

Company: Crestone Peak Resources Operating LLC

Well: Melbon Ranch 4F-17H-M265

Field: Wattenburg

County: Weld Country: USA

Pulse Neutron eXtreme

Gamma Ray Log

FIELD PRINT

Weld
Wattenburg
SWSW S17 T2N R65W
Melbon Ranch 4F-17H-M265
Crestone Peak Resources Operating LLC

Location:		SWSW S17 T2N R65W SHL: 1245 FSL & 219 FWL Lat/Long: 40.13477, -104.696636	Elev.: K.B. 4979.00 ft G.L. 4956.00 ft D.F. 4978.00 ft
Permanent Datum:	Ground Level		Elev.: 4956.00 f
Log Measured From:	Kelly Bushing		23.00 ft above Perm.Datum
Drilling Measured From:	Kelly Bushing		
API Serial No. 05-123-47756	Max.Hole Deviation 0 deg	Longitude: 0° 0' 0" E	Latitude: 0° 0' 0" N

Logging Date 24-Nov-2018

Run Number Two

Depth Driller 12116.00 ft

Schlumberger Depth 12116.00 ft

Bottom Log Interval 7611.00 ft

Top Log Interval 200.00 ft

Casing Fluid Type WBM

Salinity

Density 8.7 lbm/gal

Fluid Level 83.00 ft

BIT/CASING/TUBING STRING

Bit Size 8.50 in

From 2394.00 ft

To 12116.00 ft

Casing/Tubing Size 5.5 in

Weight 20 lbm/ft

Grade N/A

From 0.00 ft

To 12116.00 ft

Max Recorded Temperatures 204 degF

Logger on Bottom 25-Nov-2018

Unit Number 9102

Recorded By C. Stiles/L. Lewis

Witnessed By Keith Kirshisnik

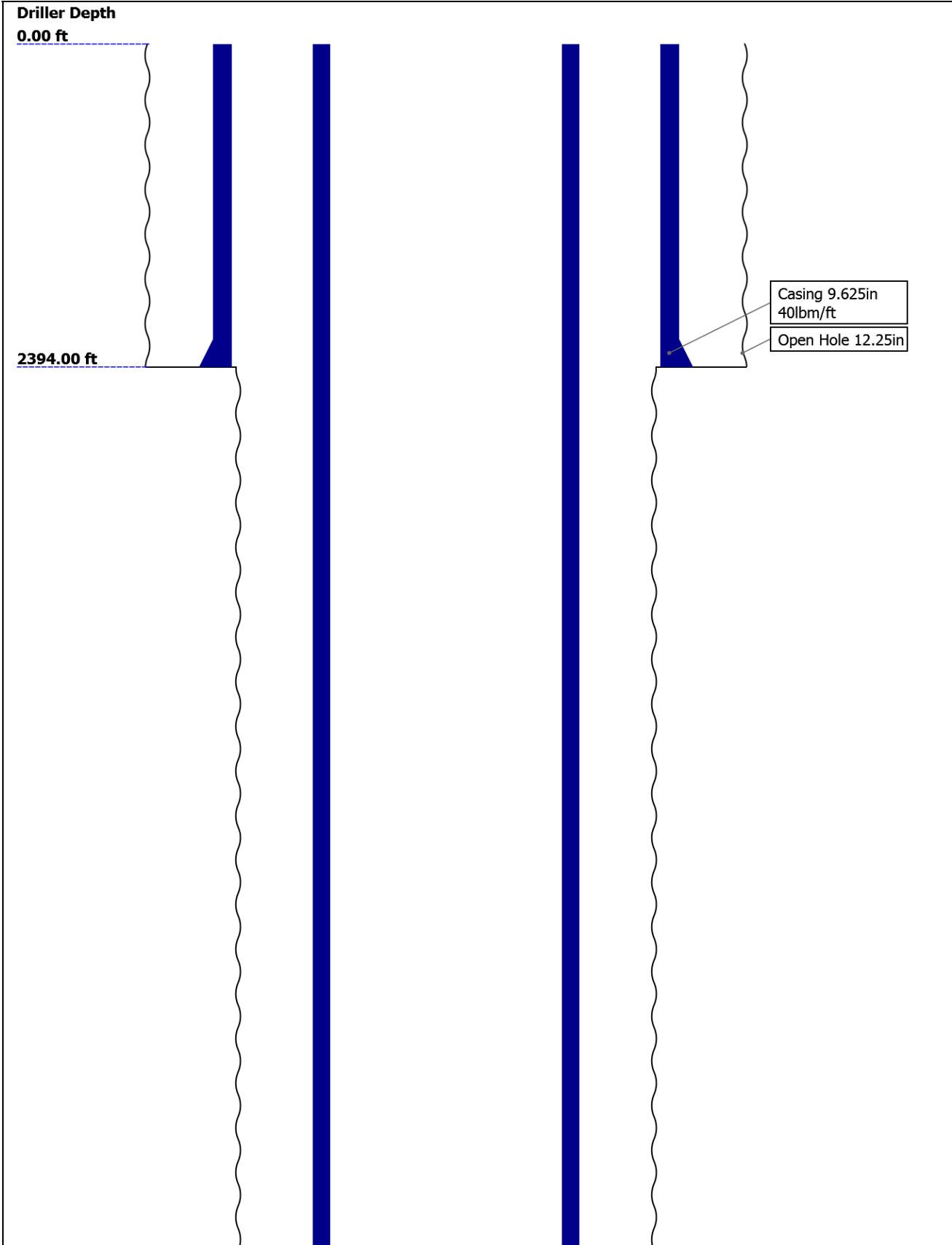
Disclaimer

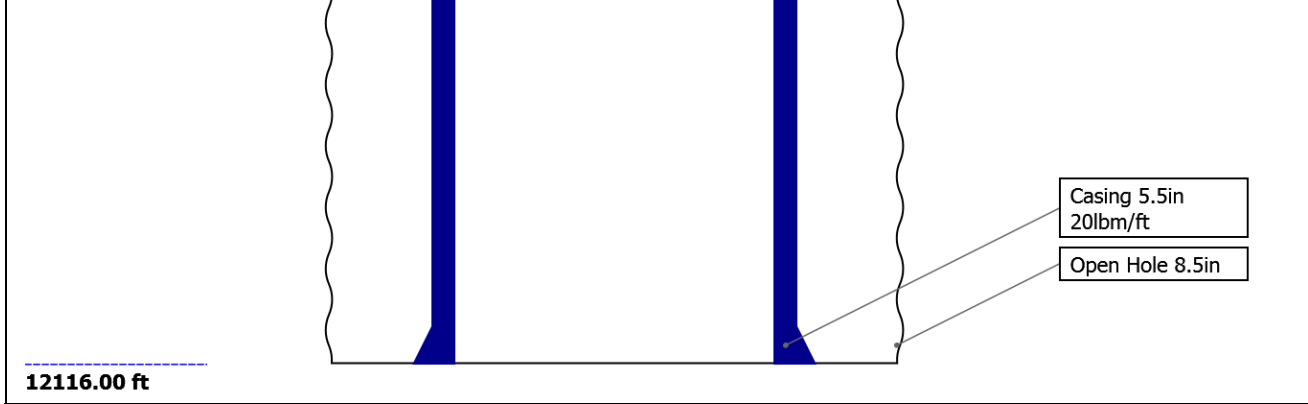
THE USE OF AND RELIANCE UPON THIS RECORDED-DATA BY THE HEREIN NAMED COMPANY (AND ANY OF ITS AFFILIATES, PARTNERS, REPRESENTATIVES, AGENTS, CONSULTANTS AND EMPLOYEES) IS SUBJECT TO THE TERMS AND CONDITIONS AGREED UPON BETWEEN SCHLUMBERGER AND THE COMPANY, INCLUDING: (a) RESTRICTIONS ON USE OF THE RECORDED-DATA; (b) DISCLAIMERS AND WAIVERS OF WARRANTIES AND REPRESENTATIONS REGARDING COMPANY'S USE AND RELIANCE UPON THE RECORDED-DATA; AND (c) CUSTOMER'S FULL AND SOLE RESPONSIBILITY FOR ANY INFERENCE DRAWN OR DECISION MADE IN CONNECTION WITH THE USE OF THIS RECORDED-DATA.

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Well Sketch




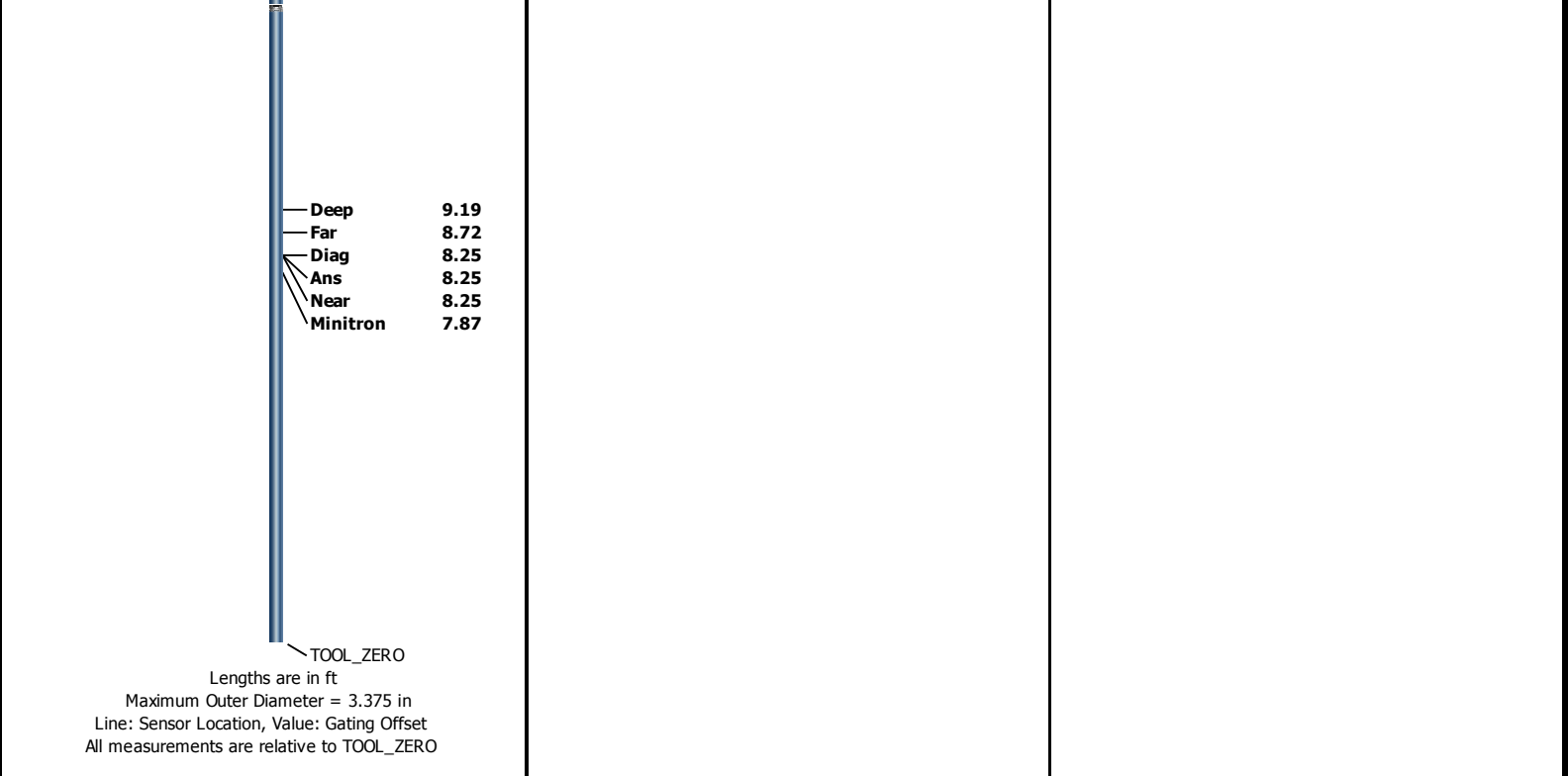


Borehole Size/Casing/Tubing Record

Bit						
Bit Size (in)	12.25	8.5				
Top Driller (ft)	0	2394				
Top Logger (ft)	0	2394				
Bottom Driller (ft)	2394	12116				
Bottom Logger (ft)	2394	12116				
Casing						
Size (in)	9.625	5.5				
Weight (lbm/ft)	40	20				
Inner Diameter (in)	8.835	4.778				
Grade	N/A	N/A				
Top Driller (ft)	0	0				
Top Logger (ft)	0	0				
Bottom Driller (ft)	2394	12116				
Bottom Logger (ft)	2394	12116				

Remarks and Equipment Summary

Two: Toolstring				Two: Remarks	
<div><div><div>Equip name</div><div>LEH-QT</div><div>LEH-QT</div></div><div><div>Length</div><div>31.34</div></div><div><div>MP name</div><div></div></div><div><div>Offset</div><div></div></div></div> <div></div>	Toolstring run as per tool sketch.				
	Pass ran under 0 psi.				
	Thank you for choosing Schlumberger!				
	<div><div><div>AH-63</div><div>27.86</div></div><div><div>AH-79</div><div>27.54</div></div><div><div>PSTP-A:2776</div><div>26.71</div></div><div><div>PSC-A:2776</div><div></div></div><div><div>PSTC-A:861</div><div></div></div><div><div>PBMS-A:2776</div><div></div></div><div><div>Sapphire 10kPSI</div><div></div></div><div><div>PNX-AB:41</div><div>18.44</div></div><div><div>PNCH-A:41</div><div></div></div><div><div>PNCE-AB:42</div><div></div></div><div><div>PNSH-A:46</div><div></div></div><div><div>PNSE-AB:41</div><div></div></div><div><div>PNG-H:3093-51</div><div>317</div></div></div>	GR23.00			
PSTC22.71					
PSTC Tool String Bottom0.00					
Temperature19.92					
Sapphire Pressure19.8					
CCL19.19					
PBMS18.44					



Depth Summary			
		Two	
Depth Measuring Device			
Type	IDW-B		
Serial Number	5822		
Calibration Date	14-Oct-2018		
Calibrator Serial Number	57		
Calibration Cable Type	7-46A XS		
Wheel Correction 1	-2		
Wheel Correction 2	-2		
Tension Device			
Type	CMTD-B/A		
Serial Number	1106		
Calibration Date	19-Oct-2018		
Calibrator Serial Number	78135A		
Number of Calibration Points	10		
Calibration Root Mean Square Error	69		
Calibration Peak Error	116		
Logging Cable			
Type	7-46A-XS		
Serial Number			
Length	24000.00 ft		
Conveyance Type	Wireline		
Rig Type	Crane		
Two:Depth Control Parameters		Depth Control Remarks	
Log Sequence	Subsequent Log In the Well	All Schlumberger depth control procedures followed.	
Reference Log Name	Isolation Scanner	IDW used as primary depth control method.	

Two

Software Version	
Acquisition System	Version
Maxwell 2018 SP2	8.2.104493.3100

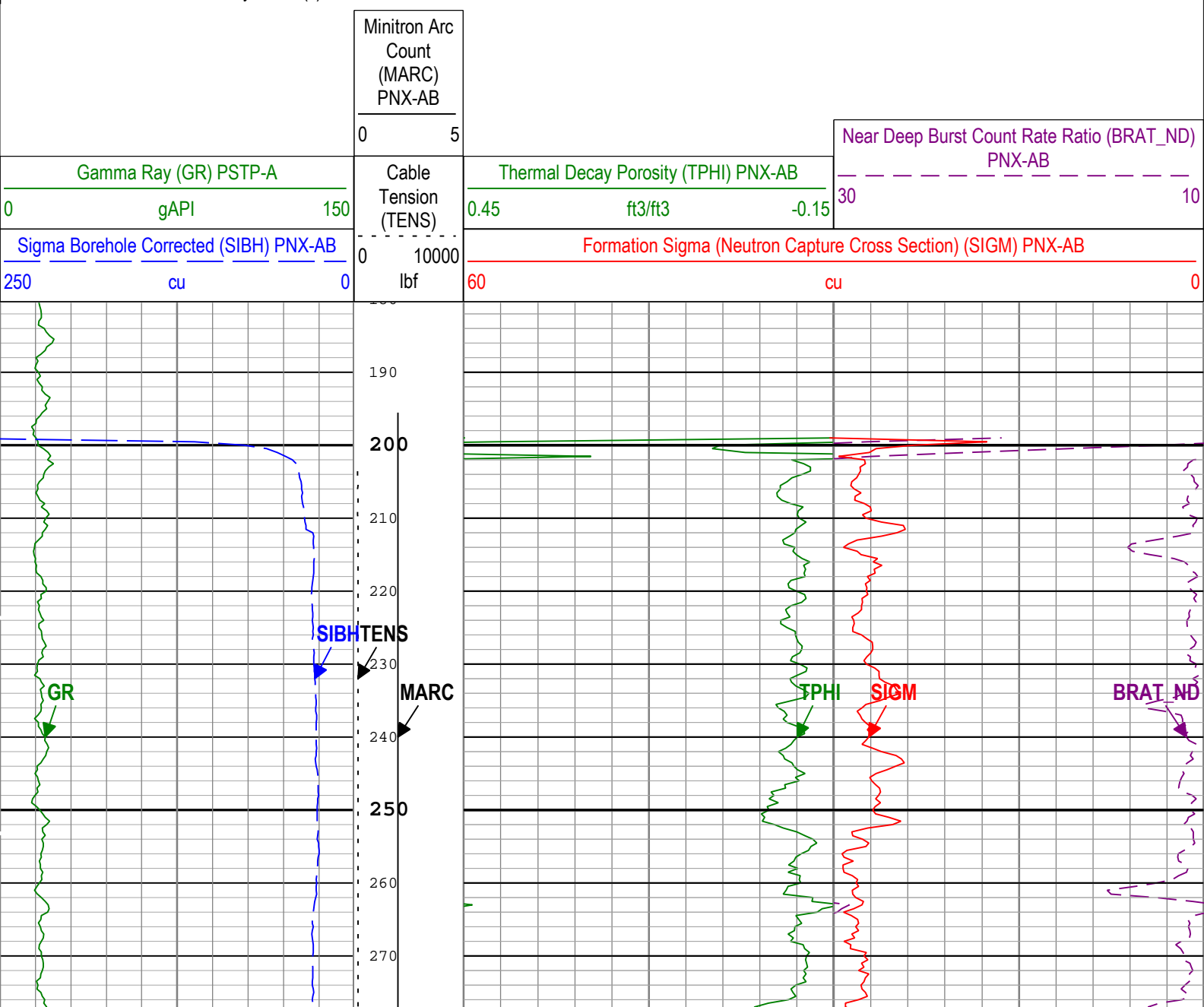
Pass Summary									
Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	DSC Mode	Depth Shift	Include Parallel Data
Two	Log[7]:Up	Up	203.15 ft	7622.20 ft	25-Nov-2018 5:56:07 PM	25-Nov-2018 10:22:33 PM	ON	2.16 ft	No

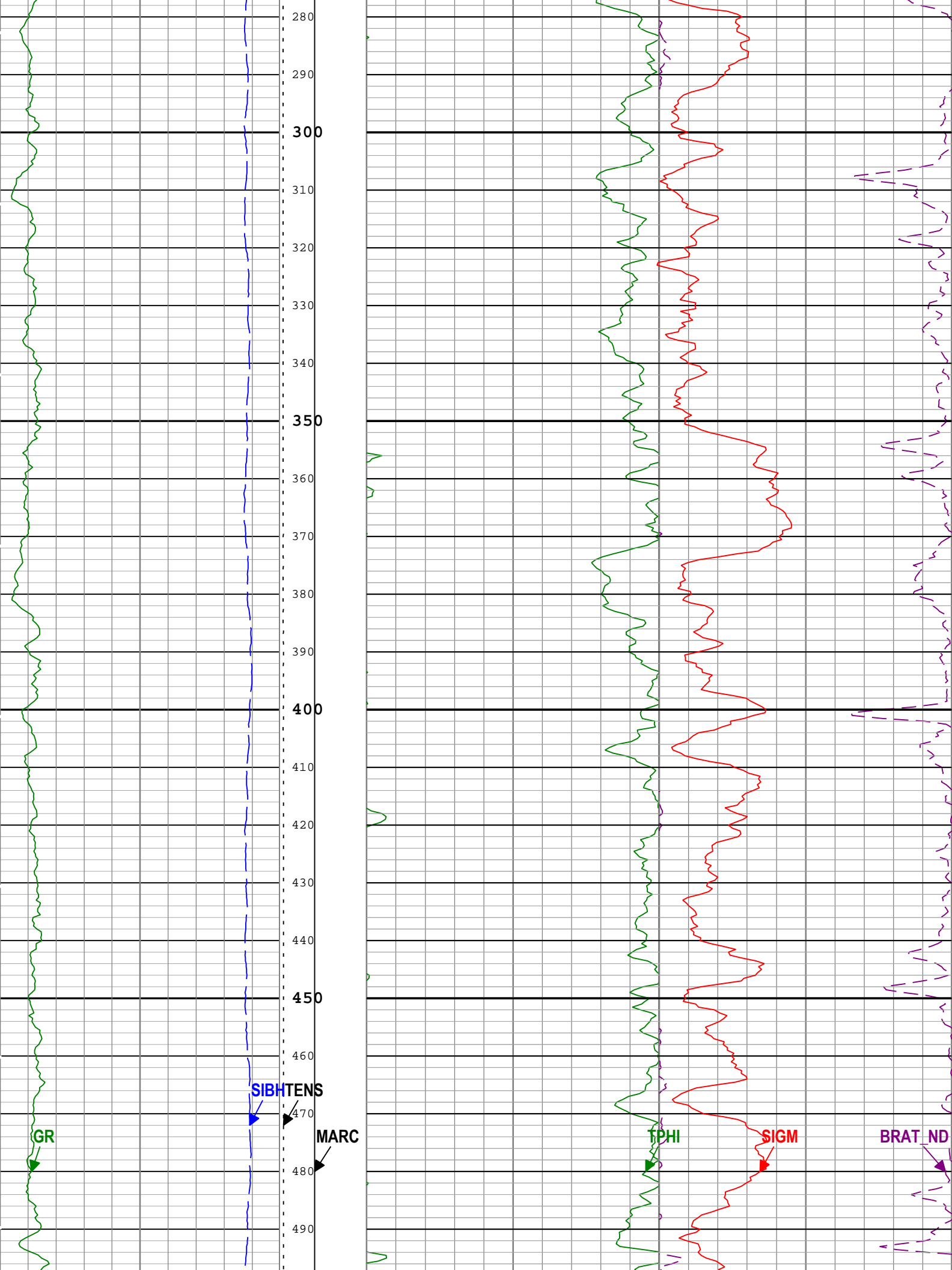
All depths are referenced to toolstring zero

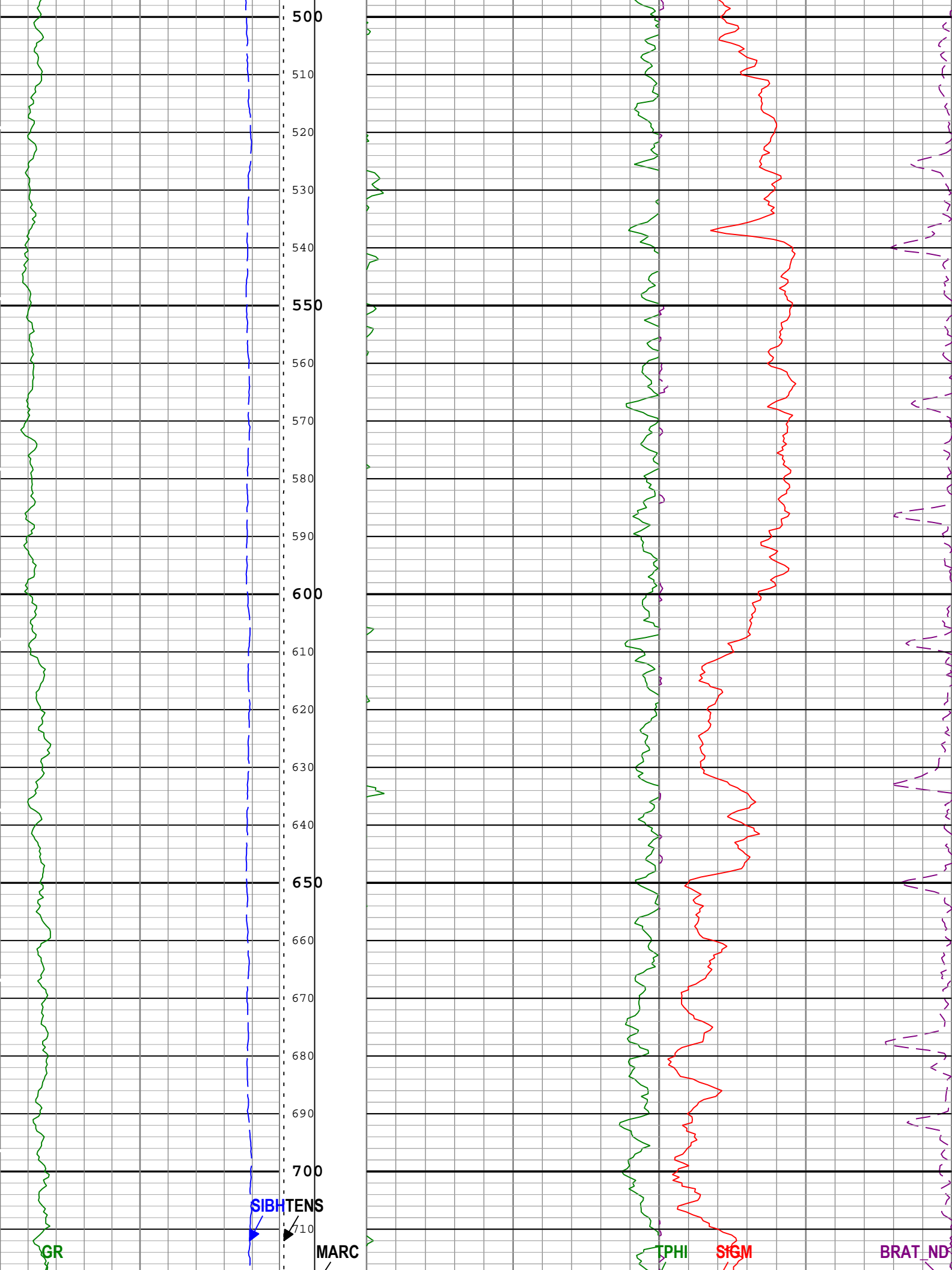
Log	Company:Crestone Peak Resources Operating LLC	Well:Melbon Ranch 4F-17H-M265
	Two: Log[7]:Up:S004	

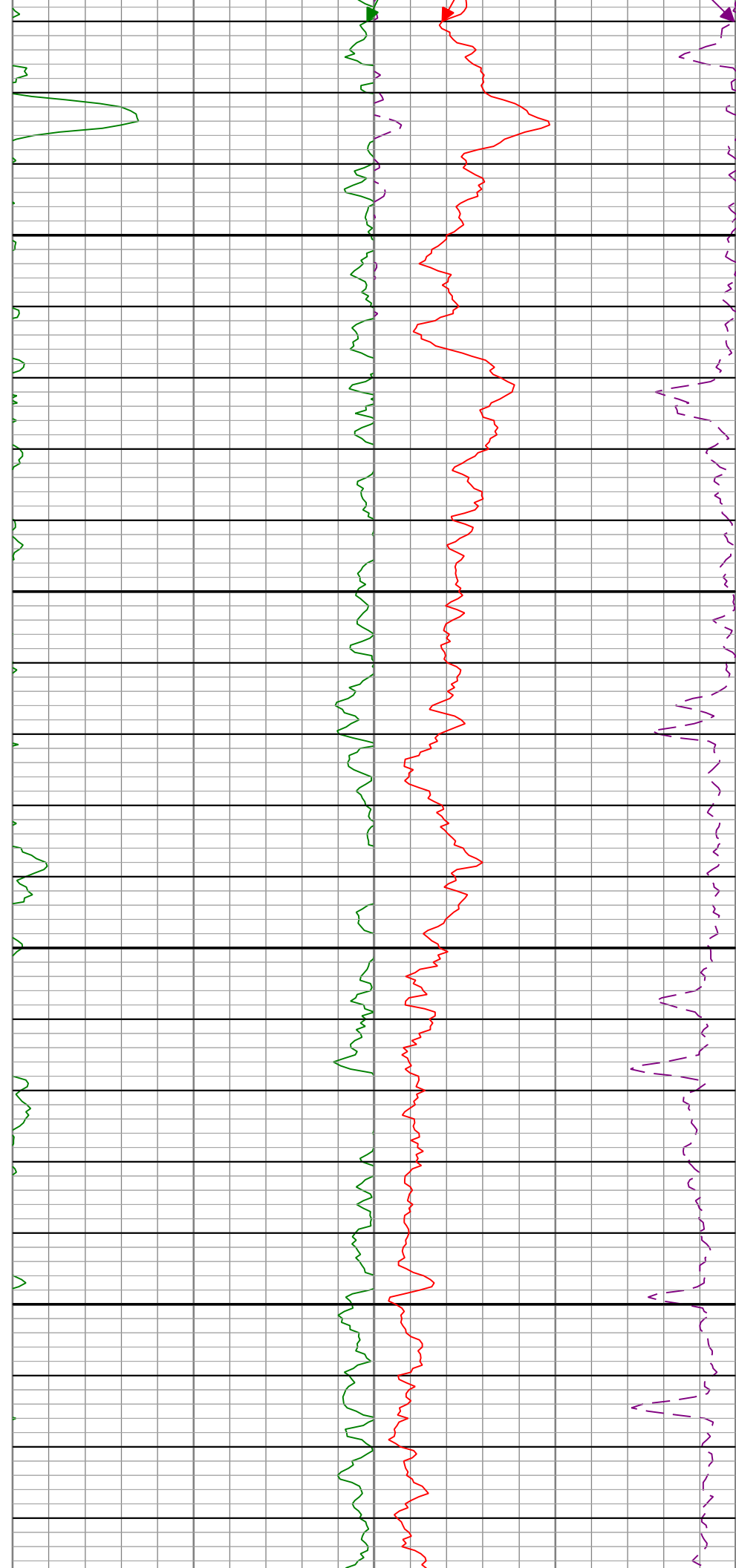
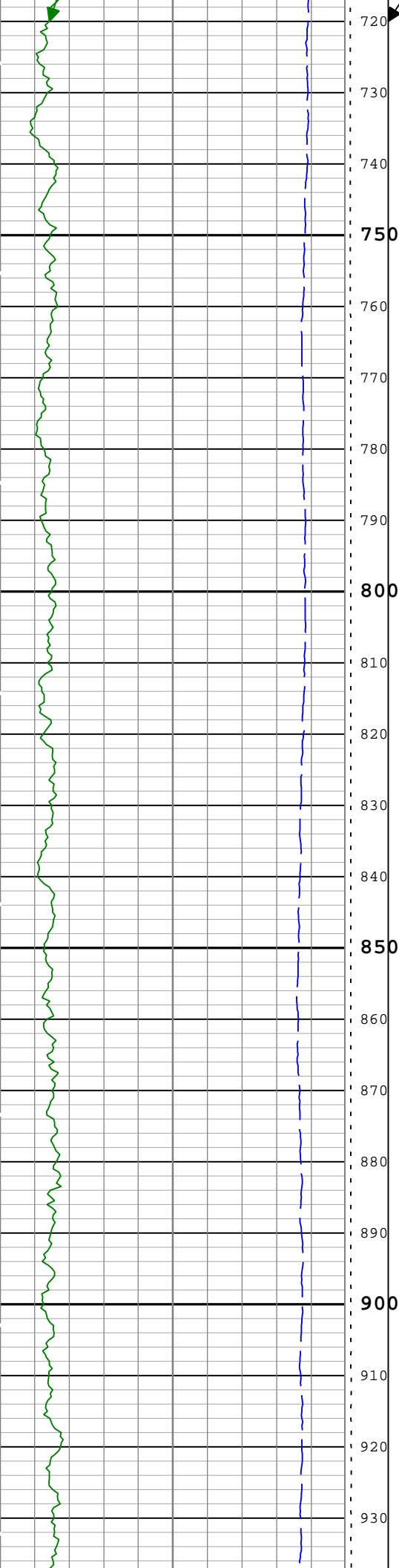
Description: Pulsar (PNX) Sigma Format: Log (Pulsar (PNX) Sigma) Index Scale: 5 in per 100 ft Index Unit: ft Index Type: Measured Depth Creation Date: 25-Nov-2018 23:07:51

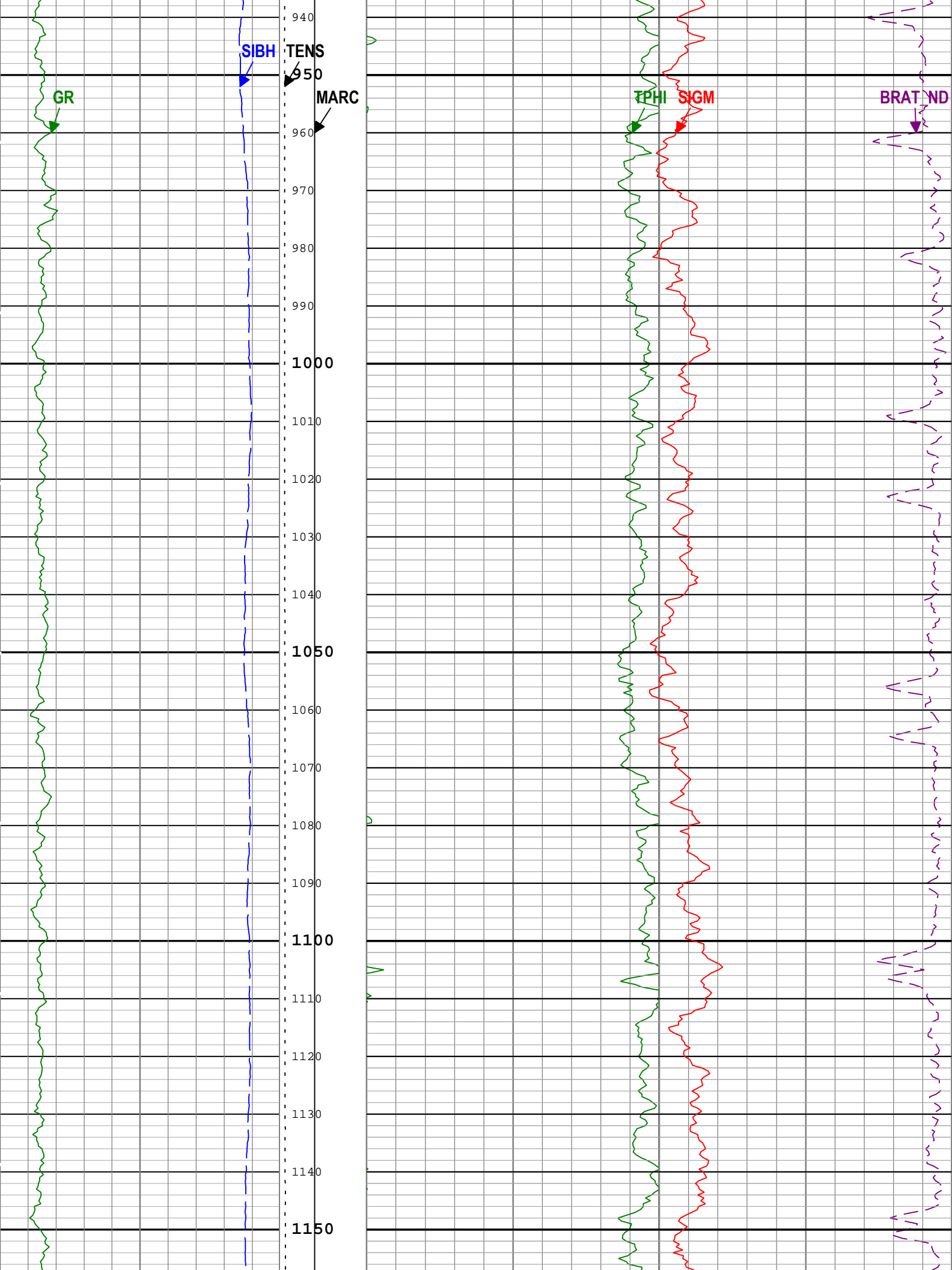
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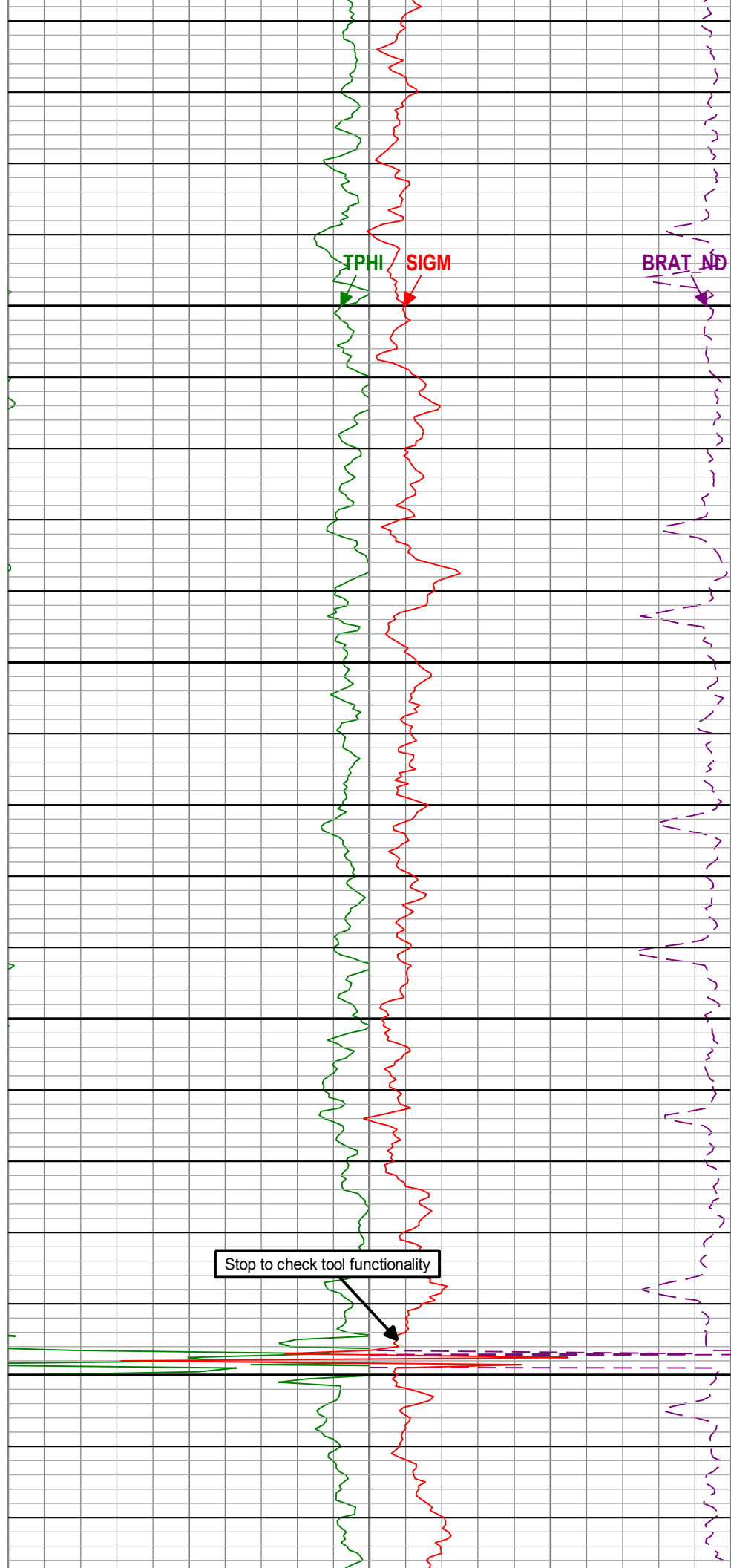
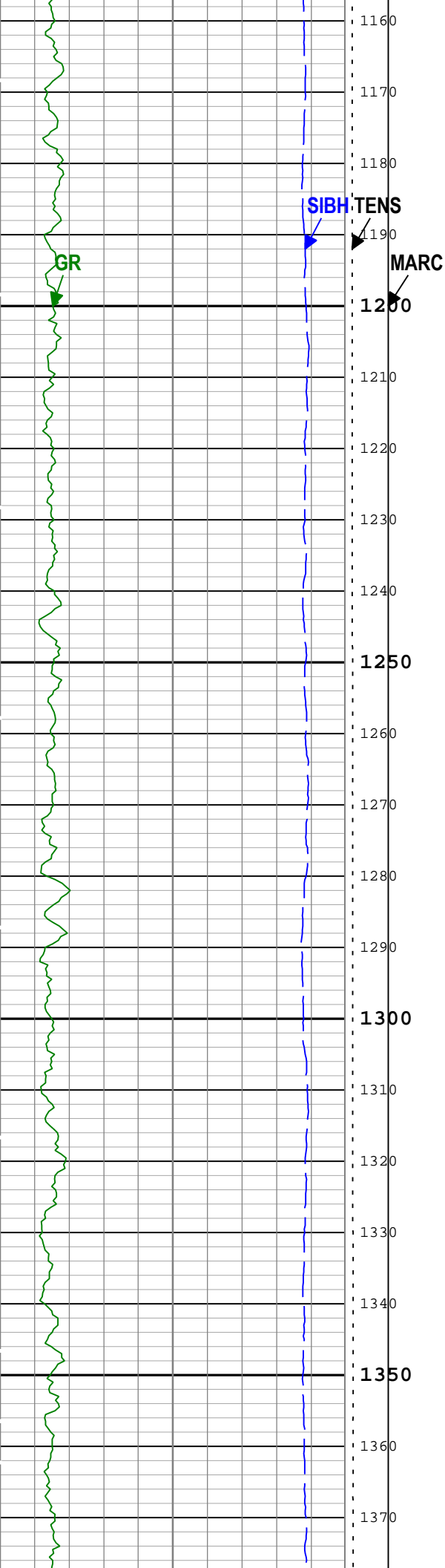


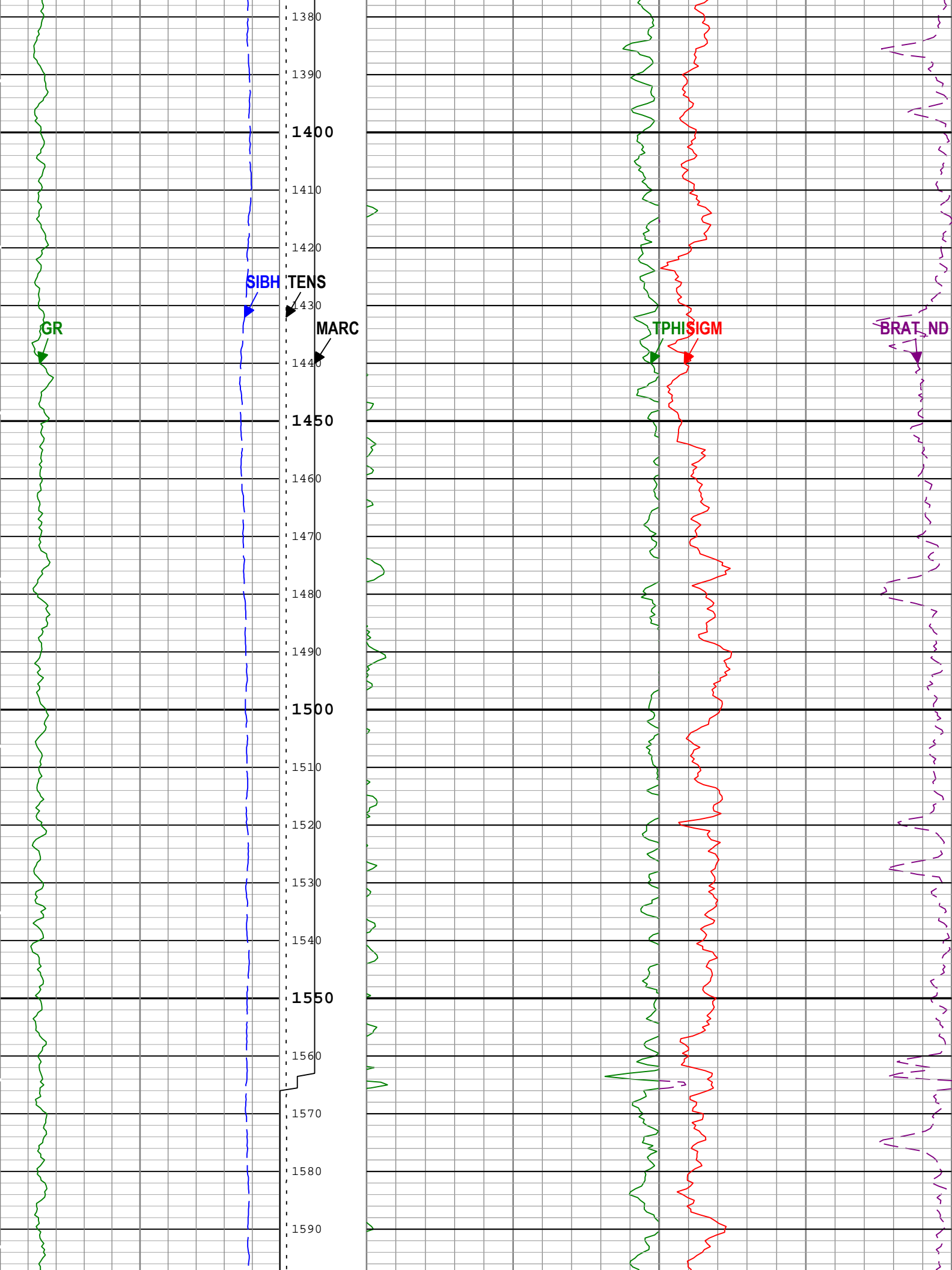


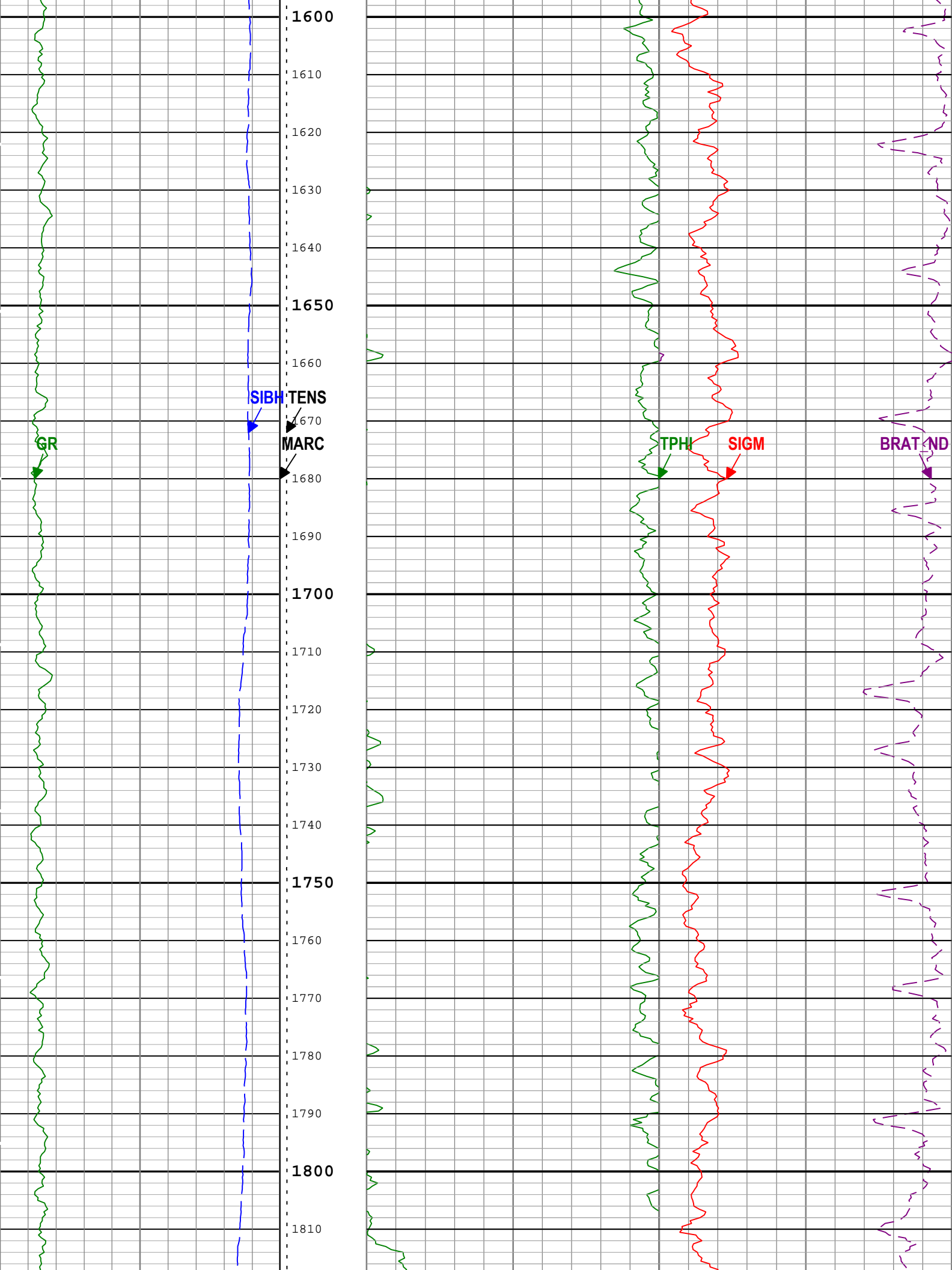


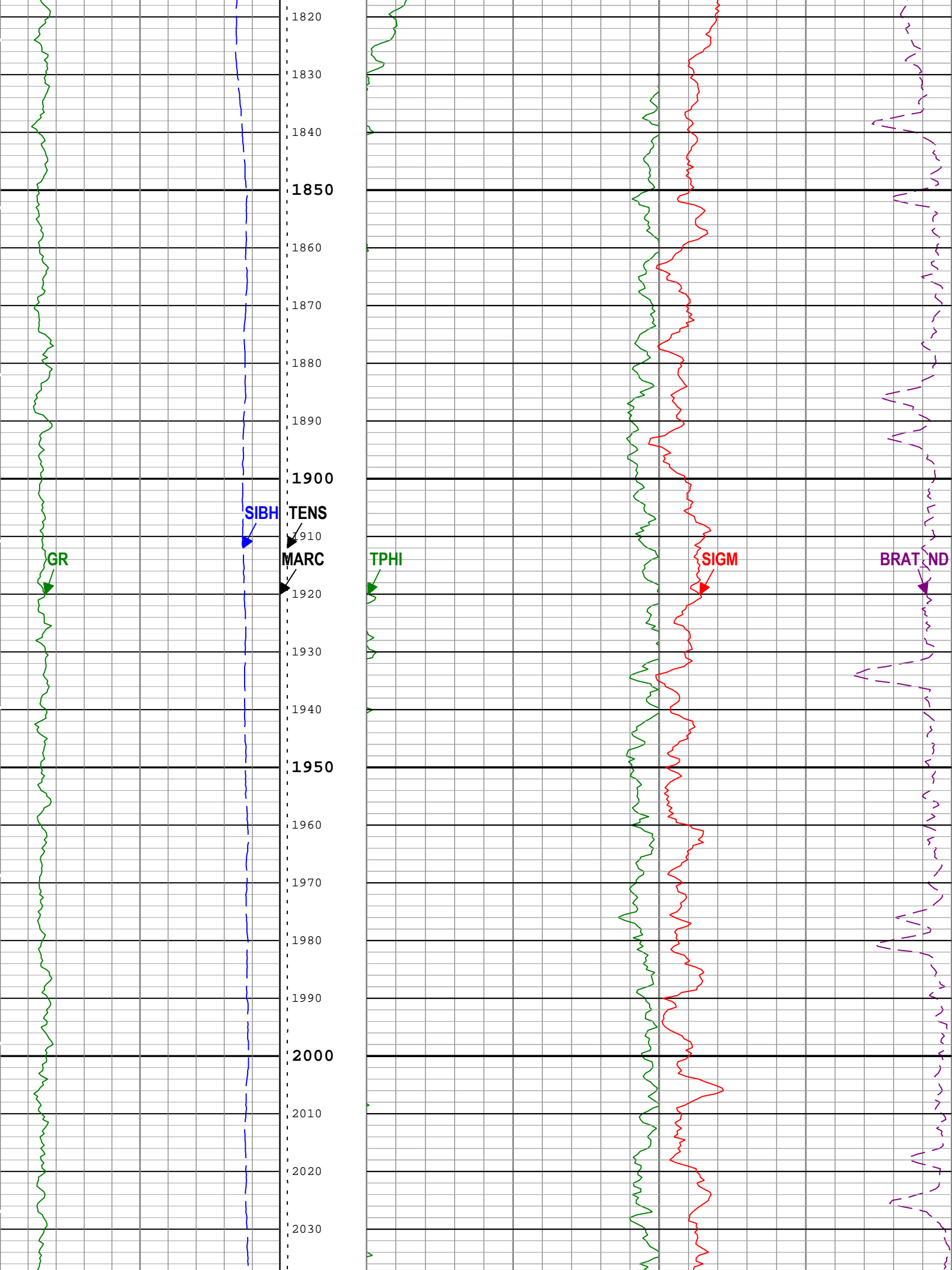


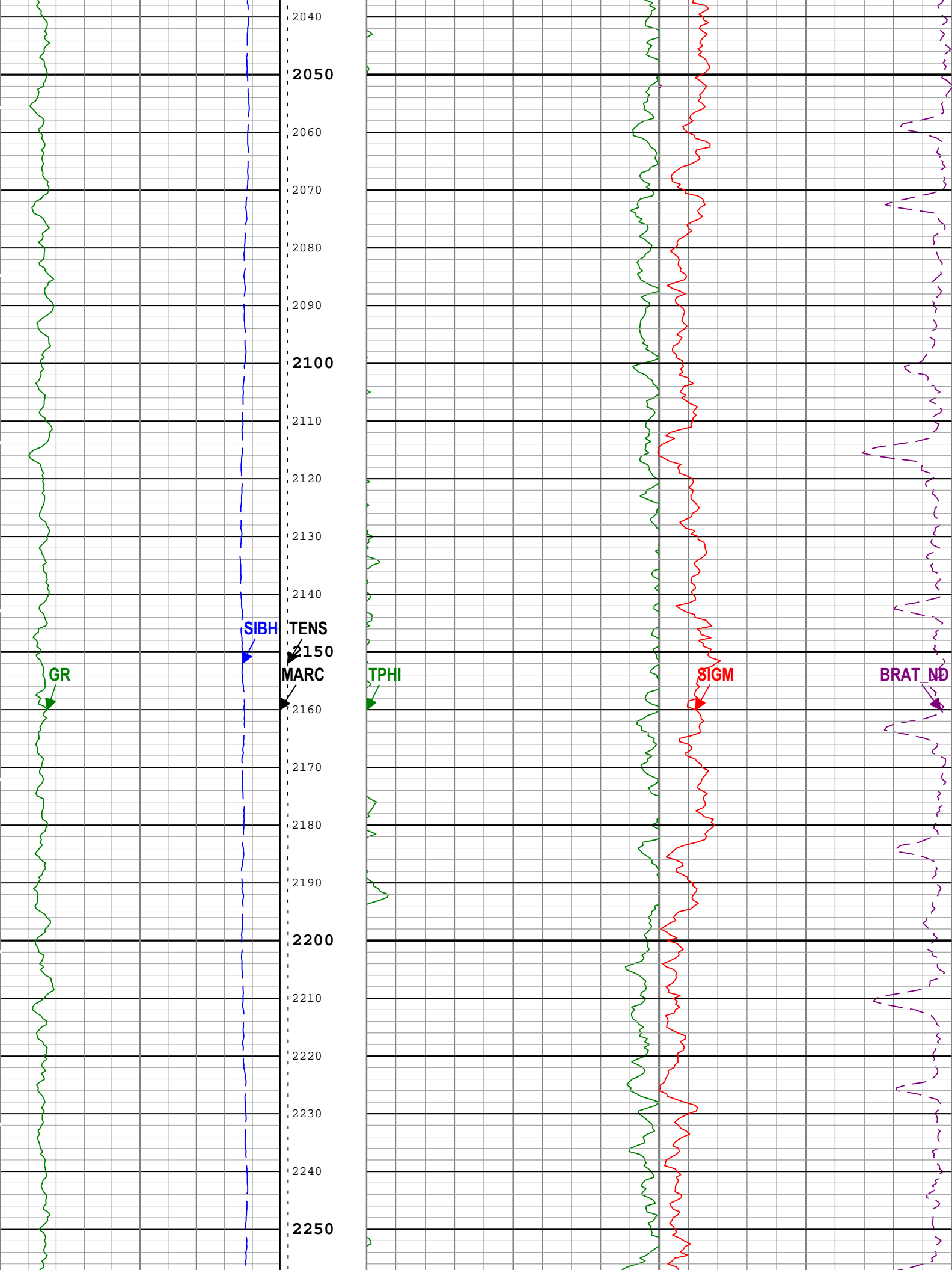


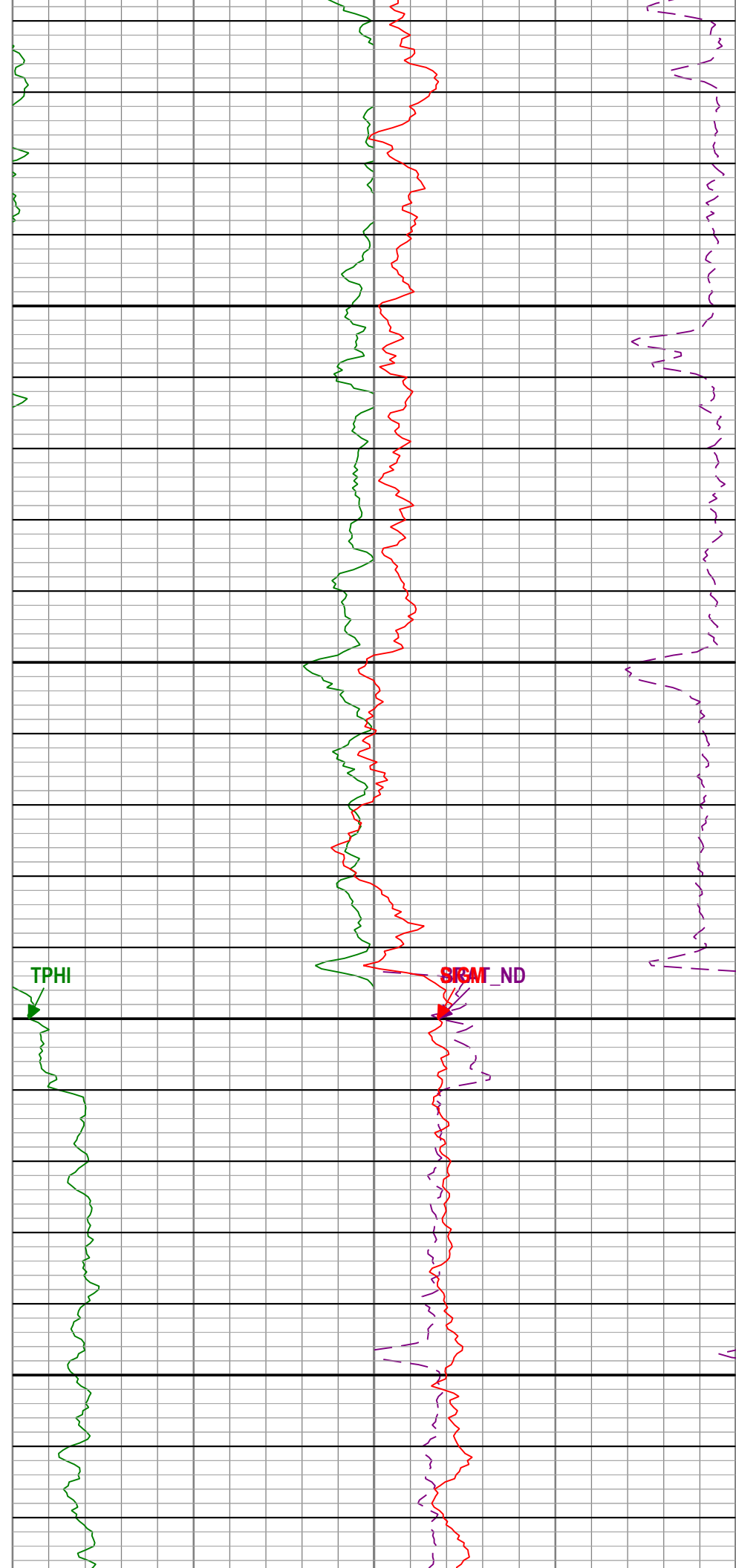
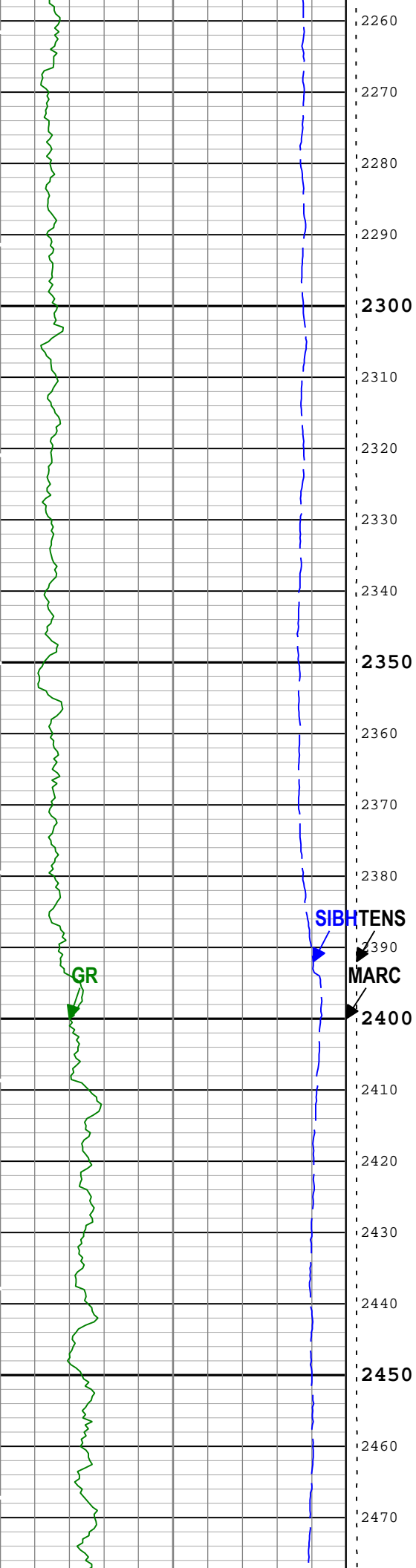


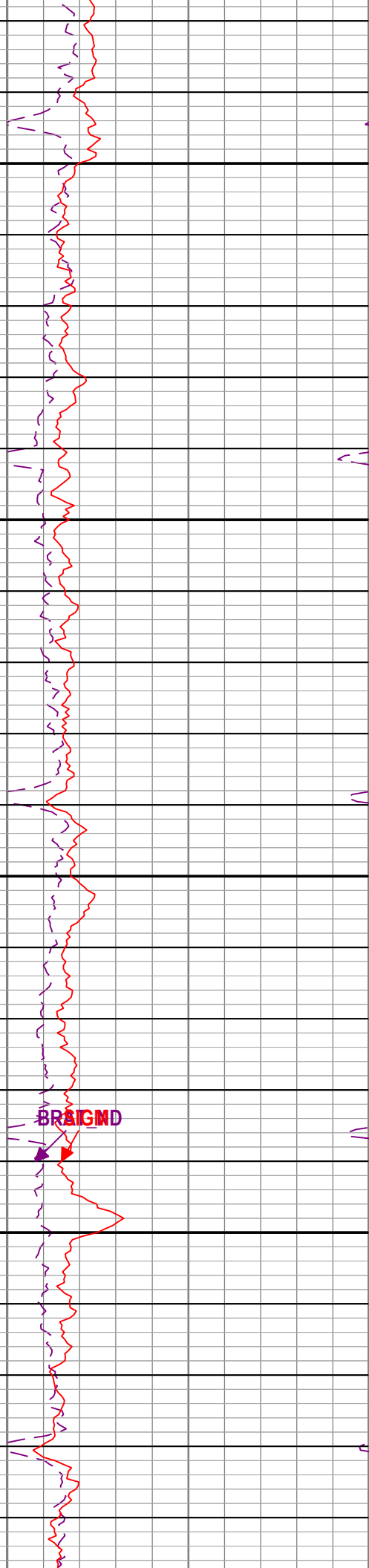
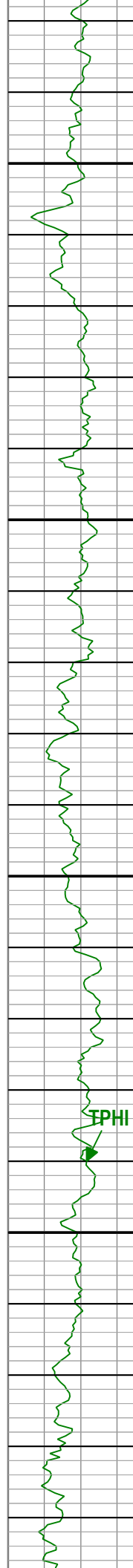
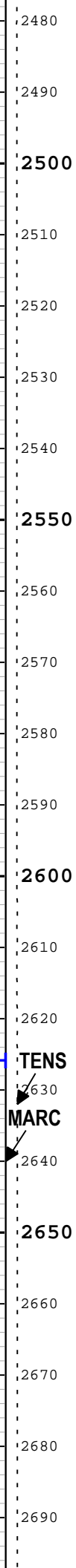
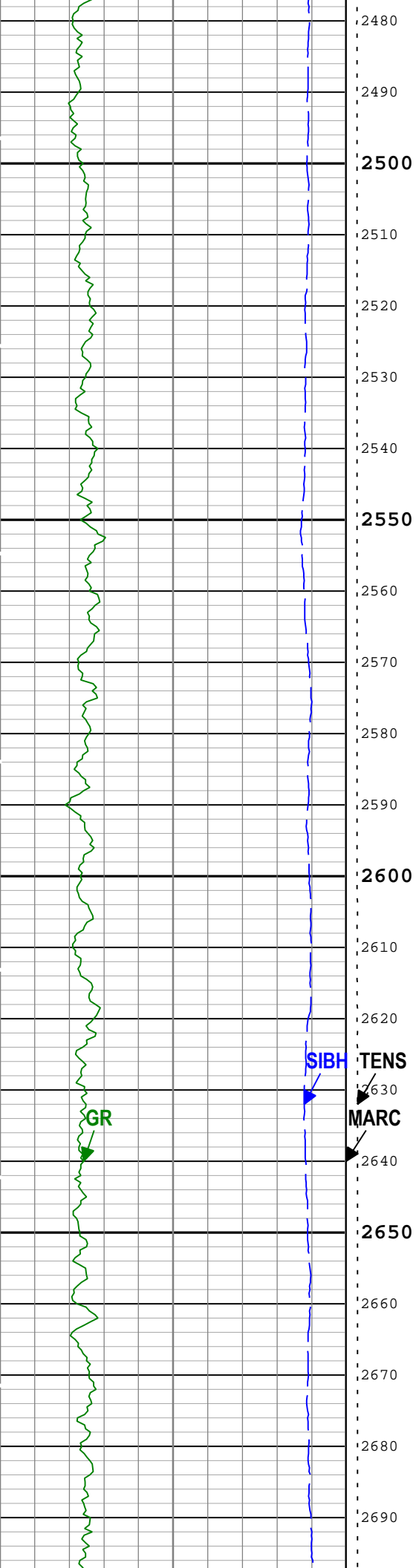


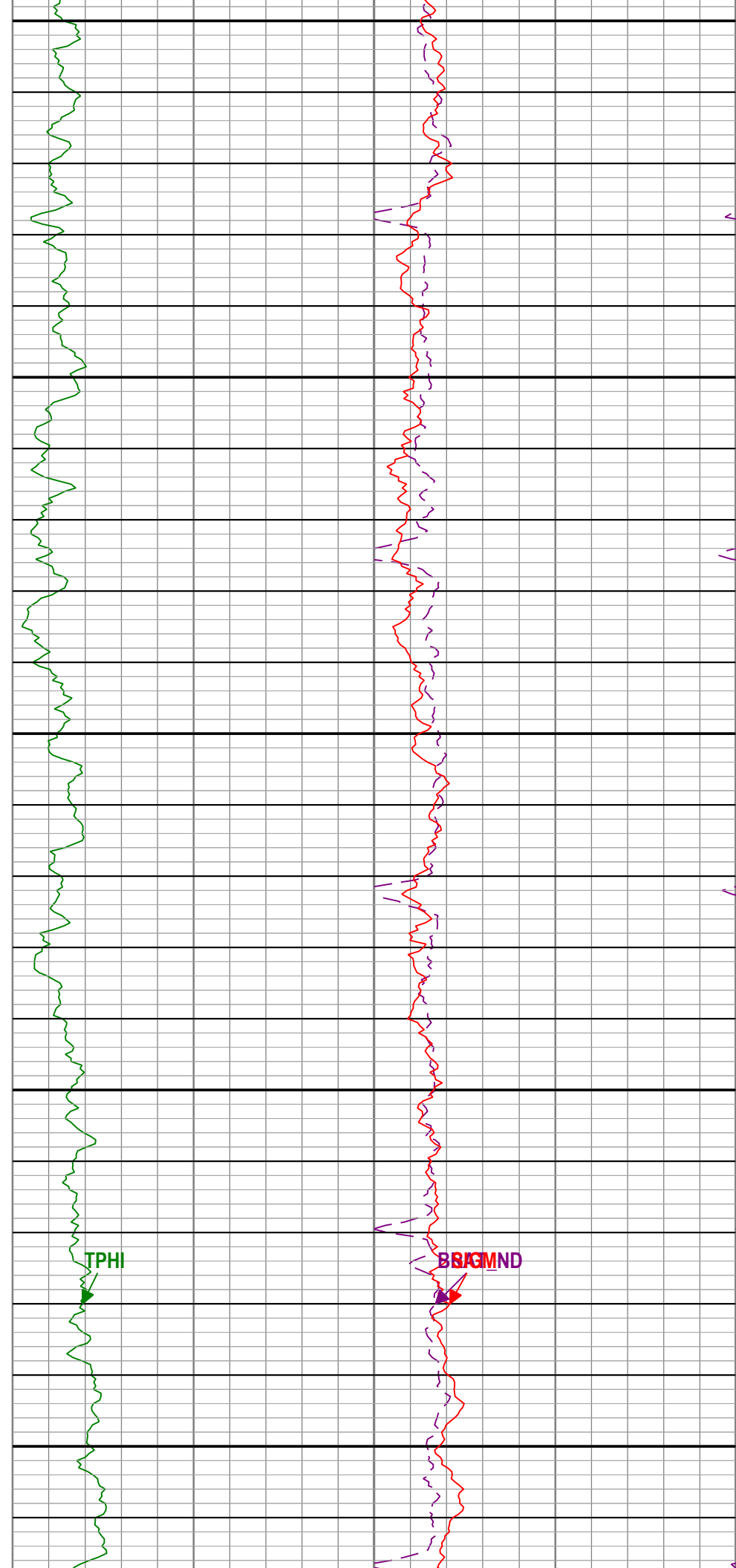
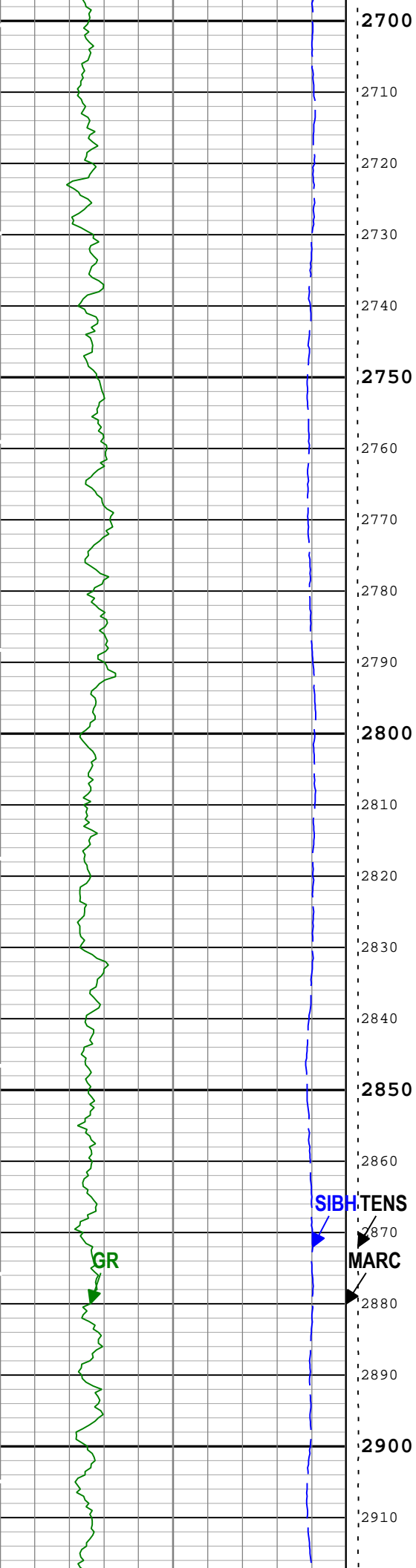


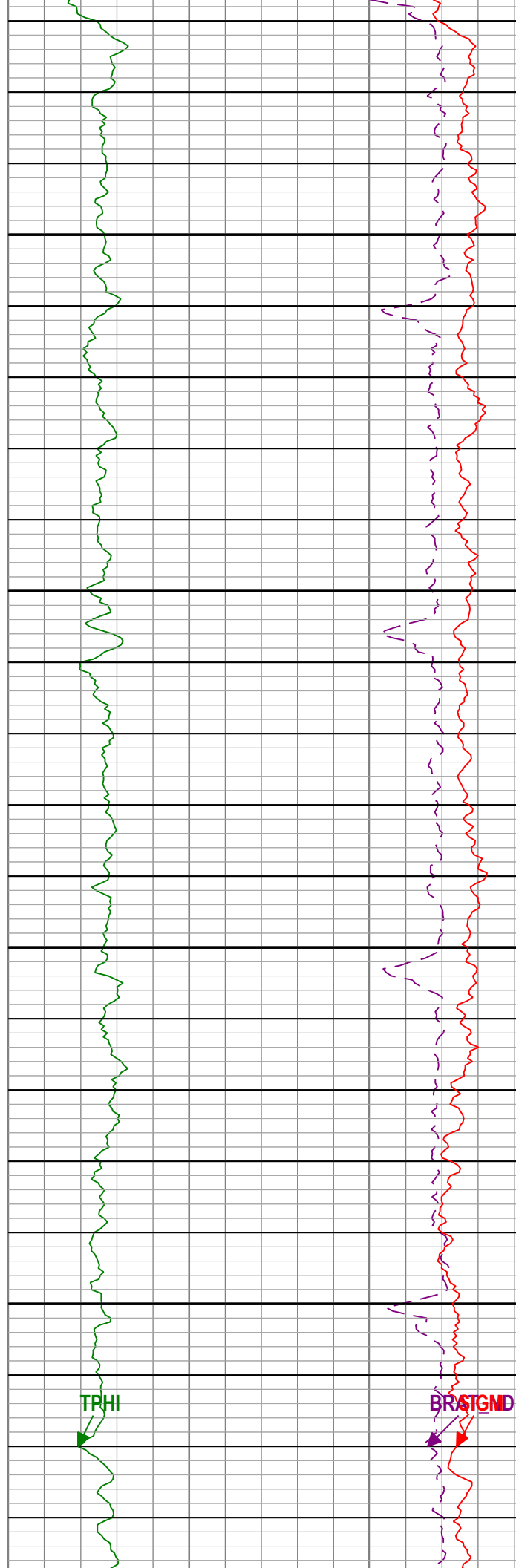
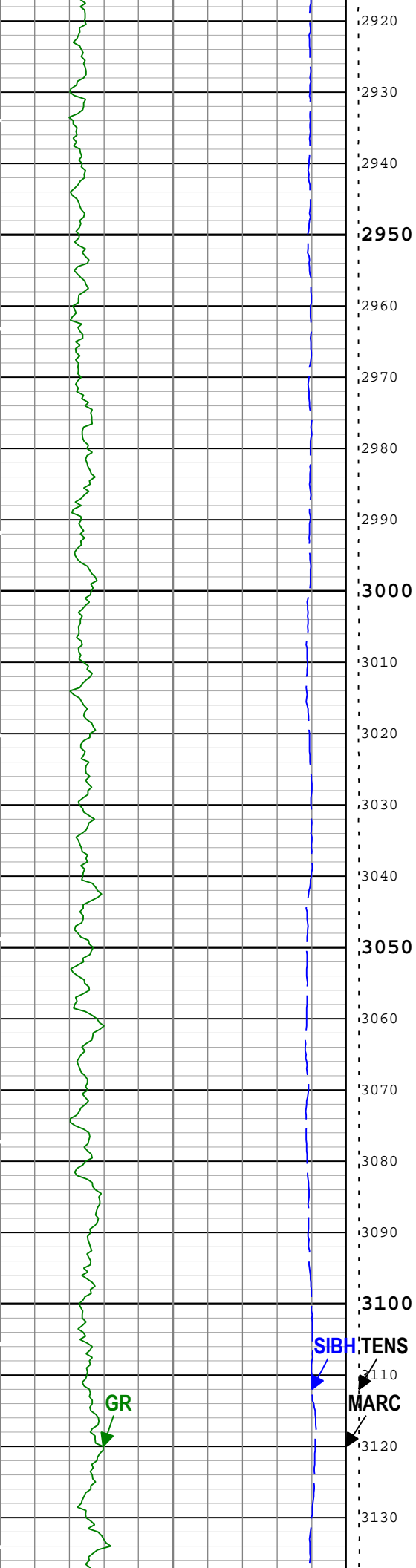


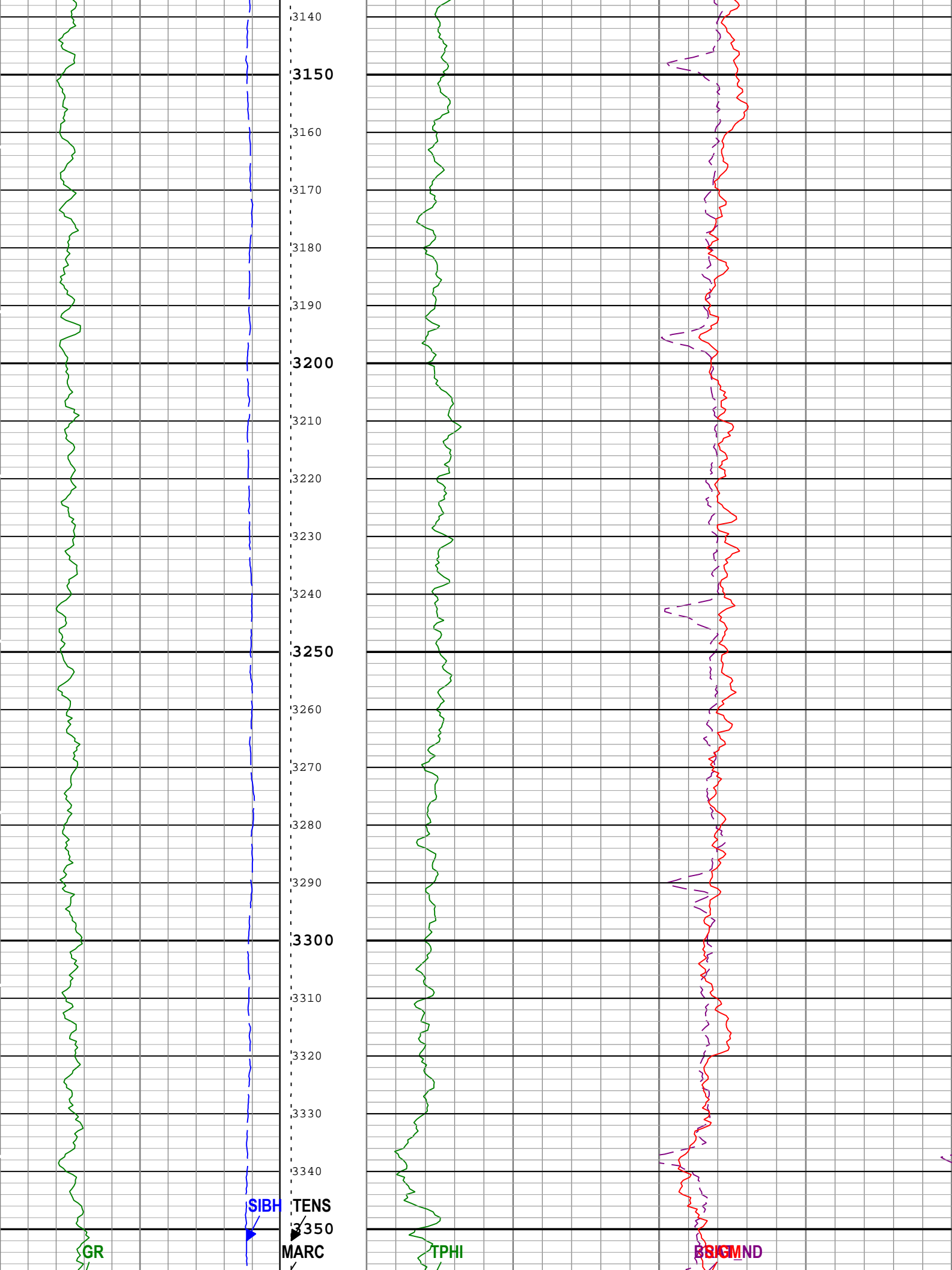


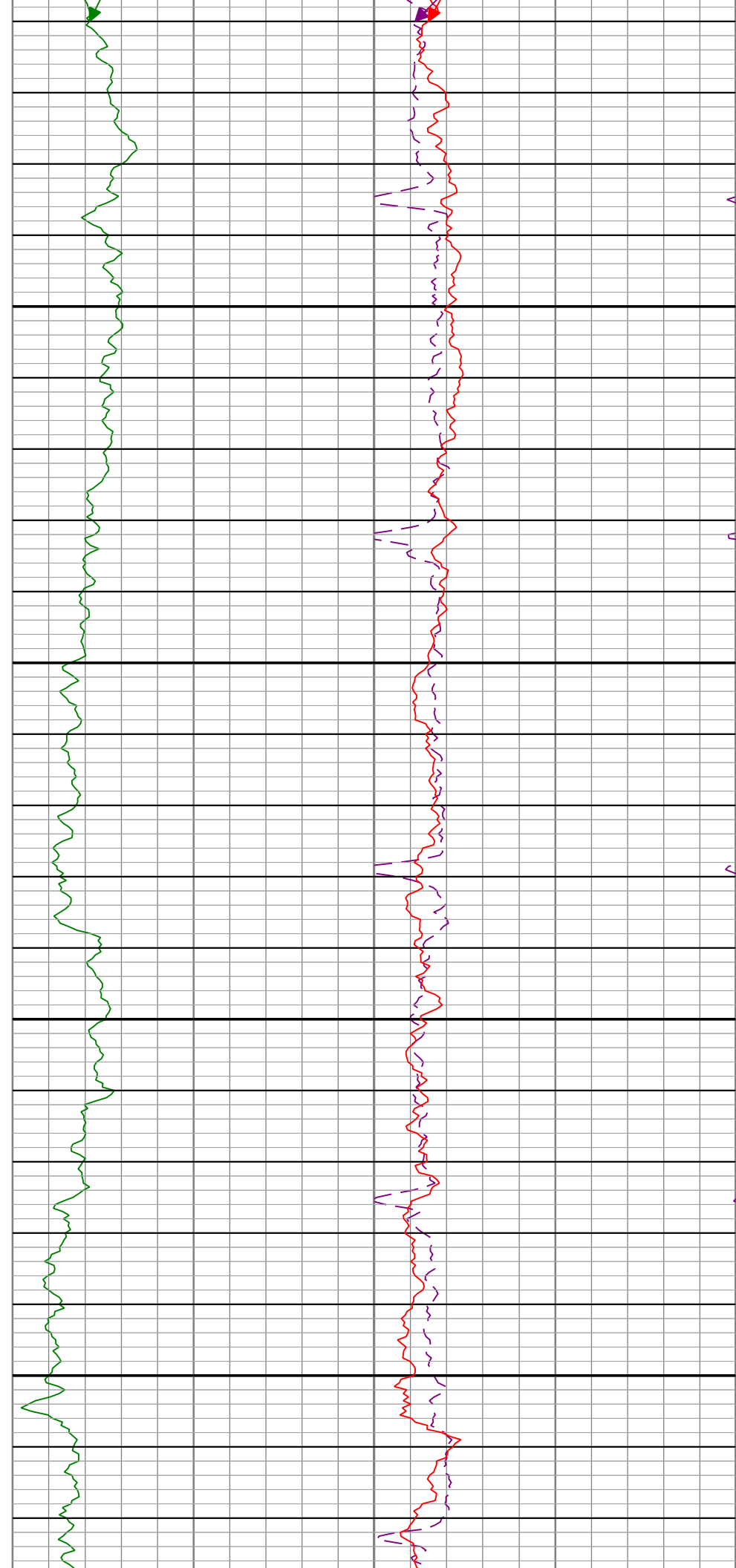
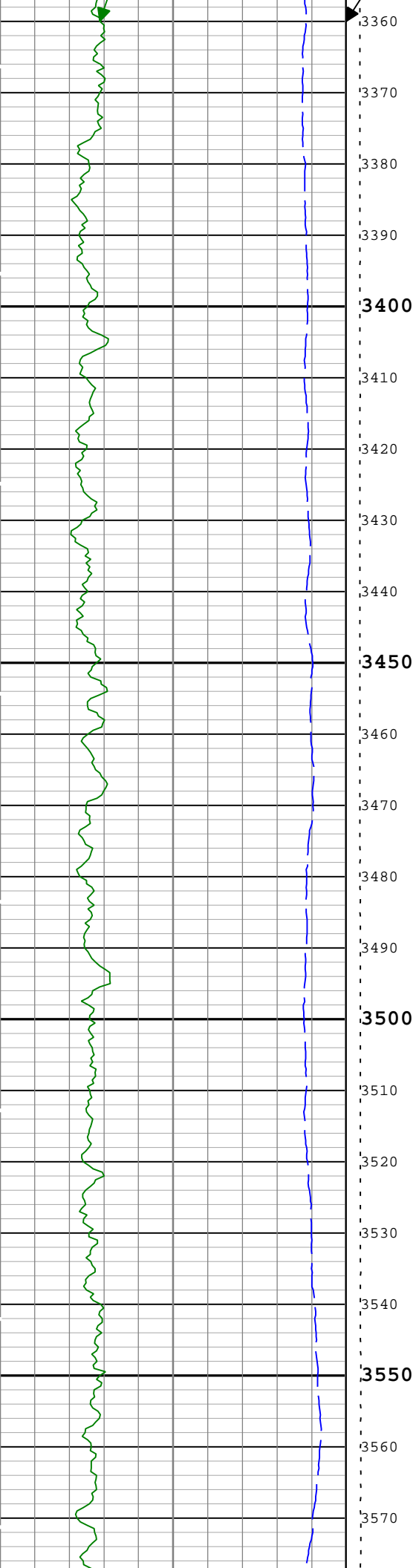


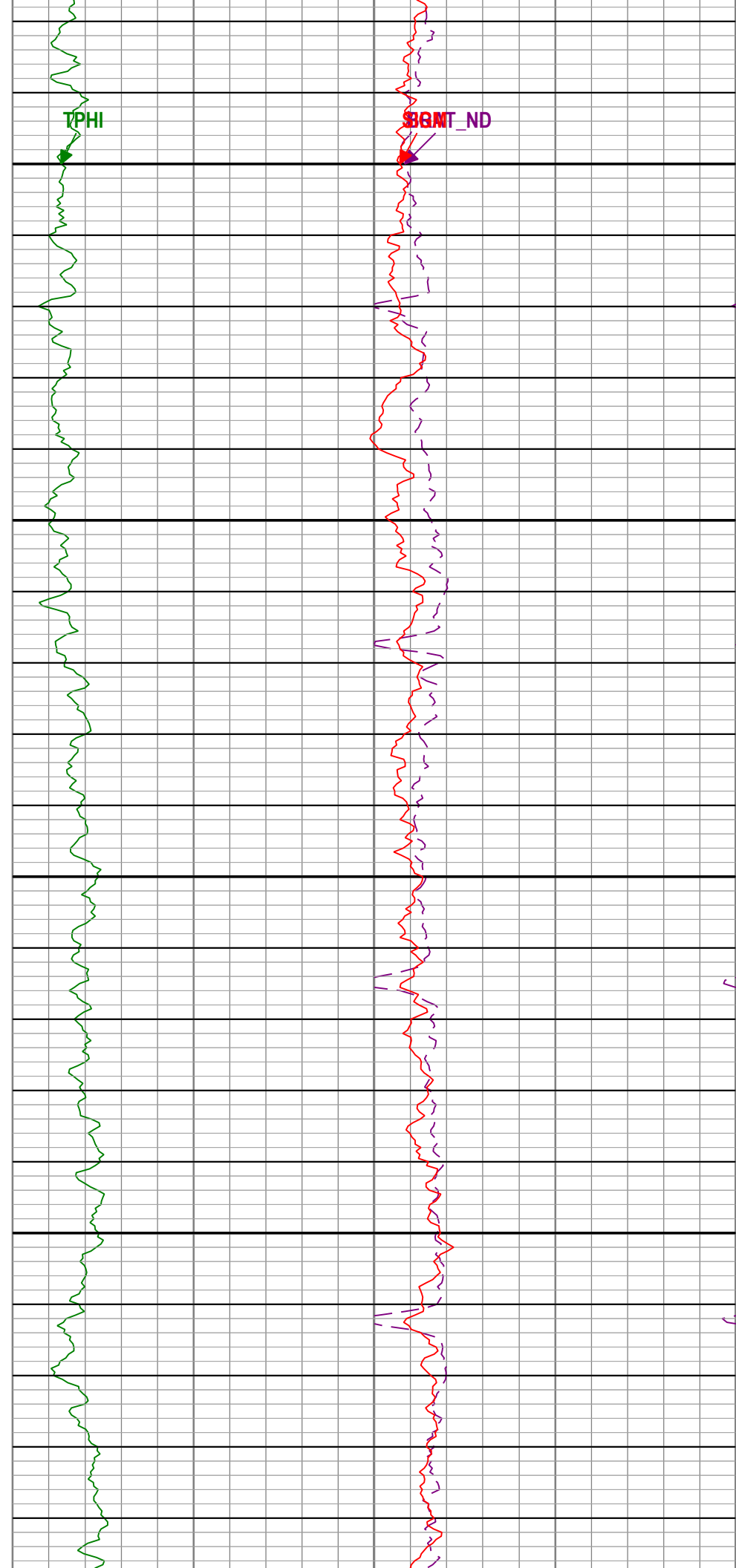
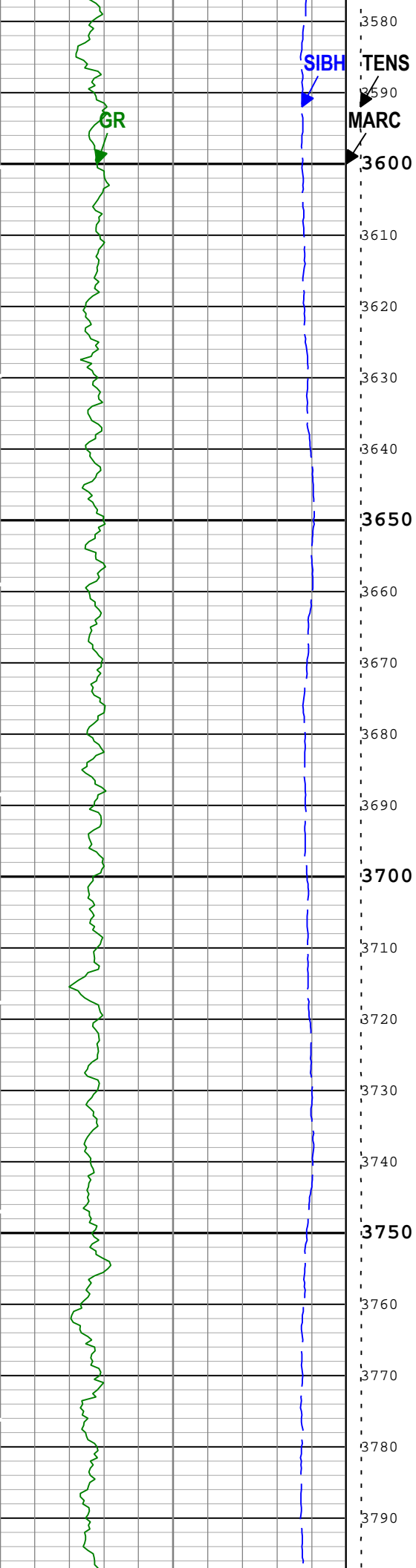


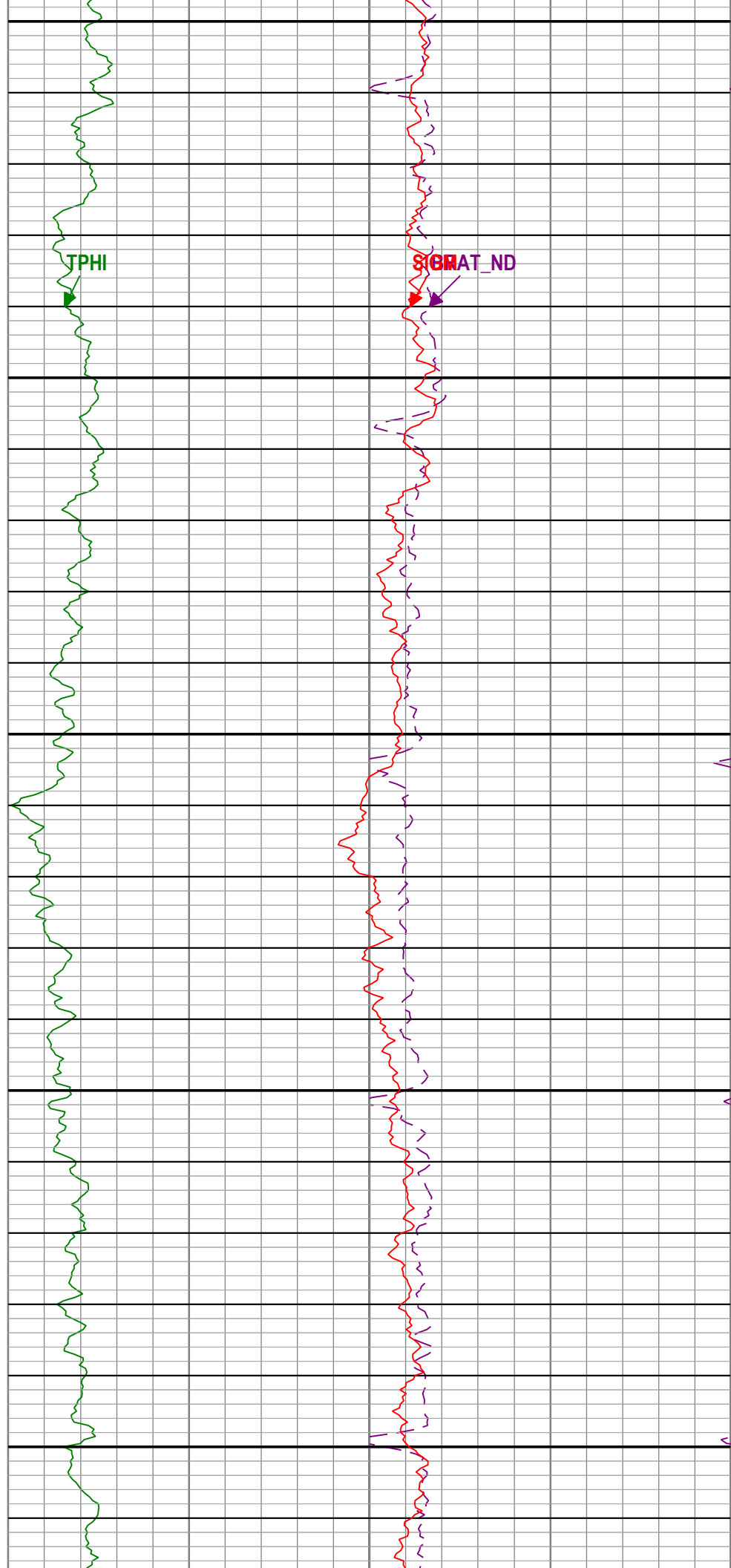
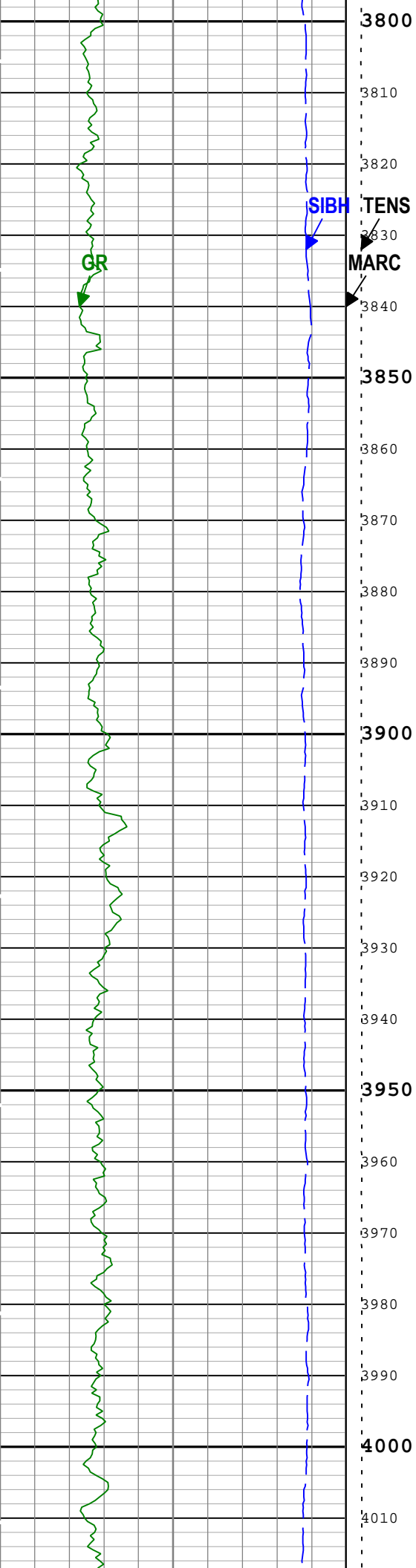


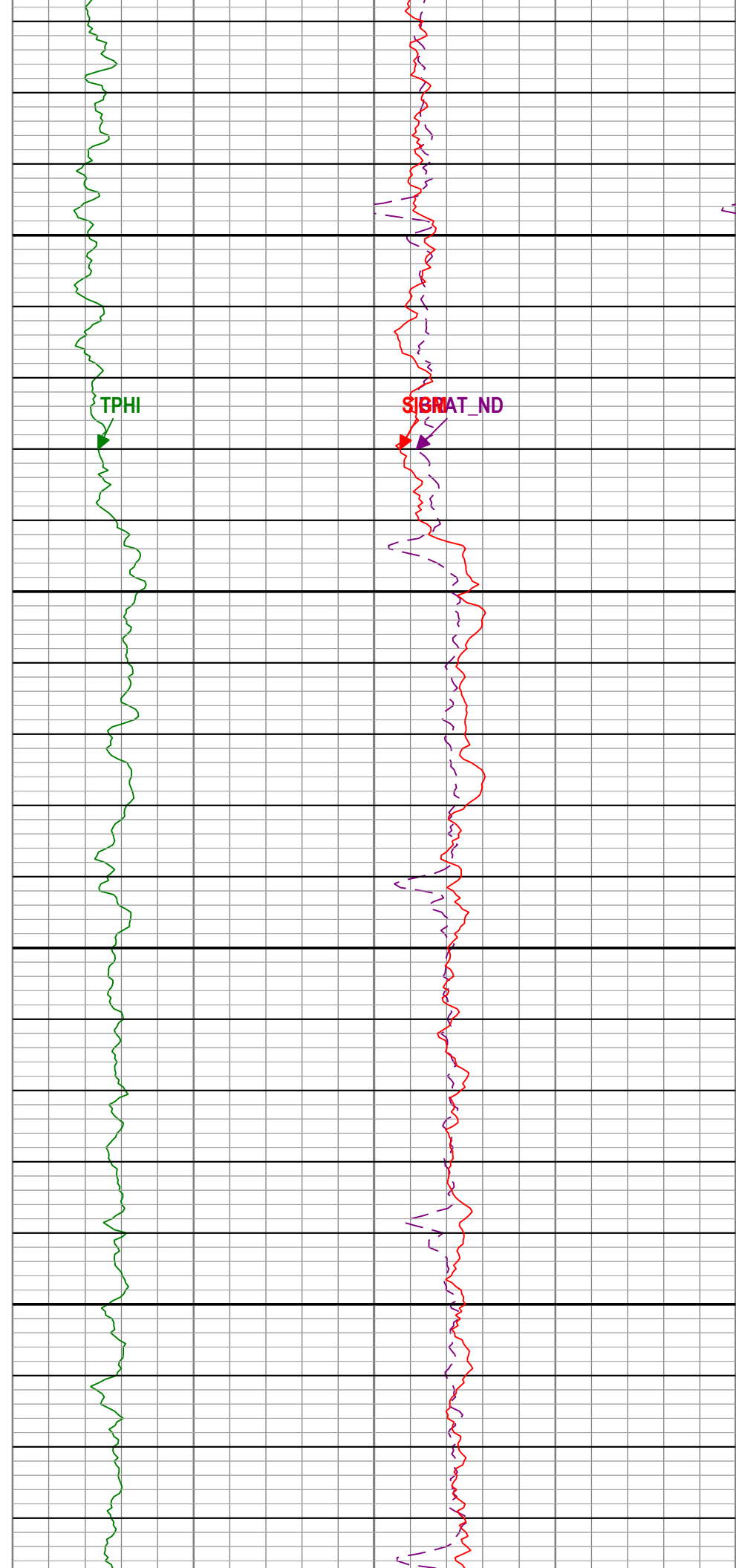
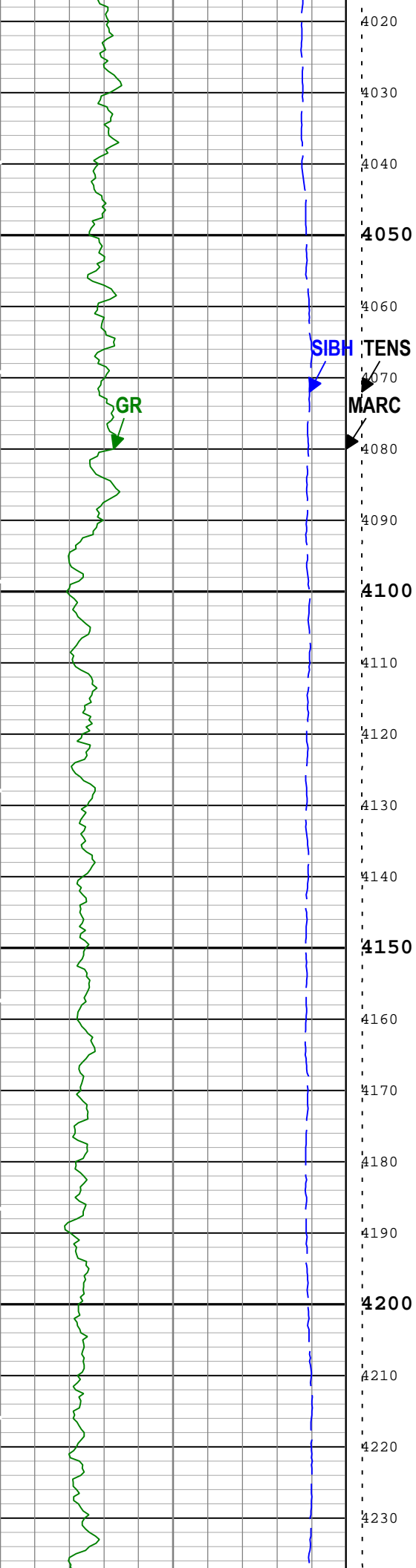


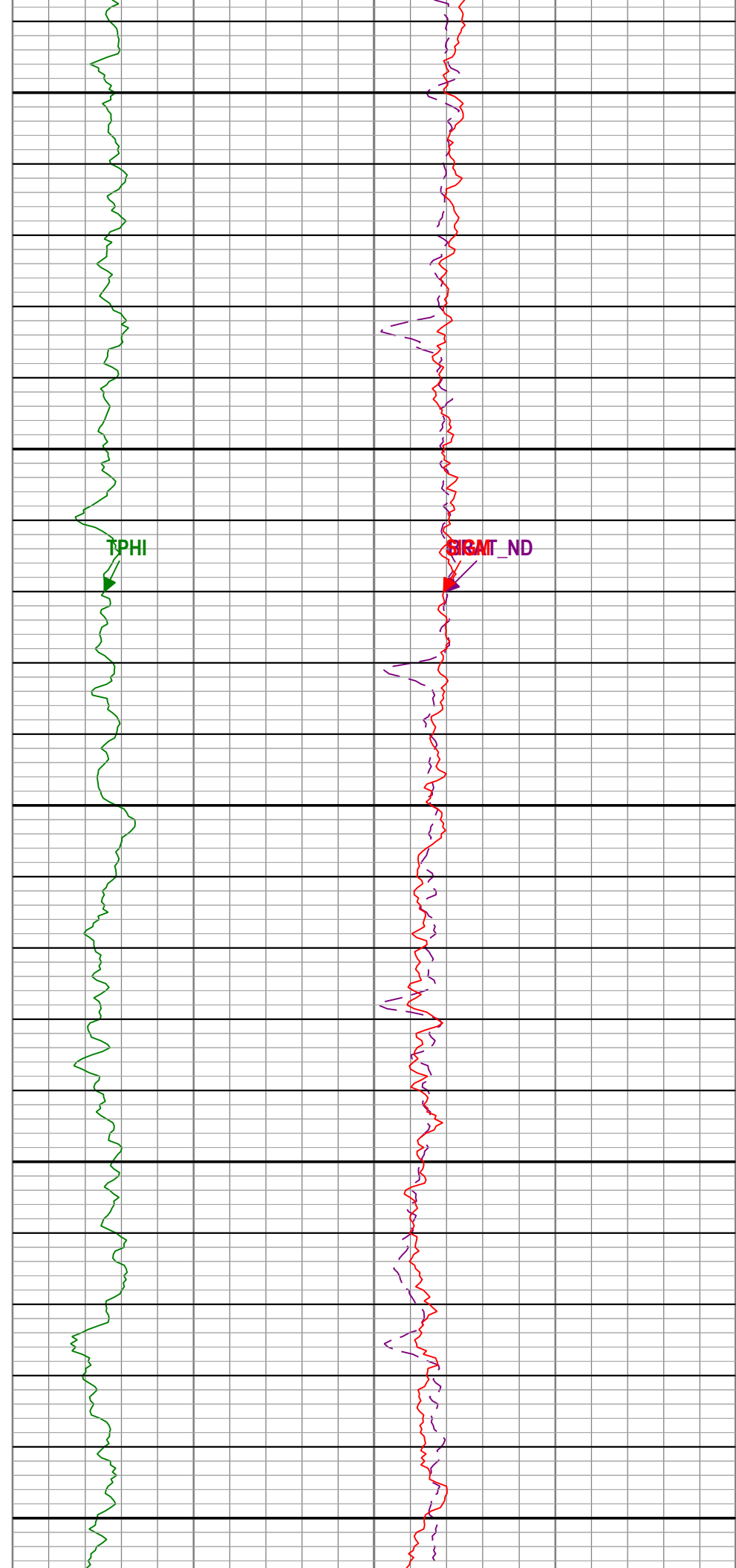
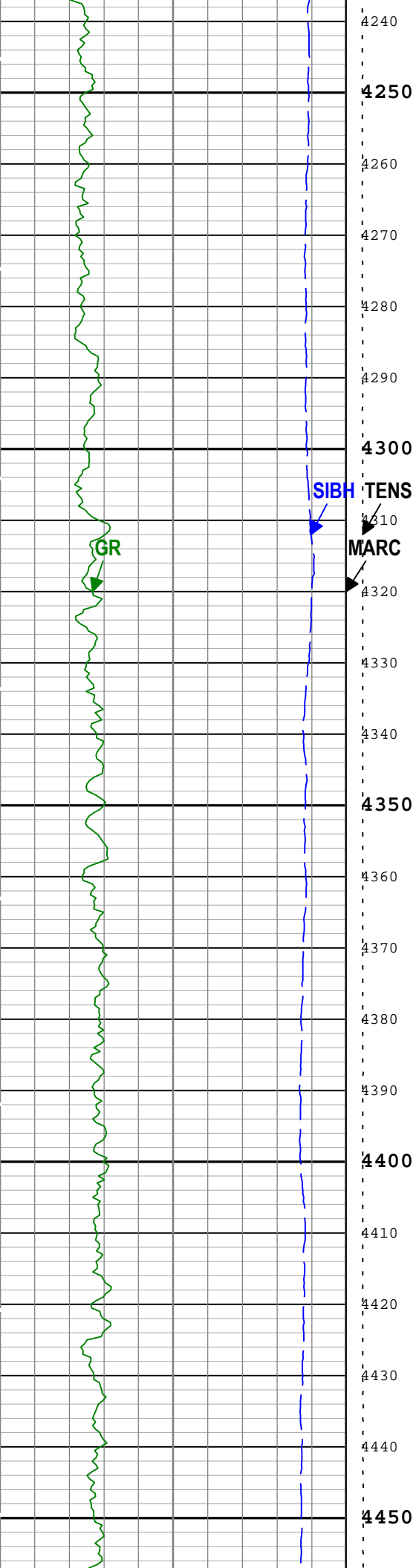


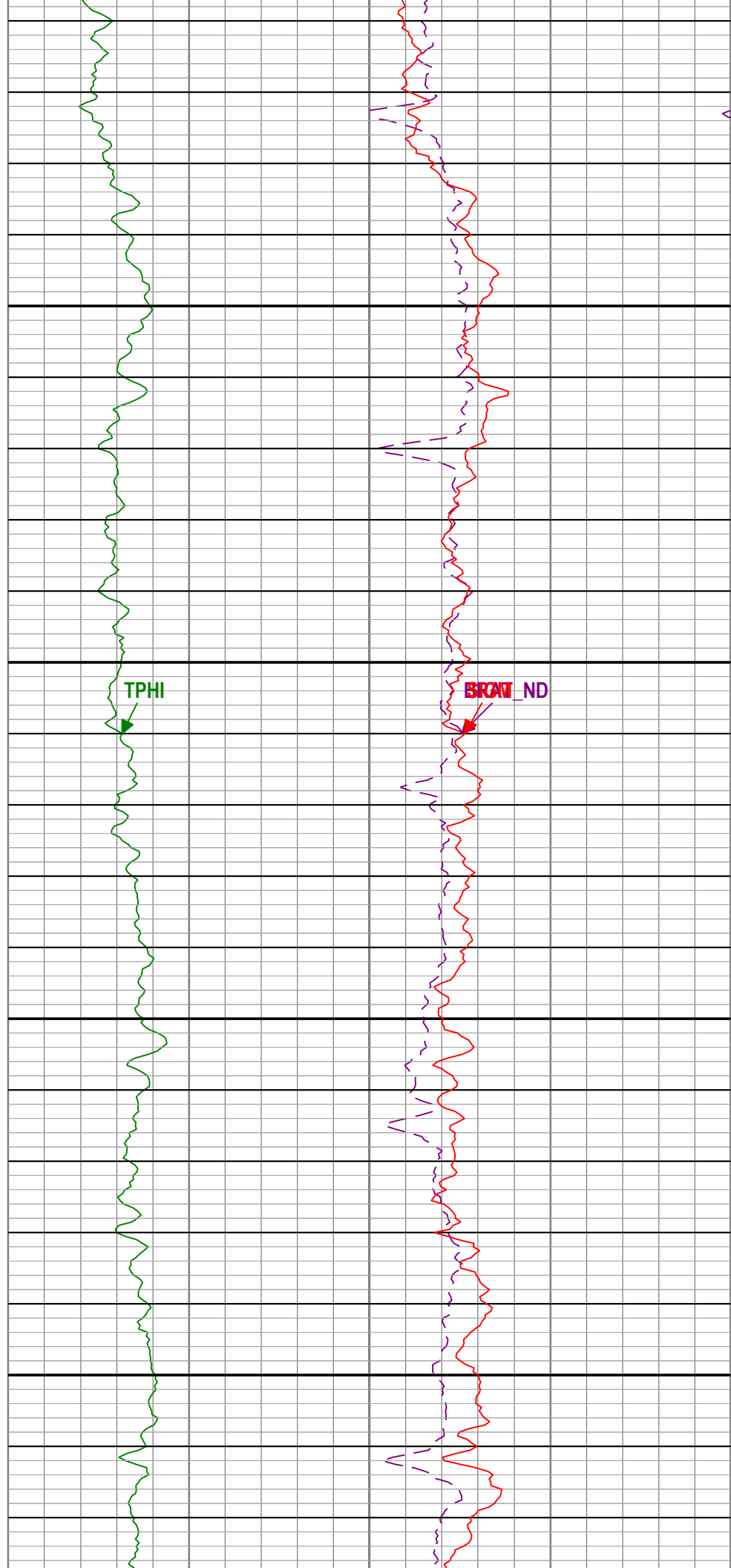
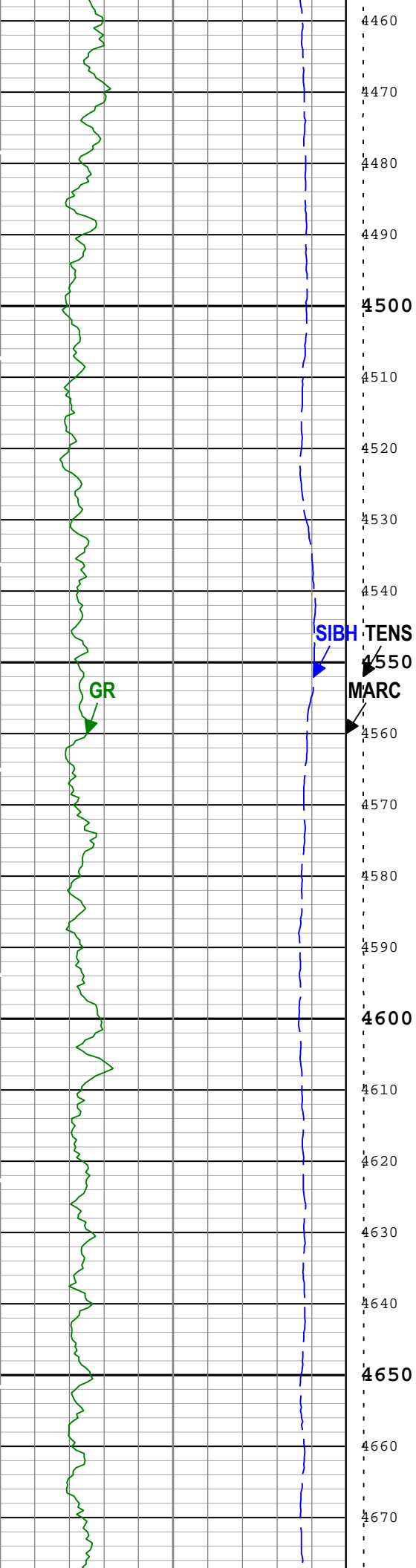


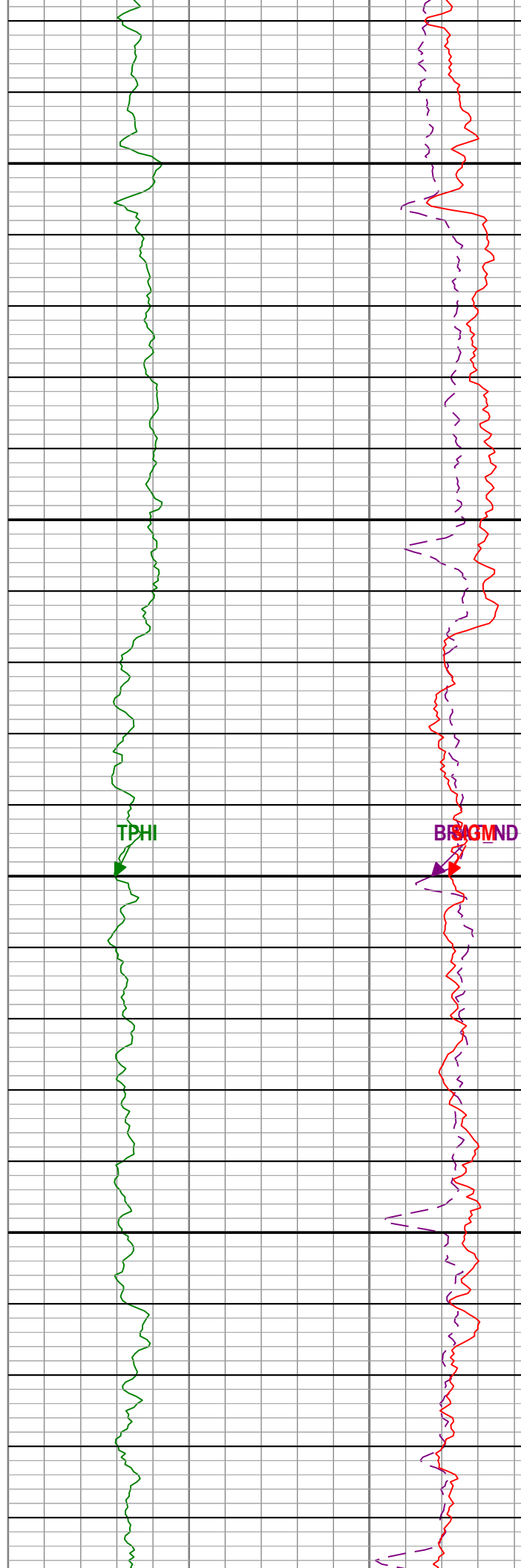
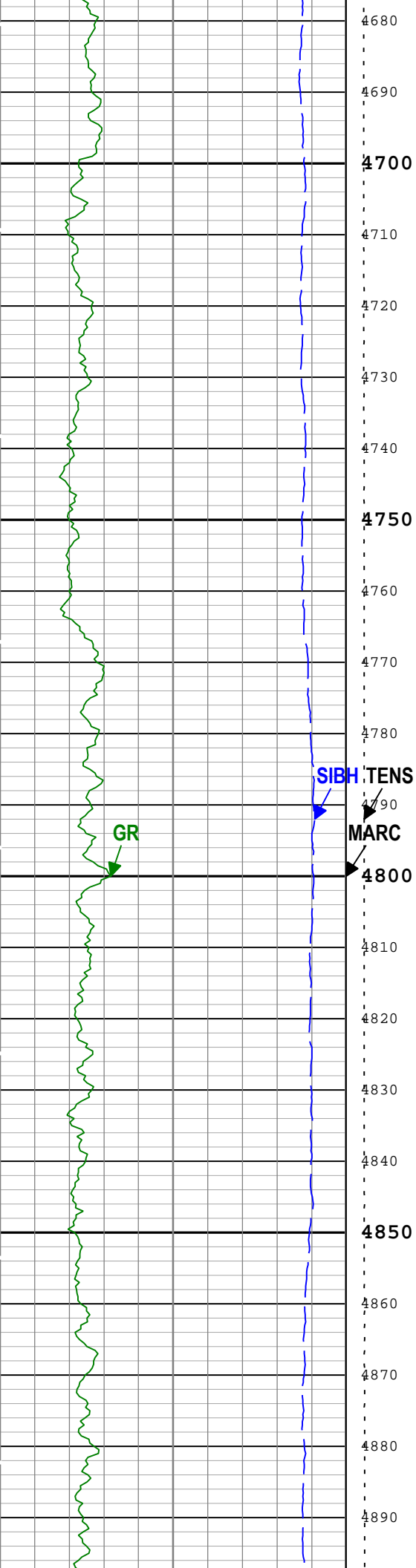


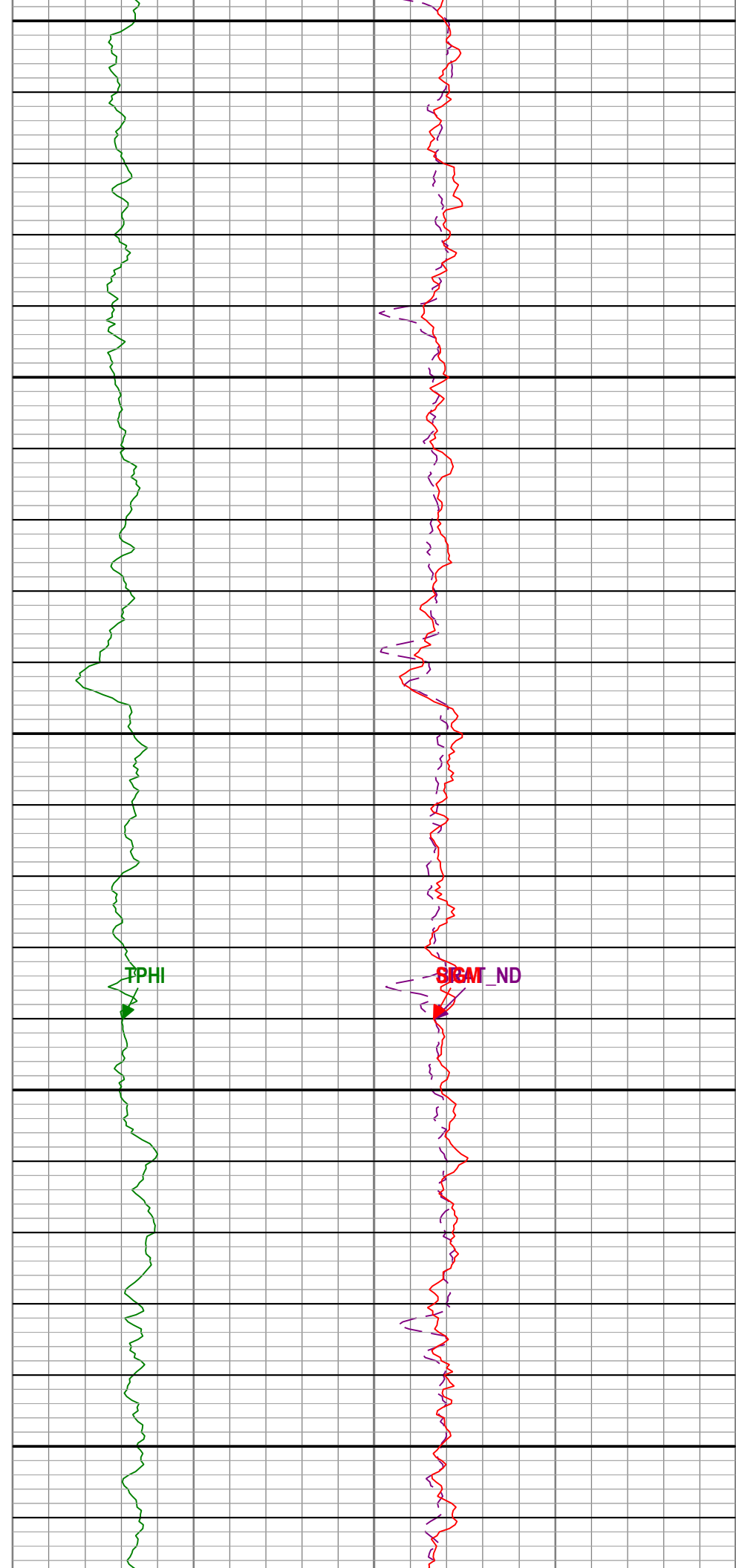
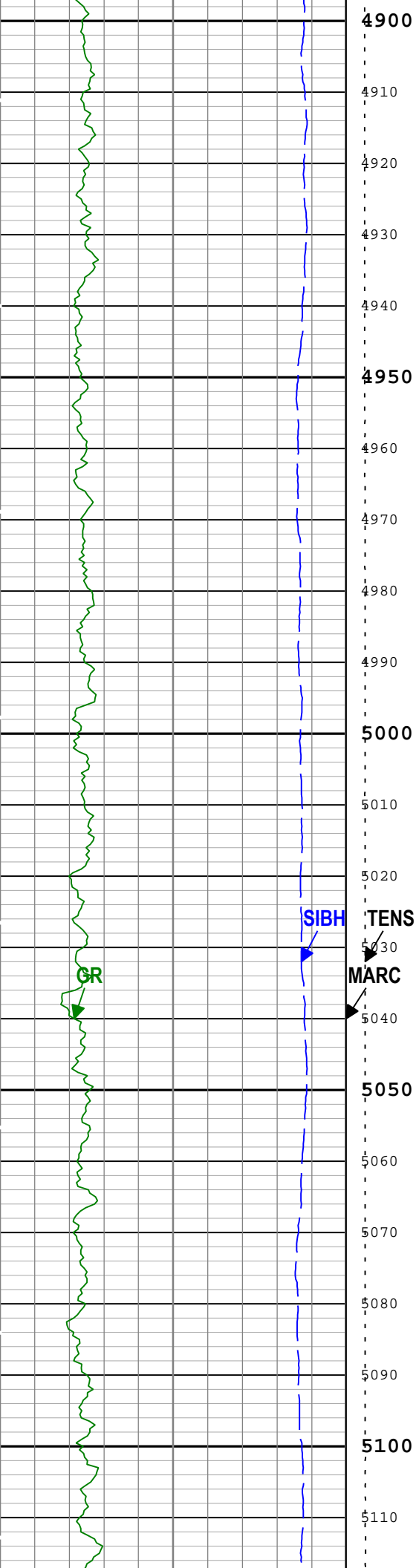


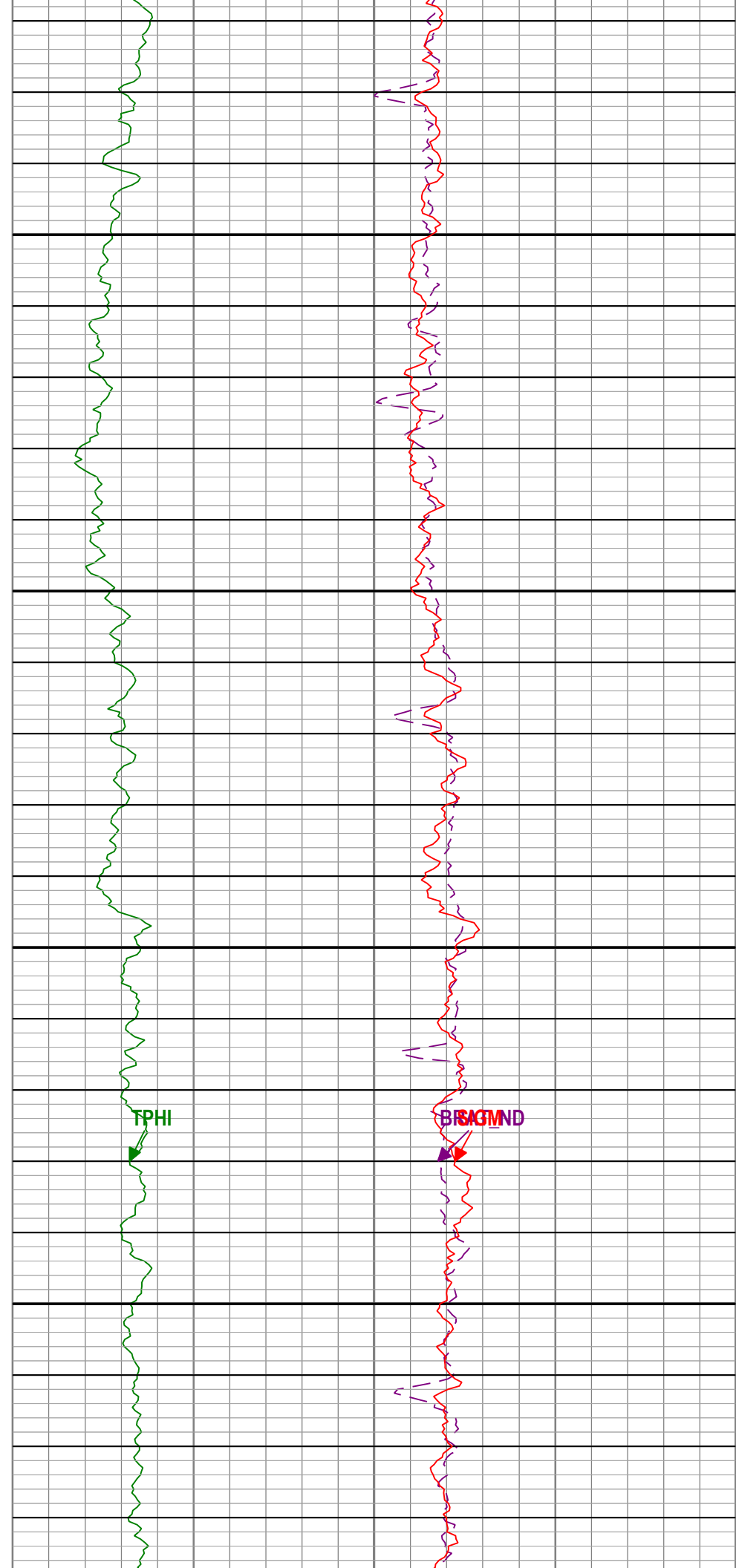
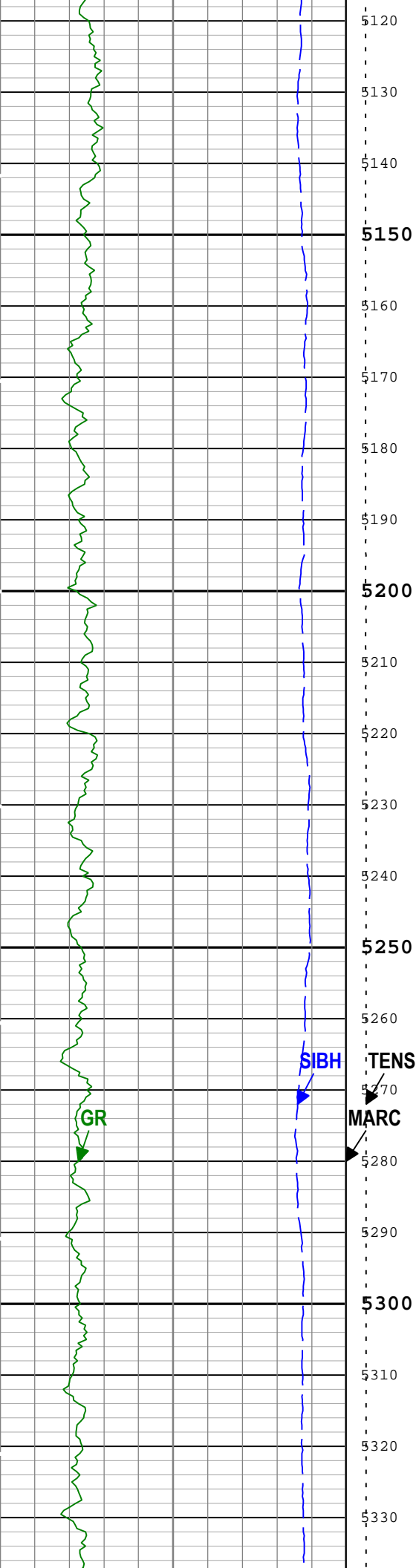


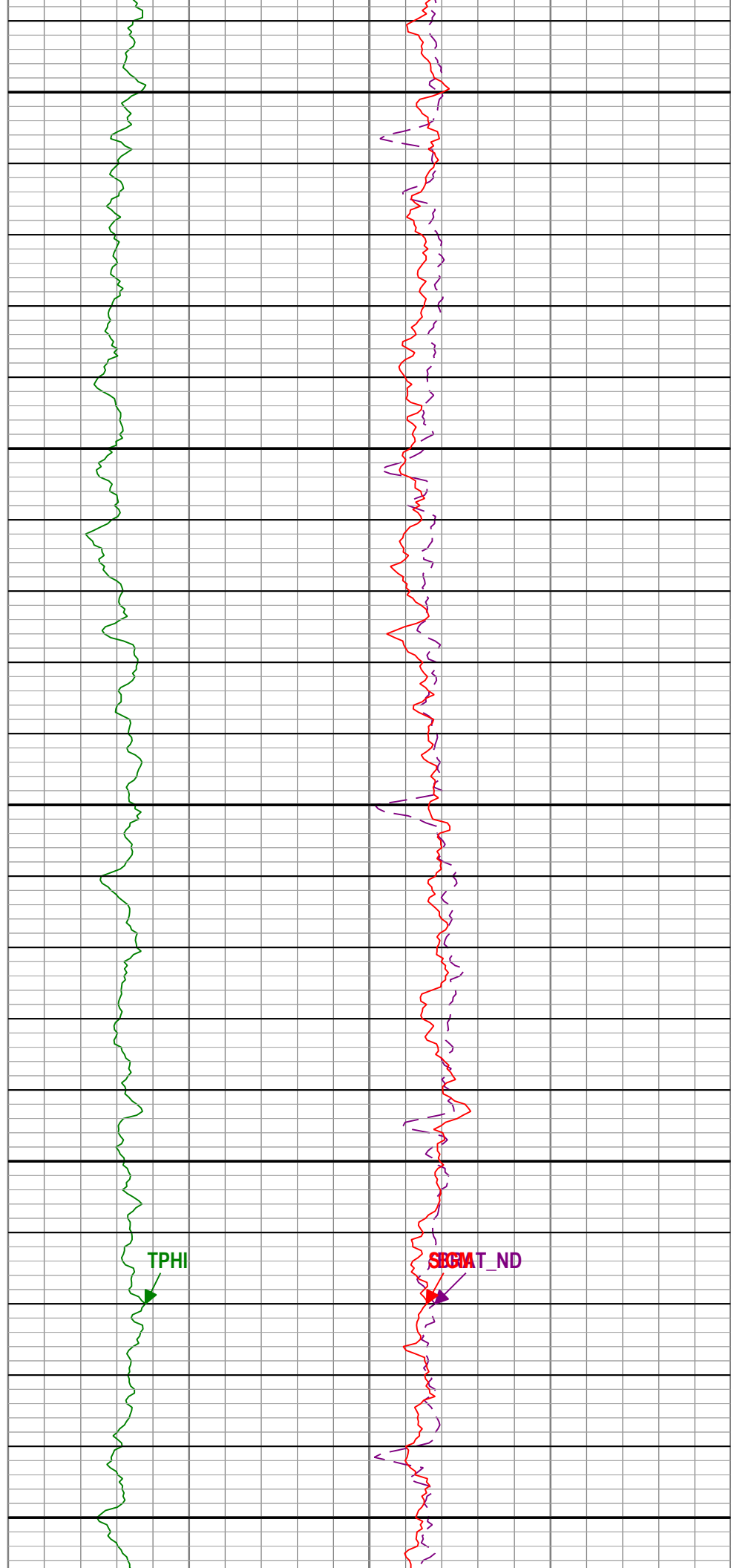
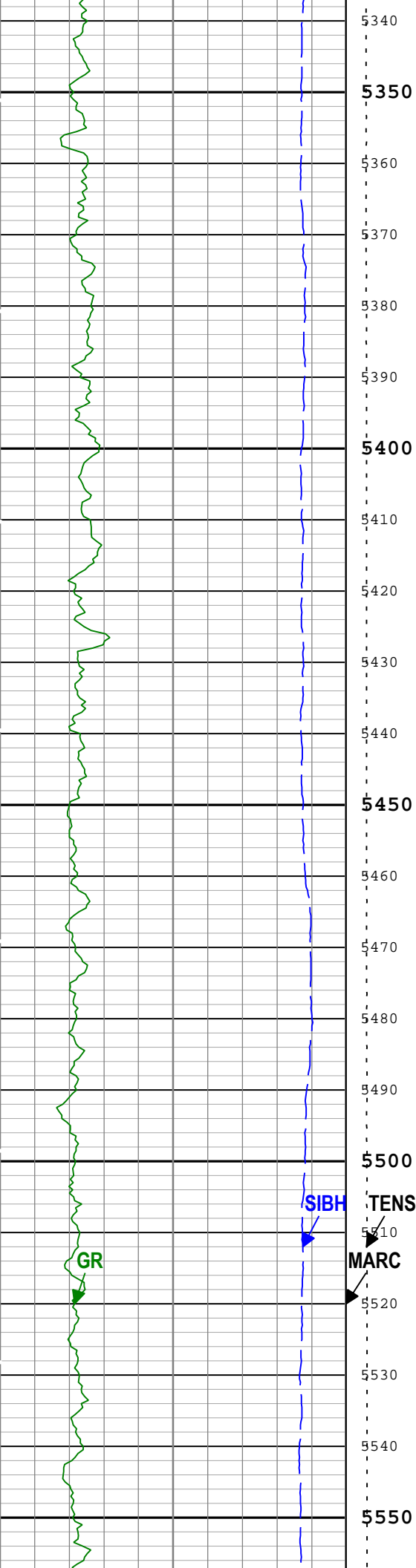


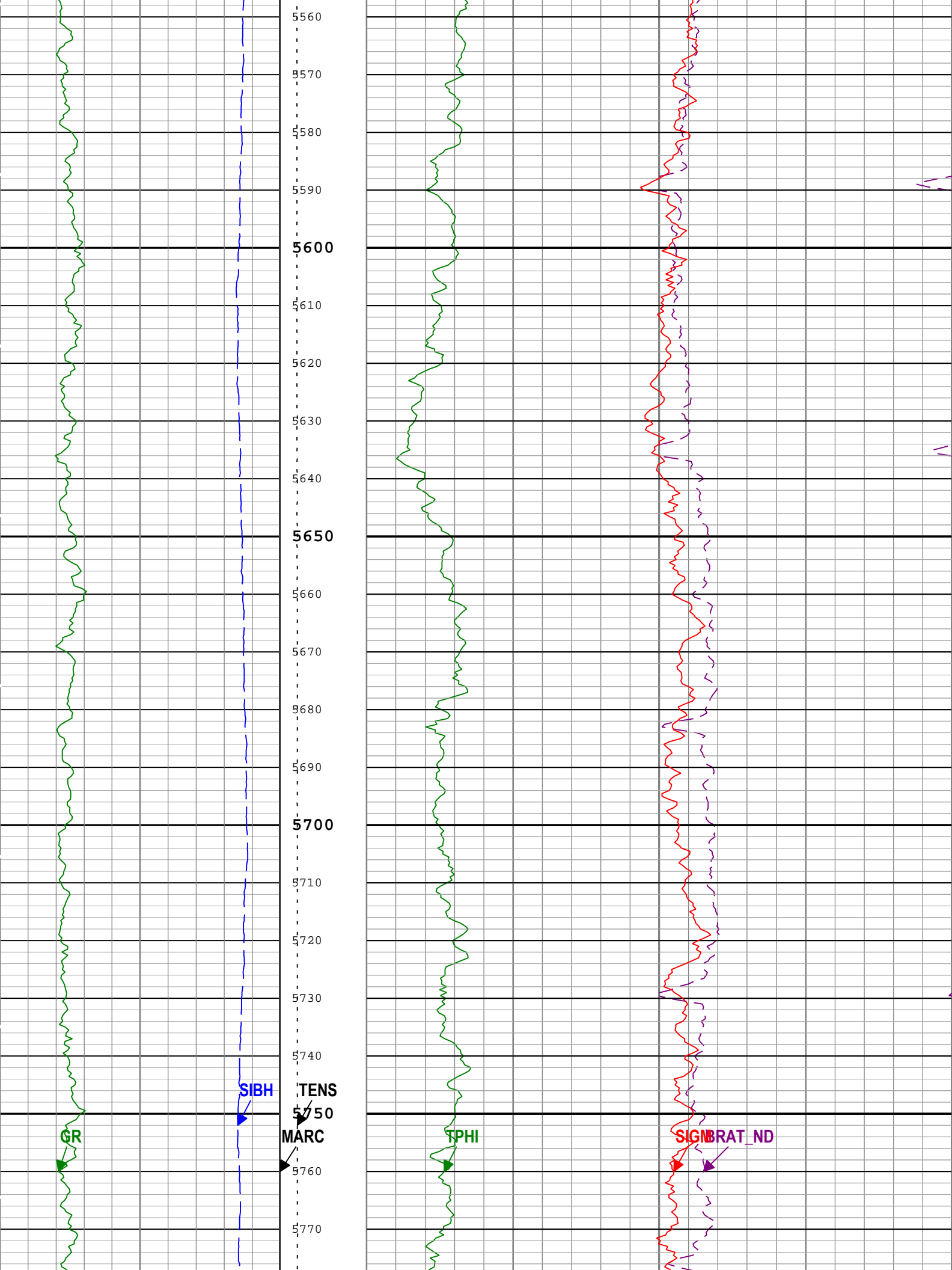


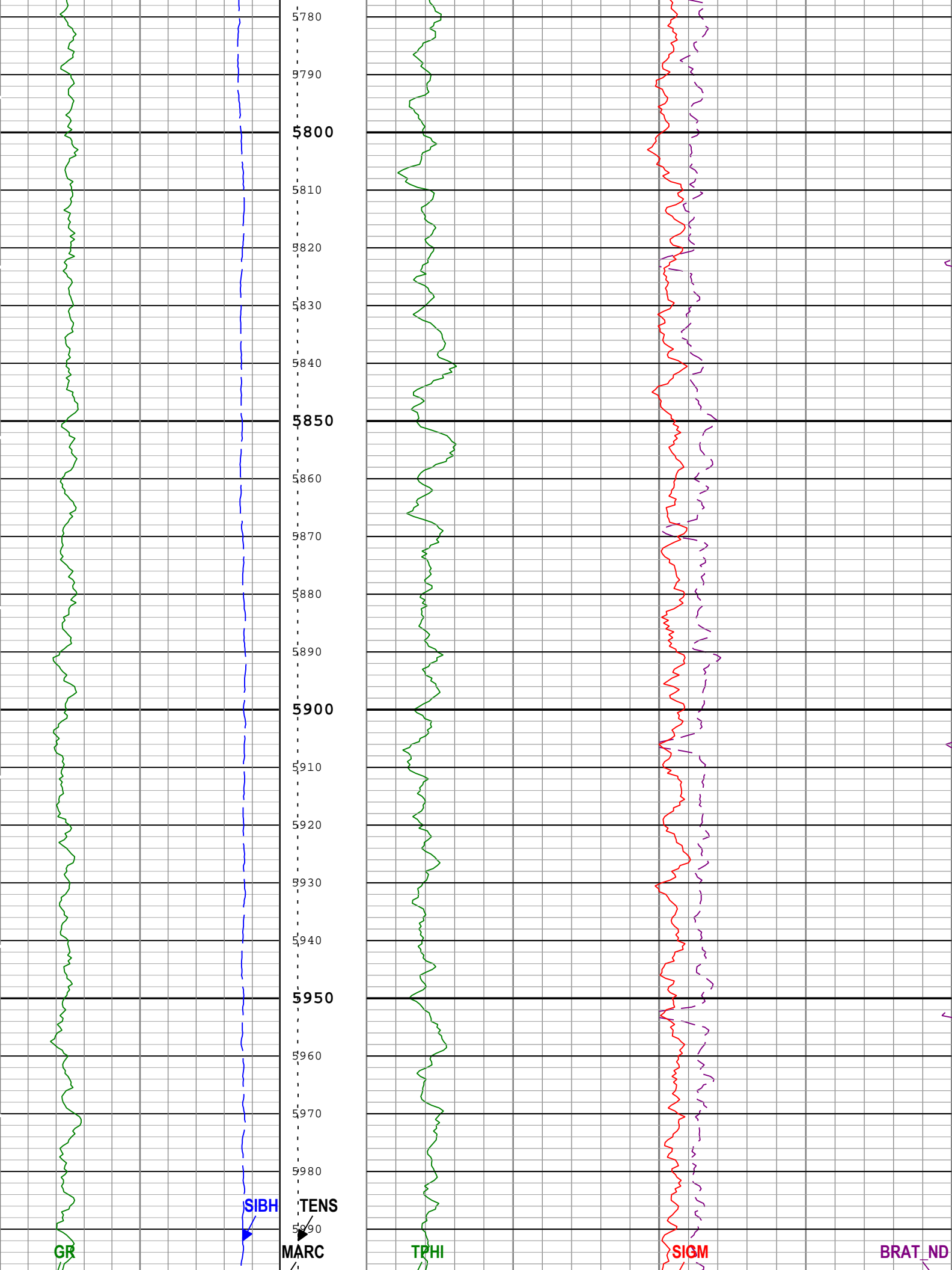


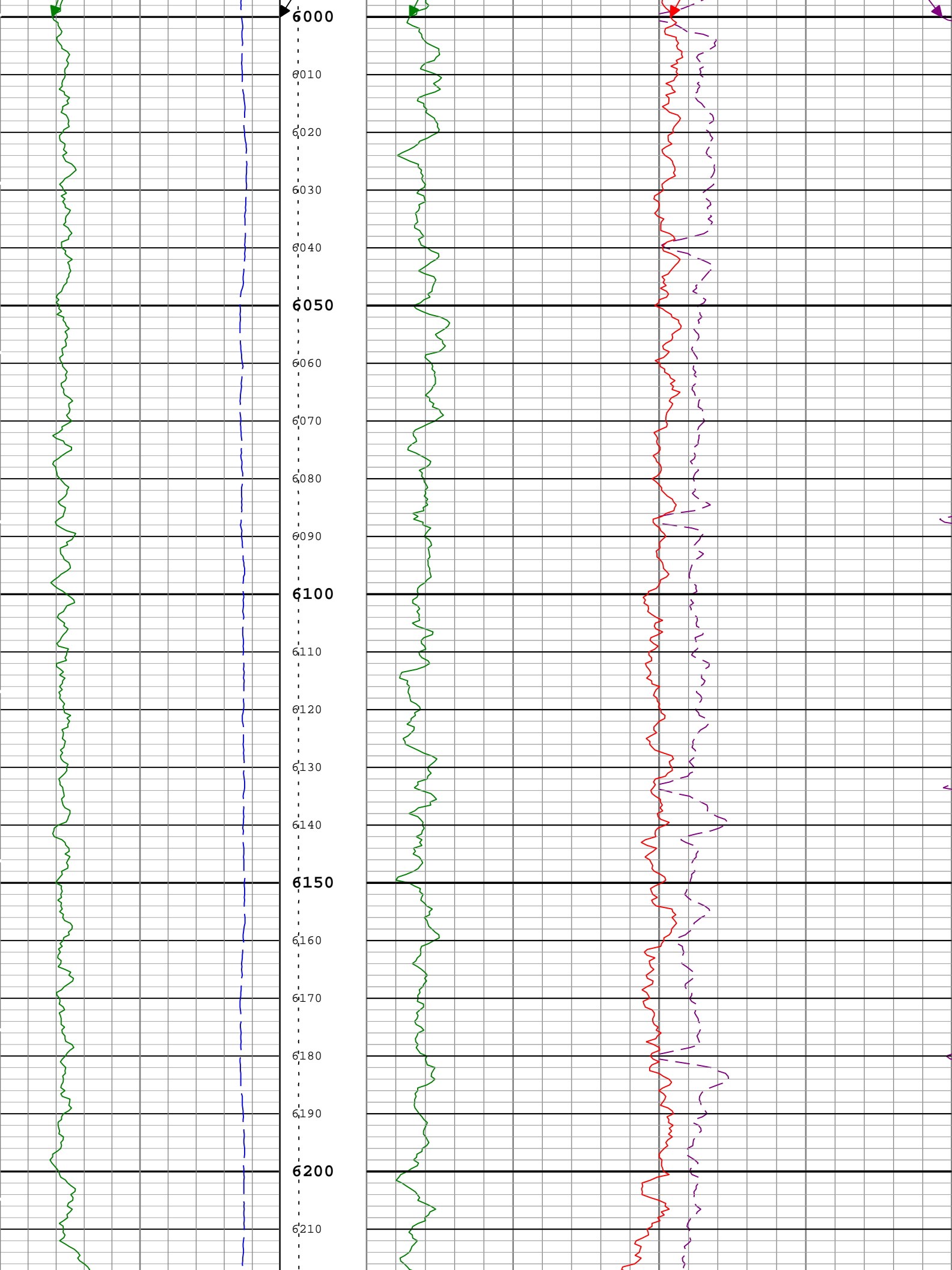


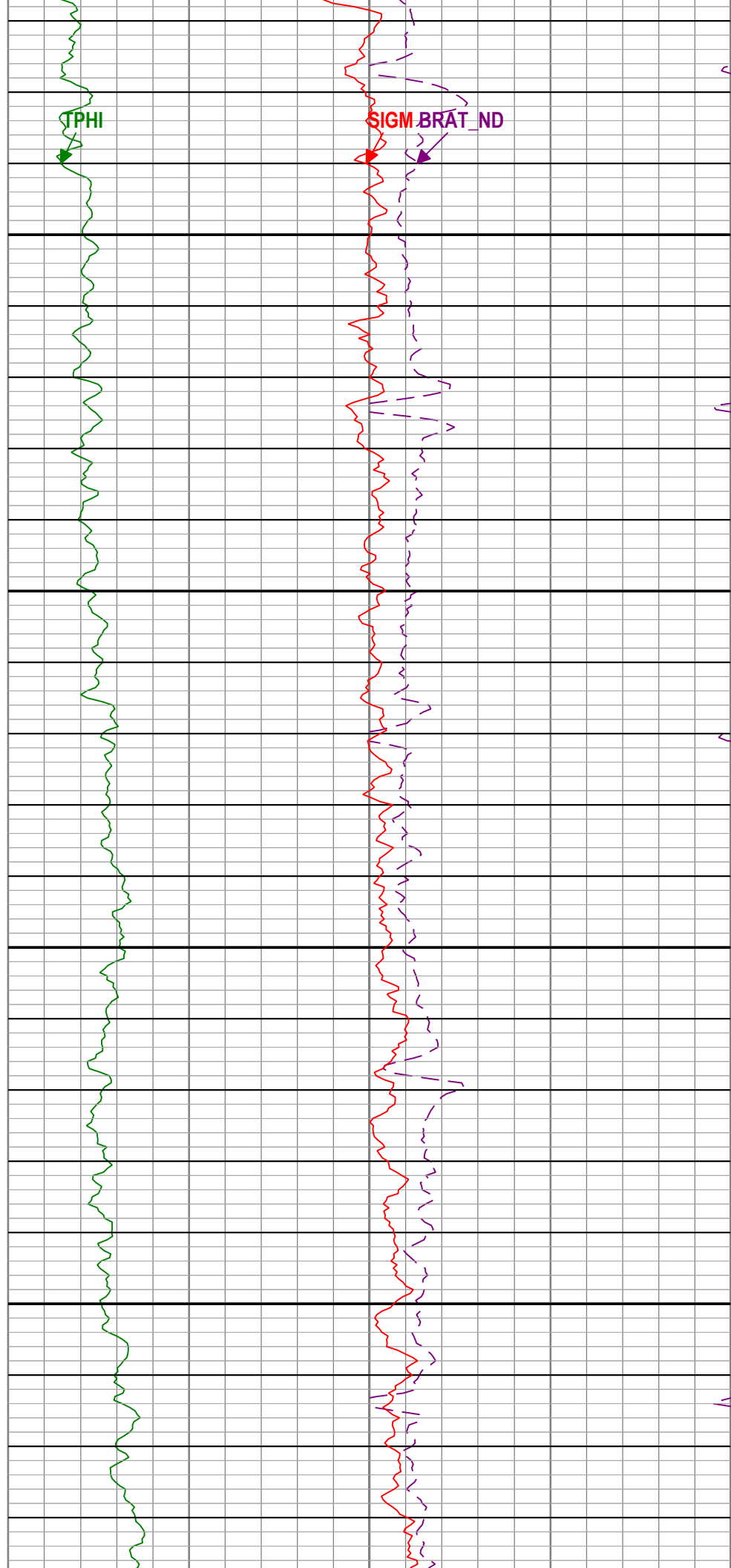
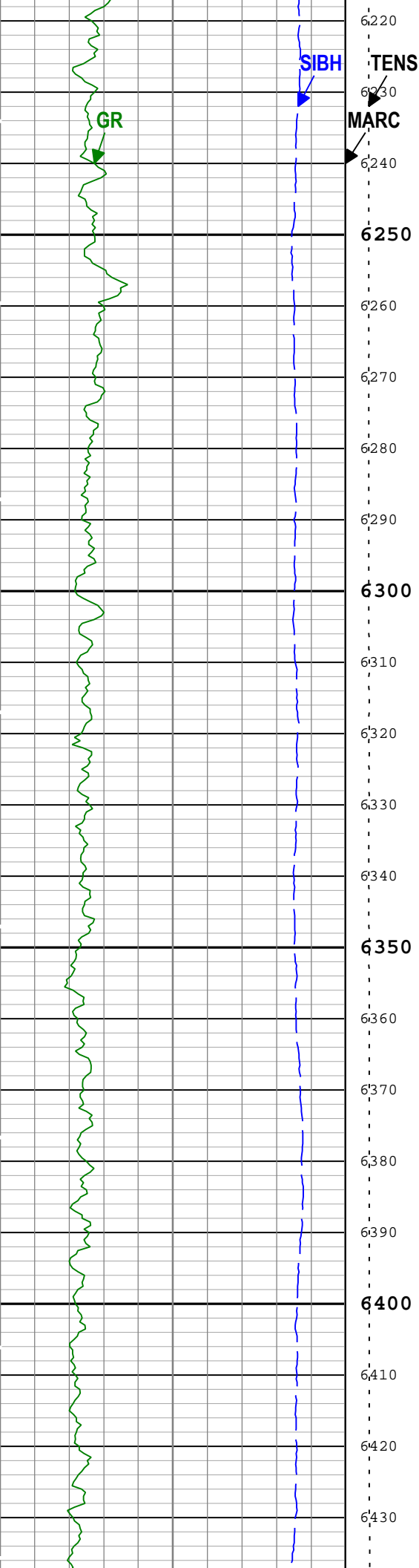


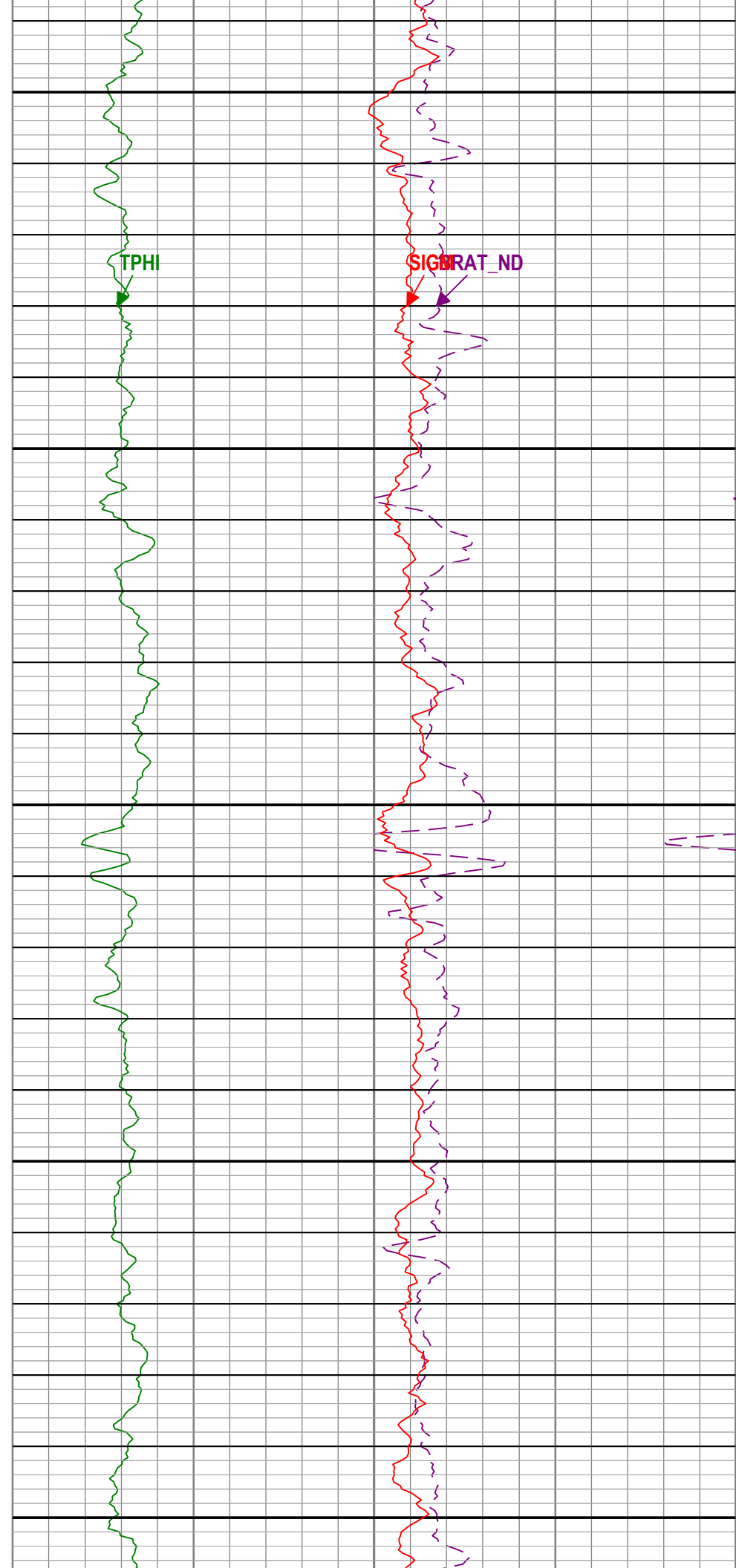
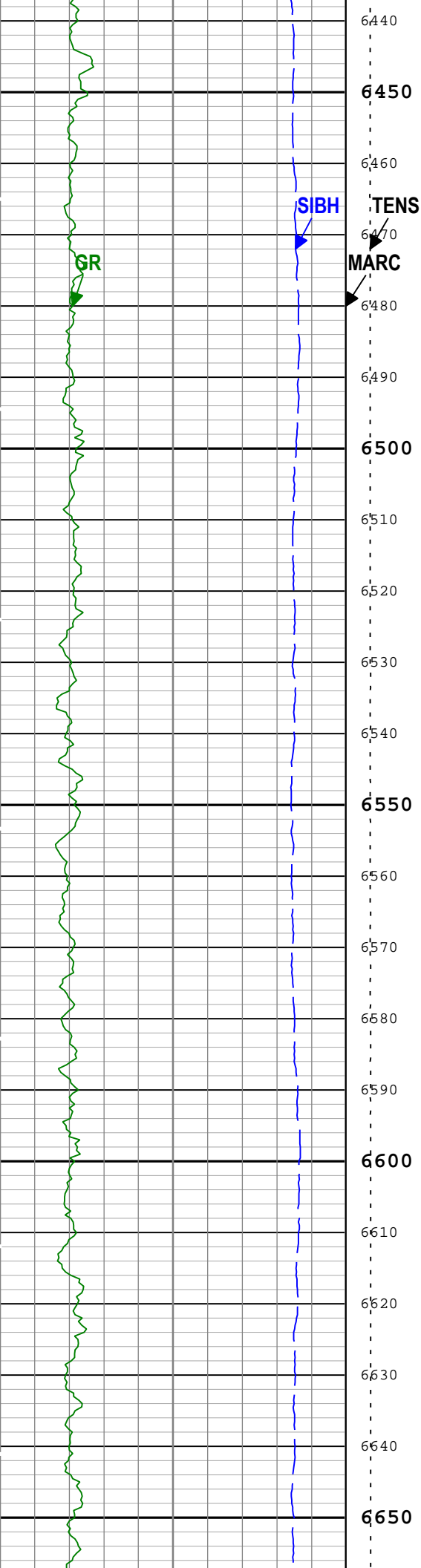


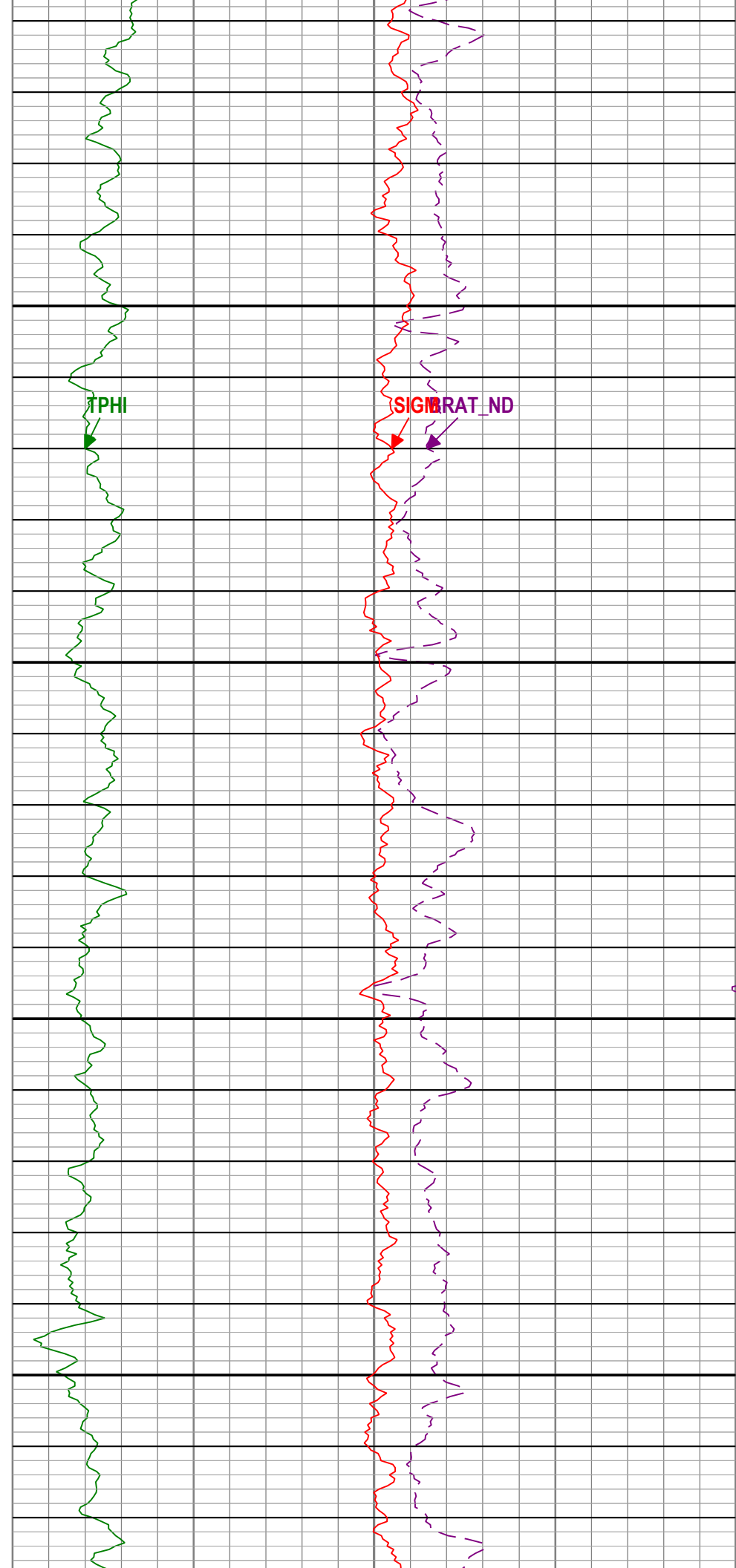
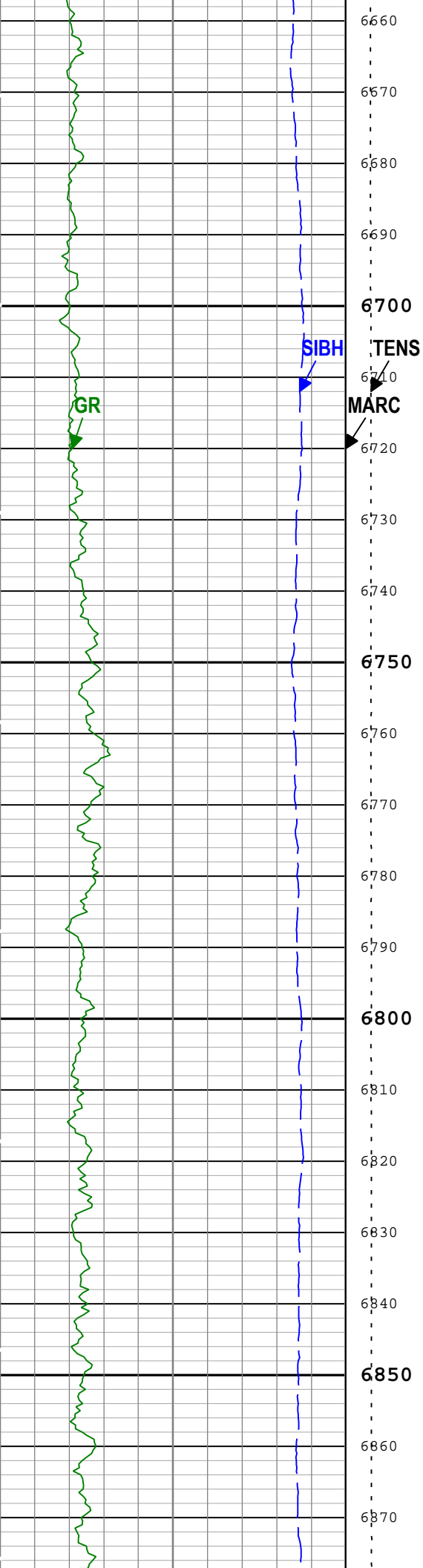


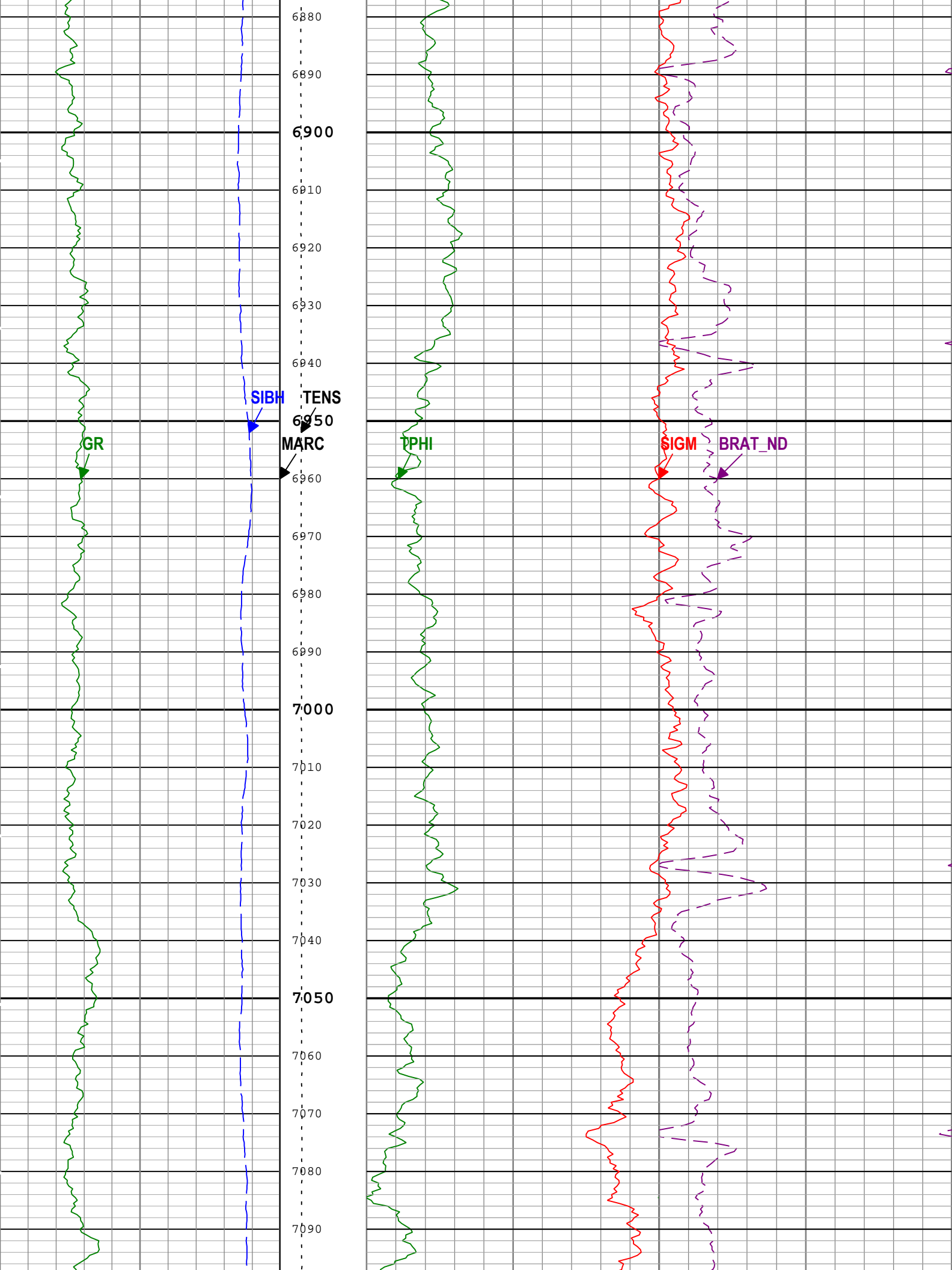


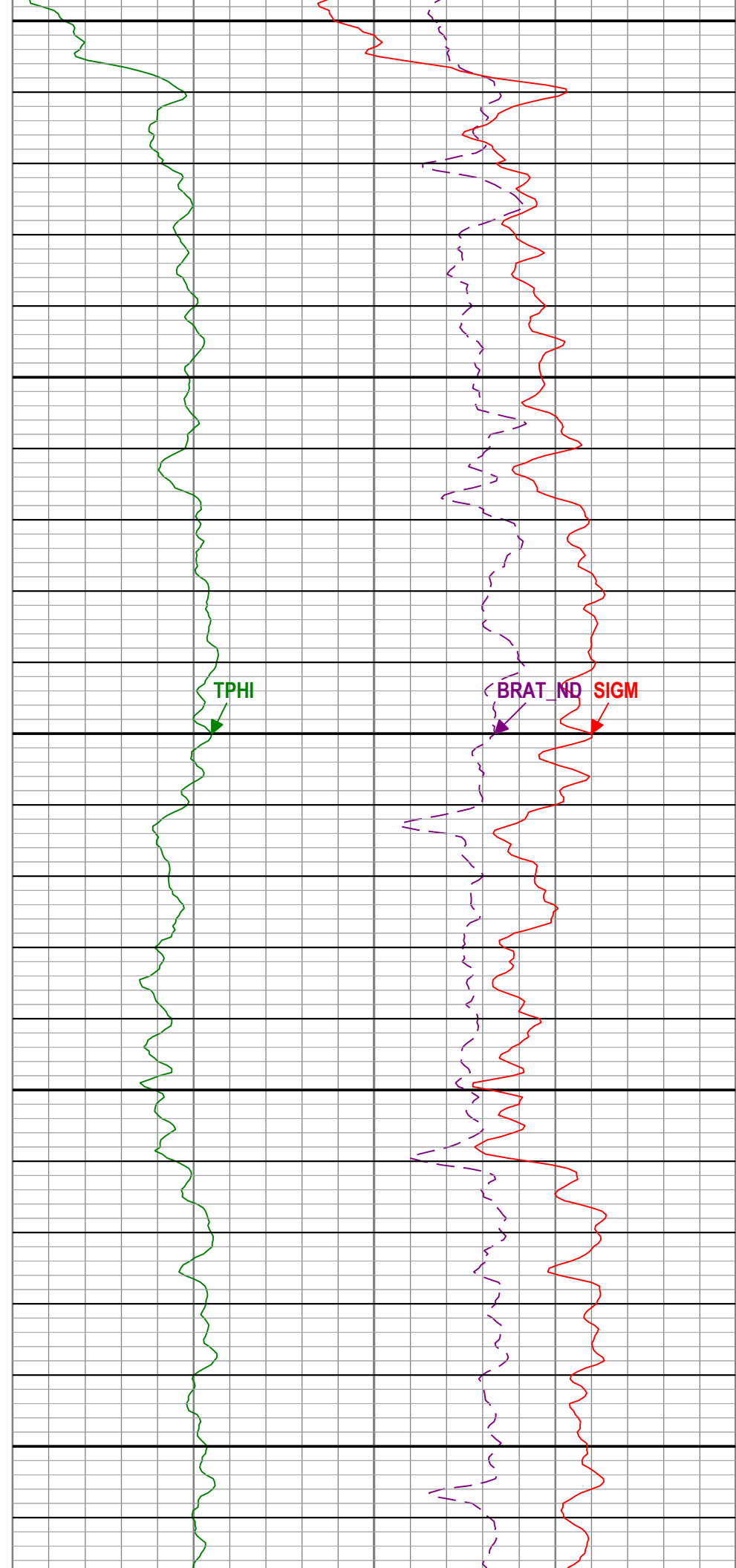
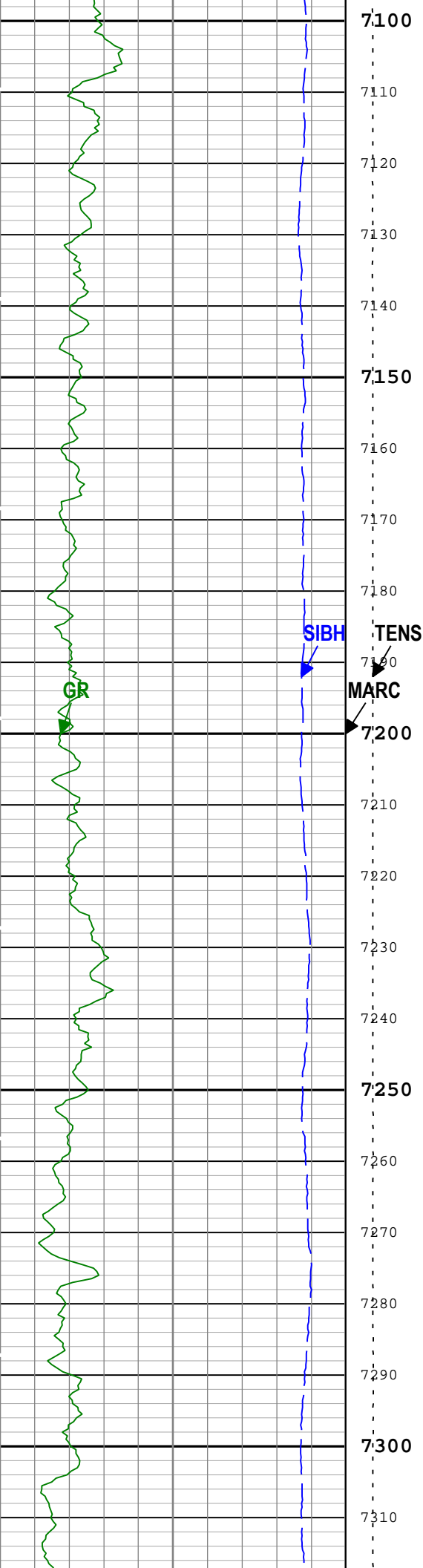


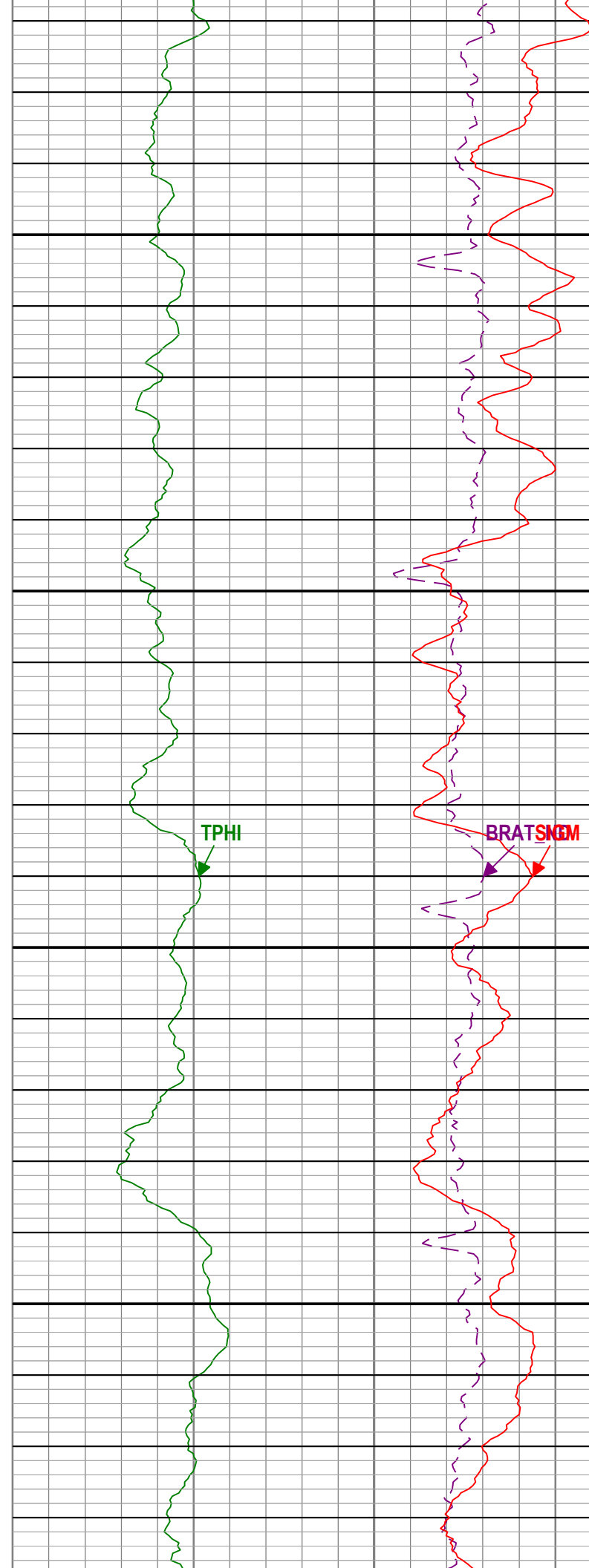
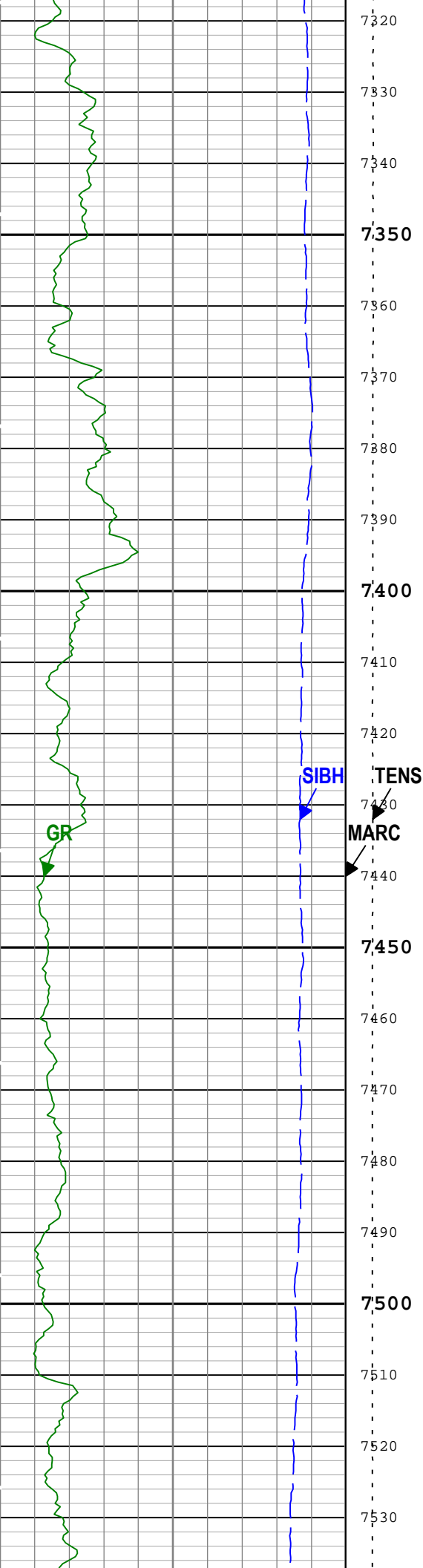


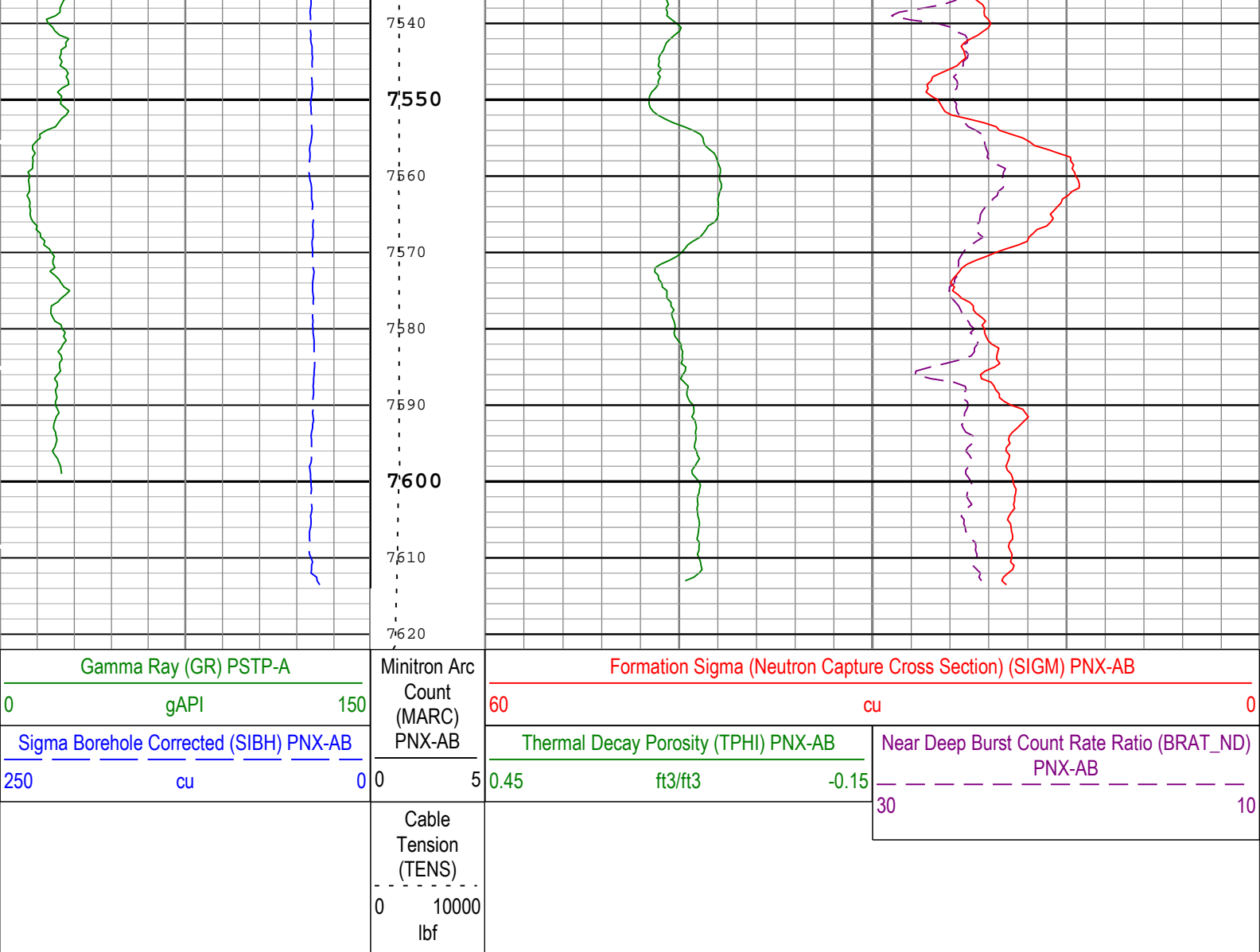












TIME_1900 - Time Marked every 60.00 (s)

Description: Pulsar (PNX) Sigma Format: Log (Pulsar (PNX) Sigma) Index Scale: 5 in per 100 ft Index Unit: ft Index Type: Measured Depth Creation Date: 25-Nov-2018 23:07:51

Channel Processing Parameters

Two: Parameters

Parameter	Description	Tool	Value	Unit
BHS	Borehole Status (Open or Cased Hole)	Borehole	Cased	
BS	Bit Size	WLSESSION	Depth Zoned	in
GSHPV	GSH Processing Version	PNX-AB	3.34A0_8	
MATR	Rock Matrix for Neutron Porosity Corrections	Borehole	LIMESTONE	

Depth Zone Parameters

Parameter	Value	Start (ft)	Stop (ft)
BS	12.25	180.5	2394
BS	8.5	2394	7622

All depth are actual.

Tool Control Parameters

Two: Parameters

Parameter	Description	Tool	Value	Unit
GRAT_CAL	Gas Ratio Calibration Coefficient	PNX-AB	1.2	
MAX_LOG_SPEED	Toolstring Maximum Logging Speed	WLSESSION	3600	ft/h

MAX_TOOL_SPEED	Maximum service speed allowed for, or attained by, a logging tool.	PNX-AB	3600	ft/h
PCCG	PSP Downhole CCL Gain	PSTP-A	Time Zoned	

Time Zone Parameters

Parameter	Value	Start Time	Stop Time	Start Depth (ft)	Stop Depth (ft)
PCCG	36 dB	25-Nov-2018 17:56:07	25-Nov-2018 18:04:30	7622.2	7570.12
PCCG	0 dB	25-Nov-2018 18:04:30	25-Nov-2018 18:05:00	7570.12	7555.16
PCCG	12 dB	25-Nov-2018 18:05:00	25-Nov-2018 18:05:58	7555.16	7526.71
PCCG	0 dB	25-Nov-2018 18:05:58	25-Nov-2018 22:22:33	7526.71	203.15

All depth are at tool zero.

Company:

Melbon Ranch 4F-17H-M265

Well:

Wattenburg

Field:

Weld

County:

USA

Crestone Peak Resources Operating LLC

Schlumberger

Pulse Neutron eXtreme
Gamma Ray Log
FIELD PRINT