

Company: Omimex Petroleum Inc

Well: Sagehorn 14-34-6-45

Field: Ballyneal

County: Phillips State: Colorado

Platform Express Caliper Cement Volume	Location:			
	SESW Sec.34, T6N, R45W	Elev.:	K.B. 3871.00 ft	
	SHL: 733' FSL & 1899' FWL		G.L. 3865.00 ft	
	Lat/Long: 40.441640/-102.371340		D.F. 3870.00 ft	
	Permanent Datum:	Ground Level	Elev.: 3865.00 f	
Field:	Ballyneal			
Location:	SESW Sec.34, T6N, R45W			
Well:	Sagehorn 14-34-6-45			
Company:	Omimex Petroleum Inc			
	Log Measured From:	Kelly Bushing	6.00 ft	above Perm.Datum
	Drilling Measured From:	Kelly Bushing		
	API Serial No.	Section:	Township:	Range:
	05-095-0	34	6N	45W

Logging Date	09-Dec-2014				
Run Number	ONE				
Depth Driller	2698.00 ft				
Schlumberger Depth	2698.00 ft				
Bottom Log Interval	2698.00 ft				
Top Log Interval	498.25 ft				
Casing Driller Size @ Depth	7 in @ 495.00 ft				
Casing Schlumberger	495 ft				
Bit Size	6.25 in				
Type Fluid In Hole	WBM				
MUD	Density	8.5 lbm/gal	28 s		
	Fluid Loss	PH	8		
	Source of Sample				
RM @ Meas Temp	0.23 ohm.m @ 71.57 degF				
RMF @ Meas Temp	0.16 ohm.m @ 75 degF				
RMC @ Meas Temp	0.33 ohm.m @ 75 degF				
Source RMF	RMC	Calculated	Calculated		
RM @ BHT	RMF @ BHT	0.15 @ 110	0.11 @ 110		
Max Recorded Temperatures			110 degF		
Circulation Stopped	Time	09-Dec-2014 08:30:00			
Logger on Bottom	Time	09-Dec-2014 13:50:00			
Unit Number	Location:	9108	Fort Morgan		
Recorded By	Nolan Welsh				
Witnessed By	Paul Dekaye				

Disclaimer

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Well Sketch

Driller Depth

0.00 ft

495.00 ft

Casing 7in
17lbm/ft

2698.00 ft

Open Hole 6.25in

Borehole Size/Casing/Tubing Record

Bit						
Bit Size (in)	6.25					
Top Driller (ft)	0					
Top Logger (ft)	0					
Bottom Driller (ft)	2698					
Bottom Logger (ft)	2698					
Casing						
Size (in)	7					
Weight (lbm/ft)	17					
Inner Diameter (in)	6.538					
Grade	N/A					
Top Driller (ft)	0					
Top Logger (ft)	0					
Bottom Driller (ft)	495					
Bottom Logger (ft)	495					

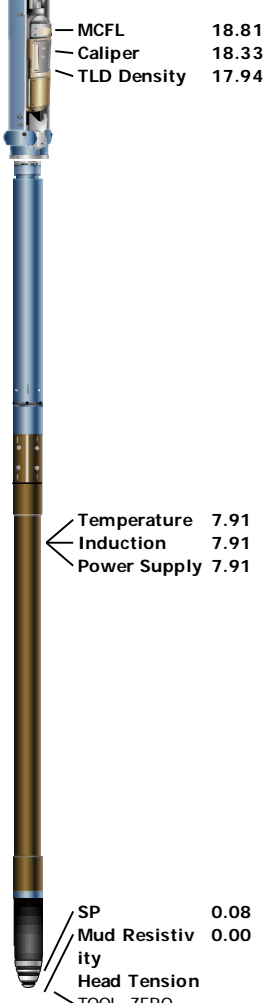
Borehole Fluids

Parameter(unit)	ONE					
Fluid Type	Water					
Fluid Name	WBM					
Max Recorded Temperatures (degF)	110					
Source of Sample	Active Tank					
Salinity (ppm)	11600					
Density (lbm/gal)	8.5					
Funnel Viscosity (s)	28					
Fluid Loss (cm3)	4					
PH	8					
Date/Time Circulation Stopped	09-Dec-2014 08:30:00					
Date Logger on Bottom	09-Dec-2014					
Time Logger on Bottom	13:50:00					
Source RMF	Calculated					
RMC	Calculated					
RM @ Meas Temp (ohm.m@degF)	0.23 @ 71.57					
RMF @ Meas Temp (ohm.m@degF)	0.16 @ 75					

RMC @ Meas Temp (ohm.m@degF)	0.33 @ 75					
RM @ BHT (ohm.m@degF)	0.15 @ 110					
RMF @ BHT (ohm.m@degF)	0.11 @ 110					
RMC @ BHT (ohm.m@degF)	0.23 @ 110					
Total Solid (%)						
High Gravity Solids (%)						

Remarks and Equipment Summary

ONE: Toolstring					ONE: Remarks
Equip name	Length	MP name	Offset		Toolstring run as per tool sketch.
LEH-QT	55.57				Matrix: Limestone MDEN: 2.71 g/cm3
LEH-QT					Rig: Excell #2
					Crew: Troy Ocanus, Jeffery Schossow
DTCH-H	52.65	CTEM	51.75		
ECH-KC		HV	0.00		
DTCH-H					
		ToolStatus	49.65		
Weight[2]	49.65	TelStatus	49.65		
GPIT-F	45.65				
GPIH-B		GPIT-F Incl	44.23		
GPIC-F		ometer			
DHRU-F					
		GPIT	0.00		
Weight[1]	41.65				
HGNS-H	37.65	Temperature	37.62		
HGNH					
NPV-N		GR	36.91		
NSR-F:5068					
HGNS-H					
HACCZ-H:3616					
HMCA-H					
		CNL Porosity	30.57		
		HMCA	28.24		
		HGNS	28.24		
		Acceleromete	0.00		
		r			
HDRS-H	28.24				
ECH-MEB					
HRCC-H					
HRMS-H					
HRGD-H:5788					
Backscatter:2696					
1					
Short Spacing					
Long Spacing					
GSR-J:5416					
GPV-Q					



AIT-M:181 16.00
AMIS:181
AMRM

Depth Summary

ONE

Depth Measuring Device

Type	IDW-JA		
Serial Number	5896		
Calibration Date	13-Aug-2014		
Calibrator Serial Number			
Calibration Cable Type	7-46-AXS		
Wheel Correction 1	-3		
Wheel Correction 2	-2		

Tension Device

Type	CMTD-B/A		
Serial Number	1109		
Calibration Date	18-Nov-2014		
Calibrator Serial Number	441345A		
Number of Calibration Points	10		
Calibration Root Mean Square Error	36		
Calibration Peak Error	69		

Logging Cable

Type	7-46A-XS		
Serial Number	U711136		
Length	18000.00 ft		
Conveyance Type	Wireline		
Rig Type	Land		

ONE:Depth Control Parameters

Depth Control Remarks

Log Sequence	First Log In the Well	All Schlumberger depth procedures followed
Rig Up Length At Surface		IDW used as primary depth control
Rig Up Length At Bottom		Z-Chart used as secondary depth control.
Rig Up Length Correction		
Stretch Correction		
Tool Zero Check At Surface		

ONE

Caliper Log

Integration Summary

Output Channel(s)	Output Description	Input Parameter	Output Value	Unit
ICV	Integrated Cement Volume	GCSE_UP_PASS, FCD	248.56	ft3
IHV	Integrated Hole Volume	GCSE_UP_PASS	492.05	ft3

Software Version

Acquisition System	Version
MaxWell	4.0.9163.3000
Application Patch	Patch-SP-10767_26570-4.0.9163.3001

Computation	Description	Version
Borehole	Borehole Ensemble provides common Borehole Parameters and Channels	4.0.9469.3000
DepthCorrection	DepthCorrection	4.0.9469.3000

Tool Elements	Description	Software Version	Firmware Version
HRCC-H	HILT High-Resolution Control Cartridge, 150 degC	4.0.9575.3000	
HGNS-H	HILT Gamma-Ray and Neutron Sonde, 150 degC	4.0.9575.3000	

Pass Summary

Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	DSC Mode	Depth Shift	Include Parallel Data
ONE	Main[3]:Up	Up	54.64 ft	2700.43 ft	09-Dec-2014 2:09:10 PM	09-Dec-2014 2:54:47 PM	ON	0.00 ft	Yes

All depths are referenced to toolstring zero

Log

Company: Omimex Petroleum Inc

Well:Sagehorn 14-34-6-45

ONE: Main[3]:Up:S004

Description: Format: Log (Noble East Caliper) Index Scale: 5 in per 100 ft Index Unit: ft Index Type: Measured Depth Creation Date: 09-Dec-2014 15:06:32

Channel	Source	Sampling
CALI	HDRS-H:HRCC-H:HRCC-H	1in
BS	Borehole	6in
CALI	HDRS-H:HRCC-H:HRCC-H	1in
GR_CAL	HGNS-H:HGNS-H:HGNS-H	6in
ICV	Borehole	6in
ICV	Borehole	6in
IHV	Borehole	6in
STIT	DepthCorrection	6in
TENS	WLWorkflow	6in
TIME_1900	WLWorkflow	0.1in

—IHV - Integrated Hole Volume every 100.00 (ft3)

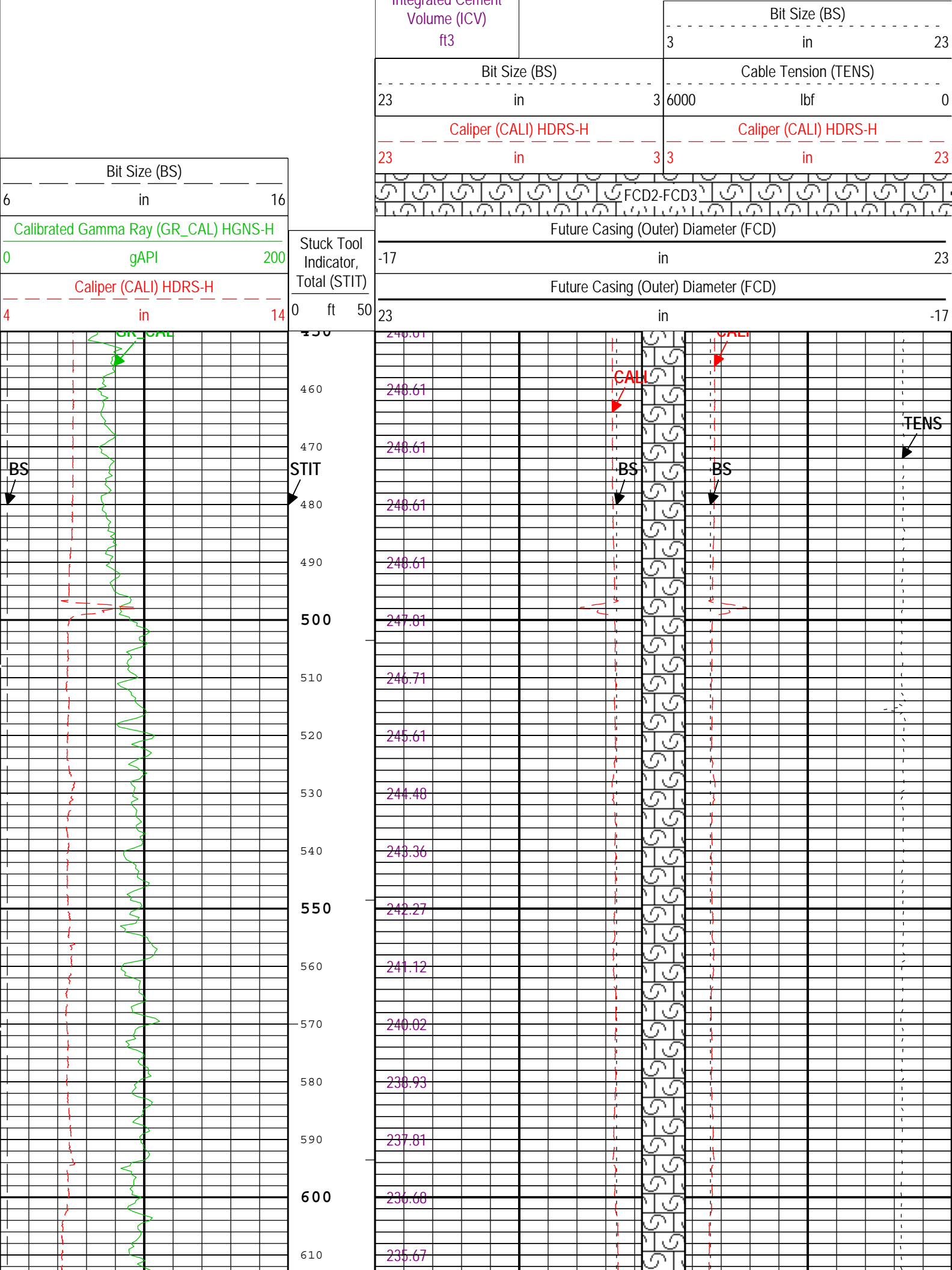
TIME_1900 - Time Marked every 60.00 (s)

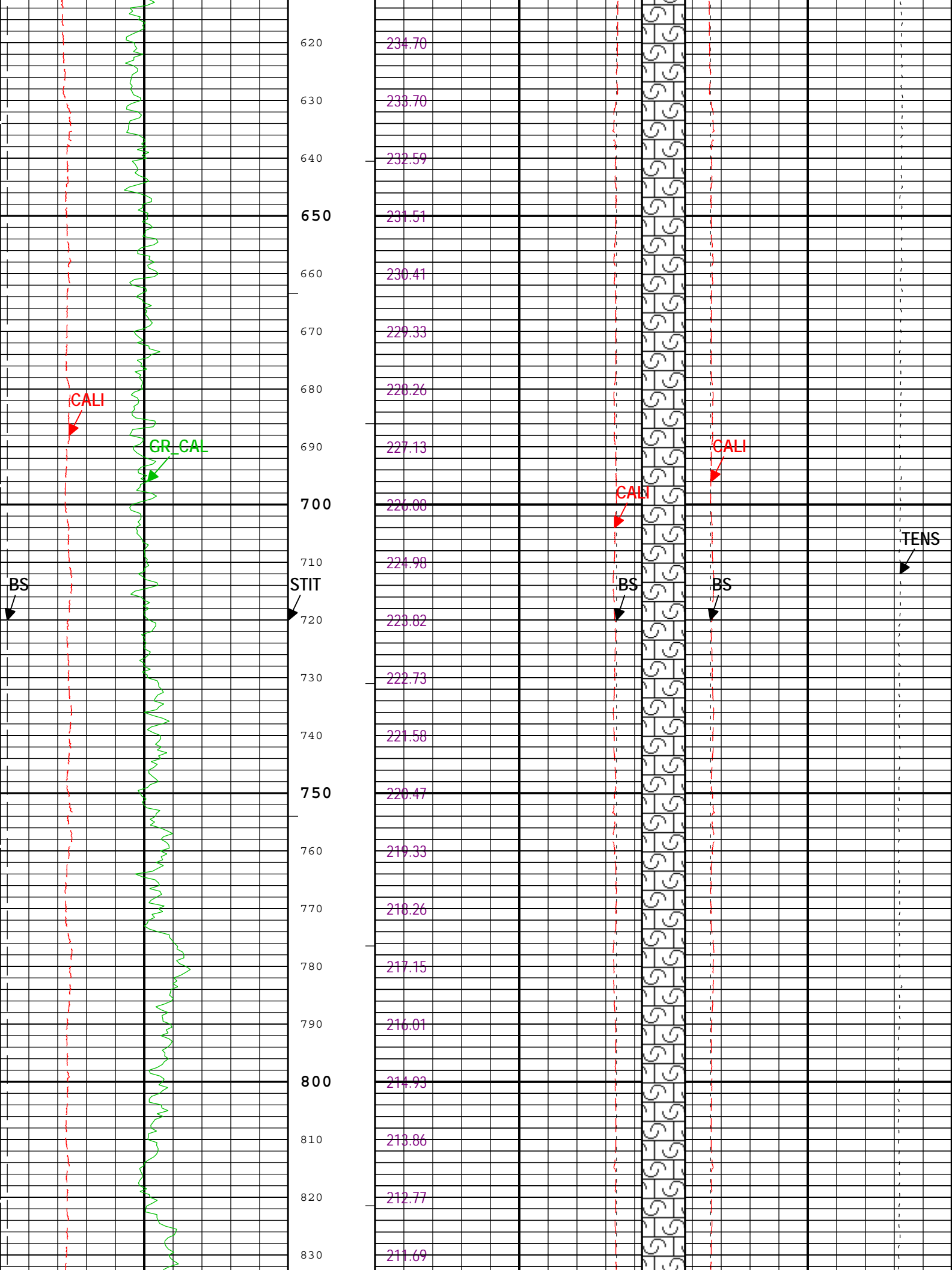
└ ICV - Integrated Cement Volume every 100.00 (ft3)

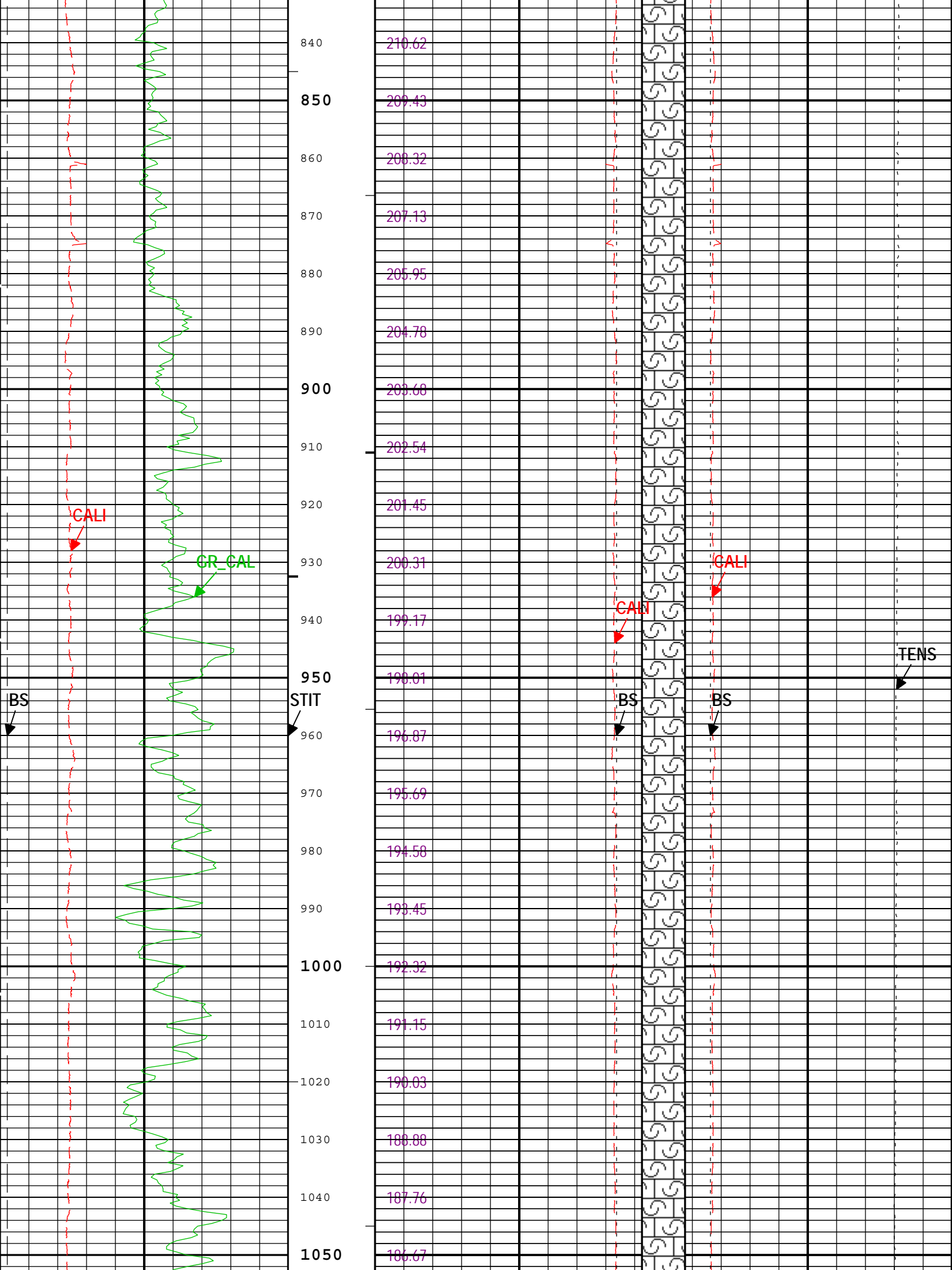
—IHV - Integrated Hole Volume every 10.00 (ft3)

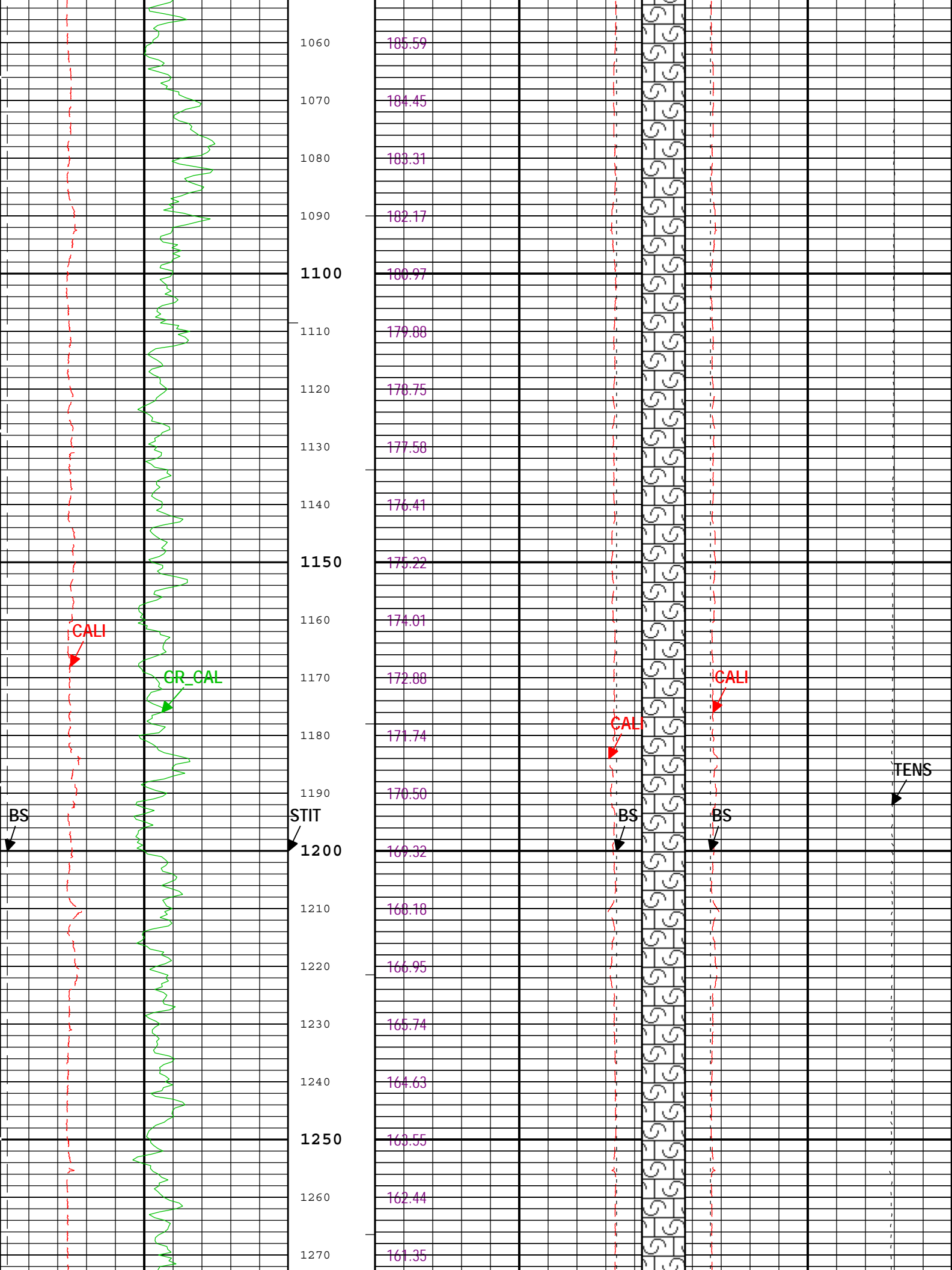
— ICV - Integrated Cement Volume every 10.00 (ft3)

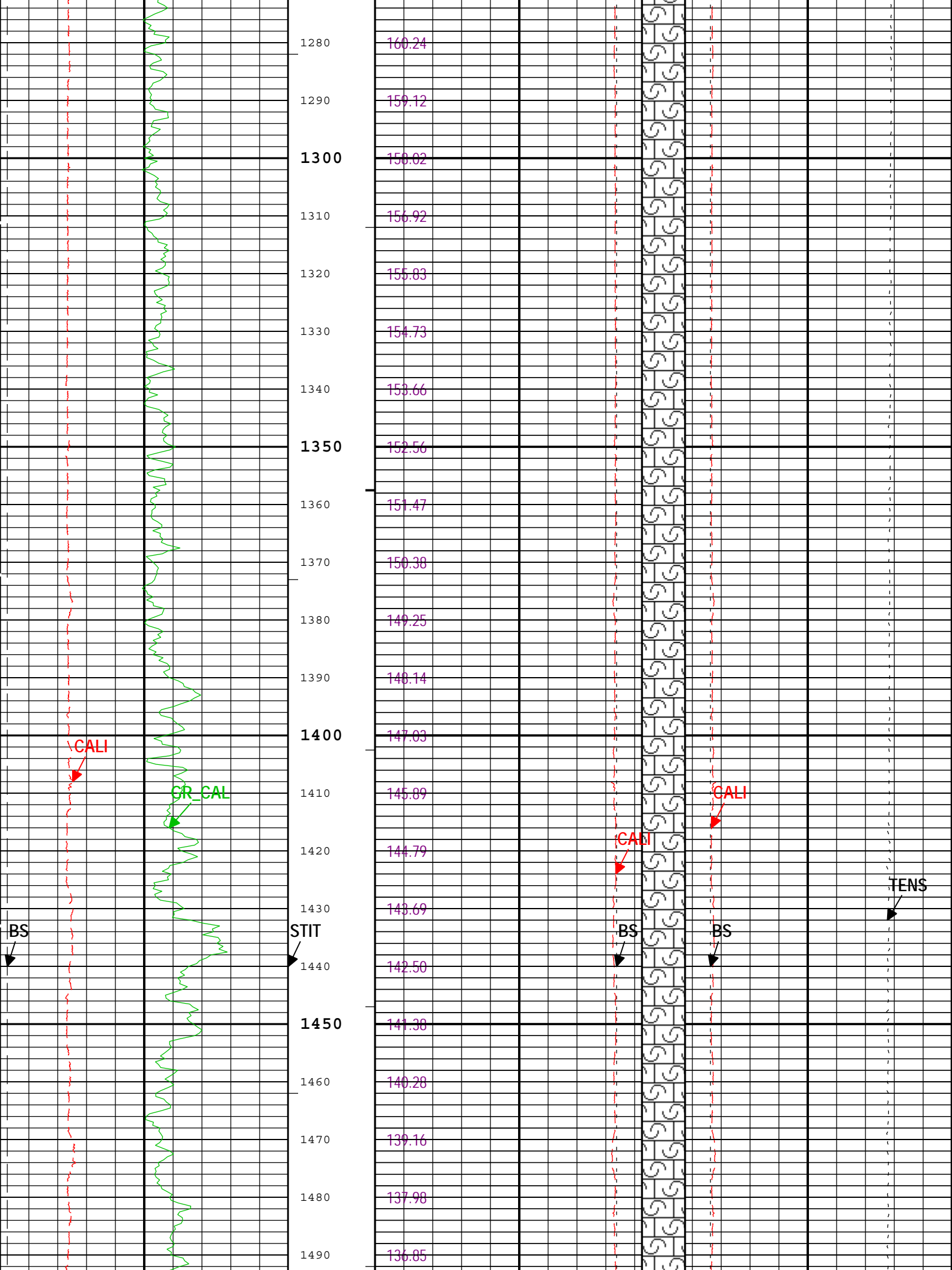
Integrated Comment

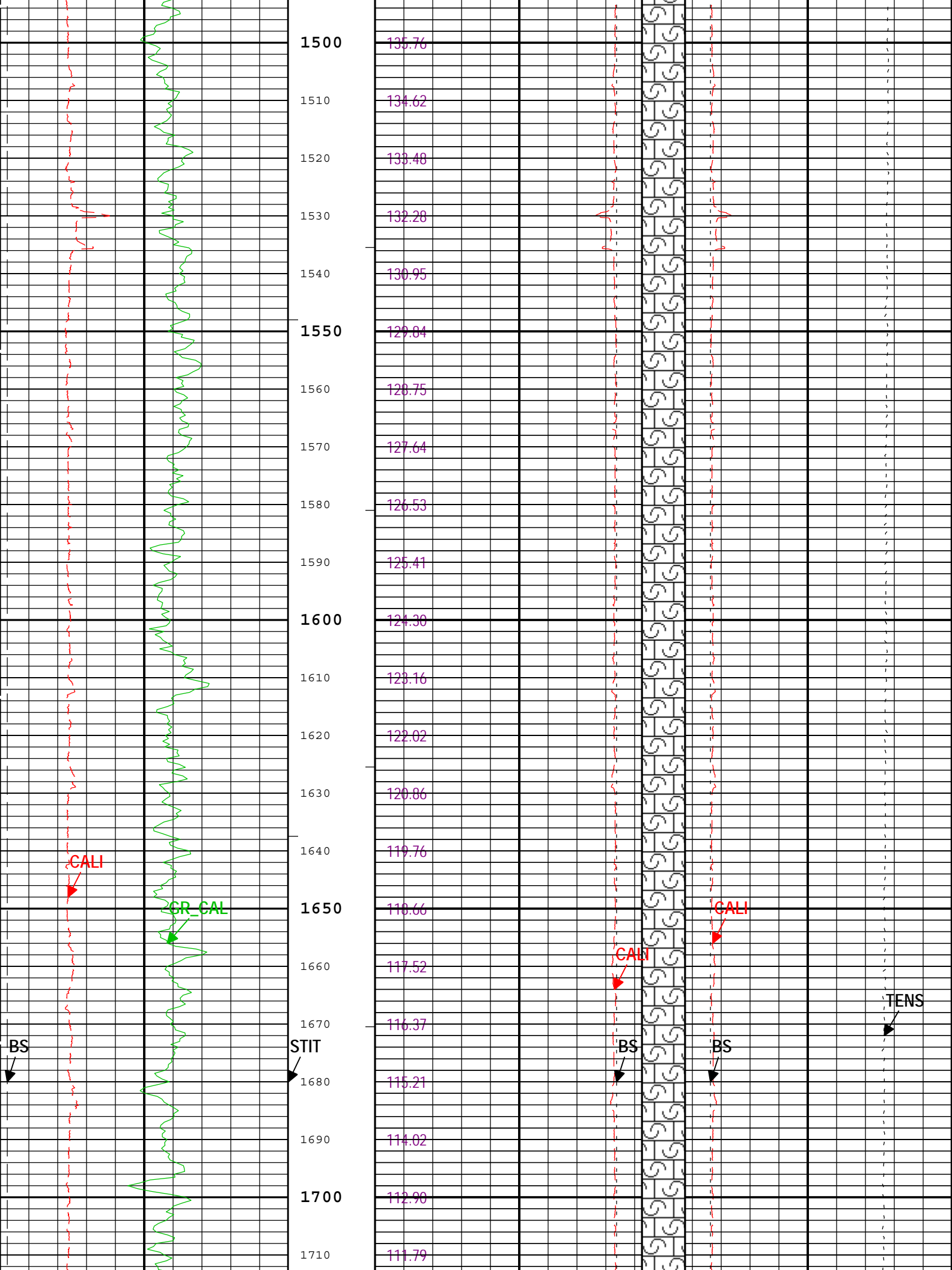


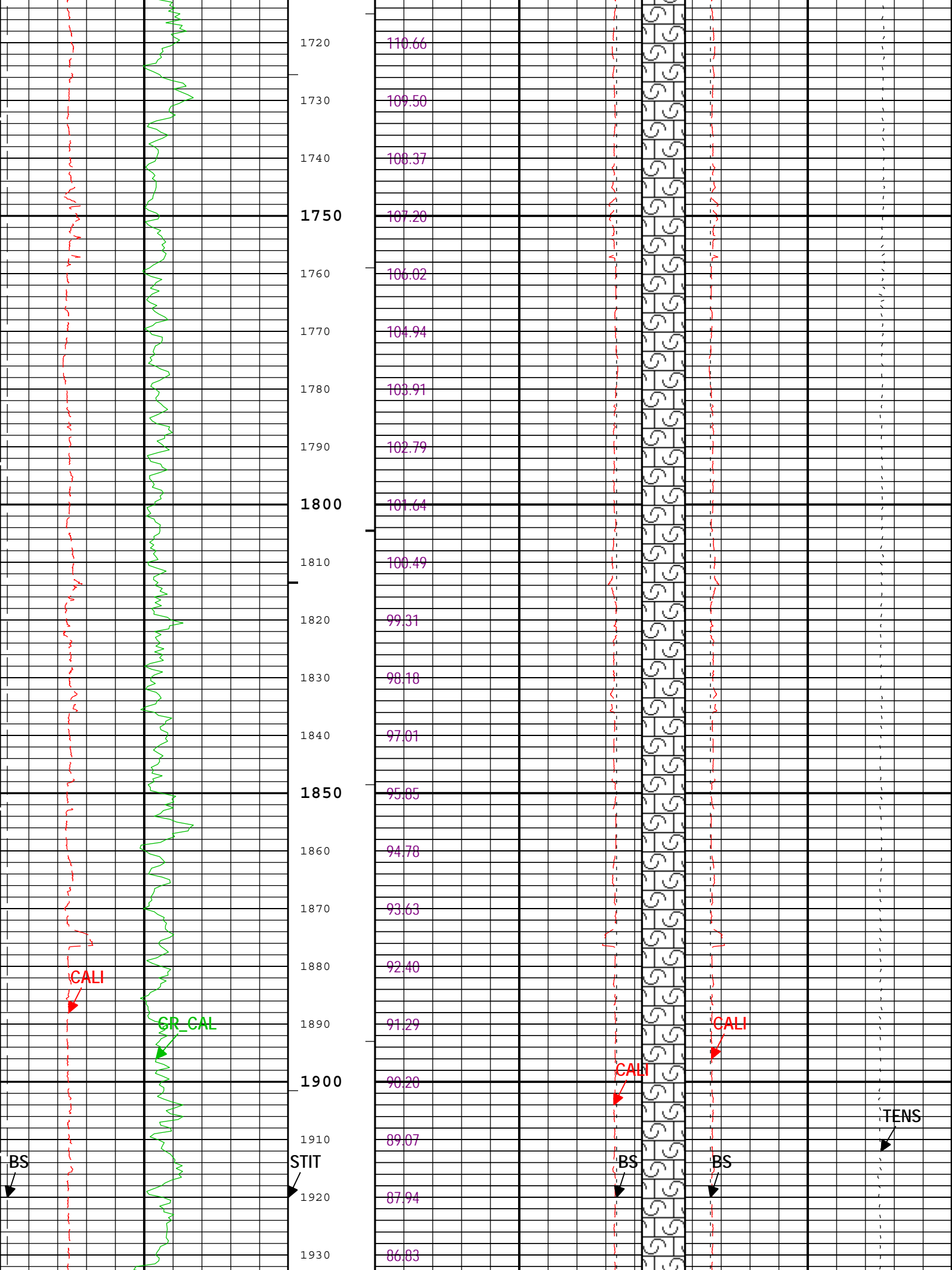




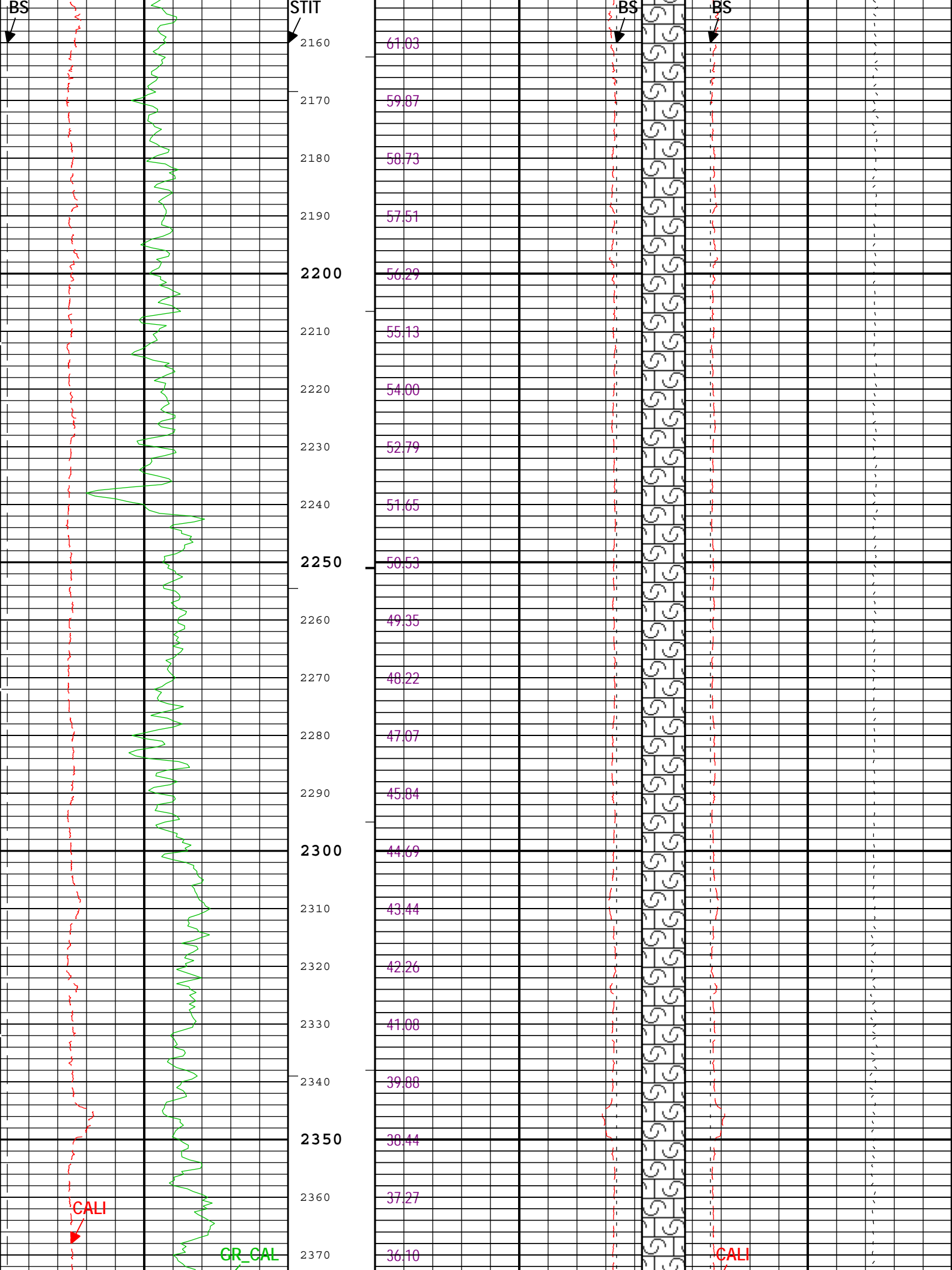


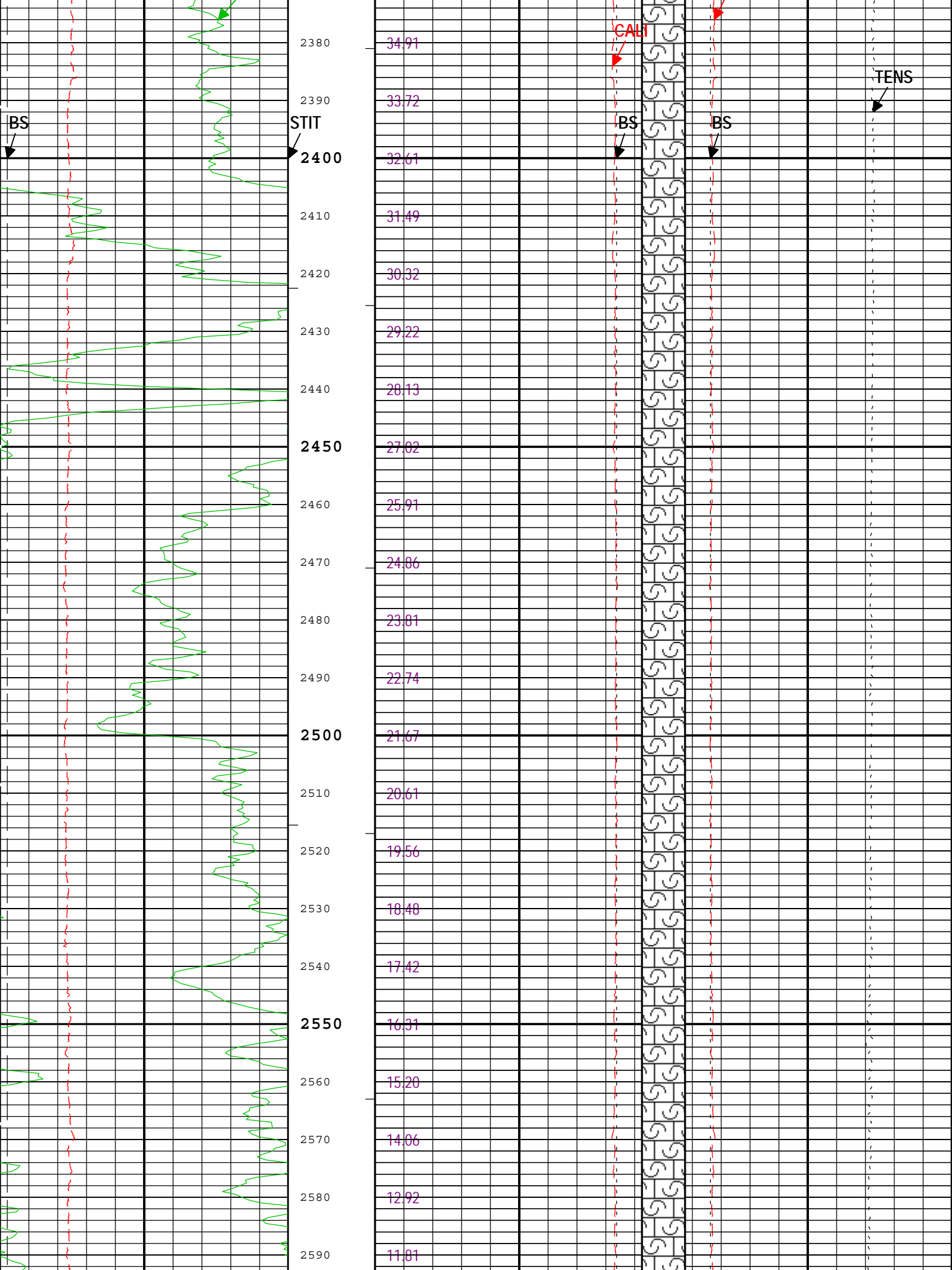


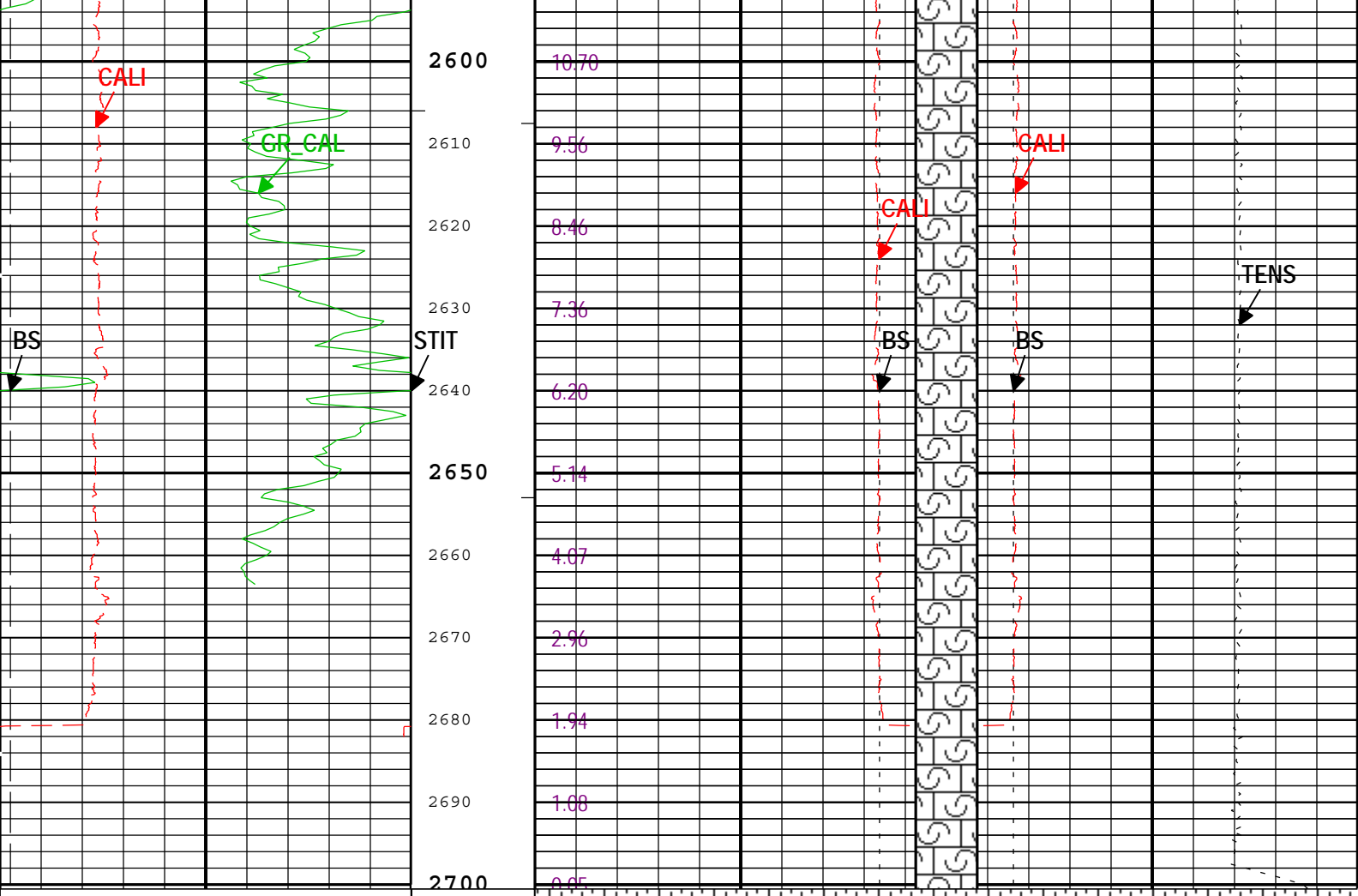












Bit Size (BS)		Stuck Tool Indicator, Total (STIT)	
6	in	0	ft 50
Calibrated Gamma Ray (GR_CAL) HGNS-H		Future Casing (Outer) Diameter (FCD)	
0	gAPI	200	

Caliper (CALI) HDRS-H		Future Casing (Outer) Diameter (FCD)	
4	in	14	

Bit Size (BS)		Bit Size (BS)	
23	in	3	3
Caliper (CALI) HDRS-H		Cable Tension (TENS)	
23	in	3	6000 lbf
Integrated Cement Volume (ICV) ft3		Caliper (CALI) HDRS-H	
		3	in

- ICV - Integrated Cement Volume every 10.00 (ft3)
- IHV - Integrated Hole Volume every 10.00 (ft3)
- 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 ft Index Unit: ft Index Type: Measured Depth Creation Date: 09-Dec-2014 15:06:32

Channel Processing Parameters				
Parameter	Description	Tool	Value	Unit
BHS	Borehole Status (Open or Cased Hole)	Borehole	Open	
BS	Bit Size	WLSESSION	6.25	in

CALI_SHIFT	CALI Supplementary Offset	HDRS-H	0.075	in
CBLO	Casing Bottom (Logger)	WLSESSION	495	ft
CSODDRL	Casing Outer Diameter - Zoned along driller depths	WLSESSION	7	in
DC_MODE	Depth Correction Mode	DepthCorrection	Real-time	
FCD	Future Casing (Outer) Diameter	WLSESSION	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	2698	ft

Tool Control Parameters

Parameter	Description	Tool	Value	Unit
MAX_LOG_SPEED	Toolstring Maximum Logging Speed	WLSESSION	3600	ft/h

Calibration Report

HDRS-H (HILT Density and Rxo Sonde, 150 degC) Calibration - Run ONE

Primary Equipment :

HILT High-Resolution Control Cartridge, 150 degC	HRCC-H	
HILT Resistivity Gamma-Ray Density Device, 150 degC	HRGD-H	5788

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): 21:38:36 29-Nov-2014 Expired by 8 days

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Small Ring	in	Before	8.00	6.00	7.48	10.00	
Large Ring	in	Before	12.00	9.00	11.83	15.00	

HDRS Density Calibration - Background Summary

Before (Measured): 21:35:25 29-Nov-2014 Expired by 8 days

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
BS Window Ratio		Before	0.7470	0.7097	0.7474	0.7844	
BS Window Sum	1/s	Before	24968	23719	24966	26216	
SS Window Ratio		Before	0.4888	0.4644	0.4898	0.5133	
SS Window Sum	1/s	Before	11963	11365	11953	12562	
LS Window Ratio		Before	0.2999	0.2850	0.2982	0.3149	
LS Window Sum	1/s	Before	1352	1285	1347	1420	

HDRS Density Calibration - Photo-multiplier High Voltages

Before (Measured): 21:35:25 29-Nov-2014 Expired by 8 days

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
BS PM High Voltage	V	Before		1000	1498	2400	
SS PM High Voltage	V	Before		1000	1870	2400	
LS PM High Voltage	V	Before		1000	1267	2400	

HDRS Density Calibration - Crystal Quality Resolutions

Before (Measured): 21:35:25 29-Nov-2014 Expired by 8 days

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
BS Crystal Resolution	%	Before		5.00	10.95	25.00	
SS Crystal Resolution	%	Before		5.00	9.77	20.00	
LS Crystal Resolution	%	Before		5.00	8.25	20.00	

HDRS MCFL Calibration - MCFL Accumulations

Before (Measured): 13:27:22 09-Dec-2014

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Main Resistivity	ohm.m	Before	3875	3565	3889	4185	
Deep Resistivity	ohm.m	Before	3830	3524	3824	4136	
Shallow Resistivity	ohm.m	Before	3830	3524	3847	4136	

Company:	Omimex Petroleum Inc	Schlumberger
Well:	Sagehorn 14-34-6-45	
Field:	Ballyneal	
County:	Phillips	
State:	Colorado	
Platform Express		
Caliper		
Cement Volume		