Schlumberger

Company: Omimex Petroleum Inc

Well: Fiddler Peak Ranch 4-3-5-45

Field: Ballyneal

County: Yuma State: Colorado

Platform Express

Caliper

Cement Volume

County: Yuma
Field: Ballyneal
Location: NWNW Sec3 T5N R45W
Well: Fiddler Peak Ranch 4-3-5-45
Company: Omimex Petroleum Inc

Location:			
NWNW Sec3 T5N R45W SHL: 433' FNL, 603' FWL	Elev.:	K.B.	3798.00 ft
		G.L.	3792.00 ft
		D.F.	3797.00 ft

Permanent Datum:	Ground Level	Elev.:	3792.00 f
Log Measured From:	Kelly Bushing	6.00 ft	above Perm.Datum
Drilling Measured From:	Kelly Bushing		

API Serial No.	Section:	Township:	Range:
05-125-12124	3	5N	45W

Logging Date			15-Nov-2014			
Run Number			ONE			
Depth Driller			2725.00 ft			
Schlumberger Depth			2726.00 ft			
Bottom Log Interval			2726.00 ft			
Top Log Interval			494.00 ft			
Casing Driller Size @ Depth			7 in @ 493.00 ft			
Casing Schlumberger			494 ft			
Bit Size			6.25 in			
Type Fluid In Hole			Water			
MUD	Density	Viscosity	8.8 lbm/gal	29 s		
	Fluid Loss	PH	3.2 cm3	8		
	Source of Sample		AIT Measured			
RM @ Meas Temp			0.23 ohm.m @ 86 degF			
RMF @ Meas Temp			0.16 ohm.m @ 86 degF			
RMC @ Meas Temp			0.31 ohm.m @ 86 degF			
Source RMF	RMC		Calculated	Calculated		
RM @ BHT	RMF @ BHT		0.19 @ 103	0.14 @ 103		
Max Recorded Temperatures			103 degF			
Circulation Stopped	Time		15-Nov-2014	11:45:00		
Logger on Bottom	Time		15-Nov-2014	16:39:12		
Unit Number	Location:		9108	Fort Morgan		
Recorded By			B Makinson			
Witnessed By			Paul Dekaye			

Disclaimer

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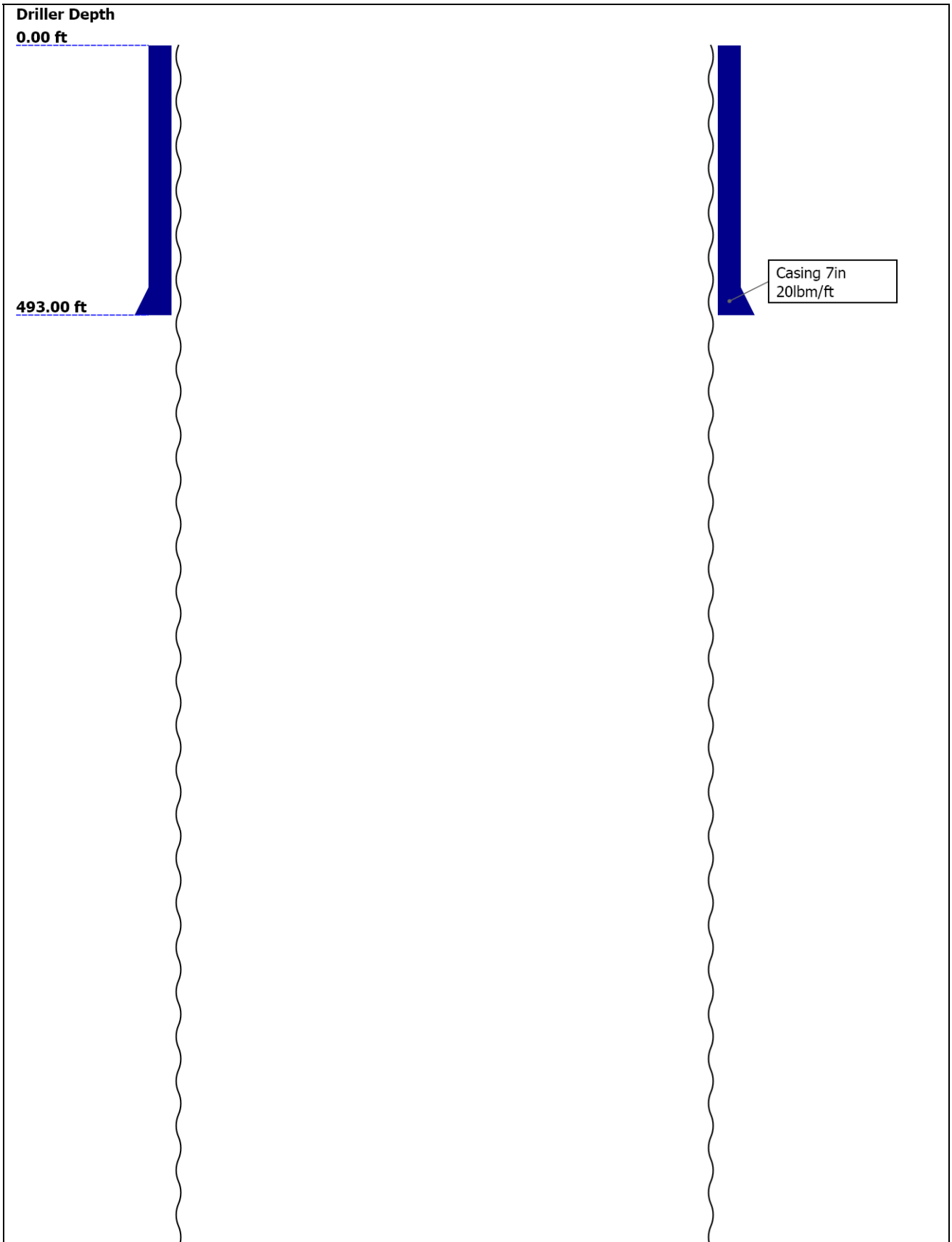
Contents

Well Sketch



Borehole Size/Casing/Tubing Record

Bit						
Bit Size (in)	6.25					
Top Driller (ft)	0					
Top Logger (ft)	0					
Bottom Driller (ft)	2725					
Bottom Logger (ft)	2726					
Casing						
Size (in)	7					
Weight (lbm/ft)	20					
Inner Diameter (in)	6.456					
Grade	J55					
Top Driller (ft)	0					
Top Logger (ft)	0					
Bottom Driller (ft)	493					
Bottom Logger (ft)	494					

Remarks and Equipment Summary

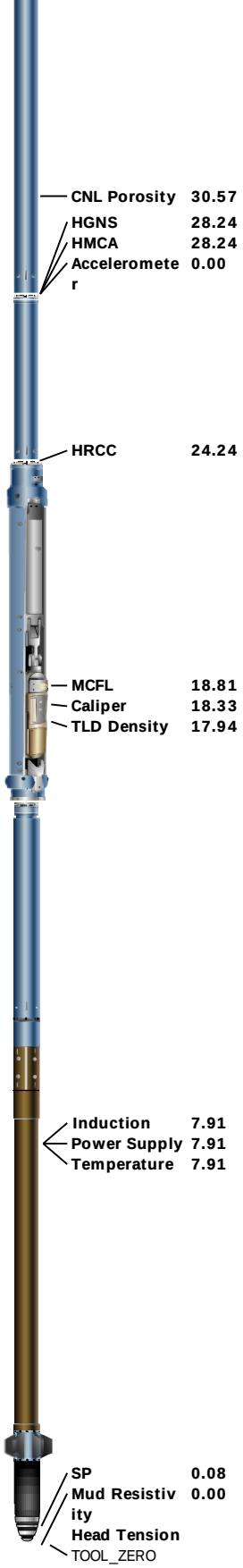
ONE: Toolstring

Equip name	Length	MP name	Offset
LEH-QT	**51.57**		
LEH-QT			
DTC-H	**48.65**		
ECH-KC		**CTEM**	**47.75**
DTC-H		**HV**	**0.00**
		ToolStatus	**45.65**
		TelStatus	**45.65**
AH-184[2]	**45.65**		
AH-184[1]	**43.65**		
GPIT-F	**41.65**		
GPIH-B			
DHRU-F		**GPIT-F Inclinometer**	**40.23**
GPIC-F			
		GPIT	**0.00**
HGNS-H:4810	**37.65**	**Temperature**	**37.62**
HGNH			
NSR-F:5215		**GR**	**36.91**
NPV-N			
HACCZ-H:5955			

ONE: Remarks

First run in the well.
Toolstring run as per tool sketch.
No bowspring used to eccenter HGNS as per
Limestone matrix, MDEN: 2.71
Neutron corrections applied: Hole size,
Cement volume calculated assuming 4.5"
Down log stretch correction: 0.26 ft.
Caliper check in casing within 0.1" tolerance.
Mud resistivity measured from AIT AMF.
TD: 2726 ft, CSG: 498 ft.

HGNS-H:4810
HMCA-H



HDRS-H **28.24**
ECH-MEB
HRCC-H
HRMS-H
GPV-Q
GSR-J:5094
Backscatter
Short Spacing
HRGD-H:3933
Long Spacing:287
36

AIT-M:181 **16.00**
AMIS:181
AMRM:181

Lengths are in ft
Maximum Outer Diameter = 9.000 in
Line: Sensor Location, Value: Gating Offset
All measurements are relative to TOOL_ZERO

Depth Summary

	ONE		
Depth Measuring Device			
Type	IDW-JA		
Serial Number	6431		
Calibration Date	07-Apr-2014		

Calibrator Serial Number			
Calibration Cable Type	7-46 AXS		
Wheel Correction 1	-4		
Wheel Correction 2	-4		

Tension Device

Type	CMTD-B/A		
Serial Number	147		
Calibration Date	19-Oct-2014		
Calibrator Serial Number	78135A		
Number of Calibration Points	10		
Calibration Root Mean Square Error	78		
Calibration Peak Error	130		

Logging Cable

Type	7-46A-XS		
Serial Number	U714022		
Length	18500.00 ft		
Conveyance Type	Wireline		
Rig Type	Single		

ONE:Depth Control Parameters

Log Sequence	First Log In the Well
Rig Up Length At Surface	
Rig Up Length At Bottom	
Rig Up Length Correction	
Stretch Correction	0.26 ft
Tool Zero Check At Surface	

Depth Control Remarks

All Schlumberger depth control procedures followed.

IDW used as primary depth control.

Z-Chart used as secondary depth control.

ONE

Cement

Integration Summary

Output Channel(s)	Output Description	Input Parameter	Output Value	Unit
ICV	Integrated Cement Volume	GCSE_UP_PASS, FCD	249.86	ft3
IHV	Integrated Hole Volume	GCSE_UP_PASS	497.6	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	2.0
HGNS-H	HILT Gamma-Ray and Neutron Sonde, 150 degC	4.0.9575.3000	2.0

Pass Summary

Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	DSC Mode	Depth Shift	Include Parallel Data
ONE	Log[4]:Up	Up	38.39 ft	2736.62 ft	15-Nov-2014 5:00:13 PM	15-Nov-2014 5:50:10 PM	ON	0.00 ft	No

All depths are referenced to toolstring zero

Log

Company:Omimex Petroleum Inc Well:Fiddler Peak Ranch 4-3-5-45

ONE: Log[4]:Up:S002

Description: Format: Log (Noble East Caliper) Index Scale: 5 in per 100 ft Index Unit: ft Index Type: Measured Depth Creation Date: 15-Nov-2014 18:19:37

Channel	Source	Sampling
CALI	HDRS-H:HRCC-H:HRCC-H	1in
BS	Borehole	6in
BS	Borehole	6in
CALI	HDRS-H:HRCC-H:HRCC-H	1in
GR_CAL	HGNS-H:HGNS-H:HGNS-H	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 Cement Volume (ICV) ft3

Bit Size (BS)
3 in 23

Bit Size (BS)
23 in 3

Cable Tension (TENS)
6000 lbf 0

Caliper (CALI) HDRS-H
23 in 3

Caliper (CALI) HDRS-H
3 in 23

FCD2-FCD3

Future Casing (Outer) Diameter (FCD)
-17 in 23

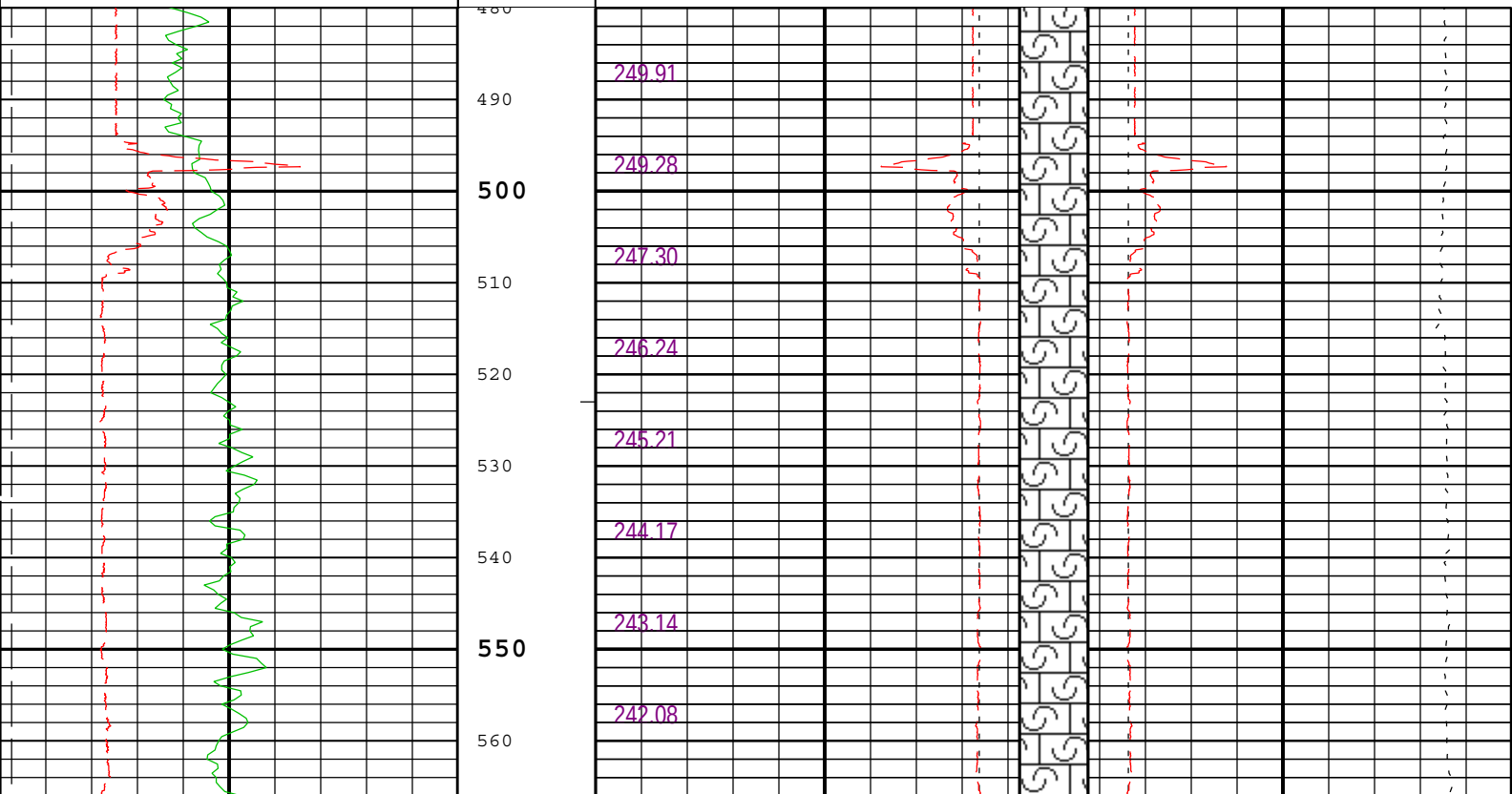
Bit Size (BS)
6 in 16

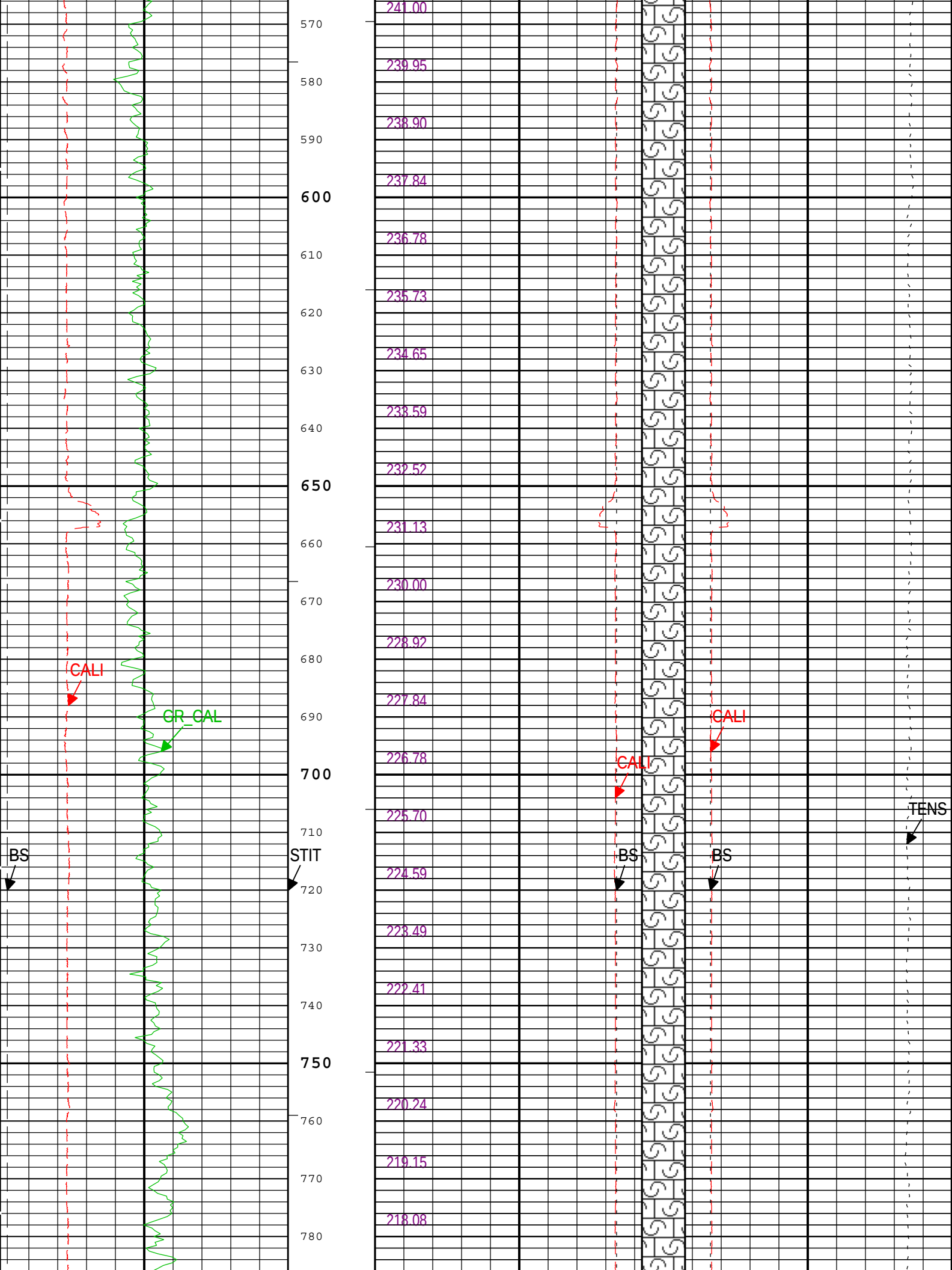
Calibrated Gamma Ray (GR_CAL) HGNS-H
0 gAPI 200

Caliper (CALI) HDRS-H
4 in 14

Stuck Tool Indicator, Total (STIT)
0 ft 50

Future Casing (Outer) Diameter (FCD)
23 in -17

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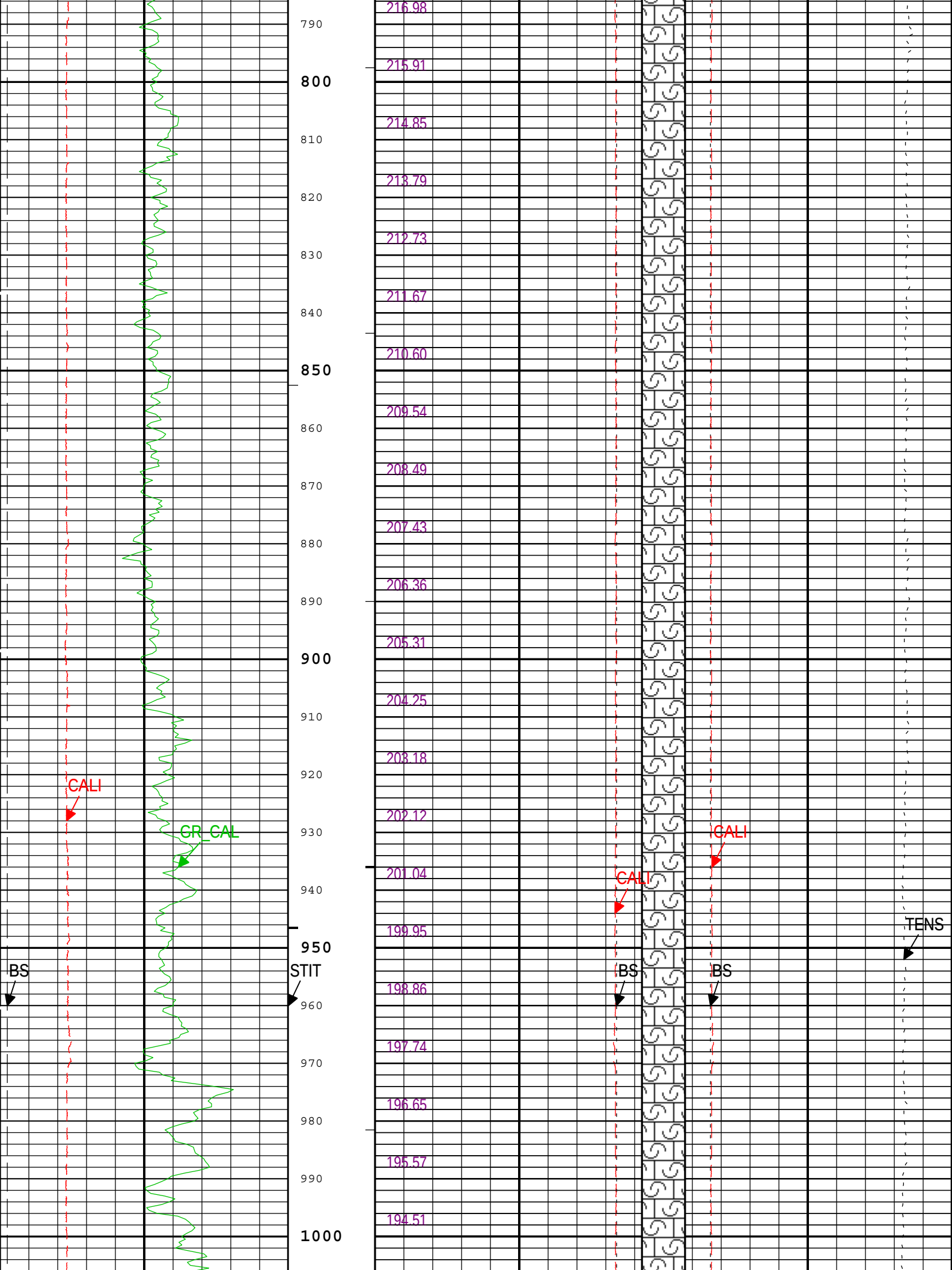
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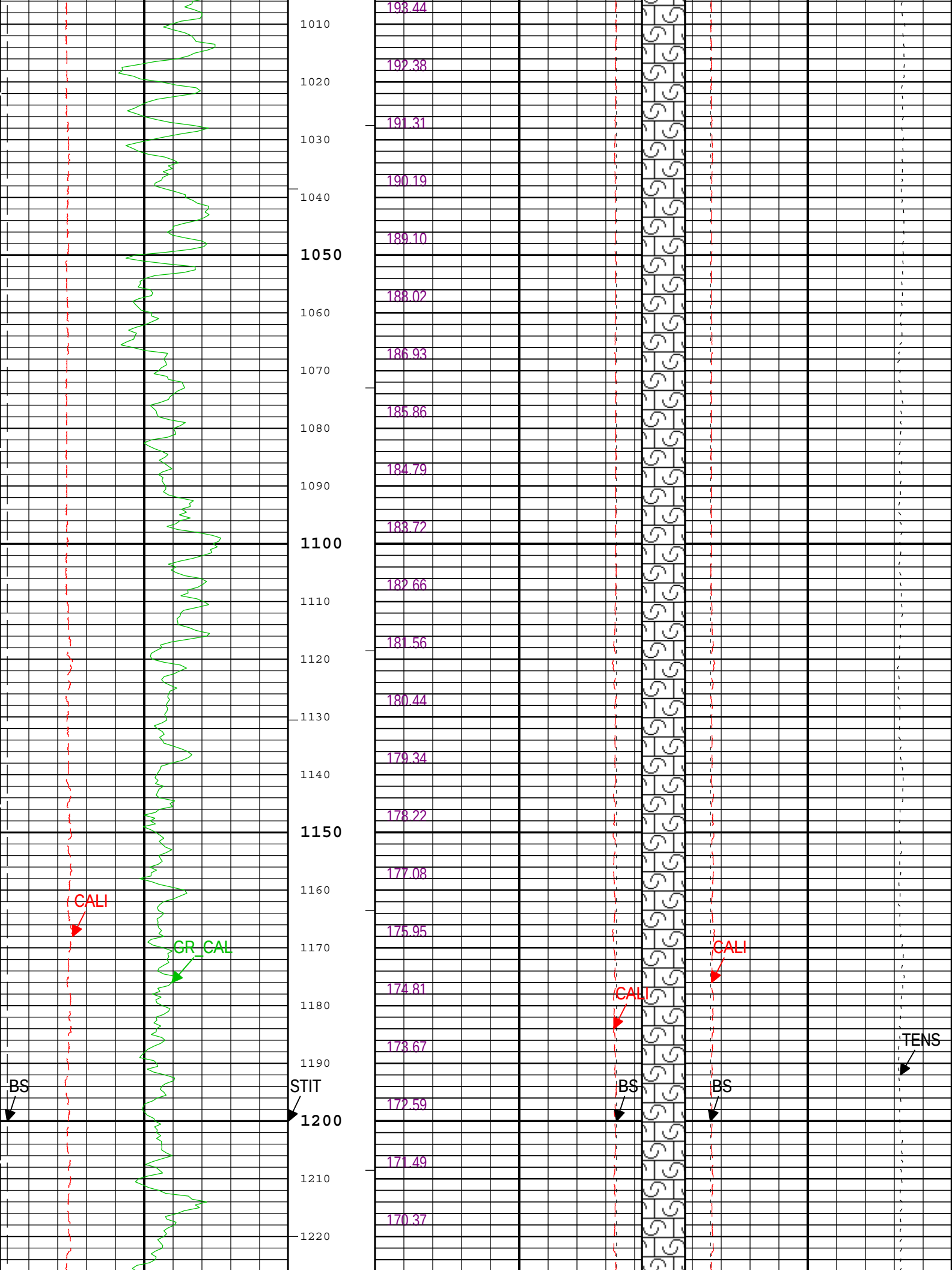
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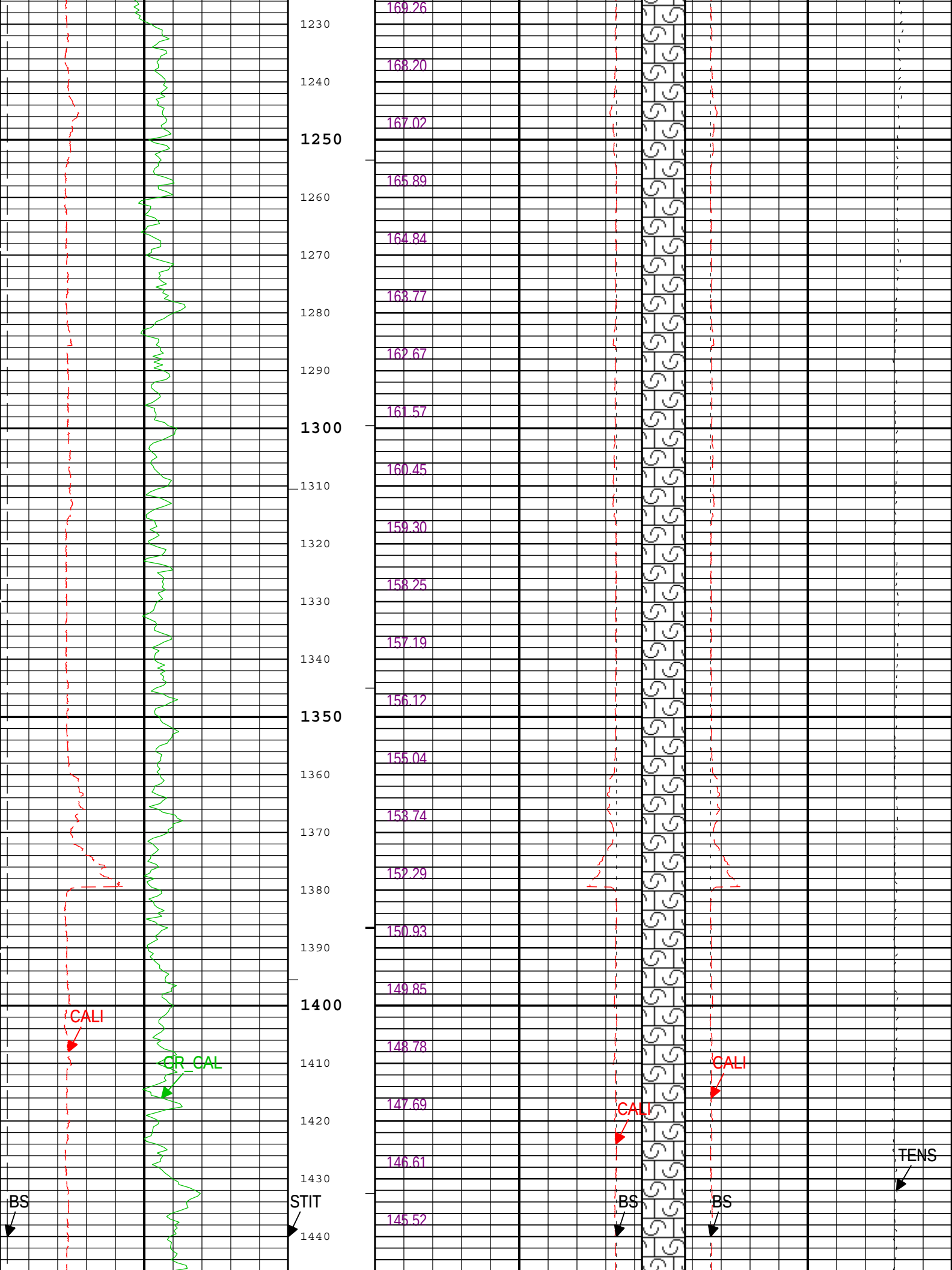
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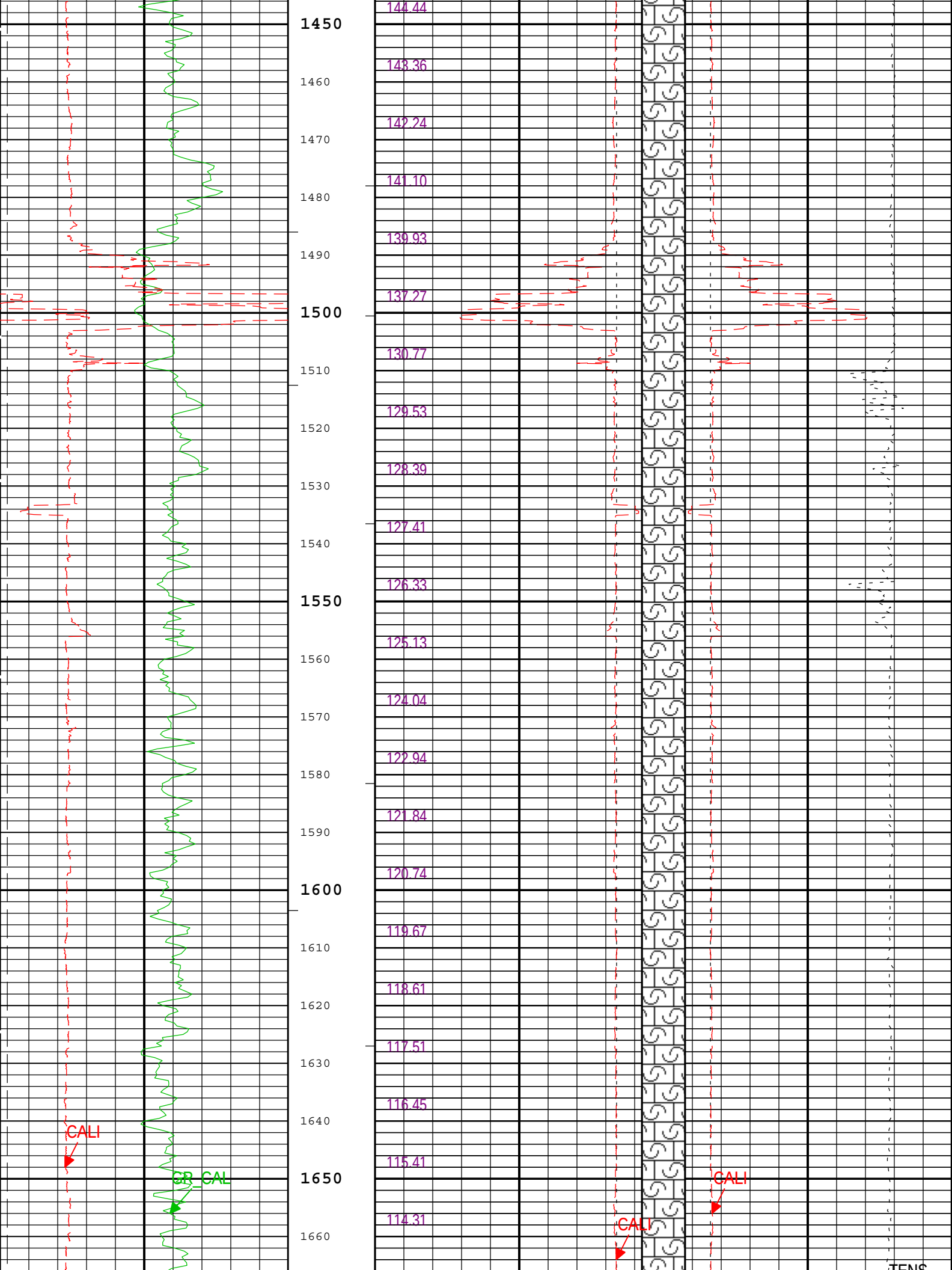
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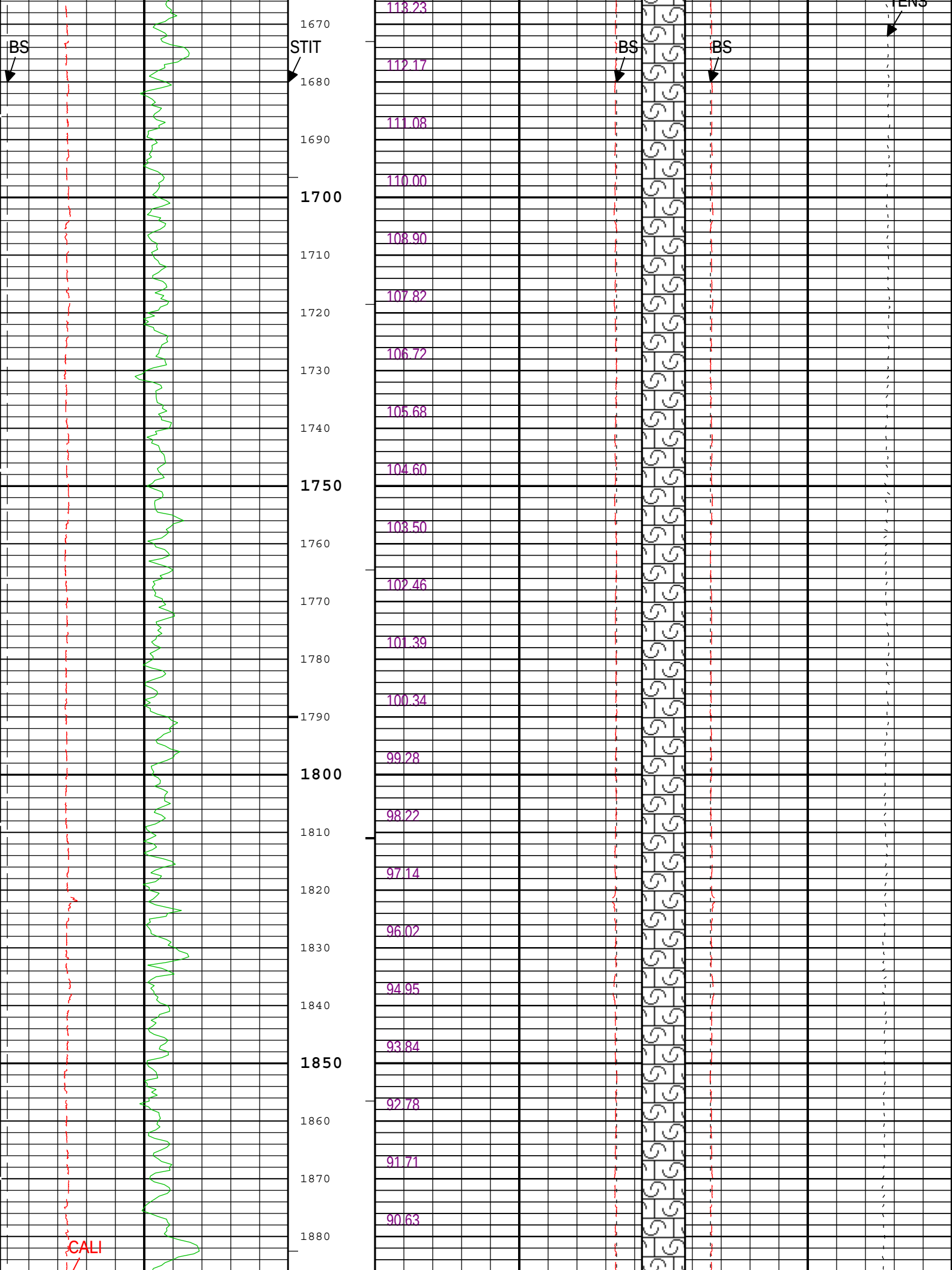
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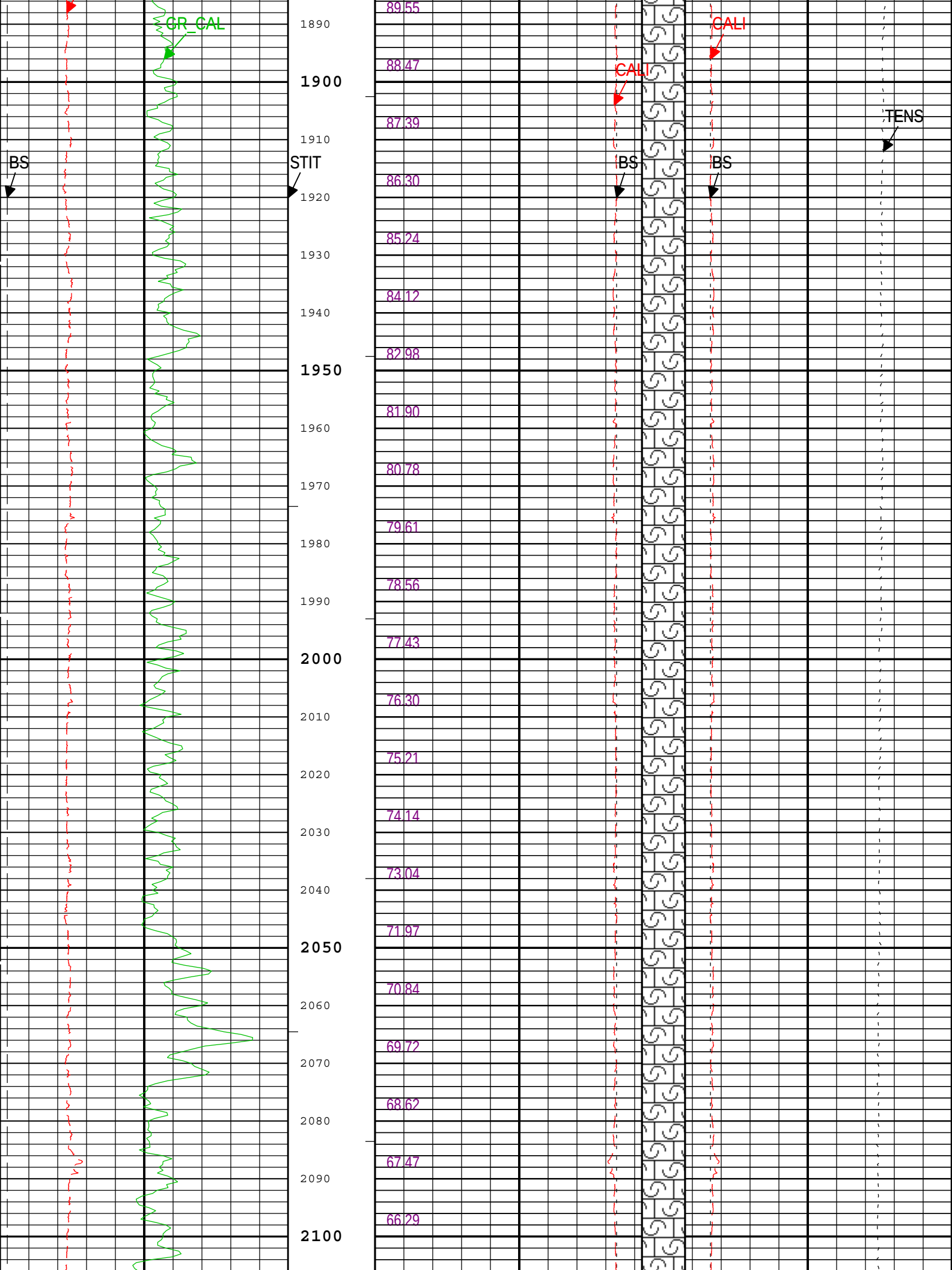
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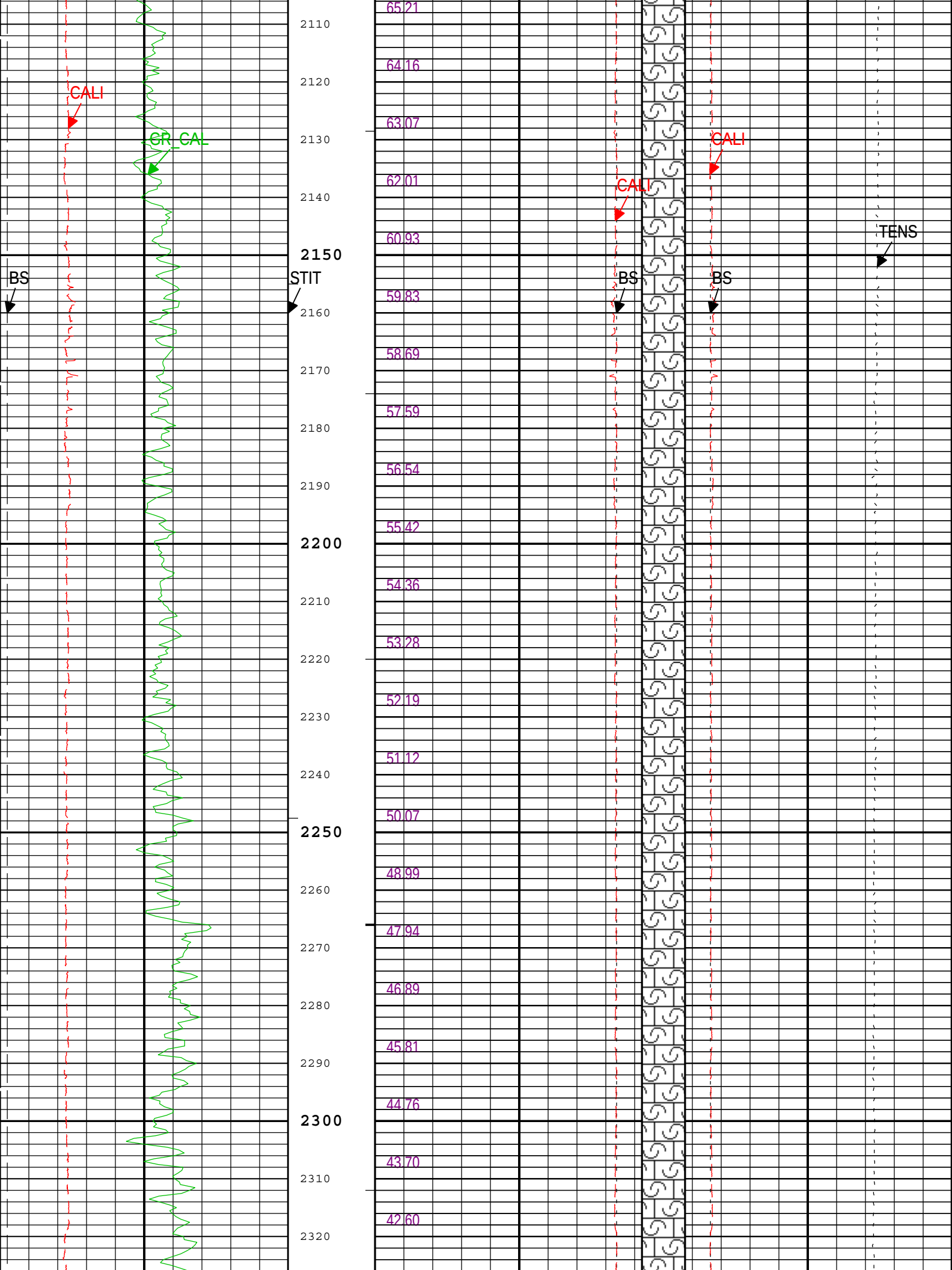
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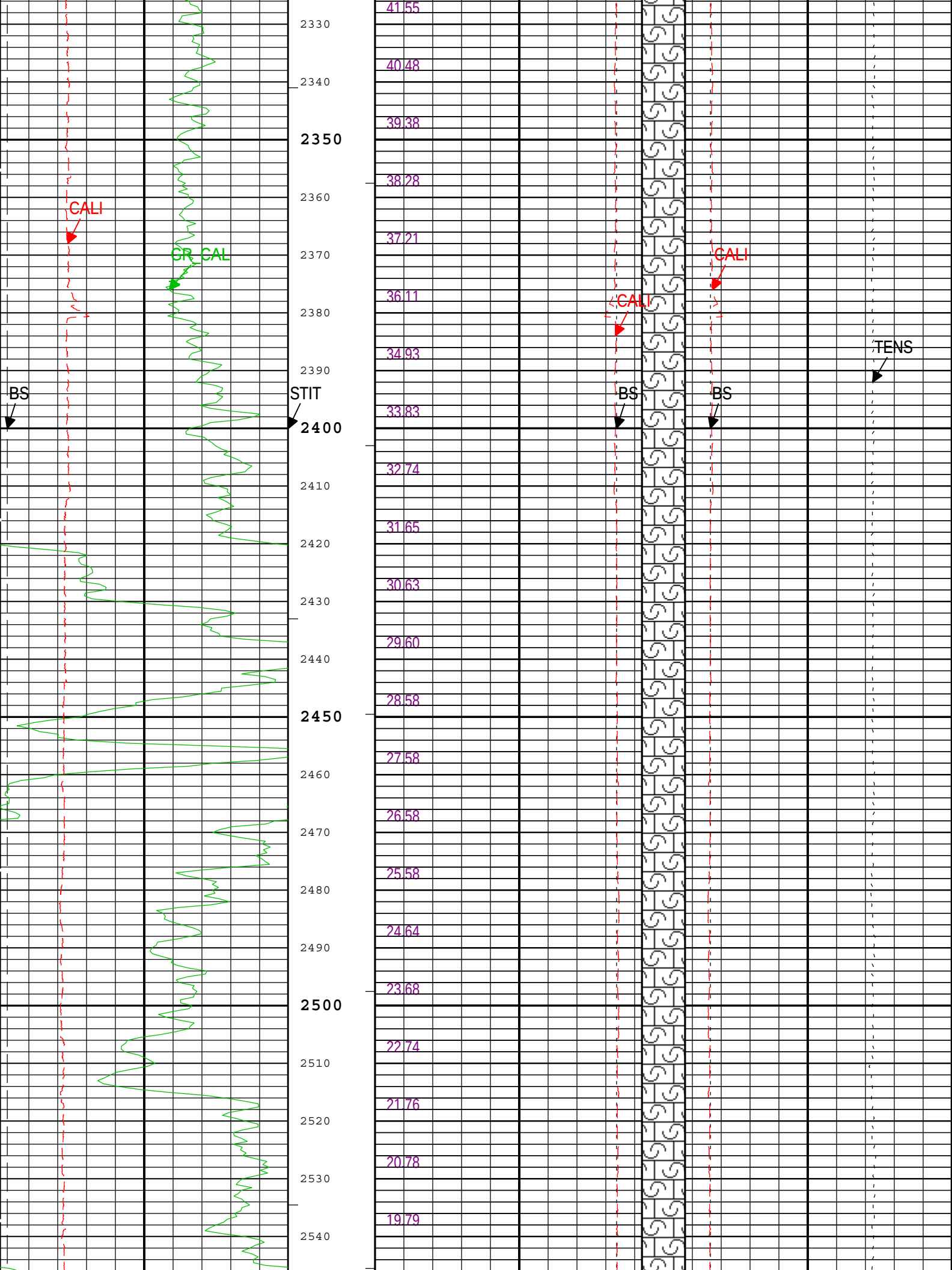
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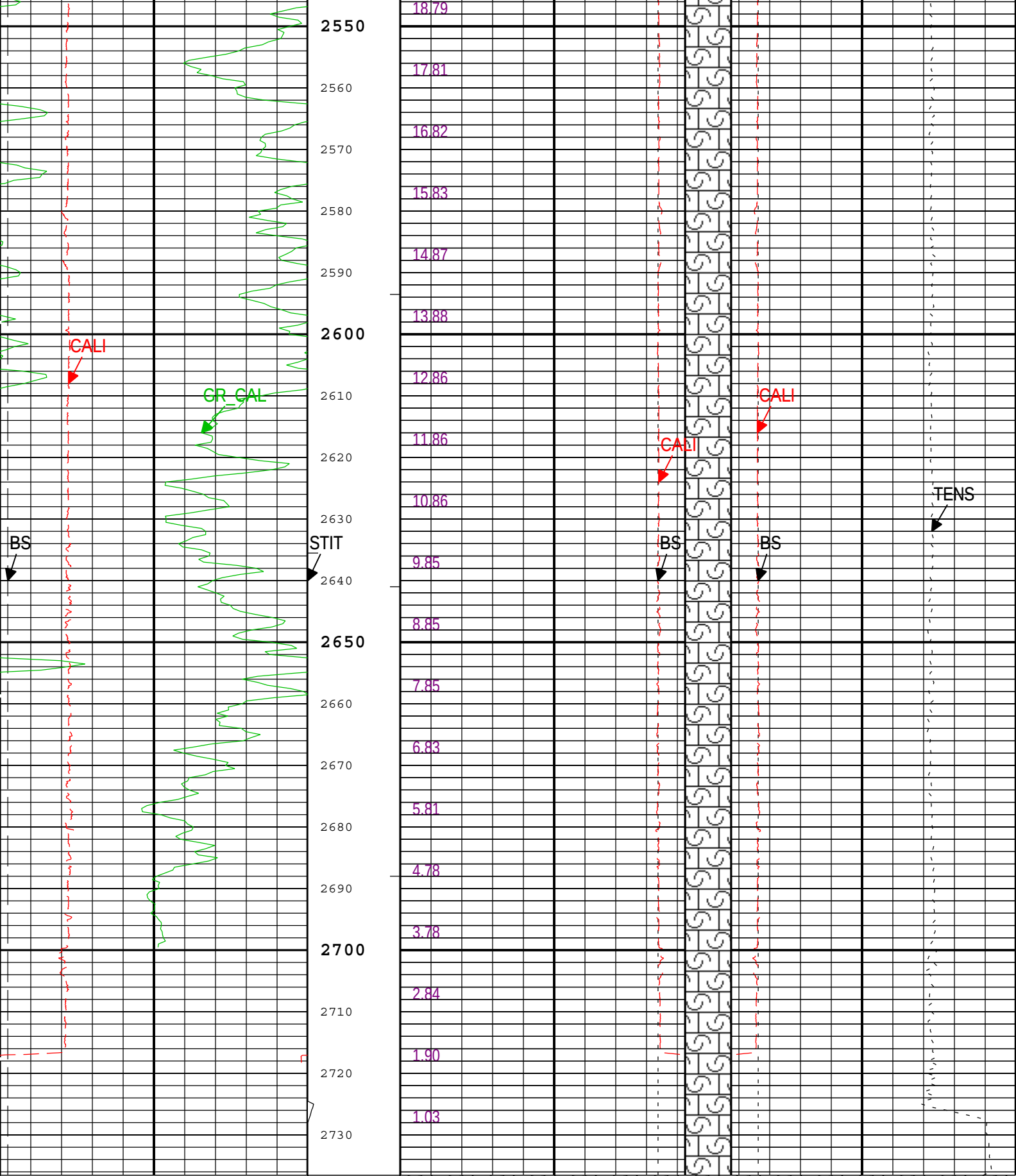


Bit Size (BS)

6 in 16

Calibrated Gamma Ray (GR_CAL) HGNS-H

0 gAPI 200

Caliper (CALI) HDRS-H

4 in 14

Stuck Tool Indicator, Total (STIT)

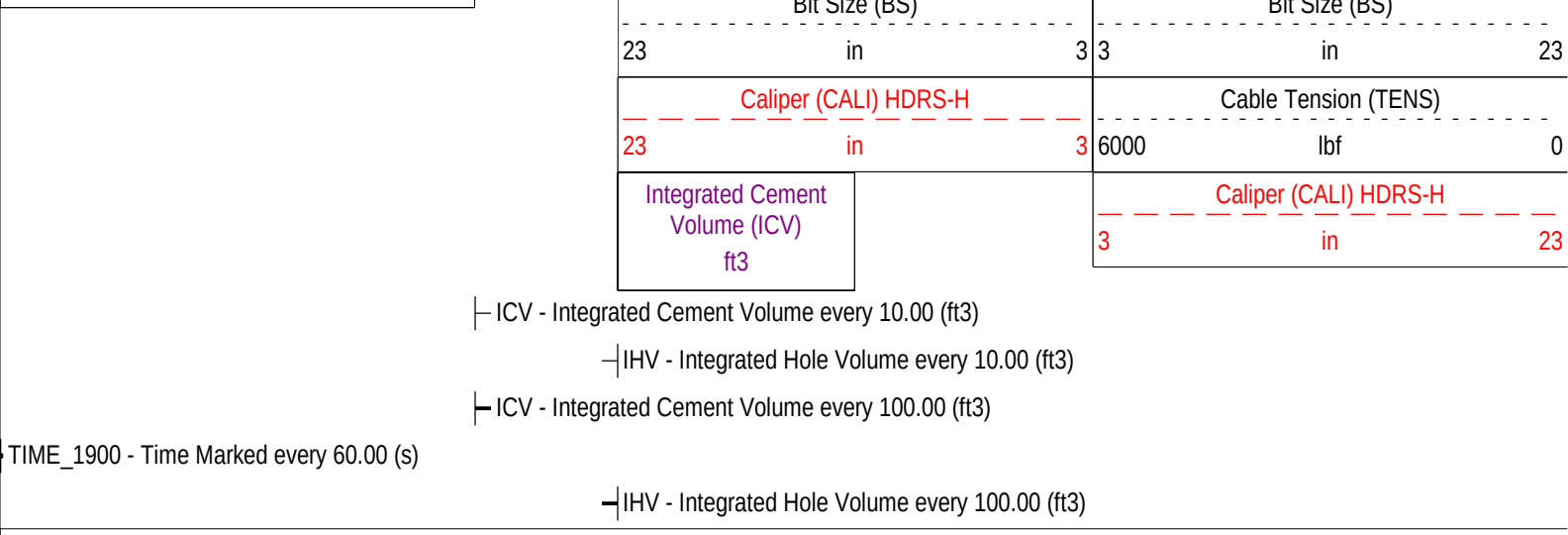
0 ft 50

Future Casing (Outer) Diameter (FCD)

-17 in 23

Future Casing (Outer) Diameter (FCD)

23 in -17



Description: Format: Log (Noble East Caliper) Index Scale: 5 in per 100 ft Index Unit: ft Index Type: Measured Depth Creation Date: 15-Nov-2014 18:19:37

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	in
CBLO	Casing Bottom (Logger)	WLSESSION	494	ft
CSODDRL	Casing Outer Diameter - Zoned along driller depths	WLSESSION	7	in
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	2726	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	3933

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): 11:58:26 15-Nov-2014

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit
Small Ring	in	Before	8.00	6.00	7.56	10.00
Large Ring	in	Before	12.00	9.00	11.85	15.00

HDRS Density Calibration - Background Summary

Before (Measured): 12:28:56 15-Nov-2014

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit
BS Window Ratio		Before	0.7486	0.7111	0.7503	0.7860
BS Window Sum	1/s	Before	23350	22183	23336	24518
SS Window Ratio		Before	0.4883	0.4639	0.4867	0.5127
SS Window Sum	1/s	Before	10931	10384	10899	11477
LS Window Ratio		Before	0.3000	0.2850	0.3024	0.3150
LS Window Sum	1/s	Before	1194	1134	1188	1253

HDRS Density Calibration - Photo-multiplier High Voltages

Before (Measured): 12:28:56 15-Nov-2014

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit
BS PM High Voltage	V	Before		1000	1600	2400
SS PM High Voltage	V	Before		1000	1490	2400
LS PM High Voltage	V	Before		1000	1290	2400

HDRS Density Calibration - Crystal Quality Resolutions

Before (Measured): 12:28:56 15-Nov-2014

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit
BS Crystal Resolution	%	Before		5.00	10.79	25.00
SS Crystal Resolution	%	Before		5.00	9.92	20.00
LS Crystal Resolution	%	Before		5.00	8.28	20.00

HDRS MCFL Calibration - MCFL Accumulations

Before (Measured): 12:23:12 15-Nov-2014

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit
Main Resistivity	ohm.m	Before	3875	3565	3873	4185
Deep Resistivity	ohm.m	Before	3830	3524	3812	4136
Shallow Resistivity	ohm.m	Before	3830	3524	3819	4136

County:	Yuma
State:	Colorado

Platform Express

Caliper

Cement Volume