

Company: Omimex Petroleum, Inc

Well: Bledsoe 13x-2-5-45

Field: Ballyneal

County: Yuma State: Colorado

County: Yuma State: Colorado	Platform Express	
	Compensated Neutron Log	
	LithoDensity	
	Location:	SHL : 306' FSL x 630' FWL SWSW
	Permanent Datum: SHL : 306' FSL x 630' FWL SWSW	Elev. K.B. 3817.00 ft
Log Measured From: Kelly Bushing		G.L. 3811.00 ft
Drilling Measured From: Kelly Bushing		D.F. 3816.00 ft
API Serial No. 05-125-11969-00		Section: 2
Logging Date 26-Jun-2013		Township: 5N
Run Number Run 1		Range: 45W
Depth Driller 2736.00 ft		
Schlumberger Depth 2732.00 ft		
Bottom Log Interval 2732.00 ft		
Top Log Interval 473.00 ft		
Casing Driller Size @ Depth 7 in @ 454.00 ft		
Casing Schlumberger 473 ft		
Bit Size 6.25 in		
Type Fluid In Hole Fresh Water		
MUD	Density	9 lbm/gal
	Viscosity	31 s
Source of Sample	Fluid Loss	PH
	Flowline	
RM @ Meas Temp 0.11 ohm.m @ 81.6 degF		
RMF @ Meas Temp 0.08 ohm.m @ 81.6 degF		
RMC @ Meas Temp 0.14 ohm.m @ 81.6 degF		
Source RMF Calculated		
RM @ BHT 0.08 @ 111 0.06 @ 111		
Max Recorded Temperatures 111 degF 111 111		
Circulation Stopped 26-Jun-2013 20:45:00		
Logger on Bottom 27-Jun-2013 00:31:12		
Unit Number 2154		
Recorded By Arvin Shi		
Witnessed By Paul Dekaye		

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.

Contents

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

11. Run 1 5" Density

11.1 Integration Summary

11.2 Software Version

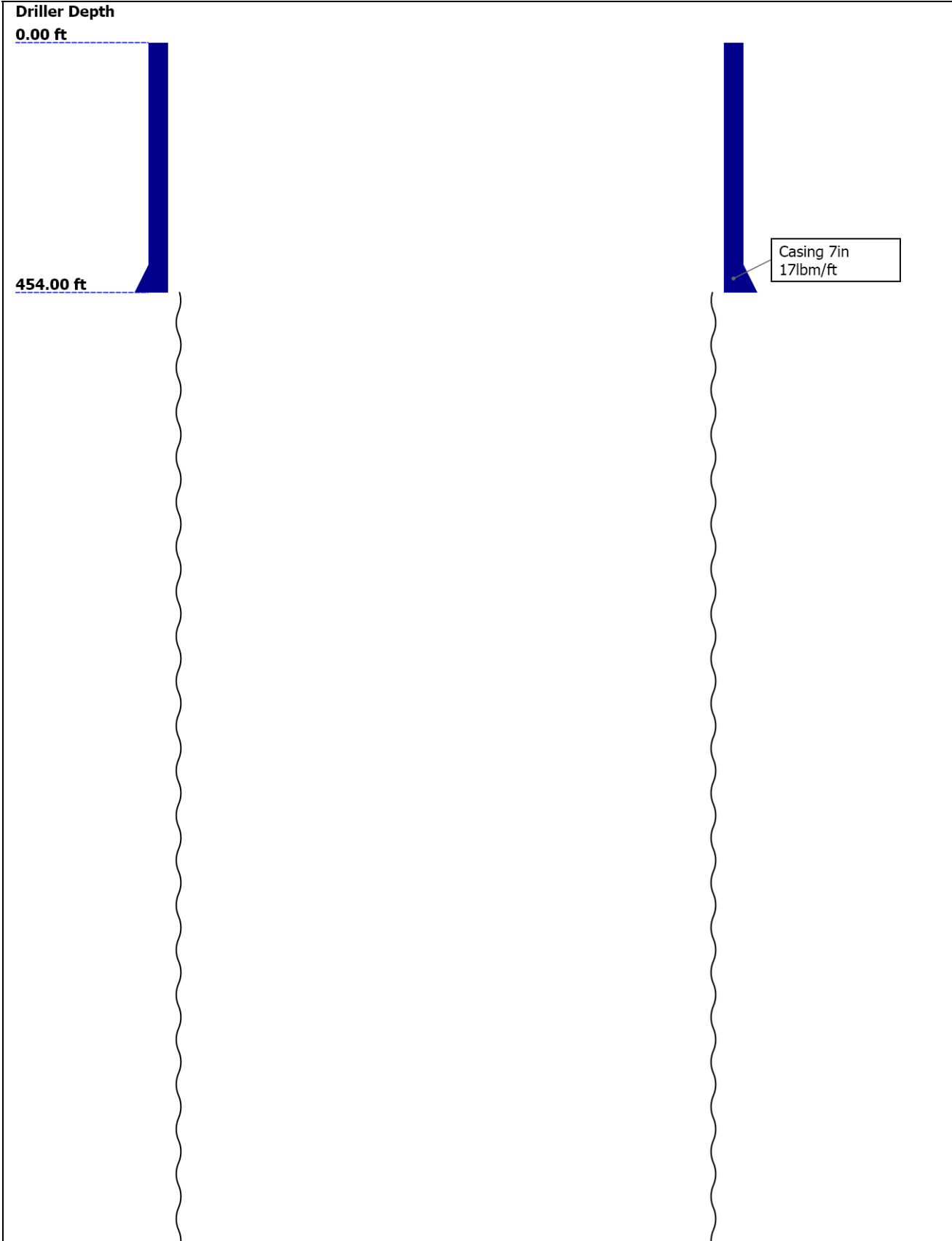
11.3 Composite Summary

11.4 Log (EMD 5in Density)

11.5 Parameter Listing

12. Tail

Well Sketch



2736.00 ft

Open Hole 6.25in

Borehole Size/Casing/Tubing Record

Bit						
Bit Size (in)	6.25					
Top Driller (ft)	454					
Top Logger (ft)	473					
Bottom Driller (ft)	2736					
Bottom Logger (ft)	2732					
Casing						
Size (in)	7					
Weight (lbm/ft)	17					
Inner Diameter (in)	6.54					
Top Driller (ft)	0					
Top Logger (ft)	0					
Bottom Driller (ft)	454					
Bottom Logger (ft)	473					

Operational Run Summary

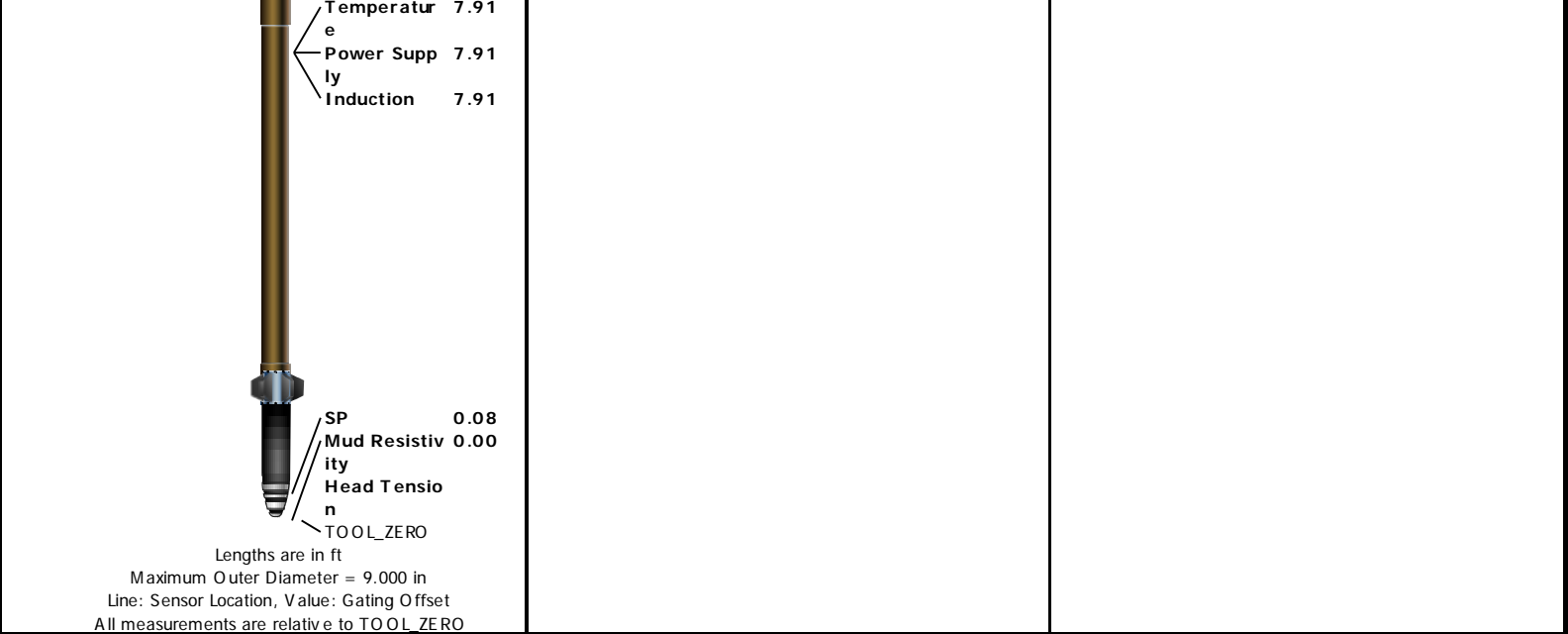
Parameter (unit)	Run 1					
Date Log Started	26-Jun-2013					
Time Log Started	23:59:39					
Date Log Finished	27-Jun-2013					
Time Log Finished	01:28:16					
Top Log Interval (ft)	473.00					
Bottom Log Interval (ft)	2732.00					
Total Depth (ft)	2732.00					
Max Hole Deviation (deg)	1.29					
Azimuth of Max Deviation (deg)	166.66					
Bit Size (in)	6.250					
Logging Unit Number	2154					
Logging Unit Location	Fort Morgan					
Recorded By	Arvin Shi					
Witnessed By	Paul Dekaye					
Service Order Number	C6VJ-00062					

Remarks and Equipment Summary

Run 1: Toolstring

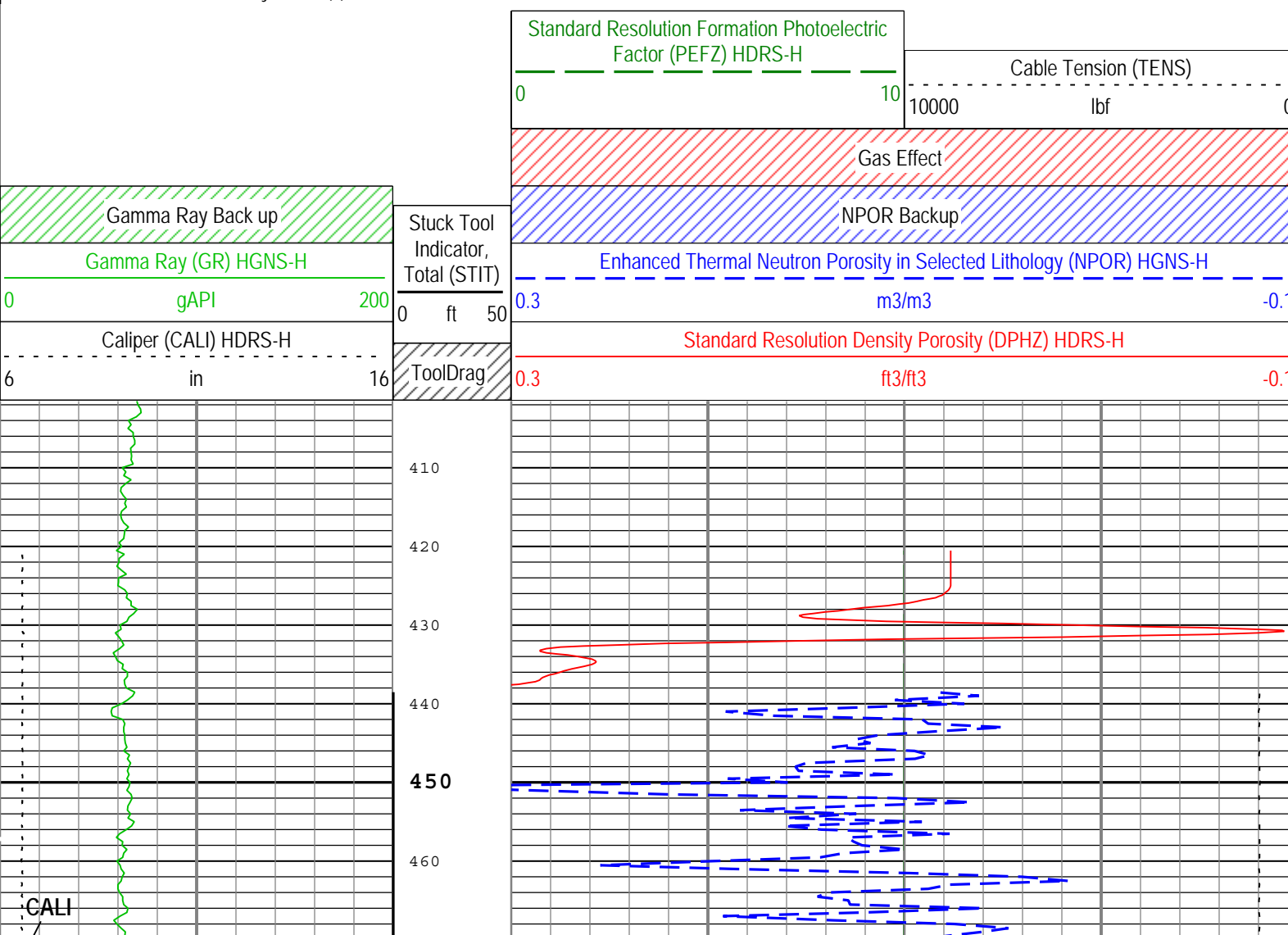
Run 1: Remarks

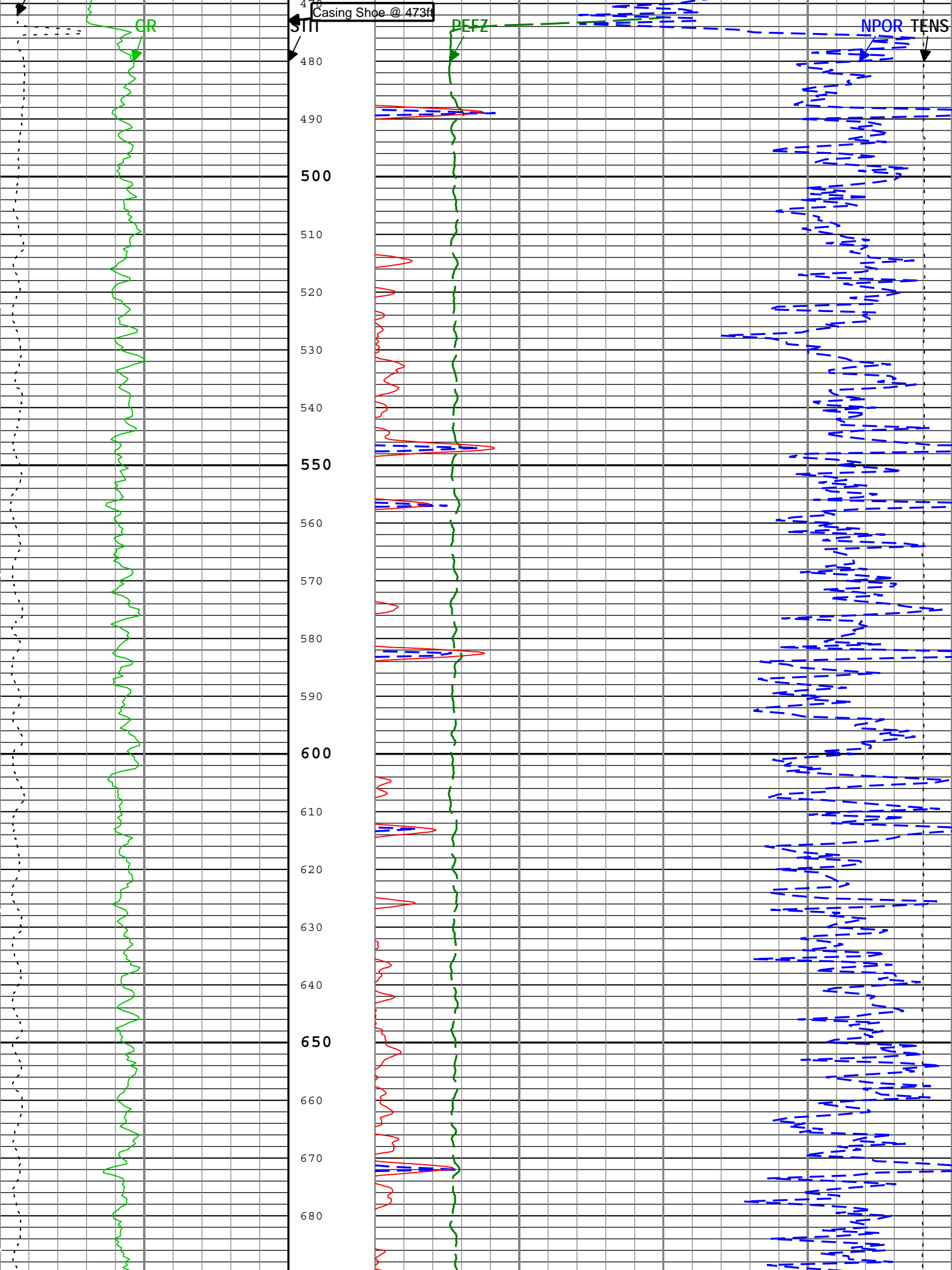
Equip name	Length	MP name	Offset
LEH-QT LEH-QT	55.57		
DTC-H ECH-KC DTC-H	52.65	CTEM HV	51.75 0.00
A daptor_Head	49.65	TelStatus ToolStatus	49.65 49.65
GPIT-F GPIH-B DHRU-F GPIC-F	41.65	GPIT-F Incl inometer	40.23
HGNS-H HGNH NPV-N NSR-F:2554 HMCA-H HACCZ-H:6991 HGNS-H	37.65	GPIT Temperature GR	0.00 37.62 36.91
HDRS-H ECH-MEB HRCC-H HRMS-H GPV-Q Long Spacing:28 620 HRGD-H:3870 Short Spacing Backscatter GSR-J:5471	28.24	CNL Porosity HGNS HMCA Accelerometer HRCC	30.57 28.24 28.24 0.00 24.24
AIT-H:392 AHIS:392 AHRM	16.00	MCFL Caliper TLD Density	18.81 18.33 17.94

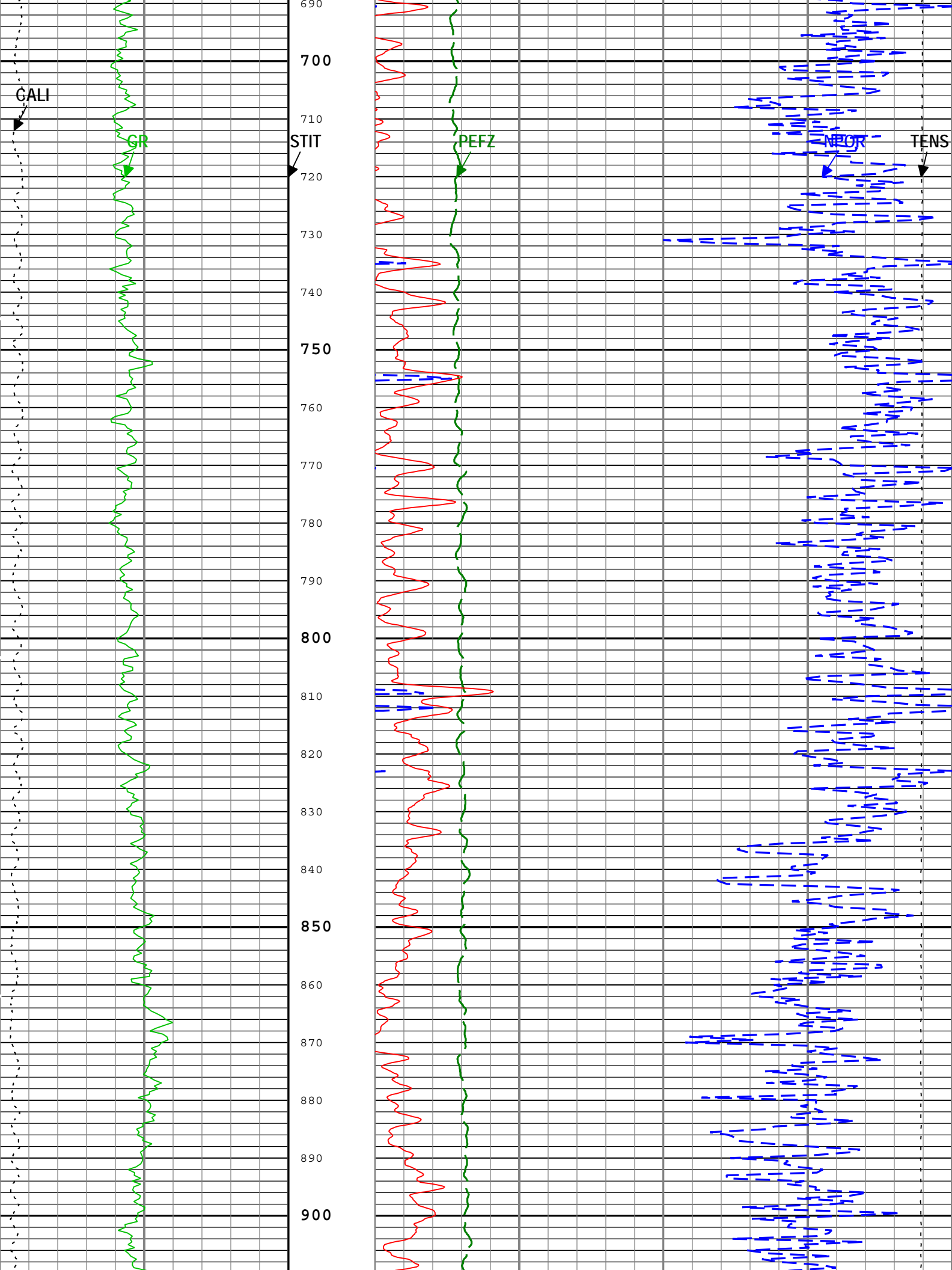


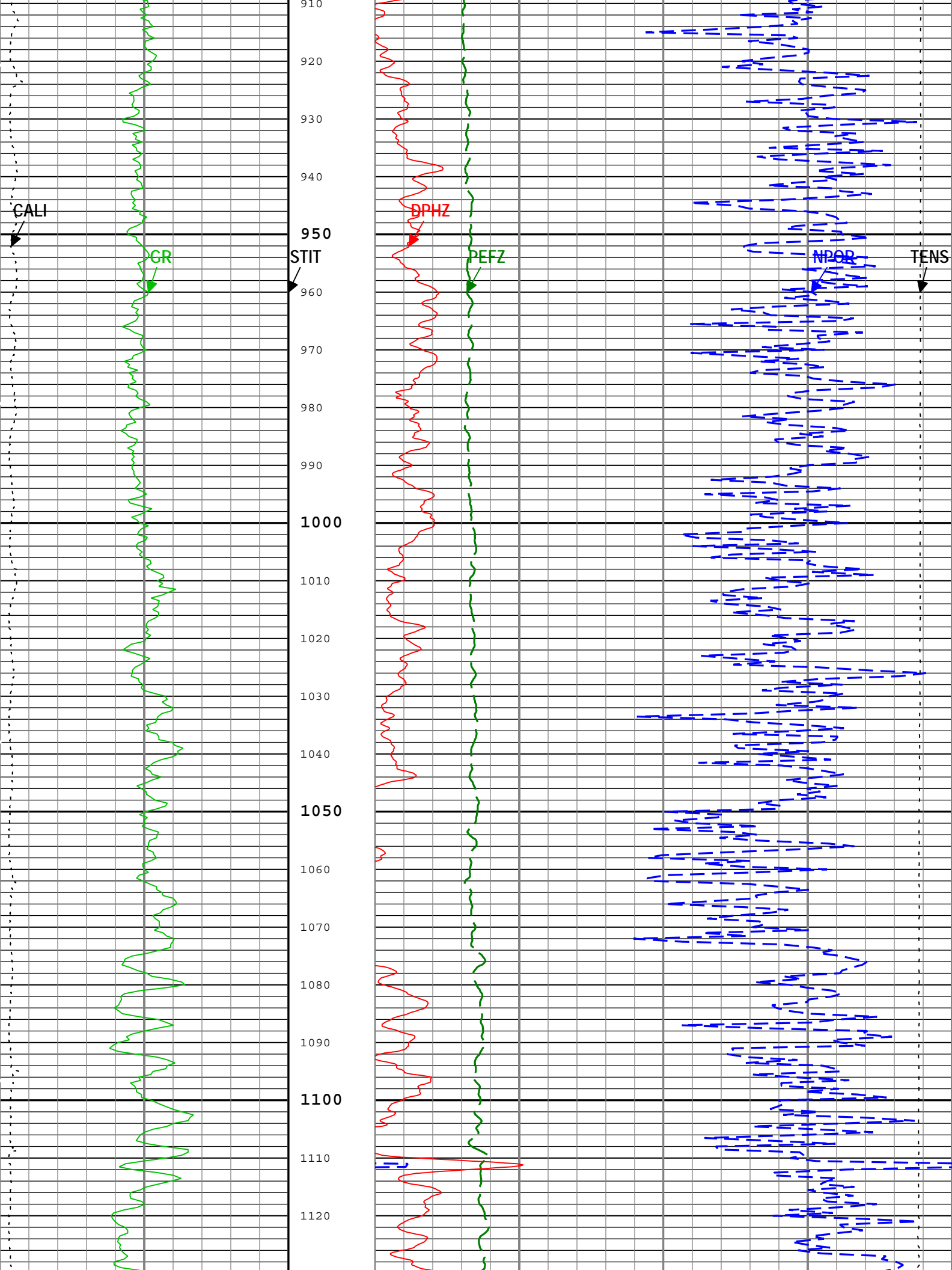
Depth Summary			
Depth Control Parameters	Run 1		
Conveyance Type	Wireline		
Rig Type	Land		
Depth Measuring Device	Run 1		
Type	IDW-JA		
Serial Number	6122		
Calibration Date	19-Jun-2013		
Calibration Cable Type	7-46 P-LXS		
Wheel Correction 1	-2		
Wheel Correction 2	-3		
Tension Device	Run 1		
Type	CMTD-B/A		
Serial Number	1433		
Calibration Date	21-Jun-2013		
Calibration Points	10		
Calibration RMS	6		
Calibration Peak Error	9		
Logging Cable	Run 1		
Type	7-46NT-XS		
Logging Cable Length (ft)	24000.00		
Run 1			

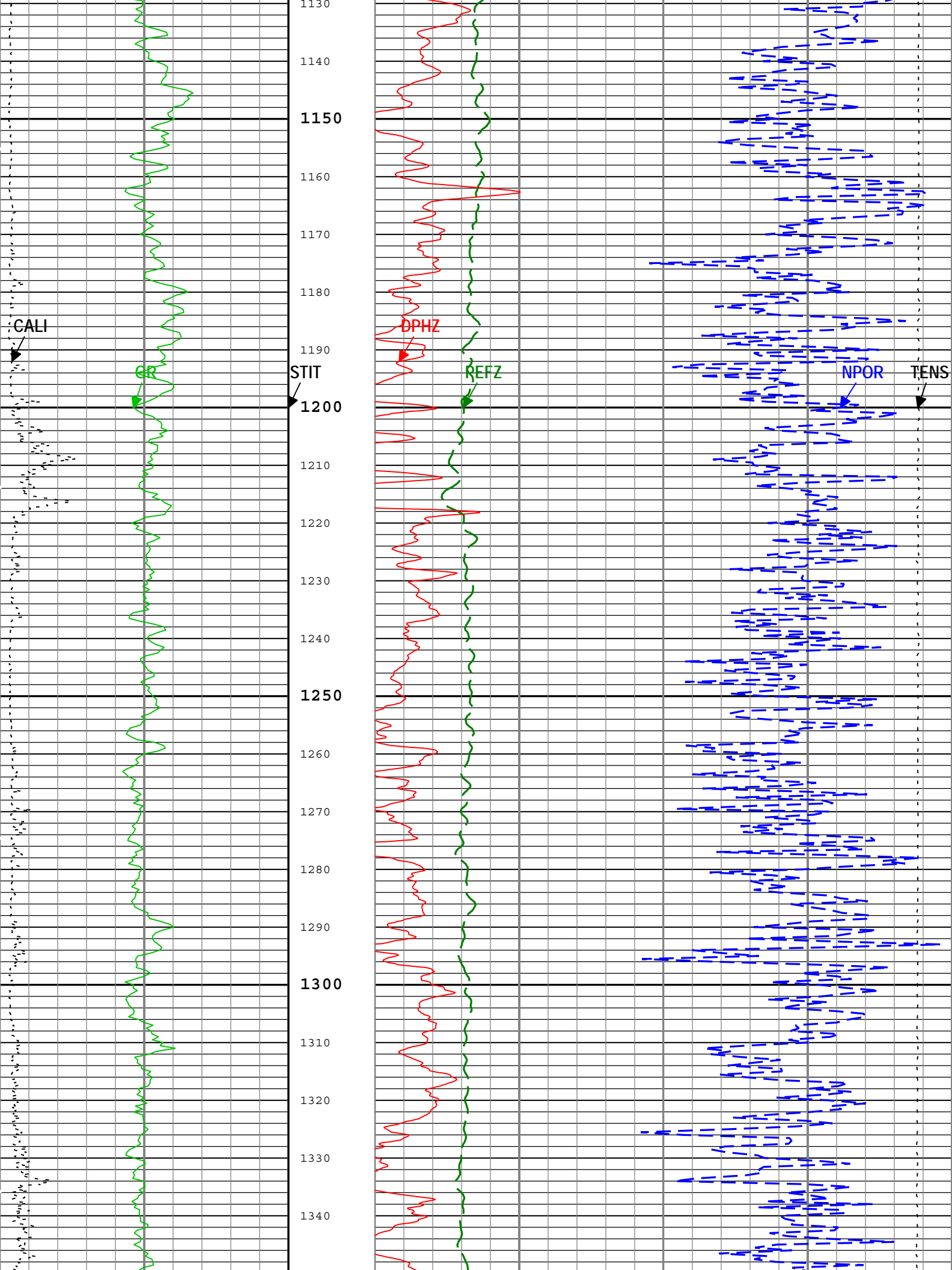
Integration Summary				
Output Channel(s)	Output Description	Input Parameter	Output Value	Unit
Software Version				
Acquisition System		Version		
MaxWell		3.1.9755.0		
Application Patch		SP-20130325-3.1.9755.1799		
Computation	Description			Version
HENVIR	Computation Ensemble for the HGNS Neutron environmental corrections			3.1.9755.0
DepthCorrection	DepthCorrection			3.1.9755.1799

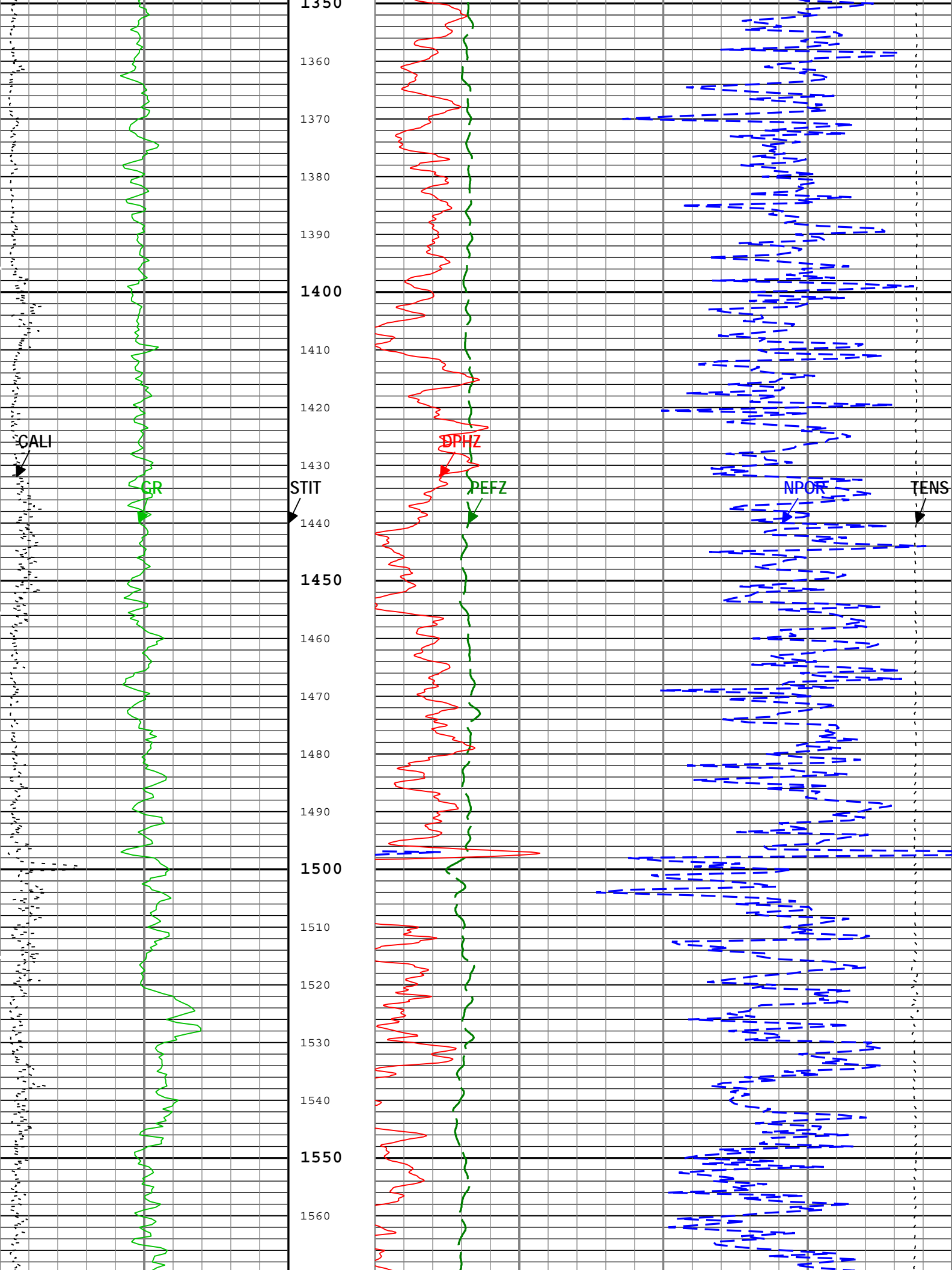


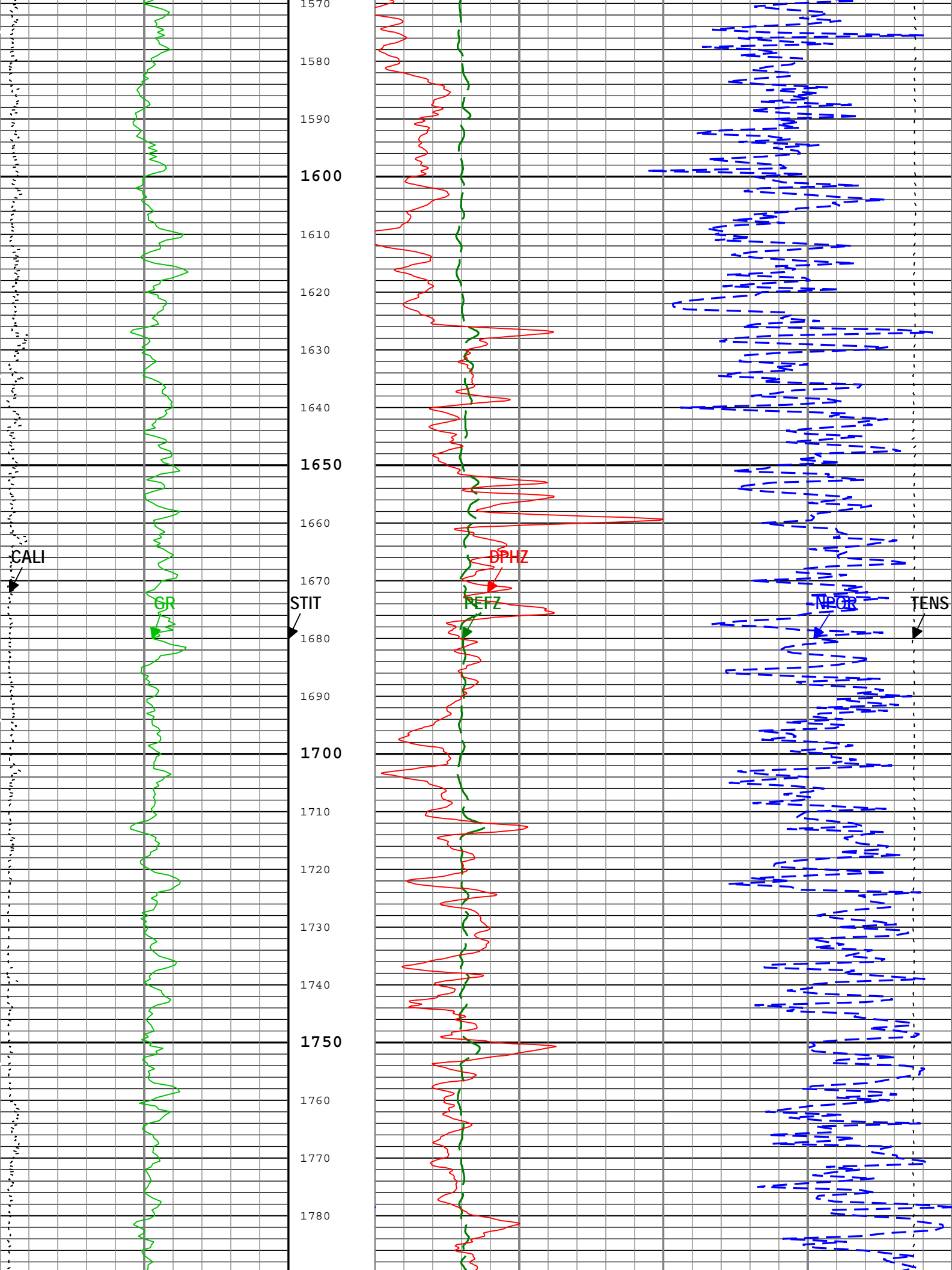


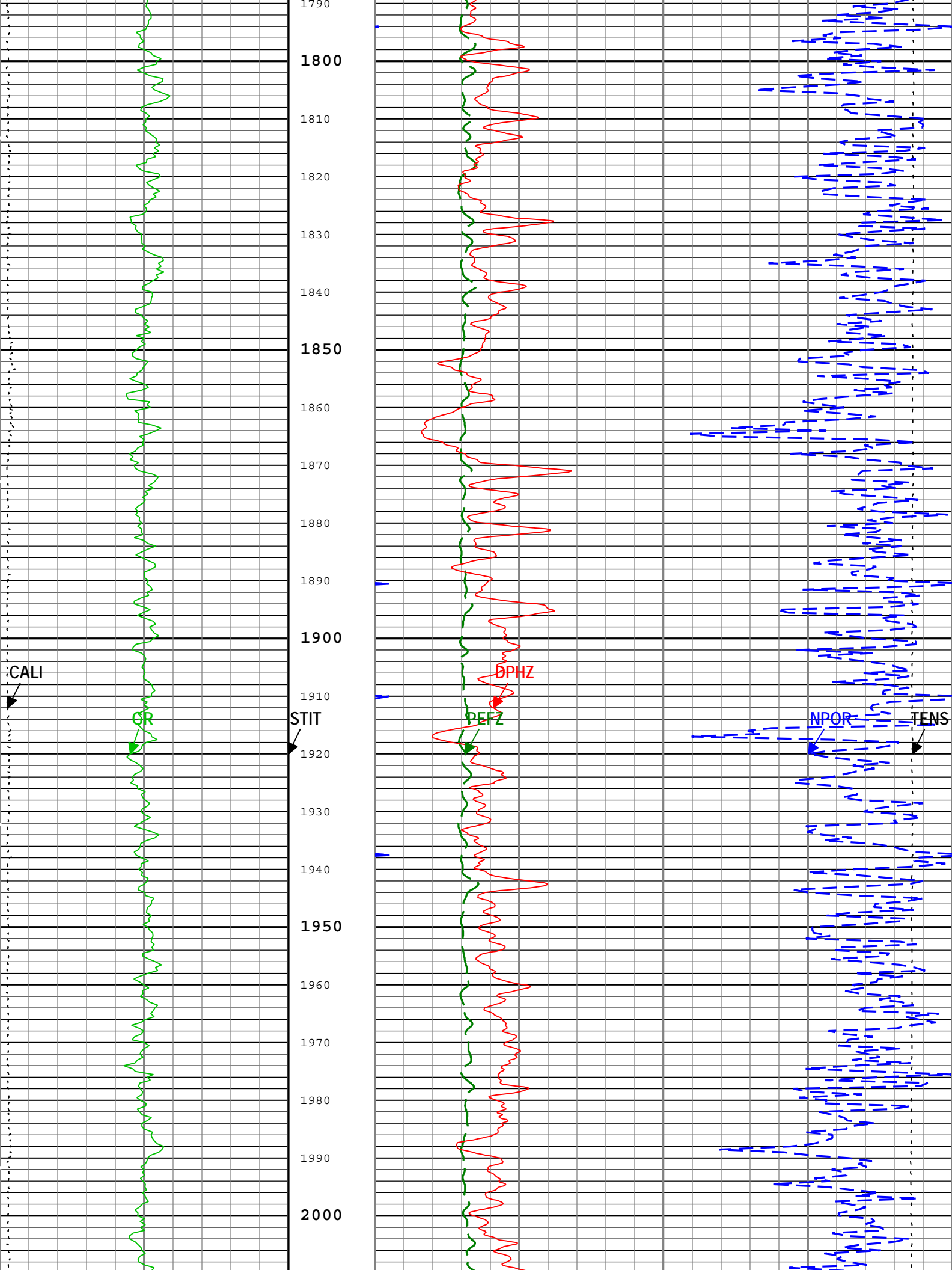


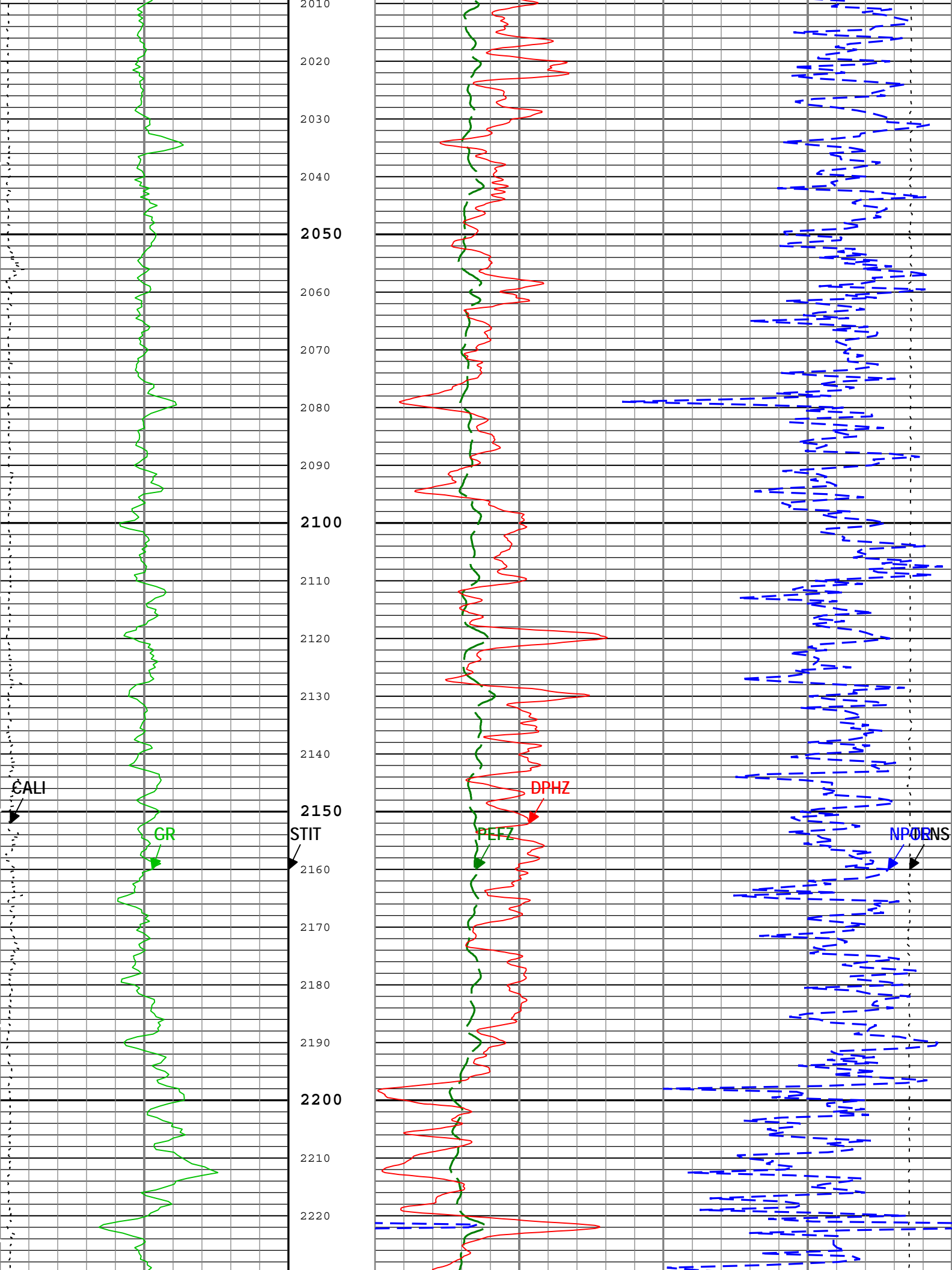


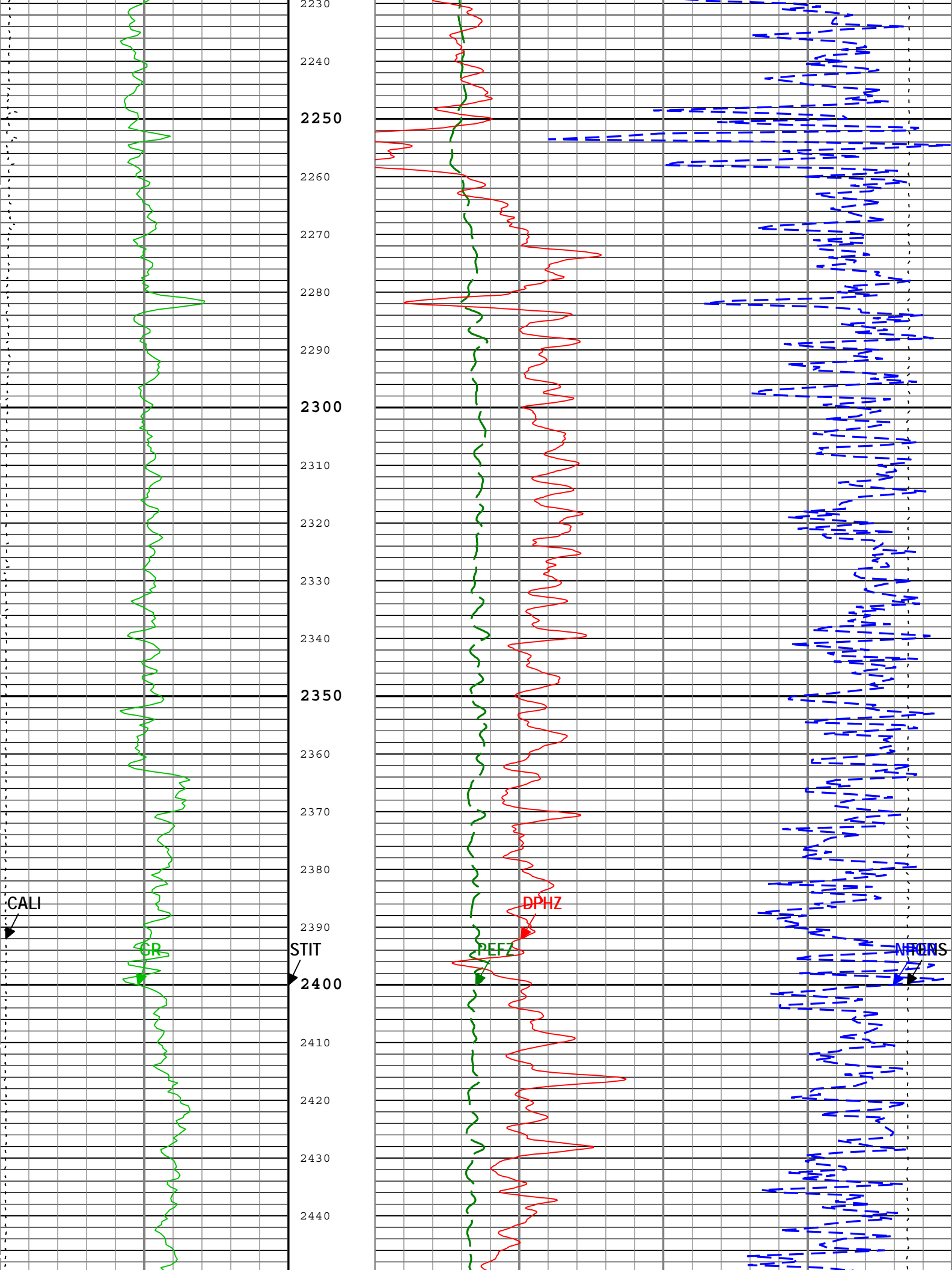


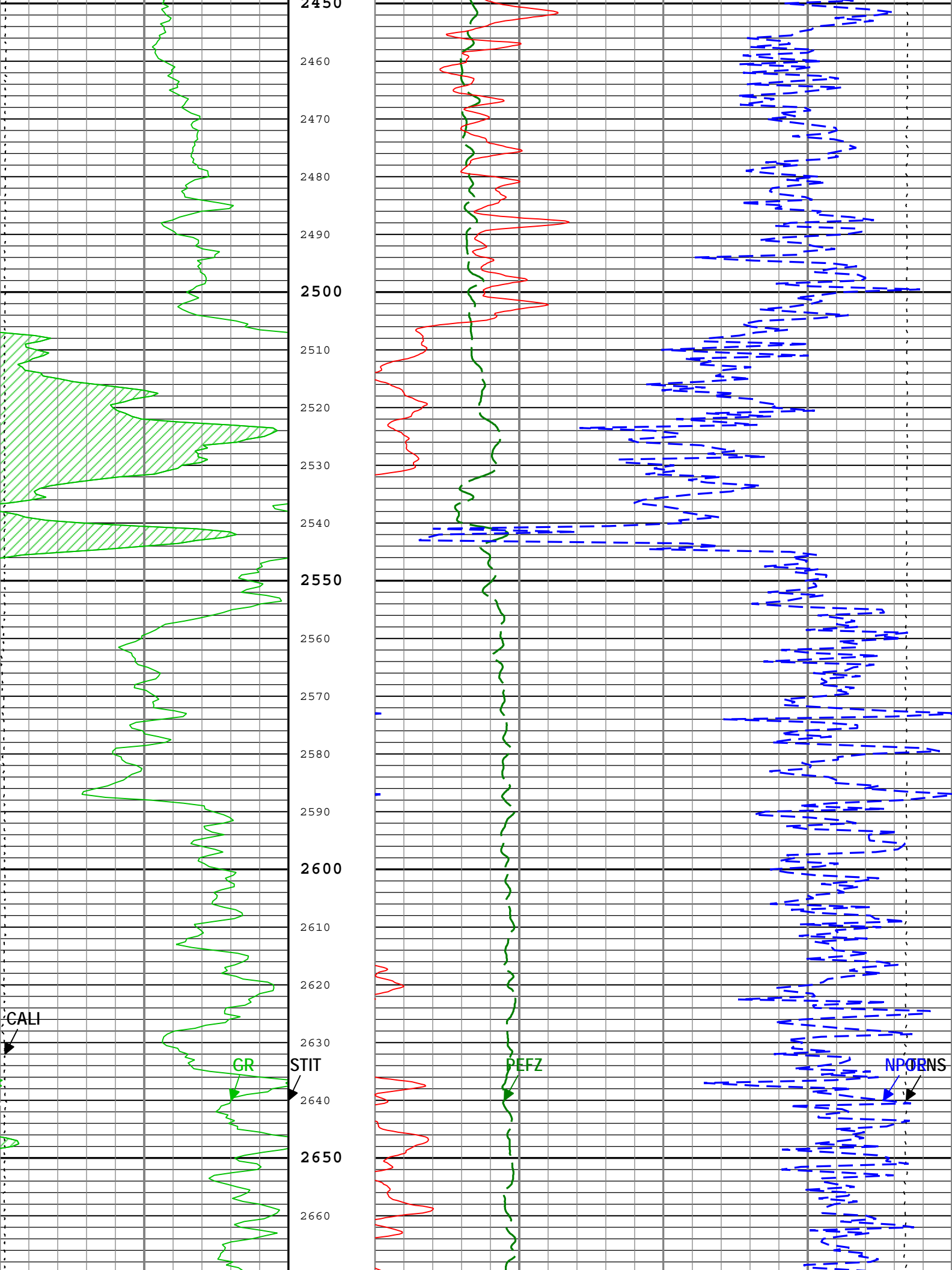


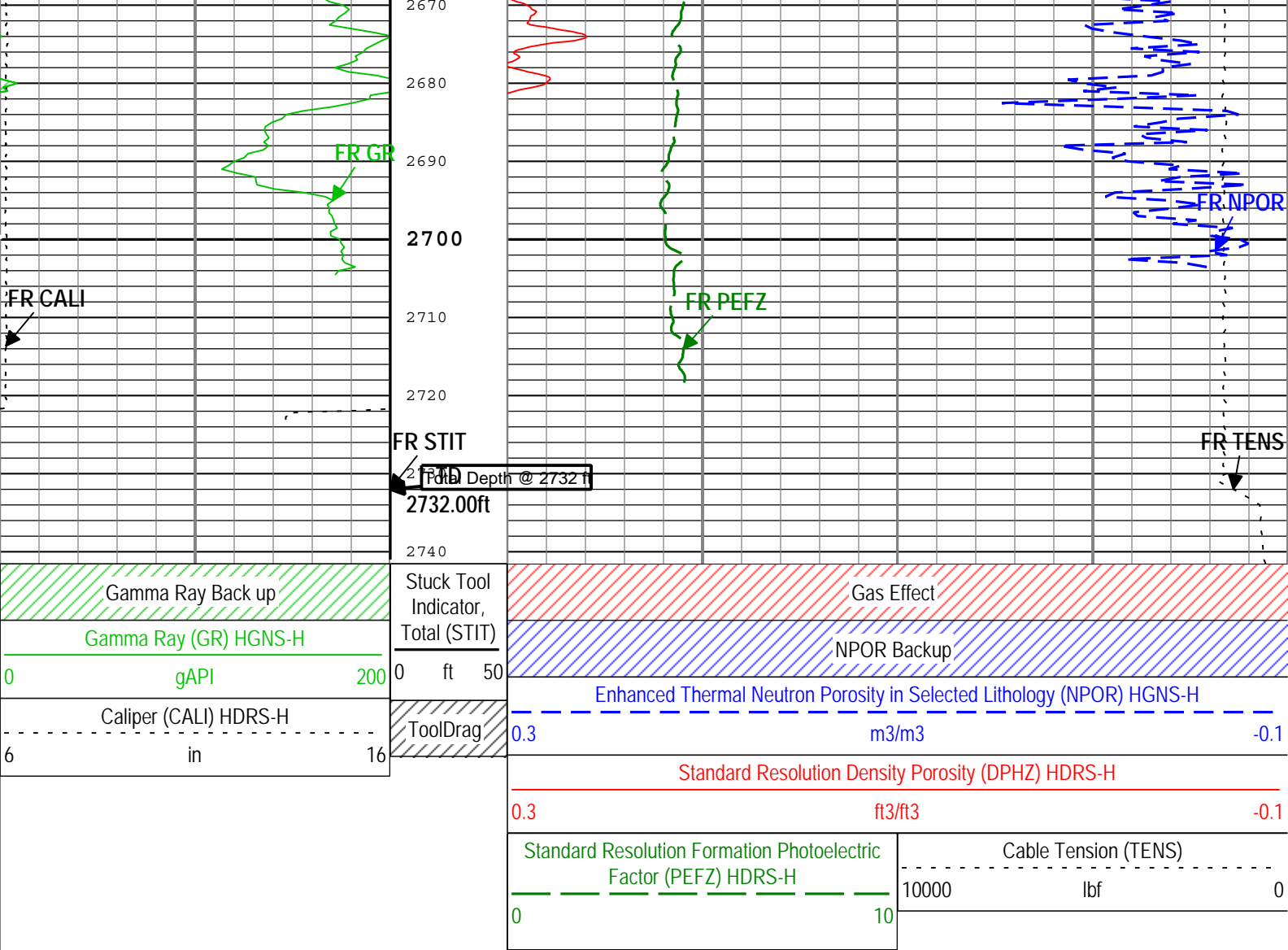












Channel Processing Parameters				
Parameter	Description	Tool	Value	Unit
BARI	Barite Mud Presence Flag	Borehole	No	
BHS	Borehole Status (Open or Cased Hole)	Borehole	Open	
BS	Bit Size	WLSESSION	Depth Zoned	in
BSAL	Borehole Salinity	Borehole	56786.09	ppm
CALI_SHIFT	CALI Supplementary Offset	HDRS-H	0	in
CBLO	Casing Bottom (Logger)	WLSESSION	473	ft
CDEN	Cement Density	HGNS-H	2	g/cm3
DC_MODE	Depth Correction Mode	DepthCorrection	Real-time	
DFD	Drilling Fluid Density	Borehole	9	lbm/gal
DFT	Drilling Fluid Type	Borehole	Water	
DFT_WATER	Drilling Fluid Water Type	Borehole	Fresh Water	
DHC	Density Hole Correction	HDRS-H	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-H	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	81.6	degF
RMFS	Resistivity of Mud Filtrate Sample	Borehole	0.08	ohm.m
SOCO	Standoff Correction Option	HGNS-H	Yes	
TD	Total Measured Depth	Borehole	2732	ft

Depth Zone Parameters			
Parameter	Value	Start (ft)	Stop (ft)
BS	0	401.5	473
BS	6.25	473	2741.5
All depth are actual.			

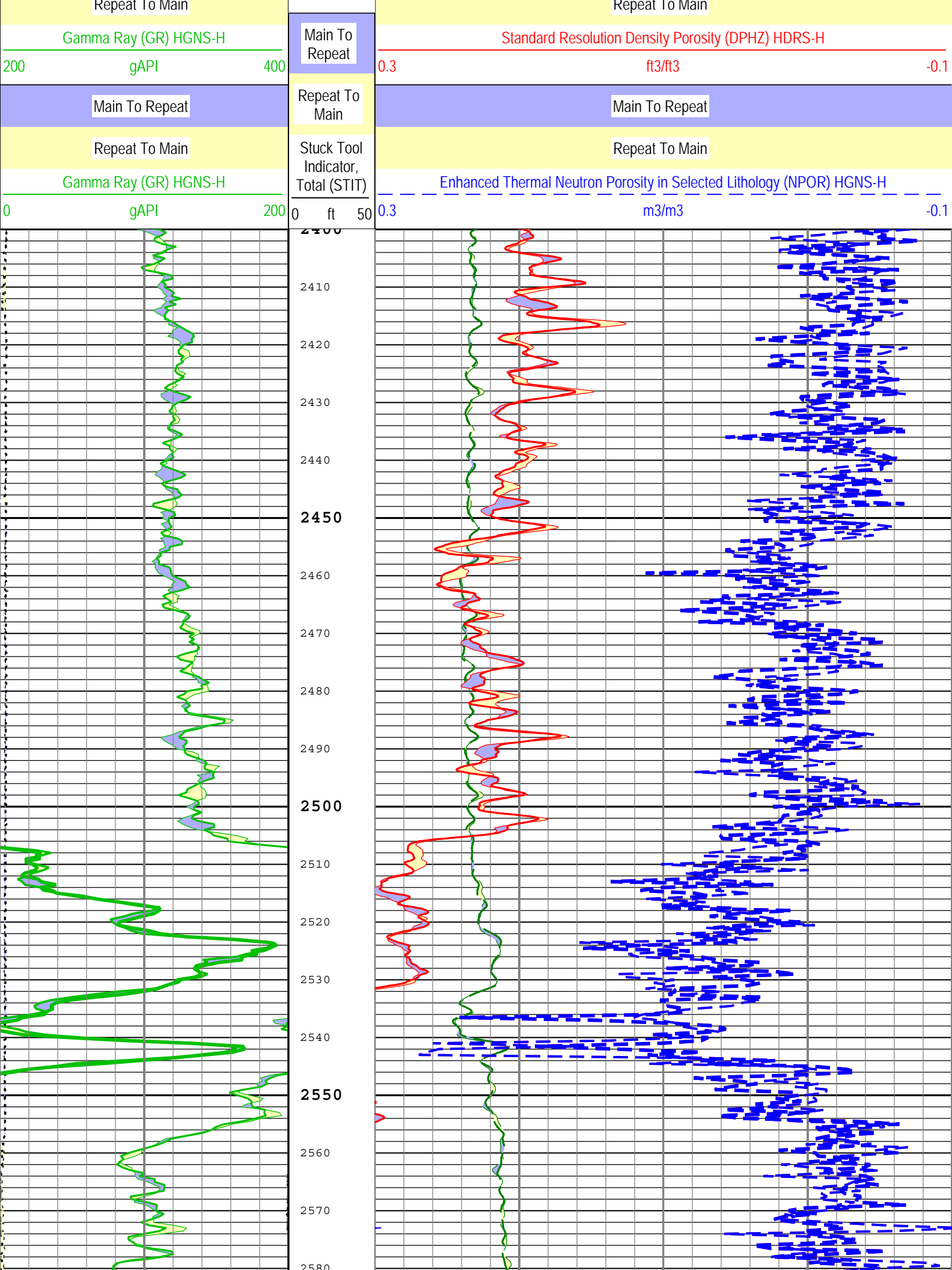
Tool Control Parameters				
Parameter	Description	Tool	Value	Unit
HMCA_BRD_TYPE	HMCA Board Type	HGNS-H	1	
HRGD_BRD_TYPE	HRGD Board Type	HDRS-H	WITH_HET	
MAX_LOG_SPEED	Toolstring Maximum Logging Speed	WLSESSION	3600	ft/h

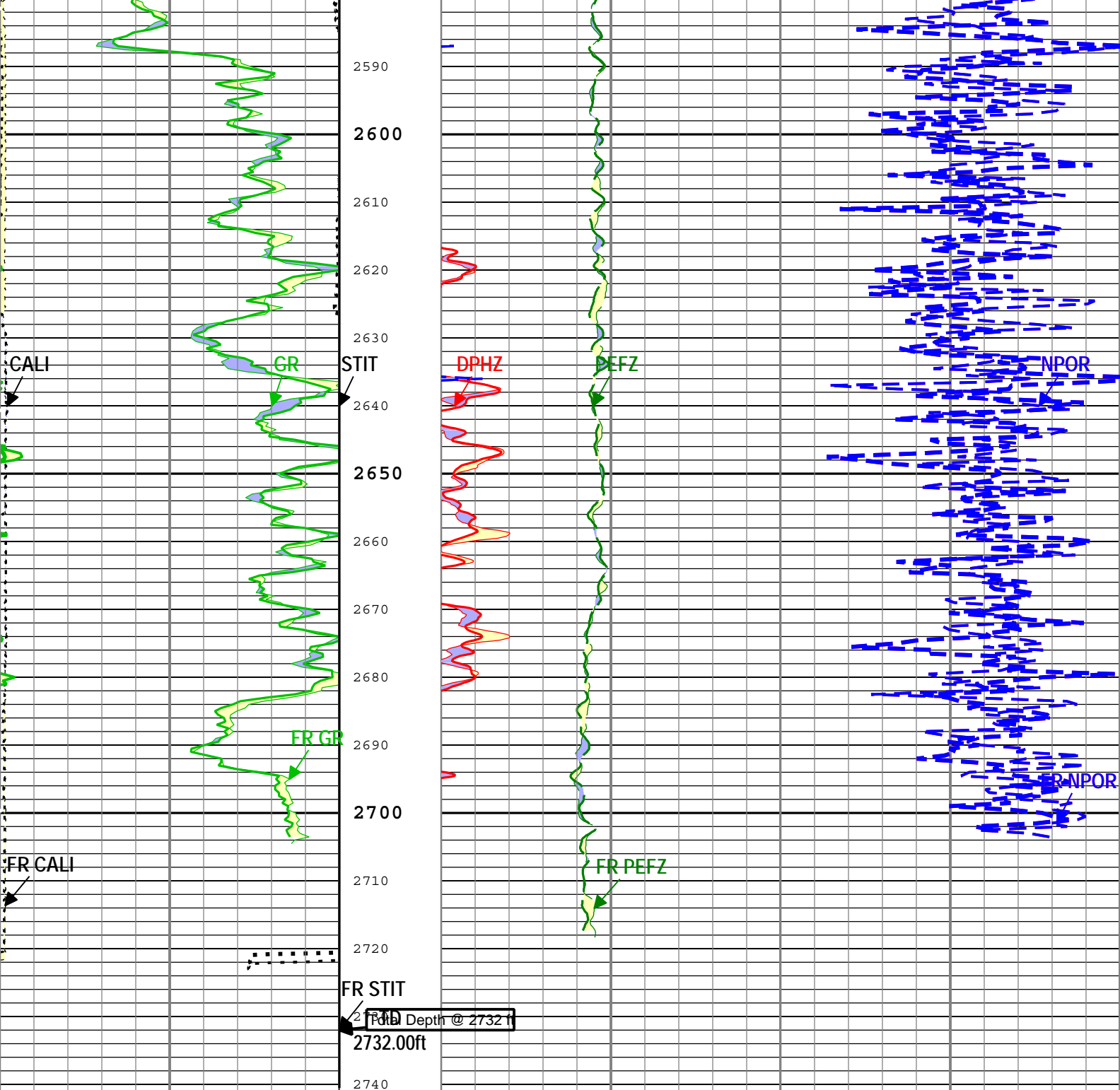
Run 1								

Pass Summary								
Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	Depth Shift	Include Parallel Data
Run 1	Log[2]:Up	Up	2333.58 ft	2740.57 ft	27-Jun-2013 12:24:54 AM	27-Jun-2013 12:32:30 AM	0.00 ft	true
Run 1	Log[3]:Up	Up	438.30 ft	2741.44 ft	27-Jun-2013 12:37:15 AM	27-Jun-2013 1:23:52 AM	0.00 ft	true
All depths are referenced to toolstring zero								

Log			Run 1: Log[3]:Up		
Description: HGNS standard resolution porosities for Platform Express Format: EMD 5in Porosity RA Index Scale: 5 in per 100 ft Index Unit: ft Index Type: Measured Depth Creation Date: 27-Jun-2013 02:03:20					
Channel	Source	Sampling			
TIME_1900	WLWorkflow	0.1in			

TIME_1900 - Time Marked every 60.00 (s)								
			<div> <div>Main To Repeat</div> <div>Repeat To Main</div> <div>Standard Resolution Formation Photoelectric Factor (PEFZ) HDRS-H</div> <div>010</div> </div>					
<div> <div>Main To Repeat</div> <div>Repeat To Main</div> <div>Caliper (CALI) HDRS-H</div> <div>6in16</div> </div>			<div> <div>Main To Repeat</div> <div>Repeat To Main</div> <div>Enhanced Thermal Neutron Porosity in Selected Lithology (NPOR) HGNS-H</div> <div>0.3ft3/ft3-0.1</div> </div>					
<div> <div>Main To Repeat</div> <div>Repeat To Main</div> </div>			<div> <div>Main To Repeat</div> <div>Repeat To Main</div> </div>					





Main To Repeat		Main To Repeat	
Repeat To Main		Repeat To Main	
Caliper (CALI) HDRS-H		Enhanced Thermal Neutron Porosity in Selected Lithology (NPOR) HGNS-H	
6	in	0.3	ft3/ft3
Main To Repeat		Main To Repeat	
Repeat To Main		Repeat To Main	
Gamma Ray (GR) HGNS-H		Standard Resolution Density Porosity (DPHZ) HDRS-H	
200	gAPI	0.3	ft3/ft3
Main To Repeat		Main To Repeat	

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

Repeat To Main		
Enhanced Thermal Neutron Porosity in Selected Lithology (NPOR) HGNS-H		
0.3	m3/m3	-0.1
Main To Repeat		
Repeat To Main		
Standard Resolution Formation Photoelectric Factor (PEFZ) HDRS-H		
0		10

TIME_1900 - Time Marked every 60.00 (s)

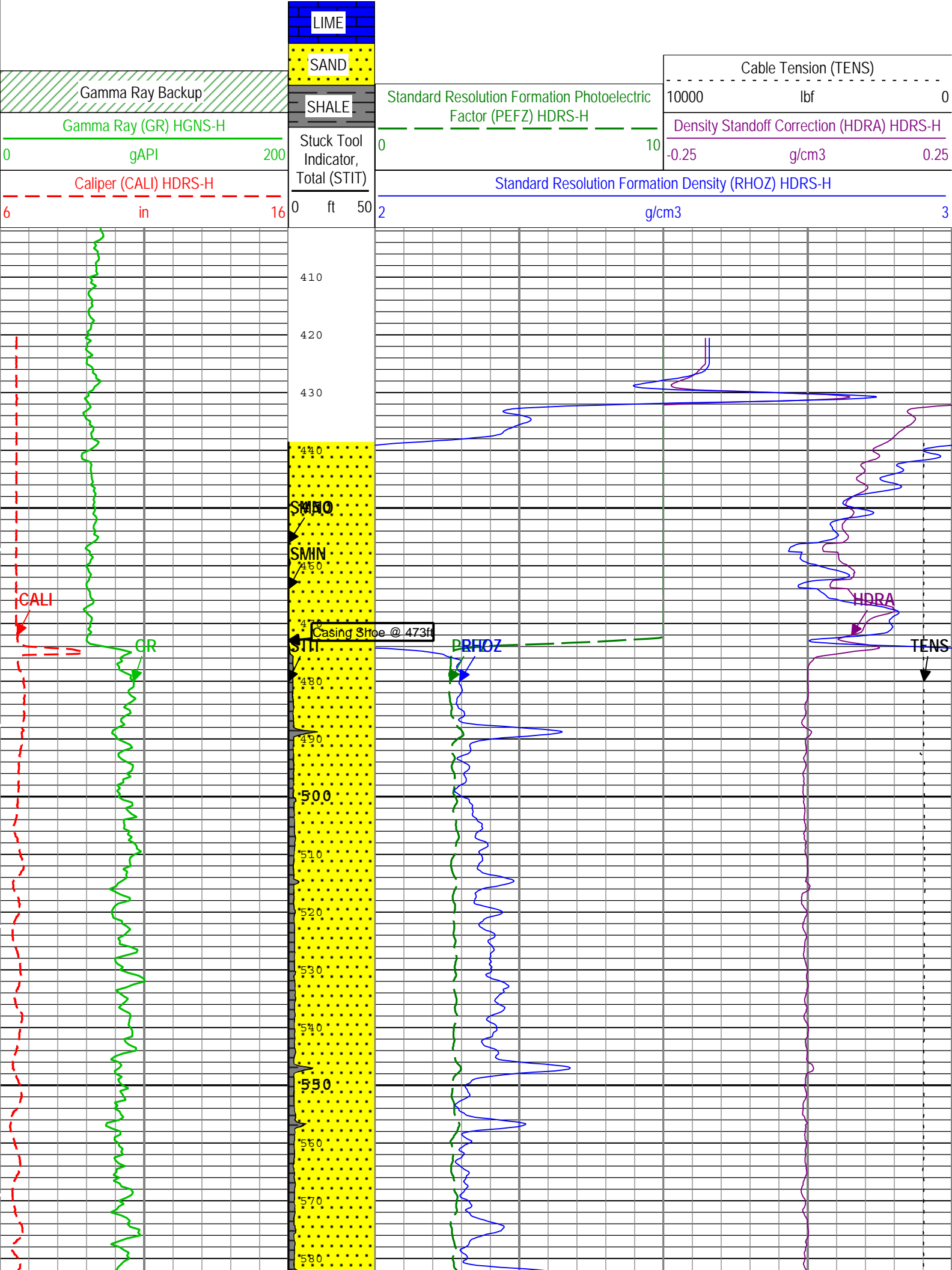
Description: HGNS standard resolution porosities for Platform Express Format: EMD 5in Porosity RA Index Scale: 5 in per 100 ft Index Unit: ft Index Type: Measured Depth Creation Date: 27-Jun-2013 02:03:20

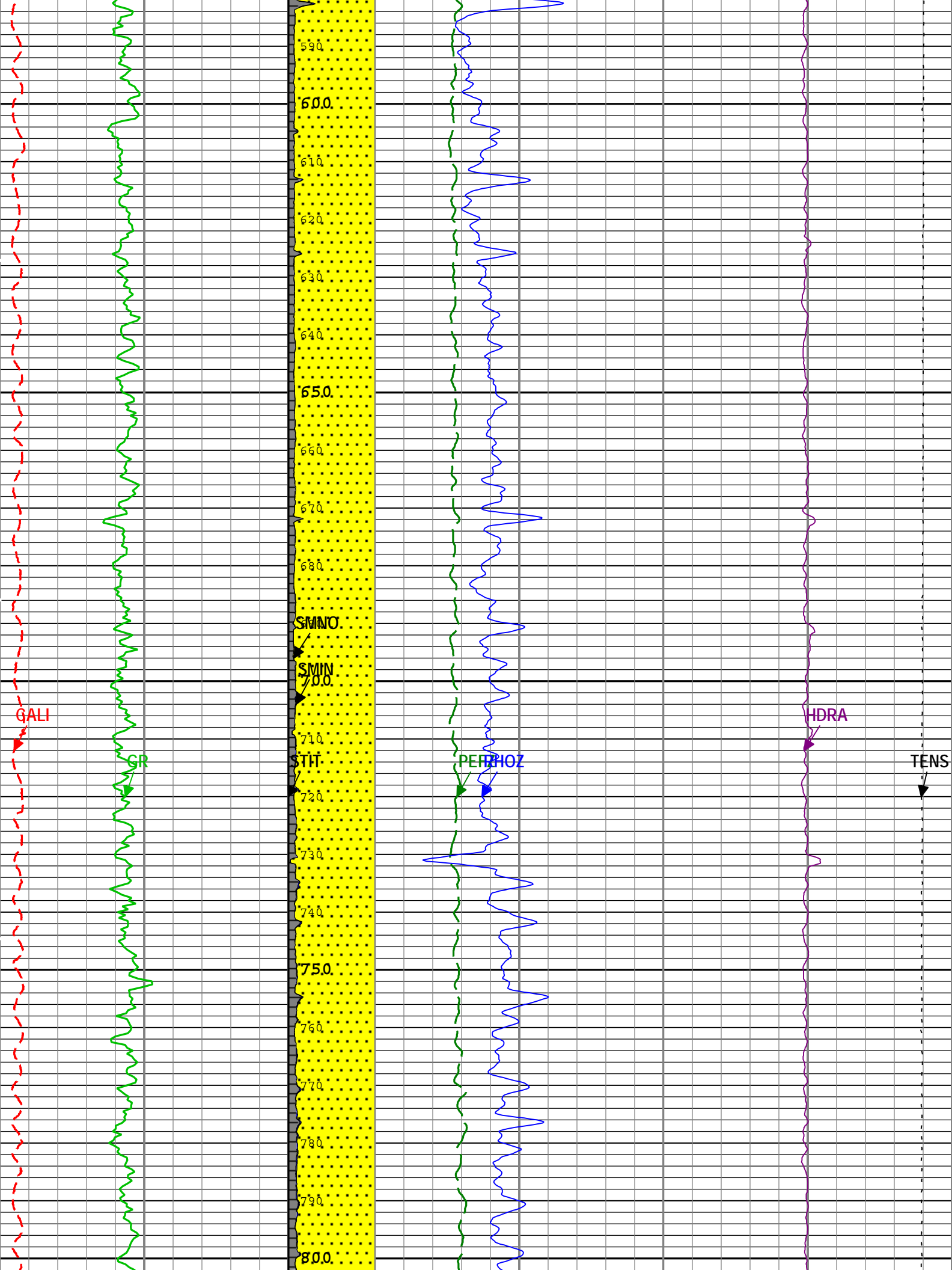
Run 1									
5" Density									
Integration Summary									
Output Channel(s)	Output Description			Input Parameter			Output Value		Unit
Software Version									
Acquisition System						Version			
MaxWell						3.1.9755.0			
Application Patch						SP-20130325-3.1.9755.1799			
Computation		Description					Version		
DepthCorrection		DepthCorrection					3.1.9755.1799		
Tool Elements		Description				Software Version		Firmware Version	
HRCC-H		HILT High-Resolution Control Cartridge, 150 degC				3.1.9755.0		2.0	
HGNS-H		HILT Gamma-Ray and Neutron Sonde, 150 degC				3.1.9755.0		2.0	
HRGD-H		HILT Resistivity Gamma-Ray Density Device, 150 degC				3.1.9755.0		3.0	
Pass Summary									
Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	Depth Shift	Include Parallel Data	
Run 1	Log[3]:Up	Up	438.30 ft	2741.44 ft	27-Jun-2013 12:37:15 AM	27-Jun-2013 1:23:52 AM	0.00 ft	true	
All depths are referenced to toolstring zero									
Log	Run 1: Log[3]:Up								

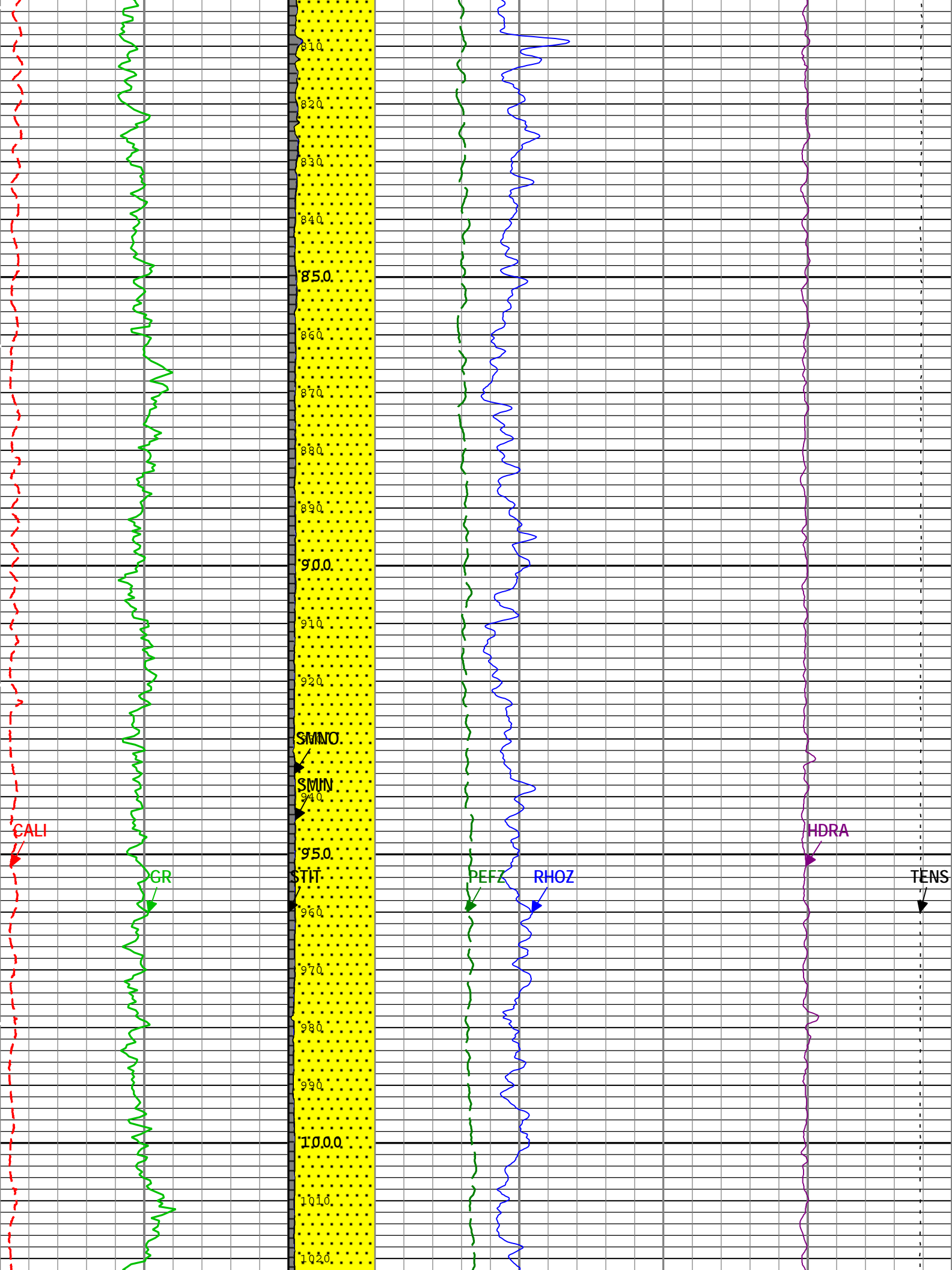
Description: HGNS standard resolution porosities for Platform Express Format: Log (EMD 5in Density) Index Scale: 5 in per 100 ft Index Unit: ft Index Type: Measured Depth Creation Date: 27-Jun-2013 02:03:22

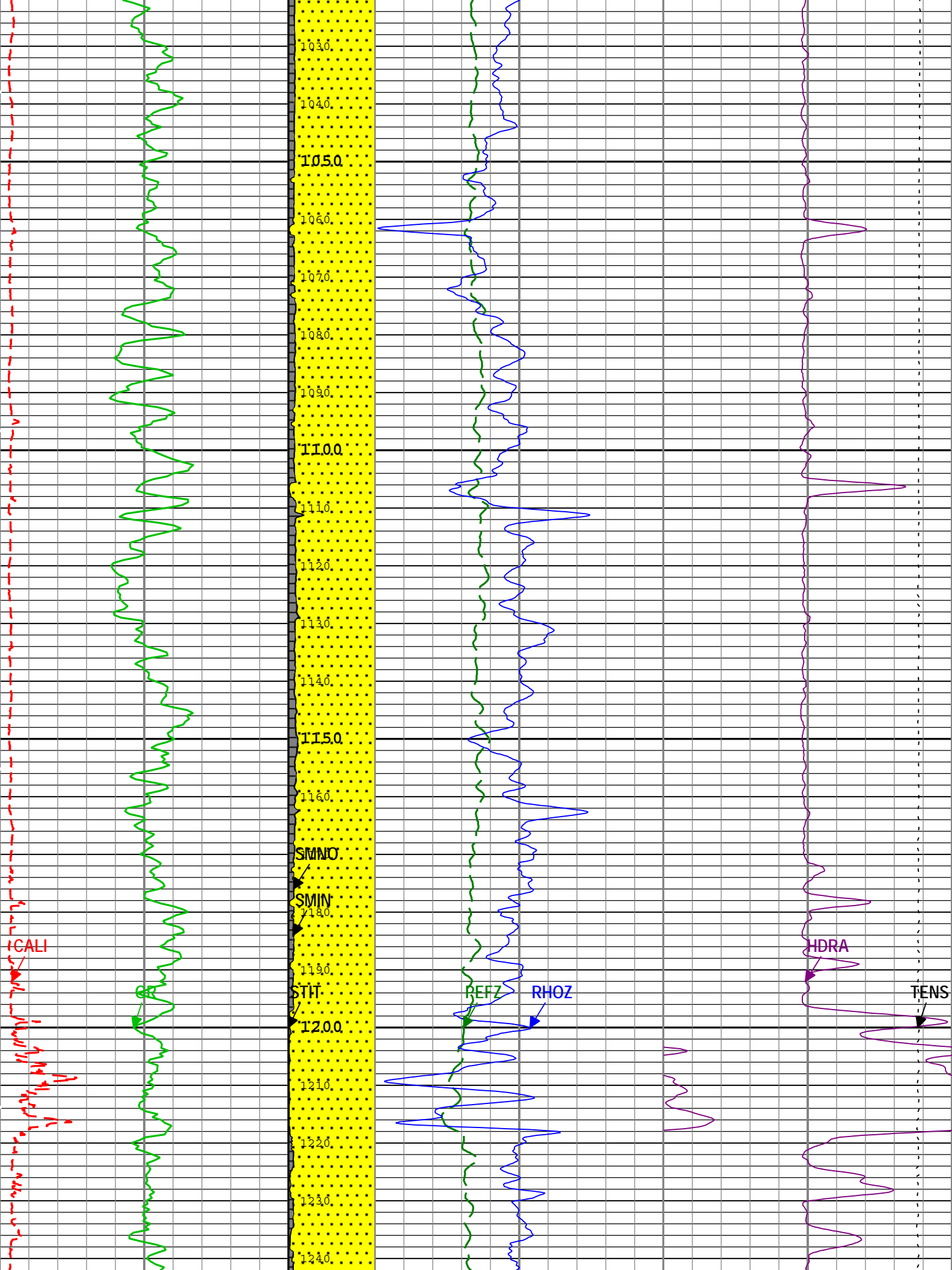
Channel	Source	Sampling
CALI	HDRS-H:HRCC-H:HRCC-H	1in
GR	HGNS-H:HGNS-H:HGNS-H	6in
HDRA	HDRS-H:HRMS-H:HRGD-H	2in
PEFZ	HDRS-H:HRMS-H:HRGD-H	2in
RHOZ	HDRS-H:HRMS-H:HRGD-H	2in
SMIN	HDRS-H:HRMS-H:HRGD-H	2in
SMNO	HDRS-H:HRMS-H:HRGD-H	2in
STIT	DepthCorrection	6in
TENS	WLWorkflow	6in
TIME_1900	WLWorkflow	0.1in

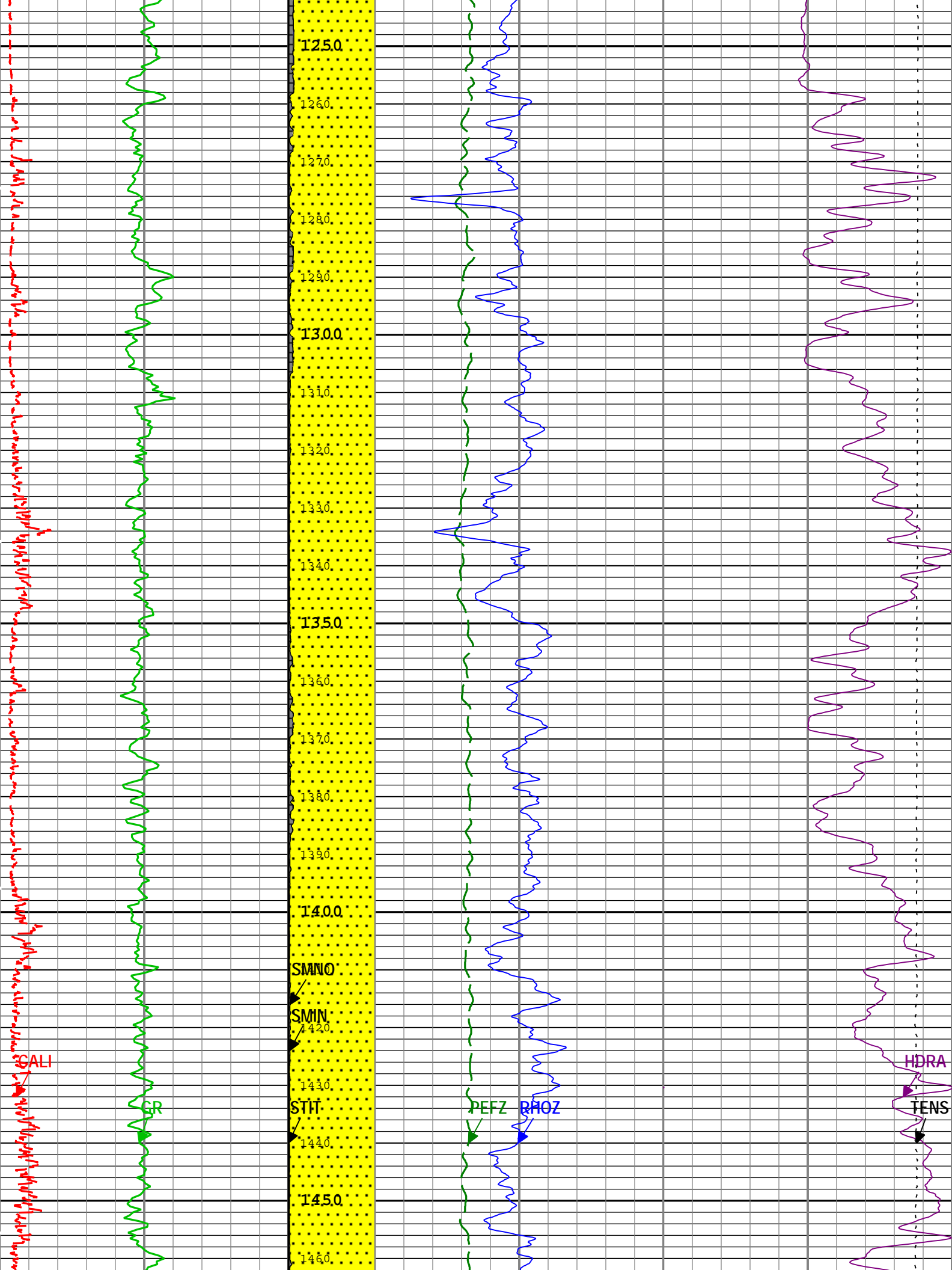
TIME_1900 - Time Marked every 60.00 (s)

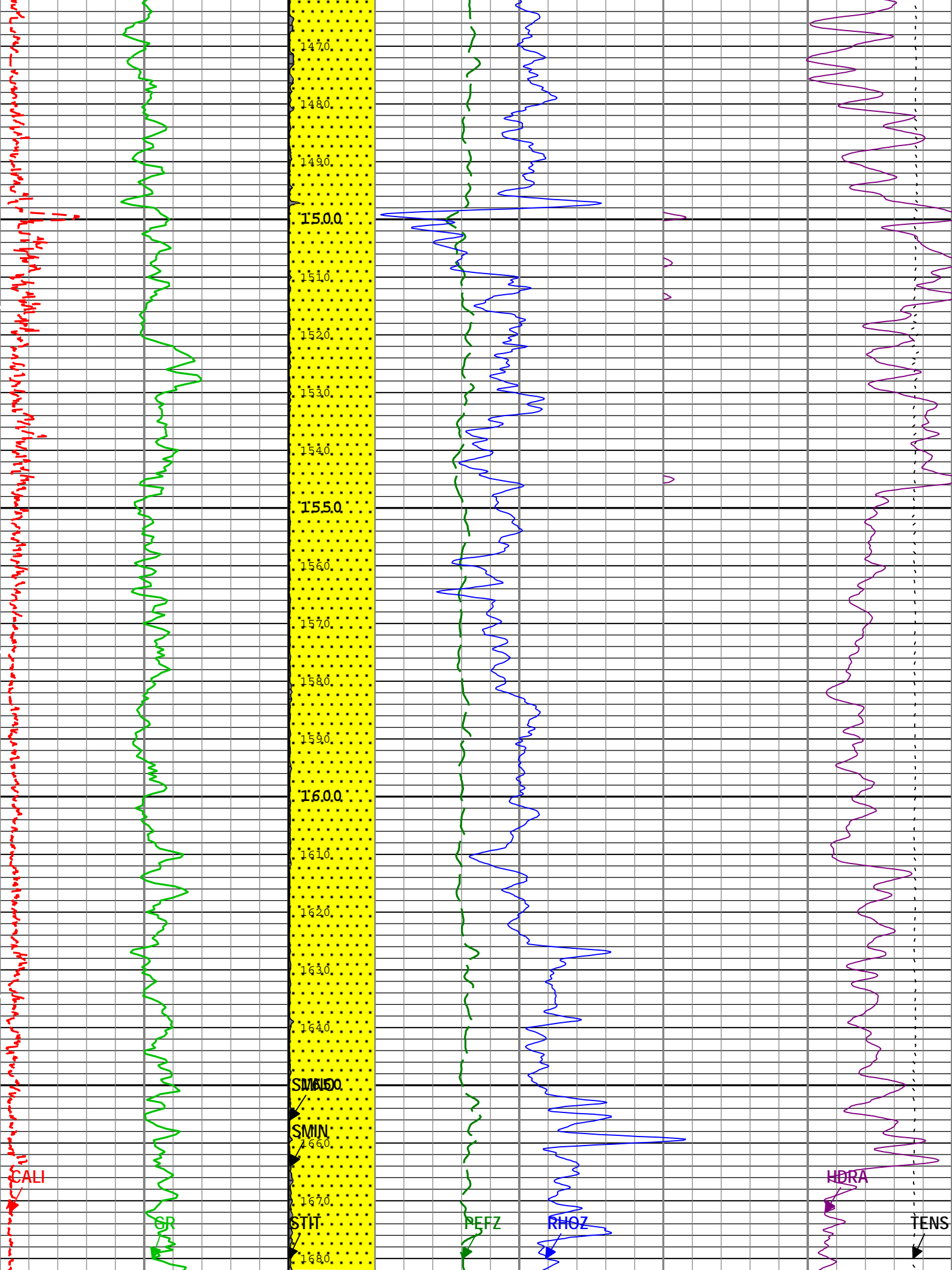


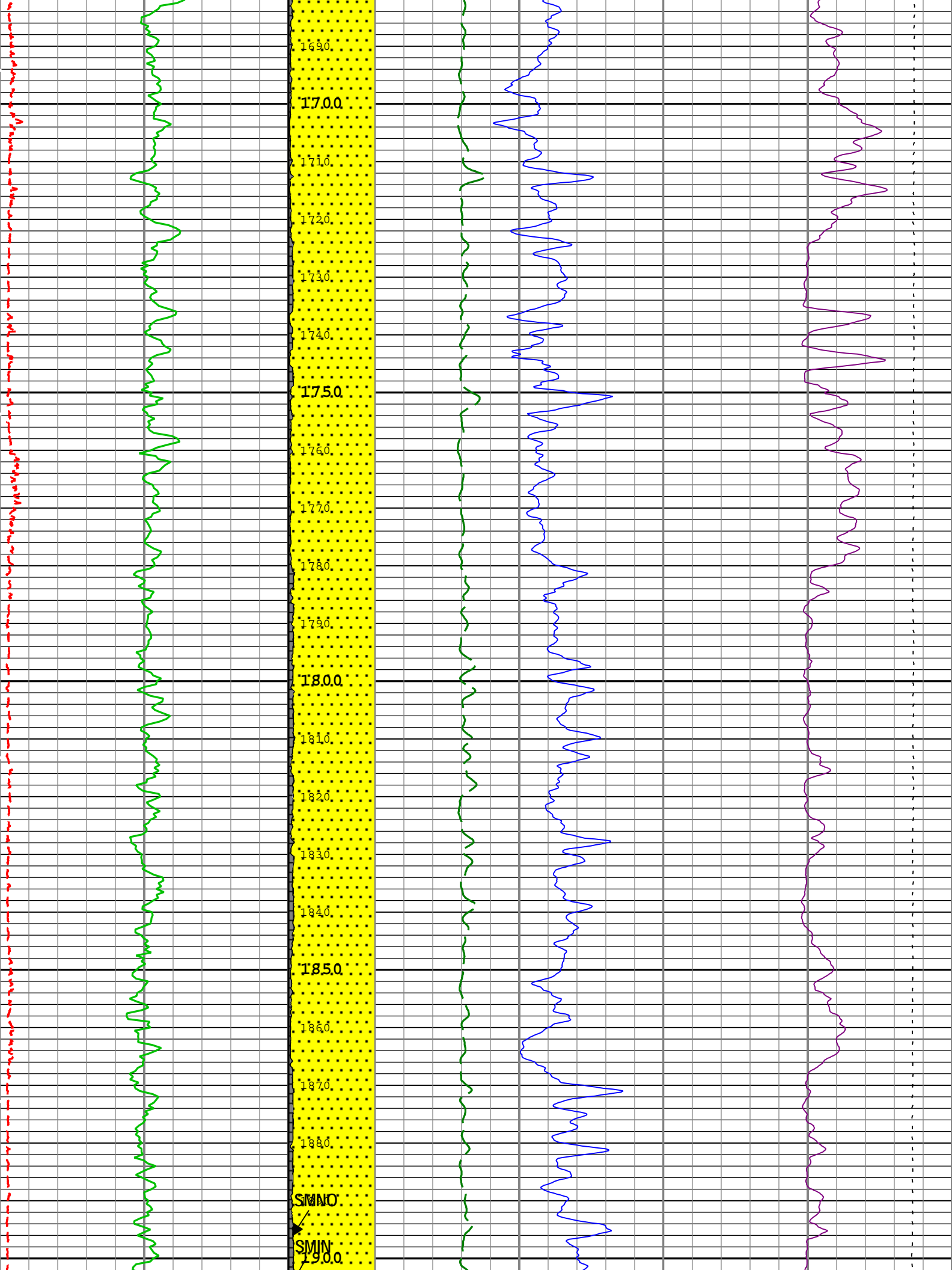


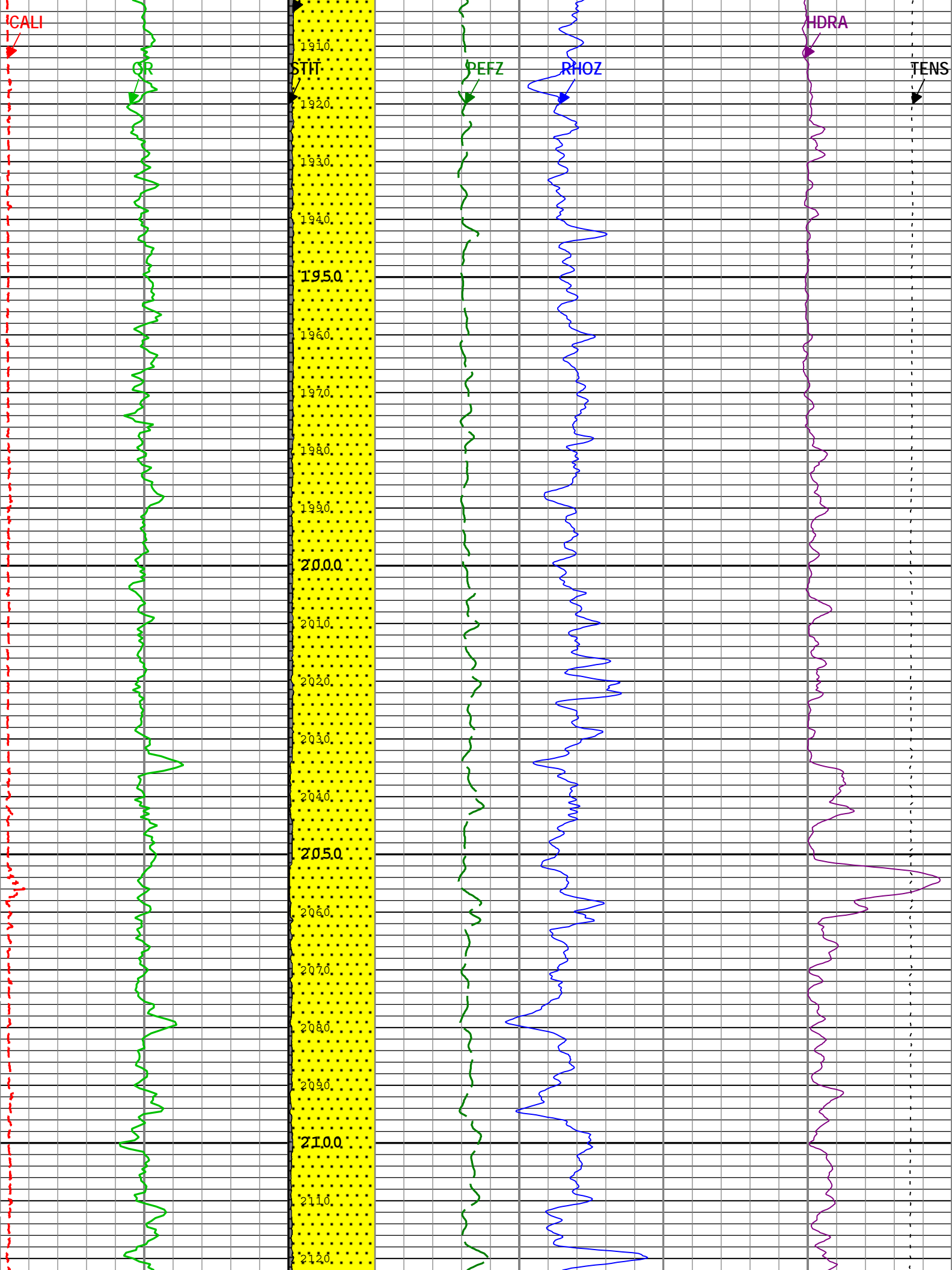


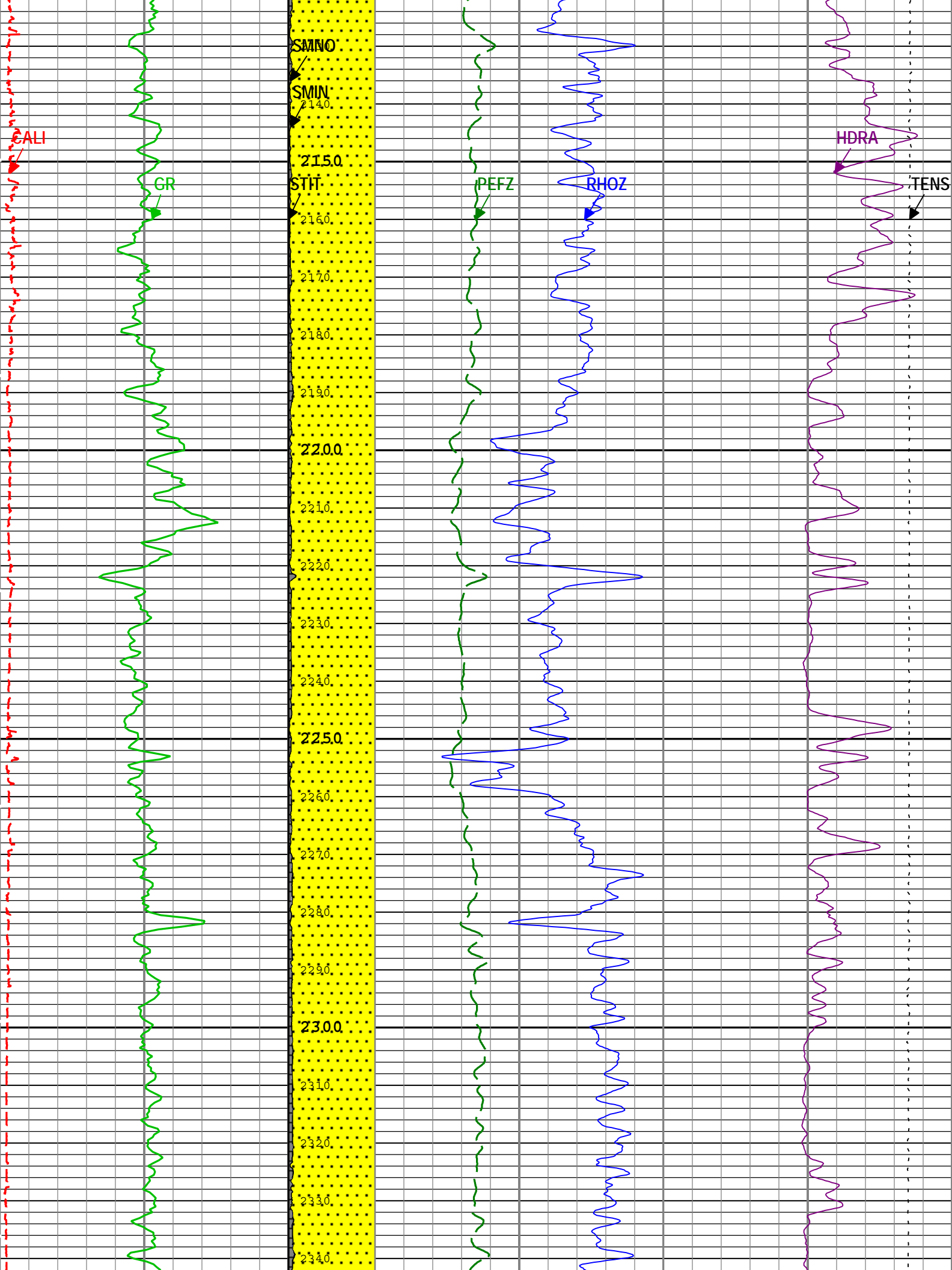


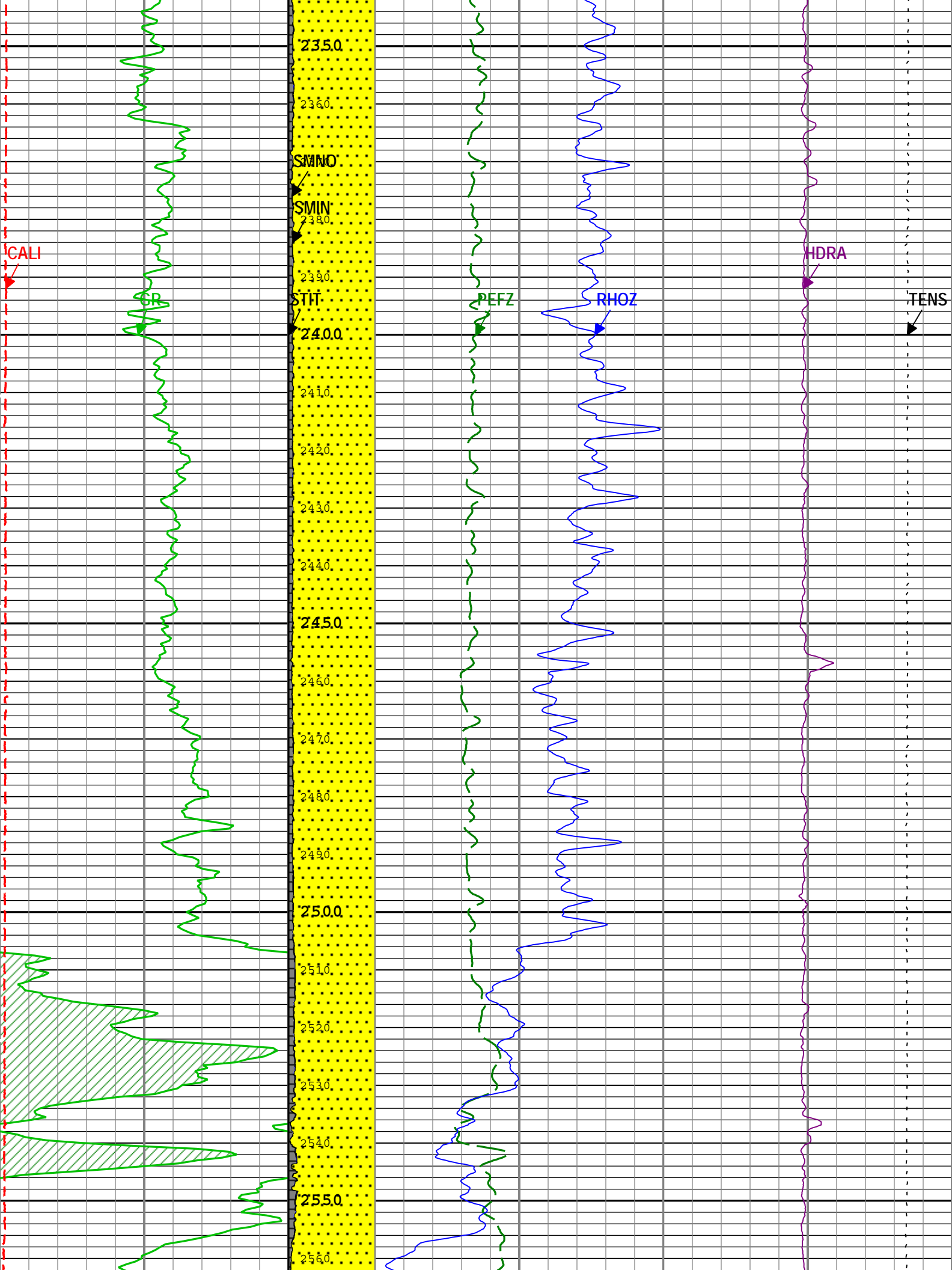


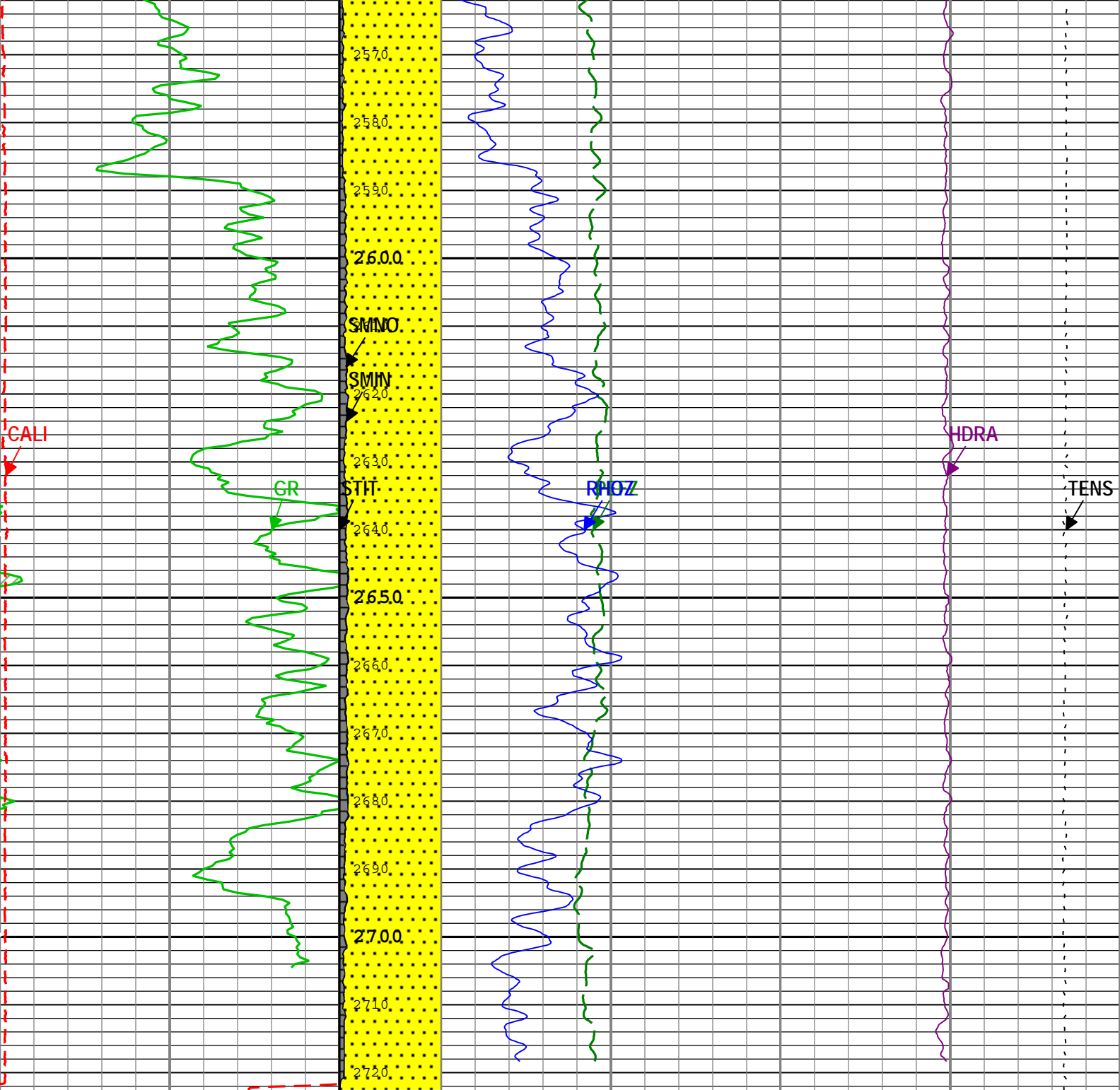












2730		Total Depth @ 2732 ft	
2740			
Gamma Ray Backup		LIME	Standard Resolution Formation Density (RHOZ) HDRS-H
Gamma Ray (GR) HGNS-H		SAND	g/cm3
gAPI		SHALE	Standard Resolution Formation Photoelectric Factor (PEFZ) HDRS-H
Caliper (CALI) HDRS-H		Stuck Tool Indicator, Total (STIT)	Cable Tension (TENS)
in		0 ft 50	lb
			Density Standoff Correction (HDRA) HDRS-H
			g/cm3

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-H	0	in
CBLO	Casing Bottom (Logger)	WLSESSION	473	ft
CDEN	Cement Density	HGNS-H	2	g/cm3
DC_MODE	Depth Correction Mode	DepthCorrection	Real-time	
DFD	Drilling Fluid Density	Borehole	9	lbm/gal
DFT	Drilling Fluid Type	Borehole	Water	
DHC	Density Hole Correction	HDRS-H	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	
SOCO	Standoff Correction Option	HGNS-H	Yes	
TD	Total Measured Depth	Borehole	2732	ft

Depth Zone Parameters

Parameter	Value	Start (ft)	Stop (ft)
BS	0	401.5	473
BS	6.25	473	2741.5

All depth are actual.

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

Company: Omimex Petroleum, Inc

Schlumberger

Well: Bledsoe 13x-2-5-45

Field: Ballyneal

County: Yuma

State: Colorado

Platform Express

Compensated Neutron Log

LithoDensity