

Company: Vecta Oil & Gas LTD

Well: Maroon 24-20

Field: Wildcat

County: Cheyenne State: Colorado

Platform Express			
Triple Combo			
MicroLog			
County: Cheyenne	Field: Wildcat	Location: SE/SW Sec. 20, Twn 14 S, Rng 47 W	Elev. K.B. 4253.00 ft
Well: Maroon 24-20	Company: Vecta Oil & Gas LTD	SHL: 888' FSL & 1,499' FWL	G.L. 4242.00 ft
			D.F. 4252.00 ft
	Location:	Permanent Datum: _____	Ground Level _____ Elev.: _____ 4242.00 f
		Log Measured From: _____	Kelly Bushing _____ 11.00 ft above Perm.Datum
		Drilling Measured From: _____	Kelly Bushing _____
	API Serial No. _____	Section: _____	Township: _____ Range: _____
	05-017-07718-0000	20	47 W 47 W

Logging Date	19-Nov-2012	
Run Number	Run-1	
Depth Driller	5445.00 ft	
Schlumberger Depth	5442.00 ft	
Bottom Log Interval	5442.00 ft	
Top Log Interval	431.00 ft	
Casing Driller Size @ Depth	8.625 in @ 434.00 ft	
Casing Schlumberger	431 ft	
Bit Size	7.875 in	
Type Fluid In Hole	Gel Chemical	
Density	9.2 lbm/gal	58 s
Fluid Loss	8.8 cm3	9
Source of Sample	Flowline	
RM @ Meas Temp	2.59 ohm.m @ 51.6 degF	
RMF @ Meas Temp	1.94 ohm.m @ 51.6 degF	
RMC @ Meas Temp	3.24 ohm.m @ 51.6 degF	
Source RMF	RMC	Calculated
RM @ BHT	0.81 @ 180 0.61 @ 180	
Max Recorded Temperatures	130 degF	
Circulation Stopped	19-Nov-2012 14:00:00	
Logger on Bottom	Time	
Unit Number	Location: Time	
Recorded By	2135 Stan Thompson	Fort Morgan, CO
Witnessed By	Larry Schneider & Ryan	

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

Driller Depth

0.00 ft

434.00 ft

Casing 8.625in
24lbm/ft

5445.00 ft

Open Hole 7.875in

Borehole Size/Casing/Tubing Record

Bit						
Bit Size (in)	7.875					
Top Driller (ft)	434					
Top Logger (ft)	434					
Bottom Driller (ft)	5445					
Bottom Logger (ft)	5442					
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)	434					
Bottom Logger (ft)	431					

Remarks and Equipment Summary

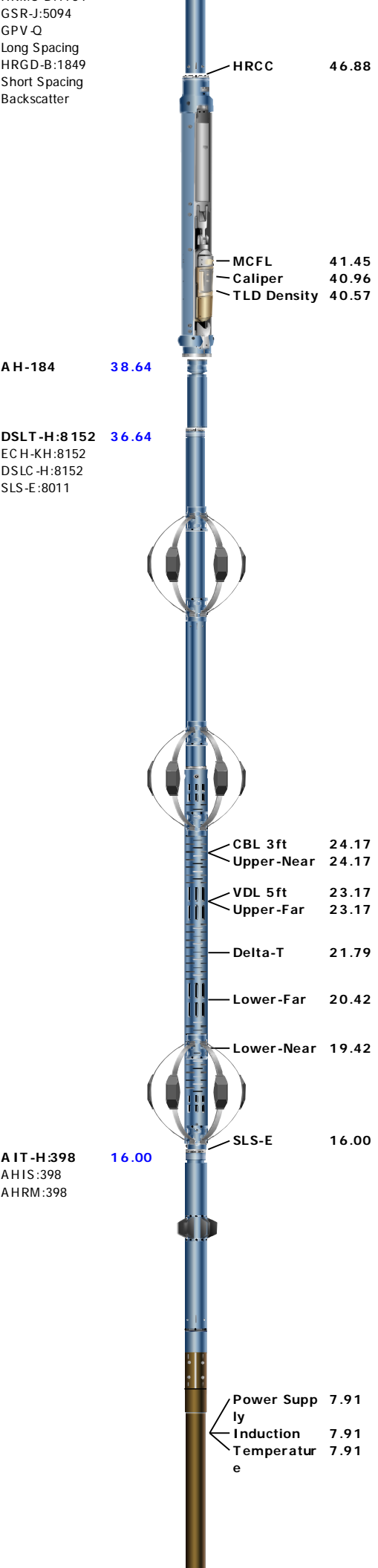
Run-1: Toolstring				Run-1: Remarks	
<div><div><div>Equip name</div><div>Length</div><div>MP name</div><div>Offset</div></div><div><div>LEH-QT</div><div>66.21</div><div></div><div></div></div><div><div>DTC-H:9236</div><div>63.29</div><div></div><div></div></div><div><div>ECH-KC:10316</div><div></div><div></div><div></div></div><div><div>DTC-H:9236</div><div></div><div></div><div></div></div><div><div>HGNS-B:1927</div><div>60.29</div><div></div><div></div></div><div><div>HGNH:3878</div><div></div><div></div><div></div></div><div><div>NPV-N</div><div></div><div></div><div></div></div><div><div>NSR-F:5069</div><div></div><div></div><div></div></div><div><div>HACCZ-B:749</div><div></div><div></div><div></div></div><div><div>HMCA-B</div><div></div><div></div><div></div></div><div><div>HGNS-B:1927</div><div></div><div></div><div></div></div><div><div>HDRS-B:1754</div><div>50.88</div><div></div><div></div></div><div><div>ECH-MEB:1922</div><div></div><div></div><div></div></div><div><div>HRCC-B:791</div><div></div><div></div><div></div></div><div><div>HRMS-B:1754</div><div></div><div></div><div></div></div></div> <div><div><div>CTEM</div><div>62.39</div></div><div><div>HV</div><div>0.00</div></div><div><div>TelStatus</div><div>60.29</div></div><div><div>ToolStatus</div><div>60.29</div></div><div><div>Temperature</div><div>60.26</div></div><div><div>GR</div><div>59.55</div></div><div><div>CNL Porosity</div><div>53.21</div></div><div><div>HMCA</div><div>50.88</div></div><div><div>HGNS</div><div>50.88</div></div><div><div>Accelerometer</div><div>0.00</div></div></div>	Toolstring run as per tool sketch.				
	High-res data acquisition from TD-3,900'				
	Matrix was set to Limestone: 2.71 g/cc				
	Crew: Ed Ponce & Matt Rocha				

Toolstring run as per tool sketch.

High-res data acquisition from TD-3,900'

Matrix was set to Limestone: 2.71 g/cc

Crew: Ed Ponce & Matt Rocha





SP 0.08
Mud Resistivity 0.00
Head Tension
TOOL_ZERO

Lengths are in ft

Maximum Outer Diameter = 5.000 in

Line: Sensor Location, Value: Gating Offset

All measurements are relative to TOOL_ZERO

Depth Summary

Depth Control Parameters	Run-1		
Conveyance Type	Wireline		
Log Sequence	1		
Depth Remark Parameters	Run-1		
Depth Remark 1	All Schlumberger depth procedures followed.		
Depth Remark 2	IDW used as primary depth device, Z-chart used as secondary depth reference.		
Depth Measuring Device	Run-1		
Type	IDW-JA		
Serial Number	6515A		
Calibration Date	23-Oct-2012		
Calibrator Serial Number	1324		
Calibration Cable Type	7-46P LXS		
Wheel Correction 1	-7		
Wheel Correction 2	-5		
Tension Device	Run-1		
Type	CMTD-B/A		
Serial Number	1919		
Calibration Date	10-Nov-2012		
Calibrator Serial Number	78135		
Calibration Points	10		
Calibration RMS	6		
Calibration Peak Error	11		
Logging Cable	Run-1		
Type	7-46P-XS		
Serial Number	U7110		
Logging Cable Length (ft)	23450.00		

Composite 1

5" Micro Log

Integration Summary

Output Channel(s)	Output Description	Input Parameter	Output Value	Unit
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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
HRGD-B	HILT Resistivity Gamma-Ray Density Device, 125 degC	3.1.9755.0	3.0
HGNS-B	HILT Gamma-Ray and Neutron Sonde, 125 degC	3.1.9755.0	2.0
HRCC-B	HILT High-Resolution Control Cartridge, 125 degC	3.1.9755.0	2.0

Composite Summary

Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	Depth Shift	Include Parallel Data
Run-1	Log[3]:Up	Up	2330.23 ft	5462.23 ft	19-Nov-2012 9:11:52 PM	19-Nov-2012 10:30:49 PM	0.00 ft	
Run-1	Log[4]:Up	Up	323.00 ft	2404.61 ft	19-Nov-2012 11:00:30 PM	19-Nov-2012 11:31:37 PM	0.00 ft	

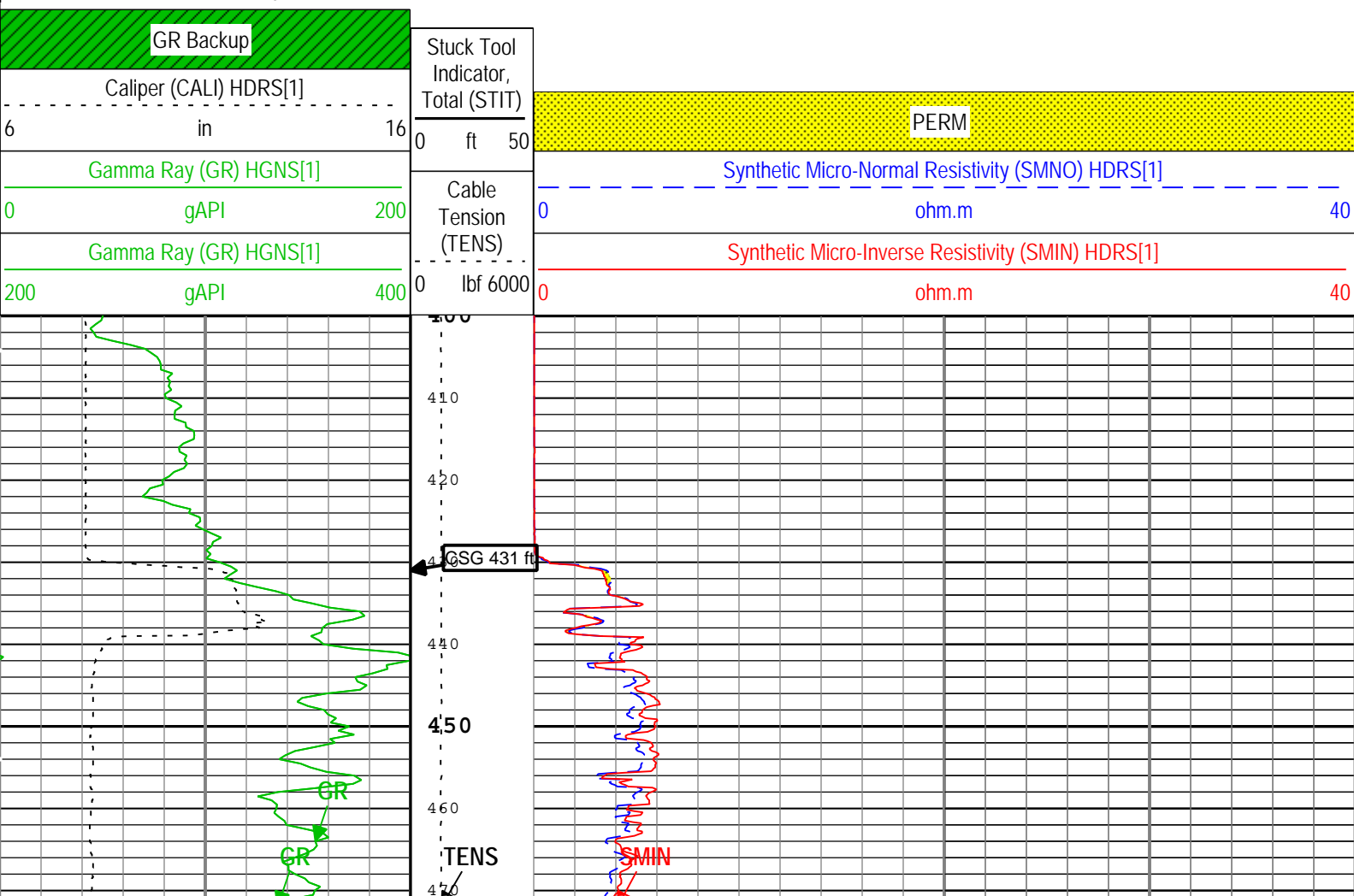
Log

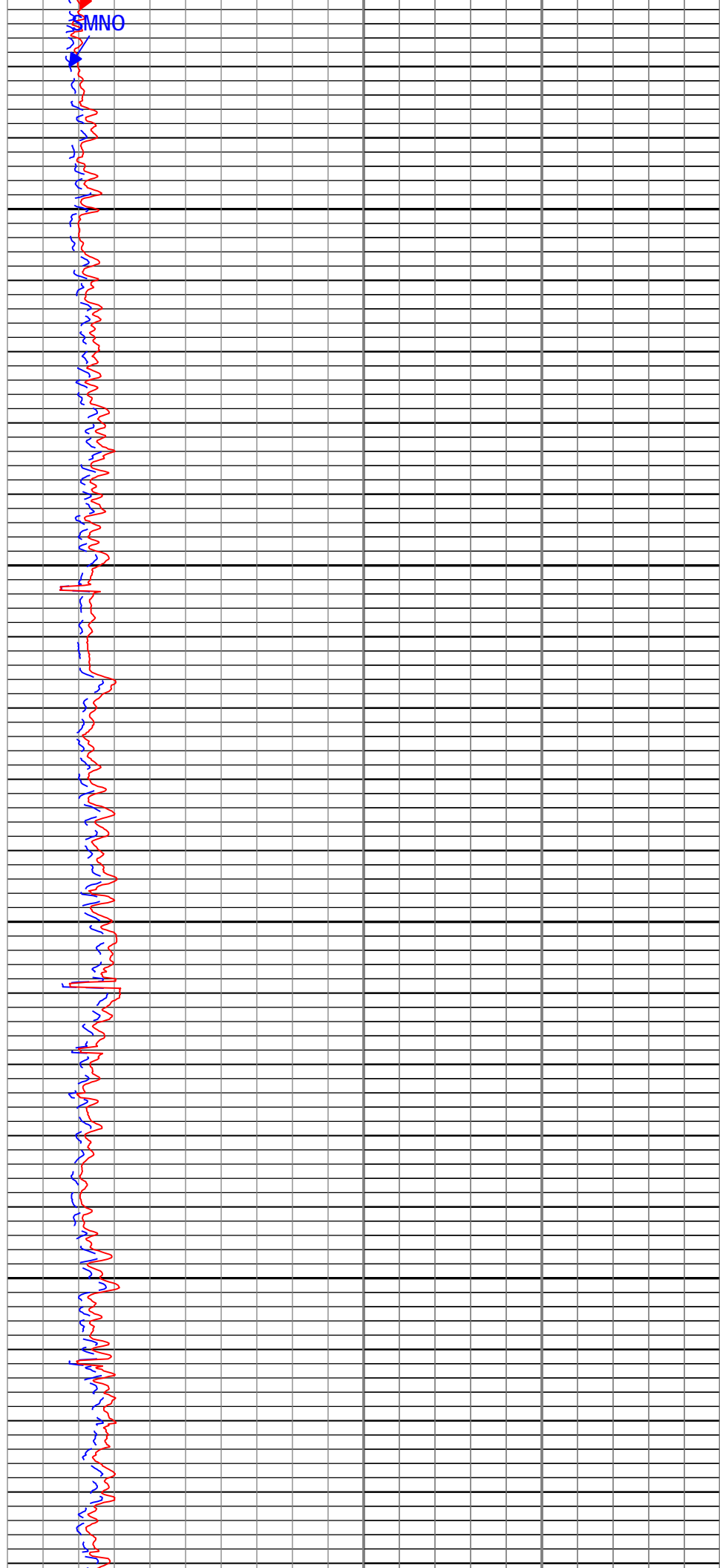
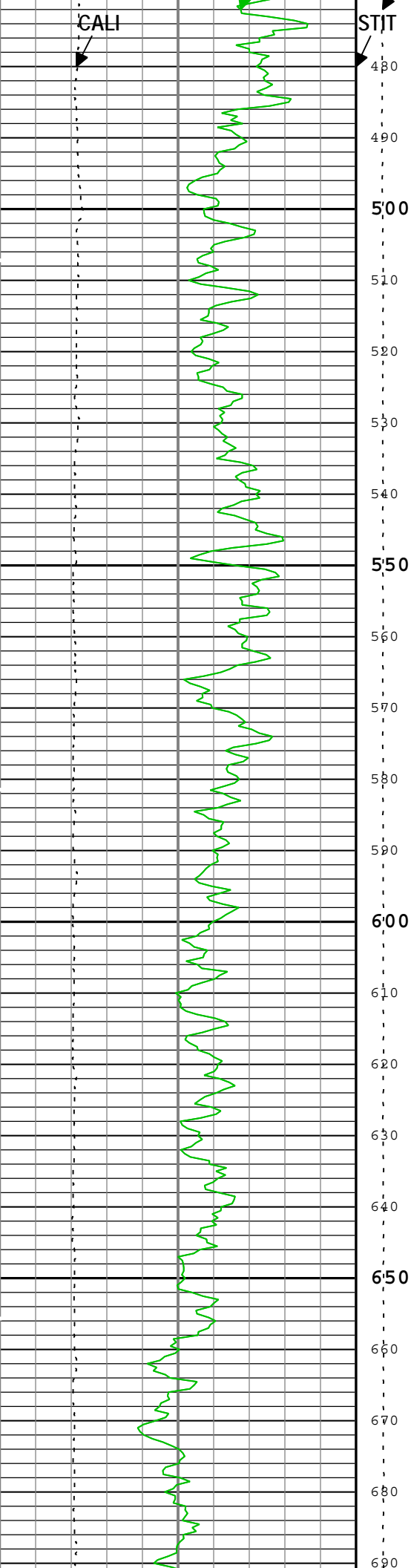
Composite 1

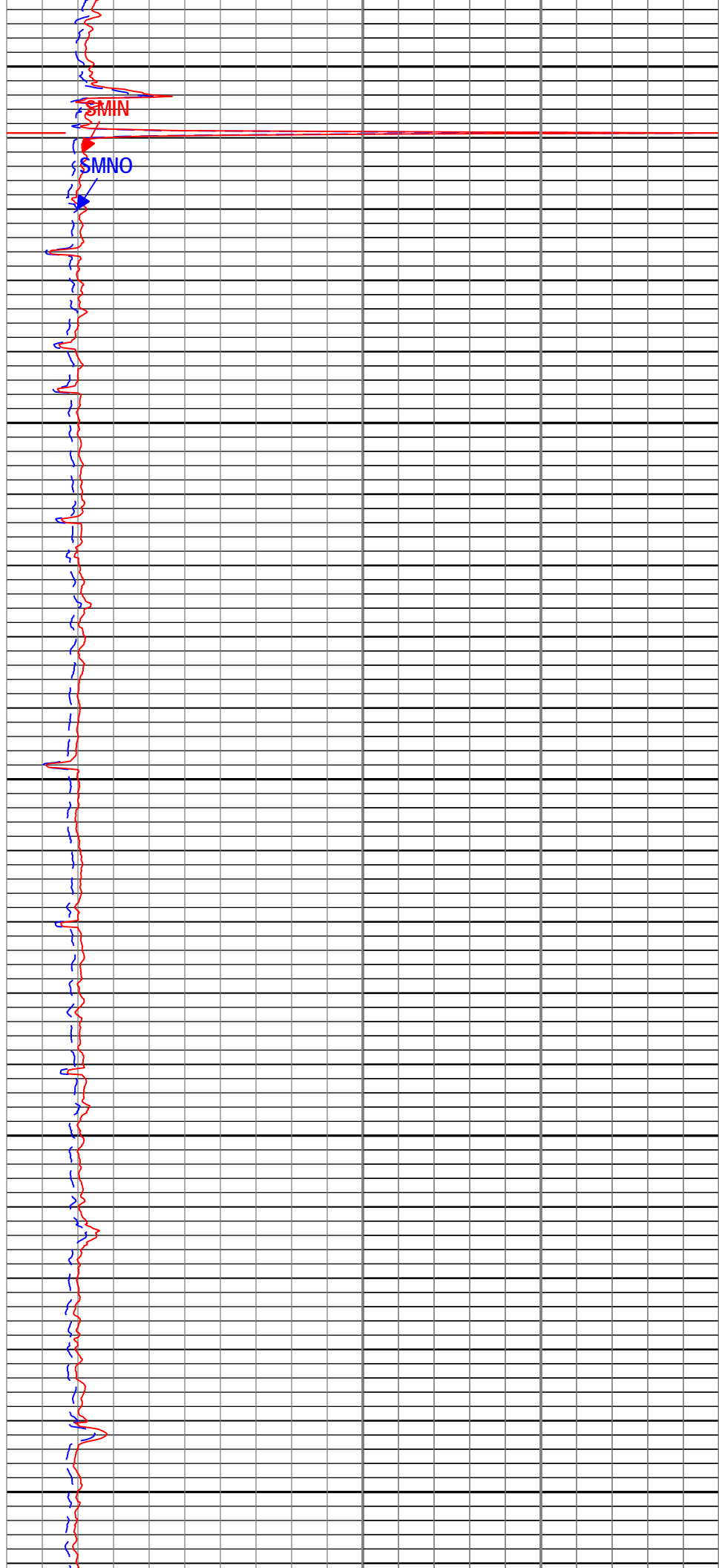
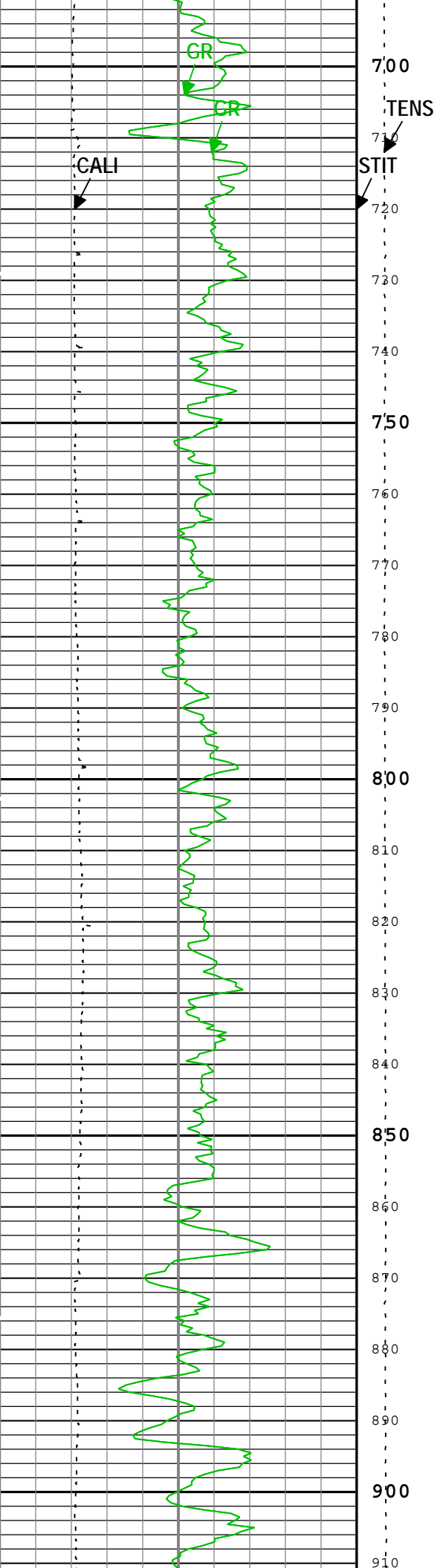
Description: MCFL processing for Platform Express Format: Log (EMD 5in Micro Log) Index Scale: 5 in per 100 ft Index Unit: ft Index Type: Measured
Depth Creation Date: 19-Nov-2012 23:47:27

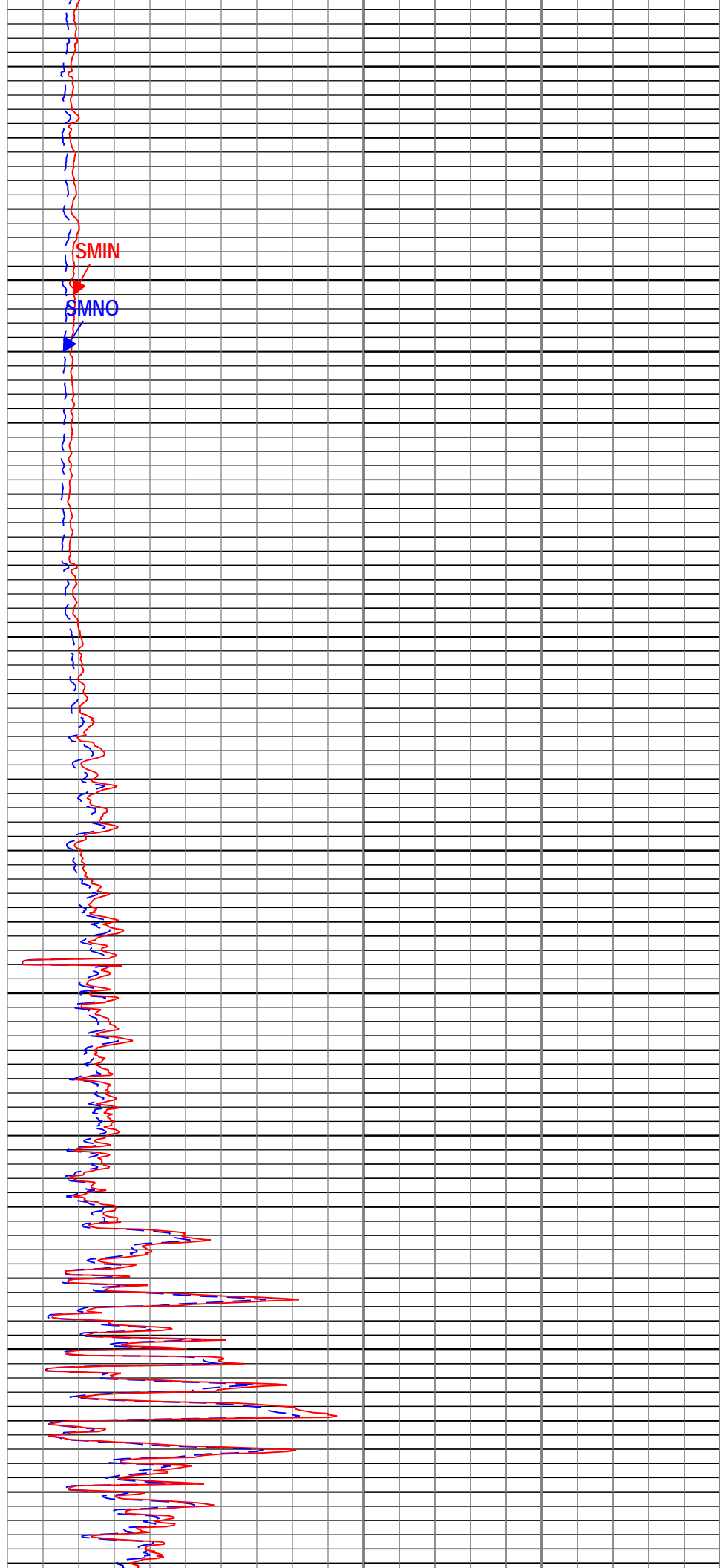
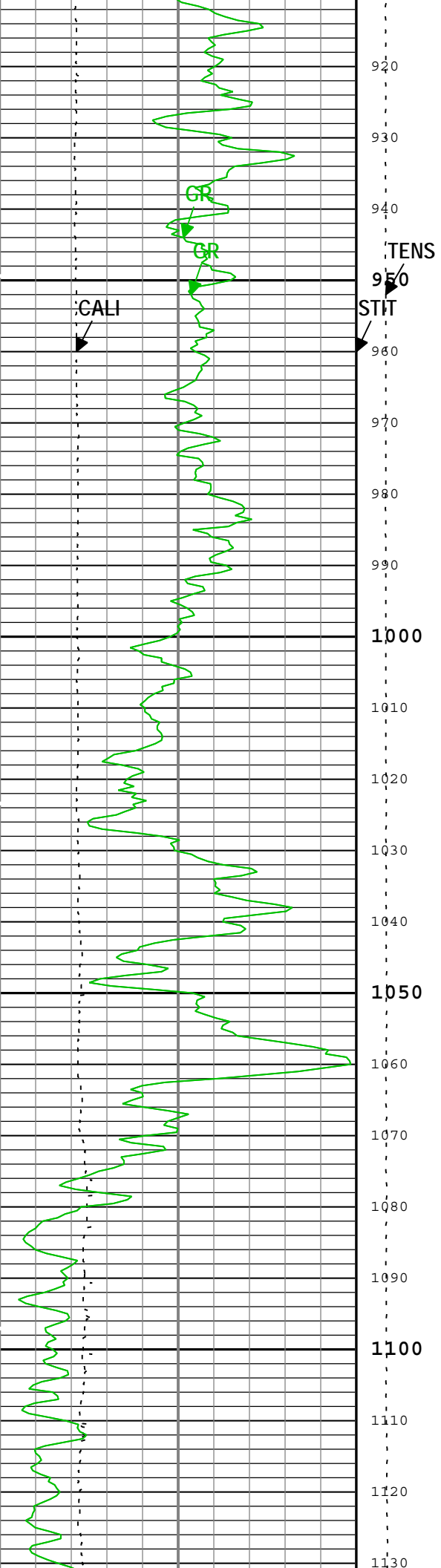
Channel	Source	Sampling
CALI	HDRS[1]:HRCC-B[1]:HRCC-B[1]	1in
GR	HGNS[1]:HGNS-B[1]:HGNS-B[1]	6in
SMIN	HDRS[1]:HRMS-B[1]:HRGD-B[1]	2in
SMNO	HDRS[1]:HRMS-B[1]:HRGD-B[1]	2in
STIT	DepthCorrection	6in
TENS	WLWorkflow	6in
TIME_1900	WLWorkflow	0.1in

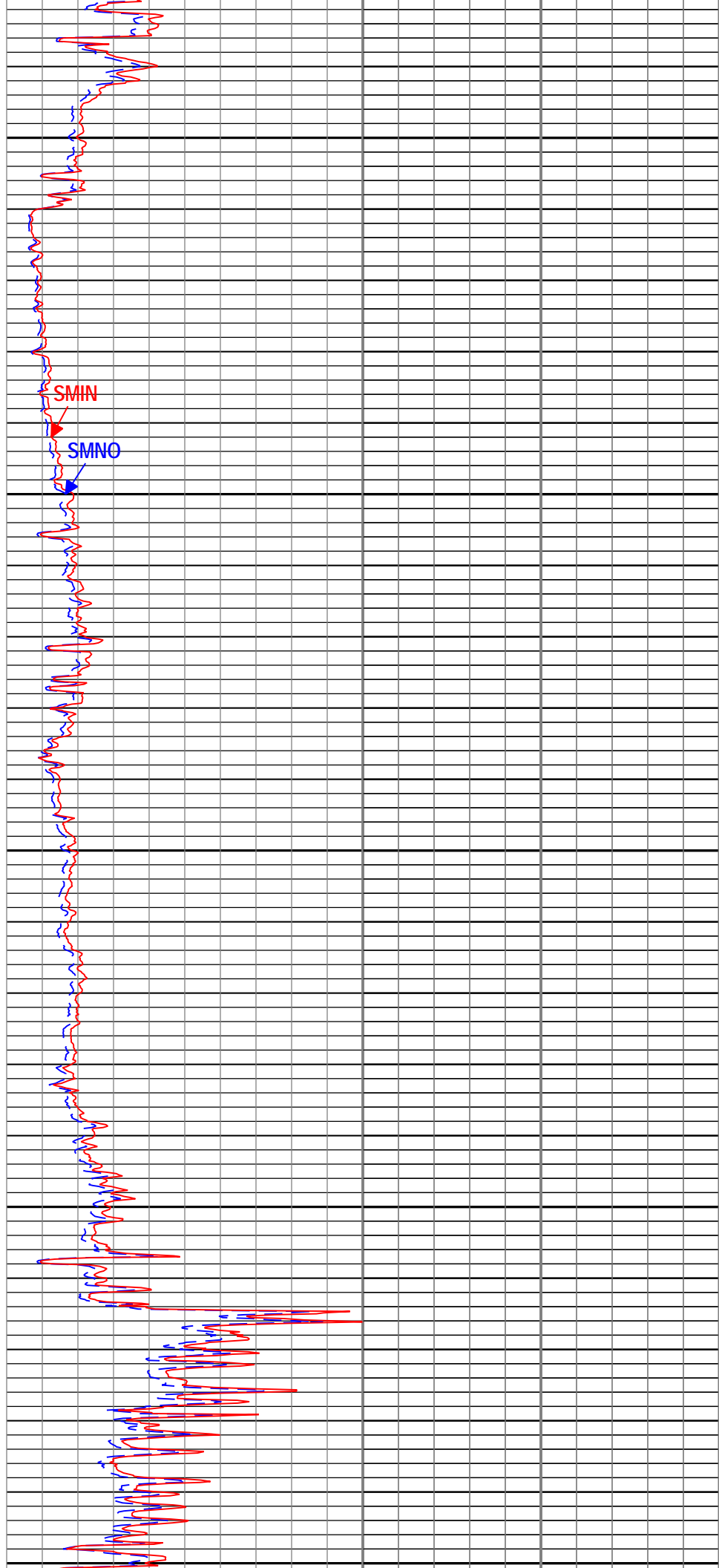
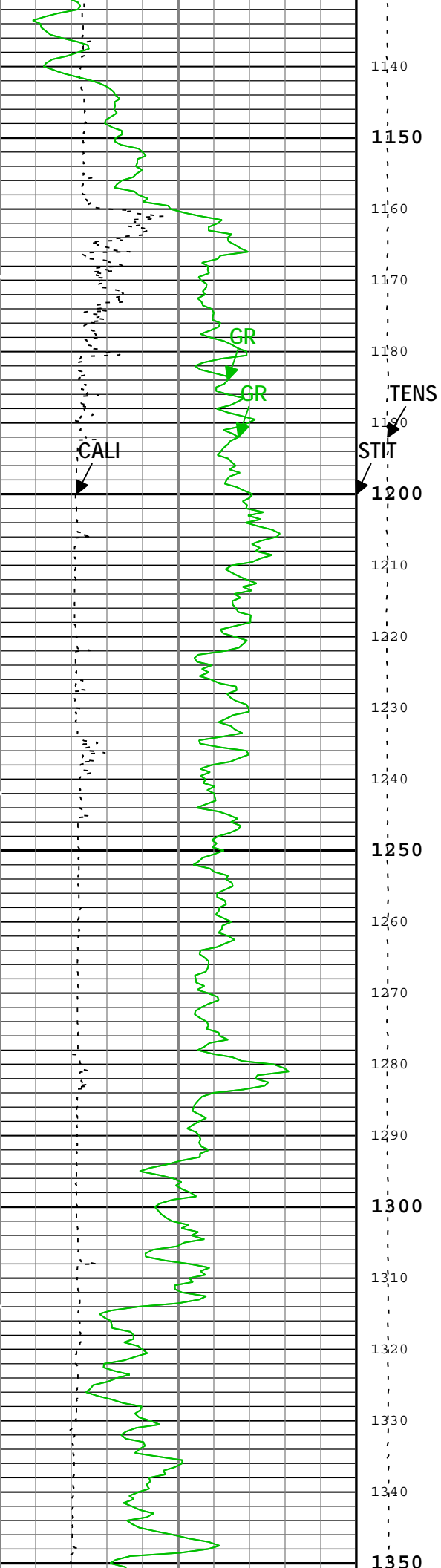
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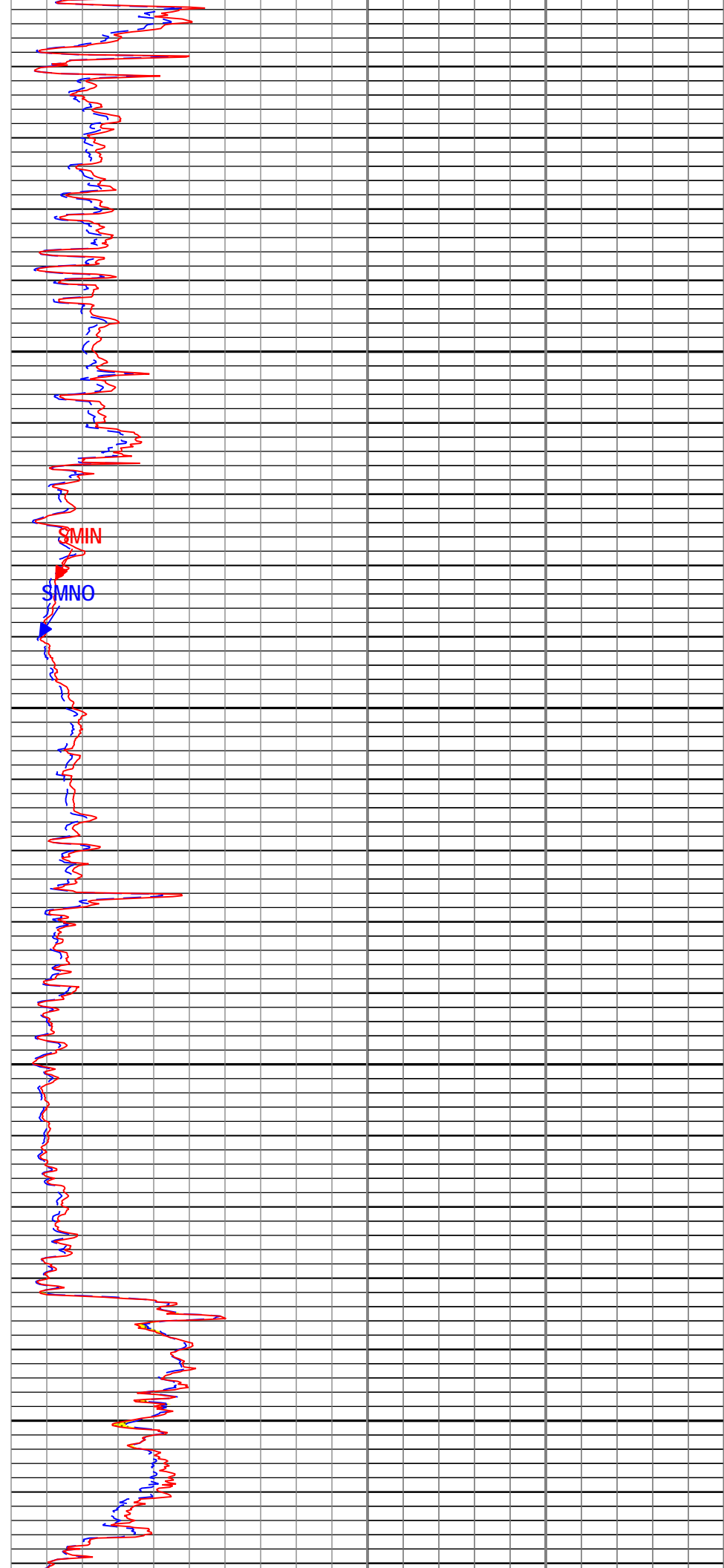
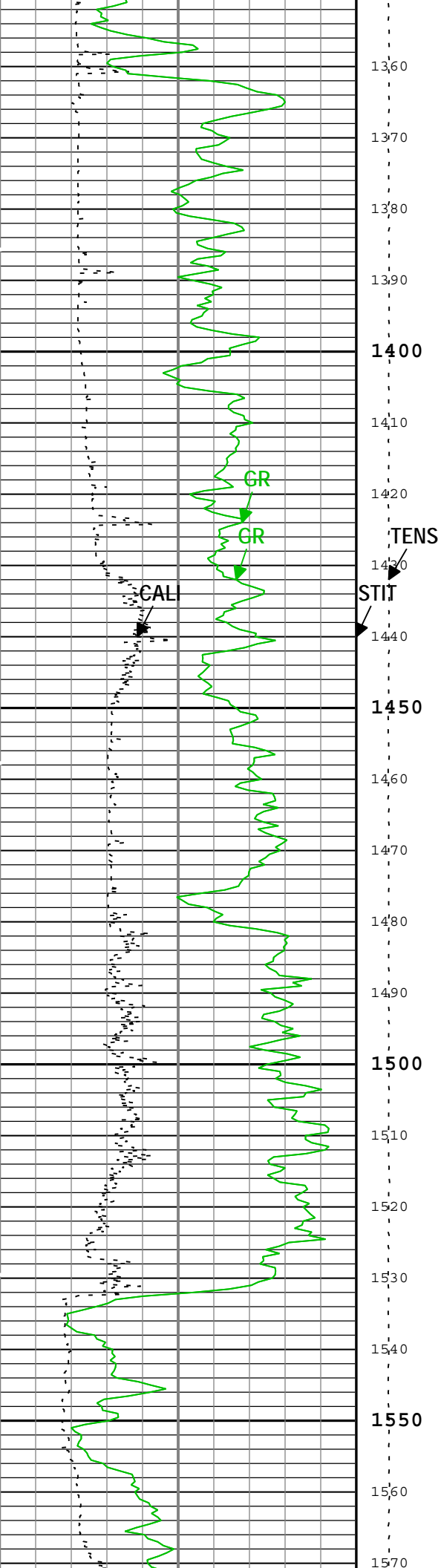


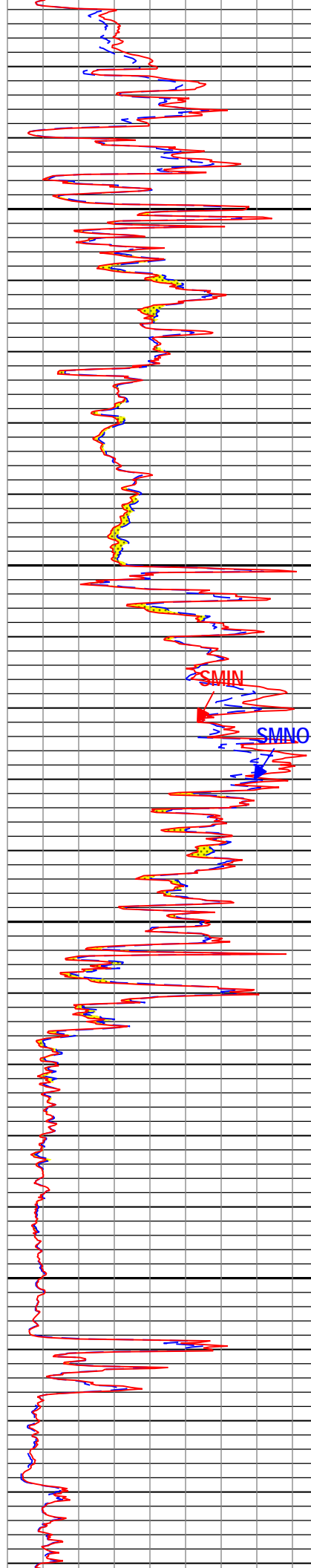
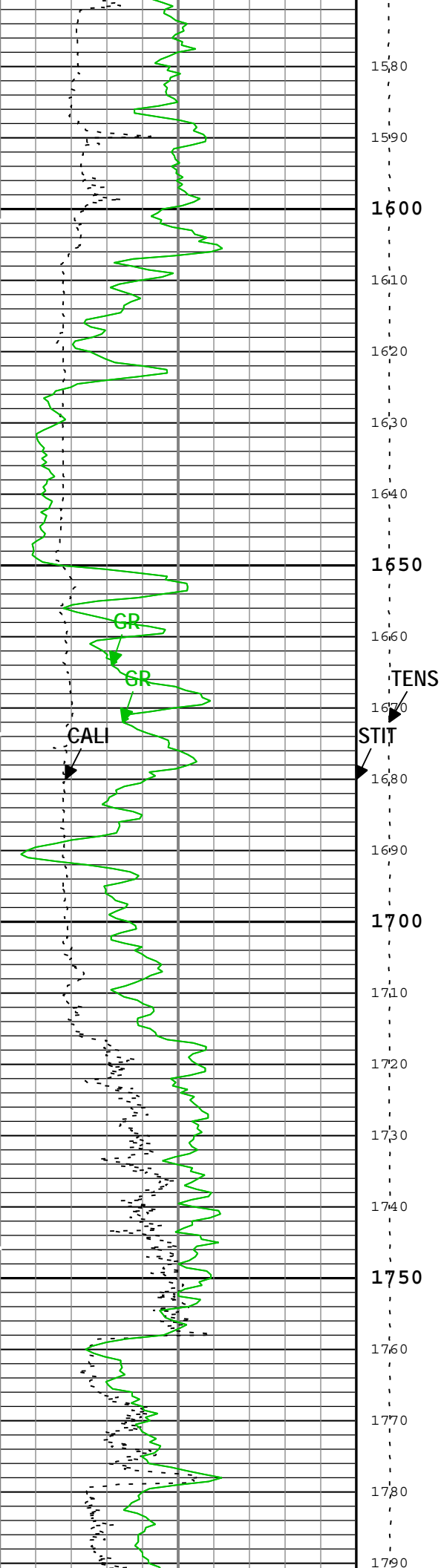


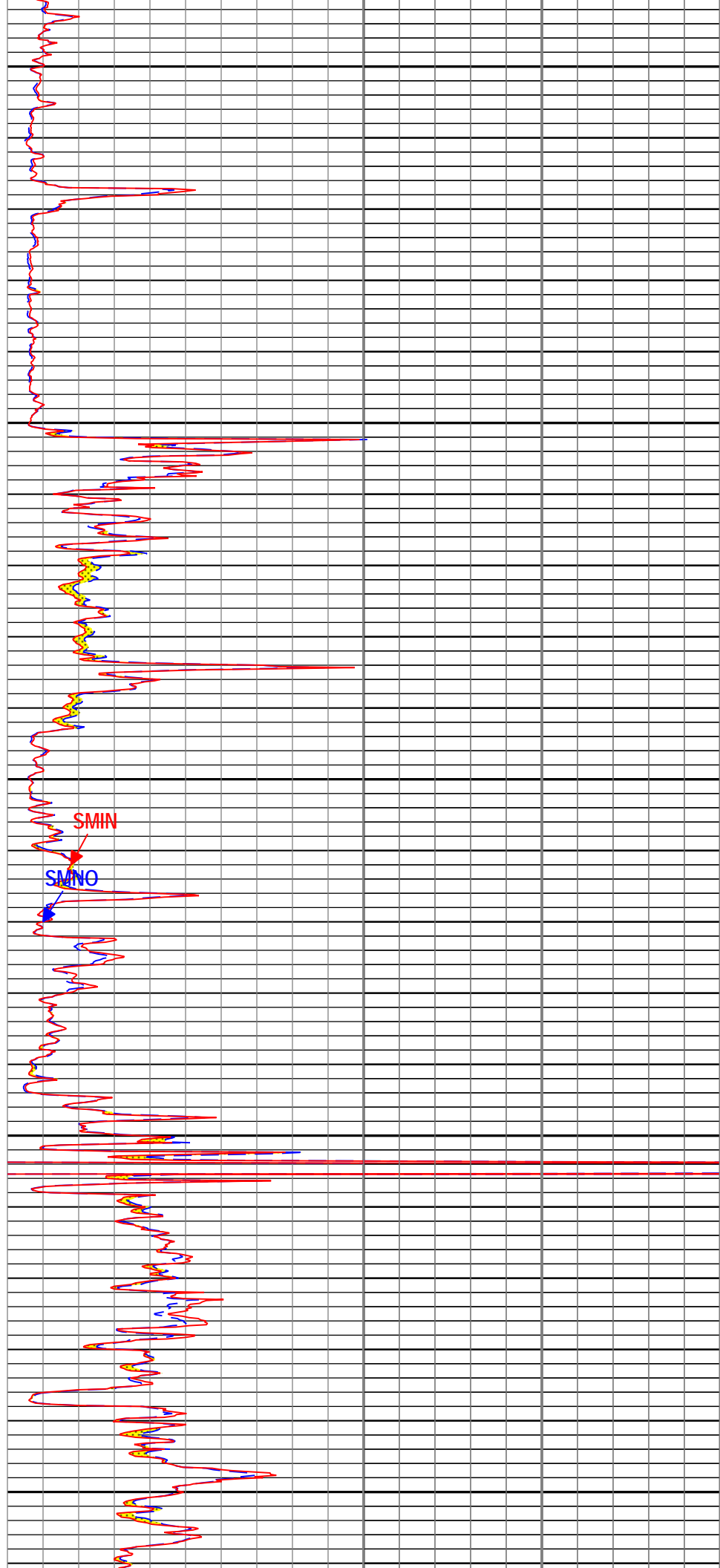
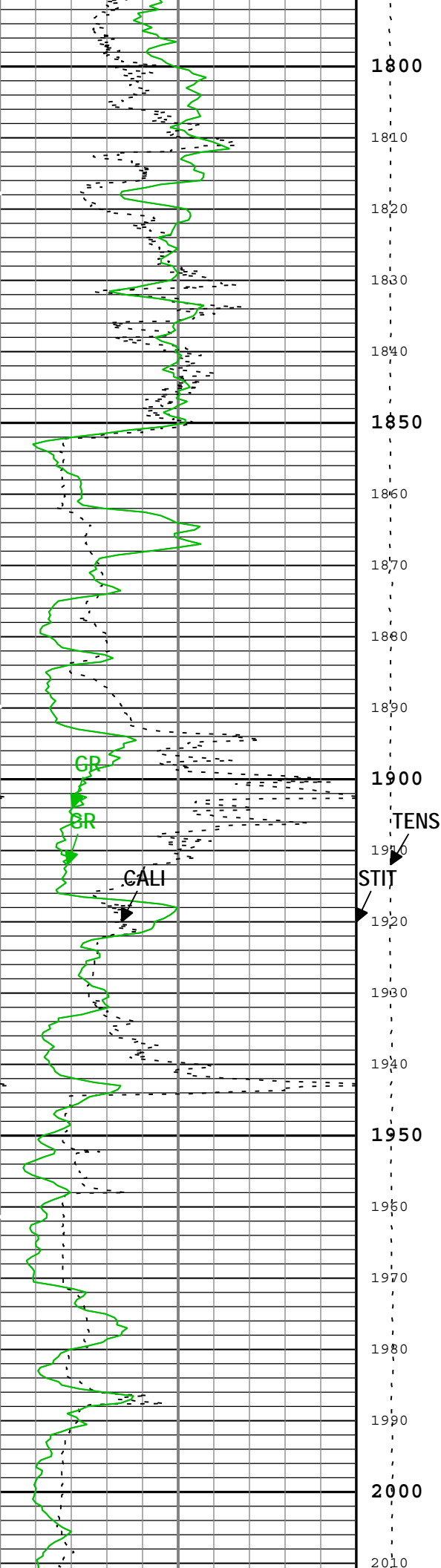


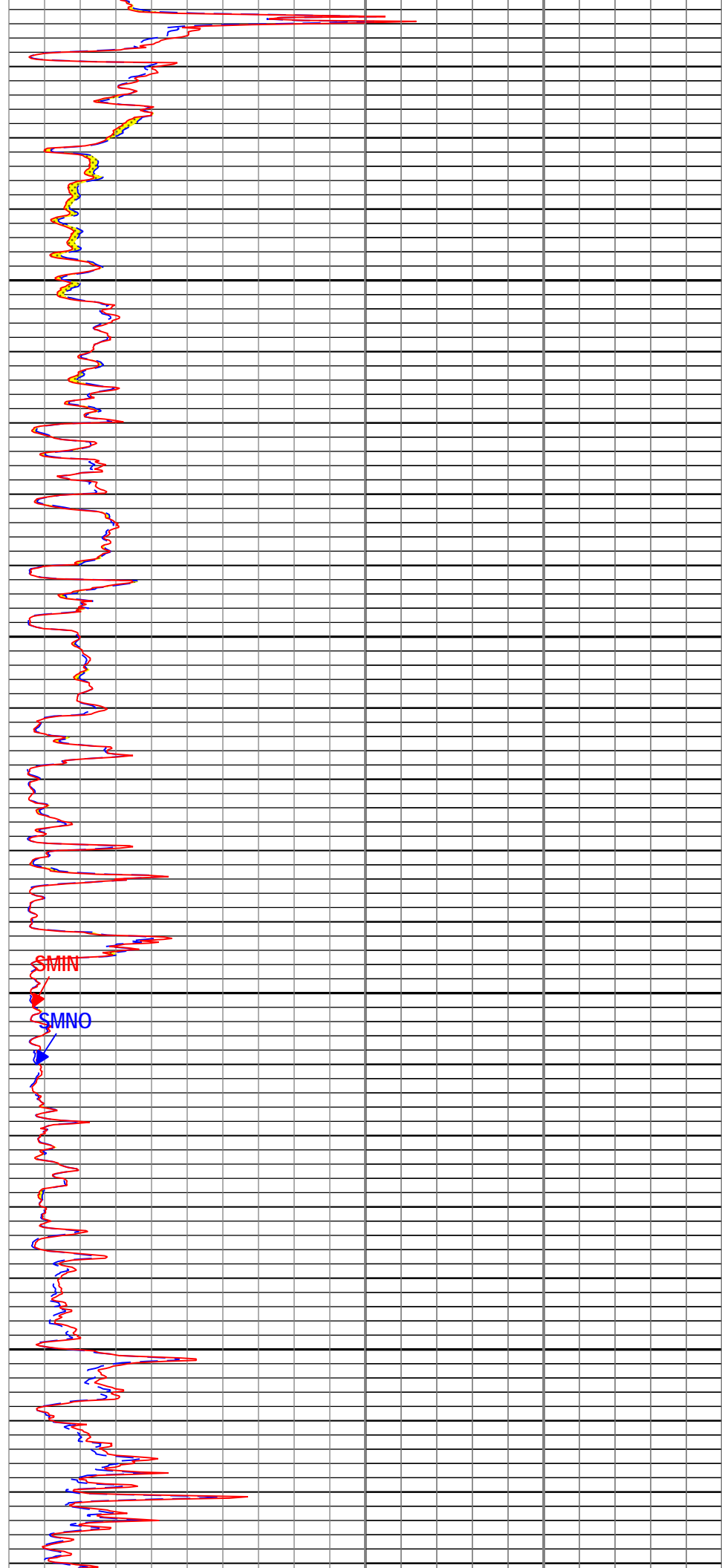
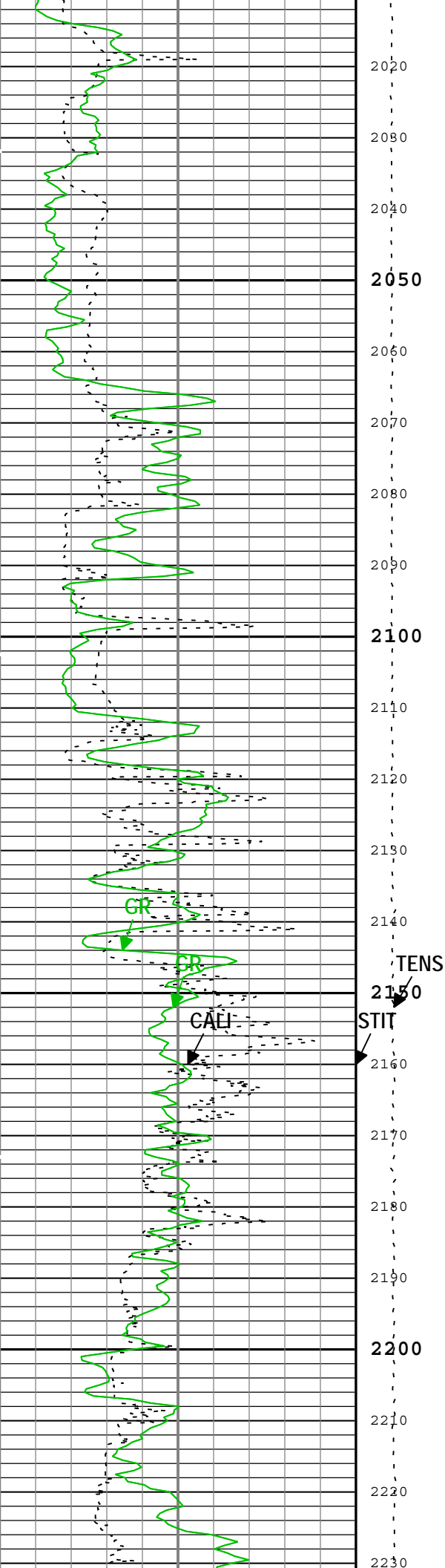


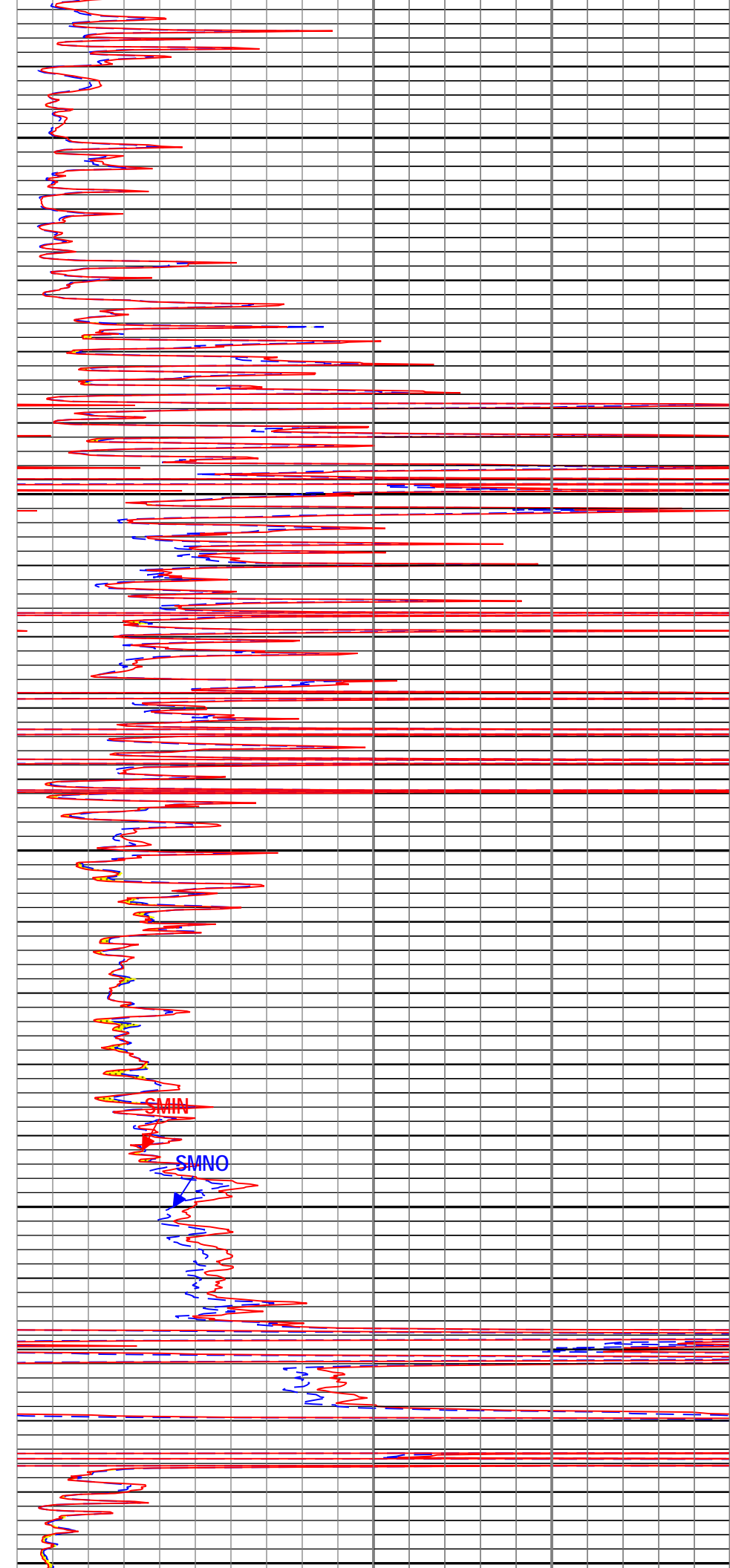
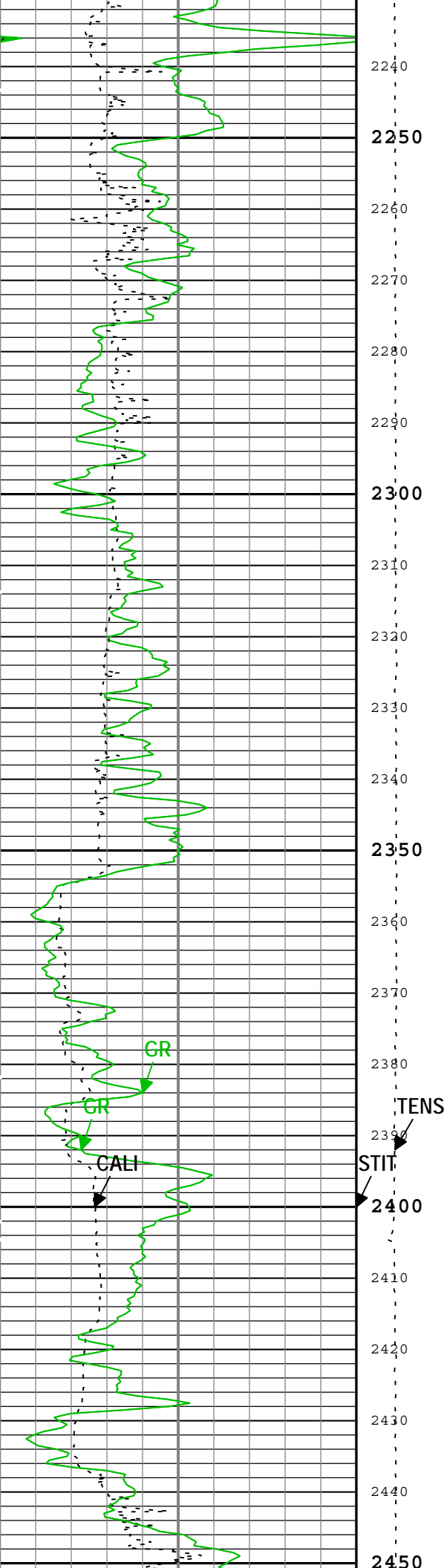


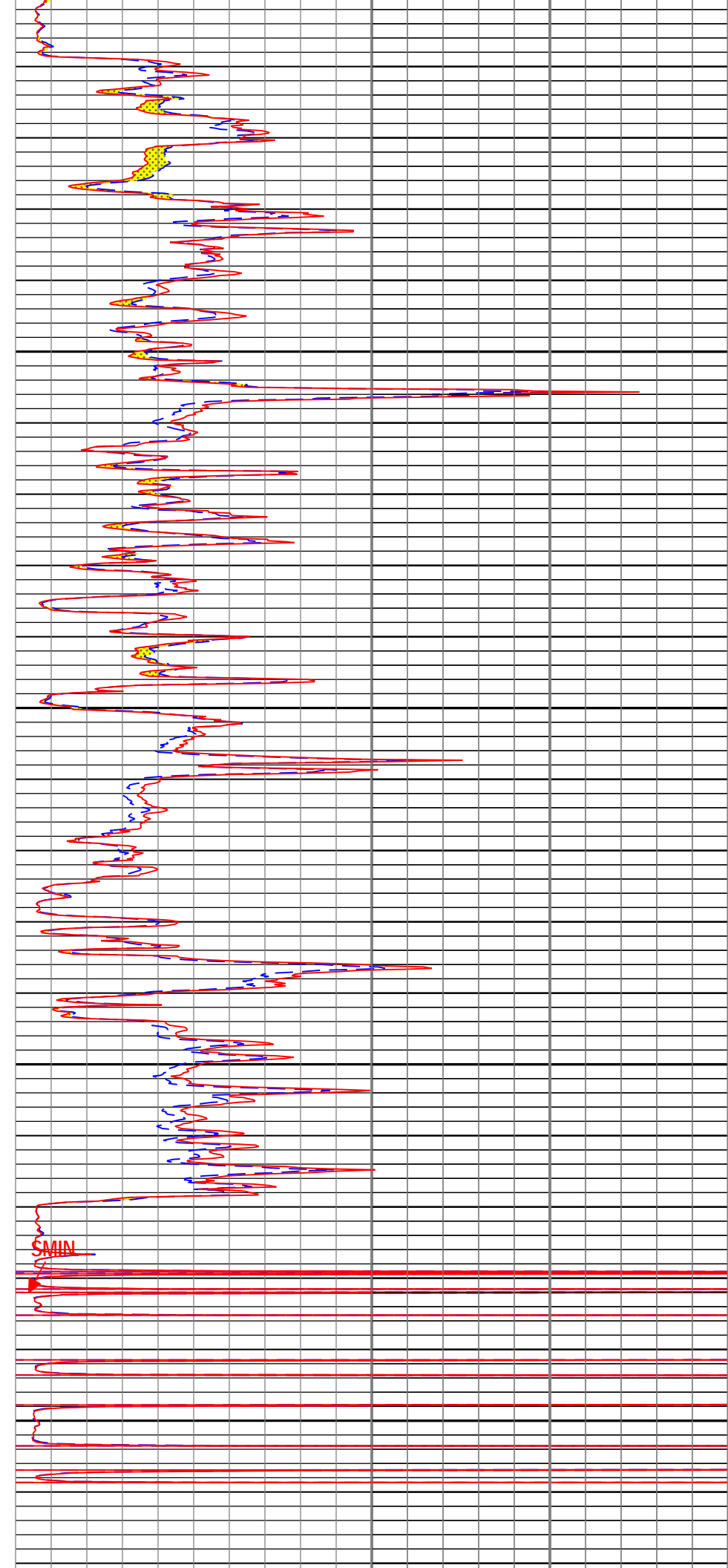
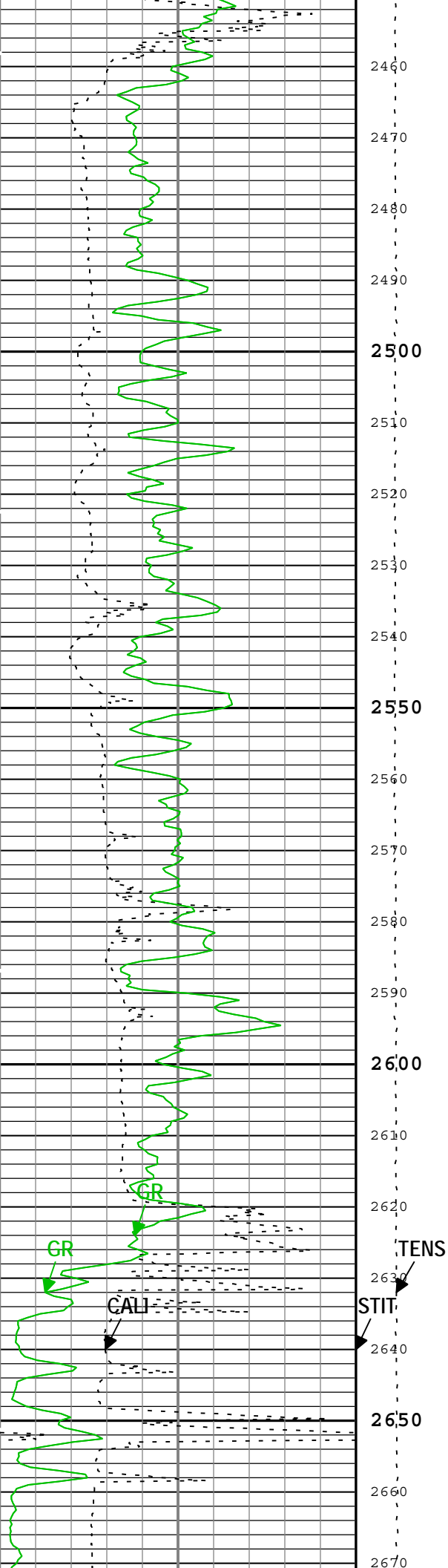


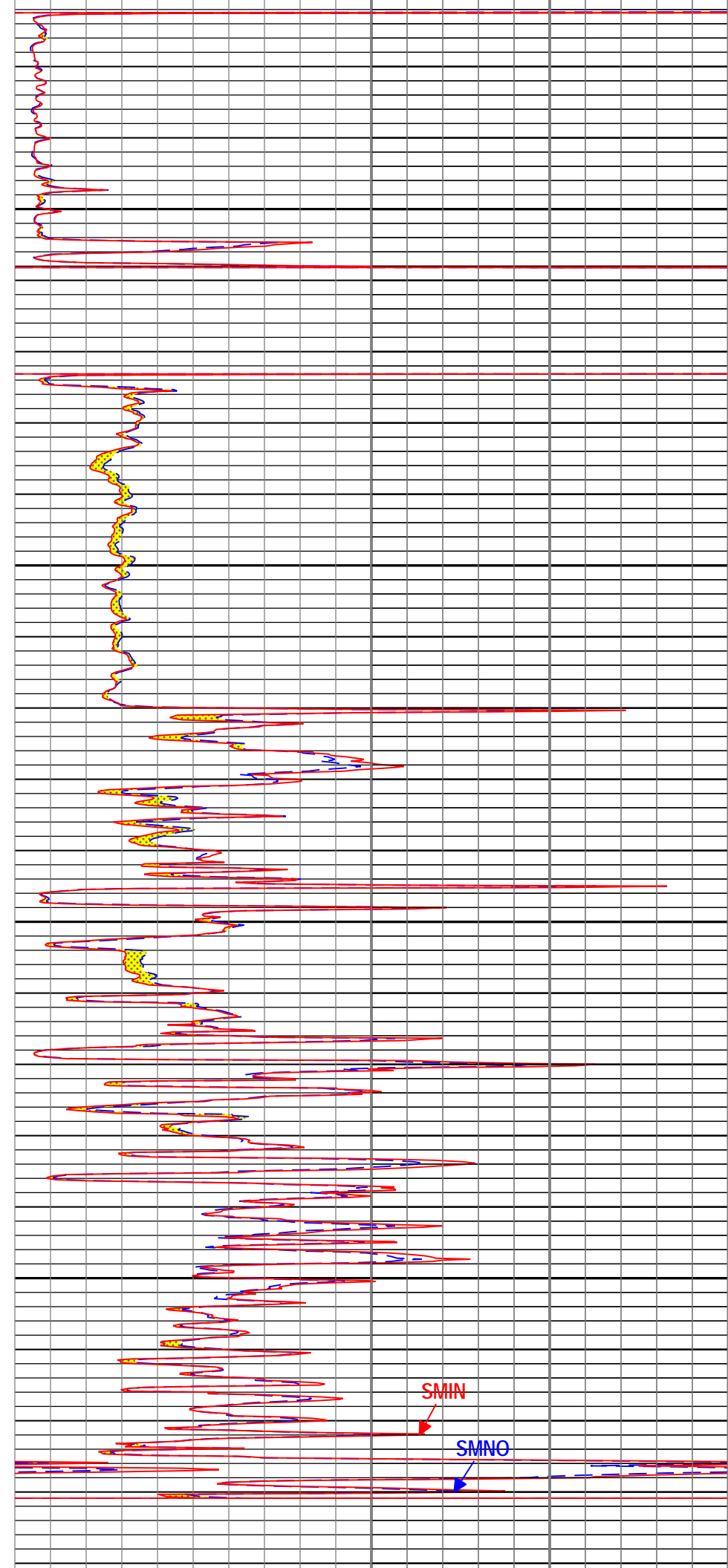
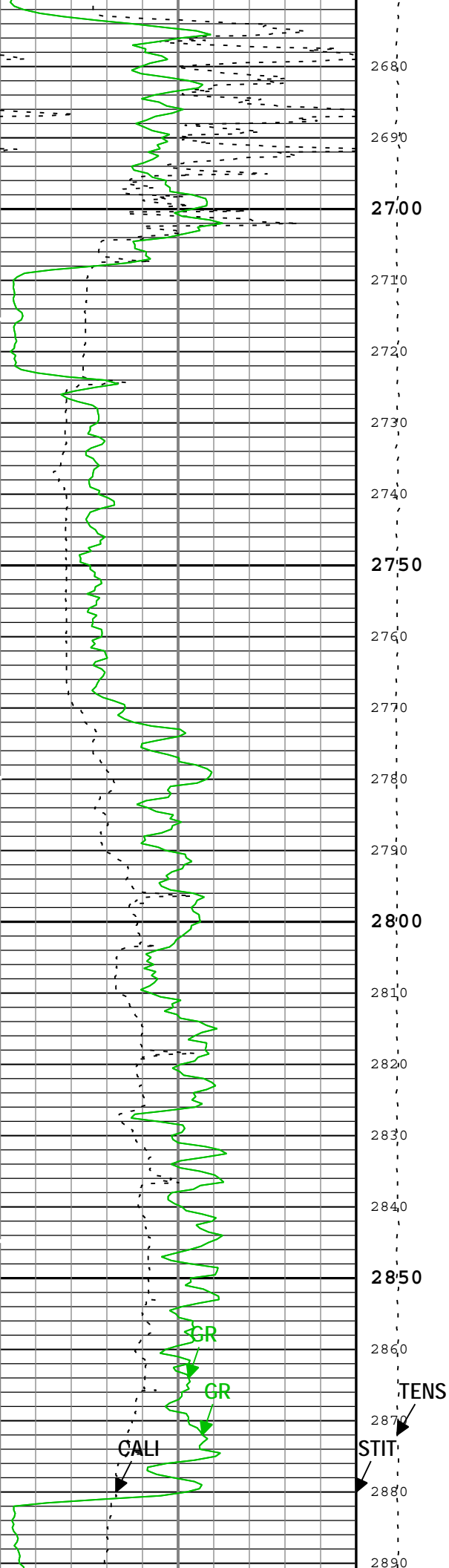


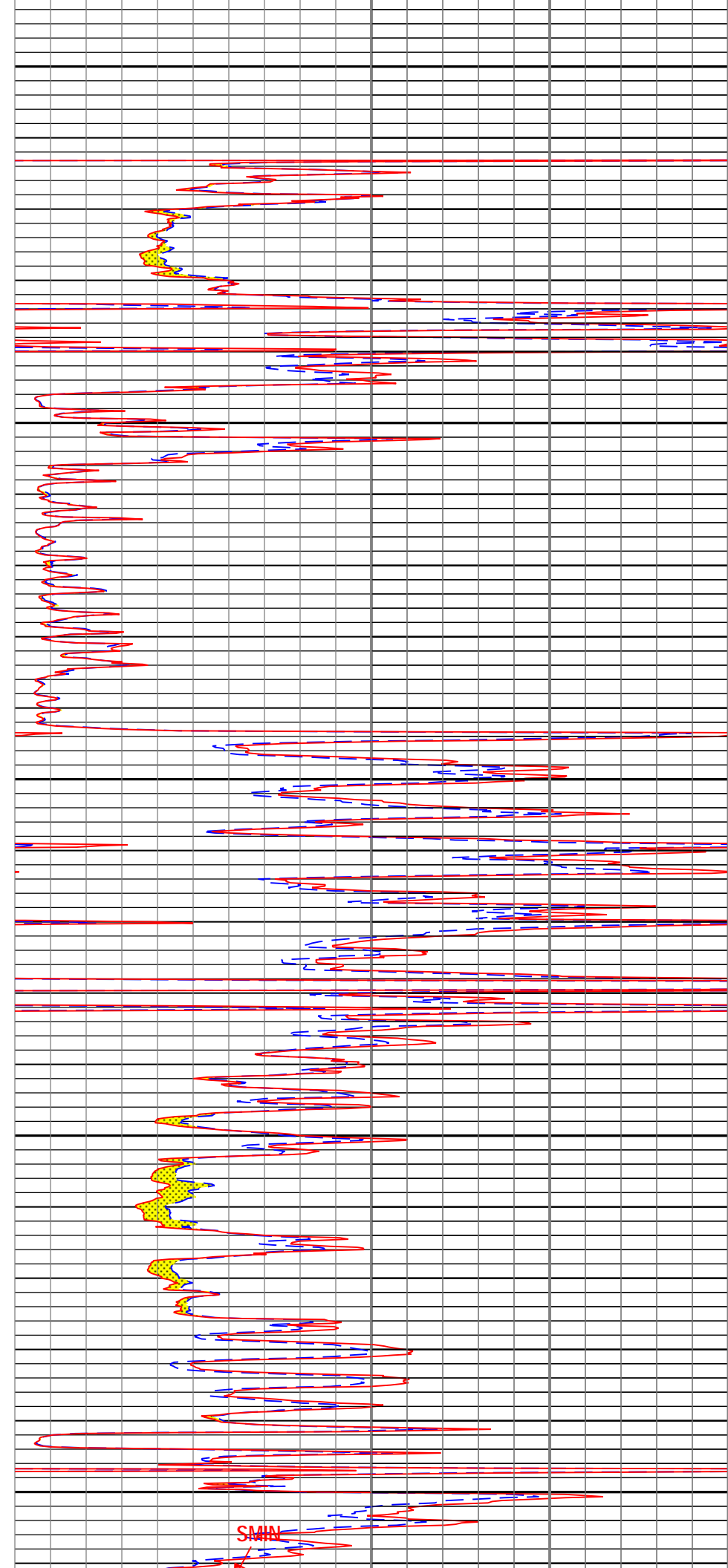
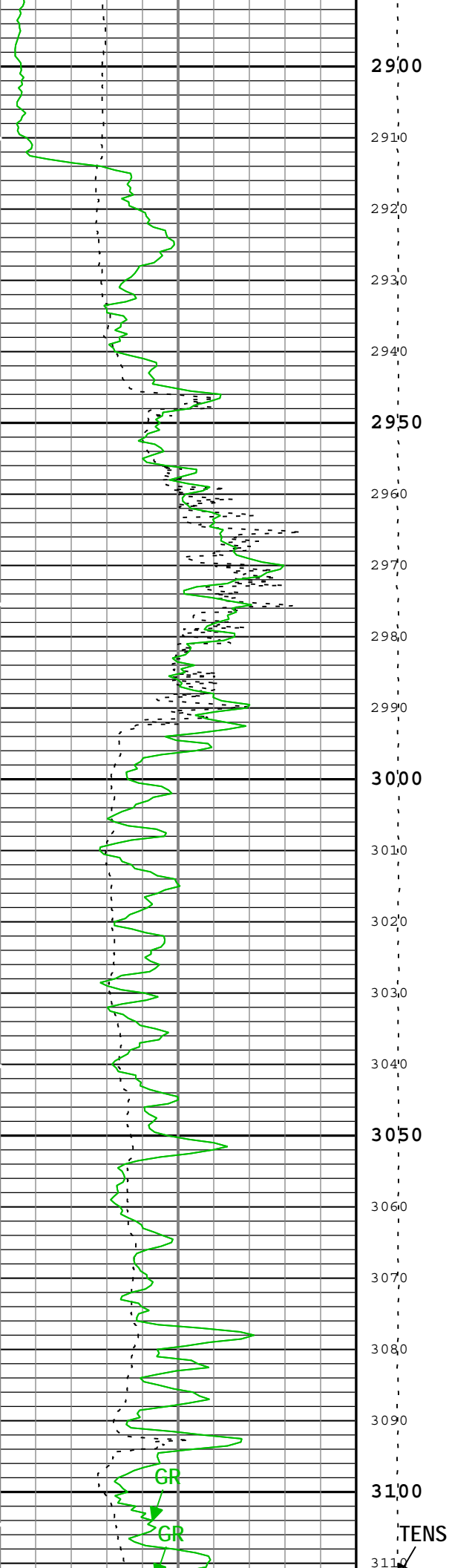


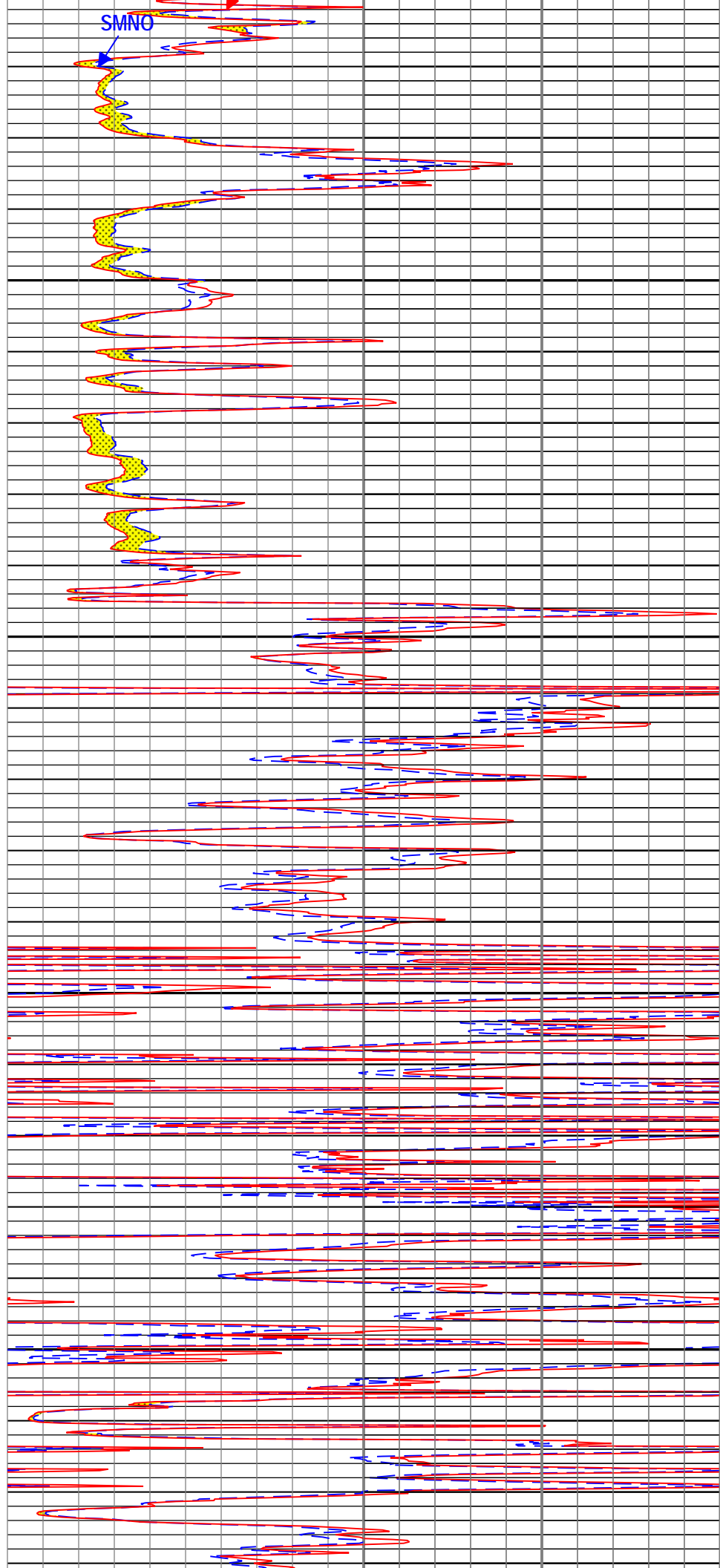
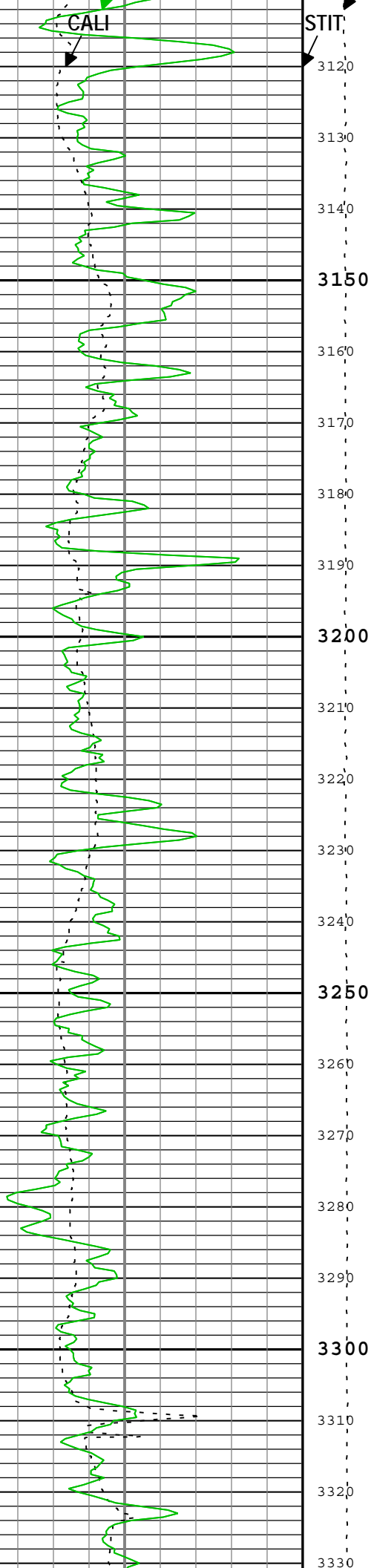


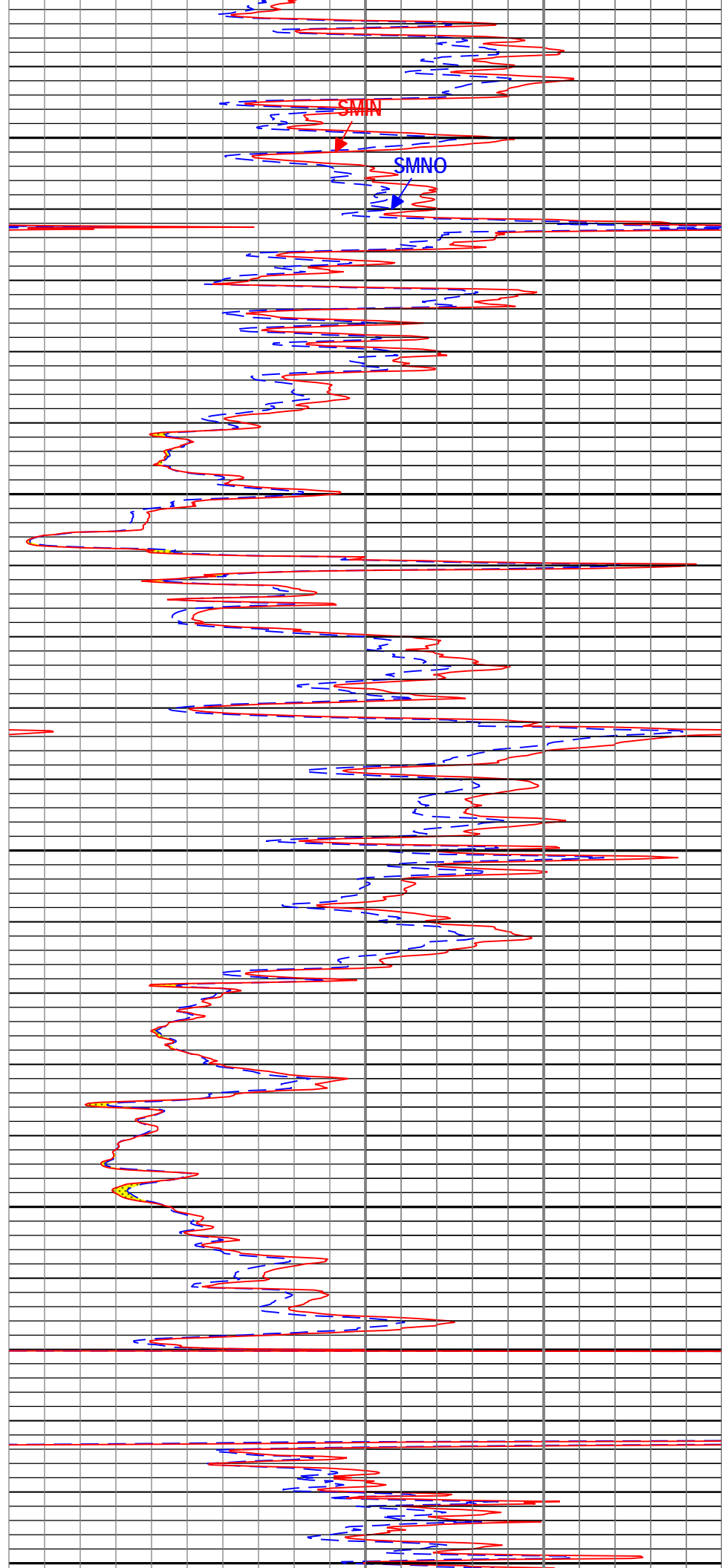
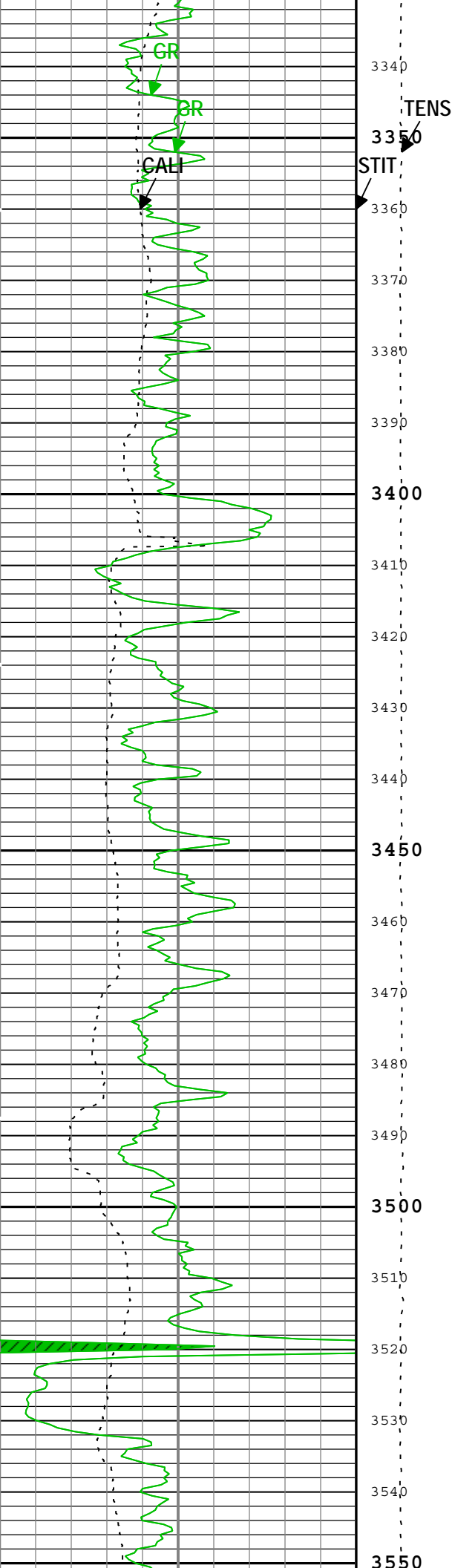


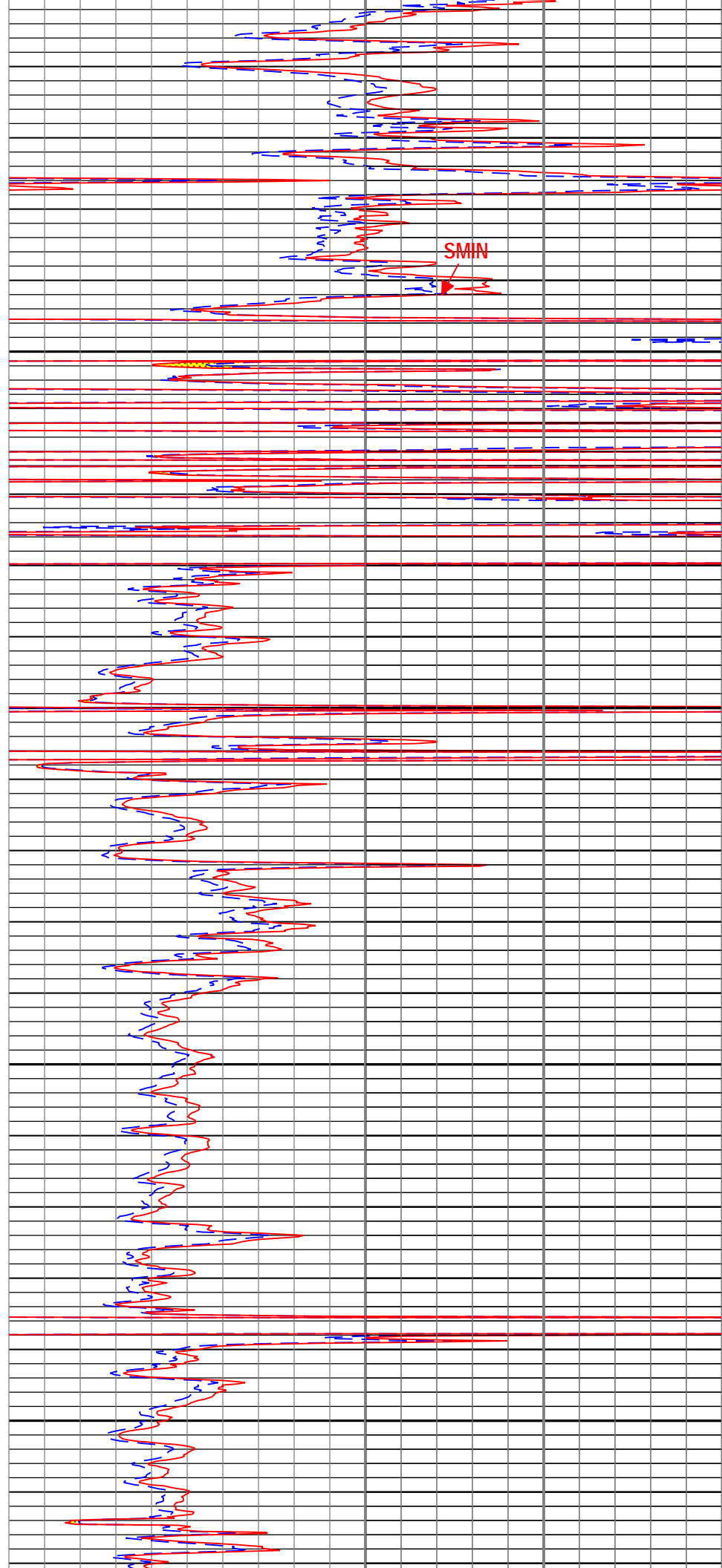
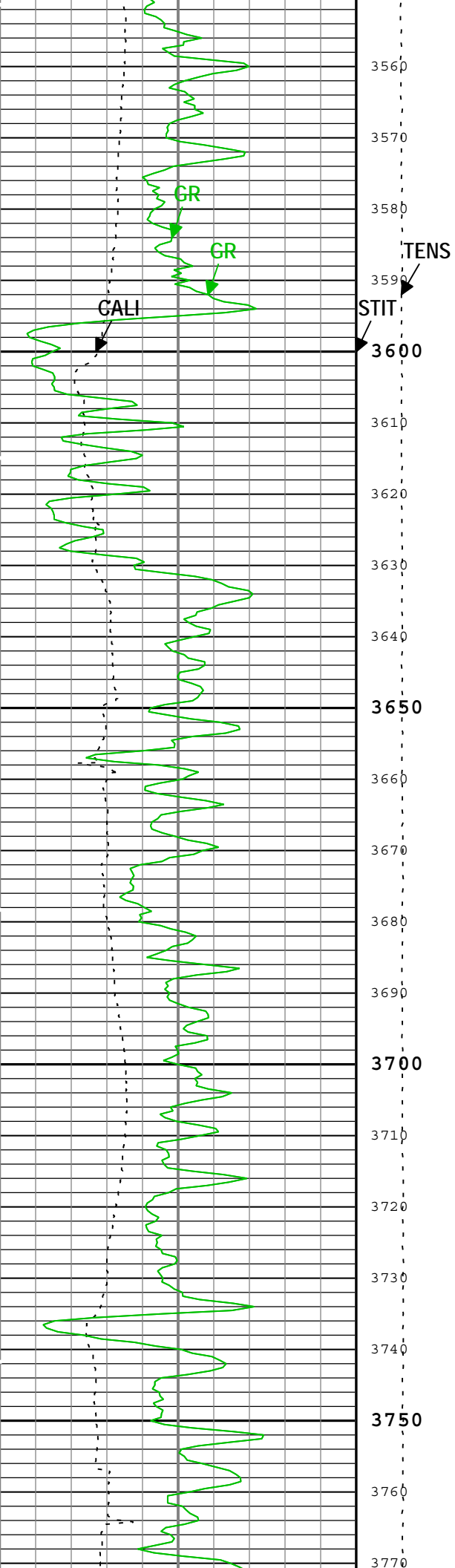


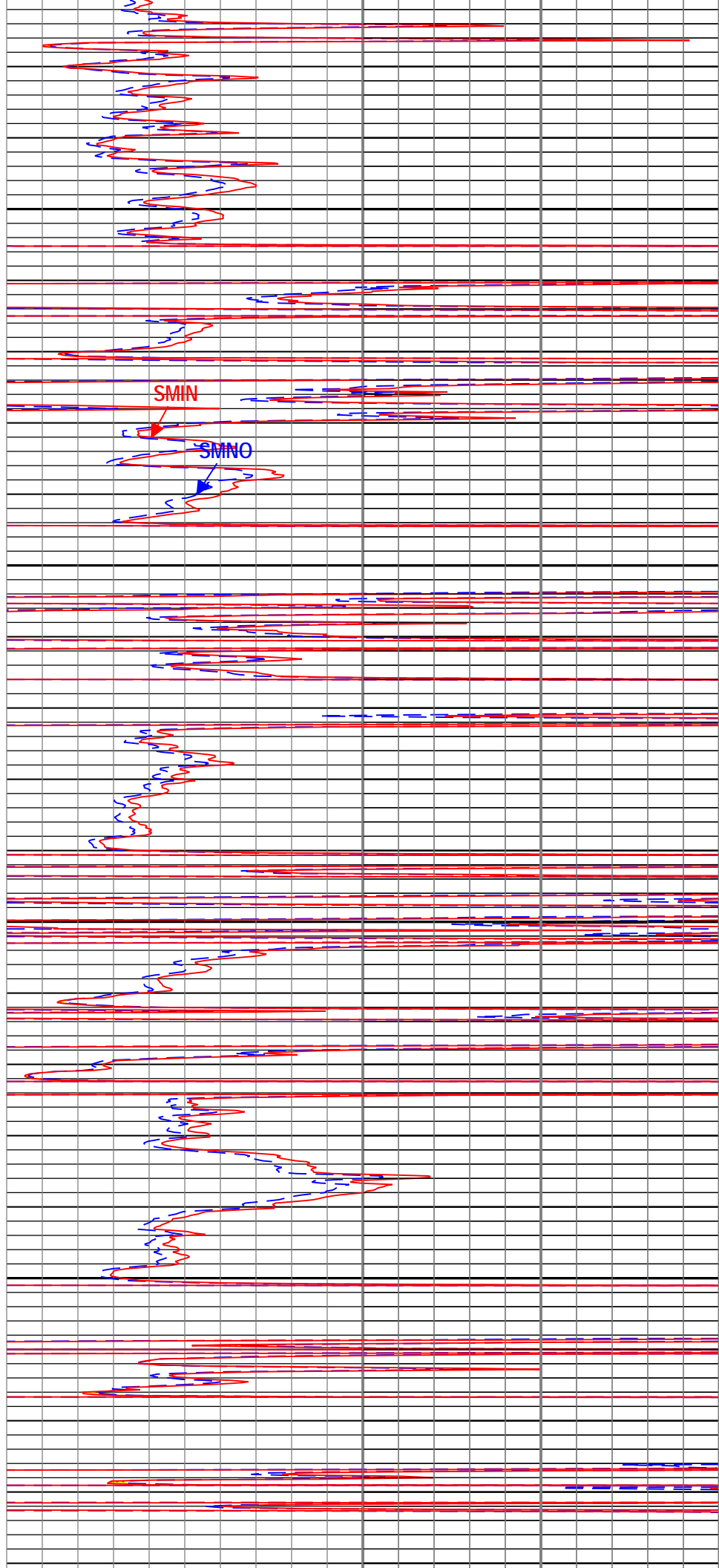
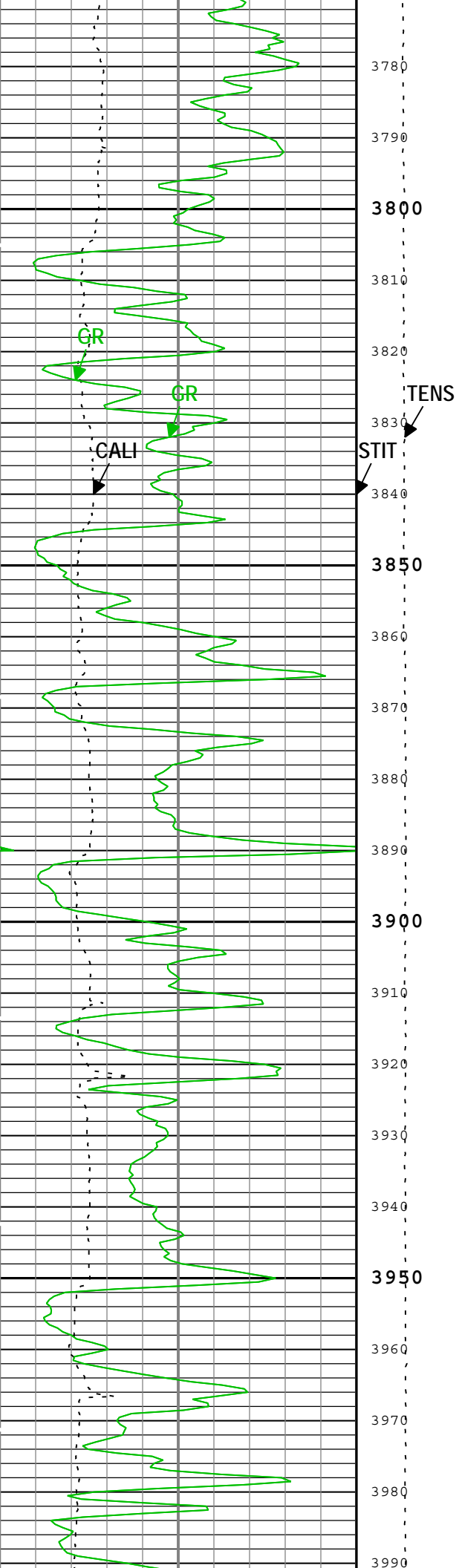


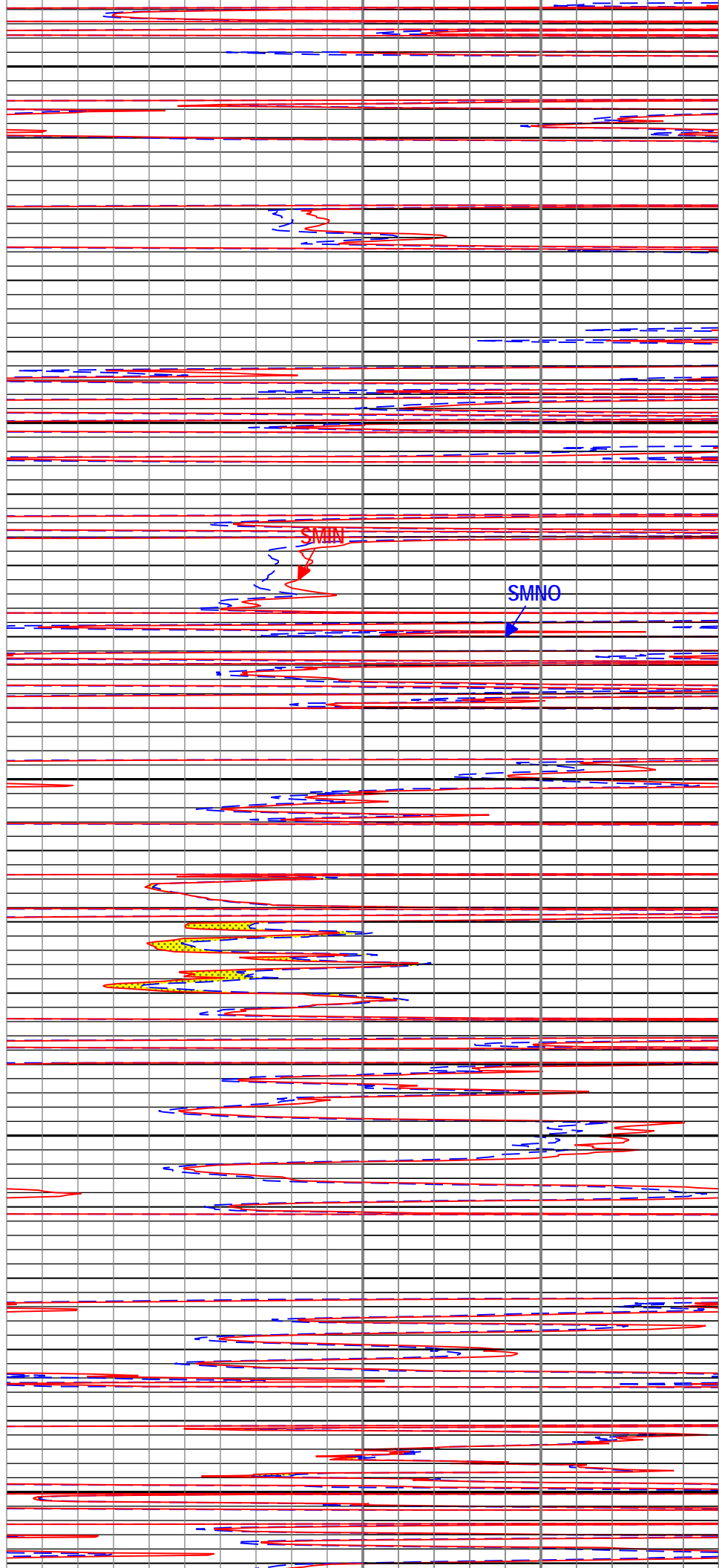
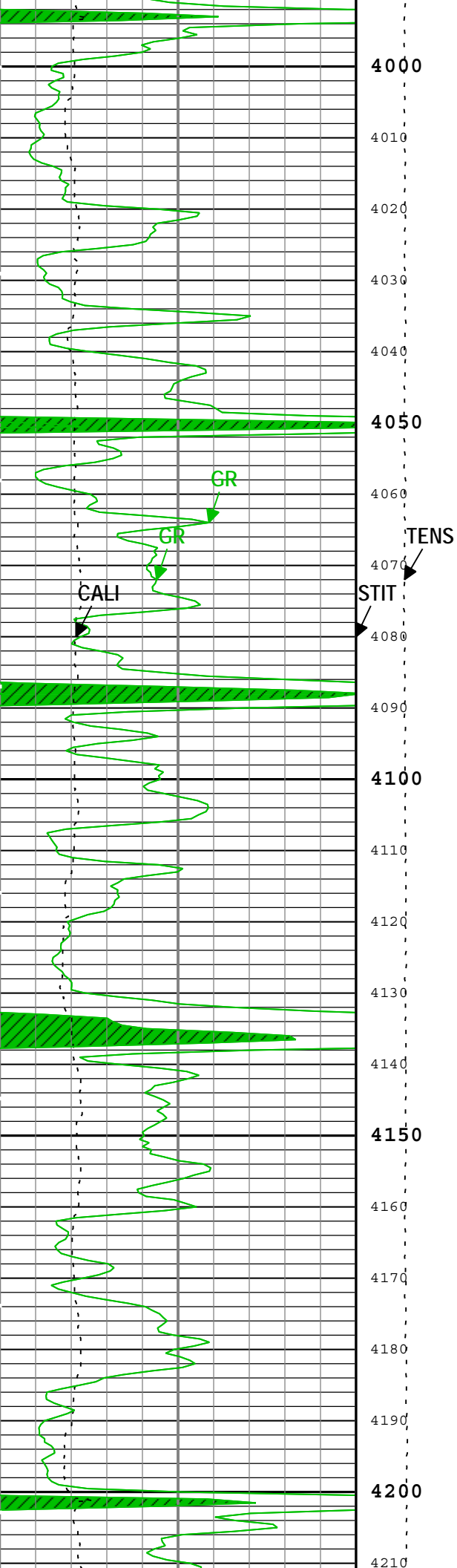


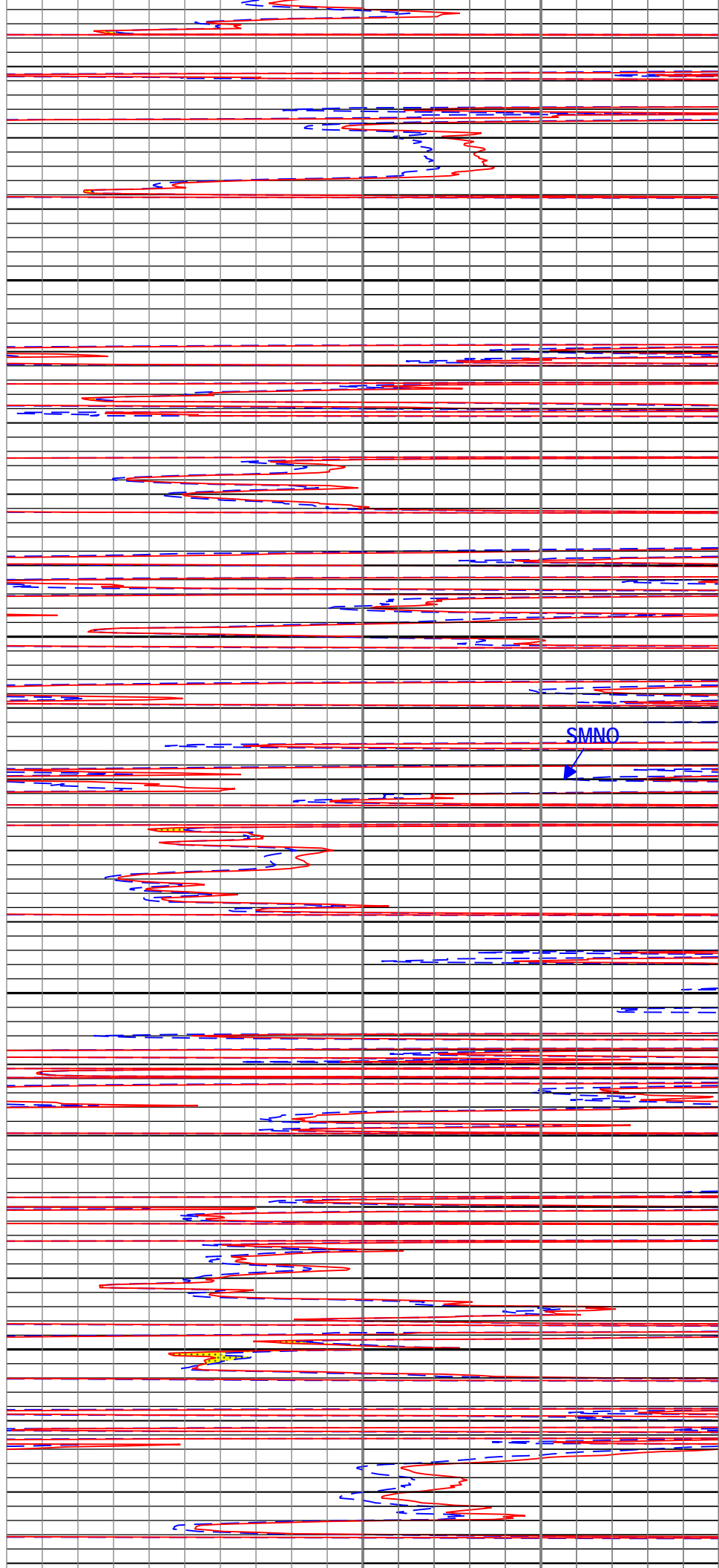
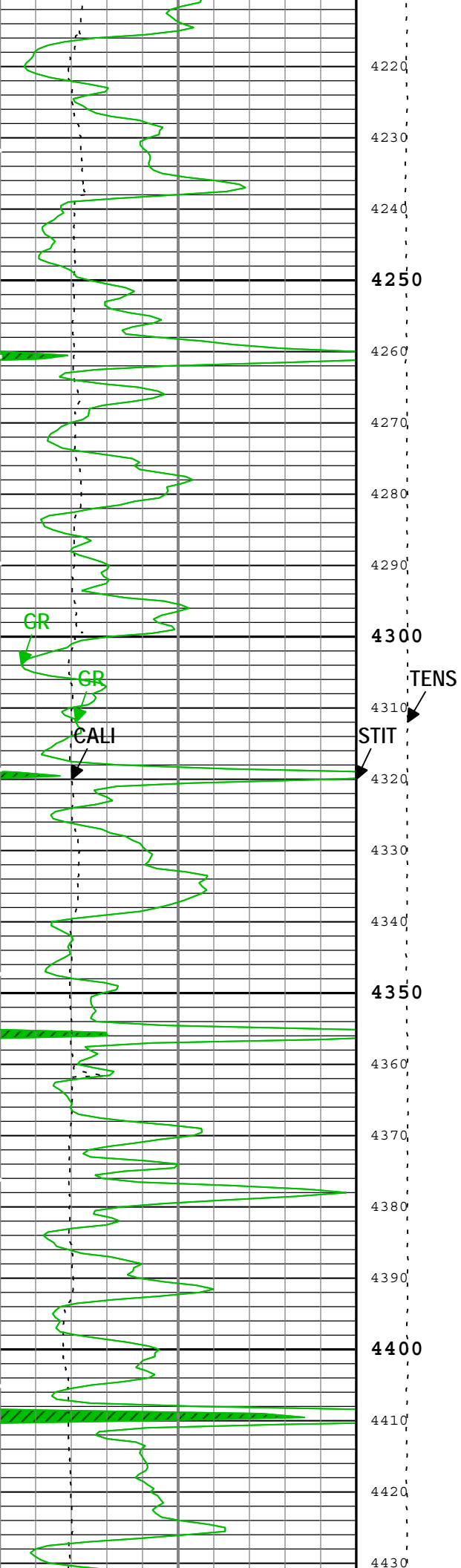


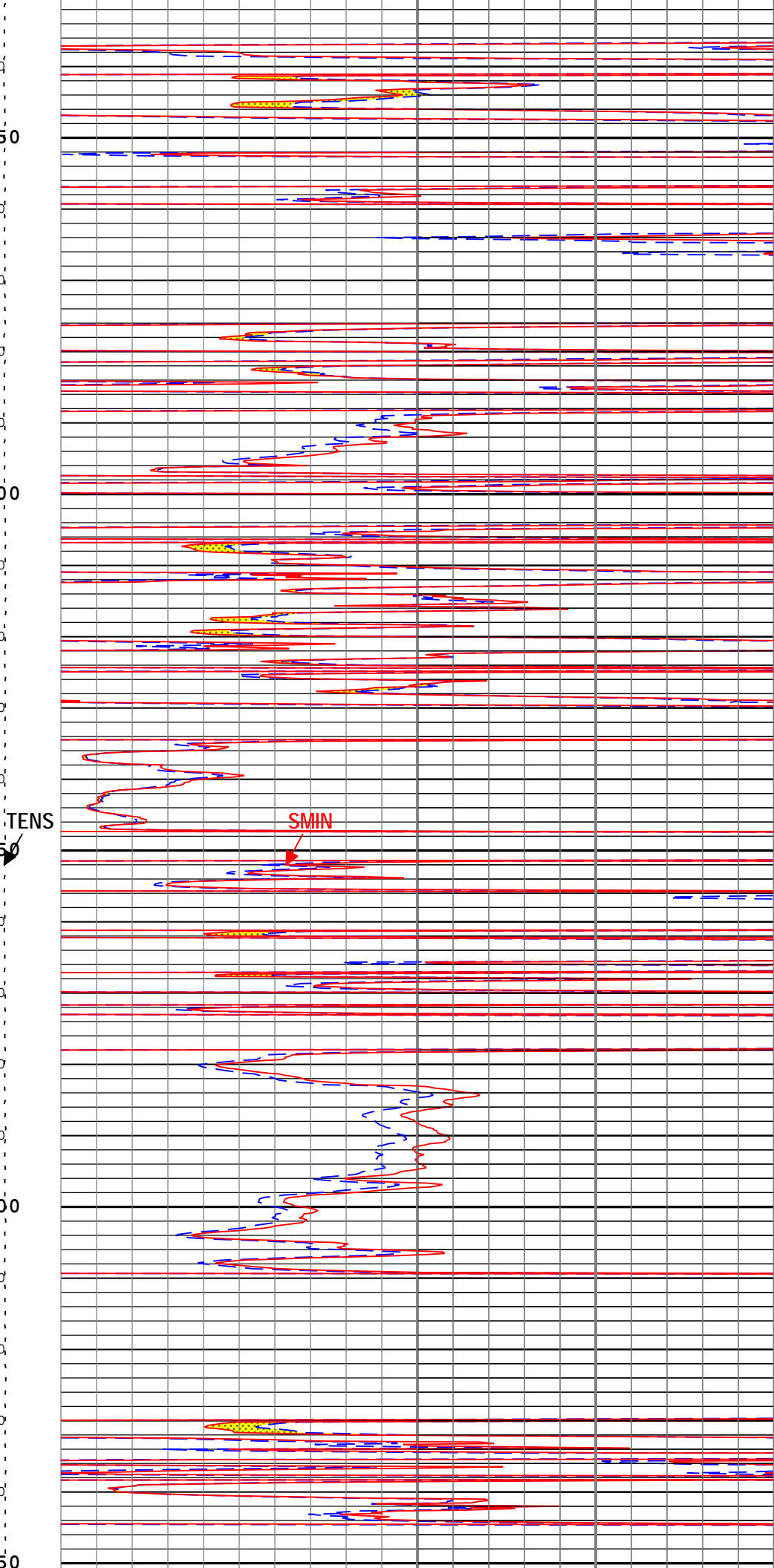
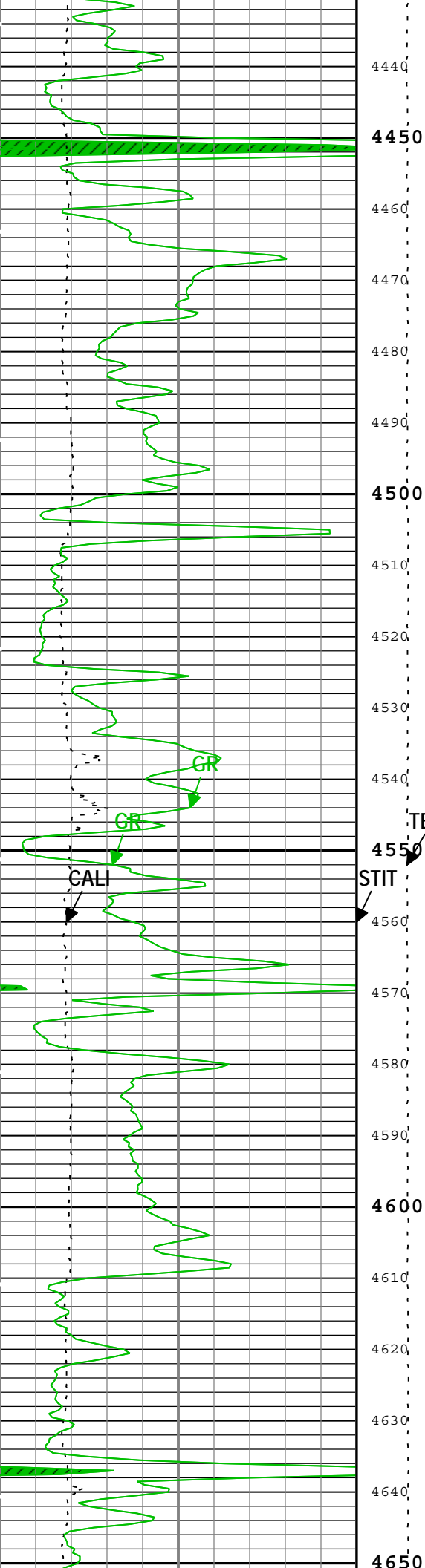


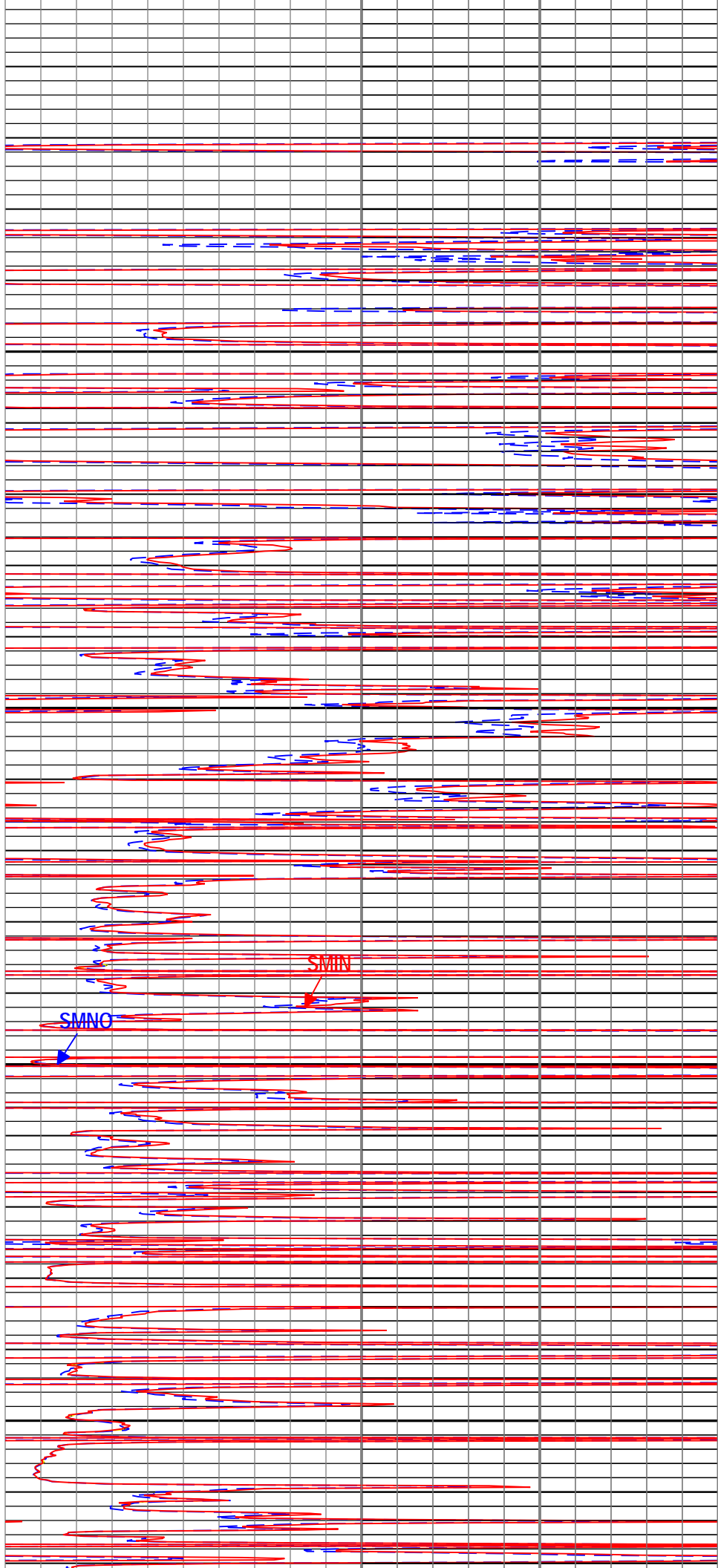
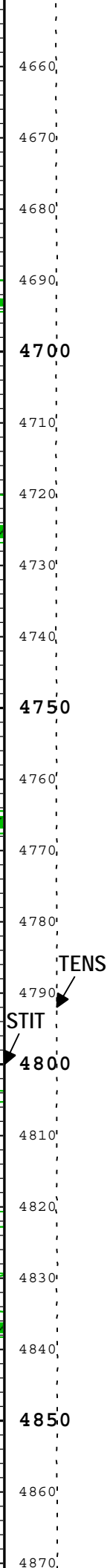
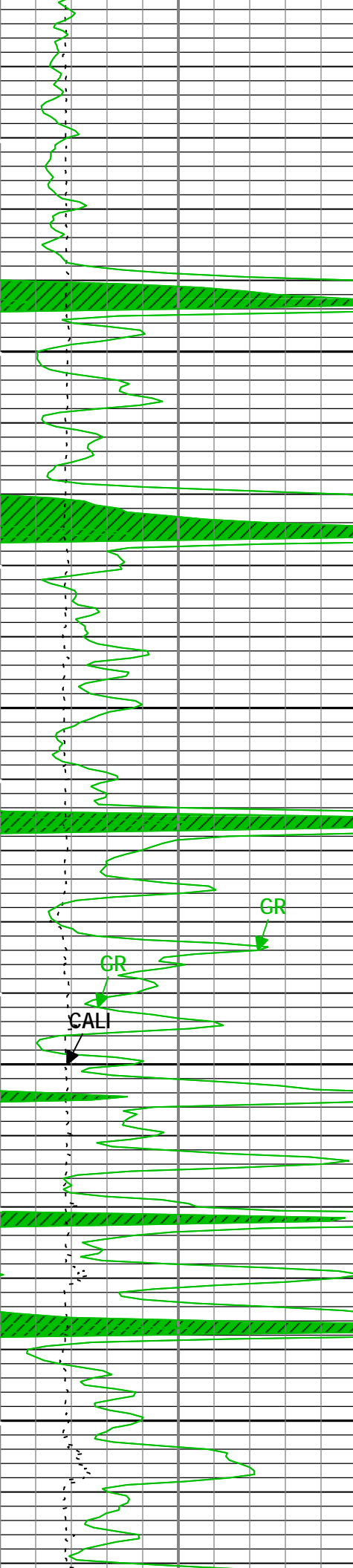


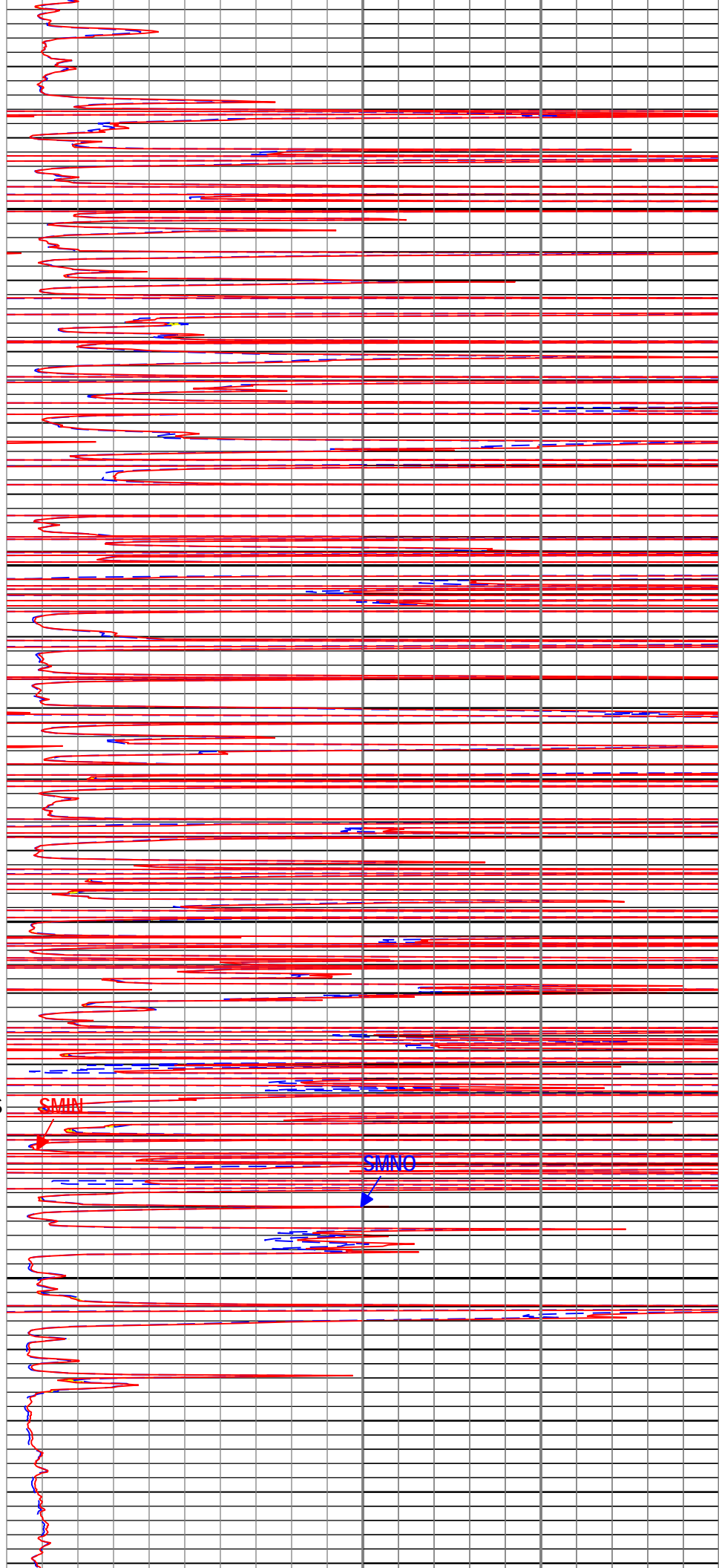
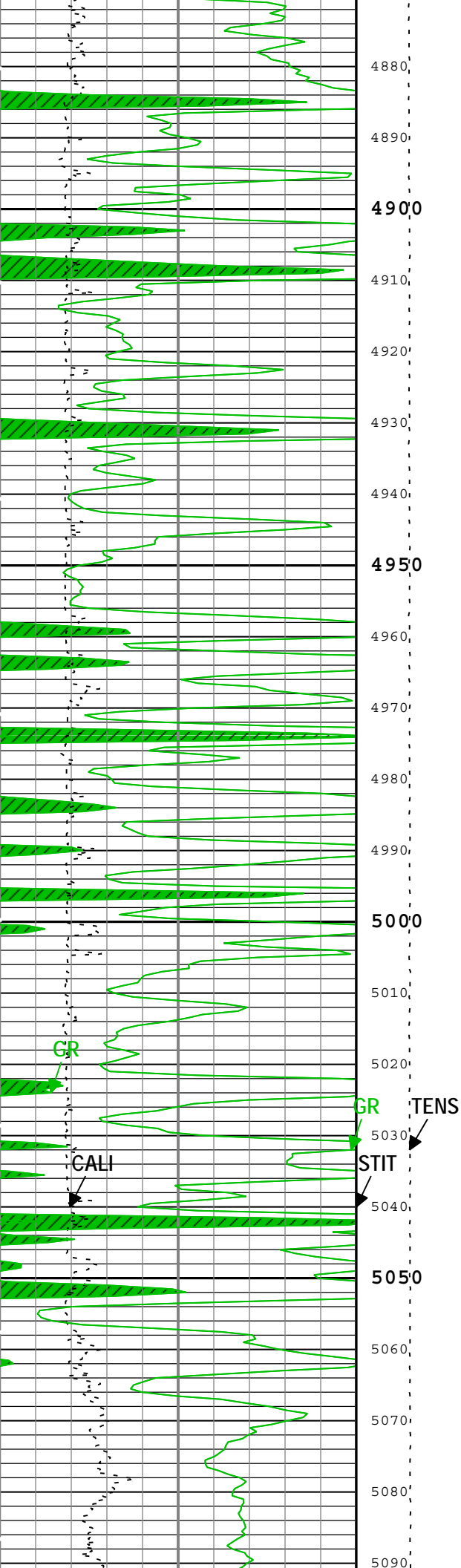


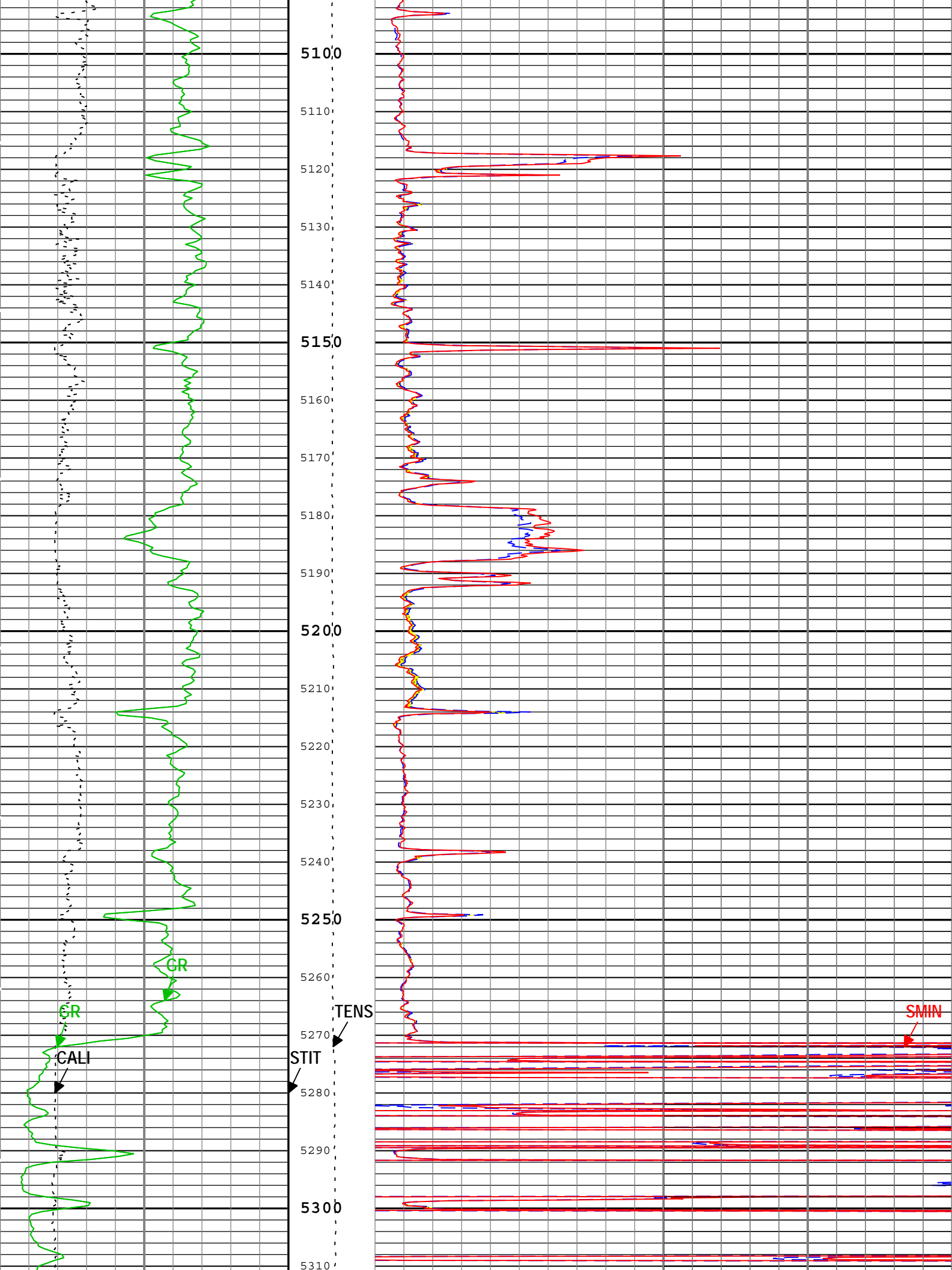


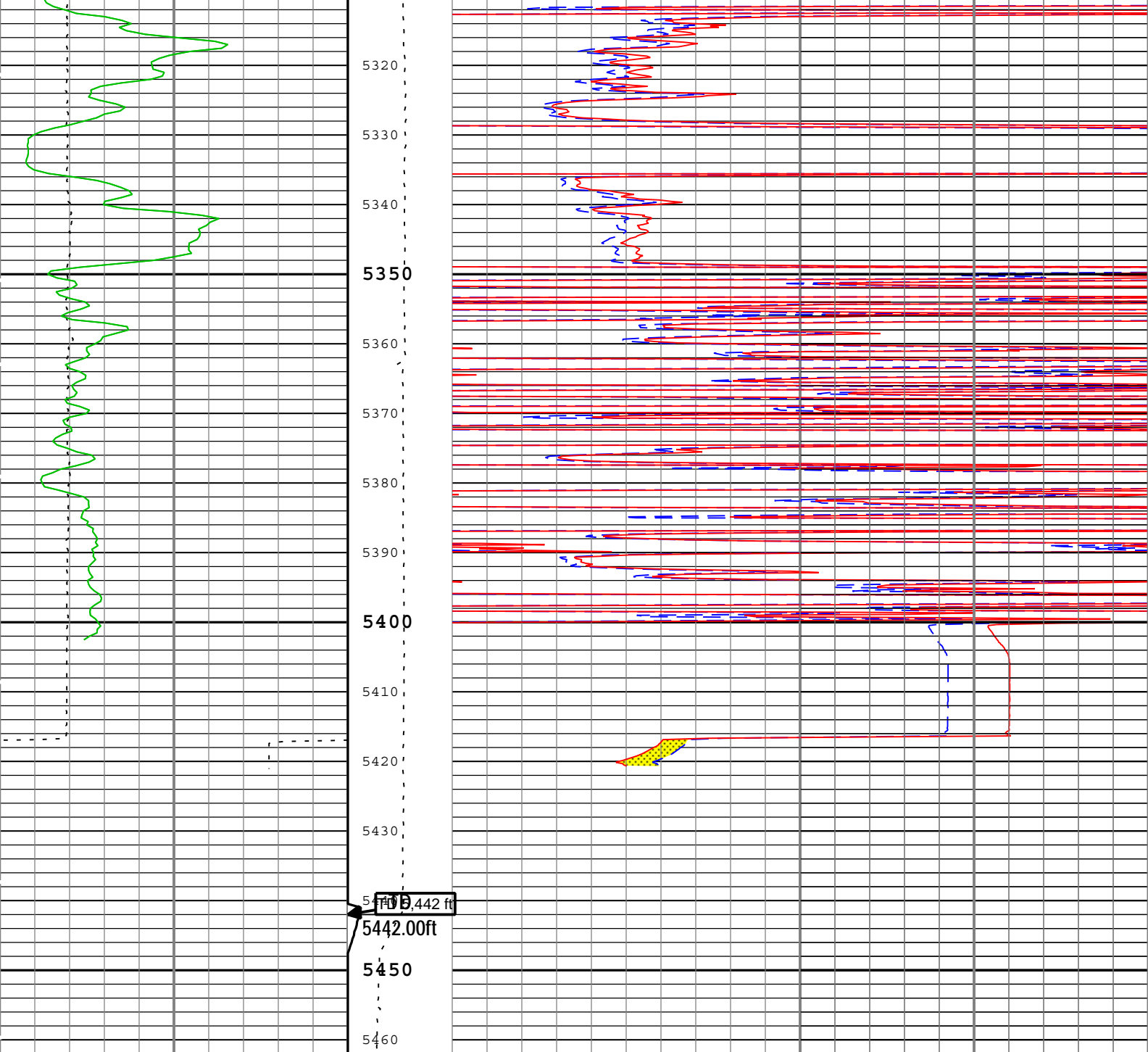












GR Backup		Stuck Tool Indicator, Total (STIT)		PERM	
Caliper (CALI) HDRS[1]		Cable Tension (TENS)		Synthetic Micro-Normal Resistivity (SMNO) HDRS[1]	
6	in	0	ft 50	0	ohm.m
Gamma Ray (GR) HGNS[1]				Synthetic Micro-Inverse Resistivity (SMIN) HDRS[1]	
0	gAPI	200		0	ohm.m
Gamma Ray (GR) HGNS[1]					
200	gAPI	400			

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: 19-Nov-2012 23:47:27

Channel Processing Parameters

Run-1: 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-B	0.109	in
CBLO	Casing Bottom (Logger)	WLSESSION	431	ft
CDEN	Cement Density	HGNS-B	2	g/cm3
DC_MODE	Depth Correction Mode	DepthCorrection	Real-time	
DFD	Drilling Fluid Density	Borehole	9.2	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-B	Yes	
TD	Total Measured Depth	Borehole	5442	ft

Run-1Depth Zoned Parameters				
Parameter	Value	Start (ft)		Stop (ft)
BS	0	400		434
BS	7.875	434		5462

All depth are actual.

Tool Control Parameters				
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Run-1: Parameters				
Parameter	Description	Tool	Value	Unit
HRGD_BRD_TYPE	HRGD Board Type	HDRS-B	WITHOUT_HET	
MAX_LOG_SPEED	Toolstring Maximum Logging Speed	WLSESSION	1800	ft/h
STSO_HRDD	Temperature Source for the Density Algorithm	HDRS-B	Decaytime algorithm	

Calibration Report				
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AIT-H (Array Induction Tool - H) Calibration - Run Run-1			
Primary Equipment :			
Array Induction Sonde - H	AHIS		398
Auxiliary Equipment :			
AITH Rm/SP Bottom Nose	AHRM		398

AIT Sonde Calibration - Test Loop Gain							
Master (EEPROM):		10:54:27 13-Sep-2012					
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Test Loop Gain - 0		Master	1.000	0.950	1.018	1.050	<div></div>
Test Loop Phase - 0	deg	Master	0	-3.000	0.588	3.000	<div></div>
Test Loop Gain - 1		Master	1.000	0.950	1.019	1.050	<div></div>
Test Loop Phase - 1	deg	Master	0	-3.000	0.646	3.000	<div></div>
Test Loop Gain - 2		Master	1.000	0.950	1.020	1.050	<div></div>
Test Loop Phase - 2	deg	Master	0	-3.000	-0.013	3.000	<div></div>
Test Loop Gain - 3		Master	1.000	0.950	1.018	1.050	<div></div>
Test Loop Phase - 3	deg	Master	0	-3.000	0.040	3.000	<div></div>
Test Loop Gain - 4		Master	1.000	0.950	0.999	1.050	<div></div>
Test Loop Phase - 4	deg	Master	0	-3.000	-0.034	3.000	<div></div>
Test Loop Gain - 5		Master	1.000	0.950	0.992	1.050	<div></div>
Test Loop Phase - 5	deg	Master	0	-3.000	-0.222	3.000	<div></div>
Test Loop Gain - 6		Master	1.000	0.950	1.000	1.050	<div></div>
Test Loop Phase - 6	deg	Master	0	-3.000	0.151	3.000	<div></div>
Test Loop Gain - 7		Master	1.000	0.950	1.015	1.050	<div></div>
Test Loop Phase - 7	deg	Master	0	-3.000	-0.171	3.000	<div></div>

AIT Sonde Calibration - Sonde Error Correction							
Master (EEPROM):		10:54:27 13-Sep-2012					
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Sonde Error Correction Real - 0	mS/m	Master	-----	-231.000	-83.485	119.000	<div></div>

		Before-Master After-Before	----	----	-0.001	----	
Thru Cal Phase - 4	deg	Master Before After Before-Master After-Before	---- ---- ---- ---- ----	-1.000 -1.000 ---- ---- ----	61.558 61.810 ---- 0.252 ----	119.000 119.000 ---- ---- ----	
Thru Cal Mag - 5	V	Master Before After Before-Master After-Before	---- ---- ---- ---- ----	1.173 1.173 ---- ---- ----	1.947 1.946 ---- -0.001 ----	2.737 2.737 ---- ---- ----	
Thru Cal Phase - 5	deg	Master Before After Before-Master After-Before	---- ---- ---- ---- ----	-3.000 -3.000 ---- ---- ----	59.409 59.659 ---- 0.250 ----	117.000 117.000 ---- ---- ----	
Thru Cal Mag - 6	V	Master Before After Before-Master After-Before	---- ---- ---- ---- ----	1.173 1.173 ---- ---- ----	1.943 1.942 ---- -0.001 ----	2.737 2.737 ---- ---- ----	
Thru Cal Phase - 6	deg	Master Before After Before-Master After-Before	---- ---- ---- ---- ----	-3.000 -3.000 ---- ---- ----	59.473 59.723 ---- 0.250 ----	117.000 117.000 ---- ---- ----	
Thru Cal Mag - 7	V	Master Before After Before-Master After-Before	---- ---- ---- ---- ----	0.849 0.849 ---- ---- ----	1.382 1.381 ---- -0.001 ----	1.981 1.981 ---- ---- ----	
Thru Cal Phase - 7	deg	Master Before After Before-Master After-Before	---- ---- ---- ---- ----	-7.000 -7.000 ---- ---- ----	53.953 54.249 ---- 0.296 ----	113.000 113.000 ---- ---- ----	
SPA Zero	mV	Master Before After Before-Master After-Before	 ---- ----	-50.000 -50.000 ---- ---- ----	-0.053 -0.061 ---- -0.008 ----	50.000 50.000 ---- ---- ----	
SPA Plus	mV	Master Before After Before-Master After-Before	 ---- ---- ----	941.000 941.000 ---- ---- ----	993.658 993.363 ---- -0.295 ----	1040.000 1040.000 ---- ---- ----	
Temperature Zero	V	Master Before After Before-Master After-Before	 ---- ---- ----	-0.050 -0.050 ---- ---- ----	0.000 0.000 ---- 0.000 ----	0.050 0.050 ---- ---- ----	
Temperature Plus	V	Master Before After Before-Master After-Before	 ---- ---- ----	0.870 0.870 ---- ---- ----	0.920 0.920 ---- 0.000 ----	0.960 0.960 ---- ---- ----	

DSLT-H (Digitizing Sonic Logging Tool - H) Calibration - Run Run-1							
Primary Equipment : <div> Sonic Logging Sonde E supports 3'-5'BHC DT and CBL/VDL SLS-E 8011 </div>							
CBL Normalization - CBL Accumulations							
Master:							
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Upper Far Amplitude - 0		Master	----	----	----	----	

Upper Near Raw Amplitude - 0	mV	Master	-----	-----	-----	-----	
Lower Far Amplitude - 0		Master	-----	-----	-----	-----	
Lower Near Raw Amplitude - 0	mV	Master	-----	-----	-----	-----	

CBL Normalization - CBL/VDL Coefficients

Master:							
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
CBL Correction Factor for UT		Master	3.500	2.700	NOT DONE	4.300	
CBL Correction Factor for LT		Master	2.500	1.700	NOT DONE	4.300	
VDL Ratio between UT and LT for CBLB Mode		Master	1.000		NOT DONE		

CBL Free Pipe Adjustment - Free Pipe Measurement

Before:							
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
CBL Amplitude - 0	mV	Before	-----	-----	-----	-----	
CBL Reference Amplitude (CBRA) - 0	mV	Before	-----	-----	-----	-----	
Measurement Depth - 0	ft	Before	-----	-----	-----	-----	

CBL Free Pipe Adjustment - CBL Amplitude Coefficient

Before:							
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
CBL Adjustment Factor		Before	1.000	0.200	NOT DONE	5.000	
Depth of Before Calibration	ft	Before			NOT DONE		

HDRS-B (HILT Density and Rxo Sonde, 125 degC) Calibration - Run Run-1

Primary Equipment :			
HILT High-Resolution Control Cartridge, 125 degC	HRCC-B	791	
HILT Resistivity Gamma-Ray Density Device, 125 degC	HRGD-B	1849	
Auxiliary Equipment :			
HRDD Backscatter Detector	Backscatter		
HRDD Long Spacing Detector	Long Spacing		
HRDD Short Spacing Detector	Short Spacing		
Cesium 137 Gamma-Ray Logging Source	GSR-J	5094	
HILT High-Resolution Control Cartridge, 125 degC	HRCC-B	791	
HILT High-Resolution Mechanical Sonde, 125 degC	HRMS-B	1754	
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):		11:01:07 19-Nov-2012					
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Small Ring	in	Before	8.00	6.00	8.02	10.00	
Large Ring	in	Before	12.00	9.00	12.20	15.00	

HDRS Density Calibration - Inversion Results

Master (EEPROM):		15:32:56 16-Nov-2012					
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Rho Aluminum	g/cm3	Master	2.596	2.586	2.600	2.606	
Rho Magnesium	g/cm3	Master	1.686	1.676	1.686	1.696	
Pe Aluminum		Master	2.570	2.470	2.563	2.670	
Pe Magnesium		Master	2.650	2.550	2.632	2.750	

HDRS Density Calibration - Deviation Summary

Master (EEPROM):		15:32:56 16-Nov-2012					
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
BS Average Deviation	%	Master	0	-0.6000	0.4813	0.6000	
BS Max Deviation	%	Master	0	-1.6000	1.0620	1.6000	
SS Average Deviation	%	Master	0	-1.0000	0.3288	1.0000	
SS Max Deviation	%	Master	0	-2.5000	1.5436	2.5000	
LS Average Deviation	%	Master	0	-1.5000	0.5170	1.5000	
LS Max Deviation	%	Master	0	-3.5000	1.2479	3.5000	

HDRS Density Calibration - Background Summary

HDRS Density Calibration Background Summary

Master (EEPROM):		15:32:56 16-Nov-2012		Before (Measured):		11:04:03 19-Nov-2012	
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
BS Window Ratio		Master	1.0000		0.7367		
		Before	0.7367	0.6998	0.7377	0.7735	
		Before-Master	-----	-----	0.0010	-----	
BS Window Sum	1/s	Master	1		9557		
		Before	9557	9080	9556	10035	
		Before-Master	-----	-----	-1	-----	
SS Window Ratio		Master	1.0000		0.4943		
		Before	0.4943	0.4696	0.4948	0.5190	
		Before-Master	-----	-----	0.0005	-----	
SS Window Sum	1/s	Master	1		9176		
		Before	9176	8717	9196	9635	
		Before-Master	-----	-----	20	-----	
LS Window Ratio		Master	1.0000		0.2976		
		Before	0.2976	0.2828	0.2997	0.3125	
		Before-Master	-----	-----	0.0021	-----	
LS Window Sum	1/s	Master	1		1073		
		Before	1073	1020	1072	1127	
		Before-Master	-----	-----	-1	-----	

HDRS Density Calibration - Photo-multiplier High Voltages

Master (EEPROM):		15:32:56 16-Nov-2012		Before (Measured):		11:04:03 19-Nov-2012	
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
BS PM High Voltage	V	Master		1000	1627	2400	
		Before		1000	1622	2400	
		Before-Master	-----	-100	-5	100	
SS PM High Voltage	V	Master		1000	1690	2400	
		Before		1000	1695	2400	
		Before-Master	-----	-100	5	100	
LS PM High Voltage	V	Master		1000	1588	2400	
		Before		1000	1579	2400	
		Before-Master	-----	-100	-9	100	

HDRS Density Calibration - Crystal Quality Resolutions

Master (EEPROM):		15:32:56 16-Nov-2012		Before (Measured):		11:04:03 19-Nov-2012	
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
BS Crystal Resolution	%	Master		5.00	11.80	25.00	
		Before		5.00	11.79	25.00	
		Before-Master	-----	-1.00	-0.01	1.00	
SS Crystal Resolution	%	Master		5.00	10.12	20.00	
		Before		5.00	10.21	20.00	
		Before-Master	-----	-1.00	0.09	1.00	
LS Crystal Resolution	%	Master		5.00	9.55	20.00	
		Before		5.00	9.64	20.00	
		Before-Master	-----	-1.00	0.09	1.00	

HDRS MCFL Calibration - MCFL Accumulations

Before (Measured):		11:04:17 19-Nov-2012					
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Main Resistivity	ohm.m	Before	3875	3565	3831	4185	
Deep Resistivity	ohm.m	Before	3830	3524	3794	4136	
Shallow Resistivity	ohm.m	Before	3830	3524	3822	4136	

HGNS-B (HILT Gamma-Ray and Neutron Sonde, 125 degC) Calibration - Run Run-1

Primary Equipment :			
HILT Gamma-Ray and Neutron Sonde, 125 degC	HGNS-B	1927	
Auxiliary Equipment :			
HGNS Accelerometer, 125 degC	HACCZ-B	749	
AmBe Neutron Logging Source	NSR-F	5069	
Calibration Parameter :			
Water Temperature			
Housing Size			

HGNS Accelerometer Calibration - Accelerometer Accumulations

Before (Measured): 20:12:05 19-Nov-2012

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
AZ Vertical Measurement	ft/s2	Before	32.2	31.5	32.2	32.8	

HGNS Accelerometer EEPROM - Accelerometer EEPROM Read

Master (EEPROM): 00:00:00 15-Mar-2001

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Accelerometer Manufacturer		Master			Sunstrand		
Accelerometer Reference Temperature	degF	Master		30.2	68.0	122.0	
Accelerometer Coefficients - 0		Master	----	----	-5693.000	----	
Accelerometer Coefficients - 1		Master	----	----	20.390	----	
Accelerometer Coefficients - 2		Master	----	----	-0.031	----	
Accelerometer Coefficients - 3		Master	----	----	0.000	----	
Accelerometer Coefficients - 4		Master	----	----	2.141	----	
Accelerometer Coefficients - 5		Master	----	----	0.000	----	
Accelerometer Coefficients - 6		Master	----	----	0.000	----	
Accelerometer Coefficients - 7		Master	----	----	0.000	----	
Accelerometer Coefficients - 8		Master	----	----	295.800	----	
Accelerometer Coefficients - 9		Master	----	----	1.031	----	

HGNS Neutron Calibration - HGNS Neutron Accumulations

Master (EEPROM): 12:04:40 16-Nov-2012 Before (Measured): 10:57:38 19-Nov-2012 After:

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Near Zero Measurement	1/s	Master	0	5.0	27.1	40.0	
		Before	0	5.0	26.6	40.0	
		After	----	----	----	----	
		Before-Master	----	-4.1	-0.5	4.1	
		After-Before	----	----	----	----	
Far Zero Measurement	1/s	Master	0	5.0	26.8	40.0	
		Before	0	5.0	27.4	40.0	
		After	----	----	----	----	
		Before-Master	----	-4.0	0.6	4.0	
		After-Before	----	----	----	----	
Near Plus Measurement - 0	1/s	Master	6031.0	4700.0	4898.0	6900.0	
		Before	----	----	----	----	
		After	----	----	----	----	
		Before-Master	----	----	----	----	
		After-Before	----	----	----	----	
Far Plus Measurement - 0	1/s	Master	2793.0	1900.0	2070.0	2900.0	
		Before	----	----	----	----	
		After	----	----	----	----	
		Before-Master	----	----	----	----	
		After-Before	----	----	----	----	
Near Corrected Plus Measurement - 0	1/s	Master		4700.0	4970.0	6900.0	
		Before	----	----	----	----	
		After	----	----	----	----	
		Before-Master	----	----	----	----	
		After-Before	----	----	----	----	
Far Corrected Plus Measurement - 0	1/s	Master		1900.0	2107.0	2900.0	
		Before	----	----	----	----	
		After	----	----	----	----	
		Before-Master	----	----	----	----	
		After-Before	----	----	----	----	

HGNS Gamma-Ray Calibration - Gamma-Ray Accumulations

Before (Measured): 11:02:29 19-Nov-2012 After:

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
RGR Zero Measurement	gAPI	Before	30.0	0	73.3	120.0	
		After	----	----	----	----	
		After-Before	----	----	----	----	
RGR Plus Measurement	gAPI	Before	185.4	157.1	170.6	206.3	
		After	----	----	NOT DONE	----	
		After-Before	----	----	----	----	
GR Calibration Gain		Before	0.89	0.80	0.97	1.05	

		After	----	----	----	----		
		After-Before	----	----	----	----		

LEH-QT (Logging Equipment Head - QT, 3-3/8 inch 31 pin HPHT with Tension Sensor) Calibration - Run Run-1

Primary Equipment :
Logging Equipment Head - QT, 3-3/8 inch 31 pin HPHT with Tension Sensor LEH-QT

HTEN Master Calibration - HTEN Master Calibration

Master:							
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
HTEN Shop Gain		Master	1.000	0.800	NOT DONE	4.500	
HTEN Shop Offset	lbf	Master	0	-1000.000	NOT DONE	1000.000	

HTEN Before Calibration - HTEN Before Calibration

Before:							
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
RHTE Zero Measurement - 0	lbf	Before	----	----	----	----	
RHTE Plus Measurement - 0	lbf	Before	----	----	----	----	
HTEN Gain - 0		Before	----	----	----	----	
HTEN Offset - 0	lbf	Before	----	----	----	----	

Company:

Vecta Oil & Gas LTD

Well:

Maroon 24-20

Field:

Wildcat

County:

Cheyenne

State:

Colorado

Platform Express

Triple Combo

MicroLog

Schlumberger