

Company: Caerus Operating LLC

Well: Puckett 24D-23 697

Field: Grand Valley

County: Garfield State: Colorado

Cement Bond Log
RST Sigma Log
Gamma Ray Collar LogCounty: Garfield
Field: Grand Valley
Location:
Well: Puckett 24D-23 697
Company: Caerus Operating LLC

Location:		Elev.:	
Permanent Datum:	Mean Sea Level	K.B.	8454.00 ft
Log Measured From:	Kelly Bushing	G.L.	8424.00 ft
Drilling Measured From:	Kelly Bushing	D.F.	8454.00 ft
API Serial No.	Section:	Township:	Range:
05045233790000	23	6S	97W

Logging Date 17-Dec-2017

Run Number RST/SCMT

Depth Driller 8895.00 ft

Schlumberger Depth 8895.00 ft

Bottom Log Interval 8886.00 ft

Top Log Interval 2500.00 ft

Casing Fluid Type Water

Salinity

Density 8.4 lbm/gal

Fluid Level 8.00 ft

BIT/CASING/TUBING STRING

Bit Size 8.75 in

From 0.00 ft

To 8895.00 ft

Casing/Tubing Size 4.5 in

Weight 11.6 lbm/ft

Grade P110

From 30.00 ft

To 8895.00 ft

Max Recorded Temperatures

Logger on Bottom 17-Dec-2017 07:04:00

Unit Number 3003 Location: Evanson

Recorded By John Emery

Witnessed By Ryan Tompkins

Disclaimer

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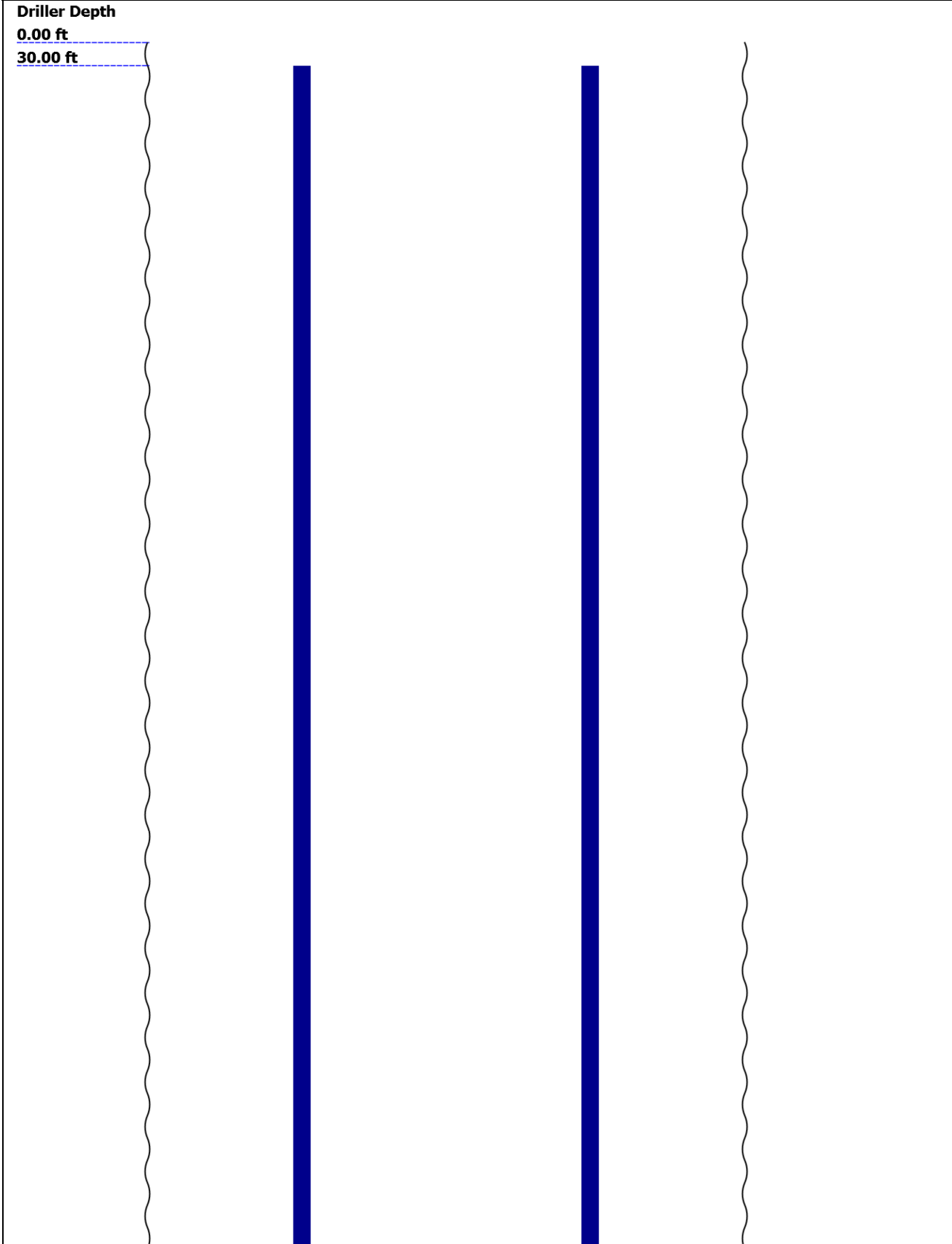
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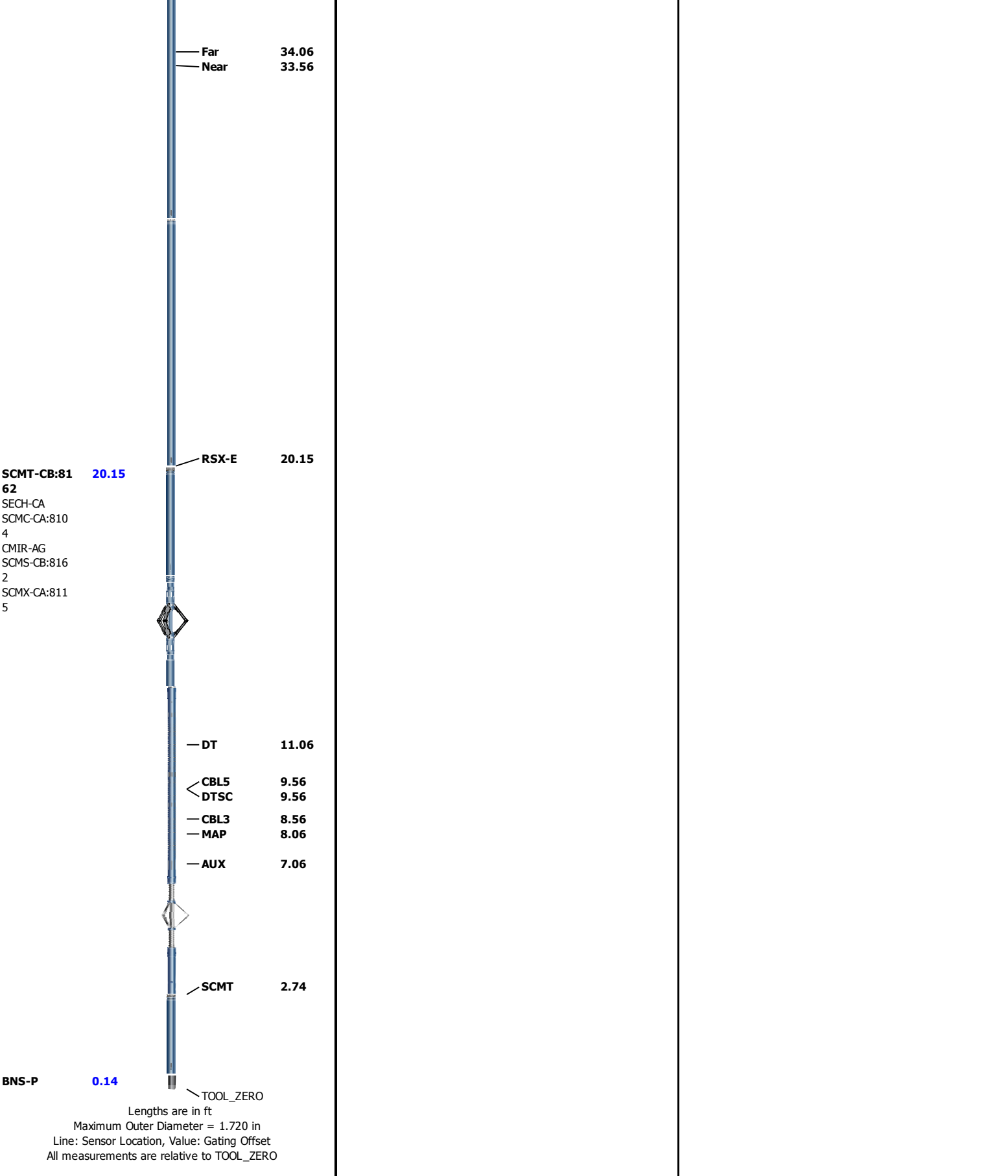
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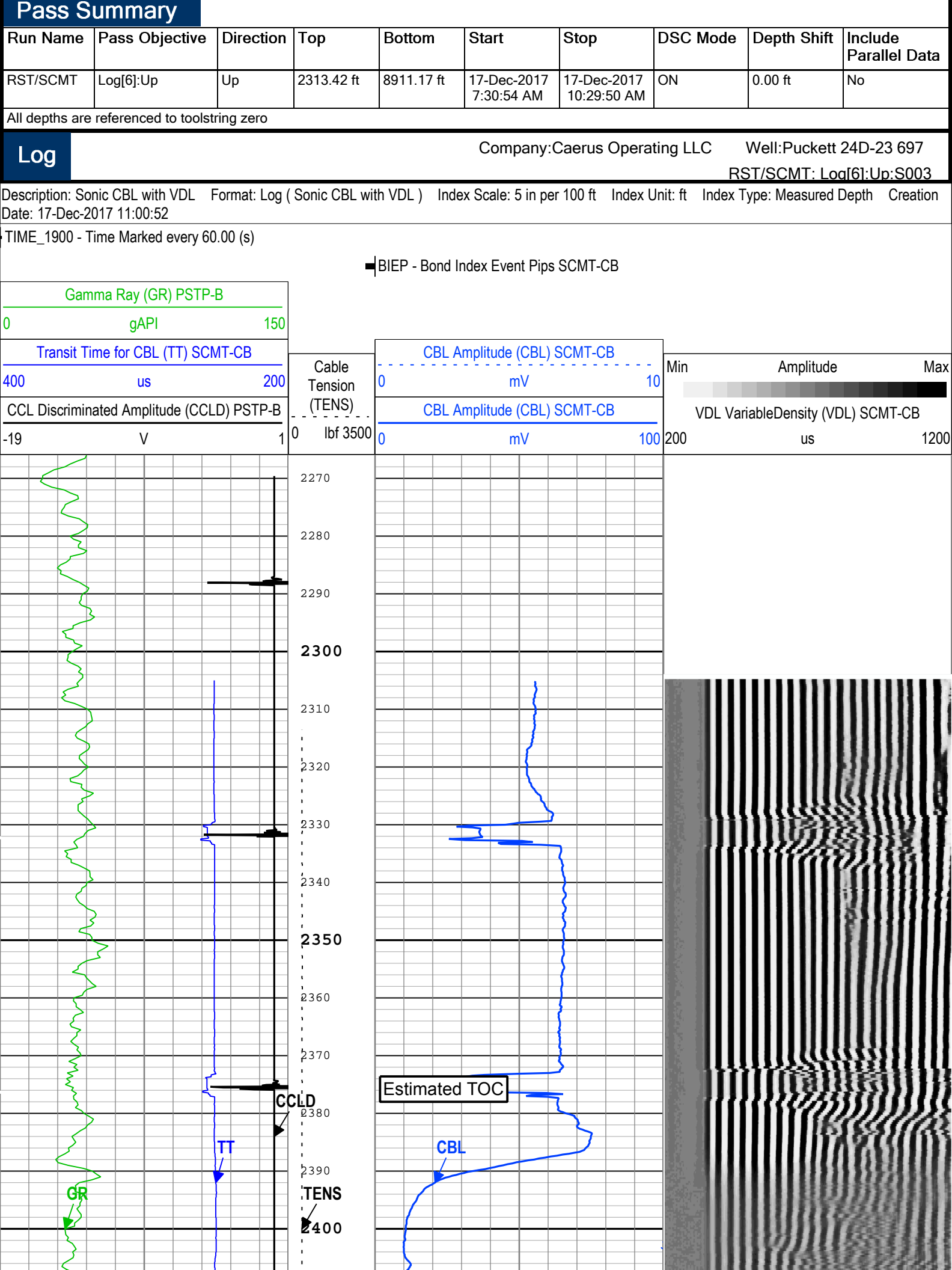
Well Sketch

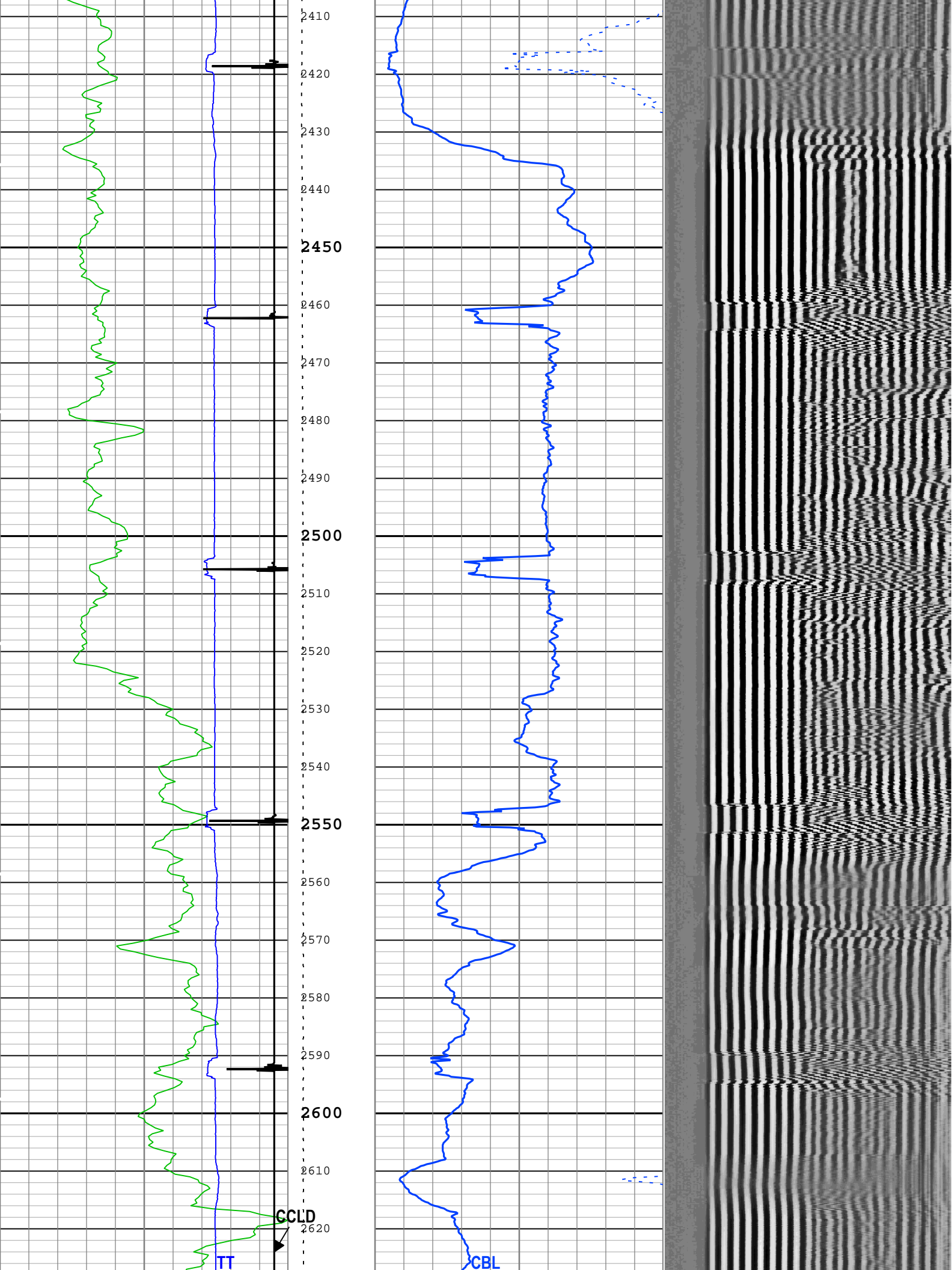


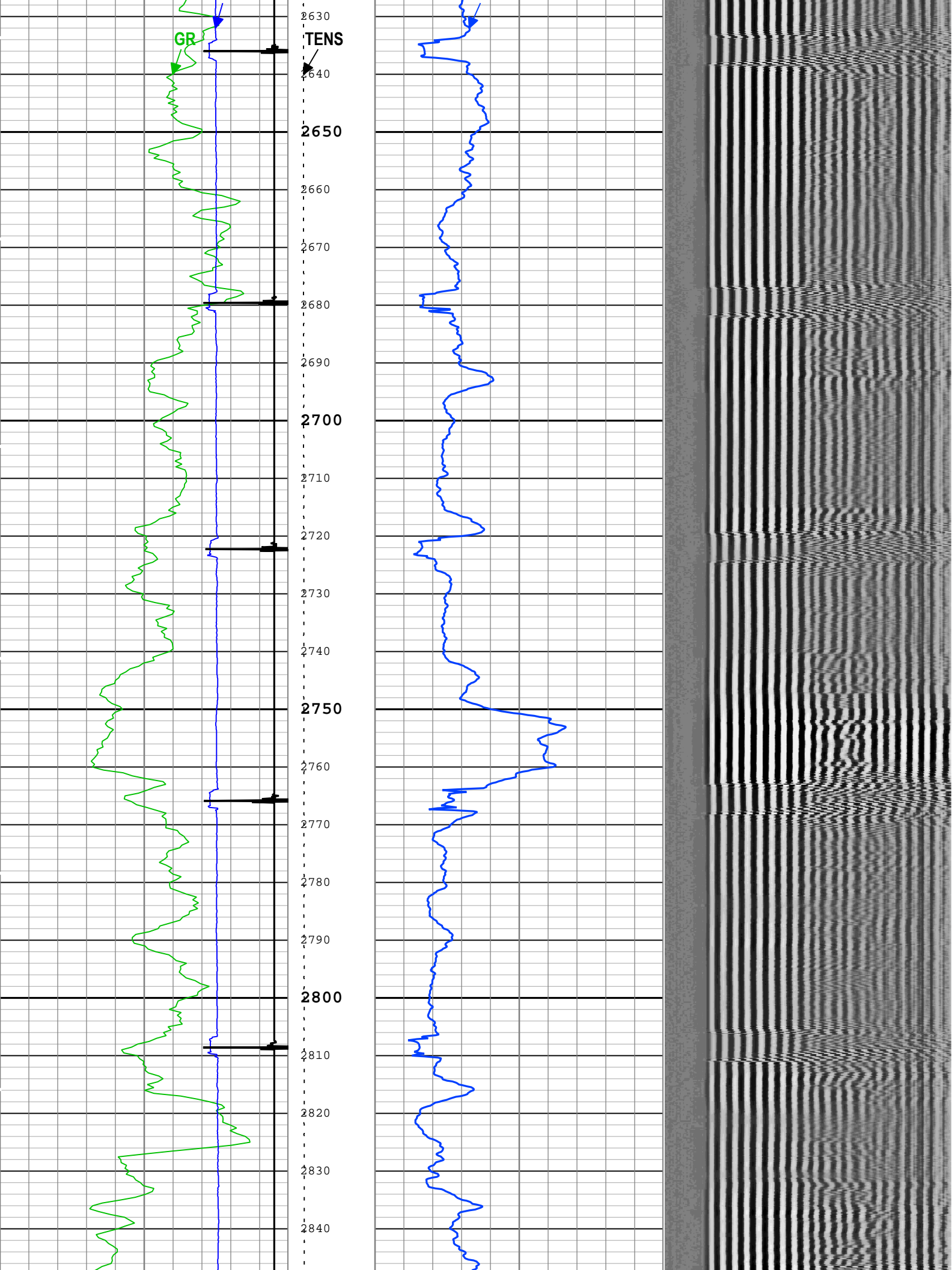


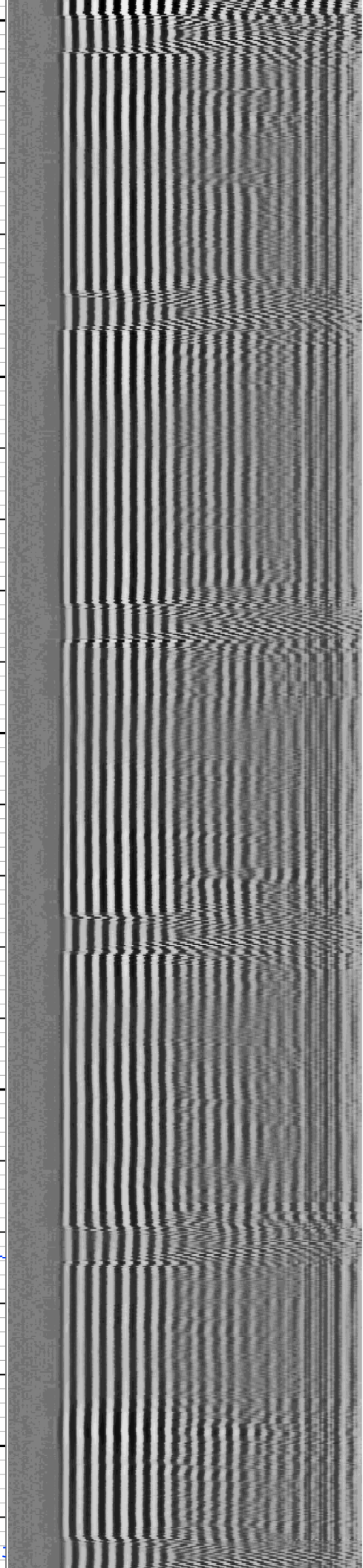
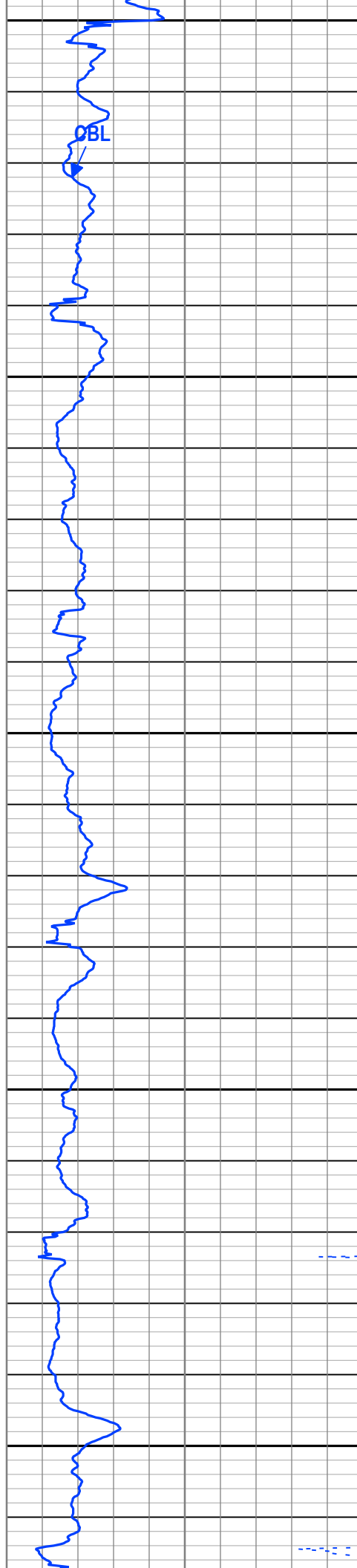
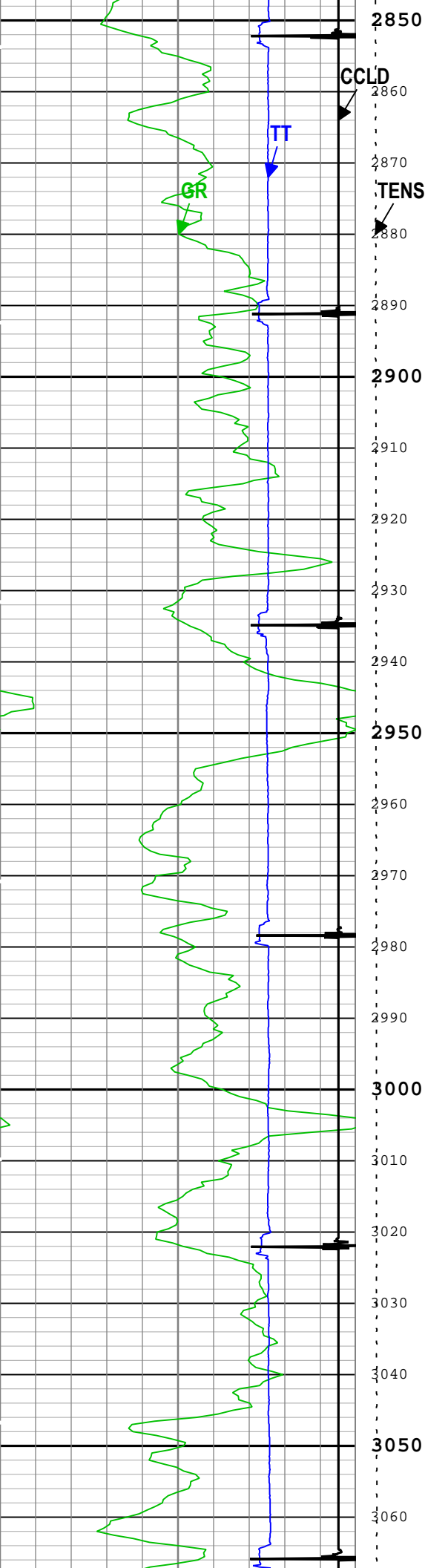
Depth Summary			
RST/SCMT			
Depth Measuring Device			
Type	IDW-B		
Serial Number			
Calibration Date			

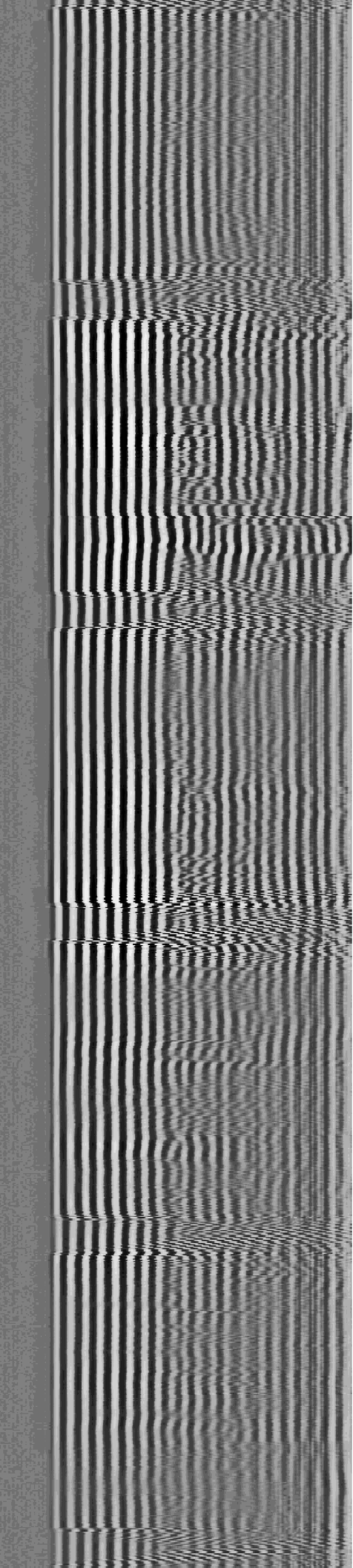
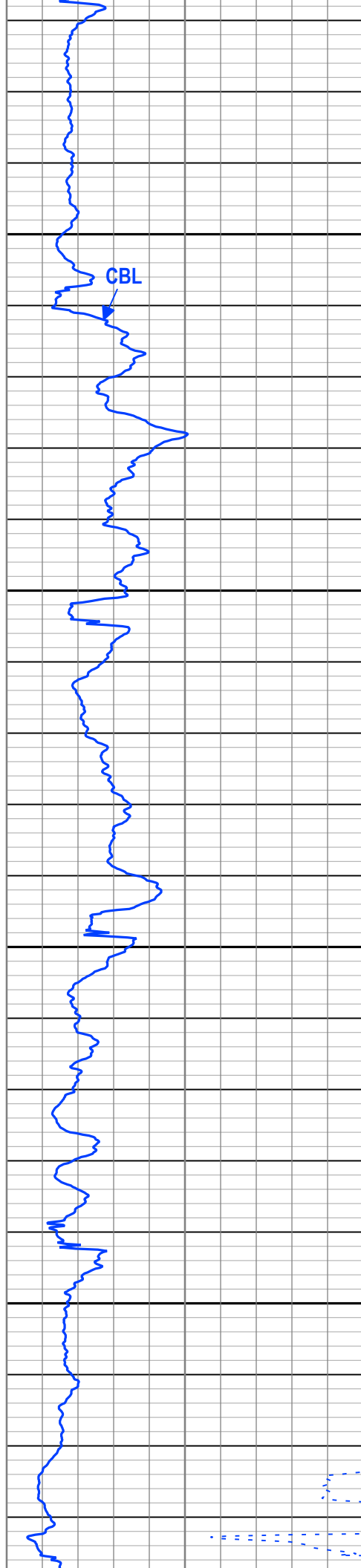
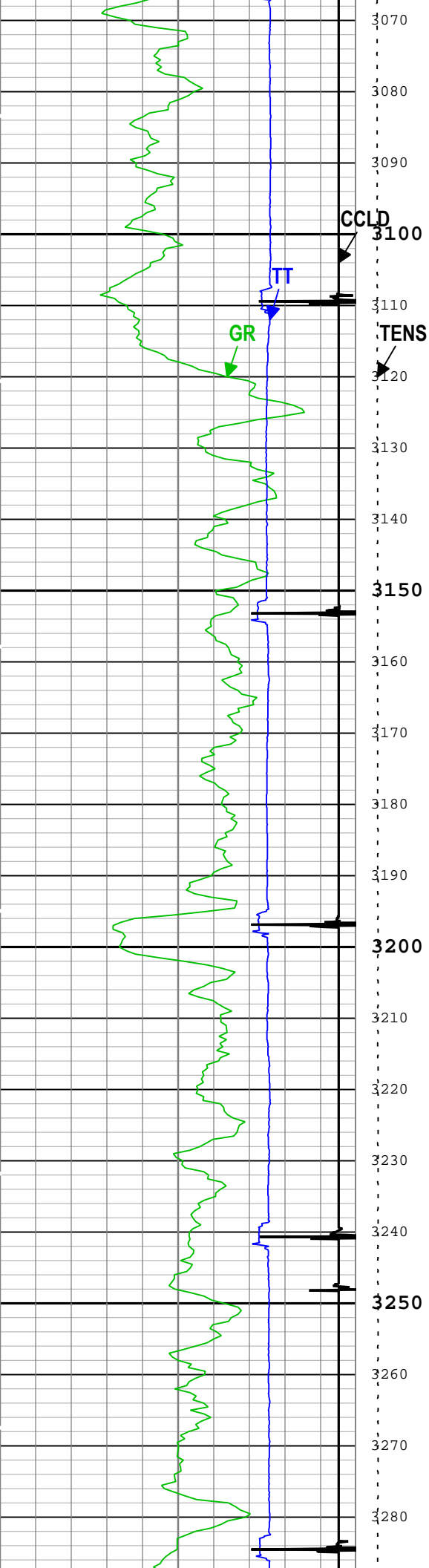
Calibrator Serial Number															
Calibration Cable Type															
Wheel Correction 1		0													
Wheel Correction 2		0													
Tension Device															
Type		CMTD-B/A													
Serial Number															
Calibration Date															
Calibrator Serial Number															
Number of Calibration Points		0													
Logging Cable															
Type		1-32ZA-XS													
Serial Number															
Length		20000.00 ft													
Conveyance Type		Wireline													
Rig Type															
RST/SCMT:Depth Control Parameters				Depth Control Remarks											
Log Sequence		First Log In the Well		Log Correlated To Down Log											
Rig Up Length At Surface															
Rig Up Length At Bottom															
Rig Up Length Correction															
Stretch Correction															
Tool Zero Check At Surface															
Survey Record															
Survey Calculation															
Method :		Minimum Radius of Curvature		DLS Method :		Lubinski									
North Reference :		True North		Total Correction Formula :		Magnetic Dec									
Rig Location															
Latitude :		0° 0' 0" N		Longitude :		0° 0' 0" E									
Tie In Point															
Measured Depth:		0.00 ft	Inclination:		0.00 deg	Azimuth:		0.00 deg							
True Vertical Depth:		0.00 ft	North Displacement:		0.00 ft	East Displacement:		0.00 ft							
Survey Quality Index															
28 : Tie-In Point															
Survey Correction Index															
0 : No correction															
Survey Description Index															
0 : Not Flagged Survey															
Seq	MD (ft)	Incl (deg)	Azim (deg)	Course (ft)	TVD (ft)	V Sec (ft)	N/ -S (ft)	E/ -W (ft)	Closure (ft)	at Azim (deg)	DLS deg/100ft	Tool Type	QI	CI	DI
1	0.00	0.00	0.00	----	0.00	0.00	0.00	0.00	0.00	90.00	0.00	TIP	28	0	0
RST/SCMT															
Main Pass															
Software Version															
Acquisition System										Version					
Maxwell 2017 SP3										7.3.92069.3100					

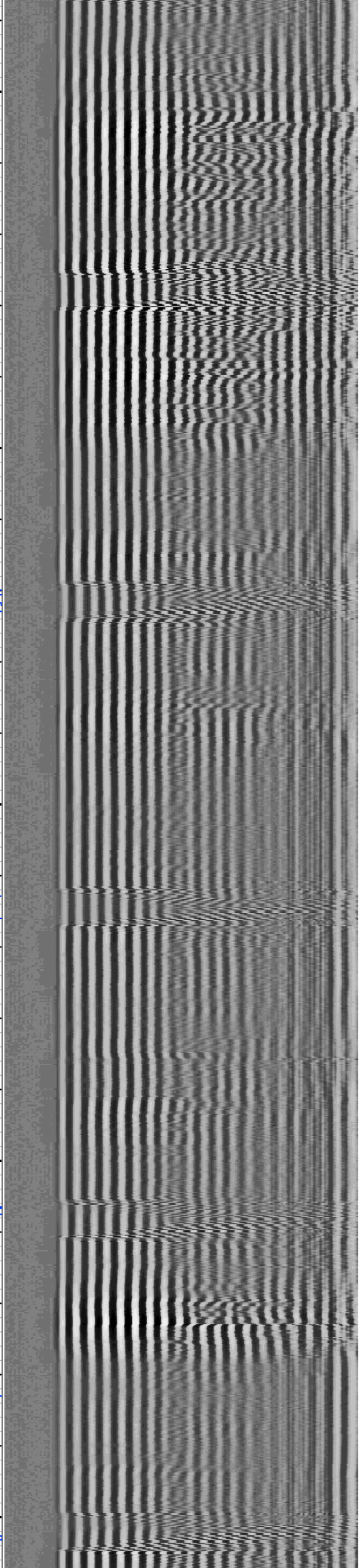
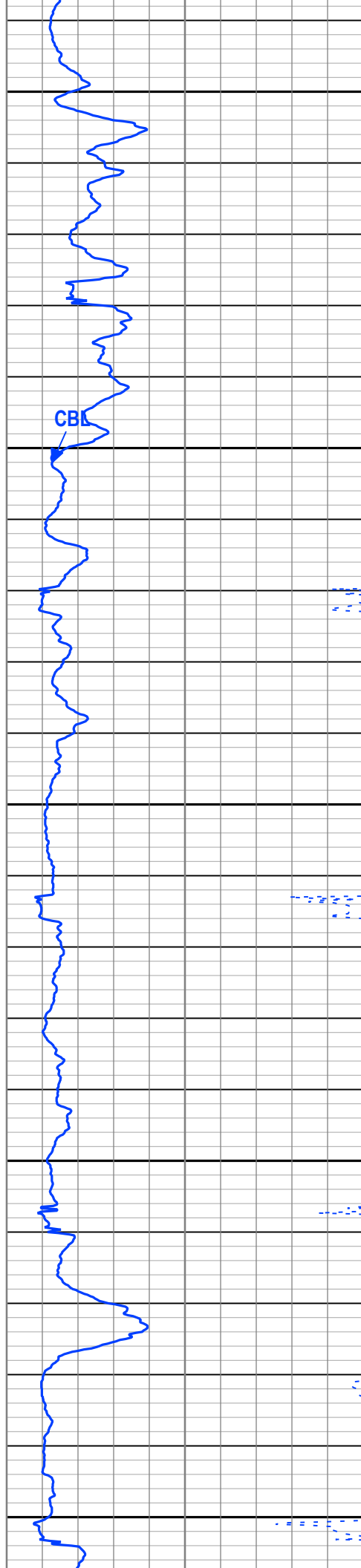
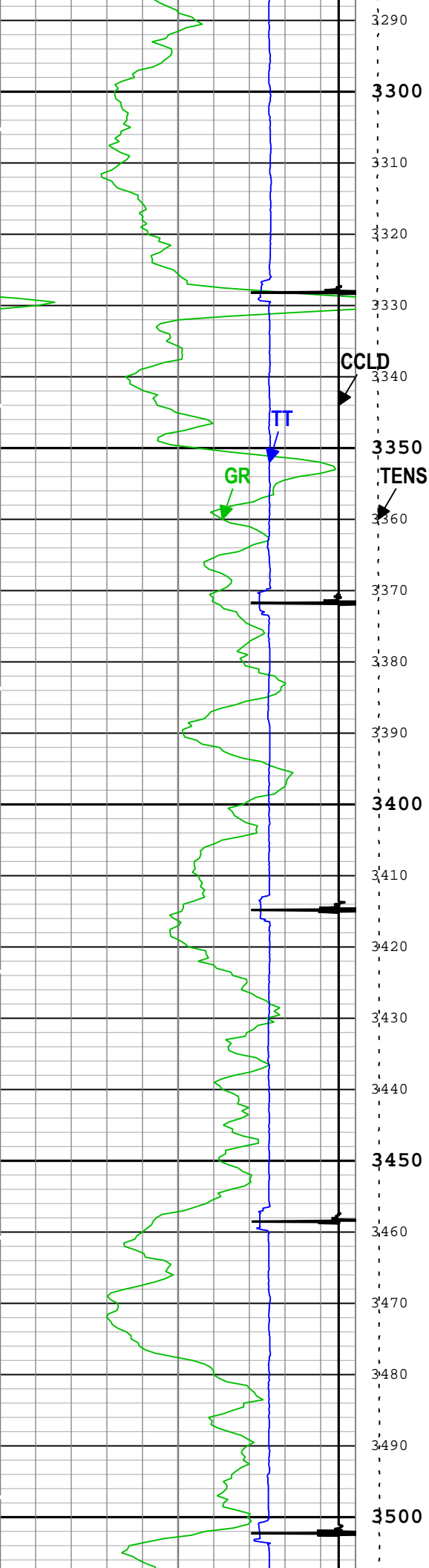


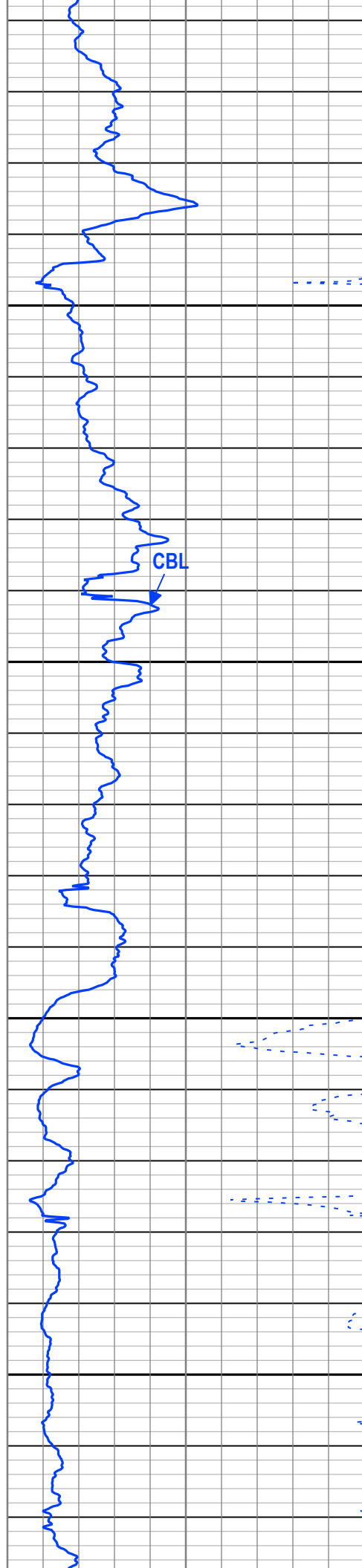
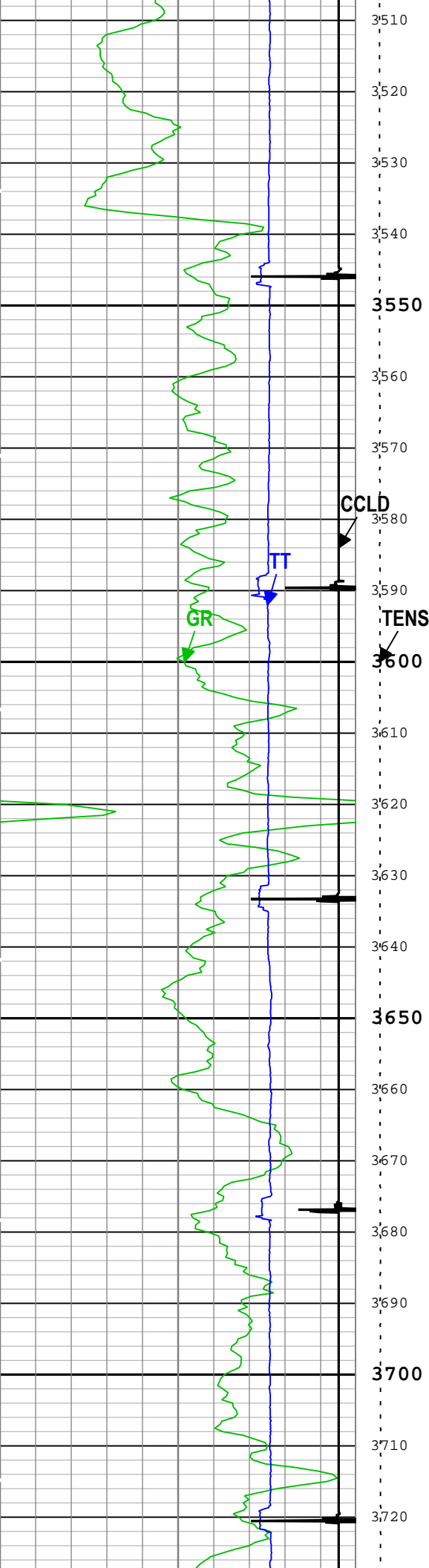


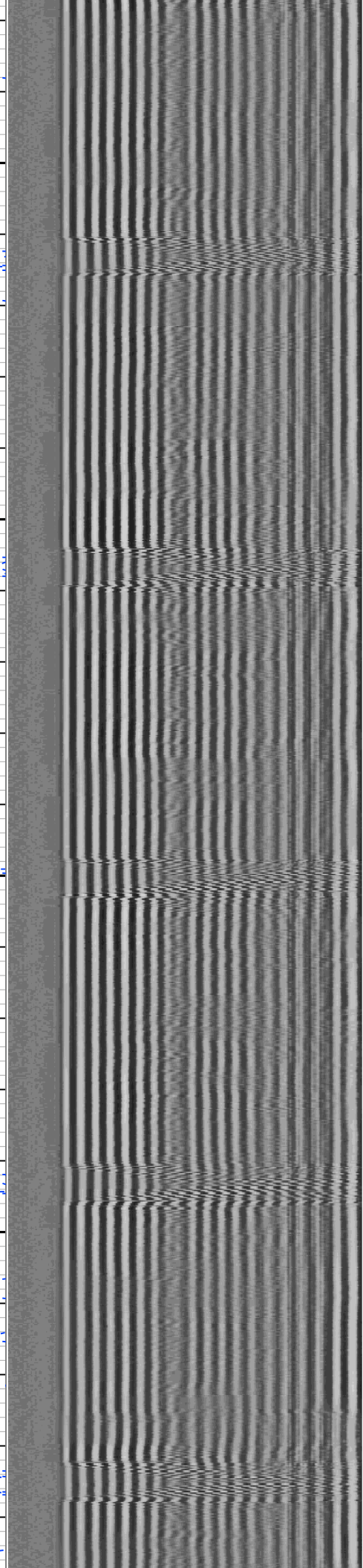
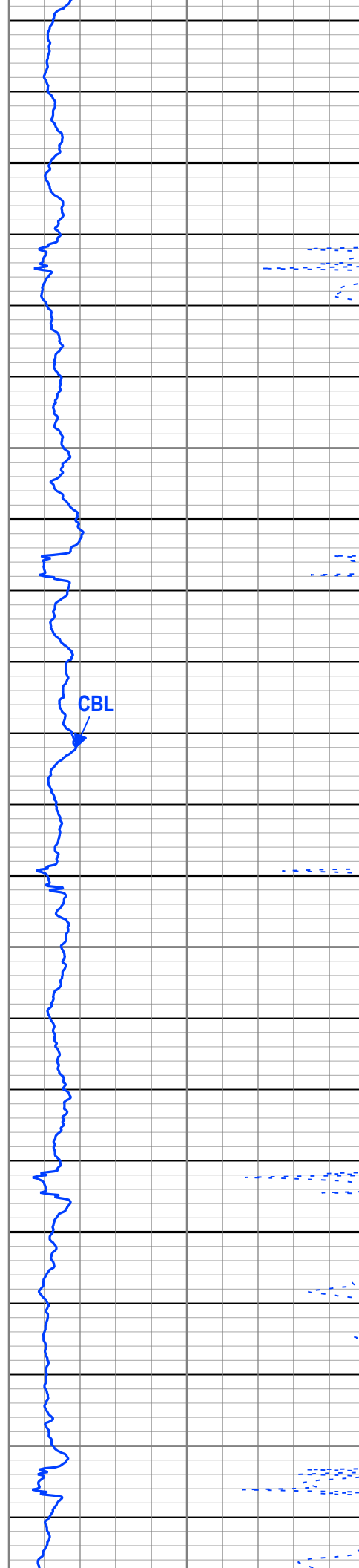
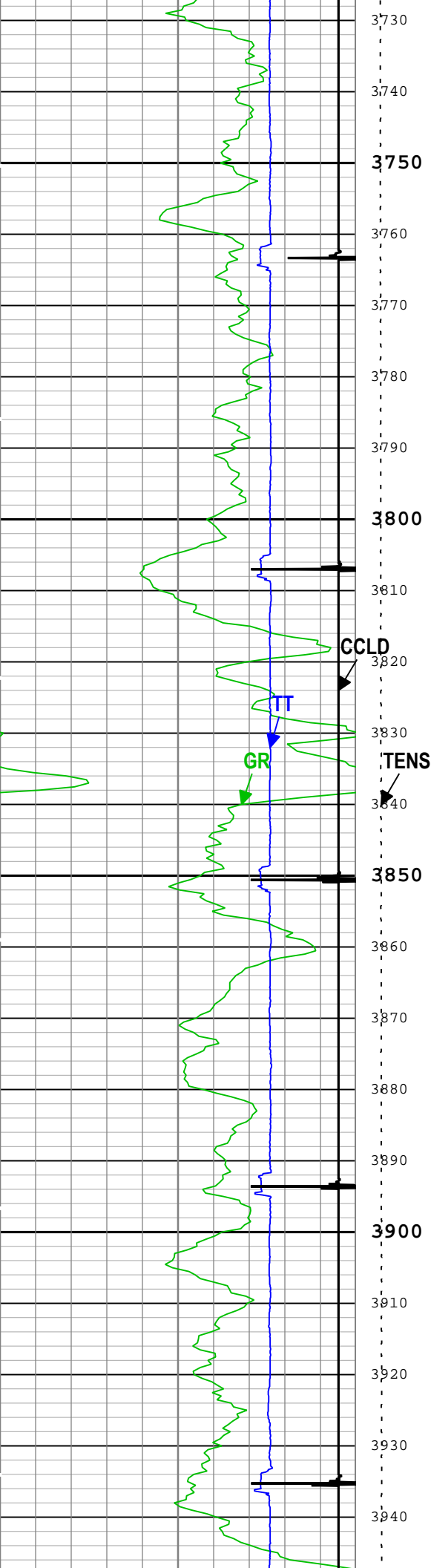


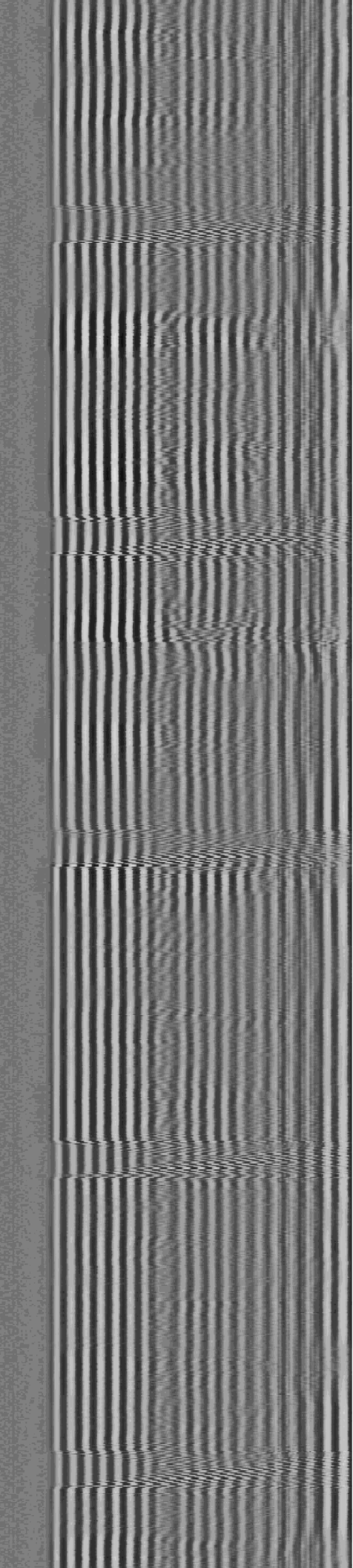
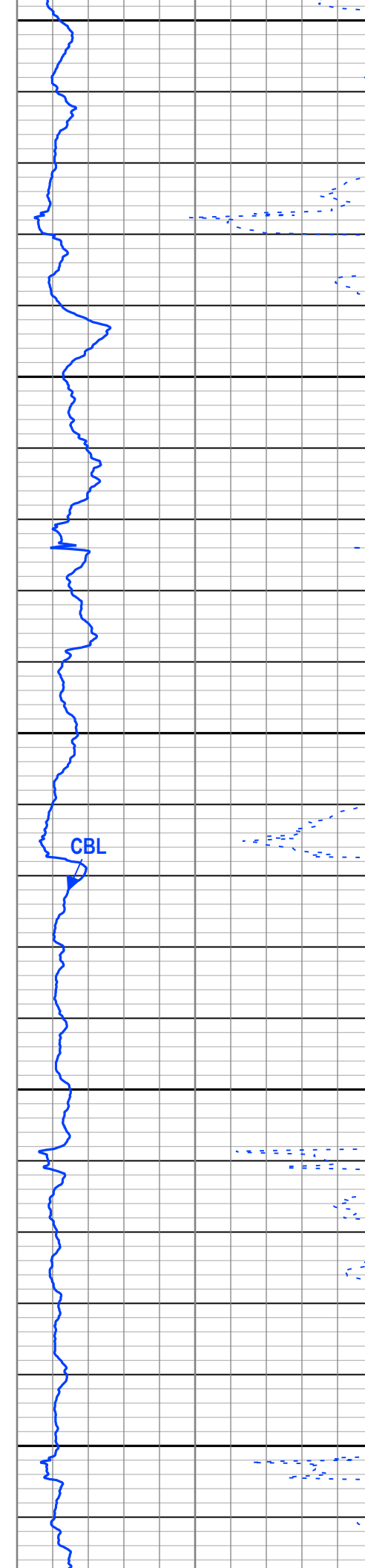
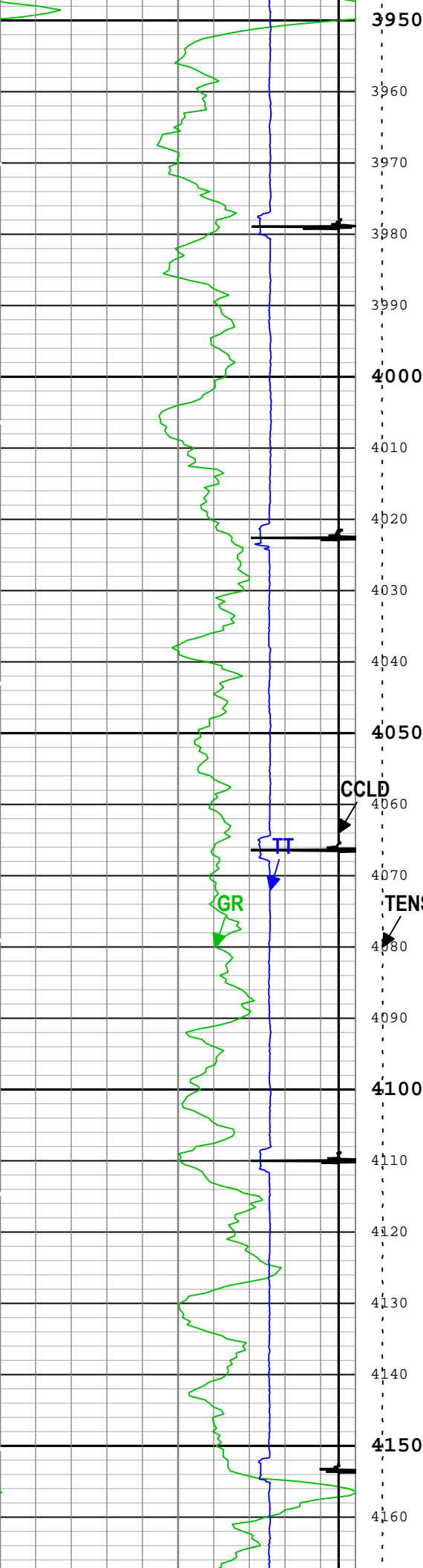


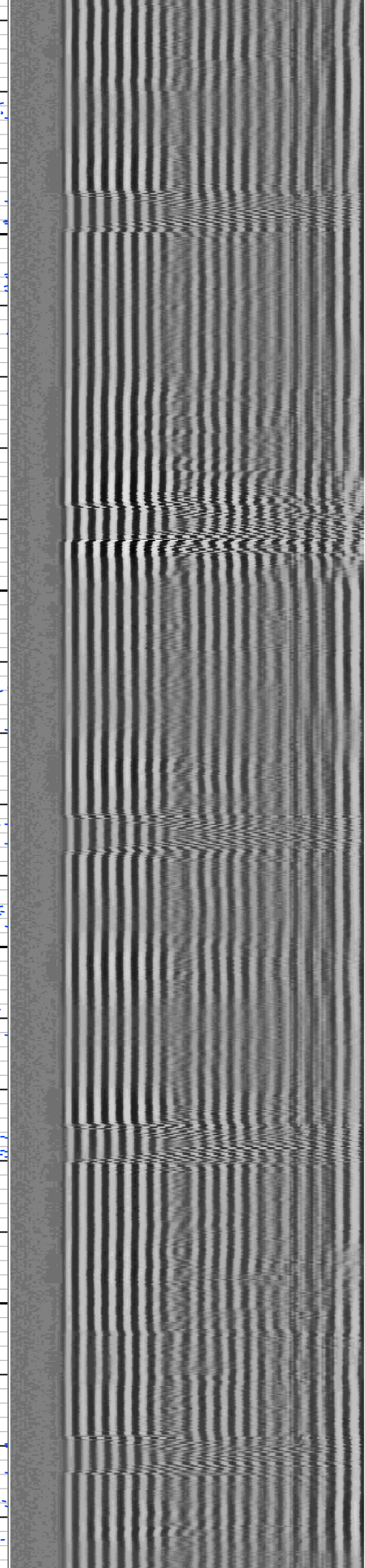
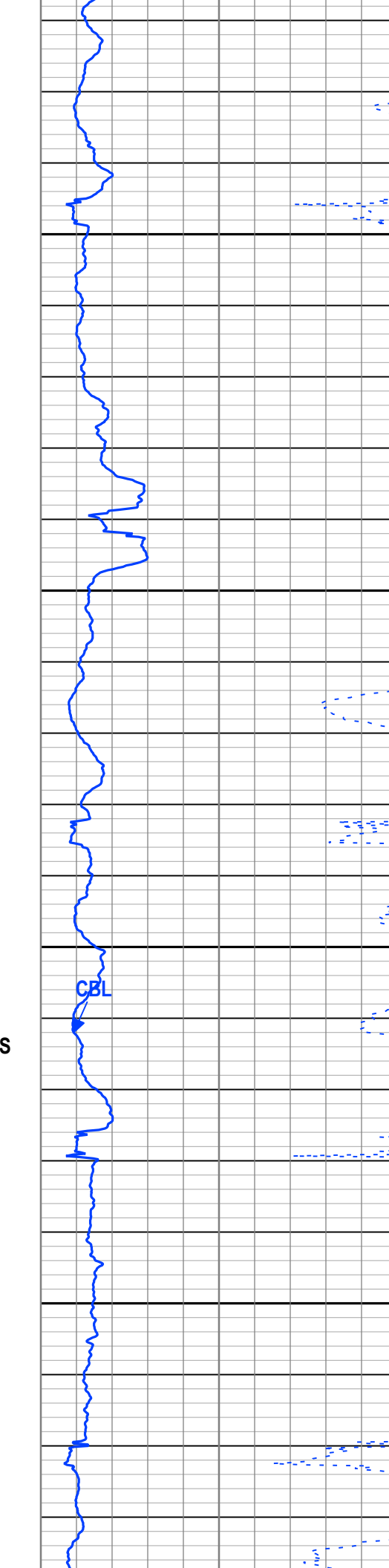
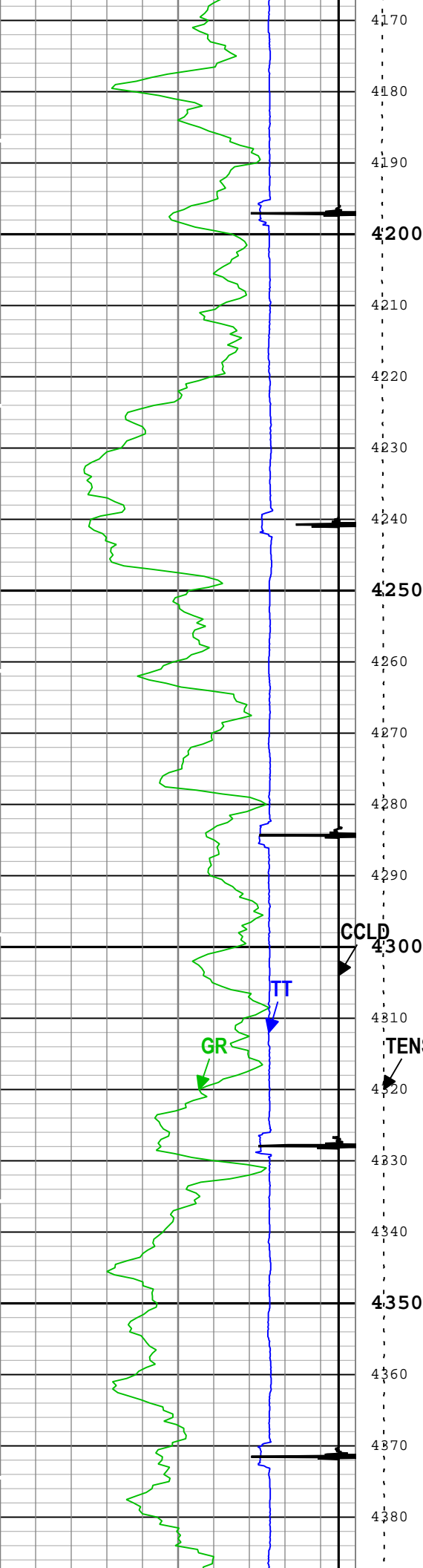


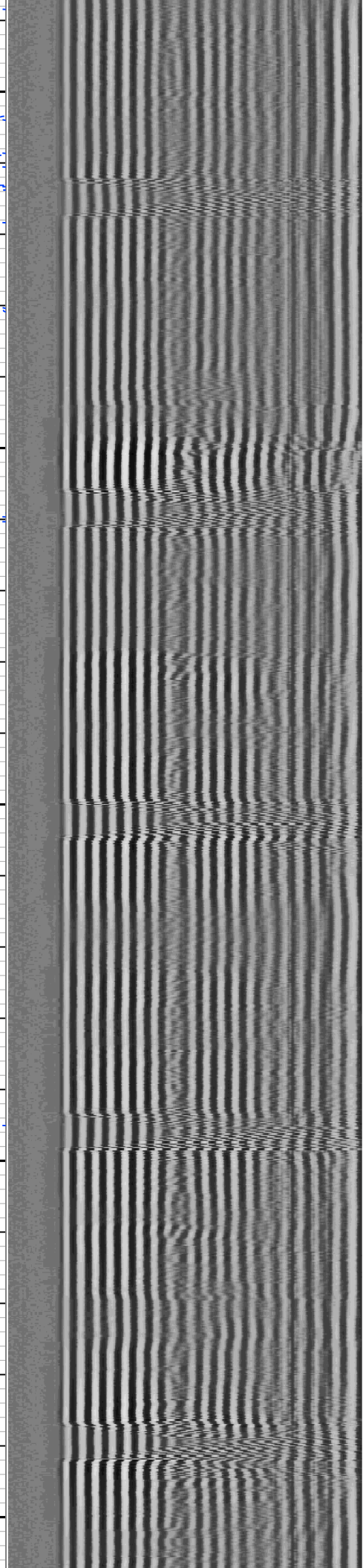
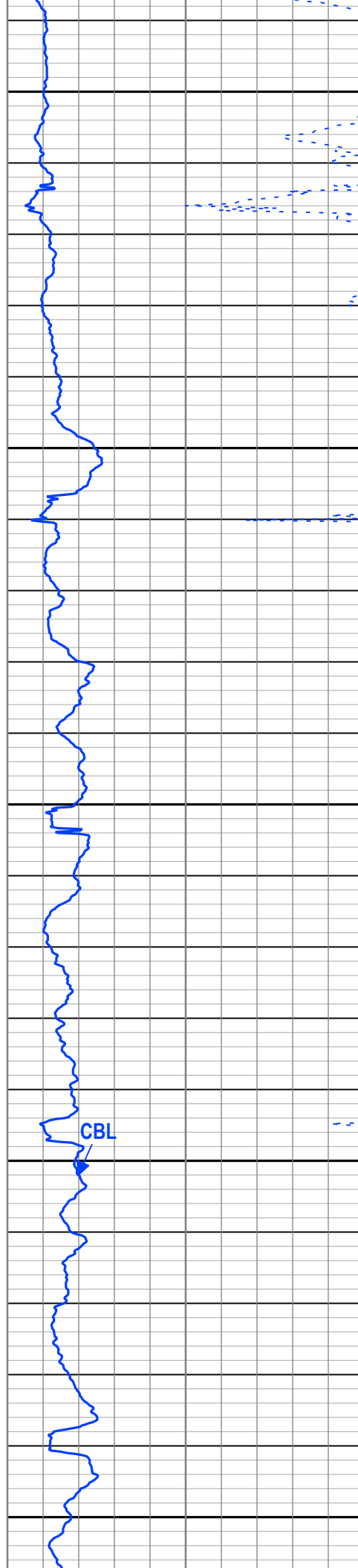
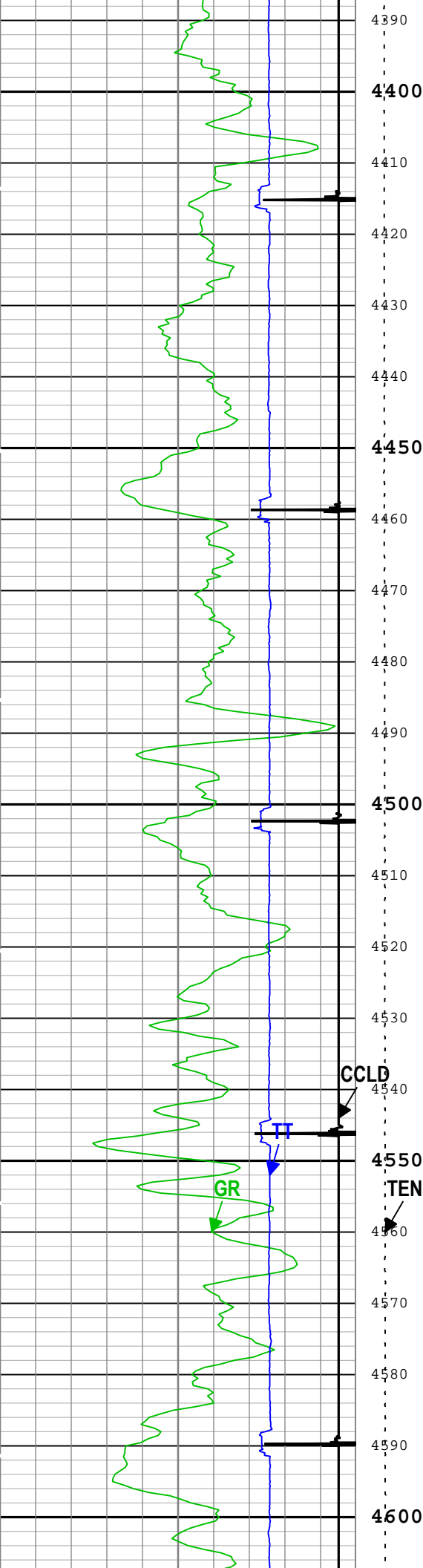


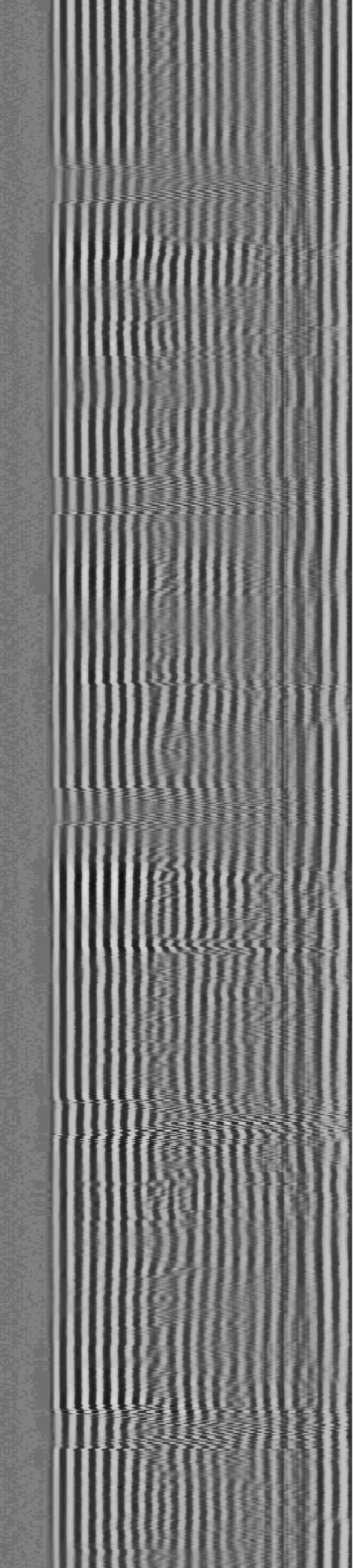
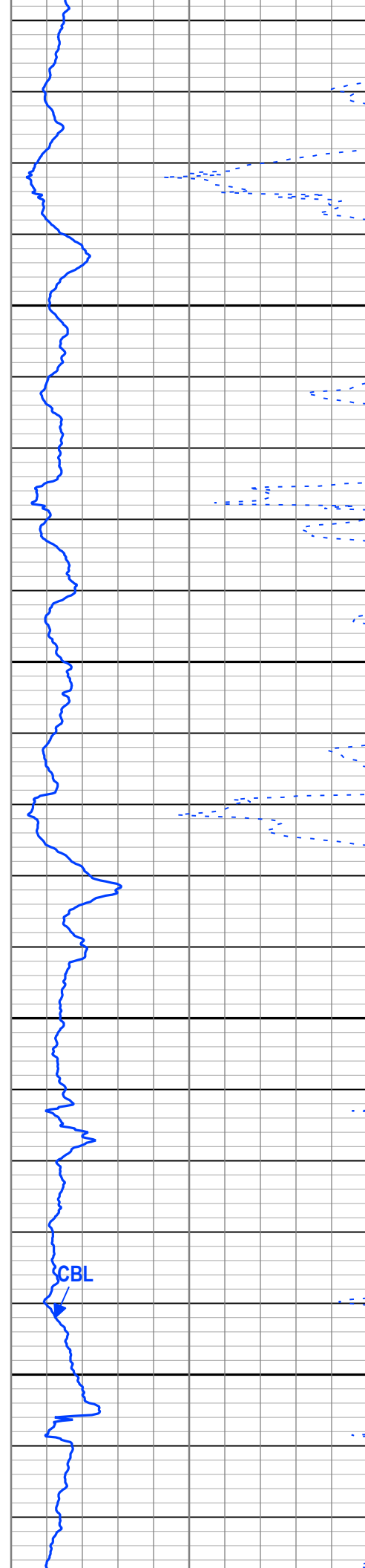
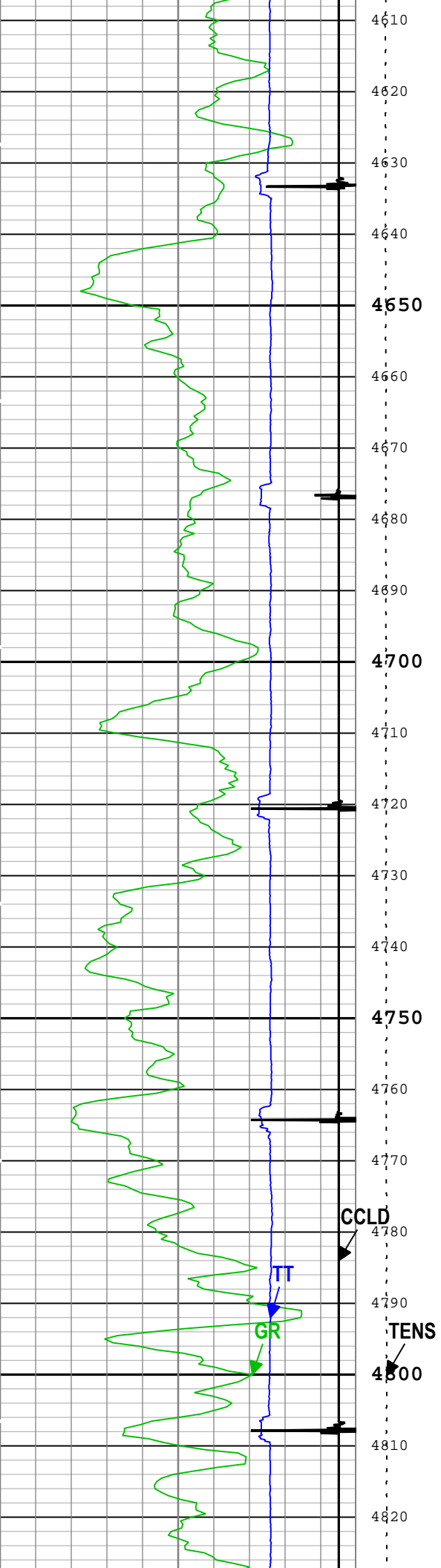


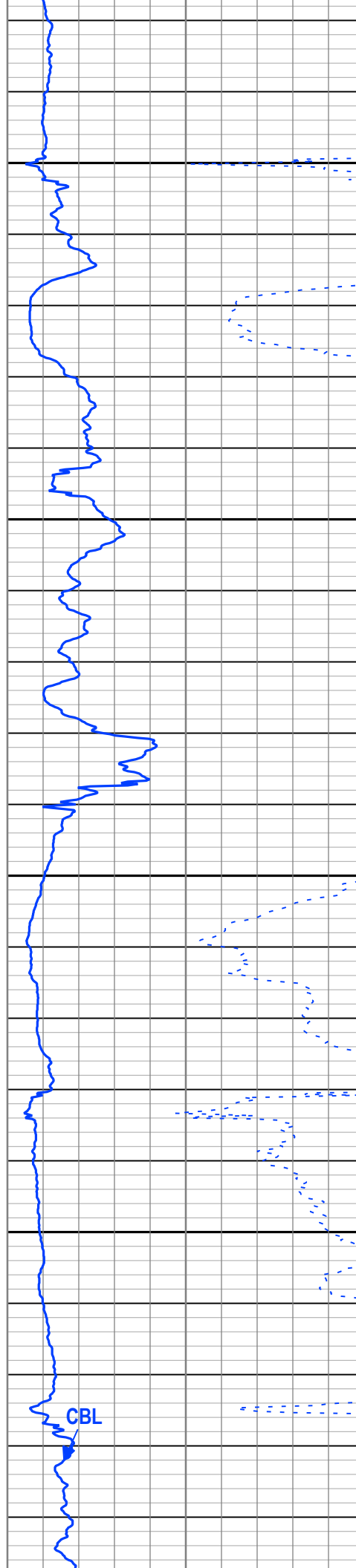
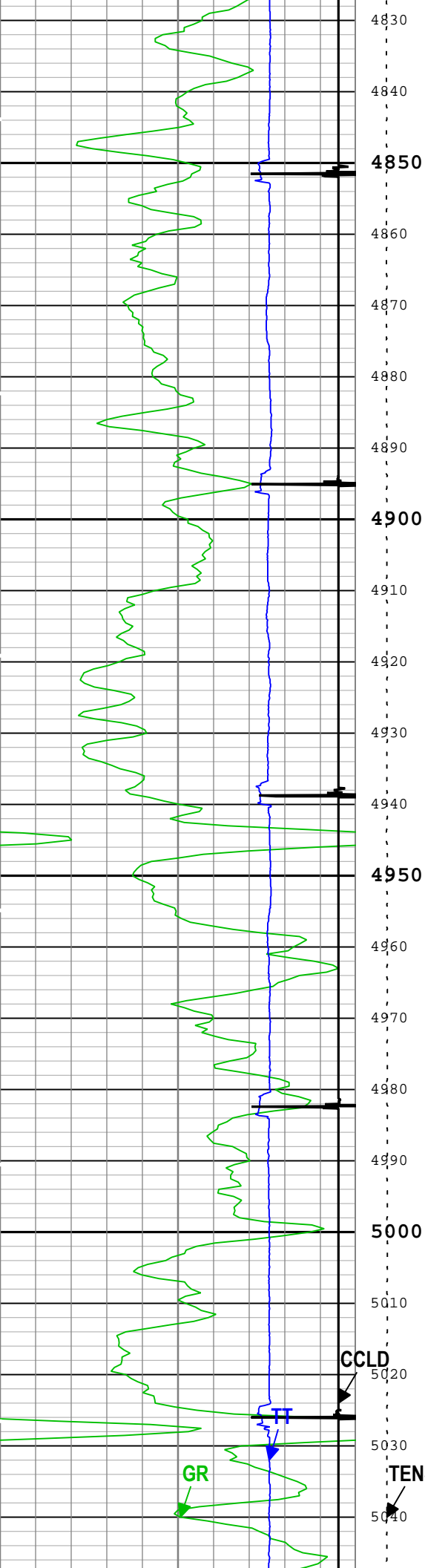


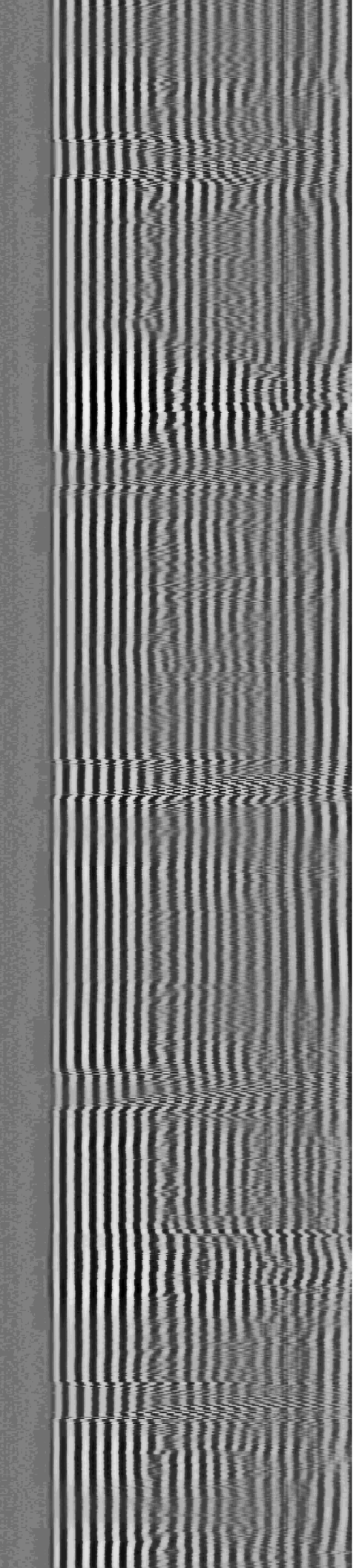
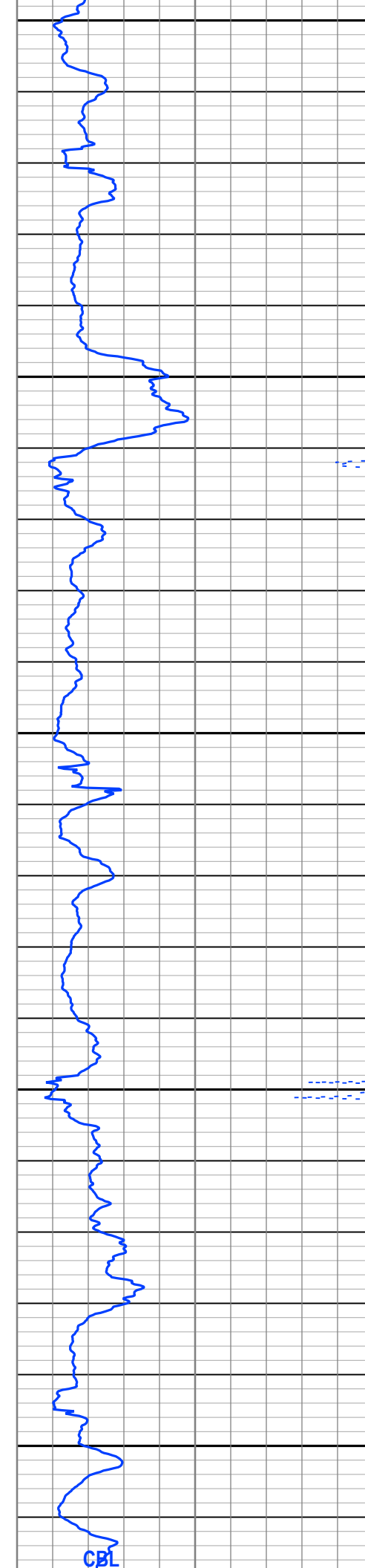
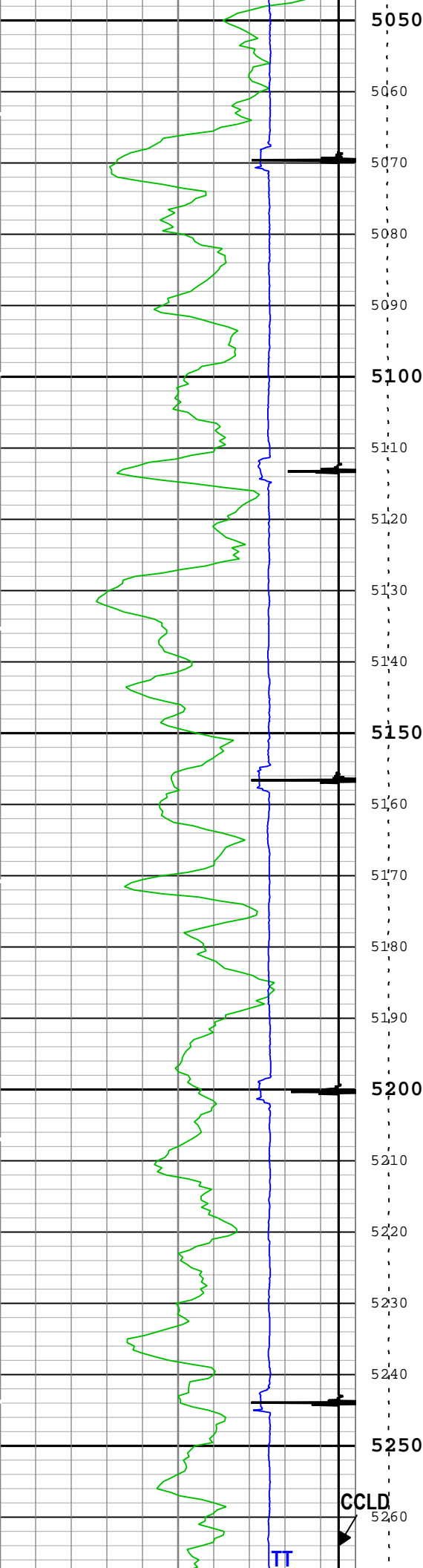


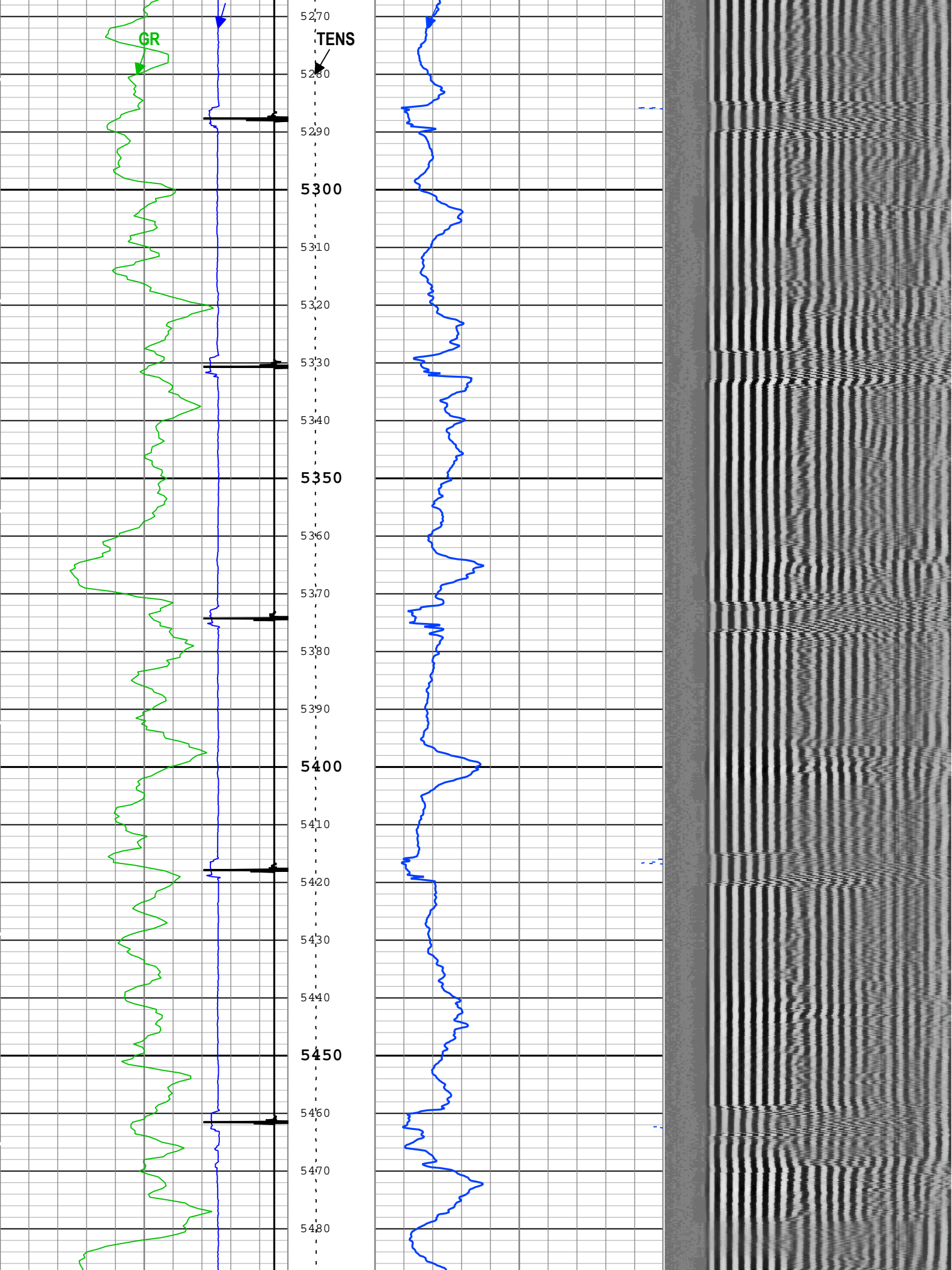


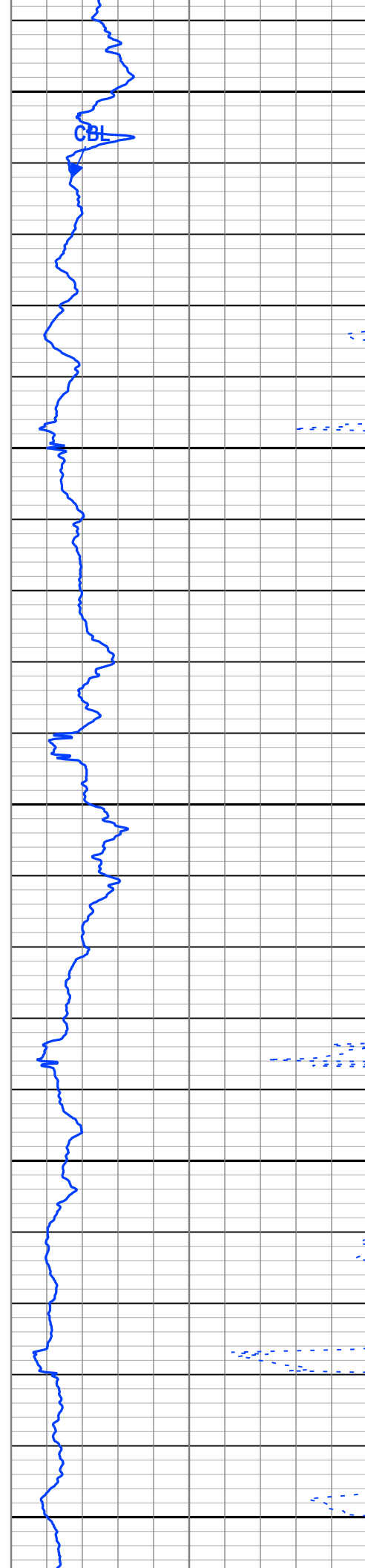
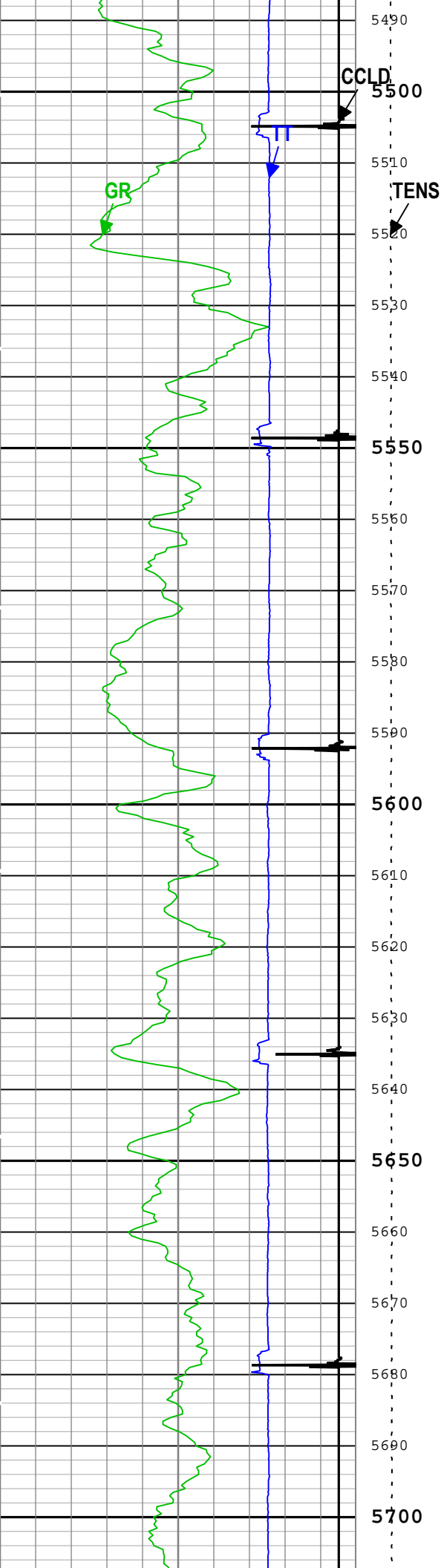


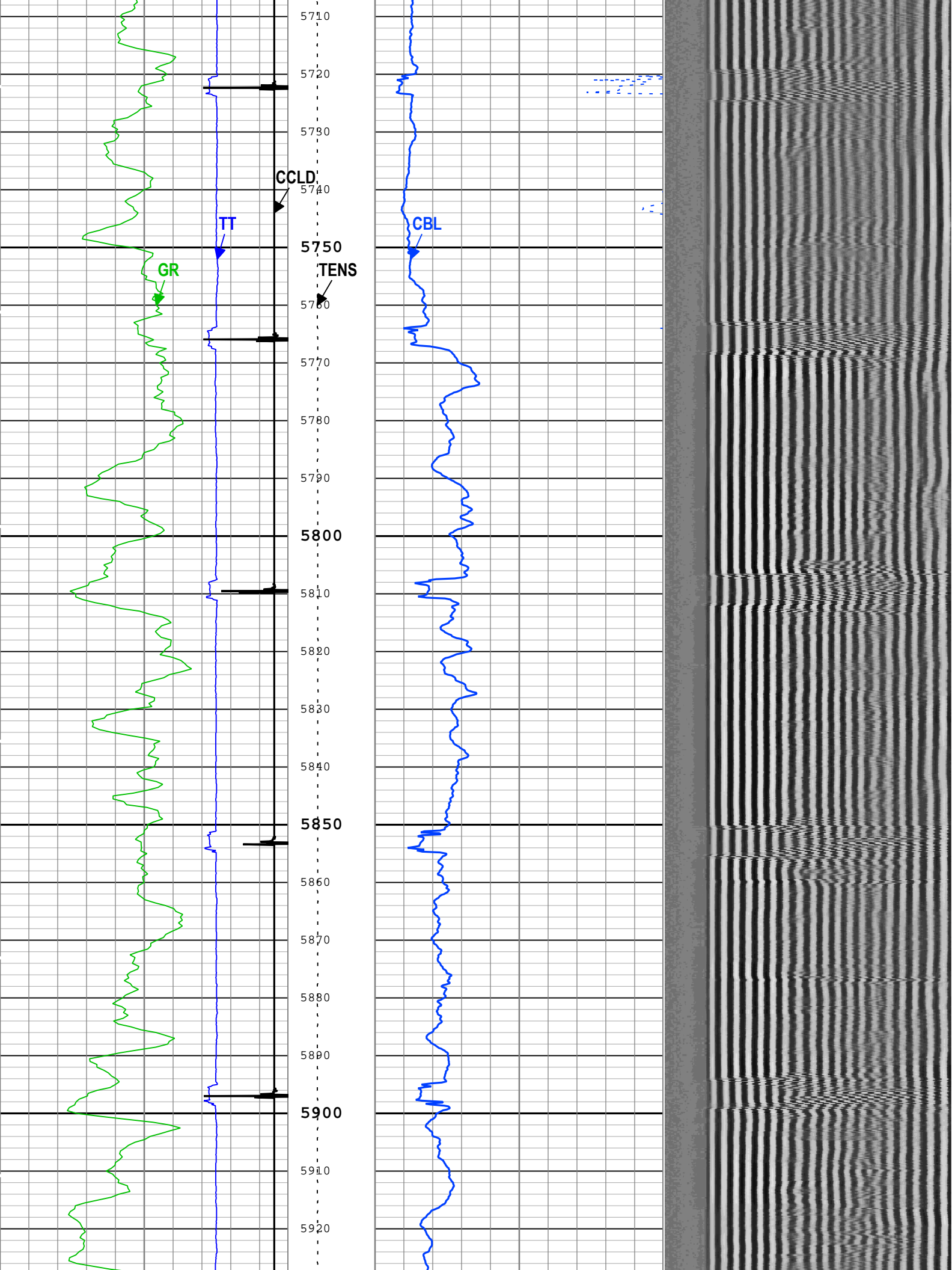


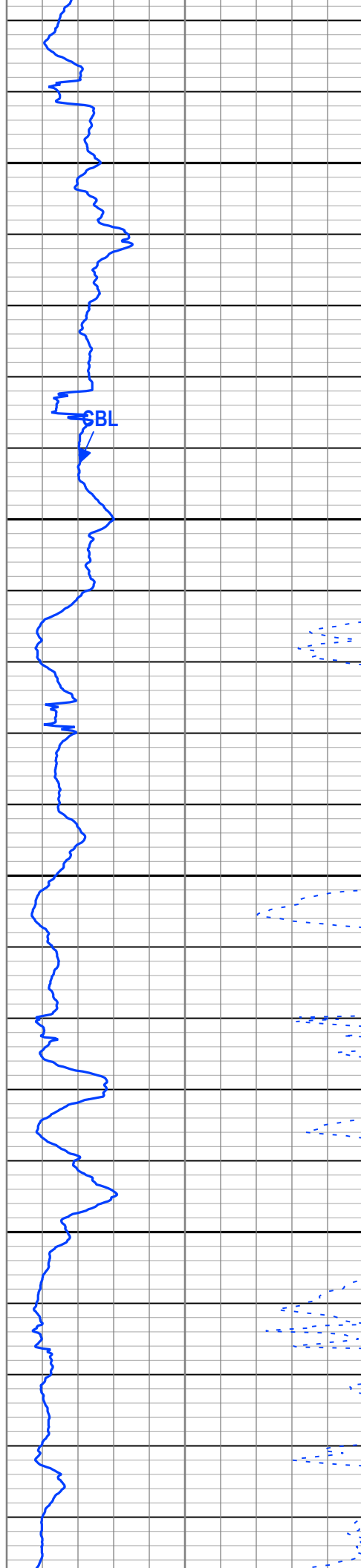
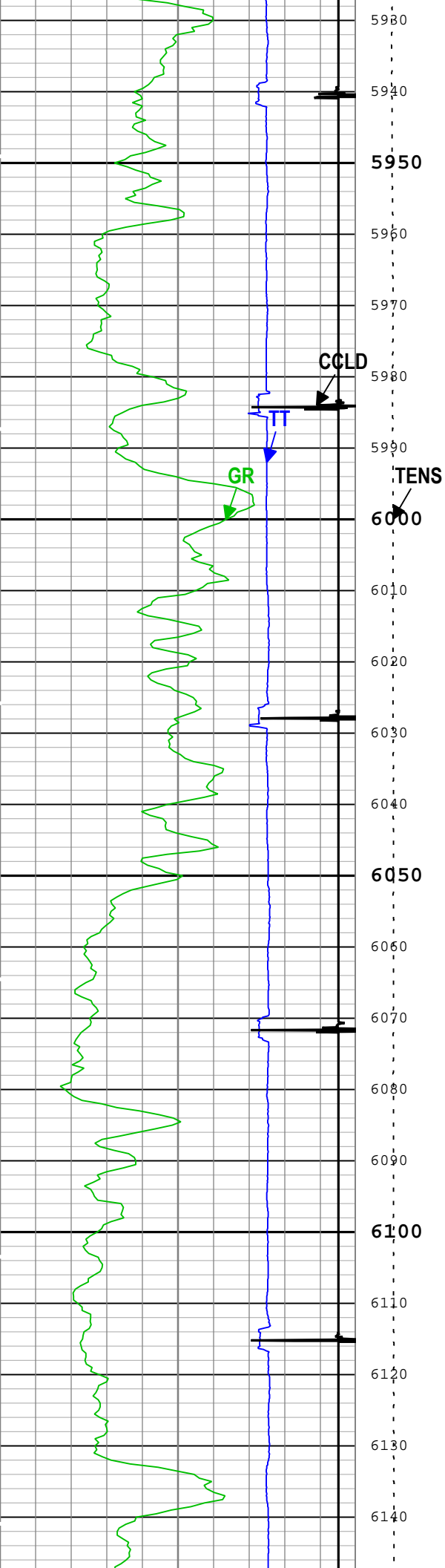


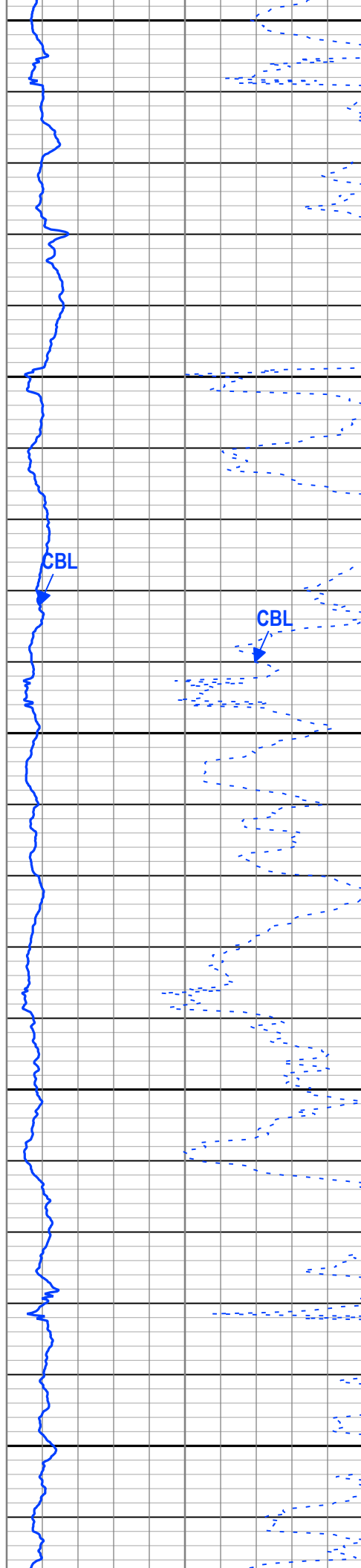
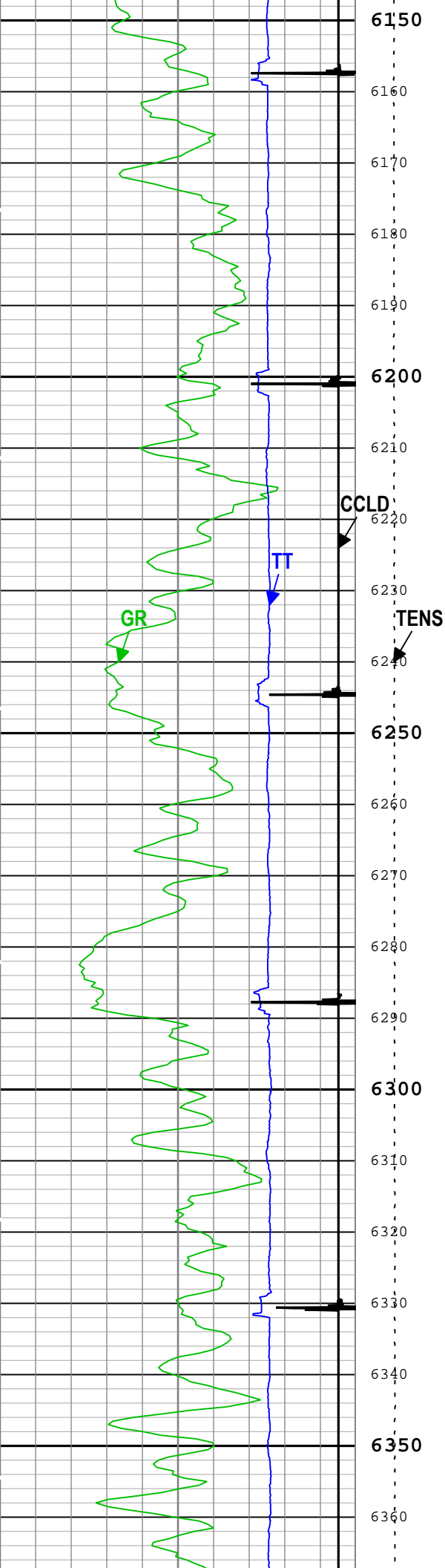


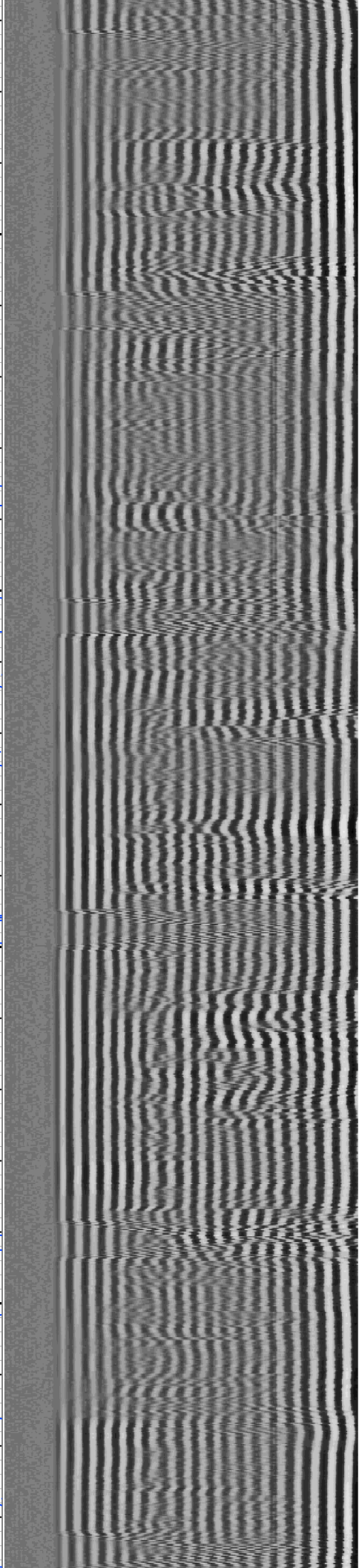
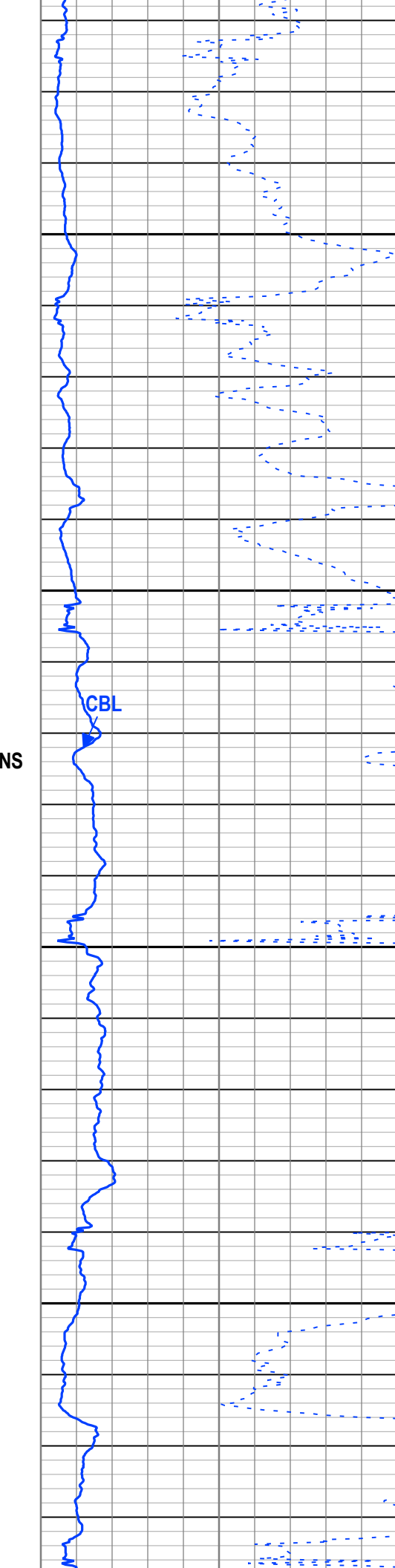
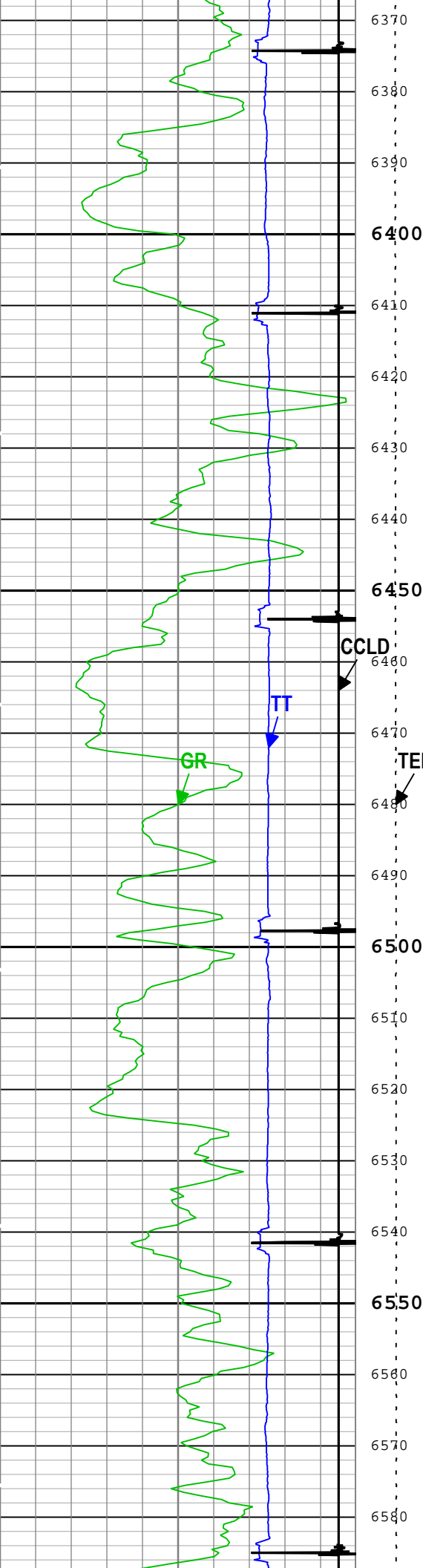


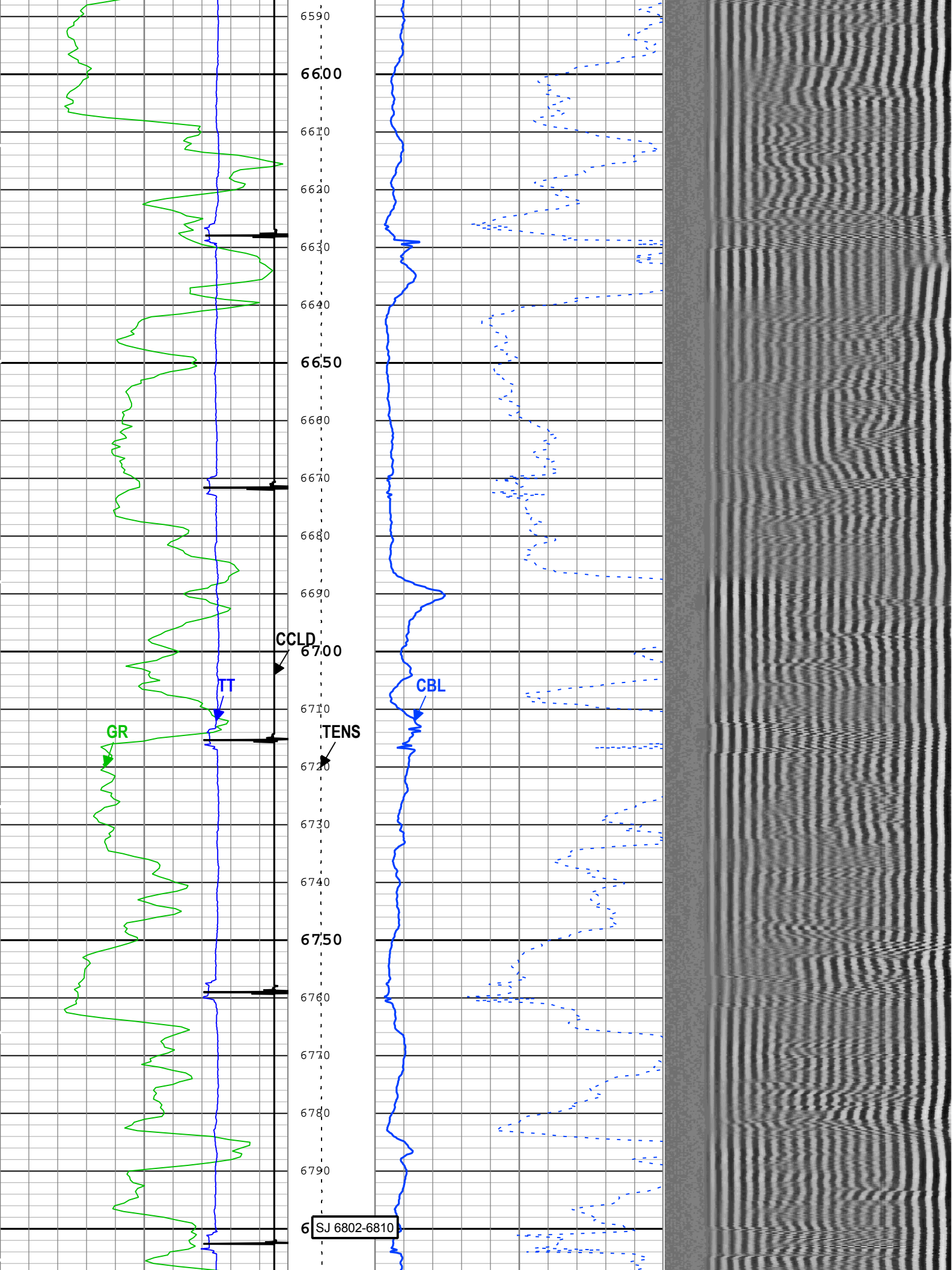


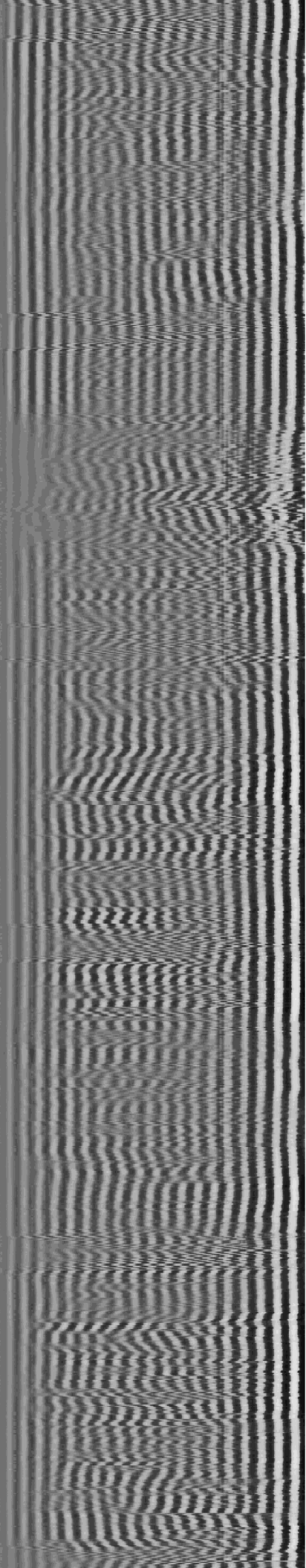
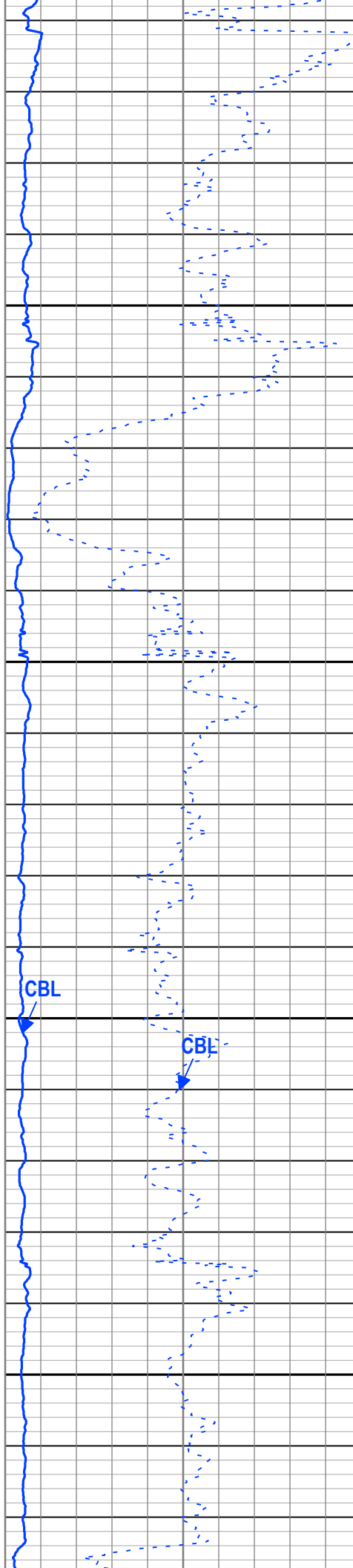
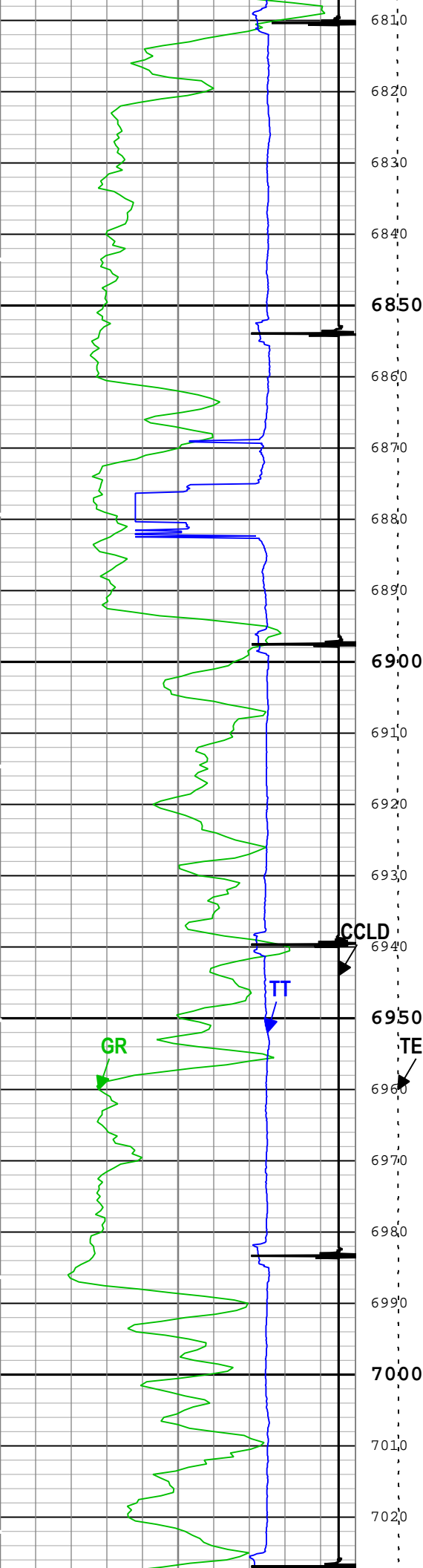


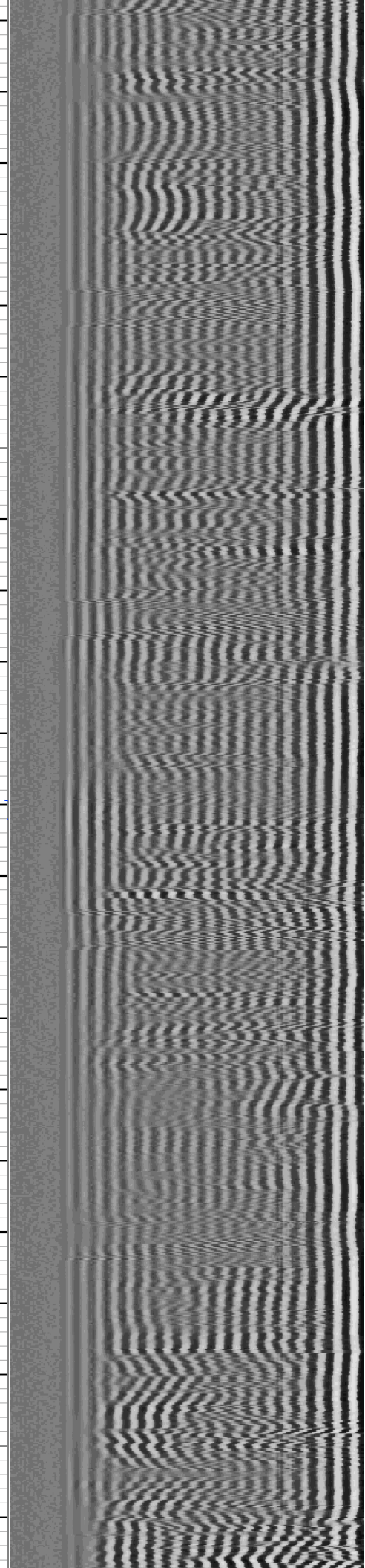
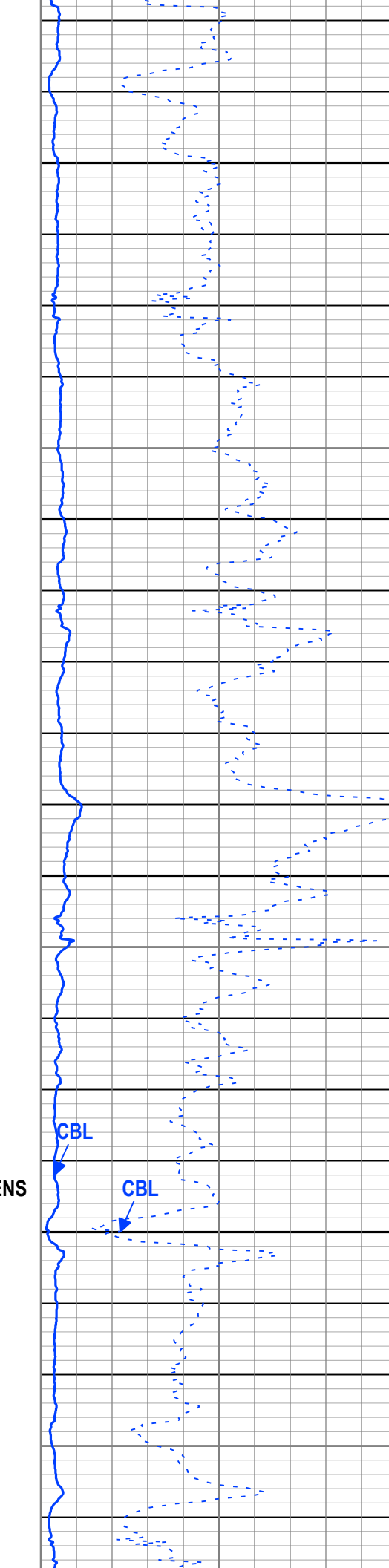
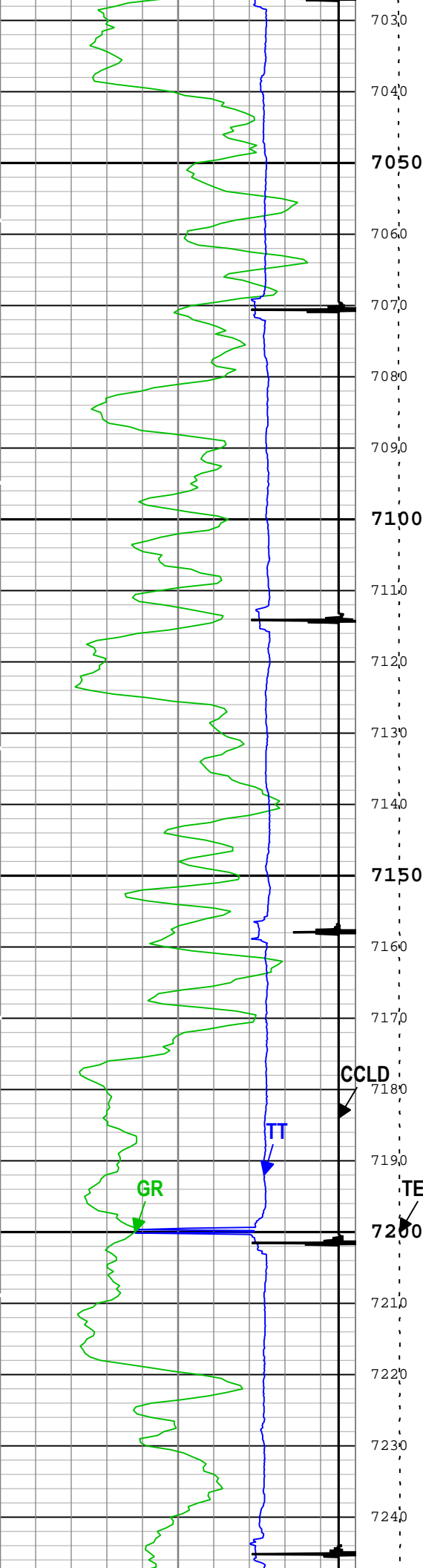


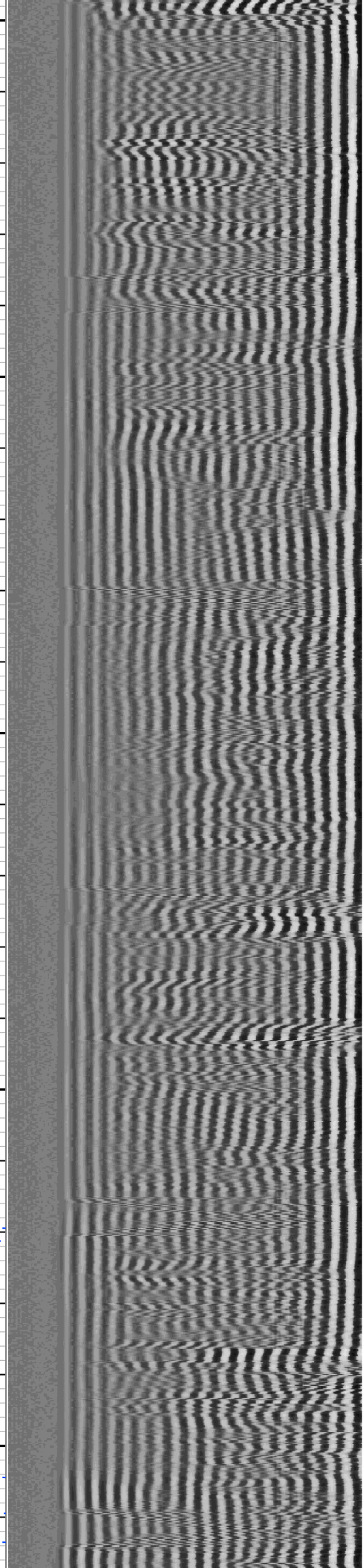
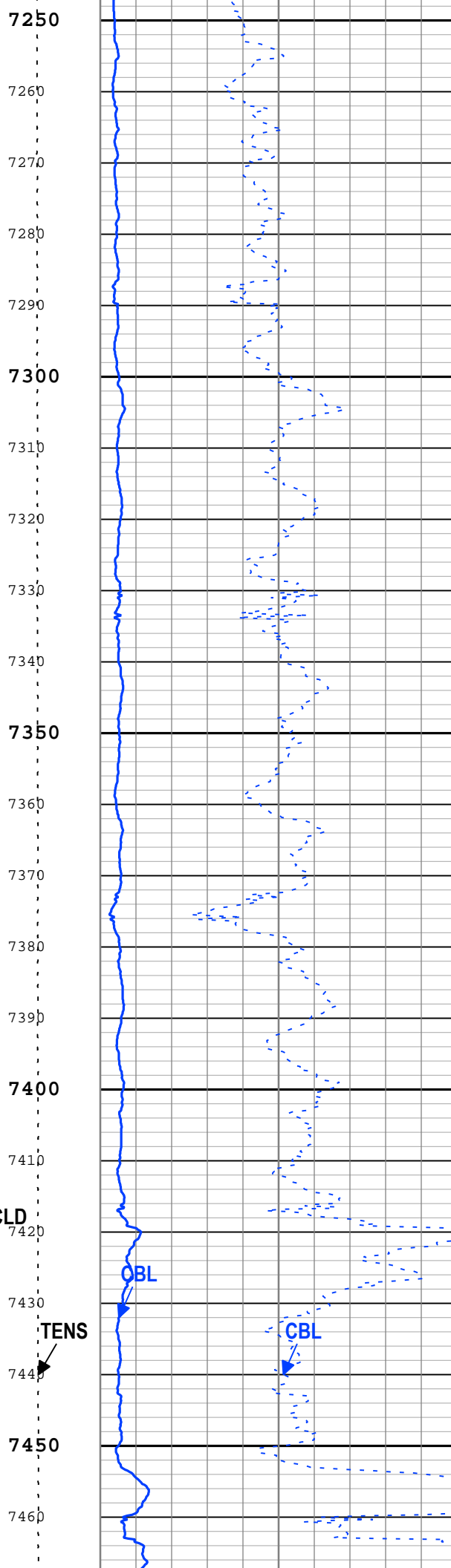
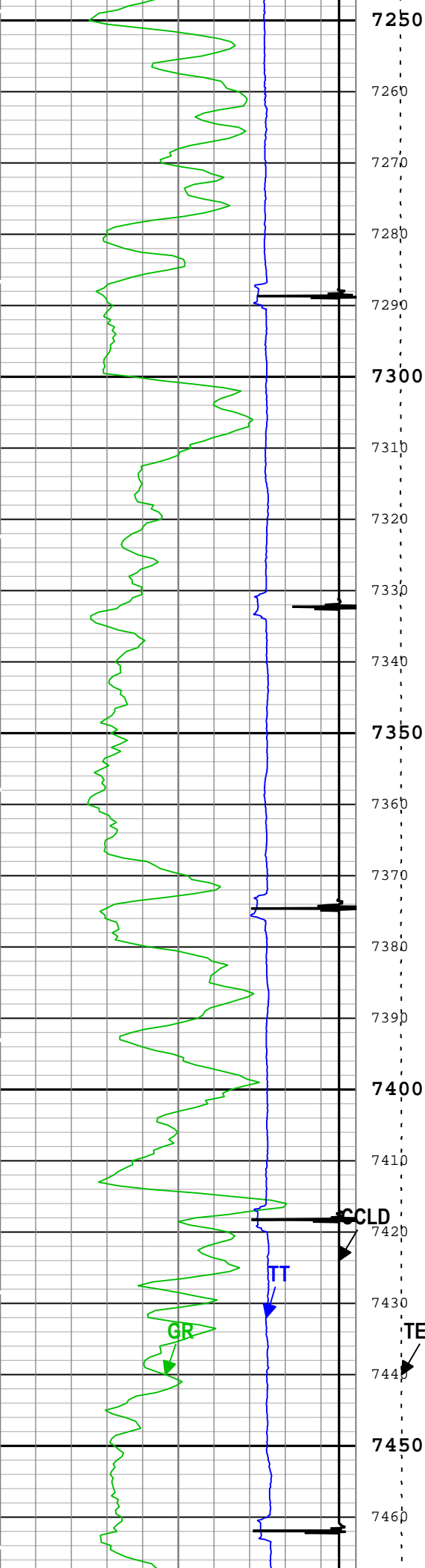


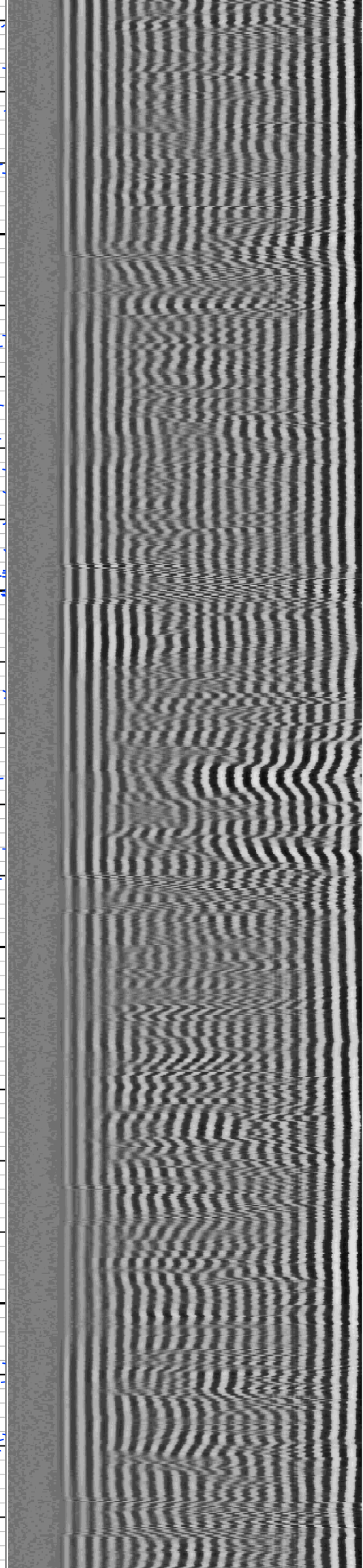
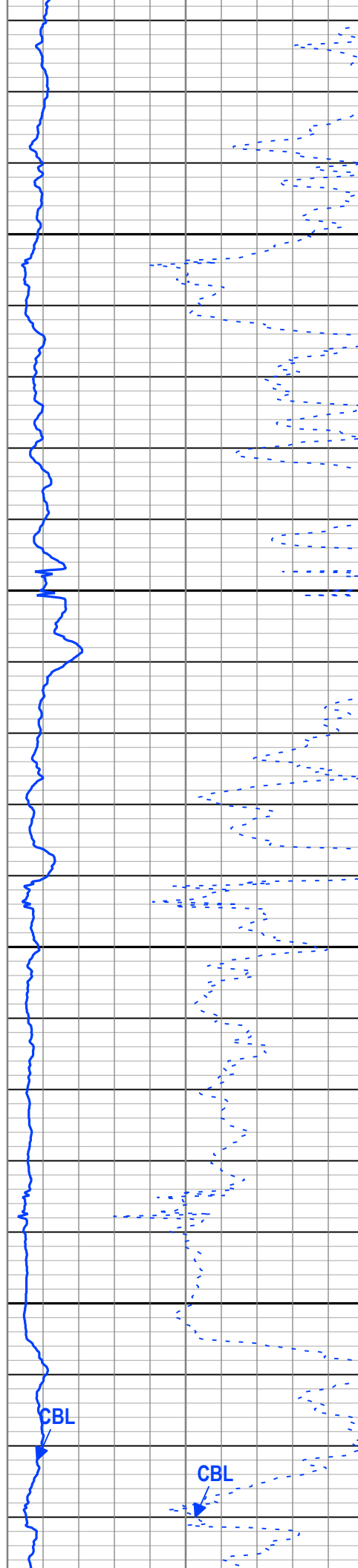
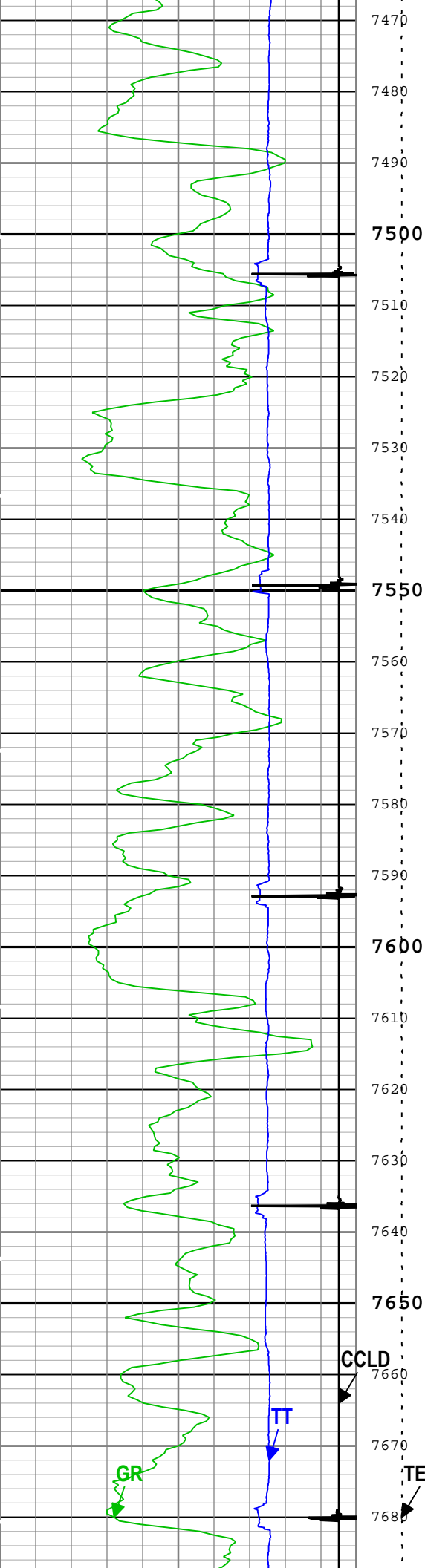


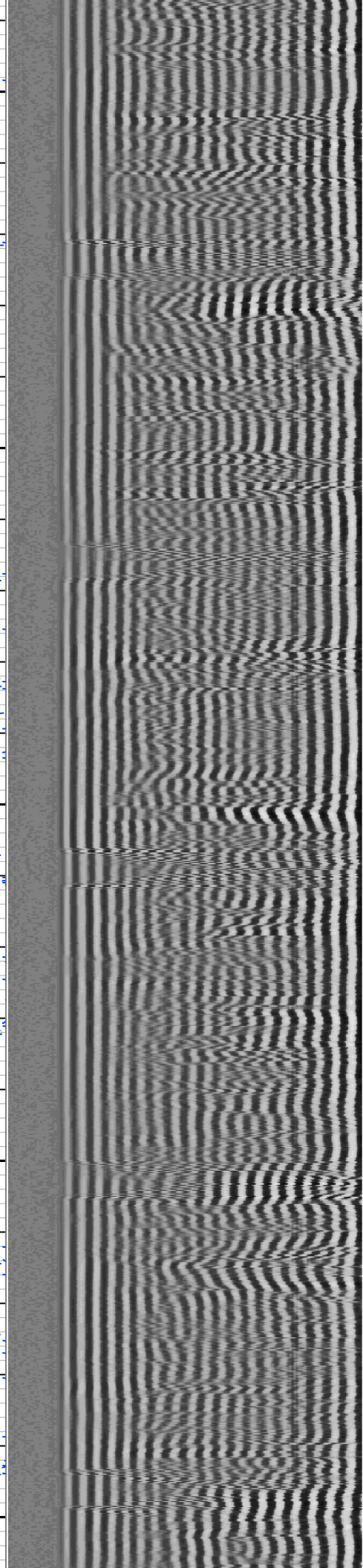
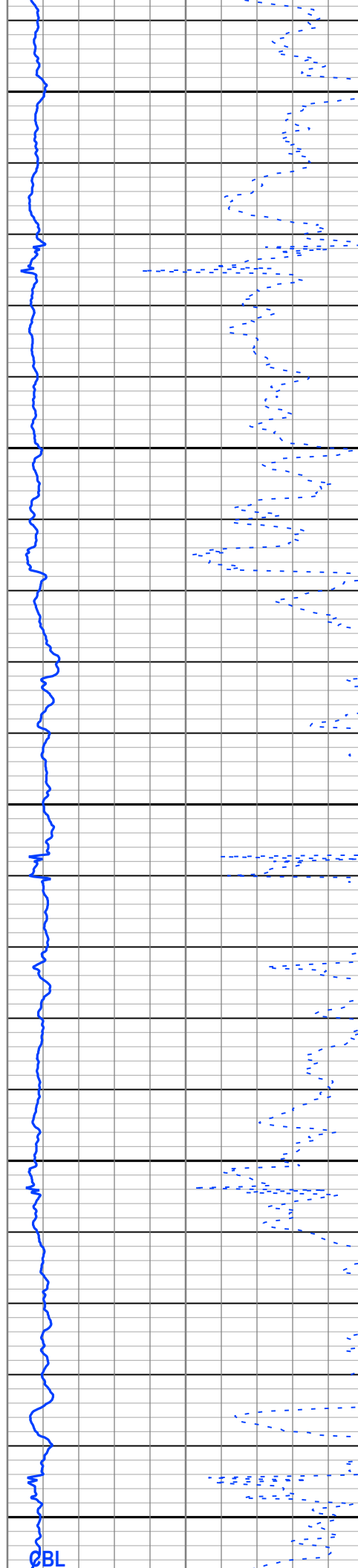
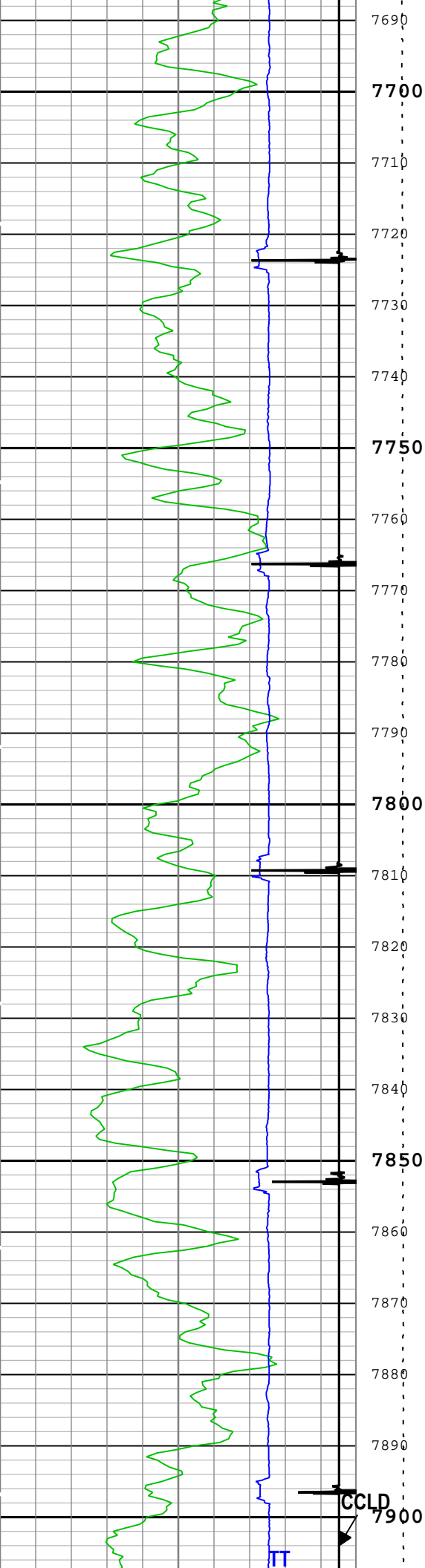


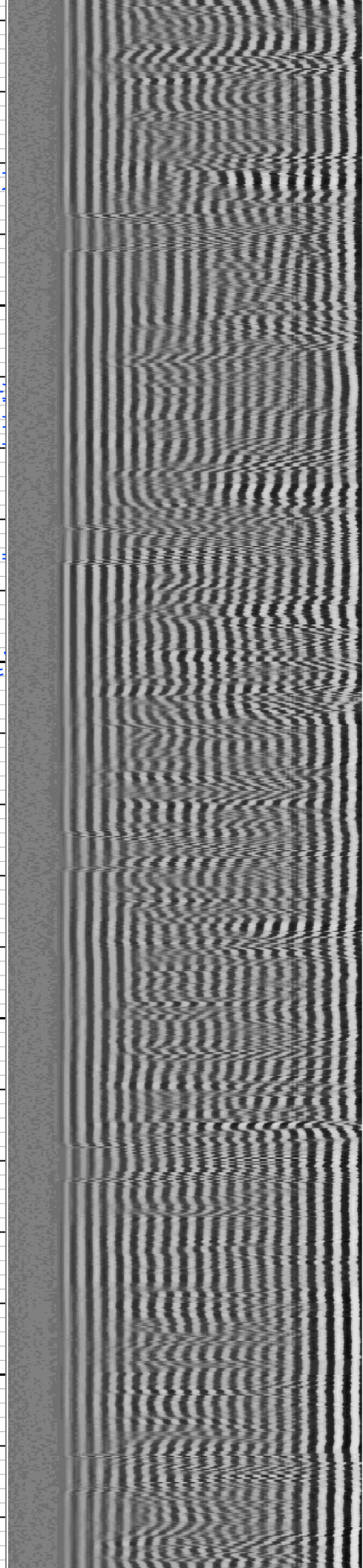
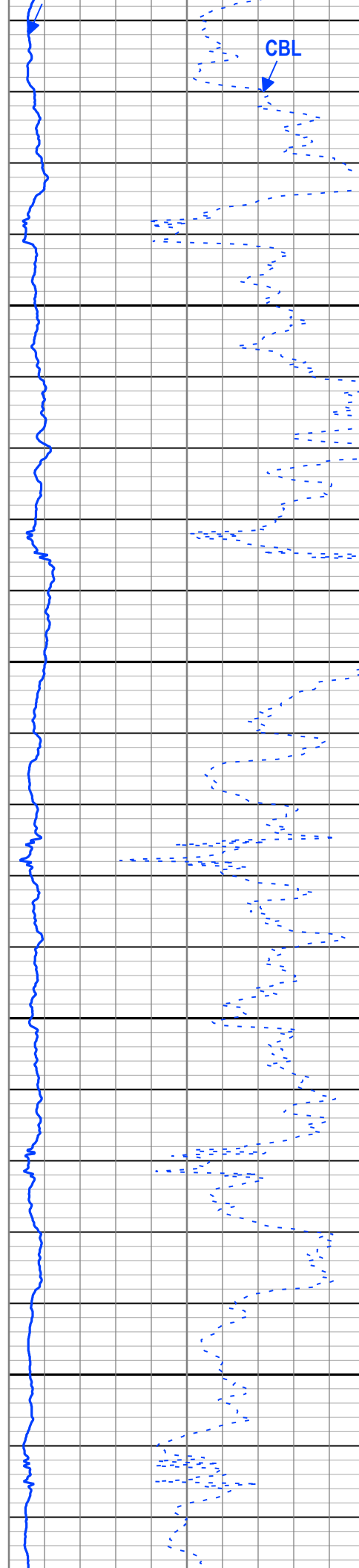
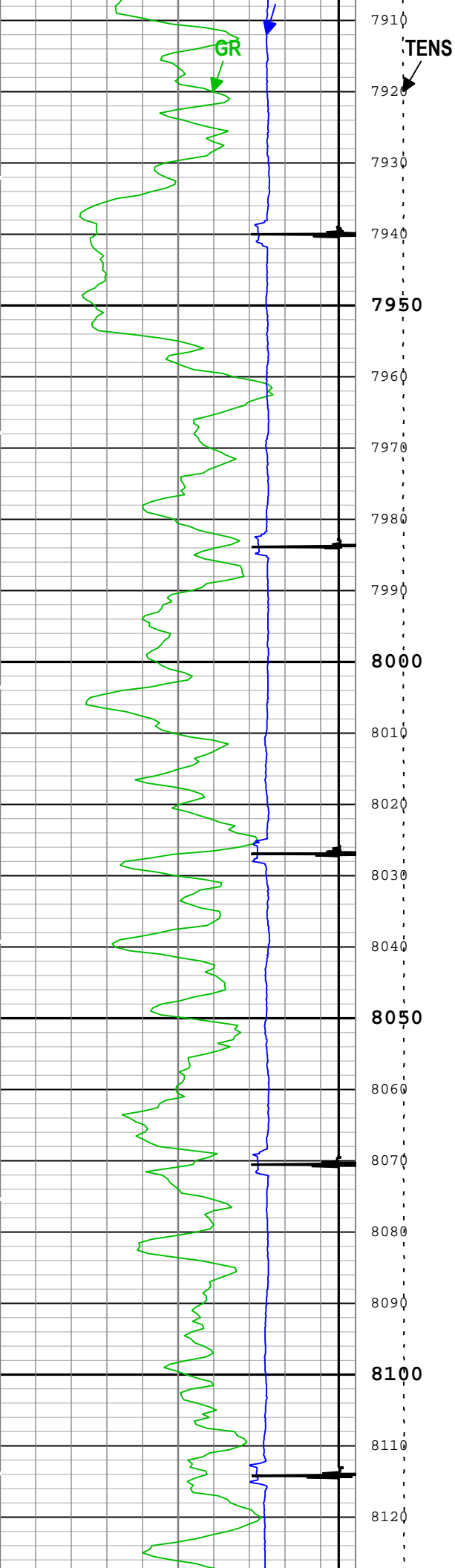


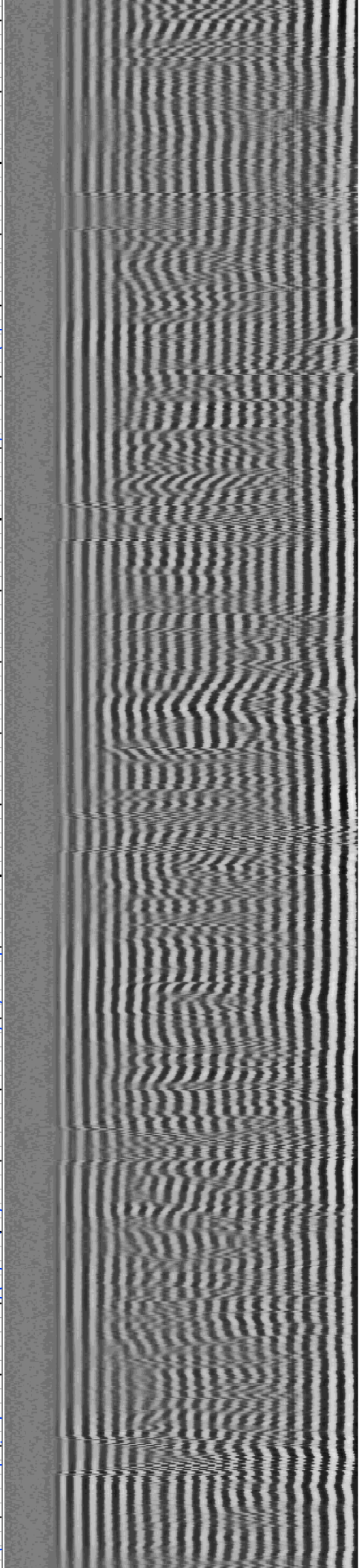
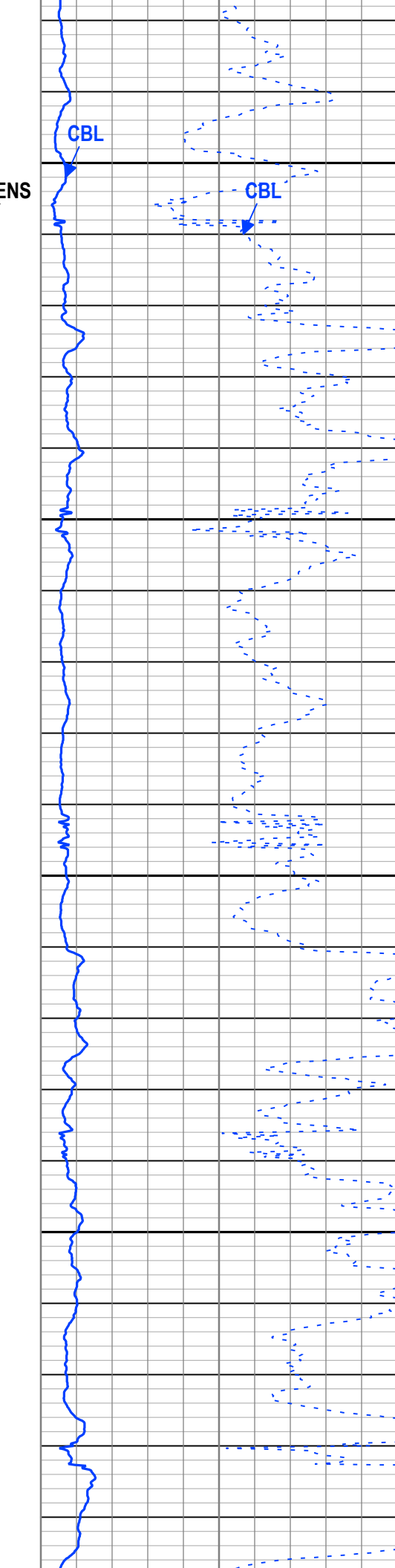
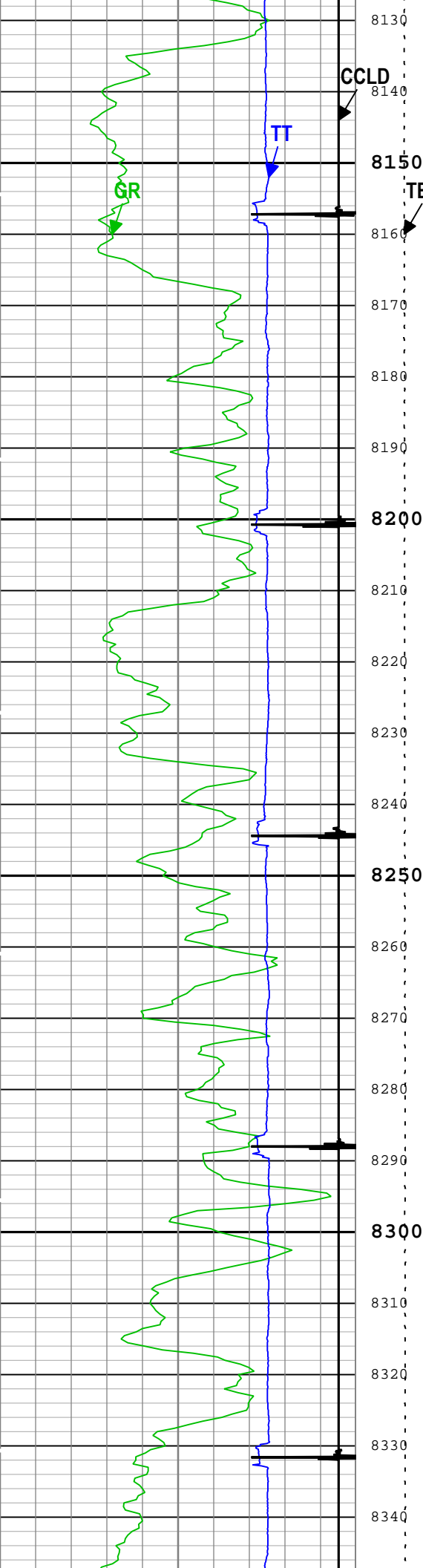


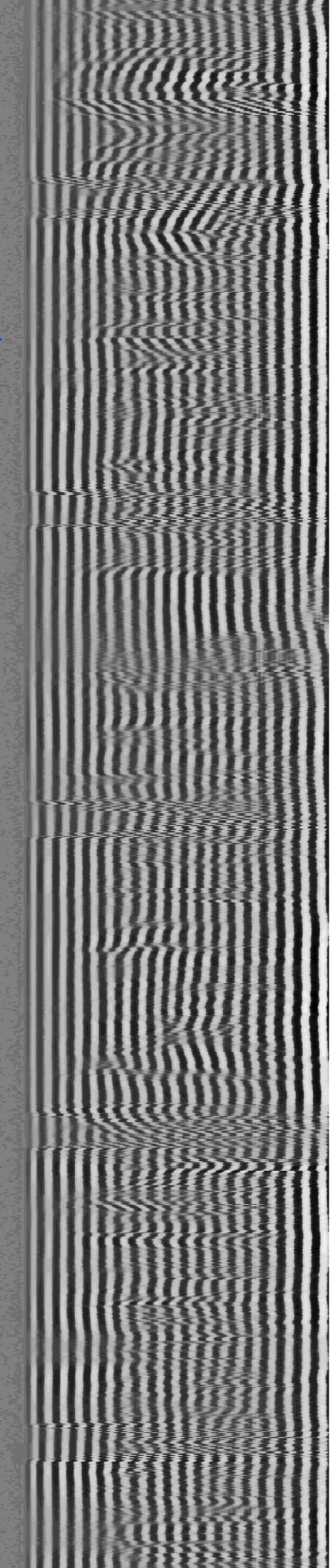
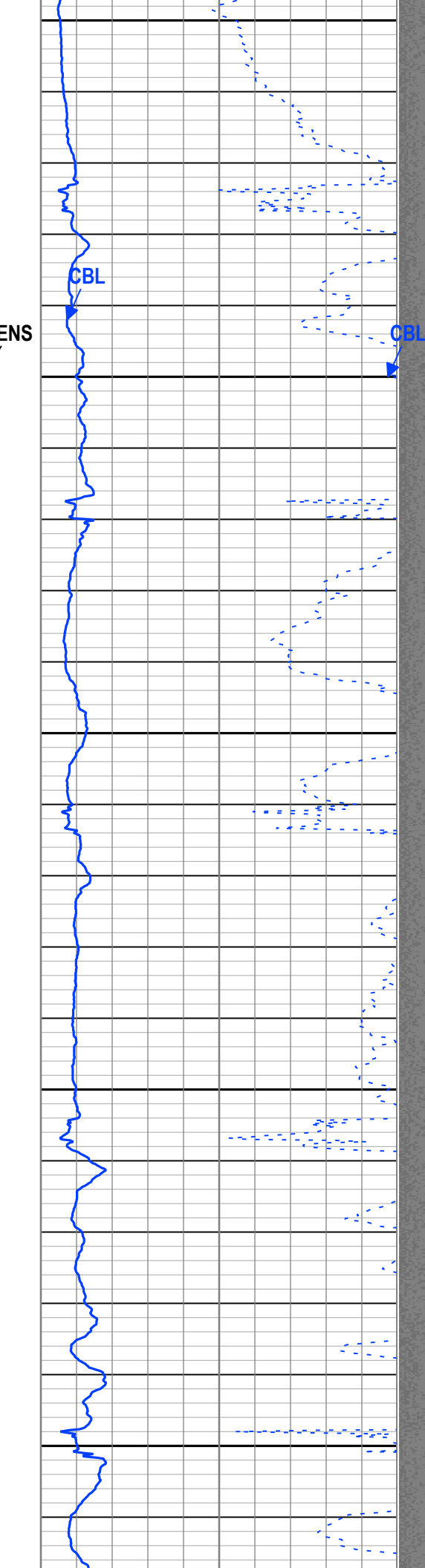
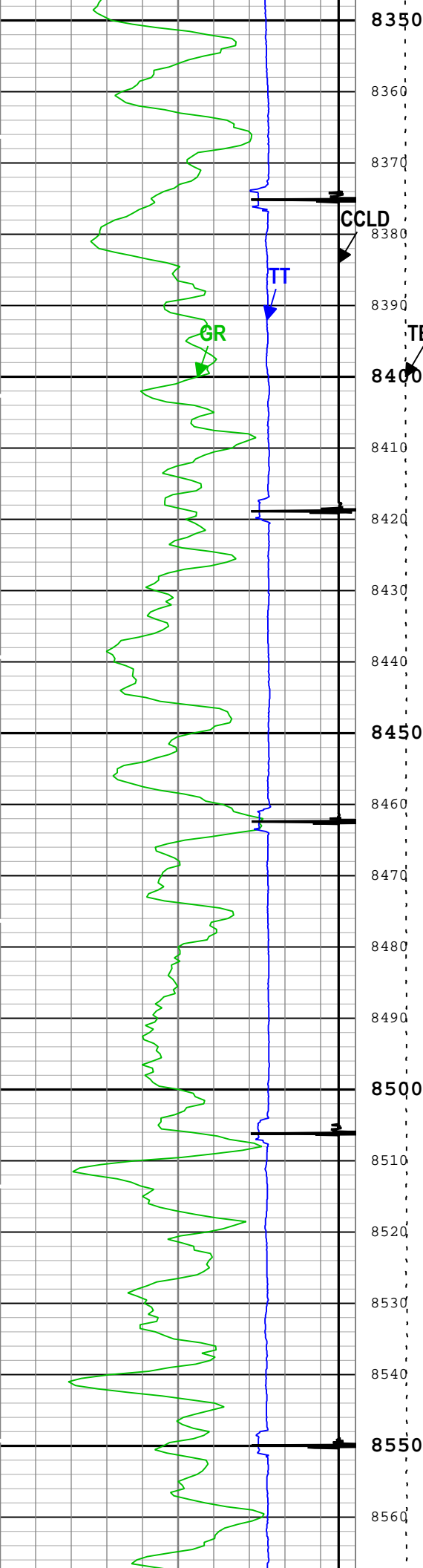


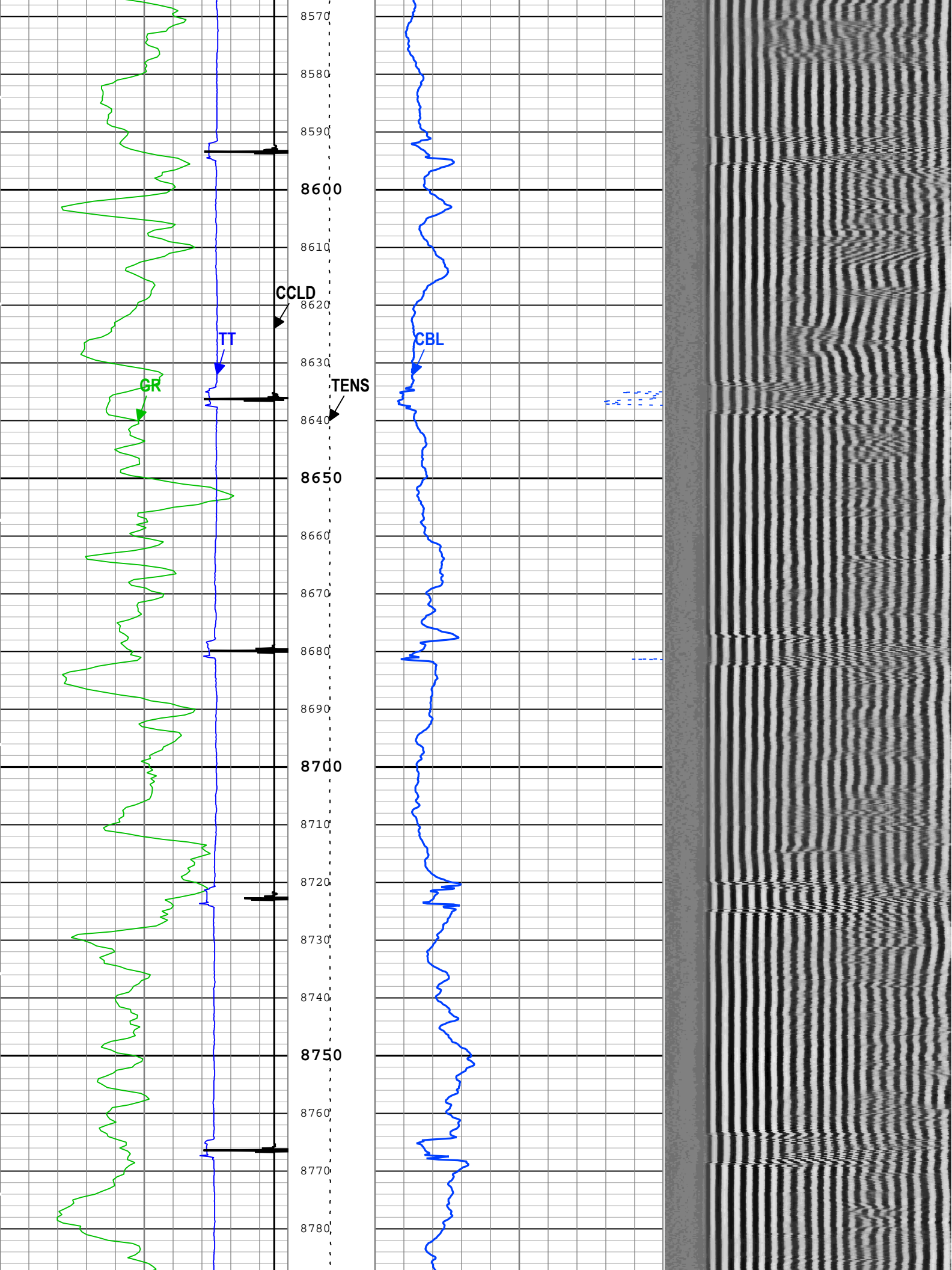


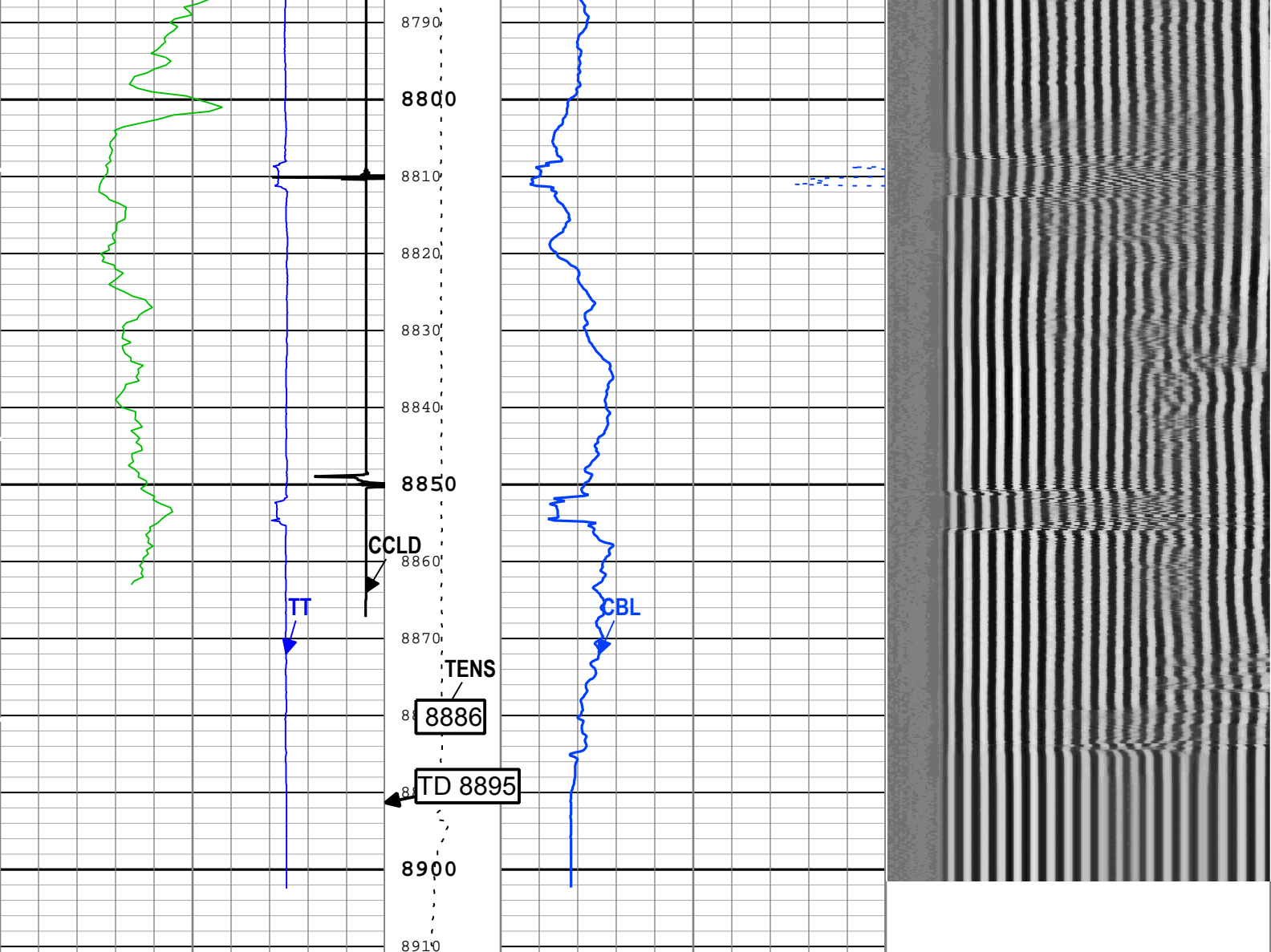












Gamma Ray (GR) PSTP-B			CBL Amplitude (CBL) SCMT-CB			Min	Amplitude	Max
0	gAPI	150	0	mV	10			
Transit Time for CBL (TT) SCMT-CB			CBL Amplitude (CBL) SCMT-CB				VDL VariableDensity (VDL) SCMT-CB	
400	us	200	0	mV	100	200	us	1200
CCL Discriminated Amplitude (CCLD) PSTP-B								
-19	V	1						

■ 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: 17-Dec-2017 11:00:52

Channel Processing Parameters

RST/SCMT: 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	46	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	8.4	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	8454	ft
EPD	Elevation of Permanent Datum (PDAT) above Mean Sea Level	WLSESSION	0	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	MSL	
RUN_SNUM	Run Sequence Number	WSDRUN	1	
SHT	Surface Hole Temperature	Borehole	68	degF

Tool Control Parameters

RST/SCMT: 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-B	24 dB	

RST/SCMT

Repeat Pass

Software Version

Acquisition System	Version
Maxwell 2017 SP3	7.3.92069.3100

Pass Summary

Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	DSC Mode	Depth Shift	Include Parallel Data
RST/SCMT	Log[5]:Up	Up	8620.55 ft	8910.89 ft	17-Dec-2017 7:16:00 AM	17-Dec-2017 7:24:55 AM	ON	0.00 ft	No

All depths are referenced to toolstring zero

Log

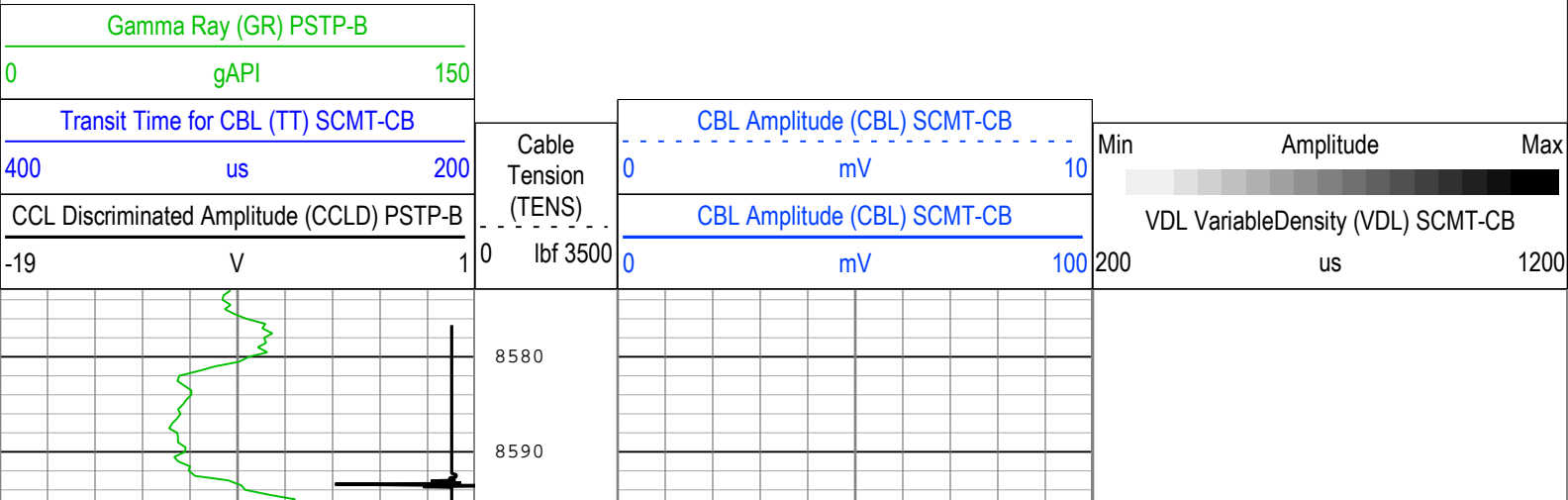
Company:Caerus Operating LLC Well:Puckett 24D-23 697

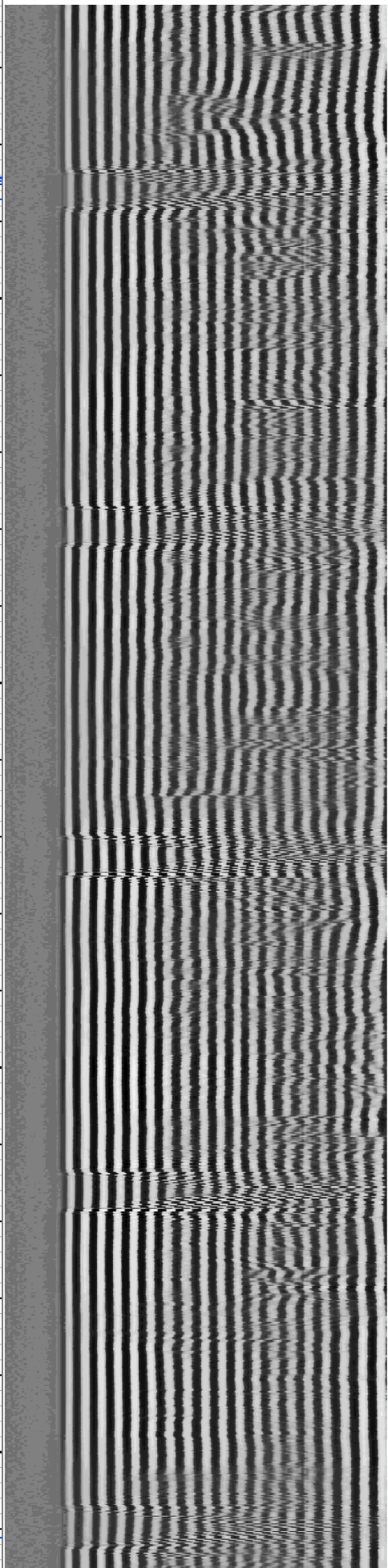
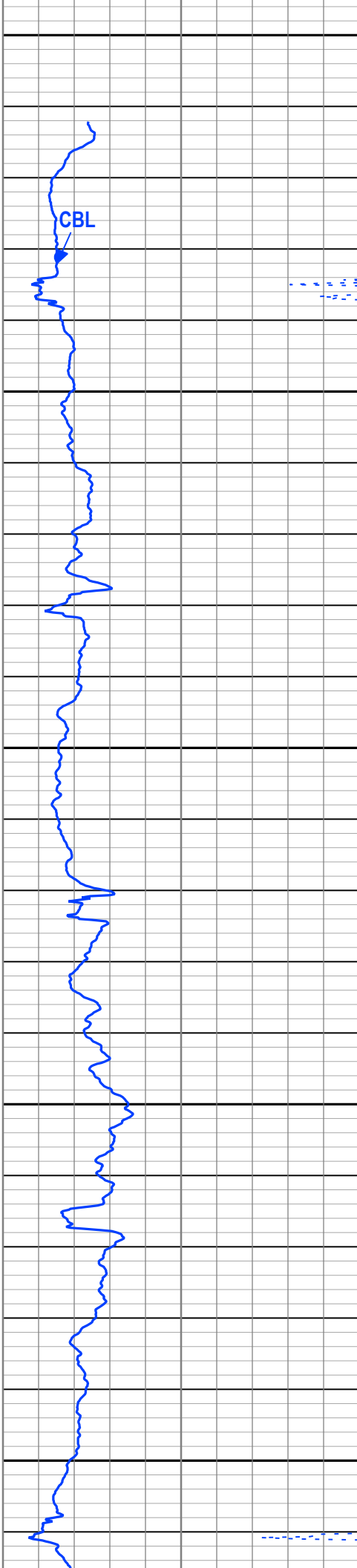
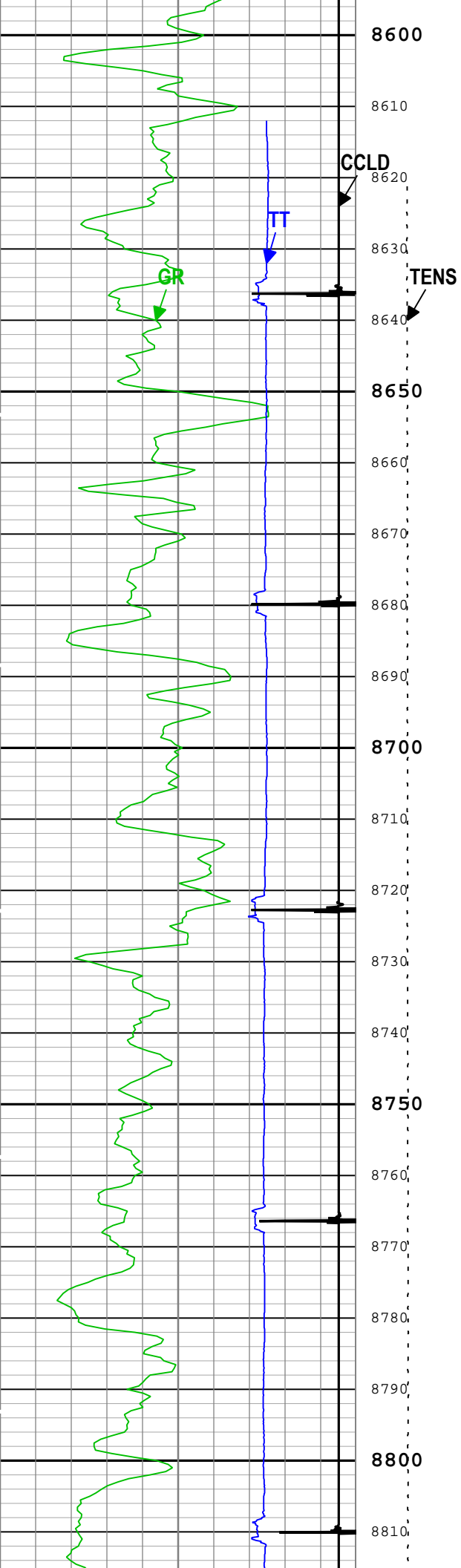
RST/SCMT: Log[5]:Up:S003

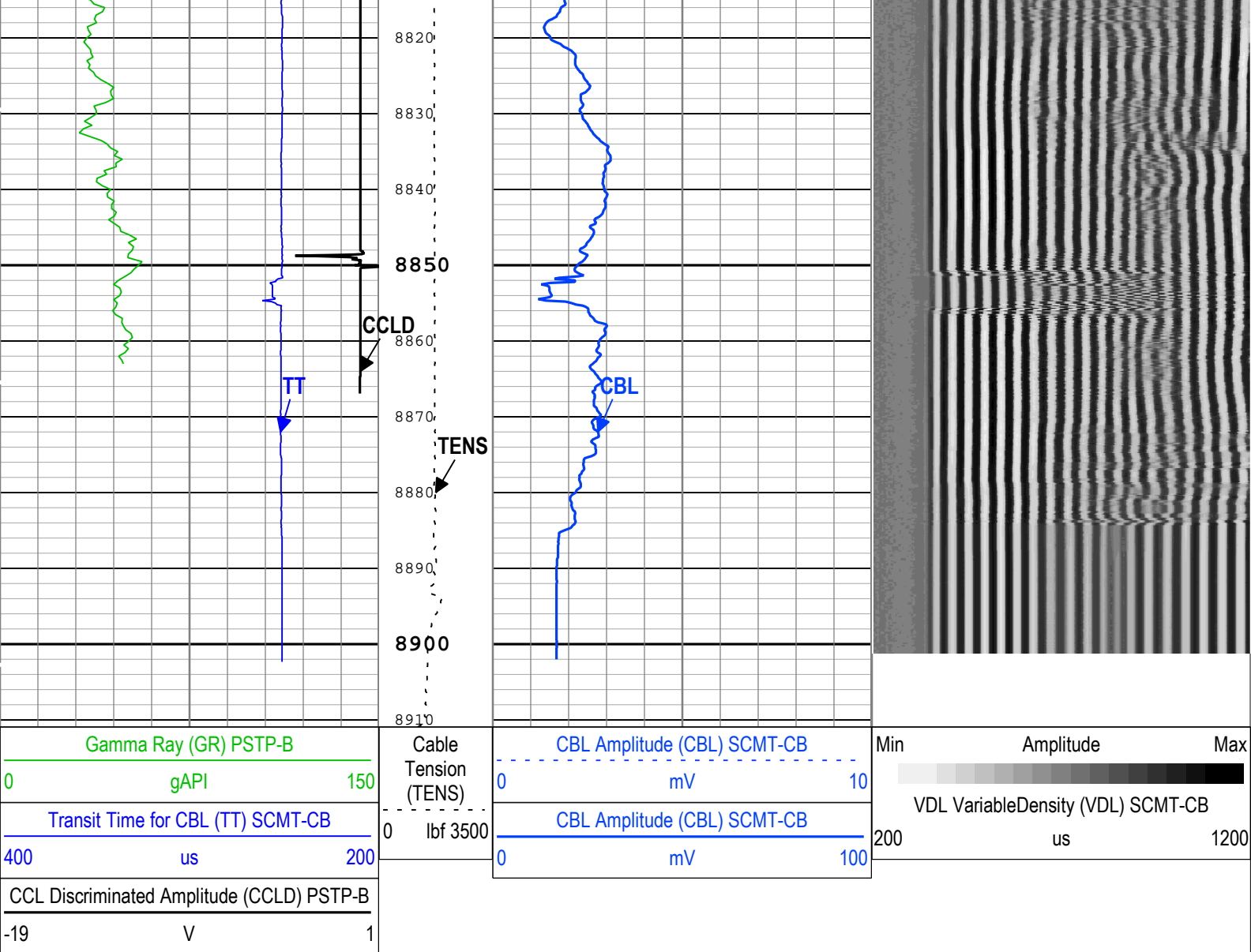
Description: Sonic CBL with VDL Format: Log (Sonic CBL with VDL) Index Scale: 5 in per 100 ft Index Unit: ft Index Type: Measured Depth Creation Date: 17-Dec-2017 11:01:02

■ BIEP - Bond Index Event Pips SCMT-CB

TIME_1900 - Time Marked every 60.00 (s)







TIME_1900 - Time Marked every 60.00 (s)

■ BIEP - Bond Index Event Pips SCMT-CB

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: 17-Dec-2017 11:01:03

Channel Processing Parameters				
RST/SCMT: 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	46	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	8.4	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	8454	ft
EPD	Elevation of Permanent Datum (PDAT) above Mean Sea Level	WLSESSION	0	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	MSL	
RUN_SNUM	Run Sequence Number	WSDRUN	1	
SHT	Surface Hole Temperature	Borehole	68	degF

Tool Control Parameters

RST/SCMT: 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-B	24 dB	

RST/SCMT

Free Pipe Pass

Software Version

Acquisition System	Version
Maxwell 2017 SP3	7.3.92069.3100

Pass Summary

Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	DSC Mode	Depth Shift	Include Parallel Data
RST/SCMT	Log[3]:Up	Up	1098.93 ft	1352.54 ft	17-Dec-2017 6:32:41 AM	17-Dec-2017 6:37:55 AM	ON	0.00 ft	No

All depths are referenced to toolstring zero

Log

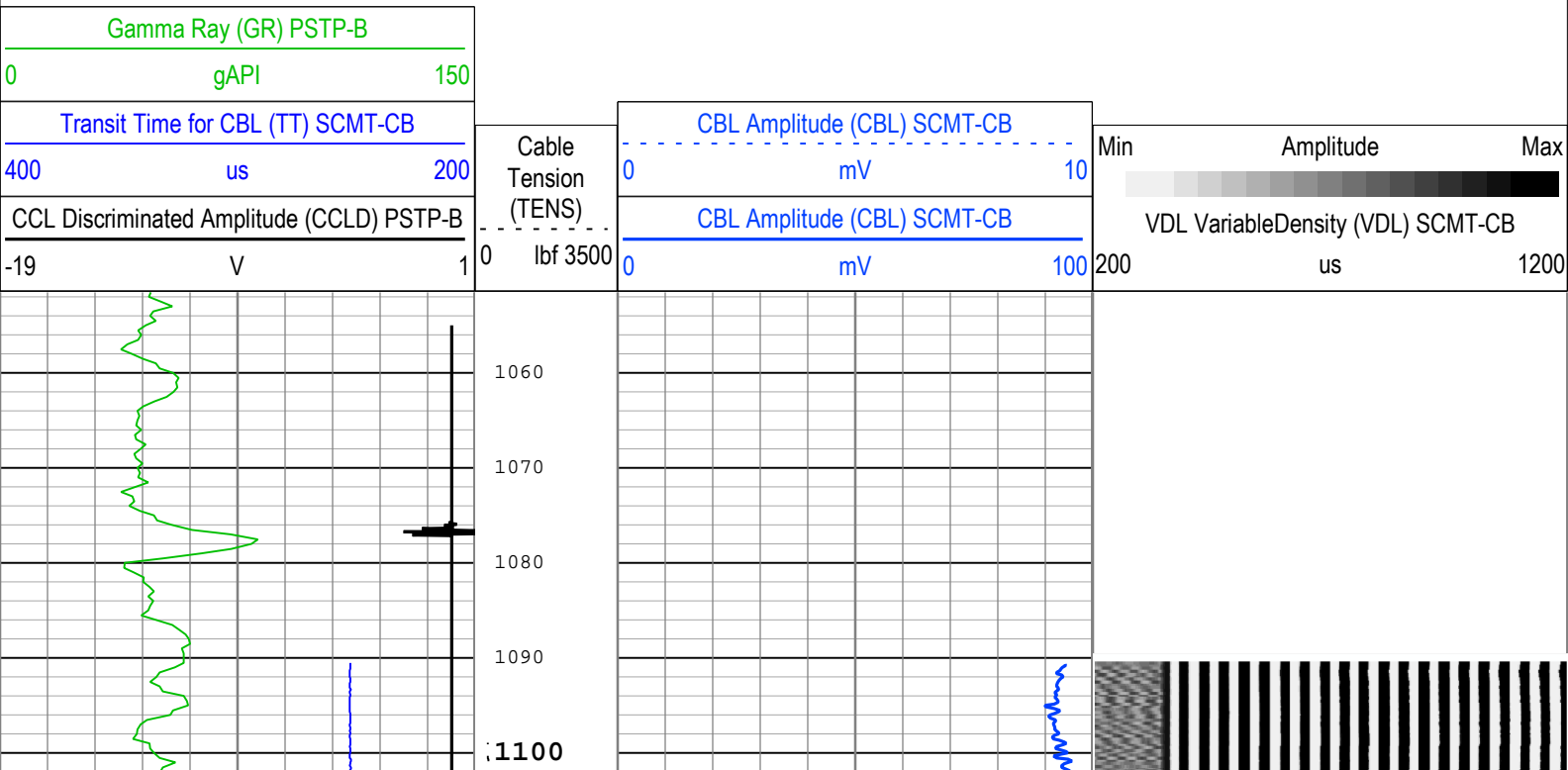
Company:Caerus Operating LLC Well:Puckett 24D-23 697

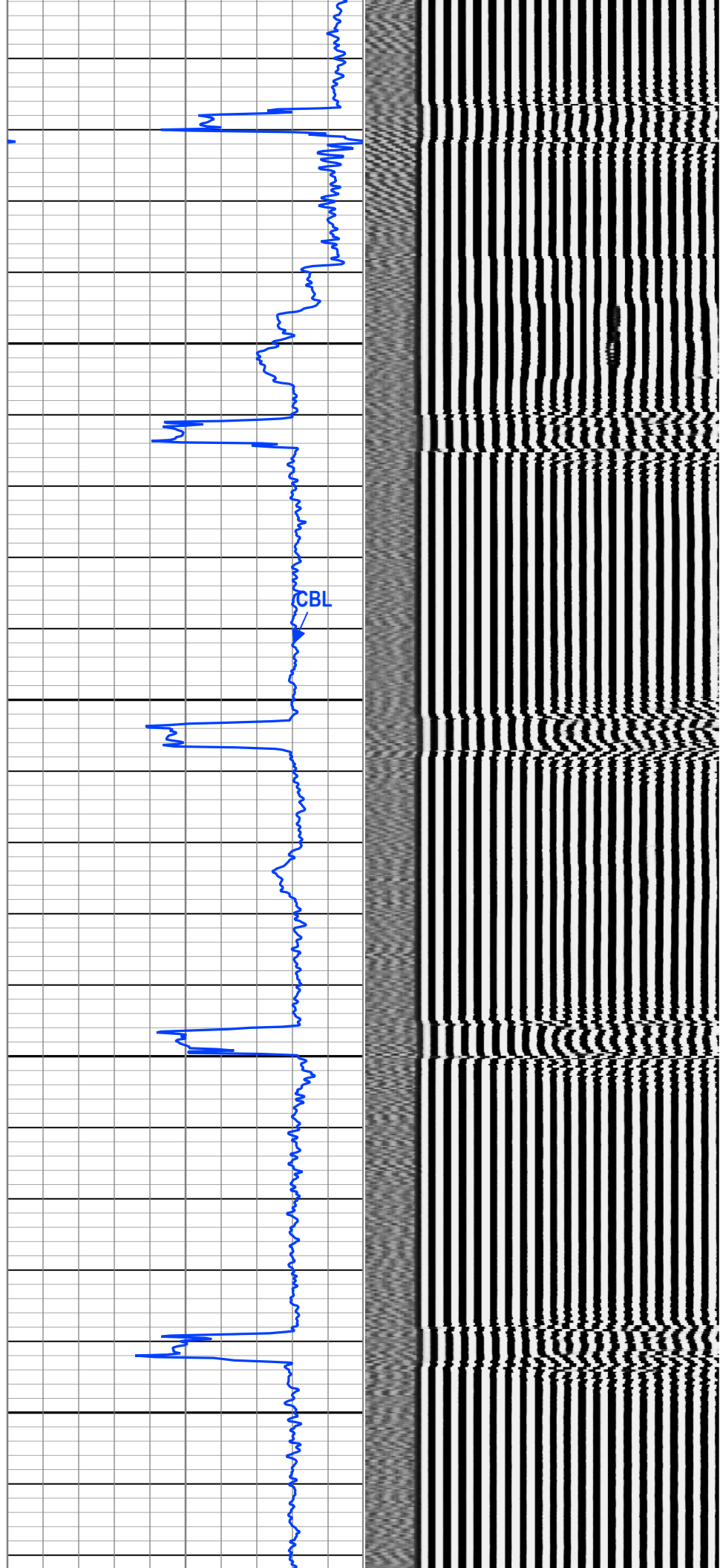
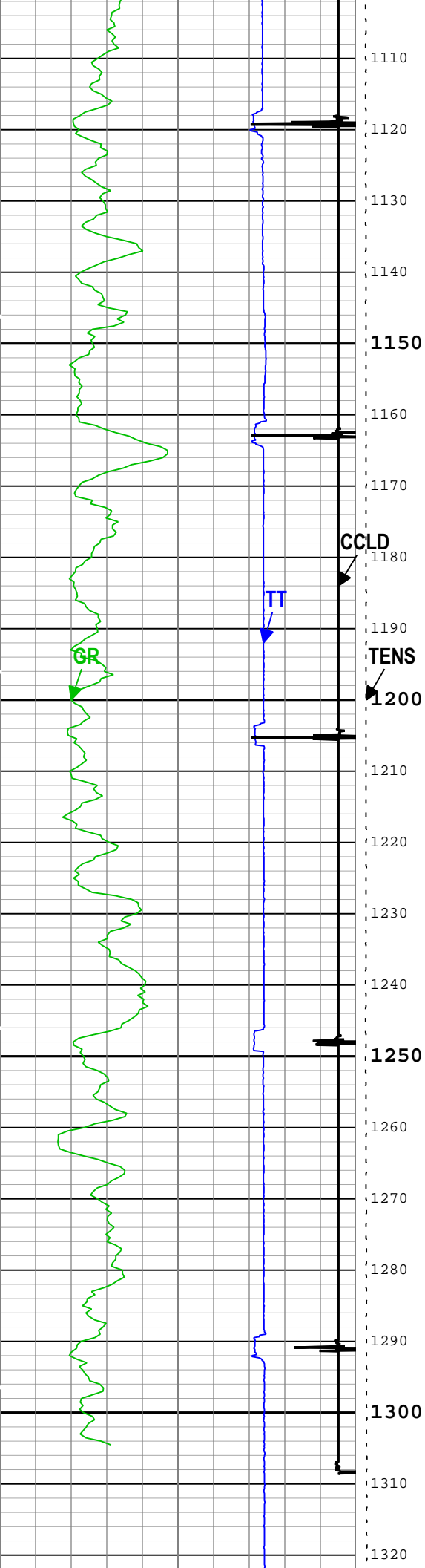
RST/SCMT: Log[3]:Up:S003

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: 17-Dec-2017 11:01:05

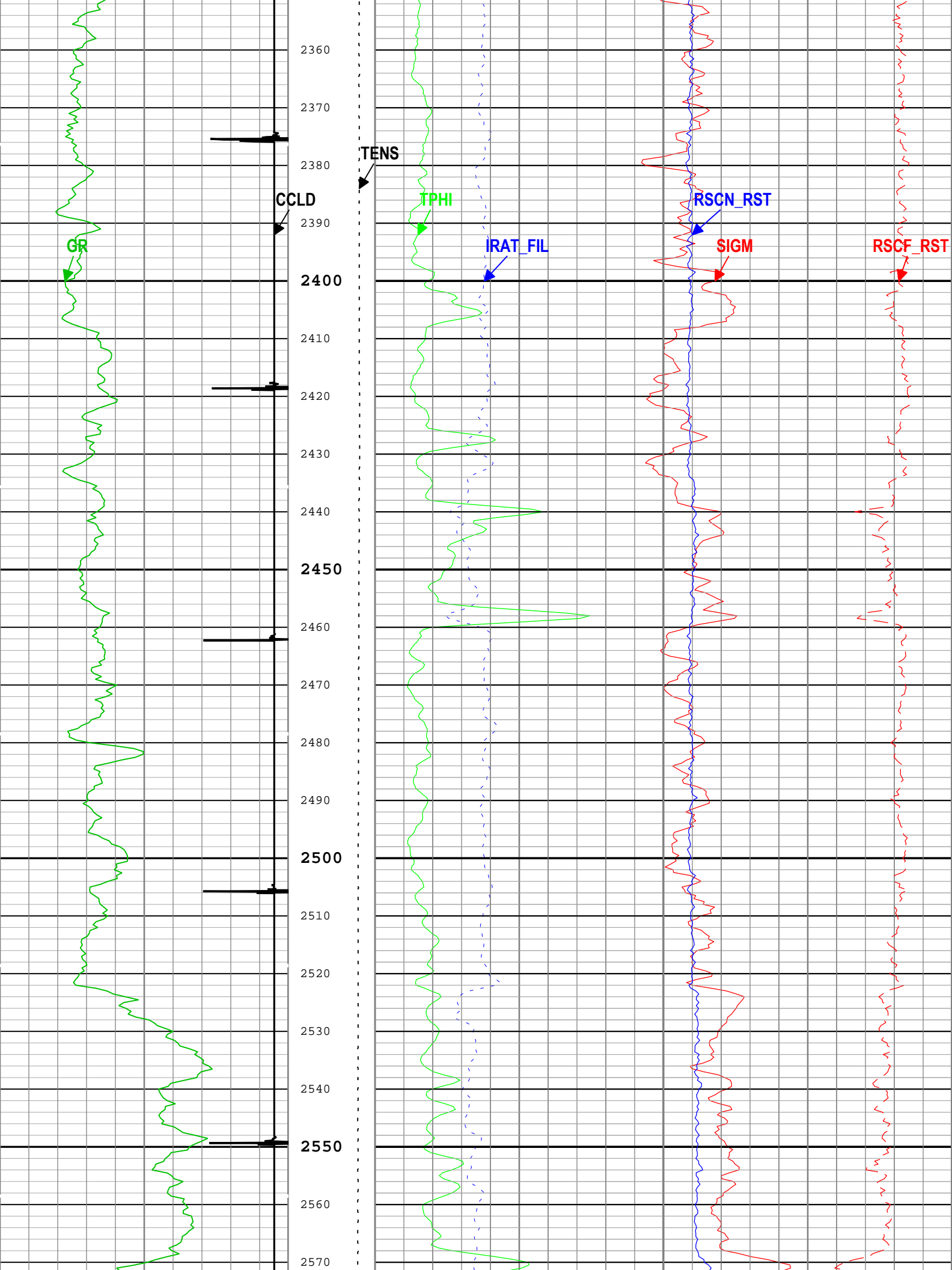
■ BIEP - Bond Index Event Pips SCMT-CB

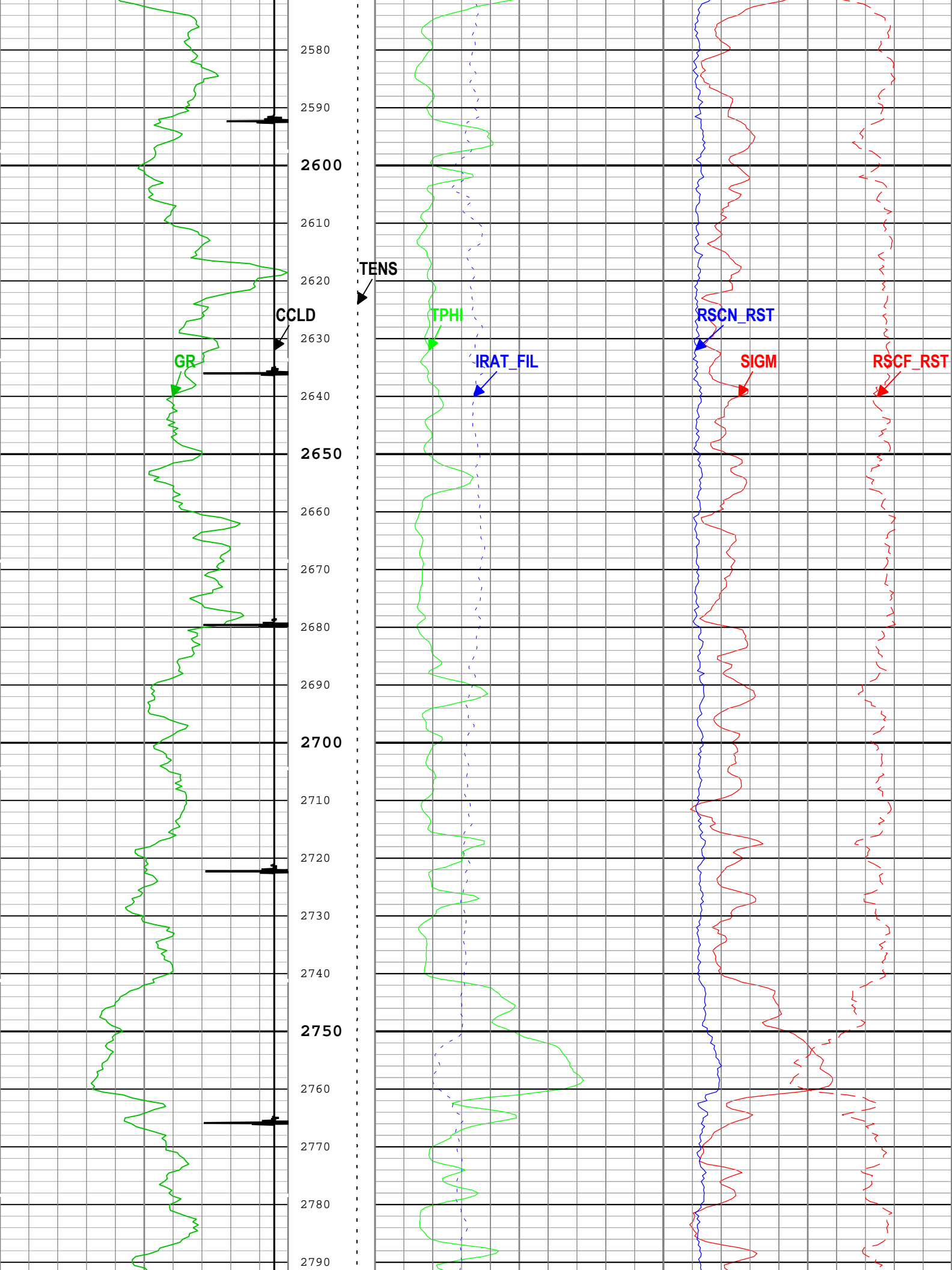
TIME_1900 - Time Marked every 60.00 (s)

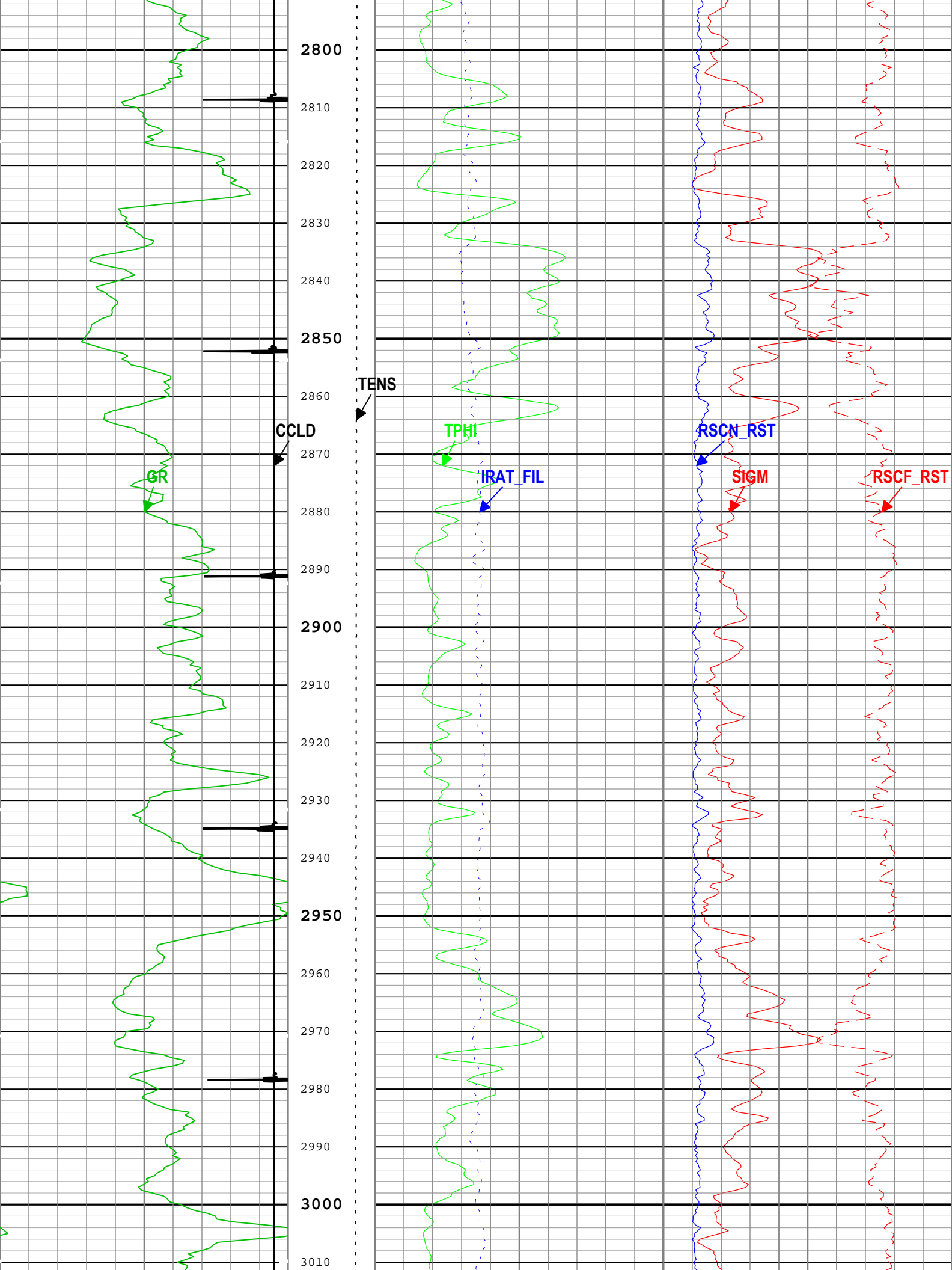


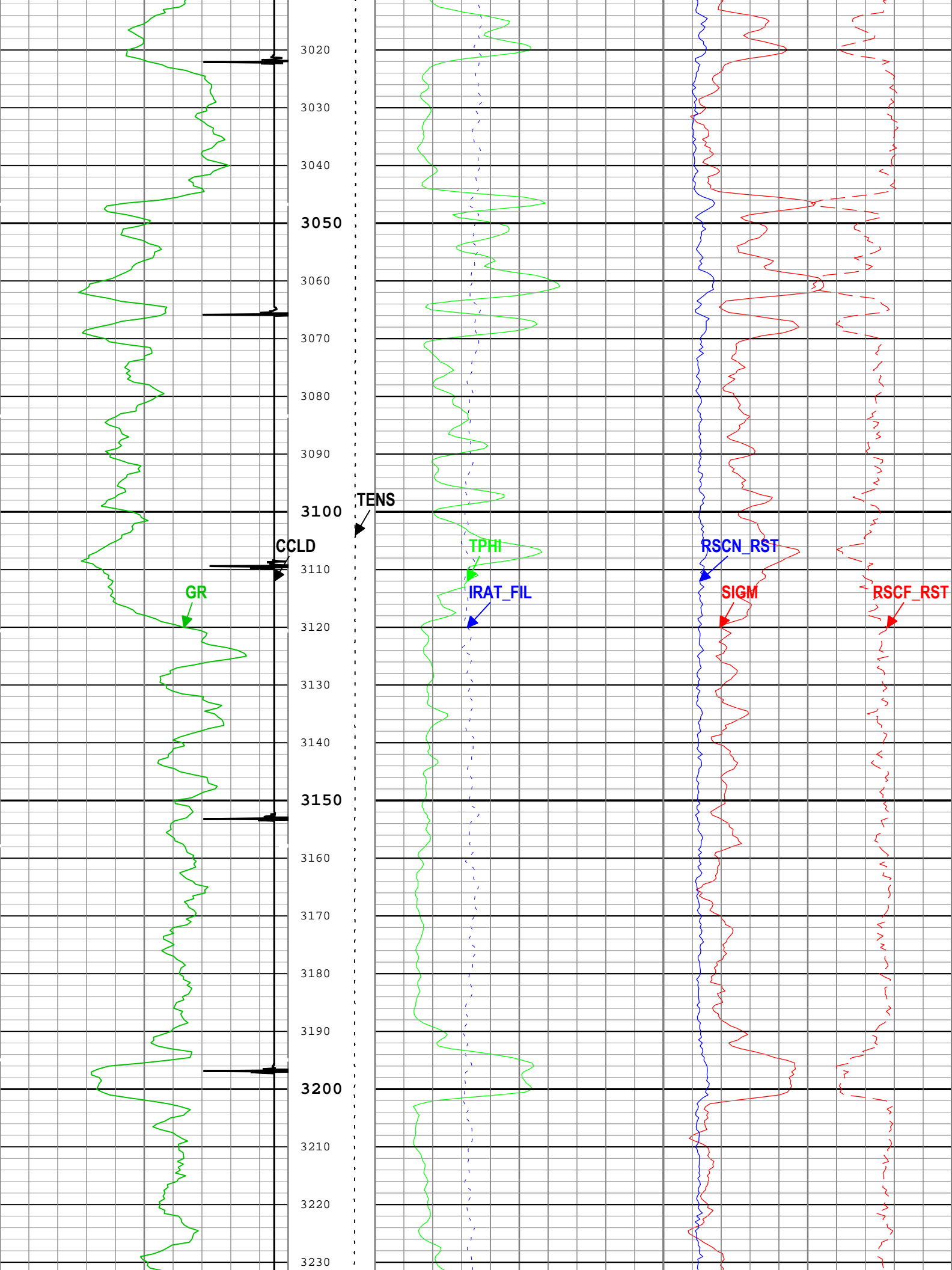


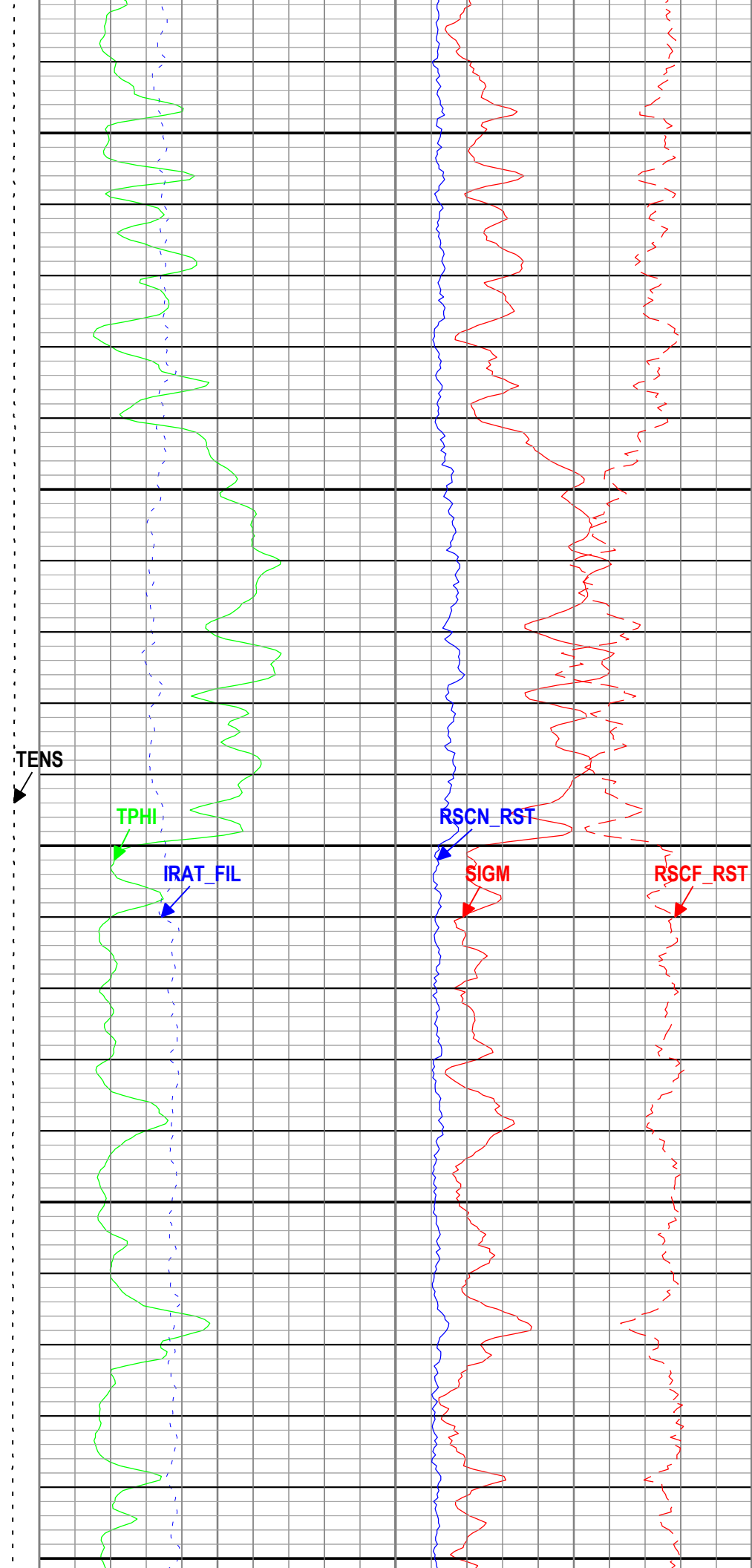
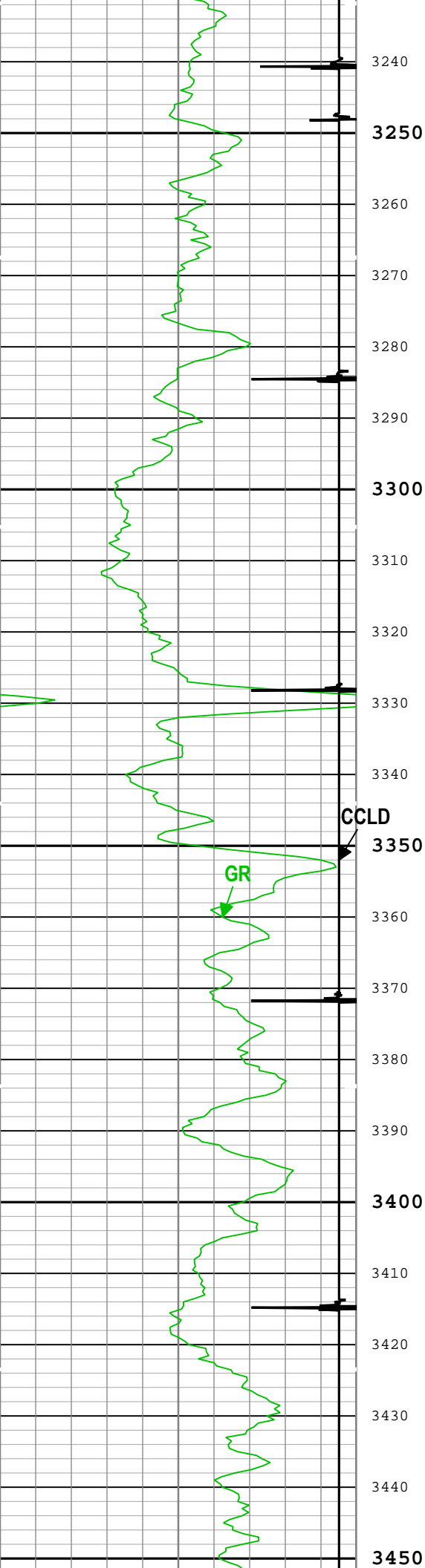
RST/SCMT

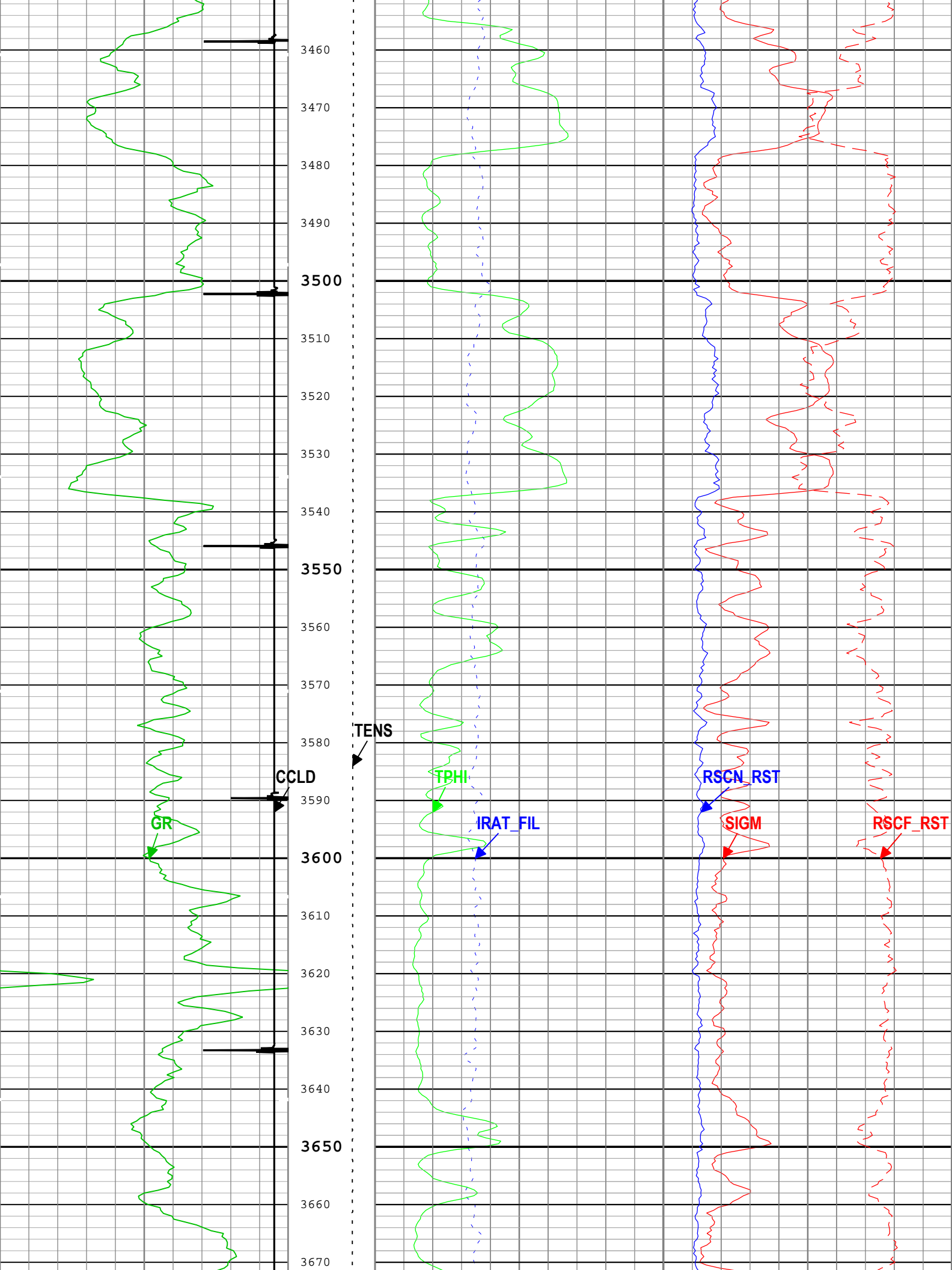


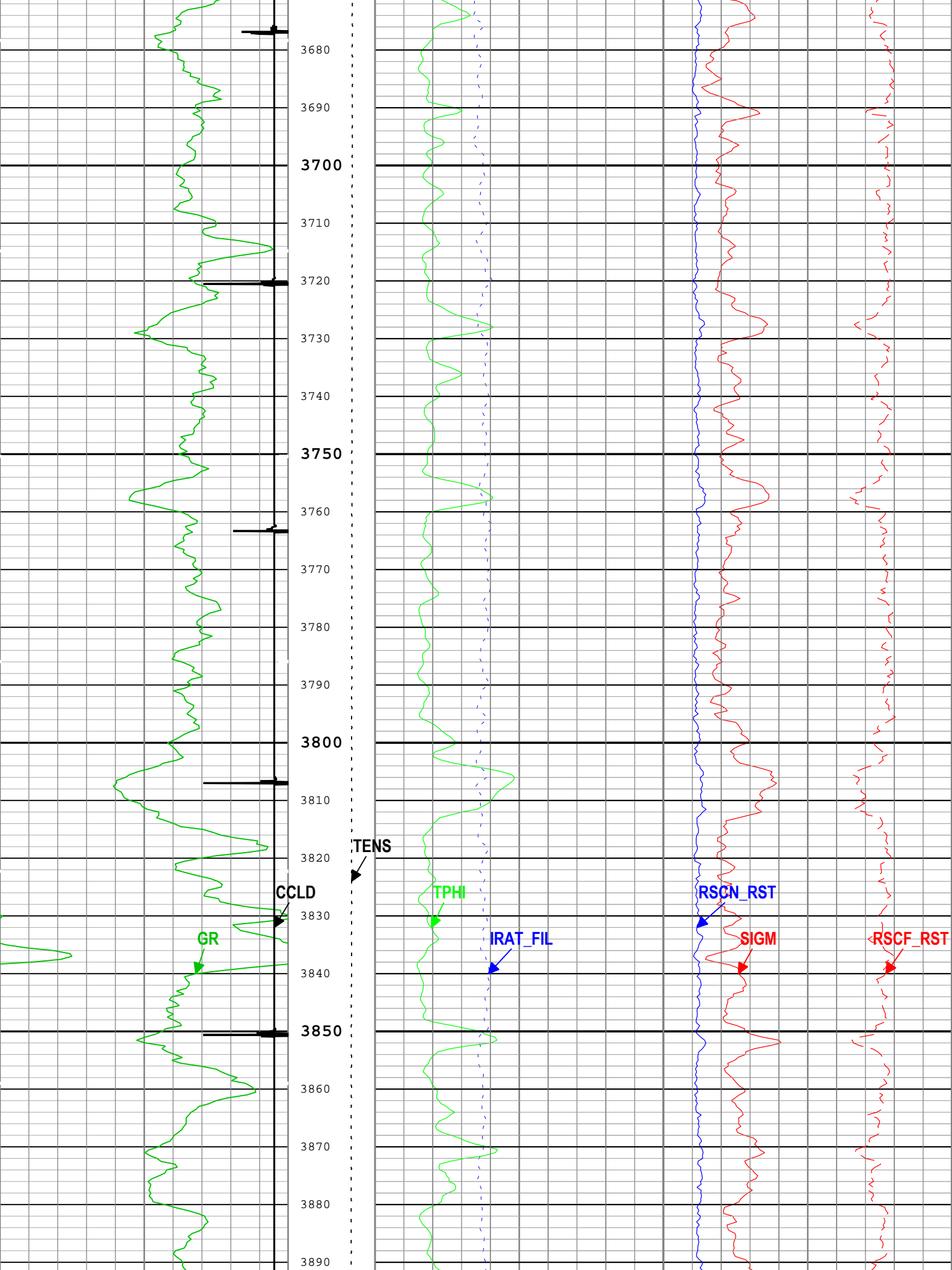


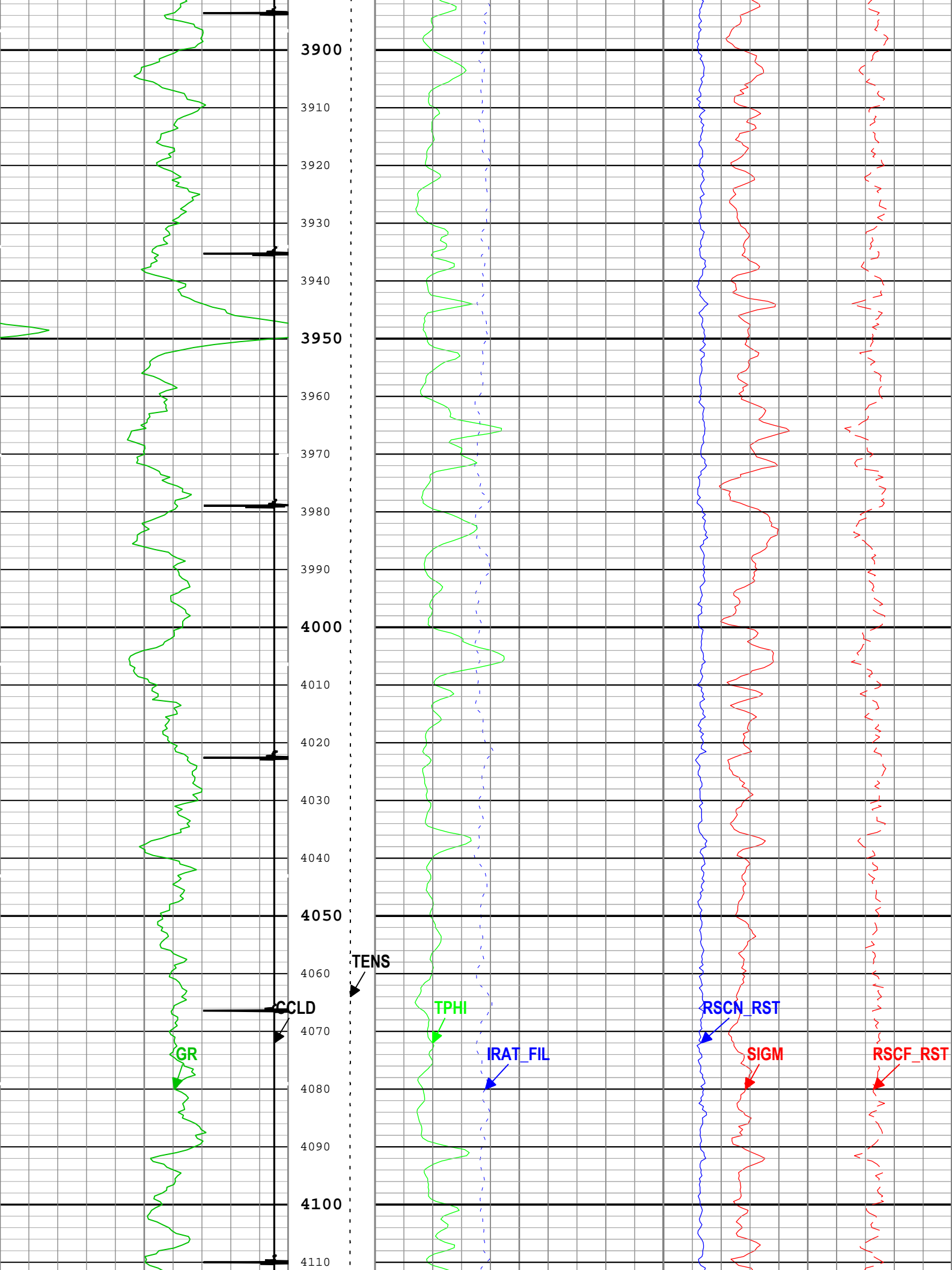


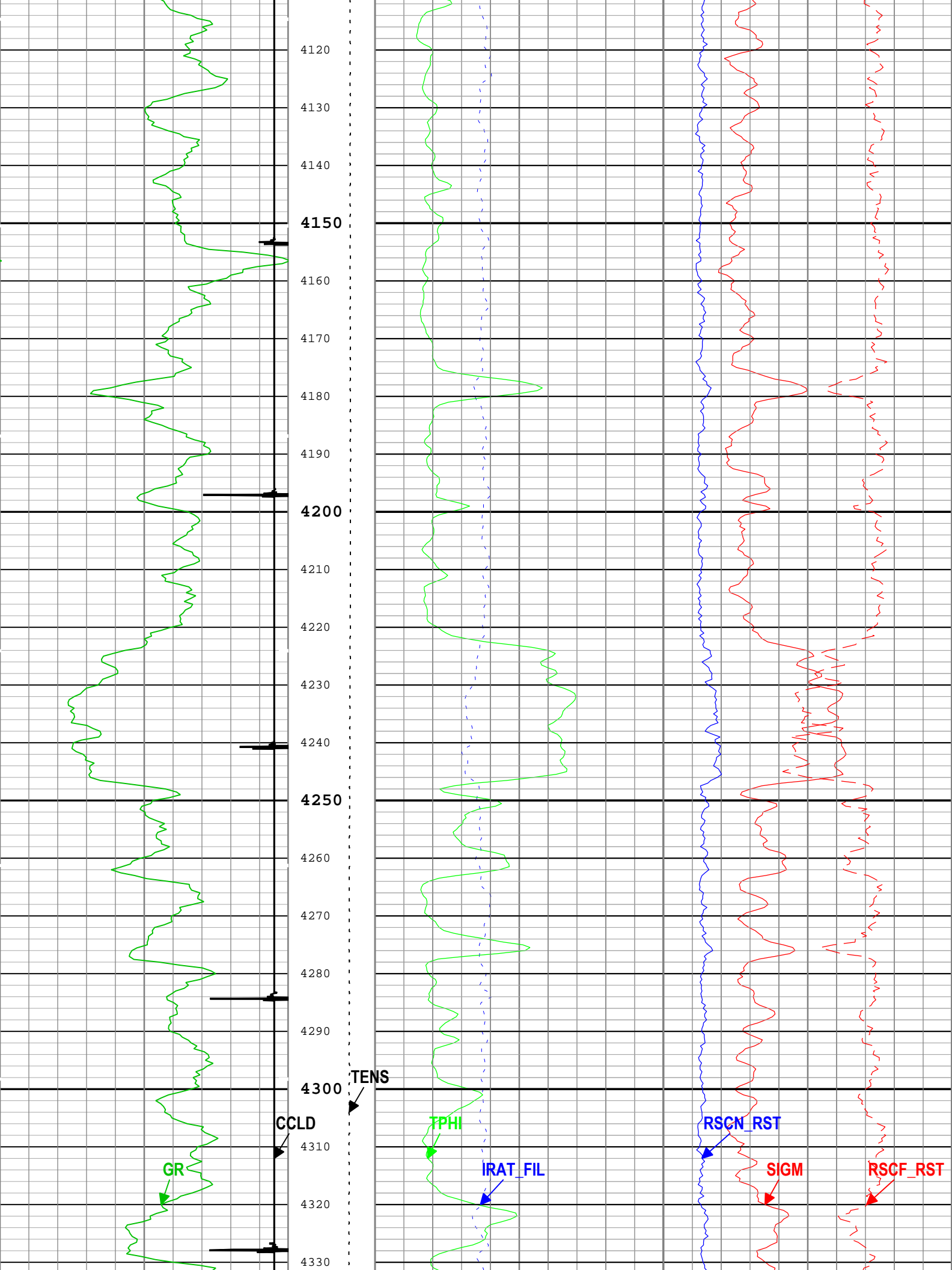


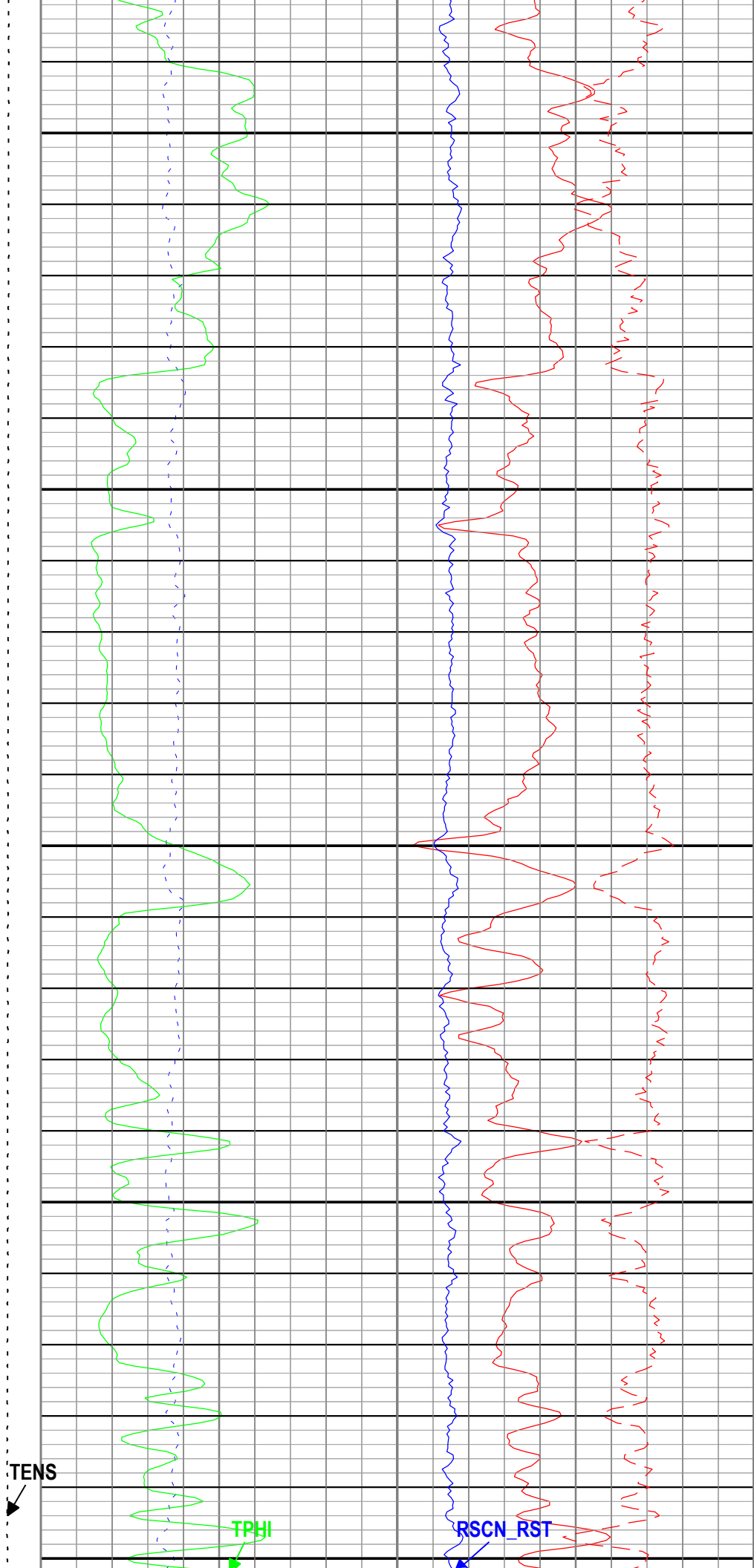
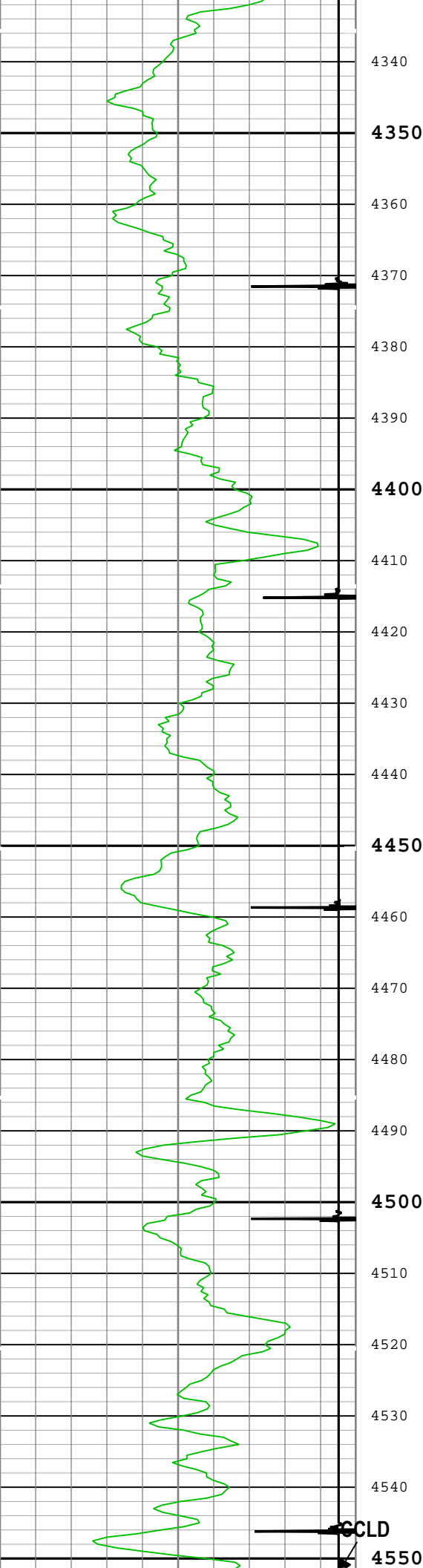


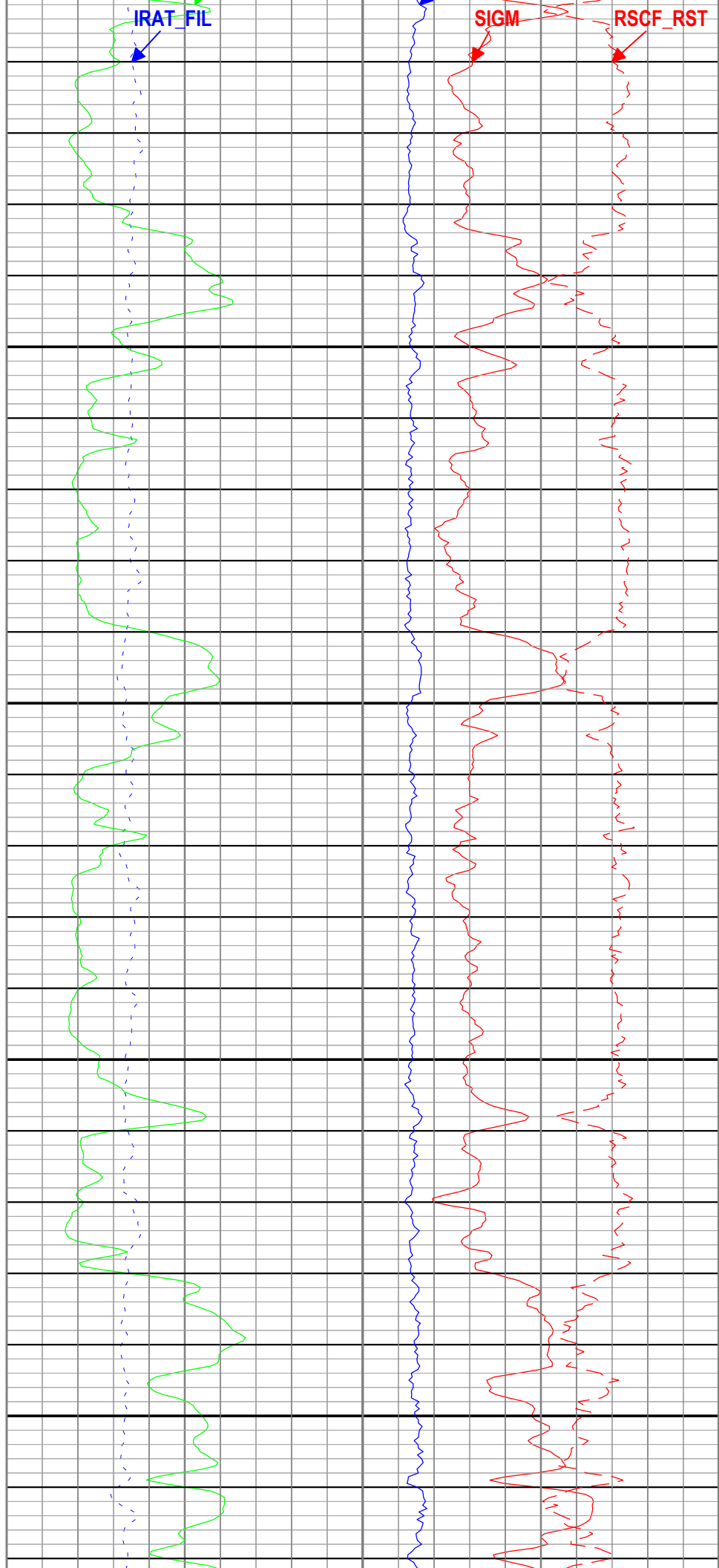
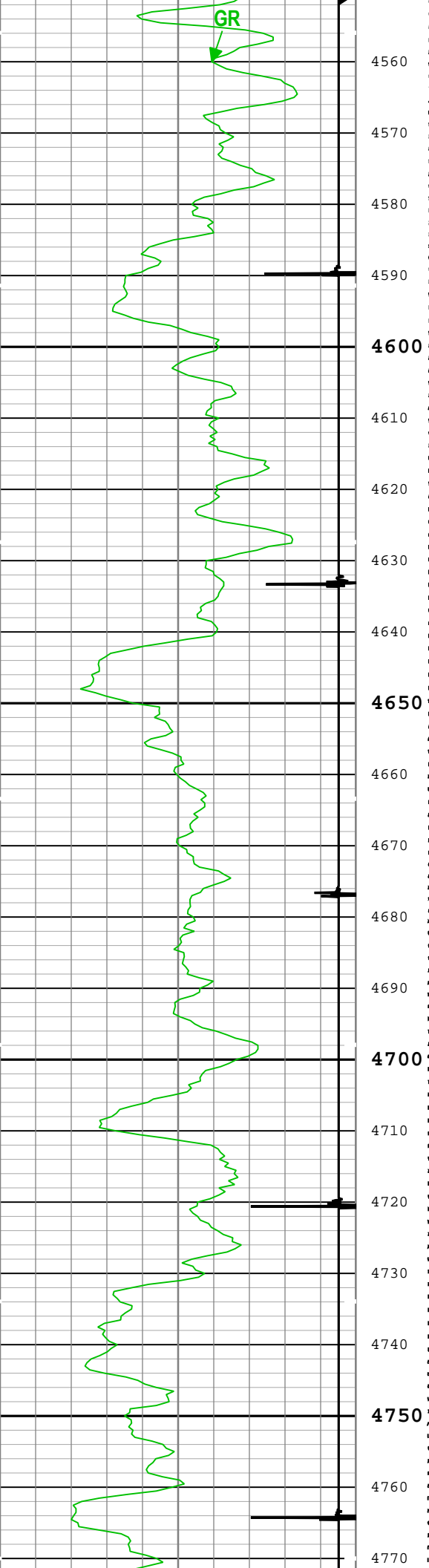


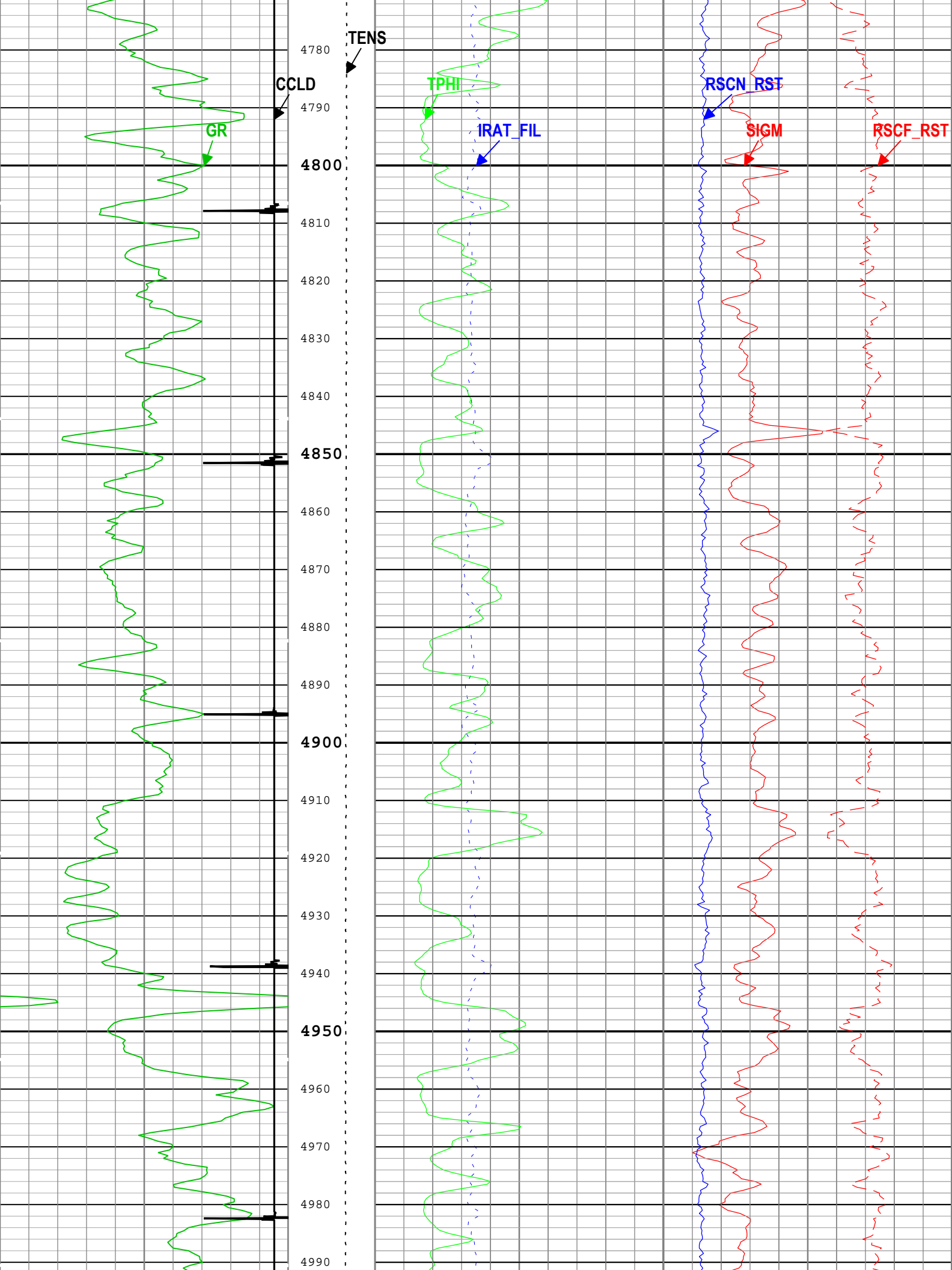


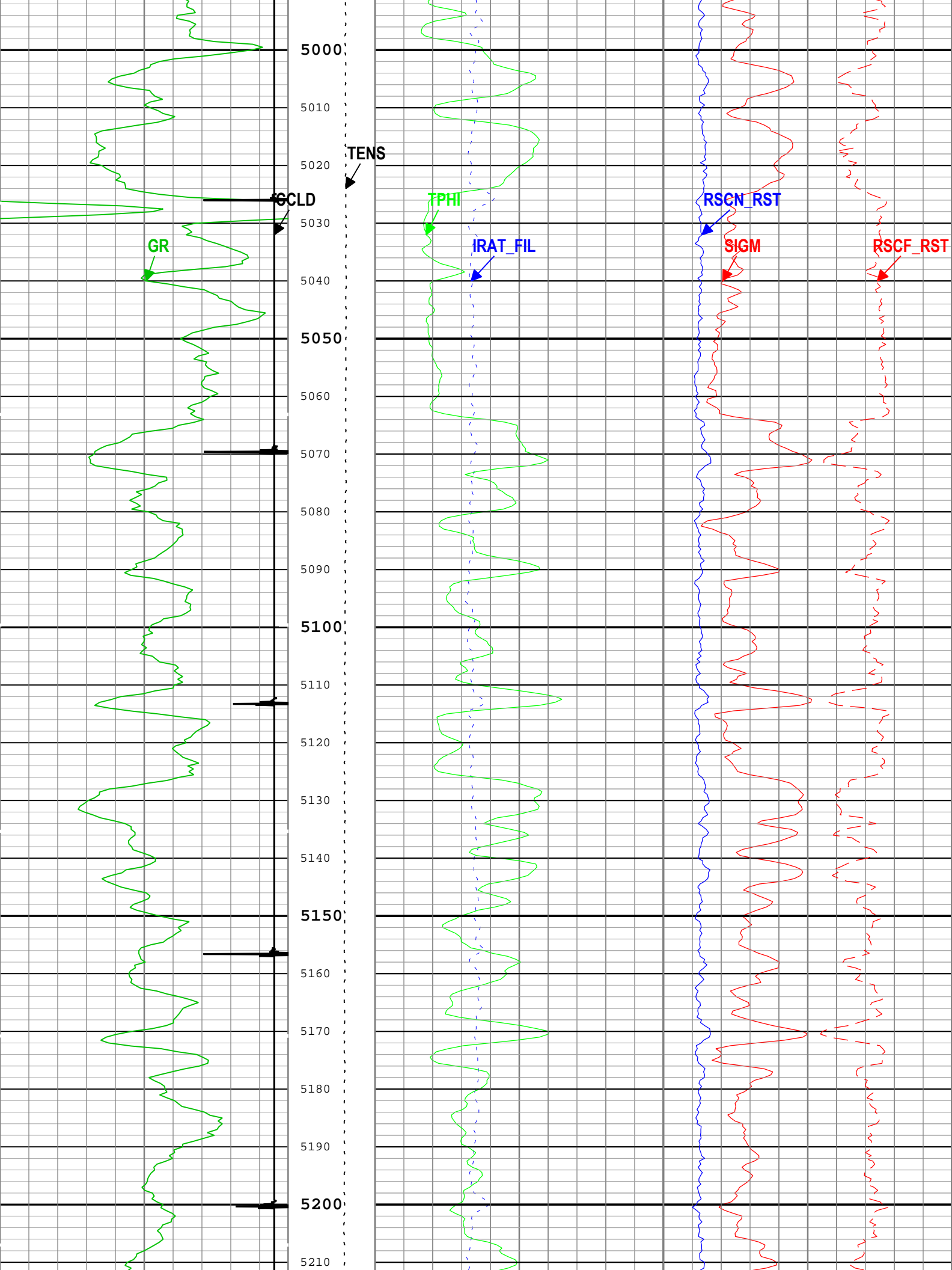


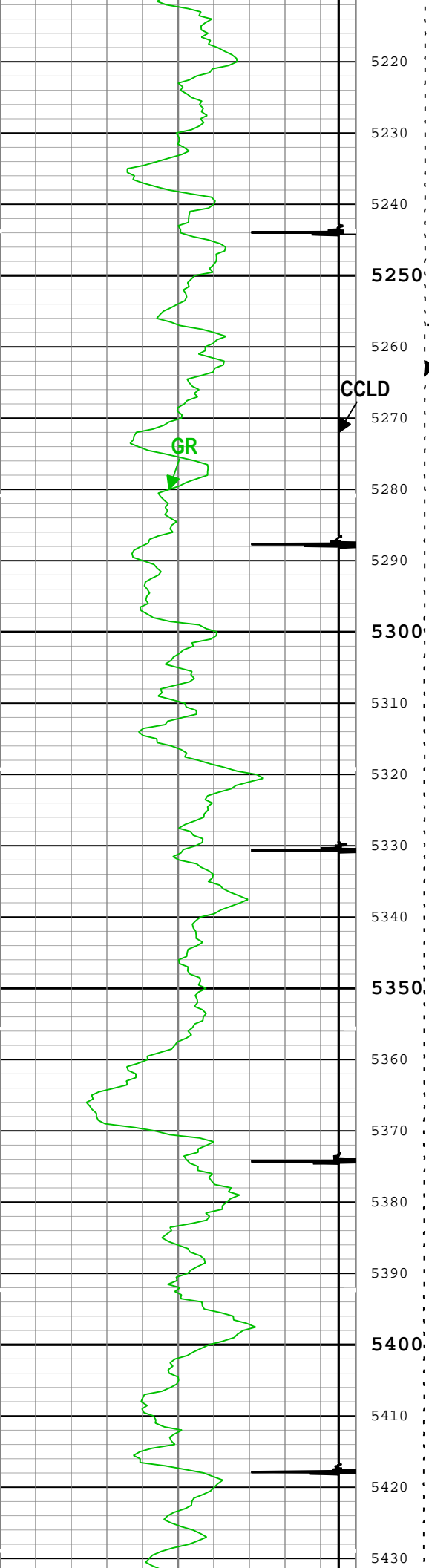










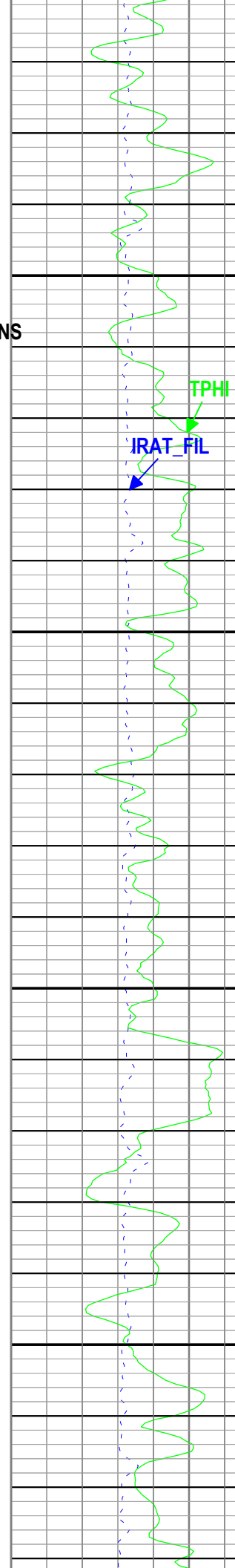


5220
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5420
5430

TENS

CCLD

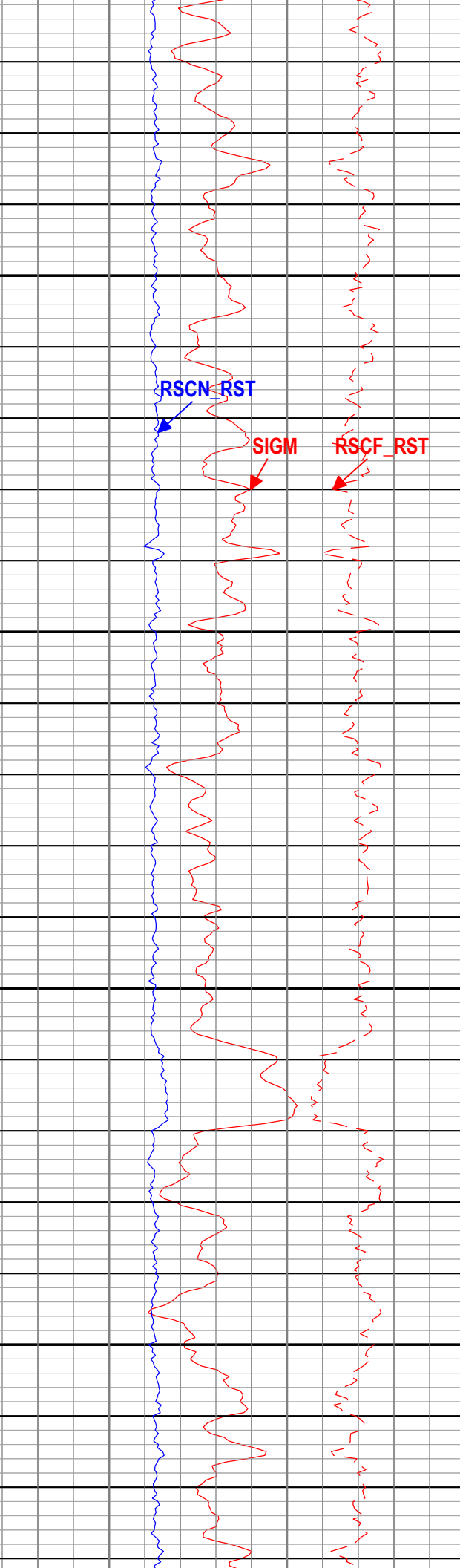
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IRAT_FIL

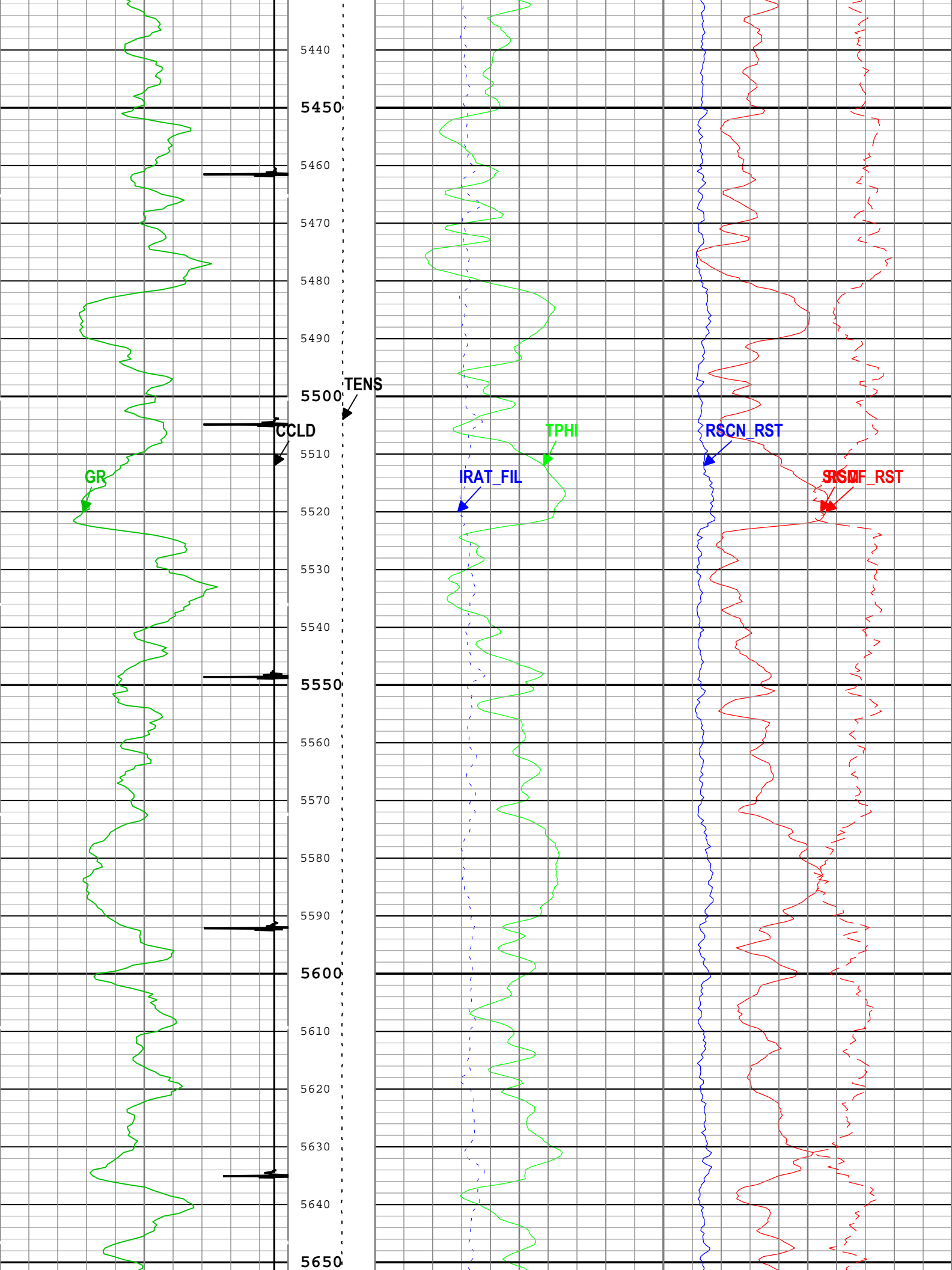
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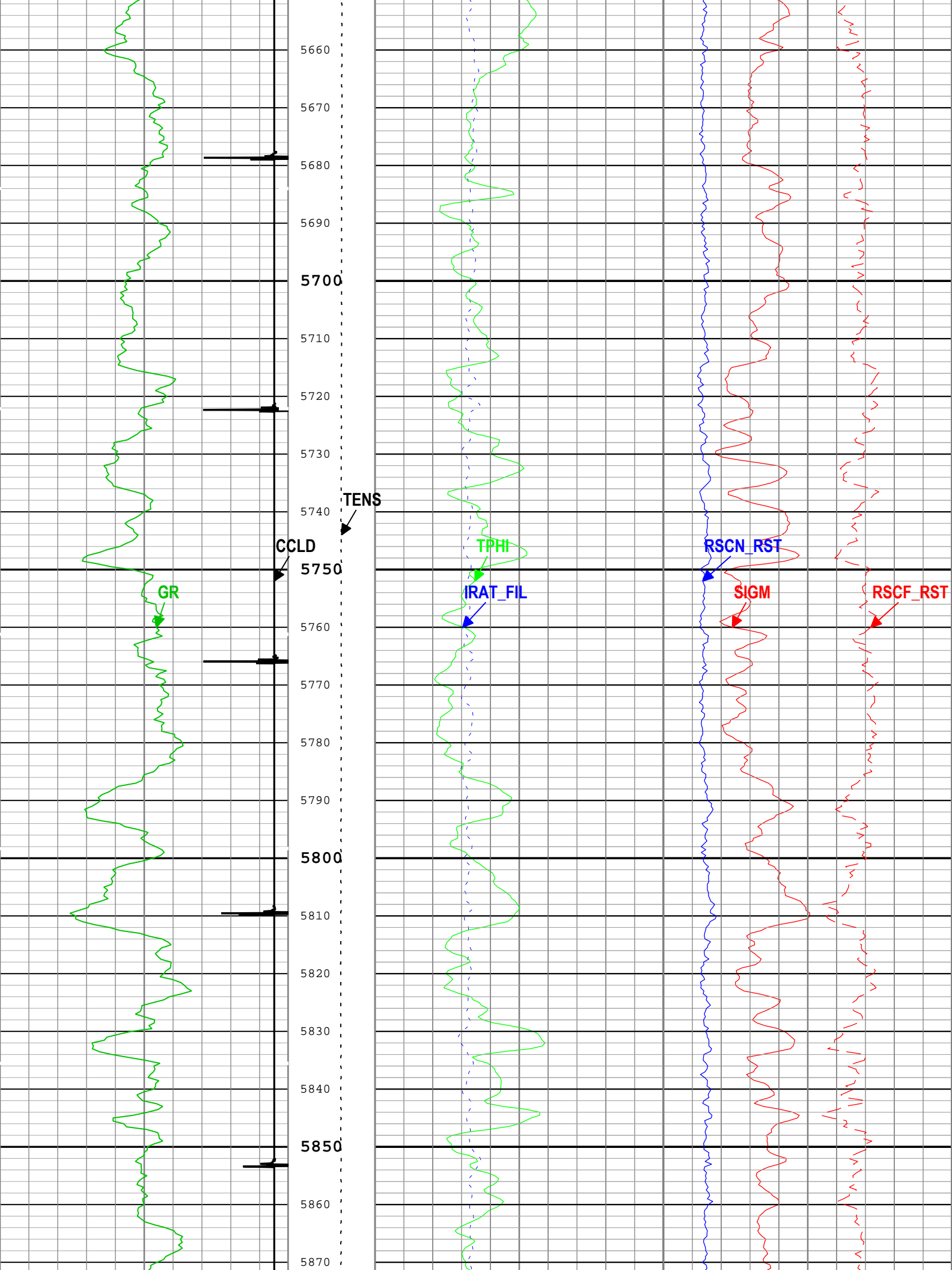
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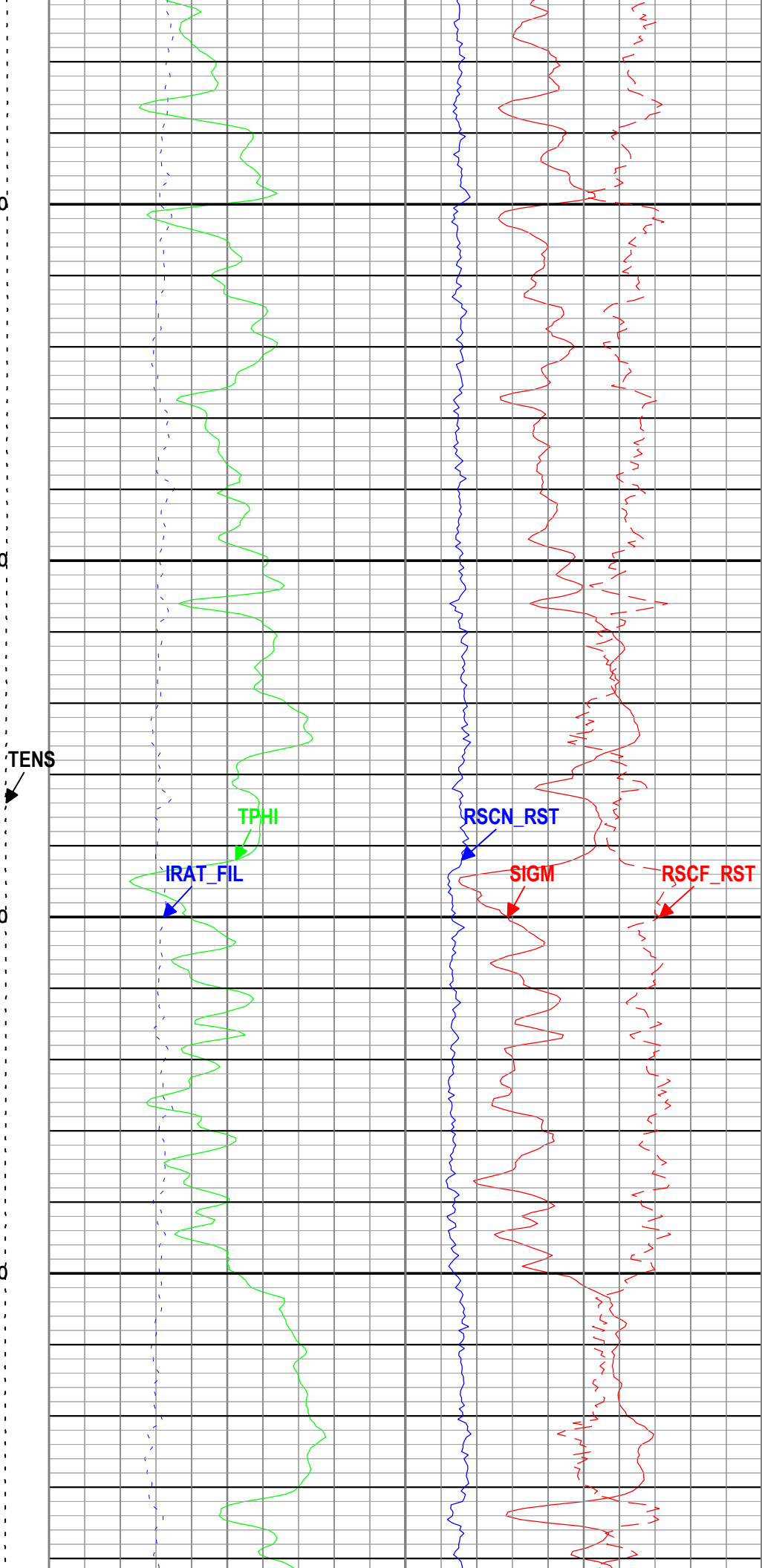
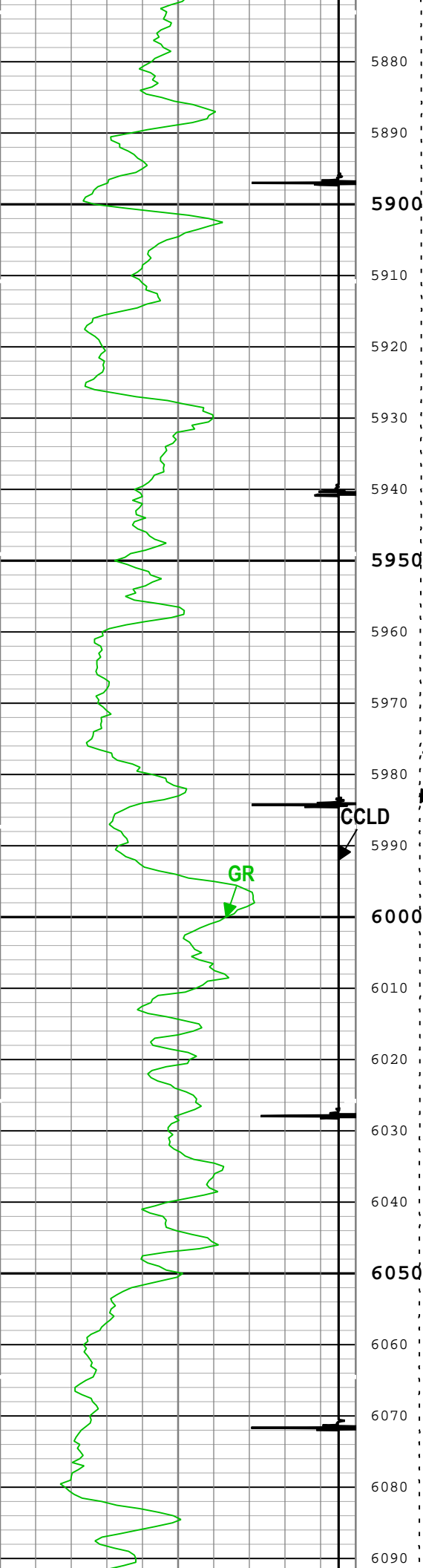


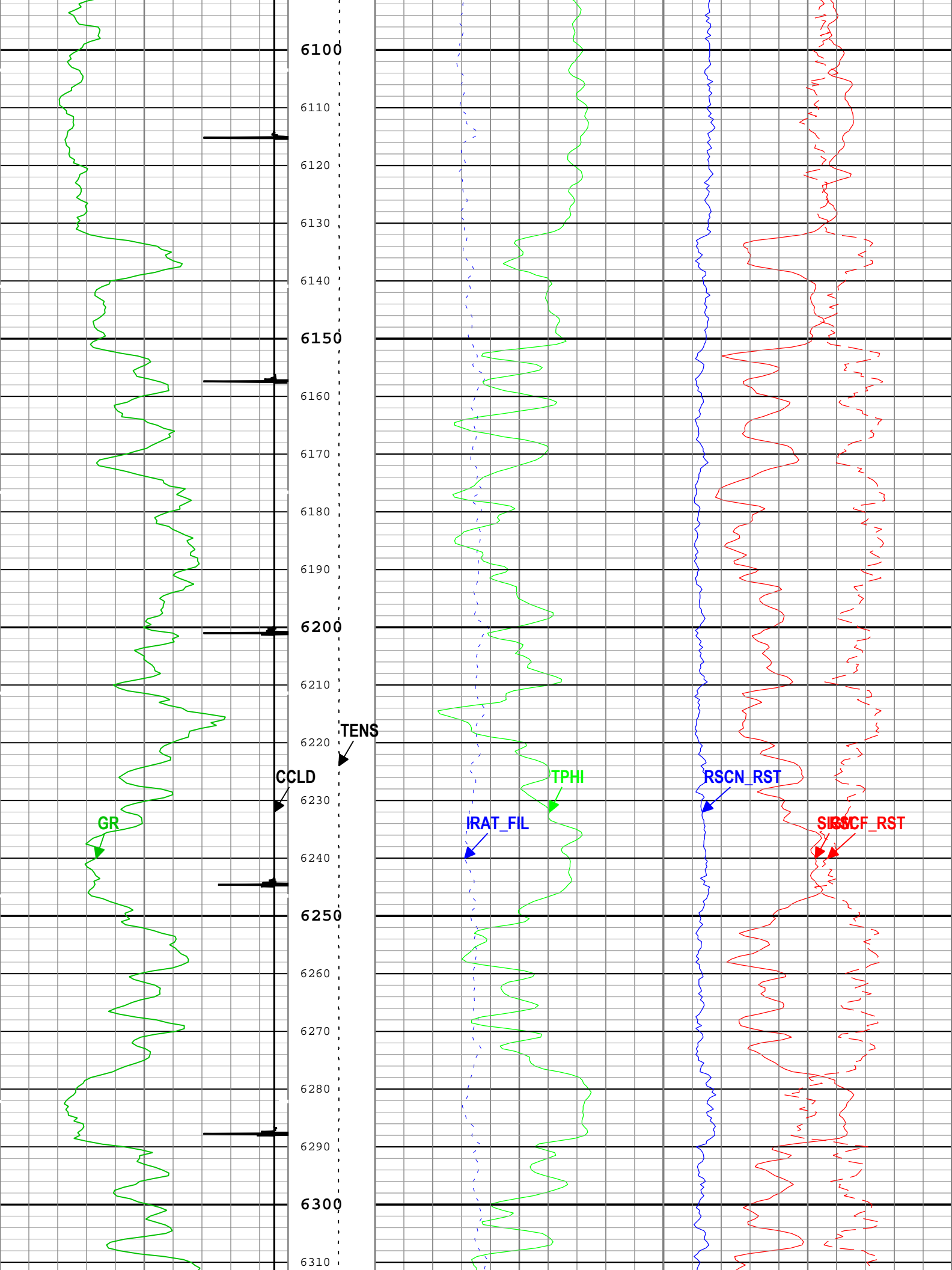
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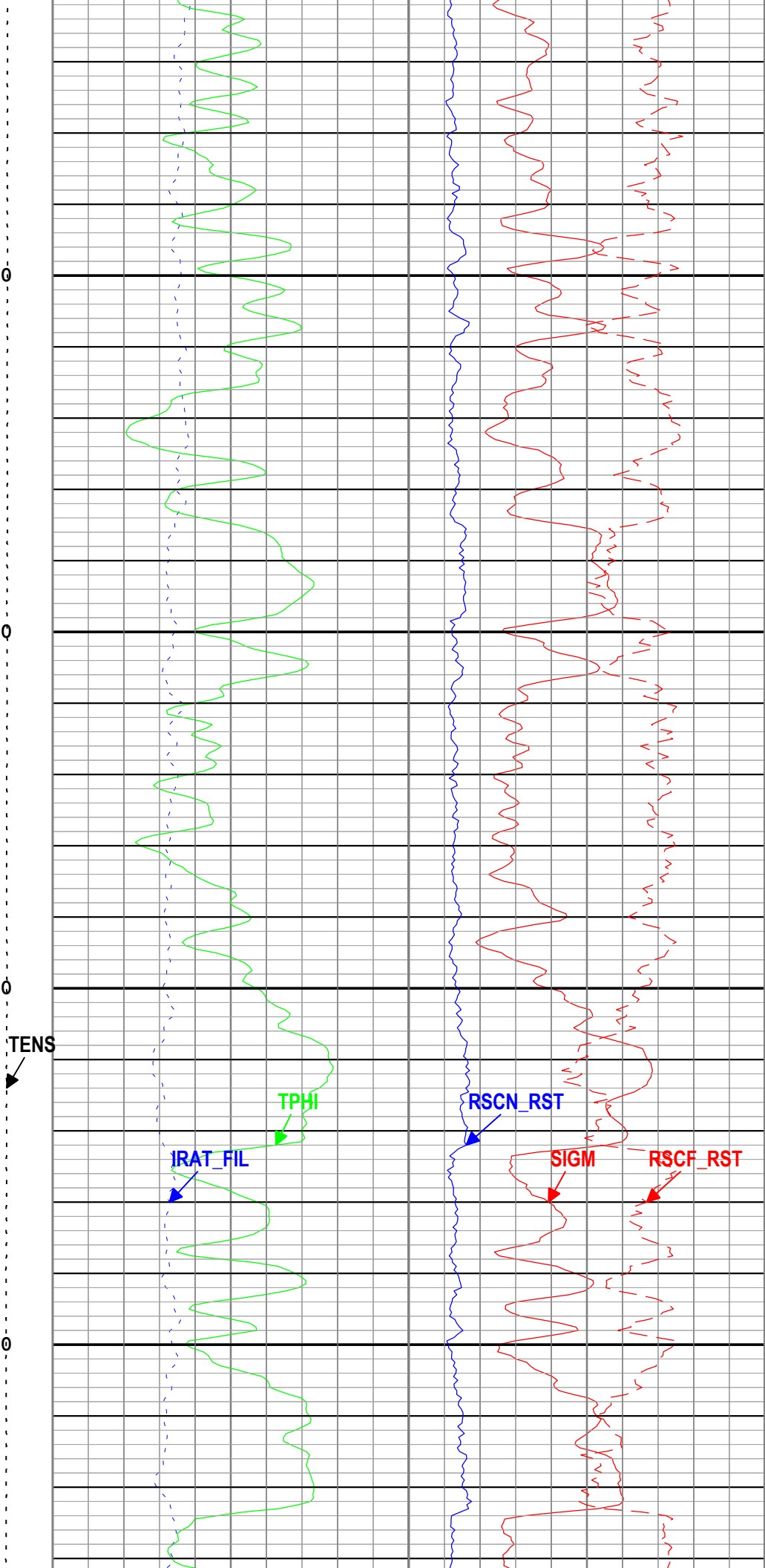
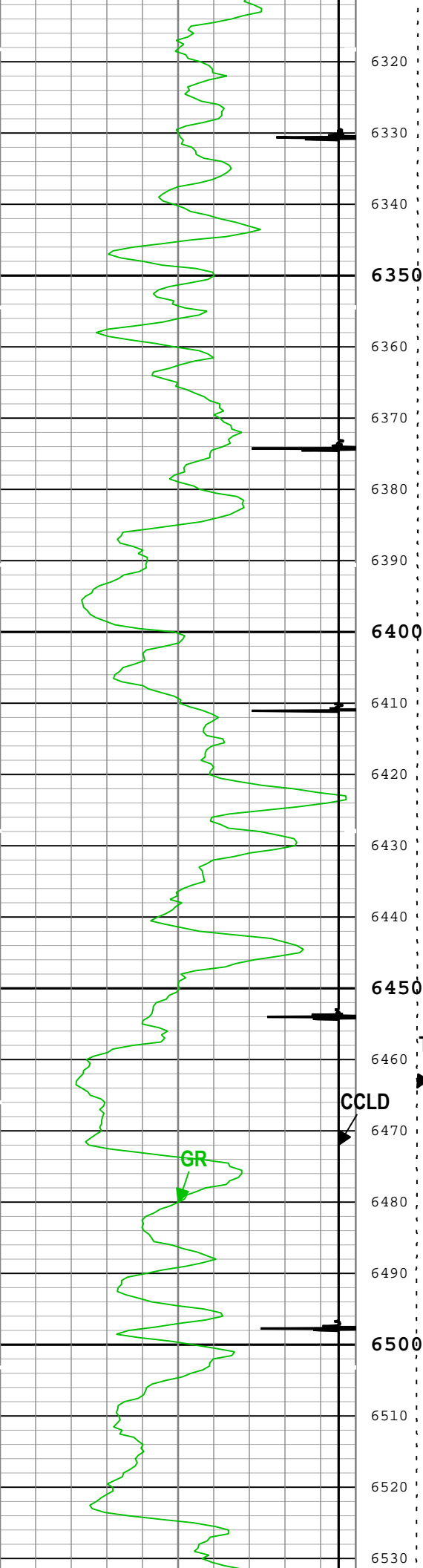
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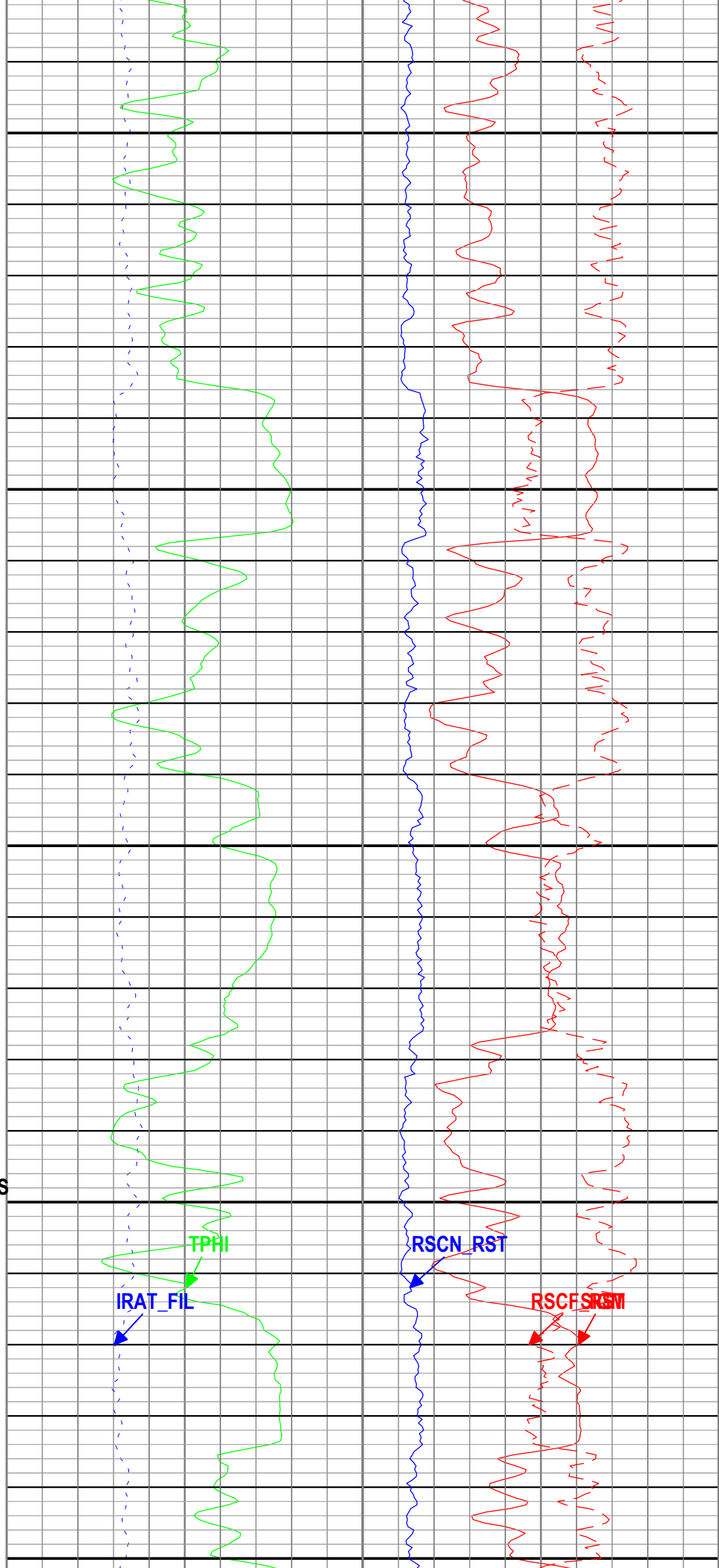
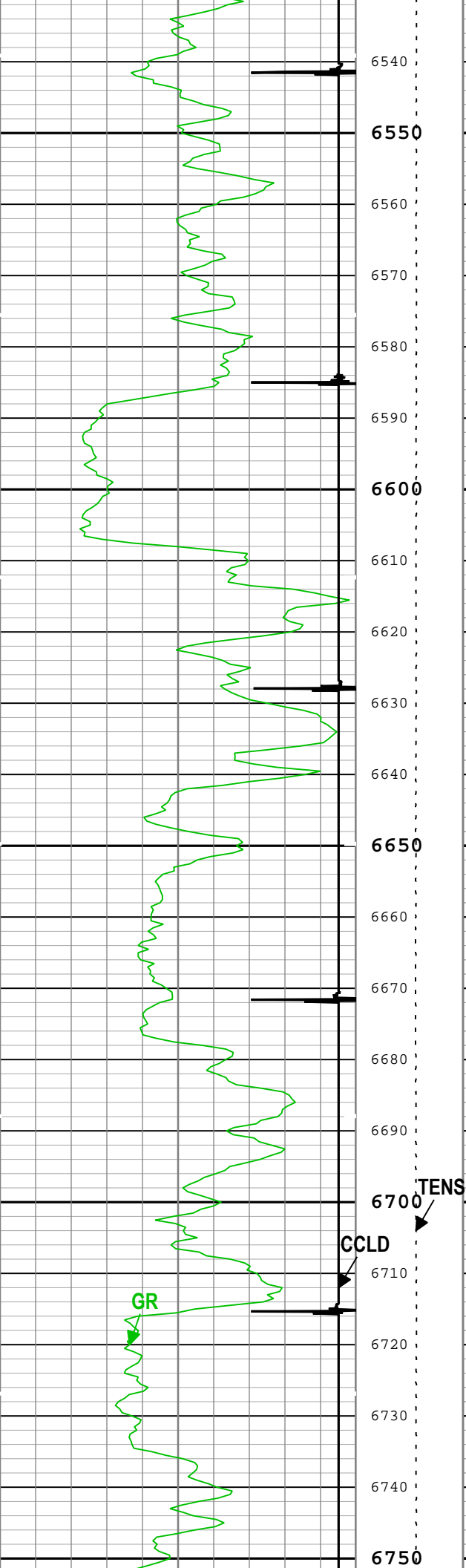


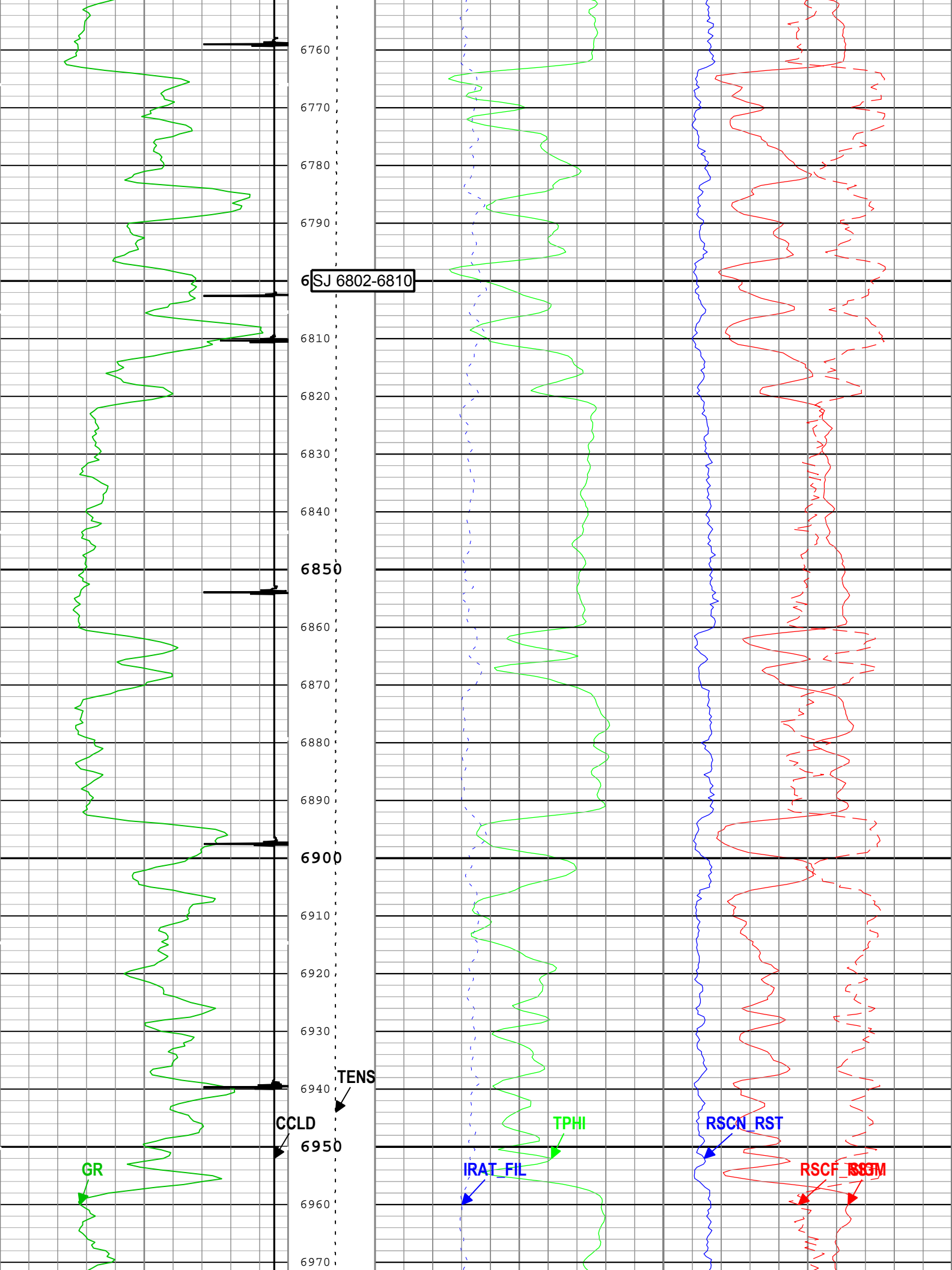


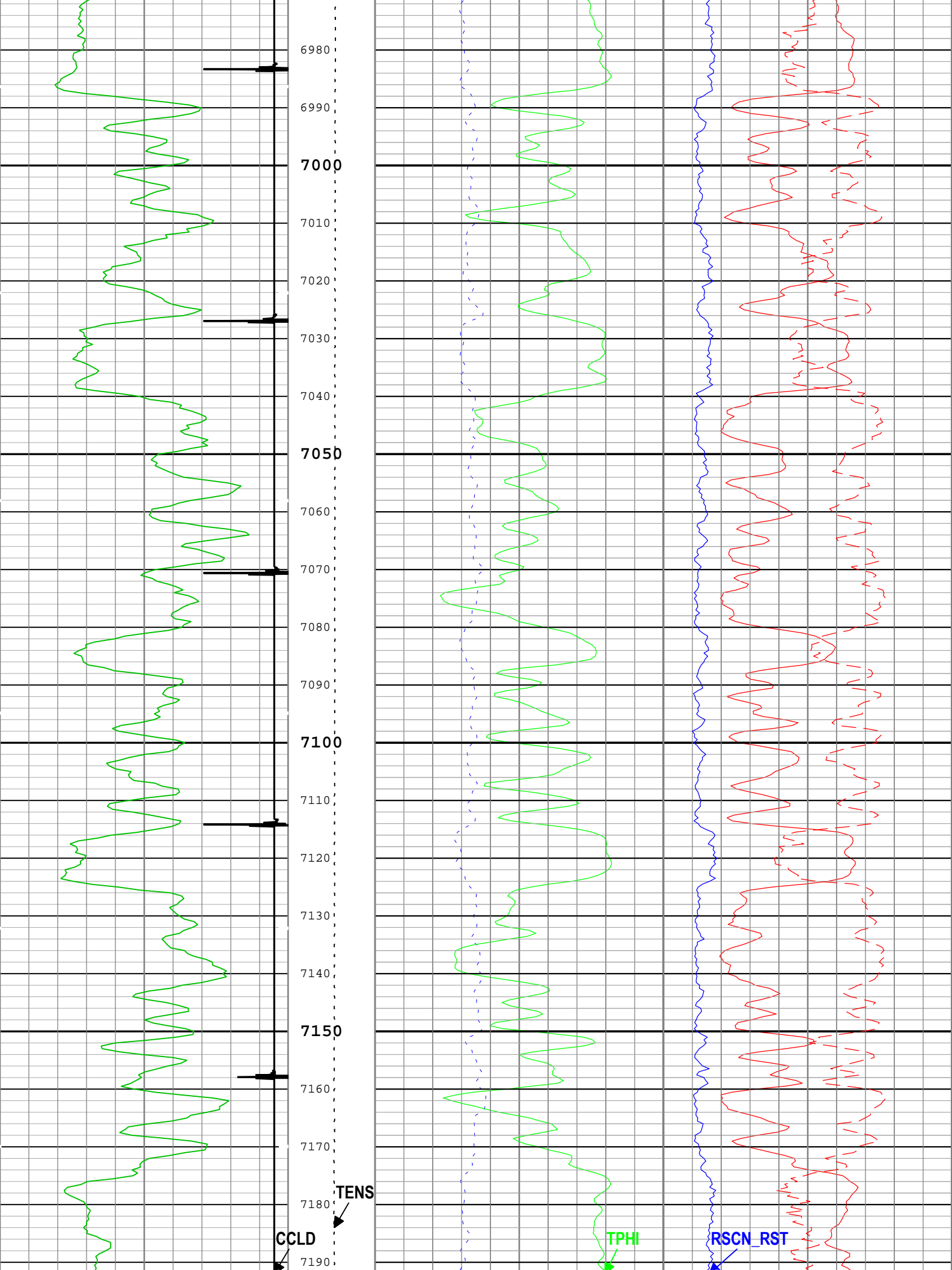


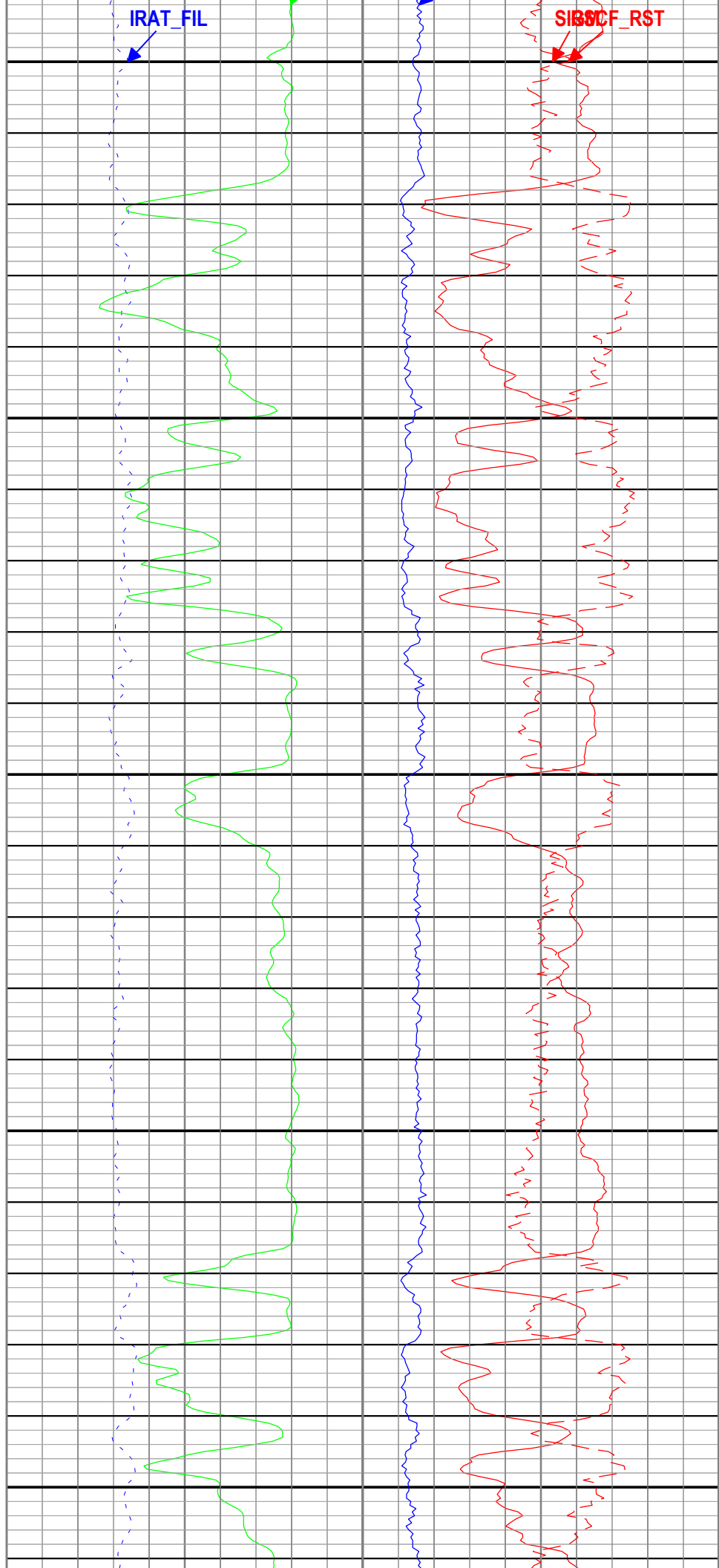
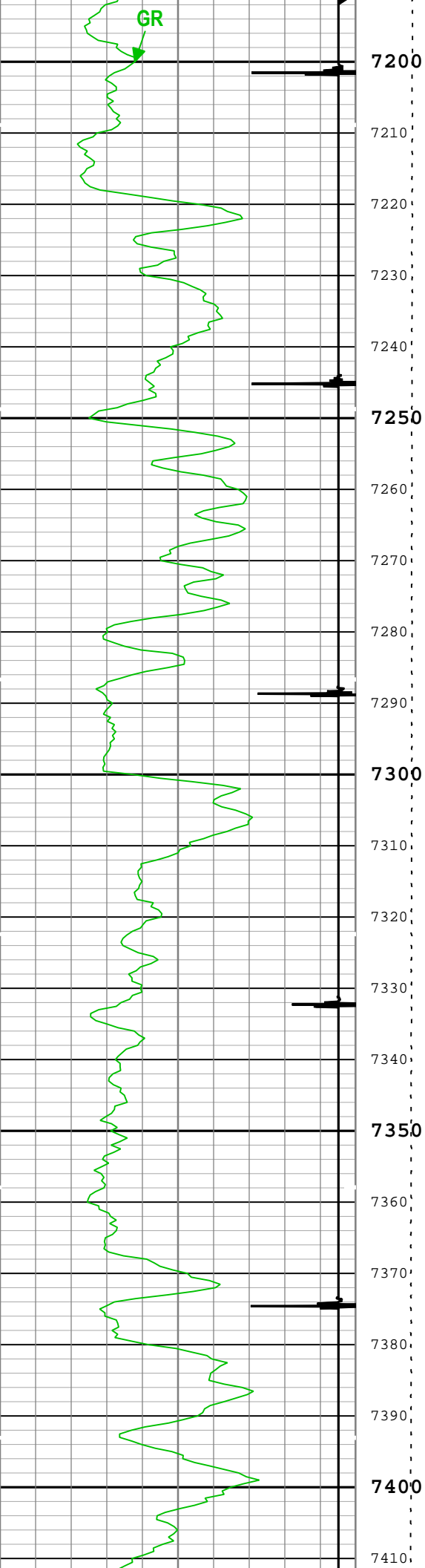


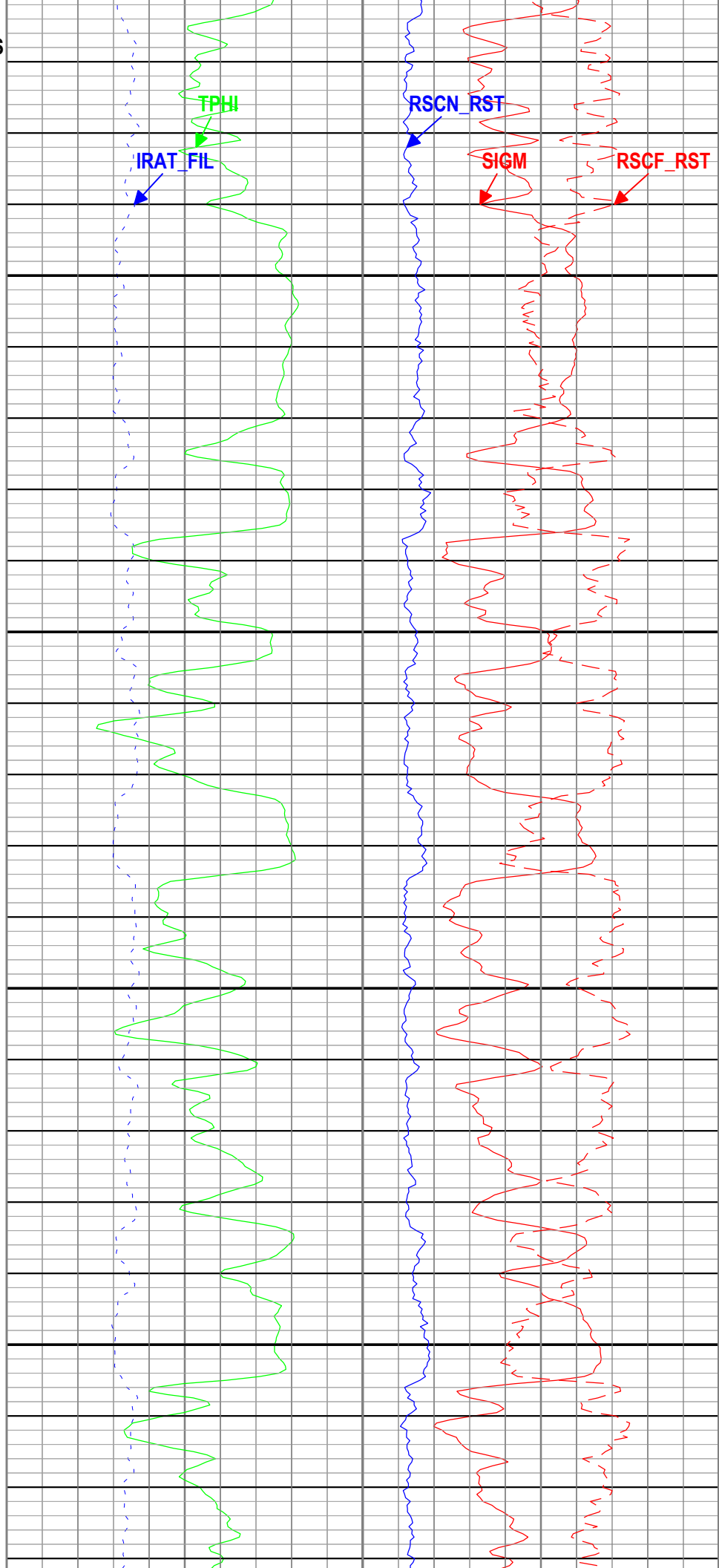
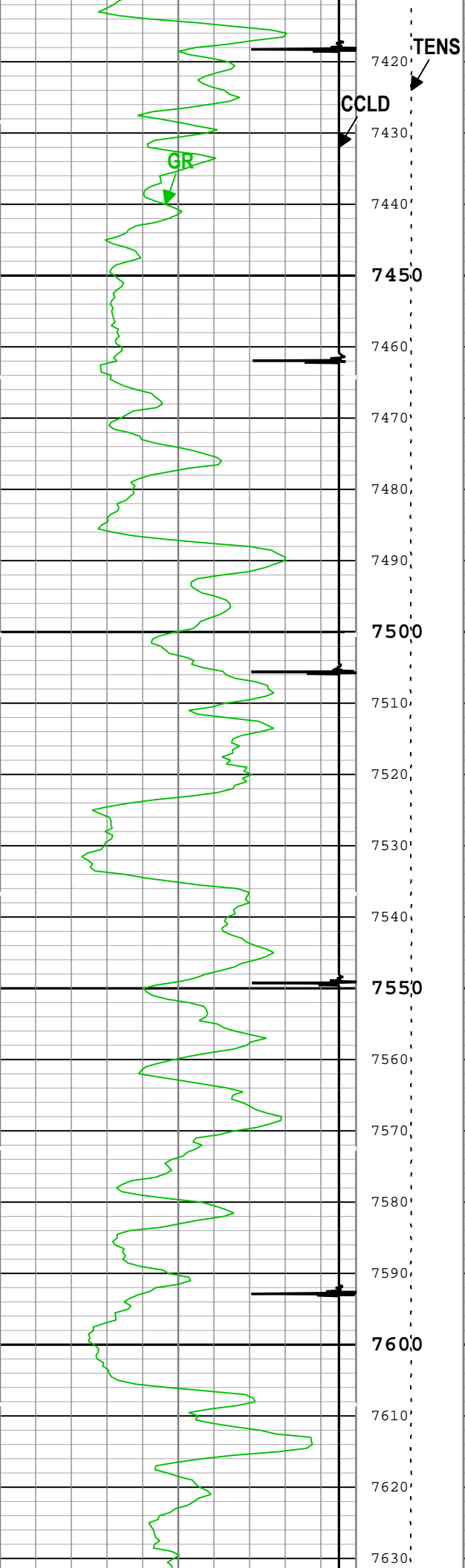


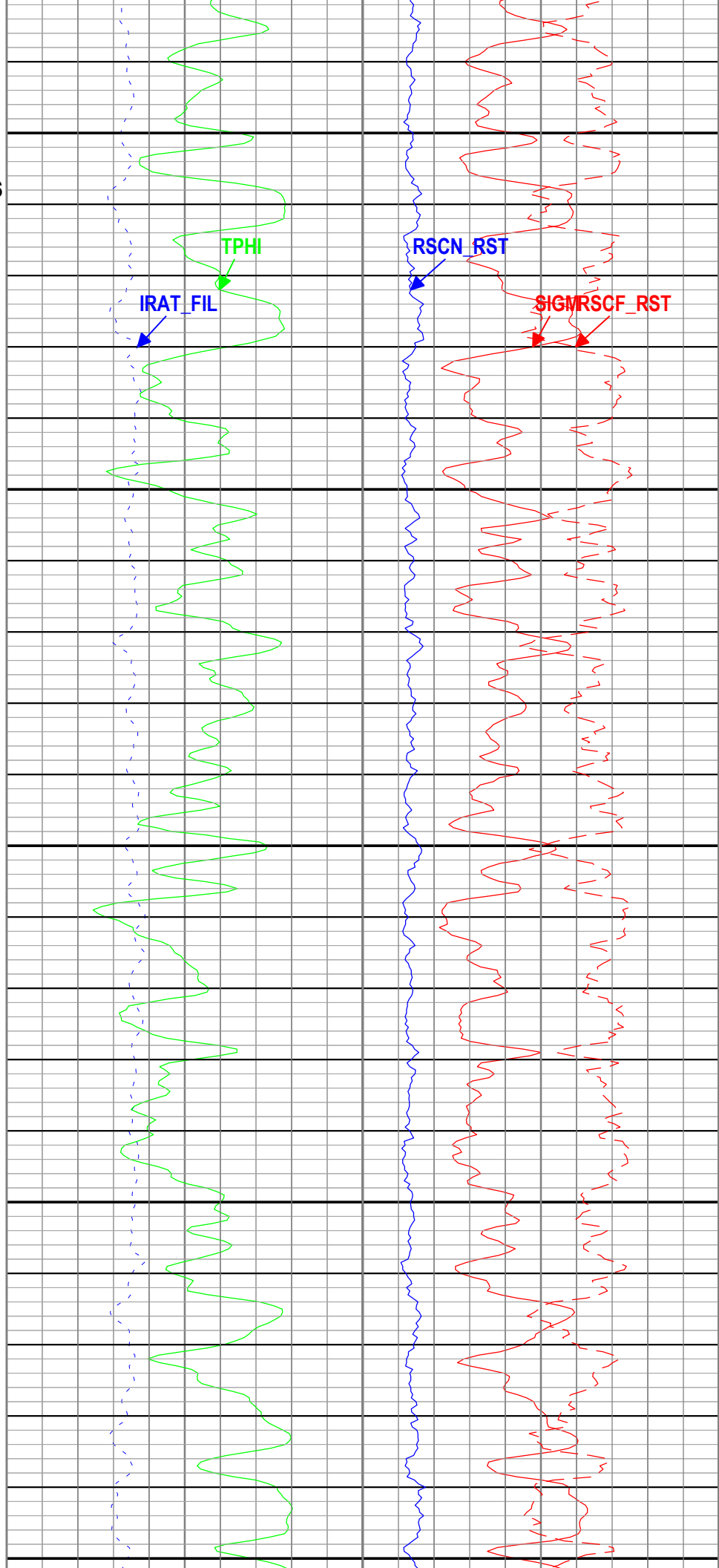
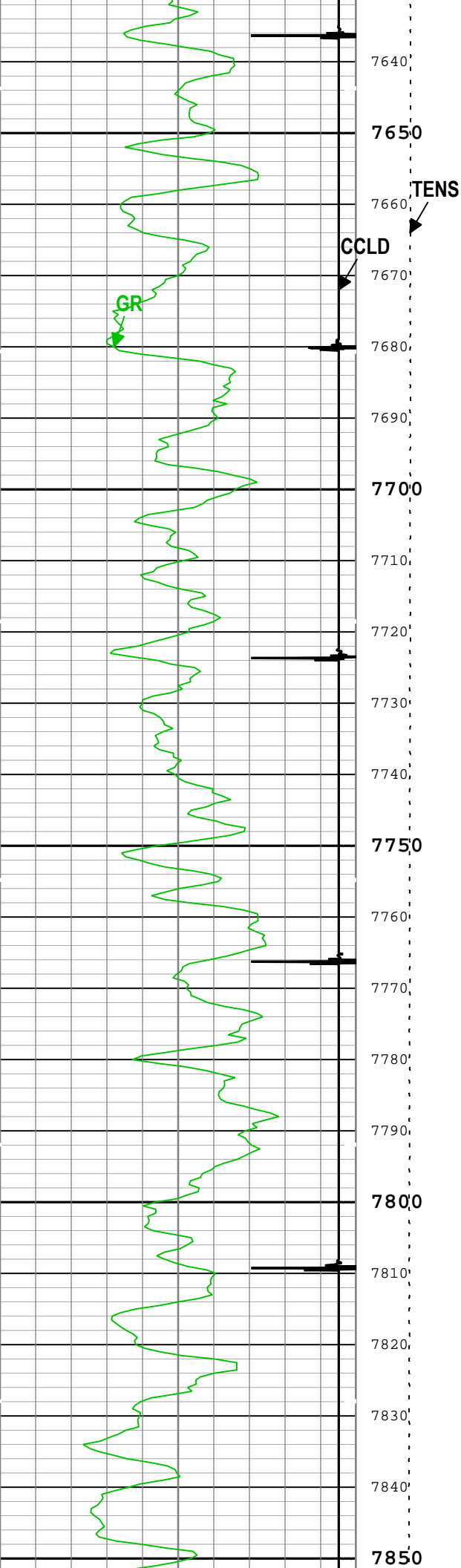


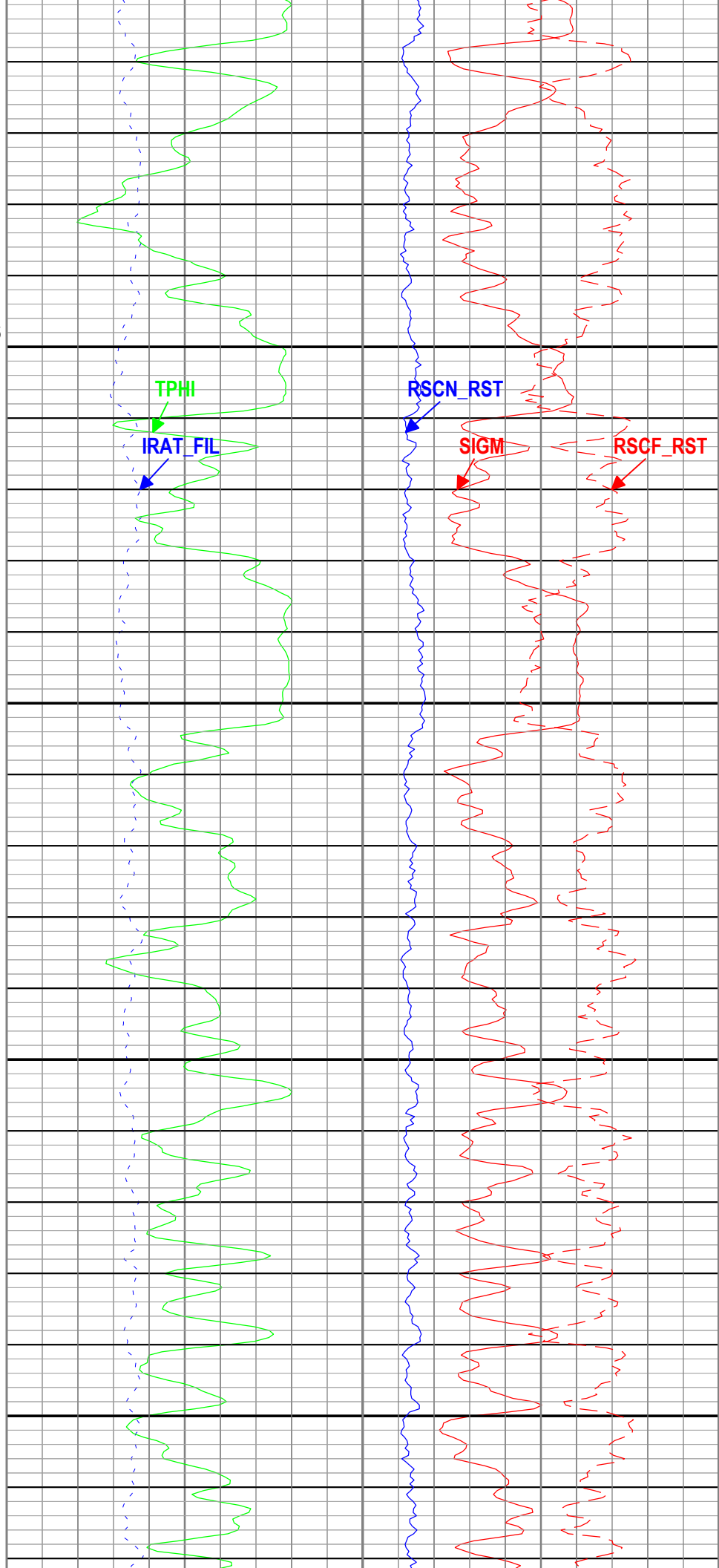
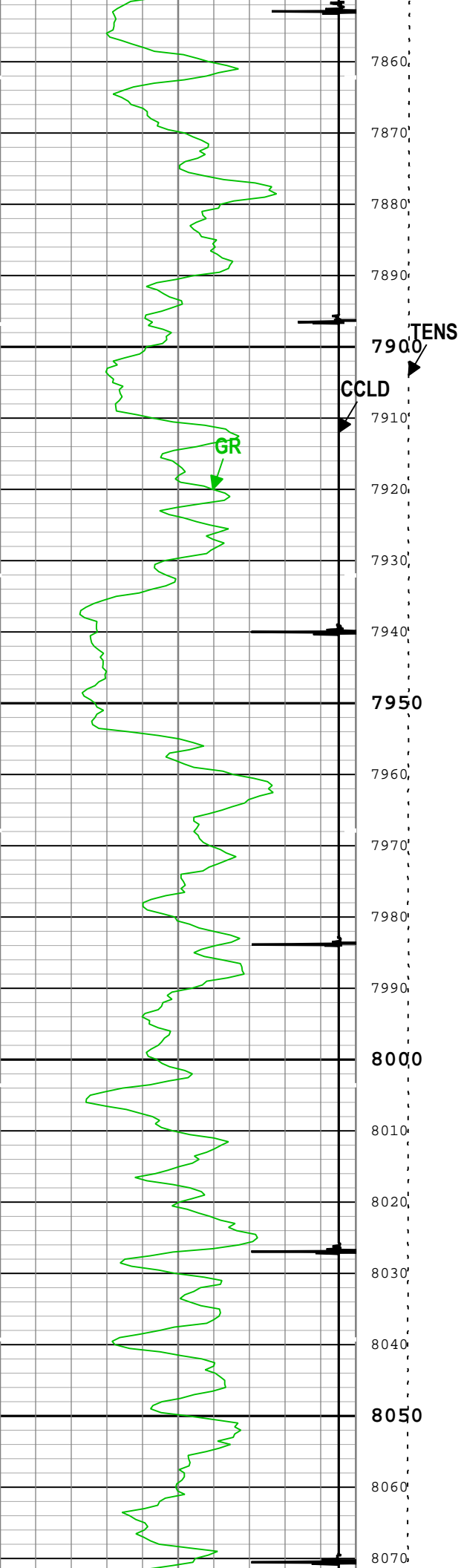


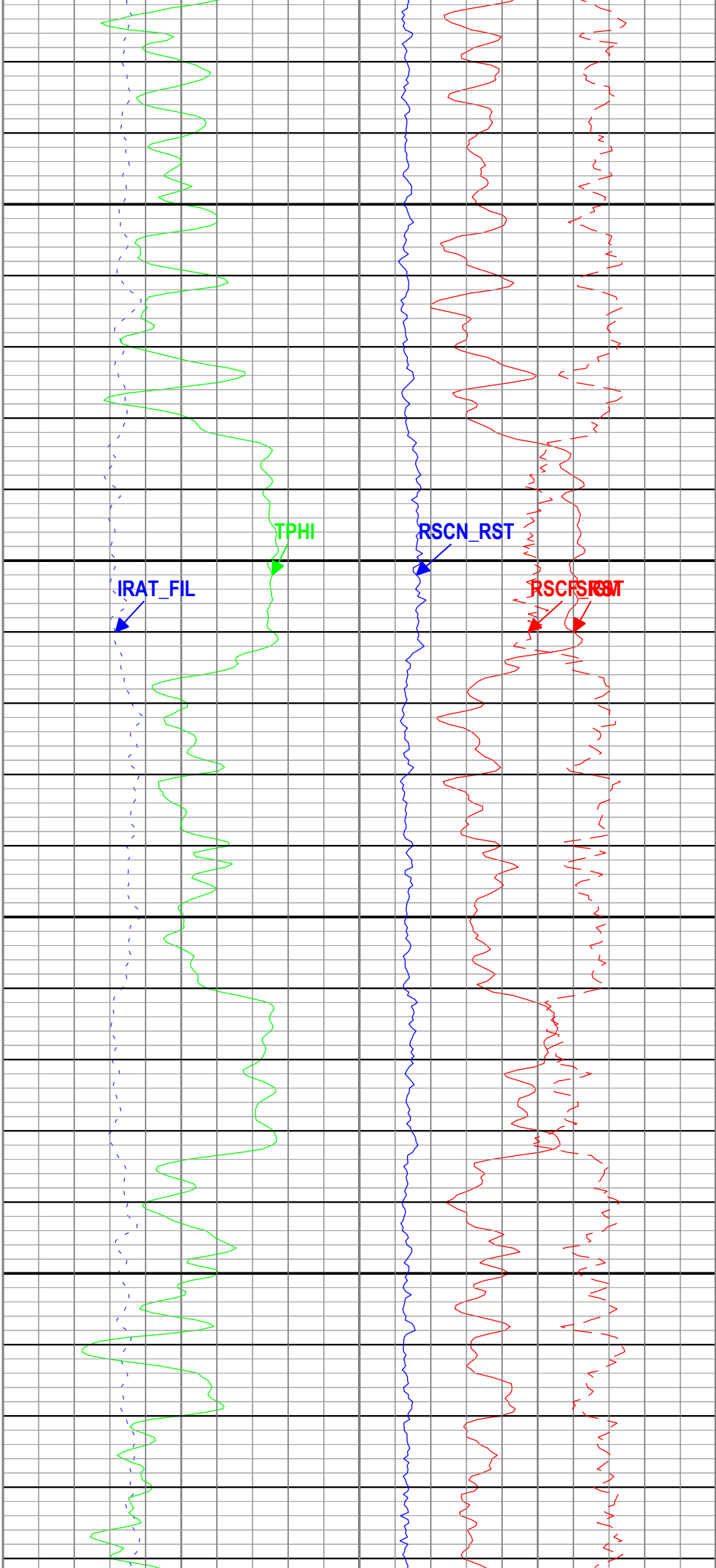
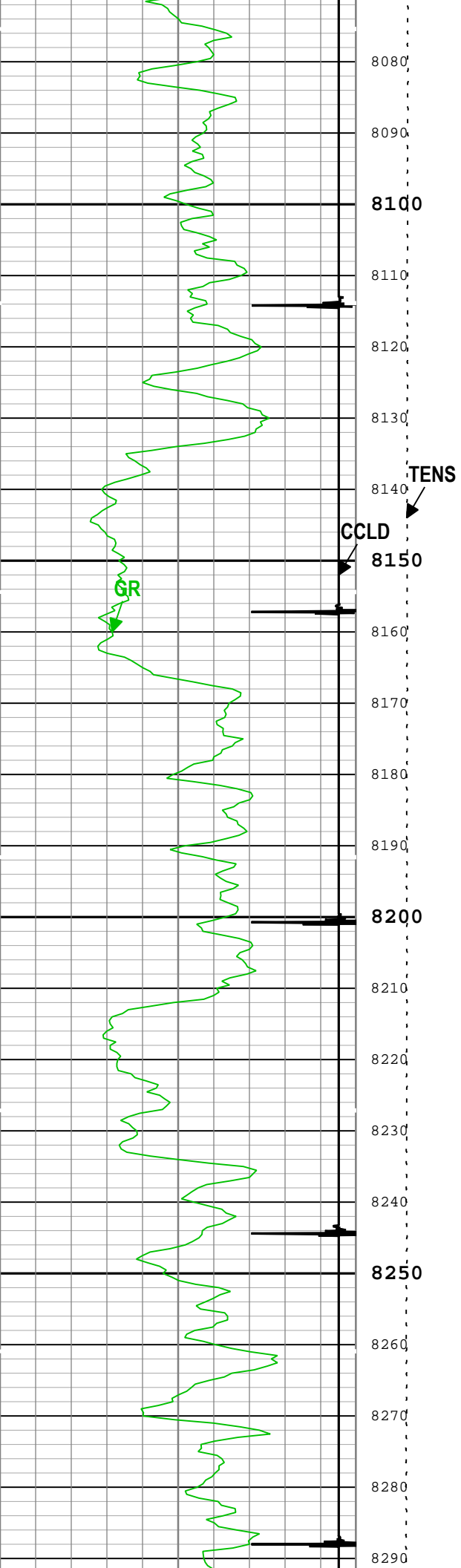


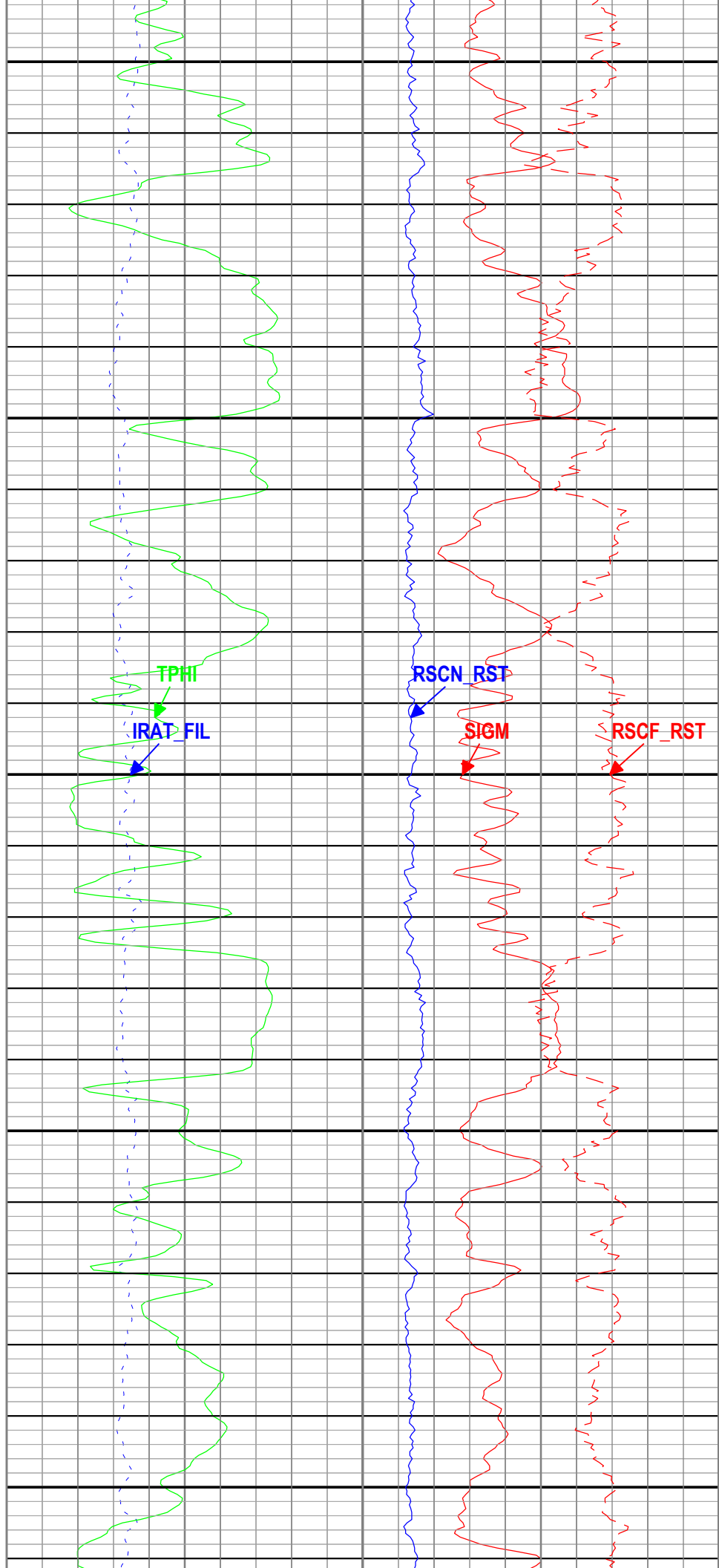
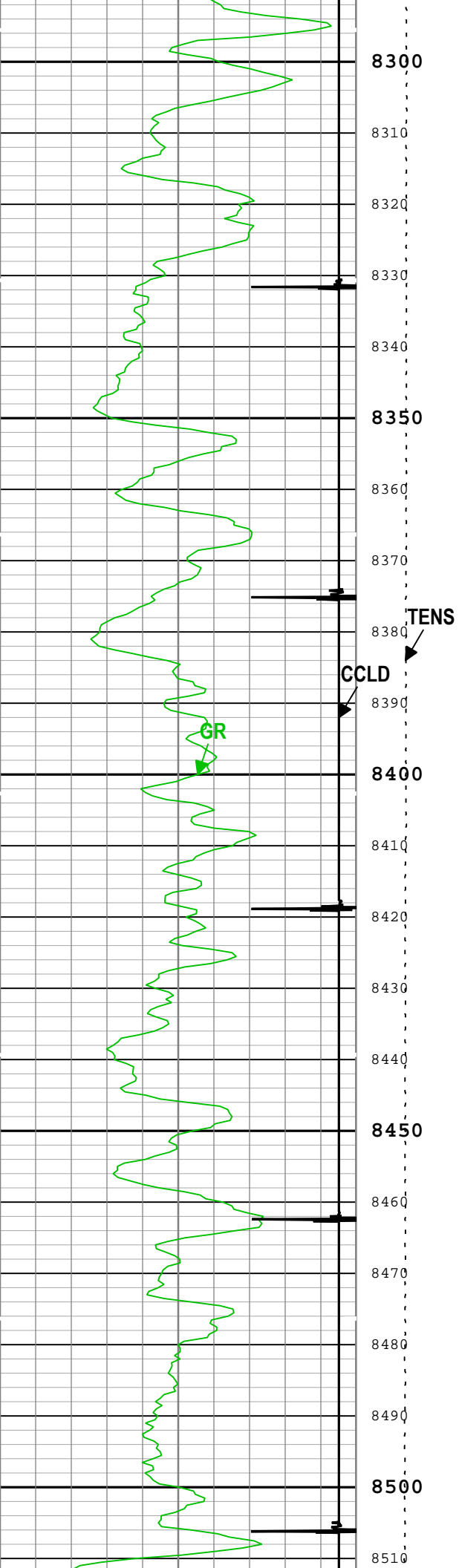


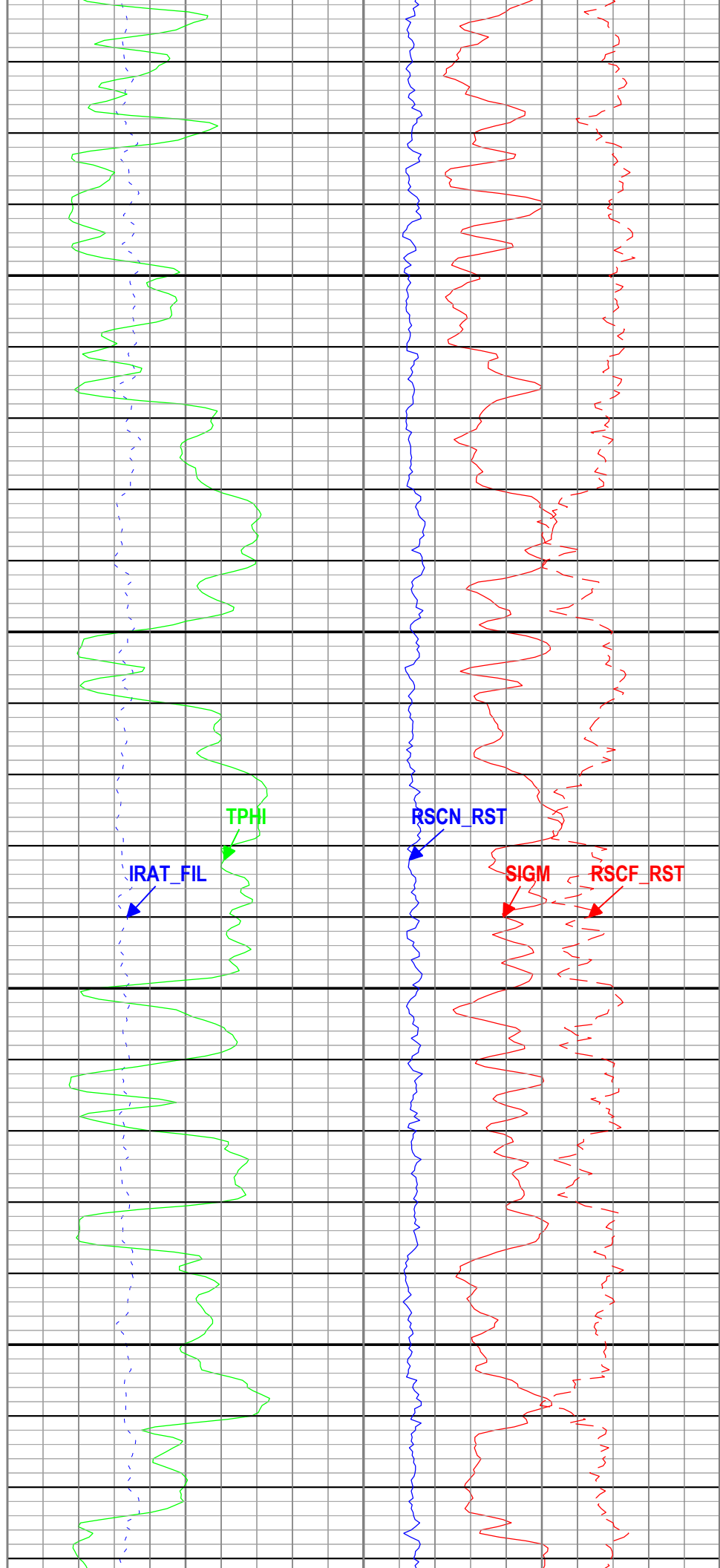
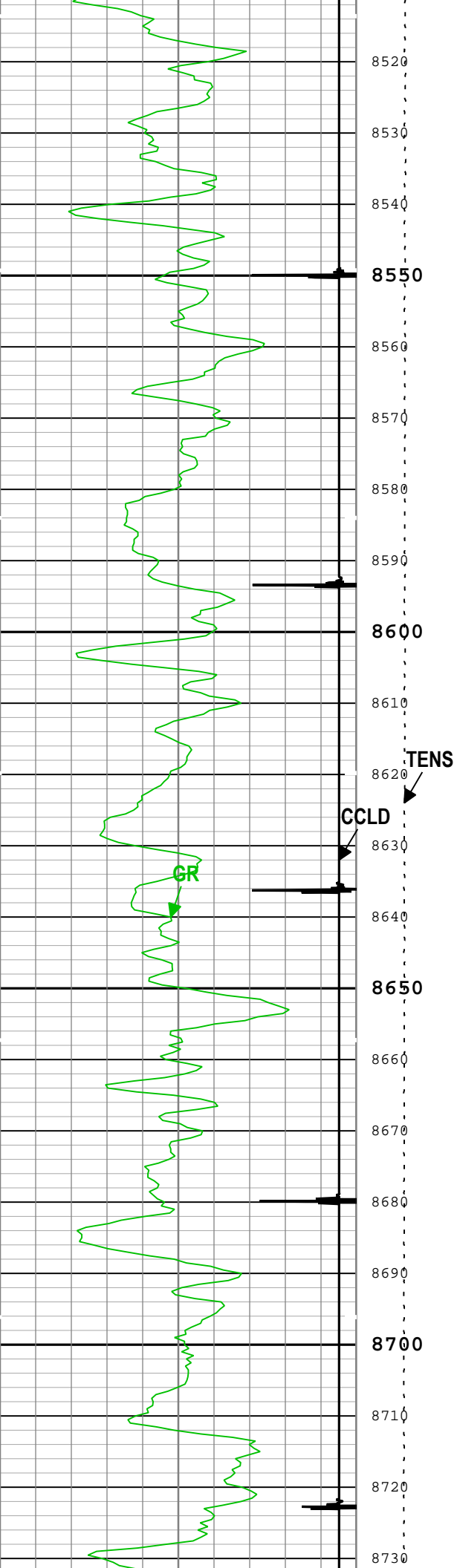


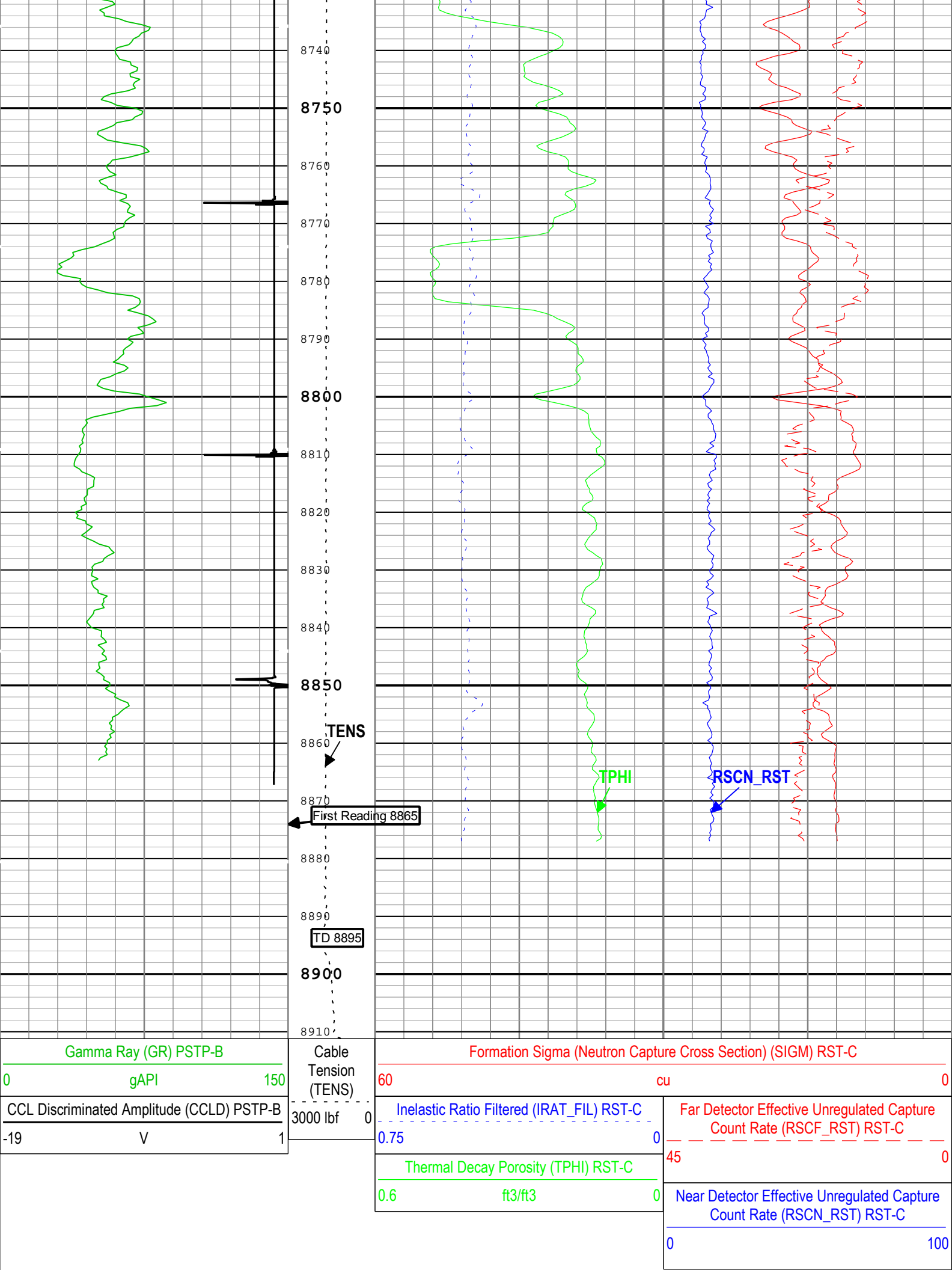










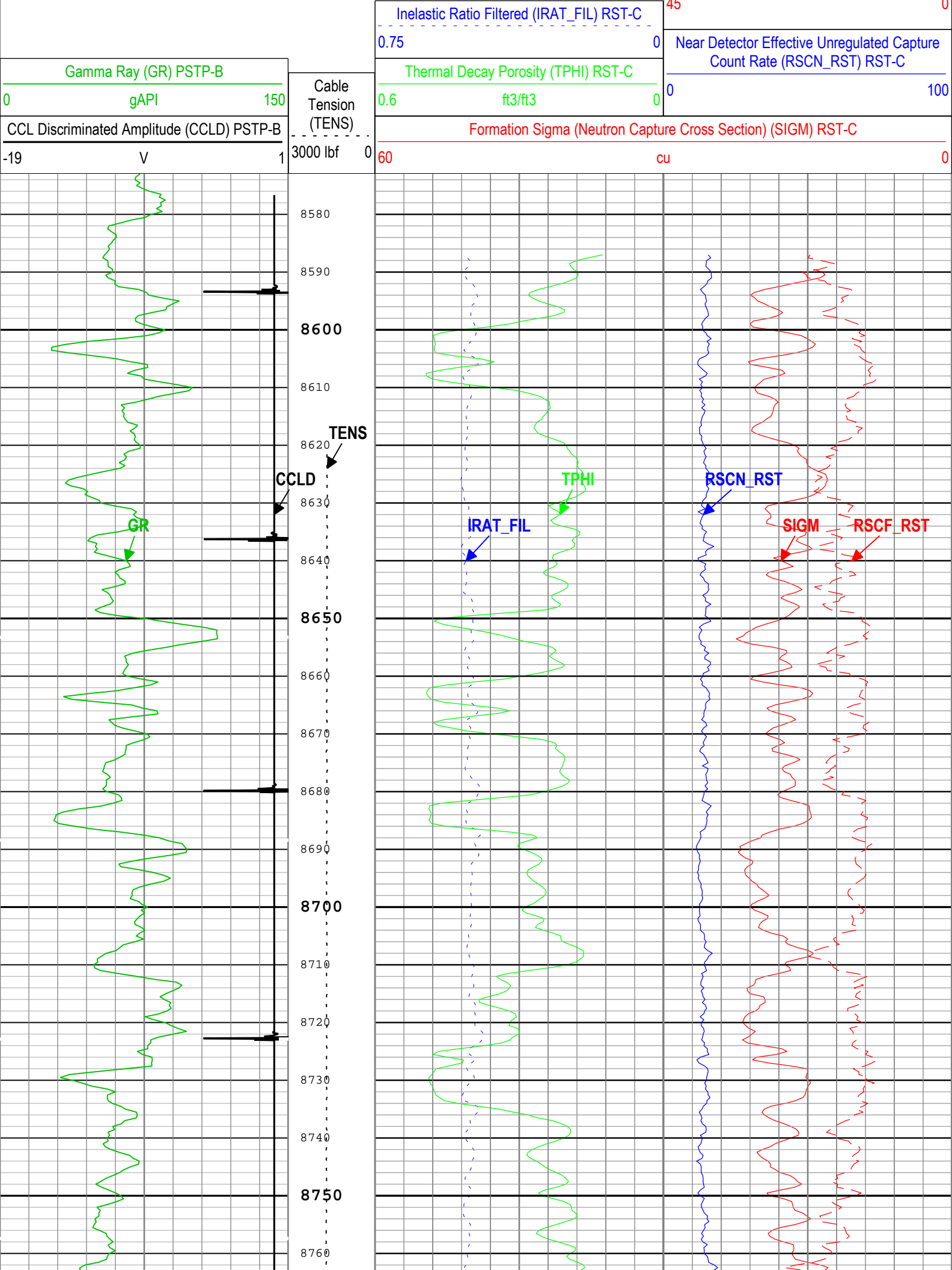


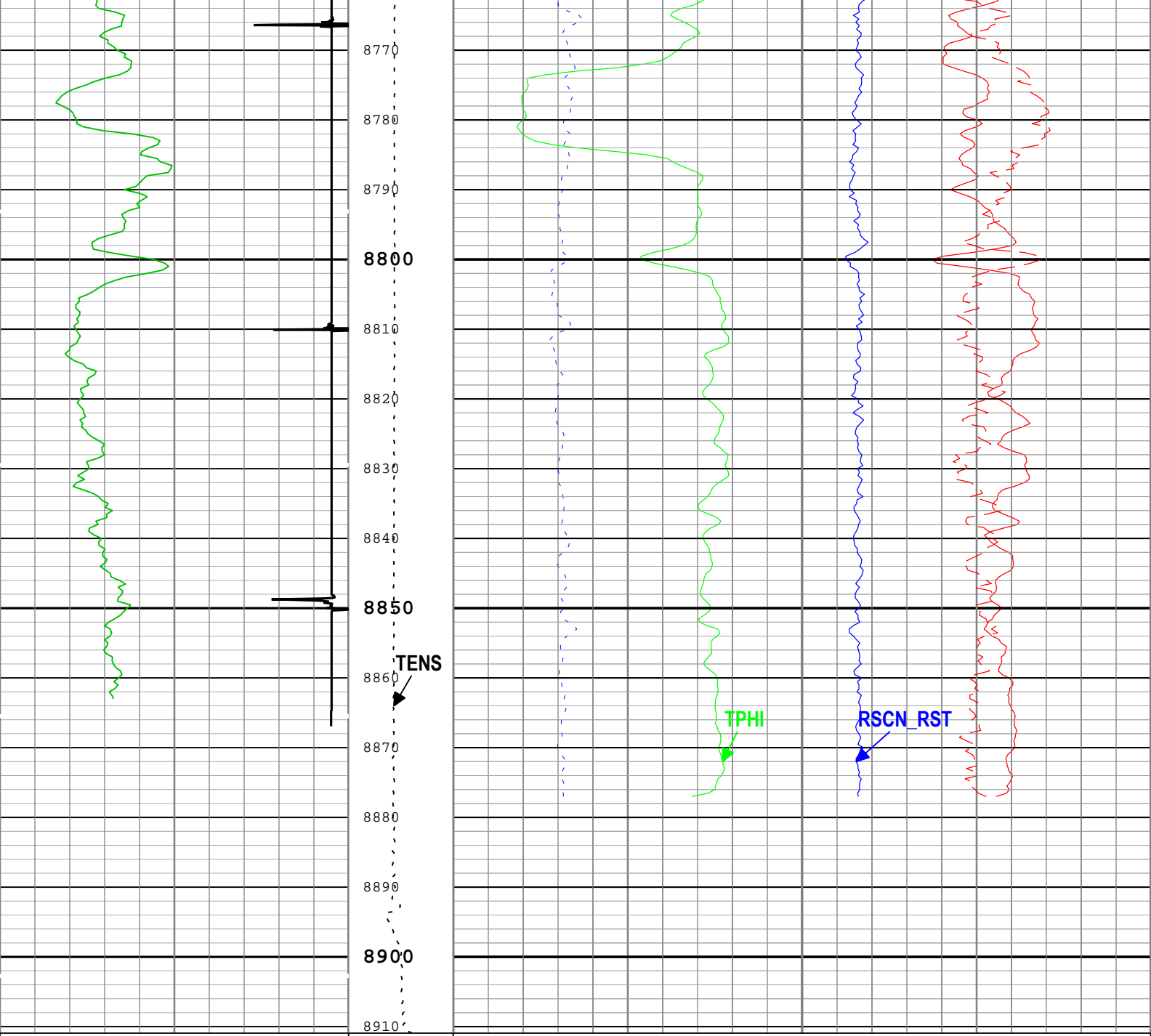
└ ICV - Integrated Cement Volume every 10.00 (ft3)

—IHV - Integrated Hole Volume every 10.00 (ft3)

— ICV - Integrated Cement Volume every 100.00 (ft3)

Far Detector Effective Unregulated Capture
Count Rate (RSCF RST) RST-C





Gamma Ray (GR) PSTP-B			Cable Tension (TENS)	Formation Sigma (Neutron Capture Cross Section) (SIGM) RST-C		
0	gAPI	150		60	cu	0
CCL Discriminated Amplitude (CCLD) PSTP-B			3000 lbf	Inelastic Ratio Filtered (IRAT_FIL) RST-C	Far Detector Effective Unregulated Capture Count Rate (RSCF_RST) RST-C	
-19	V	1	0	0.75	0	45
				Thermal Decay Porosity (TPHI) RST-C	Near Detector Effective Unregulated Capture Count Rate (RSCN_RST) RST-C	
				0.6	0	0
				ft3/ft3		100

- 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)

Channel Processing Parameters	
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RST/SCMT: Parameters

Parameter	Description	Tool	Value	Unit
BHS	Borehole Status (Open or Cased Hole)	Borehole	Open	
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	
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RST/SCMT: 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	

Calibration Report	
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SCMT-CB (Slim Cement Mapping Tool, 1-11/16 OD) Calibration - Run RST/SCMT
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Primary Equipment :		
Slim Cement Mapping Sonde	SCMS-CB	8162

CBL and MAP Amplitude Normalization - Measurements

Master (File):		22:06:24 16-Dec-2017					
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
CBL 3 ft Temperature/Pressure Compensated Raw Amplitude (at 0 degree) - 0	mV	Master	----	----	----	----	<div></div>
MAP 1 Temperature/Pressure Compensated Raw Amplitude (at 0 degree) - 0	mV	Master	----	----	----	----	<div></div>
MAP 2 Temperature/Pressure Compensated Raw Amplitude (at 0 degree) - 0	mV	Master	----	----	----	----	<div></div>
MAP 3 Temperature/Pressure Compensated Raw Amplitude (at 0 degree) - 0	mV	Master	----	----	----	----	<div></div>
MAP 4 Temperature/Pressure Compensated Raw Amplitude (at 0 degree) - 0	mV	Master	----	----	----	----	<div></div>
MAP 5 Temperature/Pressure Compensated Raw Amplitude (at 0 degree) - 0	mV	Master	----	----	----	----	<div></div>
MAP 6 Temperature/Pressure Compensated Raw Amplitude (at 0 degree) - 0	mV	Master	----	----	----	----	<div></div>
MAP 7 Temperature/Pressure Compensated Raw Amplitude (at 0 degree) - 0	mV	Master	----	----	----	----	<div></div>
MAP 8 Temperature/Pressure Compensated Raw Amplitude (at 0 degree) - 0	mV	Master	----	----	----	----	<div></div>
CBL 3 ft Temperature/Pressure Compensated Raw Amplitude (at 90 degree) - 0	mV	Master	----	----	----	----	<div></div>
MAP 1 Temperature/Pressure Compensated Raw Amplitude (at 90 degree) - 0	mV	Master	----	----	----	----	<div></div>
MAP 2 Temperature/Pressure Compensated Raw Amplitude (at 90 degree) - 0	mV	Master	----	----	----	----	<div></div>
MAP 3 Temperature/Pressure Compensated Raw Amplitude (at 90 degree) - 0	mV	Master	----	----	----	----	<div></div>
MAP 4 Temperature/Pressure Compensated Raw Amplitude (at 90 degree) - 0	mV	Master	----	----	----	----	<div></div>
MAP 5 Temperature/Pressure Compensated Raw Amplitude (at 90 degree) - 0	mV	Master	----	----	----	----	<div></div>
MAP 6 Temperature/Pressure Compensated Raw Amplitude (at 90 degree) - 0	mV	Master	----	----	----	----	<div></div>
MAP 7 Temperature/Pressure Compensated Raw Amplitude (at 90 degree) - 0	mV	Master	----	----	----	----	<div></div>
MAP 8 Temperature/Pressure Compensated Raw Amplitude (at 90 degree) - 0	mV	Master	----	----	----	----	<div></div>

CBL 3 ft Temperature/Pressure Compensated Raw Amplitude (at 180 degree) - 0	mV	Master	----	----	----	----	<input type="text"/>
MAP 1 Temperature/Pressure Compensated Raw Amplitude (at 180 degree) - 0	mV	Master	----	----	----	----	<input type="text"/>
MAP 2 Temperature/Pressure Compensated Raw Amplitude (at 180 degree) - 0	mV	Master	----	----	----	----	<input type="text"/>
MAP 3 Temperature/Pressure Compensated Raw Amplitude (at 180 degree) - 0	mV	Master	----	----	----	----	<input type="text"/>
MAP 4 Temperature/Pressure Compensated Raw Amplitude (at 180 degree) - 0	mV	Master	----	----	----	----	<input type="text"/>
MAP 5 Temperature/Pressure Compensated Raw Amplitude (at 180 degree) - 0	mV	Master	----	----	----	----	<input type="text"/>
MAP 6 Temperature/Pressure Compensated Raw Amplitude (at 180 degree) - 0	mV	Master	----	----	----	----	<input type="text"/>
MAP 7 Temperature/Pressure Compensated Raw Amplitude (at 180 degree) - 0	mV	Master	----	----	----	----	<input type="text"/>
MAP 8 Temperature/Pressure Compensated Raw Amplitude (at 180 degree) - 0	mV	Master	----	----	----	----	<input type="text"/>
CBL 3 ft Temperature/Pressure Compensated Raw Amplitude (at 270 degree) - 0	mV	Master	----	----	----	----	<input type="text"/>
MAP 1 Temperature/Pressure Compensated Raw Amplitude (at 270 degree) - 0	mV	Master	----	----	----	----	<input type="text"/>
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MAP 3 Temperature/Pressure Compensated Raw Amplitude (at 270 degree) - 0	mV	Master	----	----	----	----	<input type="text"/>
MAP 4 Temperature/Pressure Compensated Raw Amplitude (at 270 degree) - 0	mV	Master	----	----	----	----	<input type="text"/>
MAP 5 Temperature/Pressure Compensated Raw Amplitude (at 270 degree) - 0	mV	Master	----	----	----	----	<input type="text"/>
MAP 6 Temperature/Pressure Compensated Raw Amplitude (at 270 degree) - 0	mV	Master	----	----	----	----	<input type="text"/>
MAP 7 Temperature/Pressure Compensated Raw Amplitude (at 270 degree) - 0	mV	Master	----	----	----	----	<input type="text"/>
MAP 8 Temperature/Pressure Compensated Raw Amplitude (at 270 degree) - 0	mV	Master	----	----	----	----	<input type="text"/>

CBL and MAP Amplitude Normalization - Coefficients

Master (File):		22:06:24 16-Dec-2017					
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	<input type="text"/>
Normalization Temperature in SFT Tube	degF	Master			70.00		<input type="text"/>
CBL Correction Factor		Master			0.076		<input type="text"/>
MAP 1 Correction Factor		Master			0.076		<input type="text"/>
MAP 2 Correction Factor		Master			0.093		<input type="text"/>
MAP 3 Correction Factor		Master			0.114		<input type="text"/>
MAP 4 Correction Factor		Master			0.127		<input type="text"/>
MAP 5 Correction Factor		Master			0.140		<input type="text"/>
MAP 6 Correction Factor		Master			0.096		<input type="text"/>
MAP 7 Correction Factor		Master			0.076		<input type="text"/>
MAP 8 Correction Factor		Master			0.082		<input type="text"/>

CBL and MAP Amplitude Adjustment - Measurements

Before (Measured):		06:32:25 17-Dec-2017					
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	<input type="text"/>
CBL Amplitude	mV	Before			95.17		<input type="text"/>
Average MAP Amplitude (Fluid Compensated)	mV	Before			115.55		<input type="text"/>
Measurement Depth	ft	Before			1351.88		<input type="text"/>

CBL and MAP Amplitude Adjustment - Coefficients

Before (Measured):		06:32:25 17-Dec-2017					
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	<input type="text"/>
CBL Adjustment Factor		Before			0.841		<input type="text"/>
CBL LQC Reference Amplitude in Free Pipe	mV	Before			80.00		<input type="text"/>
MAP Adjustment Factor		Before			0.865		<input type="text"/>
Depth of Before Calibration	ft	Before			1351.88		<input type="text"/>

RST-C (Reservoir Saturation Pro Tool C) Calibration - Run RST/SCMT

Primary Equipment :

RST IC Tank Calibration - RST IC Tank Calibration

Master:

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Near Spectral Acquisition Time Calibration Coefficient - 0	min	Master	----	----	----	----	
Near Carbon/Oxygen Ratio Calibration Coefficient - 0		Master	----	----	----	----	
Far Carbon/Oxygen Ratio Calibration Coefficient - 0		Master	----	----	----	----	
Near Windows Carbon/Oxygen Ratio Calibration Coefficient - 0		Master	----	----	----	----	
Far Windows Carbon/Oxygen Ratio Calibration Coefficient - 0		Master	----	----	----	----	
Near IC Mode Capture Optimization Resolution Degradation Factor Calibration Coefficient - 0		Master	----	----	----	----	
Far IC Mode Capture Optimization Resolution Degradation Factor Calibration Coefficient - 0		Master	----	----	----	----	
Near Pulse Shape Compensation Voltage Setting Echo Calibration Coefficient - 0	V	Master	----	----	----	----	
Far Pulse Shape Compensation Voltage Setting Echo Calibration Coefficient - 0	V	Master	----	----	----	----	
Near Photomultiplier High Voltage Setting Echo Calibration Coefficient - 0	V	Master	----	----	----	----	
Far Photomultiplier High Voltage Setting Echo Calibration Coefficient - 0	V	Master	----	----	----	----	
Minitron Measured Beam Current Calibration Coefficient - 0	uA	Master	----	----	----	----	
Grid Current Peak Calibration Coefficient - 0	mA	Master	----	----	----	----	
Minitron Measured Extractor Current Calibration Coefficient - 0	uA	Master	----	----	----	----	
Minitron Measured High Voltage Calibration Coefficient - 0	kV	Master	----	----	----	----	
Near Instantaneous Count Rate Calibration Coefficient - 0	kHz	Master	----	----	----	----	
Near/Far Count Rate Ratio Calibration Coefficient - 0		Master	----	----	----	----	

RST IC Tank Check - RST IC Tank Check

Master:

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Near Spectral Acquisition Time Calibration Coefficient - 0	min	Master	----	----	----	----	
Near Carbon/Oxygen Ratio Calibration Coefficient - 0		Master	----	----	----	----	
Far Carbon/Oxygen Ratio Calibration Coefficient - 0		Master	----	----	----	----	
Near Windows Carbon/Oxygen Ratio Calibration Coefficient - 0		Master	----	----	----	----	
Far Windows Carbon/Oxygen Ratio Calibration Coefficient - 0		Master	----	----	----	----	
Near IC Mode Capture Optimization Resolution Degradation Factor Calibration Coefficient - 0		Master	----	----	----	----	
Far IC Mode Capture Optimization Resolution Degradation Factor Calibration Coefficient - 0		Master	----	----	----	----	
Near Pulse Shape Compensation Voltage Setting Echo Calibration Coefficient - 0	V	Master	----	----	----	----	
Far Pulse Shape Compensation Voltage Setting Echo Calibration Coefficient - 0	V	Master	----	----	----	----	
Near Photomultiplier High Voltage Setting Echo Calibration Coefficient - 0	V	Master	----	----	----	----	
Far Photomultiplier High Voltage Setting Echo Calibration Coefficient - 0	V	Master	----	----	----	----	
Minitron Measured Beam Current Calibration Coefficient - 0	uA	Master	----	----	----	----	
Grid Current Peak Calibration Coefficient - 0	mA	Master	----	----	----	----	
Minitron Measured Extractor Current Calibration Coefficient - 0	uA	Master	----	----	----	----	
Minitron Measured High Voltage Calibration Coefficient - 0	kV	Master	----	----	----	----	
Near Instantaneous Count Rate Calibration Coefficient - 0	kHz	Master	----	----	----	----	

Near Instantaneous Count Rate Calibration Coefficient - 0	KHz	Master	----	----	----	----	<div></div>
Near/Far Count Rate Ratio Calibration Coefficient - 0		Master	----	----	----	----	<div></div>
RST Sigma Tank Check - RST Sigma Tank Check							
Master:							
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	<div></div>
Near Spectral Acquisition Time Calibration Coefficient - 0	min	Master	----	----	----	----	<div></div>
Near/Far Capture Ratio Calibration Coefficient - 0		Master	----	----	----	----	<div></div>
Sigma Formation Near Apparent Calibration Coefficient - 0	1/m	Master	----	----	----	----	<div></div>
Sigma Formation Far Apparent Calibration Coefficient - 0	1/m	Master	----	----	----	----	<div></div>
Near Pulse Shape Compensation Voltage Setting Echo Calibration Coefficient - 0	V	Master	----	----	----	----	<div></div>
Far Pulse Shape Compensation Voltage Setting Echo Calibration Coefficient - 0	V	Master	----	----	----	----	<div></div>
Near Photomultiplier High Voltage Setting Echo Calibration Coefficient - 0	V	Master	----	----	----	----	<div></div>
Far Photomultiplier High Voltage Setting Echo Calibration Coefficient - 0	V	Master	----	----	----	----	<div></div>
Minitron Measured Beam Current Calibration Coefficient - 0	uA	Master	----	----	----	----	<div></div>
Grid Current Peak Calibration Coefficient - 0	mA	Master	----	----	----	----	<div></div>
Minitron Measured Extractor Current Calibration Coefficient - 0	uA	Master	----	----	----	----	<div></div>
Minitron Measured High Voltage Calibration Coefficient - 0	kV	Master	----	----	----	----	<div></div>
Near Instantaneous Count Rate Calibration Coefficient - 0	KHz	Master	----	----	----	----	<div></div>
Near/Far Count Rate Ratio Calibration Coefficient - 0		Master	----	----	----	----	<div></div>

PSTP-B (PSP Telemetry Platform B - Quartz) Calibration - Run RST/SCMT

Primary Equipment :			
PBMS-B	PBMS-B	2826	
Calibration Parameter :			
JIG-BKGD			

PBMS Gamma Ray Check - PBMSB Gamma Ray Accumulations

Before:			After:				
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	<div></div>
GR Zero Average - 0	gAPI	Before	----	----	----	----	<div></div>
		After	----	----	----	----	<div></div>
		After-Before	----	----	----	----	<div></div>
GR Zero Standard Deviation - 0	gAPI	Before	----	----	----	----	<div></div>
		After	----	----	----	----	<div></div>
		After-Before	----	----	----	----	<div></div>
GR Zero Accumulation - 0	gAPI	Before	----	----	----	----	<div></div>
		After	----	----	----	----	<div></div>
		After-Before	----	----	----	----	<div></div>
GR Plus Average - 0	gAPI	Before	----	----	----	----	<div></div>
		After	----	----	----	----	<div></div>
		After-Before	----	----	----	----	<div></div>
GR Plus Standard Deviation - 0	gAPI	Before	----	----	----	----	<div></div>
		After	----	----	----	----	<div></div>
		After-Before	----	----	----	----	<div></div>
GR Plus Max Deviation - 0	gAPI	Before	----	----	----	----	<div></div>
		After	----	----	----	----	<div></div>
		After-Before	----	----	----	----	<div></div>
Jig-Background	gAPI	Before			NOT DONE		<div></div>
		After			NOT DONE		<div></div>
		After-Before	----	----	----	----	<div></div>

PBMS RTD Well Thermometer Master Calibration

Master (EEPROM): 18:00:00 20-Sep-2005

PBMS_RTD_THERM RTD Coefficients
(Master)

	Tt**0	Tt**1	Tt**2	Tt**3	Tt**4	Tt**5
Tt**0	-1039.041	886.4933	-323.12	59.47004	-4.053754	0

PBMS Gamma Ray Master Calibration

Master (EEPROM): 18:00:00 21-Jul-2005

PBMS_GR_MODEL GR Coefficients
(Master)

	Rt**0	Rt**1
Rt**0	2000	1700

PBMS CQG Master Calibration

Master (EEPROM): 18:00:00 20-Sep-2005

PBMS_P_GAUGE_PRES CQG Pressure Model Coefficients
(Master)

	Fb**0	Fb**1	Fb**2	Fb**3	Fb**4	Fb**5
Fc**0	7028.166	0.01527838	-2.999174E-07	-8.000375E-11	-1.300101E-15	-4.427982E-20
Fc**1	-1.08348	-1.294387E-05	-1.002177E-10	-6.98536E-17	3.707468E-20	0
Fc**2	1.007386E-06	4.623061E-11	1.079423E-15	0	0	0
Fc**3	1.722176E-12	3.962212E-16	0	0	0	0
Fc**4	0	0	0	0	0	0
Fc**5	0	0	0	0	0	0

PBMS_P_GAUGE_TEMP CQG Temperature Model Coefficients
(Master)


	Fc**0	Fc**1	Fc**2	Fc**3	Fc**4	Fc**5
Fb**0	113.2112	-0.0003421631	7.580948E-09	1.410591E-13	-1.934219E-17	-2.438453E-21
Fb**1	-0.006012942	1.787595E-08	1.40429E-13	-8.550516E-18	4.836245E-22	0
Fb**2	-3.240061E-08	3.721504E-13	-1.810314E-18	0	0	0
Fb**3	-2.734516E-13	5.075405E-18	0	0	0	0
Fb**4	0	0	0	0	0	0
Fb**5	0	0	0	0	0	0

PBMS_CQG_FCLK_FREQ CQG Clock Frequency Model Coefficients
(Master)

	(Fb'-Fc')**0	(Fb'-Fc')**1	(Fb'-Fc')**2	(Fb'-Fc')**3	(Fb'-Fc')**4	(Fb'-Fc')**5
(Fb'-Fc')**0	31055.54	0.004476088	5.677383E-07	-6.804825E-11	-7.650912E-16	2.396102E-20

PBMS_CQG_FCLK_TEMP CQG Clock Temperature Model Coefficients
(Master)

	(Fb'-Fc')**0	(Fb'-Fc')**1	(Fb'-Fc')**2	(Fb'-Fc')**3	(Fb'-Fc')**4	(Fb'-Fc')**5
(Fb'-Fc')**0	111.4295	-0.005698525	-2.99739E-08	4.77961E-14	-1.361904E-17	1.226328E-21

Company:	Caerus Operating LLC	
Well:	Puckett 24D-23 697	
Field:	Grand Valley	
County:	Garfield	
State:	Colorado	
Cement Bond Log		
RST Sigma Log		
Gamma Ray Collar Log		