

Company: Ominex Petroleum Inc

Well: Denney State 5-36-7-45

Field: Holyoke South

County: Phillips State: Colorado

Platform Express  
Caliper  
Cement Volume

County: Phillips  
Field: Holyoke South  
Location: SWNW Sec. 36, T7N, R45W  
Well: Denney State 5-36-7-45  
Company: Ominex Petroleum Inc

Location:		Elev.:	
SWNW Sec. 36, T7N, R45W		K.B. 3783.00 ft	
SHL: 2502' FNL & 513" FWL		G.L. 3777.00 ft	
Lat/Long: 40.535140/-102.338550		D.F. 3782.00 ft	
Permanent Datum:	Ground Level	Elev.:	3777.00 f
Log Measured From:	Kelly Bushing	6.00 ft	above Perm.Datum
Drilling Measured From:	Kelly Bushing		
API Serial No.	Section:	Township:	Range:
05-095-06279-0000	36	7N	45W

Logging Date	06-Dec-2014		
Run Number	Run 1		
Depth Driller	2761.00 ft		
Schlumberger Depth	2764.00 ft		
Bottom Log Interval	2764.00 ft		
Top Log Interval	498.00 ft		
Casing Driller Size @ Depth	7 in @ 495.00 ft		
Casing Schlumberger	495 ft		
Bit Size	6.25 in		
Type Fluid In Hole	Water		
Density	Viscosity	29 s	
Fluid Loss	PH	4 cm3	8
Source of Sample			
RM @ Meas Temp	0.2 ohm.m @ 93.2 degF		
RMF @ Meas Temp	0.15 ohm.m @ 75 degF		
RMC @ Meas Temp	0.25 ohm.m @ 75 degF		
Source RMF	RMC	Calculated	
RM @ BHT	RMF @ BHT	0.17 @ 112.19	0.1 @ 112.19
Max Recorded Temperatures			
Circulation Stopped		Time	
Logger on Bottom		Time	
Unit Number	Location:	2135	Fort Morgan, CO
Recorded By	Keri Ondrus		
Witnessed By	Paul Dekaye		

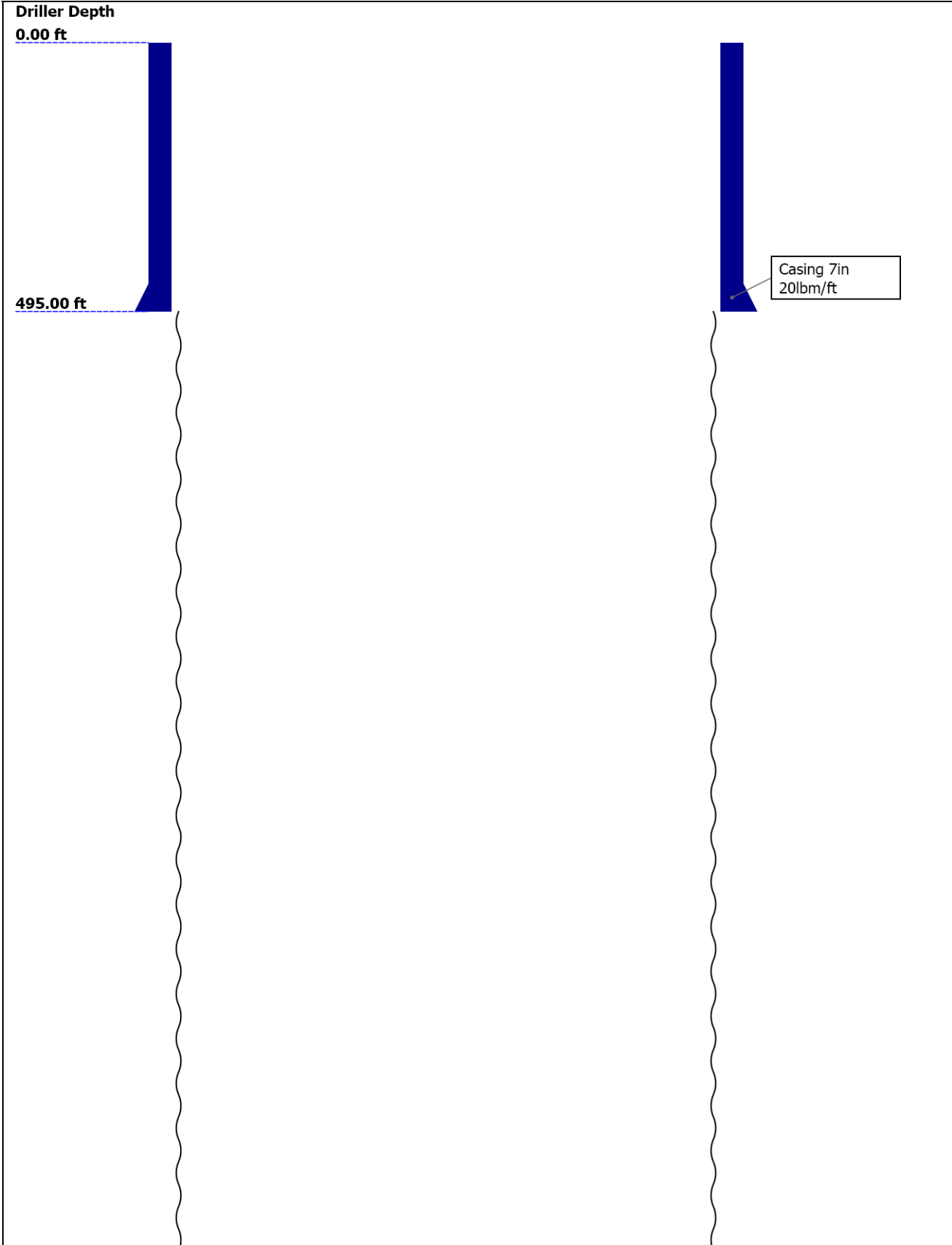
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Well Sketch





Borehole Size/Casing/Tubing Record						
------------------------------------	--	--	--	--	--	--

Bit						
Bit Size ( in )	6.25					
Top Driller ( ft )	495					
Top Logger ( ft )	498					
Bottom Driller ( ft )	2761					
Bottom Logger ( ft )	2764					
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 )	495					
Bottom Logger ( ft )	495					

Operational Run Summary						
-------------------------	--	--	--	--	--	--

Parameter ( unit )	Run 1					
Date Log Started	06-Dec-2014					
Time Log Started	12:38:48					
Date Log Finished	06-Dec-2014					
Time Log Finished	14:18:42					
Top Log Interval ( ft )	498.00					
Bottom Log Interval ( ft )	2764.00					
Total Depth ( ft )	2764.00					
Max Hole Deviation ( deg )	1.28					
Azimuth of Max Deviation ( deg )	176.64					
Bit Size ( in )	6.250					
Logging Unit Number	2135					
Logging Unit Location	Fort Morgan, CO					
Recorded By	Keri Ondrus					
Witnessed By	Paul Dekaye					
Service Order Number	BX19-00199					

Service Order Number

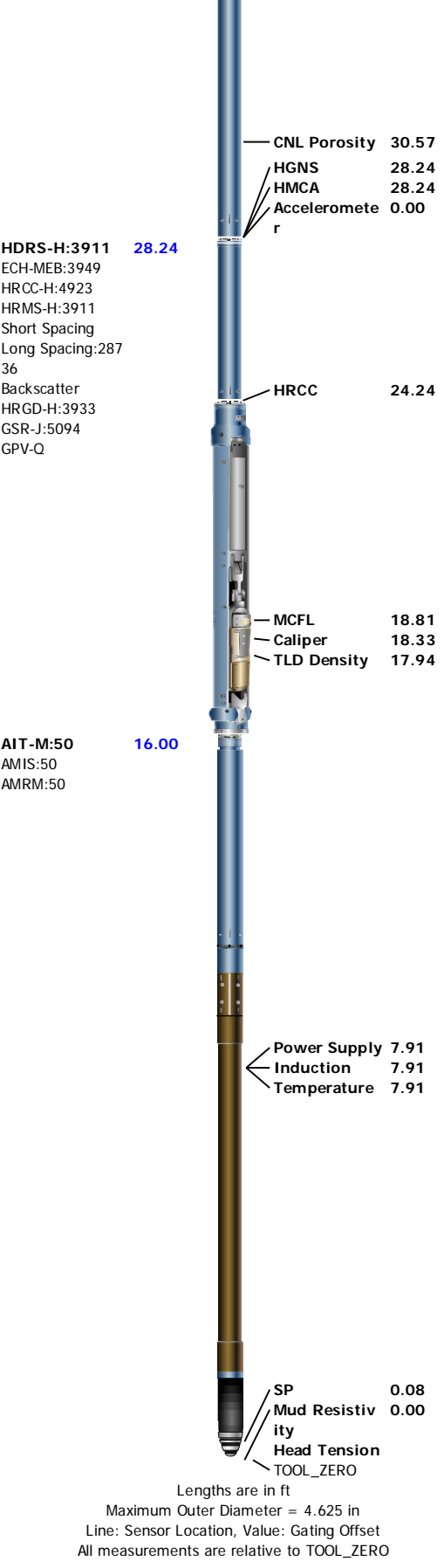
DX15-00155

Borehole Fluids

Parameter( unit )	Run 1					
Fluid Type	Water					
Max Recorded Temperatures ( degF )	NaN					
Source of Sample	Flowline					
Salinity ( ppm )	0					
Density ( lbm/gal )	8.9					
Funnel Viscosity ( s )	29					
Fluid Loss ( cm3 )	4					
PH	8					
Date/Time Circulation Stopped	NaN					
Date Logger on Bottom	06-Dec-2014					
Time Logger on Bottom	13:35:00					
Source RMF	Calculated					
RMC	Calculated					
RM @ Meas Temp ( ohm.m@degF )	0.2 @ 93.2					
RMF @ Meas Temp ( ohm.m@degF )	0.15 @ 75					
RMC @ Meas Temp ( ohm.m@degF )	0.25 @ 75					
RM @ BHT ( ohm.m@degF )	0.17 @ 112.19					
RMF @ BHT ( ohm.m@degF )	0.1 @ 112.19					
RMC @ BHT ( ohm.m@degF )	0.17 @ 112.19					
Total Solid ( % )	4.3					
High Gravity Solids ( % )						

Remarks and Equipment Summary

Run 1: Toolstring				Run 1: Remarks	
Equip name	Length	MP name	Offset		
LEH-QT:2552	51.57				
LEH-QT:2552					
DTC-H:10530	48.65				
ECH-KC:9469		CTEM	47.75		
DTC-H:10530		HV	0.00		
		ToolStatus	45.65		
Adaptor_Head	45.65	TelStatus	45.65		
GPIT-F:770	41.65				
GPIH-B					
GPIC-F:770		GPIT-F Incl	40.23		
DHRU-F:799		ometer			
HGNS-H:4810	37.65				
HGNH:3912		GPIT	0.00		
NSR-F:5215		Temperature	37.62		
NPV-N					
HMCA-H		GR	36.91		
HACCZ-H:5955					
HGNS-H:4810					



## Depth Summary

	Run 1		
Depth Measuring Device			
Type	IDW-JA		
Serial Number	6433		
Calibration Date	23-Sep-2014		
Calibrator Serial Number			
Calibration Cable Type	7.46P XS		

Calibration Cable Type	-40P XS		
Wheel Correction 1	-3		
Wheel Correction 2	-2		

Tension Device			
Type	CMTD-B/A		
Serial Number	1919		
Calibration Date	07-Nov-2014		
Calibrator Serial Number	441345A		
Number of Calibration Points	10		
Calibration Root Mean Square Error	13		
Calibration Peak Error	24		

Logging Cable			
Type	7-46P-XS		
Serial Number	U713066		
Length	17500.00 ft		
Conveyance Type	Wireline		
Rig Type	Land		

Run 1:Depth Control Parameters		Depth Control Remarks
Log Sequence	First Log In the Well	
Rig Up Length At Surface		
Rig Up Length At Bottom		
Rig Up Length Correction		
Stretch Correction		
Tool Zero Check At Surface		

Run 1

Caliper Log

Integration Summary				
Output Channel(s)	Output Description	Input Parameter	Output Value	Unit
ICV	Integrated Cement Volume	GCSE_UP_PASS, FCD	246.98	ft3
IHV	Integrated Hole Volume	GCSE_UP_PASS	498.84	ft3

Software Version	
Acquisition System	Version
MaxWell	4.0.9163.3000
Application Patch	Patch-SP-10767_18214-4.0.9163.3001 Patch-Hotfix_Task_Tree_GDI_SP2-20806-4.0.9434.3002

Computation	Description	Version	
Borehole	Borehole Ensemble provides common Borehole Parameters and Channels	4.0.9433.3000	
DepthCorrection	DepthCorrection	4.0.9433.3000	
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
Run 1	Main[5]:Up	Up	407.01 ft	2775.70 ft	06-Dec-2014 1:33:17 PM	06-Dec-2014 2:14:30 PM	ON	0.00 ft	Yes

All depths are referenced to toolstring zero

Log	Company:Omimex Petroleum Inc	Well:Denney State 5-36-7-45
	Run 1: Main[5]:Up:S004	

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)

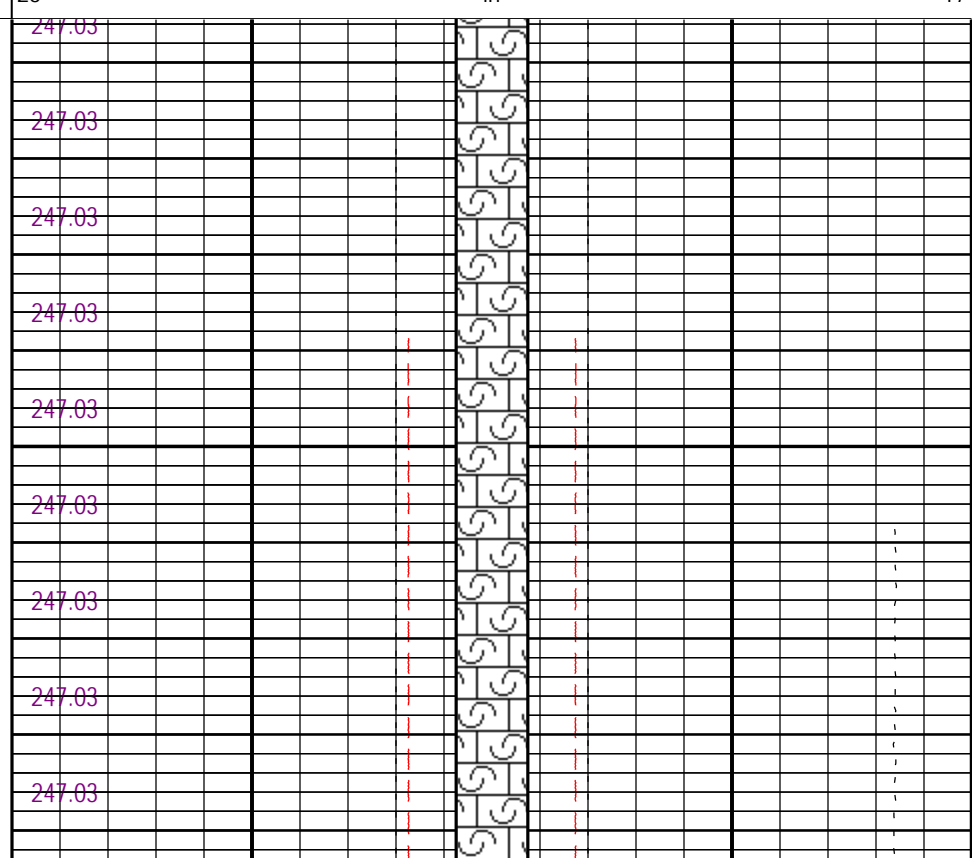
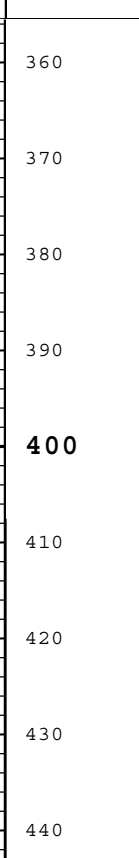
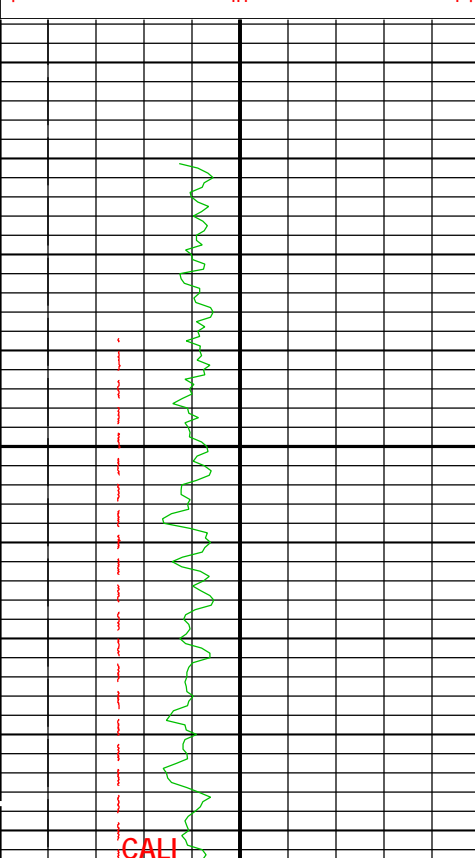
—IHV - Integrated Hole Volume every 10.00 (ft3)

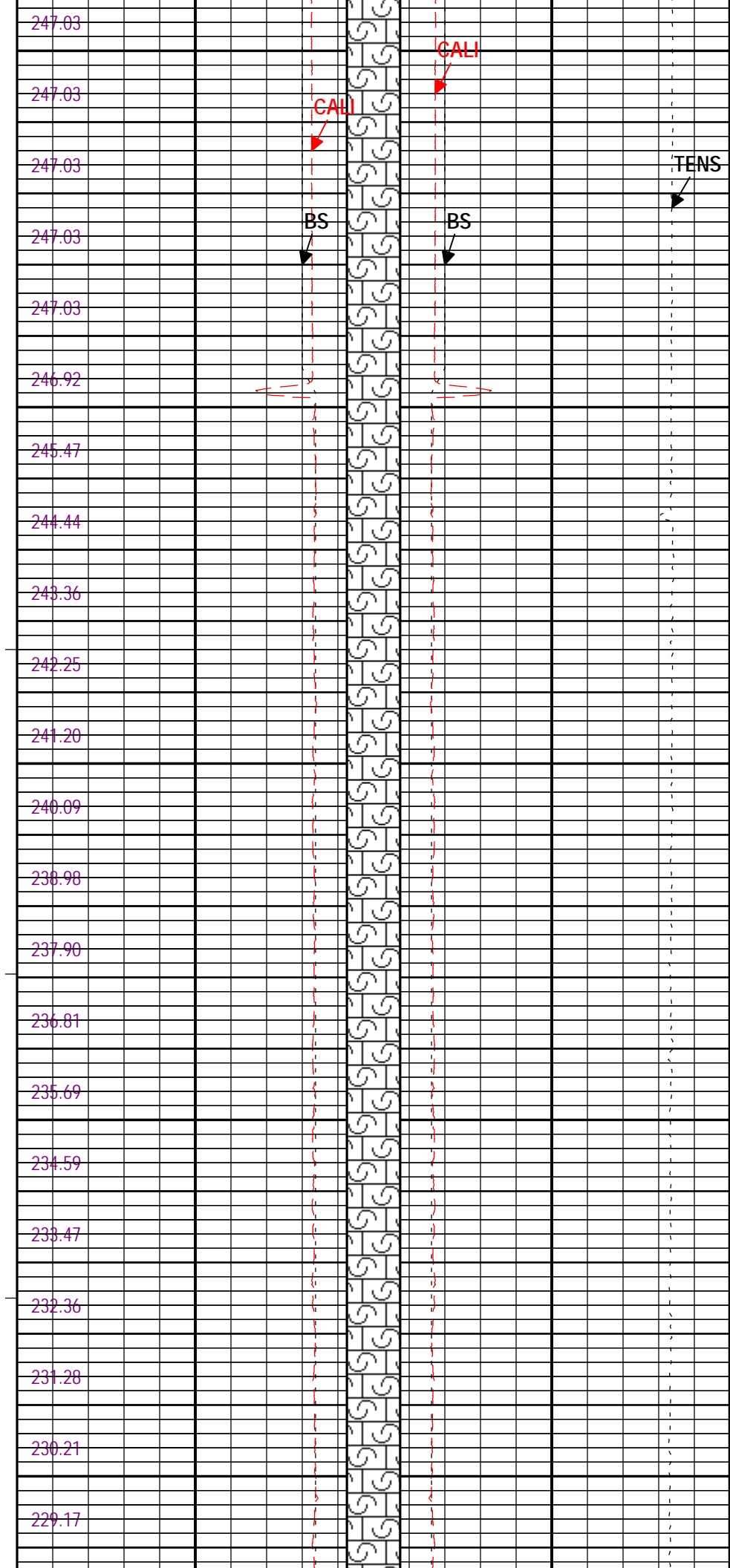
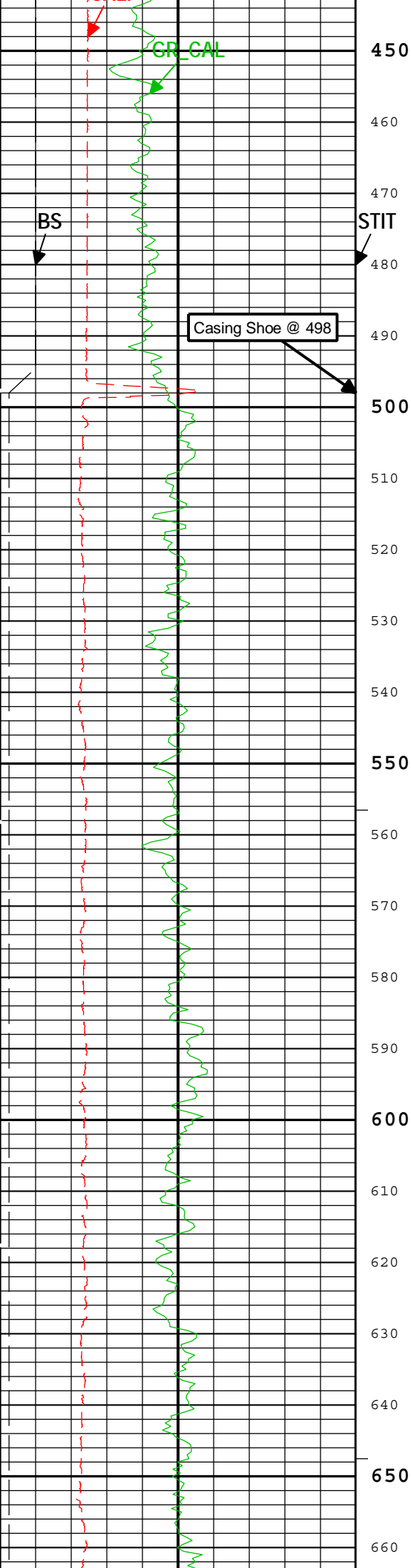
└ ICV - Integrated Cement Volume every 10.00 (ft3)

Model	Input Bit Size (BS)	Output Bit Size (BS)
Calibrated Gamma Ray (GR_CAL) HGNS-H	6	16
Caliper (CALI) HDRS-H	4	14

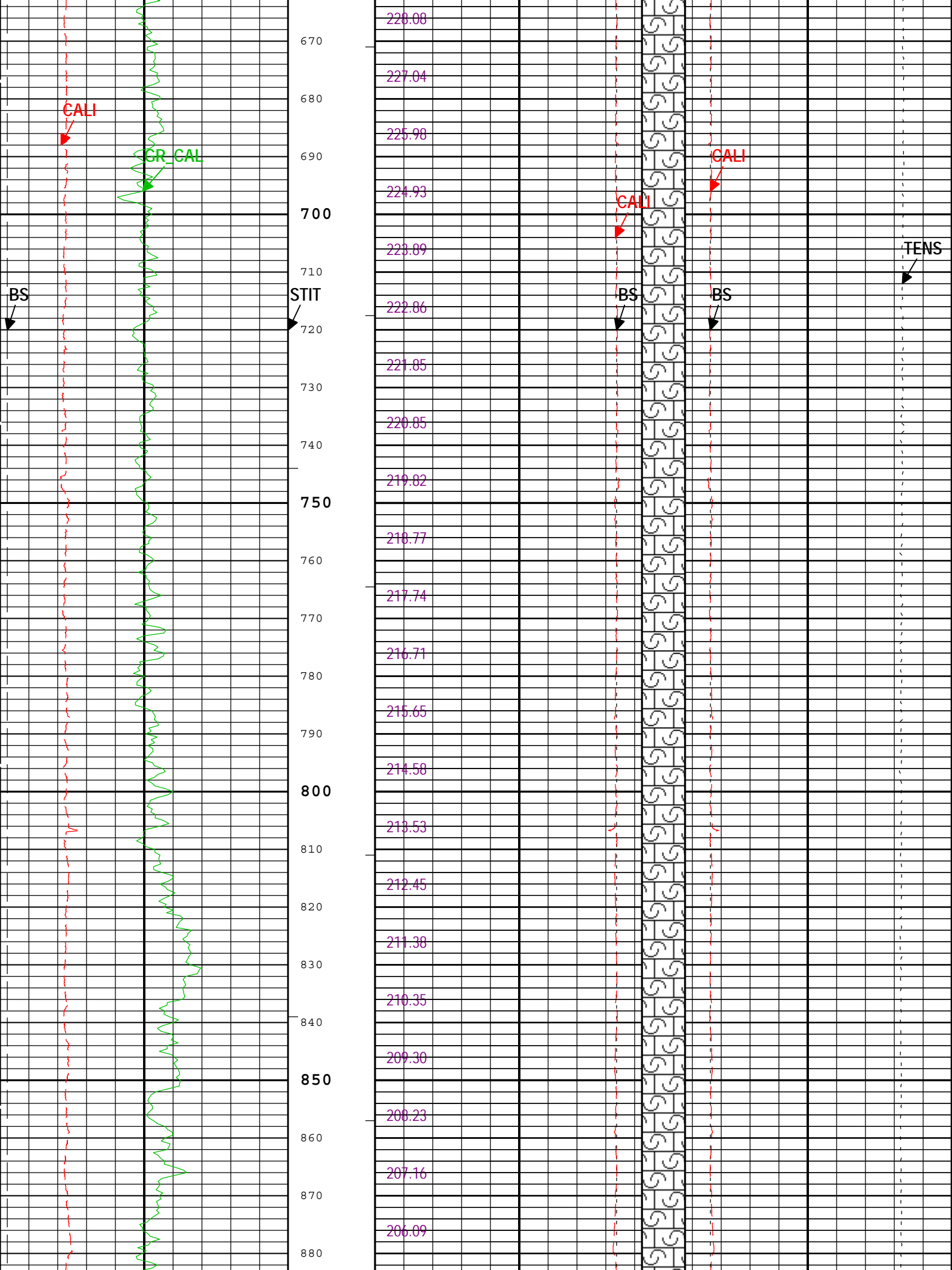
Stuck Tool Indicator, Total (STIT)
0 ft 50

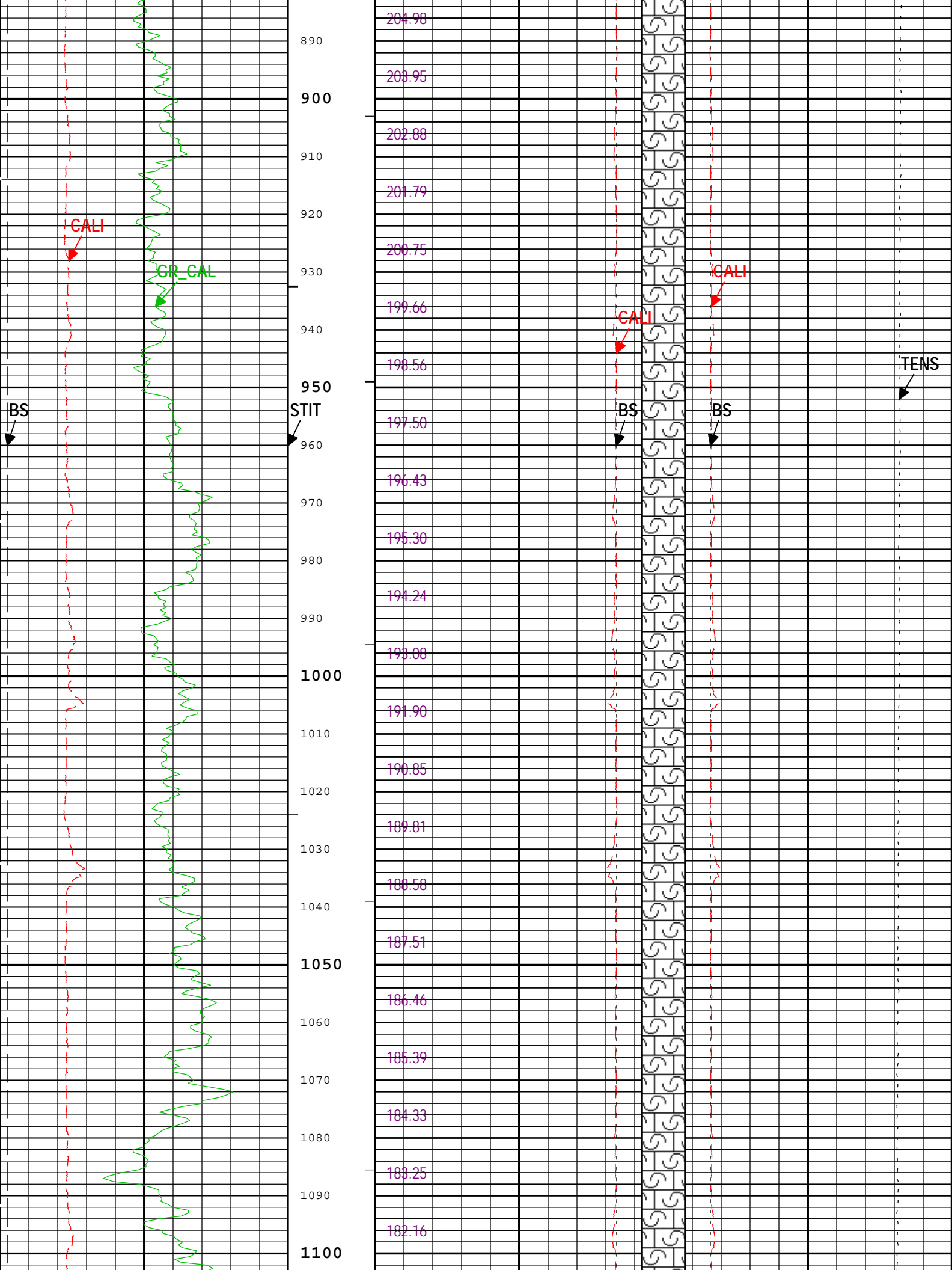
Integrated Cement Volume (ICV) ft3			Bit Size (BS)	
	3	in	23	
Bit Size (BS)		Cable Tension (TENS)		
23	in	3	6000	lb
Caliper (CALI) HDRS-H		Caliper (CALI) HDRS-H		
23	in	3	3	in
Future Casing (Outer) Diameter (FCD)				
-17	in			23
Future Casing (Outer) Diameter (FCD)				
23	in			-17

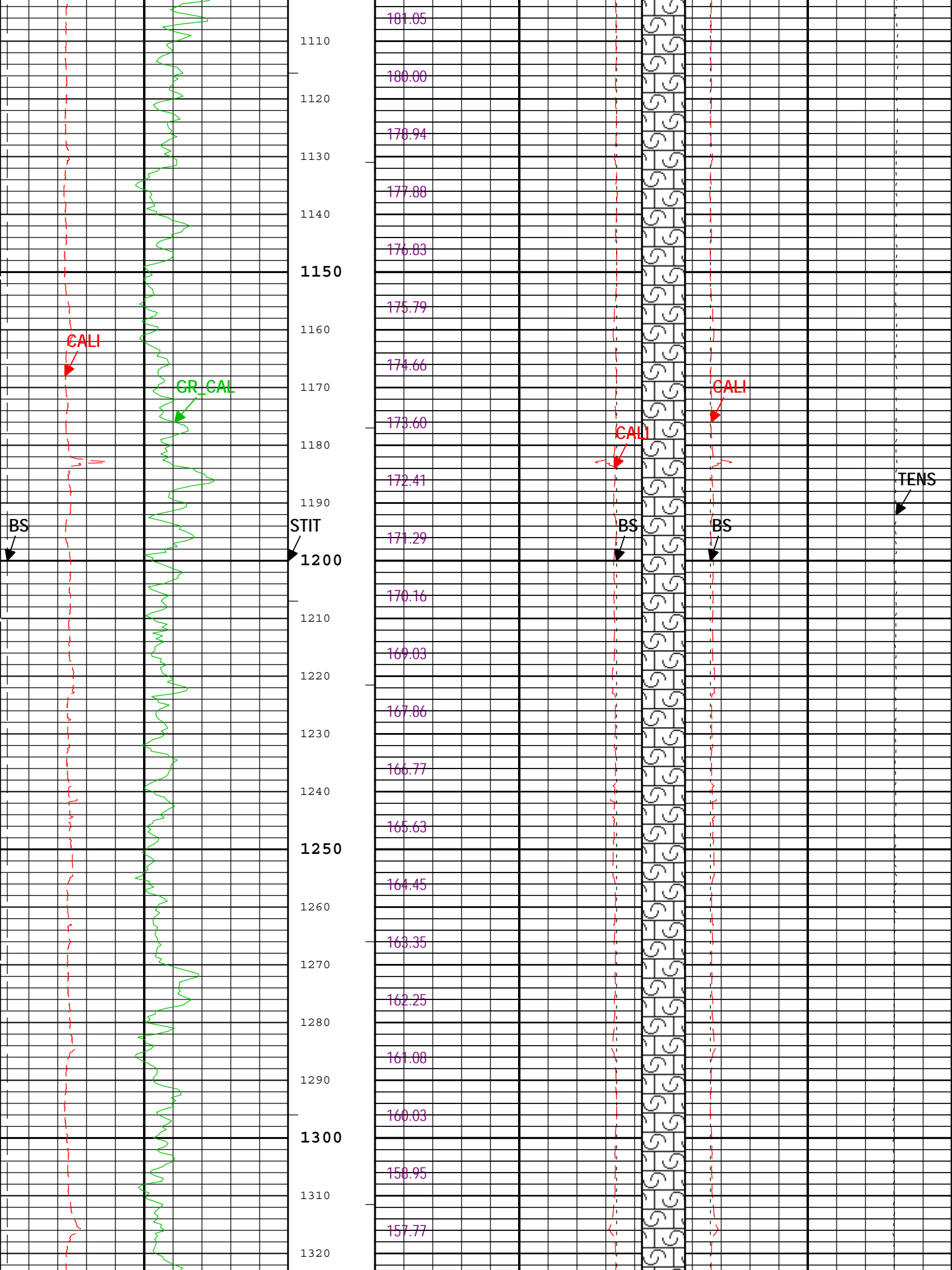


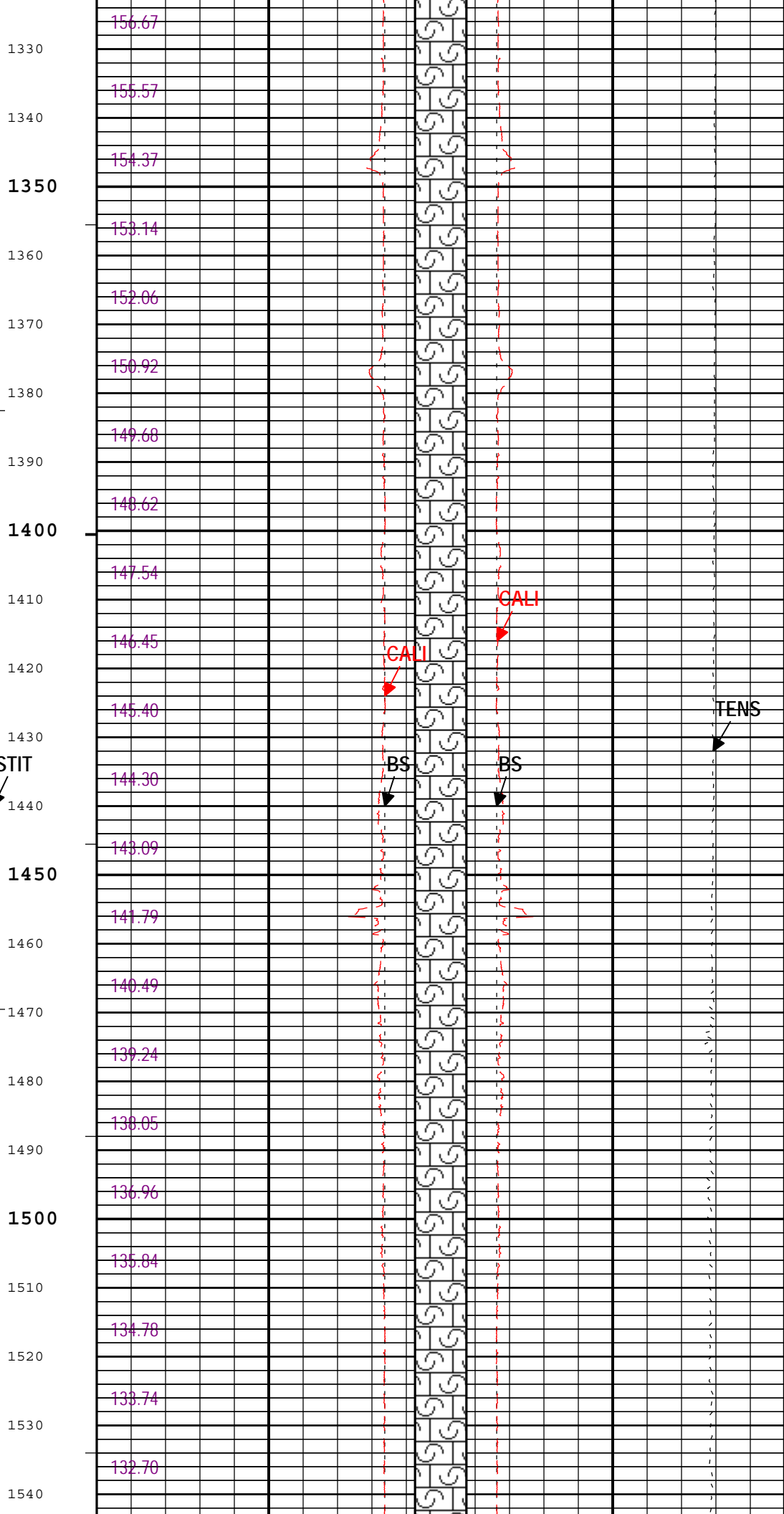
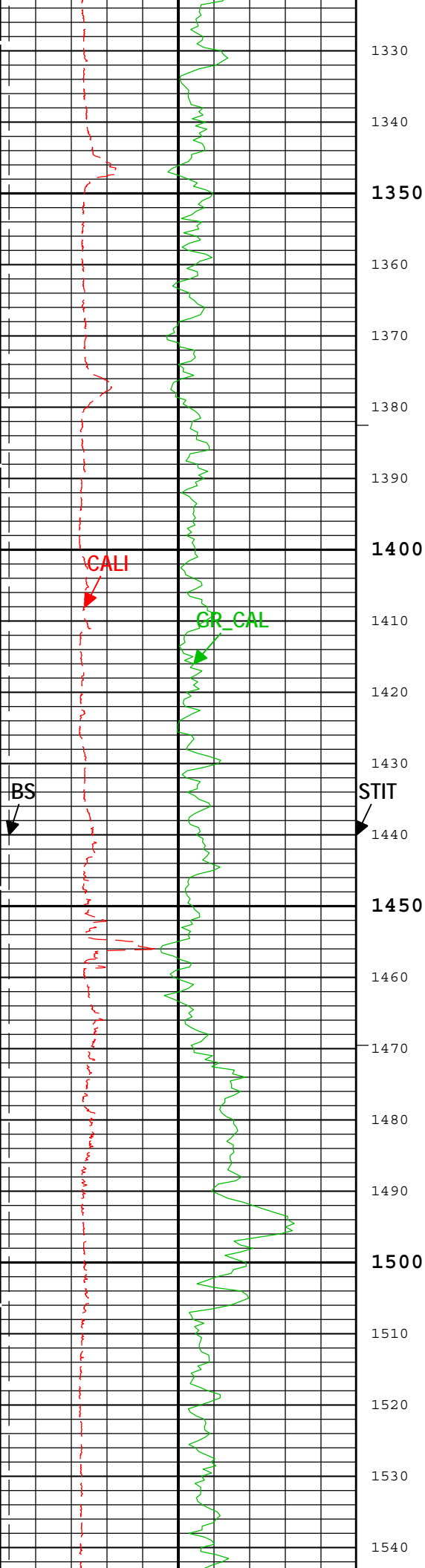


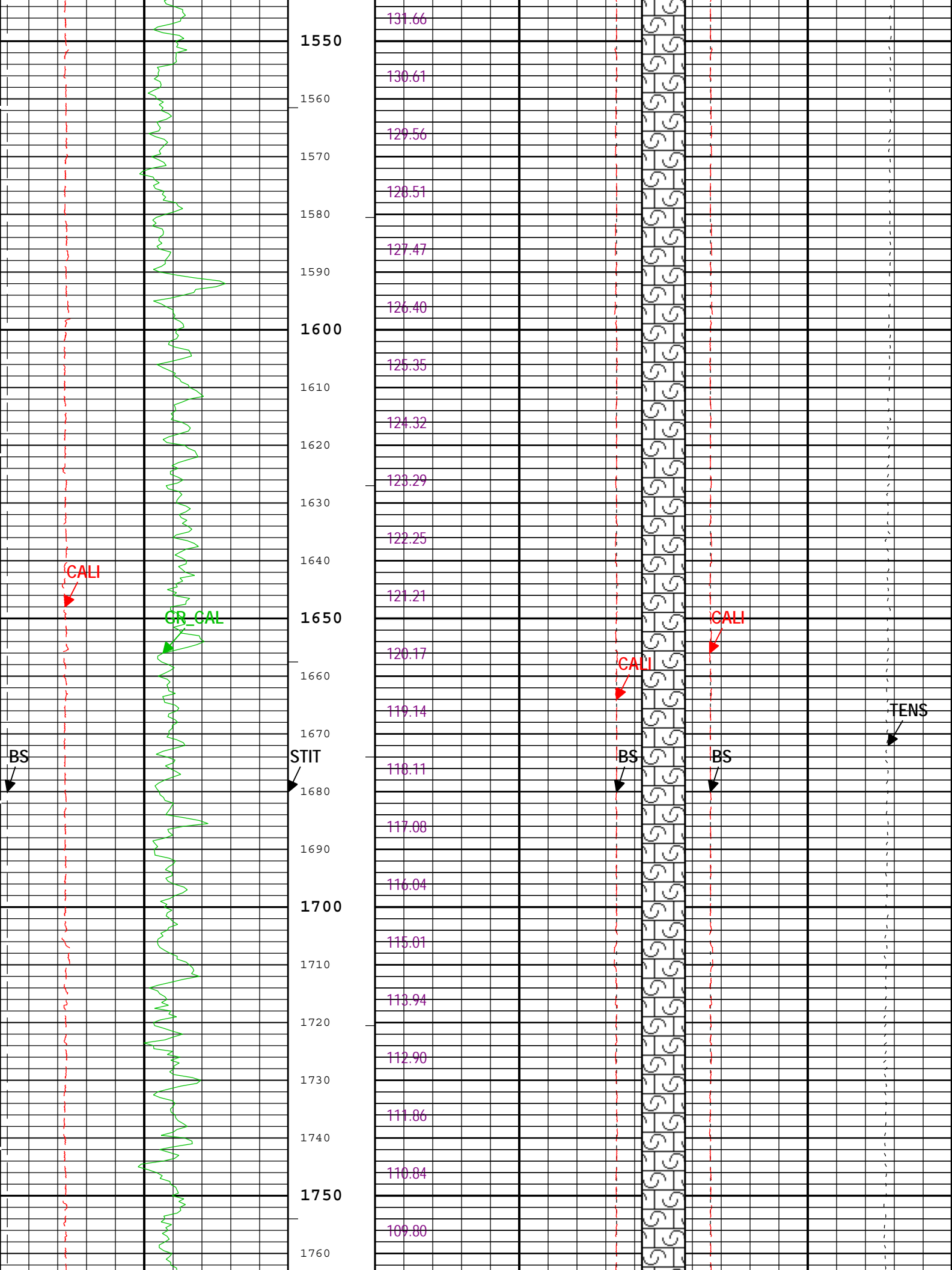


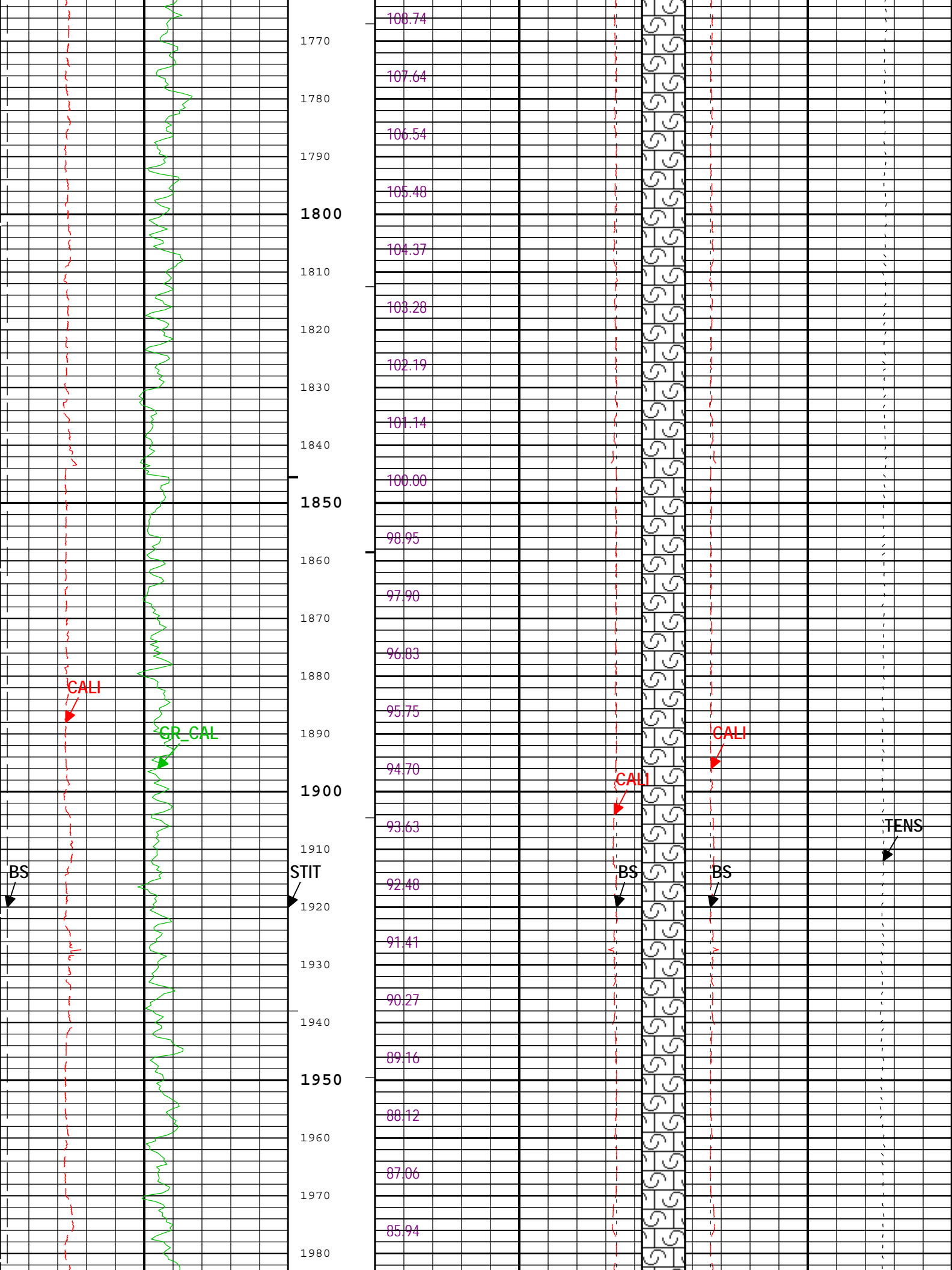


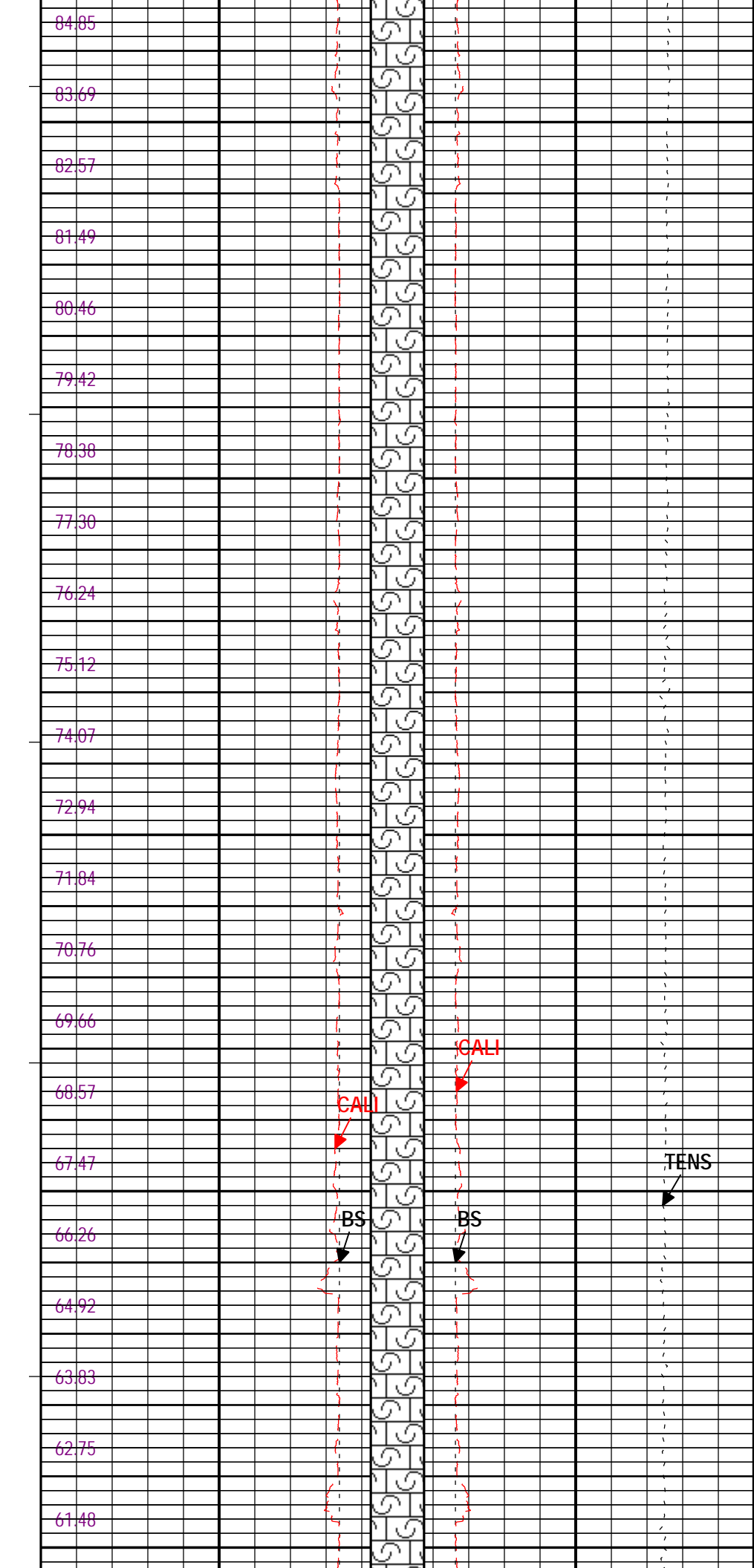
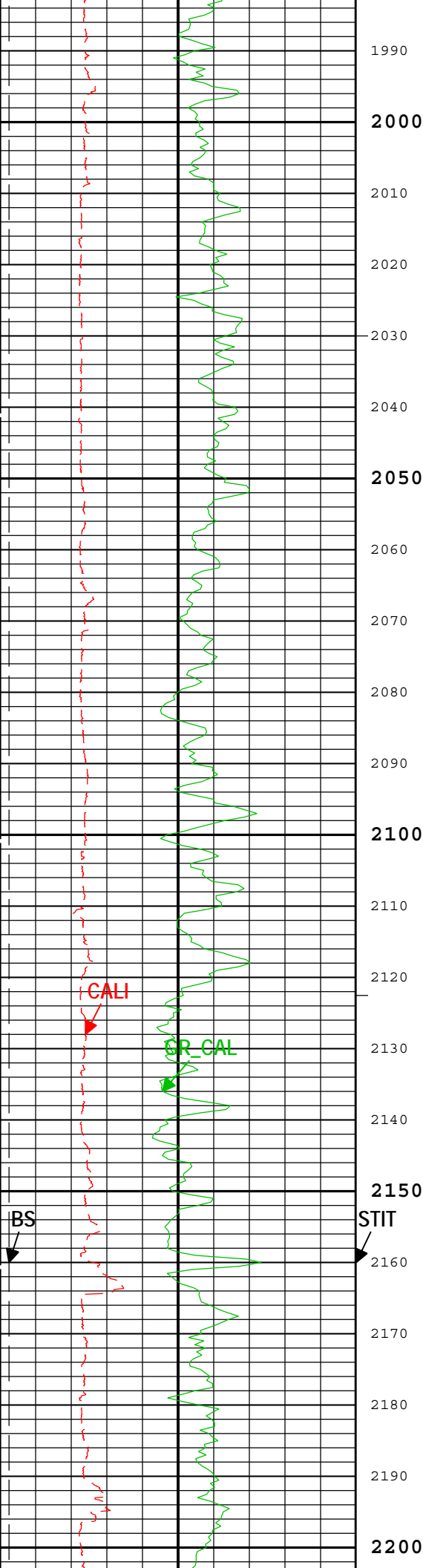


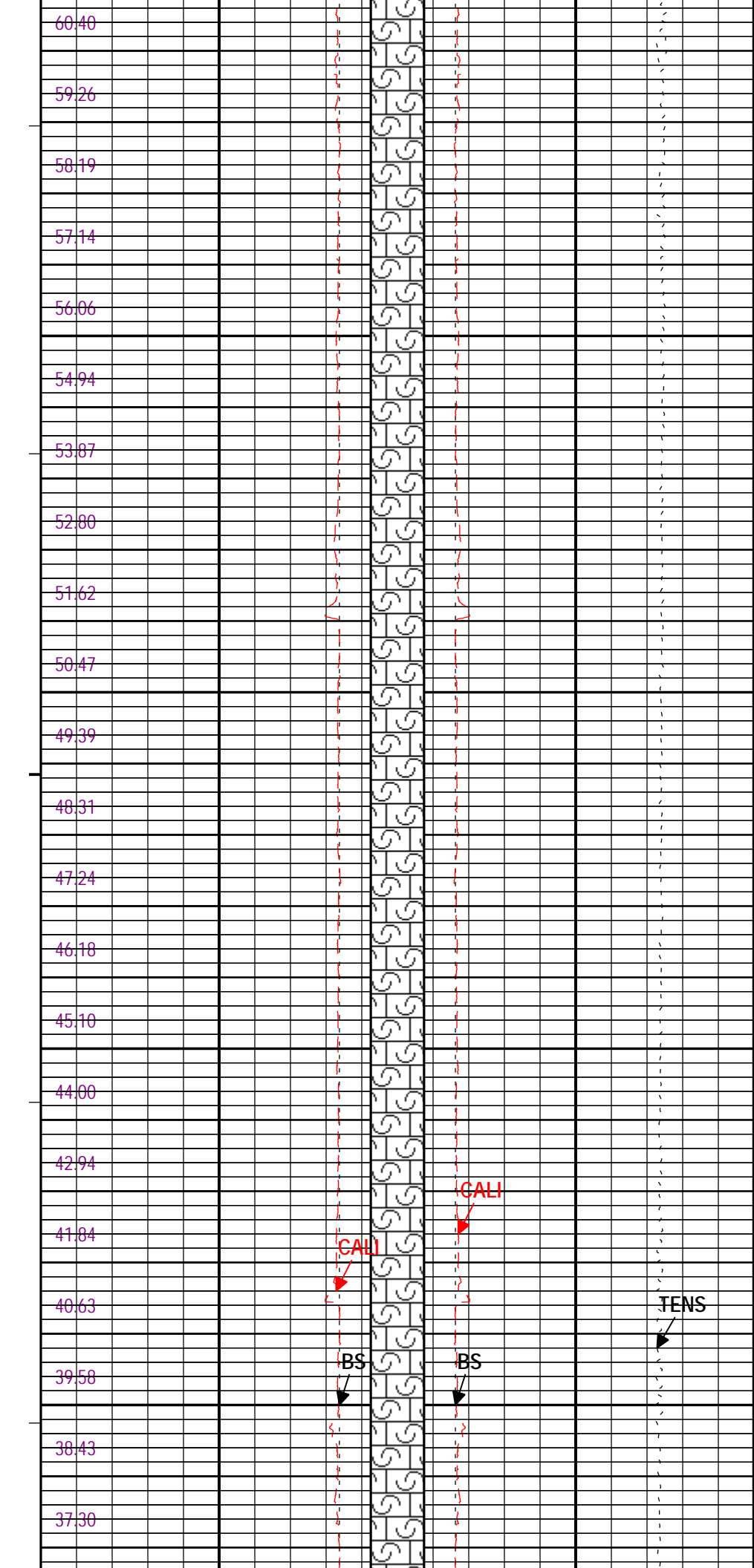
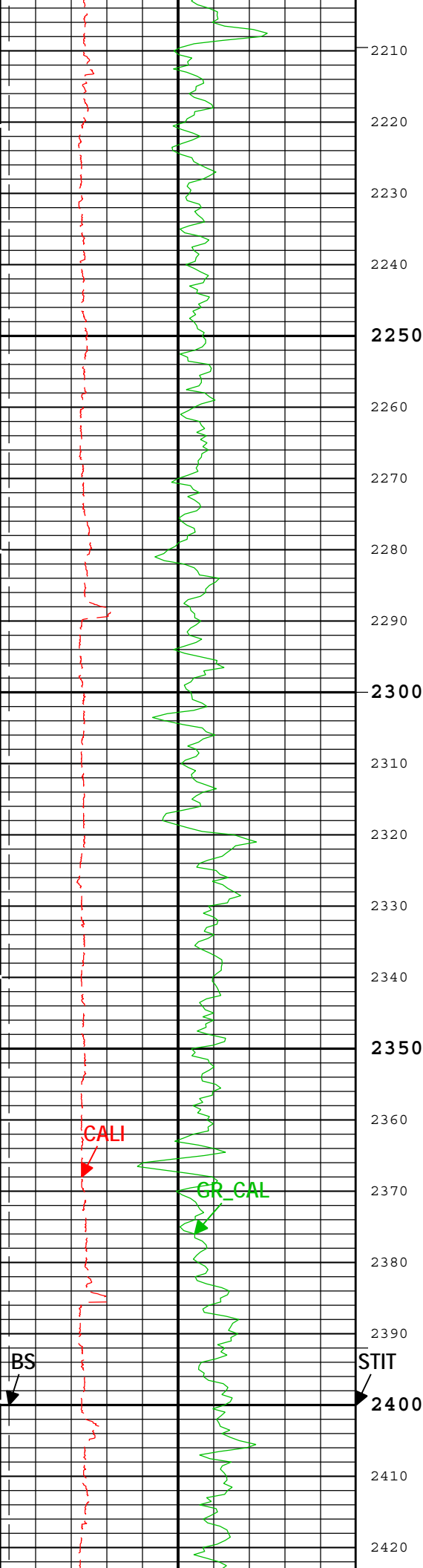




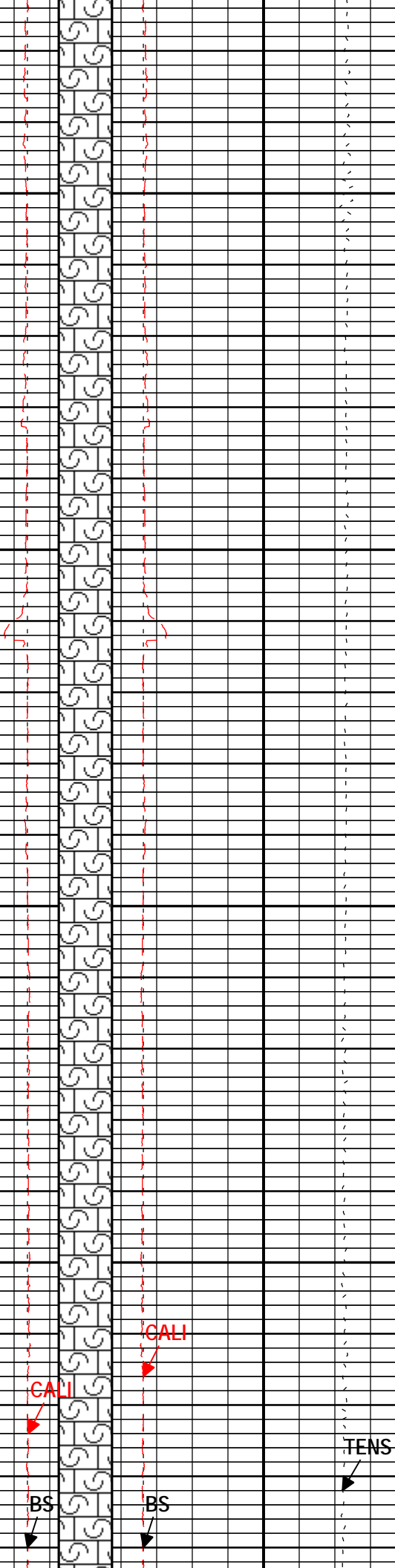
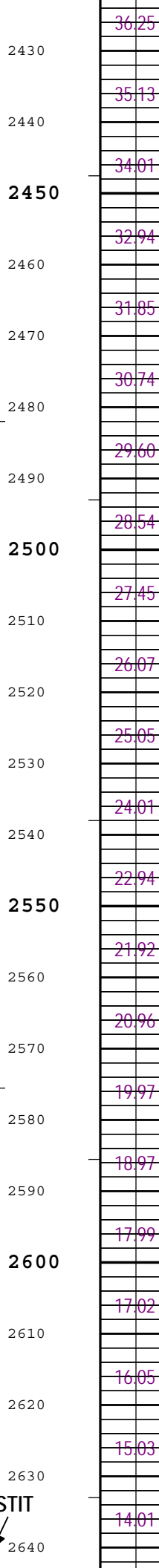
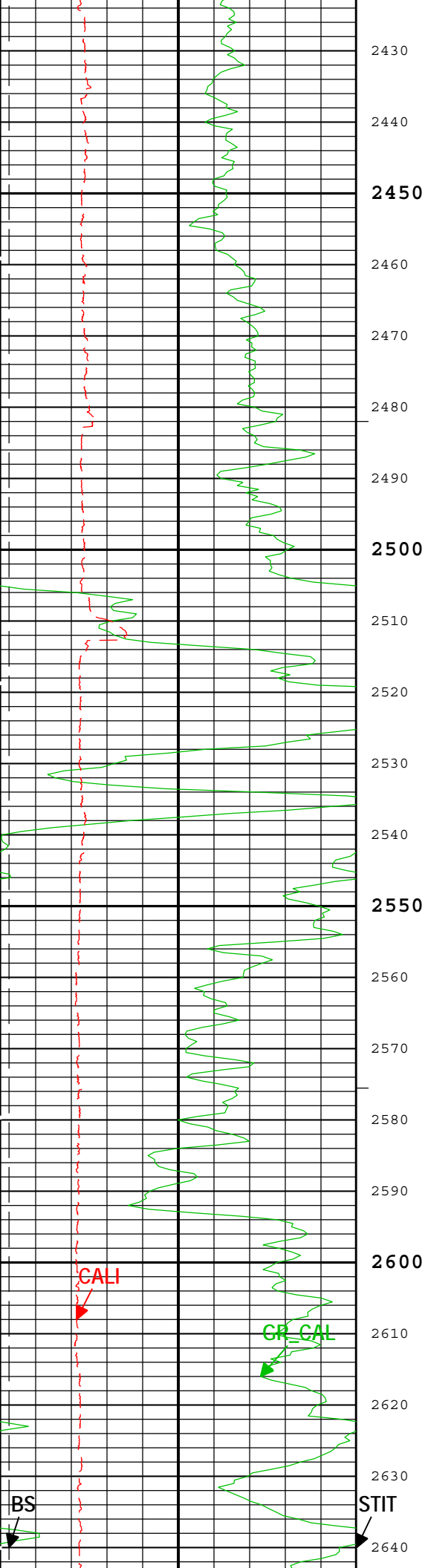


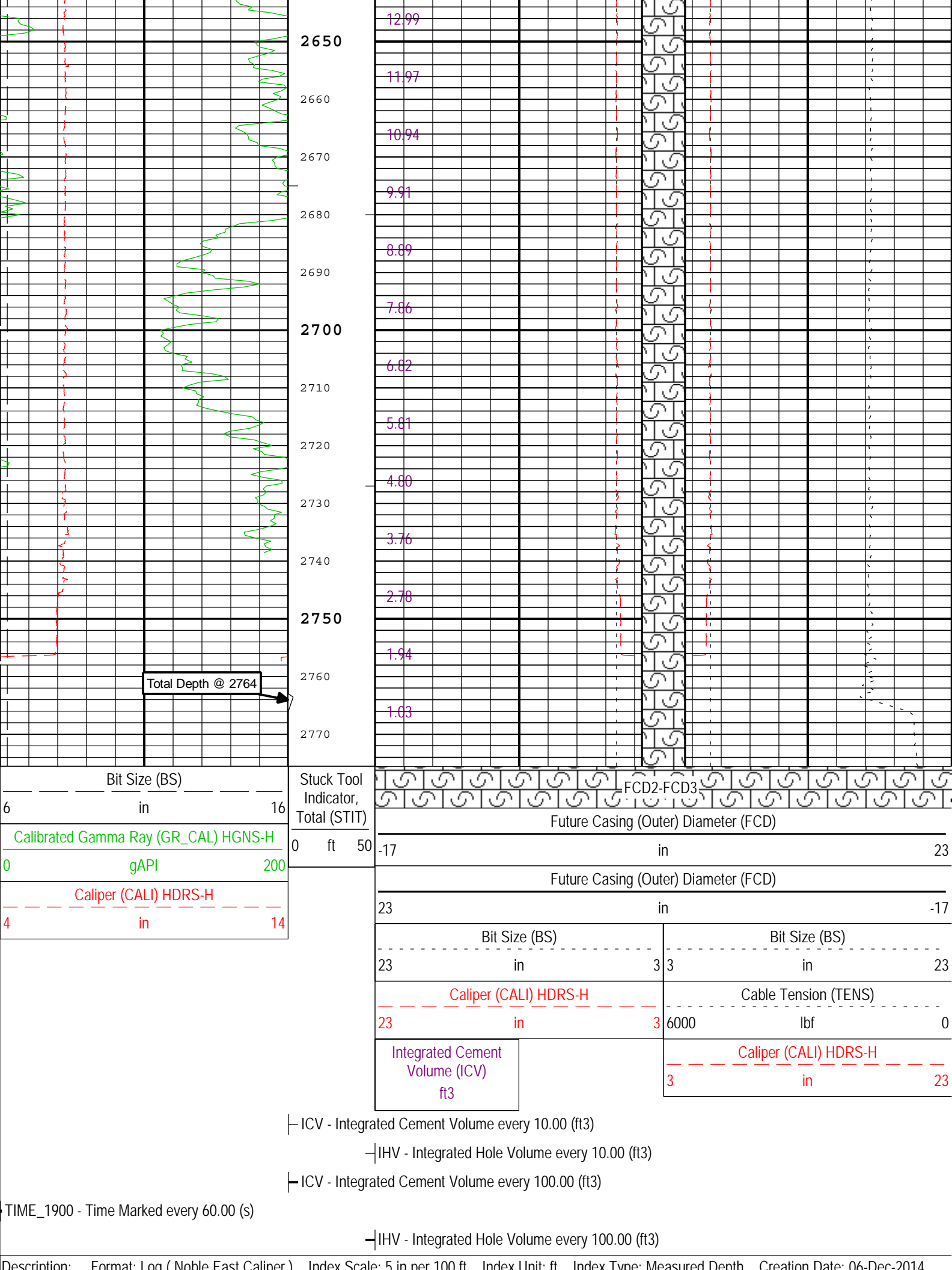












Channel Processing Parameters				
Parameter	Description	Tool	Value	Unit
BHS	Borehole Status (Open or Cased Hole)	Borehole	Open	
BS	Bit Size	WLSESSION	6.25	in
CALI_SHIFT	CALI Supplementary Offset	HDRS-H	-0.02	in
CBLO	Casing Bottom (Logger)	WLSESSION	495	ft
CSODDRL	Casing Outer Diameter - Zoned along driller 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	2764	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 1				
Primary Equipment :				
	HILT High-Resolution Control Cartridge, 150 degC	HRCC-H	4923	
	HILT Resistivity Gamma-Ray Density Device, 150 degC	HRGD-H	3933	
Auxiliary Equipment :				
	HRDD Backscatter Detector	Backscatter		
	HRDD Long Spacing Detector	Long Spacing	28736	
	HRDD Short Spacing Detector	Short Spacing		
	Cesium 137 Gamma-Ray Logging Source	GSR-J	5094	
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):		09:28:05 06-Dec-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	11.83	15.00	

HDRS Density Calibration - Inversion Results							
Master (EEPROM):		12:46:24 19-Nov-2014					
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Rho Aluminum	g/cm3	Master	2.596	2.586	2.593	2.606	
Rho Magnesium	g/cm3	Master	1.686	1.676	1.690	1.696	
Pe Aluminum		Master	2.570	2.470	2.570	2.670	
Pe Magnesium		Master	2.650	2.550	2.591	2.750	

HDRS Density Calibration - Deviation Summary							
Master (EEPROM):		12:46:24 19-Nov-2014					
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
BS Average Deviation	%	Master	0	-0.6000	0.4612	0.6000	
BS Max Deviation	%	Master	0	-1.6000	1.0740	1.6000	
SS Average Deviation	%	Master	0	-1.0000	0.2751	1.0000	
SS Max Deviation	%	Master	0	-2.5000	0.7133	2.5000	
LS Average Deviation	%	Master	0	-1.5000	1.0852	1.5000	
LS Max Deviation	%	Master	0	-3.5000	3.1061	3.5000	

HDRS Density Calibration - Background Summary							
Master (EEPROM):		12:46:24 19-Nov-2014		Before (Measured):		09:26:17 06-Dec-2014	
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	

Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
BS Window Ratio		Master Before Before-Master	1.0000 0.7489 -----	 0.7114 -----	0.7489 0.7474 -0.0015	 0.7863 -----	
BS Window Sum	1/s	Master Before Before-Master	1 23293 -----	 22128 -----	23293 23278 -15	 24458 -----	
SS Window Ratio		Master Before Before-Master	1.0000 0.4872 -----	 0.4628 -----	0.4872 0.4878 0.0006	 0.5116 -----	
SS Window Sum	1/s	Master Before Before-Master	1 10907 -----	 10361 -----	10907 10912 5	 11452 -----	
LS Window Ratio		Master Before Before-Master	1.0000 0.3004 -----	 0.2854 -----	0.3004 0.2970 -0.0034	 0.3154 -----	
LS Window Sum	1/s	Master Before Before-Master	1 1191 -----	 1131 -----	1191 1191 0	 1250 -----	

### HDRS Density Calibration - Photo-multiplier High Voltages

Master (EEPROM):		12:46:24 19-Nov-2014		Before (Measured):		09:26:17 06-Dec-2014	
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
BS PM High Voltage	V	Master Before Before-Master	  -----	1000 1000 -100	1635 1623 -12	2400 2400 100	
SS PM High Voltage	V	Master Before Before-Master	  -----	1000 1000 -100	1496 1514 18	2400 2400 100	
LS PM High Voltage	V	Master Before Before-Master	  -----	1000 1000 -100	1283 1280 -3	2400 2400 100	

### HDRS Density Calibration - Crystal Quality Resolutions

Master (EEPROM):		12:46:24 19-Nov-2014		Before (Measured):		09:26:17 06-Dec-2014	
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
BS Crystal Resolution	%	Master Before Before-Master	  -----	5.00 5.00 -1.00	10.91 10.81 -0.10	25.00 25.00 1.00	
SS Crystal Resolution	%	Master Before Before-Master	  -----	5.00 5.00 -1.00	9.66 9.76 0.10	20.00 20.00 1.00	
LS Crystal Resolution	%	Master Before Before-Master	  -----	5.00 5.00 -1.00	8.11 8.11 0.00	20.00 20.00 1.00	

### HDRS MCFL Calibration - MCFL Accumulations

Before (Measured):		13:21:22 06-Dec-2014					
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Main Resistivity	ohm.m	Before	3875	3565	3882	4185	
Deep Resistivity	ohm.m	Before	3830	3524	3810	4136	
Shallow Resistivity	ohm.m	Before	3830	3524	3833	4136	

### HGNS-H (HILT Gamma-Ray and Neutron Sonde, 150 degC) Calibration - Run 1

Primary Equipment :			
HILT Gamma-Ray and Neutron Sonde, 150 degC		HGNS-H	4810
Auxiliary Equipment :			
HGNS Accelerometer, 150 degC		HACCZ-H	5955
AmBe Neutron Logging Source		NSR-F	5215
Calibration Parameter :			
Water Temperature			
Housing Size			
JIG-BKG (Jig minus background reference)		165	

### HGNS Accelerometer Calibration - Accelerometer Accumulations

Before (Measured):		13:01:18 06-Dec-2014					
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
AZ Vertical Measurement	ft/s2	Before	32.2	31.5	32.1	32.8	
HGNS Accelerometer EEPROM - Accelerometer EEPROM Read							
Master (Manual Entry):		00:00:00 15-Jan-2007					
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Accelerometer Manufacturer		Master			QAT_160		
Accelerometer Reference Temperature	degF	Master		30.2	77.0	122.0	
Accelerometer Coefficients - 0		Master	----	----	1155.700	----	
Accelerometer Coefficients - 1		Master	----	----	26.890	----	
Accelerometer Coefficients - 2		Master	----	----	-0.008	----	
Accelerometer Coefficients - 3		Master	----	----	0.000	----	
Accelerometer Coefficients - 4		Master	----	----	2.748	----	
Accelerometer Coefficients - 5		Master	----	----	0.000	----	
Accelerometer Coefficients - 6		Master	----	----	0.000	----	
Accelerometer Coefficients - 7		Master	----	----	0.000	----	
Accelerometer Coefficients - 8		Master	----	----	298.600	----	
Accelerometer Coefficients - 9		Master	----	----	0.983	----	
HGNS Neutron Calibration - HGNS Neutron Accumulations							
Master (Manual Entry):		10:43:32 31-Oct-2014		Before (Measured):		09:23:55 06-Dec-2014	
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
Near Zero Measurement - 0	1/s	Master	----	----	----	----	
		Before	0	5.0	25.0	40.0	
		Before-Master	----	----	----	----	
Far Zero Measurement - 0	1/s	Master	----	----	----	----	
		Before	0	5.0	28.1	40.0	
		Before-Master	----	----	----	----	
Near Plus Measurement - 0	1/s	Master	----	----	----	----	
		Before	----	----	----	----	
		Before-Master	----	----	----	----	
Far Plus Measurement - 0	1/s	Master	----	----	----	----	
		Before	----	----	----	----	
		Before-Master	----	----	----	----	
Near Corrected Plus Measurement	1/s	Master		4700.0	5330.0	6900.0	
		Before	----	----	----	----	
		Before-Master	----	----	----	----	
Far Corrected Plus Measurement	1/s	Master		1900.0	2259.0	2900.0	
		Before	----	----	----	----	
		Before-Master	----	----	----	----	
HGNS Gamma-Ray Calibration - Gamma-Ray Accumulations							
Before (Measured):		09:32:35 06-Dec-2014					
Measurement	Unit	Phase	Nominal	Low Limit	Actual	High Limit	
RGR Zero Measurement	gAPI	Before	30.0	0	143.6	120.0	
RGR Plus Measurement	gAPI	Before	185.4	157.1	173.3	206.3	
GR Calibration Gain		Before	0.89	0.80	0.95	1.05	

Company:	Omimex Petroleum Inc	Schlumberger
Well:	Denney State 5-36-7-45	
Field:	Holyoke South	
County:	Phillips	
State:	Colorado	
Platform Express		
Caliper		
Cement Volume		