

Company: Nighthawk Production LLC

Well: Whistler 6-22

Field: Wildcat

County: Lincoln State: Colorado

County: Lincoln	Platform Express	
	Sonic	
	Location:	
	SENW Sec 22, Twp 6S, Rng 54 SHL: 1668' FNL, 1951' FWL Lat 39.516583, Long -103.42763	Elev. K.B. 5264.00 ft G.L. 5252.00 ft D.F. 5263.00 ft
	Permanent Datum: Log Measured From: Drilling Measured From:	Ground Level Kelly Bushing Kelly Bushing Elev.: 12.00 ft above Perm.Datum
Field:	Wildcat	
Location:	SENW Sec 22, Twp 6S, Rng 54	
Well:	Whistler 6-22	
Company:	Nighthawk Production LLC	
Logging Date	05-073-06481-0000	Section: 22 Township: 6S Range: 54W
Run Number	Run 1	
Depth Driller	8500.00 ft	
Schlumberger Depth	8507.00 ft	
Bottom Log Interval	8499.00 ft	
Top Log Interval	410.00 ft	
Casing Driller Size @ Depth	8.625 in @ 401.00 ft	
Casing Schlumberger	410 ft	
Bit Size	7.875 in	
Type Fluid In Hole	Chemical Gel	
Density	9.2 lbm/gal	75 s
Fluid Loss	PH 11.6 cm3	7.4
Source of Sample	Active Tank	
RM @ Meas Temp	0.2 ohm.m @ 85.66 degF	
RMF @ Meas Temp	0.15 ohm.m @ 85.66 degF	
RMC @ Meas Temp	0.52 ohm.m @ 85.66 degF	
Source RMF	RMC Calculated	Calculated
RM @ BHT	0.09 @ 210.25	0.06 @ 210.25
Max Recorded Temperatures	210.25 degF	
Circulation Stopped	06-Nov-2012 16:30:00	
Logger on Bottom	06-Nov-2012 03:15:26	
Unit Number	Location: 2135	Fort Morgan
Recorded By	Megan Leone	
Witnessed By	Jerry Hedrick	

Disclaimer

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Well Sketch

Driller Depth

0.00 ft

401.00 ft

Casing 8.625in
24lbm/ft

8500.00 ft

Open Hole 7.875in

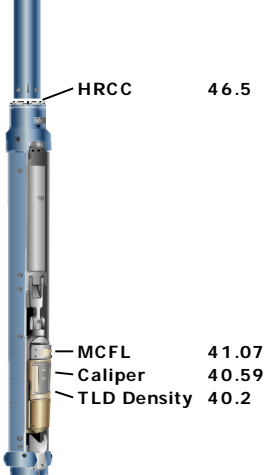
Borehole Size/Casing/Tubing Record

Bit						
Bit Size (in)	7.875					
Top Driller (ft)	401					
Top Logger (ft)	410					
Bottom Driller (ft)	8500					
Bottom Logger (ft)	8507					
Casing						
Size (in)	8.625					
Weight (lbm/ft)	24					
Inner Diameter (in)	8.099					
Top Driller (ft)	0					
Top Logger (ft)	0					
Bottom Driller (ft)	401					
Bottom Logger (ft)	410					

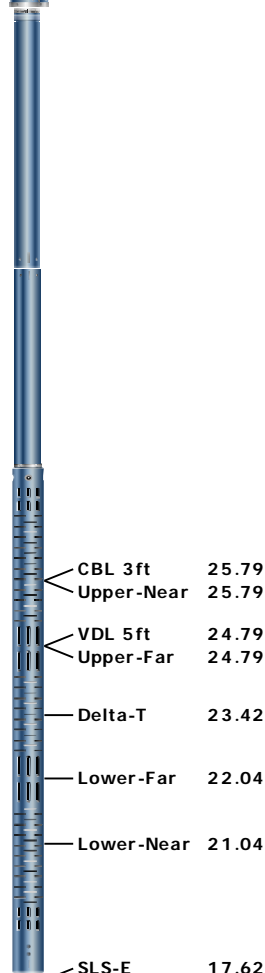
Remarks and Equipment Summary

Run1: Toolstring				Run1: Remarks	
Equip name	Length	MP name	Offset	This is the first run in hole	
LEH-QT	65.83			Toolstring run as per toolsketch	
LEH-QT				Limestone Matrix 2.71	
DTC-H	62.91			Replaced AIT bottom nose with hole finder	
ECH-KC		CTEM	62.01		
DTC-H		HV	0.00		
		TelStatus	59.91		
		ToolStatus	59.91		
		Temperature	59.89		
HGNS-H	59.91				
HGNH:3823		GR	59.17		
NSR-F:5215					
NPV-N					
HMCA-H					
HACCZ-H:5736					
HGNS-H					
		CNL Porosity	52.84		
		HGNS	50.51		
		HMCA	50.51		
		Accelerometer	0.00		
HDRS-H	50.51				
ECH-MEB					
HRCC-H					
HRMS-H					

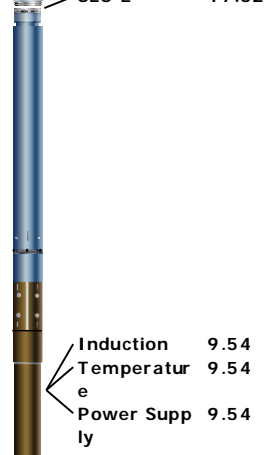
GSR-J:5240
Long Spacing:28
732
HRGD-H:3816
GPV-Q
Backscatter
Short Spacing:27
634



DSLT-H:3823 38.26
ECH-KH
DSLH-H:3823
SLS-E



AIT-H:392 17.62
AHIS:392
AHHF



			
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Depth Summary			
Depth Control Parameters		Run1	
Conveyance Type		Wireline	
Log Sequence		This is the first run in hole	
Stretch Correction (ft)		8.00	
Rig Type		Land	
Depth Remark Parameters		Run1	
Depth Remark 1		All Schlumberger depth procedures followed	
Depth Remark 2		IDW used as primary depth device. Z-chart used as secondary depth device.	
Depth Measuring Device		Run1	
Type		IDW-B	
Wheel Correction 1		1	
Wheel Correction 2		0	
Tension Device		Run1	
Type		CMTD-B/A	
Calibration Points		0	
Logging Cable		Run1	
Type		7-46NT-XS	
Logging Cable Length (ft)		24000.00	

Run1			

Integration Summary				
Output Channel(s)	Output Description	Input Parameter	Output Value	Unit
Software Version				
Acquisition System			Version	
MaxWell			3.1.9755.0	
Application Patch			SP-20120723-3.1.9755.1112	
			EXP_APL-MASTAXIS-3.1.9755.1221	
Computation	Description			Version
Sonic Openhole Ensemble	Sonic Openhole Ensemble			3.1.9755.1112
DepthCorrection	DepthCorrection			3.1.9755.0
Tool Elements	Description		Software Version	Firmware Version
HGNS-H	HILT Gamma-Ray and Neutron Sonde, 150 degC		3.1.9755.0	2.0
SLS-E	Sonic Logging Sonde E supports 3'-5'BHC DT and CBL/VDL		3.1.9755.1112	4.0

Pass Summary								
Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	Depth Shift	Include Parallel Data

Run1	Log[4]:Up	Up	166.47 ft	8504.24 ft	06-Nov-2012 3:30:47 AM	06-Nov-2012 5:24:04 AM	0.00 ft	Data
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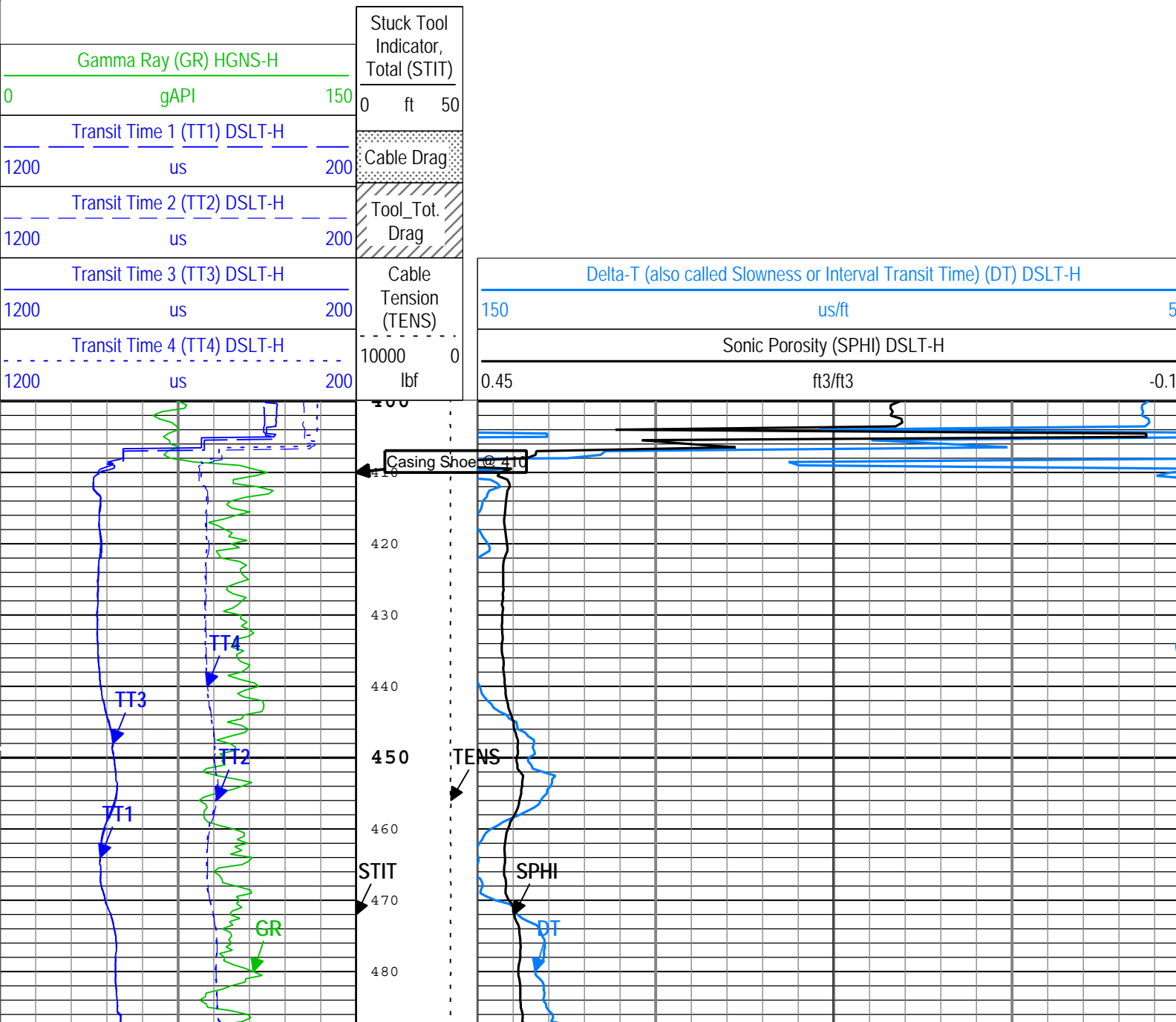
All depths are referenced to toolstring zero

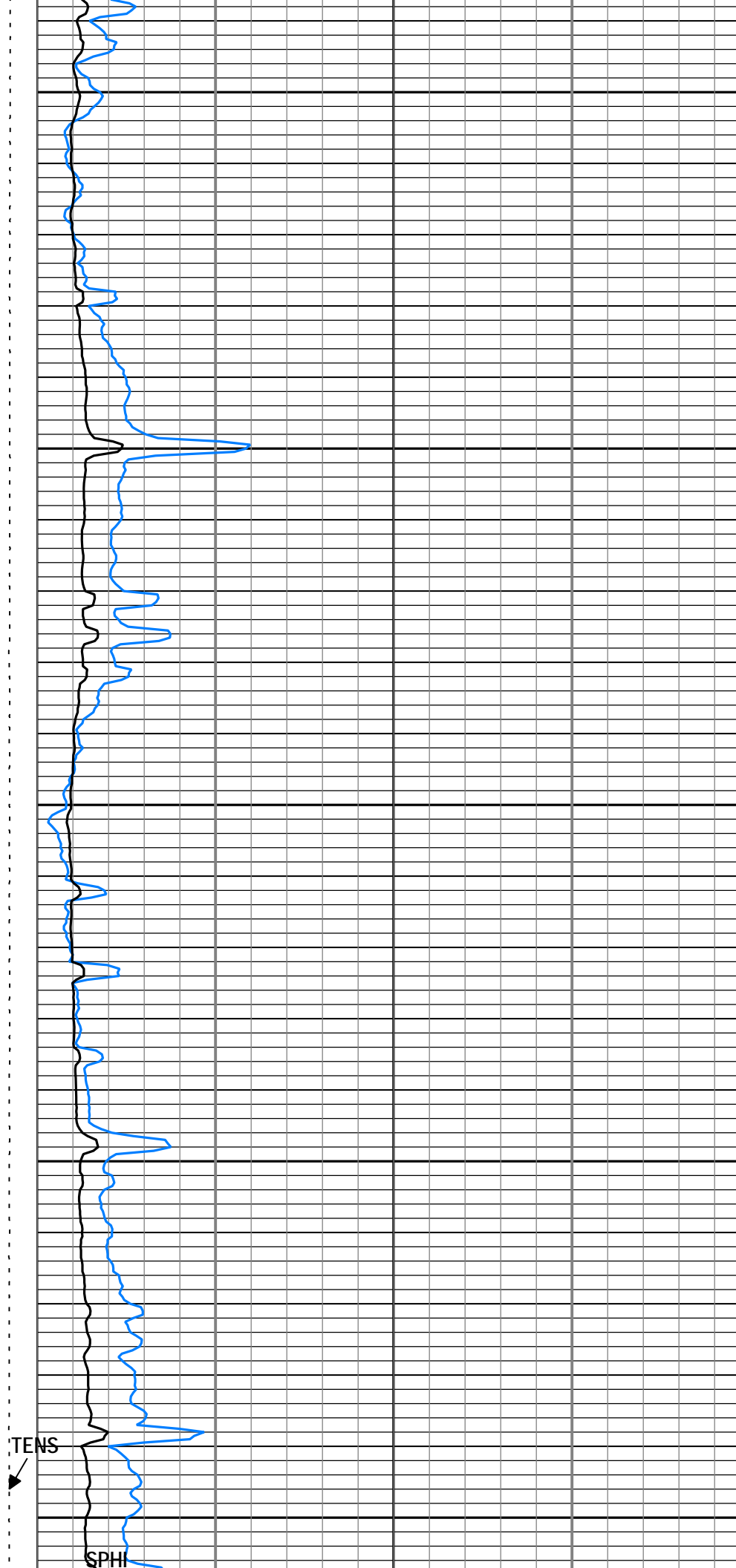
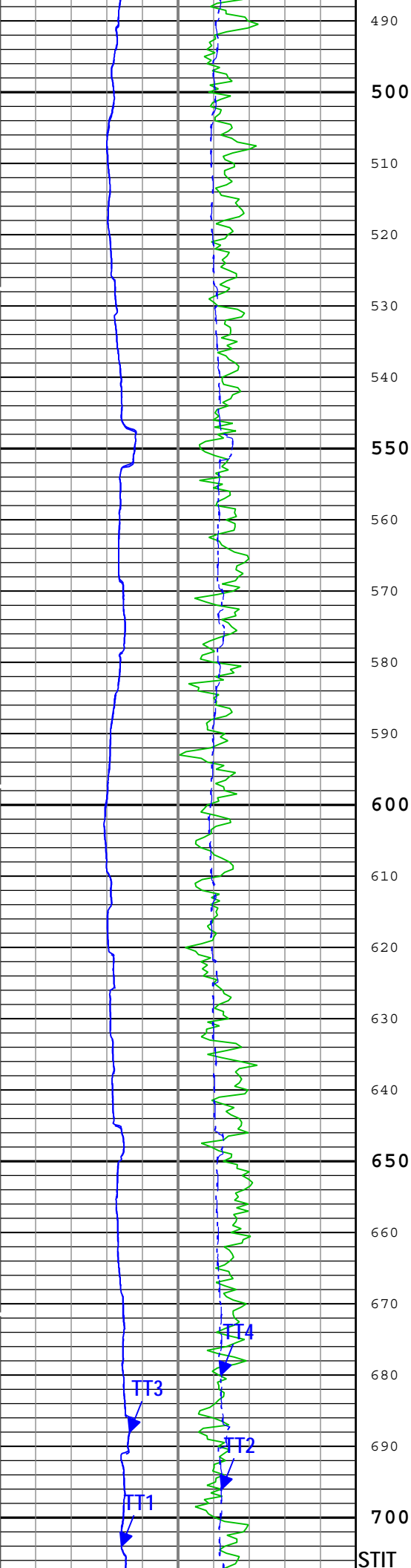
Log	Run1: Log[4]:Up
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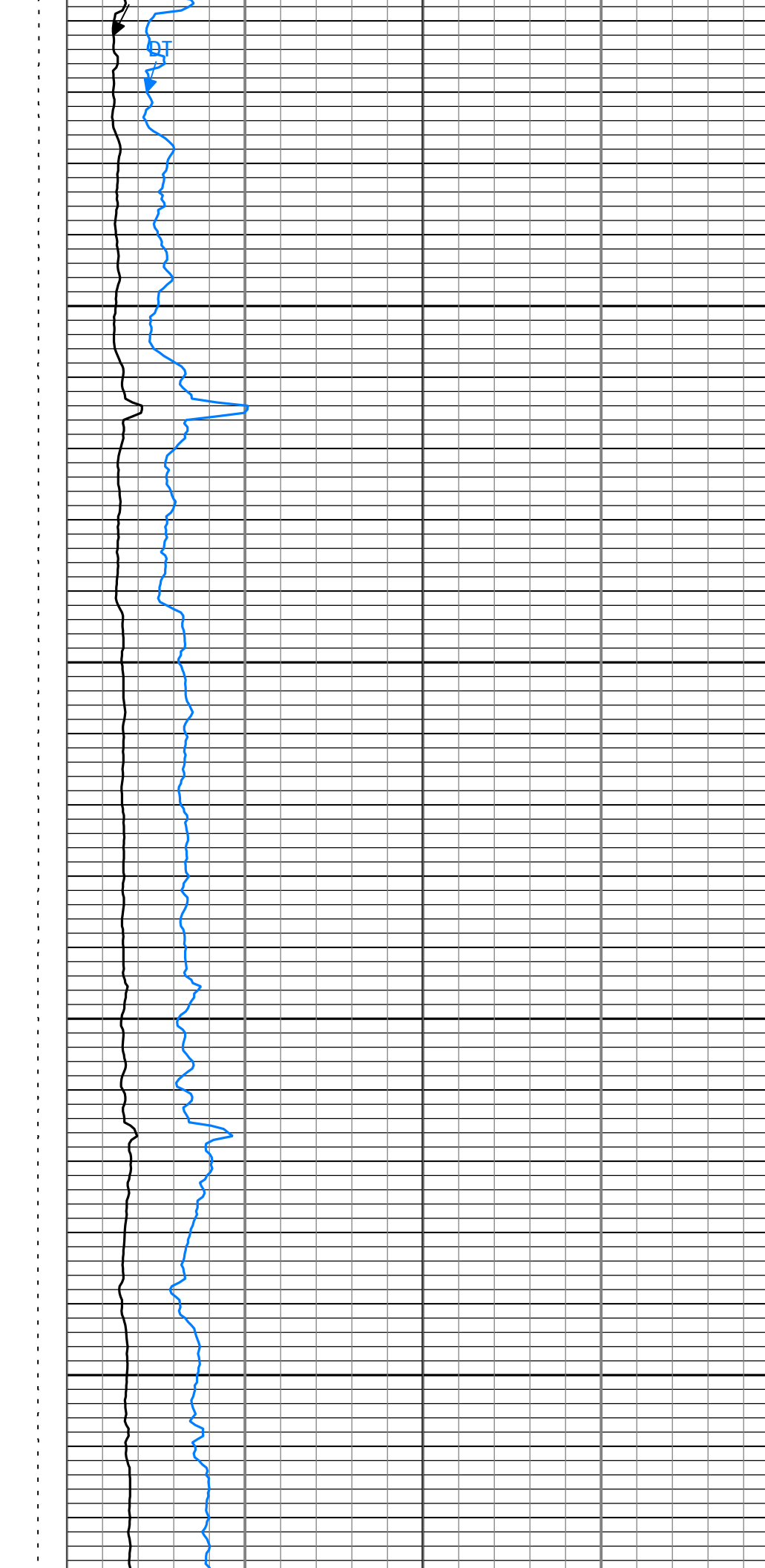
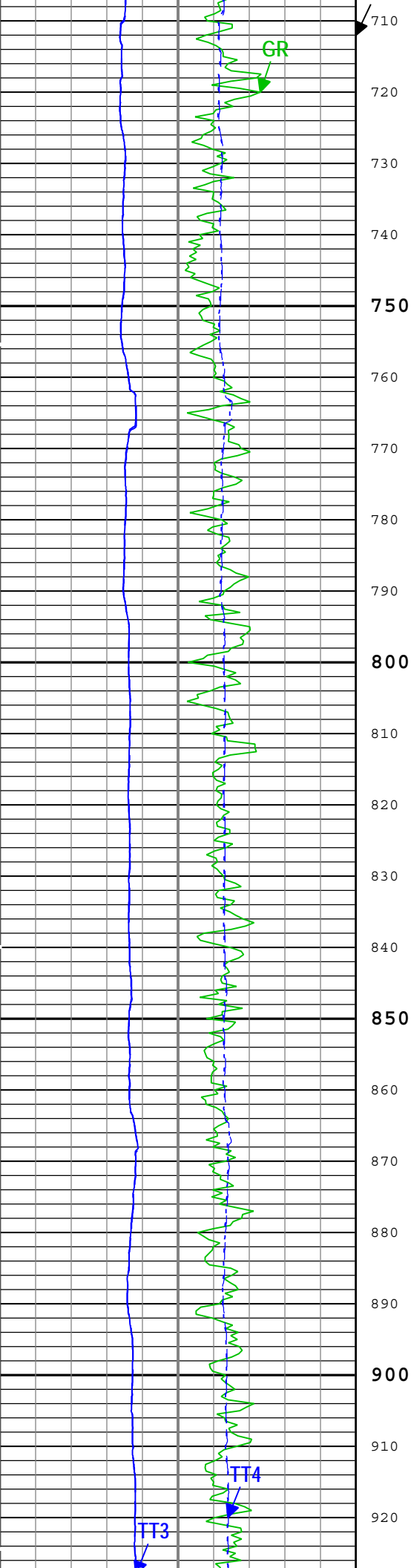
Description: DSST P&S Format: Log (EMD Sonic DSST) Index Scale: 5 in per 100 ft Index Unit: ft Index Type: Measured Depth Creation Date: 06-Nov-2012 05:32:07

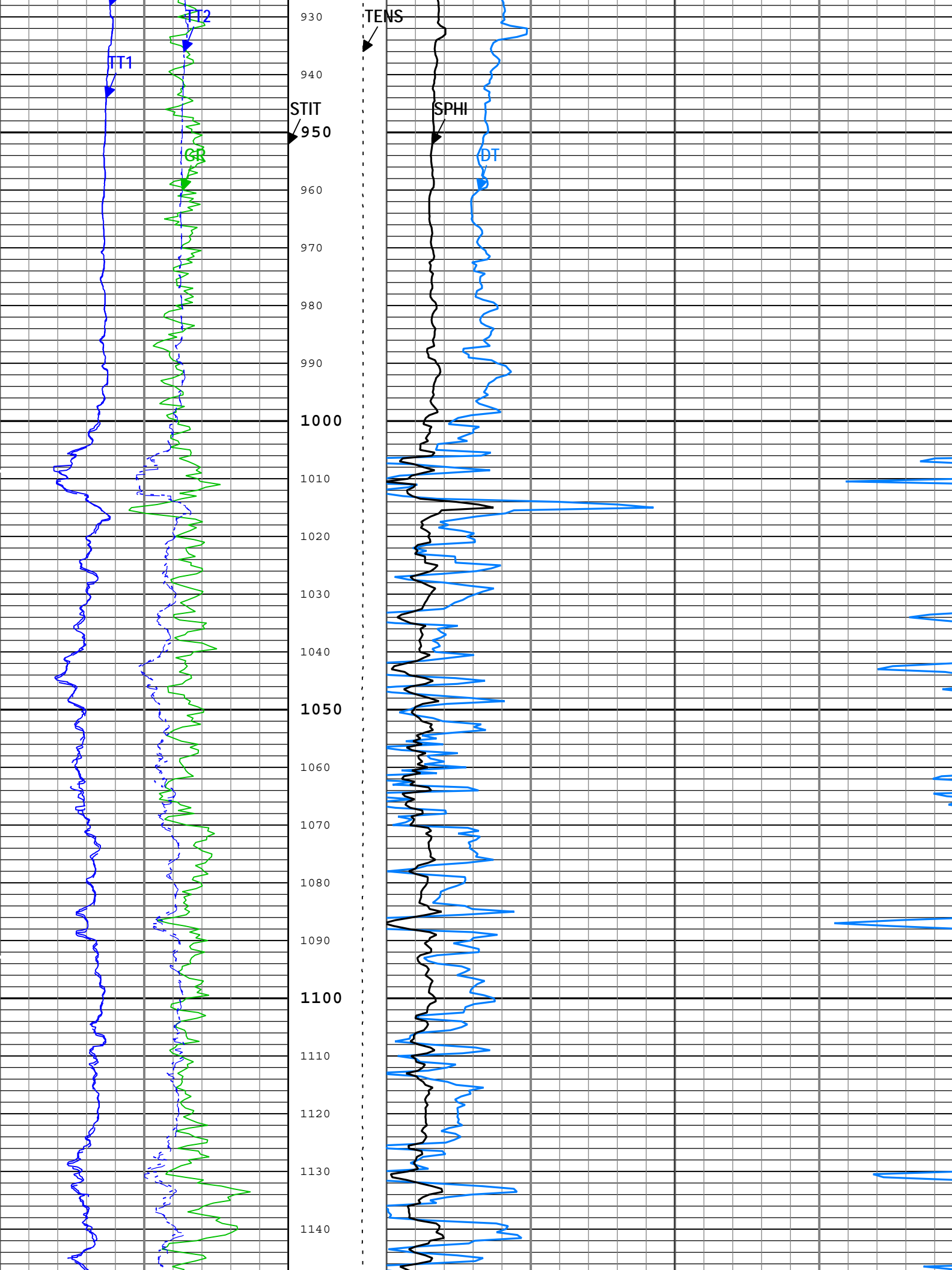
Channel	Source	Sampling
DT	DSLT-H:SLS-E:SLS-E	6in
GR	HGNS-H:HGNS-H:HGNS-H	6in
SPHI	DSLT-H:SLS-E:SLS-E	6in
STIT	DepthCorrection	6in
TENS	WLWorkflow	1in
TIME_1900	WLWorkflow	0.1in
TT1	DSLT-H:SLS-E:SLS-E	2in
TT2	DSLT-H:SLS-E:SLS-E	2in
TT3	DSLT-H:SLS-E:SLS-E	2in
TT4	DSLT-H:SLS-E:SLS-E	2in

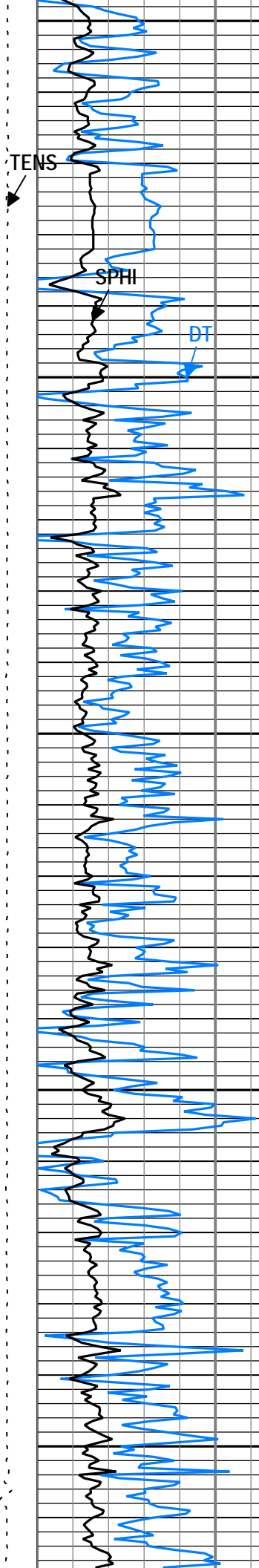
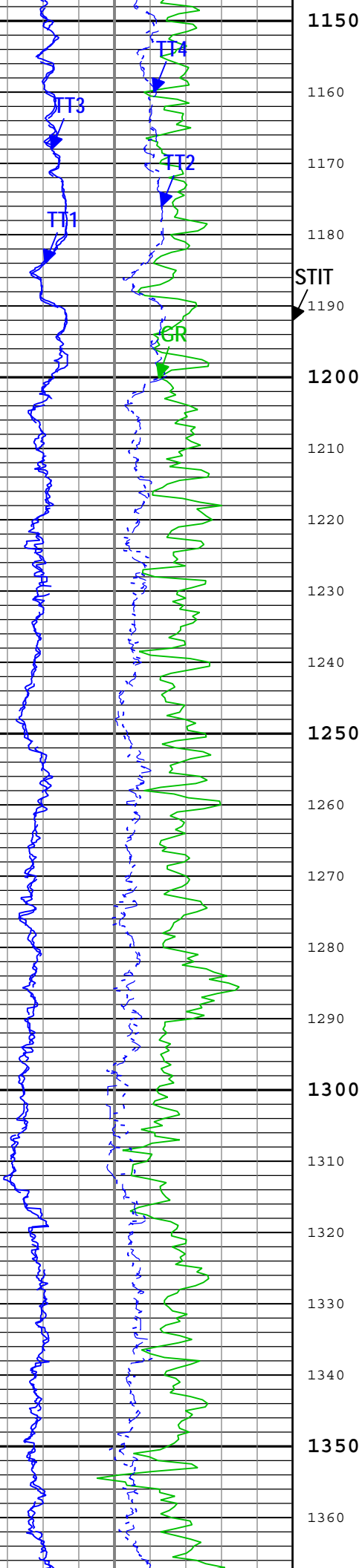
TIME_1900 - Time Marked every 60.00 (s)

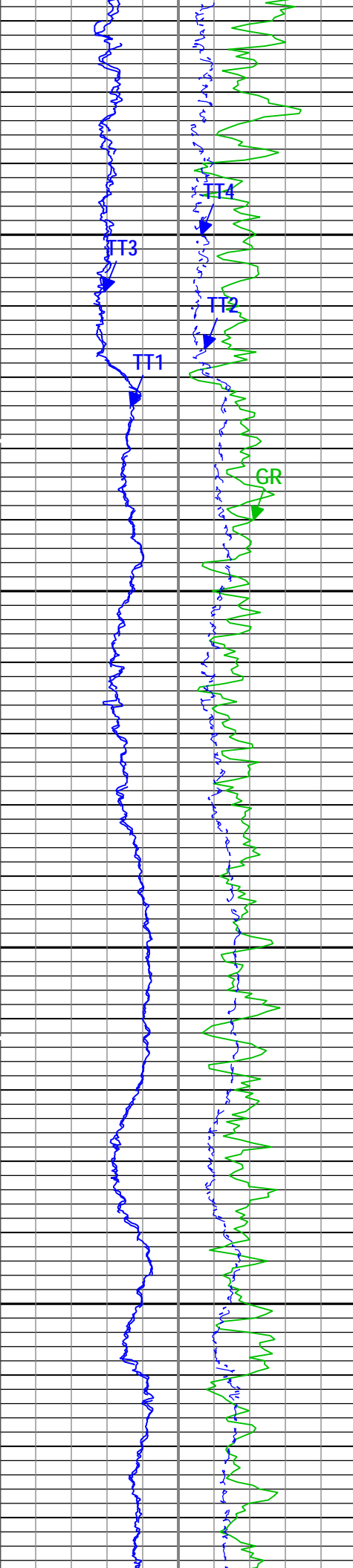




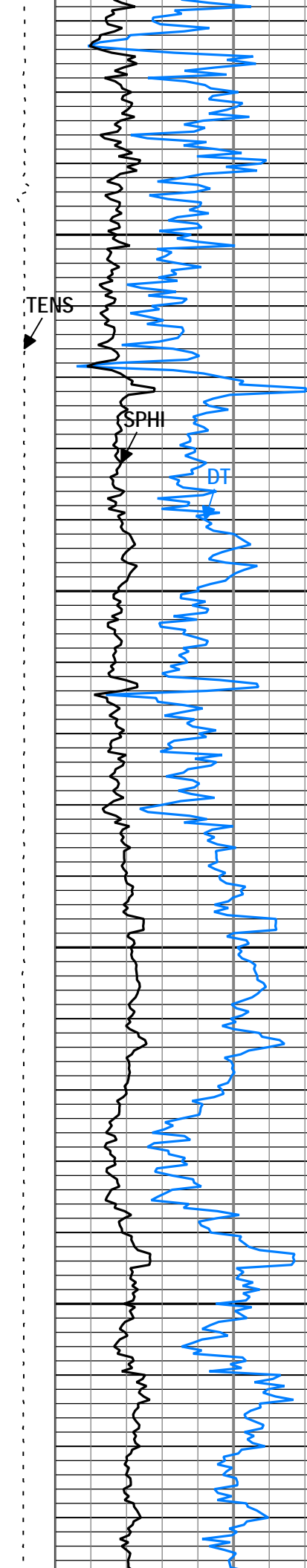


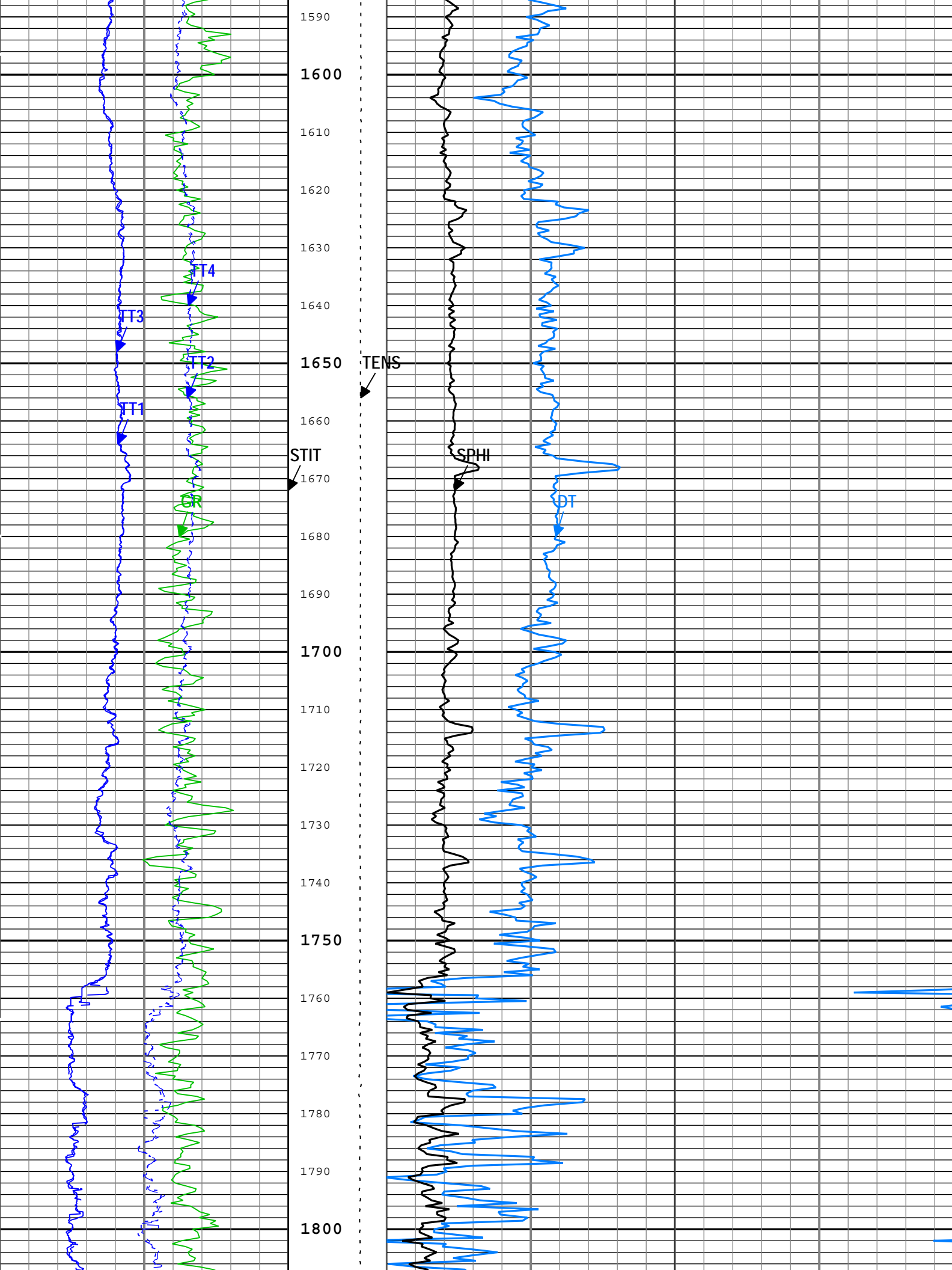


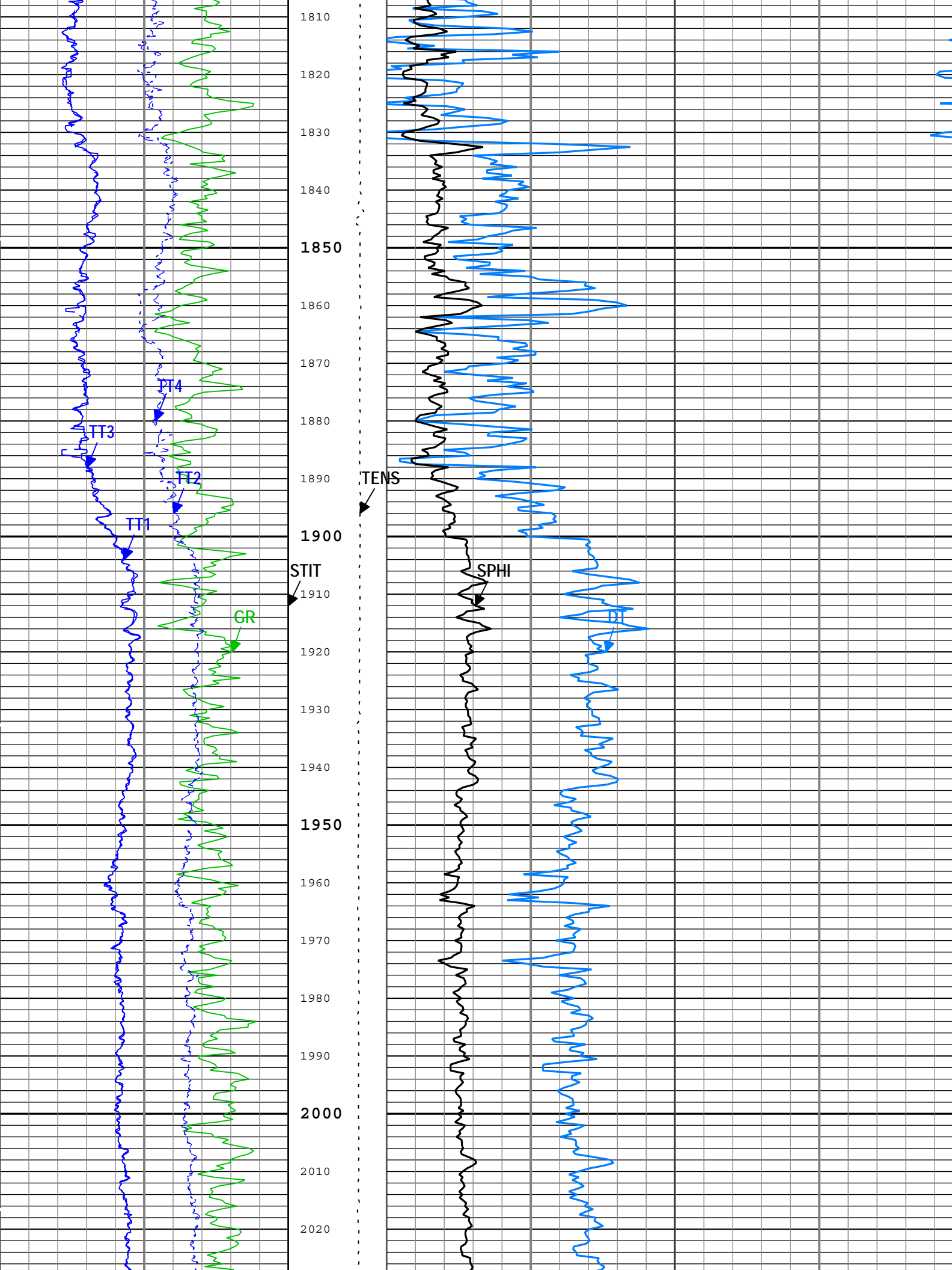


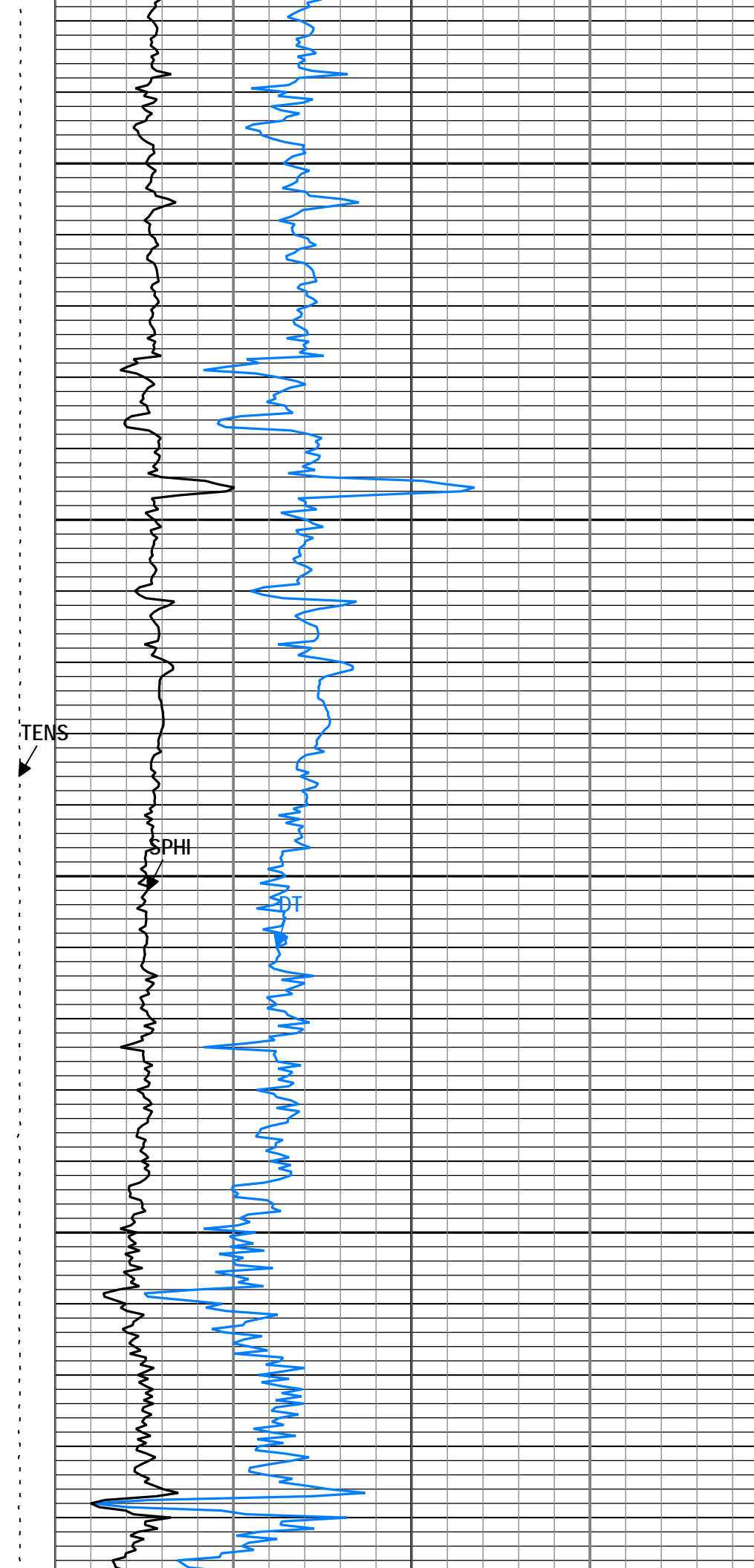
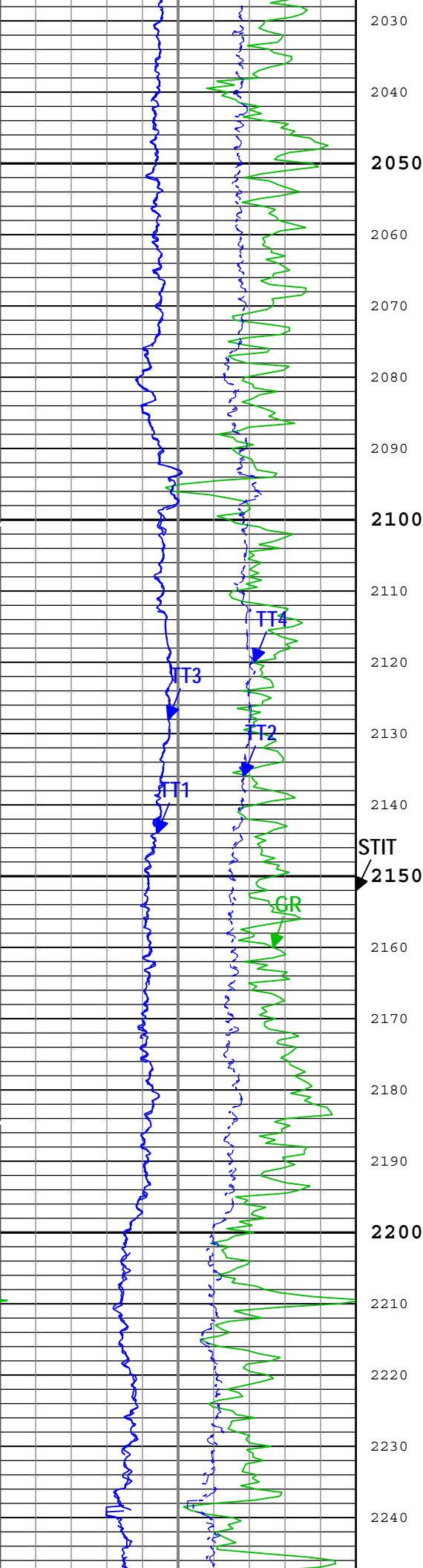


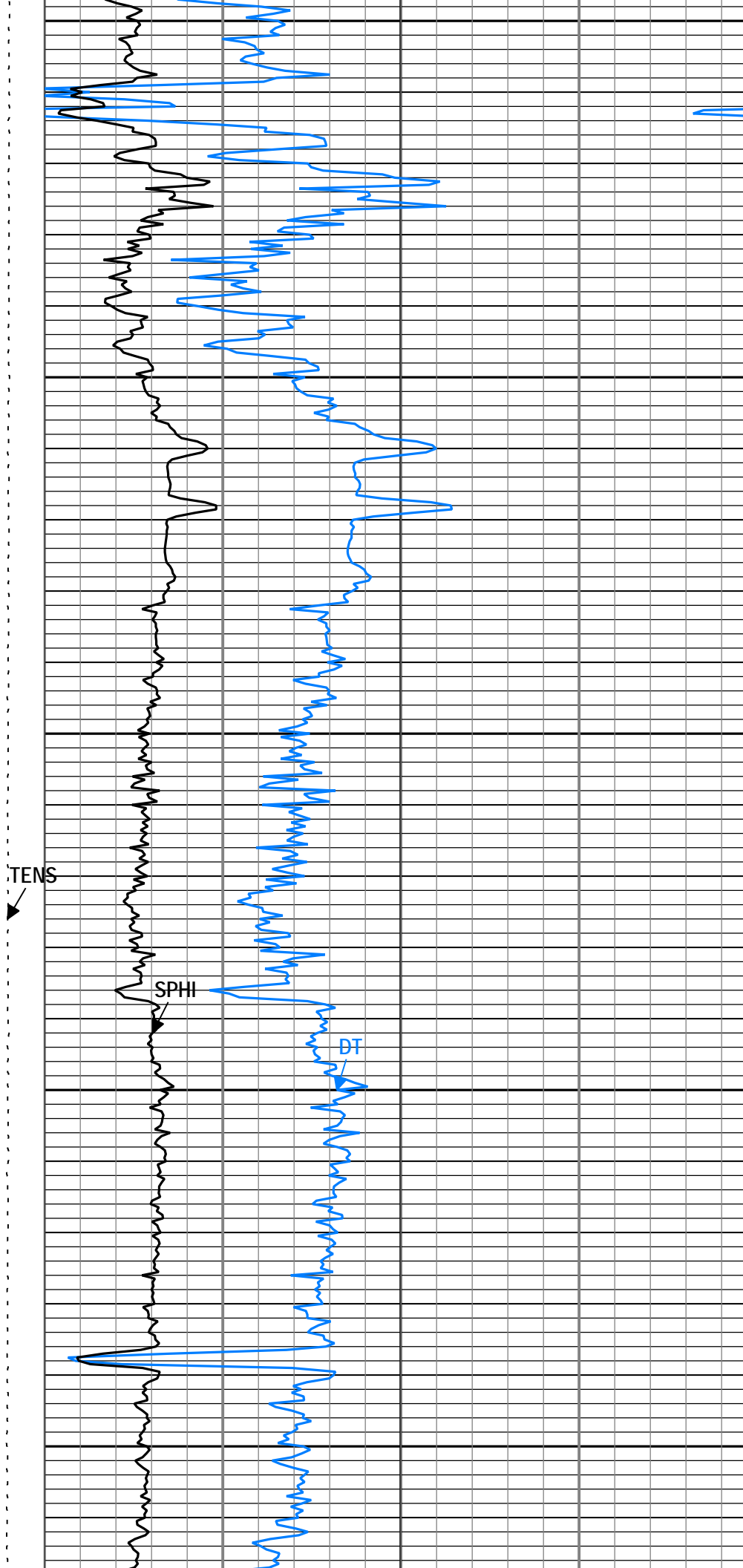
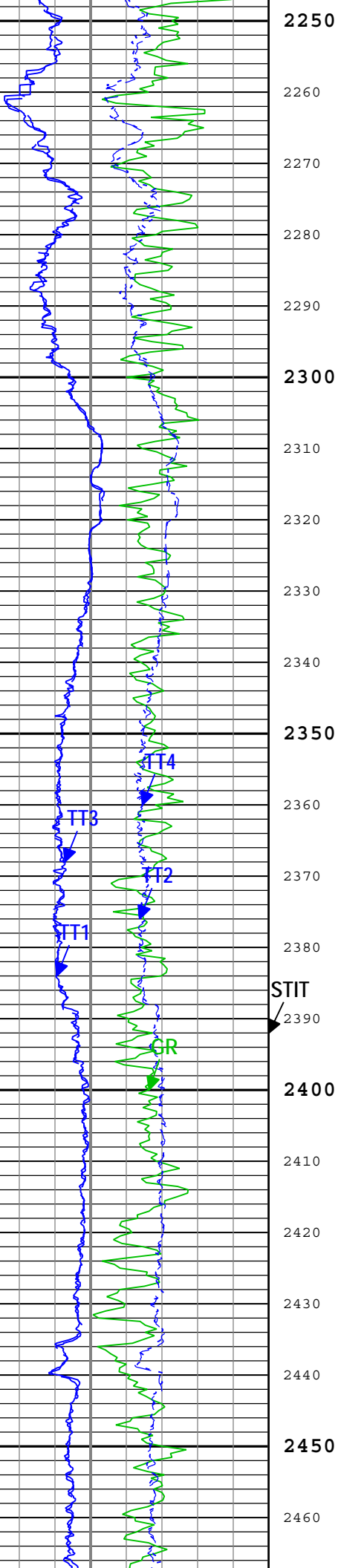
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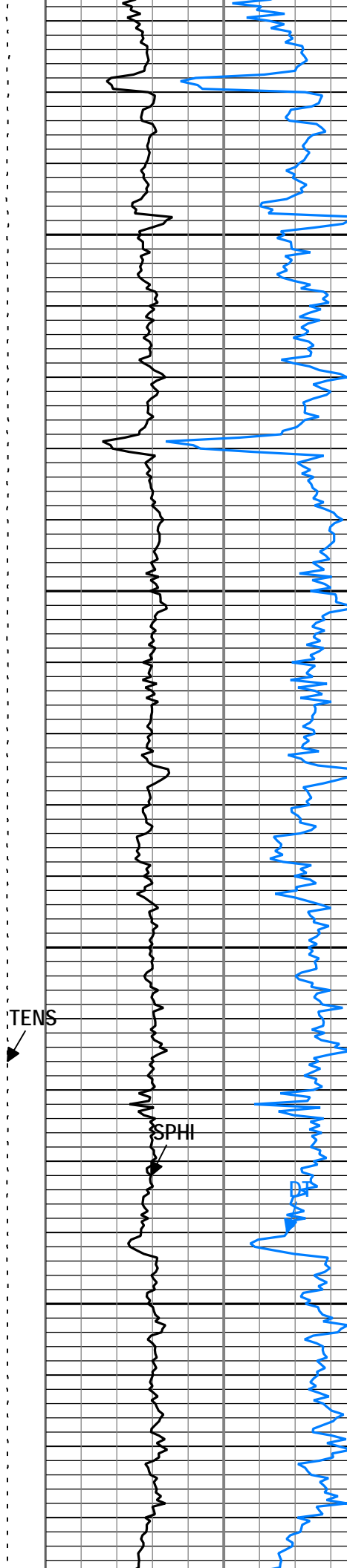
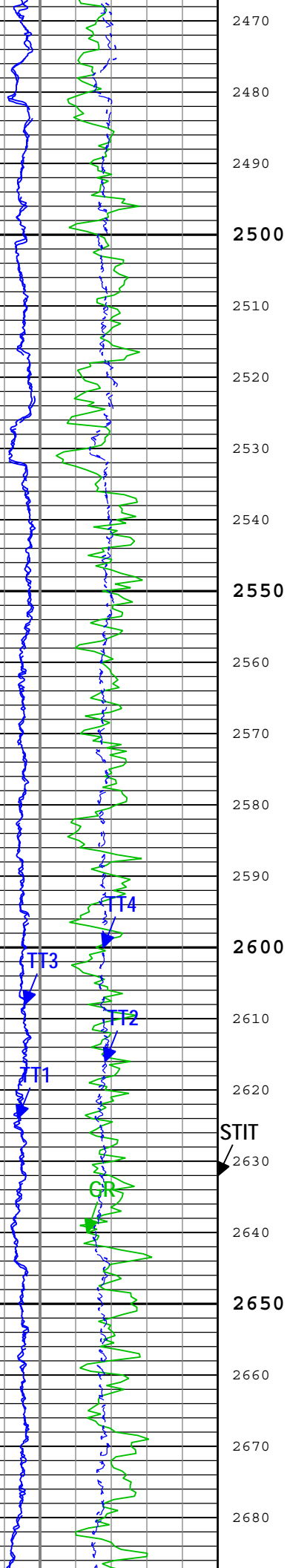


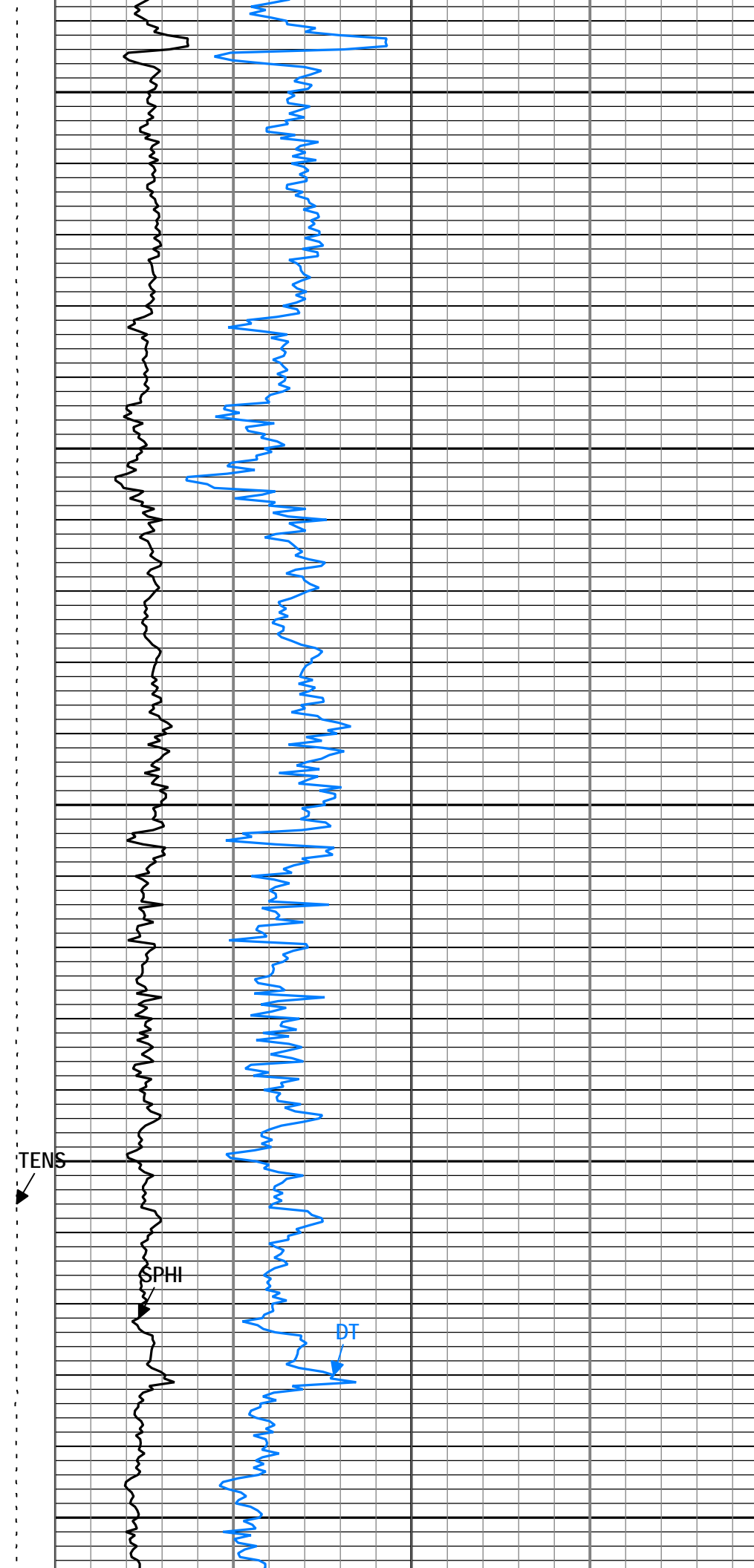
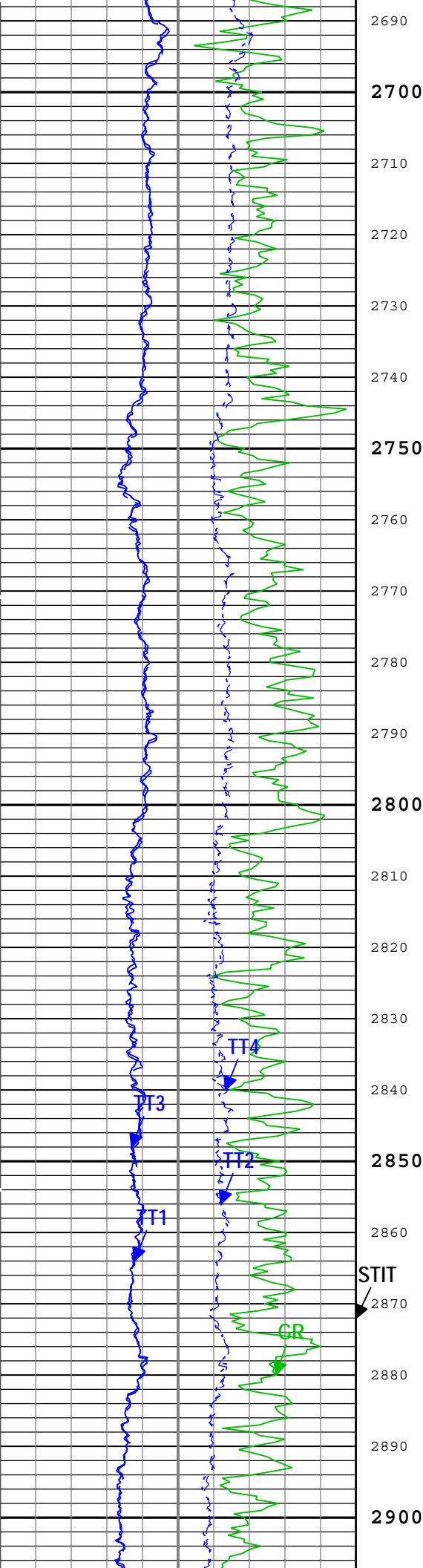


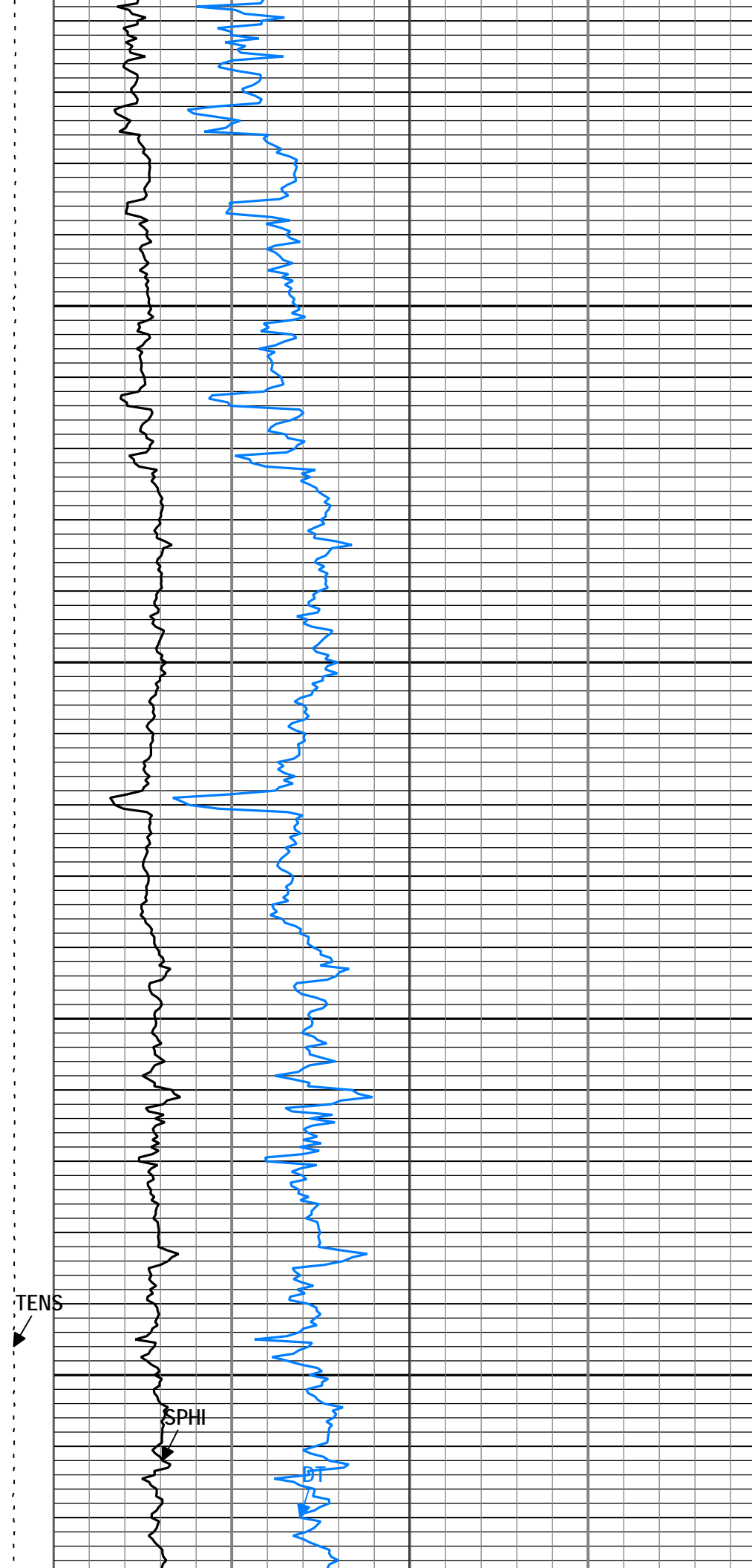
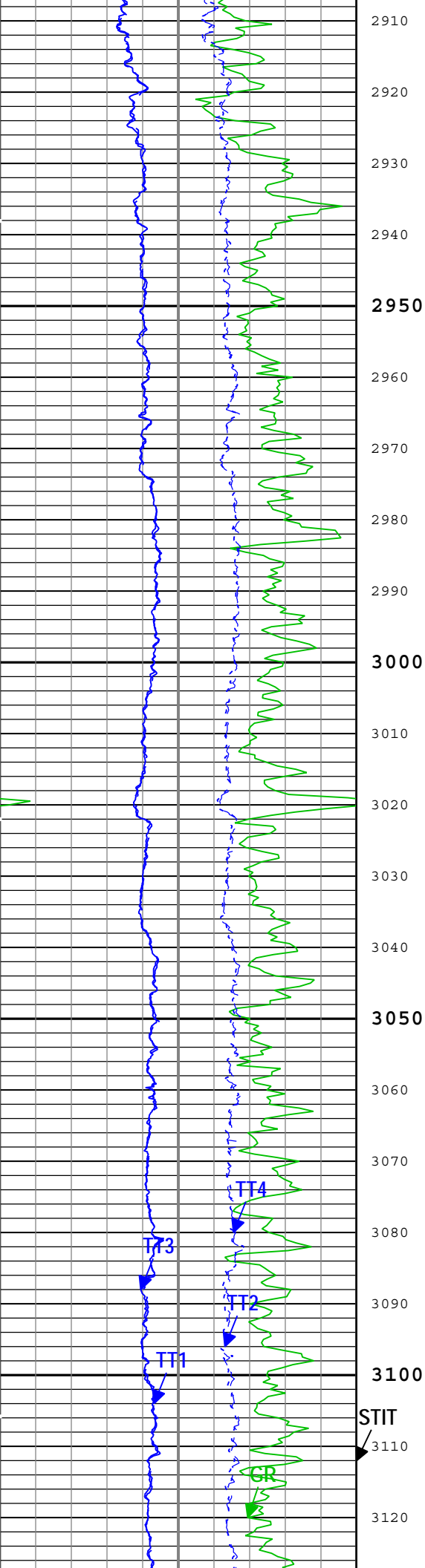


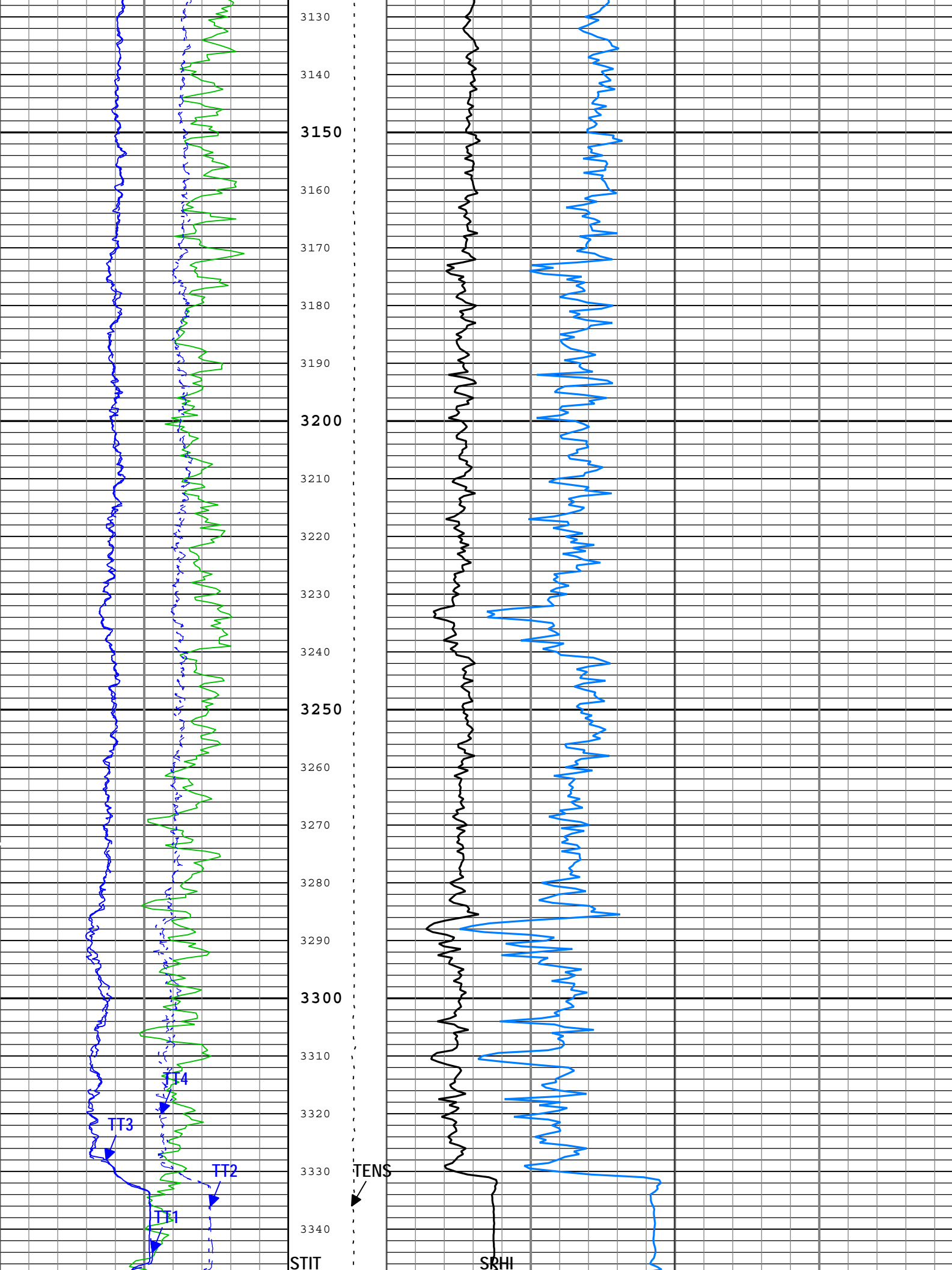


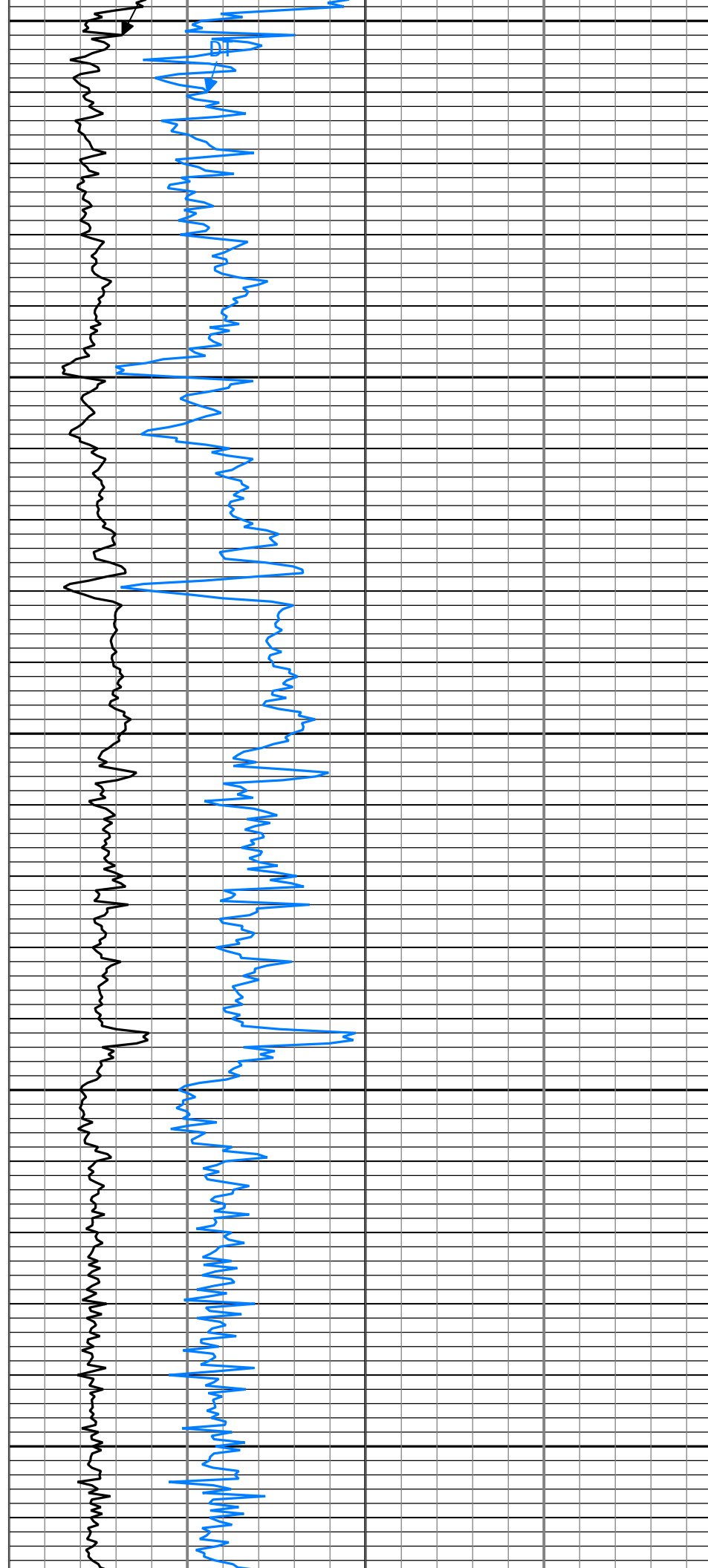
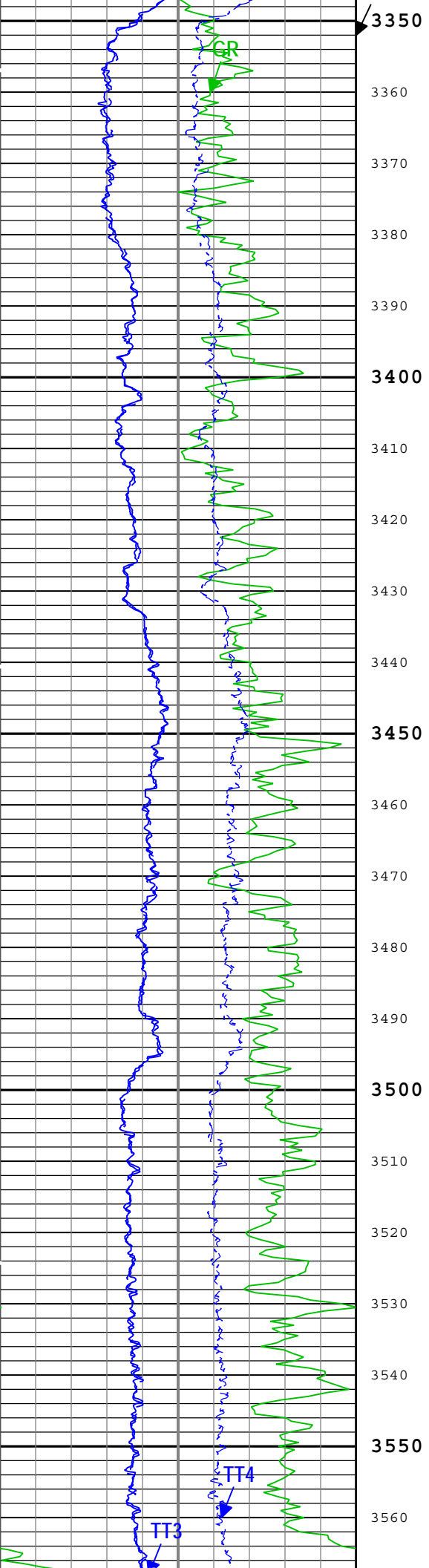


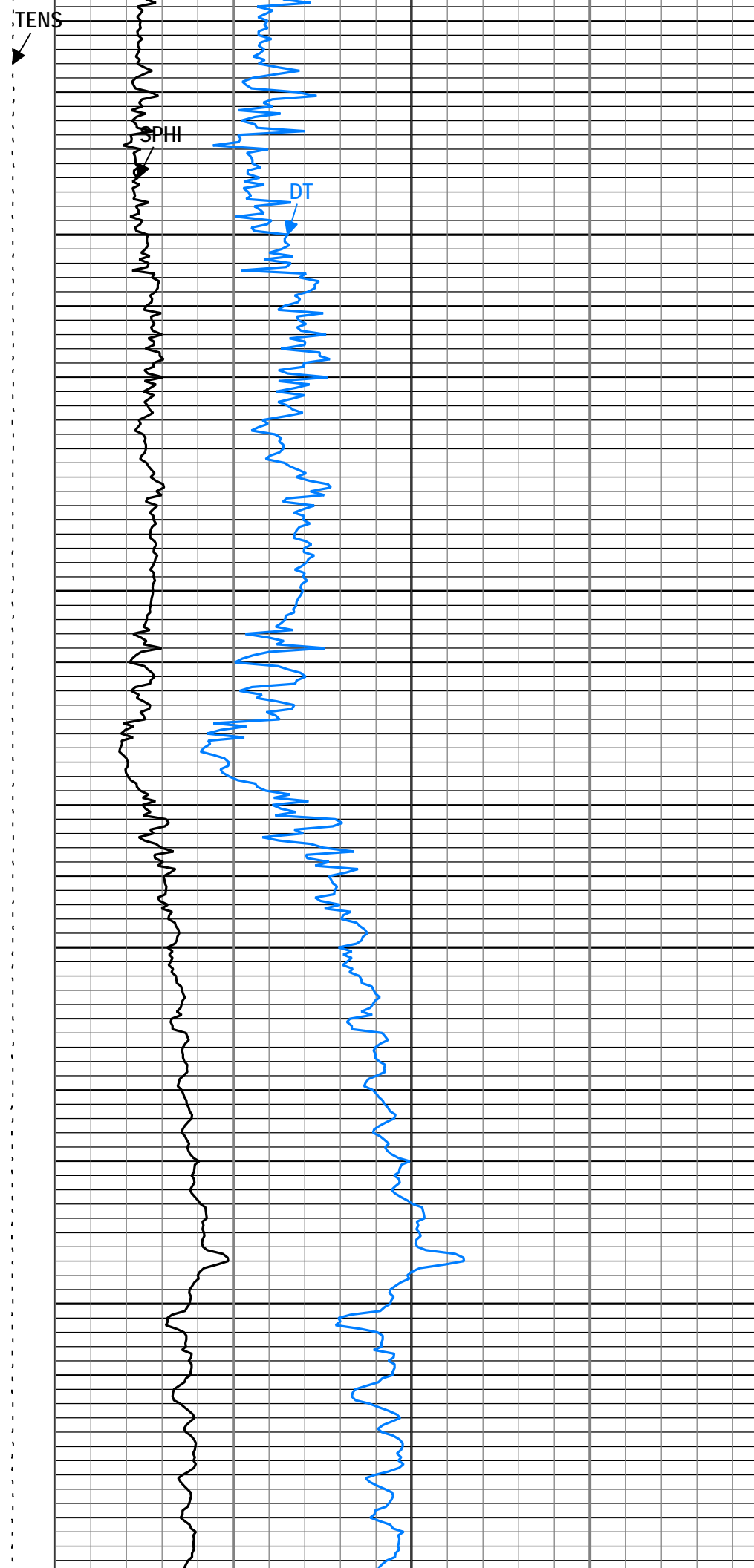
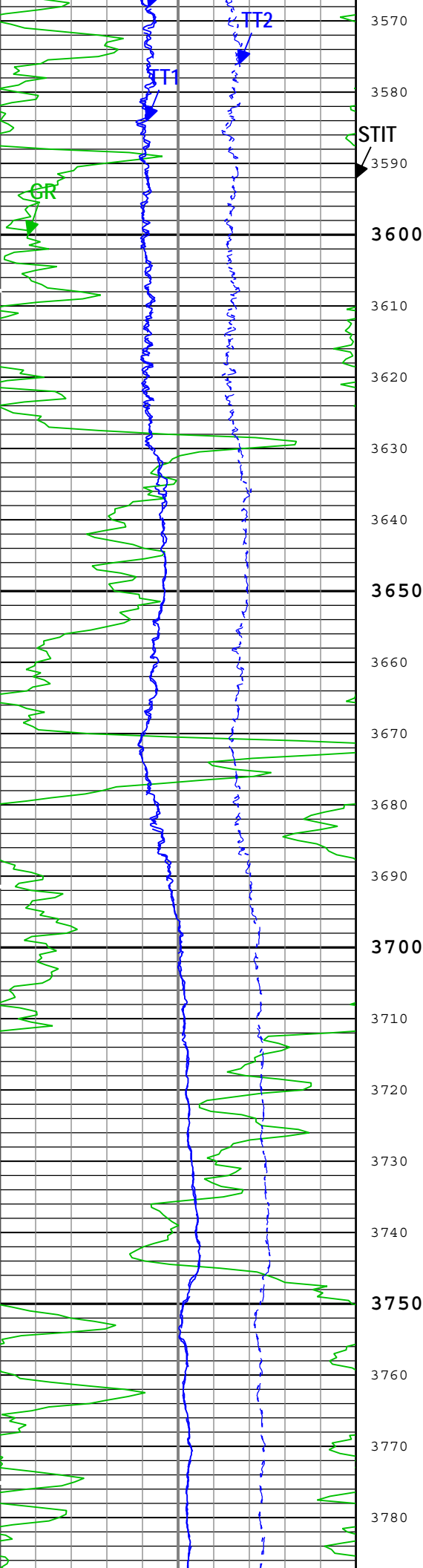


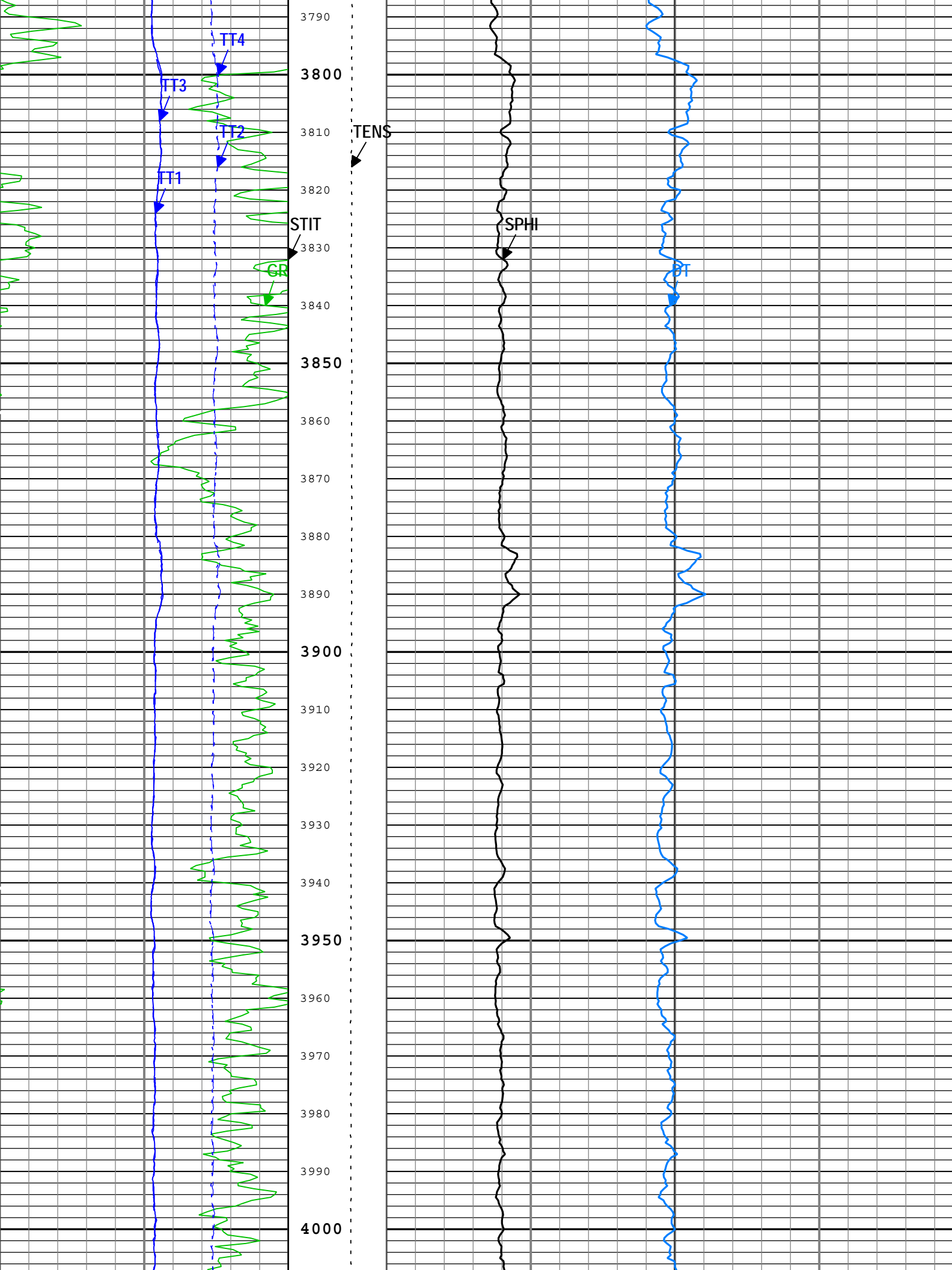


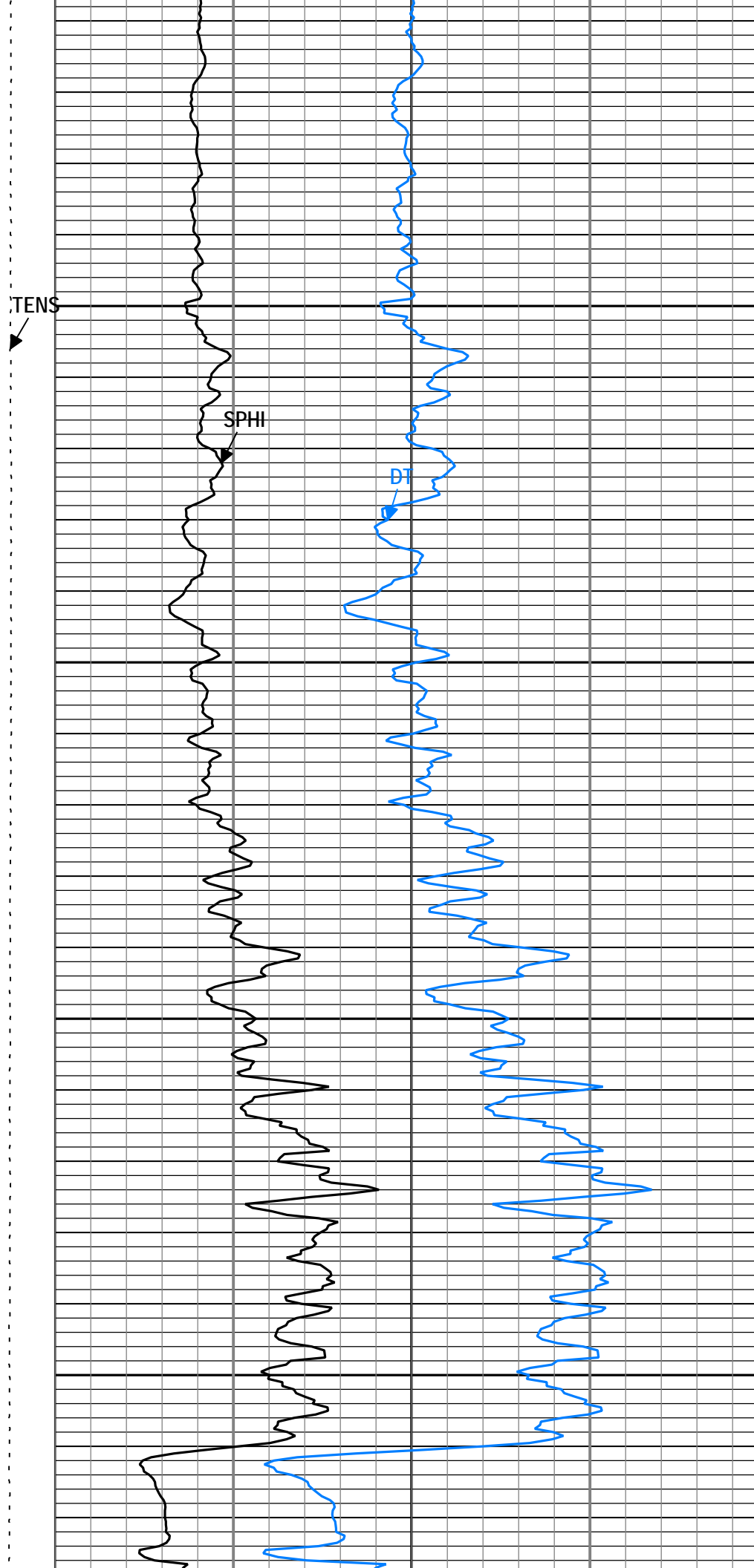
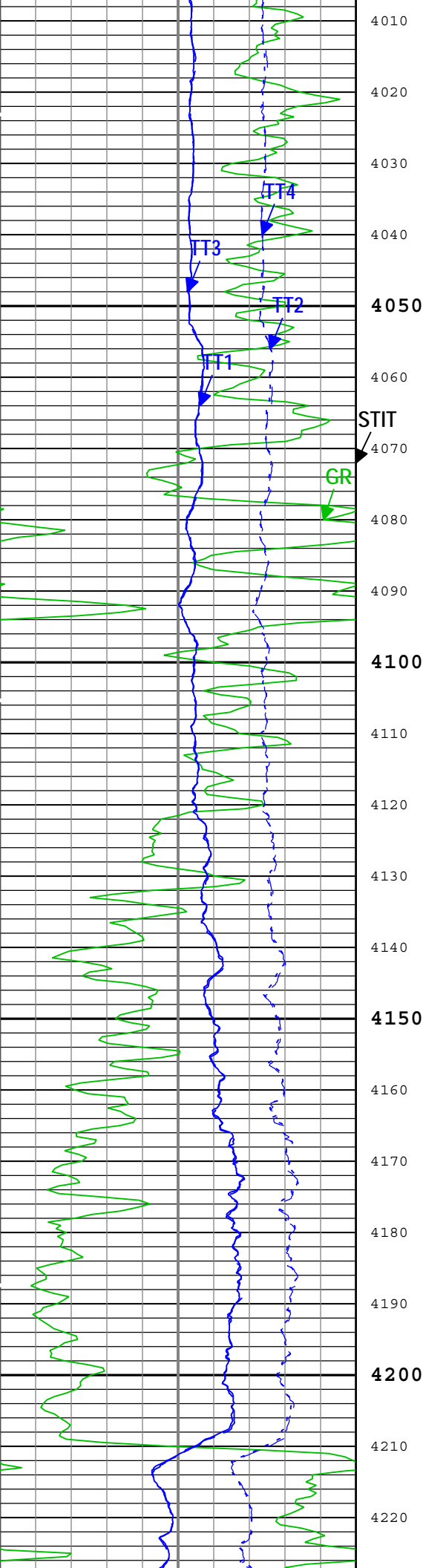


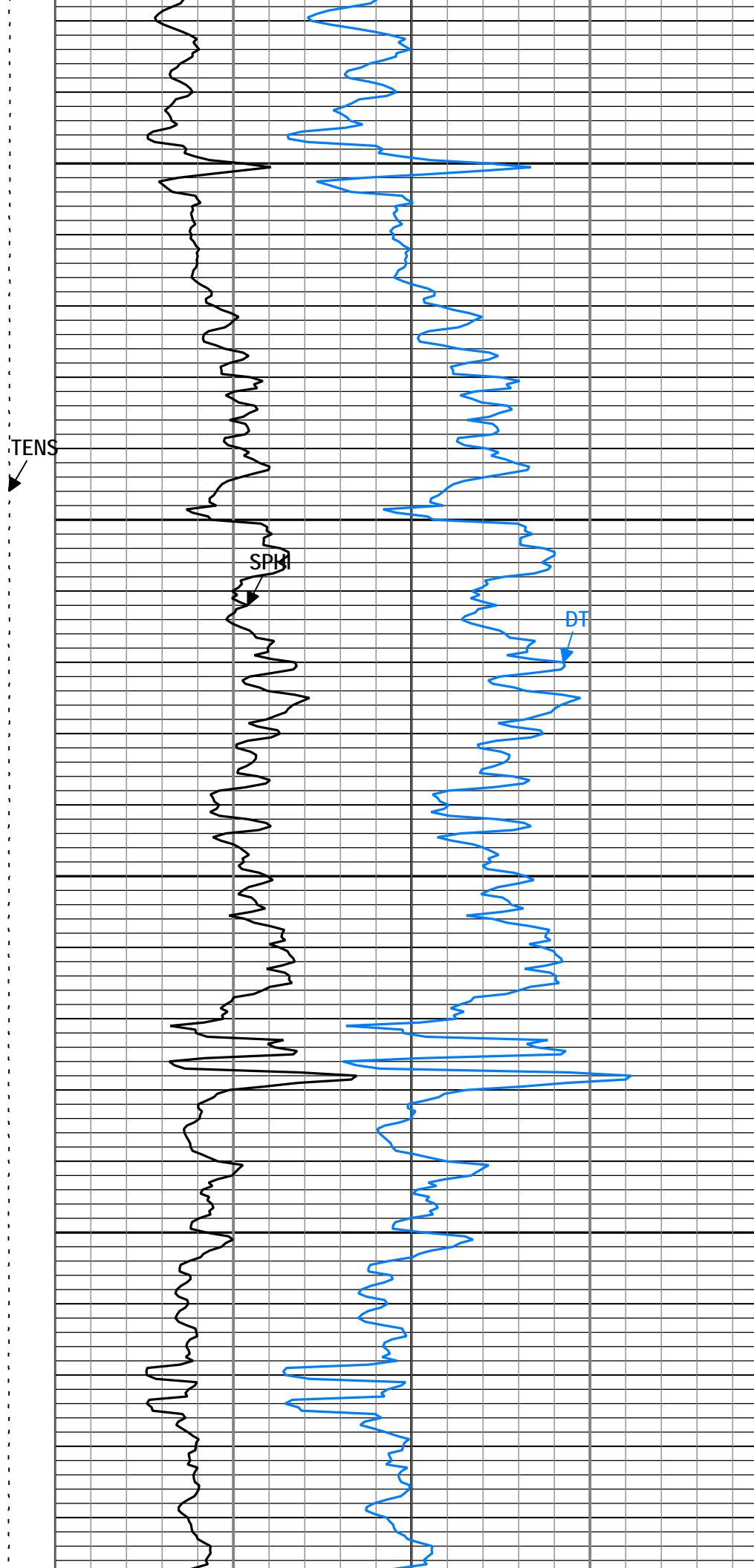
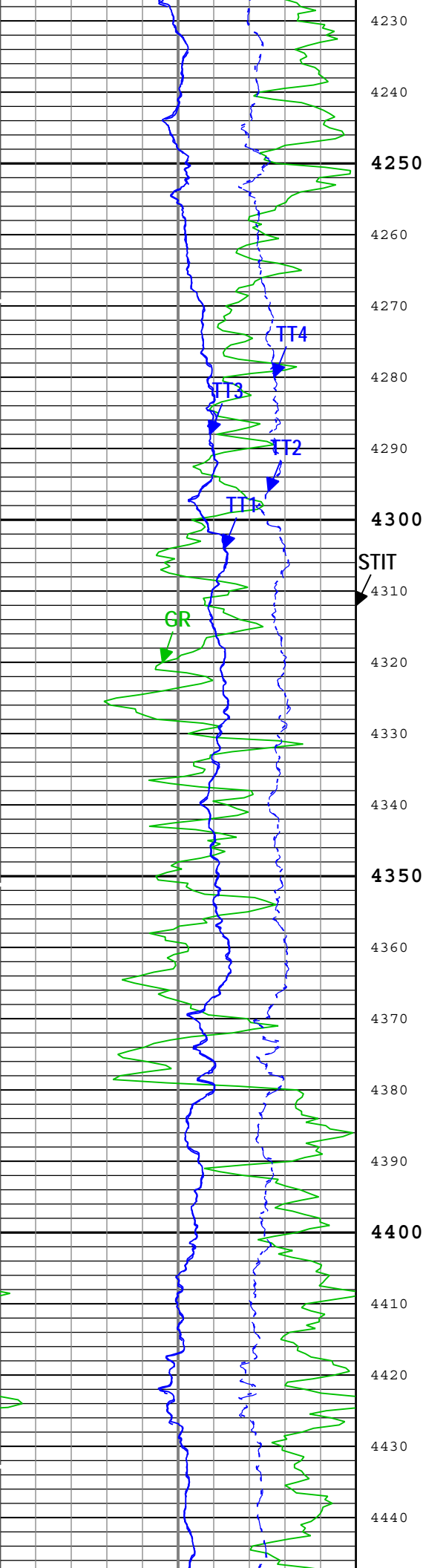


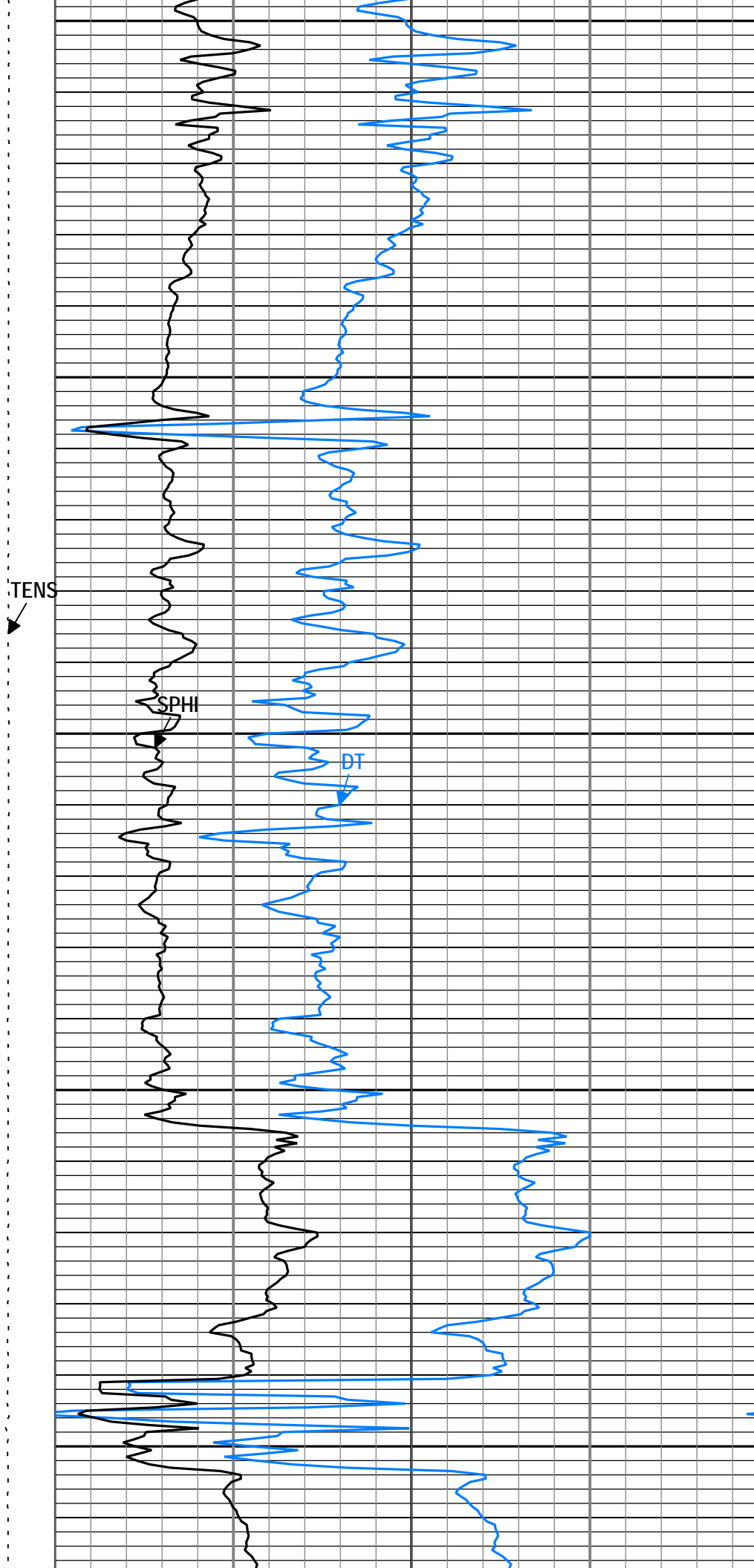
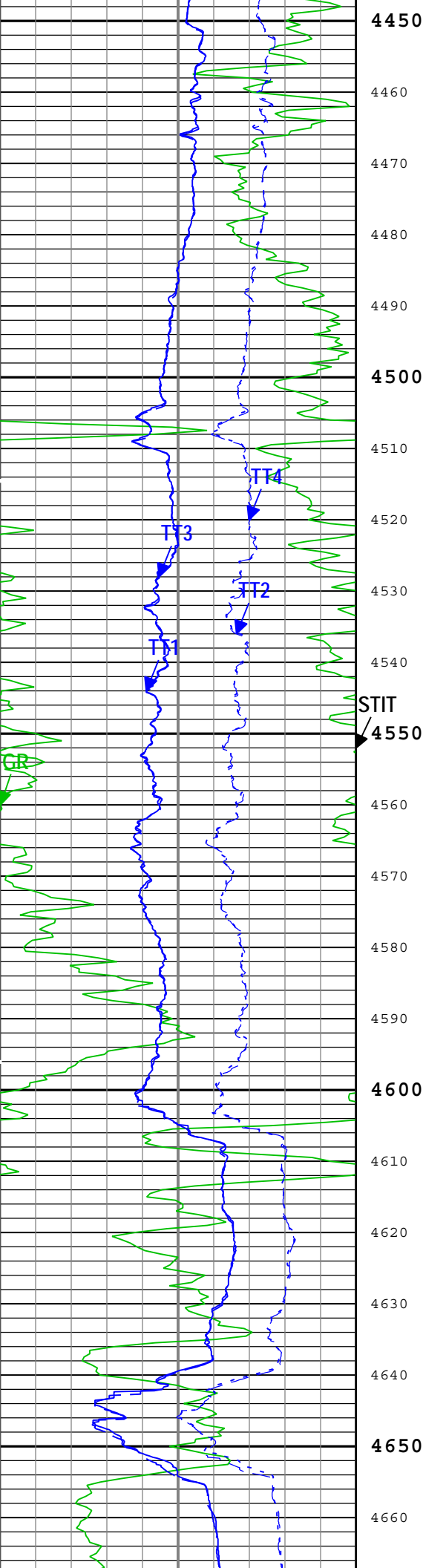


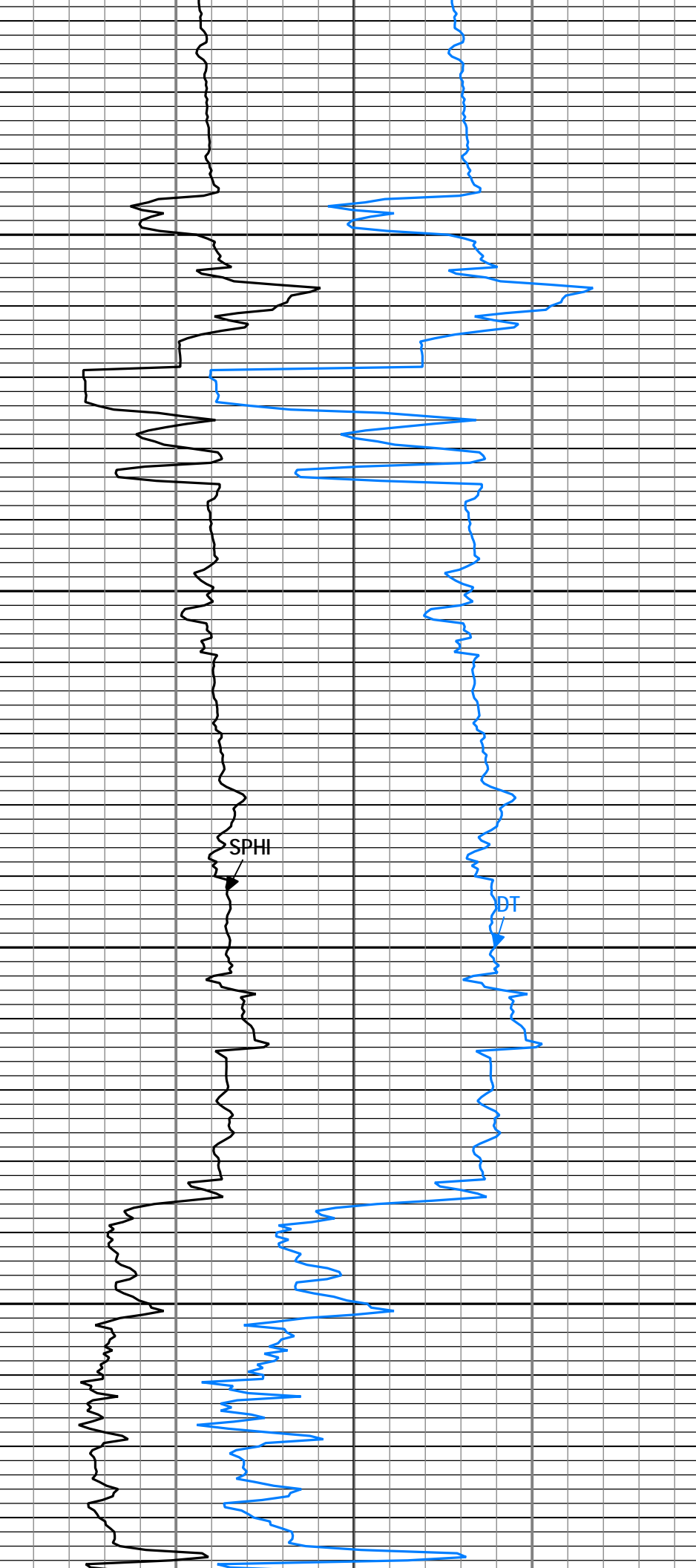
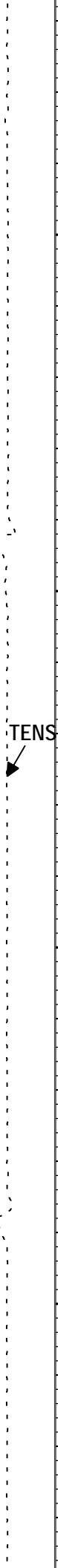
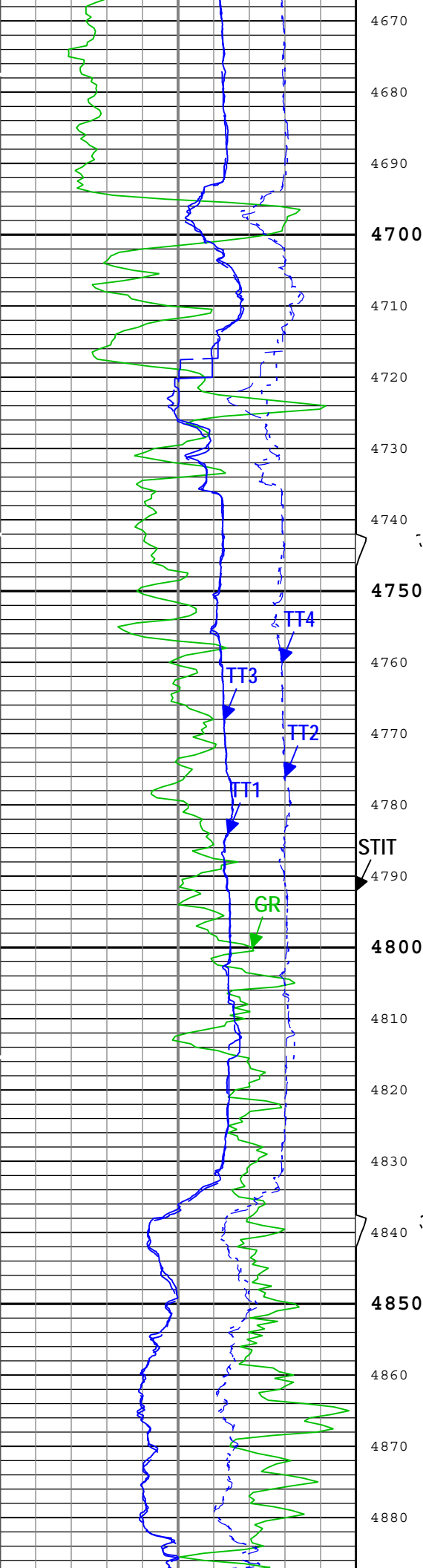


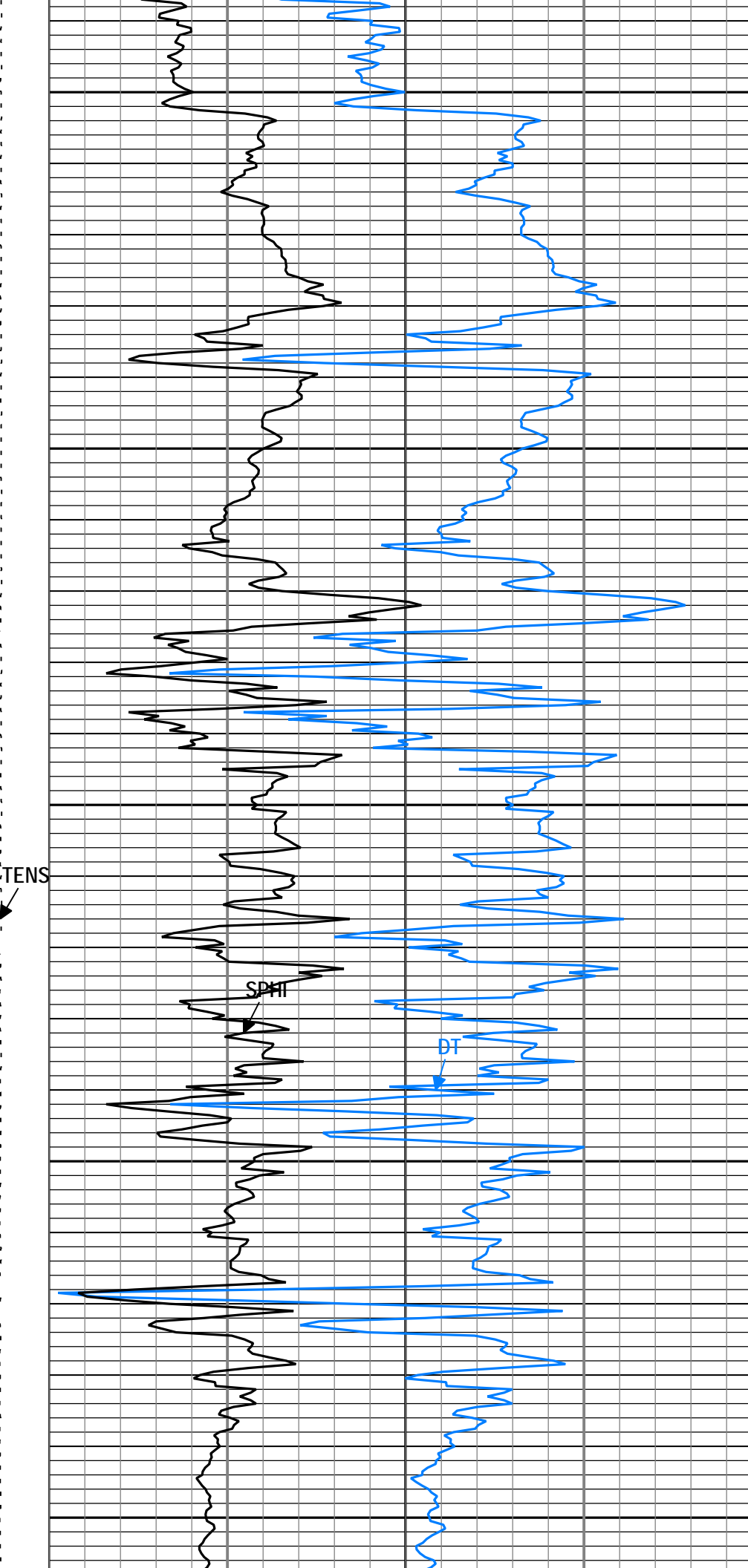
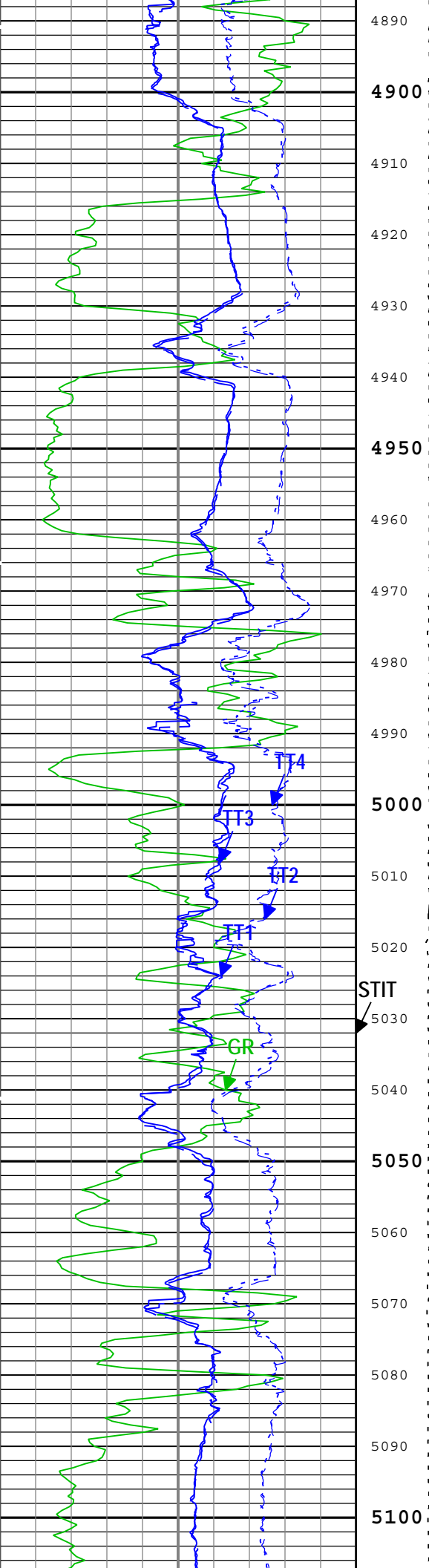


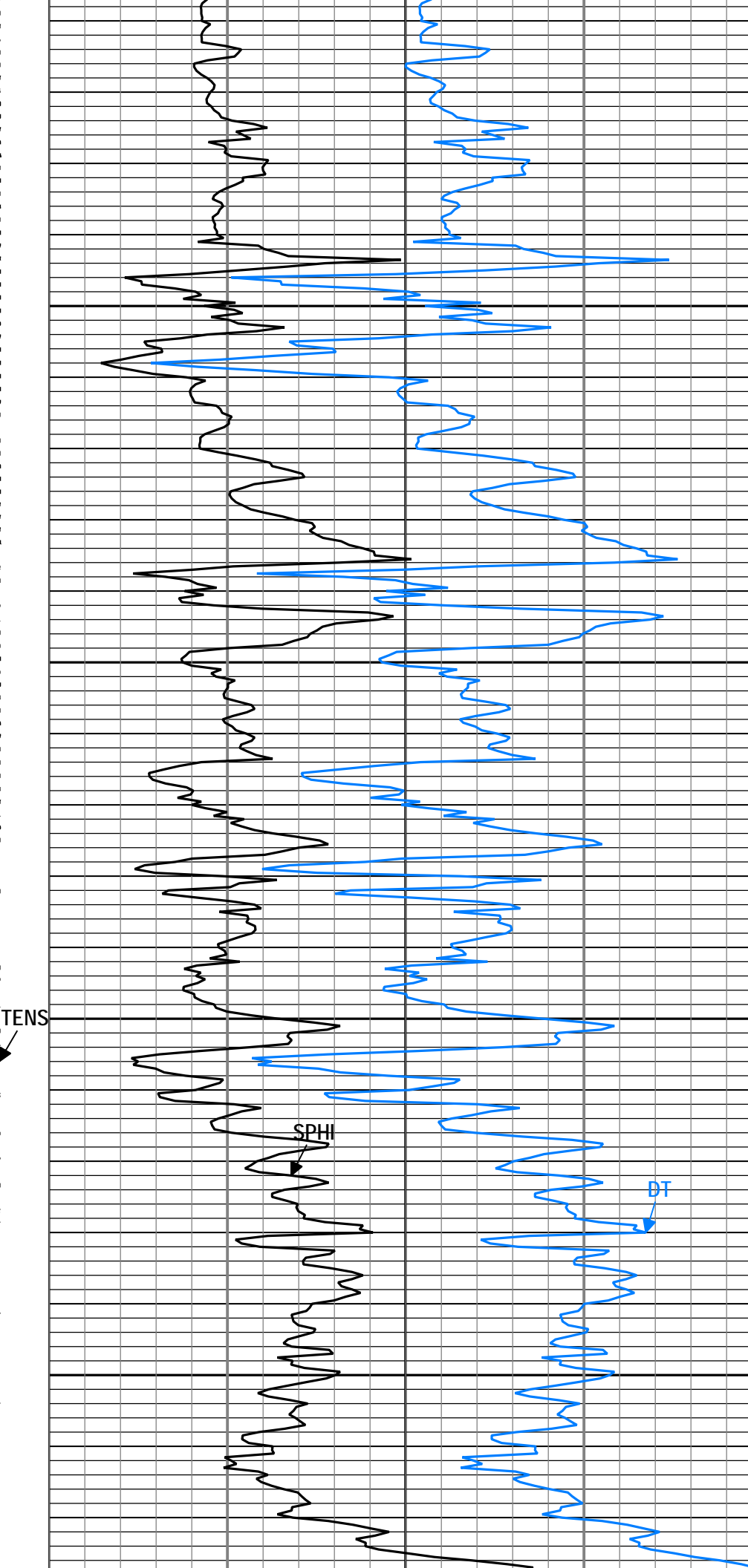
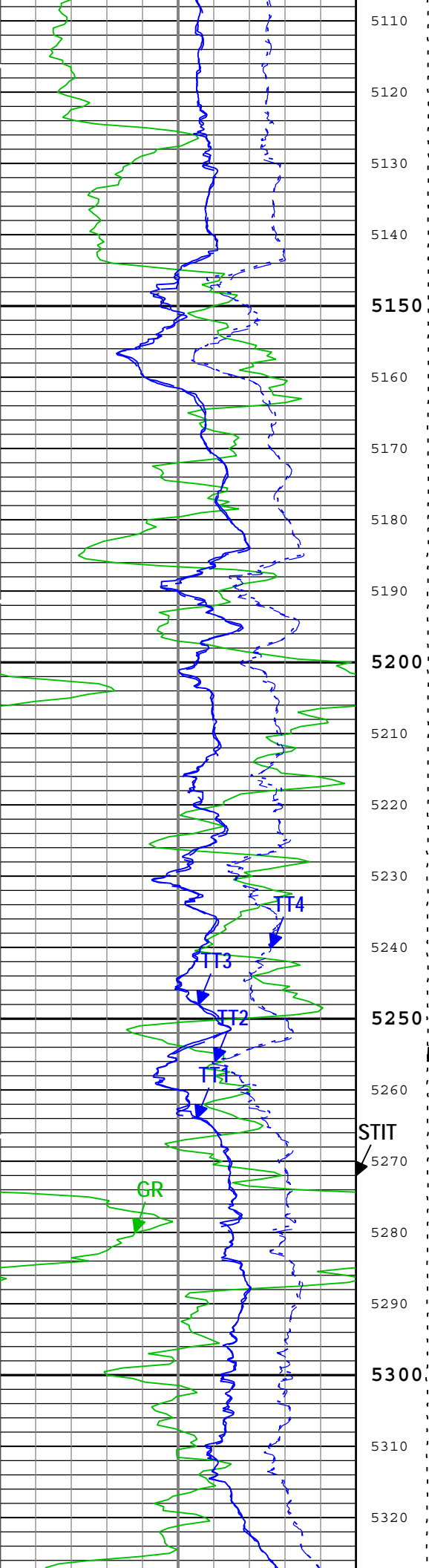


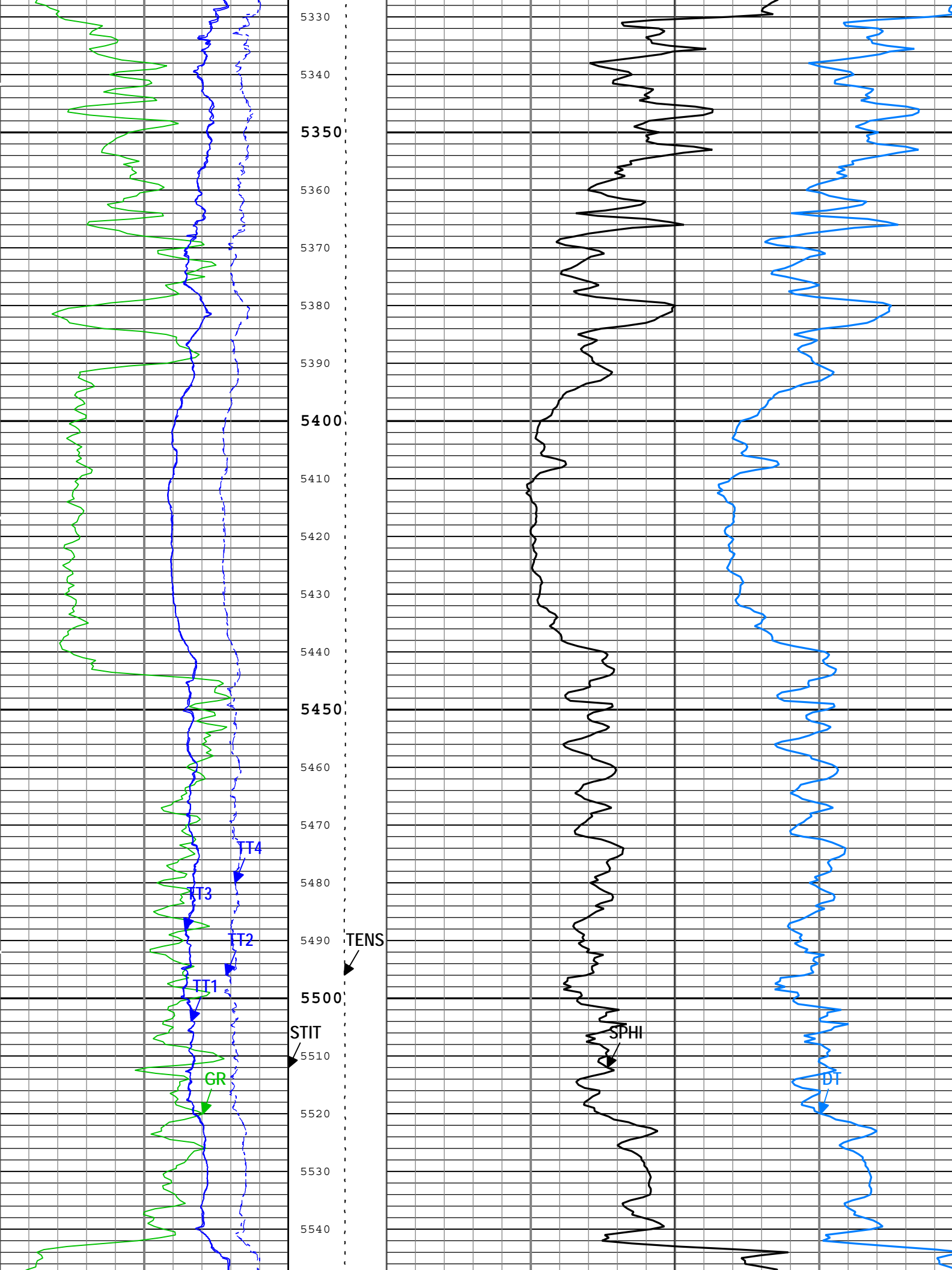


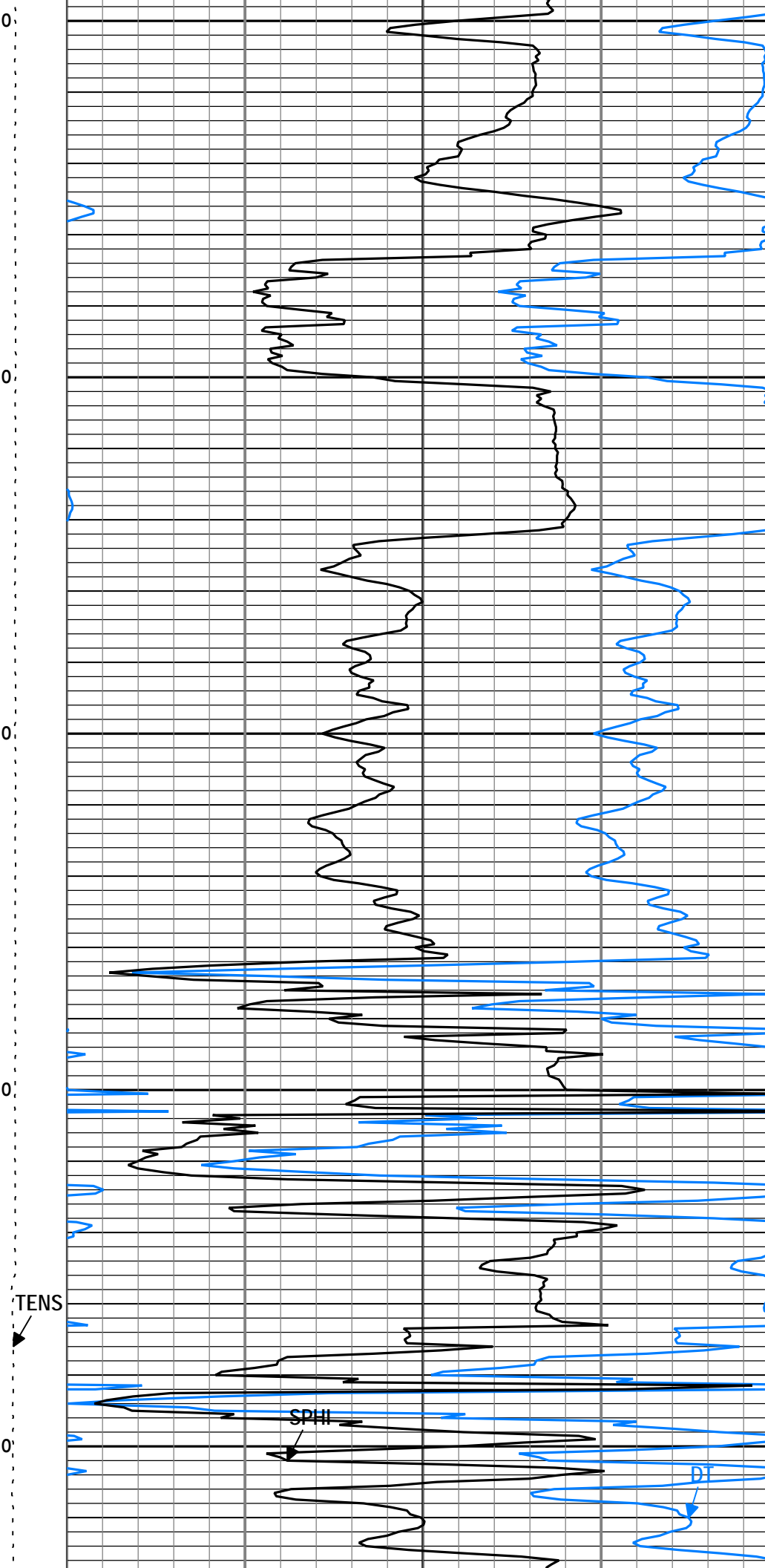
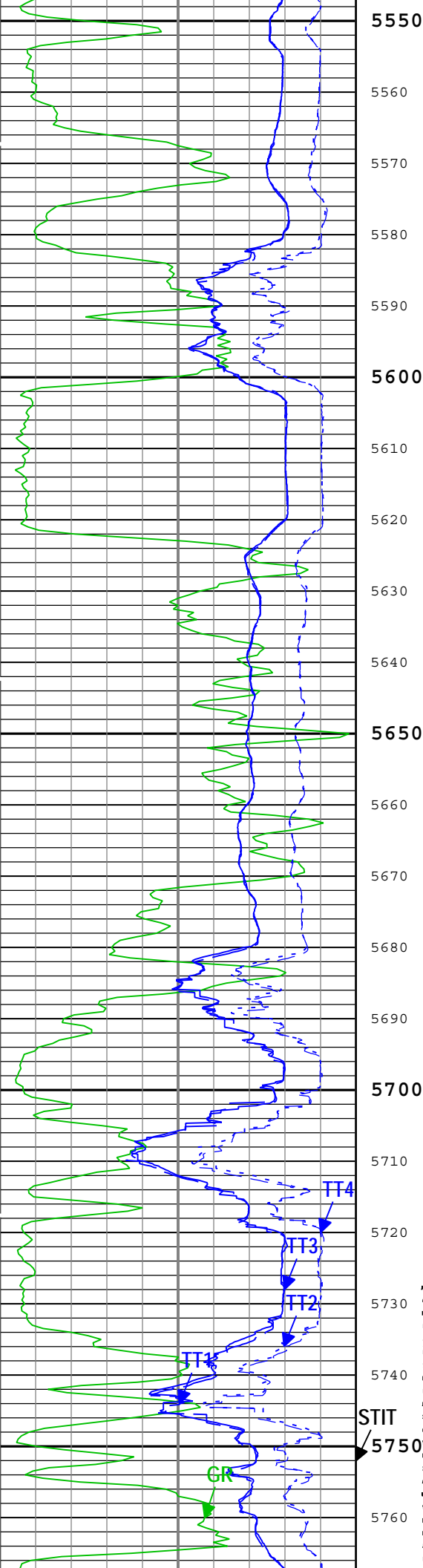


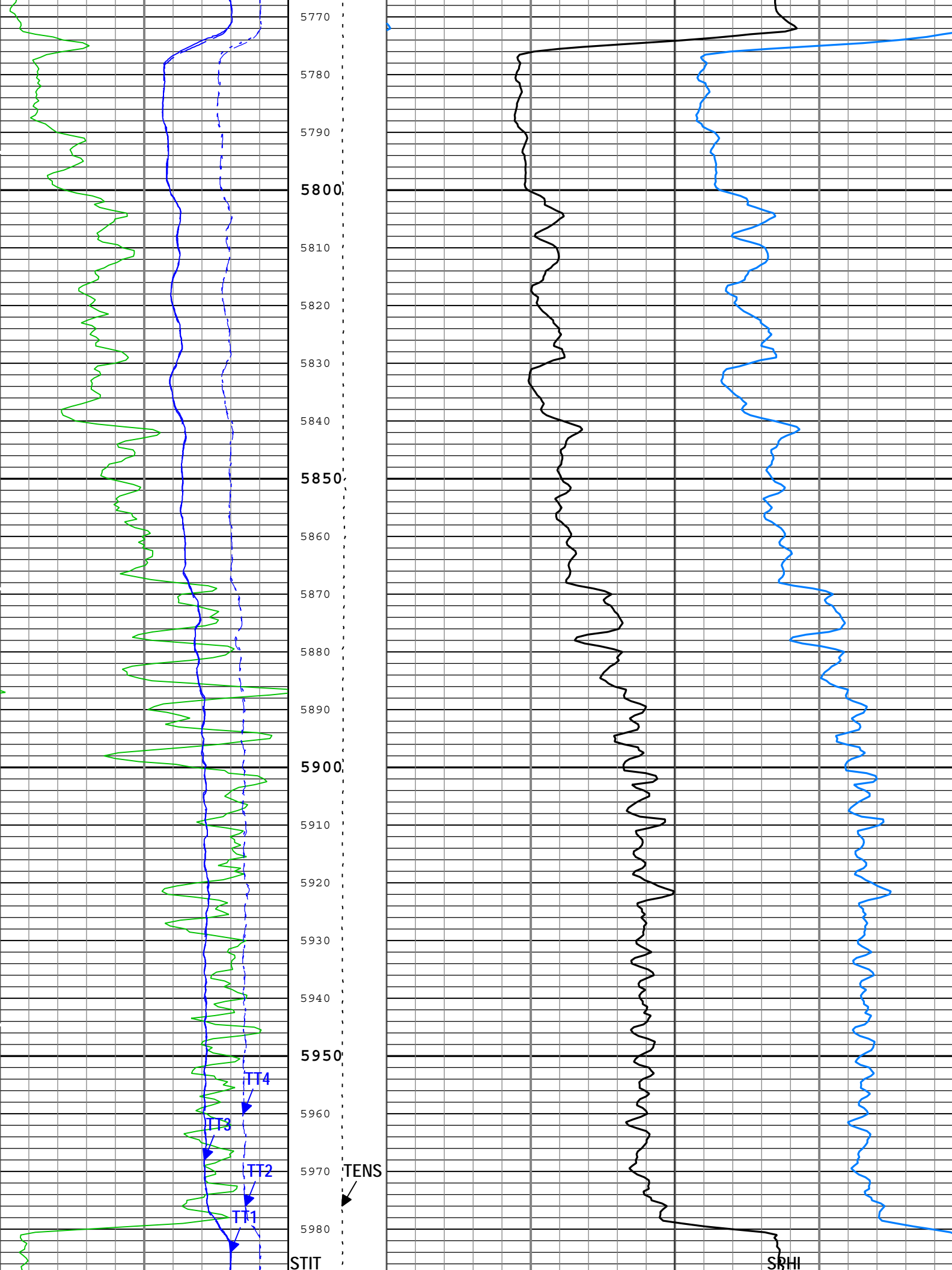


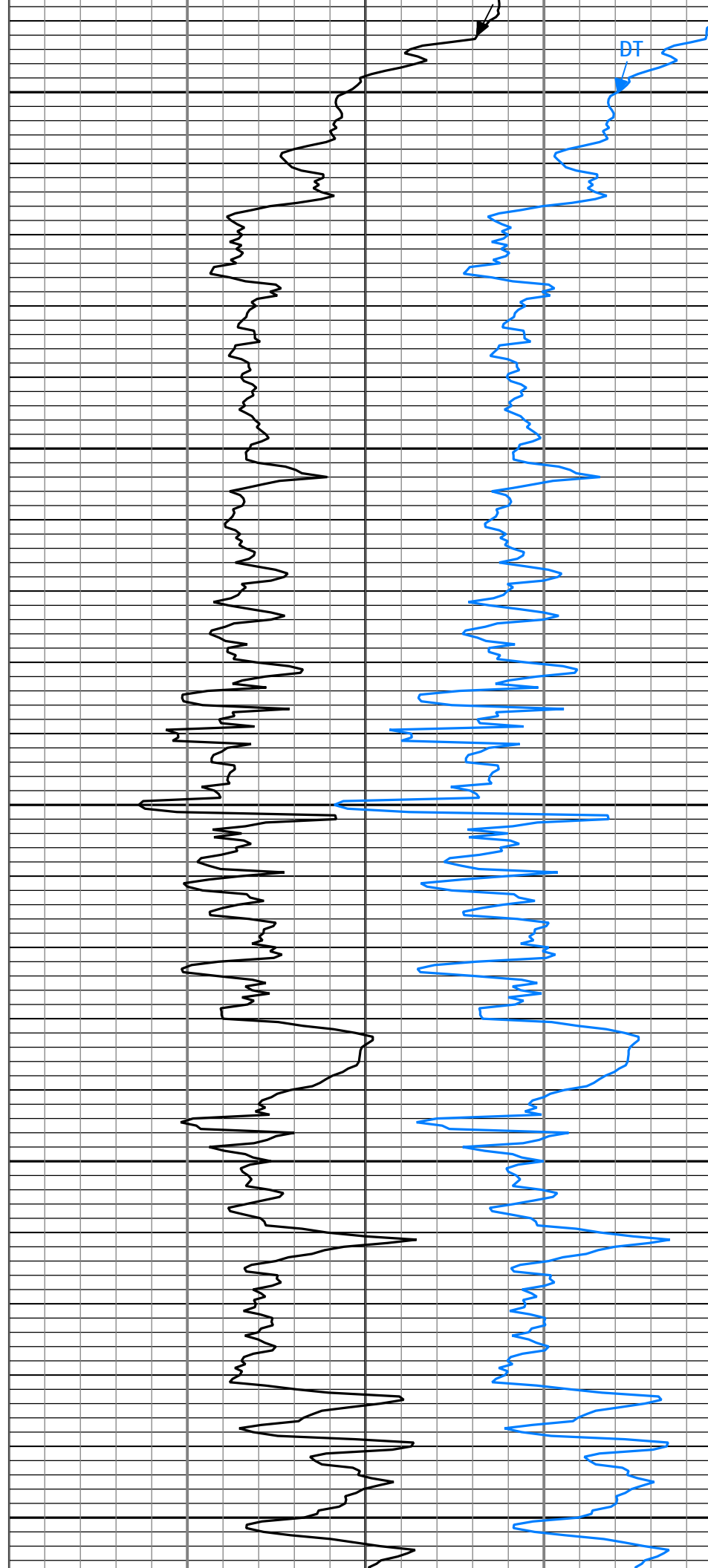
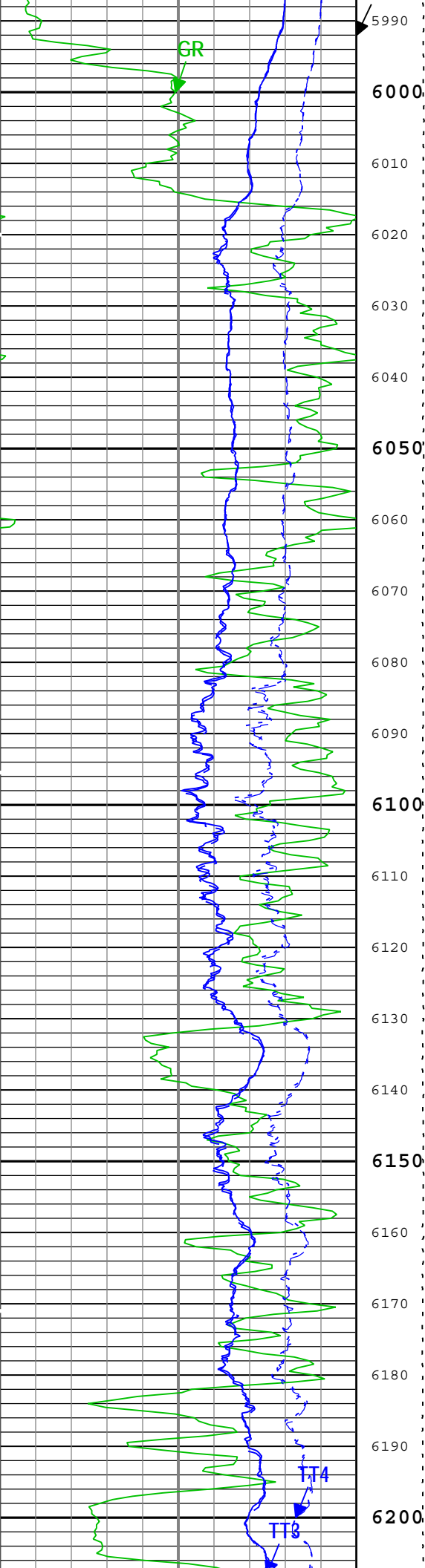


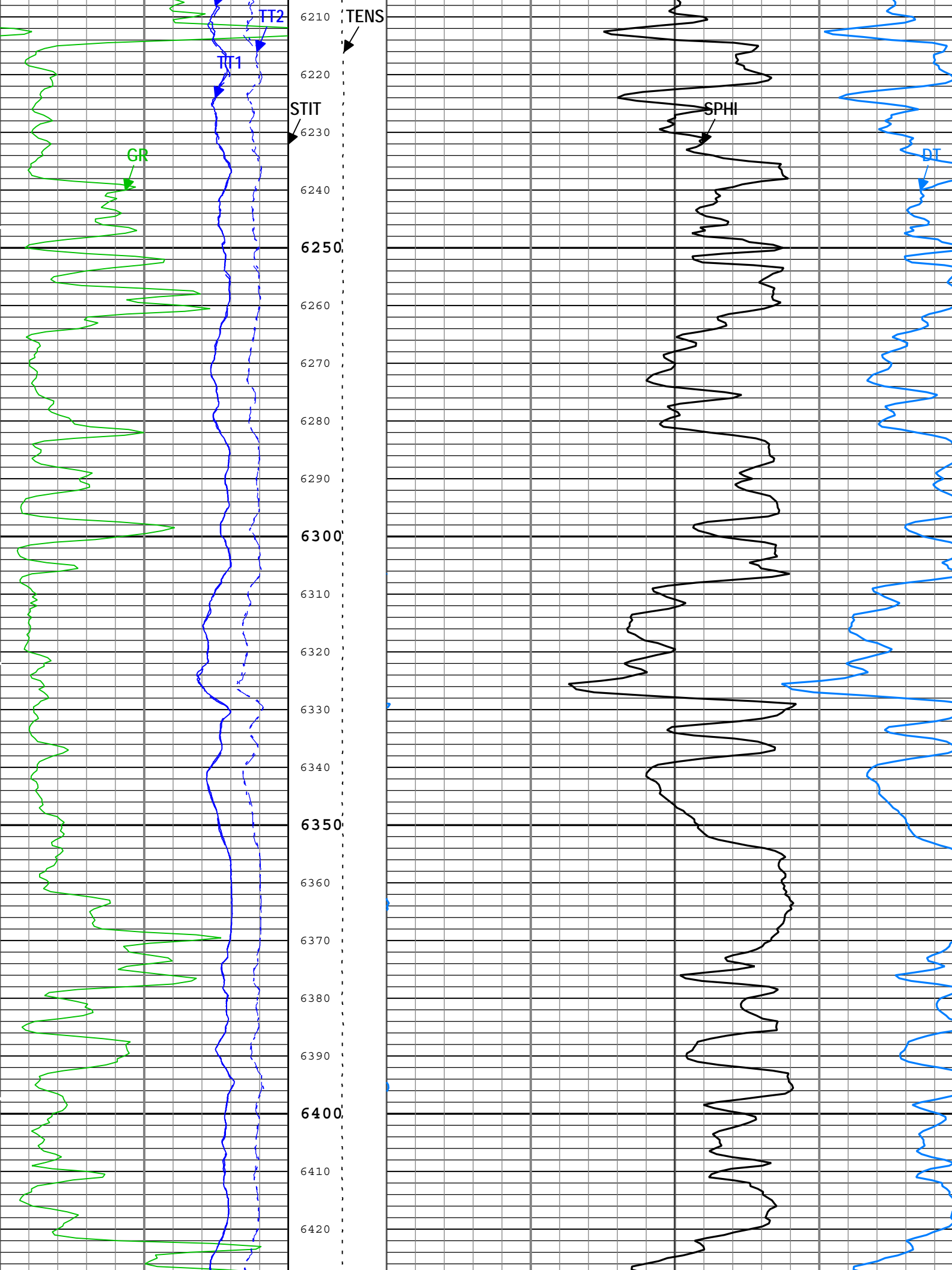


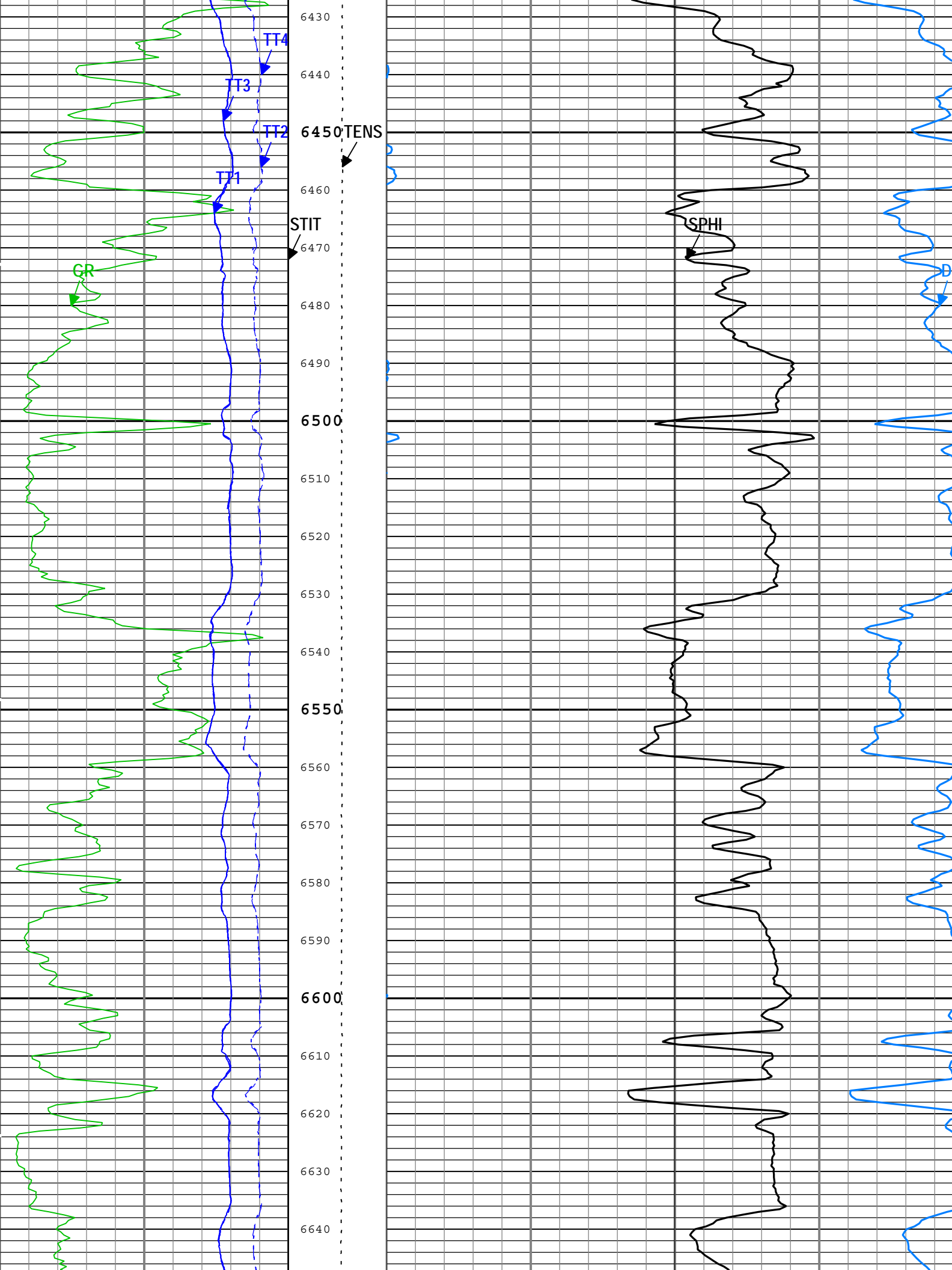


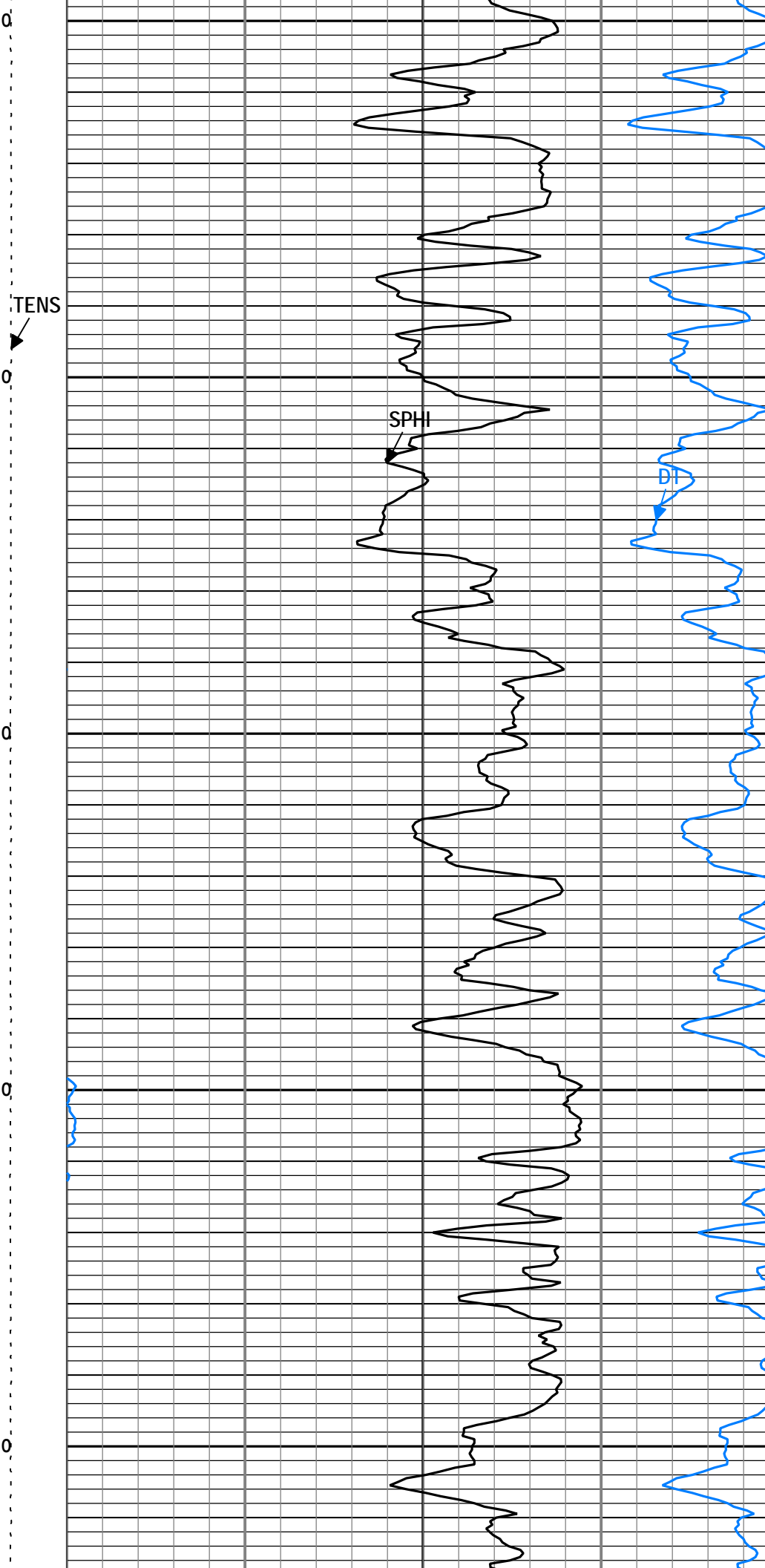
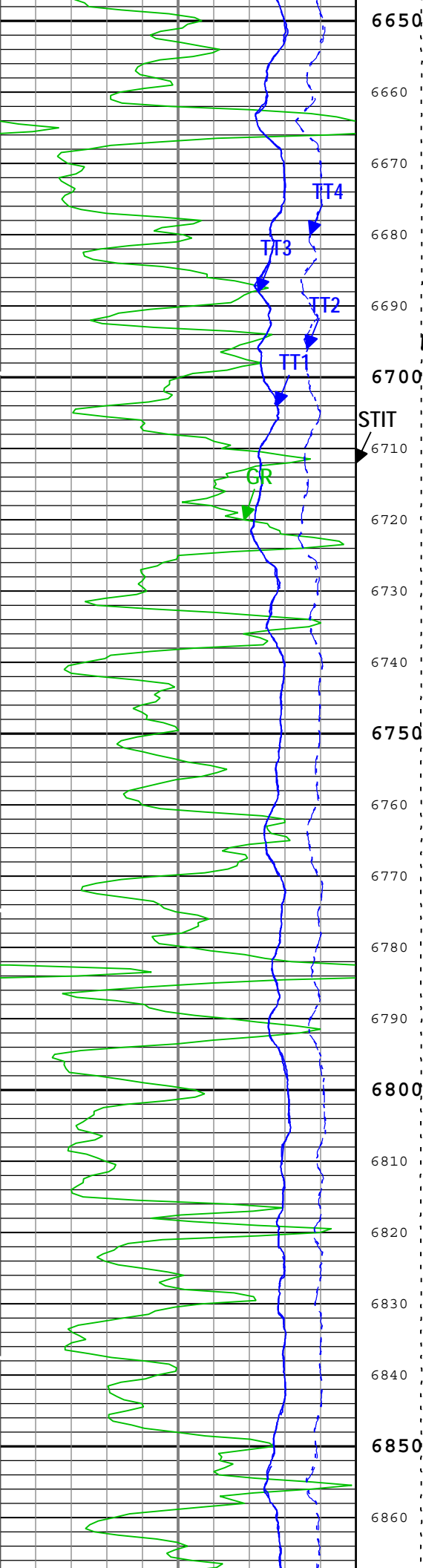


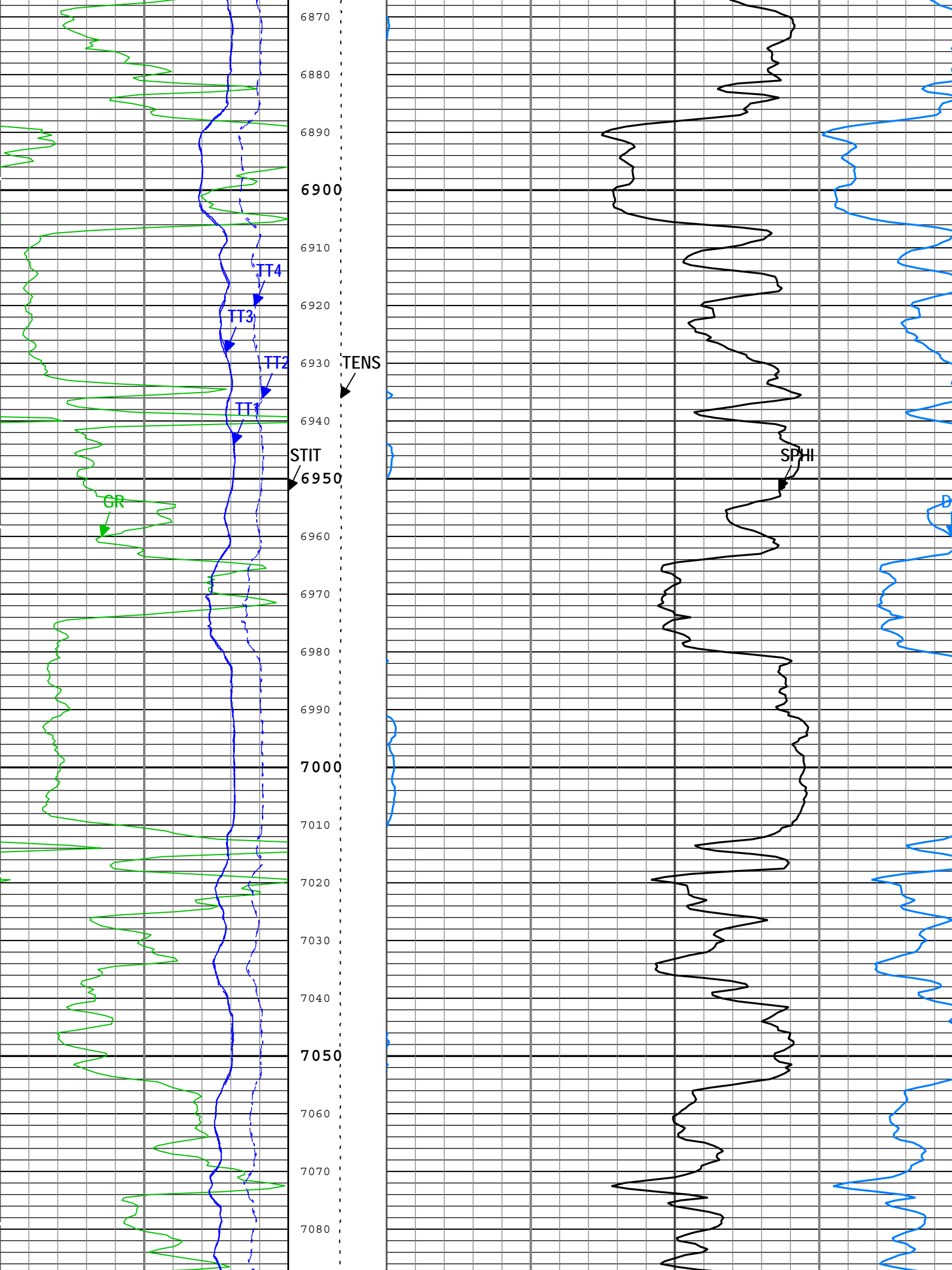


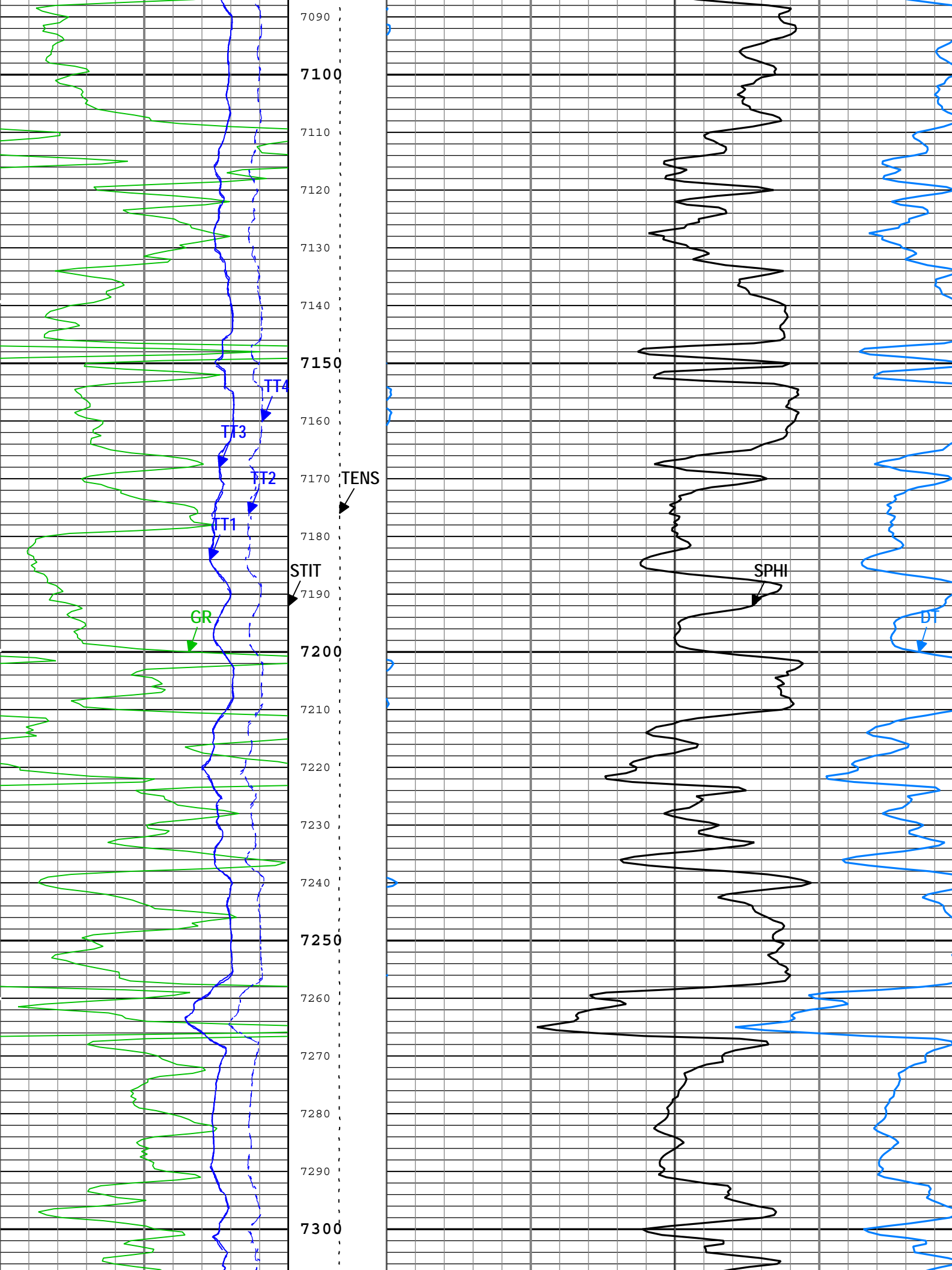


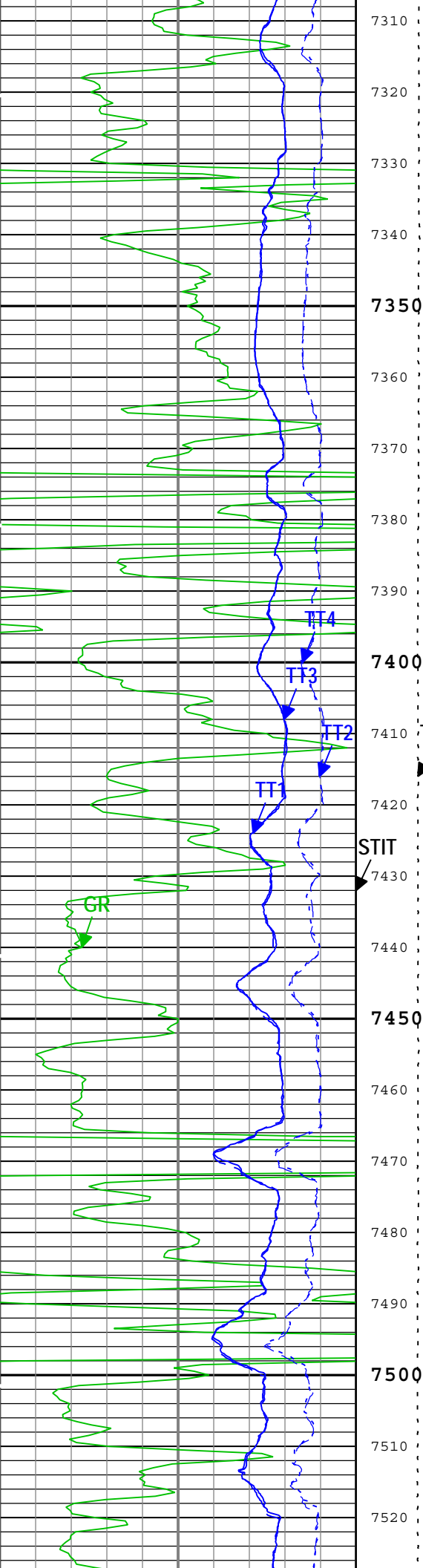












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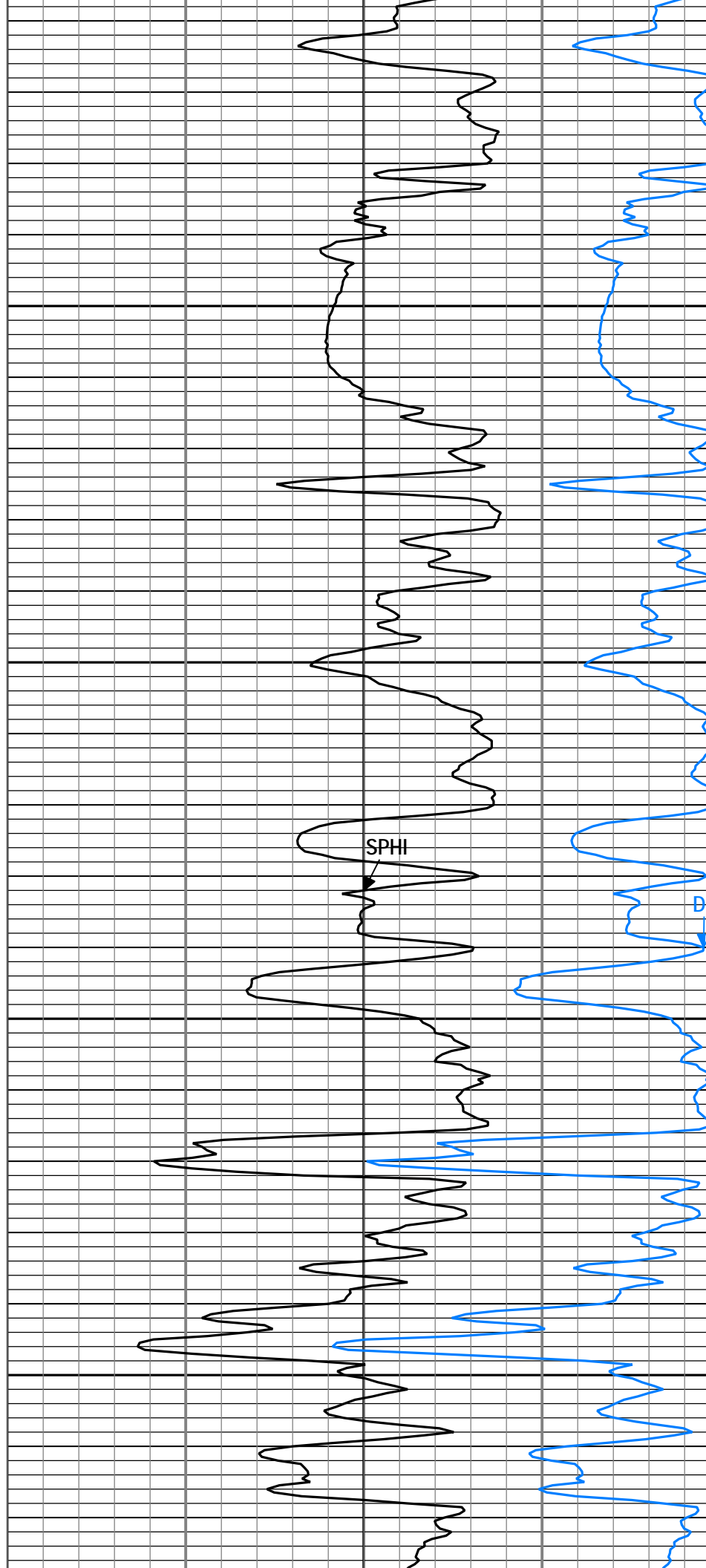
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TT4

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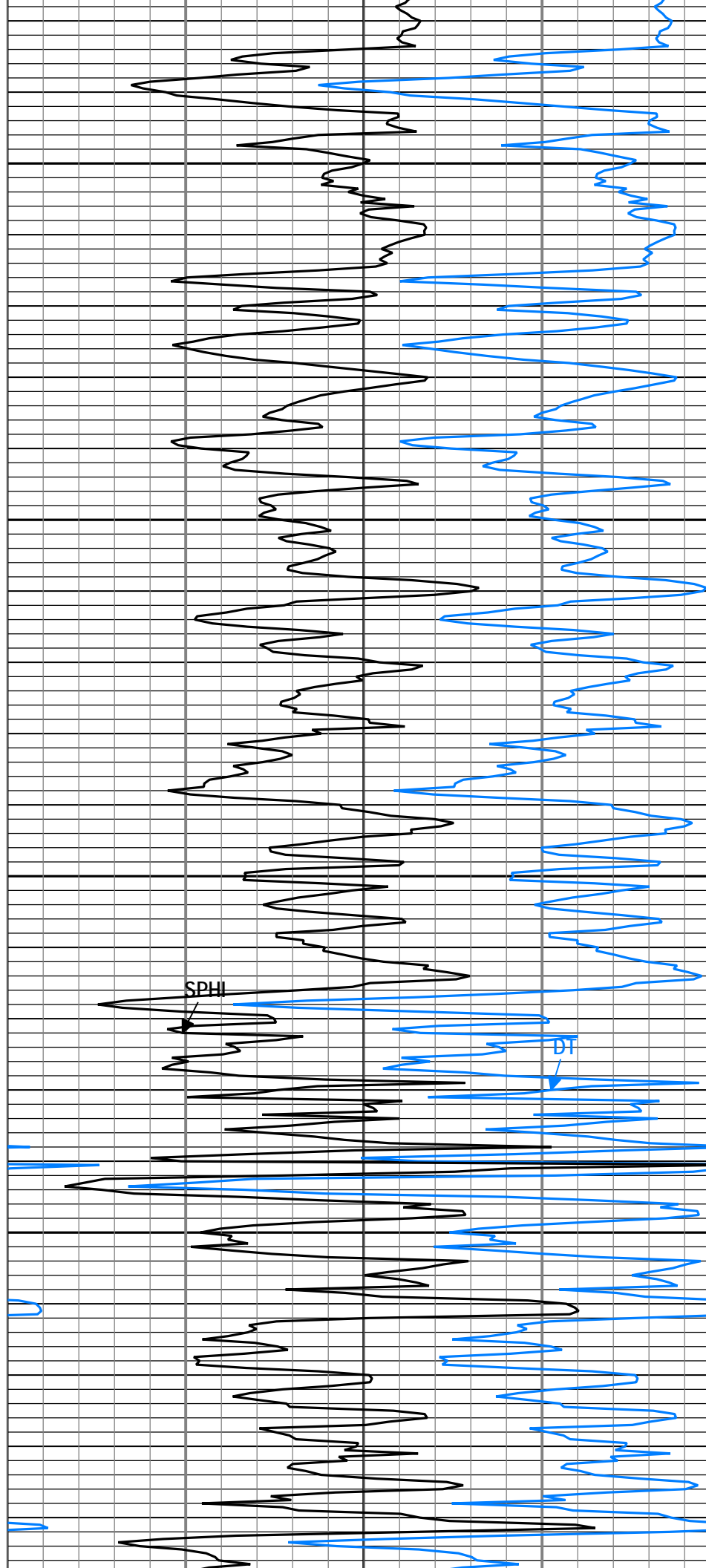
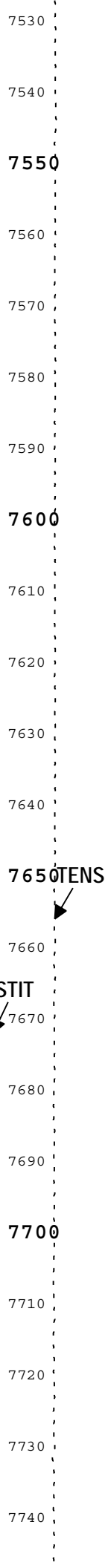
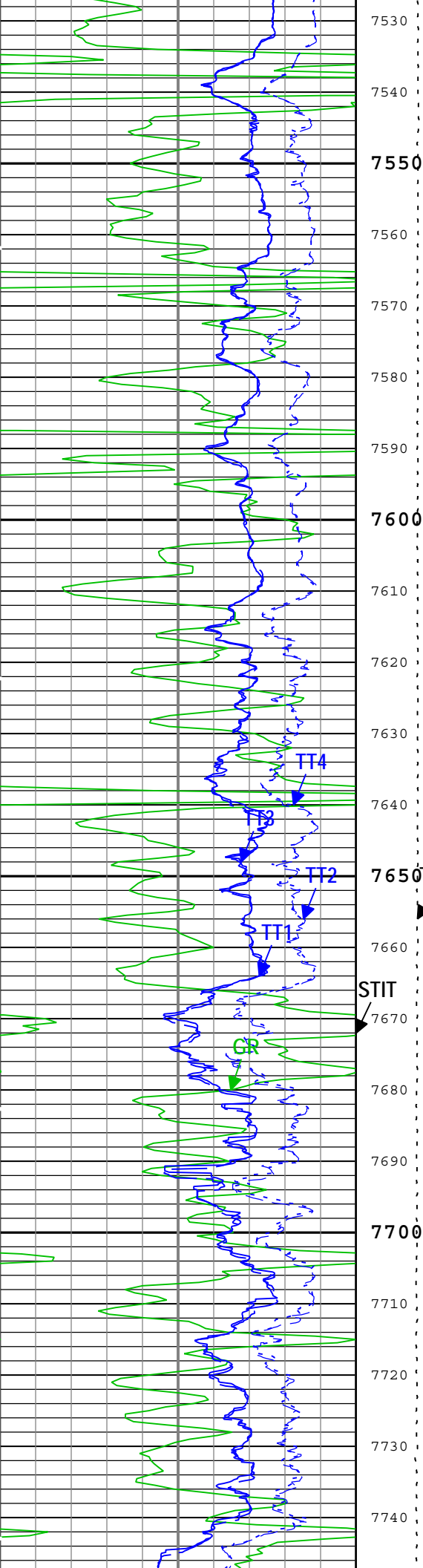
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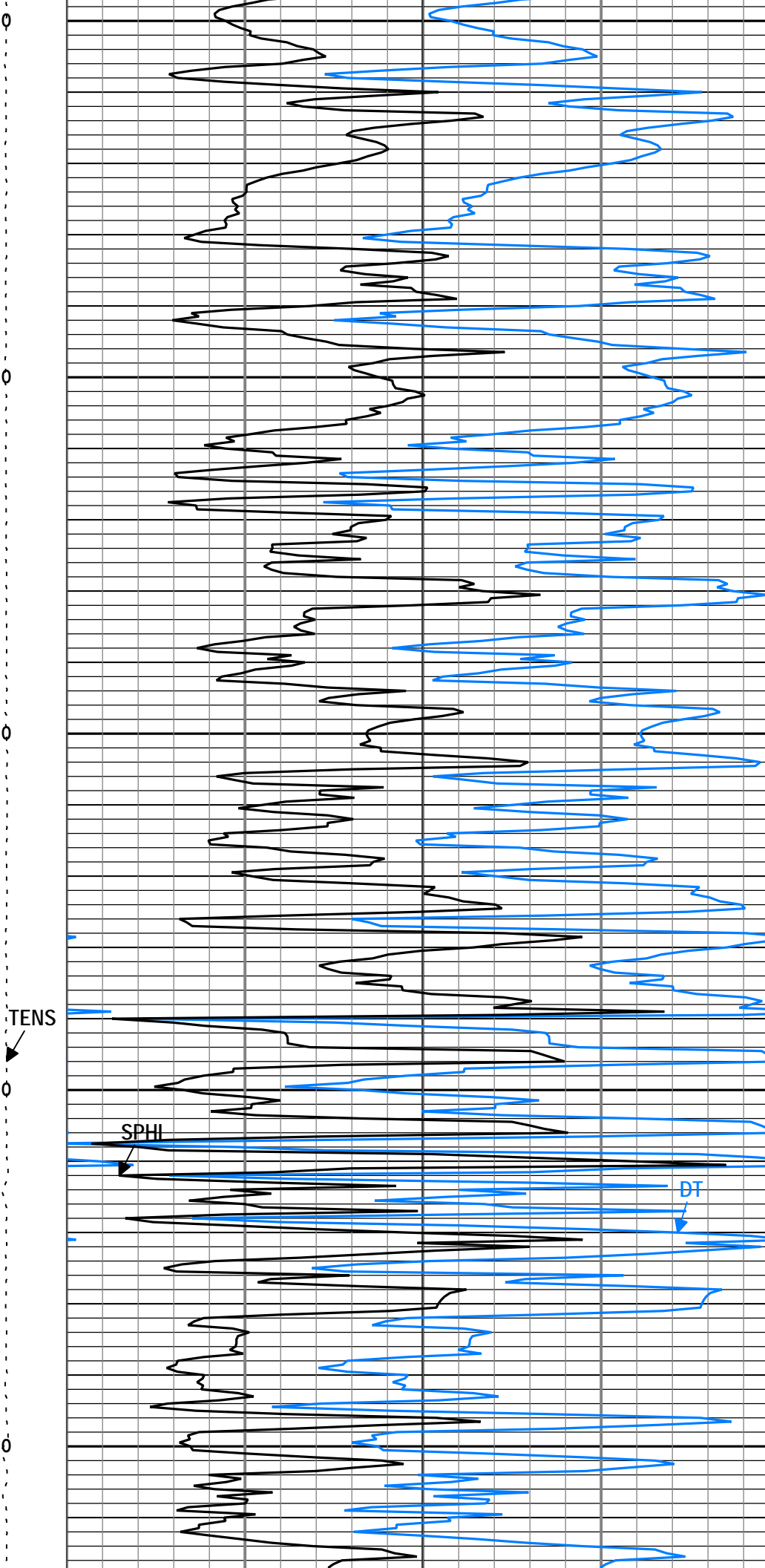
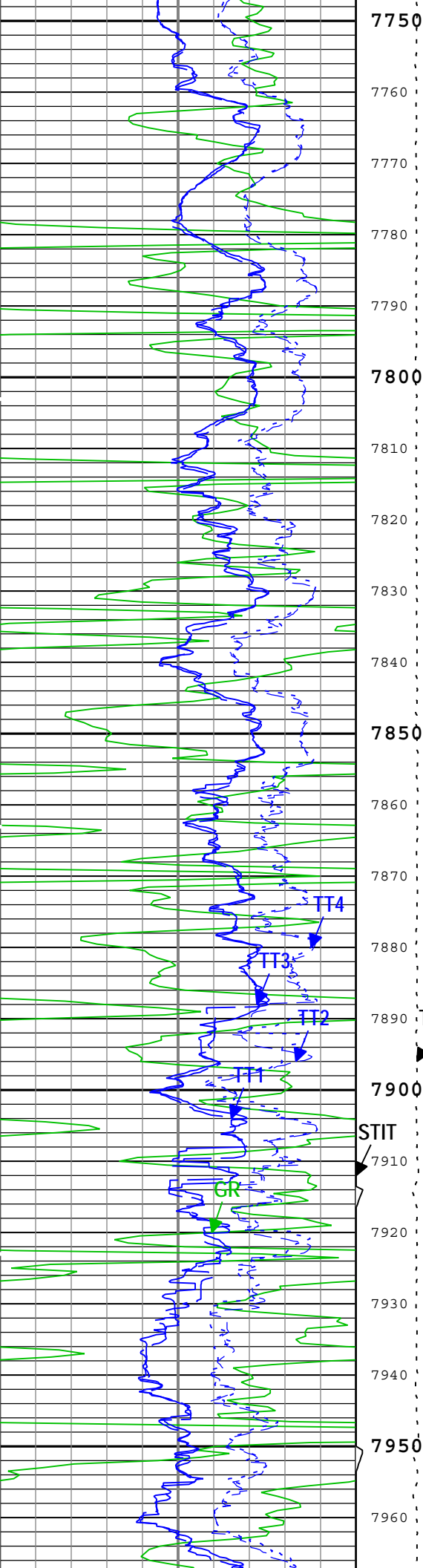
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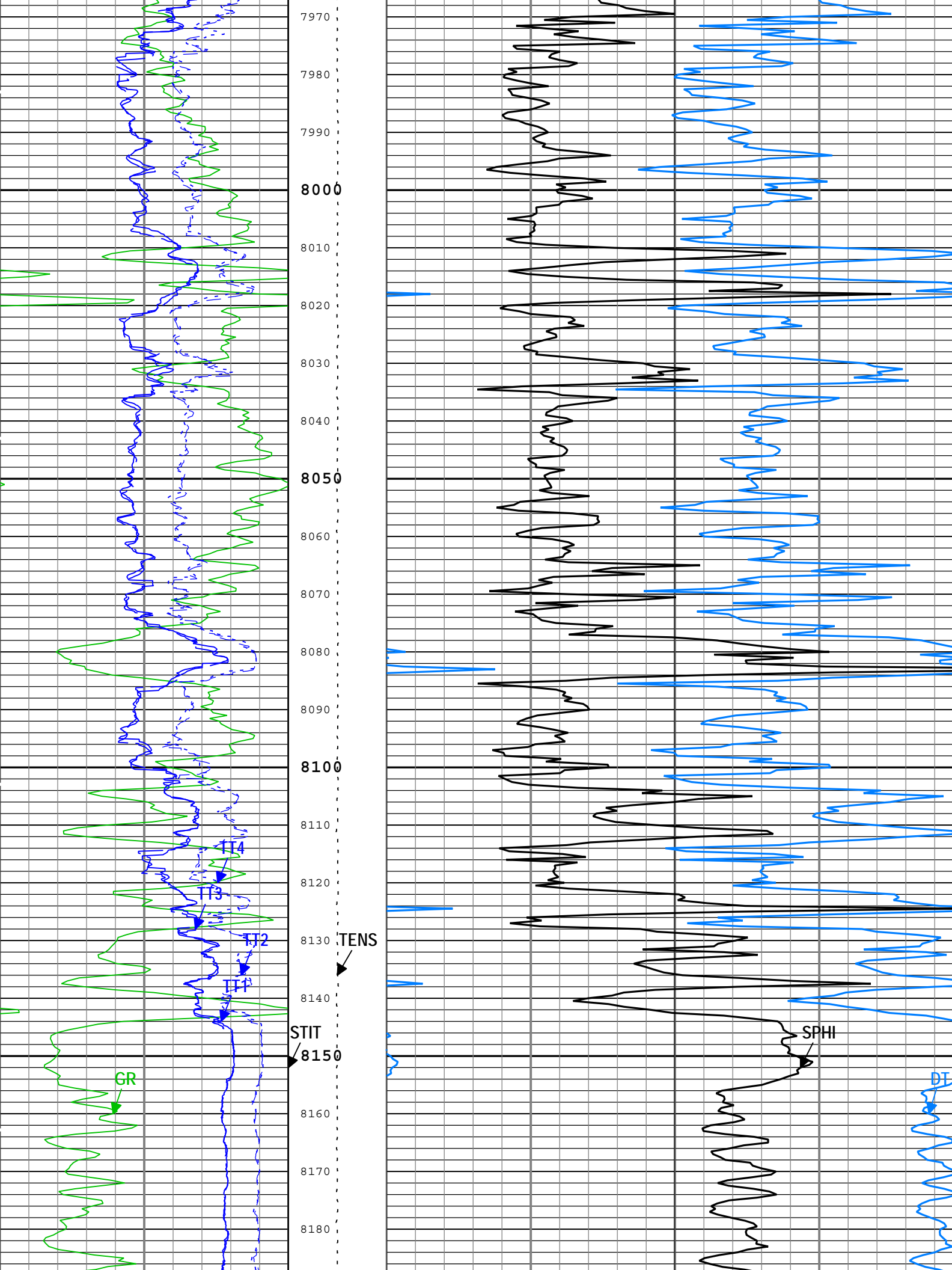


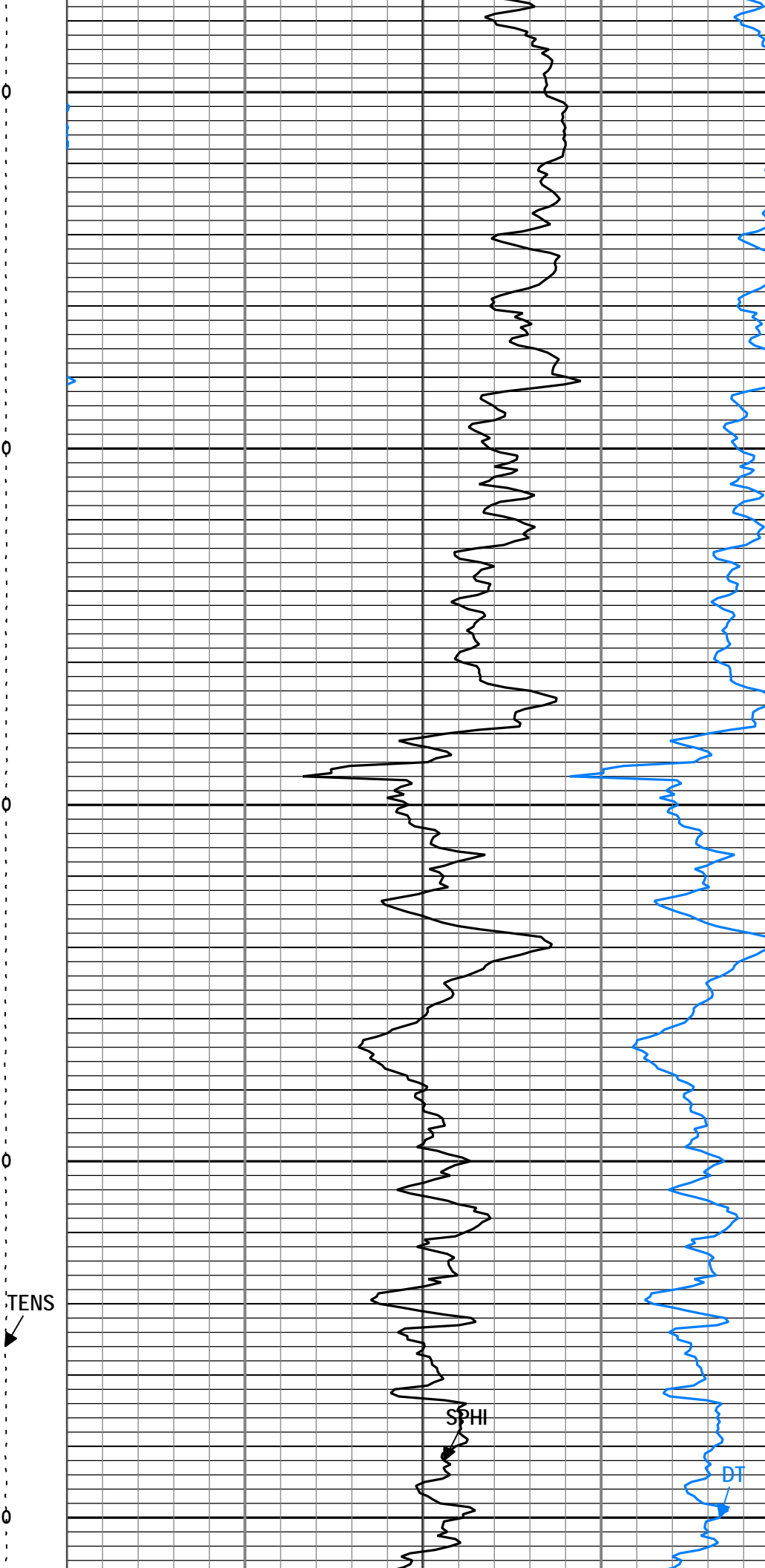
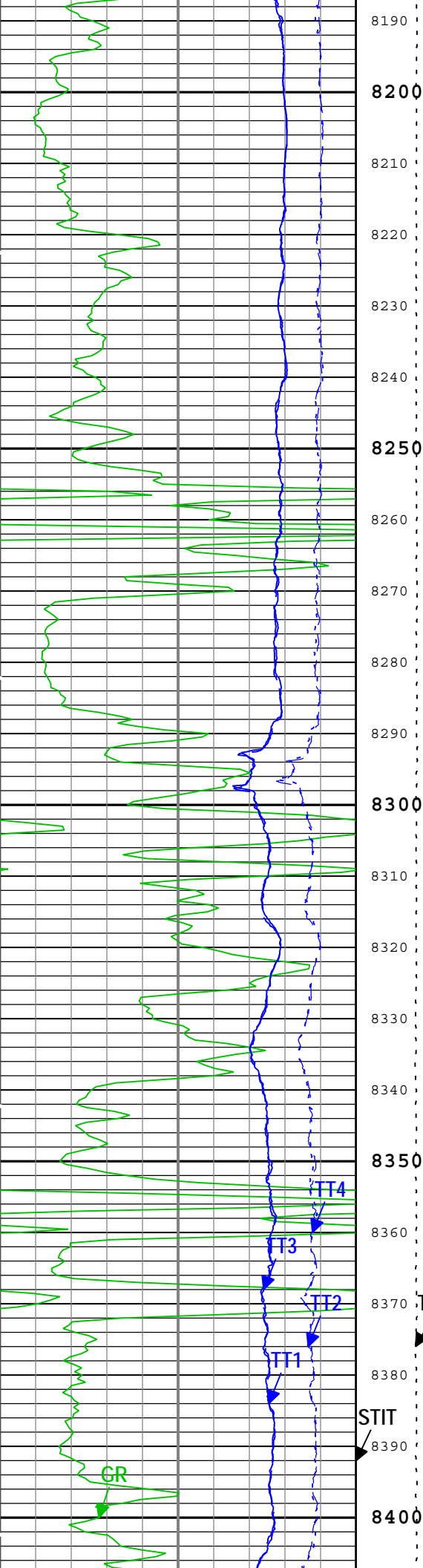
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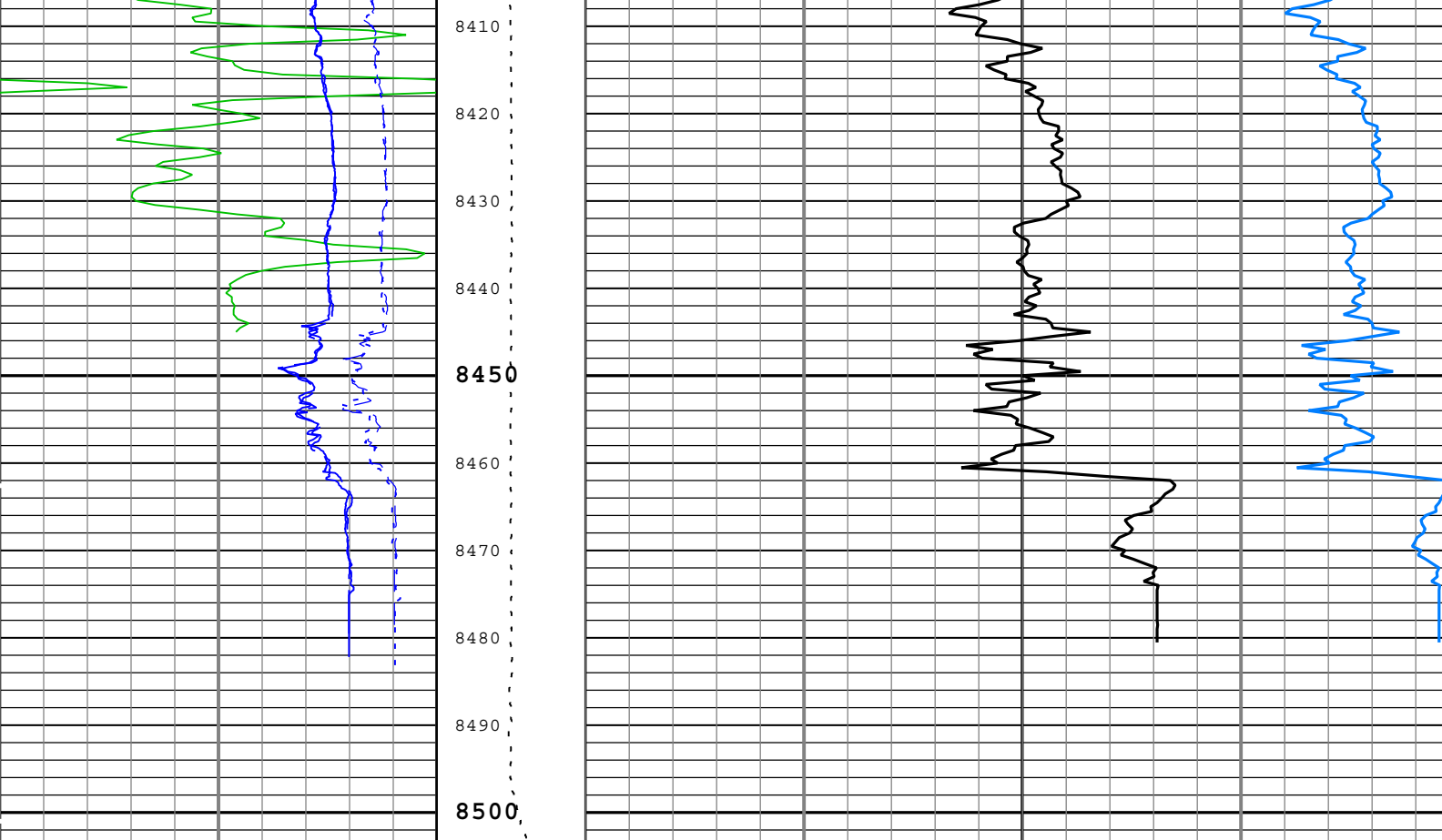
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Gamma Ray (GR) HGNS-H			Stuck Tool Indicator, Total (STIT)	Delta-T (also called Slowness or Interval Transit Time) (DT) DSLT-H		
0	gAPI	150		150	us/ft	5
Transit Time 1 (TT1) DSLT-H			0 ft 50	Sonic Porosity (SPHI) DSLT-H		
1200	us	200		0.45	ft3/ft3	-0.1
Transit Time 2 (TT2) DSLT-H			Cable Drag			
1200	us	200	Tool_Tot. Drag			
Transit Time 3 (TT3) DSLT-H			Cable Tension (TENS)			
1200	us	200				
Transit Time 4 (TT4) DSLT-H			10000 0			
1200	us	200	lbf			

TIME_1900 - Time Marked every 60.00 (s)

Description: DSST P&S Format: Log (EMD Sonic DSST) Index Scale: 5 in per 100 ft Index Unit: ft Index Type: Measured Depth Creation Date: 06-Nov-2012 05:32:07

Channel Processing Parameters				
Parameter	Description	Tool	Value	Unit
BARI	Barite Mud Presence Flag	Borehole	No	
BHS	Borehole Status (Open or Cased Hole)	Borehole	Open	
BS	Bit Size	WLSESSION	Depth Zoned	in
CALI_SHIFT	CALI Supplementary Offset	HDRS-H	0	in
CBLO	Casing Bottom (Logger)	WLSESSION	410	ft
CDEN	Cement Density	HGNS-H	2	g/cm3
CDTS	Correction for Delta-T Shale, Empirical	Borehole	100	us/ft
DC_MODE	Depth Correction Mode	DepthCorrection	Real-time	
DETE	Delta-T Detection	DSLTH-H	E2	
DFD	Drilling Fluid Density	Borehole	9.2	lbm/gal

DTCM	Delta-T Computation Mode	DSLT-H	Full	
DTF	Delta-T Fluid	Borehole	189	us/ft
DTM	Delta-T Matrix	Borehole	47.5	us/ft
GCSE_DOWN_PASS	Generalized Caliper Selection for WL Log Down Passes	Borehole	BS	
GCSE_UP_PASS	Generalized Caliper Selection for WL Log Up Passes	Borehole	CALI	
MAHTR	Manual High Threshold Reference for first arrival detection	DSLT-H	120	
MNHTR	Minimum High Threshold Reference for first arrival detection	DSLT-H	100	
NMSG	Near Minimum Sliding Gate	DSLT-H	140	us
SGAD	Sliding Gate Status	DSLT-H	On	
SOCO	Standoff Correction Option	HGNS-H	Yes	
SPFS	Sonic Porosity Formula	Borehole	Raymer-Hunt	
SPSO	Sonic Porosity Source	DSLT-H	DT	
TD	Total Measured Depth	Borehole	8507	ft

Depth Zone Parameters				
Parameter	Value	Start (ft)	Stop (ft)	
BS	0	400	410	
BS	7.875	410	8504.25	
All depth are actual.				

Tool Control Parameters				
Parameter	Description	Tool	Value	Unit
DSLT_MODE	DSLT Acquisition Mode	DSLT-H	BHC	
DSLT_RATE	DSLT Firing Rate	DSLT-H	15 Hz	
DTFS	DSLT Telemetry Frame Size	DSLT-H	536	
MAX_LOG_SPEED	Toolstring Maximum Logging Speed	WLSESSION	3600	ft/h

Company:	Nighthawk Production LLC	Schlumberger
Well:	Whistler 6-22	
Field:	Wildcat	
County:	Lincoln	
State:	Colorado	

Platform Express
Sonic