Schlumberger

Company: Bayswater Exploration and Production

Well: Badger Creek 22 32B

Field: Badger Creek

County: Adams State: Colorado

Platform Express

Mico Log

County: Adams
Field: Badger Creek
Location: SHL: SWNE 1738' FNL & 2232' FEL
Well: Badger Creek 22 32B
Company: Bayswater Exploration and Production

Location:				
SHL: SWNE 1738' FNL & 2232' FEL		Elev.:	K.B.	4670.00 ft
Section 22, Township 2S, Range 57W			G.L.	4658.00 ft
Lat: 39.866164, Long: -103.750266			D.F.	4669.00 ft
Permanent Datum:	Ground Level	Elev.:		4658.00 f
Log Measured From:	Kelly Bushing	12.00 ft		above Perm.Datum
Drilling Measured From:	Kelly Bushing			

API Serial No.	Section:	Township:	Range:
05-001-09766-00	22	2S	57W

Logging Date			23-Nov-2013			
Run Number			Run 1			
Depth Driller			5525.00 ft			
Schlumberger Depth			5526.00 ft			
Bottom Log Interval			5526.00 ft			
Top Log Interval			320.00 ft			
Casing Driller Size @ Depth			8.625 in @ 315.00 ft			
Casing Schlumberger			320 ft			
Bit Size			7.875 in			
Type Fluid In Hole			Fresh Water			
MUD	Density	Viscosity	9.1 lbm/gal	39 s		
	Fluid Loss	PH	8 cm3	9.5		
	Source of Sample		Active Tank			
RM @ Meas Temp			0.4 ohm.m @ 70 degF			
RMF @ Meas Temp			0.3 ohm.m @ 70 degF			
RMC @ Meas Temp			0.5 ohm.m @ 70 degF			
Source RMF	RMC		Calculated	Calculated		
RM @ BHT	RMF @ BHT		0.2 @ 145	0.15 @ 145		
Max Recorded Temperatures			145 degF			
Circulation Stopped Time			23-Nov-2013	08:30:00		
Logger on Bottom Time			23-Nov-2013	12:45:36		
Unit Number	Location:		2135	Fort Morgan, CO		
Recorded By			Max Pace			
Witnessed By			Pete Debenham			

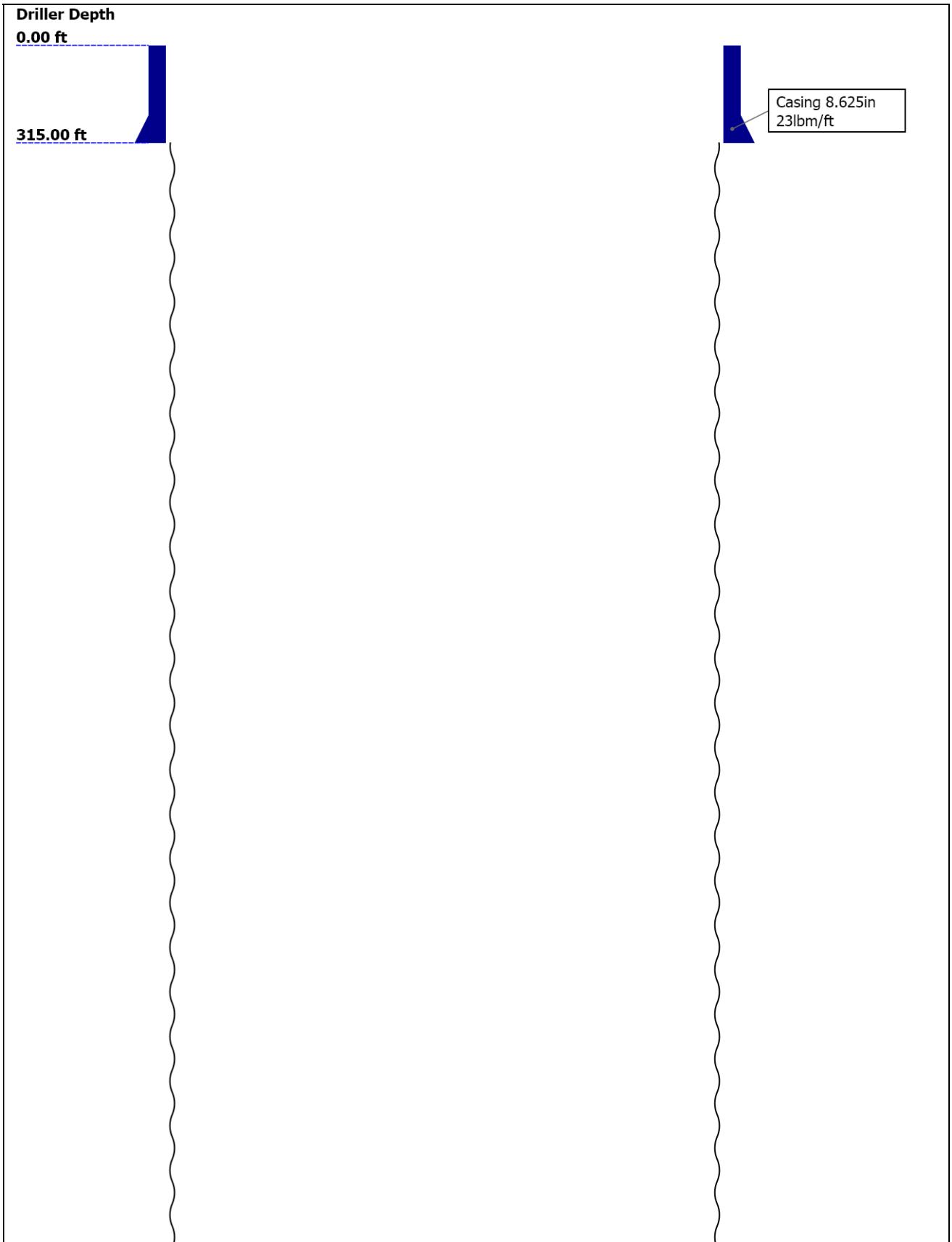
Disclaimer

Contents

1. Header
2. Disclaimer
3. Contents
4. Well Sketch
5. Borehole Size/Casing/Tubing Record
6. Borehole Fluids
7. Remarks and Equipment Summary
8. Depth Summary
9. Run 1 5" Micro Log
   9.1 Integration Summary
   9.2 Software Version
   9.3 Composite Summary
   9.4 Log (KM 5in Micro Log)
   9.5 Parameter Listing
10. Run 1 5" Micro Log Repeat
   10.1 Composite Summary
   10.2 Log (KM 5in Micro Log RA)

11. Tail

Well Sketch



Borehole Size/Casing/Tubing Record

Bit						
Bit Size (in)	7.875					
Top Driller (ft)	315					
Top Logger (ft)	315					
Bottom Driller (ft)	5525					
Bottom Logger (ft)	5526					
Casing						
Size (in)	8.625					
Weight (lbm/ft)	23					
Inner Diameter (in)	8.122					
Grade	N/A					
Top Driller (ft)	0					
Top Logger (ft)	0					
Bottom Driller (ft)	315					
Bottom Logger (ft)	320					

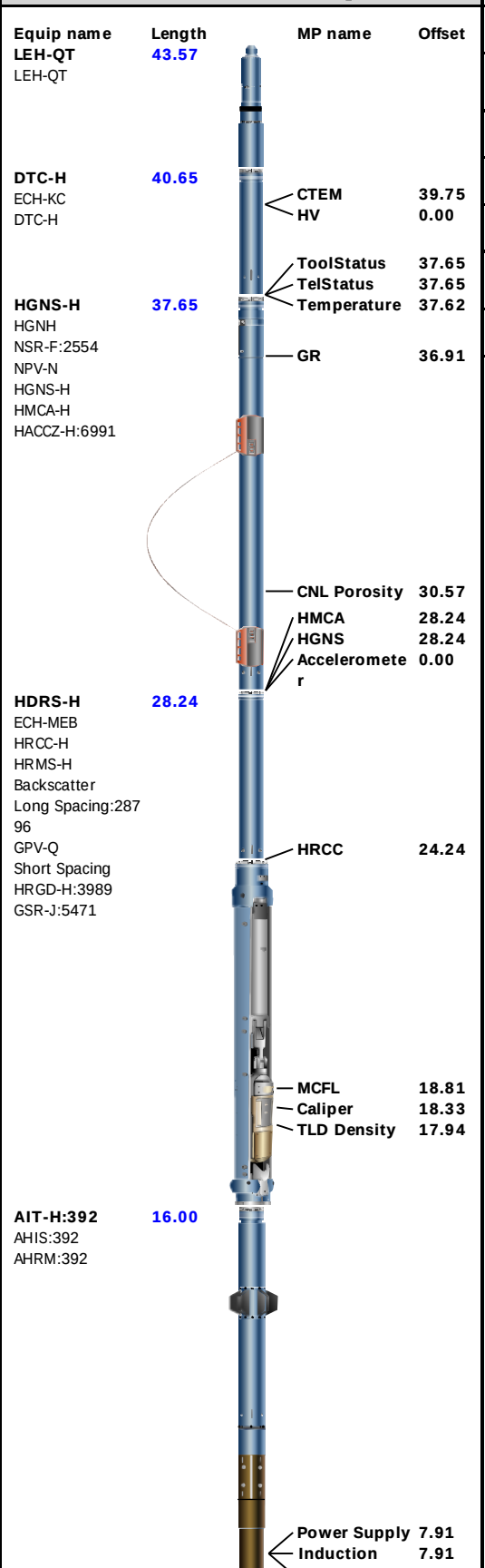
Borehole Fluids

Parameter(unit)	Run 1					
Fluid Type	Water					
Fluid Name	Fresh Water					
Max Recorded Temperatures (degF)	145					
Source of Sample	Active Tank					
Salinity (ppm)	0					
Density (lbm/gal)	9.1					
Funnel Viscosity (s)	39					
Fluid Loss (cm3)	8					
PH	9.5					
Date/Time Circulation Stopped	23-Nov-2013 08:30:00					
Date Logger on Bottom	23-Nov-2013					
Time Logger on Bottom	12:45:36					
Source RMF	Calculated					
RMC	Calculated					
RM @ Meas Temp (ohm.m@degF)	0.4 @ 70					
RMF @ Meas Temp (ohm.m@degF)	0.3 @ 70					

RMC @ Meas Temp (ohm.m@degF)	0.5 @ 70					
RM @ BHT (ohm.m@degF)	0.2 @ 145					
RMF @ BHT (ohm.m@degF)	0.15 @ 145					
RMC @ BHT (ohm.m@degF)	0.25 @ 145					
Total Solid (%)	5.8					
High Gravity Solids (%)						

Remarks and Equipment Summary

Run 1: Toolstring



Run 1: Remarks

Run 1: Remarks
This is the first run in hole
All Schlumberger depth control procedures followed
IDW used as primary depth device
Z Chart used as secondary depth reference
Sandstone matrix (2.65 density) from TD-5160
Limestone matrix (2.71 density) from 5160 to surface
Tool string run as per tool sketch

Lengths are in ft
Maximum Outer Diameter = 7.000 in
Line: Sensor Location, Value: Gating Offset
All measurements are relative to TOOL_ZERO

Depth Summary

	Run 1		
Depth Measuring Device			
Type	IDW-B		
Serial Number			
Calibration Date			
Calibrator Serial Number			
Calibration Cable Type			
Wheel Correction 1	0		
Wheel Correction 2	0		
Tension Device			
Type	CMTD-B/A		
Serial Number			
Calibration Date			
Calibrator Serial Number			
Number of Calibration Points	0		
Logging Cable			
Type	7-46NT-XS		
Serial Number			
Length	24000.00 ft		
Conveyance Type	Wireline		
Rig Type	Land		

Run 1:Depth Control Parameters		Depth Control Remarks
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

5" Micro Log

Software Version

Acquisition System	Version
MaxWell	4.0.9163.3000

Computation	Description	Version
DepthCorrection	DepthCorrection	4.0.9125.3000

Tool Elements	Description	Software Version	Firmware Version

HRCC-H	HILT High-Resolution Control Cartridge, 150 degC	4.0.9033.3000	2.0
HRGD-H	HILT Resistivity Gamma-Ray Density Device, 150 degC	4.0.9033.3000	3.0
HGNS-H	HILT Gamma-Ray and Neutron Sonde, 150 degC	4.0.9033.3000	2.0

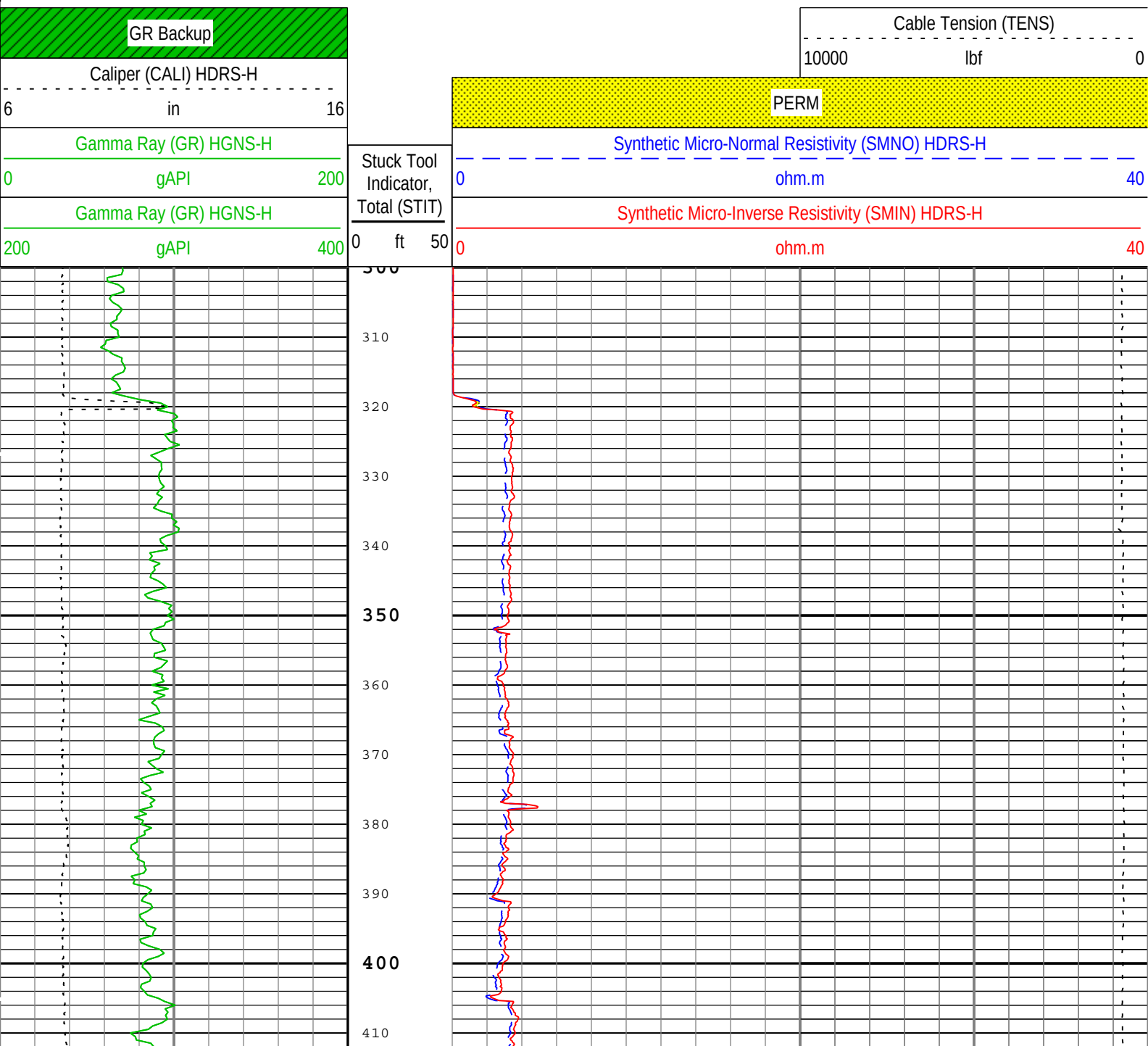
Log Company:Bayswater Exploration and Production Well:Badger Creek 22 32B

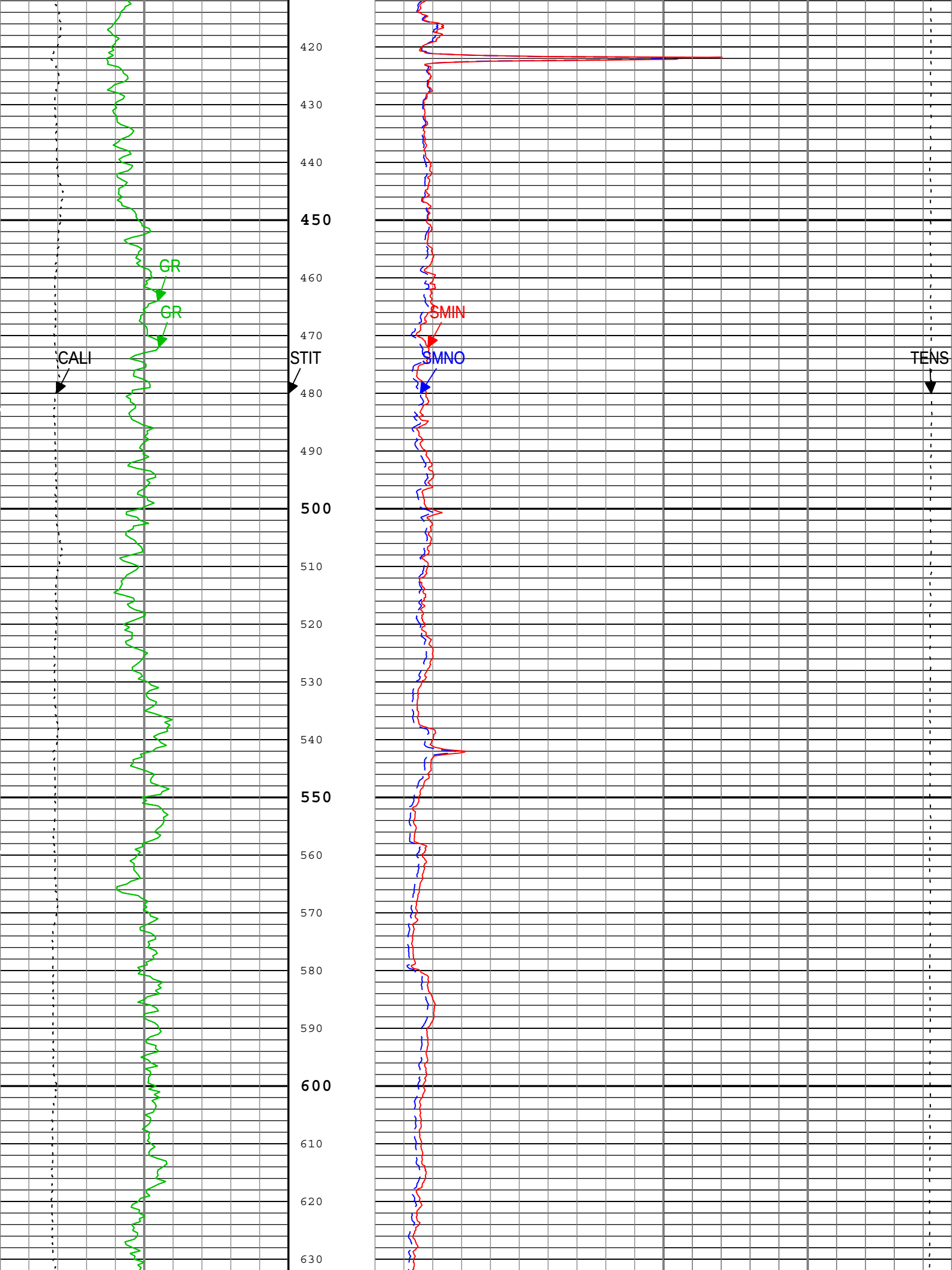
Run 1: Main[3]:Up:S002

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: 23-Nov-2013 14:05:25

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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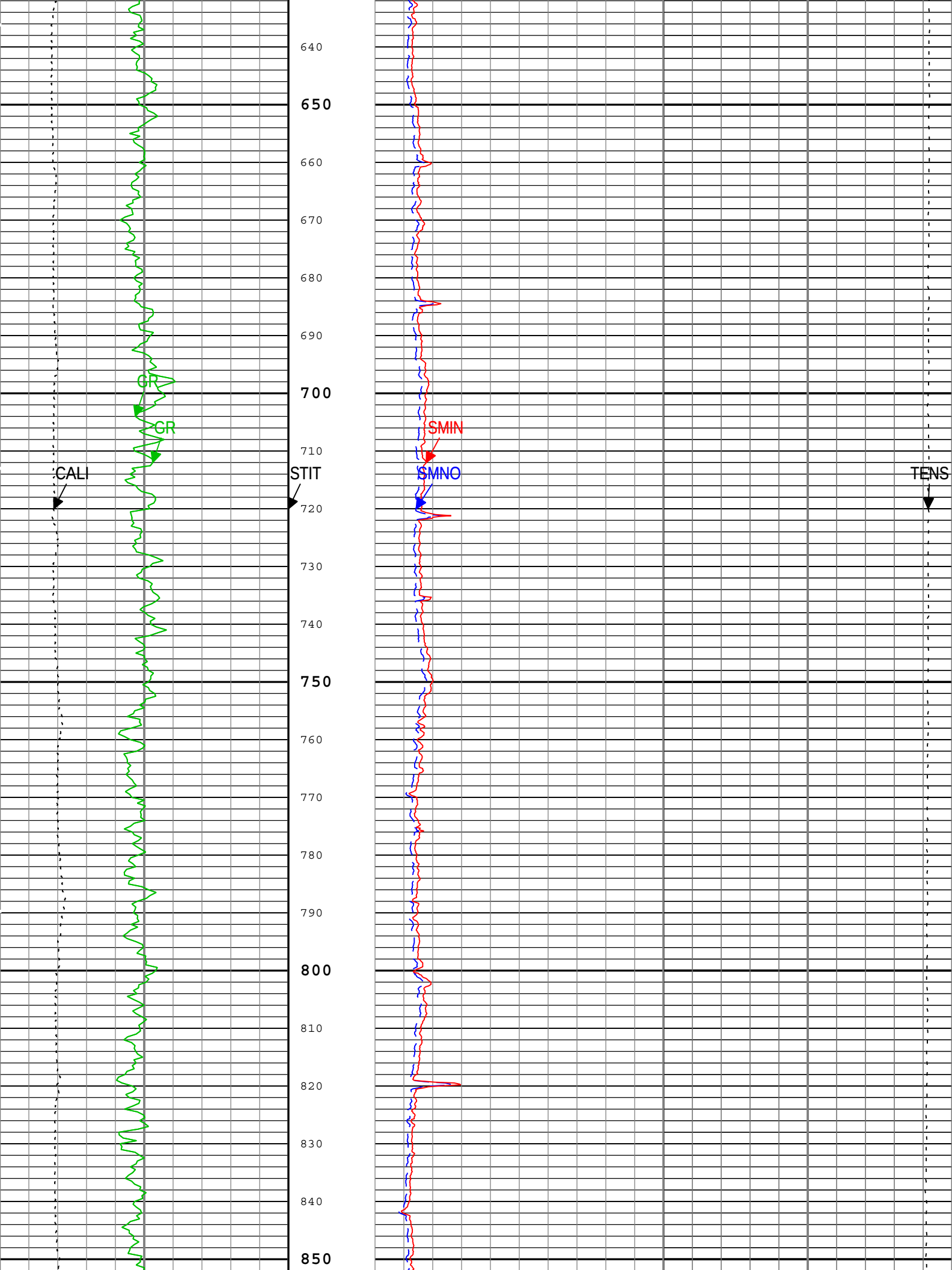
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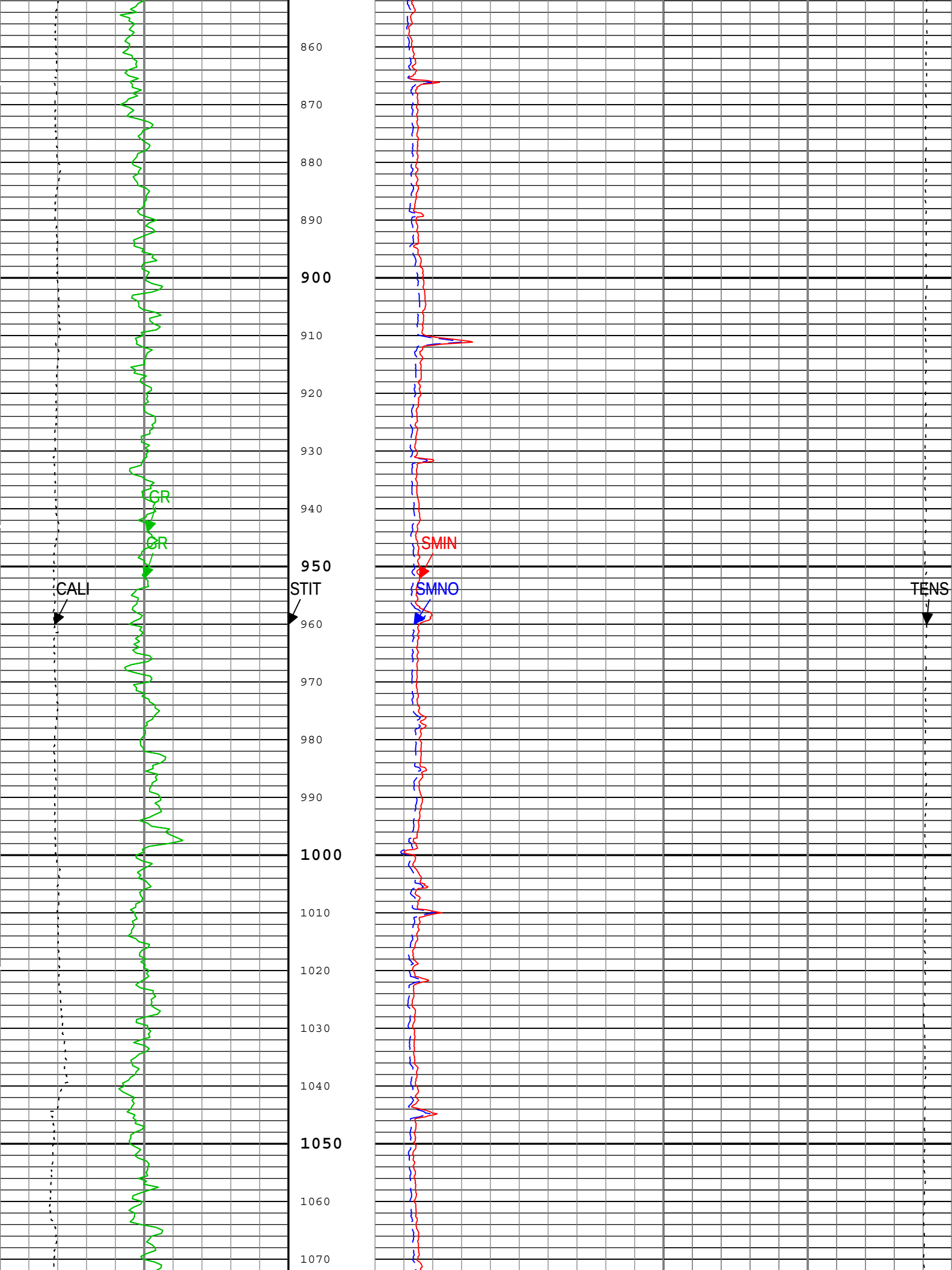
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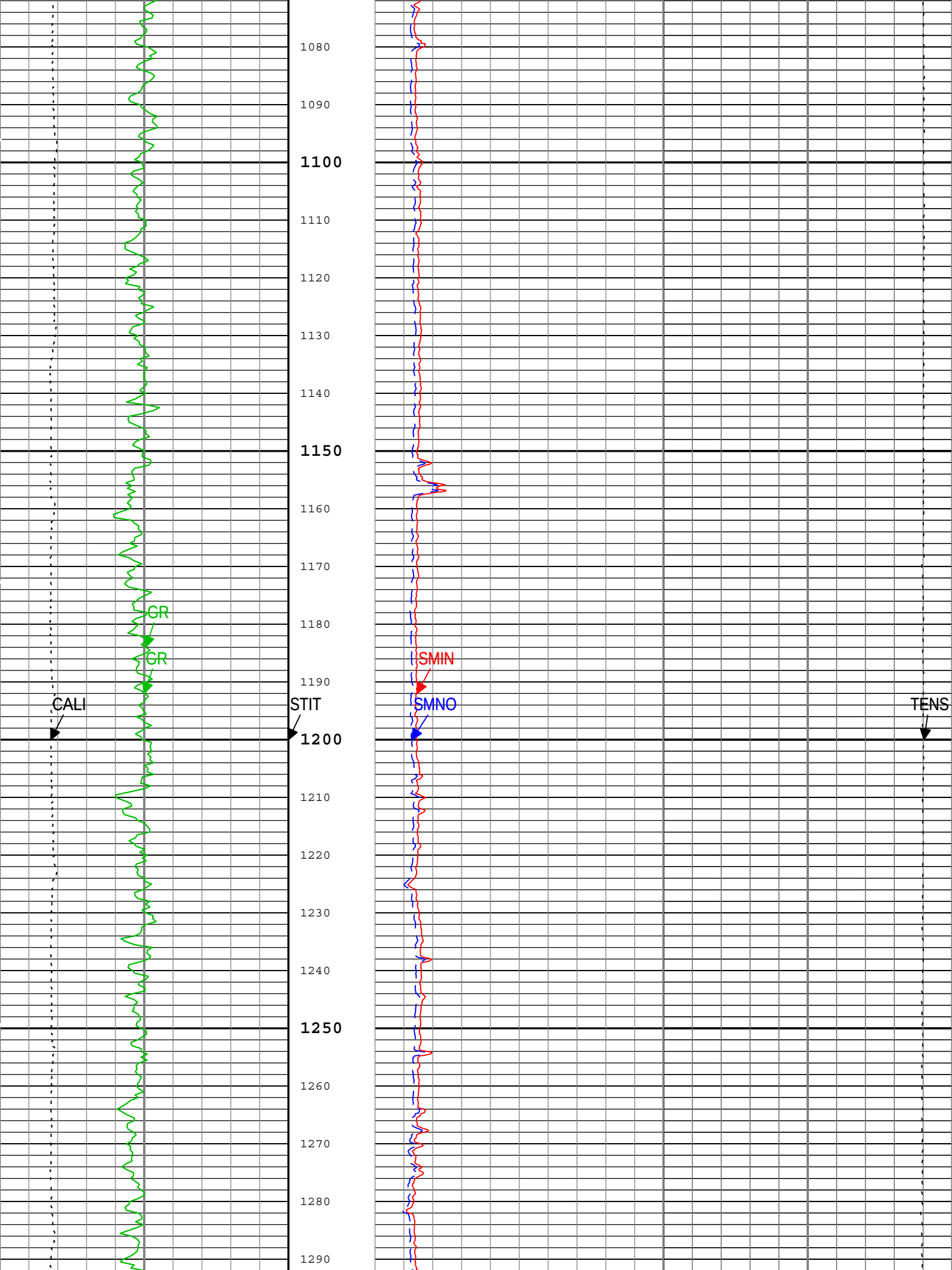
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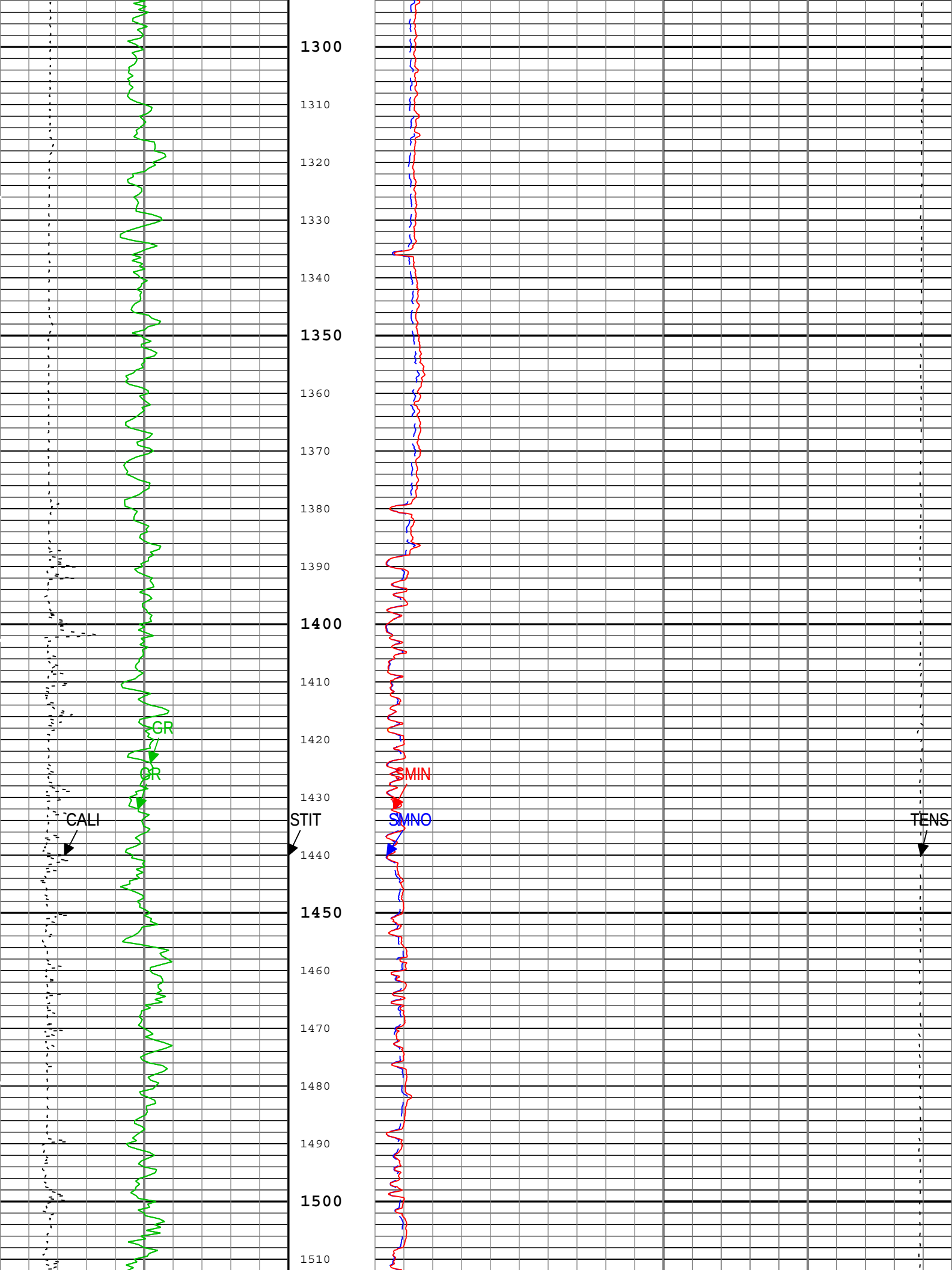
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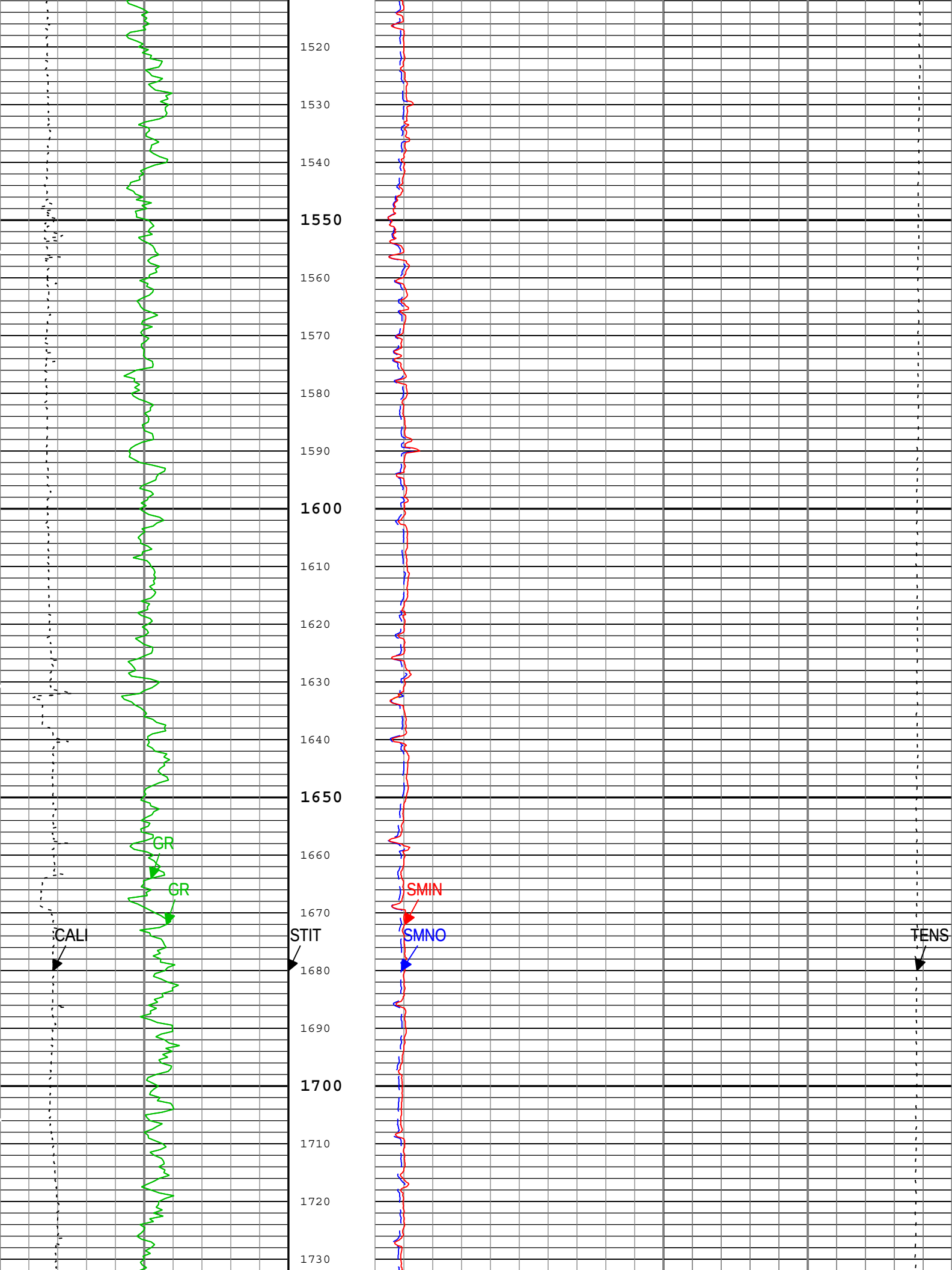
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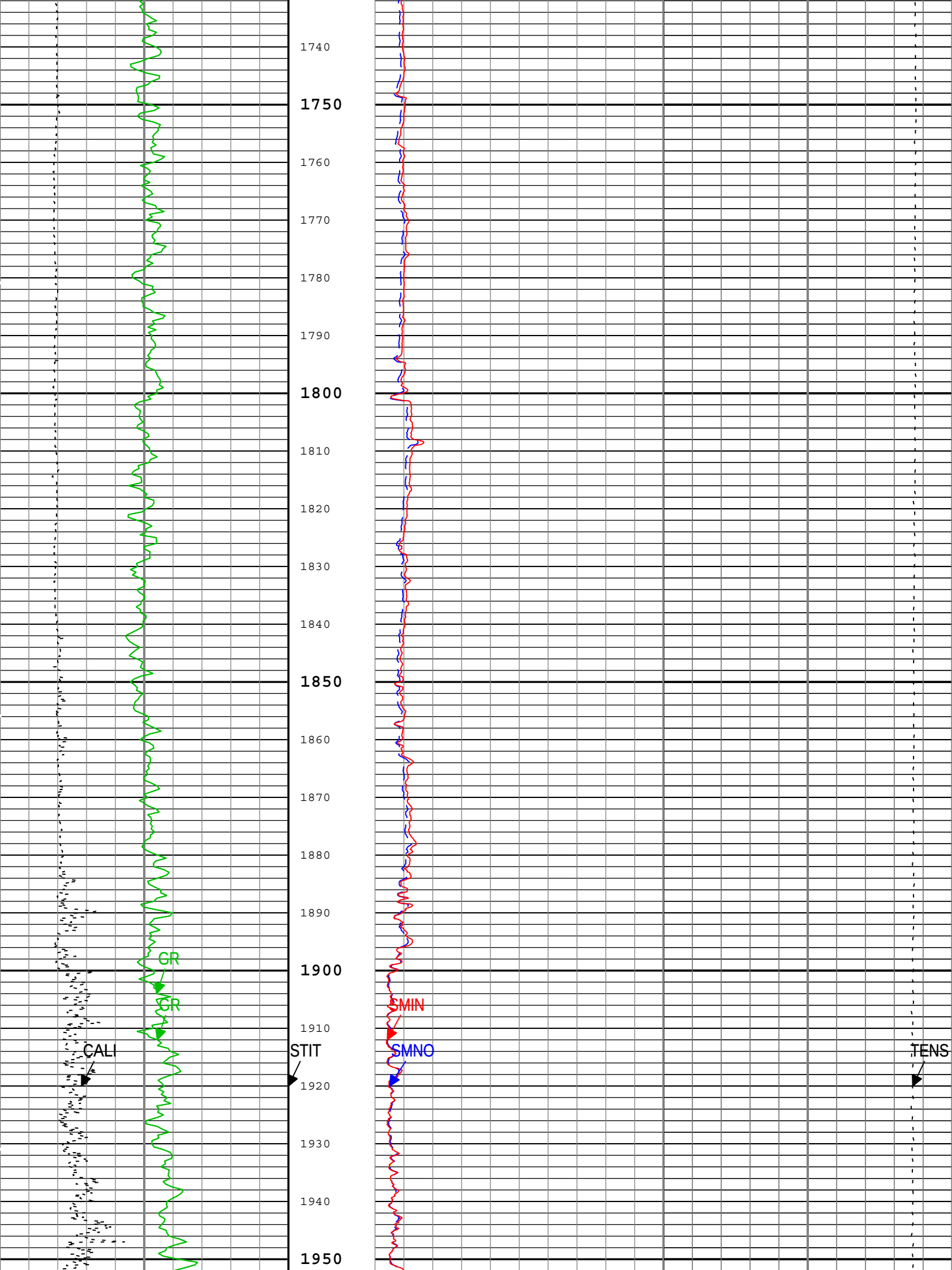
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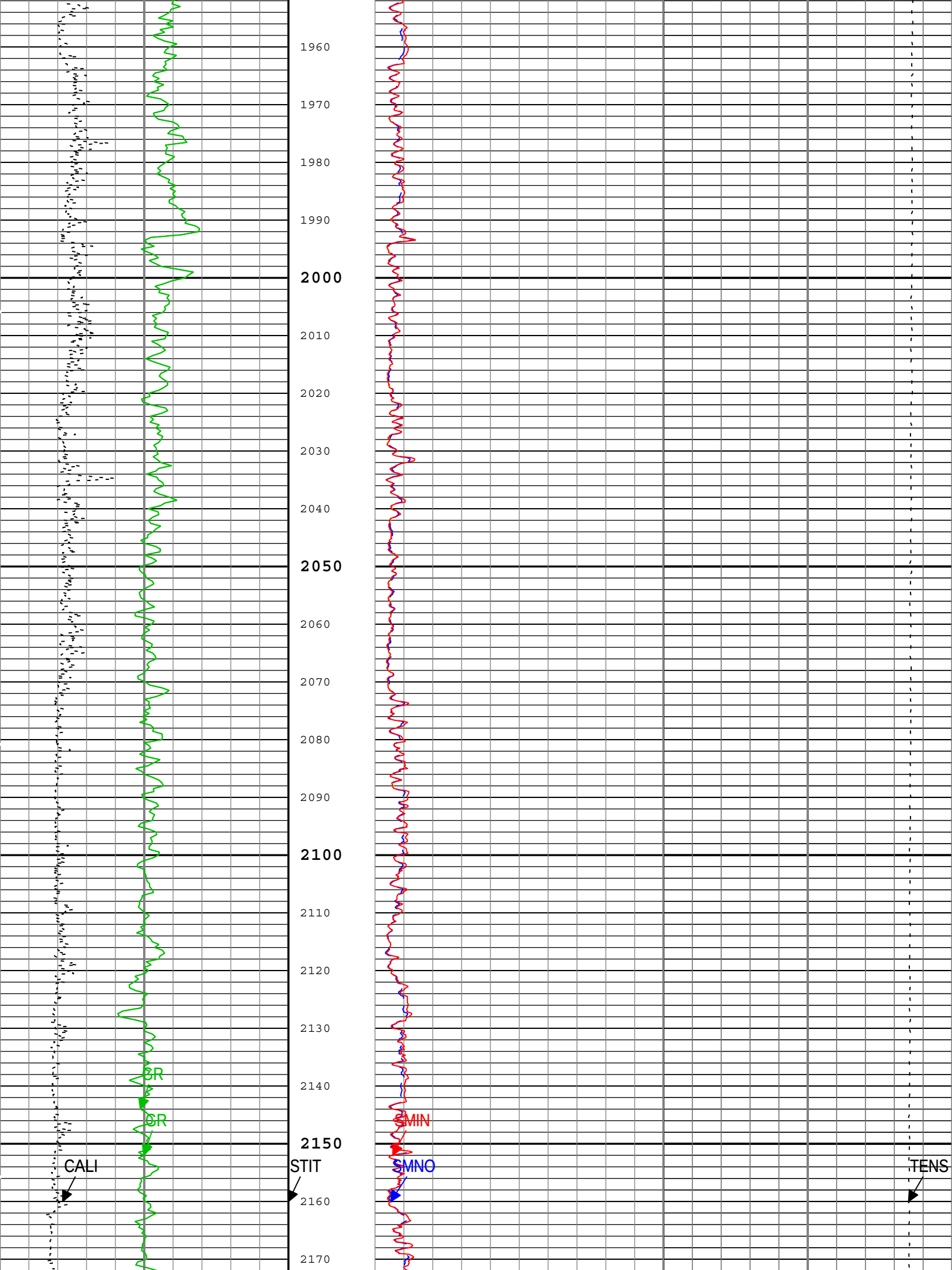
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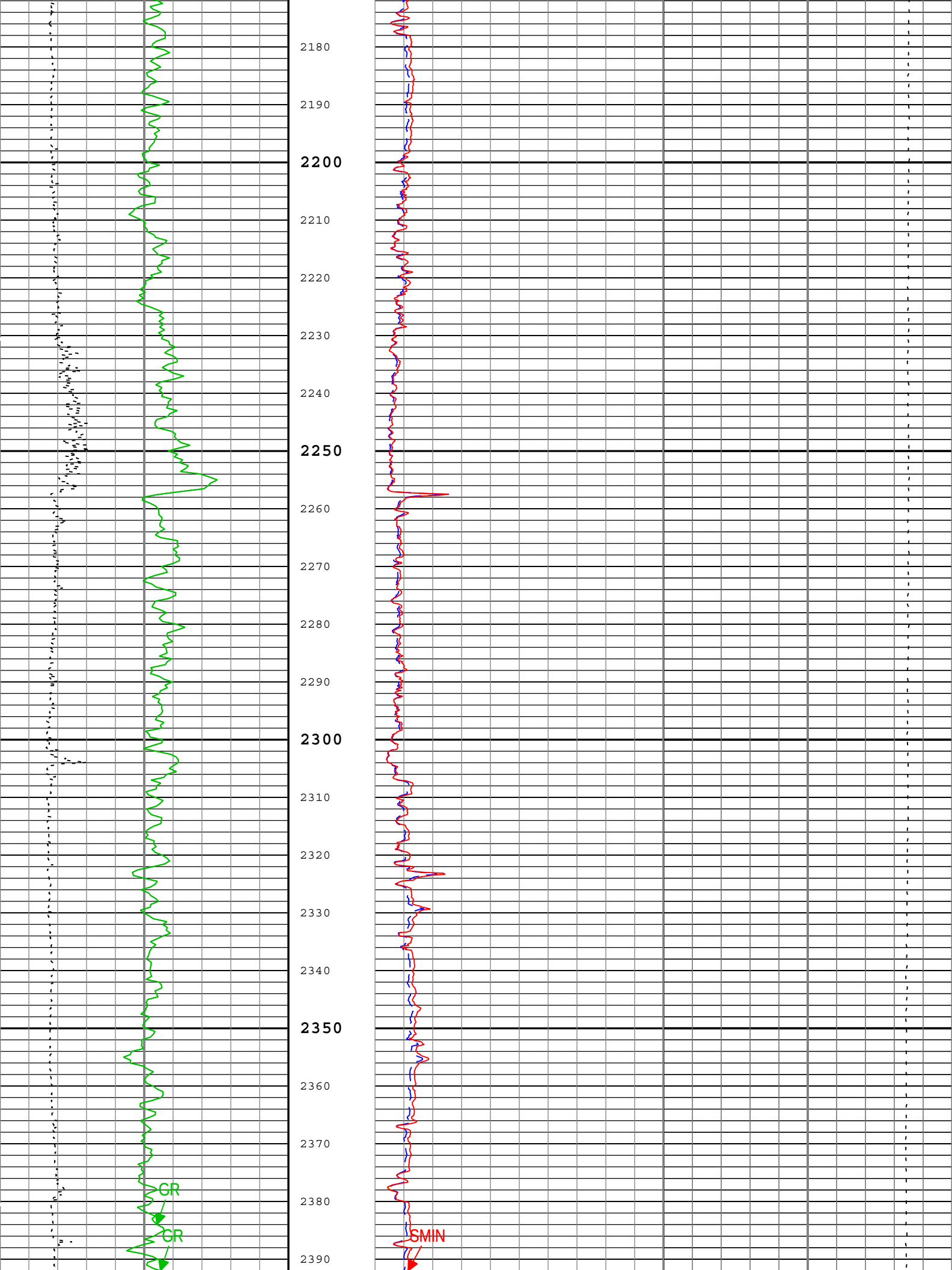
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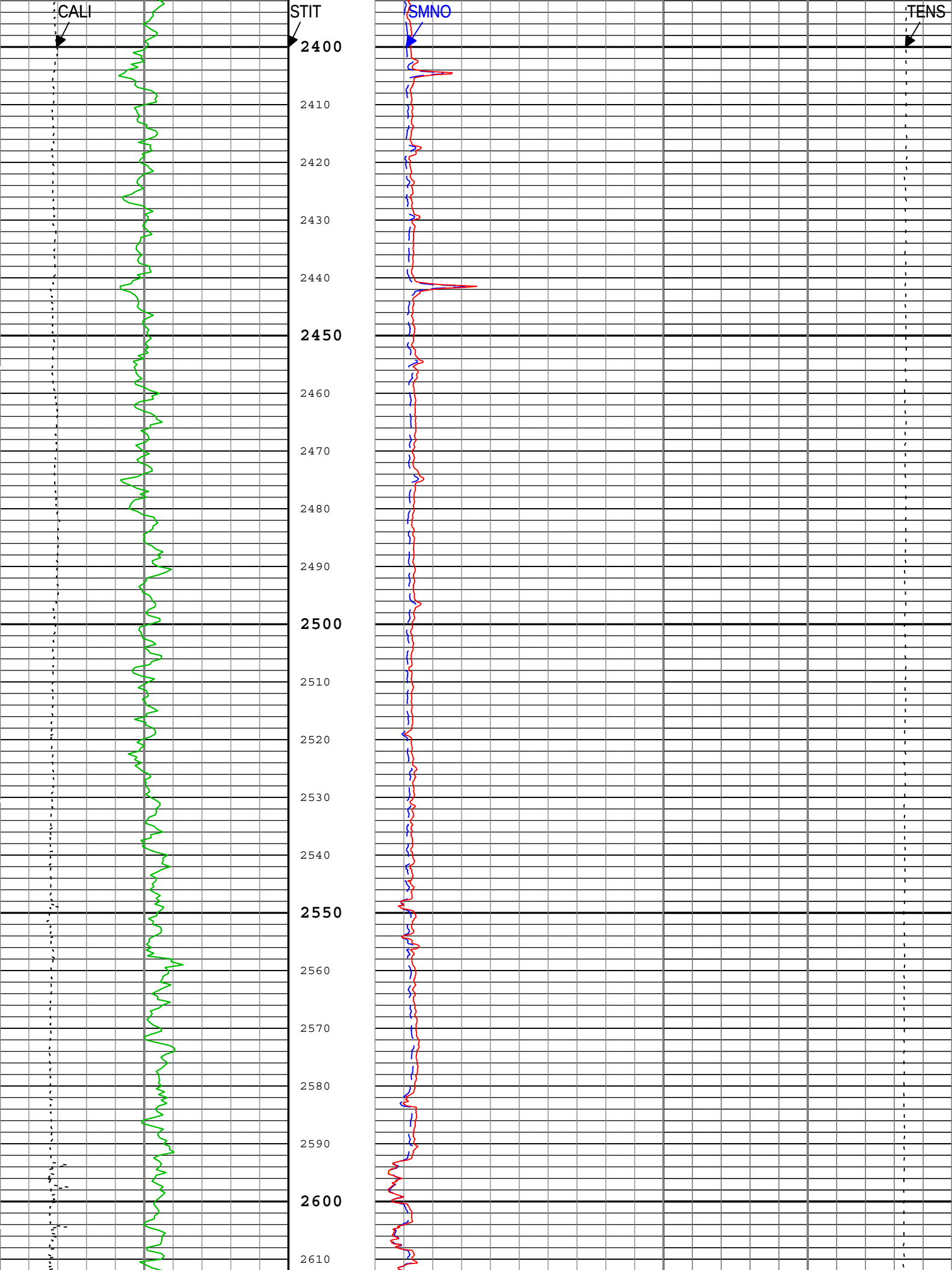
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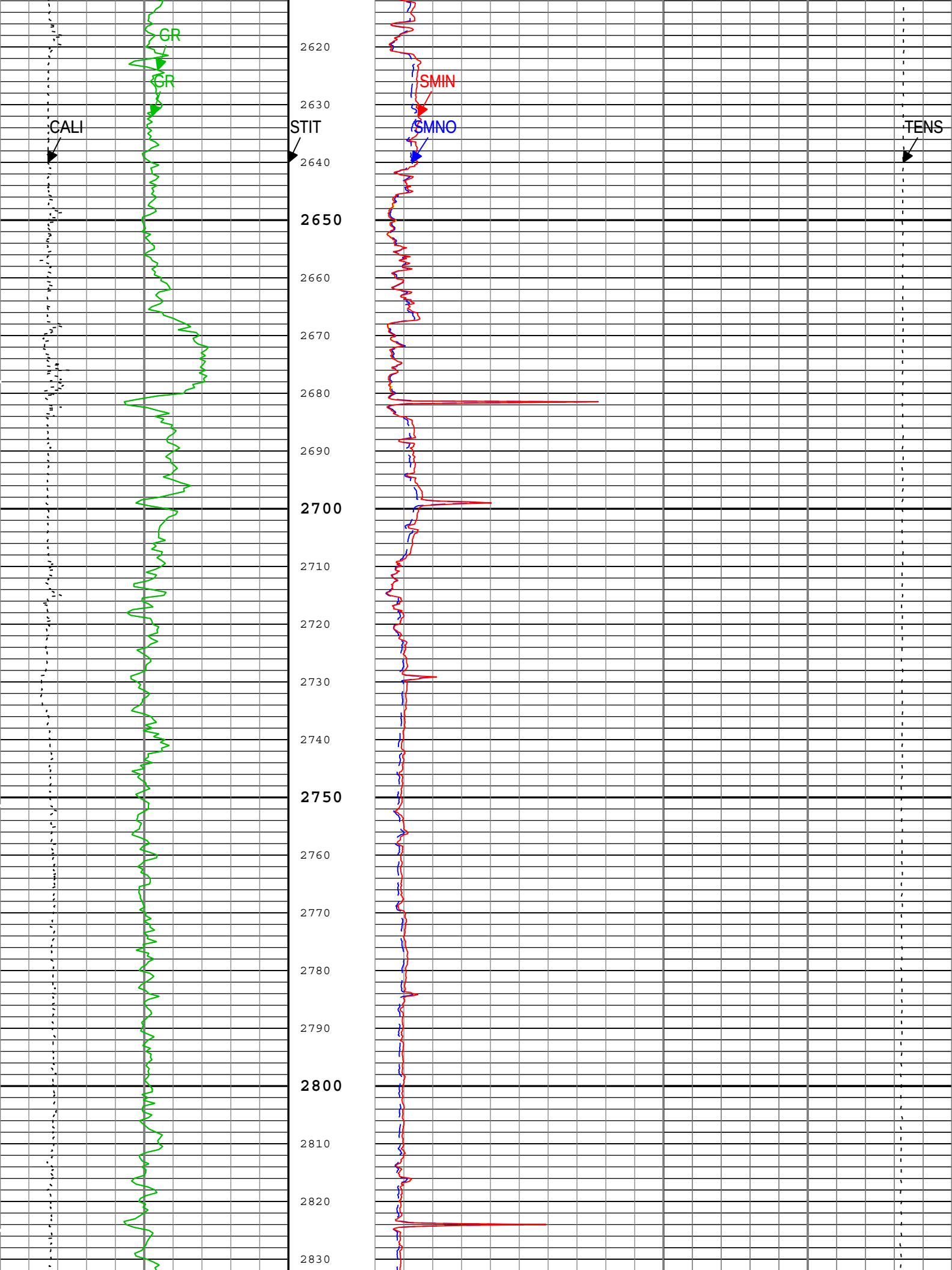
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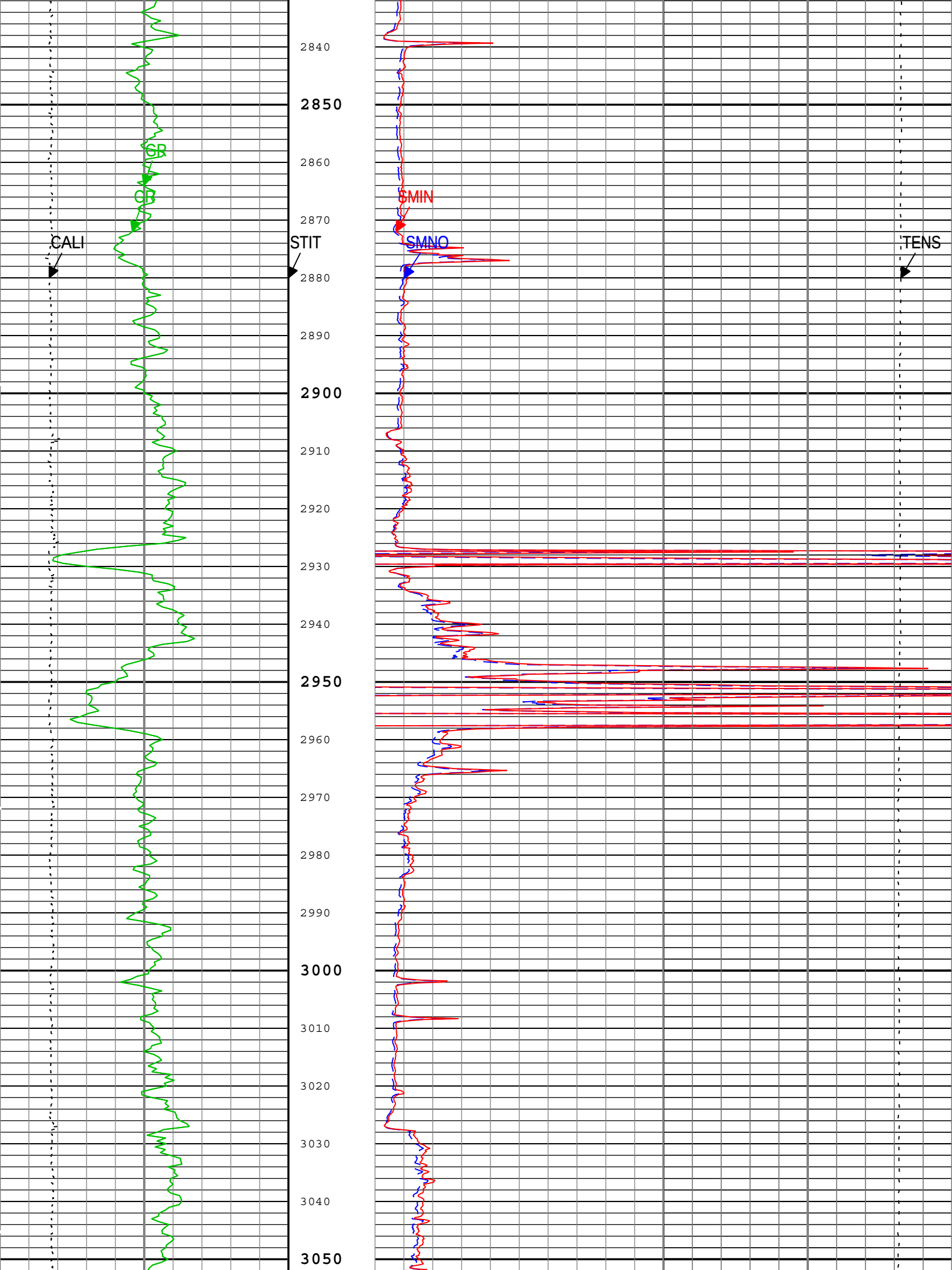
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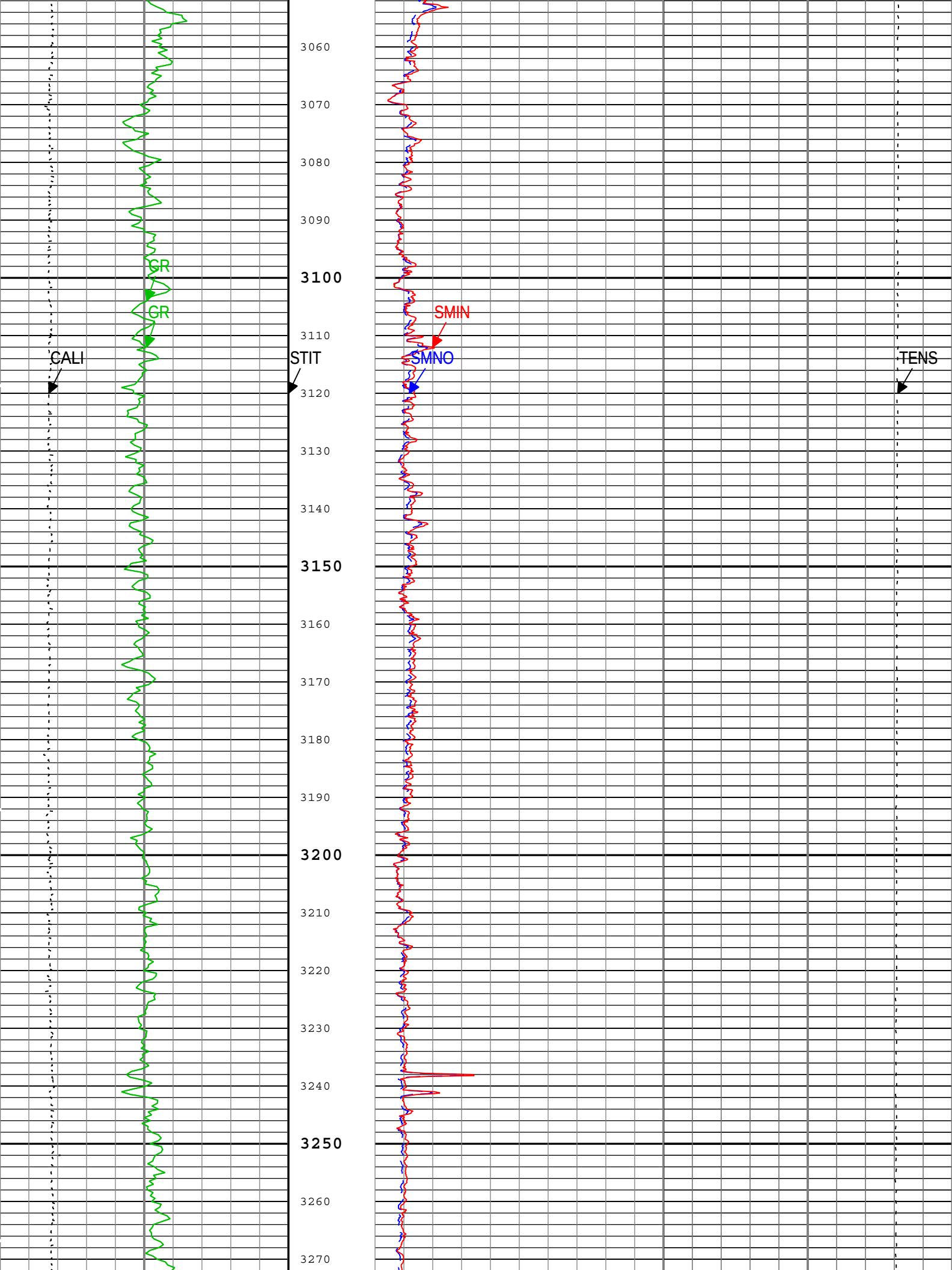
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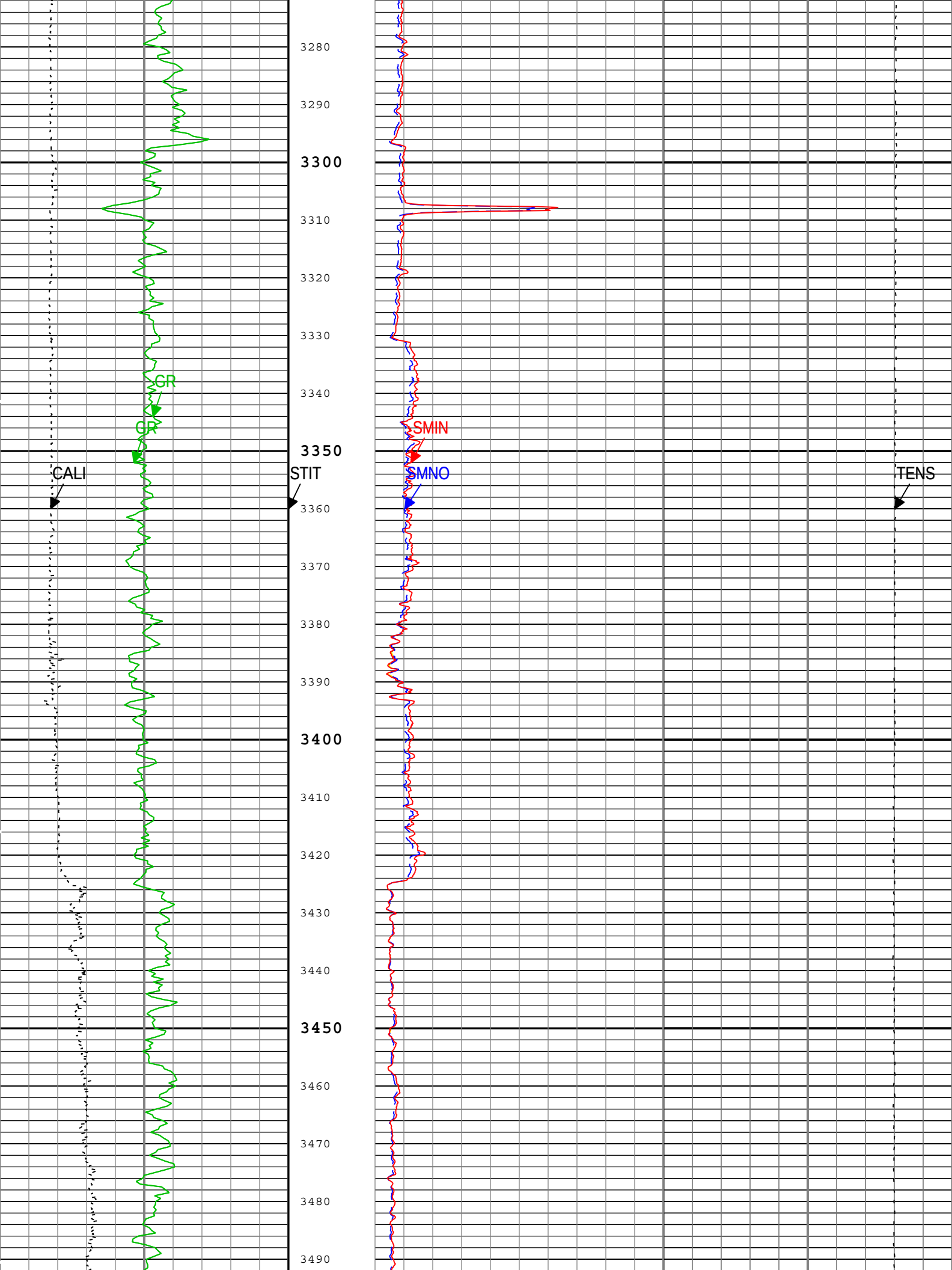
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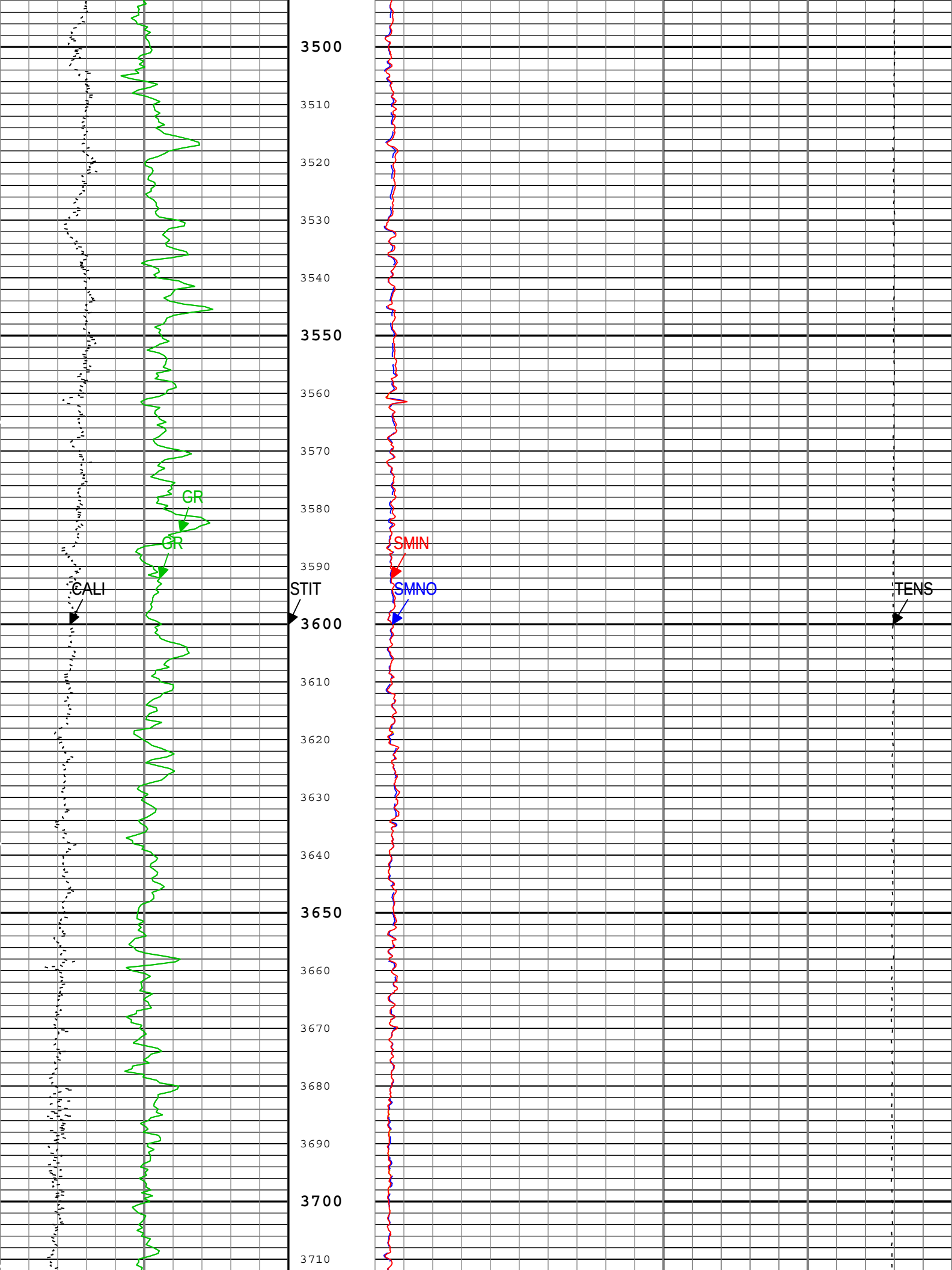
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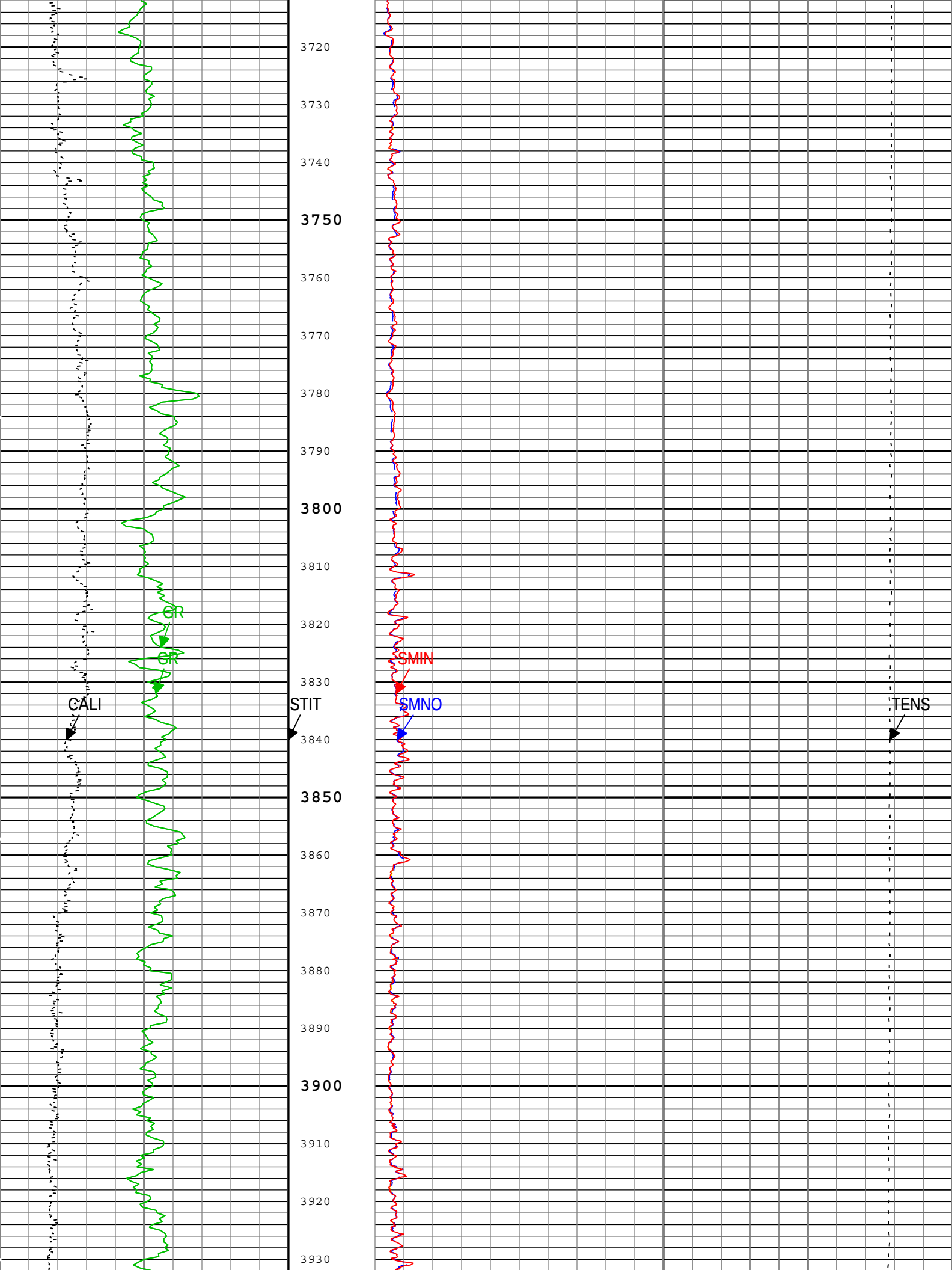
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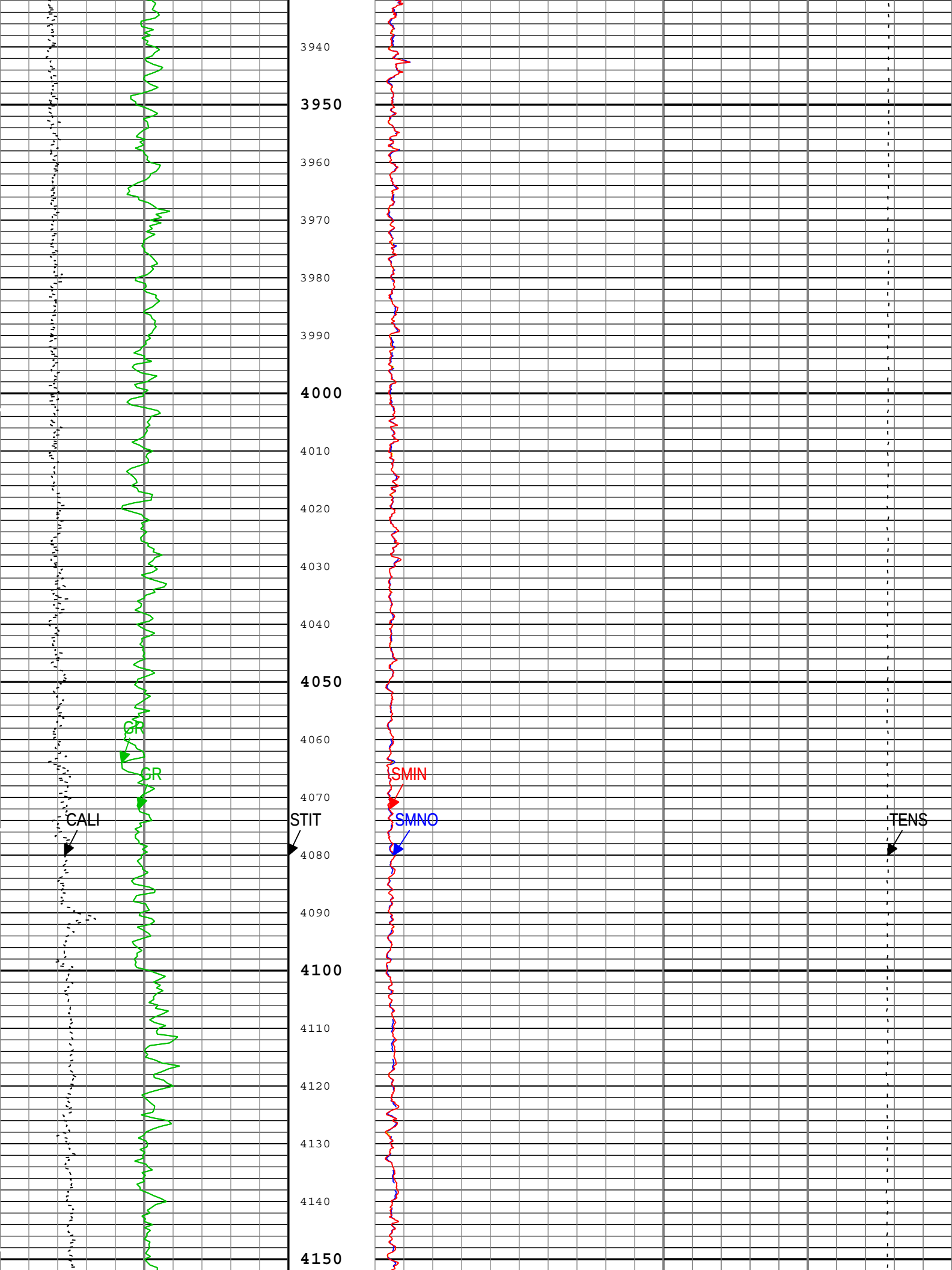
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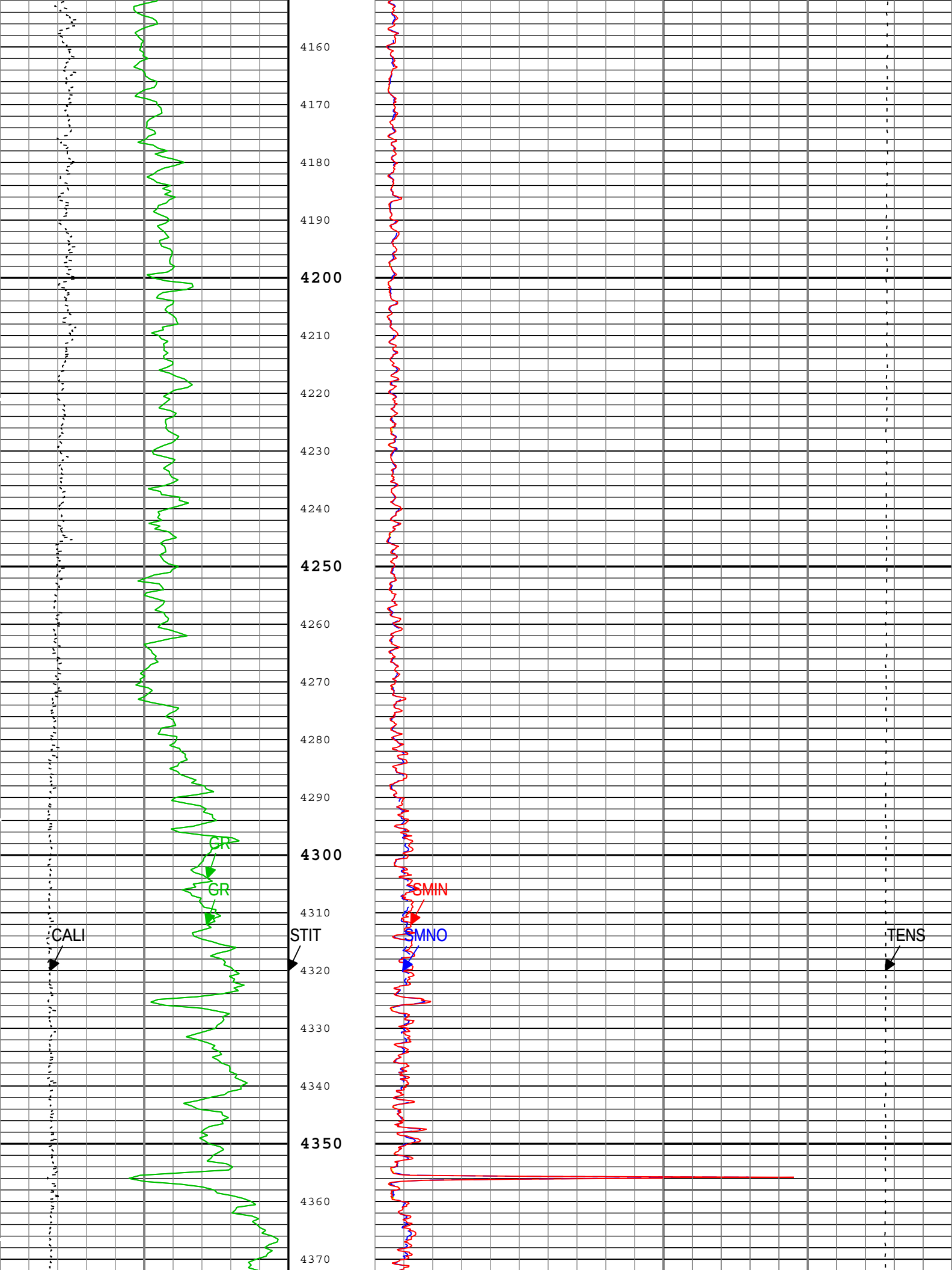
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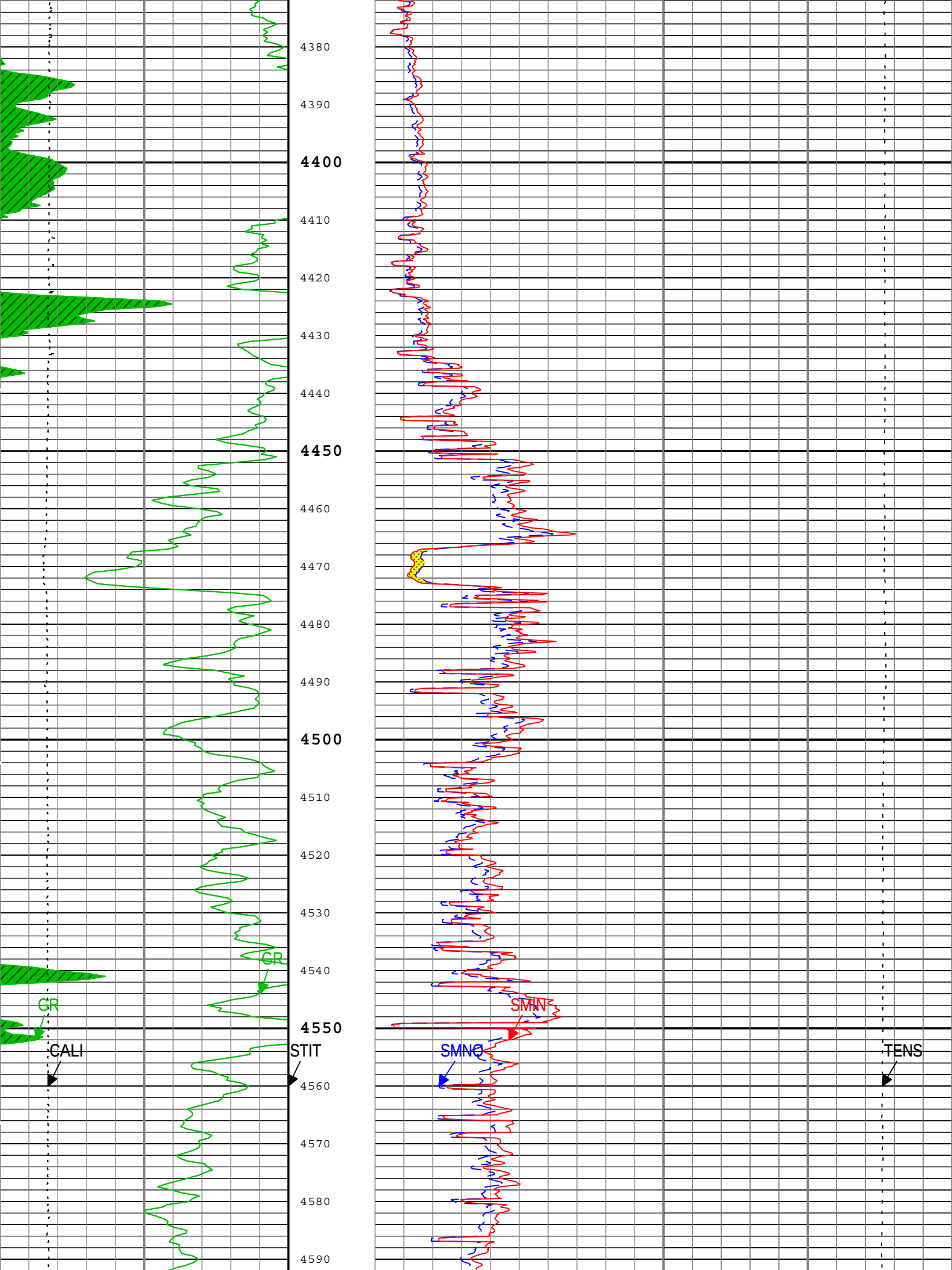
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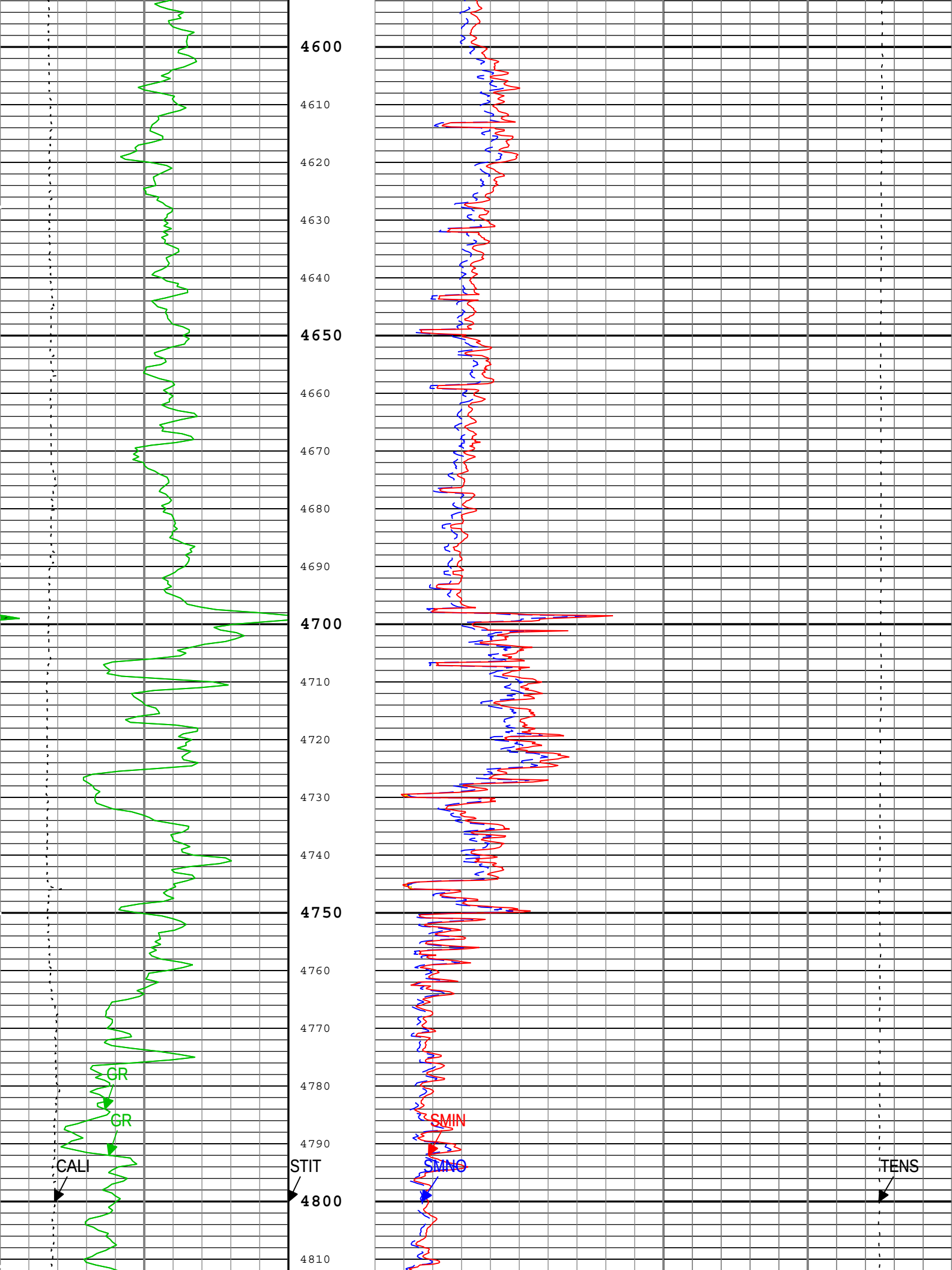
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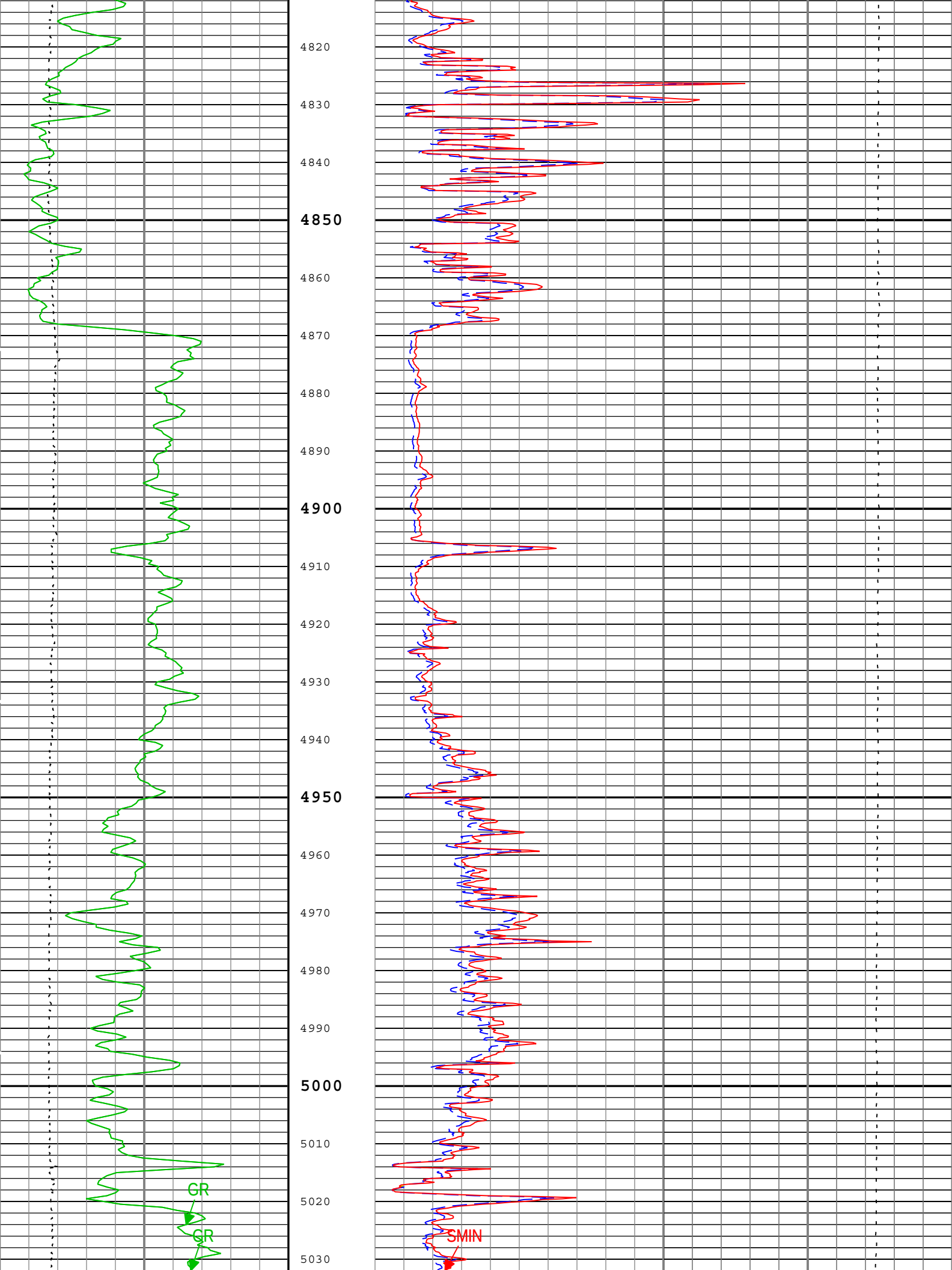
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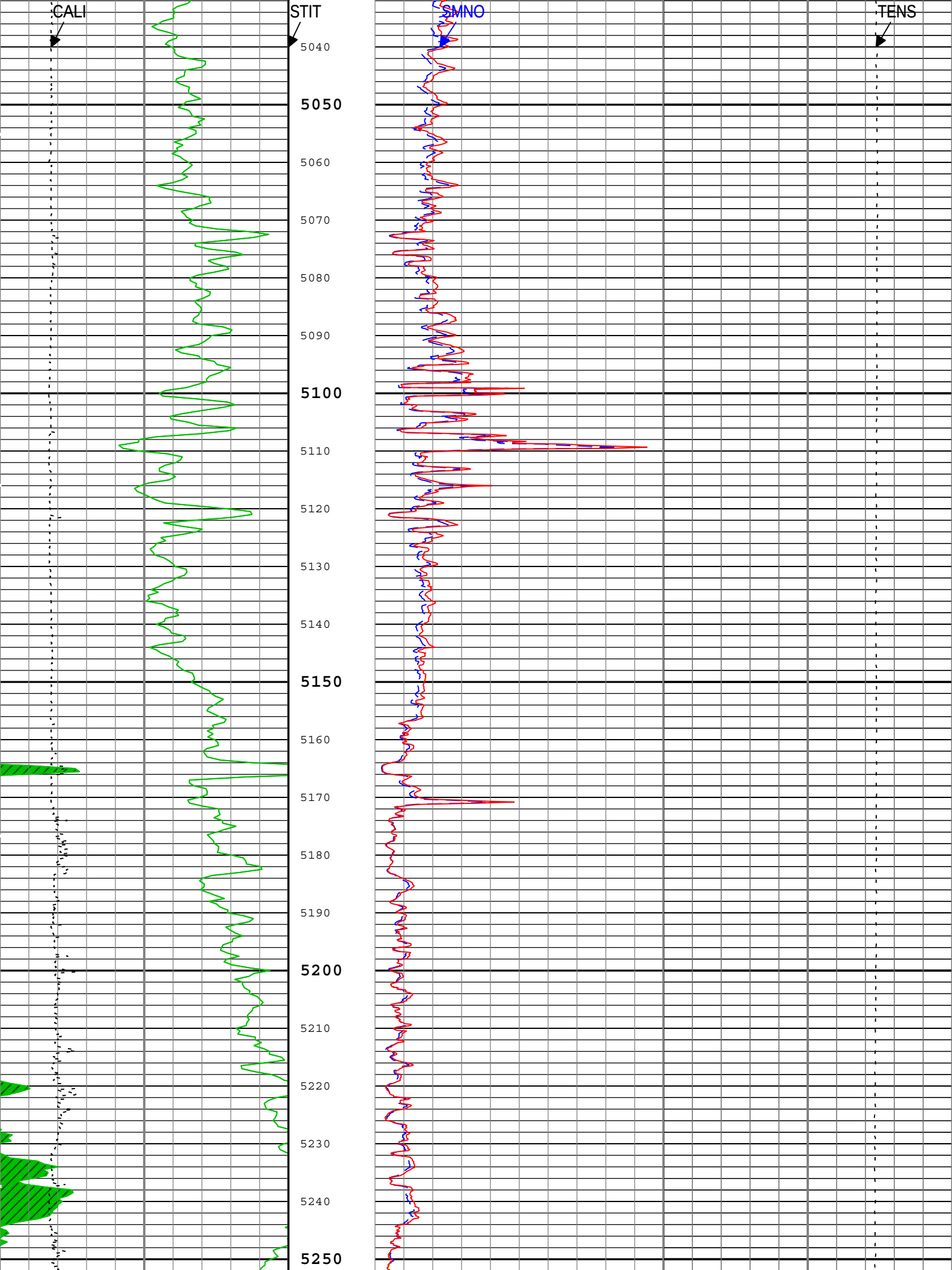
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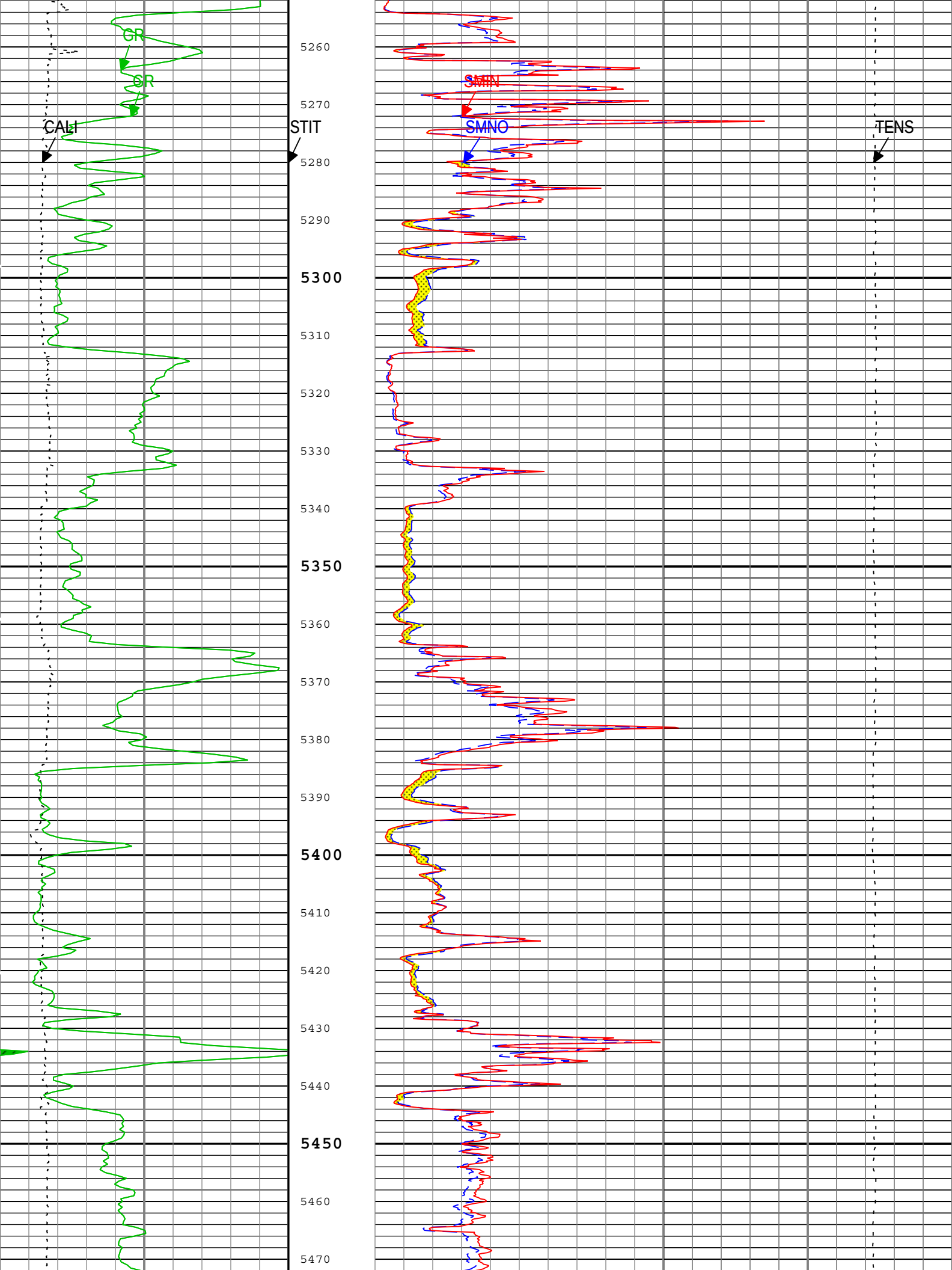
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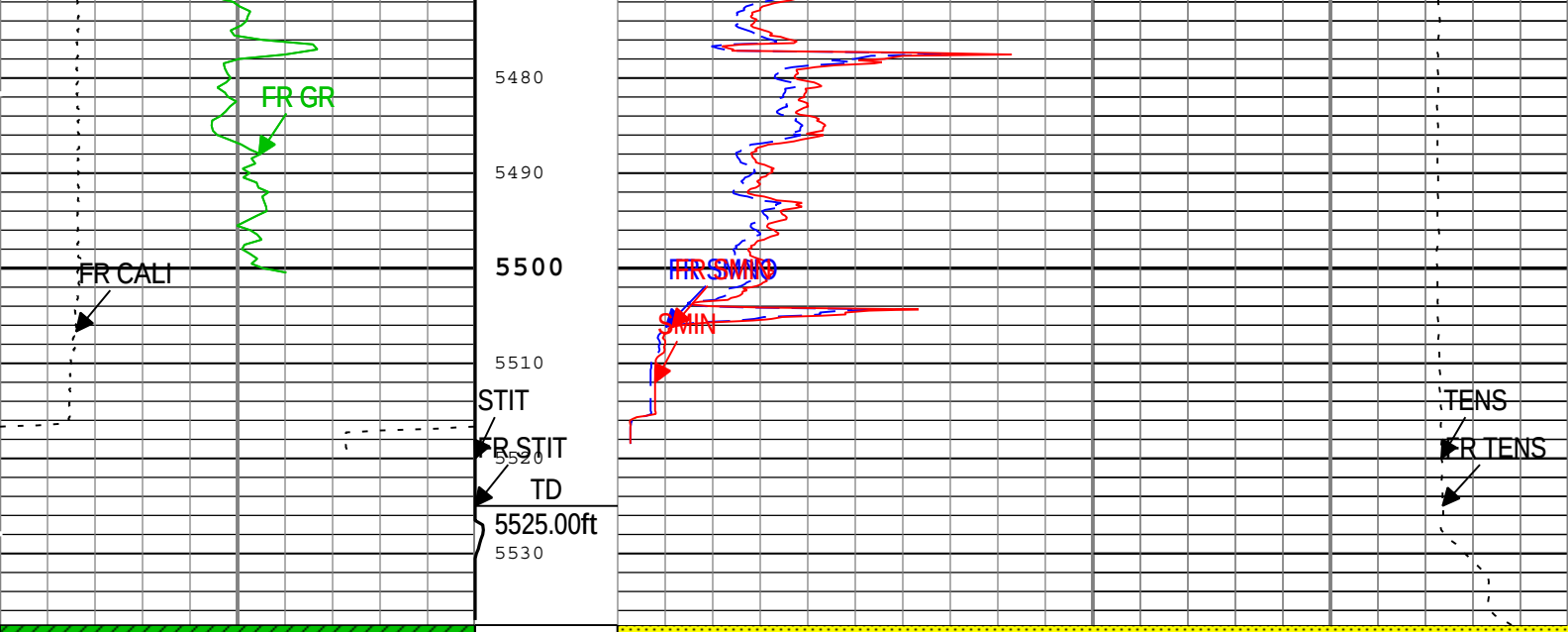


Description: MCFL processing for Platform Express Format: Log (KM 5in Micro Log) Index Scale: 5 in per 100 ft Index Unit: ft Index Type: Measured Depth Creation Date: 23-Nov-2013 14:05:25

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	320	ft
CDEN	Cement Density	HGNS-H	2	g/cm3
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	
TD	Total Measured Depth	Borehole	5525	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

Run 1

5" Micro Log Repeat

Log Company:Bayswater Exploration and Production Well:Badger Creek 22 32B

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: 23-Nov-2013 14:05:27

TIME_1900 - Time Marked every 60.00 (s)

Main To Repeat
Repeat To Main
Caliper (CALI) HDRS-H
6 in 16

Main To Repeat
Repeat To Main
Cable Tension (TENS)
10000 lbf 0

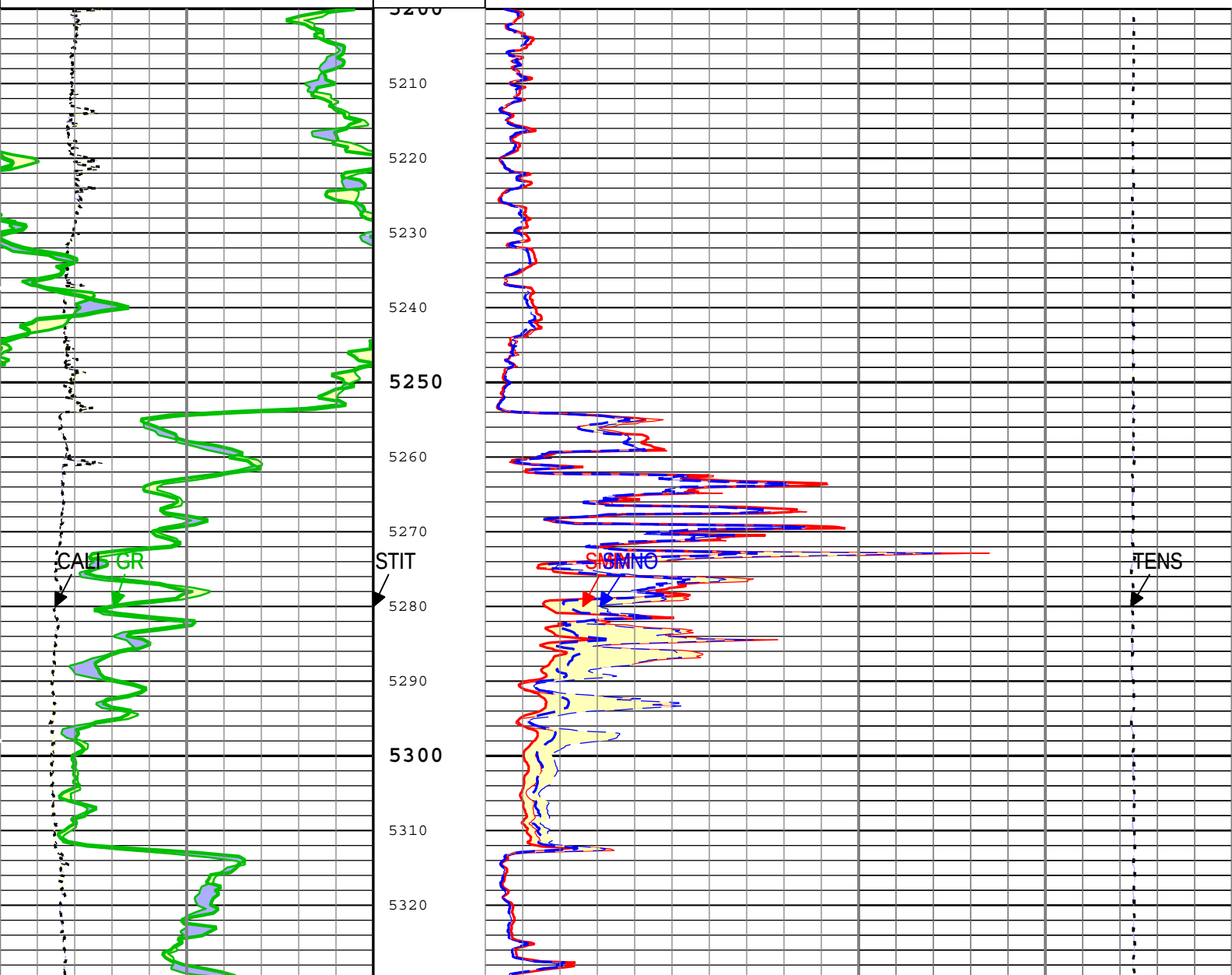
Main To Repeat
Repeat To Main
Gamma Ray (GR) HGNS-H
200 gAPI 400

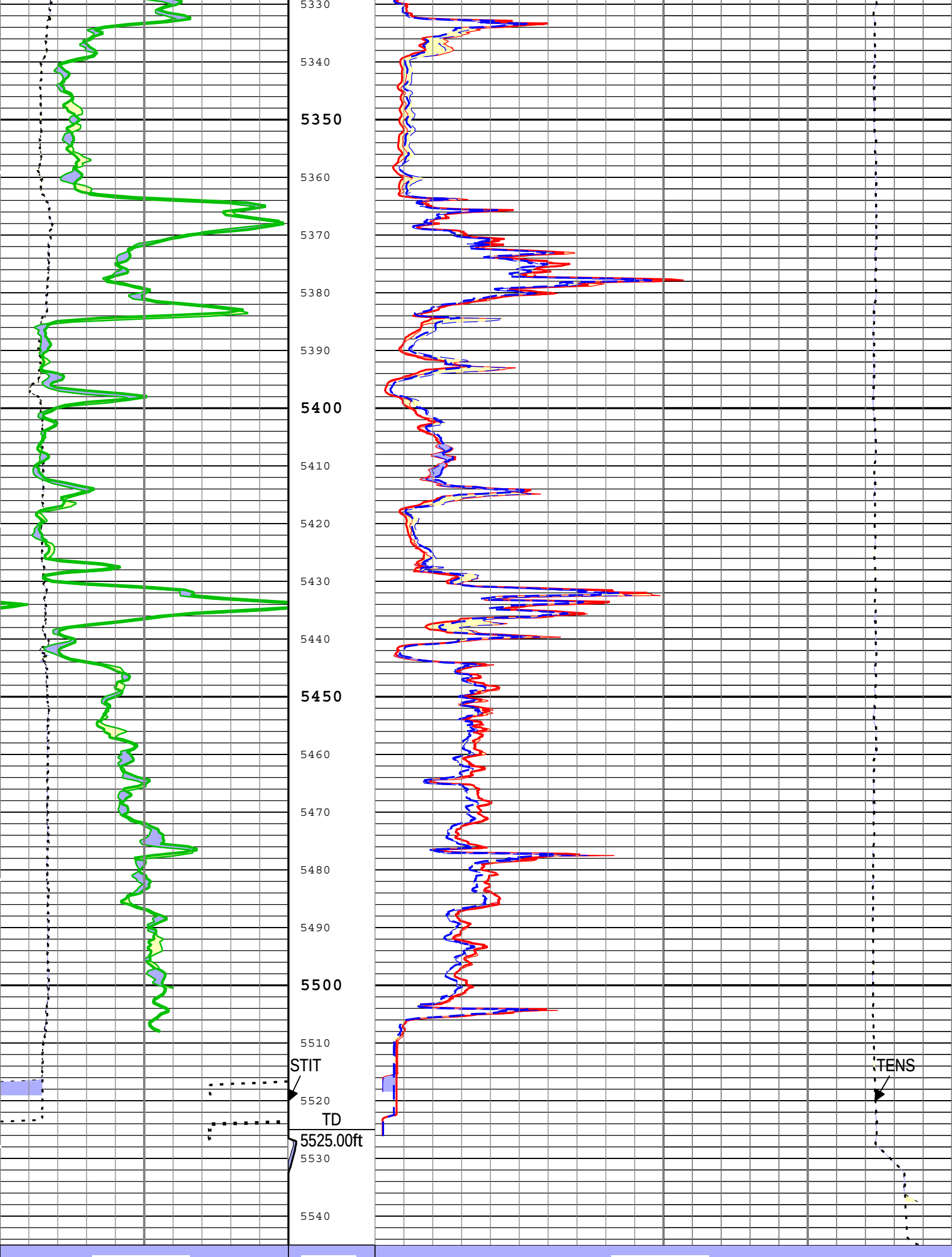
Main To Repeat
Repeat To Main
Synthetic Micro-Inverse Resistivity (SMIN) HDRS-H
0 ohm.m 40

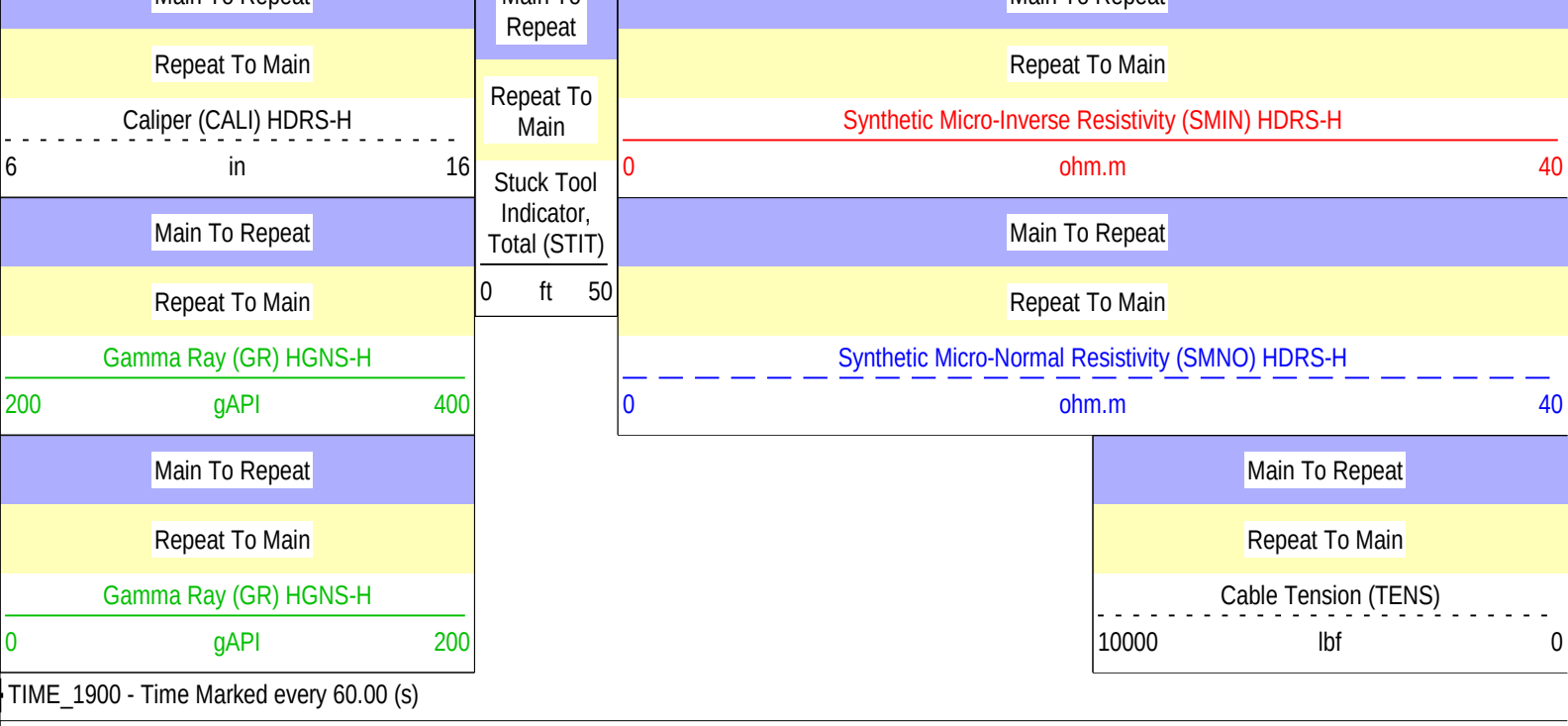
Main To Repeat
Repeat To Main
Gamma Ray (GR) HGNS-H
0 gAPI 200

Main To Repeat
Repeat To Main
Stuck Tool Indicator, Total (STIT)
0 ft 50

Main To Repeat
Repeat To Main
Synthetic Micro-Normal Resistivity (SMNO) HDRS-H
0 ohm.m 40




5330
5340
5350
5360
5370
5380
5390
5400
5410
5420
5430
5440
5450
5460
5470
5480
5490
5500
5510
STIT
5520
TD
5525.00ft
5530
5540
TENS
Main To Repeat
Main To
Main To Repeat



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: 23-Nov-2013 14:05:27

Company:	Bayswater Exploration and Production
Well:	Badger Creek 22 32B
Field:	Badger Creek
County:	Adams
State:	Colorado

Schlumberger

Platform Express

Mico Log