

Company: Aurora Power Resources Inc

Well: David Bender 1A

Field: Bijou West

County: Morgan State: Colorado

Platform Express

Mico Log

County:	Morgan			
Field:	Bijou West			
Location:	SHL: NWSW 2441' FSL & 260' FWL			
Well:	David Bender 1A			
Company:	Aurora Power Resources Inc			
Location:		SHL: NWSW 2441' FSL & 260' FWL	Elev.:	K.B. 4476.00 ft
		Section 12, Township 4N, Range 60W		G.L. 4462.00 ft
		Lat: 40.326670, Long: -104.054240		D.F. 4475.00 ft
		Permanent Datum:	Ground Level	Elev.: 4462.00 f
		Log Measured From:	Kelly Bushing	14.00 ft above Perm.Datum
		Drilling Measured From:	Kelly Bushing	
		API Serial No.	Section:	Township:
		05-087-08178-00	12	4N
				Range: 60W

Logging Date	16-Feb-2014		
Run Number	Run 1: PEX-AIT		
Depth Driller	6585.00 ft		
Schlumberger Depth	6585.00 ft		
Bottom Log Interval	6590.00 ft		
Top Log Interval	536.00 ft		
Casing Driller Size @ Depth	8.625 in @ 500.00 ft		
Casing Schlumberger	500 ft		
Bit Size	7.875 in		
Type Fluid In Hole	Chemical Gel		
Density	9.1 lbm/gal	34 s	
Fluid Loss	PH 10 cm3	8.5	
Source of Sample			
RM @ Meas Temp	1.2 ohm.m @ 70 degF		
RMF @ Meas Temp	0.9 ohm.m @ 70 degF		
RMC @ Meas Temp	1.5 ohm.m @ 70 degF		
Source RMF	Calculated	Calculated	
RM @ BHT	0.51 @ 175	0.38 @ 175	
Max Recorded Temperatures	175 degF		
Circulation Stopped	15-Feb-2014	15:00:00	
Logger on Bottom	16-Feb-2014	01:30:34	
Unit Number	2135	Fort Morgan, CO	
Recorded By	Max Pace		
Witnessed By	Ed Jones		

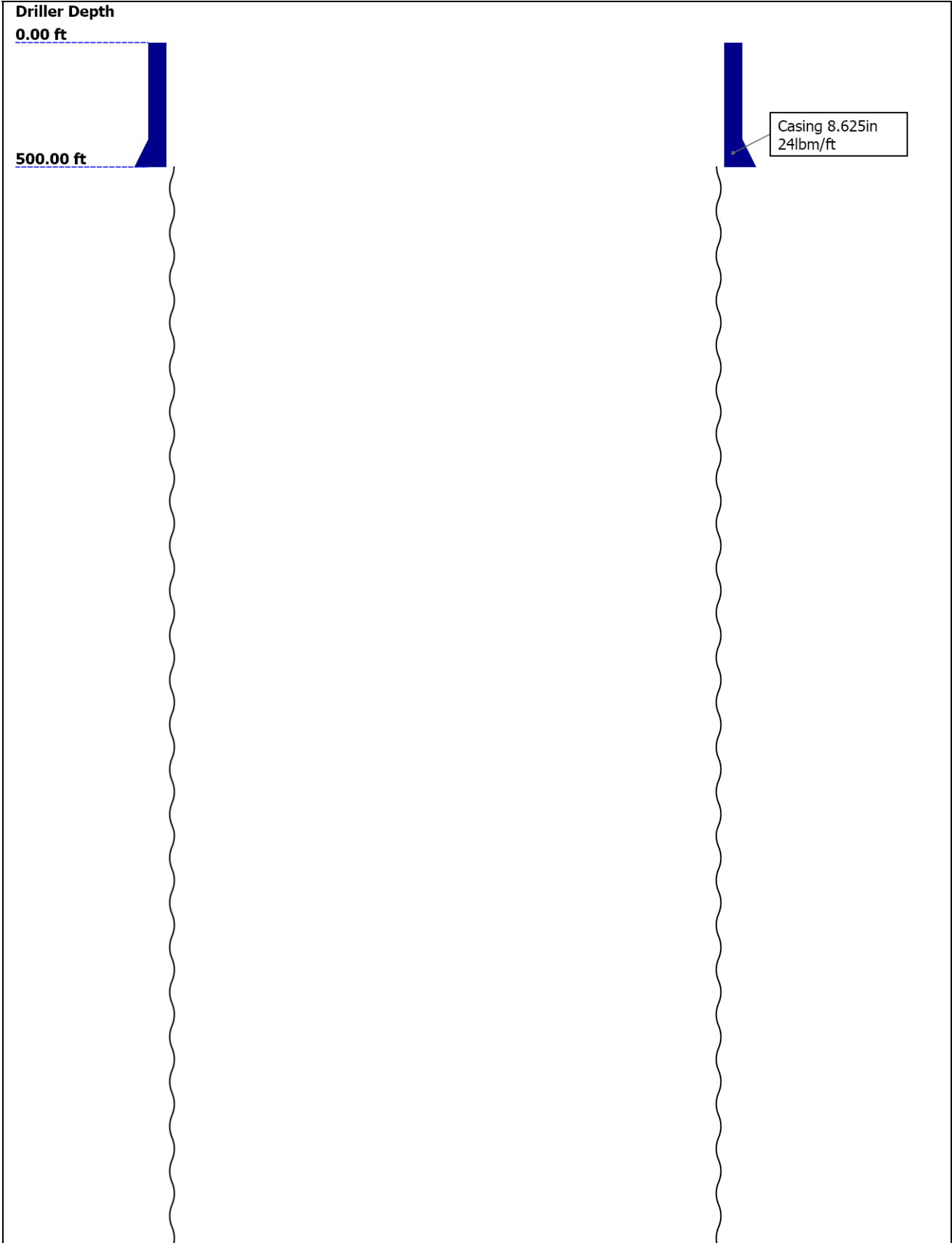
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Well Sketch



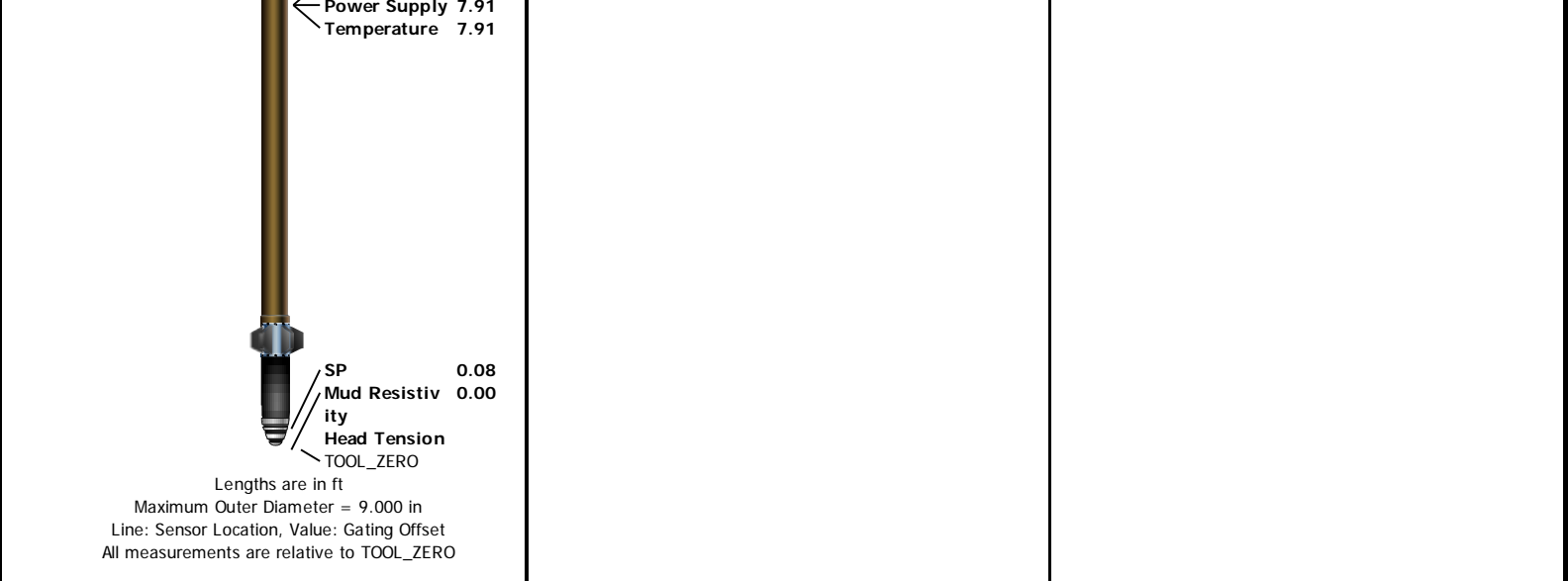


Borehole Size/Casing/Tubing Record

Bit						
Bit Size (in)	7.875					
Top Driller (ft)	500					
Top Logger (ft)	500					
Bottom Driller (ft)	6585					
Bottom Logger (ft)	6585					
Casing						
Size (in)	8.625					
Weight (lbm/ft)	24					
Inner Diameter (in)	8.097					
Grade	N80					
Top Driller (ft)	0					
Top Logger (ft)	0					
Bottom Driller (ft)	500					
Bottom Logger (ft)	500					

Borehole Fluids

Parameter(unit)	Run 1: PEX-AIT					
Fluid Type	Water					
Fluid Name	Chemical Gel					
Max Recorded Temperatures (degF)	175					
Source of Sample	Flowline					
Salinity (ppm)	0					
Density (lbm/gal)	9.1					
Funnel Viscosity (s)	34					
Fluid Loss (cm3)	10					
PH	8.5					
Date/Time Circulation Stopped	15-Feb-2014 15:00:00					
Date Logger on Bottom	16-Feb-2014					
Time Logger on Bottom	01:30:34					
Source RMF	Calculated					
RMC	Calculated					
RM @ Meas Temp (ohm.m@degF)	1.2 @ 70					
RMF @ Meas Temp (ohm.m@degF)	0.9 @ 70					



Depth Summary			
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	Run 1: PEX-AIT		
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Depth Measuring Device			
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Type	IDW-B		
Serial Number			
Calibration Date			
Calibrator Serial Number			
Calibration Cable Type			
Wheel Correction 1	0		
Wheel Correction 2	0		

Tension Device			
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Type	CMTD-B/A		
Serial Number			
Calibration Date			
Calibrator Serial Number			
Number of Calibration Points	0		

Logging Cable			
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Type	7-46NT-XS		
Serial Number			
Length	24000.00 ft		
Conveyance Type	Wireline		
Rig Type	Land		

Run 1: PEX-AIT:Depth Control Parameters		Depth Control Remarks	
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Log Sequence	First Log In the Well		
Rig Up Length At Surface			
Rig Up Length At Bottom			
Rig Up Length Correction			
Stretch Correction			
Tool Zero Check At Surface			

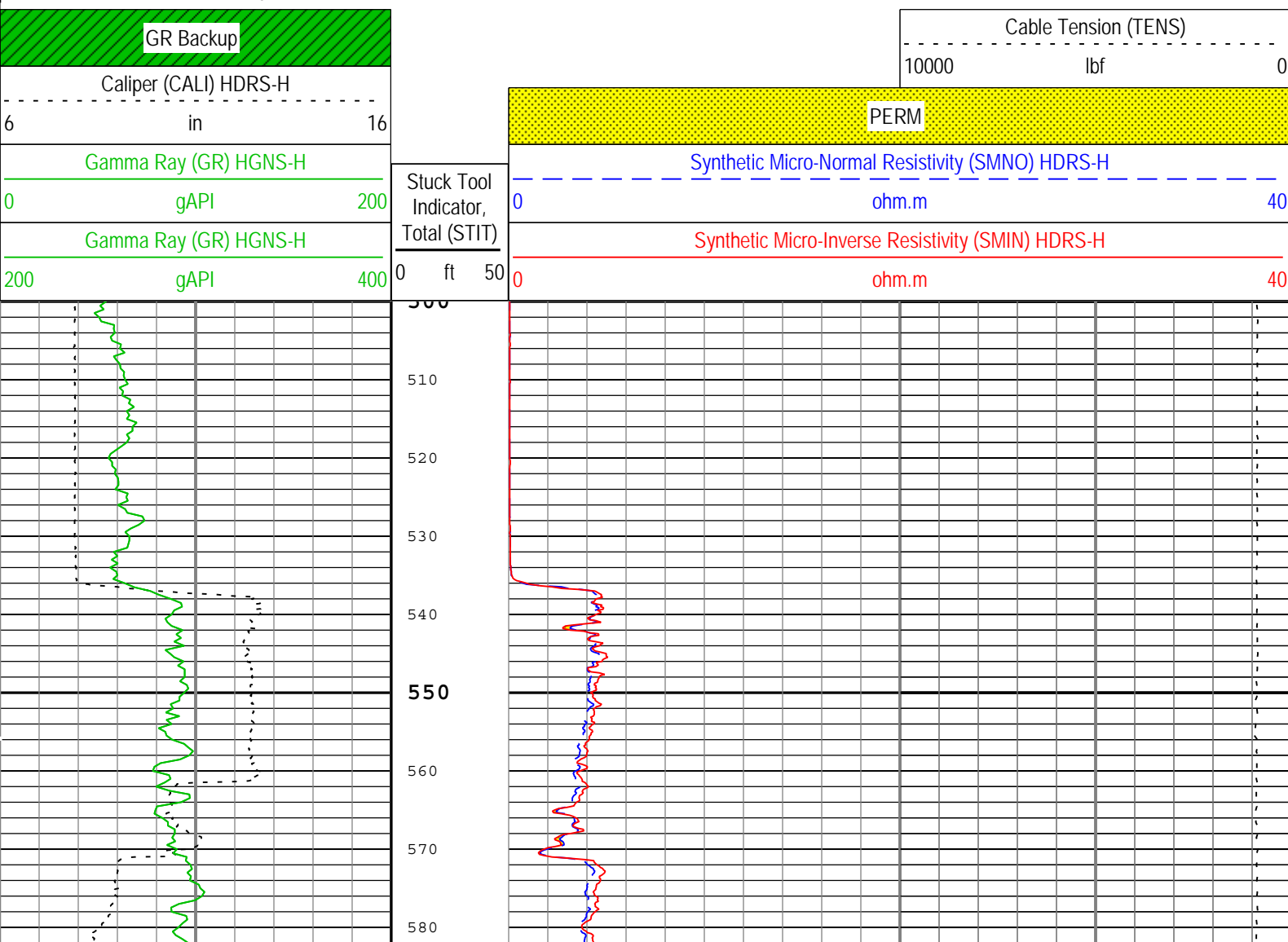
Run 1: PEX-AIT			
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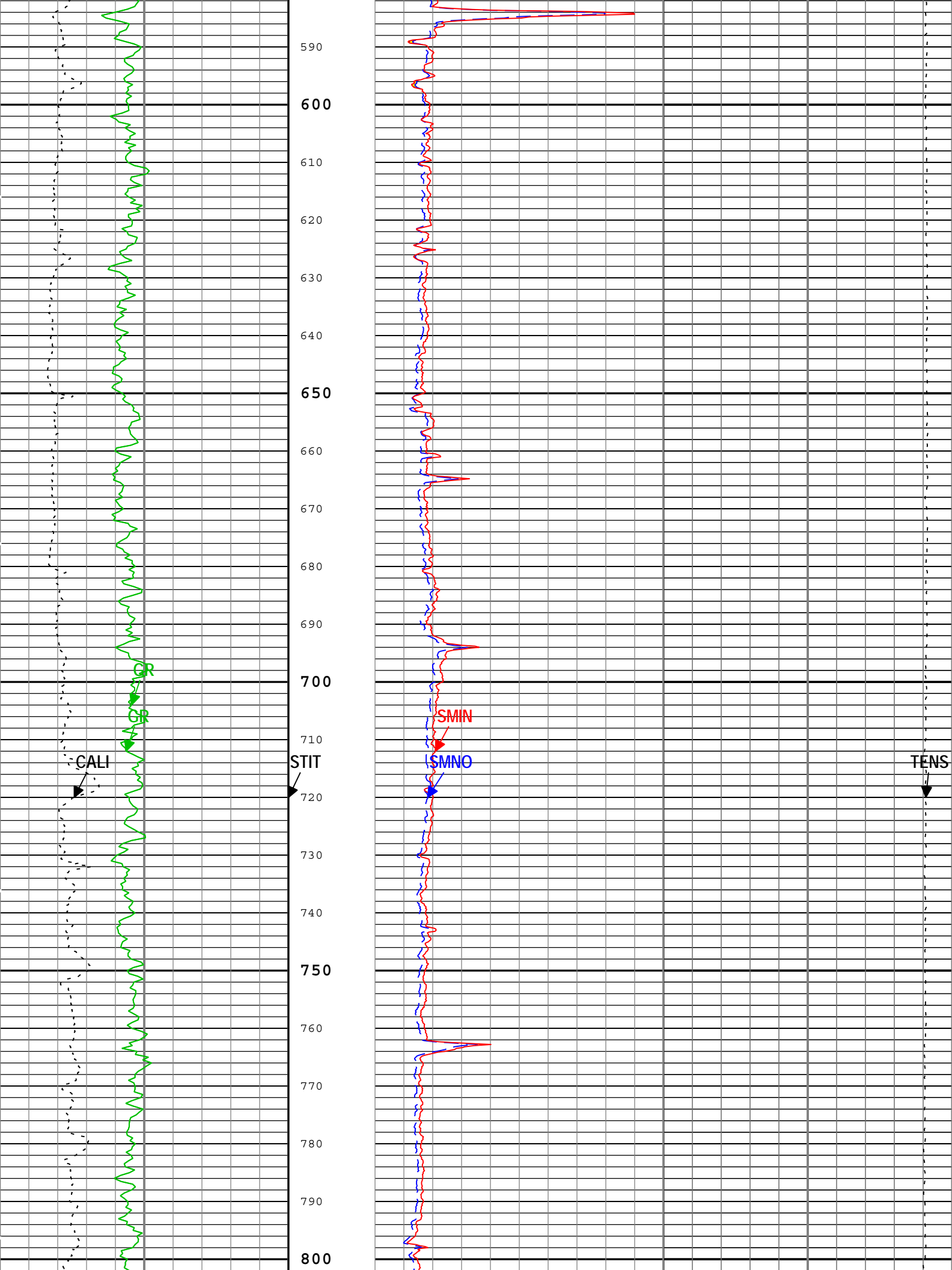
5" Micro Log			
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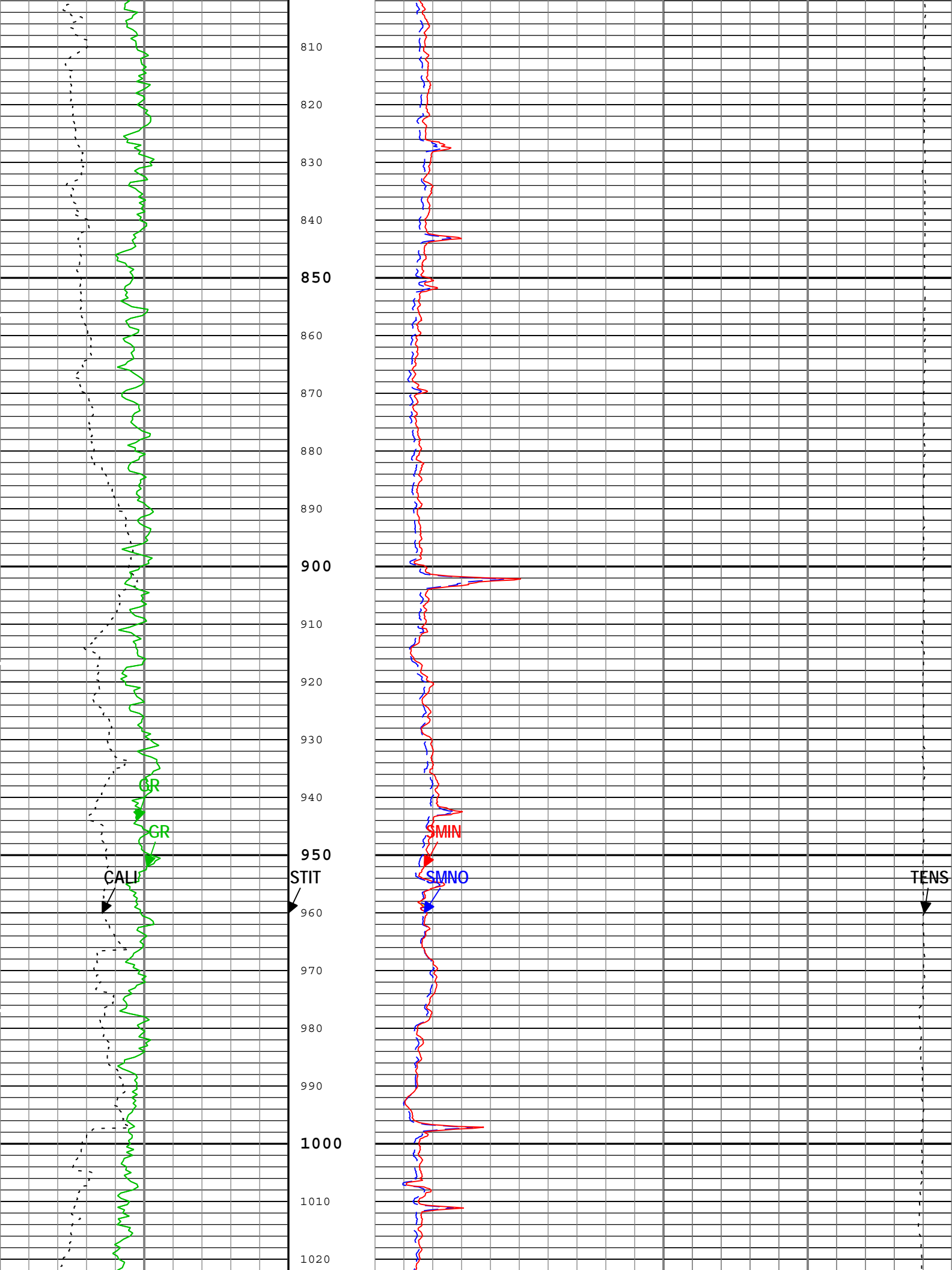
Software Version			
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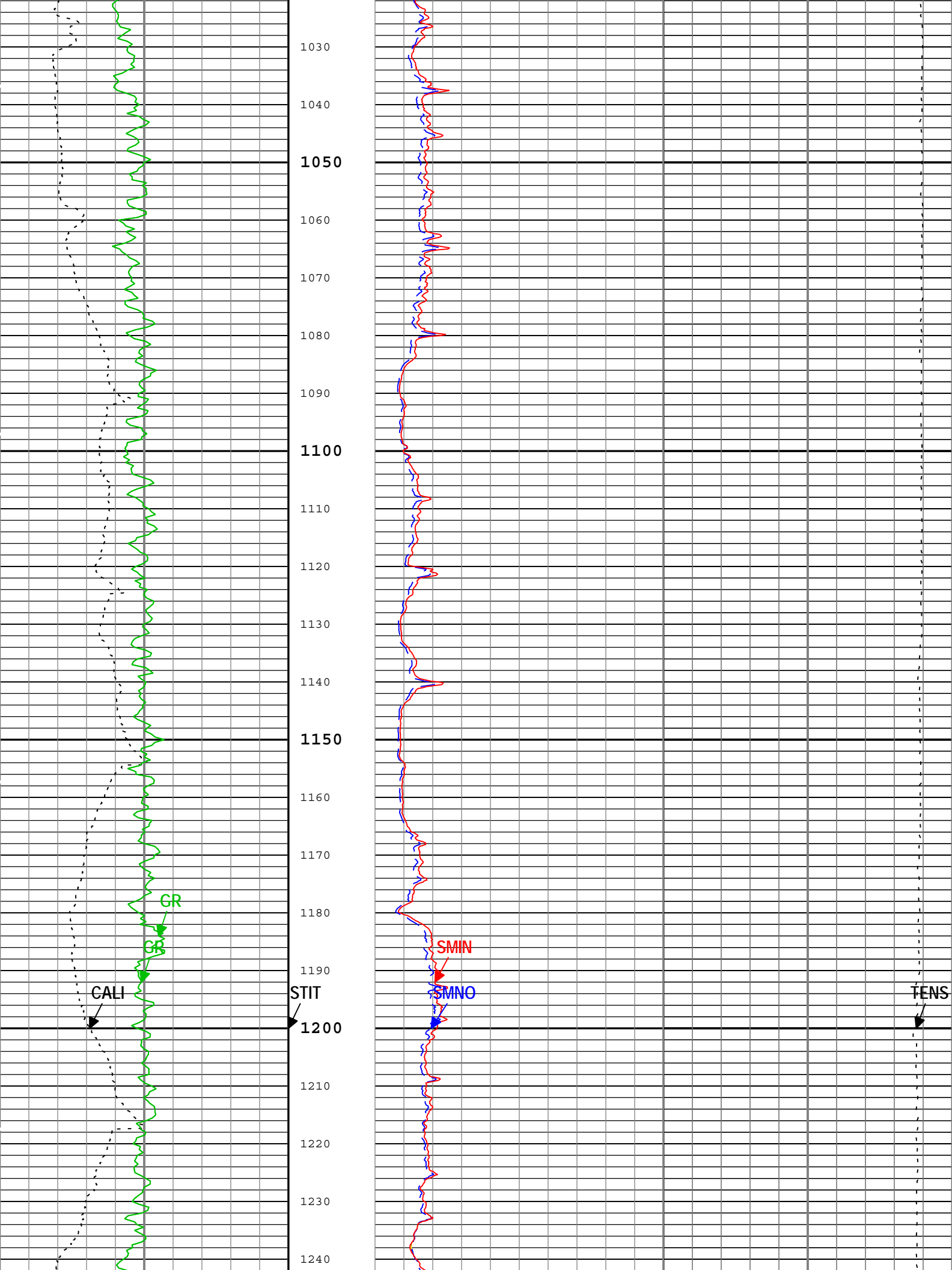
Acquisition System		Version	
MaxWell		4.0.9163.3000	
Application Patch		Patch-SP-10767_13393-4.0.9163.3001	

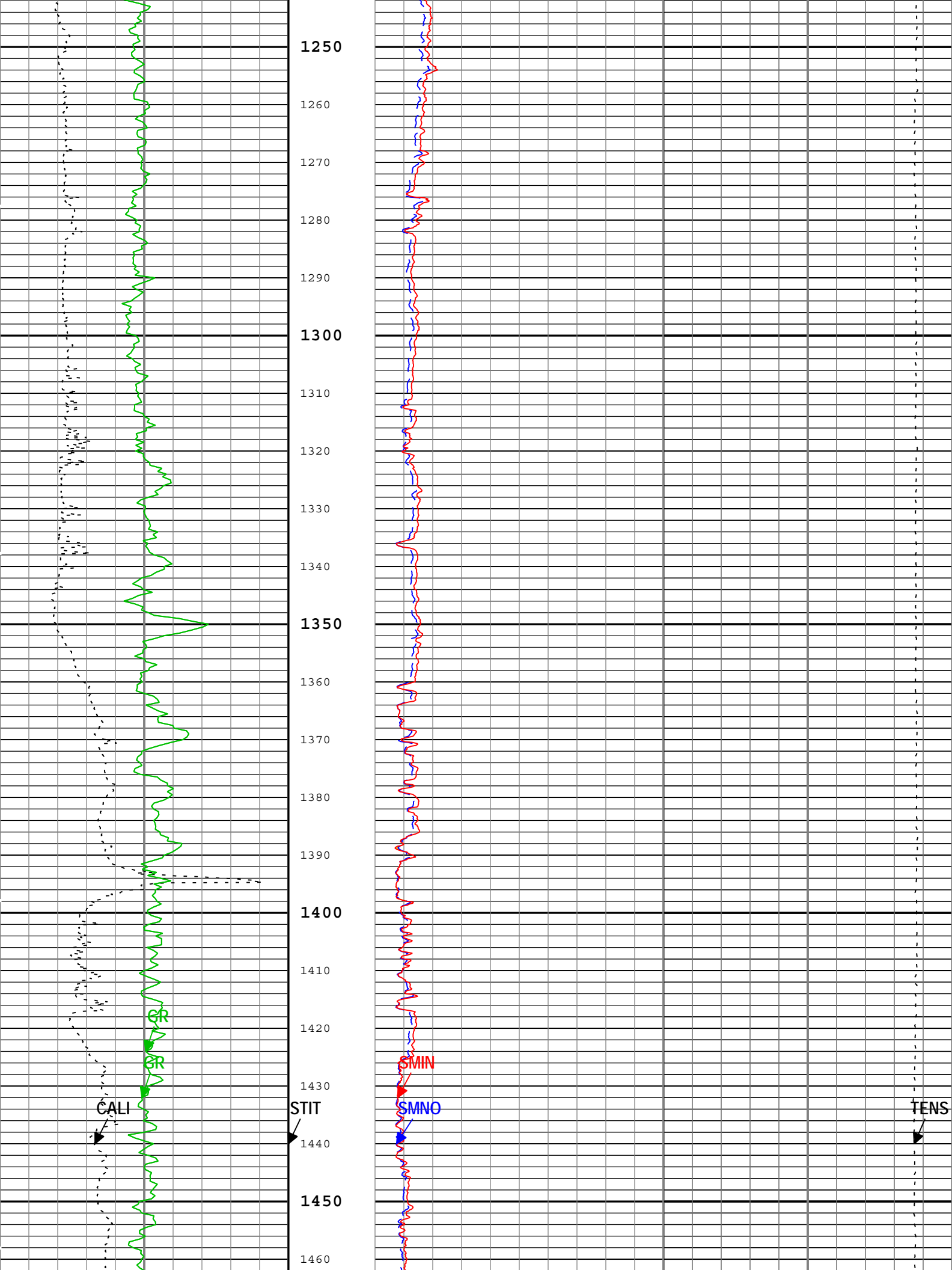
Computation	Description	Version	

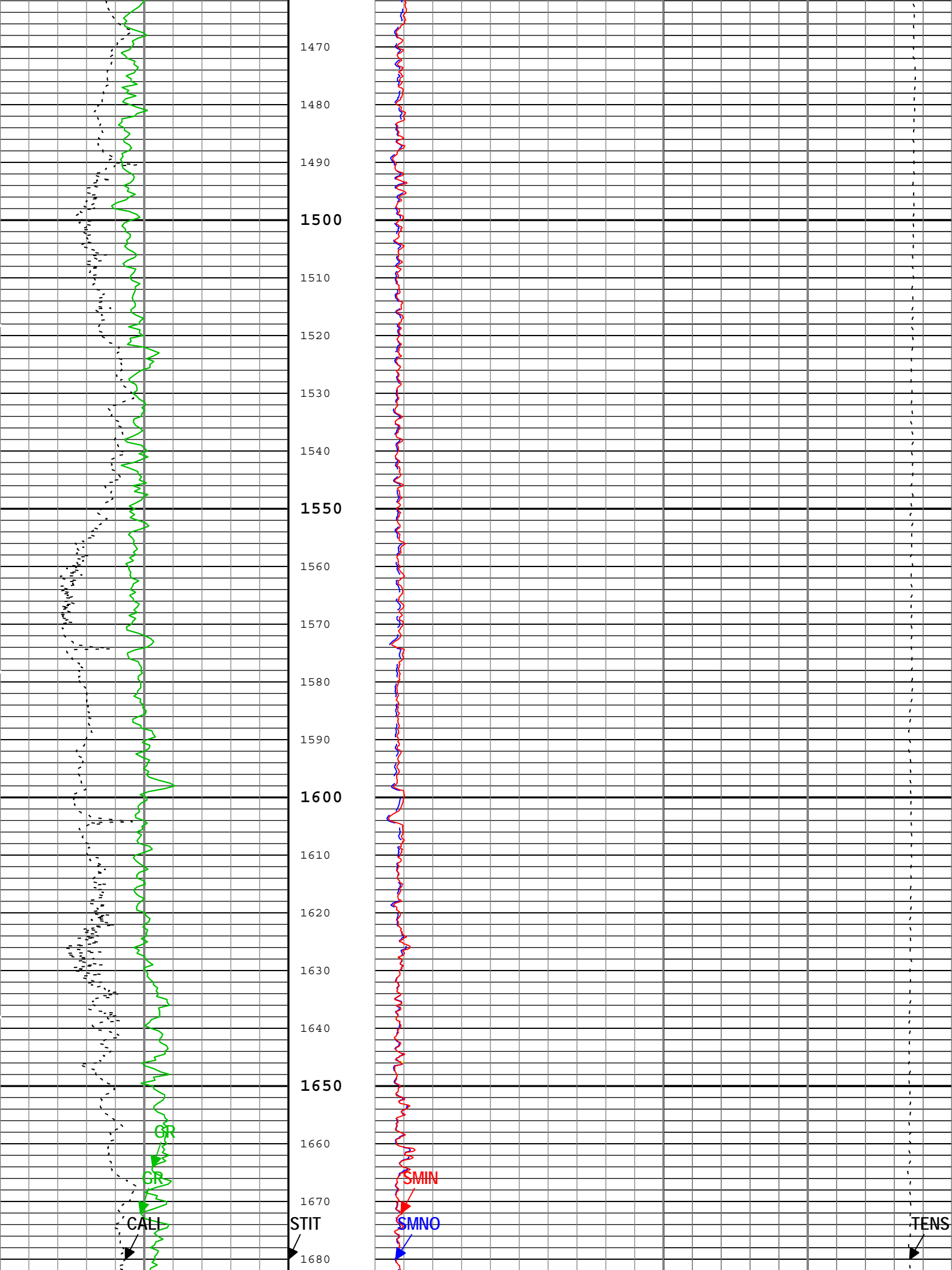


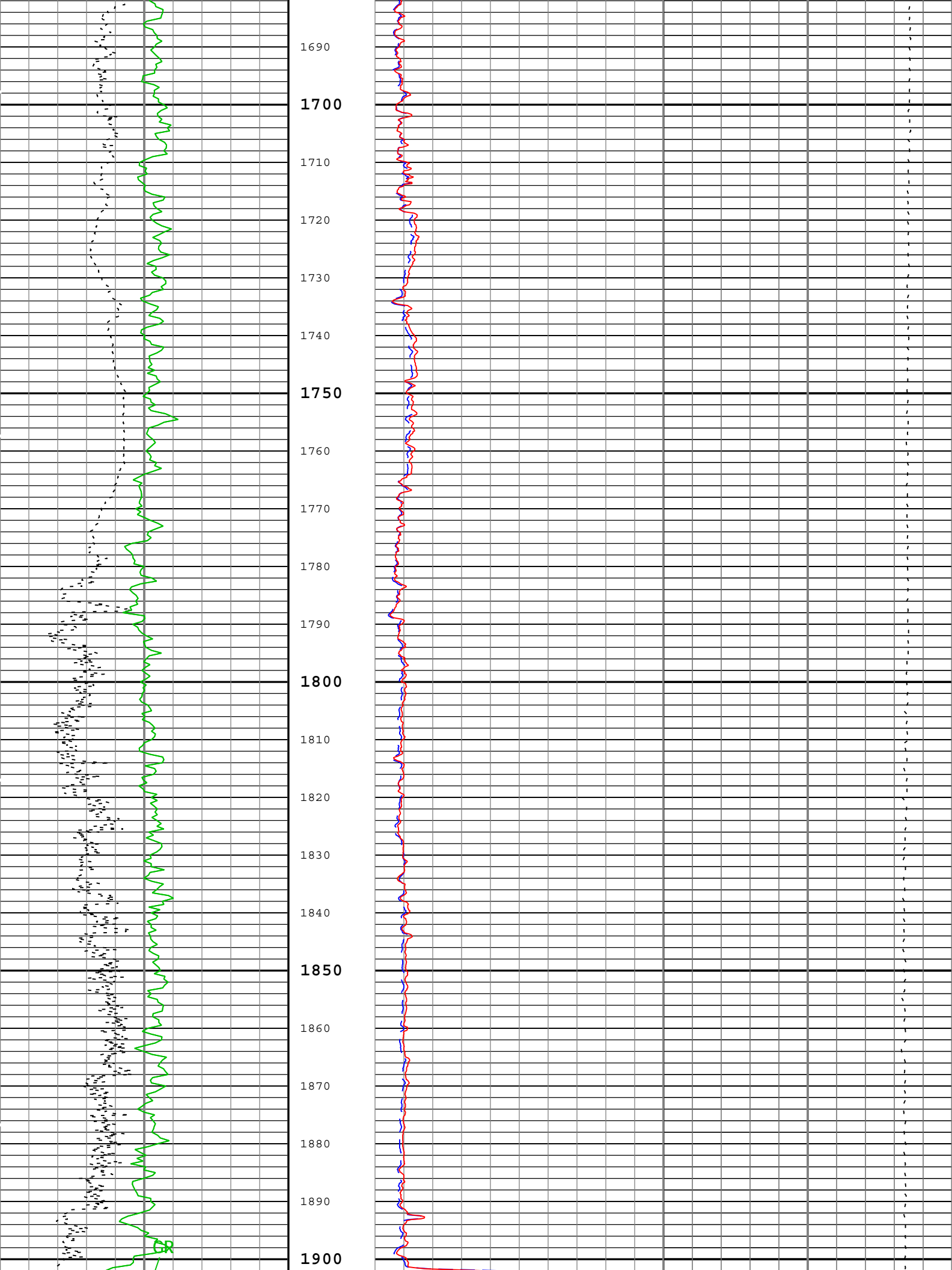


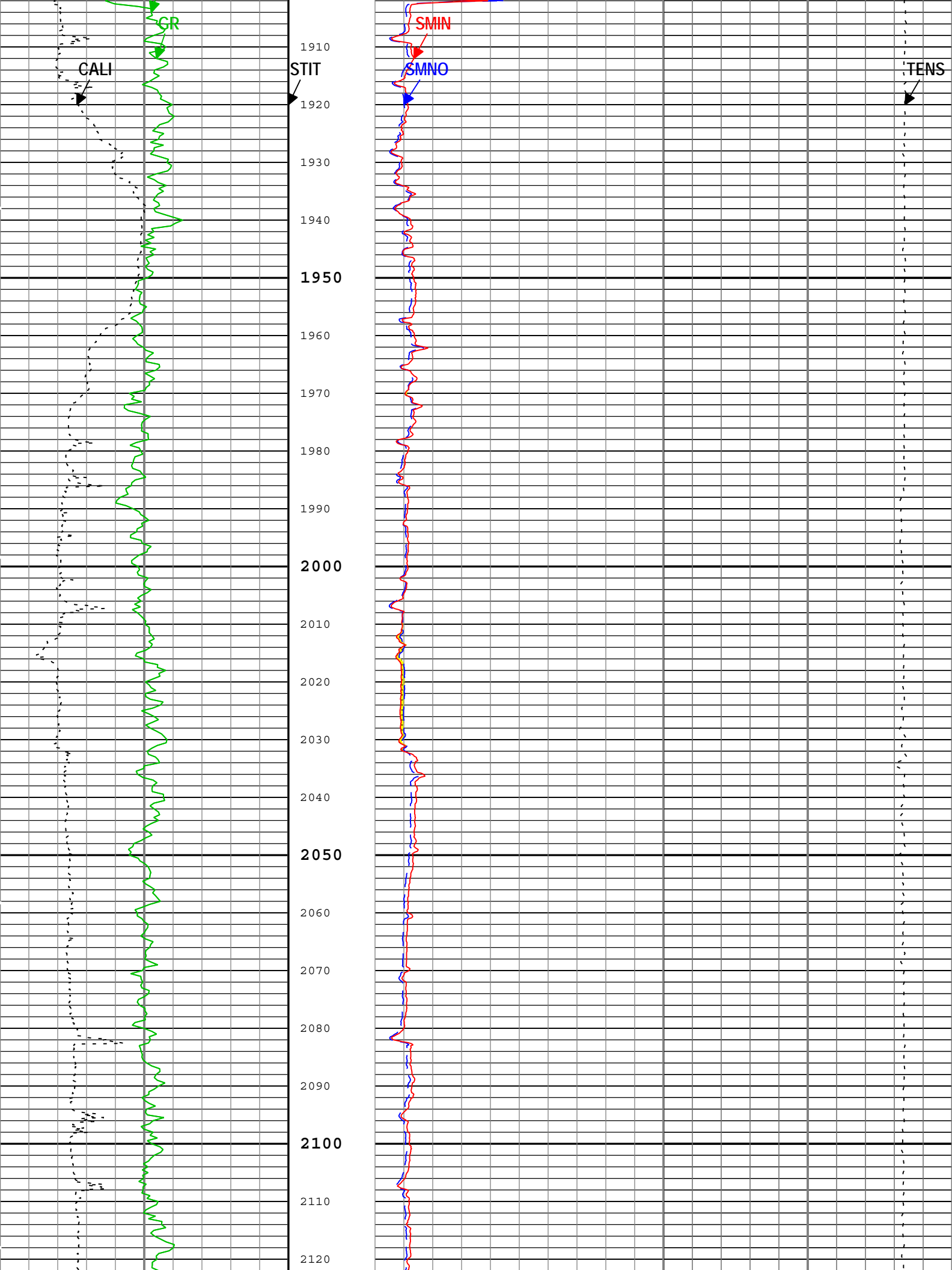


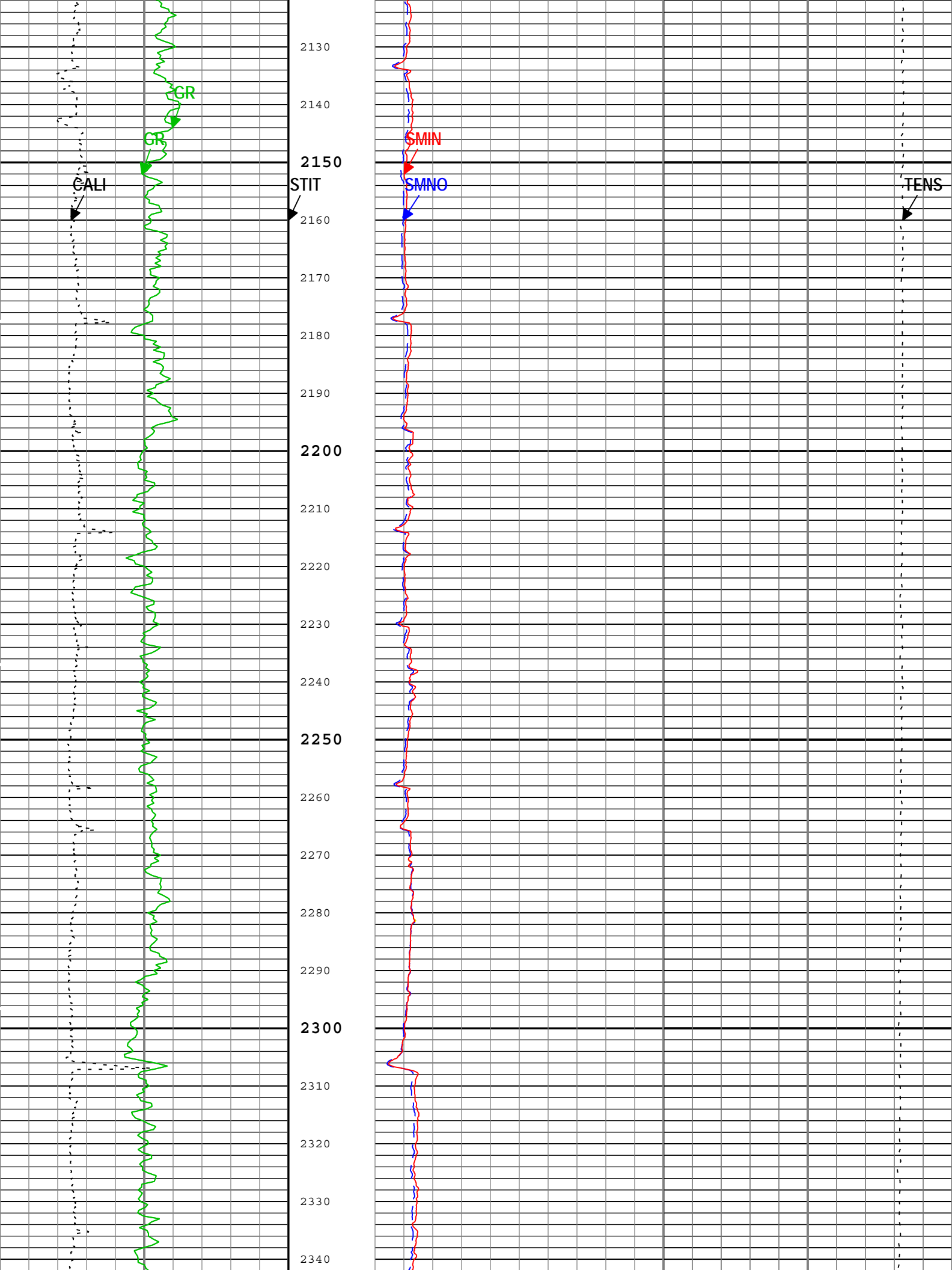


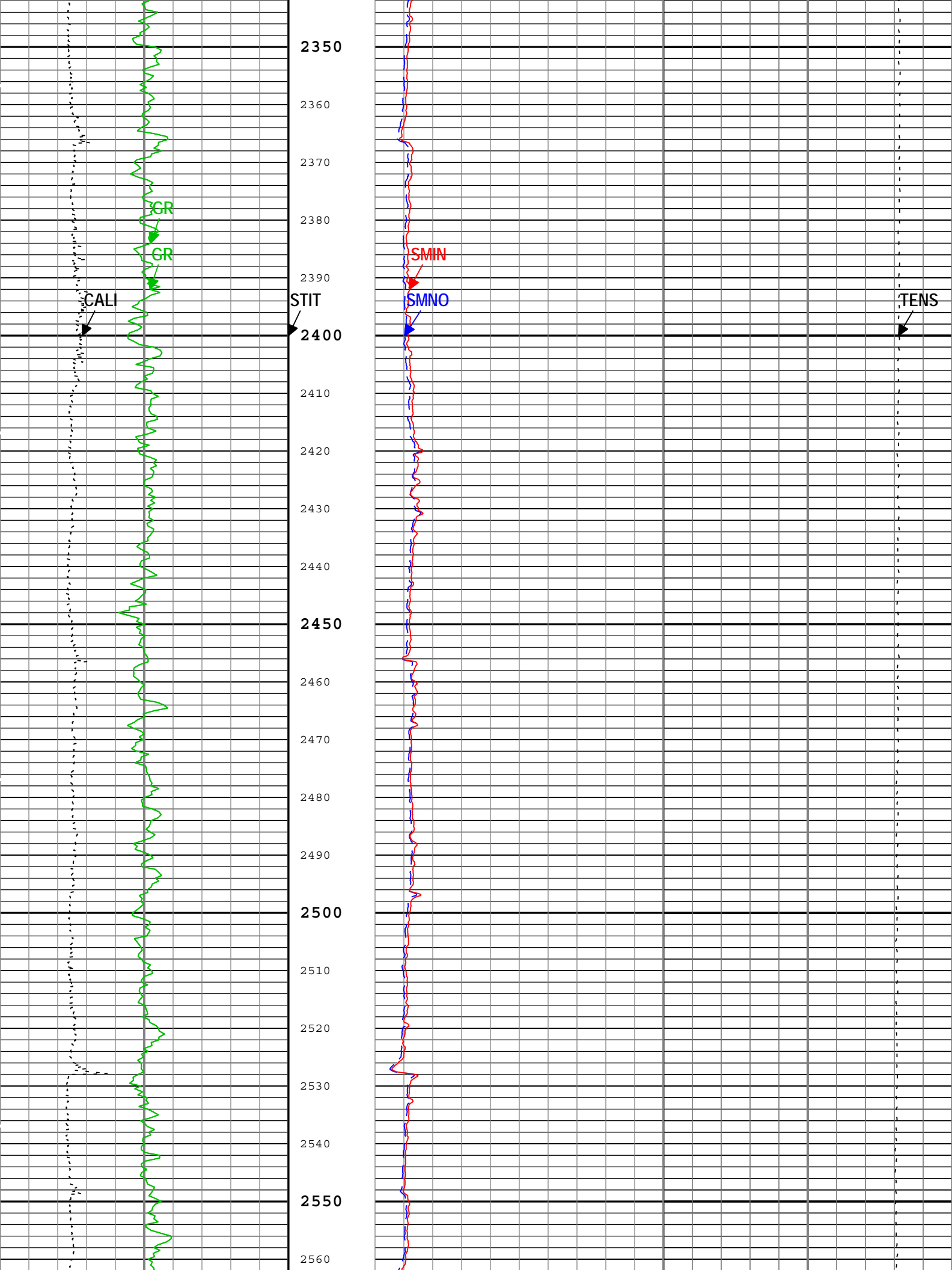


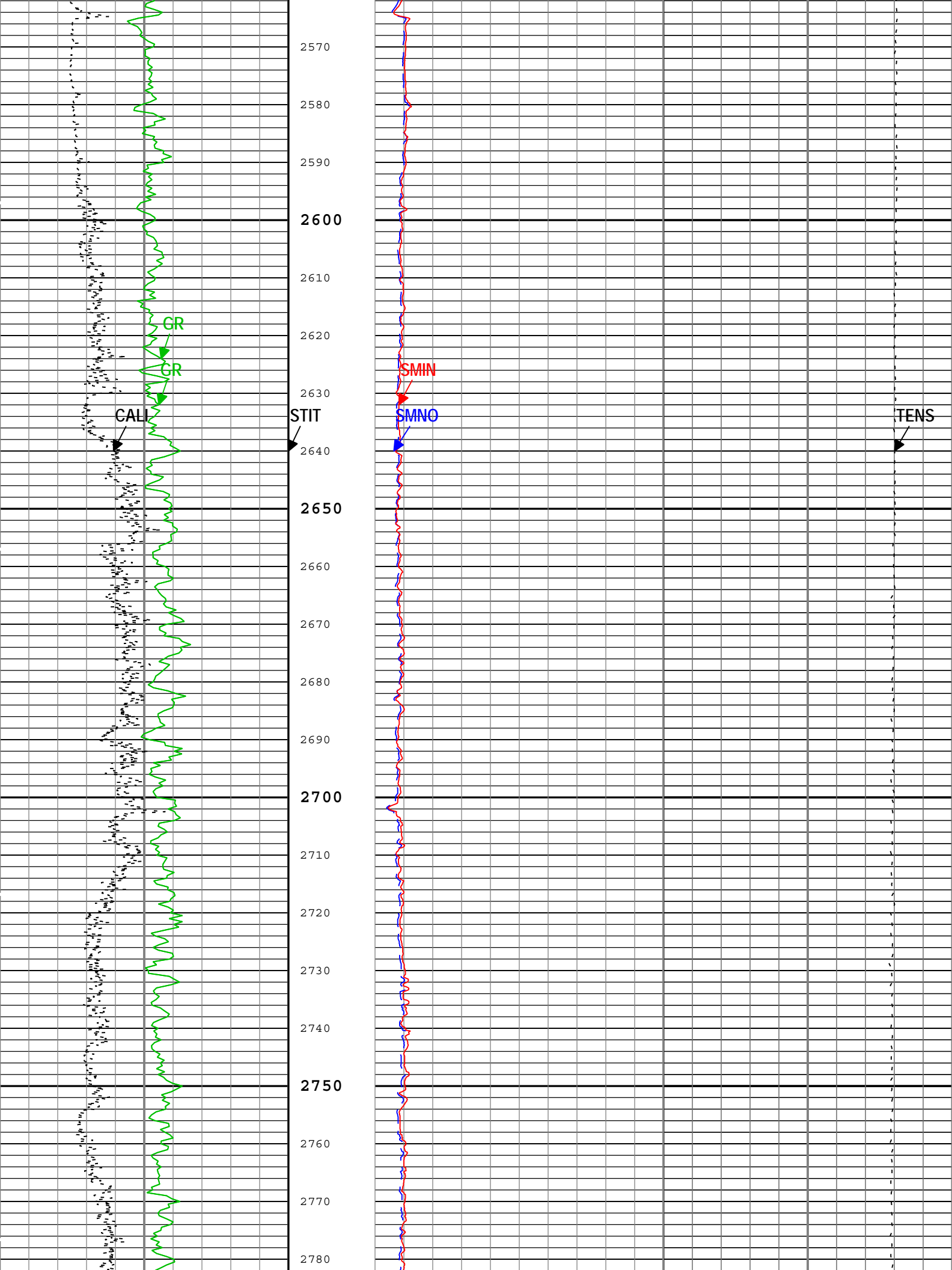


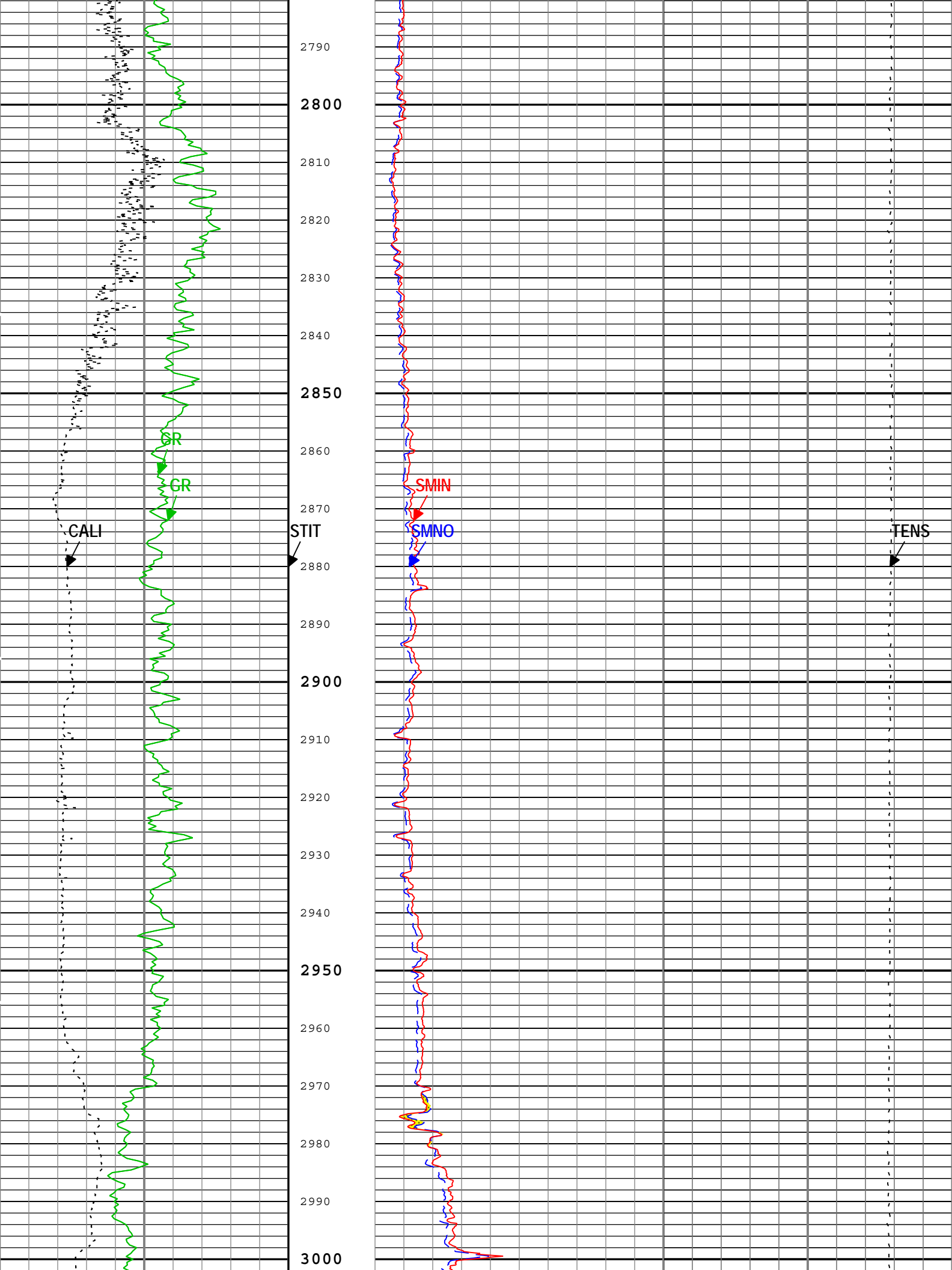


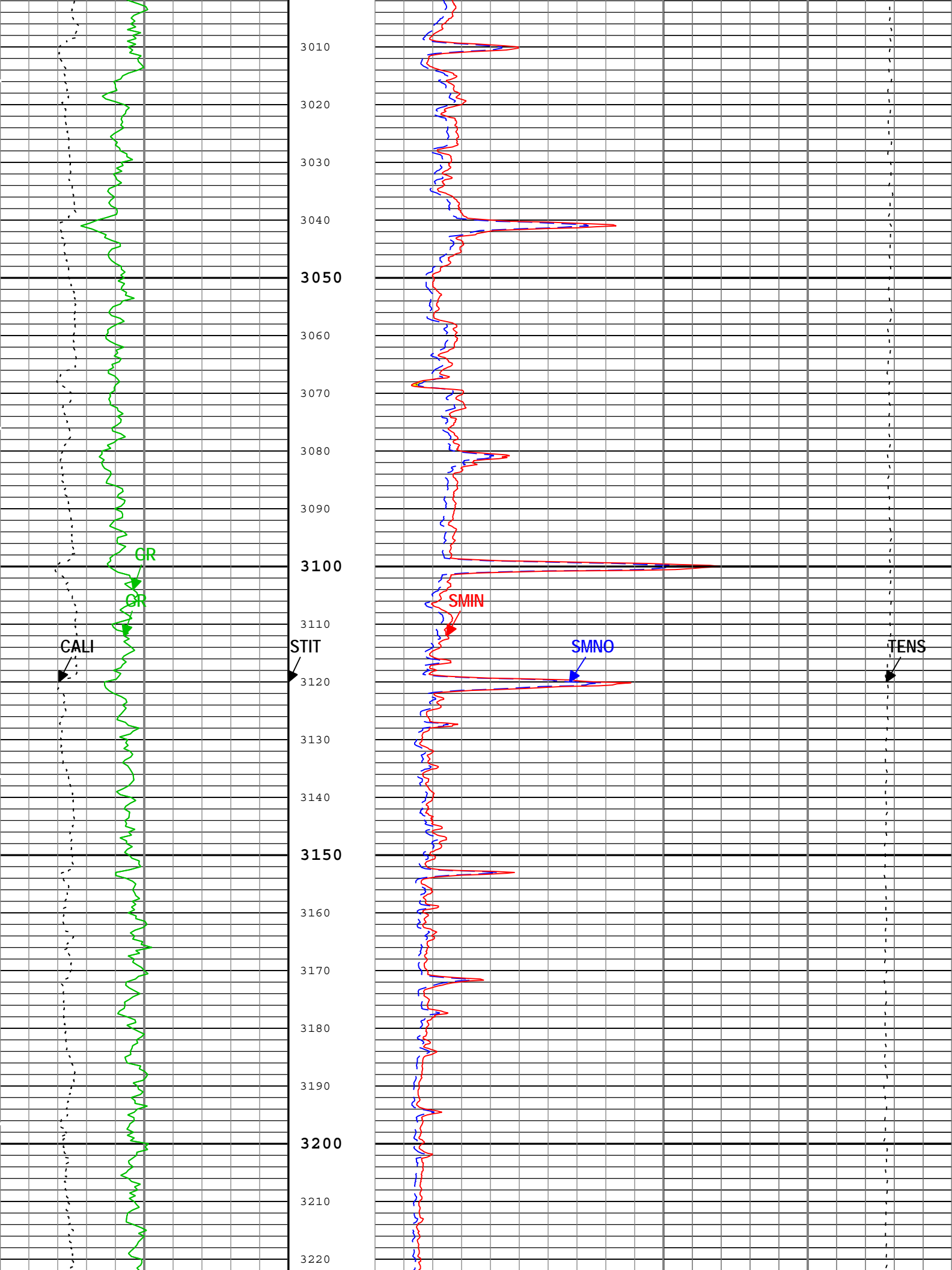


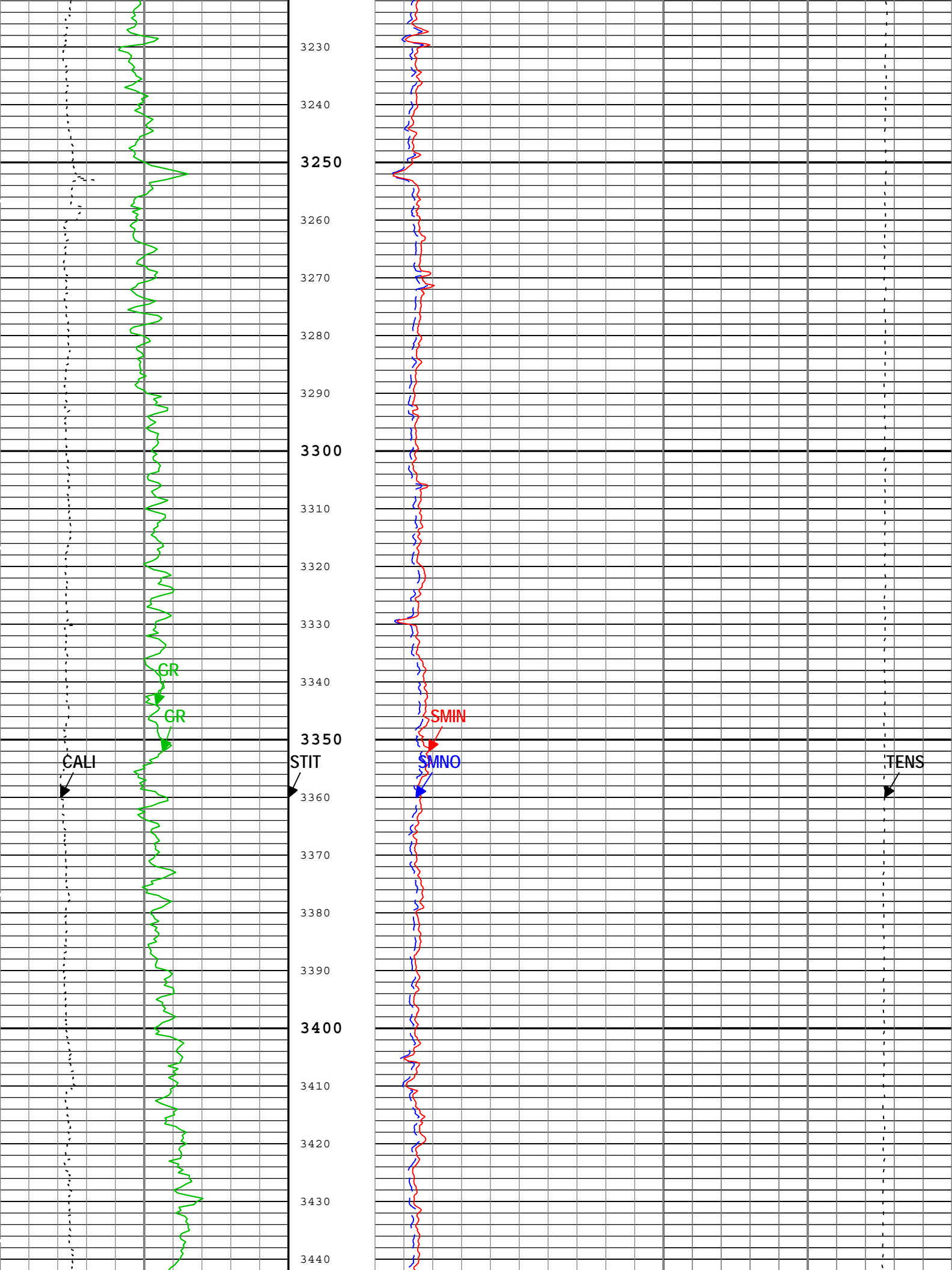


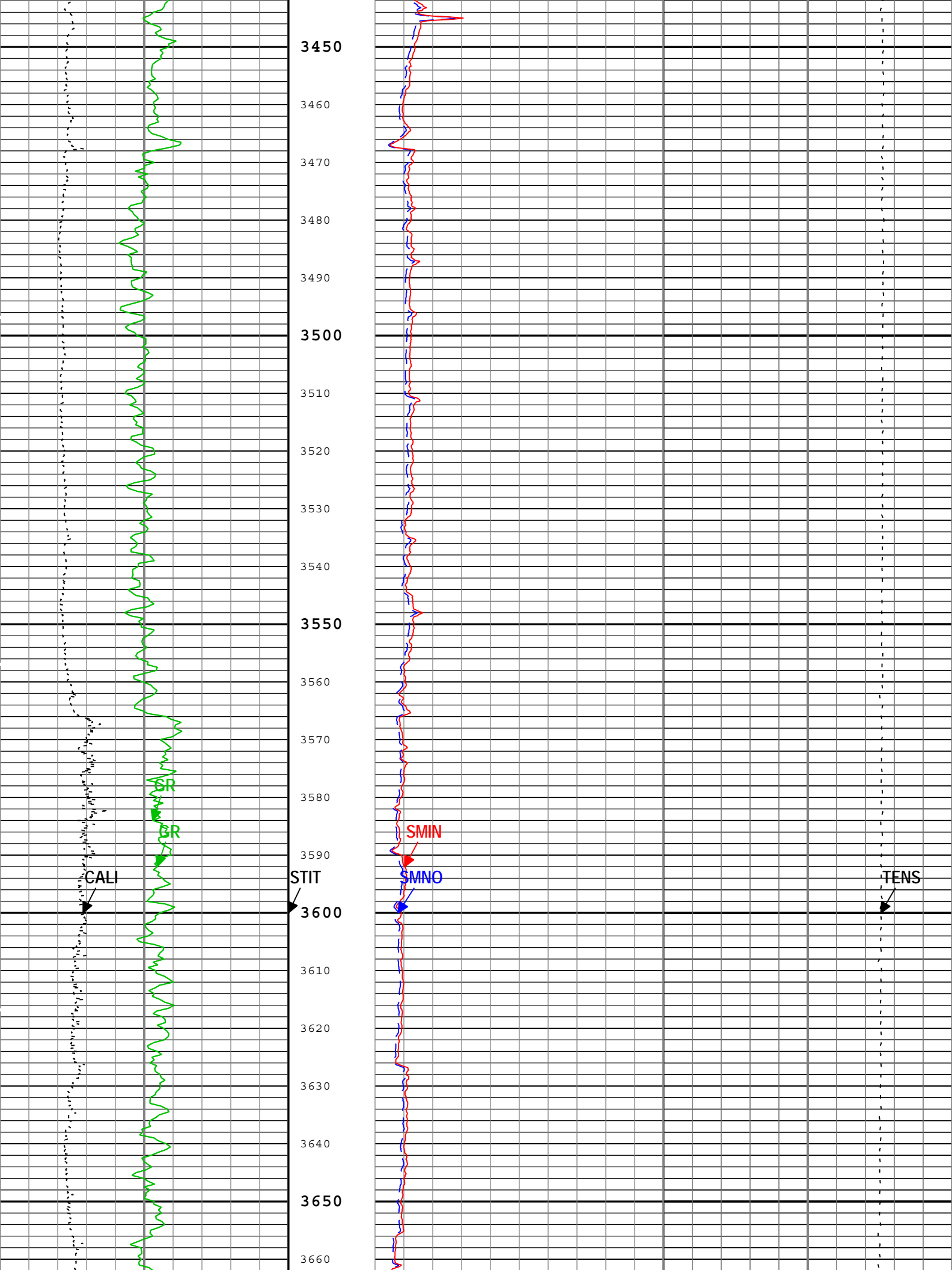


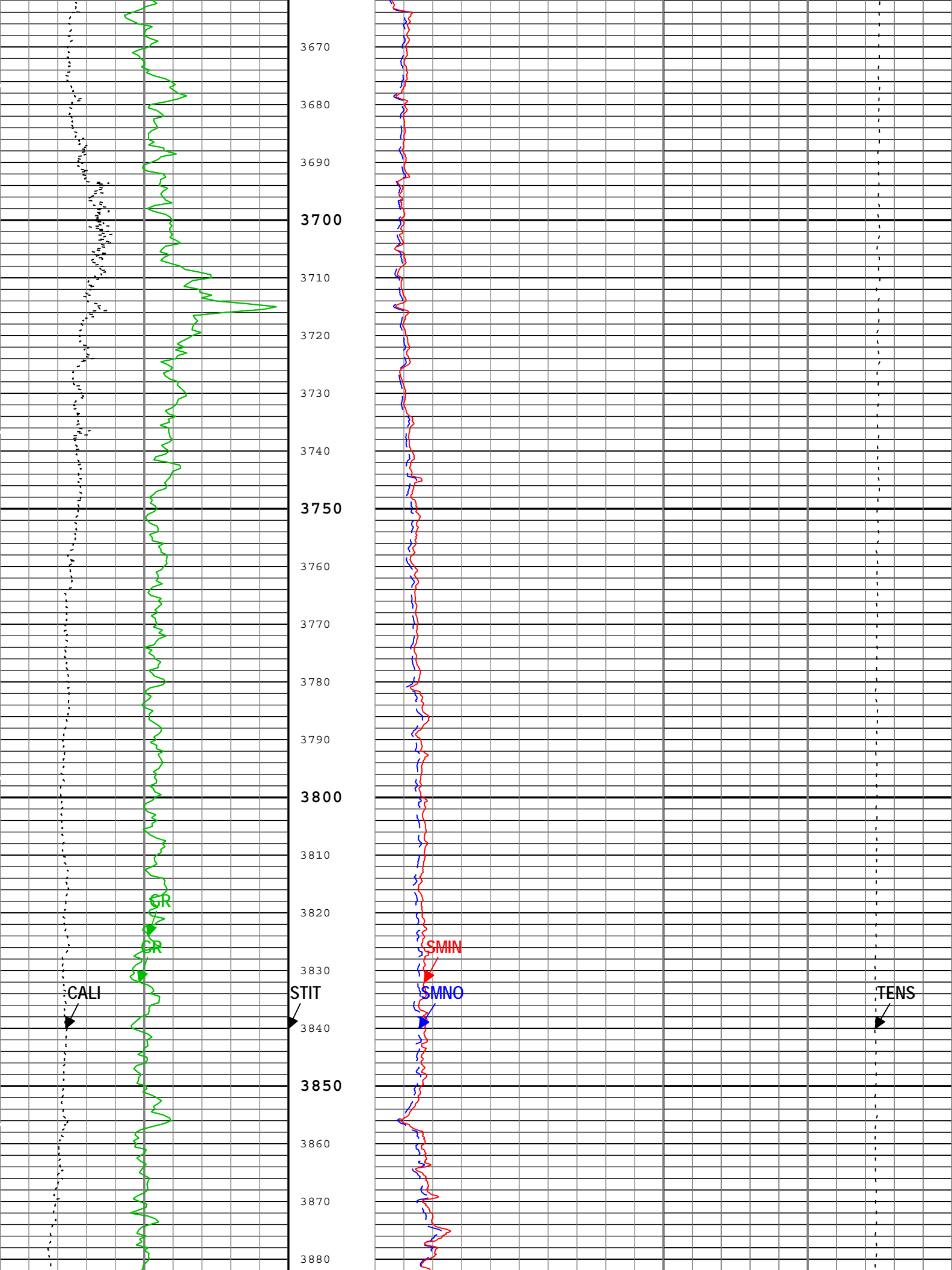


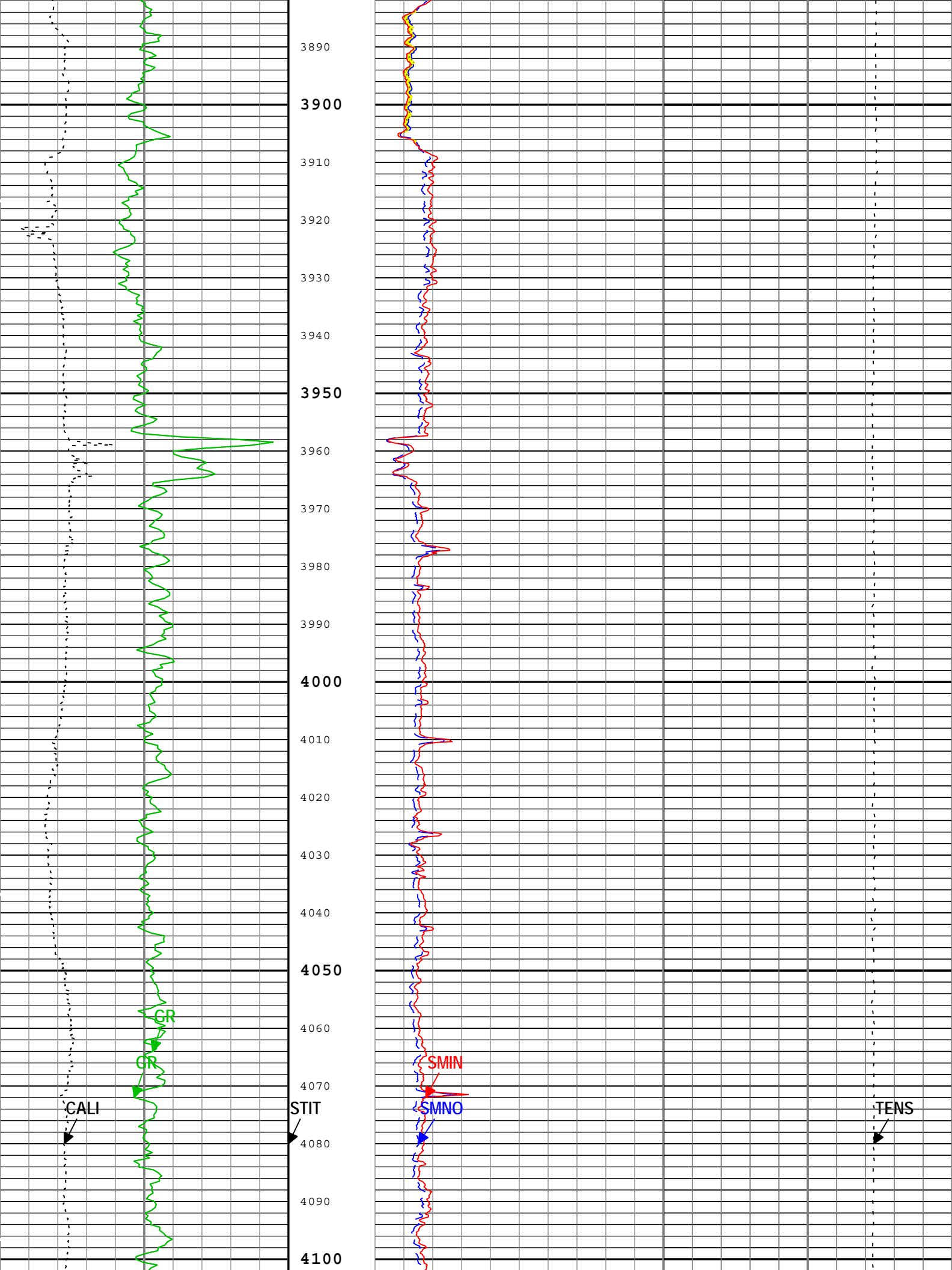


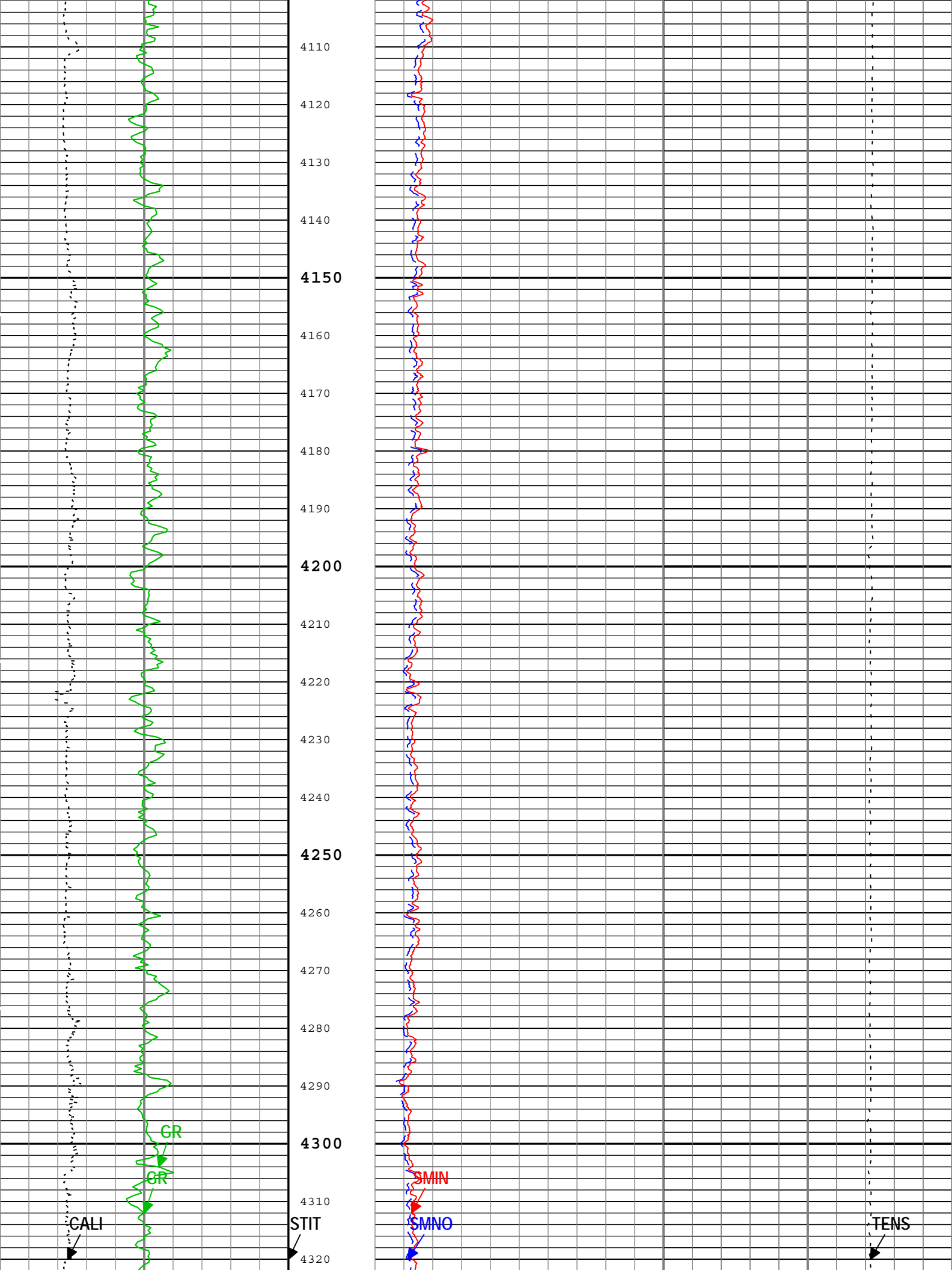


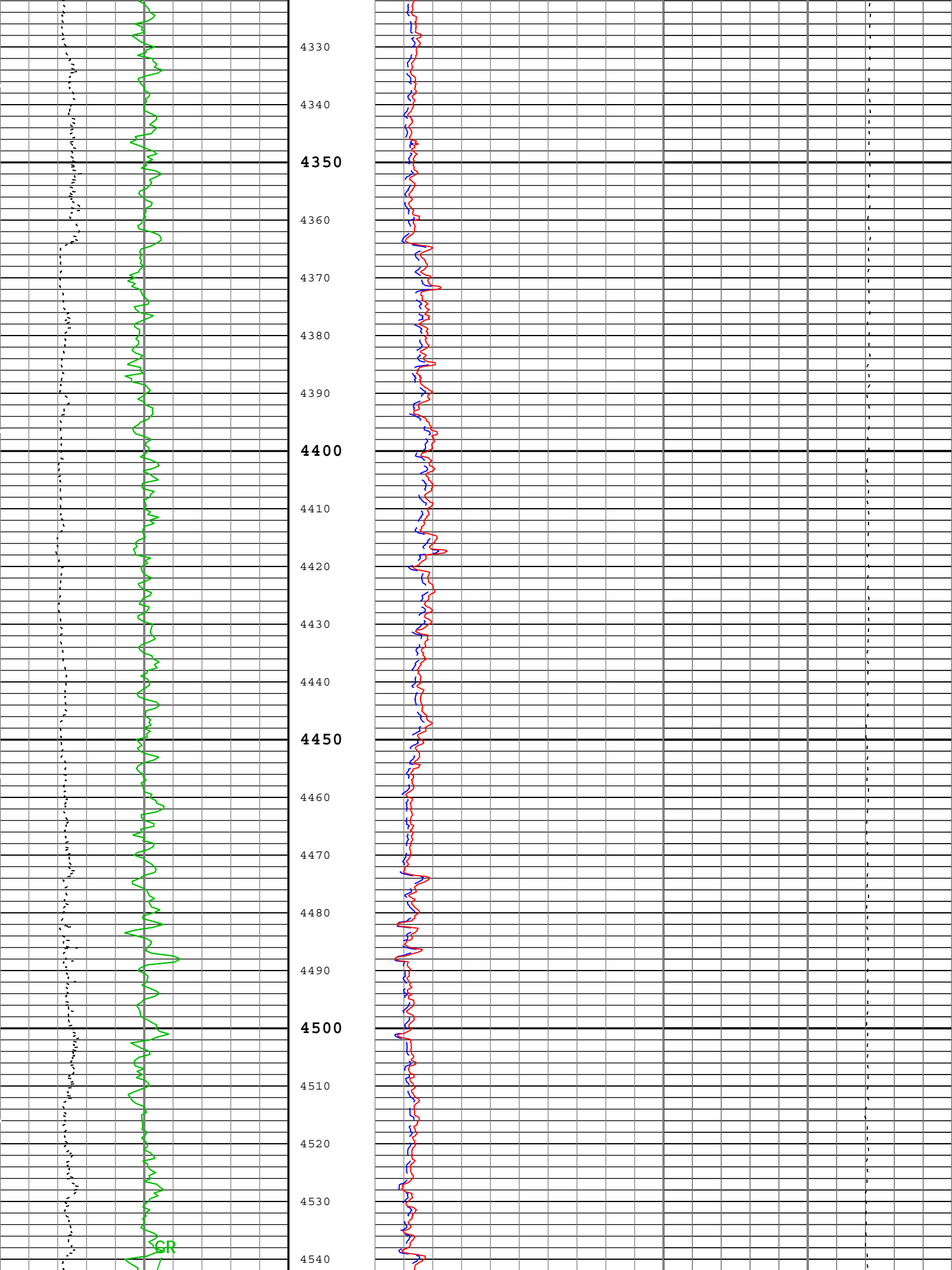


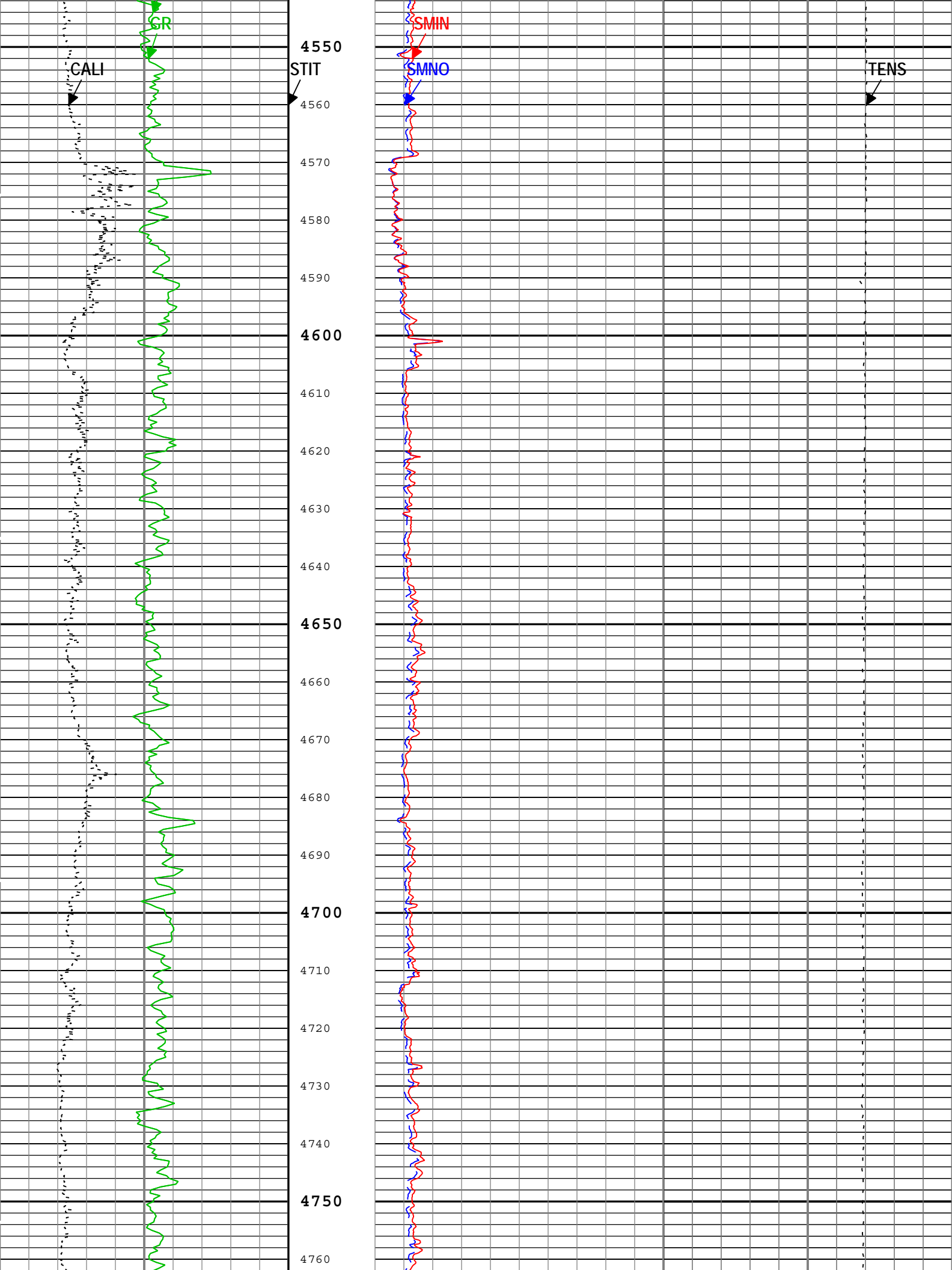


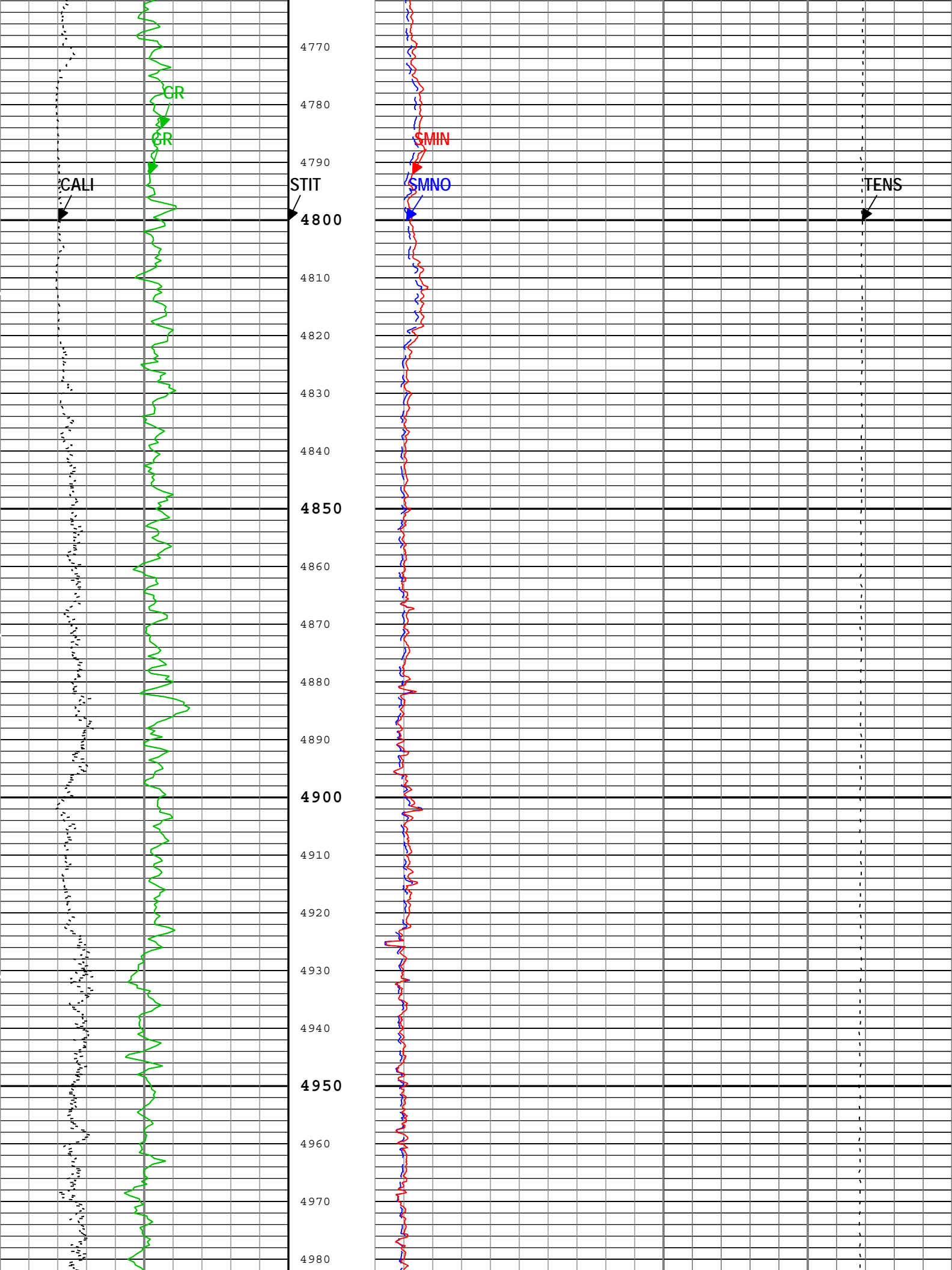


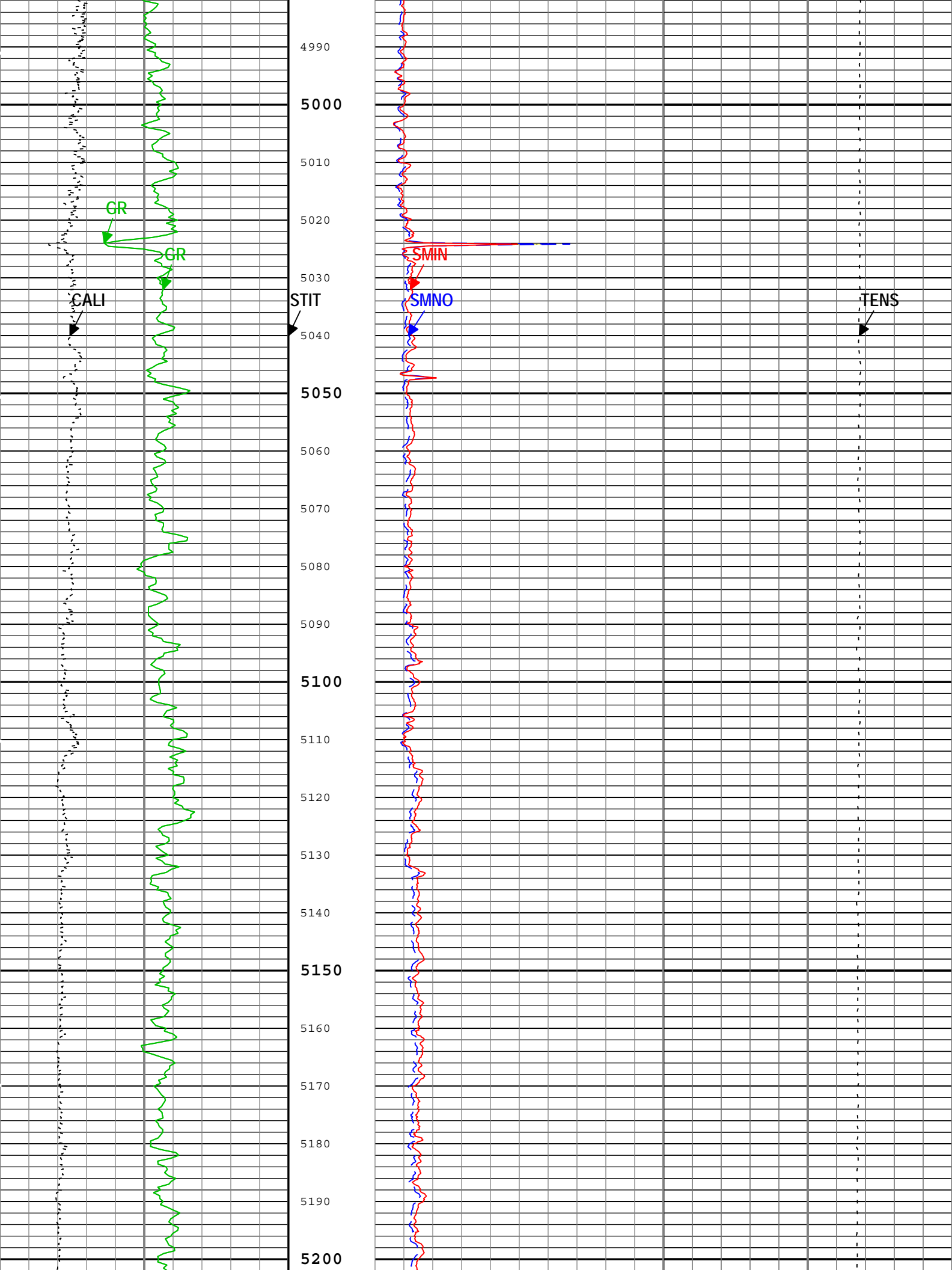


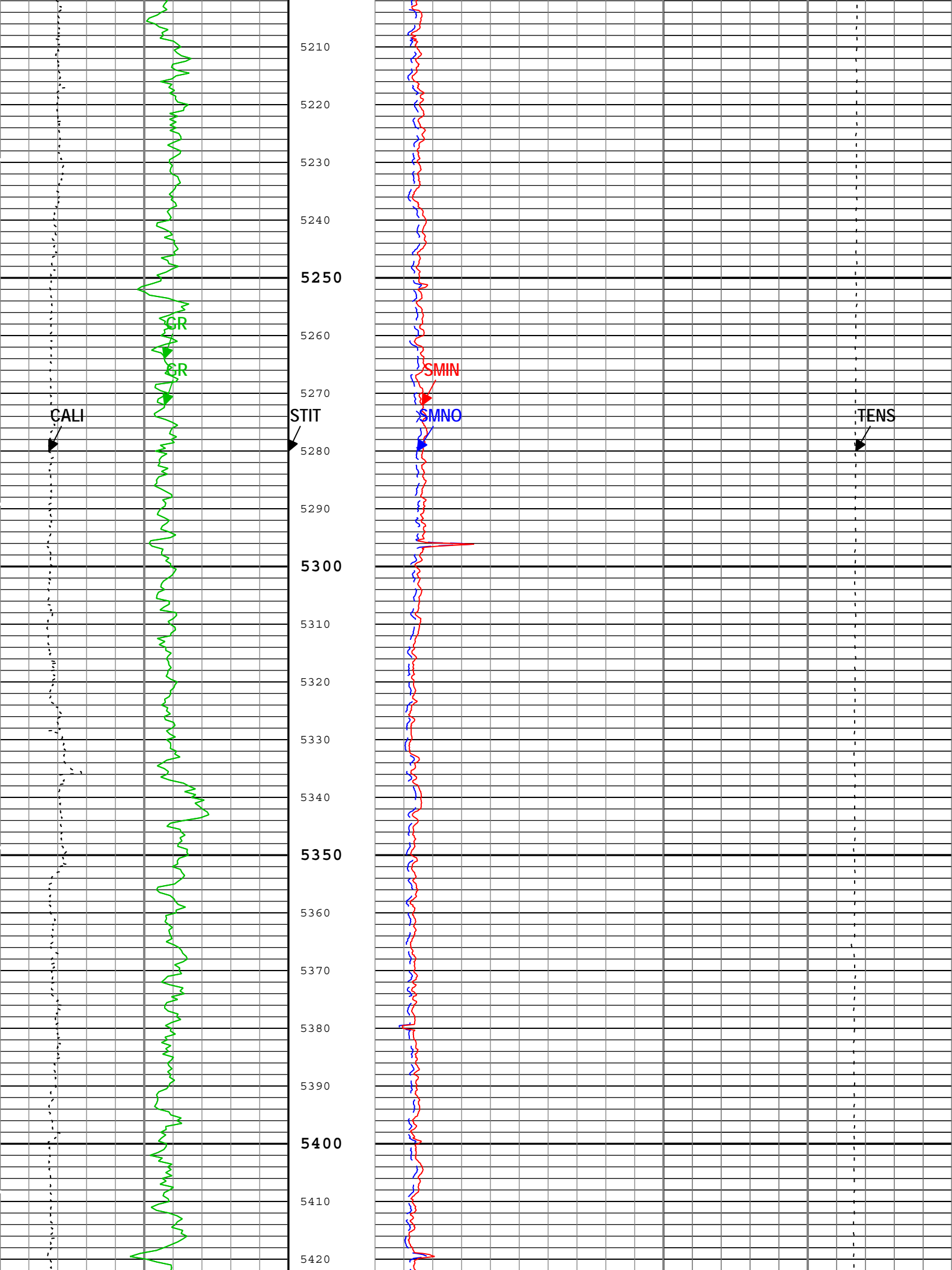


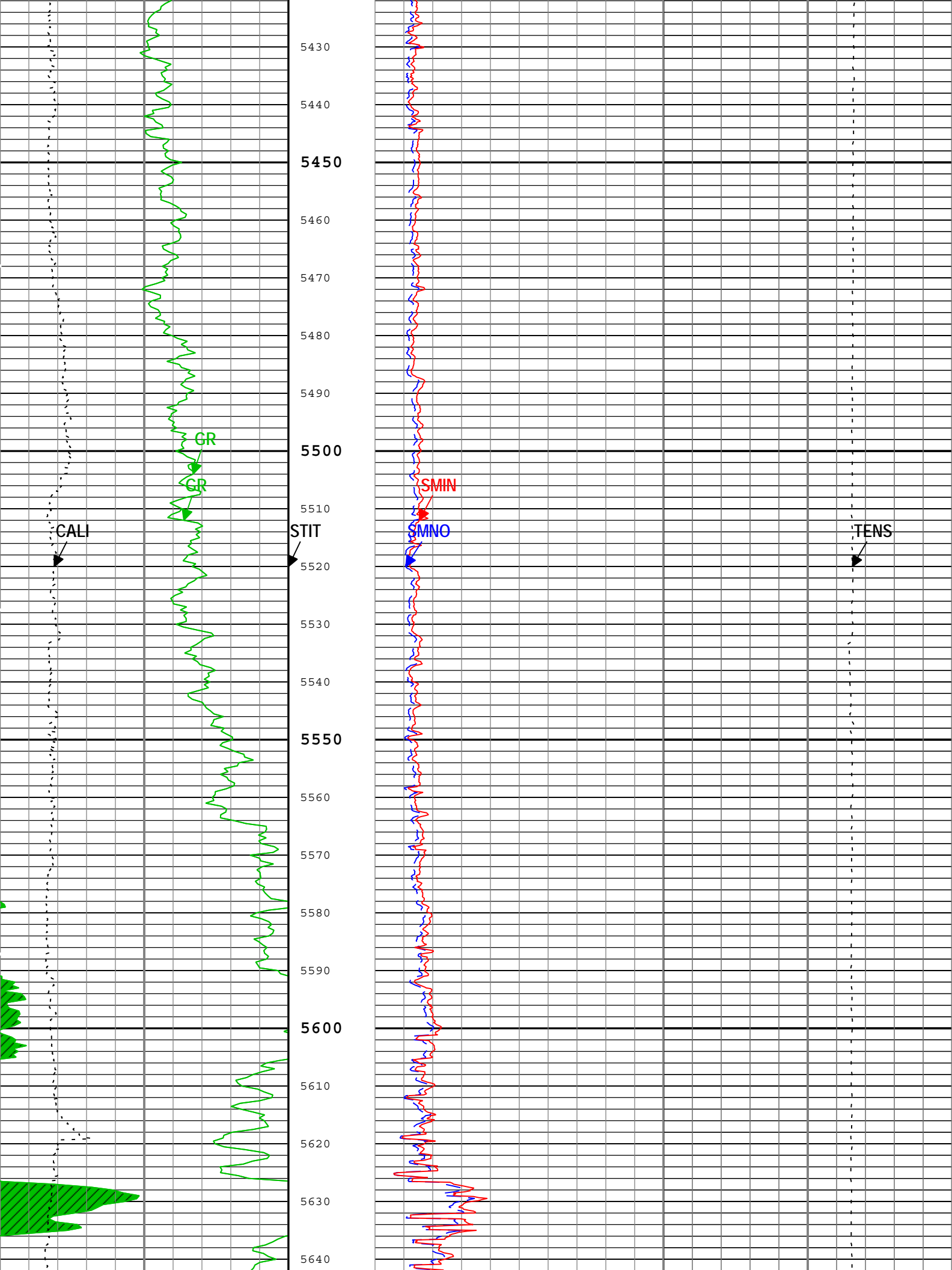


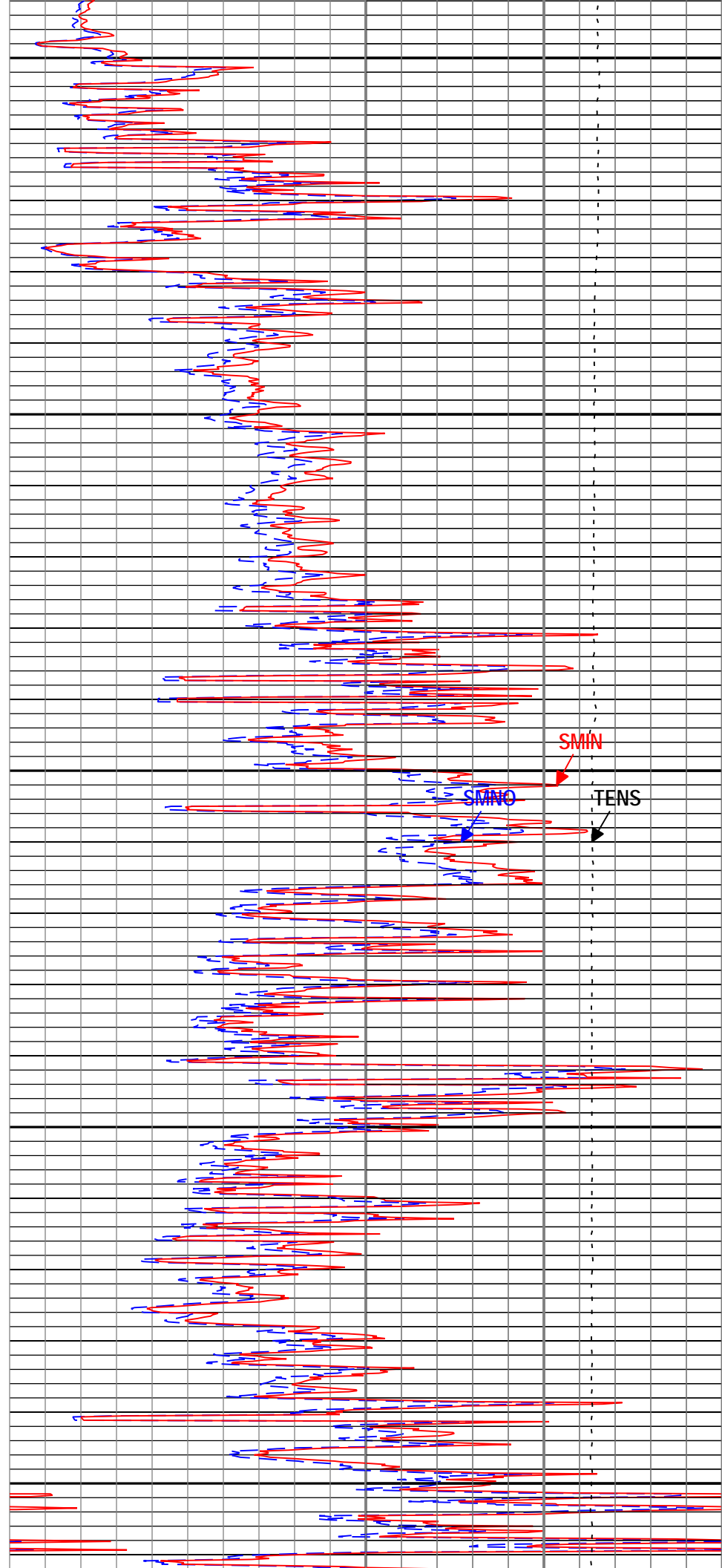
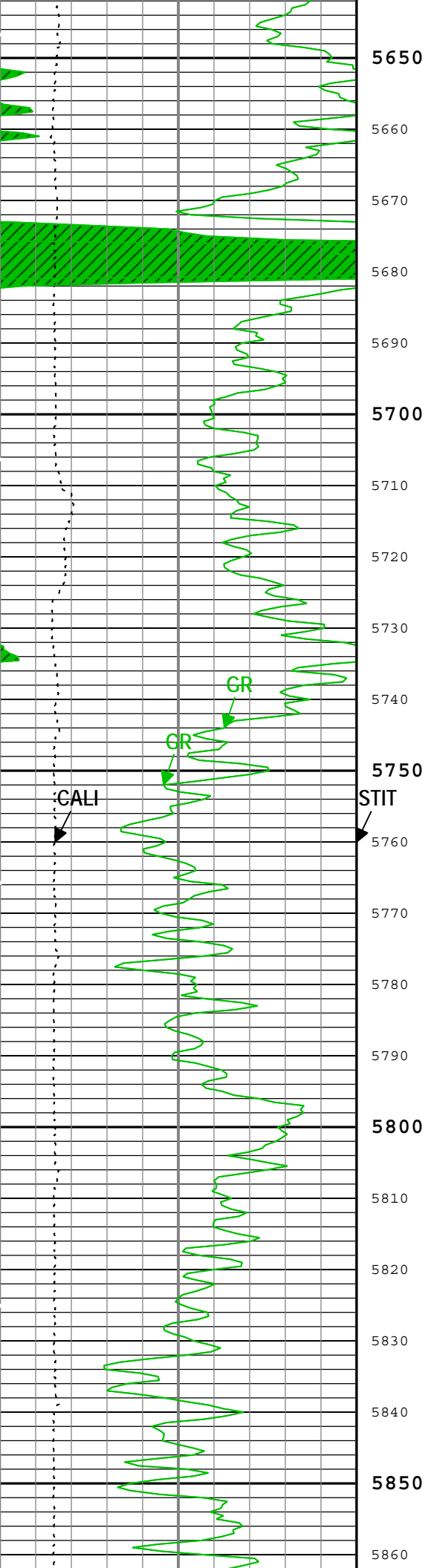


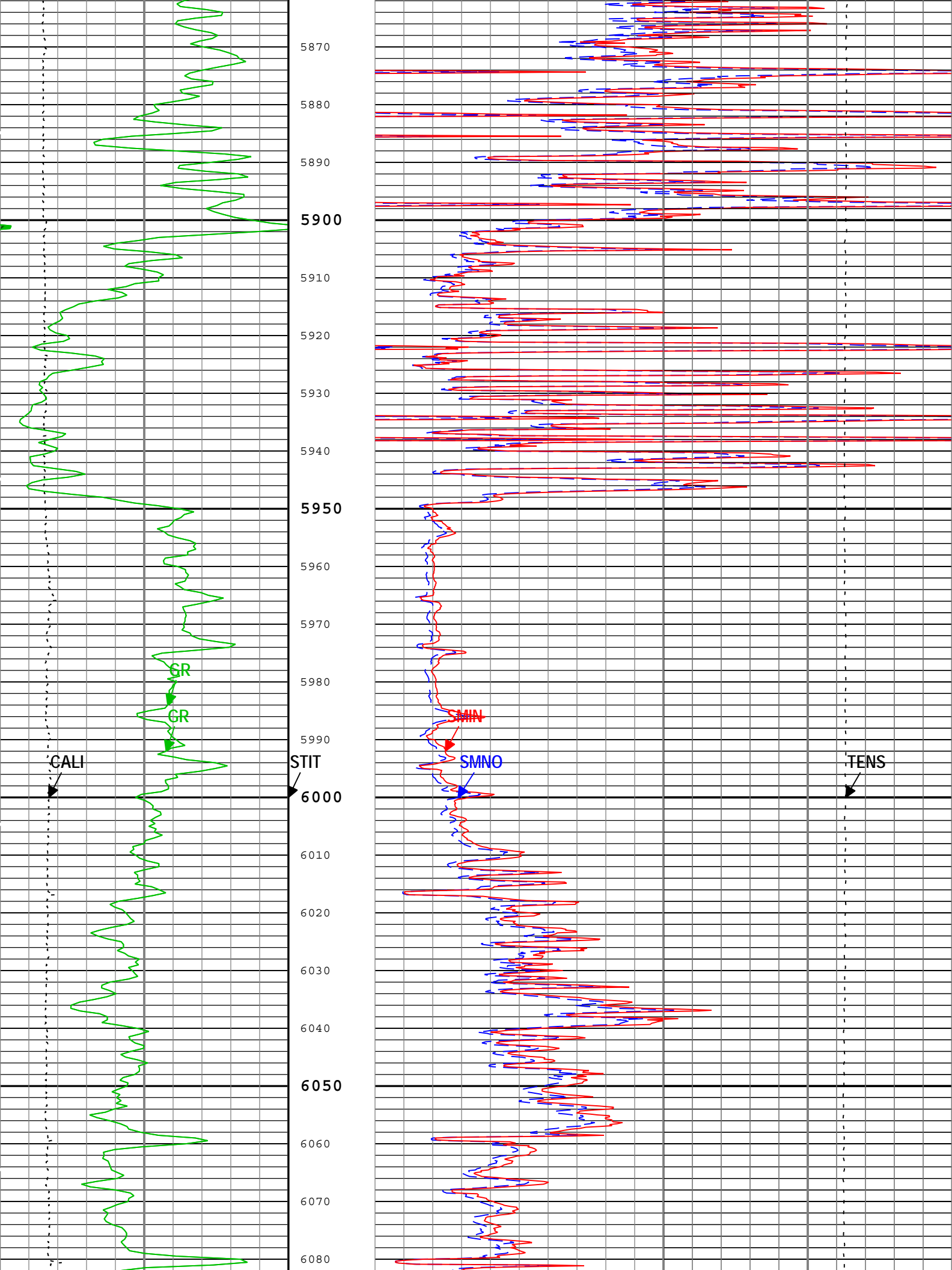


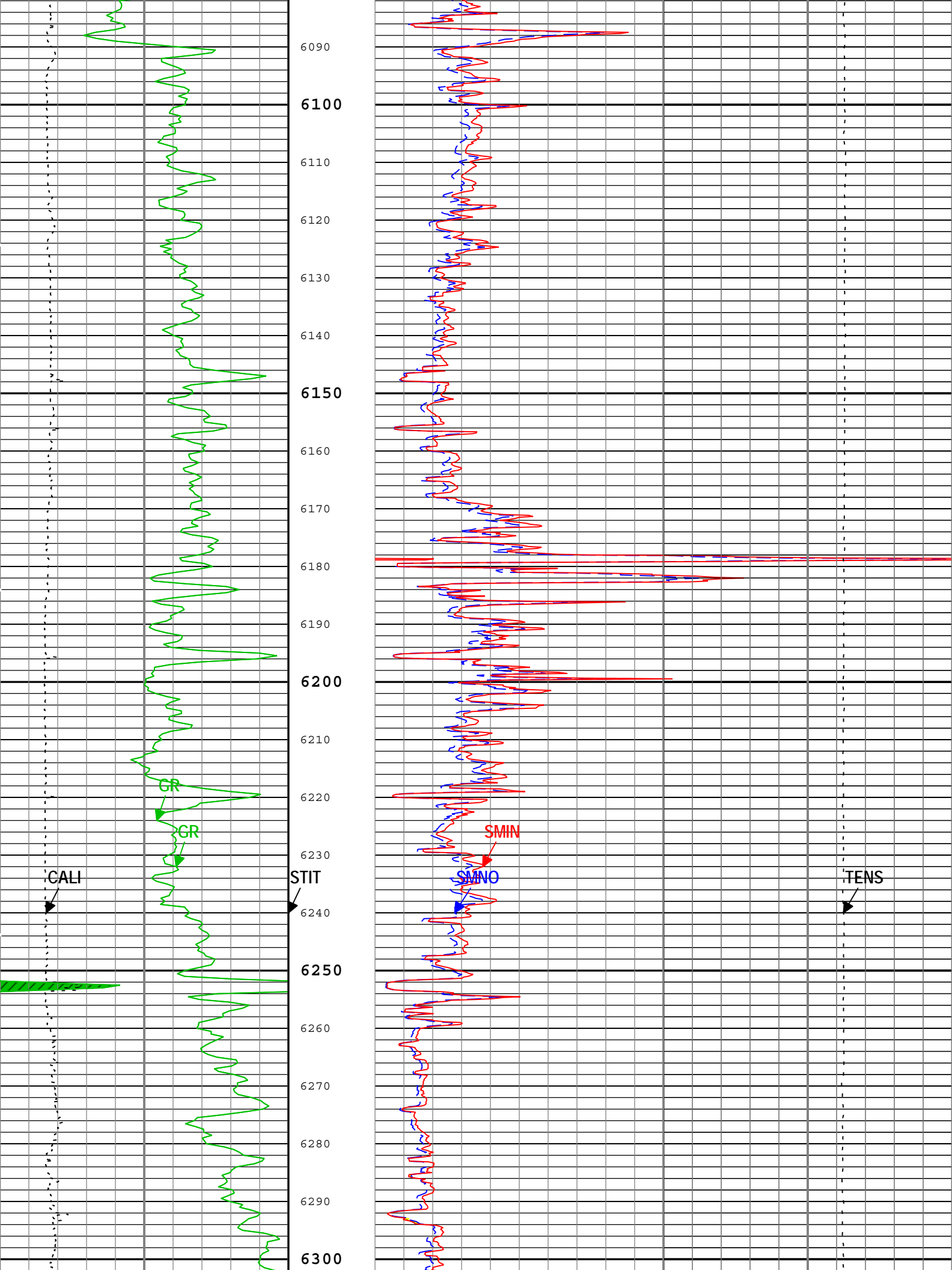


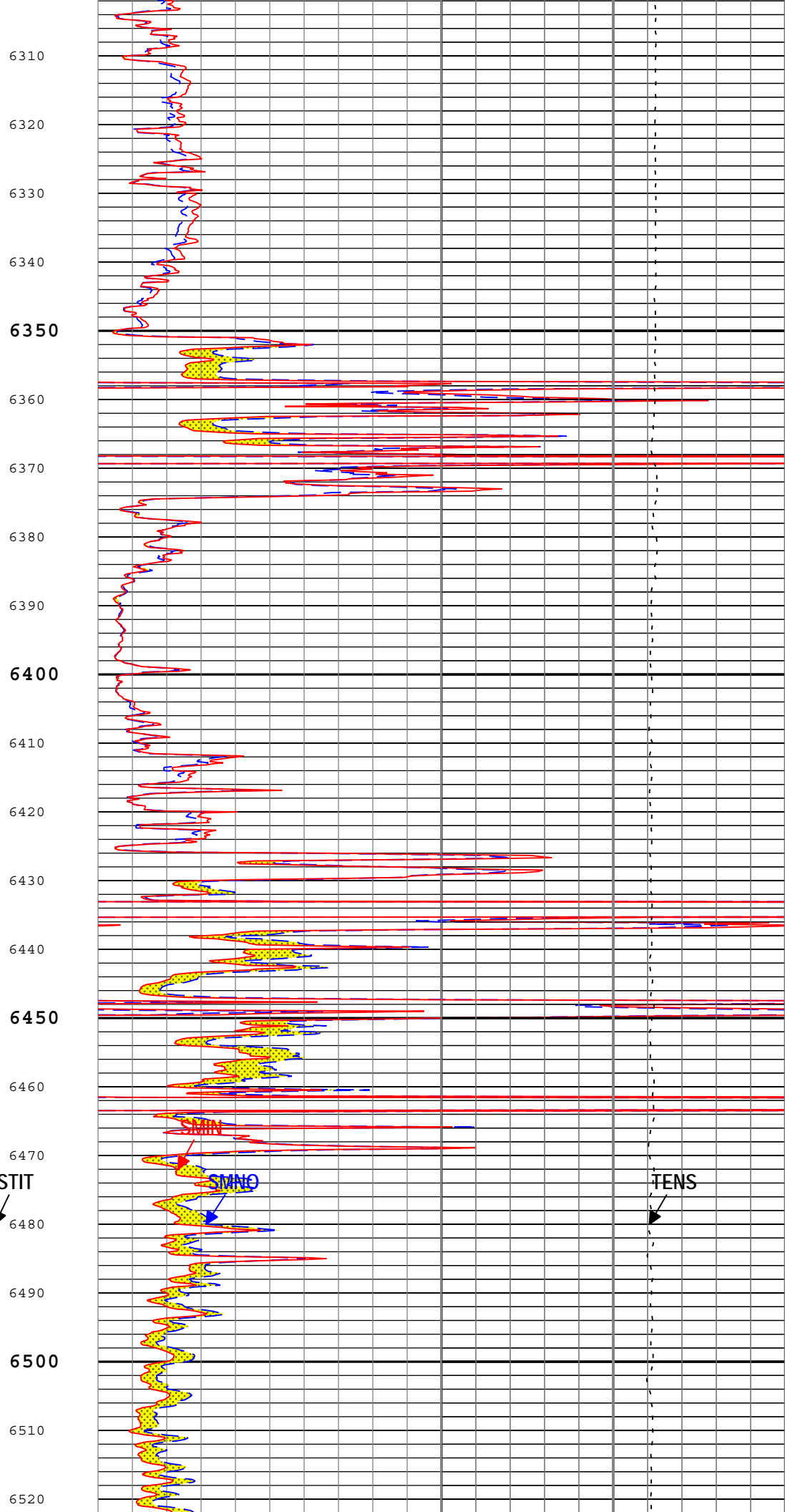
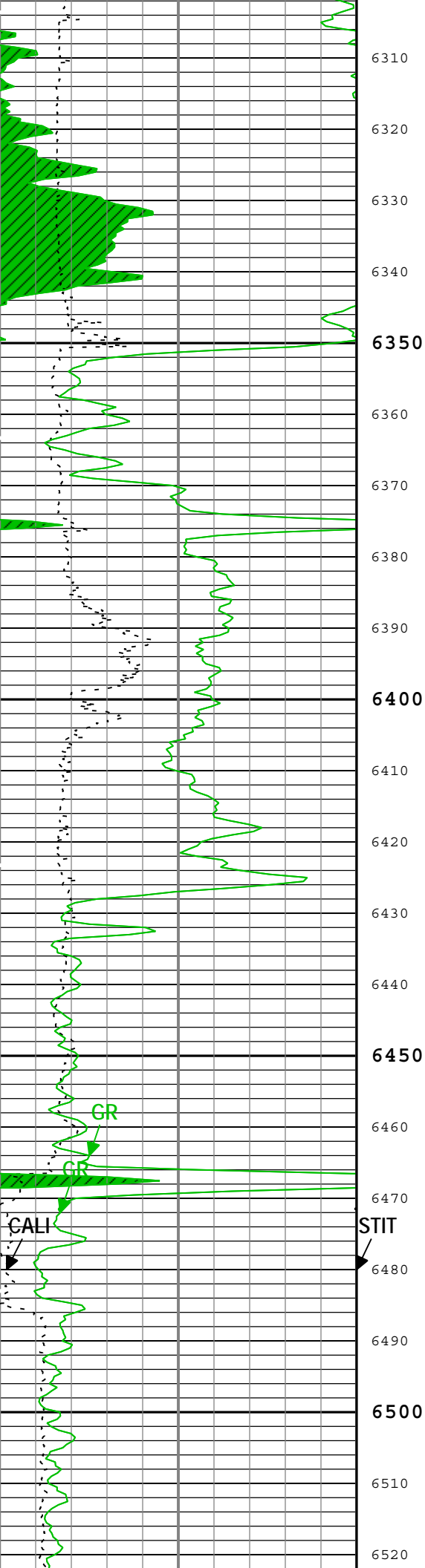


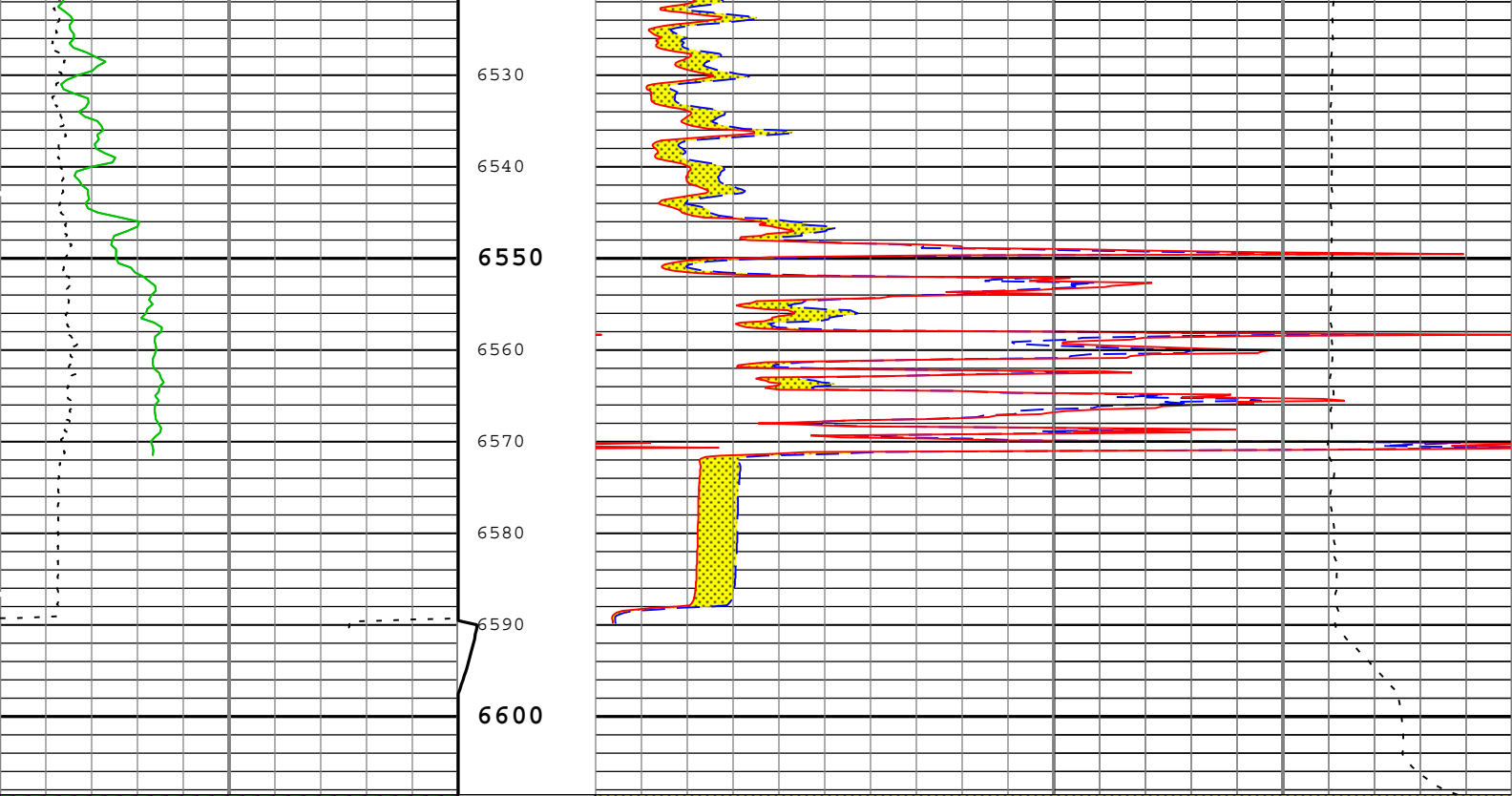












GR Backup		Stuck Tool Indicator, Total (STIT)	PERM	
Caliper (CALI) HDRS-H			Synthetic Micro-Normal Resistivity (SMNO) HDRS-H	
6	in	0	ft	50
0		0		ohm.m
Gamma Ray (GR) HGNS-H		0		ohm.m
gAPI		0		ohm.m
200		0		ohm.m
Gamma Ray (GR) HGNS-H				Cable Tension (TENS)
gAPI				10000
200				lbf
				40000

TIME_1900 - Time Marked every 60.00 (s)

Description: MCFL processing for Platform Express Format: Log (KM 5in Micro Log) Index Scale: 5 in per 100 ft Index Unit: ft Index Type: Measured
Depth Creation Date: 16-Feb-2014 04:32:56

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	7.875	in
CALI_SHIFT	CALI Supplementary Offset	HDRS-H	0	in
CBLO	Casing Bottom (Logger)	WLSESSION	500	ft
CDEN	Cement Density	HGNS-H	2	g/cm3
DC_MODE	Depth Correction Mode	DepthCorrection	Real-time	
DFD	Drilling Fluid Density	Borehole	9.1	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	AMF	
SOCO	Standoff Correction Option	HGNS-H	Yes	

Tool Control Parameters				
Parameter	Description	Tool	Value	Unit
HRGD_BRD_TYPE	HRGD Board Type	HDRS-H	WITH_HET	
MAX_LOG_SPEED	Toolstring Maximum Logging Speed	WLSESSION	3600	ft/h

Run 1: PEX-AIT

5" Micro Log Repeat

Pass Summary	
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Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	DSC Mode	Depth Shift	Include Parallel Data
Run 1: PEX-AIT	Log[4]:Up	Up	6179.23 ft	6612.05 ft	16-Feb-2014 1:24:37 AM	16-Feb-2014 1:34:44 AM	ON	9.00 ft	No
Run 1: PEX-AIT	Main[6]:Up	Up	412.38 ft	6608.73 ft	16-Feb-2014 1:44:28 AM	16-Feb-2014 3:30:23 AM	ON	0.00 ft	No

All depths are referenced to toolstring zero

Log

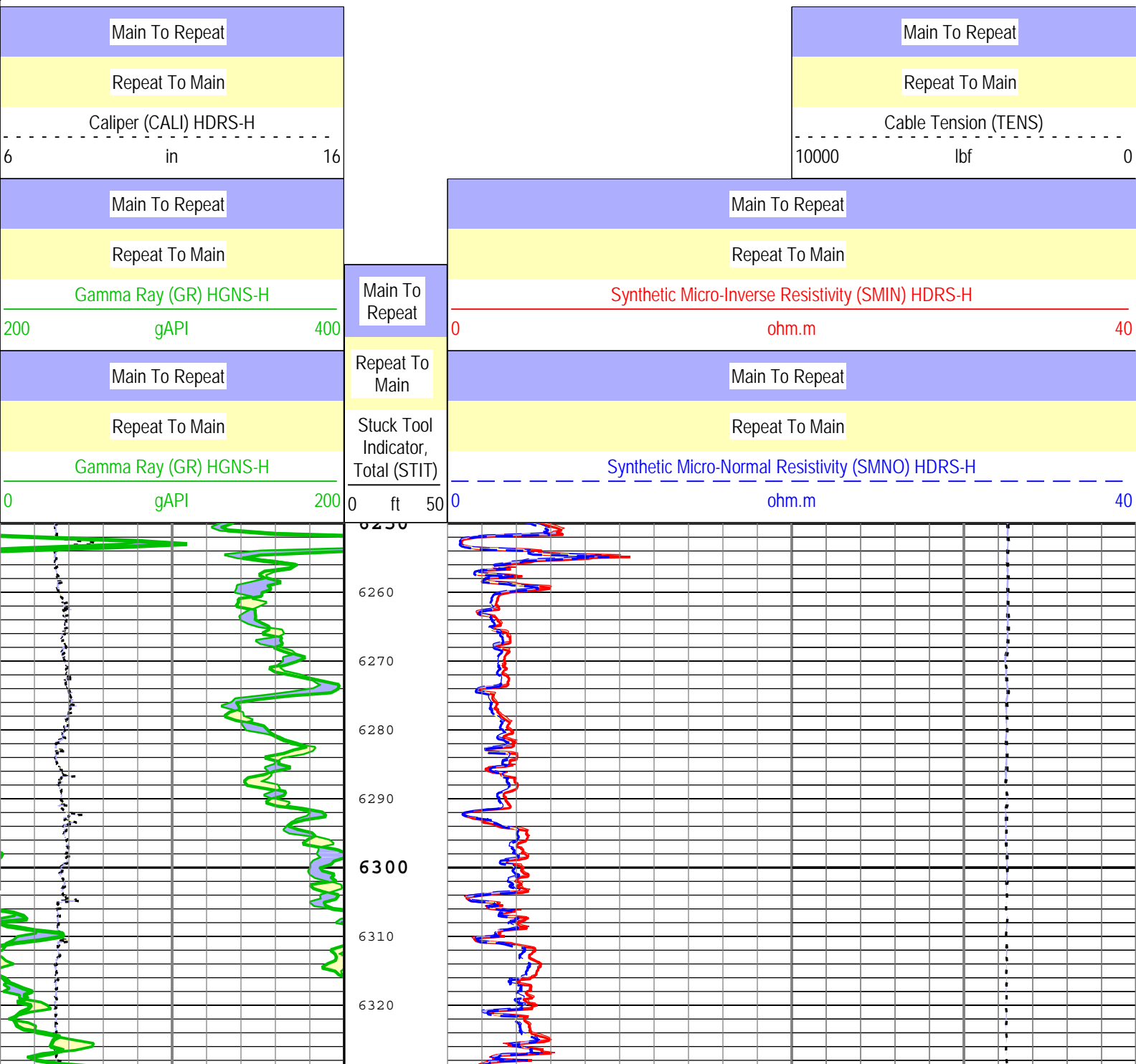
Well:David Bender 1A

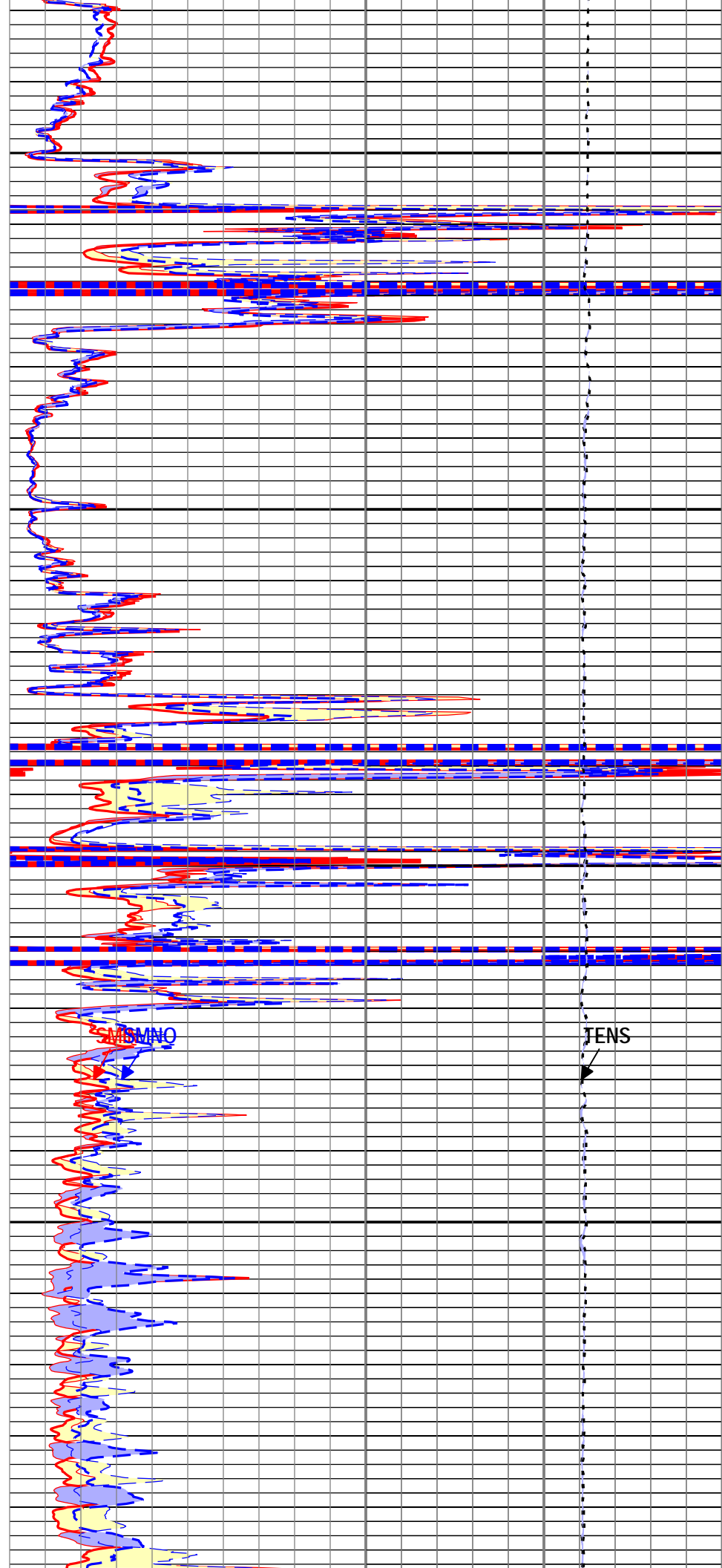
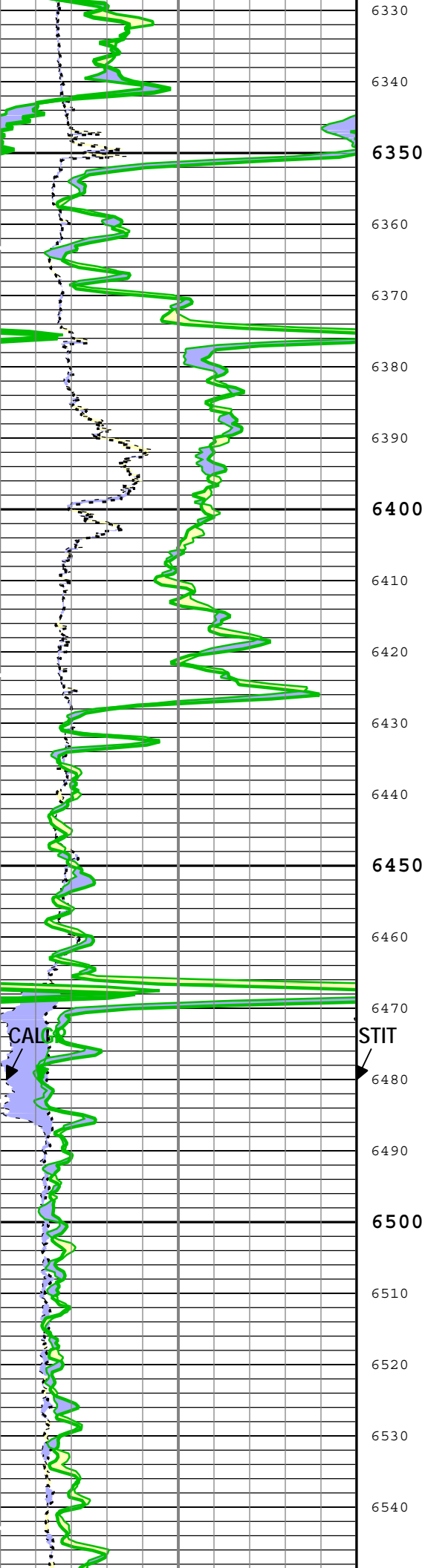
Run 1: PEX-AIT: Main[6]:Up:S003

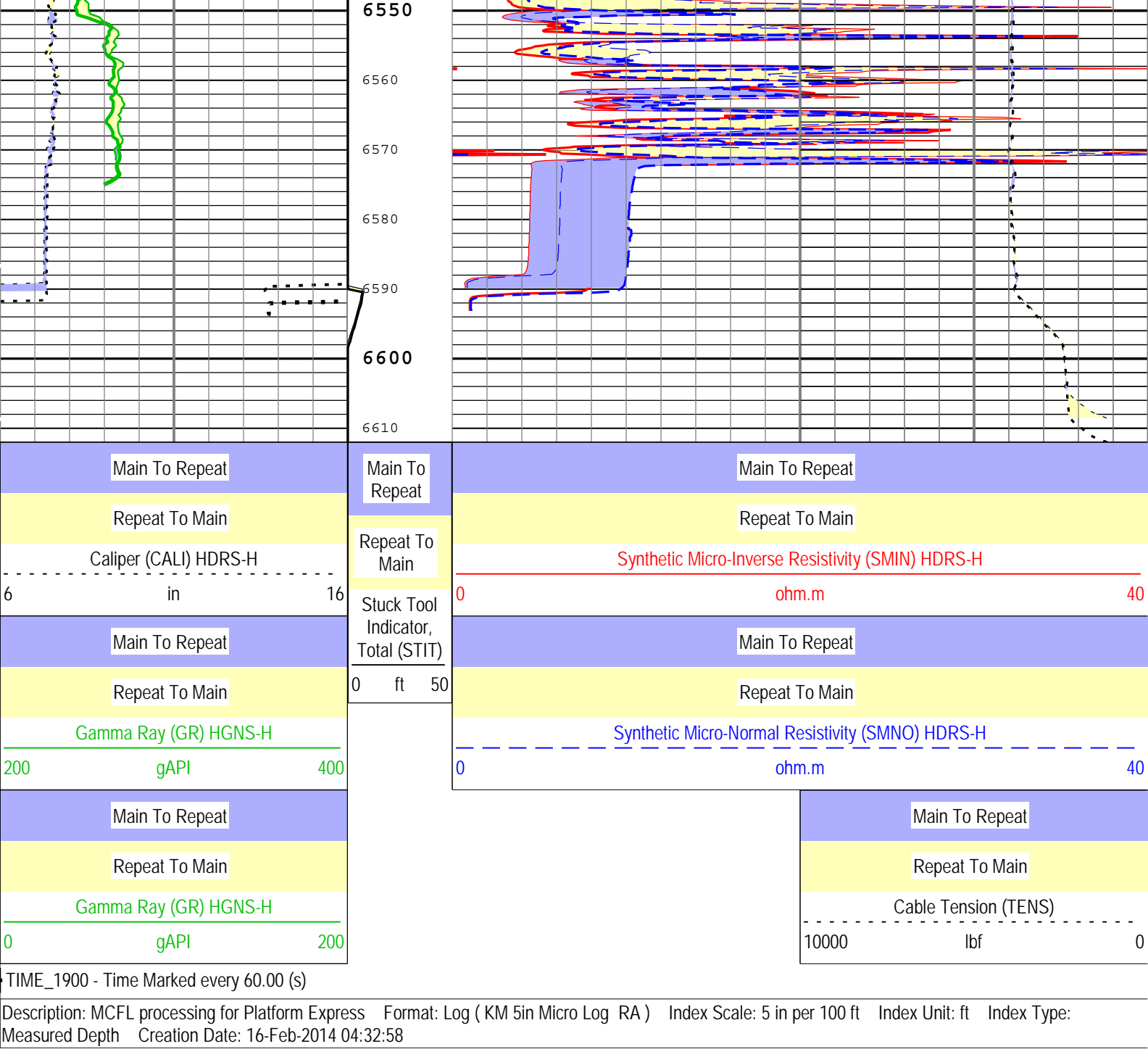
Description: MCFL processing for Platform Express Format: Log (KM 5in Micro Log RA) Index Scale: 5 in per 100 ft Index Unit: ft Index Type:

Measured Depth	Creation Date: 16-Feb-2014 04:32:58
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TIME_1900 - Time Marked every 60.00 (s)







Company:	Aurora Power Resources Inc	Schlumberger
Well:	David Bender 1A	
Field:	Bijou West	
County:	Morgan	
State:	Colorado	
Platform Express		
Mico Log		