

Company: Caerus Operating LLC

Well: Puckett 12D-26-697

Field: Grand Valley

County: Garfield State: Colorado

Cement Bond Log

RST Sigma Log

Gamma Ray - Collar Locator Log

County: Garfield
Field: Grand Valley
Location: Mesa F26
Well: Puckett 12D-26-697
Company: Caerus Operating LLC

Mesa F26	Elev.:	K.B.	8352.00 ft
		G.L.	8322.00 ft
		D.F.	8352.00 ft
Permanent Datum:	Ground Level	Elev.:	8322.00 f
Log Measured From:	Kelly Bushing	30.00 ft	above Perm.Datum
Drilling Measured From:	Kelly Bushing		
API Serial No.	Section:	Township:	Range:
05045234210000	26	6S	97W

Logging Date 09-May-2018 21-May-2018

Run Number One Two

Depth Driller 8800.00 ft 8800.00 ft

Schlumberger Depth 6258.00 ft 8753.00 ft

Bottom Log Interval 6258.00 ft 8753.00 ft

Top Log Interval 2300.00 ft 2300.00 ft

Casing Fluid Type 2% KCL Water 2% KCL Water

Salinity

Density 8.49 lbm/gal 8.49 lbm/gal

Fluid Level 8.00 ft 8.00 ft

BIT/CASING/TUBING STRING

Bit Size 8.75 in 8.75 in

From 2523.00 ft 2523.00 ft

To 6258.00 ft 8753.00 ft

Casing/Tubing Size 4.5 in 4.5 in

Weight 11.6 lbm/ft 11.6 lbm/ft

Grade P110 P110

From 0.00 ft 0.00 ft

To 6258.00 ft 8753.00 ft

Max Recorded Temperatures 175.15 degF 223.14 degF

Logger on Bottom 09-May-2018 18:10:00 21-May-2018 09:08:00

Unit Number 3046 Location: Evanston

Recorded By Mauricio Castaneda Justin Ray

Witnessed By Ryan Tompkins Ryan Tompkins

Disclaimer

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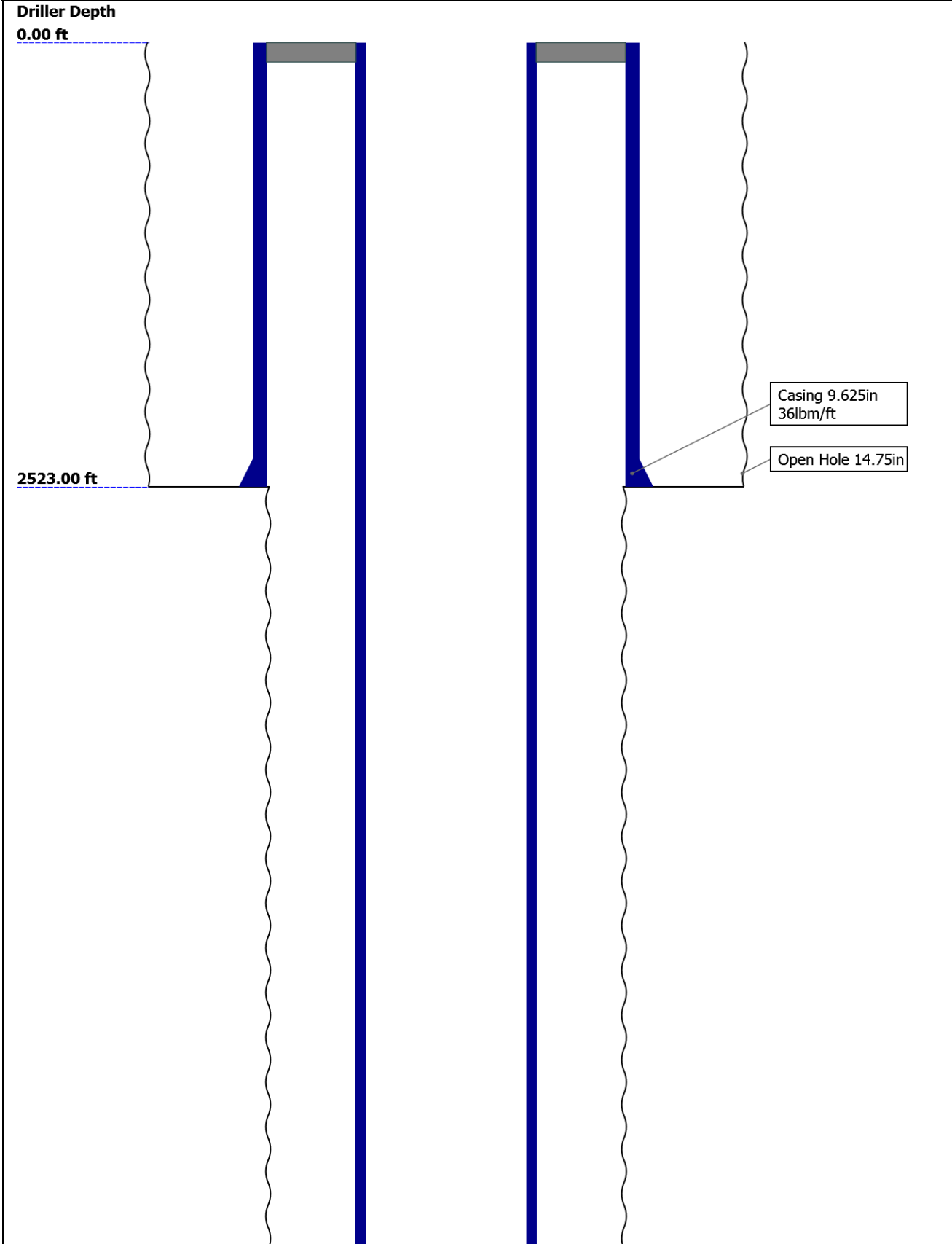
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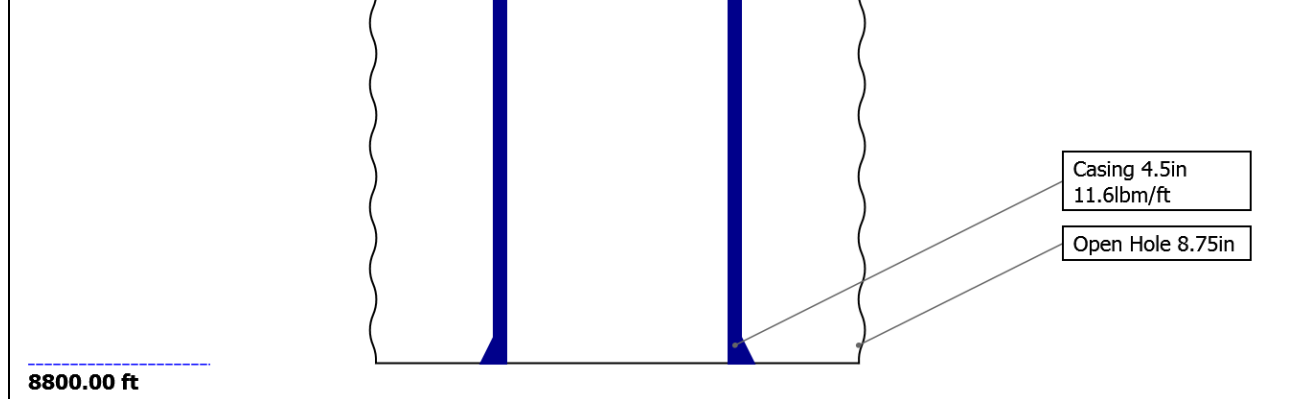
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Well Sketch





Borehole Size/Casing/Tubing Record

Bit						
Bit Size (in)	14.75	8.75				
Top Driller (ft)	0	2523				
Top Logger (ft)	0	2523				
Bottom Driller (ft)	2523	8800				
Bottom Logger (ft)	2523	8753				
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)	2523	8800				
Bottom Logger (ft)	2523	8753				

Remarks and Equipment Summary

One: Remarks	Two: Remarks
Tool Ran as per tool Sketch	Tool string ran as per tool Sketch
3xGemcos used to enhance centralization	Gemcos used to enhance centralization
Max temperature 175.15 F	TD@ 8753ft
Schlumberger TD@ 6258 ft. It is 2542ft shallower than driller depth	Max temprature 223.14 F
Thank you for choosing Schlumberger	Thank you for choosing Schlumberger

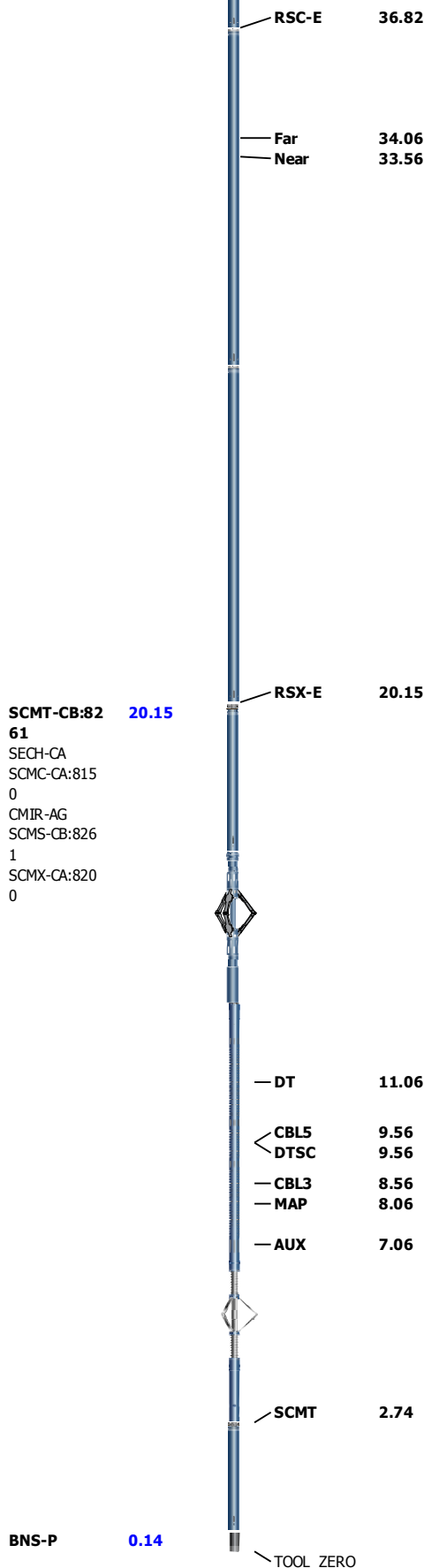
One: Toolstring

Equip name	Length	MP name	Offset
PEH-E	53.4		
AH-38	51.72		
PSTP-A:378	51.44		
1		GR	47.74
PSC-A:3781		PSTC	47.44
PSTC-A:859		PSTC Tool	0.00
PBMS-A:3781		String Bot	
Sapphire 10kP		tom	
SI:33930		Temperatu	44.65
		re	
		Sapphire P	44.54
		ressure	
		CCL	43.92
		PBMS	43.17
RST-C:424	43.17		
RSCH-A:277			
PSC-E:205			

Two: Toolstring

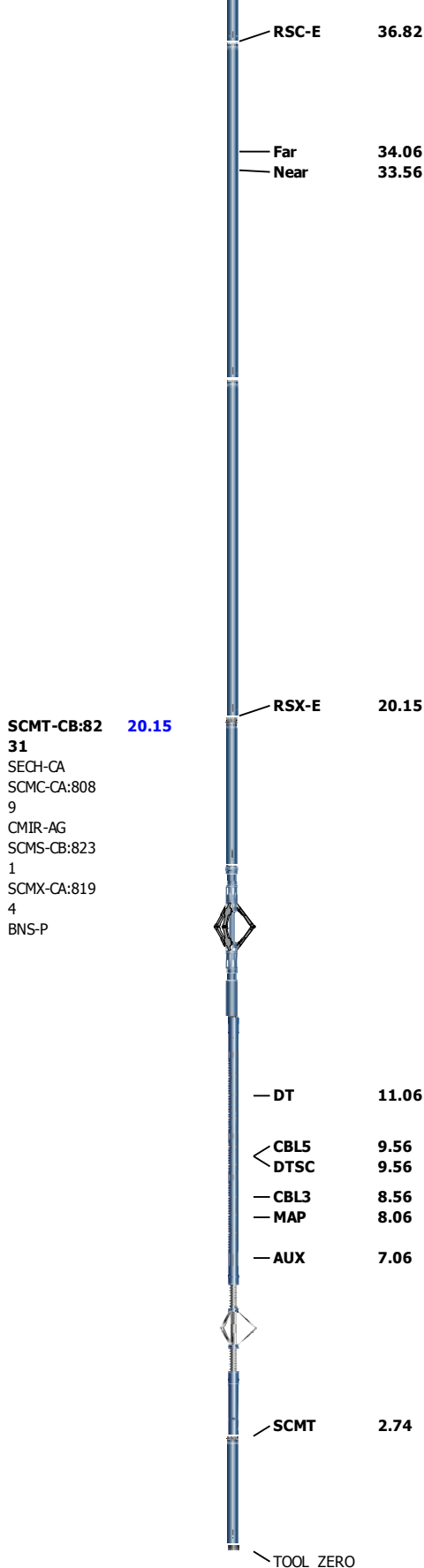
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AH-38	51.72		
PSTP-A:378	51.44		
1		GR	47.74
PSC-A		PSTC	47.44
PSTC-A		PSTC Tool	0.00
PBMS-A:3781		String Bot	
Sapphire 10kP		tom	
SI		Temperatu	44.65
		re	
		Sapphire P	44.54
		ressure	
		CCL	43.92
		PBMS	43.17
RST-C:312	43.17		
RSCH-A:277			

RSC-E:295
RSS-A:373
MNTR-F:1258
RSXH-A:417
RSX-E:424



Lengths are in ft
Maximum Outer Diameter = 1.720 in
Line: Sensor Location, Value: Gating Offset
All measurements are relative to TOOL_ZERO

RSC-E:295
RSS-A:373
MNTR-F:1258
RSXH-A:309
RSX-E:312



Lengths are in ft
Maximum Outer Diameter = 1.720 in
Line: Sensor Location, Value: Gating Offset
All measurements are relative to TOOL_ZERO

Depth Summary			
	One	Two	
Depth Measuring Device			
Type	IDW-B	IDW-B	
Serial Number	6459	6459	
Calibration Date	22-Jan-2018	22-Jan-2018	
Calibrator Serial Number	20	20	
Calibration Cable Type	1-25AXXS	1-25AXXS	
Wheel Correction 1	-5	-5	
Wheel Correction 2	-2	-2	
Tension Device			
Type	CMTD-B/A	CMTD-B/A	
Serial Number	5036	5036	
Calibration Date	03-Apr-2018	03-May-2018	
Calibrator Serial Number	86479A	86479A	
Number of Calibration Points	10	10	
Calibration Root Mean Square Error	5	5	
Calibration Peak Error	3	3	
Logging Cable			
Type	1-25ZA-XXS	1-25ZA-XXS	
Serial Number	F112140	F112140	
Length	20000.00 ft	15000.00 ft	
Conveyance Type	Wireline	Wireline	
Rig Type	Rigless	Rigless	
One:Depth Control Parameters		Depth Control Remarks	
Log Sequence	First Log In the Well	Schlumberger depth control procedures followed IDW used as primary depth measurement Z-chart used as secondary depth measurement Log down used as reference pass for correlation	
Rig Up Length At Surface			
Rig Up Length At Bottom			
Rig Up Length Correction			
Stretch Correction	8.98 ft		
Tool Zero Check At Surface	30.00 ft		
Two:Depth Control Parameters		Depth Control Remarks	
Log Sequence	Subsequent Trip To the Well	Schlumberger depth control procedures followed IDW used as primary depth measurement Z-chart used as secondary depth measurement Log One used for correlation. Depth correction 9.9ft Correlation interval 6258-5920ft	
Reference Log Name	RST-SCMT Schlumberger		
Reference Log Run Number	One		
Reference Log Date	09-May-2018		
Subsequent Trip Down Log Correction	9.90 ft		
Composite 1			
CBL-VDL Main Pass			
Software Version			
Acquisition System		Version	
Maxwell 2018		8.0.95333.3100	
Application Patch		Wireline_NPD-PNX-2018CMZ_8.0.100887	

Composite Summary

Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	DSC Mode	Depth Shift	Include Parallel Data
One	Log[6]:Up	Up	2296.87 ft	6282.73 ft	09-May-2018 18:10:22	09-May-2018 20:32:21	ON	9.15 ft	Yes
Two	Log[8]:Up	Up	5907.38 ft	7369.78 ft	21-May-2018 06:45:32	21-May-2018 07:38:10	ON	9.90 ft	No
Two	Log[12]:Up	Up	6908.96 ft	8765.97 ft	21-May-2018 09:42:48	21-May-2018 10:45:24	ON	9.90 ft	No

All depths are referenced to toolstring zero

Log

Company:Caerus Operating LLC

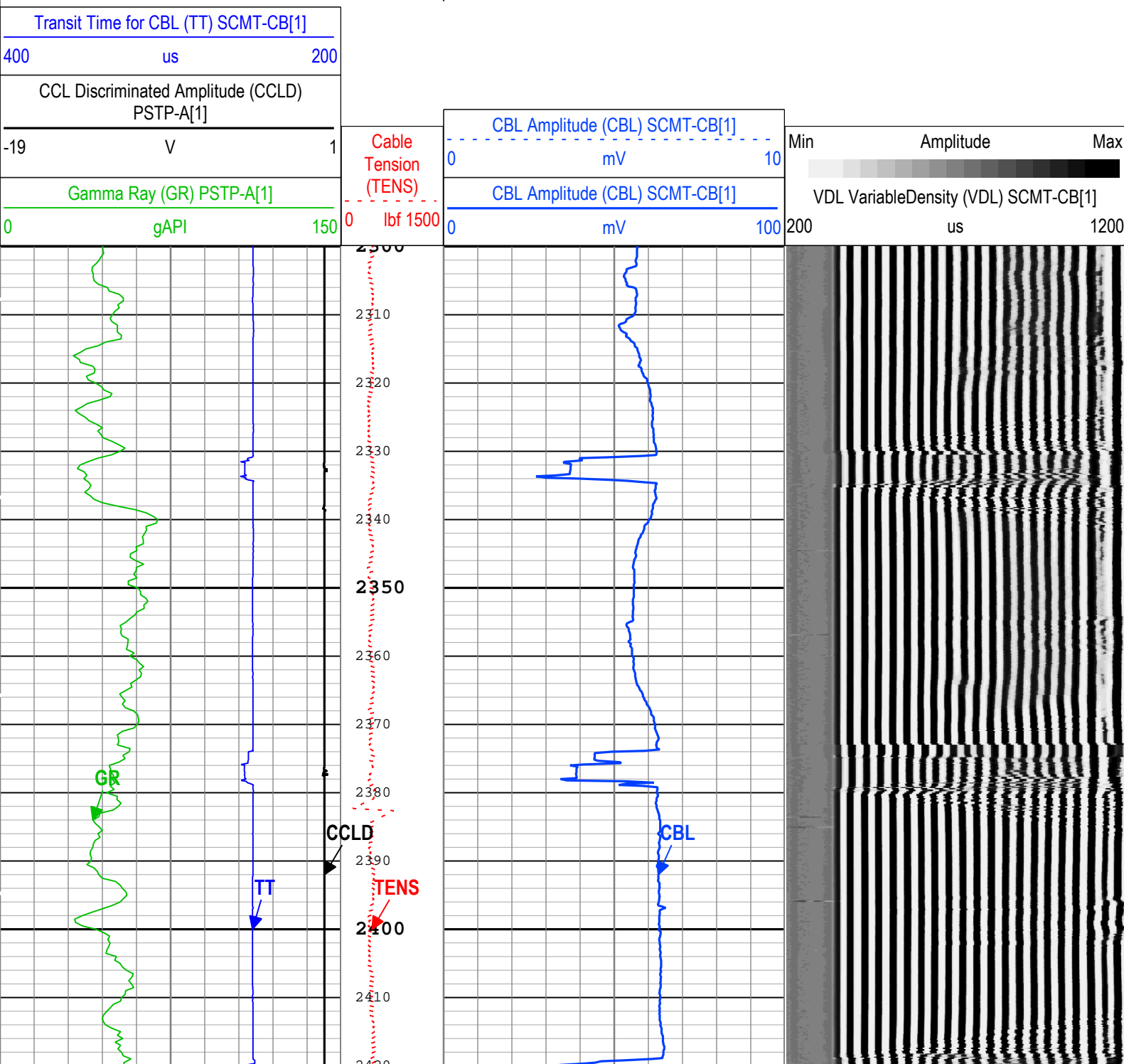
Well:Puckett 12D-26-697

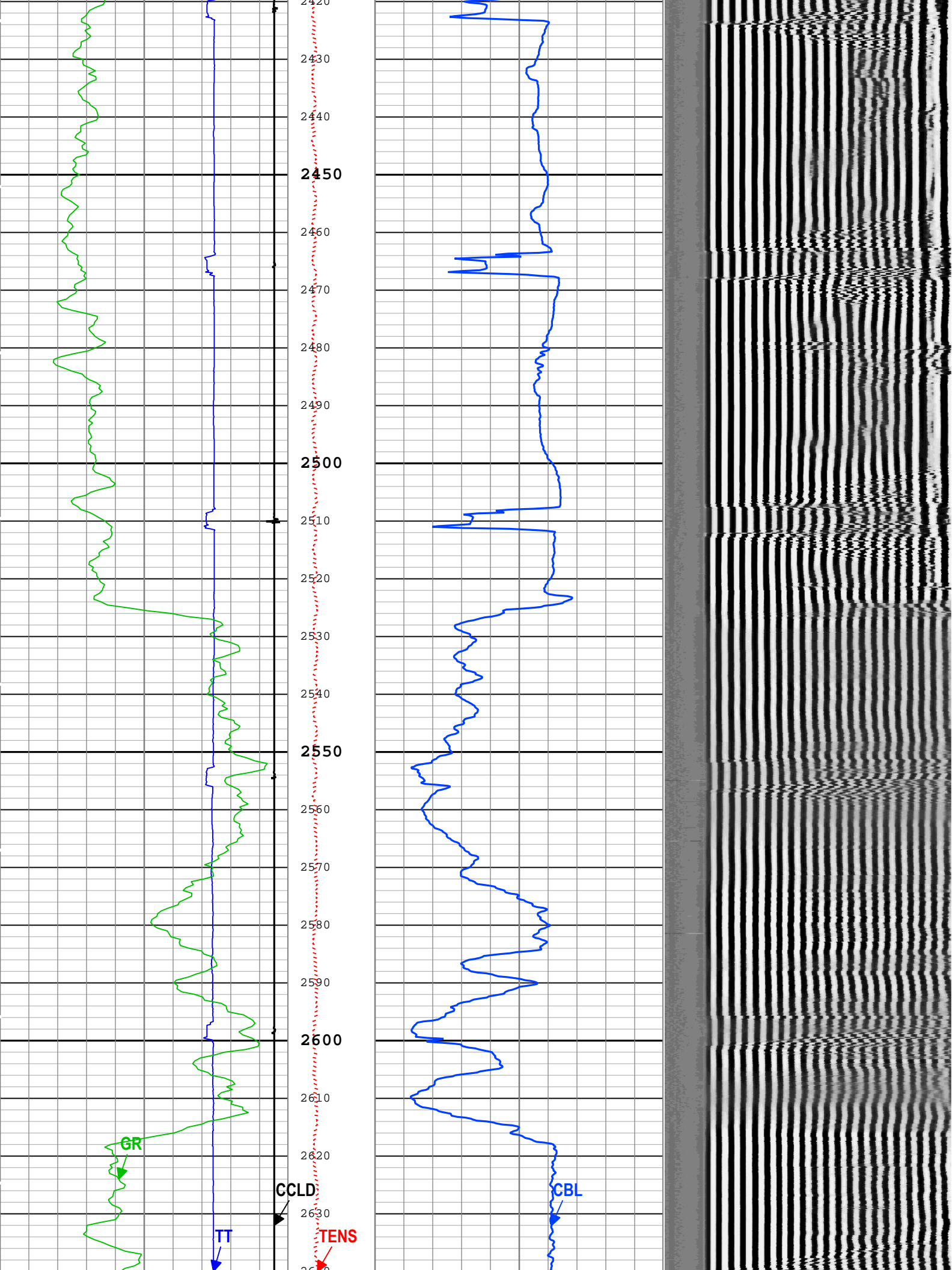
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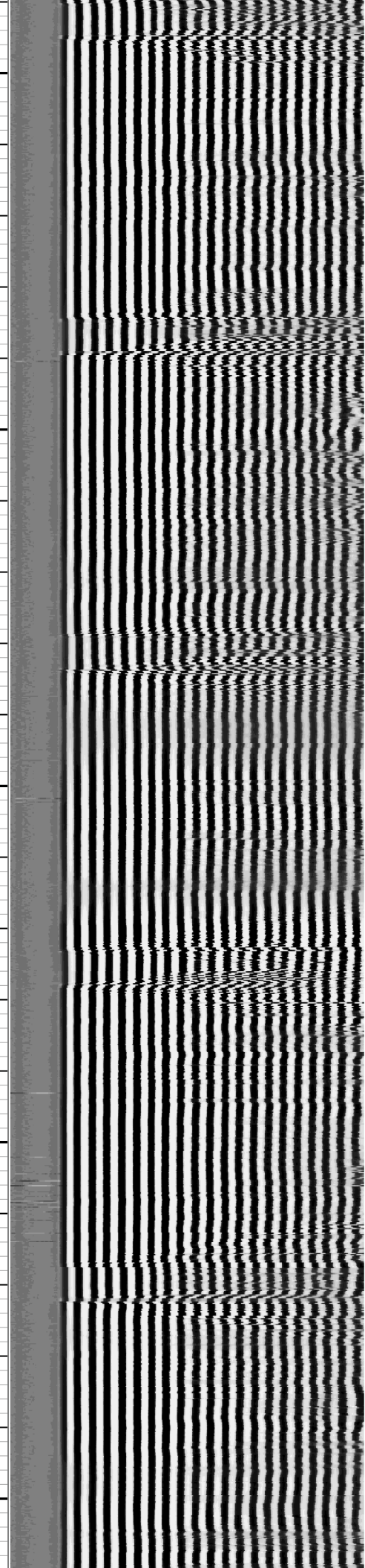
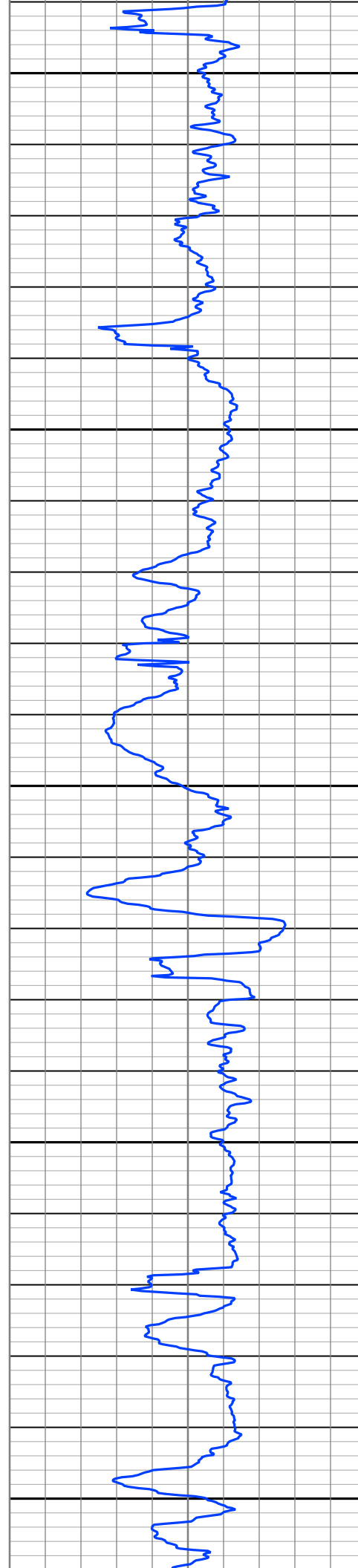
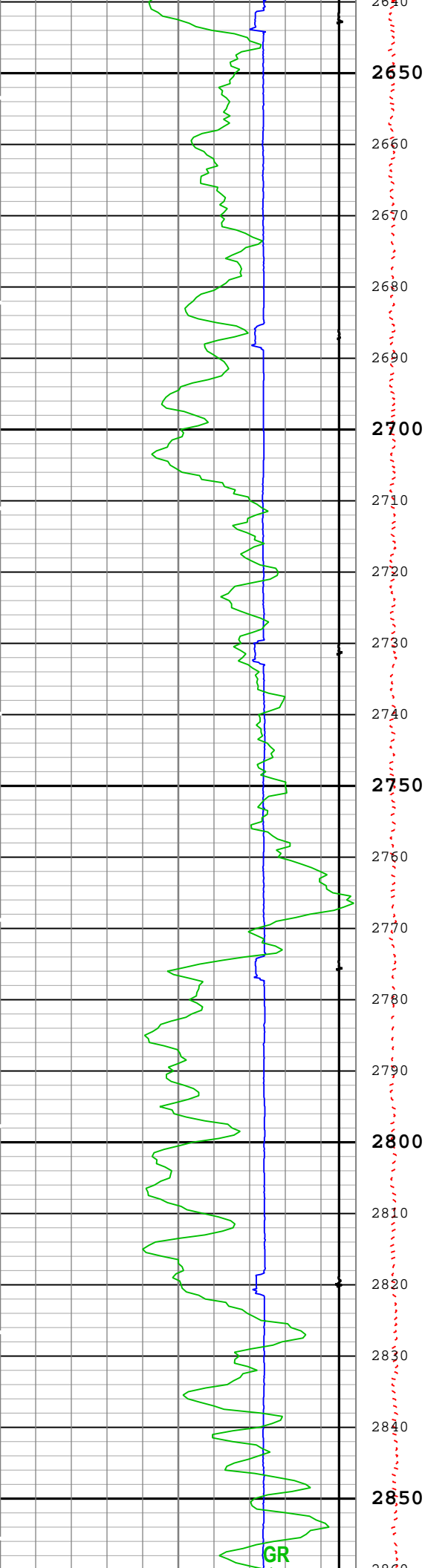
Description: Sonic CBL with VDL Format: Log (Sonic CBL with VDL) Index Scale: 5 in per 100 ft Index Unit: ft Index Type: Measured Depth Creation Date: 21-May-2018 11:31:21

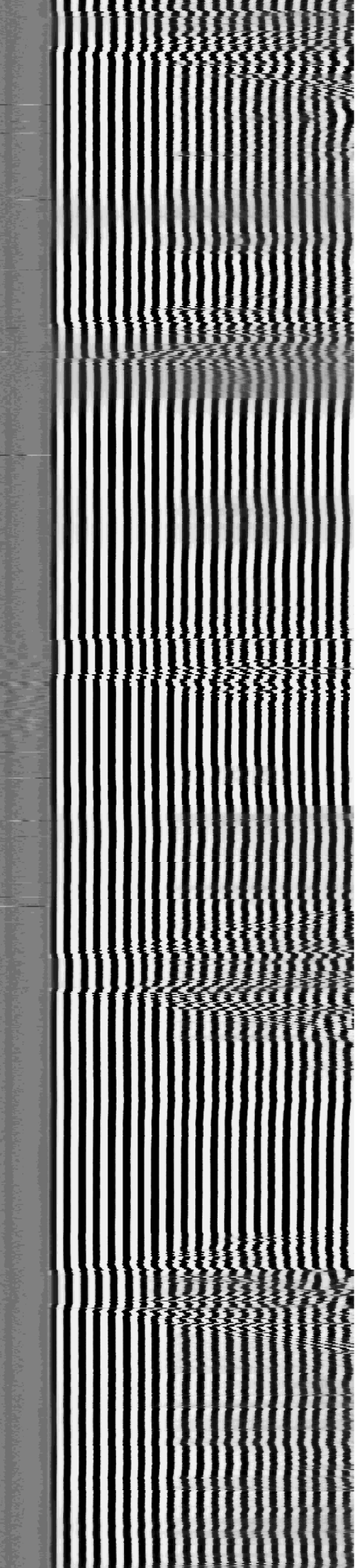
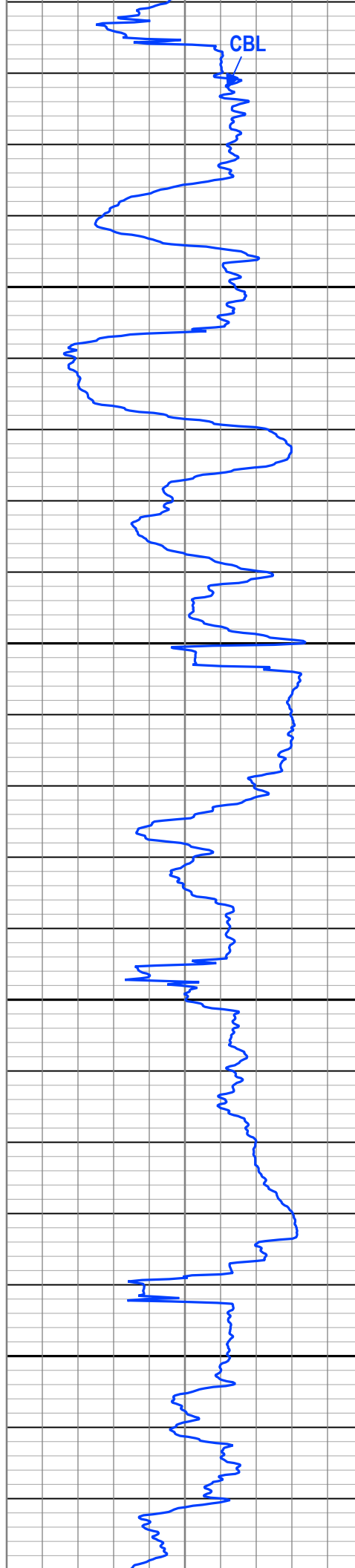
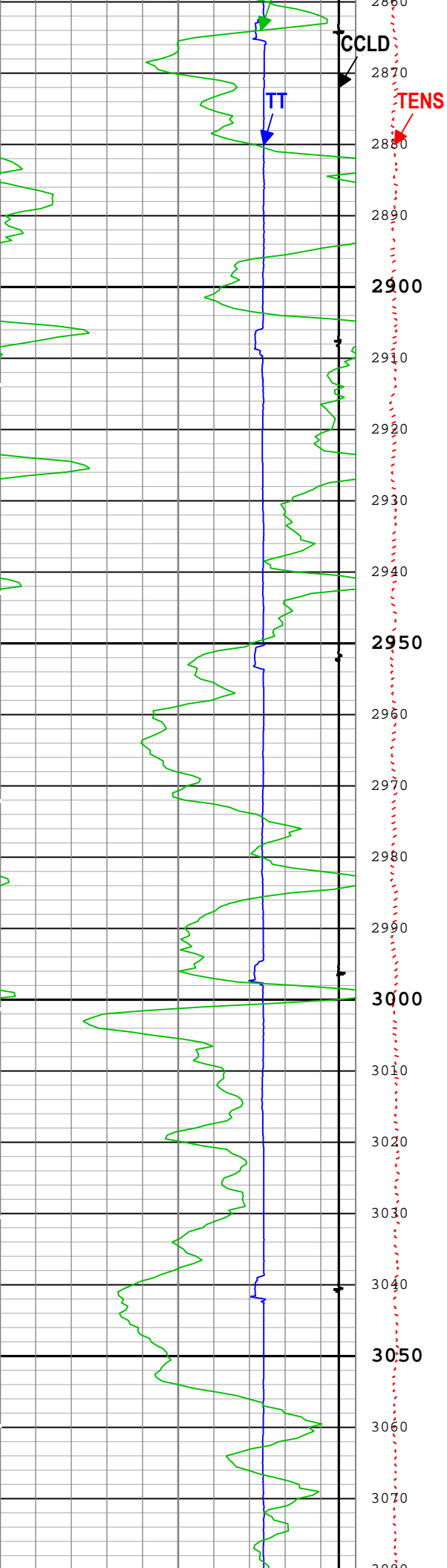
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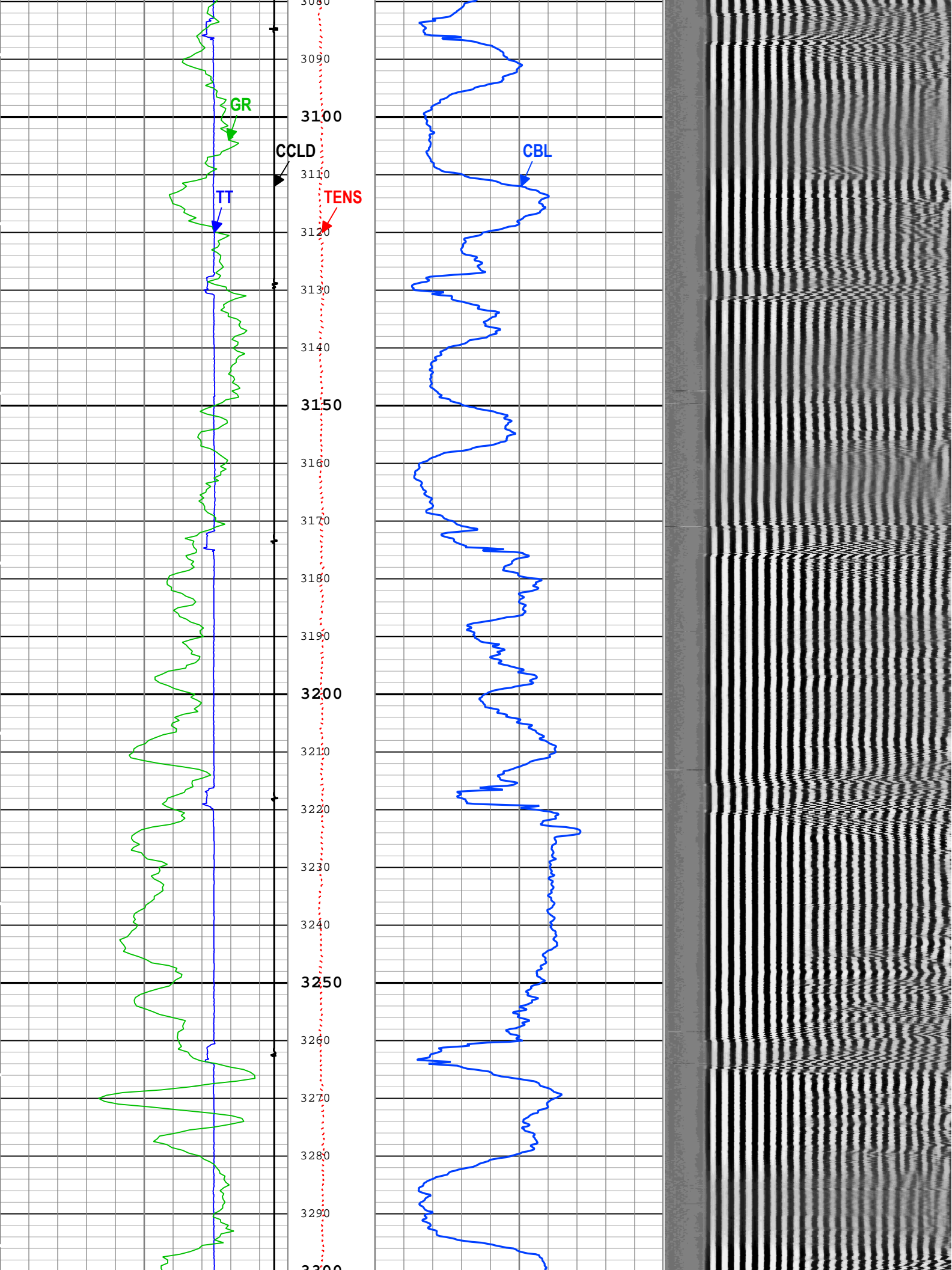
■ BIEP - Bond Index Event Pips SCMT-CB[1]

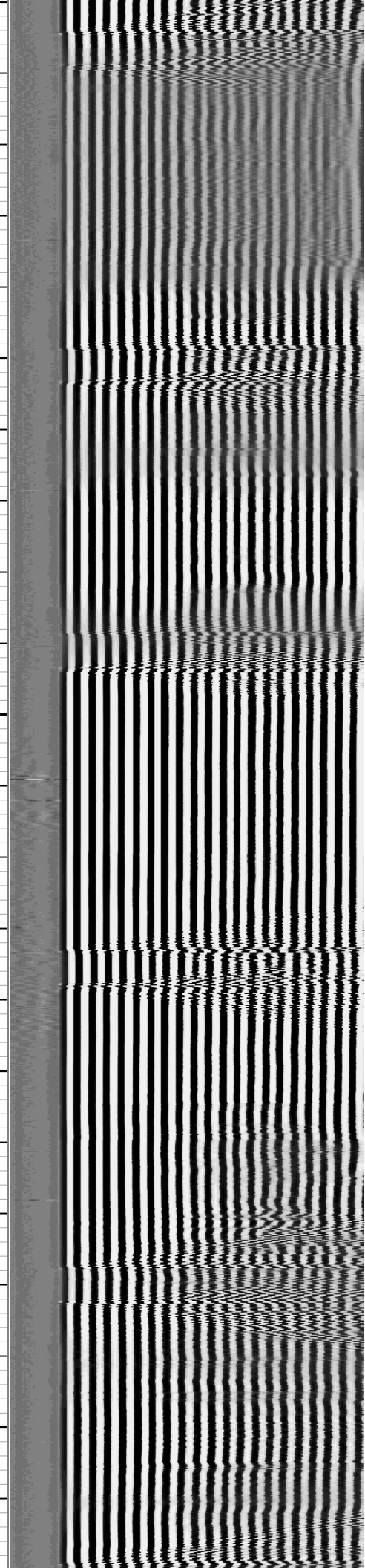
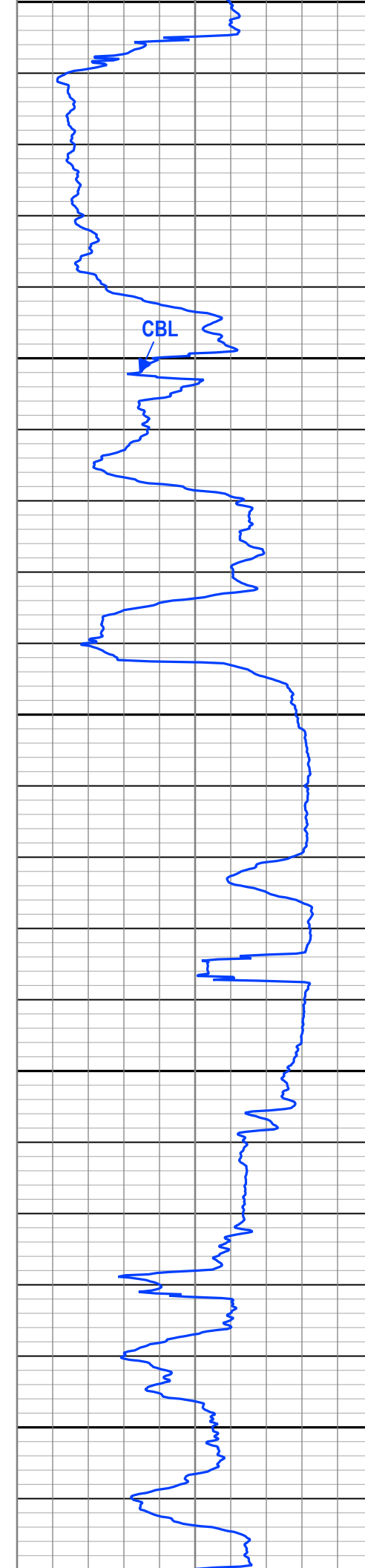
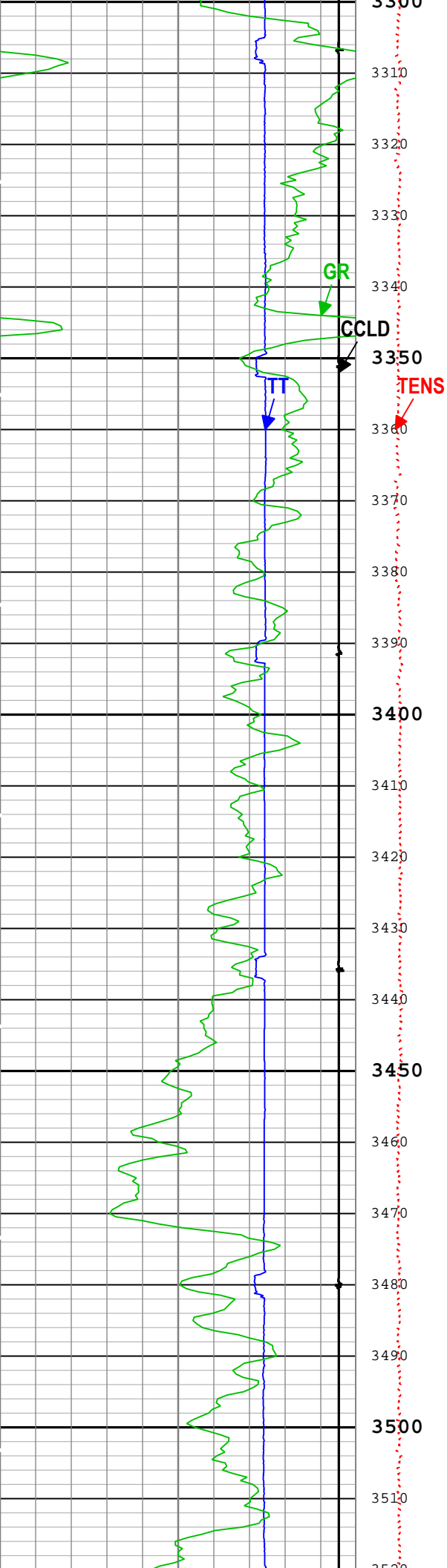


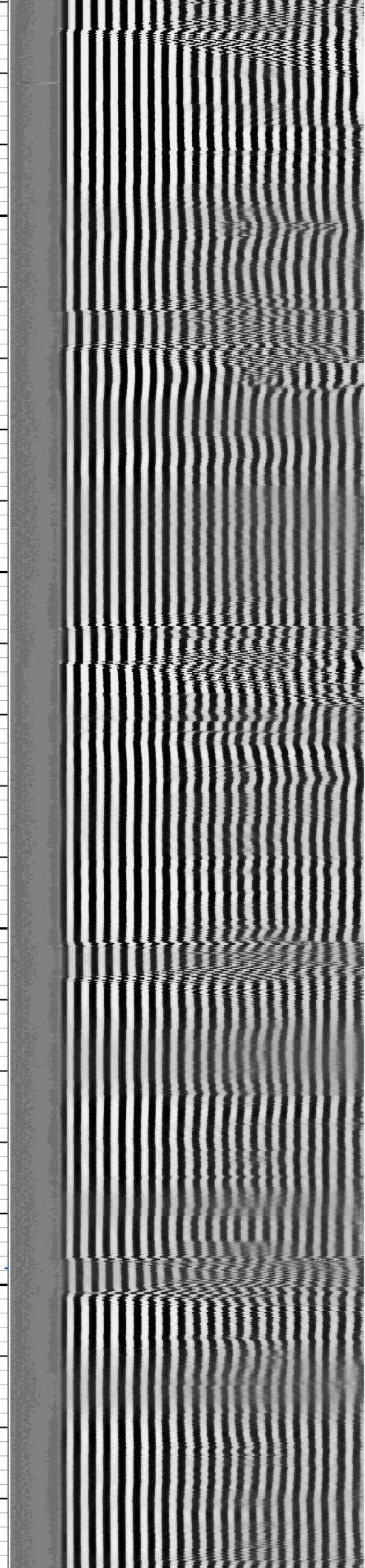
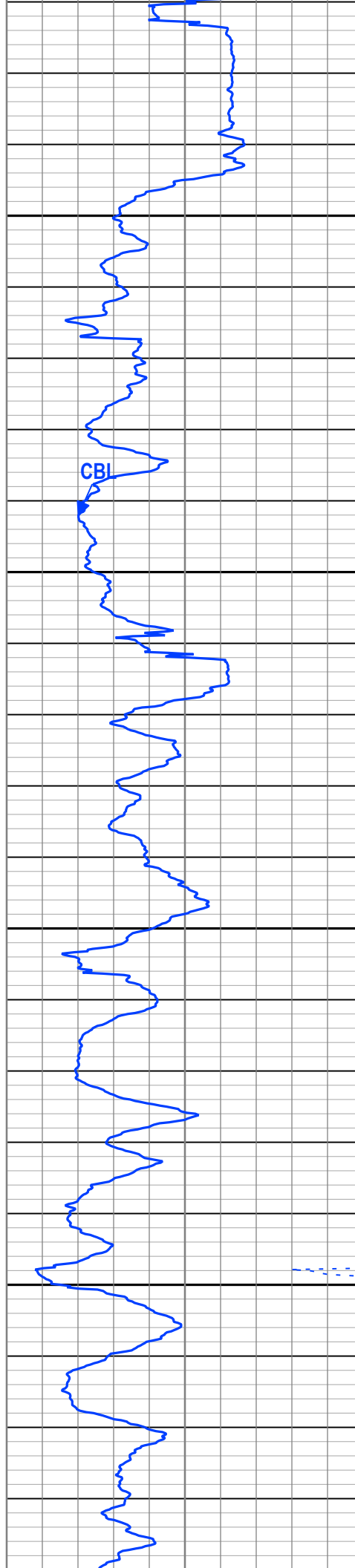
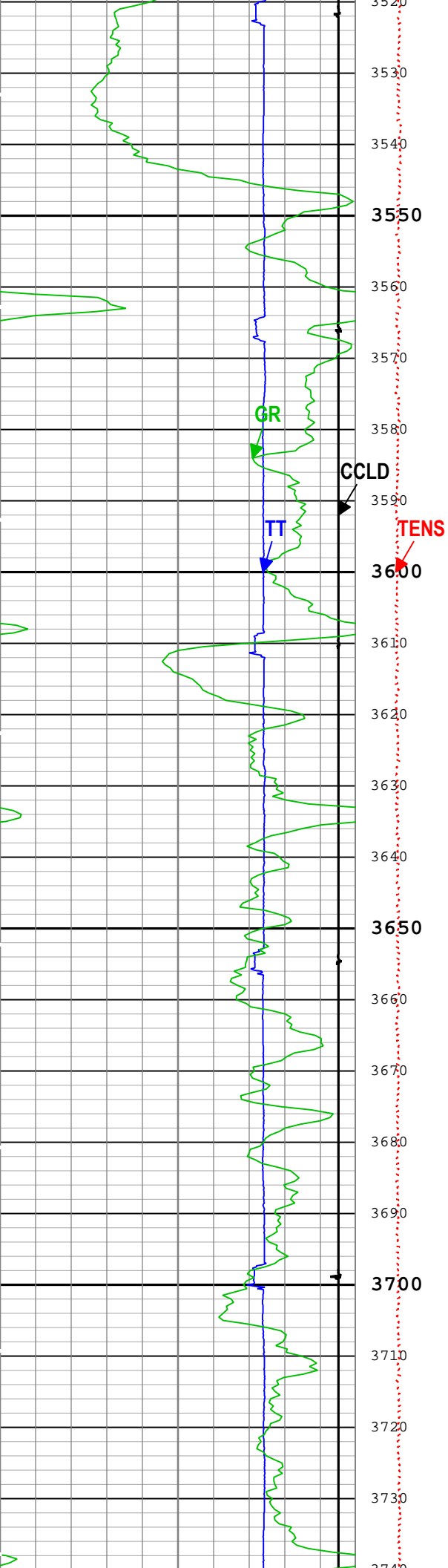


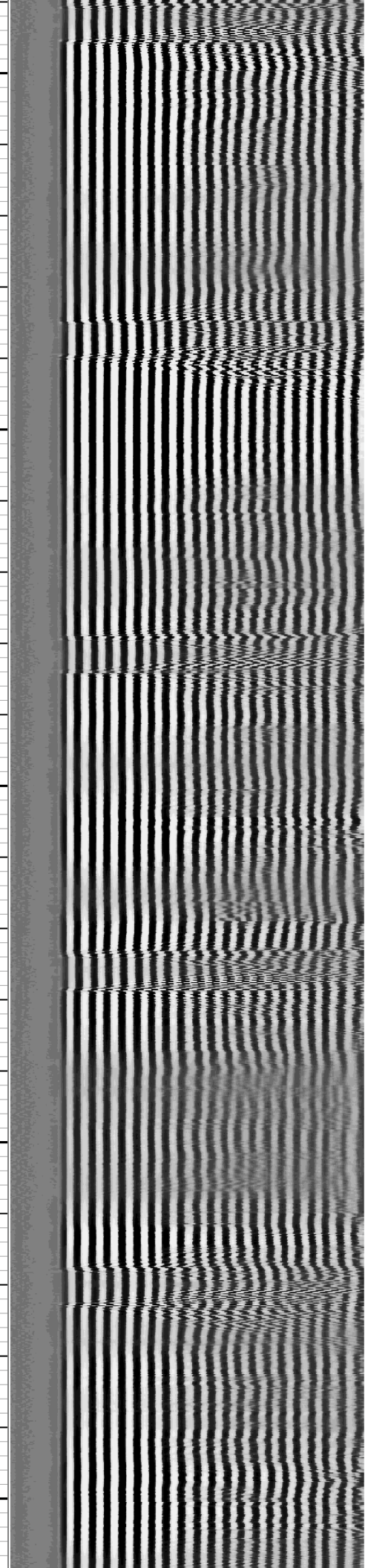
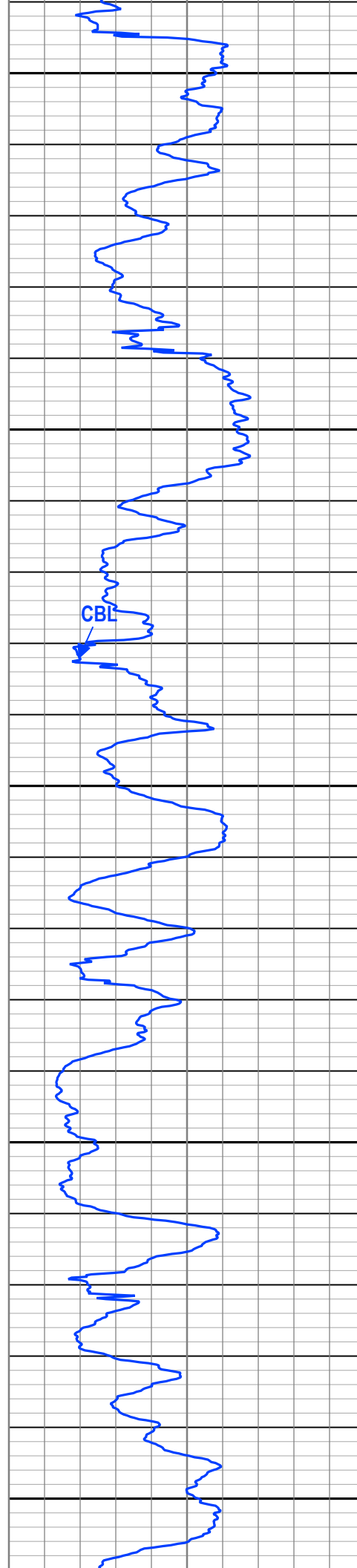
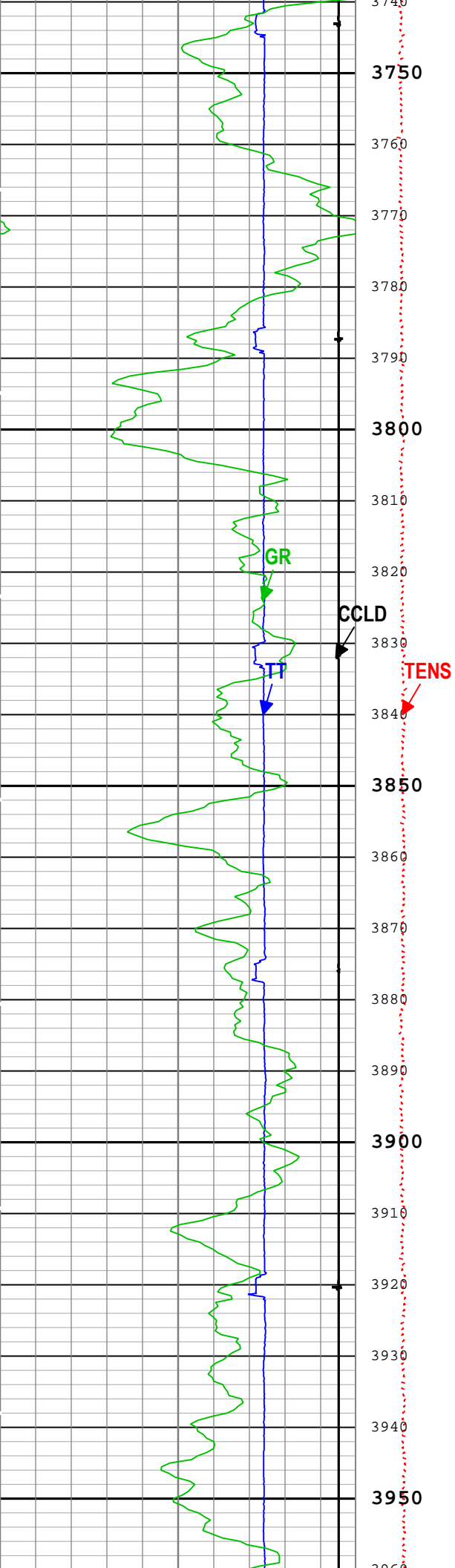


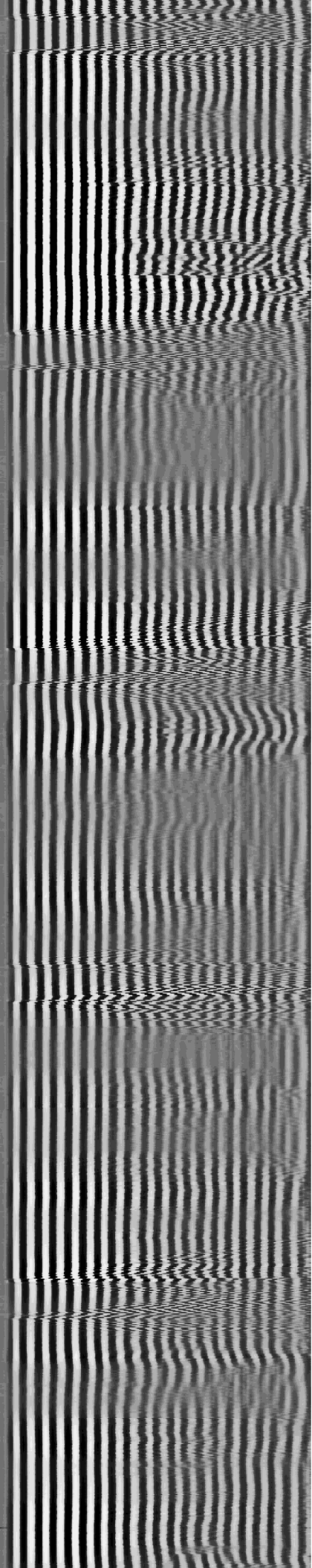
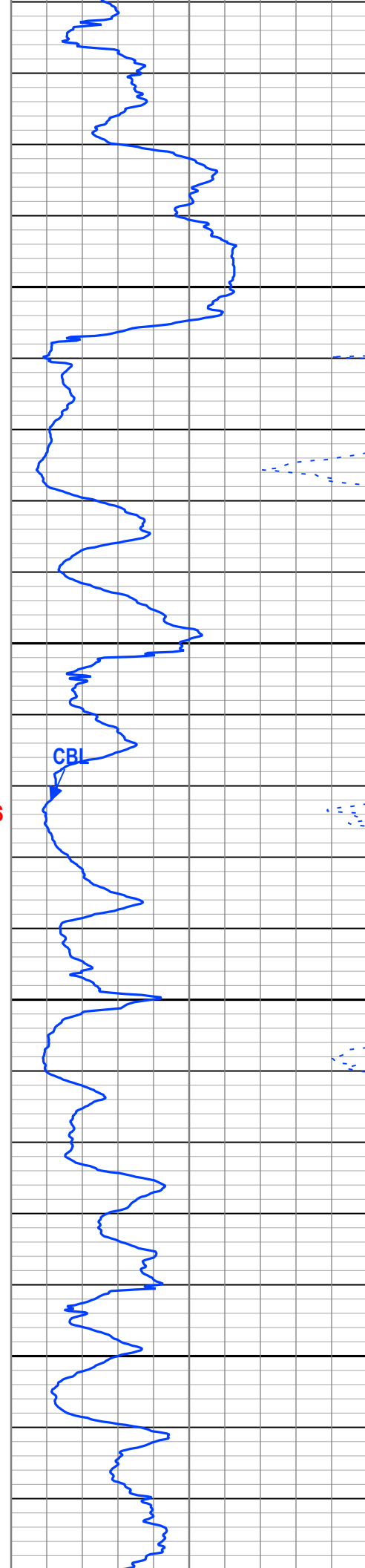
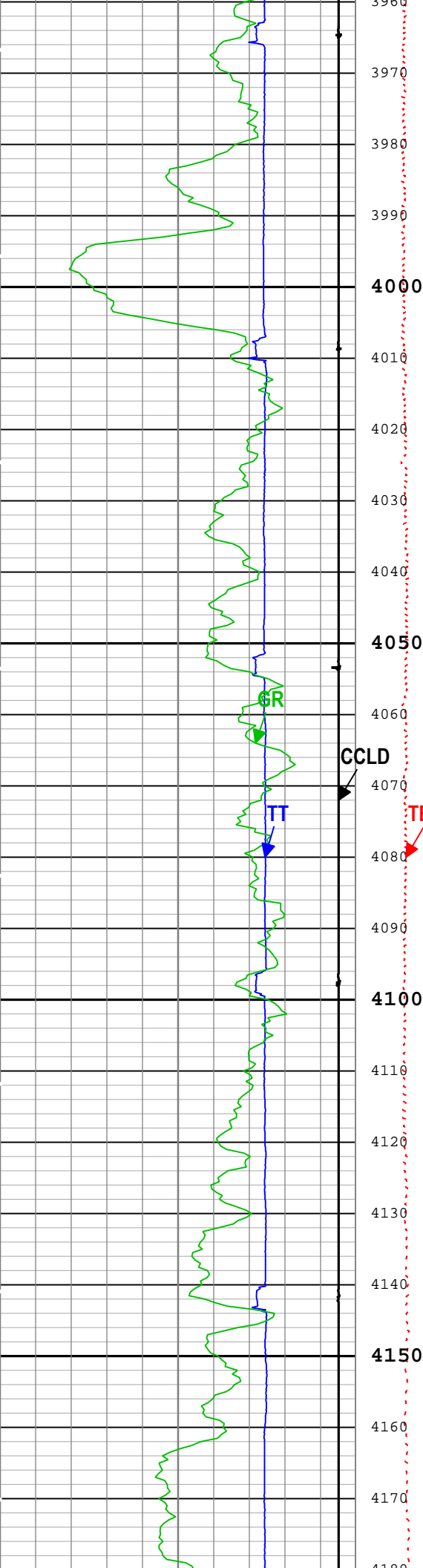


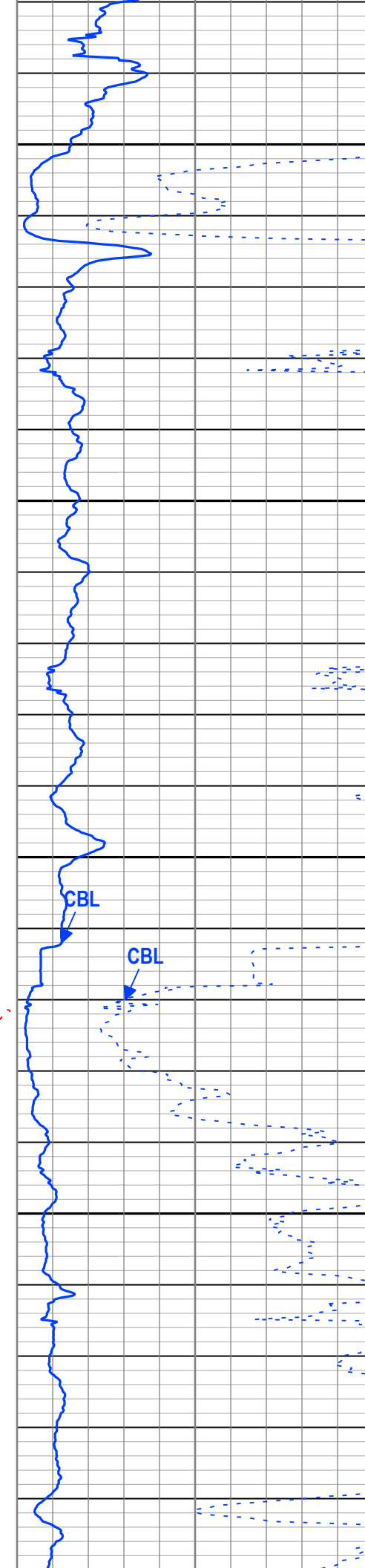
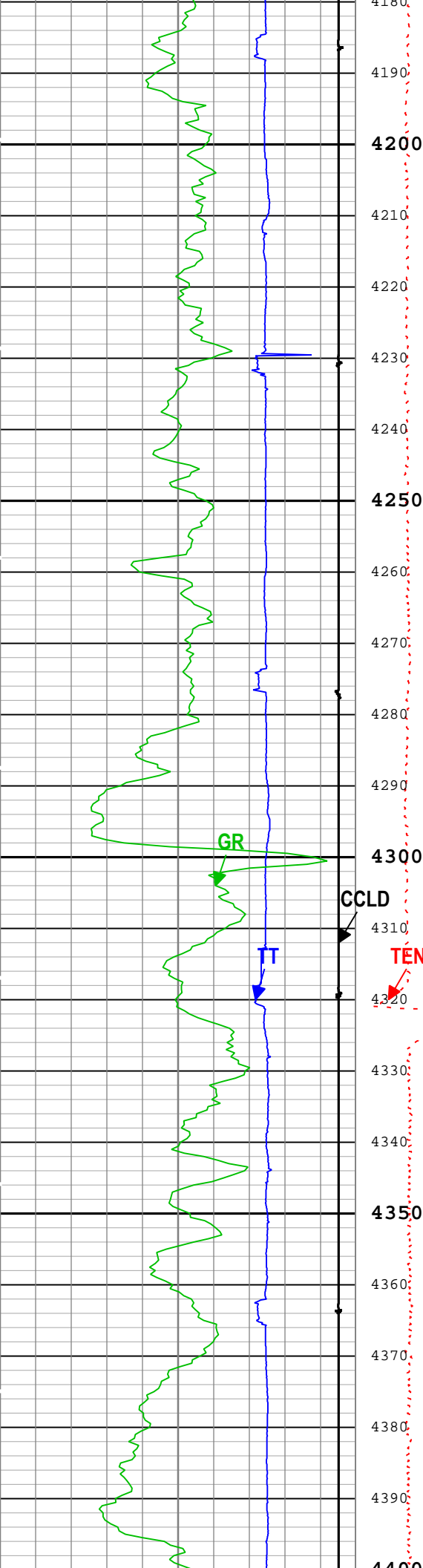


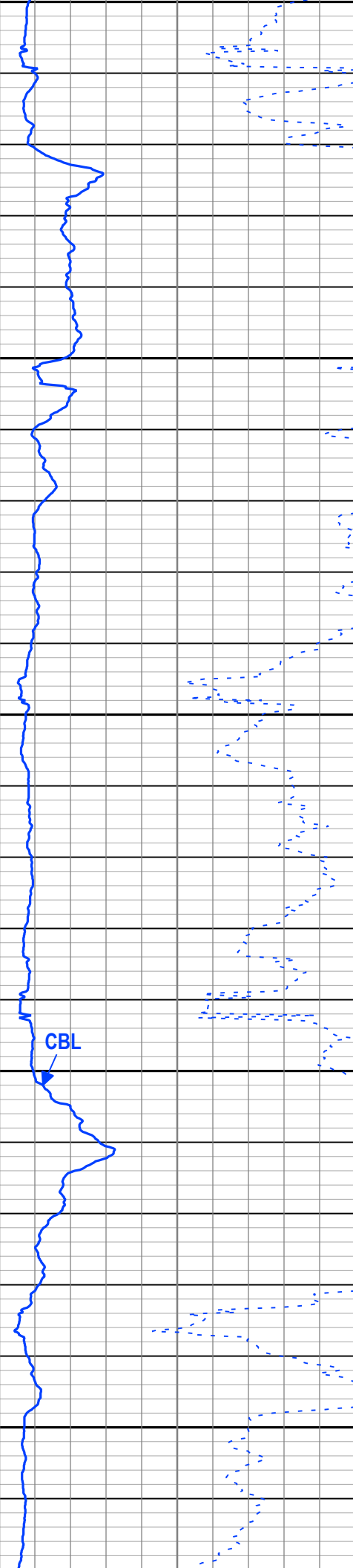
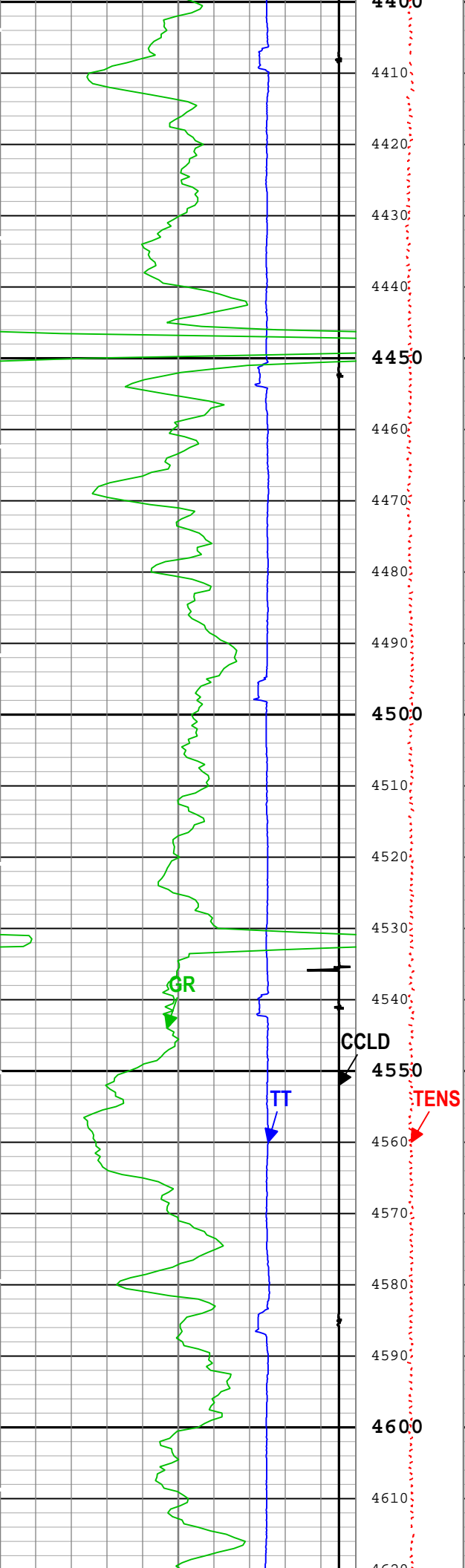


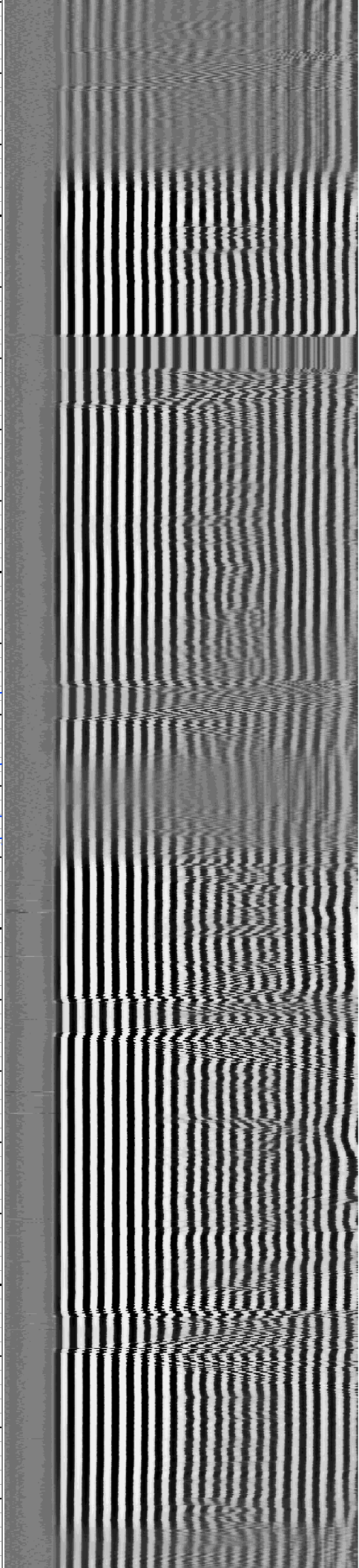
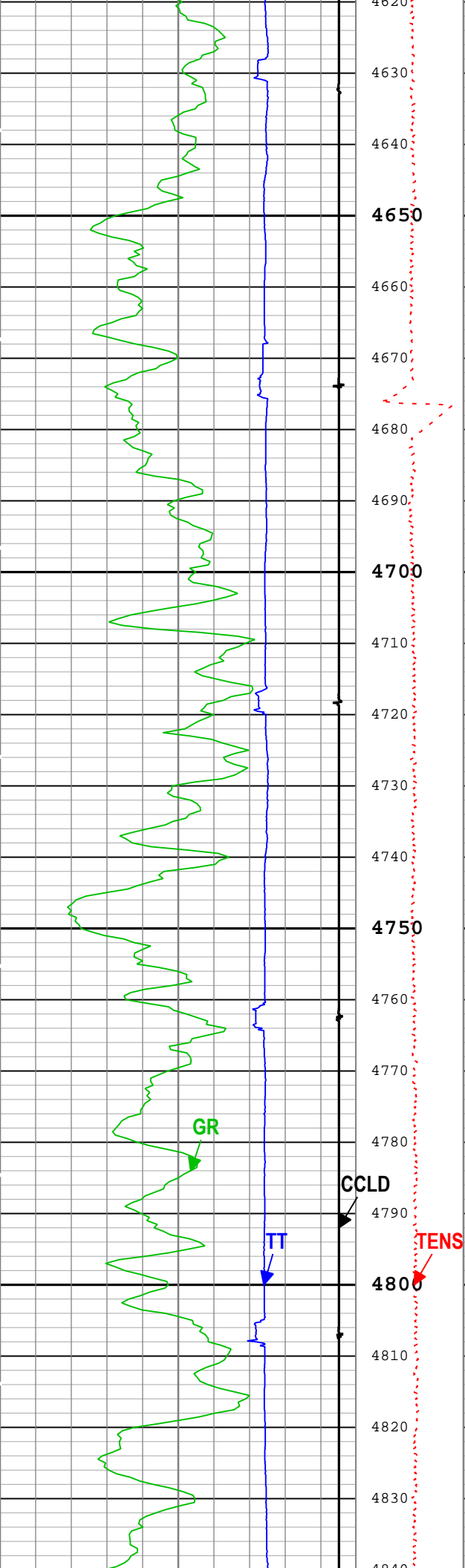


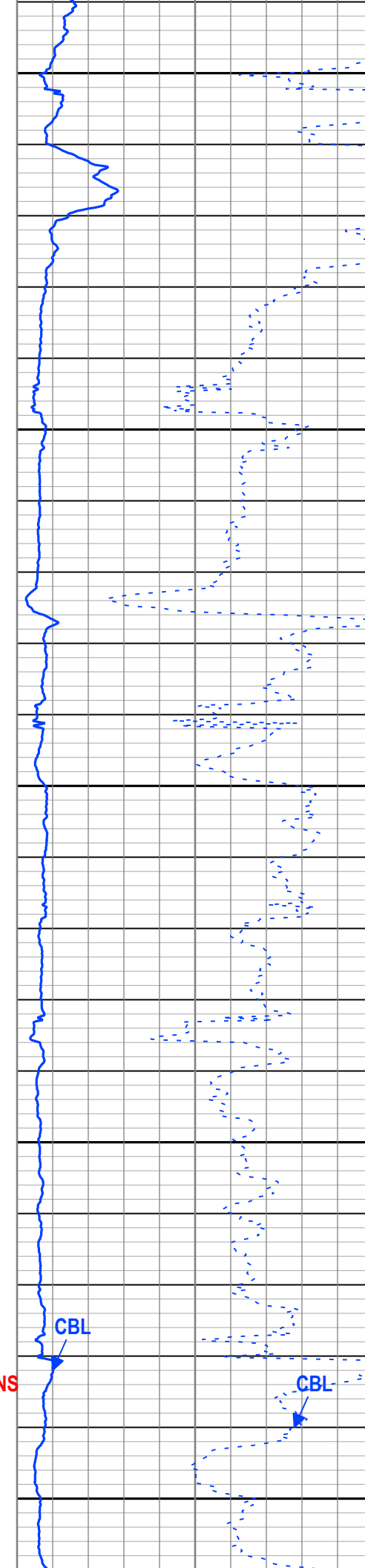
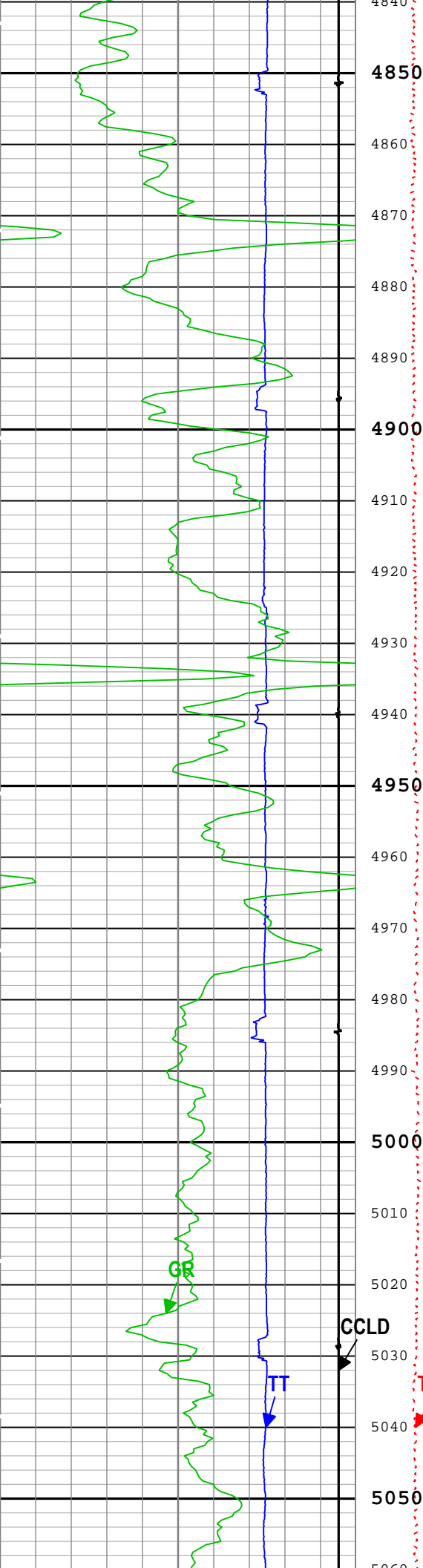


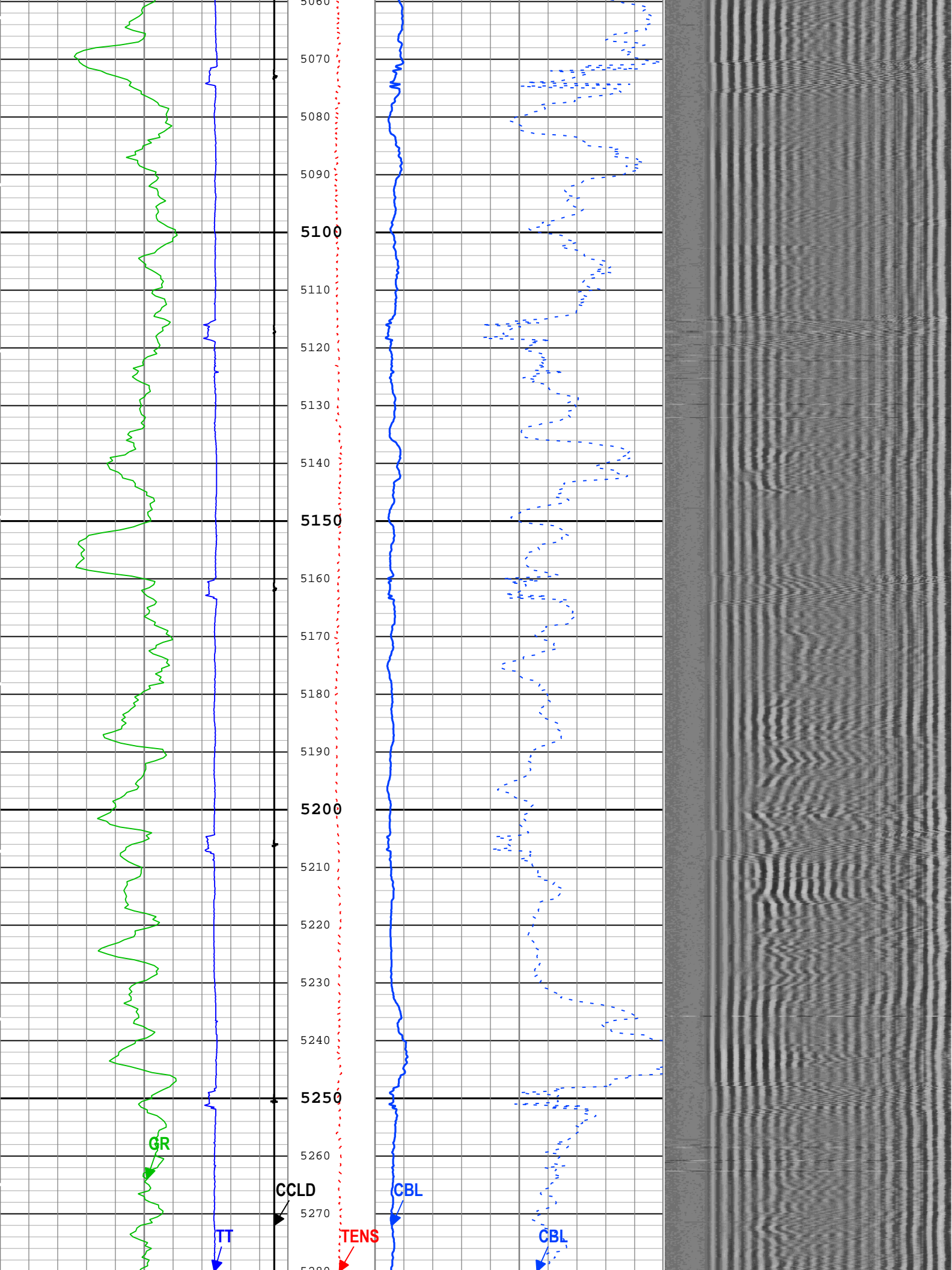


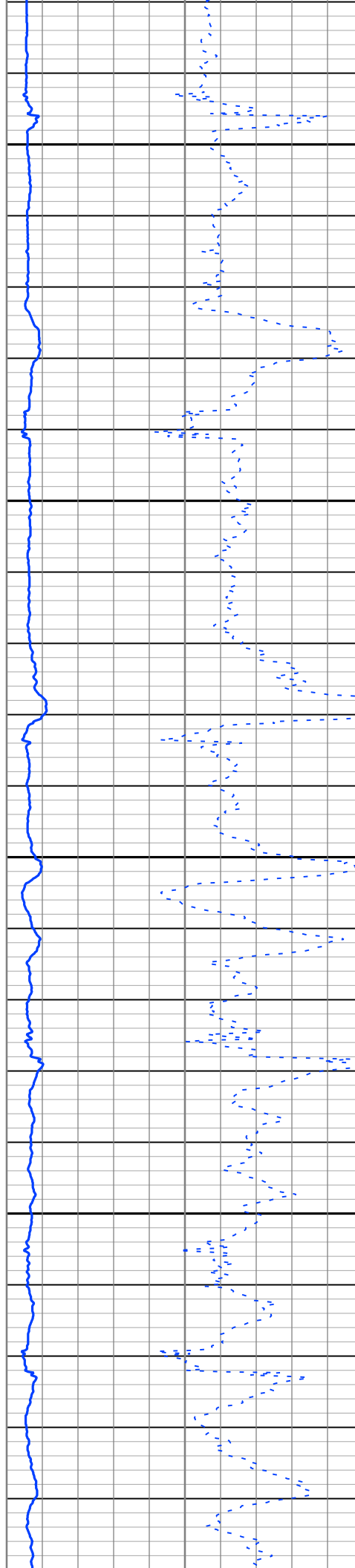
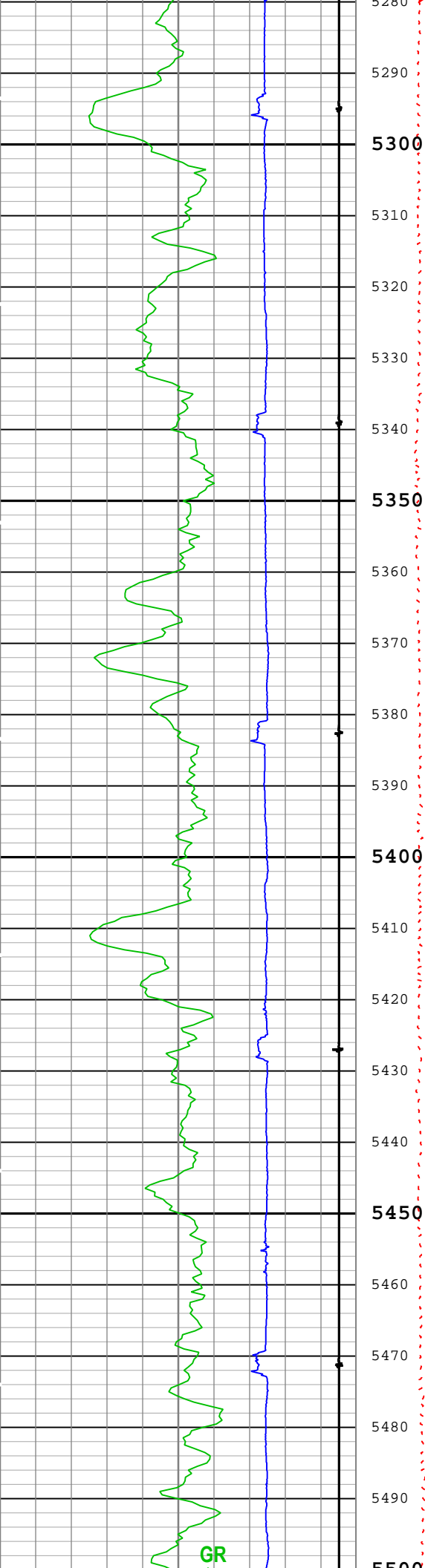


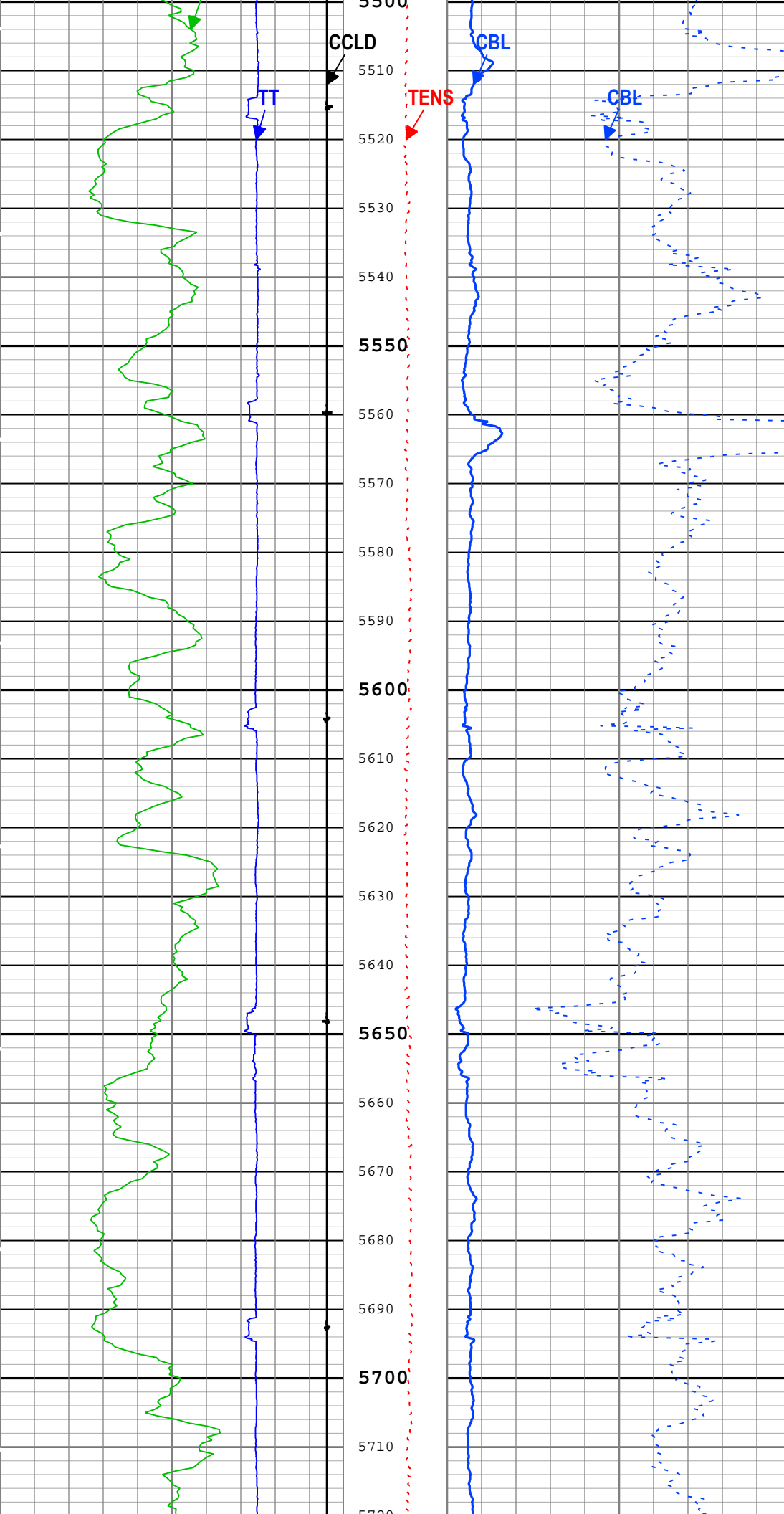


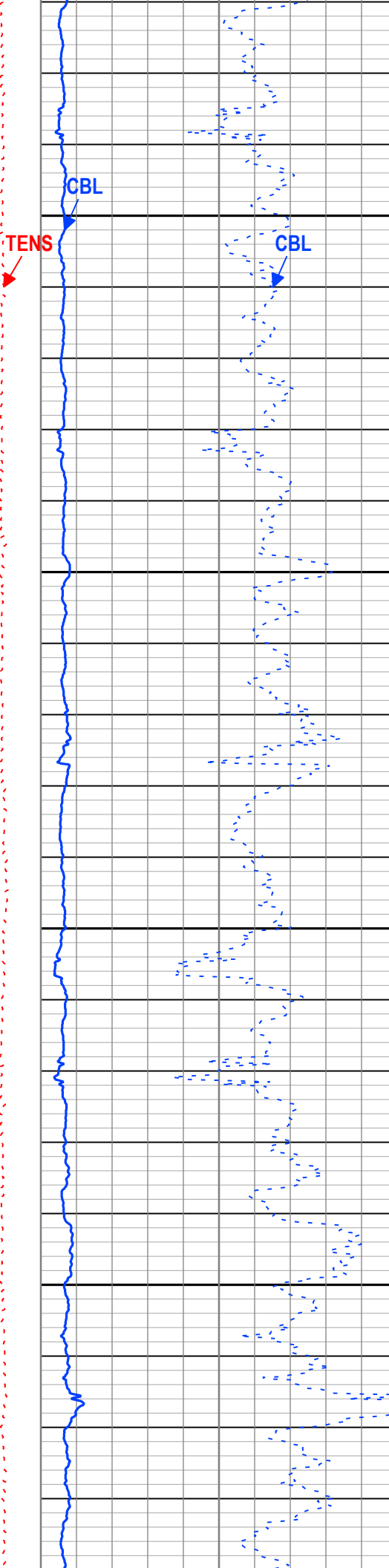
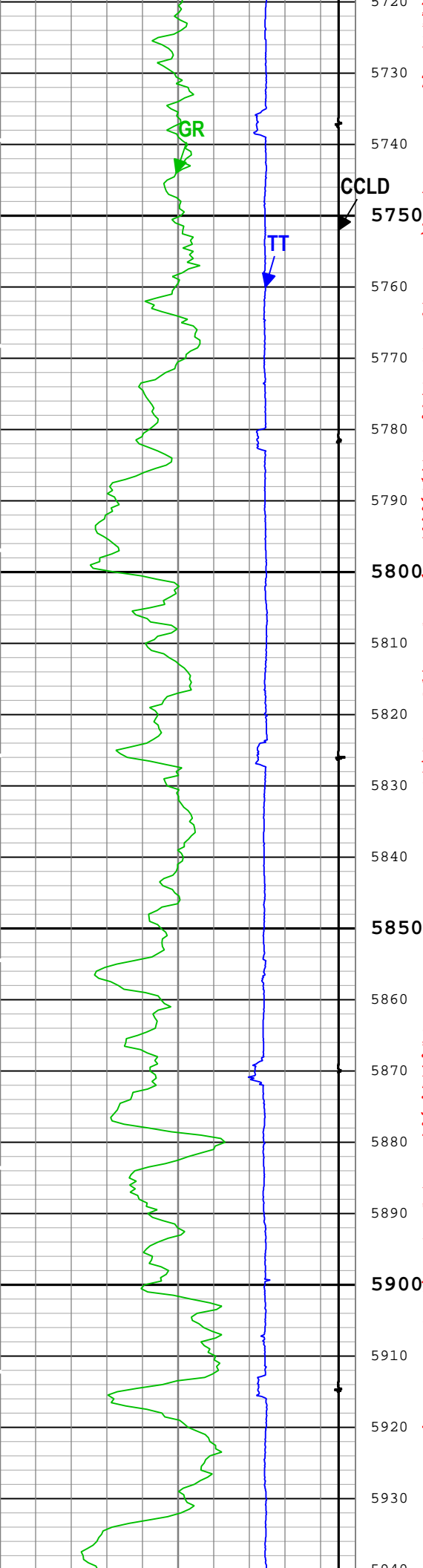


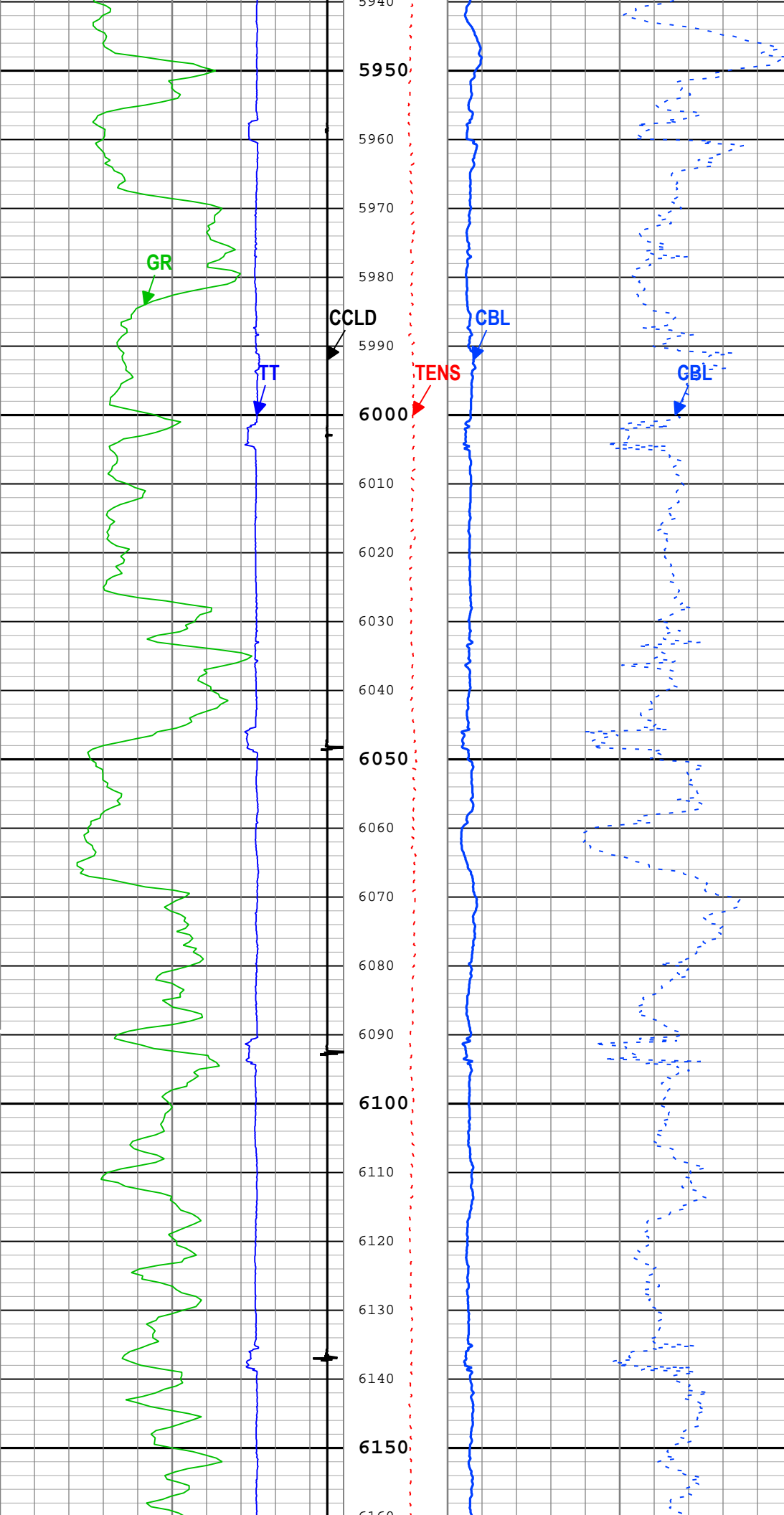


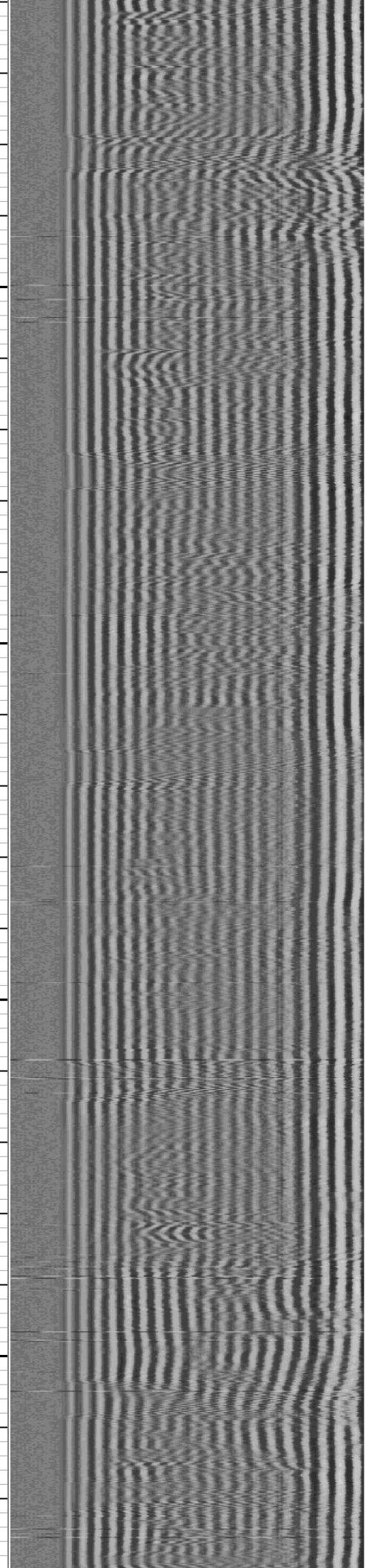
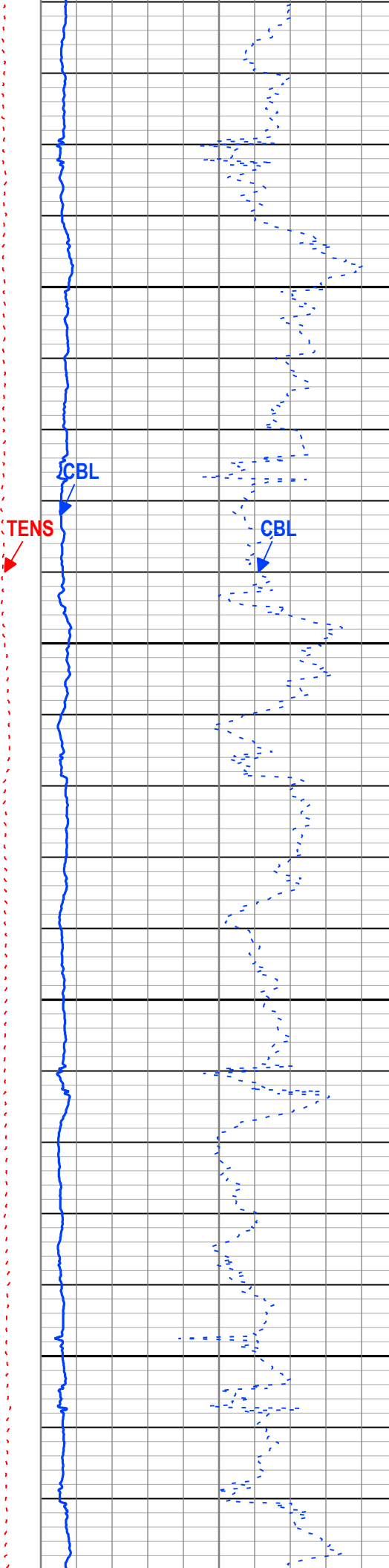
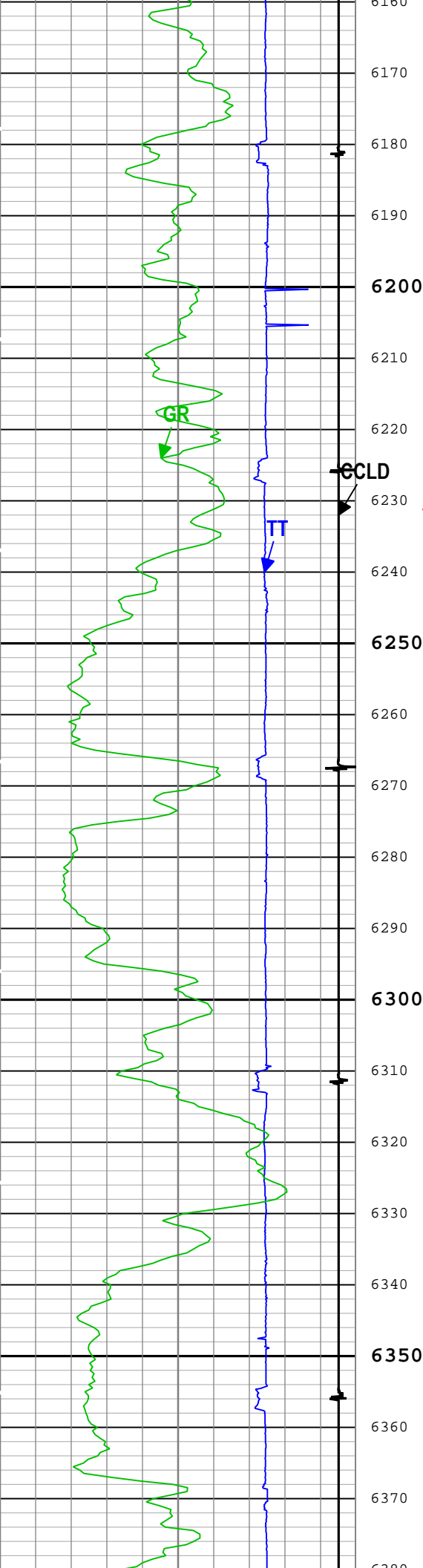


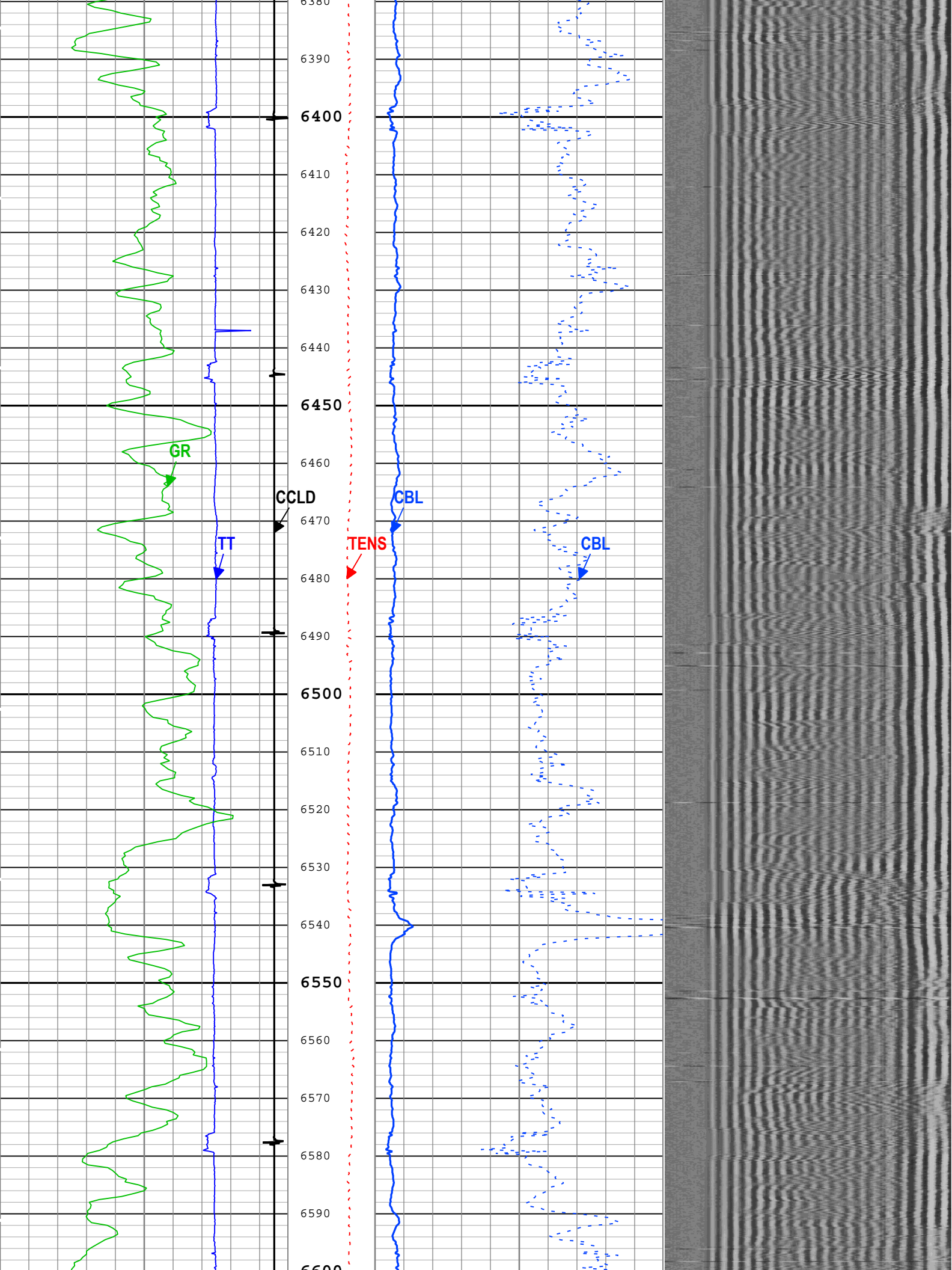


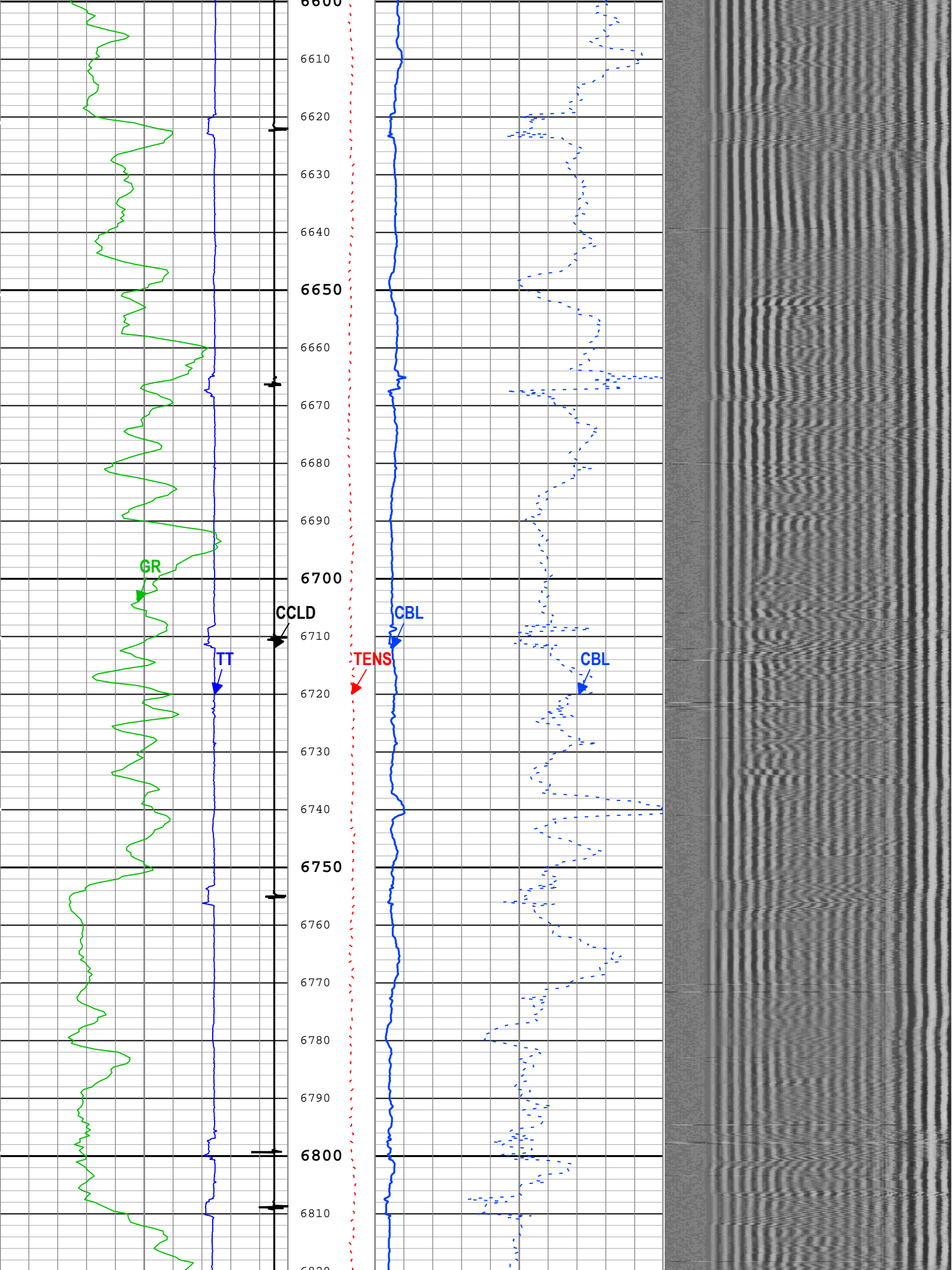


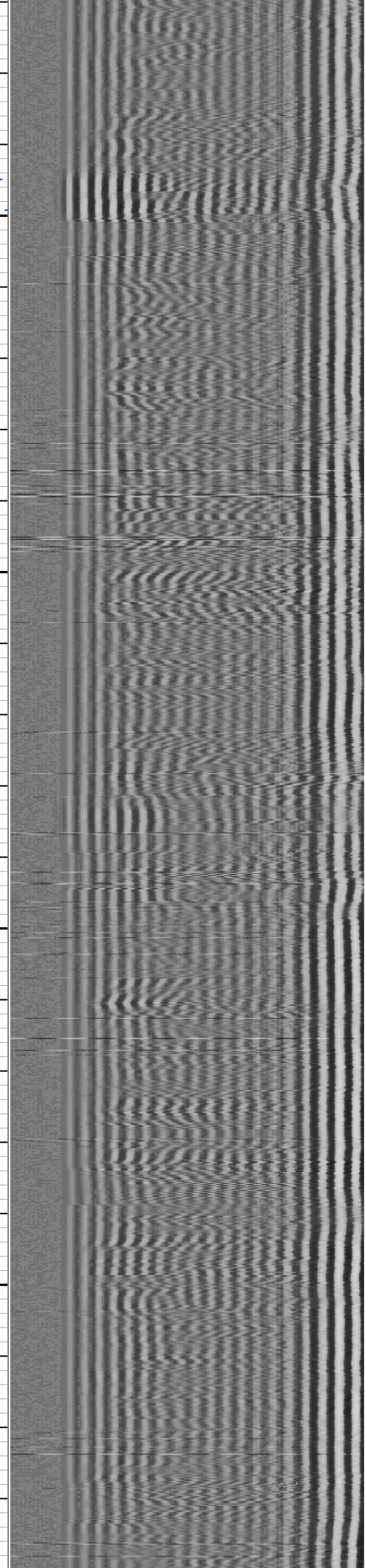
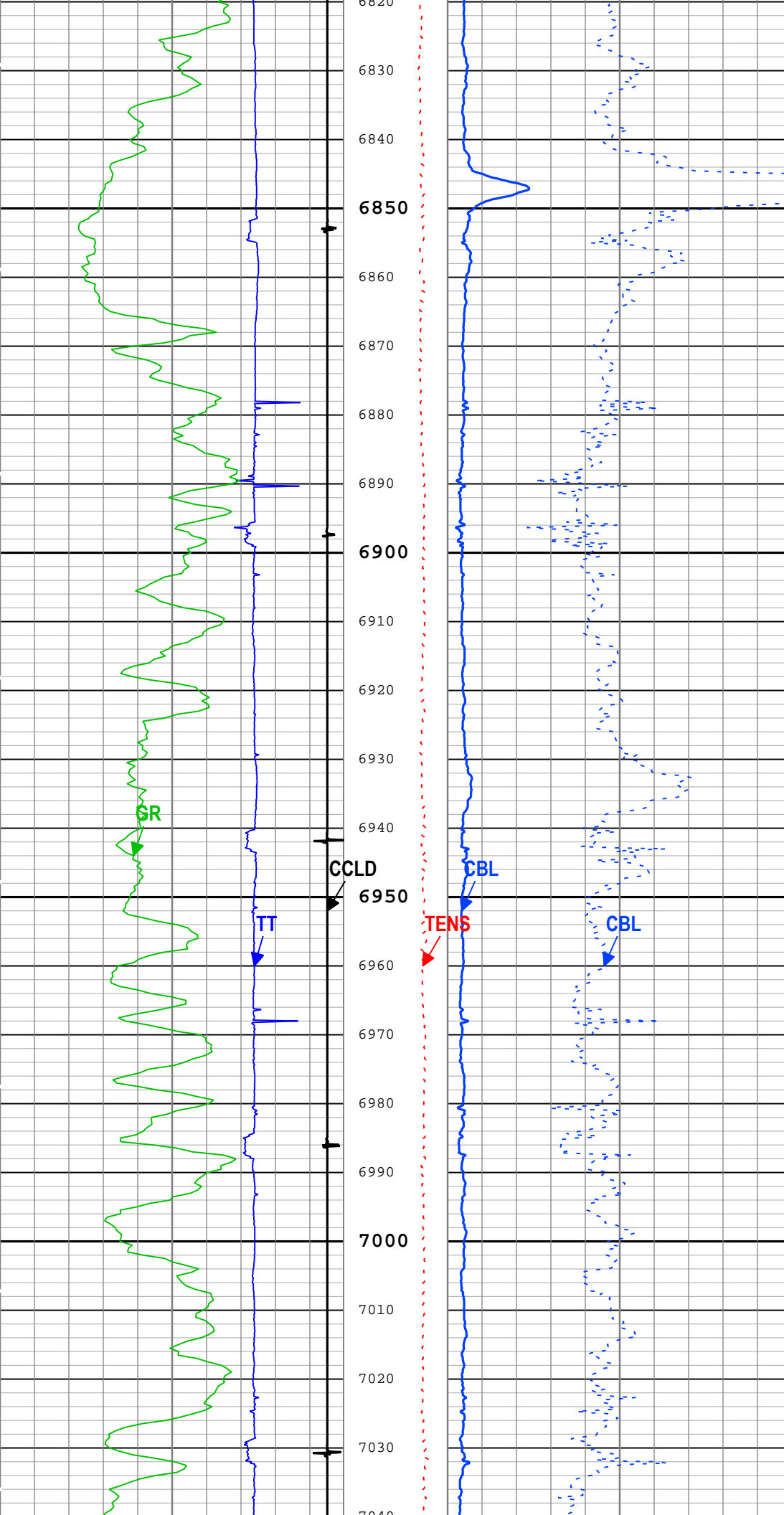


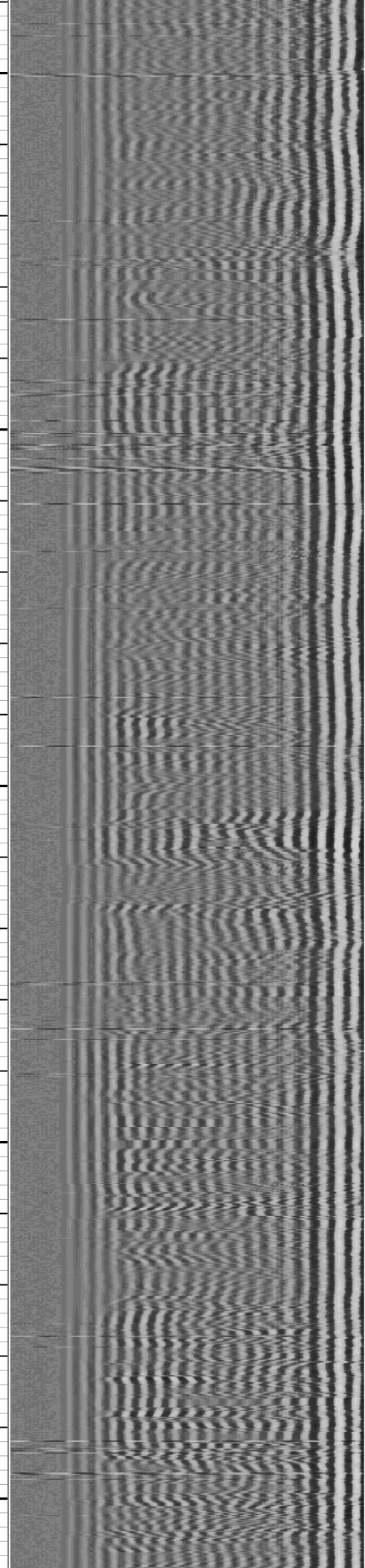
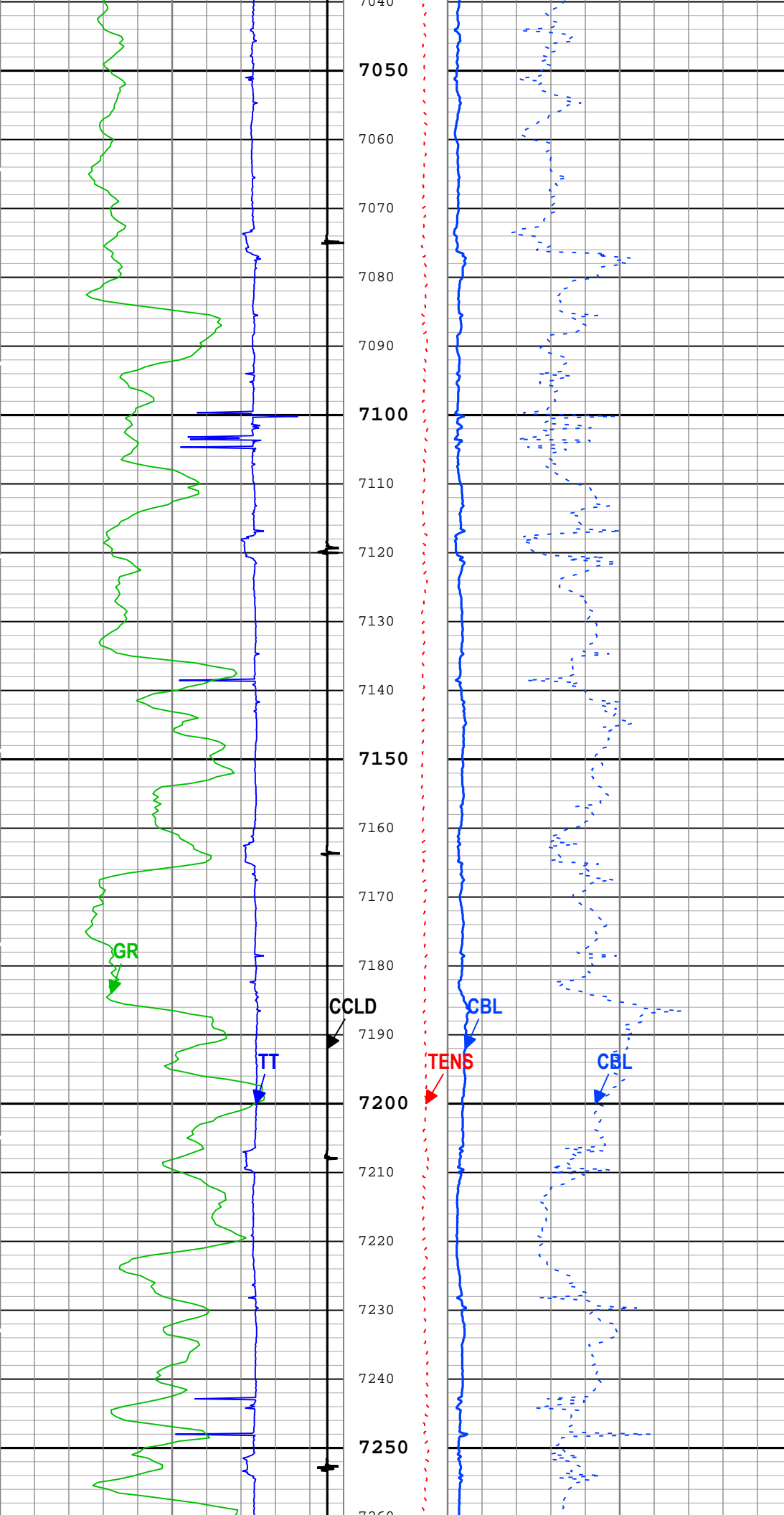


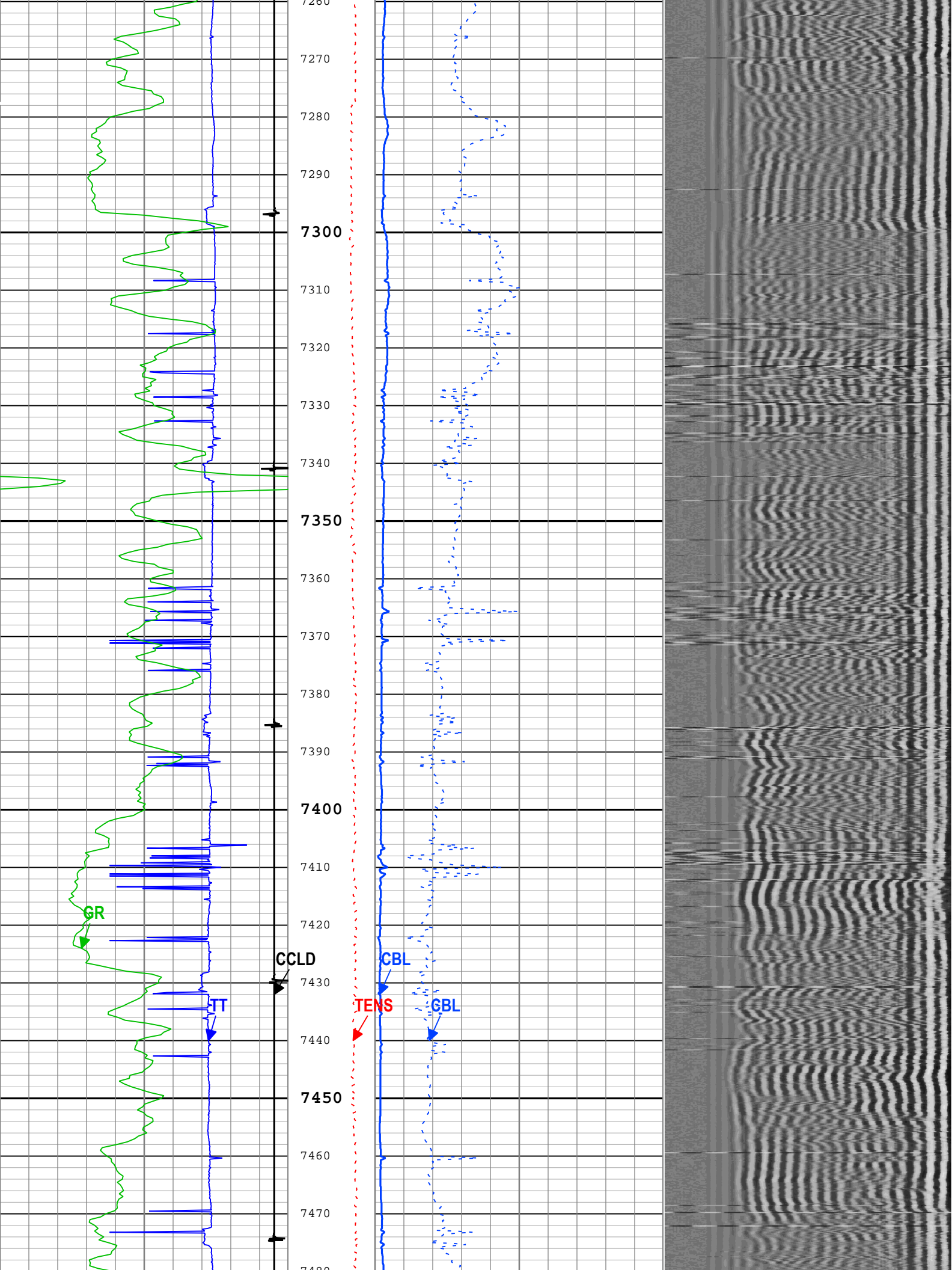


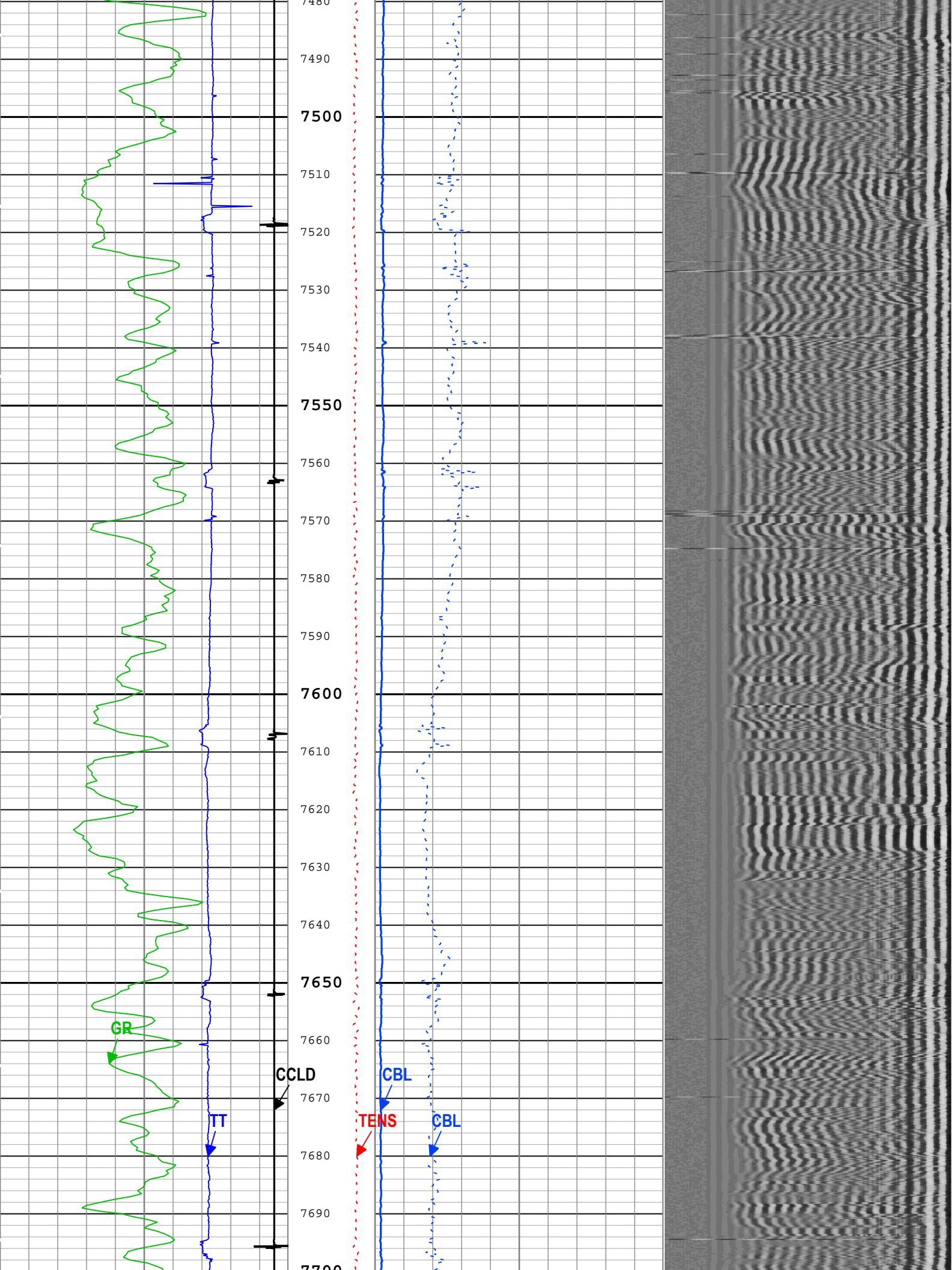


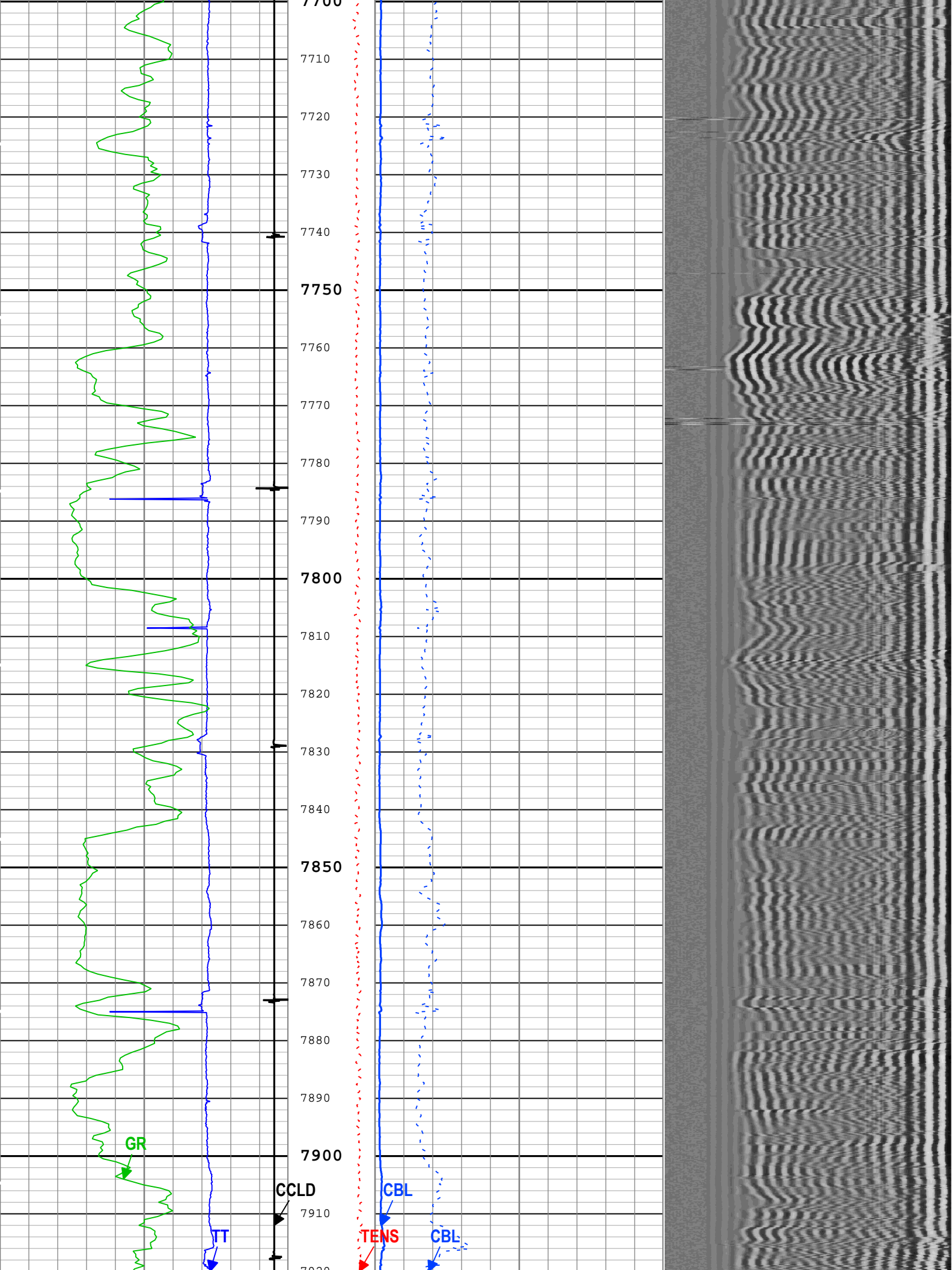


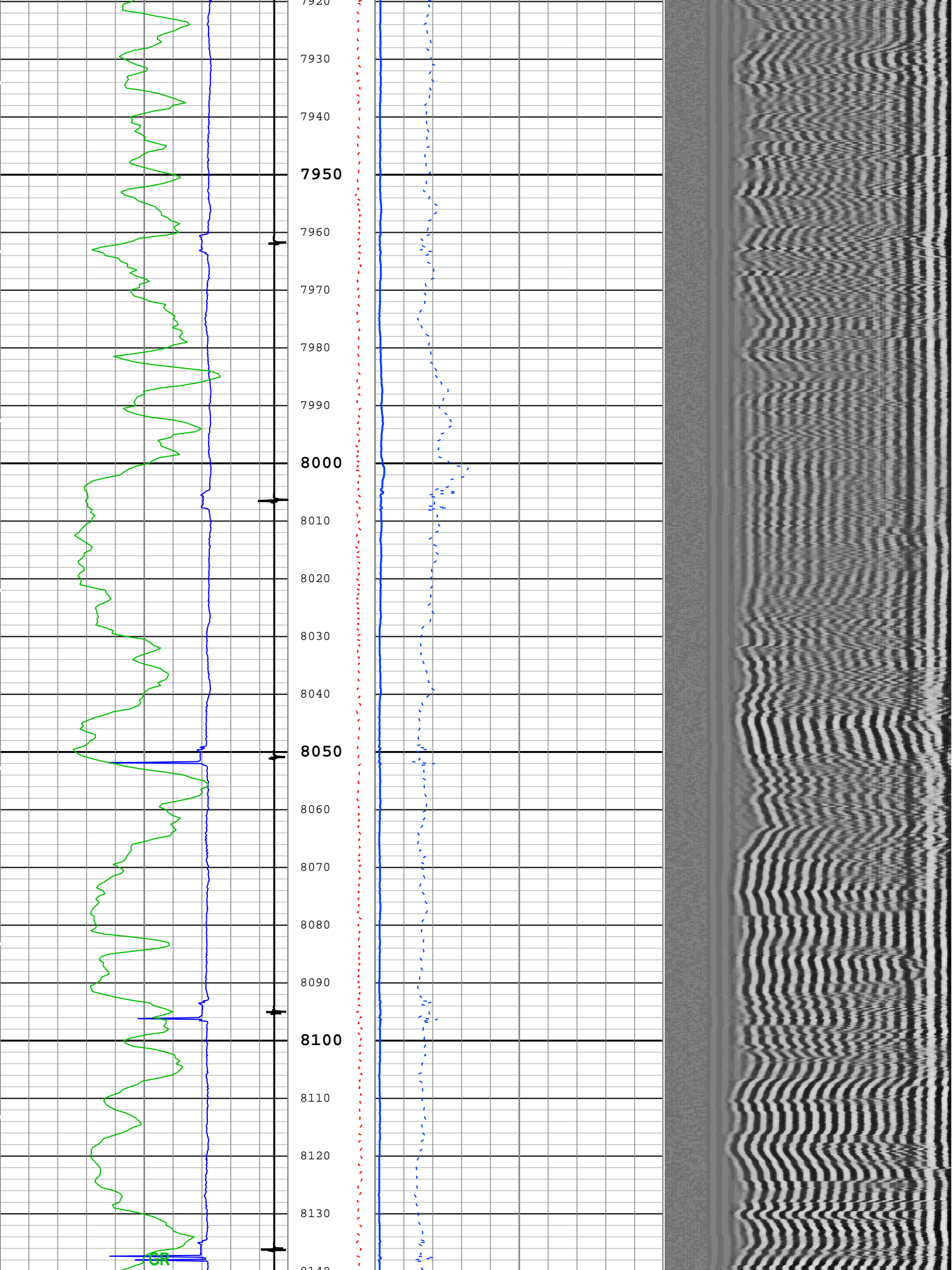


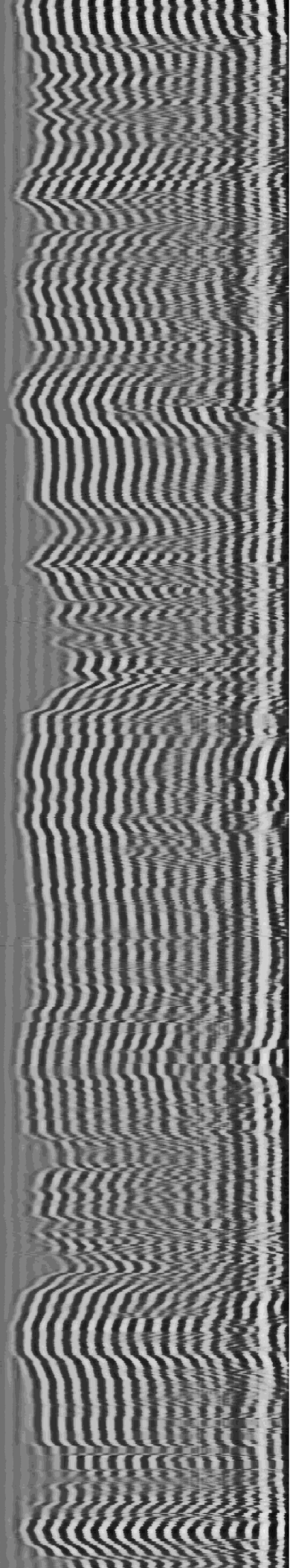
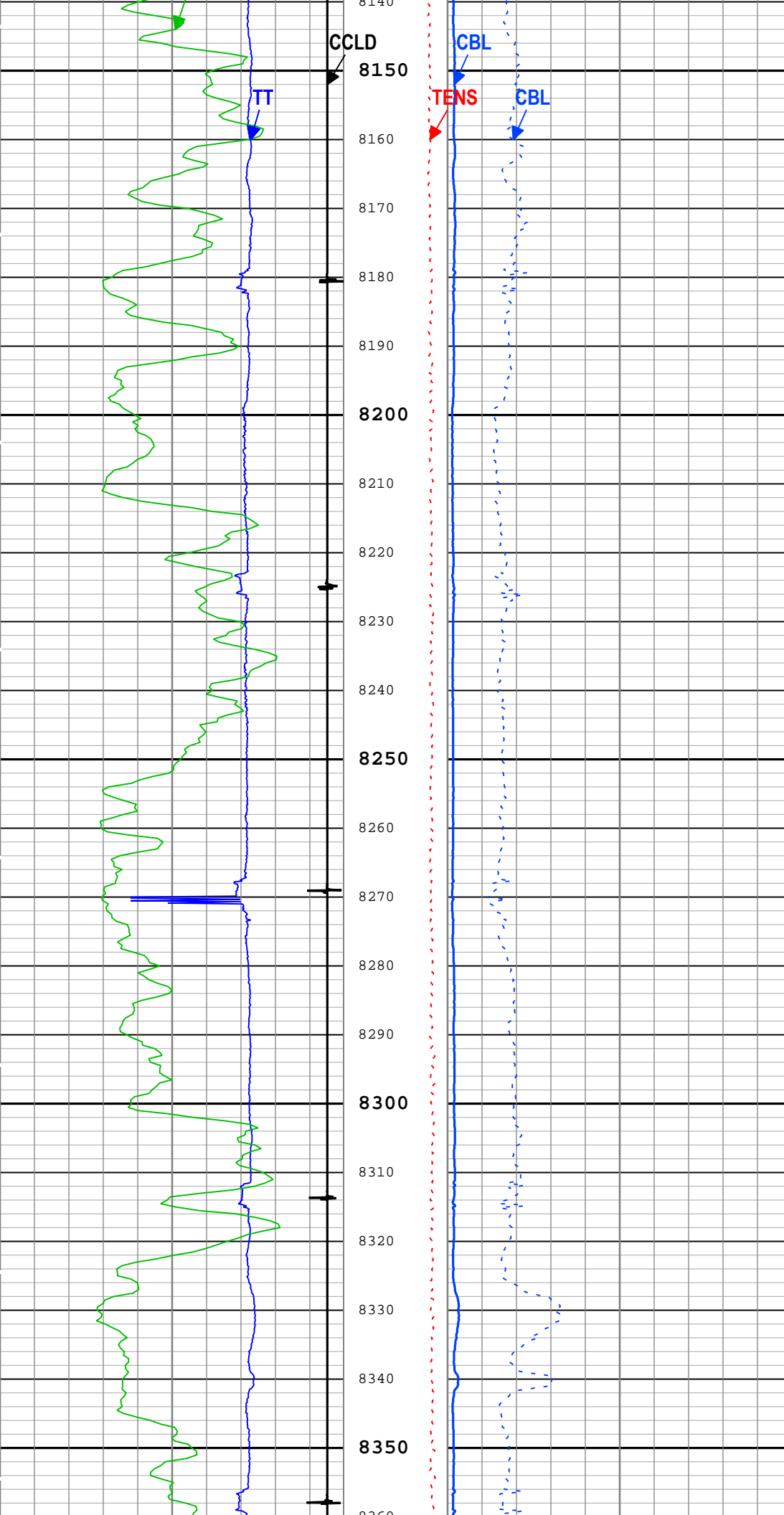


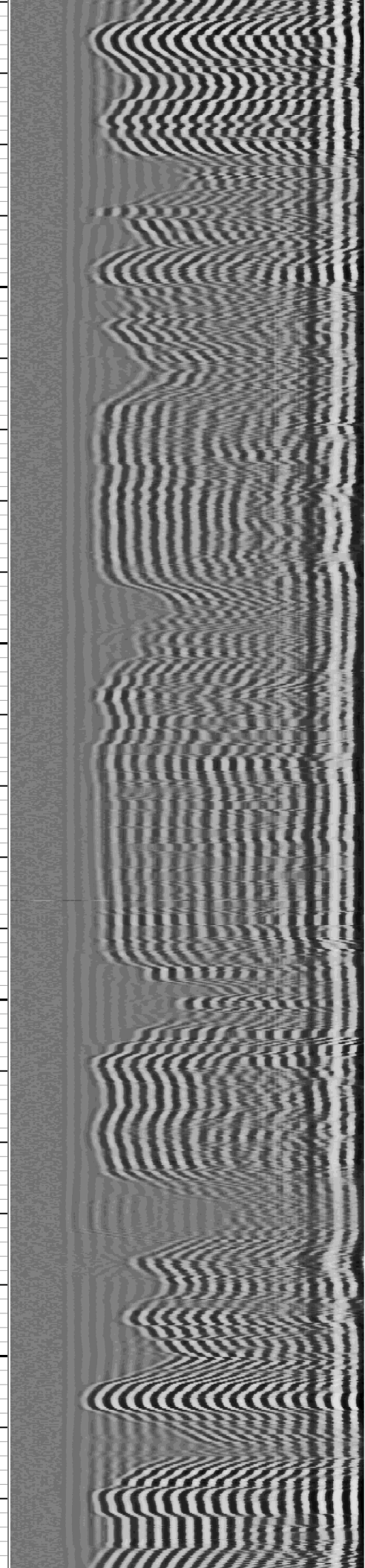
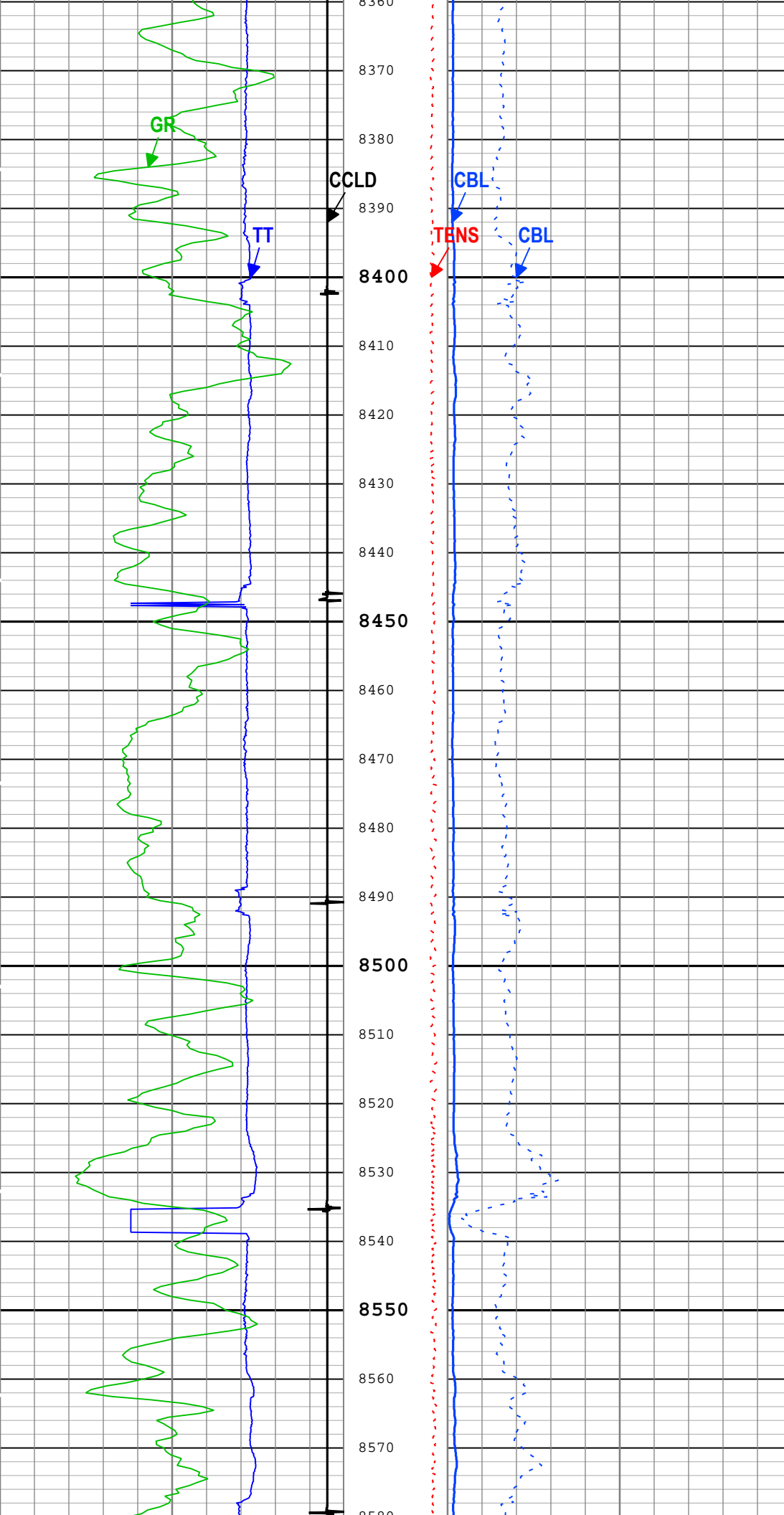


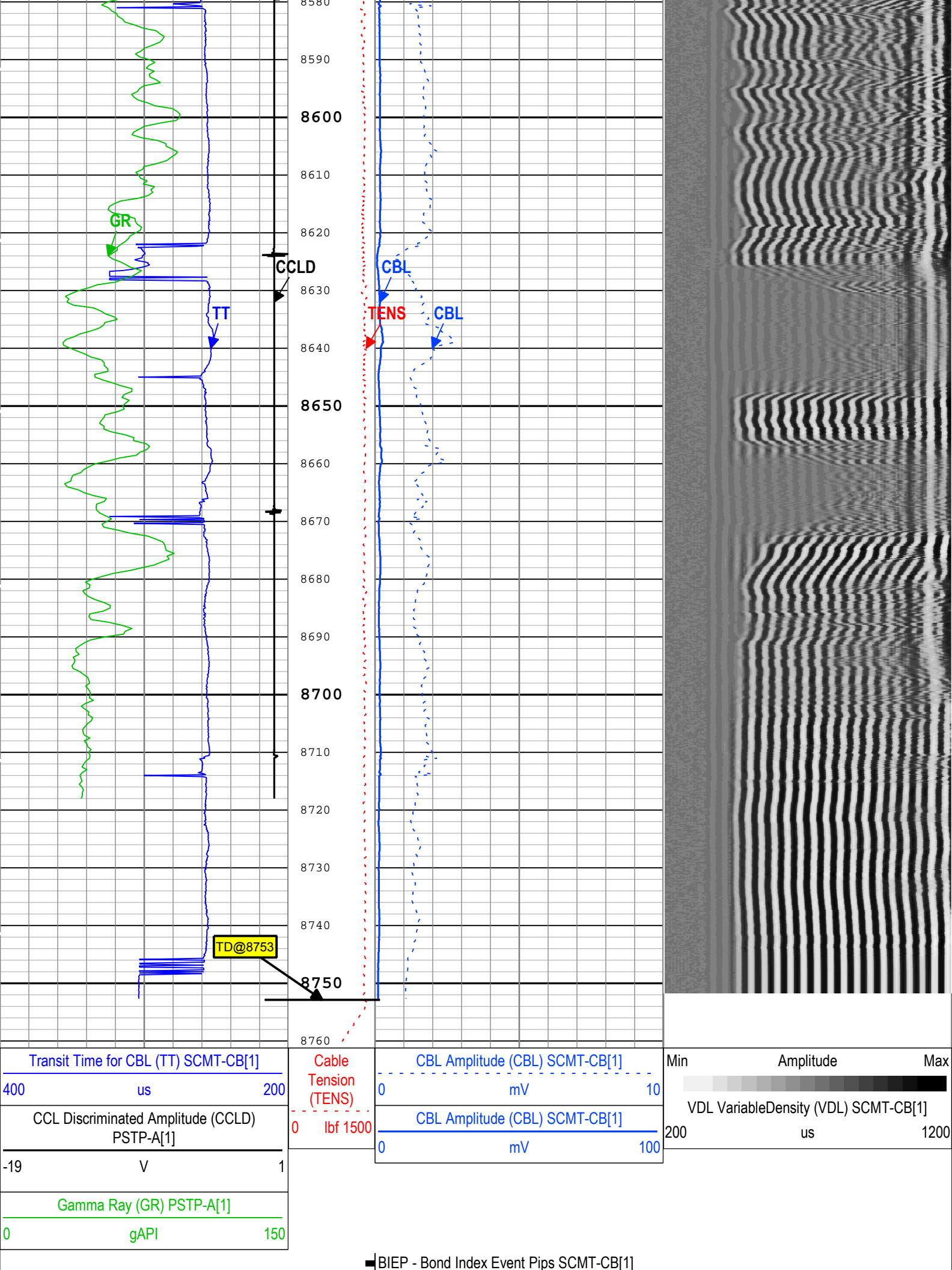












Channel Processing Parameters

One: Parameters

Parameter	Description	Tool	Value	Unit
BHT	Bottom Hole Temperature	Borehole	212	degF
CB3G	SCMT CBL 3 ft Peak Detection T0_Delay and Noise Gate	SCMT-CB	224	us
CBLG	CBL Gate Width	SCMT-CB	40	us
CBRA	CBL LQC Reference Amplitude in Free Pipe	SCMT-CB	Depth Zoned	mV
DFD	Drilling Fluid Density	Borehole	8.49	lbm/gal
DFT_CATEGORY	Drilling Fluid Type	Borehole	Water	
EDF	Elevation of Derrick Floor Above Permanent Datum	WLSESSION	30	ft
EPD	Elevation of Permanent Datum (PDAT) above Mean Sea Level	WLSESSION	8322	ft
GGRD	Geothermal Gradient	Borehole	1	0.01 degF/ft
GOBO_CURR	Good Bond in Arbitrary Cement	SCMT-CB	Depth Zoned	mV
GTSE	Generalized Temperature Selection, from Measured or Computed Temperature	Borehole	GTEM_LINEST(RT)	
MATT_CURR	Maximum Attenuation in Arbitrary Cement	SCMT-CB	Depth Zoned	dB/ft
MCI	Minimum Cemented Interval for Isolation	SCMT-CB	Depth Zoned	ft
MSA	Minimum Sonic Amplitude	SCMT-CB	Depth Zoned	mV
MSA_CURR	Minimum Sonic Amplitude in Arbitrary Cement	SCMT-CB	Depth Zoned	mV
PDAT	Permanent Datum	WLSESSION	GL	
RUN_SNUM	Run Sequence Number	WSDRUN	1	
SHT	Surface Hole Temperature	Borehole	68	degF

OneDepth Zoned Parameters

Parameter	Value	Start (ft)	Stop (ft)
CBRA	80	2300	6258
CBRA	0	6258	6282.72
GOBO_CURR	1.4	2300	6258
GOBO_CURR	0	6258	6282.72
MATT_CURR	16.92	2300	6258
MATT_CURR	0	6258	6282.72
MCI	14.81	2300	2523
MCI	1.25	2523	6258
MCI	0	6258	6282.72
MSA	0.51	2300	6258
MSA	0	6258	6282.72
MSA_CURR	0.51	2300	6258
MSA_CURR	0	6258	6282.72

All depth are actual.

Two: Parameters

Parameter	Description	Tool	Value	Unit
BHT	Bottom Hole Temperature	Borehole	212	degF
CB3G	SCMT CBL 3 ft Peak Detection T0_Delay and Noise Gate	SCMT-CB	224	us
CBLG	CBL Gate Width	SCMT-CB	Time Zoned	us
CBRA	CBL LQC Reference Amplitude in Free Pipe	SCMT-CB	Depth Zoned	mV
THNO	Nominal Casing Thickness - Zoned along logger depths	WLSESSION	0.25	in
DFD	Drilling Fluid Density	Borehole	8.49	lbm/gal

DFT_CATEGORY	Drilling Fluid Type	Borehole	Water	
DTMD	Borehole Fluid Slowness	Borehole	206	us/ft
EDF	Elevation of Derrick Floor Above Permanent Datum	WLSESSION	30	ft
EPD	Elevation of Permanent Datum (PDAT) above Mean Sea Level	WLSESSION	8322	ft
GGRD	Geothermal Gradient	Borehole	1	0.01 degF/ft
GOBO_CURR	Good Bond in Arbitrary Cement	SCMT-CB	Depth Zoned	mV
GTSE	Generalized Temperature Selection, from Measured or Computed Temperature	Borehole	GTEM_LINEST(RT)	
MATT_CURR	Maximum Attenuation in Arbitrary Cement	SCMT-CB	Depth Zoned	dB/ft
MCI	Minimum Cemented Interval for Isolation	SCMT-CB	Depth Zoned	ft
MSA	Minimum Sonic Amplitude	SCMT-CB	Depth Zoned	mV
MSA_CURR	Minimum Sonic Amplitude in Arbitrary Cement	SCMT-CB	Depth Zoned	mV
PDAT	Permanent Datum	WLSESSION	GL	
RUN_SNUM	Run Sequence Number	WSDRUN	2	
SHT	Surface Hole Temperature	Borehole	68	degF

TwoDepth Zoned Parameters

Parameter	Value	Start (ft)	Stop (ft)
CBRA	80	5853.3	8753
CBRA	0	8753	8761.17
GOBO_CURR	1.4	5853.3	8753
GOBO_CURR	0	8753	8761.17
MATT_CURR	16.92	5853.3	8753
MATT_CURR	0	8753	8761.17
MCI	1.25	5853.3	8753
MCI	0	8753	8761.17
MSA	0.51	5853.3	8753
MSA	0	8753	8761.17
MSA_CURR	0.51	5853.3	8753
MSA_CURR	0	8753	8761.17

All depth are actual.

TwoTime Zoned Parameters

Pass Log[8]:Up

Parameter	Value	Start Time	Stop Time	Start Depth (ft)	Stop Depth (ft)
CBLG	40	21-May-2018 06:51:24	21-May-2018 07:38:10	7277.63	6089.51

Pass Log[12]:Up

CBLG	43	21-May-2018 09:43:18	21-May-2018 10:45:24	8761.17	7165.13
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All depth are at tool zero.

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	0 dB	

Two: Parameters

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

PCCG	PSP Downhole CCL Gain	PSTP-A	12 dB	
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Two

CBL-VDL Repeat Pass

Software Version

Acquisition System	Version
Maxwell 2018	8.0.95333.3100
Application Patch	Wireline_NPD-PNX-2018CMZ_8.0.100887

Pass Summary

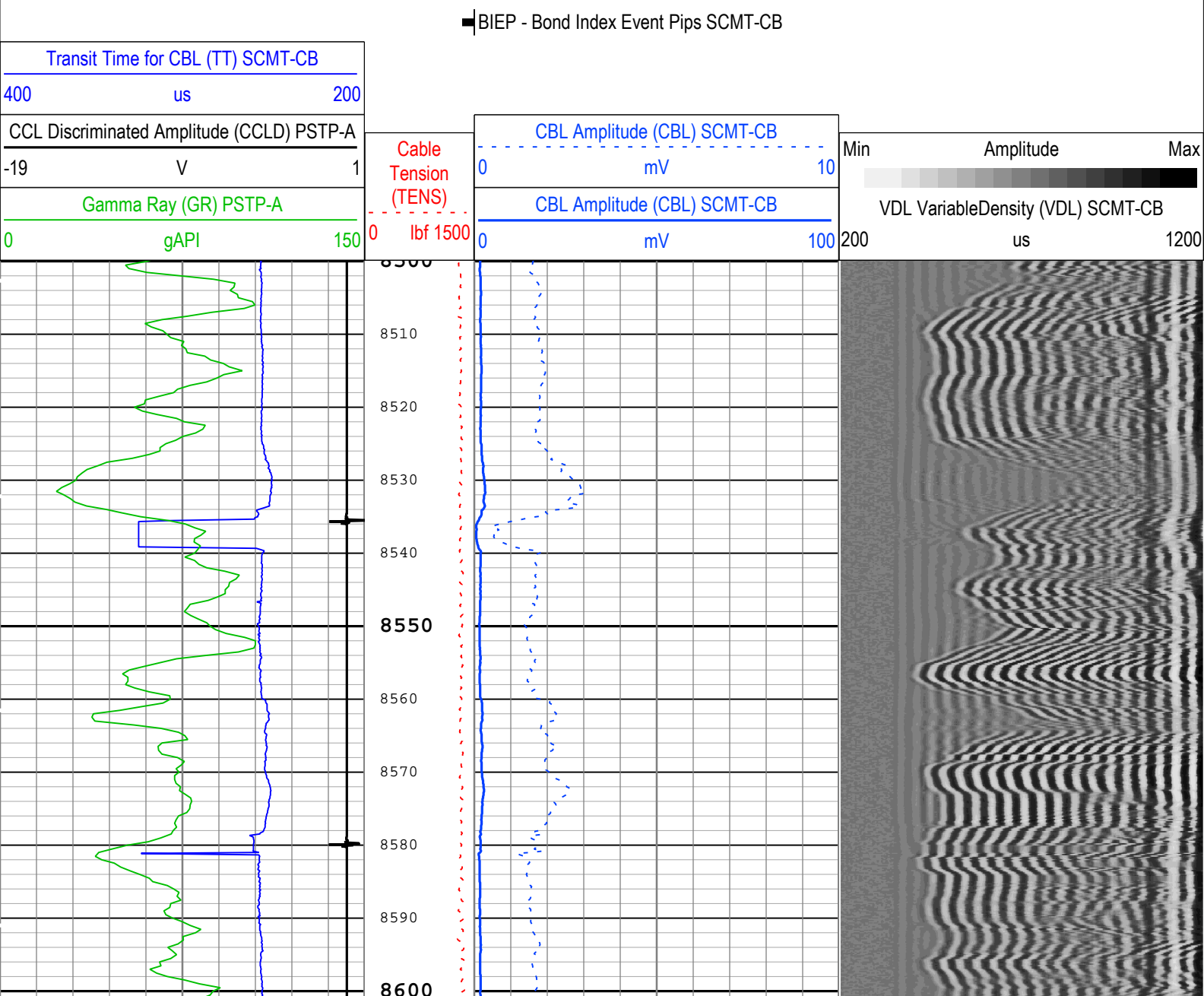
Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	DSC Mode	Depth Shift	Include Parallel Data
Two	Log[11]:Up	Up	8236.25 ft	8765.36 ft	21-May-2018 09:14:41	21-May-2018 09:36:06	ON	9.90 ft	No

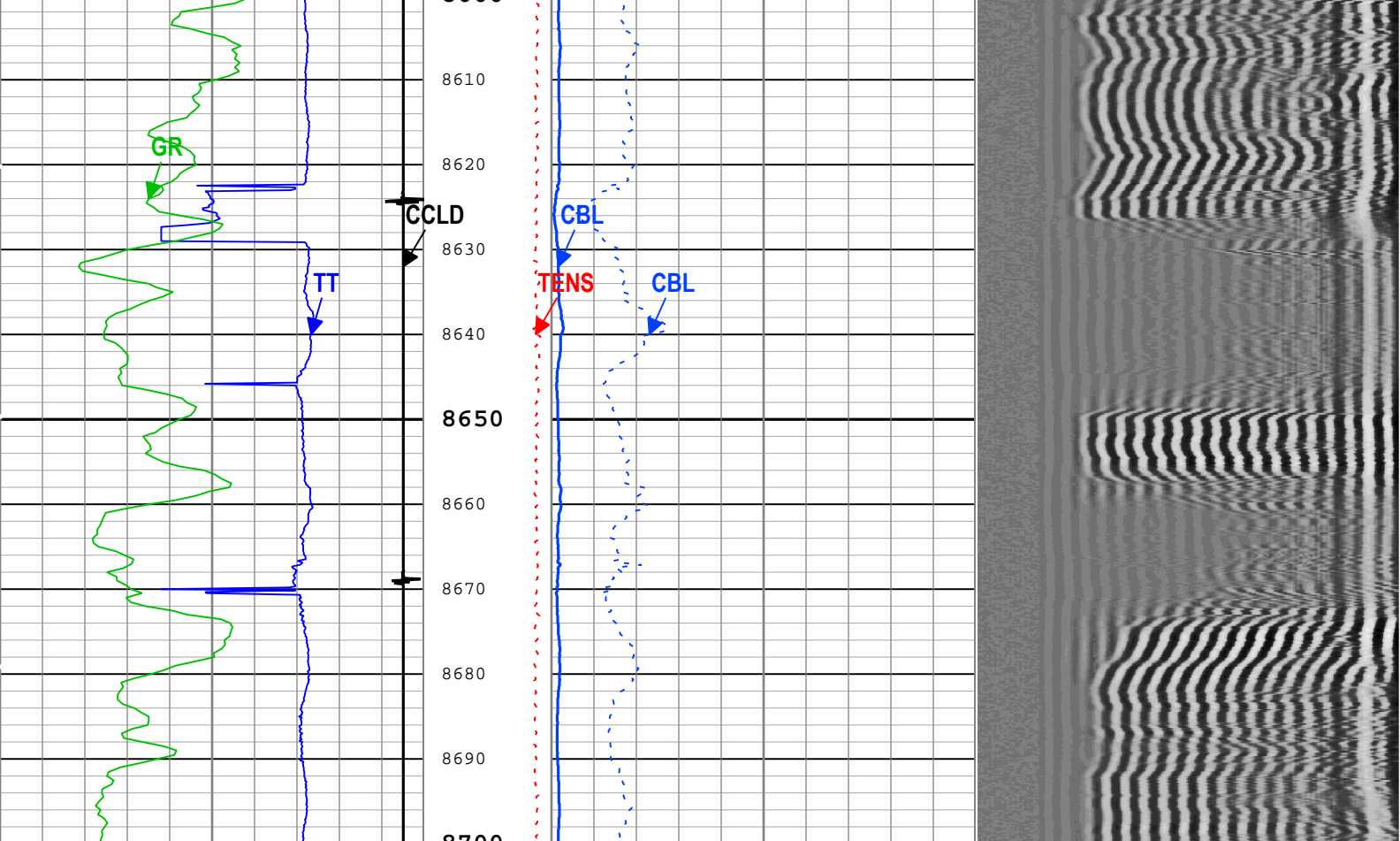
All depths are referenced to toolstring zero

Log	Company:Caerus Operating LLC	Well:Puckett 12D-26-697
		Two: Log[11]:Up:S016

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: 21-May-2018 11:31:32

TIME_1900 - Time Marked every 60.00 (s)





Transit Time for CBL (TT) SCMT-CB	Cable Tension (TENS)	CBL Amplitude (CBL) SCMT-CB	Min	Amplitude	Max
400 us 200	0 1500 lbf	0 mV 10			
CCL Discriminated Amplitude (CCLD) PSTP-A		CBL Amplitude (CBL) SCMT-CB		VDL VariableDensity (VDL) SCMT-CB	
-19 V 1		0 mV 100	200	us	1200
Gamma Ray (GR) PSTP-A					
0 gAPI 150					

■ BIEP - Bond Index Event Pips SCMT-CB

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: 21-May-2018 11:31:32

Channel Processing Parameters				
Two: Parameters				
Parameter	Description	Tool	Value	Unit
BHT	Bottom Hole Temperature	Borehole	212	degF
CB3G	SCMT CBL 3 ft Peak Detection T0_Delay and Noise Gate	SCMT-CB	224	us
CBLG	CBL Gate Width	SCMT-CB	Time Zoned	us
CBRA	CBL LQC Reference Amplitude in Free Pipe	SCMT-CB	80	mV
THNO	Nominal Casing Thickness - Zoned along logger depths	WLSESSION	0.25	in
DFD	Drilling Fluid Density	Borehole	8.49	lbm/gal
DFT_CATEGORY	Drilling Fluid Type	Borehole	Water	
DTMD	Borehole Fluid Slowness	Borehole	206	us/ft
EDF	Elevation of Derrick Floor Above Permanent Datum	WLSESSION	30	ft
EPD	Elevation of Permanent Datum (PDAT) above Mean Sea Level	WLSESSION	8322	ft
GGRD	Geothermal Gradient	Borehole	1	0.01 degF/ft
GOBO_CURR	Good Bond in Arbitrary Cement	SCMT-CB	1.4	mV
GTSE	Generalized Temperature Selection, from Measured or	Borehole	GTEM_LINEST(RT)	

	Computed Temperature			
MATT_CURR	Maximum Attenuation in Arbitrary Cement	SCMT-CB	16.92	dB/ft
MCI	Minimum Cemented Interval for Isolation	SCMT-CB	1.25	ft
MSA	Minimum Sonic Amplitude	SCMT-CB	0.51	mV
MSA_CURR	Minimum Sonic Amplitude in Arbitrary Cement	SCMT-CB	0.51	mV
PDAT	Permanent Datum	WLSESSION	GL	
RUN_SNUM	Run Sequence Number	WSDRUN	2	
SHT	Surface Hole Temperature	Borehole	68	degF

Time Zone Parameters

Parameter	Value	Start Time	Stop Time	Start Depth (ft)	Stop Depth (ft)
CBLG	40	21-May-2018 09:14:41	21-May-2018 09:26:37	8765.36	8513.53
CBLG	43	21-May-2018 09:26:37	21-May-2018 09:36:06	8513.53	8236.25

All depth are at tool zero.

Tool Control Parameters

Two: Parameters

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

Two

CBL-VDL Repeat Pass 2

Software Version

Acquisition System	Version
Maxwell 2018	8.0.95333.3100
Application Patch	Wireline_NPD-PNX-2018CMZ_8.0.100887

Pass Summary

Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	DSC Mode	Depth Shift	Include Parallel Data
Two	Log[13]:Up	Up	6995.92 ft	7490.10 ft	21-May-2018 10:51:16	21-May-2018 11:08:52	ON	9.90 ft	No

All depths are referenced to toolstring zero

Log

Company:Caerus Operating LLC

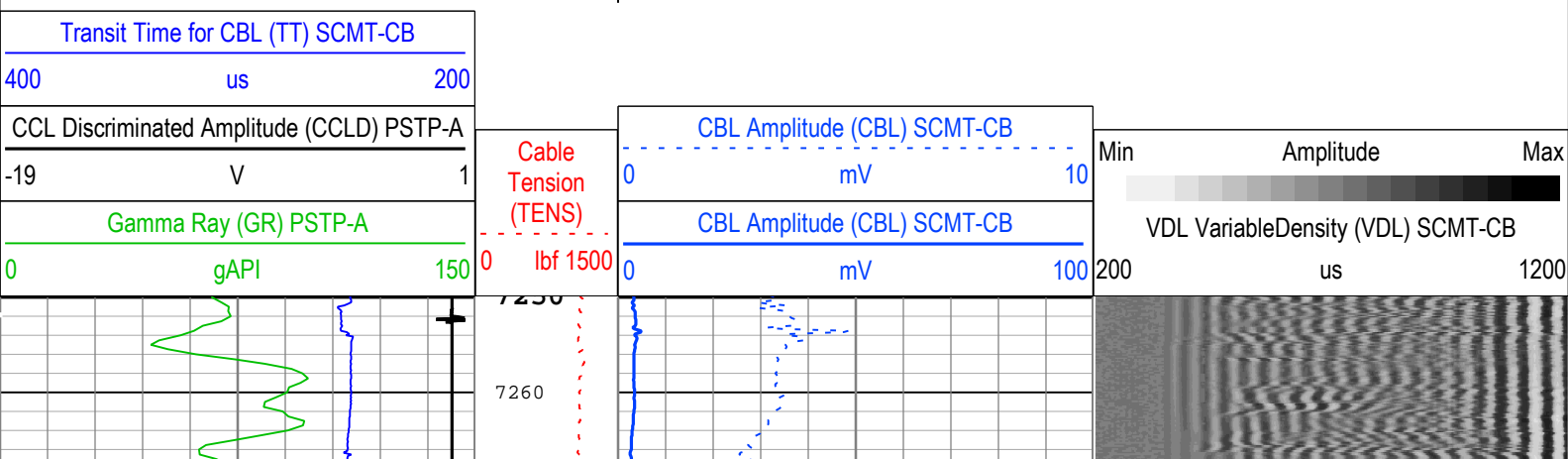
Well:Puckett 12D-26-697

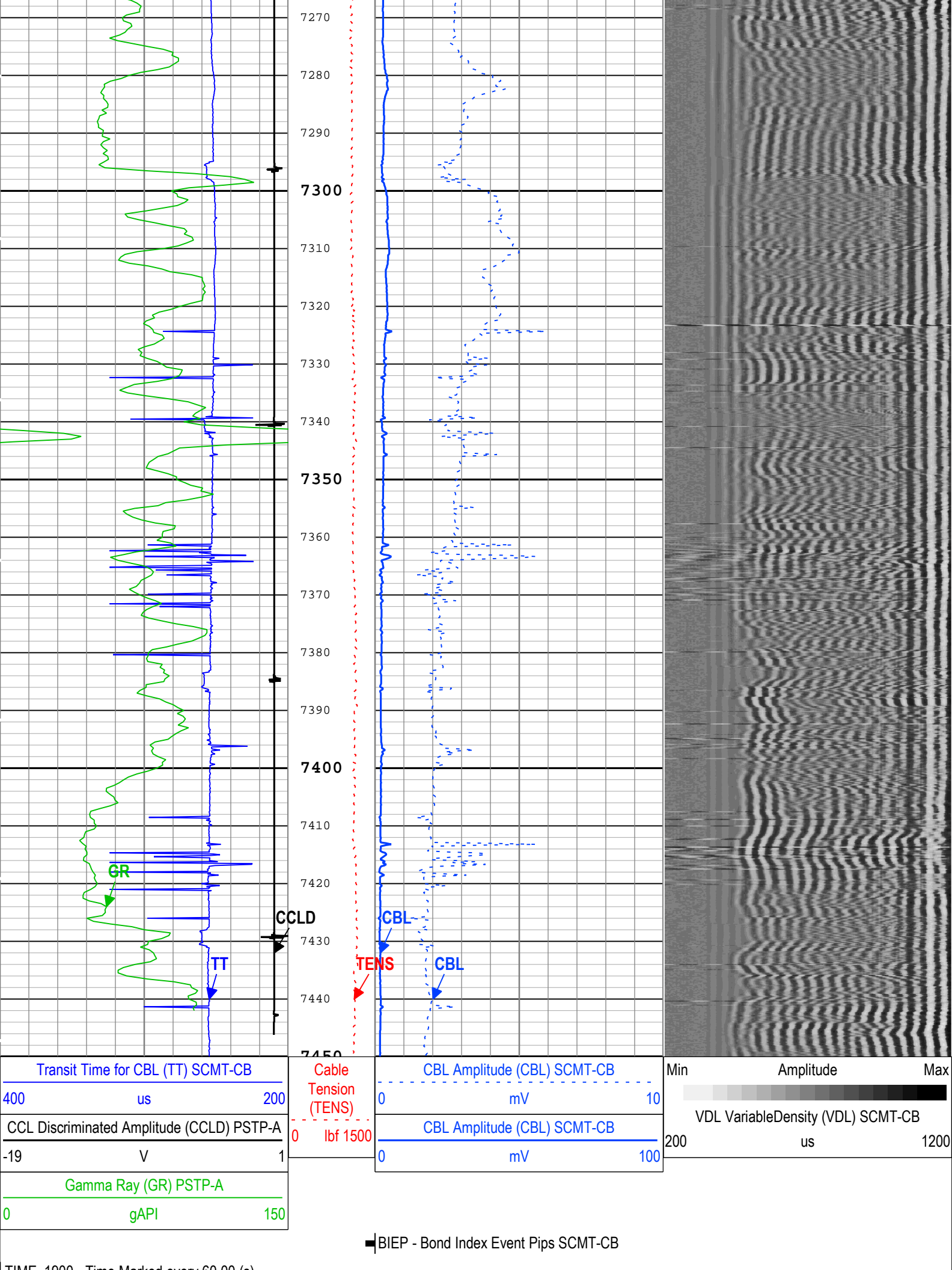
Two: Log[13]:Up:S016

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: 21-May-2018 11:31:36

TIME 1900 - Time Marked every 60.00 (s)

■ BIEP - Bond Index Event Pips SCMT-CB





Channel Processing Parameters**Two: Parameters**

Parameter	Description	Tool	Value	Unit
BHT	Bottom Hole Temperature	Borehole	212	degF
CB3G	SCMT CBL 3 ft Peak Detection T0_Delay and Noise Gate	SCMT-CB	224	us
CBLG	CBL Gate Width	SCMT-CB	43	us
CBRA	CBL LQC Reference Amplitude in Free Pipe	SCMT-CB	80	mV
THNO	Nominal Casing Thickness - Zoned along logger depths	WLSESSION	0.25	in
DFD	Drilling Fluid Density	Borehole	8.49	lbm/gal
DFT_CATEGORY	Drilling Fluid Type	Borehole	Water	
DTMD	Borehole Fluid Slowness	Borehole	206	us/ft
EDF	Elevation of Derrick Floor Above Permanent Datum	WLSESSION	30	ft
EPD	Elevation of Permanent Datum (PDAT) above Mean Sea Level	WLSESSION	8322	ft
GGRD	Geothermal Gradient	Borehole	1	0.01 degF/ft
GOBO_CURR	Good Bond in Arbitrary Cement	SCMT-CB	1.4	mV
GTSE	Generalized Temperature Selection, from Measured or Computed Temperature	Borehole	GTEM_LINEST(RT)	
MATT_CURR	Maximum Attenuation in Arbitrary Cement	SCMT-CB	16.92	dB/ft
MCI	Minimum Cemented Interval for Isolation	SCMT-CB	1.25	ft
MSA	Minimum Sonic Amplitude	SCMT-CB	0.51	mV
MSA_CURR	Minimum Sonic Amplitude in Arbitrary Cement	SCMT-CB	0.51	mV
PDAT	Permanent Datum	WLSESSION	GL	
RUN_SNUM	Run Sequence Number	WSDRUN	2	
SHT	Surface Hole Temperature	Borehole	68	degF

Tool Control Parameters**Two: Parameters**

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

Two**CBL-VDL Free pipe****Software Version**

Acquisition System	Version
Maxwell 2018	8.0.95333.3100
Application Patch	Wireline_NPD-PNX-2018CMZ_8.0.100887

Pass Summary

Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	DSC Mode	Depth Shift	Include Parallel Data
Two	Log[9]:Up	Up	1714.43 ft	5906.39 ft	21-May-2018 07:38:15	21-May-2018 08:03:05	ON	10.94 ft	No

All depths are referenced to toolstring zero

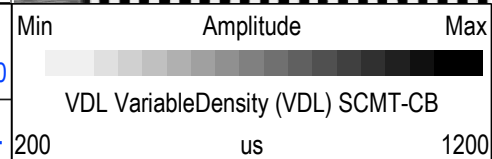
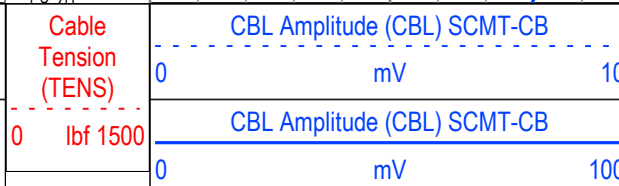
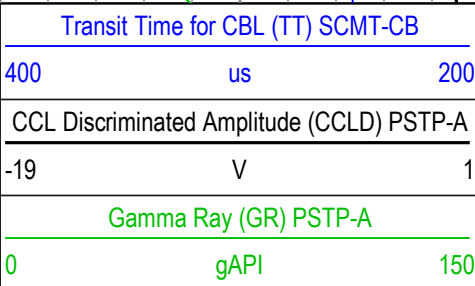
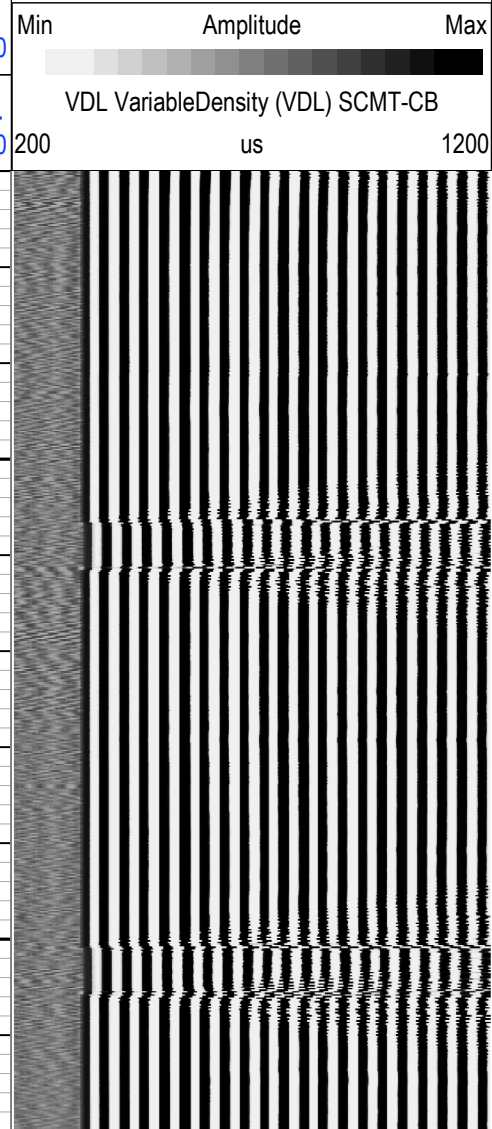
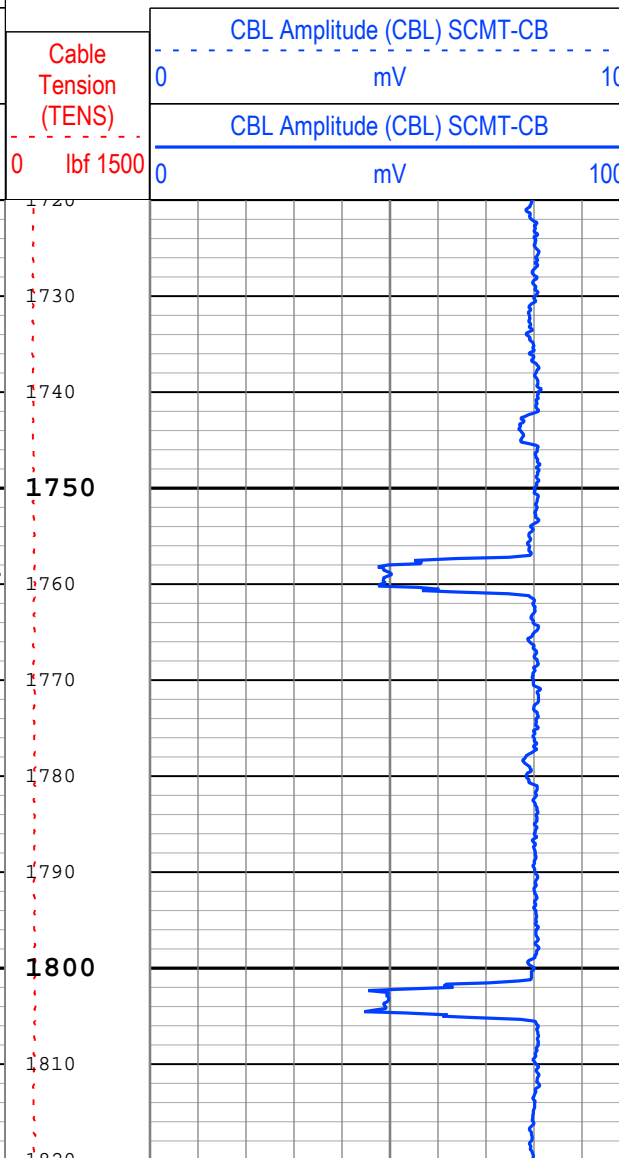
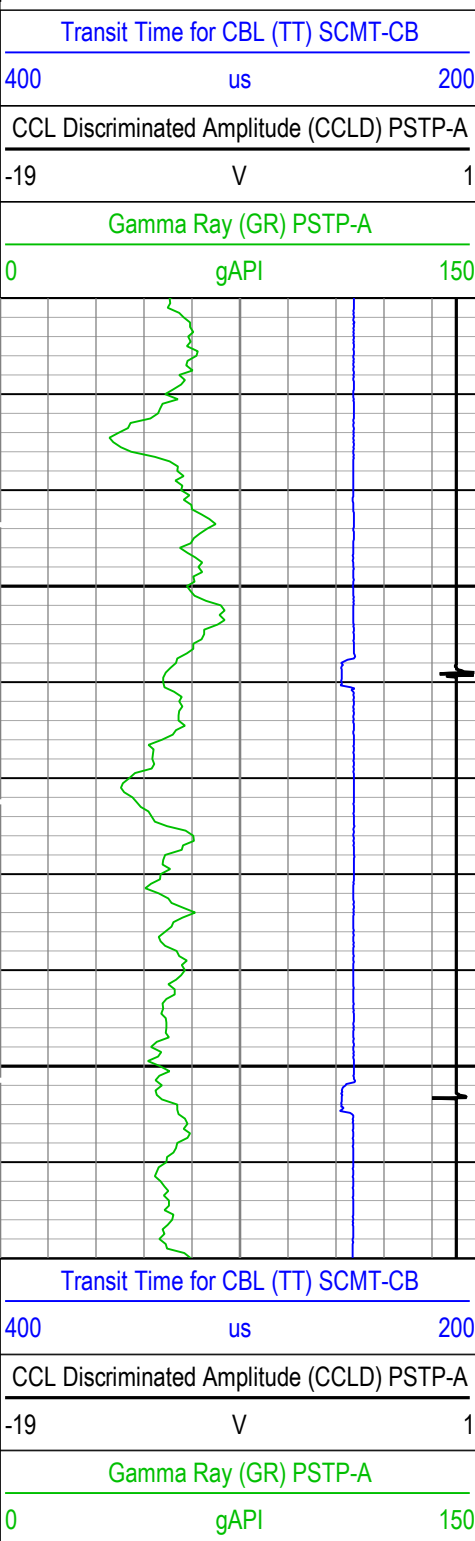
Log

Company:Caerus Operating LLC

Well:Puckett 12D-26-697

Two: Log[9]:Up:S016

TIME_1900 - Time Marked every 60.00 (s)



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: 21-May-2018 11:31:39

Channel Processing Parameters

Two: Parameters

Parameter	Description	Tool	Value	Unit
BHT	Bottom Hole Temperature	Borehole	212	degF
CB3G	SCMT CBL 3 ft Peak Detection T0_Delay and Noise Gate	SCMT-CB	224	us
CBLG	CBL Gate Width	SCMT-CB	40	us
CBDA	CBL LOC Reference Amplitude in Free Pipe	SCMT-CB	80	mV

CBLRA	CBL LQC Reference Amplitude in Free Pipe	SCMT-CB	80	mV
THNO	Nominal Casing Thickness - Zoned along logger depths	WLSESSION	0.25	in
DFD	Drilling Fluid Density	Borehole	8.49	lbm/gal
DFT_CATEGORY	Drilling Fluid Type	Borehole	Water	
DTMD	Borehole Fluid Slowness	Borehole	206	us/ft
EDF	Elevation of Derrick Floor Above Permanent Datum	WLSESSION	30	ft
EPD	Elevation of Permanent Datum (PDAT) above Mean Sea Level	WLSESSION	8322	ft
GGRD	Geothermal Gradient	Borehole	1	0.01 degF/ft
GOBO_CURR	Good Bond in Arbitrary Cement	SCMT-CB	1.4	mV
GTSE	Generalized Temperature Selection, from Measured or Computed Temperature	Borehole	GTEM_LINEST(RT)	
MATT_CURR	Maximum Attenuation in Arbitrary Cement	SCMT-CB	16.92	dB/ft
MCI	Minimum Cemented Interval for Isolation	SCMT-CB	14.81	ft
MSA	Minimum Sonic Amplitude	SCMT-CB	0.51	mV
MSA_CURR	Minimum Sonic Amplitude in Arbitrary Cement	SCMT-CB	0.51	mV
PDAT	Permanent Datum	WLSESSION	GL	
RUN_SNUM	Run Sequence Number	WSDRUN	2	
SHT	Surface Hole Temperature	Borehole	68	degF

Tool Control Parameters

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

Composite 1

RST Main pass

Software Version

Acquisition System		Version
Maxwell 2018		8.0.95333.3100
Application Patch		Wireline_NPD-PNX-2018CMZ_8.0.100887

Composite Summary

Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	DSC Mode	Depth Shift	Include Parallel Data
One	Log[6]:Up	Up	2296.87 ft	6282.73 ft	09-May-2018 18:10:22	09-May-2018 20:32:21	ON	9.15 ft	Yes
Two	Log[8]:Up	Up	5907.38 ft	7369.78 ft	21-May-2018 06:45:32	21-May-2018 07:38:10	ON	9.90 ft	No
Two	Log[12]:Up	Up	6908.96 ft	8765.97 ft	21-May-2018 09:42:48	21-May-2018 10:45:24	ON	9.90 ft	No

All depths are referenced to toolstring zero

Log

Company:Caerus Operating LLC

Well:Puckett 12D-26-697

Composite 1:S016

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: 21-May-2018 11:31:43

IHV - Integrated Hole Volume every 10.00 (ft3)

IHV - Integrated Hole Volume every 100.00 (ft3)

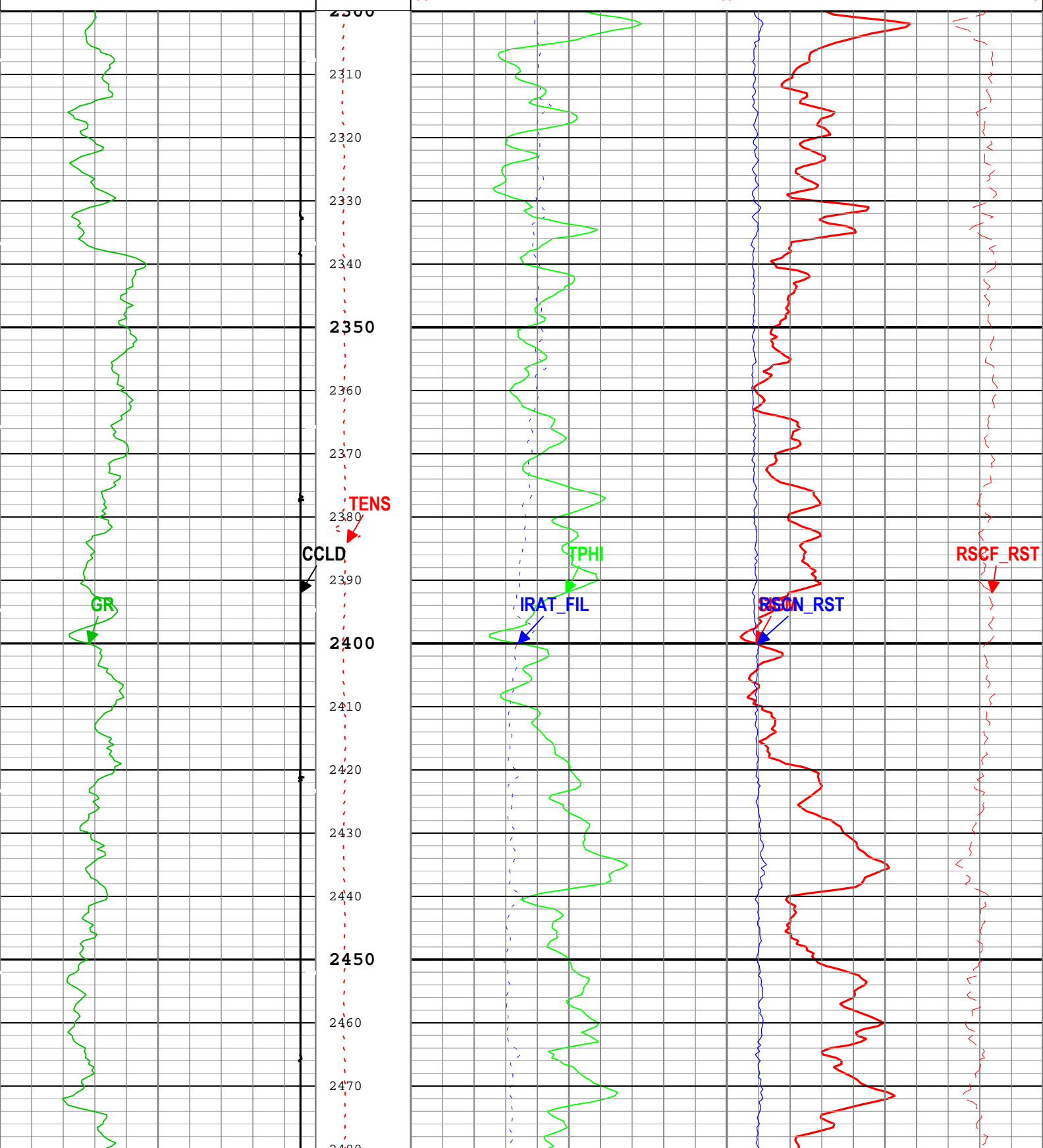
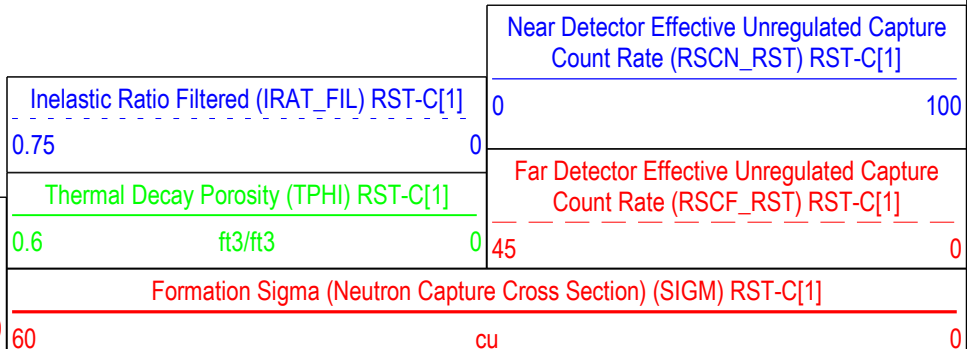
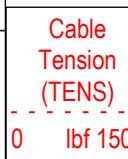
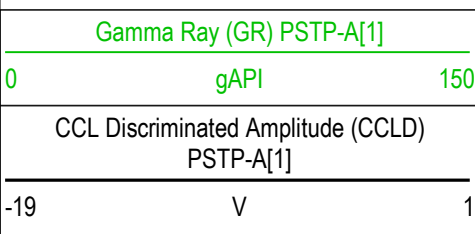
ICV - Integrated Cement Volume every 10.00 (ft3)

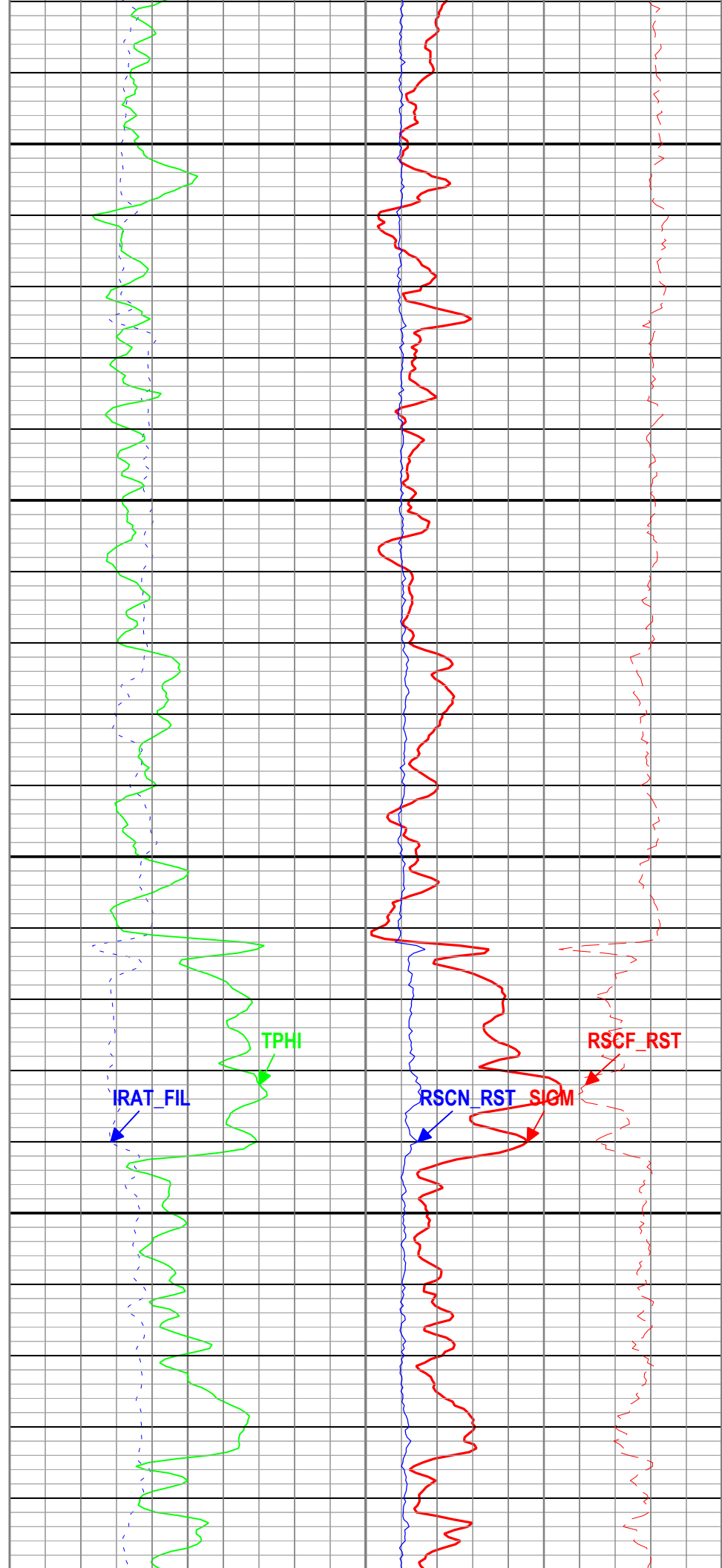
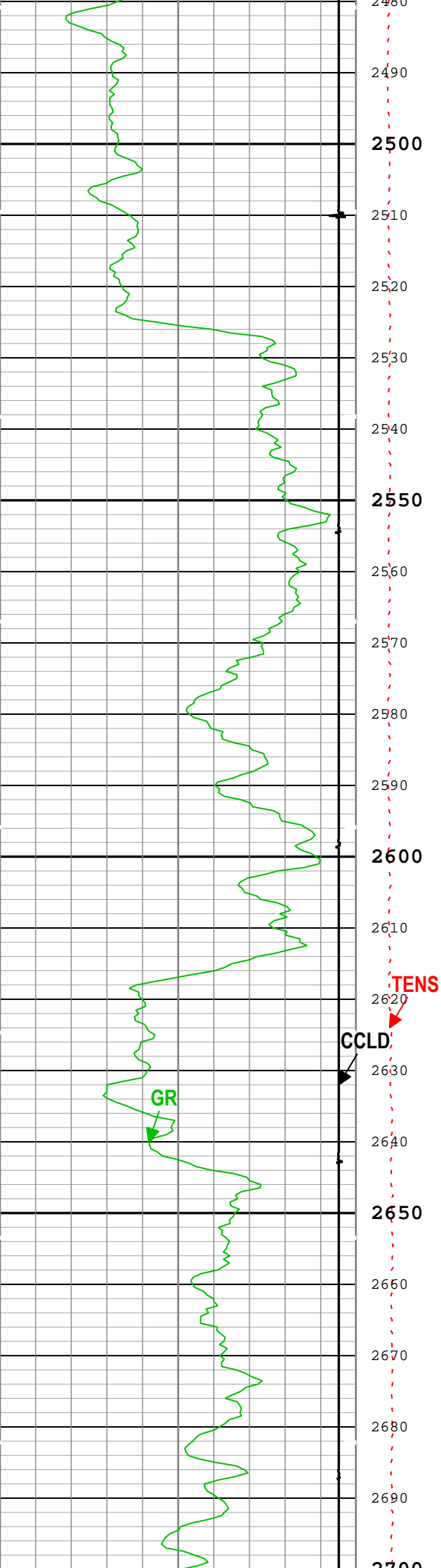
TIME_1900 - Elapsed time since midnight, 30 December 1899 every 60.00 (s)

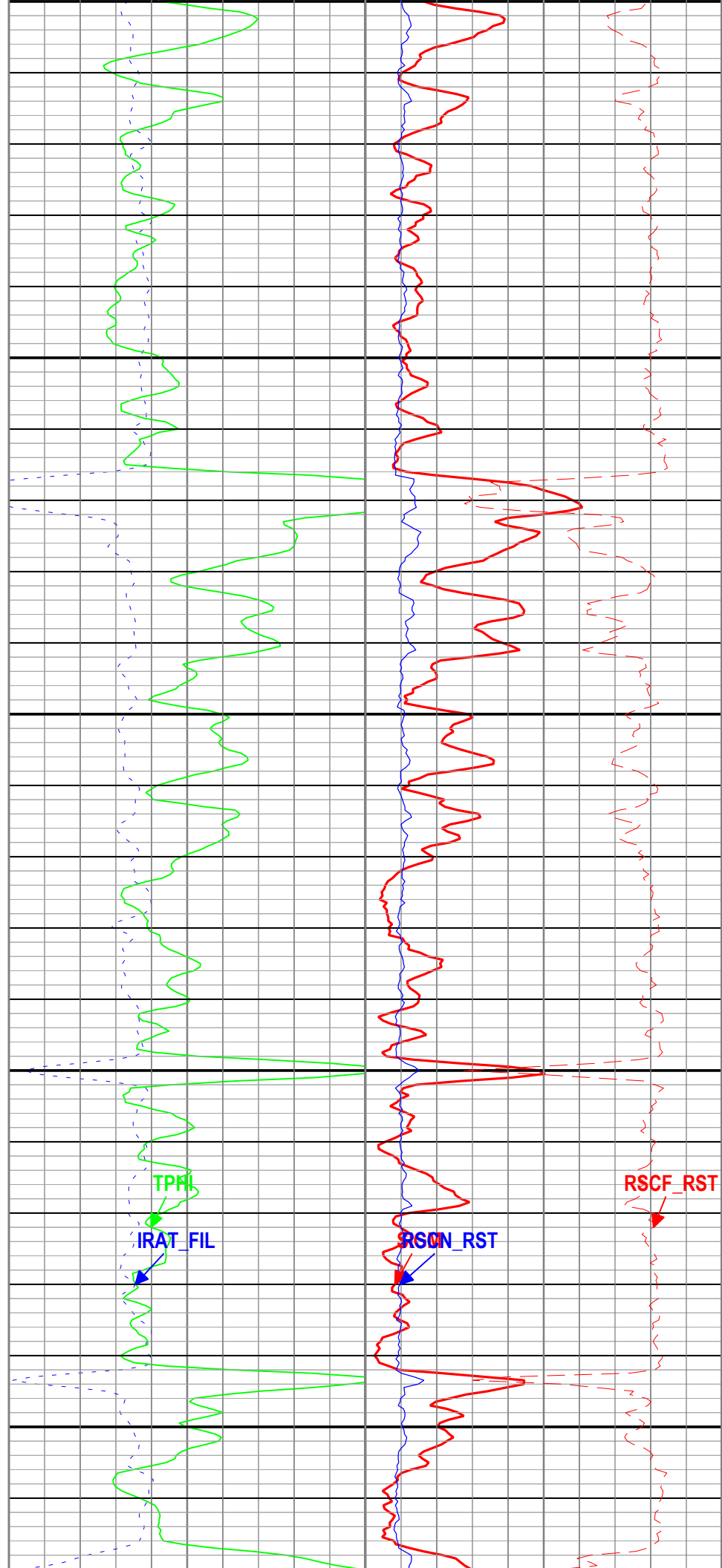
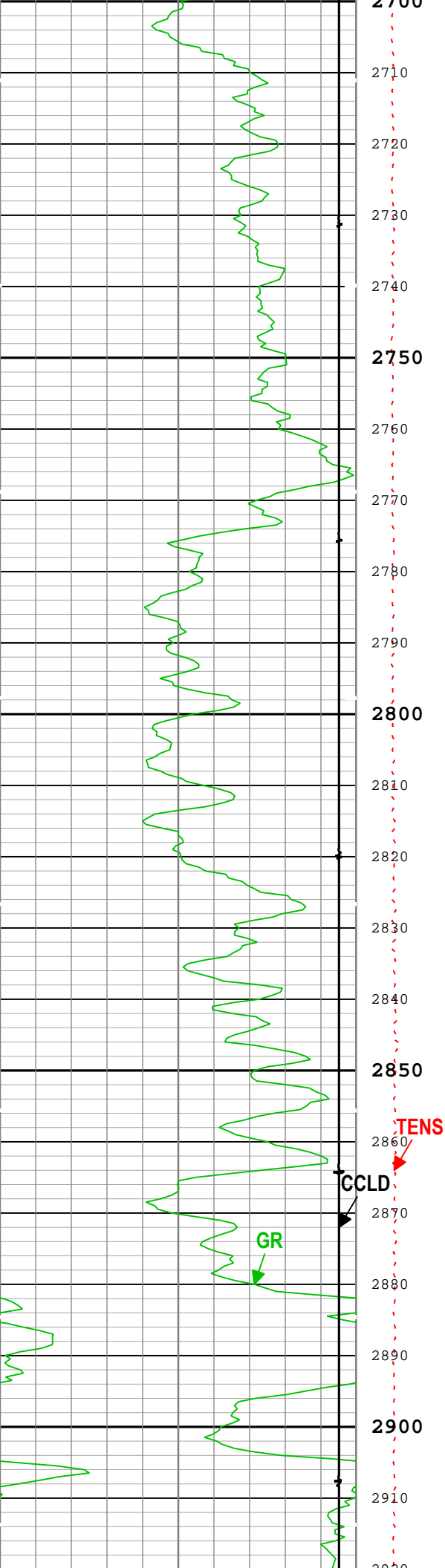
ICV - Integrated Cement Volume every 100.00 (ft3)

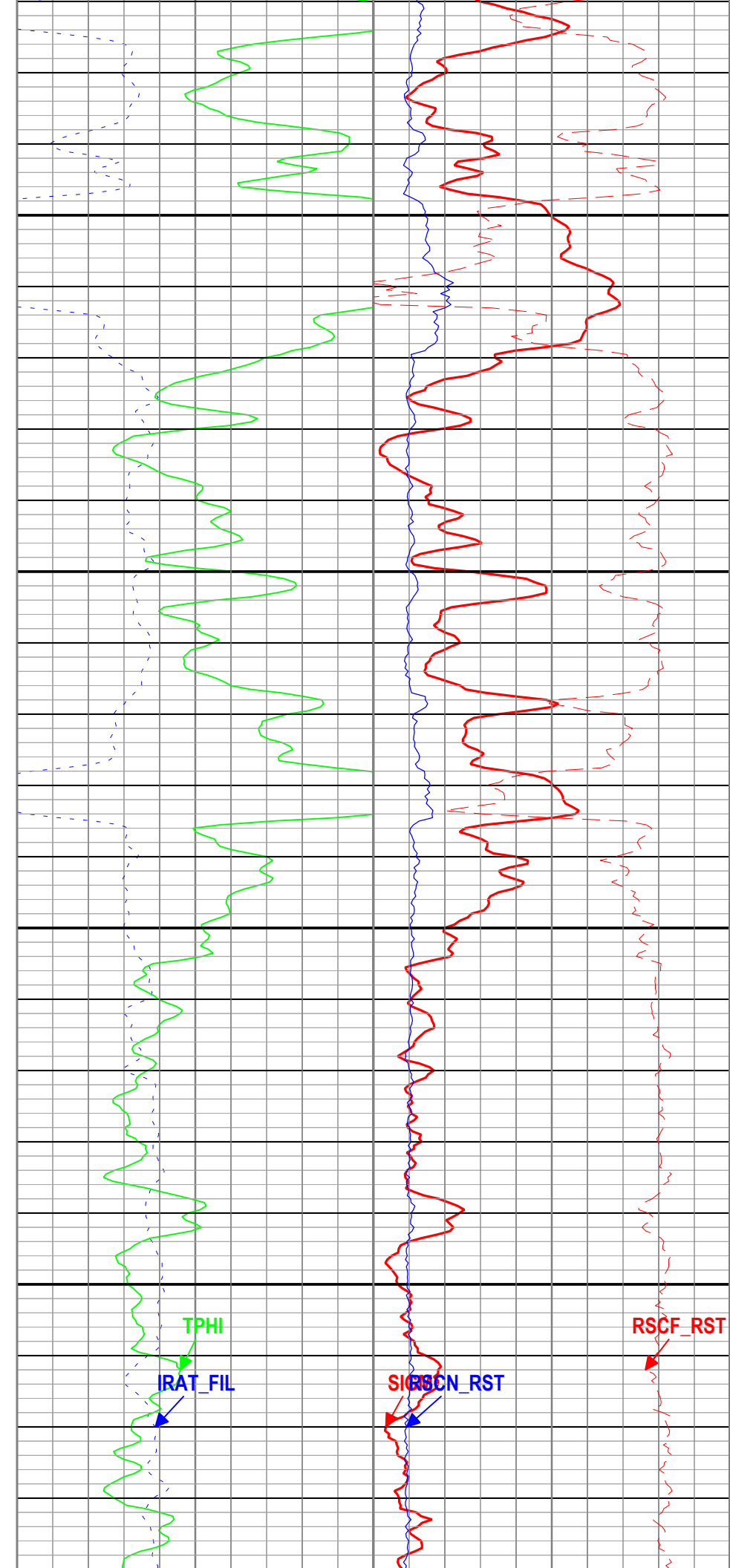
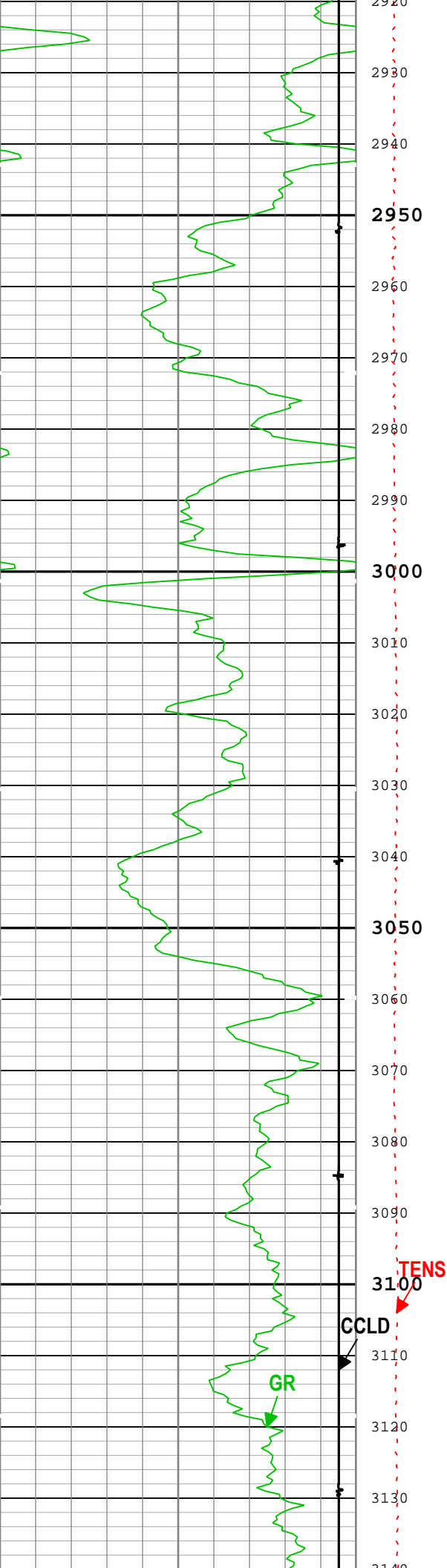
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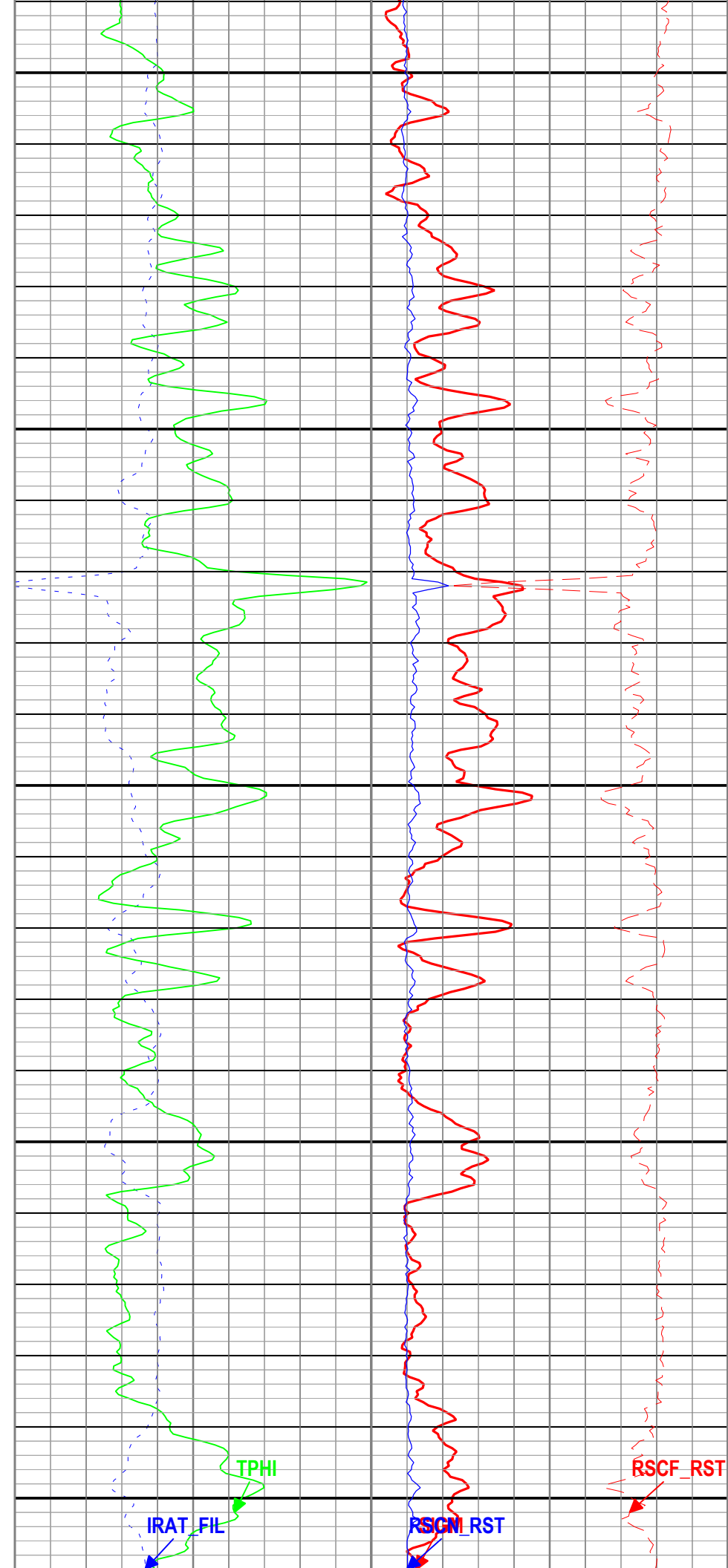
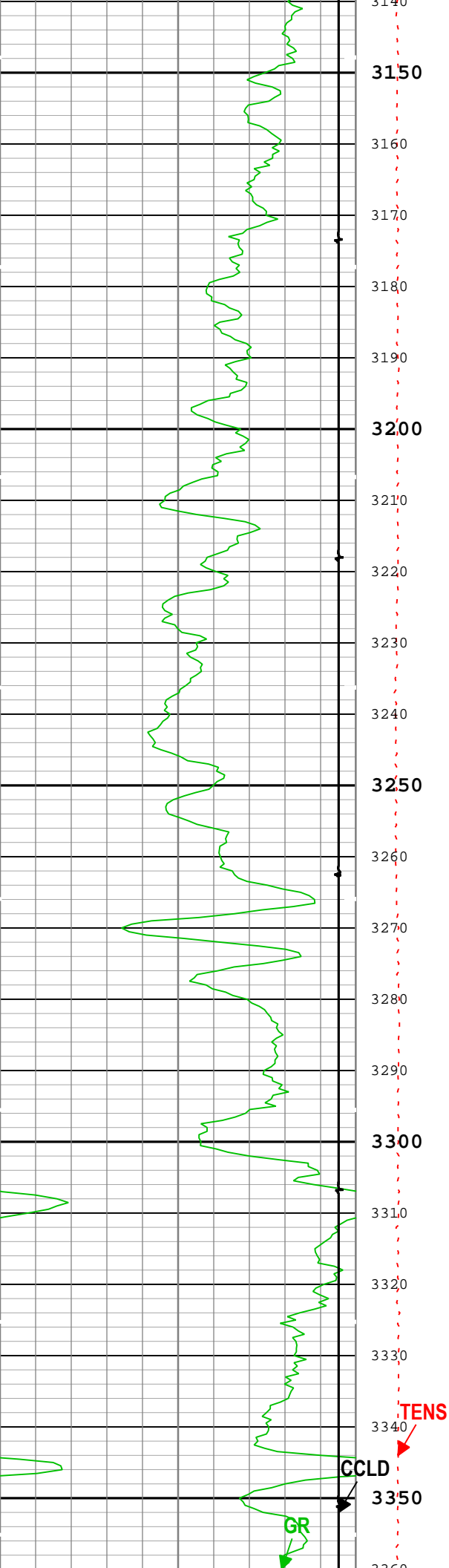
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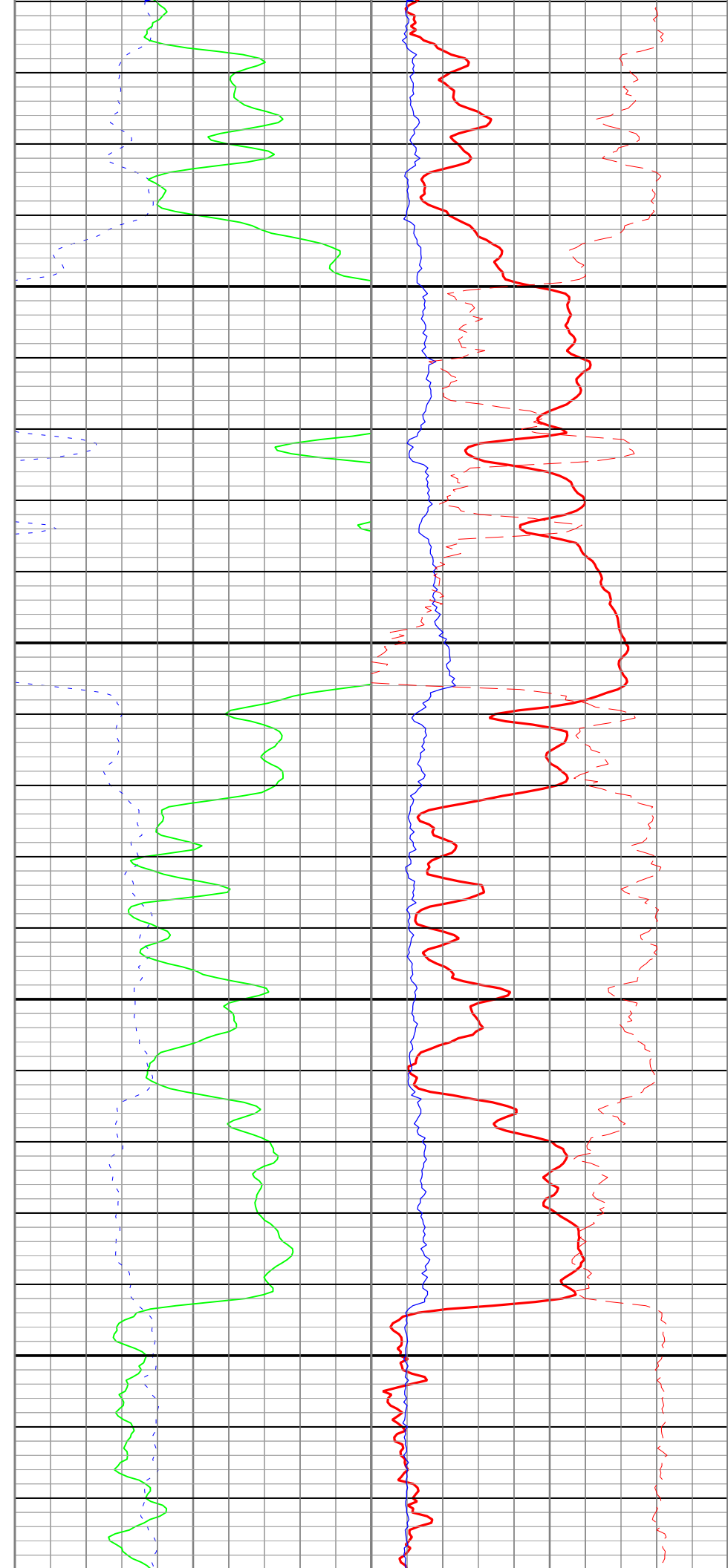
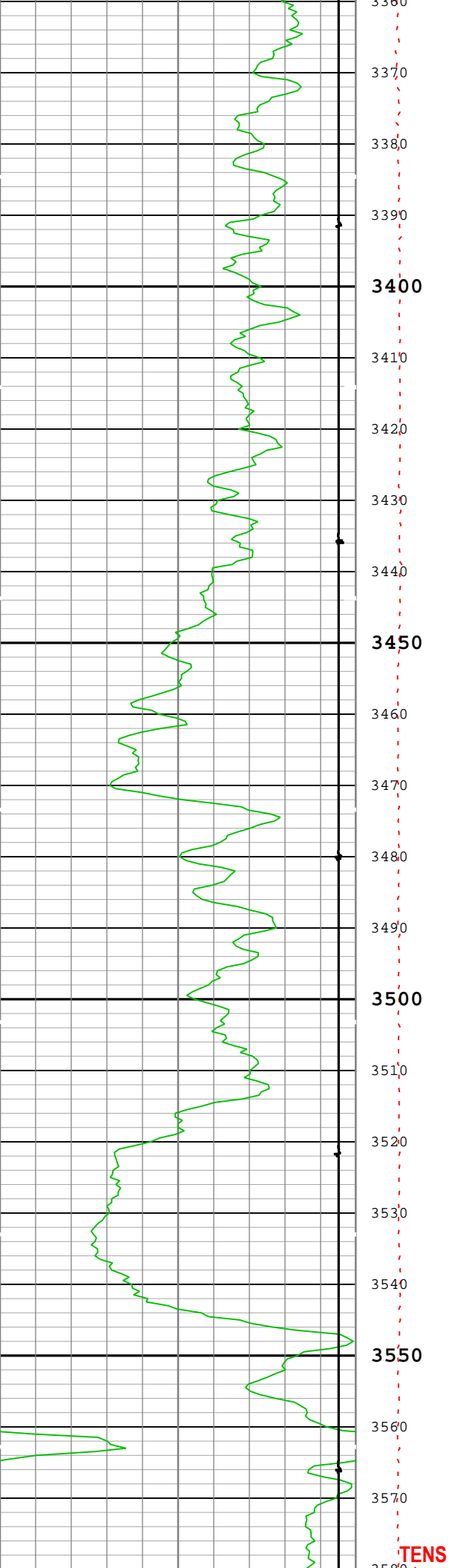


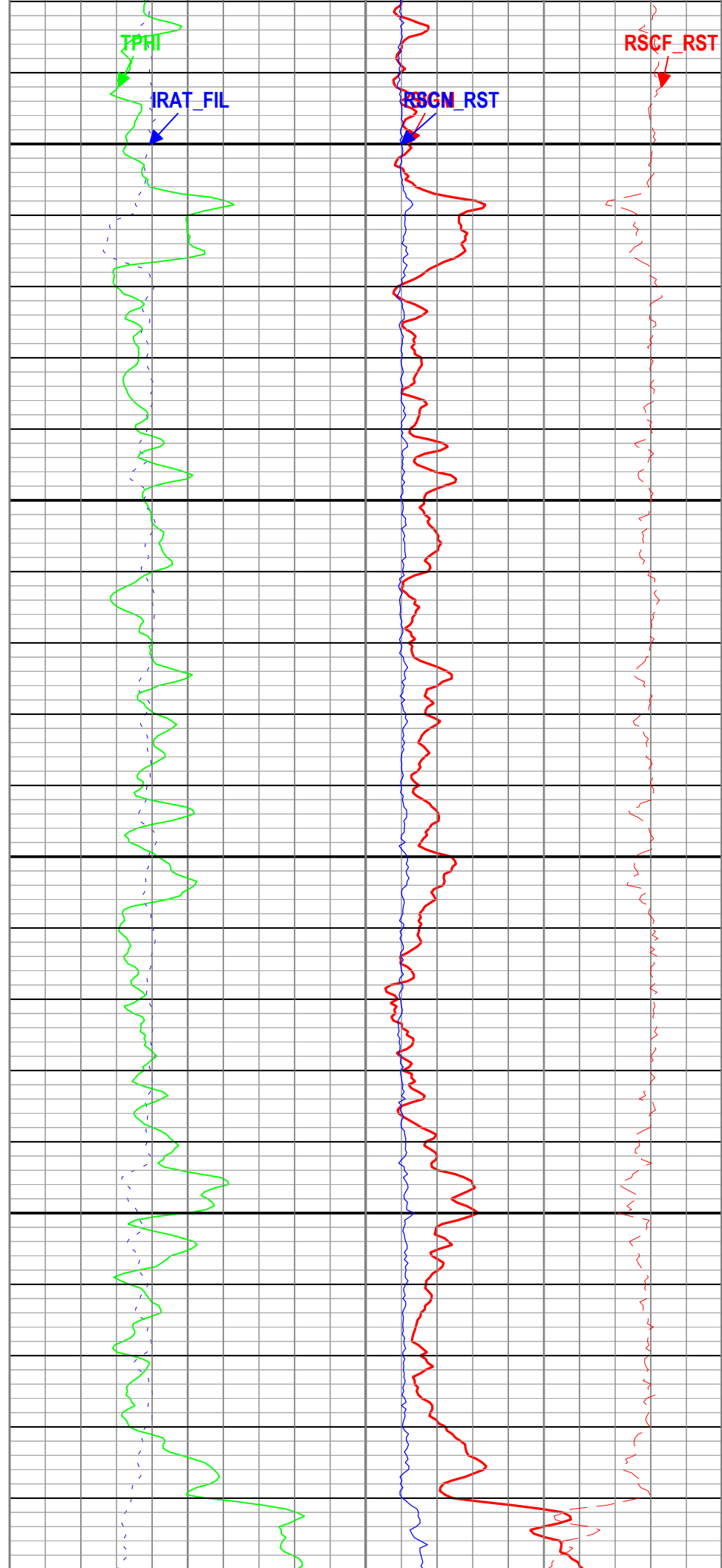
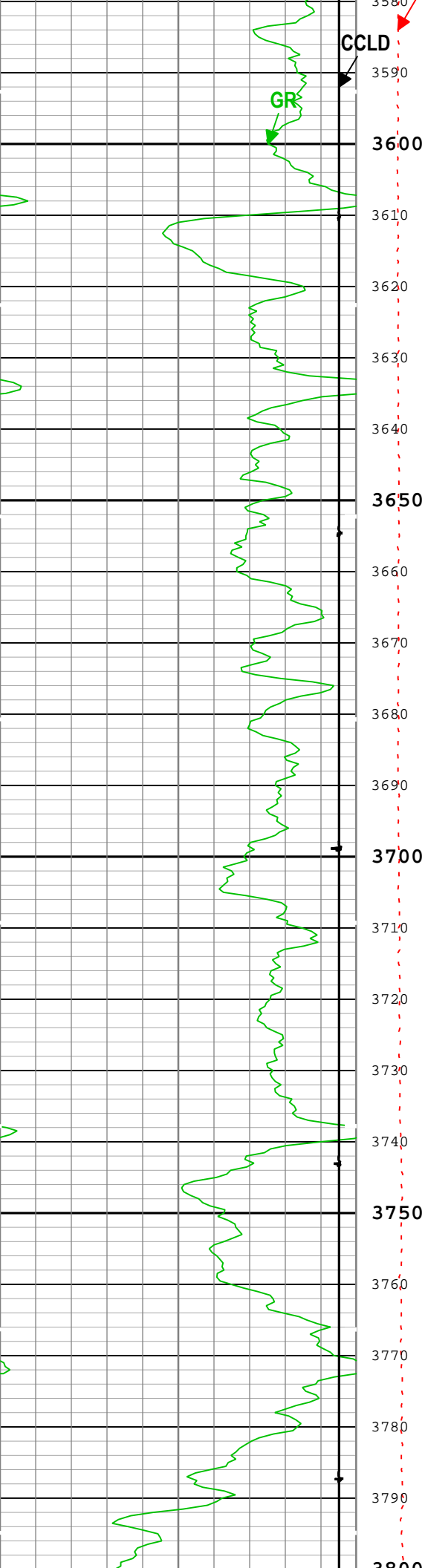


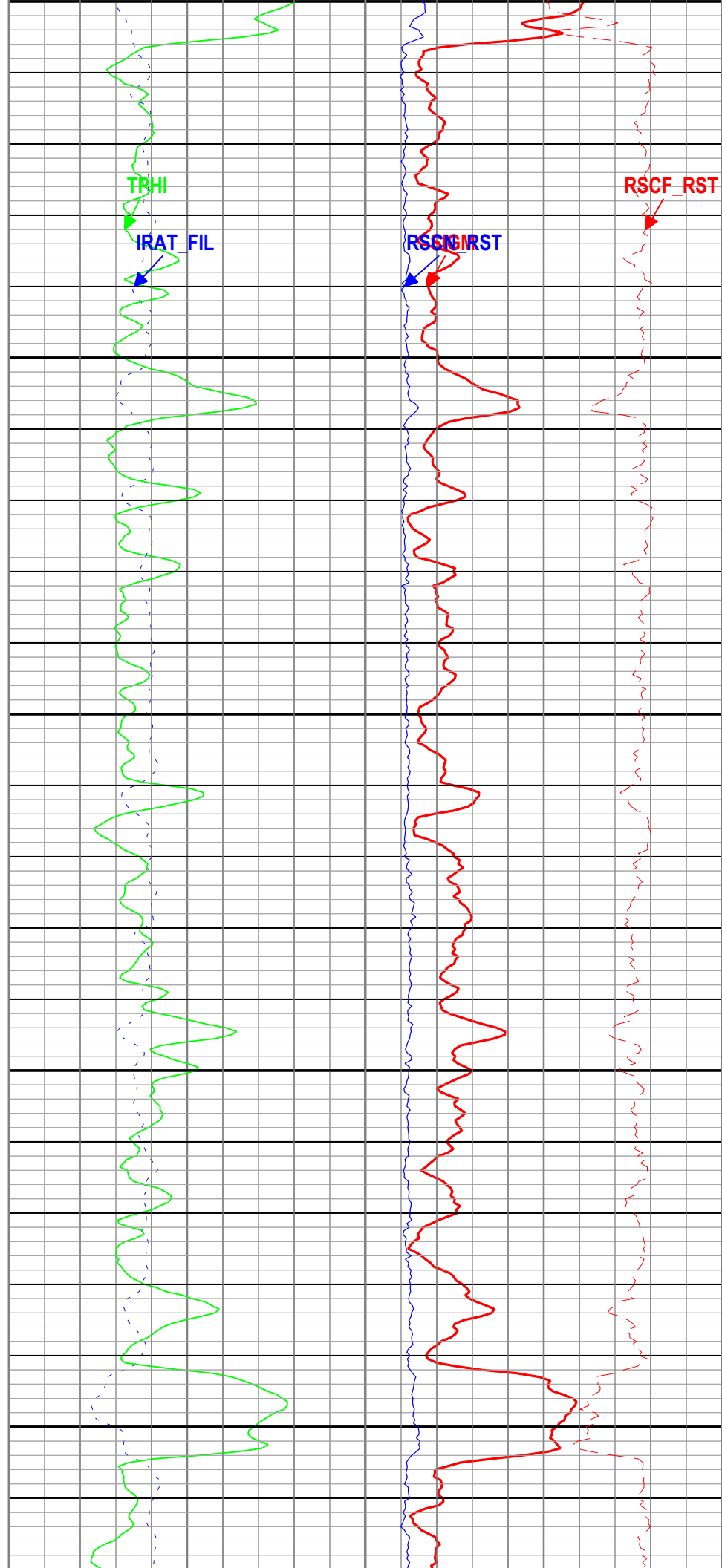
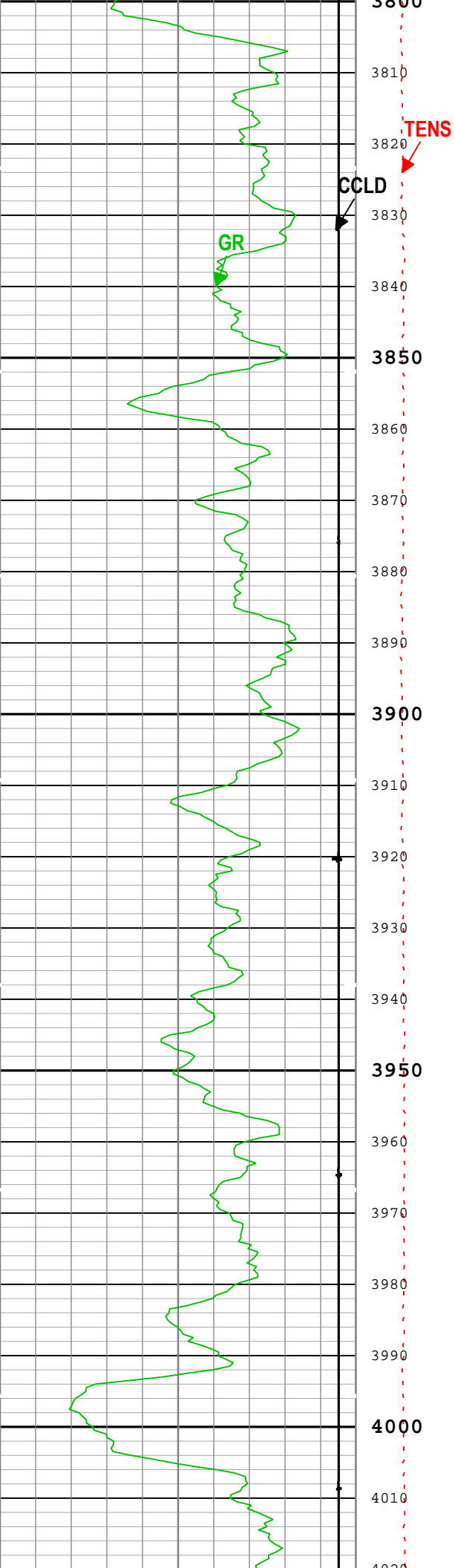


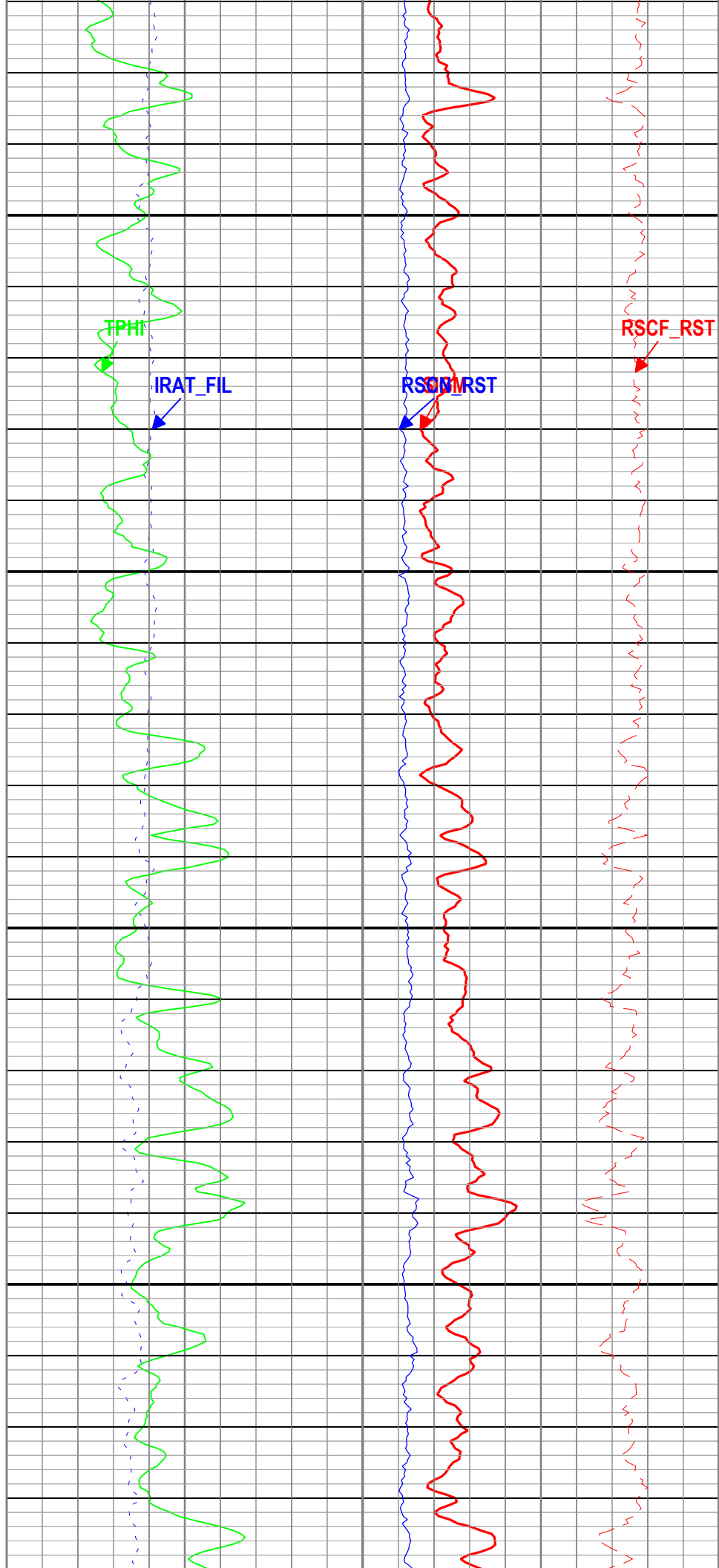
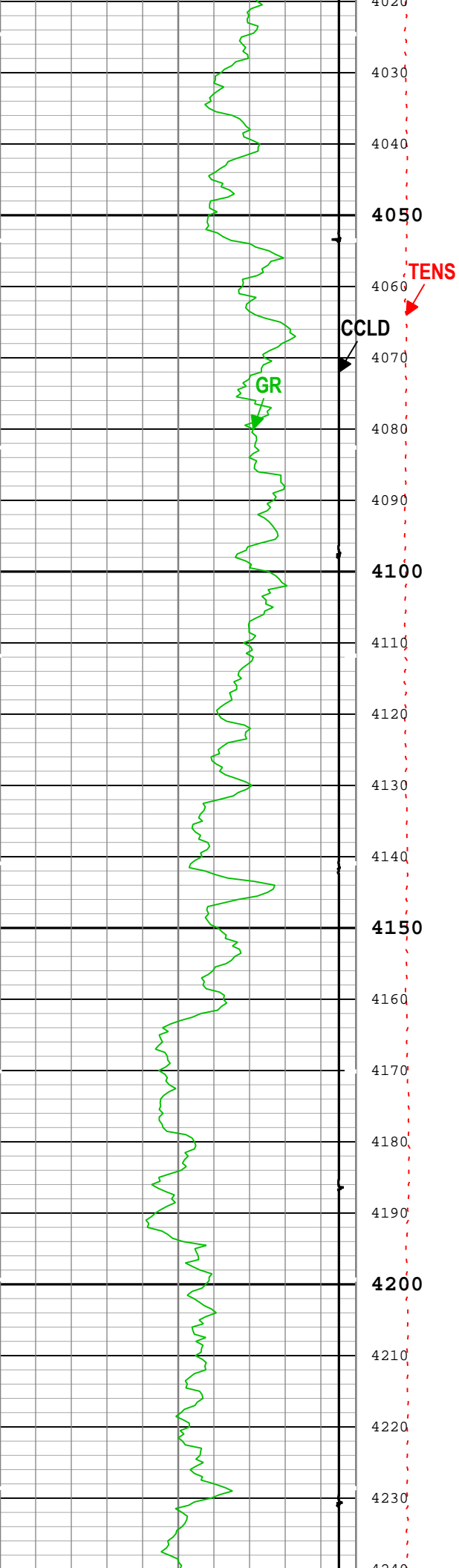


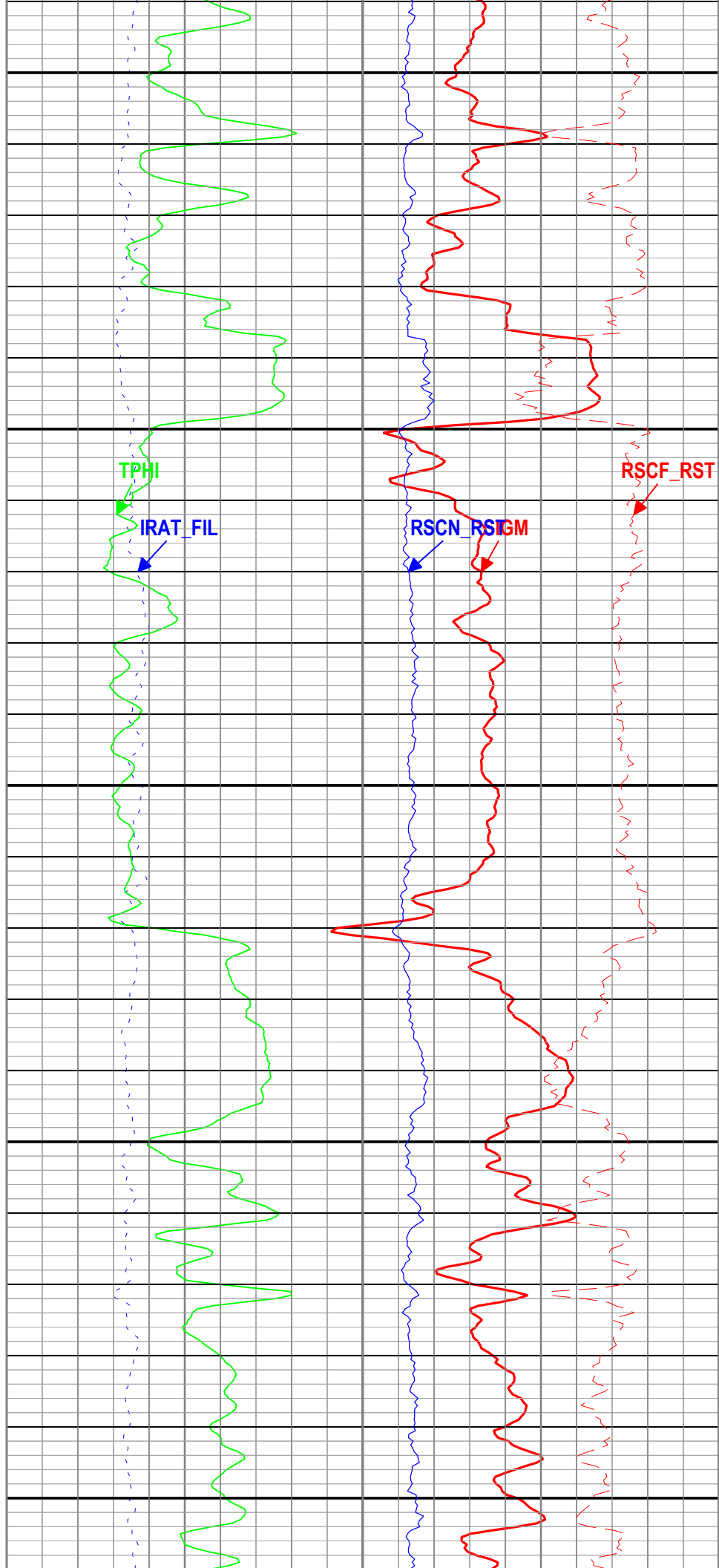
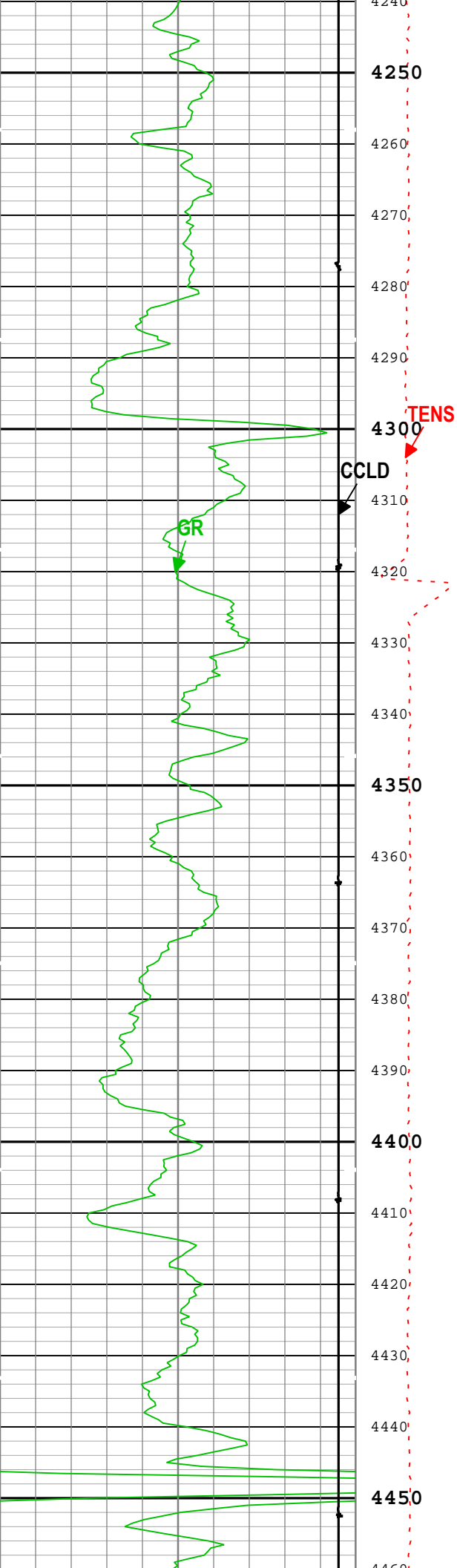


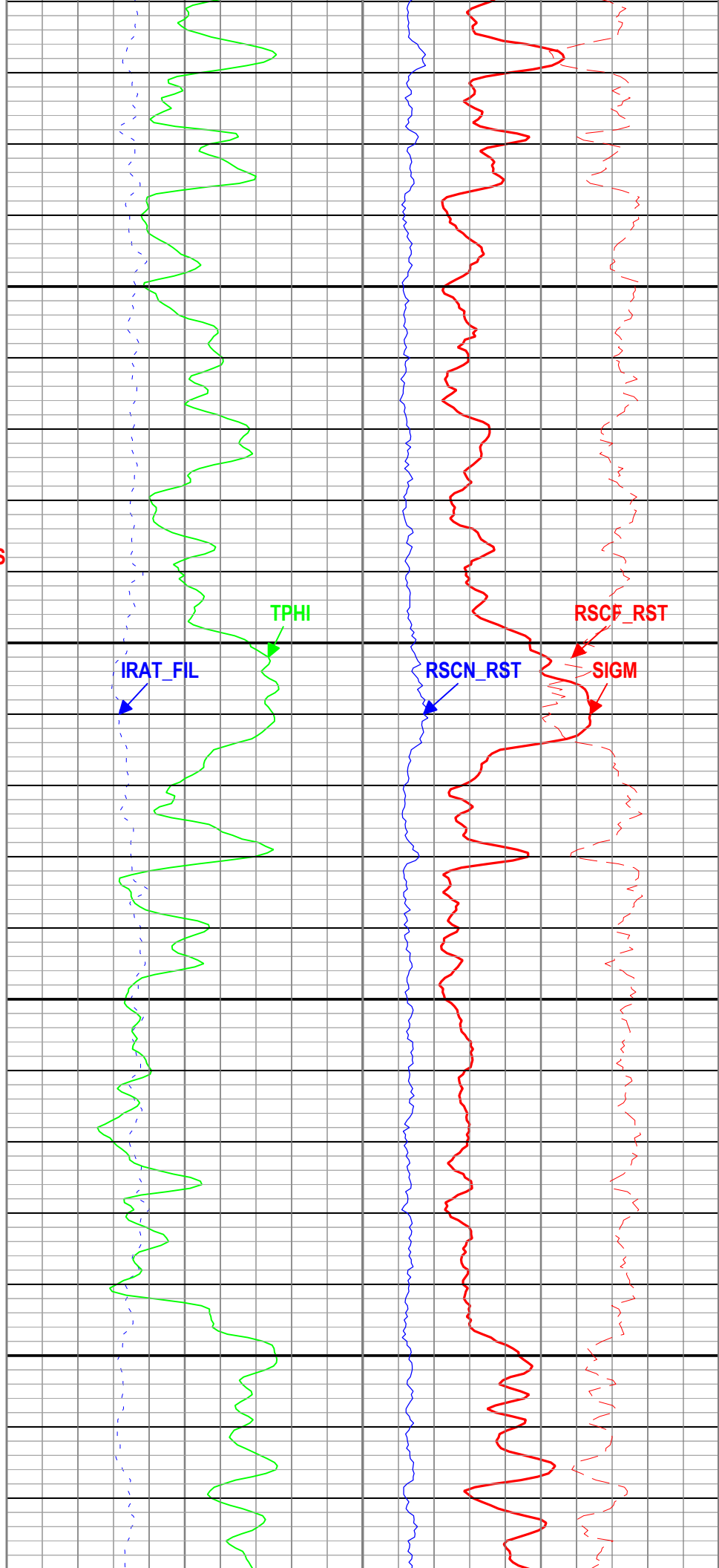
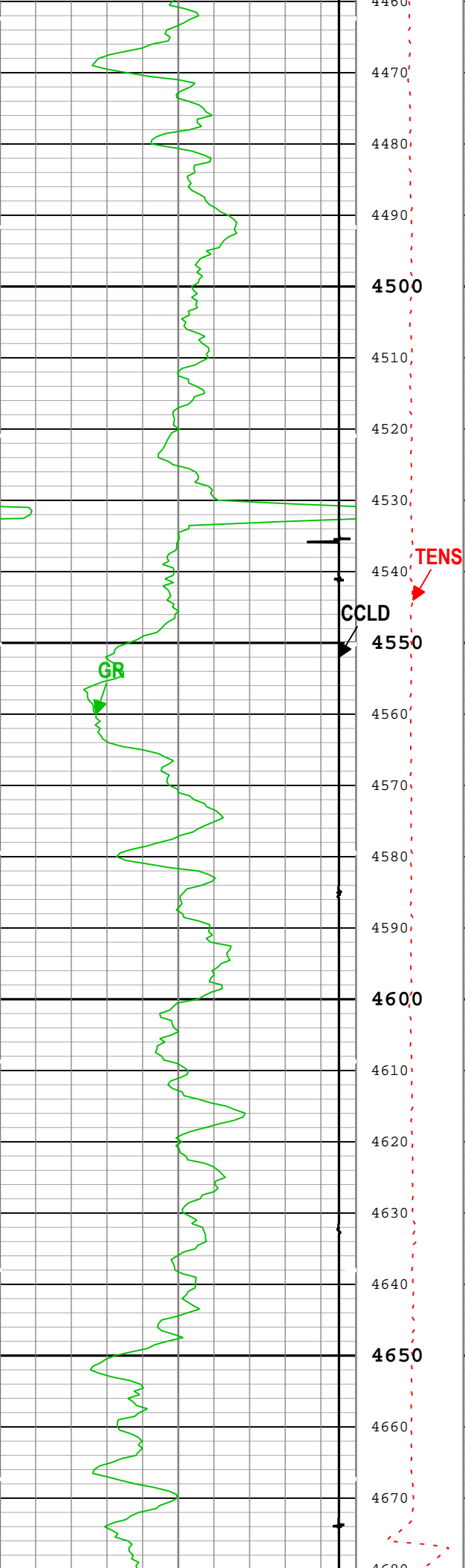


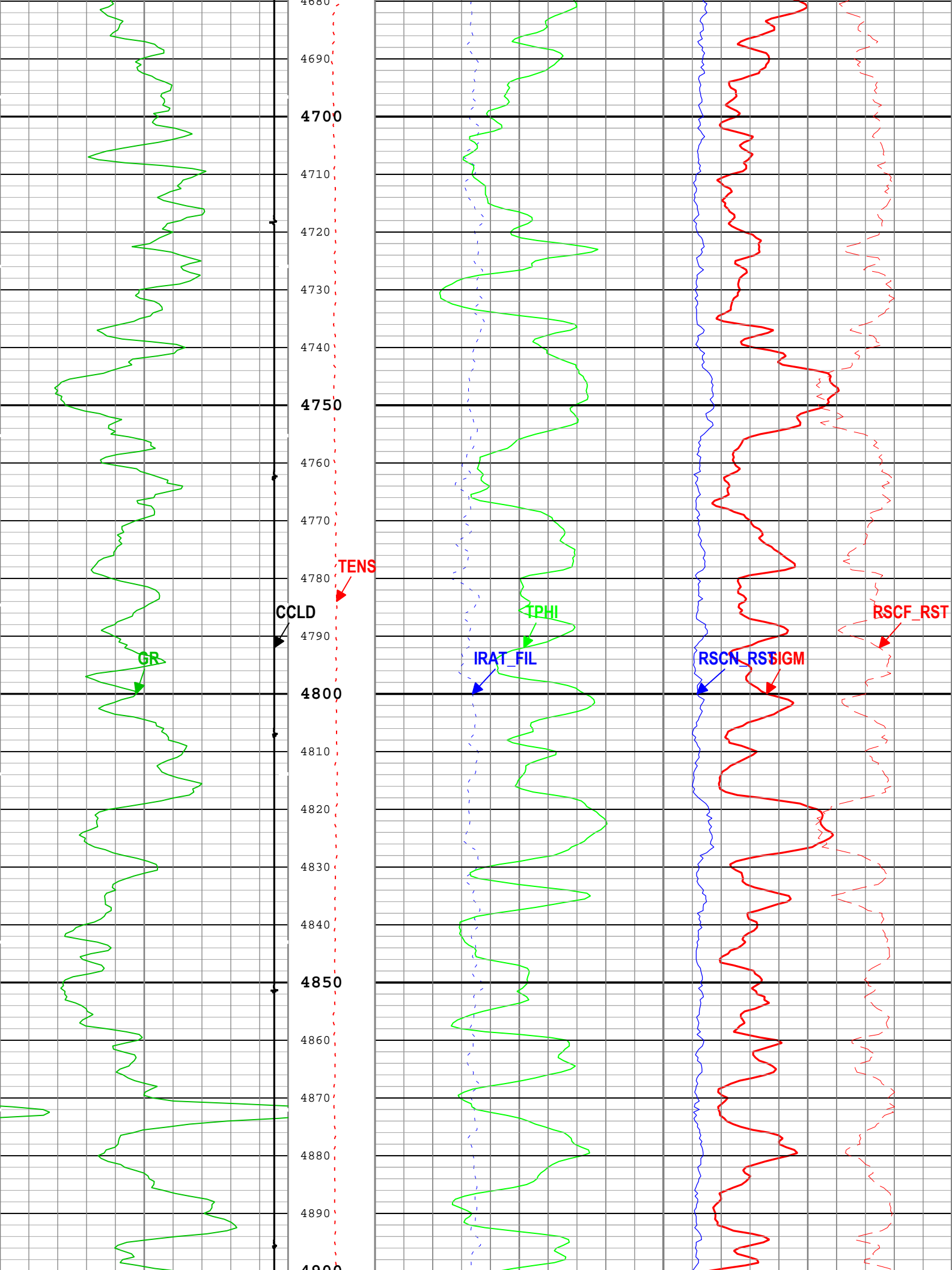


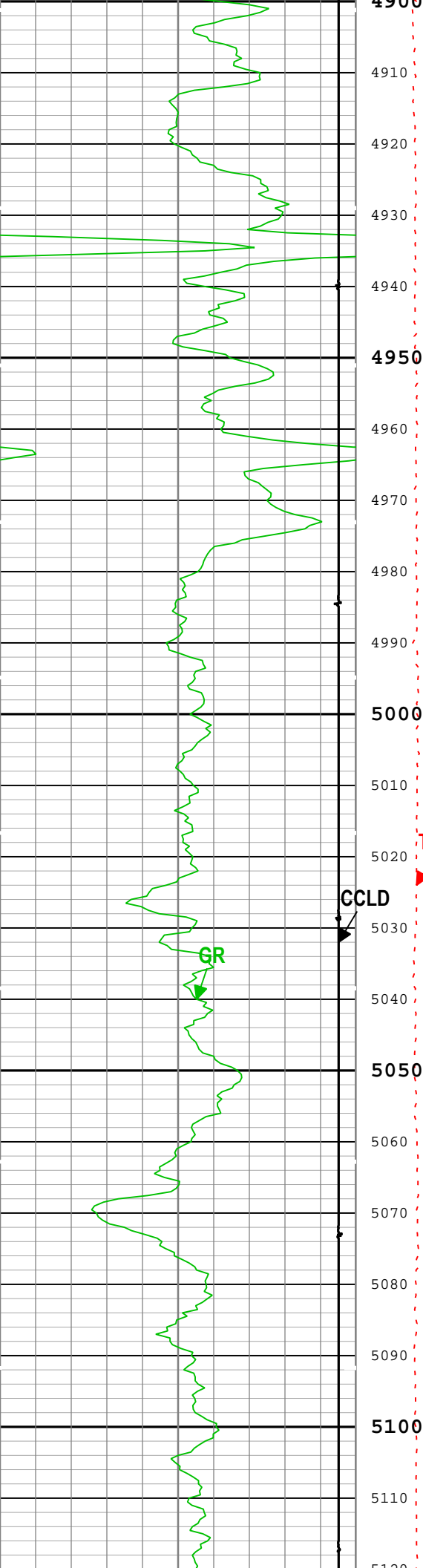




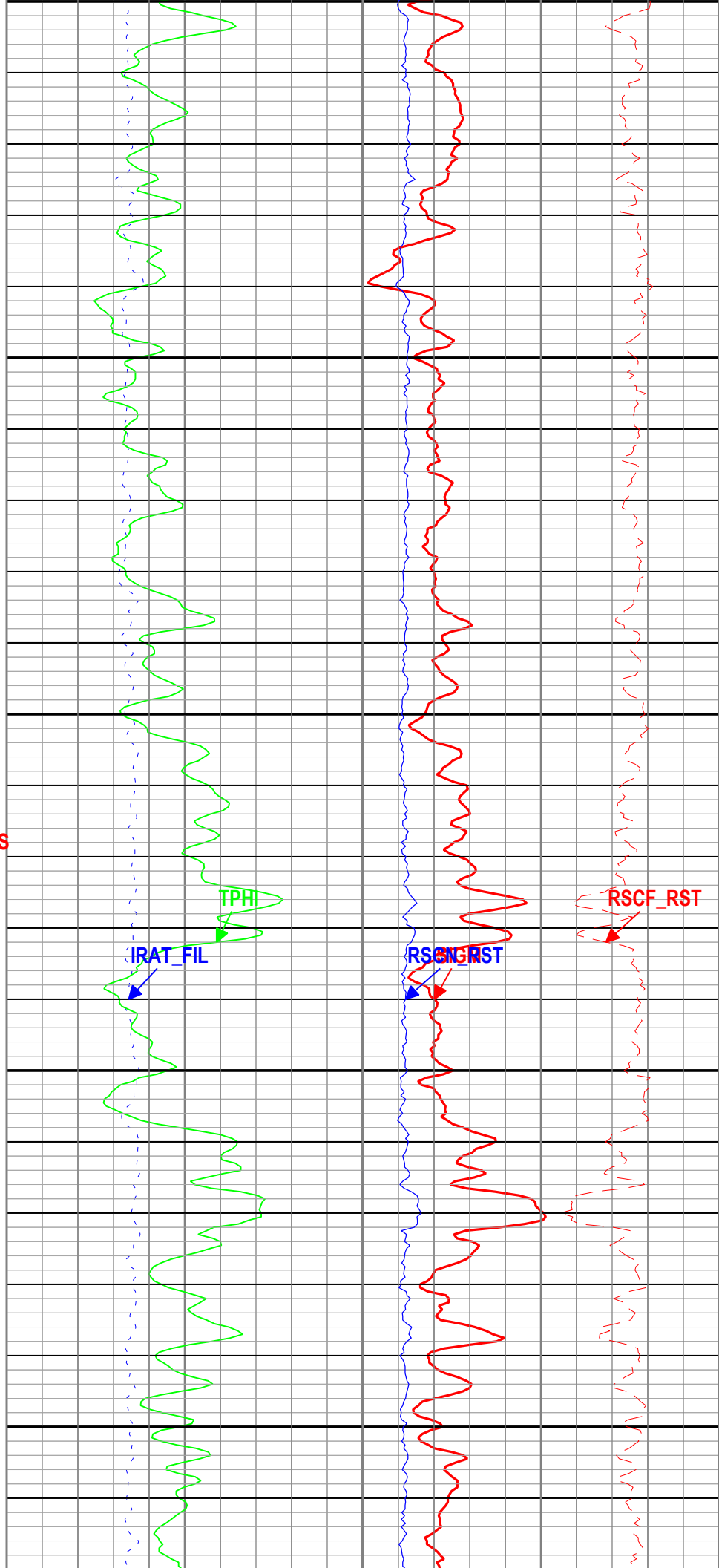


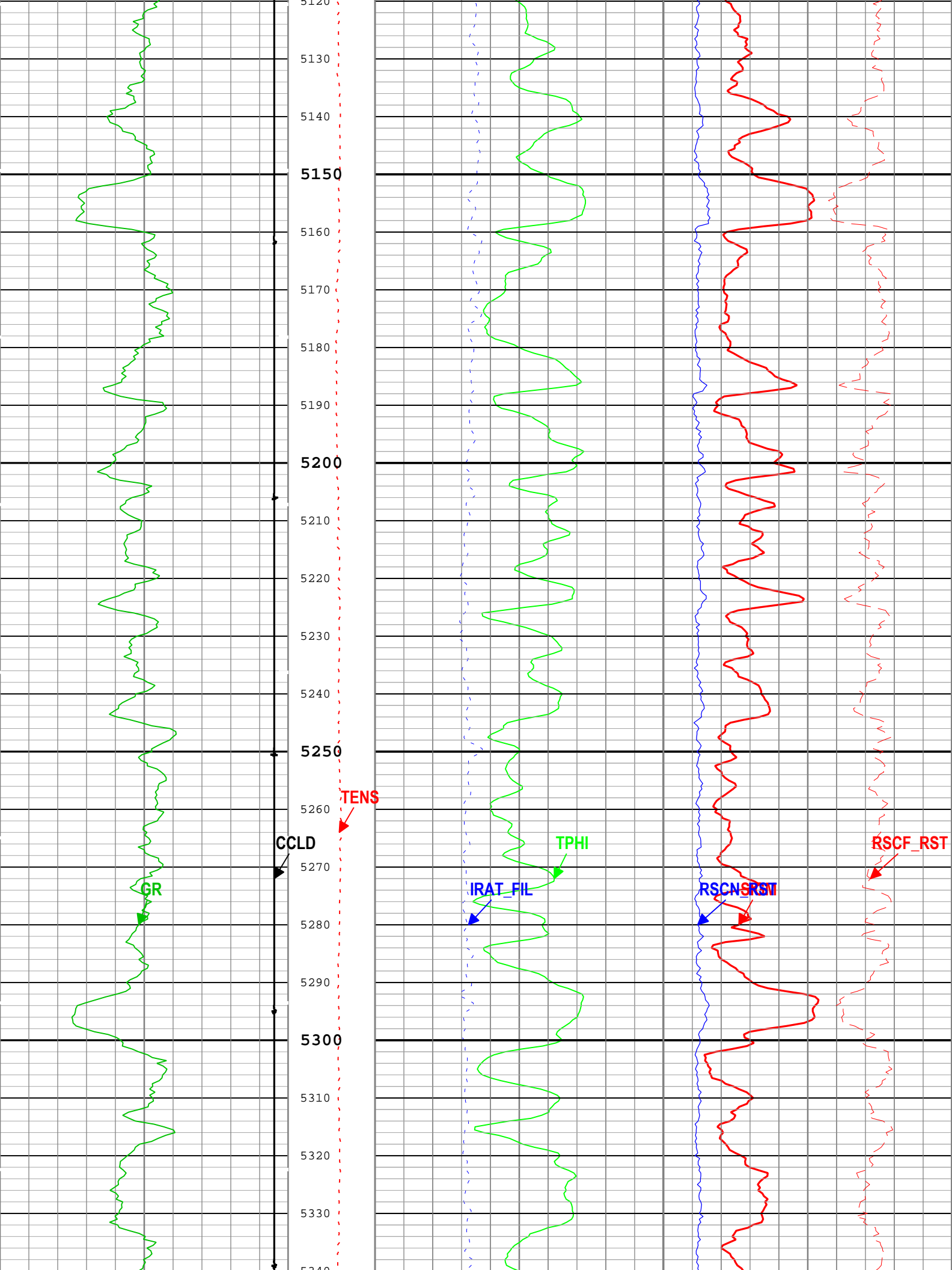


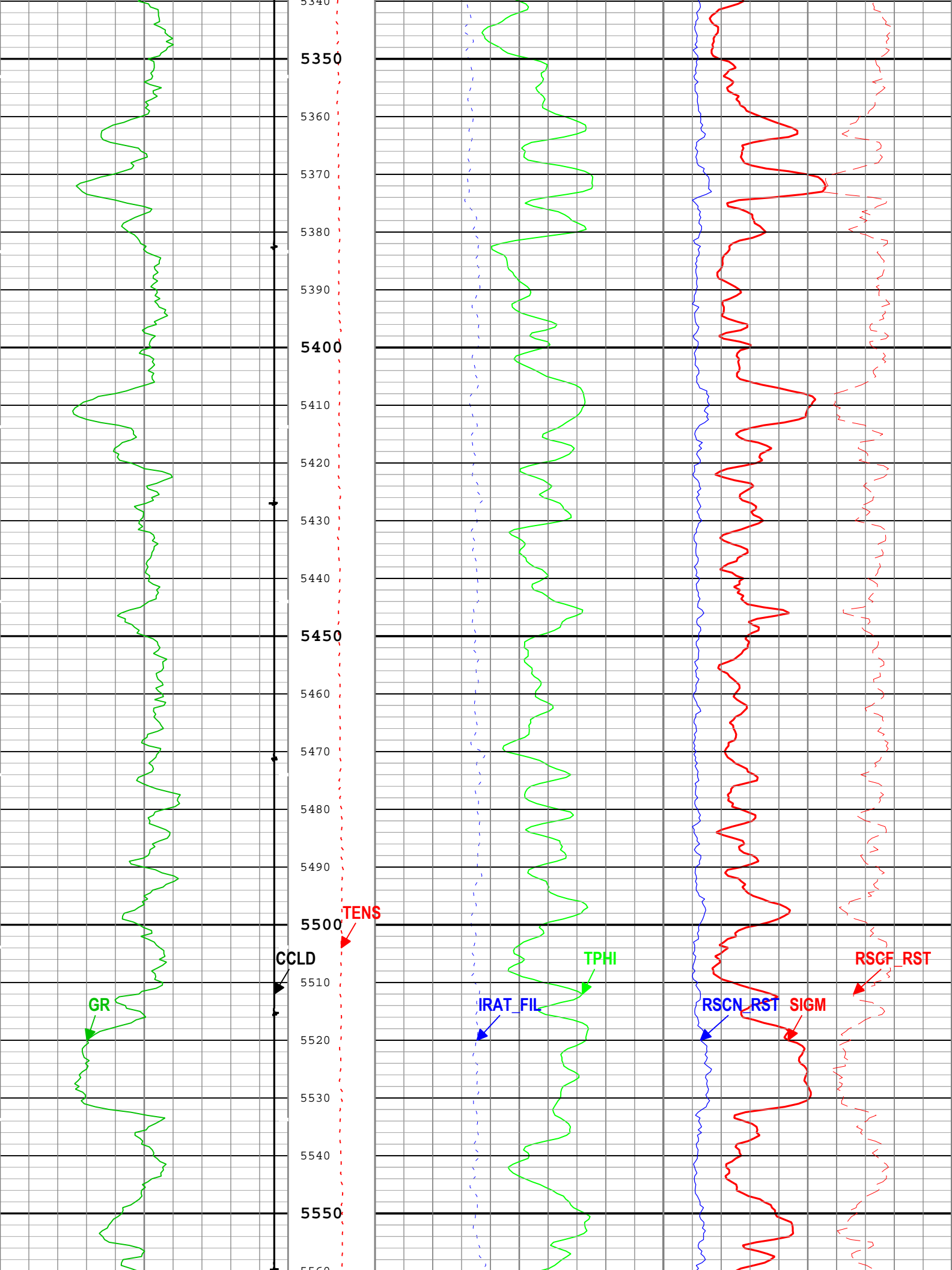


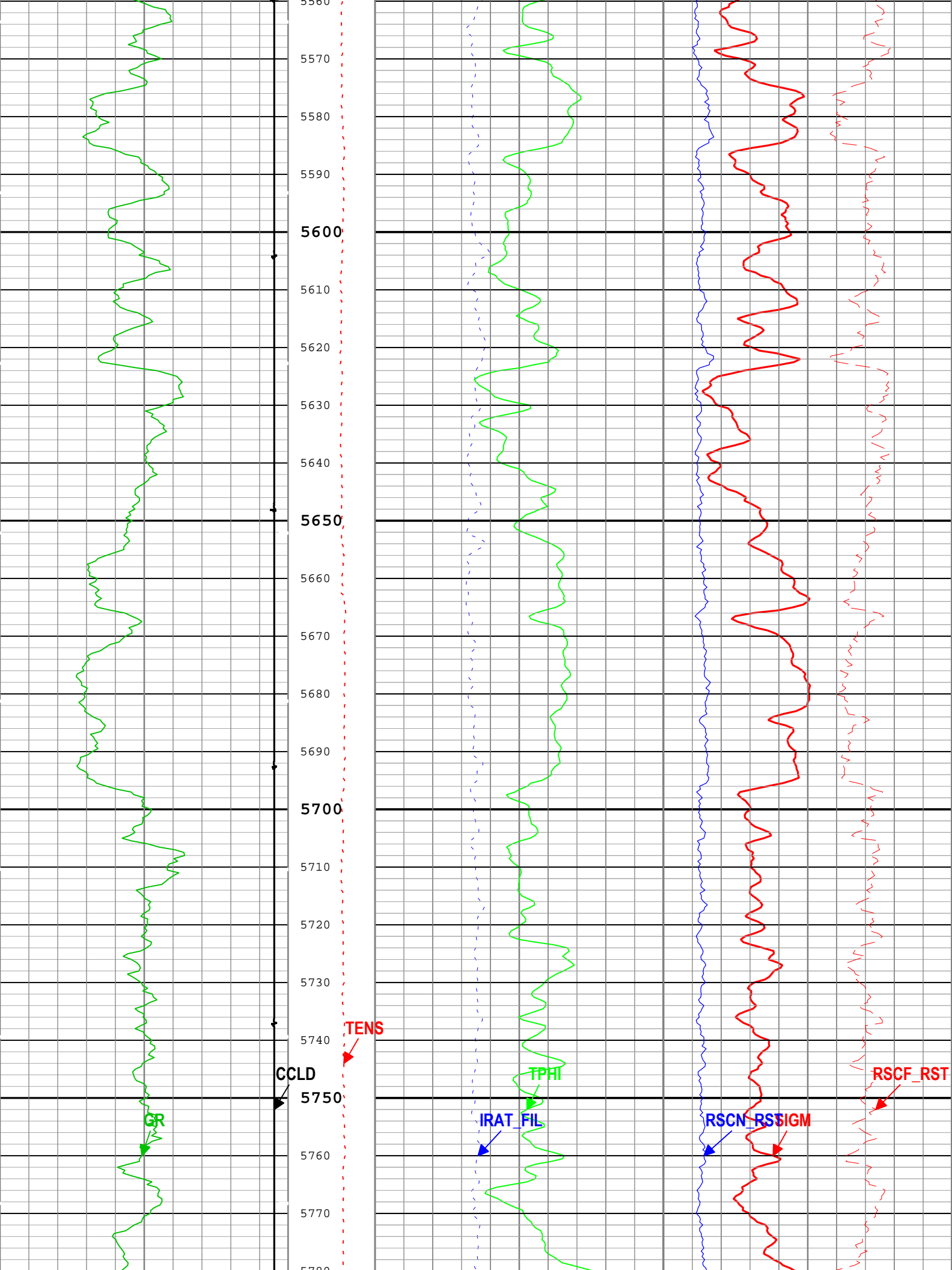


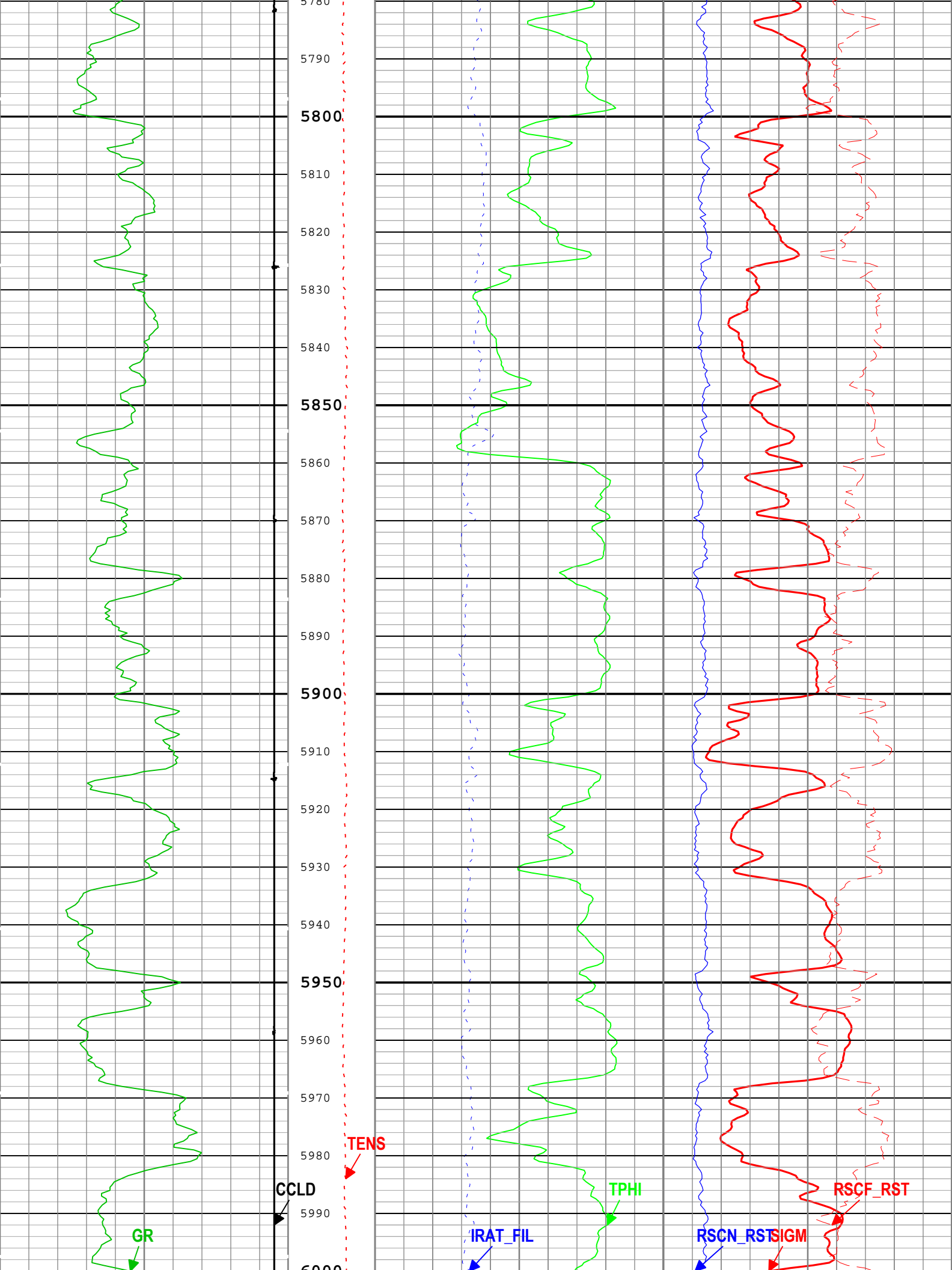
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5120

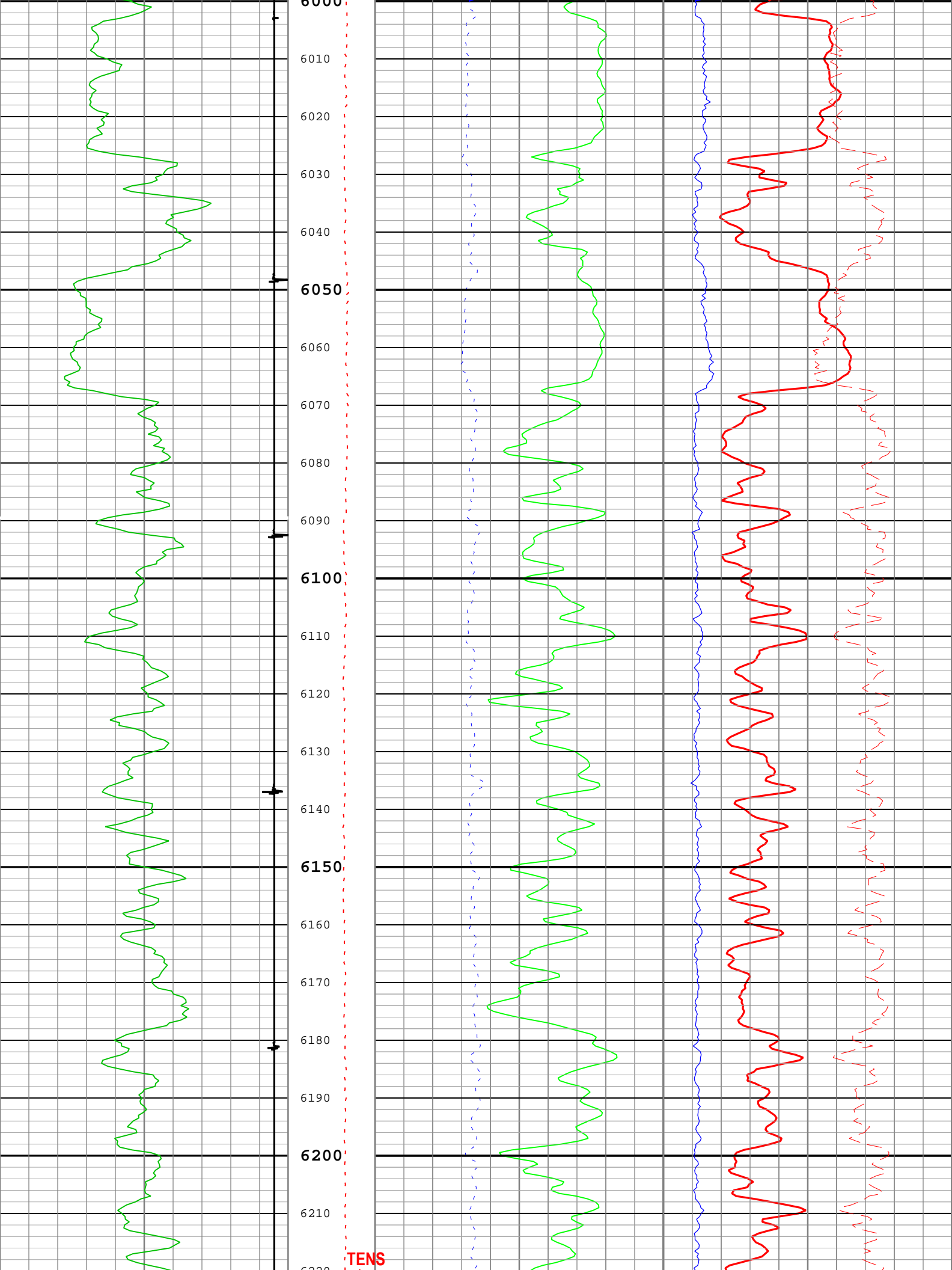


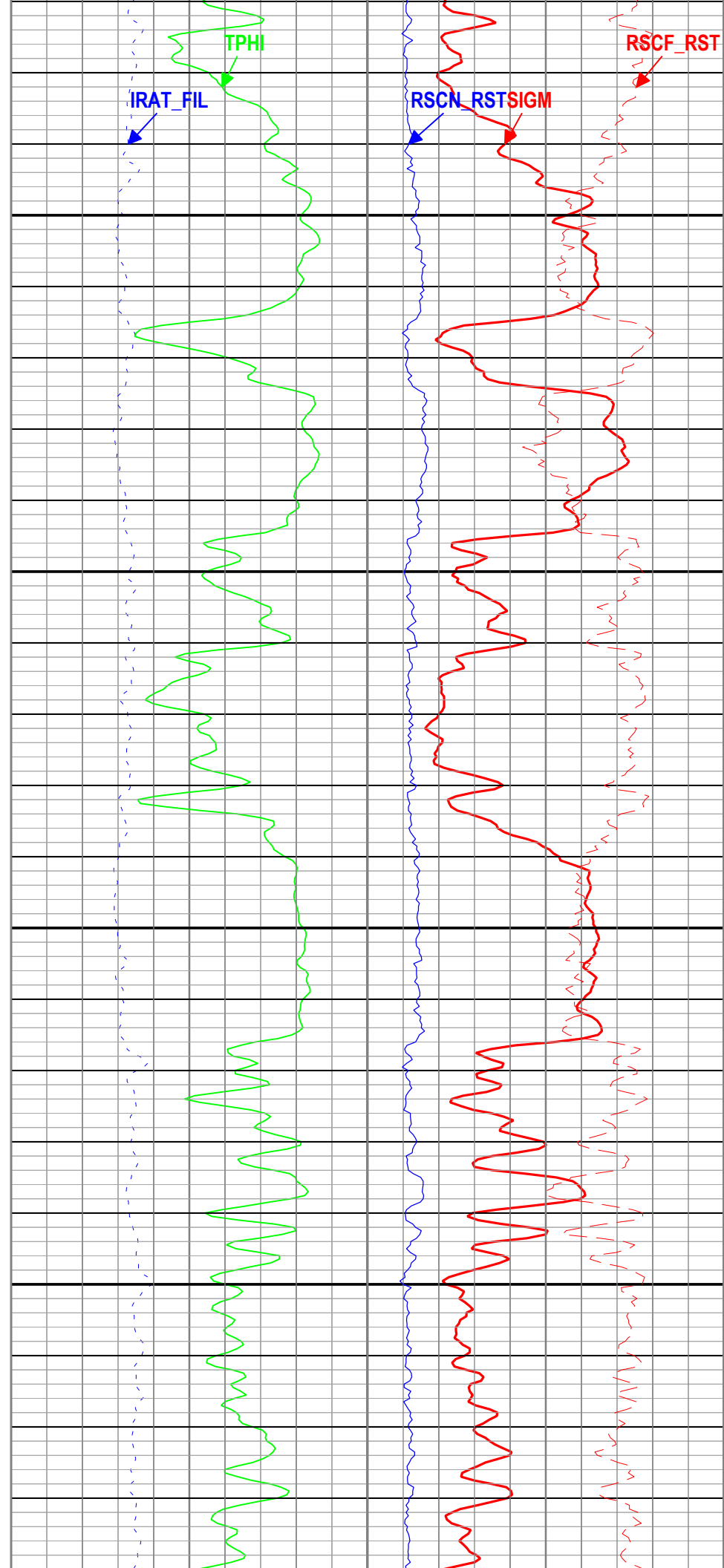
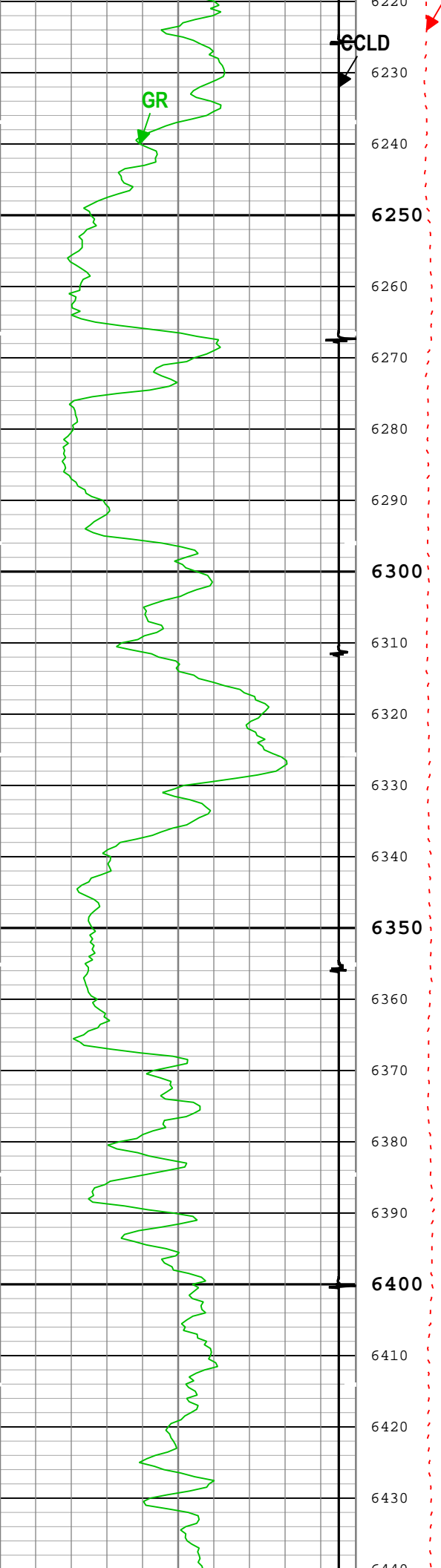


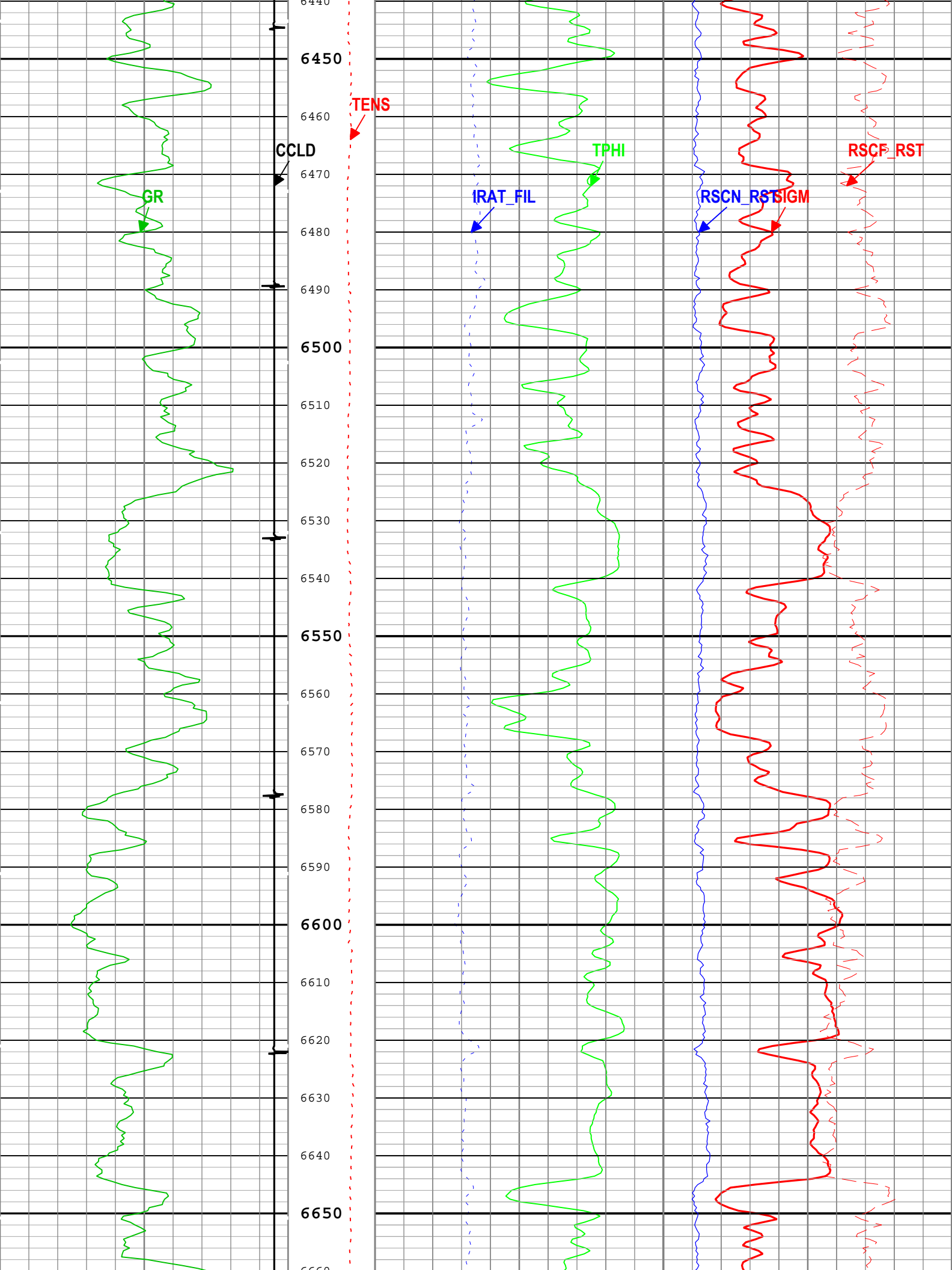


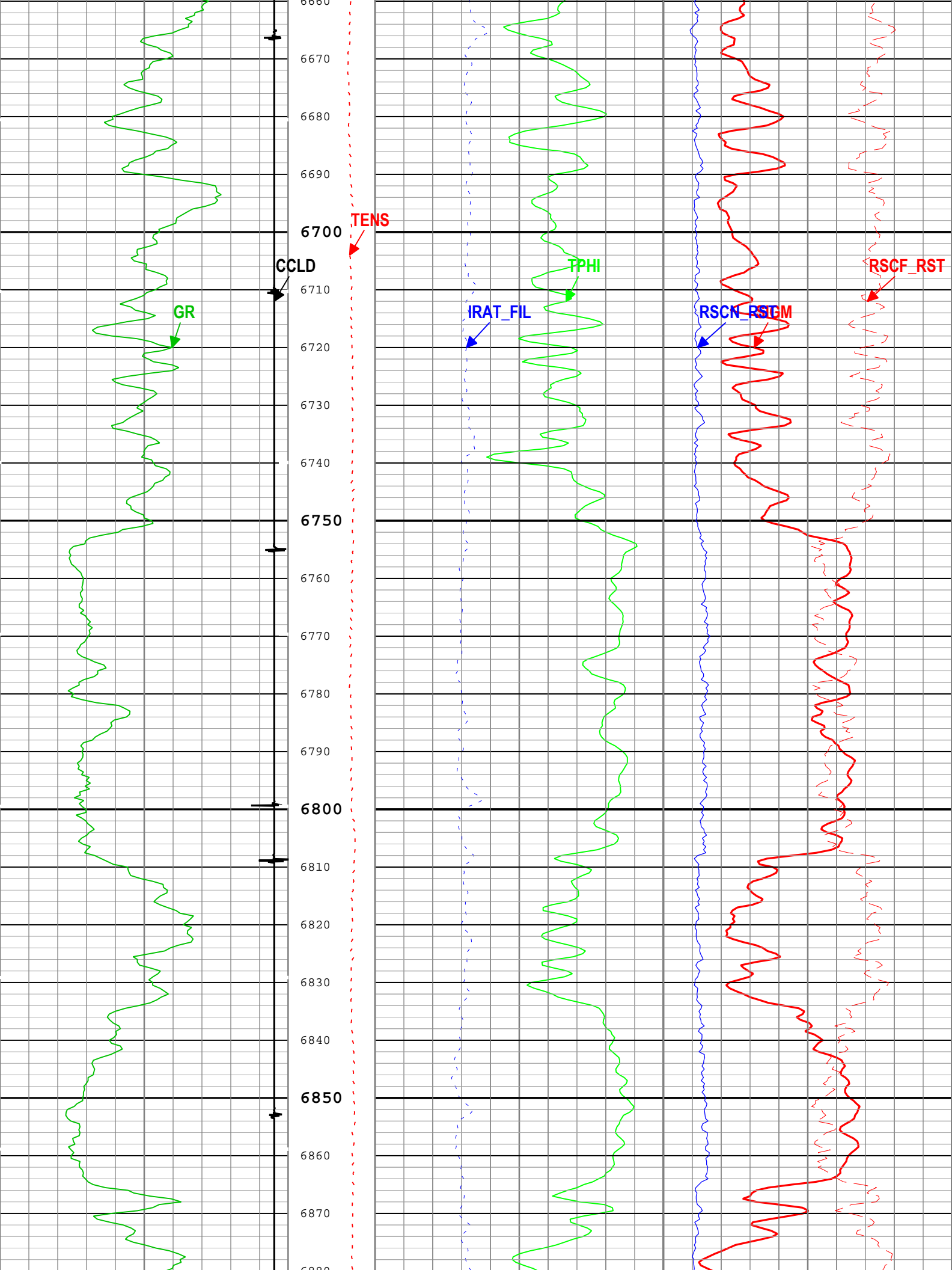


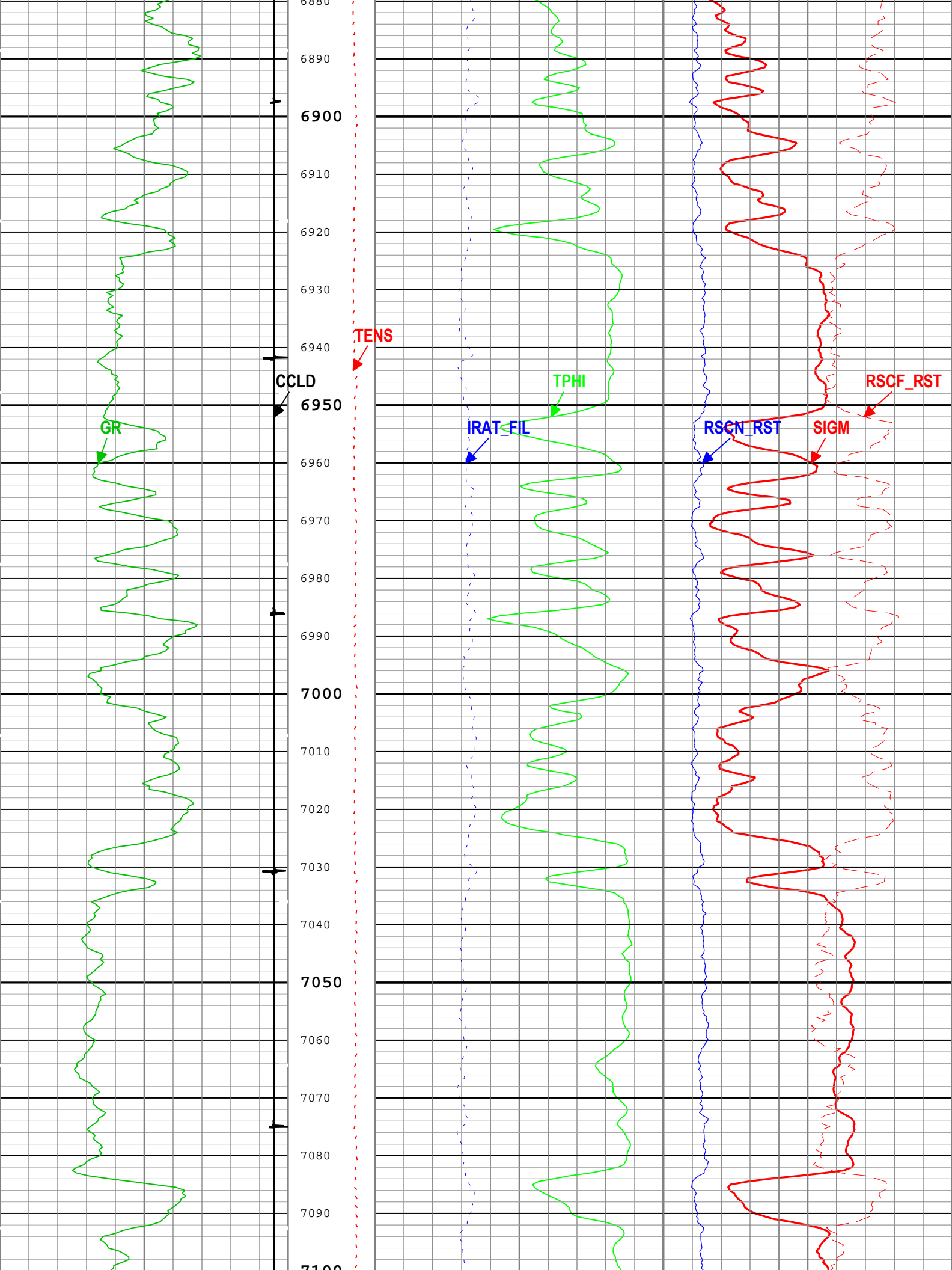


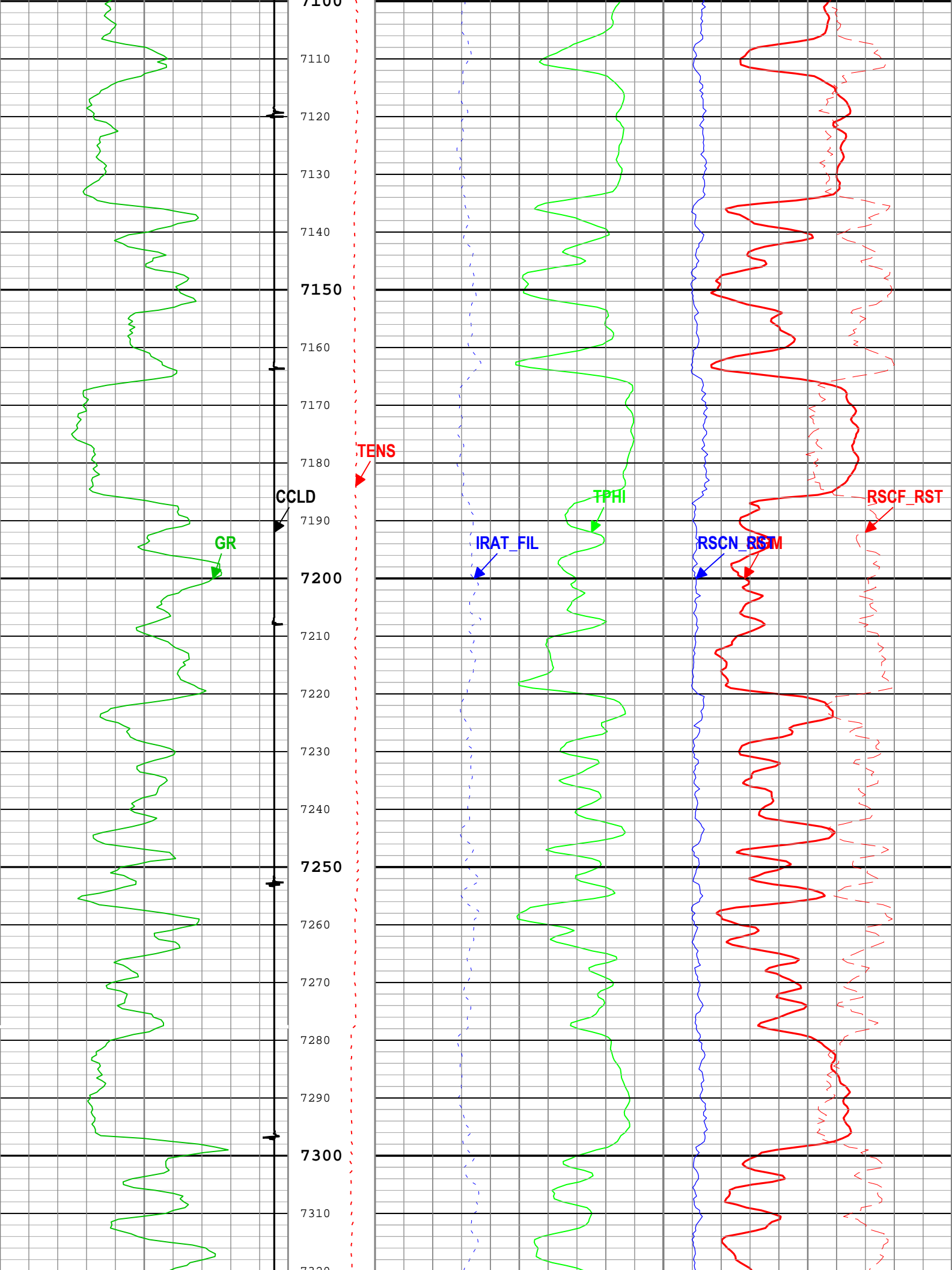


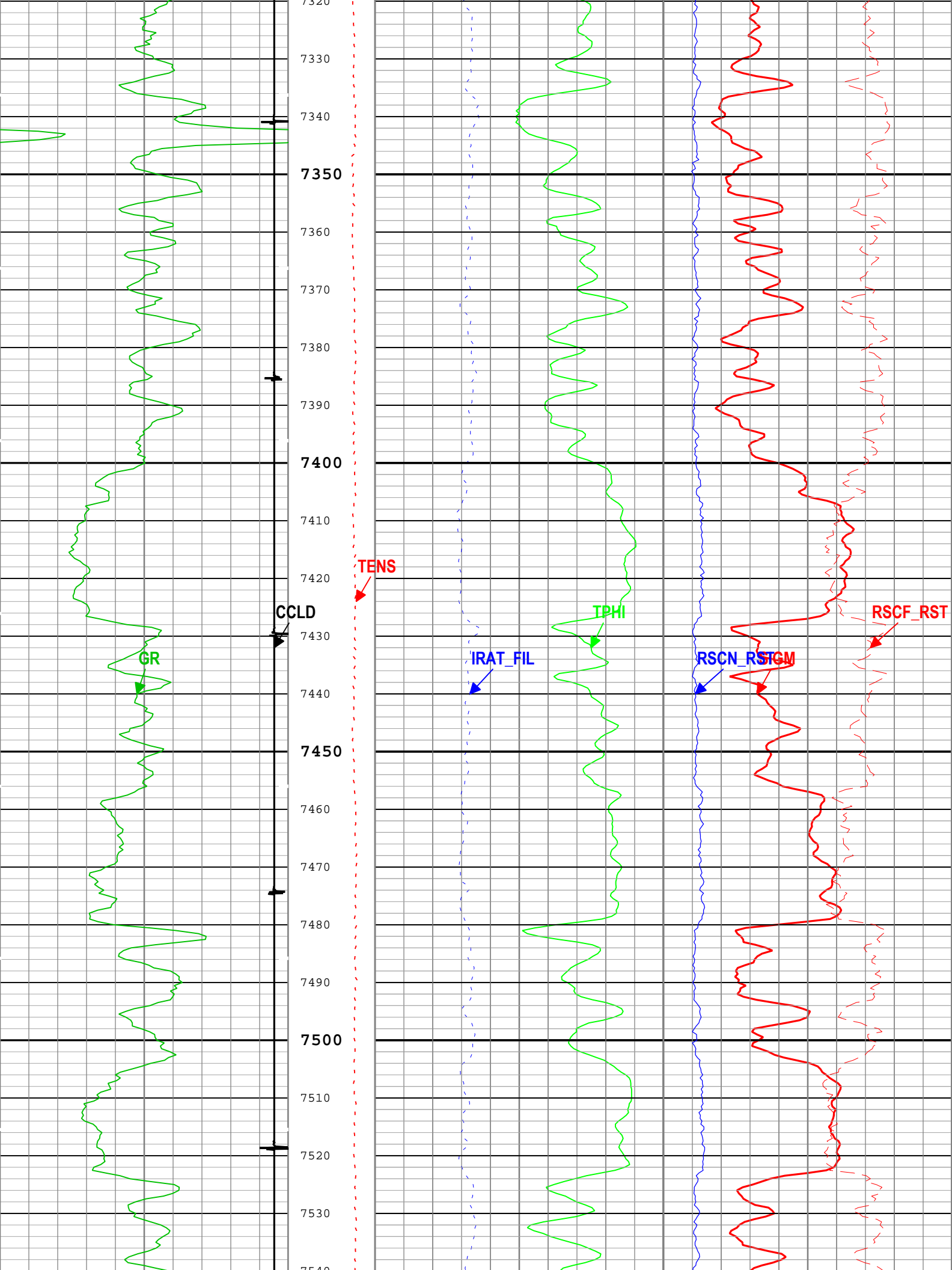


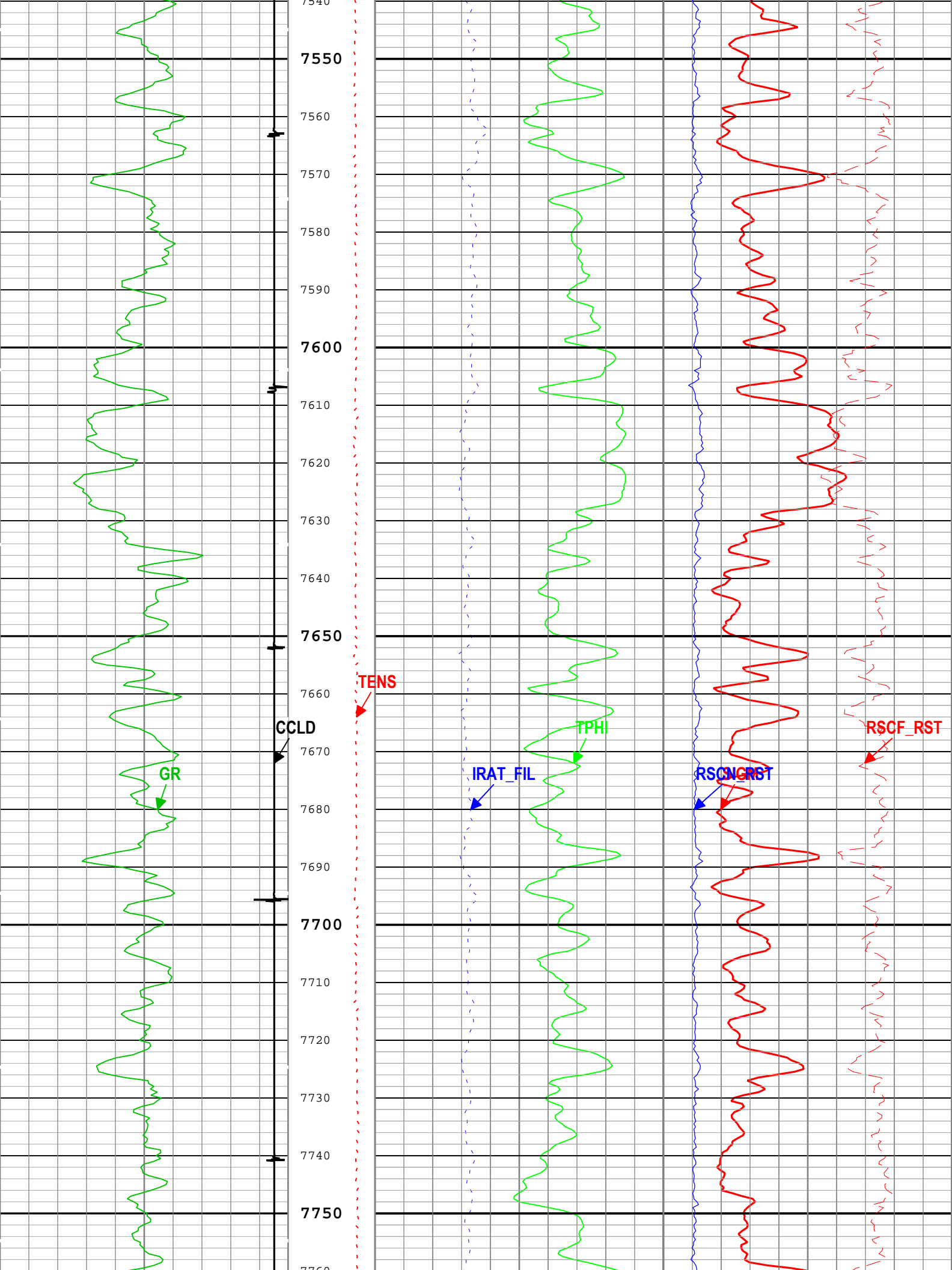


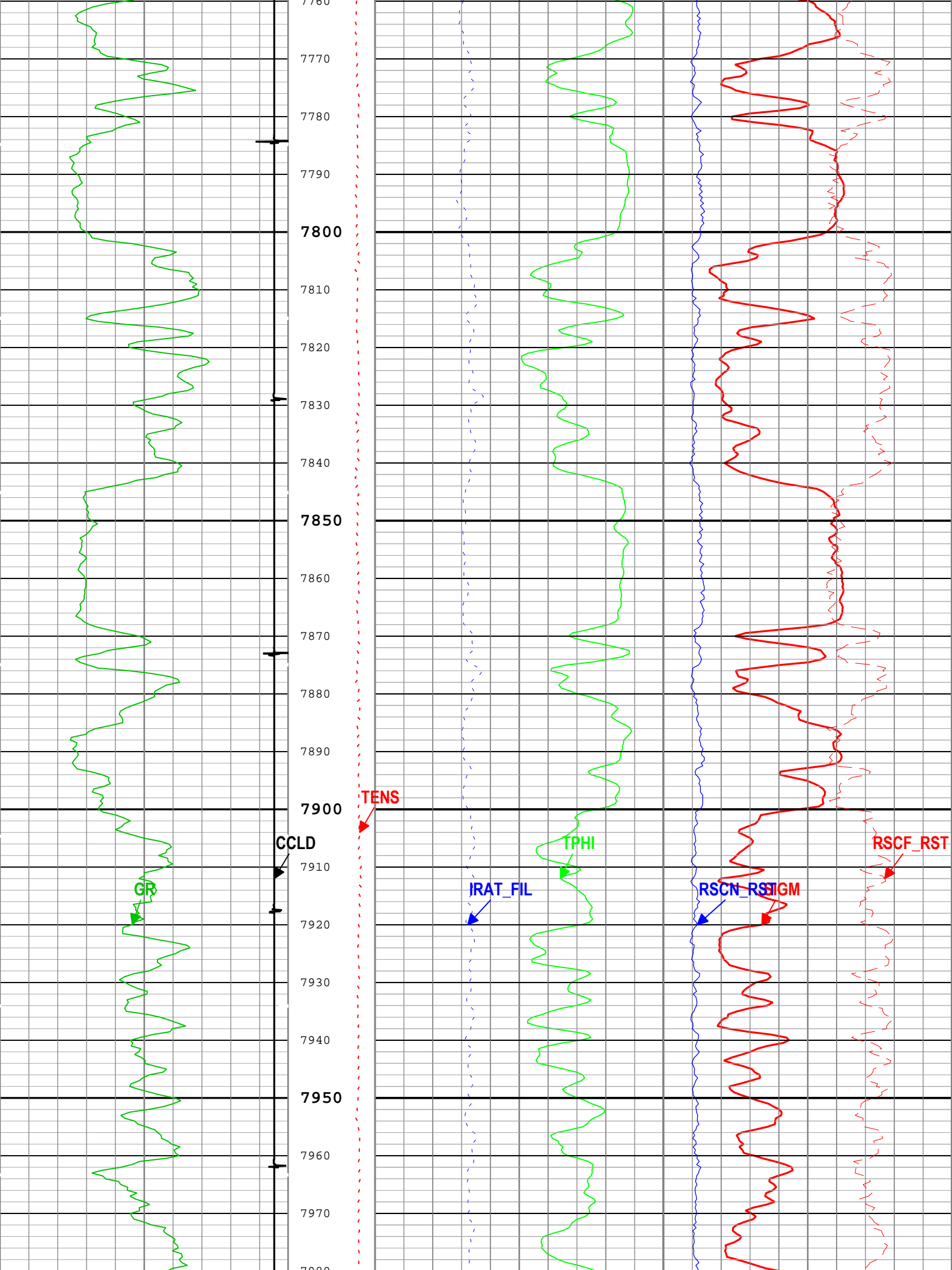


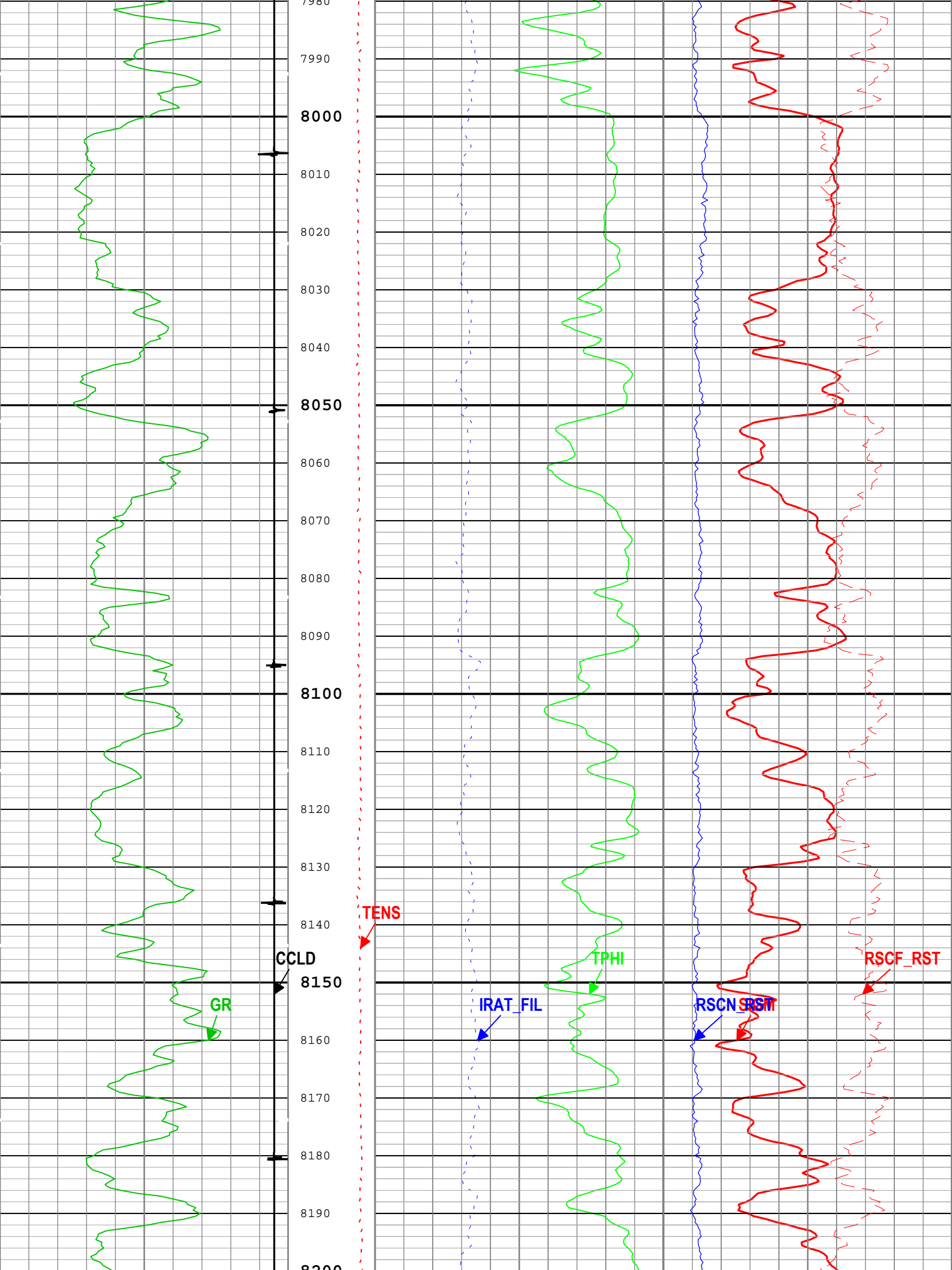


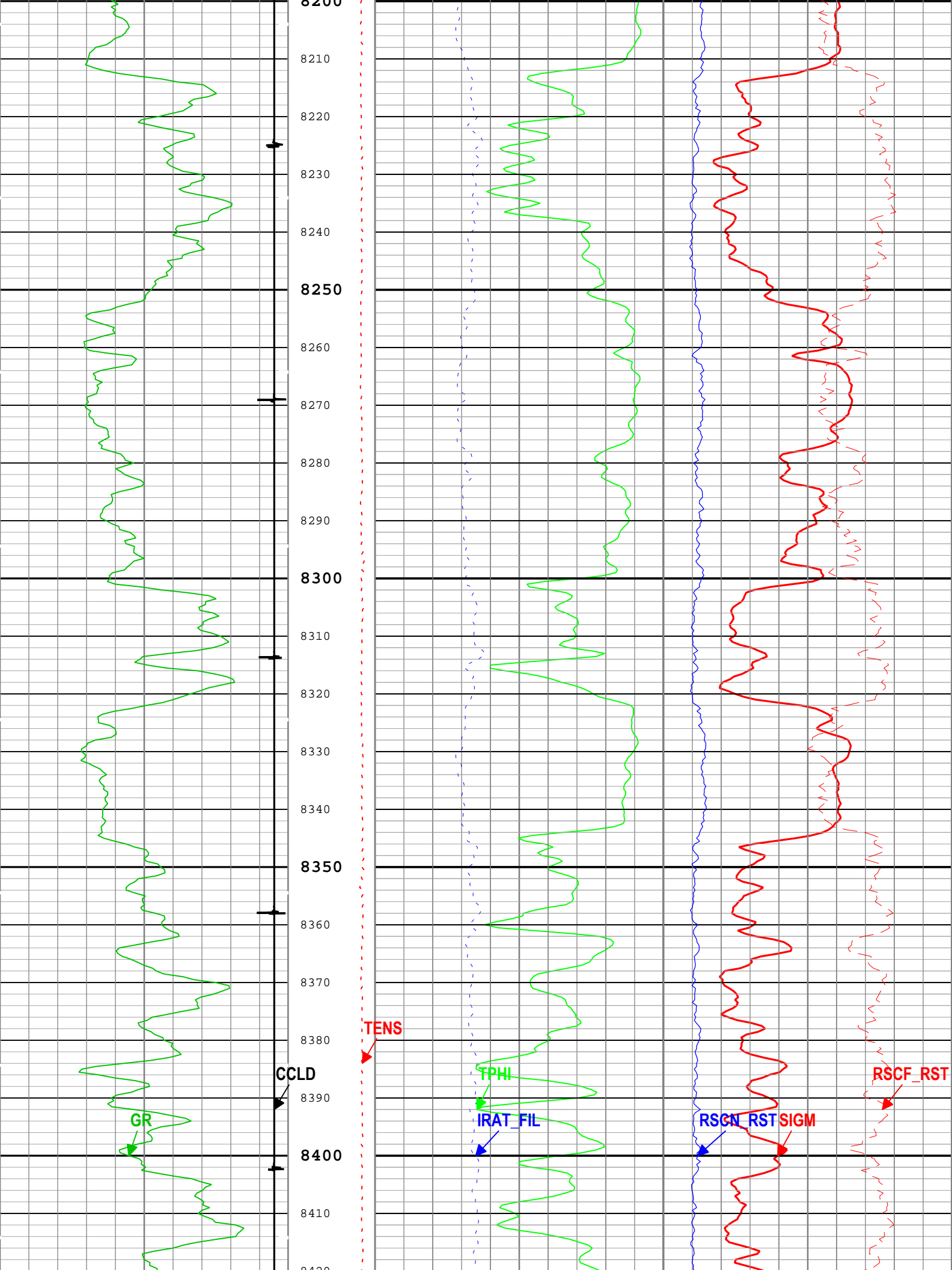


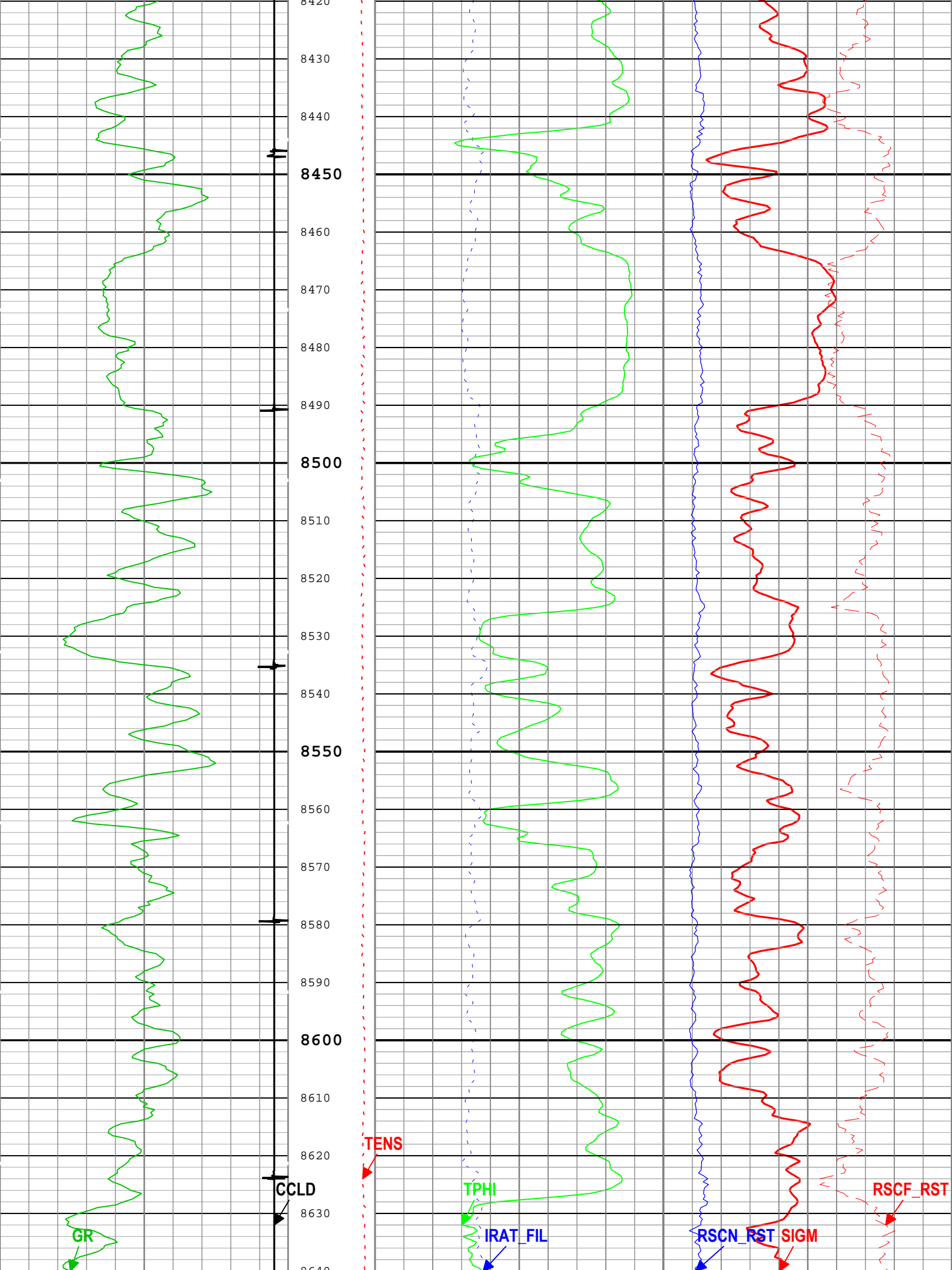


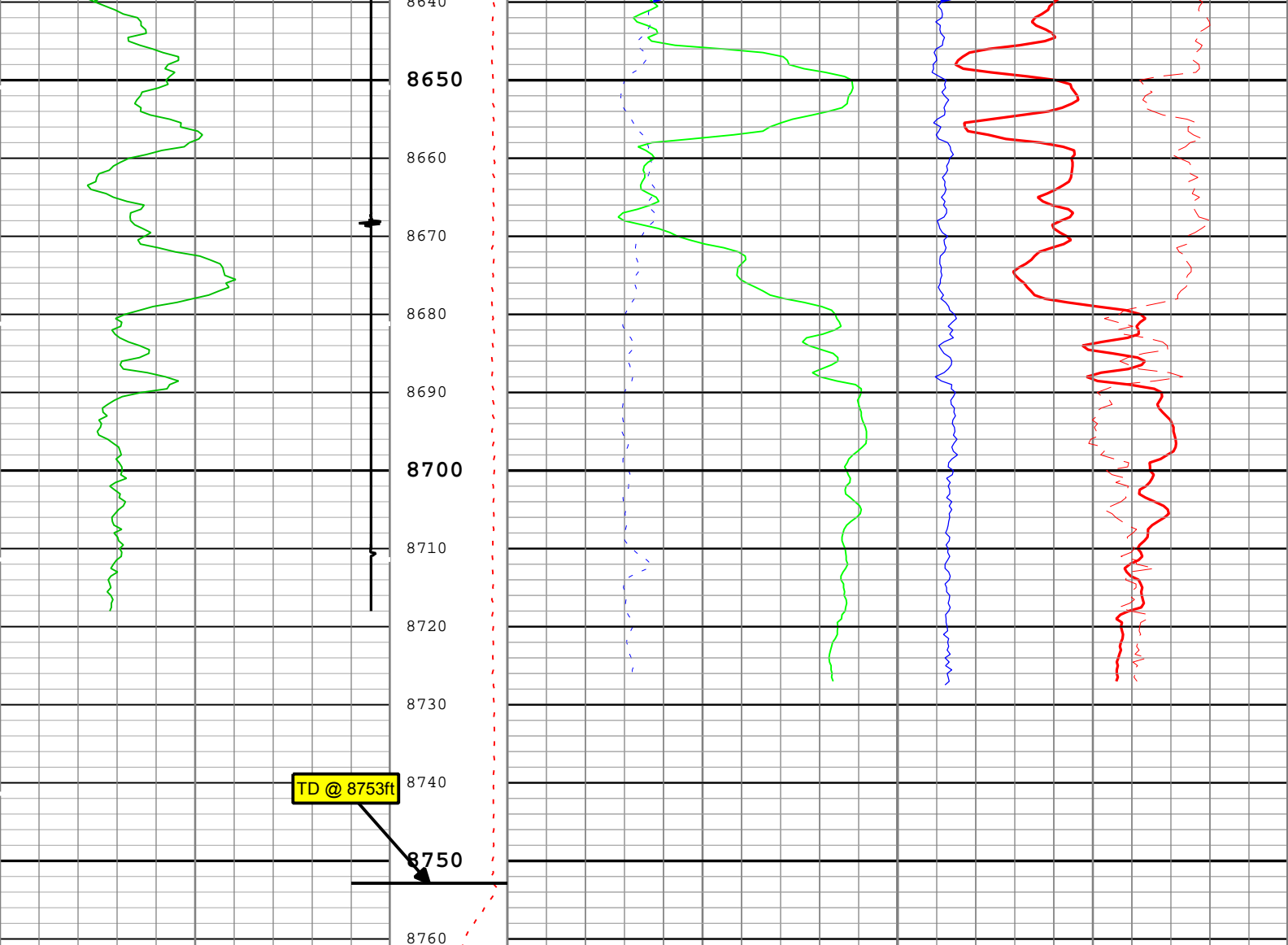












Gamma Ray (GR) PSTP-A[1]		Cable Tension (TENS)	Formation Sigma (Neutron Capture Cross Section) (SIGM) RST-C[1]	
0	gAPI 150		60	cu 0
CCL Discriminated Amplitude (CCLD) PSTP-A[1]		0 lbf 1500	Inelastic Ratio Filtered (IRAT_FIL) RST-C[1]	Near Detector Effective Unregulated Capture Count Rate (RSCN_RST) RST-C[1]
-19	V 1		0.75	0 100
			Thermal Decay Porosity (TPHI) RST-C[1]	Far Detector Effective Unregulated Capture Count Rate (RSCF_RST) RST-C[1]
			0.6 ft3/ft3 0	45 0

TIME_1900 - Time Marked every 60.00 (s)

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

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: 21-May-2018 11:31:43

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	

OneDepth Zoned Parameters

Parameter	Value	Start (ft)	Stop (ft)
BS	14.75	2300	2523
BS	8.75	2523	6258

All depth are actual.

Two: 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	

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-A	0 dB	
RST_DLM	Depth Log Mode	RST-C	Sigma	

Two: Parameters

Parameter	Description	Tool	Value	Unit
MAX_LOG_SPEED	Toolstring Maximum Logging Speed	WLSESSION	150	ft/h
PCCG	PSP Downhole CCL Gain	PSTP-A	12 dB	
RST_DLM	Depth Log Mode	RST-C	Sigma	

Two

RST Repeat Pass

Software Version

Acquisition System	Version
Maxwell 2018	8.0.95333.3100
Application Patch	Wireline_NPD-PNX-2018CMZ_8.0.100887

Pass Summary

Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	DSC Mode	Depth Shift	Include Parallel Data
Two	Log[11]:Up	Up	8236.25 ft	8765.36 ft	21-May-2018 09:14:41	21-May-2018 09:36:06	ON	9.90 ft	No

All depths are referenced to toolstring zero

Log

Company:Caerus Operating LLC Well:Puckett 12D-26-697
Two: Log[11]:Up:S016

Description: RST SIGMA Answer Format: Log (RST SIGMA Answer_1) Index Scale: 5 in per 100 ft Index Unit: ft Index Type: Measured Depth
Creation Date: 21-May-2018 11:31:50

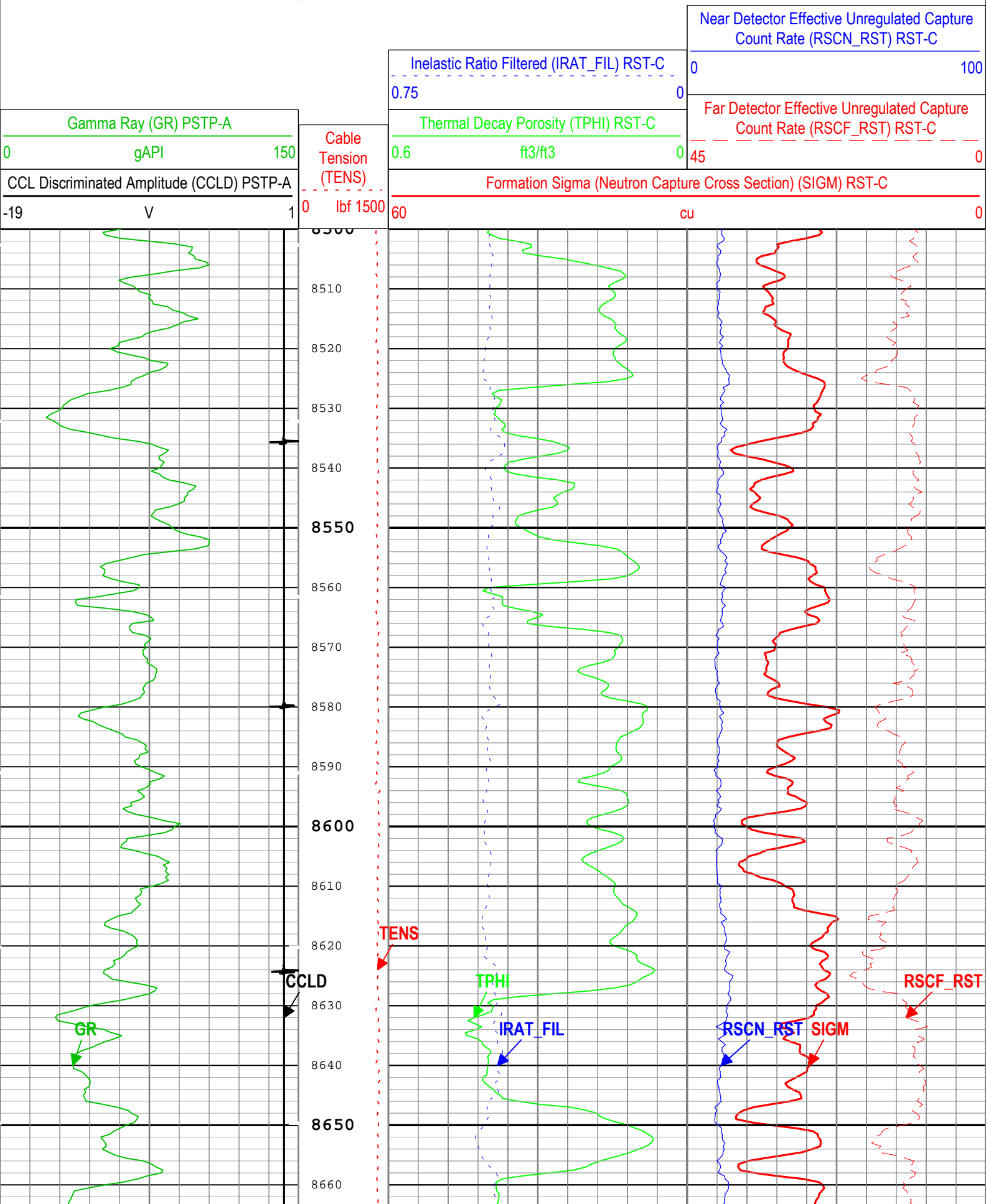
- IHV - Integrated Hole Volume every 10.00 (ft3)
- IHV - Integrated Hole Volume every 100.00 (ft3)

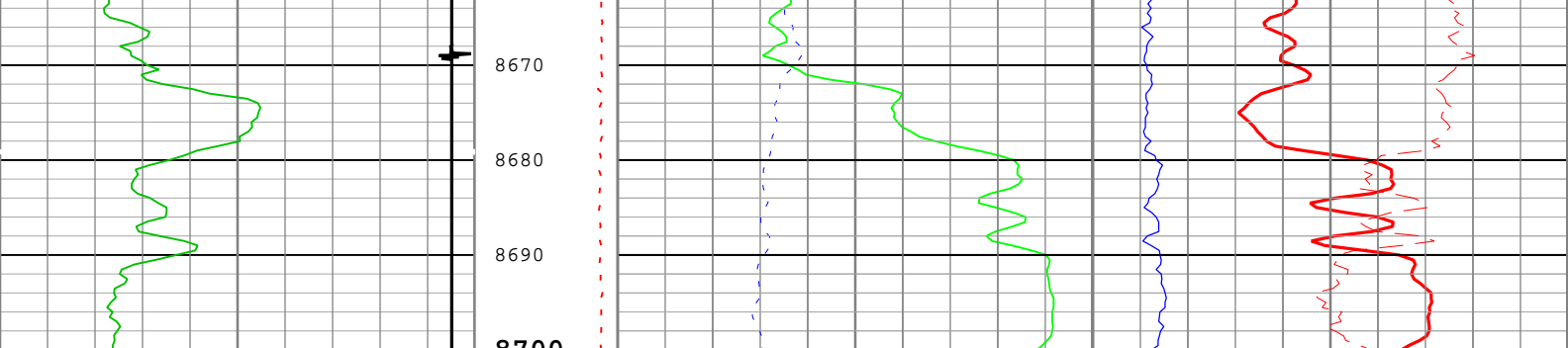
TIME_1900 - Time Marked every 60.00 (s)

ICV - Integrated Cement Volume every 10.00 (ft3)

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

ICV - Integrated Cement Volume every 100.00 (ft3)





Gamma Ray (GR) PSTP-A		Cable Tension (TENS)	Formation Sigma (Neutron Capture Cross Section) (SIGM) RST-C	
0	gAPI 150		60	cu 0
CCL Discriminated Amplitude (CCLD) PSTP-A		0 lbf 1500	Inelastic Ratio Filtered (IRAT_FIL) RST-C	Near Detector Effective Unregulated Capture Count Rate (RSCN_RST) RST-C
-19	V 1		0.75 0	0 100
			Thermal Decay Porosity (TPHI) RST-C	Far Detector Effective Unregulated Capture Count Rate (RSCF_RST) RST-C
			0.6 ft3/ft3 0	45 0

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

Description: RST SIGMA Answer Format: Log (RST SIGMA Answer_1) Index Scale: 5 in per 100 ft Index Unit: ft Index Type: Measured Depth
 Creation Date: 21-May-2018 11:31:50

Channel Processing Parameters

Two: 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	

Tool Control Parameters

Two: Parameters

Parameter	Description	Tool	Value	Unit
MAX_LOG_SPEED	Toolstring Maximum Logging Speed	WLSESSION	150	ft/h
PCCG	PSP Downhole CCL Gain	PSTP-A	12 dB	
RST_DLM	Depth Log Mode	RST-C	Sigma	

Well: Puckett 12D-26-697
Field: Grand Valley
County: Garfield
State: Colorado

Cement Bond Log

RST Sigma Log

Gamma Ray - Collar Locator Log