

Company: Texas American Resources Company

Well: Roth 44-30

Field: Wattenberg

County: Weld State: Colorado

Platform Express	SESE Sec 30, T5N, R63W				Elev.	K.B.	4590.00 ft
Caliper	SHL: 641 FSL / 655 FEL					G.L.	4576.00 ft
Cement Volume	LatLong: 40.365020 / -104.47196					D.F.	4589.00 ft
Location:	Permanent Datum:		Ground Level		Elev.: 4576.00 f		
	Log Measured From:		Kelly Bushing		14.00 ft above Perm. Datum		
	Drilling Measured From:		Kelly Bushing				
	API Serial No.	Section:	Township:		Range:		
Logging Date	03-Nov-2011	05-123-32101-0000	30	5N	63W		

Run Number	1_PEx-BHC		
Depth Driller	6767.00 ft		
Schlumberger Depth	6767.00 ft		
Bottom Log Interval	6763.00 ft		
Top Log Interval	708.00 ft		
Casing Driller Size @ Depth	8.625 in @ 714.00 ft		
Casing Schlumberger	714 ft		
Bit Size	7.875 in		
Type Fluid In Hole	Fresh Water		
Density	9.5 lbm/gal	50 s	
Fluid Loss	PH		
Source of Sample	Flowline		
RM @ Meas Temp	1.18 ohm.m @ 56 degF		
RMF @ Meas Temp	0.15 ohm.m @ 68 degF		
RMC @ Meas Temp	N/A @ 68 degF		
Source RMF	Calculated	Calculated	
RM @ BHT	0.39 @ 185	0.06 @ 185	
Max Recorded Temperatures	185 degF		
Circulation Stopped	03-Nov-2011	08:00:00	
Logger on Bottom	03-Nov-2011	13:18:16	
Unit Number	2153	Fort Morgan, Co	
Recorded By	Keri Loring, Jared R. Hoskins		
Witnessed By	Jim Boyd		

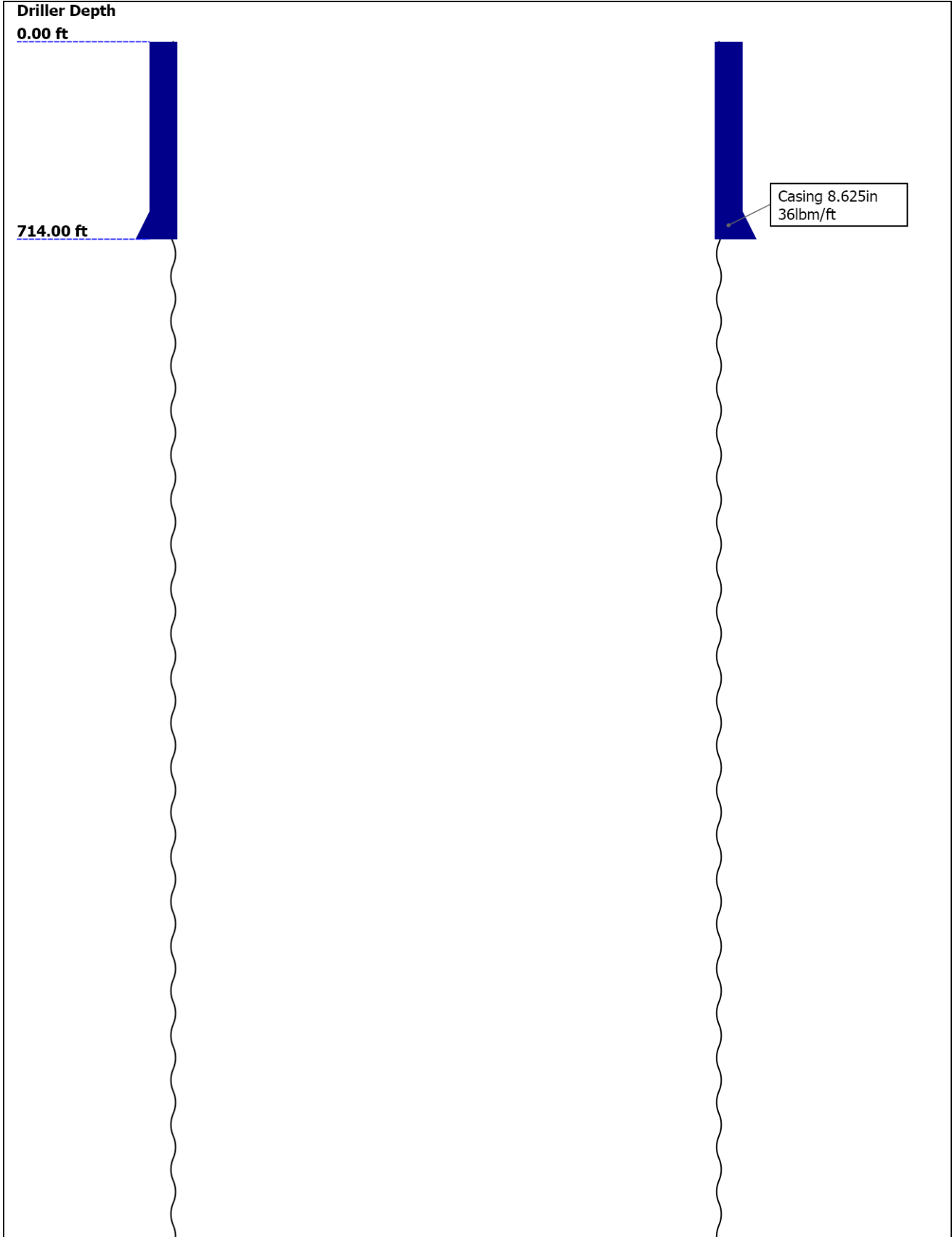
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Well Sketch





Borehole Size/Casing/Tubing Record

Bit						
Bit Size (in)	7.875					
Top Driller (ft)	0					
Top Logger (ft)	0					
Bottom Driller (ft)	6767					
Bottom Logger (ft)	6767					
Casing						
Size (in)	8.625					
Weight (lbm/ft)	36					
Inner Diameter (in)	7.823					
Grade	N80					
Top Driller (ft)	0					
Top Logger (ft)	0					
Bottom Driller (ft)	714					
Bottom Logger (ft)	714					

Operational Run Summary

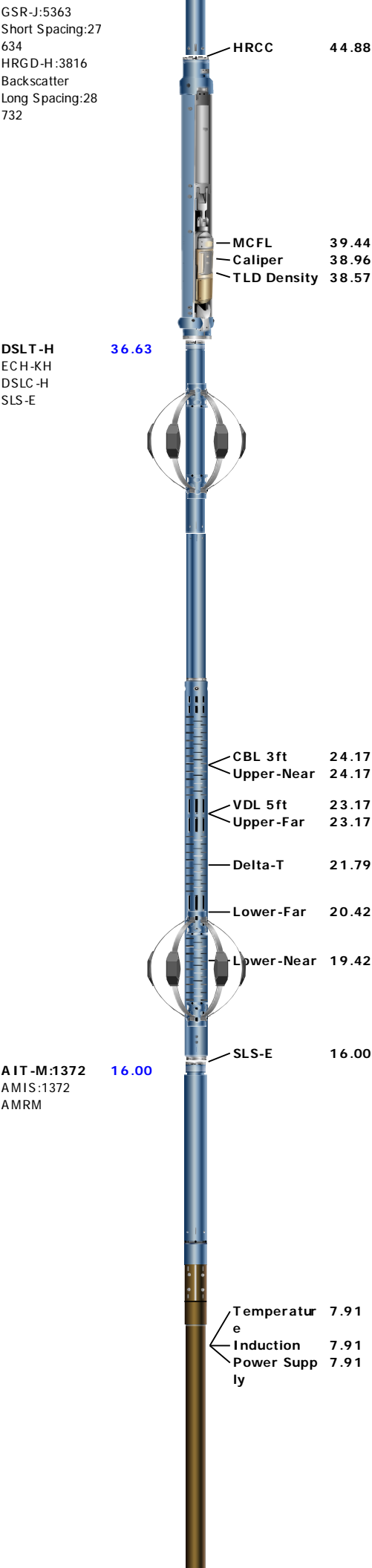
Parameter (unit)	1_PEx-BHC					
Date Log Started	03-Nov-2011					
Time Log Started	15:37:21					
Date Log Finished	03-Nov-2011					
Time Log Finished	17:35:15					
Top Log Interval (ft)	708.00					
Bottom Log Interval (ft)	6763.00					
Total Depth (ft)	6767.00					
Max Hole Deviation (deg)	0.00					
Azimuth of Max Deviation (deg)	0.00					
Bit Size (in)	7.875					
Logging Unit Number	2153					
Logging Unit Location	Fort Morgan, Co					
Recorded By	Keri Loring, Jared R. Hoskins					
Witnessed By	Jim Boyd					

Service Order Number	BSS4-00132					
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Borehole Fluids						
Parameter(unit)	1_PEx-BHC					
Fluid Type	Water					
Fluid Name	Fresh Water					
Max Recorded Temperatures (degF)	185					
Source of Sample	Flowline					
Salinity (ppm)	6101.52					
Density (lbm/gal)	9.5					
Viscosity (s)	50					
Fluid Loss (cm3)						
PH						
Date/Time Circulation Stopped	03-Nov-2011 08:00:00					
Date Logger on Bottom	03-Nov-2011					
Time Logger on Bottom	13:18:16					
Source RMF	Calculated					
RMC	Calculated					
RM @ Meas Temp (ohm.m@degF)	1.18 @ 56					
RMF @ Meas Temp (ohm.m@degF)	0.15 @ 68					
RMC @ Meas Temp (ohm.m@degF)						
RM @ BHT (ohm.m@degF)	0.39 @ 185					
RMF @ BHT (ohm.m@degF)	0.06 @ 185					
RMC @ BHT (ohm.m@degF)	NaN @ 185					

Remarks and Equipment Summary

1_PEx-BHC: Toolstring				1_PEx-BHC: Remarks	
Equip name	Length	MP name	Offset	Tool ran as per tool sketch.	
LEH-QT LEH-QT	64.2				
DTC-H:9469 ECH-KC DTC -H:9469	61.28	CTEM HV	60.38 0.00		
HGNS-H:4779 HGNH NPV-N NSR-F:5168 HMCA -H:5736 HGNS -H:4779 HACCZ-H:5736	58.28	TelStatus ToolStatus Temperature GR	58.28 58.28 58.26 57.54		
HDRS-H:4706 ECH-MEB HRC C-H:5705 HRMS-H:4706 GPV-Q	48.88	CNL Porosit y HGNS HMCA Accelerome ter	51.21 48.88 48.88 0.00		



 <p>SP 0.08 Mud Resistivity 0.00 Head Tension TOOL_ZERO</p> <p>Lengths are in ft Maximum Outer Diameter = 6.000 in Line: Sensor Location, Value: Gating Offset All measurements are relative to TOOL_ZERO</p>		
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Depth Summary			
Depth Control Parameters	1_PEx-BHC		
Conveyance Type	Wireline		
Rig Type	Land		
Depth Remark Parameters	1_PEx-BHC		
Depth Remark 1	First run in hole.		
Depth Measuring Device	1_PEx-BHC		
Type	IDW-B		
Serial Number	6380		
Calibration Date	17-Sep-2011		
Calibration Cable Type	7-46A-XS		
Wheel Correction 1	-9		
Wheel Correction 2	-8		
Tension Device	1_PEx-BHC		
Type	CMTD-B/A		
Serial Number	1433		
Calibration Date	27-Oct-2011		
Calibrator Serial Number	100513		
Calibration Points	10		
Calibration RMS	11		
Calibration Peak Error	20		
Logging Cable	1_PEx-BHC		
Type	7-46A-XS		
Serial Number	4		
Logging Cable Length (ft)	13300.00		

1_PEx-BHC			

Integration Summary				
Output Channel(s)	Output Description	Input Parameter	Output Value	Unit
ICV	Integrated Cement Volume	GCSE_UP_PASS, FCD	1628.7	ft3
IHV	Integrated Hole Volume	GCSE_UP_PASS	2299.55	ft3

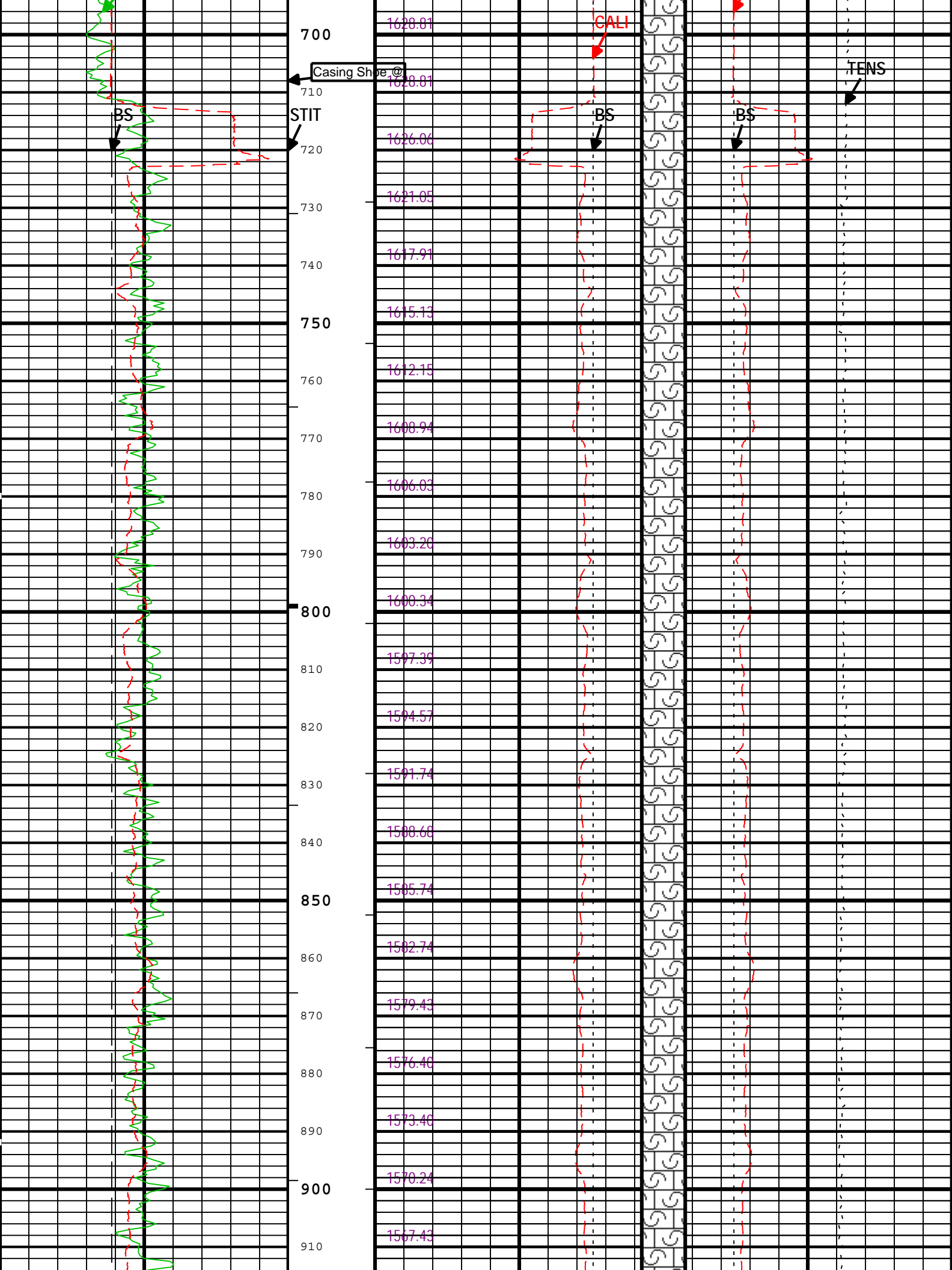
Pass Summary							
Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	Depth Shift
1_PEx-BHC	Main[3]:Up	Up	625.56 ft	6788.41 ft	03-Nov-2011 4:27:22 PM	03-Nov-2011 5:31:43 PM	4.43 ft
All depths are referenced to toolstring zero							

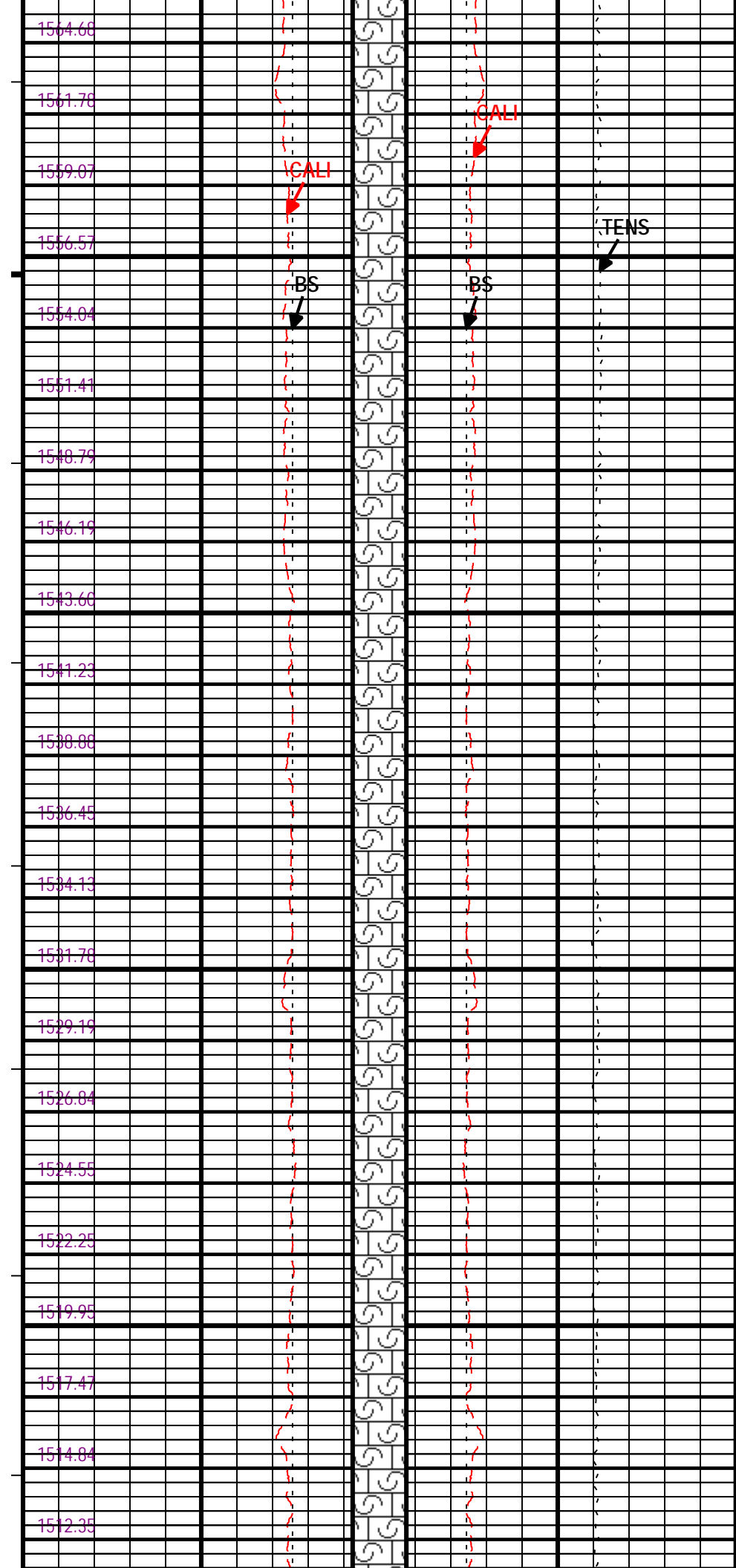
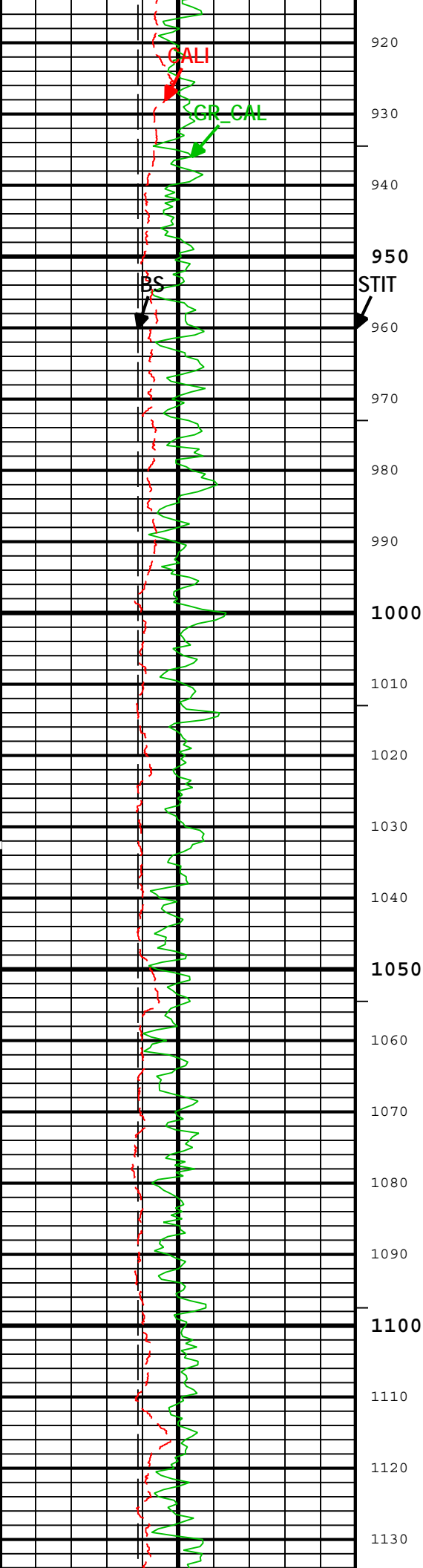
Log	1_PEx-BHC: Main[3]:Up 856C951F-172C-4A89-BF1B-E6F55FDFB74E						
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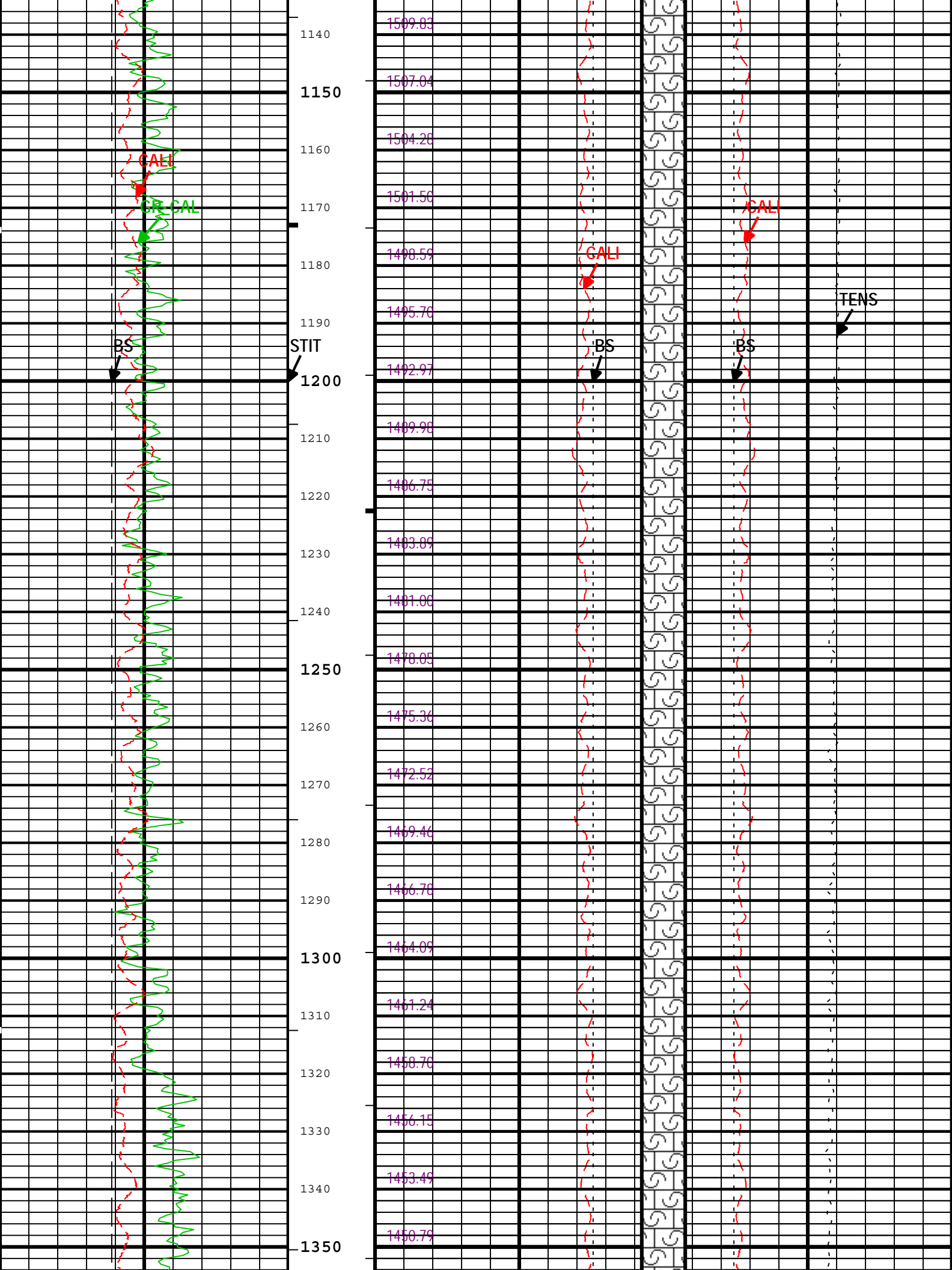
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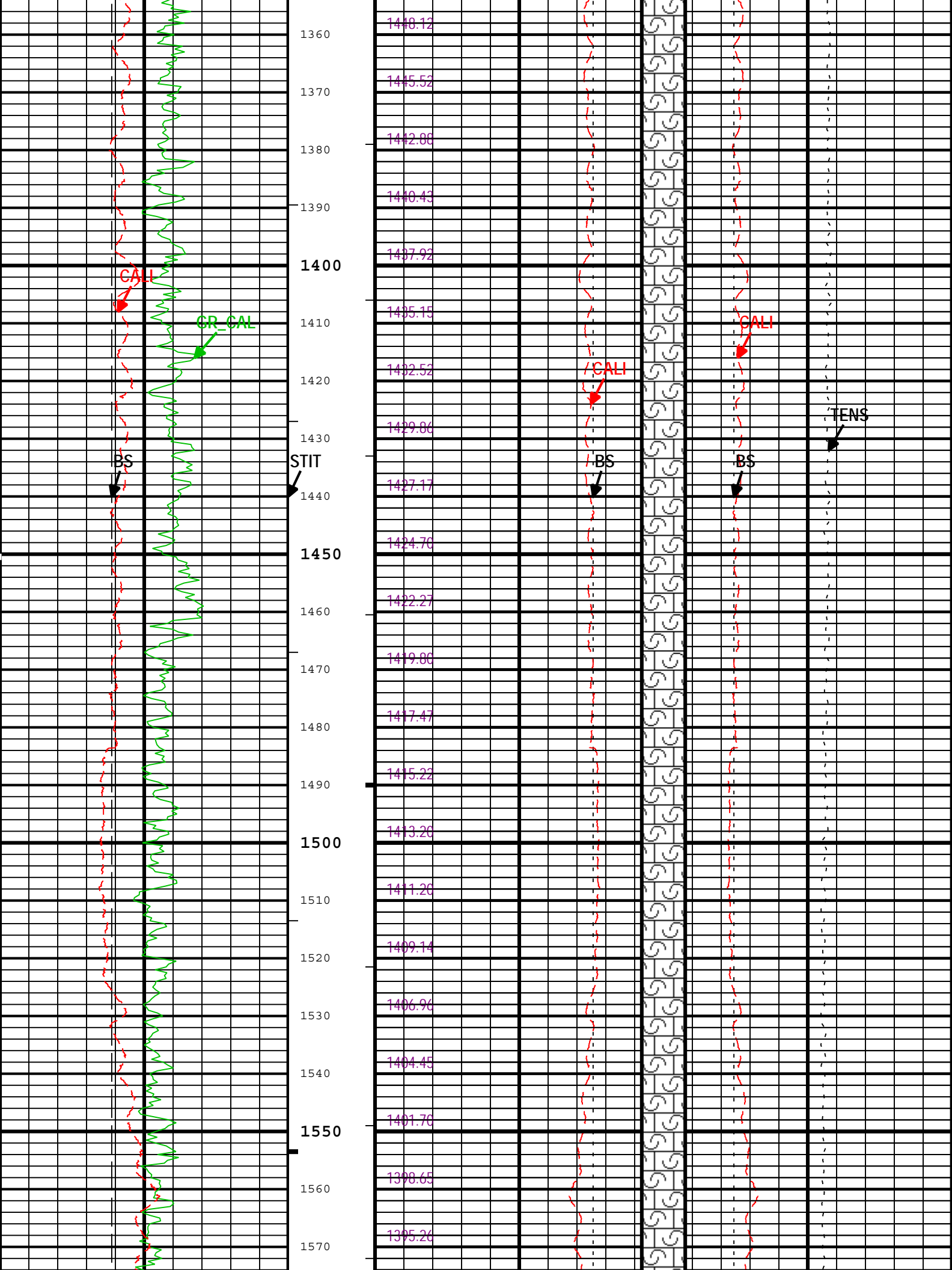
Channel	Source	Sampling
CALL	HD RS-H:HRCC-H:HRCC-H	1in

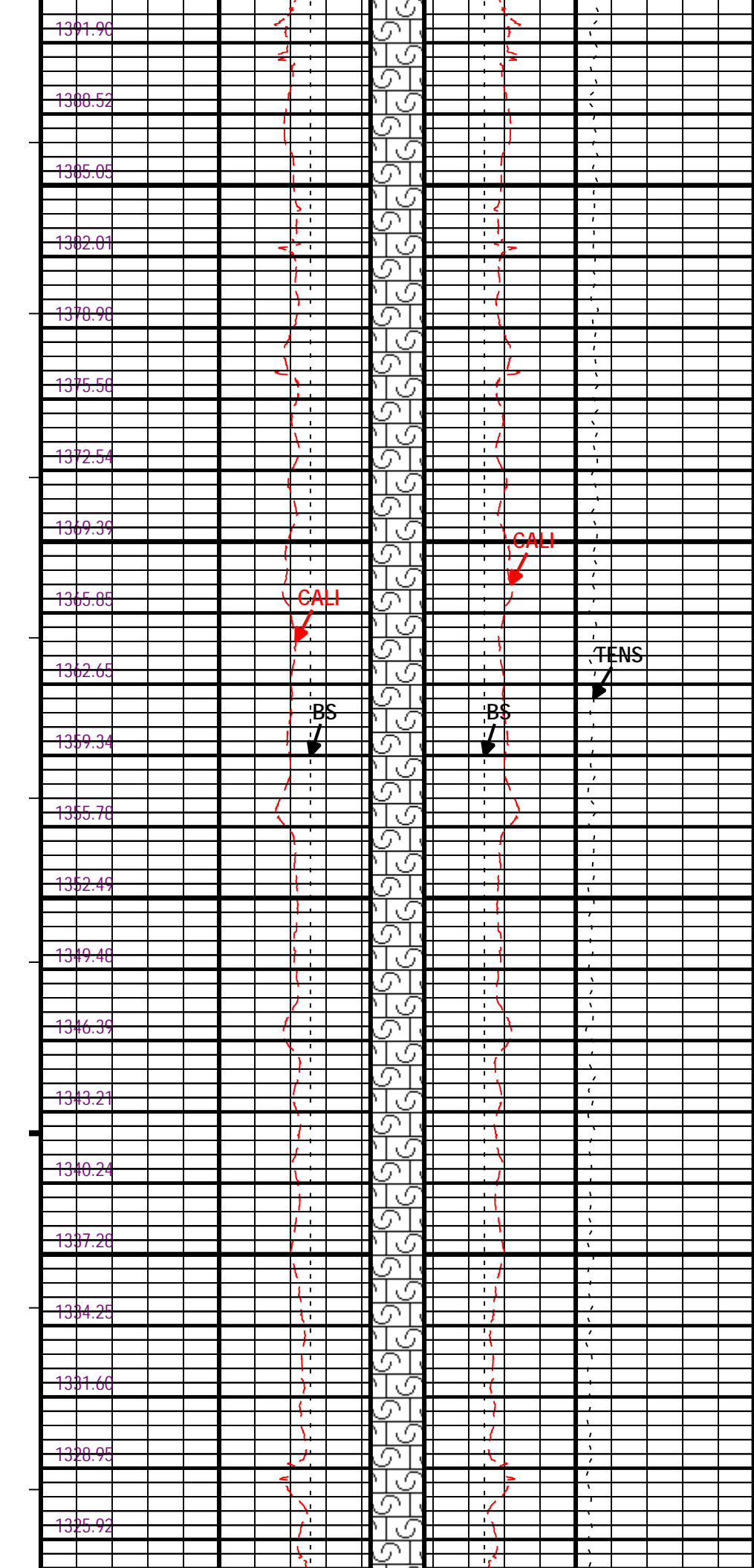
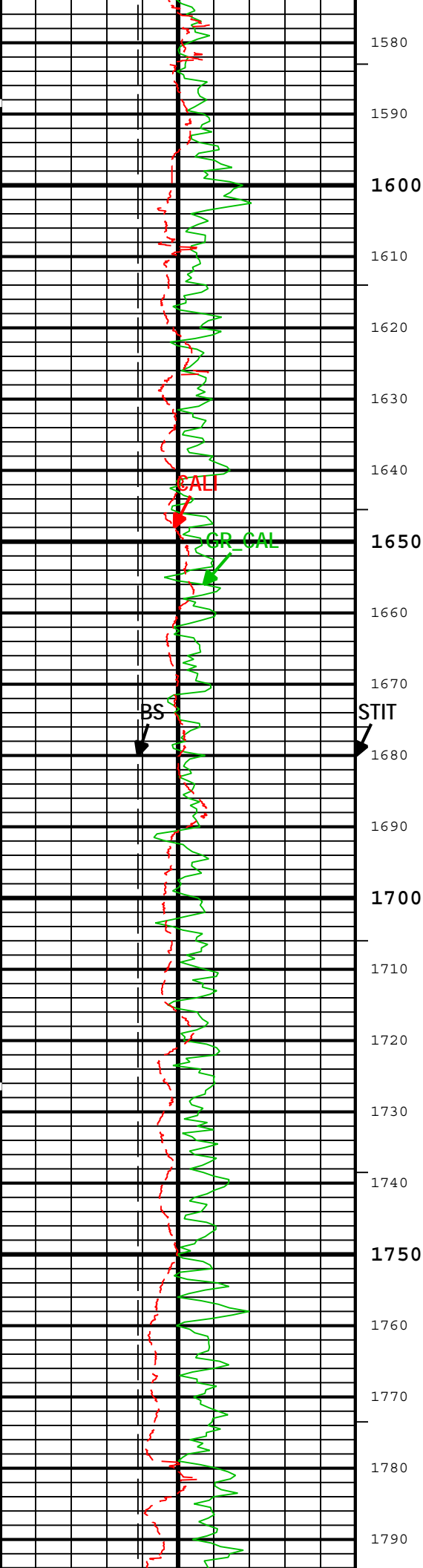
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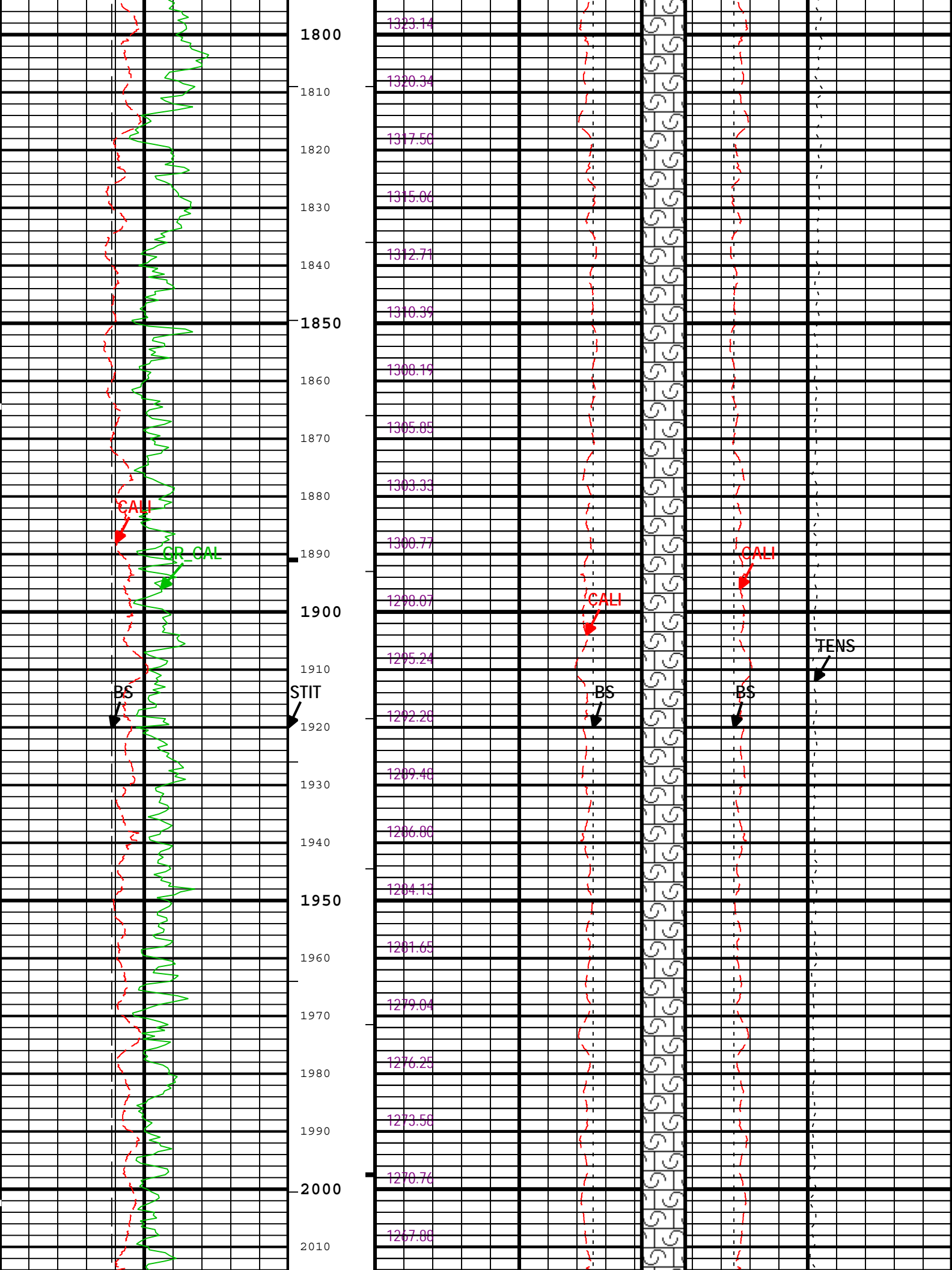


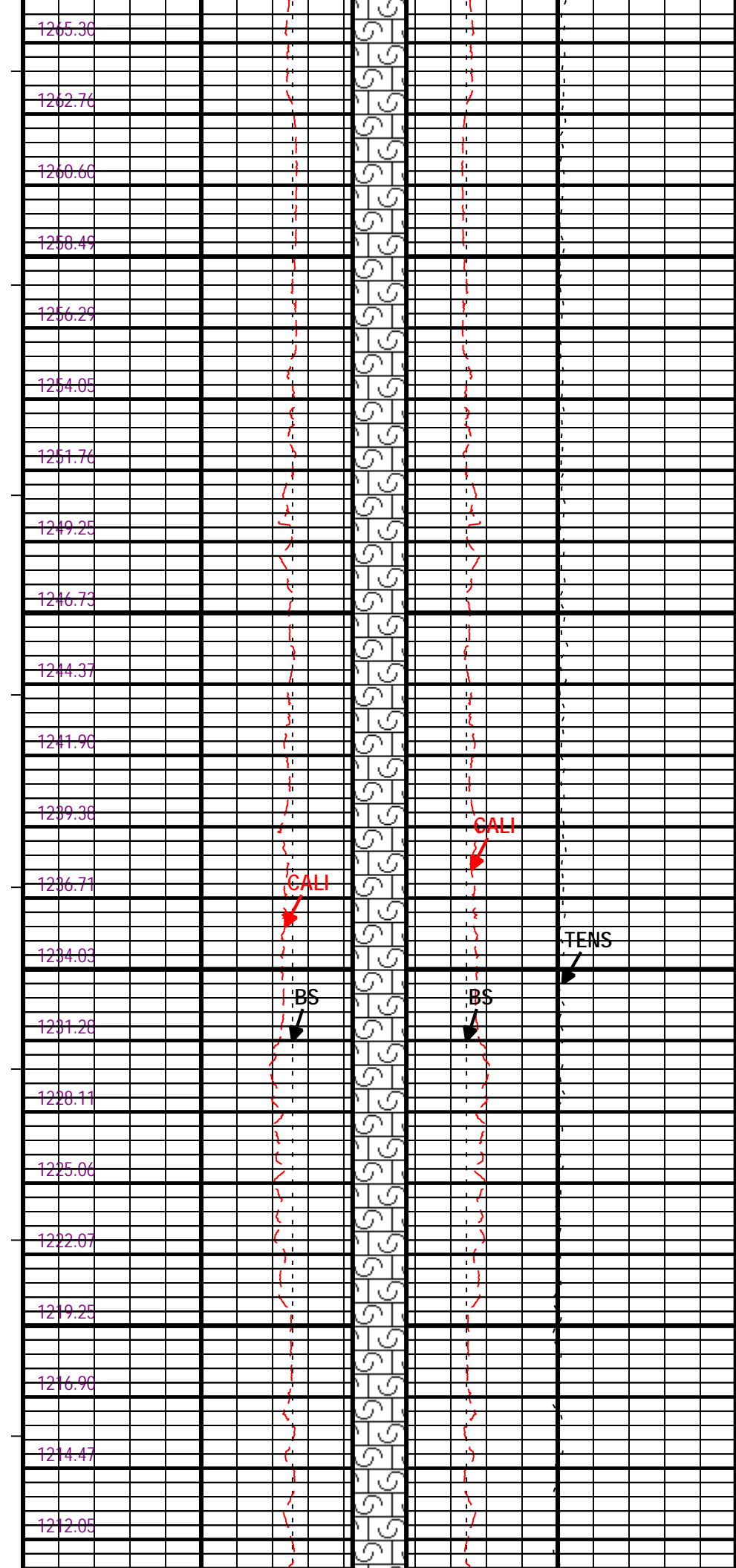
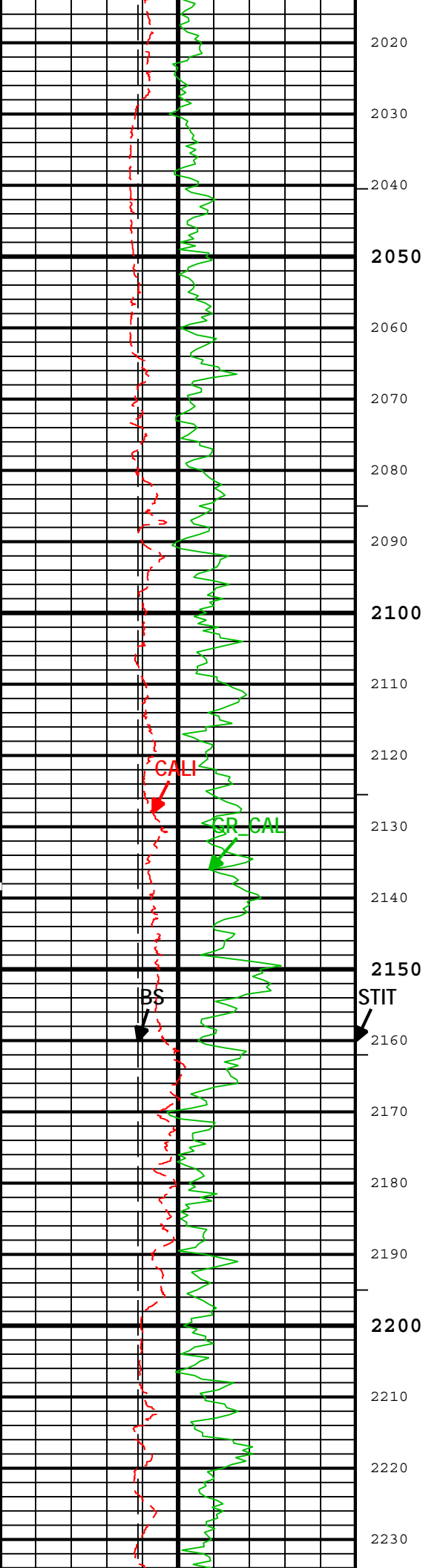


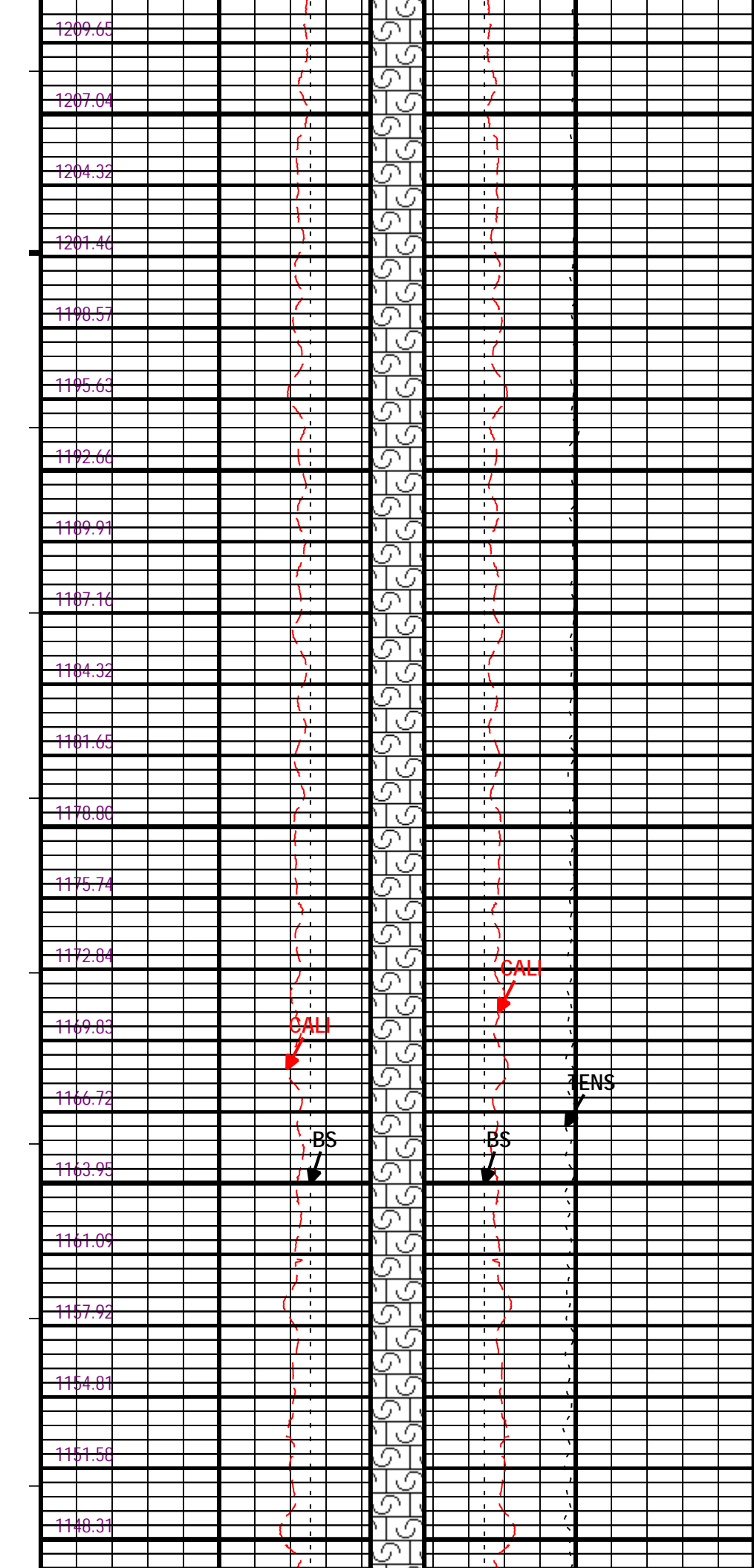
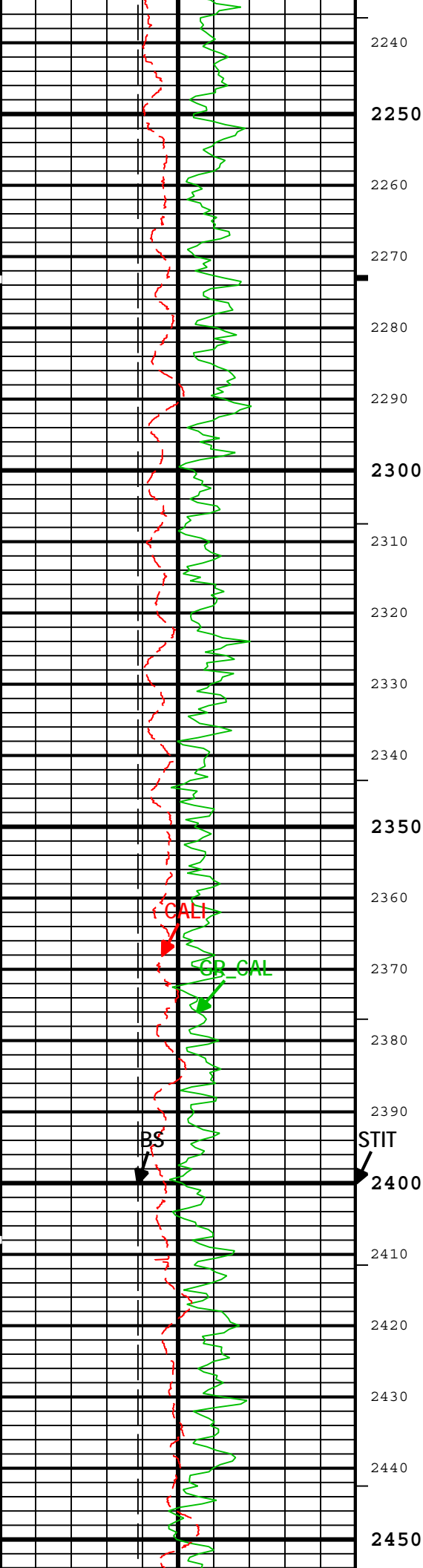


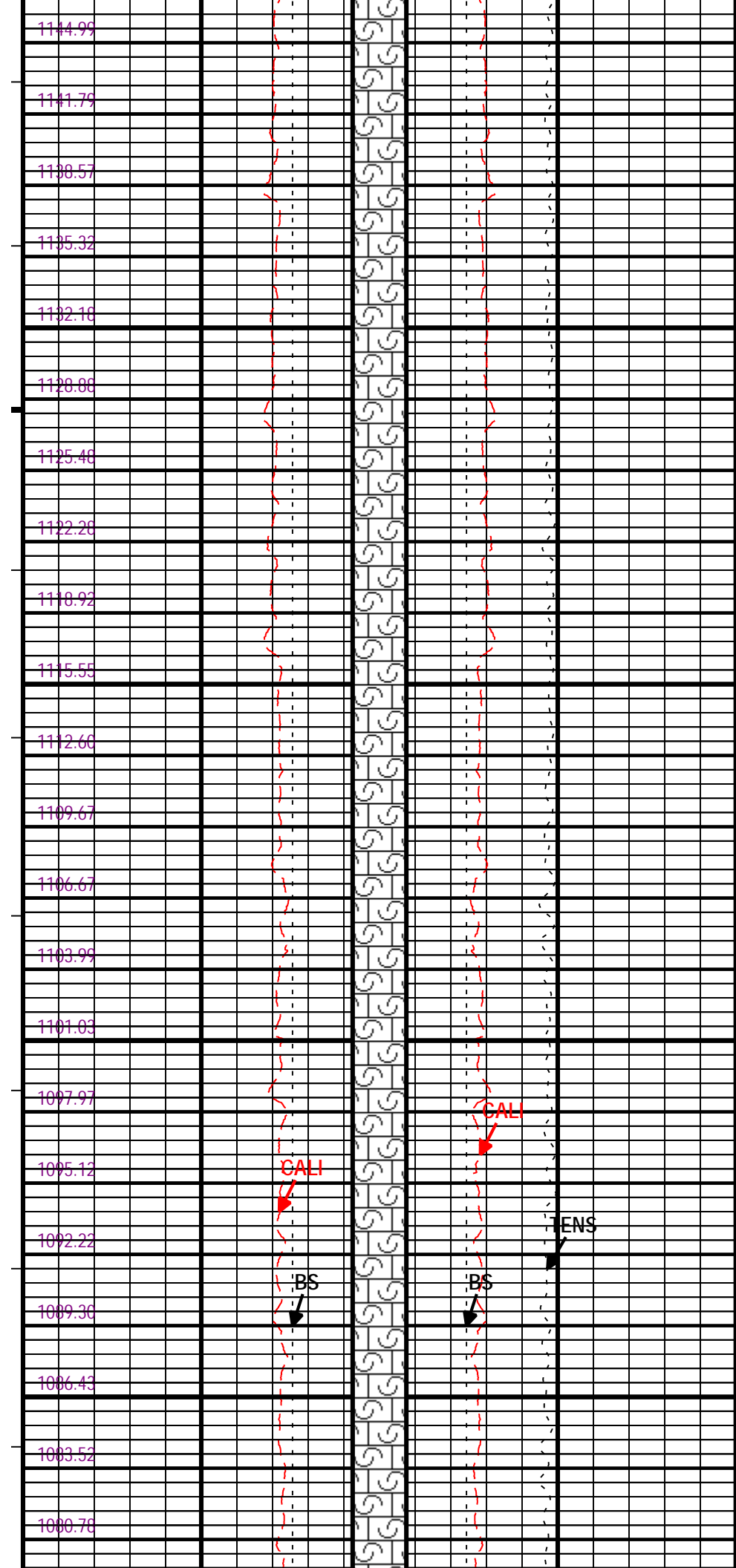
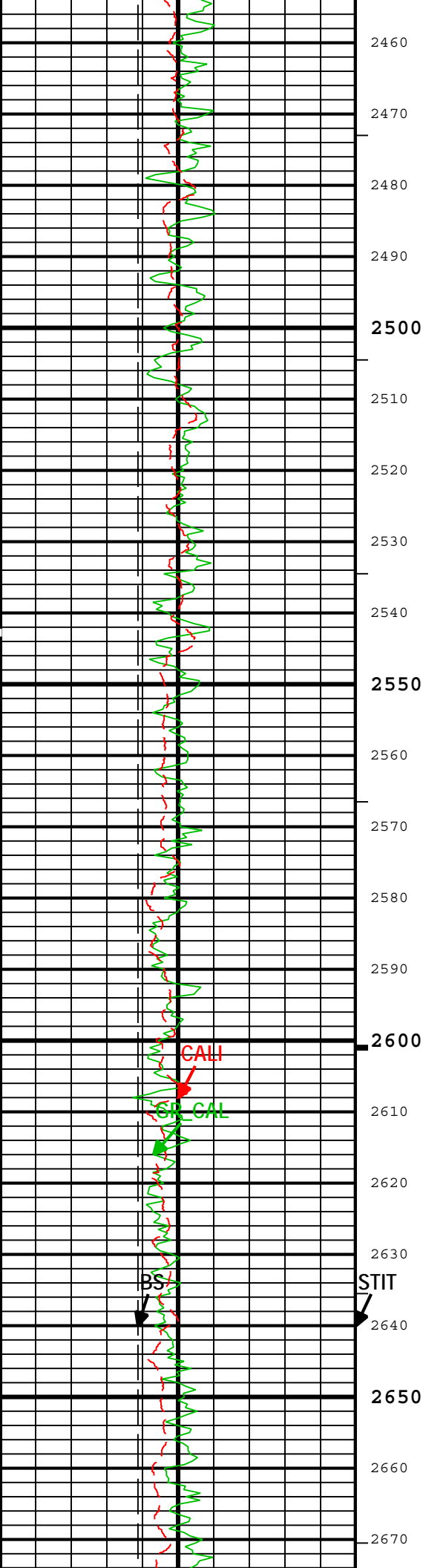


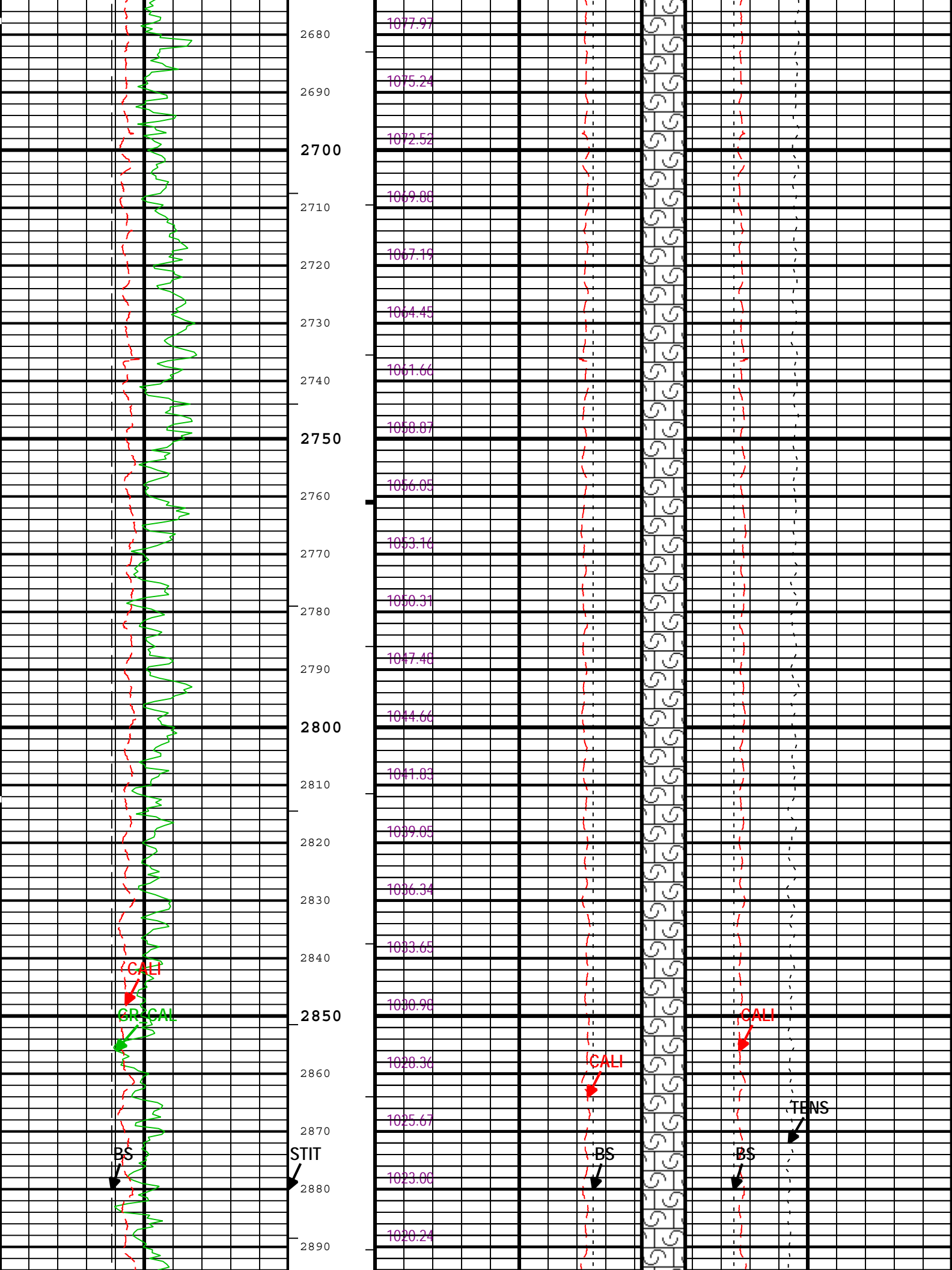


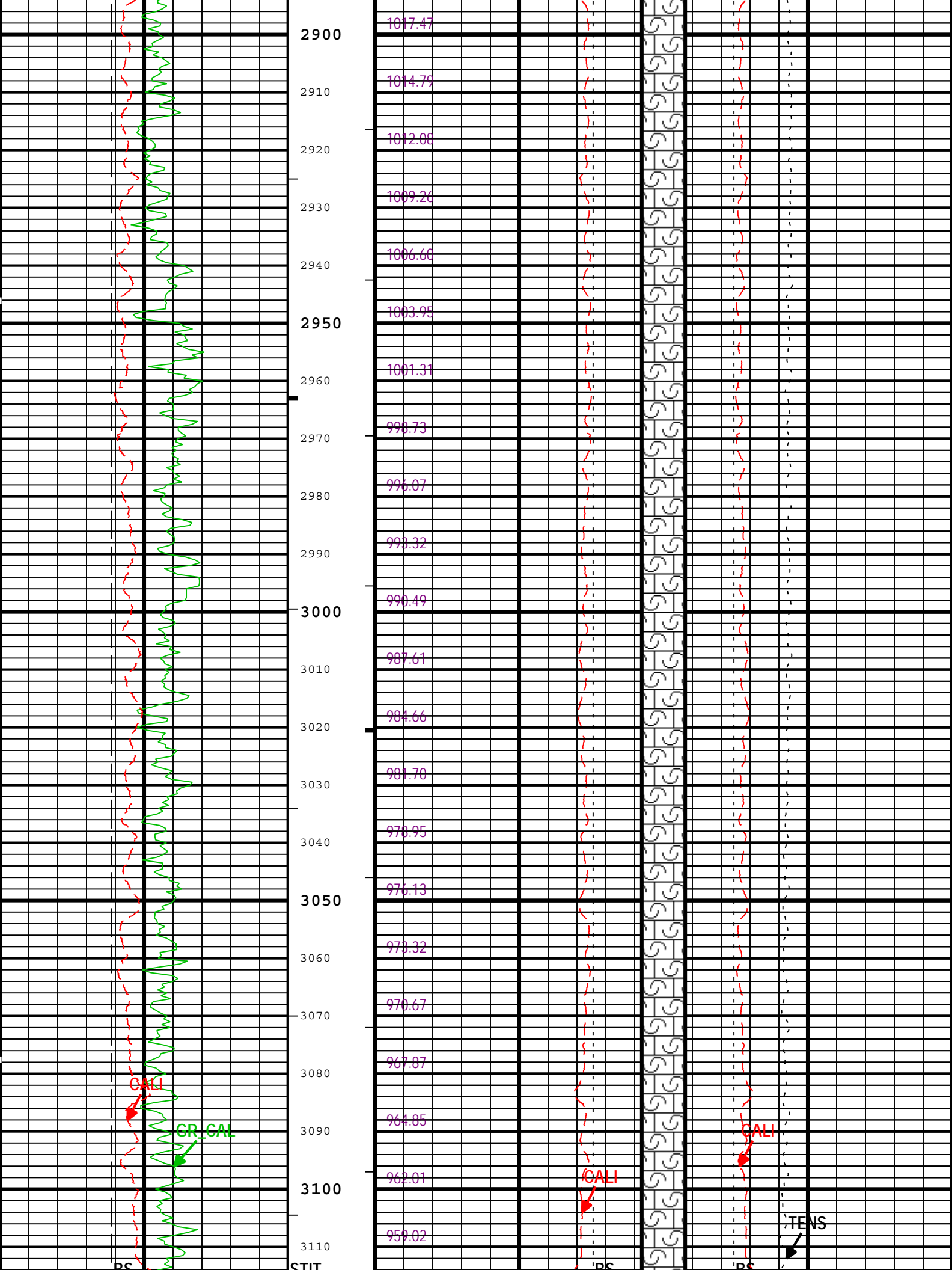


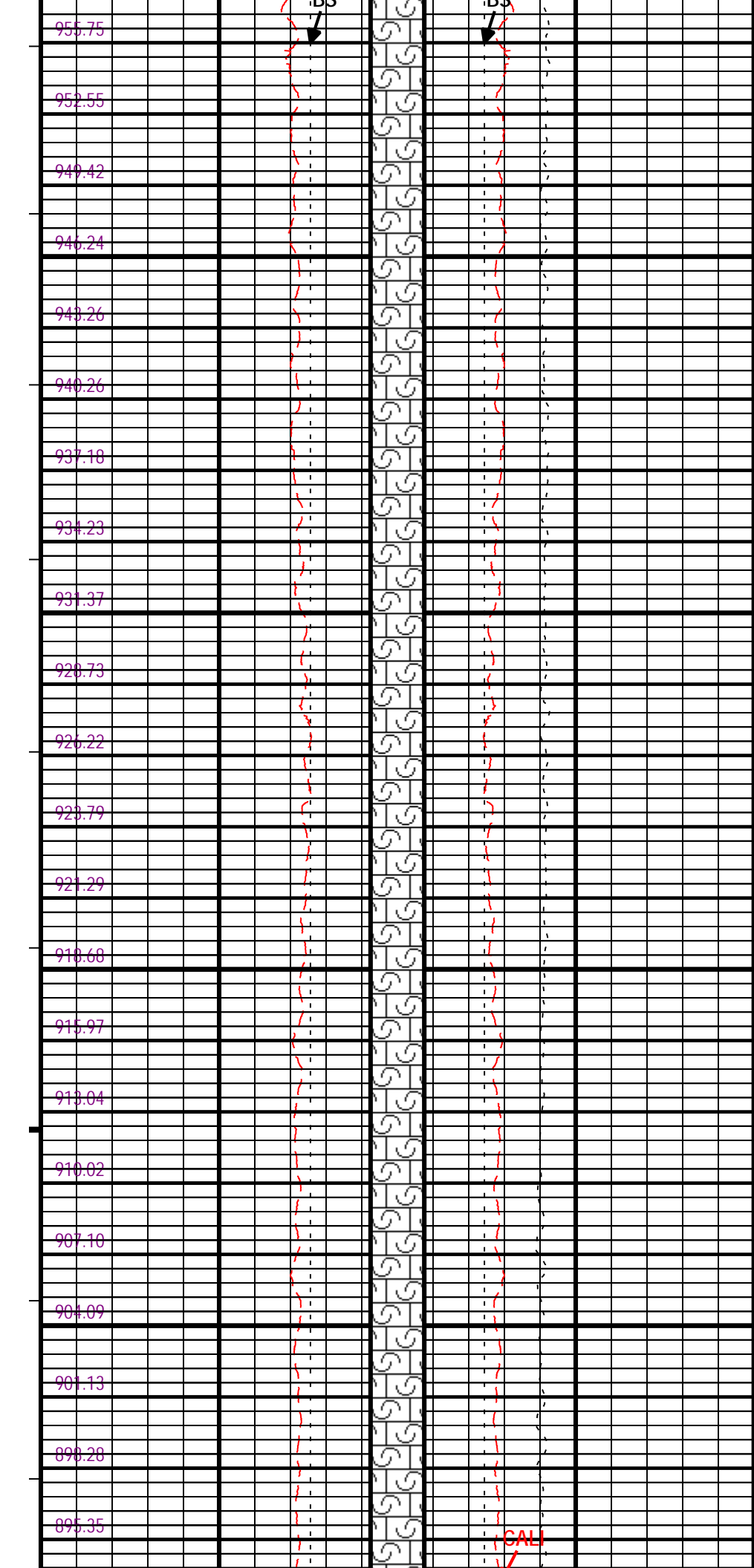
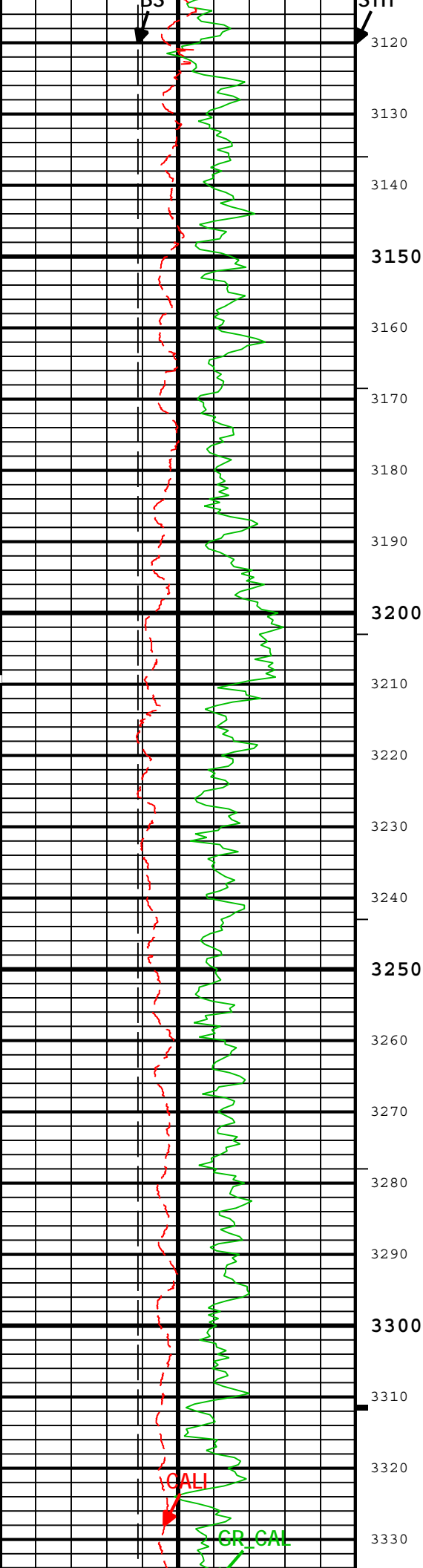


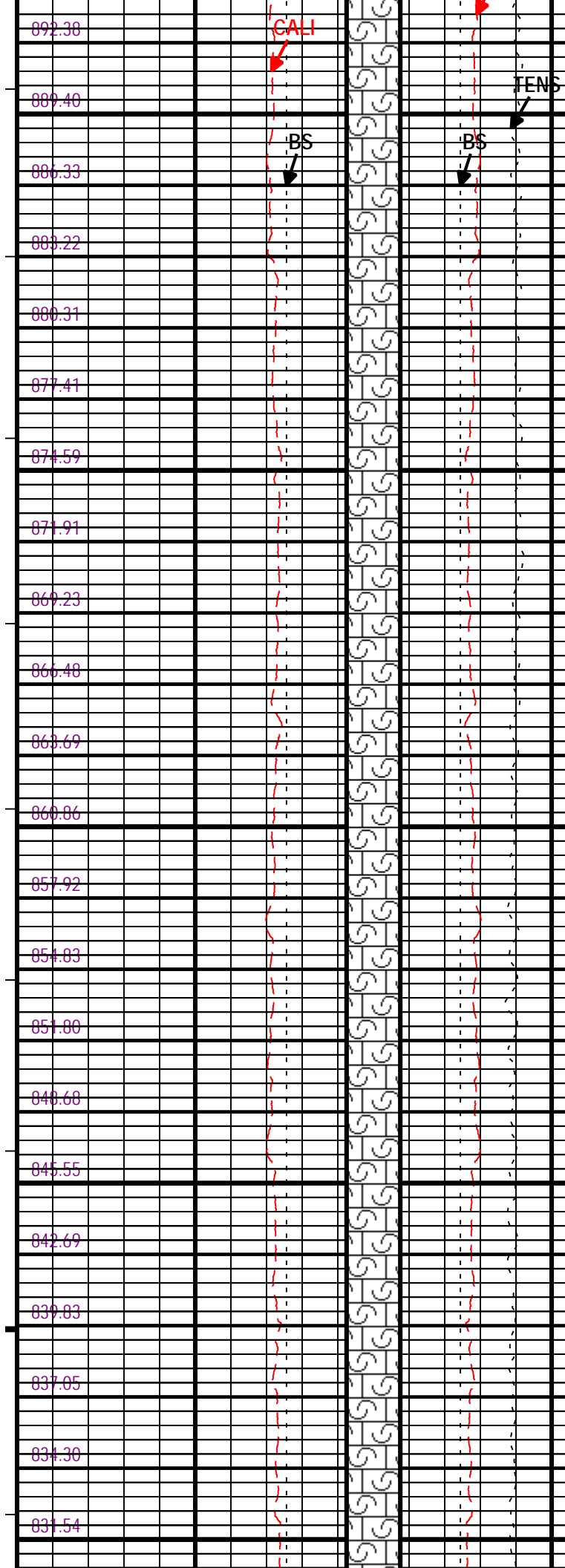
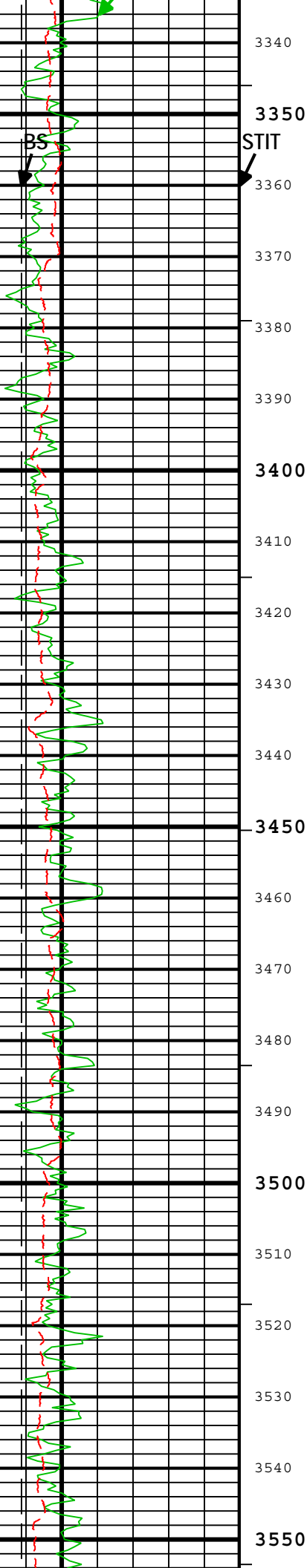


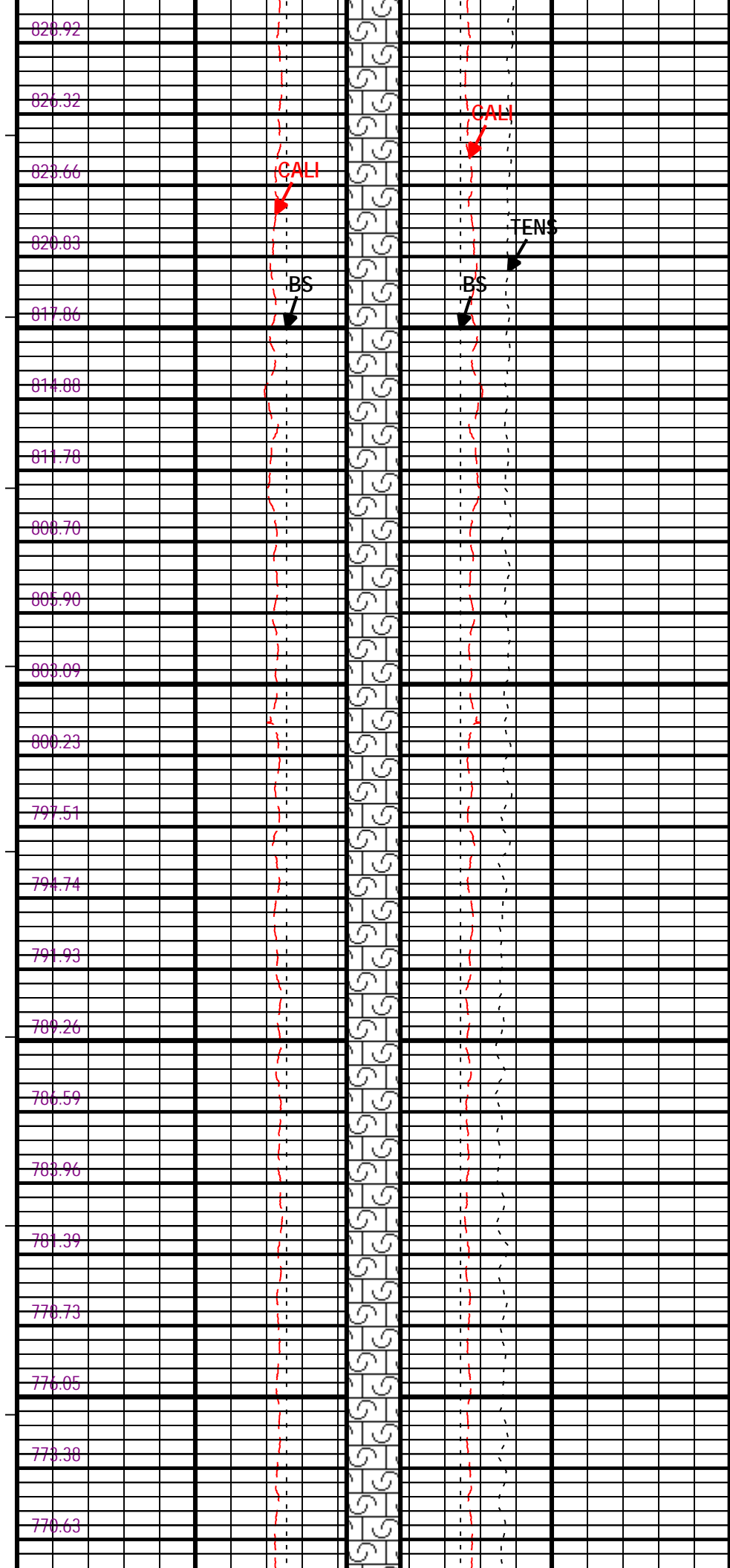
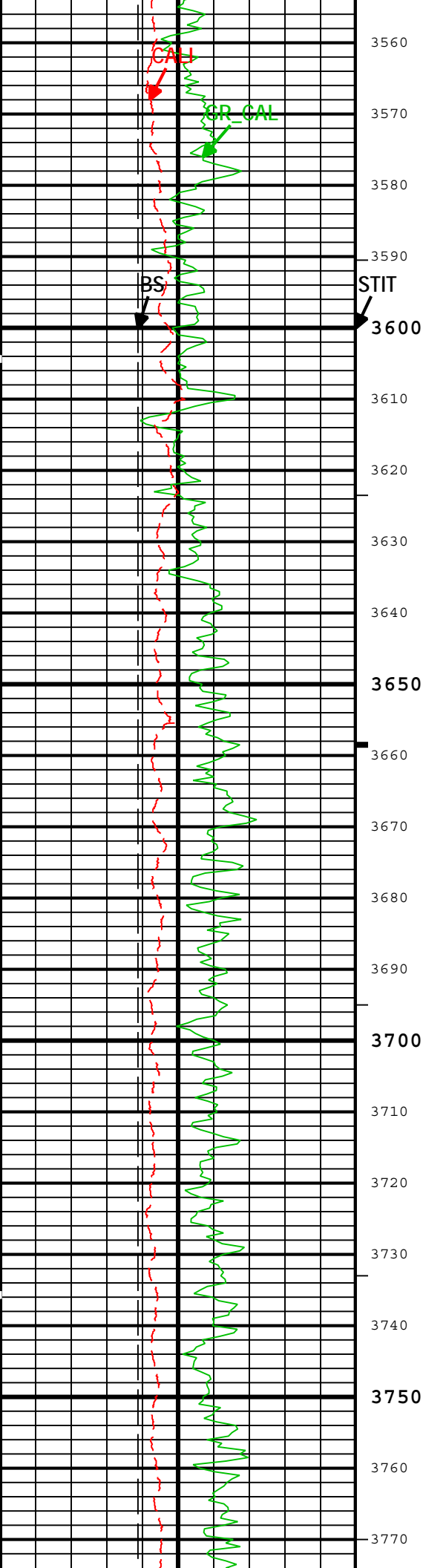


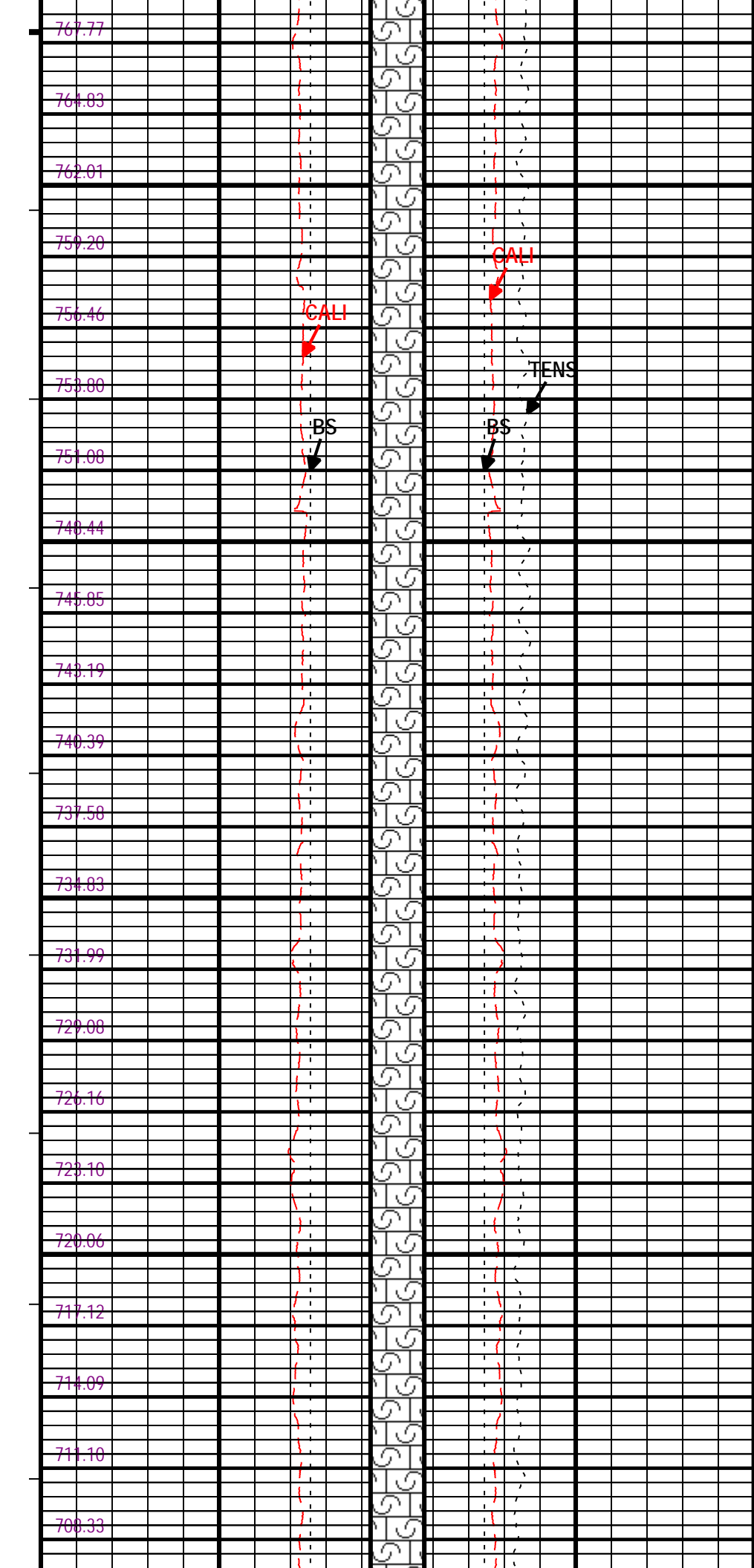
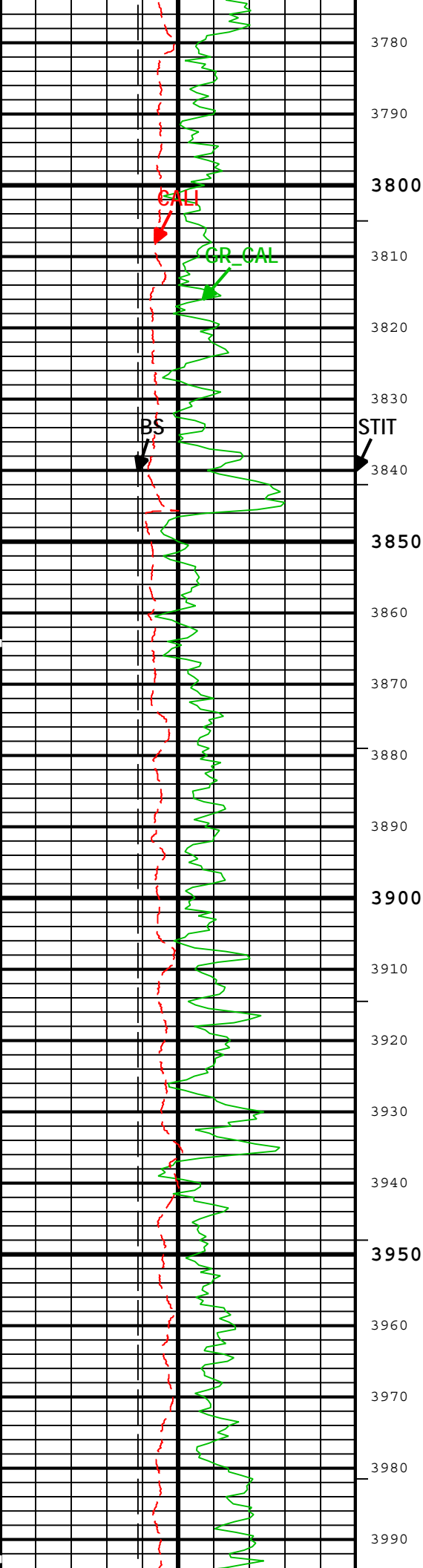


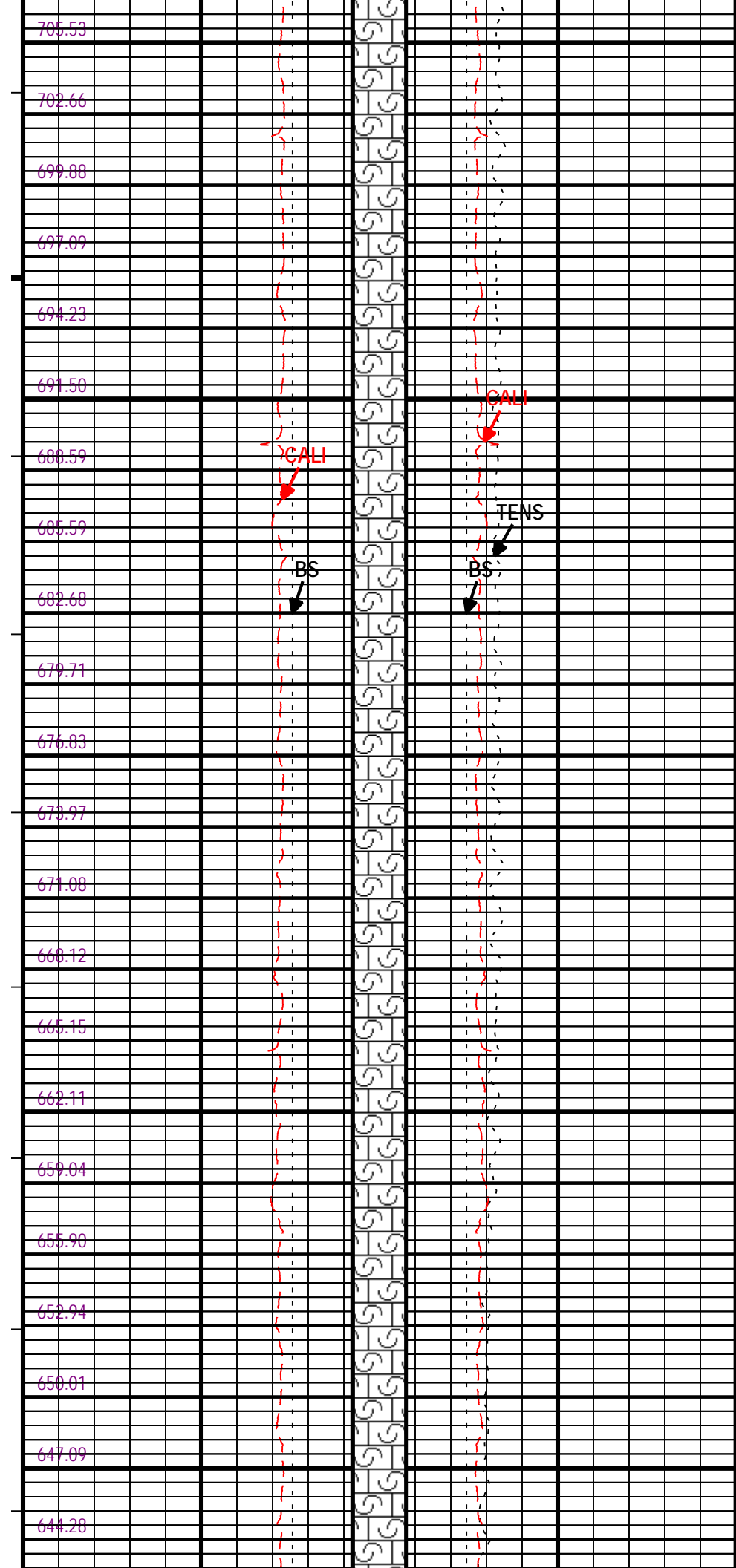
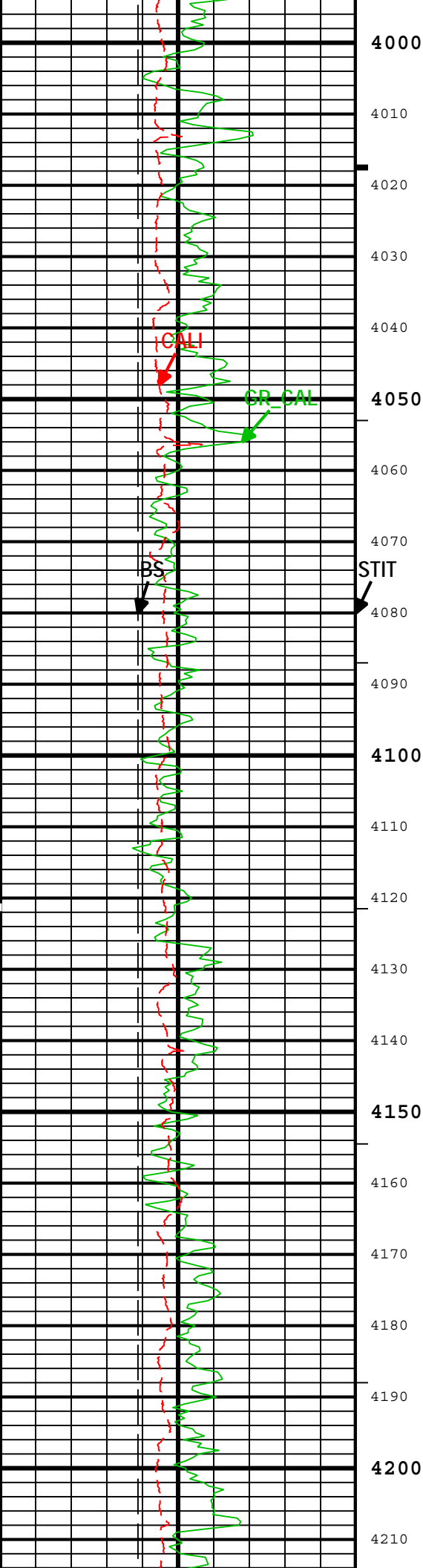


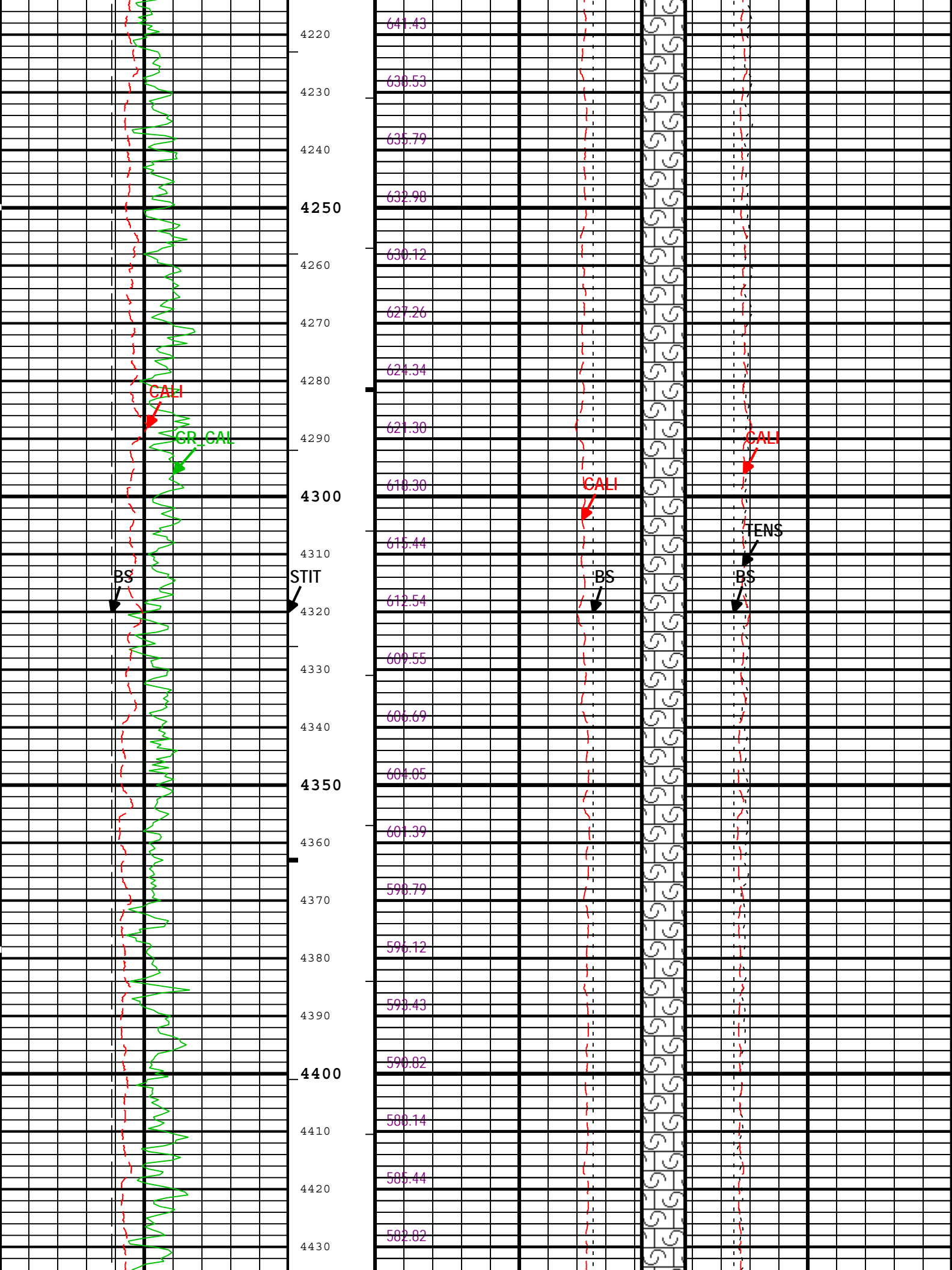


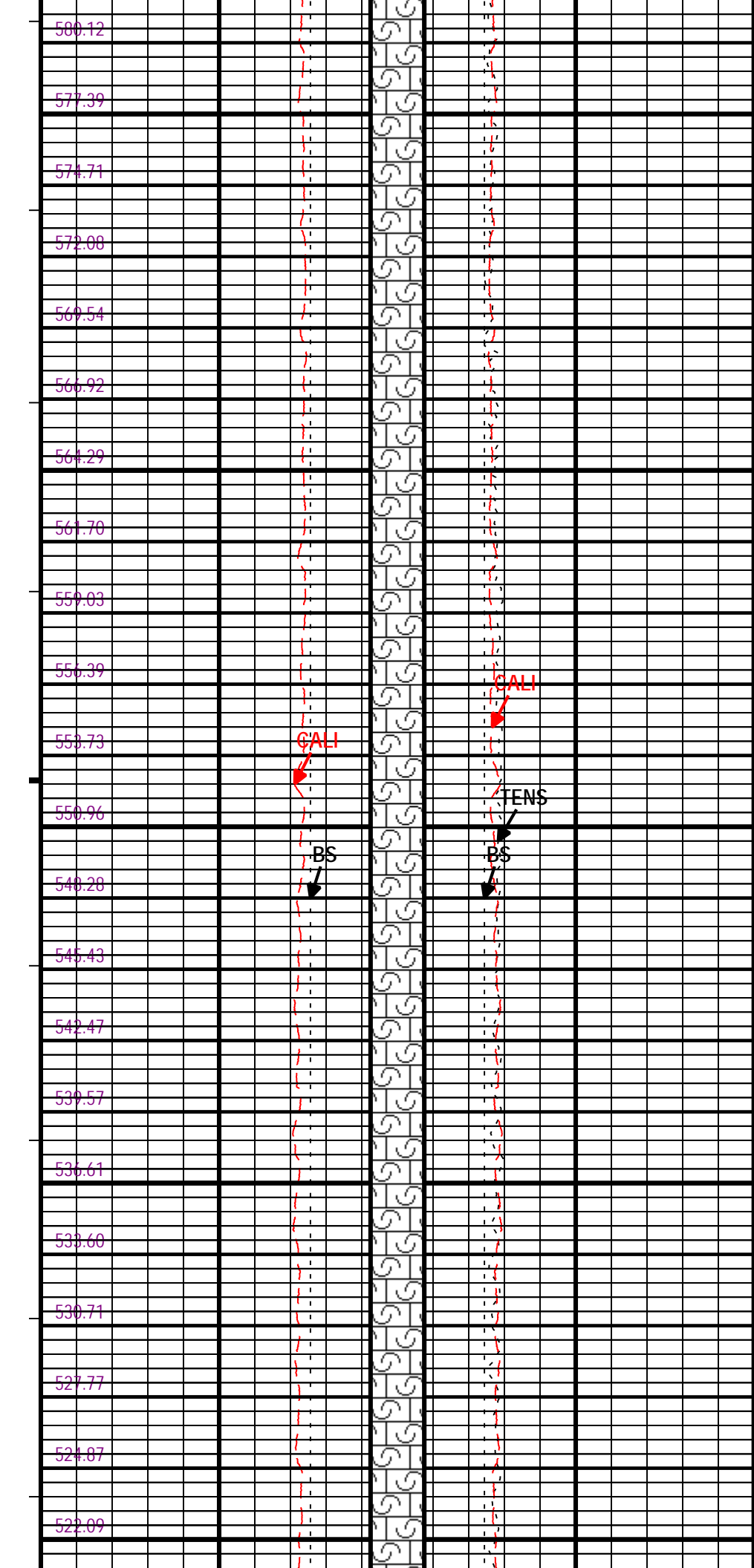
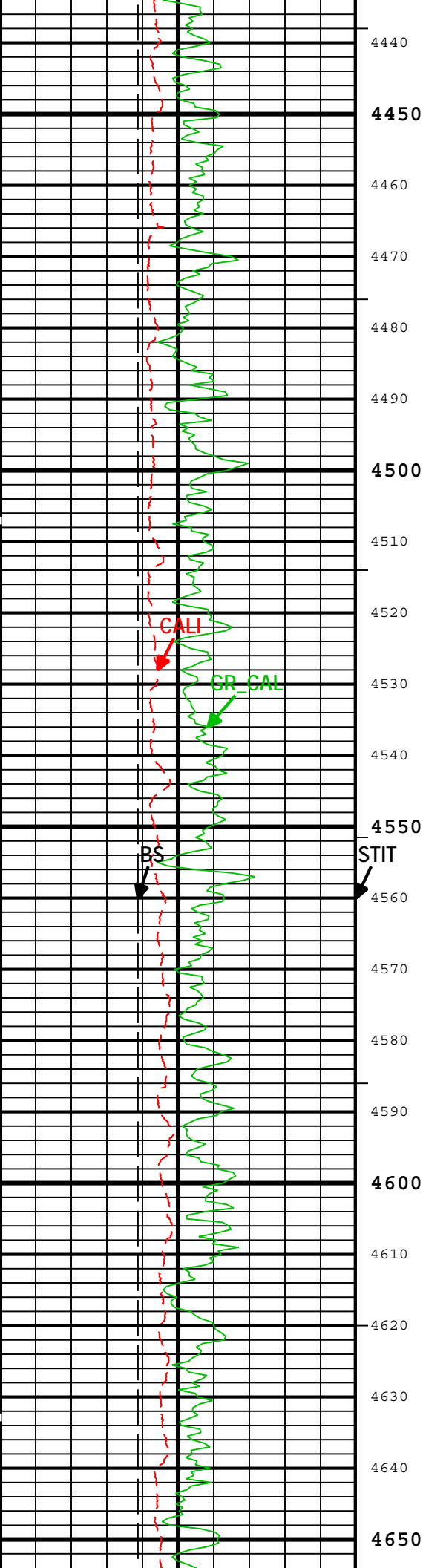


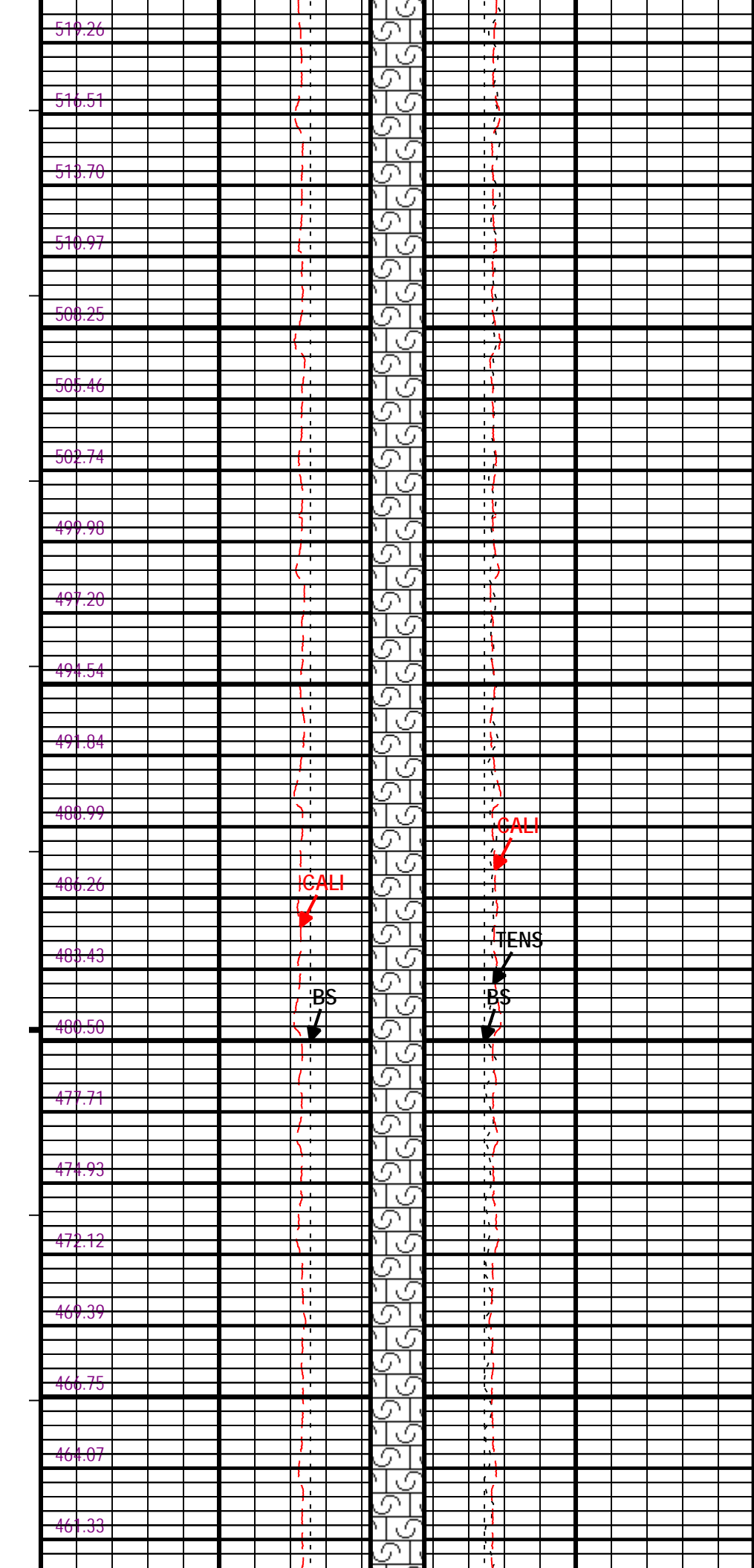
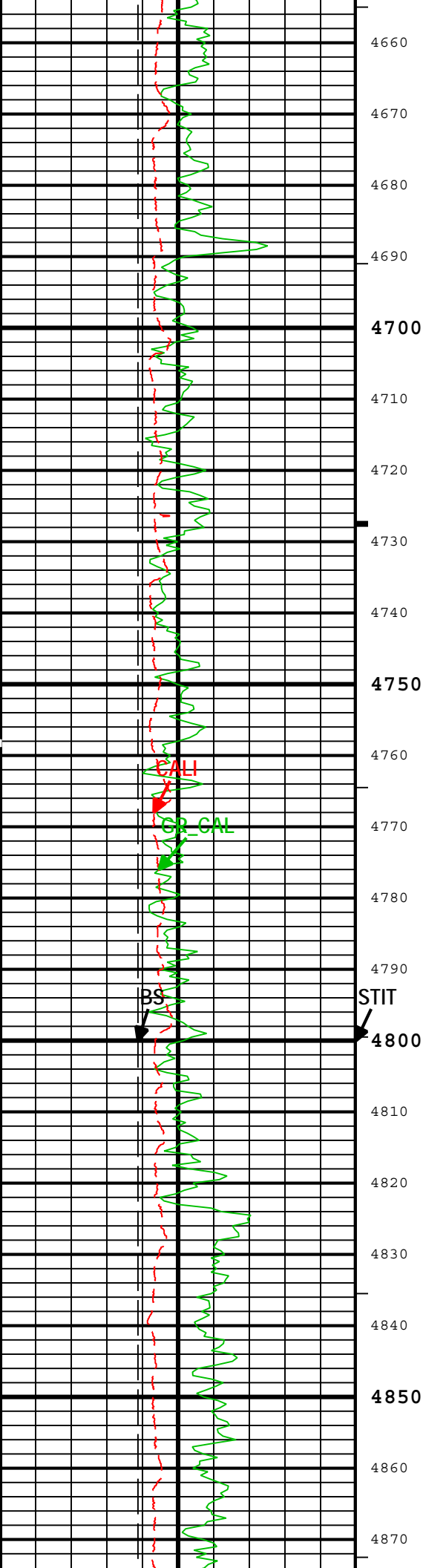


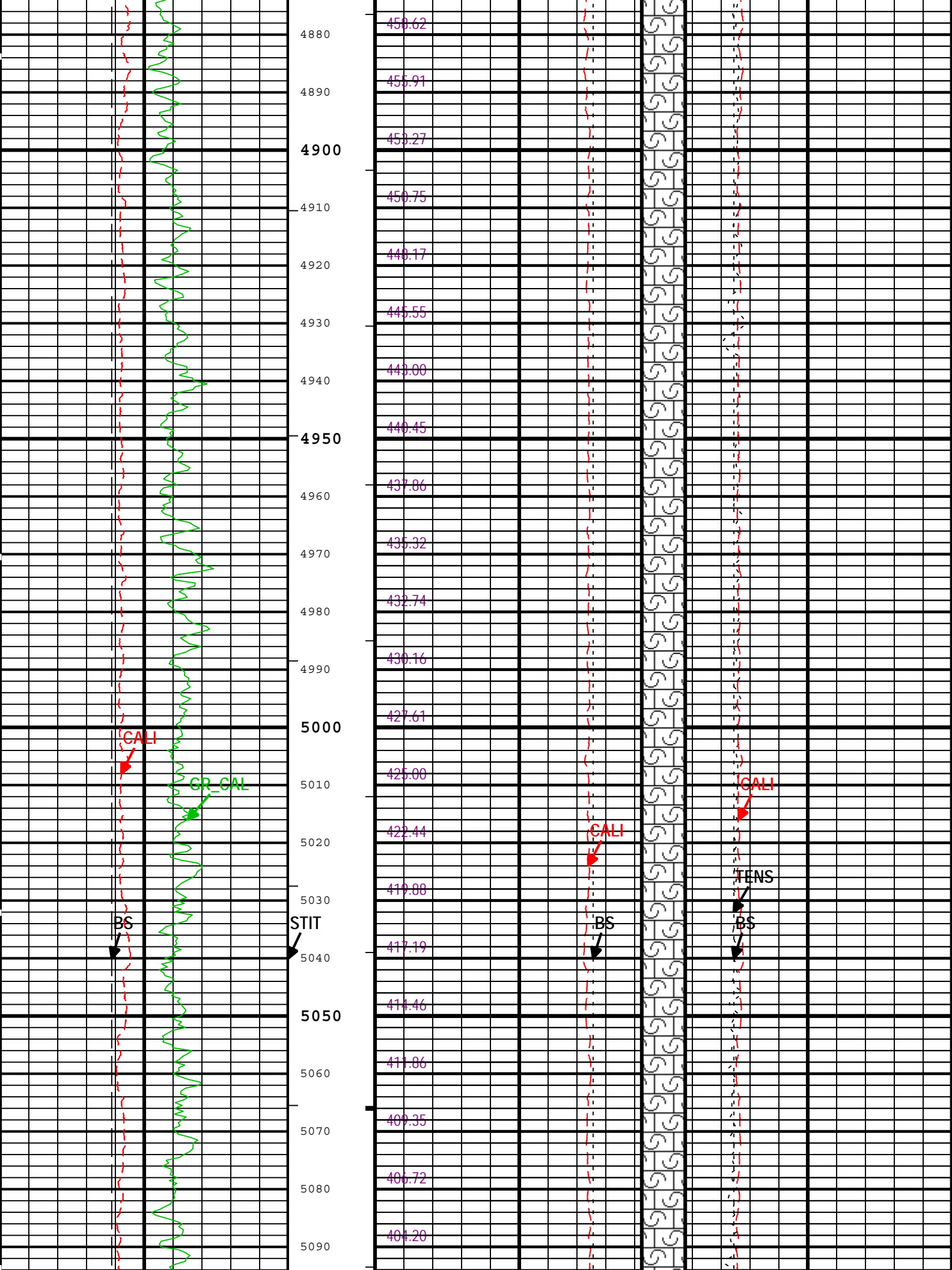


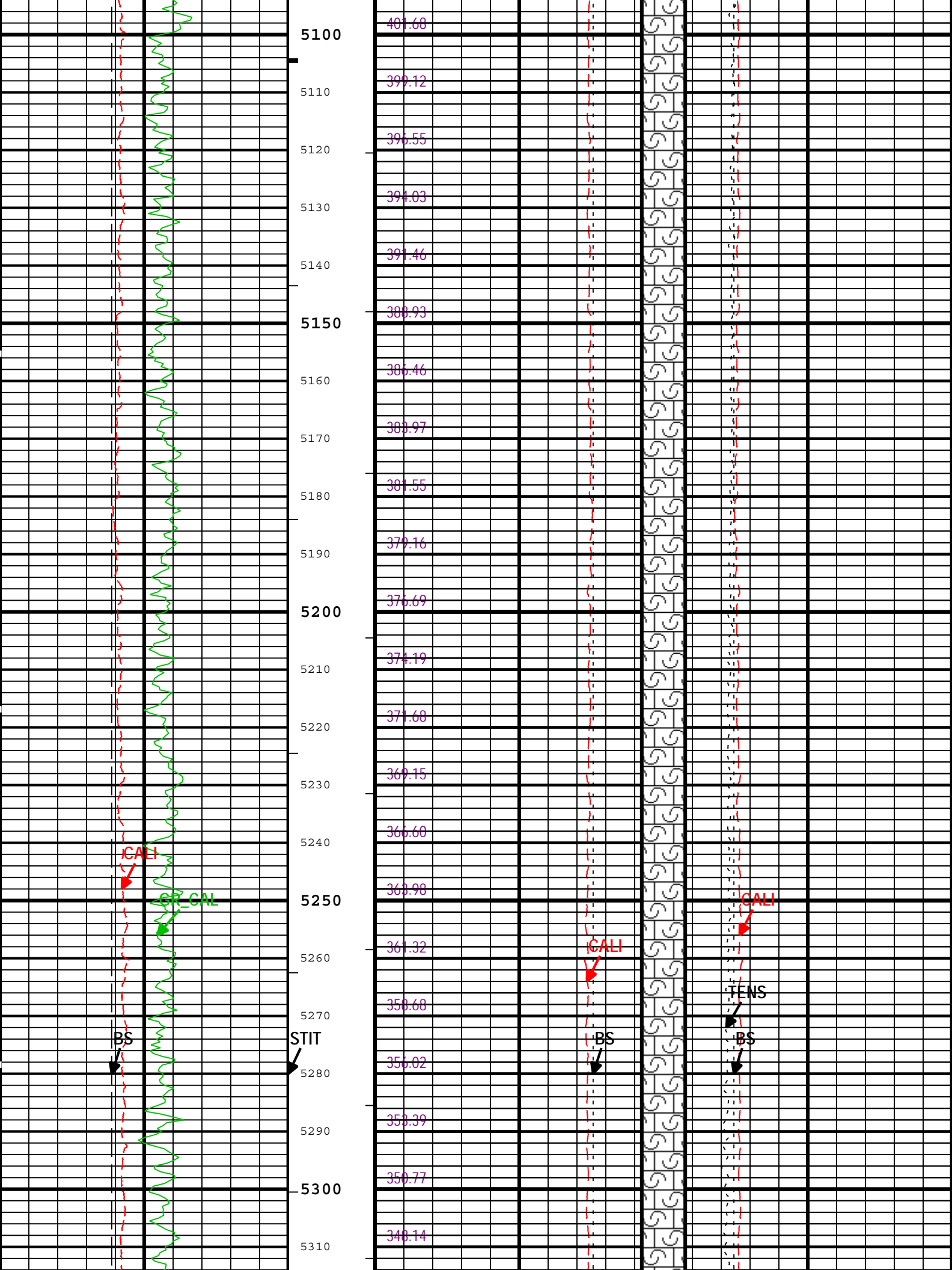


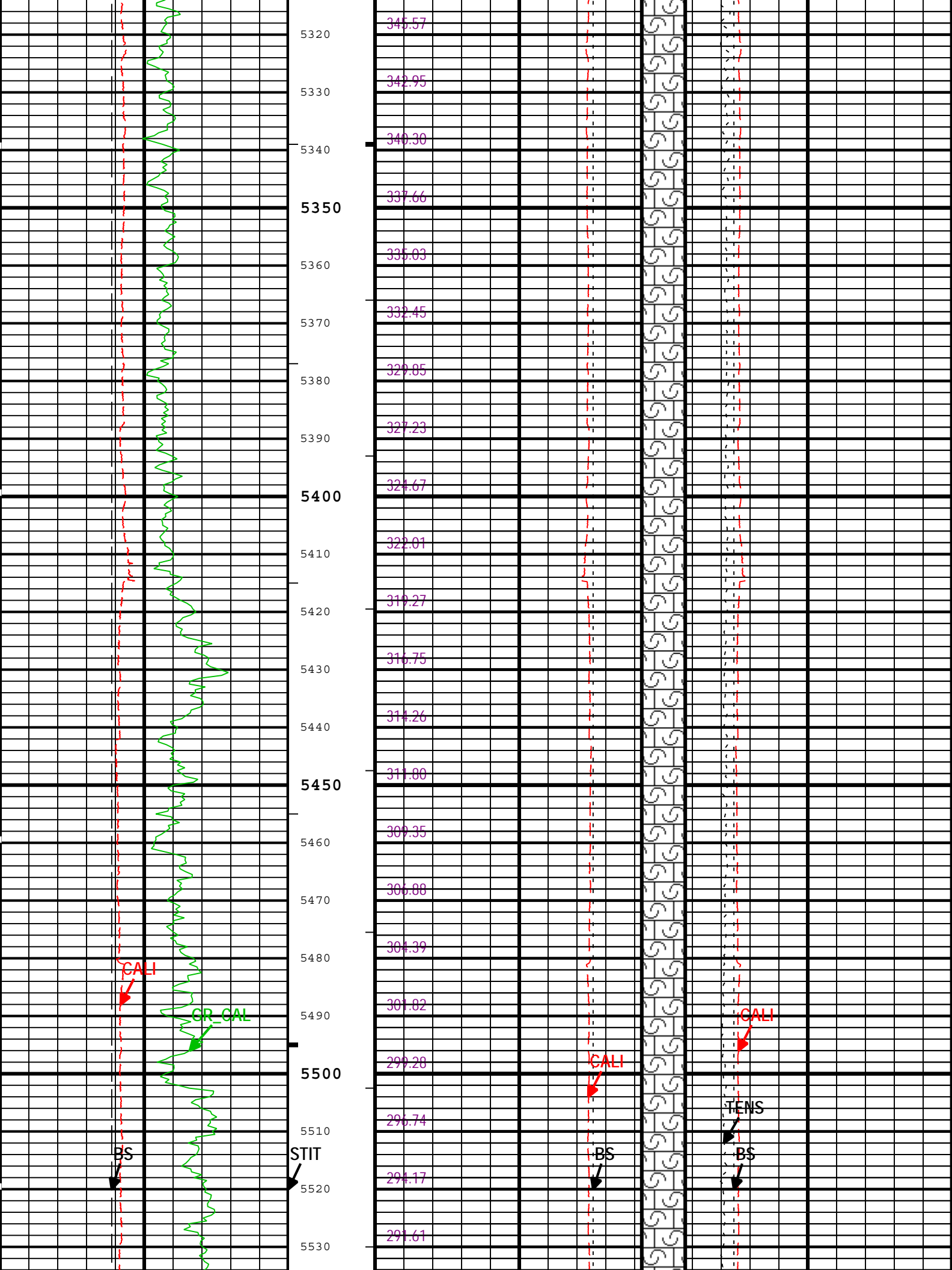


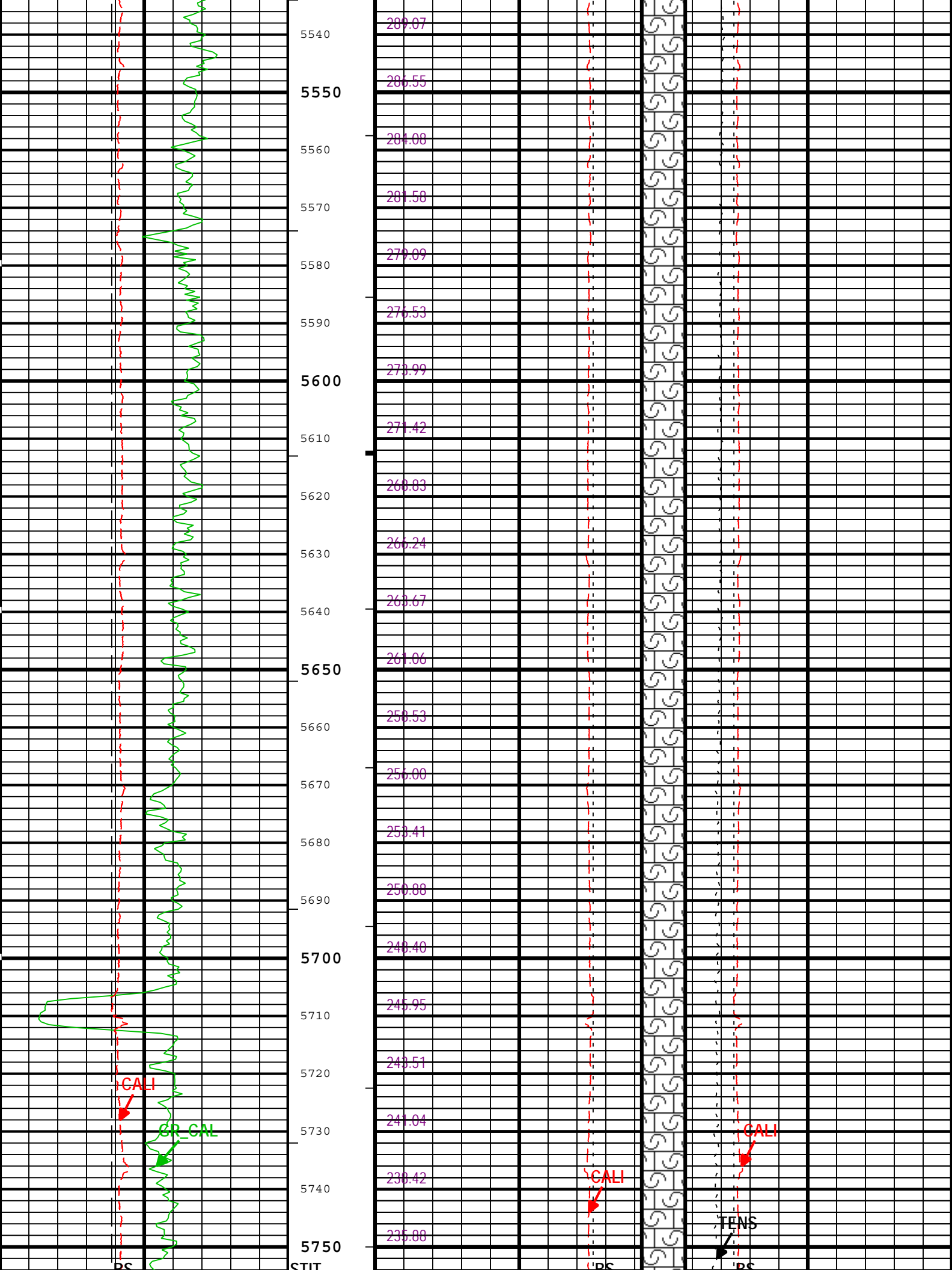


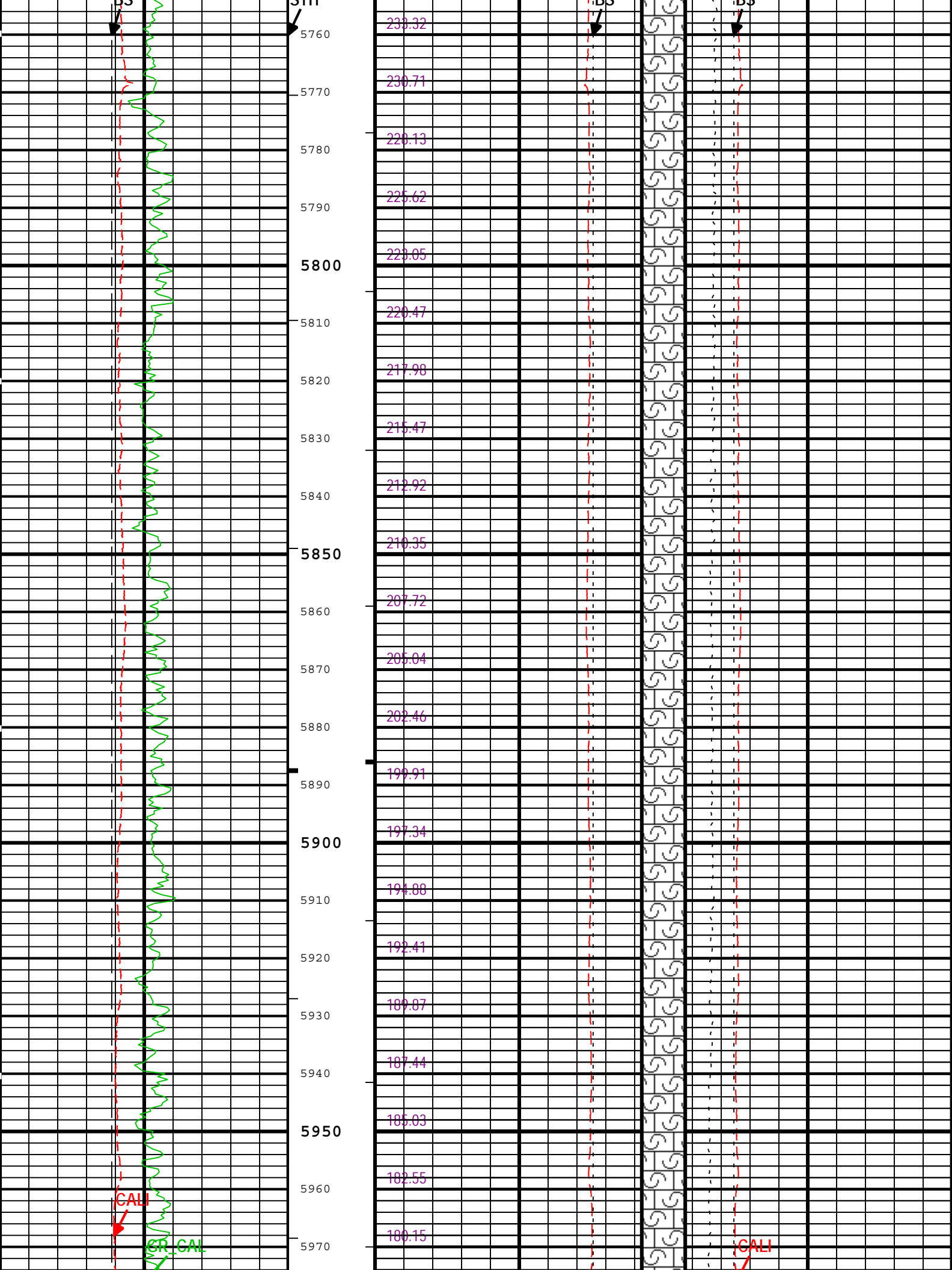


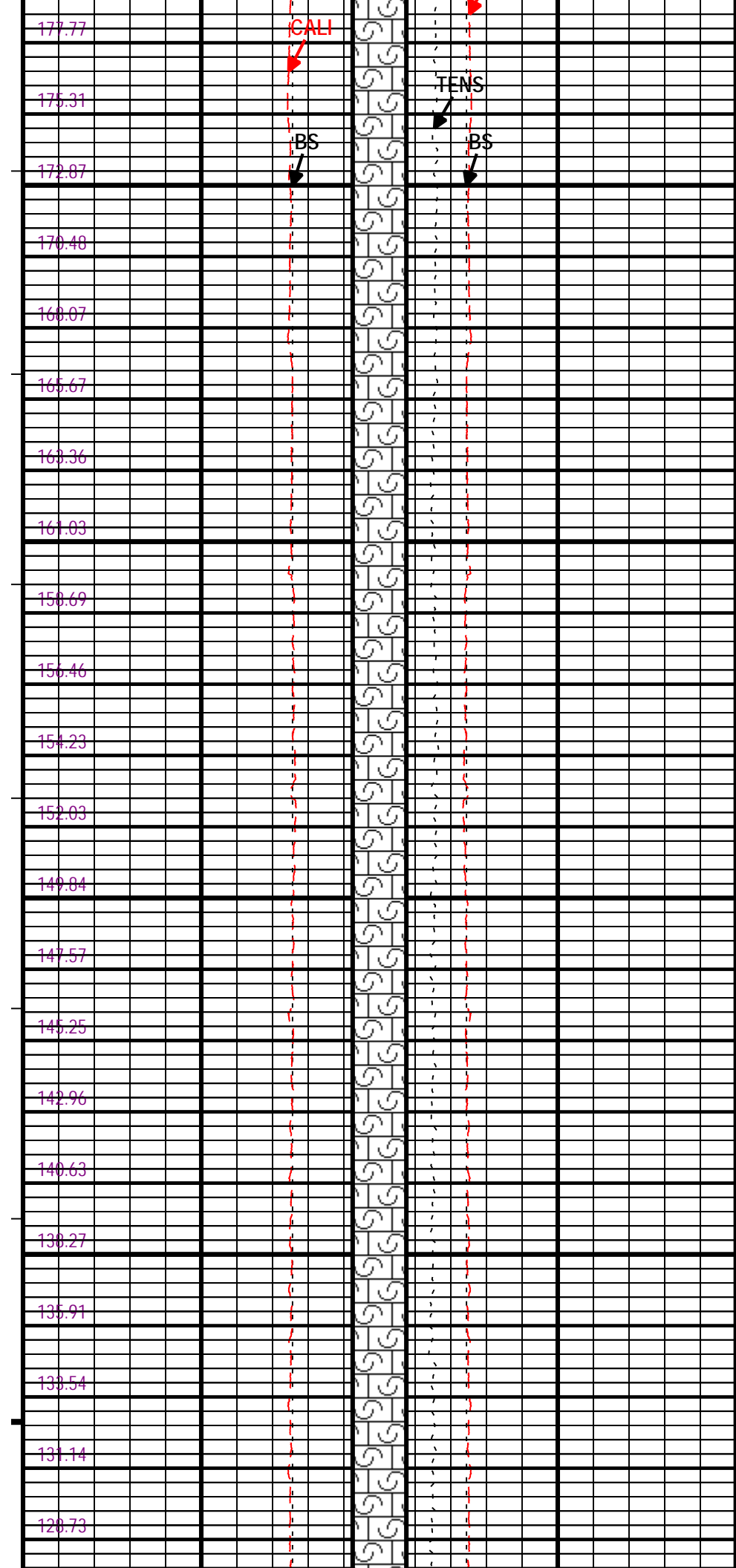
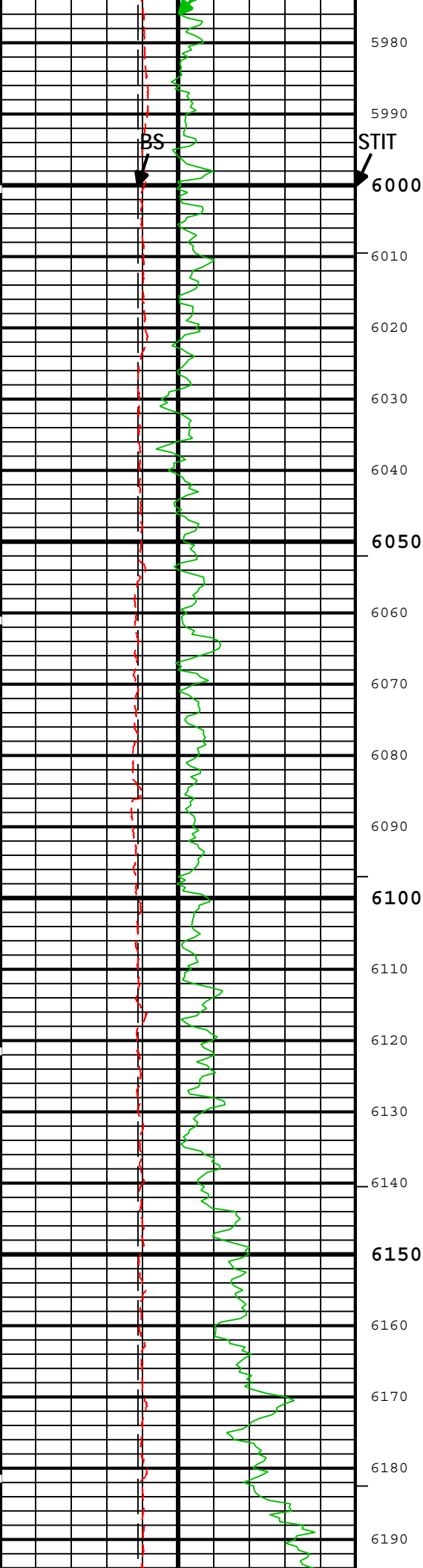


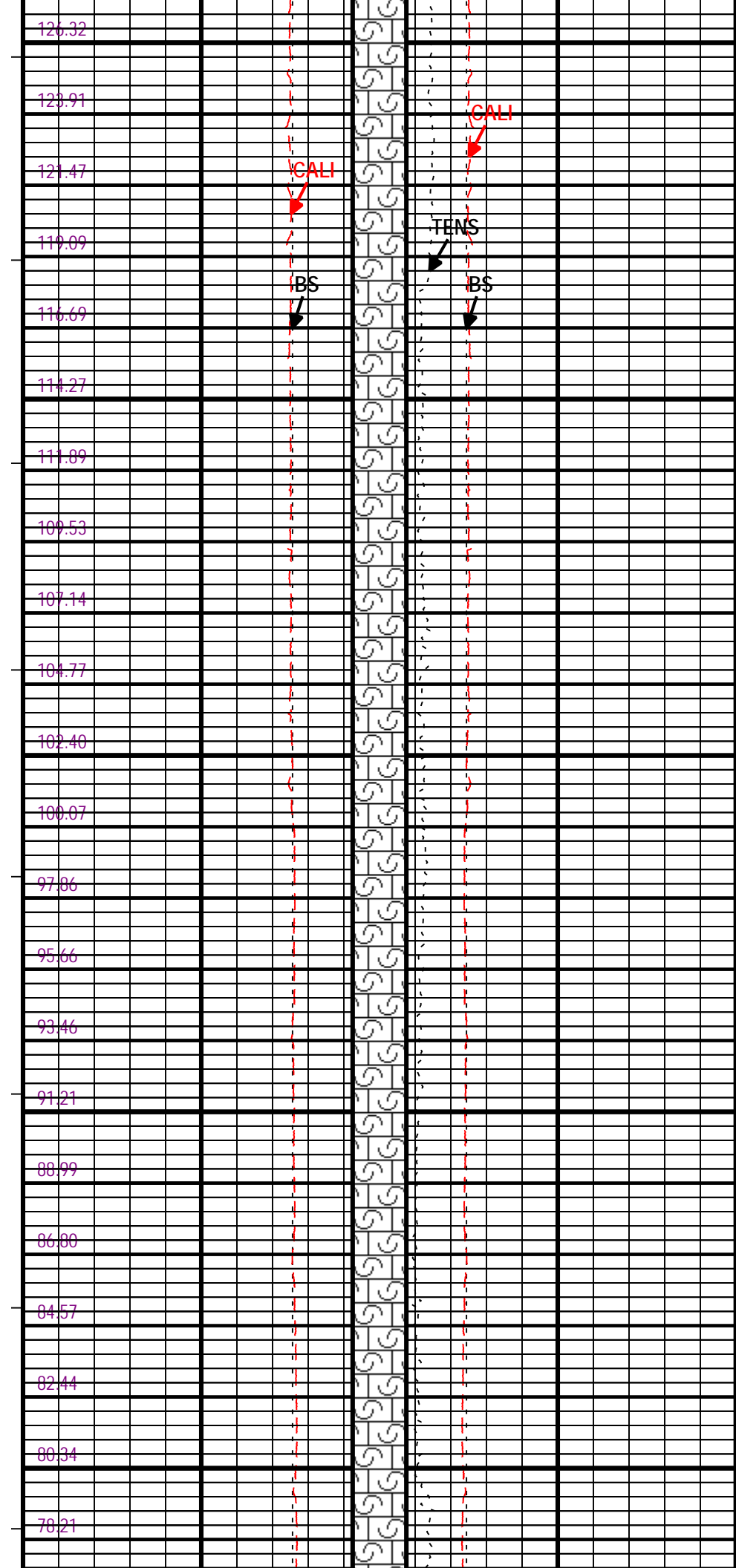
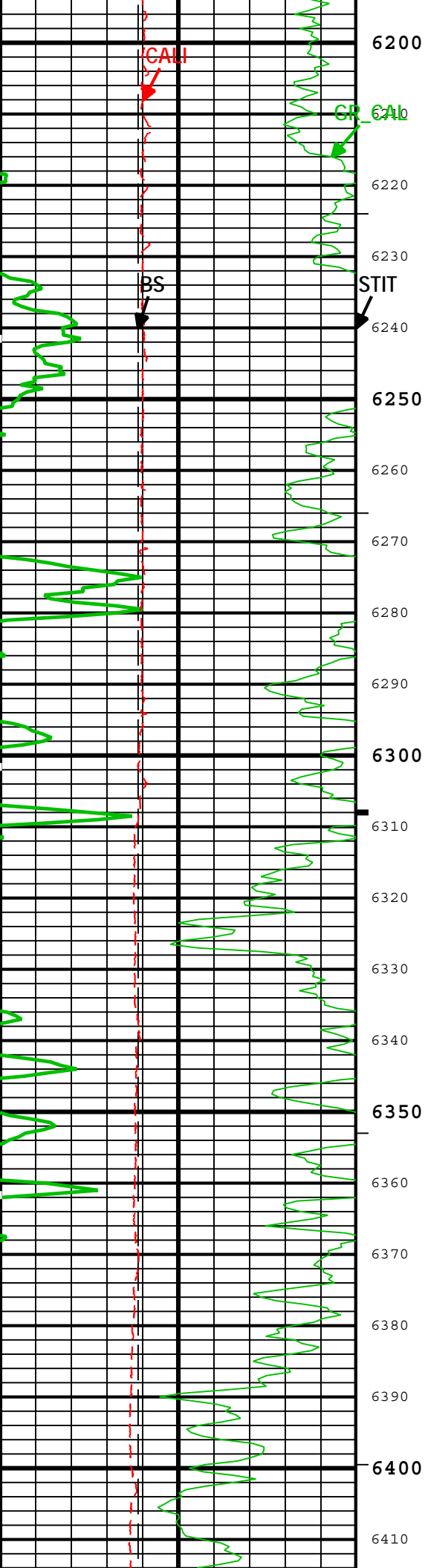


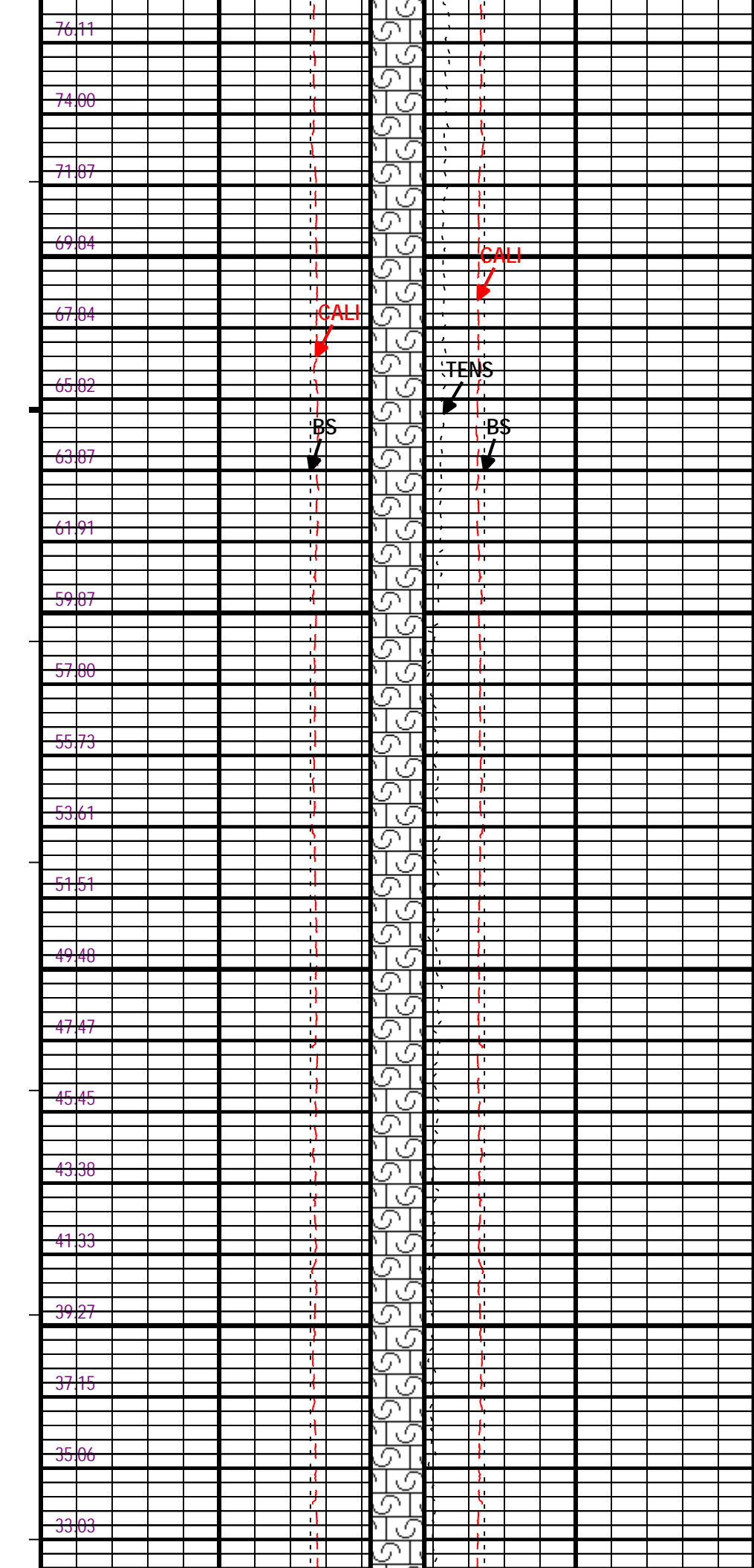
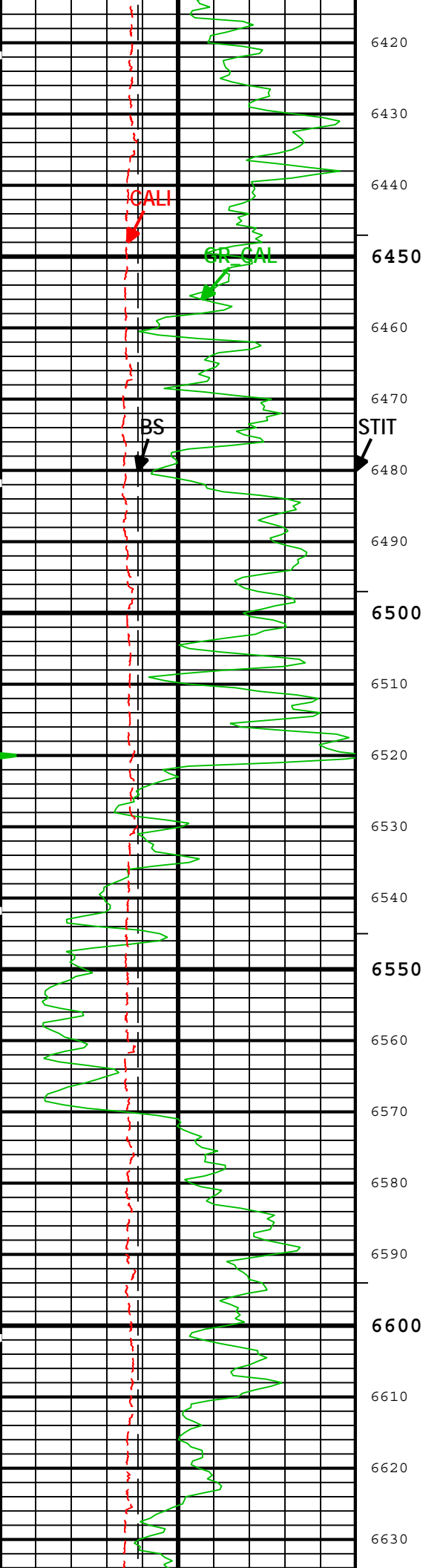












ICV - Integrated Cement Volume every 100.00 (ft3)

TIME_1900 - Time Marked every 60.00 (s)

IHV - Integrated Hole Volume every 100.00 (ft3)

Description:Format: Log (Noble East Caliper)Index Scale: 5 in per 100 ftIndex Unit: ftIndex Type: Measured DepthCreation Date: 04-Nov-2011 02:24:36

Channel Processing Parameters

Parameter	Description	ToolPath	Value	Unit
BHS	Borehole Status (Open or Cased Hole)	Borehole	Open	
BS	Bit Size	COMPLETION	7.875	in
CALI_SHIFT	CALI Supplementary Offset	HDRS-H:HRCC-H:HRCC-H	0	in
CBLO	Casing Bottom (Logger)	COMPLETION	714	ft
CSODDRL	Casing Outer Diameter - Zoned along driller depths	COMPLETION	Depth Zoned	in
DC_MODE	Depth Correction Mode	DepthCorrection	Real-time	
FCD	Future Casing (Outer) Diameter	COMPLETION	4.5	in
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	
TD	Total Measured Depth	Borehole	6767	ft

Depth Zone Parameters

Parameter	Value	Start (ft)	Stop (ft)
CSODDRL	[8.625]	600	714
CSODDRL	[0]	714	6788.5

All depth are actual.

Tool Control Parameters

Parameter	Description	ToolPath	Value	Unit
MAX_LOG_SPEED	Toolstring Maximum Logging Speed	WLWorkflow	3600	ft/h

Company:

Texas American Resources Company

Schlumberger

Well:

Roth 44-30

Field:

Wattenberg

County:

Weld

State:

Colorado

Platform Express

Caliper

Cement Volume