

Company: Triton Energy Services LLC

Well: Triton 2

Field: Wattenberg

County: Weld State: Colorado

Platform Express

Caliper

Cement Volume

County:		Weld					
Field:		Wattenberg					
Location:		SWSE, Sec. 35, T6N, R65W					
Well:		Triton 2					
Company:		Triton Energy Services LLC					
		Cement Volume					
		Caliper					
		Location:					
		SWSE, Sec. 35, T6N, R65W					
		SHL: 1164' FSL X 2044' FEL					
Lat/Long: 40.438300, -104.628000		Elev.:		K.B.		4671.00 ft	
Permanent Datum:		Ground Level		Elev.:		4654.00 f	
Log Measured From:		Kelly Bushing		17.00 ft		above Perm.Datum	
Drilling Measured From:		Kelly Bushing					
API Serial No.		Section:		Township:		Range:	
05-123-37808-0000		6N		6N		65W	

Logging Date	30-Mar-2014				
Run Number	Run 1				
Depth Driller	10445.00 ft				
Schlumberger Depth	10449.00 ft				
Bottom Log Interval	10449.00 ft				
Top Log Interval	8691.00 ft				
Casing Driller Size @ Depth	7 in @ 8684.00 ft				
Casing Schlumberger	8691 ft				
Bit Size	6.125 in				
Type Fluid In Hole	Water				
D M M	Density	8.7 lbm/gal	38 s		
	Fluid Loss	PH			
	Source of Sample	Active Tank			
RM @ Meas Temp	0.85 ohm.m @ 69.2 degF				
RMF @ Meas Temp	0.67 ohm.m @ 80 degF				
RMC @ Meas Temp	1.01 ohm.m @ 80 degF				
Source RMF	RMC	Calculated	Calculated		
RM @ BHT	RMF @ BHT	0.23 @ 275	0.21 @ 275		
Max Recorded Temperatures		275 degF			
Circulation Stopped		30-Mar-2014 13:30:00			
Logger on Bottom		30-Mar-2014 22:01:13			
Unit Number	Location:	2135	Fort Morgan		
Recorded By	Elizabeth Wilson / Heather Hoffman				
Witnessed By	Scott Osborn/ Louise Kitley				

Disclaimer

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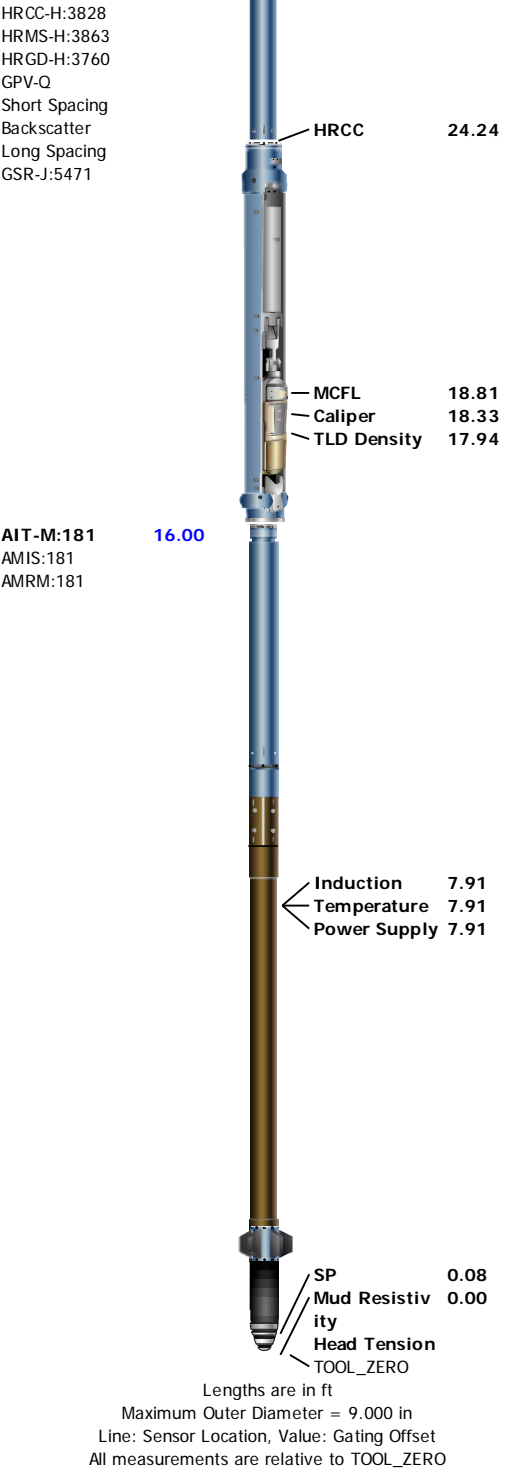
Well Sketch

Driller Depth  
0.00 ft

8684.00 ft

Casing 7in  
26lbm/ft





Depth Summary

	Run 1		
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Depth Measuring Device

Type	IDW-B		
Serial Number			
Calibration Date			
Calibrator Serial Number			
Calibration Cable Type			
Wheel Correction 1	0		
Wheel Correction 2	0		

Tension Device

Type	CMTD-B/A		
Serial Number			
Calibration Date			
Calibrator Serial Number			
Number of Calibration Points	0		

Logging Cable									
Type	7-46NT-XS								
Serial Number									
Length	24000.00 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									
Integration Summary									
Output Channel(s)	Output Description		Input Parameter			Output Value		Unit	
ICV	Integrated Cement Volume		GCSE_UP_PASS, FCD			187.01		ft3	
IHV	Integrated Hole Volume		GCSE_UP_PASS			382.1		ft3	
Software Version									
Acquisition System					Version				
MaxWell					4.0.9163.3000				
Application Patch					Patch-SP-10767_13393-4.0.9163.3001				
Computation		Description					Version		
Borehole		Borehole Ensemble provides common Borehole Parameters and Channels					4.0.9213.3000		
DepthCorrection		DepthCorrection					4.0.9213.3000		
Tool Elements		Description			Software Version		Firmware Version		
HRCC-H		HILT High-Resolution Control Cartridge, 150 degC			4.0.9231.3000		2.0		
HGNS-H		HILT Gamma-Ray and Neutron Sonde, 150 degC			4.0.9231.3000		2.0		
Pass Summary									
Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	DSC Mode	Depth Shift	Include Parallel Data
Run 1	Log[3]:Up	Up	8565.68 ft	10458.46 ft	30-Mar-2014 8:55:56 PM	30-Mar-2014 9:31:04 PM	ON	2.00 ft	Yes
All depths are referenced to toolstring zero									
Log	Company:Triton Energy Services LLC      Well:Triton 2 Run 1: Log[3]:Up:S011								
Description:    Format: Log ( Noble East Caliper )    Index Scale: 5 in per 100 ft    Index Unit: ft    Index Type: Measured Depth    Creation Date: 30-Mar-2014 22:22:05									
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	WI Workflow	0 1in							

IHV - Integrated Hole Volume every 100.00 (ft3)

ICV - Integrated Cement Volume every 100.00 (ft3)

TIME\_1900 - Time Marked every 60.00 (s)

IHV - Integrated Hole Volume every 10.00 (ft3)

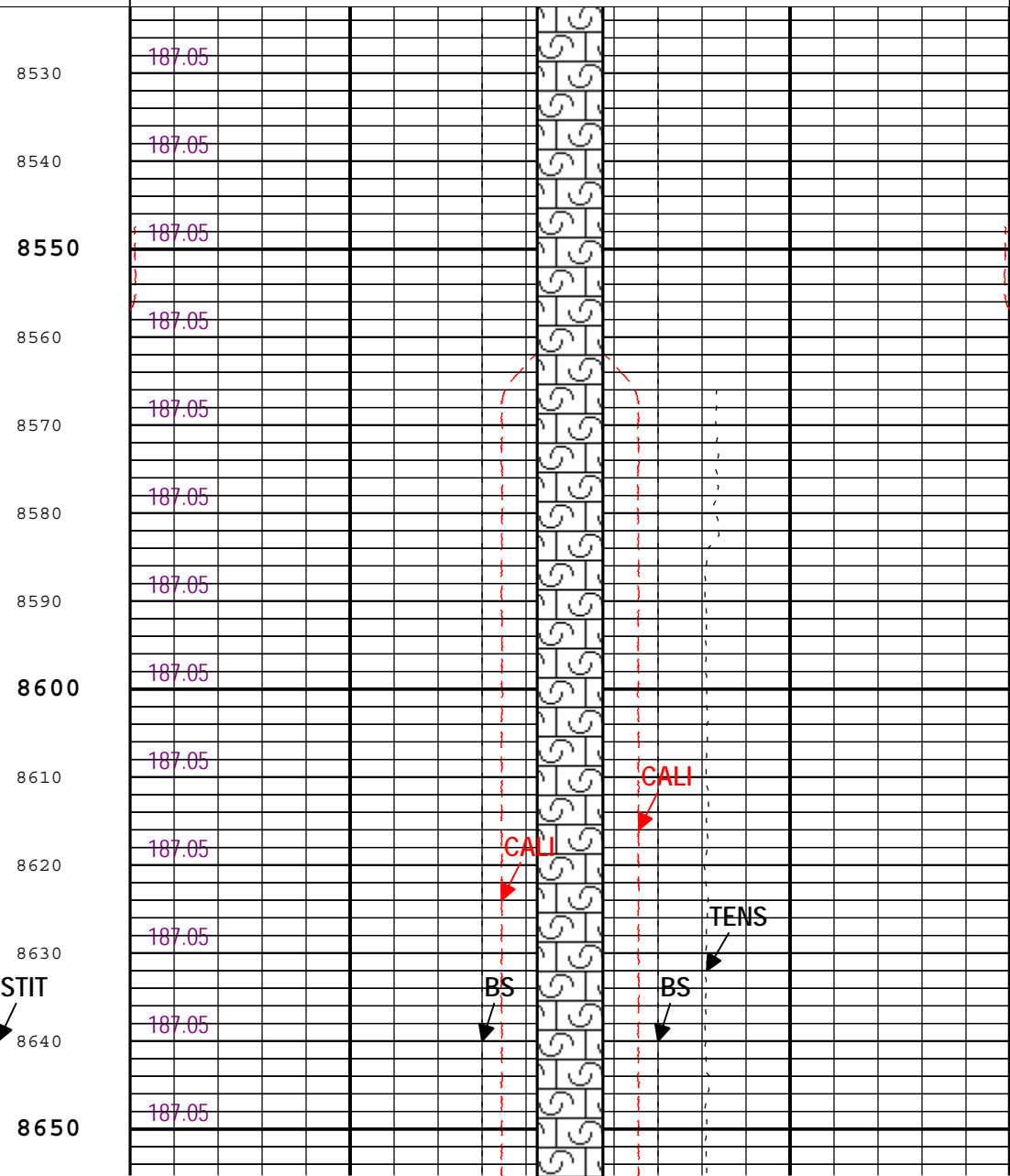
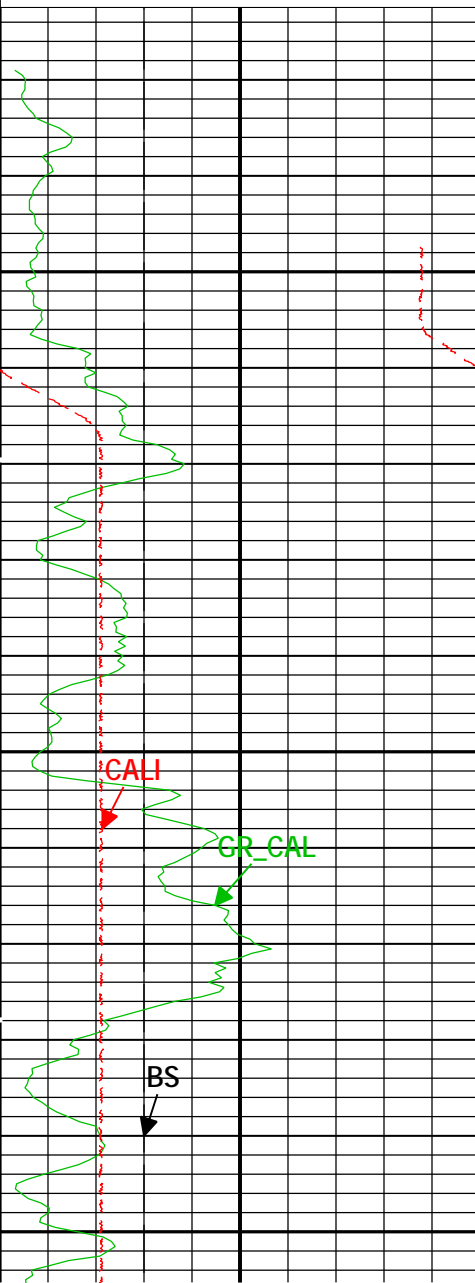
ICV - Integrated Cement Volume every 10.00 (ft3)

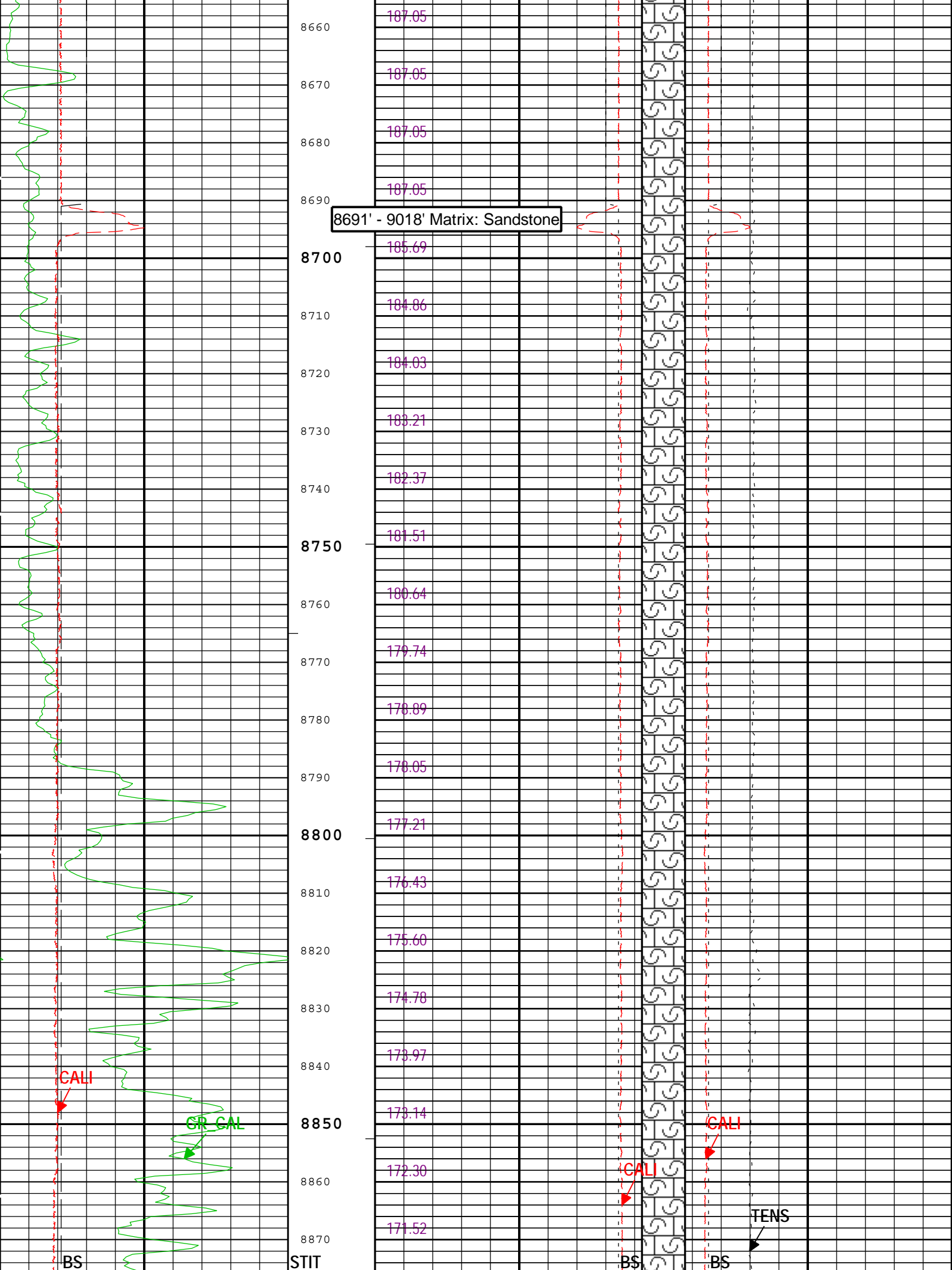
Bit Size (BS)		
4	in	14
Calibrated Gamma Ray (GR_CAL) HGNS-H		
0	gAPI	200
Caliper (CALI) HDRS-H		
4	in	14

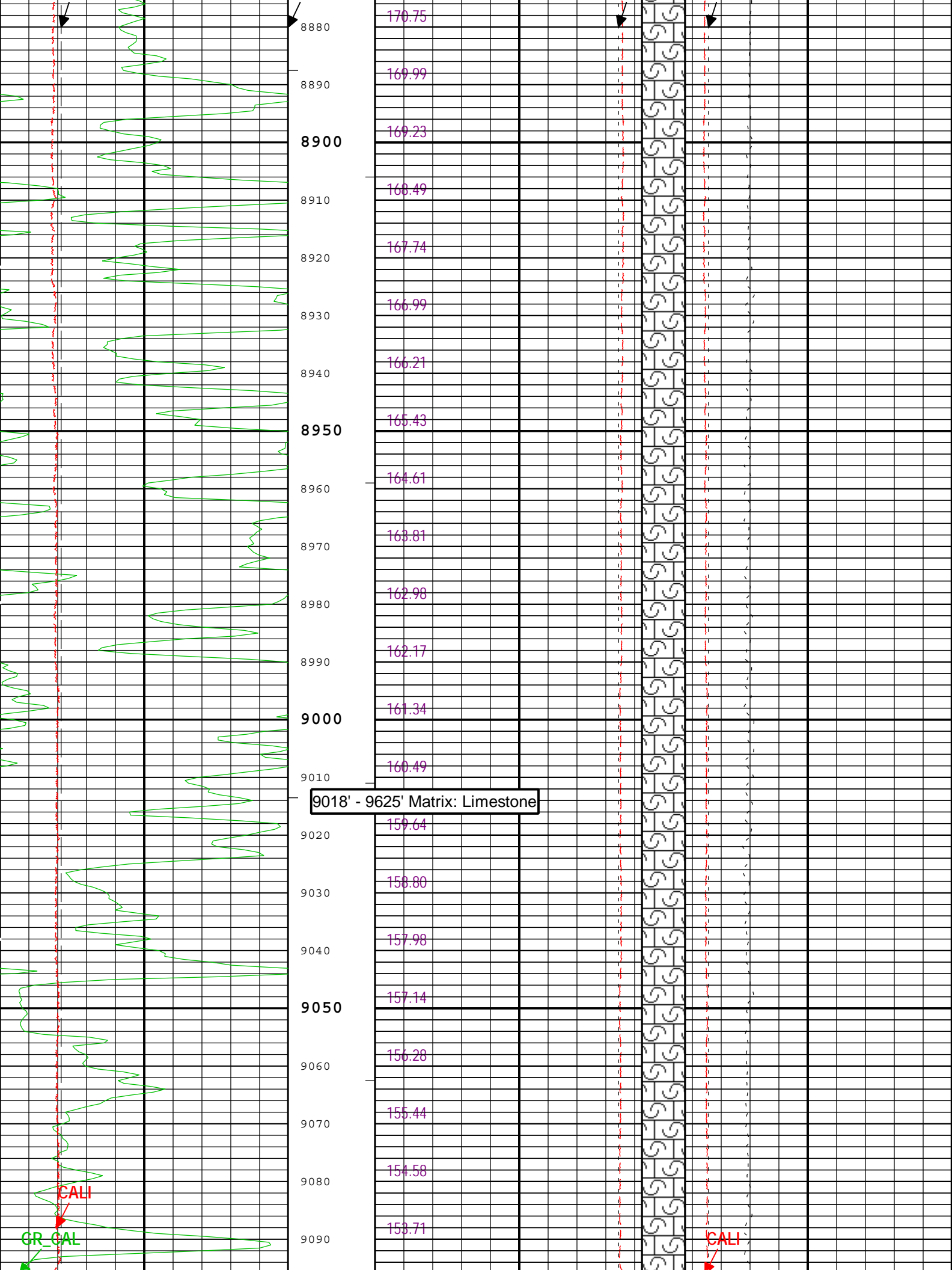
Stuck Tool  
Indicator,  
Total (STIT)

0 ft 50

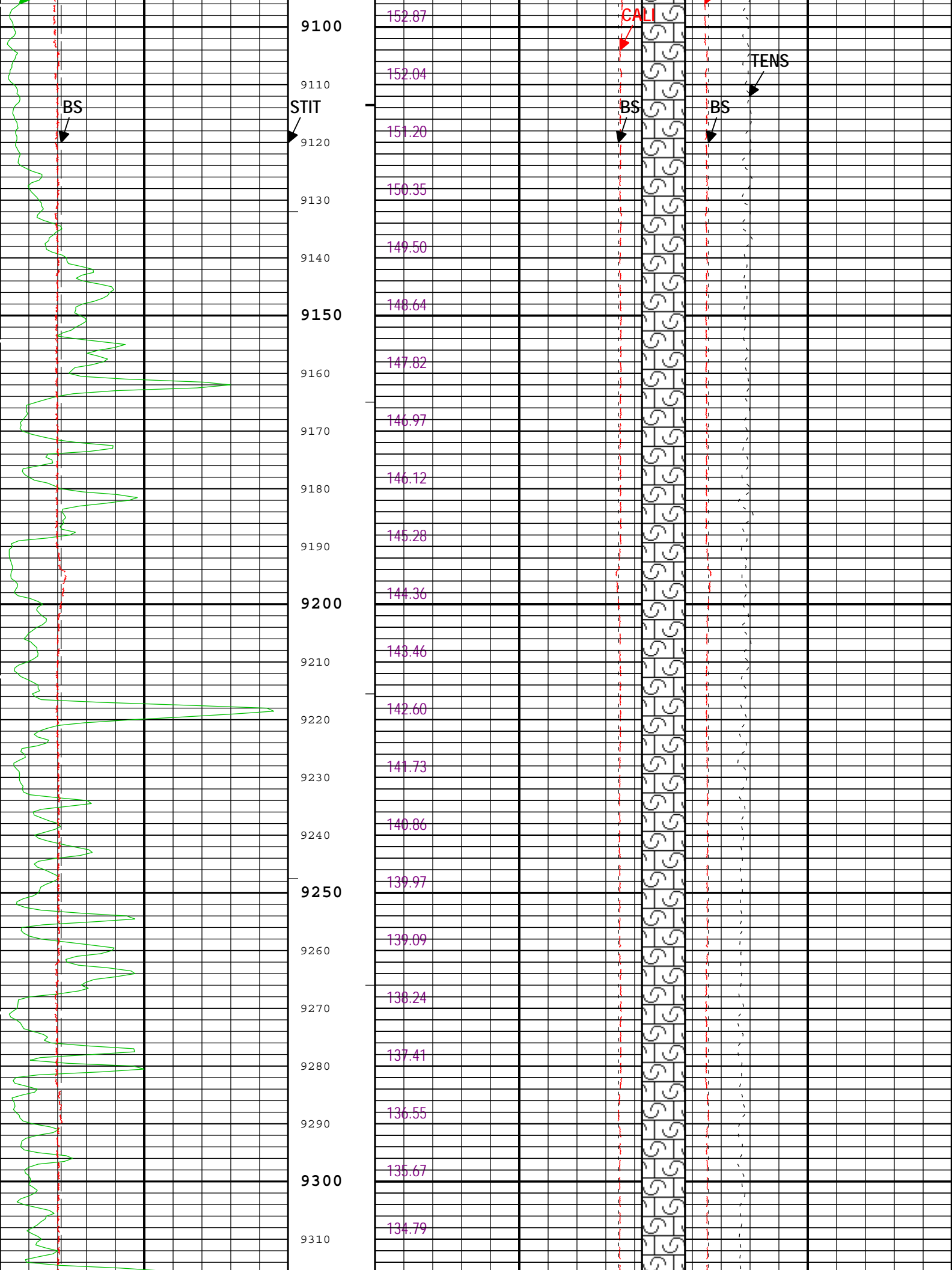
Integrated Cement Volume (ICV) ft3		Bit Size (BS)	
		3	23
		in	
Bit Size (BS)		Cable Tension (TENS)	
23	in	3	0
		5000	lbf
Caliper (CALI) HDRS-H		Caliper (CALI) HDRS-H	
23	in	3	23
FCD2-FCD3			
Future Casing (Outer) Diameter (FCD)			
-17 in 23			
Future Casing (Outer) Diameter (FCD)			
23 in -17			

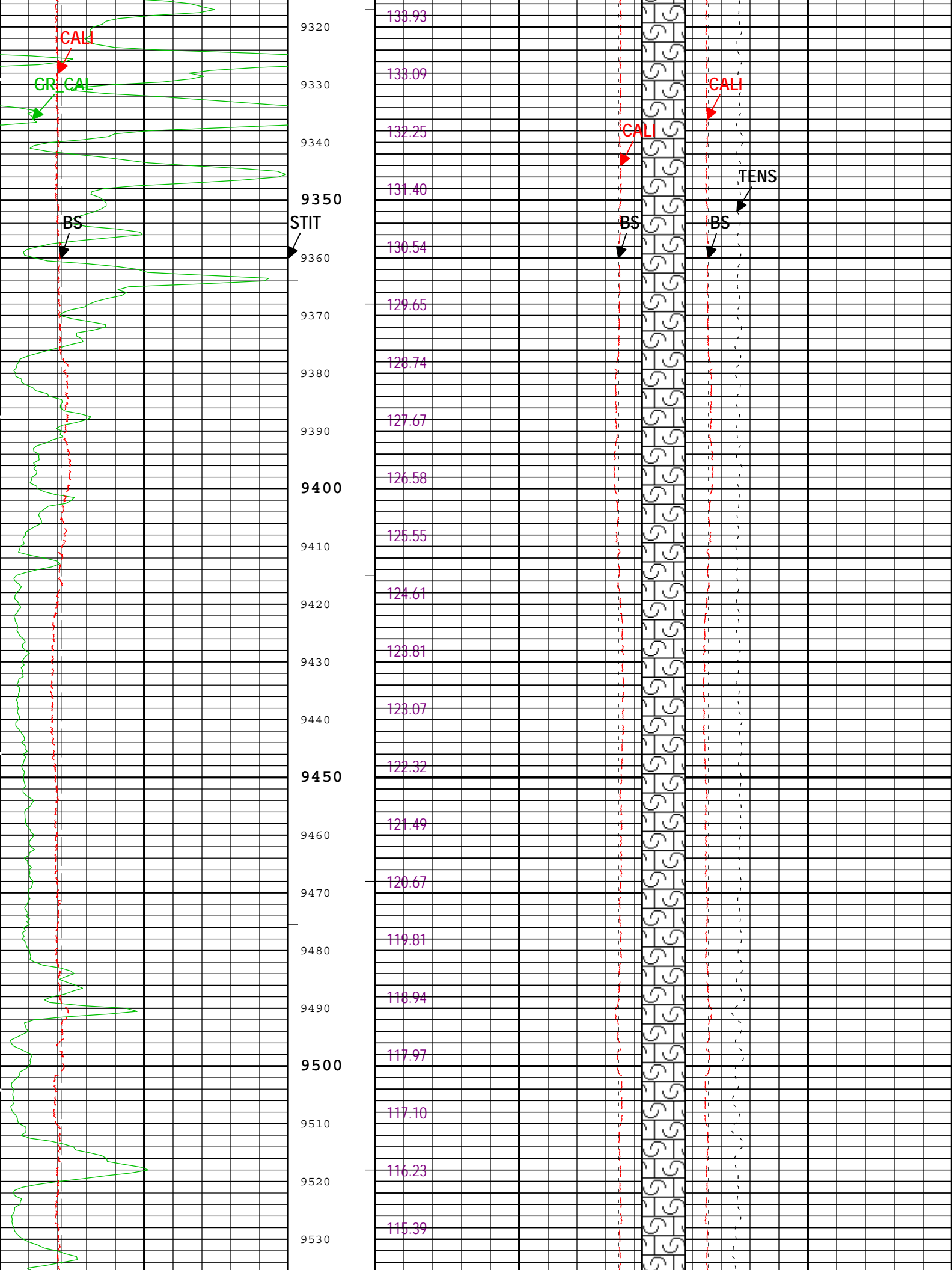


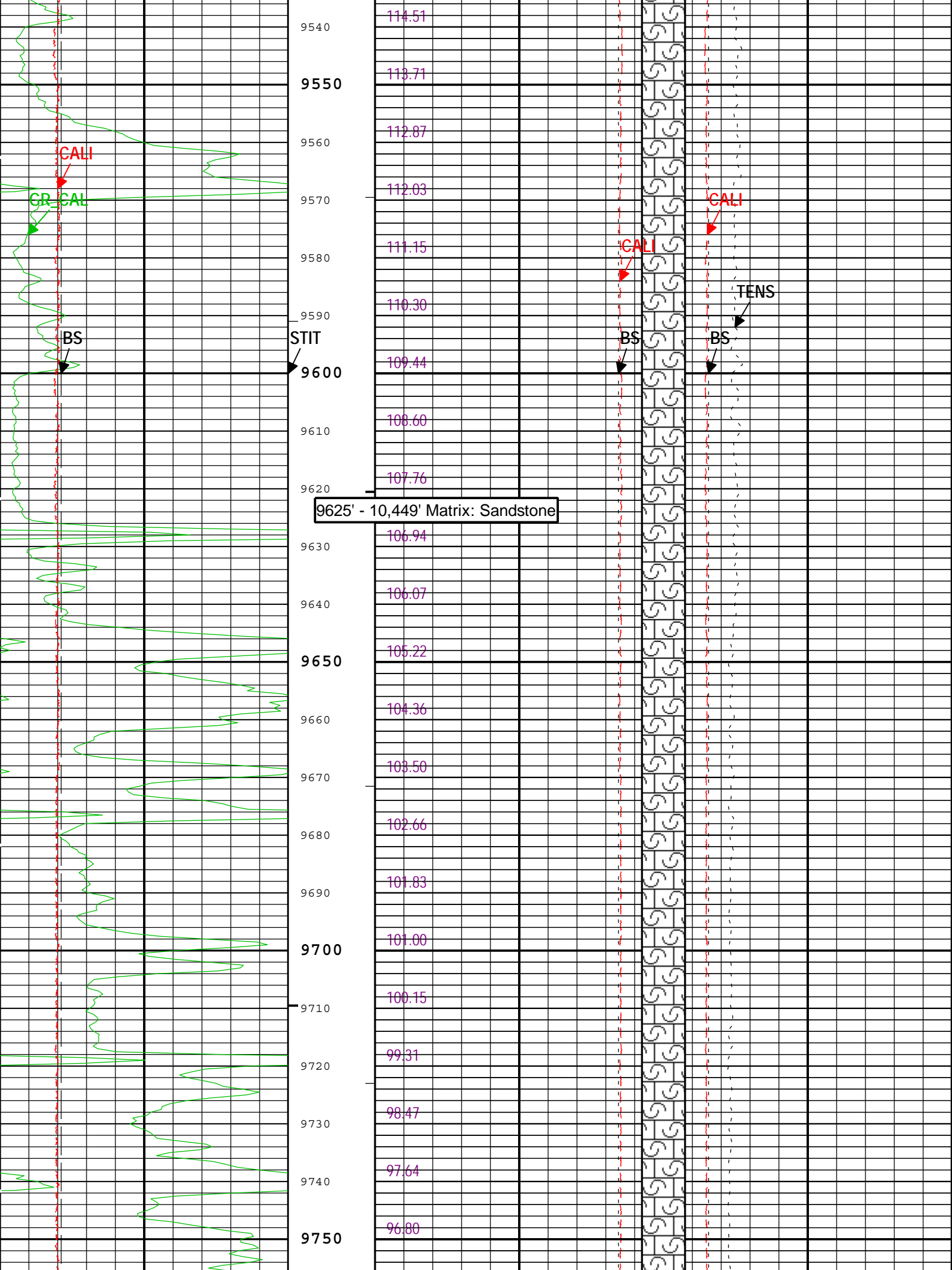


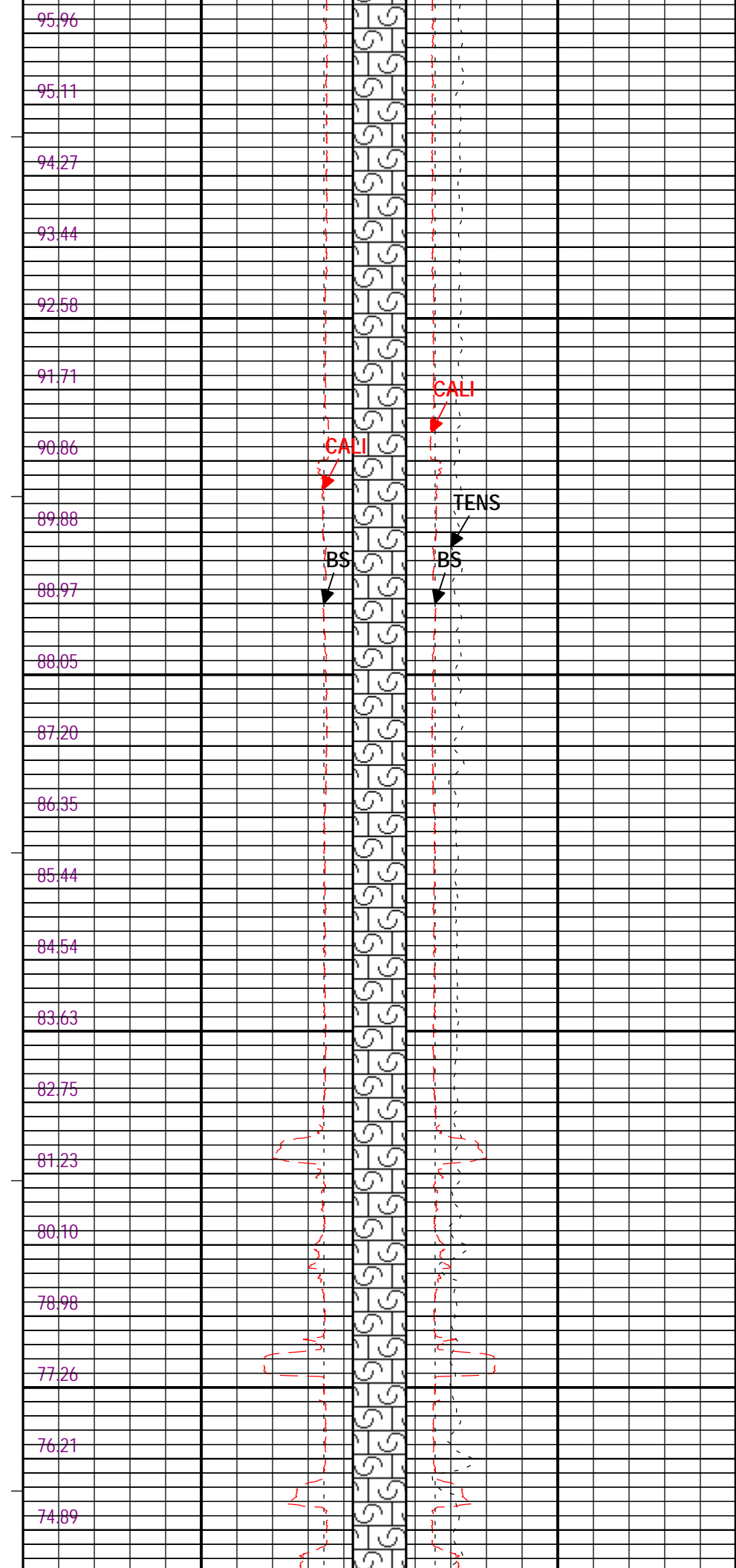
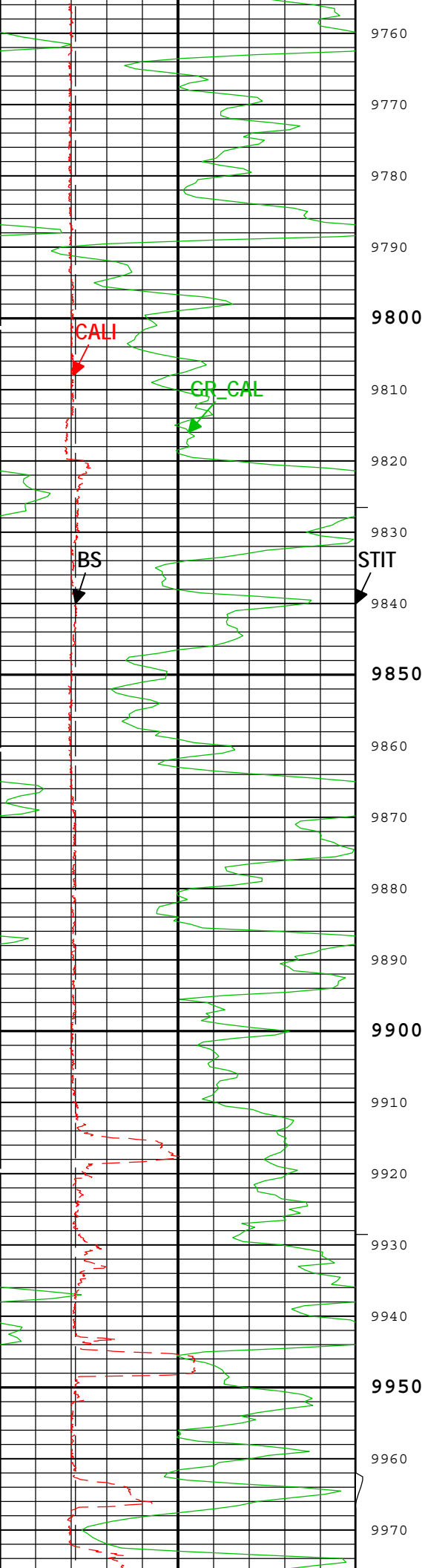


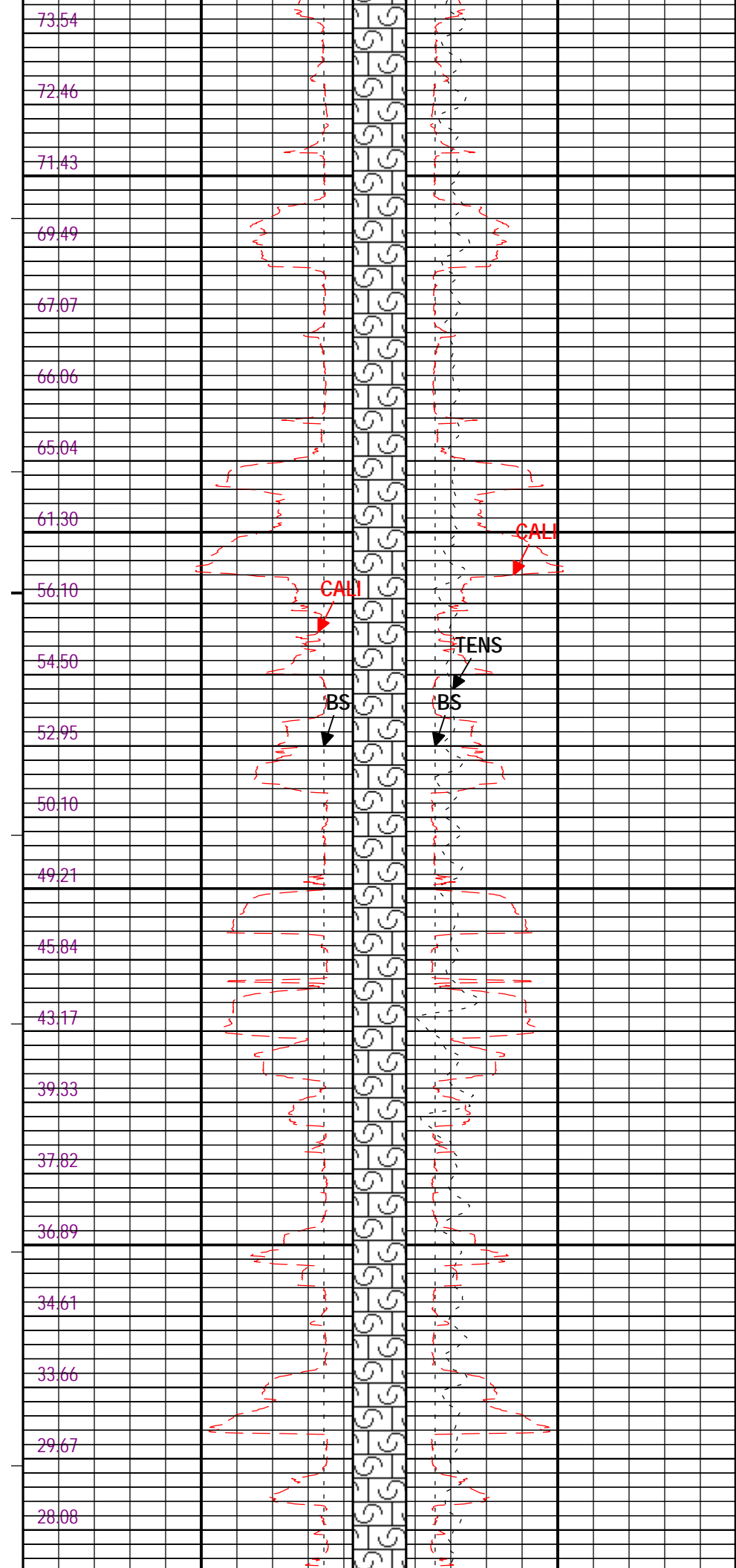
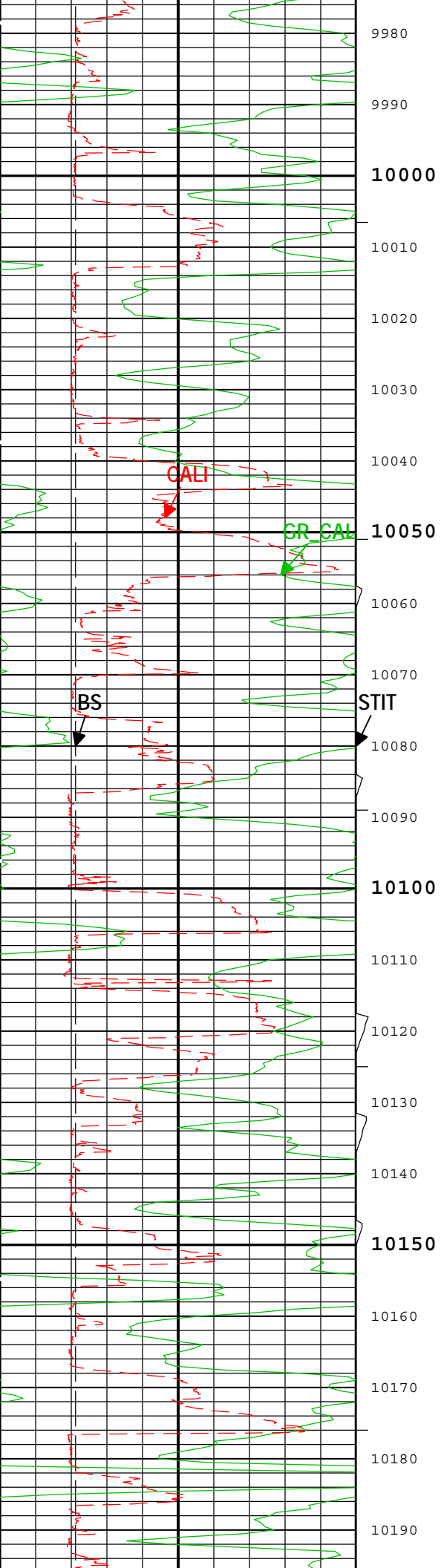


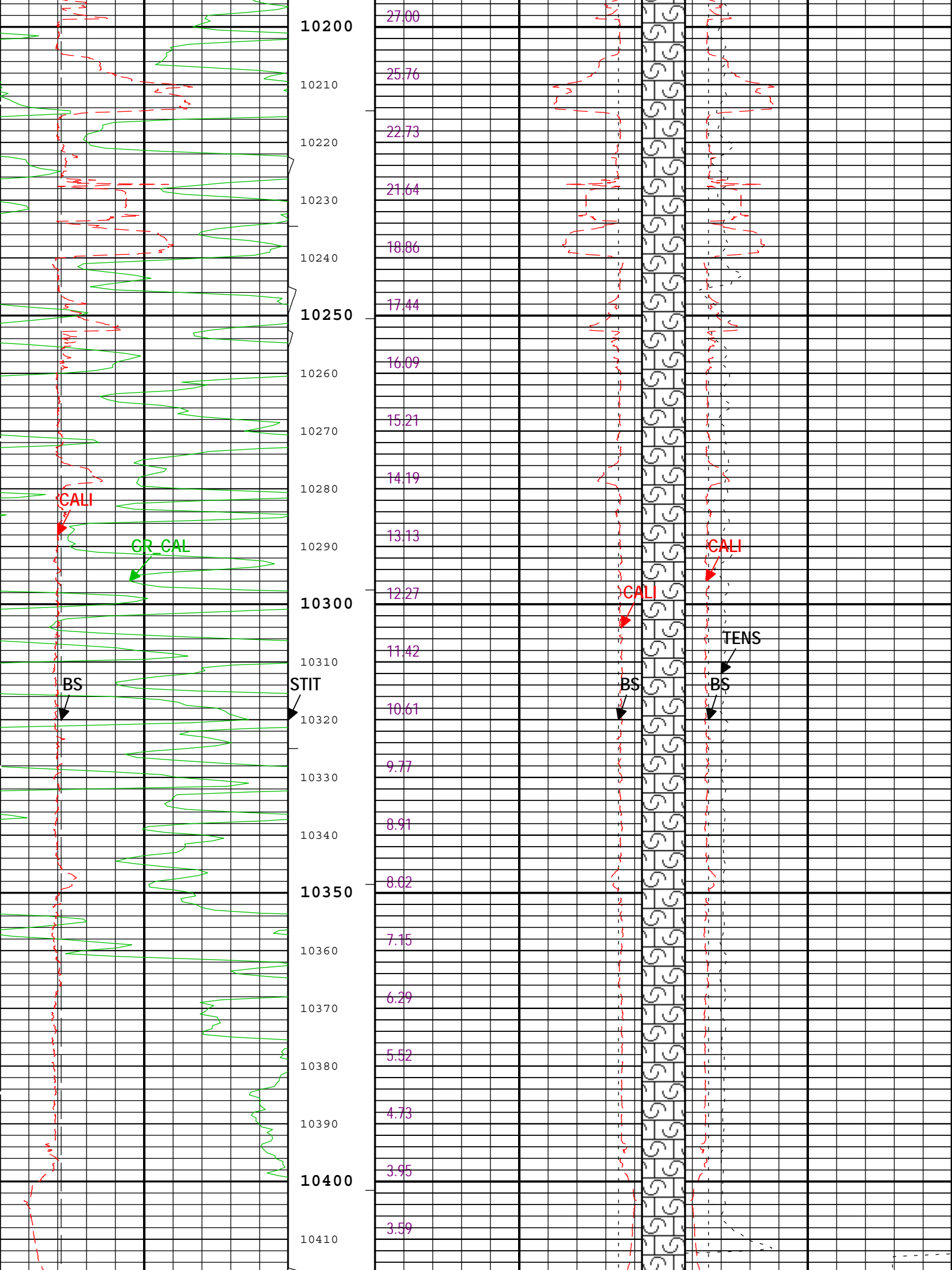


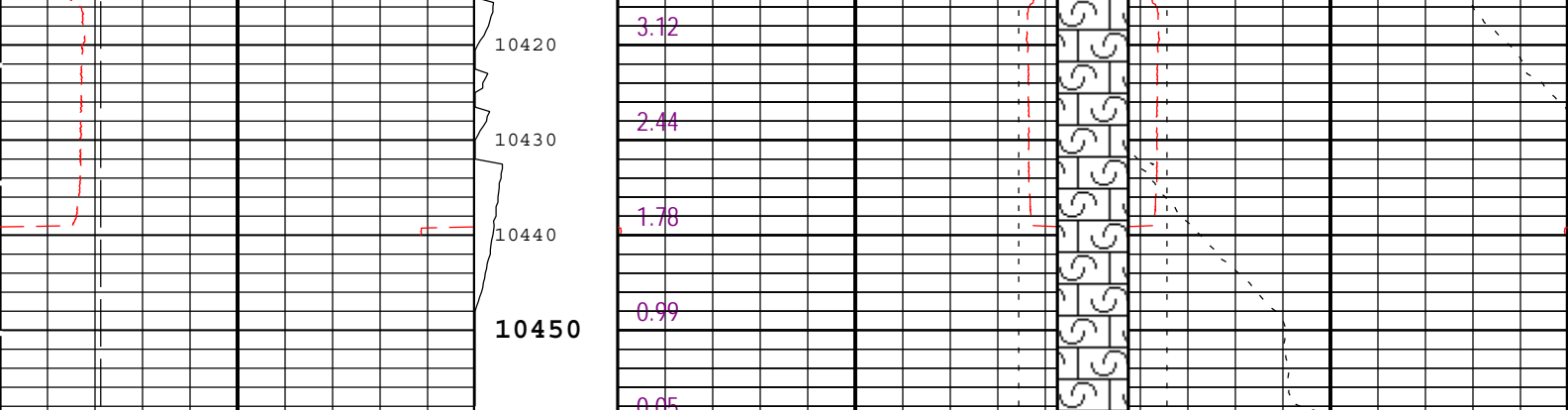












Bit Size (BS)		
4	in	14
Calibrated Gamma Ray (GR_CAL) HGNS-H		
0	gAPI	200
Caliper (CALI) HDRS-H		
4	in	14

Stuck Tool  
Indicator,  
Total (STIT)

0 ft 50

FCD2-FCD3	
Future Casing (Outer) Diameter (FCD)	
-17	in -23
Future Casing (Outer) Diameter (FCD)	
23	in -17
Bit Size (BS)	
23	in 3
Caliper (CALI) HDRS-H	
23	in 3
Integrated Cement Volume (ICV) ft3	
3	in 23

—ICV - Integrated Cement Volume every 10.00 (ft3)

—IHV - Integrated Hole Volume every 10.00 (ft3)

TIME\_1900 - Time Marked every 60.00 (s)

—ICV - Integrated Cement Volume every 100.00 (ft3)

—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: 30-Mar-2014 22:22:05

## Channel Processing Parameters

Parameter	Description	Tool	Value	Unit
BHS	Borehole Status (Open or Cased Hole)	Borehole	Open	
BS	Bit Size	WLSESSION	6.125	in
CALI_SHIFT	CALI Supplementary Offset	HDRS-H	0	in
CBLO	Casing Bottom (Logger)	WLSESSION	8691	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	10445	ft

## Tool Control Parameters

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

Company:	Triton Energy Services LLC	Schlumberger
Well:	Triton 2	
Field:	Wattenberg	
County:	Weld	
State:	Colorado	
Platform Express		
Caliper		
Cement Volume		