

Company: Vecta Oil & Gas Ltd

Well: Bierstadt 32-33

Field: Wildcat

County: Cheyenne

State: Colorado

Platform Expresss		Microlog	
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	Elev.:	4330.00 f
Log Measured From:	Kelly Bushing	11.00 ft	above Perm.Datum
Drilling Measured From:	Kelly Bushing		
API Serial No.	Section:	Township:	Range:
05-017-07733-0000	33	13S	47W
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	Viscosity	61 s	
Fluid Loss	PH		
MUD			
Source of Sample			
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	Calculated	
RM @ BHT	RMF @ BHT	0.74 @ 140 0.43 @ 140	
Max Recorded Temperatures			
Circulation Stopped		Time	08:00:00
Logger on Bottom		Time	17:00:00
Unit Number	Location:	3022	Fort Morgan, CO
Recorded By	Heather Bennett		
Witnessed By	Ryan Scribner		

Disclaimer

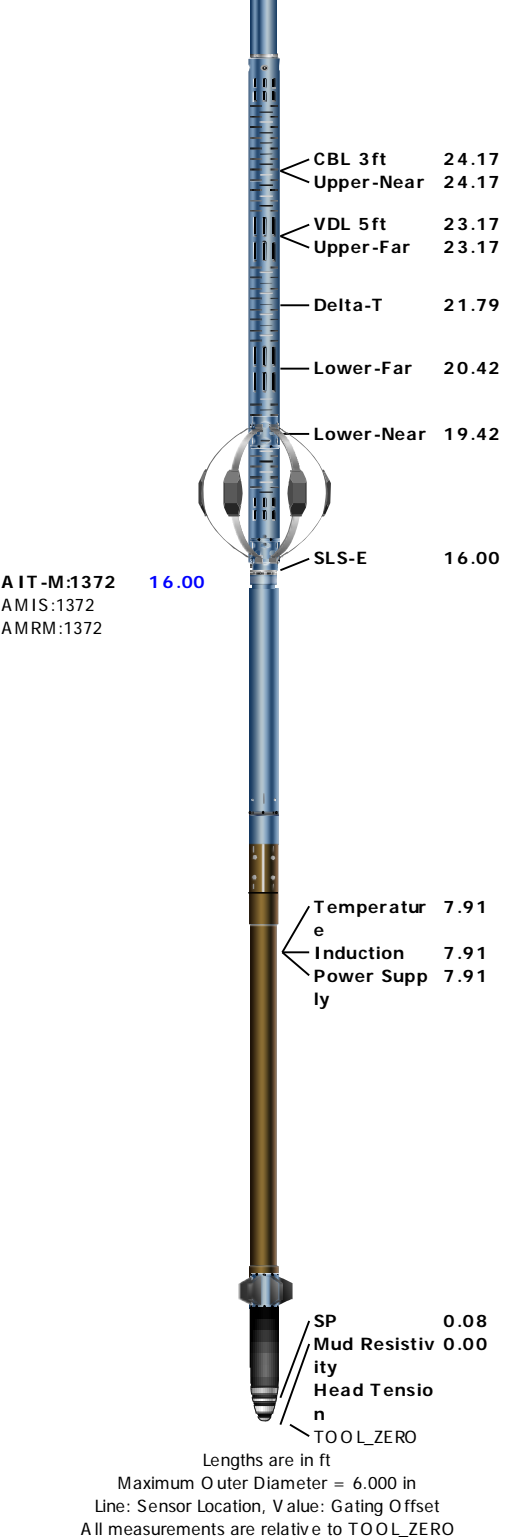
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Remarks and Equipment Summary

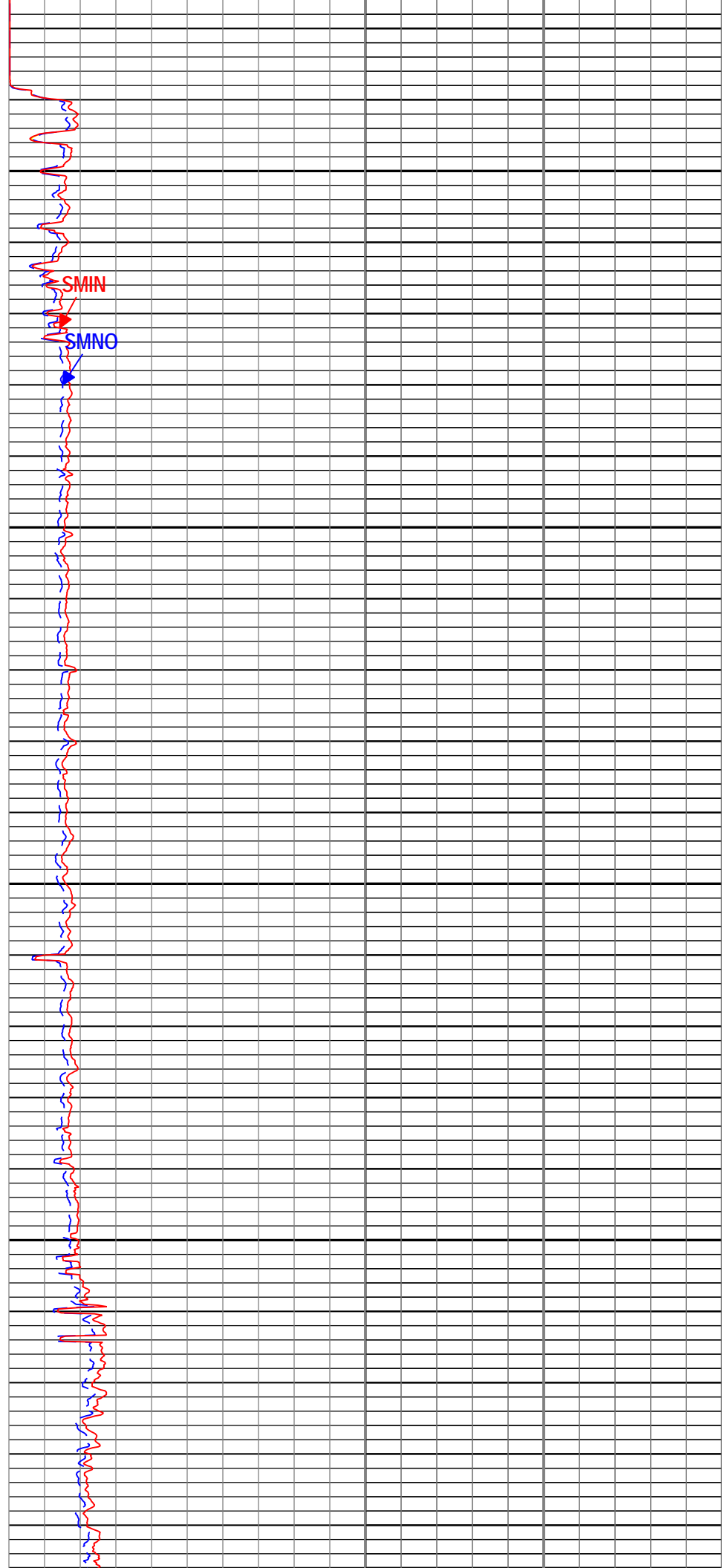
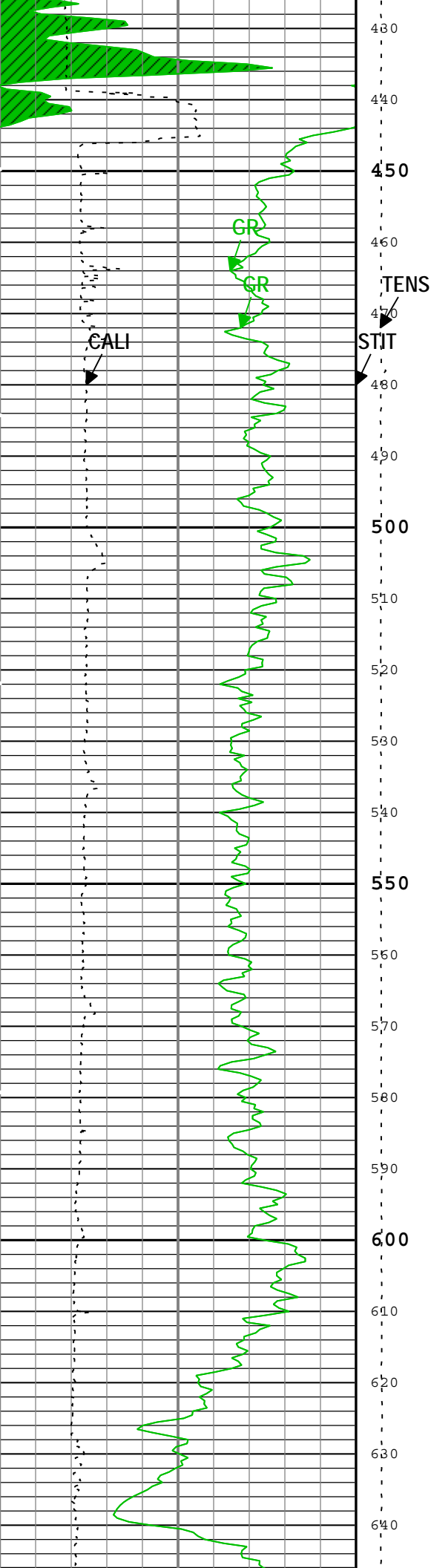
PEX-AIT: Toolstring				PEX-AIT: Remarks
Equip name	Length	MP name	Offset	This is the first run in hole
LEH-QT	64.21			Toolstring run as per tool sketch
LEH-QT				Matrix: Limestone 2.71 (g/cc)
DTC-H:9236	61.29			Crew:Ian Derry, Jake Jump
ECH-KC:10316		CTEM	60.39	
DTC-H:9236		HV	0.00	
		TelStatus	58.29	
		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				

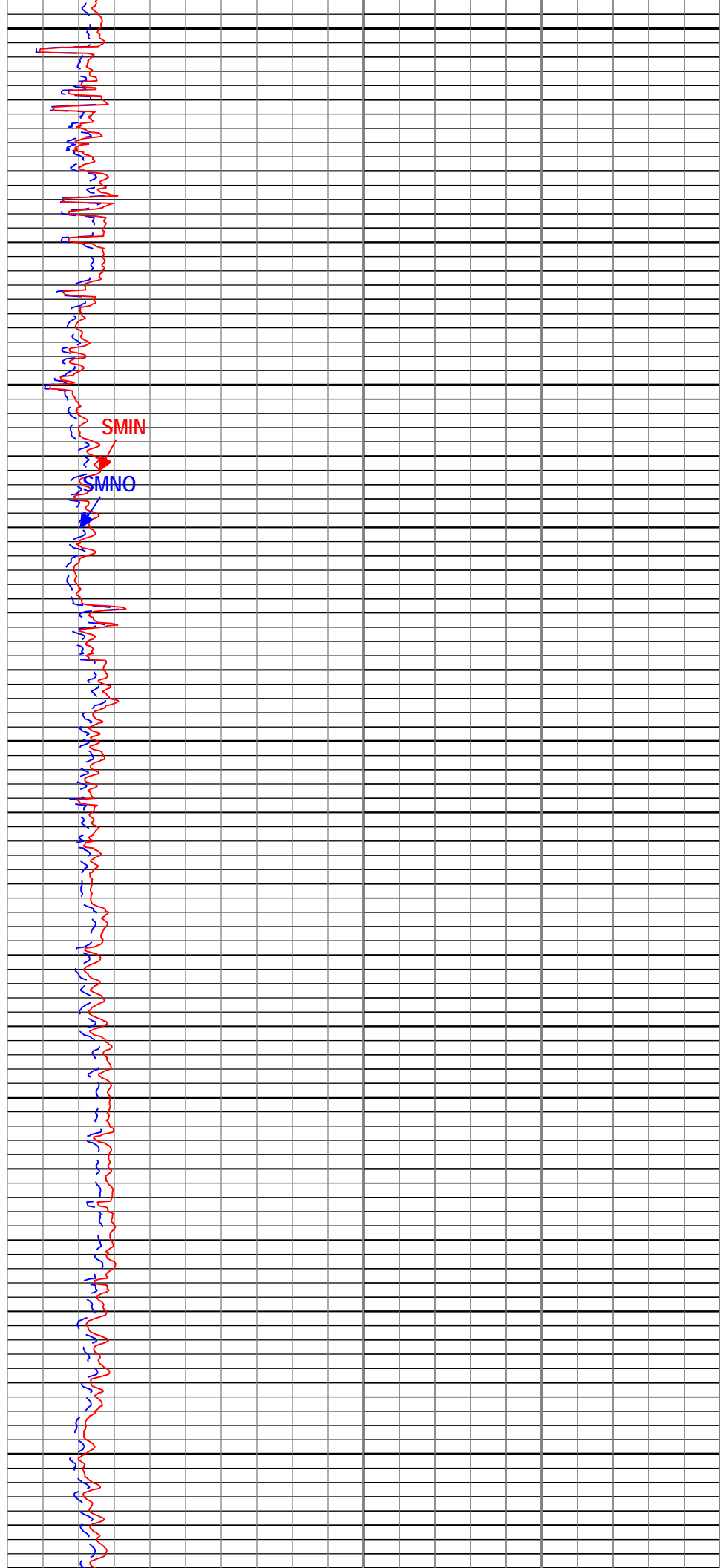
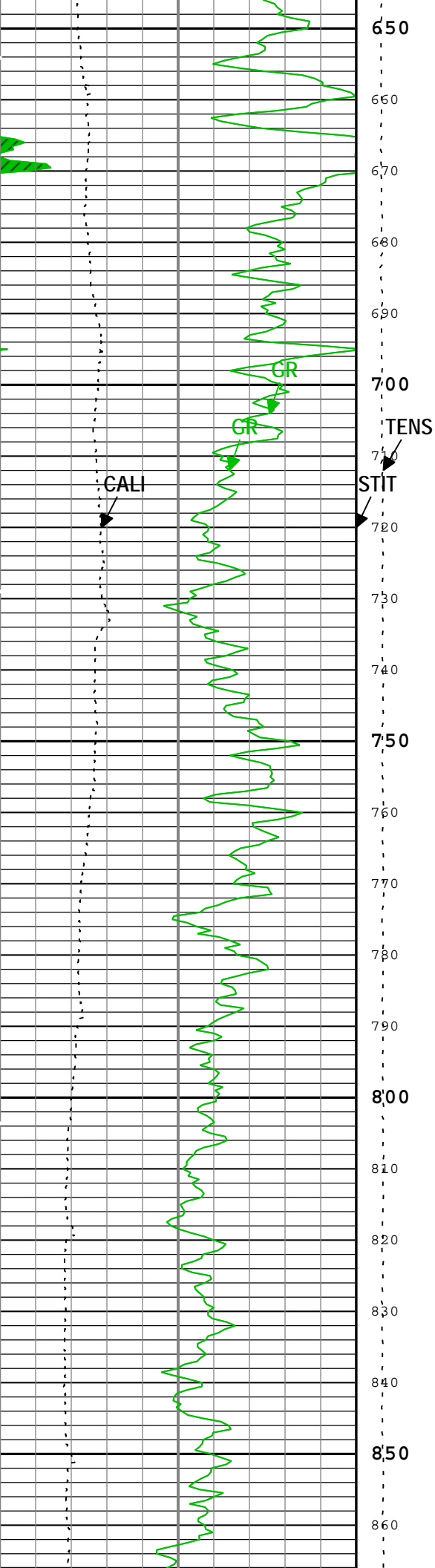


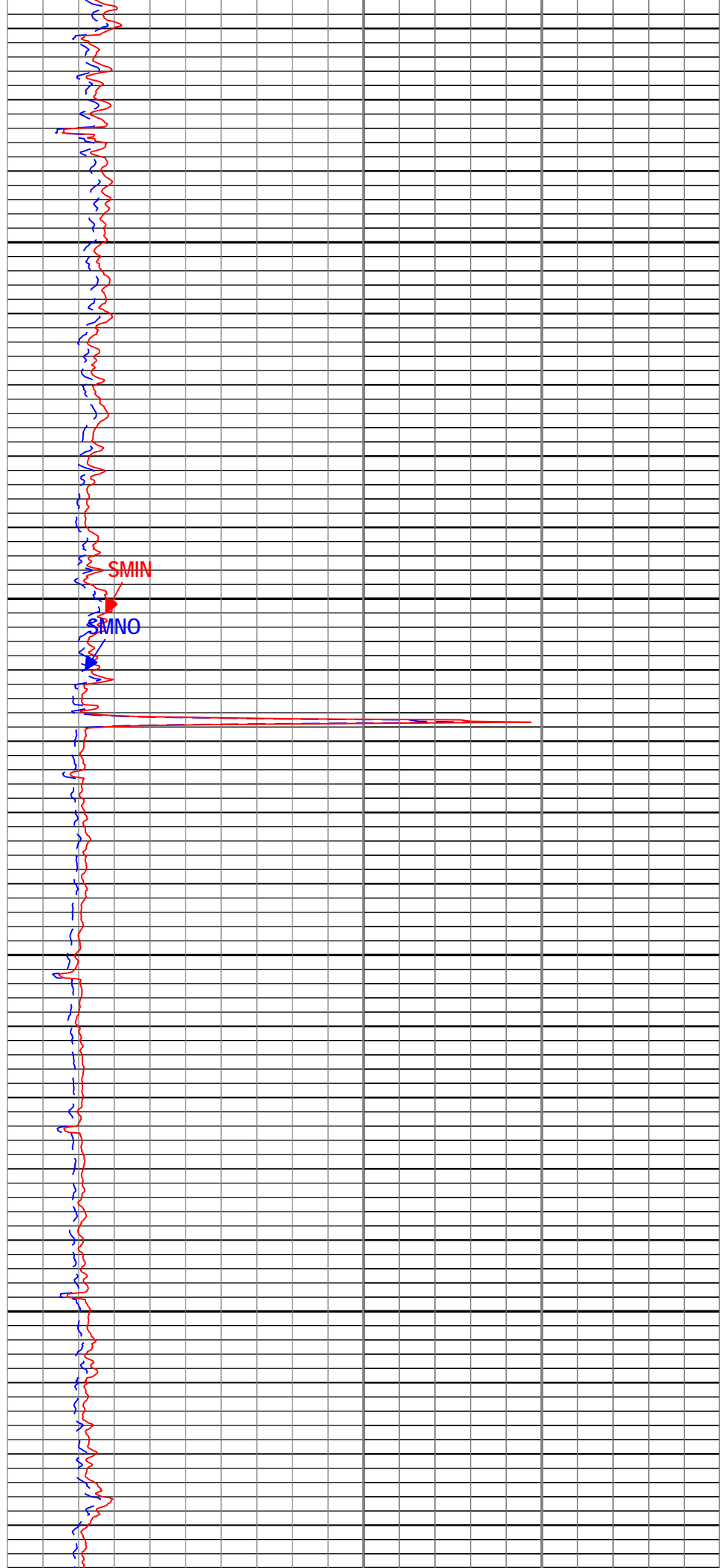
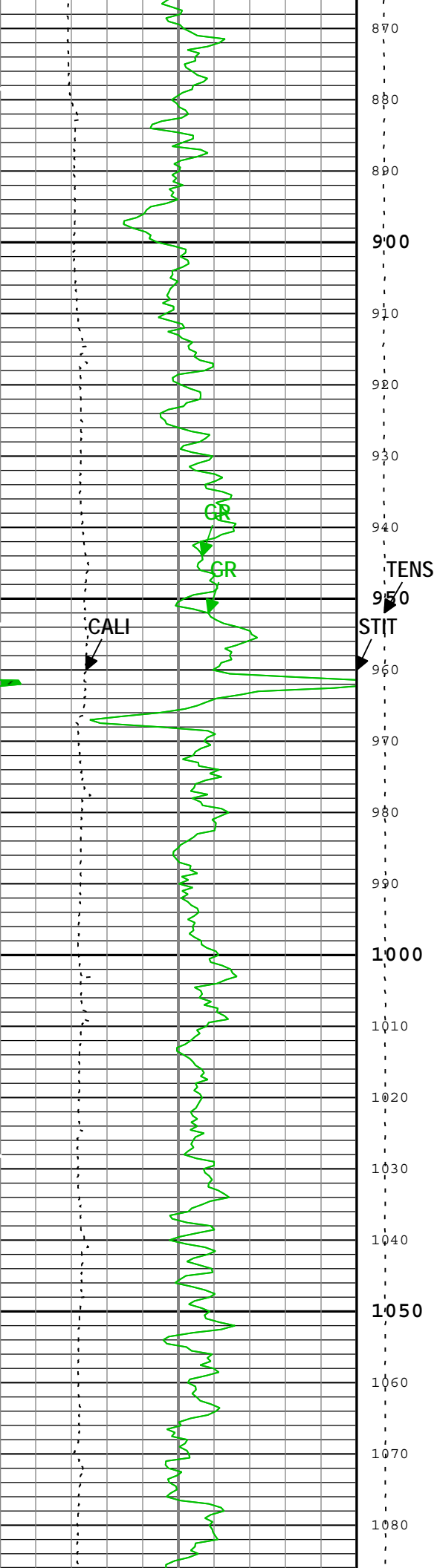
## Depth Summary

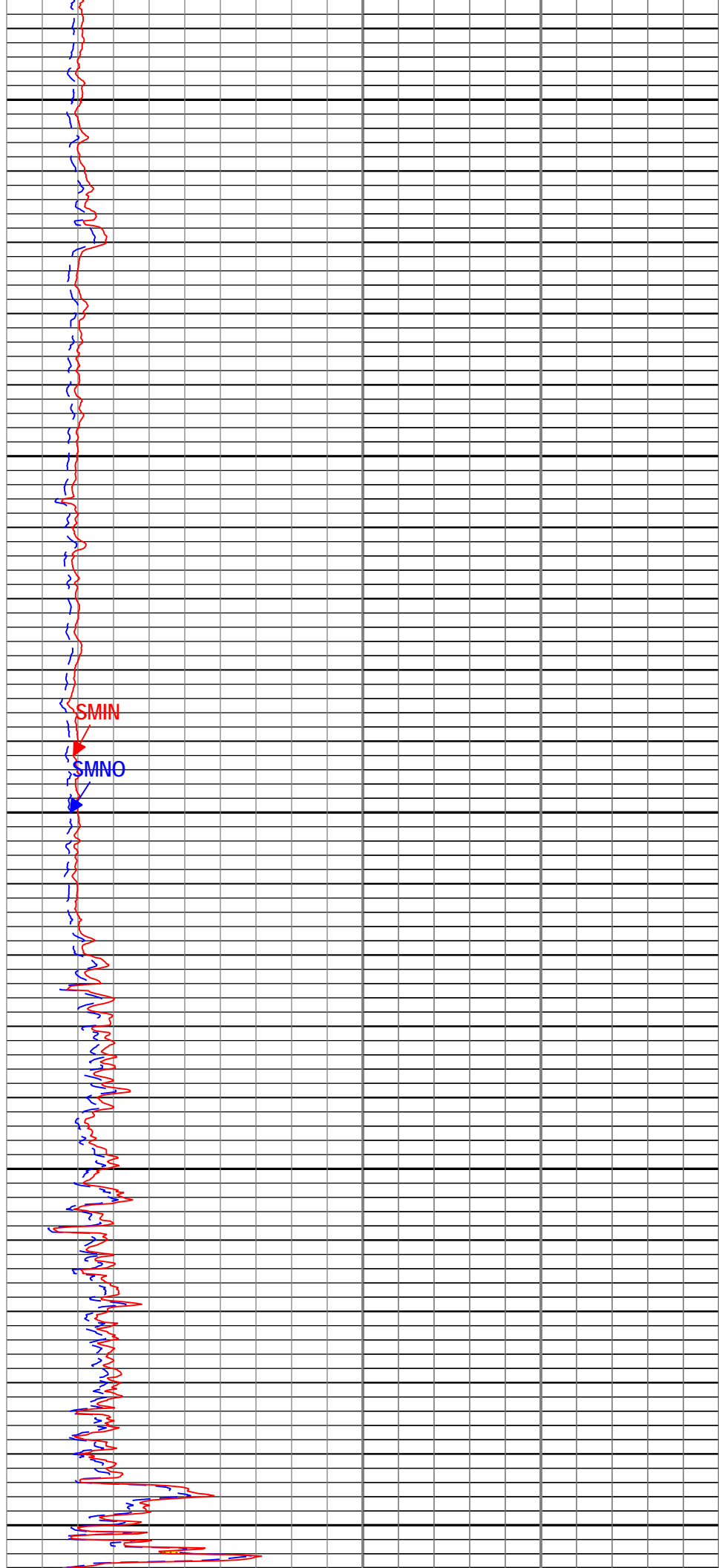
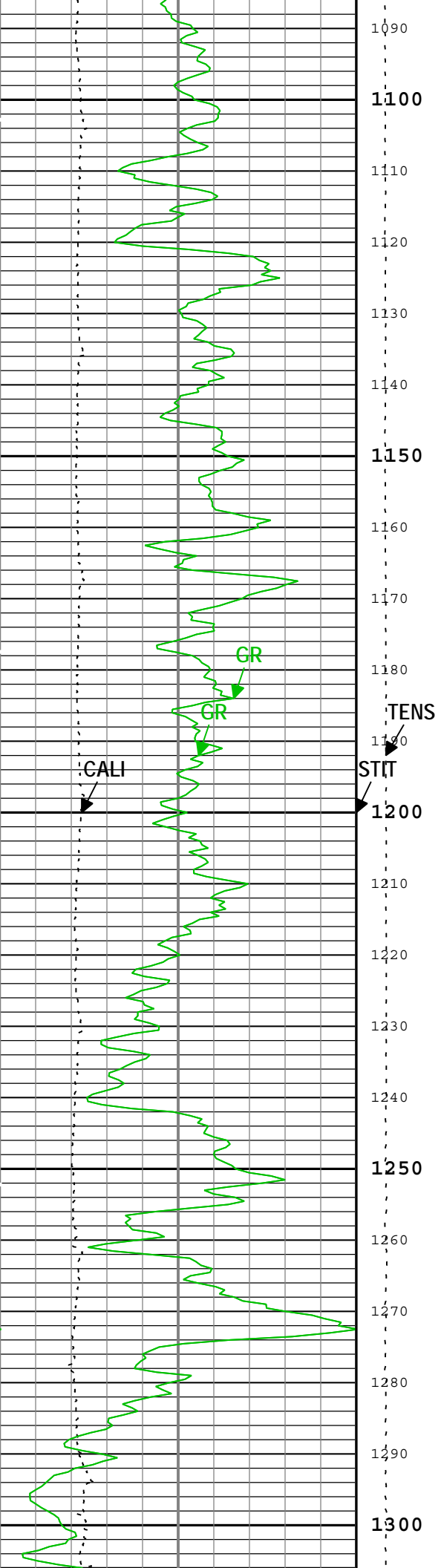
Depth Control Parameters	PEX-AIT		
Conveyance Type	Wireline		
Depth Measuring Device	PEX-AIT		
Type	IDW-B		
Wheel Correction 1	1		
Wheel Correction 2	0		
Tension Device	PEX-AIT		
Type	CMTD-B/A		
Calibration Points	0		
Logging Cable	PEX-AIT		
Type	7-46NT-XS		
Logging Cable Length ( ft )	24000.00		

PEX-AIT									
5" Micro Log									
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		
DepthCorrection		DepthCorrection					3.1.9755.0		
Tool Elements		Description			Software Version		Firmware Version		
HRCC-H		HILT High-Resolution Control Cartridge, 150 degC			3.1.9755.0		2.0		
HRGD-H		HILT Resistivity Gamma-Ray Density Device, 150 degC			3.1.9755.0		3.0		
HGNS-H		HILT Gamma-Ray and Neutron Sonde, 150 degC			3.1.9755.0		2.0		
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: MCFL processing for Platform Express    Format: Log ( EMD 5in Micro Log )    Index Scale: 5 in per 100 ft    Index Unit: ft    Index Type: Measured									
Depth    Creation Date: 11-Dec-2012 18:57:09									
Channel	Source		Sampling						
CALI	HDRS-H:HRCC-H:HRCC-H		1in						
GR	HGNS-H:HGNS-H:HGNS-H		6in						
SMIN	HDRS-H:HRMS-H:HRGD-H		2in						
SMNO	HDRS-H:HRMS-H:HRGD-H		2in						
STIT	DepthCorrection		6in						
TENS	WLWorkflow		6in						
TIME_1900	WLWorkflow		0.1in						
TIME_1900 - Time Marked every 60.00 (s)									
GR Backup			Stuck Tool Indicator, Total (STIT)		PERM				
Caliper (CALI) HDRS-H			0    ft    50						
6									

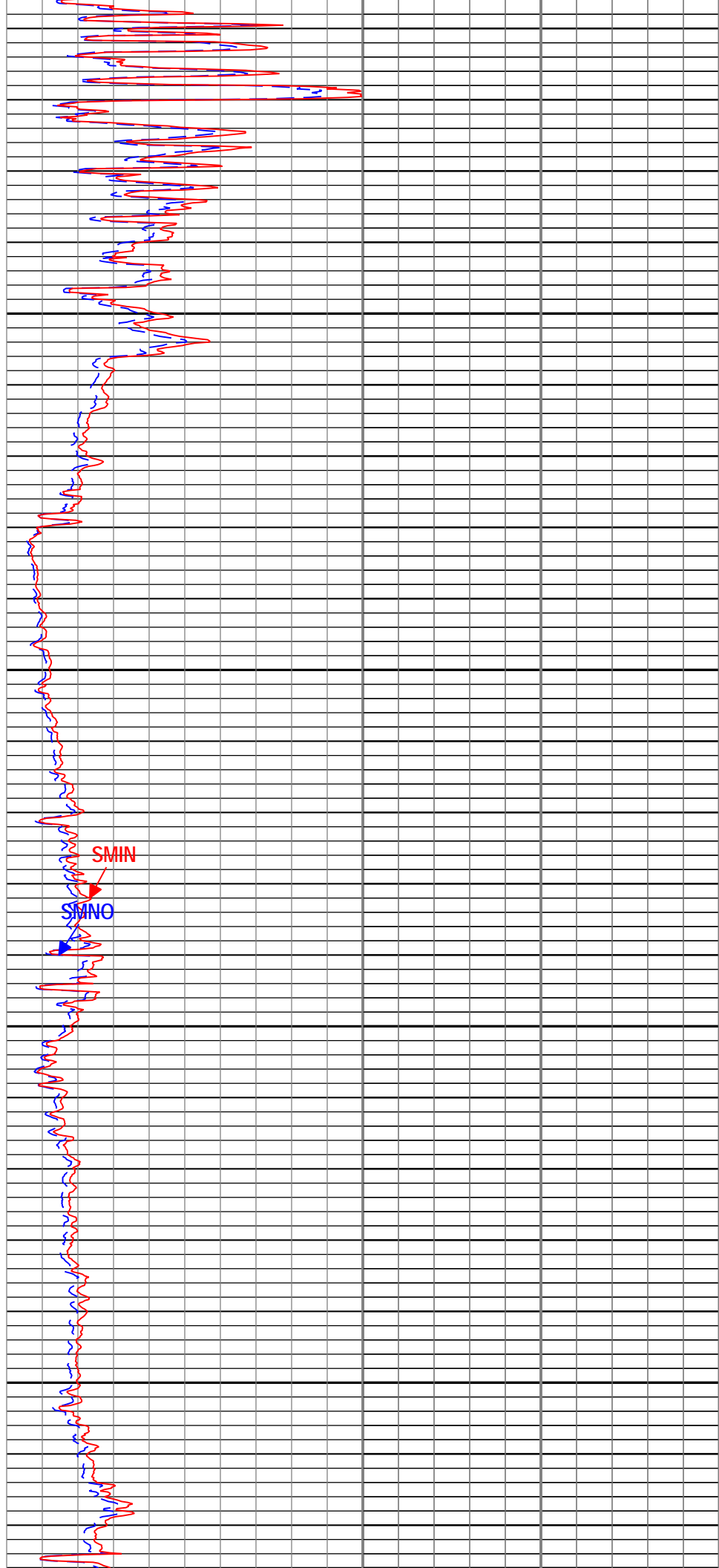
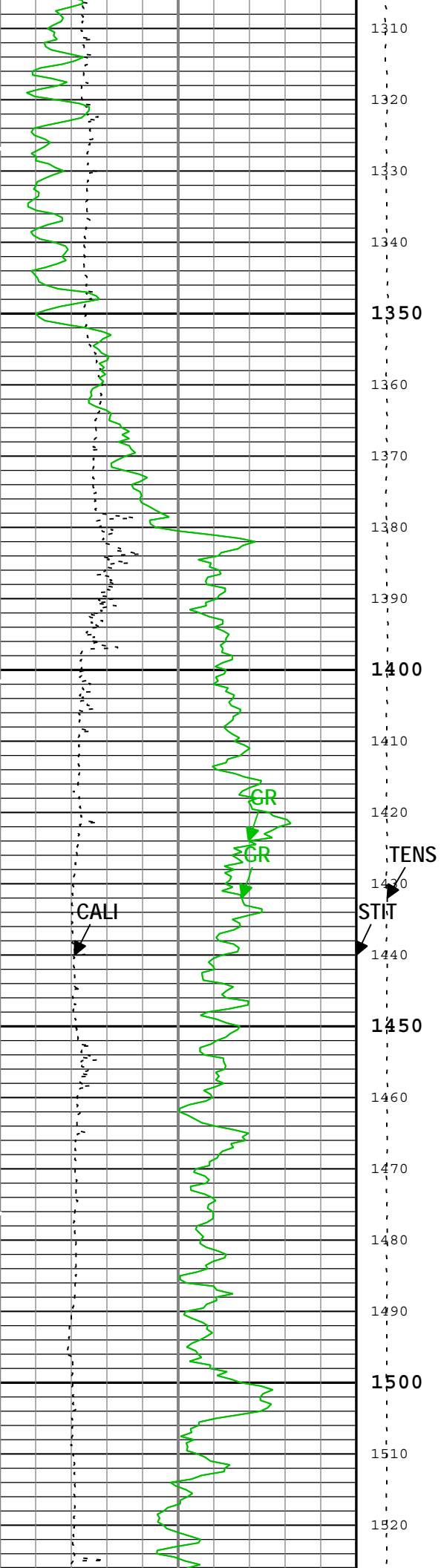


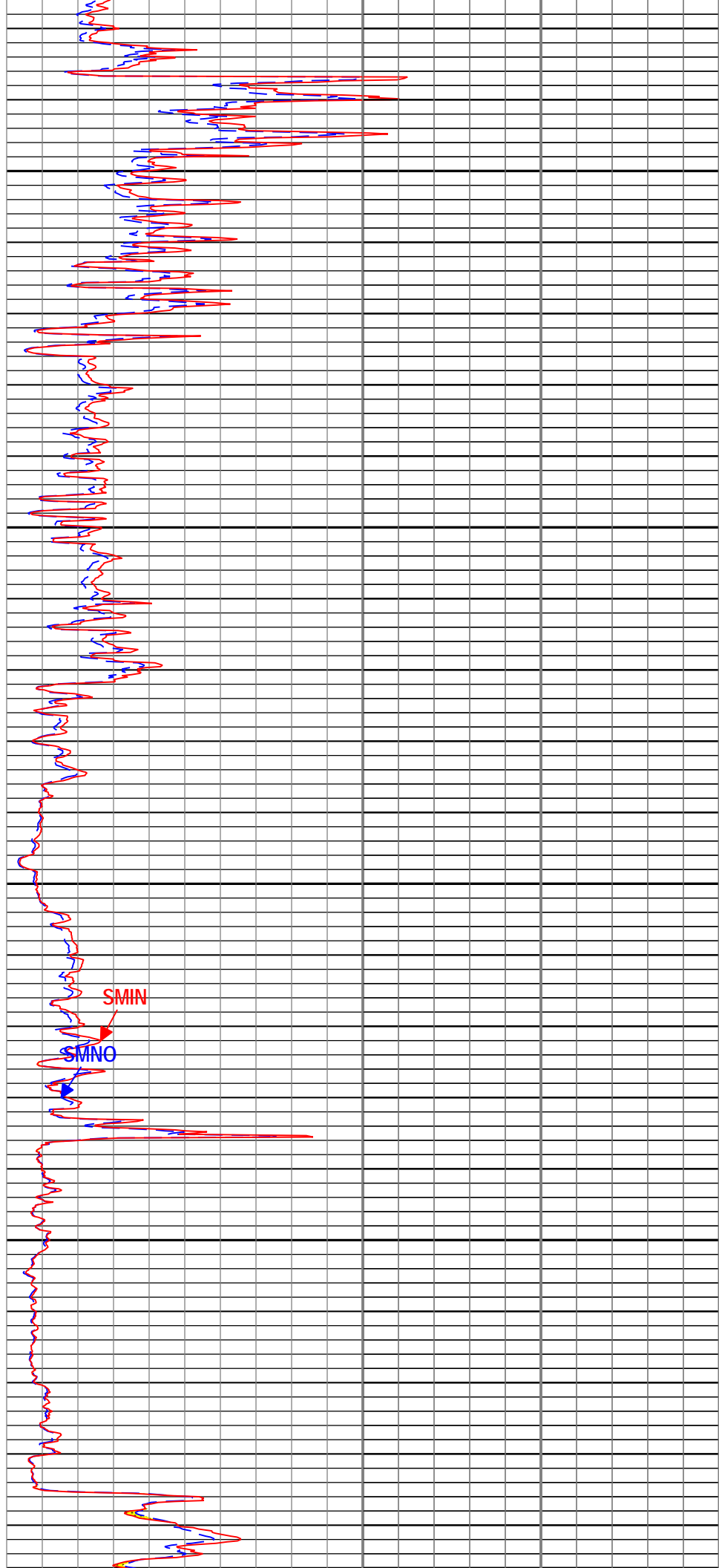
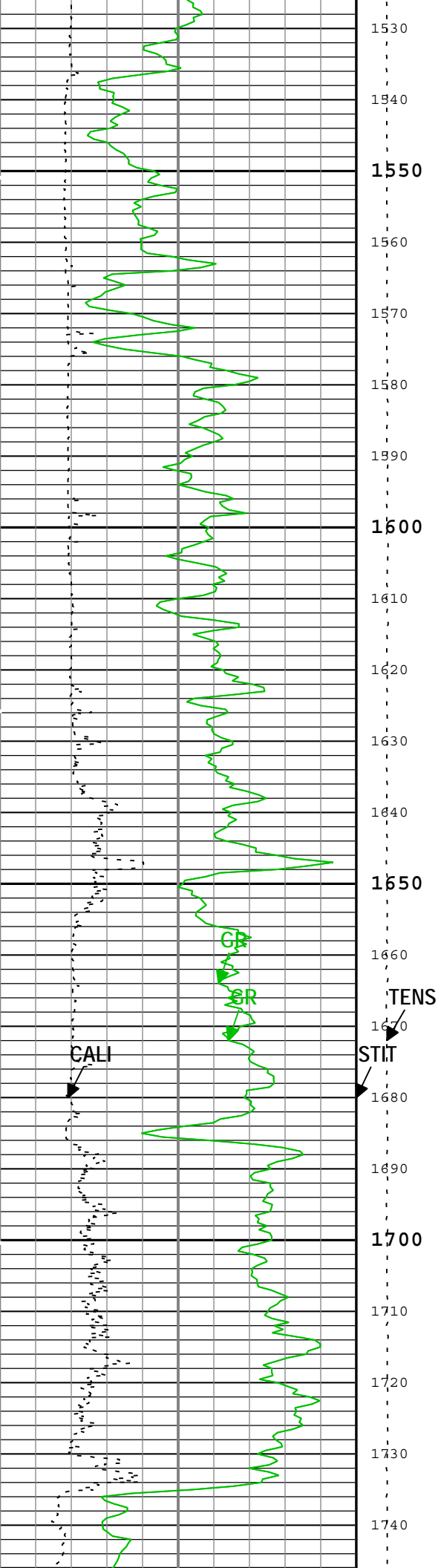


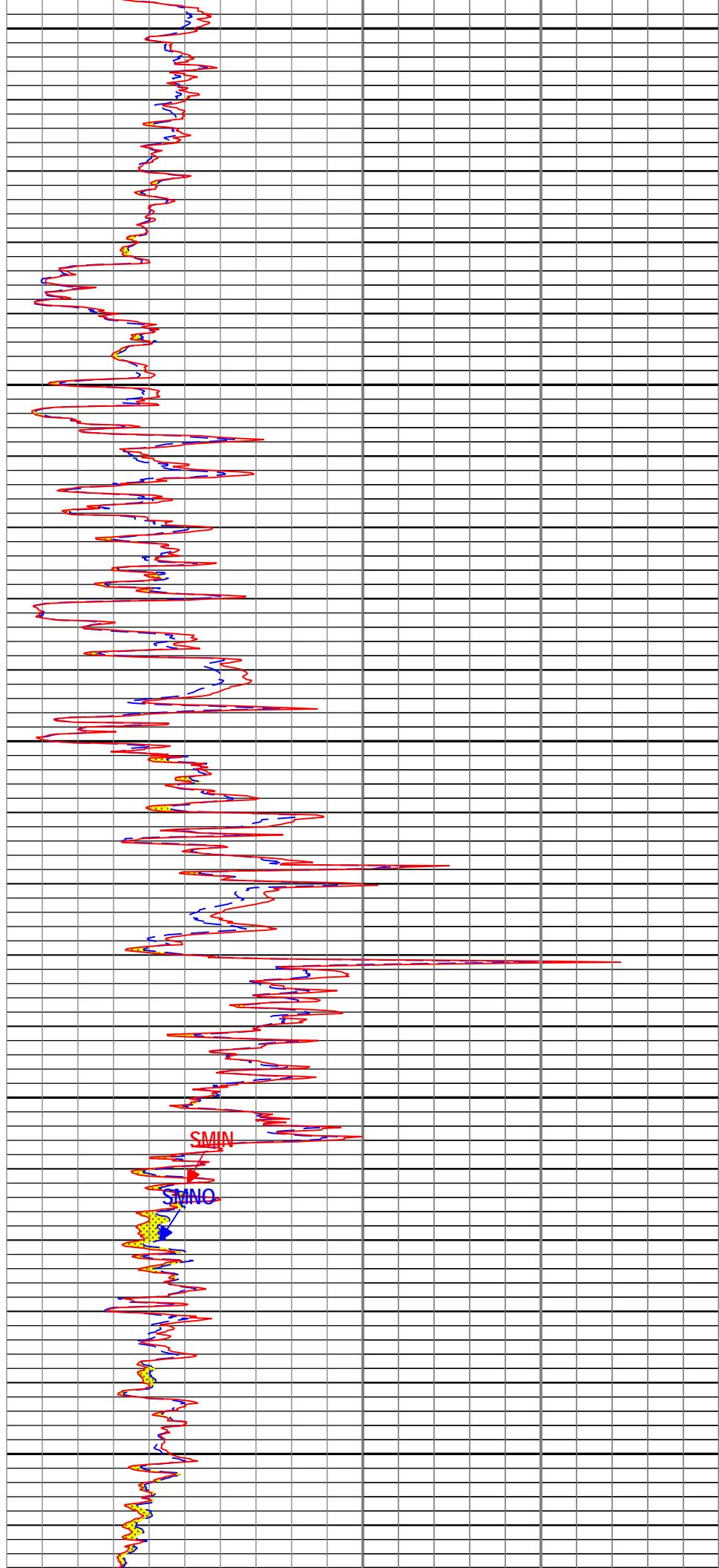
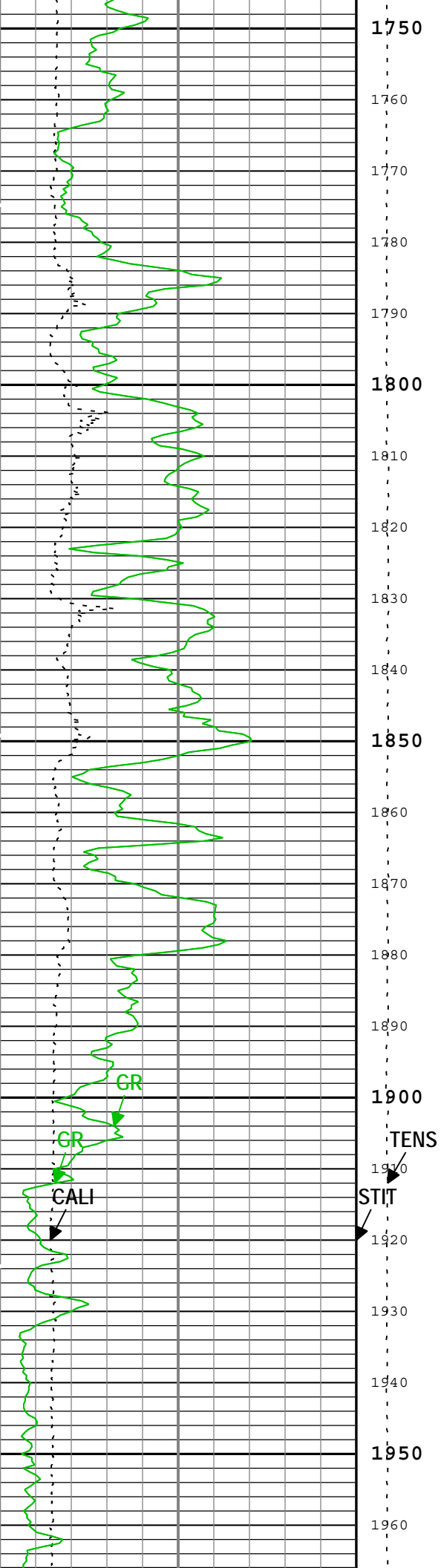


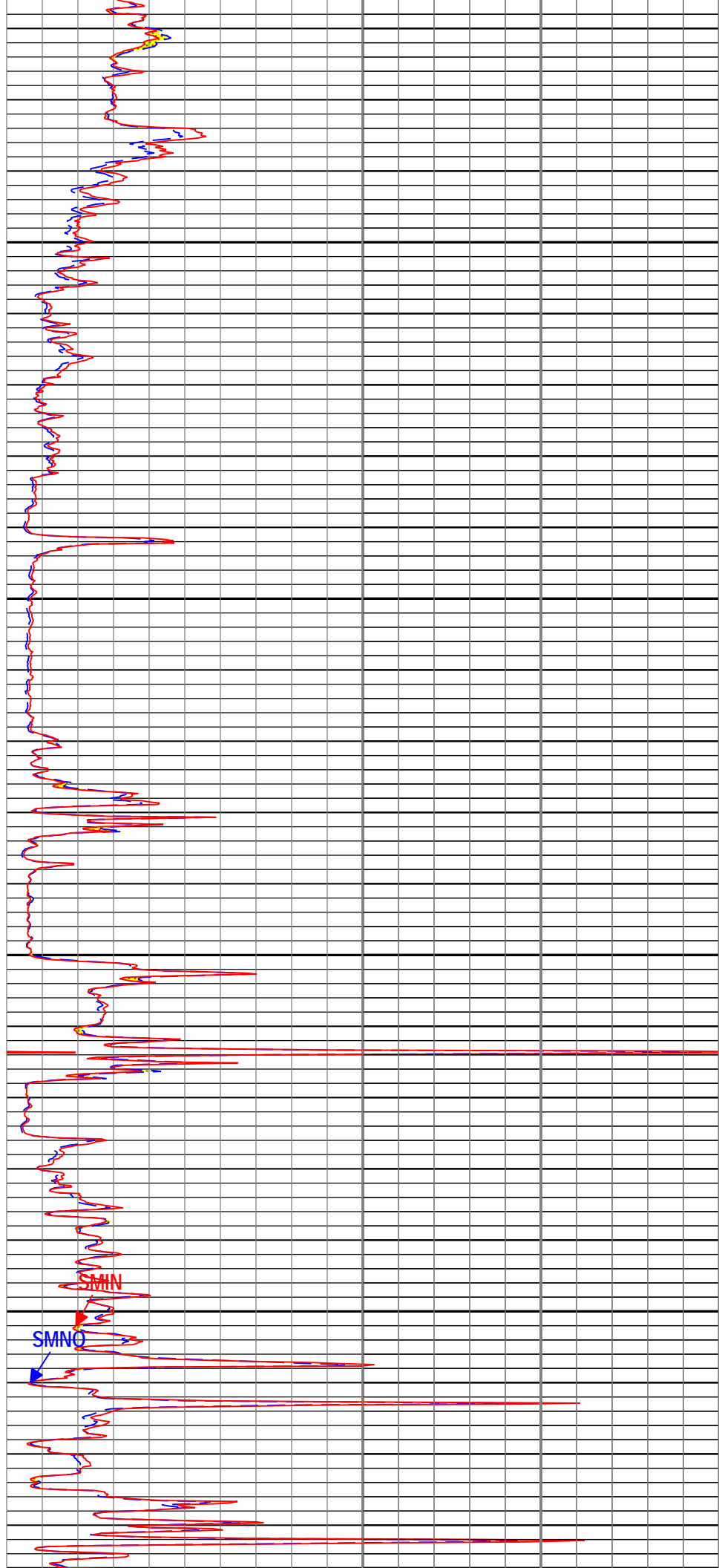
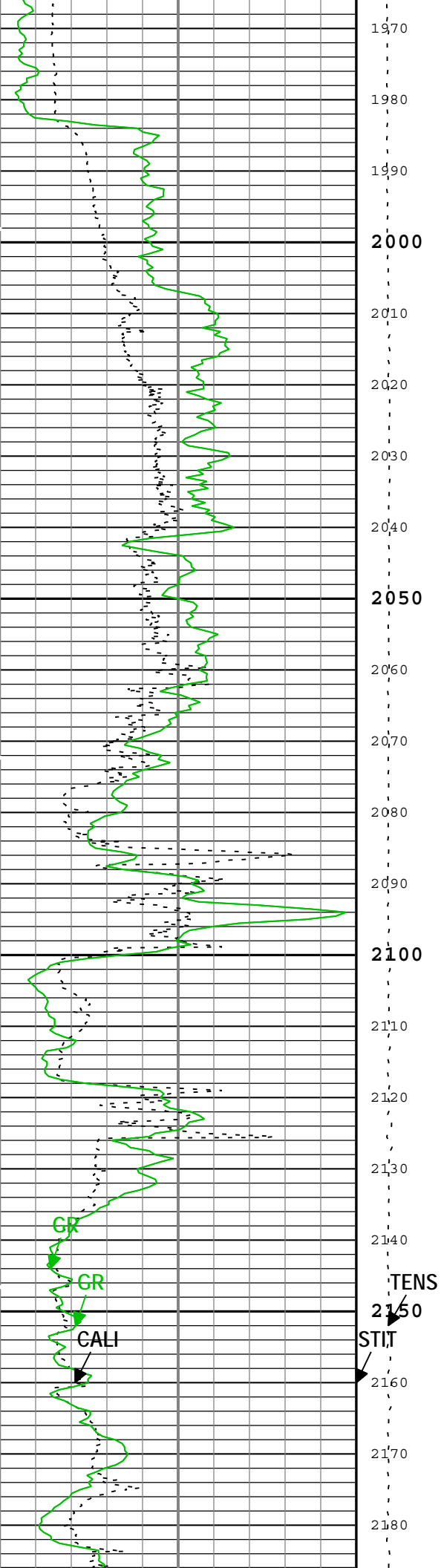


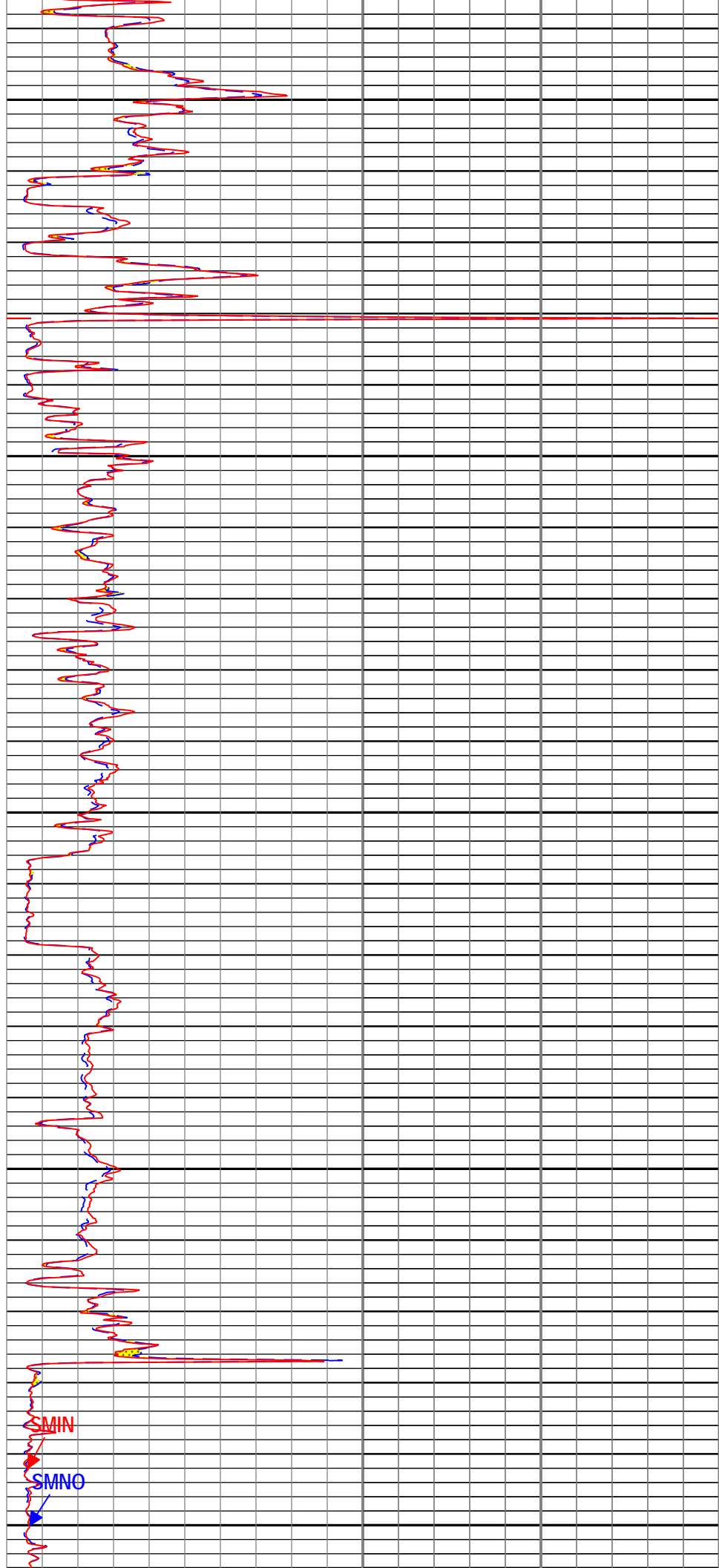
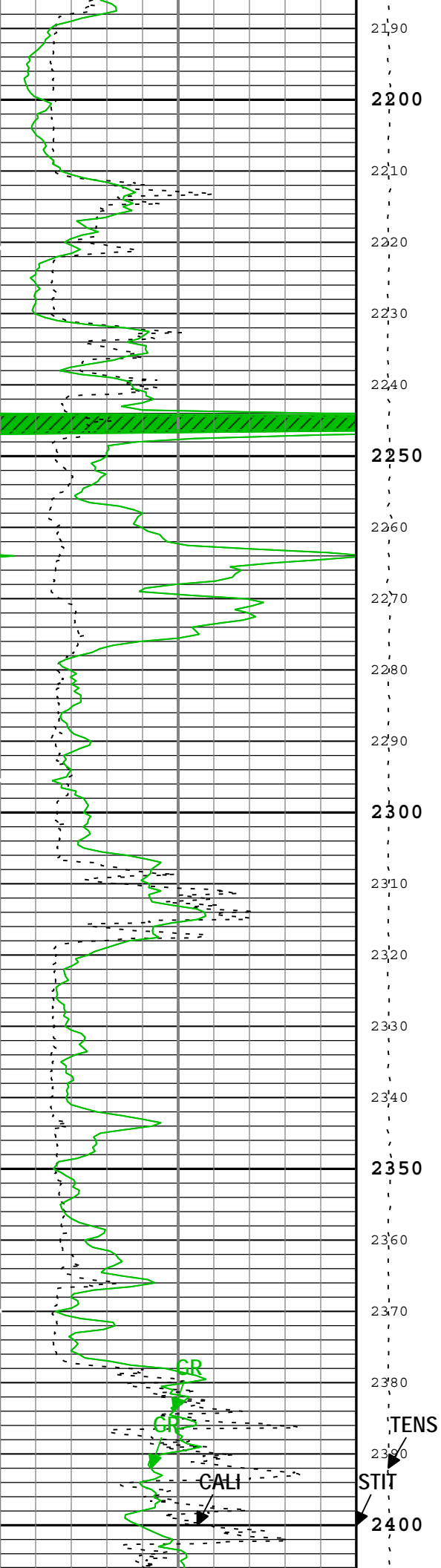


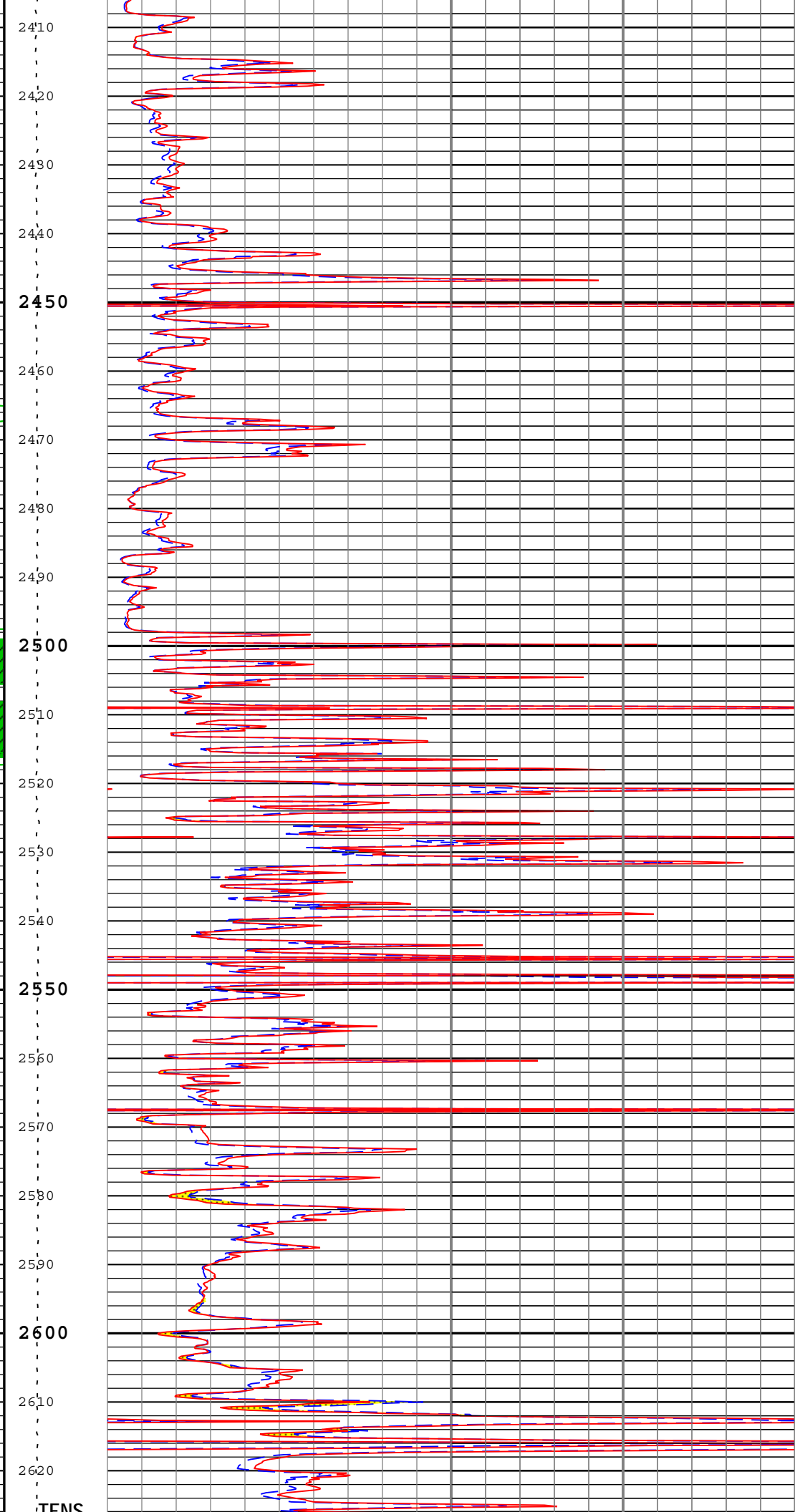
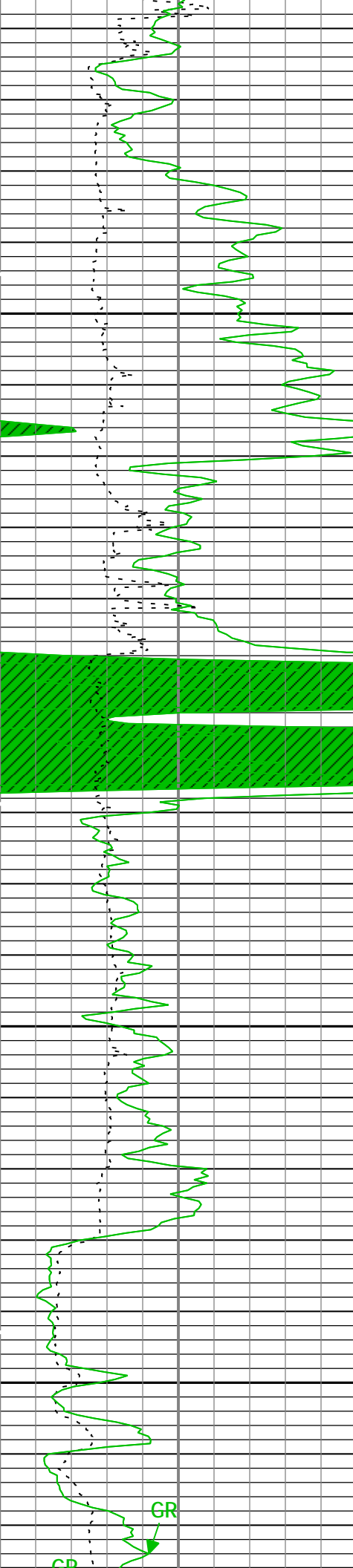


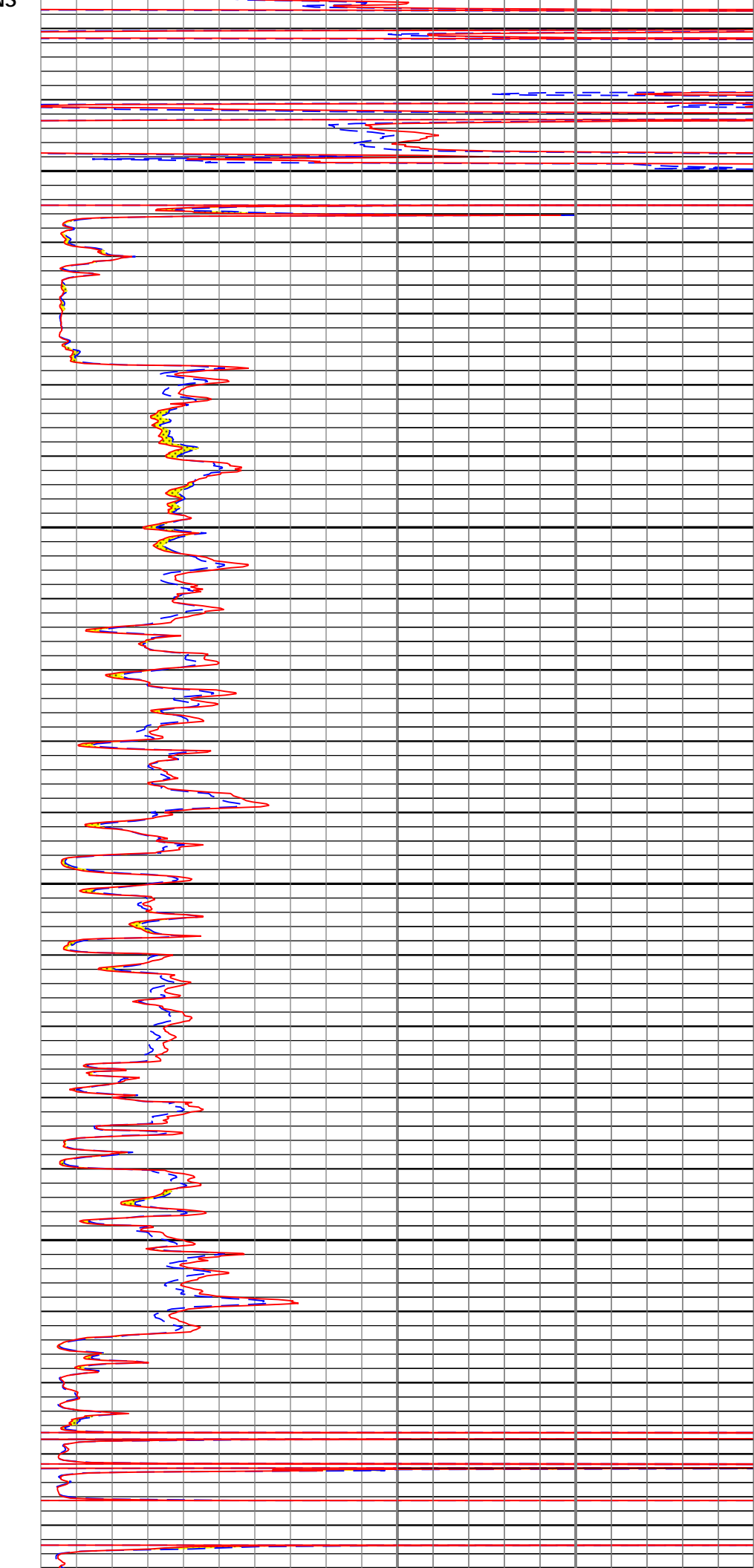
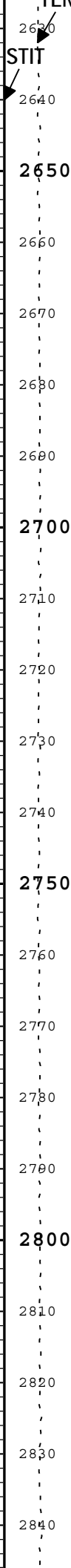
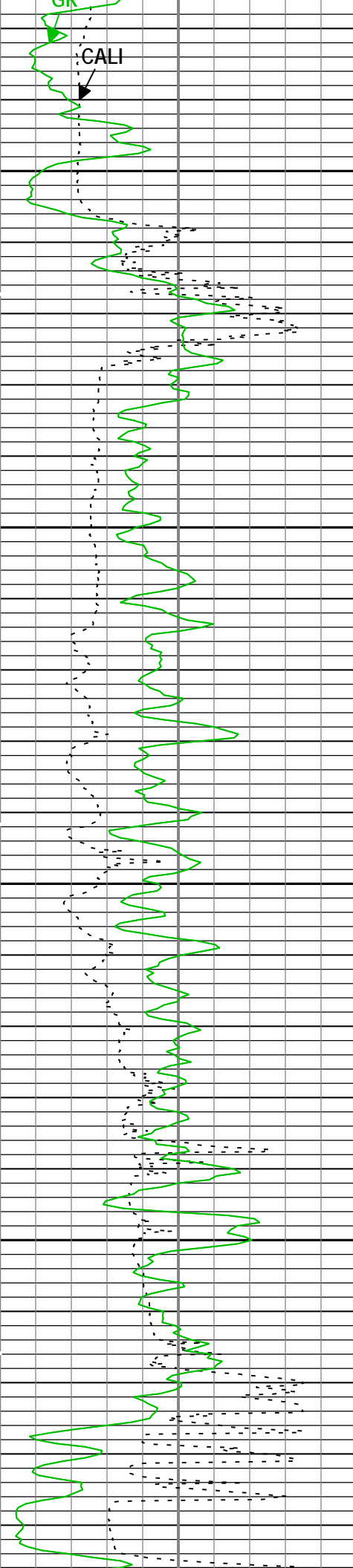


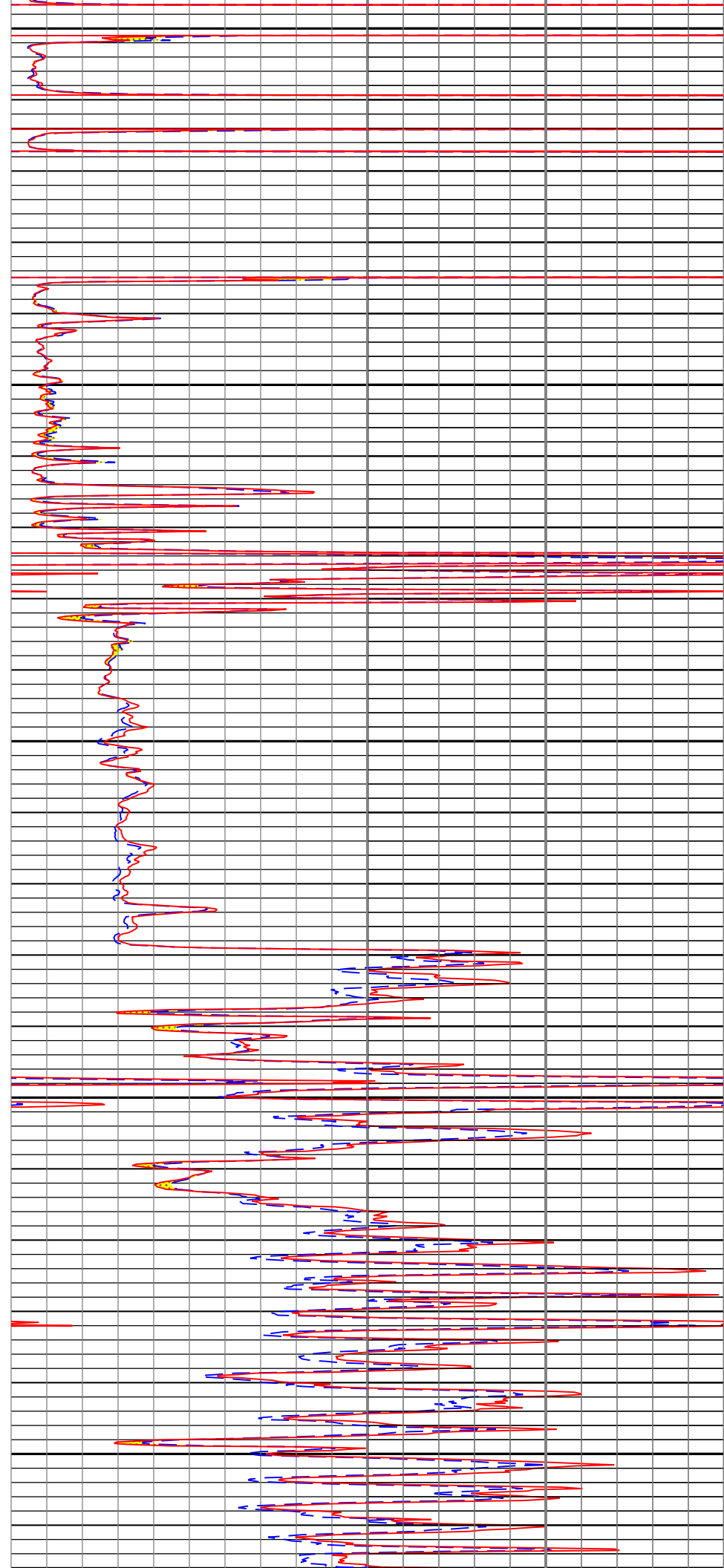
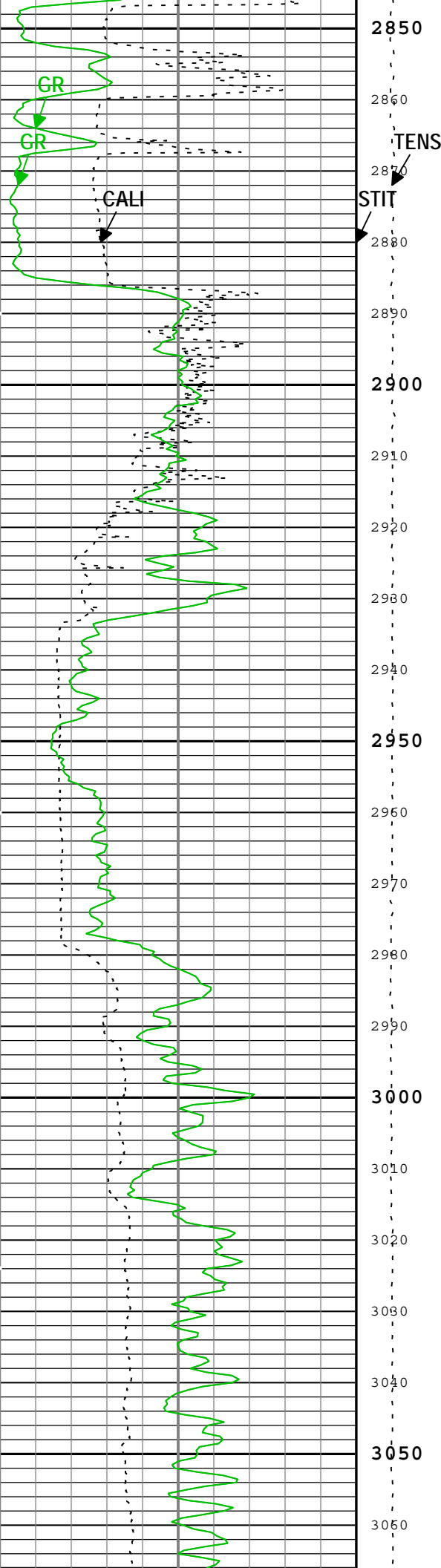




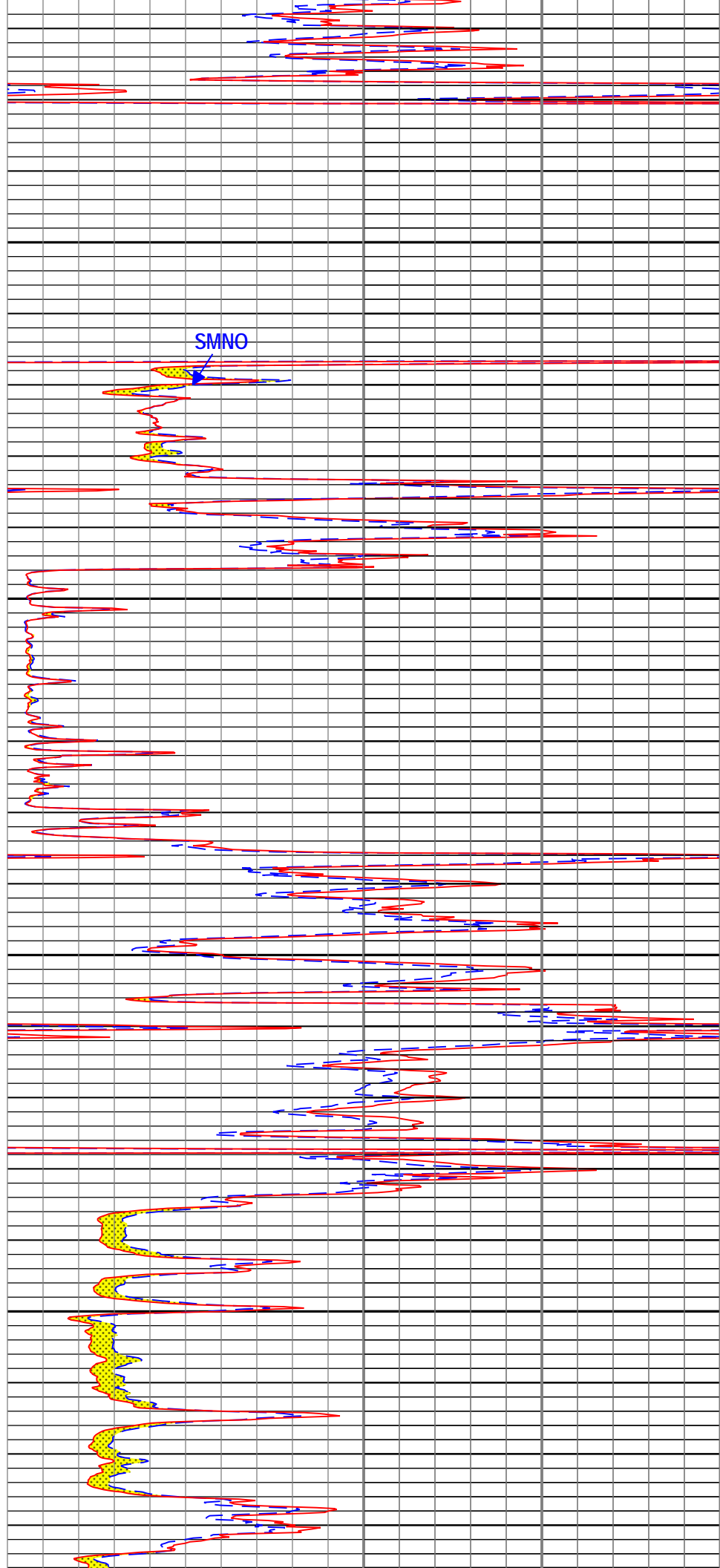
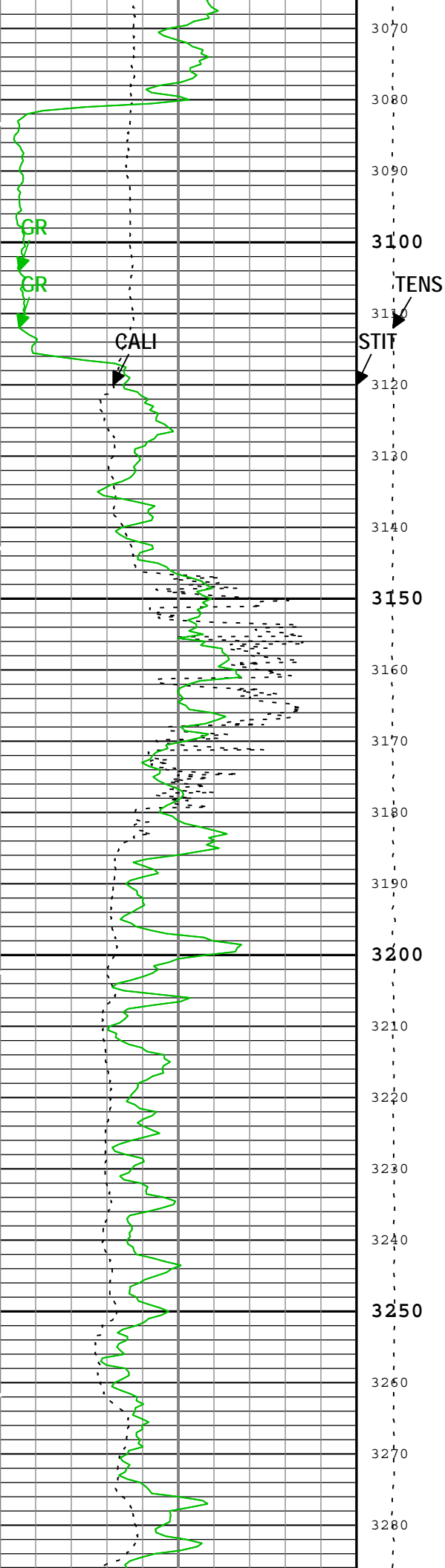


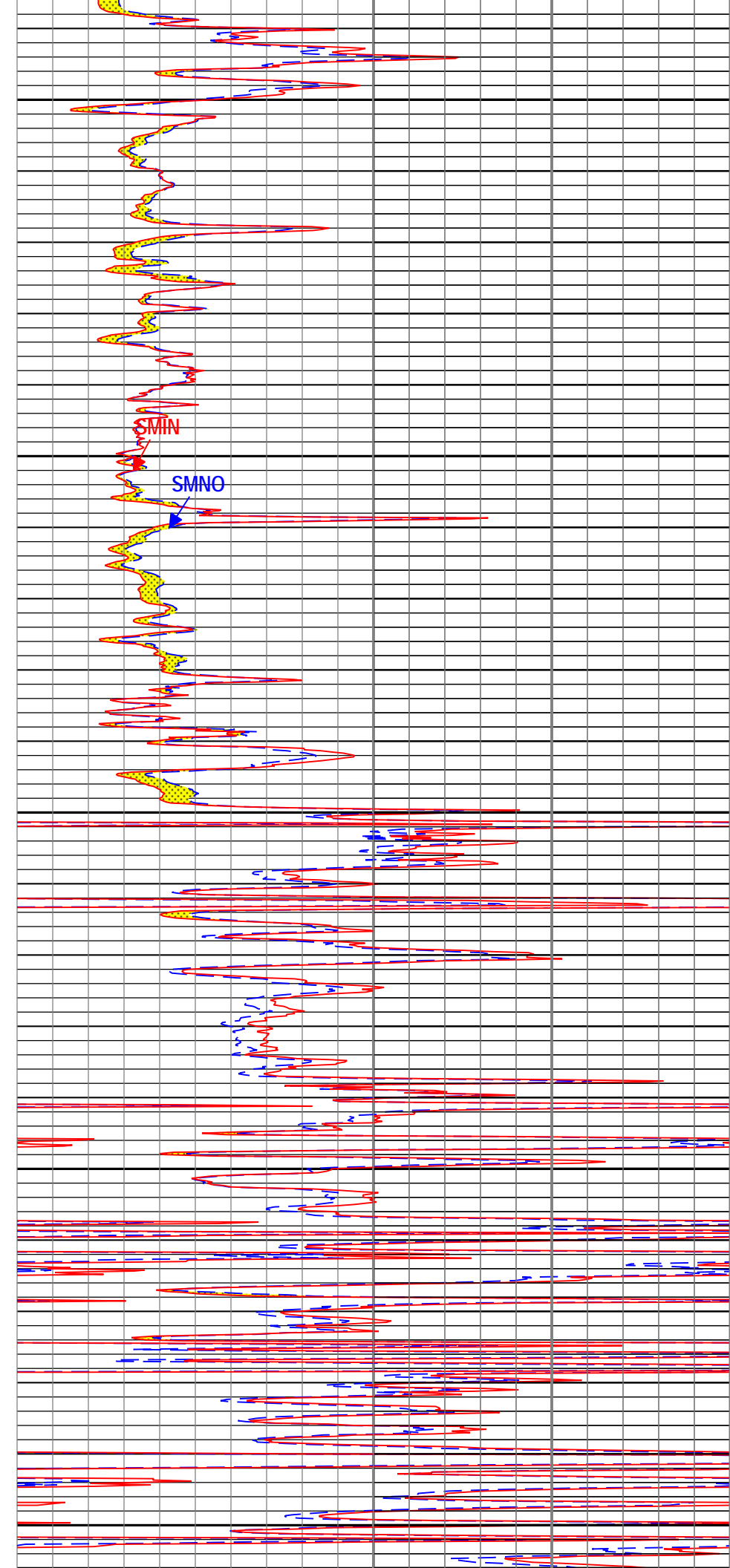
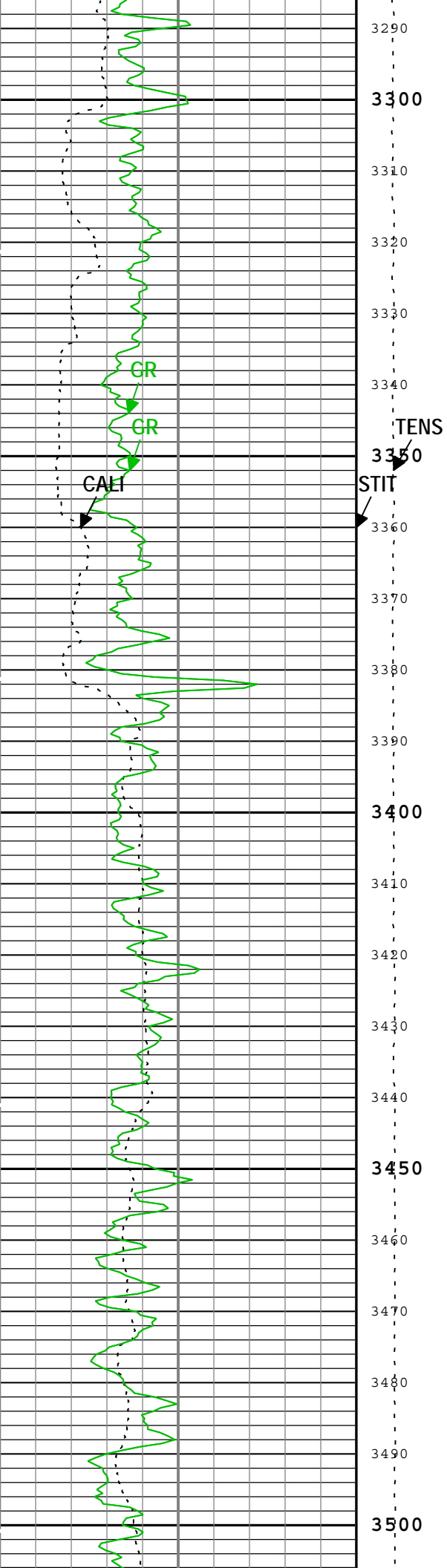


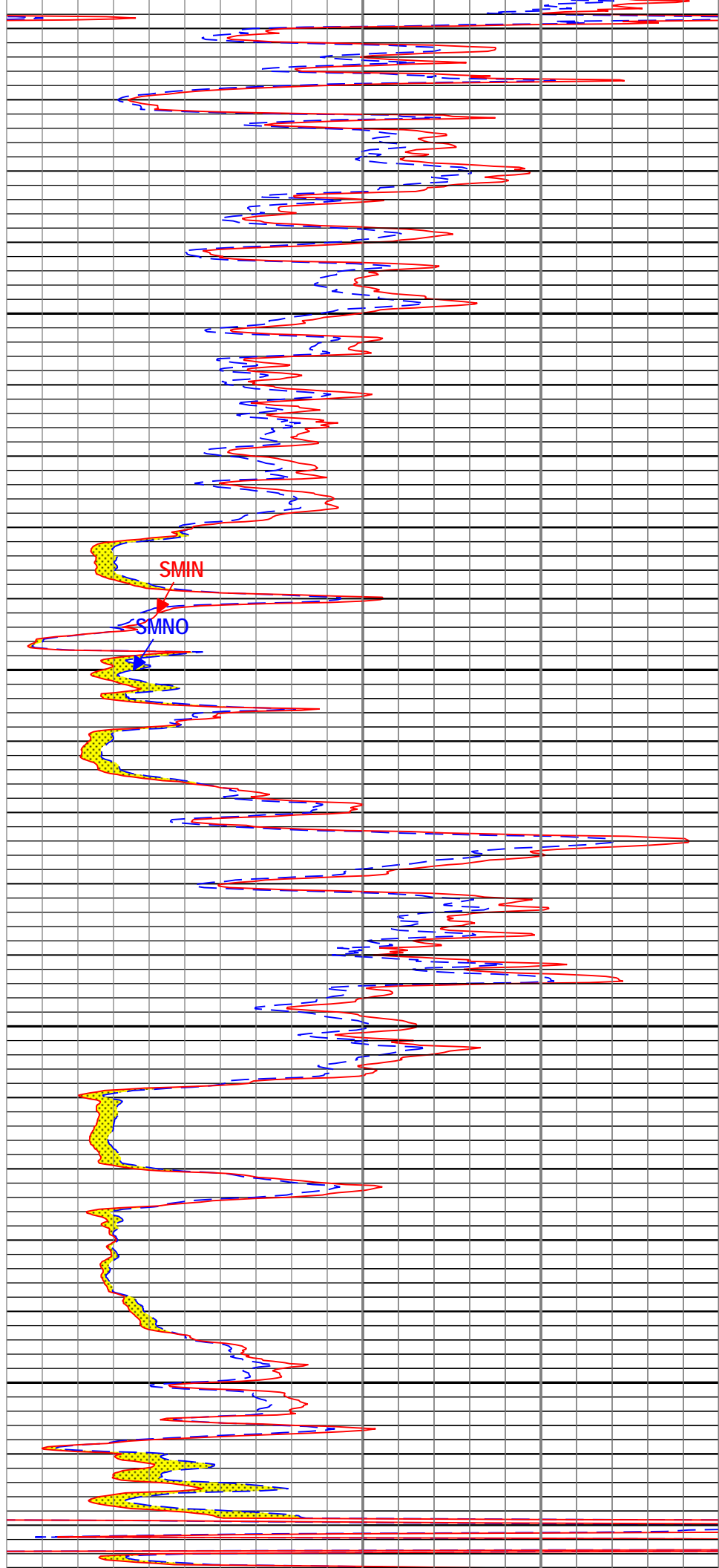
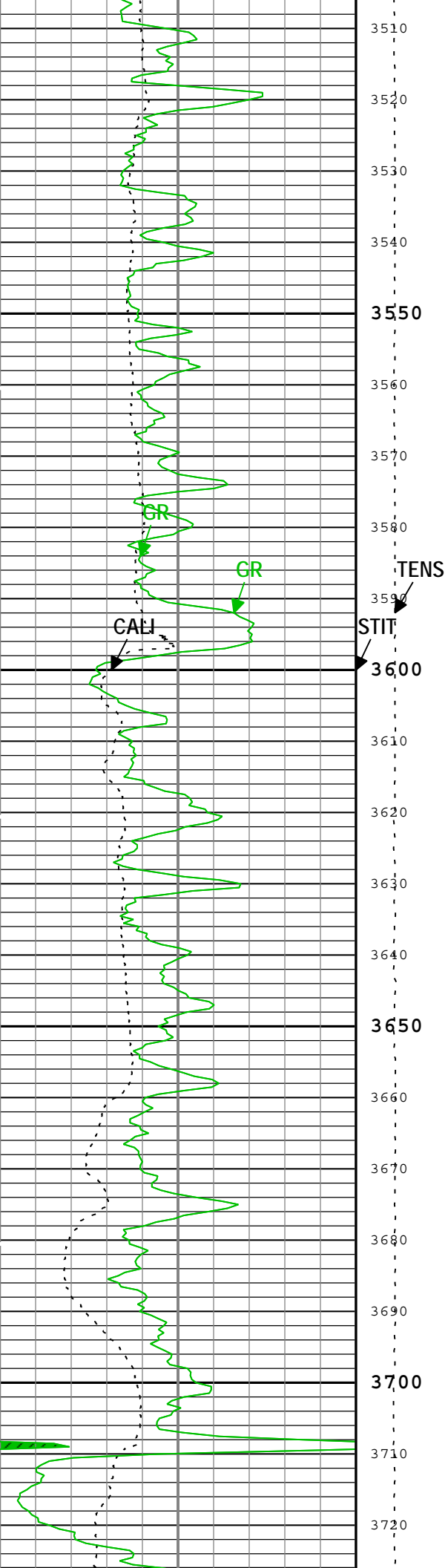


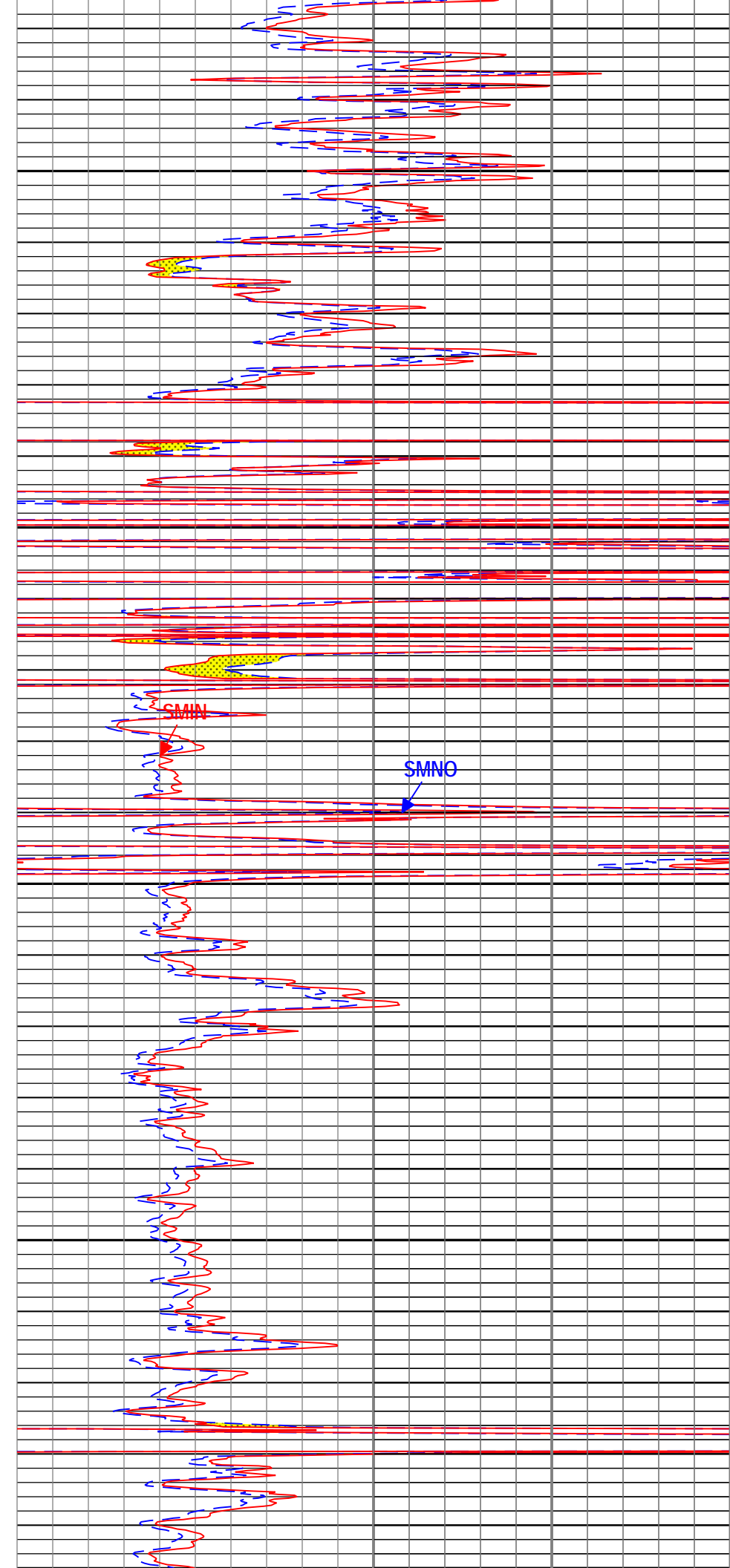
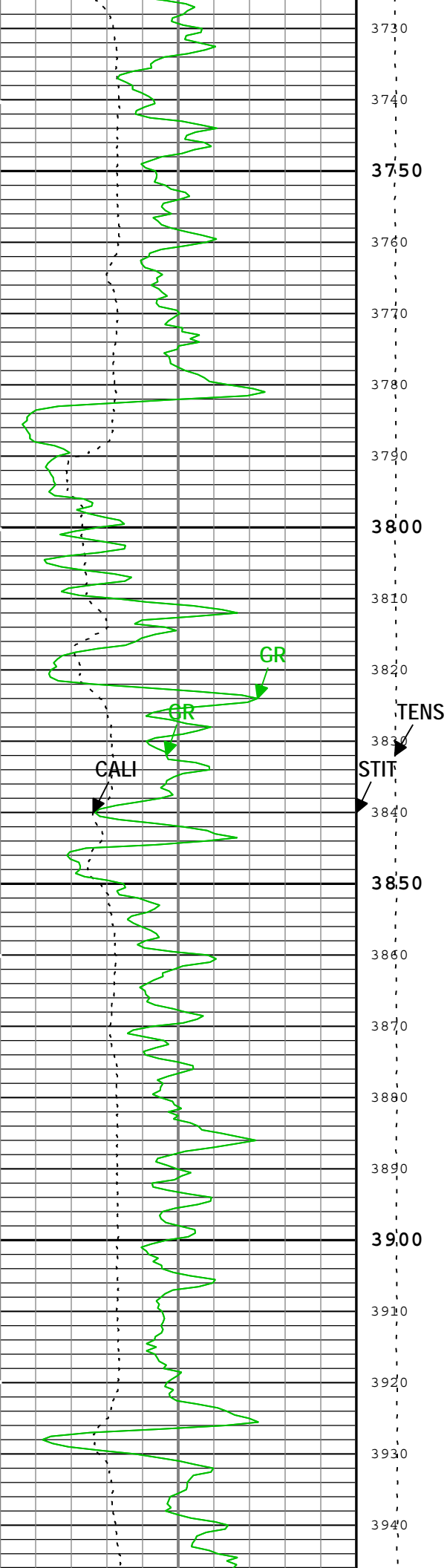


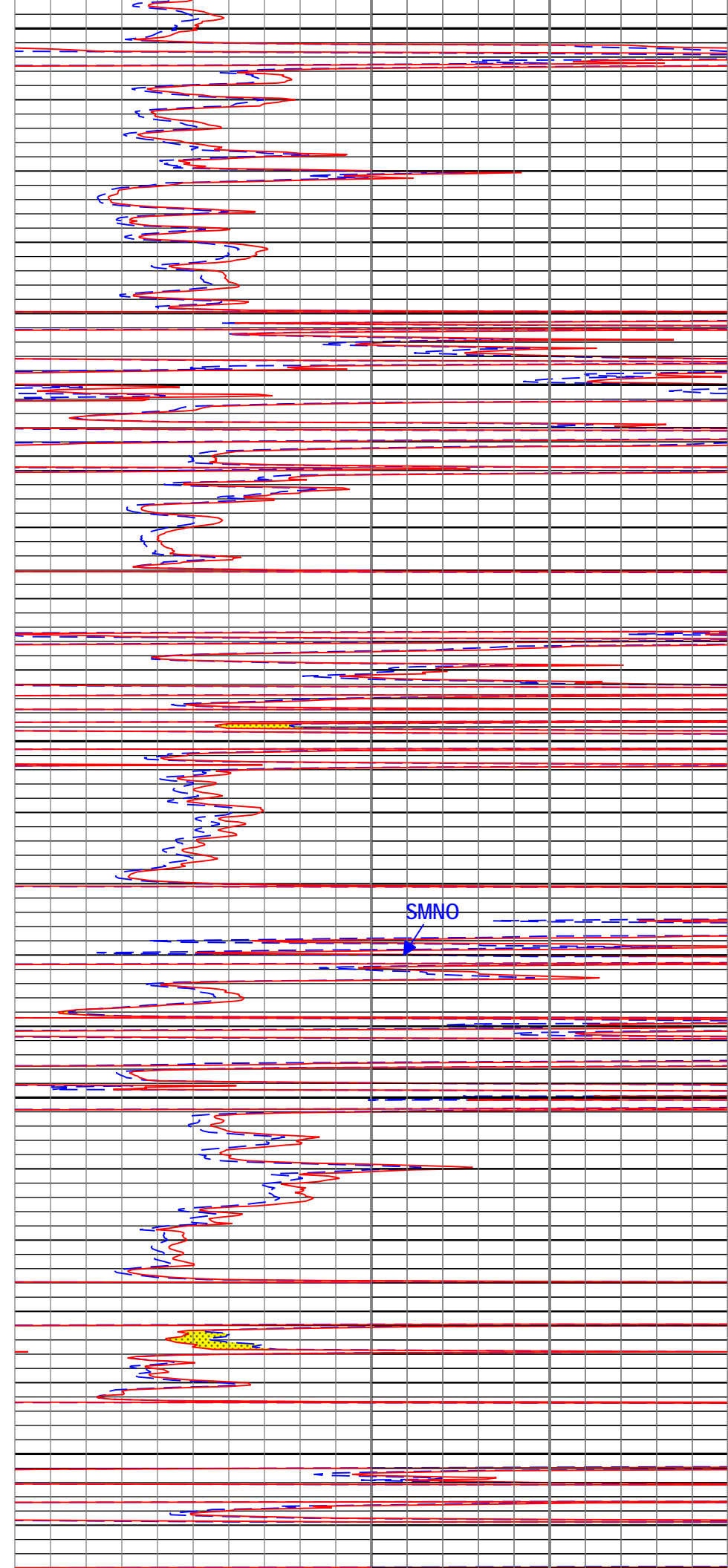
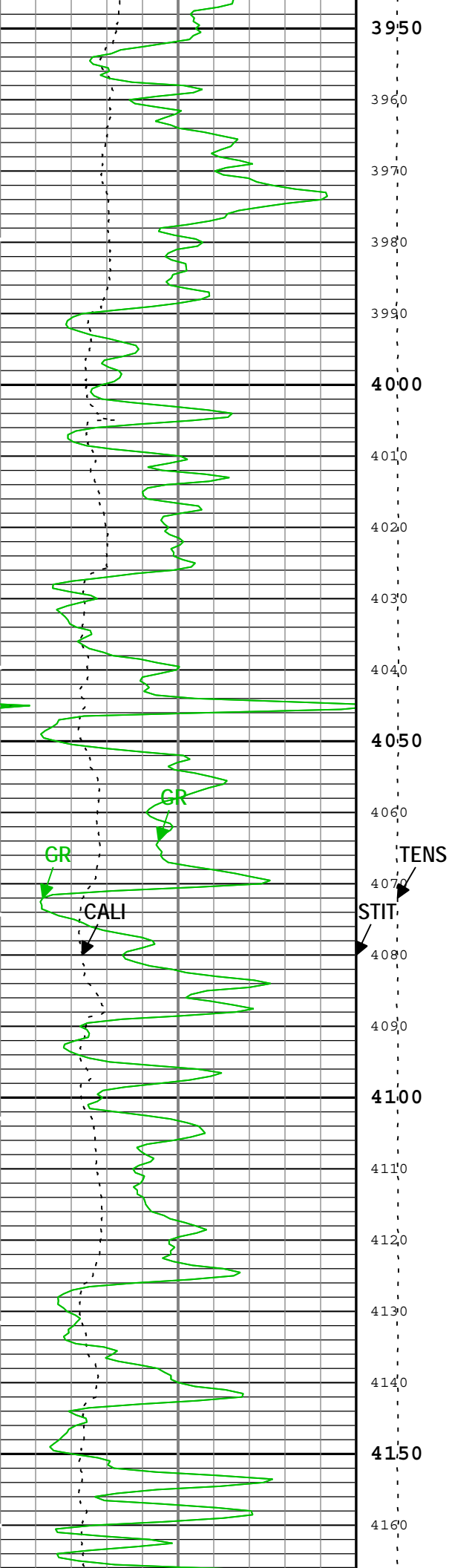


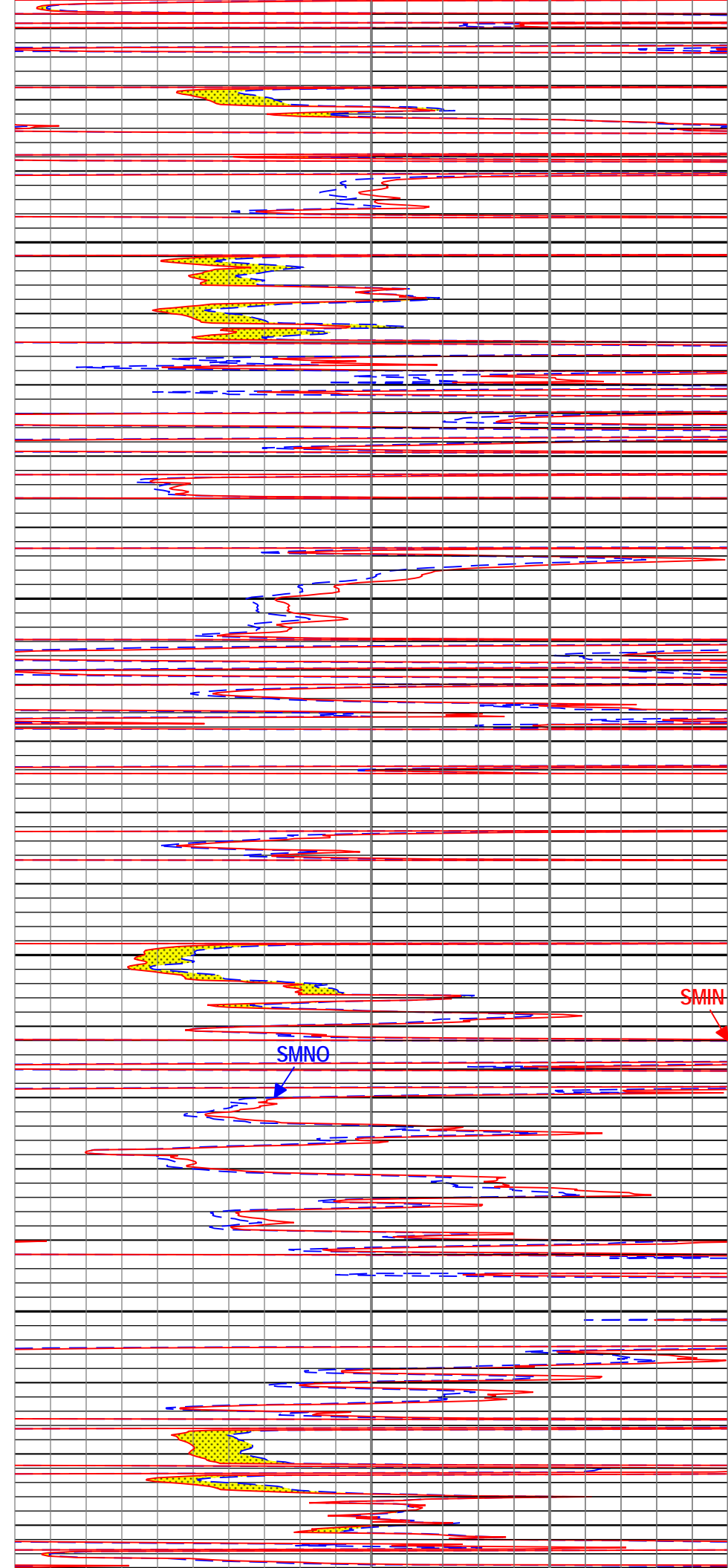
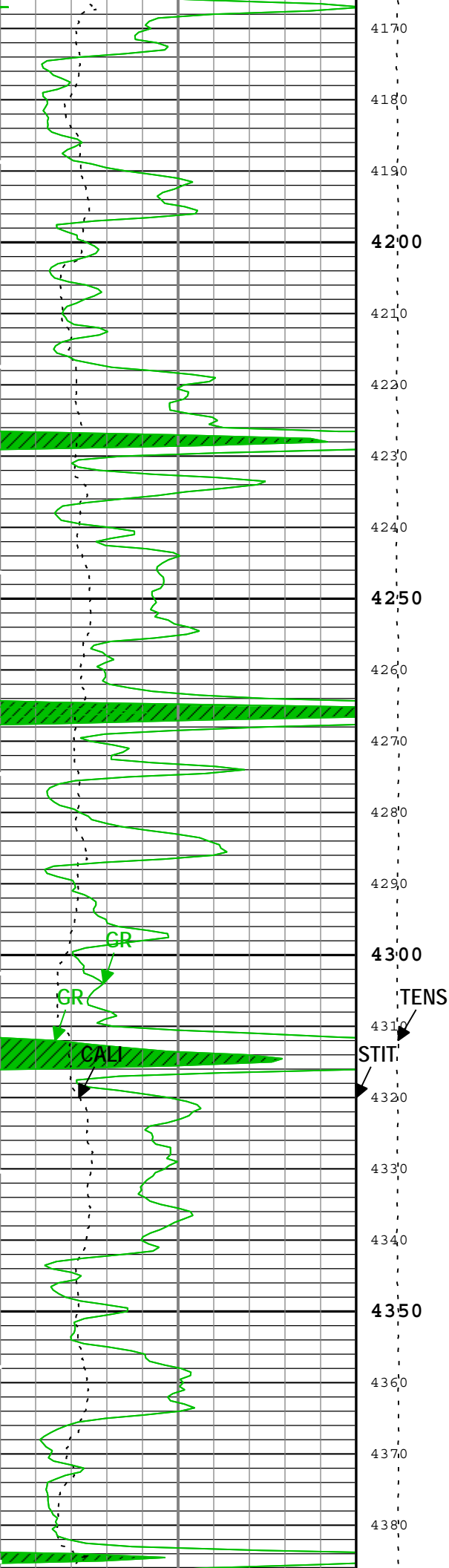


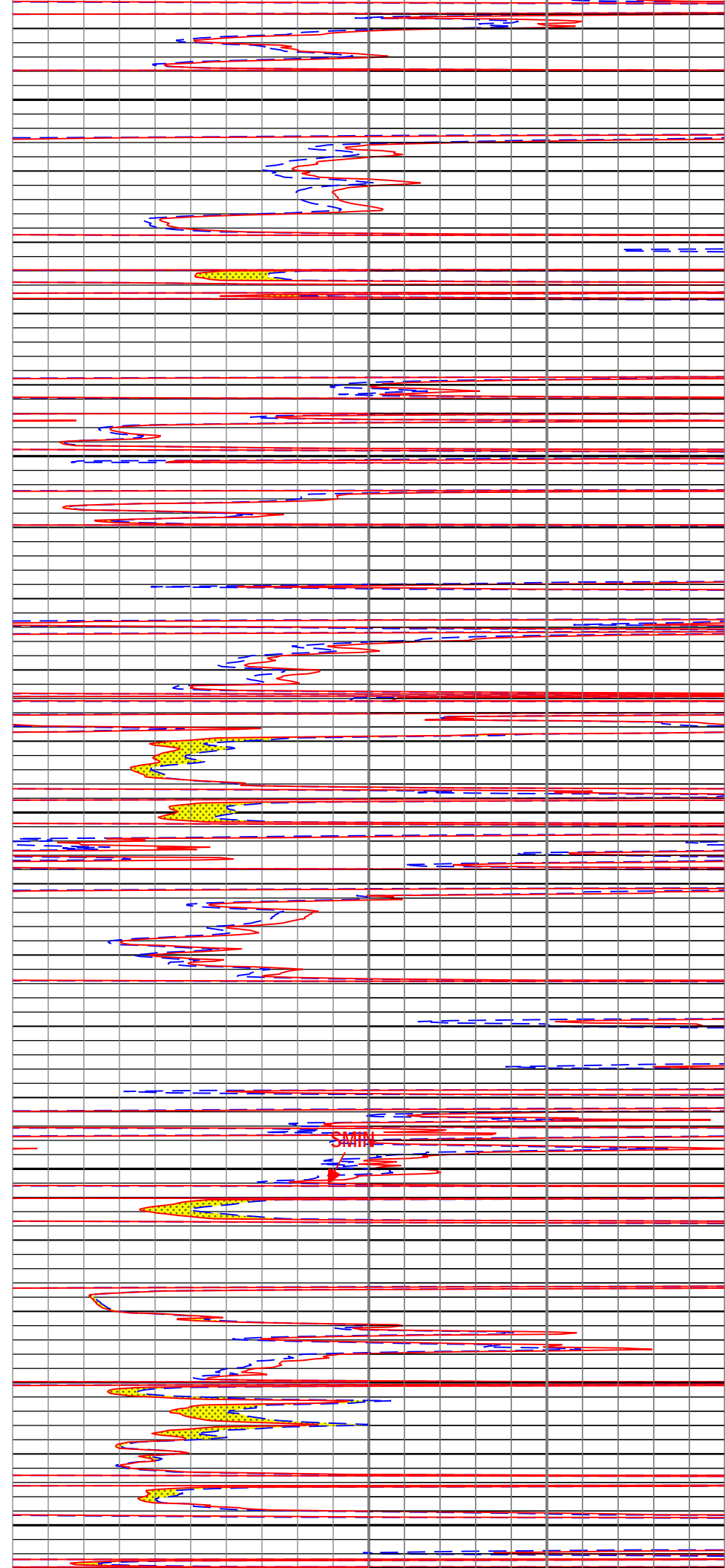
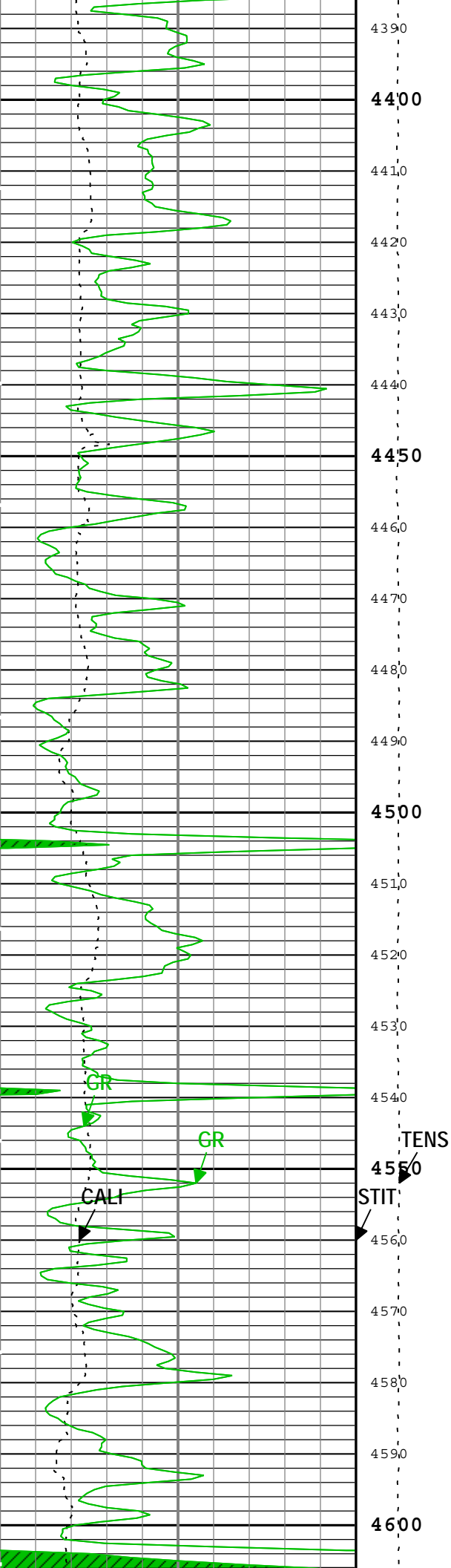


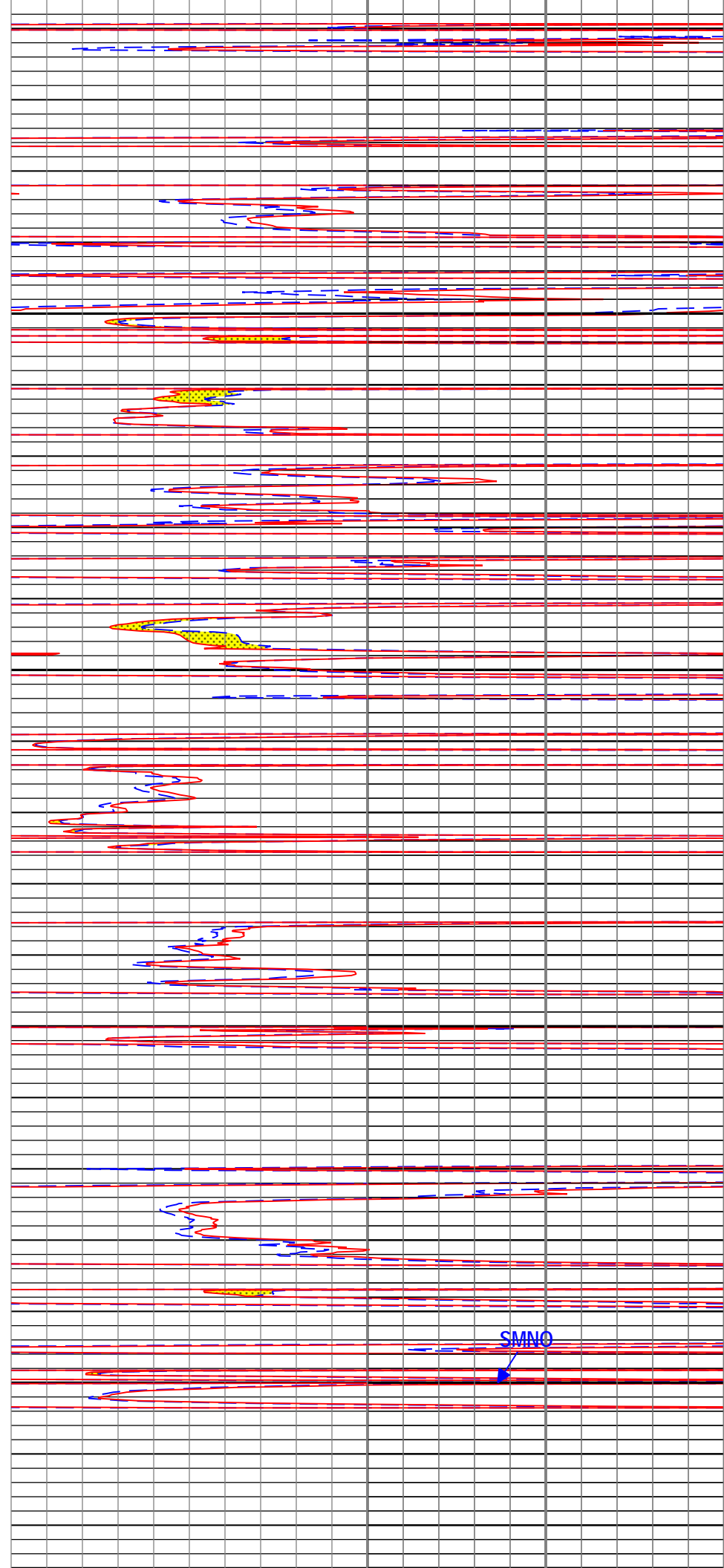
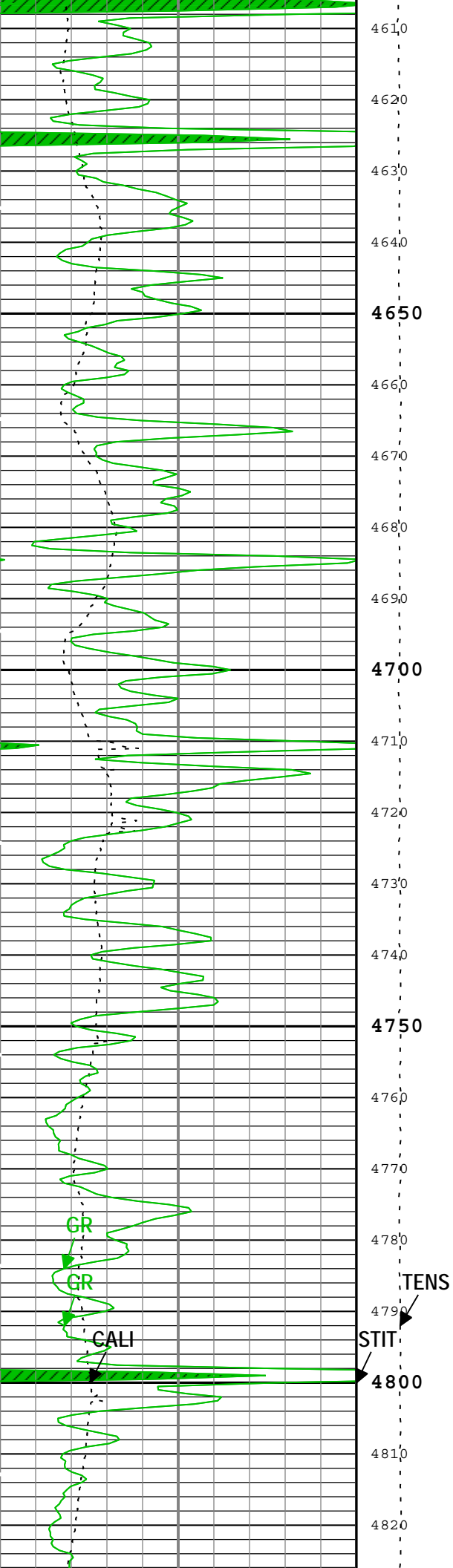




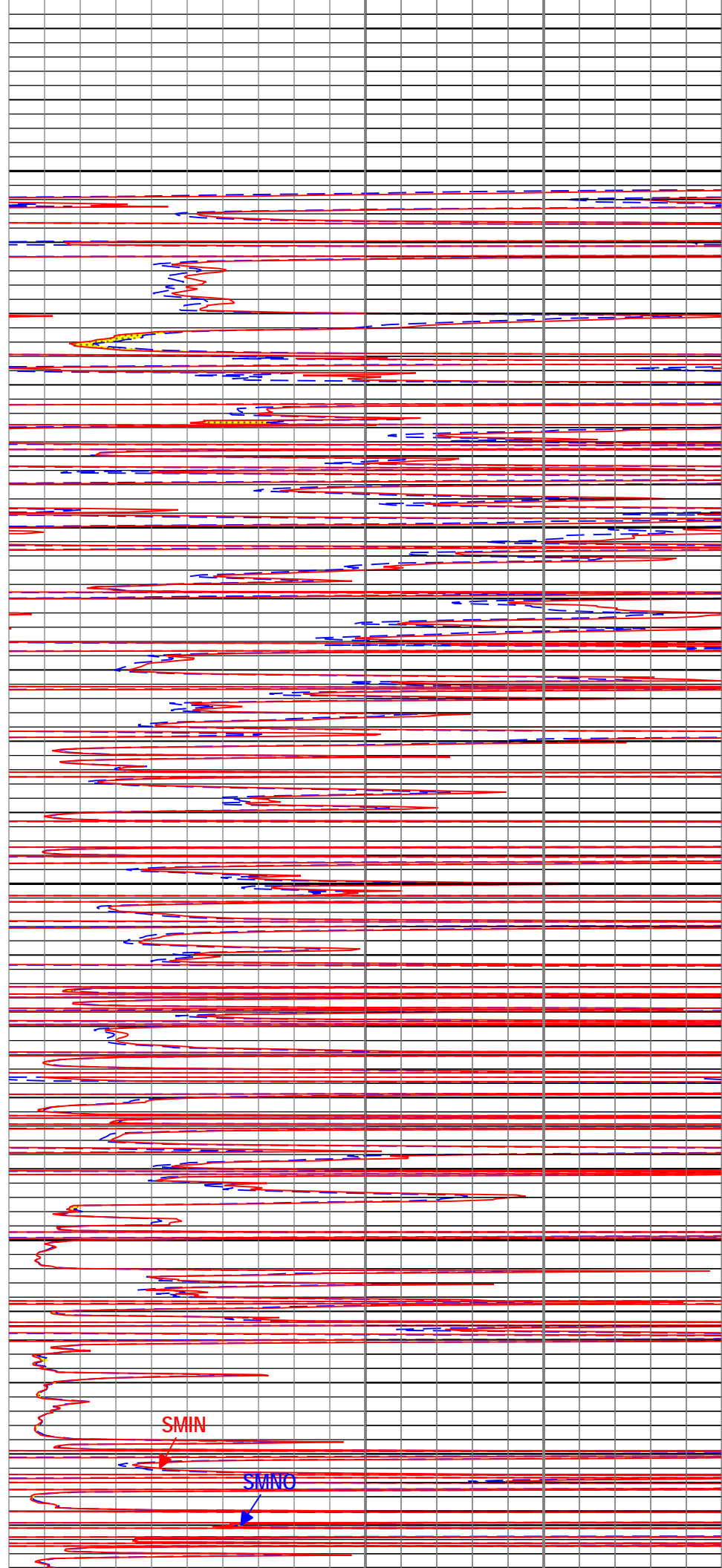
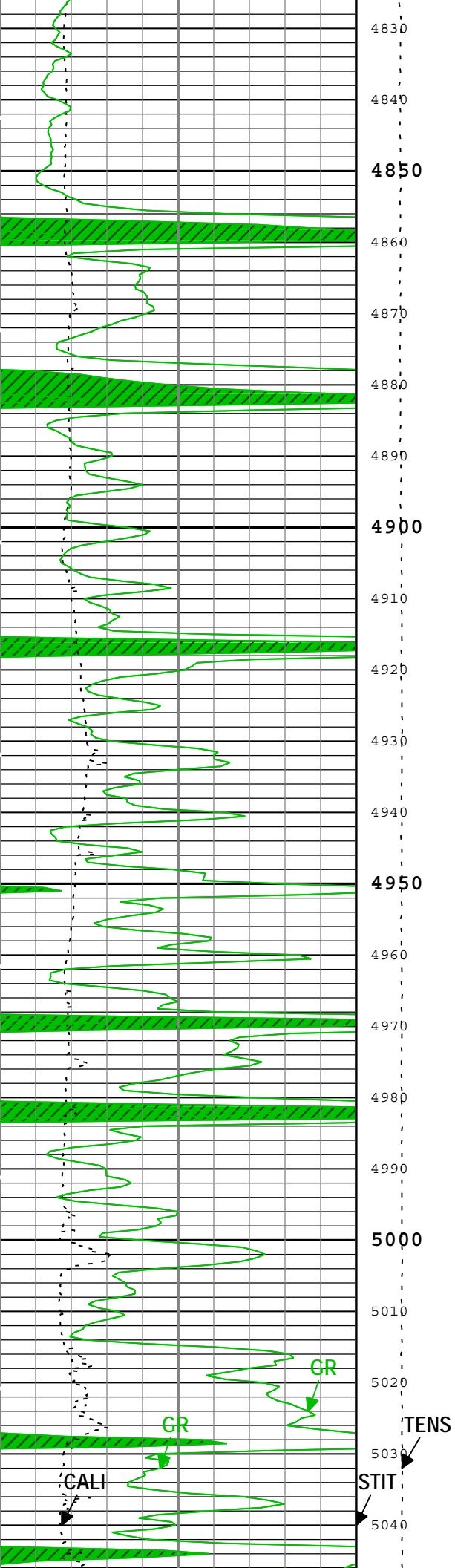


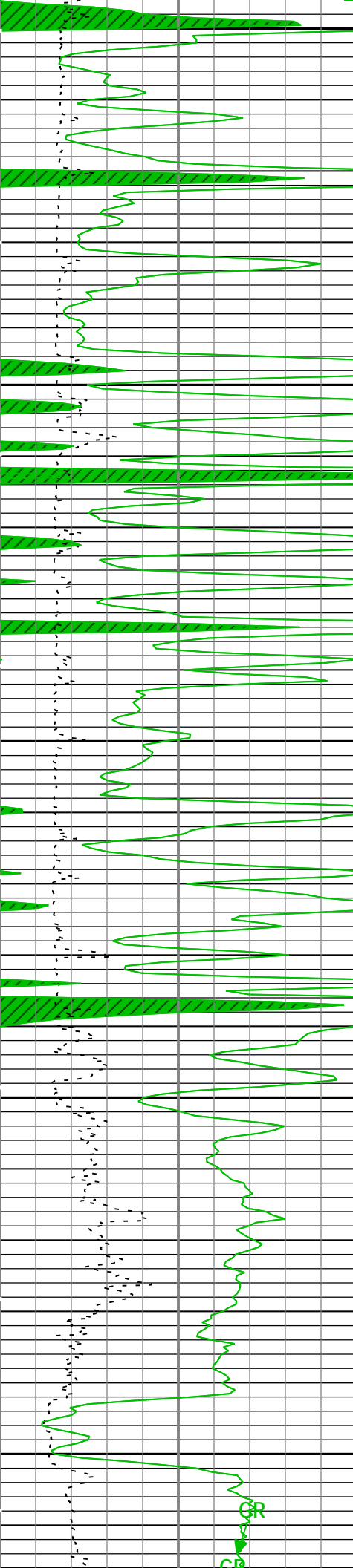






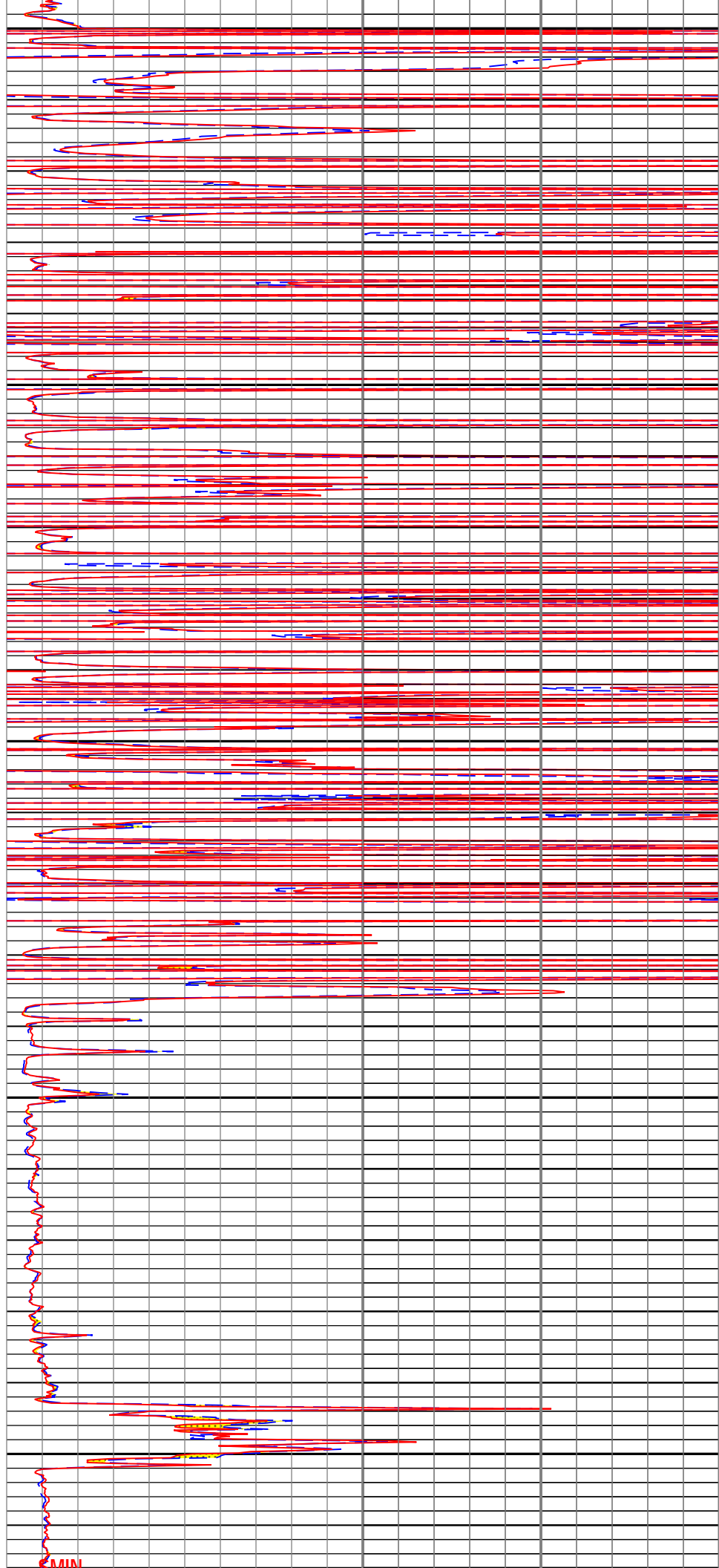




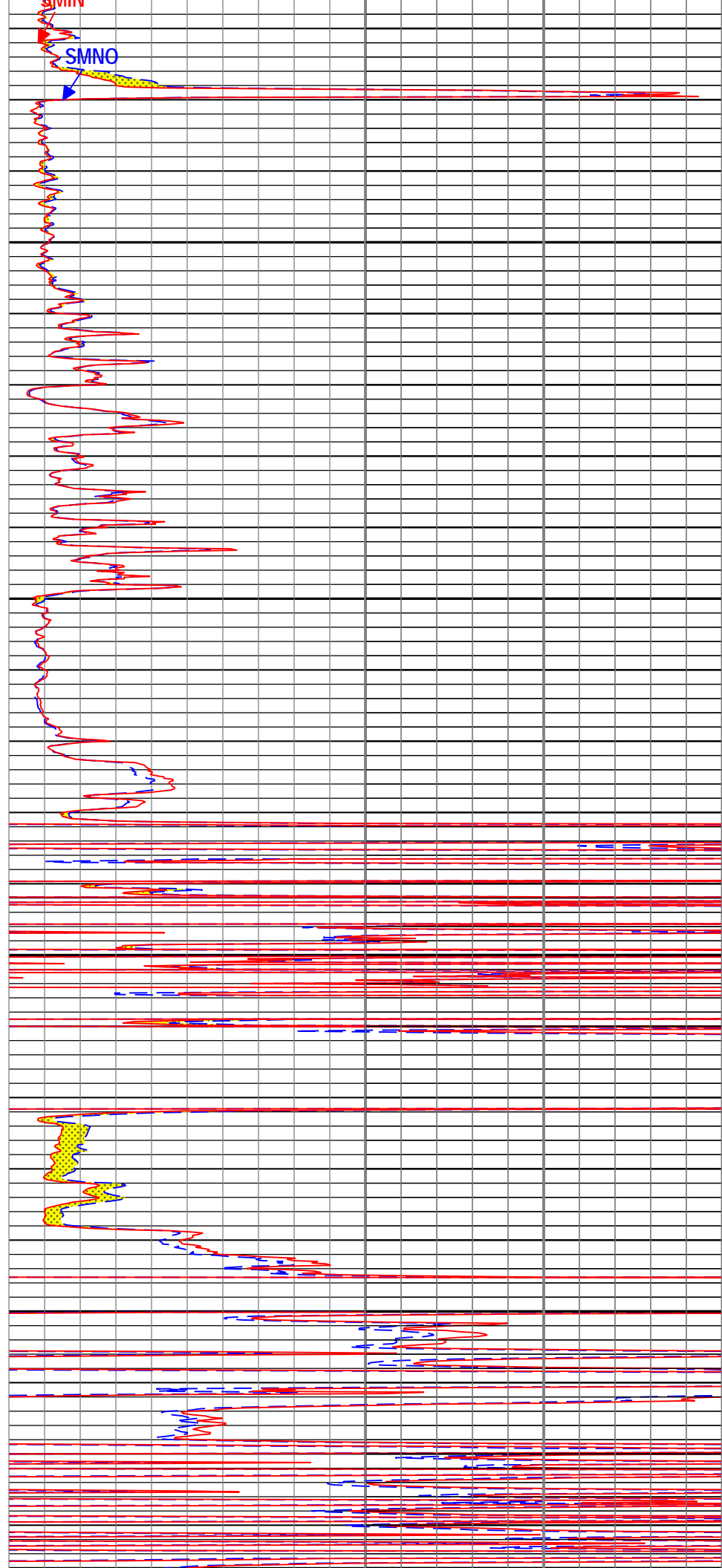
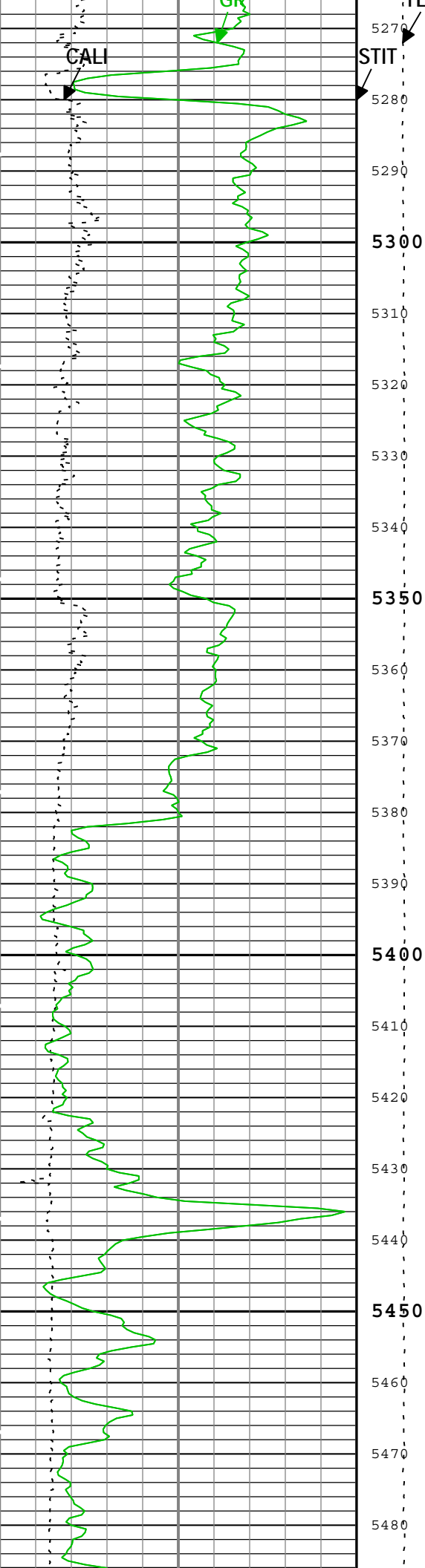


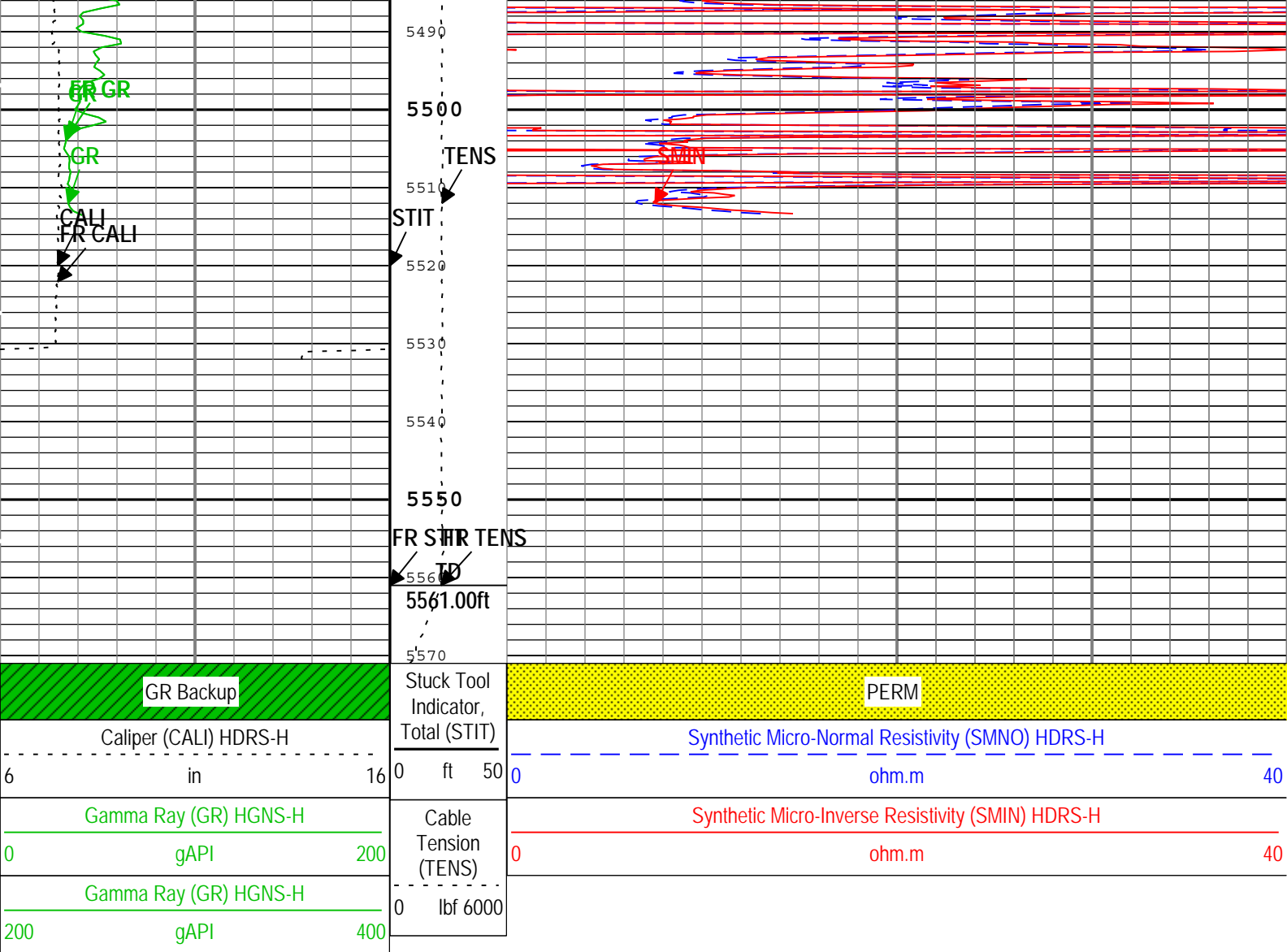
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5140  
5150  
5160  
5170  
5180  
5190  
5200  
5210  
5220  
5230  
5240  
5250  
5260

TENS



MINI





TIME\_1900 - Time Marked every 60.00 (s)

Description: MCFL processing for Platform Express Format: Log ( EMD 5in Micro Log ) Index Scale: 5 in per 100 ft Index Unit: ft Index Type: Measured Depth Creation Date: 11-Dec-2012 18:57:09

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
DFD	Drilling Fluid Density	Borehole	9.3	lbm/gal
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	
GRSE	Generalized Mud Resistivity Selection, from Measured or Computed Mud Resistivity	Borehole	REMS	
GTSE	Generalized Temperature Selection, from Measured or Computed Temperature	Borehole	CTEM	
MST	Mud Sample Temperature	Borehole	90.6	degF
RMS	Resistivity of Mud Sample	Borehole	1.12	ohm.m
SOCO	Standoff Correction Option	HGNS-H	Yes	
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

All depth are actual.

Tool Control Parameters				
Parameter	Description	Tool	Value	Unit
HMCA_BRD_TYPE	HMCA Board Type	HGNS-H	1	
HRGD_BRD_TYPE	HRGD Board Type	HDRS-H	WITH_HET	
MAX_LOG_SPEED	Toolstring Maximum Logging Speed	WLSESSION	1800	ft/h

## Calibration Report

### HDRS-H (HILT Density and Rxo Sonde, 150 degC) Calibration - Run PEX-AIT

#### Primary Equipment :

HILT High-Resolution Control Cartridge, 150 degC	HRCC-H	3712
HILT Resistivity Gamma-Ray Density Device, 150 degC	HRGD-H	3775

#### Auxiliary Equipment :

HRDD Backscatter Detector	Backscatter	26404
HRDD Long Spacing Detector	Long Spacing	28926
HRDD Short Spacing Detector	Short Spacing	
Cesium 137 Gamma-Ray Logging Source	GSR-J	5240
HILT High-Resolution Control Cartridge, 150 degC	HRCC-H	3712
HILT High-Resolution Mechanical Sonde, 150 degC	HRMS-H	4826

#### Calibration Parameter :

Small Ring Size (Caliper Calibration Small Ring)	8.00
Large Ring Size (Caliper Calibration Large Ring)	12.00

### HDRS Caliper Calibration - Caliper Accumulations

Before (Measured): 09:38:28 11-Dec-2012

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Small Ring	in	Before	8.00	6.00	8.32	10.00	
Large Ring	in	Before	12.00	9.00	12.50	15.00	

### HDRS Density Calibration - Inversion Results

Master (EEPROM): 20:14:00 09-Dec-2012

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Rho Aluminum	g/cm3	Master	2.596	2.586	2.599	2.606	
Rho Magnesium	g/cm3	Master	1.686	1.676	1.686	1.696	
Pe Aluminum		Master	2.570	2.470	2.547	2.670	
Pe Magnesium		Master	2.650	2.550	2.632	2.750	

### HDRS Density Calibration - Deviation Summary

Master (EEPROM): 20:14:00 09-Dec-2012

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
BS Average Deviation	%	Master	0	-0.6000	0.2389	0.6000	
BS Max Deviation	%	Master	0	-1.6000	0.8046	1.6000	
SS Average Deviation	%	Master	0	-1.0000	0.2825	1.0000	
SS Max Deviation	%	Master	0	-2.5000	0.6831	2.5000	
LS Average Deviation	%	Master	0	-1.5000	0.5659	1.5000	
LS Max Deviation	%	Master	0	-3.5000	1.1242	3.5000	

### HDRS Density Calibration - Background Summary

Master (EEPROM): 20:14:00 09-Dec-2012		Before (Measured): 09:40:39 11-Dec-2012					
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
BS Window Ratio		Master	1.0000		0.7540		
		Before	0.7540	0.7163	0.7552	0.7917	
		Before-Master	-----	-----	0.0012	-----	
BS Window Sum	1/s	Master	1		25277		
		Before	25277	24013	25272	26541	
		Before-Master	-----	-----	-5	-----	
SS Window Ratio		Master	1.0000		0.4895		

