

Schlumberger

Company: **SANDIA TECHNOLOGIES, LLC**

Well: **NYSTA TANDEM LOT 1**

Field: **WILDCAT**

County: **ROCKLAND**

State: **NEW YORK**

POWERED POSITIONING CALIPER – PPC 4 ARM CALIPER LOG

LAT: 41.1039
LONG: -74.027

Elev.: K.B. 402.00 ft
G.L. 386.00 ft
D.F. 402.00 ft

Permanent Datum: _____ GROUND LEVEL _____ Elev.: 386.00 ft
Log Measured From: KELLY BUSHING 16.00 ft above Perm. Datum
Drilling Measured From: KELLY BUSHING

County: **ROCKLAND**
Field: **WILDCAT**
Location: **LAT: 41.1039**
Well: **NYSTA TANDEM LOT 1**
Company: **SANDIA TECHNOLOGIES, LLC**

LOCATION					
Permanent Datum: _____	GROUND LEVEL _____	Elev.: 386.00 ft			
Log Measured From: <u>KELLY BUSHING</u>		16.00 ft	above Perm. Datum		
Drilling Measured From: <u>KELLY BUSHING</u>					
API Serial No. 31-087-27016-00-00	Section _____	Township CLARKSTOWN	QUAD _____		

Logging Date: 31-Aug-2011

Run Number: 1

Depth Driller: 1528 ft

Schlumberger Depth: 1500 ft

Bottom Log Interval: 1482 ft

Top Log Interval: 602 ft

Casing Driller Size @ Depth: 13.375 in @ 603 ft

Casing Schlumberger: 602 ft

Bit Size: 12.250 in

Type Fluid In Hole: FRESH WATER BASED MUD

Density: 9.3 lbm/gal

Fluid Loss: _____

PH: _____

Source Of Sample: MEASURED

RM @ Measured Temperature: 6.690 ohm.m @ 77 degF

RMF @ Measured Temperature: 5.017 ohm.m @ 77 degF

RMC @ Measured Temperature: 10.035 ohm.m @ 77 degF

Source RMF: CALCULATED

RM @ MRT: 7.490 @ 68 5.617 @ 68

Maximum Recorded Temperatures: 68 degF

Circulation Stopped: _____ Time _____

Logger On Bottom: 31-Aug-2011 17:00

Unit Number: 3039 BRADFORD

Recorded By: TIM ZOTARA

Witnessed By: DAN COLLINS

Run 1

Run 2

Run

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

Fluid Loss

PH

Source Of Sample

RM @ Measured Temperature

RMF @ Measured Temperature

RMC @ Measured Temperature

Source RMF

RM @ MRT

Maximum Recorded Temperatures

Circulation Stopped

Logger On Bottom

Unit Number

Recorded By

Witnessed By

MUD

MEASURED

MEASURED

MEASURED

MEASURED

MEASURED

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DEPTH SUMMARY LISTING

Date Created: 31-AUG-2011 1:45:23

Depth System Equipment

Depth Measuring Device	Tension Device	Logging Cable
Type: IDW-B Serial Number: 2828 Calibration Date: 1-JAN-2011 Calibrator Serial Number: 33 Calibration Cable Type: 7-39P LXS Wheel Correction 1: -5 Wheel Correction 2: -4	Type: CMTD-B/A Serial Number: 2929 Calibration Date: 2-AUG-2011 Calibrator Serial Number: 1095 Number of Calibration Points: 10 Calibration RMS: 45 Calibration Peak Error: 71	Type: 7-39P LXS Serial Number: 3039 Length: 13300 FT Conveyance Method: Wireline Rig Type: LAND

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:
Tool Zero Check At Surface: 0.50 FT

Depth Control Remarks

<ol style="list-style-type: none"> 1. ALL SCHLUMBERGER DEPTH CONTROL POLICIES FOLLOWED 2. IDW USED AS PRIMARY DEPTH DEVICE 3. Z-CHART USED AS SECONDARY DEPTH DEVICE 4. 5. 6.

DISCLAIMER

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 SERVICES1 OS1: PEX-AIT OS2: CMR-ECS-HNGS OS3: PPC-SSCAN-FMI OS4: MDT-MSCT OS5: CBL/VDL-USIT	OTHER SERVICES2 OS1: OS2: OS3: OS4: OS5:
REMARKS: RUN NUMBER 1	REMARKS: RUN NUMBER 2
THANK YOU FOR CHOOSING SCHLUMBERGER	
TOOLS RUN AS PER TOOL SKETCH, W/BOWSPRING & STANDOFFS ON AIT	
ALL WELLSITE DATA, PERMIT, MUD REPORT, SOP PROVIDED BY CLIENT	
RUN1: PEX-AIT RUN2: CMR-ECS-HNGS RUN3: PPC-SSCAN-FMI	
RUN4: MSCT RUN5: MDT RUN6: CBL/VDL-USIT	

GEO REQUESTED MATR = SANDSTONE / MDEN = 2.65 G/CC
 3 MAX TEMP THERMOMETERS RUN IN HEAD, PER RUN, MAX TEMP FROM HTEM.
 RUN1 LOGGED AT: REPEAT & MAIN @ 1600'/HR
 CMR TUNED @ 1184'

SLB CREW: THIMLAR / CANNON

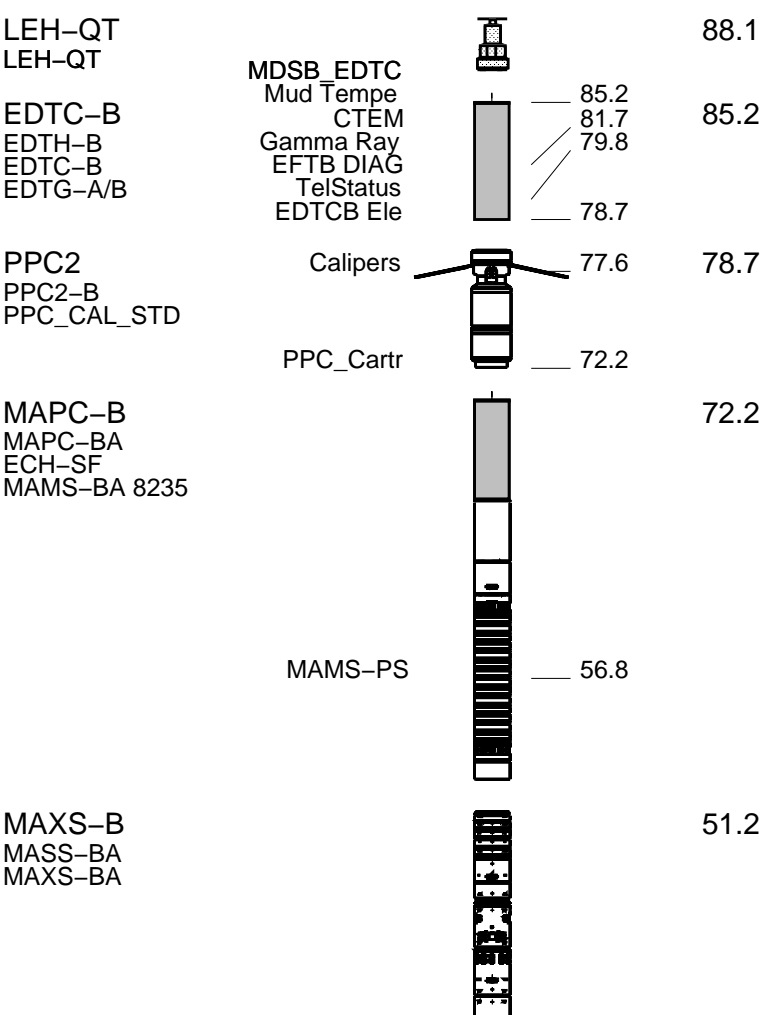
RUN 1			RUN 2		
SERVICE ORDER #:	AXPS-00185		SERVICE ORDER #:		
PROGRAM VERSION:	19C0-187		PROGRAM VERSION:		
FLUID LEVEL:	0 ft		FLUID LEVEL:		
LOGGED INTERVAL	START	STOP	LOGGED INTERVAL	START	STOP

EQUIPMENT DESCRIPTION

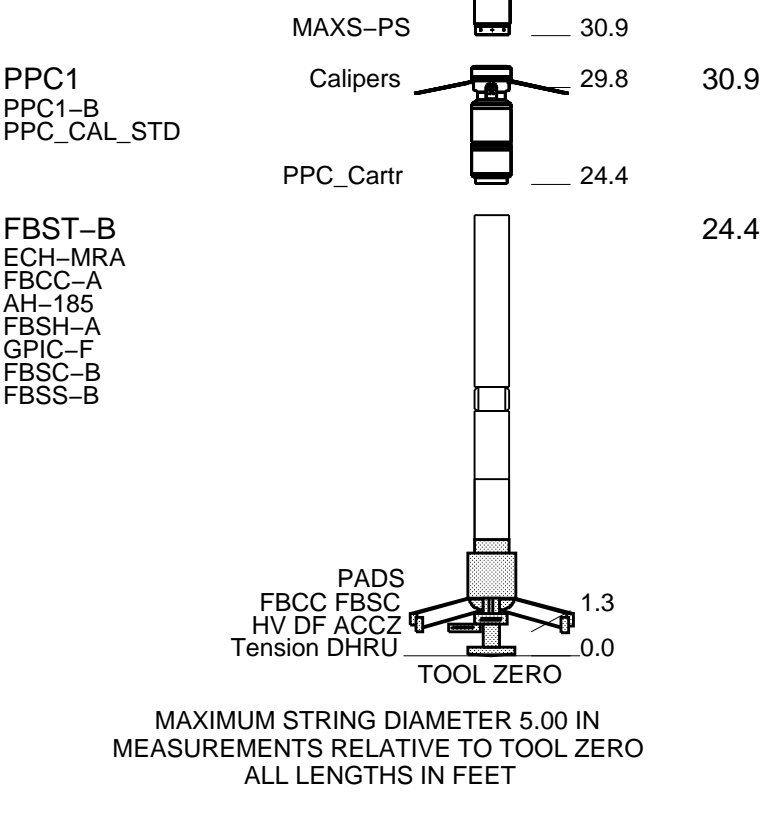
RUN 1 RUN 2

SURFACE EQUIPMENT
 WITM (EDTS)-A

DOWNHOLE EQUIPMENT



RUN 2



Company: SANDIA TECHNOLOGIES, LLC Well: NYSTA TANDEM LOT 1

Input DLIS Files

DEFAULT	FMI_CAL_MAXS_MAPC_074PUP	FN:110	PRODUCER	31-Aug-2011 20:42	1500.0 FT	82.5 FT
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Output DLIS Files

DEFAULT	FMI_CAL_MAXS_MAPC_084PUP	FN:127	PRODUCER	31-Aug-2011 22:40	1500.0 FT	82.5 FT
RTB	FMI_CAL_MAXS_MAPC_084PUP	FN:128	PRODUCER	31-Aug-2011 22:40	1500.0 FT	82.5 FT

Integrated Hole/Cement Volume Summary

Hole Volume = 106.68 F3
 Cement Volume = 46.04 F3 (assuming 9.63 IN casing O.D.)
 Computed from 1500.0 FT to 1380.5 FT using data channel(s) CRD1_PPC1 CRD2_PPC1 CRD3_PPC1 CRD4_PPC1

OP System Version: 19C0-187

FBST-B	19C0-187	PPC1	19C0-187
MAXS-B	19C0-187	MAPC-B	19C0-187
PPC2	19C0-187	EDTC-B	19C0-187

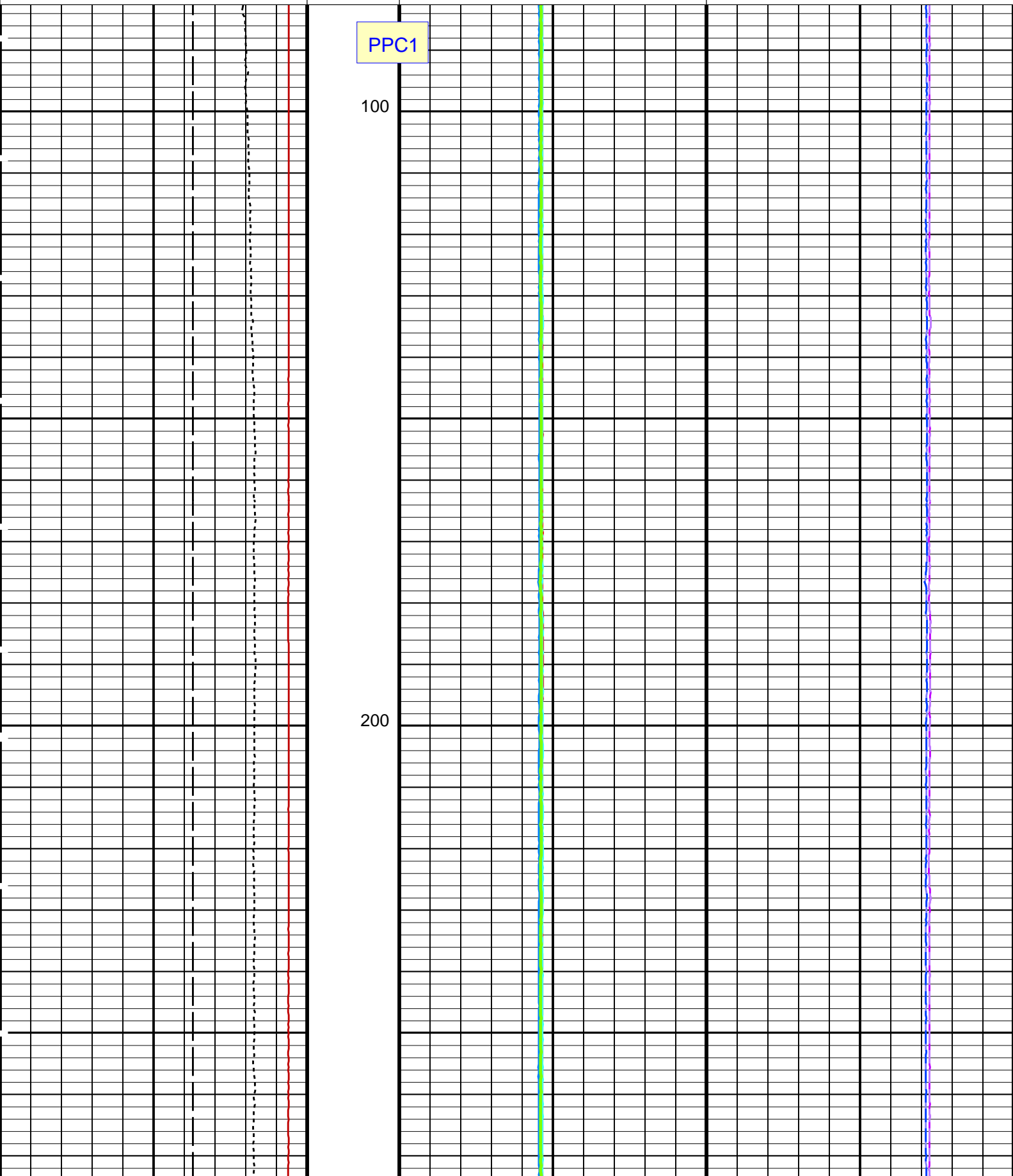
PIP SUMMARY

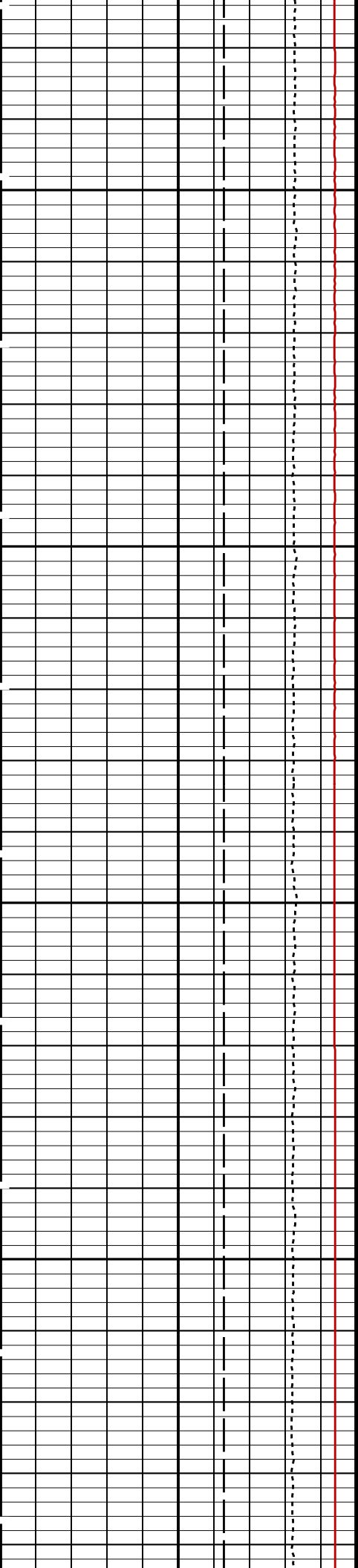
- └ Integrated Hole Volume Minor Pip Every 10 F3
- └ Integrated Hole Volume Major Pip Every 100 F3
 - └ Integrated Cement Volume Minor Pip Every 10 F3
 - └ Integrated Cement Volume Major Pip Every 100 F3

Time Mark Every 60 S

		PPC1 Radius 4 (CRD4_PPC1)	PPC1 Hole Diameter 2 (HD2_PPC1)
		2 (IN) 12 6	(IN) 16
Tension (TENS) (LBF)	Tool/Tot. Drag From D3T to STIA	PPC1 Radius 3 (CRD3_PPC1)	PPC1 Hole Diameter 1 (HD1_PPC1)
10000	0	2 (IN) 12 6	(IN) 16

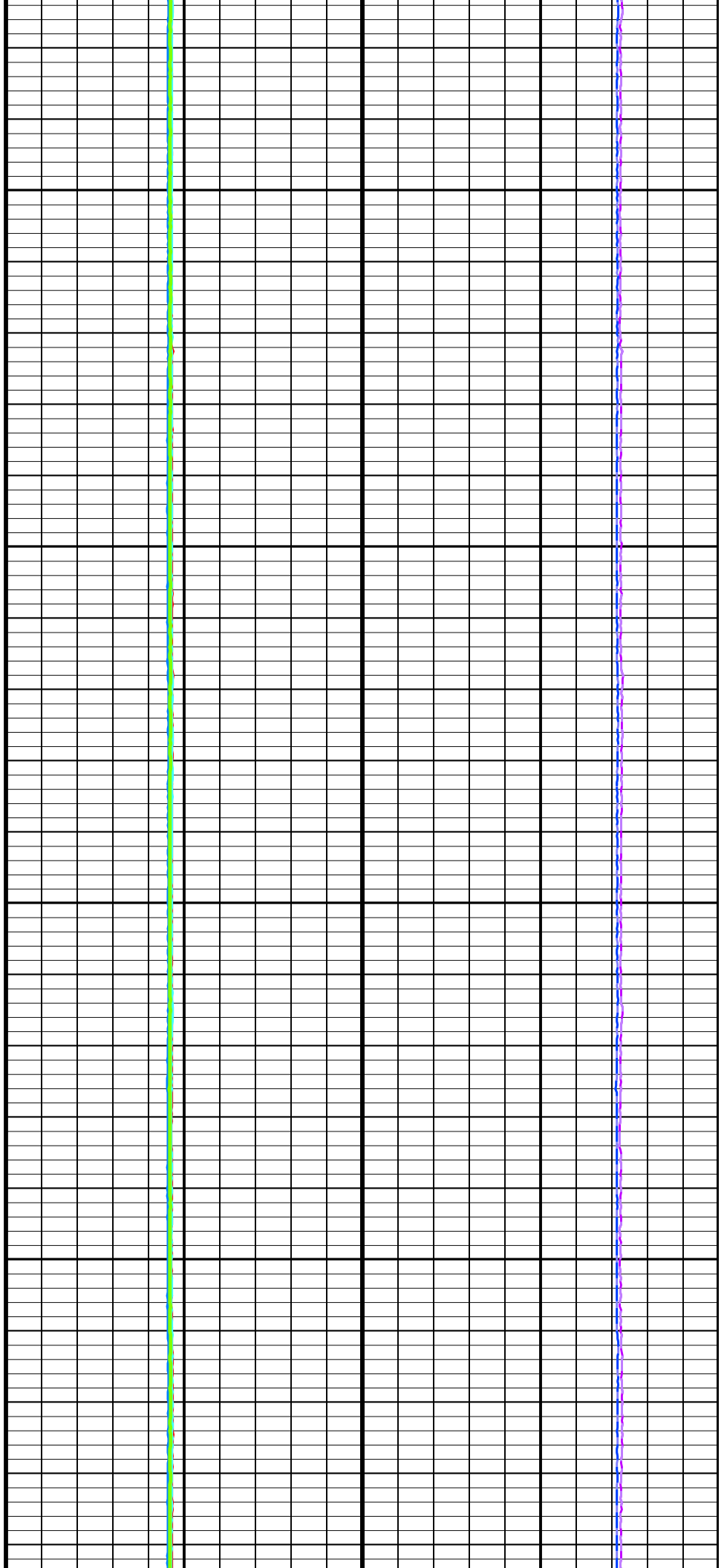
PPC1 Relative Bearing (RB_PPC1) (DEG)	Cable Drag From STIA to STIT	PPC1 Radius 2 (CRD2_PPC1) (IN)	PPC1 Ellipse Hole Diameter 2 (EHD2_PPC1) (IN)
0 360		2 12	6 16
Bit Size (BS) (IN)	Stuck Stretch (STIT) (F) 50	PPC1 Radius 1 (CRD1_PPC1) (IN)	PPC1 Ellipse Hole Diameter 1 (EHD1_PPC1) (IN)
6 16	0	2 12	6 16

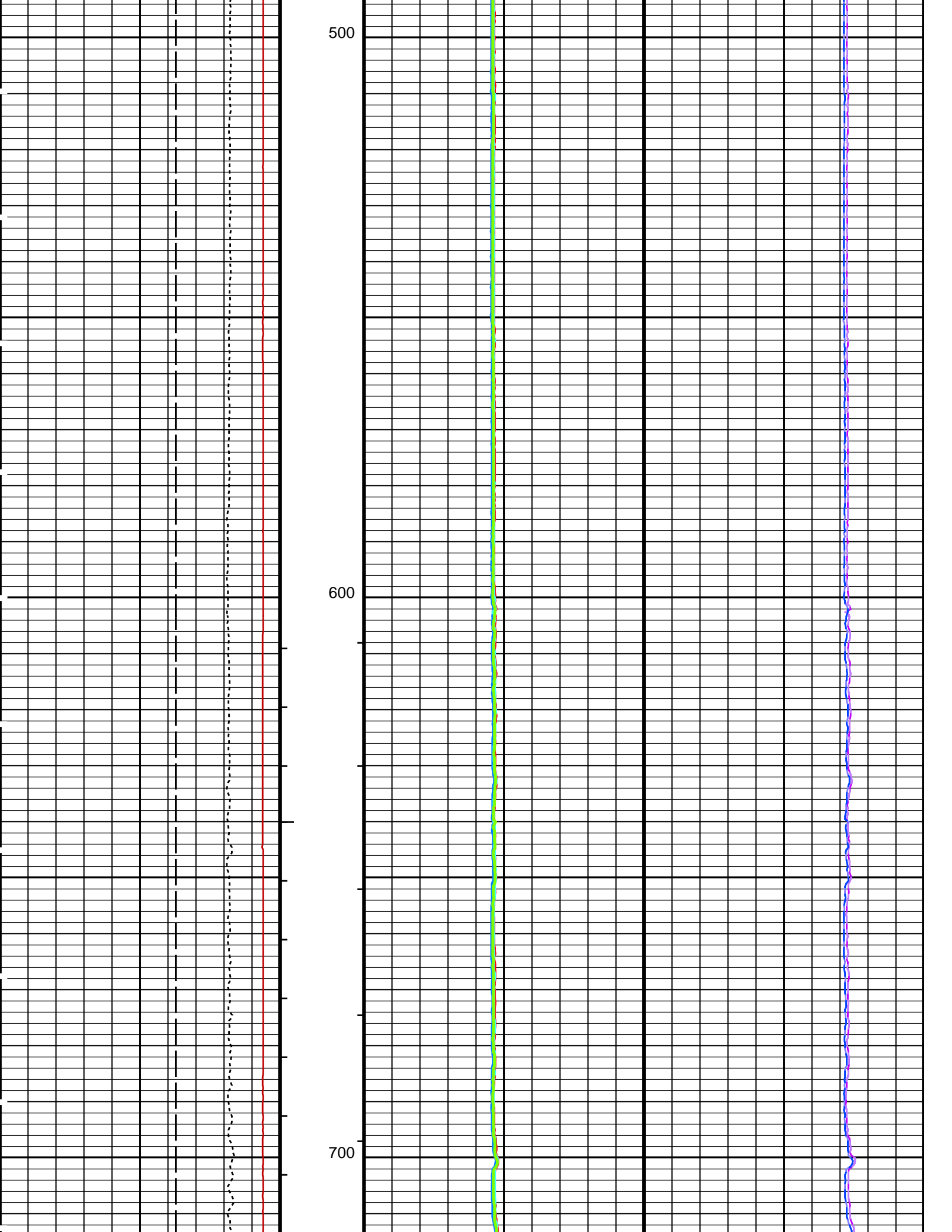


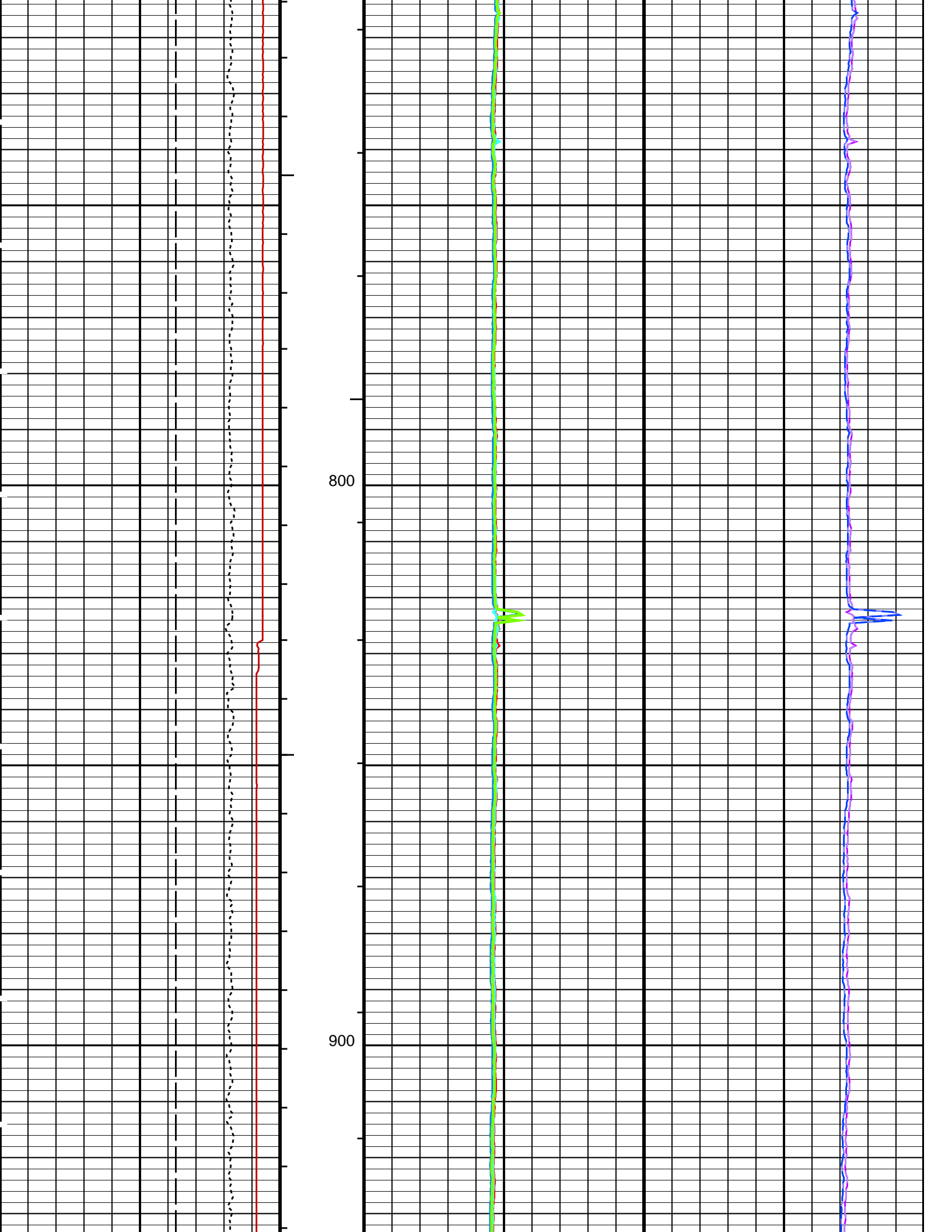


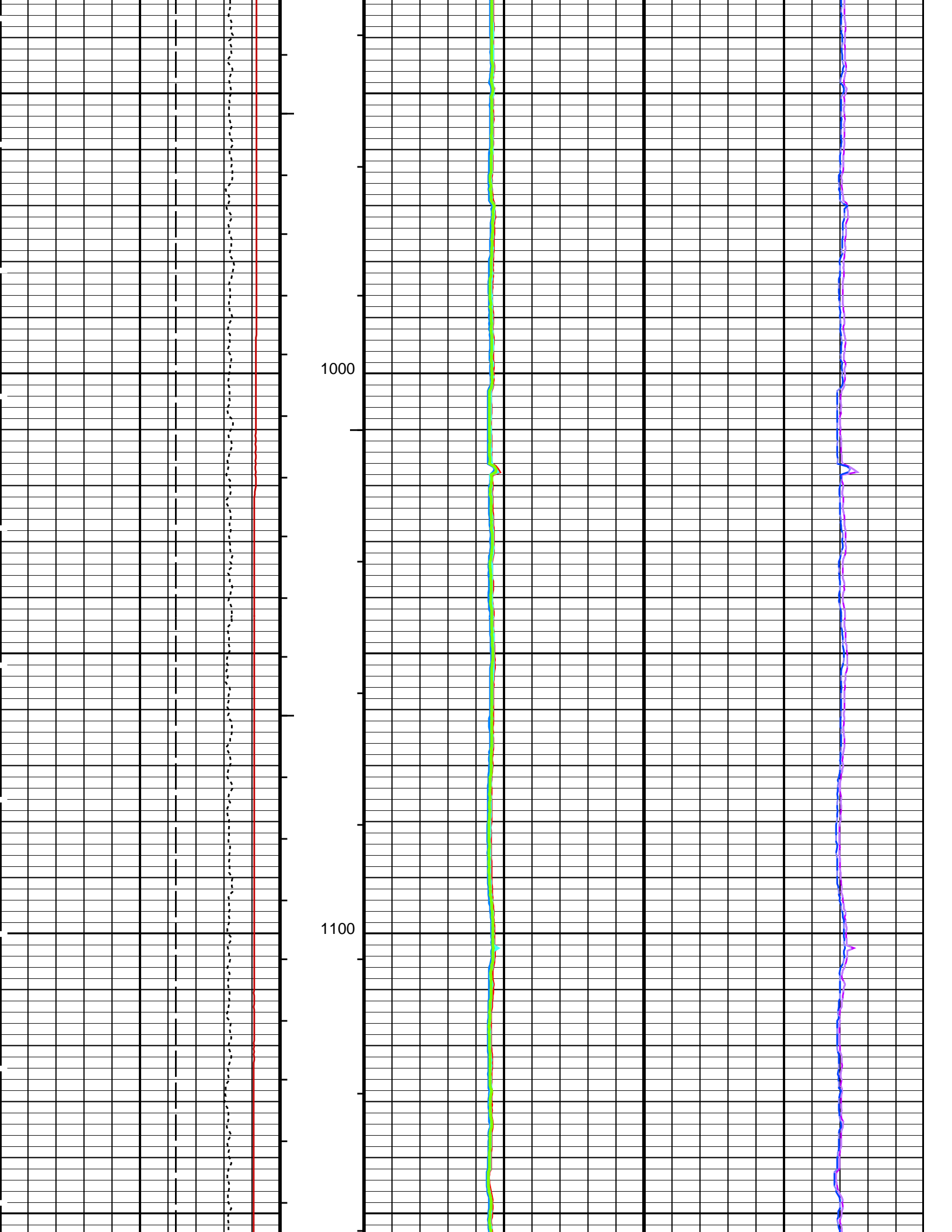
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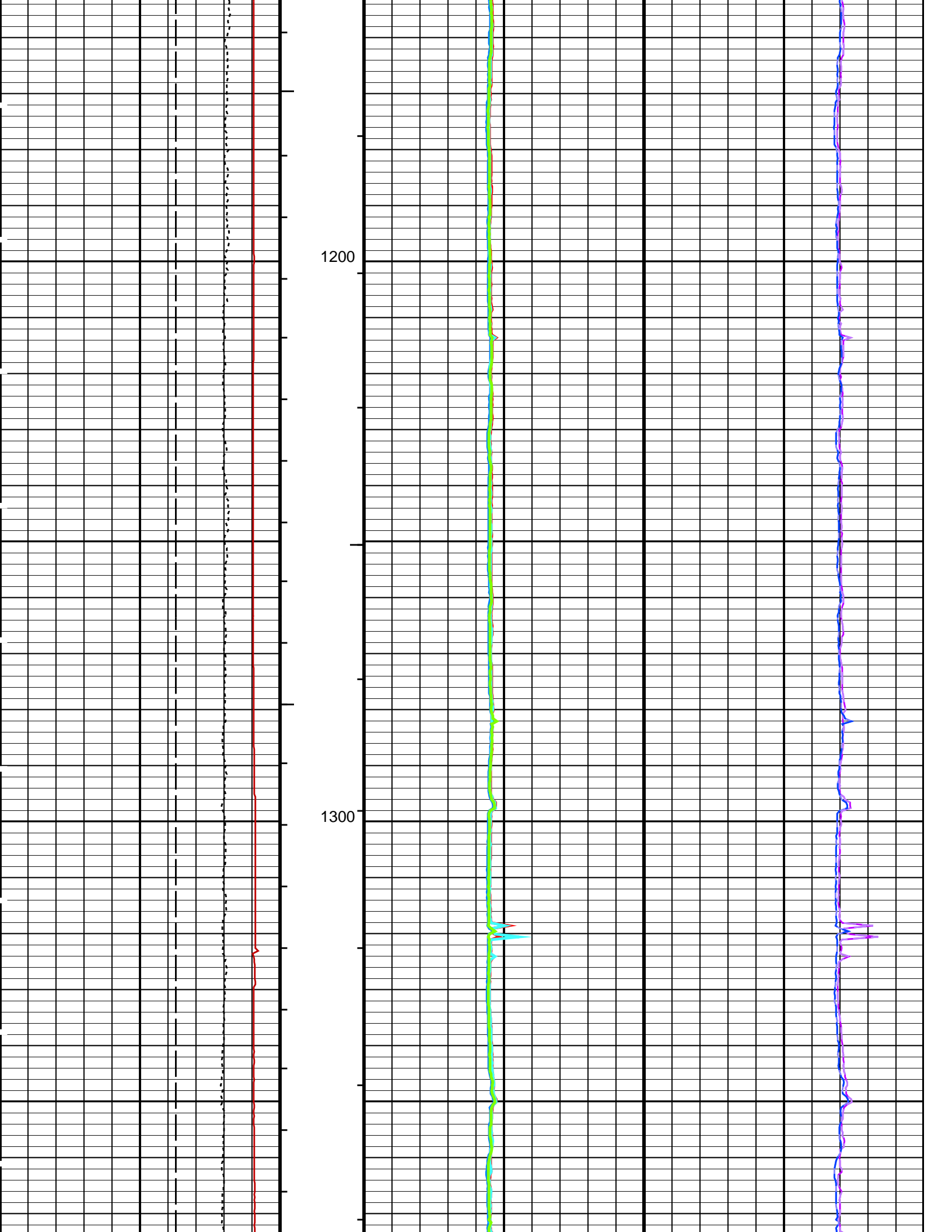
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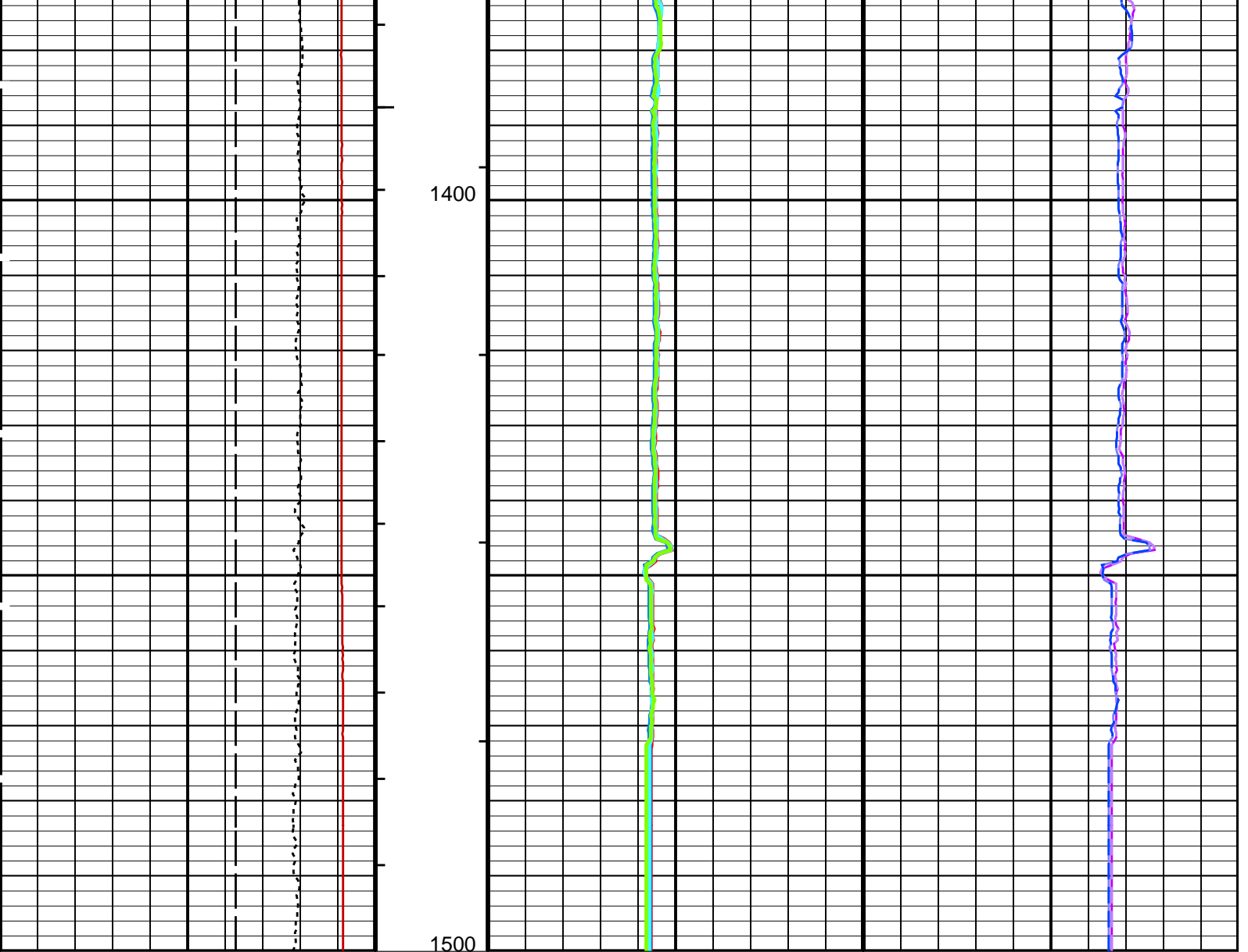












Bit Size (BS) (IN)	Stuck Stretch (STIT) (F)	PPC1 Radius 1 (CRD1_PPC1) (IN)	PPC1 Ellipse Hole Diameter 1 (EHD1_PPC1) (IN)
0 6 16	0 50	2 12	6 16
PPC1 Relative Bearing (RB_PPC1) (DEG)	Cable Drag From STIA to STIT	PPC1 Radius 2 (CRD2_PPC1) (IN)	PPC1 Ellipse Hole Diameter 2 (EHD2_PPC1) (IN)
0 360		2 12	6 16
Tension (TENS) (LBF)	Tool/Tot. Drag From D3T to STIA	PPC1 Radius 3 (CRD3_PPC1) (IN)	PPC1 Hole Diameter 1 (HD1_PPC1) (IN)
10000 0		2 12	6 16
		PPC1 Radius 4 (CRD4_PPC1) (IN)	PPC1 Hole Diameter 2 (HD2_PPC1) (IN)
		2 12	6 16

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
PPC1:	Powered Positioning Device/Caliper 1	

CLBD_PPC	PPC1 Caliper Type	CAL_STD ROM	
MAPC-B: Multimode Array Sonic Power Cartridge			
BS	Bit Size	12.250	IN
PPC2: Powered Positioning Device/Caliper 2			
CLBD_PPC	PPC2 Caliper Type	CAL_STD ROM	
DIP: Dip Computation			
DIR: Directional Survey Computation	DIP Tool	FBST	
SPVD	TVD of Starting Point	1499.87	FT
TIMD	Along-hole depth of Tie-in Point	650	FT
TIVD	TVD of Tie-in Point	650	FT
STI: Stuck Tool Indicator			
LBFR	Trigger for MAXIS First Reading Label	TDL	
STKT	STI Stuck Threshold	2.5	FT
TDD	Total Depth - Driller	1528.00	FT
TDL	Total Depth - Logger	1500.00	FT
HOLEV: Integrated Hole/Cement Volume			
FCD	Future Casing (Outer) Diameter	9.625	IN
HVCS	Integrated Hole Volume Caliper Selection	AUTOMATIC	
System and Miscellaneous			
DO	Depth Offset for Playback	0.0	FT
PP	Playback Processing	OFF	
TD	Total Depth	1500	FT

Format: PPC1_Logging Vertical Scale: 5" per 100' Graphics File Created: 31-Aug-2011 22:40

OP System Version: 19C0-187

FBST-B	19C0-187	PPC1	19C0-187
MAXS-B	19C0-187	MAPC-B	19C0-187
PPC2	19C0-187	EDTC-B	19C0-187

Input DLIS Files

DEFAULT	FMI_CAL_MAXS_MAPC_074PUP	FN:110	PRODUCER	31-Aug-2011 20:42	1500.0 FT	82.5 FT
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Output DLIS Files

DEFAULT	FMI_CAL_MAXS_MAPC_084PUP	FN:127	PRODUCER	31-Aug-2011 22:40
RTB	FMI_CAL_MAXS_MAPC_084PUP	FN:128	PRODUCER	31-Aug-2011 22:40

Company: SANDIA TECHNOLOGIES, LLC

Well: NYSTA TANDEM LOT 1

Input DLIS Files

DEFAULT	FMI_CAL_MAXS_MAPC_074PUP	FN:110	PRODUCER	31-Aug-2011 20:42	1500.0 FT	82.5 FT
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Output DLIS Files

DEFAULT	FMI_CAL_MAXS_MAPC_081PUP	FN:123	PRODUCER	31-Aug-2011 22:21	1500.0 FT	82.5 FT
RTB	FMI_CAL_MAXS_MAPC_081PUP	FN:124	PRODUCER	31-Aug-2011 22:21	1500.0 FT	82.5 FT

Integrated Hole/Cement Volume Summary

Hole Volume = 106.68 F3

Cement Volume = 46.04 F3 (assuming 9.63 IN casing O.D.)

Computed from 1500.0 FT to 1380.5 FT using data channel(s) CRD1_PPC1 CRD2_PPC1 CRD3_PPC1 CRD4_PPC1

OP System Version: 19C0-187

FBST-B	19C0-187	PPC1	19C0-187
MAXS-B	19C0-187	MAPC-B	19C0-187
PPC2	19C0-187	EDTC-B	19C0-187

PIP SUMMARY

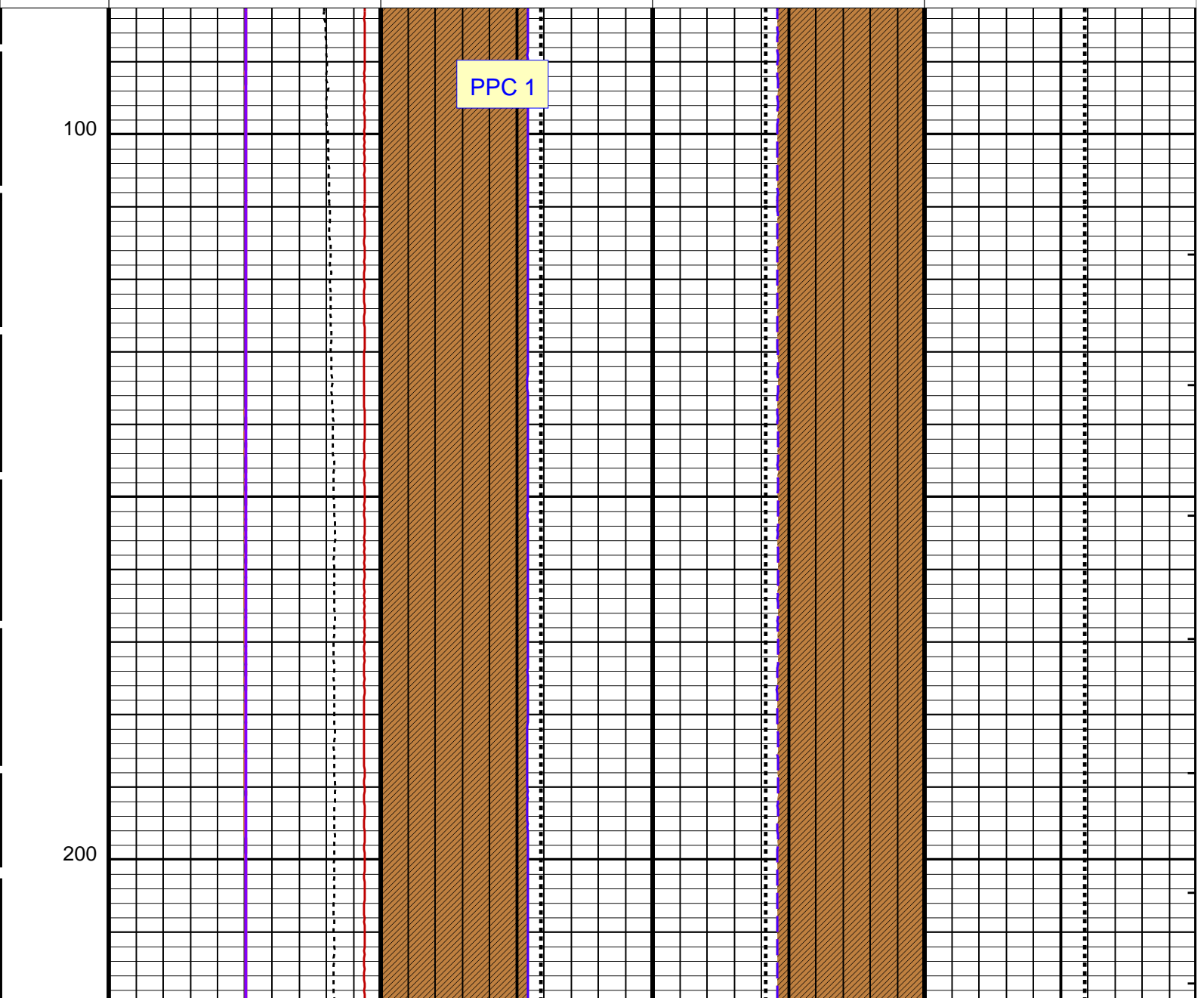
- └ Integrated Hole Volume Minor Pip Every 10 F3
- └ Integrated Hole Volume Major Pip Every 100 F3
- └ Integrated Cement Volume Minor Pip Every 10 F3

Integrated Cement Volume Major Pip Every 100 F3

Integrated Transit Time Minor Pip Every 1 MS
 Integrated Transit Time Major Pip Every 10 MS

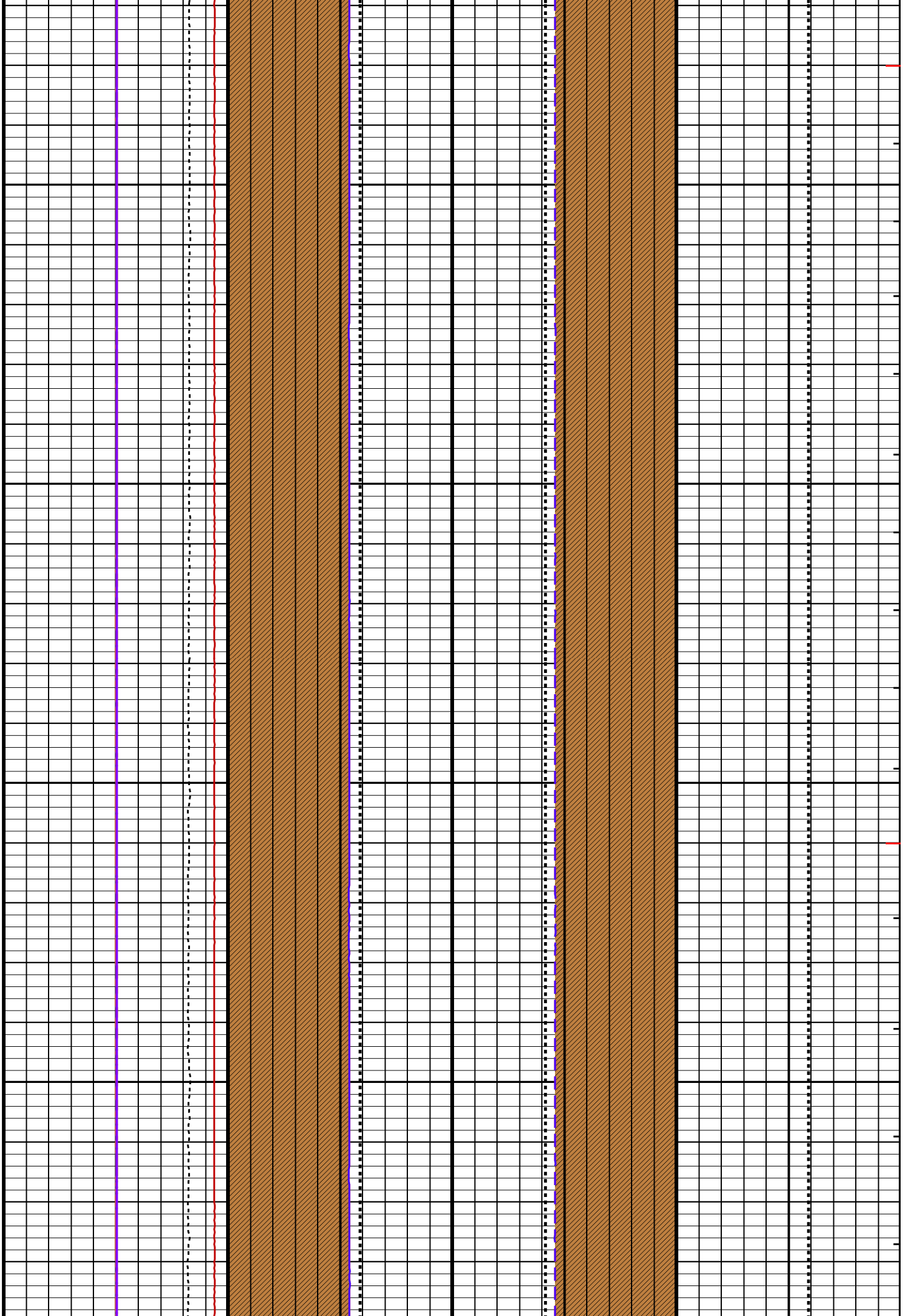
Time Mark Every 60 S

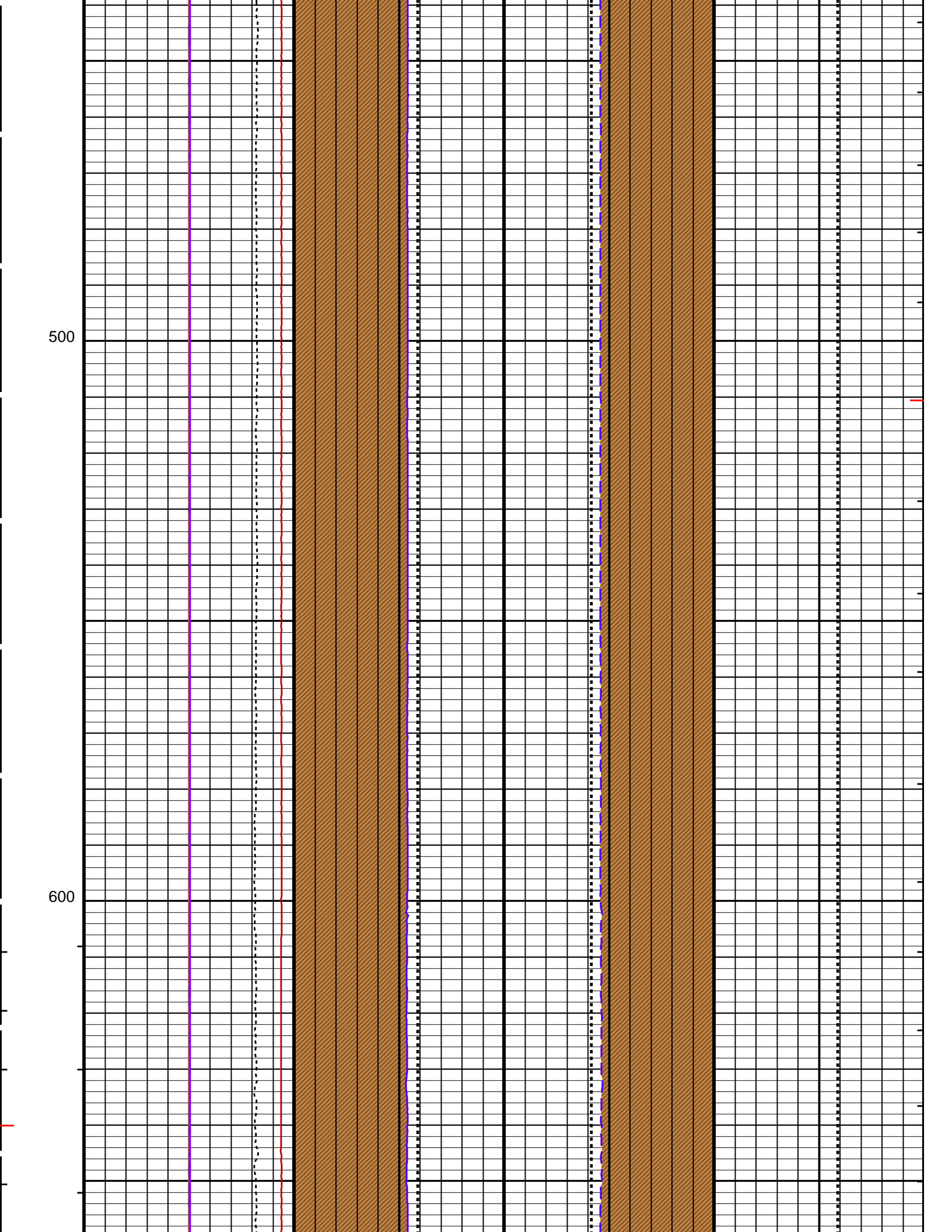
		HD difference From EHD1_PPC1 to HD1_PPC1		HD difference From HD2_PPC1 to EHD2_PPC1	
Tension (TENS) 10000 (LBF) 0		Formation From F2 to EHD1_PPC1		Formation From EHD2_PPC1 to F3	
Tool/Tot. Drag From D4T to STIA	PPC1 Relative Bearing (RB_PPC1)	PPC1 Hole Diameter 1 (HD1_PPC1)		PPC1 Hole Diameter 2 (HD2_PPC1)	
	0 (DEG) 360	24 (IN)	4 4	4 4	24 (IN) 24
Cable Drag From D4T to STIT	PPC1 Tool Center 2 (ETC2_PPC1)	PPC1 Ellipse Hole Diameter 1 (EHD1_PPC1)		PPC1 Ellipse Hole Diameter 2 (EHD2_PPC1)	
	-10 (IN) 10	24 (IN)	4 4	4 4	24 (IN) 24
Stuck Stretch (STIT)	PPC1 Tool Center 1 (ETC1_PPC1)	Bit Size (BS)		Bit Size (BS)	
	-10 (IN) 10	24 (IN)	4 4	4 4	24 (IN) 24 4



300

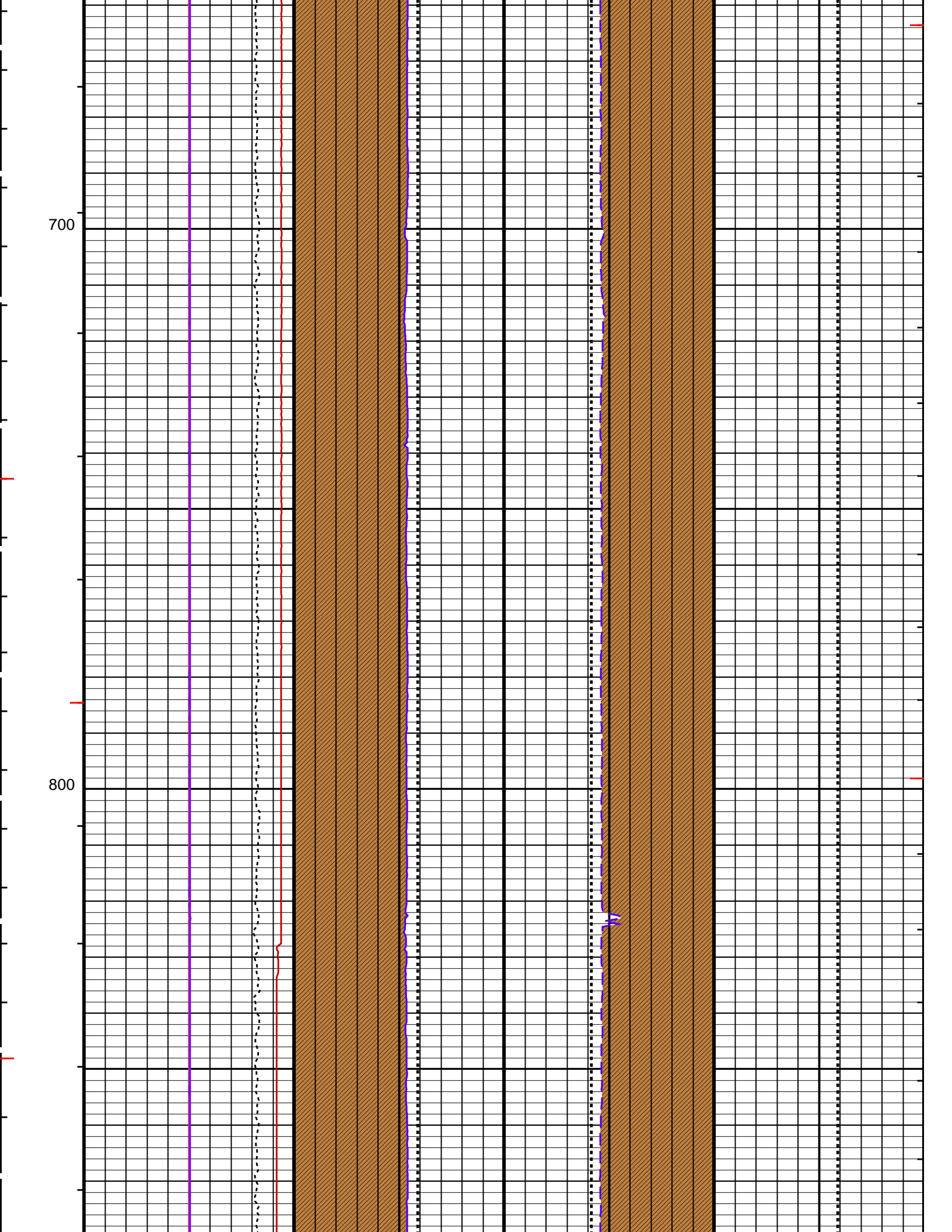
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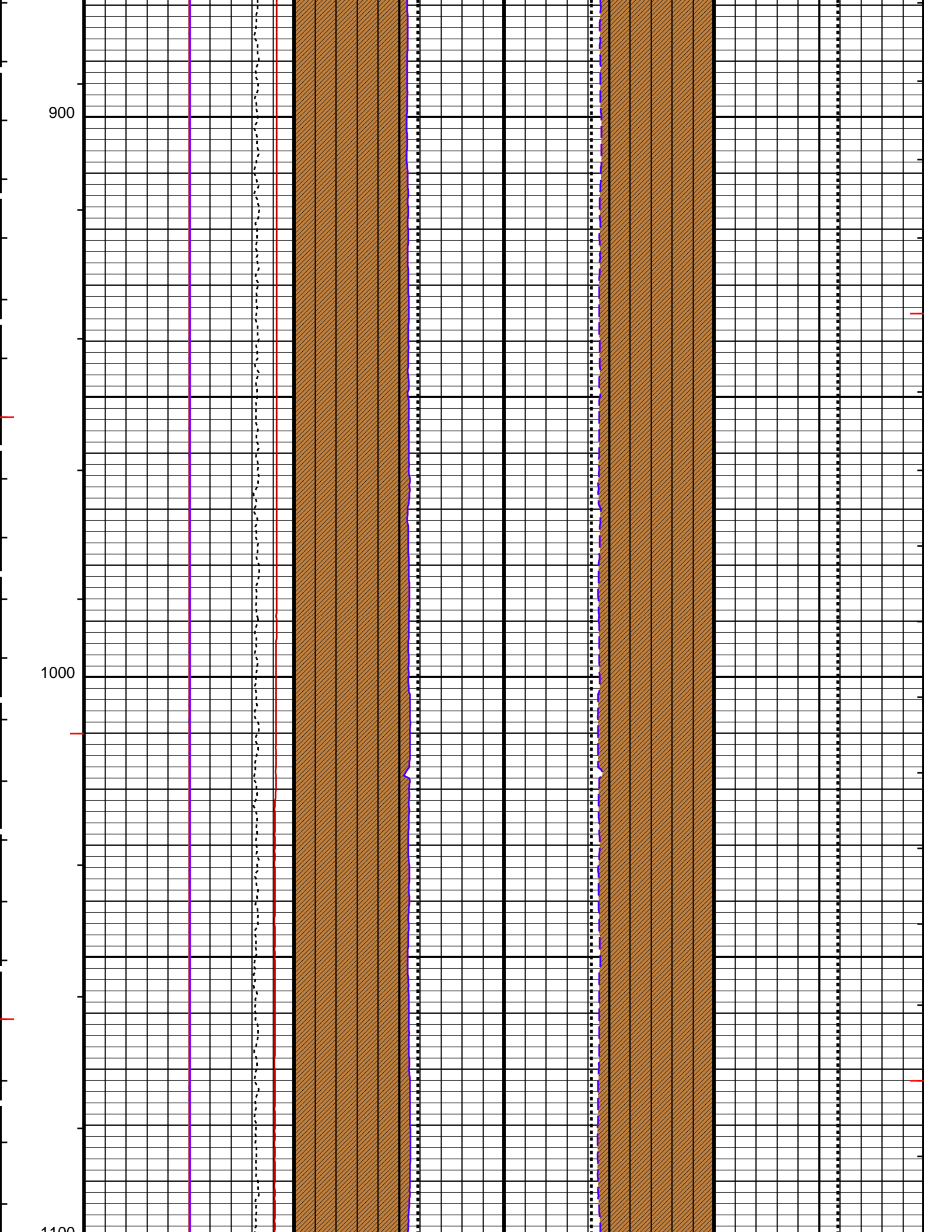


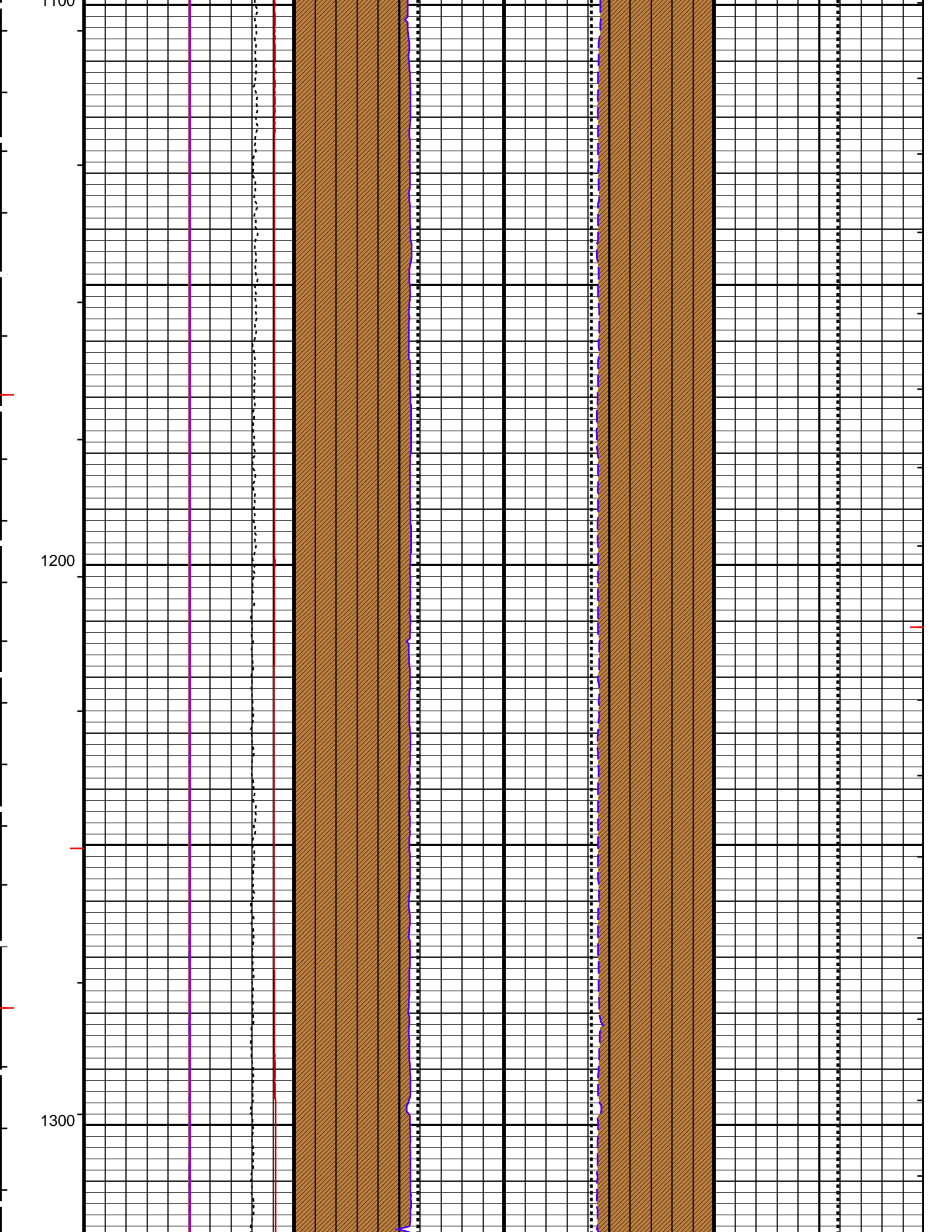


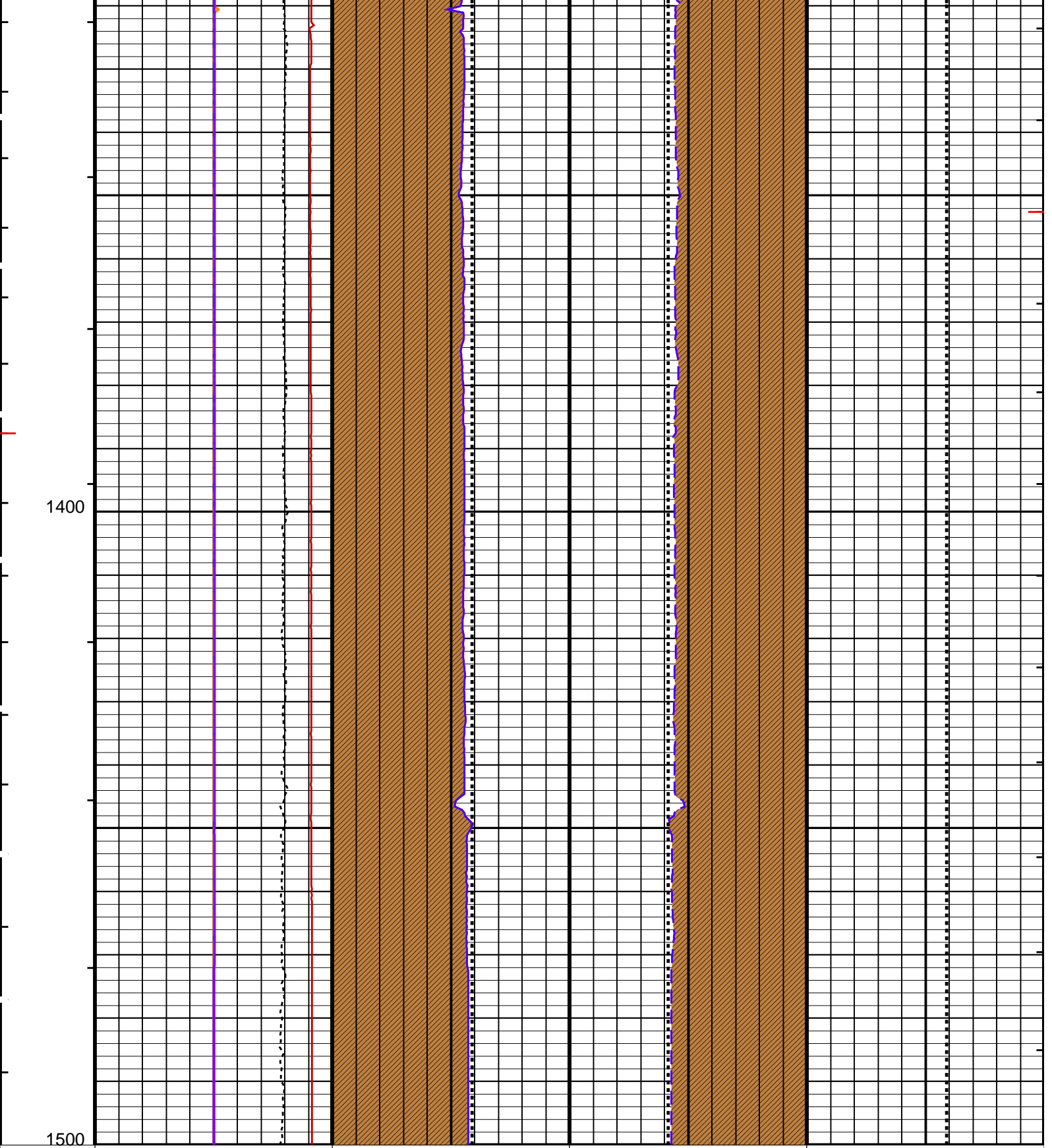
500

600









Stuck Stretch (STIT) 0 (F) 50	PPC1 Tool Center 1 (ETC1_PPC1) -10 (IN) 10	Bit Size (BS) 24 (IN) 4 4	Bit Size (BS) (IN) 24 24	Bit Size (BS) (IN) 4
Cable Drag From D4T to STIT	PPC1 Tool Center 2 (ETC2_PPC1) -10 (IN) 10	PPC1 Ellipse Hole Diameter 1 (EHD1_PPC1) 24 (IN) 4 4	PPC1 Ellipse Hole Diameter 2 (EHD2_PPC1) (IN) 24	
Tool/Tot. Drag	PPC1 Relative Bearing (RB_PPC1)	PPC1 Hole Diameter 1 (HD1_PPC1)	PPC1 Hole Diameter 2 (HD2_PPC1)	

From D4T to STIA	0	(DEG)	360	24	(IN)	4	4	(IN)	24
Tension (TENS)		10000 (LBF)		0		Formation From F2 to EHD1_PPC1		Formation From EHD2_PPC1 to F3	
				HD difference From EHD1_PPC1 to HD1_PPC1				HD difference From HD2_PPC1 to EHD2_PPC1	

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

- └ Integrated Transit Time Minor Pip Every 1 MS
- └ Integrated Transit Time Major Pip Every 10 MS

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
PPC1: Powered Positioning Device/Caliper 1		
CLBD_PPC	PPC1 Caliper Type	CAL_STD ROM
MAPC-B: Multimode Array Sonic Power Cartridge		
BS	Bit Size	12.250 IN
ITTS	Integrated Transit Time Source	DTCO
PPC2: Powered Positioning Device/Caliper 2		
CLBD_PPC	PPC2 Caliper Type	CAL_STD ROM
DIP: Dip Computation		
	DIP Tool	FBST
DIR: Directional Survey Computation		
SPVD	TVD of Starting Point	1499.87 FT
TIMD	Along-hole depth of Tie-in Point	650 FT
TIVD	TVD of Tie-in Point	650 FT
STI: Stuck Tool Indicator		
LBFR	Trigger for MAXIS First Reading Label	TDL
STKT	STI Stuck Threshold	2.5 FT
TDD	Total Depth - Driller	1528.00 FT
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HOLEV: Integrated Hole/Cement Volume		
FCD	Future Casing (Outer) Diameter	9.625 IN
HVCS	Integrated Hole Volume Caliper Selection	AUTOMATIC
System and Miscellaneous		
DO	Depth Offset for Playback	0.0 FT
PP	Playback Processing	OFF
TD	Total Depth	1500 FT

Format: PPC1_HoleDiameter Vertical Scale: 5" per 100' Graphics File Created: 31-Aug-2011 22:21

OP System Version: 19C0-187

FBST-B	19C0-187	PPC1	19C0-187
MAXS-B	19C0-187	MAPC-B	19C0-187
PPC2	19C0-187	EDTC-B	19C0-187

Input DLIS Files

DEFAULT	FMI_CAL_MAXS_MAPC_074PUP	FN:110	PRODUCER	31-Aug-2011 20:42	1500.0 FT	82.5 FT
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Output DLIS Files

DEFAULT	FMI_CAL_MAXS_MAPC_081PUP	FN:123	PRODUCER	31-Aug-2011 22:21
RTB	FMI_CAL_MAXS_MAPC_081PUP	FN:124	PRODUCER	31-Aug-2011 22:21

Company: SANDIA TECHNOLOGIES, LLC

Well: NYSTA TANDEM LOT 1

Input DLIS Files

DEFAULT	FMI_CAL_MAXS_MAPC_074PUP	FN:110	PRODUCER	31-Aug-2011 20:42	1500.0 FT	82.5 FT
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Cement Volume = 46.04 F3 (assuming 9.63 IN casing O.D.)

Computed from 1500.0 FT to 1380.5 FT using data channel(s) CRD1_PPC1 CRD2_PPC1 CRD3_PPC1 CRD4_PPC1

OP System Version: 19C0-187

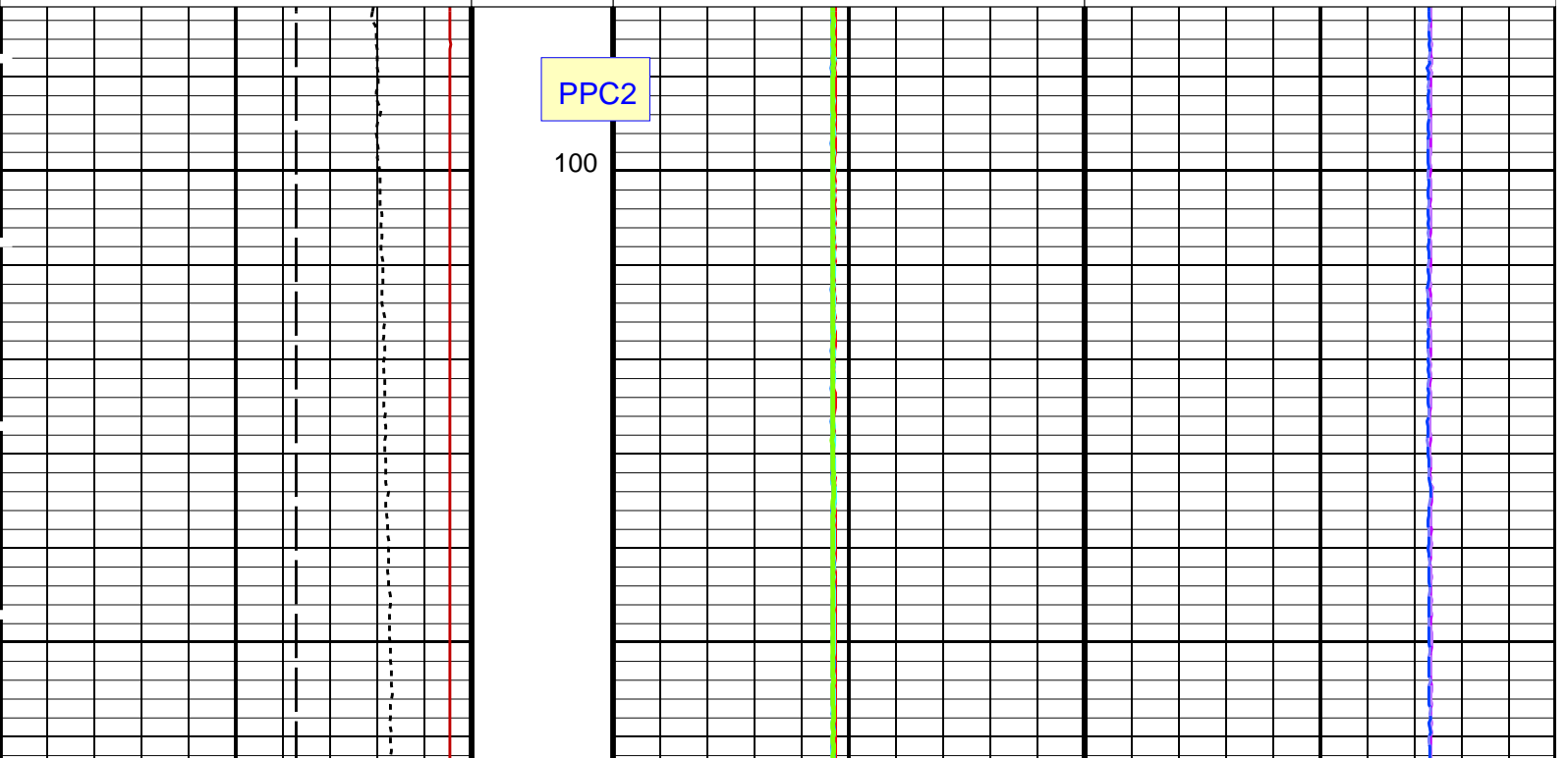
FBST-B	19C0-187	PPC1	19C0-187
MAXS-B	19C0-187	MAPC-B	19C0-187
PPC2	19C0-187	EDTC-B	19C0-187

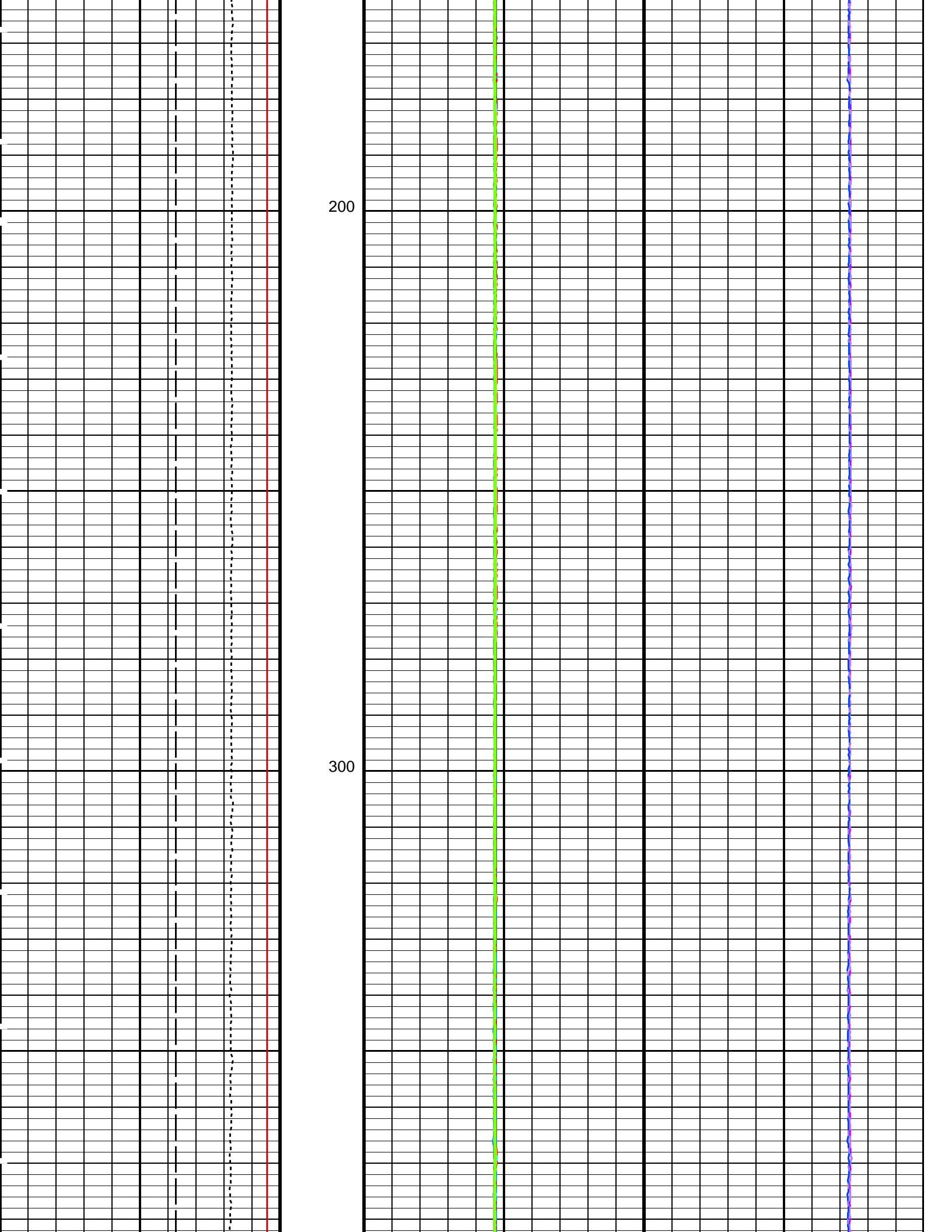
PIP SUMMARY

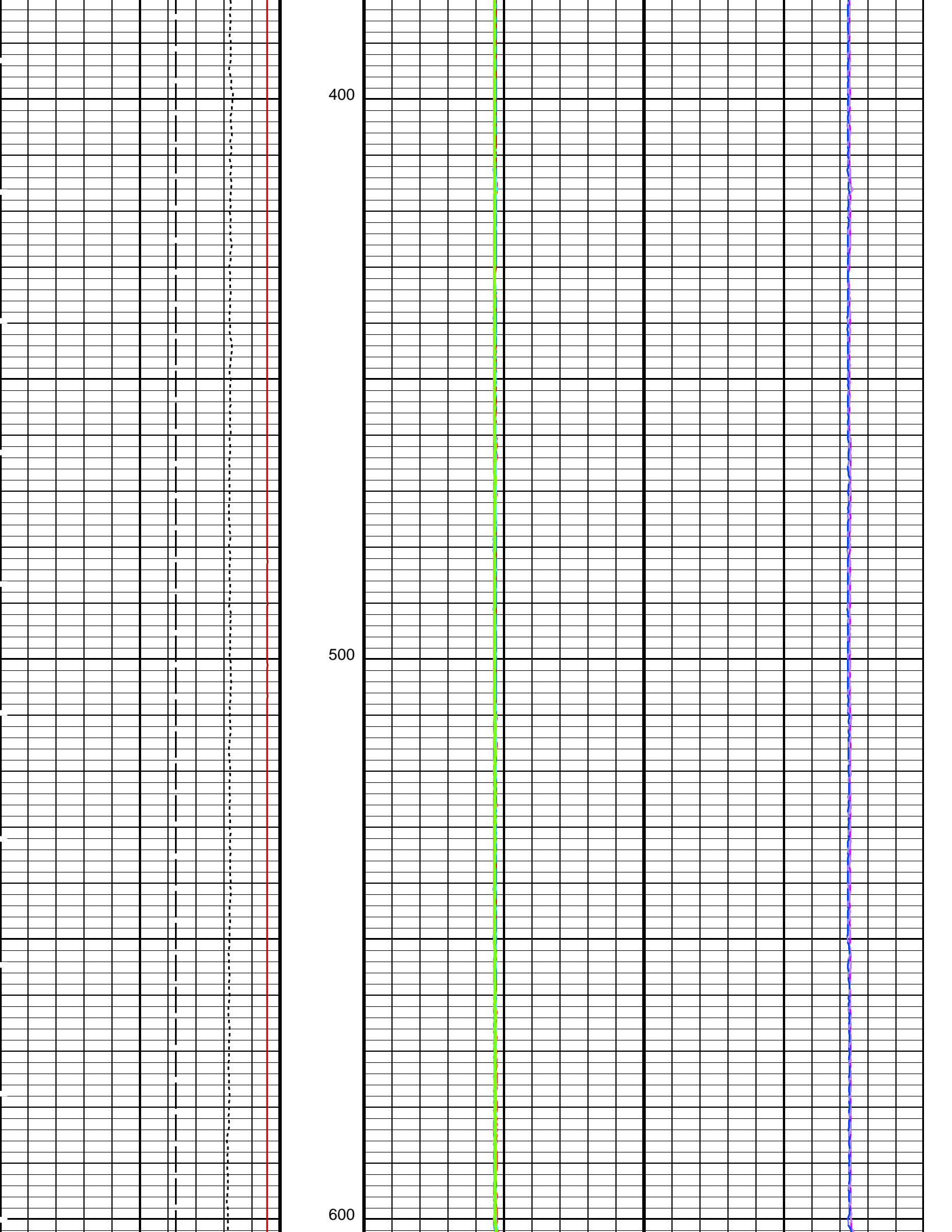
- ┆ Integrated Hole Volume Minor Pip Every 10 F3
- ┆ Integrated Hole Volume Major Pip Every 100 F3
- ┆ Integrated Cement Volume Minor Pip Every 10 F3
- ┆ Integrated Cement Volume Major Pip Every 100 F3

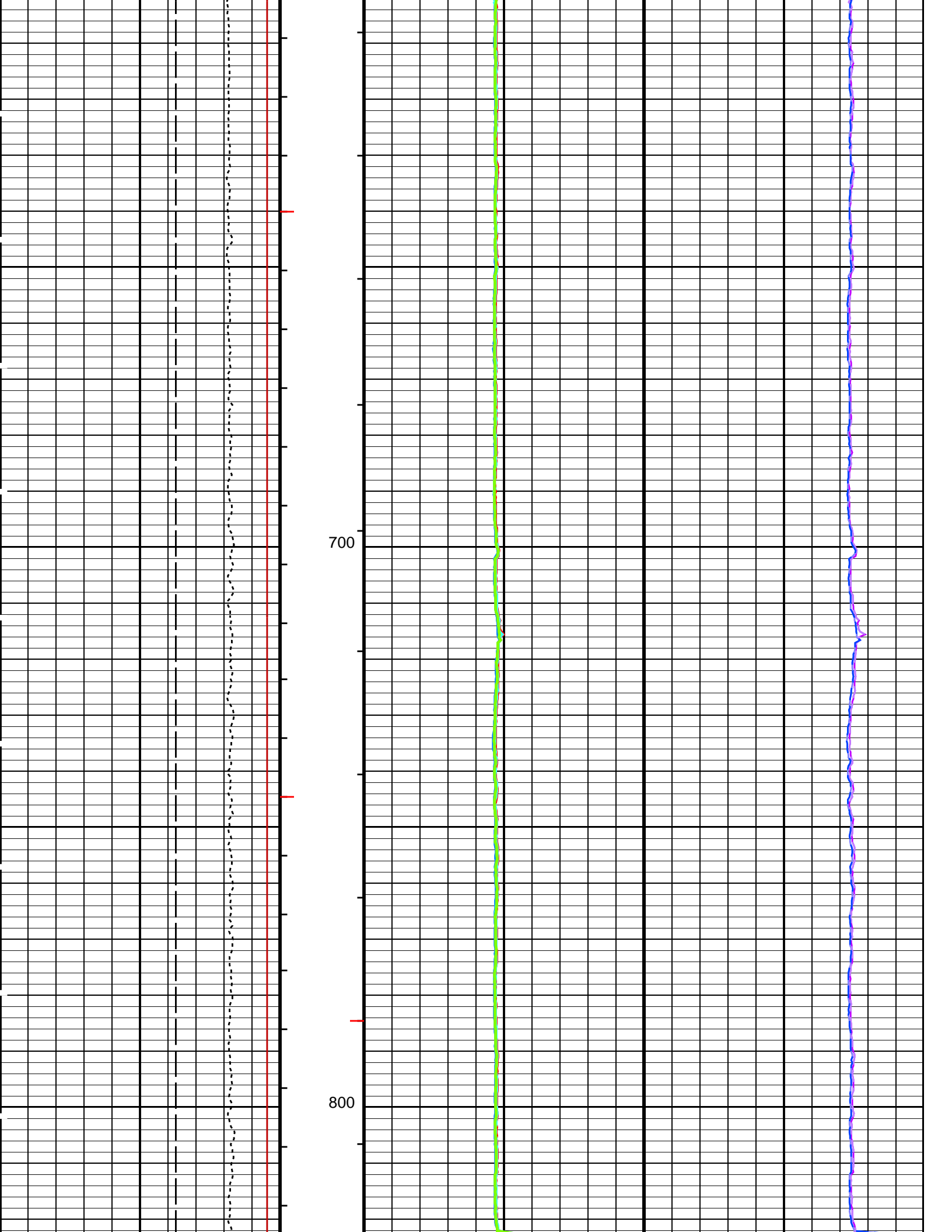
Time Mark Every 60 S

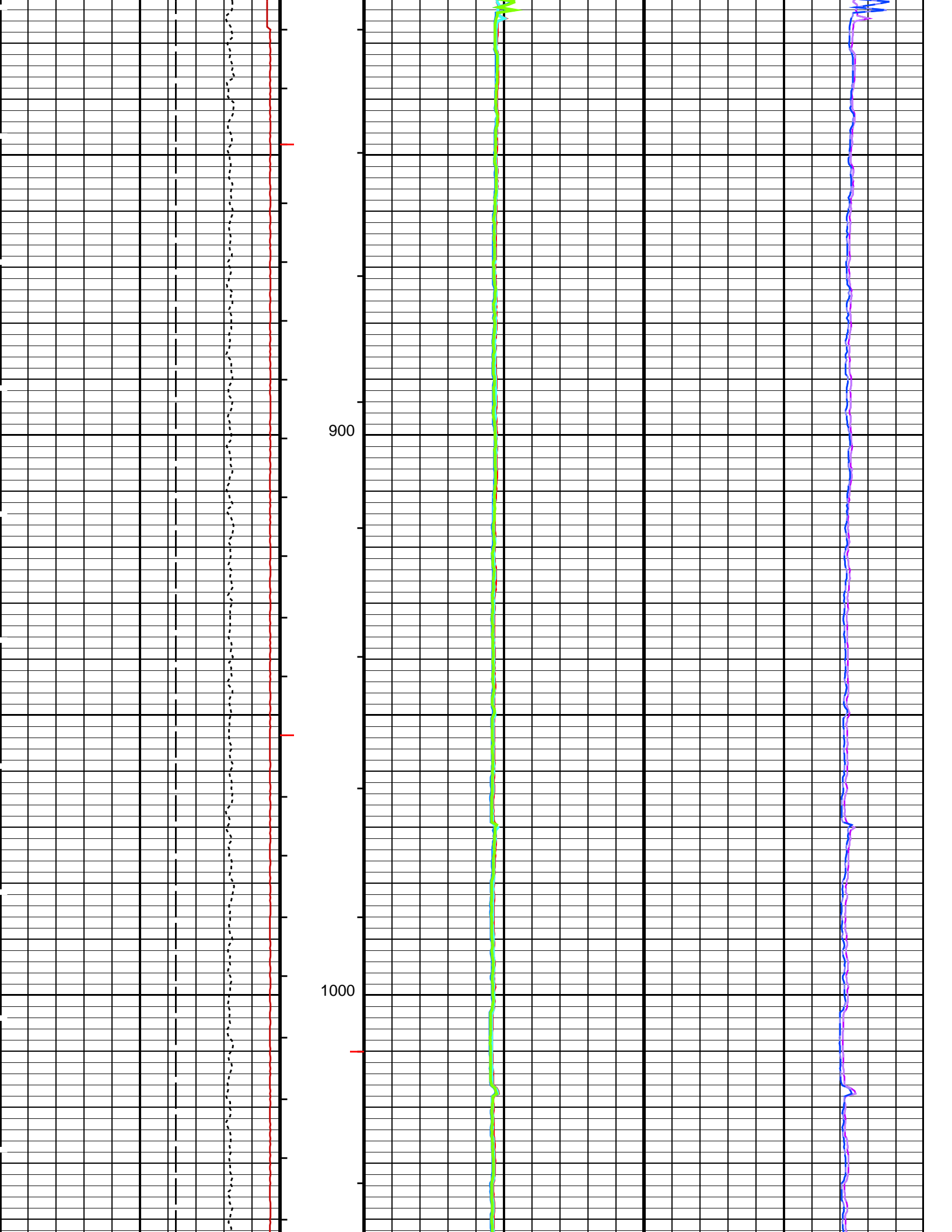
		PPC2 Radius 4 (CRD4_PPC2)	PPC2 Hole Diameter 2 (HD2_PPC2)
		2 (IN) 12 6	(IN) 16
Tension (TENS) (LBF)	Tool/Tot. Drag From D3T to STIA	PPC2 Radius 3 (CRD3_PPC2)	PPC2 Hole Diameter 1 (HD1_PPC2)
10000 0	0	2 (IN) 12 6	(IN) 16
PPC2 Relative Bearing (RB_PPC2)	Cable Drag From STIA to STIT	PPC2 Radius 2 (CRD2_PPC2)	PPC2 Ellipse Hole Diameter 2 (EHD2_PPC2)
0 (DEG) 360	0	2 (IN) 12 6	(IN) 16
Bit Size (BS) (IN)	Stuck Stretch (STIT) (F) 50	PPC2 Radius 1 (CRD1_PPC2)	PPC2 Ellipse Hole Diameter 1 (EHD1_PPC2)
6 16	0	2 (IN) 12 6	(IN) 16

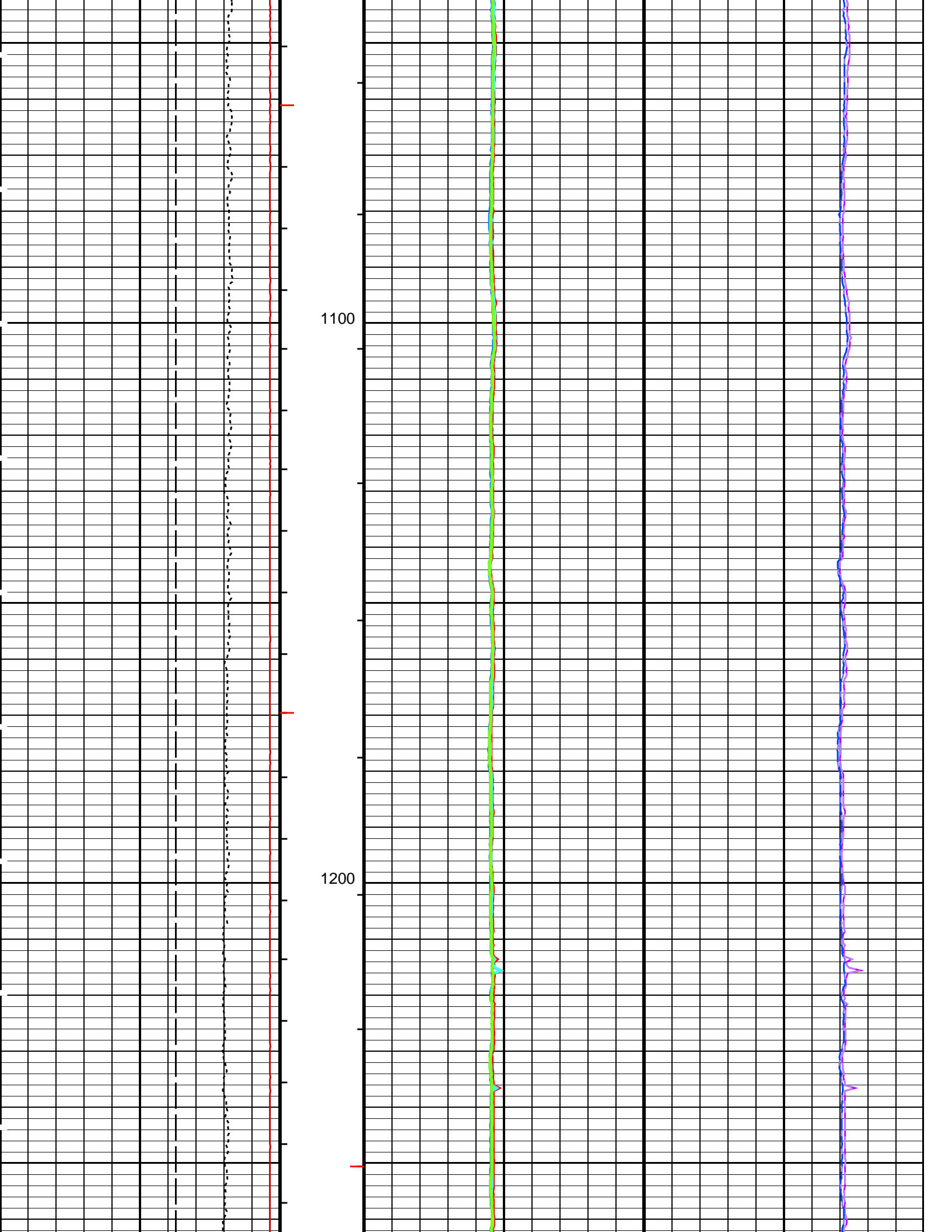


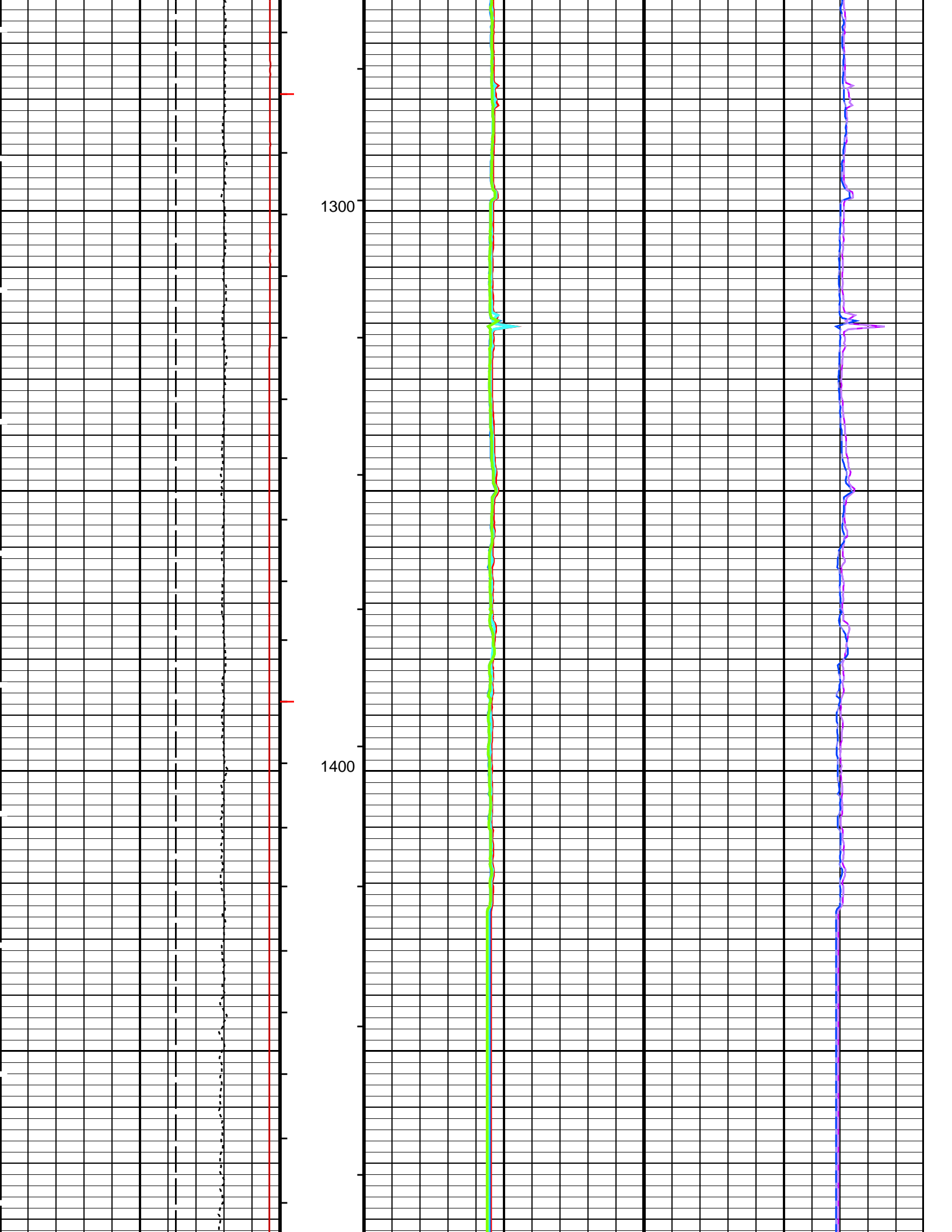












1500		Stuck Stretch (STIT)		PPC2 Radius 1 (CRD1_PPC2)		PPC2 Ellipse Hole Diameter 1 (EHD1_PPC2)	
6	Bit Size (BS) (IN)	16	0 (F) 50	2	(IN)	12	6 (IN) 16
0	PPC2 Relative Bearing (RB_PPC2) (DEG)	360	Cable Drag From STIA to STIT	2	PPC2 Radius 2 (CRD2_PPC2) (IN)	12	6 PPC2 Ellipse Hole Diameter 2 (EHD2_PPC2) (IN) 16
10000	Tension (TENS) (LBF)	0	Tool/Tot. Drag From D3T to STIA	2	PPC2 Radius 3 (CRD3_PPC2) (IN)	12	6 PPC2 Hole Diameter 1 (HD1_PPC2) (IN) 16
				2	PPC2 Radius 4 (CRD4_PPC2) (IN)	12	6 PPC2 Hole Diameter 2 (HD2_PPC2) (IN) 16

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
PPC1: Powered Positioning Device/Caliper 1		
CLBD_PPC	PPC1 Caliper Type	CAL_STD ROM
MAPC-B	Multimode Array Sonic Power Cartridge	
BS	Bit Size	12.250 IN
PPC2: Powered Positioning Device/Caliper 2		
CLBD_PPC	PPC2 Caliper Type	CAL_STD ROM
DIP	Dip Computation	
	DIP Tool	FBST
DIR	Directional Survey Computation	
SPVD	TVD of Starting Point	1499.87 FT
TIMD	Along-hole depth of Tie-in Point	650 FT
TIVD	TVD of Tie-in Point	650 FT
STI: Stuck Tool Indicator		
LBFR	Trigger for MAXIS First Reading Label	TDL
STKT	STI Stuck Threshold	2.5 FT
TDD	Total Depth - Driller	1528.00 FT
TDL	Total Depth - Logger	1500.00 FT
HOLEV: Integrated Hole/Cement Volume		
FCD	Future Casing (Outer) Diameter	9.625 IN
HVCS	Integrated Hole Volume Caliper Selection	AUTOMATIC
System and Miscellaneous		
DO	Depth Offset for Playback	0.0 FT
PP	Playback Processing	OFF
TD	Total Depth	1500 FT

Format: PPC2_Logging Vertical Scale: 5" per 100' Graphics File Created: 31-Aug-2011 22:40

OP System Version: 19C0-187

FBST-B	19C0-187	PPC1	19C0-187
MAXS-B	19C0-187	MAPC-B	19C0-187
PPC2	19C0-187	EDTC-B	19C0-187

Input DLIS Files

DEFAULT FMI_CAL_MAXS_MAPC_074PUP FN:110 PRODUCER 31-Aug-2011 20:42 1500.0 FT 82.5 FT

Output DLIS Files

DEFAULT	FMI_CAL_MAXS_MAPC_084PUP	FN:127	PRODUCER	31-Aug-2011 22:40
RTB	FMI_CAL_MAXS_MAPC_084PUP	FN:128	PRODUCER	31-Aug-2011 22:40

Company: SANDIA TECHNOLOGIES, LLC
Well: NYSTA TANDEM LOT 1

Input DLIS Files

DEFAULT	FMI_CAL_MAXS_MAPC_074PUP	FN:110	PRODUCER	31-Aug-2011 20:42	1500.0 FT	82.5 FT
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Output DLIS Files

DEFAULT	FMI_CAL_MAXS_MAPC_081PUP	FN:123	PRODUCER	31-Aug-2011 22:21	1500.0 FT	82.5 FT
RTB	FMI_CAL_MAXS_MAPC_081PUP	FN:124	PRODUCER	31-Aug-2011 22:21	1500.0 FT	82.5 FT

Integrated Hole/Cement Volume Summary

Hole Volume = 106.68 F3
 Cement Volume = 46.04 F3 (assuming 9.63 IN casing O.D.)
 Computed from 1500.0 FT to 1380.5 FT using data channel(s) CRD1_PPC1 CRD2_PPC1 CRD3_PPC1 CRD4_PPC1

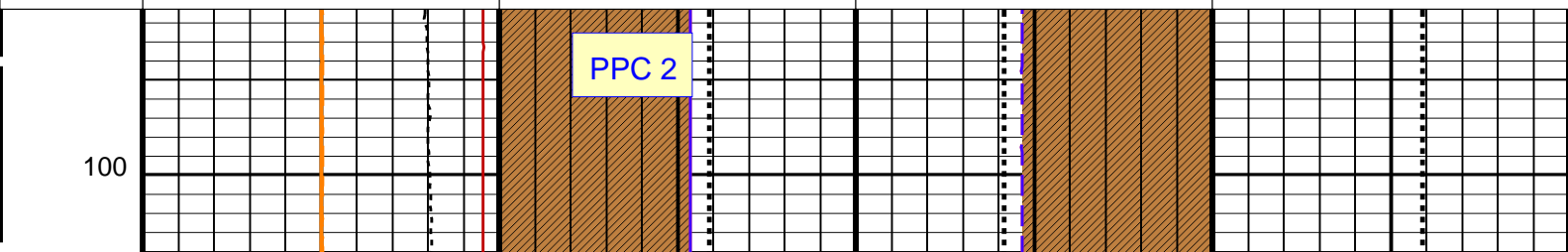
OP System Version: 19C0-187

FBST-B	19C0-187	PPC1	19C0-187
MAXS-B	19C0-187	MAPC-B	19C0-187
PPC2	19C0-187	EDTC-B	19C0-187

PIP SUMMARY

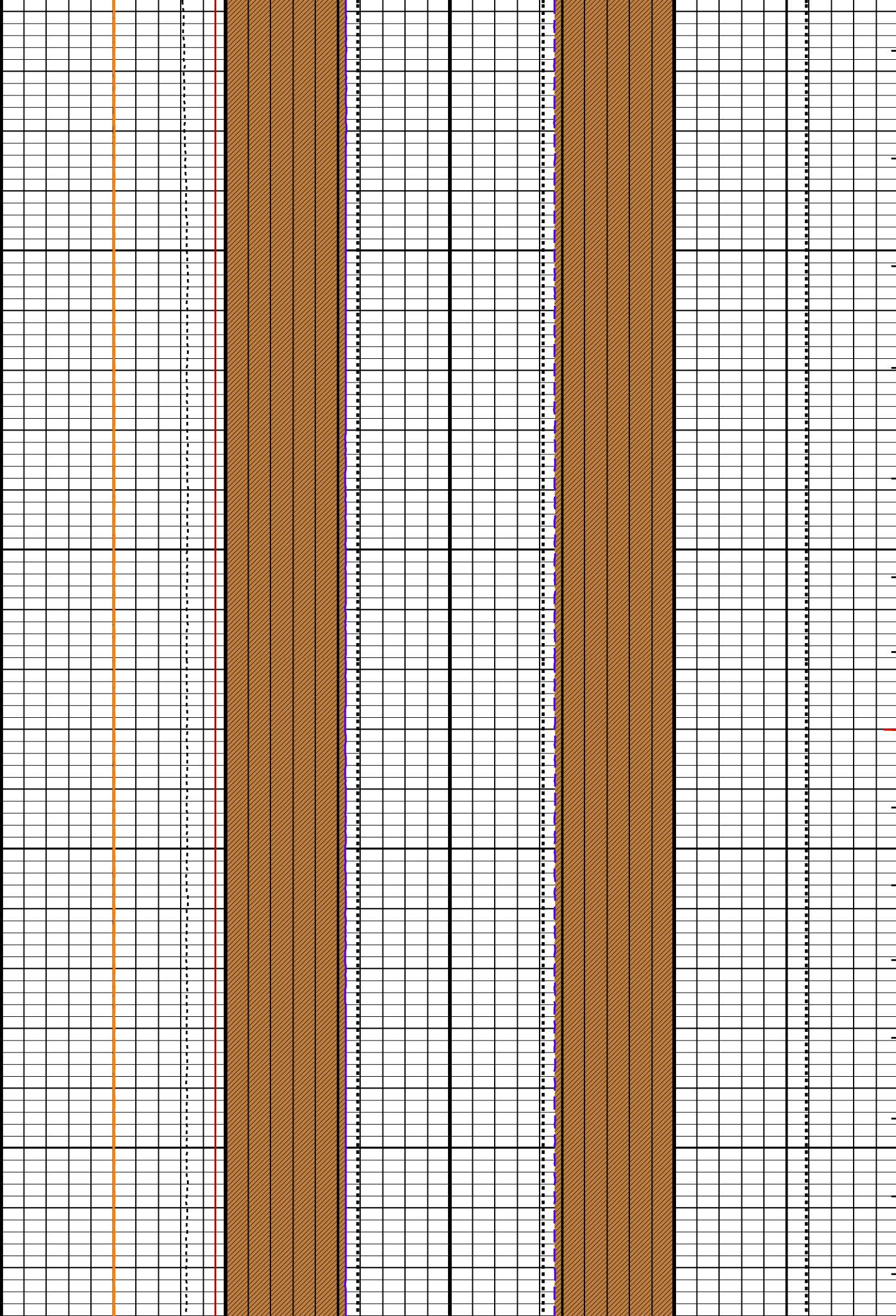
- ┆ Integrated Hole Volume Minor Pip Every 10 F3
- ┆ Integrated Hole Volume Major Pip Every 100 F3
- ┆ Integrated Cement Volume Minor Pip Every 10 F3
- ┆ Integrated Cement Volume Major Pip Every 100 F3
- Integrated Transit Time Minor Pip Every 1 MS ┆
- Integrated Transit Time Major Pip Every 10 MS ┆
- Time Mark Every 60 S

	Tension (TENS) (LBF)	HD difference From EHD1_PPC2 to HD1_PPC2	HD difference From HD2_PPC2 to EHD2_PPC2	Formation From F2 to EHD1_PPC2	Formation From EHD2_PPC2 to F3
10000	0				
0					
360					
24					
4 4					
24					
-10					
10					
24					
4 4					
24					
-10					
10					
24					
4 4					
24					
24					
4					



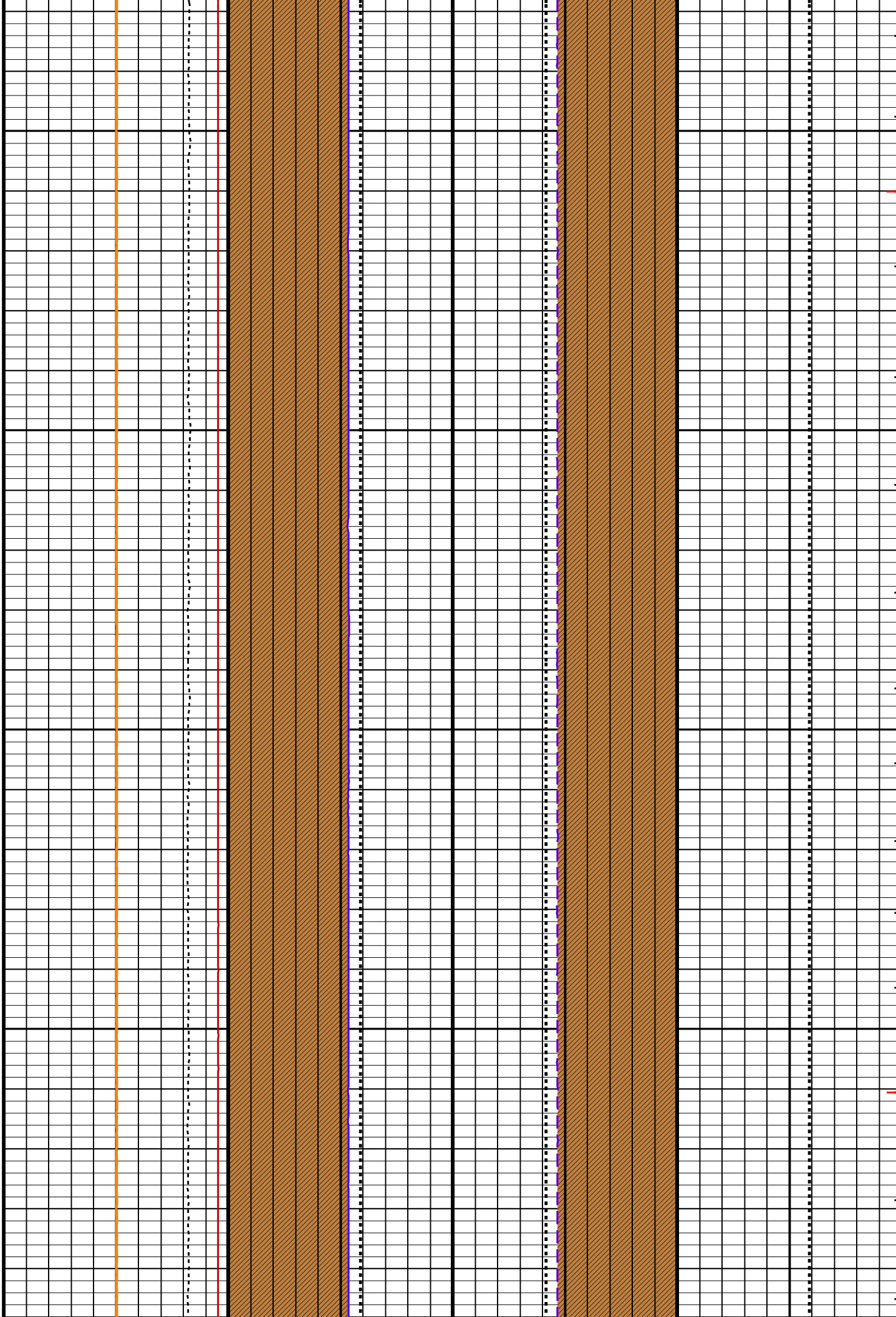
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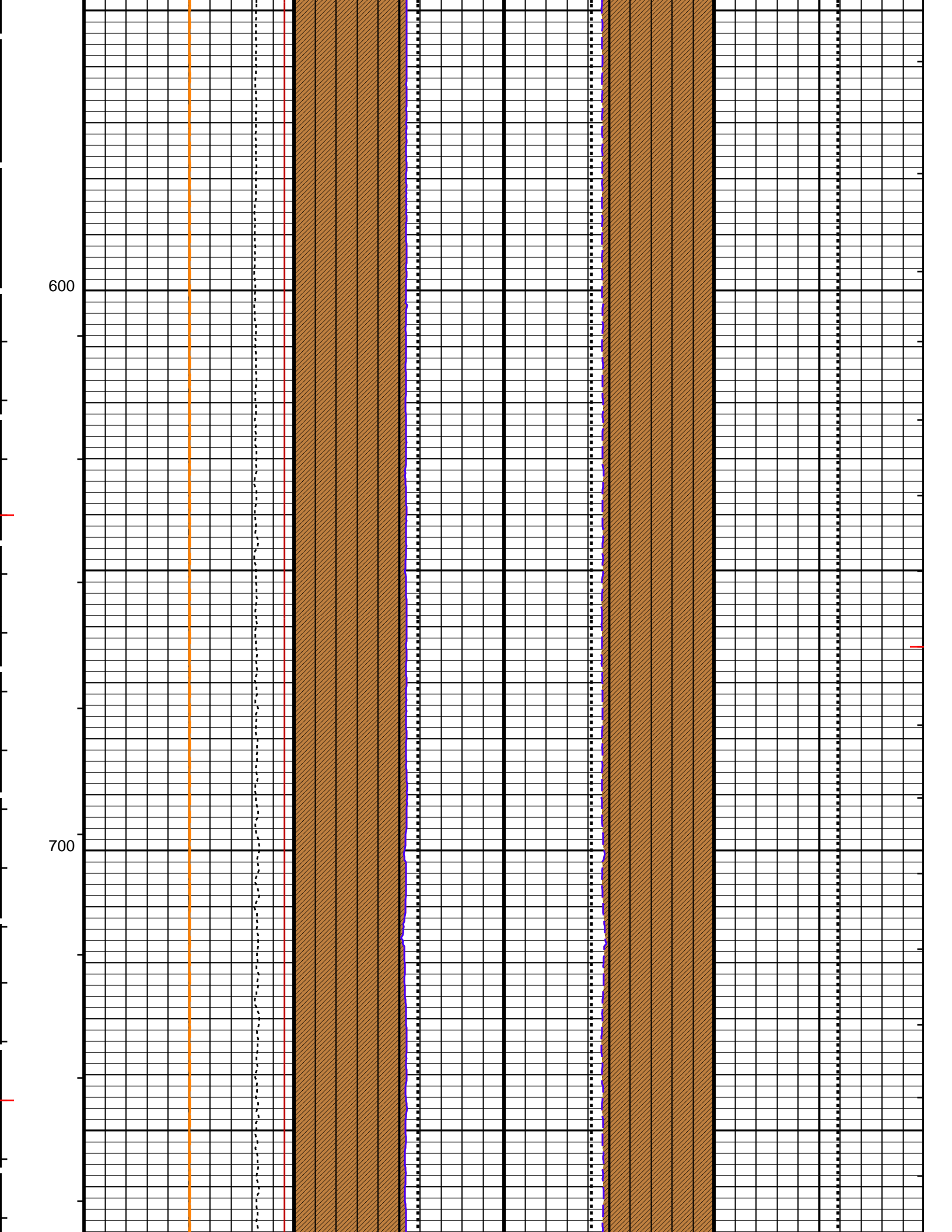
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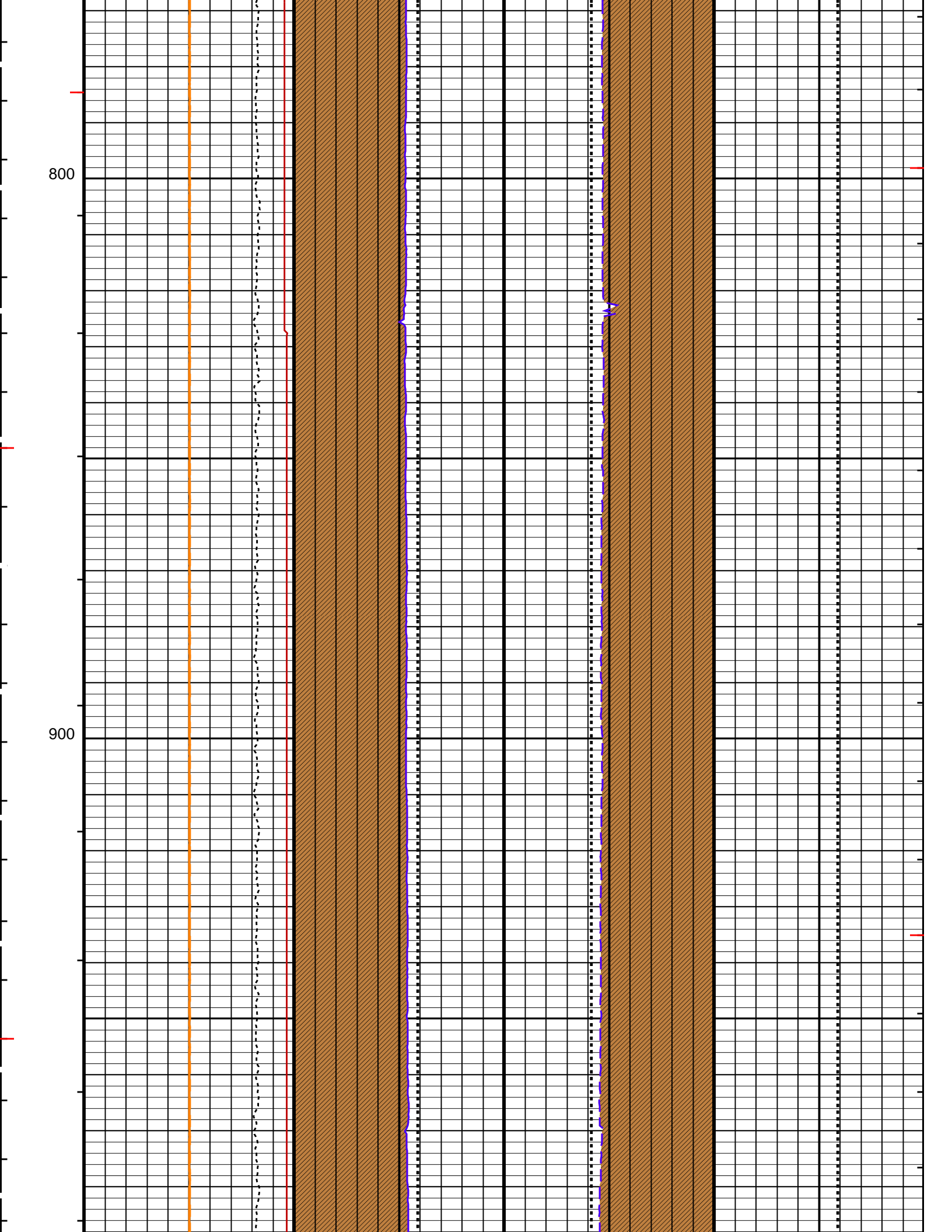


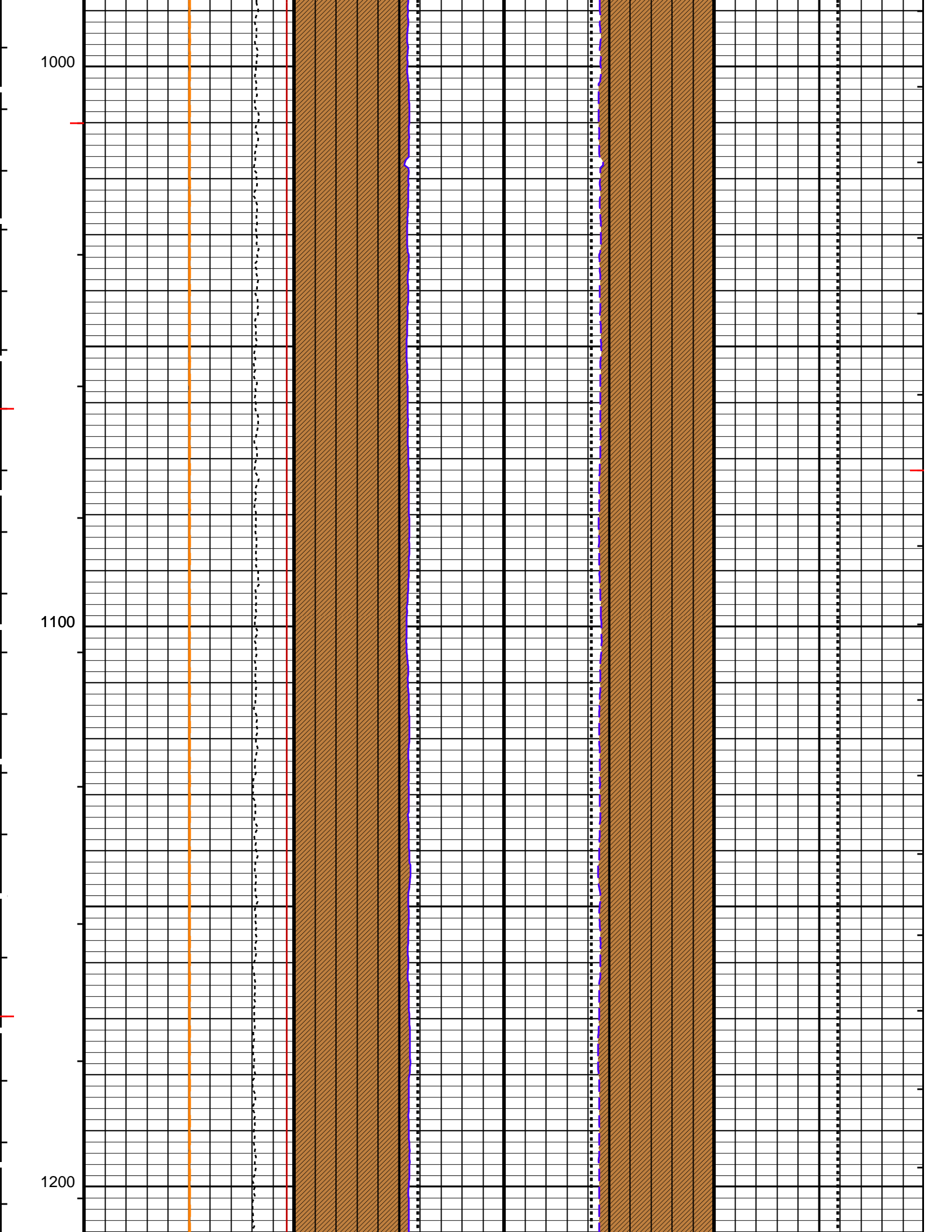
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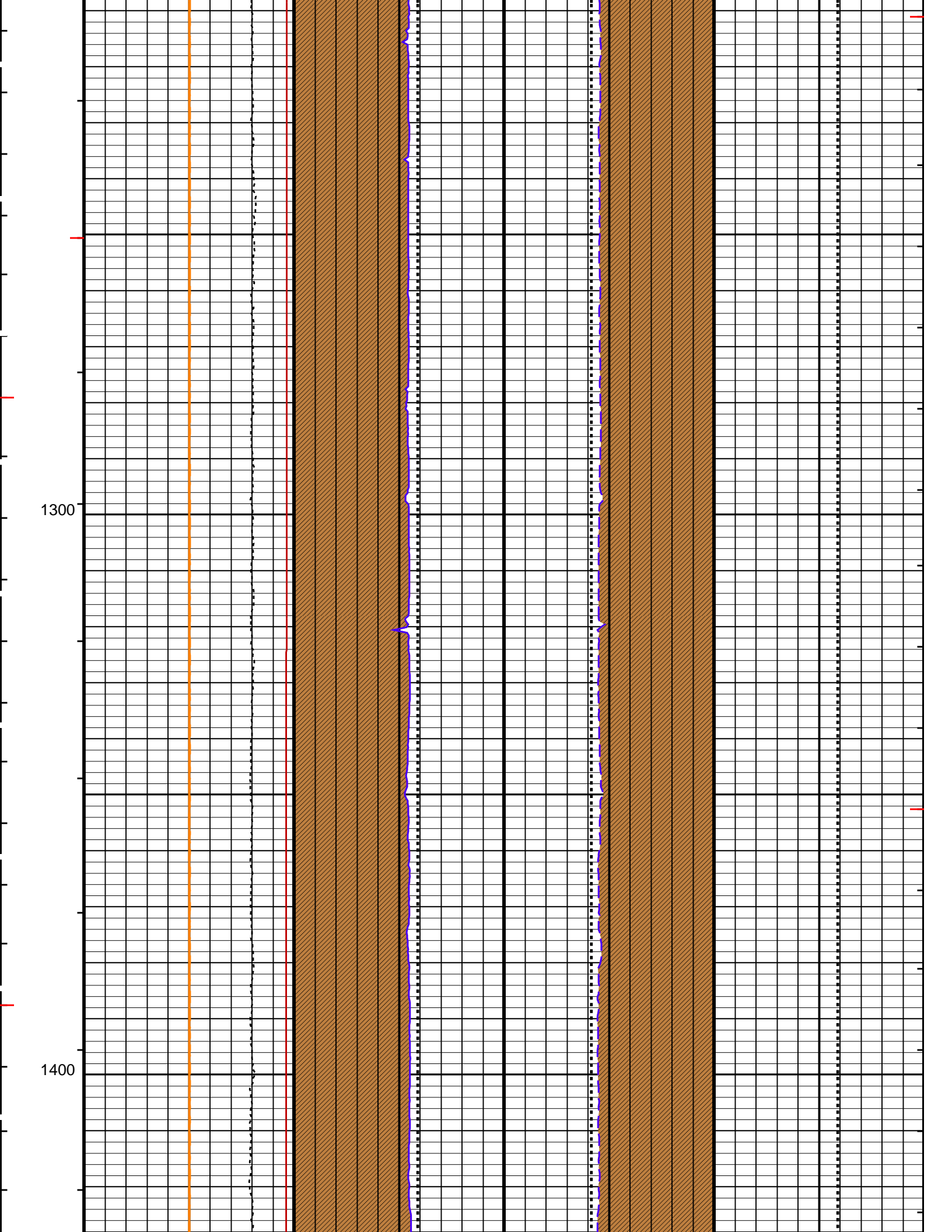
500

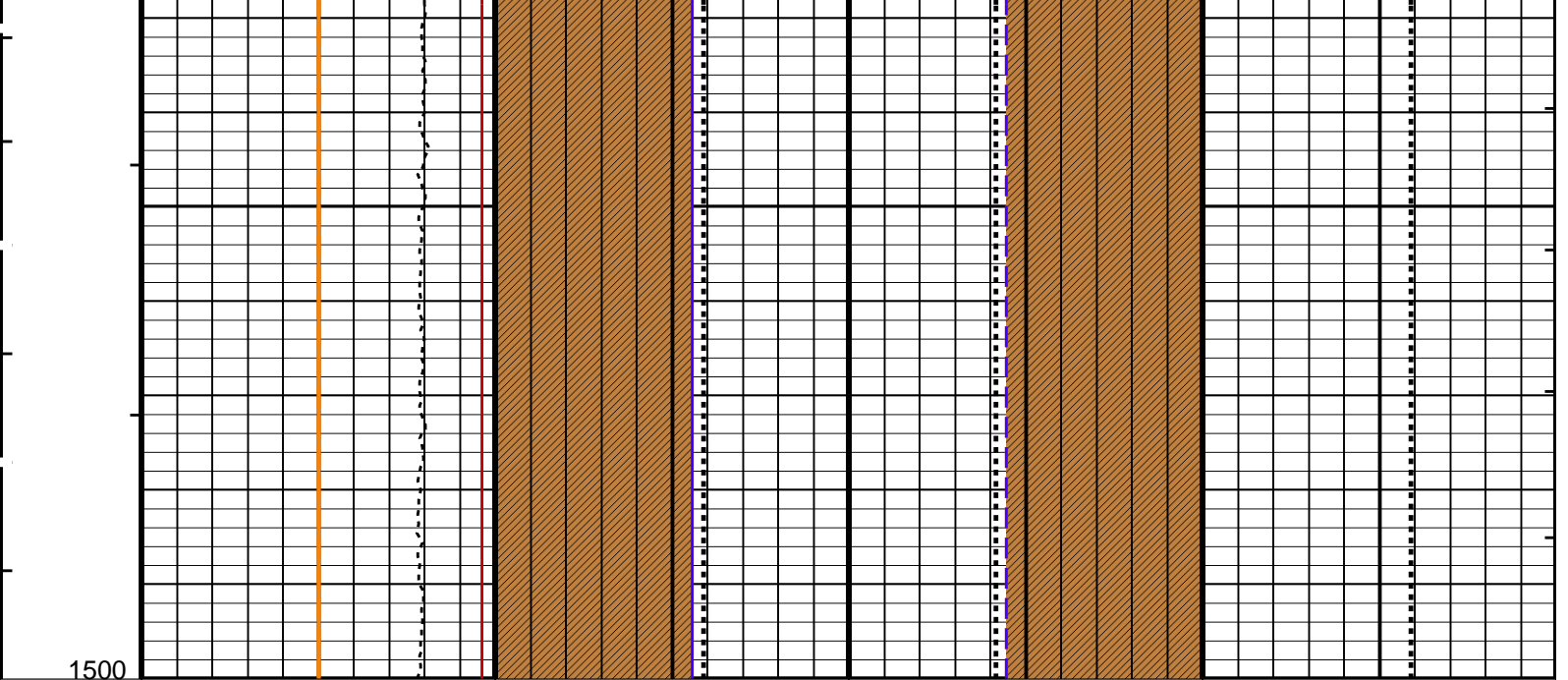












Stuck Stretch (STIT) 0 (F) 50	PPC2 Tool Center 1 (ETC1_PPC2) -10 (IN) 10	Bit Size (BS) 24 (IN) 4 4	Bit Size (BS) 24 (IN) 24	Bit Size (BS) 24 (IN) 4
Cable Drag From D4T to STIT	PPC2 Tool Center 2 (ETC2_PPC2) -10 (IN) 10	PPC2 Ellipse Hole Diameter 1 (EHD1_PPC2) 24 (IN) 4 4	PPC2 Ellipse Hole Diameter 2 (EHD2_PPC2) 24 (IN) 24	
Tool/Tot. Drag From D4T to STIA	PPC2 Relative Bearing (RB_PPC2) 0 (DEG) 360	PPC2 Hole Diameter 1 (HD1_PPC2) 24 (IN) 4 4	PPC2 Hole Diameter 2 (HD2_PPC2) 24 (IN) 24	
	Tension (TENS) 10000 (LBF) 0	Formation From F2 to EHD1_PPC2	Formation From EHD2_PPC2 to F3	
		HD difference From EHD1_PPC2 to HD1_PPC2	HD difference From HD2_PPC2 to EHD2_PPC2	

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
- Integrated Transit Time Minor Pip Every 1 MS ┆
- Integrated Transit Time Major Pip Every 10 MS ┆
- Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
PPC1: Powered Positioning Device/Caliper 1	PPC1 Caliper Type	CAL_STD
CLBD_PPC	PPC Calibration data selection	ROM
MAPC-B: Multimode Array Sonic Power Cartridge		
BS	Bit Size	12.250 IN
ITTS	Integrated Transit Time Source	DTCO
PPC2: Powered Positioning Device/Caliper 2	PPC2 Caliper Type	CAL_STD
CLBD_PPC	PPC Calibration data selection	ROM
DIP: Dip Computation	DIP Tool	FBST
DIR: Directional Survey Computation		
SPVD	TVD of Starting Point	1499.87 FT
TIMD	Along-hole depth of Tie-in Point	650 FT

TVD	STI: Stuck Tool Indicator	TVD of Tie-in Point	650	FT
LBFR		Trigger for MAXIS First Reading Label	TDL	
STKT		STI Stuck Threshold	2.5	FT
TDD		Total Depth - Driller	1528.00	FT
TDL		Total Depth - Logger	1500.00	FT
FCD	HOLEV: Integrated Hole/Cement Volume	Future Casing (Outer) Diameter	9.625	IN
HVCS		Integrated Hole Volume Caliper Selection	AUTOMATIC	
	System and Miscellaneous			
DO		Depth Offset for Playback	0.0	FT
PP		Playback Processing	OFF	
TD		Total Depth	1500	FT

Format: PPC2_HoleDiameter Vertical Scale: 5" per 100' Graphics File Created: 31-Aug-2011 22:21

OP System Version: 19C0-187

FBST-B	19C0-187	PPC1	19C0-187
MAXS-B	19C0-187	MAPC-B	19C0-187
PPC2	19C0-187	EDTC-B	19C0-187

Input DLIS Files

DEFAULT	FMI_CAL_MAXS_MAPC_074PUP	FN:110	PRODUCER	31-Aug-2011 20:42	1500.0 FT	82.5 FT
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Output DLIS Files

DEFAULT	FMI_CAL_MAXS_MAPC_081PUP	FN:123	PRODUCER	31-Aug-2011 22:21
RTB	FMI_CAL_MAXS_MAPC_081PUP	FN:124	PRODUCER	31-Aug-2011 22:21

Company: **SANDIA TECHNOLOGIES, LLC**



Well: **NYSTA TANDEM LOT 1**
Field: **WILDCAT**
County: **ROCKLAND**
State: **NEW YORK**

POWERED POSITIONING CALIPER - PPC
4 ARM CALIPER LOG