

Company: Vecta Oil & Gas Ltd

Well: Bierstadt 32-33

Field: Wildcat

County: Cheyenne

Country:

Platform Express	
Sonic	
Location:	SWNE, Sec. 33, T.13S
	1562 FNL X 2055 FEL R47W
	Elev. K.B. 4341.00 ft G.L. 4330.00 ft D.F. 4340.00 ft
Permanent Datum:	Ground Level
Log Measured From:	Kelly Bushing
Drilling Measured From:	Kelly Bushing
API Serial No.	Max.Hole Deviation
05-017-07733-0000	0 deg
	Longitude: -102.67432 degrees
	Latitude: 38.876890 degrees
Logging Date	11-Dec-2012

Run Number	PEX-AIT
Depth Driller	5565.00 ft
Schlumberger Depth	5565.00 ft
Bottom Log Interval	5561.00 ft
Top Log Interval	442.00 ft
Casing Driller Size @ Depth	8.625 in @ 441.00 ft
Casing Schlumberger	441 ft
Bit Size	7.875 in
Type Fluid In Hole	Water
Density	9.3 lbm/gal
Fluid Loss	PH
Viscosity	61 s
Source of Sample	Active Tank
RM @ Meas Temp	1.12 ohm.m @ 90.6 degF
RMF @ Meas Temp	0.84 ohm.m @ 68 degF
RMC @ Meas Temp	1.68 ohm.m @ 68 degF
Source RMF	RMC
RM @ BHT	0.74 @ 140 0.43 @ 140
Max Recorded Temperatures	140 degF
Circulation Stopped	11-Dec-2012 08:00:00
Logger on Bottom	11-Dec-2012 17:00:00
Unit Number	3022
Recorded By	Heather Bennett
Witnessed By	Ryan Scribner

Disclaimer

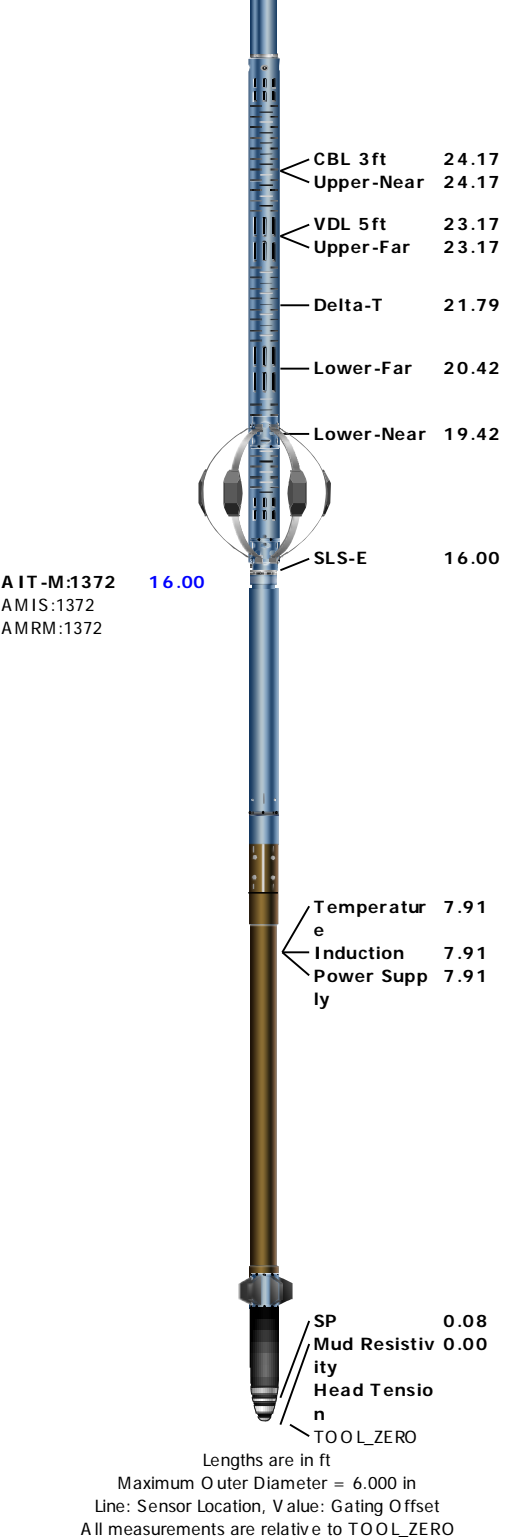
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Remarks and Equipment Summary

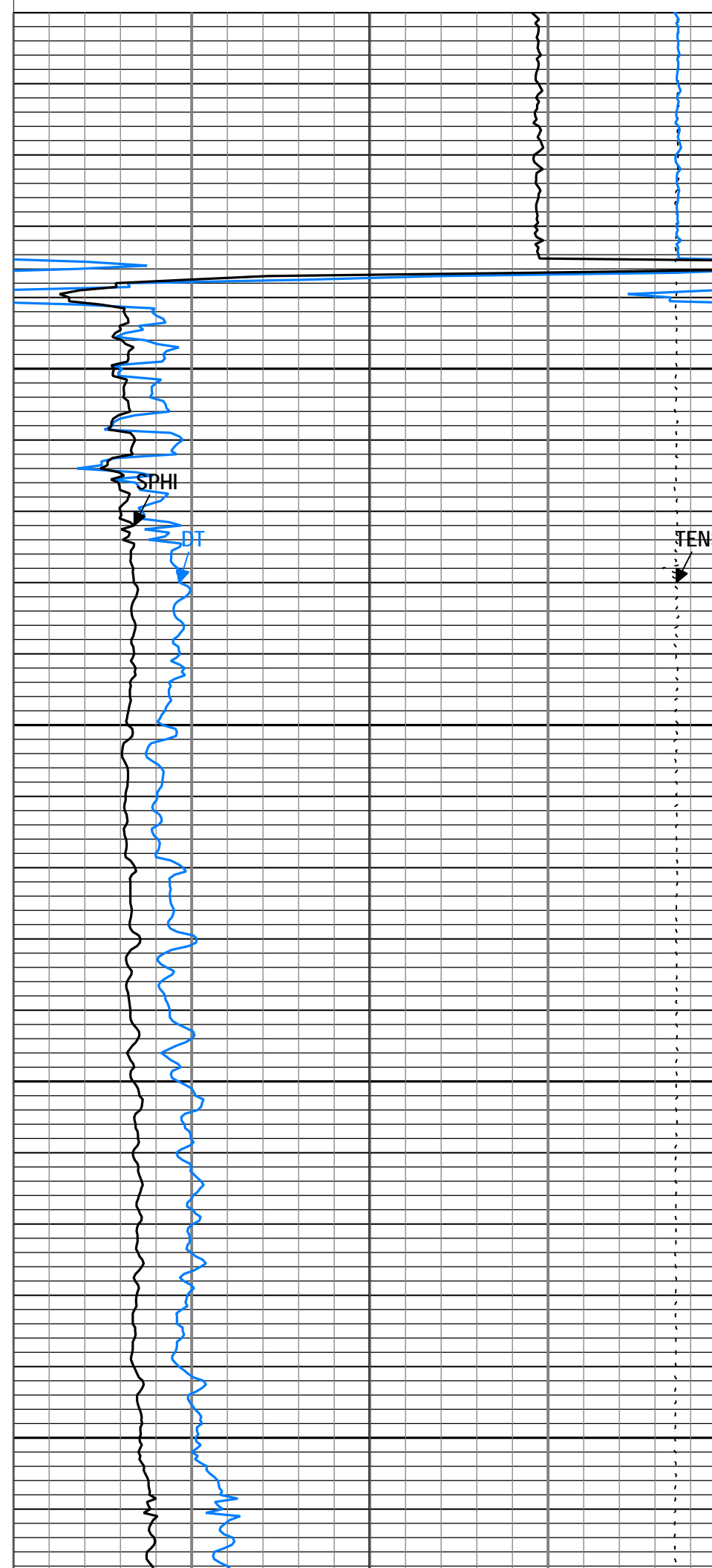
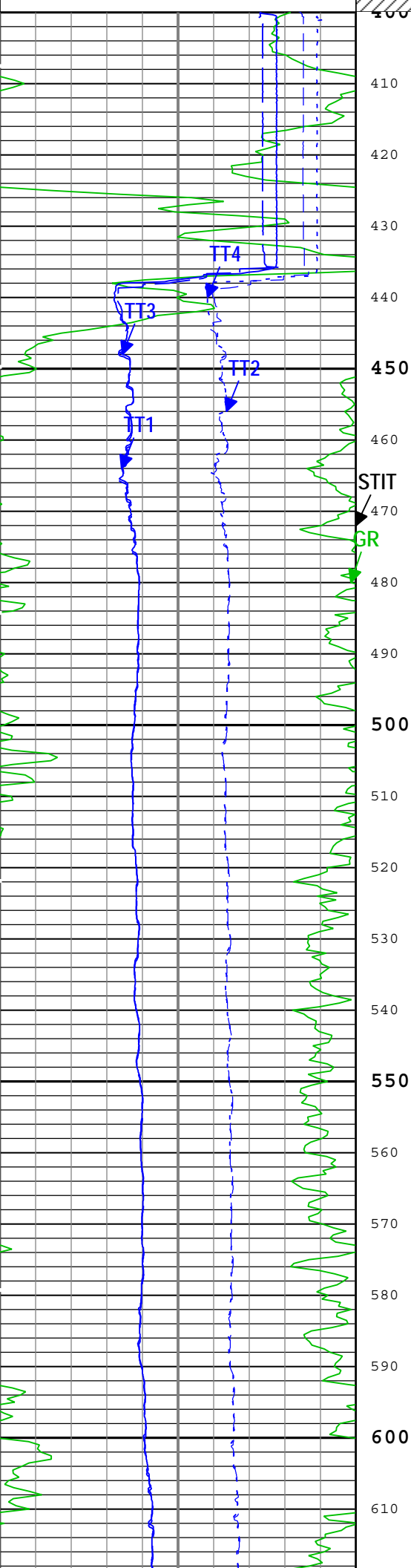
PEX-AIT: Toolstring				PEX-AIT: Remarks
Equip name	Length	MP name	Offset	This is the first run in hole
LEH-QT	64.21			Toolstring run as per tool sketch
LEH-QT				Matrix: Limestone 2.71 (g/cc)
				Crew:Ian Derry, Jake Jump
DTC-H:9236	61.29			
ECH-KC:10316		CTEM	60.39	
DTC-H:9236		HV	0.00	
		TelStatus	58.29	
		ToolStatus	58.29	
HGNS-H:4779	58.29	Temperatur	58.26	
HGNH:3826				
NPV-N		GR	57.55	
NSR-F:5215				
HMCA-H				
HGNS-H:4779				
HACCZ-H:5736				
		CNL Porosit	51.21	
		y		
		HGNS	48.88	
		HMCA	48.88	
		Accelerome	0.00	
		ter		
HDRS-H:4826	48.88			
ECH-MEB				
HRCC-H:3712				
HRMS-H:4826				
Long Spacing:28				
926				
HRGD-H:3775				
GPV-Q		HRCC	44.88	
Backscatter:2640				
4				
Short Spacing				
GSR-J:5240				
		MCFL	39.45	
		Caliper	38.96	
		TLD Density	38.57	
DSLT-H:8318	36.64			
ECH-KH				
DSLC-H:8318				
SLS-E:165				

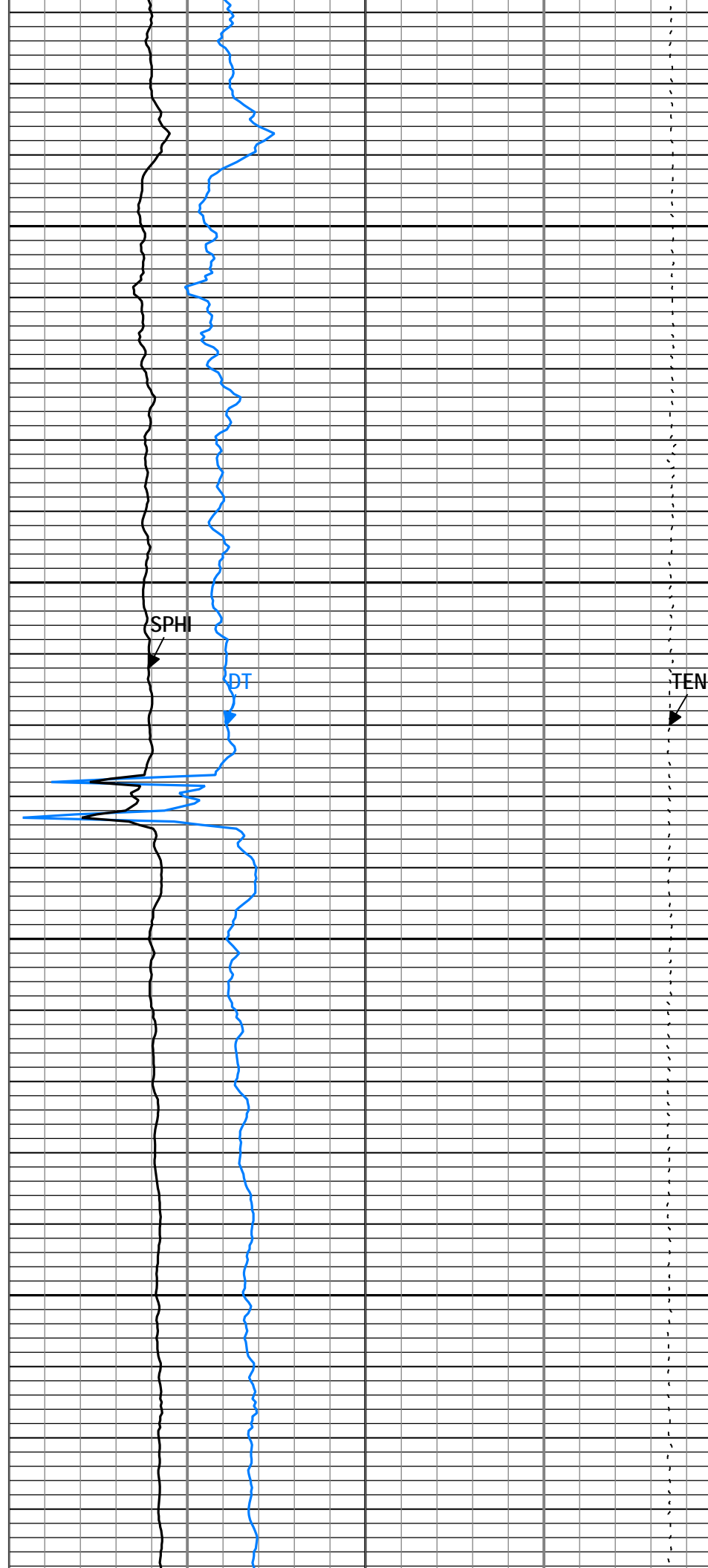
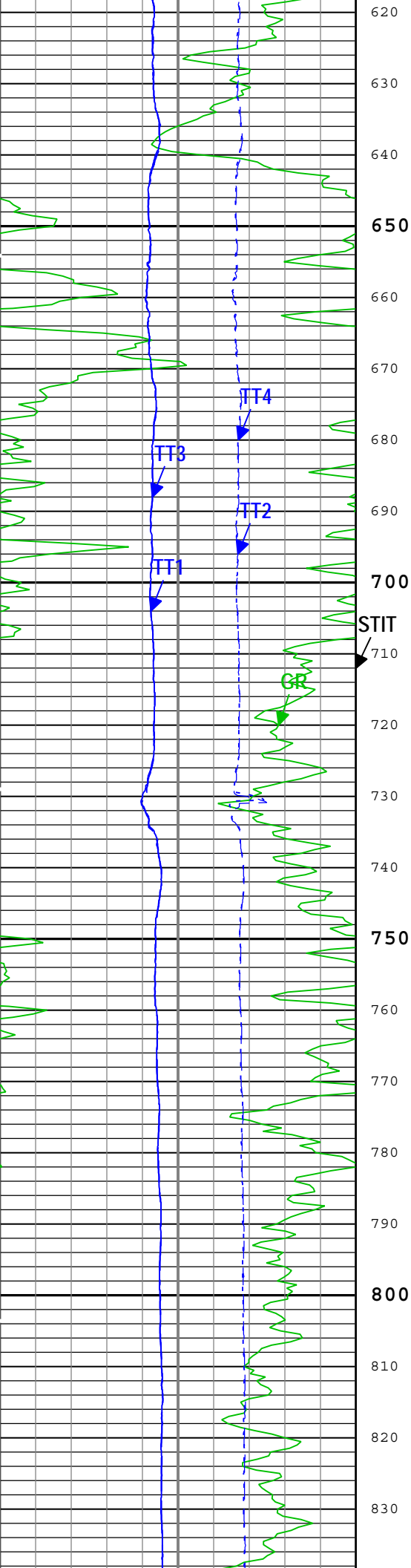


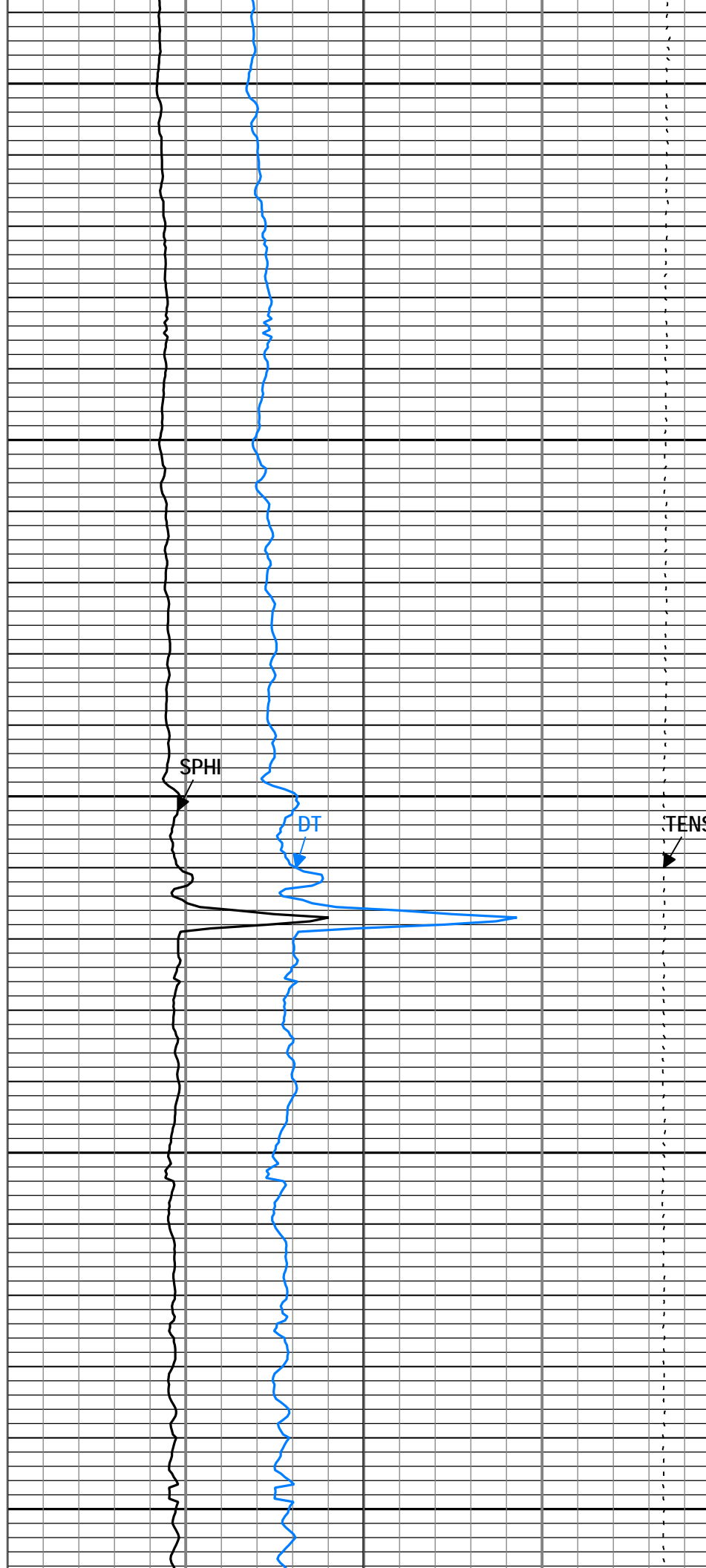
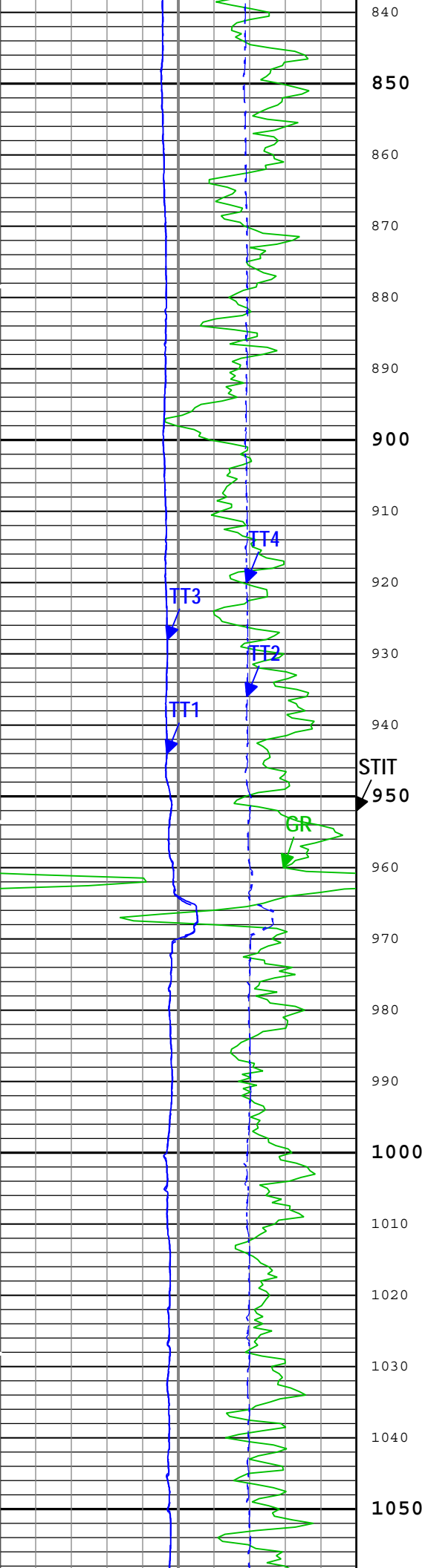
Depth Summary

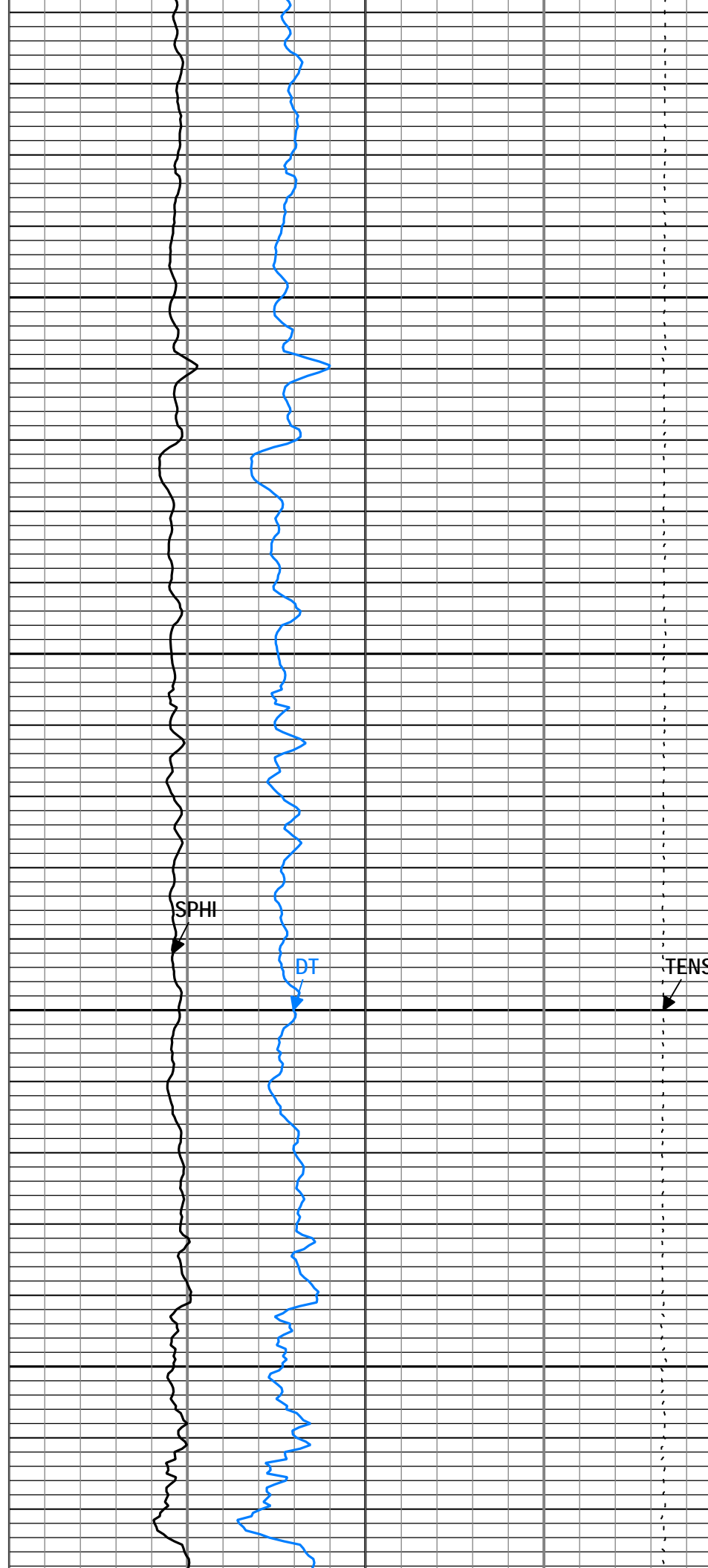
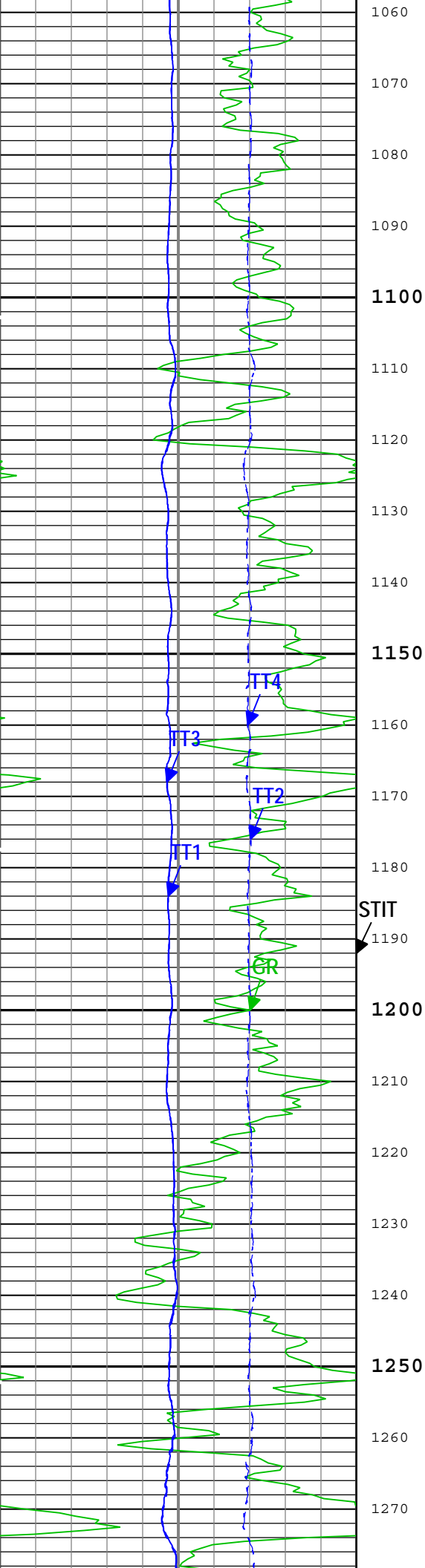
Depth Control Parameters	PEX-AIT		
Conveyance Type	Wireline		
Depth Measuring Device	PEX-AIT		
Type	IDW-B		
Wheel Correction 1	1		
Wheel Correction 2	0		
Tension Device	PEX-AIT		
Type	CMTD-B/A		
Calibration Points	0		
Logging Cable	PEX-AIT		
Type	7-46NT-XS		
Logging Cable Length (ft)	24000.00		

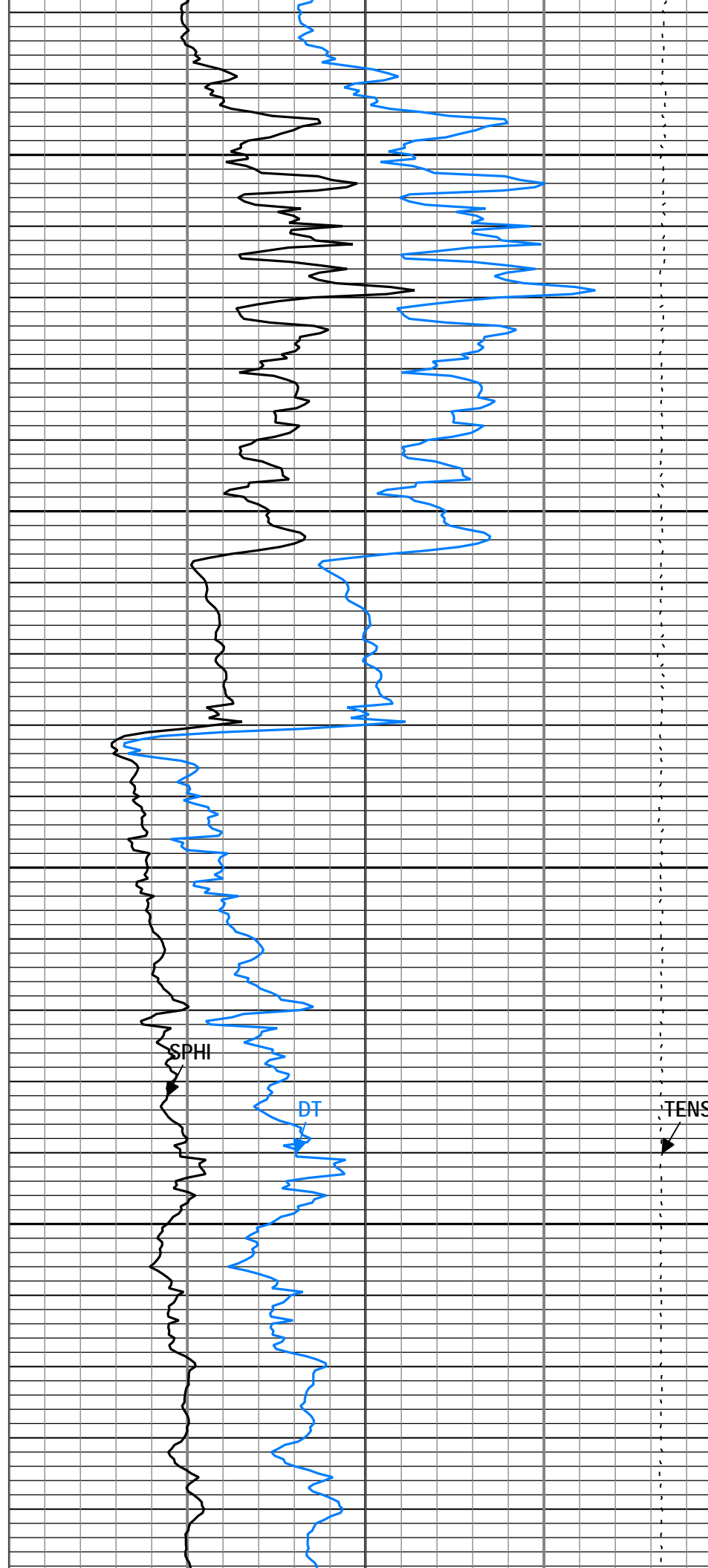
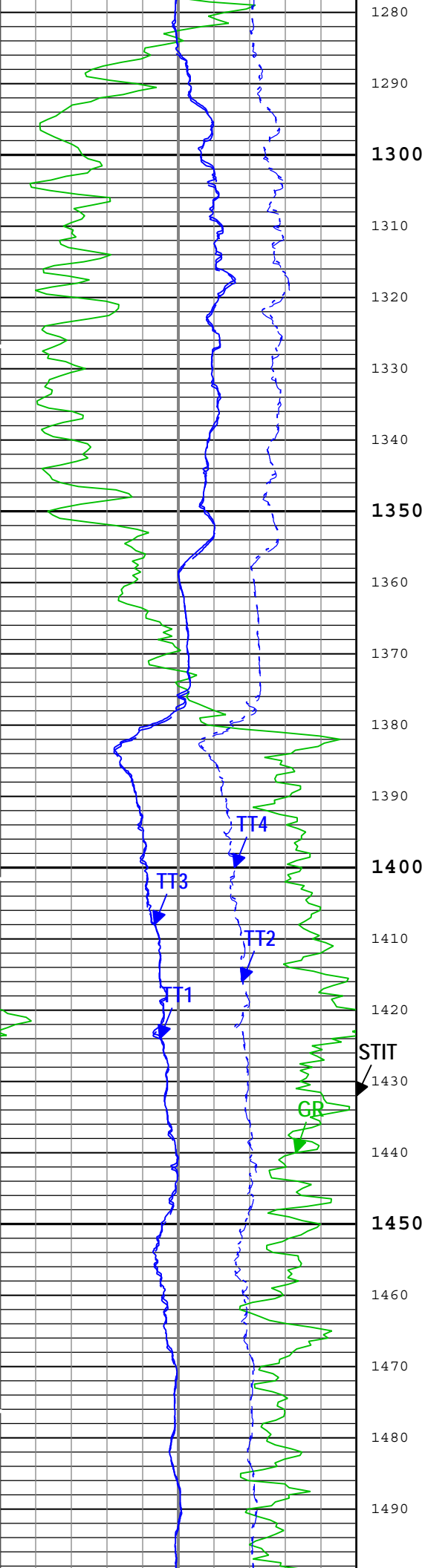
PEX-AIT									
Integration Summary									
Output Channel(s)		Output Description		Input Parameter		Output Value		Unit	
Software Version									
Acquisition System					Version				
MaxWell					3.1.9755.0				
Application Patch					SP-20120723-3.1.9755.1112				
					EXP_APL-MASTAXIS-3.1.9755.1221				
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	
PEX-AIT	Log[3]:Up	Up	365.61 ft	5571.09 ft	11-Dec-2012 4:54:22 PM	11-Dec-2012 6:41:38 PM	5.00 ft		
All depths are referenced to toolstring zero									
Log									
PEX-AIT: Log[3]:Up									
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: 11-Dec-2012 18:56:24									
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)									
<div><div><div>Gamma Ray (GR) HGNS-H</div><div>0gAPI150</div></div><div><div>Transit Time 1 (TT1) DSLT-H</div><div>1200us200</div></div><div><div>Transit Time 2 (TT2) DSLT-H</div><div>1200us200</div></div><div><div>Transit Time 3 (TT3) DSLT-H</div><div>1200us200</div></div><div><div>Transit Time 4 (TT4) DSLT-H</div><div>1200us200</div></div></div> <div><div>Stuck Tool Indicator, Total (STIT)</div><div>0ft50</div></div> <div><div>Cable Drag</div><div></div></div> <div><div>Tool_Tot. Drag</div><div></div></div>									
					<div><div>Cable Tension (TENS)</div><div>10000lbf</div></div>				
					<div><div>Delta-T (also called Slowness or Interval Transit Time) (DT) DSLT-H</div><div>150us/ft5</div></div>				
					<div><div>Sonic Porosity (SPHI) DSLT-H</div><div>0.45ft3/ft3-0.1</div></div>				

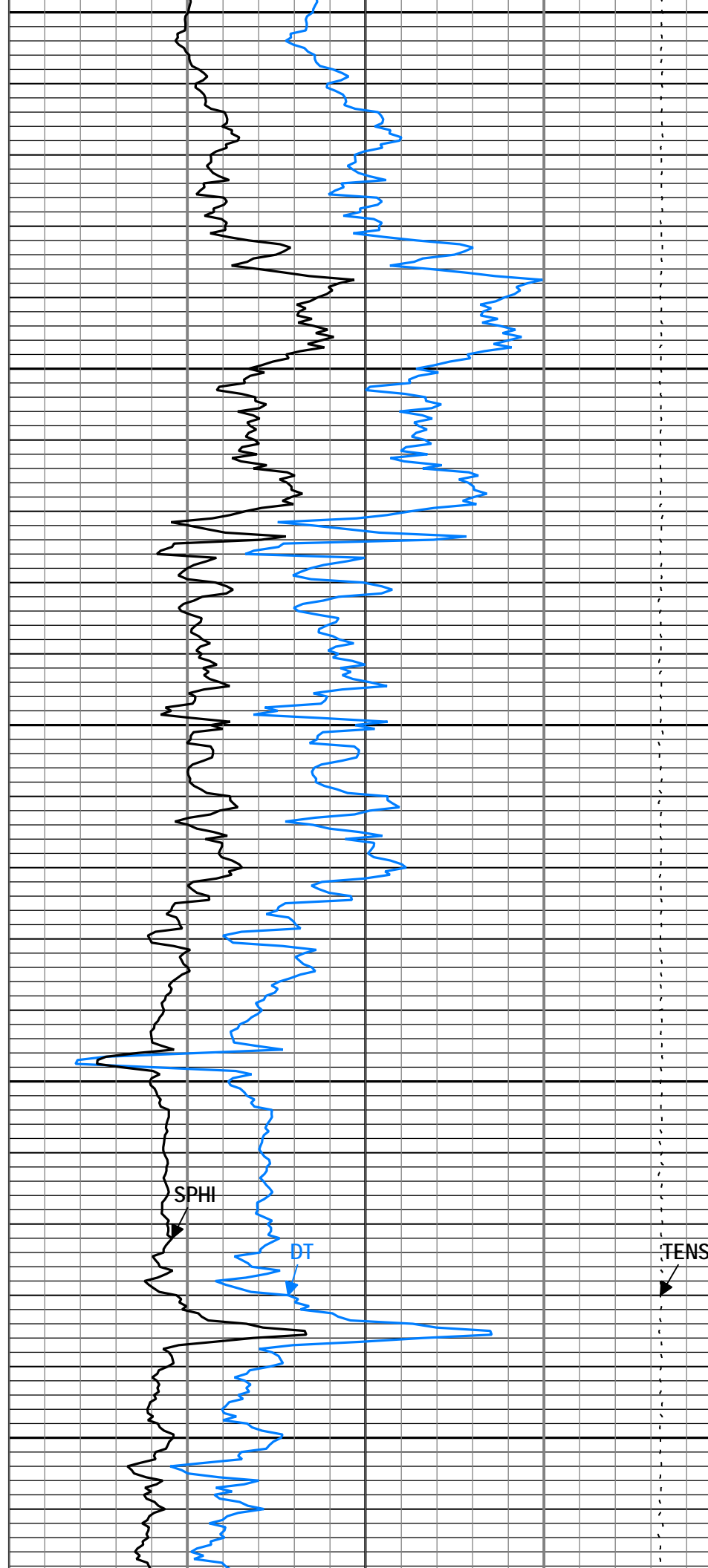
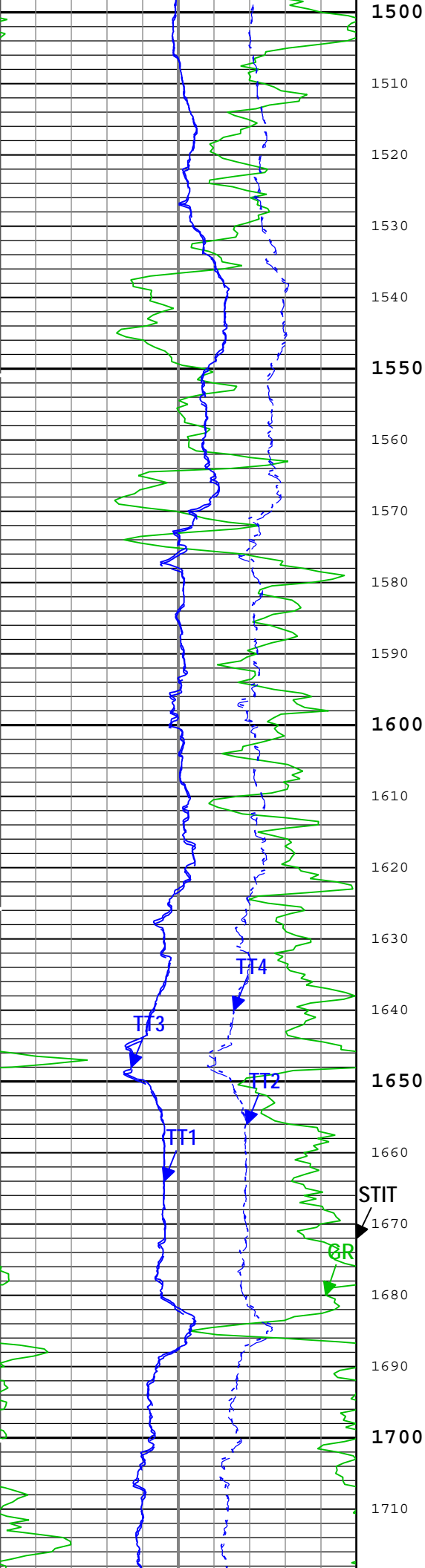


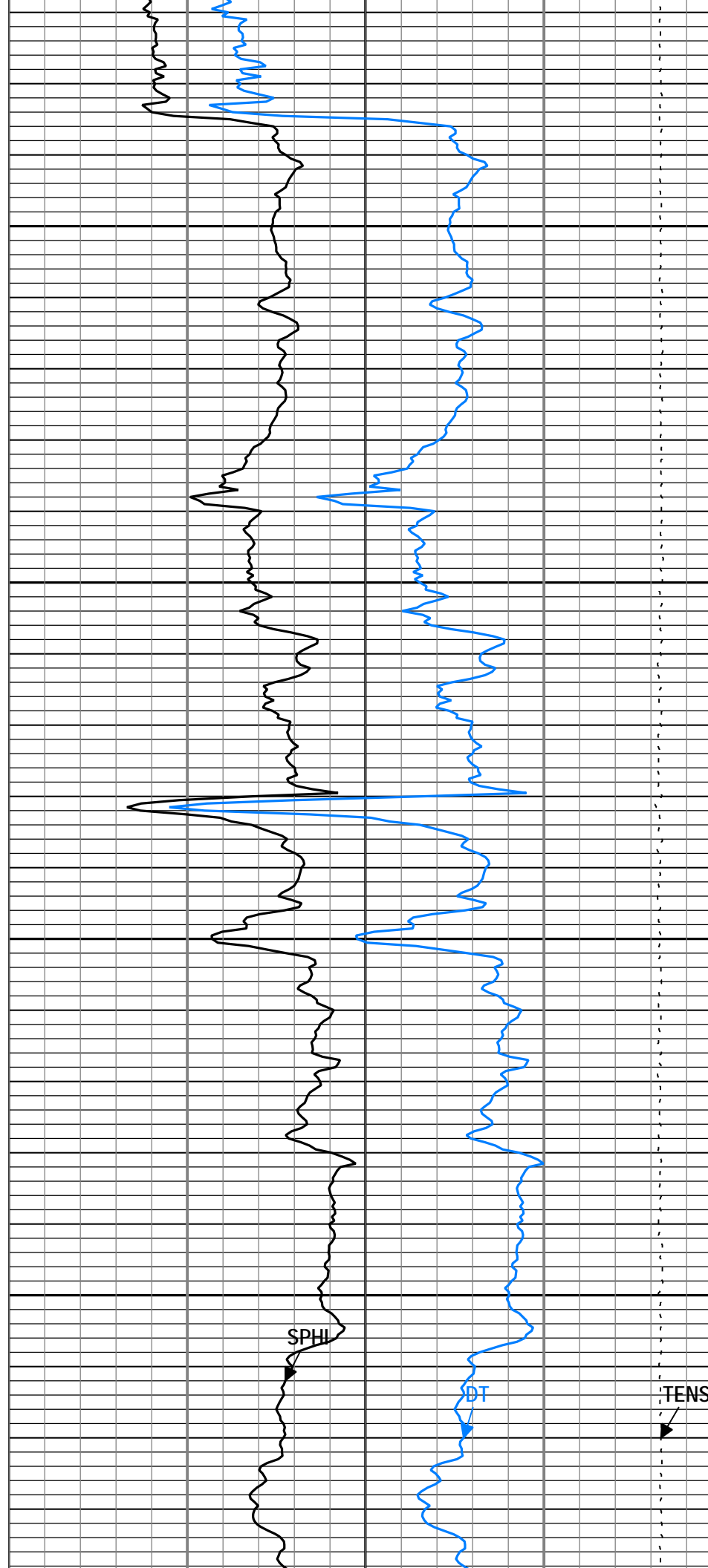
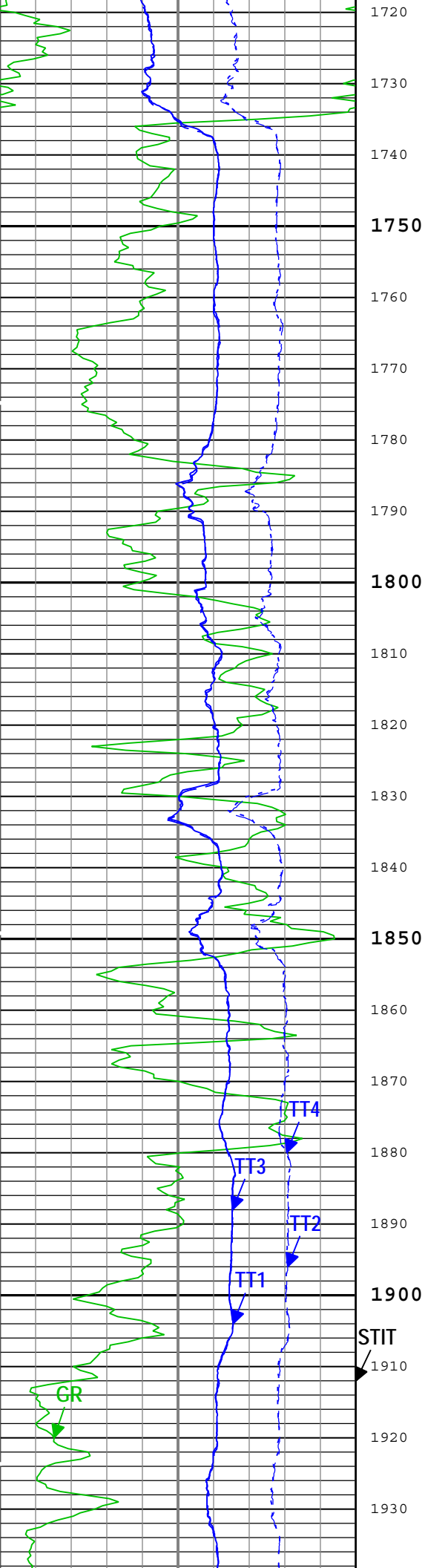


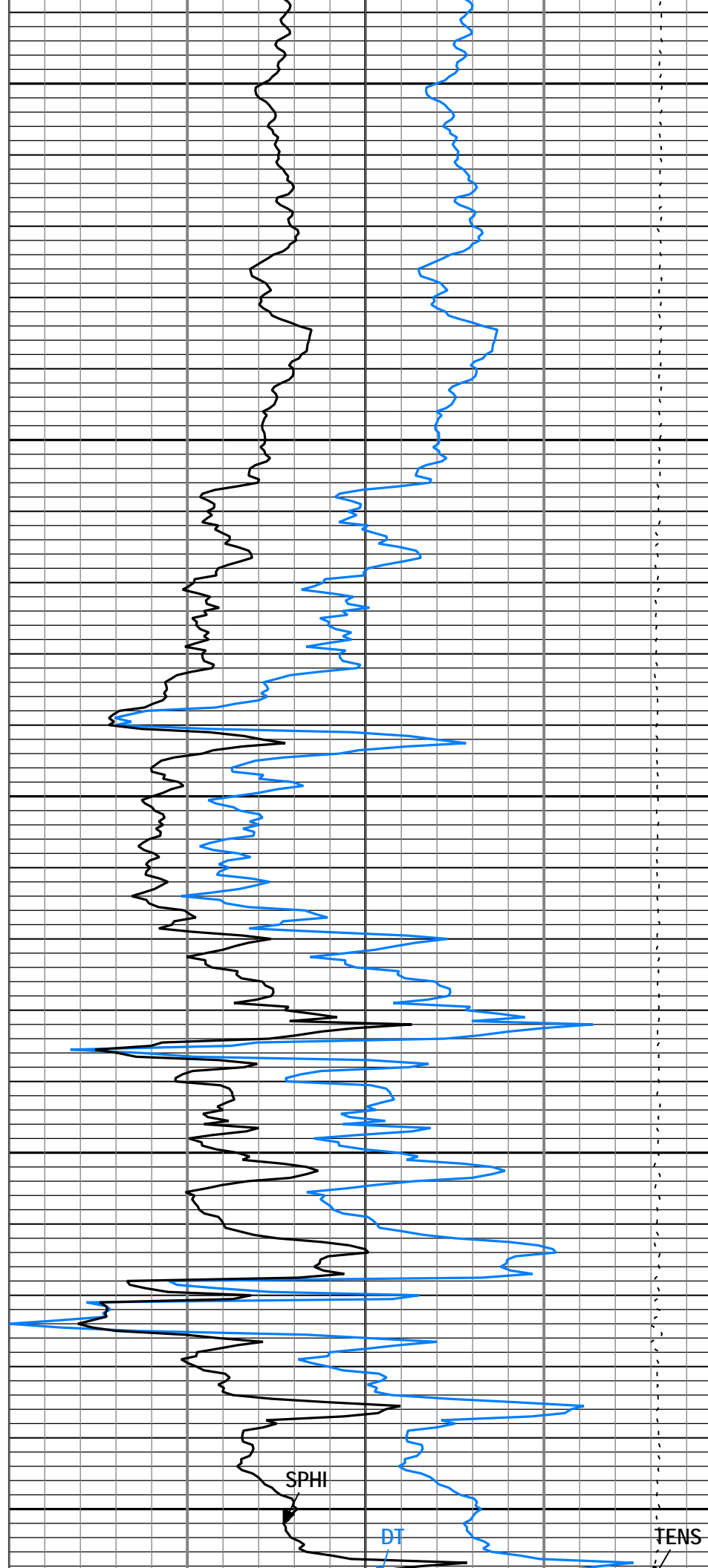
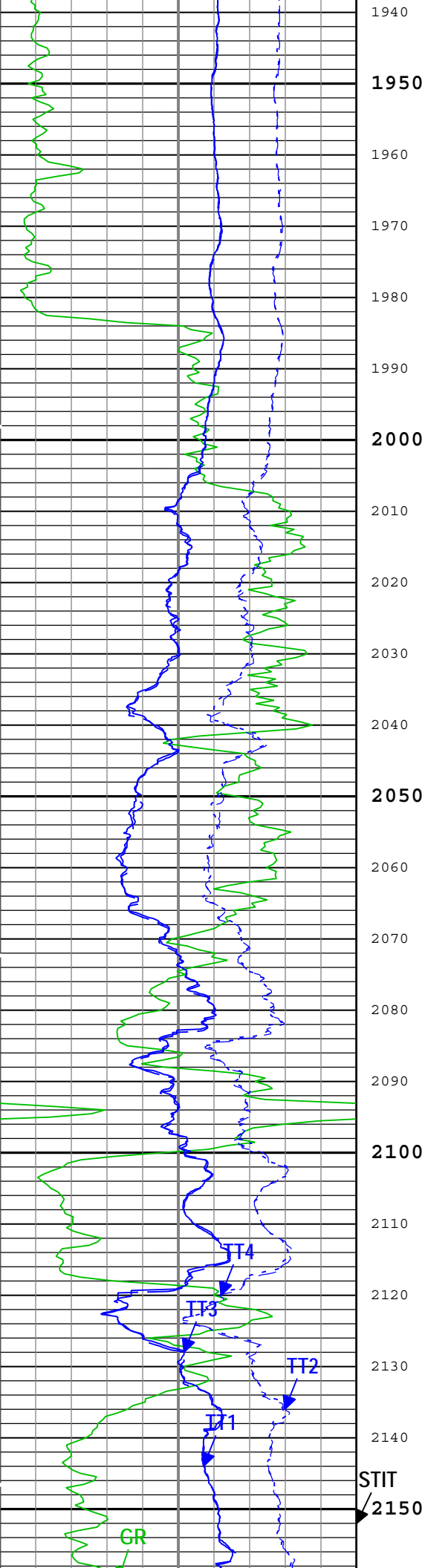


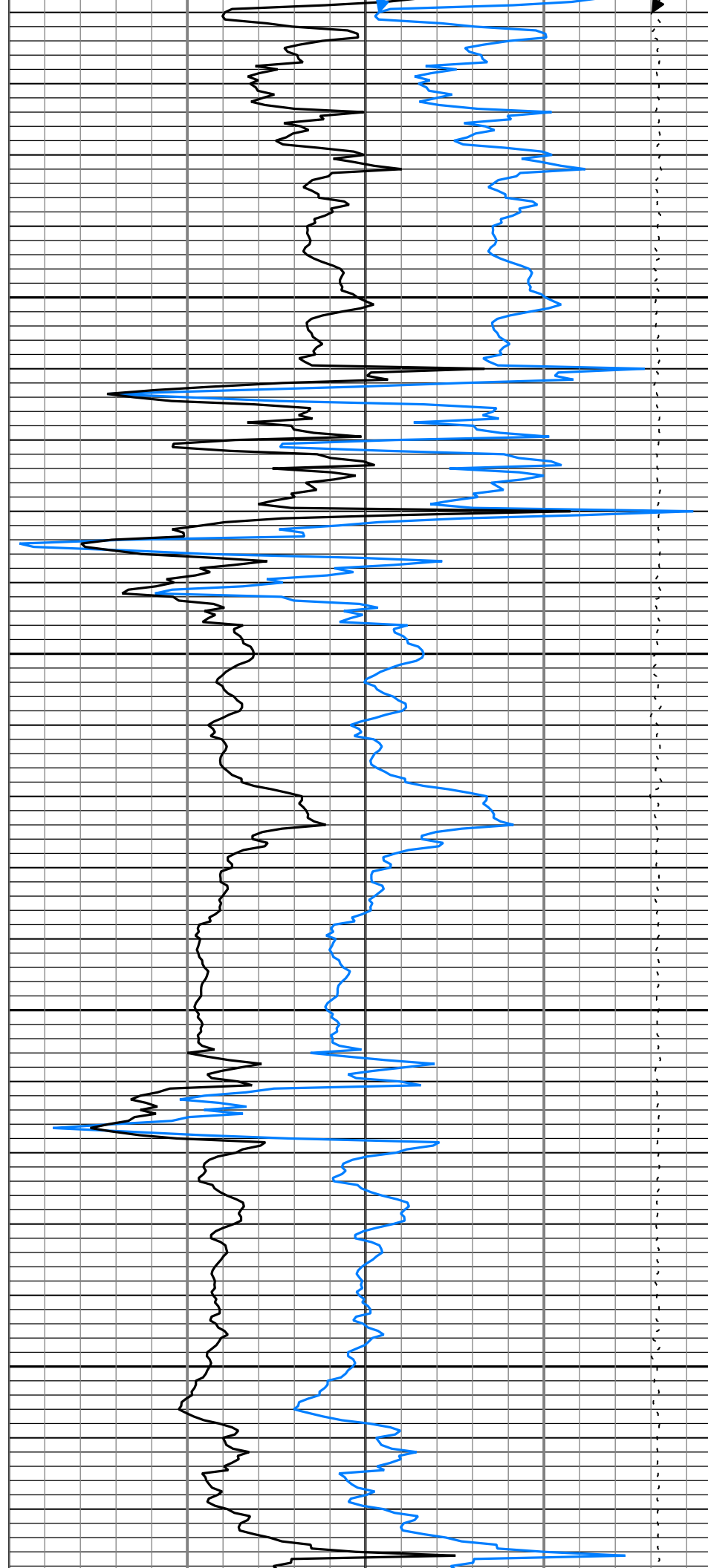
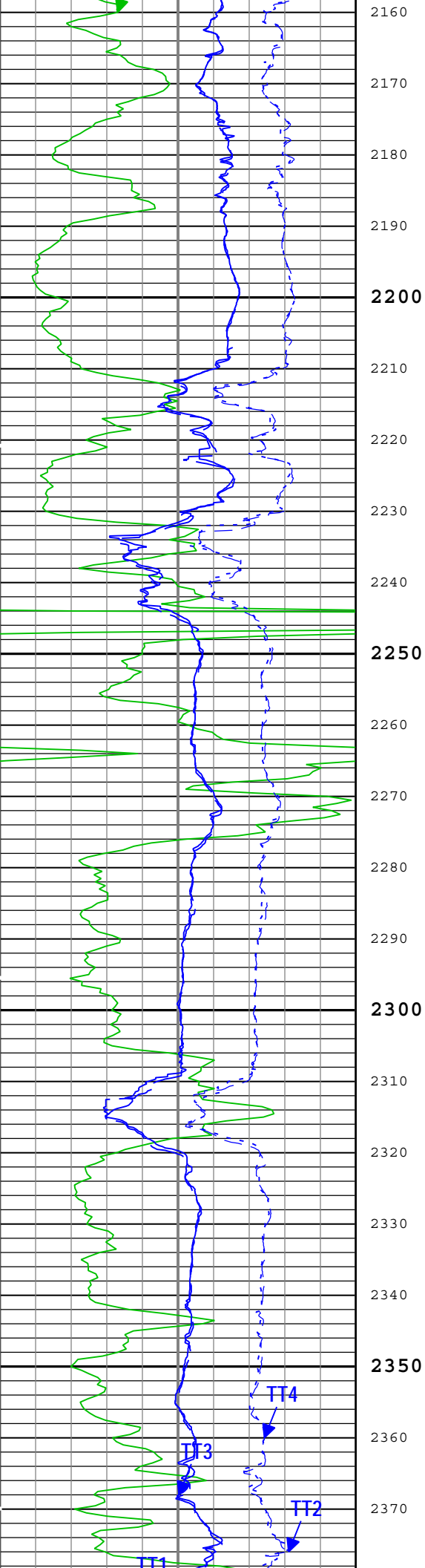


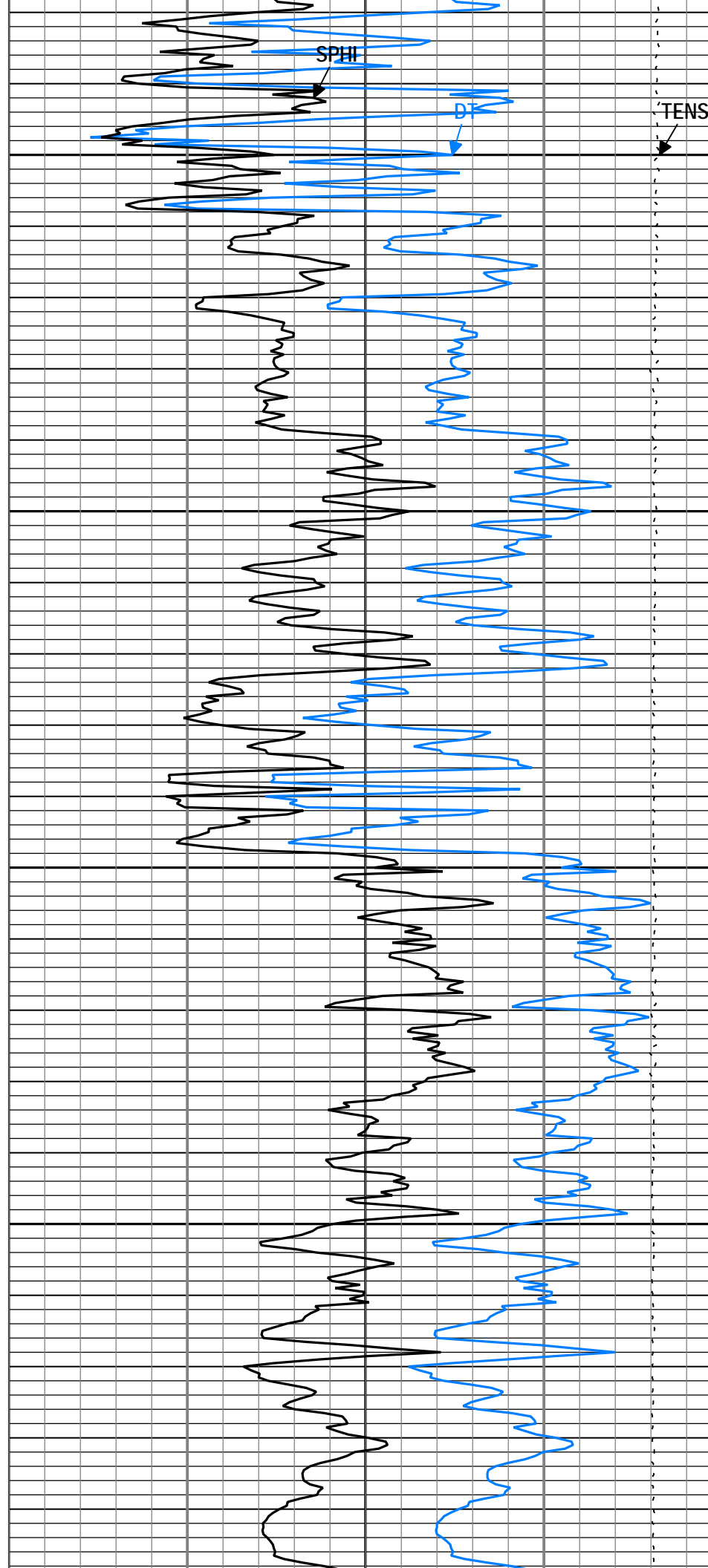
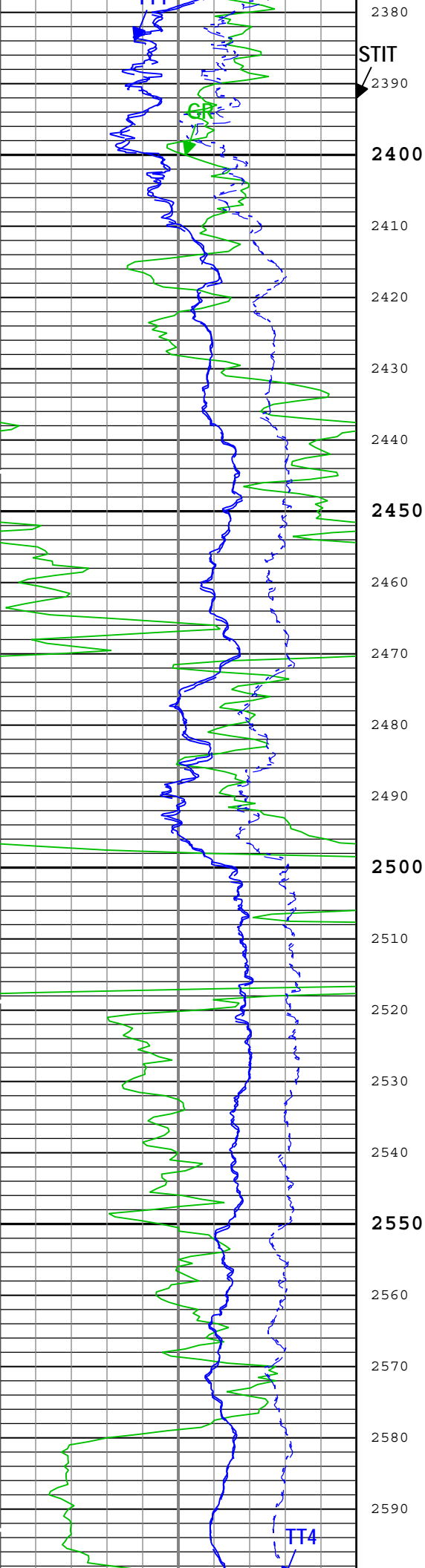


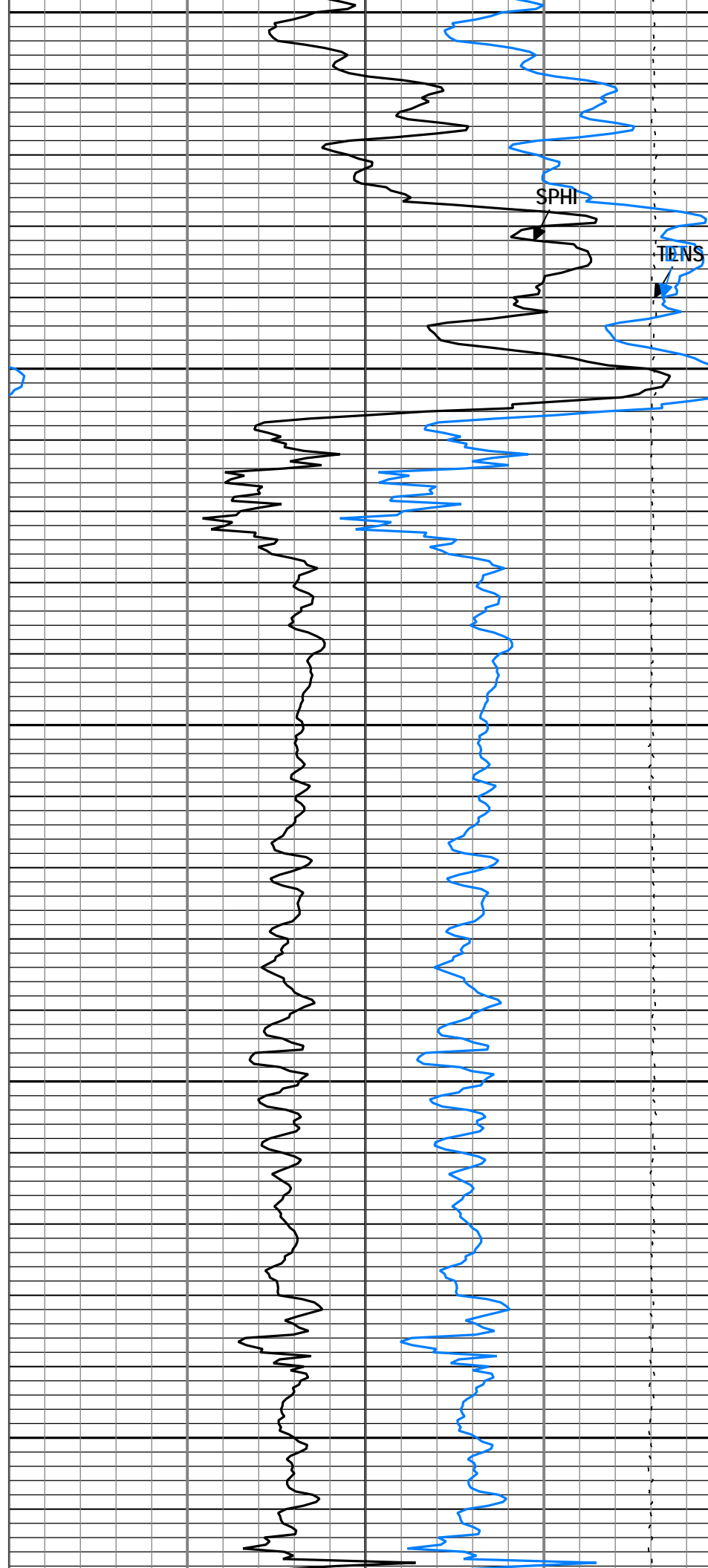
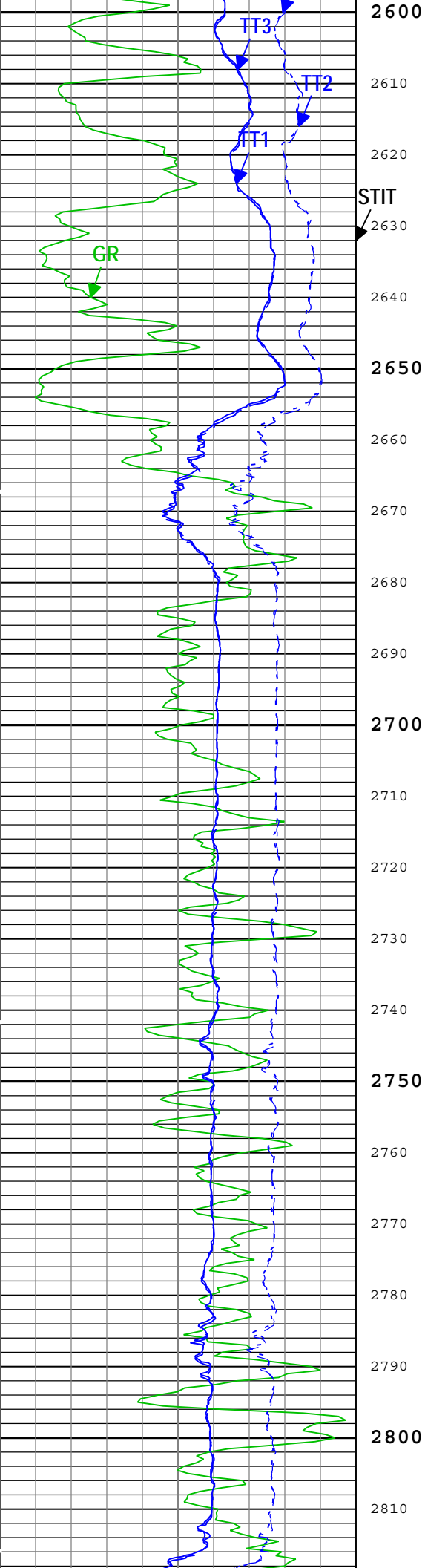


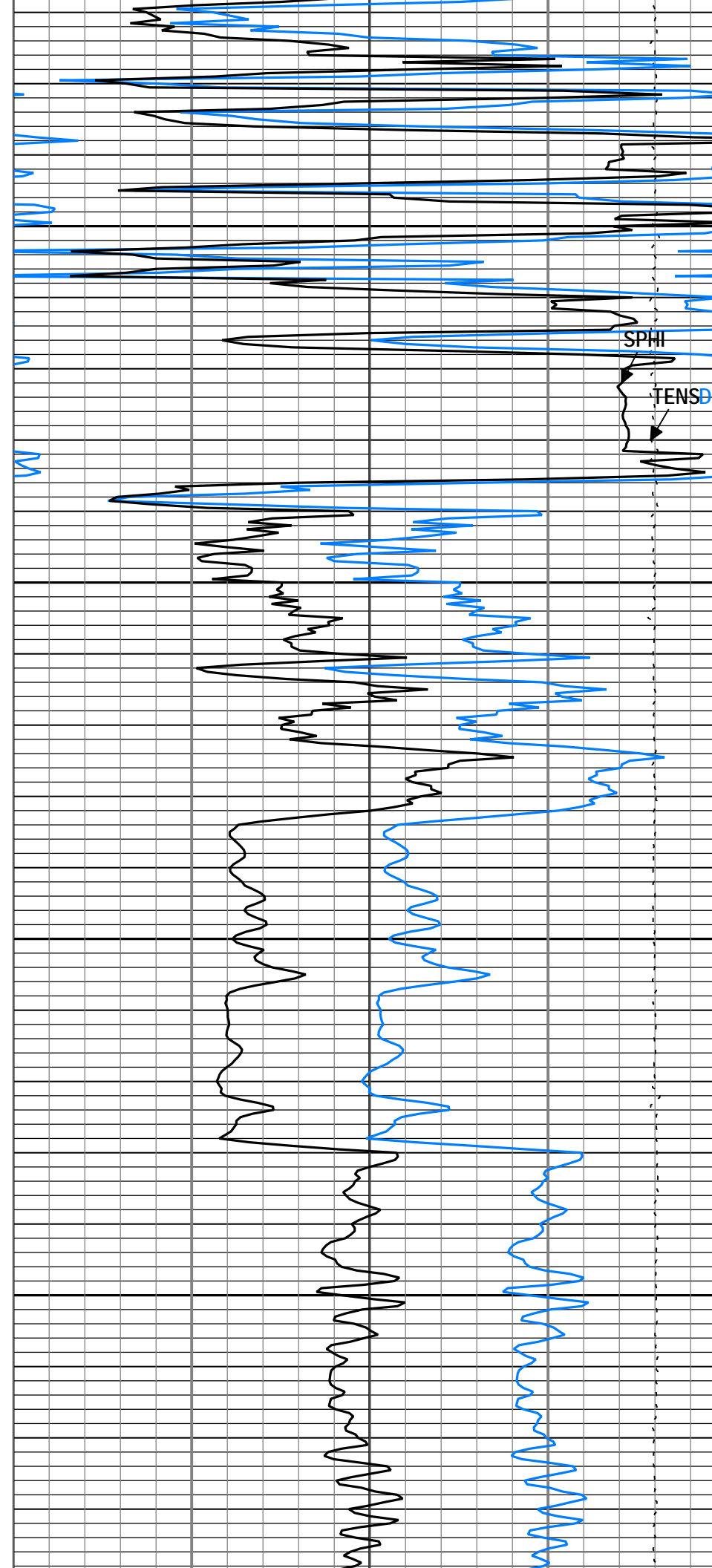
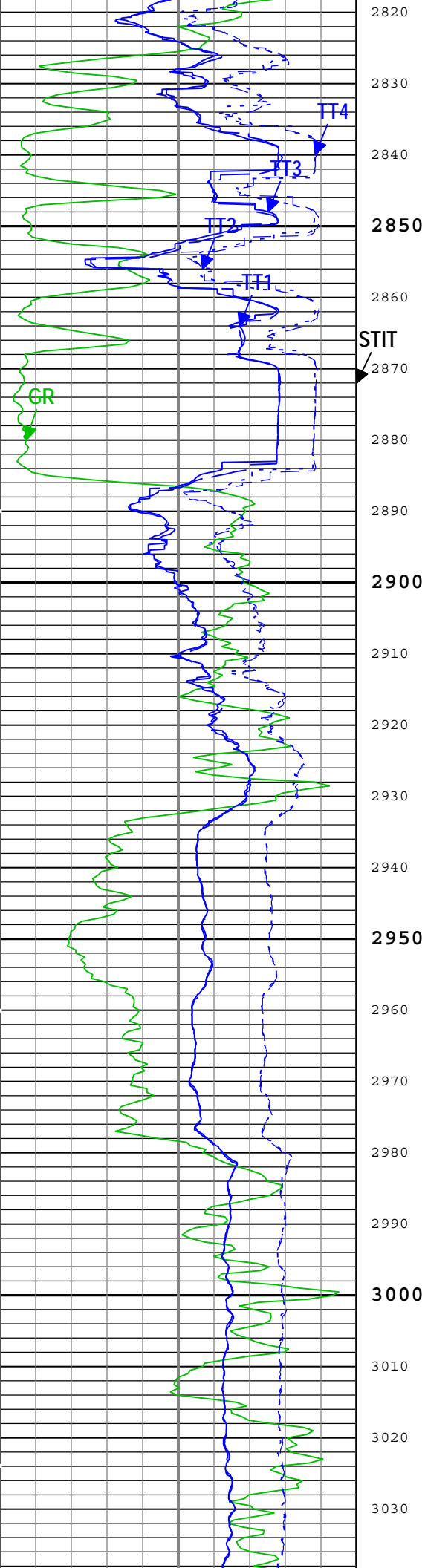


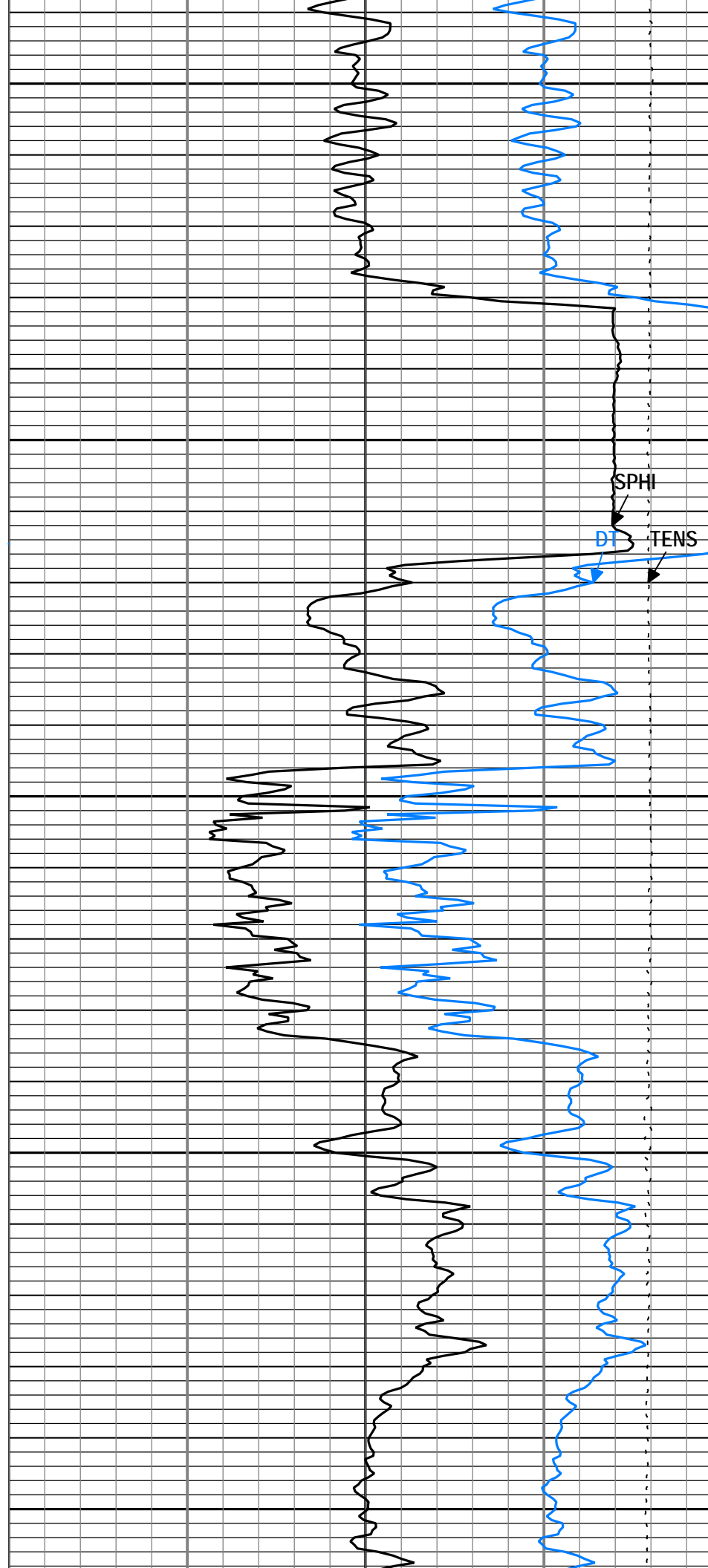
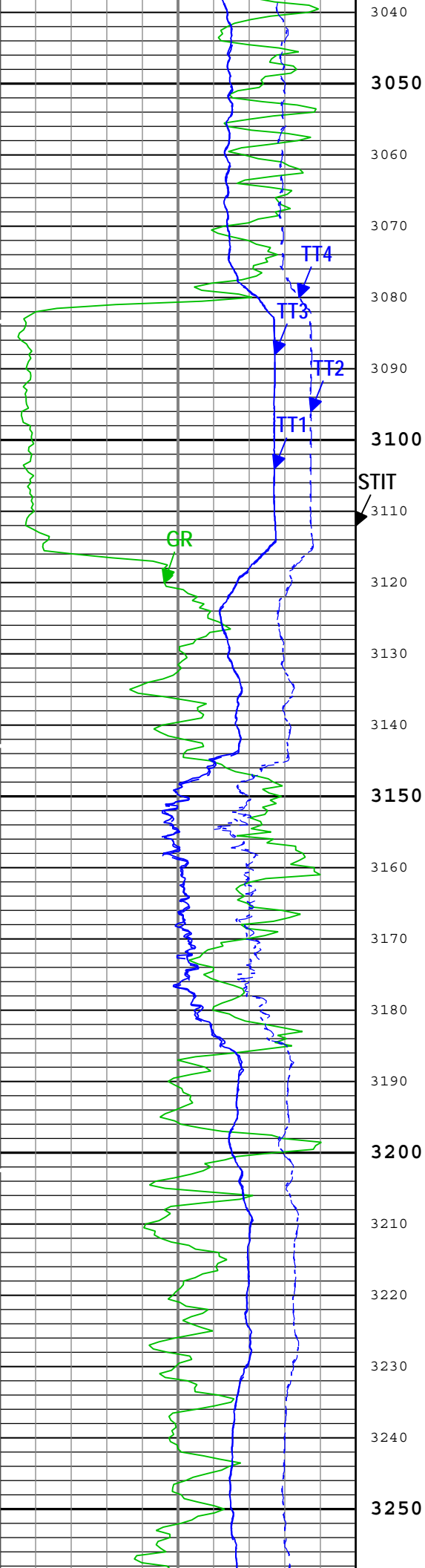


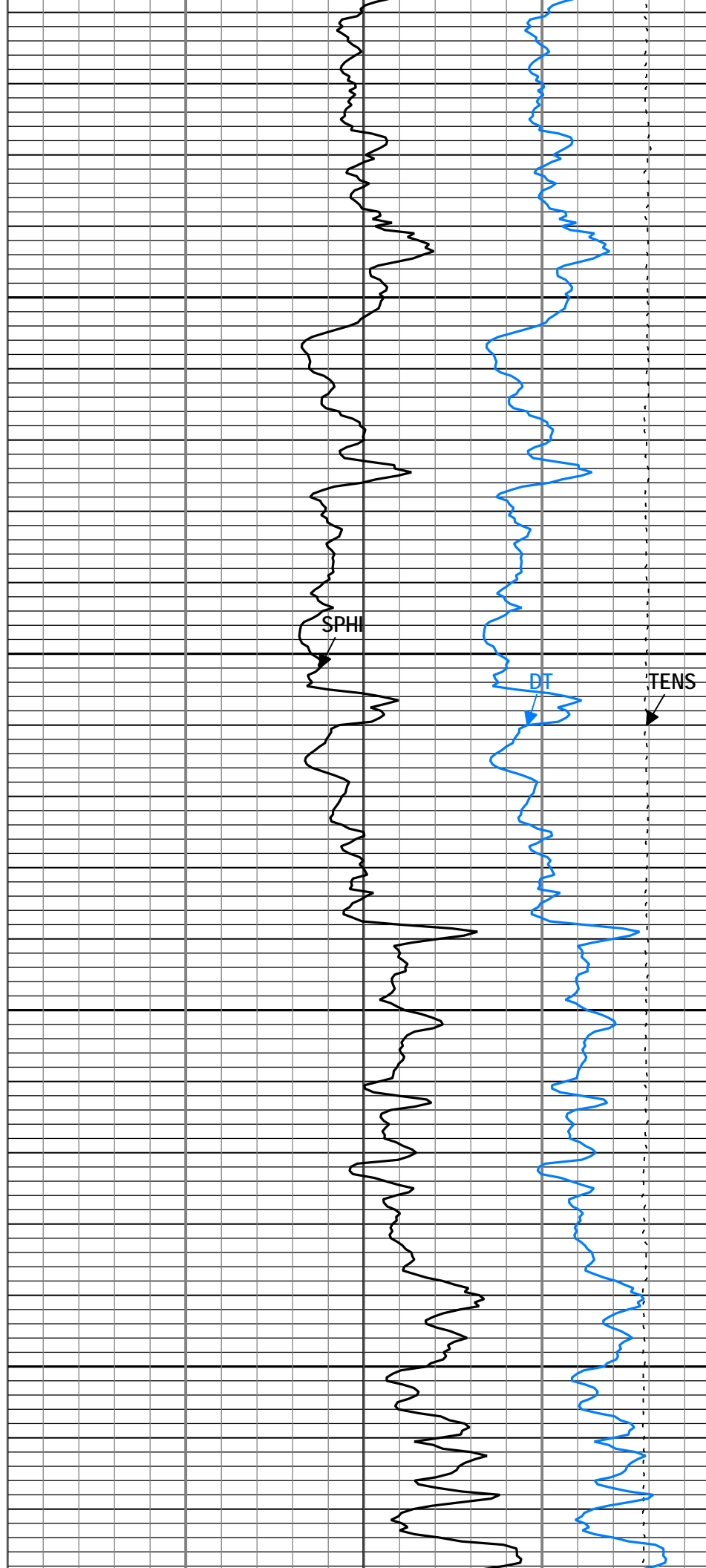
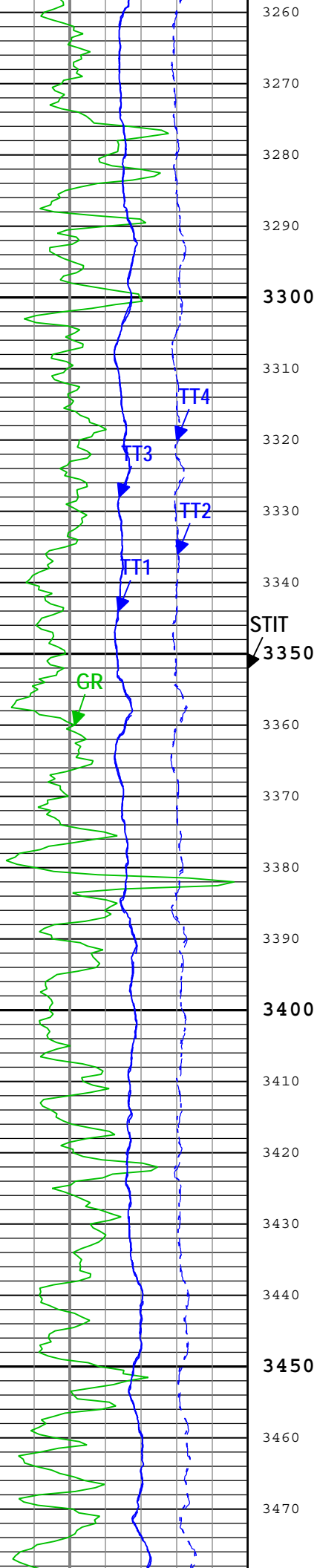


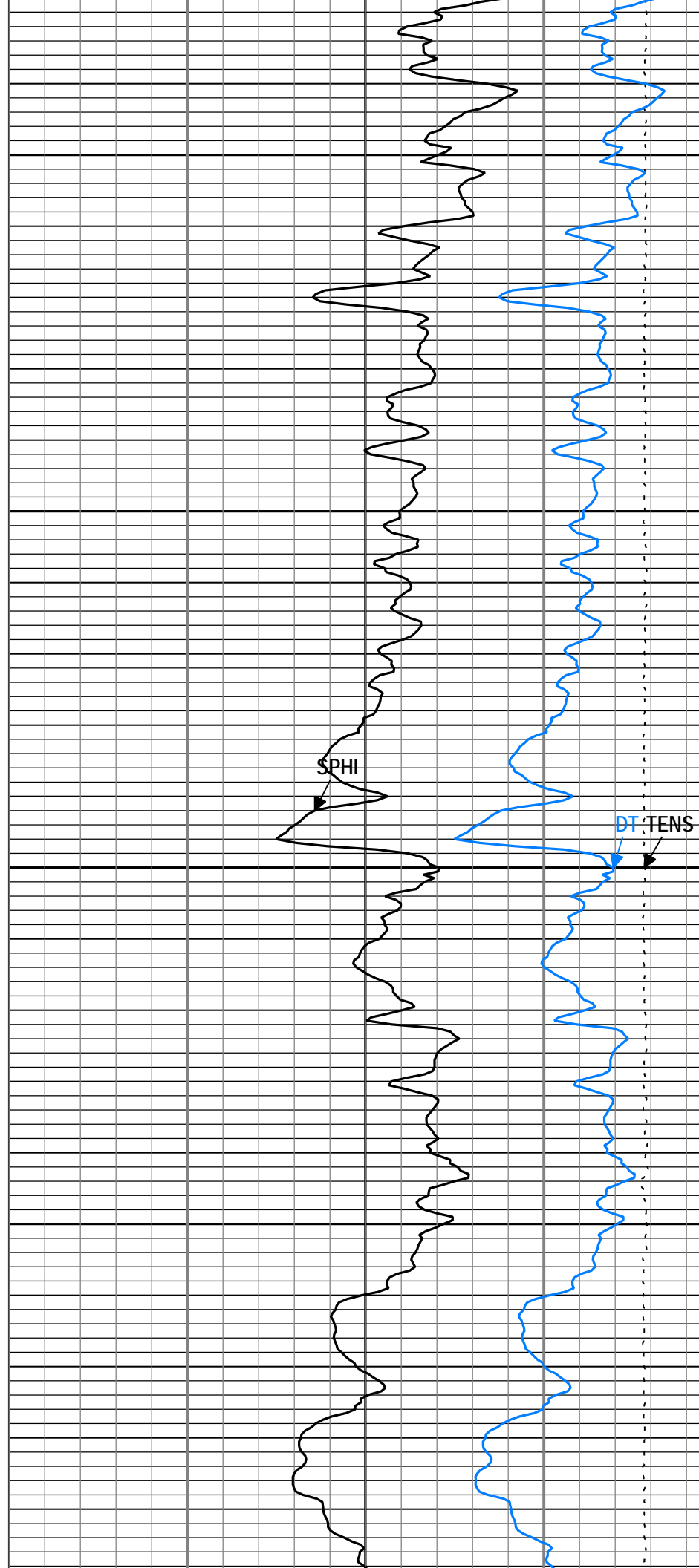
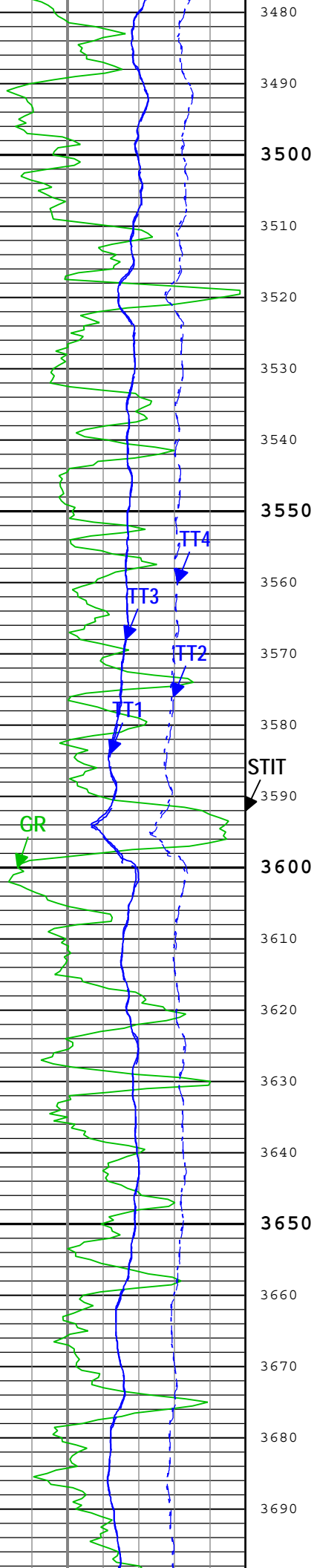


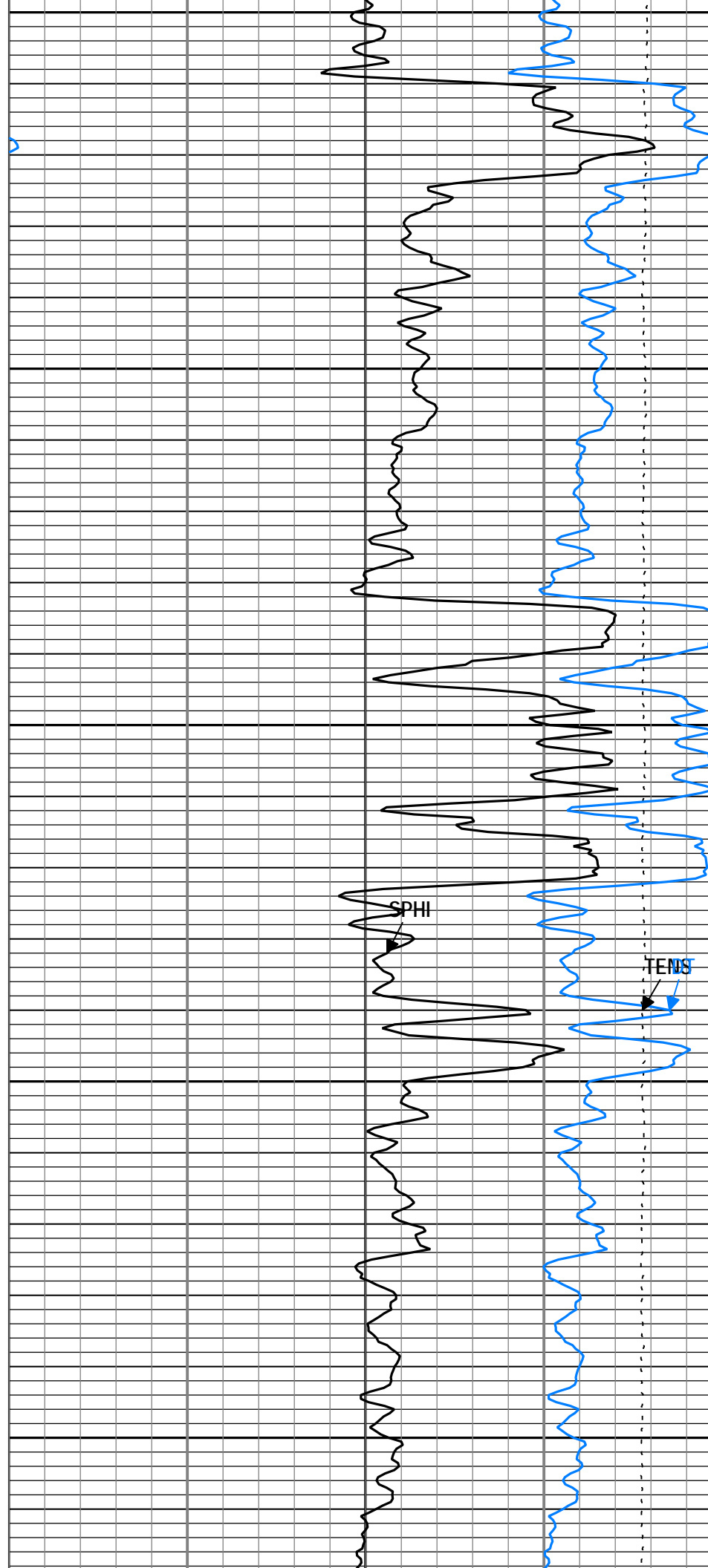
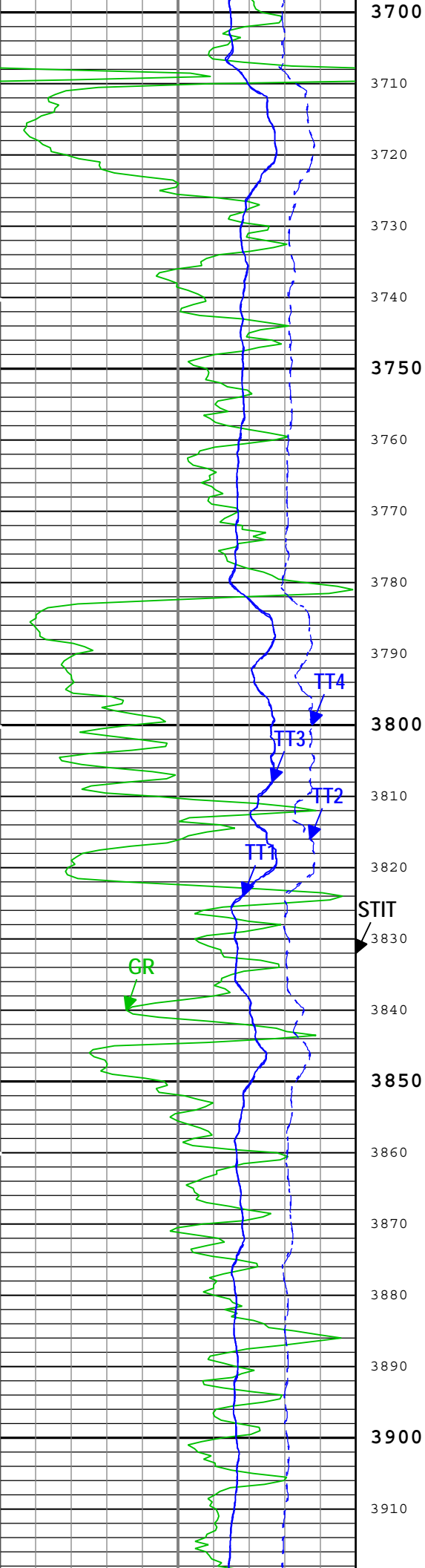


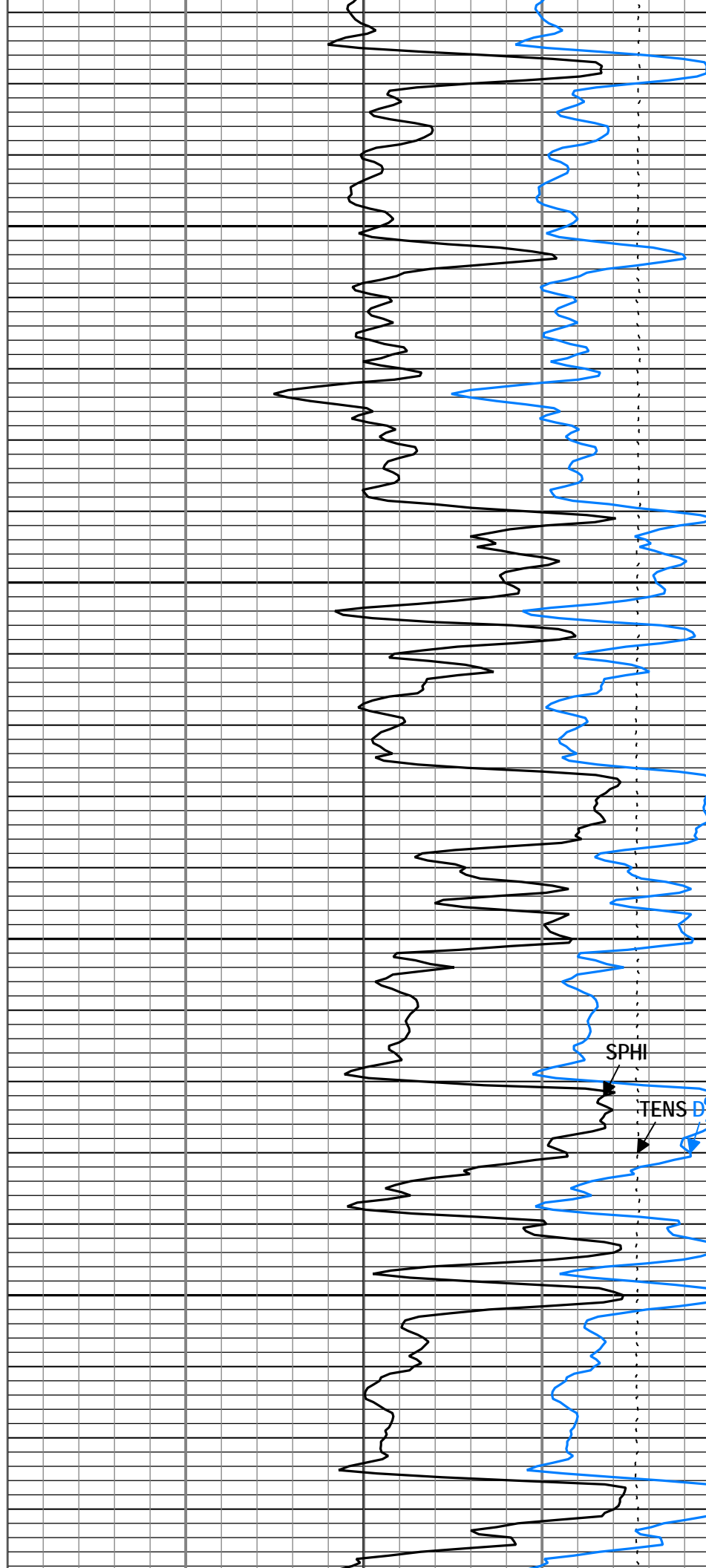
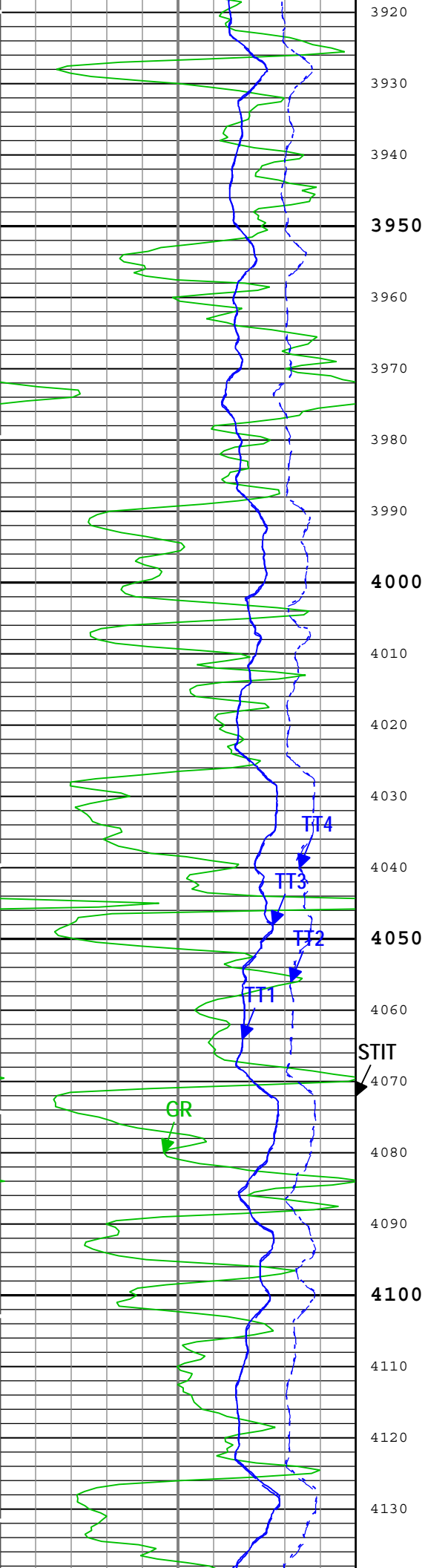


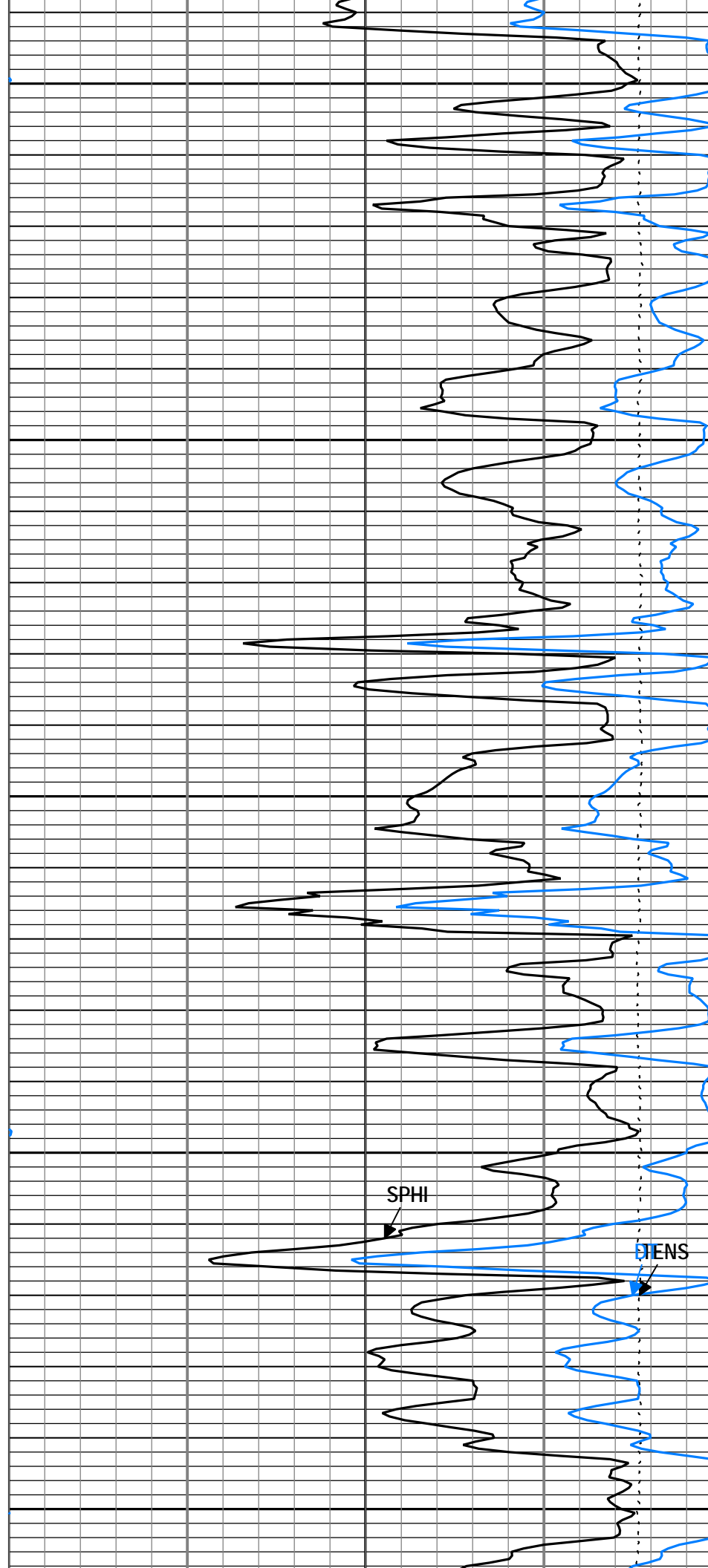
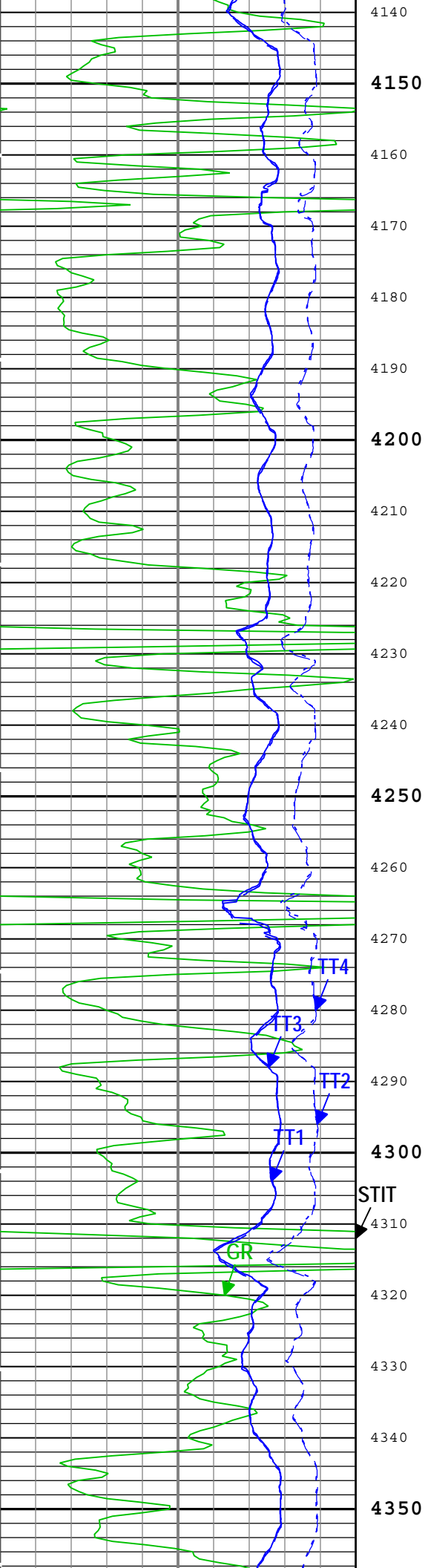


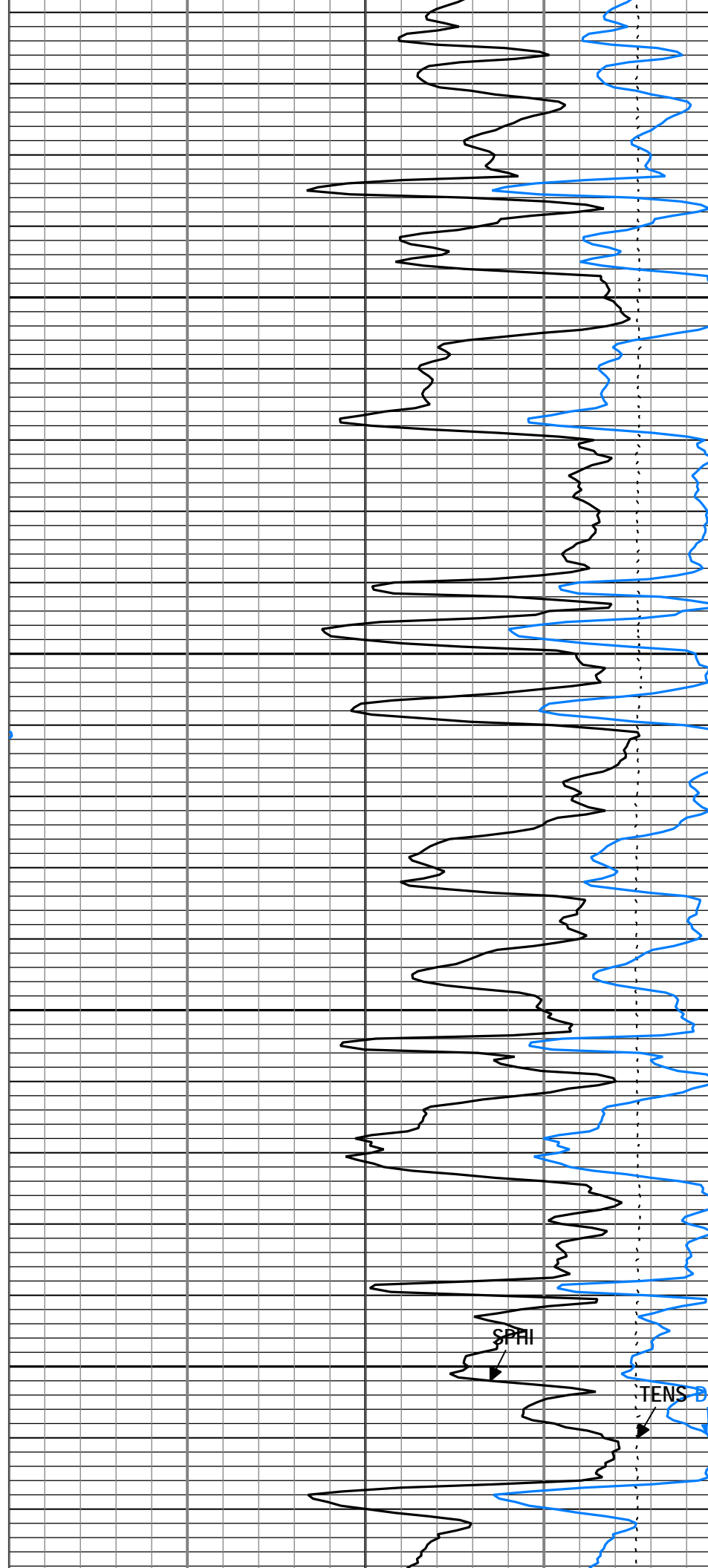
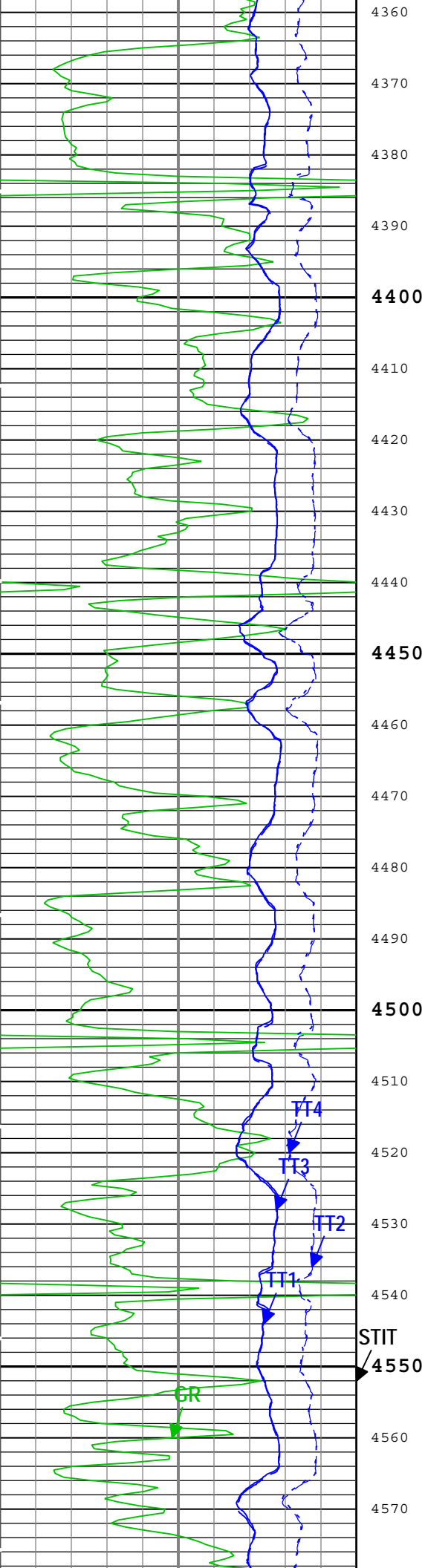


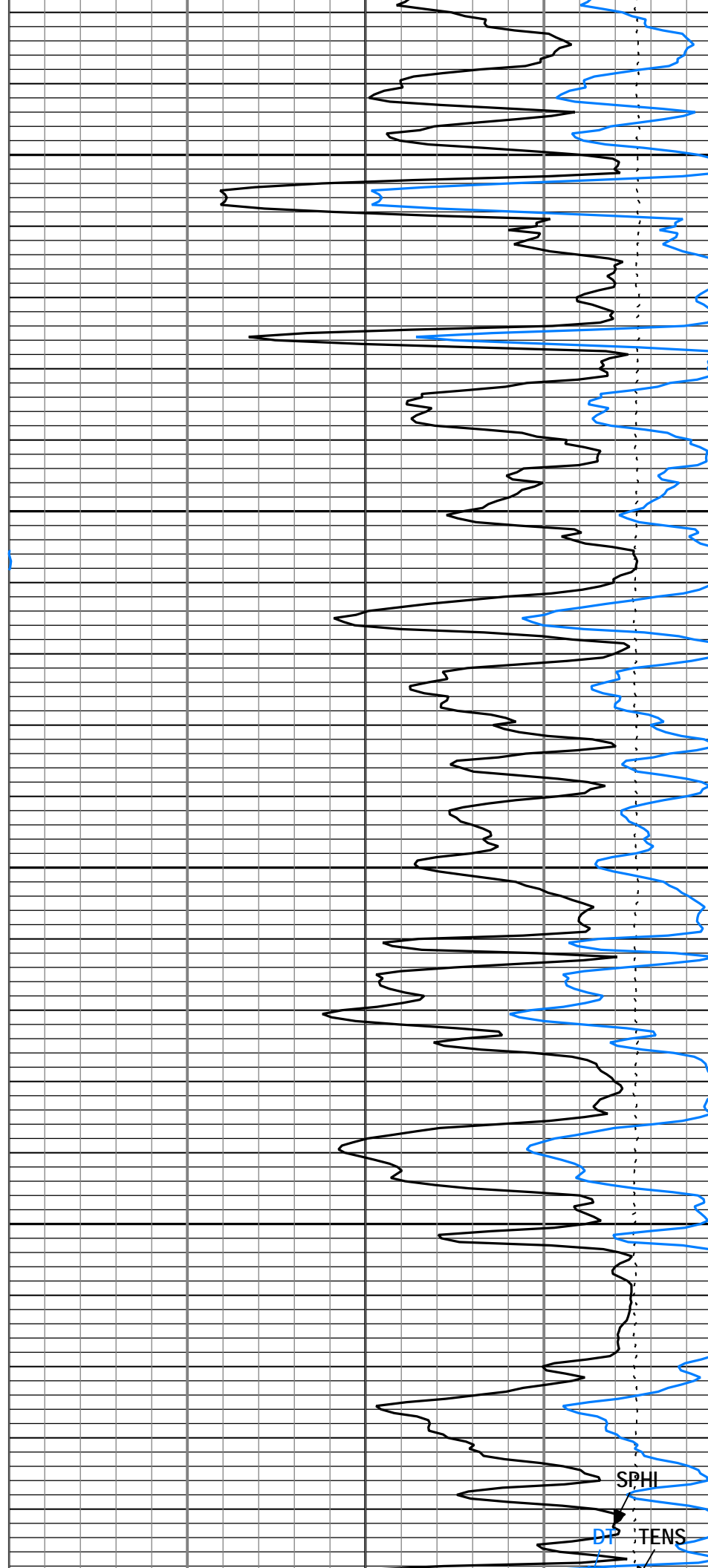
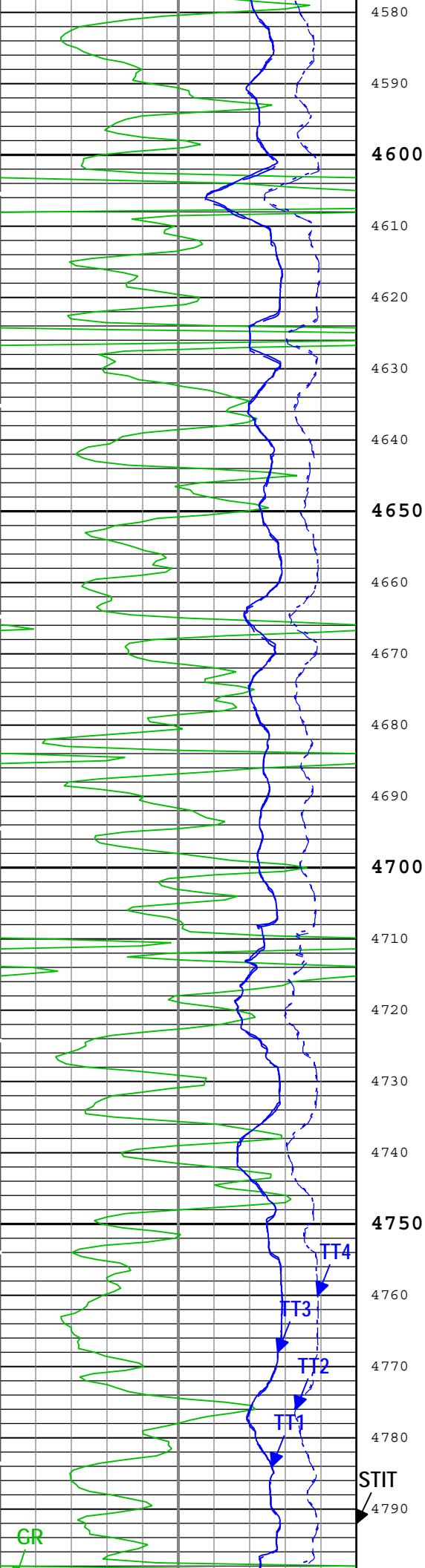


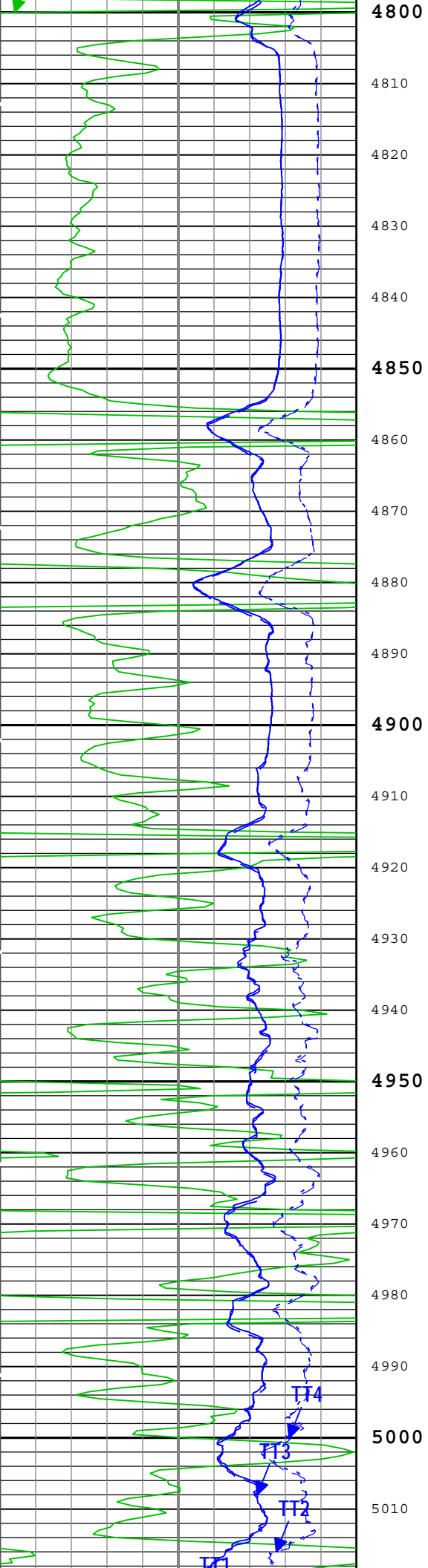












4800

4810

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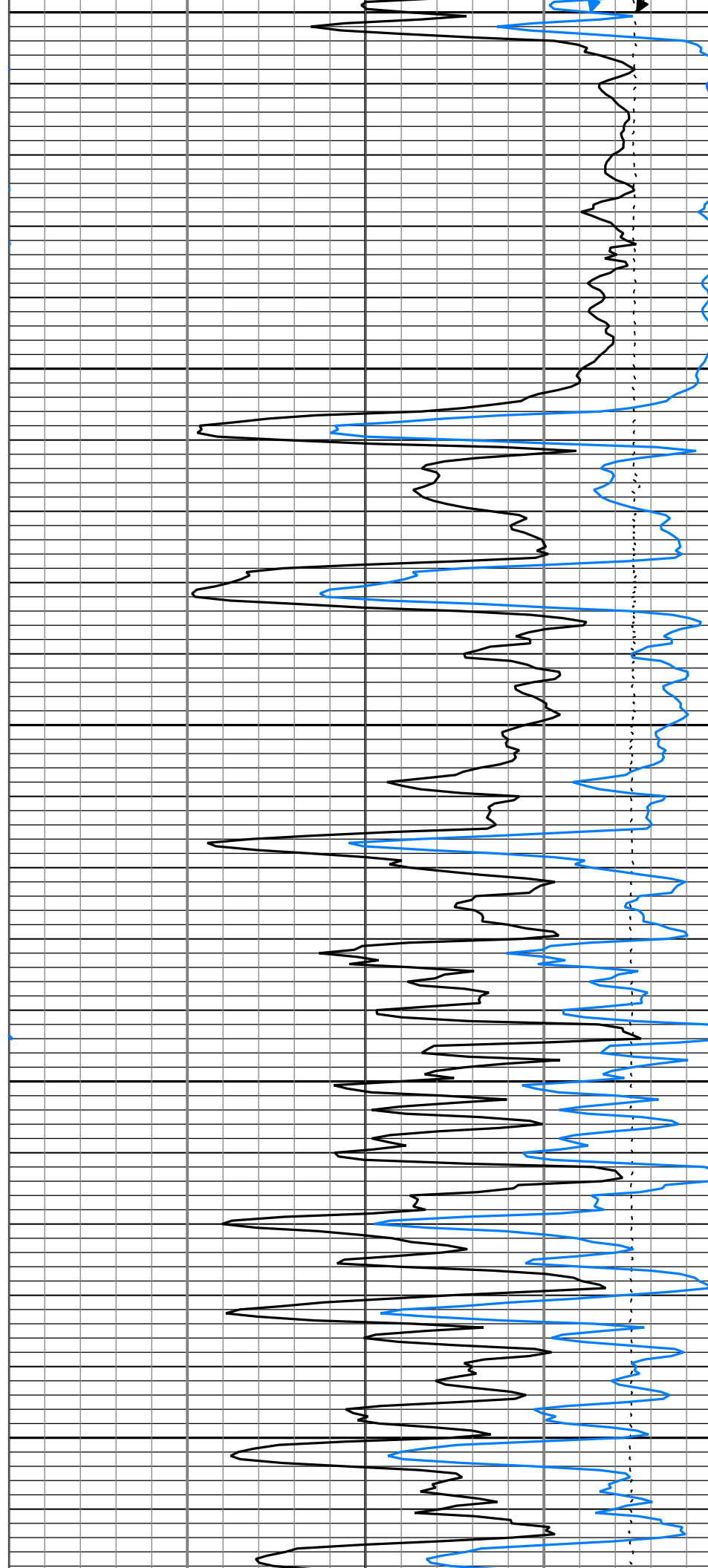
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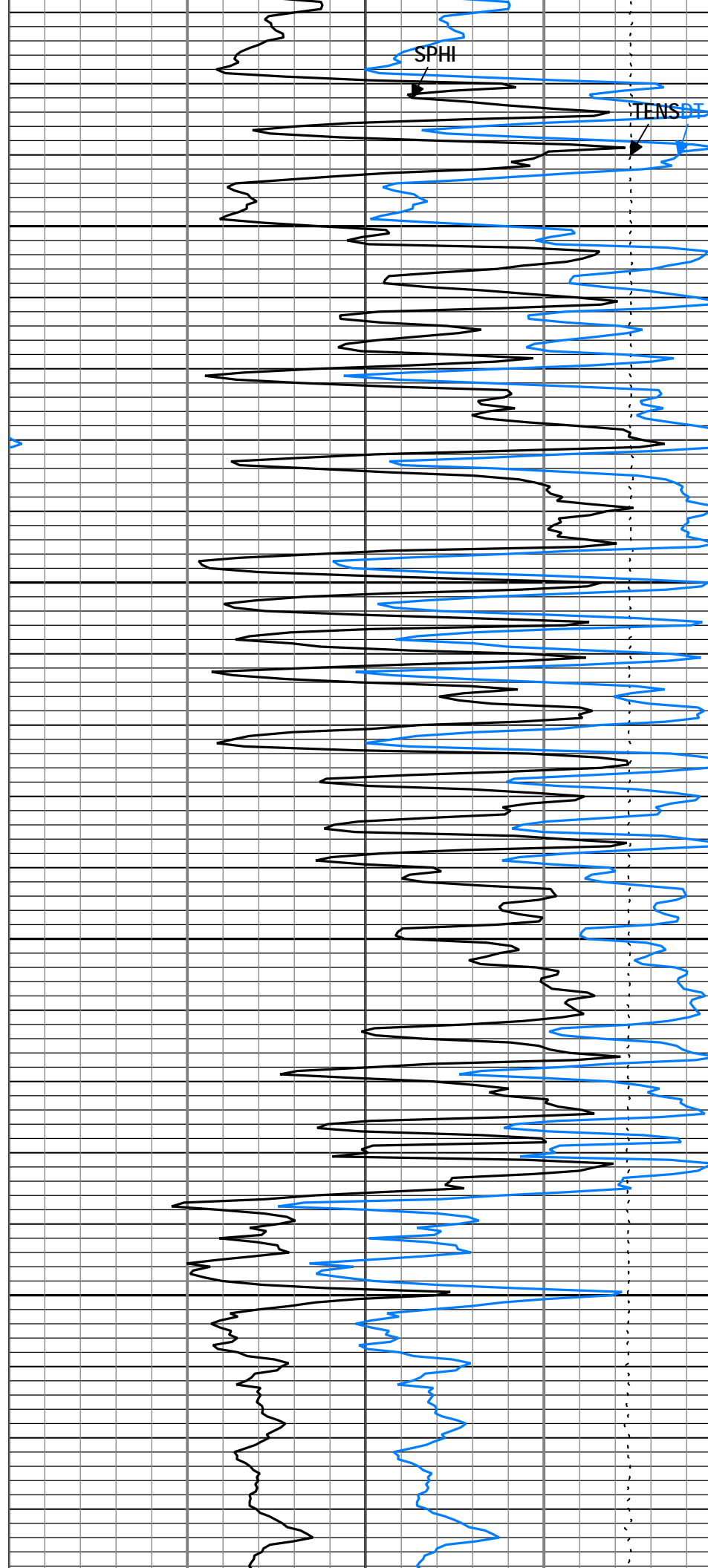
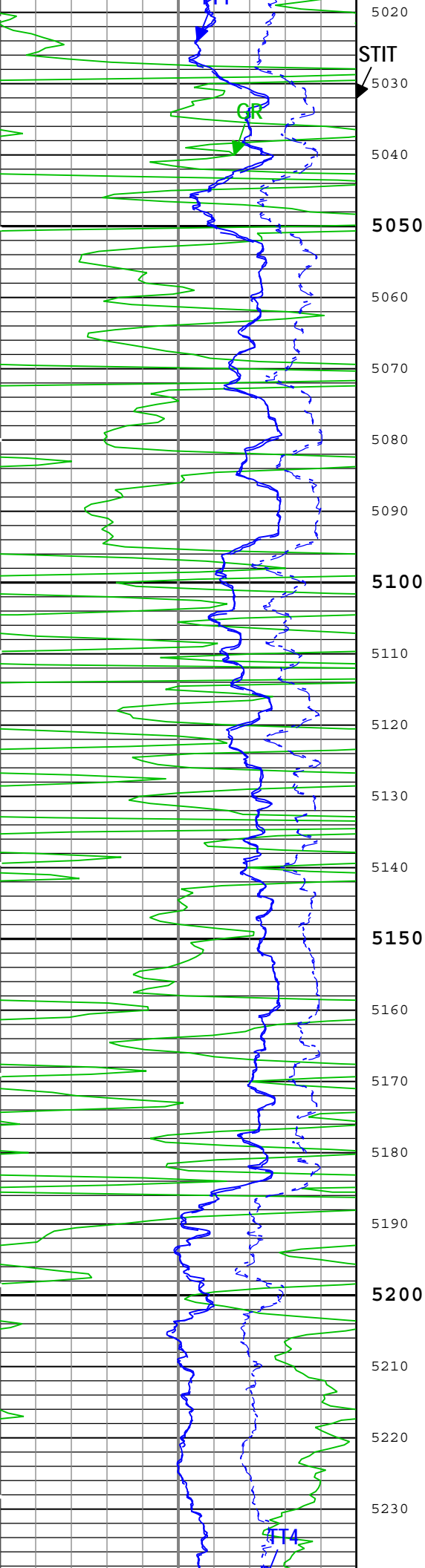
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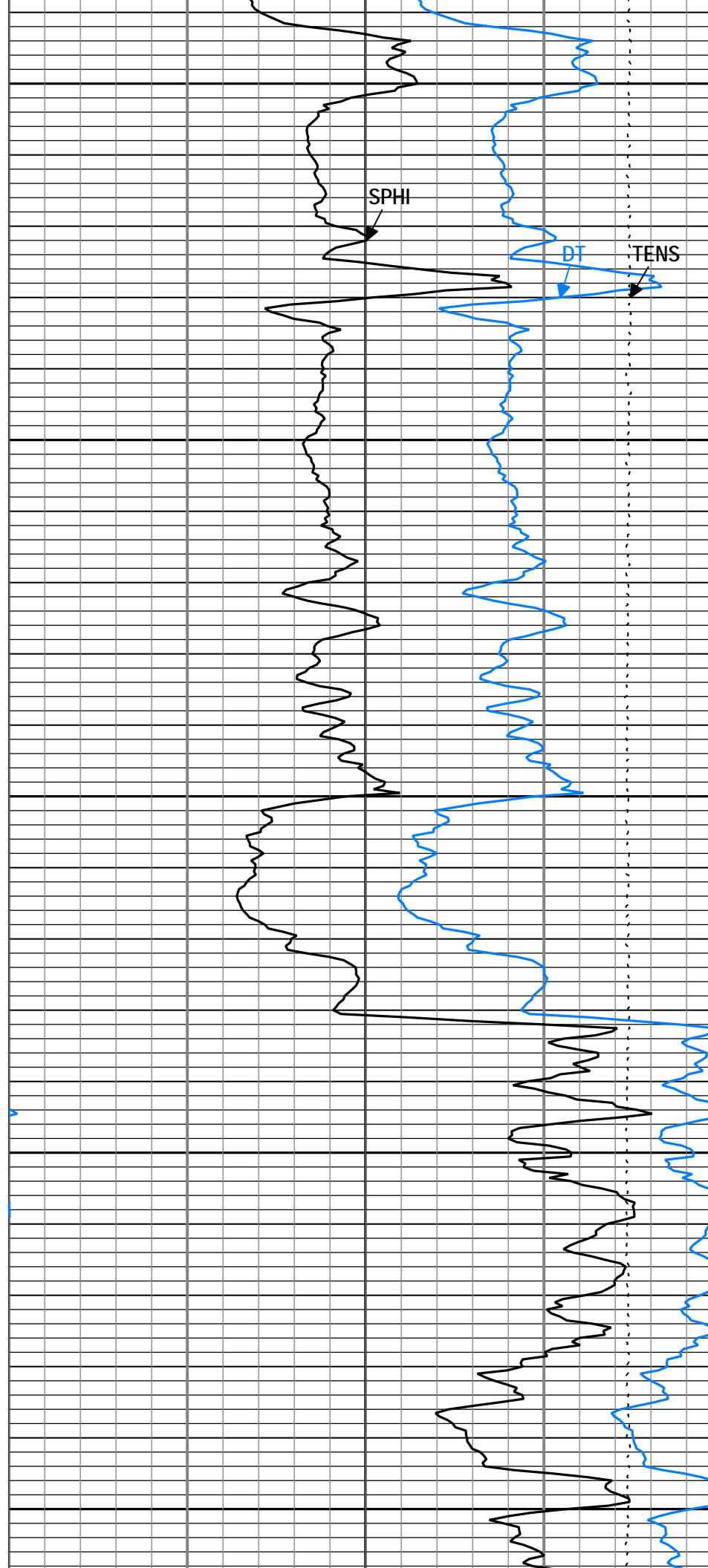
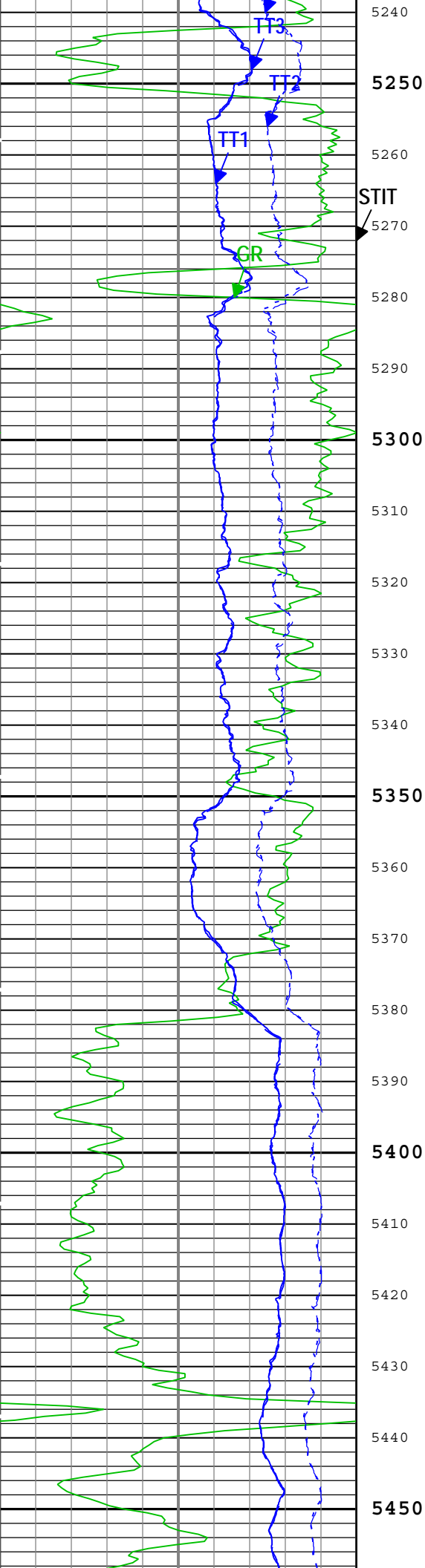
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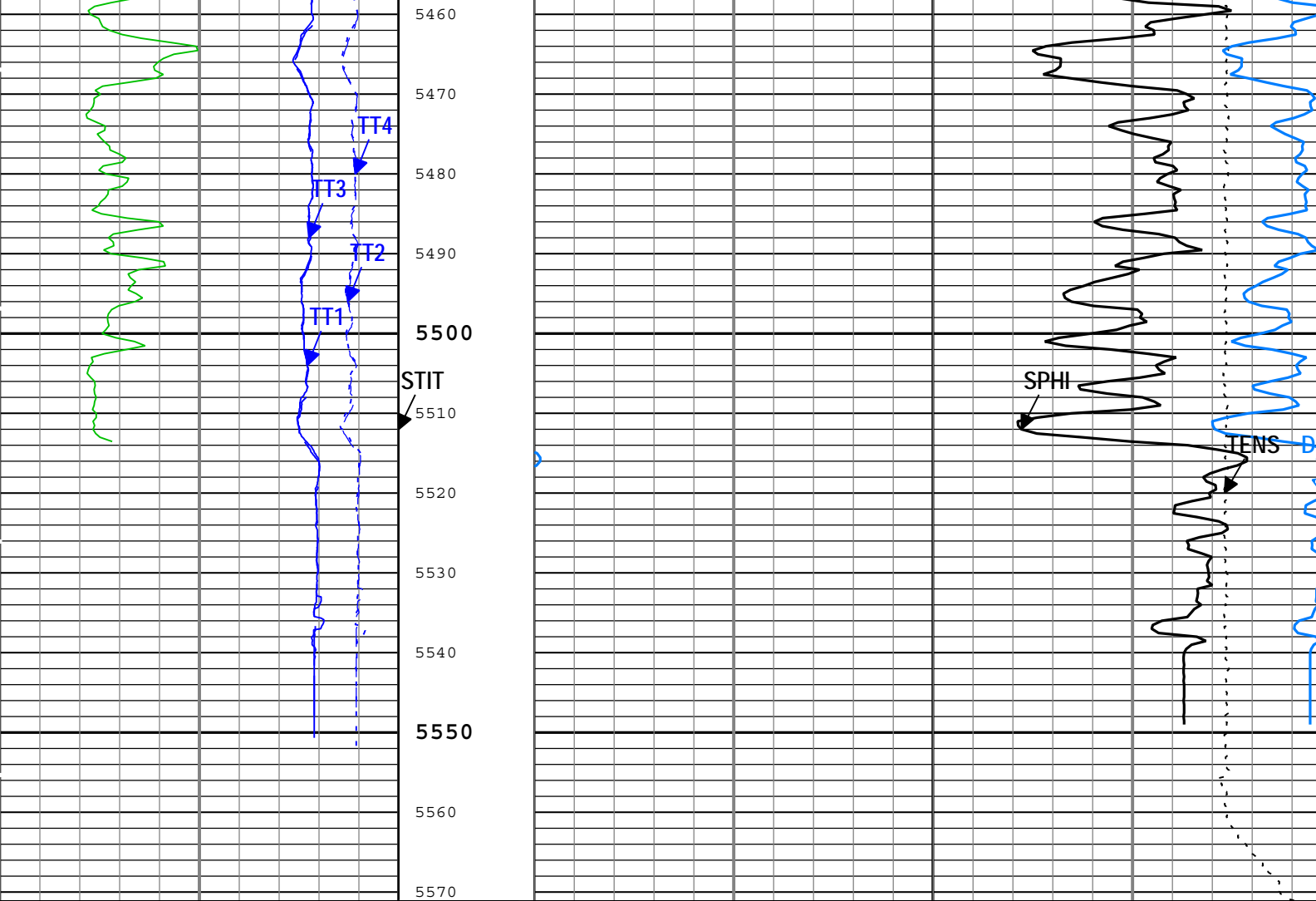
5000

5010









Gamma Ray (GR) HGNS-H			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			Sonic Porosity (SPHI) DSLT-H		
1200	us	200	0.45	ft3/ft3	-0.1
Transit Time 2 (TT2) DSLT-H			Cable Tension (TENS)		
1200	us	200	10000	lbf	
Transit Time 3 (TT3) DSLT-H					
1200	us	200			
Transit Time 4 (TT4) DSLT-H					
1200	us	200			

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: 11-Dec-2012 18:56:24

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	-0.005	in
CBLO	Casing Bottom (Logger)	WLSESSION	441	ft
CDEN	Cement Density	HGNS-H	2	g/cm3
CDTS	Correction for Delta-T Shale, Empirical	Borehole	100	us/ft
DETE	Delta-T Detection	DSLT-H	E2	

DFD	Drilling Fluid Density	Borehole	9.3	lbm/gal
DTCM	Delta-T Computation Mode	DSLTH	Full	
DTF	Delta-T Fluid	Borehole	189	us/ft
DTM	Delta-T Matrix	Borehole	56	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	DSLTH	120	
MNHTR	Minimum High Threshold Reference for first arrival detection	DSLTH	100	
NMSG	Near Minimum Sliding Gate	DSLTH	140	us
SGAD	Sliding Gate Status	DSLTH	On	
SOCO	Standoff Correction Option	HGNS-H	Yes	
SPFS	Sonic Porosity Formula	Borehole	Raymer-Hunt	
SPSO	Sonic Porosity Source	DSLTH	DT	
TD	Total Measured Depth	Borehole	5561	ft

Depth Zone Parameters			
Parameter	Value	Start (ft)	Stop (ft)
BS	0	400	441
BS	7.875	441	5571.08
All depth are actual.			

Tool Control Parameters				
Parameter	Description	Tool	Value	Unit
DSLTH_MODE	DSLTH Acquisition Mode	DSLTH	BHC	
DSLTH_RATE	DSLTH Firing Rate	DSLTH	15 Hz	
DTFS	DSLTH Telemetry Frame Size	DSLTH	536	
MAX_LOG_SPEED	Toolstring Maximum Logging Speed	WLSESSION	1800	ft/h

Company:	Vecta Oil & Gas Ltd	Schlumberger
Well:	Bierstadt 32-33	
Field:	Wildcat	
County:	Cheyenne	
Country:		

Platform Express
Sonic