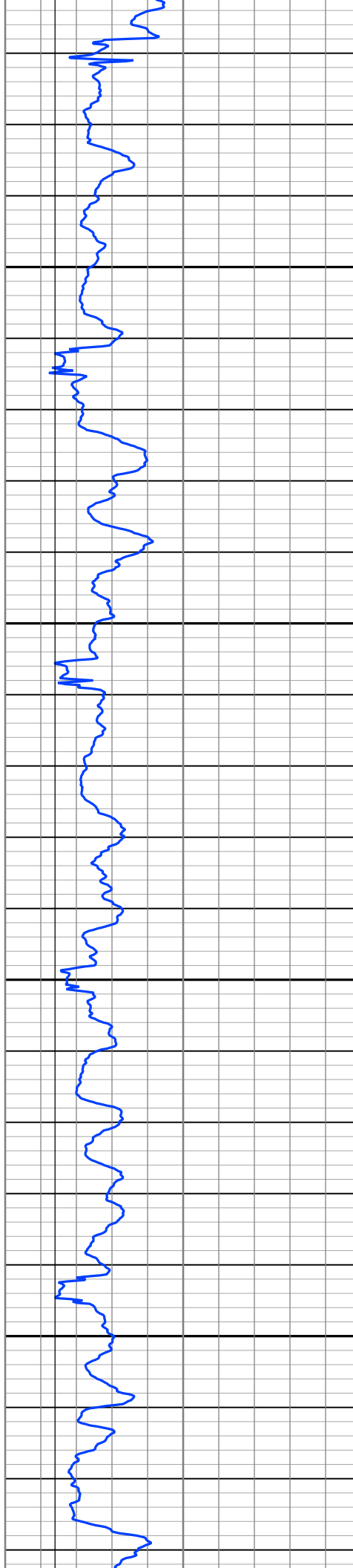
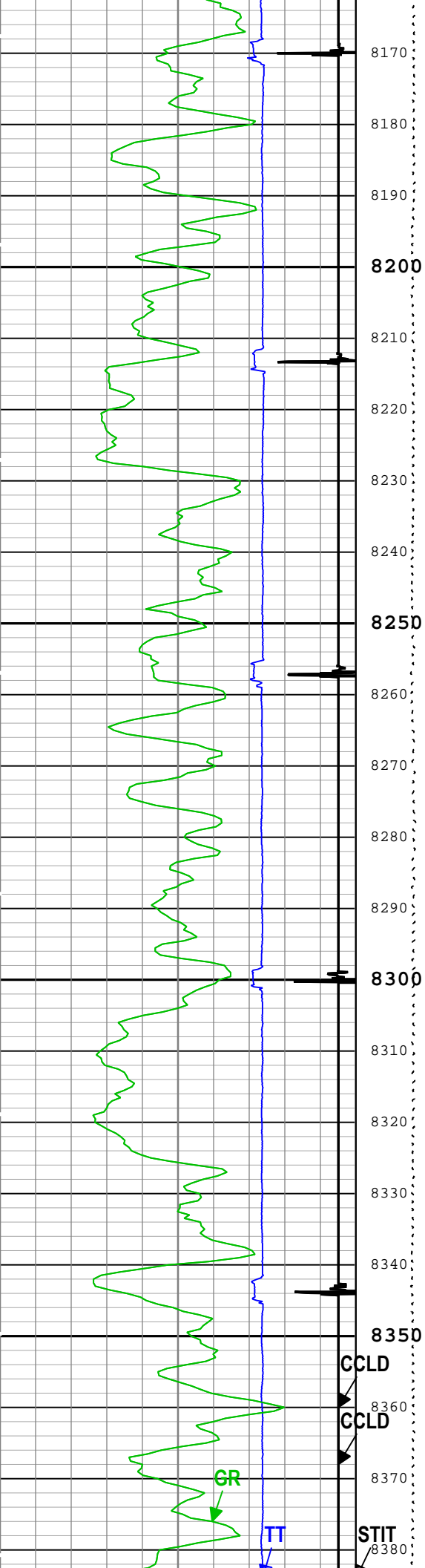


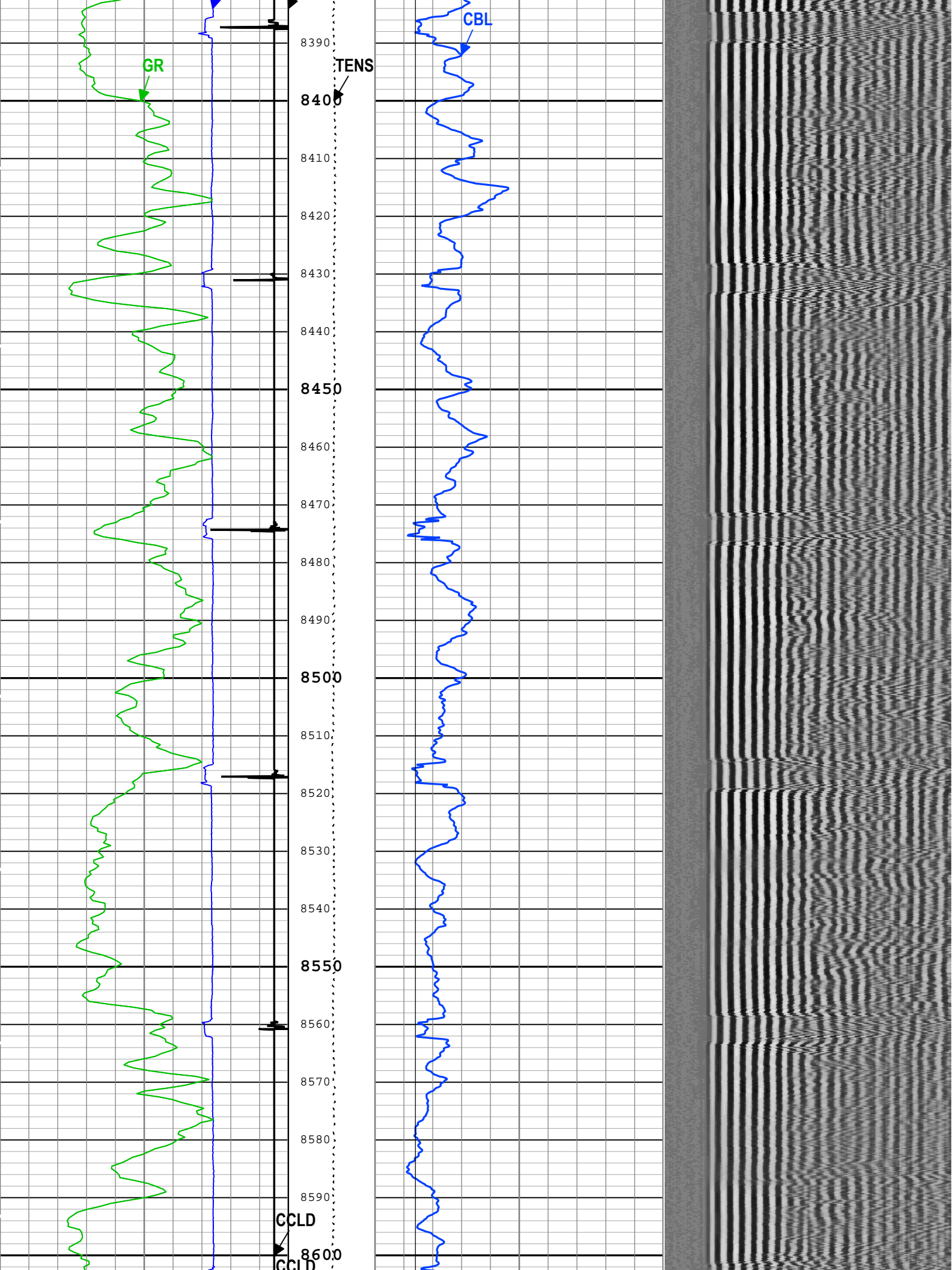


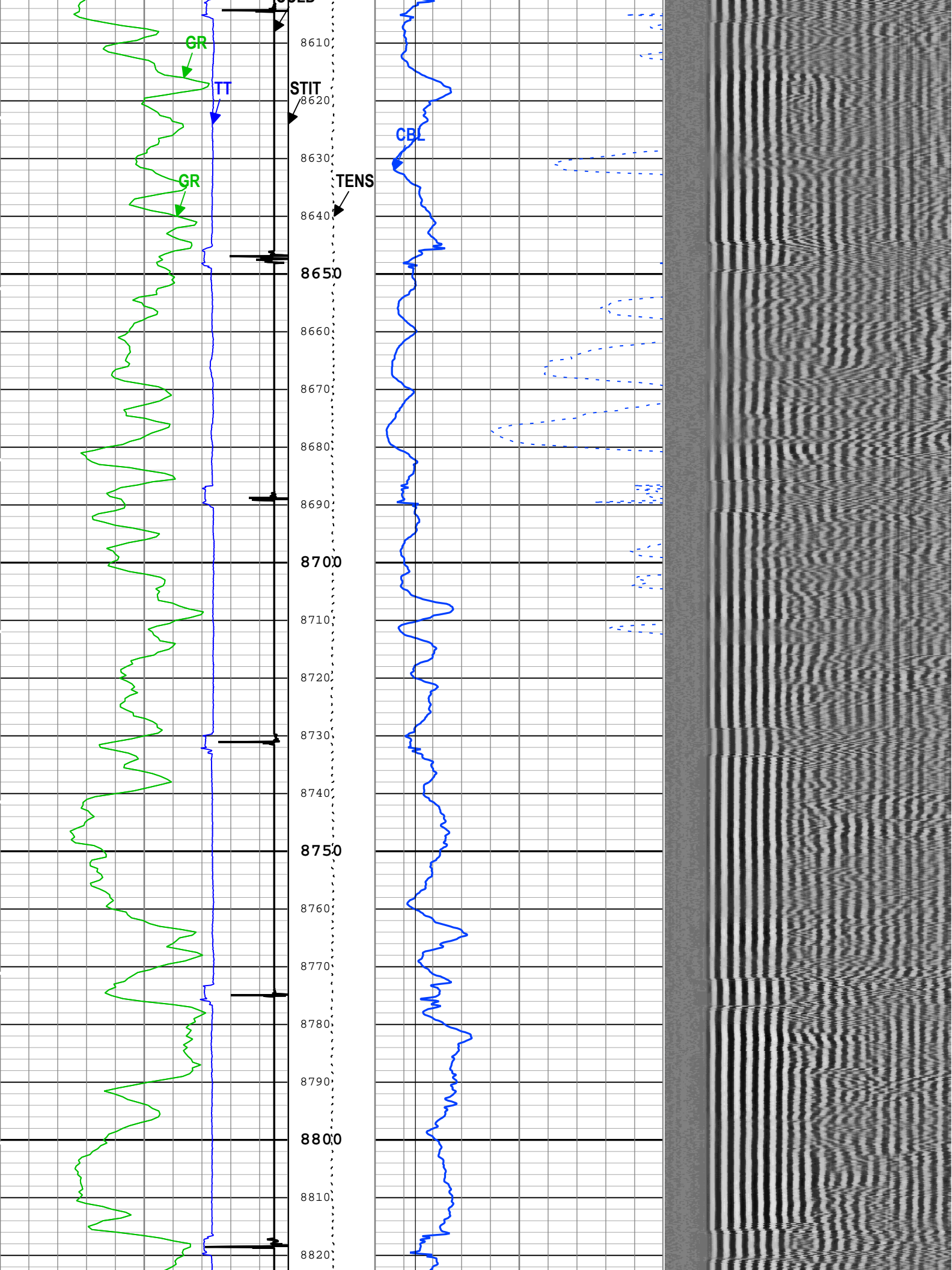


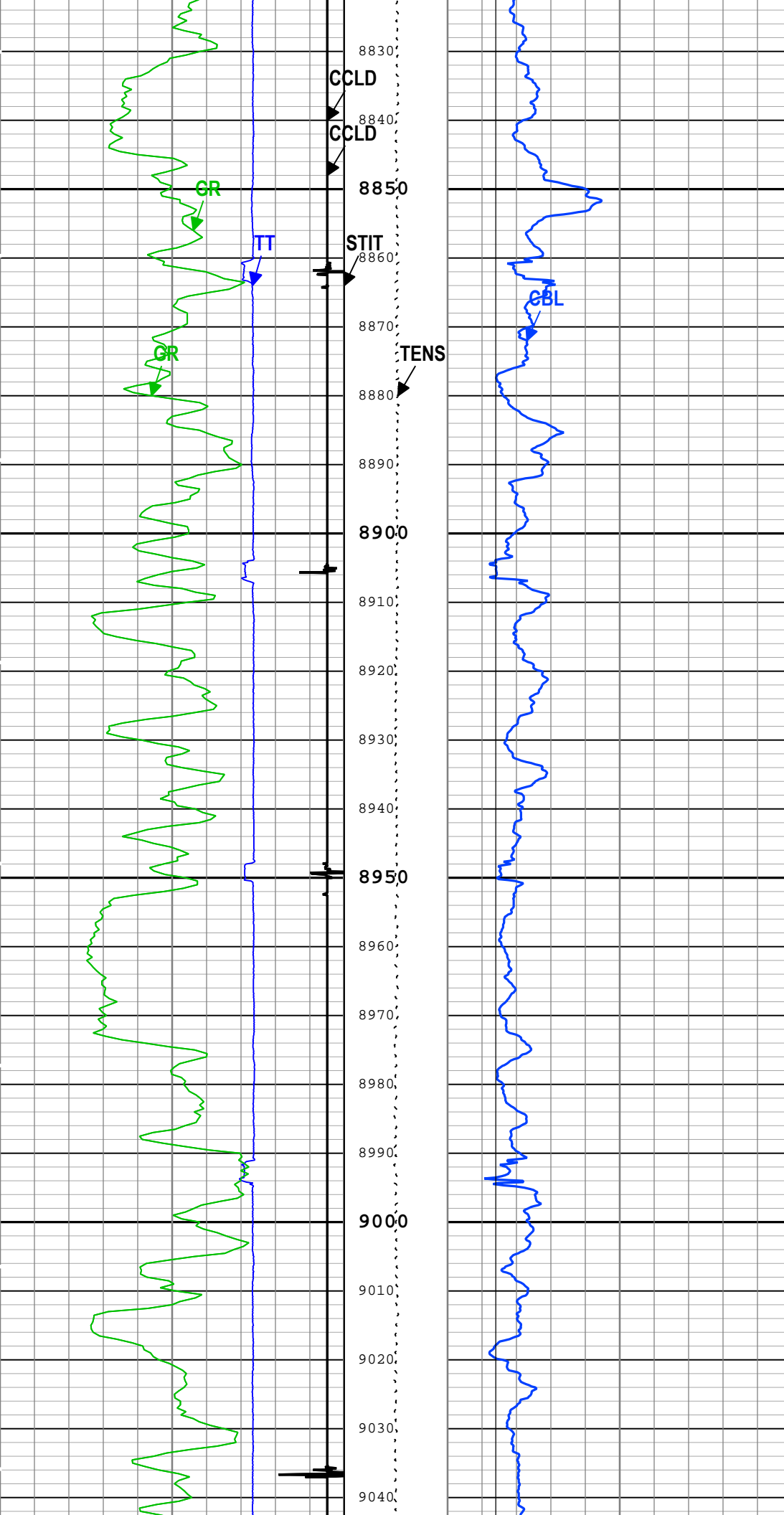


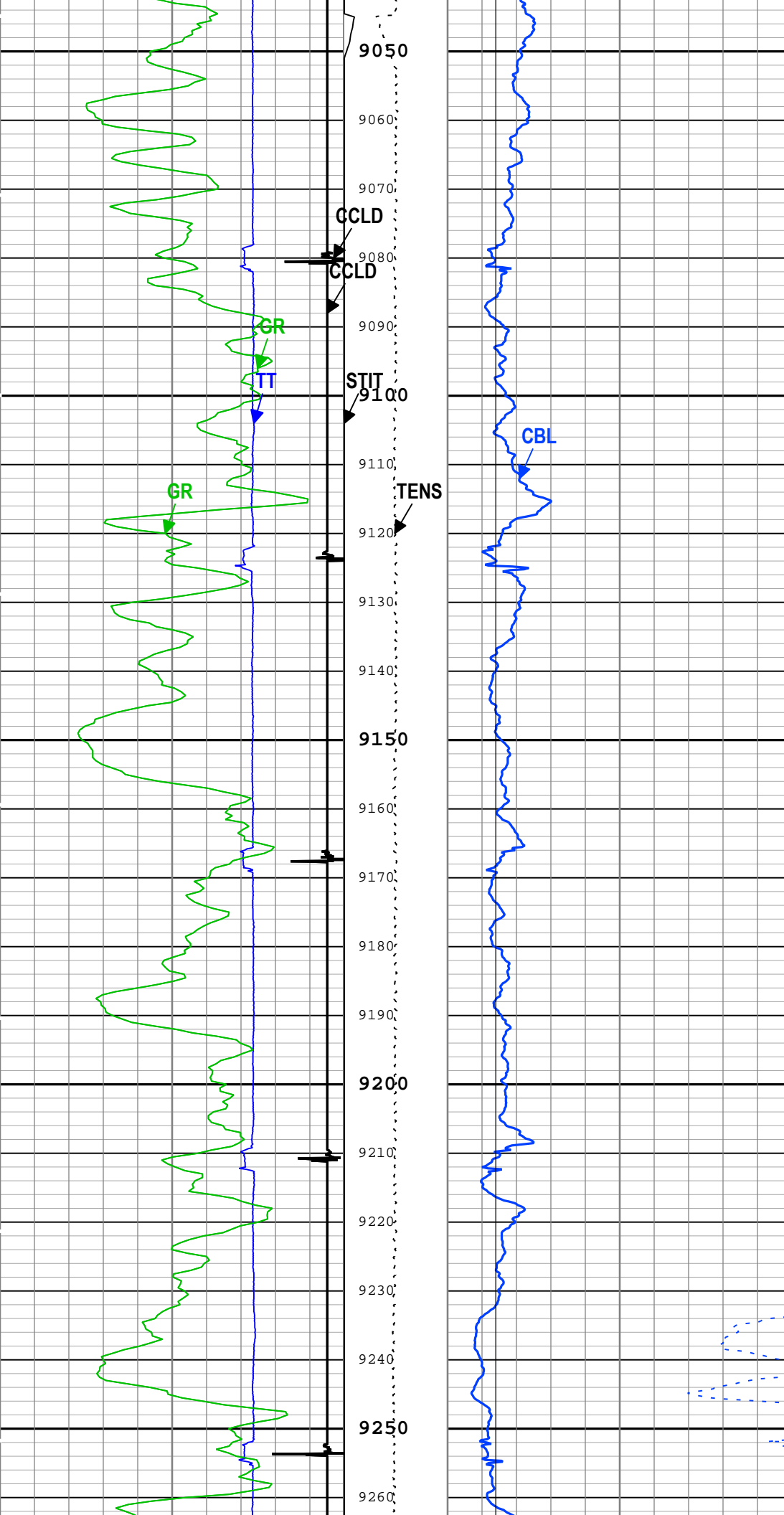


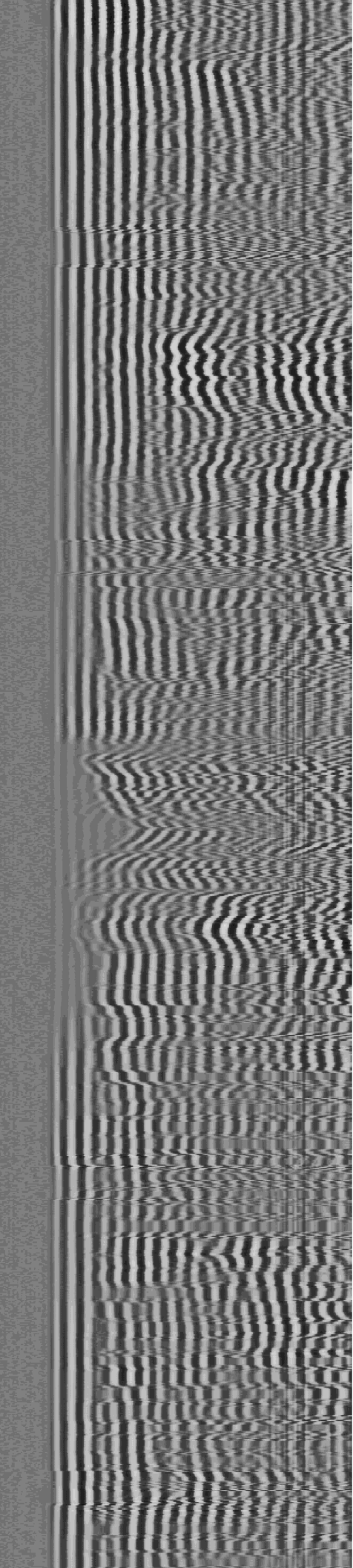
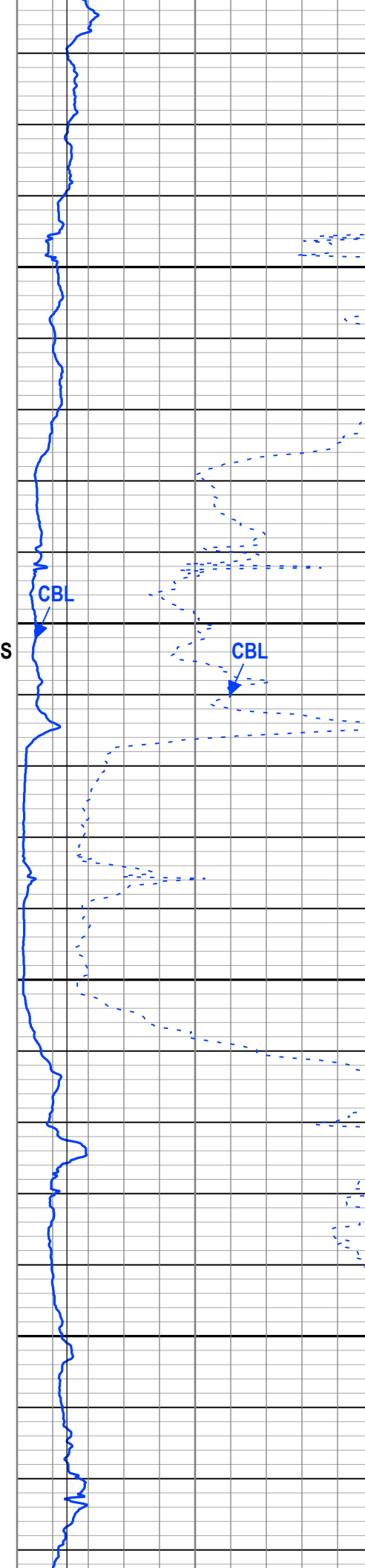
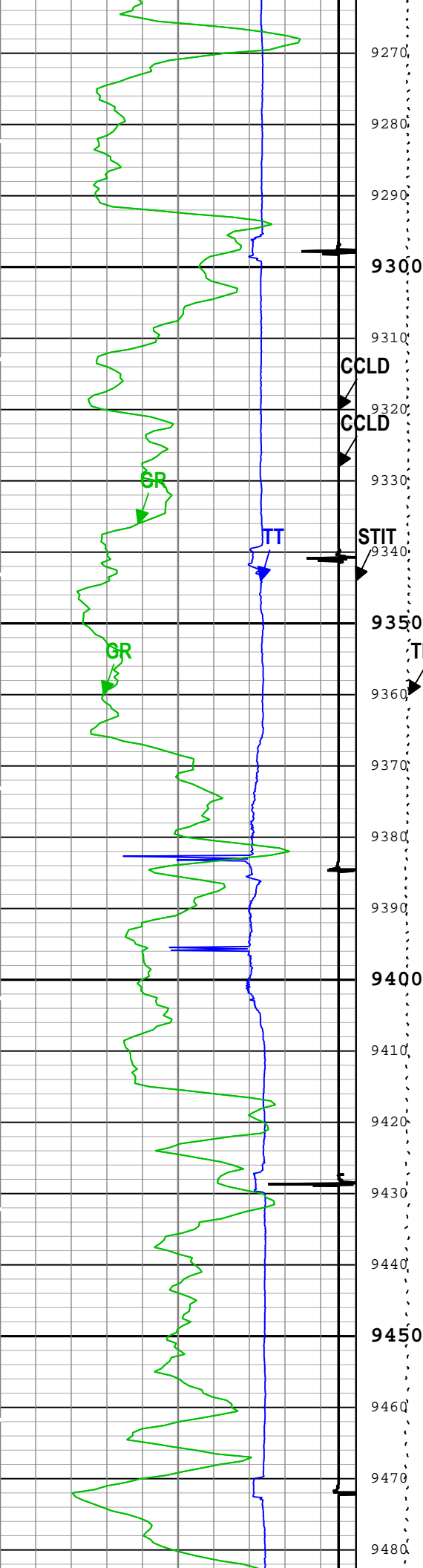


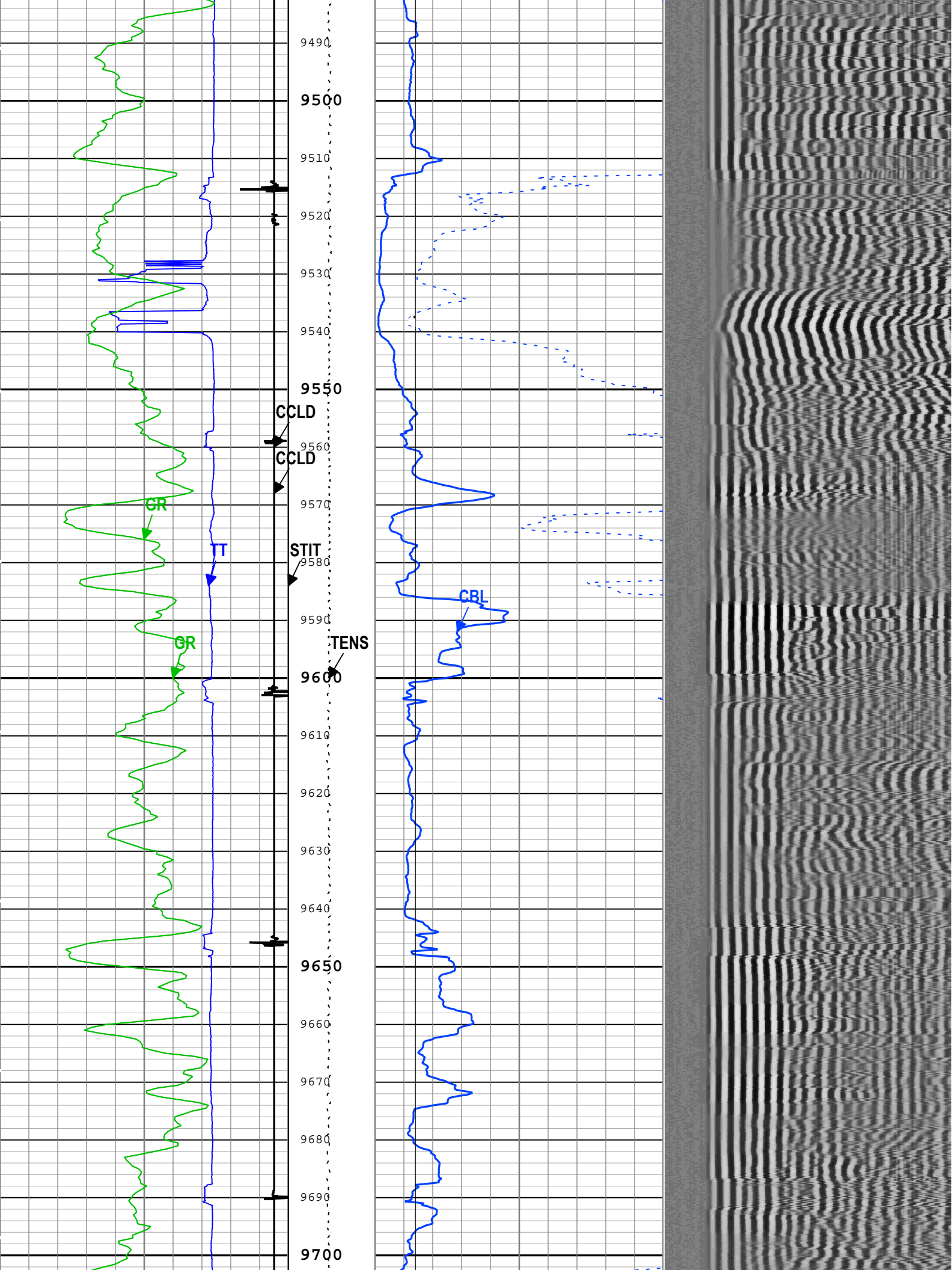


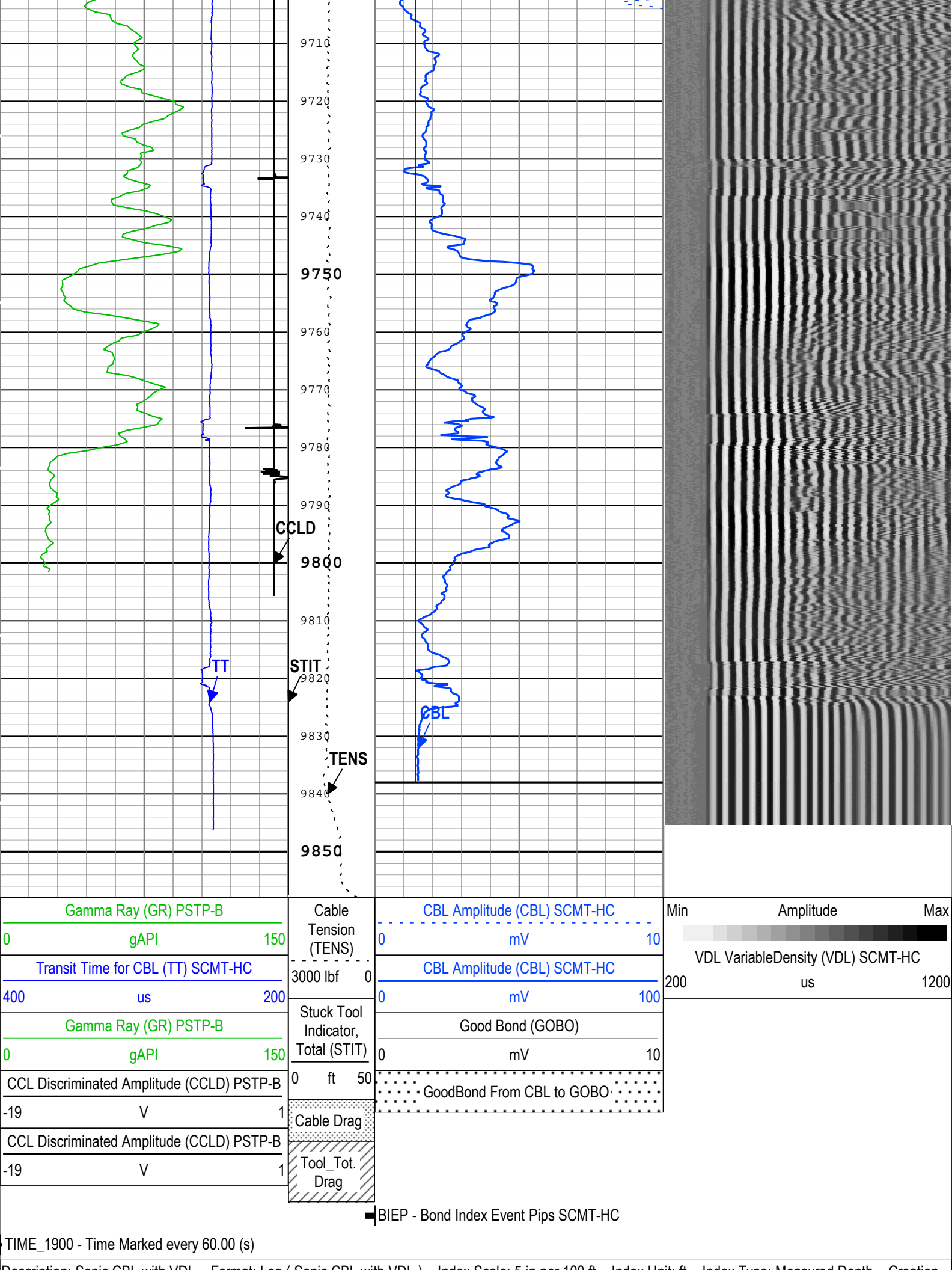












Channel Processing Parameters	
-------------------------------	--

One: Parameters

Parameter	Description	Tool	Value	Unit
BHT	Bottom Hole Temperature	Borehole	274.7	degF
CB3G	SCMT CBL 3 ft Peak Detection T0_Delay and Noise Gate	SCMT-HC	Time Zoned	us
CBLG	CBL Gate Width	SCMT-HC	40	us
CBRA	CBL LQC Reference Amplitude in Free Pipe	SCMT-HC	Depth Zoned	mV
DFD	Drilling Fluid Density	Borehole	8.5	lbm/gal
DFT_CATEGORY	Drilling Fluid Type	Borehole	Water	
GOBO_CURR	Good Bond in Arbitrary Cement	SCMT-HC	Depth Zoned	mV
GTSE	Generalized Temperature Selection, from Measured or Computed Temperature	Borehole	WTEP	
MATT_CURR	Maximum Attenuation in Arbitrary Cement	SCMT-HC	Depth Zoned	dB/ft
MCI	Minimum Cemented Interval for Isolation	SCMT-HC	Depth Zoned	ft
MSA	Minimum Sonic Amplitude	SCMT-HC	Depth Zoned	mV
MSA_CURR	Minimum Sonic Amplitude in Arbitrary Cement	SCMT-HC	Depth Zoned	mV
RUN_SNUM	Run Sequence Number	WSDRUN	1	
TD	Total Measured Depth	Borehole	9838	ft

Depth Zone Parameters

Parameter	Value	Start (ft)	Stop (ft)
CBRA	80	2100	9838
CBRA	0	9838	9857.92
GOBO_CURR	1.4	2100	9838
GOBO_CURR	0	9838	9857.92
MATT_CURR	16.92	2100	9838
MATT_CURR	0	9838	9857.92
MCI	14.81	2100	2254
MCI	1.25	2254	9838
MCI	0	9838	9857.92
MSA	0.51	2100	9838
MSA	0	9838	9857.92
MSA_CURR	0.51	2100	9838
MSA_CURR	0	9838	9857.92

All depth are actual.

Time Zone Parameters

Parameter	Value	Start Time	Stop Time	Start Depth (ft)	Stop Depth (ft)
CB3G	224	13-Sep-2018 19:16:19	13-Sep-2018 19:17:41	9857.92	9822.01
CB3G	231.3	13-Sep-2018 19:17:41	14-Sep-2018 00:28:11	9822.01	206.68

All depth are at tool zero.

Tool Control Parameters	
-------------------------	--

One: Parameters

Parameter	Description	Tool	Value	Unit
CMTM	SCMT Operating Mode	SCMT-HC	Log	
MAX_LOG_SPEED	Toolstring Maximum Logging Speed	WLSESSION	150	ft/h
PCCG	PSP Downhole CCL Gain	PSTP-B	24 dB	

Software Version

Acquisition System

Maxwell 2017 SP3

Application Patch

Version

7.3.92069.3100

Wireline_Hotfix-RTDLIS-2017SP3_7.3.92363

Wireline_Hotfix-SML-2017SP3_7.3.101161

Pass Summary

Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	DSC Mode	Depth Shift	Include Parallel Data
One	Log[2]:Up	Up	9424.34 ft	9900.70 ft	13-Sep-2018 6:48:06 PM	13-Sep-2018 7:05:34 PM	ON	7.99 ft	No

All depths are referenced to toolstring zero

Log

Company:Caerus Operating LLC

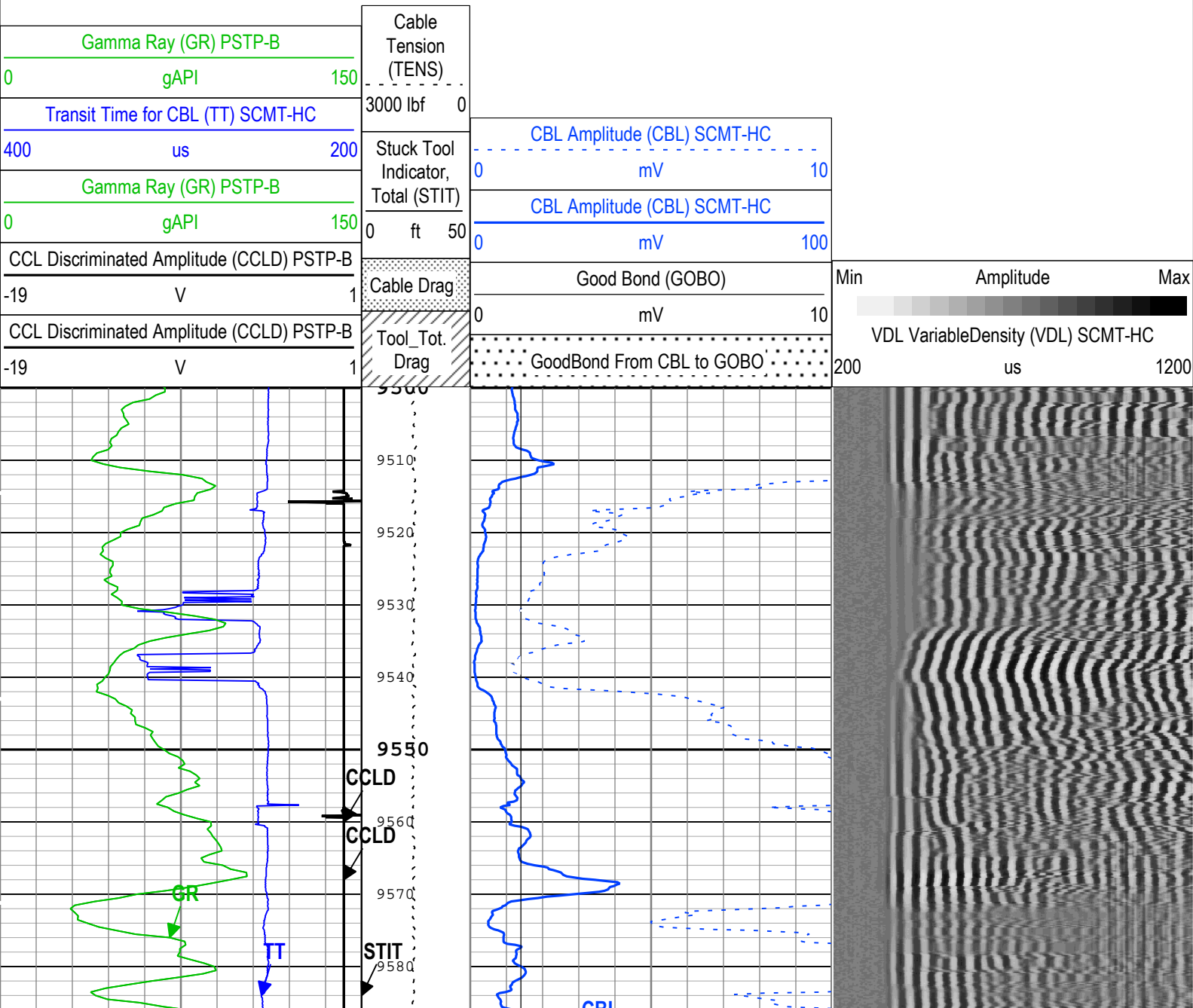
Well:NPR 23A-10 596

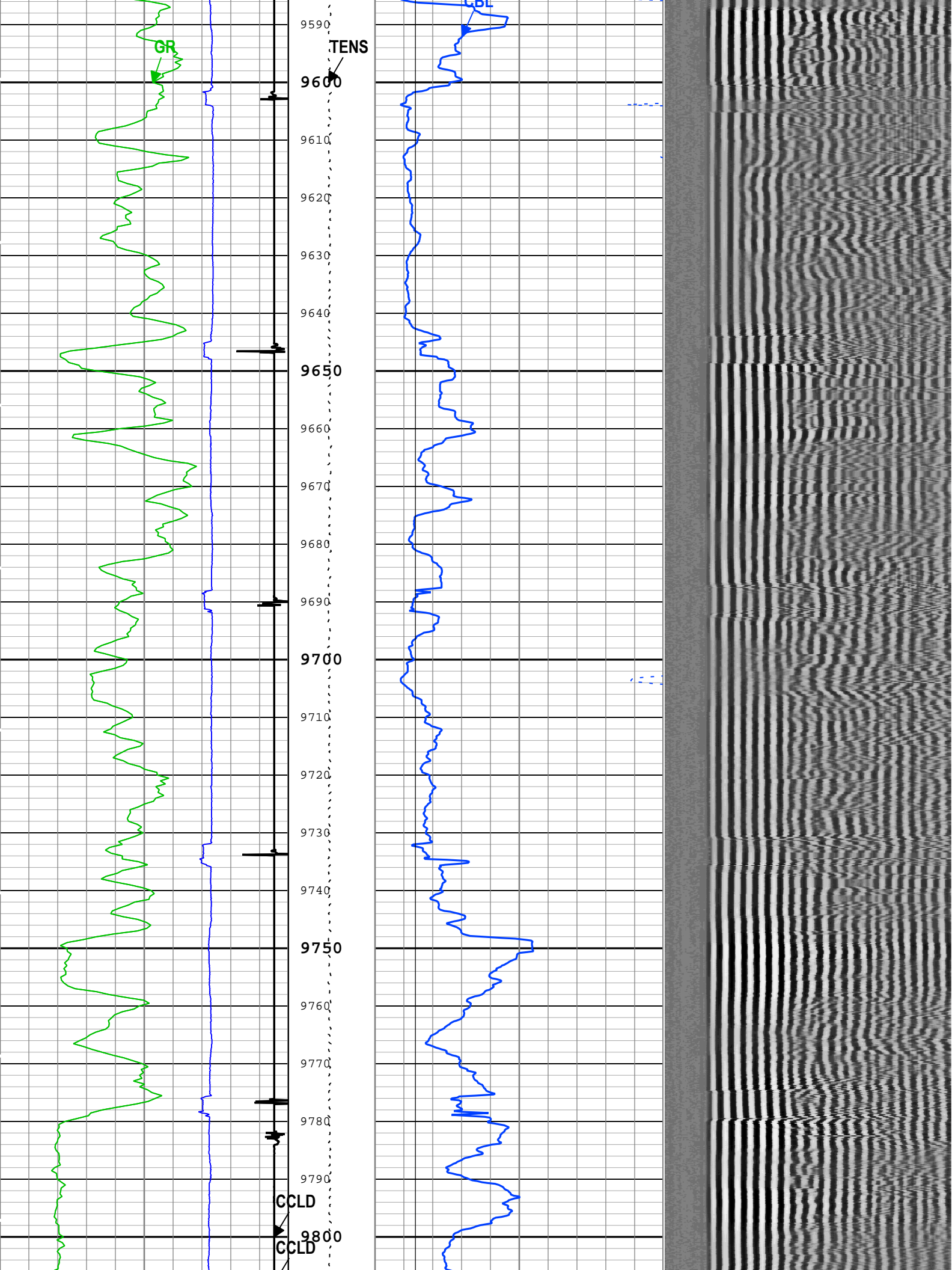
One: Log[2]:Up:S003

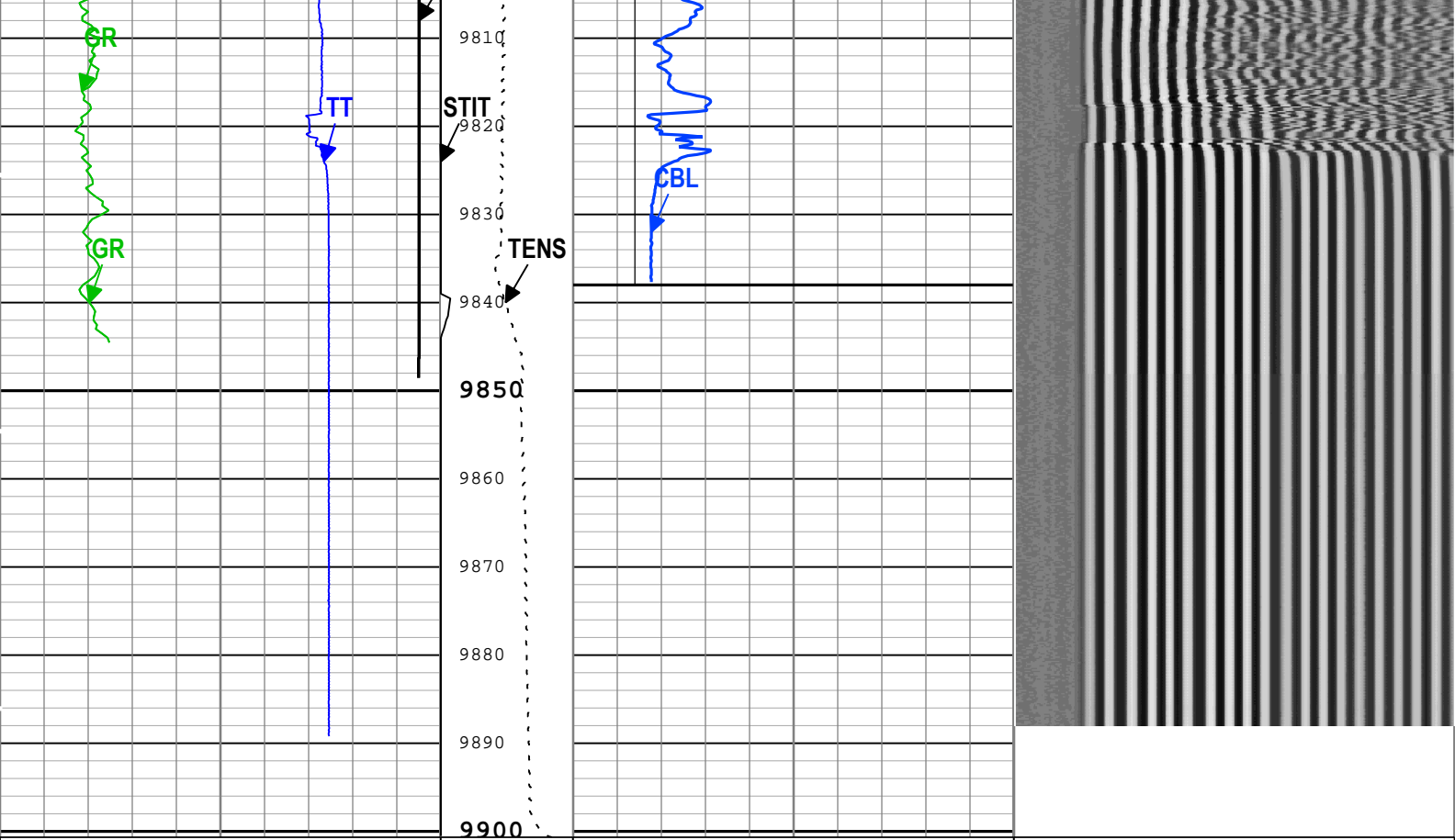
Description: Sonic CBL with VDL Format: Log (Sonic CBL with VDL) Index Scale: 5 in per 100 ft Index Unit: ft Index Type: Measured Depth Creation Date: 14-Sep-2018 04:03:14

TIME_1900 - Time Marked every 60.00 (s)

■ BIEP - Bond Index Event Pips SCMT-HC







Gamma Ray (GR) PSTP-B	Cable Tension (TENS)	CBL Amplitude (CBL) SCMT-HC	Min	Amplitude	Max
0 gAPI 150	3000 lbf 0	0 mV 10			
Transit Time for CBL (TT) SCMT-HC	Stuck Tool Indicator, Total (STIT)	CBL Amplitude (CBL) SCMT-HC		VDL VariableDensity (VDL) SCMT-HC	
400 us 200	0 ft 50	0 mV 100	200	us	1200
Gamma Ray (GR) PSTP-B	Cable Drag	Good Bond (GOBO)			
0 gAPI 150	Tool_Tot. Drag	0 mV 10			
CCL Discriminated Amplitude (CCLD) PSTP-B		GoodBond From CBL to GOBO			
-19 V 1					
CCL Discriminated Amplitude (CCLD) PSTP-B					
-19 V 1					

■ BIEP - Bond Index Event Pips SCMT-HC

TIME_1900 - Time Marked every 60.00 (s)

Description: Sonic CBL with VDL Format: Log (Sonic CBL with VDL) Index Scale: 5 in per 100 ft Index Unit: ft Index Type: Measured Depth Creation Date: 14-Sep-2018 04:03:14

Channel Processing Parameters

One: Parameters

Parameter	Description	Tool	Value	Unit
BHT	Bottom Hole Temperature	Borehole	274.7	degF
CB3G	SCMT CBL 3 ft Peak Detection T0_Delay and Noise Gate	SCMT-HC	224	us
CBLG	CBL Gate Width	SCMT-HC	40	us
CBRA	CBL LQC Reference Amplitude in Free Pipe	SCMT-HC	Depth Zoned	mV
DFD	Drilling Fluid Density	Borehole	8.5	lbm/gal
DFT_CATEGORY	Drilling Fluid Type	Borehole	Water	
GOBO_CURR	Good Bond in Arbitrary Cement	SCMT-HC	Depth Zoned	mV
GTSE	Generalized Temperature Selection, from Measured or Computed Temperature	Borehole	WTEP	
MATT_CURR	Maximum Attenuation in Arbitrary Cement	SCMT-HC	Depth Zoned	dB/ft

MCI	Minimum Cemented Interval for Isolation	SCMT-HC	Depth Zoned	ft
MSA	Minimum Sonic Amplitude	SCMT-HC	Depth Zoned	mV
MSA_CURR	Minimum Sonic Amplitude in Arbitrary Cement	SCMT-HC	Depth Zoned	mV
RUN_SNUM	Run Sequence Number	WSDRUN	1	
TD	Total Measured Depth	Borehole	9838	ft

Depth Zone Parameters			
Parameter	Value	Start (ft)	Stop (ft)
CBRA	80	9500	9838
CBRA	0	9838	9900.67
GOBO_CURR	1.4	9500	9838
GOBO_CURR	0	9838	9900.67
MATT_CURR	16.92	9500	9838
MATT_CURR	0	9838	9900.67
MCI	1.25	9500	9838
MCI	0	9838	9900.67
MSA	0.51	9500	9838
MSA	0	9838	9900.67
MSA_CURR	0.51	9500	9838
MSA_CURR	0	9838	9900.67
All depth are actual.			

Tool Control Parameters				
One: Parameters				
Parameter	Description	Tool	Value	Unit
CMTM	SCMT Operating Mode	SCMT-HC	Log	
MAX_LOG_SPEED	Toolstring Maximum Logging Speed	WLSESSION	150	ft/h
PCCG	PSP Downhole CCL Gain	PSTP-B	24 dB	
One				

Software Version	
Acquisition System	Version
Maxwell 2017 SP3	7.3.92069.3100
Application Patch	Wireline_Hotfix-RTDLIS-2017SP3_7.3.92363
	Wireline_Hotfix-SML-2017SP3_7.3.101161

Pass Summary									
Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	DSC Mode	Depth Shift	Include Parallel Data
One	Log[3]:Up	Up	206.68 ft	9857.92 ft	13-Sep-2018 7:16:19 PM	14-Sep-2018 12:28:11 AM	ON	8.64 ft	No
All depths are referenced to toolstring zero									

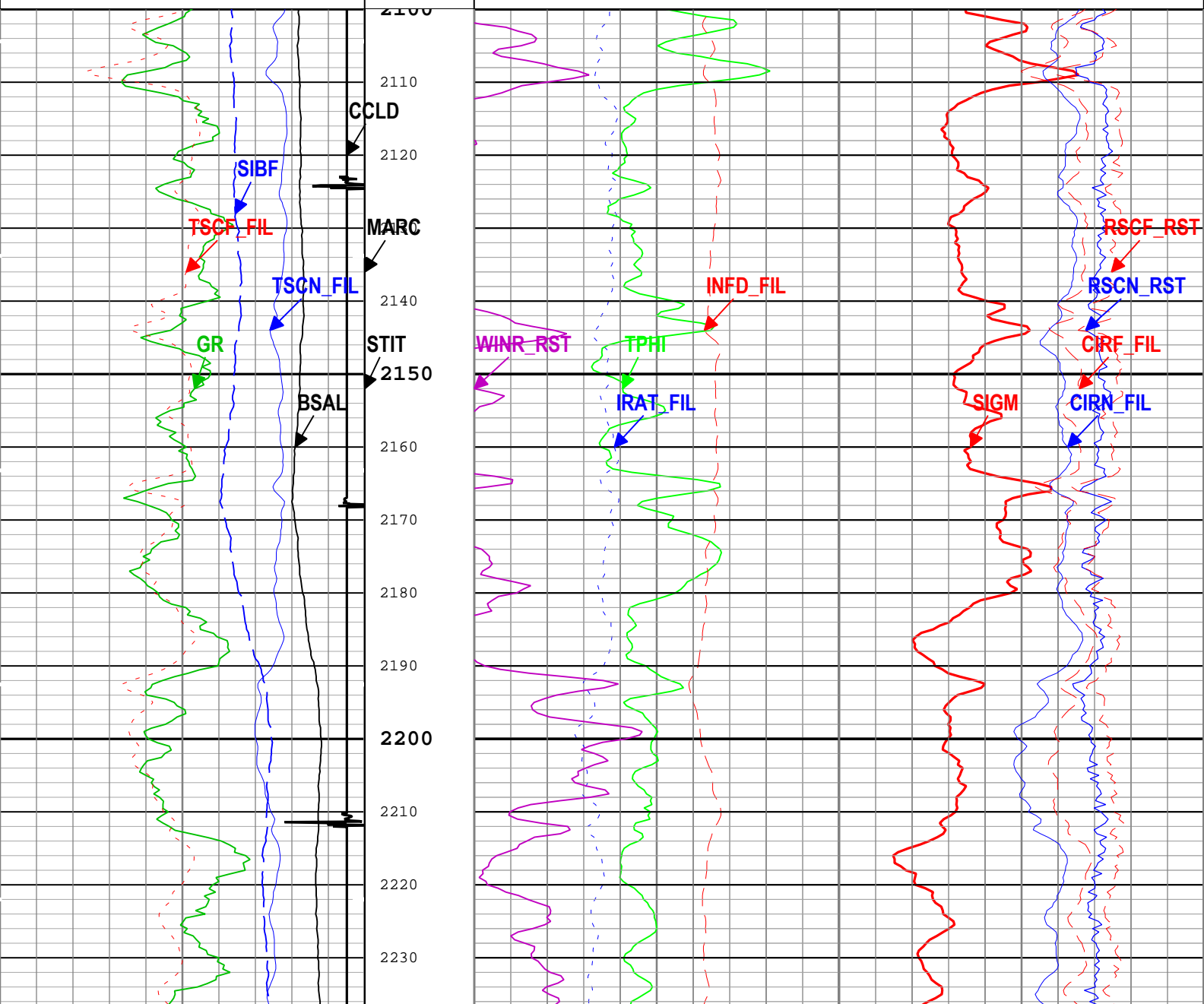
Log	Company:Caerus Operating LLC Well:NPR 23A-10 596 One: Log[3]:Up:S003
Description: RST SIGMA Answer Format: Log (RST SIGMA Answer) Index Scale: 5 in per 100 ft Index Unit: ft Index Type: Measured Depth Creation Date: 14-Sep-2018 04:03:19	

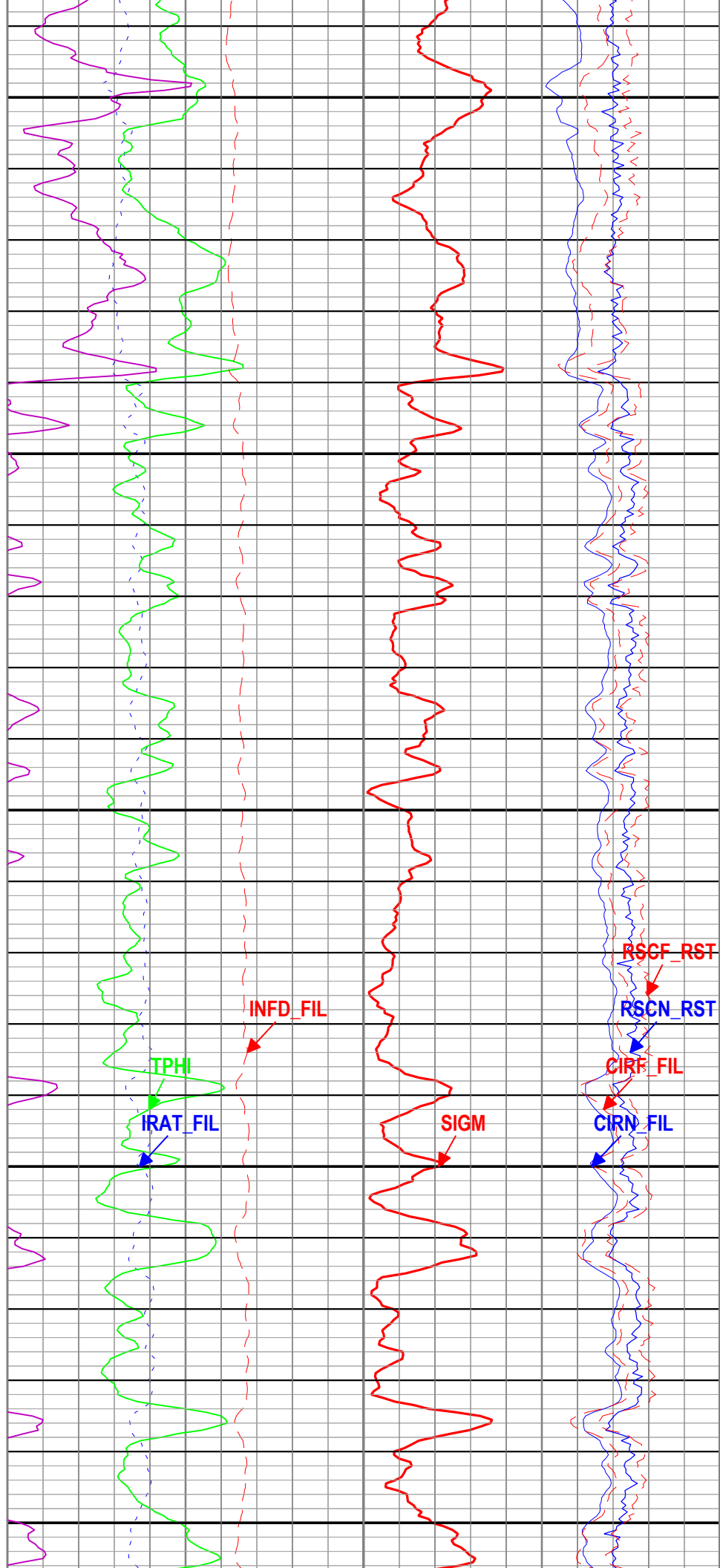
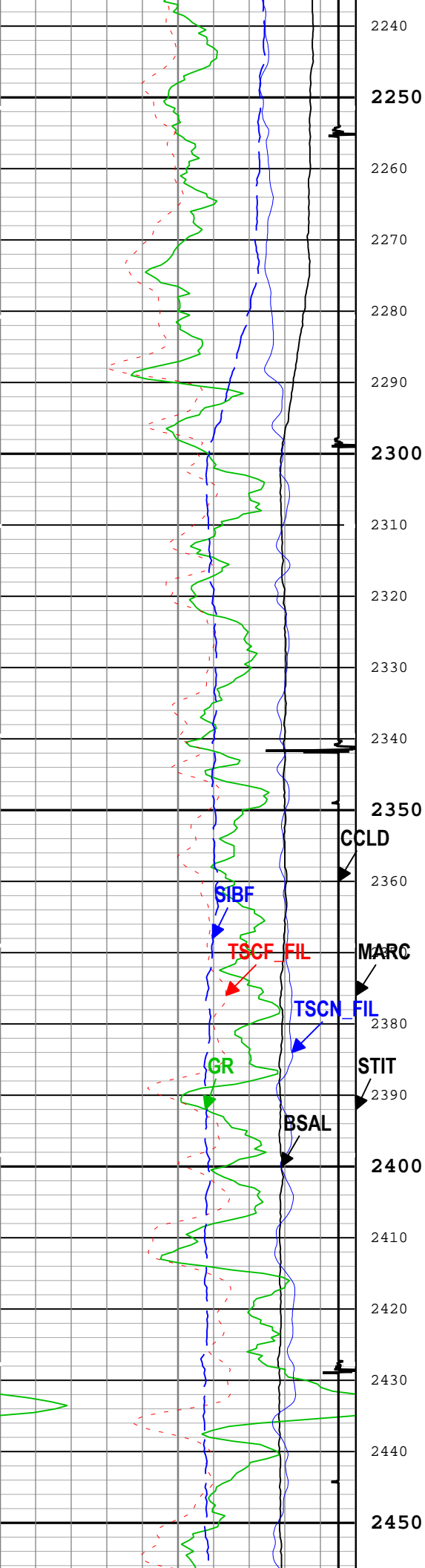
<div> TIME_1900 - Elapsed time since midnight, 30 December 1899 every 60.00 (s) </div> <div> <div> <div>IHV - Integrated Hole Volume every 10.00 (ft3)</div> <div>IHV - Integrated Hole Volume every 100.00 (ft3)</div> <div>ICV - Integrated Cement Volume every 10.00 (ft3)</div> </div> </div>

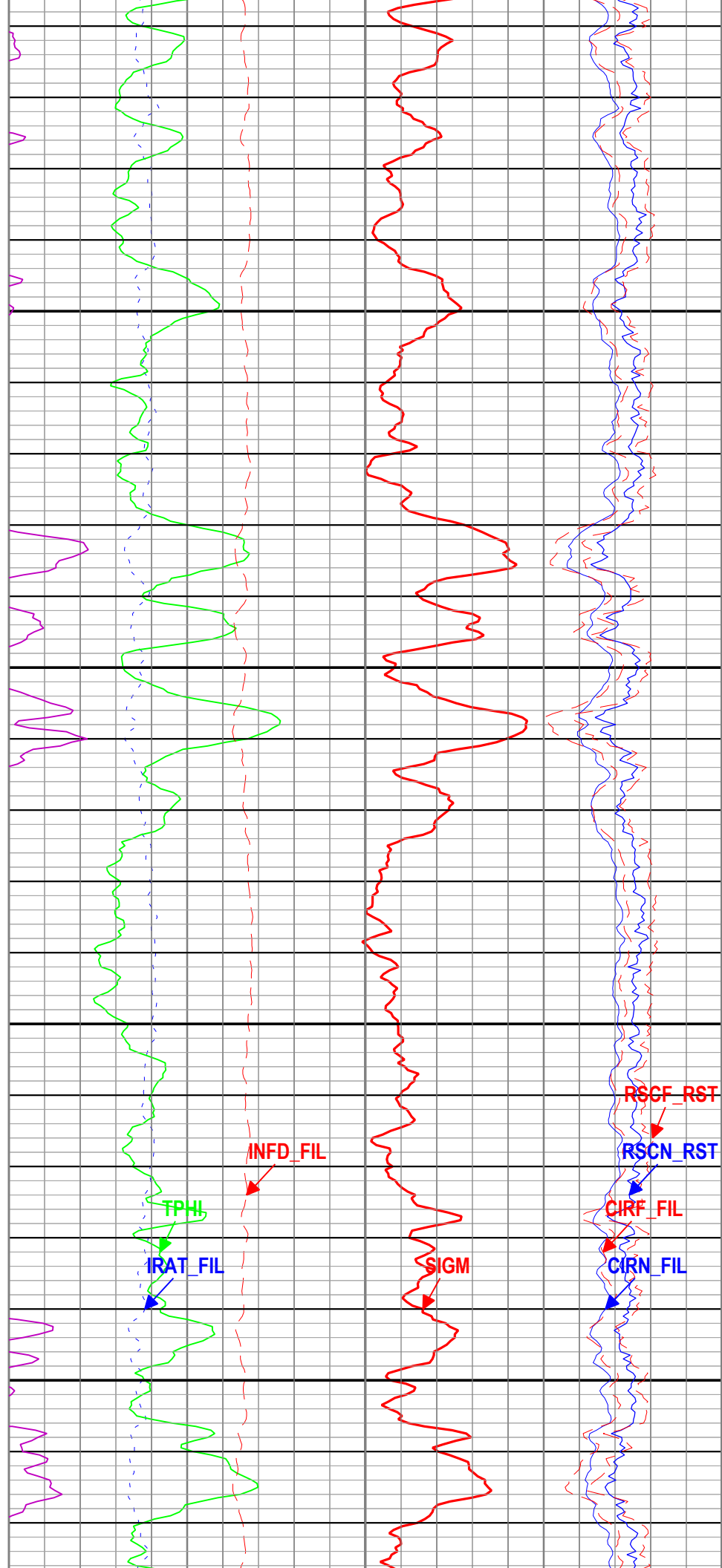
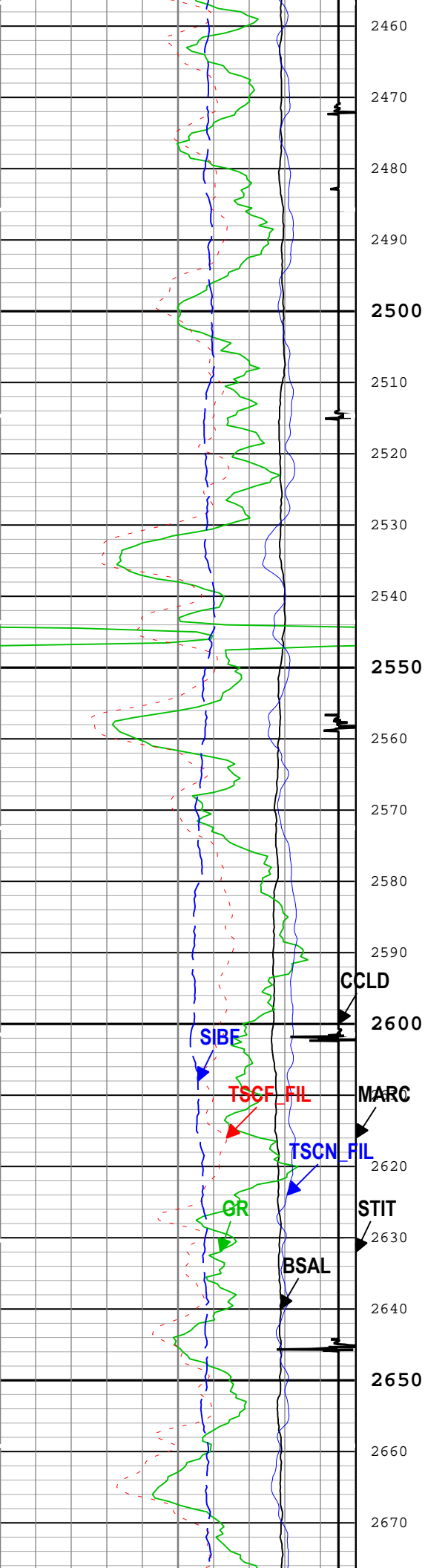
ICV - Integrated Cement Volume every 100.00 (ft3)

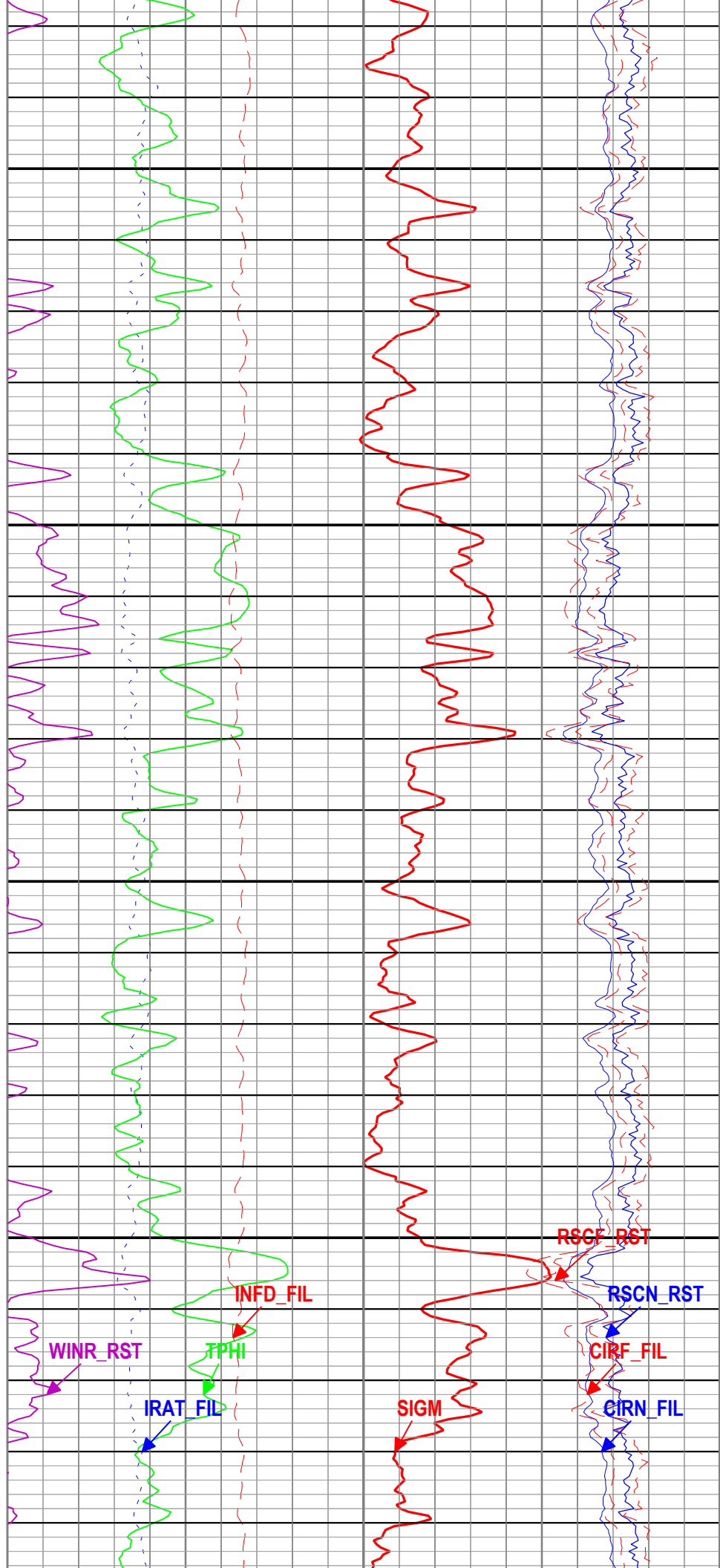
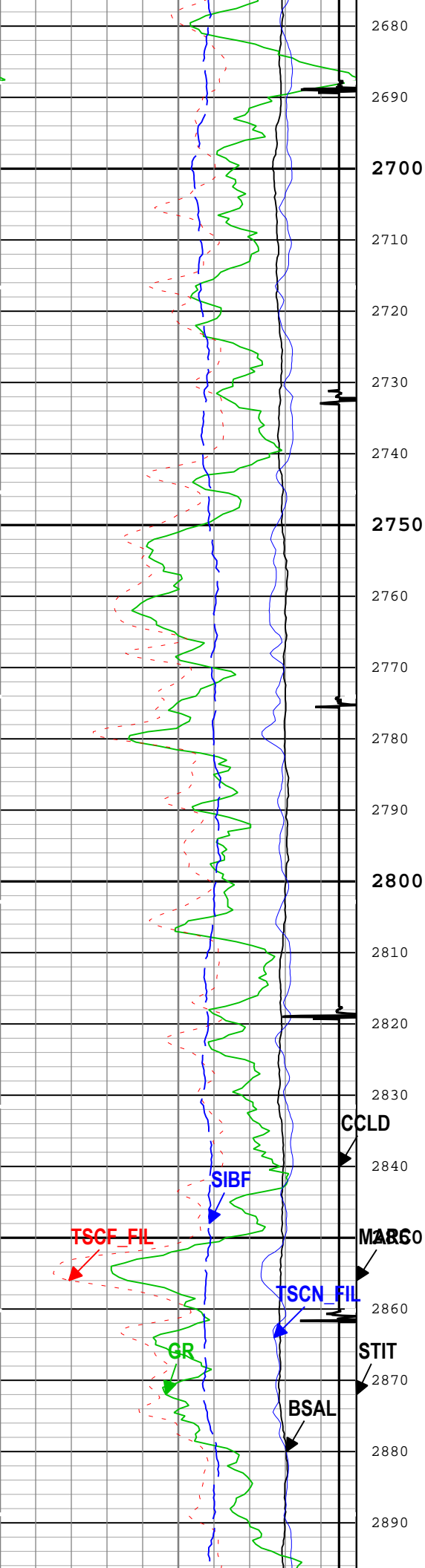
TIME_1900 - Time Marked every 60.00 (s)

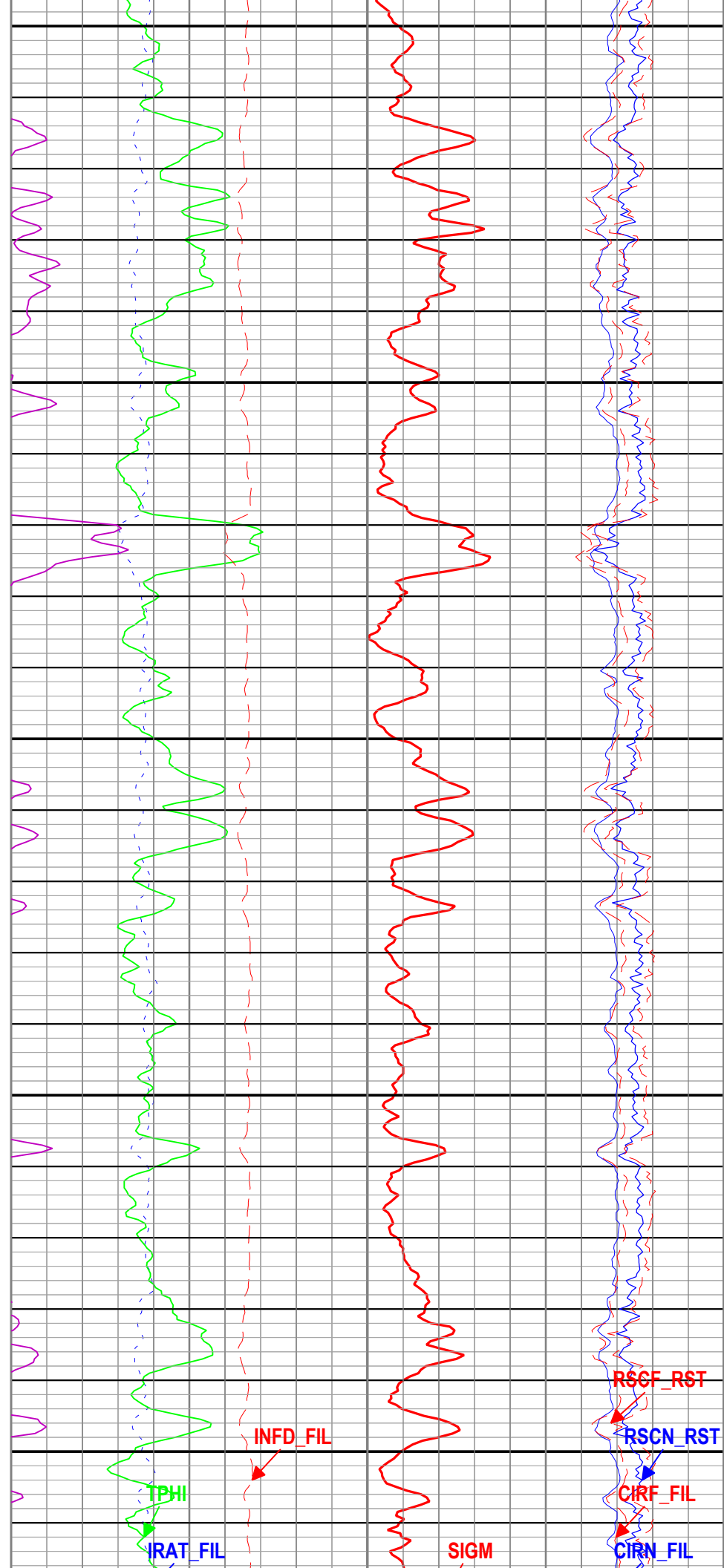
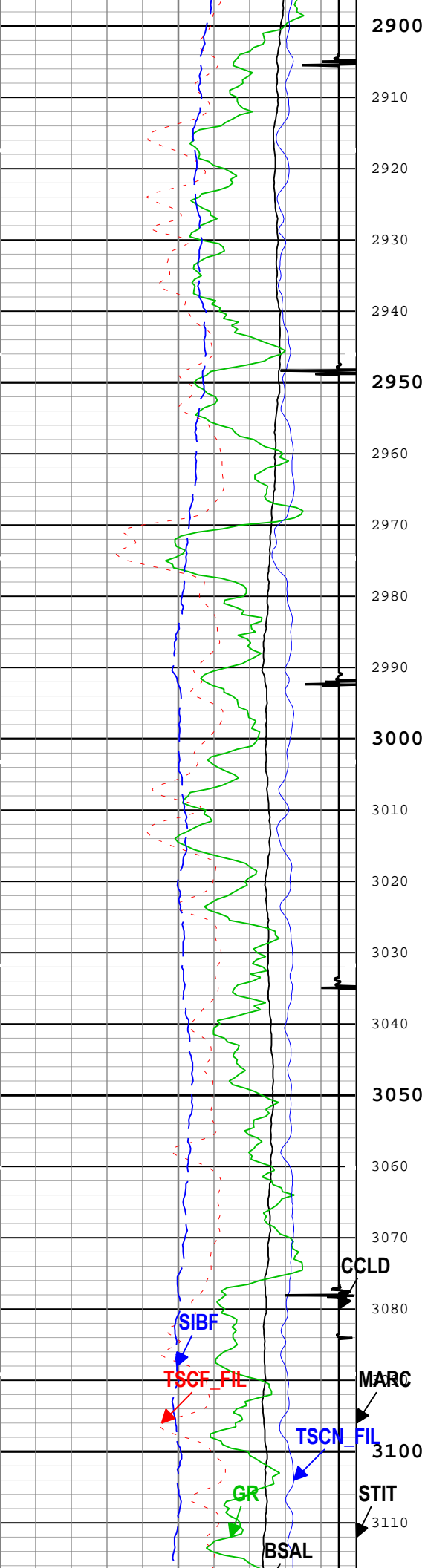
Borehole Salinity (BSAL) RST-C			Stuck Tool Indicator, Total (STIT)	Capture to Inelastic Ratio Near Filtered (CIRN_FIL) RST-C	
450	ppk	-50		2.5	0
Gamma Ray (GR) PSTP-B			Cable Drag From STIA to STIT	Capture to Inelastic Ratio Far Filtered (CIRF_FIL) RST-C	
0	gAPI	150		5	0
Total Selected Count Rate Near Detector Filtered (TSCN_FIL) RST-C			Tool Tot. Drag From D3T to STIT	Near Detector Effective Unregulated Capture Count Rate (RSCN_RST) RST-C	
30000	1/s	0		45	0
Total Selected Count Rate Far Detector Filtered (TSCF_FIL) RST-C			Minitron Arc Count (MARC) RST-C	Far Detector Effective Unregulated Capture Count Rate (RSCF_RST) RST-C	
12000	1/s	0		45	0
Sigma Borehole Fluid (SIBF) RST-C				Formation Sigma (Neutron Capture Cross Section) (SIGM) RST-C	
100	cu	0		60	0
CCL Discriminated Amplitude (CCLD) PSTP-B				Weighted Inelastic Ratio (WINR_RST) RST-C	
-19	V	1		0	0.4

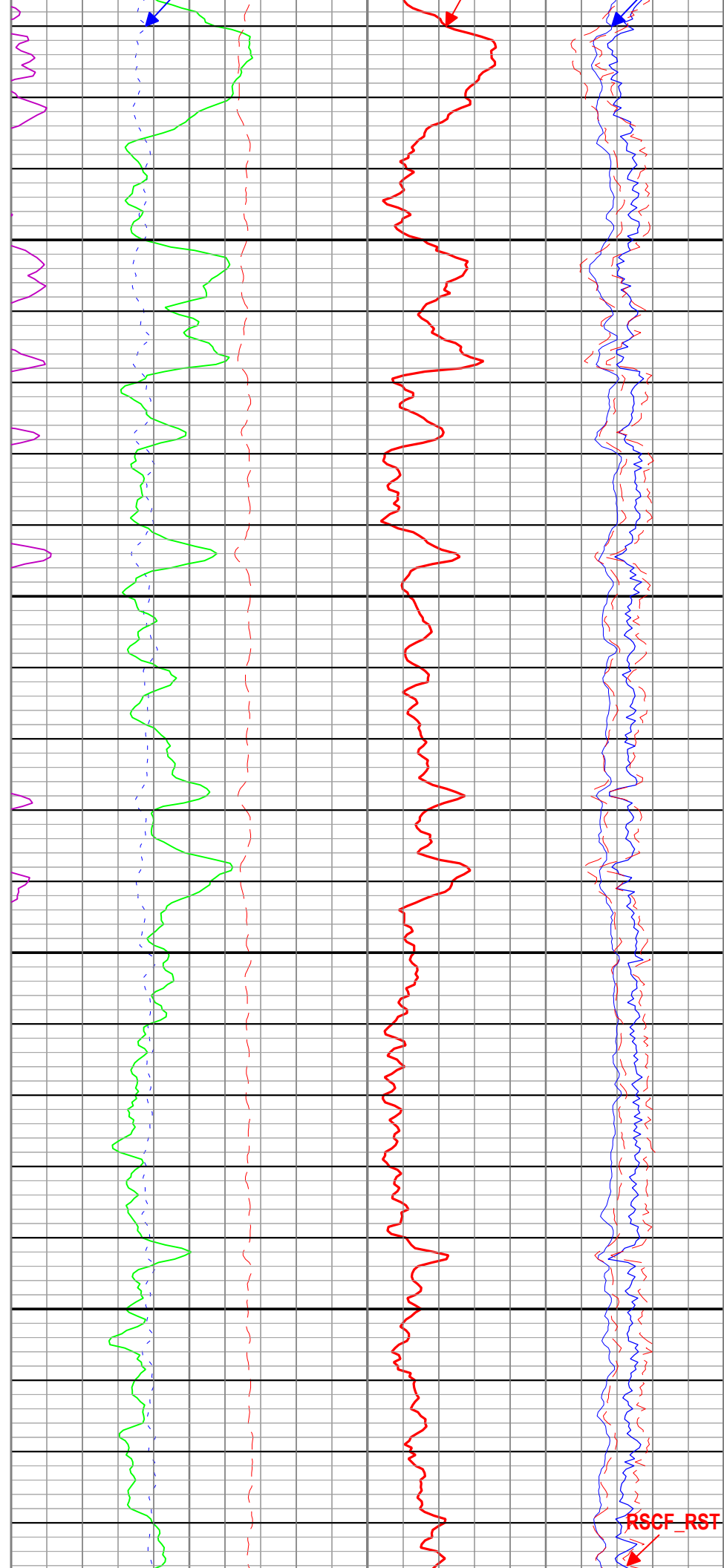
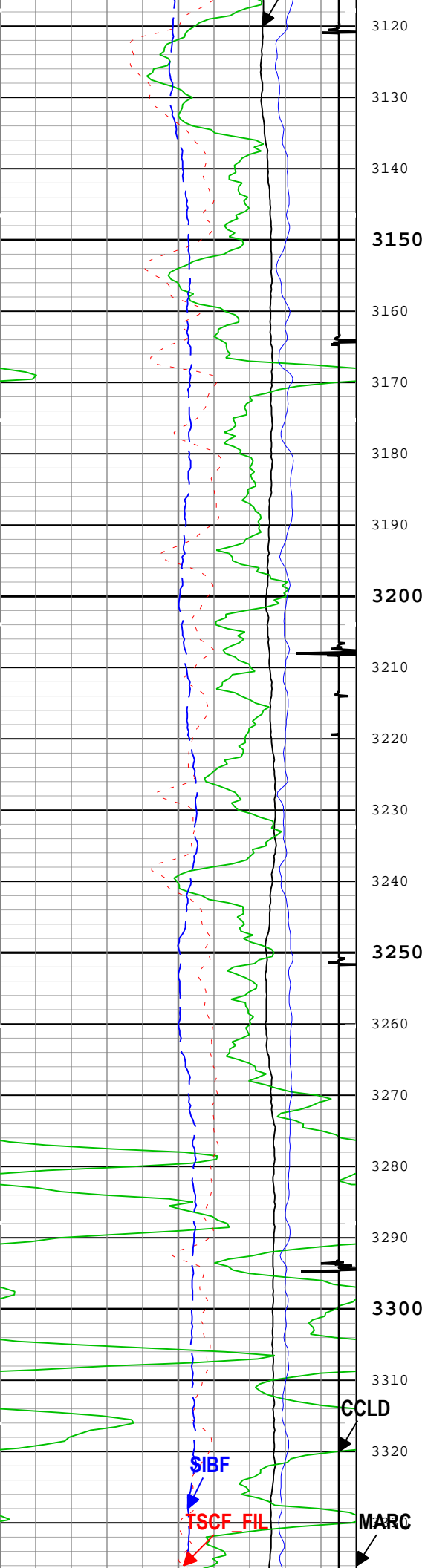


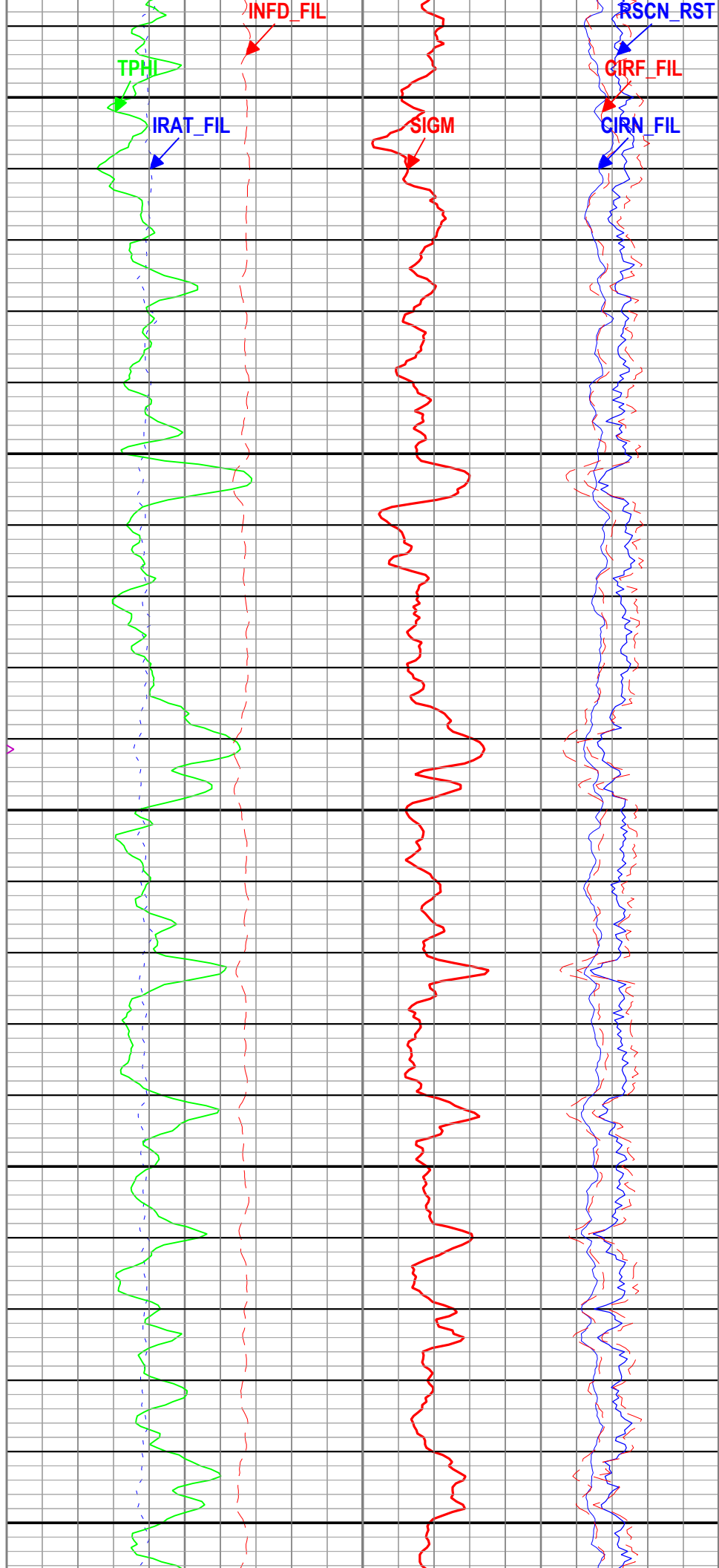
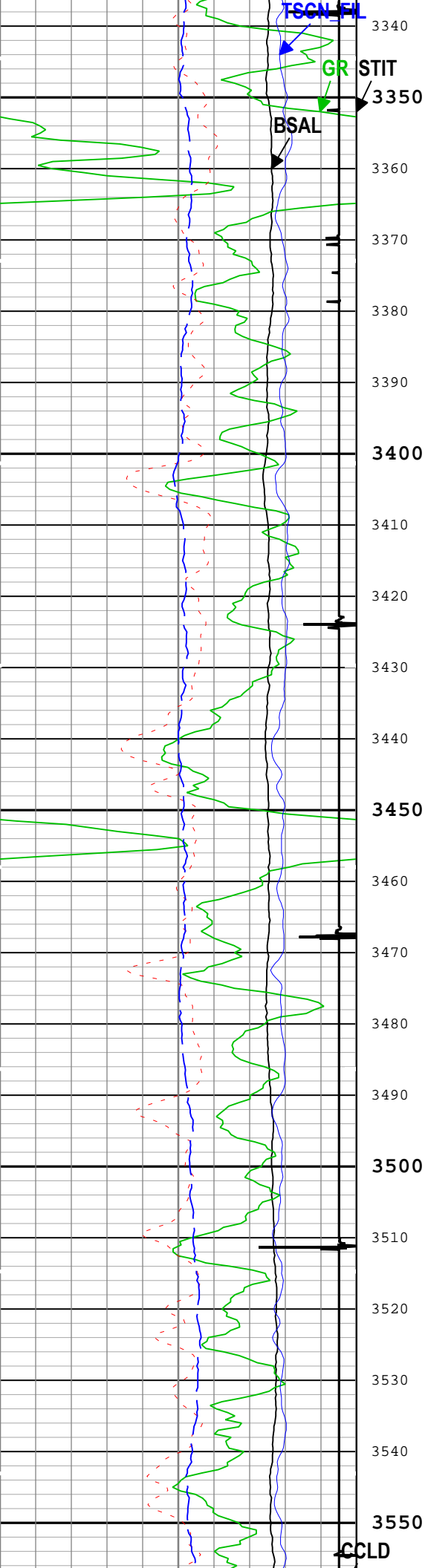


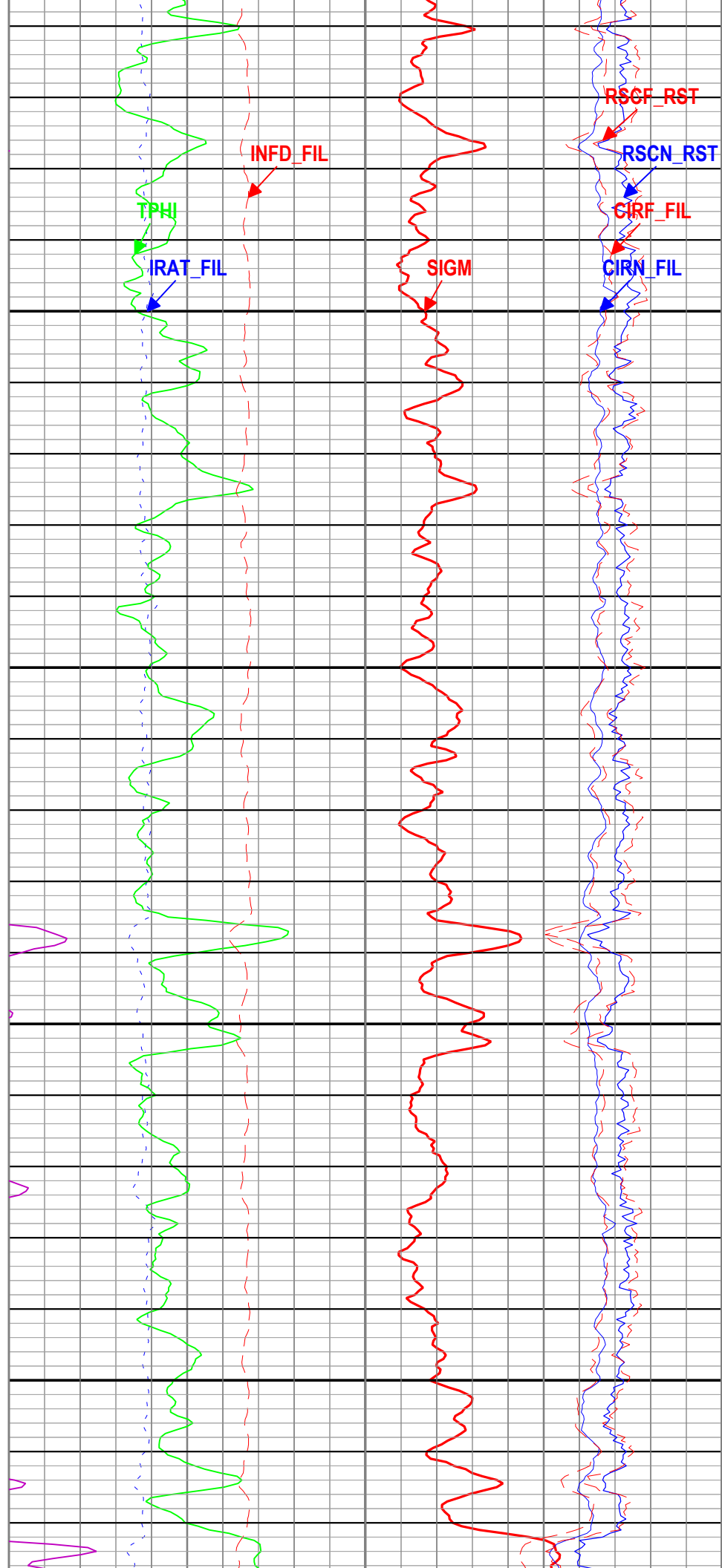
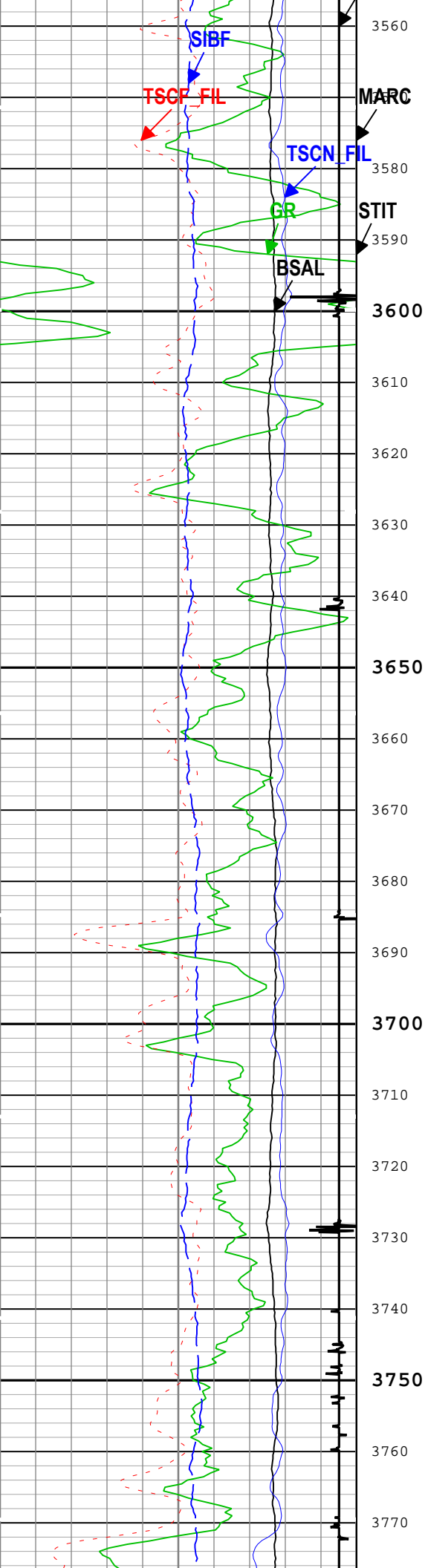


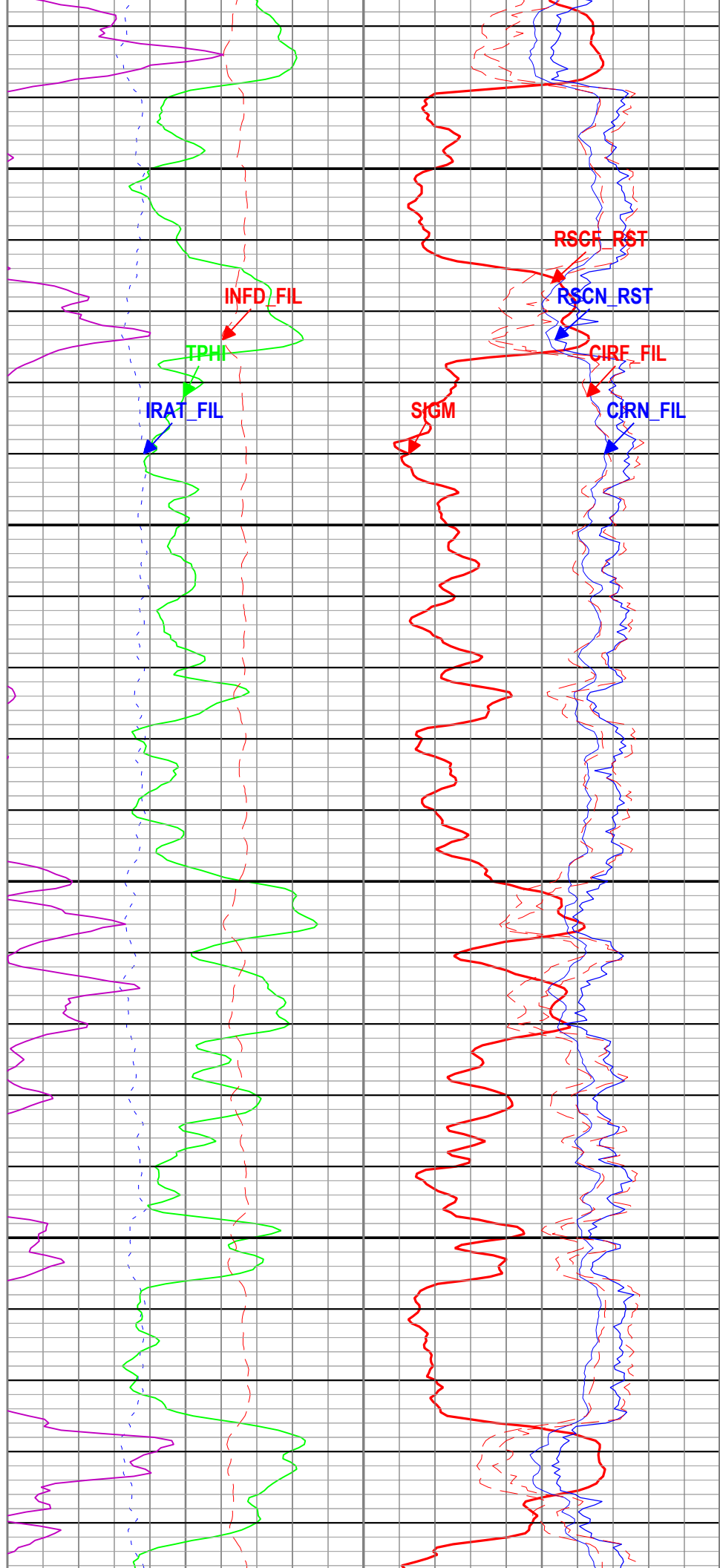
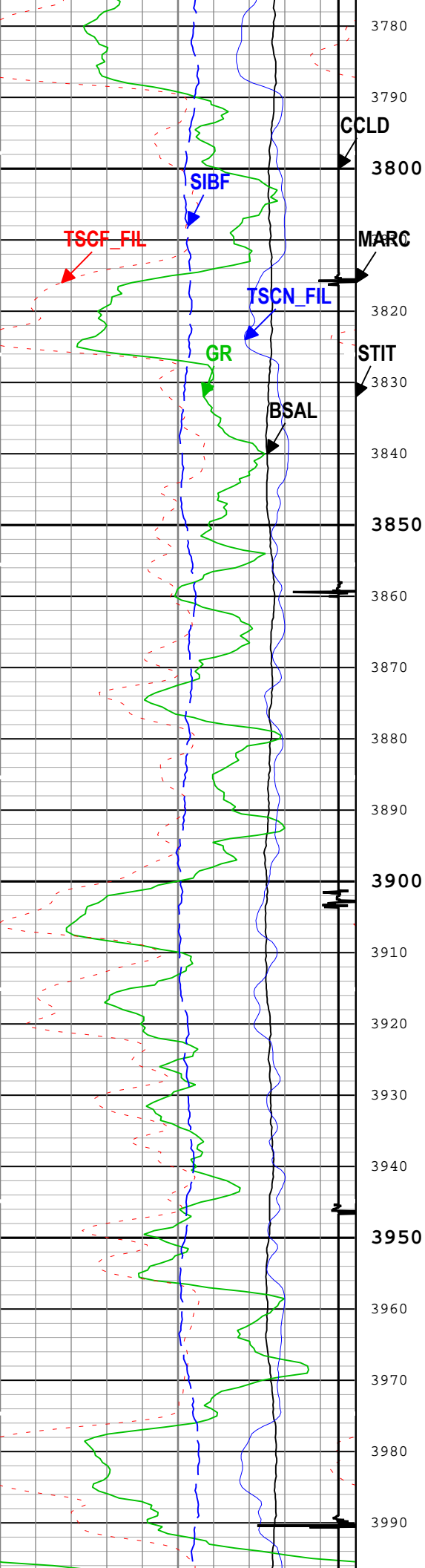


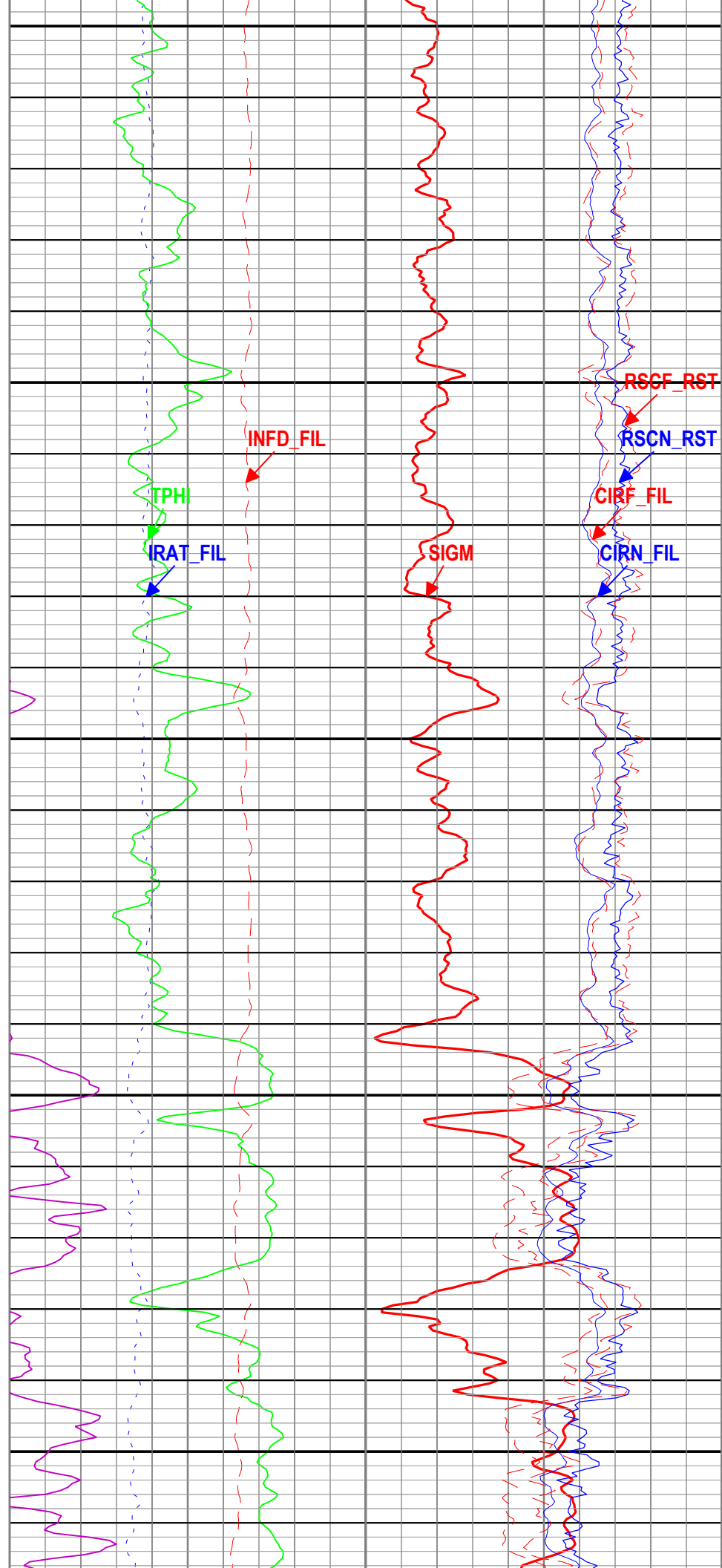
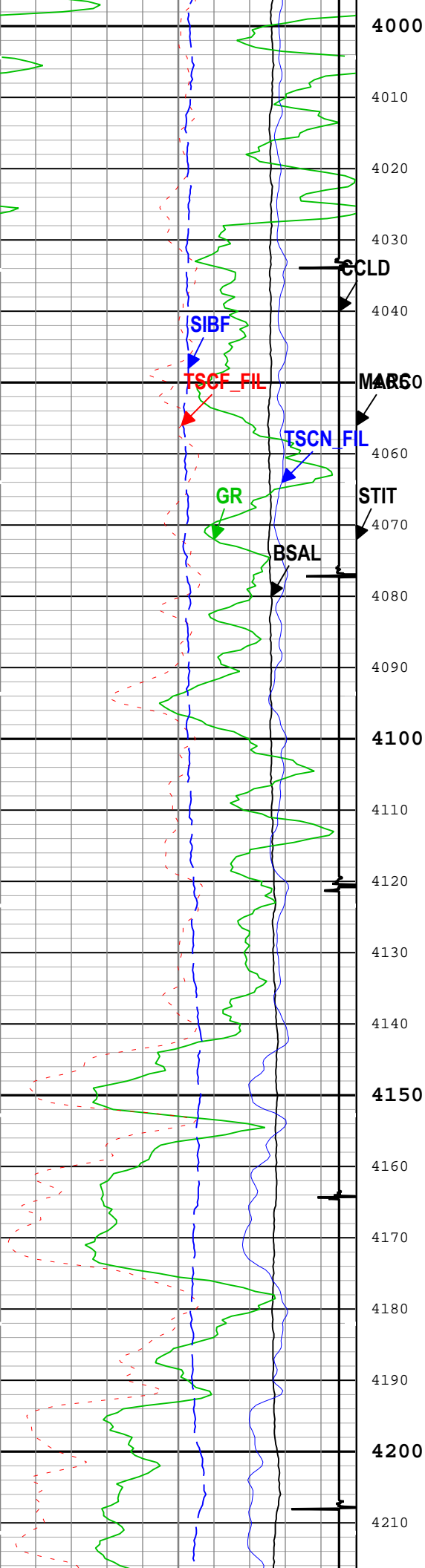


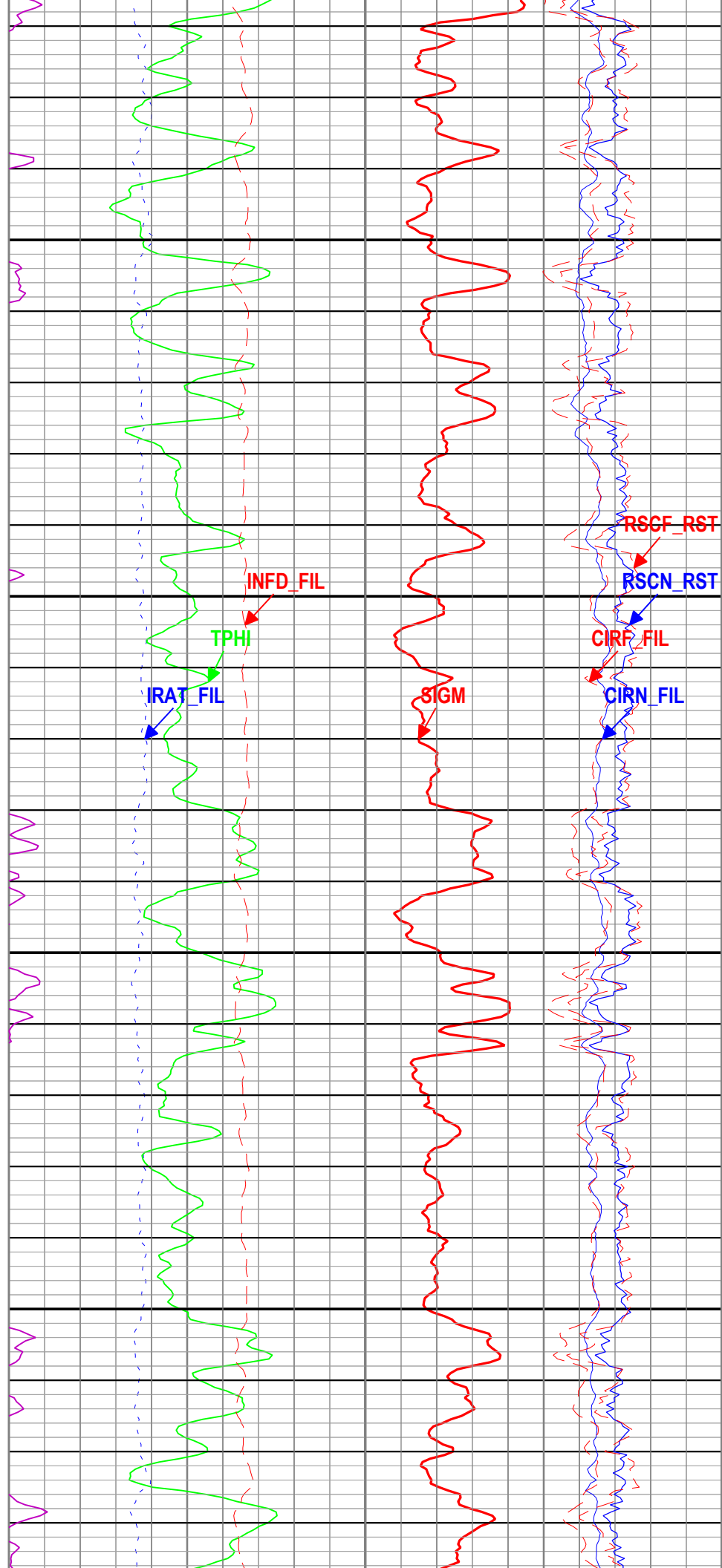
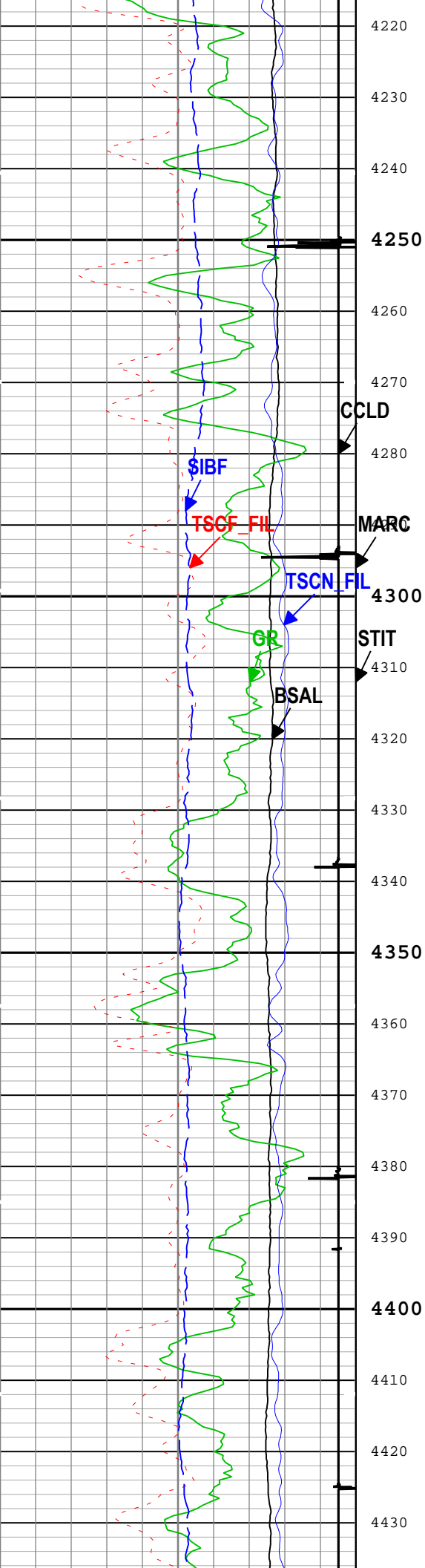


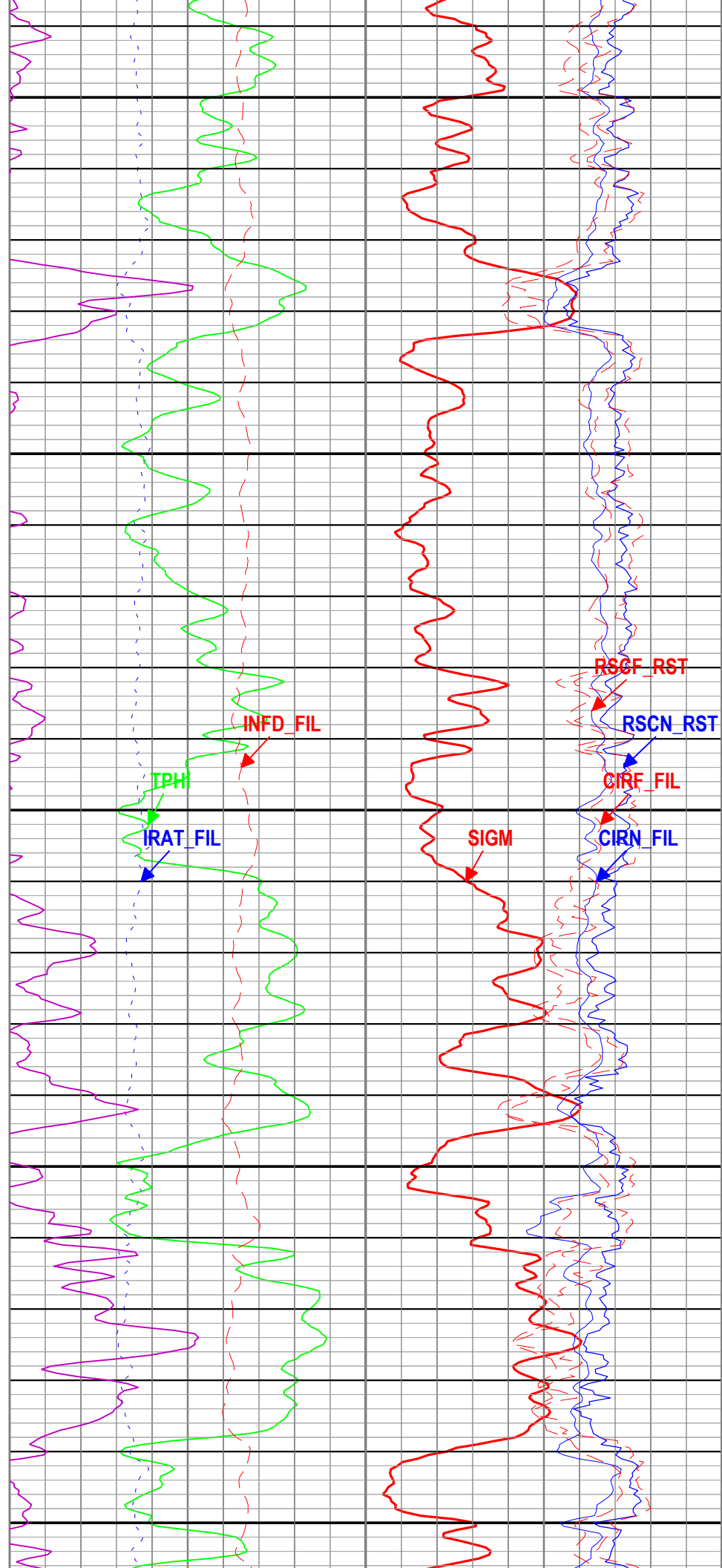
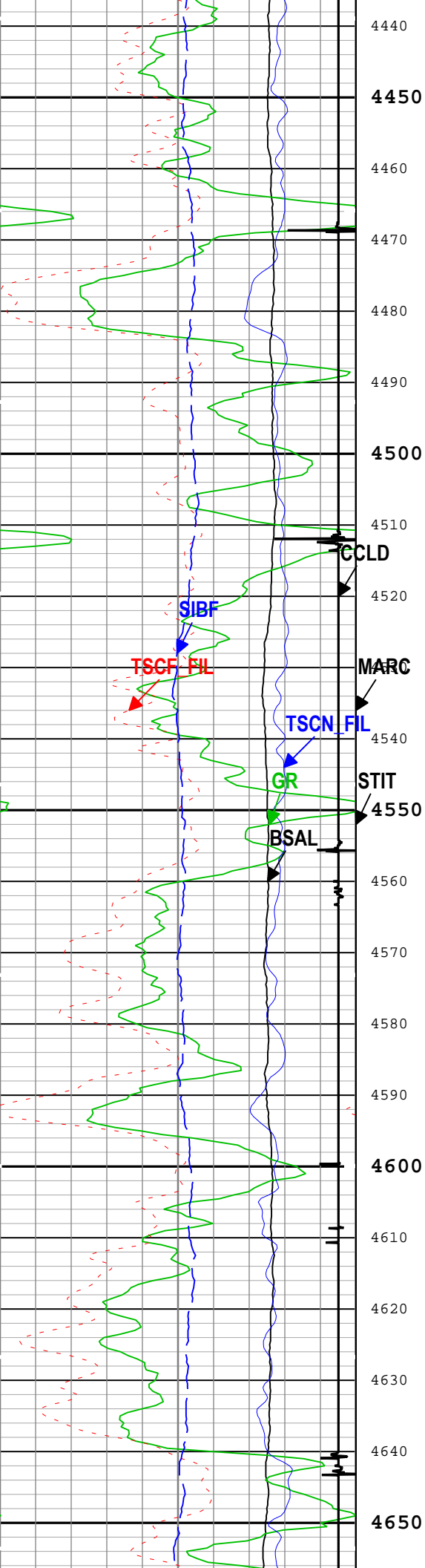


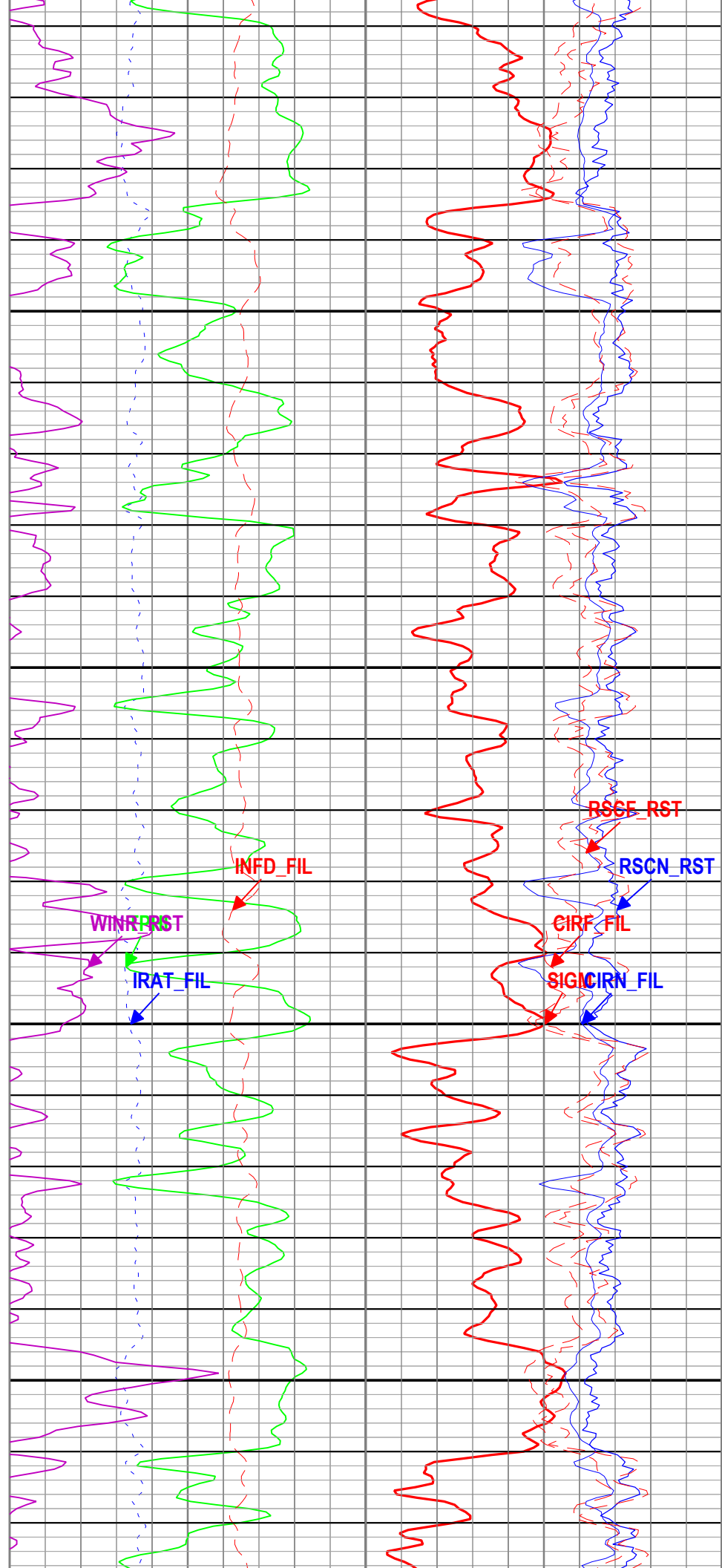
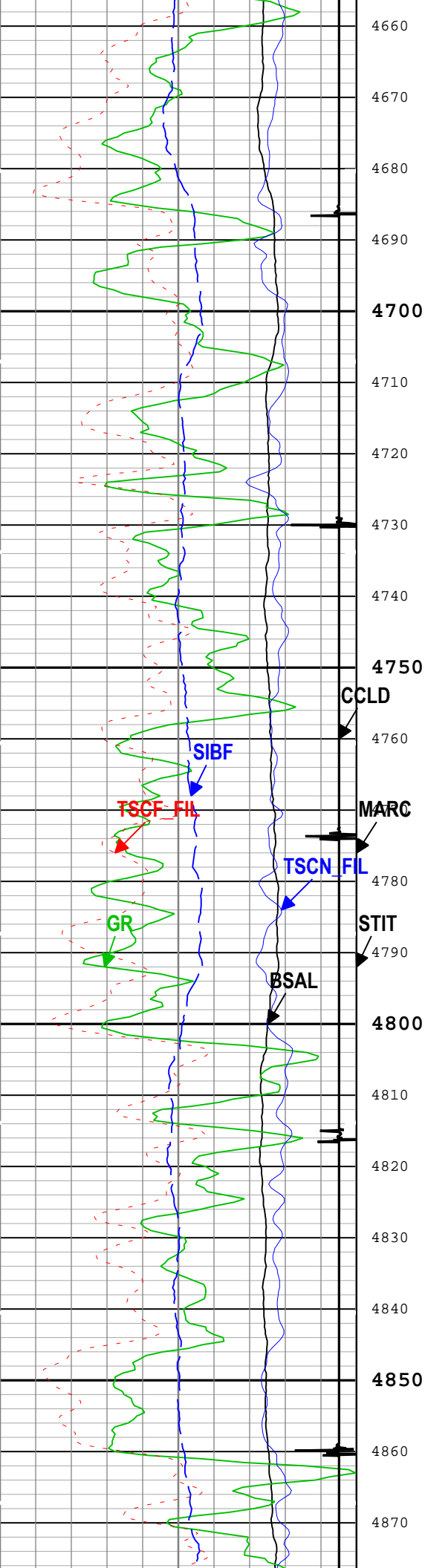


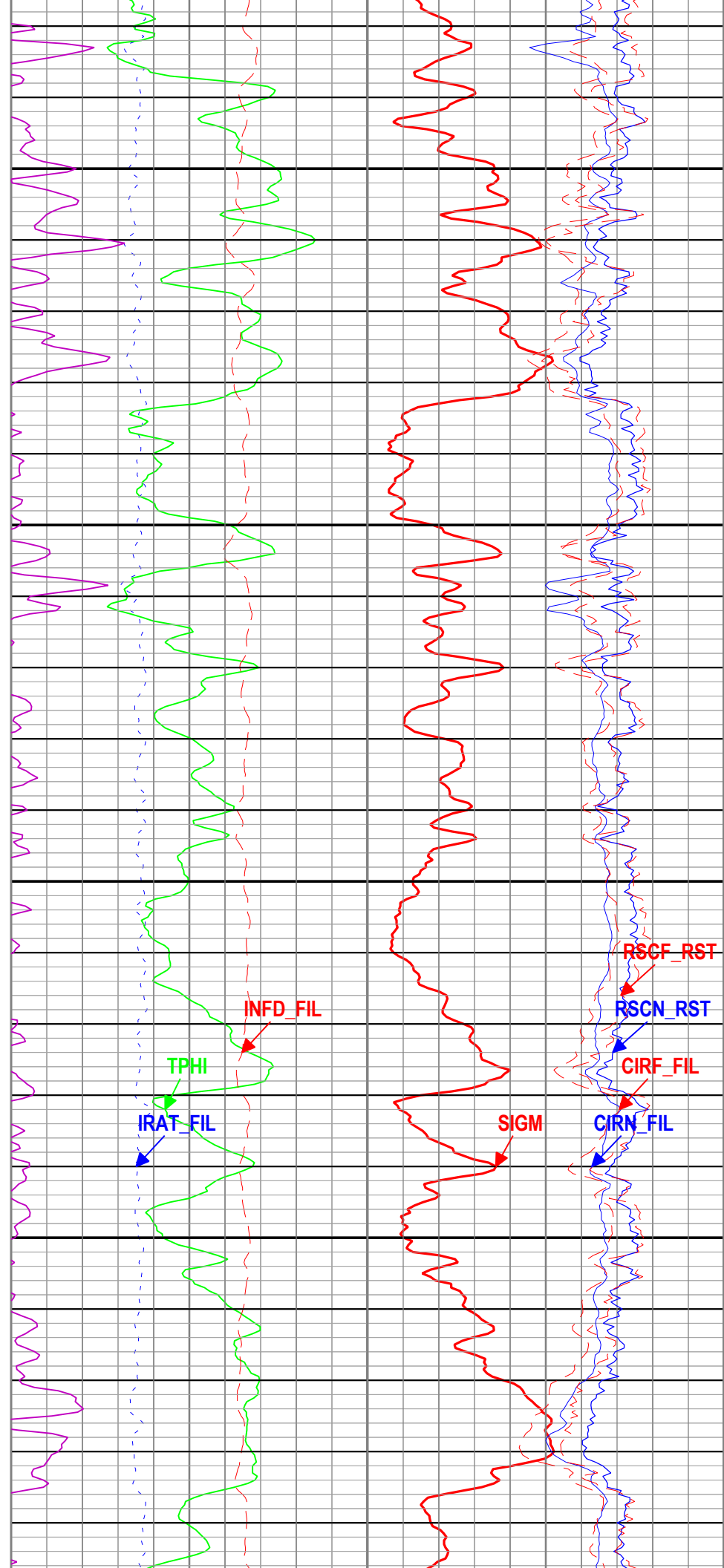
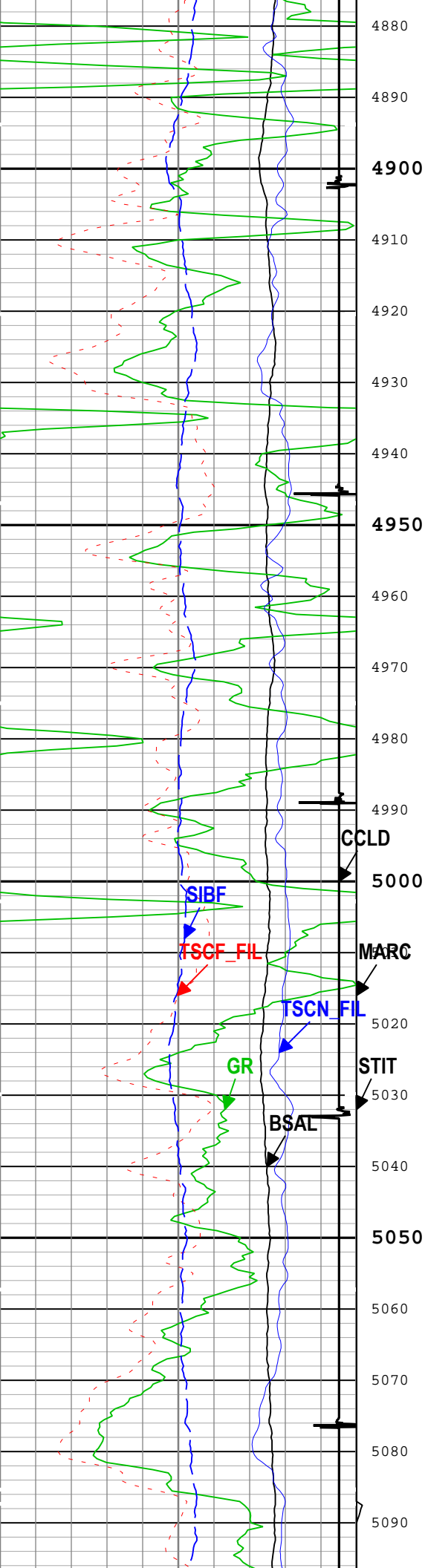


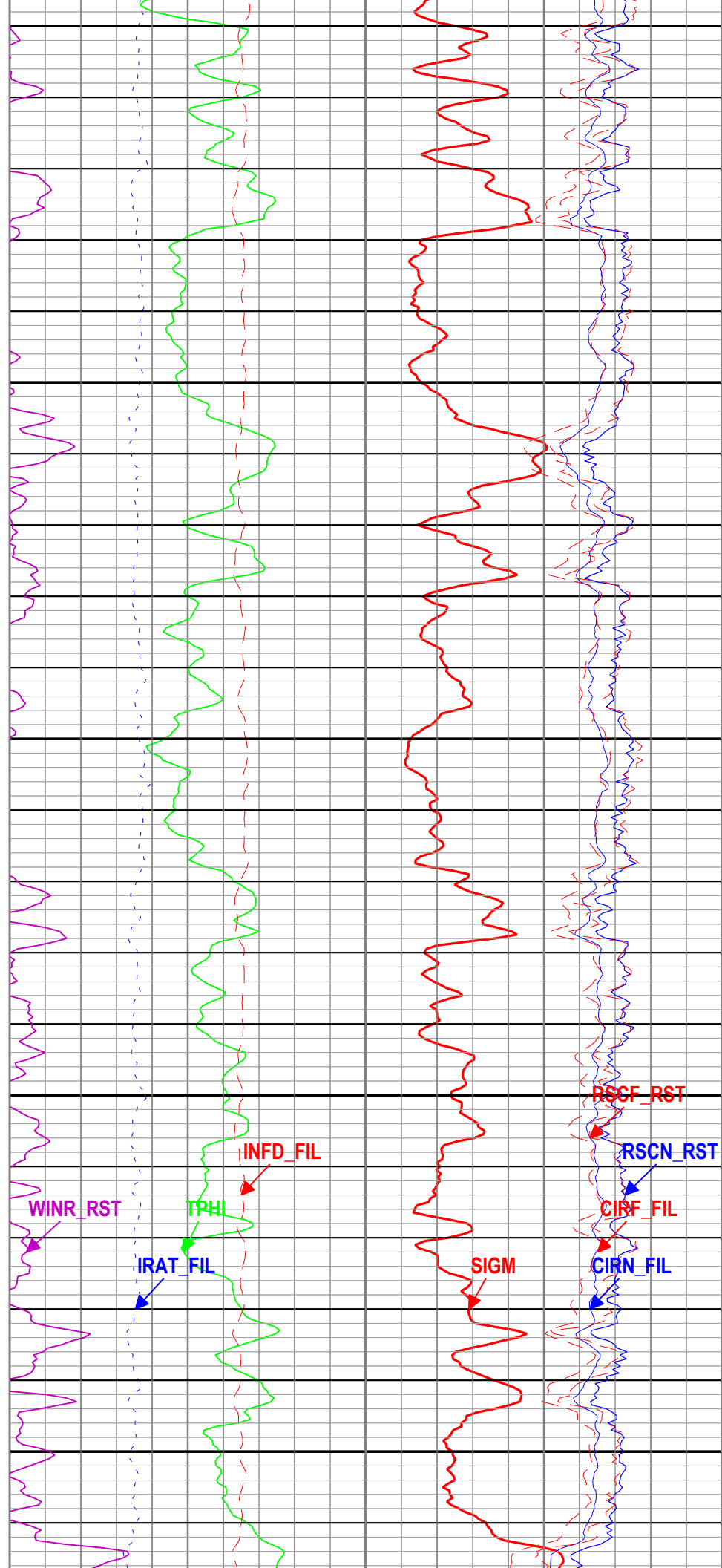
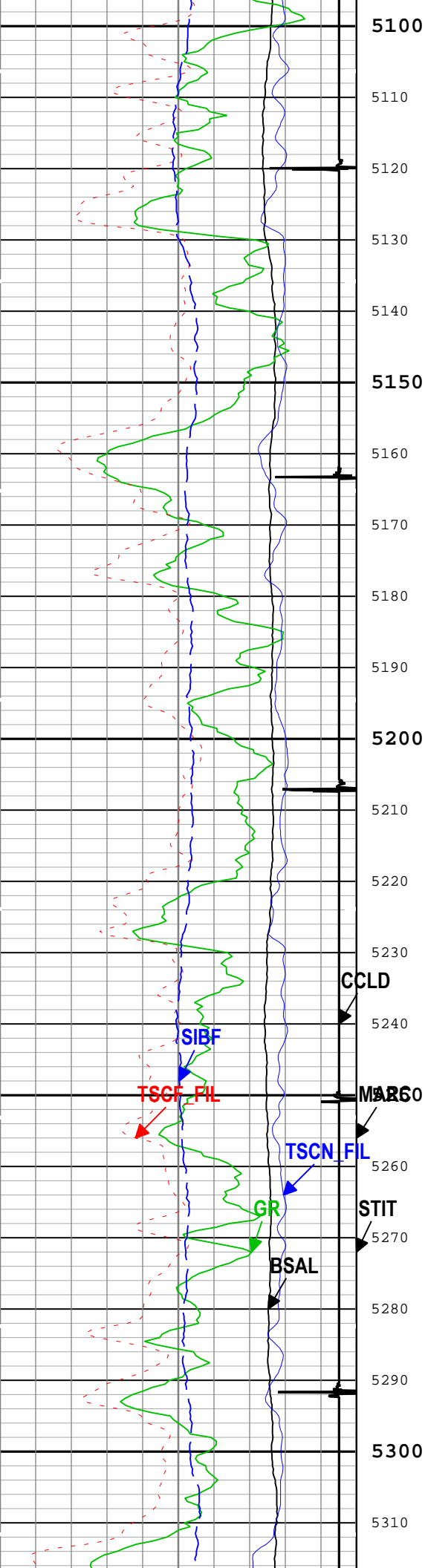


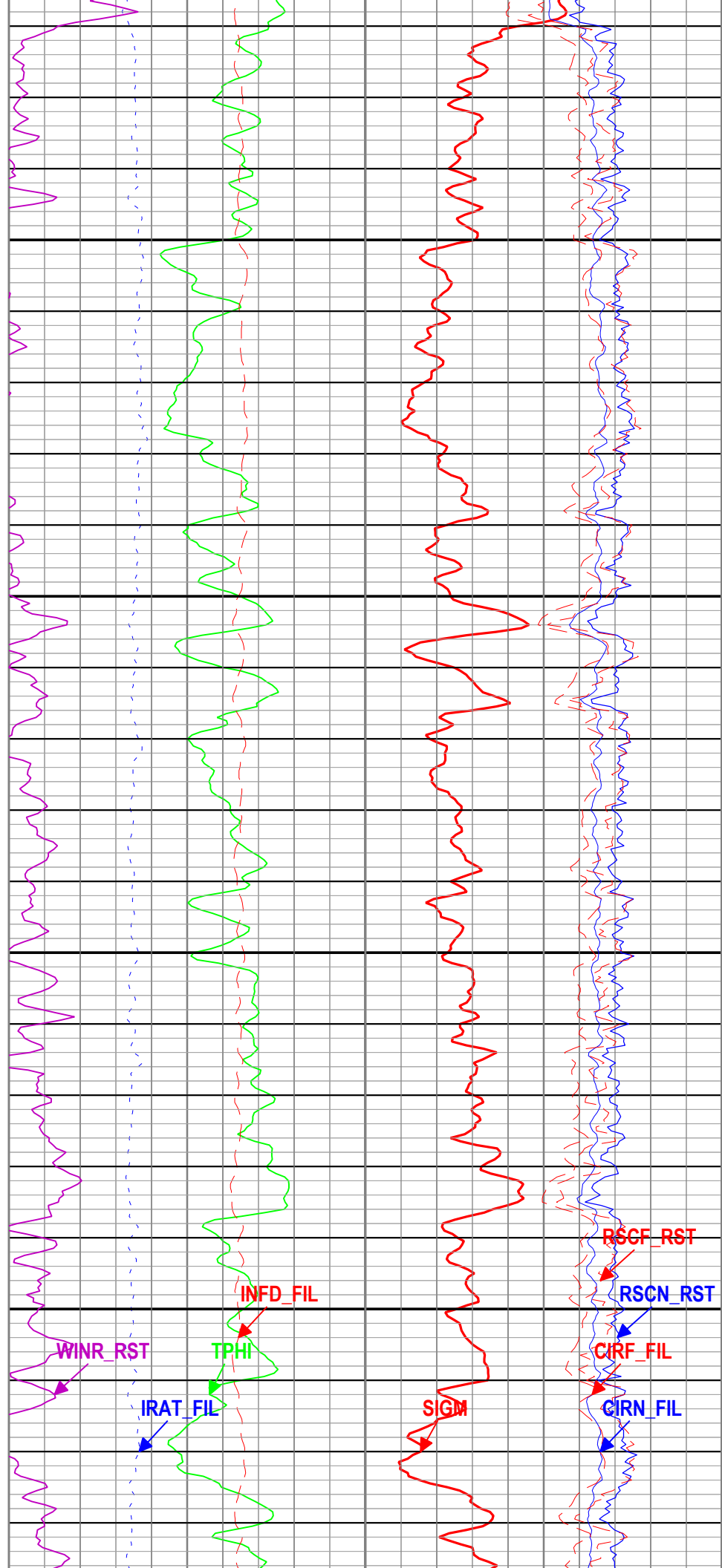
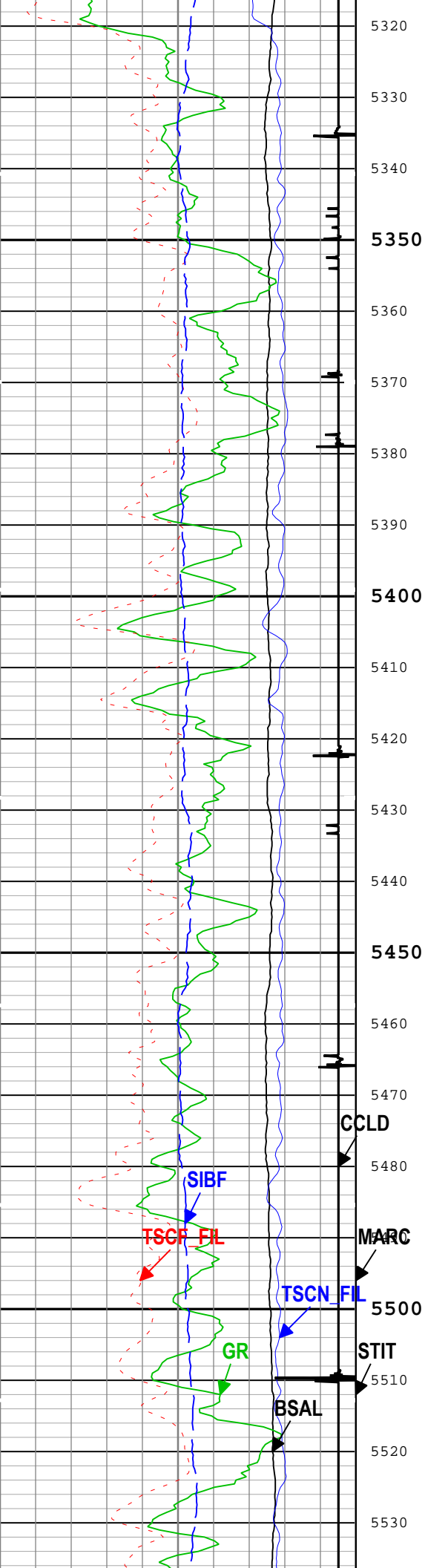


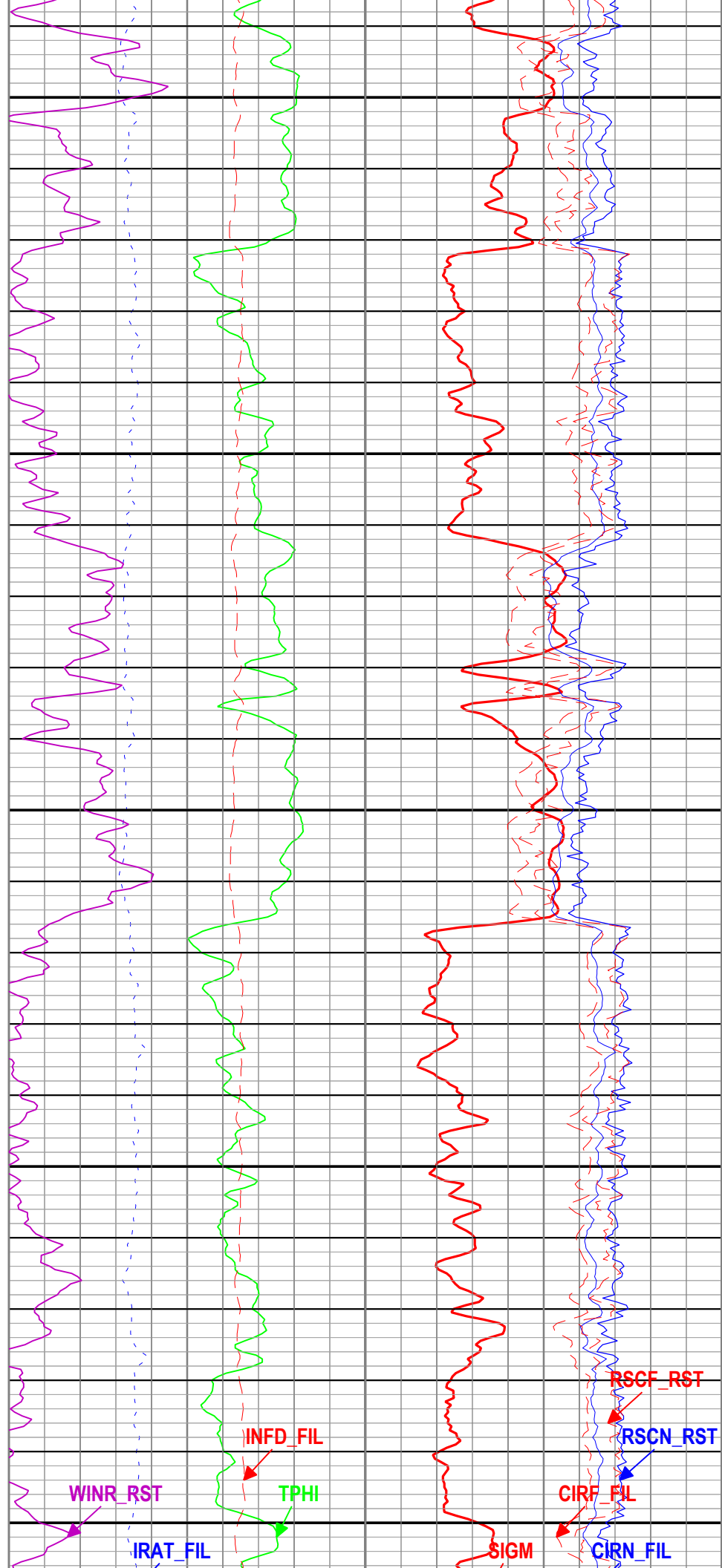
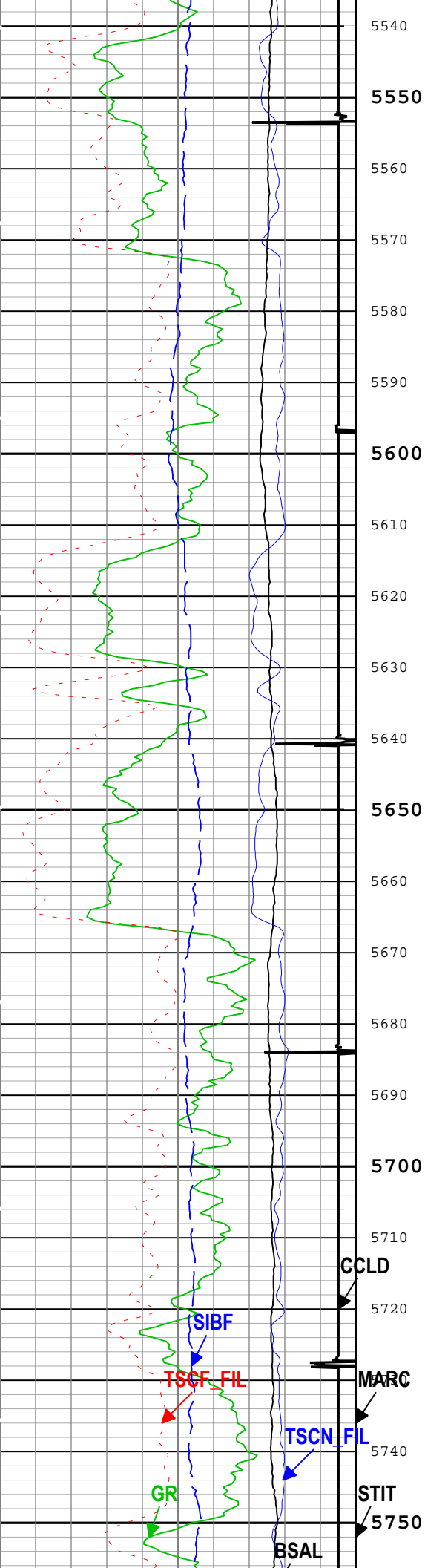


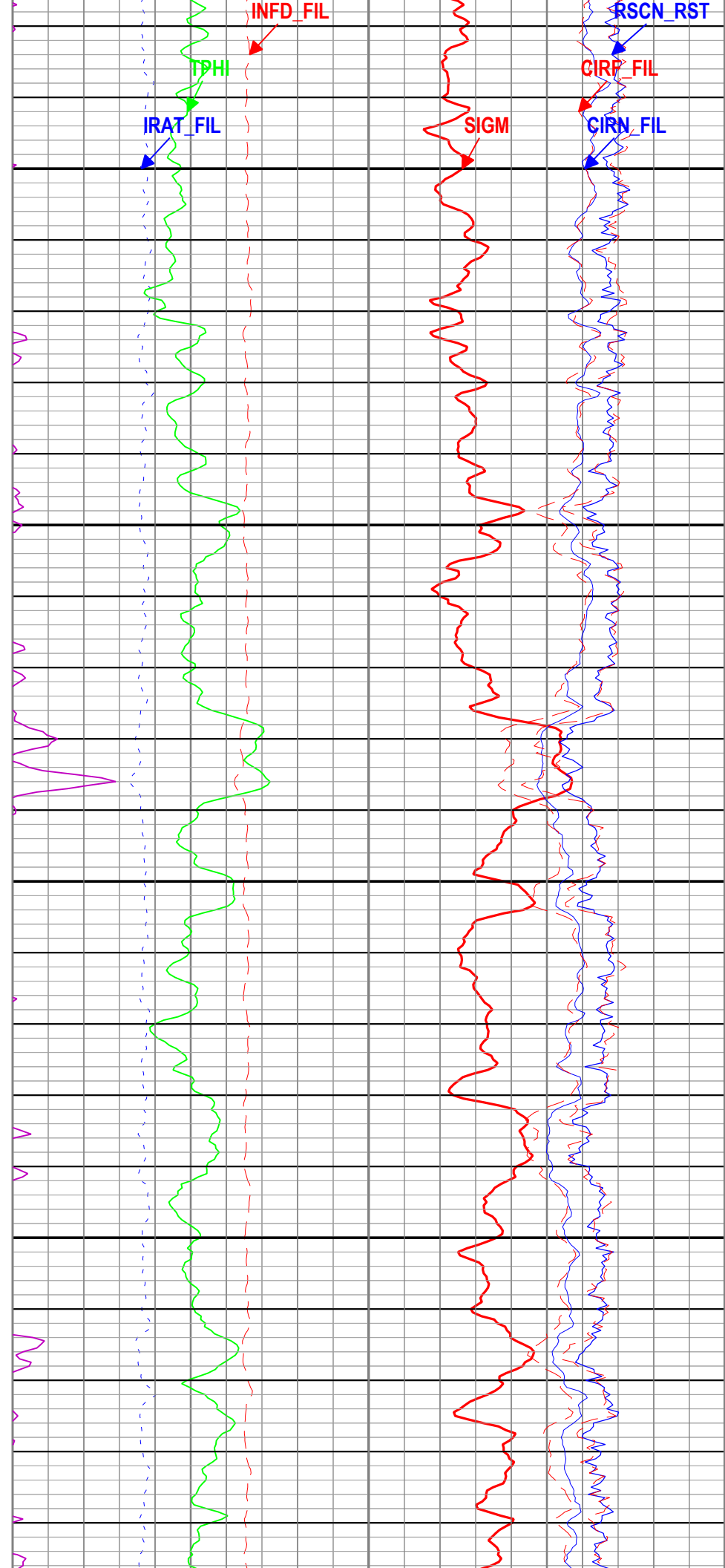
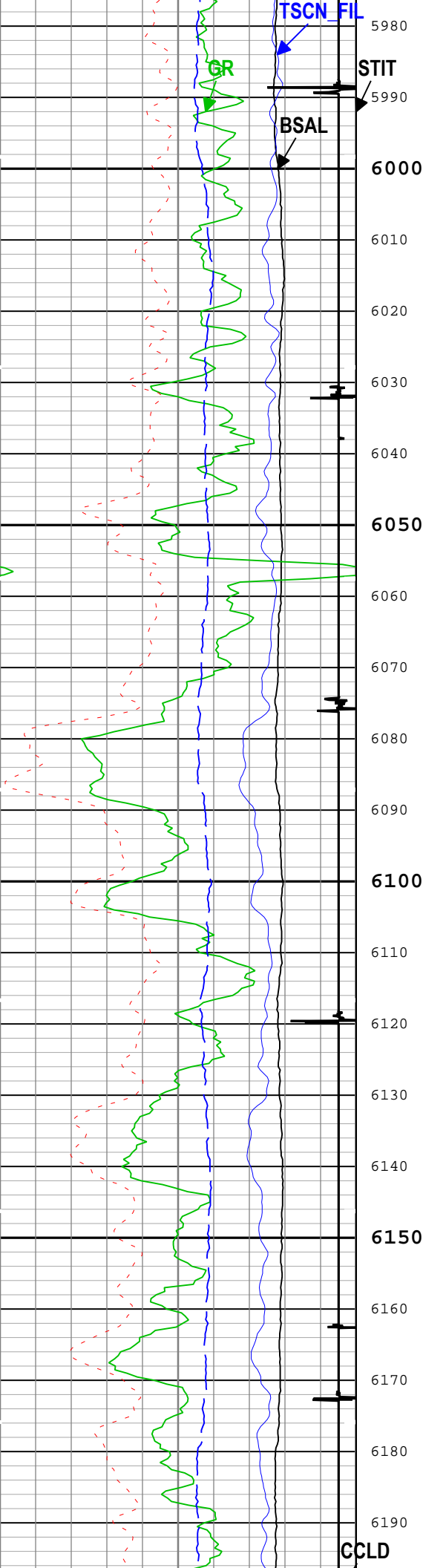


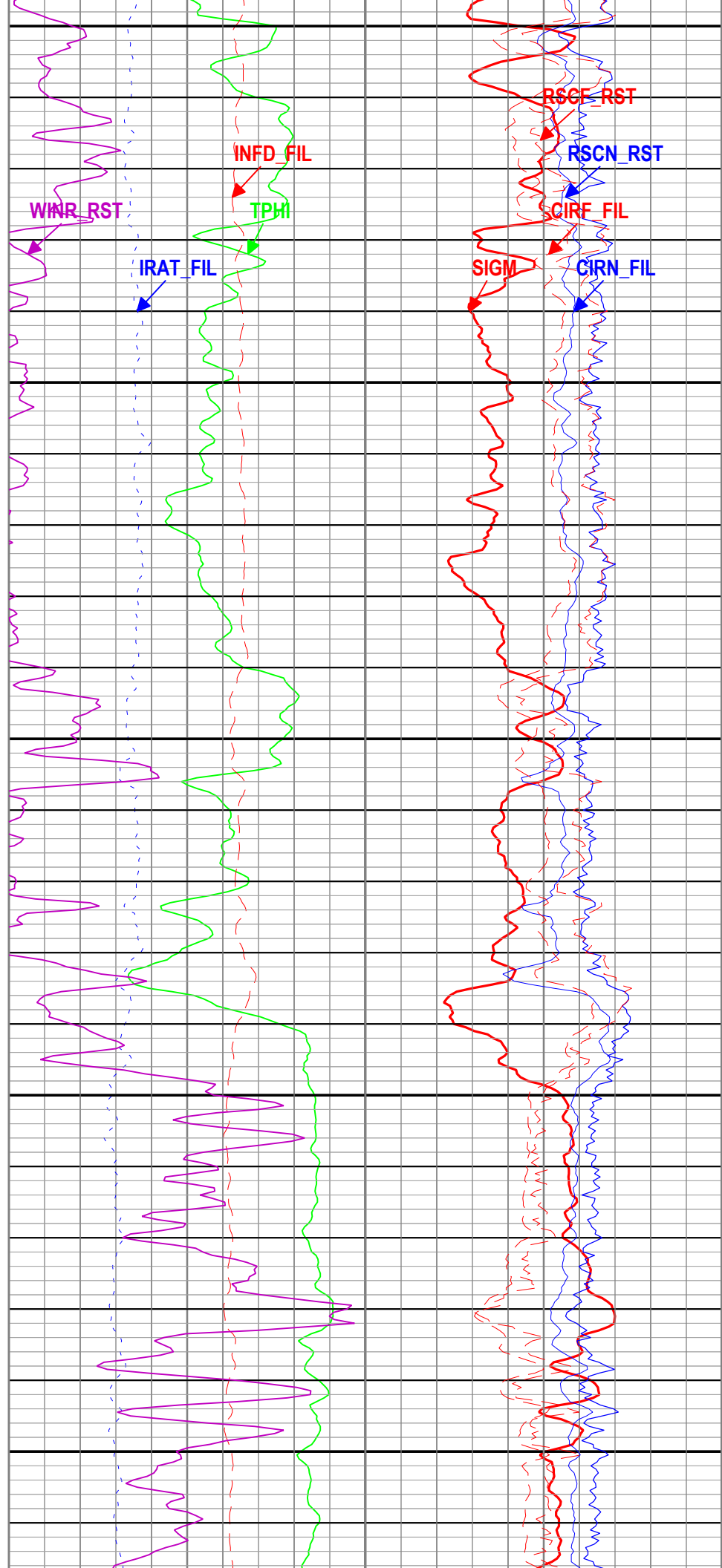
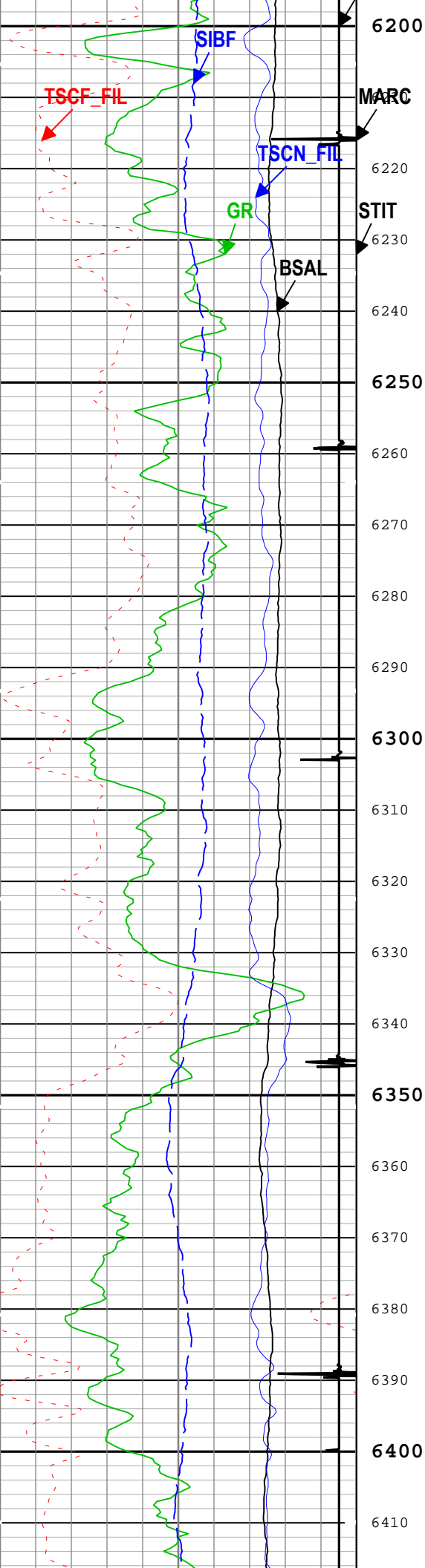


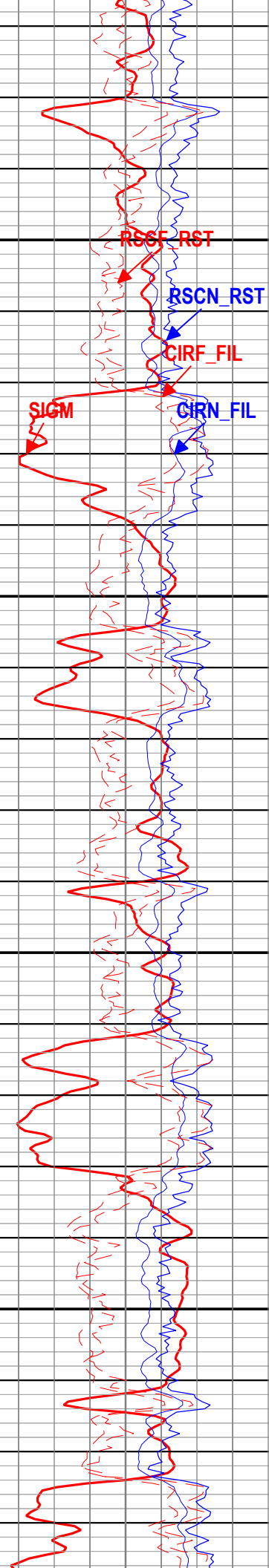
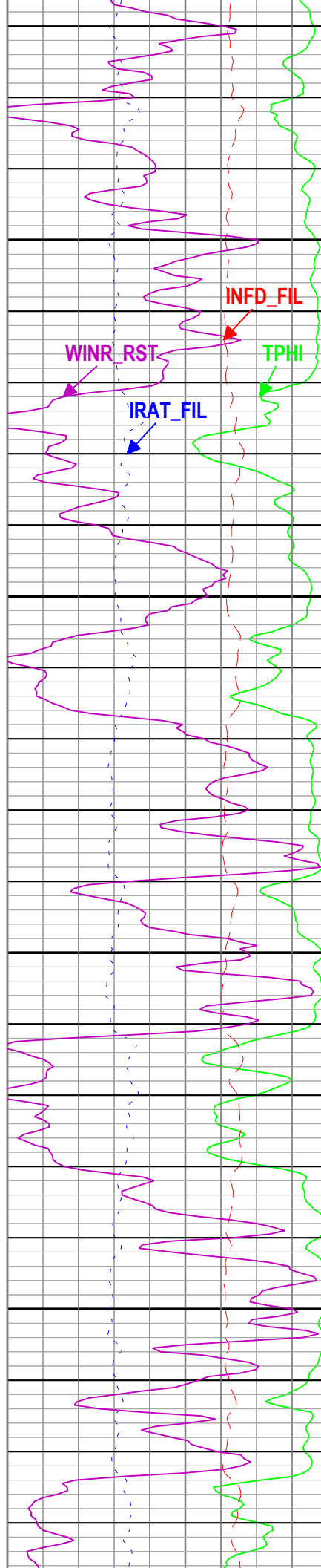
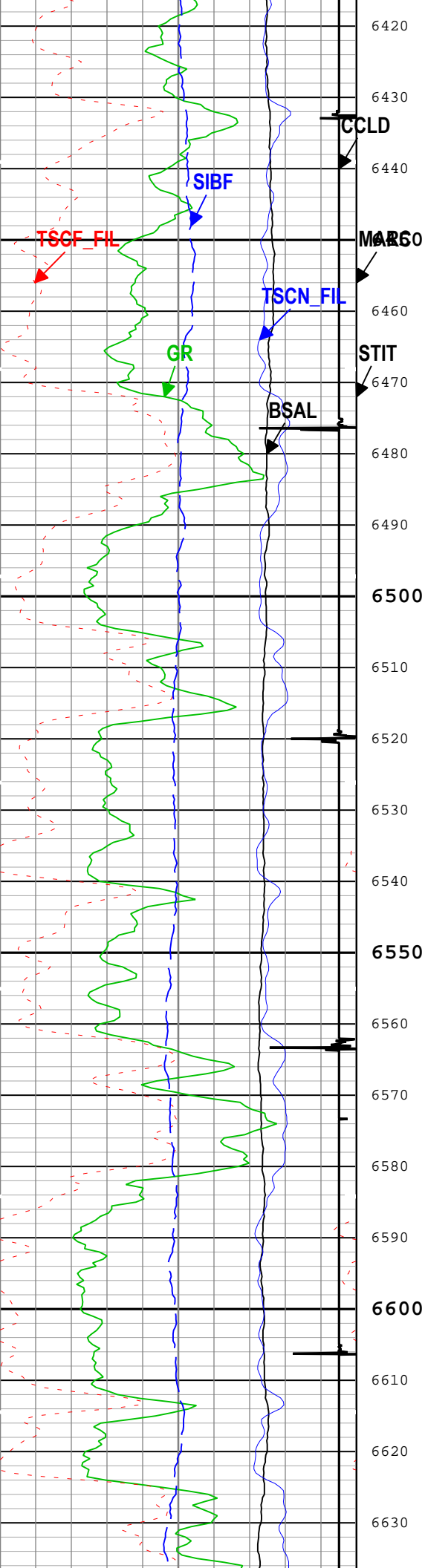


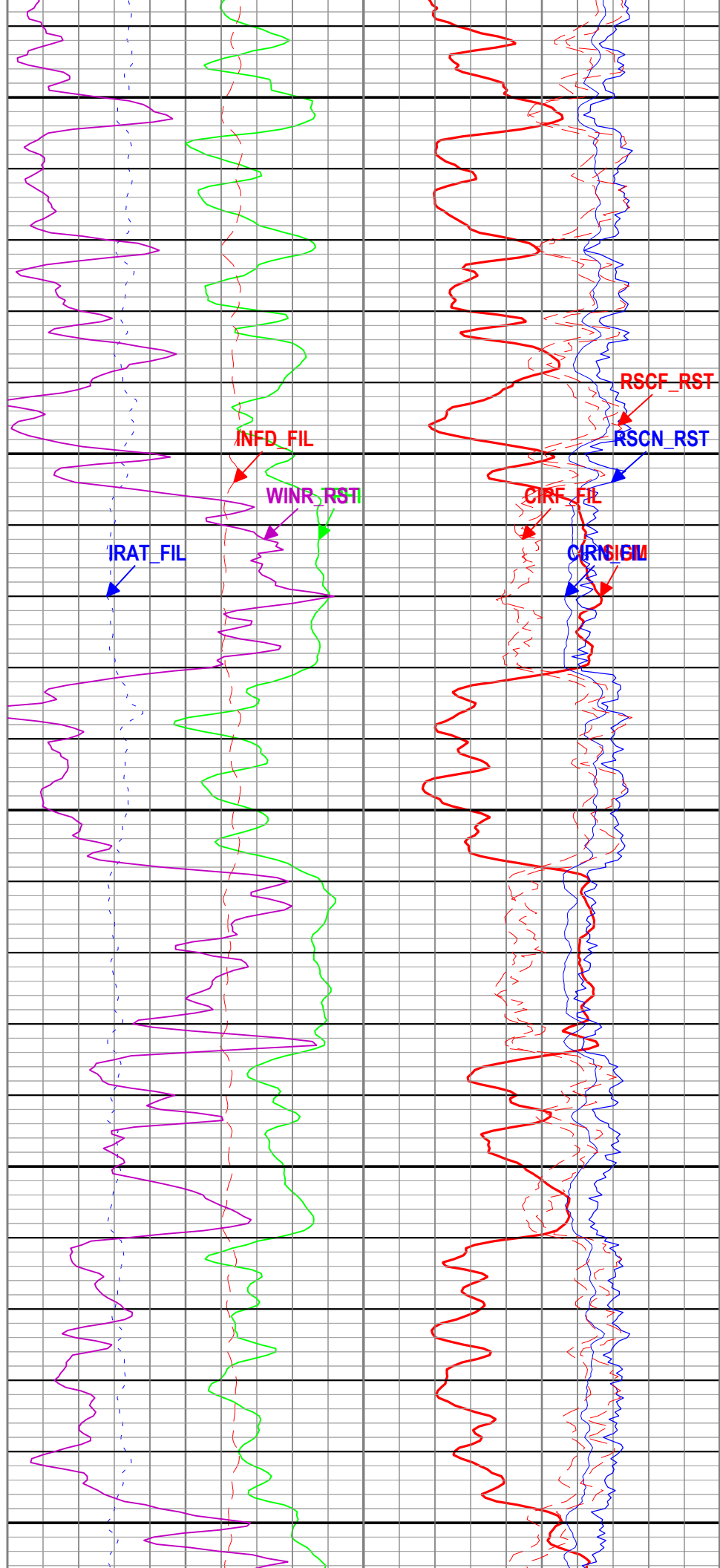
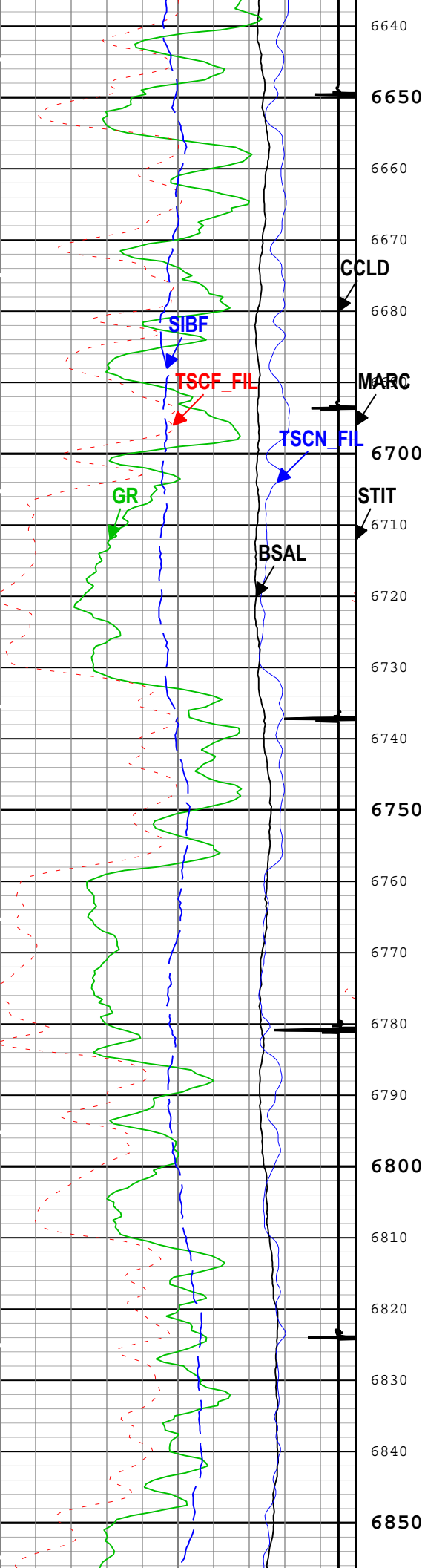


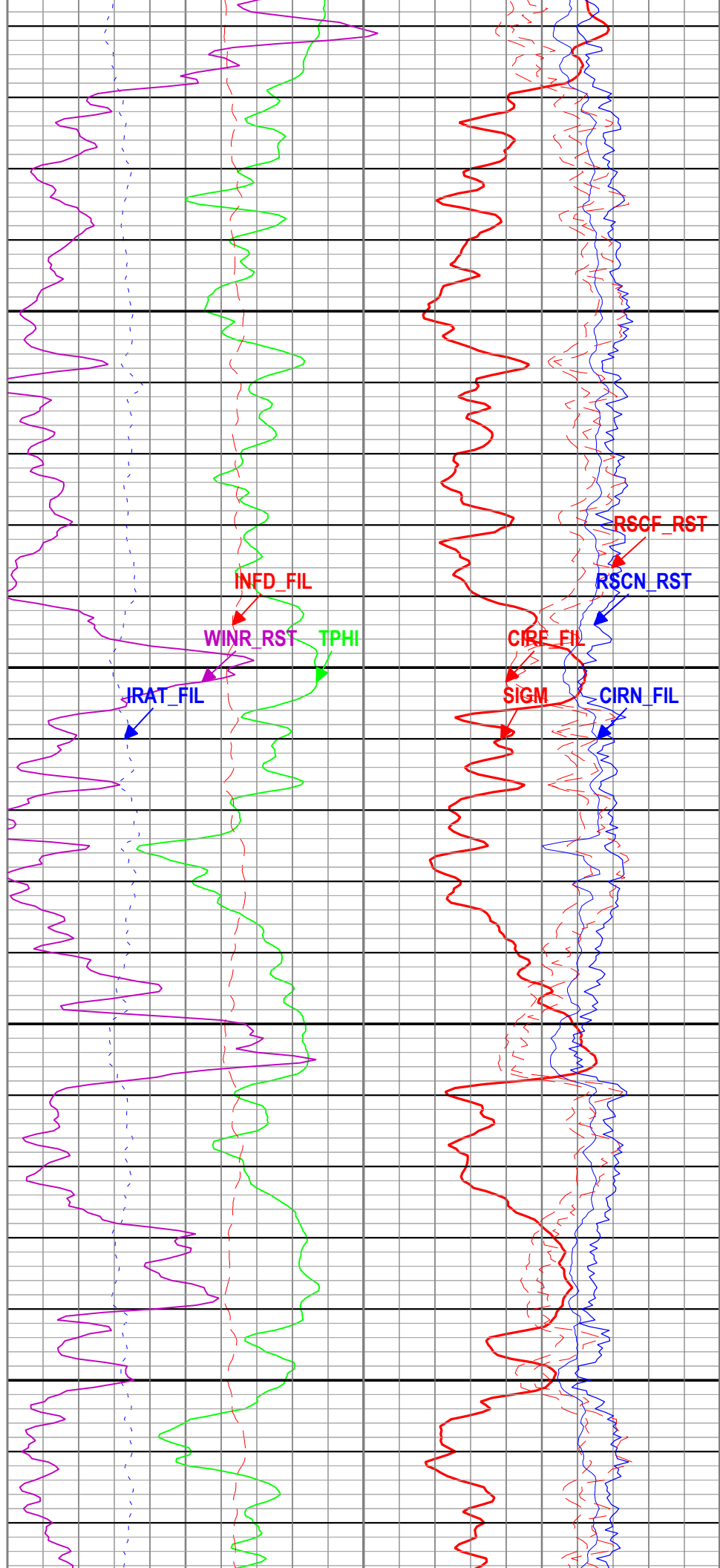
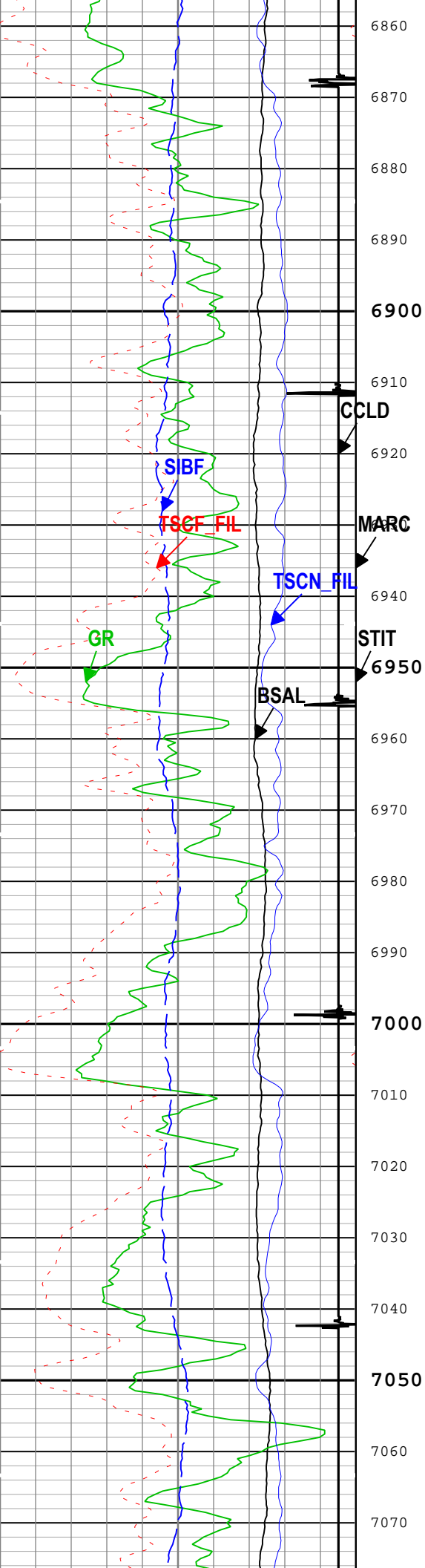


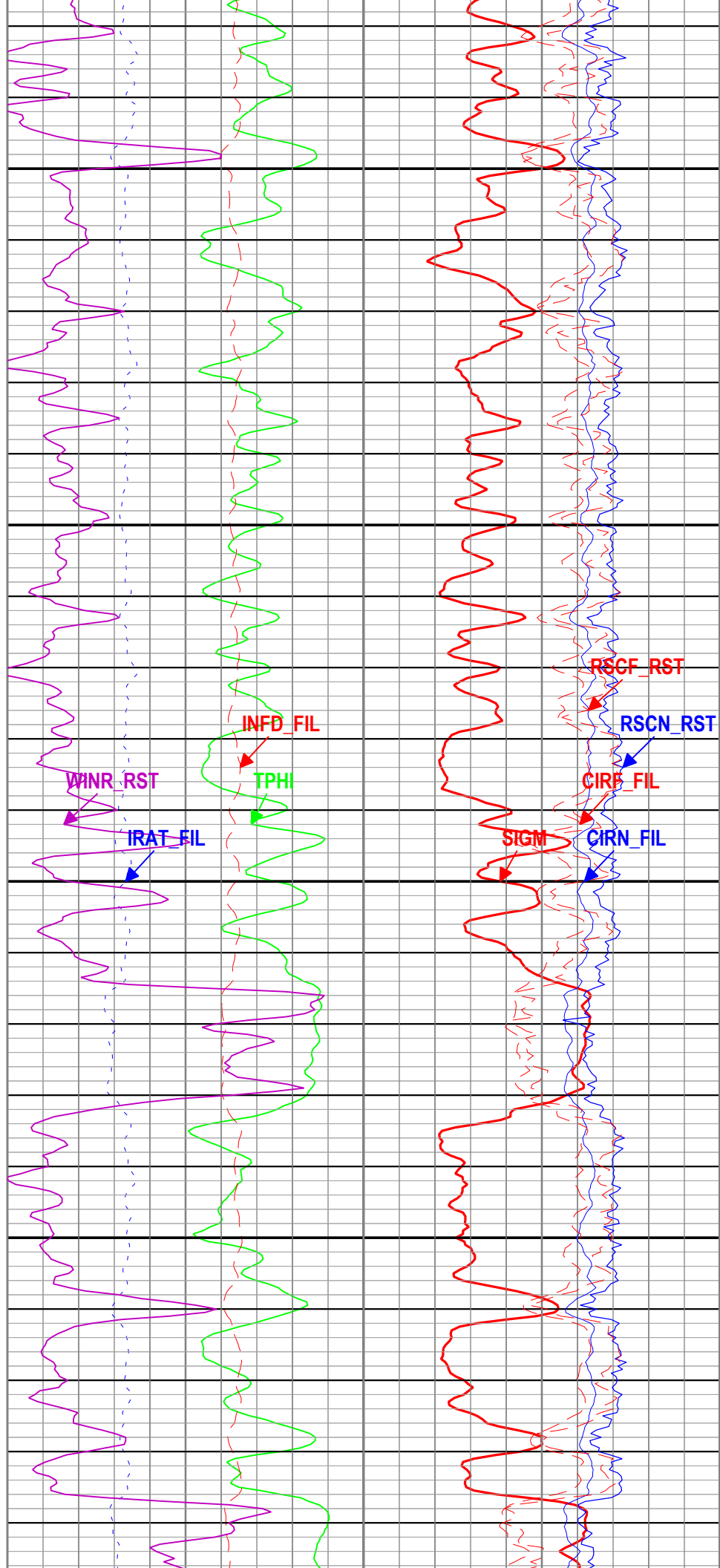
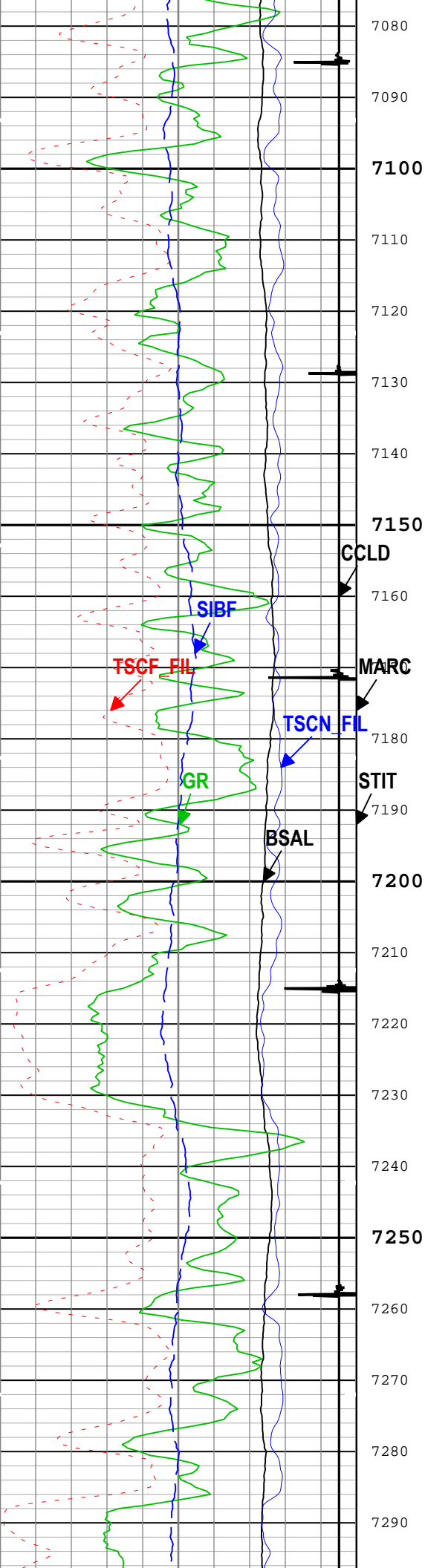


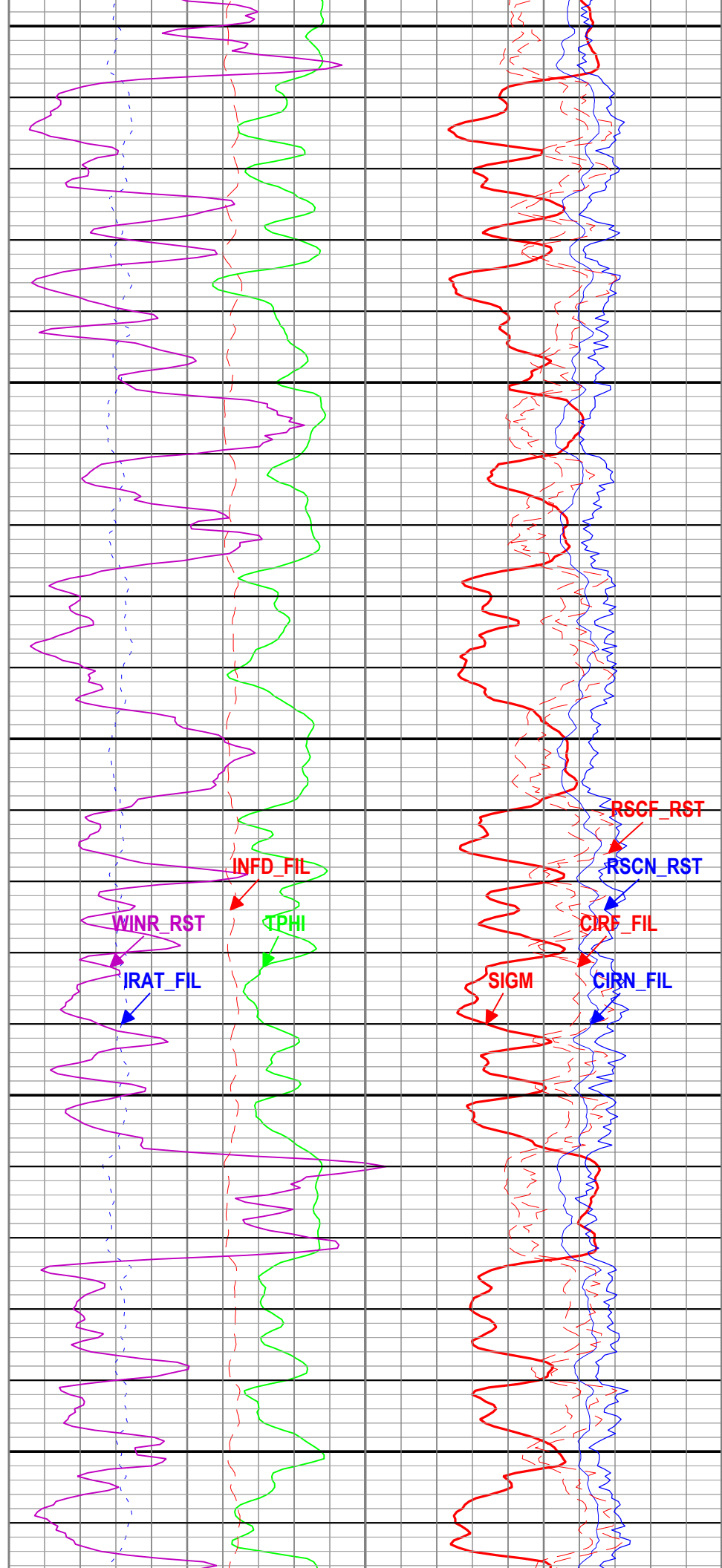
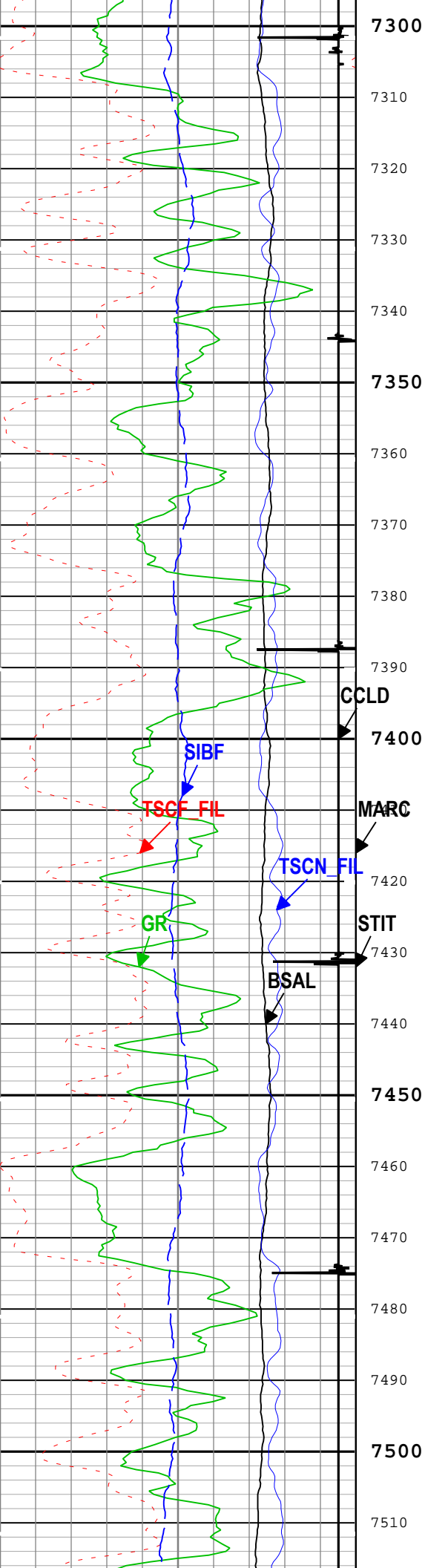


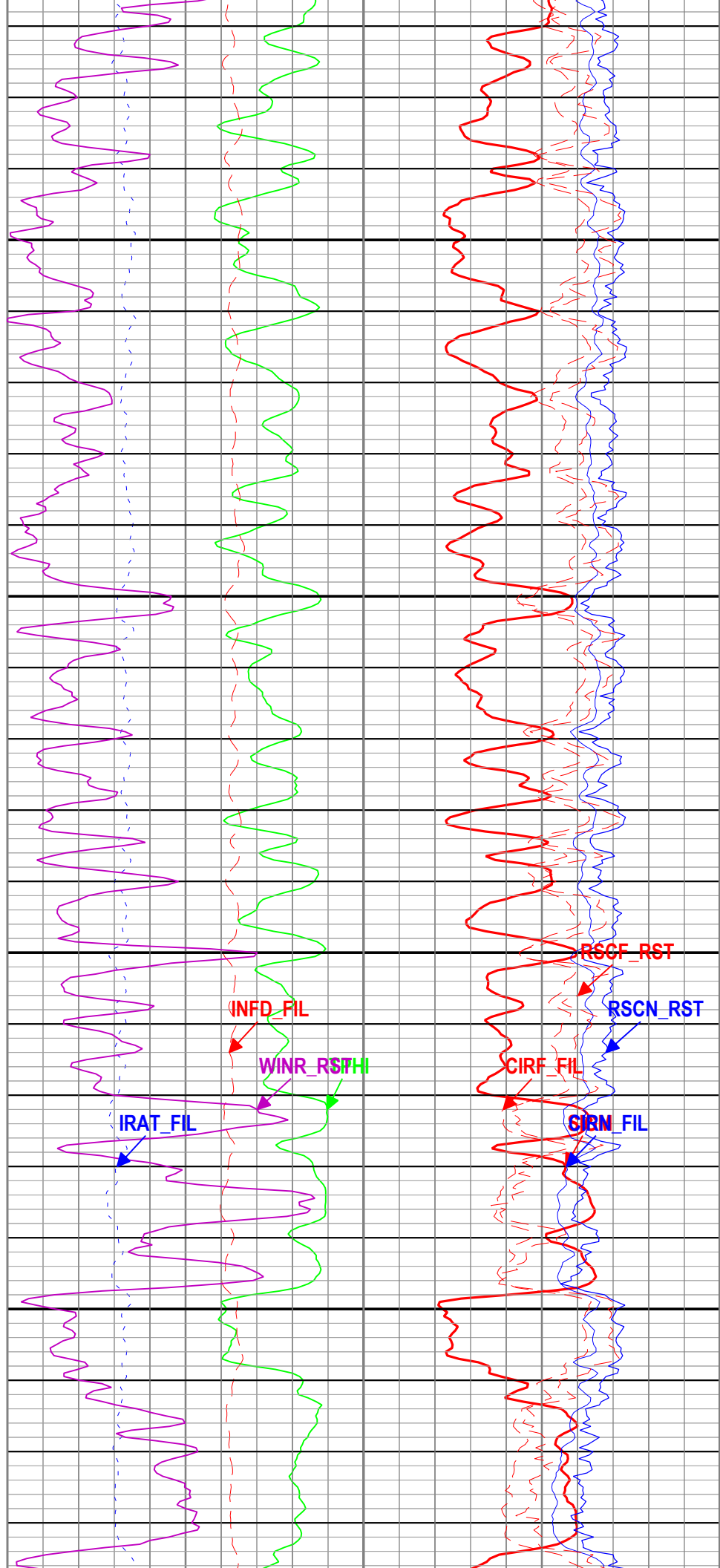
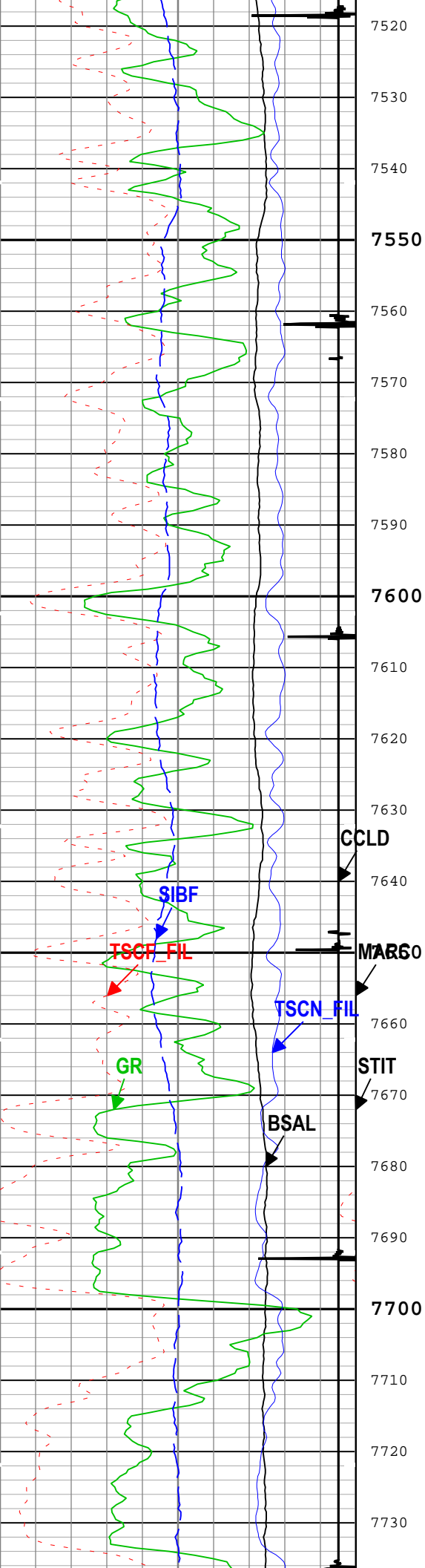


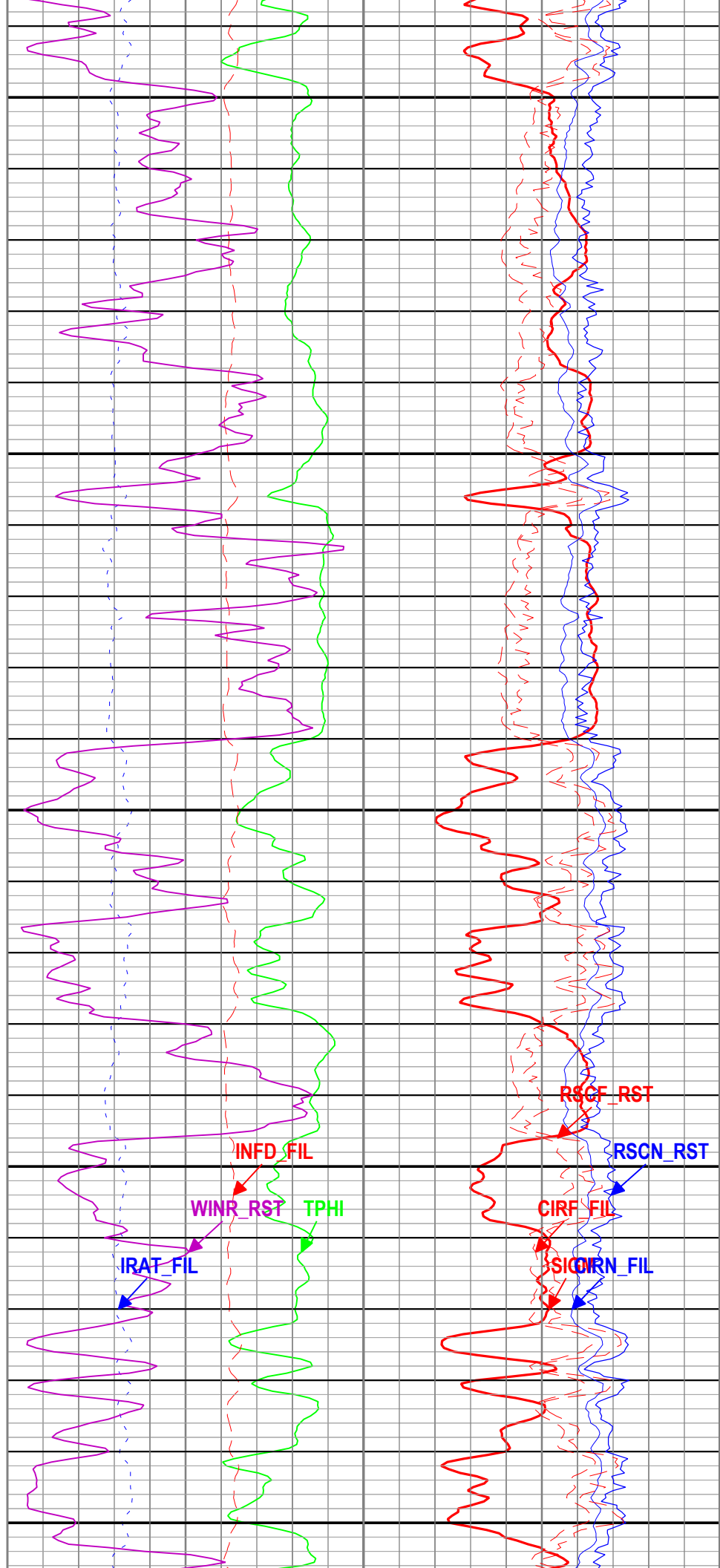
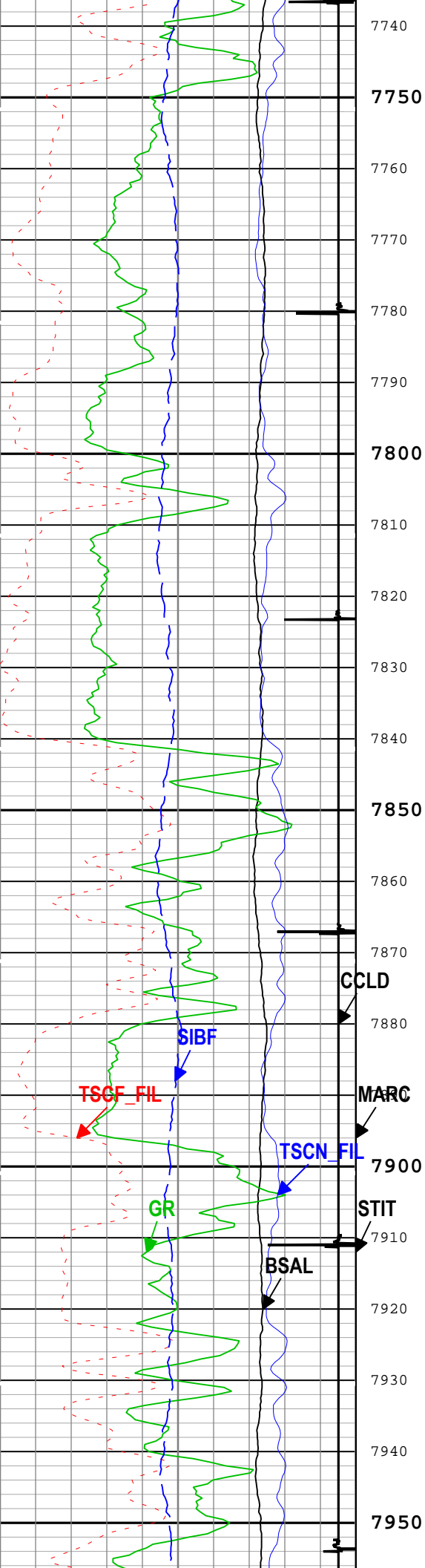


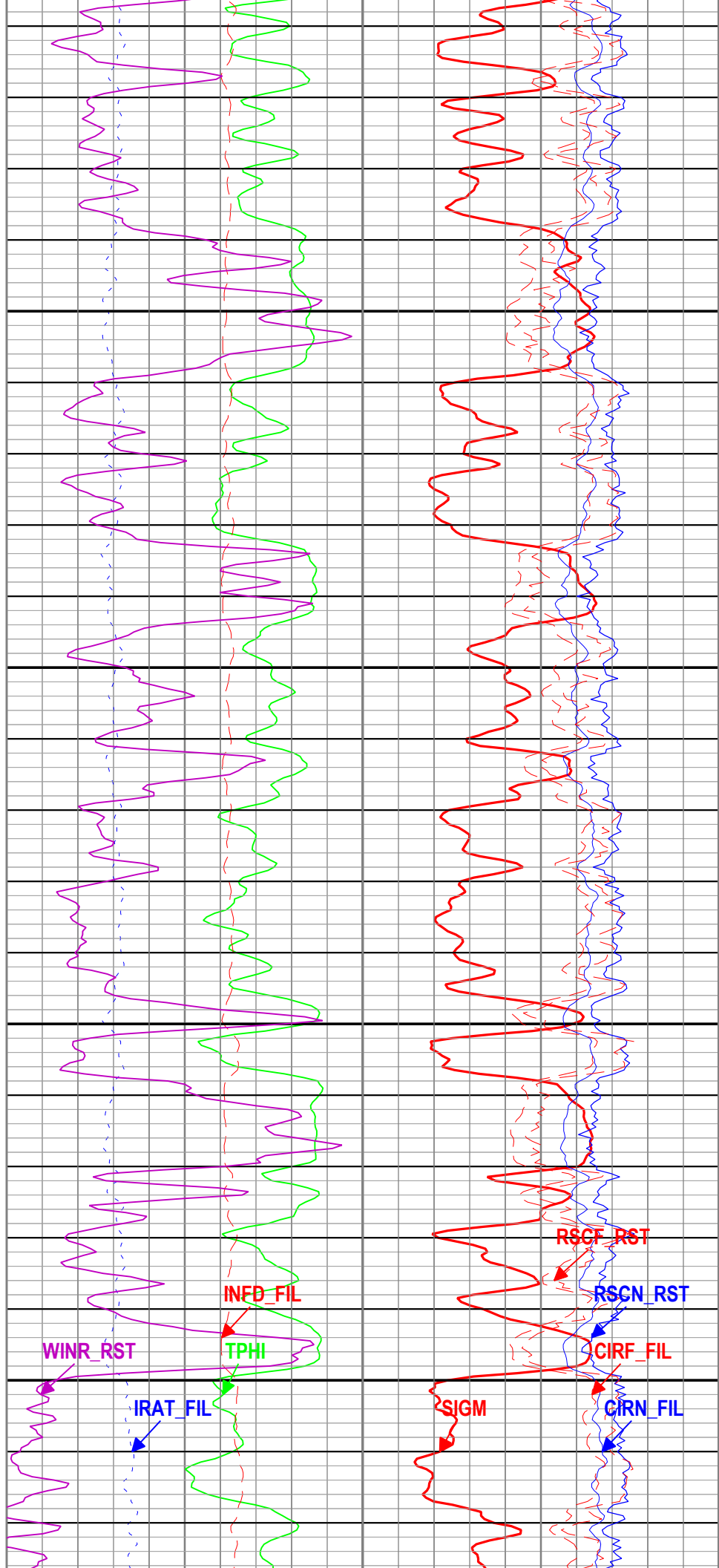
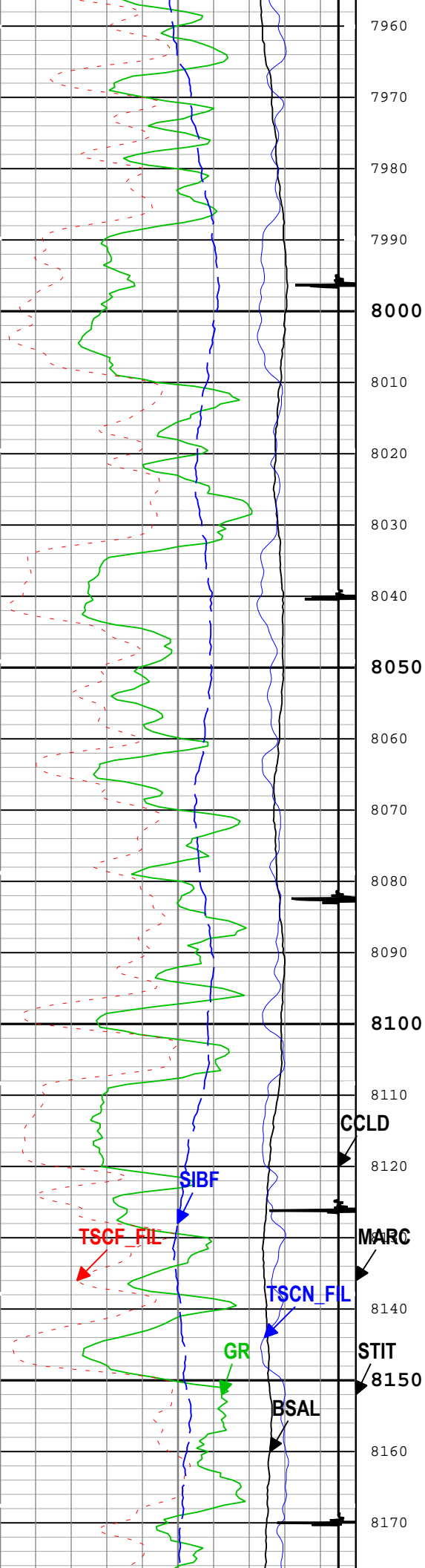


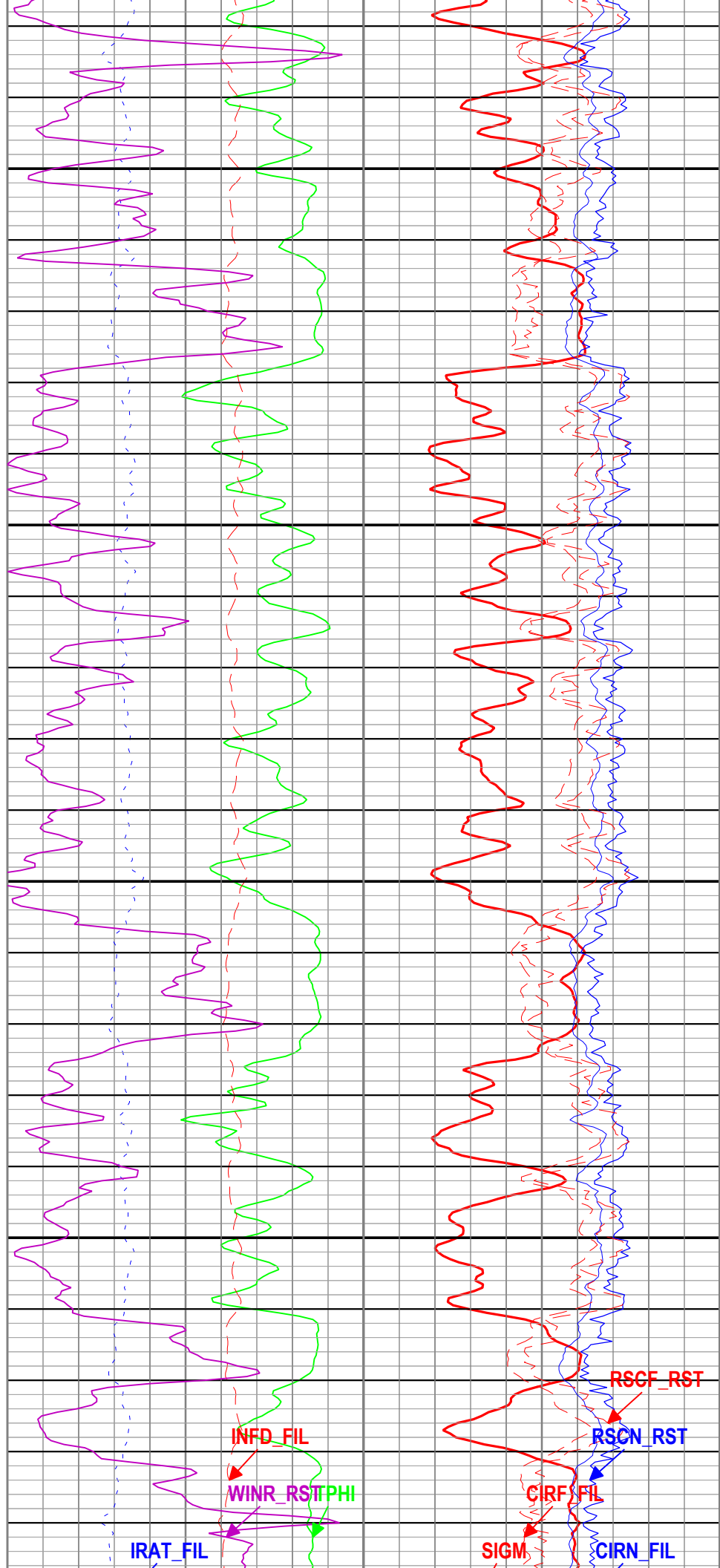
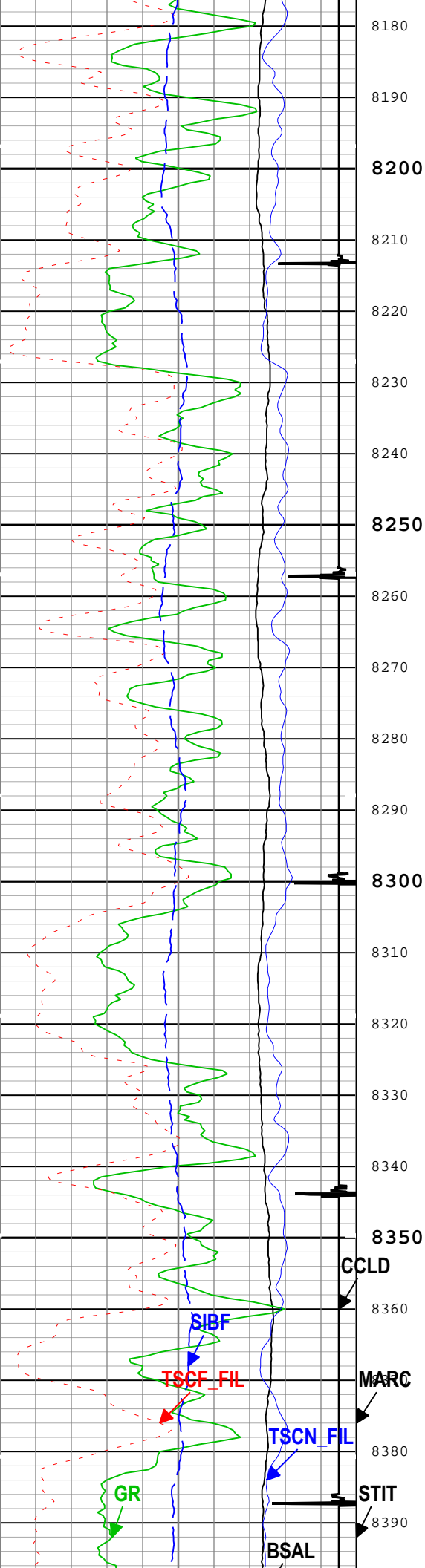


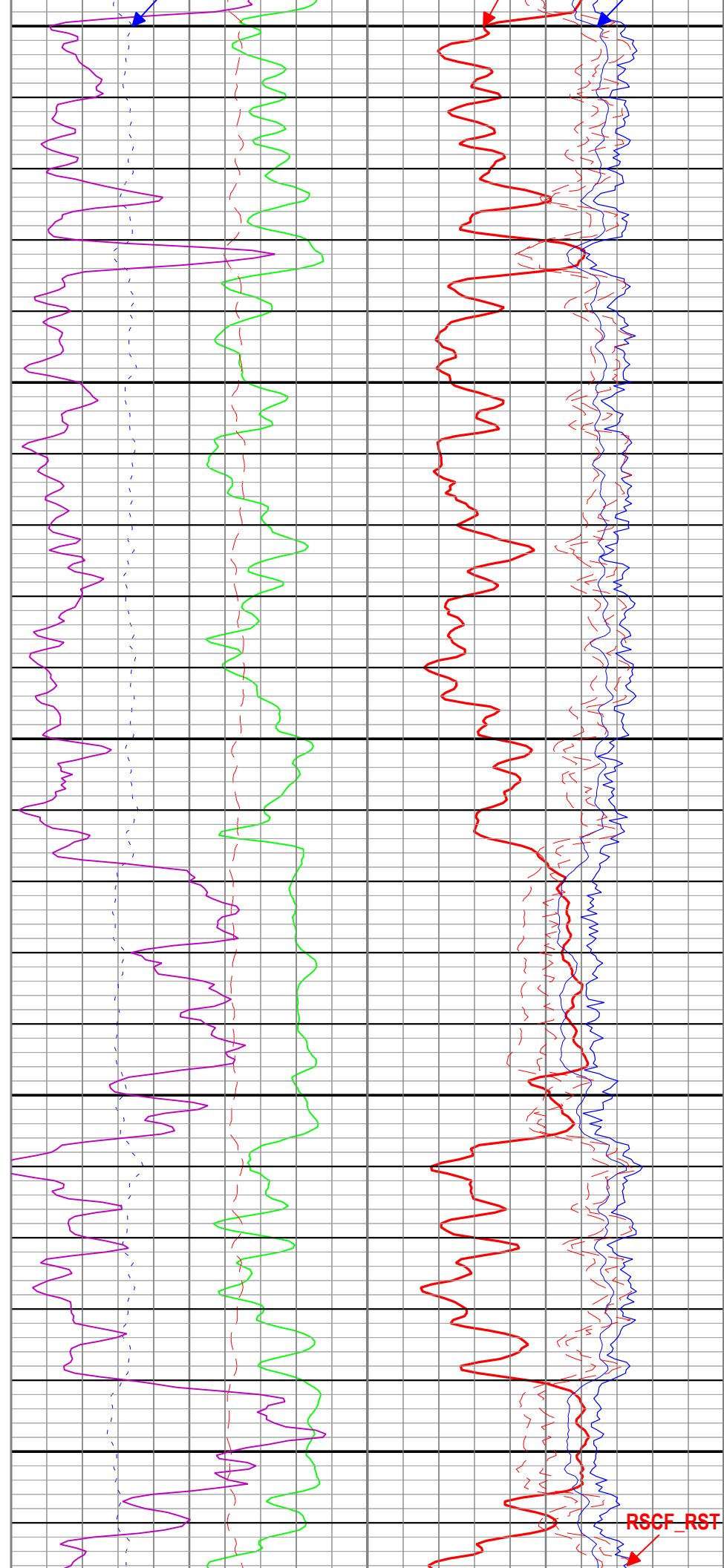
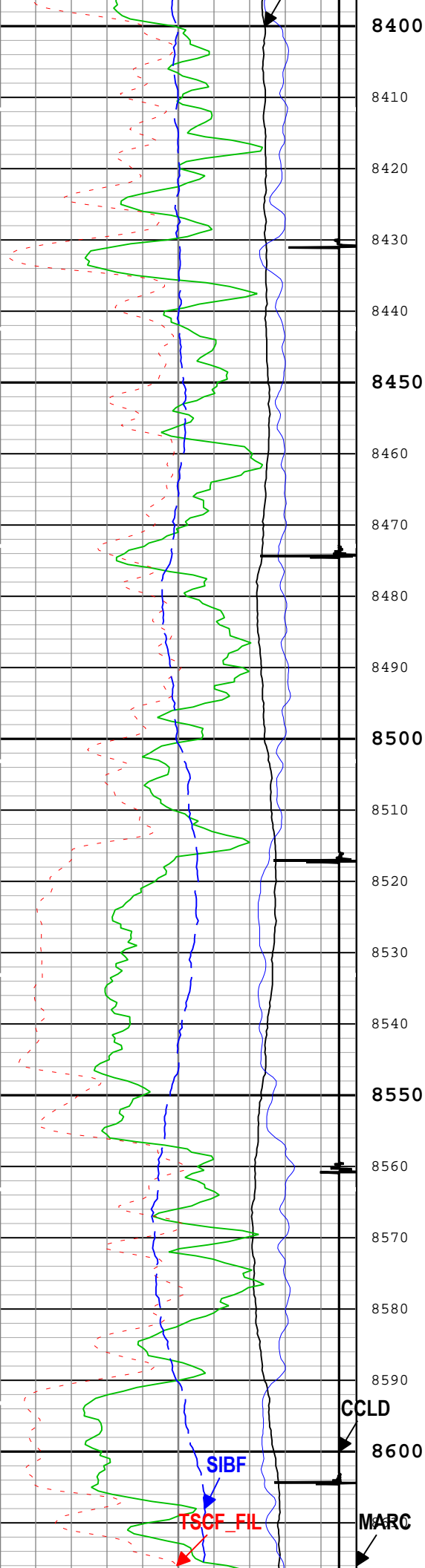


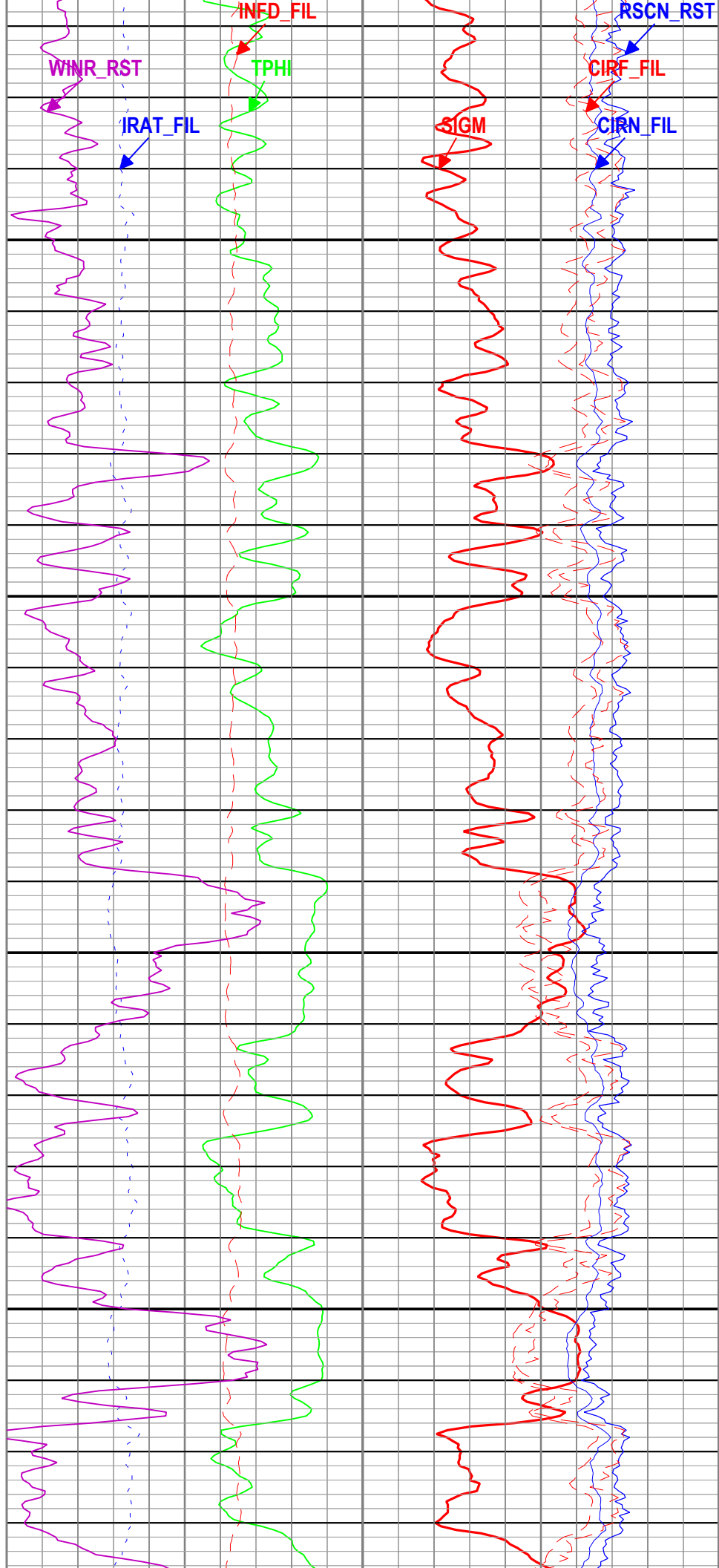
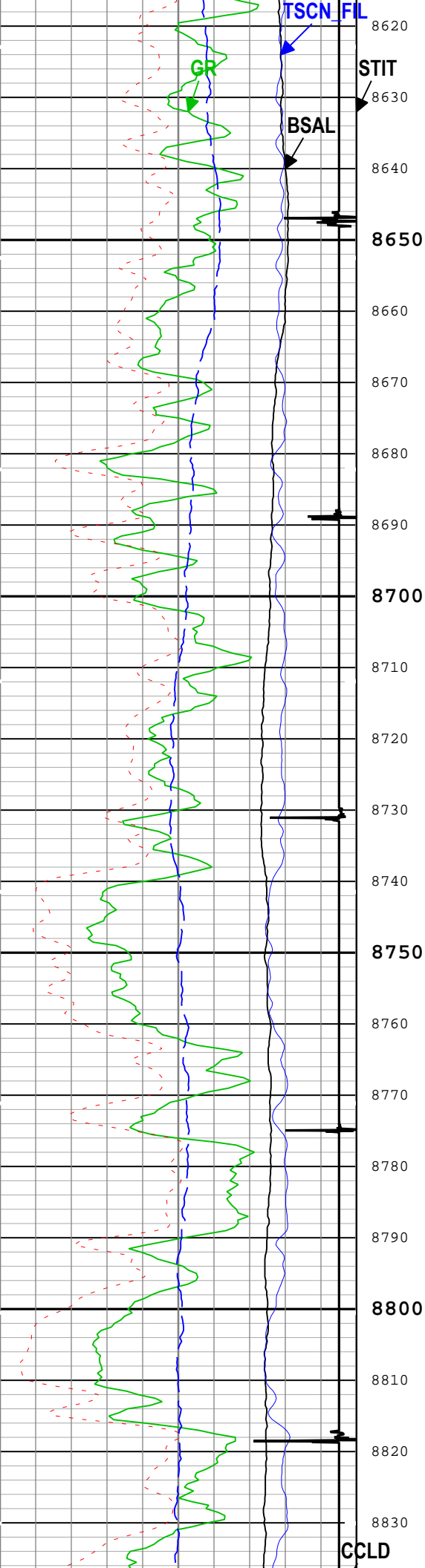


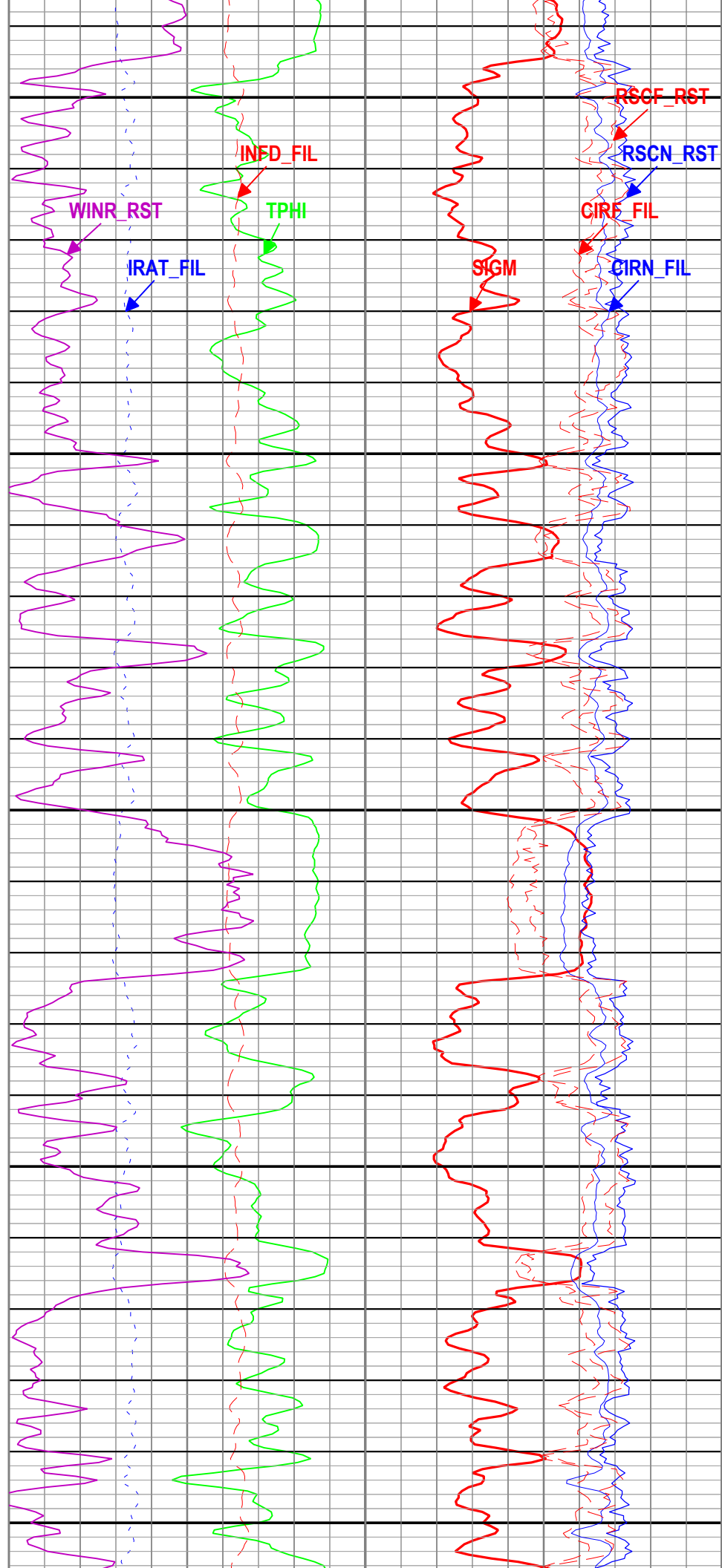
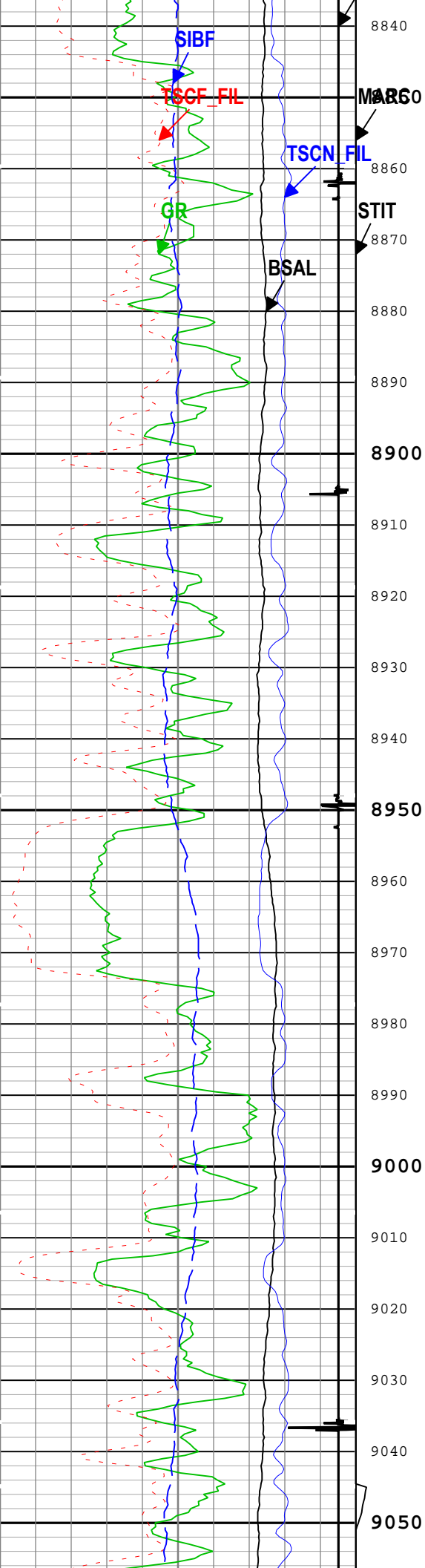


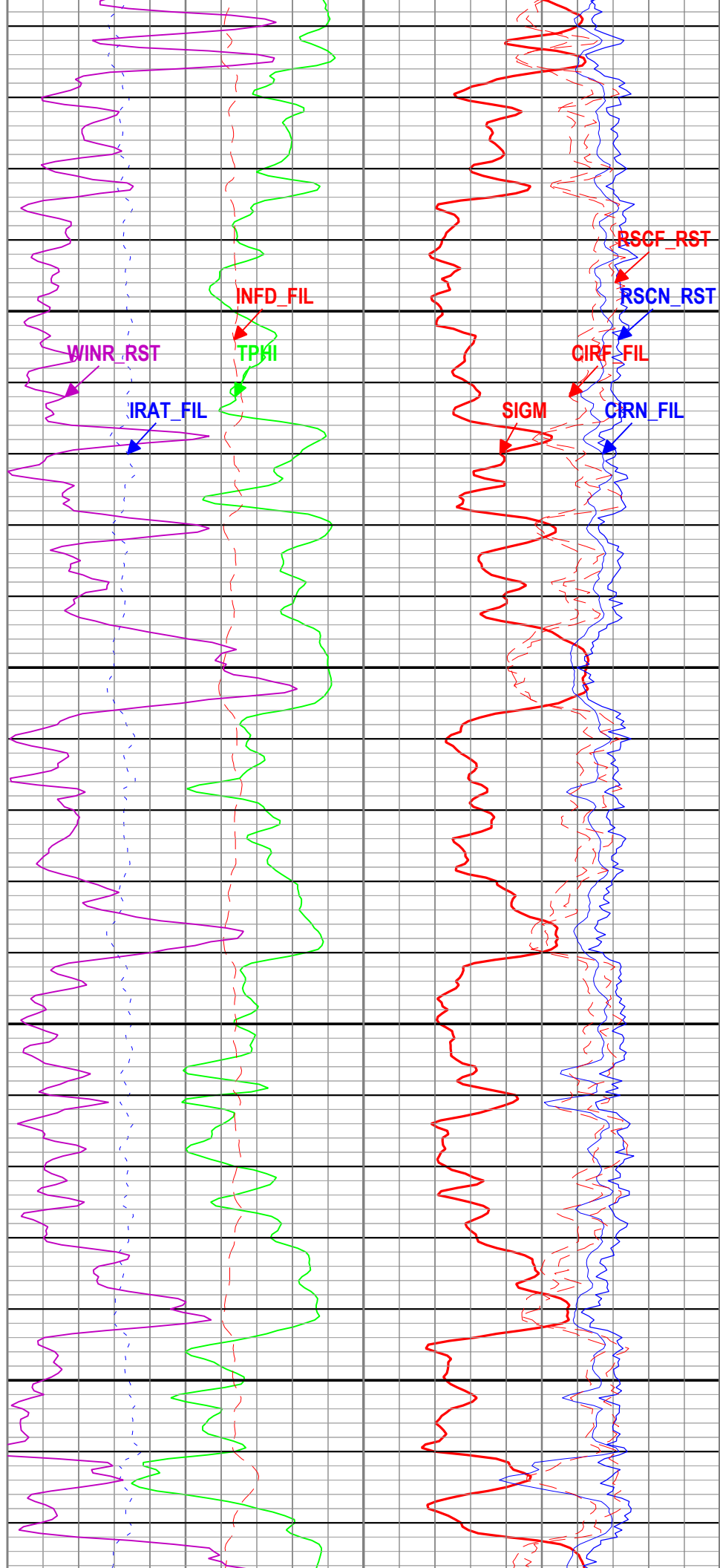
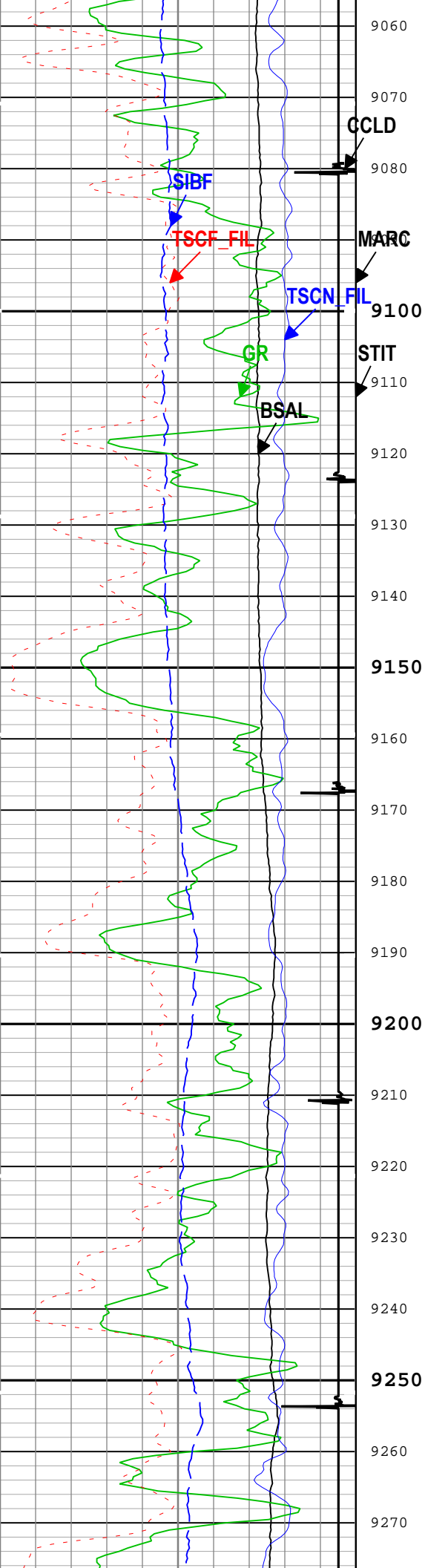


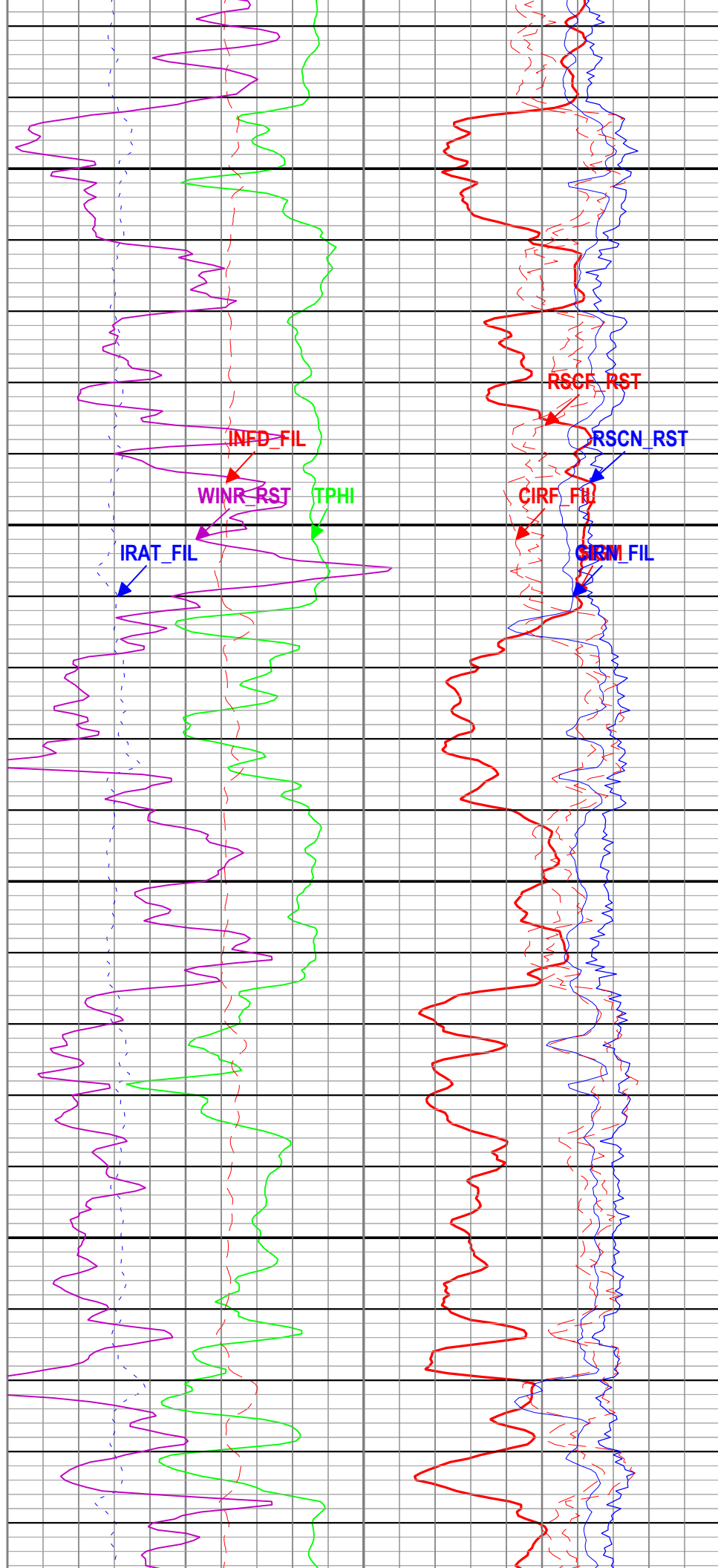
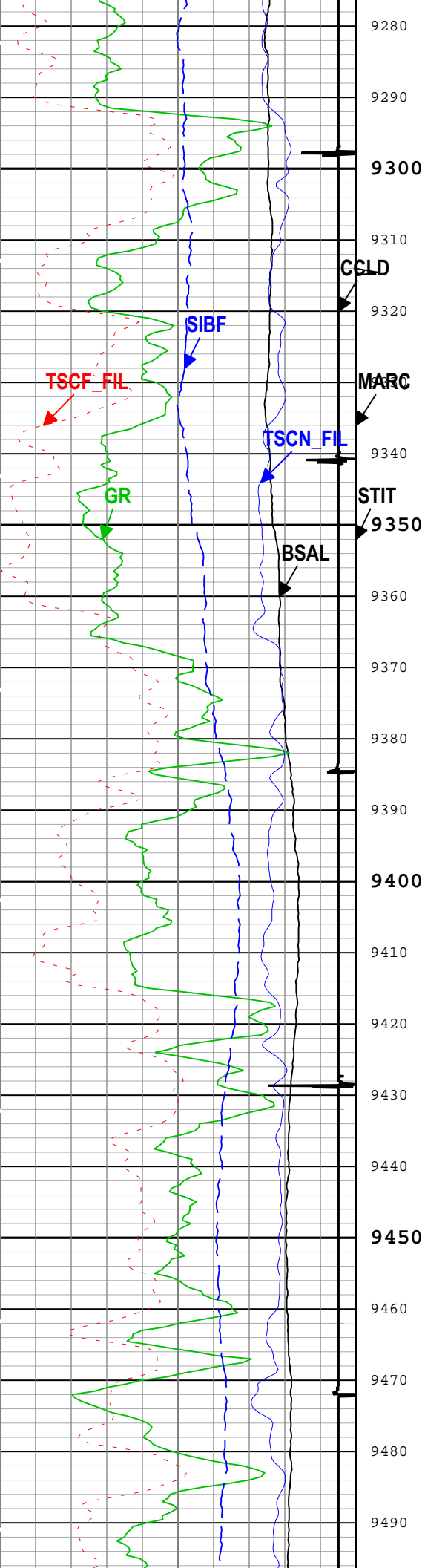


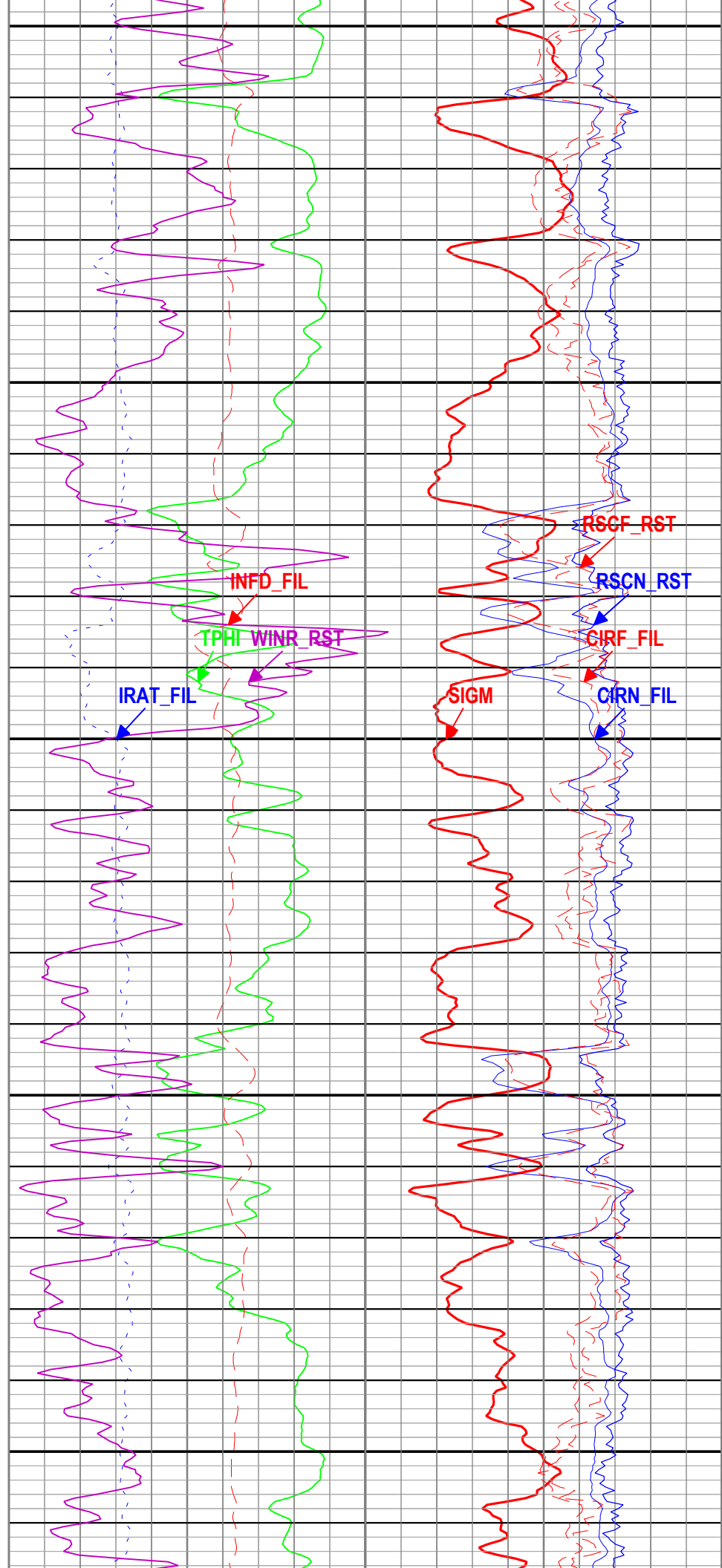
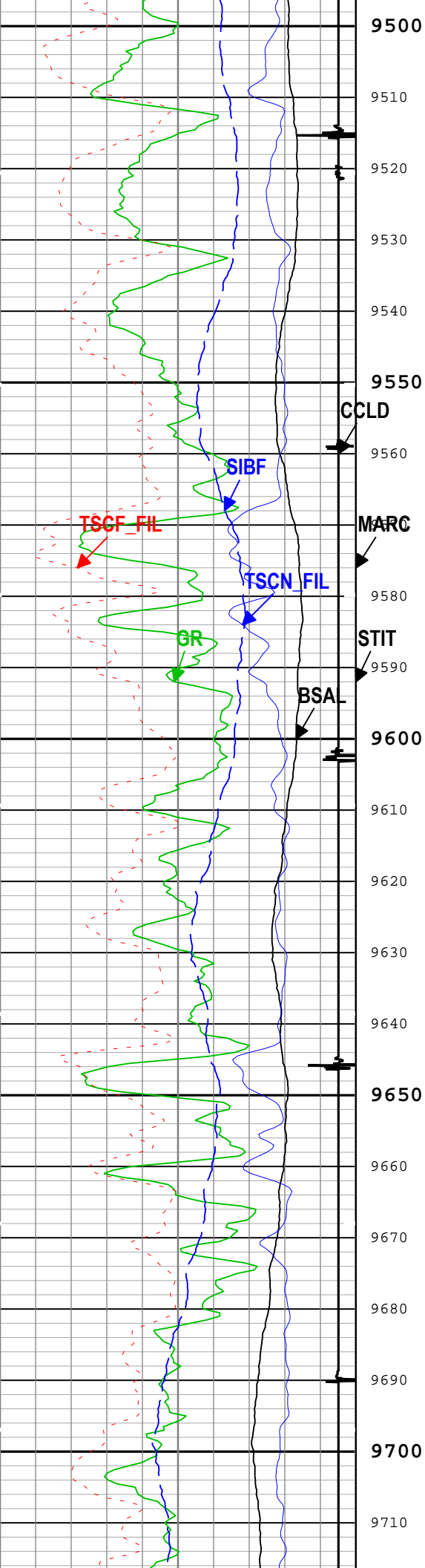


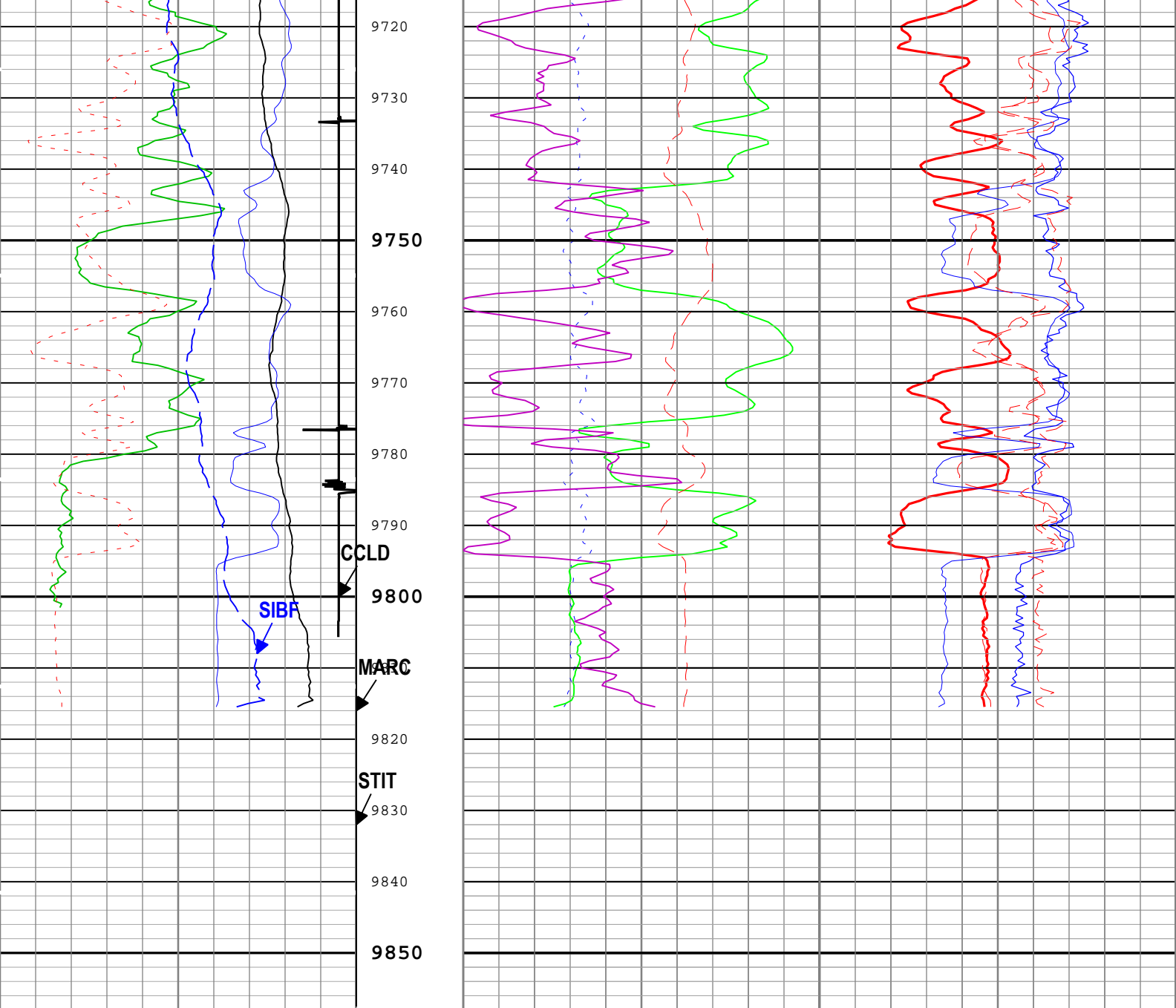












Borehole Salinity (BSAL) RST-C			Stuck Tool Indicator, Total (STIT)			Formation Sigma (Neutron Capture Cross Section) (SIGM) RST-C		
450	ppk	-50	0	ft	50	60	cu	0
Gamma Ray (GR) PSTP-B			Cable Drag From STIA to STIT			Weighted Inelastic Ratio (WINR_RST) RST-C		
0	gAPI	150	Tool_Tot. Drag From D3T to STIT			0		0.4
Total Selected Count Rate Near Detector Filtered (TSCN_FIL) RST-C			Minitron Arc Count (MARC) RST-C			Inelastic Ratio Filtered (IRAT_FIL) RST-C		
30000	1/s	0	0		5	0.75		0
Total Selected Count Rate Far Detector Filtered (TSCF_FIL) RST-C			Thermal Decay Porosity (TPHI) RST-C			Capture to Inelastic Ratio Near Filtered (CIRN_FIL) RST-C		
12000	1/s	0	ft3/ft3			2.5		0
Sigma Borehole Fluid (SIBF) RST-C			Gross Inelastic Count Rate Far Detector Filtered (INFD_FIL) RST-C			Capture to Inelastic Ratio Far Filtered (CIRF_FIL) RST-C		
100	cu	0	1/s			5		0
CCL Discriminated Amplitude (CCLD) PSTP-B			Near Detector Effective Unregulated Capture Count Rate (RSCN_RST) RST-C			45		0
-19	V	1	Far Detector Effective Unregulated Capture Count Rate (RSCF_RST) RST-C			45		0

TIME_1900 - Time Marked every 60.00 (s)

TIME_1900 - Elapsed time since midnight, 30 December 1899 every 60.00 (s)

Channel Processing Parameters

One: Parameters

Parameter	Description	Tool	Value	Unit
BHS	Borehole Status (Open or Cased Hole)	Borehole	Cased	
BS	Bit Size	WLSESSION	Depth Zoned	in
BSAL	Borehole Salinity	Borehole	0	ppm
BSALOPT	Borehole Salinity Option	RST-C	Unknown	
DFT_CATEGORY	Drilling Fluid Type	Borehole	Water	
MATR	Rock Matrix for Neutron Porosity Corrections	Borehole	SANDSTONE	
TD	Total Measured Depth	Borehole	9838	ft

Depth Zone Parameters

Parameter	Value	Start (ft)	Stop (ft)
BS	14.75	2100	2254
BS	8.75	2254	9838

All depth are actual.

Tool Control Parameters

One: Parameters

Parameter	Description	Tool	Value	Unit
MAX_LOG_SPEED	Toolstring Maximum Logging Speed	WLSESSION	150	ft/h
PCCG	PSP Downhole CCL Gain	PSTP-B	24 dB	
RST_DLM	Depth Log Mode	RST-C	Sigma	

One

Software Version

Acquisition System	Version
Maxwell 2017 SP3	7.3.92069.3100
Application Patch	Wireline_Hotfix-RTDLIS-2017SP3_7.3.92363
	Wireline_Hotfix-SML-2017SP3_7.3.101161

Pass Summary

Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	DSC Mode	Depth Shift	Include Parallel Data
One	Log[2]:Up	Up	9424.34 ft	9900.70 ft	13-Sep-2018 6:48:06 PM	13-Sep-2018 7:05:34 PM	ON	7.99 ft	No

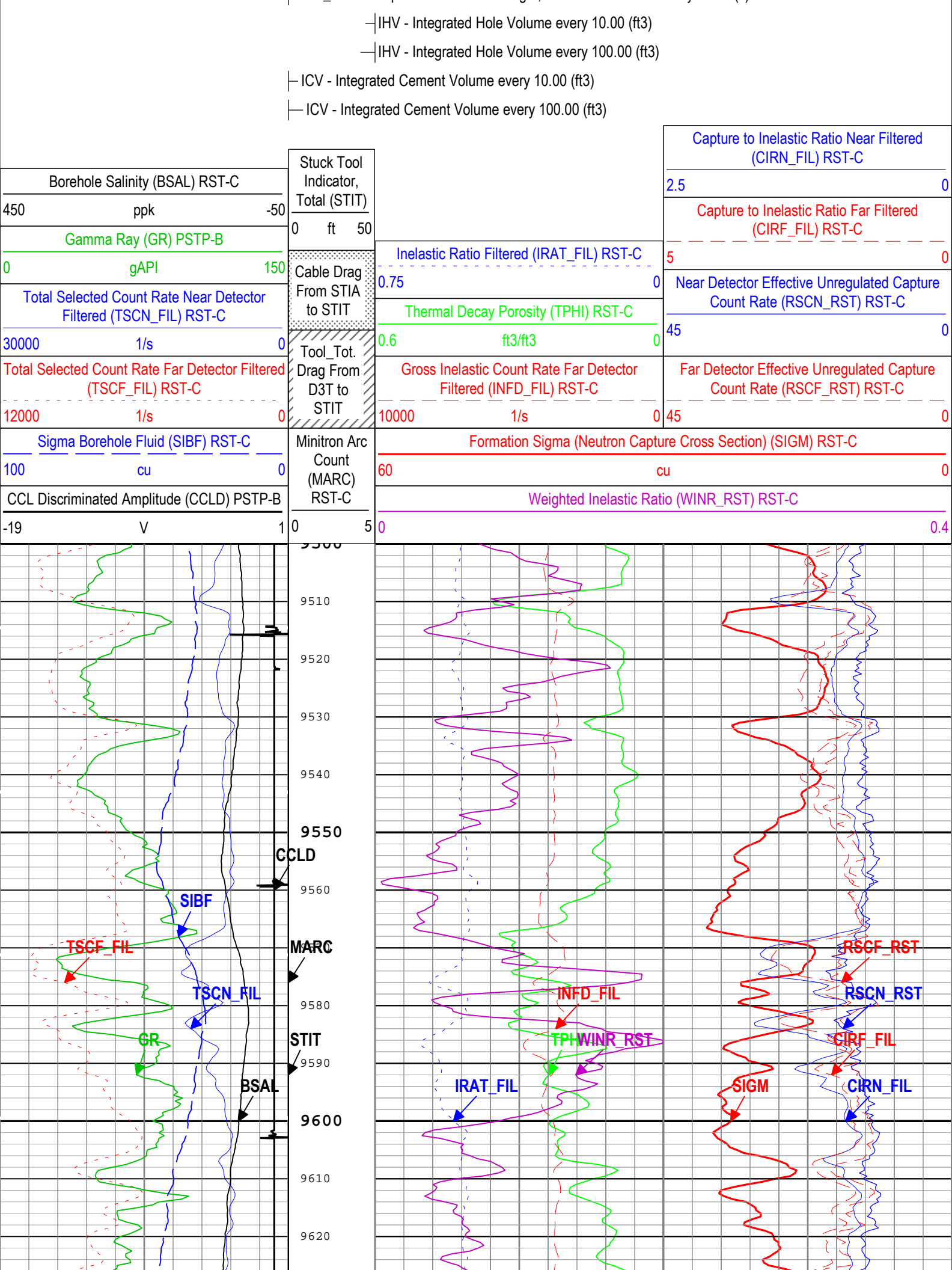
All depths are referenced to toolstring zero

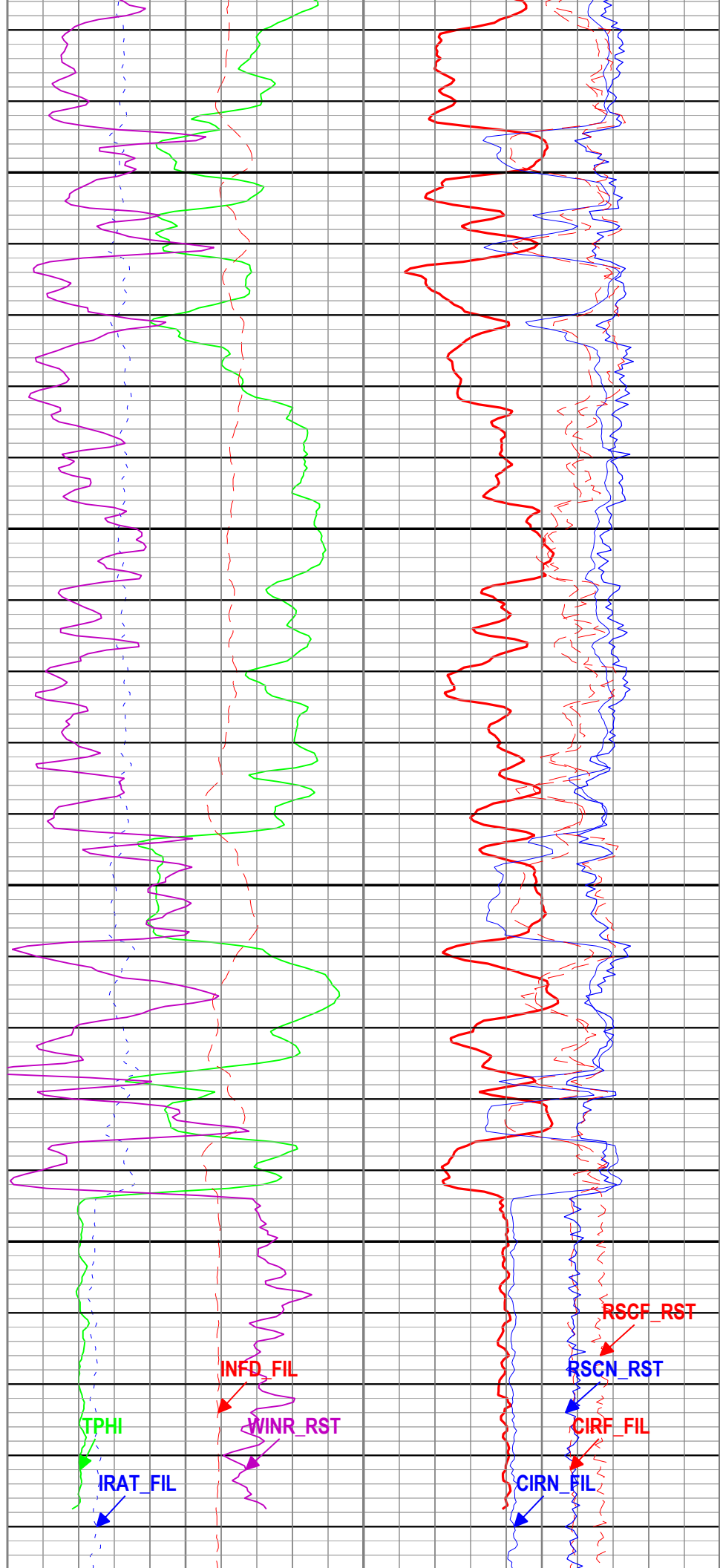
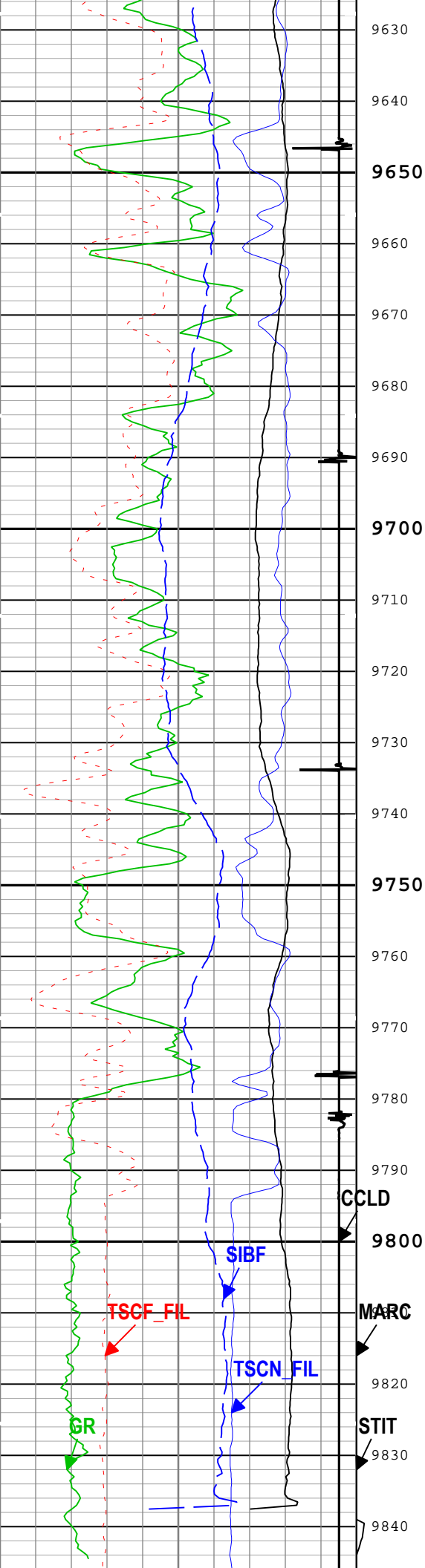
Log

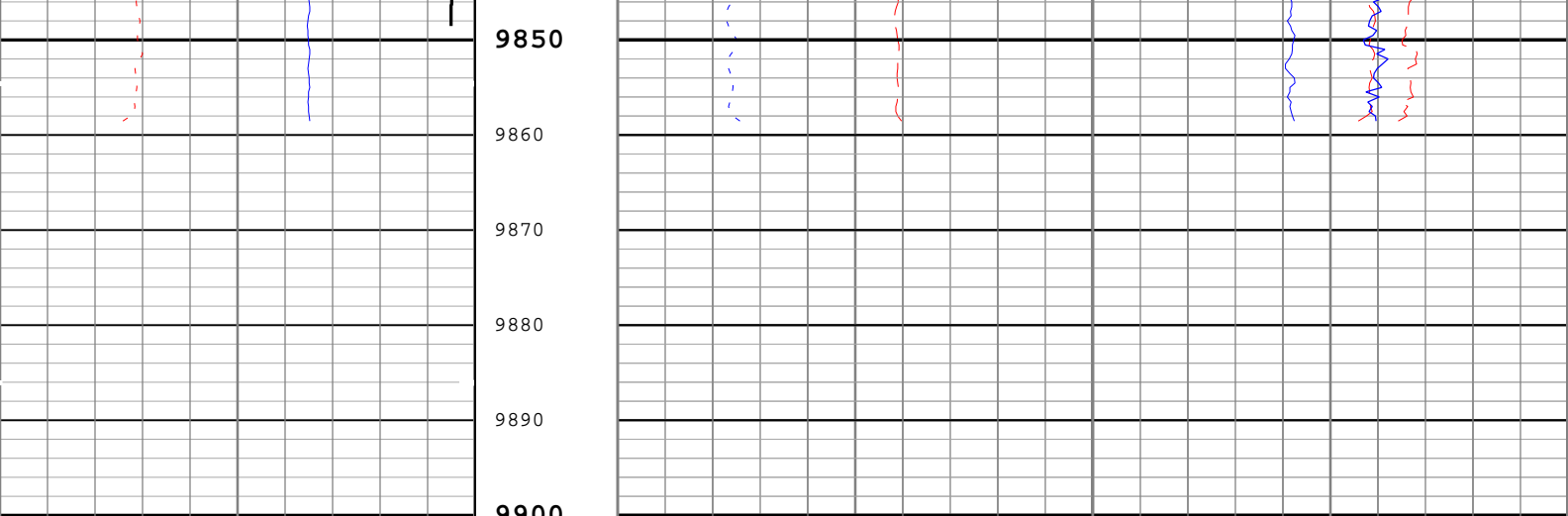
One: Log[2]:Up:S003

TIME 1900 - Time Marked every 60.00 (s)

TIME 1900 - Elapsed time since midnight, 30 December 1899 every 60.00 (s)







Borehole Salinity (BSAL) RST-C			Stuck Tool Indicator, Total (STIT)			Formation Sigma (Neutron Capture Cross Section) (SIGM) RST-C		
450	ppk	-50	0	ft	50	60	cu	0
Gamma Ray (GR) PSTP-B			Cable Drag From STIA to STIT			Weighted Inelastic Ratio (WINR_RST) RST-C		
0	gAPI	150	Tool_Tot. Drag From D3T to STIT			0		0.4
Total Selected Count Rate Near Detector Filtered (TSCN_FIL) RST-C			Minitron Arc Count (MARC) RST-C			Inelastic Ratio Filtered (IRAT_FIL) RST-C		
30000	1/s	0	0			0.75		0
Total Selected Count Rate Far Detector Filtered (TSCF_FIL) RST-C			Thermal Decay Porosity (TPHI) RST-C			Capture to Inelastic Ratio Near Filtered (CIRN_FIL) RST-C		
12000	1/s	0	0.6			ft3/ft3	2.5	0
Sigma Borehole Fluid (SIBF) RST-C			Gross Inelastic Count Rate Far Detector Filtered (INFD_FIL) RST-C			Capture to Inelastic Ratio Far Filtered (CIRF_FIL) RST-C		
100	cu	0	10000			1/s	5	0
CCL Discriminated Amplitude (CCLD) PSTP-B			Near Detector Effective Unregulated Capture Count Rate (RSCN_RST) RST-C			Far Detector Effective Unregulated Capture Count Rate (RSCF_RST) RST-C		
-19	V	1	45			45		0

- ICV - Integrated Cement Volume every 100.00 (ft3)
- ICV - Integrated Cement Volume every 10.00 (ft3)
- IHV - Integrated Hole Volume every 100.00 (ft3)
- IHV - Integrated Hole Volume every 10.00 (ft3)
- TIME_1900 - Elapsed time since midnight, 30 December 1899 every 60.00 (s)

TIME_1900 - Time Marked every 60.00 (s)

Description: RST SIGMA Answer Format: Log (RST SIGMA Answer) Index Scale: 5 in per 100 ft Index Unit: ft Index Type: Measured Depth Creation Date: 14-Sep-2018 04:03:30

Channel Processing Parameters				
One: Parameters				
Parameter	Description	Tool	Value	Unit
BHS	Borehole Status (Open or Cased Hole)	Borehole	Cased	
BS	Bit Size	WLSESSION	8.75	in
BSAL	Borehole Salinity	Borehole	0	ppm
BSALOPT	Borehole Salinity Option	RST-C	Unknown	
DFT_CATEGORY	Drilling Fluid Type	Borehole	Water	
MATR	Rock Matrix for Neutron Porosity Corrections	Borehole	SANDSTONE	
TD	Total Measured Depth	Borehole	9838	ft

Tool Control Parameters				
-------------------------	--	--	--	--

One: Parameters

Parameter	Description	Tool	Value	Unit
MAX_LOG_SPEED	Toolstring Maximum Logging Speed	WLSESSION	150	ft/h
PCCG	PSP Downhole CCL Gain	PSTP-B	24 dB	
RST_DLM	Depth Log Mode	RST-C	Sigma	

Company:	Caerus Operating LLC	Schlumberger
Well:	NPR 23A-10 596	
Field:	NPR	
County:	Garfield	
State:	Colorado	
Cement Bond Log		
RST Sigma Log		
Gamma Ray - Collar Locator		