

Company: Vecta Oil & Gas Ltd

Well: Snowmass 44-32

Field: Wildcat

County: Cheyenne

Country: USA

Platform Express

Compensated Neutron Log

LithoDensity

County: Cheyenne

Field: Wildcat

Location: Lot 16, Sec. 32, Twn.12S, Rng. 47W

Well: Snowmass 44-32

Company: Vecta Oil & Gas Ltd

Location:

Lot 16, Sec. 32, Twn. 12S, Rng. 47W

SHL: 689' FSL & 643' FEL

Lat/Long: 38.955540/-102.688810

Elev.:

K.B. 4528.00 ft

G.L. 4517.00 ft

D.F. 4527.00 ft

Permanent Datum:

Ground Level

Elev.: 4517.00 f

Log Measured From:

Kelly Bushing

11.00 ft

above Perm.Datum

Drilling Measured From:

Kelly Bushing

API Serial No.

05-017-07725-00

Max.Hole Deviation

0 deg

Longitude:

-102.68881 degrees

Latitude:

38.955540 degrees

Logging Date	20-Oct-2012		
Run Number	Run 1		
Depth Driller	5858.00 ft		
Schlumberger Depth	5852.00 ft		
Bottom Log Interval	5852.00 ft		
Top Log Interval	427.00 ft		
Casing Driller Size @ Depth	8.625 in @ 434.00 ft		
Casing Schlumberger	427 ft		
Bit Size	7.875 in		
Type Fluid In Hole	Chemical Gel		
Density	Viscosity	62 s	
Fluid Loss	PH	7.2 cm3	8
MUD			
Source of Sample			
RM @ Meas Temp	1.6 ohm.m @ 60.6 degF		
RMF @ Meas Temp	1.2 ohm.m @ 60.6 degF		
RMC @ Meas Temp	2 ohm.m @ 60.6 degF		
Source RMF	RMC	Calculated	
RM @ BHT	RMF @ BHT	0.71 @ 145	0.53 @ 145
Max Recorded Temperatures			
Circulation Stopped		Time	02:00:00
Logger on Bottom		Time	19:26:42
Unit Number	Location:	3022	Ft. Morgan
Recorded By	Stan, Arvin, Megan		
Witnessed By	Ryan Scribner		

Disclaimer

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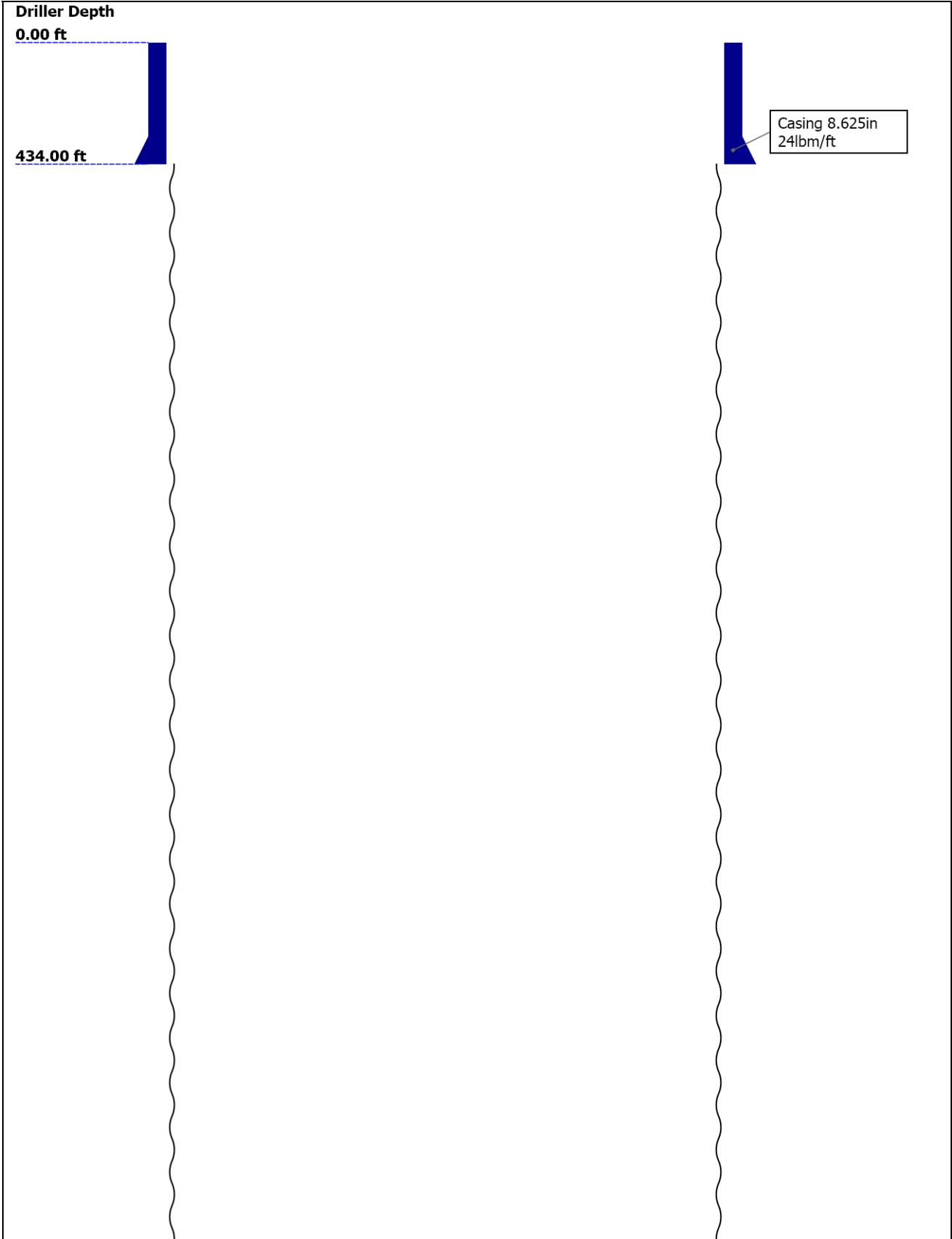
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Well Sketch





Borehole Size/Casing/Tubing Record						
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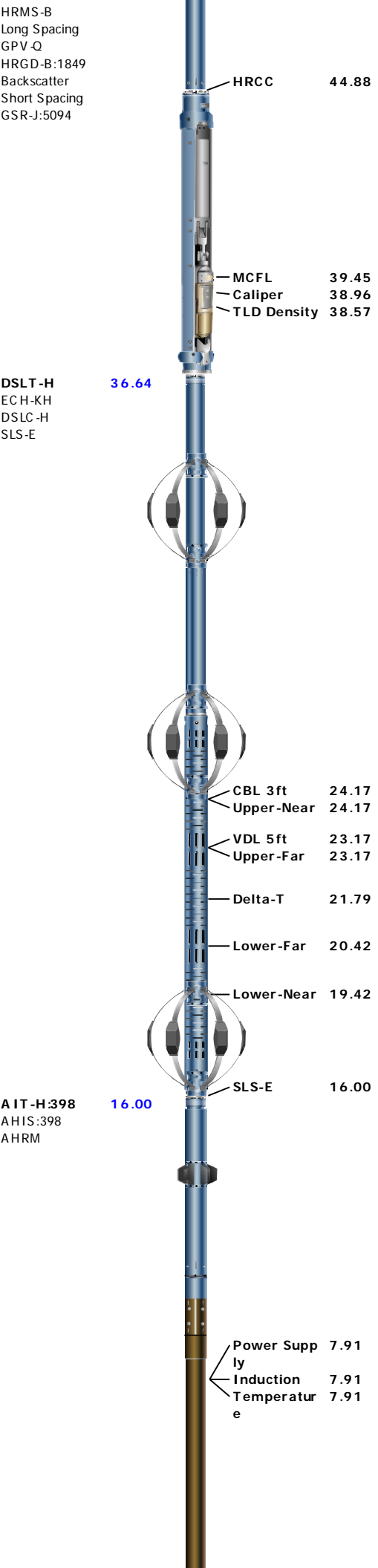
Bit						
Bit Size (in)	7.875					
Top Driller (ft)	434					
Top Logger (ft)	427					
Bottom Driller (ft)	5858					
Bottom Logger (ft)	5852					
Casing						
Size (in)	8.625					
Weight (lbm/ft)	24					
Inner Diameter (in)	8.099					
Top Driller (ft)	0					
Top Logger (ft)	0					
Bottom Driller (ft)	434					
Bottom Logger (ft)	427					

Operational Run Summary						
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Parameter (unit)	Run 1					
Date Log Started	20-Oct-2012					
Time Log Started	08:45:30					
Date Log Finished	20-Oct-2012					
Time Log Finished	21:22:59					
Top Log Interval (ft)	427.00					
Bottom Log Interval (ft)	5852.00					
Total Depth (ft)	5858.00					
Max Hole Deviation (deg)	0.00					
Azimuth of Max Deviation (deg)	0.00					
Bit Size (in)	7.875					
Logging Unit Number	3022					
Logging Unit Location	Ft. Morgan					
Recorded By	Stan, Arvin, Megan					
Witnessed By	Ryan Scribner					
Service Order Number	C6VJ-00026					

Borehole Fluids						
Parameter(unit)	Run 1					
Fluid Type	Water					
Fluid Name	Chemical Gel					
Max Recorded Temperatures (degF)	145					
Source of Sample	Flowline					
Salinity (ppm)	500					
Density (lbm/gal)	9.2					
Funnel Viscosity (s)	62					
Fluid Loss (cm3)	7.2					
PH	8					
Date/Time Circulation Stopped	20-Oct-2012 02:00:00					
Date Logger on Bottom	20-Oct-2012					
Time Logger on Bottom	19:26:42					
Source RMF						
RMC	Calculated					
RM @ Meas Temp (ohm.m@degF)	1.6 @ 60.6					
RMF @ Meas Temp (ohm.m@degF)	1.2 @ 60.6					
RMC @ Meas Temp (ohm.m@degF)	2 @ 60.6					
RM @ BHT (ohm.m@degF)	0.71 @ 145					
RMF @ BHT (ohm.m@degF)	0.53 @ 145					
RMC @ BHT (ohm.m@degF)	0.89 @ 145					
Total Solid (%)						
High Gravity Solids (%)						

Remarks and Equipment Summary				
Run 1: Toolstring				Run 1: Remarks
Equip name	Length	MP name	Offset	Toolstring run as per tool sketch.
LEH-QT LEH-QT	64.21			
DTC-H ECH-KC DTC-H	61.29	CTEM HV	60.39 0.00	
HGNS-B HGNH NPV-N NSR-F :5069 HGNS-B HACCZ-B:749 HMCA-B	58.29	TelStatus ToolStatus Temperature GR	58.29 58.29 58.26 57.55	
		CNL Porosity HMCA HGNS Accelerometer	51.21 48.88 48.88 0.00	
HDRS-B ECH-MEB HRCC-B	48.88			





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	Run 1		
Depth Remark Parameters	Run 1		
Depth Remark 1	All Schlumberger depth procedures followed.		
Depth Remark 2	IDW as primary depth reference, Z-chart as secondary depth reference.		
Depth Measuring Device	Run 1		
Type	IDW-B		
Calibration Date	02-Oct-2012		
Calibrator Serial Number	78135a		
Calibration Cable Type	7-39P LXS		
Wheel Correction 1	1		
Wheel Correction 2	0		
Tension Device	Run 1		
Type	CMTD-B/A		
Serial Number	1109		
Calibration Date	02-Oct-2012		
Calibrator Serial Number	78135a		
Calibration Points	10		
Calibration RMS	6		
Calibration Peak Error	10		
Logging Cable	Run 1		
Type	7-39P-LXS		
Serial Number	A711075		
Logging Cable Length (ft)	16000.00		

Run 1

5" Porosity

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
HENVIR	Computation Ensemble for the HGNS Neutron environmental corrections	3.1.9755.0
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

Pass Summary

Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	Depth Shift	Include Parallel Data
Run 1	Log[5]:Up	Up	86.55 ft	5872.33 ft	20-Oct-2012 7:17:25 PM	20-Oct-2012 9:22:44 PM	7.00 ft	

All depths are referenced to toolstring zero

Log

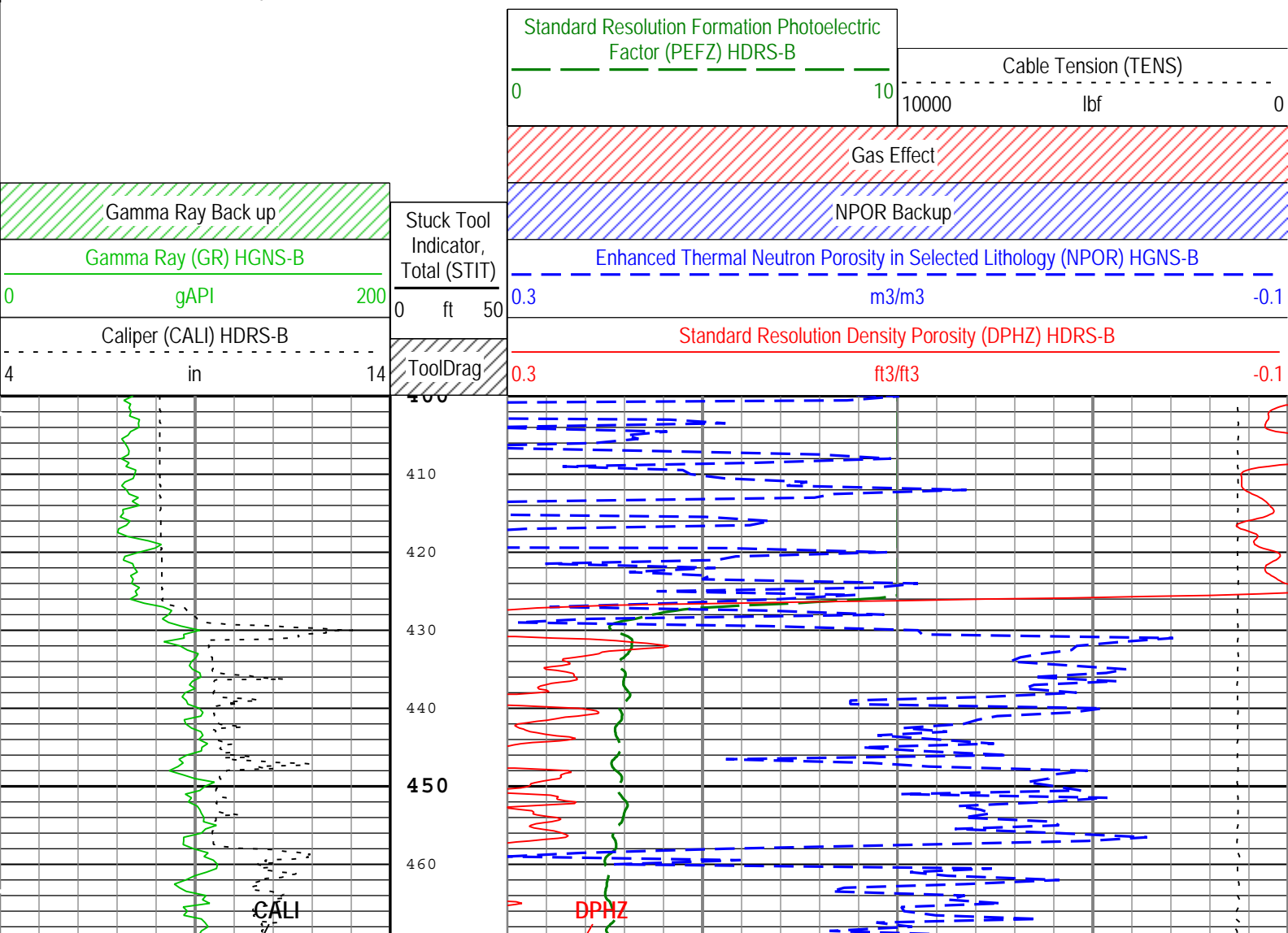
Run 1: Log[5]:Up

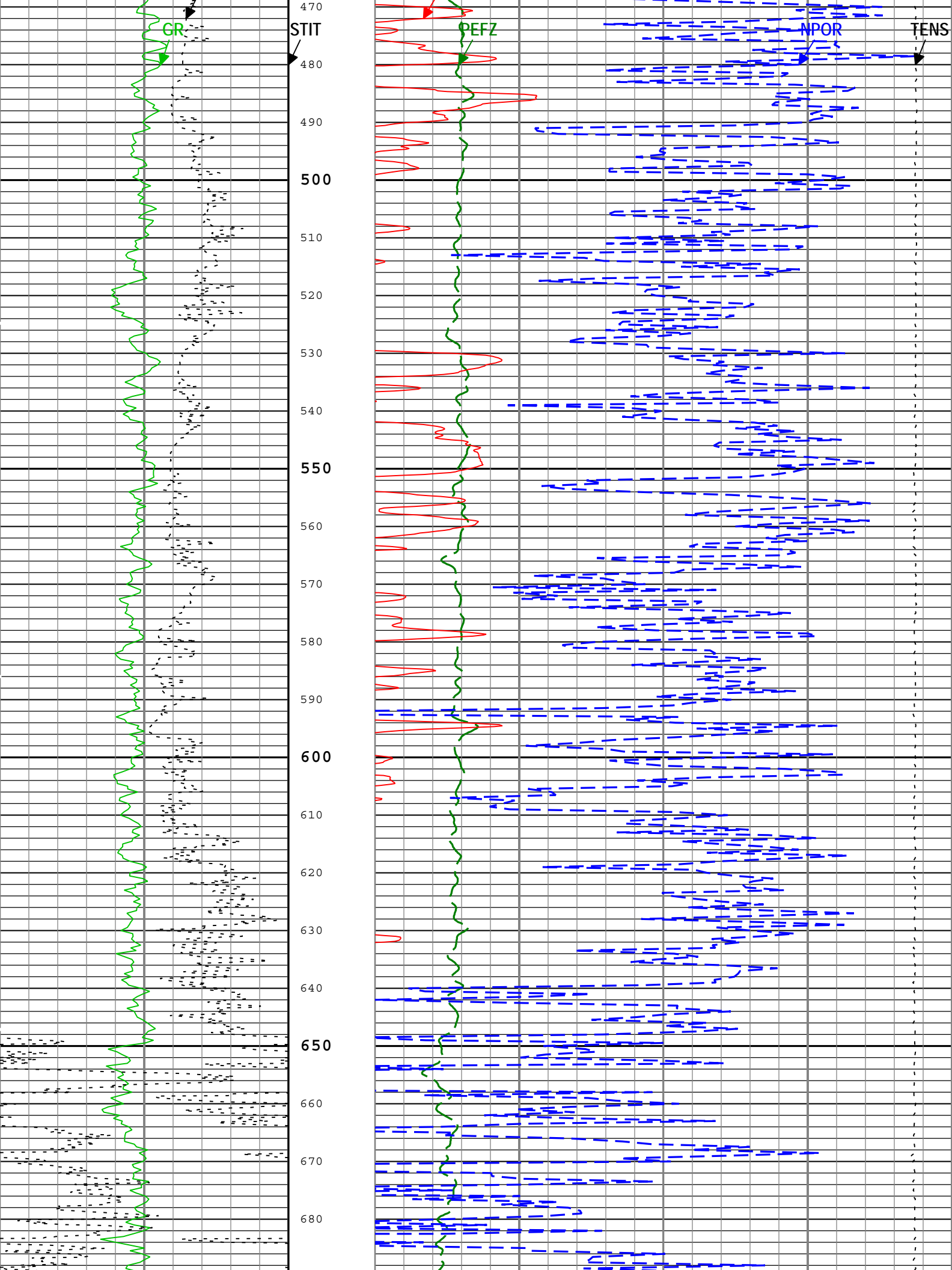
Description: HGNS standard resolution porosities for Platform Express Format: Log (EMD 5in Porosity) Index Scale: 5 in per 100 ft Index Unit: ft Index

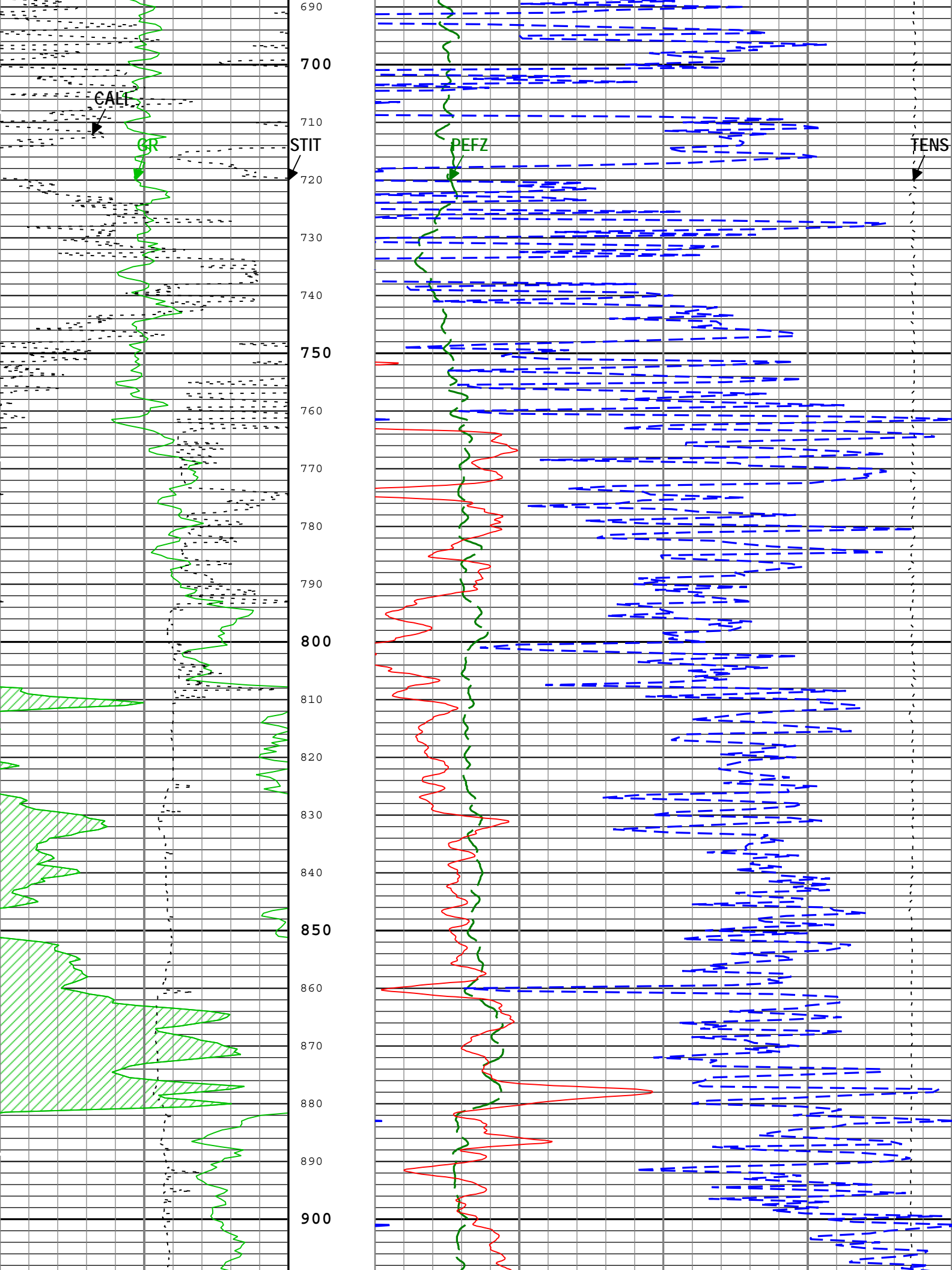
Type: Measured Depth Creation Date: 20-Oct-2012 22:22:08

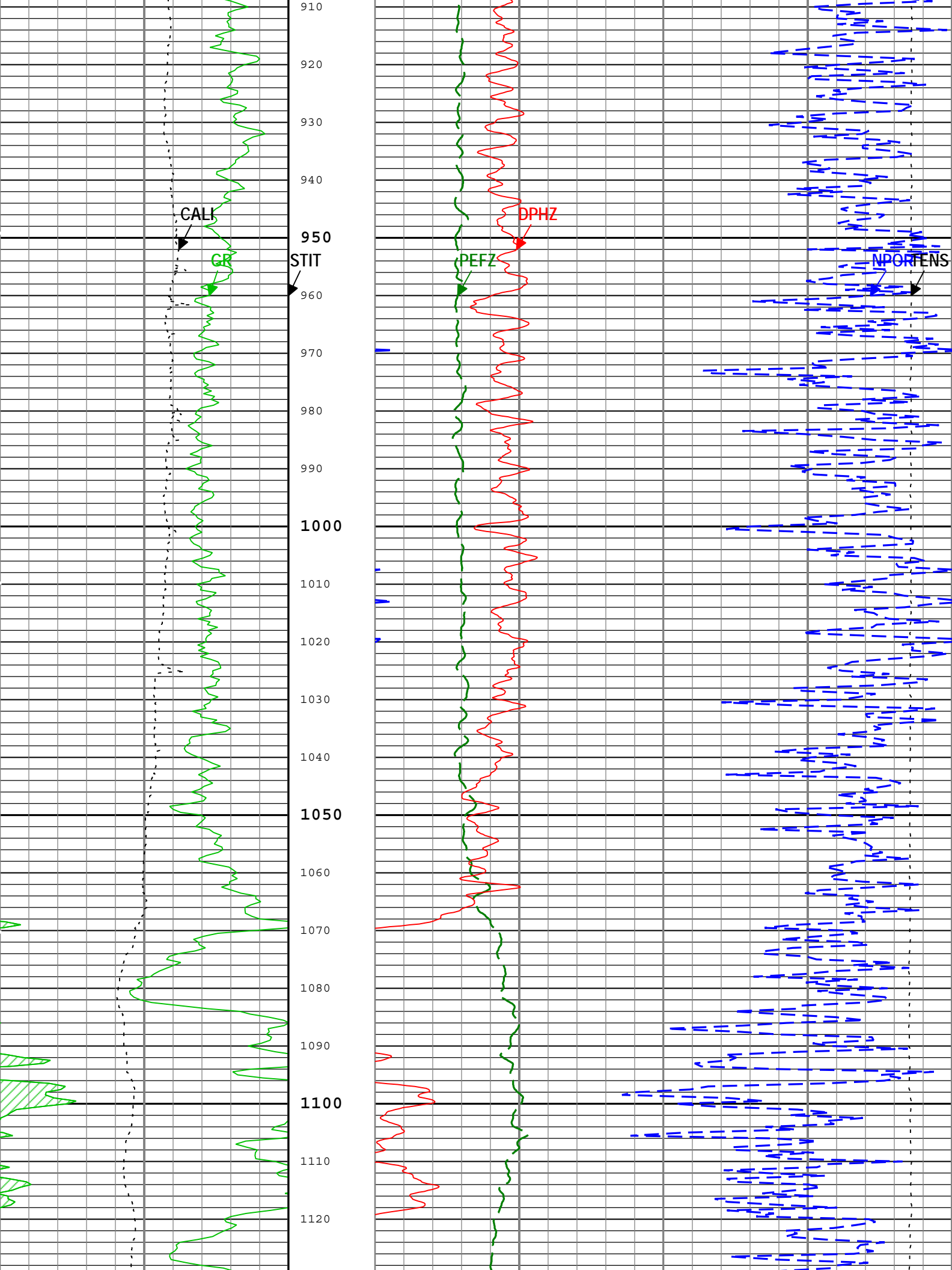
Channel	Source	Sampling
CALI	HDRS-B:HRCC-B:HRCC-B	1in
DPHZ	HDRS-B:HRMS-B:HRGD-B	2in
GR	HGNS-B:HGNS-B:HGNS-B	6in
NPOR	HGNS-B:HGNS-B:HGNS-B	6in
PEFZ	HDRS-B:HRMS-B:HRGD-B	2in
STIT	DepthCorrection	6in
TENS	WLWorkflow	6in
TIME_1900	WLWorkflow	0.1in

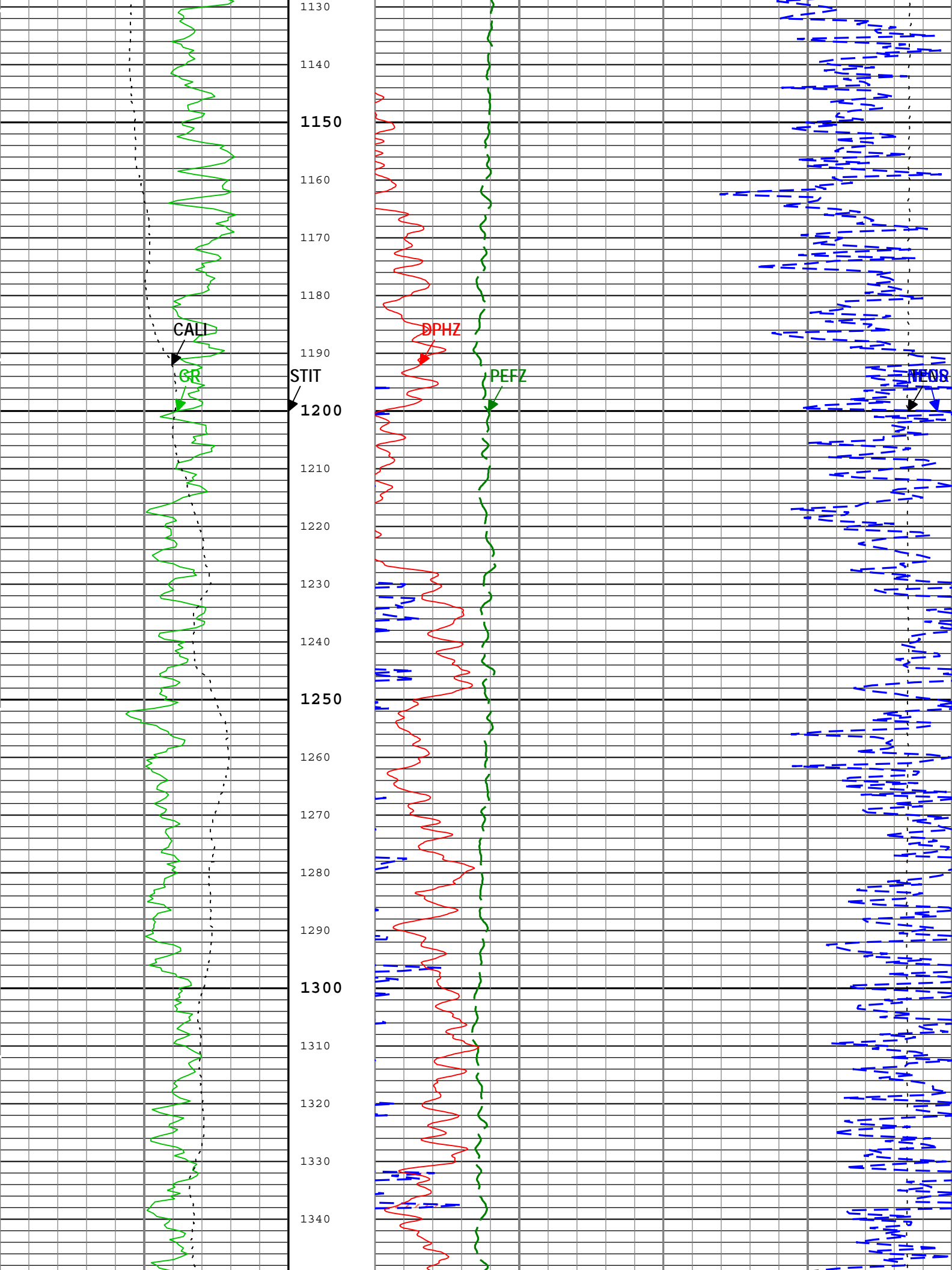
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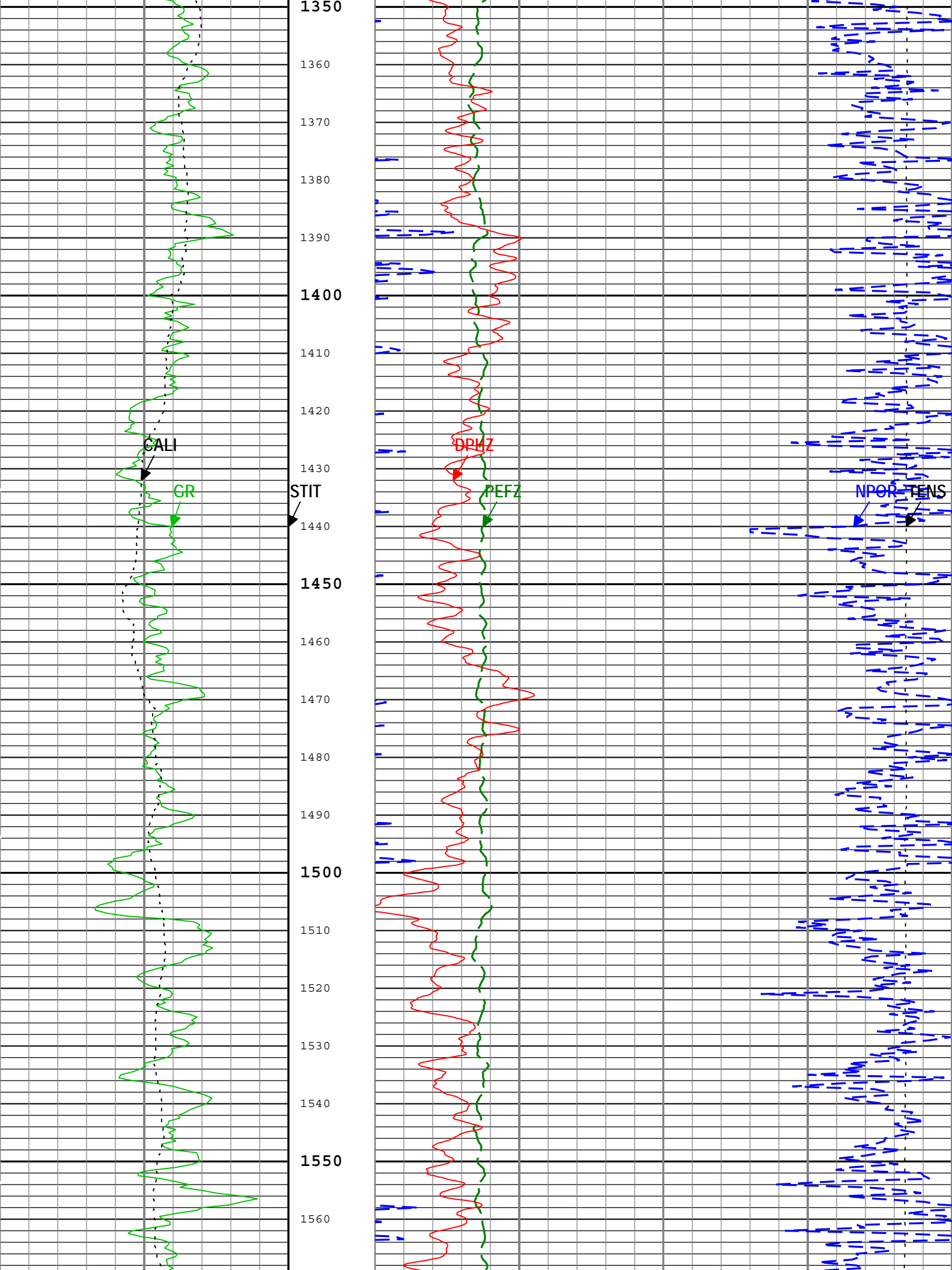


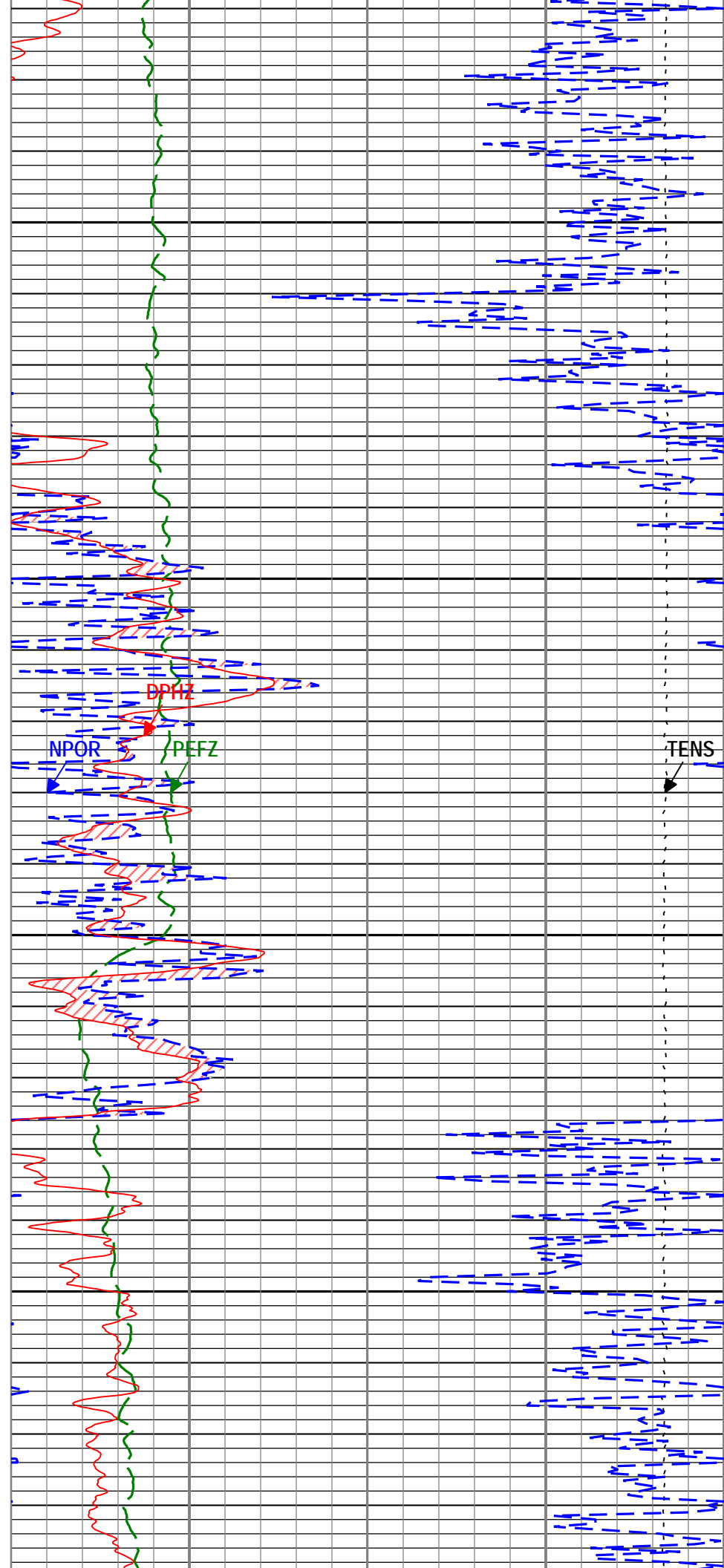
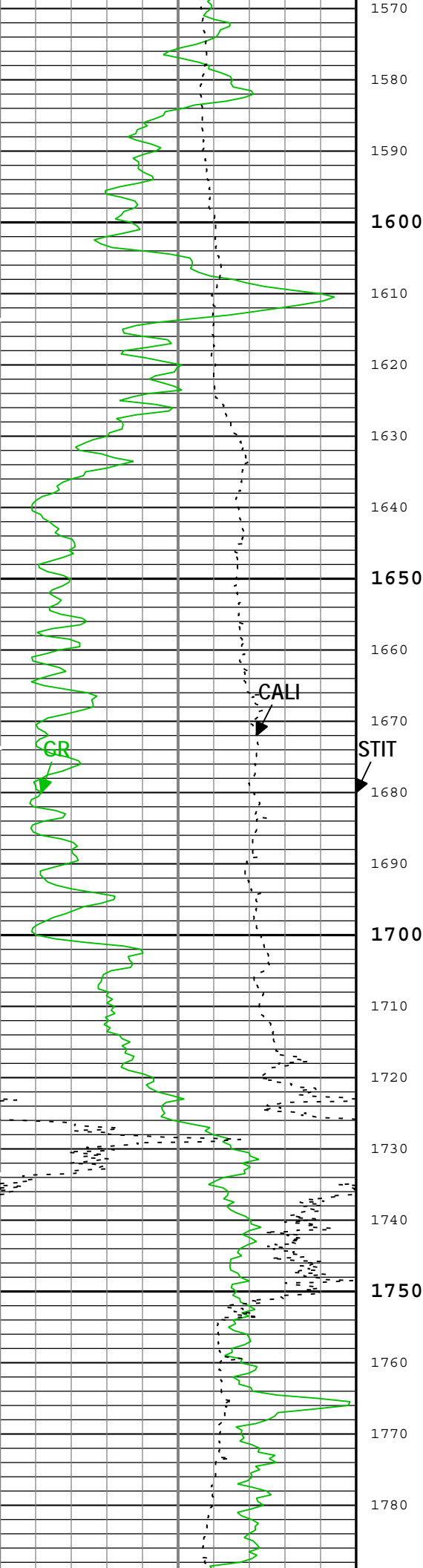


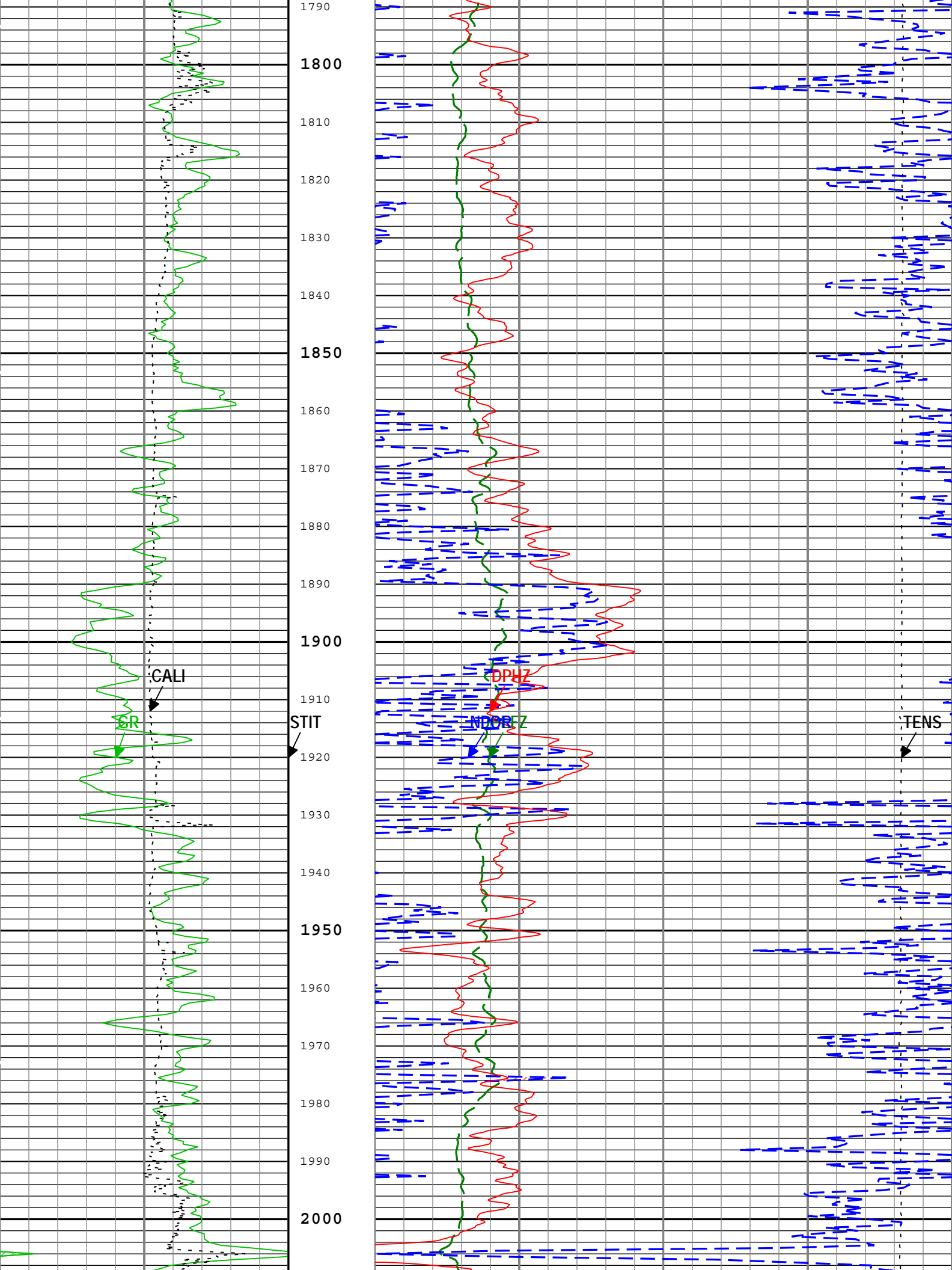


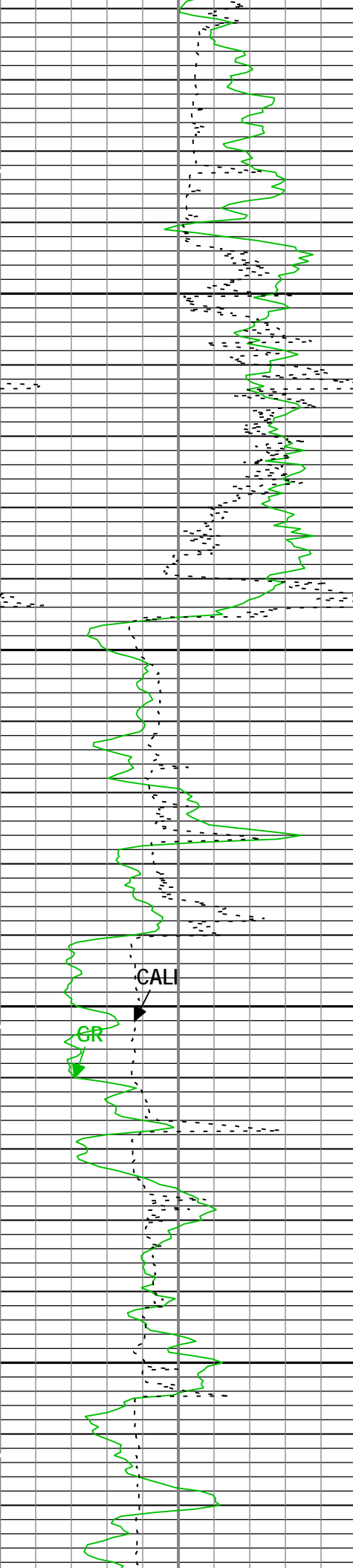




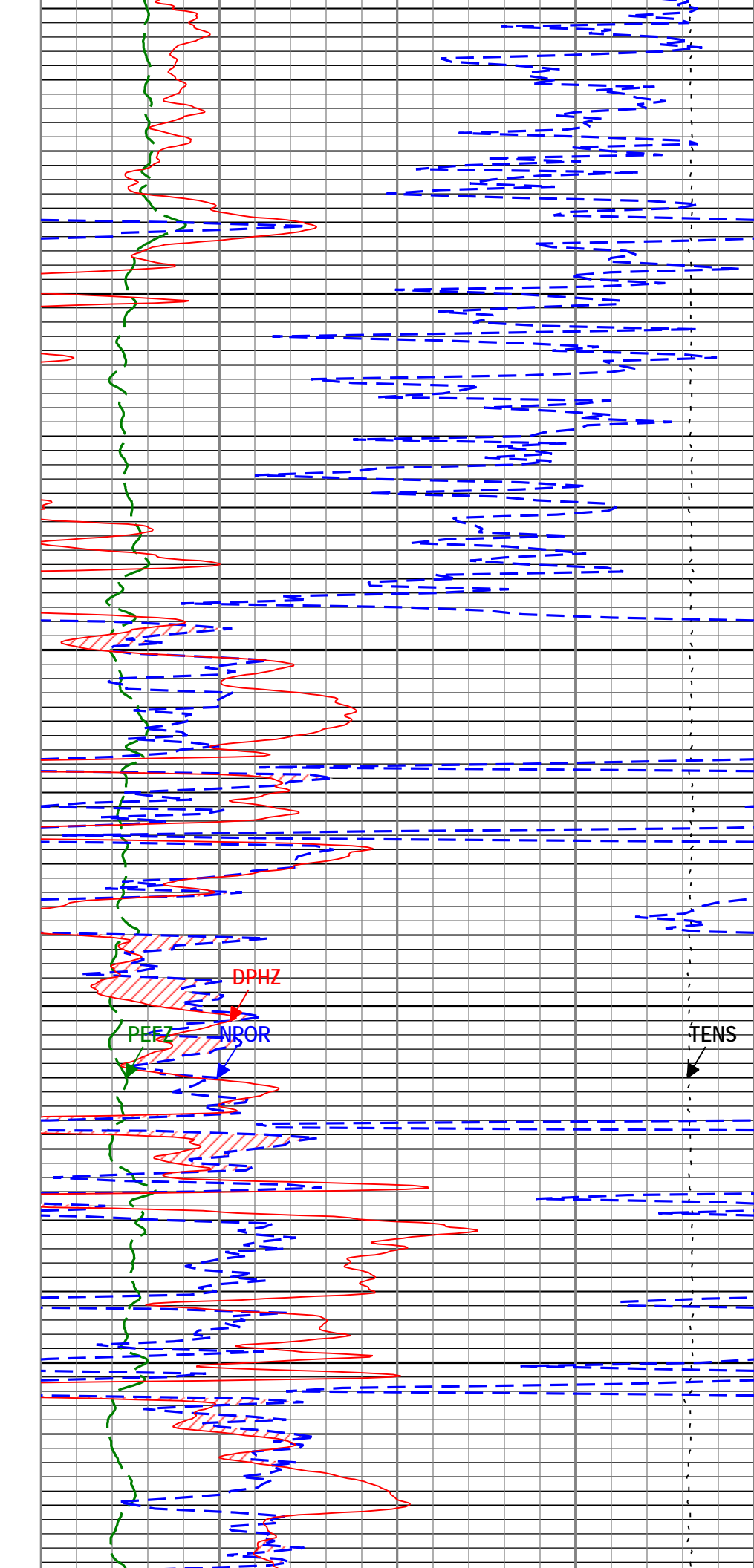


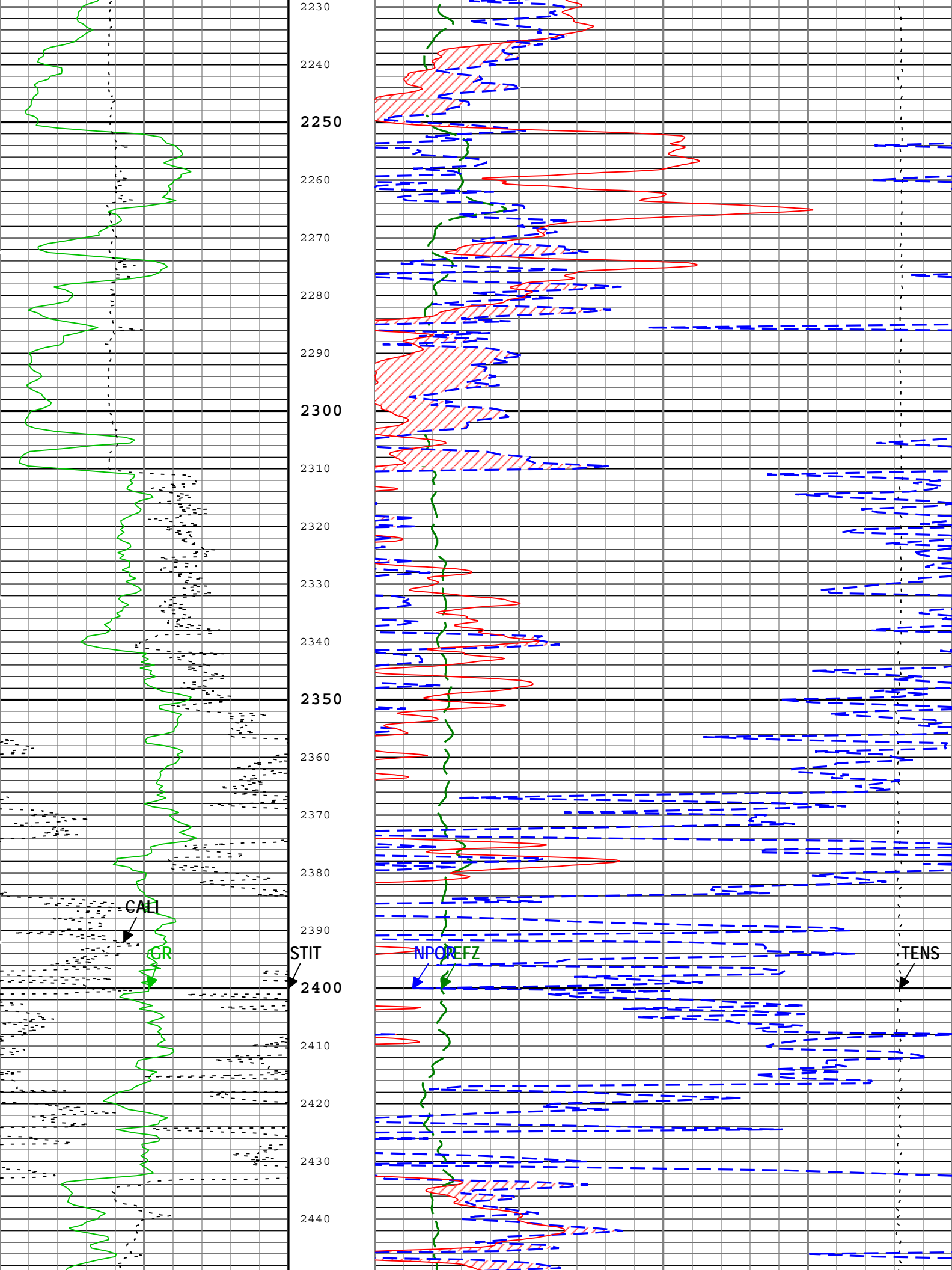


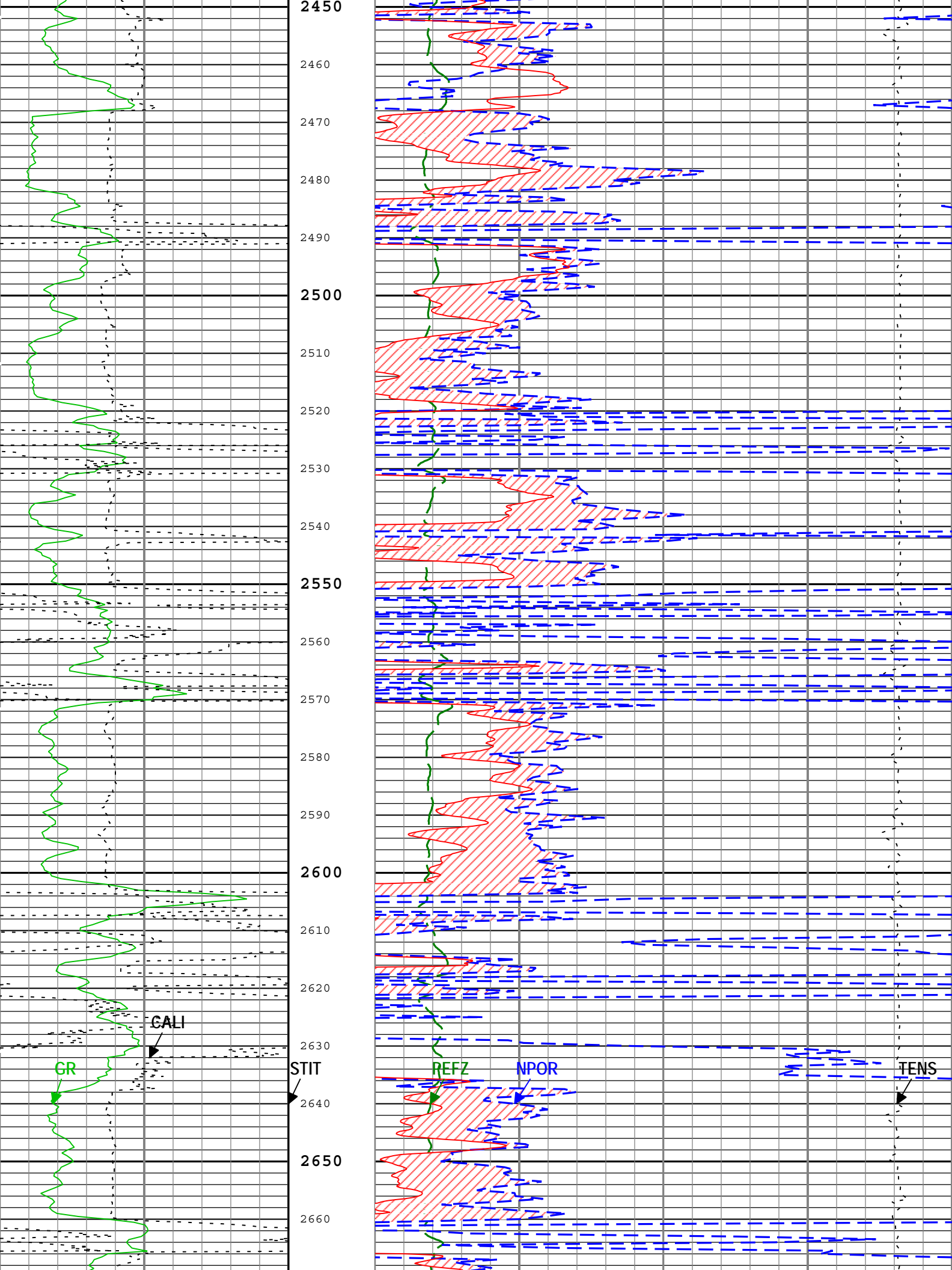


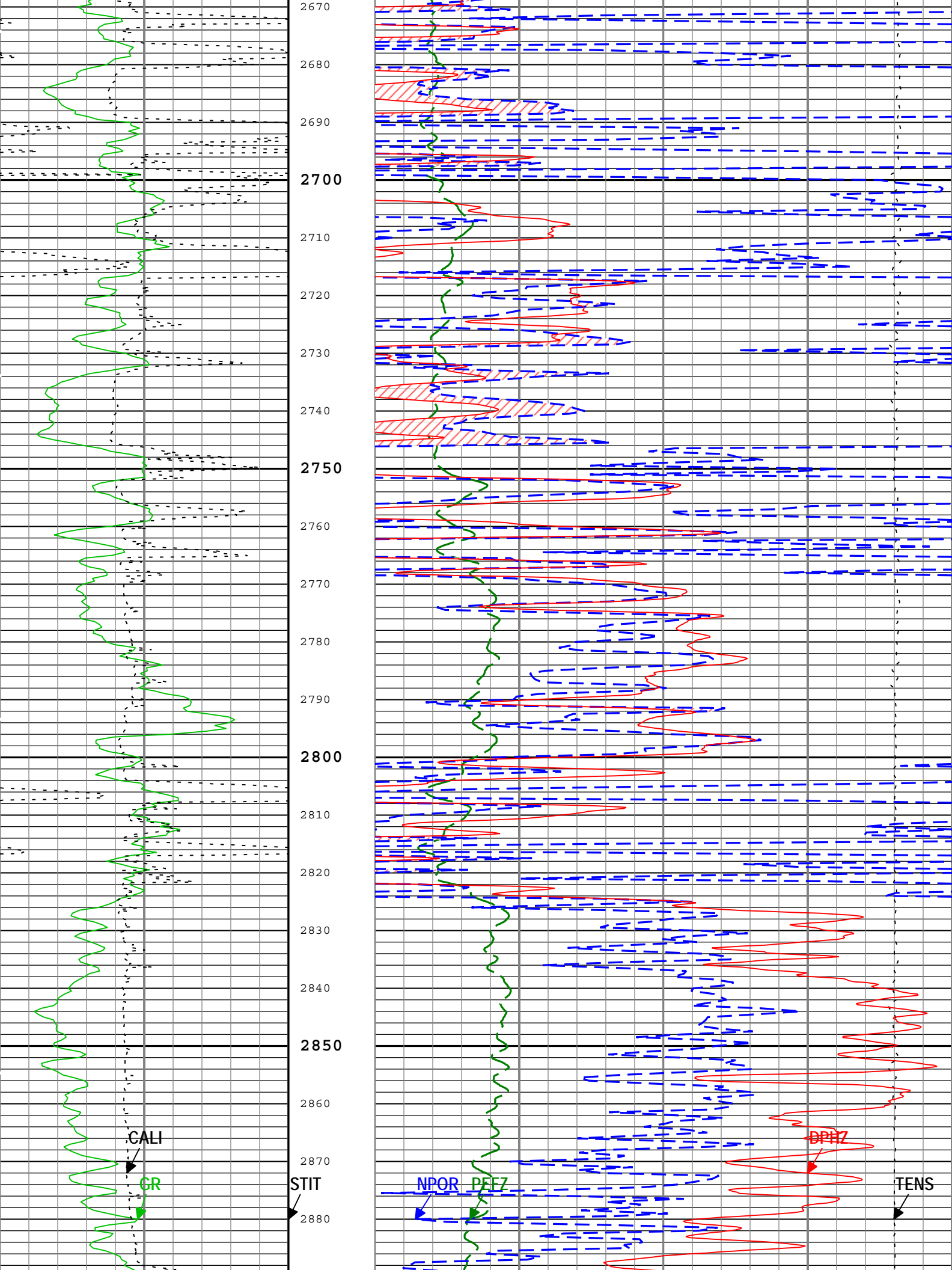


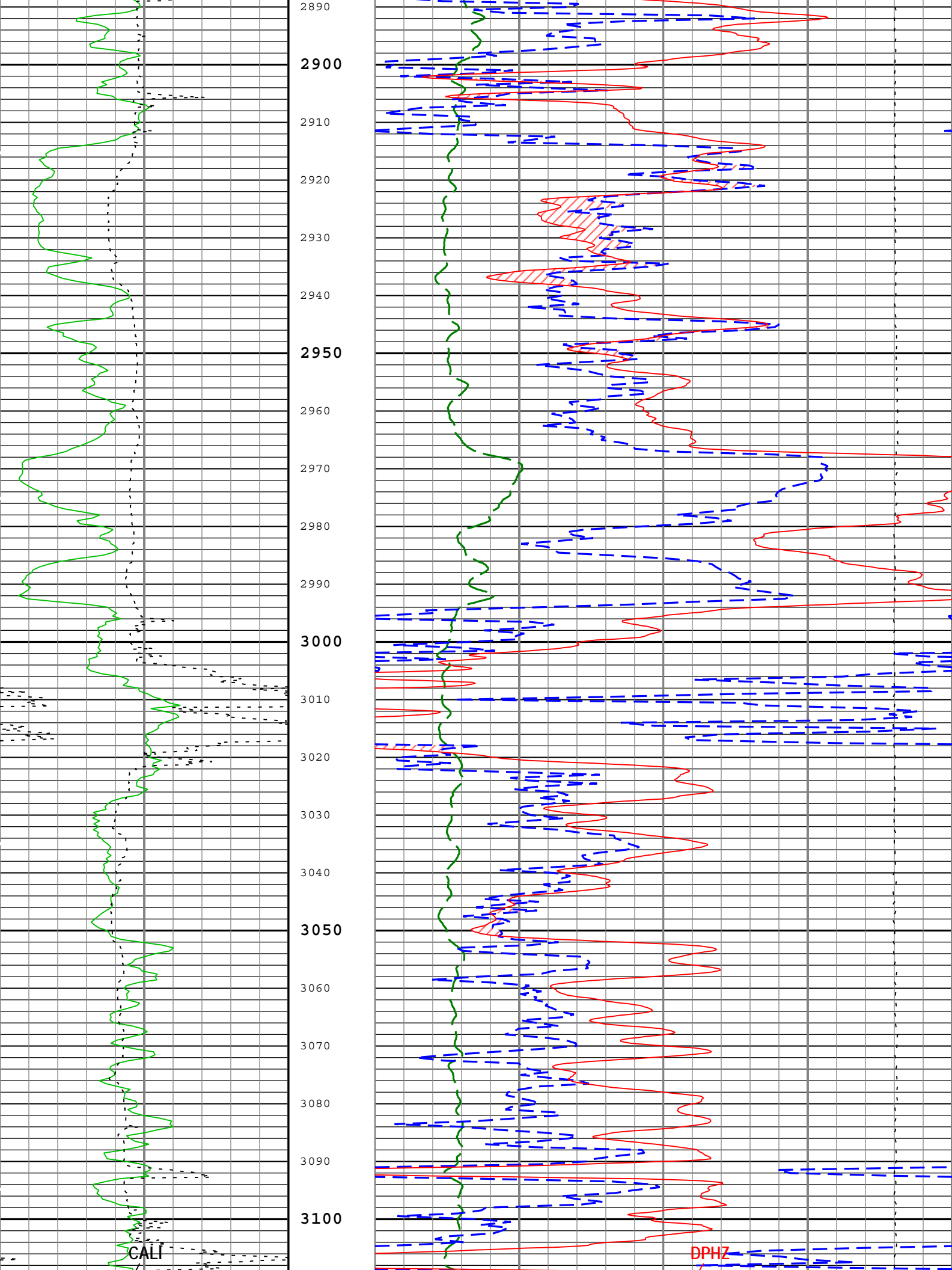
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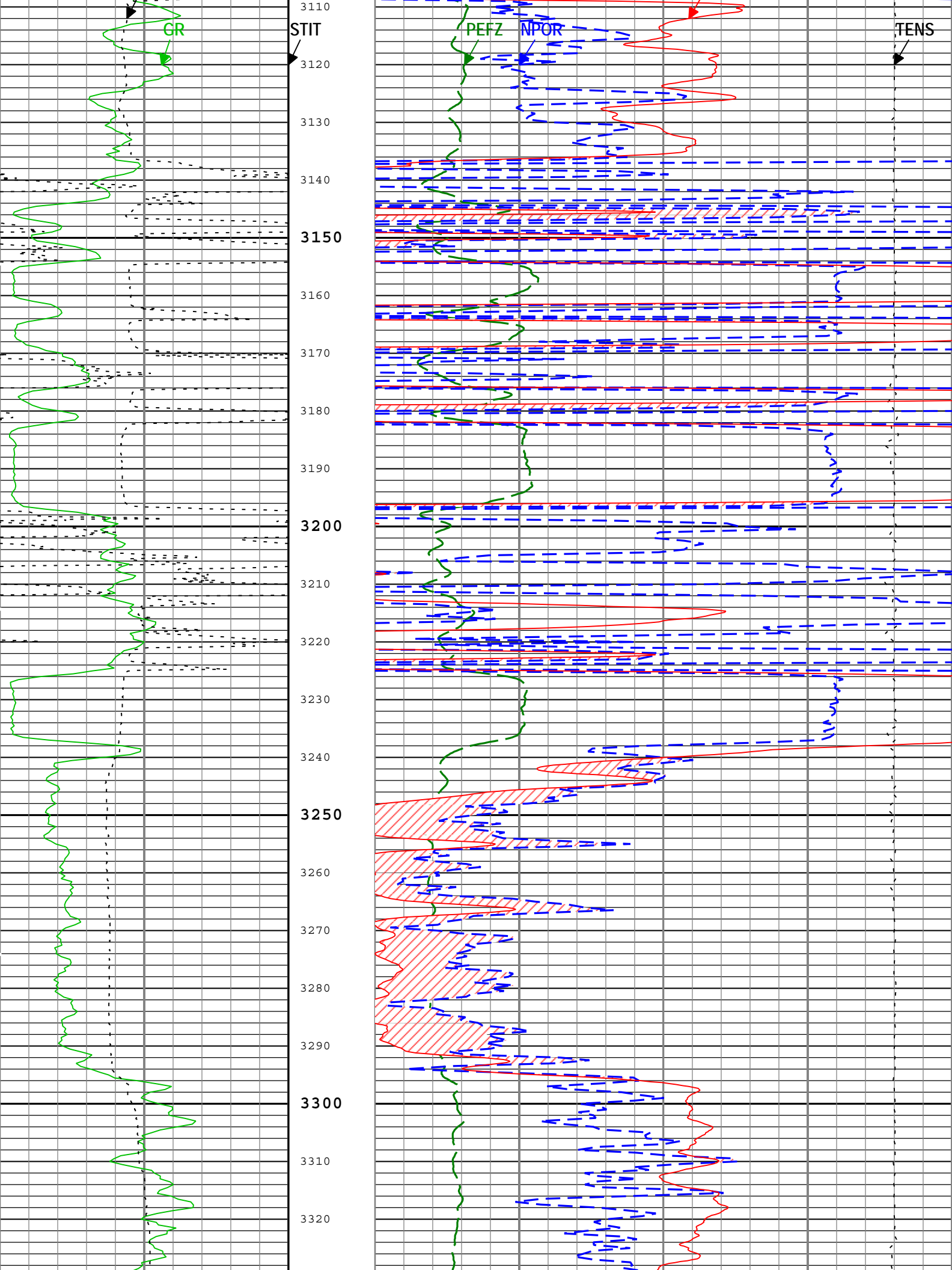


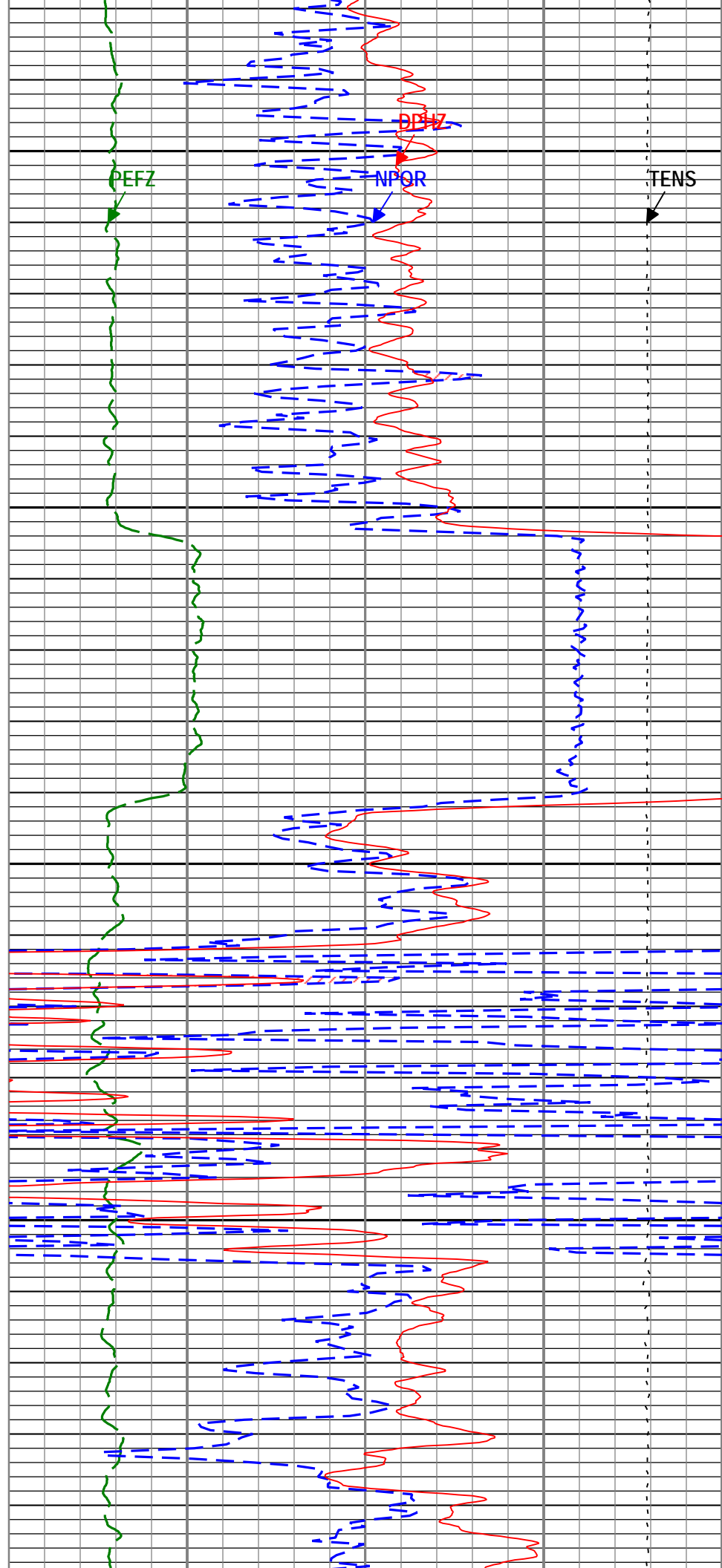
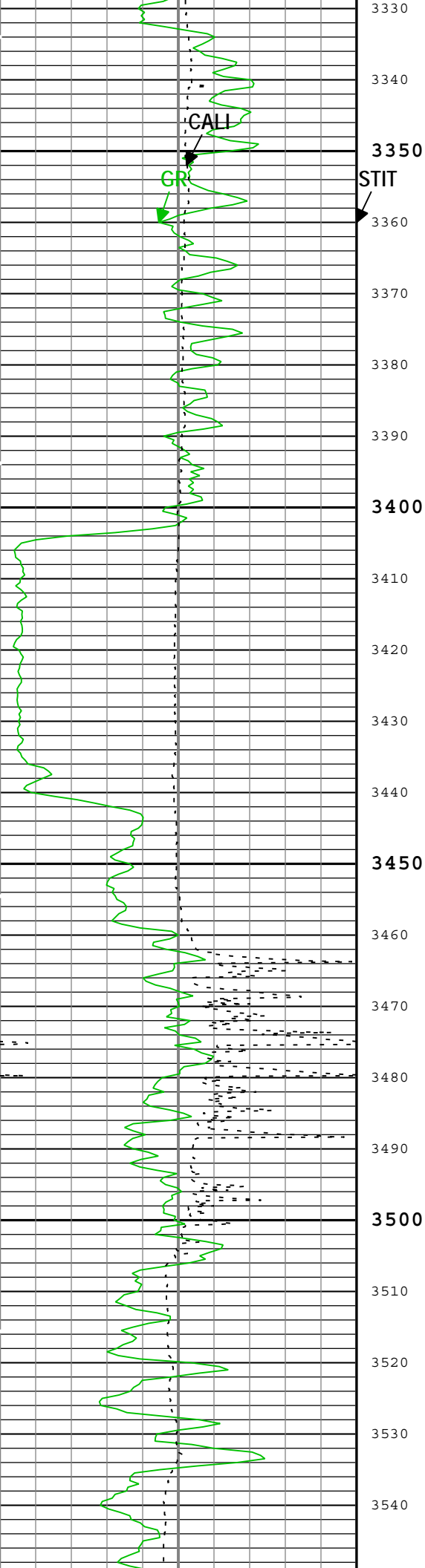


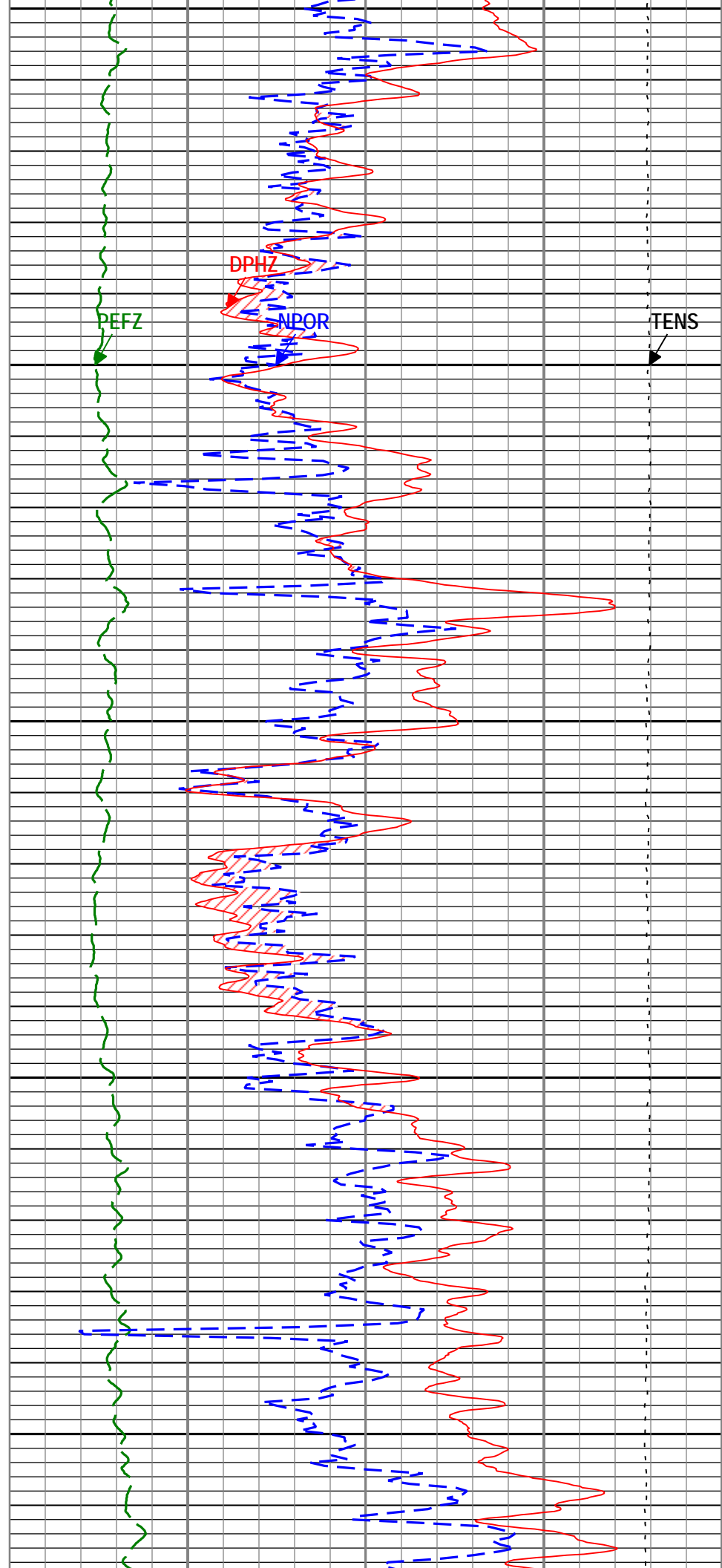
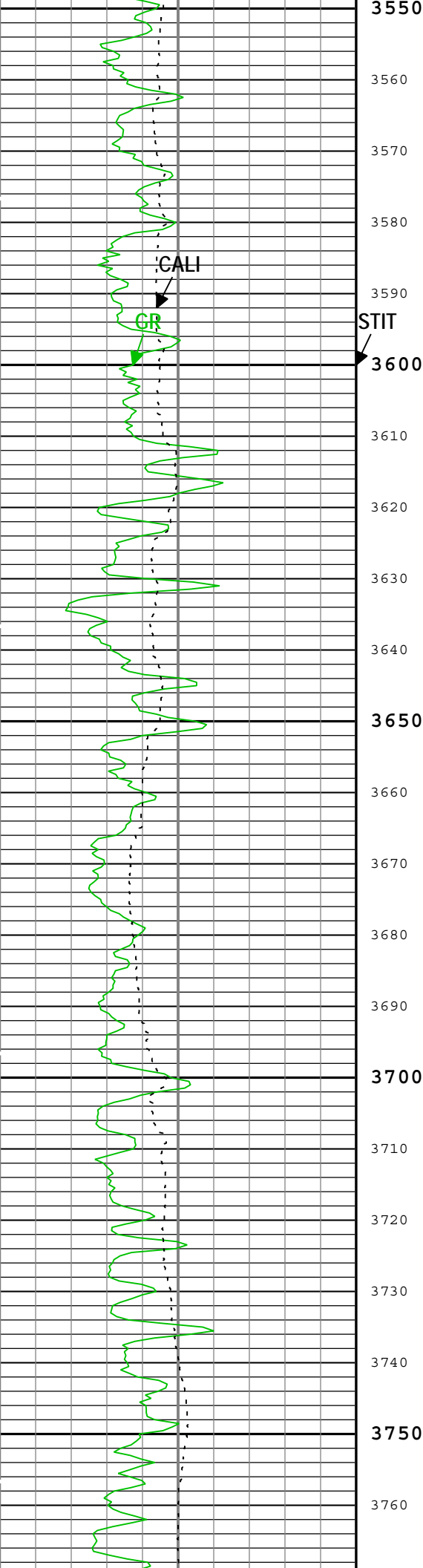


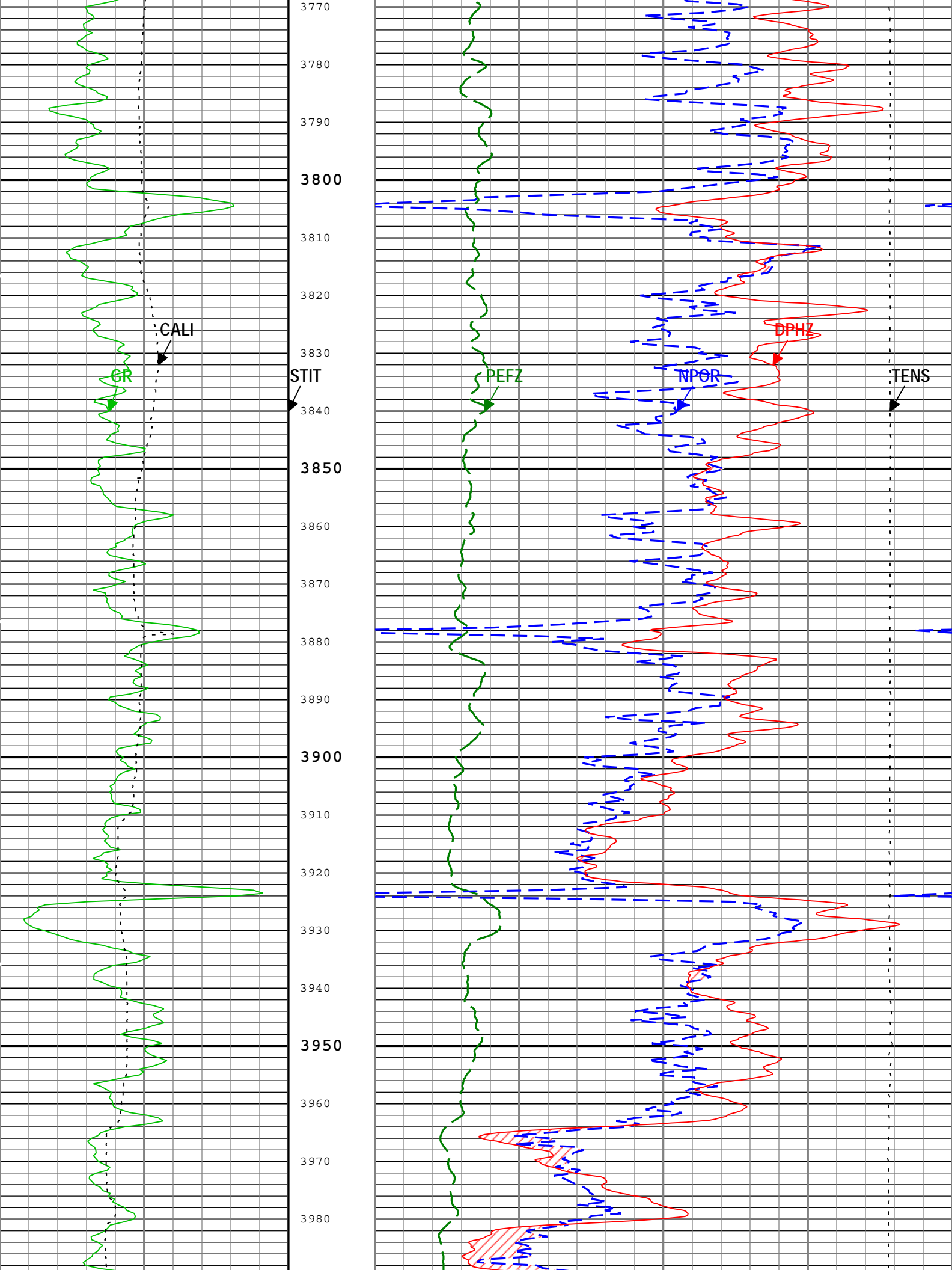


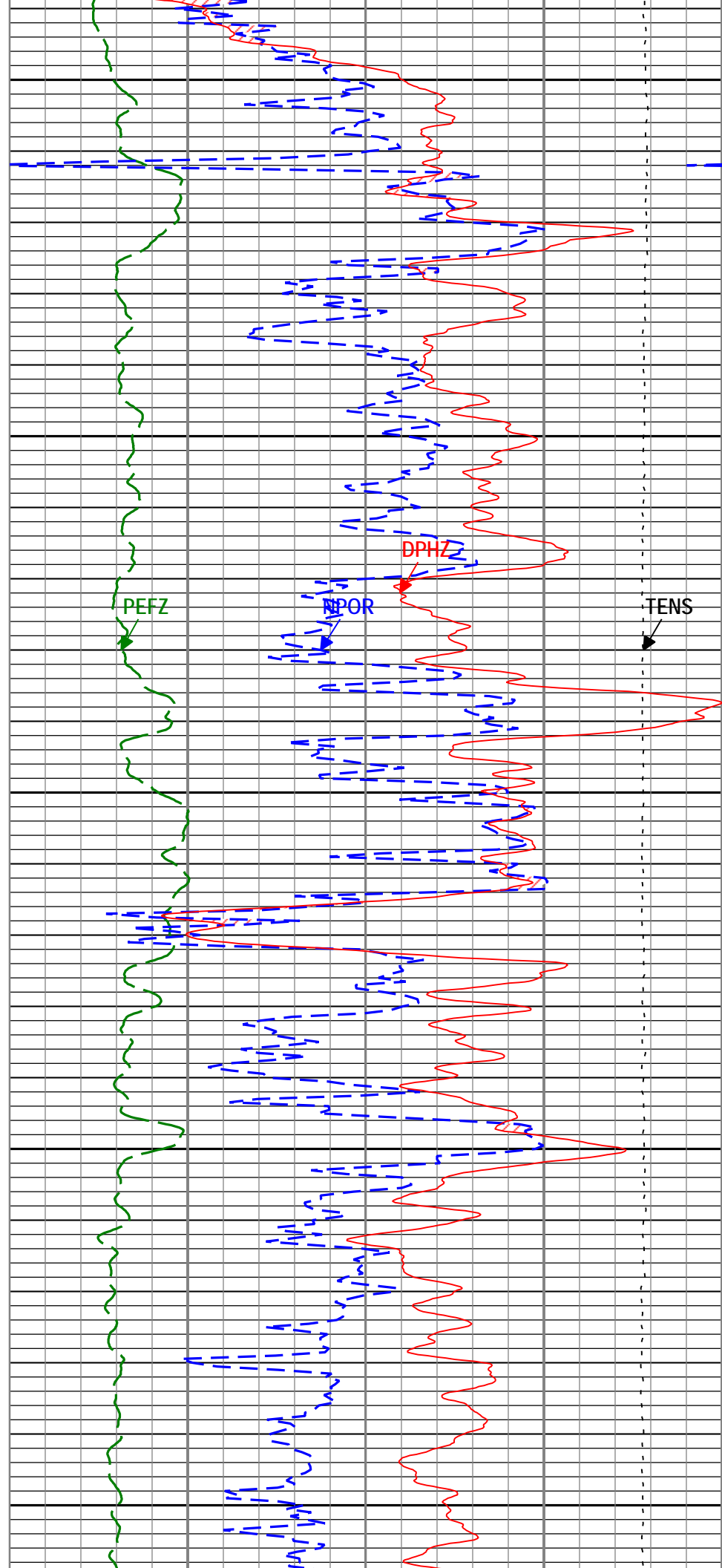
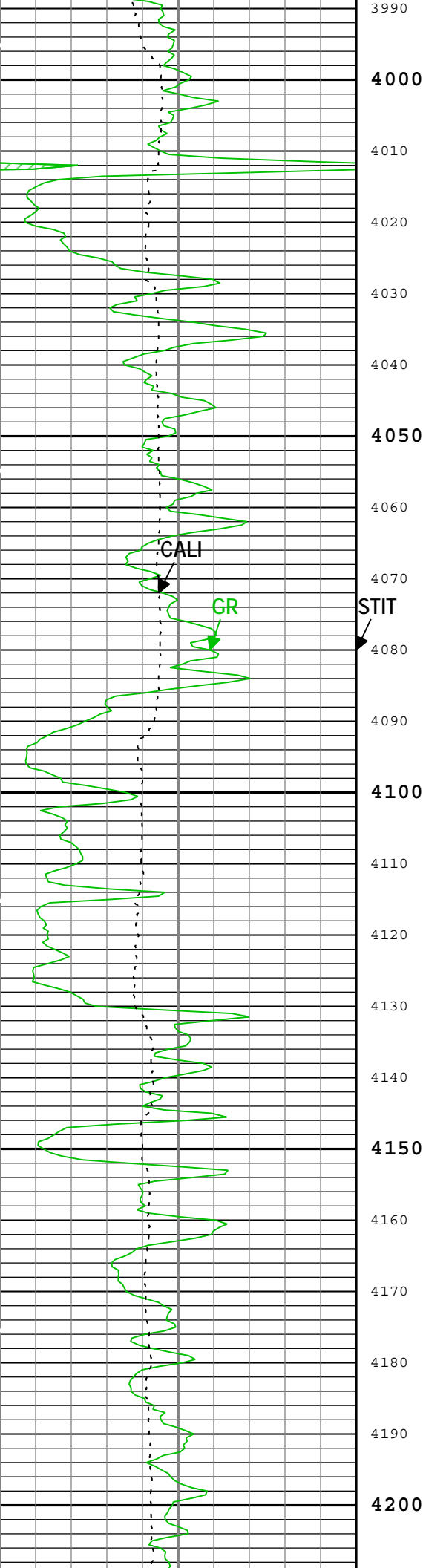


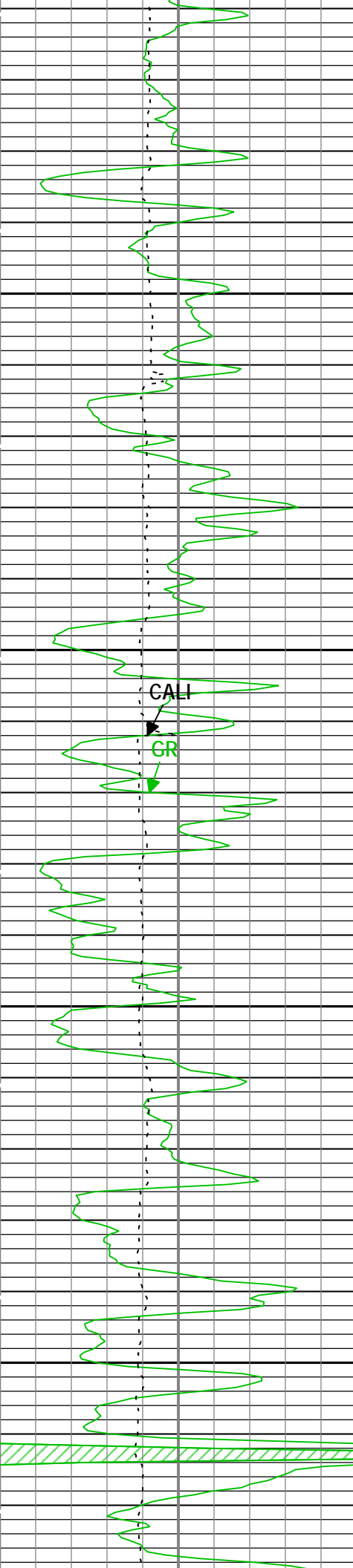




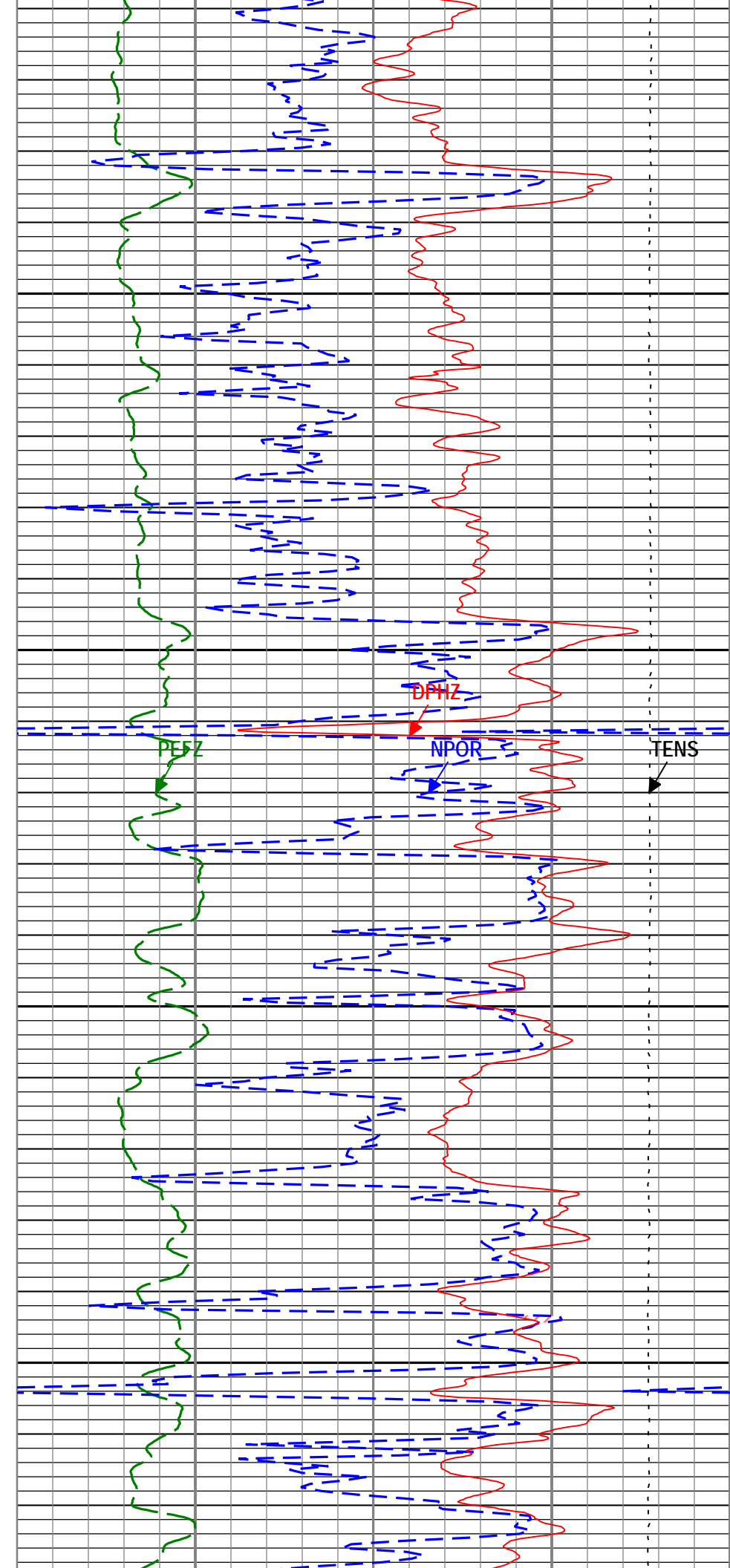


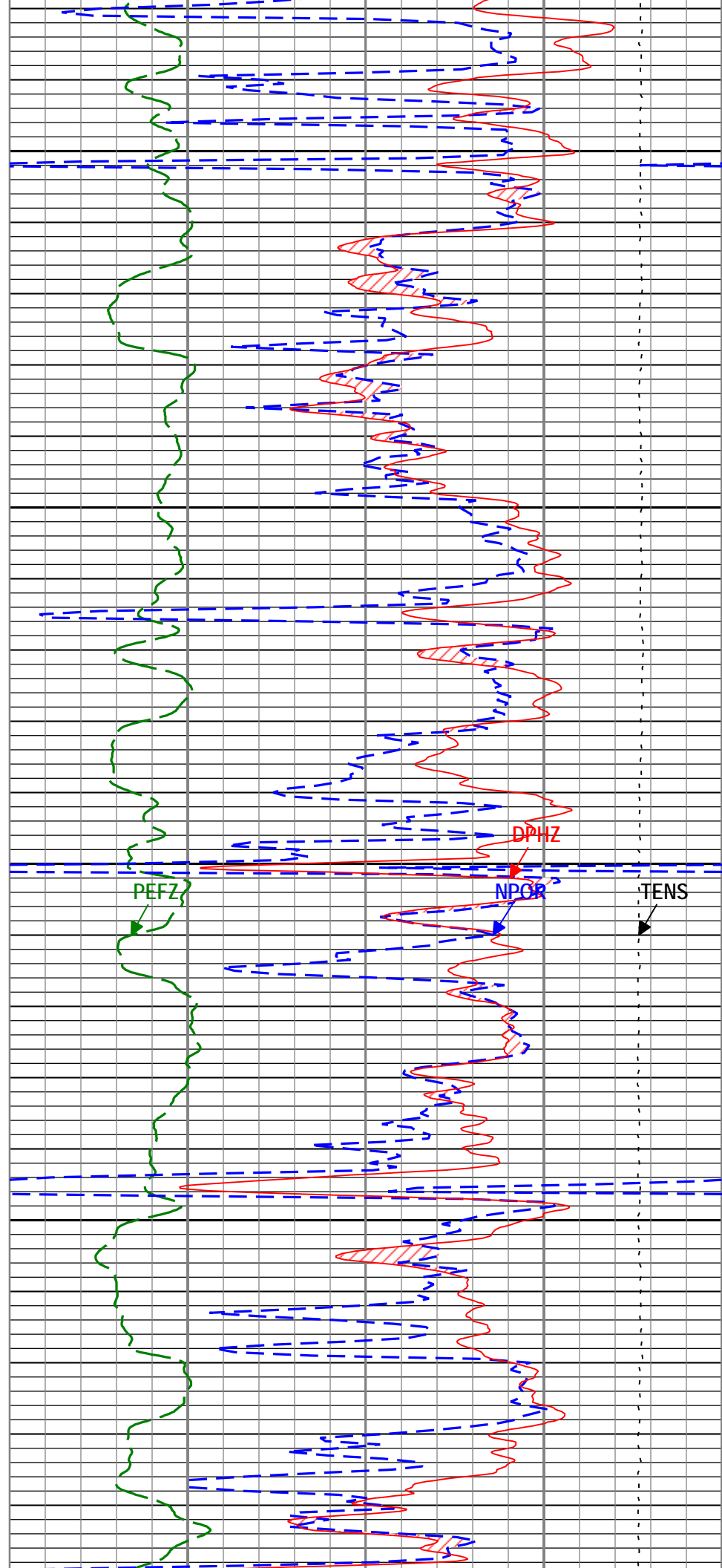
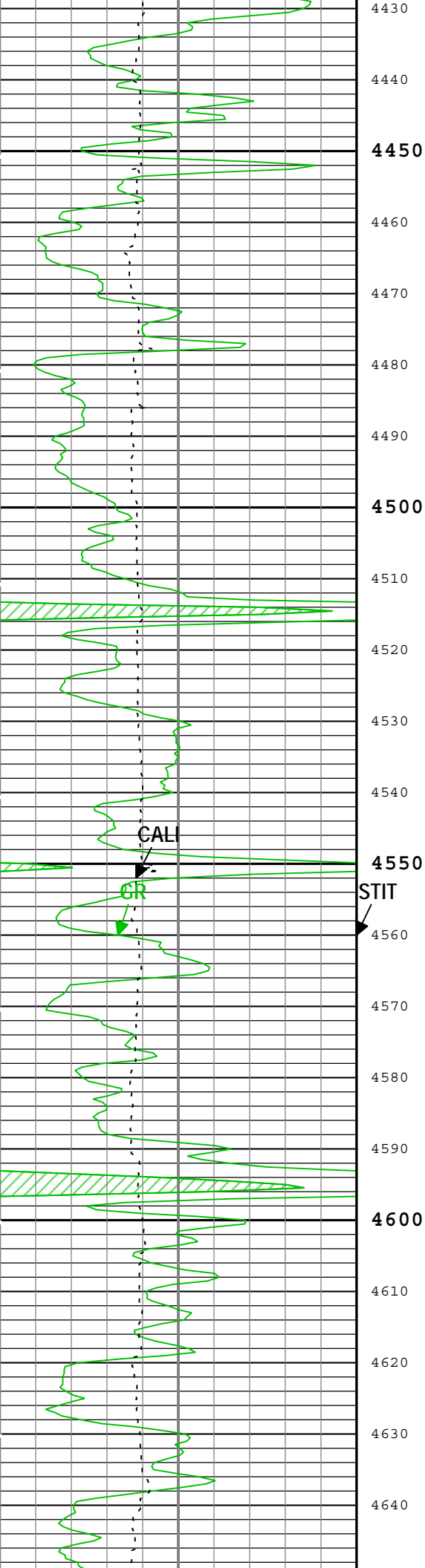


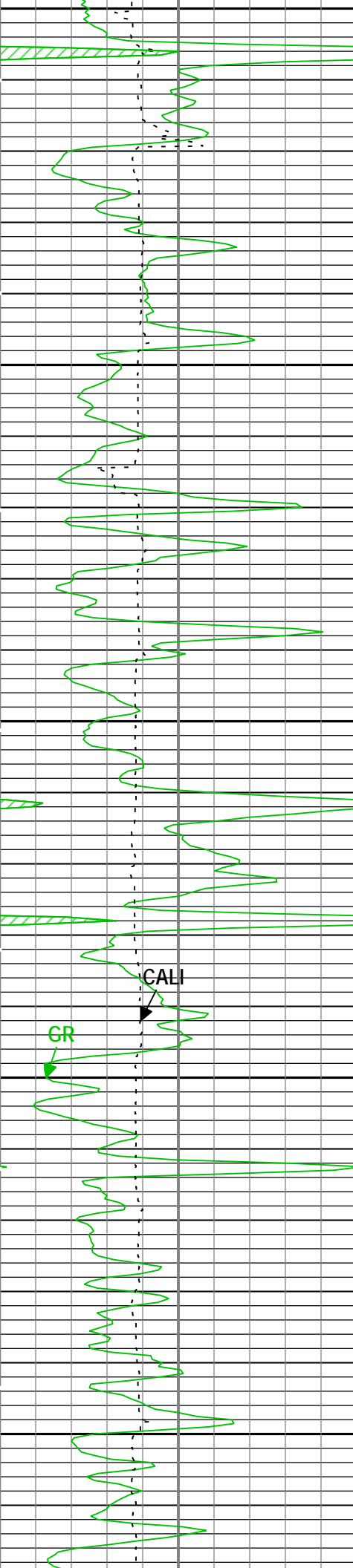




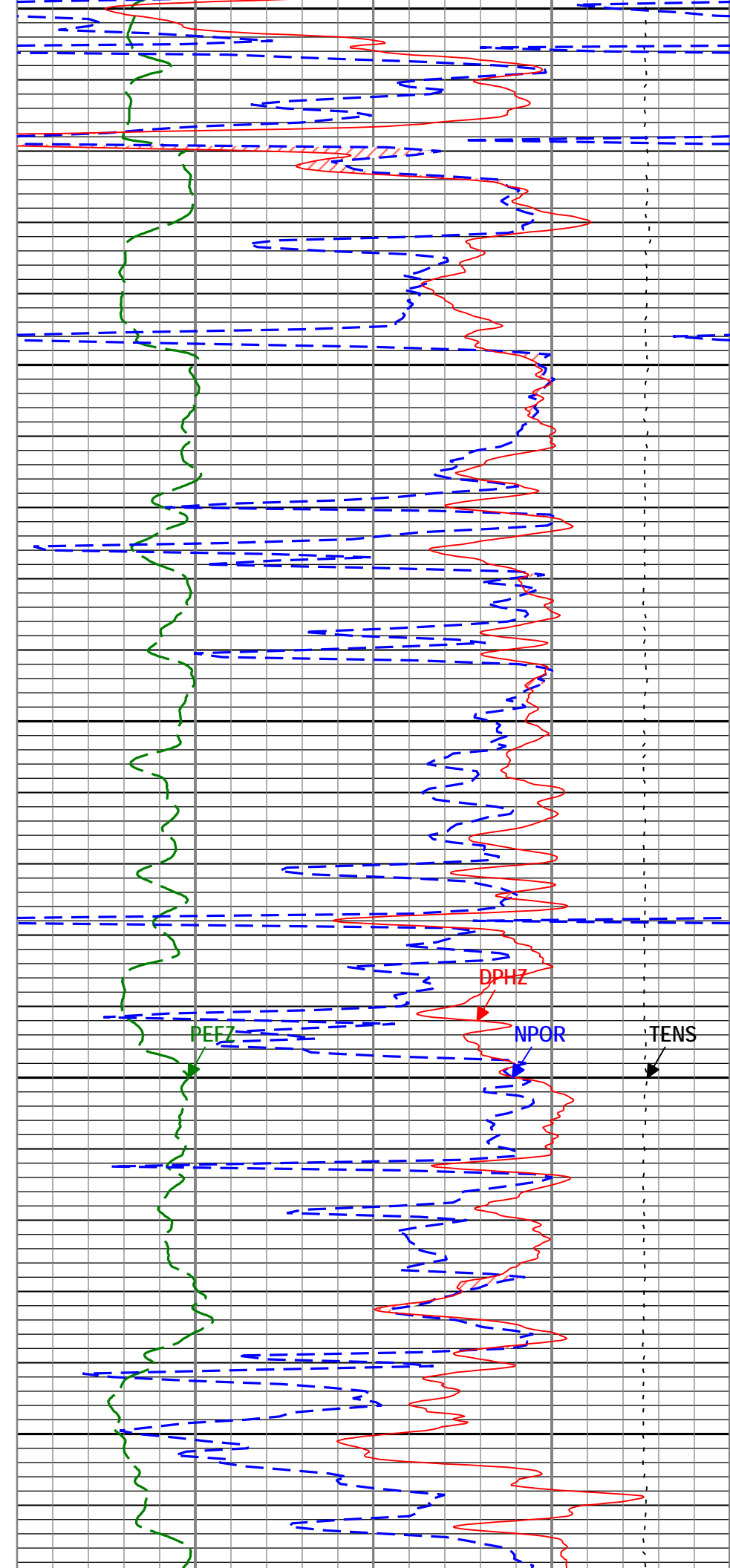
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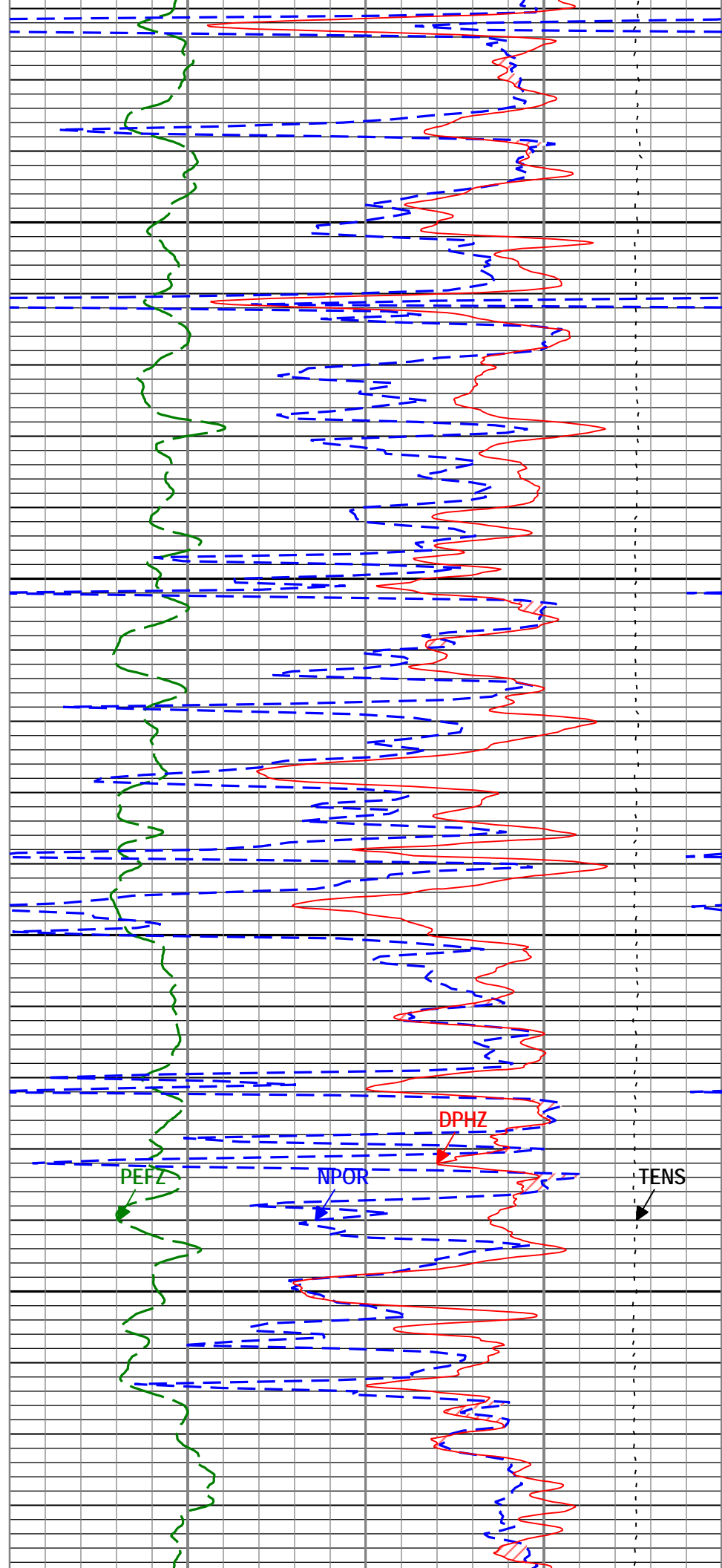
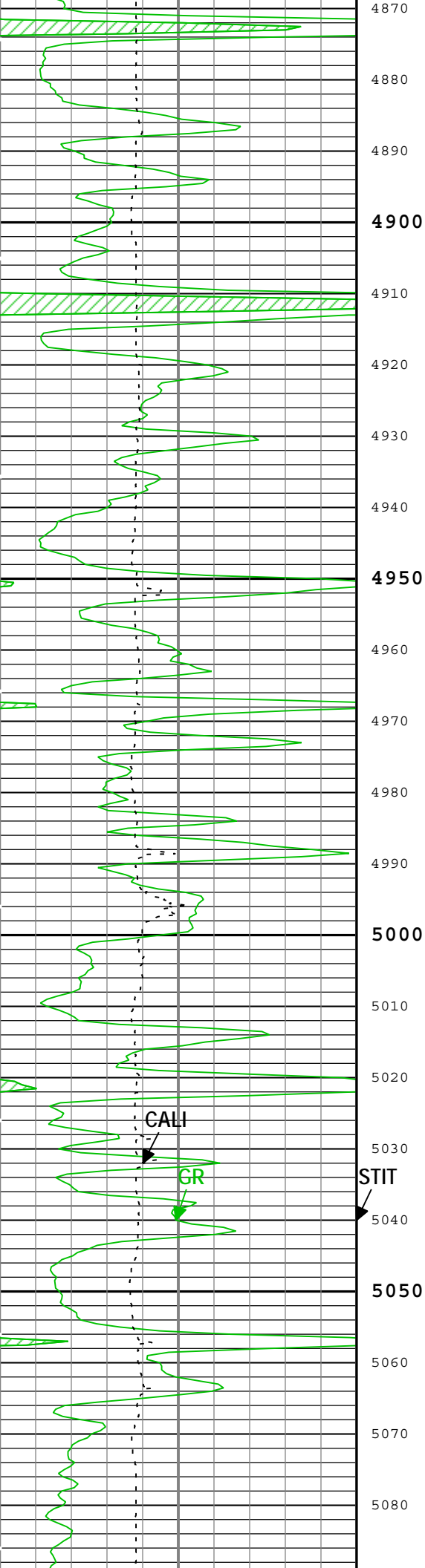


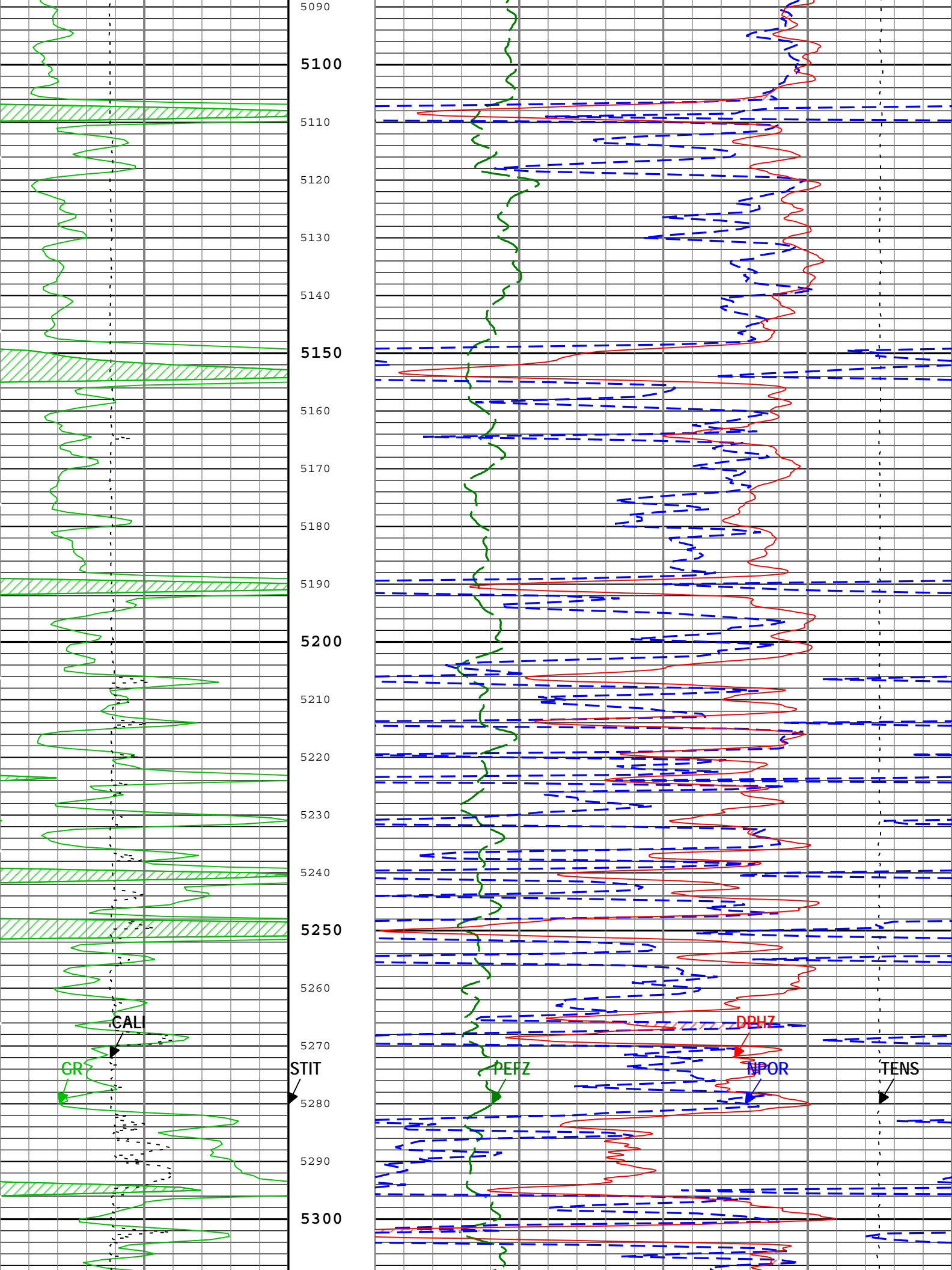


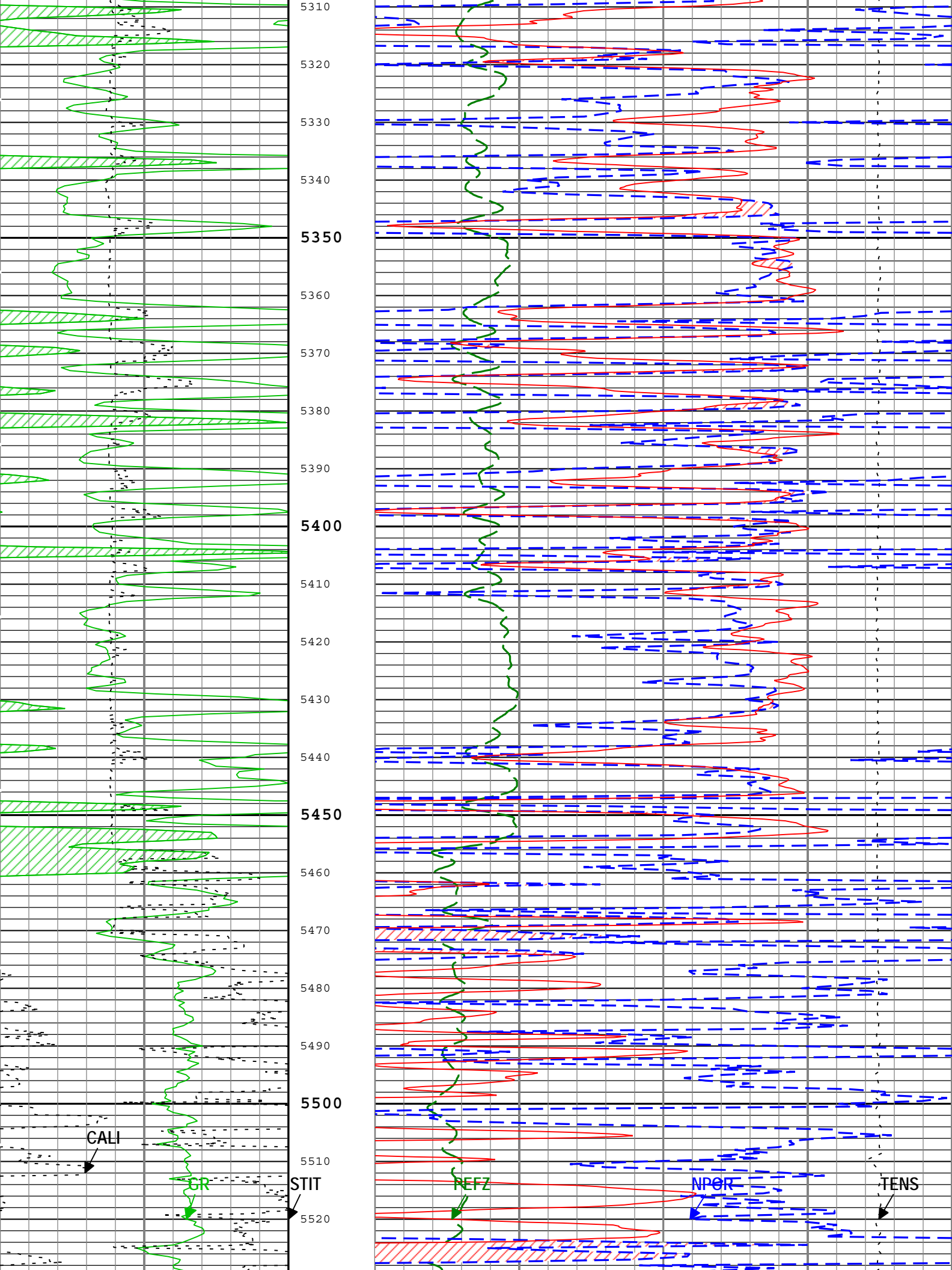


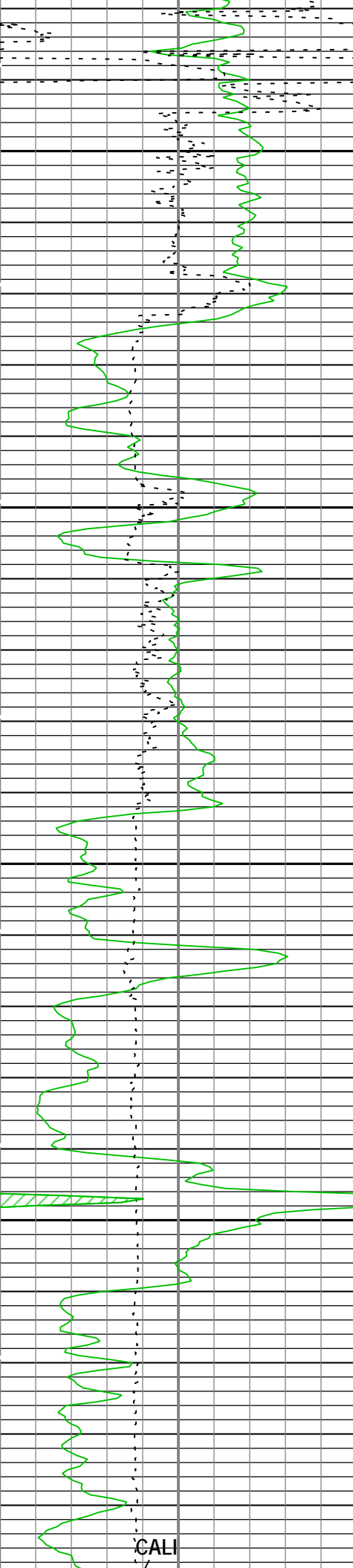
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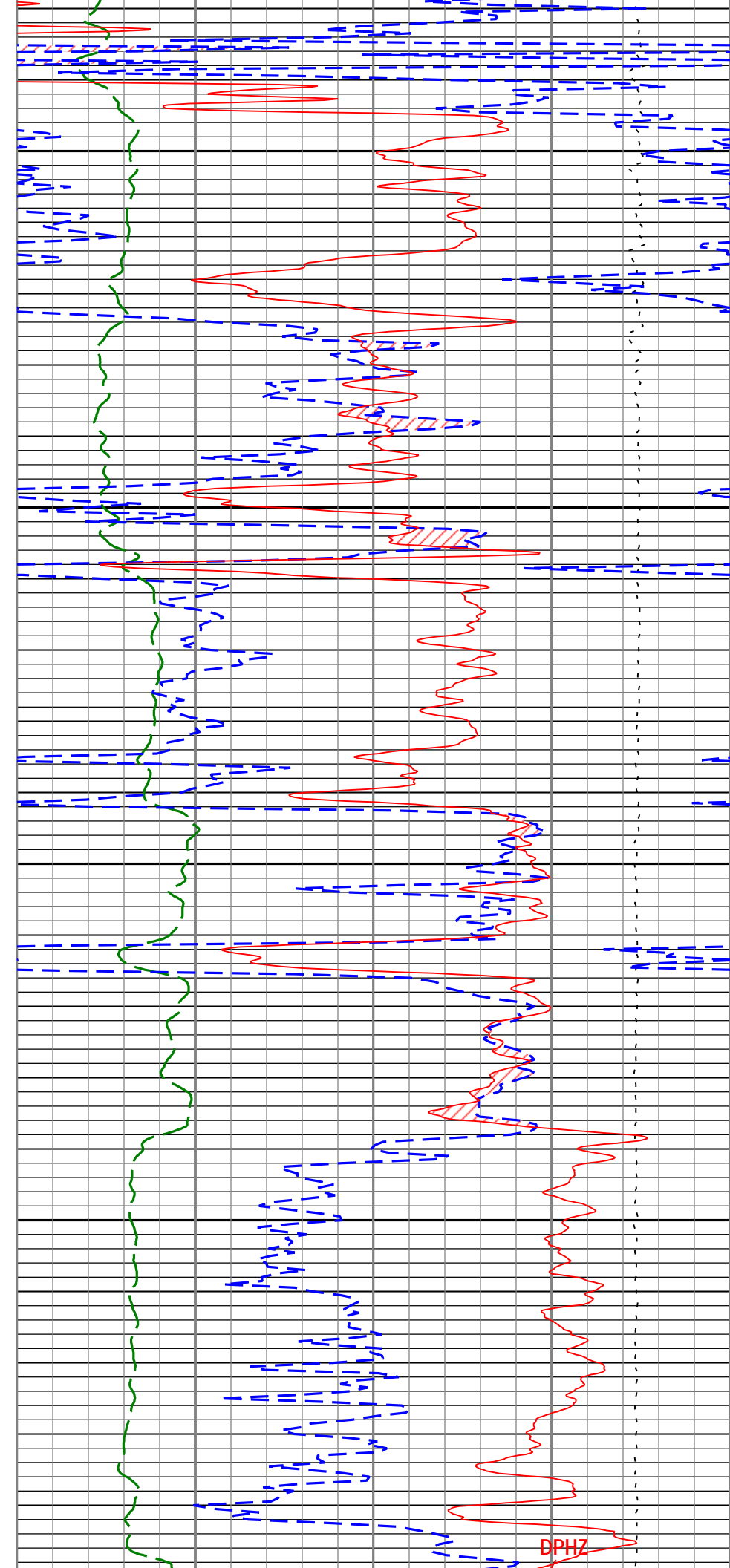


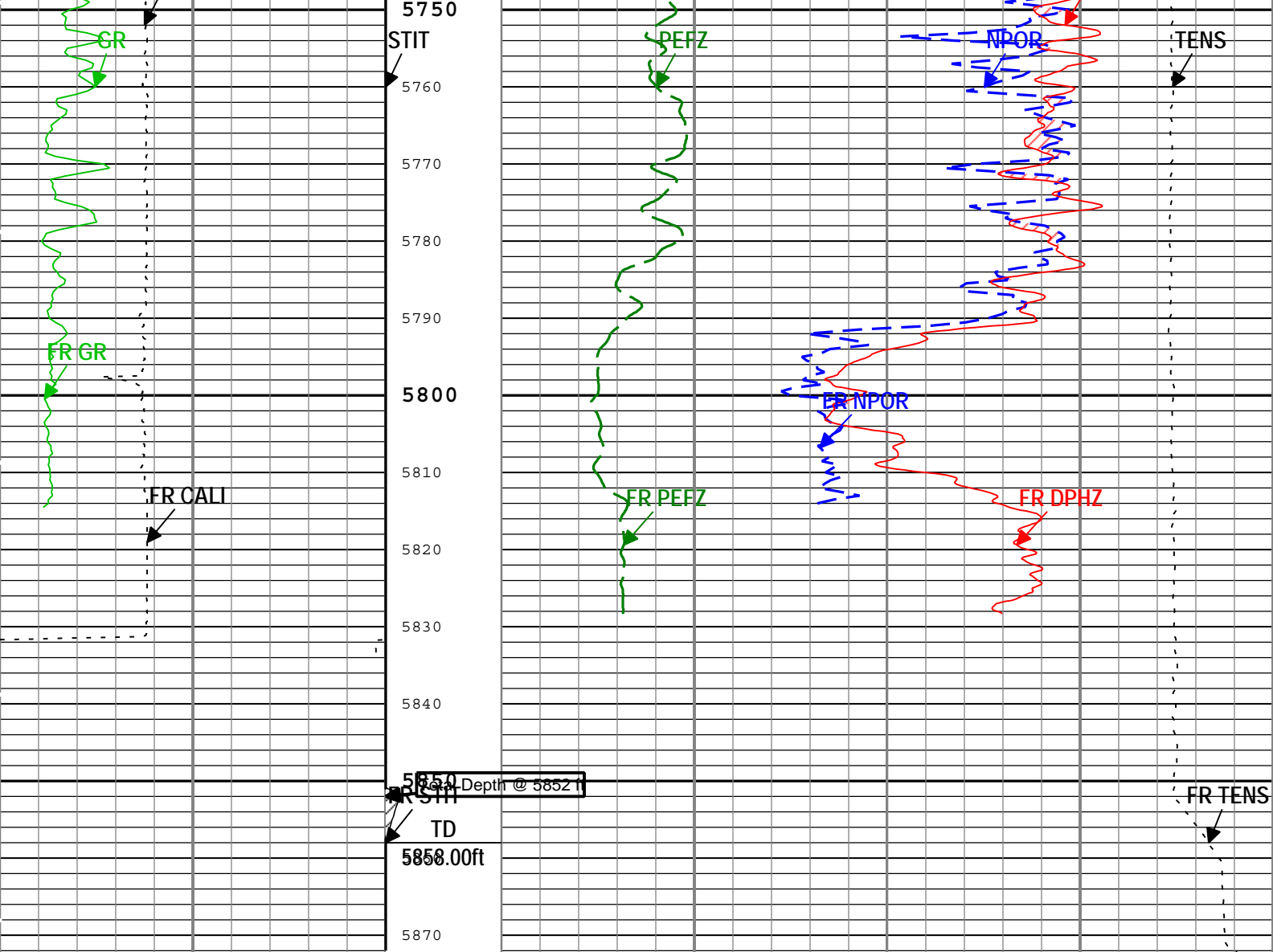






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Gamma Ray Back up	Stuck Tool Indicator, Total (STIT)	Gas Effect
Gamma Ray (GR) HGNS-B	0 ft 50	NPOR Backup
0 gAPI 200		Enhanced Thermal Neutron Porosity in Selected Lithology (NPOR) HGNS-B
Caliper (CALI) HDRS-B	ToolDrag	0.3 m3/m3 -0.1
4 in 14		Standard Resolution Density Porosity (DPHZ) HDRS-B
		0.3 ft3/ft3 -0.1
		Standard Resolution Formation Photoelectric Factor (PEFZ) HDRS-B
		0 10
		Cable Tension (TENS)
		10000 lbf 0

TIME_1900 - Time Marked every 60.00 (s)

Description: HGNS standard resolution porosities for Platform Express Format: Log (EMD 5in Porosity) Index Scale: 5 in per 100 ft Index Unit: ft Index Type: Measured Depth Creation Date: 20-Oct-2012 22:22:08

Channel Processing Parameters				
Parameter	Description	Tool	Value	Unit
BARI	Barite Mud Presence Flag	Borehole	No	
BHS	Borehole Status (Open or Cased Hole)	Borehole	Open	
BS	Bit Size	WLSESSION	Depth Zoned	in
BSAL	Borehole Salinity	Borehole	500	ppm
CALI_SHIFT	CALI Supplementary Offset	HDRS-B	0.177	in
CBLD	Casing Bottom (Logger)	WLSESSION	427	ft

CBLD	Casing Bottom (Logger)	WLSESSION	427	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
DFT	Drilling Fluid Type	Borehole	Water	
DFT_WATER	Drilling Fluid Water Type	Borehole	Chemical Gel	
DHC	Density Hole Correction	HDRS-B	Bit Size	
FD	Fluid Density	Borehole	1	g/cm3
FSAL	Formation Salinity	Borehole	0	ppm
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	
GTSE	Generalized Temperature Selection, from Measured or Computed Temperature	Borehole	CTEM	
HSCO	Hole Size Correction Option	HGNS-B	Yes	
MATR	Rock Matrix for Neutron Porosity Corrections	Borehole	LIMESTONE	
MDEN	Matrix Density for Density Porosity	Borehole	2.71	g/cm3
MFST	Mud Filtrate Sample Temperature	Borehole	60.6	degF
NPRM	HRDD Nuclear Processing Mode	HDRS-B	High Resolution	
RMFS	Resistivity of Mud Filtrate Sample	Borehole	1.2	ohm.m
SOCO	Standoff Correction Option	HGNS-B	Yes	
TD	Total Measured Depth	Borehole	5858	ft

Depth Zone Parameters			
Parameter	Value	Start (ft)	Stop (ft)
BS	0	400	427
BS	7.875	427	5872.5

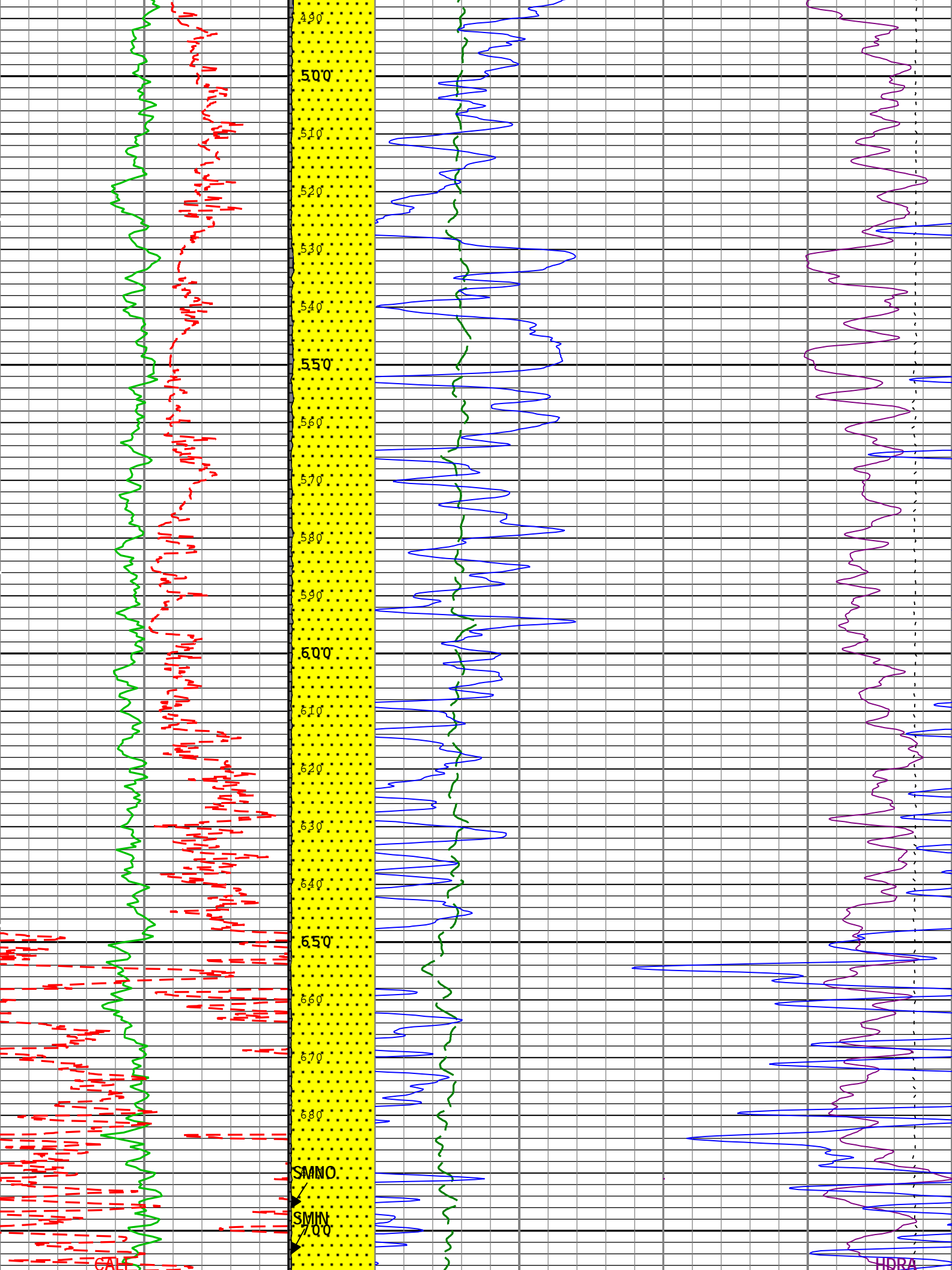
All depth are actual.

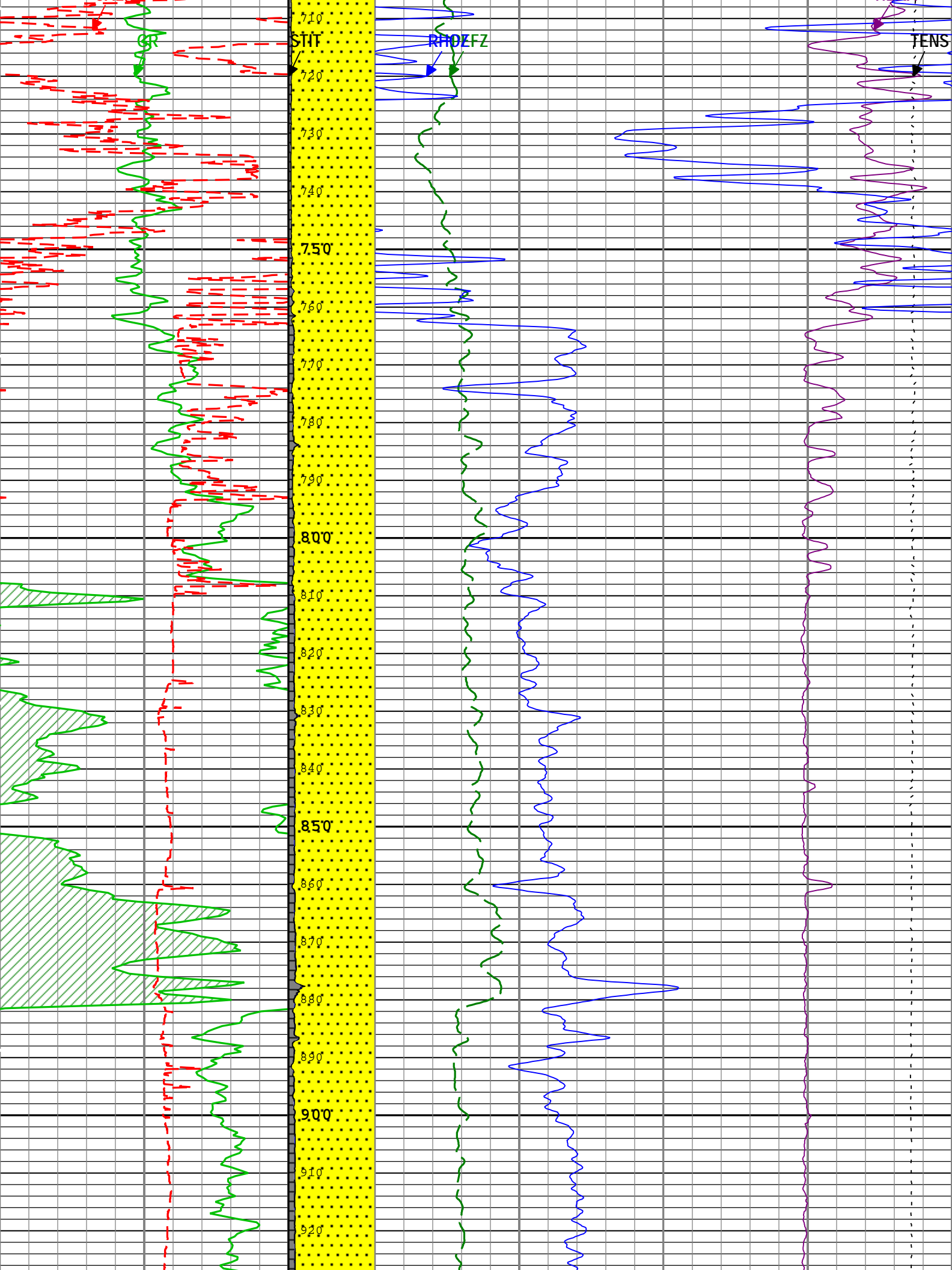
Tool Control Parameters				
Parameter	Description	Tool	Value	Unit
HMCA_BRD_TYPE	HMCA Board Type	HGNS-B	0	
HRGD_BRD_TYPE	HRGD Board Type	HDRS-B	WITHOUT_HET	
MAX_LOG_SPEED	Toolstring Maximum Logging Speed	WLSESSION	1800	ft/h
STSO_HRDD	Temperature Source for the Density Algorithm	HDRS-B	Decaytime algorithm	

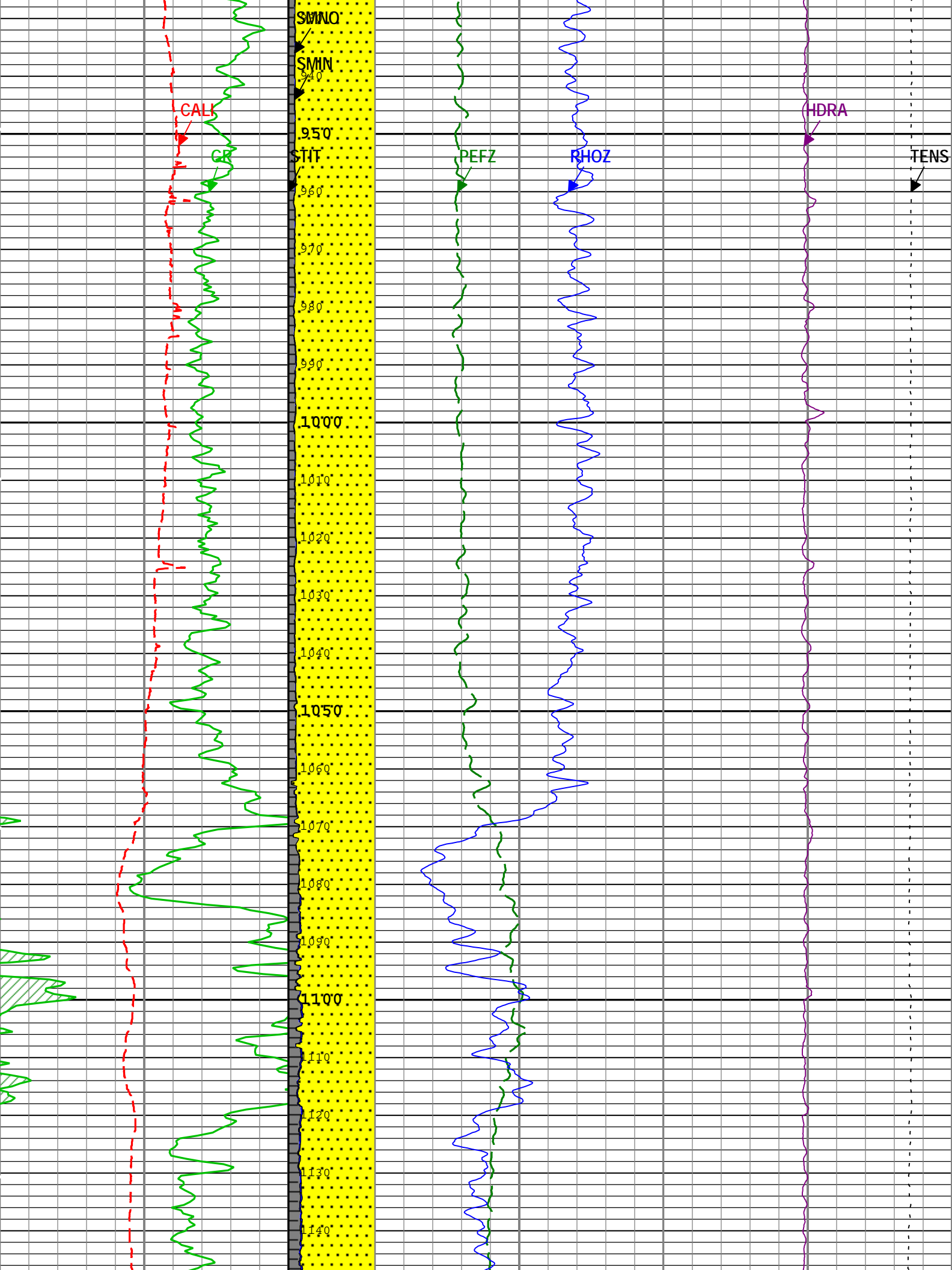
Run 1				
5" Density				

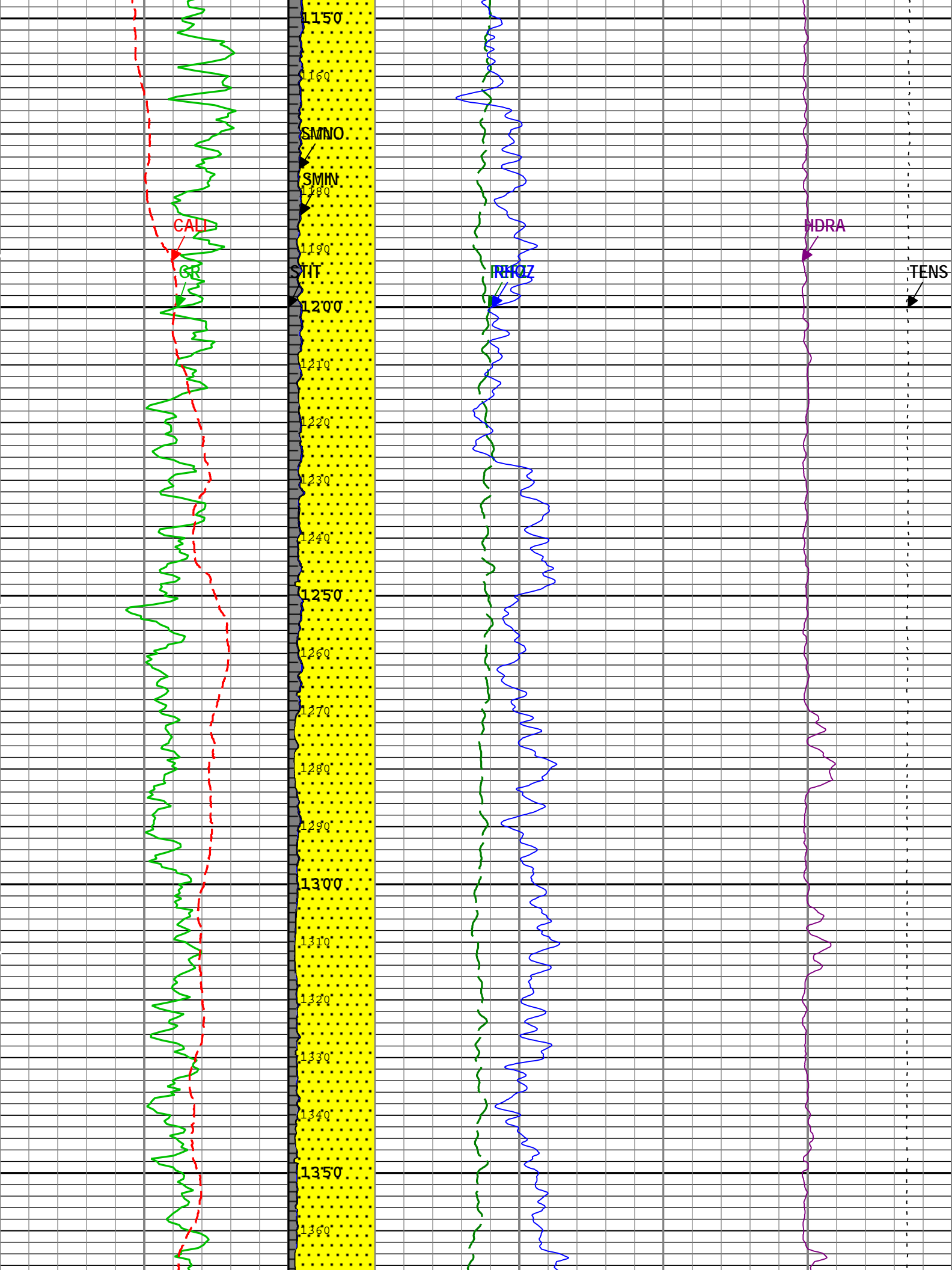
Integration Summary				
Output Channel(s)	Output Description	Input Parameter	Output Value	Unit
Software Version				
Acquisition System		Version		
MaxWell		3.1.9755.0		
Application Patch		SP-20120723-3.1.9755.1112		
		EXP_APL-MASTAXIS-3.1.9755.1221		

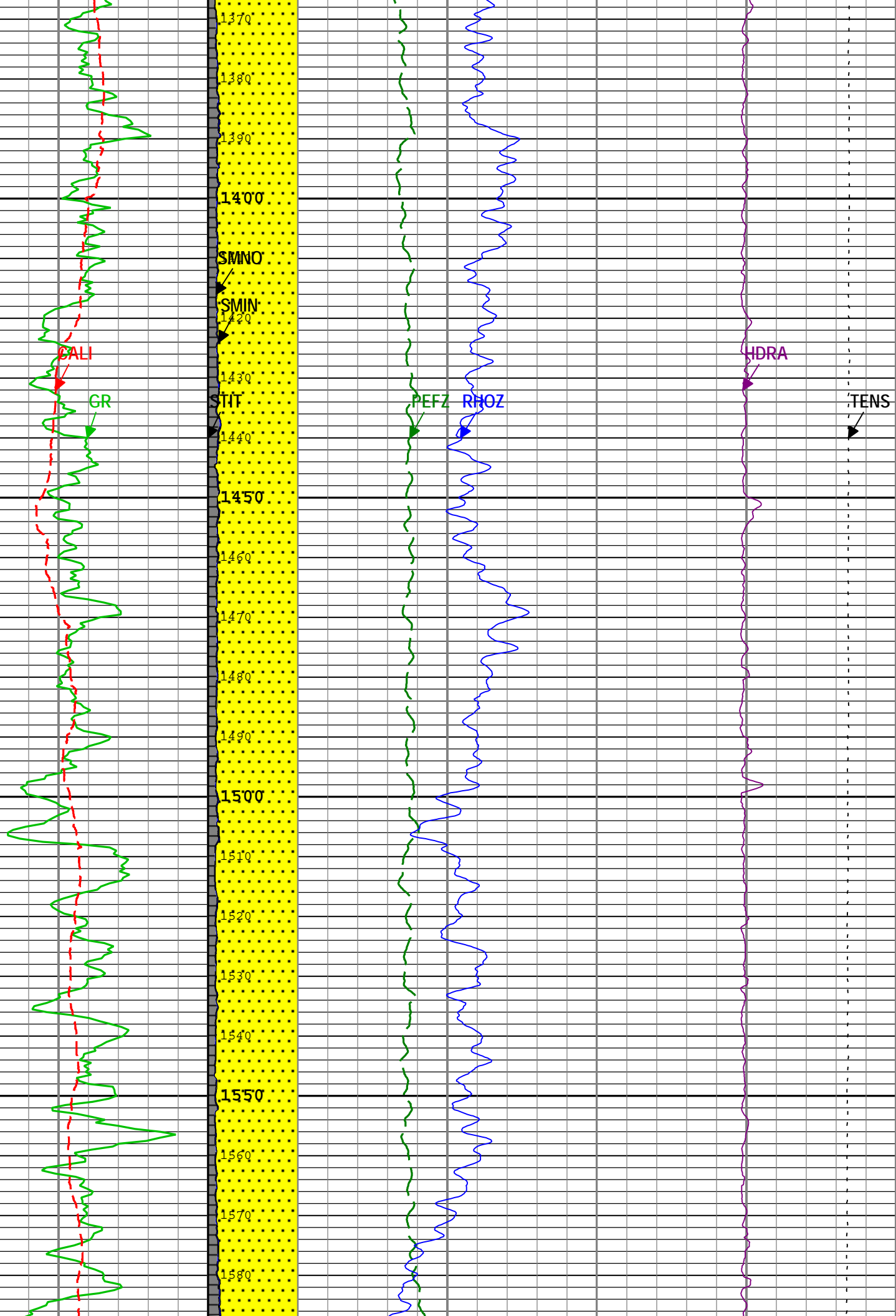
Computation	Description	Version	
DepthCorrection	DepthCorrection	3.1.9755.0	
Tool Elements	Description	Software Version	Firmware Version
HRGD-B	HILT Resistivity Gamma-Ray Density Device, 125 degC	3.1.9755.0	3.0
HGNS-B	HILT Gamma-Ray and Neutron Sonde, 125 degC	3.1.9755.0	2.0
HRCC-B	HILT High-Resolution Control Cartridge, 125 degC	3.1.9755.0	2.0

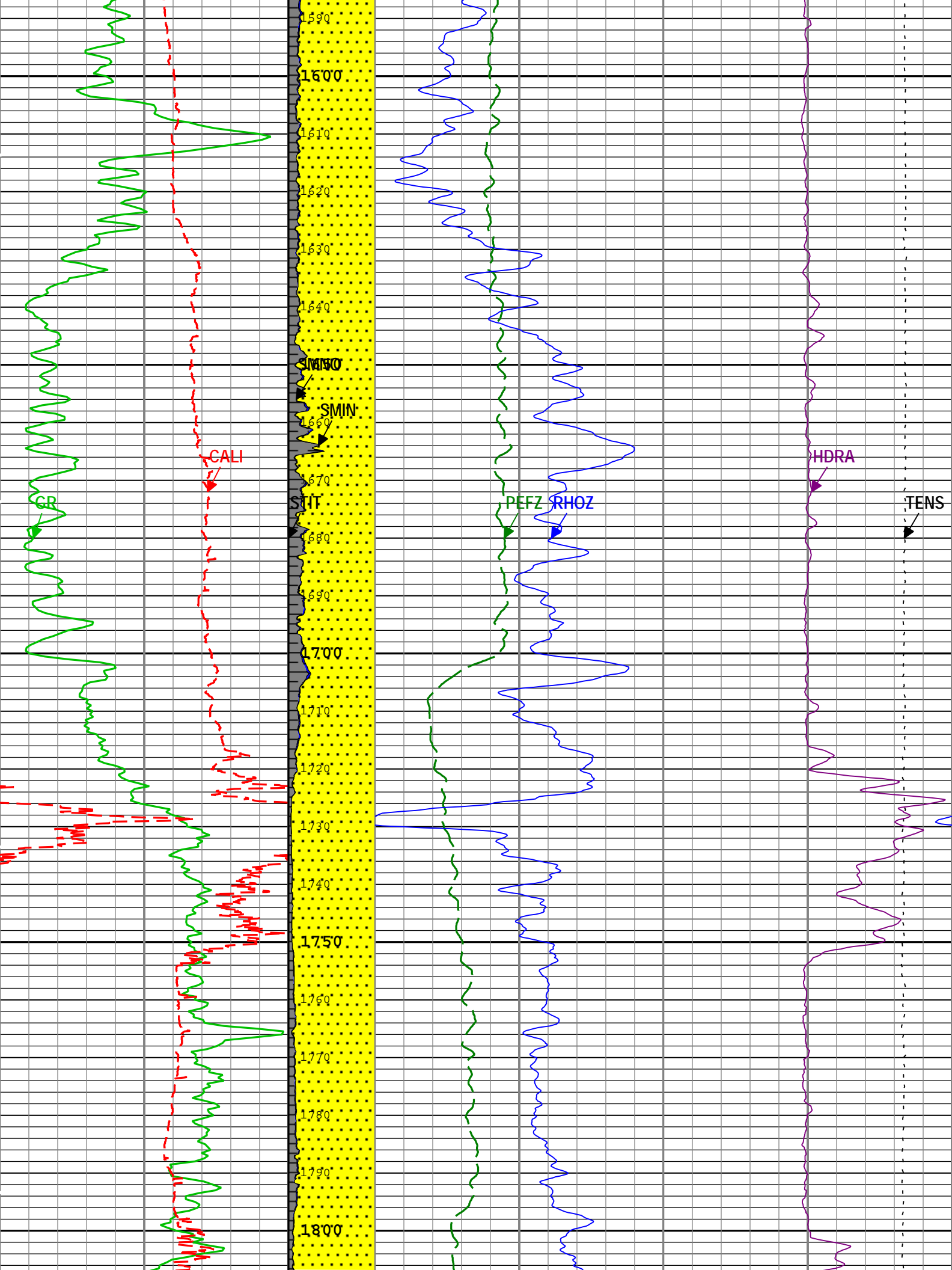


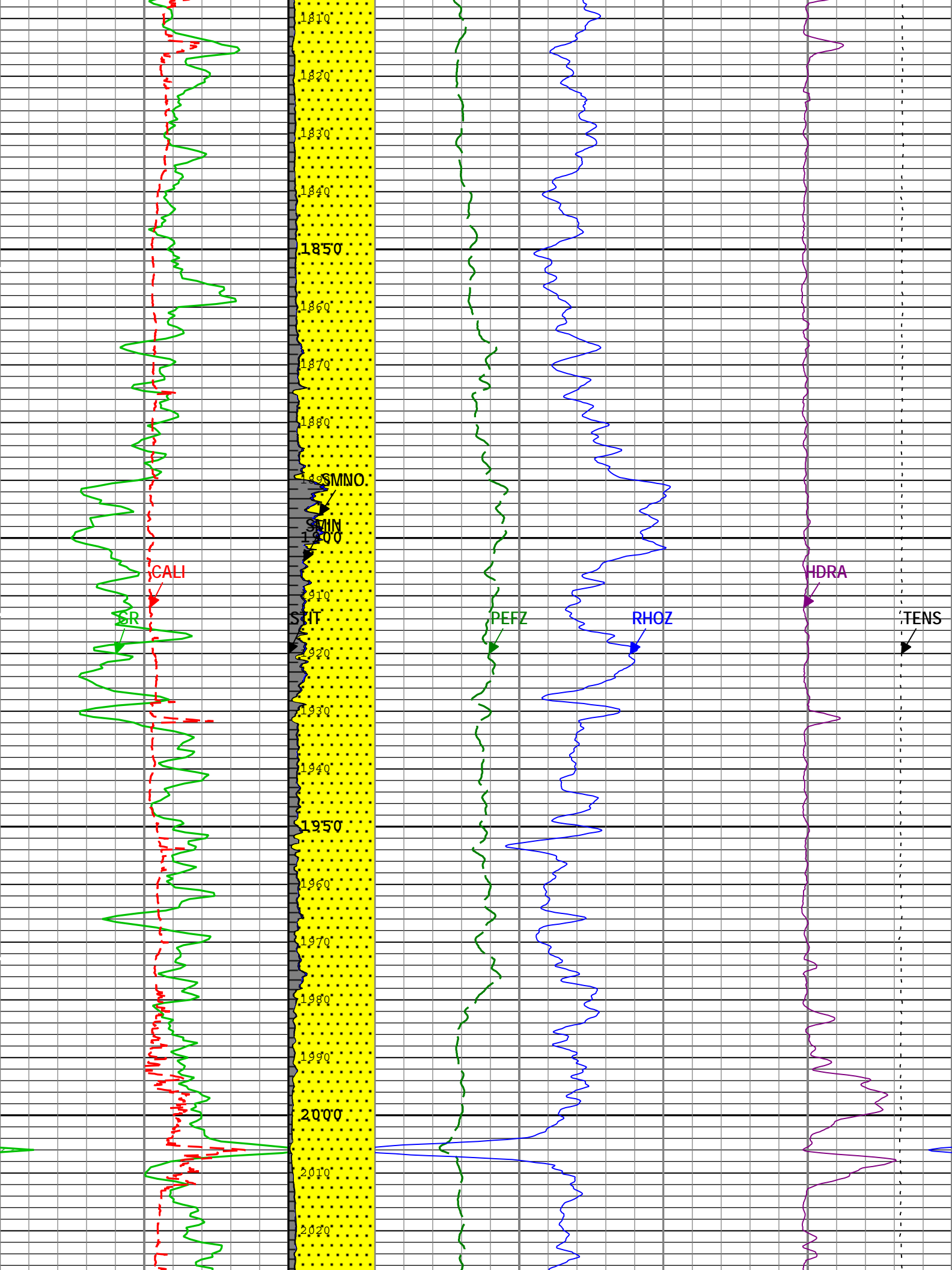


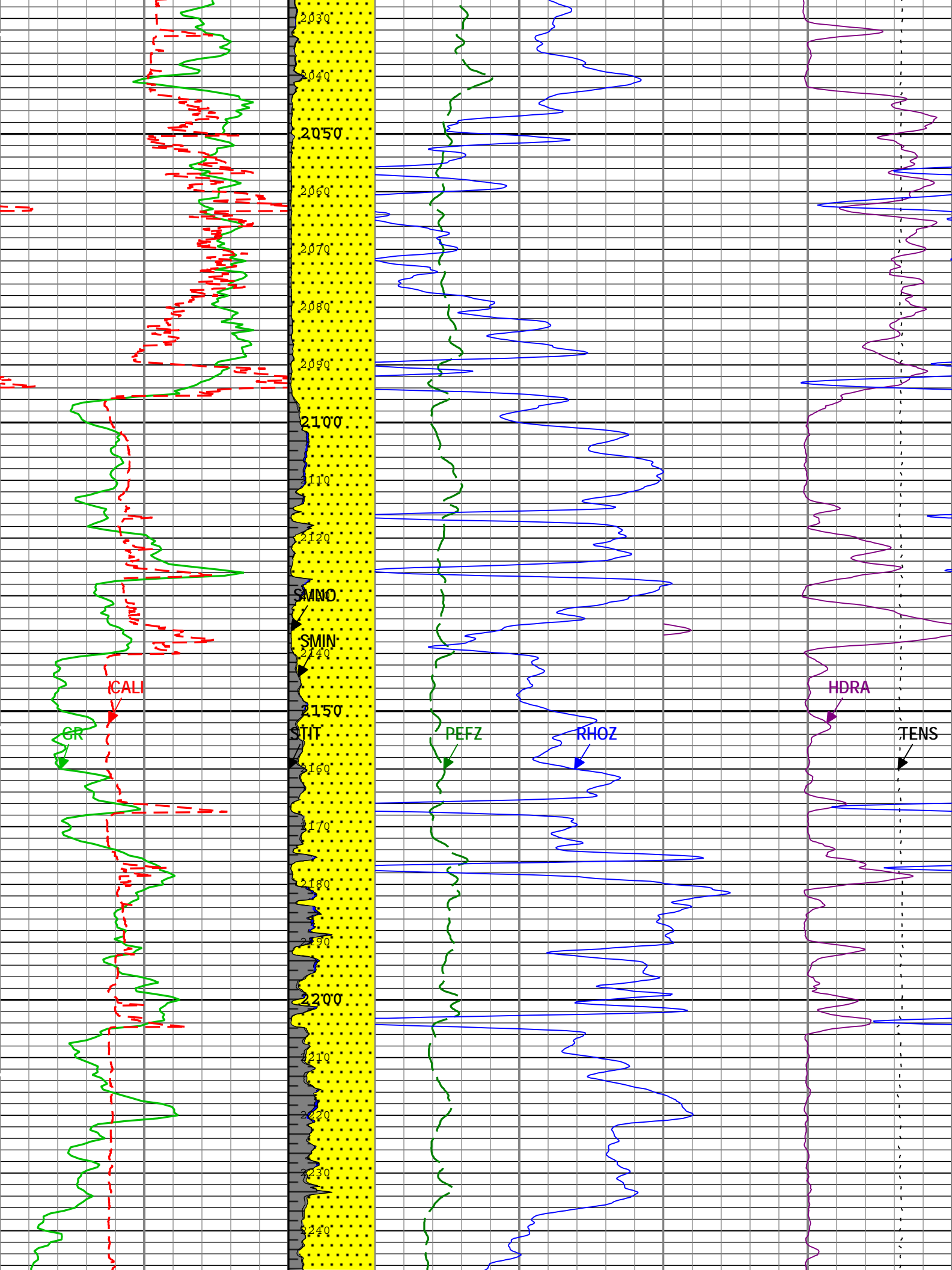


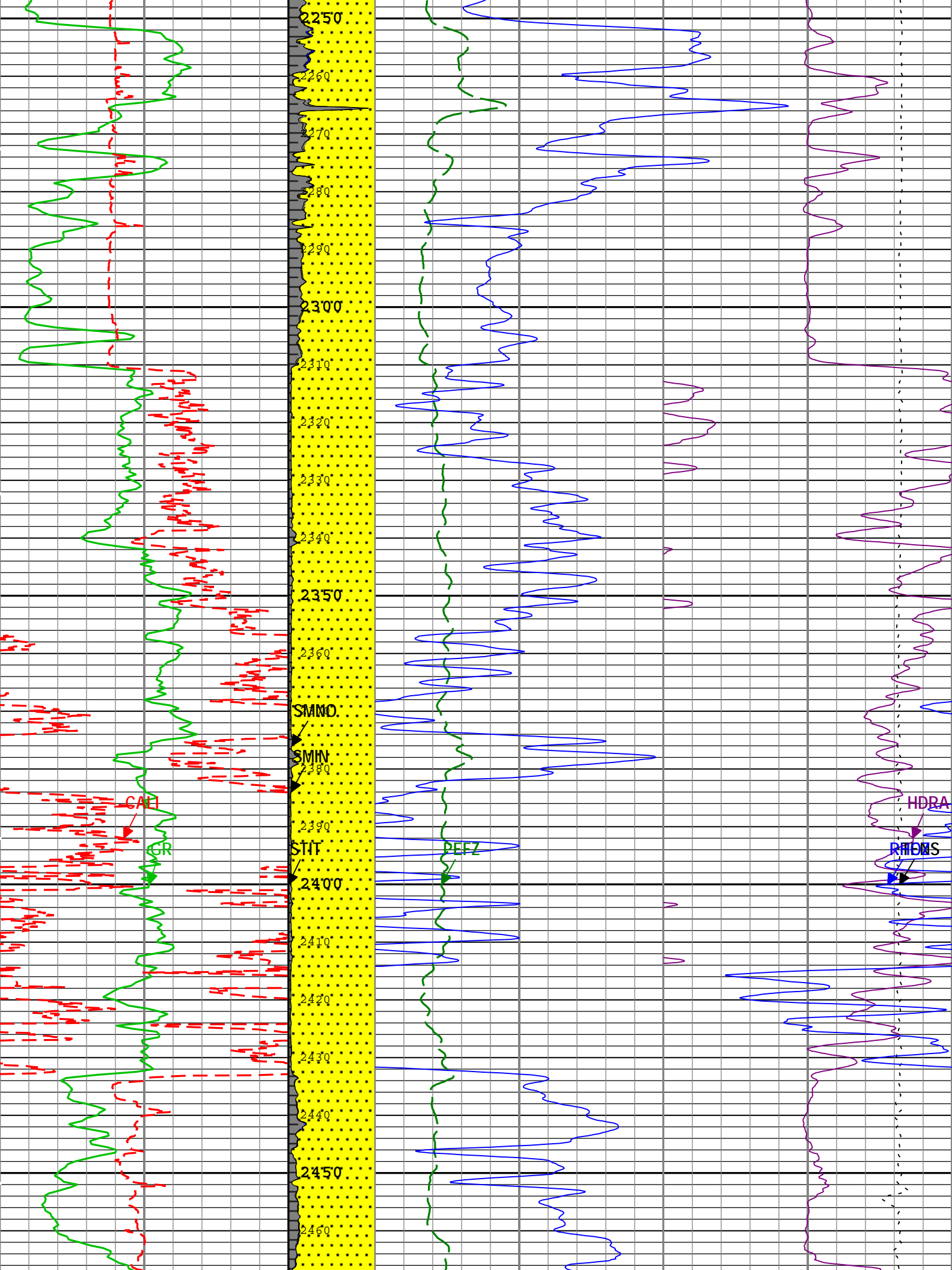


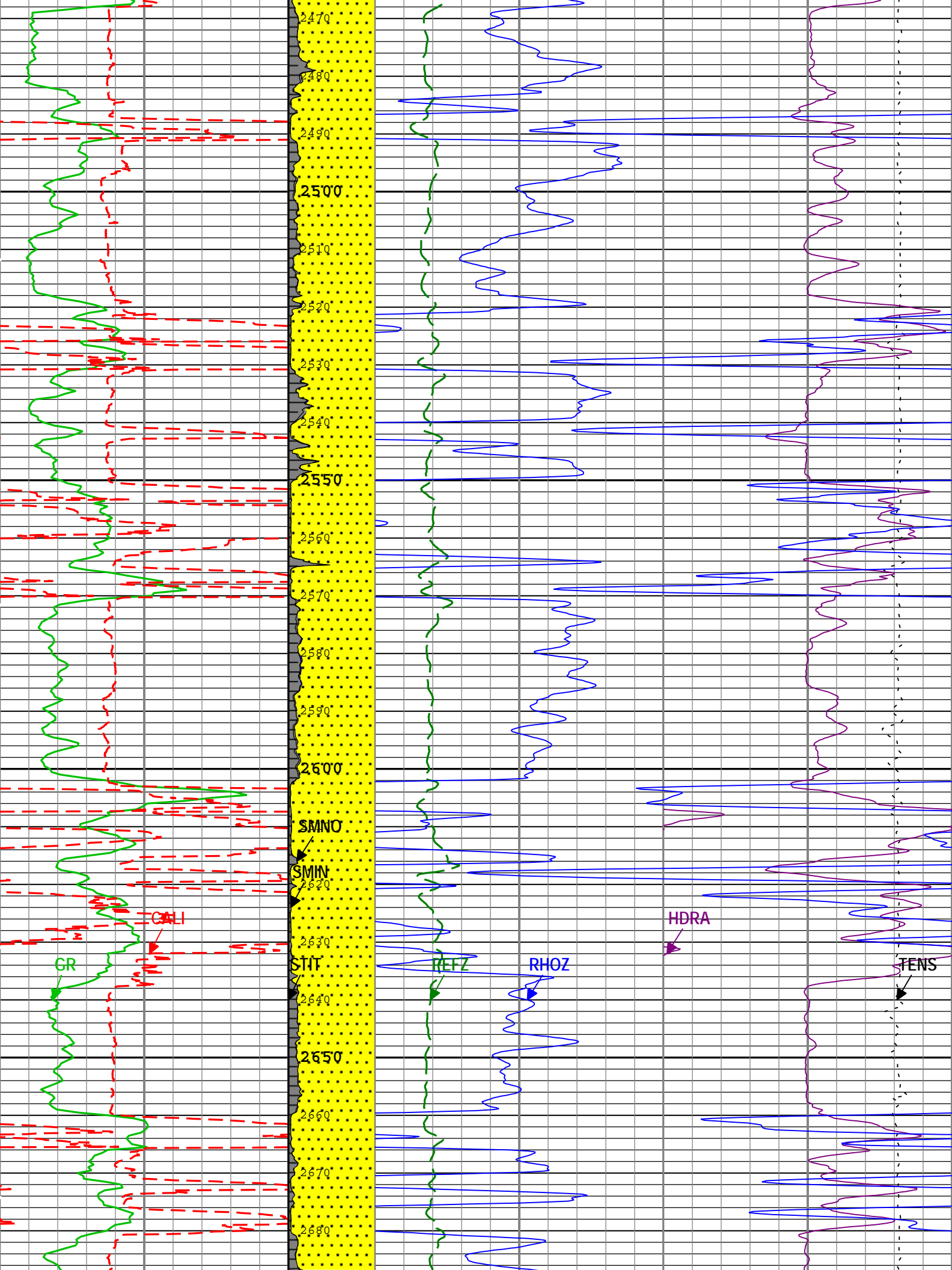


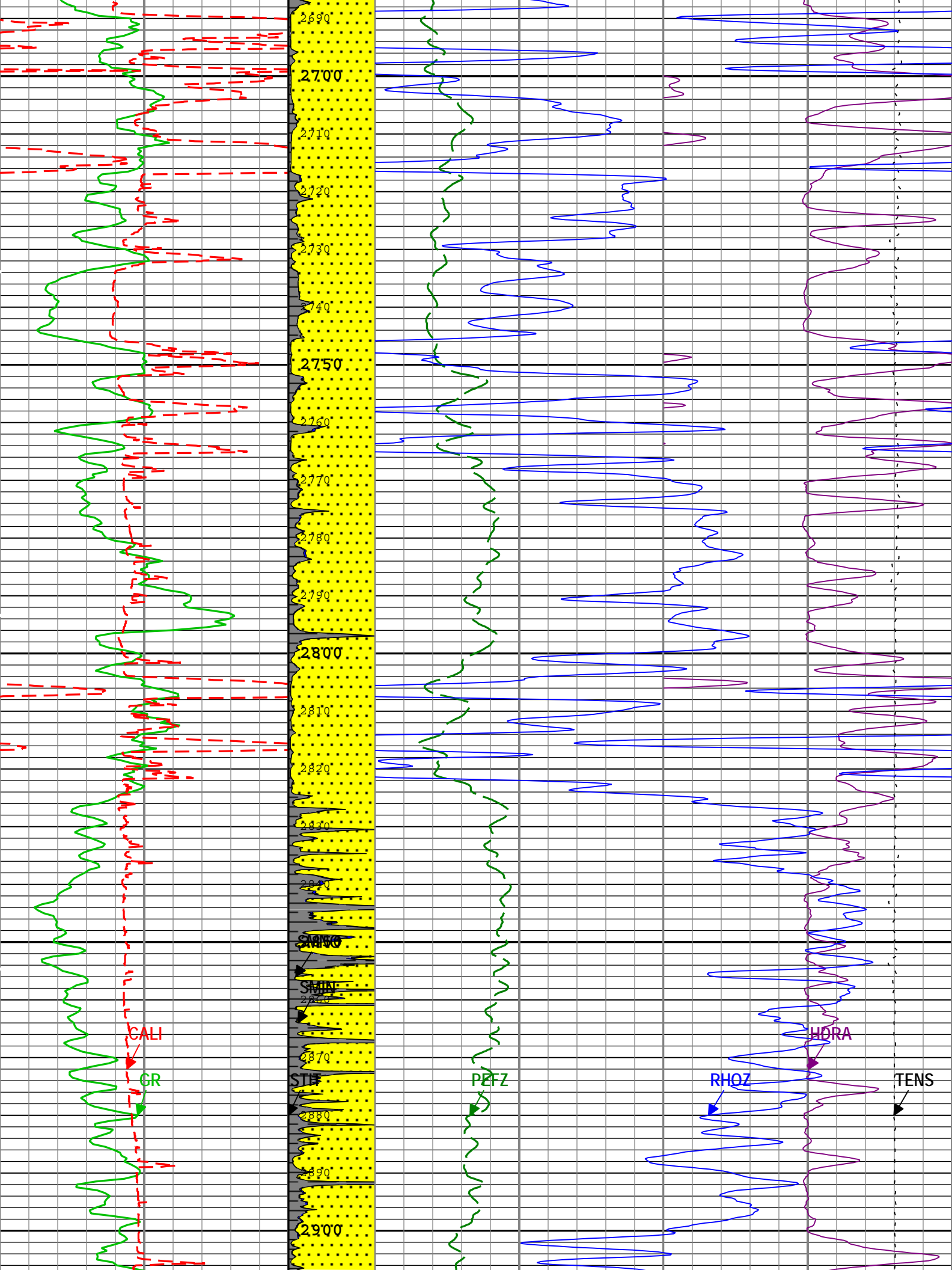


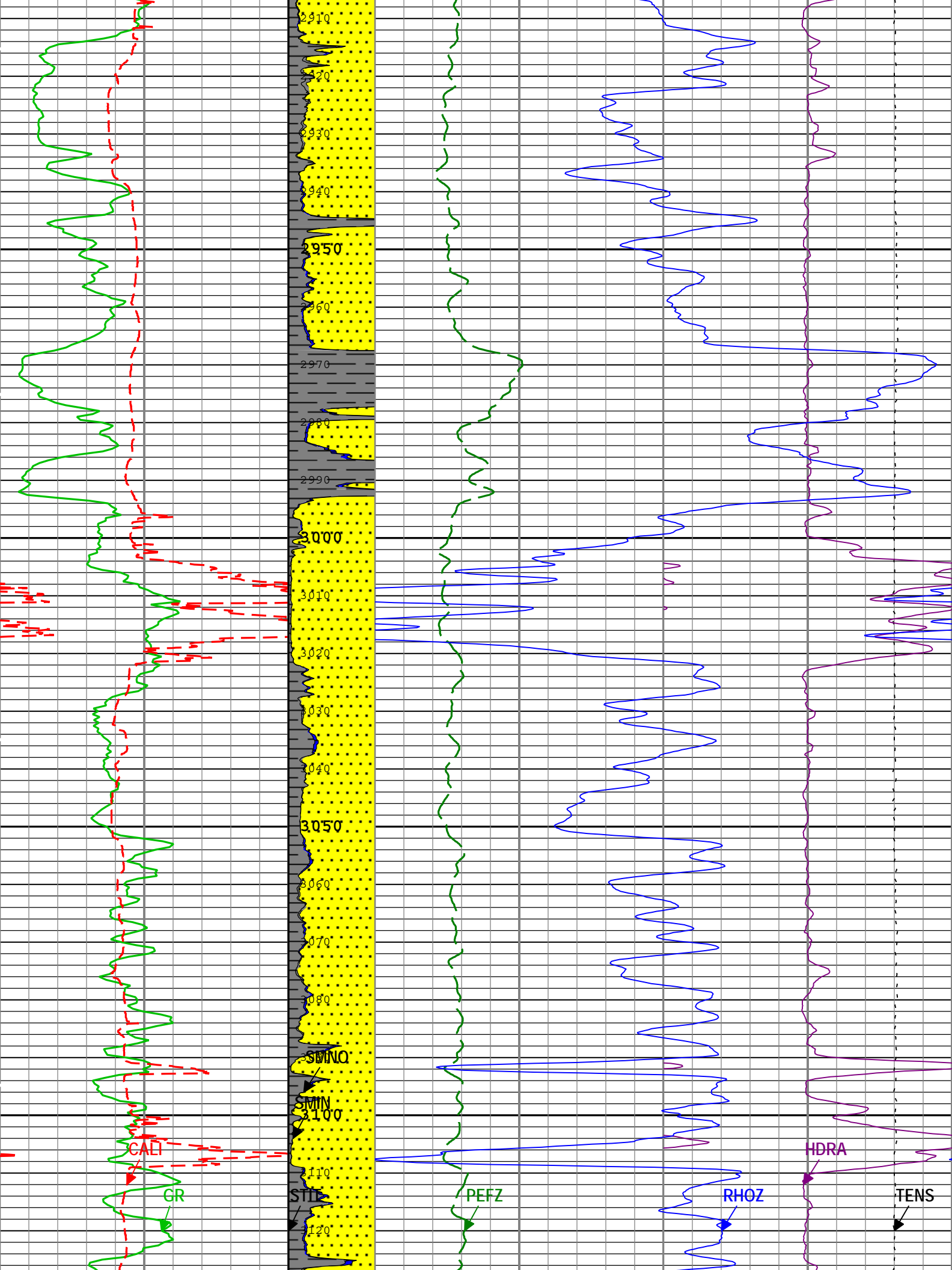


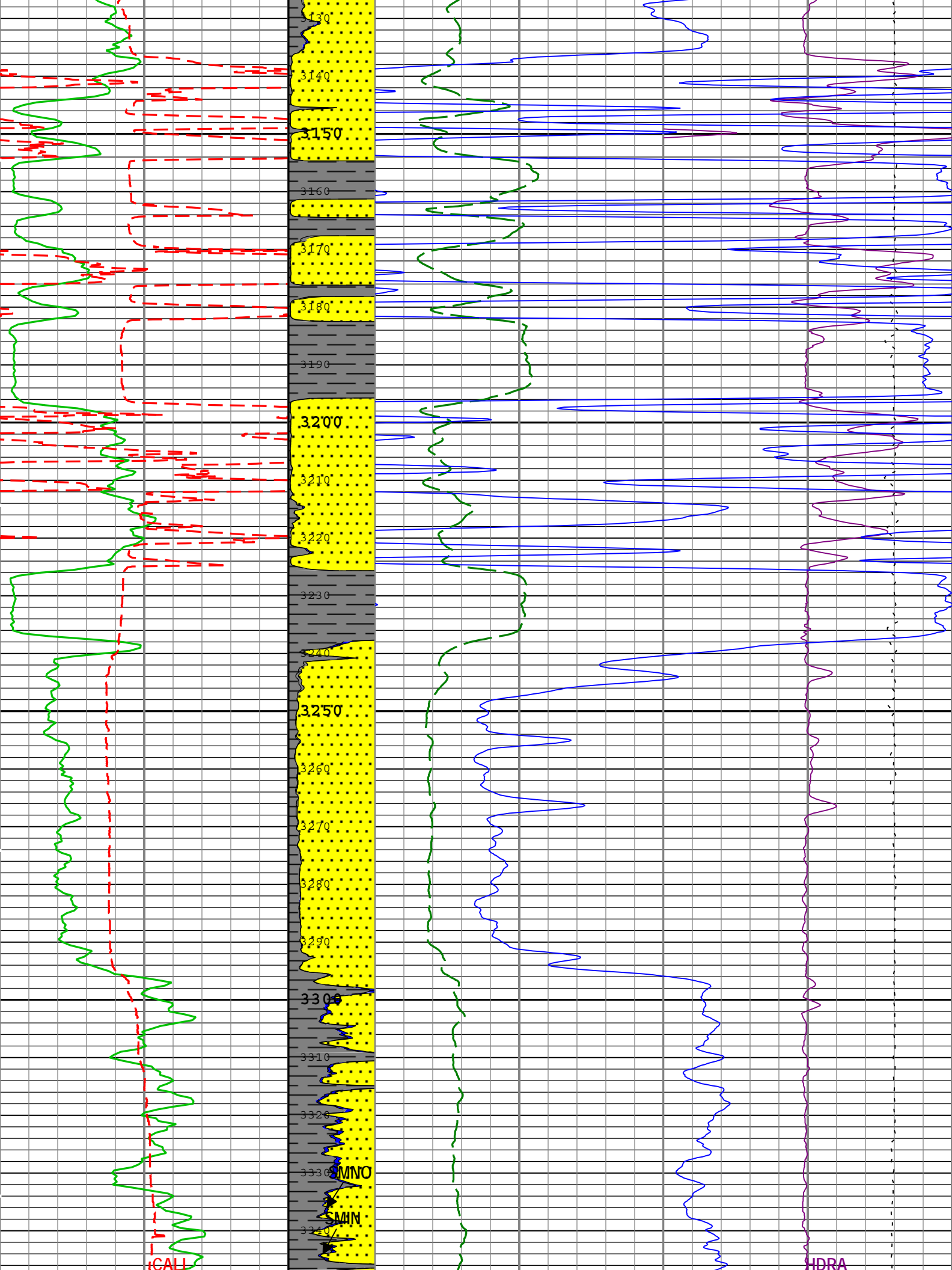


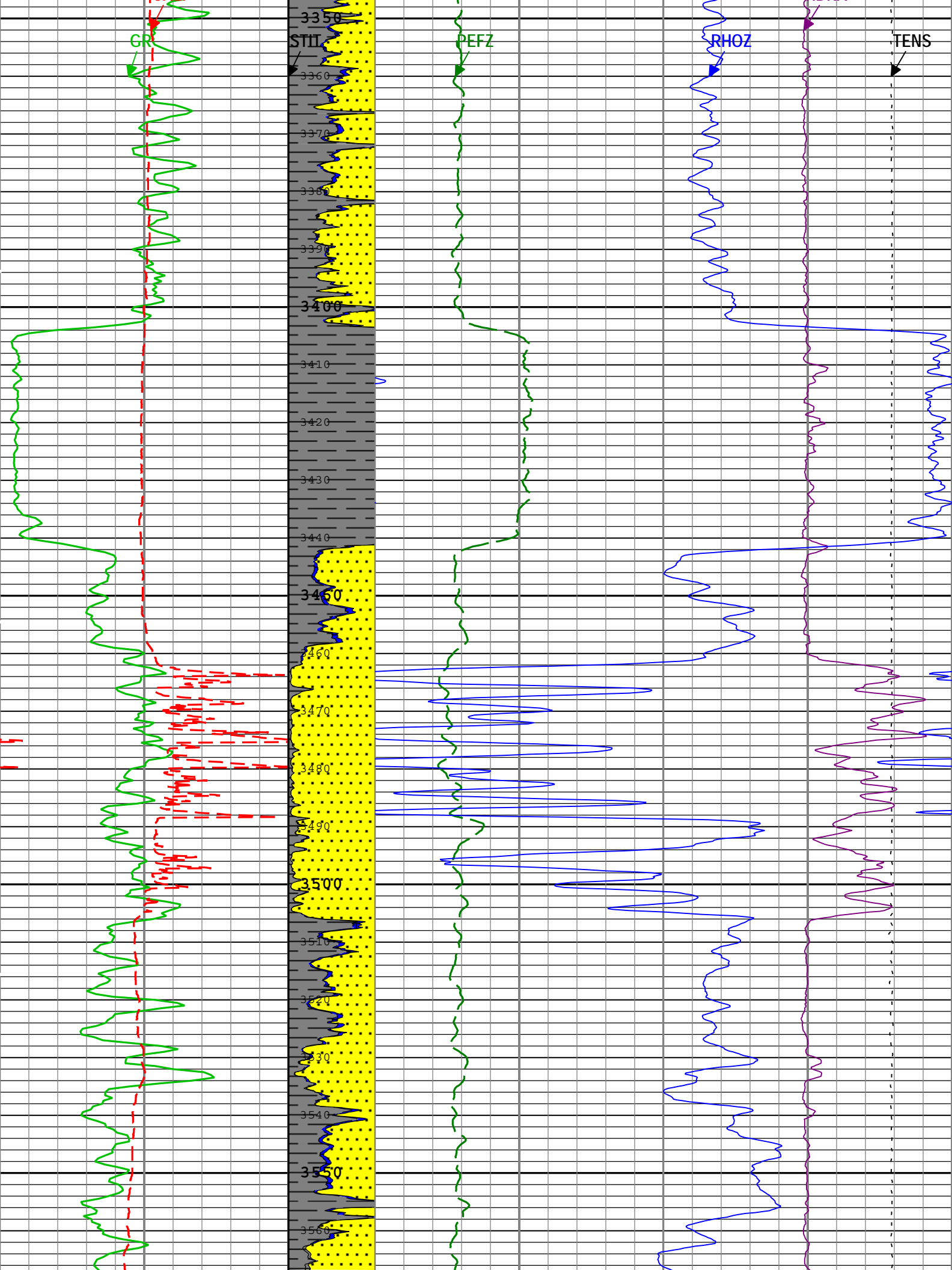


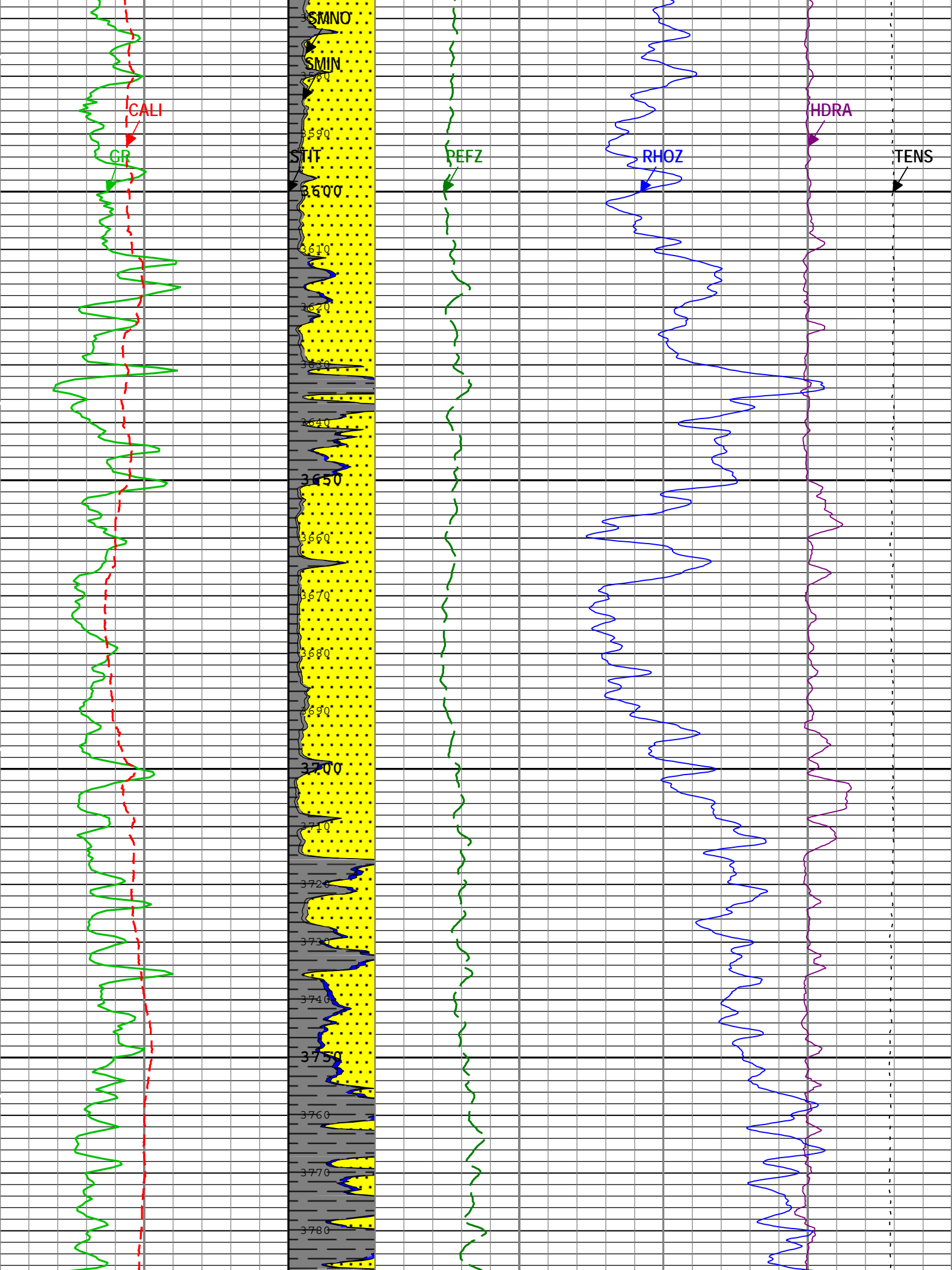


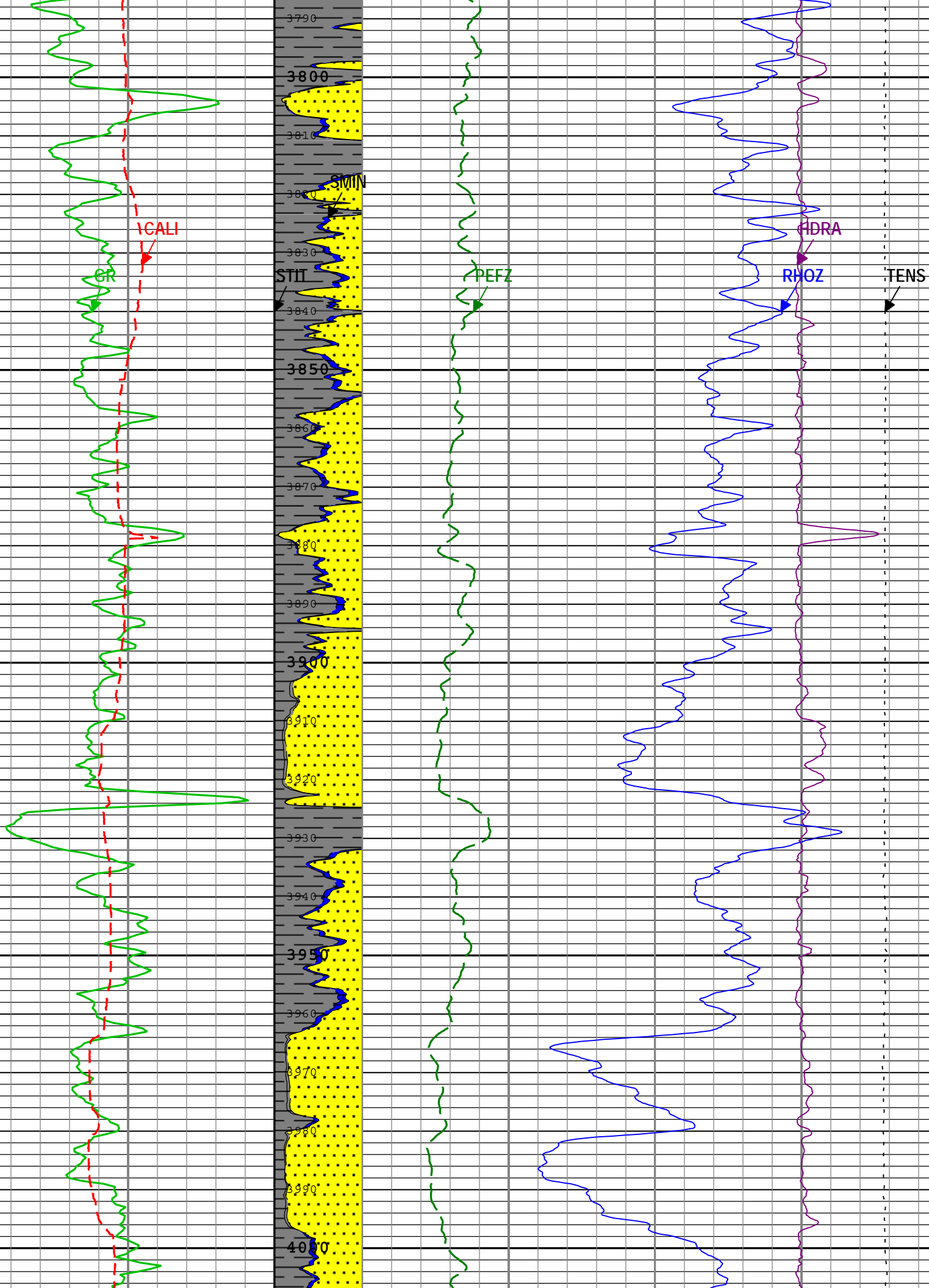


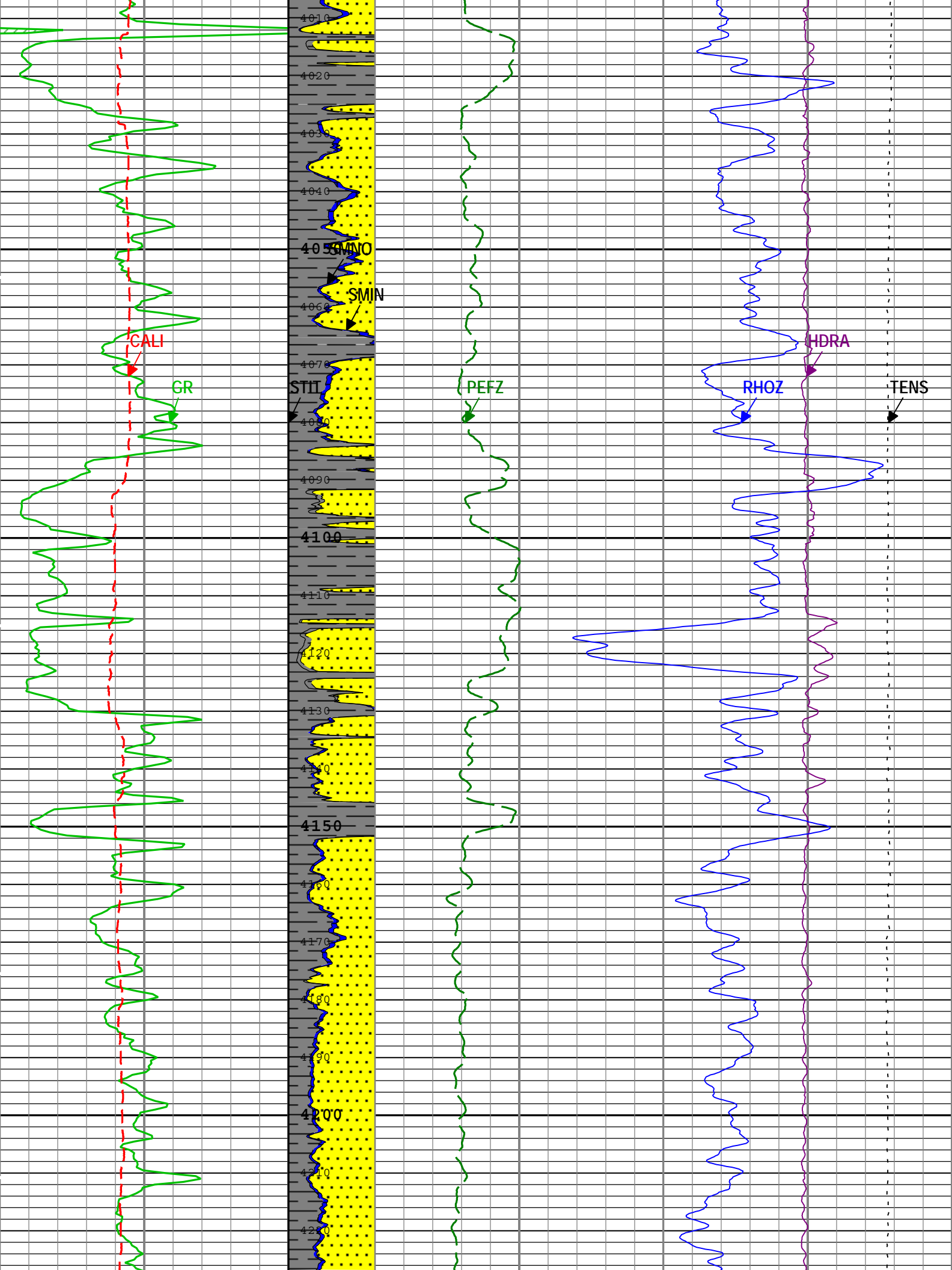


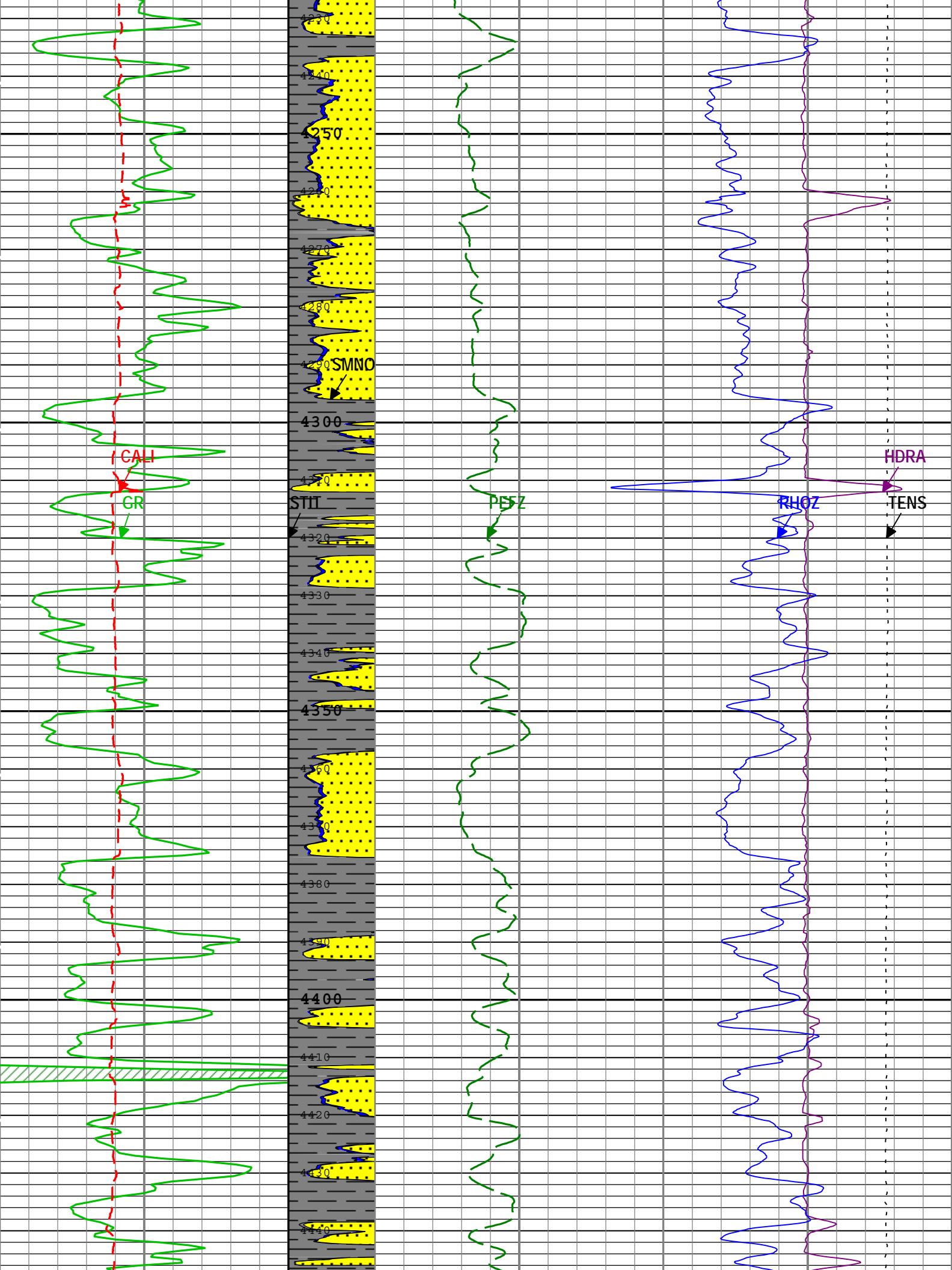


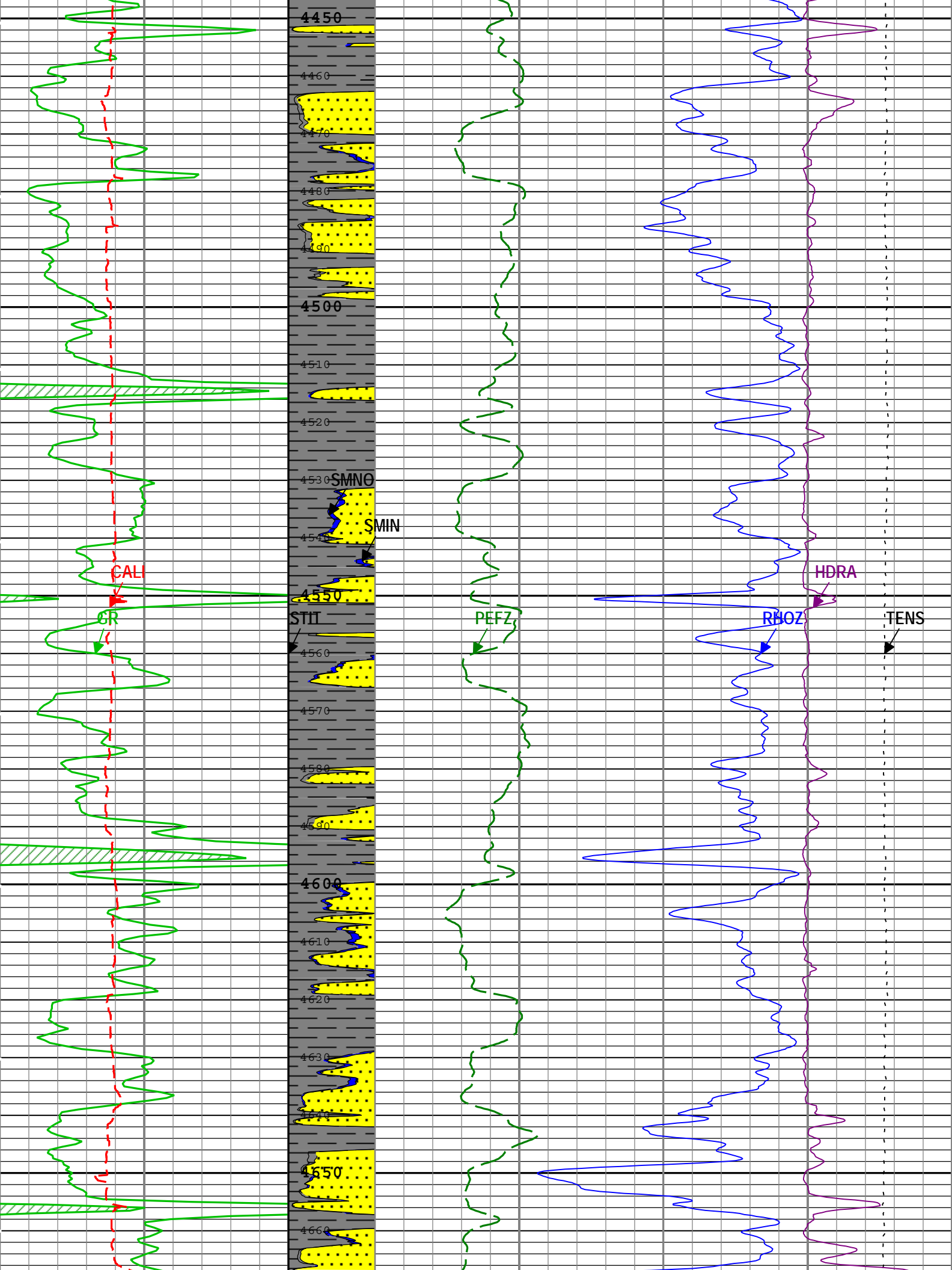


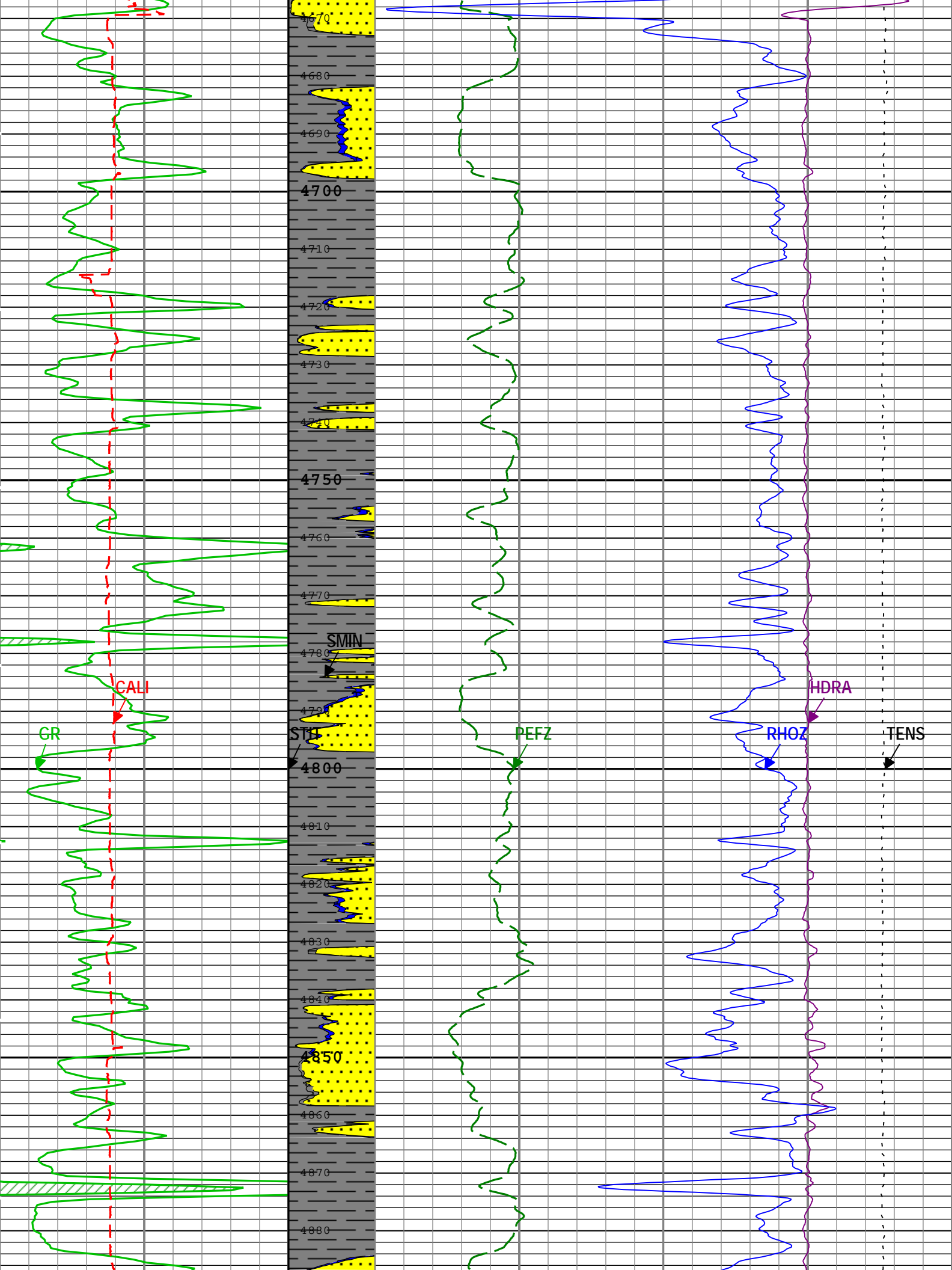


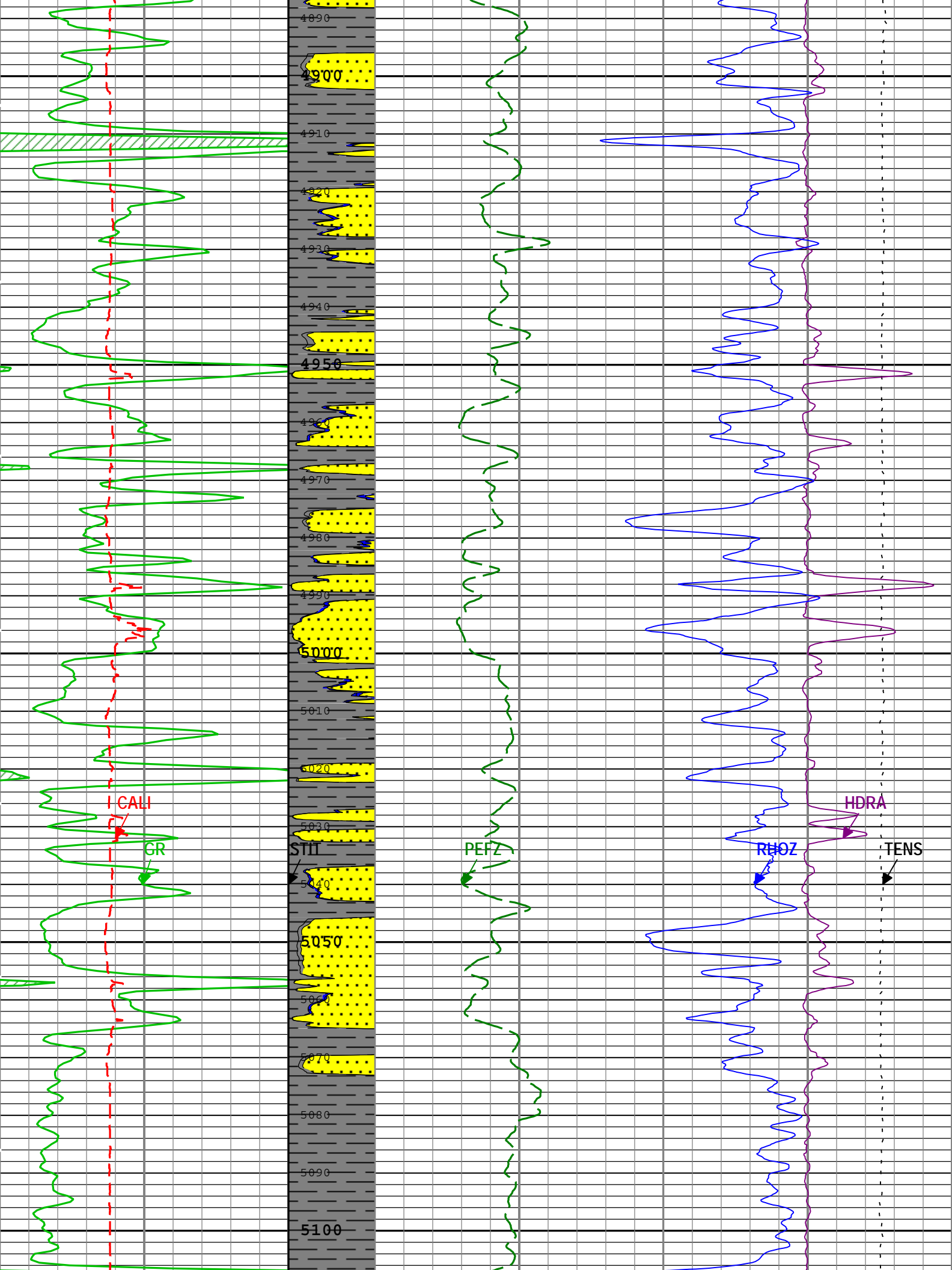


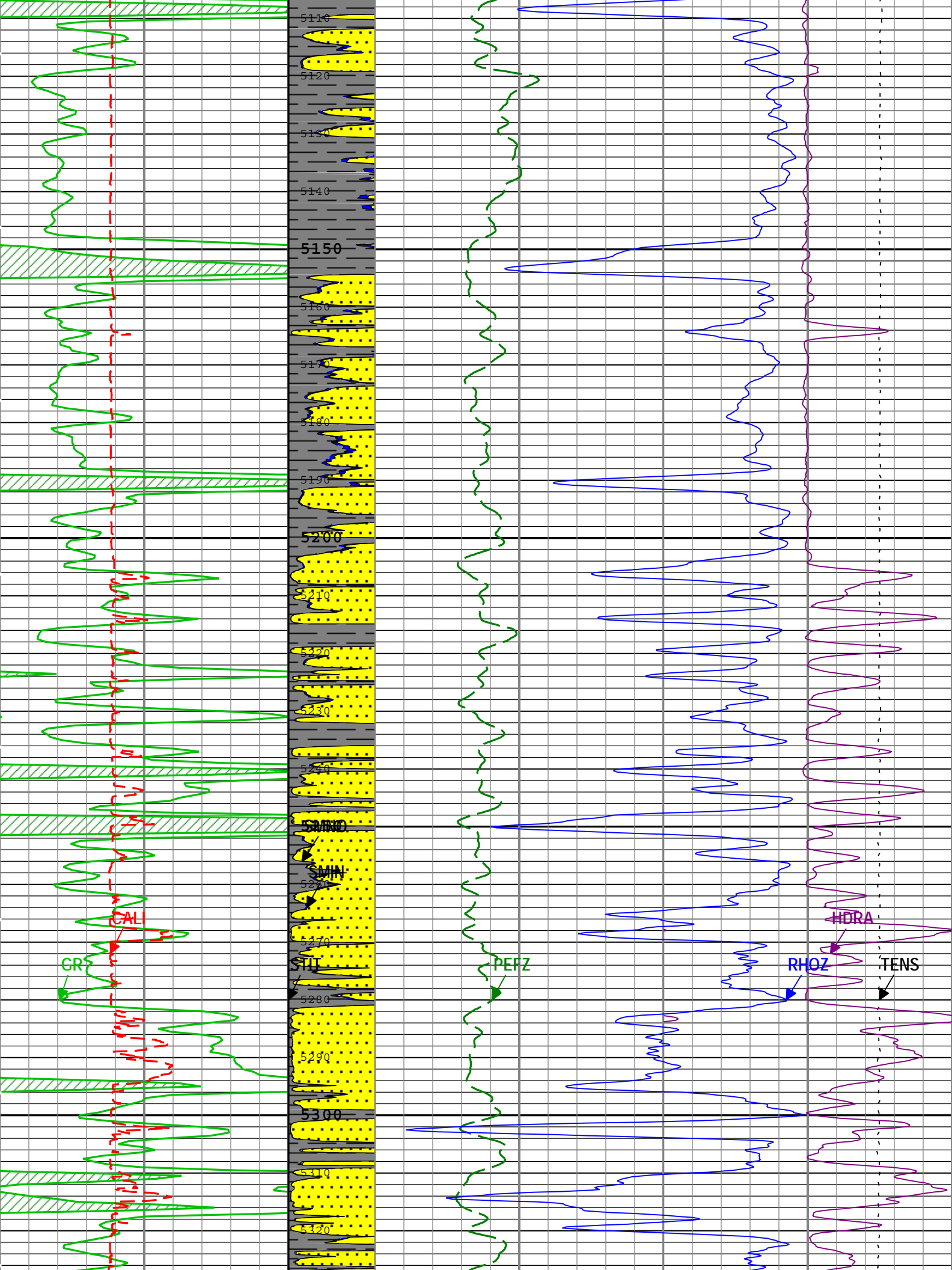


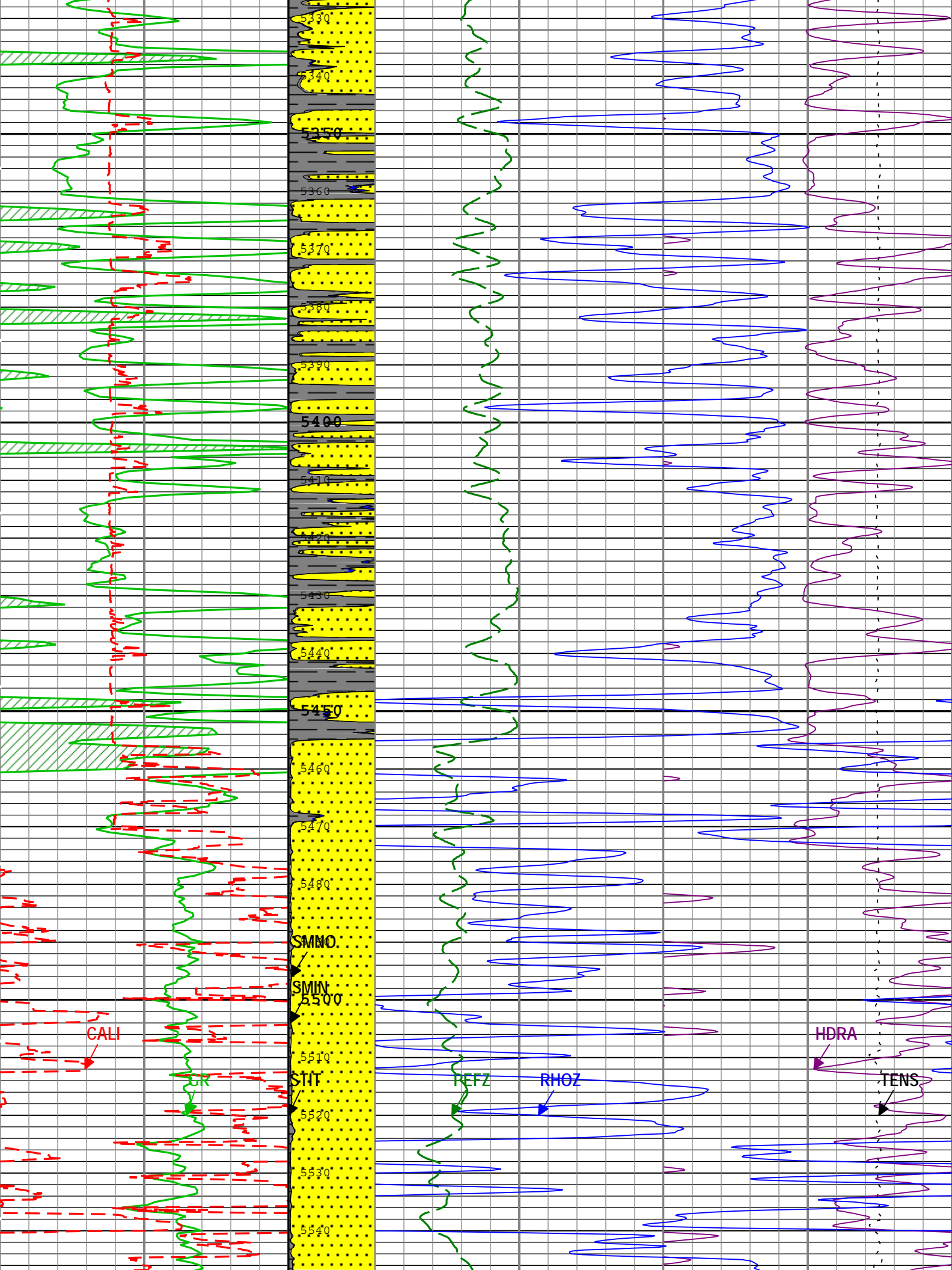


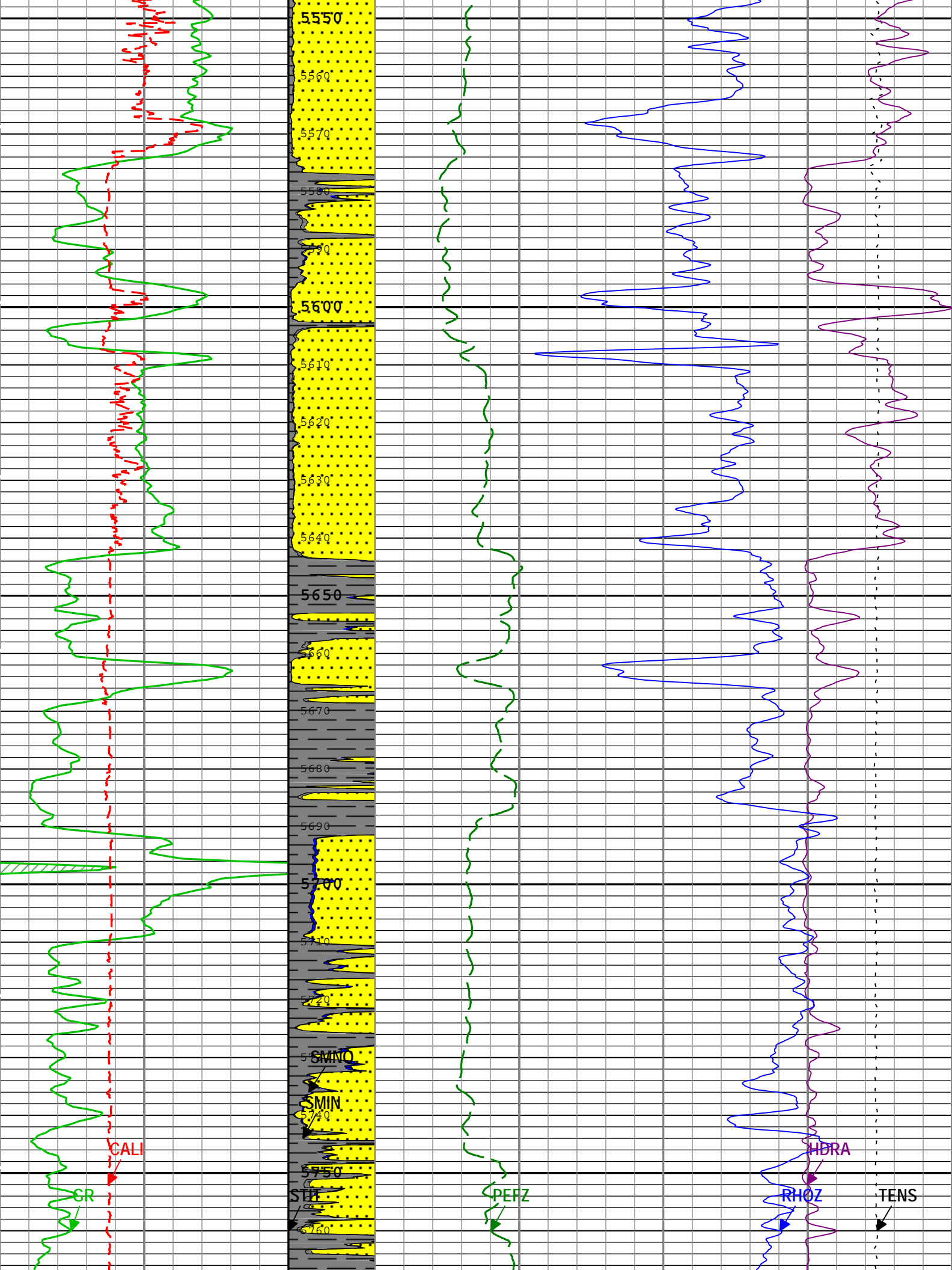


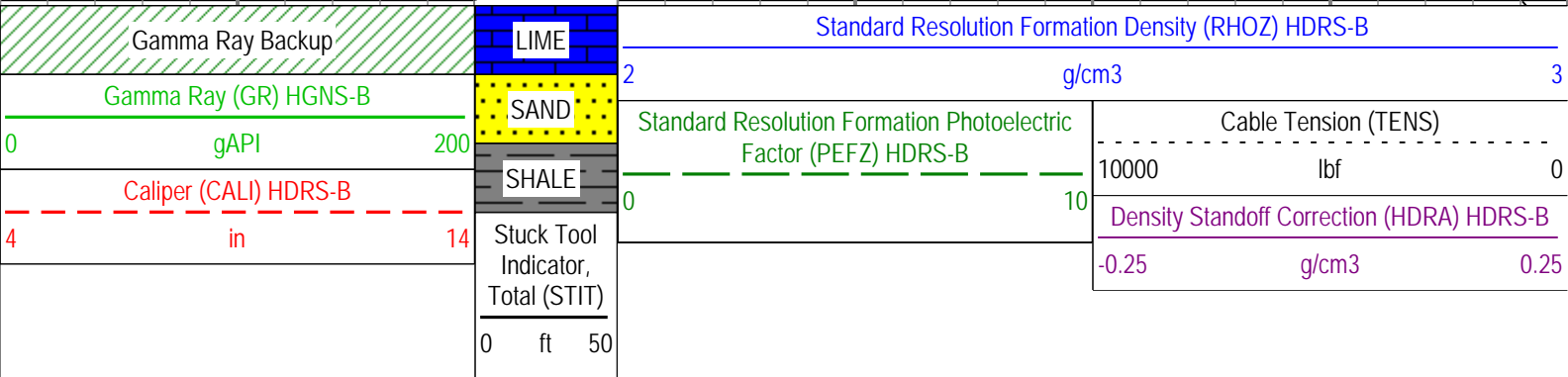
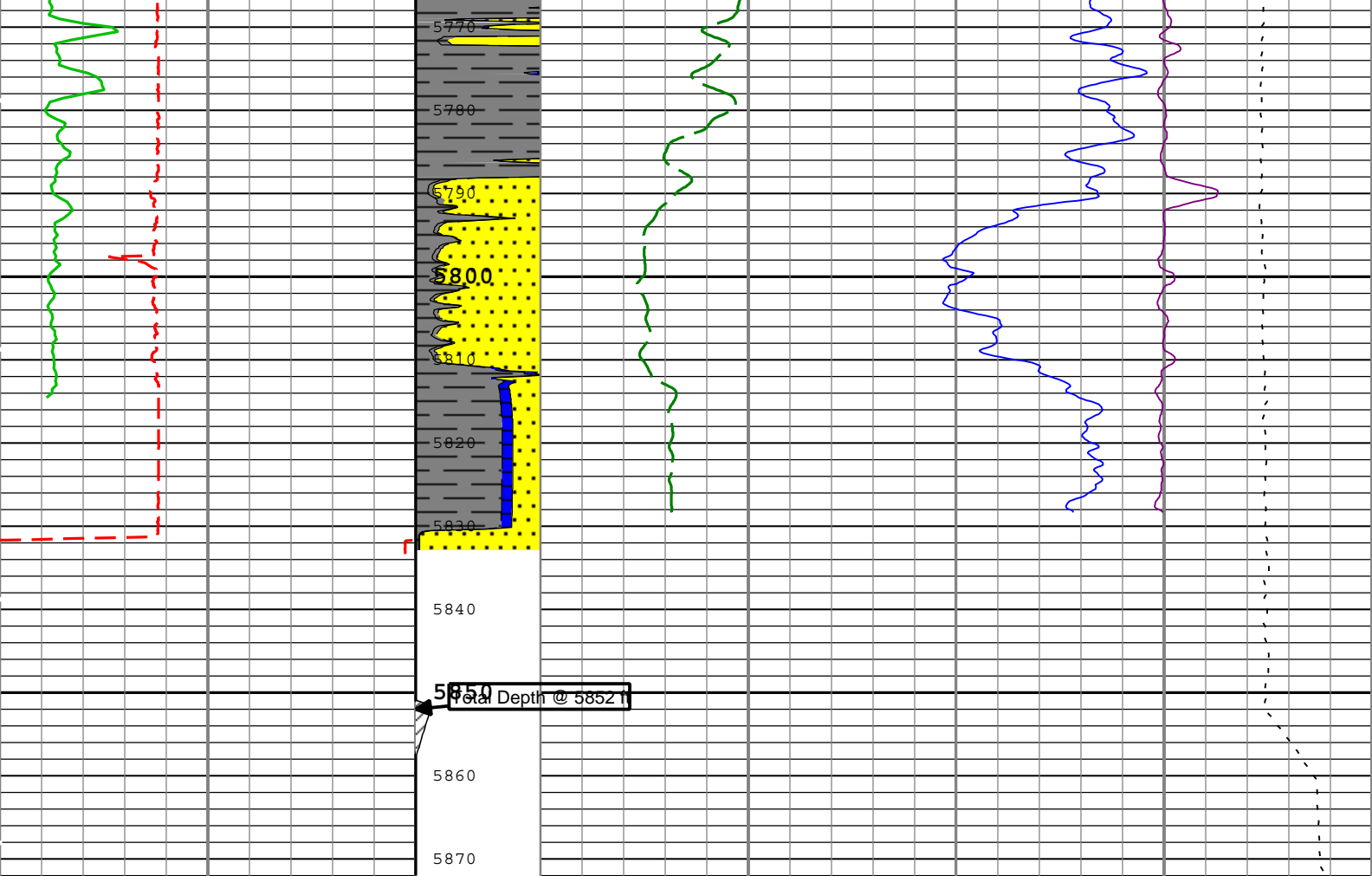












TIME_1900 - Time Marked every 60.00 (s)

Description: HGNS standard resolution porosities for Platform Express Format: Log (EMD 5in Density) Index Scale: 5 in per 100 ft Index Unit: ft Index Type: Measured Depth Creation Date: 20-Oct-2012 22:22:12

Channel Processing Parameters				
Parameter	Description	Tool	Value	Unit
BARI	Barite Mud Presence Flag	Borehole	No	
BHS	Borehole Status (Open or Cased Hole)	Borehole	Open	
BS	Bit Size	WLSESSION	Depth Zoned	in
CALI_SHIFT	CALI Supplementary Offset	HDRS-B	0.177	in
CBLO	Casing Bottom (Logger)	WLSESSION	427	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
DFT	Drilling Fluid Type	Borehole	Water	
DHC	Density Hole Correction	HDRS-B	Bit Size	
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	
NPRM	HRDD Nuclear Processing Mode	HDRS-B	High Resolution	
SOCO	Standoff Correction Option	HGNS-B	Yes	
TD	Total Measured Depth	Borehole	5858	ft

Depth Zone Parameters

Parameter	Value	Start (ft)	Stop (ft)
BS	0	400	427
BS	7.875	427	5872.5

All depth are actual.

Tool Control 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	

Company:

Vecta Oil & Gas Ltd

Well:

Snowmass 44-32

Field:

Wildcat

County:

Cheyenne

Country:

USA

Schlumberger

Platform Express
Compensated Neutron Log
LithoDensity