

Company: Chevron AMBU

Well: Conner 6H

Field: Wildcat

County: Marshall

Country:

PLATFORM EXPRESS HIGH RESOLUTION LATEROLOG ARRAY GR/CALIPER

County: Marshall
 Field: Wildcat
 Location: Latitude: 39.880749 N
 Well: Conner 6H
 Company: Chevron AMBU

Location:		Latitude: 39.880749 N	Elev.:	K.B. 1254.33 ft
		Longitude: 80.750941 W		G.L. 1222.00 ft
				D.F.
Permanent Datum:	Ground Level		1222.00 f	
Log Measured From:	Kelly Bushing		32.33 ft	above Perm.Datum
Drilling Measured From:	Kelly Bushing			
API Serial No.	Max.Hole Deviation		Longitude:	Latitude:
47-051-01599	0 deg		-80.750941 degrees	39.880749 degrees

Logging Date: 02-Sep-2013

Run Number: 2A

Depth Driller: 11275.00 ft

Schlumberger Depth: 11291.00 ft

Bottom Log Interval: 11262.50 ft

Top Log Interval: 8490.00 ft

Casing Driller Size @ Depth: 9.625 in @ 8480.00 ft

Casing Schlumberger: 8490 ft

Bit Size: 7.875 in

Type Fluid In Hole: Salt Brine

Density: 11.1 lbm/gal

Viscosity: 41 s

Fluid Loss: 6.4 cm3

PH: 9.1

Source of Sample: HRLA

RM @ Meas Temp: 0.02 ohm.m @ 175 degF

RMF @ Meas Temp: 0.02 ohm.m @ 175 degF

RMC @ Meas Temp: 0.02 ohm.m @ 175 degF

Source RMF: Calculated

RM @ BHT: 0.02 @ 185.3 @ 0.01 @ 185.3

Max Recorded Temperatures: 185.3 degF

Circulation Stopped: 01-Sep-2013 22:00:00

Logger on Bottom: 02-Sep-2013 13:15:00

Unit Number: 2134

Recorded By: Beth DiBella/Hurst Nuckols

Witnessed By: Caleb Worthman

Disclaimer

THE USE OF AND RELIANCE UPON THIS RECORDED-DATA BY THE HEREIN NAMED COMPANY (AND ANY OF ITS AFFILIATES, PARTNERS, REPRESENTATIVES, AGENTS, CONSULTANTS AND EMPLOYEES) IS SUBJECT TO THE TERMS AND CONDITIONS AGREED UPON BETWEEN SCHLUMBERGER AND THE COMPANY, INCLUDING: (a) RESTRICTIONS ON USE OF THE RECORDED-DATA; (b) DISCLAIMERS AND WAIVERS OF WARRANTIES AND REPRESENTATIONS REGARDING COMPANY'S USE AND RELIANCE UPON THE RECORDED-DATA; AND (c) CUSTOMER'S FULL AND SOLE RESPONSIBILITY FOR ANY INFERENCE DRAWN OR DECISION MADE IN CONNECTION WITH THE USE OF THIS RECORDED-DATA.

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10.1 Integration Summary	
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10.4 Parameter Listing

11. 2A

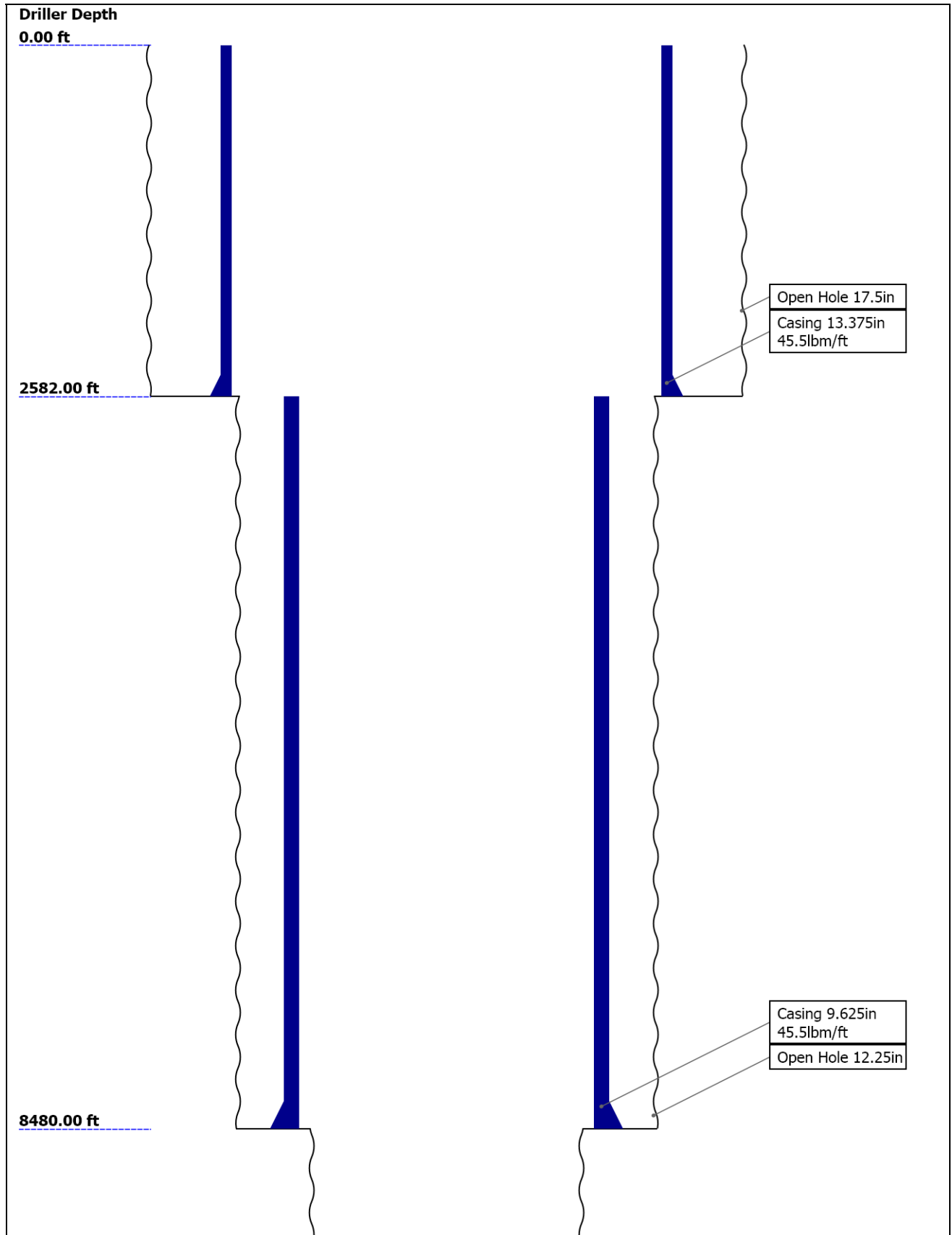
11.1 Composite Summary

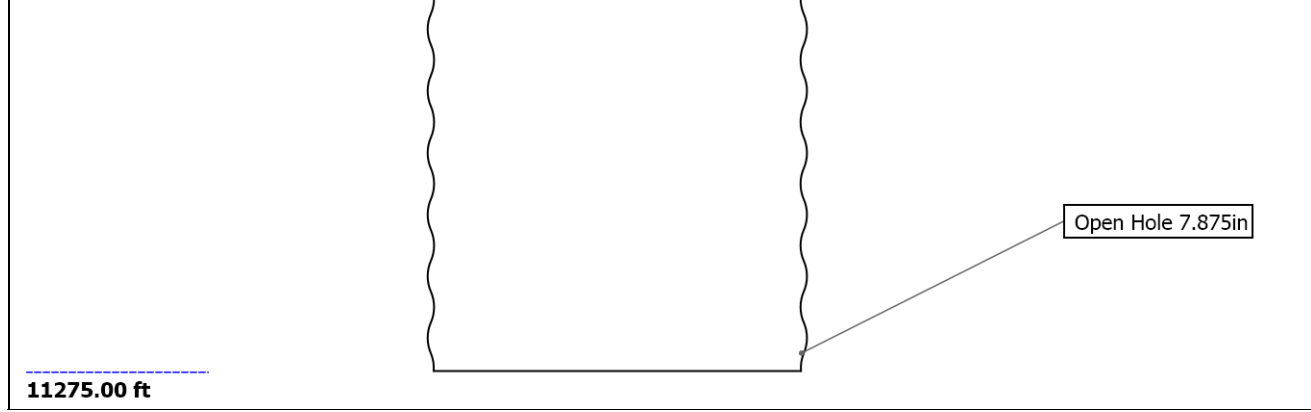
11.2 Log (5 in AIT Resistivity Image Two RA)

12. Calibration Report

13. Tail

Well Sketch





Borehole Size/Casing/Tubing Record

Bit						
Bit Size (in)	17.5	12.25	7.875			
Top Driller (ft)	0	2582	8480			
Top Logger (ft)	0	2582	8506			
Bottom Driller (ft)	2582	8480	11275			
Bottom Logger (ft)	2582	8506	11291			
Casing						
Size (in)	13.375	9.625				
Weight (lbm/ft)	45.5	45.5				
Inner Diameter (in)	12.737	8.717				
Grade	J55	J55				
Top Driller (ft)	0	2582				
Top Logger (ft)	0	2582				
Bottom Driller (ft)	2582	8480				
Bottom Logger (ft)	2582	8490				

Borehole Fluids

Parameter(unit)	2A					
Fluid Type	Water					
Fluid Name	Salt Brine					
Max Recorded Temperatures (degF)	185.3					
Source of Sample	HRLA					
Salinity (ppm)	197824.3					
Density (lbm/gal)	11.1					
Funnel Viscosity (s)	41					
Fluid Loss (cm3)	6.4					
PH	9.1					
Date/Time Circulation Stopped	01-Sep-2013 22:00:00					
Date Logger on Bottom	02-Sep-2013					
Time Logger on Bottom	13:15:00					
Source RMF	Calculated					
RMC	Calculated					
RM @ Meas Temp (ohm.m@degF)	0.02 @ 175					
RMF @ Meas Temp (ohm.m@degF)	0.02 @ 175					

RMC @ Meas Temp (ohm.m@degF)	0.02 @ 175				
RM @ BHT (ohm.m@degF)	0.02 @ 185.3				
RMF @ BHT (ohm.m@degF)	0.01 @ 185.3				
RMC @ BHT (ohm.m@degF)	0.02 @ 185.3				
Total Solid (%)					
High Gravity Solids (%)					

Remarks and Equipment Summary

2A: Toolstring	2A: Remarks																																																																									
<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Equip name</th> <th style="text-align: left;">Length</th> <th style="text-align: left;">MP name</th> <th style="text-align: left;">Offset</th> </tr> </thead> <tbody> <tr> <td>LEH-QT LEH-QT</td> <td style="color: blue;">86.39</td> <td></td> <td></td> </tr> <tr> <td>AH-369</td> <td style="color: blue;">83.48</td> <td></td> <td></td> </tr> <tr> <td>EDTC-B:834 1 EDTH-B:8343 EDTG-A EDTC-B:8341</td> <td style="color: blue;">82.05</td> <td></td> <td></td> </tr> <tr> <td>HGNS-B:189 3 HGNH:3866 NPV-N NSR-F:2179 HGNS-B:1893 HACCZ-B:452 HMCA-B</td> <td style="color: blue;">75.55</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td>CTEM</td> <td>78.55</td> </tr> <tr> <td></td> <td></td> <td>ACCZ</td> <td>0.00</td> </tr> <tr> <td></td> <td></td> <td>HV</td> <td>0.00</td> </tr> <tr> <td></td> <td></td> <td>Gamma Ray</td> <td>76.68</td> </tr> <tr> <td></td> <td></td> <td>Temperature</td> <td>75.55</td> </tr> <tr> <td></td> <td></td> <td>GR</td> <td>74.81</td> </tr> <tr> <td>AH-107[2]</td> <td style="color: blue;">66.14</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td>CNL Porosity</td> <td>68.47</td> </tr> <tr> <td></td> <td></td> <td>HMCA</td> <td>66.14</td> </tr> <tr> <td></td> <td></td> <td>HGNS</td> <td>66.14</td> </tr> <tr> <td></td> <td></td> <td>Accelerometer</td> <td>0.00</td> </tr> <tr> <td>HRLT-B:814 HRUH-B:1765 HRUC-B:1765 HRLS-B:814 HRLH-B:818 HRLC-B:818 AH-270</td> <td style="color: blue;">64.14</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td>Resistivity</td> <td>52.38</td> </tr> </tbody> </table>	Equip name	Length	MP name	Offset	LEH-QT LEH-QT	86.39			AH-369	83.48			EDTC-B:834 1 EDTH-B:8343 EDTG-A EDTC-B:8341	82.05			HGNS-B:189 3 HGNH:3866 NPV-N NSR-F:2179 HGNS-B:1893 HACCZ-B:452 HMCA-B	75.55					CTEM	78.55			ACCZ	0.00			HV	0.00			Gamma Ray	76.68			Temperature	75.55			GR	74.81	AH-107[2]	66.14					CNL Porosity	68.47			HMCA	66.14			HGNS	66.14			Accelerometer	0.00	HRLT-B:814 HRUH-B:1765 HRUC-B:1765 HRLS-B:814 HRLH-B:818 HRLC-B:818 AH-270	64.14					Resistivity	52.38	<p>TOOLSTRINGS RAN AS PER TOOL SKETCH</p> <p>PRESENTATIONS AS PER CLIENT REQUEST</p> <p>MATRIX: LIMESTONE DENSITY: 2.68 G/CC</p> <p>MUD RESISTIVITY FROM HRLA TOOL</p>	
Equip name	Length	MP name	Offset																																																																							
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		Resistivity	52.38																																																																							



AH-107[1] 39.94

HRS-B:184 37.94

9
ECH-MEB:183
0
HRCC-B:1813
HRMS-B:1849
Short Spacing
HRGD-B:1850
GSR-J:5159
GPV-Q
Long Spacing
Backscatter

HRCC 33.94

MCFL 28.51
Caliper 28.02
TLD Density 27.64

NEXT-A:6 25.7

NEXH-A:6
PNG-G:7024-4
2554
NEXS-A:6

Spect 19.82

Status 18.41

AH-191 12.00

ILE-D:26 11.00



AH-190 3.00
 BNS-NG 2.00

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	2A		
Conveyance Type	Wireline		
Log Sequence	SUBSEQUENT TRIP IN HOLE		
Reference Log Date	09-Aug-2013		
Reference Log Name	PLATFORM EXPRESS		
Reference Log Run Number	1B		
Depth Remark Parameters	2A		
Depth Remark 1	ALL CURRENT SCHLUMBERGER DEPTH POLICIES FOLLOWED		
Depth Remark 2	IDW USED AS PRIMARY DEPTH CONTROL		
Depth Remark 3	Z-CHART USED AS SECONDARY DEPTH CONTROL		
Depth Remark 4	SUBSEQUENT TRIP DEPTH CORRECTION: 16.5 FT		
Depth Measuring Device	2A		
Type	IDW-B		
Wheel Correction 1	1		
Wheel Correction 2	0		
Tension Device	2A		
Type	CMTD-B/A		
Calibration Points	0		
Logging Cable	2A		
Type	7-46NT-XS		
Logging Cable Length (ft)	24000.00		

2A

2 IN

Integration Summary

Output Channel(s)	Output Description	Input Parameter	Output Value	Unit
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Pass Summary

Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	Depth Shift	Include Parallel Data
2A	Log[5]:Up	Up	6011.38 ft	11304.86 ft	02-Sep-2013 2:31:05 PM	02-Sep-2013 8:03:44 PM	16.50 ft	

All depths are referenced to toolstring zero

Log

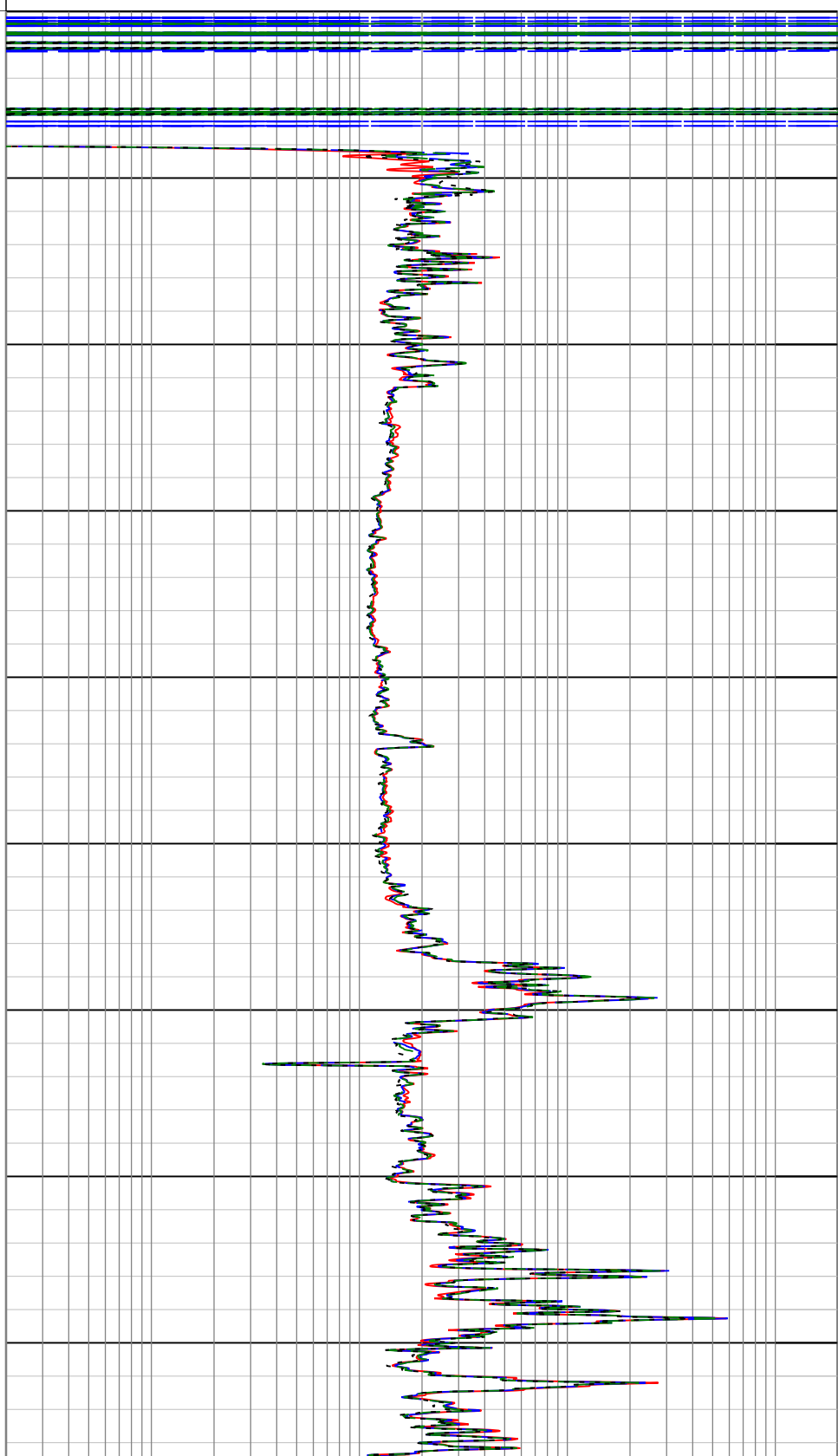
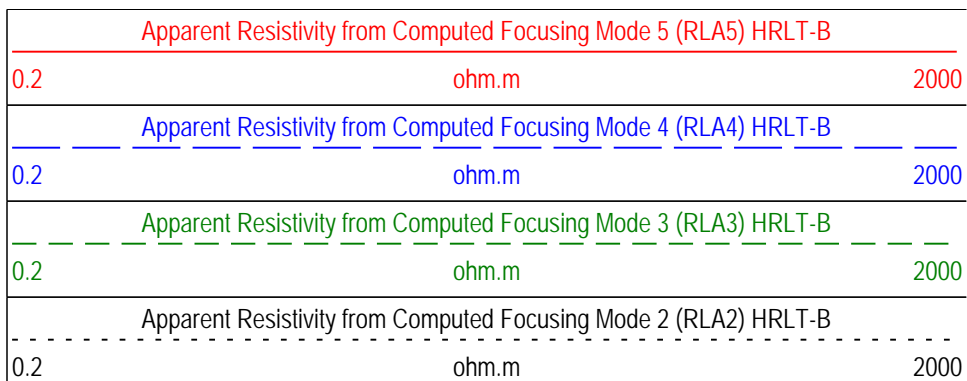
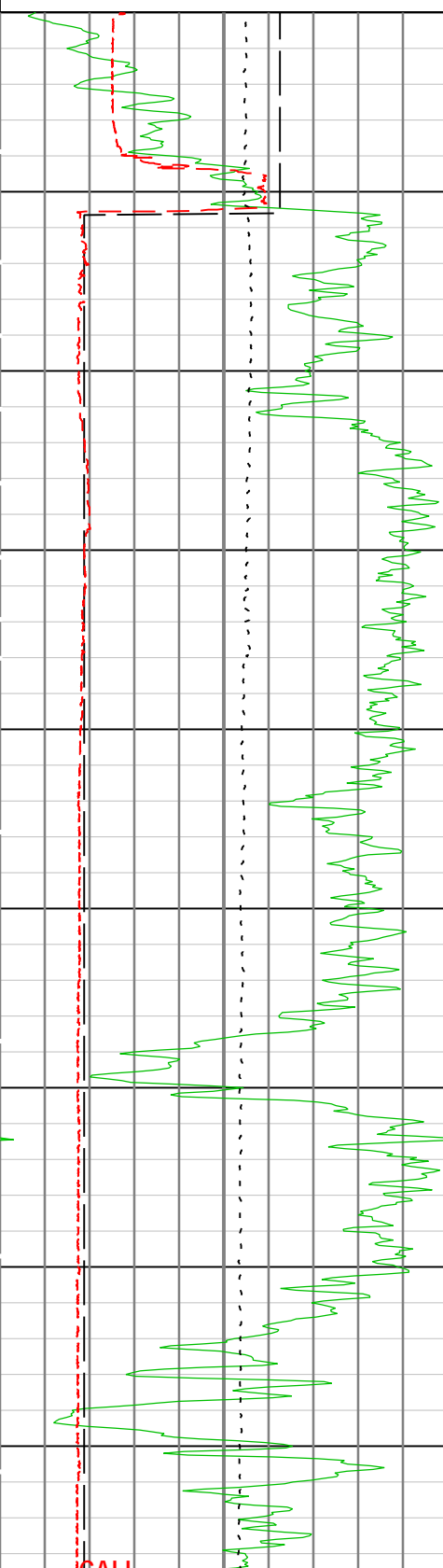
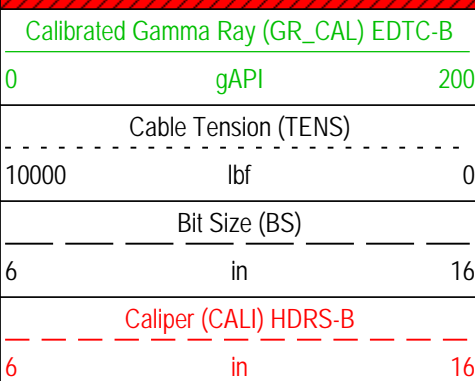
2A: Log[5]:Up

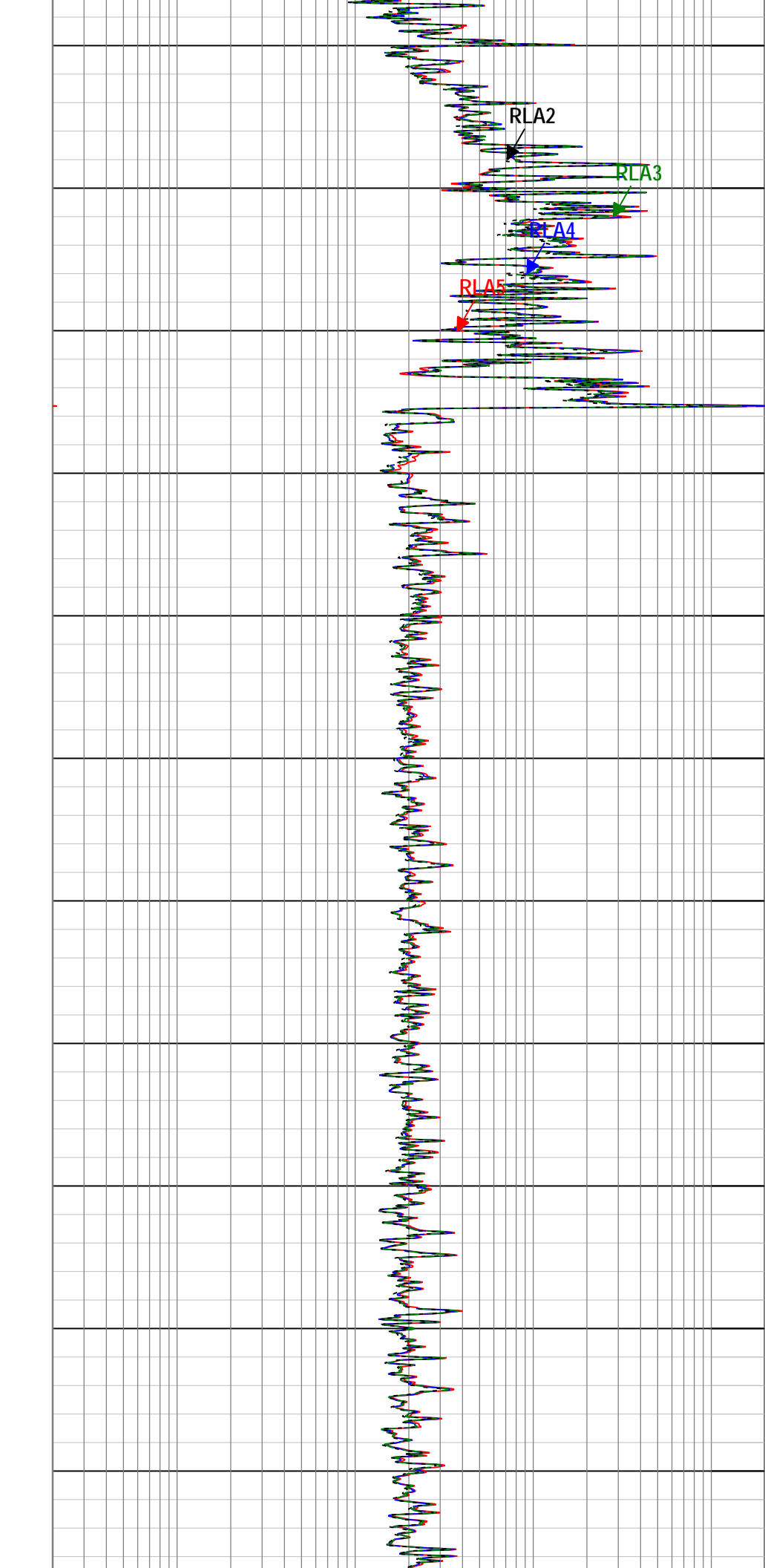
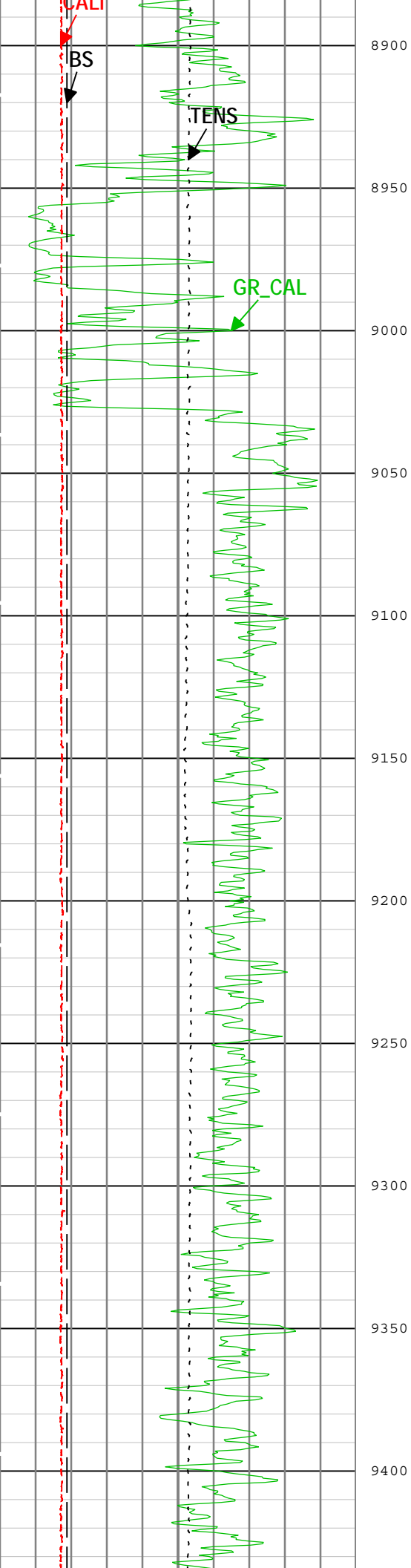
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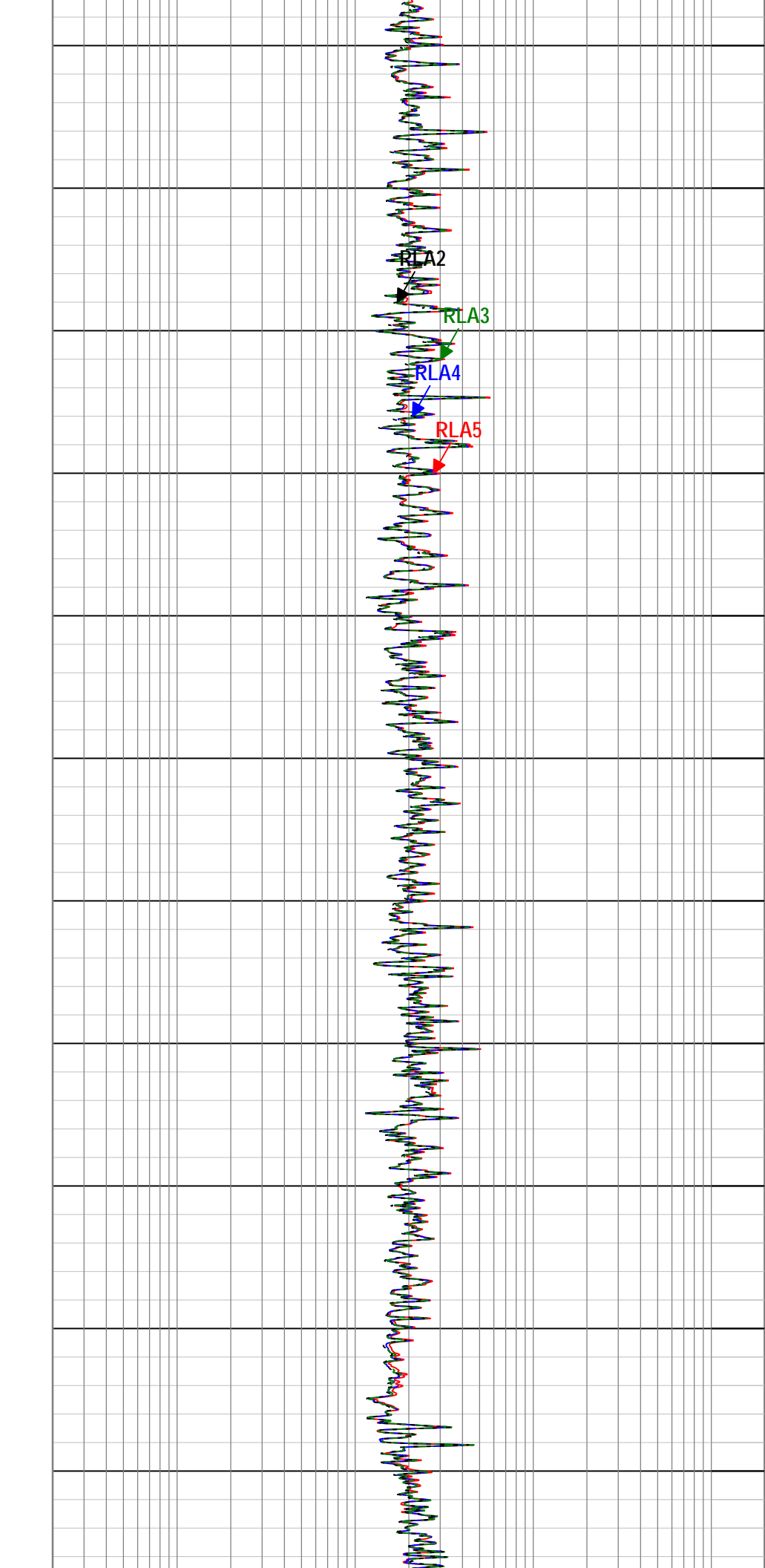
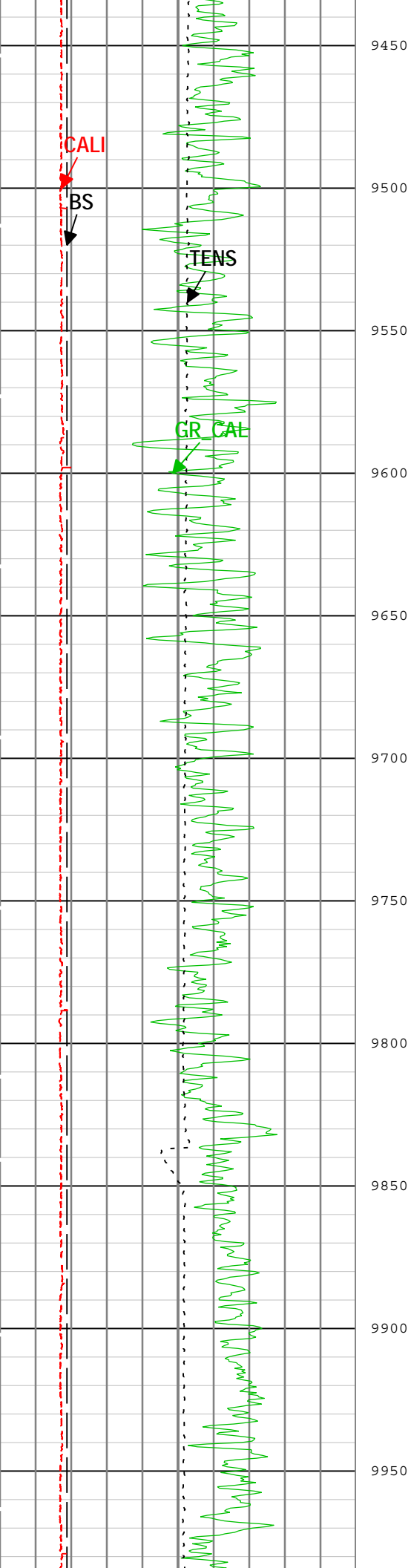
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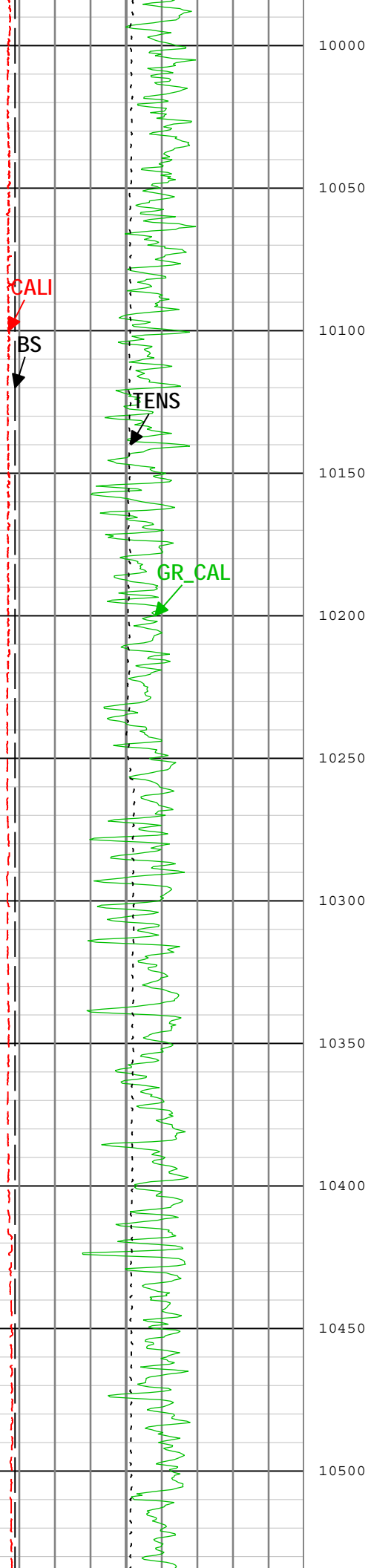
GR > 200 GAPI

GR > 400 GAPI

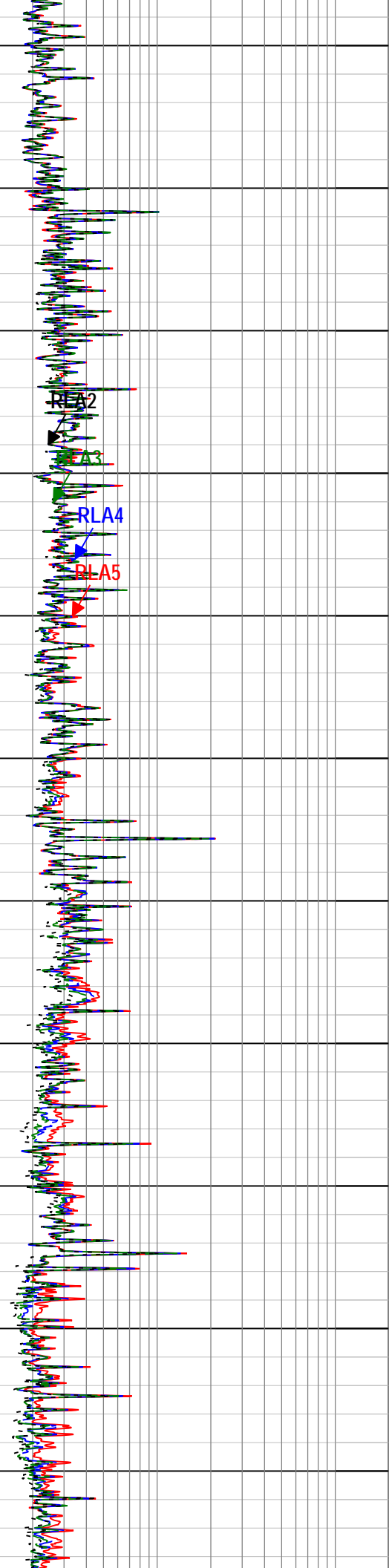




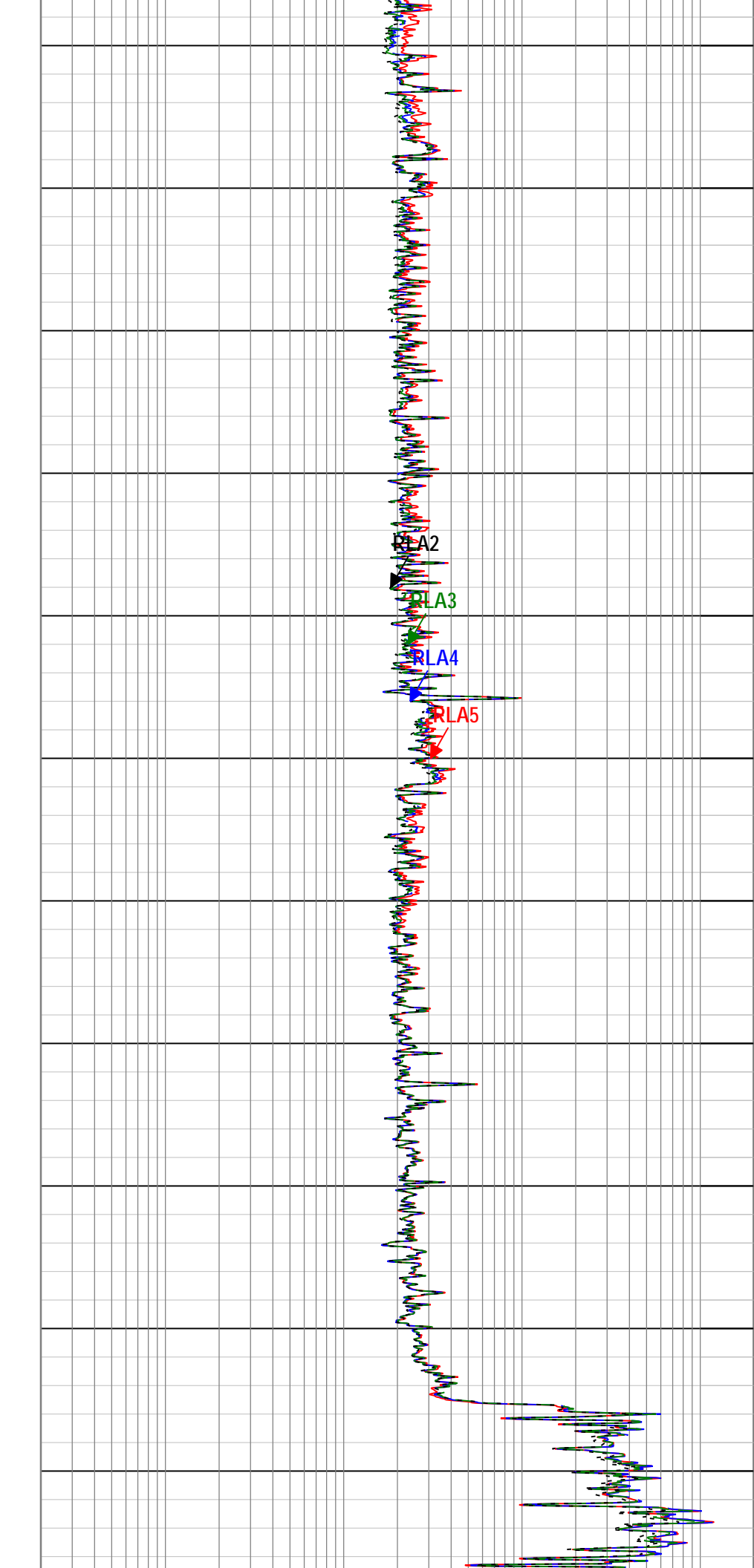
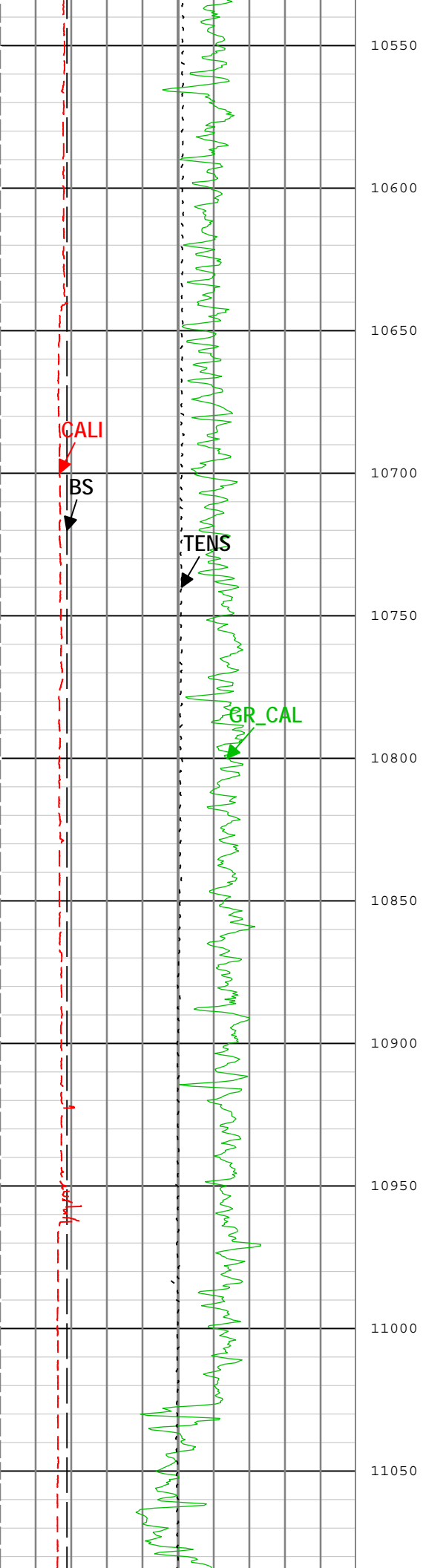


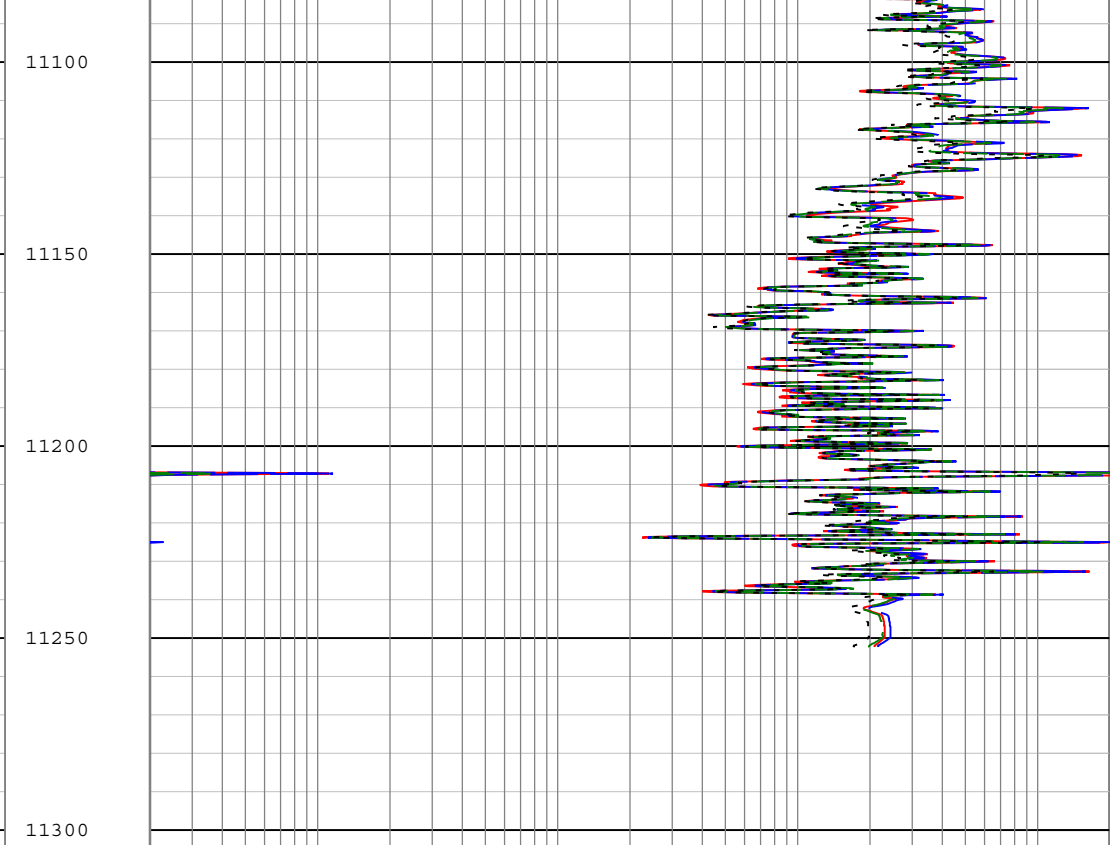
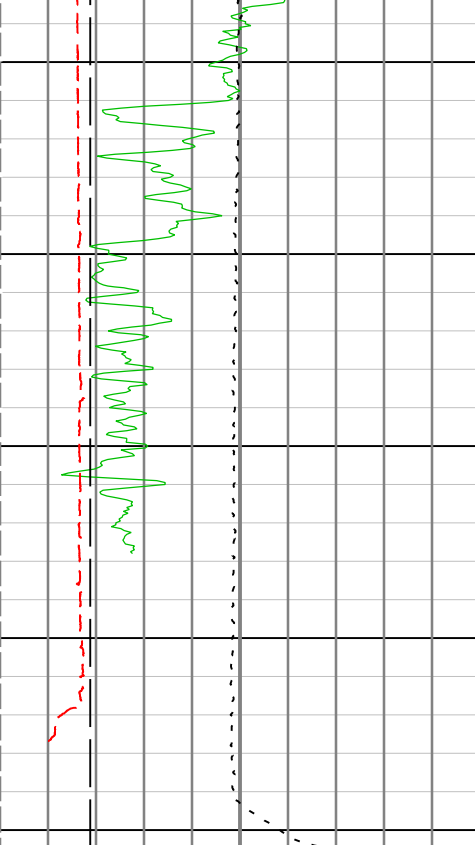


10000
10050
10100
10150
10200
10250
10300
10350
10400
10450
10500



10000
10050
10100
10150
10200
10250
10300
10350
10400
10450
10500





GR > 200 GAPI		
GR > 400 GAPI		
Calibrated Gamma Ray (GR_CAL) EDTC-B		
0	gAPI	200
Cable Tension (TENS)		
10000	lbf	0
Bit Size (BS)		
6	in	16
Caliper (CALI) HDRS-B		
6	in	16

Apparent Resistivity from Computed Focusing Mode 5 (RLA5) HRLT-B		
0.2	ohm.m	2000
Apparent Resistivity from Computed Focusing Mode 4 (RLA4) HRLT-B		
0.2	ohm.m	2000
Apparent Resistivity from Computed Focusing Mode 3 (RLA3) HRLT-B		
0.2	ohm.m	2000
Apparent Resistivity from Computed Focusing Mode 2 (RLA2) HRLT-B		
0.2	ohm.m	2000

TIME_1900 - Time Marked every 60.00 (s)

Description: AIT Resistivity Image Two Format: Log (5 in AIT Resistivity Image Two) Index Scale: 2 in per 100 ft Index Unit: ft Index Type: Measured
 Depth Creation Date: 02-Sep-2013 20:58:31

Channel Processing Parameters

Parameter	Description	Tool	Value	Unit
BHS	Borehole Status (Open or Cased Hole)	Borehole	Depth Zoned	
BS	Bit Size	WLSESSION	Depth Zoned	in
CALI_SHIFT	CALI Supplementary Offset	HDRS-B	0	in
CBLO	Casing Bottom (Logger)	WLSESSION	8490	ft
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	MRES	
HRLT_PROCRM	Mud Resistivity Select	HRLT-B	HRLT Compute	
KFAC_HRLT	HRLT Geometrical Factor Option	HRLT-B	Sonde	
PROCMSO	Mechanical Standoff Size	HRLT-B	1.5	in
PROCSP0	Sonde Position	HRLT-B	Eccentered	

Depth Zone Parameters

Parameter	Value	Start (ft)	Stop (ft)
BHS	Cased	8450	8480
BHS	Open	8480	11305
BS	12.25	8450	8506
BS	7.875	8506	11305

All depth are actual.

Tool Control Parameters

Parameter	Description	Tool	Value	Unit
MAX_LOG_SPEED	Toolstring Maximum Logging Speed	WLSESSION	1800	ft/h

2A

MAIN 5"

Integration Summary

Output Channel(s)	Output Description	Input Parameter	Output Value	Unit
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Pass Summary

Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	Depth Shift	Include Parallel Data
2A	Log[5]:Up	Up	6011.38 ft	11304.86 ft	02-Sep-2013 2:31:05 PM	02-Sep-2013 8:03:44 PM	16.50 ft	

All depths are referenced to toolstring zero

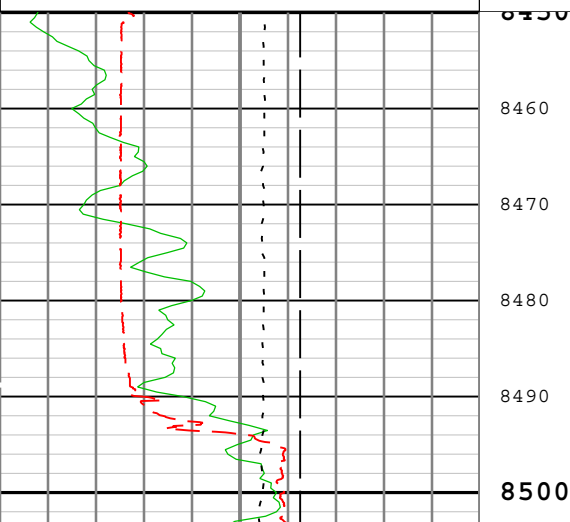
Log

2A: Log[5]:Up

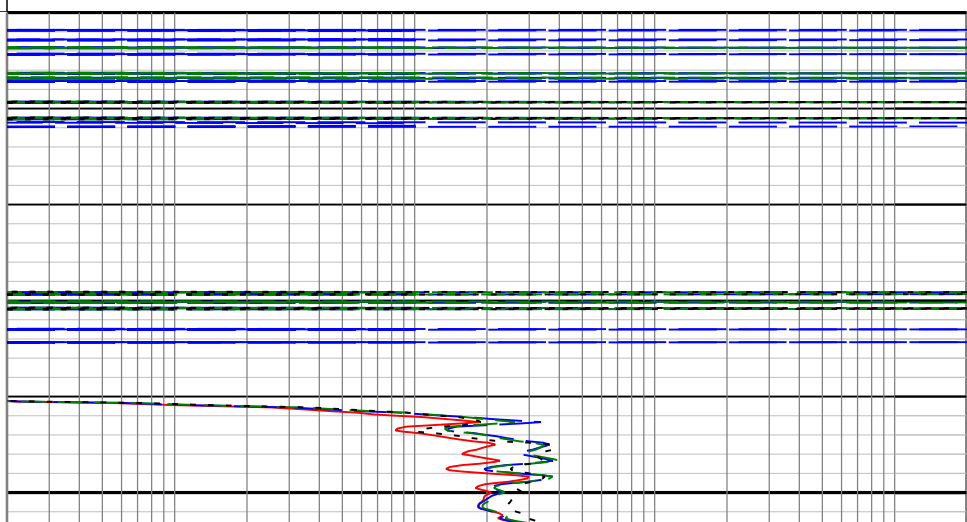
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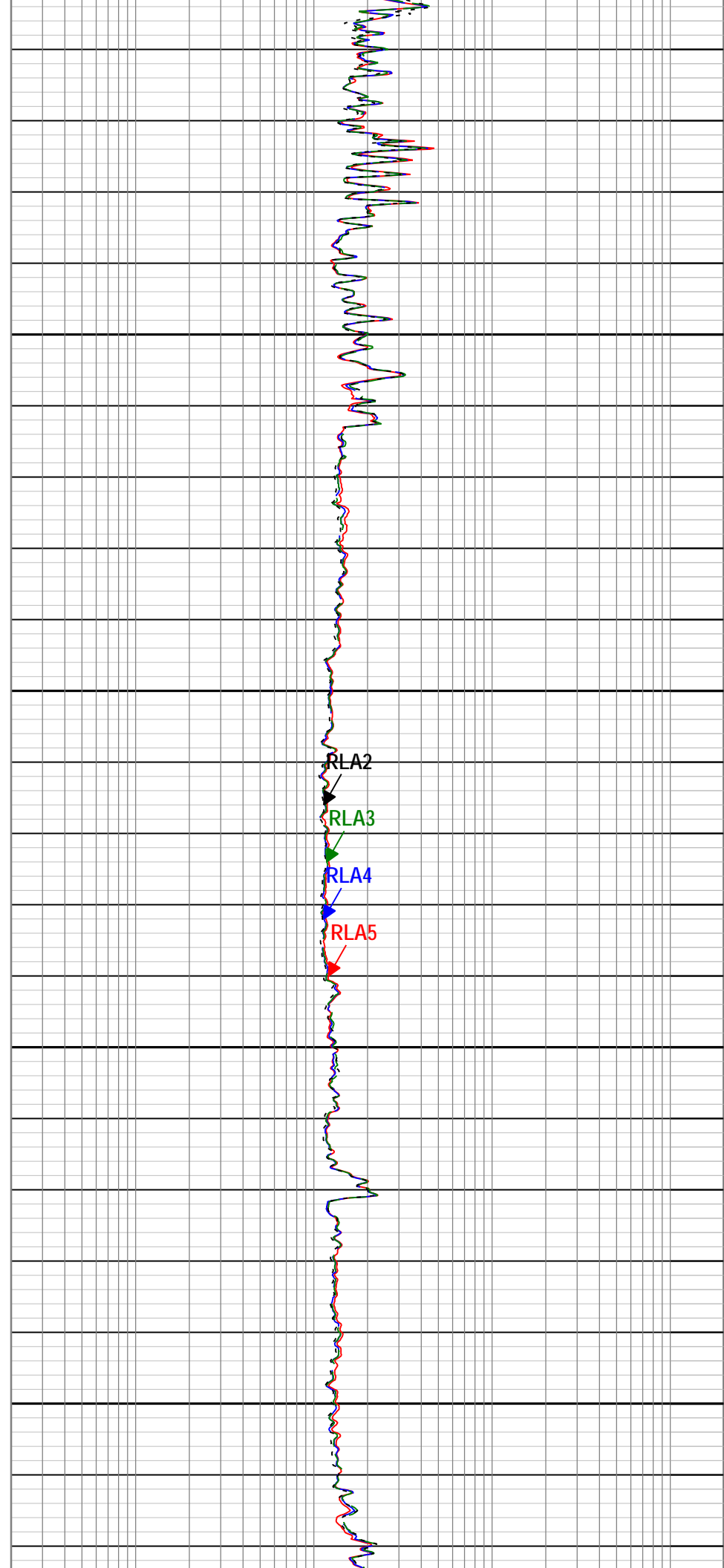
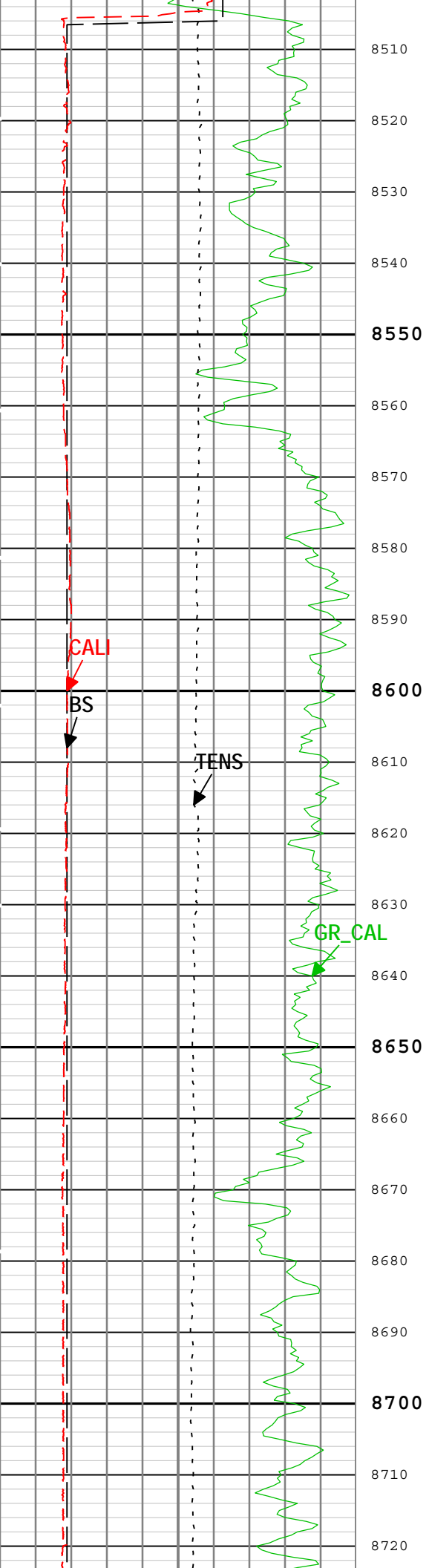
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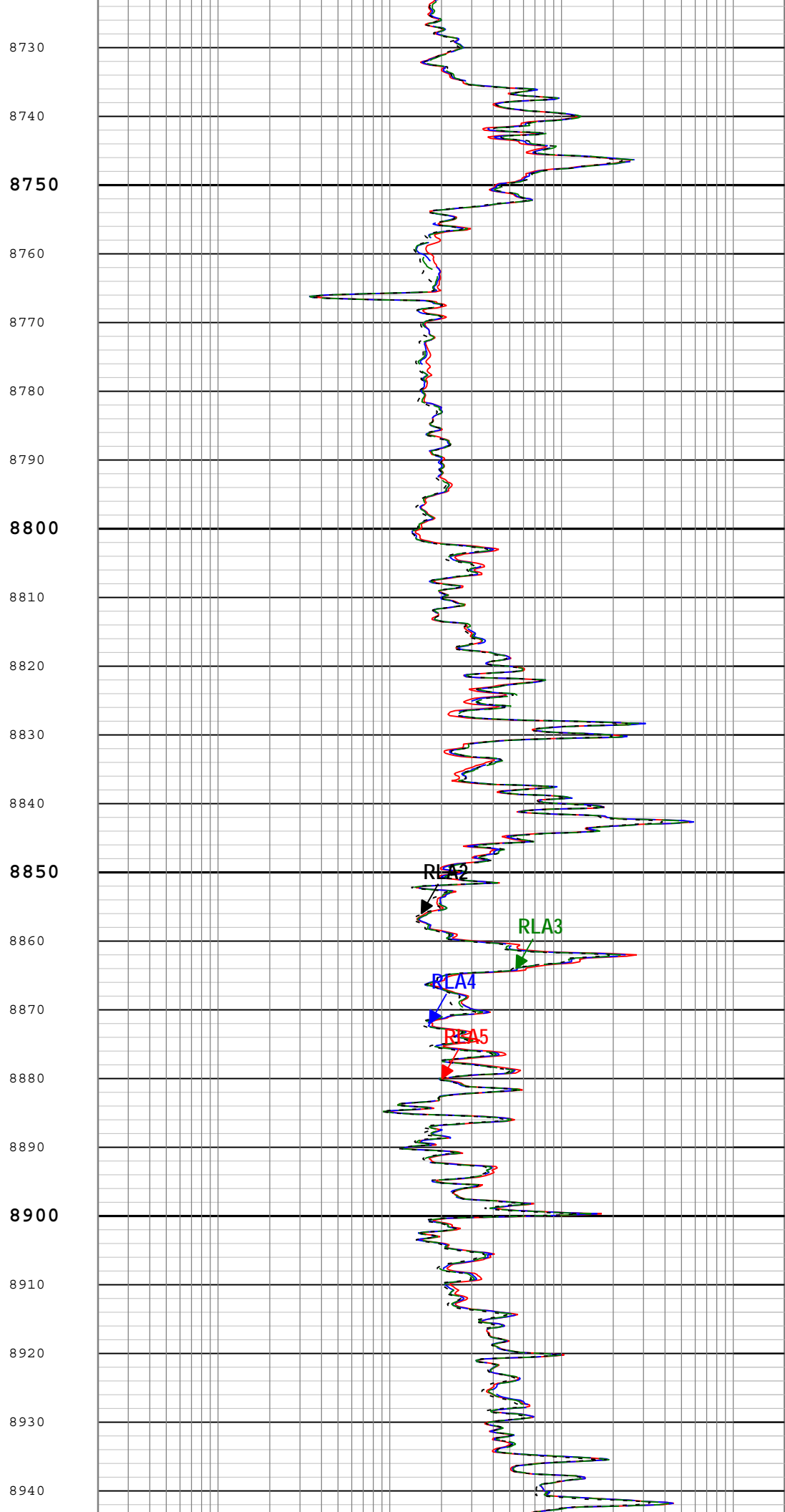
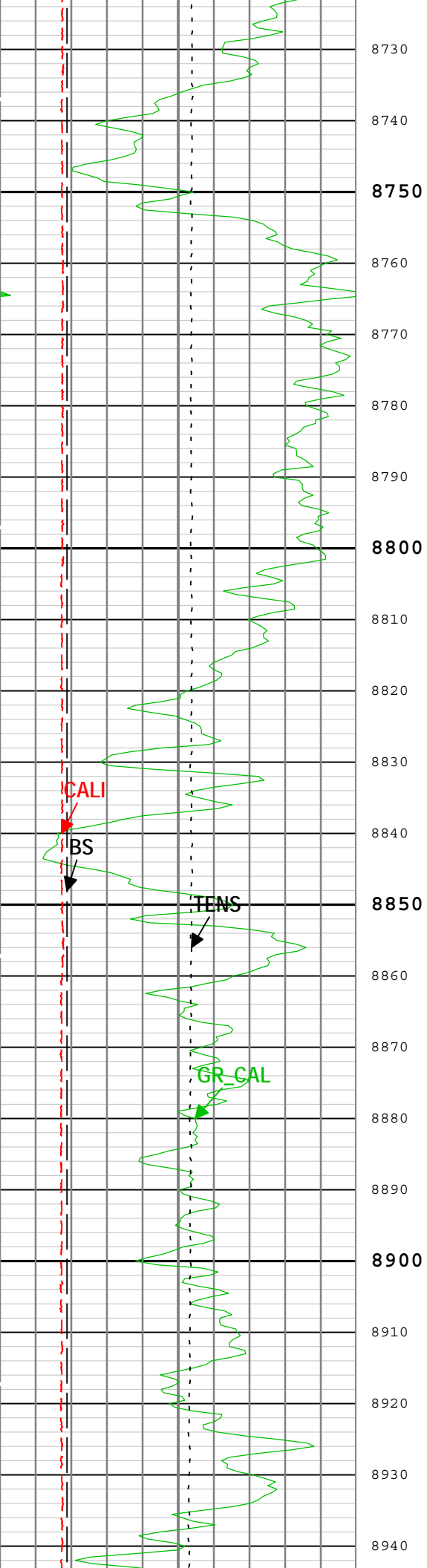
GR > 200 GAPI		
GR > 400 GAPI		
Calibrated Gamma Ray (GR_CAL) EDTC-B		
0	gAPI	200
Cable Tension (TENS)		
10000	lbf	0
Bit Size (BS)		
6	in	16
Caliper (CALI) HDRS-B		
6	in	16

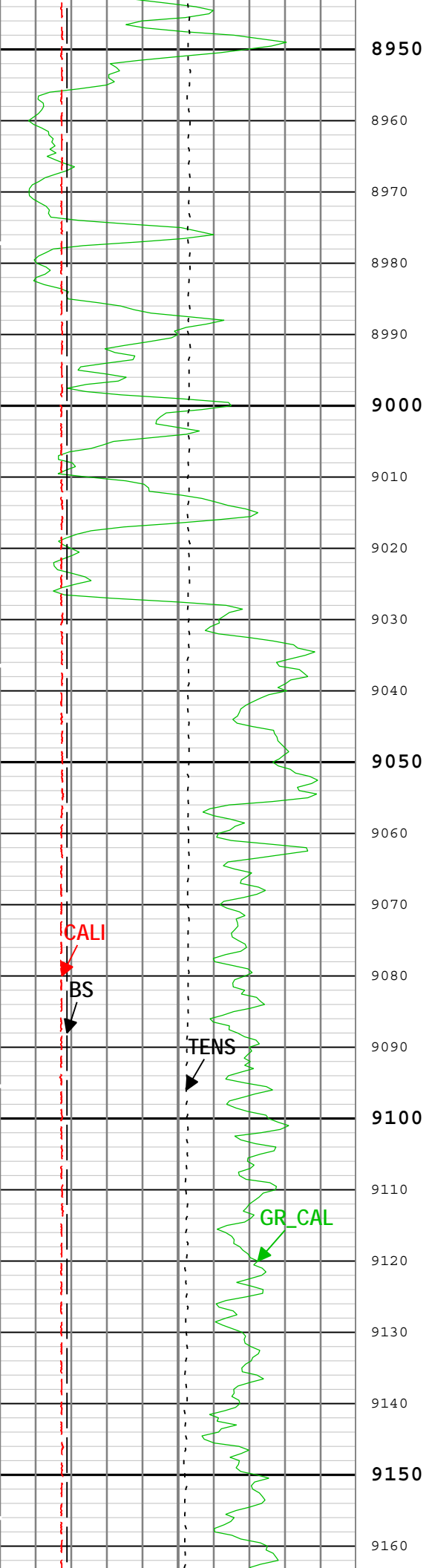


Apparent Resistivity from Computed Focusing Mode 5 (RLA5) HRLT-B		
0.2	ohm.m	2000
Apparent Resistivity from Computed Focusing Mode 4 (RLA4) HRLT-B		
0.2	ohm.m	2000
Apparent Resistivity from Computed Focusing Mode 3 (RLA3) HRLT-B		
0.2	ohm.m	2000
Apparent Resistivity from Computed Focusing Mode 2 (RLA2) HRLT-B		
0.2	ohm.m	2000









8950

8960

8970

8980

8990

9000

9010

9020

9030

9040

9050

9060

9070

9080

9090

9100

9110

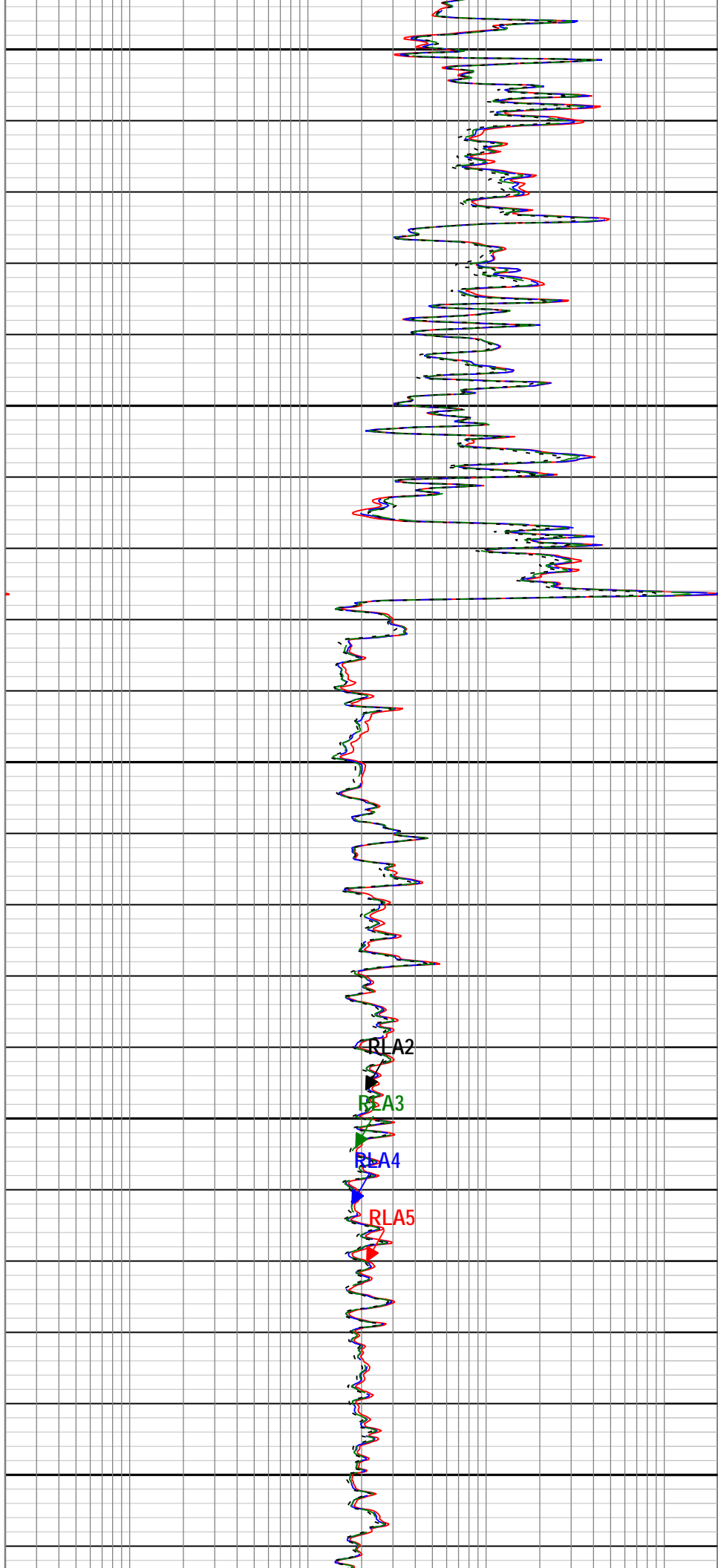
9120

9130

9140

9150

9160

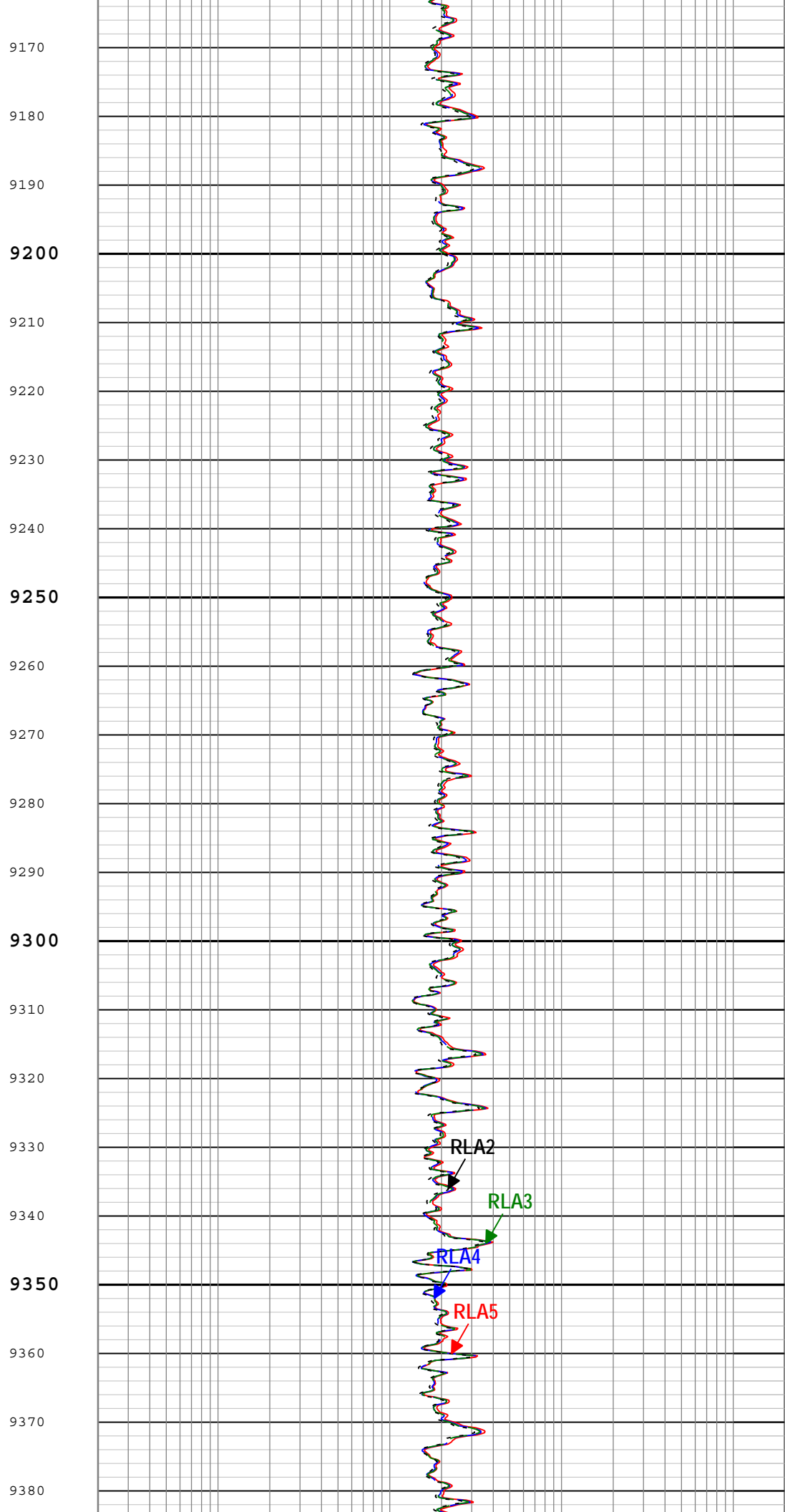
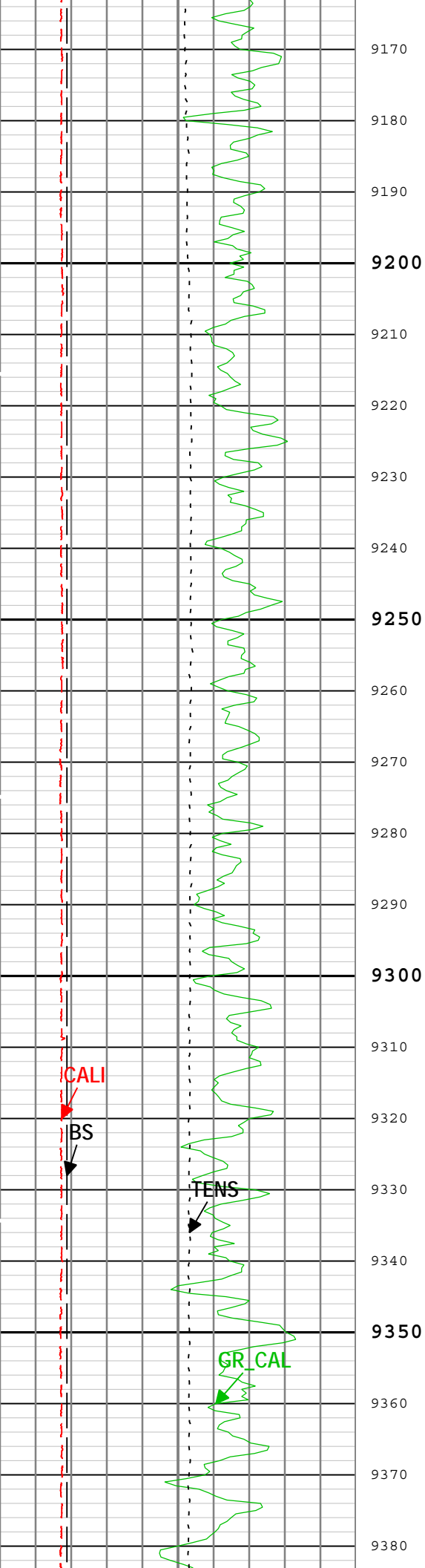


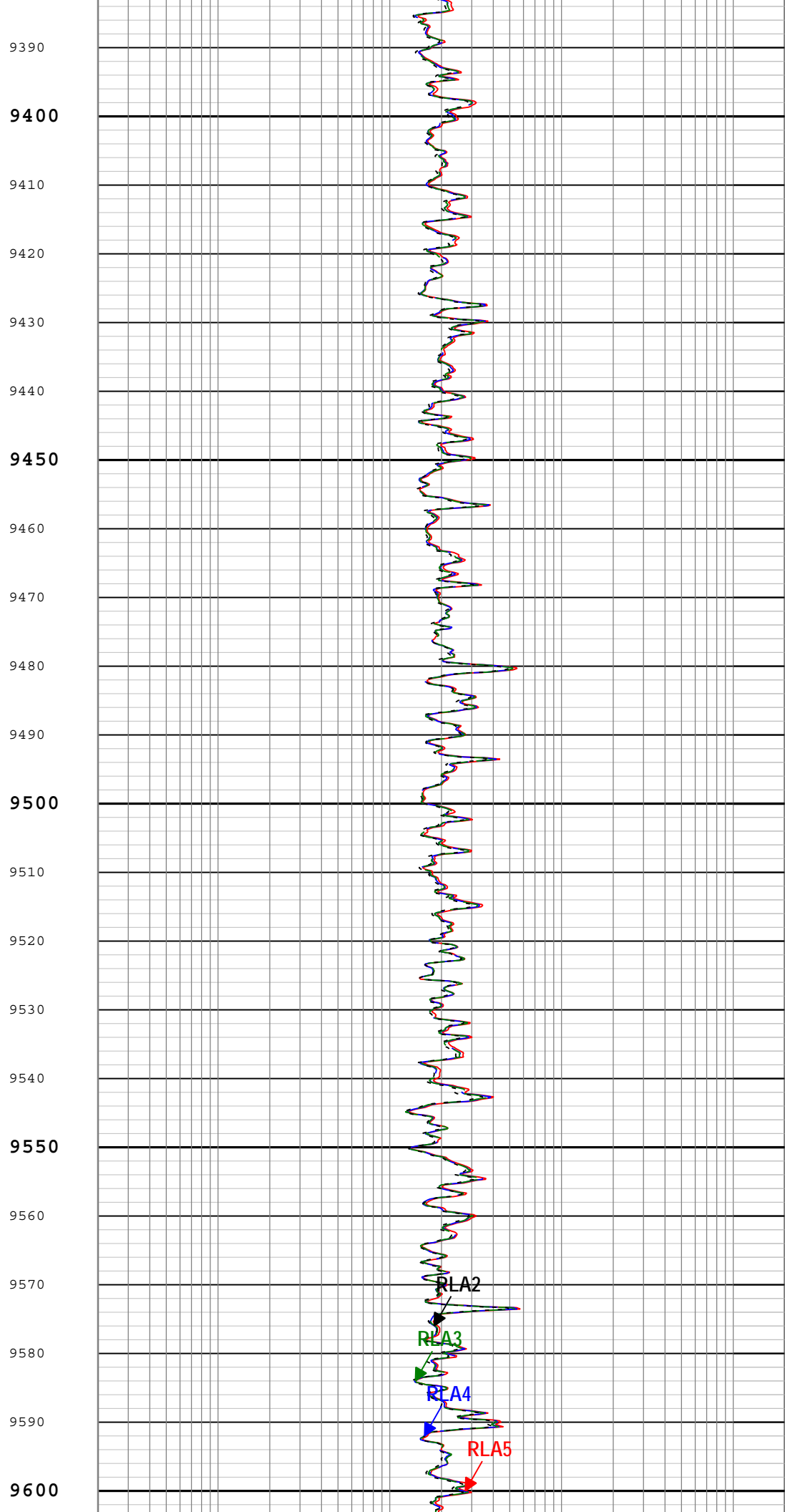
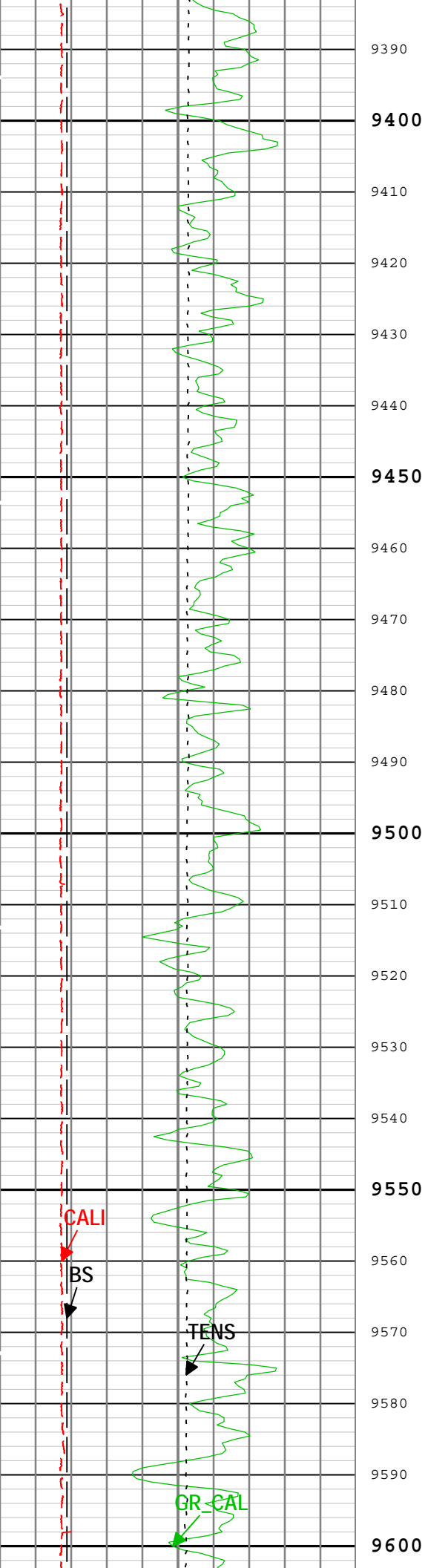
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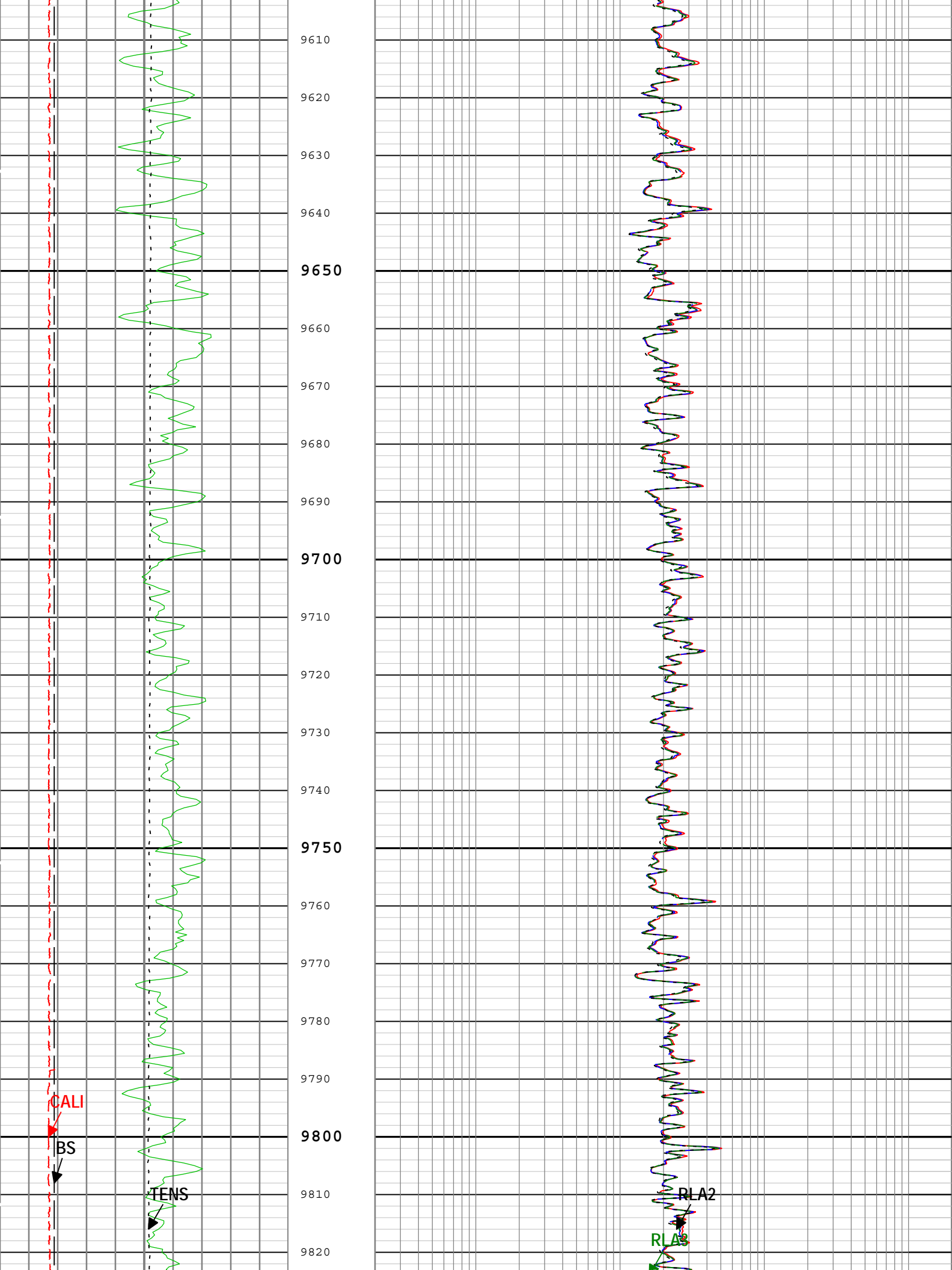
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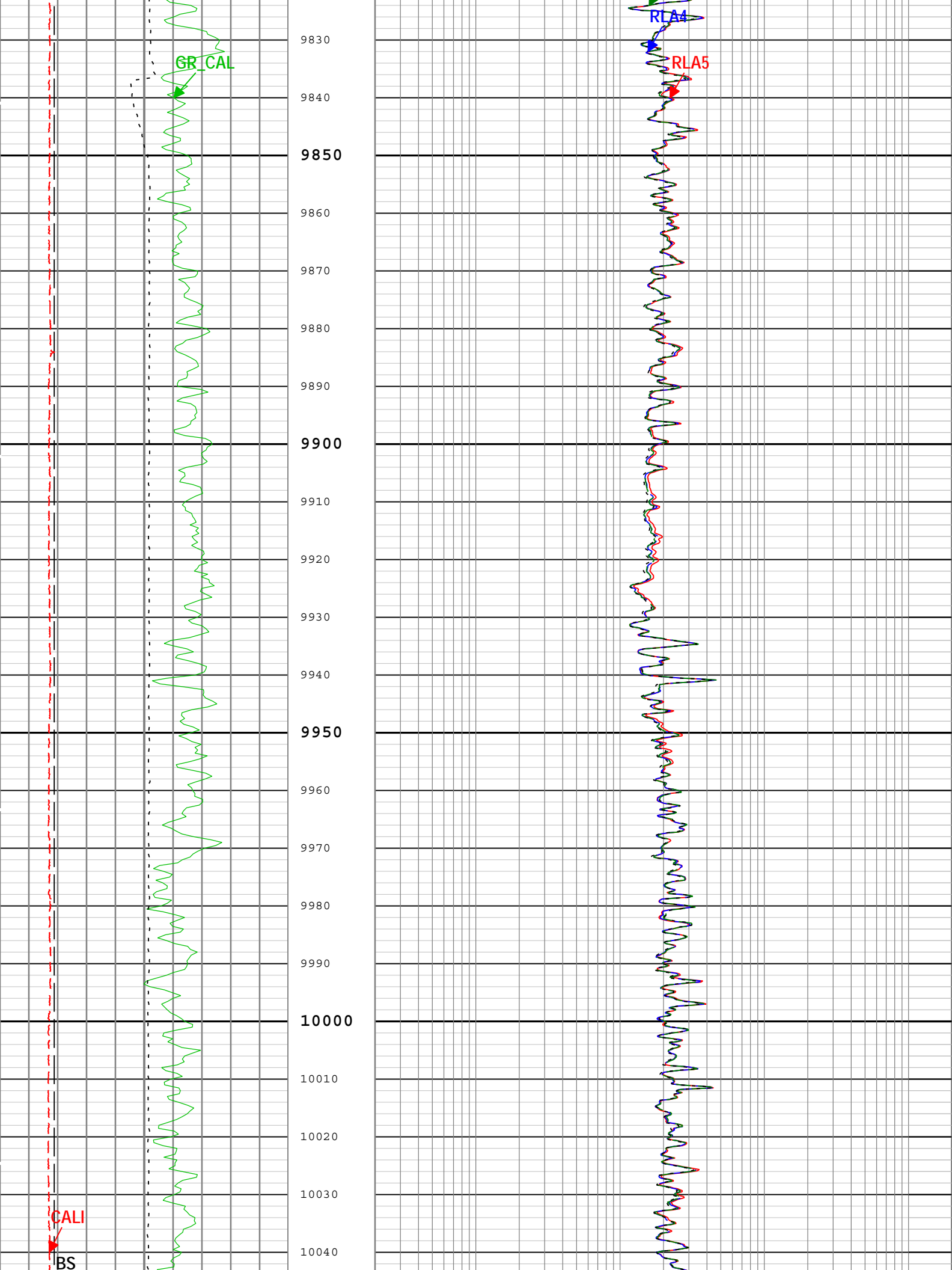
RLA4

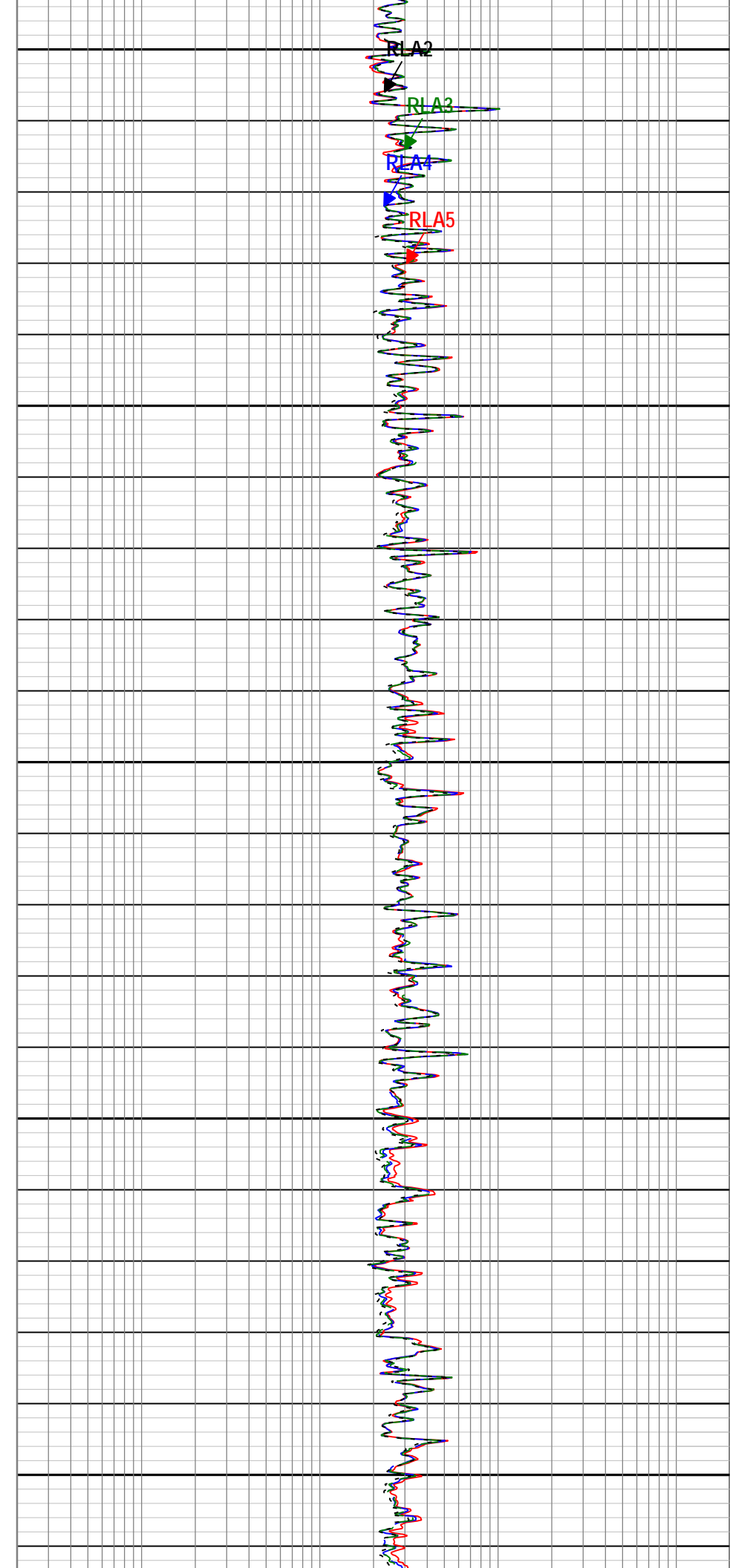
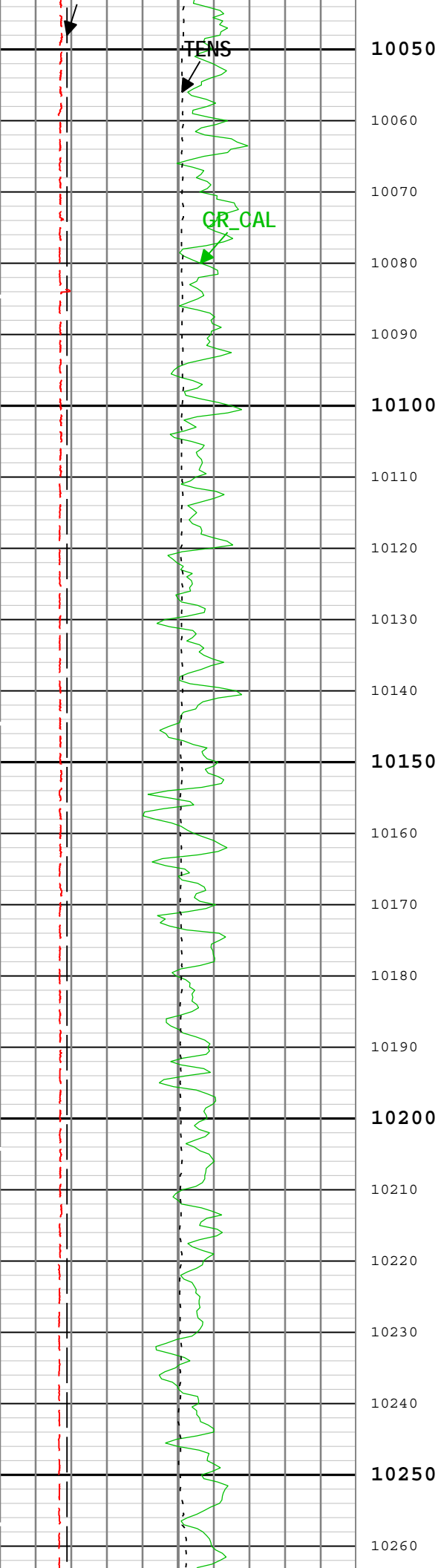
RLA5

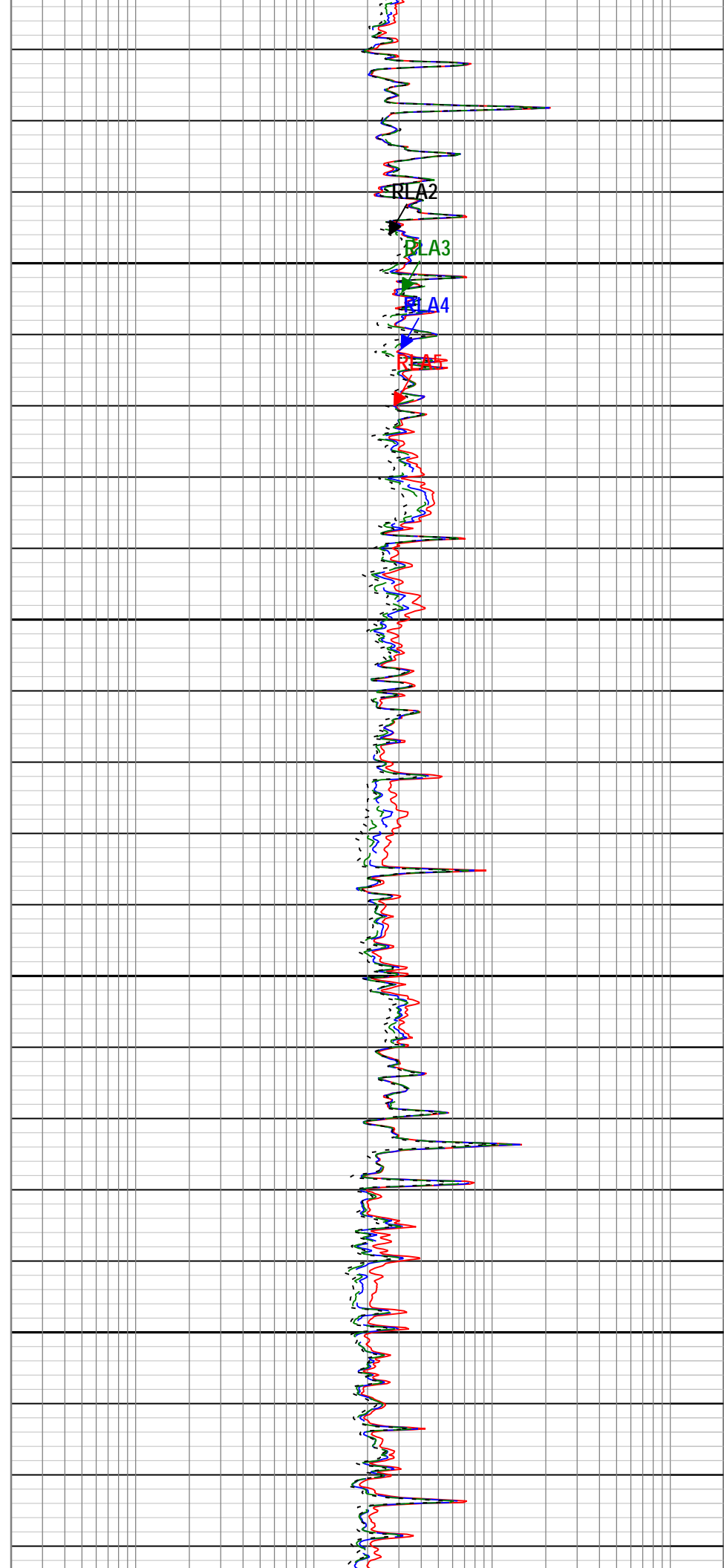
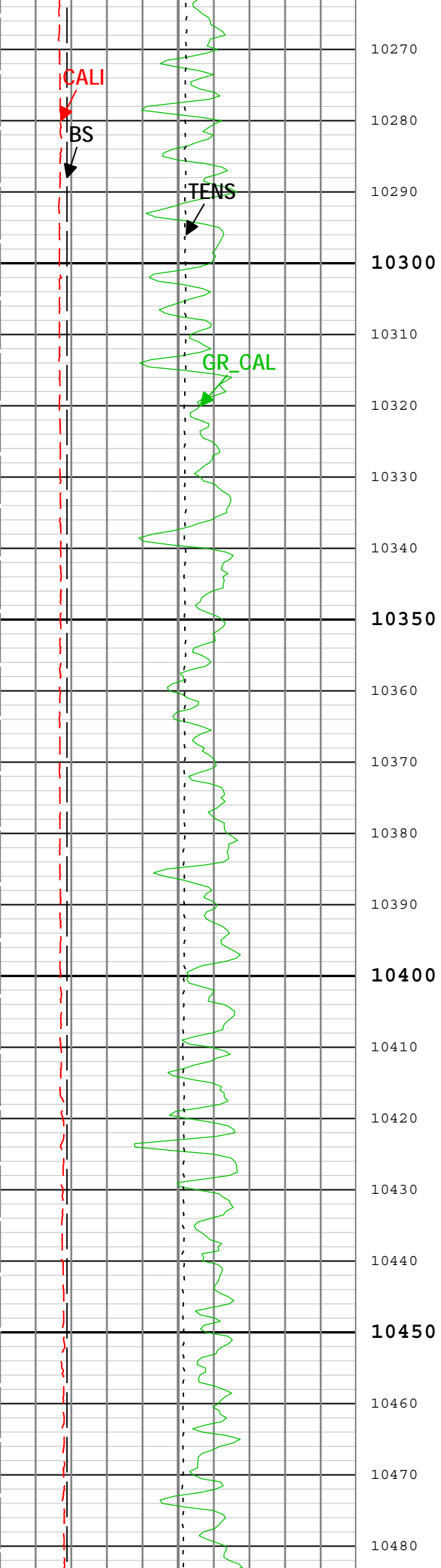


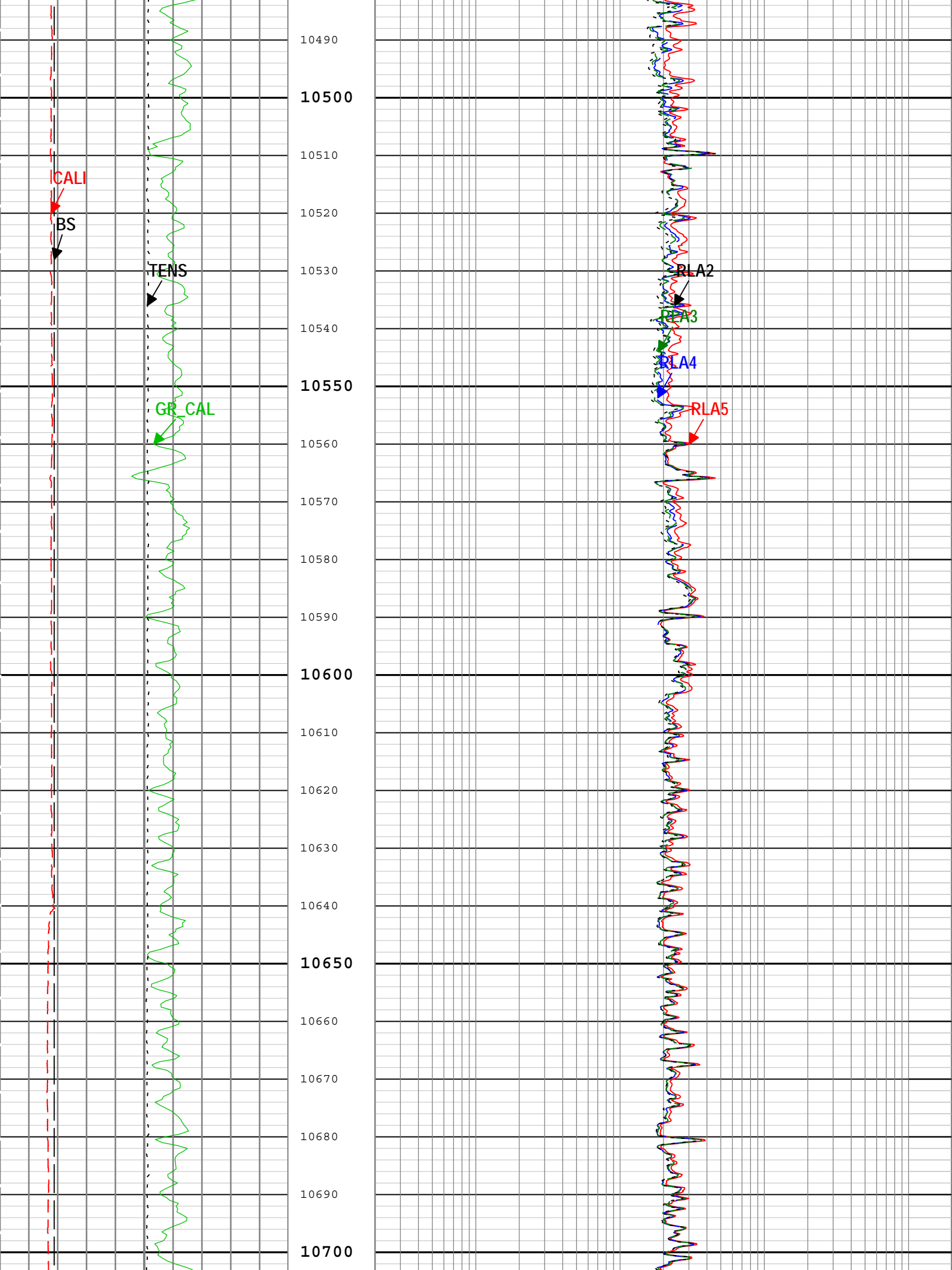


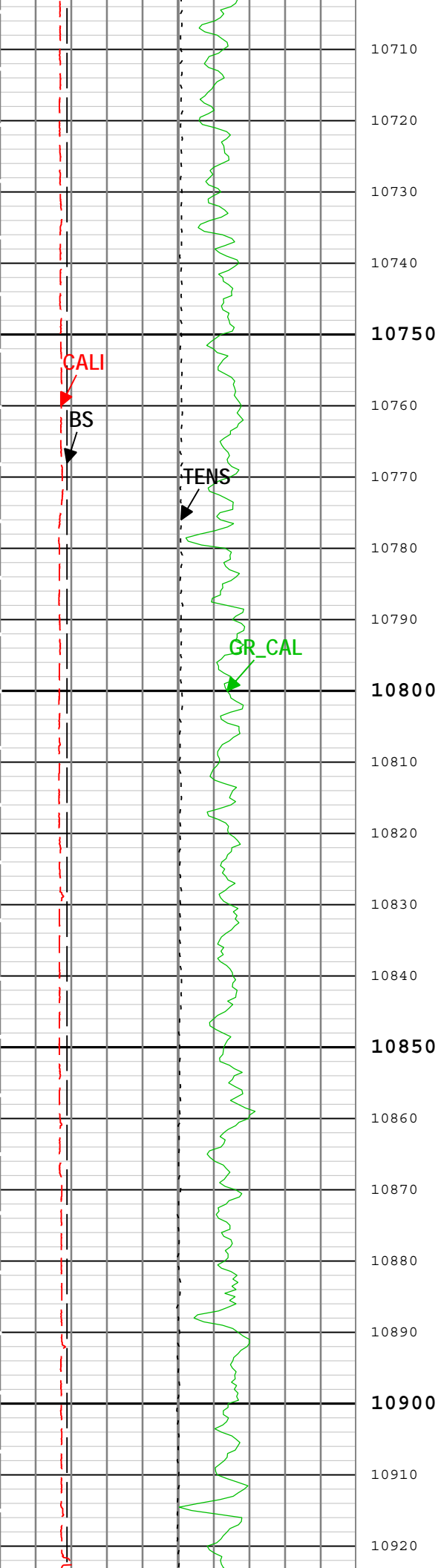




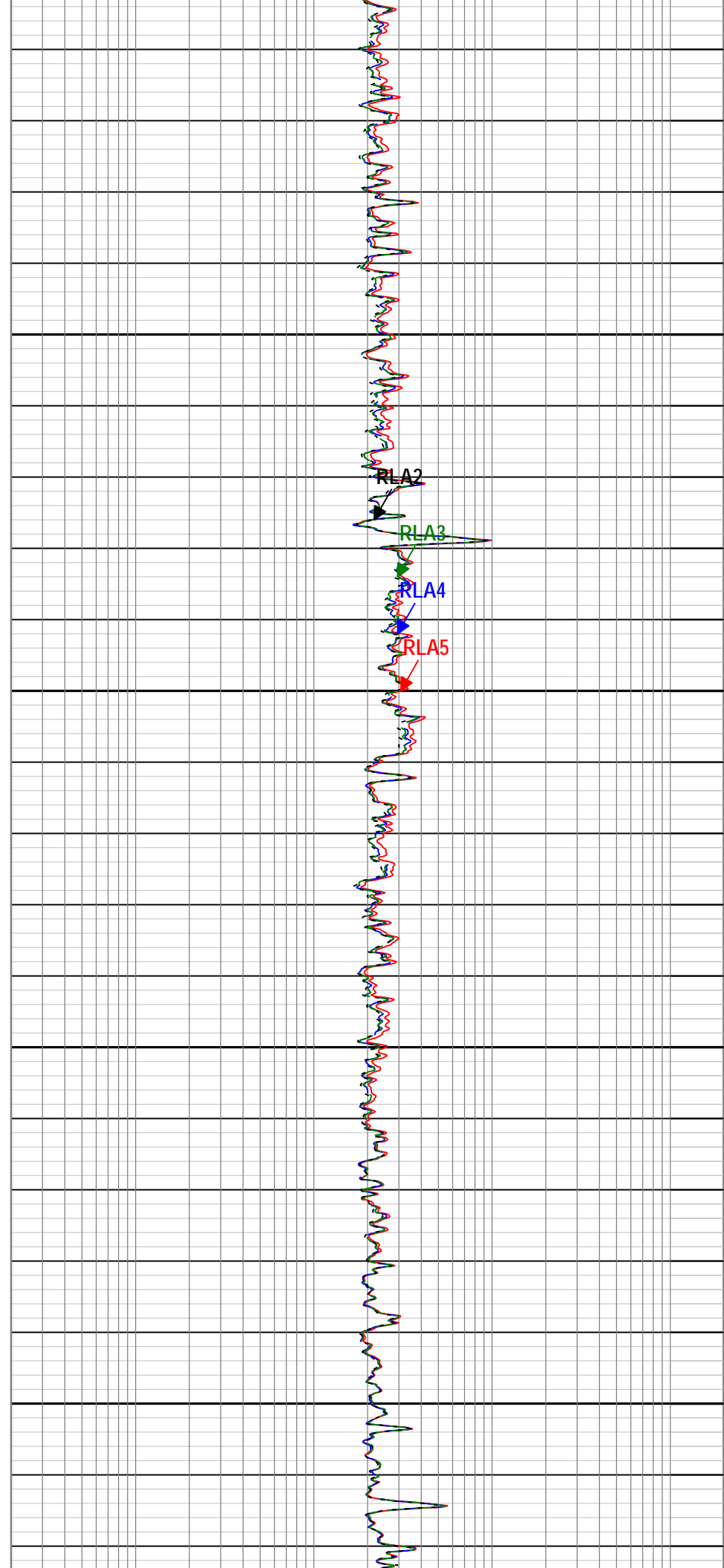


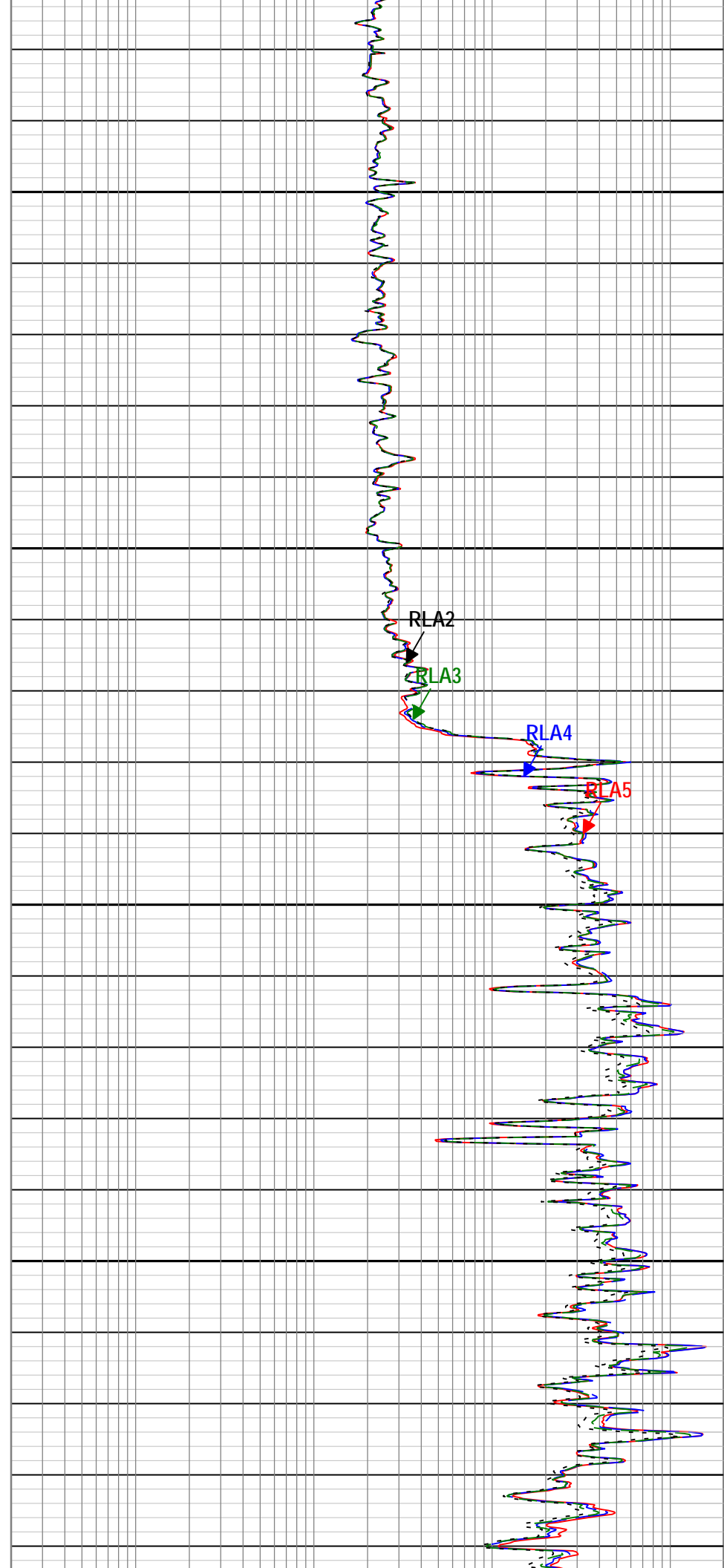
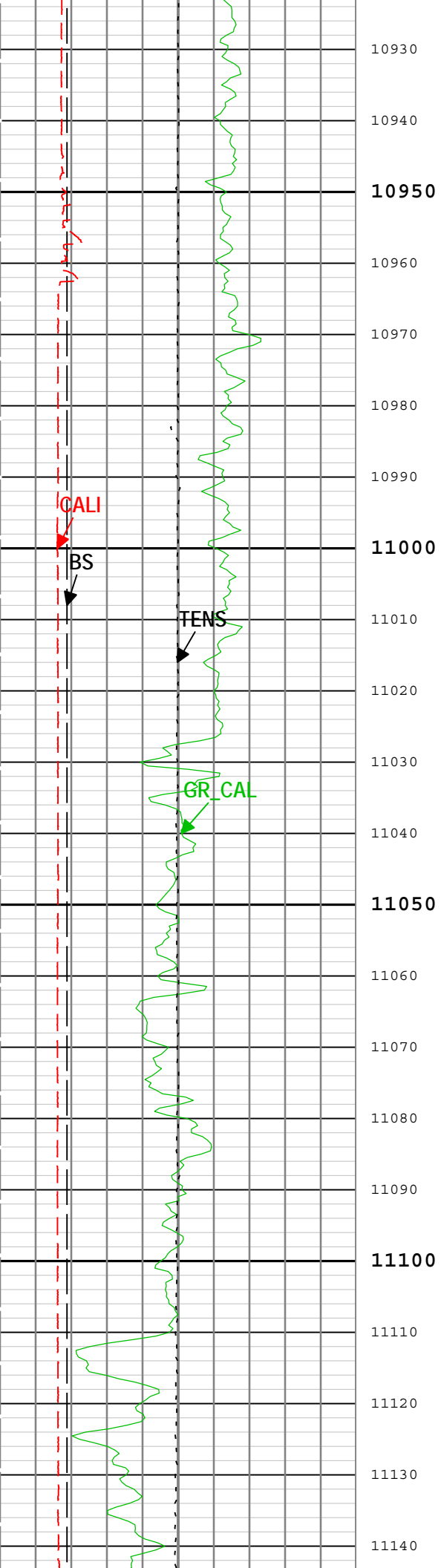


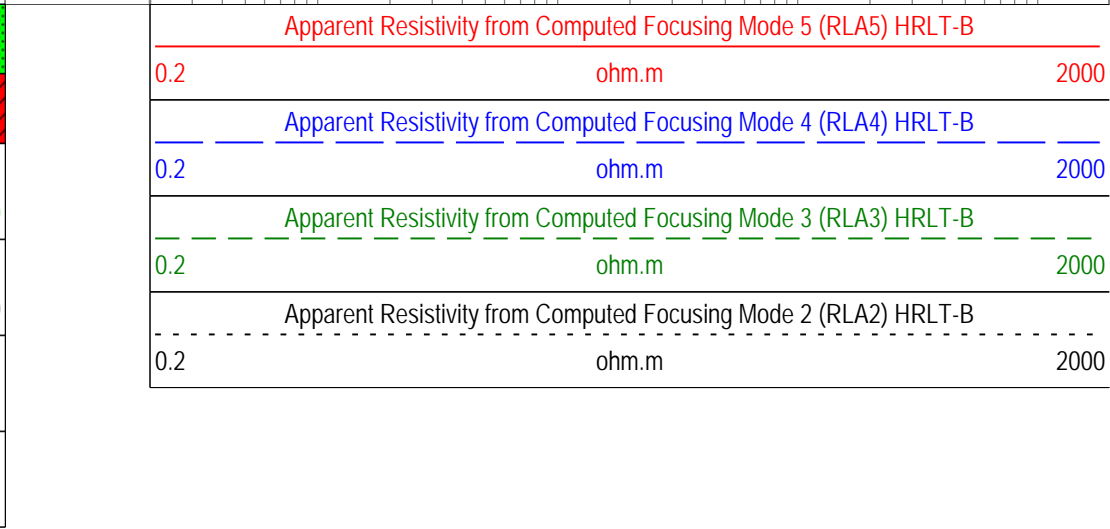
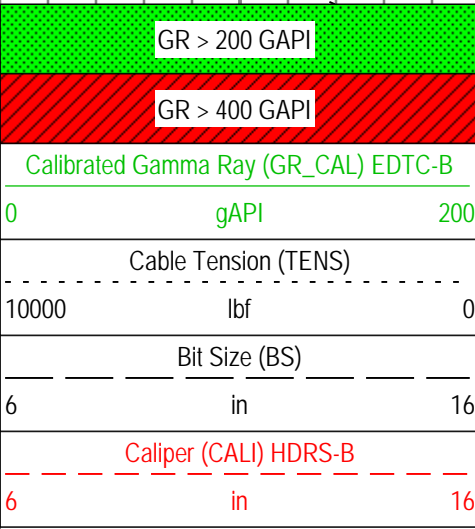
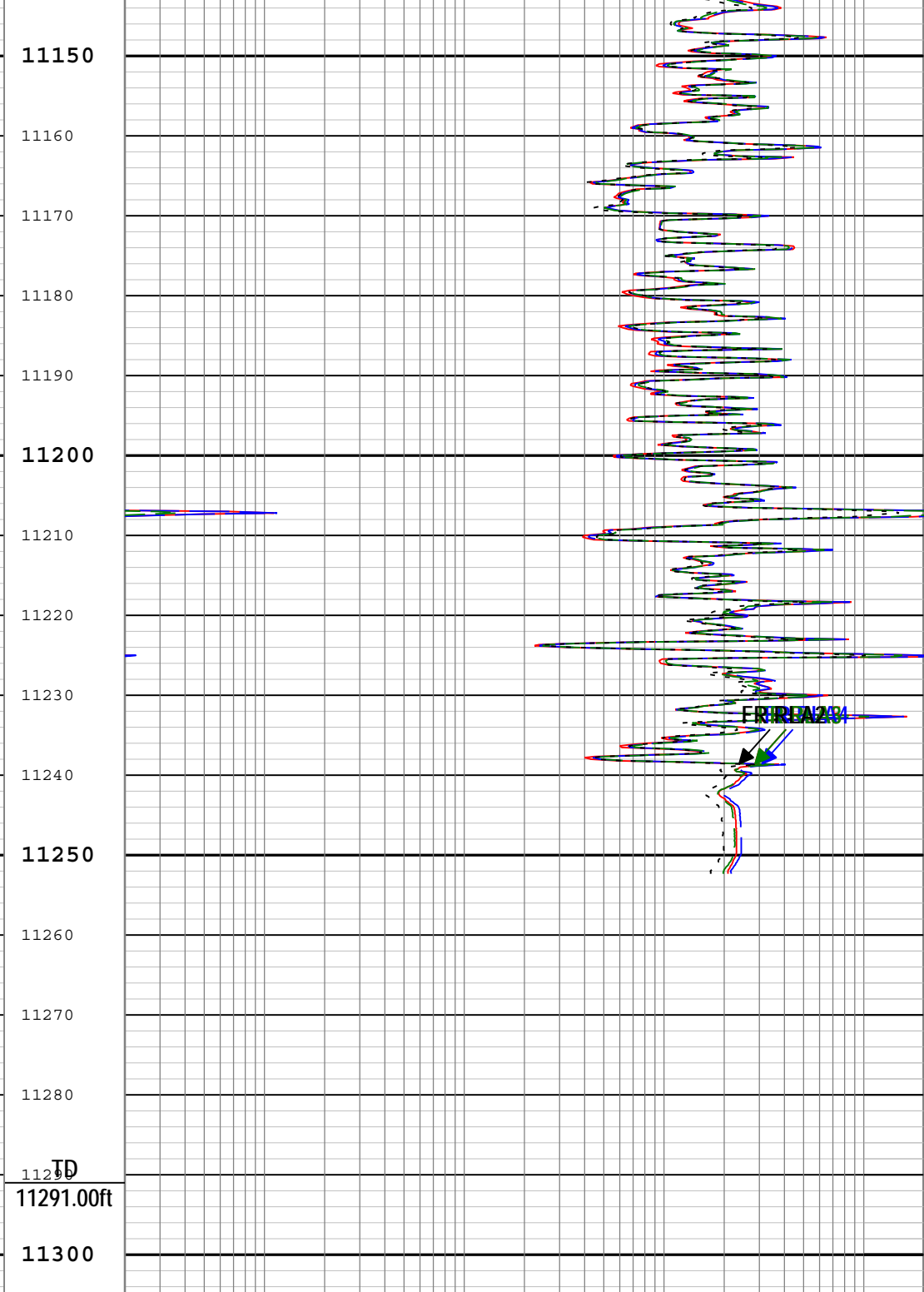
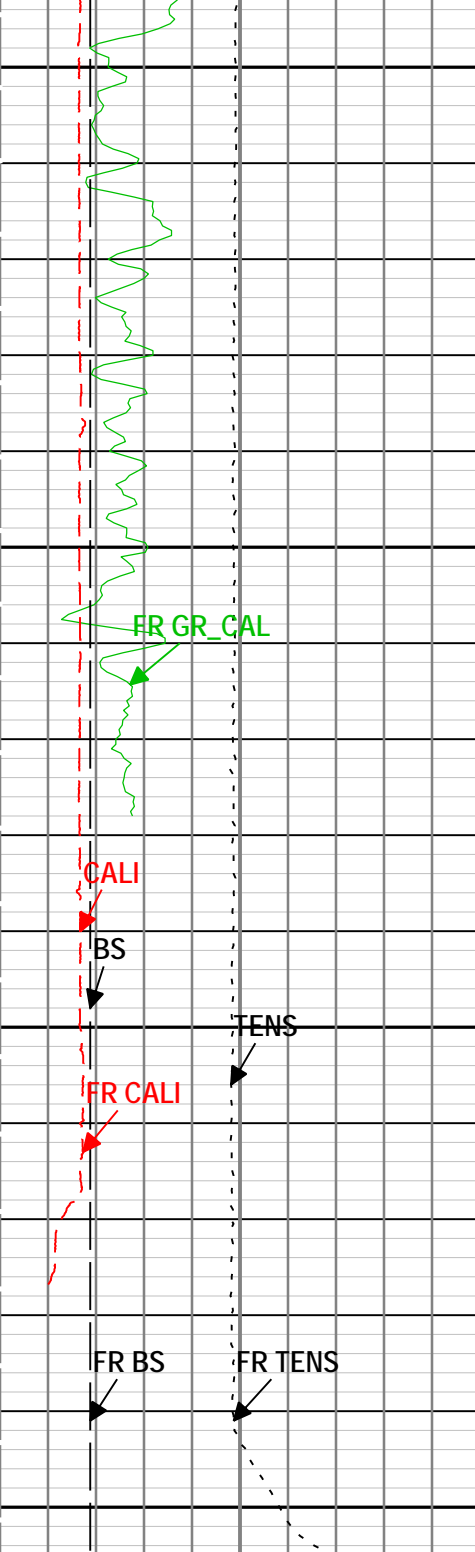




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TIME_1900 - Time Marked every 60.00 (s)

Channel Processing Parameters

Parameter	Description	Tool	Value	Unit
BHS	Borehole Status (Open or Cased Hole)	Borehole	Depth Zoned	
BS	Bit Size	WLSESSION	Depth Zoned	in
CALI_SHIFT	CALI Supplementary Offset	HDRS-B	0	in
CBLO	Casing Bottom (Logger)	WLSESSION	8490	ft
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	MRES	
HRLT_PROCRM	Mud Resistivity Select	HRLT-B	HRLT Compute	
KFAC_HRLT	HRLT Geometrical Factor Option	HRLT-B	Sonde	
PROCMSO	Mechanical Standoff Size	HRLT-B	1.5	in
PROCSPO	Sonde Position	HRLT-B	Eccentered	

Depth Zone Parameters

Parameter	Value	Start (ft)	Stop (ft)
BHS	Cased	8450	8480
BHS	Open	8480	11305
BS	12.25	8450	8506
BS	7.875	8506	11305

All depth are actual.

Tool Control Parameters

Parameter	Description	Tool	Value	Unit
MAX_LOG_SPEED	Toolstring Maximum Logging Speed	WLSESSION	1800	ft/h

2A

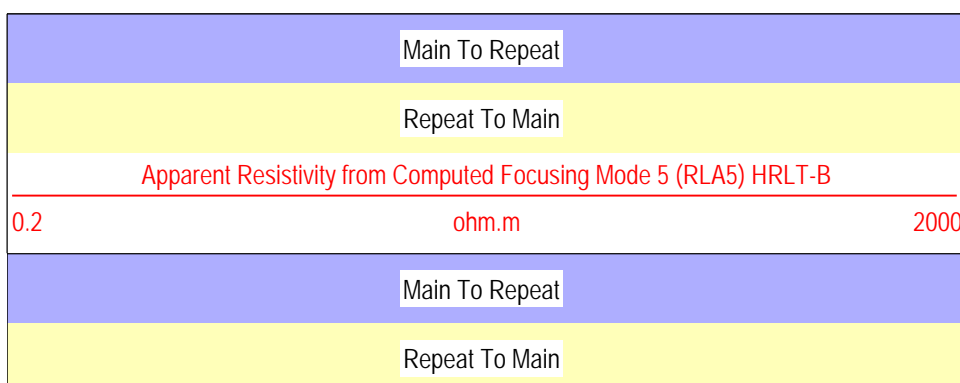
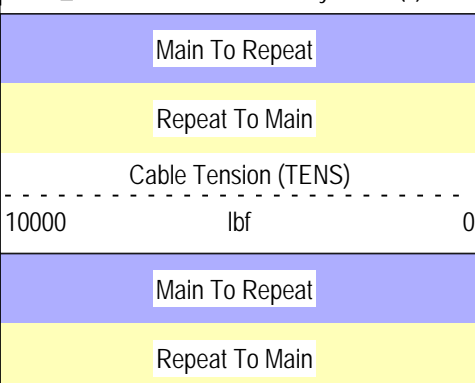
Pass Summary

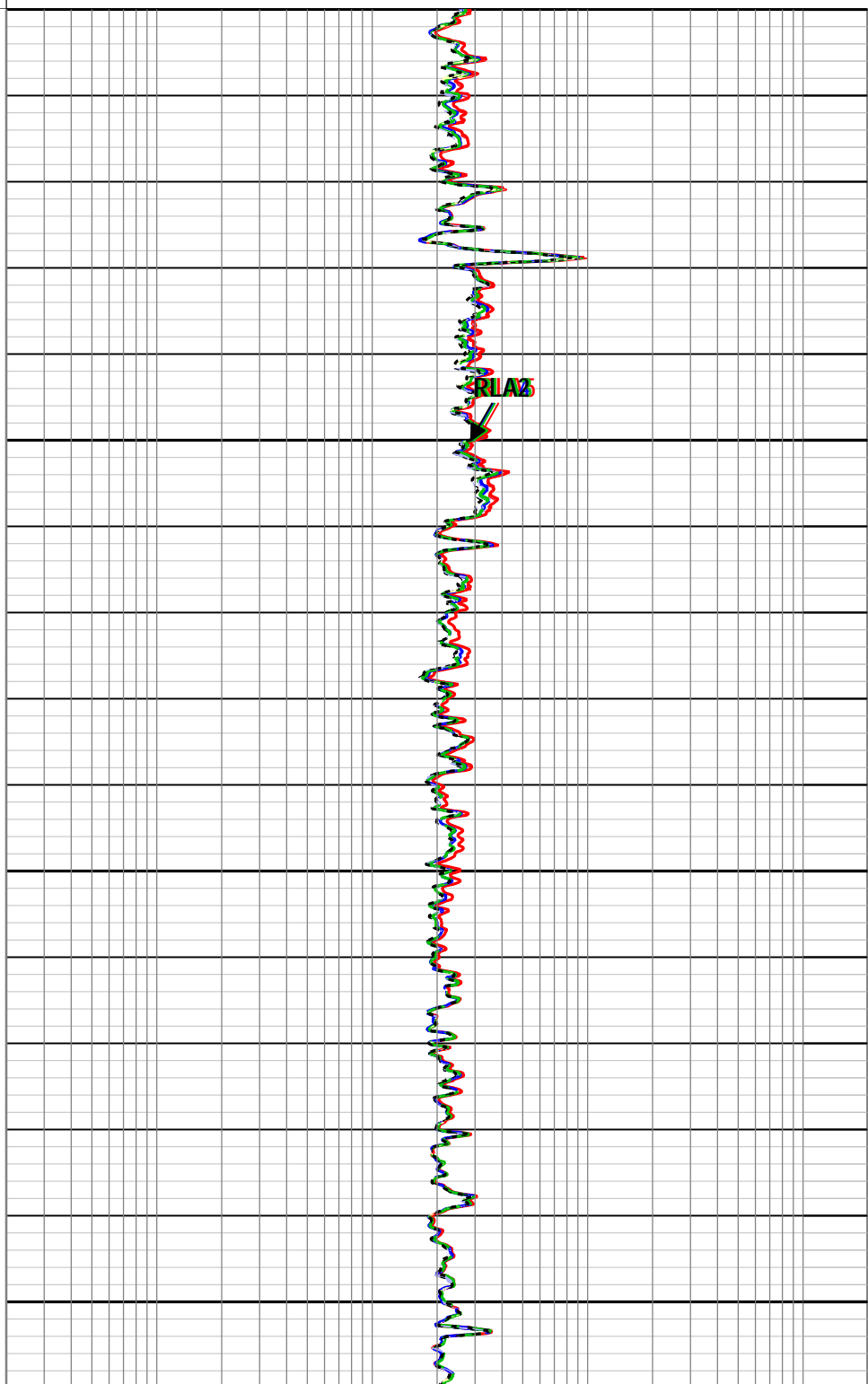
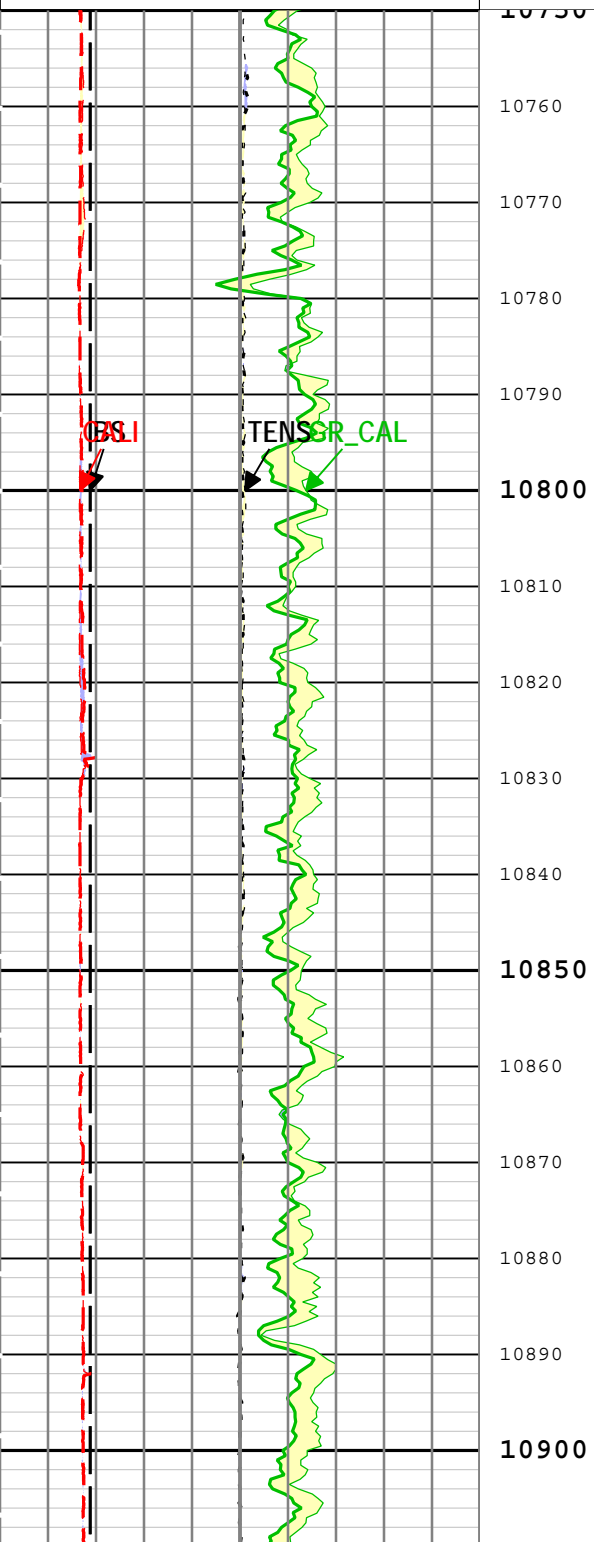
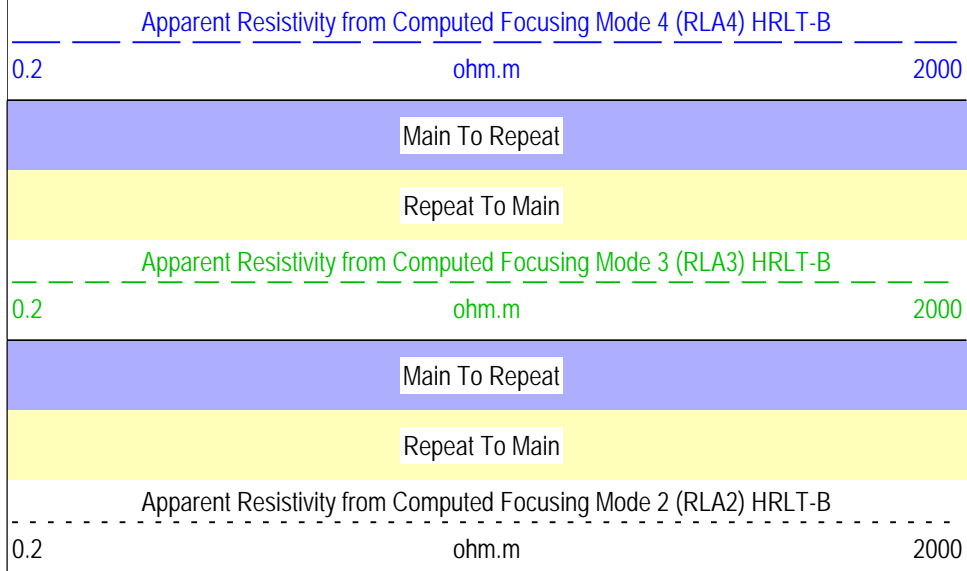
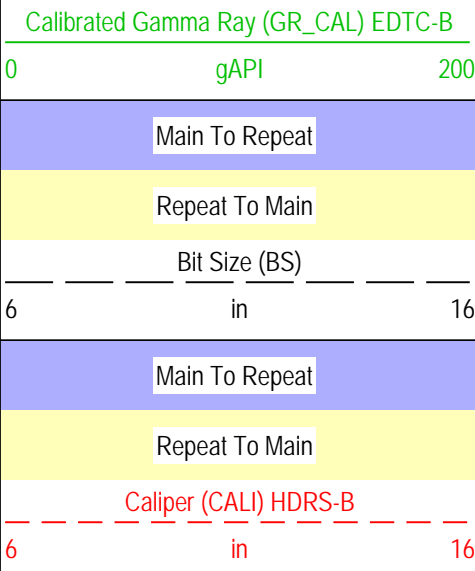
Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	Depth Shift	Include Parallel Data
2A	Log[4]:Up	Up	10755.46 ft	11306.17 ft	02-Sep-2013 1:17:35 PM	02-Sep-2013 2:24:27 PM	15.40 ft	
2A	Log[5]:Up	Up	6011.38 ft	11304.86 ft	02-Sep-2013 2:31:05 PM	02-Sep-2013 8:03:44 PM	16.50 ft	

All depths are referenced to toolstring zero

Log 2A: Log[5]:Up

TIME_1900 - Time Marked every 60.00 (s)





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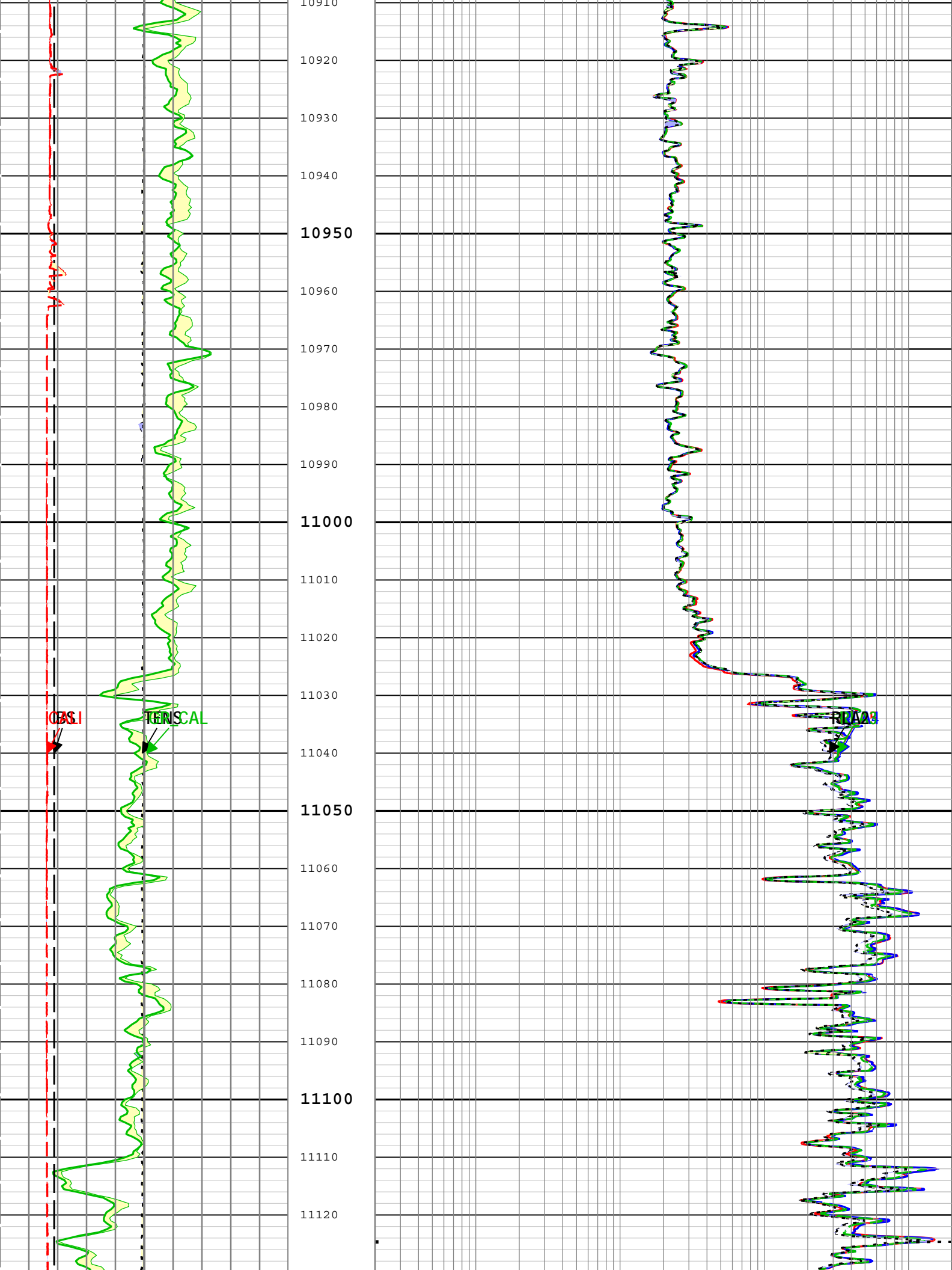
10860

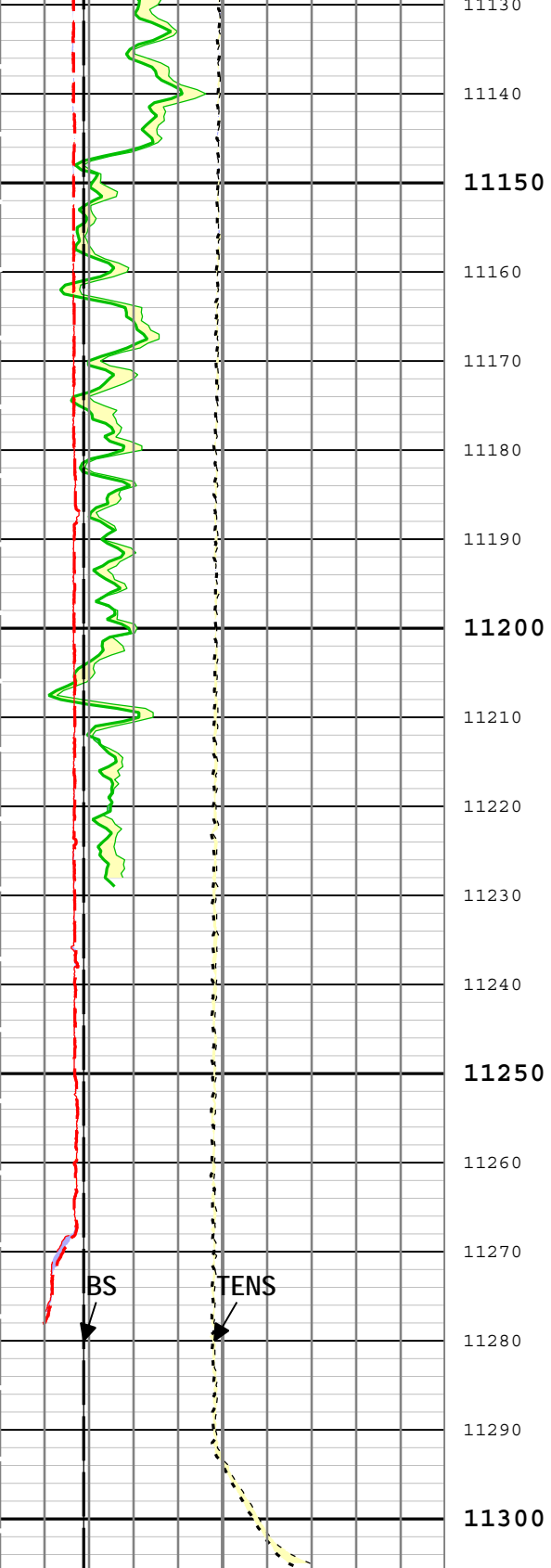
10870

10880

10890

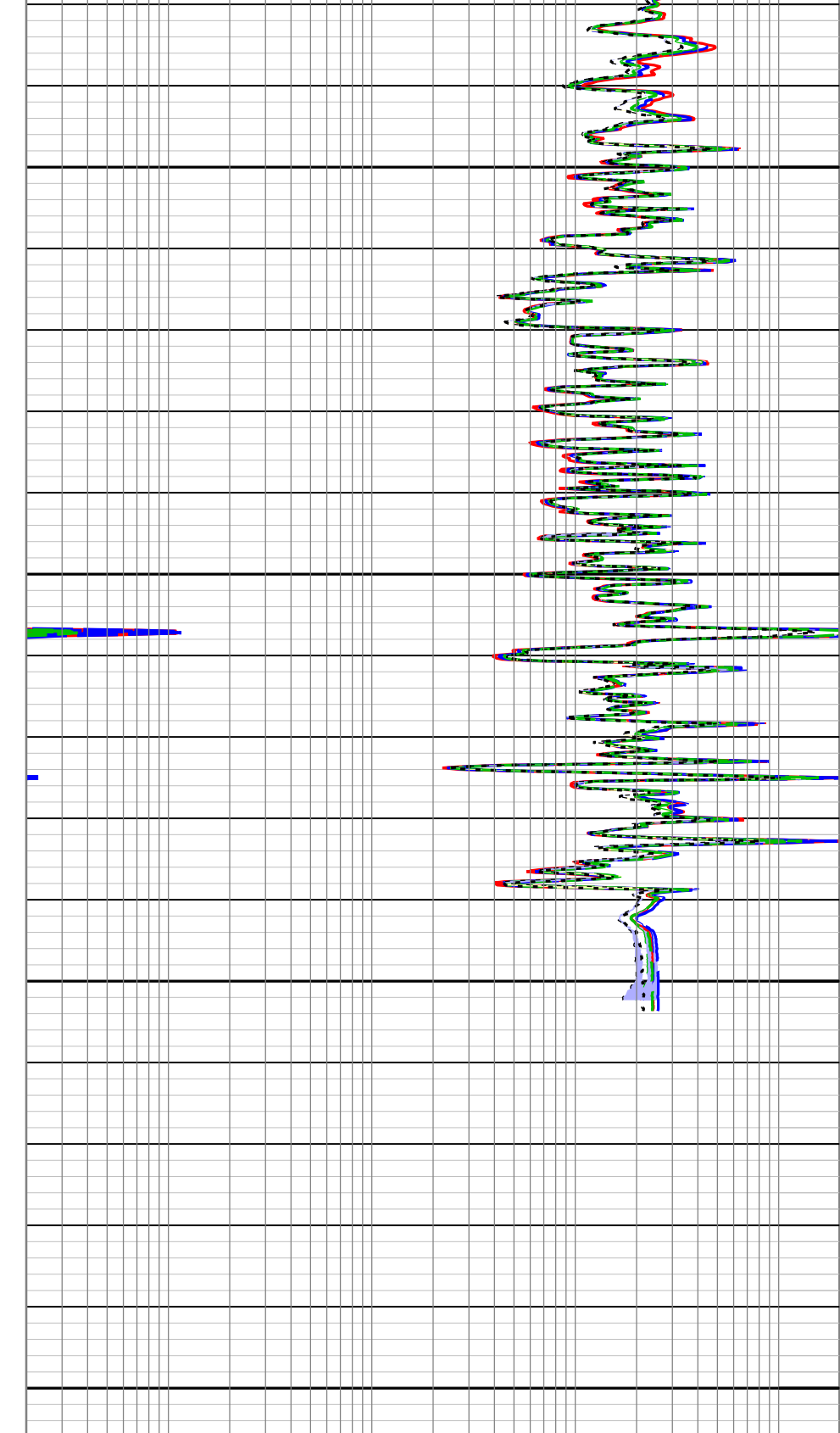
10900





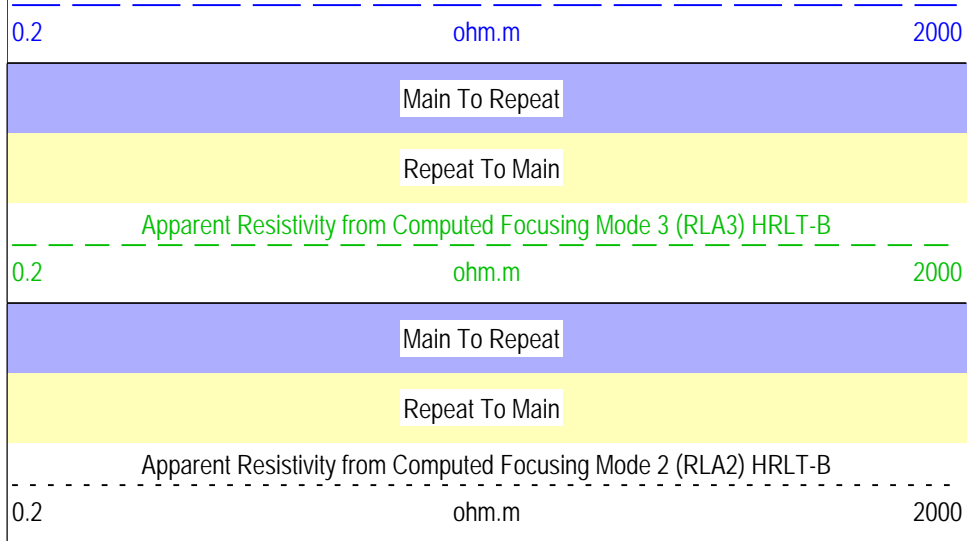
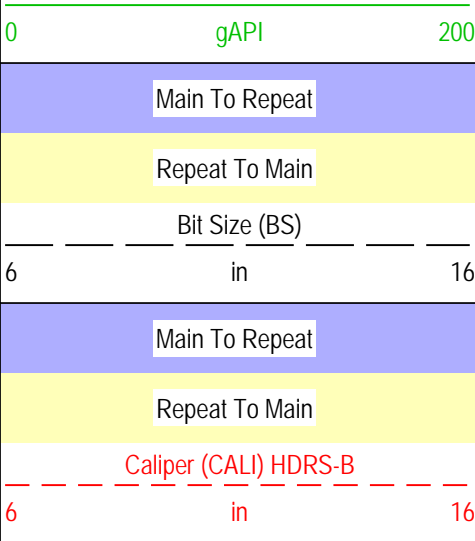
Main To Repeat
 Repeat To Main
 Cable Tension (TENS)
 10000 lbf 0

Main To Repeat
 Repeat To Main
 Calibrated Gamma Ray (GR_CAL) EDTC-B



Main To Repeat
 Repeat To Main
 Apparent Resistivity from Computed Focusing Mode 5 (RLA5) HRLT-B
 0.2 ohm.m 2000

Main To Repeat
 Repeat To Main
 Apparent Resistivity from Computed Focusing Mode 4 (RLA4) HRLT-B



TIME_1900 - Time Marked every 60.00 (s)

Description: AIT Resistivity Image Two Format: Log (5 in AIT Resistivity Image Two RA) Index Scale: 5 in per 100 ft Index Unit: ft Index Type: Measured Depth Creation Date: 02-Sep-2013 20:58:37

Calibration Report

HDRS-B (HILT Density and Rxo Sonde, 125 degC) Calibration - Run 2A

Primary Equipment :

HILT High-Resolution Control Cartridge, 125 degC	HRCC-B	1813
HILT Resistivity Gamma-Ray Density Device, 125 degC	HRGD-B	1850

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	5159
HILT High-Resolution Control Cartridge, 125 degC	HRCC-B	1813
HILT High-Resolution Mechanical Sonde, 125 degC	HRMS-B	1849

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): 14:17:39 30-Aug-2013 Expired by 1 days

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Small Ring	in	Before	8.00	6.00	8.45	10.00	
Large Ring	in	Before	12.00	9.00	12.53	15.00	

HDRS Density Calibration - Inversion Results

Master (EEPROM): 12:34:24 29-Aug-2013

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Rho Aluminum	g/cm3	Master	2.596	2.586	2.594	2.606	
Rho Magnesium	g/cm3	Master	1.686	1.676	1.690	1.696	
Pe Aluminum		Master	2.570	2.470	2.550	2.670	
Pe Magnesium		Master	2.650	2.550	2.632	2.750	

HDRS Density Calibration - Deviation Summary

Master (EEPROM): 12:34:24 29-Aug-2013

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
BS Average Deviation	%	Master	0	-0.6000	0.1674	0.6000	
BS Max Deviation	%	Master	0	-1.6000	0.4893	1.6000	
SS Average Deviation	%	Master	0	-1.0000	0.6098	1.0000	
SS Max Deviation	%	Master	0	-2.5000	1.4274	2.5000	
LS Average Deviation	%	Master	0	-1.5000	0.8293	1.5000	
LS Max Deviation	%	Master	0	-3.5000	1.8739	3.5000	

HDRS Density Calibration - Background Summary

Master (EEPROM): 12:34:24 29-Aug-2013

Before (Measured):

14:01:20 1-Sep-2013 Expired by 1 days

Master (EEPROM):		12:34:24 29-Aug-2013		Before (Measured):		14:21:01 30-Aug-2013 Expired by 1 days	
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
BS Window Ratio		Master	1.0000		0.7385		
		Before	0.7385	0.7016	0.7378	0.7754	
		Before-Master	----	----	-0.0007	----	
BS Window Sum	1/s	Master	1		9348		
		Before	9348	8881	9352	9815	
		Before-Master	----	----	4	----	
SS Window Ratio		Master	1.0000		0.4854		
		Before	0.4854	0.4611	0.4851	0.5096	
		Before-Master	----	----	-0.0003	----	
SS Window Sum	1/s	Master	1		9409		
		Before	9409	8938	9408	9879	
		Before-Master	----	----	-1	----	
LS Window Ratio		Master	1.0000		0.2921		
		Before	0.2921	0.2775	0.2907	0.3067	
		Before-Master	----	----	-0.0014	----	
LS Window Sum	1/s	Master	1		1067		
		Before	1067	1014	1057	1121	
		Before-Master	----	----	-10	----	

HDRS Density Calibration - Photo-multiplier High Voltages

Master (EEPROM):		12:34:24 29-Aug-2013		Before (Measured):		14:21:01 30-Aug-2013 Expired by 1 days	
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
BS PM High Voltage	V	Master		1000	2189	2400	
		Before		1000	2166	2400	
		Before-Master	----	-100	-23	100	
SS PM High Voltage	V	Master		1000	2130	2400	
		Before		1000	2102	2400	
		Before-Master	----	-100	-28	100	
LS PM High Voltage	V	Master		1000	1754	2400	
		Before		1000	1735	2400	
		Before-Master	----	-100	-19	100	

HDRS Density Calibration - Crystal Quality Resolutions

Master (EEPROM):		12:34:24 29-Aug-2013		Before (Measured):		14:21:01 30-Aug-2013 Expired by 1 days	
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
BS Crystal Resolution	%	Master		5.00	13.13	25.00	
		Before		5.00	13.31	25.00	
		Before-Master	----	-1.00	0.18	1.00	
SS Crystal Resolution	%	Master		5.00	10.81	20.00	
		Before		5.00	10.62	20.00	
		Before-Master	----	-1.00	-0.19	1.00	
LS Crystal Resolution	%	Master		5.00	9.85	20.00	
		Before		5.00	9.92	20.00	
		Before-Master	----	-1.00	0.07	1.00	

HDRS MCFL Calibration - MCFL Accumulations

Before (Measured):		12:13:45 02-Sep-2013					
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Main Resistivity	ohm.m	Before	3875	3565	3840	4185	
Deep Resistivity	ohm.m	Before	3830	3524	3794	4136	
Shallow Resistivity	ohm.m	Before	3830	3524	3867	4136	

HRLT-B (High Resolution Laterolog Array) Calibration - Run 2A

Primary Equipment :	HRLT-B Sonde	HRLS-B	814
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HRLT-B Calibration - HRLT M0-M1 Voltage Plus

Before (Measured):		20:35:22 02-Sep-2013		After:			
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
HRLT M01 - 0	uV	Before	-322.7	-379.6	-315.7	-280.6	
		After	----	----	----	----	
		After-Before	----	----	----	----	
HRLT M01 - 1	uV	Before	-322.7	-379.6	-340.1	-280.6	
		After	----	----	----	----	
		After-Before	----	----	----	----	

HRLT M01 - 2	uV	Before After After-Before	-322.7 ---- ----	-379.6 ---- ----	-325.1 ---- ----	-280.6 ---- ----	
HRLT M01 - 3	uV	Before After After-Before	-322.7 ---- ----	-379.6 ---- ----	-335.0 ---- ----	-280.6 ---- ----	
HRLT M01 - 4	uV	Before After After-Before	-322.7 ---- ----	-379.6 ---- ----	-316.9 ---- ----	-280.6 ---- ----	
HRLT M01 - 5	uV	Before After After-Before	-322.7 ---- ----	-379.6 ---- ----	-319.2 ---- ----	-280.6 ---- ----	
HRLT M01 - 6	uV	Before After After-Before	322.7 ---- ----	280.6 ---- ----	324.6 ---- ----	379.6 ---- ----	

HRLT-B Calibration - HRLT M1-M2 Voltage Plus

Before (Measured):		20:35:22 02-Sep-2013		After:			
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
HRLT M12 - 0	uV	Before After After-Before	1781.0 ---- ----	1548.7 ---- ----	1734.7 ---- ----	2095.3 ---- ----	
HRLT M12 - 1	uV	Before After After-Before	1781.0 ---- ----	1548.7 ---- ----	1865.2 ---- ----	2095.3 ---- ----	
HRLT M12 - 2	uV	Before After After-Before	1781.0 ---- ----	1548.7 ---- ----	1779.0 ---- ----	2095.3 ---- ----	
HRLT M12 - 3	uV	Before After After-Before	1781.0 ---- ----	1548.7 ---- ----	1835.2 ---- ----	2095.3 ---- ----	
HRLT M12 - 4	uV	Before After After-Before	1781.0 ---- ----	1548.7 ---- ----	1738.1 ---- ----	2095.3 ---- ----	
HRLT M12 - 5	uV	Before After After-Before	1781.0 ---- ----	1548.7 ---- ----	1752.3 ---- ----	2095.3 ---- ----	
HRLT M12 - 6	uV	Before After After-Before	-1781.0 ---- ----	-2095.3 ---- ----	-1787.1 ---- ----	-1548.7 ---- ----	

HRLT-B Calibration - HRLT M2-M3 Voltage Plus

Before (Measured):		20:35:22 02-Sep-2013		After:			
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
HRLT M23 - 0	uV	Before After After-Before	1781.0 ---- ----	1548.7 ---- ----	1742.4 ---- ----	2095.3 ---- ----	
HRLT M23 - 1	uV	Before After After-Before	1781.0 ---- ----	1548.7 ---- ----	1880.8 ---- ----	2095.3 ---- ----	
HRLT M23 - 2	uV	Before After After-Before	1781.0 ---- ----	1548.7 ---- ----	1797.2 ---- ----	2095.3 ---- ----	
HRLT M23 - 3	uV	Before After After-Before	1781.0 ---- ----	1548.7 ---- ----	1858.3 ---- ----	2095.3 ---- ----	
HRLT M23 - 4	uV	Before After After-Before	1781.0 ---- ----	1548.7 ---- ----	1755.3 ---- ----	2095.3 ---- ----	
HRLT M23 - 5	uV	Before After After-Before	1781.0 ---- ----	1548.7 ---- ----	1771.1 ---- ----	2095.3 ---- ----	
HRLT M23 - 6	uV	Before After After-Before	-1781.0 ---- ----	-2095.3 ---- ----	-1790.2 ---- ----	-1548.7 ---- ----	

HRLT-B Calibration - HRLT A3-A4 Voltage Plus

Before (Measured):		20:35:22 02-Sep-2013		After:			
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
HRLT V34 - 0	uV	Before	70000.0	60869.6	68181.8	82352.9	
		After	----	----	----	----	
		After-Before	----	----	----	----	
HRLT V34 - 1	uV	Before	70000.0	60869.6	73661.7	82352.9	
		After	----	----	----	----	
		After-Before	----	----	----	----	
HRLT V34 - 2	uV	Before	70000.0	60869.6	70638.0	82352.9	
		After	----	----	----	----	
		After-Before	----	----	----	----	
HRLT V34 - 3	uV	Before	70000.0	60869.6	73207.2	82352.9	
		After	----	----	----	----	
		After-Before	----	----	----	----	
HRLT V34 - 4	uV	Before	70000.0	60869.6	69042.6	82352.9	
		After	----	----	----	----	
		After-Before	----	----	----	----	
HRLT V34 - 5	uV	Before	70000.0	60869.6	69635.6	82352.9	
		After	----	----	----	----	
		After-Before	----	----	----	----	
HRLT V34 - 6	uV	Before	-70000.0	-82352.9	-69109.9	-60869.6	
		After	----	----	----	----	
		After-Before	----	----	----	----	

HRLT-B Calibration - HRLT A4-A5 Voltage Plus

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Before (Measured):		20:35:22 02-Sep-2013		After:			
HRLT V45 - 0	uV	Before	70000.0	60869.6	67847.6	82352.9	
		After	----	----	----	----	
		After-Before	----	----	----	----	
HRLT V45 - 1	uV	Before	70000.0	60869.6	73258.4	82352.9	
		After	----	----	----	----	
		After-Before	----	----	----	----	
HRLT V45 - 2	uV	Before	70000.0	60869.6	70260.2	82352.9	
		After	----	----	----	----	
		After-Before	----	----	----	----	
HRLT V45 - 3	uV	Before	70000.0	60869.6	72819.2	82352.9	
		After	----	----	----	----	
		After-Before	----	----	----	----	
HRLT V45 - 4	uV	Before	70000.0	60869.6	68697.6	82352.9	
		After	----	----	----	----	
		After-Before	----	----	----	----	
HRLT V45 - 5	uV	Before	70000.0	60869.6	69292.6	82352.9	
		After	----	----	----	----	
		After-Before	----	----	----	----	
HRLT V45 - 6	uV	Before	-70000.0	-82352.9	-68719.0	-60869.6	
		After	----	----	----	----	
		After-Before	----	----	----	----	

HRLT-B Calibration - HRLT A5-A6 Voltage Plus

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Before (Measured):		20:35:22 02-Sep-2013		After:			
HRLT V56 - 0	uV	Before	70000.0	60869.6	68147.2	82352.9	
		After	----	----	----	----	
		After-Before	----	----	----	----	
HRLT V56 - 1	uV	Before	70000.0	60869.6	73894.5	82352.9	
		After	----	----	----	----	
		After-Before	----	----	----	----	
HRLT V56 - 2	uV	Before	70000.0	60869.6	70793.6	82352.9	
		After	----	----	----	----	
		After-Before	----	----	----	----	
HRLT V56 - 3	uV	Before	70000.0	60869.6	73302.3	82352.9	
		After	----	----	----	----	
		After-Before	----	----	----	----	
HRLT V56 - 4	uV	Before	70000.0	60869.6	69044.0	82352.9	
		After	----	----	----	----	
		After-Before	----	----	----	----	
HRLT V56 - 5	uV	Before	70000.0	60869.6	69606.2	82352.9	
		After	----	----	----	----	
		After-Before	----	----	----	----	

HRLT V56 - 6	uV	Before After After-Before	----- ----- -----	-70000.0 ----- -----	-82352.9 ----- -----	-69363.1 ----- -----	-60869.6 ----- -----	
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HRLT-B Calibration - HRLT Torpedo-M0 Voltage

Before (Measured):		20:35:22 02-Sep-2013		After:				
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit		
HRLT VTP - 0	uV	Before After After-Before	----- ----- -----	-70000.0 ----- -----	-82352.9 ----- -----	-67731.4 ----- -----	-60869.6 ----- -----	
HRLT VTP - 1	uV	Before After After-Before	----- ----- -----	-70000.0 ----- -----	-82352.9 ----- -----	-73694.1 ----- -----	-60869.6 ----- -----	
HRLT VTP - 2	uV	Before After After-Before	----- ----- -----	-70000.0 ----- -----	-82352.9 ----- -----	-70645.3 ----- -----	-60869.6 ----- -----	
HRLT VTP - 3	uV	Before After After-Before	----- ----- -----	-70000.0 ----- -----	-82352.9 ----- -----	-73219.8 ----- -----	-60869.6 ----- -----	
HRLT VTP - 4	uV	Before After After-Before	----- ----- -----	-70000.0 ----- -----	-82352.9 ----- -----	-69037.8 ----- -----	-60869.6 ----- -----	
HRLT VTP - 5	uV	Before After After-Before	----- ----- -----	-70000.0 ----- -----	-82352.9 ----- -----	-69615.8 ----- -----	-60869.6 ----- -----	
HRLT VTP - 6	uV	Before After After-Before	----- ----- -----	70000.0 ----- -----	60869.6 ----- -----	69122.2 ----- -----	82352.9 ----- -----	

HRLT-B Calibration - HRLT Bridle#9-M0 Voltage

Before (Measured):		20:35:22 02-Sep-2013		After:				
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit		
HRLT VBD - 0	uV	Before After After-Before	----- ----- -----	-70000.0 ----- -----	-82352.9 ----- -----	-67752.1 ----- -----	-60869.6 ----- -----	
HRLT VBD - 1	uV	Before After After-Before	----- ----- -----	-70000.0 ----- -----	-82352.9 ----- -----	-73798.7 ----- -----	-60869.6 ----- -----	
HRLT VBD - 2	uV	Before After After-Before	----- ----- -----	-70000.0 ----- -----	-82352.9 ----- -----	-70728.6 ----- -----	-60869.6 ----- -----	
HRLT VBD - 3	uV	Before After After-Before	----- ----- -----	-70000.0 ----- -----	-82352.9 ----- -----	-73292.6 ----- -----	-60869.6 ----- -----	
HRLT VBD - 4	uV	Before After After-Before	----- ----- -----	-70000.0 ----- -----	-82352.9 ----- -----	-69085.6 ----- -----	-60869.6 ----- -----	
HRLT VBD - 5	uV	Before After After-Before	----- ----- -----	-70000.0 ----- -----	-82352.9 ----- -----	-69649.4 ----- -----	-60869.6 ----- -----	
HRLT VBD - 6	uV	Before After After-Before	----- ----- -----	70000.0 ----- -----	60869.6 ----- -----	69206.1 ----- -----	82352.9 ----- -----	

HRLT-B Calibration - HRLT Source Current Plus

Before (Measured):		20:35:22 02-Sep-2013		After:				
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit		
HRLT ISO - 0	uA	Before After After-Before	----- ----- -----	284.0 ----- -----	247.0 ----- -----	283.3 ----- -----	334.1 ----- -----	
HRLT ISO - 1	uA	Before After After-Before	----- ----- -----	281.1 ----- -----	244.4 ----- -----	281.1 ----- -----	330.7 ----- -----	
HRLT ISO - 2	uA	Before After After-Before	----- ----- -----	281.1 ----- -----	244.4 ----- -----	281.1 ----- -----	330.7 ----- -----	
HRLT ISO - 3	uA	Before After After-Before	----- ----- -----	281.1 ----- -----	244.4 ----- -----	281.1 ----- -----	330.7 ----- -----	

		After-Before	----	----	----	----	
HRLT ISO - 4	uA	Before	281.1	244.4	281.1	330.7	
		After	----	----	----	----	
		After-Before	----	----	----	----	
HRLT ISO - 5	uA	Before	281.1	244.4	281.1	330.7	
		After	----	----	----	----	
		After-Before	----	----	----	----	
HRLT ISO - 6	uA	Before	281.1	244.4	281.1	330.7	
		After	----	----	----	----	
		After-Before	----	----	----	----	

HRLT-B Calibration - HRLT Vertical Voltage PI

Before (Measured):		20:35:22 02-Sep-2013		After:			
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
HRLT MV - 0	uV	Before	-322.7	-379.6	-319.0	-280.6	
		After	----	----	----	----	
		After-Before	----	----	----	----	
HRLT MV - 1	uV	Before	-322.7	-379.6	-335.1	-280.6	
		After	----	----	----	----	
		After-Before	----	----	----	----	
HRLT MV - 2	uV	Before	-322.7	-379.6	-319.2	-280.6	
		After	----	----	----	----	
		After-Before	----	----	----	----	
HRLT MV - 3	uV	Before	-322.7	-379.6	-327.8	-280.6	
		After	----	----	----	----	
		After-Before	----	----	----	----	
HRLT MV - 4	uV	Before	-322.7	-379.6	-307.5	-280.6	
		After	----	----	----	----	
		After-Before	----	----	----	----	
HRLT MV - 5	uV	Before	-322.7	-379.6	-324.8	-280.6	
		After	----	----	----	----	
		After-Before	----	----	----	----	
HRLT MV - 6	uV	Before	322.7	280.6	332.8	379.6	
		After	----	----	----	----	
		After-Before	----	----	----	----	

HRLT-B Calibration - HRLT Calibration Temperature

Before (Measured):		20:35:22 02-Sep-2013		After:			
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
CTEM_HRLT	degF	Before			155.9		
		After	----	----	----	----	
		After-Before	----	----	----	----	

HGNS-B (HILT Gamma-Ray and Neutron Sonde, 125 degC) Calibration - Run 2A

Primary Equipment :			
HILT Gamma-Ray and Neutron Sonde, 125 degC	HGNS-B	1893	
Auxiliary Equipment :			
HGNS Accelerometer, 125 degC	HACCZ-B	452	
AmBe Neutron Logging Source	NSR-F	2179	
Calibration Parameter :			
Water Temperature			
Housing Size			
JIG-BKG (Jig minus background reference)	165		

HGNS Accelerometer Calibration - Accelerometer Accumulations

Before (Measured):		08:26:35 02-Sep-2013					
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
AZ Vertical Measurement	ft/s2	Before	32.2	31.5	31.6	32.8	

HGNS Accelerometer EEPROM - Accelerometer EEPROM Read

Master (EEPROM):		00:00:00 15-Dec-1996					
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Accelerometer Manufacturer		Master			Sunstrand		

Accelerometer Reference Temperature	degF	Master		30.2	68.0	122.0	
Accelerometer Coefficients - 0		Master	----	----	51.000	----	
Accelerometer Coefficients - 1		Master	----	----	11.800	----	
Accelerometer Coefficients - 2		Master	----	----	0.011	----	
Accelerometer Coefficients - 3		Master	----	----	0.000	----	
Accelerometer Coefficients - 4		Master	----	----	2.182	----	
Accelerometer Coefficients - 5		Master	----	----	0.000	----	
Accelerometer Coefficients - 6		Master	----	----	0.000	----	
Accelerometer Coefficients - 7		Master	----	----	0.000	----	
Accelerometer Coefficients - 8		Master	----	----	293.400	----	
Accelerometer Coefficients - 9		Master	----	----	0.997	----	

HGNS Neutron Calibration - HGNS Neutron Accumulations

Master (EEPROM): 18:48:56 01-Aug-2013 Before (Measured): 14:16:56 30-Aug-2013 Expired by 1 days After:

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Near Zero Measurement	1/s	Master	0	5.0	23.6	40.0	
		Before	0	5.0	24.2	40.0	
		After	----	----	----	----	
		Before-Master	----	-3.5	0.6	3.5	
		After-Before	----	----	----	----	
Far Zero Measurement	1/s	Master	0	5.0	26.2	40.0	
		Before	0	5.0	27.3	40.0	
		After	----	----	----	----	
		Before-Master	----	-3.9	1.1	3.9	
		After-Before	----	----	----	----	
Near Plus Measurement - 0	1/s	Master	6031.0	4700.0	5841.0	6900.0	
		Before	----	----	----	----	
		After	----	----	----	----	
		Before-Master	----	----	----	----	
		After-Before	----	----	----	----	
Far Plus Measurement - 0	1/s	Master	2793.0	1900.0	2510.0	2900.0	
		Before	----	----	----	----	
		After	----	----	----	----	
		Before-Master	----	----	----	----	
		After-Before	----	----	----	----	
Near Corrected Plus Measurement - 0	1/s	Master		4700.0	5794.0	6900.0	
		Before	----	----	----	----	
		After	----	----	----	----	
		Before-Master	----	----	----	----	
		After-Before	----	----	----	----	
Far Corrected Plus Measurement - 0	1/s	Master		1900.0	2468.0	2900.0	
		Before	----	----	----	----	
		After	----	----	----	----	
		Before-Master	----	----	----	----	
		After-Before	----	----	----	----	

HGNS Gamma-Ray Calibration - Gamma-Ray Accumulations

Before (Measured): 14:30:11 30-Aug-2013 Expired by 1 days After:

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
RGR Zero Measurement	gAPI	Before	30.0	0	33.0	120.0	
		After	----	----	----	----	
		After-Before	----	----	----	----	
RGR Plus Measurement	gAPI	Before	185.4	157.1	160.4	206.3	
		After	----	----	NOT DONE	----	
		After-Before	----	----	----	----	
GR Calibration Gain		Before	0.89	0.80	1.03	1.05	
		After	----	----	----	----	
		After-Before	----	----	----	----	

EDTC-B (Enhanced Digital Telemetry Cartridge - Version B) Calibration - Run 2A

Primary Equipment :	Enhanced Digital Telemetry Cartridge - B	EDTC-B	8341
Calibration Parameter :	Plus Reference (Jig minus background reference)	165	

EDTC-B Accelerometer Calibration - EDTC-B Accelerometer Calibration

Before (Measured):		08:26:45 02-Sep-2013					
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
AZ Vertical Measurement	ft/s2	Before	32.19	31.53	32.10	32.84	█

EDTC-B Memory Data - EDTC-B Memory Data

Master (EEPROM):		12:39:00 02-Sep-2013					
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Initial PMT HV	V	Master			1678.000		█
Accelerometer Serial Number		Master			1261		█
Accelerometer Coefficients - 0		Master	----	----	2.992	----	█
Accelerometer Coefficients - 1		Master	----	----	0.000	----	█
Accelerometer Coefficients - 2		Master	----	----	0.000	----	█
Accelerometer Coefficients - 3		Master	----	----	0.000	----	█
Accelerometer Coefficients - 4		Master	----	----	0.000	----	█
Accelerometer Coefficients - 5		Master	----	----	0.000	----	█
Accelerometer Coefficients - 6		Master	----	----	0.000	----	█
Accelerometer Coefficients - 7		Master	----	----	-0.004	----	█
Accelerometer Coefficients - 8		Master	----	----	0.000	----	█
Accelerometer Coefficients - 9		Master	----	----	0.000	----	█
Accelerometer Coefficients - 10		Master	----	----	0.000	----	█
Accelerometer Coefficients - 11		Master	----	----	0.000	----	█
Gamma-Ray Detector Serial Number		Master			77205		█

EDTC-B Gamma-Ray Calibration - Gamma Ray Coefficients

Before (Measured):		05:15:59 01-Sep-2013		After:			
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Gamma Ray Gain		Before	1.000	0.900	1.073	1.100	█
		After	----	----	----	----	█
		After-Before	----	----	----	----	█

EDTC-B Gamma-Ray Calibration - Gamma Ray Accumulations

Before (Measured):		05:15:59 01-Sep-2013		After:			
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
RGR Zero Measurement	gAPI	Before		0	32.207	120.000	█
		After	----	----	----	----	█
		After-Before	----	----	----	----	█
RGR Plus Measurement	gAPI	Before	165.000	150.000	153.752	180.000	█
		After			NOT DONE		█
		After-Before	----	----	----	----	█

Company:	Chevron AMBU	<h1 style="margin: 0;">Schlumberger</h1>
Well:	Conner 6H	
Field:	Wildcat	
County:	Marshall	
Country:		

PLATFORM EXPRESS

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GR/CALIPER