

Company: Kerr McGee Oil & Gas Onshore LP

Well: Banded 37C-27HZ

Field: Wattenberg

County: Weld State: Colorado

Platform Express

Micro Log

County:	Weld
Field:	Wattenberg
Location:	SHL: 300' FSL & 916' FEL
Well:	Banded 37C-27HZ
Company:	Kerr McGee Oil & Gas Onshore LP
Location:	
SHL: 300' FSL & 916' FEL	Elev.: K.B. 5002.00 ft G.L. 4977.00 ft D.F. 5001.00 ft
Permanent Datum:	Ground Level
Log Measured From:	Kelly Bushing
Drilling Measured From:	Kelly Bushing
API Serial No. 05-123-39303-00	Section: 27
	Township: 2N
	Range: 67W

Logging Date	08-Aug-2014
Run Number	Two
Depth Driller	7045.00 ft
Schlumberger Depth	7042.00 ft
Bottom Log Interval	7055.00 ft
Top Log Interval	1762.00 ft
Casing Driller Size @ Depth	9.625 in @ 1771.00 ft
Casing Schlumberger	1762 ft
Bit Size	8.75 in
Type Fluid In Hole	WBM
Density	10.2 lbm/gal
Fluid Loss	PH
Source of Sample	Active Tank
RM @ Meas Temp	1.13 ohm.m @ 75 degF
RMF @ Meas Temp	1.15 ohm.m @ 75 degF
RMC @ Meas Temp	1.37 ohm.m @ 75 degF
Source RMF	Calculated
RM @ BHT	0.55 @ 160
RMF @ BHT	0.56 @ 160
Max Recorded Temperatures	160 degF
Circulation Stopped	07-Aug-2014 23:00:00
Logger on Bottom	08-Aug-2014 04:00:00
Unit Number	2135
Recorded By	Nolan Welsh
Witnessed By	Steve Wilson

Disclaimer

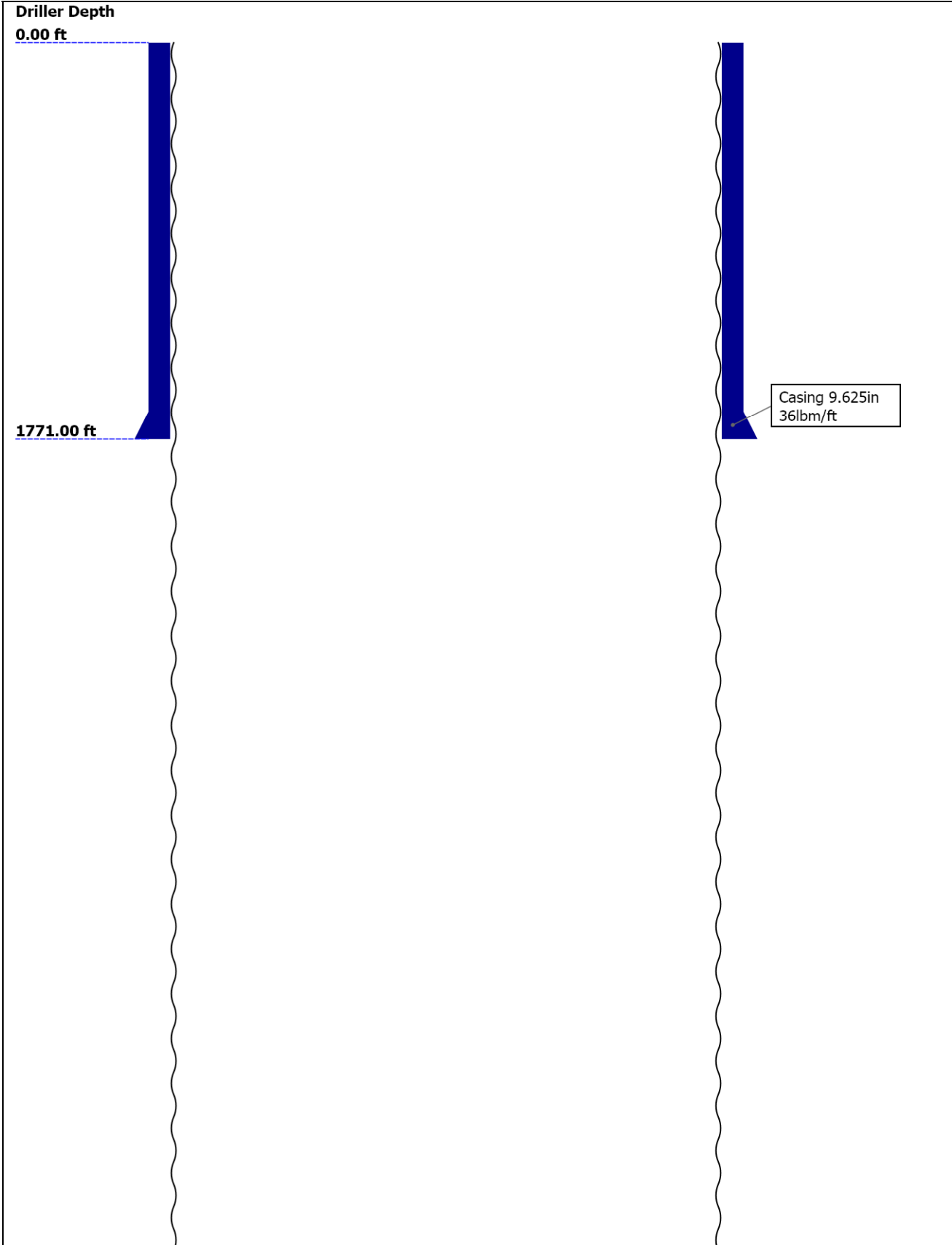
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Well Sketch





Borehole Size/Casing/Tubing Record						
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Bit						
Bit Size (in)	8.75					
Top Driller (ft)	0					
Top Logger (ft)	0					
Bottom Driller (ft)	7045					
Bottom Logger (ft)	7042					
Casing						
Size (in)	9.625					
Weight (lbm/ft)	36					
Inner Diameter (in)	8.921					
Grade	N/A					
Top Driller (ft)	0					
Top Logger (ft)	0					
Bottom Driller (ft)	1771					
Bottom Logger (ft)	1762					

Operational Run Summary						
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Parameter (unit)	Two					
Date Log Started	08-Aug-2014					
Time Log Started	03:12:32					
Date Log Finished	08-Aug-2014					
Time Log Finished	06:14:00					
Top Log Interval (ft)	1762.00					
Bottom Log Interval (ft)	7055.00					
Total Depth (ft)	7055.00					
Max Hole Deviation (deg)	19.00					
Azimuth of Max Deviation (deg)	0.00					
Bit Size (in)	8.750					
Logging Unit Number	2135					
Logging Unit Location	Fort Morgan					
Recorded By	Nolan Welsh					
Witnessed By	Steve Wilson					
Service Order Number	CXPX-00021					

Service Order Number		CATX-00021					
Borehole Fluids							
Parameter(unit)	Two						
Fluid Type	Water						
Fluid Name	WBM						
Max Recorded Temperatures (degF)	160						
Source of Sample	Active Tank						
Salinity (ppm)	0						
Density (lbm/gal)	10.2						
Funnel Viscosity (s)	41						
Fluid Loss (cm3)							
PH	9.5						
Date/Time Circulation Stopped	07-Aug-2014 23:00:00						
Date Logger on Bottom	08-Aug-2014						
Time Logger on Bottom	04:00:00						
Source RMF	Calculated						
RMC	Calculated						
RM @ Meas Temp (ohm.m@degF)	1.13 @ 75						
RMF @ Meas Temp (ohm.m@degF)	1.15 @ 75						
RMC @ Meas Temp (ohm.m@degF)	1.37 @ 75						
RM @ BHT (ohm.m@degF)	0.55 @ 160						
RMF @ BHT (ohm.m@degF)	0.56 @ 160						
RMC @ BHT (ohm.m@degF)	0.67 @ 160						
Total Solid (%)							
High Gravity Solids (%)							
Remarks and Equipment Summary							
Two: Toolstring				Two: Remarks			
Equip name	Length	MP name	Offset	Thank you for choosing schlumberger			
LEH-QT	53.58			Rig: H&P 311			
LEH-QT				AIT ran in compute standoff mode`			
EDTC-B:8315	50.67			HGNS ran without bowspring			
EDTH-B:8336				HGNS eccentered using PPC caliper with one arm powered.			
EDTG-B:77213				Logging interval from TD to Casing Shoe.			
EDTC-B:8315				Repeat analysis done 200 ft. below casing shoe due to bottom hole conditions.			
		CTEM	47.17	Crew: Kevin Crow, Troy Ocanas, Alonzo Carrera			
		ACCZ	0.00				
		HV	0.00				
		Gamma Ray	45.3				
		TelStatus	44.17				
PPC-B:8193	44.17						
PPC-B:8193		PPC-B Caliper	43.02				
		s					

HGNS-H:4865 37.65
HGNH:4817
NSR-F:2554
NPV-N
HMCA-H
HGNS-H:4865
HACCZ-H:6991

Temperature 37.62
GR 36.91

CNL Porosity 30.57
HGNS 28.24
HMCA 28.24
Acceleromete 0.00
r

HDRS-H:3863 28.24
ECH-MEB:2898
HRCC-H:3828
HRMS-H:3863
GPV-Q
Short Spacing
Long Spacing
GSR-J:5471
Backscatter
HRGD-H:3760

HRCC 24.24

MCFL 18.81
Caliper 18.33
TLD Density 17.94

AIT-M:181 16.00
AMIS:181
AMRM:181

Power Supply 7.91
Temperature 7.91
Induction 7.91

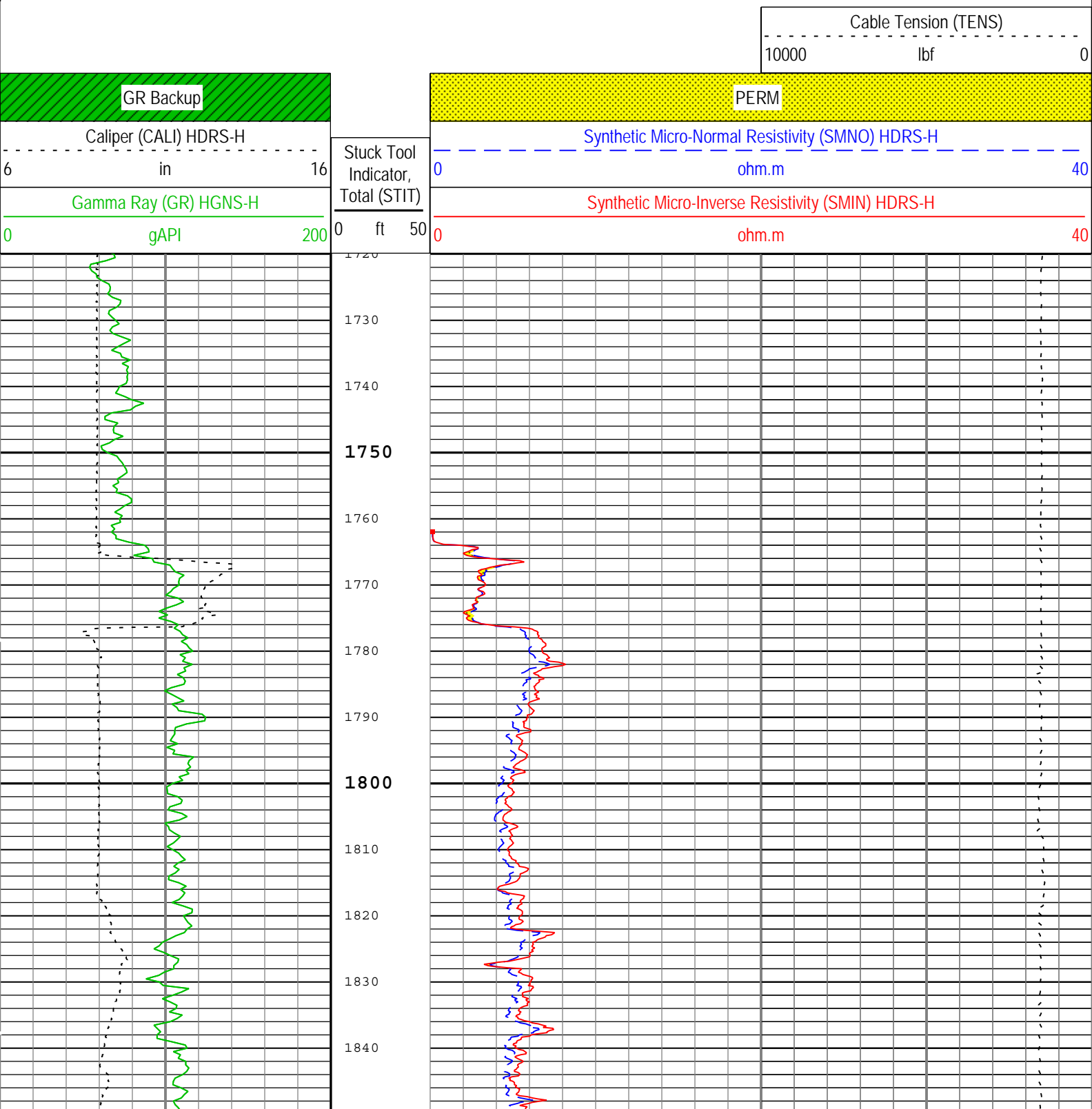
SP 0.08
Mud Resistivity 0.00
Head Tension
TOOL_ZERO

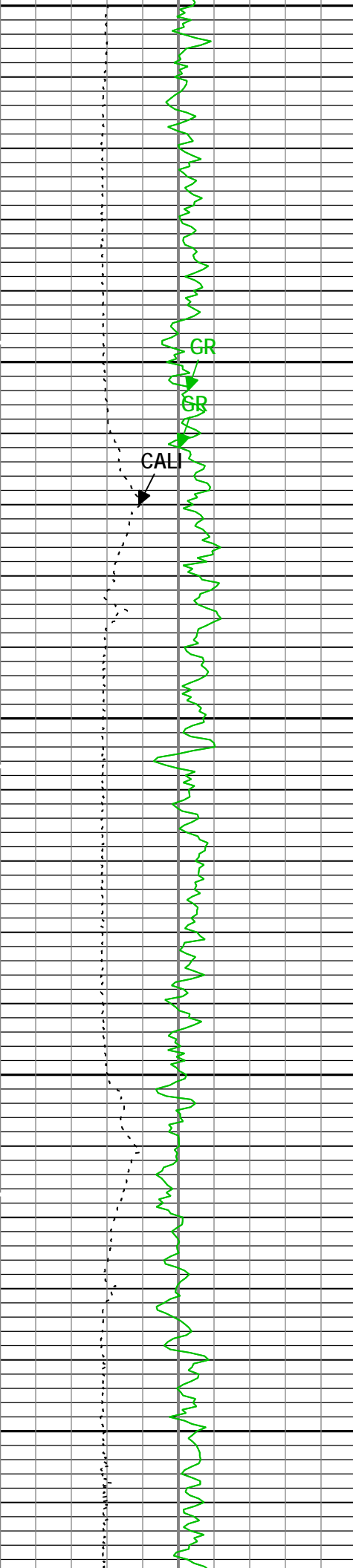
Lengths are in ft
Maximum Outer Diameter = 9.000 in
Line: Sensor Location, Value: Gating Offset
All measurements are relative to TOOL_ZERO

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: 08-Aug-2014 06:54:05				

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

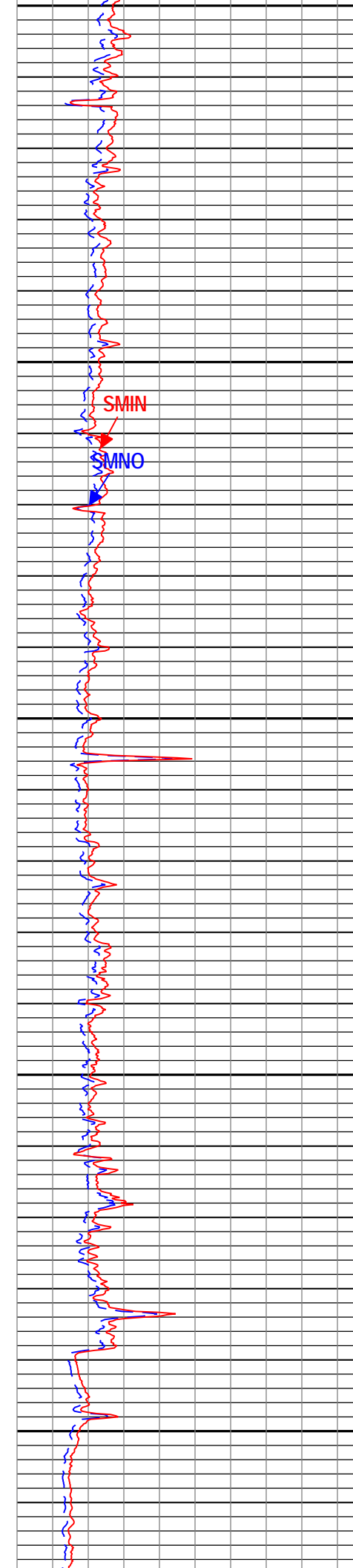
TIME_1900 - Time Marked every 60.00 (s)





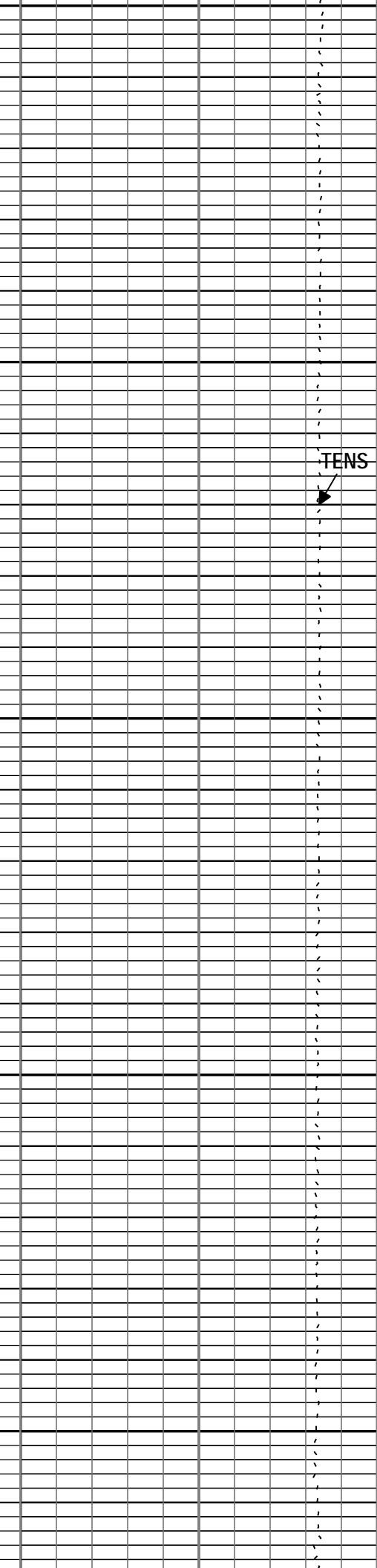
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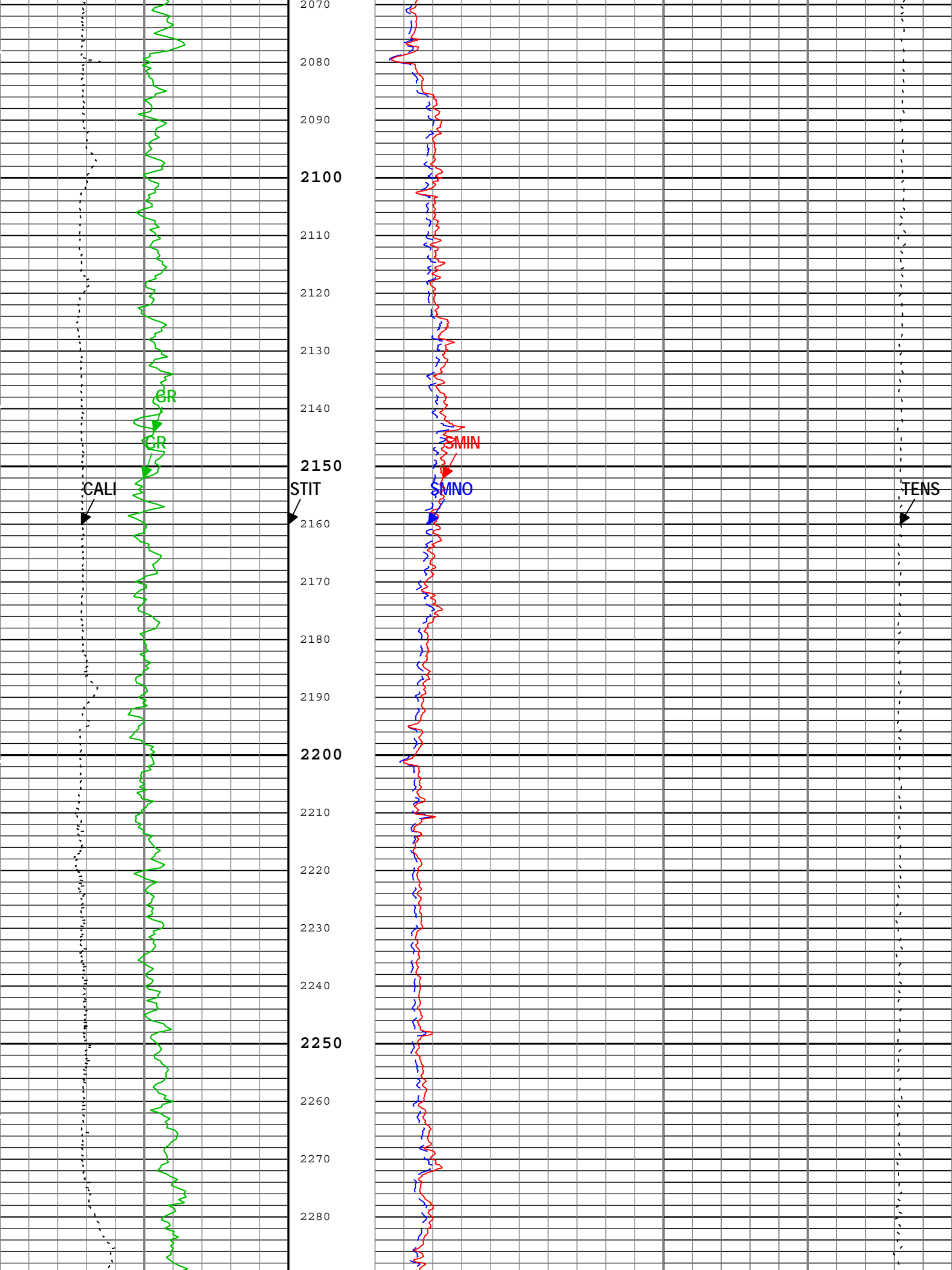


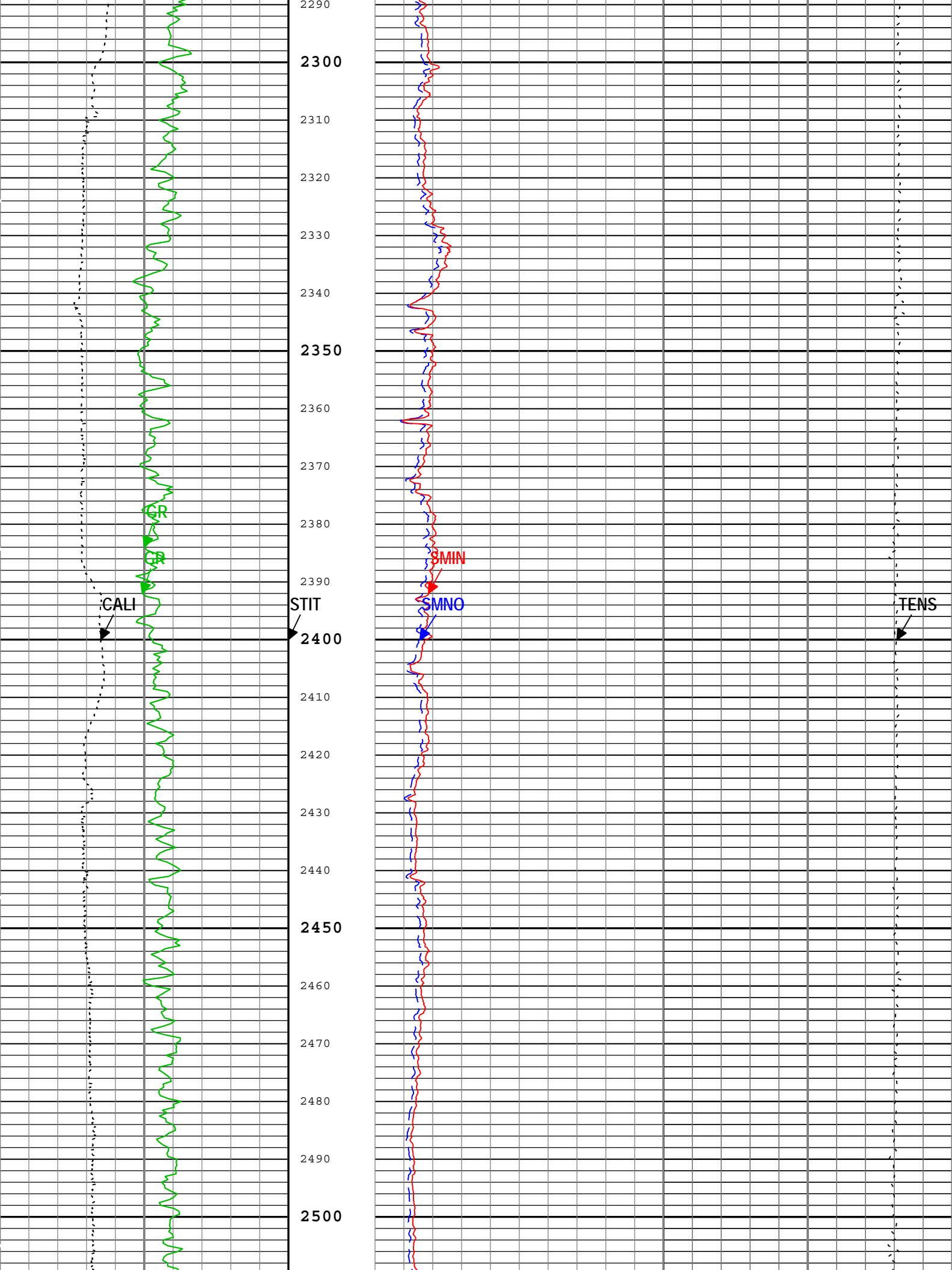
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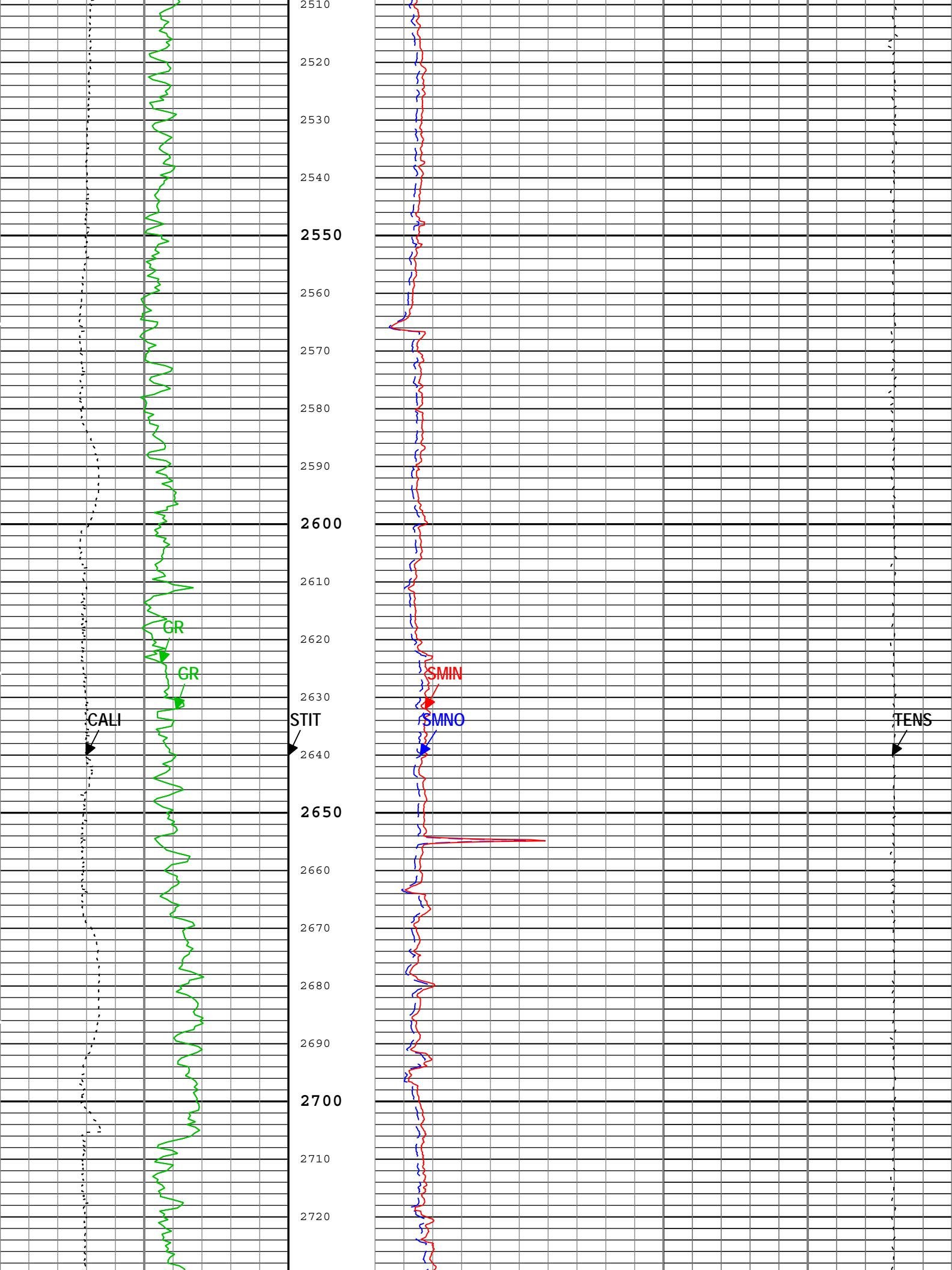
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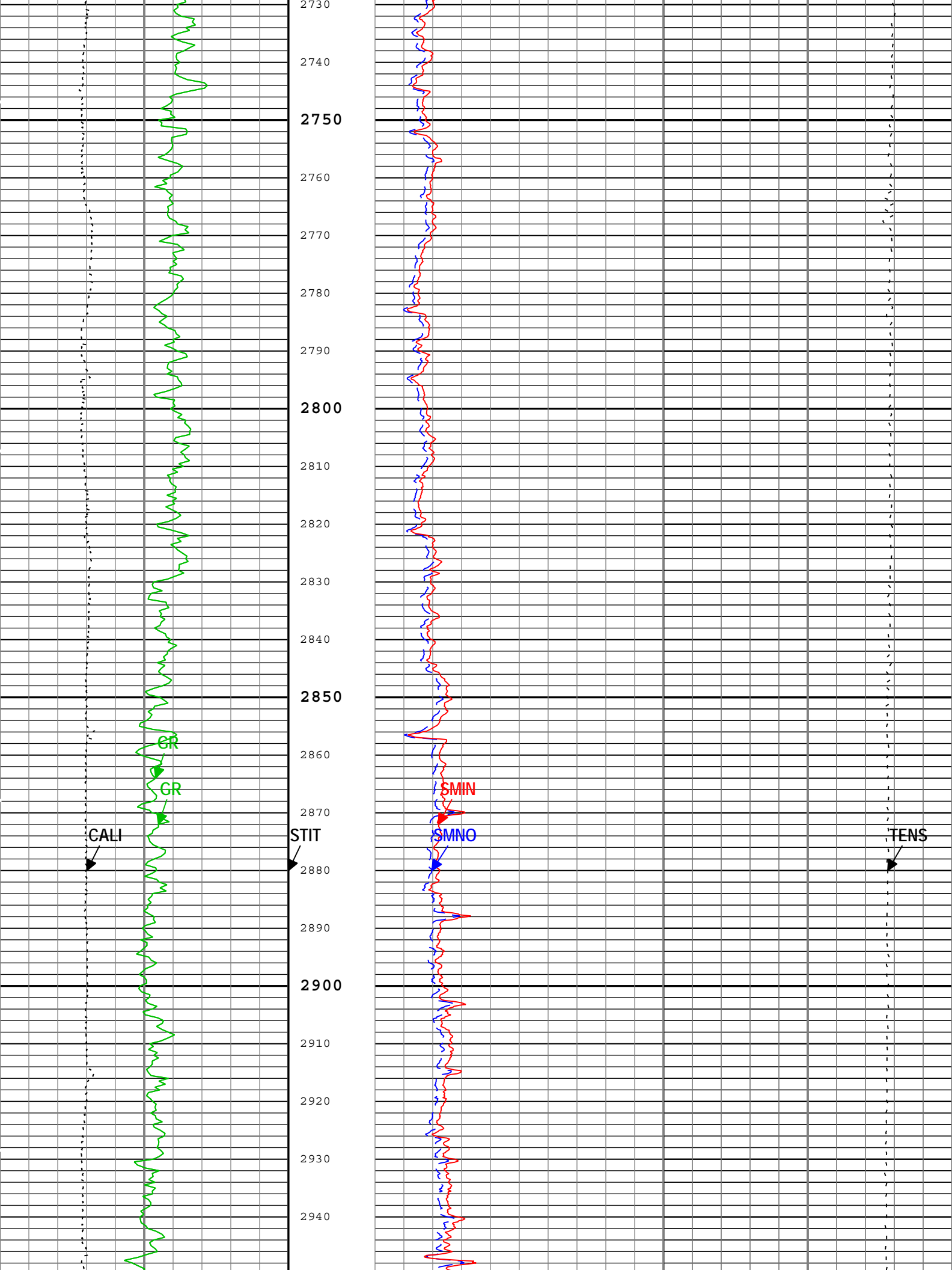


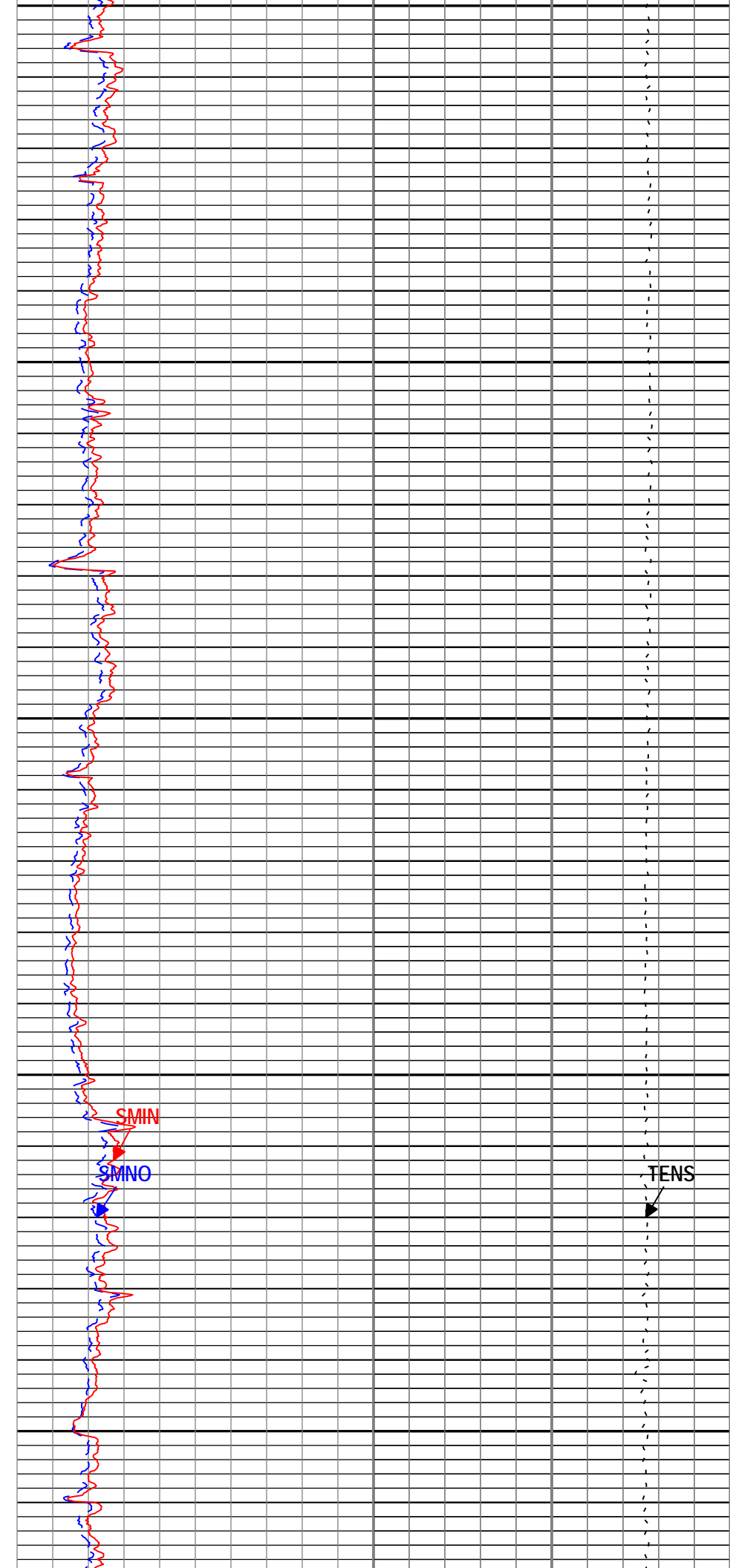
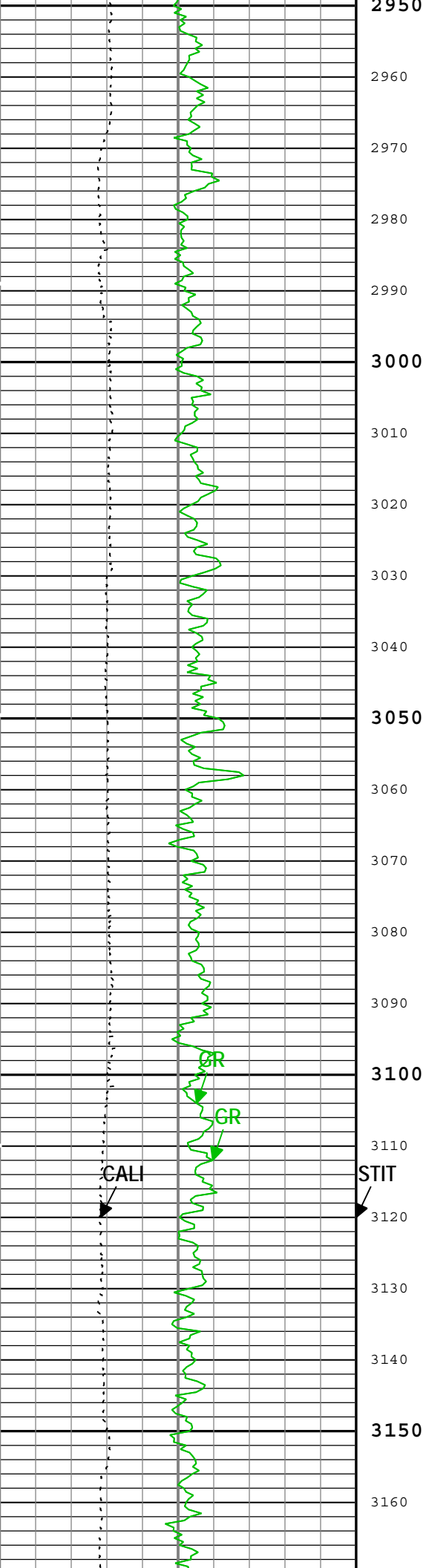
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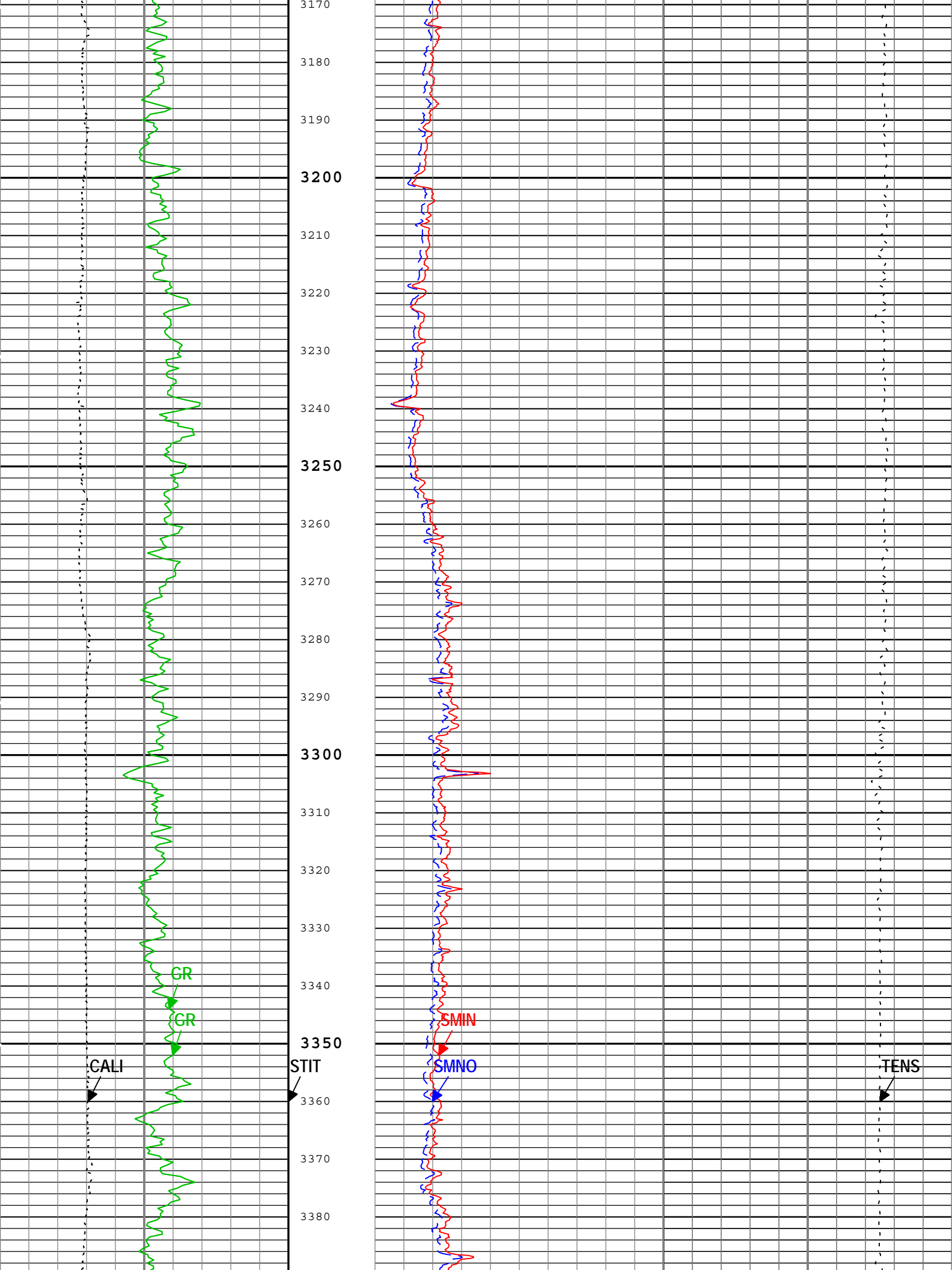


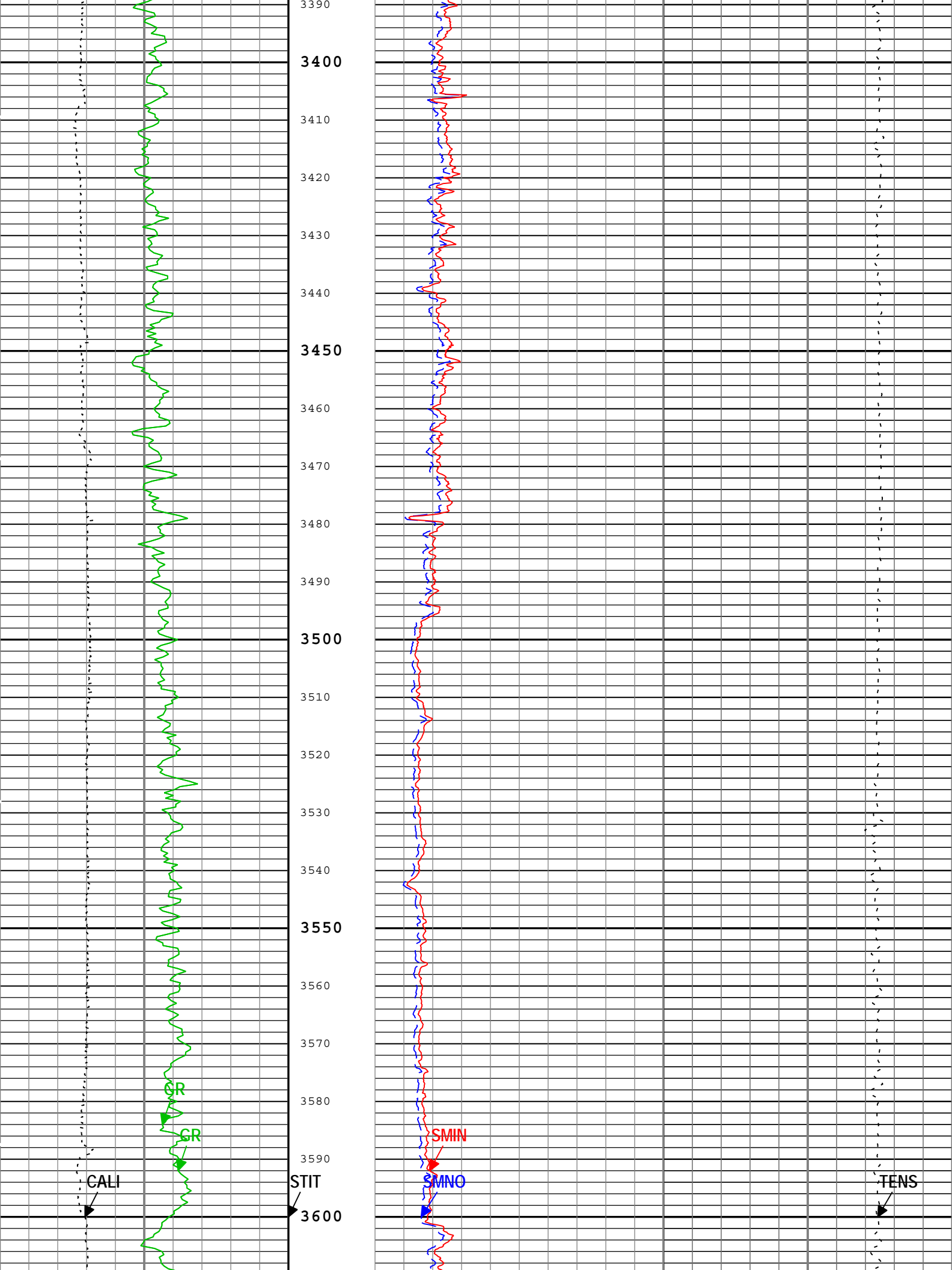


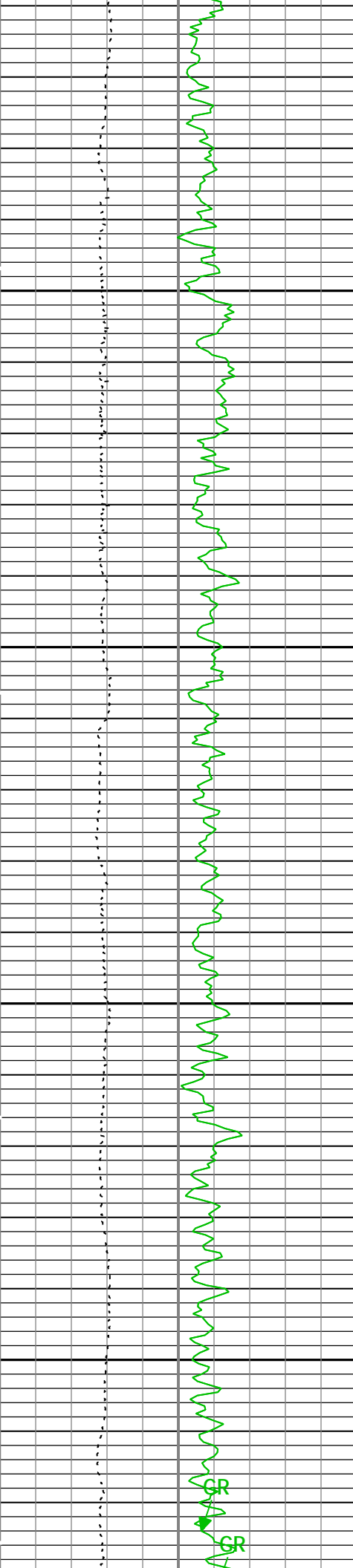




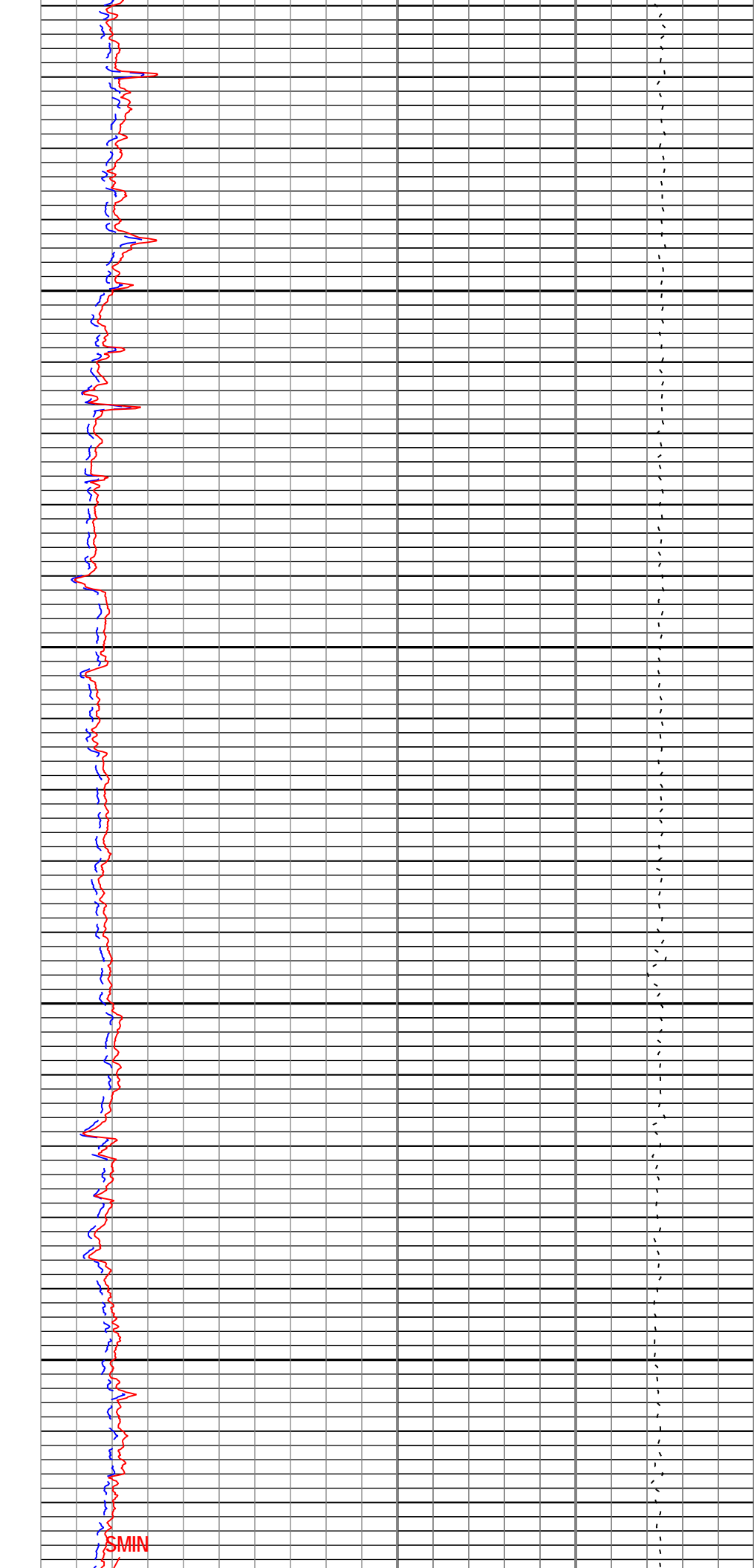


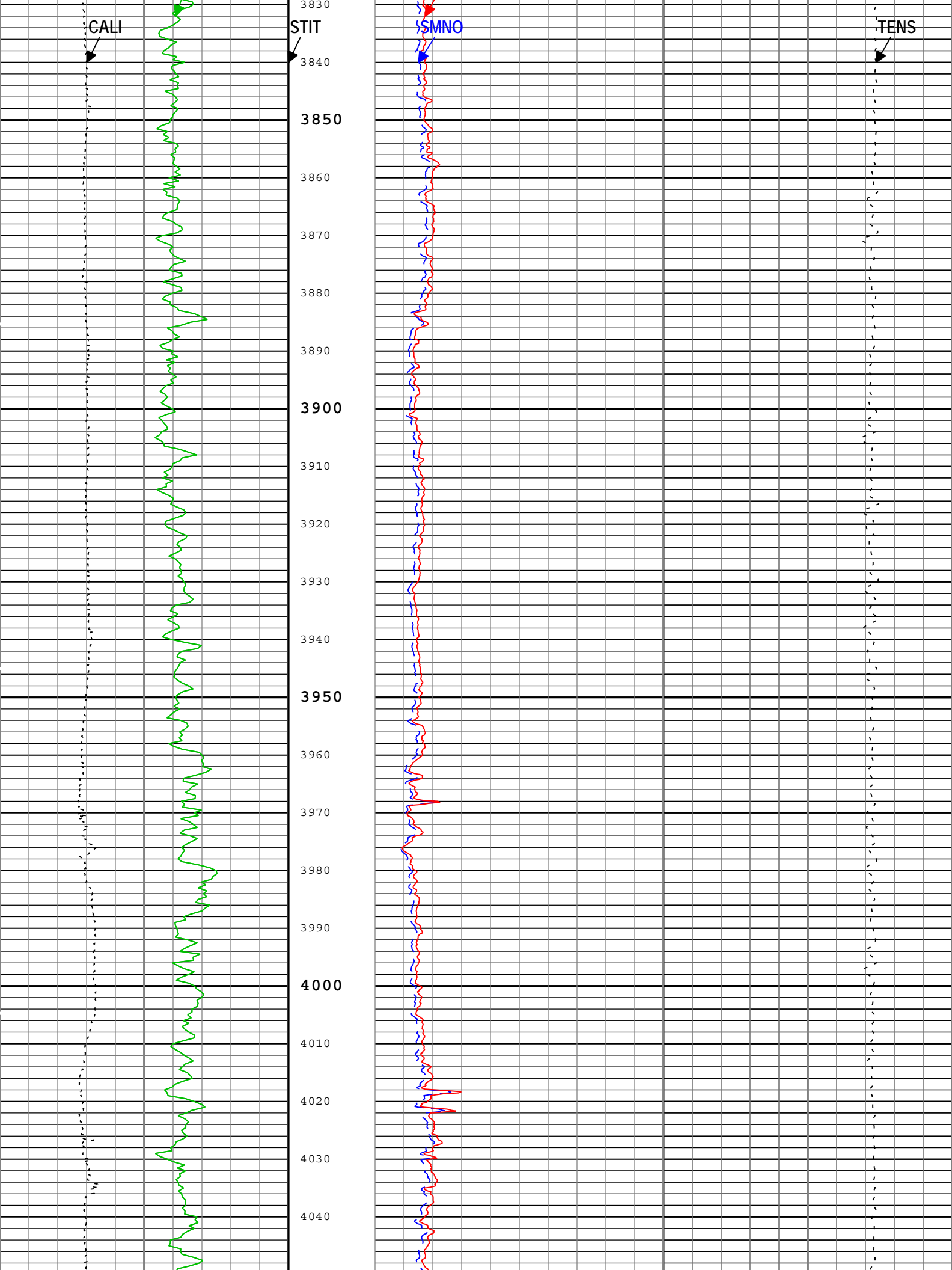


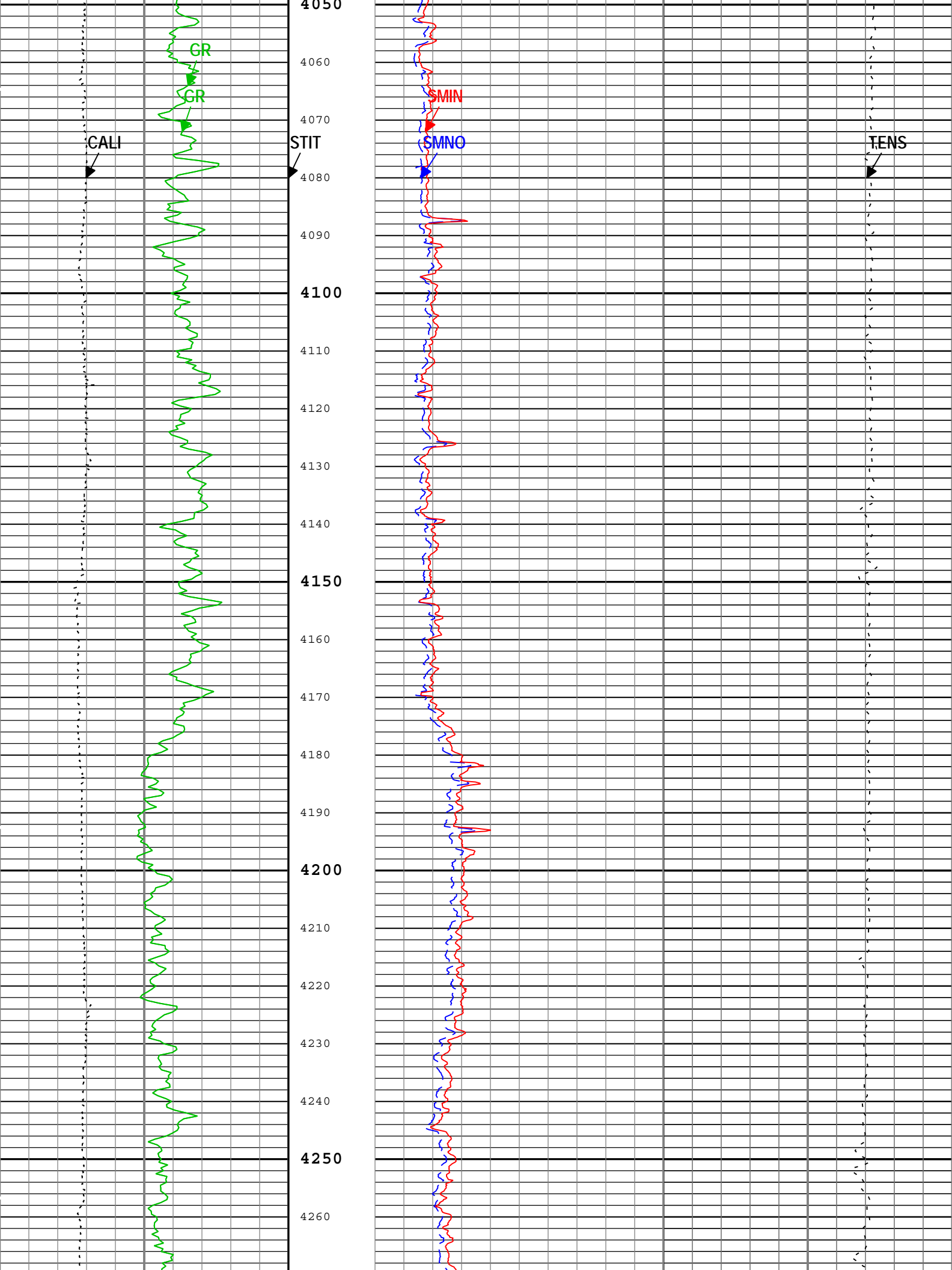


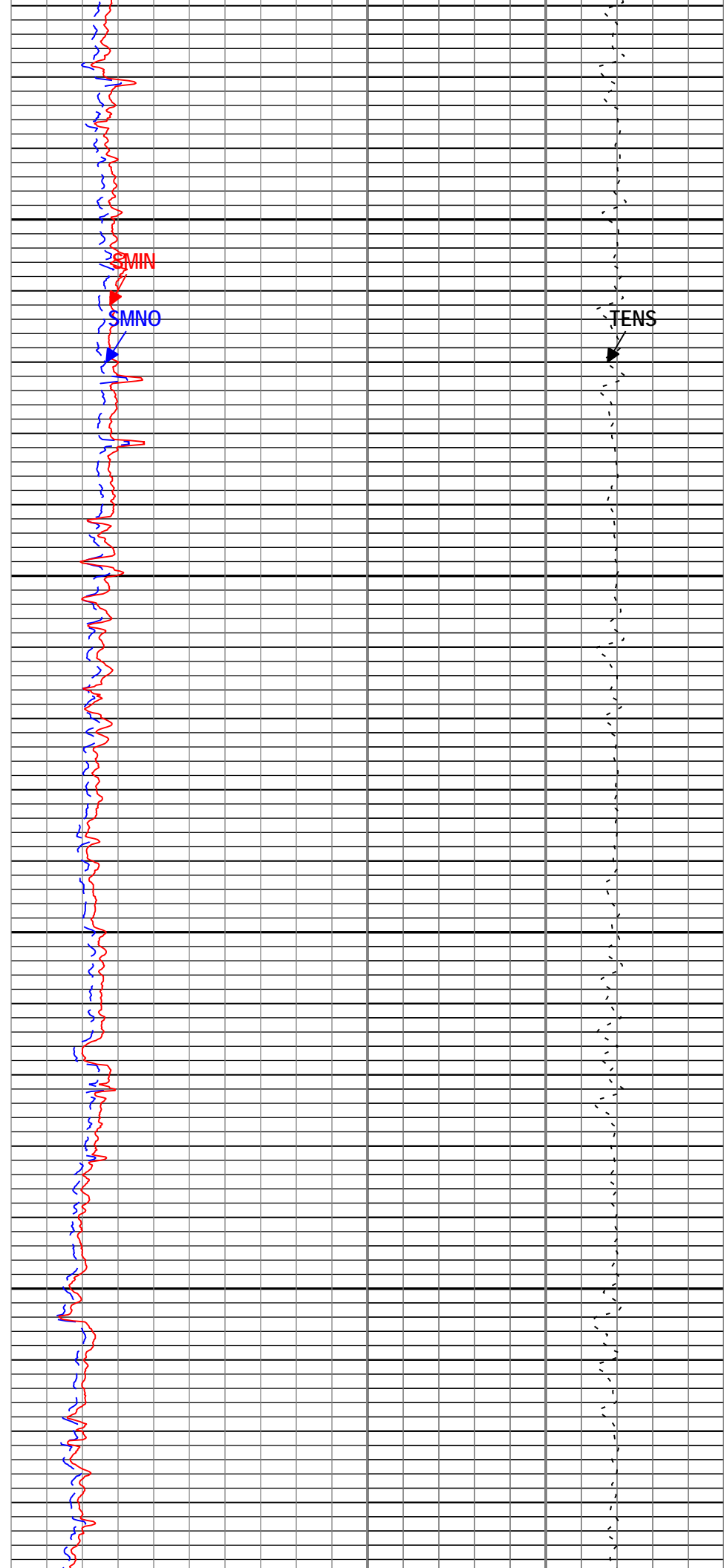
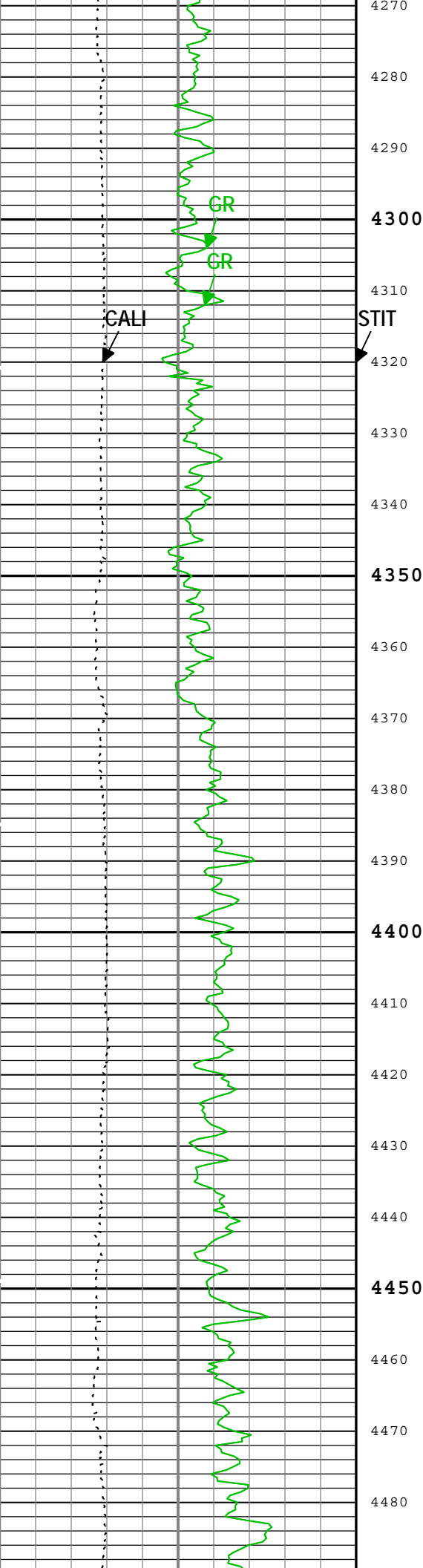


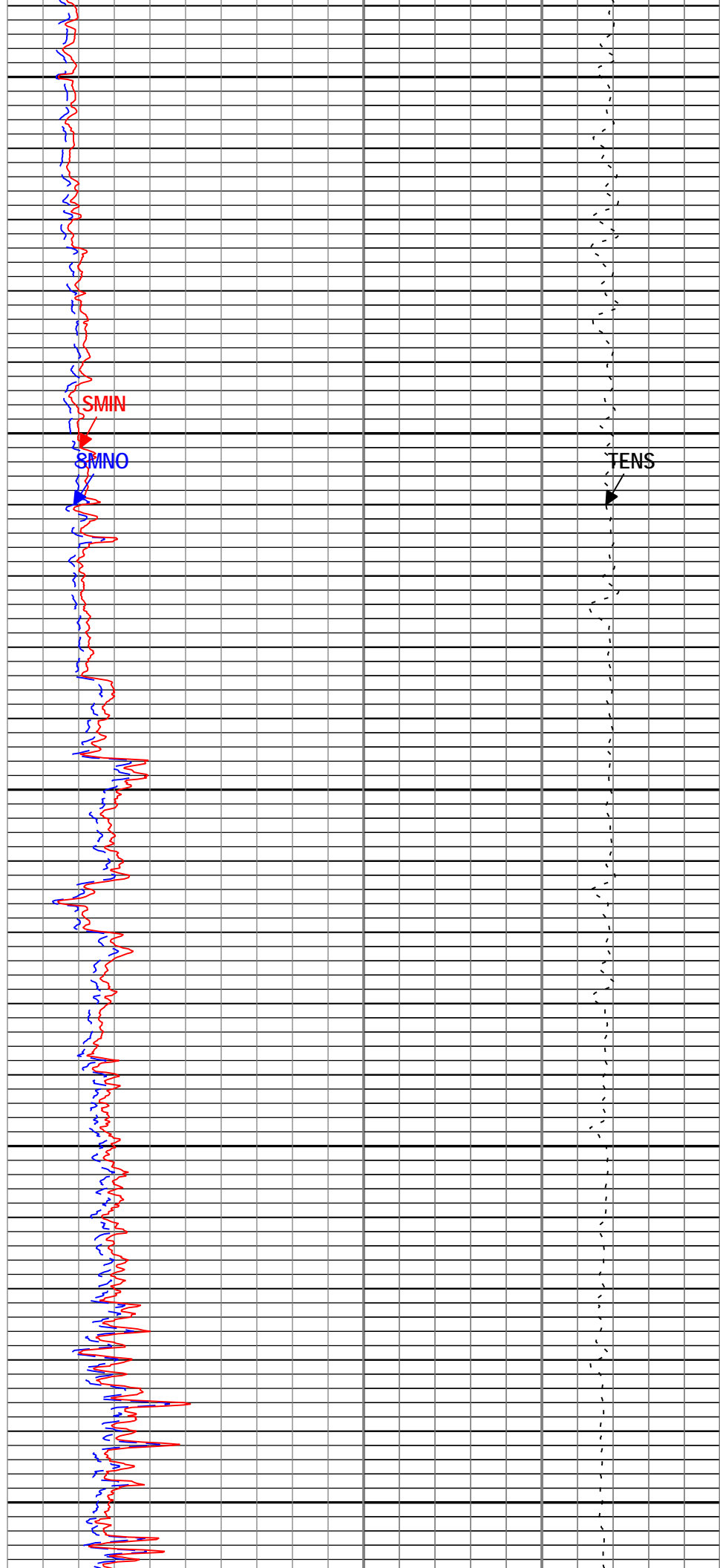
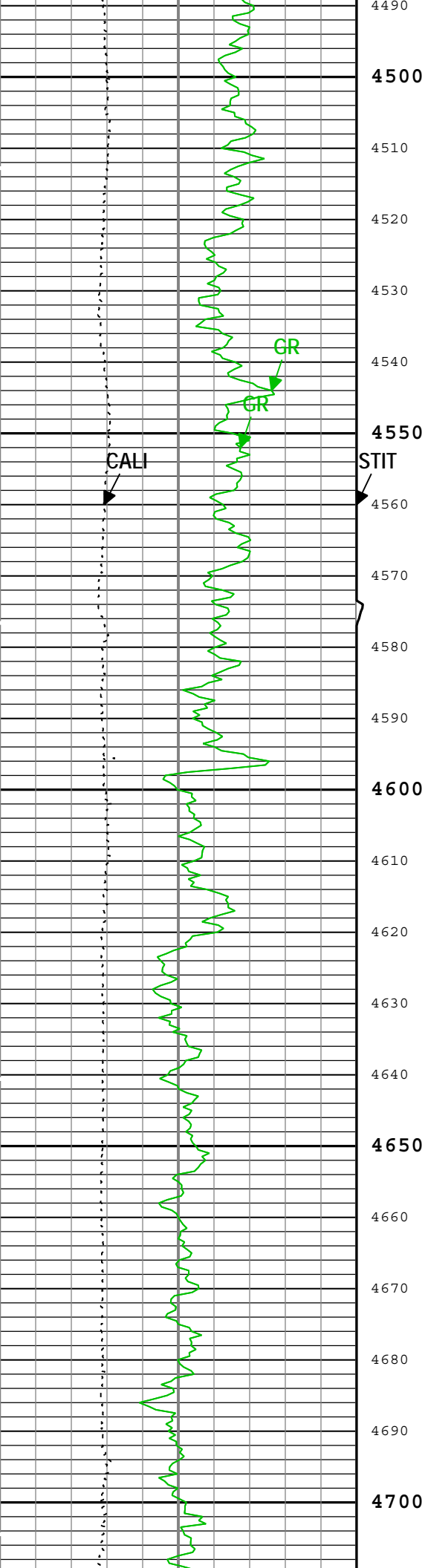
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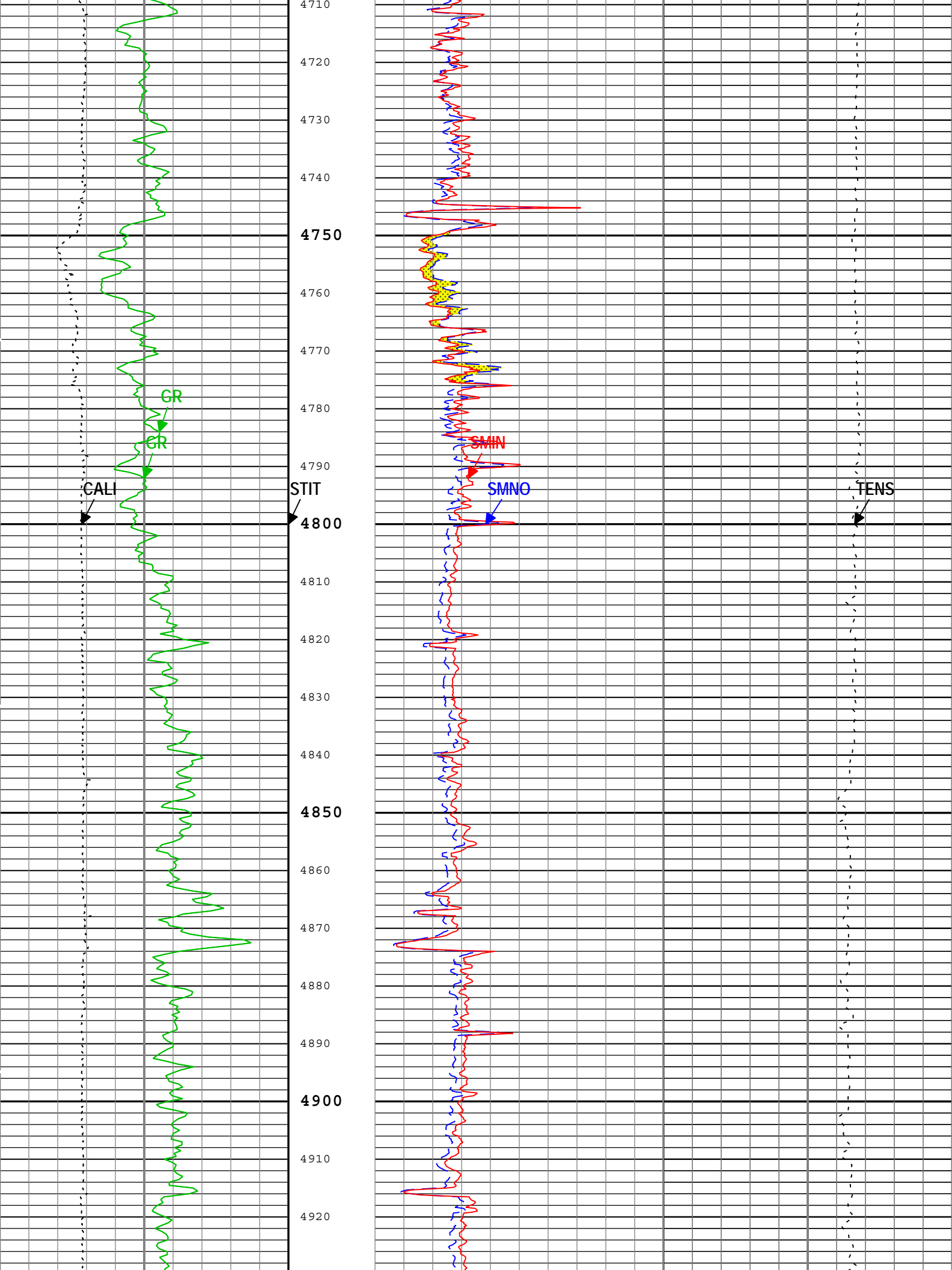


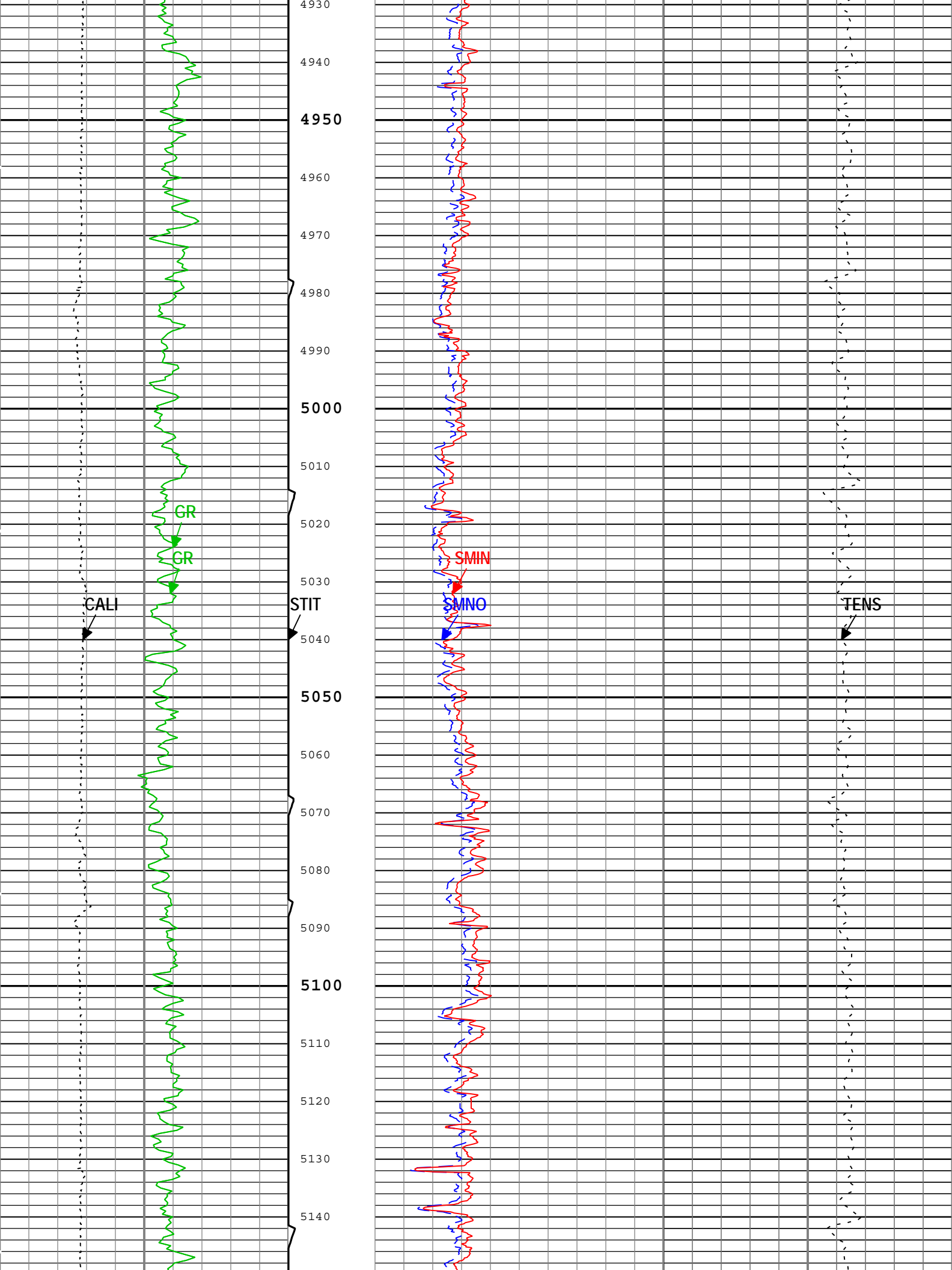


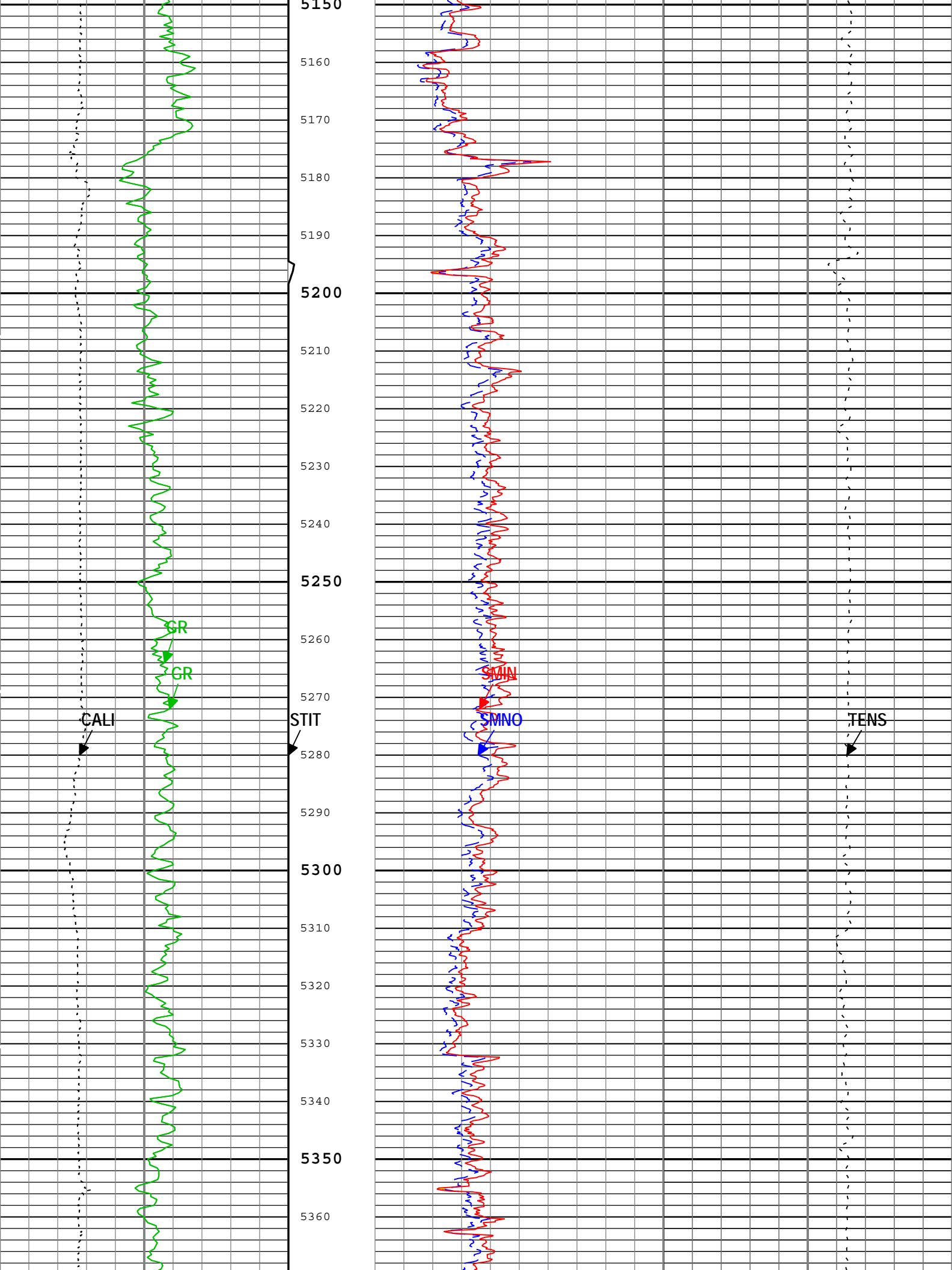


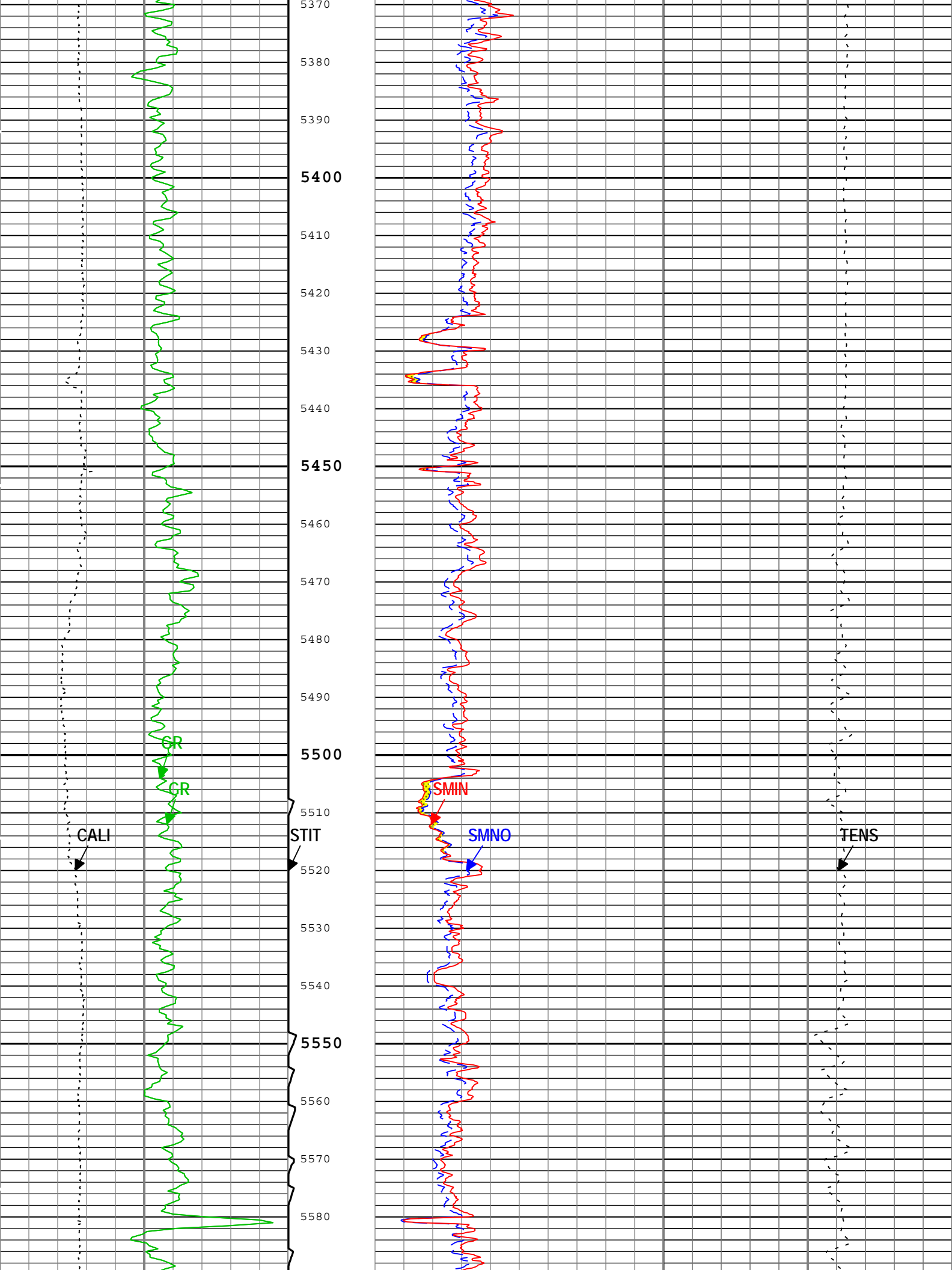


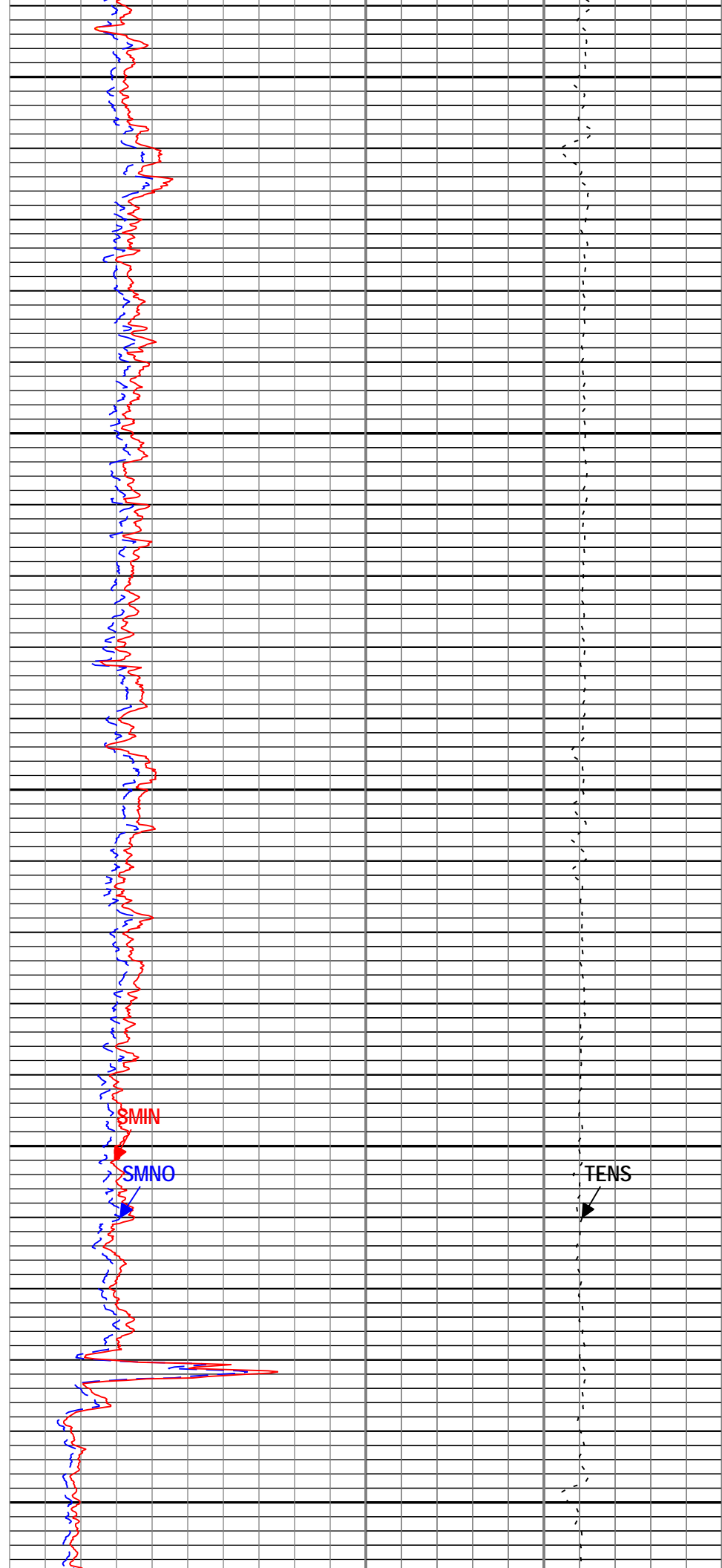
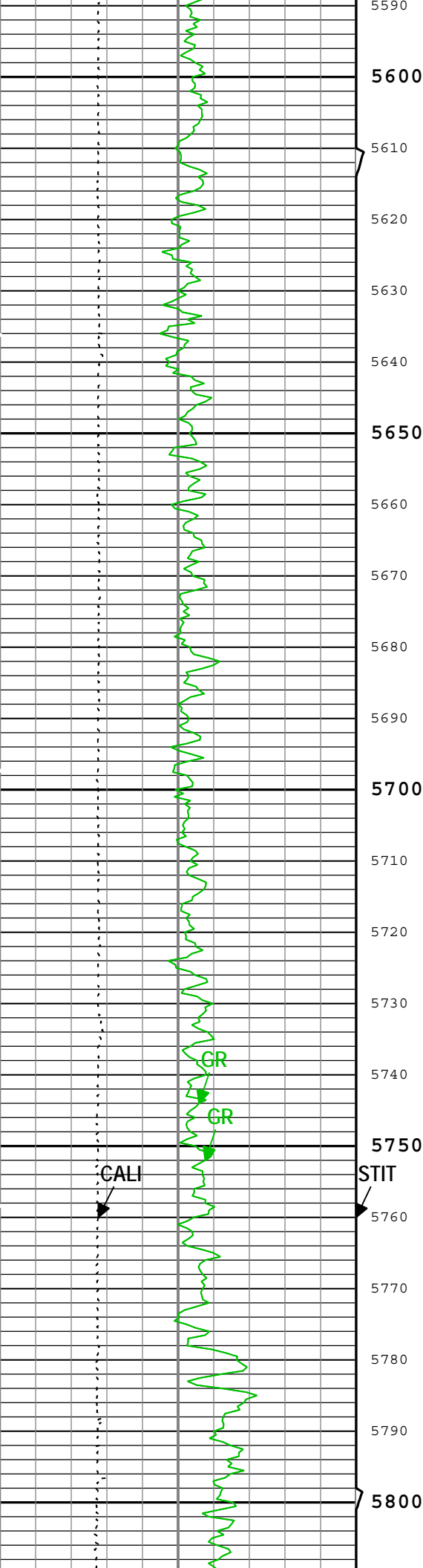


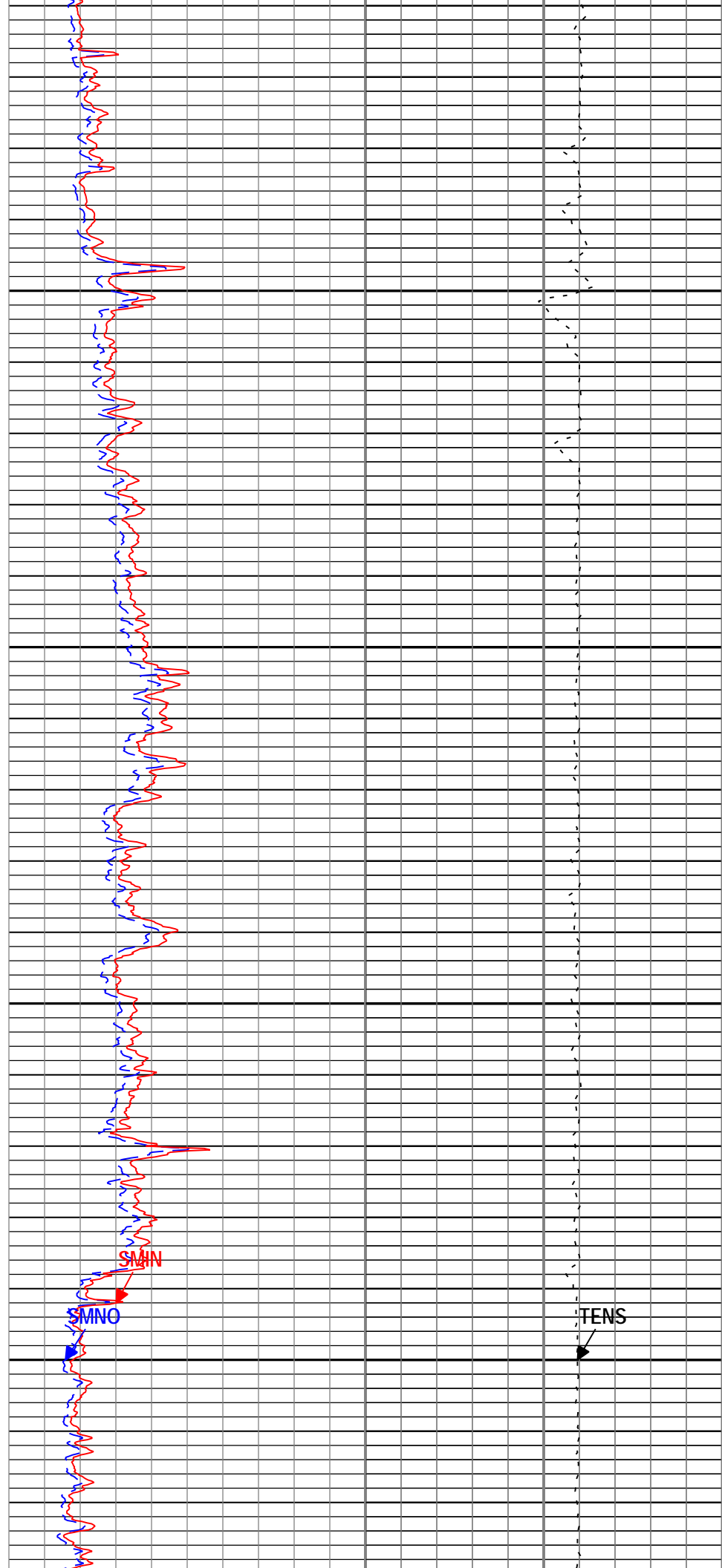
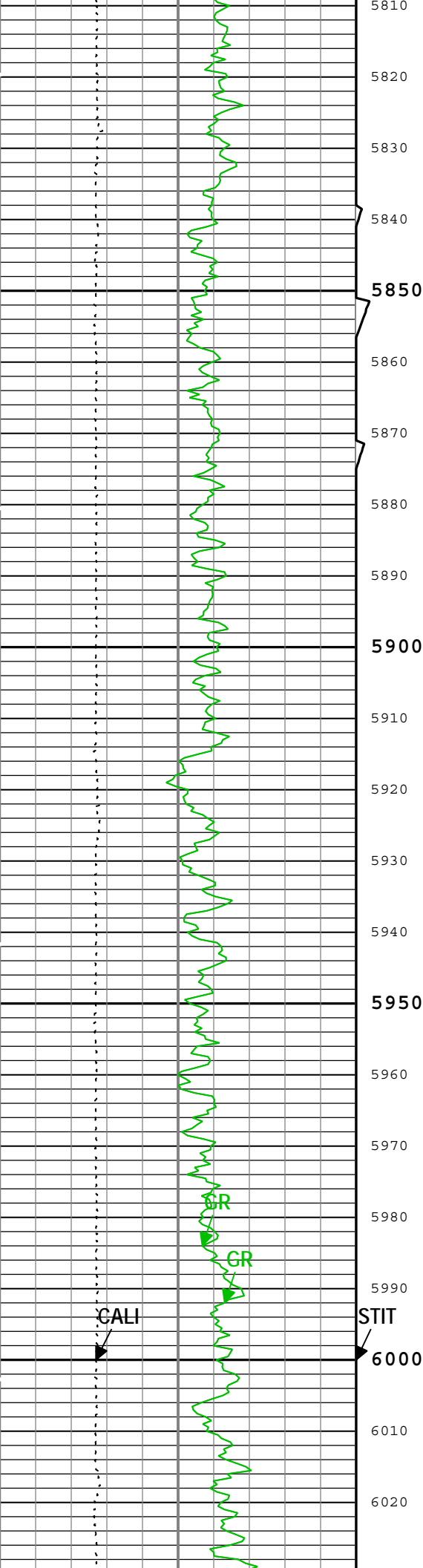


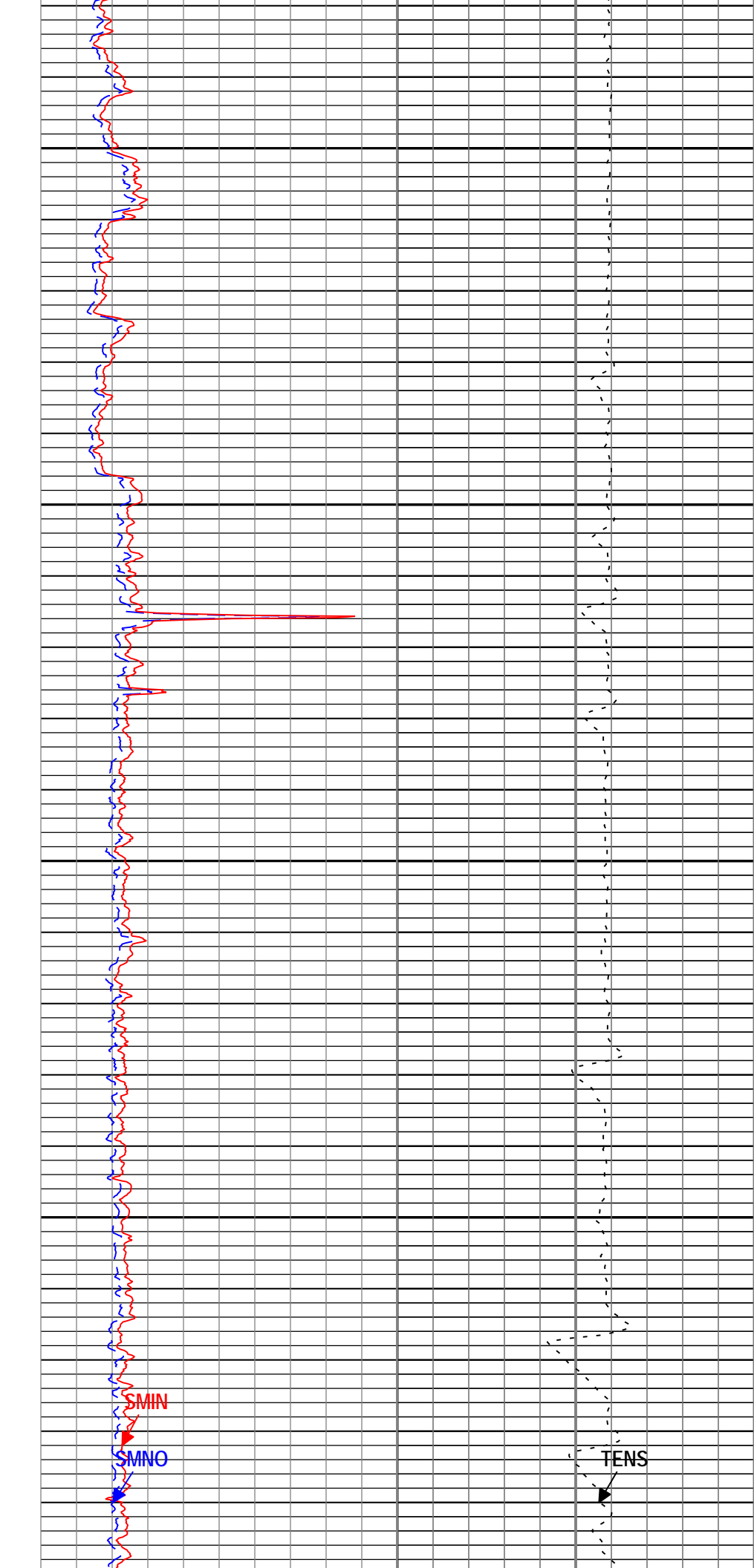
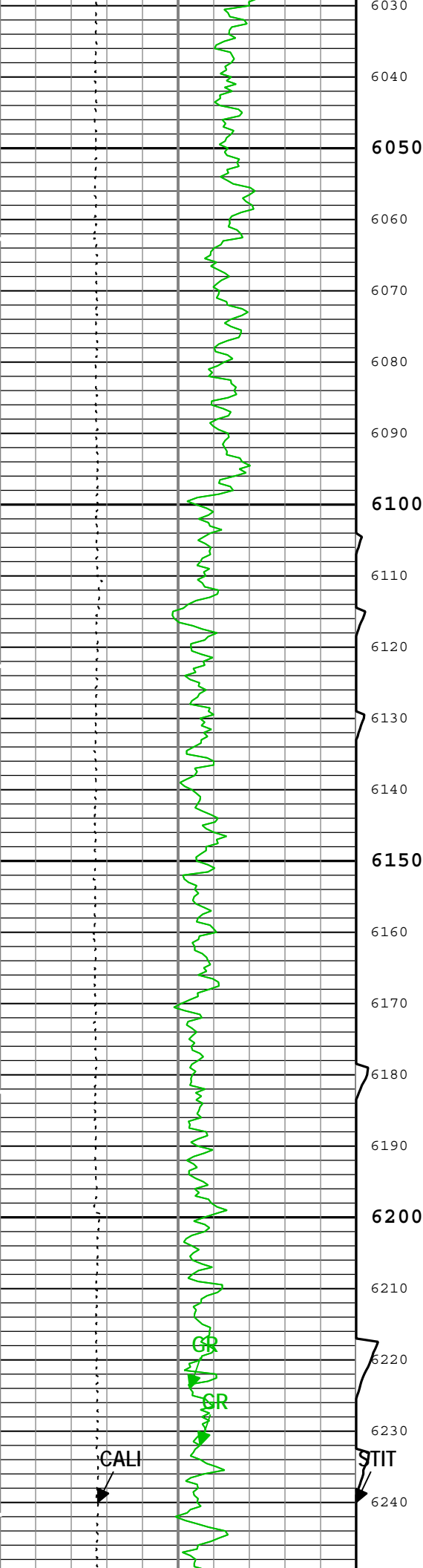


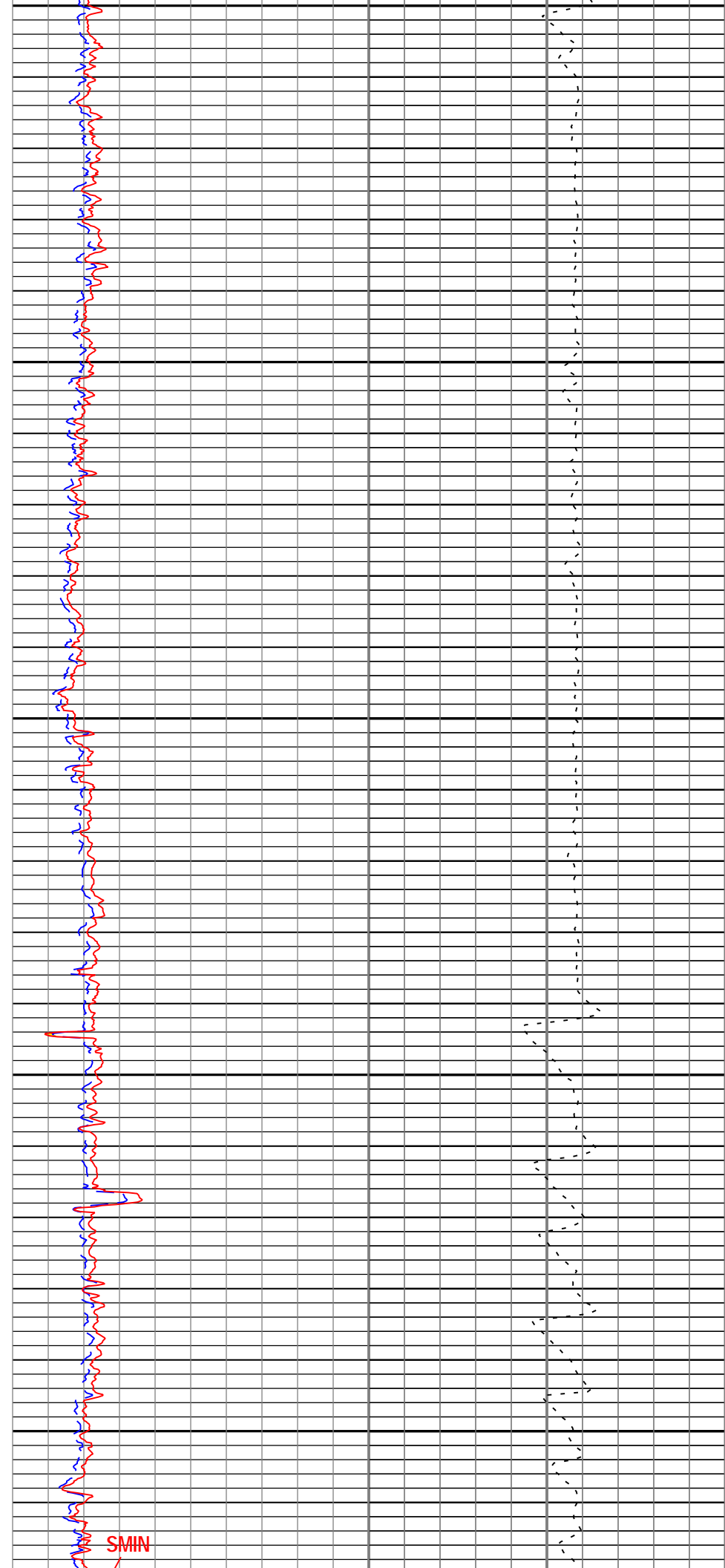
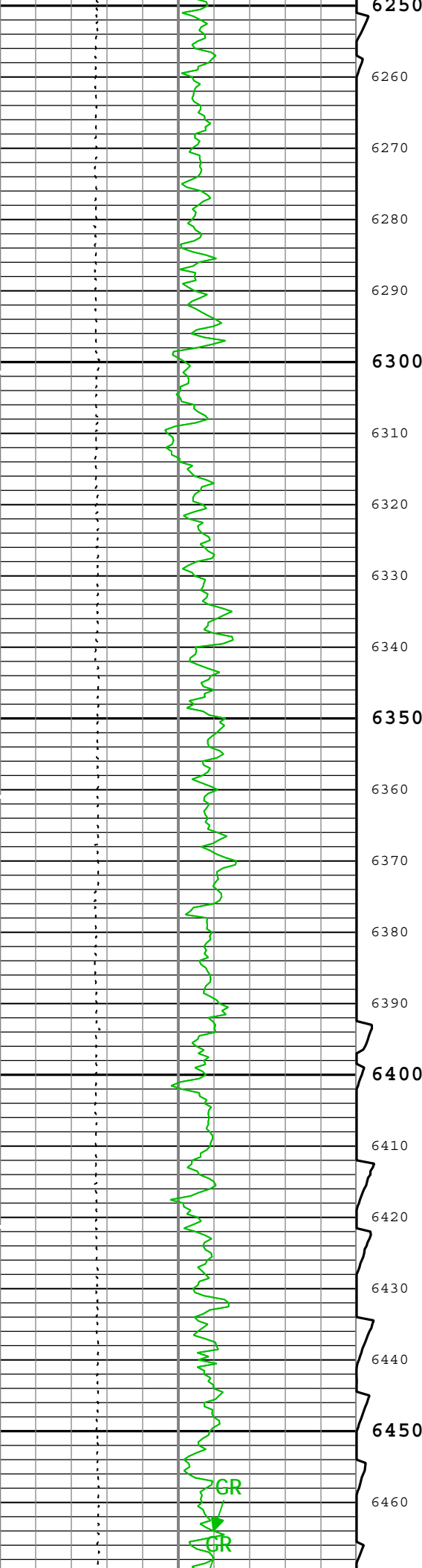


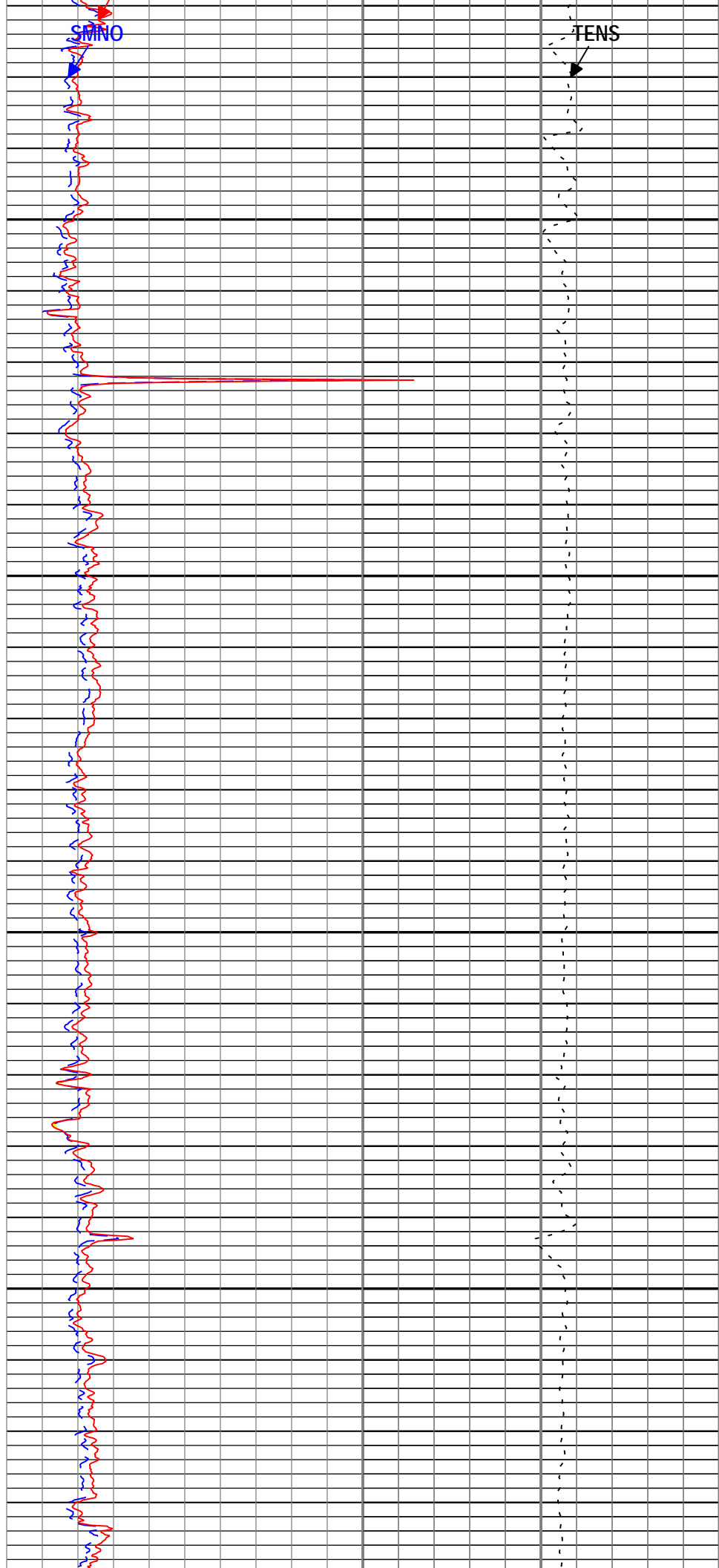
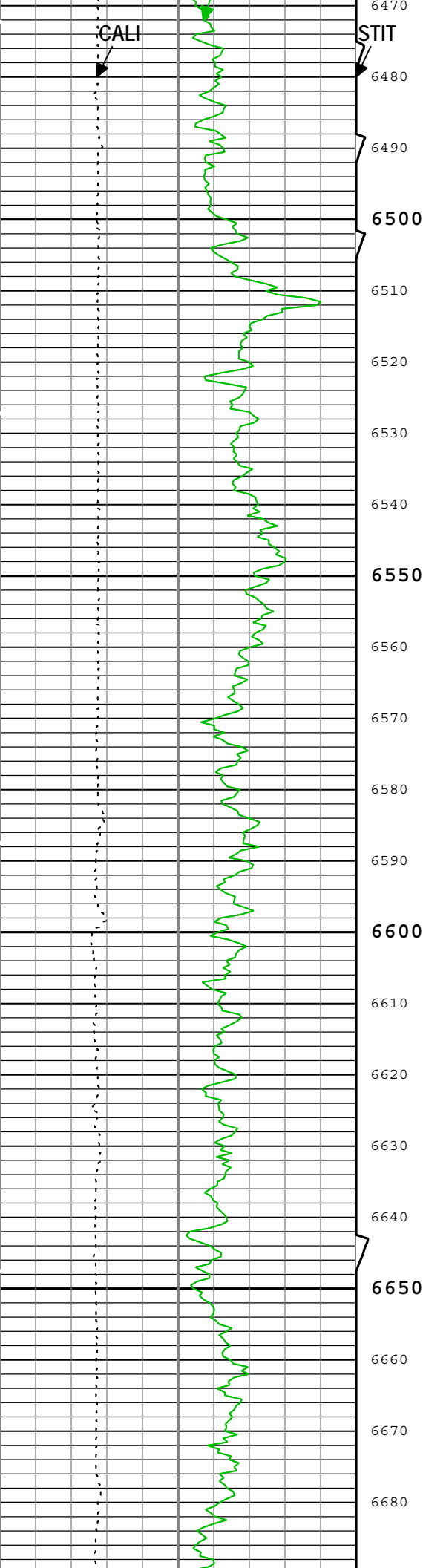


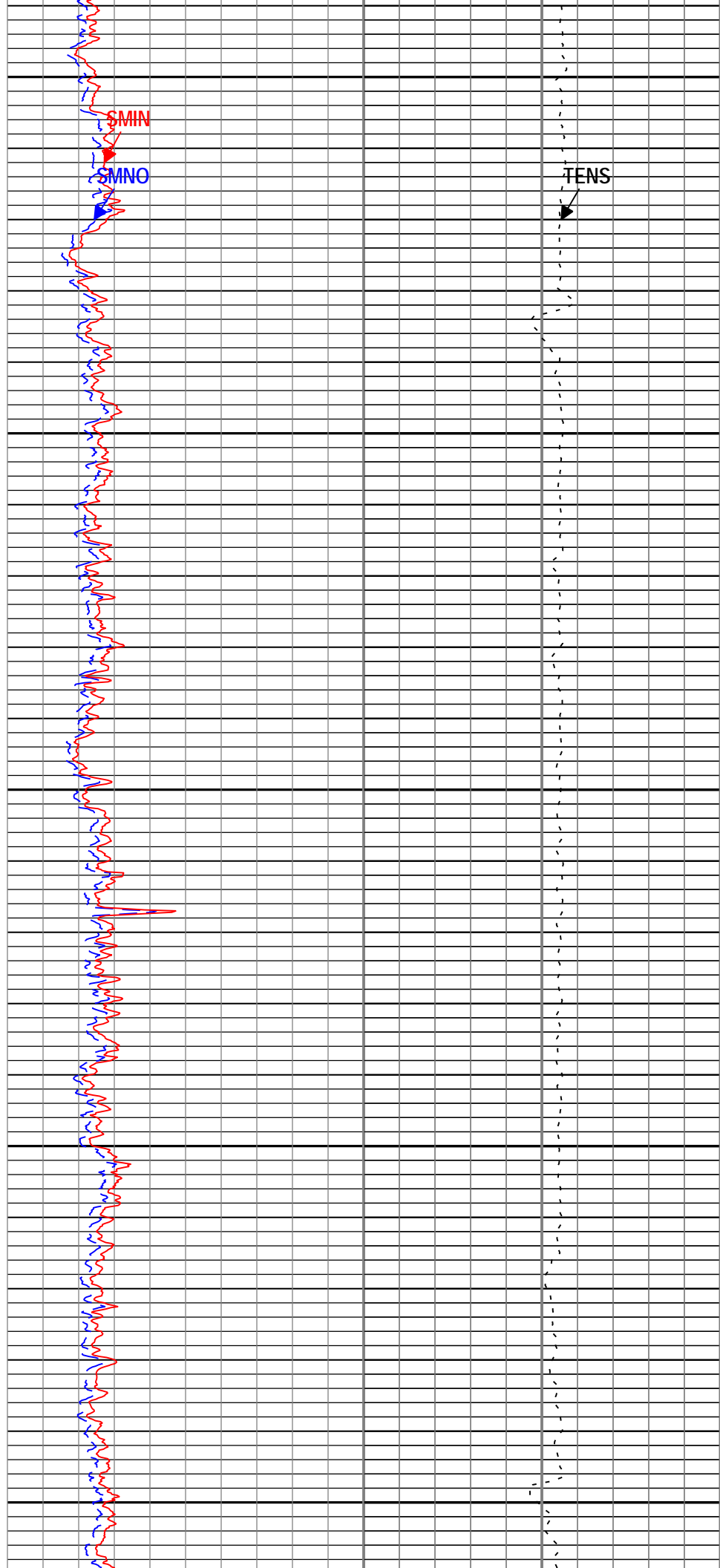
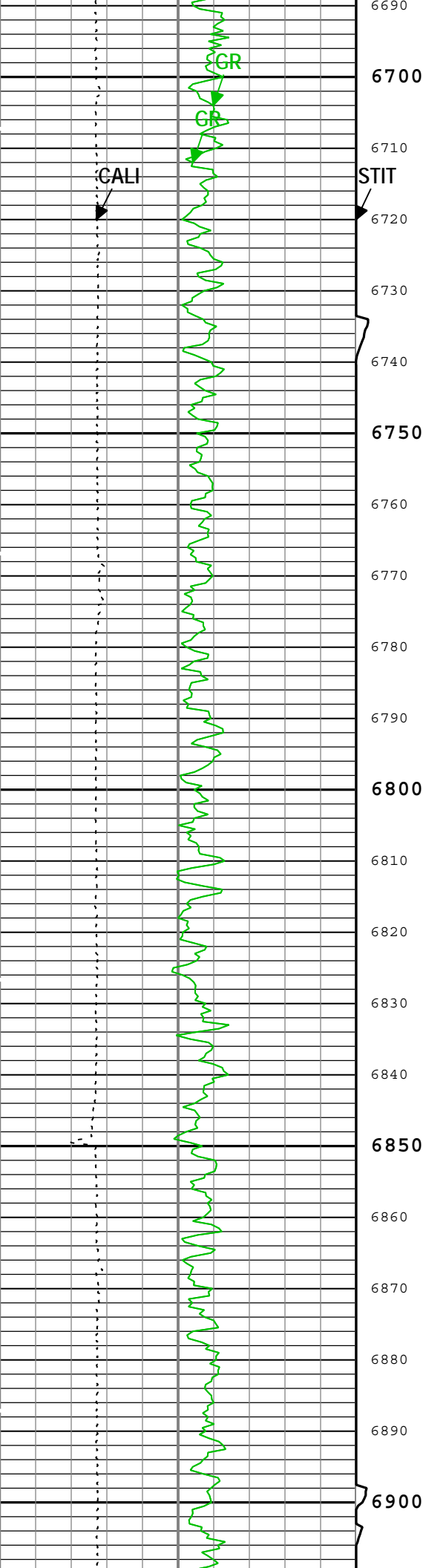


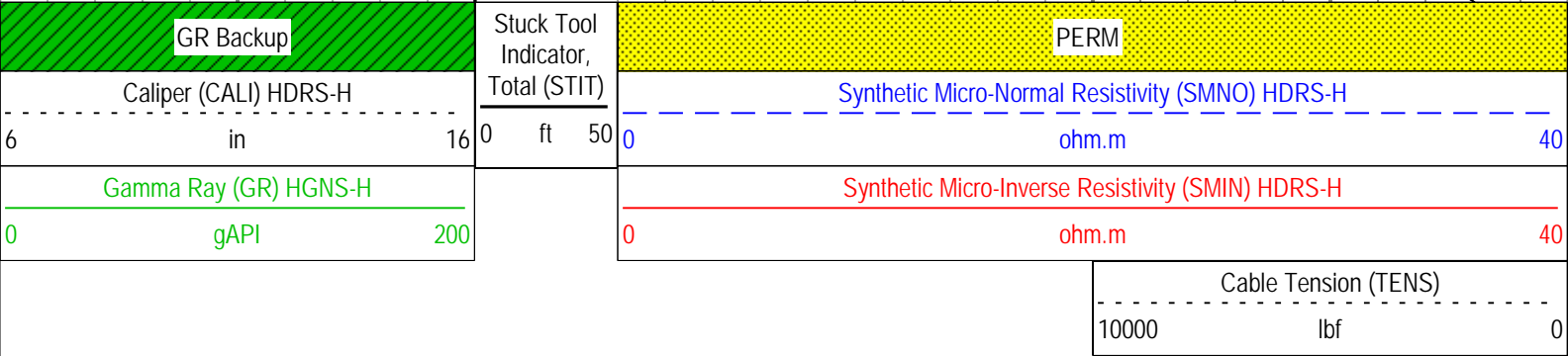
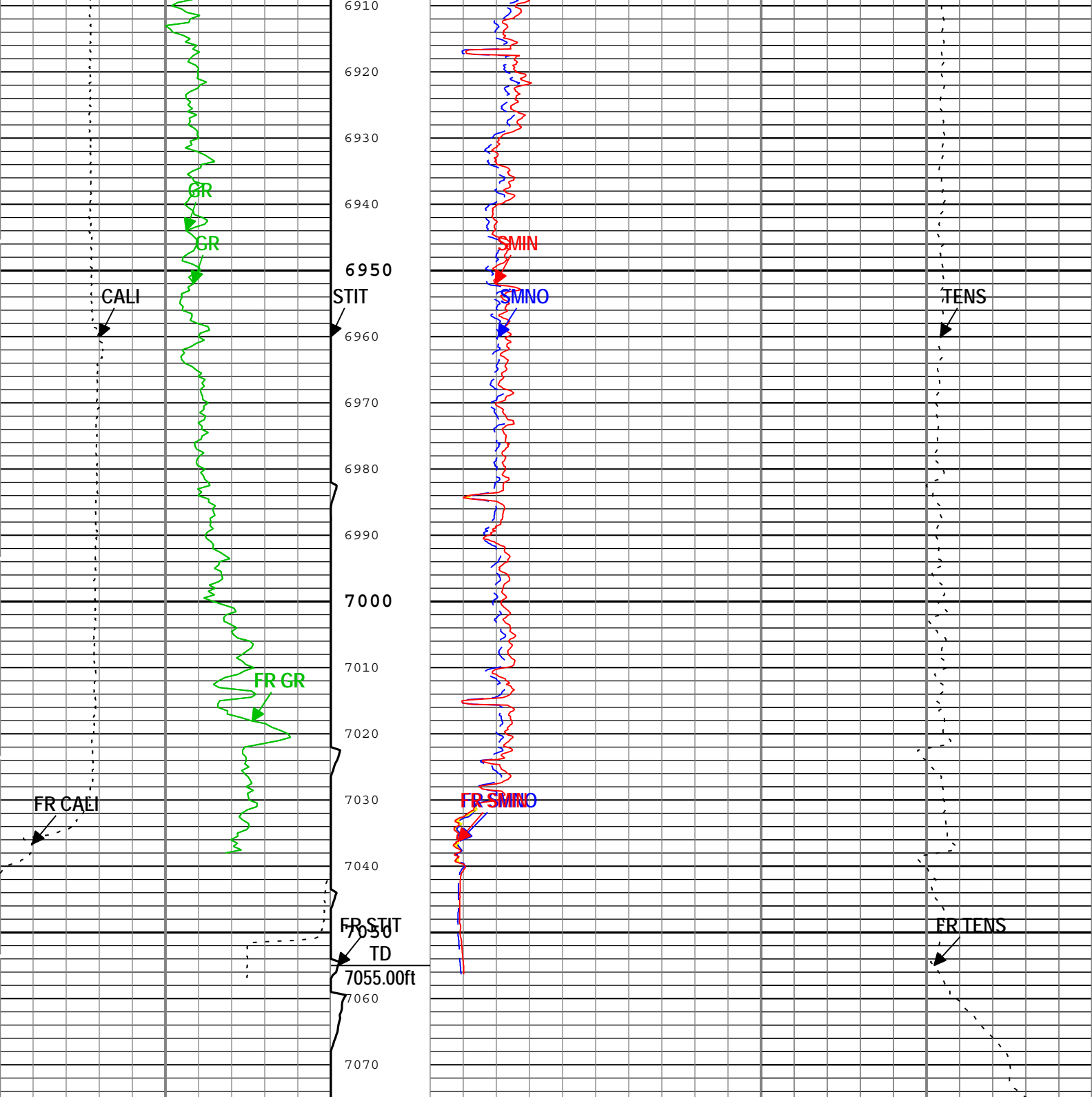












TIME_1900 - Time Marked every 60.00 (s)

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: 08-Aug-2014 06:54:05

Channel Processing Parameters

Parameter	Description	Tool	Value	Unit
BARI	Barite Mud Presence Flag	Borehole	Yes	
BHS	Borehole Status (Open or Cased Hole)	Borehole	Open	
BS	Bit Size	WLSESSION	8.75	in
CALI_SHIFT	CALI Supplementary Offset	HDRS-H	0.068	in
CBLO	Casing Bottom (Logger)	WLSESSION	1762	ft
CDEN	Cement Density	HGNS-H	2	g/cm3
DC_MODE	Depth Correction Mode	DepthCorrection	Real-time	
DFD	Drilling Fluid Density	Borehole	10.2	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-H	Yes	
TD	Total Measured Depth	Borehole	7055	ft

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

Two

5" Micro Log RA

Pass Summary

Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	DSC Mode	Depth Shift	Include Parallel Data
Two	Log[2]:Up	Up	71.32 ft	7075.21 ft	08-Aug-2014 4:00:16 AM	08-Aug-2014 5:44:41 AM	ON	13.25 ft	Yes
Two	Repeat[3]:Up	Up	1613.30 ft	2066.56 ft	08-Aug-2014 5:52:42 AM	08-Aug-2014 6:01:17 AM	ON	13.78 ft	Yes

All depths are referenced to toolstring zero

Log

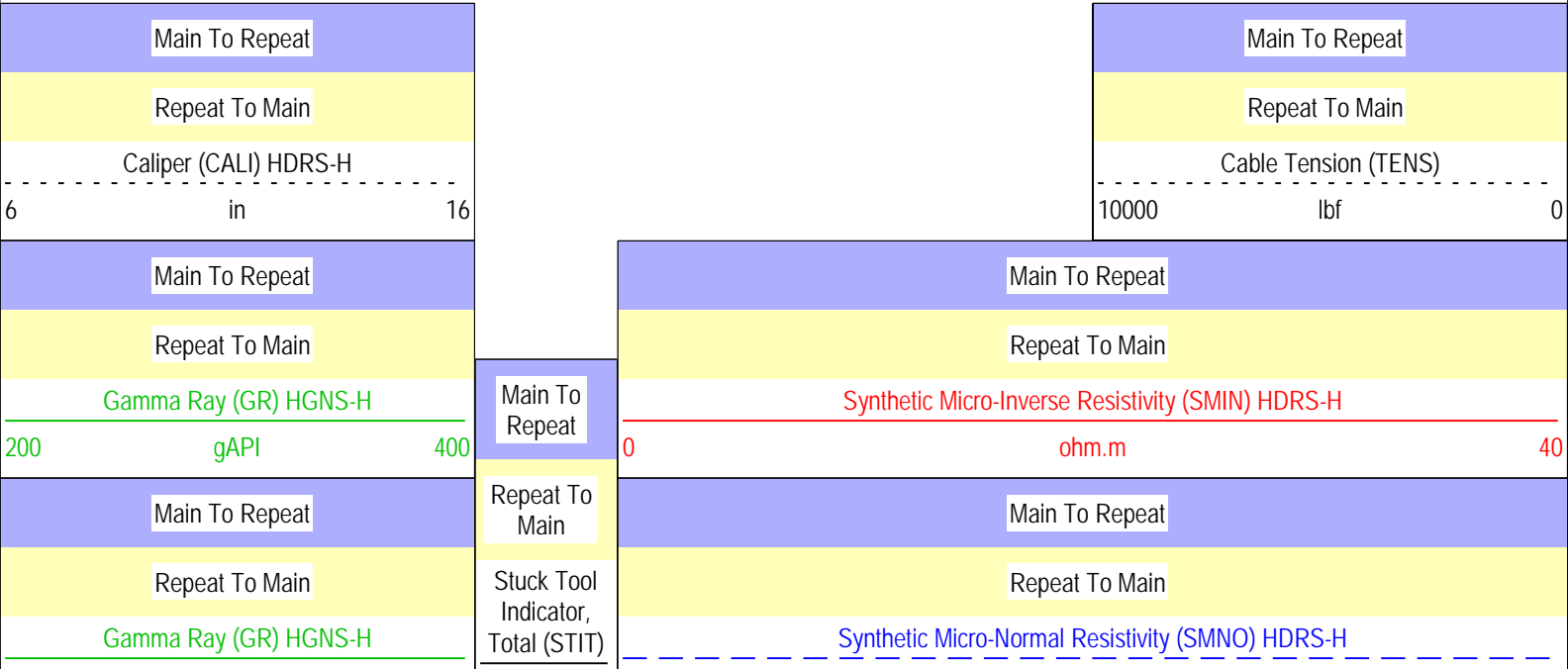
Company:Kerr McGee Oil & Gas Onshore LP

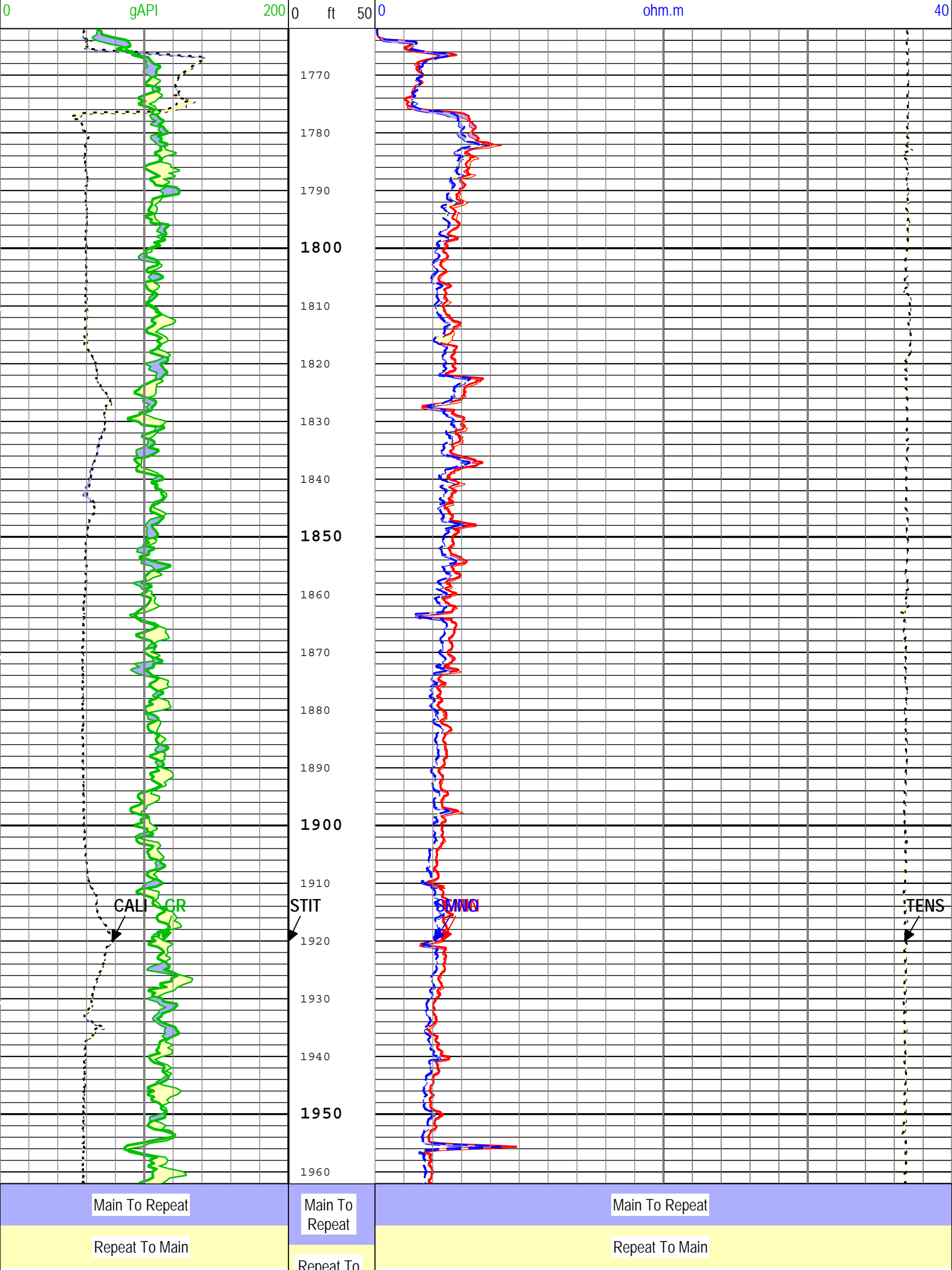
Well:Banded 37C-27HZ

Two: Repeat[3]:Up:S010

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: 08-Aug-2014 06:54:07

TIME_1900 - Time Marked every 60.00 (s)





Caliper (CALI) HDRS-H			Repeat To Main	Synthetic Micro-Inverse Resistivity (SMIN) HDRS-H		
6 in 16			Stuck Tool Indicator, Total (STIT)	0 ohm.m 40		
Main To Repeat				Main To Repeat		
Repeat To Main			0 ft 50	Repeat To Main		
Gamma Ray (GR) HGNS-H				Synthetic Micro-Normal Resistivity (SMNO) HDRS-H		
200 gAPI 400				0 ohm.m 40		
Main To Repeat						
Repeat To Main						
Gamma Ray (GR) HGNS-H						
0 gAPI 200						
TIME_1900 - Time Marked every 60.00 (s)						Main To Repeat
						Repeat To Main
						Cable Tension (TENS)
						10000 lbf 0
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: 08-Aug-2014 06:54:07						

Calibration Report							
AIT-M (Array Induction Tool - M) Calibration - Run Two							
Primary Equipment :							
File code for AIT-MA Sonde Tool Element			AMIS		181		
Auxiliary Equipment :							
File code for AIT Bottom Nose Tool Element			AMRM		181		
AIT Sonde Calibration - Test Loop Gain							
Master (EEPROM):		15:52:07 18-Jun-2014					
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Test Loop Gain - 0		Master	1.000	0.950	1.016	1.050	
Test Loop Phase - 0	deg	Master	0	-3.000	-0.873	3.000	
Test Loop Gain - 1		Master	1.000	0.950	1.016	1.050	
Test Loop Phase - 1	deg	Master	0	-3.000	-0.523	3.000	
Test Loop Gain - 2		Master	1.000	0.950	1.020	1.050	
Test Loop Phase - 2	deg	Master	0	-3.000	-0.285	3.000	
Test Loop Gain - 3		Master	1.000	0.950	1.017	1.050	
Test Loop Phase - 3	deg	Master	0	-3.000	-0.364	3.000	
Test Loop Gain - 4		Master	1.000	0.950	0.996	1.050	
Test Loop Phase - 4	deg	Master	0	-3.000	0.047	3.000	
Test Loop Gain - 5		Master	1.000	0.950	0.992	1.050	
Test Loop Phase - 5	deg	Master	0	-3.000	-0.306	3.000	
Test Loop Gain - 6		Master	1.000	0.950	0.998	1.050	
Test Loop Phase - 6	deg	Master	0	-3.000	-0.014	3.000	
Test Loop Gain - 7		Master	1.000	0.950	1.012	1.050	
Test Loop Phase - 7	deg	Master	0	-3.000	-0.171	3.000	
AIT Sonde Calibration - Sonde Error Correction							
Master (EEPROM):		15:52:07 18-Jun-2014					
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Sonde Error Correction Real - 0	mS/m	Master	-----	-231.000	-105.375	119.000	
Sonde Error Correction Quad - 0		Master	-----	-2250.000	128.249	2250.000	
Sonde Error Correction Real - 1	mS/m	Master	-----	114.000	154.526	204.000	
Sonde Error Correction Quad - 1		Master	-----	-625.000	-120.438	625.000	
Sonde Error Correction Real - 2	mS/m	Master	-----	66.000	113.010	156.000	
Sonde Error Correction Quad - 2		Master	-----	-350.000	-106.668	350.000	
Sonde Error Correction Real - 3	mS/m	Master	-----	39.000	49.722	89.000	
Sonde Error Correction Quad - 3		Master	-----	-250.000	-9.512	250.000	
Sonde Error Correction Real - 4	mS/m	Master	-----	15.000	25.368	35.000	
Sonde Error Correction Quad - 4		Master	-----	-63.000	-11.301	63.000	
Sonde Error Correction Real - 5	mS/m	Master	-----	4.000	10.767	24.000	
Sonde Error Correction Quad - 5		Master	-----	-50.000	19.041	50.000	

Sonde Error Correction Real - 6	mS/m	Master	-----	5.000	9.775	15.000	
Sonde Error Correction Quad - 6		Master	-----	-30.000	0.982	30.000	
Sonde Error Correction Real - 7	mS/m	Master	-----	-5.000	-1.211	5.000	
Sonde Error Correction Quad - 7		Master	-----	-30.000	1.407	30.000	

AIT Mud Calibration - Mud Calibration Gain

Master (EEPROM):		15:52:07 18-Jun-2014					
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Coarse Gain		Master	1.000	0.800	0.903	1.200	
Fine Gain		Master	1.000	0.800	0.900	1.200	

AIT Electronics Check - Thru Calibration Check

Master (EEPROM):		15:52:07 18-Jun-2014		Before (Measured):		20:28:46 07-Aug-2014	
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Thru Cal Mag - 0	V	Master	-----	0.366	0.576	0.854	
		Before	-----	0.366	0.575	0.854	
		Before-Master	-----	-----	-0.001	-----	
Thru Cal Phase - 0	deg	Master	-----	137.000	-169.574	-103.000	
		Before	-----	137.000	-169.066	-103.000	
		Before-Master	-----	-----	0.508	-----	
Thru Cal Mag - 1	V	Master	-----	0.762	1.179	1.778	
		Before	-----	0.762	1.178	1.778	
		Before-Master	-----	-----	-0.001	-----	
Thru Cal Phase - 1	deg	Master	-----	136.000	-170.676	-104.000	
		Before	-----	136.000	-170.166	-104.000	
		Before-Master	-----	-----	0.510	-----	
Thru Cal Mag - 2	V	Master	-----	0.372	0.585	0.868	
		Before	-----	0.372	0.585	0.868	
		Before-Master	-----	-----	0.000	-----	
Thru Cal Phase - 2	deg	Master	-----	132.000	-174.320	-108.000	
		Before	-----	132.000	-173.810	-108.000	
		Before-Master	-----	-----	0.510	-----	
Thru Cal Mag - 3	V	Master	-----	0.420	0.661	0.980	
		Before	-----	0.420	0.660	0.980	
		Before-Master	-----	-----	-0.001	-----	
Thru Cal Phase - 3	deg	Master	-----	131.000	-175.098	-109.000	
		Before	-----	131.000	-174.588	-109.000	
		Before-Master	-----	-----	0.510	-----	
Thru Cal Mag - 4	V	Master	-----	0.804	1.234	1.876	
		Before	-----	0.804	1.233	1.876	
		Before-Master	-----	-----	-0.001	-----	
Thru Cal Phase - 4	deg	Master	-----	125.000	178.625	-115.000	
		Before	-----	125.000	179.142	-115.000	
		Before-Master	-----	-----	0.517	-----	
Thru Cal Mag - 5	V	Master	-----	1.176	1.797	2.744	
		Before	-----	1.176	1.795	2.744	
		Before-Master	-----	-----	-0.002	-----	
Thru Cal Phase - 5	deg	Master	-----	122.000	176.963	-118.000	
		Before	-----	122.000	177.486	-118.000	
		Before-Master	-----	-----	0.523	-----	
Thru Cal Mag - 6	V	Master	-----	1.176	1.796	2.744	
		Before	-----	1.176	1.795	2.744	
		Before-Master	-----	-----	-0.001	-----	
Thru Cal Phase - 6	deg	Master	-----	121.000	176.970	-119.000	
		Before	-----	121.000	177.492	-119.000	
		Before-Master	-----	-----	0.522	-----	
Thru Cal Mag - 7	V	Master	-----	0.846	1.295	1.974	
		Before	-----	0.846	1.295	1.974	
		Before-Master	-----	-----	0.000	-----	
Thru Cal Phase - 7	deg	Master	-----	115.000	176.186	-125.000	
		Before	-----	115.000	176.764	-125.000	
		Before-Master	-----	-----	0.578	-----	
SPA Zero	mV	Master		-50.000	0.159	50.000	
		Before		-50.000	0.143	50.000	
		Before-Master	-----	-----	-0.016	-----	
SPA Plus	mV	Master		941.000	992.540	1040.000	
		Before		941.000	992.398	1040.000	
		Before-Master	-----	-----	-0.142	-----	

Temperature Zero	V	Master Before Before-Master	-----	-0.050 -0.050 0.000	0.000 0.000 0.000	0.050 0.050 -----	<div><div></div><div></div><div></div><div></div><div></div><div></div></div>
Temperature Plus	V	Master Before Before-Master	-----	0.870 0.870 -----	0.919 0.919 0.000	0.960 0.960 -----	<div><div></div><div></div><div></div><div></div><div></div><div></div></div>

HDRS-H (HILT Density and Rxo Sonde, 150 degC) Calibration - Run Two

Primary Equipment :			
	HILT High-Resolution Control Cartridge, 150 degC	HRCC-H	3828
	HILT Resistivity Gamma-Ray Density Device, 150 degC	HRGD-H	3760
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	5471
	HILT High-Resolution Control Cartridge, 150 degC	HRCC-H	3828
	HILT High-Resolution Mechanical Sonde, 150 degC	HRMS-H	3863
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): 20:30:24 07-Aug-2014							
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	<div><div></div><div></div><div></div><div></div><div></div><div></div></div>
Small Ring	in	Before	8.00	6.00	7.93	10.00	<div><div></div><div></div><div></div><div></div><div></div><div></div></div>
Large Ring	in	Before	12.00	9.00	12.27	15.00	<div><div></div><div></div><div></div><div></div><div></div><div></div></div>

HDRS Density Calibration - Inversion Results

Master (EEPROM): 19:57:24 07-Aug-2014							
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	<div><div></div><div></div><div></div><div></div><div></div><div></div></div>
Rho Aluminum	g/cm3	Master	2.596	2.586	2.597	2.606	<div><div></div><div></div><div></div><div></div><div></div><div></div></div>
Rho Magnesium	g/cm3	Master	1.686	1.676	1.686	1.696	<div><div></div><div></div><div></div><div></div><div></div><div></div></div>
Pe Aluminum		Master	2.570	2.470	2.573	2.670	<div><div></div><div></div><div></div><div></div><div></div><div></div></div>
Pe Magnesium		Master	2.650	2.550	2.612	2.750	<div><div></div><div></div><div></div><div></div><div></div><div></div></div>

HDRS Density Calibration - Deviation Summary

Master (EEPROM): 19:57:24 07-Aug-2014							
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	<div><div></div><div></div><div></div><div></div><div></div><div></div></div>
BS Average Deviation	%	Master	0	-0.6000	0.3581	0.6000	<div><div></div><div></div><div></div><div></div><div></div><div></div></div>
BS Max Deviation	%	Master	0	-1.6000	0.7597	1.6000	<div><div></div><div></div><div></div><div></div><div></div><div></div></div>
SS Average Deviation	%	Master	0	-1.0000	0.2058	1.0000	<div><div></div><div></div><div></div><div></div><div></div><div></div></div>
SS Max Deviation	%	Master	0	-2.5000	0.5896	2.5000	<div><div></div><div></div><div></div><div></div><div></div><div></div></div>
LS Average Deviation	%	Master	0	-1.5000	0.8070	1.5000	<div><div></div><div></div><div></div><div></div><div></div><div></div></div>
LS Max Deviation	%	Master	0	-3.5000	1.9199	3.5000	<div><div></div><div></div><div></div><div></div><div></div><div></div></div>

HDRS Density Calibration - Background Summary

Master (EEPROM): 19:57:24 07-Aug-2014		Before (Measured): 20:43:07 07-Aug-2014					
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	<div><div></div><div></div><div></div><div></div><div></div><div></div></div>
BS Window Ratio		Master	1.0000		0.7352		<div><div></div><div></div><div></div><div></div><div></div><div></div></div>
		Before	0.7352	0.6985	0.7345	0.7720	
		Before-Master	-----	-----	-0.0007	-----	
BS Window Sum	1/s	Master	1		23918		<div><div></div><div></div><div></div><div></div><div></div><div></div></div>
		Before	23918	22723	23916	25114	
		Before-Master	-----	-----	-2	-----	
SS Window Ratio		Master	1.0000		0.4821		<div><div></div><div></div><div></div><div></div><div></div><div></div></div>
		Before	0.4821	0.4580	0.4863	0.5062	
		Before-Master	-----	-----	0.0042	-----	
SS Window Sum	1/s	Master	1		9772		<div><div></div><div></div><div></div><div></div><div></div><div></div></div>
		Before	9772	9284	9770	10261	
		Before-Master	-----	-----	-2	-----	
LS Window Ratio		Master	1.0000		0.2994		<div><div></div><div></div><div></div><div></div><div></div><div></div></div>
		Before	0.2994	0.2845	0.2912	0.3144	
		Before-Master	-----	-----	-0.0082	-----	

		Before	0.2994	0.2843	0.3012	0.3144	
		Before-Master	-----	-----	0.0018	-----	
LS Window Sum	1/s	Master	1		1176		
		Before	1176	1117	1178	1235	
		Before-Master	-----	-----	2	-----	

HDRS Density Calibration - Photo-multiplier High Voltages

Master (EEPROM):		19:57:24 07-Aug-2014		Before (Measured):		20:43:07 07-Aug-2014	
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
BS PM High Voltage	V	Master		1000	1375	2400	
		Before		1000	1379	2400	
		Before-Master	-----	-100	4	100	
SS PM High Voltage	V	Master		1000	1632	2400	
		Before		1000	1647	2400	
		Before-Master	-----	-100	15	100	
LS PM High Voltage	V	Master		1000	1188	2400	
		Before		1000	1194	2400	
		Before-Master	-----	-100	6	100	

HDRS Density Calibration - Crystal Quality Resolutions

Master (EEPROM):		19:57:24 07-Aug-2014		Before (Measured):		20:43:07 07-Aug-2014	
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
BS Crystal Resolution	%	Master		5.00	10.72	25.00	
		Before		5.00	10.64	25.00	
		Before-Master	-----	-1.00	-0.08	1.00	
SS Crystal Resolution	%	Master		5.00	9.28	20.00	
		Before		5.00	9.43	20.00	
		Before-Master	-----	-1.00	0.15	1.00	
LS Crystal Resolution	%	Master		5.00	8.42	20.00	
		Before		5.00	8.45	20.00	
		Before-Master	-----	-1.00	0.03	1.00	

HDRS MCFL Calibration - MCFL Accumulations

Before (Measured):		20:39:36 07-Aug-2014					
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Main Resistivity	ohm.m	Before	3875	3565	3860	4185	
Deep Resistivity	ohm.m	Before	3830	3524	3800	4136	
Shallow Resistivity	ohm.m	Before	3830	3524	3815	4136	

HGNS-H (HILT Gamma-Ray and Neutron Sonde, 150 degC) Calibration - Run Two

Primary Equipment :			
HILT Gamma-Ray and Neutron Sonde, 150 degC		HGNS-H	4865
Auxiliary Equipment :			
HGNS Accelerometer, 150 degC		HACCZ-H	6991
AmBe Neutron Logging Source		NSR-F	2554
Calibration Parameter :			
Water Temperature			
Housing Size			
JIG-BKG (Jig minus background reference)		165	

HGNS Accelerometer Calibration - Accelerometer Accumulations

Before (Measured):		03:13:55 08-Aug-2014					
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
AZ Vertical Measurement	ft/s2	Before	32.2	31.5	32.1	32.8	

HGNS Accelerometer EEPROM - Accelerometer EEPROM Read

Master (EEPROM):		00:00:00 15-May-2007					
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Accelerometer Manufacturer		Master			QAT_160		
Accelerometer Reference Temperature	degF	Master		30.2	77.0	122.0	
Accelerometer Coefficients - 0		Master	-----	-----	-4298.000	-----	
Accelerometer Coefficients - 1		Master	-----	-----	50.180	-----	
Accelerometer Coefficients - 2		Master	-----	-----	-0.002	-----	
Accelerometer Coefficients - 3		Master	-----	-----	0.000	-----	

Accelerometer Coefficients - 4		Master	-----	-----	2.754	-----	
Accelerometer Coefficients - 5		Master	-----	-----	0.000	-----	
Accelerometer Coefficients - 6		Master	-----	-----	0.000	-----	
Accelerometer Coefficients - 7		Master	-----	-----	0.000	-----	
Accelerometer Coefficients - 8		Master	-----	-----	300.500	-----	
Accelerometer Coefficients - 9		Master	-----	-----	0.994	-----	

HGNS Neutron Calibration - HGNS Neutron Accumulations

Master (EEPROM):		14:29:32 23-Jul-2014		Before (Measured):		20:28:17 07-Aug-2014	
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Near Zero Measurement	1/s	Master	0	5.0	27.5	40.0	
		Before	0	5.0	26.6	40.0	
		Before-Master	-----	-4.1	-0.9	4.1	
Far Zero Measurement	1/s	Master	0	5.0	28.9	40.0	
		Before	0	5.0	27.6	40.0	
		Before-Master	-----	-4.3	-1.3	4.3	
Near Plus Measurement	1/s	Master	6031.0	4700.0	5764.0	6900.0	
		Before	-----	-----	-----	-----	
		Before-Master	-----	-----	-----	-----	
Far Plus Measurement	1/s	Master	2793.0	1900.0	2396.0	2900.0	
		Before	-----	-----	-----	-----	
		Before-Master	-----	-----	-----	-----	
Near Corrected Plus Measurement	1/s	Master		4700.0	5720.0	6900.0	
		Before	-----	-----	-----	-----	
		Before-Master	-----	-----	-----	-----	
Far Corrected Plus Measurement	1/s	Master		1900.0	2356.0	2900.0	
		Before	-----	-----	-----	-----	
		Before-Master	-----	-----	-----	-----	

HGNS Gamma-Ray Calibration - Gamma-Ray Accumulations

Before (Measured):		20:30:52 07-Aug-2014					
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
RGR Zero Measurement	gAPI	Before	30.0	0	73.3	120.0	
RGR Plus Measurement	gAPI	Before	185.4	157.1	174.9	206.3	
GR Calibration Gain		Before	0.89	0.80	0.94	1.05	

Company:	Kerr McGee Oil & Gas Onshore LP	Schlumberger
Well:	Banded 37C-27HZ	
Field:	Wattenberg	
County:	Weld	
State:	Colorado	
Platform Express		
Micro Log		