

Schlumberger

Company: **Kerr McGee Oil and Gas Onshore, LP**

Well: Parterre 13-16

Field: **Spindle**

County: **Adams**
State: **Colorado**

County: Adams	
Field: Spindle	
Location: NWSW Sec. 16, T 1S , R 67W	
Well: Parterre 13-16	
Company: Kerr McGee Oil and Gas Onshore	
<div>Platform Express</div> <div>Cement Volume</div> <div>Caliper</div>	
LOCATION	
NWSW Sec. 16, T 1S , R 67W	Elev.: K.B. 5175.00 ft
SHL: 1515' FSL / 1274' FWL NWSW	G.L. 5160.00 ft
BHL: 581' FSL / 608' FWL SWSW (est)	D.F. 5174.00 ft
Permanent Datum: _____	Elev.: 5160.00 ft _____
Log Measured From: _____	15.00 ft above Perm. Datum
Drilling Measured From: _____	
API Serial No. 05-001-09685-000C	Section 16 Township 1S Range 67W

[illegible]

Logging Date	2-Dec-2009					
Run Number	1					
Depth Driller	8870 ft					
Schlumberger Depth	8796 ft					
Bottom Log Interval	8788 ft					
Top Log Interval	1220 ft					
Casing Driller Size @ Depth	8.625 in @ 1220 ft				@	
Casing Schlumberger	1220 ft					
Bit Size	7.875 in					
Type Fluid In Hole	Fresh Water					
Density	Viscosity	8.5 lbm/gal		2.8 s		
Fluid Loss	PH					
Source Of Sample	Flowline					
RM @ Measured Temperature	1.420 ohm.m @ 72 degF			@		
RMF @ Measured Temperature	1.065 ohm.m @ 72 degF			@		
RMC @ Measured Temperature	2.130 ohm.m @ 72 degF			@		
Source RMF	RMC	Calculated	Calculated			
RM @ MRT	RMF @ MRT	0.522 @ 208	0.392 @ 208	@		@
Maximum Recorded Temperatures	208 degF					
Circulation Stopped	Time	2-Dec-2009	3:00			
Logger On Bottom	Time	2-Dec-2009	11:24			
Unit Number	Location	3055 Fort Morgan, CO				
Recorded By	Jared R. Hoskins					
Witnessed By	Marvin Hackworth & Mark Scannellio					

Logging Date					
Run Number					
Depth Driller					
Schlumberger Depth					
Bottom Log Interval					
Top Log Interval					
Casing Driller Size @ Depth		@			
Casing Schlumberger					
Bit Size					
Type Fluid In Hole					
Density	Viscosity				
Fluid Loss	PH				
Source Of Sample					
RM @ Measured Temperature		@			
RMF @ Measured Temperature		@			
RMC @ Measured Temperature		@			
Source RMF	RMC				
RM @ MRT	RMF @ MRT	@		@	@
Maximum Recorded Temperatures					
Circulation Stopped	Time				
Logger On Bottom	Time				
Unit Number	Location				
Recorded By					
Witnessed By					

Run 4

Date Created: 2-DEC-2009 12:19:29

Logging Cable

Type:	7-39P LXS
Serial Number:	708273
Length:	13900 FT
<hr/>	
Conveyance Method:	Wireline
Rig Type:	LAND

Log Sequence:	First Log In the Well
Rig Up Length At Surface:	0.00 FT
Rig Up Length At Bottom:	0.00 FT
Rig Up Length Correction:	0.00 FT
Stretch Correction:	4.50 FT
Tool Zero Check At Surface:	0.00 FT

1. All Schlumberger depth policy procedures applied
2. This is the primary depth reference
- 3.
- 4.
- 5.
- 6.

THE USE OF AND RELIANCE UPON THIS RECORDED-DATA BY THE HEREIN NAMED COMPANY (AND ANY OF ITS AFFILIATES, PARTNERS, REPRESENTATIVES, AGENTS, CONSULTANTS AND EMPLOYEES) IS SUBJECT TO THE TERMS AND CONDITIONS AGREED UPON BETWEEN SCHLUMBERGER AND THE COMPANY, INCLUDING: (a) RESTRICTIONS ON USE OF THE RECORDED-DATA; (b) DISCLAIMERS AND WAIVERS OF WARRANTIES AND REPRESENTATIONS REGARDING COMPANY'S USE OF AND RELIANCE UPON THE RECORDED-DATA; AND (c) CUSTOMER'S FULL AND SOLE RESPONSIBILITY FOR ANY INFERENCE DRAWN OR DECISION MADE IN CONNECTION WITH THE USE OF THIS RECORDED-DATA.

OTHER SERVICES2
OS1:
OS2:
OS3:
OS4:
OS5:

REMARKS: RUN NUMBER 2

6. Aaron Vandenberg, Herb Meighan, and Peter Hook are also witnesses.

Rig: Extreme 11	
Crew: Tim Ludgate	

RUN 1			RUN 2		
SERVICE ORDER #: PROGRAM VERSION: FLUID LEVEL:			SERVICE ORDER #: PROGRAM VERSION: FLUID LEVEL:		
AXB6-00073	17C0-154				
LOGGED INTERVAL	START	STOP	LOGGED INTERVAL	START	STOP

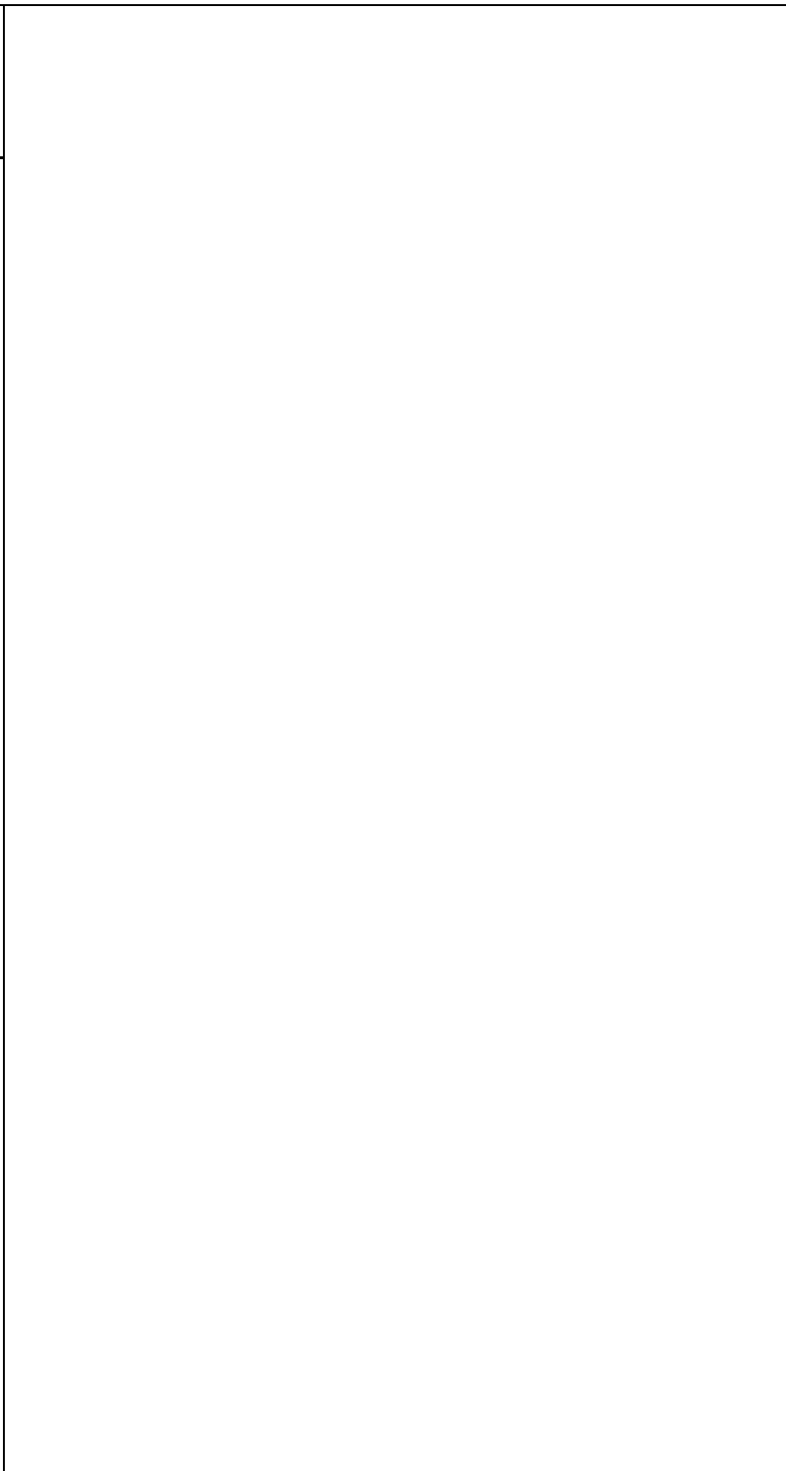
EQUIPMENT DESCRIPTION

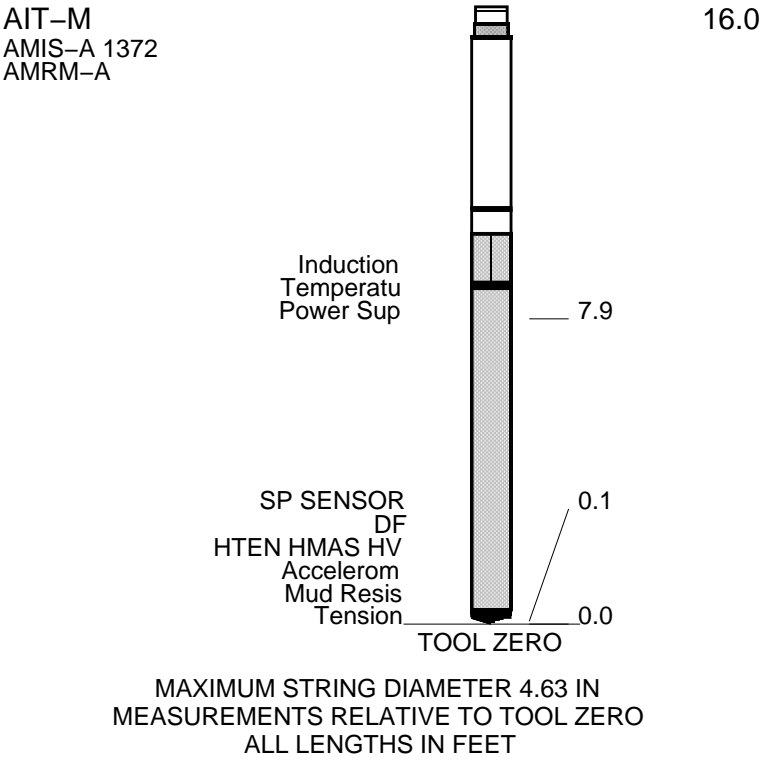
RUN 1

RUN 2

SURFACE EQUIPMENT	
GSR-U/Y	WITM (DTS)-A
NCT-B	
CNB-AB	
NCS-VB	

DOWNHOLE EQUIPMENT	
LEH-QT	43.6
LEH-QT 2552	
DTC-H	
ECH-KC	CTEM
DTCH0-A 8980	TelStatus
DTCH1-A	ToolStatu
	HGNS HTEM
	HMCA
HILTB-FTB	HGNS Gamm
HGNSD-B	
HMCA	
HGNH	
NLS-KL	
NSR-F 5068	
HACCZ 749	
HCNT	
HGR	
HRCC-B 1813	
HRMS-B 821	HGNS Neut
HRGD-B 1879	HGNS Neut
GLS-VJ 5416	
MCFL Device	
HILT Nucl. LS 42767	HGNS sens
HILT Nucl. SS 42767	
HILT Nucl. BS 42767	
NPV-N	
	HRCC cart
	MCFL
	HILT cali
	HRDD-LS
	HRDD-SS
	HRDD-BS





All depths are driller's depths

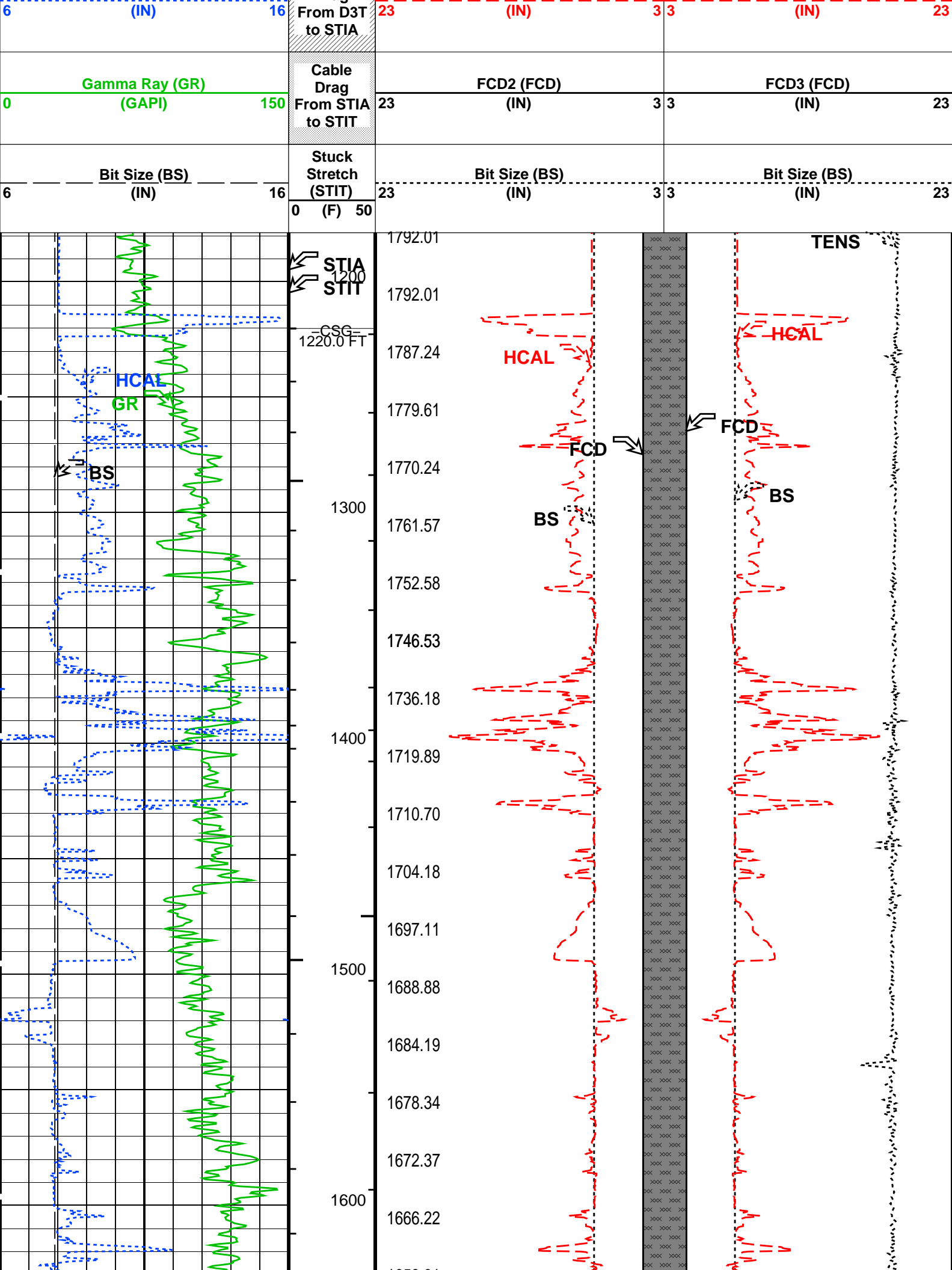
DEFAULT	AIT_TLD_MCFL_CNL_010LUP	FN:9	PRODUCER	02-Dec-2009 11:46	8808.0 FT	1178.5 FT
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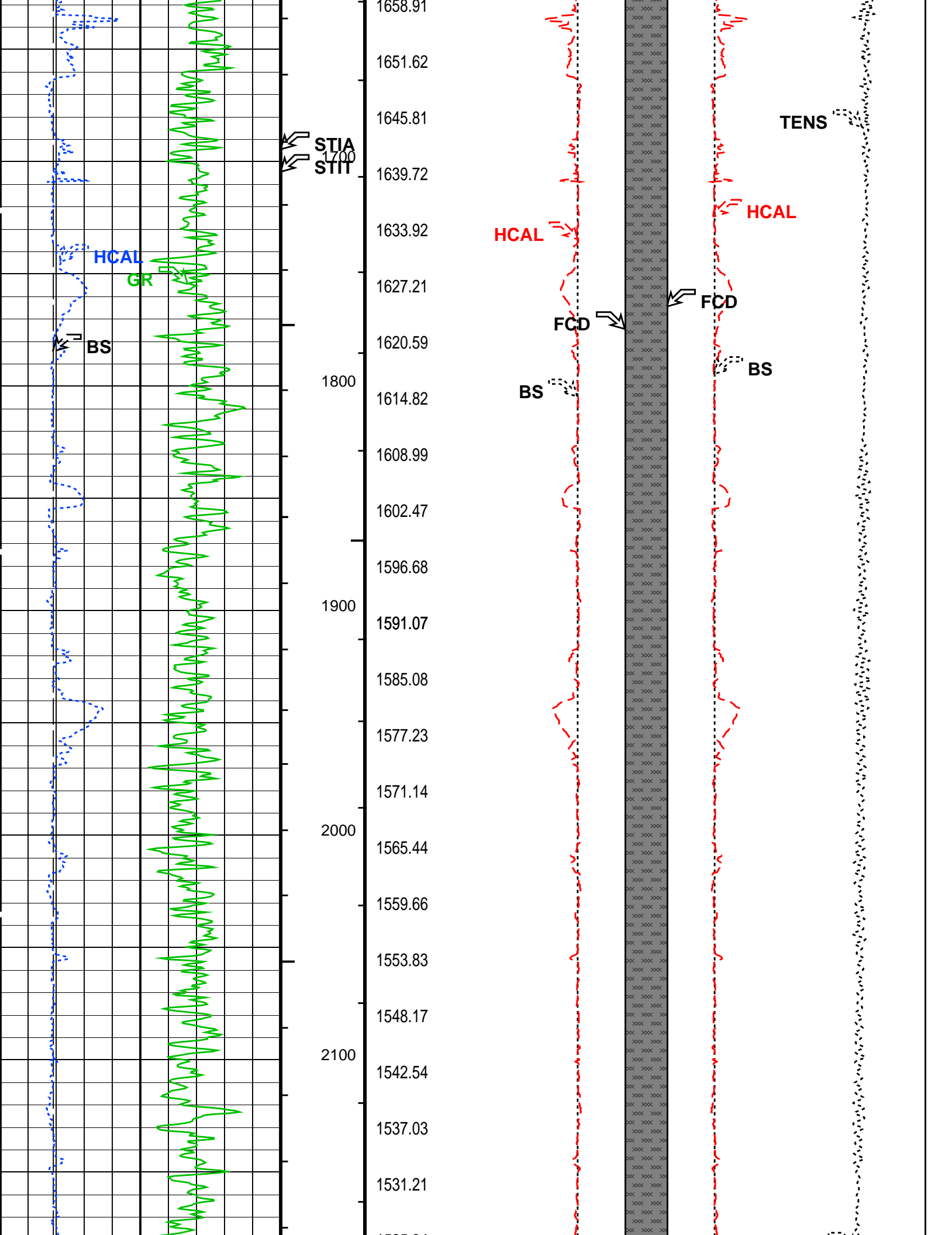
Computed from 8808.0 FT to 1220.0 FT using data channel(s) HCAL

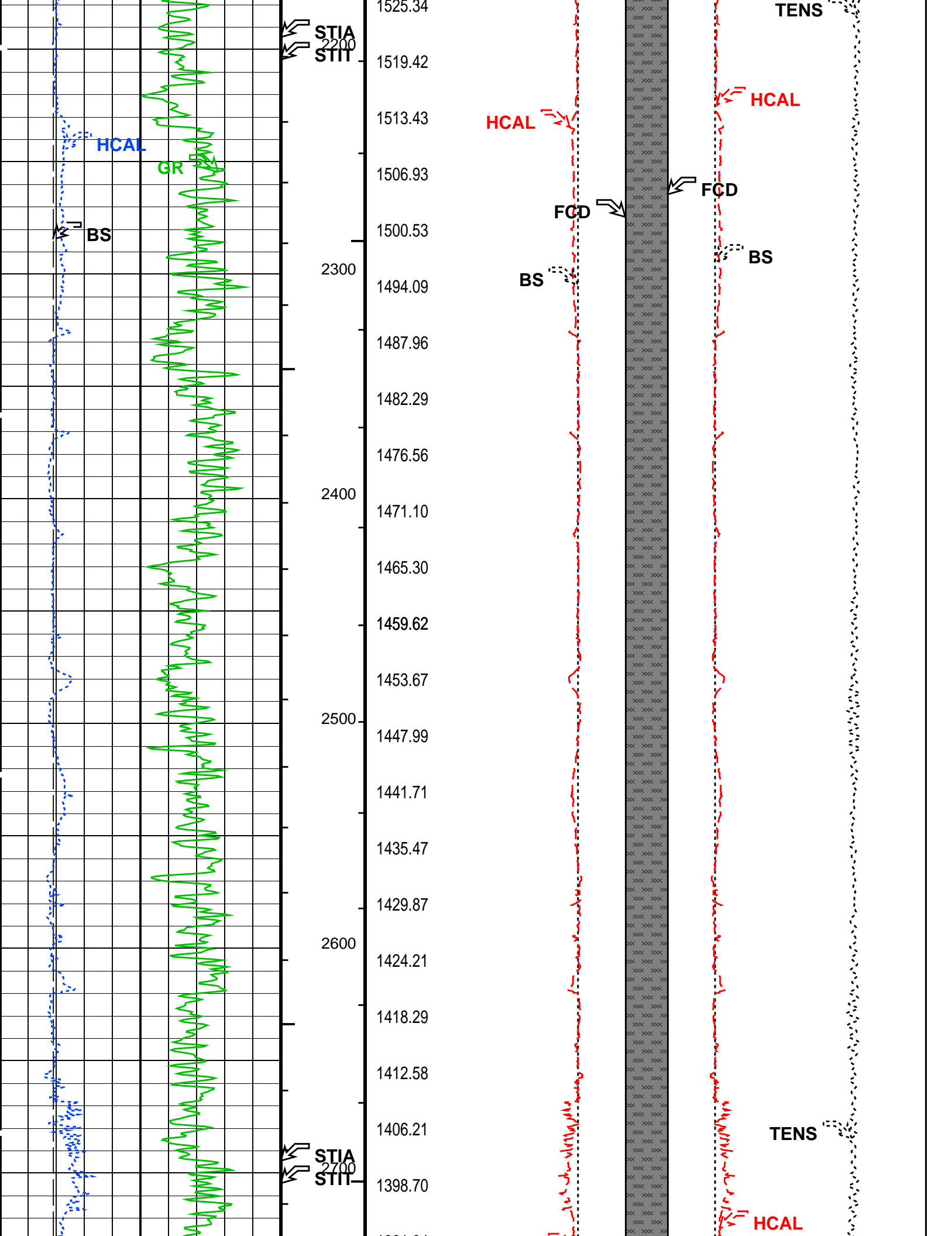
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DTC-H	17C0-154		

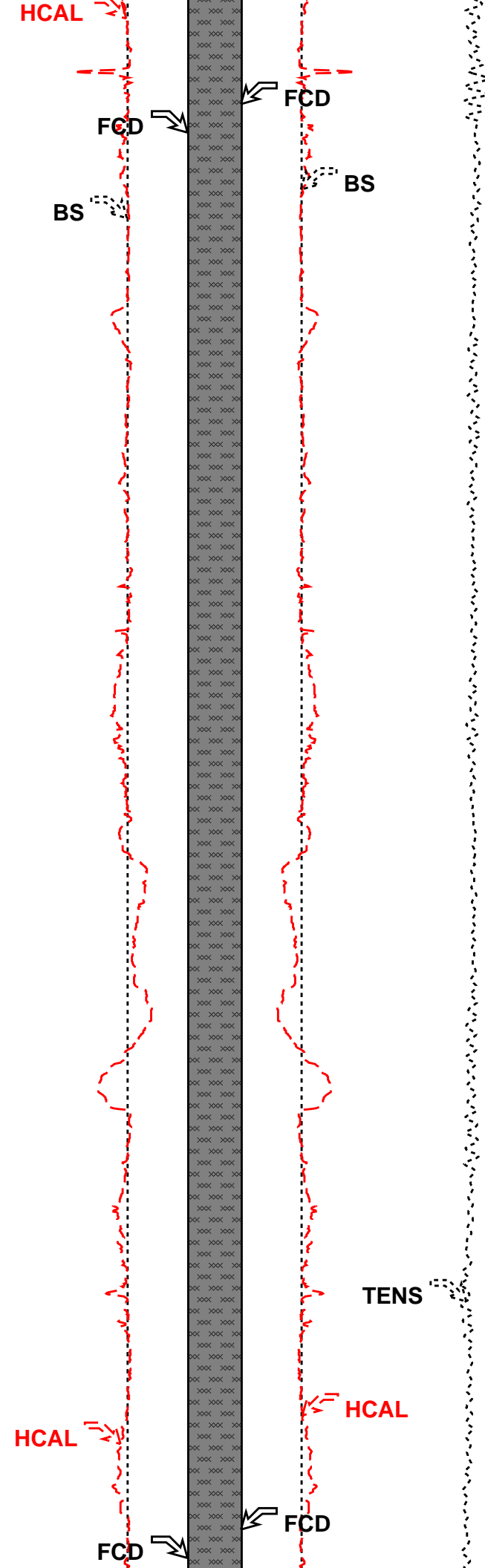
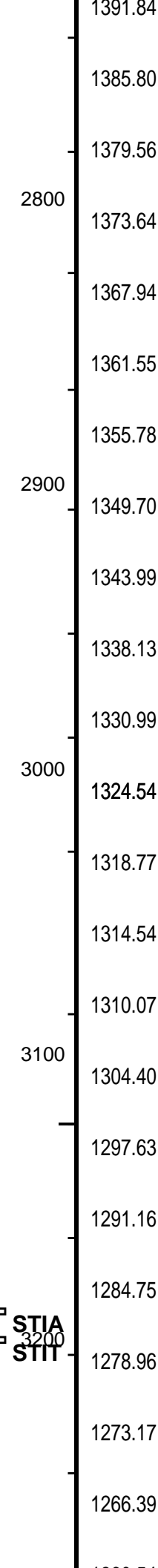
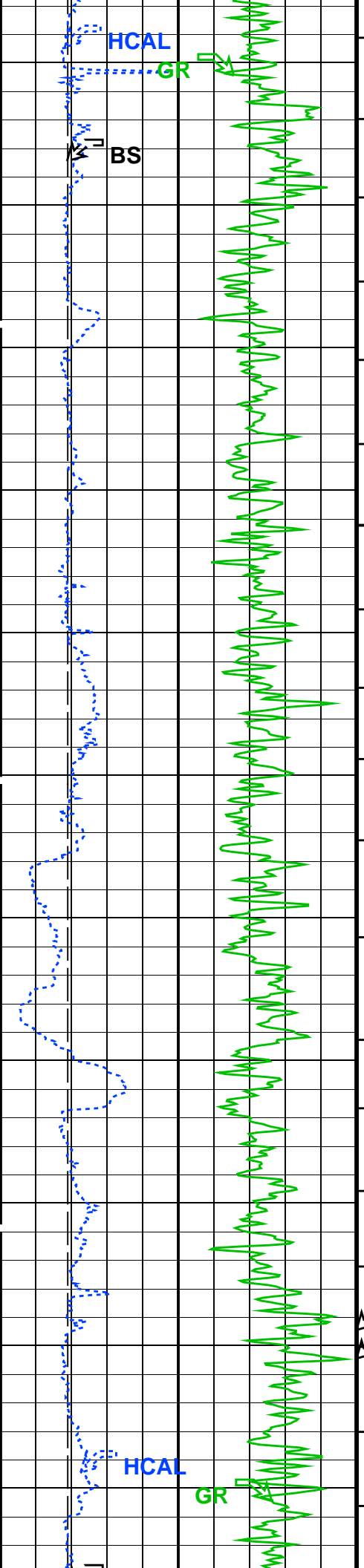
Time Mark Every 60 S

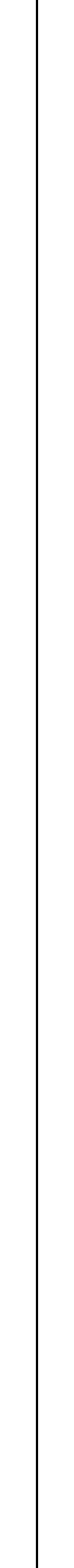
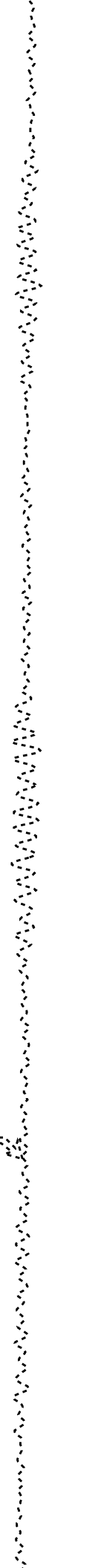
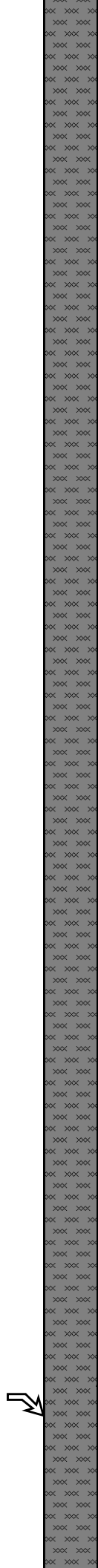
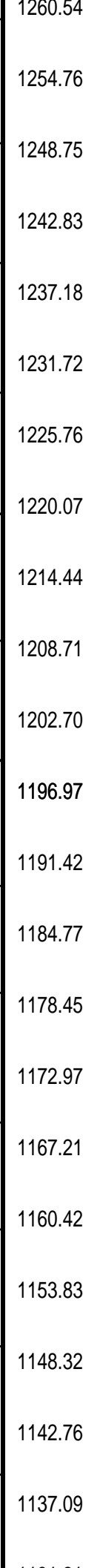
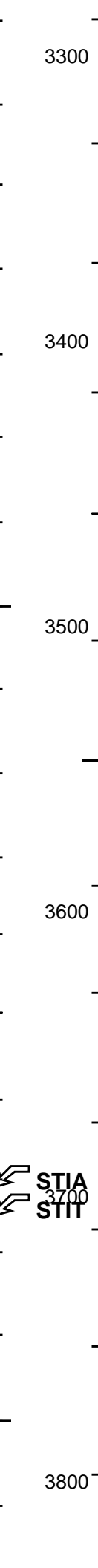
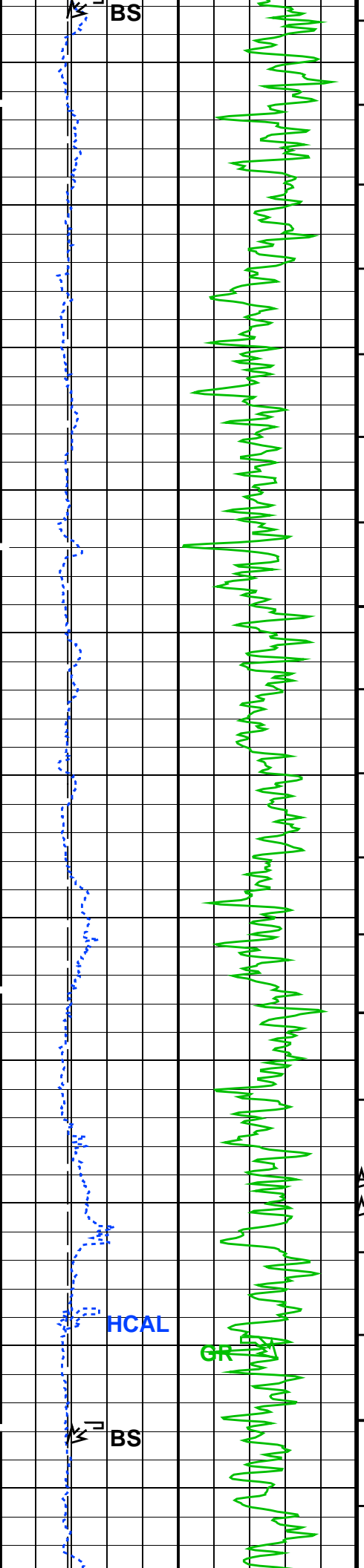
		<div style="border: 1px solid black; padding: 5px; text-align: center;"> FCD2 – FCD3 From FCD2 to FCD3 </div>	
		Cement Volume (ICV) (F3)	Tension (TENS) ----- (LBF)
			0
HILT Caliper (HCAL)	Tool/Tot. Drag	HILT Caliper (HCAL)	HILT Caliper (HCAL)

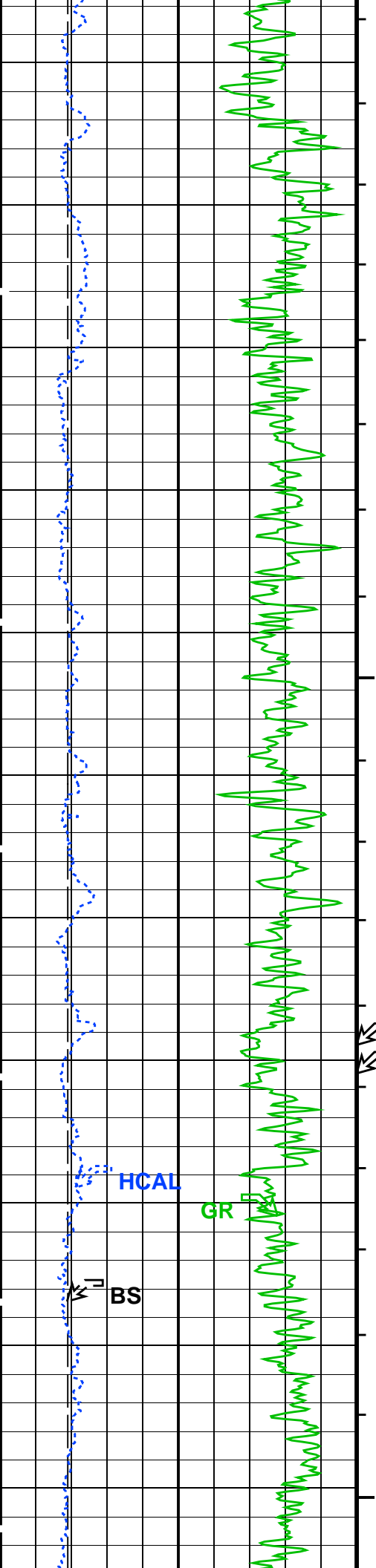




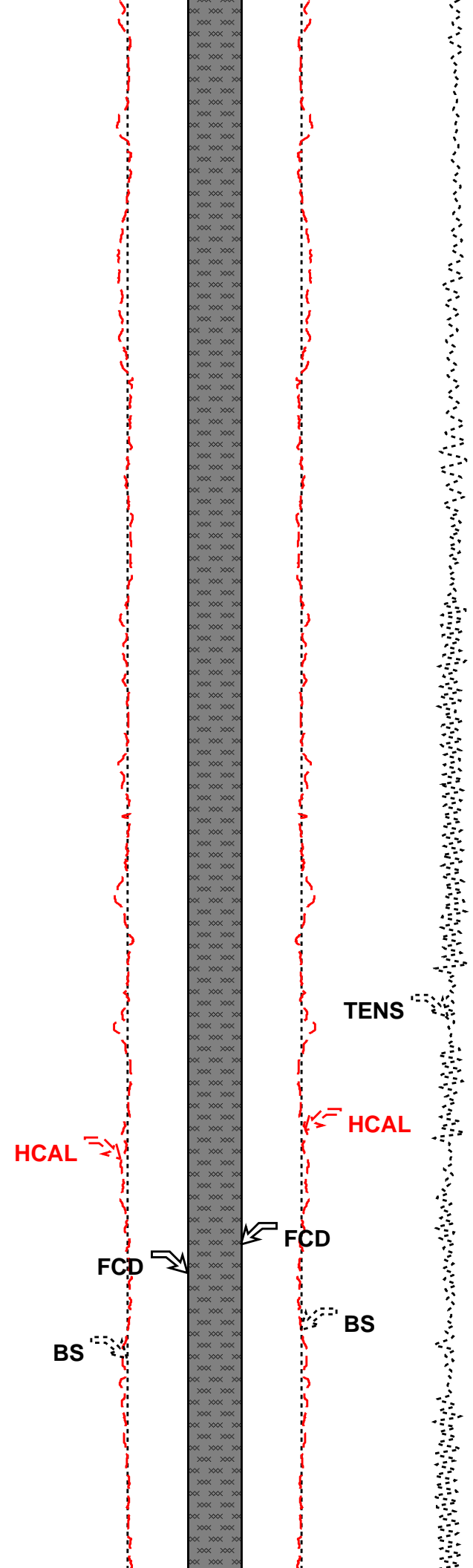




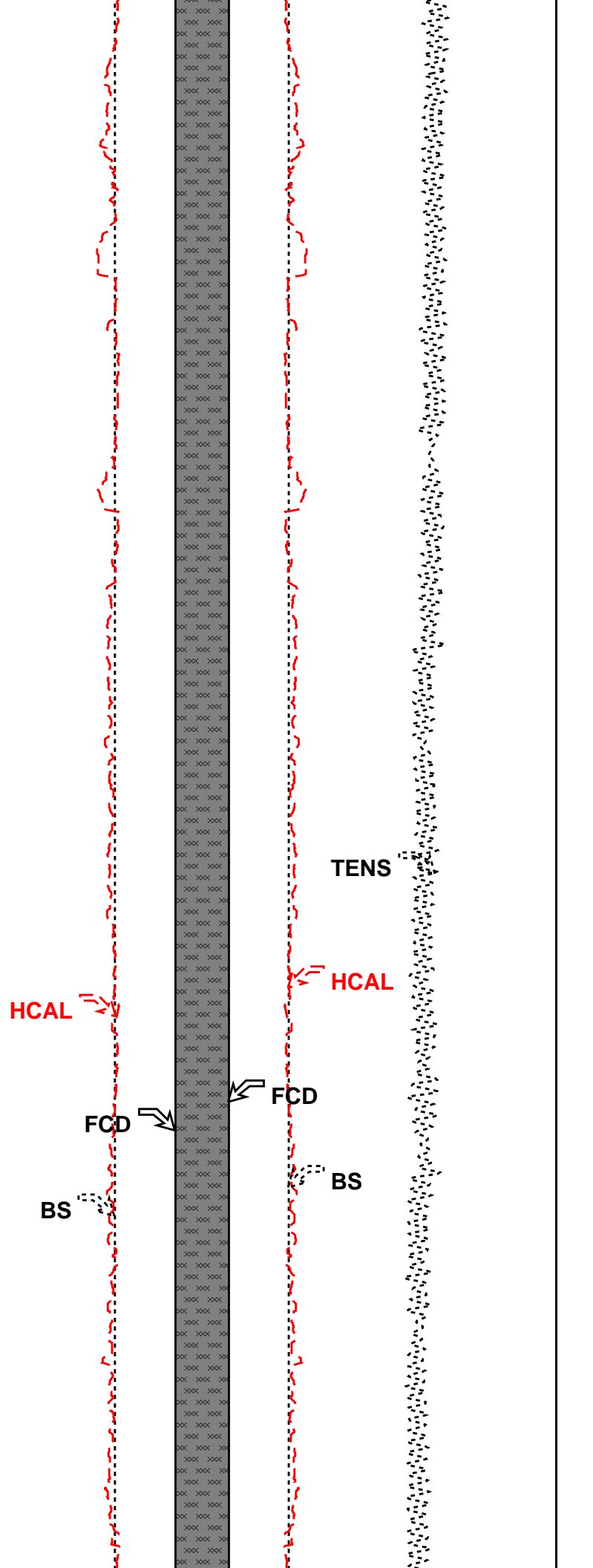
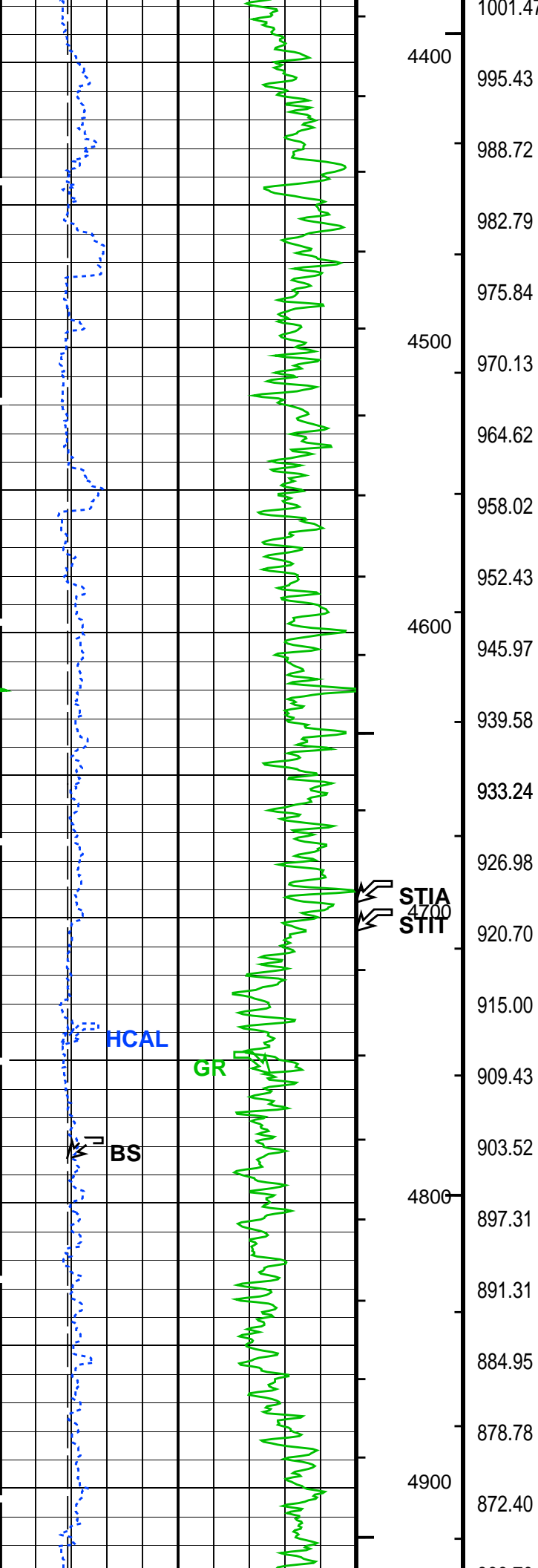


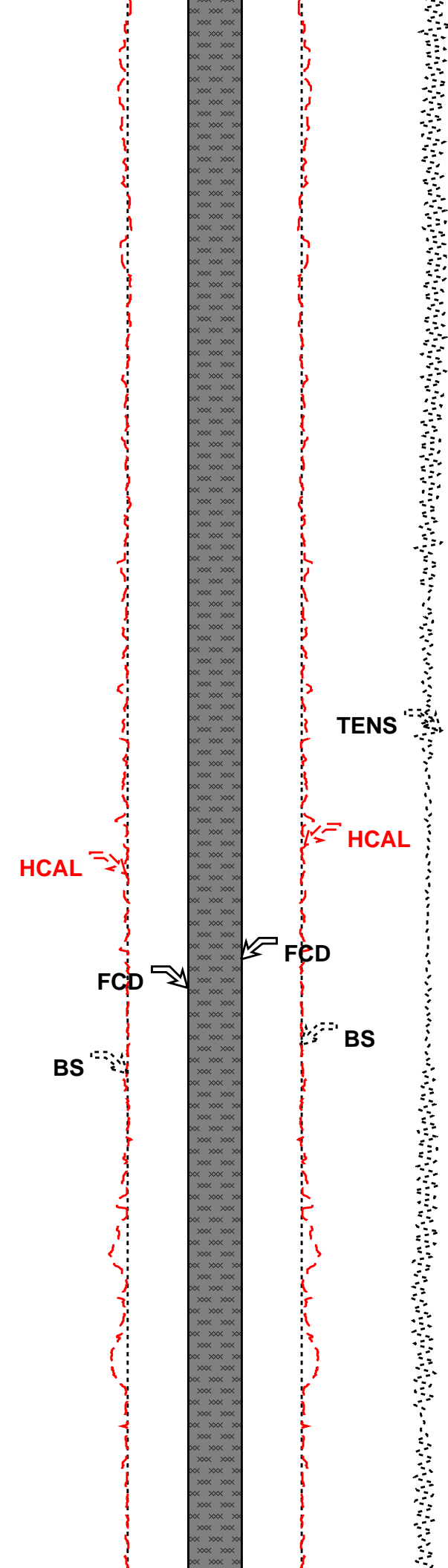
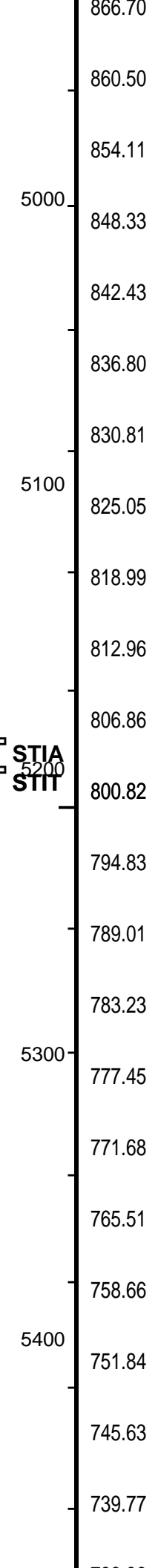
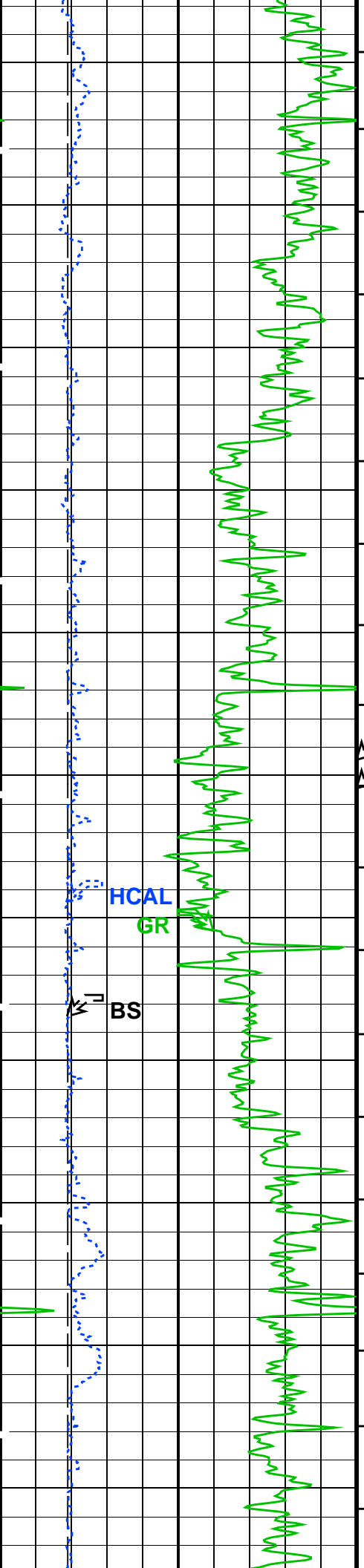


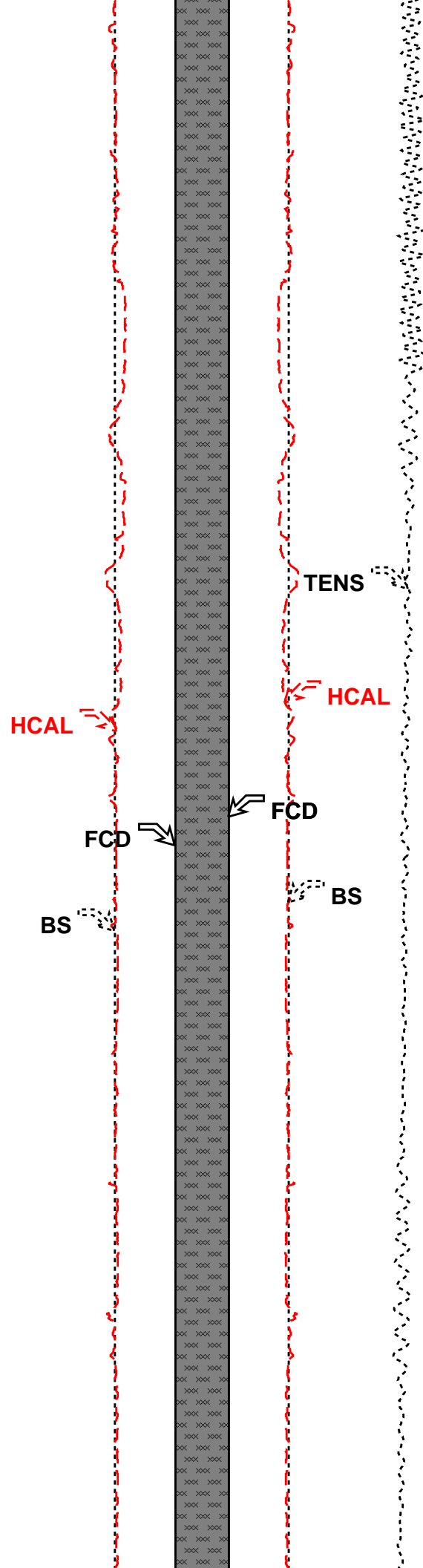
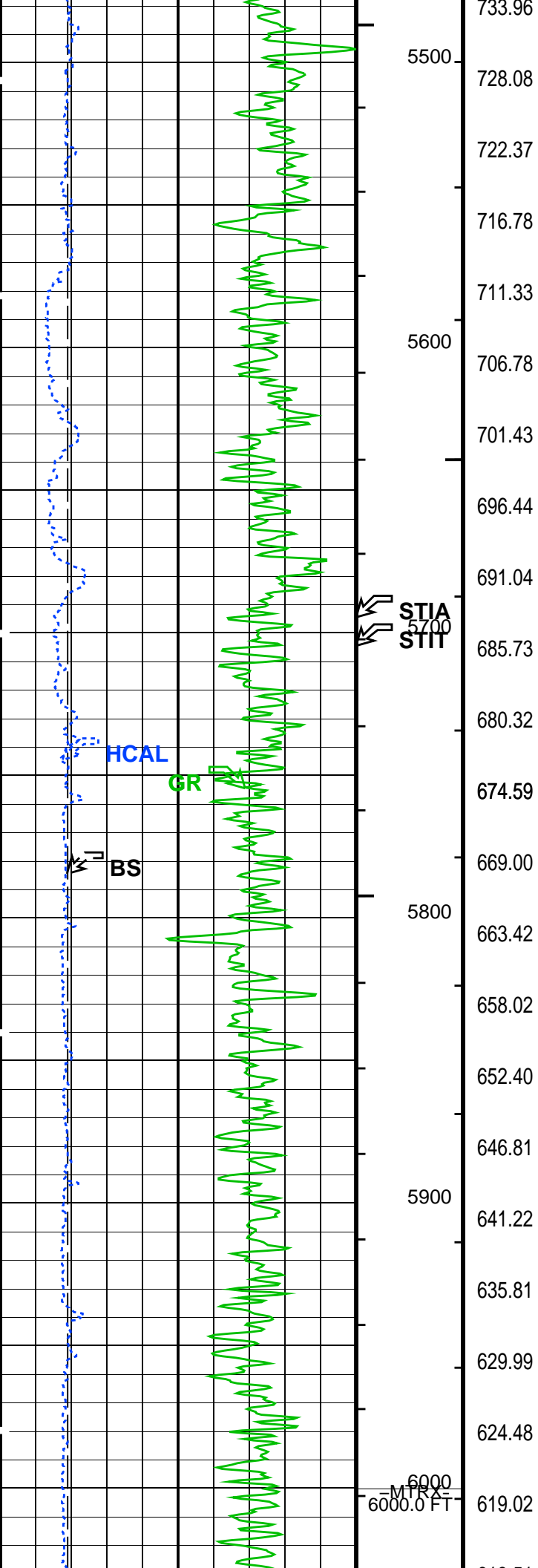
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1125.38
1119.26
1113.53
1106.85
1100.43
1095.03
1089.37
1084.05
1078.02
1072.20
1066.05
1060.33
1054.02
1048.34
1042.27
1036.48
1030.25
1024.65
1018.82
1012.64
1006.93

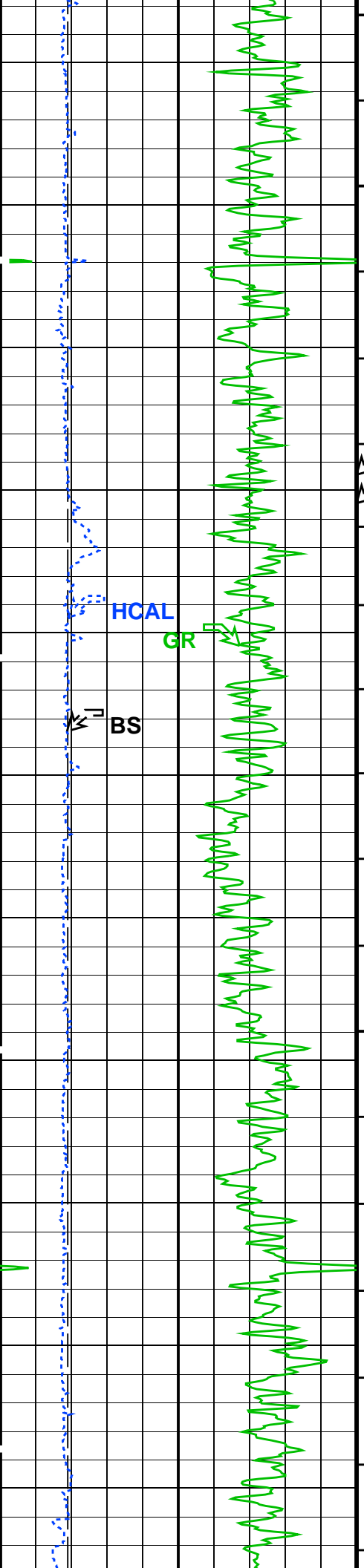


STIA
STII
4200
4300
HCAL
FCD
BS
TENS
HCAL
FCD
BS

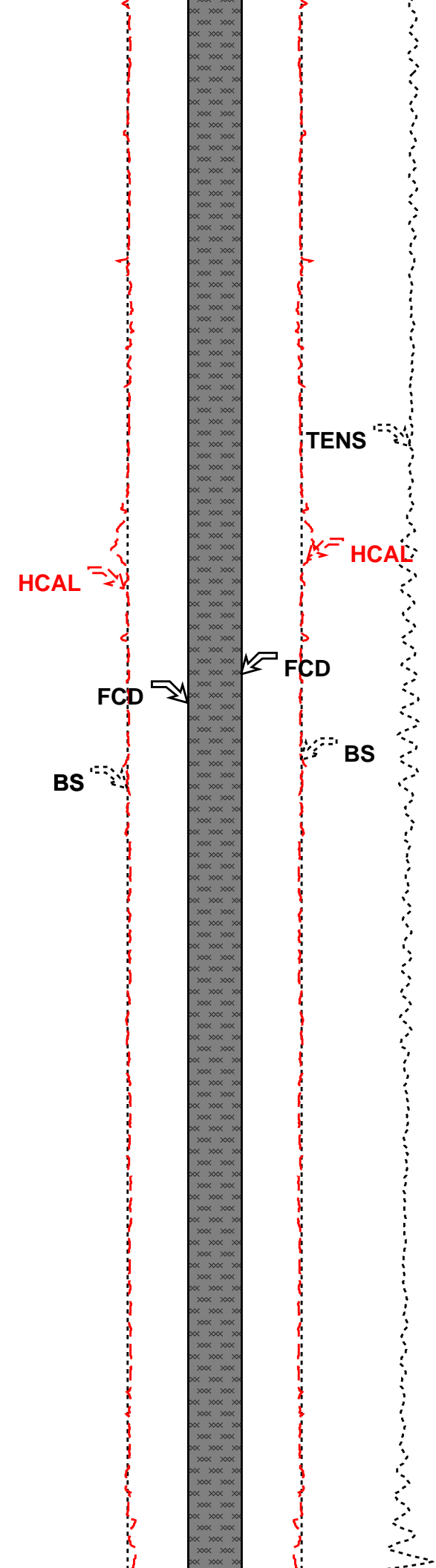


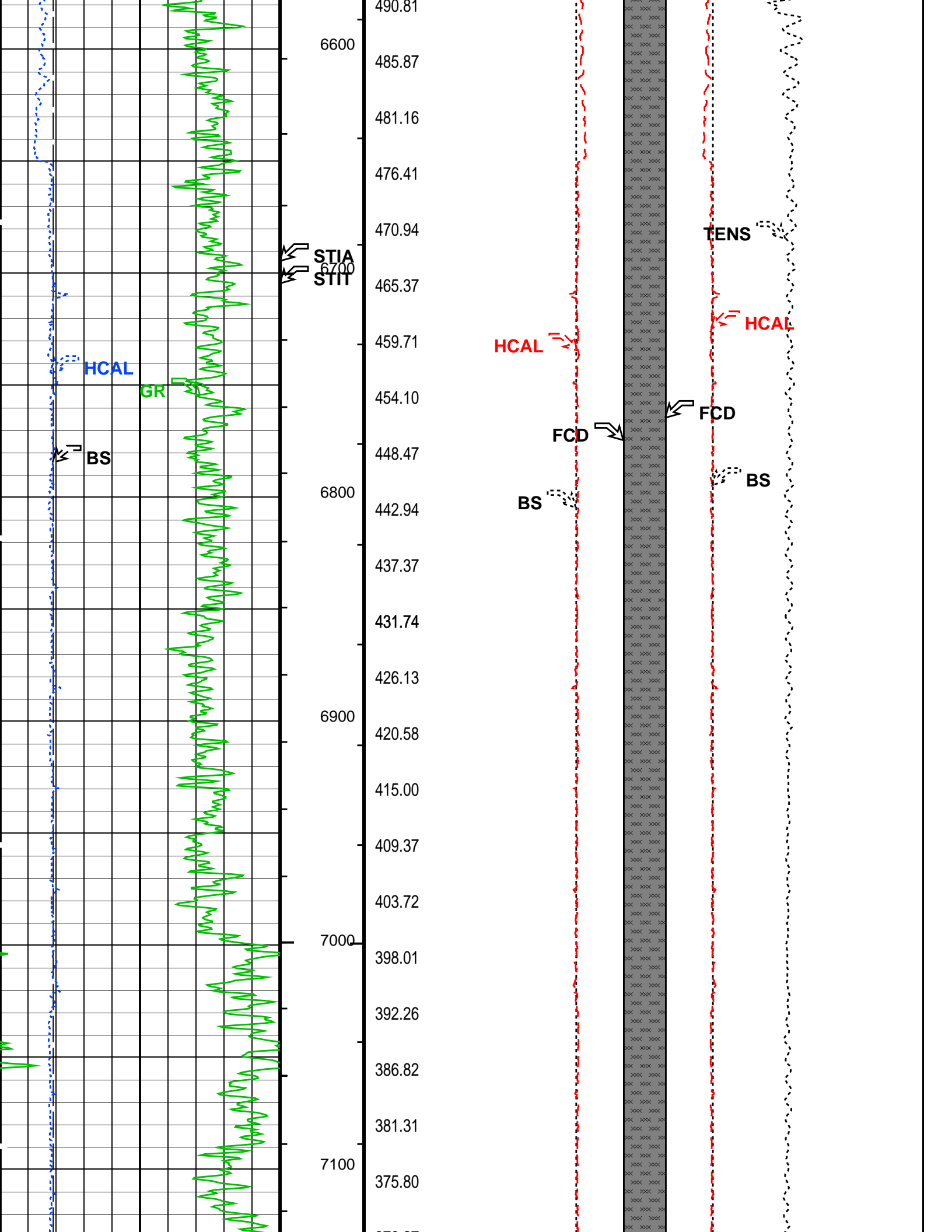


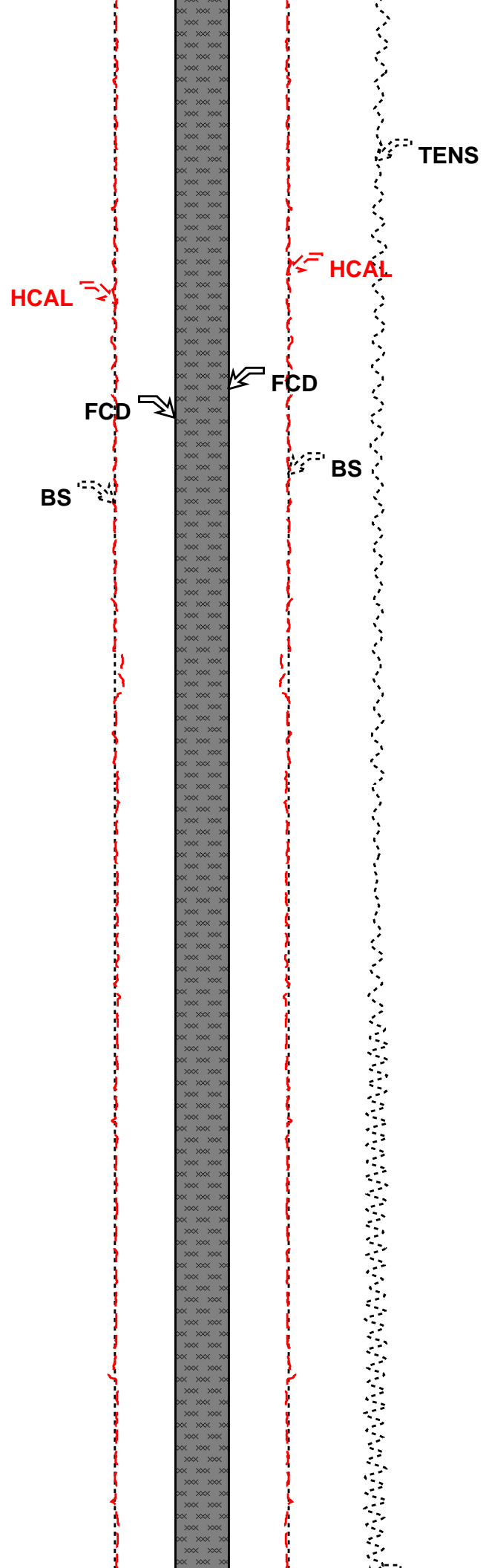
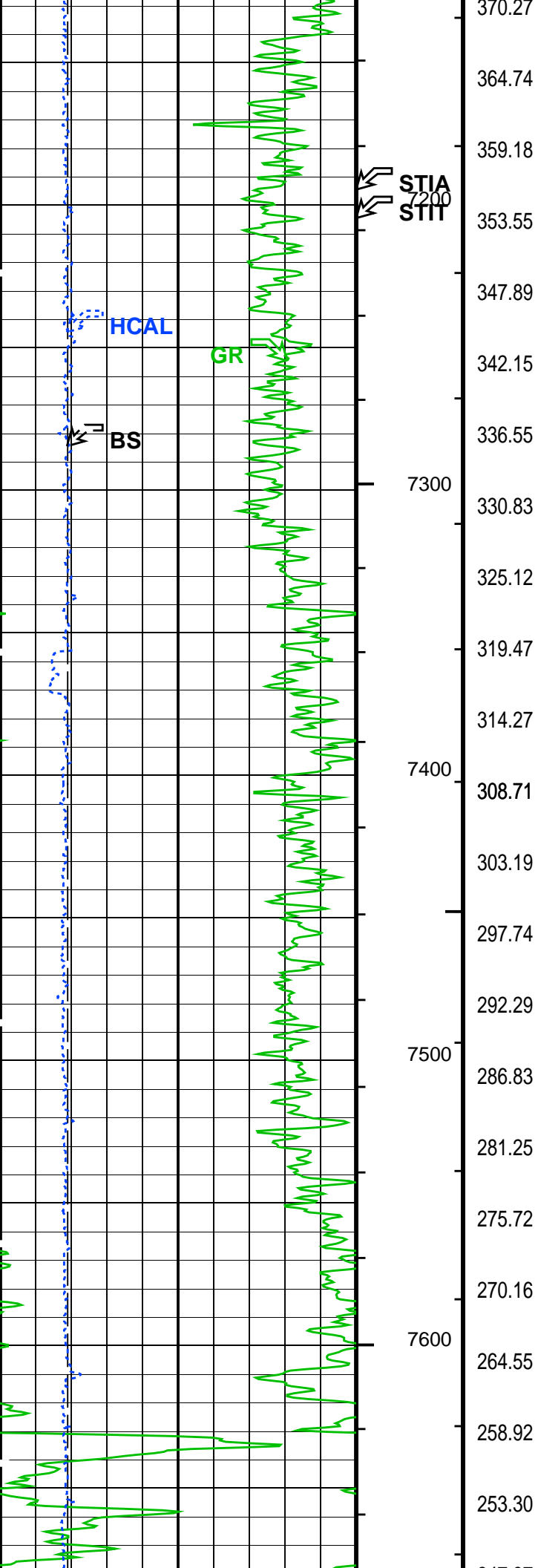


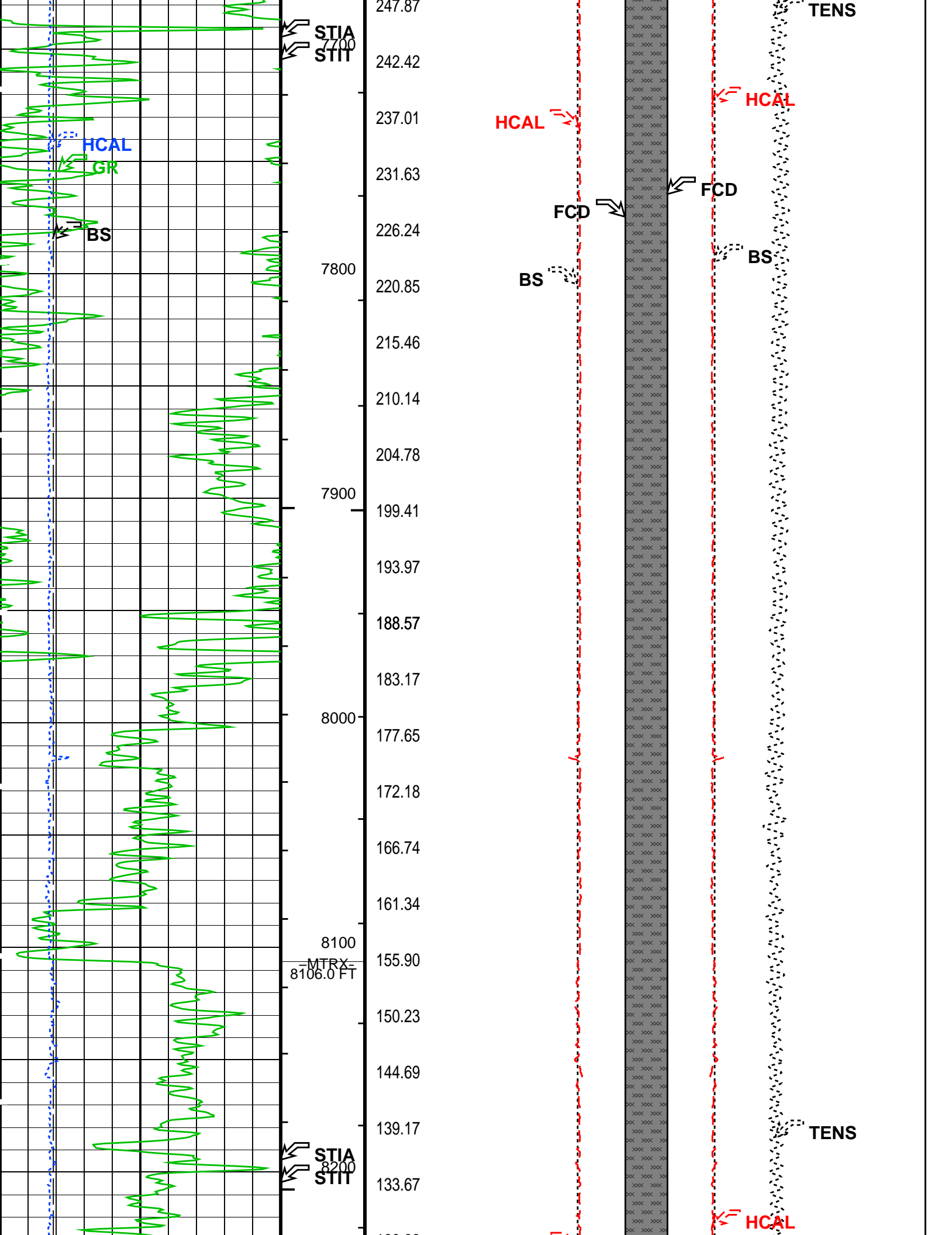


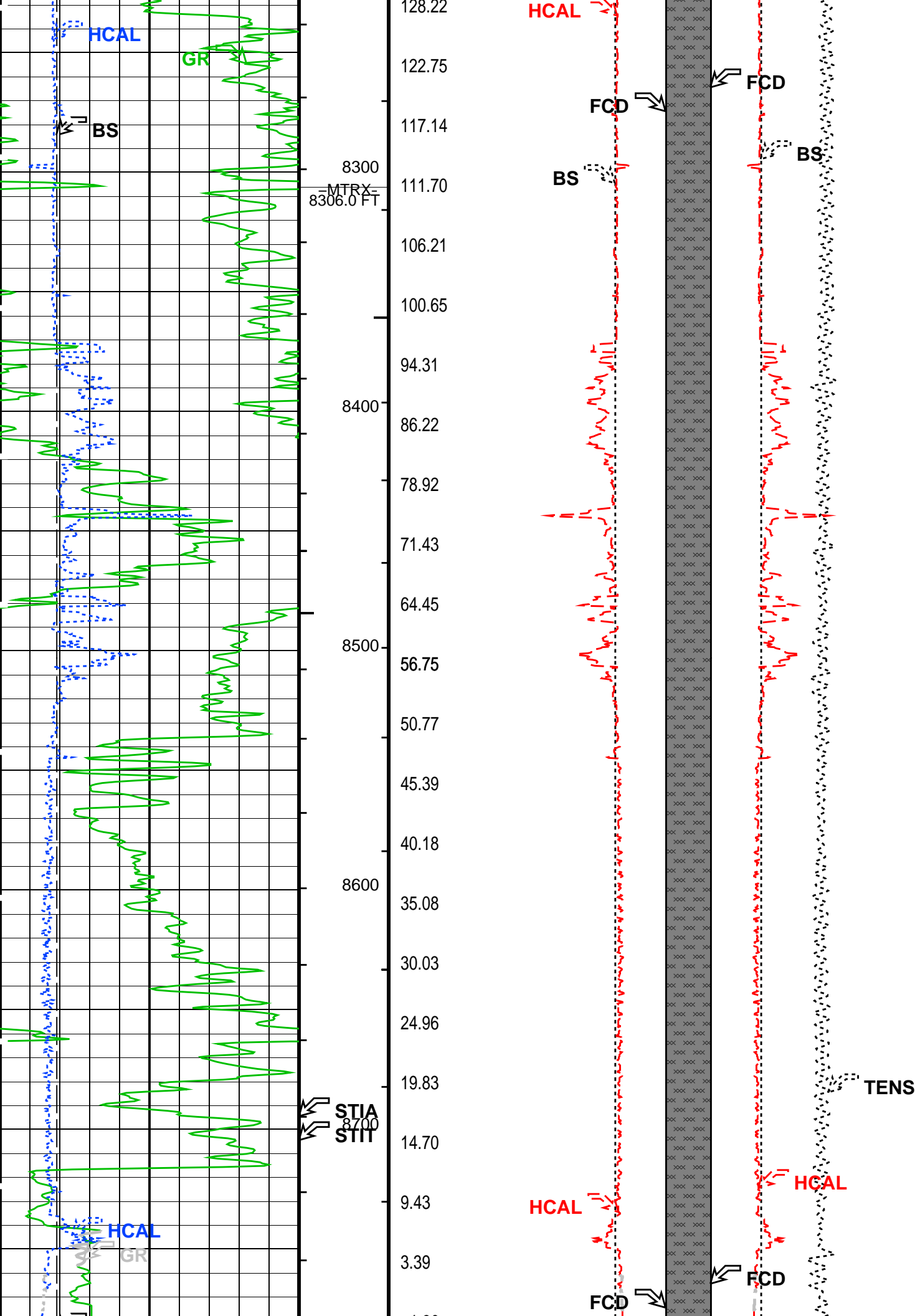
613.51
608.05
602.39
6100 596.87
591.25
585.87
580.32
6200 STIA
STII 574.57
568.06
562.31
556.67
6300 550.97
545.41
539.93
534.43
6400 528.74
523.30
517.89
512.42
6500 507.03
501.58
495.94

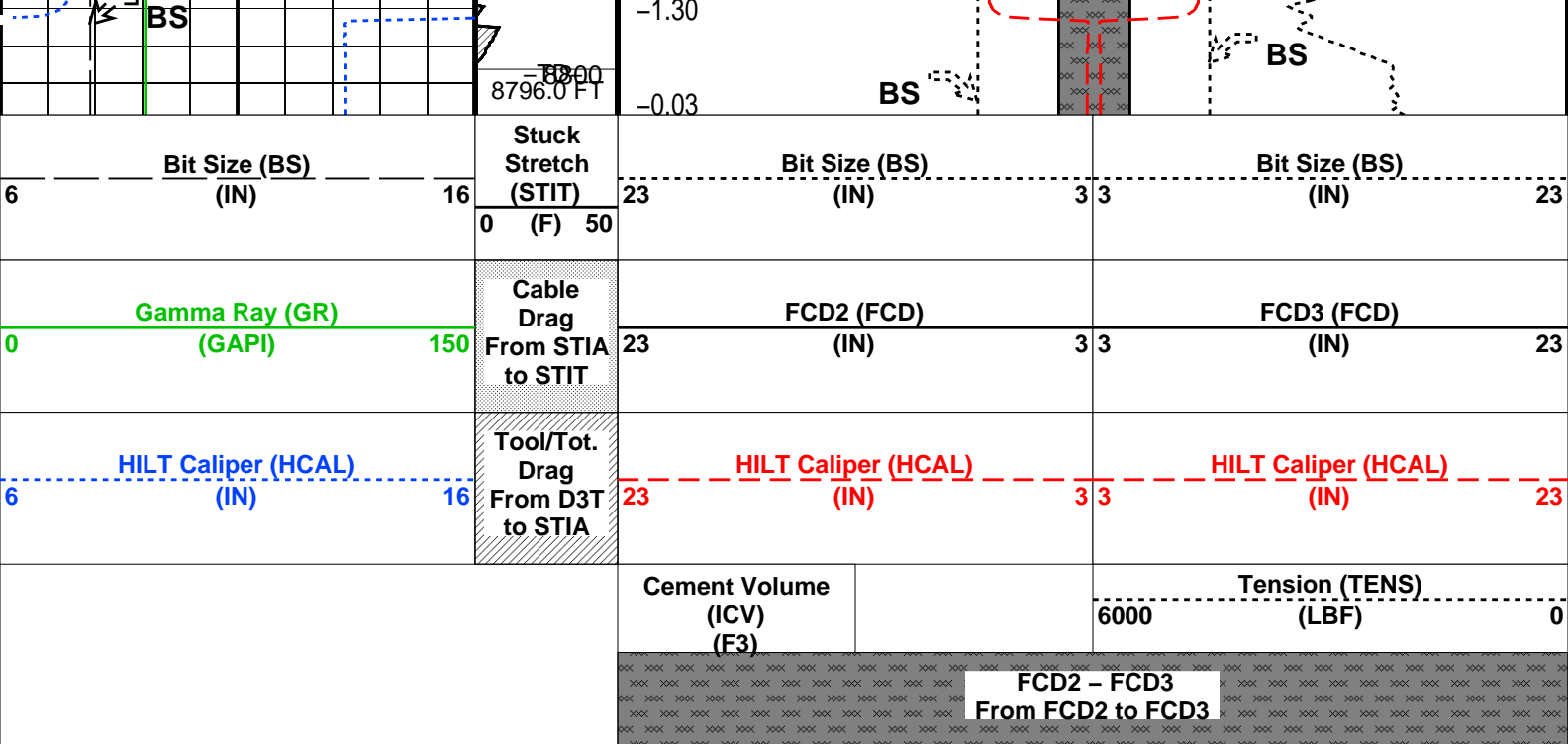












PIP SUMMARY

- └ Integrated Hole Volume Minor Pip Every 10 F3
- └ Integrated Hole Volume Major Pip Every 100 F3
 - └ Integrated Cement Volume Minor Pip Every 10 F3
 - └ Integrated Cement Volume Major Pip Every 100 F3

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
FCD	HOLEV: Integrated Hole/Cement Volume	
HVCS	Future Casing (Outer) Diameter	4.5 IN
	Integrated Hole Volume Caliper Selection	HCAL
	STI: Stuck Tool Indicator	
LBFR	Trigger for MAXIS First Reading Label	TDL
STKT	STI Stuck Threshold	2.5 FT
TDD	Total Depth - Driller	88870.00 FT
TDL	Total Depth - Logger	88870.00 FT
	System and Miscellaneous	
BS	Bit Size	7.875 IN
DORL	Depth Offset for Repeat Analysis	0.0 FT
TD	Total Depth	88870 FT

Format: G_DCAL_FORMAT Vertical Scale: 2" per 100' Graphics File Created: 02-Dec-2009 11:46

OP System Version: 17C0-154

AIT-M 17C0-154 HILTB-FTB 17C0-154
DTC-H 17C0-154

Output DLIS Files

DEFAULT AIT_TLD_MCFL_CNL_010LUP FN:9 PRODUCER 02-Dec-2009 11:46

Company: Kerr McGee Oil and Gas Onshore, LP

Schlumberger

Well: Parterre 13-16
Field: Spindle
County: Adams
State: Colorado

Platform Express

Cement Volume
Caliper