

Rig: **JOIDES Resolution** Country: **Greece**

Rig:	JOIDES Resolution	High Resolution Laterolog (HRLA)							
Field:	Hellenic Arc Volcanic Field	Litho Density (HLDS)							
Location:	Latitude: N 36° 43.7463'	Natural Gamma / MSS (HNGS/MSS)							
Well:	Expedition 398, Site U1589C								
Company:	International Ocean Discovery Program								
		LOCATION	Latitude: N 36° 43.7463'			Elev.:	K.B.	0.00 ft	
			Longitude: E 25° 38.9046'				G.L.	-1619.42 ft	
							D.F.	0.00 ft	
		Permanent Datum: <u>Sea Floor</u>			Elev.:	<u>-1619.42 ft</u>			
		Log Measured From: <u>Rig Floor</u>			1619.42 ft above Perm. Datum				
		Drilling Measured From: <u>Rig Floor</u>							
		Ocean:		Max. Well Deviation		Longitude		Latitude	
		Mediterranean		0 deg		E 25.64841°		N 36.729105°	

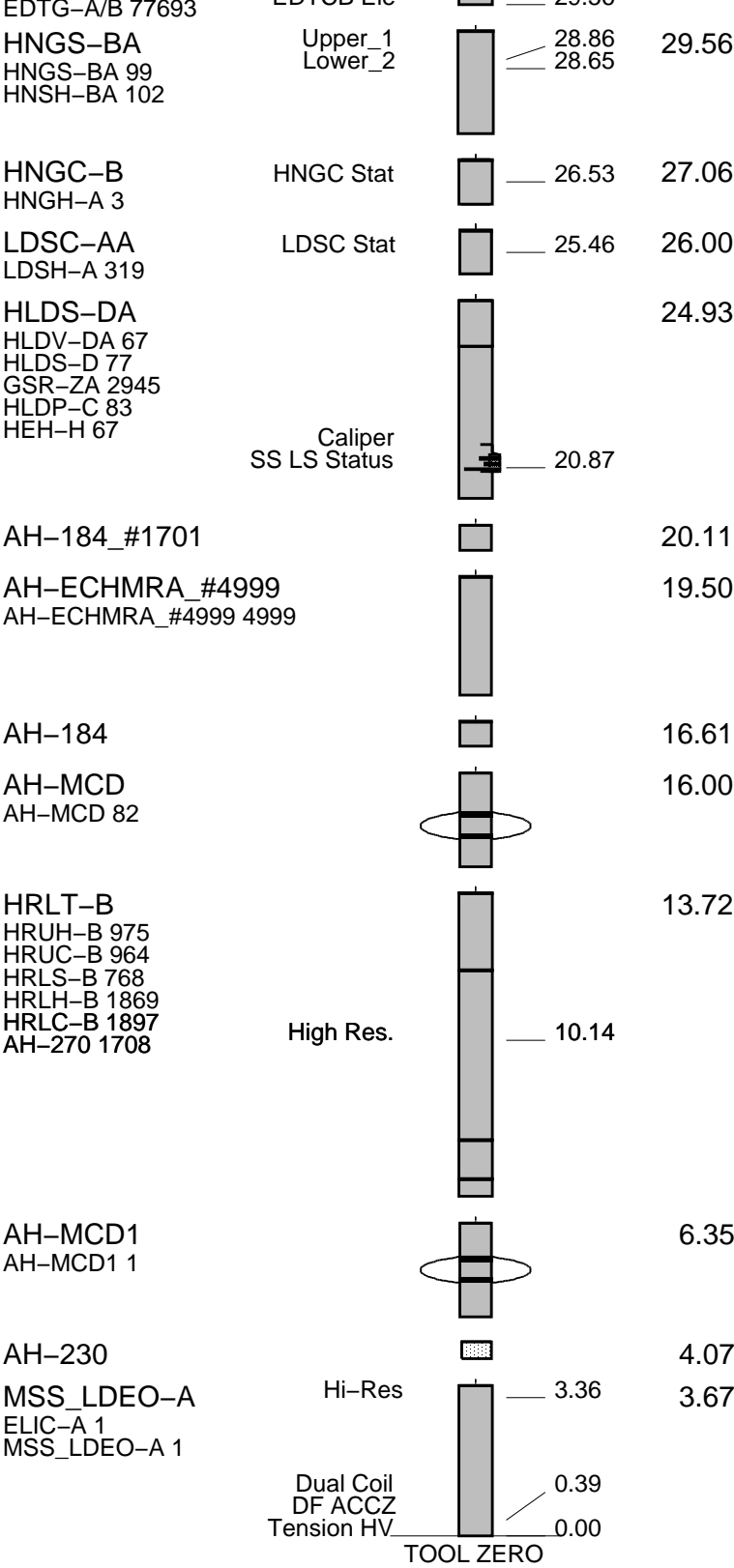
Logging Date			29-Dec-2022					
Run Number			1					
Depth Driller			2040.35 ft					
Schlumberger Depth			1787.4 ft					
Bottom Log Interval			3406.82 ft					
Top Log Interval			2478.67 ft					
Casing Driller Size @ Depth			0.000 in @ 2509.84 ft			@		
Casing Schlumberger			2509.84 ft					
Bit Size			9.875 in					
Type Fluid In Hole			Barite					
MUD	Density	Viscosity	10.5152 lbm/gal					
	Fluid Loss	PH		8.07				
	Source Of Sample		Mudpit					
	RM @ Measured Temperature		0.220 ohm.m @ 73 degF			@		
	RMF @ Measured Temperature		@			@		
RMC @ Measured Temperature		@			@			
Source RMF	RMC	N/A	N/A					
RM @ MRT	RMF @ MRT	0.455 @ 32	@ 32	@	@	@		
Maximum Recorded Temperatures		32 degF						
Circulation Stopped		Time	29-Dec-2022	10:00				
Logger On Bottom		Time	29-Dec-2022	15:00				
Unit Number		Location	627314	Larose, LA				
Recorded By			K. Garrett					
Witnessed By			B. Rhinehart					

[illegible]

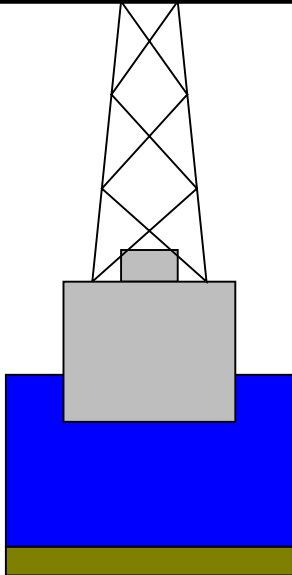
DISCLAIMER

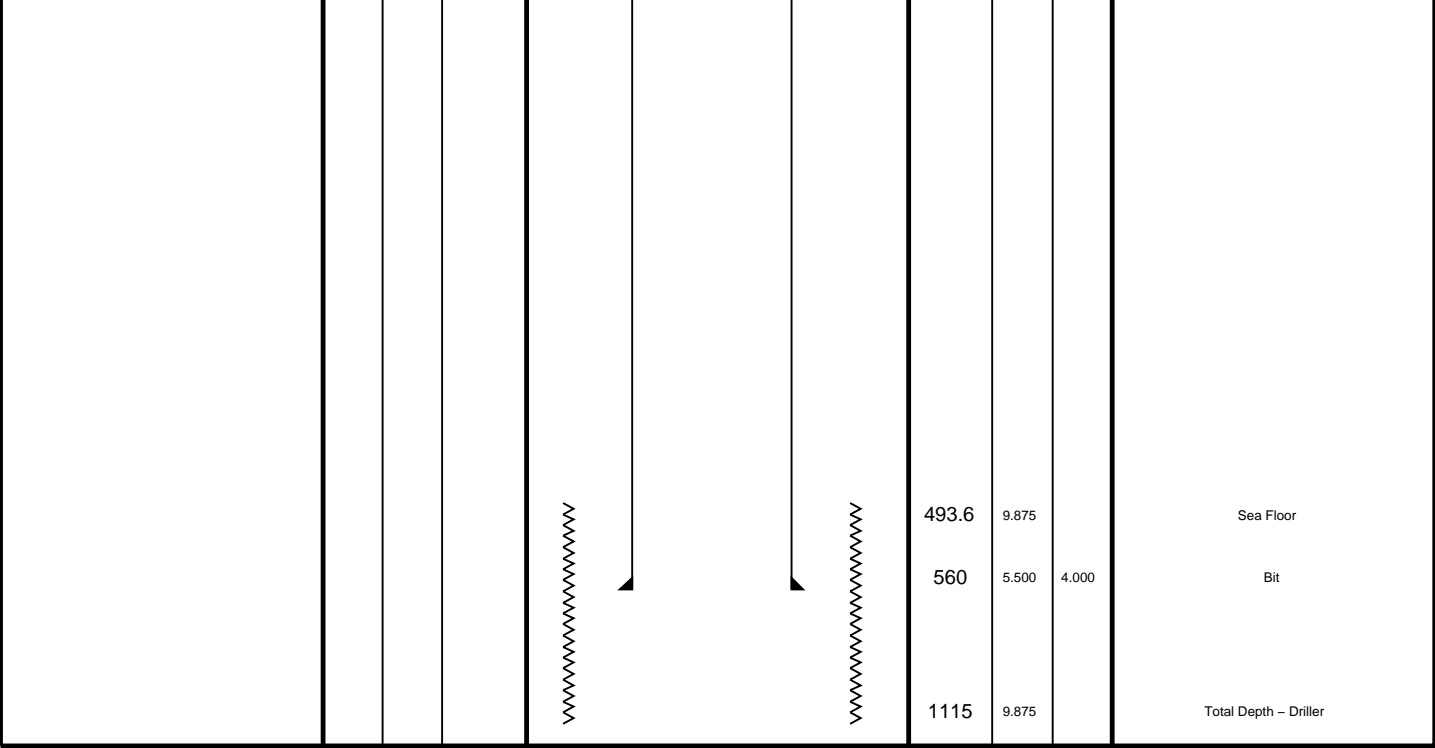
THE USE OF AND RELIANCE UPON THIS RECORDED-DATA BY THE HEREIN NAMED COMPANY (AND ANY OF ITS AFFILIATES, PARTNERS, REPRESENTATIVES, AGENTS, CONSULTANTS AND EMPLOYEES) IS SUBJECT TO THE TERMS AND CONDITIONS AGREED UPON BETWEEN SCHLUMBERGER AND THE COMPANY, INCLUDING: (a) RESTRICTIONS ON USE OF THE RECORDED-DATA; (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.

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MAXIMUM STRING DIAMETER 3.75 IN
MEASUREMENTS RELATIVE TO TOOL ZERO
ALL LENGTHS IN METERS

Production String				Well Schematic				Casing String
	(in)	(m)			(m)	(in)		
	OD	ID	MD		MD	OD	ID	
<div>Kelly Bushing Elevation</div> <div>Derrick Floor Elevation</div> <div>Mean Sea Level</div>			<div>0.0</div> <div>0.0</div> <div>11.0</div>		<div>0.0</div>	<div>5.500</div>	<div>4.000</div>	



Schlumberger

Downlog

MAXIS Field Log

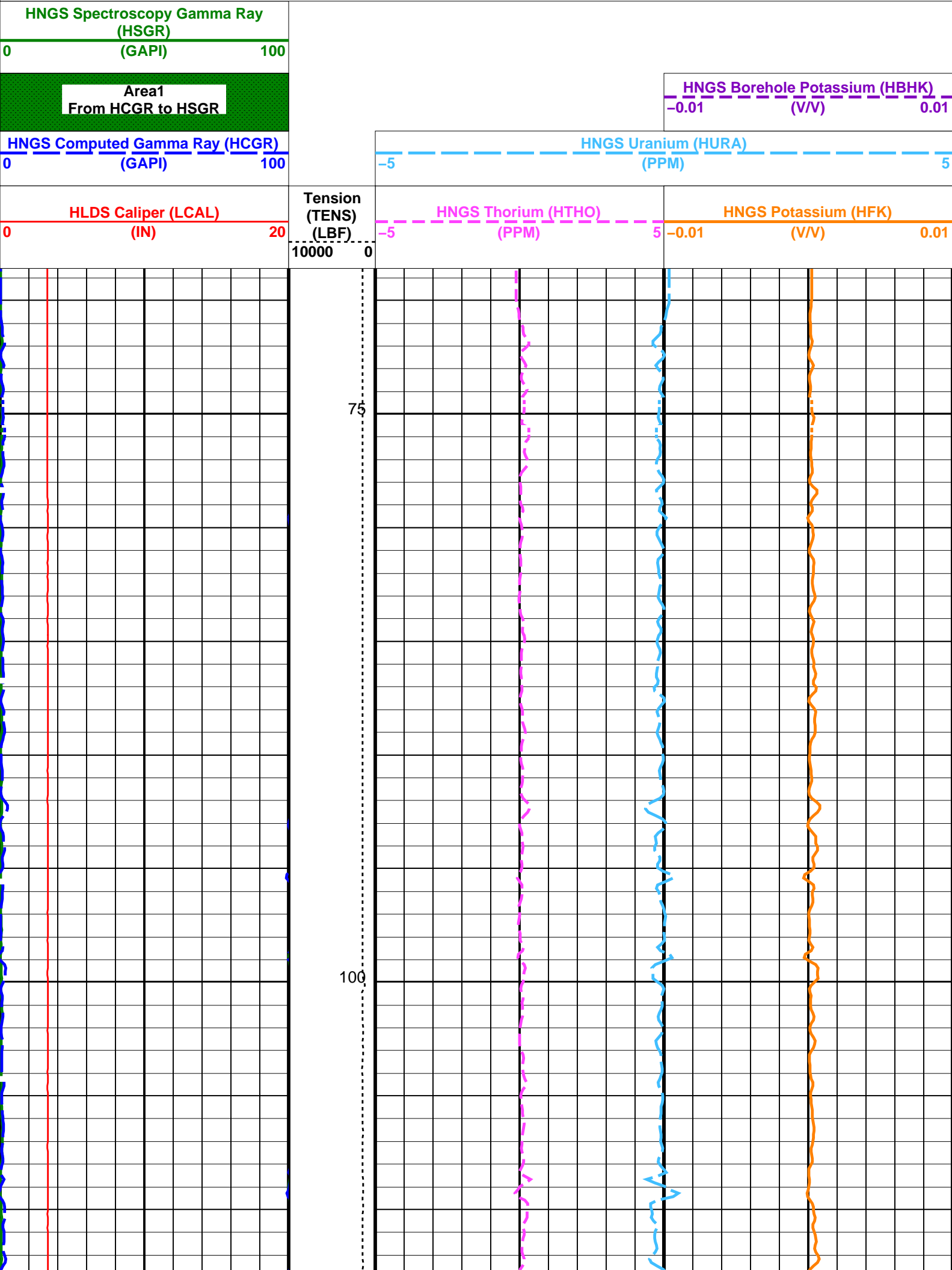
Company: International Ocean Discovery Program Well: Expedition 398, Site U1589C

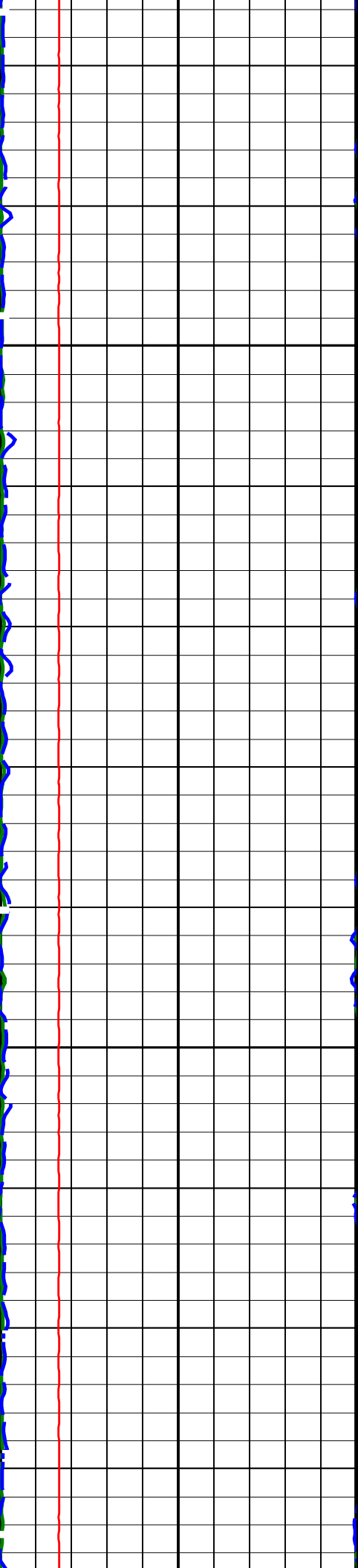
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Output DLIS Files					
DEFAULT	MSS_LDEO_HRLA_LDL_053PUP	FN:43	PRODUCER	01-Jan-2023 21:09	1002.6 M 68.6 M

OP System Version: 19C0-187			
MSS_LDEO-A	19C0-187	HRLT-B	19C0-187
HLDS-DA	19C0-187	LDSC-AA	19C0-187
HNGC-B	19C0-187	HNGS-BA	19C0-187
EDTC-B	SKK-5169-EDTCB		

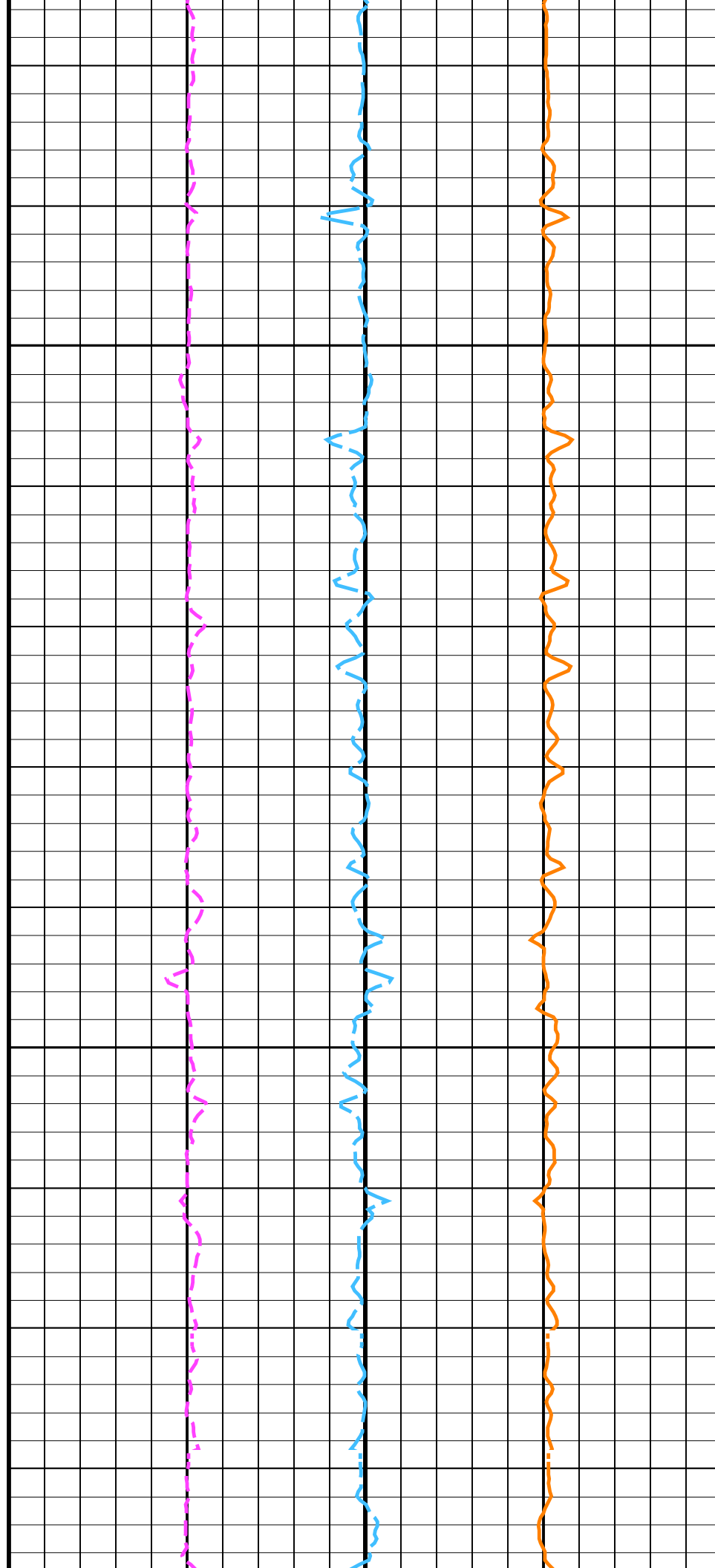
PIP SUMMARY

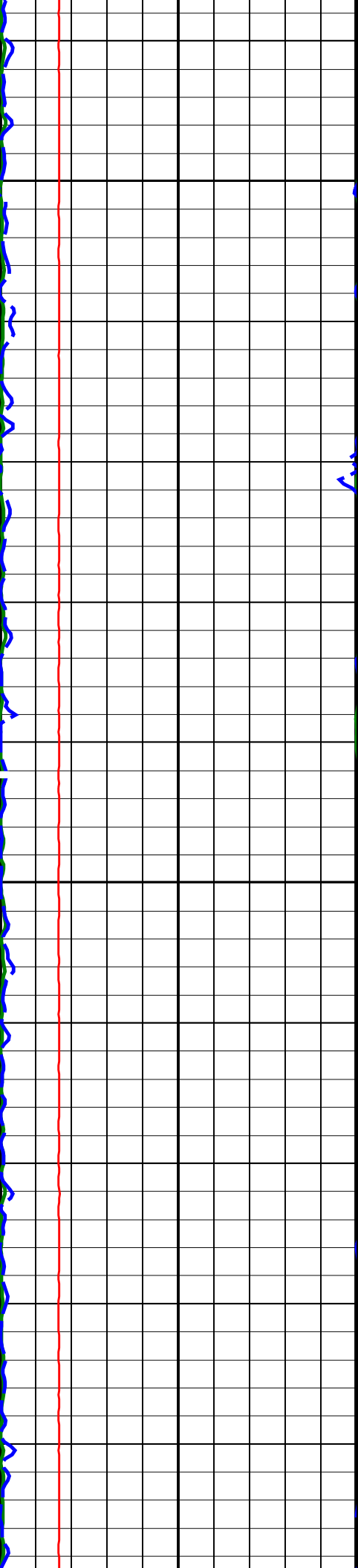




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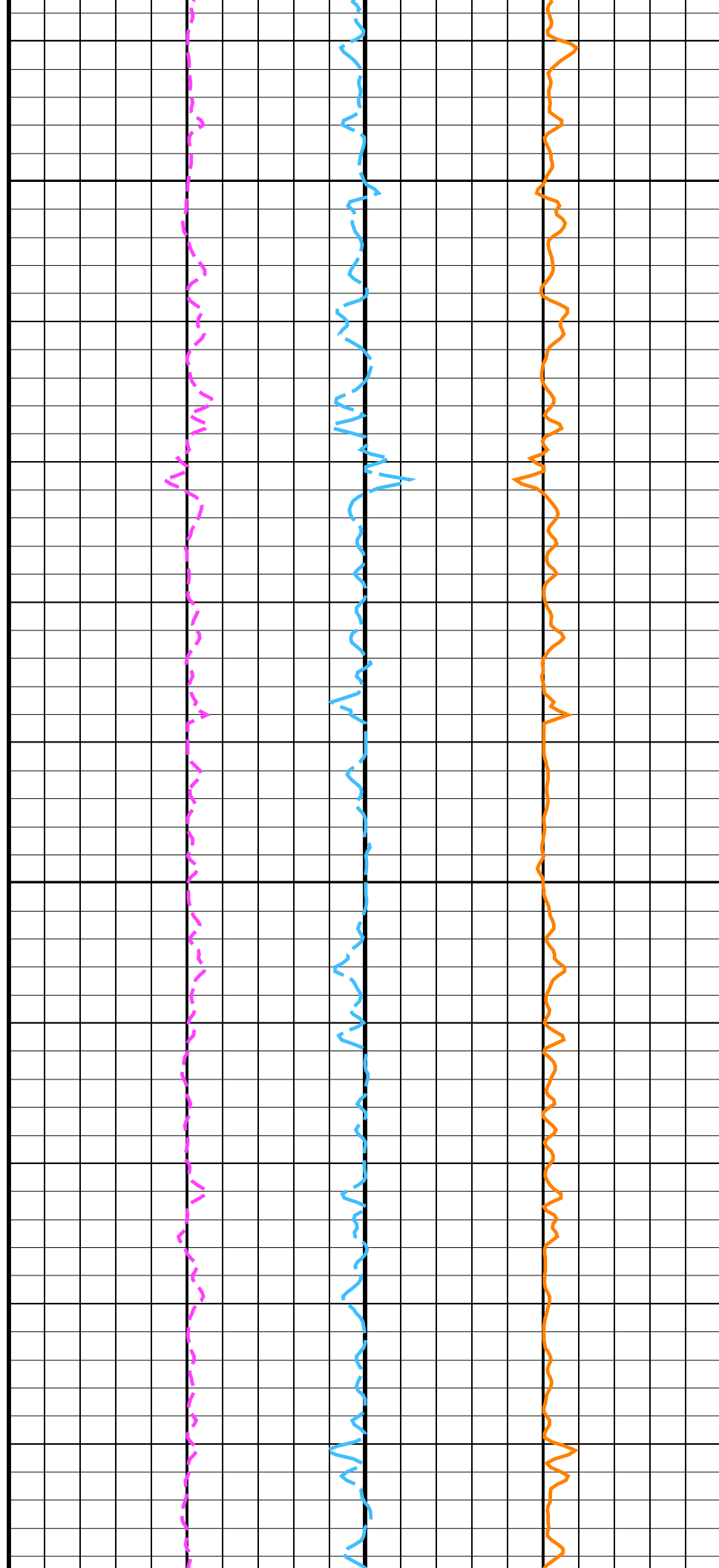
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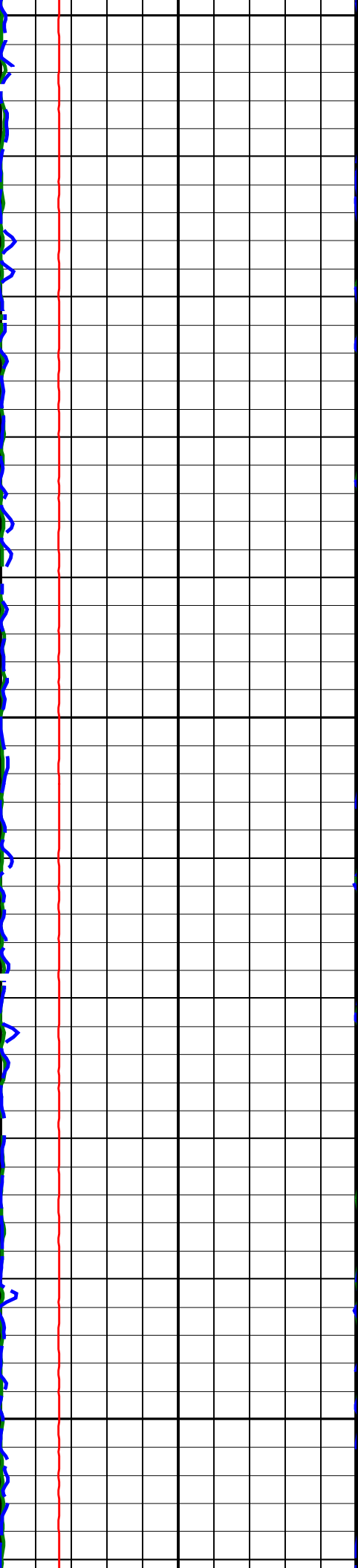




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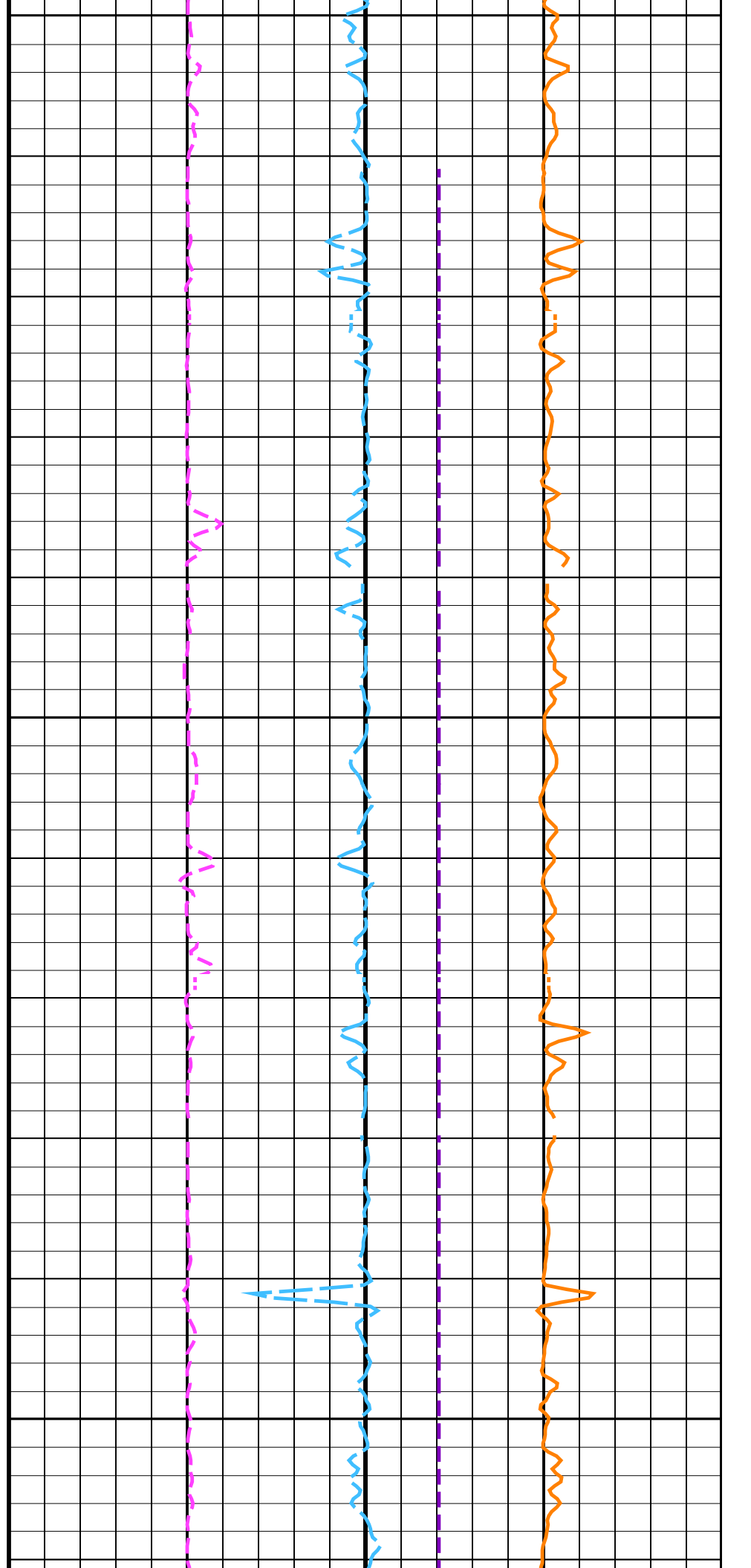


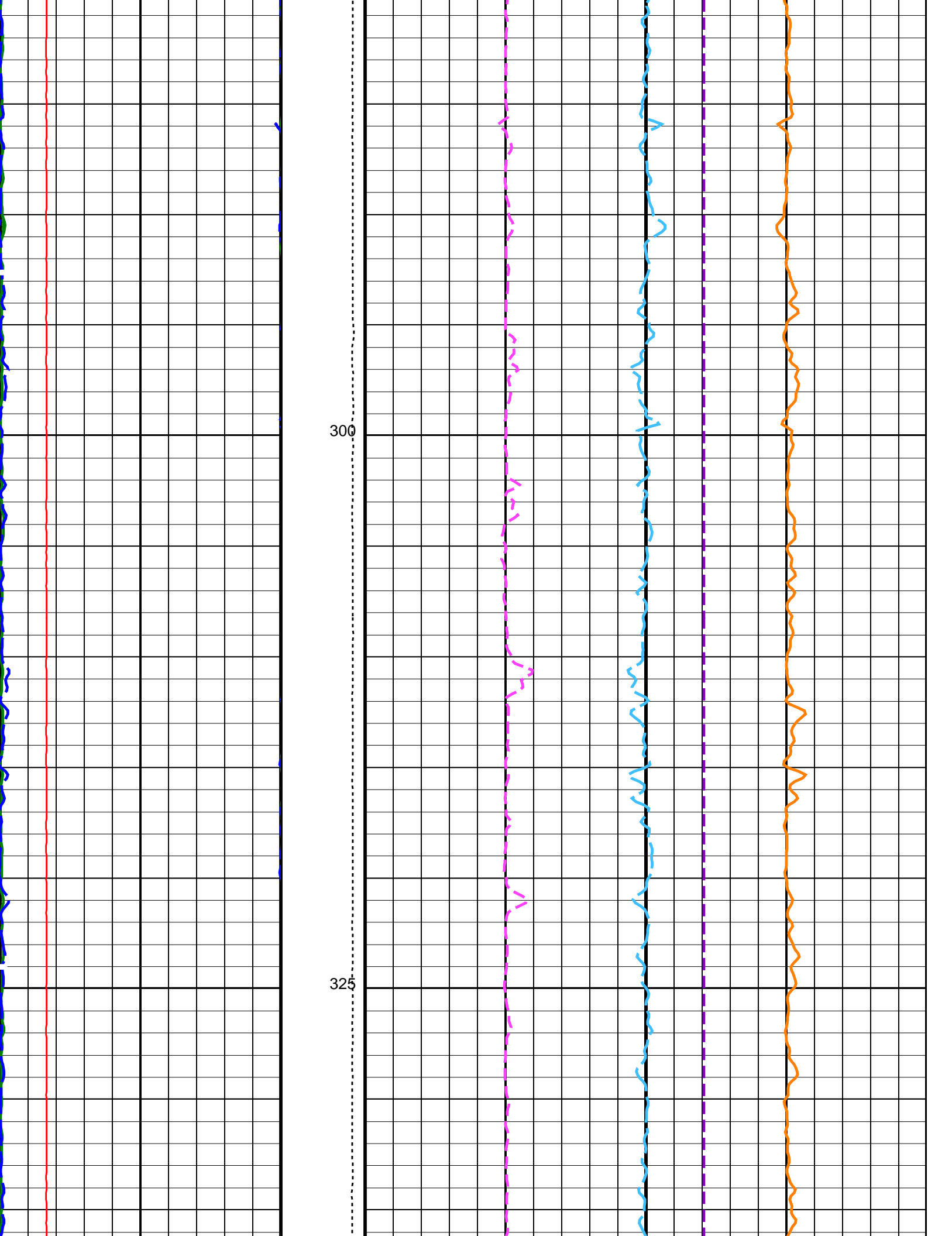


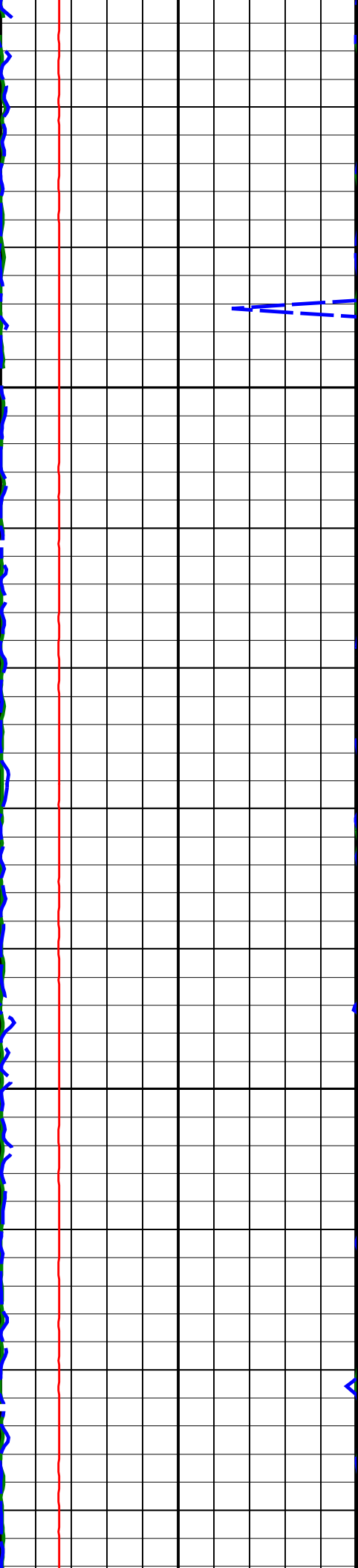
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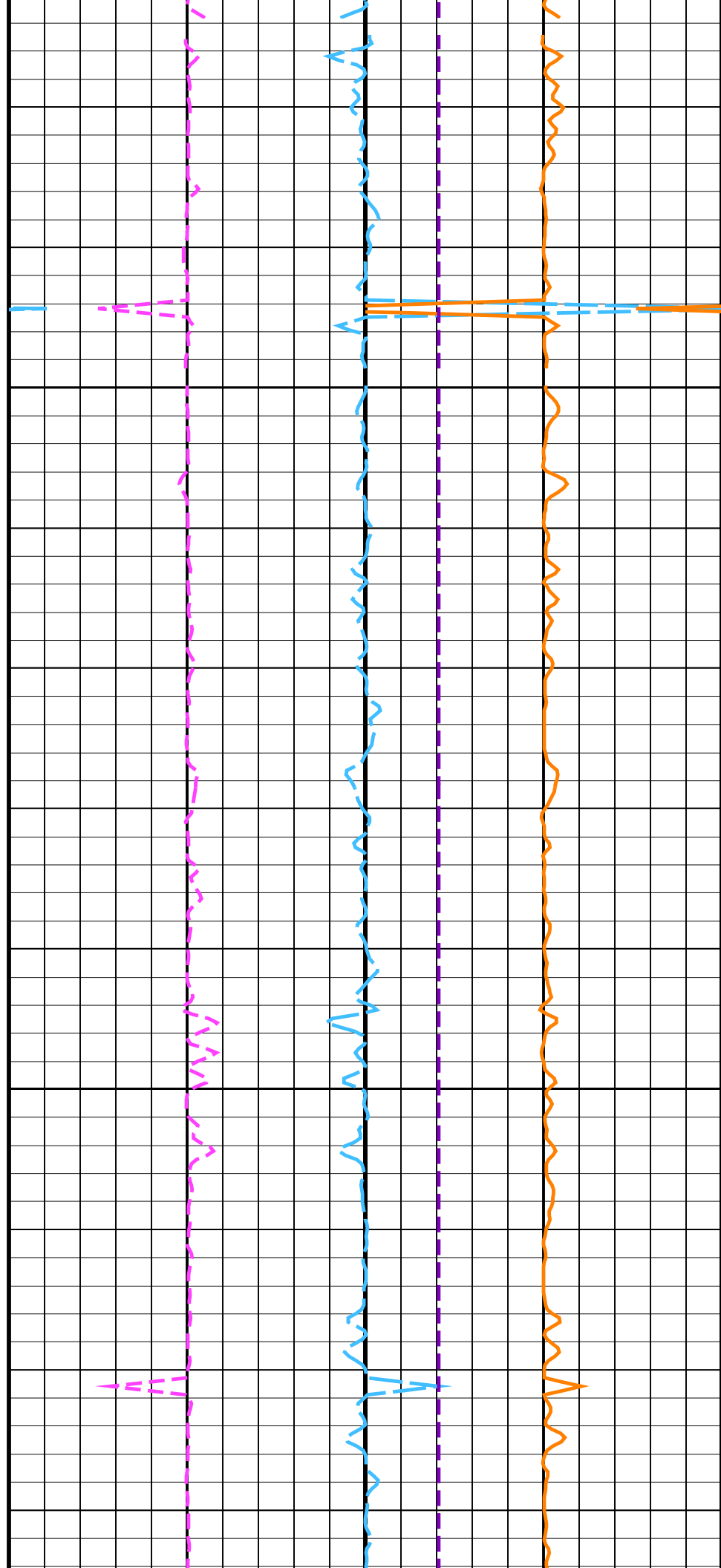


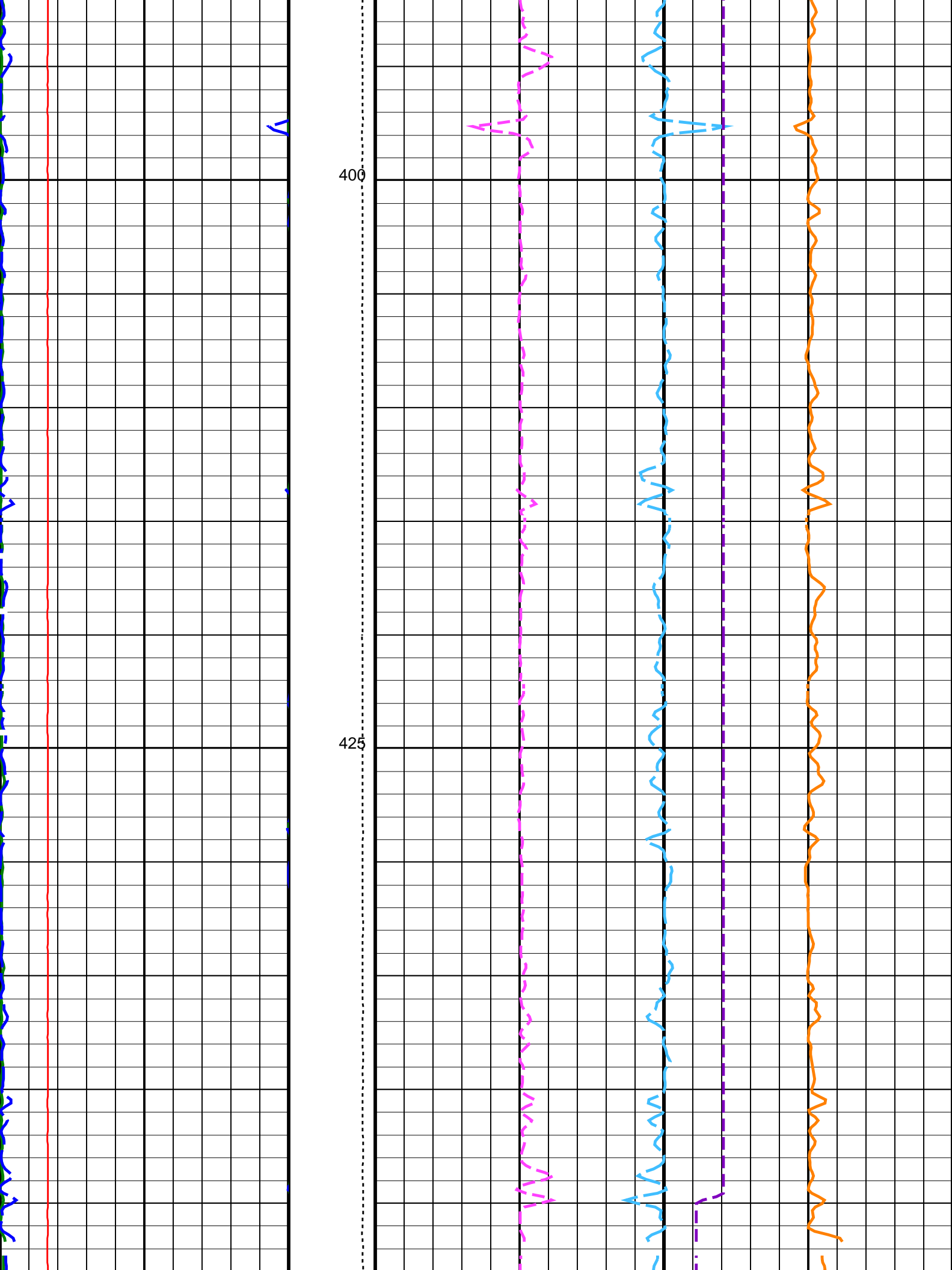


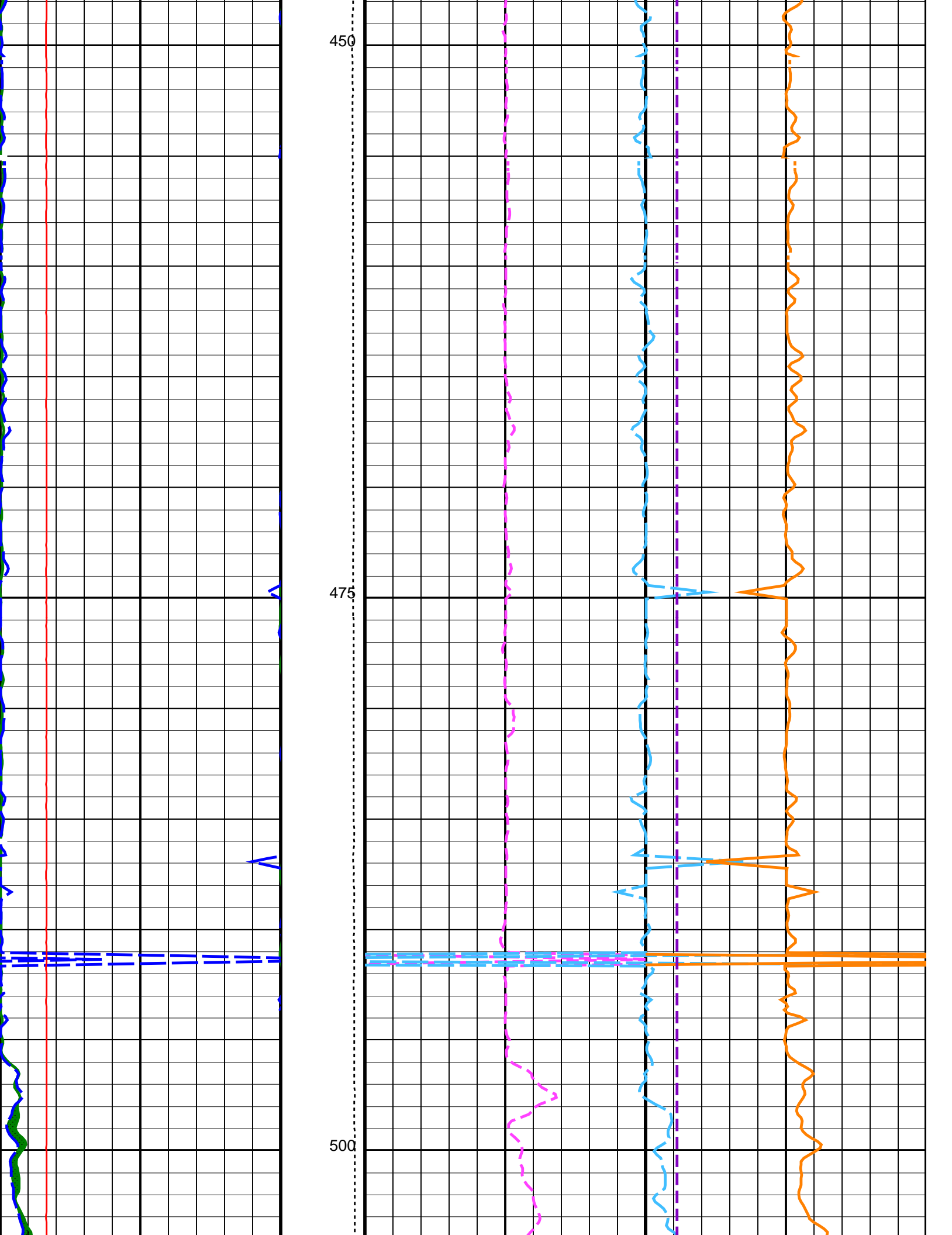


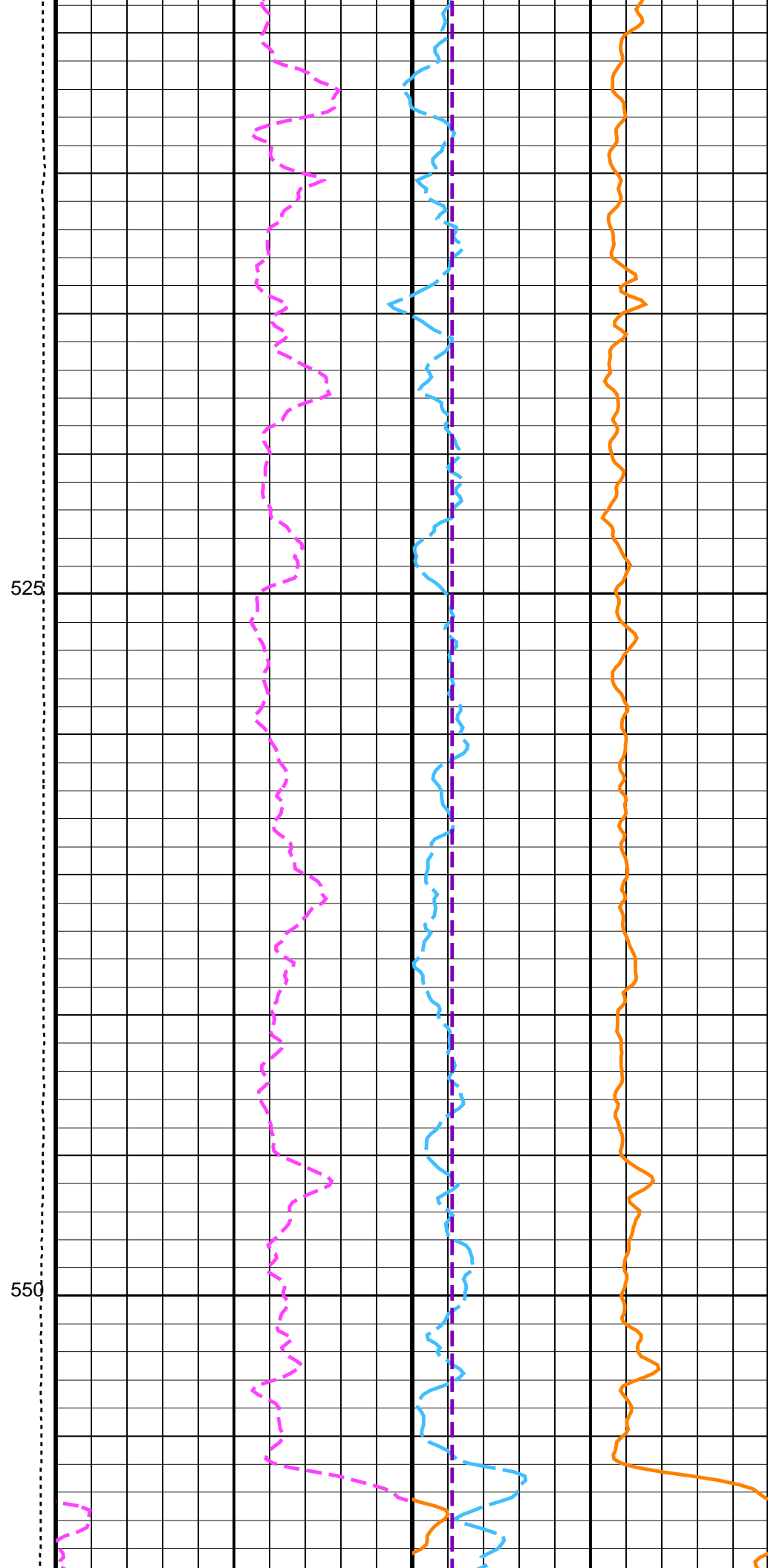
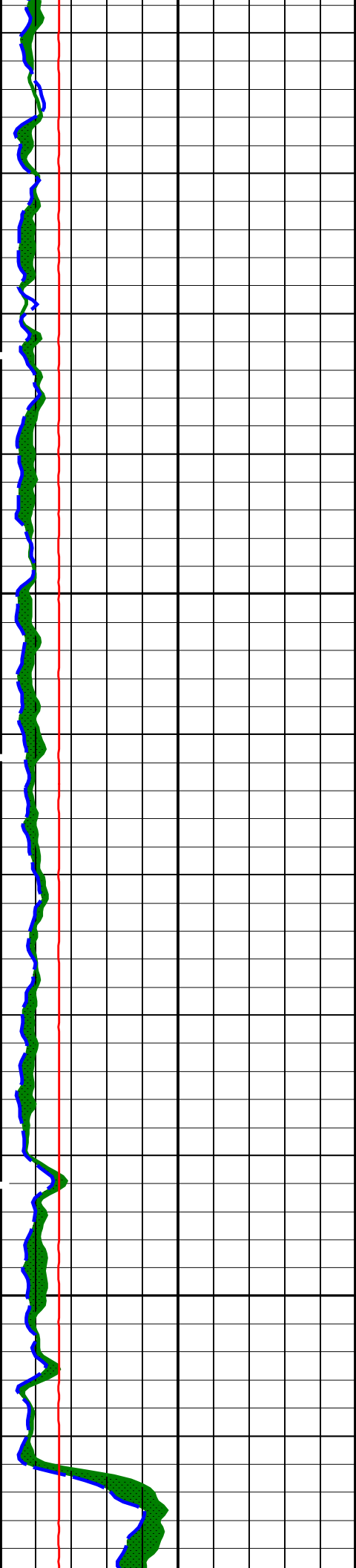
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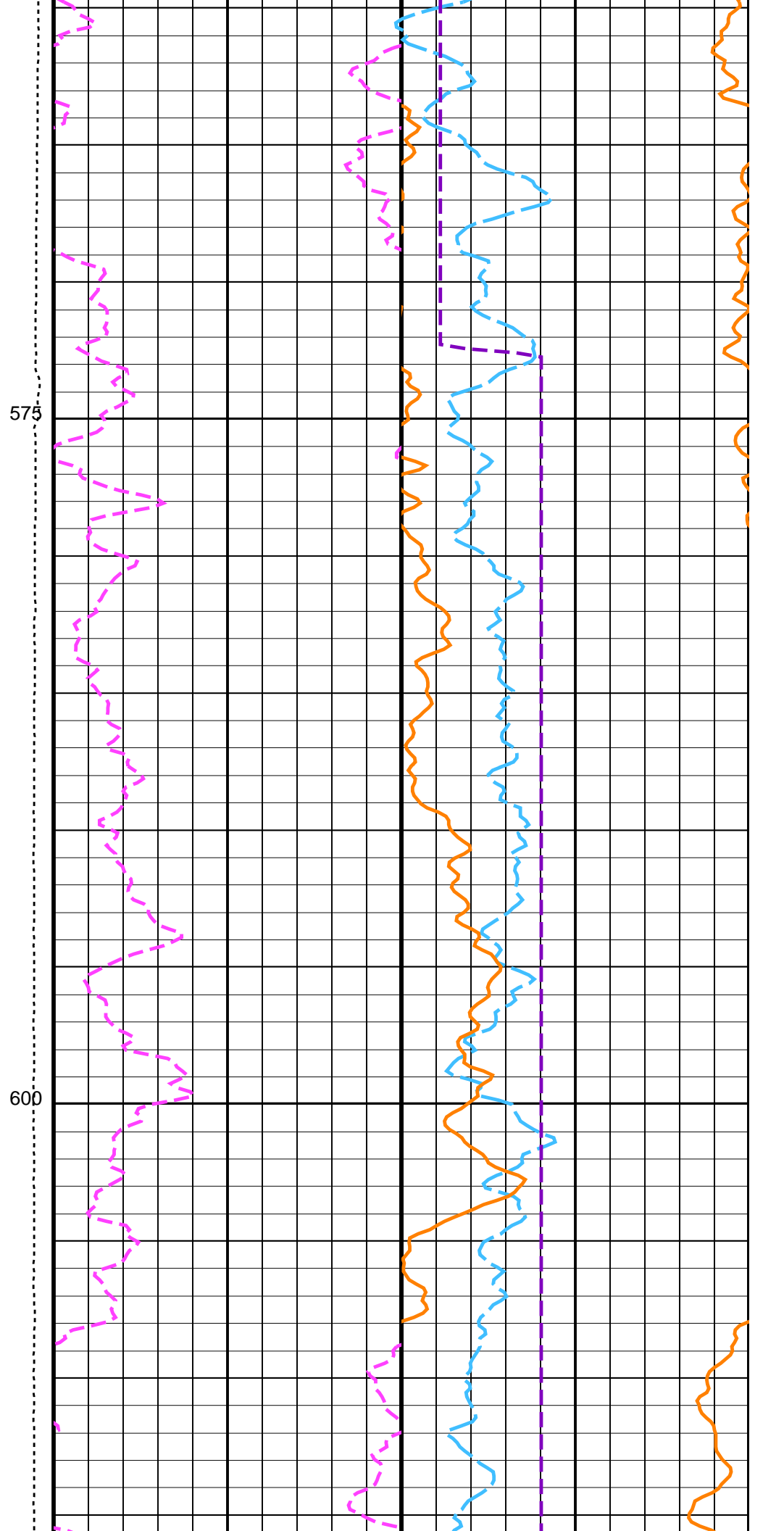
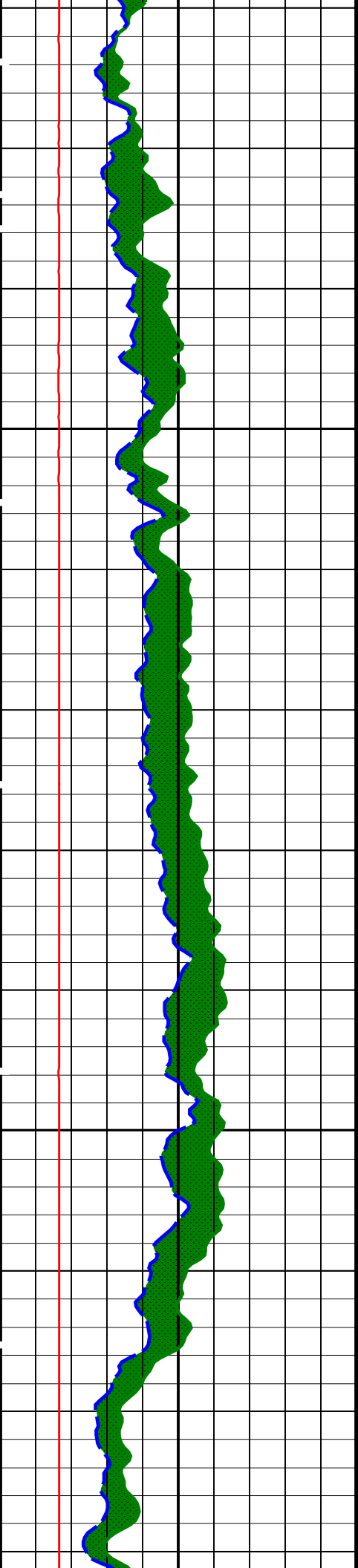
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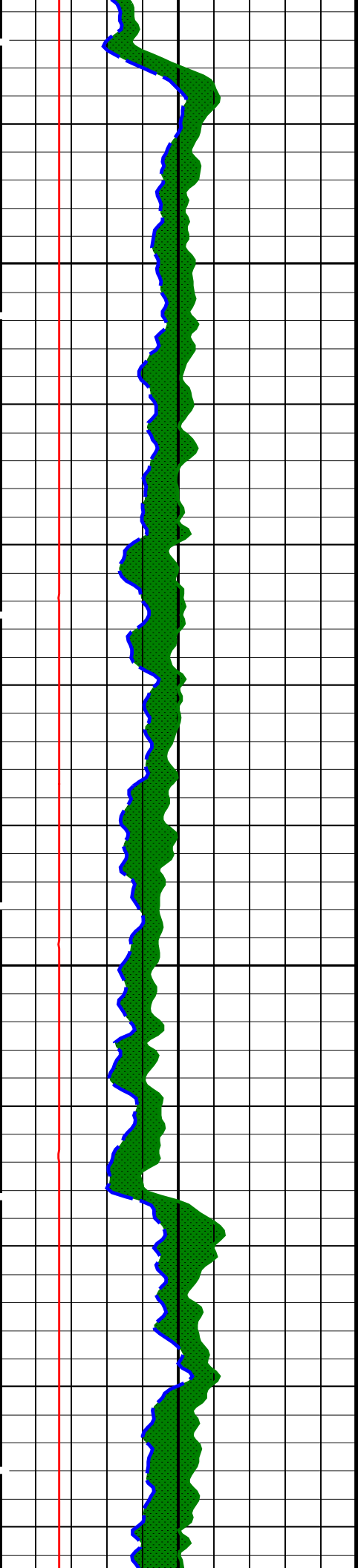






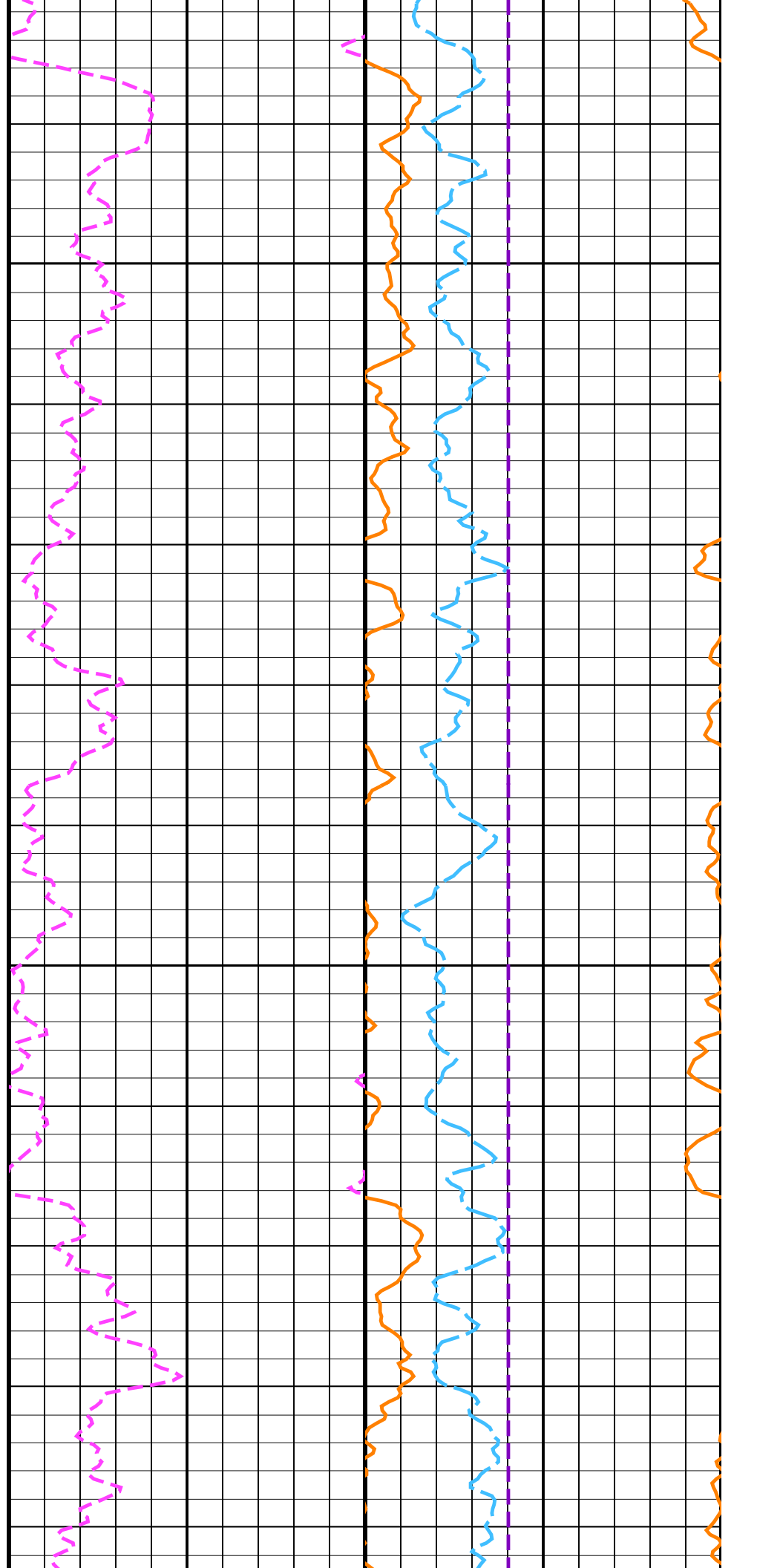


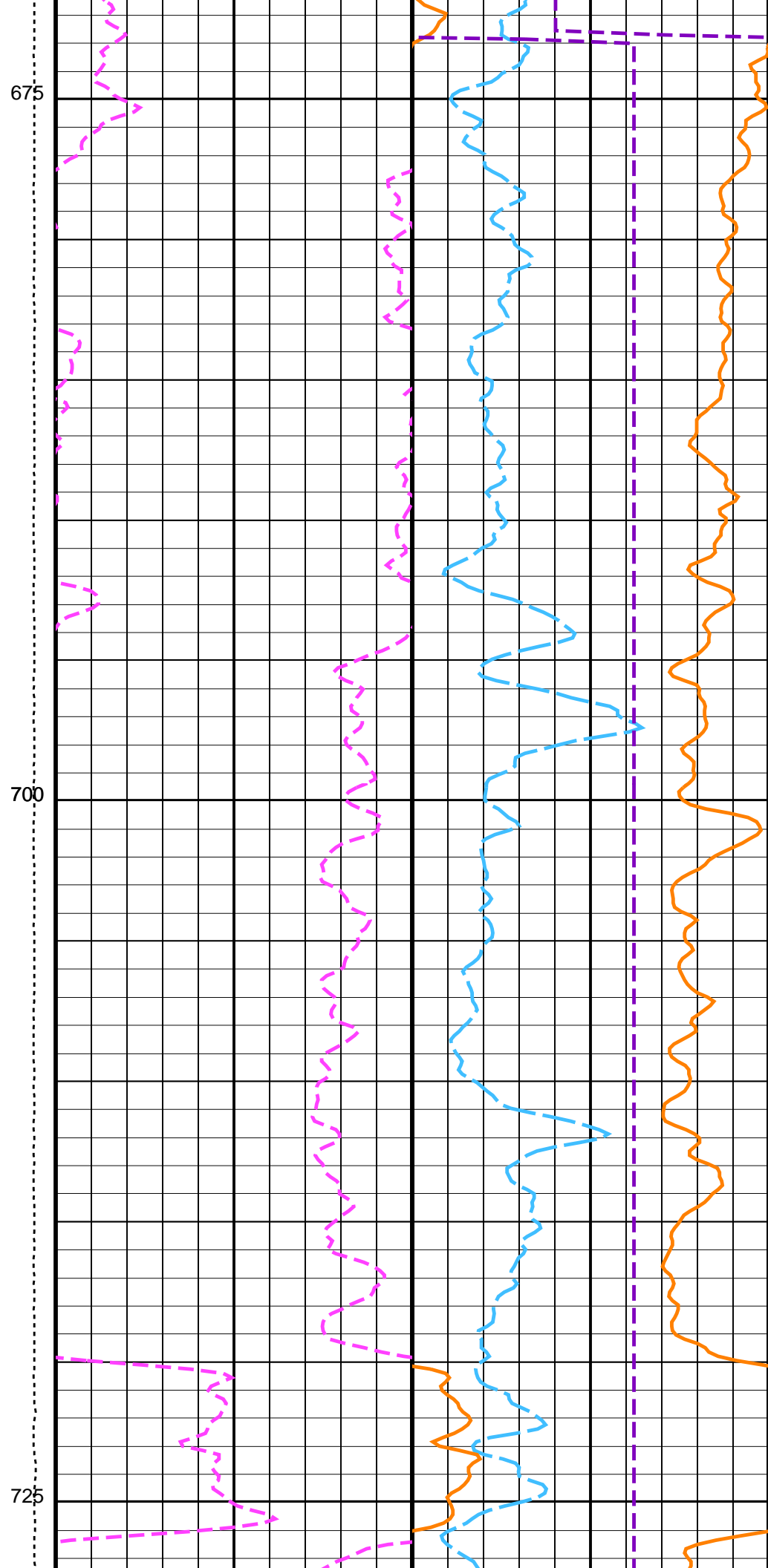
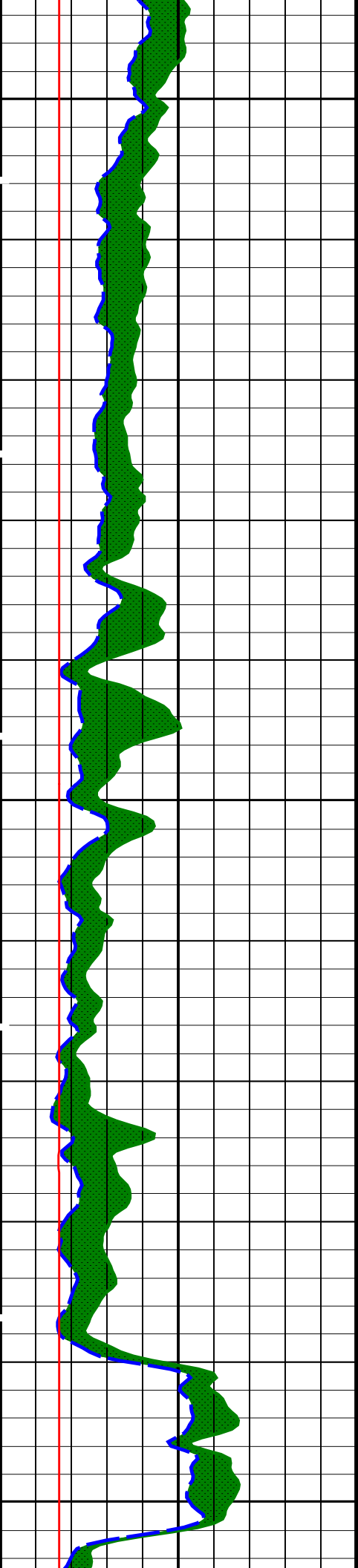


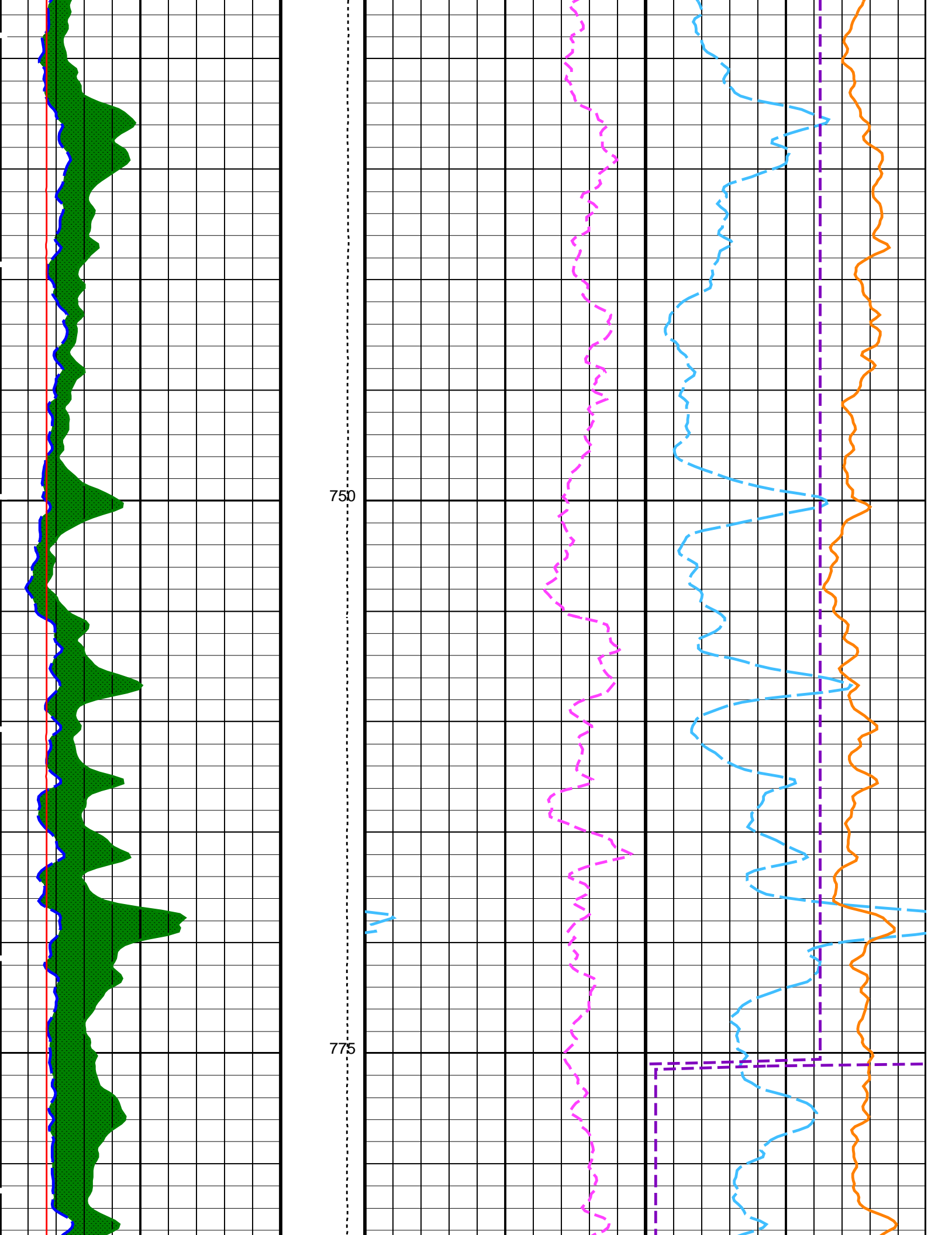


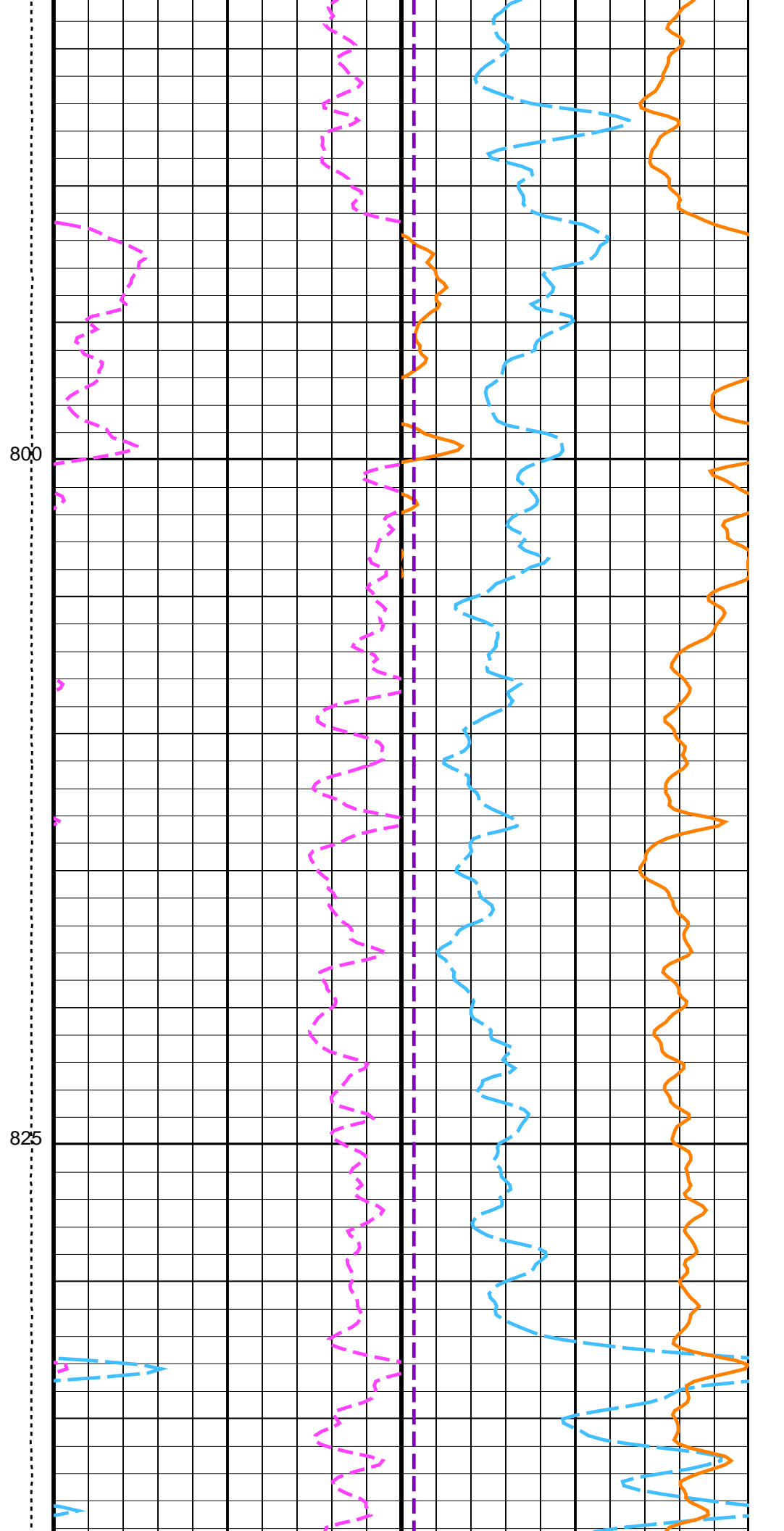
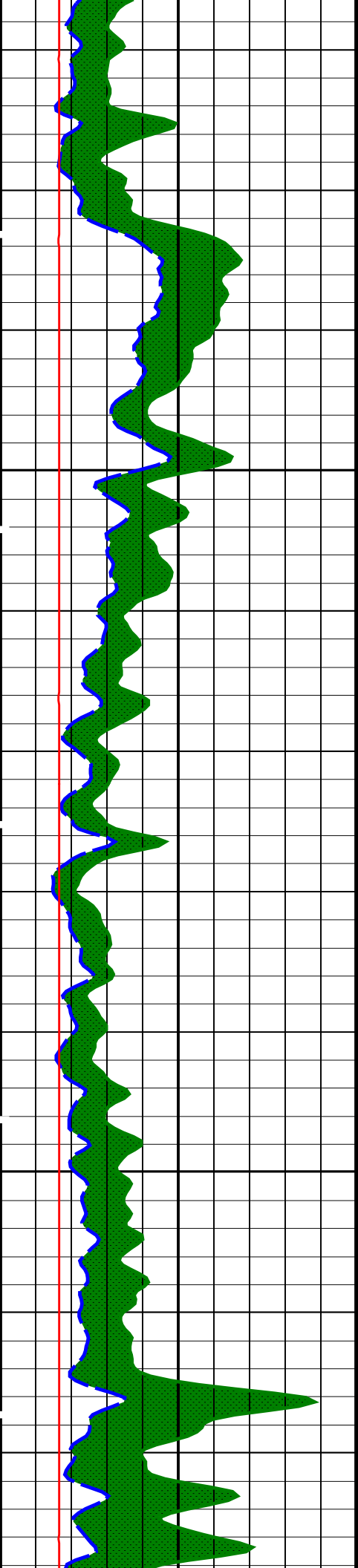
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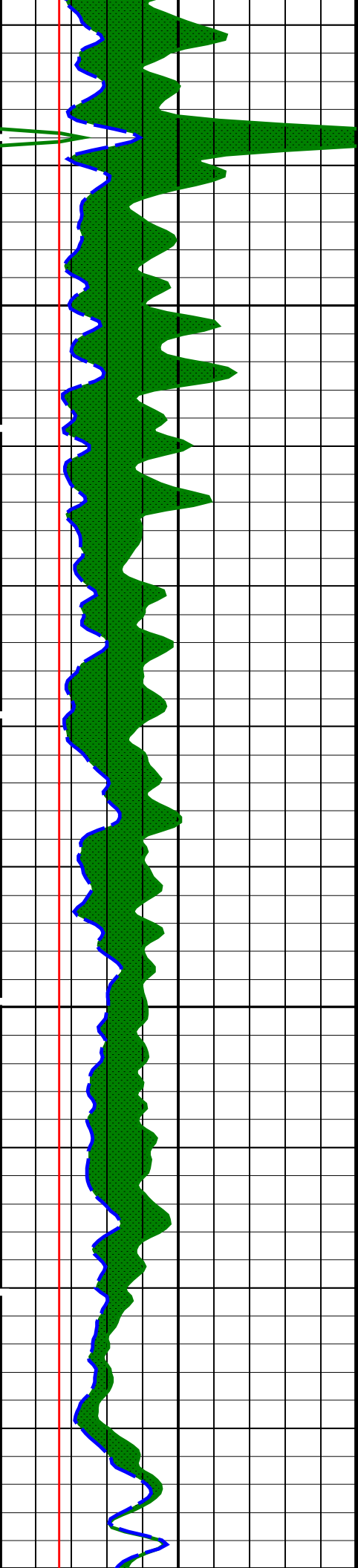
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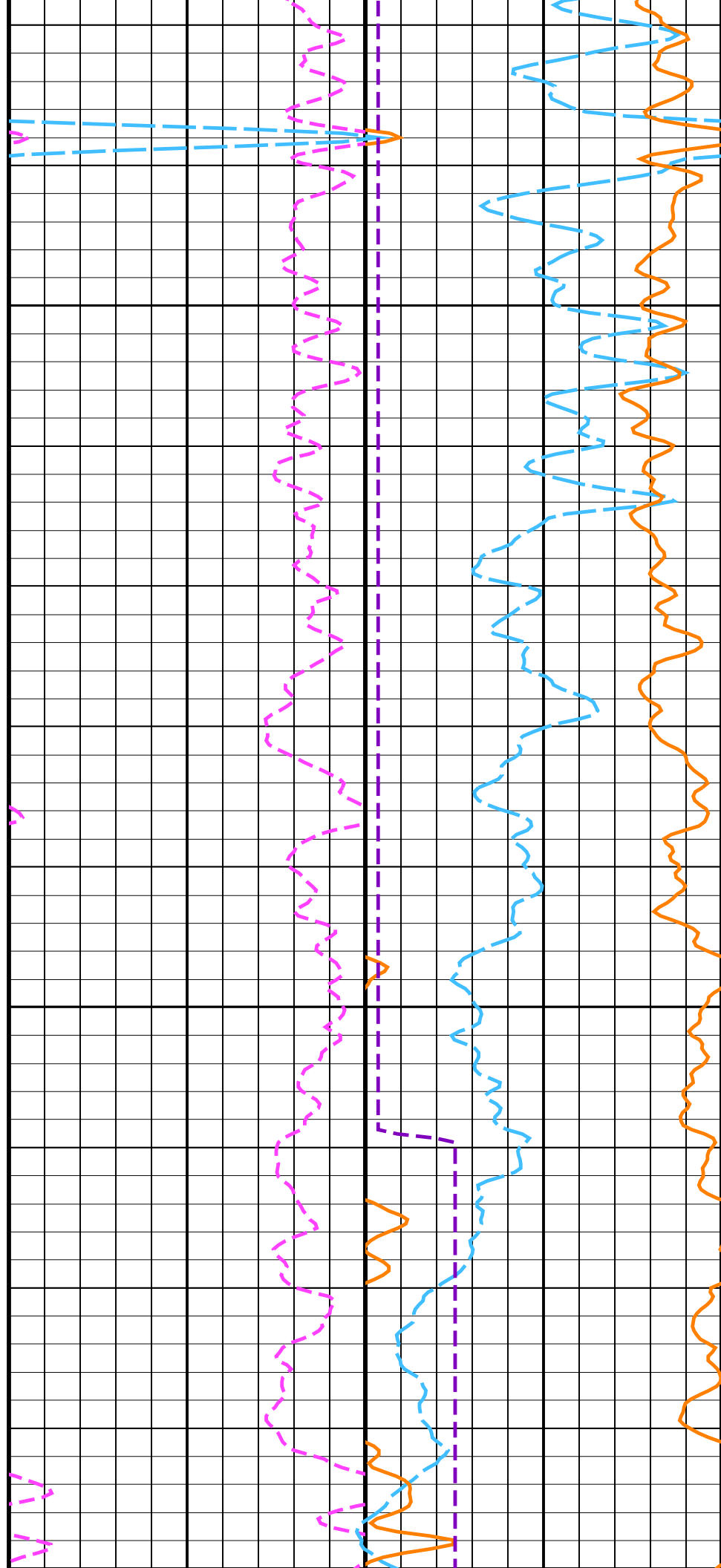


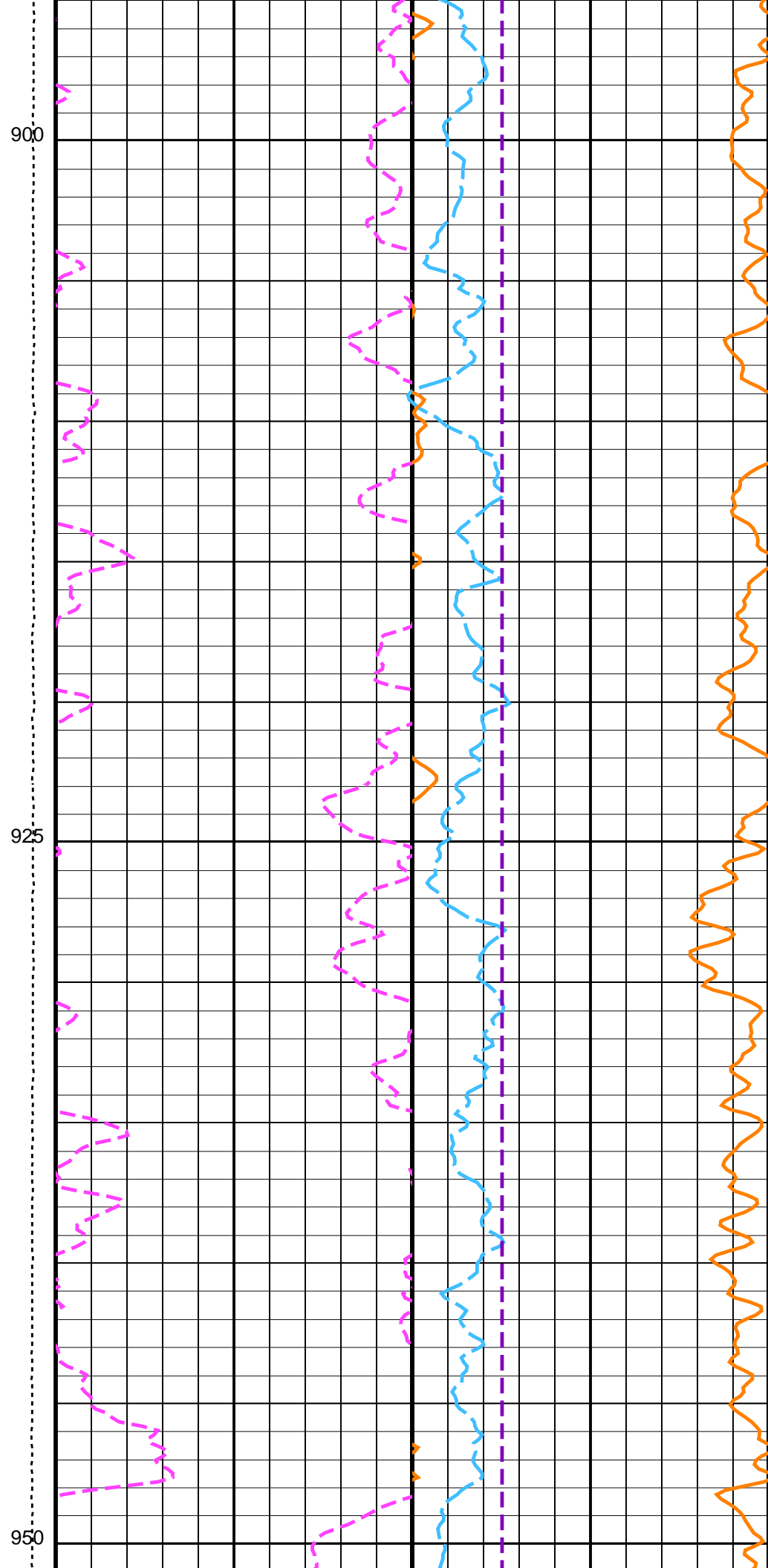
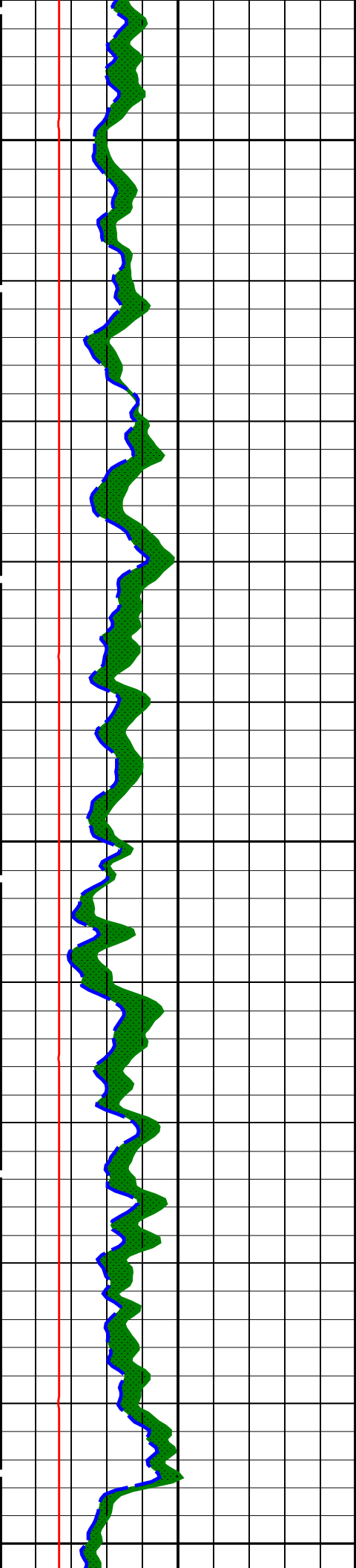


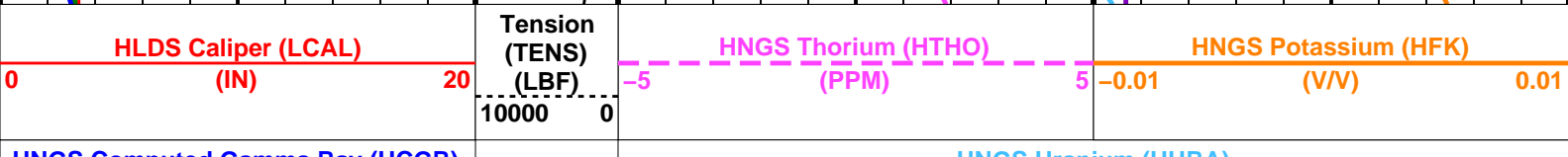
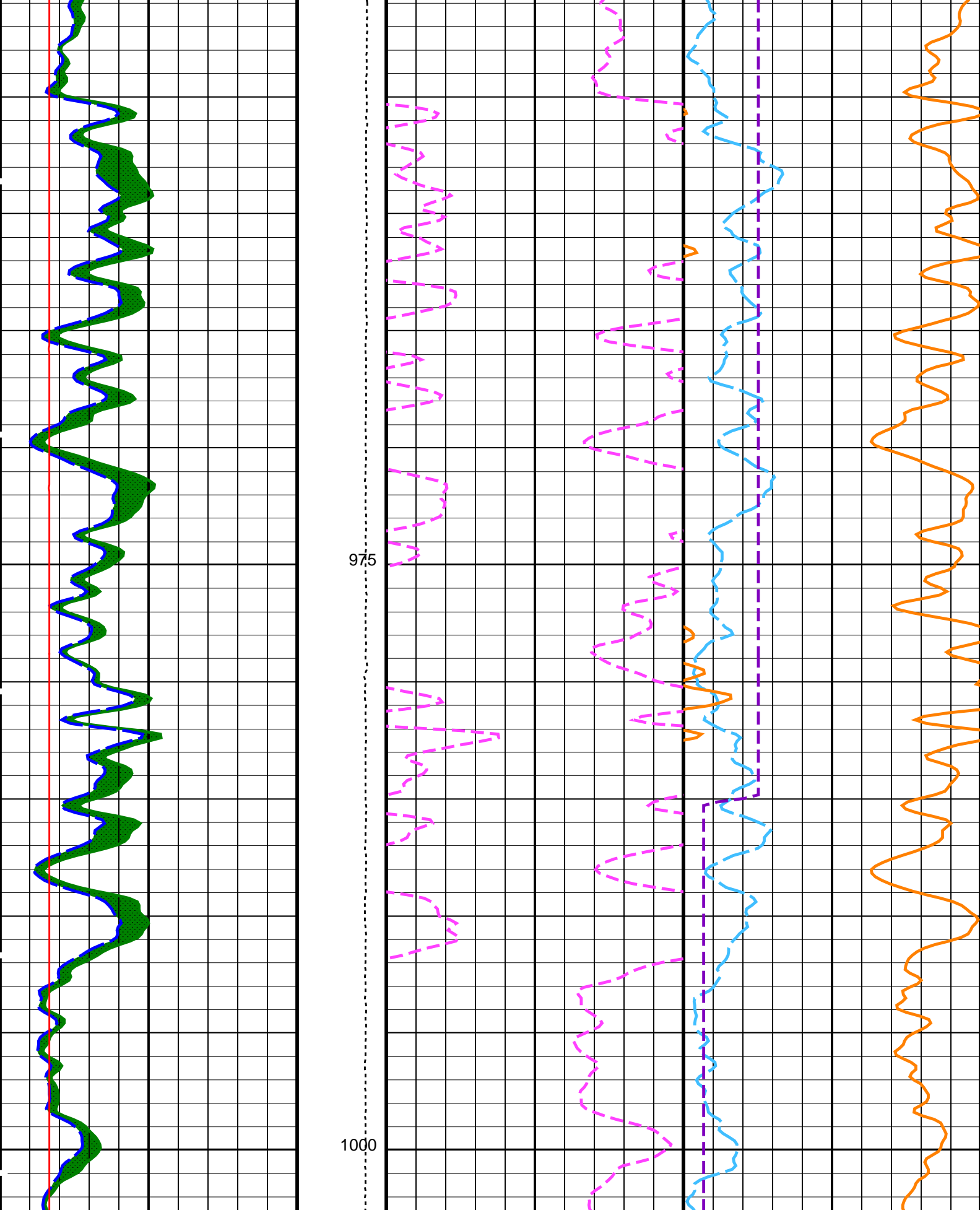


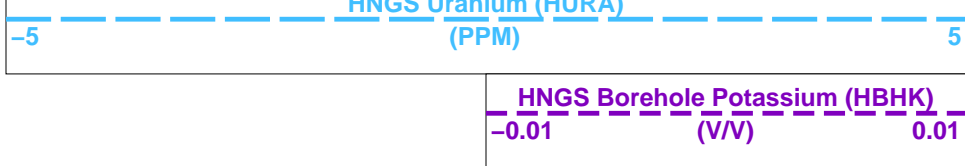
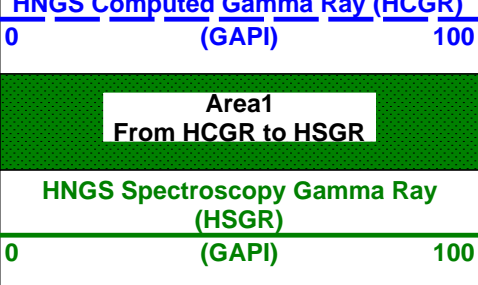
850

875









PIP SUMMARY

Time Mark Every 60 S

Parameters			
DLIS Name	Description	Value	
HRLT-B: High Resolution Laterolog Array – B			
BHS	Borehole Status	OPEN	
GCSE	Generalized Caliper Selection	BS	
HNGS-BA: Hostile Natural Gamma Ray Sonde			
BAR1	HNGS Detector 1 Barite Constant	1	
BAR2	HNGS Detector 2 Barite Constant	1	
BHK	HNGS Borehole Potassium Correction Concentration	0	
BHS	Borehole Status	OPEN	
CSD1	Inner Casing Outer Diameter	0	IN
CSD2	Outer Casing Outer Diameter	0	IN
CSW1	Inner Casing Weight	0	LB/F
CSW2	Outer Casing Weight	0	LB/F
DBCC	HNGS Barite Constant Correction Flag	NONE	
GCSE	Generalized Caliper Selection	BS	
H1P	HNGS Detector 1 Allow/Disallow In Processing	ALLOW	
H2P	HNGS Detector 2 Allow/Disallow In Processing	ALLOW	
HABK	HNGS Borehole Potassium Running Average	-0.0016371	
HALF	HNGS Alpha Filter Length	60	IN
HCRB	HNGS Apply Borehole Potassium Correction	NONE	
HMWM	Mud Weighting Material	NATU	
HNPE	HNGS Processing Enable	YES	
S1BI	HNGS Detector 1 Calibration Bismuth Count Rate	1.3	CPS
S2BI	HNGS Detector 2 Calibration Bismuth Count Rate	1.3	CPS
SGRC	HNGS Standard Gamma-Ray Correction Flag	YES	
TPOS	Tool Position	ECCE	
VBA1	HNGS Detector 1 Variable Barite Factor Running Average	0.993868	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	1.00721	
EDTC-B: Enhanced DTS Cartridge			
BHS	Borehole Status	OPEN	
GCSE	Generalized Caliper Selection	BS	
System and Miscellaneous			
BS	Bit Size	9.875	IN
DO	Depth Offset for Playback	0.0	M
PP	Playback Processing	NORMAL	

Format: HNGSYields Vertical Scale: 1:200 Graphics File Created: 01-Jan-2023 21:09

OP System Version: 19C0-187			
MSS_LDEO-A	19C0-187	HRLT-B	19C0-187
HLDS-DA	19C0-187	LDSC-AA	19C0-187
HNGC-B	19C0-187	HNGS-BA	19C0-187
EDTC-B	SKK-5169-EDTCB		

Input DLIS Files					
DEFAULT	Flip_MSS_LDEO_HRLA_052PUP	PRODUCER	01-Jan-2023 21:09	1002.6 M	68.6 M
Output DLIS Files					
DEFAULT	MSS_LDEO_HRLA_LDL_053PUP	FN:43	PRODUCER	01-Jan-2023 21:09	

Company: International Ocean Discovery Program Well: Expedition 398, Site U1589C

Input DLIS Files					
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Output DLIS Files

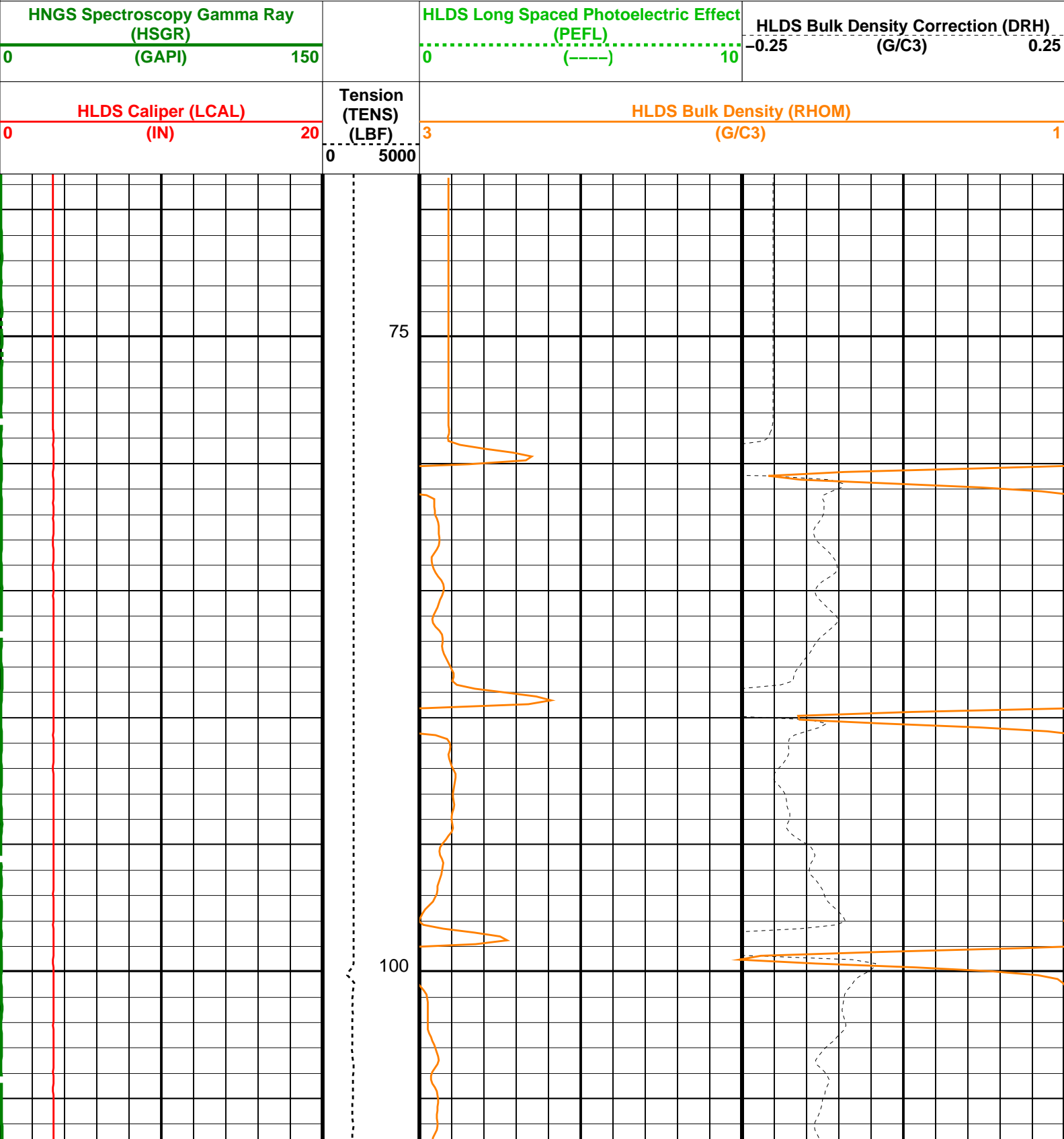
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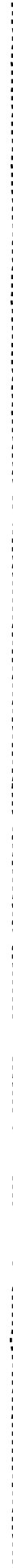
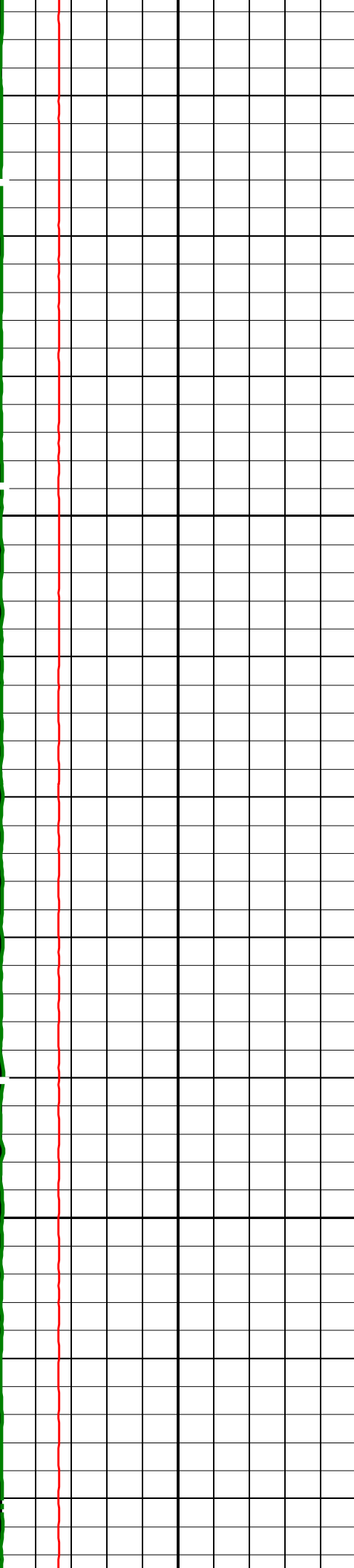
OP System Version: 19C0-187

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EDTC-B	SKK-5169-EDTCB		

PIP SUMMARY

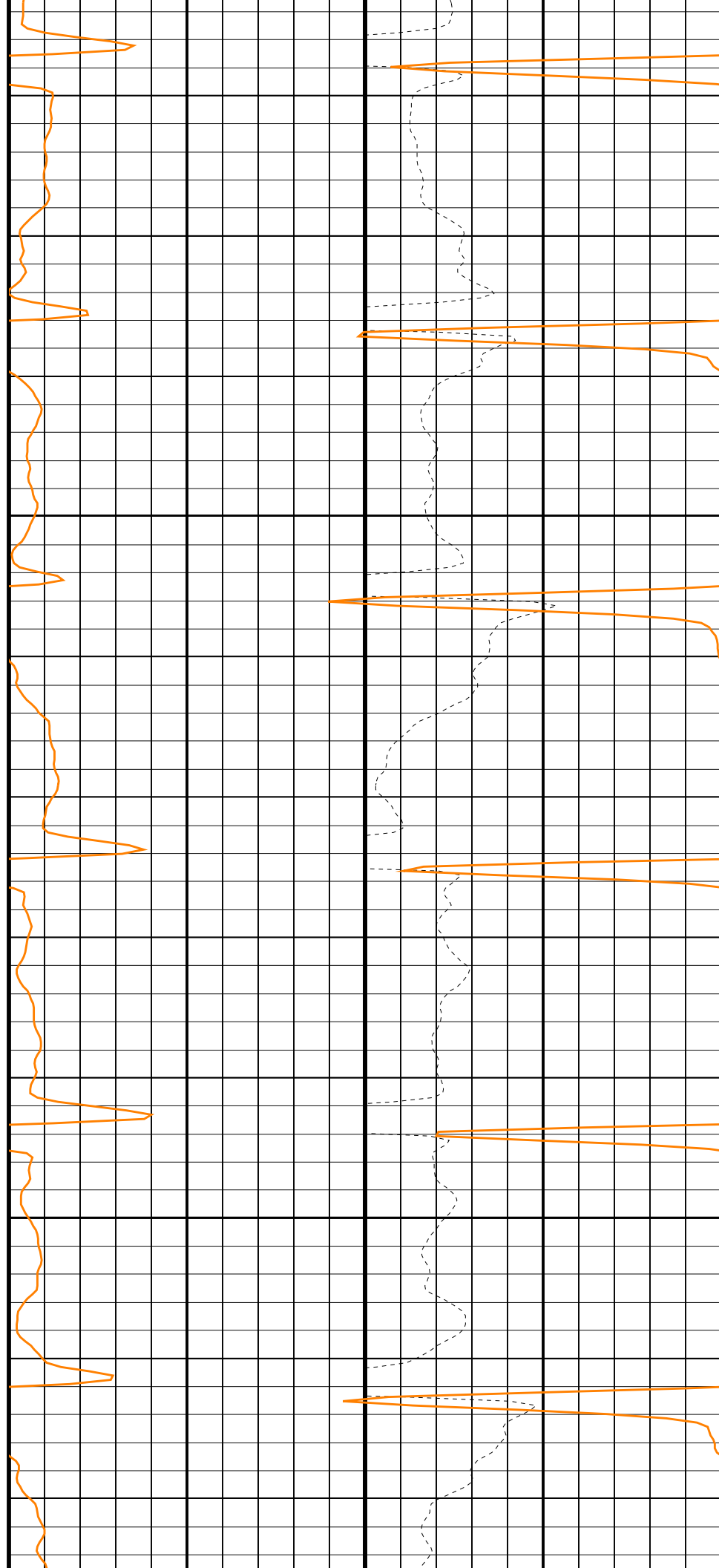
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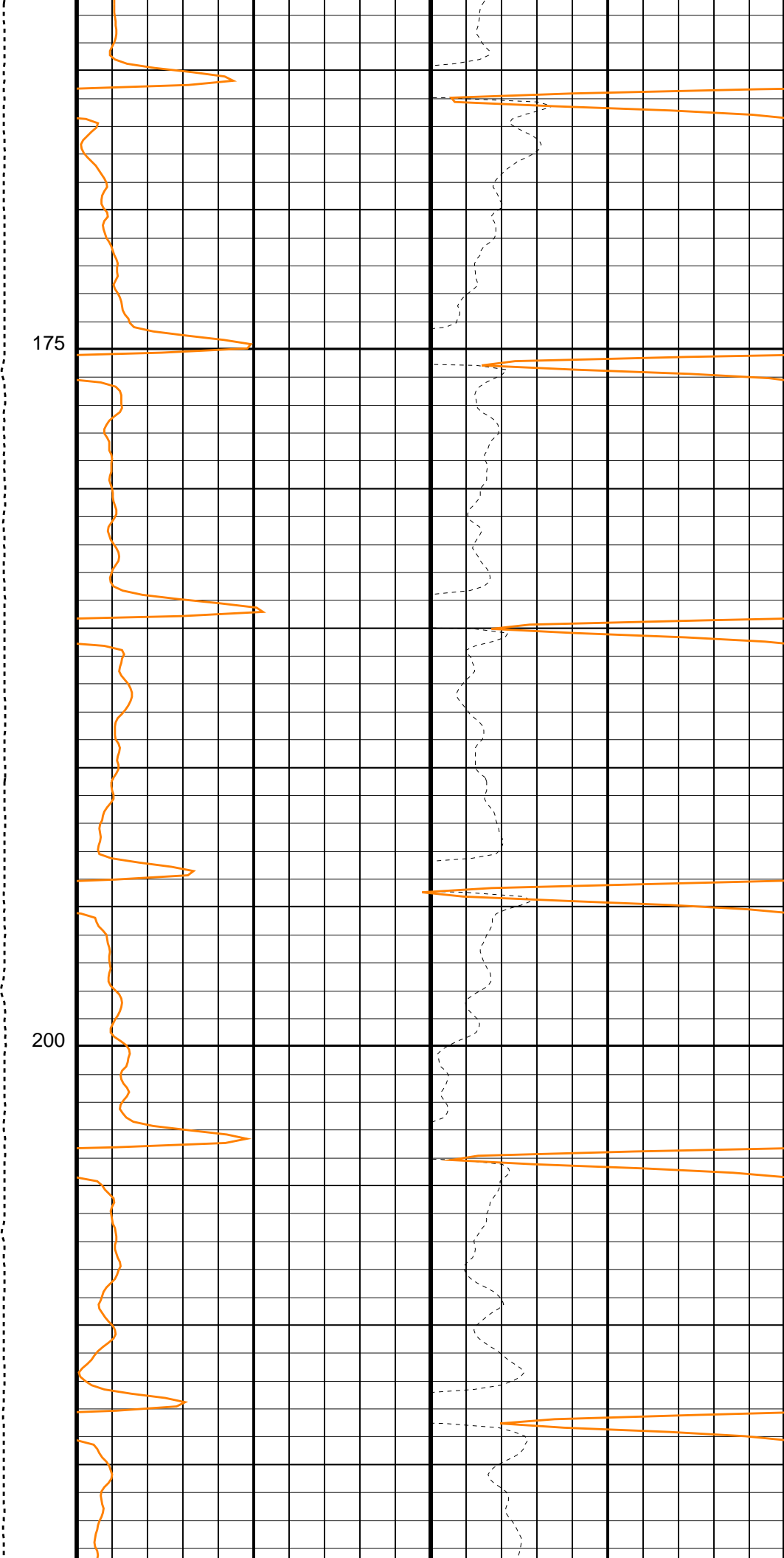
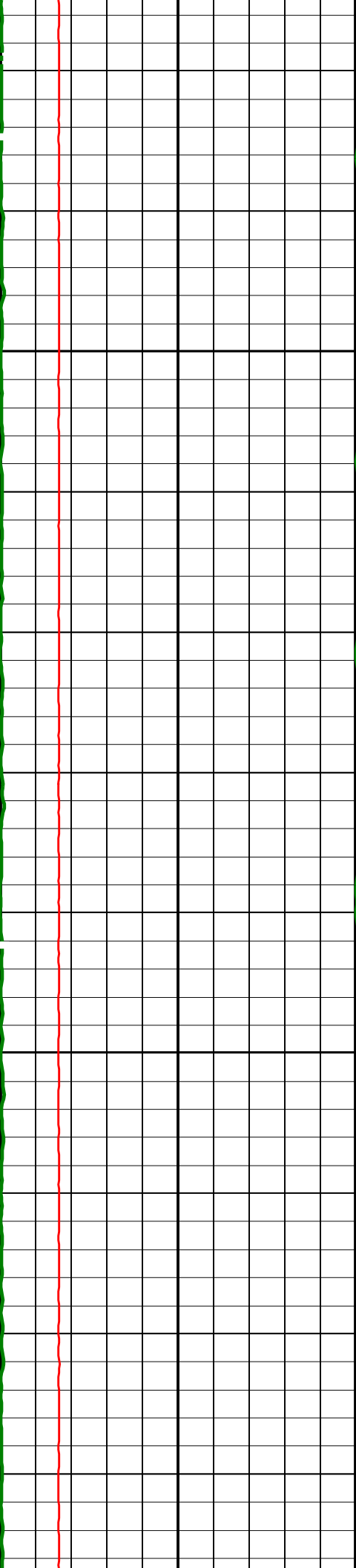


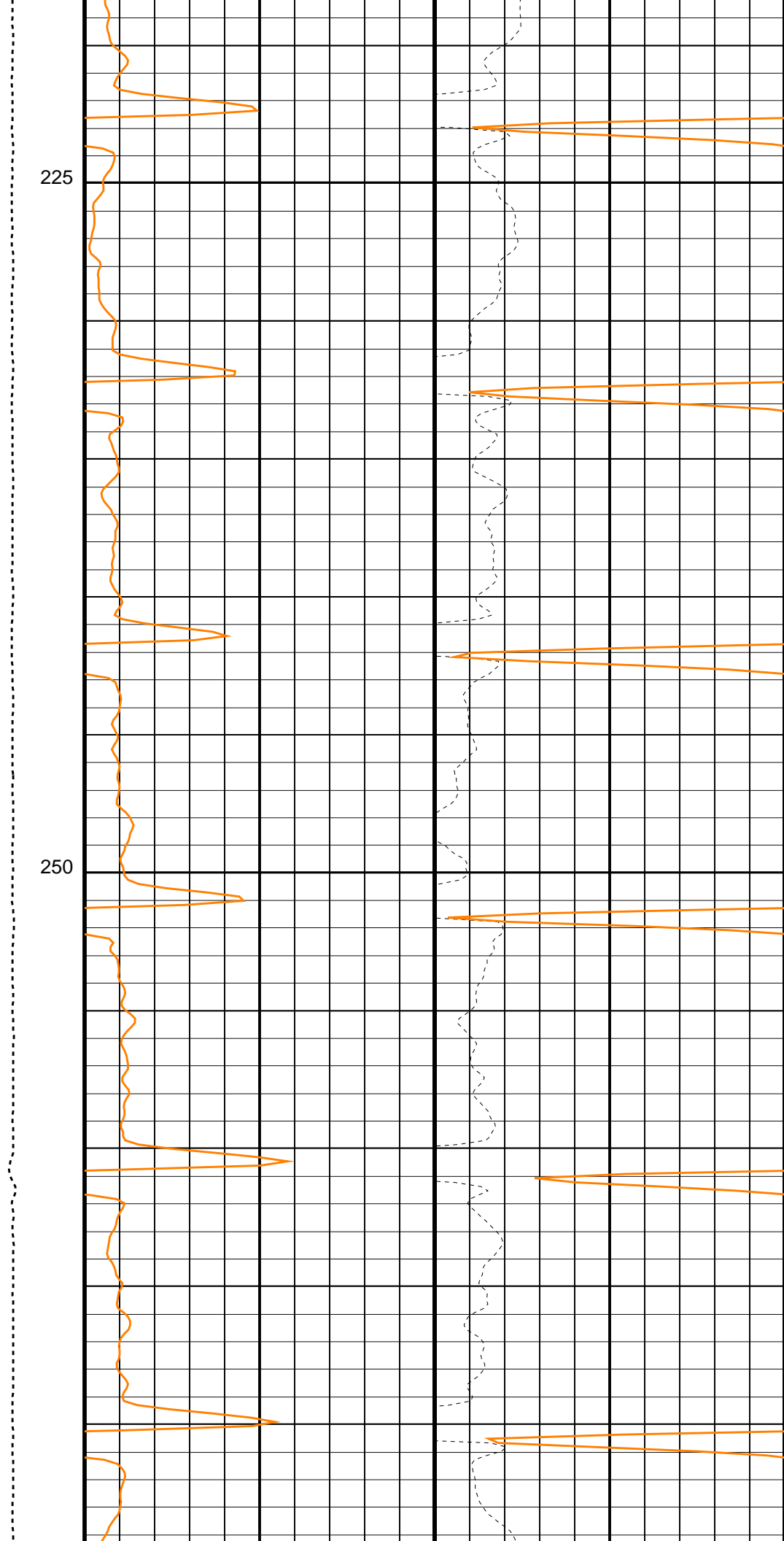
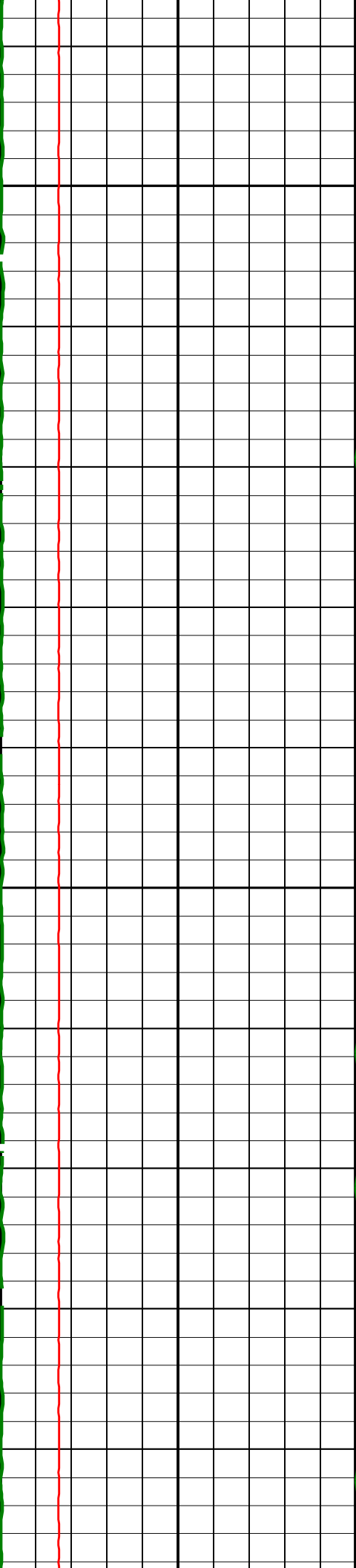


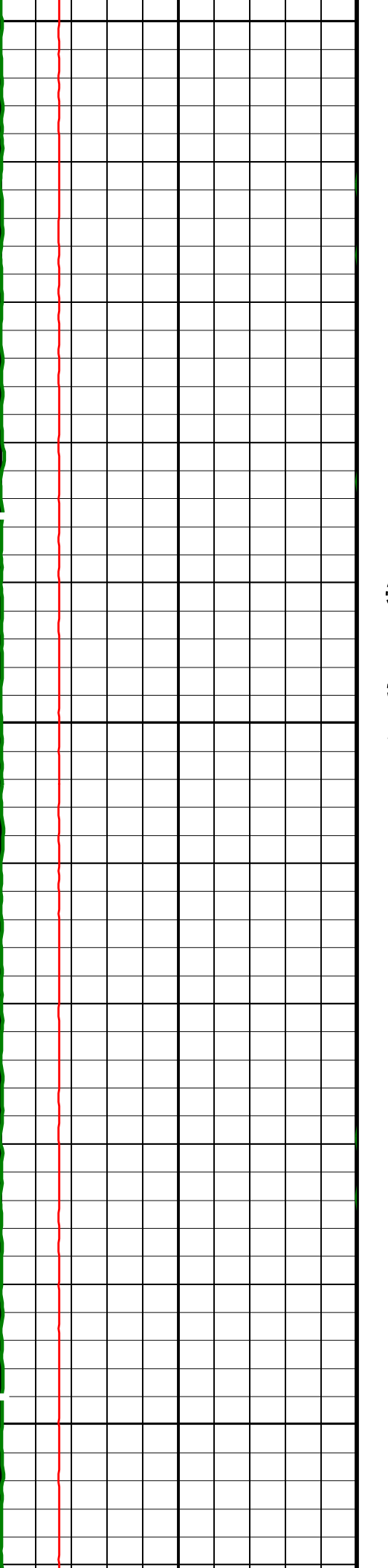
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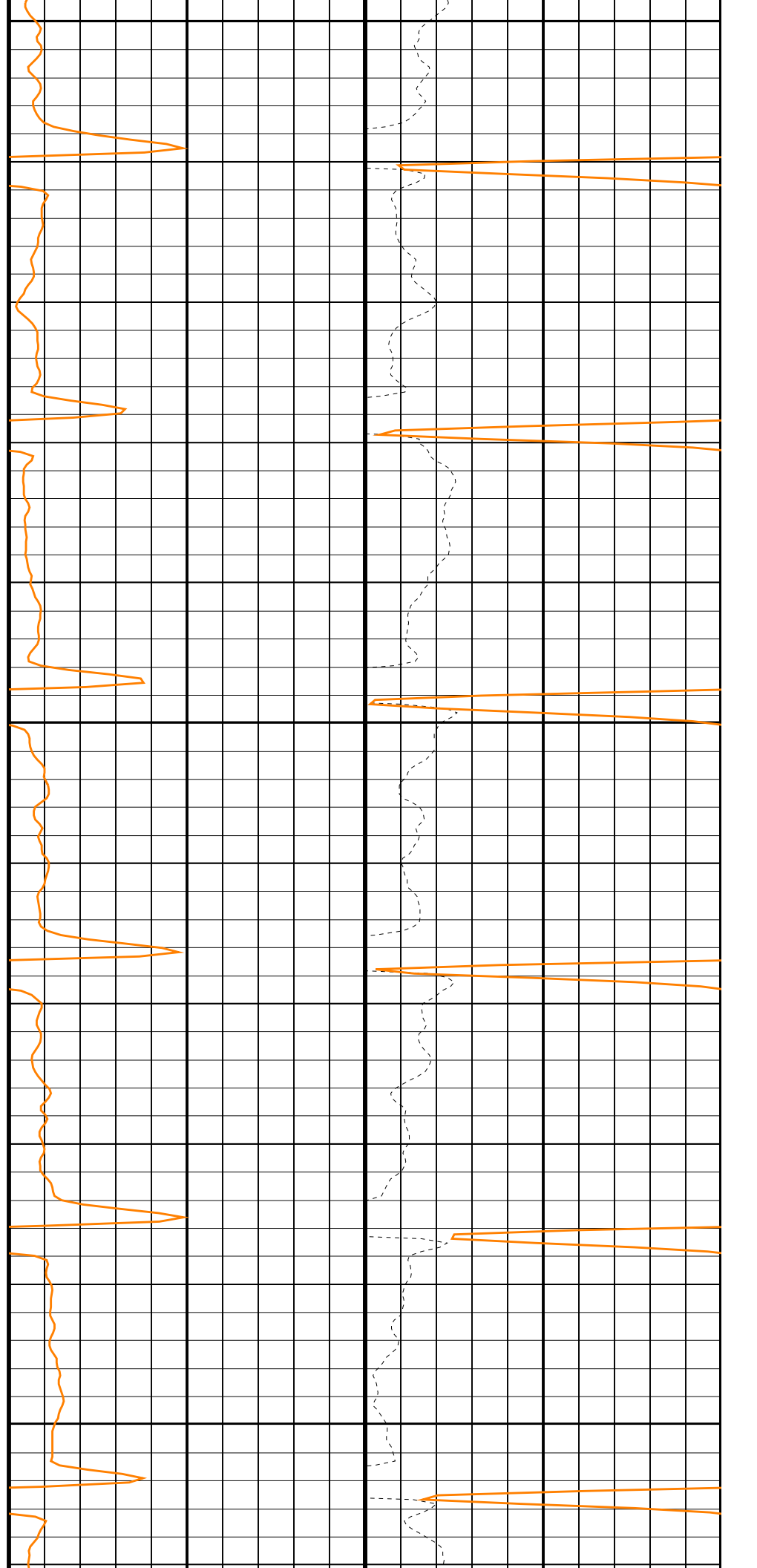


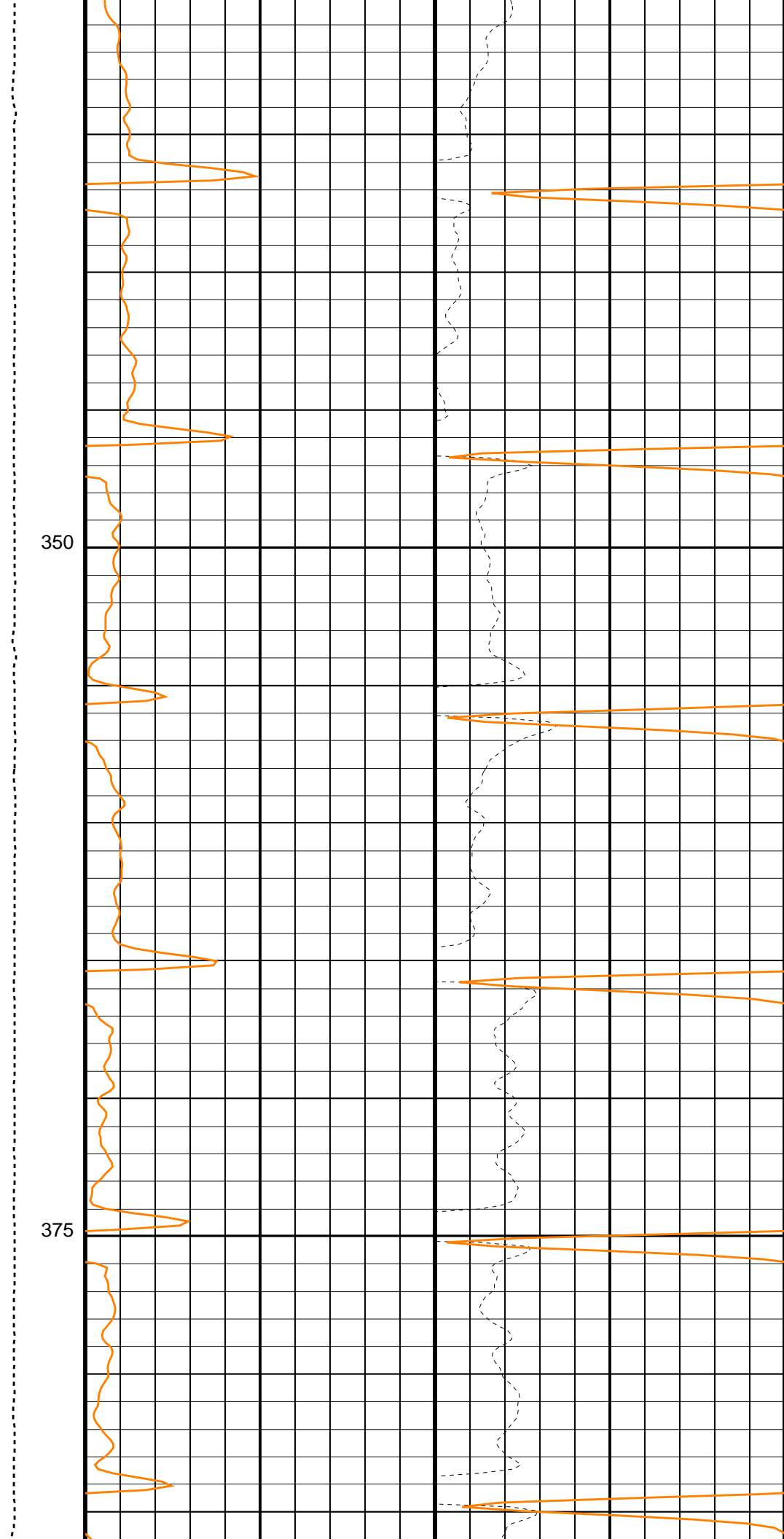
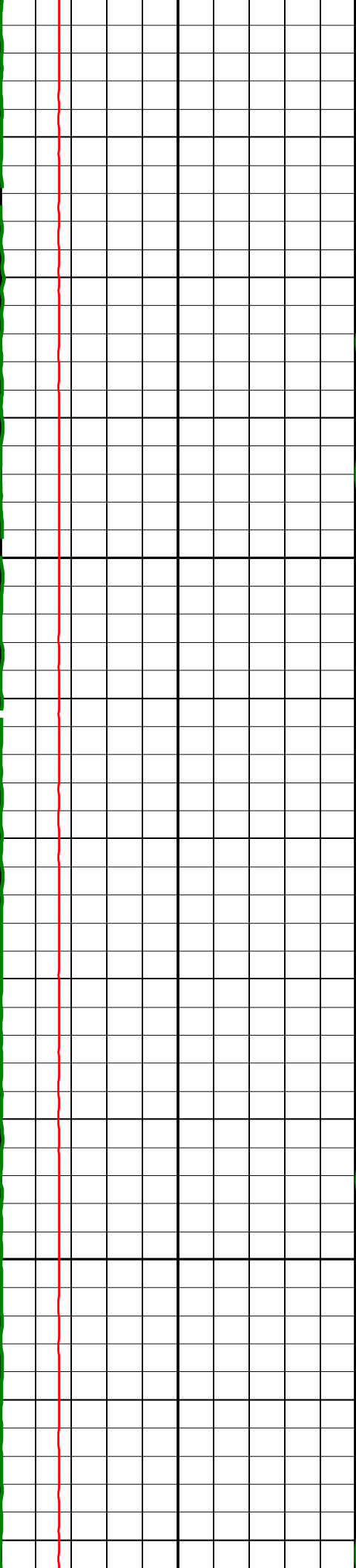


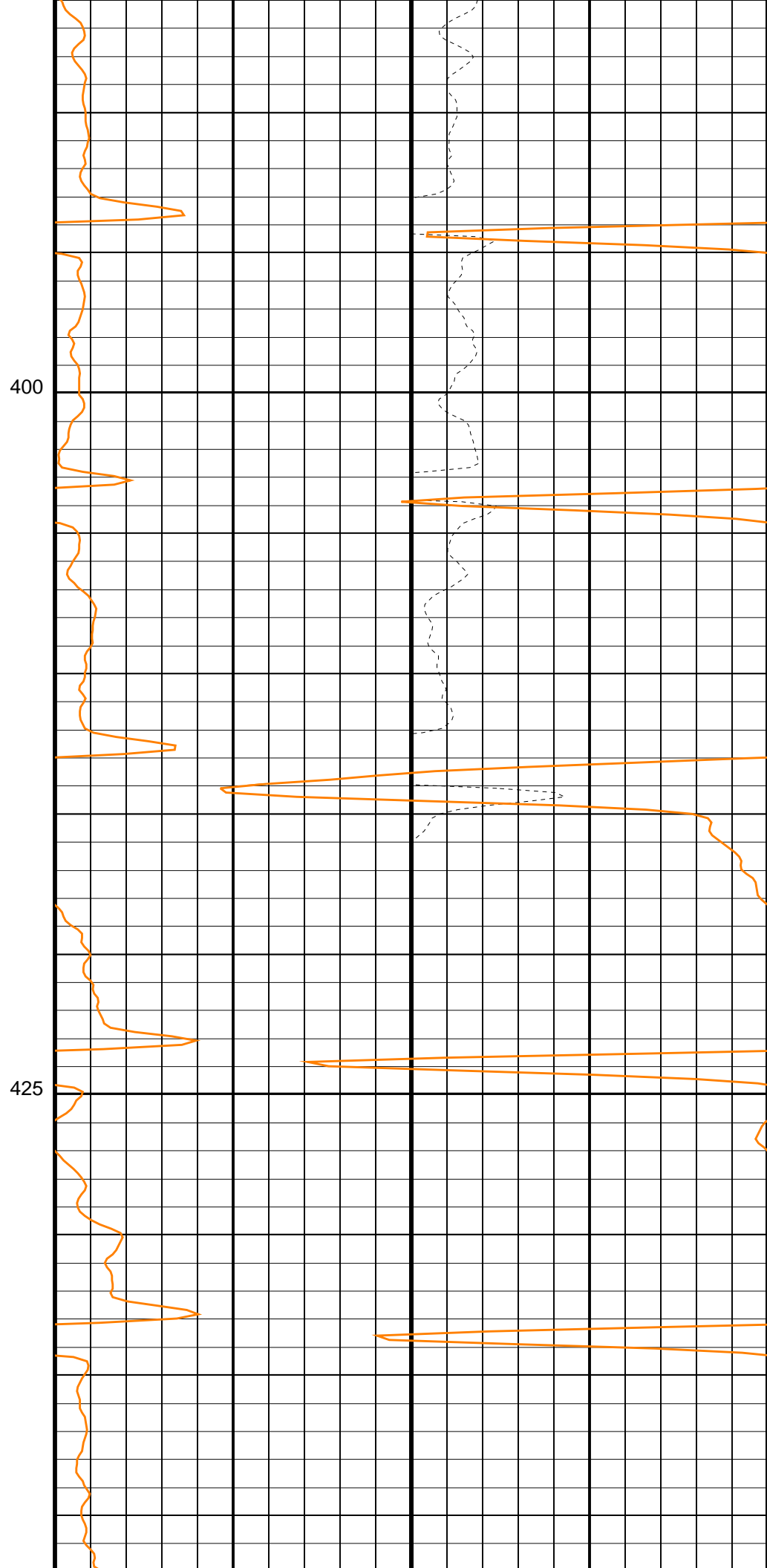
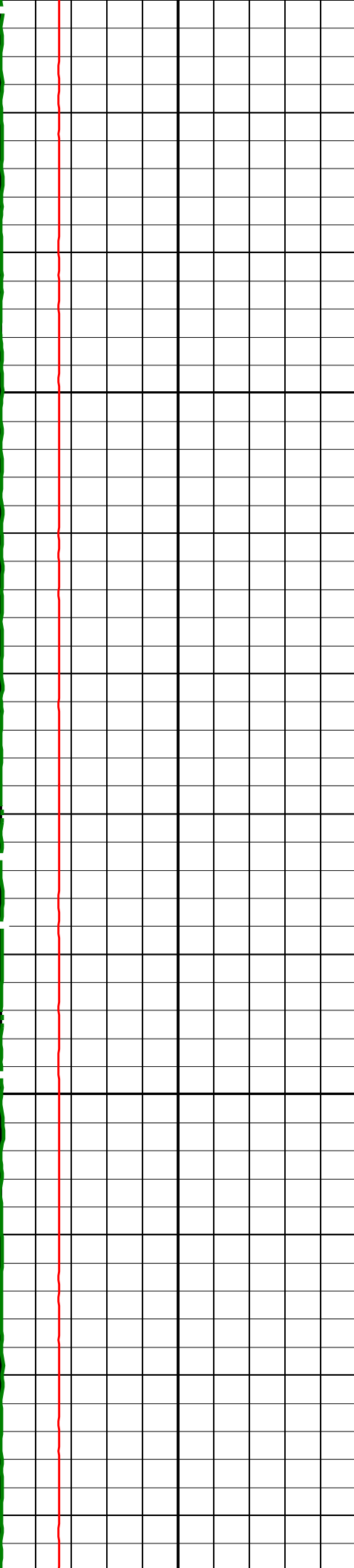
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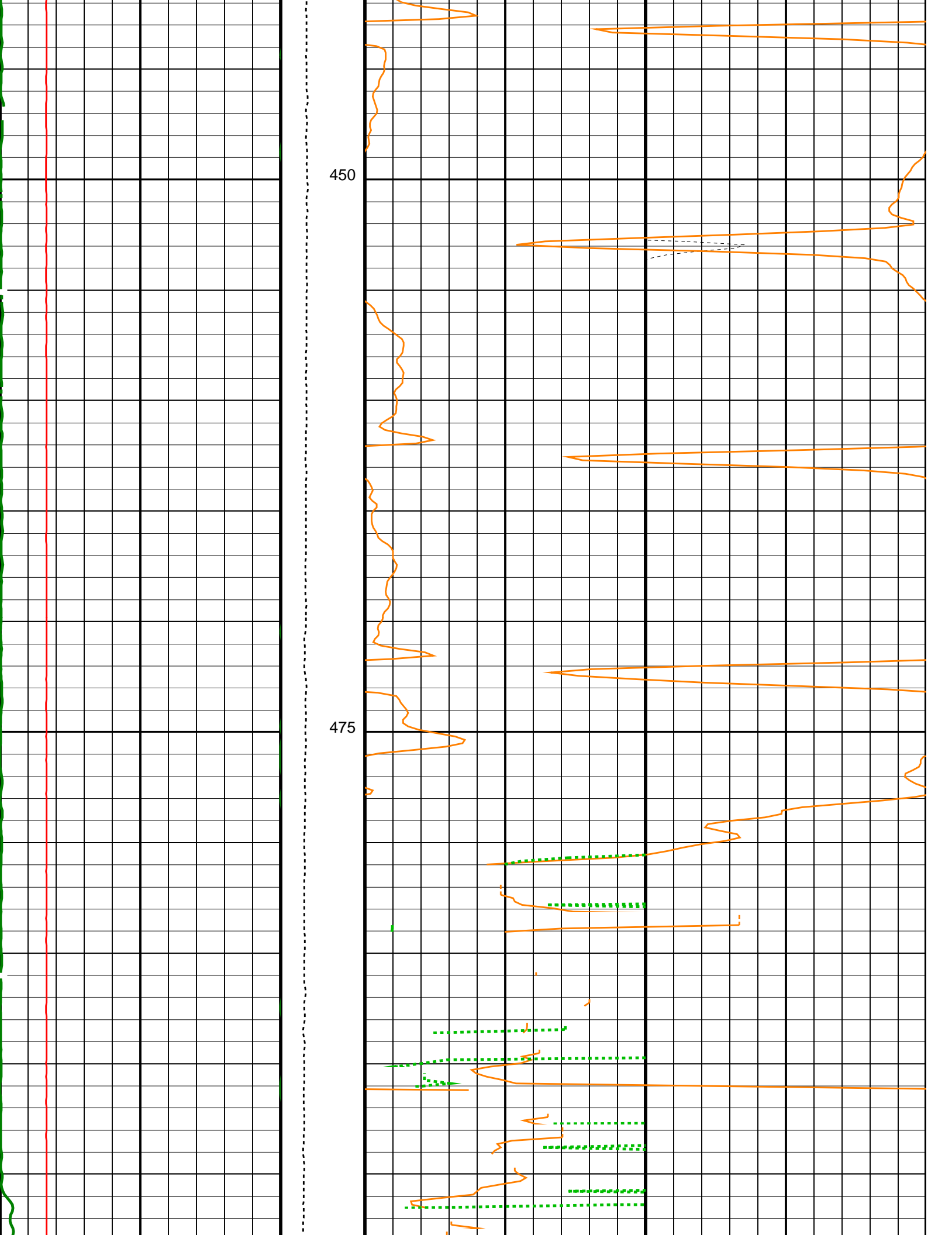
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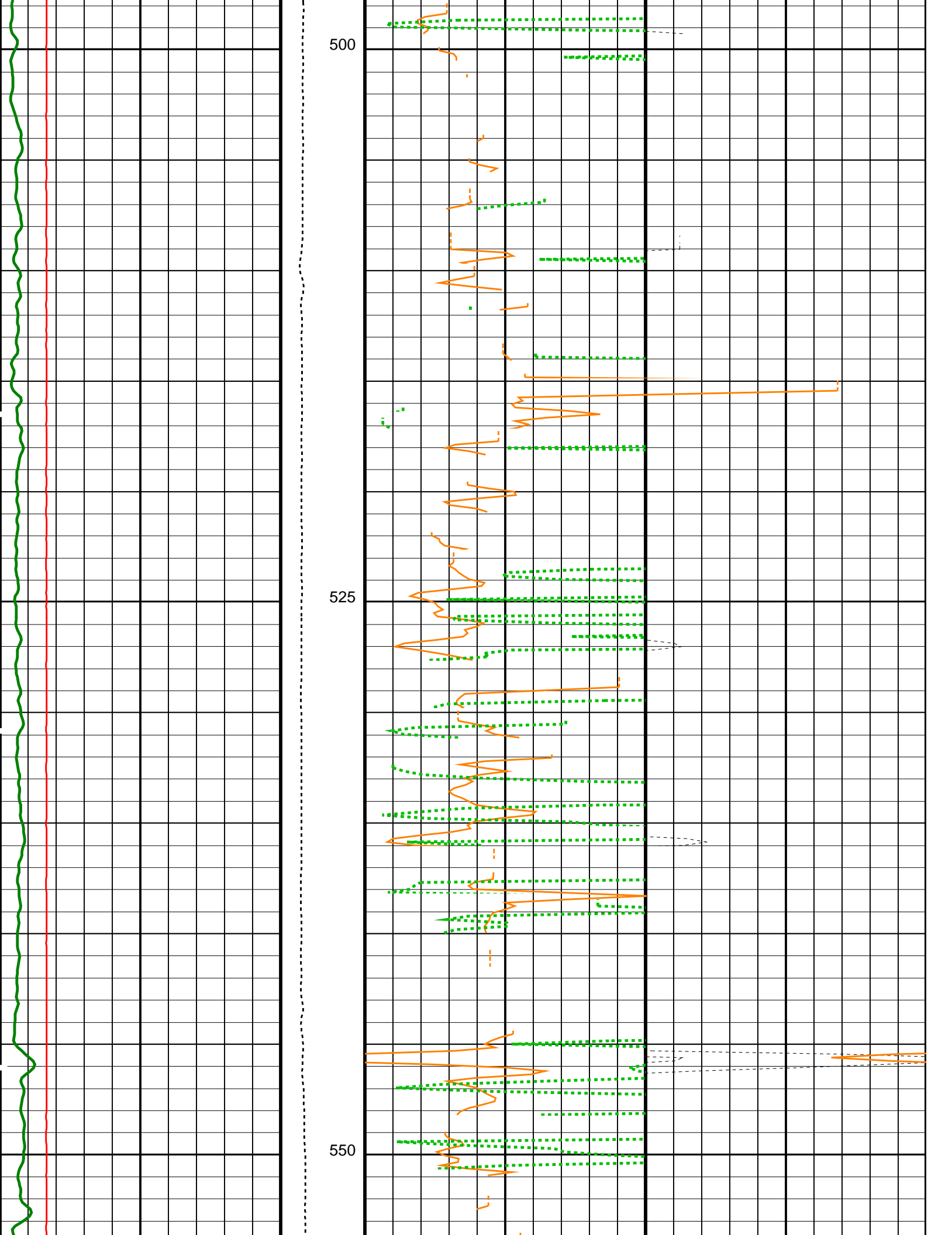
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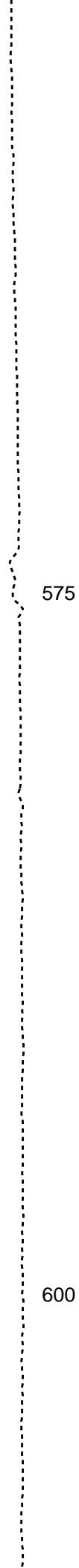
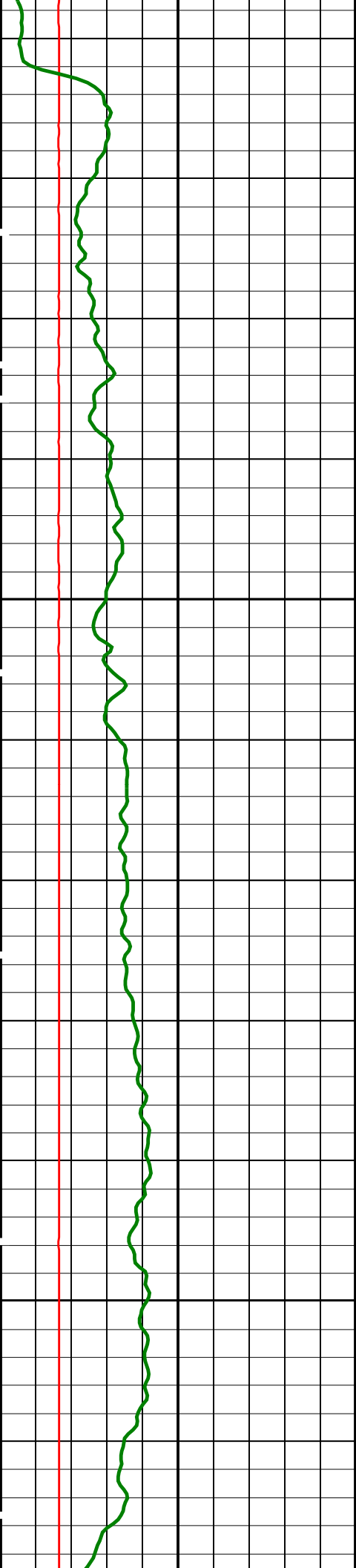






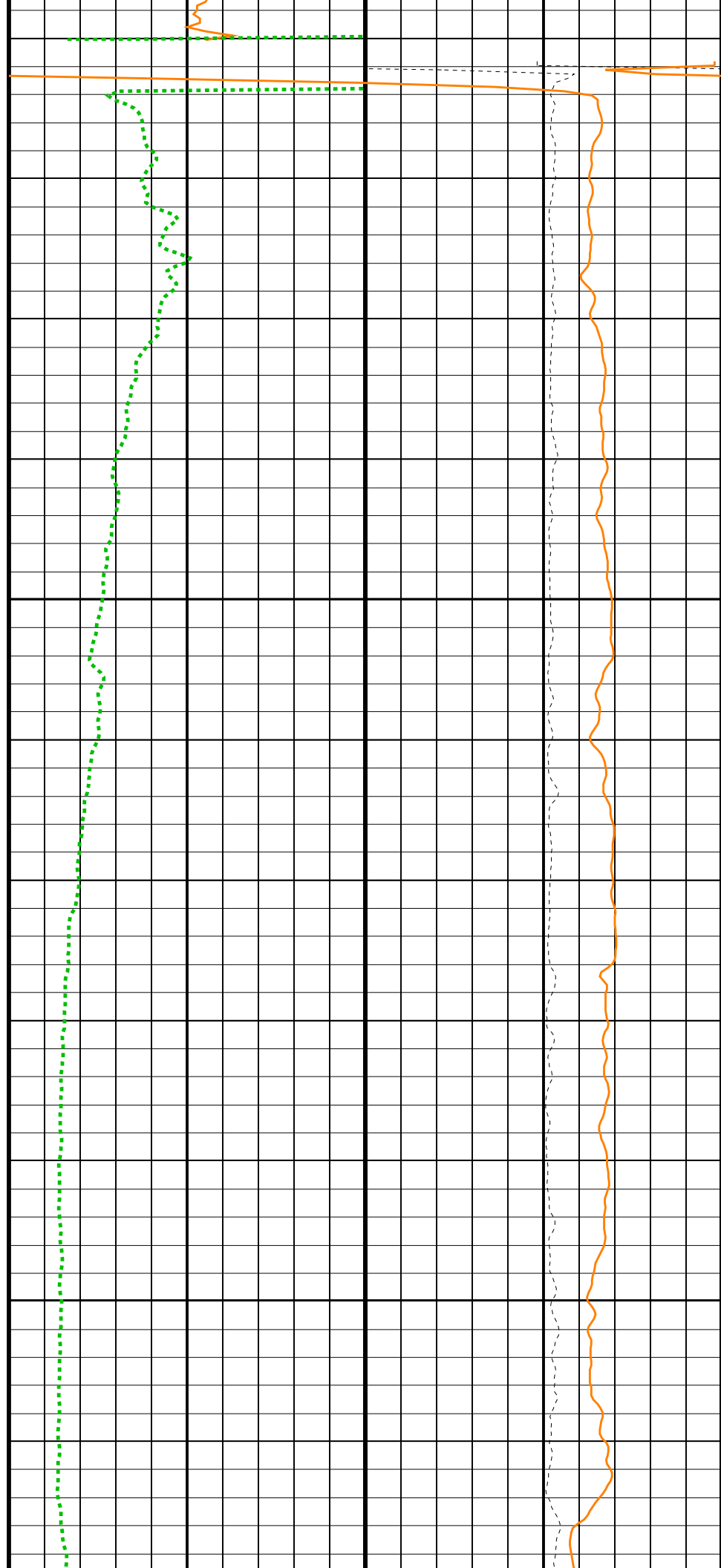


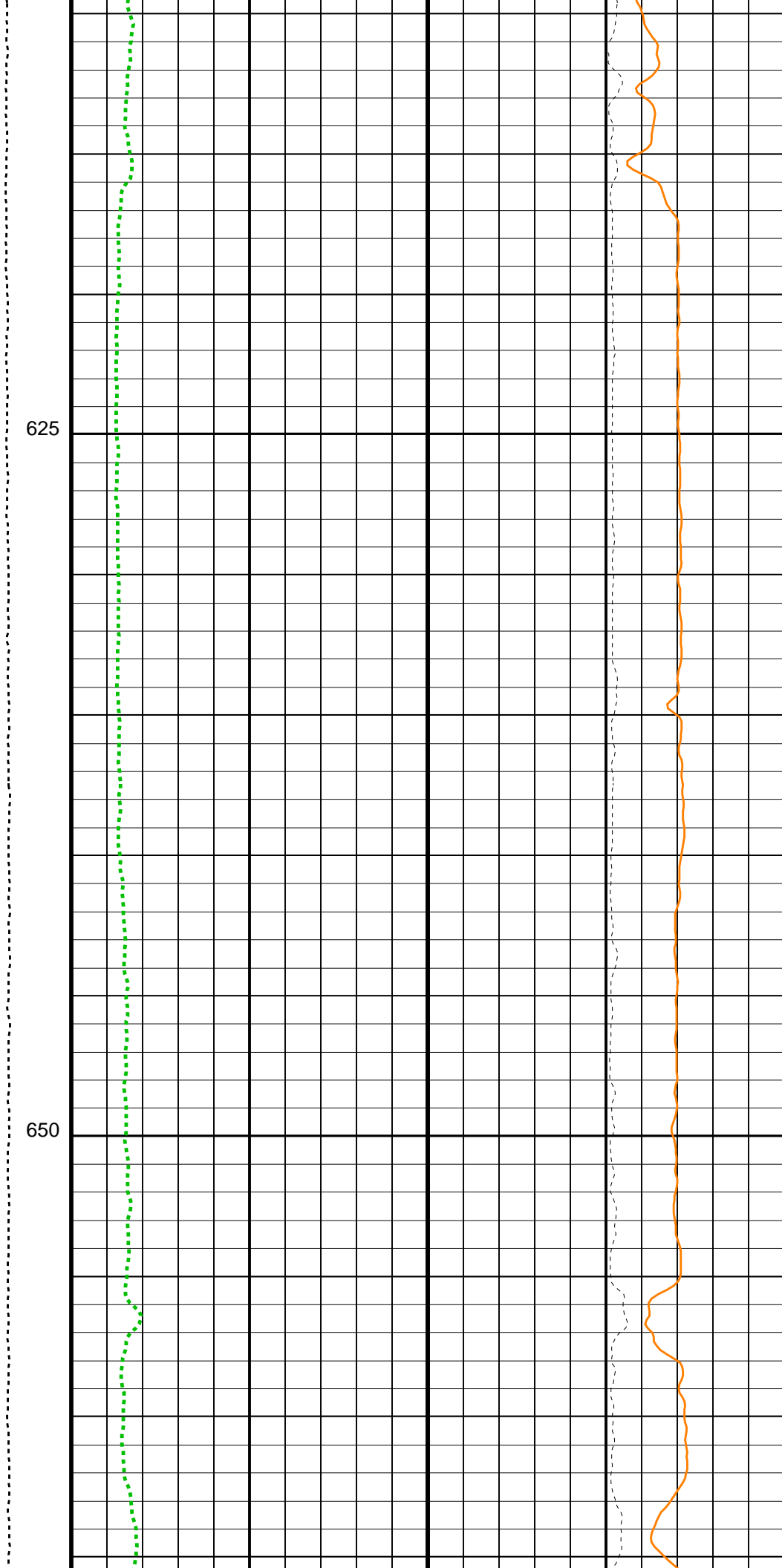
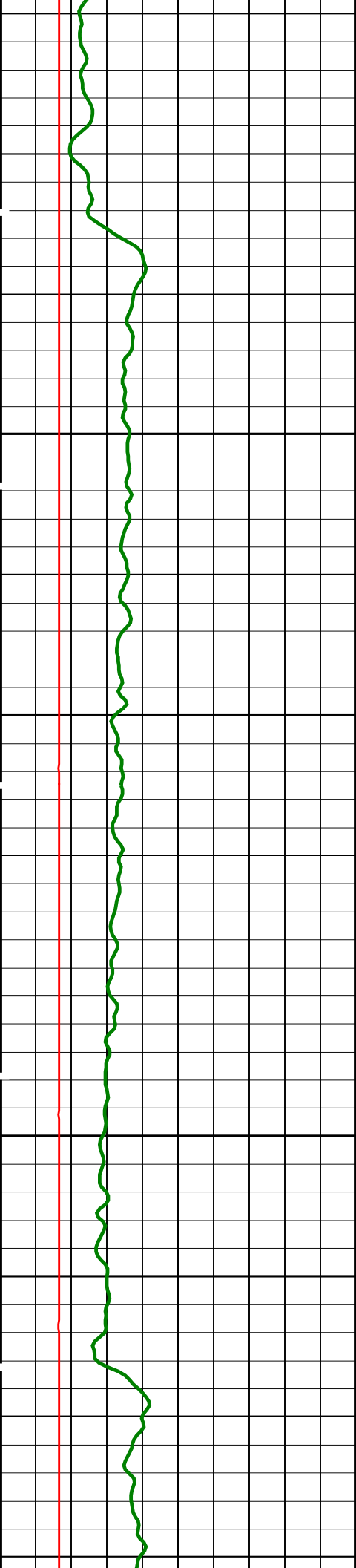


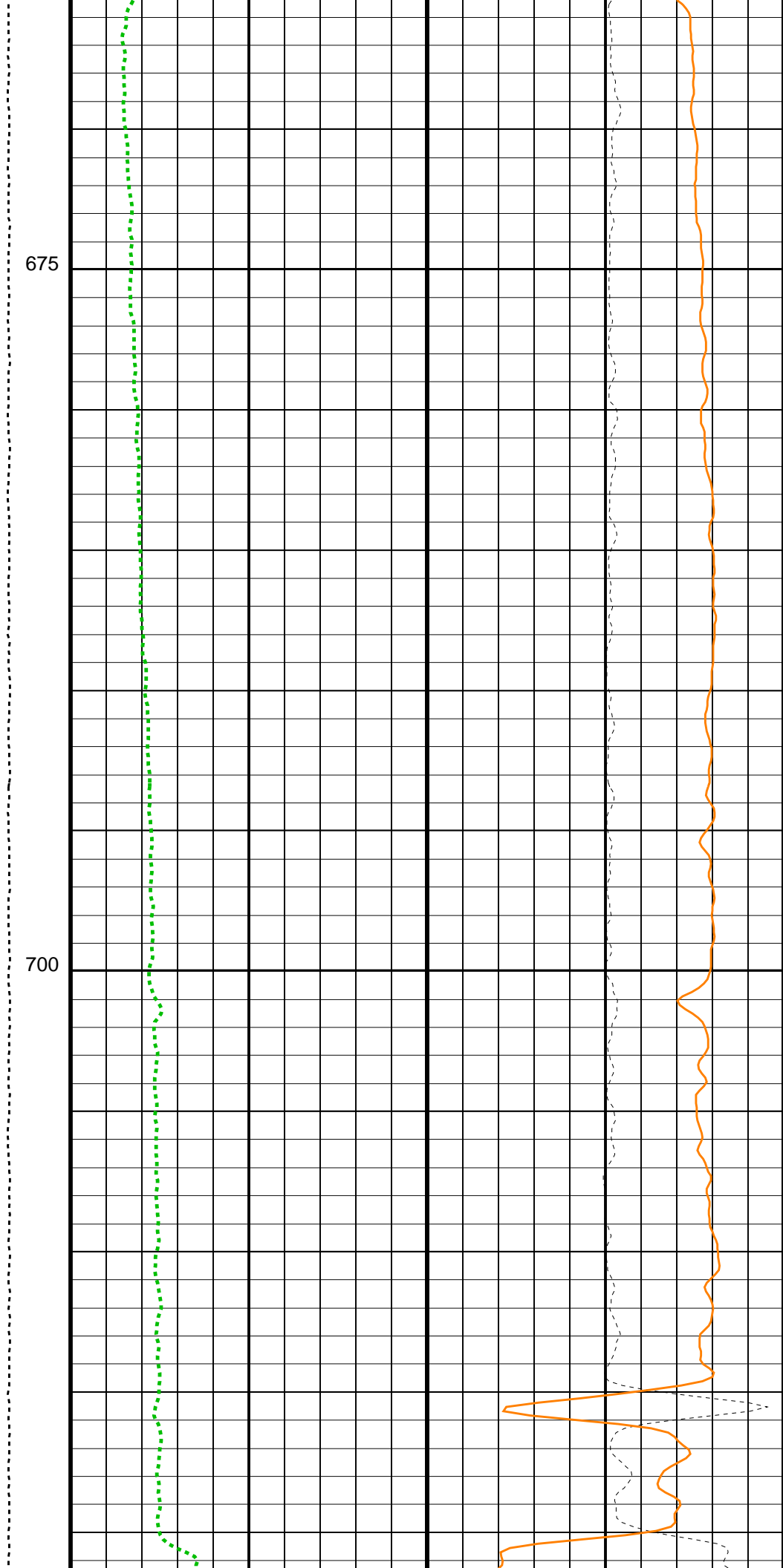
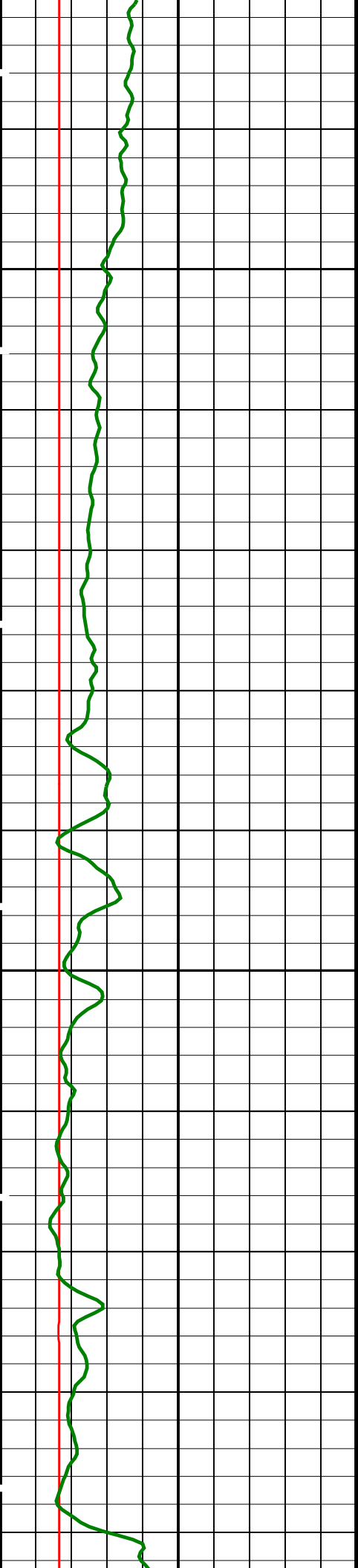


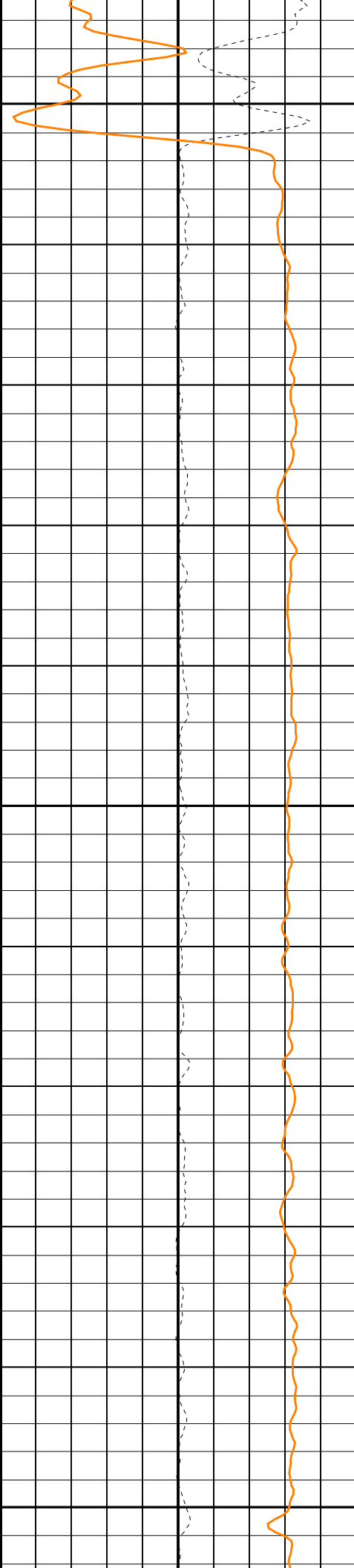
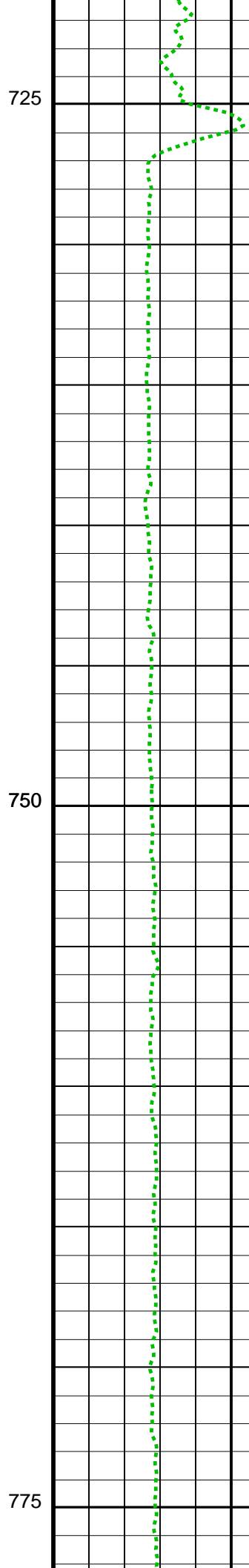
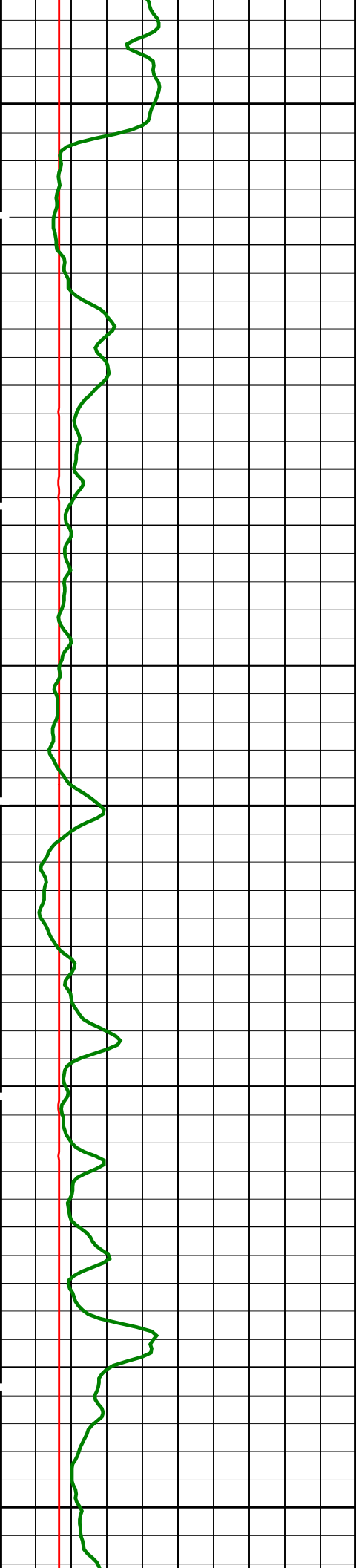
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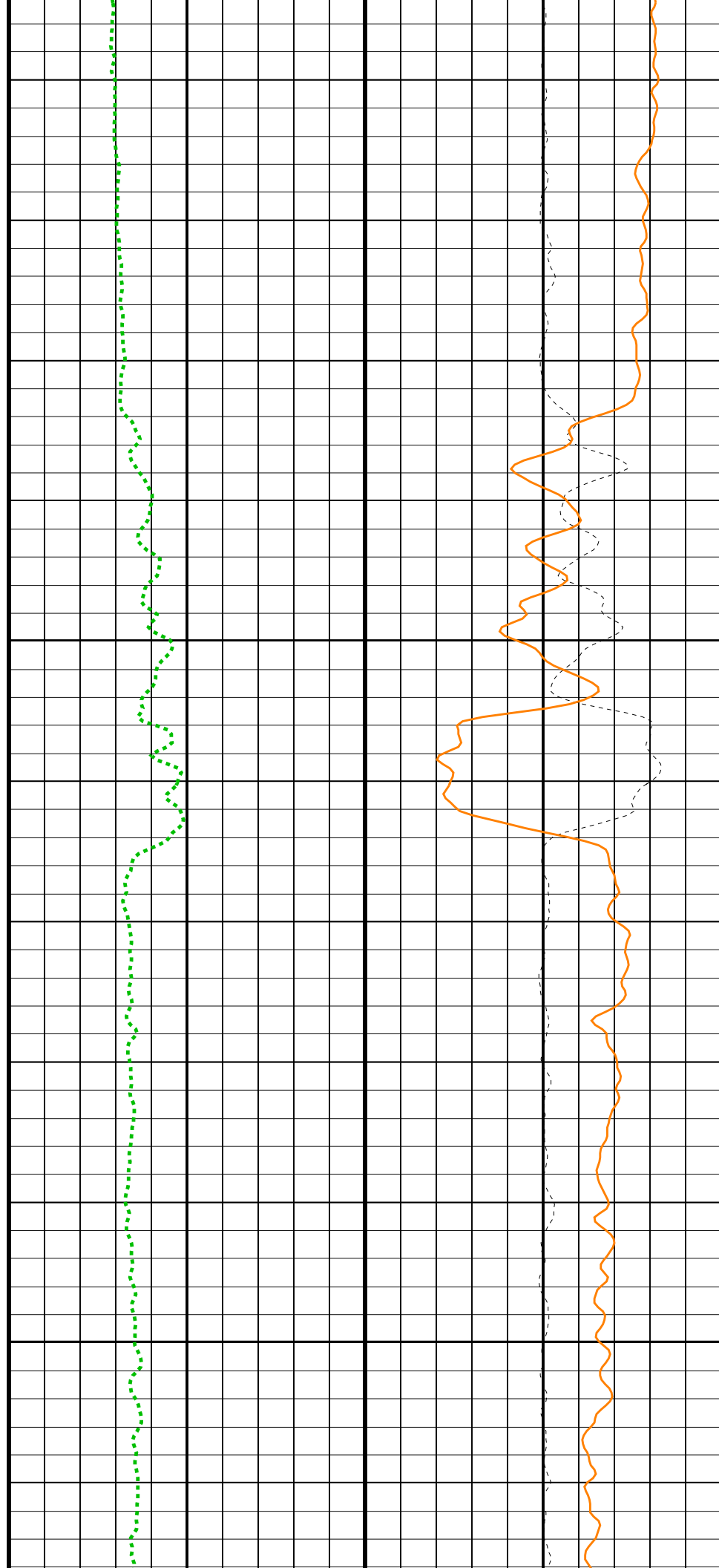
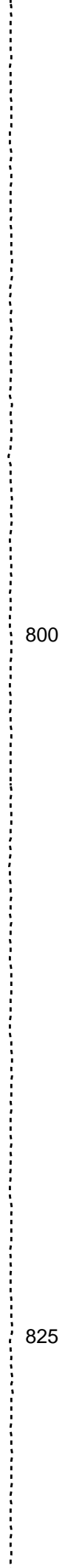
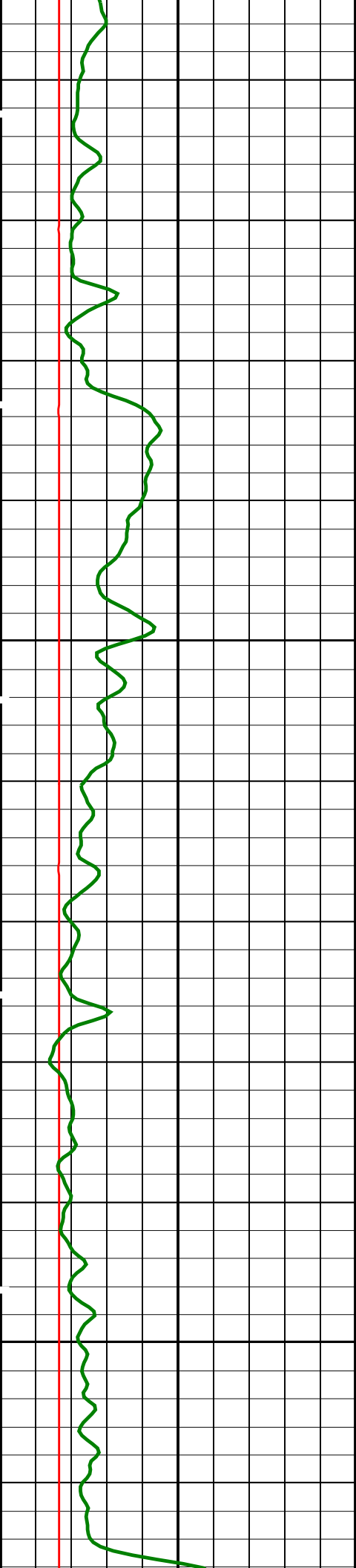
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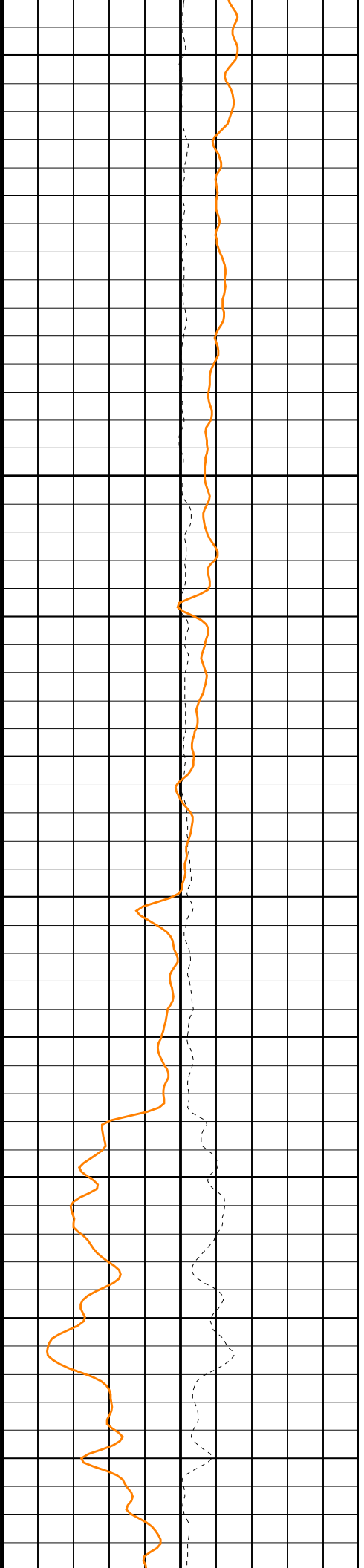
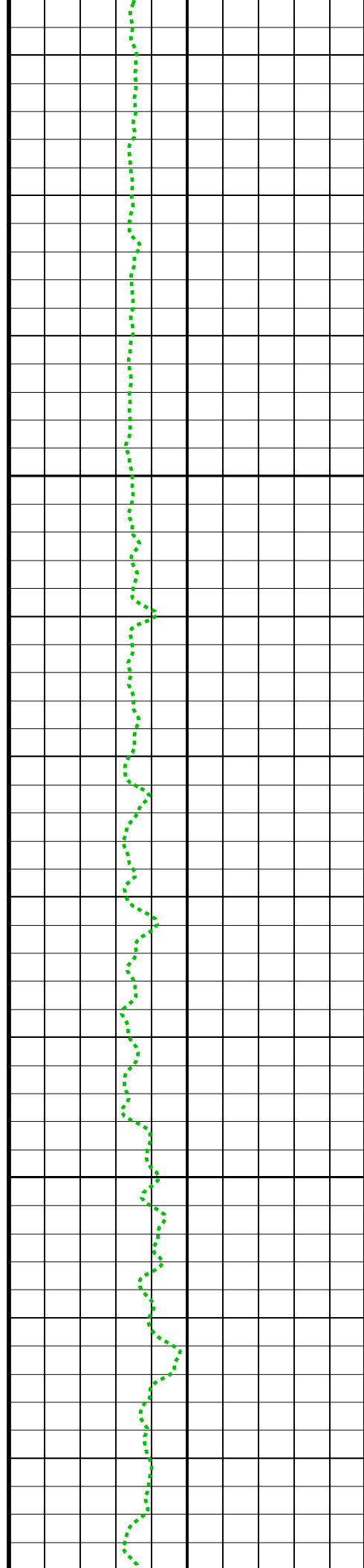
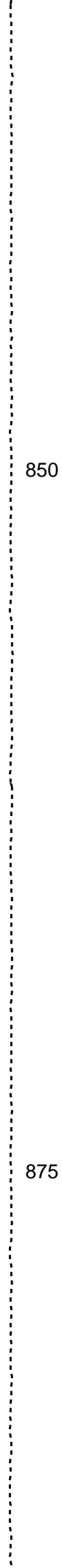
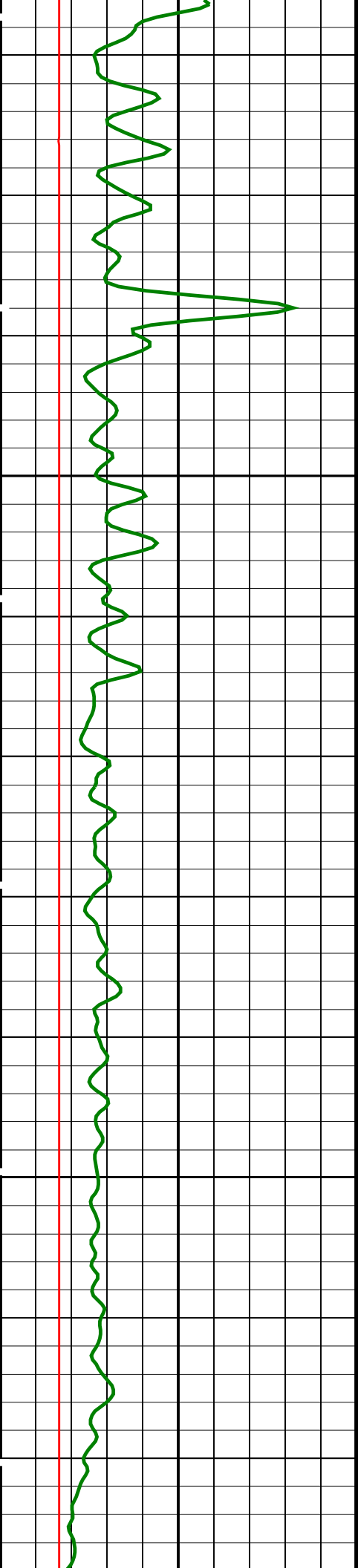


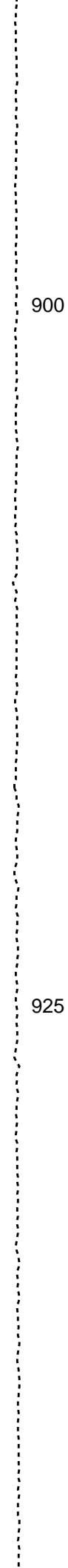
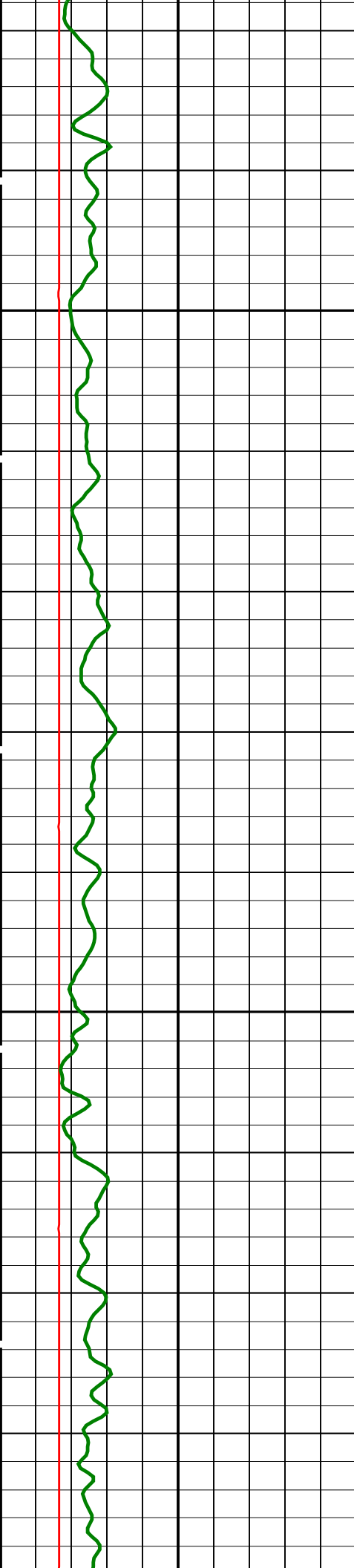






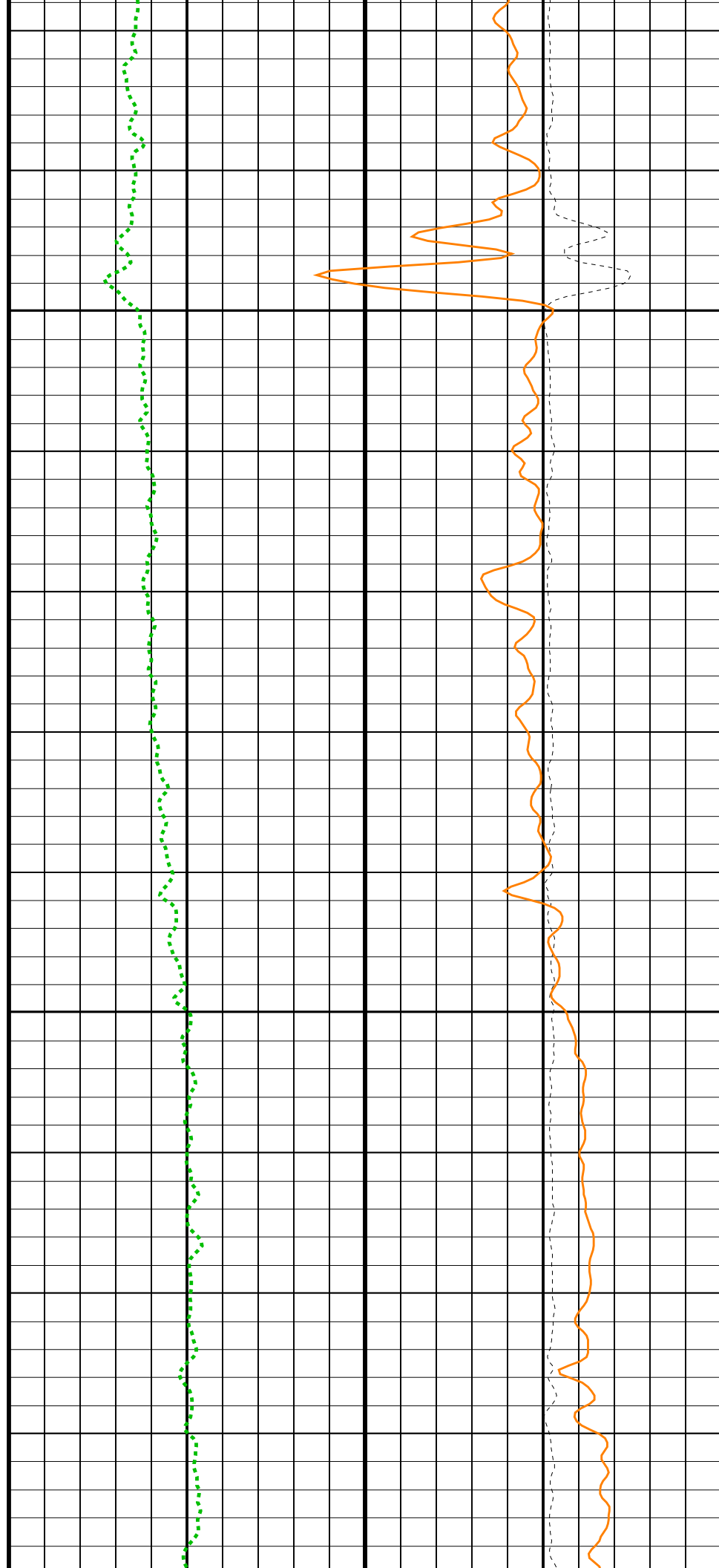


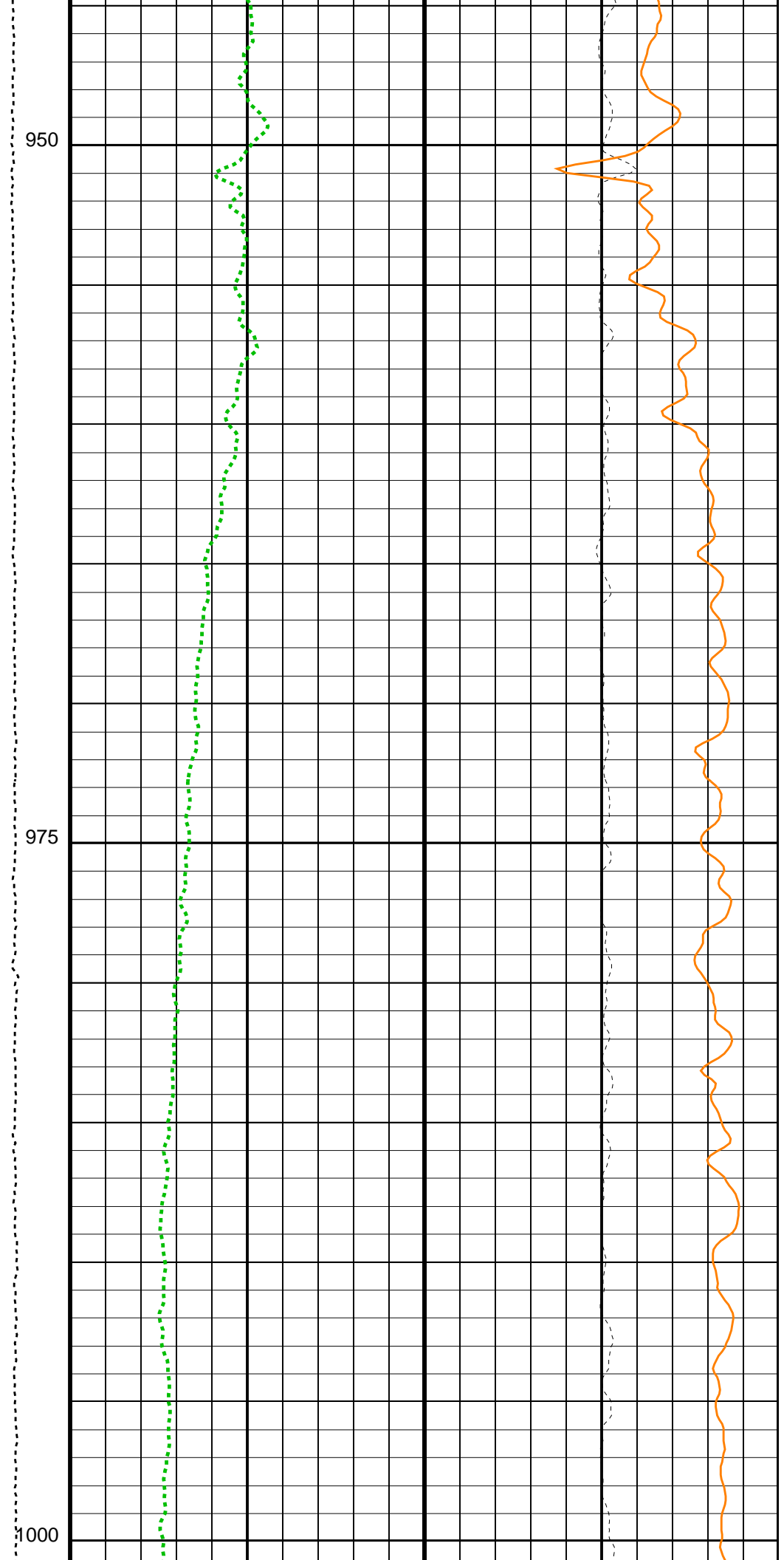
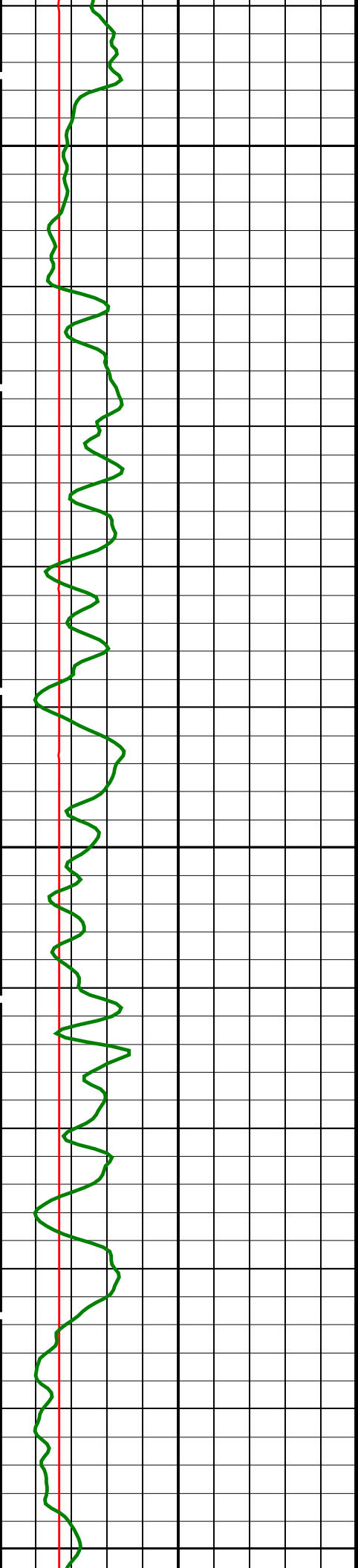




900

925





HLDS Caliper (LCAL)		Tension (TENS)	HLDS Bulk Density (RHOM)	
0	(IN)	20	3	(G/C3)
HNGS Spectroscopy Gamma Ray (HSGR)		0 5000	HLDS Bulk Density Correction (DRH)	
0	(GAPI)	150	0	(G/C3)
			10	0.25 0.25

PIP SUMMARY				
Time Mark Every 60 S				

Parameters				
DLIS Name	Description	Value		
HRLT-B: High Resolution Laterolog Array – B				
BHS	Borehole Status	OPEN		
GCSE	Generalized Caliper Selection	BS		
HLDS-DA: Hostile Litho-Density Sonde				
DHC	Density Hole Correction	CALIPER		
DPPM	Density Porosity Processing Mode	HIRS		
FD	Fluid Density	1	G/C3	
LATC	HLDS Activation Correction	ON		
MDEN	Matrix Density	2.6	G/C3	
HNGS-BA: Hostile Natural Gamma Ray Sonde				
BAR1	HNGS Detector 1 Barite Constant	1		
BAR2	HNGS Detector 2 Barite Constant	1		
BHK	HNGS Borehole Potassium Correction Concentration	0		
BHS	Borehole Status	OPEN		
CSD1	Inner Casing Outer Diameter	0	IN	
CSD2	Outer Casing Outer Diameter	0	IN	
CSW1	Inner Casing Weight	0	LB/F	
CSW2	Outer Casing Weight	0	LB/F	
DBCC	HNGS Barite Constant Correction Flag	NONE		
GCSE	Generalized Caliper Selection	BS		
H1P	HNGS Detector 1 Allow/Disallow In Processing	ALLOW		
H2P	HNGS Detector 2 Allow/Disallow In Processing	ALLOW		
HABK	HNGS Borehole Potassium Running Average	-0.0016371		
HALF	HNGS Alpha Filter Length	60	IN	
HCRB	HNGS Apply Borehole Potassium Correction	NONE		
HMWM	Mud Weighting Material	NATU		
HNPE	HNGS Processing Enable	YES		
S1BI	HNGS Detector 1 Calibration Bismuth Count Rate	1.3	CPS	
S2BI	HNGS Detector 2 Calibration Bismuth Count Rate	1.3	CPS	
SGRC	HNGS Standard Gamma-Ray Correction Flag	YES		
TPOS	Tool Position	ECCE		
VBA1	HNGS Detector 1 Variable Barite Factor Running Average	0.993868		
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	1.00721		
EDTC-B: Enhanced DTS Cartridge				
BHS	Borehole Status	OPEN		
DPPM	Density Porosity Processing Mode	HIRS		
GCSE	Generalized Caliper Selection	BS		
System and Miscellaneous				
BS	Bit Size	9.875	IN	
DO	Depth Offset for Playback	0.0	M	
PP	Playback Processing	NORMAL		

Format: HLDSDensityPE	Vertical Scale: 1:200	Graphics File Created: 01-Jan-2023 21:09
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OP System Version: 19C0-187			
MSS_LDEO-A	19C0-187	HRLT-B	19C0-187
HLDS-DA	19C0-187	LDSC-AA	19C0-187
HNGC-B	19C0-187	HNGS-BA	19C0-187
EDTC-B	SKK-5169-EDTCB		

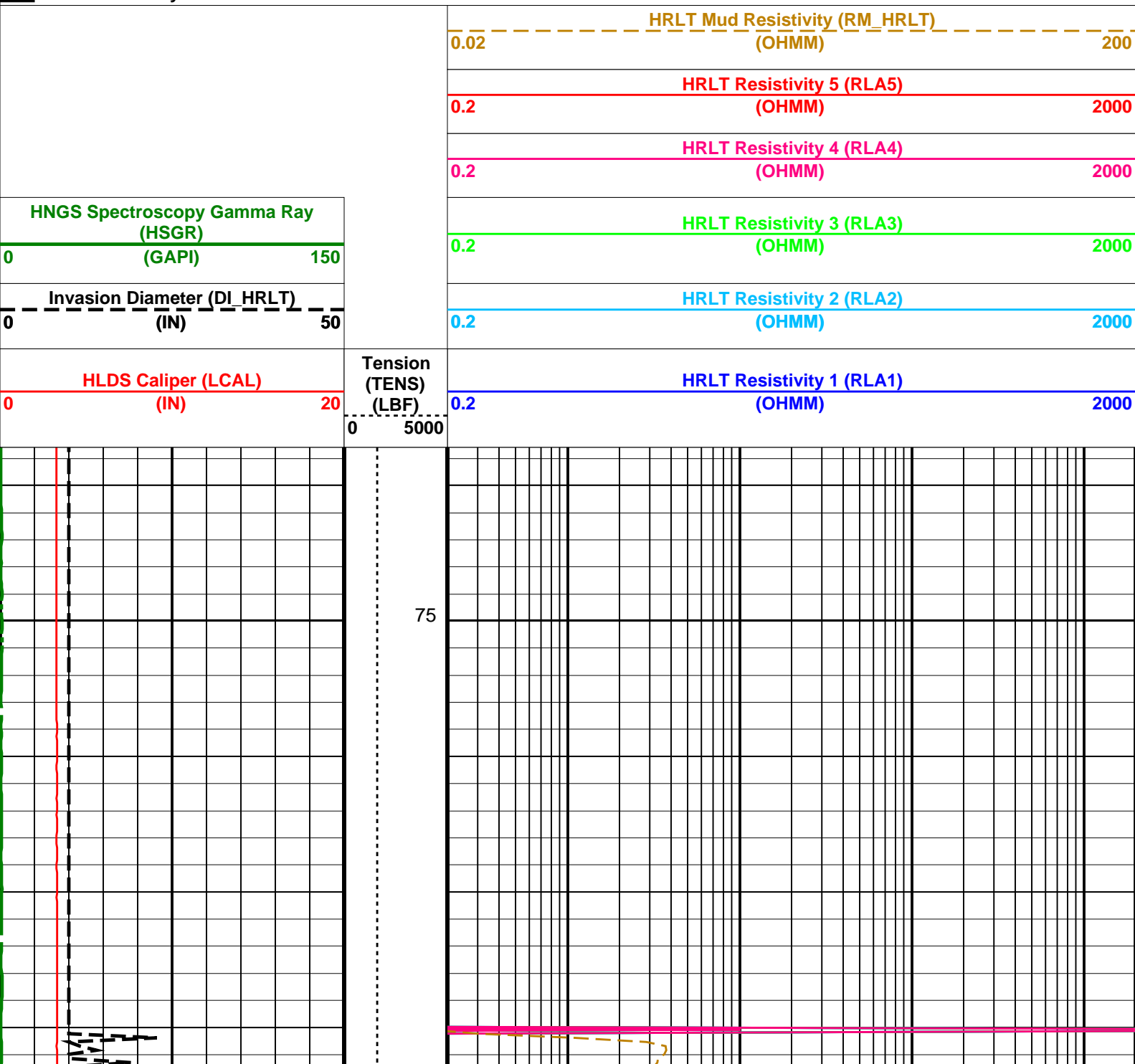
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Output DLIS Files					
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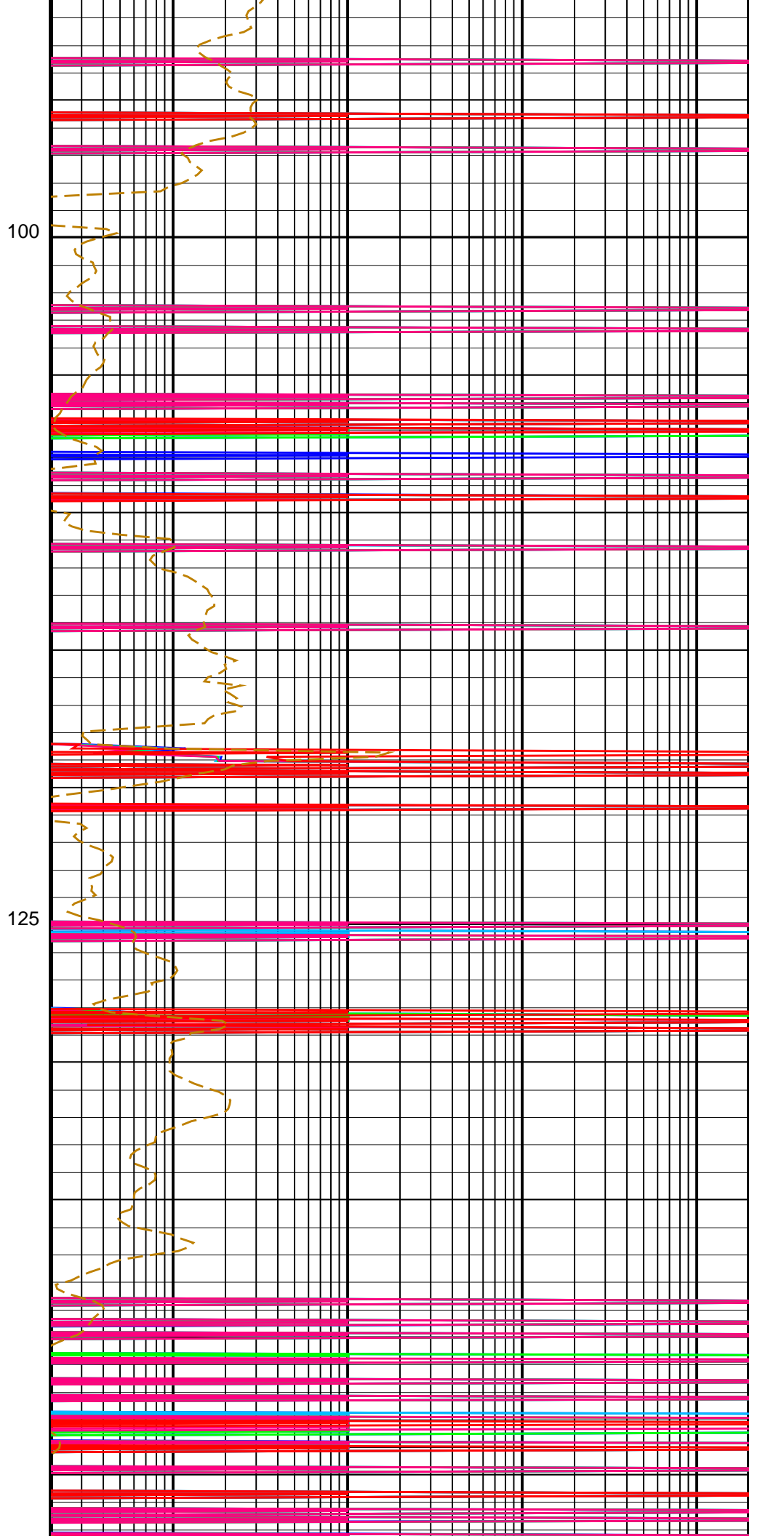
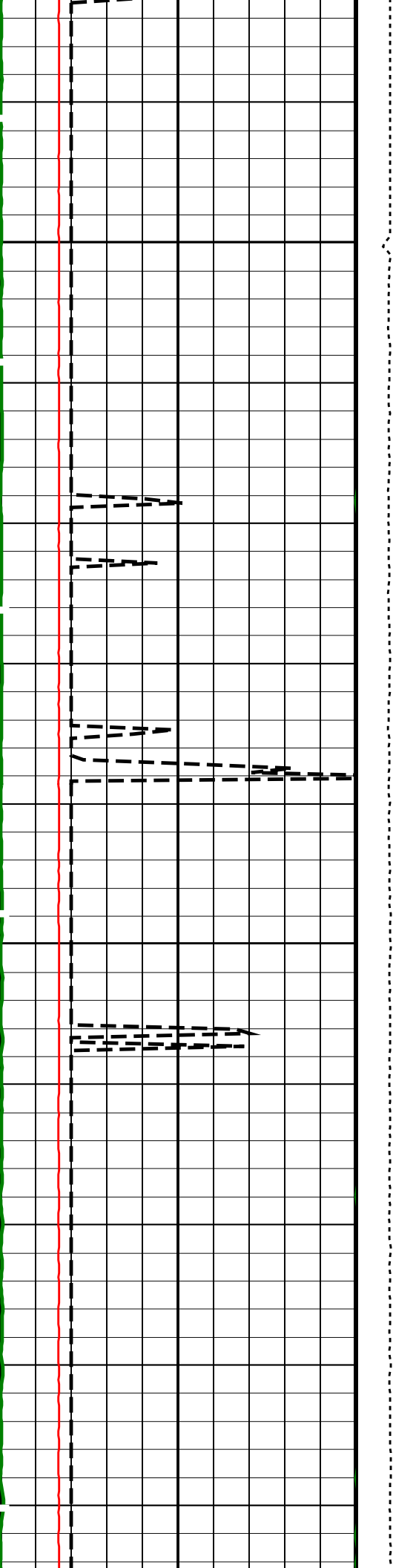
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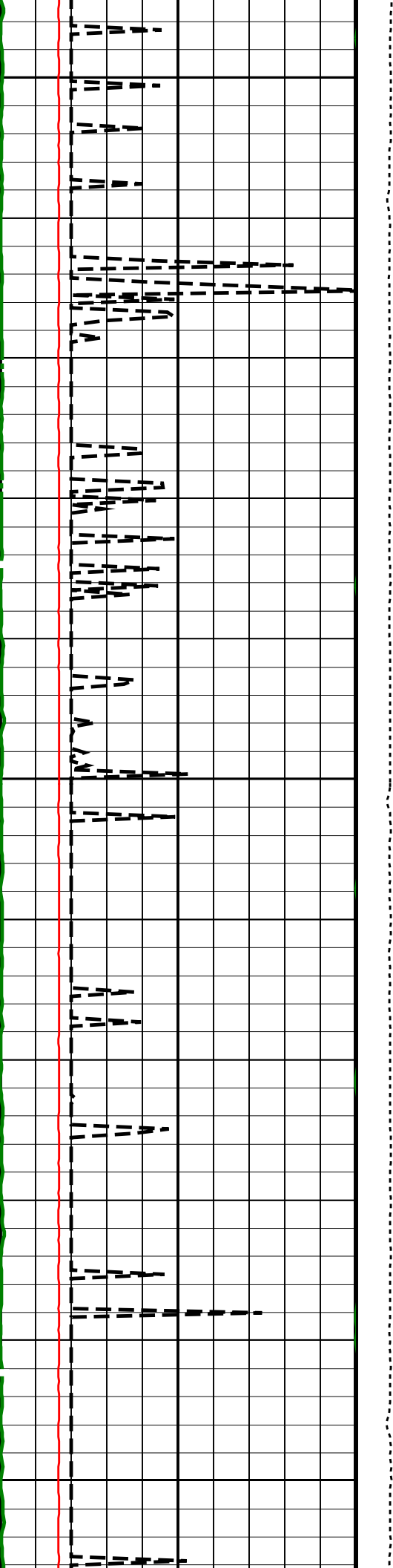
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MSS_LDEO-A	19C0-187	HRLT-B	19C0-187
HLDS-DA	19C0-187	LDSC-AA	19C0-187
HNGC-B	19C0-187	HNGS-BA	19C0-187
EDTC-B	SKK-5169-EDTCB		

Time Mark Every 60 S



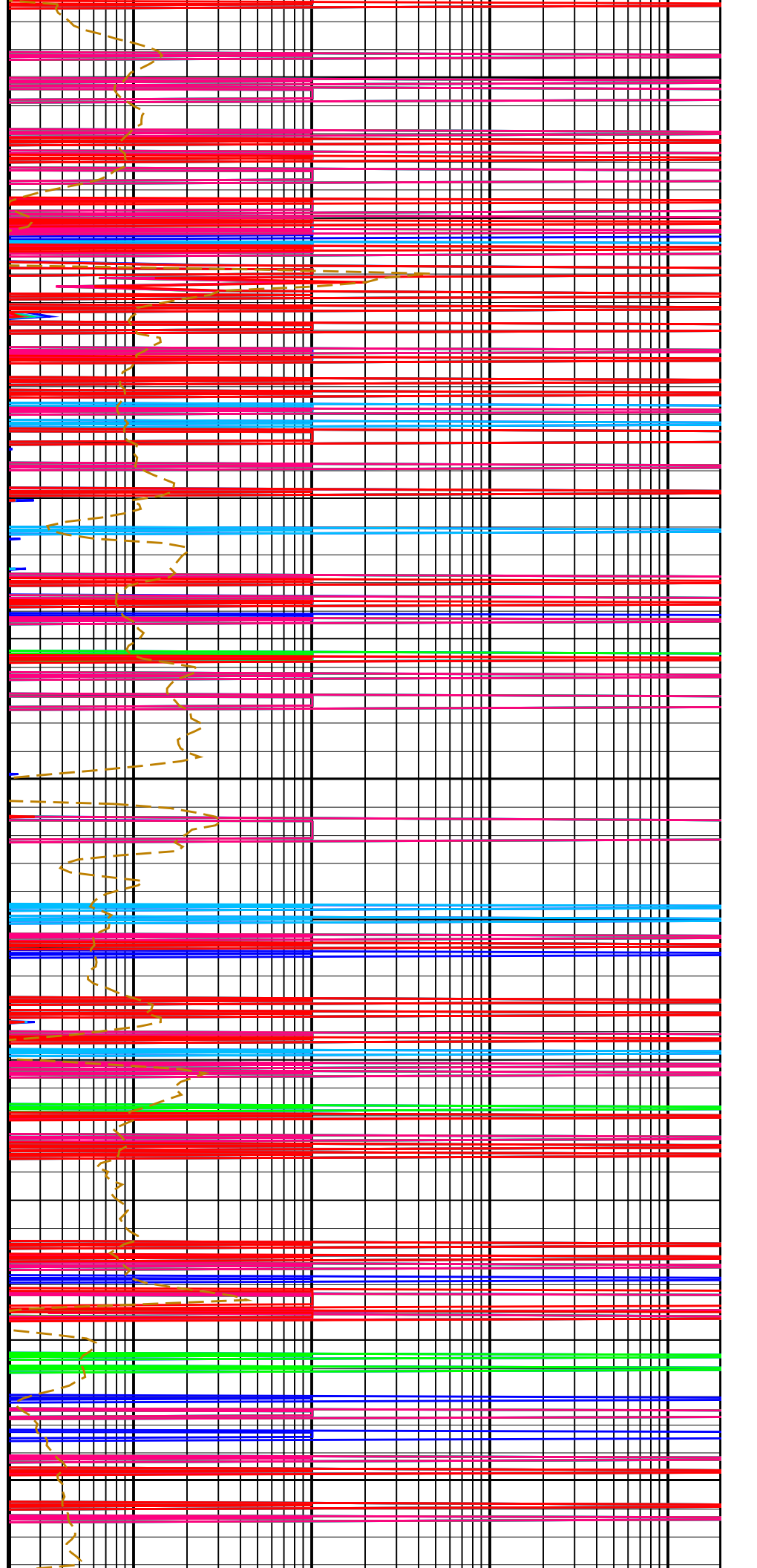


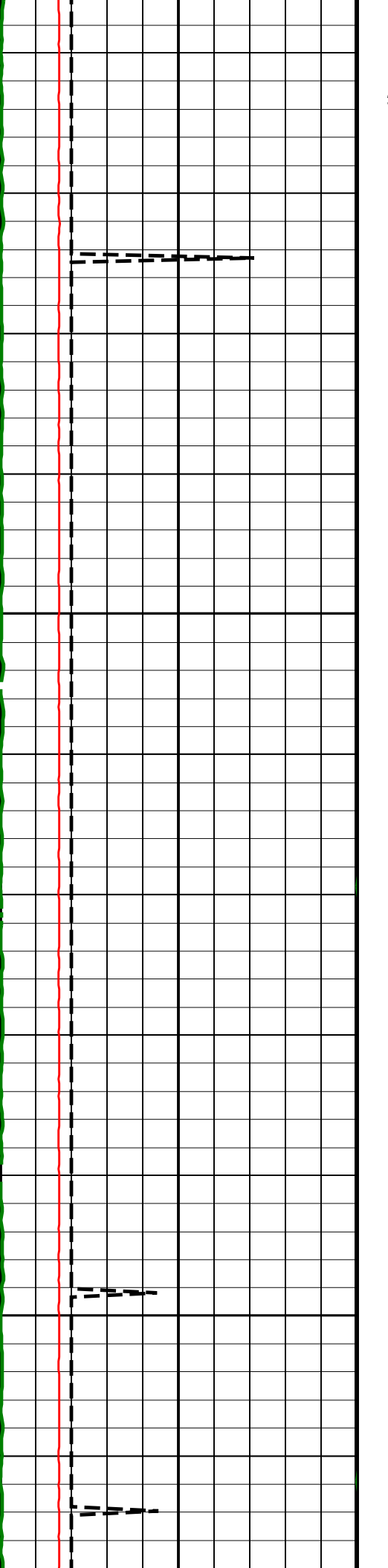


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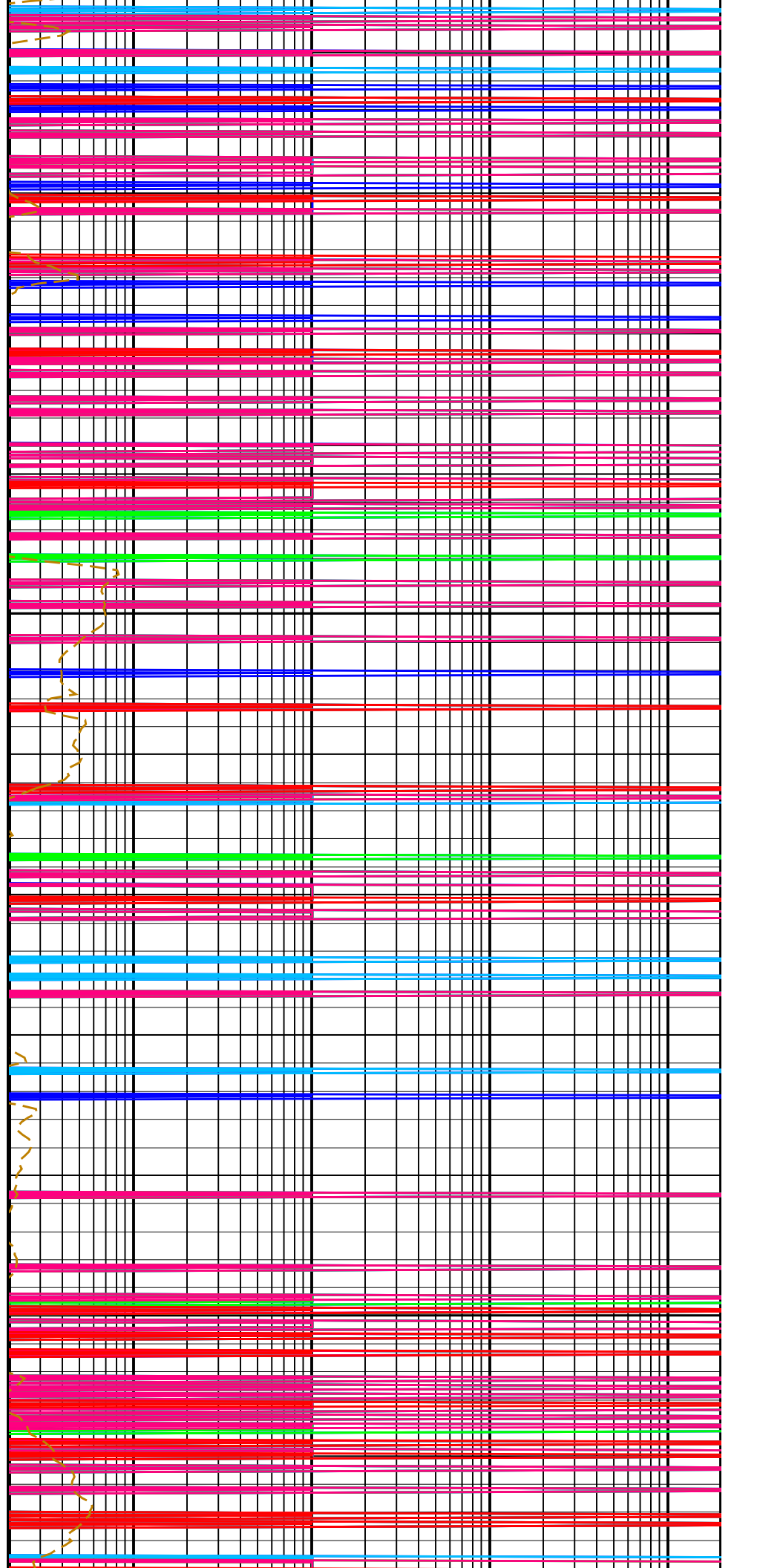
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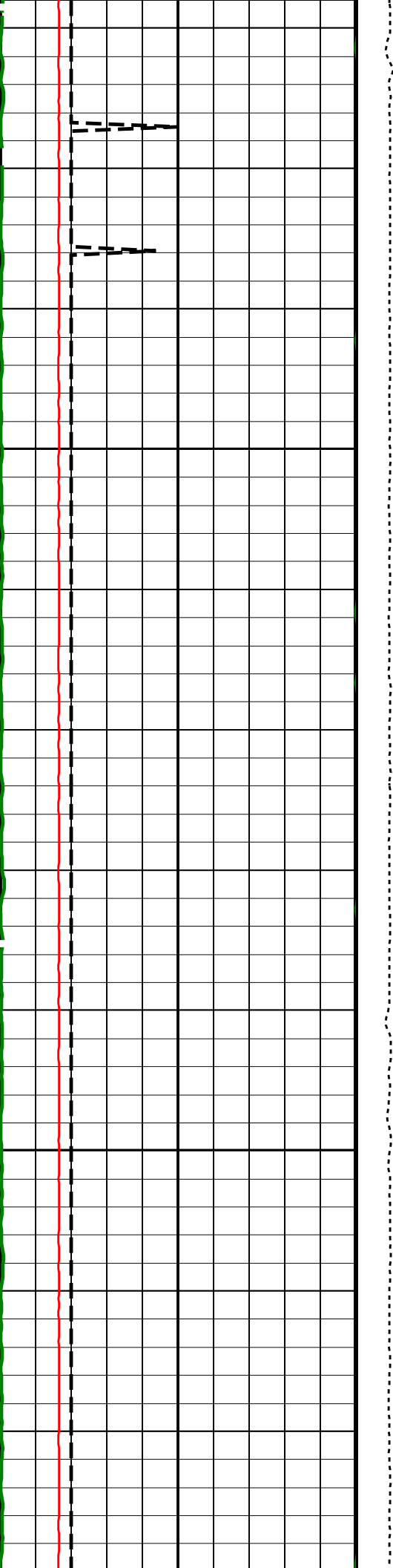




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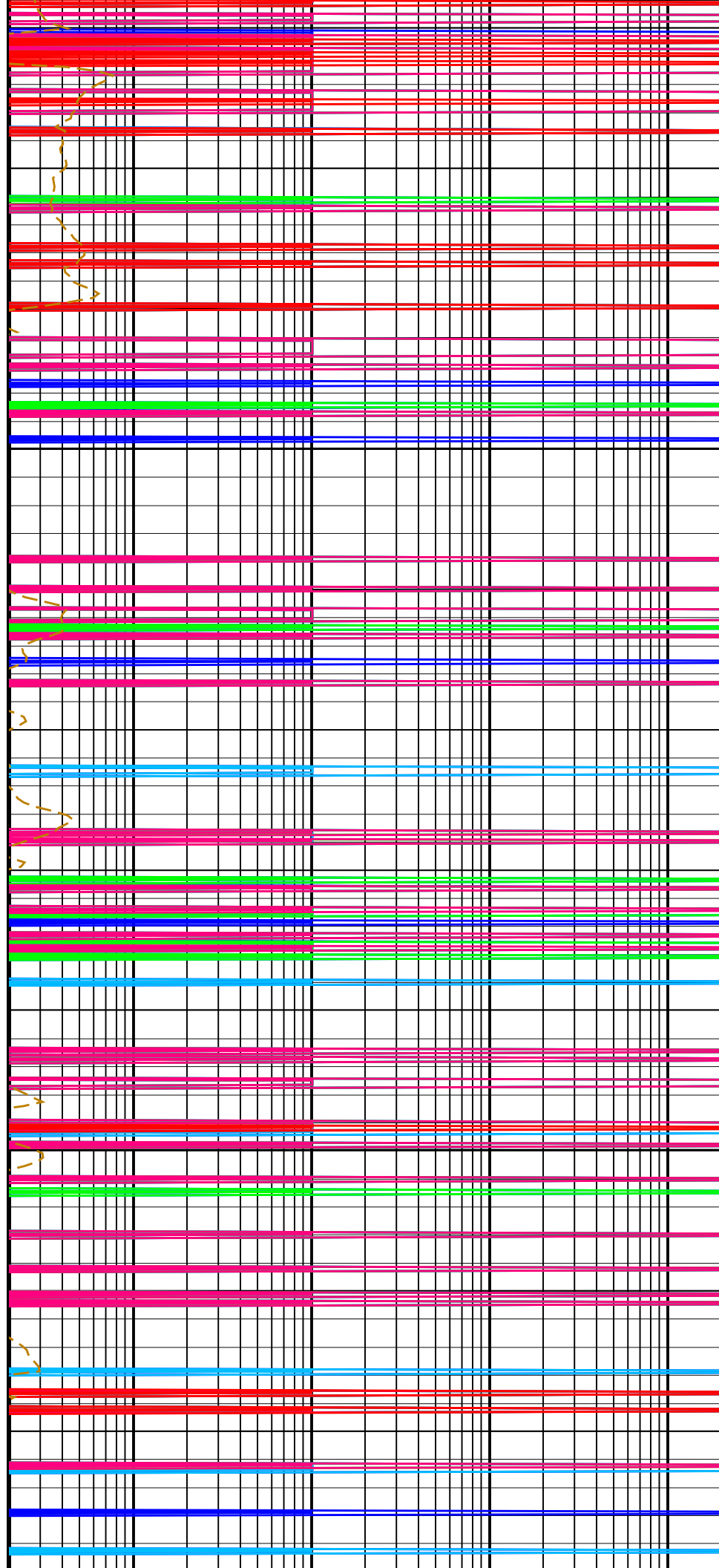
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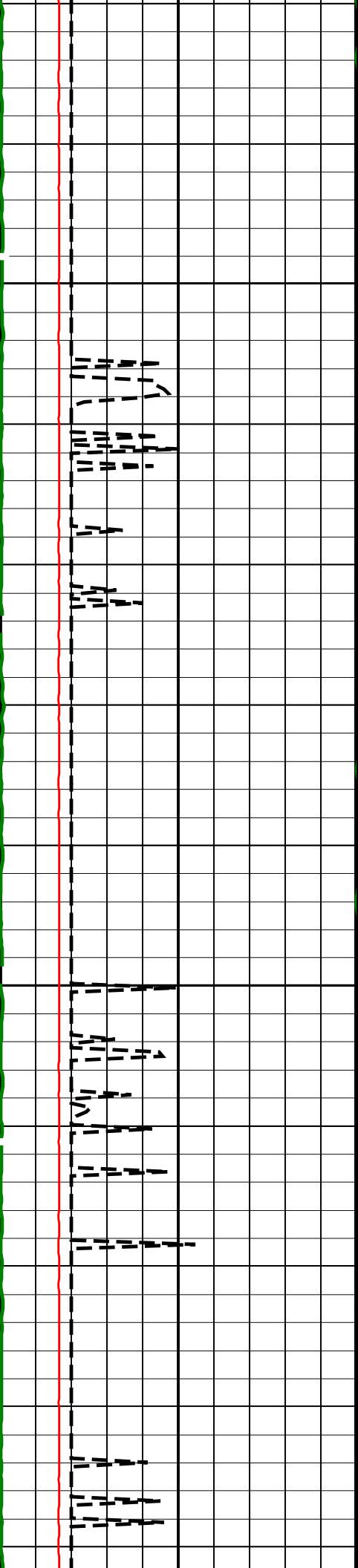




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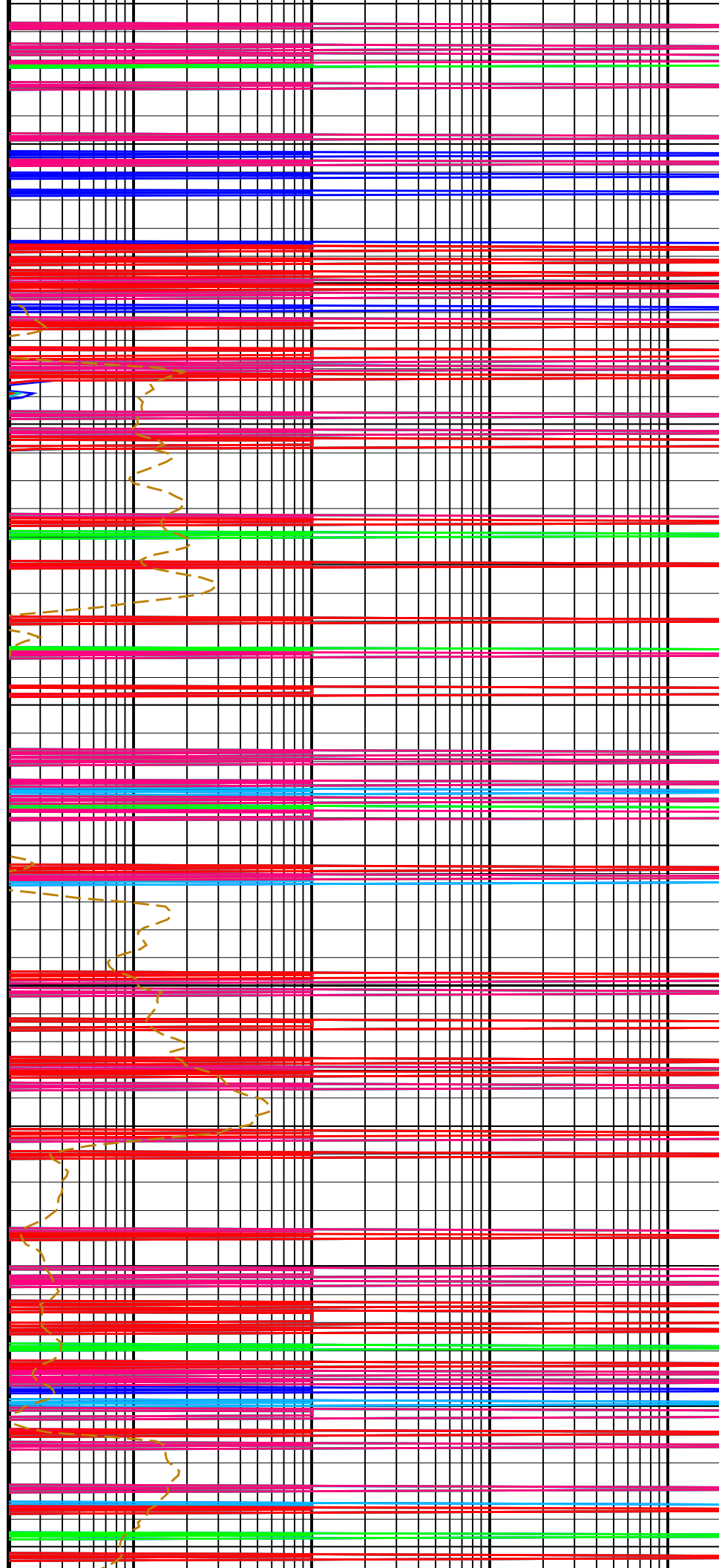
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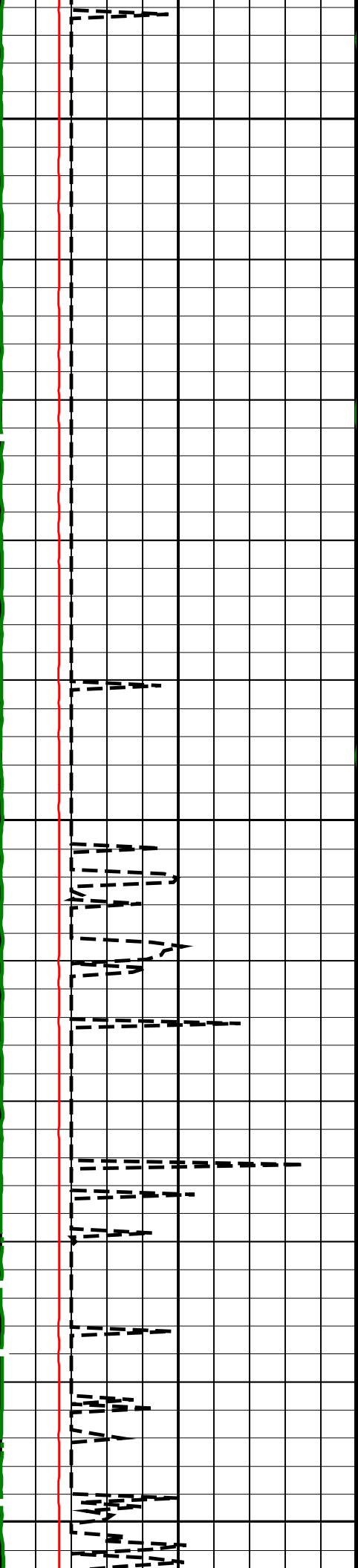




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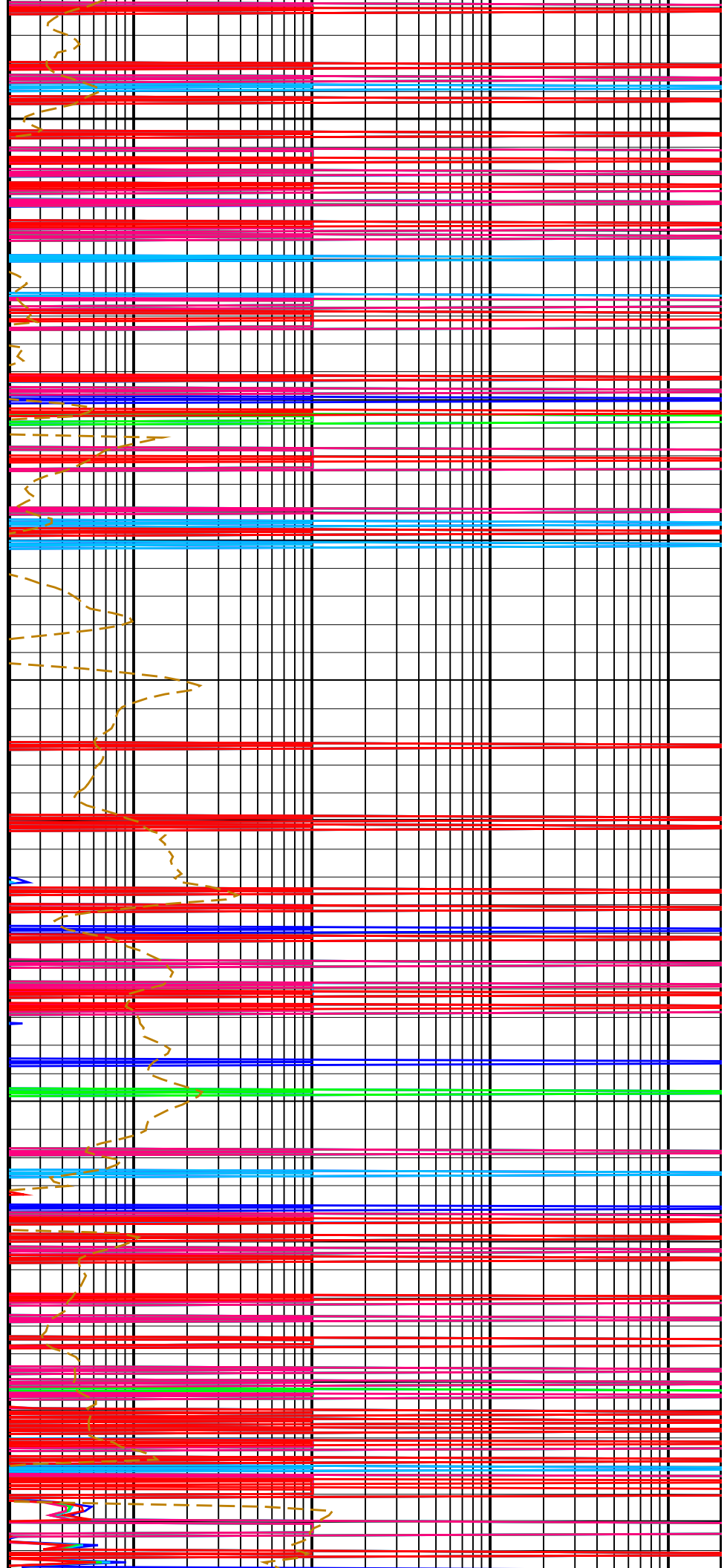


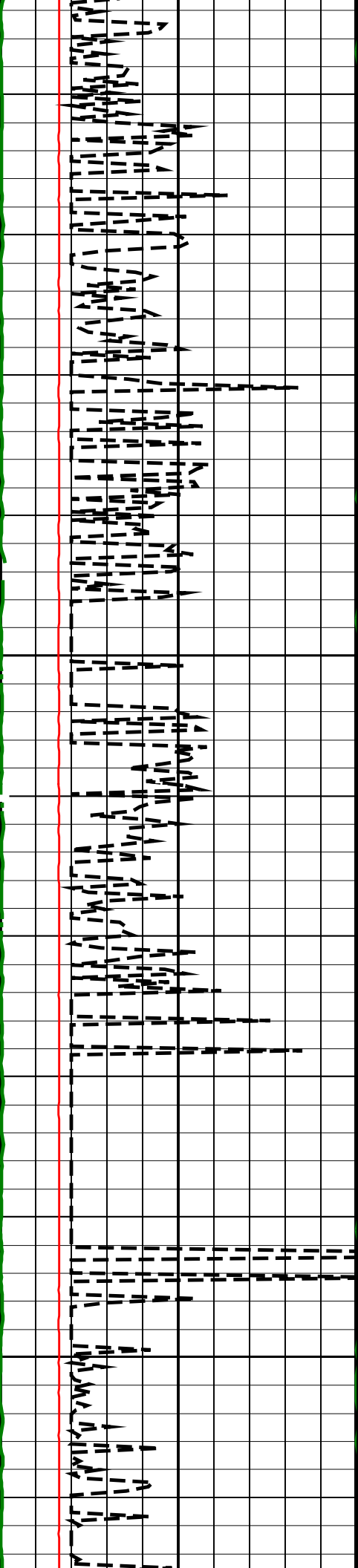


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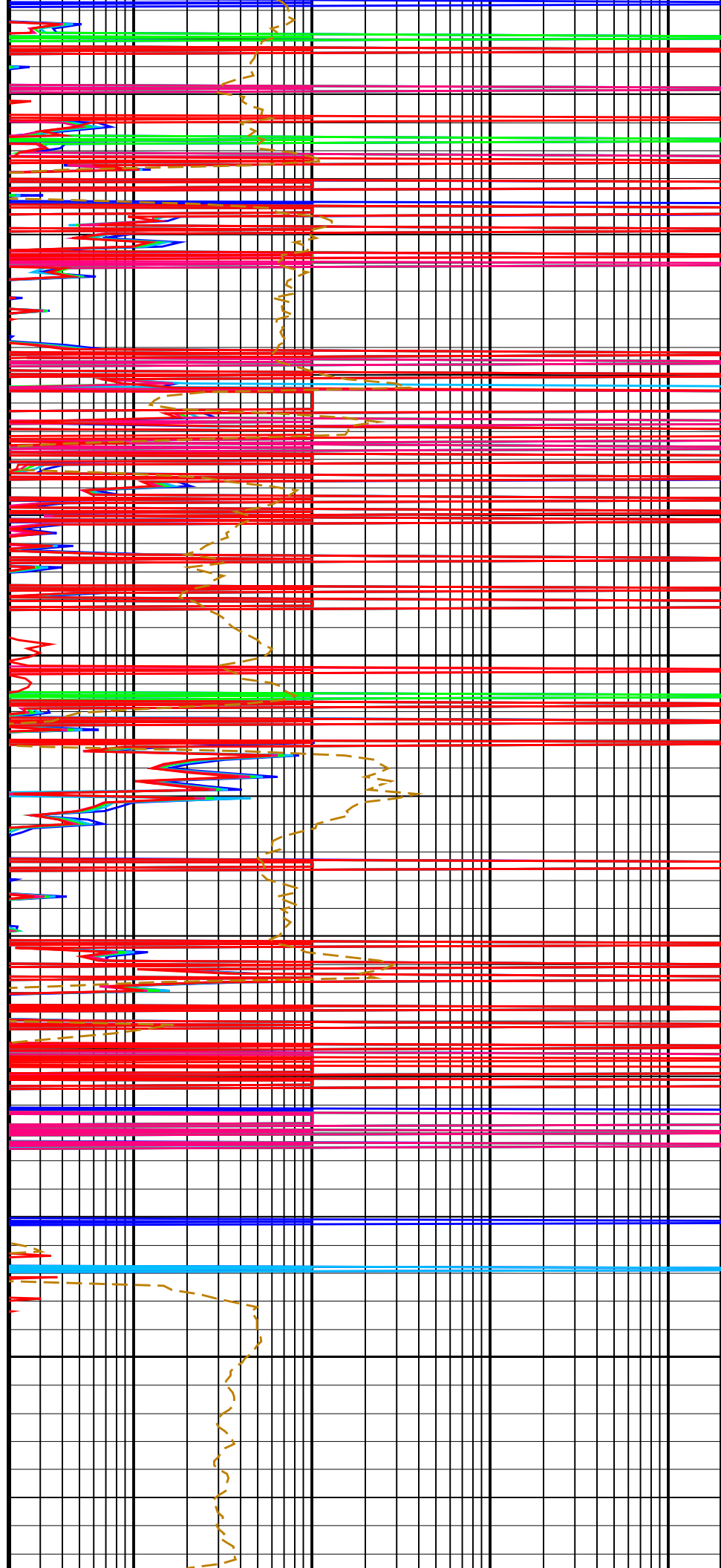
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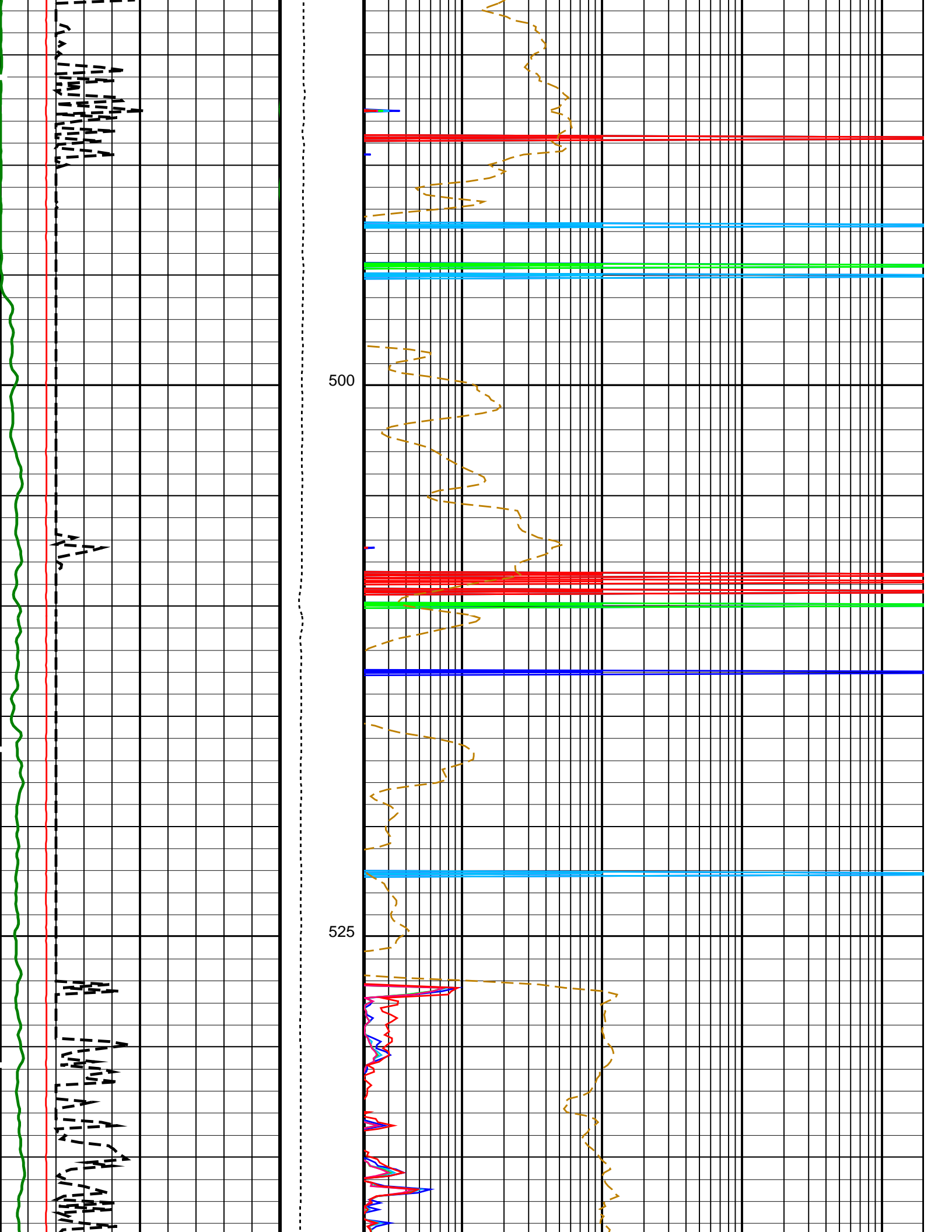


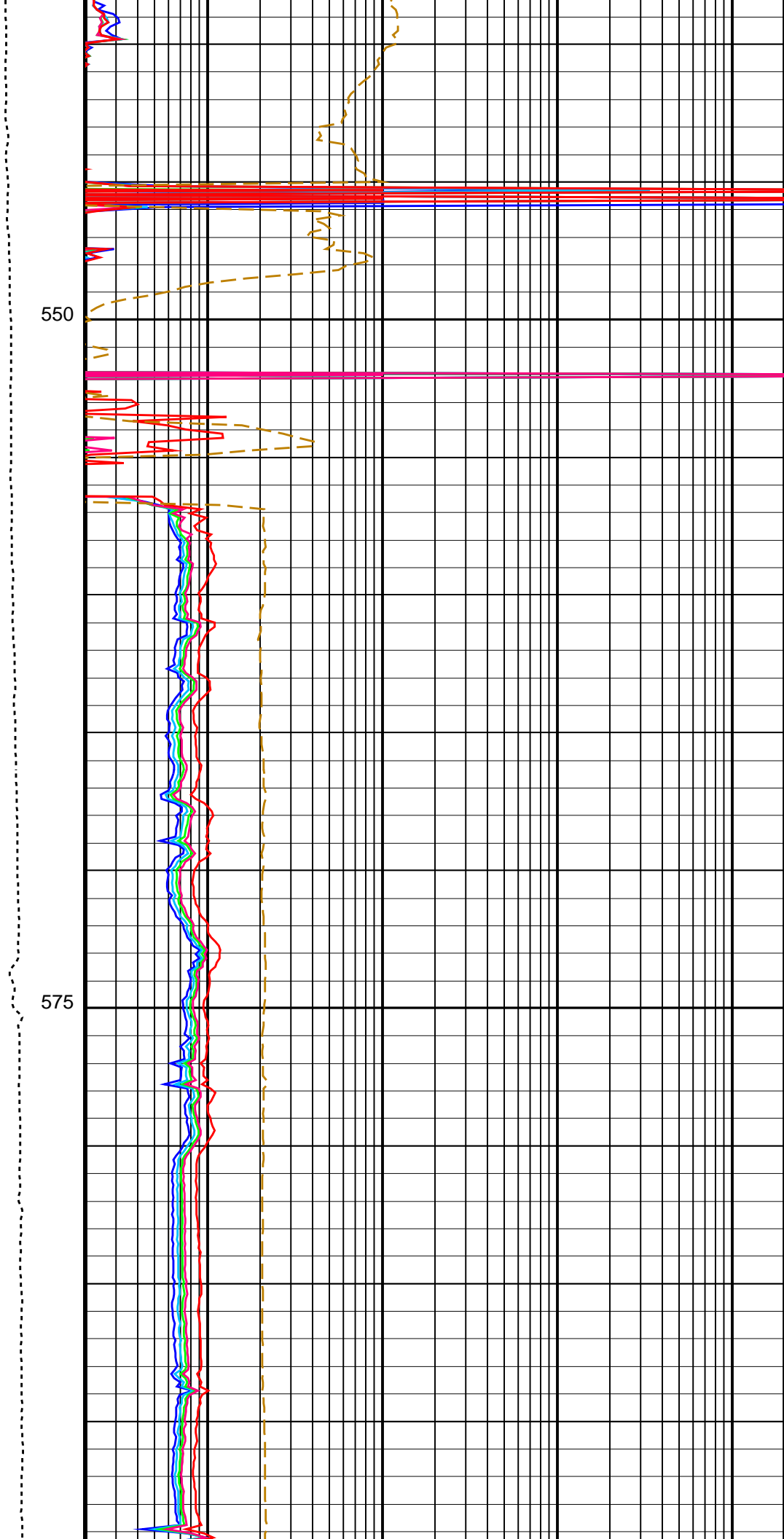
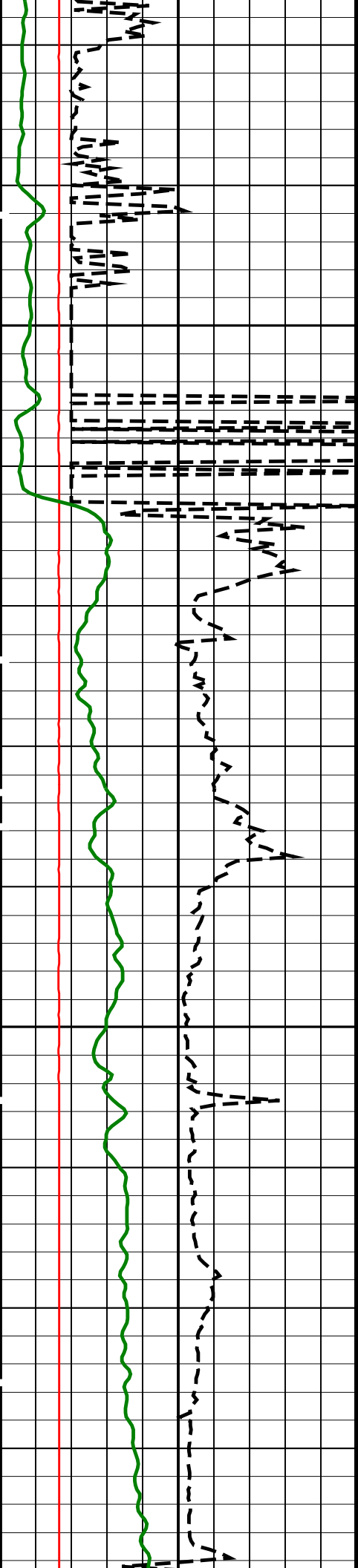


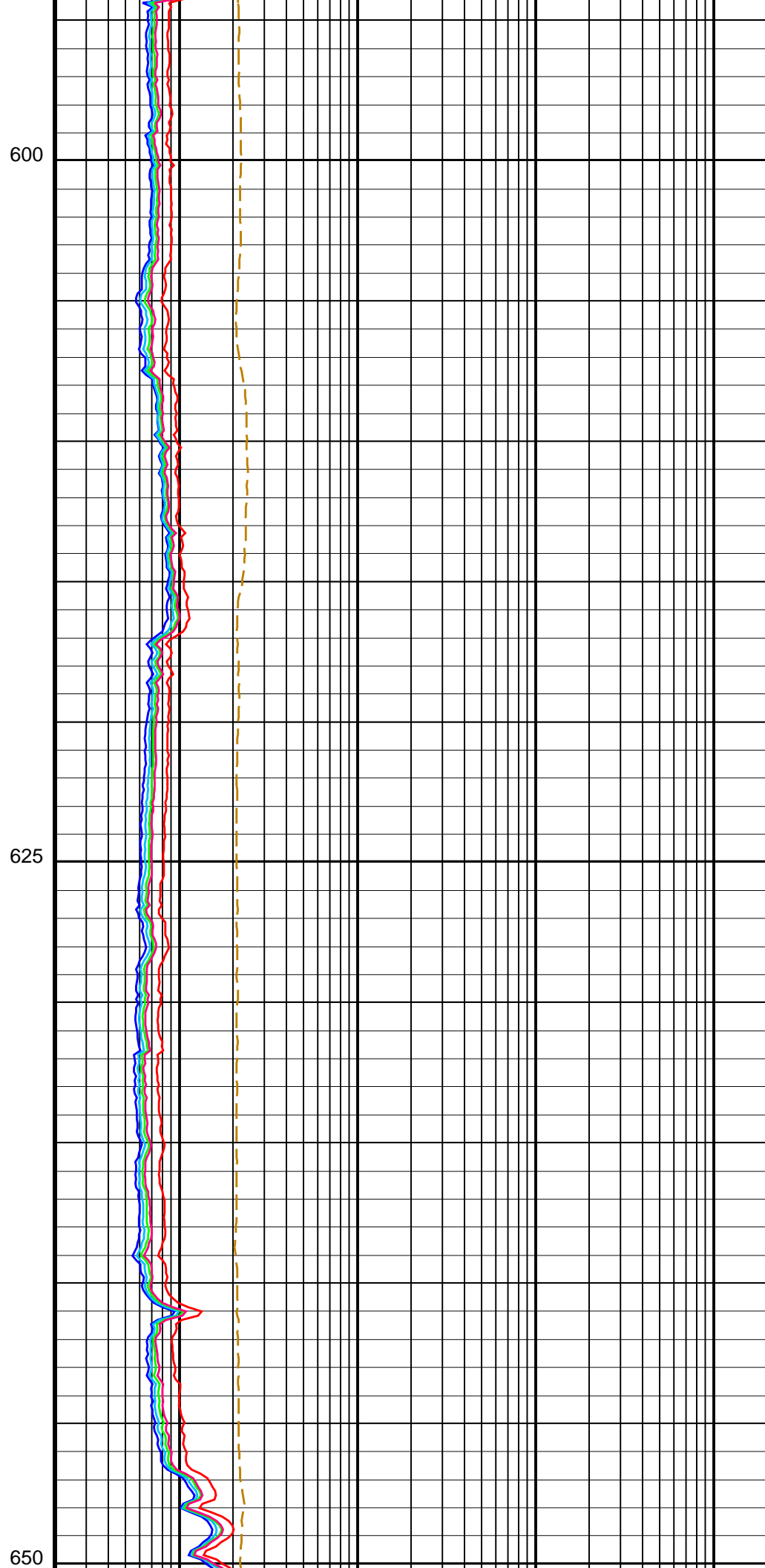
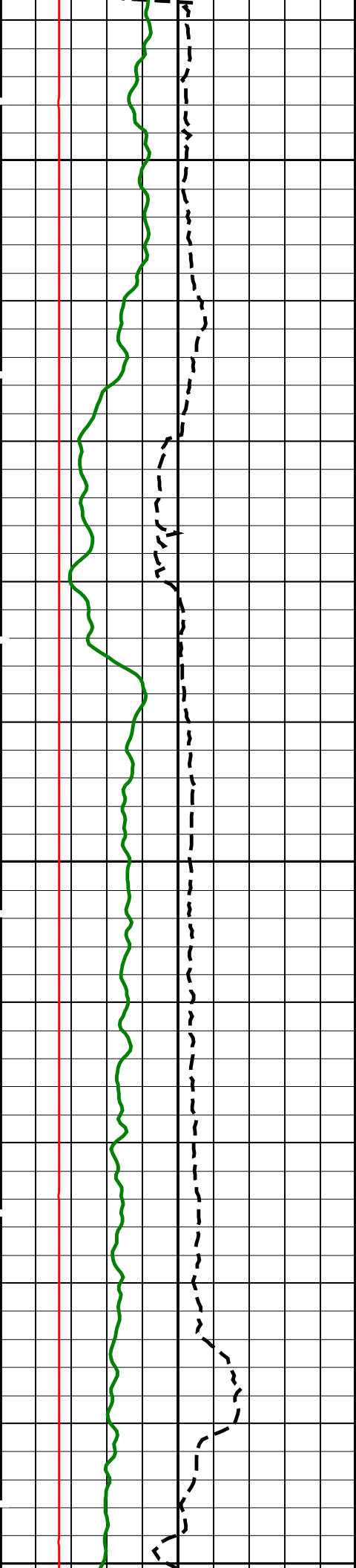
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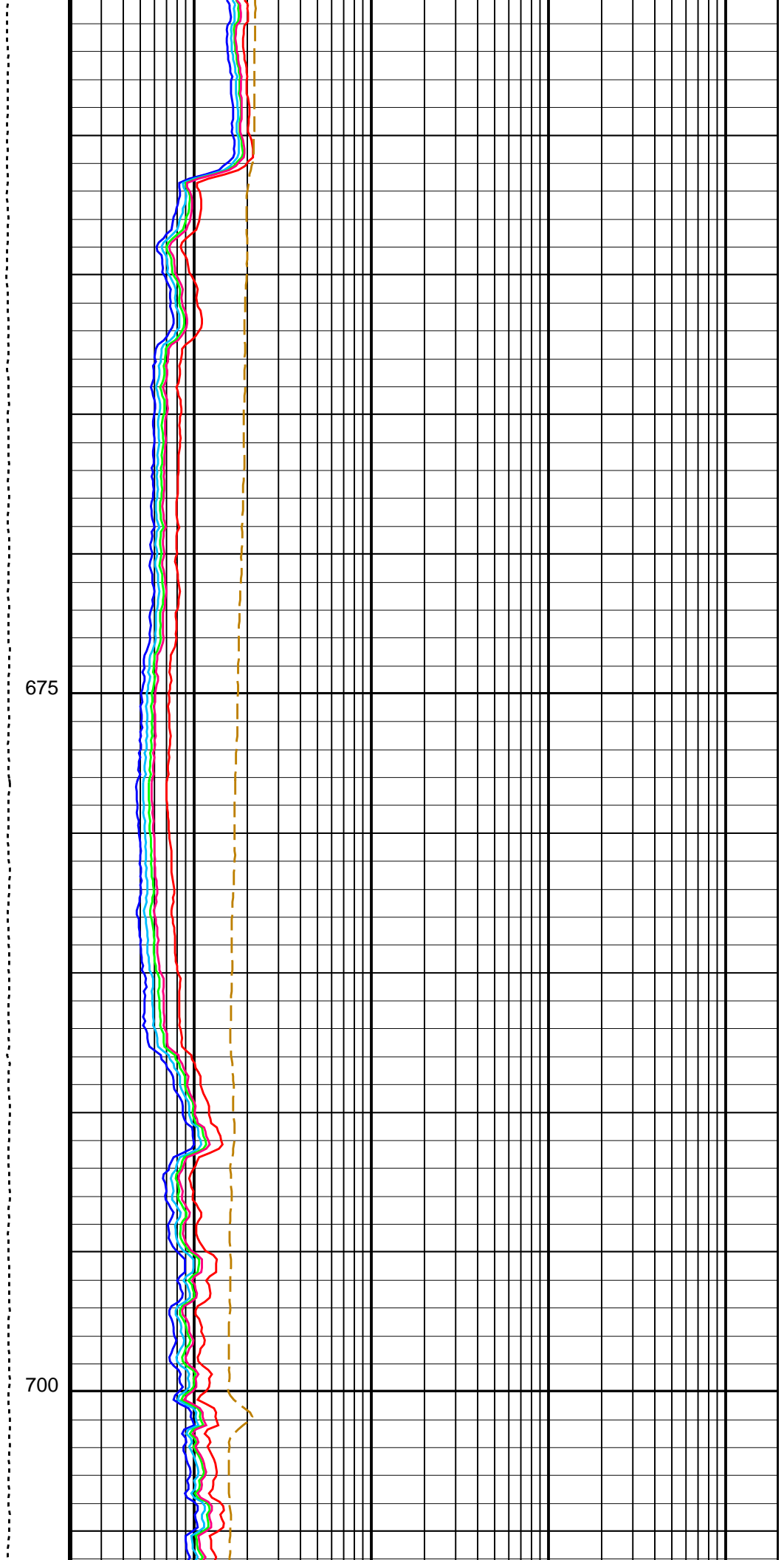
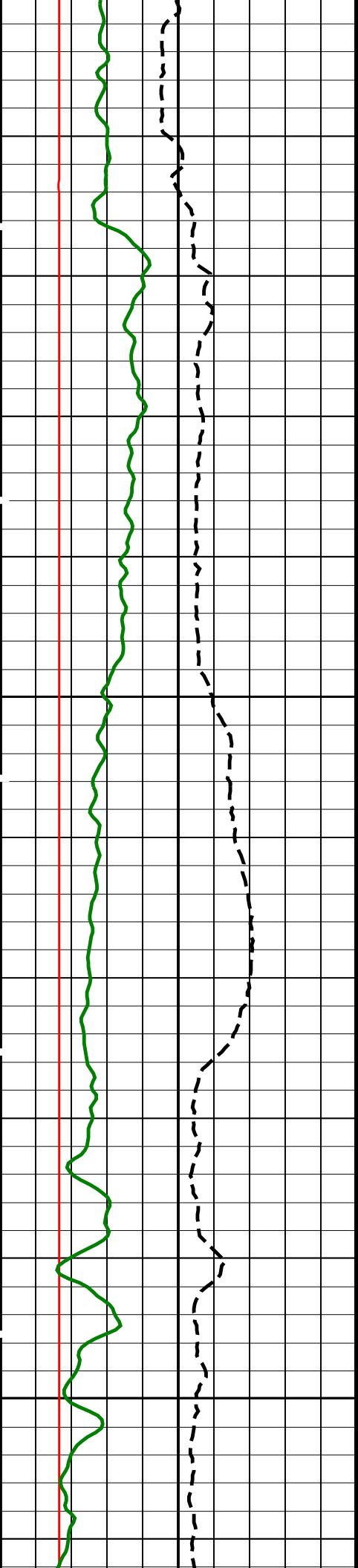
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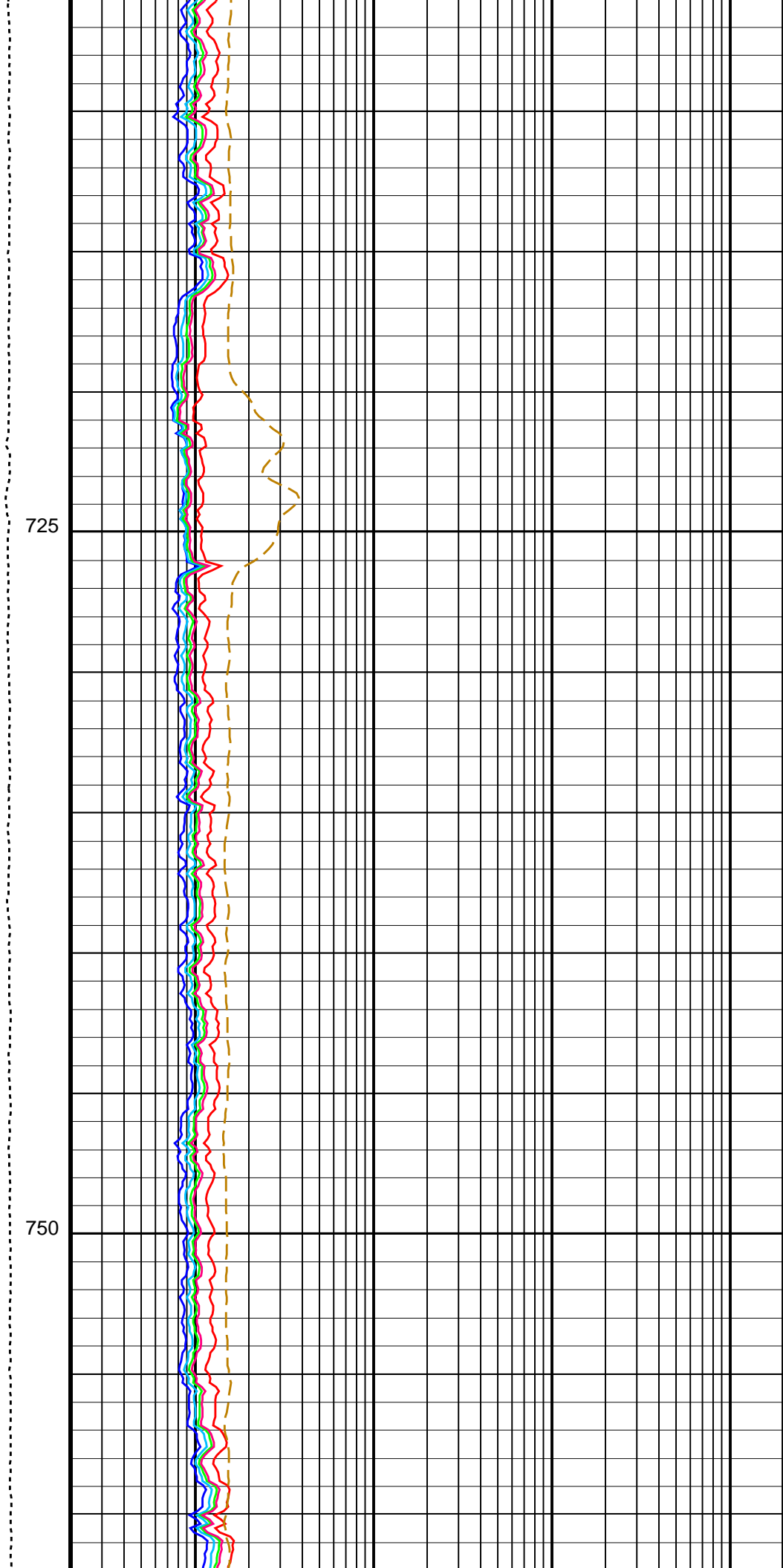
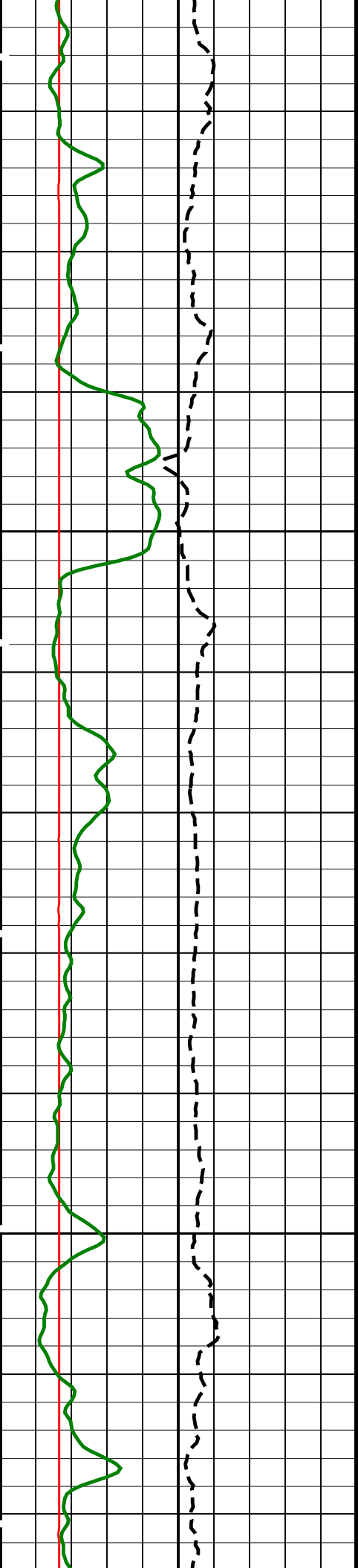


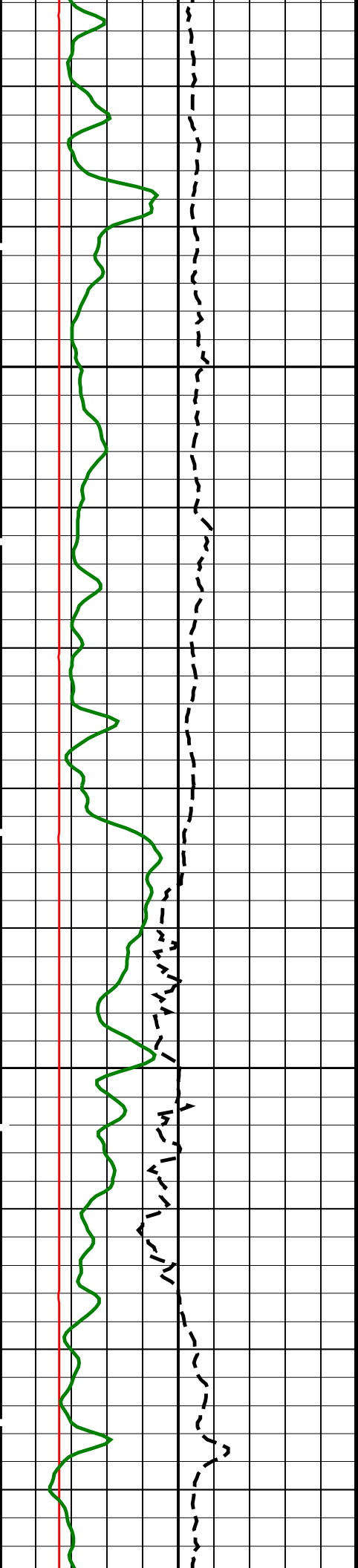






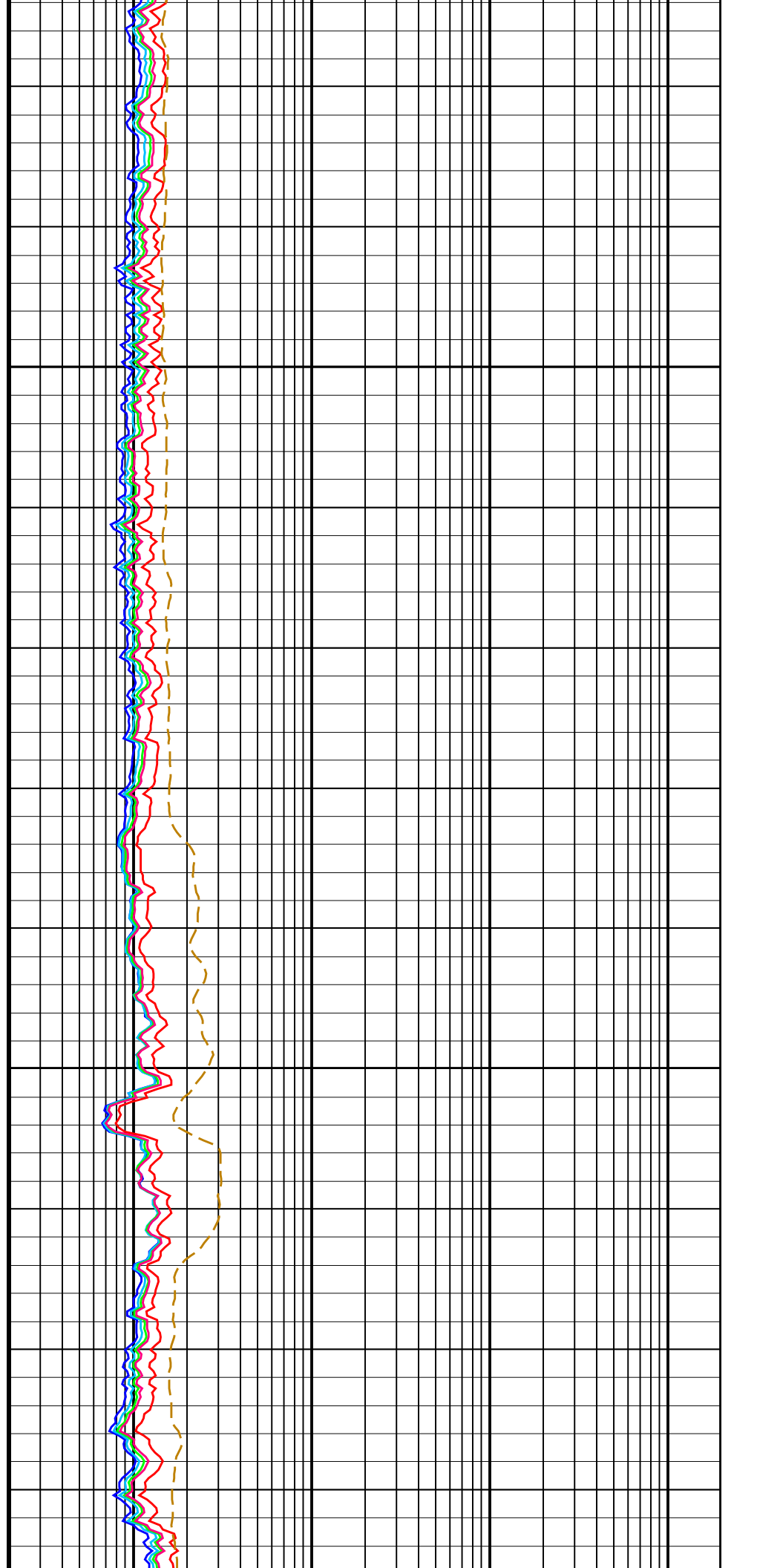


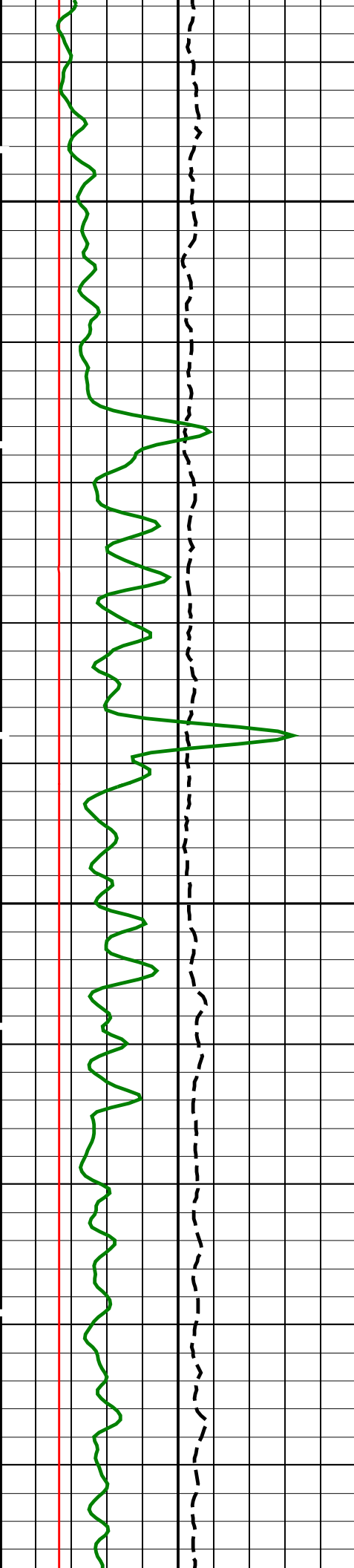




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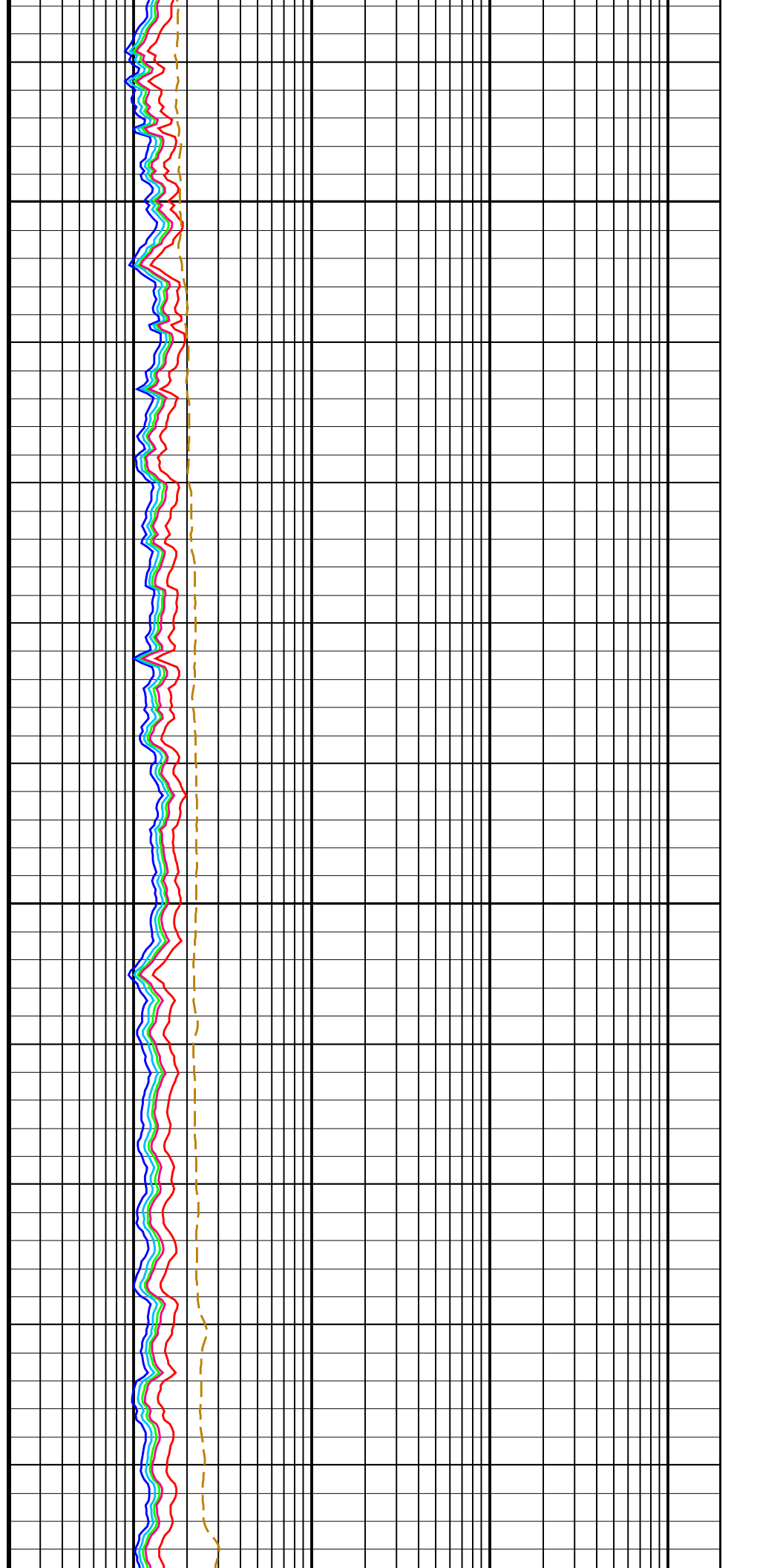
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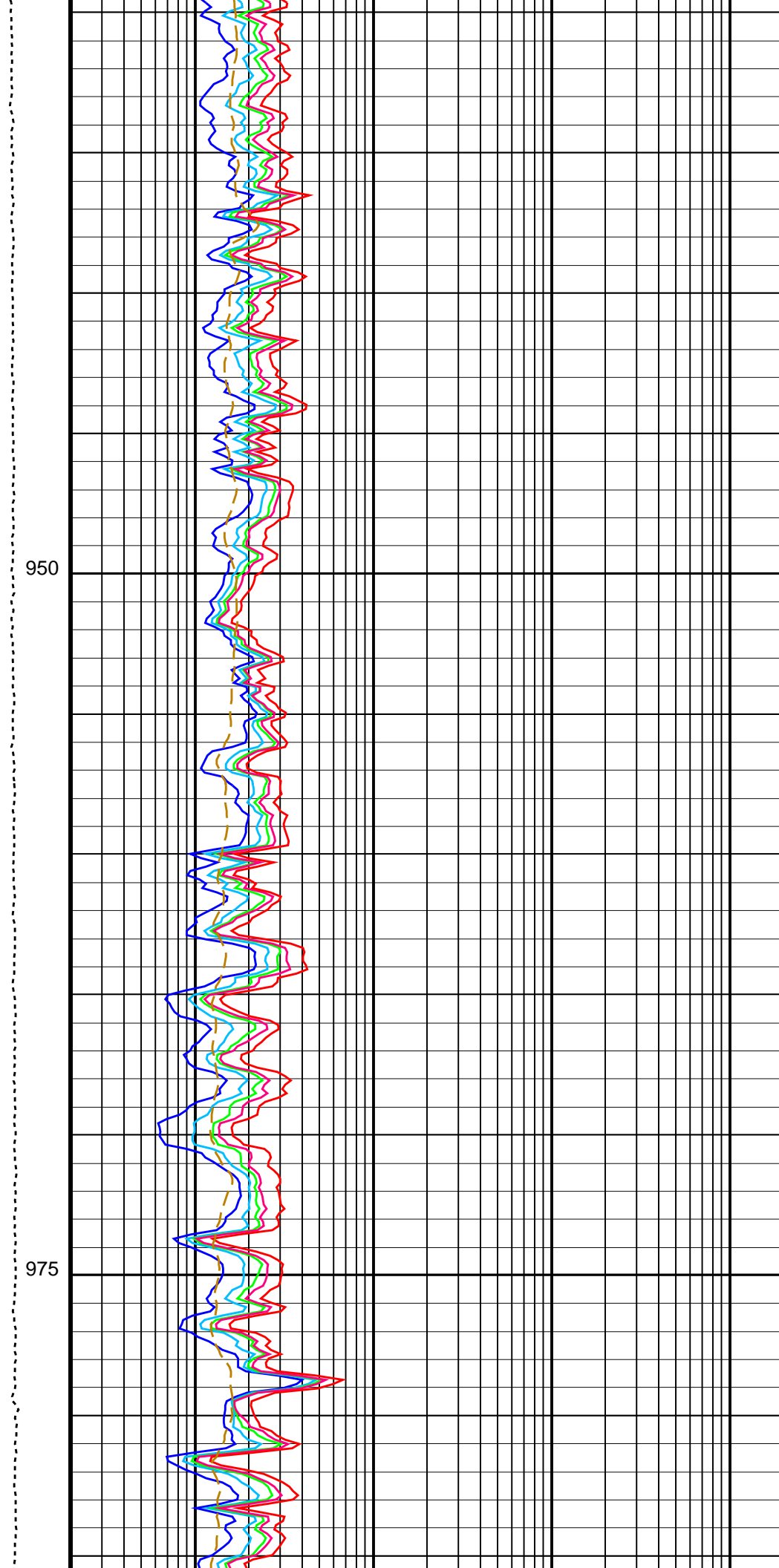
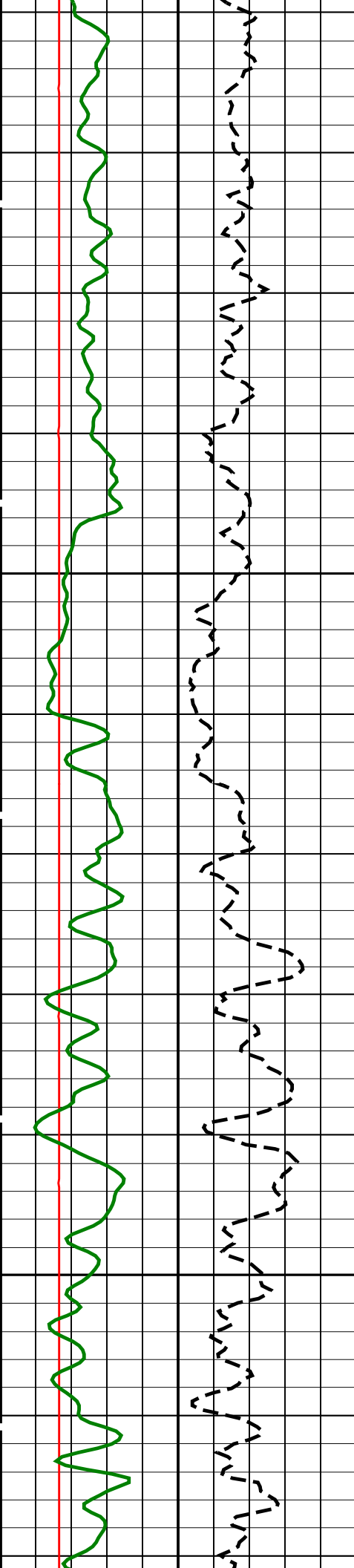


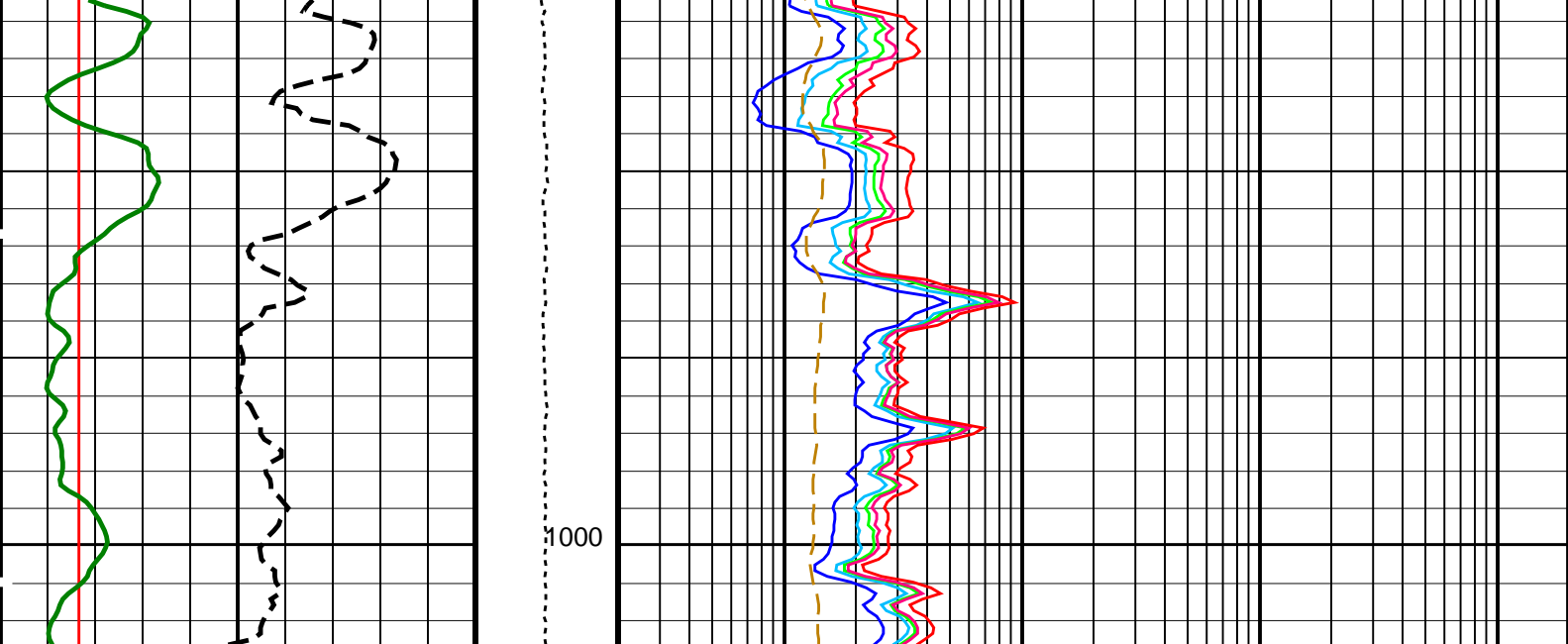


825

850







HLDS Caliper (LCAL) 0 (IN) 20		Tension (TENS) (LBF) 0 5000	HRLT Resistivity 1 (RLA1) 0.2 (OHMM) 2000	
Invasion Diameter (DI_HRLT) 0 (IN) 50			HRLT Resistivity 2 (RLA2) 0.2 (OHMM) 2000	
HNGS Spectroscopy Gamma Ray (HSGR) 0 (GAPI) 150			HRLT Resistivity 3 (RLA3) 0.2 (OHMM) 2000	
			HRLT Resistivity 4 (RLA4) 0.2 (OHMM) 2000	
			HRLT Resistivity 5 (RLA5) 0.2 (OHMM) 2000	
			HRLT Mud Resistivity (RM_HRLT) 0.02 (OHMM) 200	

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value	
HRLT-B: High Resolution Laterolog Array – B			
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	70	DEGF
GCSE	Generalized Caliper Selection	BS	
GGRD	Geothermal Gradient	0.01	DF/F
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
KFAC_HRLT	HRLT K Factor Option	SONDE	
PROCINV	Inversion Selection	ON	
PROCML	Inversion Micro-Resistivity Selection	NO_EXTERNAL_RXO	
PROCMSO	Mechanical Standoff Fin Size	0	IN
PROCRM	Processing Mud Resistivity Select	HRLT_Compute	
PROCSP0	Sonde Position	Centered	
SHT	Surface Hole Temperature	20	DEGF
HNGS-BA: Hostile Natural Gamma Ray Sonde			
BAR1	HNGS Detector 1 Barite Constant	1	
BAR2	HNGS Detector 2 Barite Constant	1	
BHK	HNGS Borehole Potassium Correction Concentration	0	
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	70	DEGF
CSD1	Inner Casing Outer Diameter	0	IN
CSD2	Outer Casing Outer Diameter	0	IN
CSW1	Inner Casing Weight	0	LB/F
CSW2	Outer Casing Weight	0	LB/F
DBCC	HNGS Barite Constant Correction Flag	NONE	

GCSE	Generalized Caliper Selection	BS	DF/F
GGRD	Geothermal Gradient	0.01	
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
H1P	HNGS Detector 1 Allow/Disallow In Processing	ALLOW	
H2P	HNGS Detector 2 Allow/Disallow In Processing	ALLOW	
HABK	HNGS Borehole Potassium Running Average	-0.0016371	
HALF	HNGS Alpha Filter Length	60	IN
HCRB	HNGS Apply Borehole Potassium Correction	NONE	
HMWM	Mud Weighting Material	NATU	
HNPE	HNGS Processing Enable	YES	
S1BI	HNGS Detector 1 Calibration Bismuth Count Rate	1.3	CPS
S2BI	HNGS Detector 2 Calibration Bismuth Count Rate	1.3	CPS
SGRC	HNGS Standard Gamma-Ray Correction Flag	YES	
SHT	Surface Hole Temperature	20	DEGF
TPOS	Tool Position	ECCE	
VBA1	HNGS Detector 1 Variable Barite Factor Running Average	0.993868	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	1.00721	
EDTC-B: Enhanced DTS Cartridge			
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	70	DEGF
GCSE	Generalized Caliper Selection	BS	
GGRD	Geothermal Gradient	0.01	DF/F
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
SHT	Surface Hole Temperature	20	DEGF
System and Miscellaneous			
BS	Bit Size	9.875	IN
DO	Depth Offset for Playback	0.0	M
MST	Mud Sample Temperature	23.00	DEGC
PP	Playback Processing	NORMAL	
TD	Total Depth	1115.5	M

Format: HRLT Vertical Scale: 1:200 Graphics File Created: 01-Jan-2023 21:09

OP System Version: 19C0-187

MSS_LDEO-A	19C0-187	HRLT-B	19C0-187
HLDS-DA	19C0-187	LDSC-AA	19C0-187
HNGC-B	19C0-187	HNGS-BA	19C0-187
EDTC-B	SKK-5169-EDTCB		

Input DLIS Files

DEFAULT	Flip_MSS_LDEO_HRLA_052PUP	PRODUCER	01-Jan-2023 21:09	1002.6 M	68.6 M
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Output DLIS Files

DEFAULT	MSS_LDEO_HRLA_LDL_053PUP	FN:43	PRODUCER	01-Jan-2023 21:09	
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Company: International Ocean Discovery Program Well: Expedition 398, Site U1589C

Input DLIS Files

DEFAULT	Flip_MSS_LDEO_HRLA_052PUP	PRODUCER	01-Jan-2023 21:09	1002.6 M	68.6 M
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Output DLIS Files

DEFAULT	MSS_LDEO_HRLA_LDL_053PUP	FN:43	PRODUCER	01-Jan-2023 21:09	1002.6 M	68.6 M
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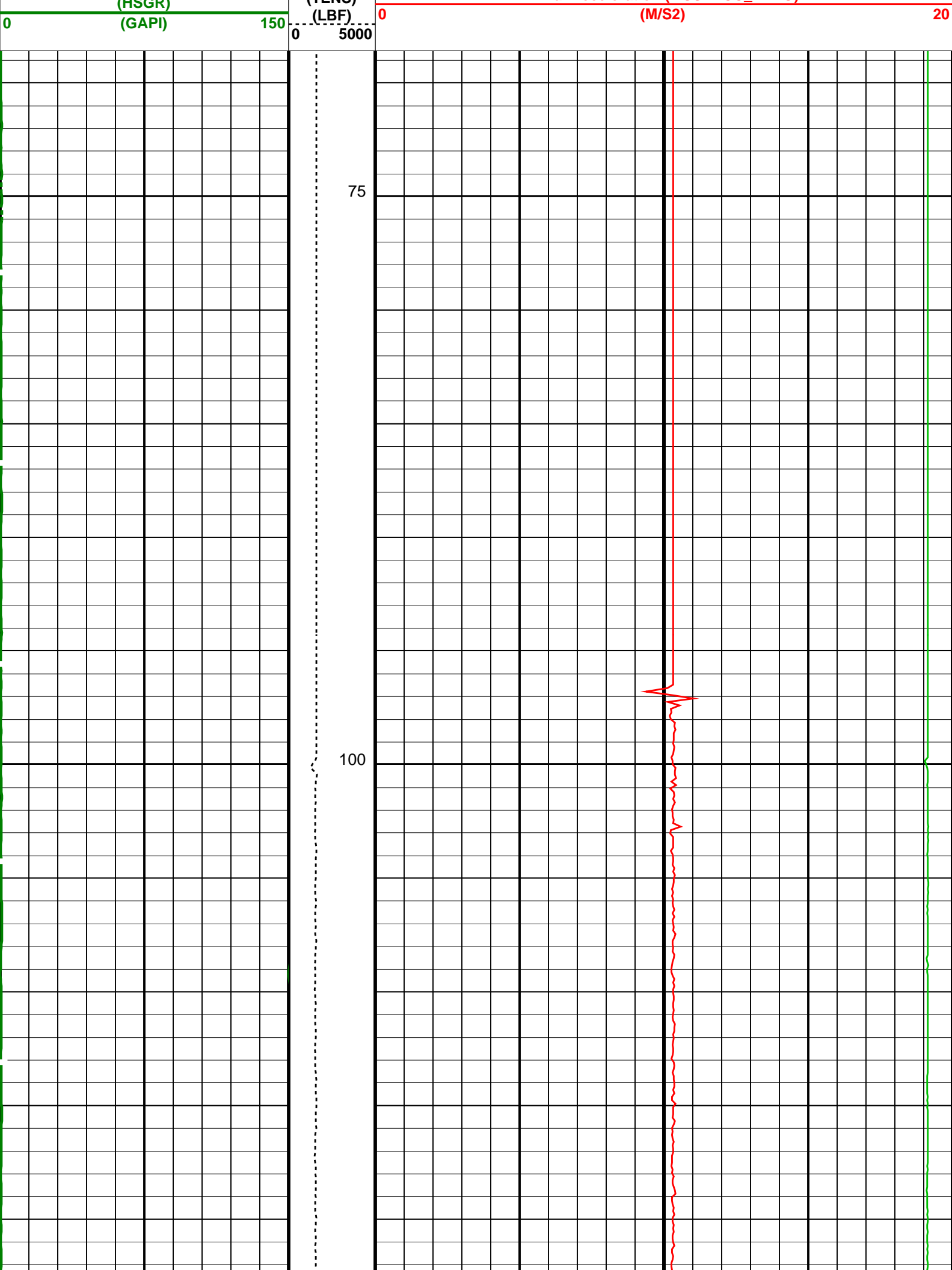
OP System Version: 19C0-187

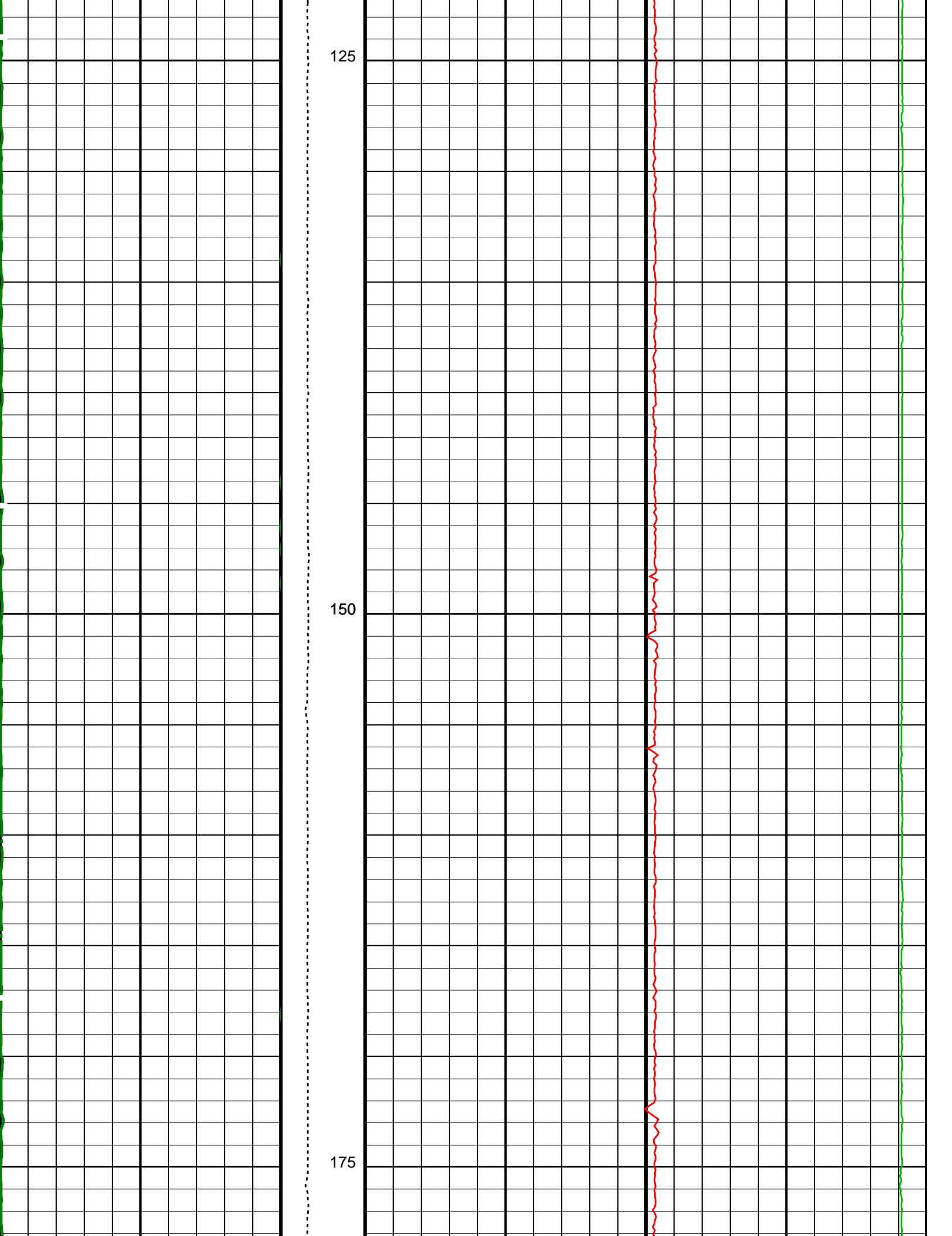
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EDTC-B	SKK-5169-EDTCB		

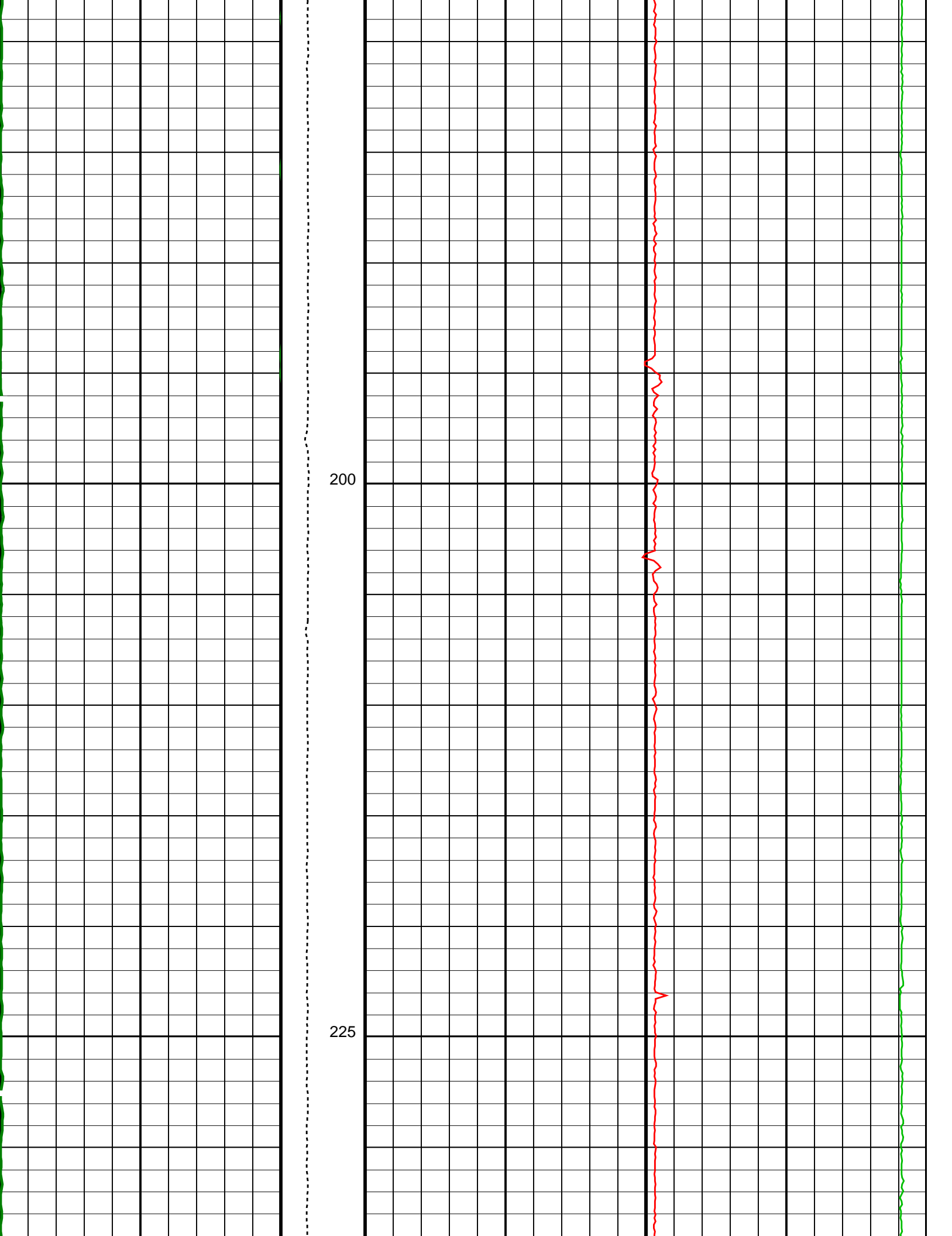
PIP SUMMARY

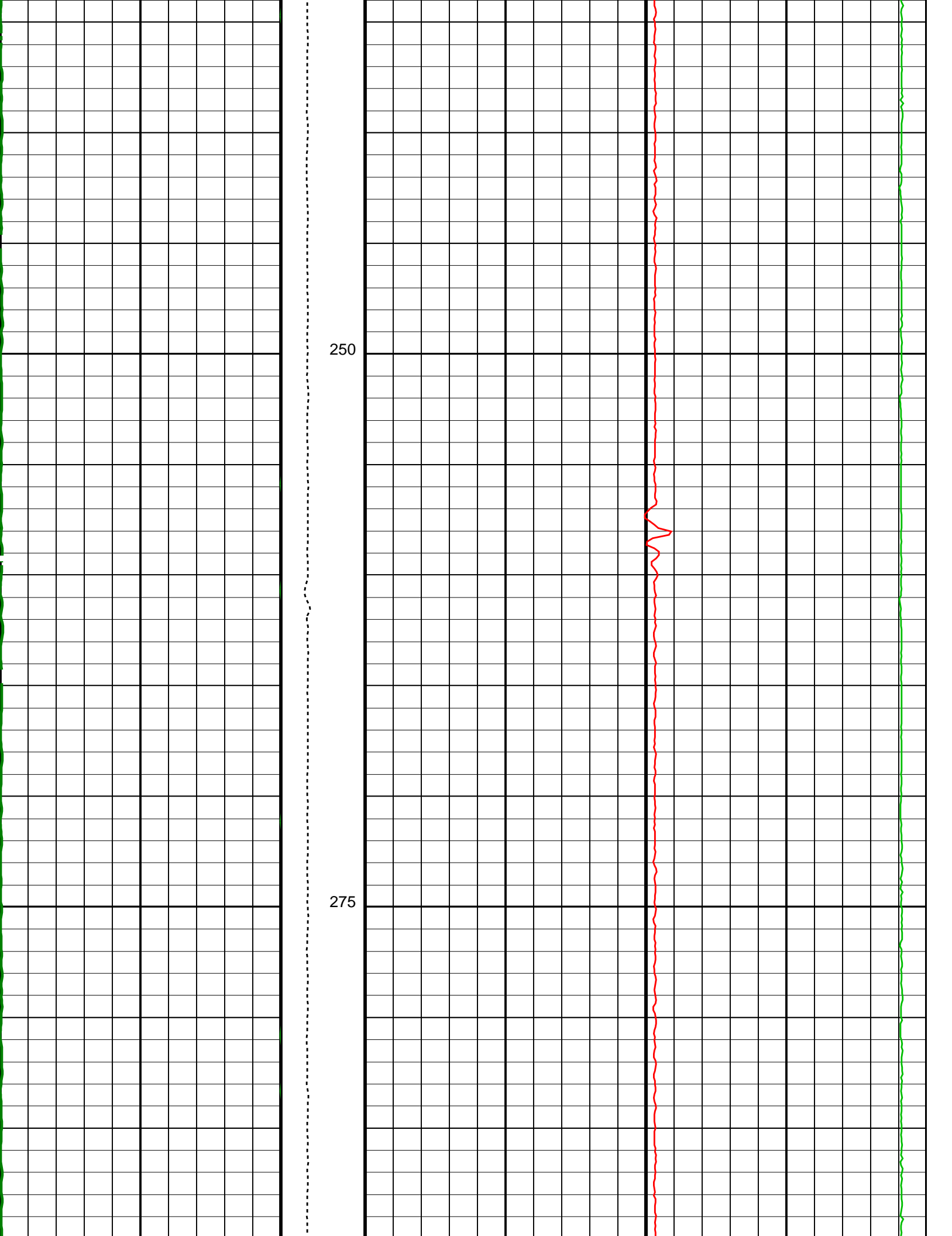
 Time Mark Every 60 S

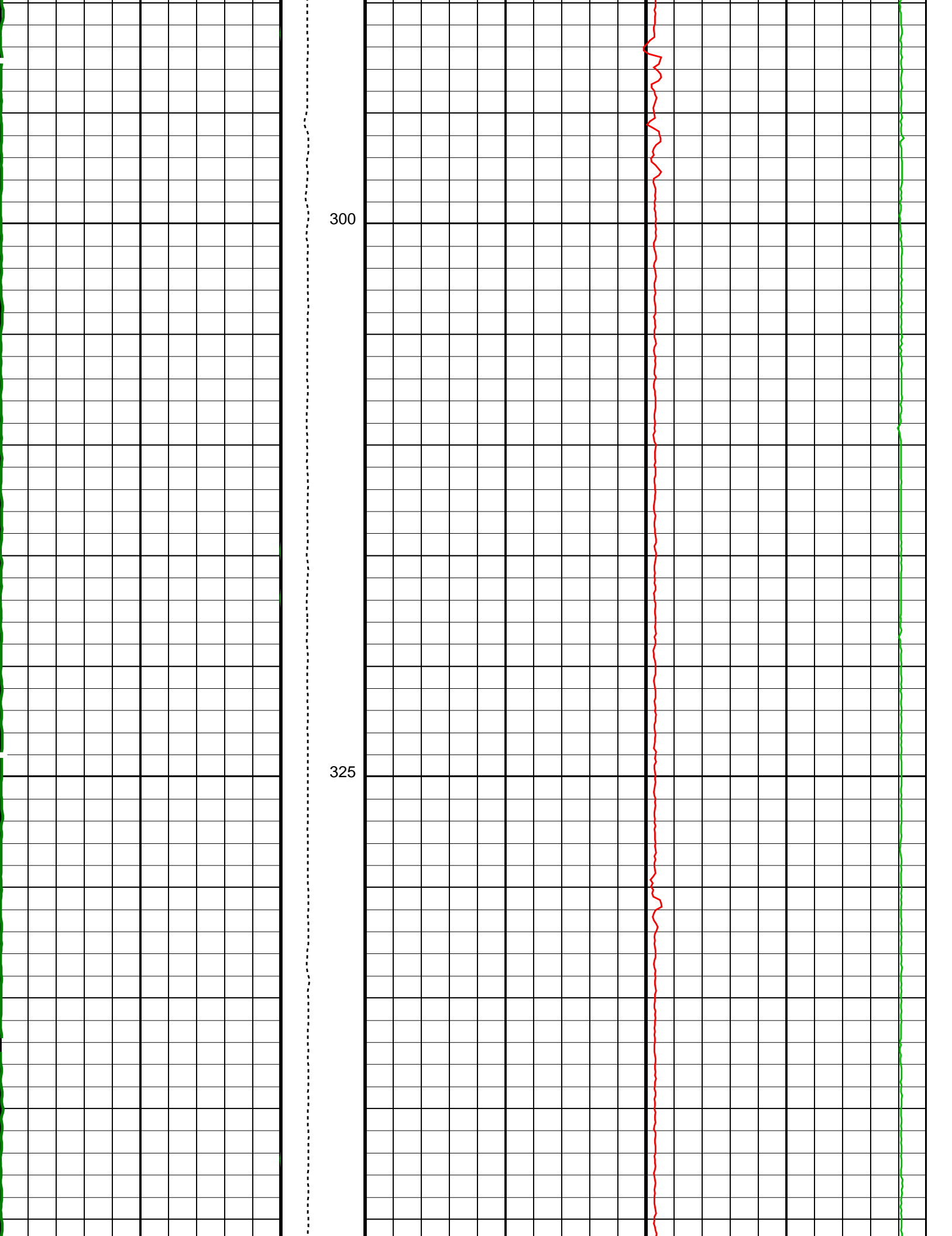
		Dual-Coil Susceptibility (MSSLSUS_LDEO)	
		-10000	90000
		(PPM)	
HNGS Spectroscopy Gamma Ray	Tension (TENS)	Axial Acceleration (MSSZACC_LDEO)	

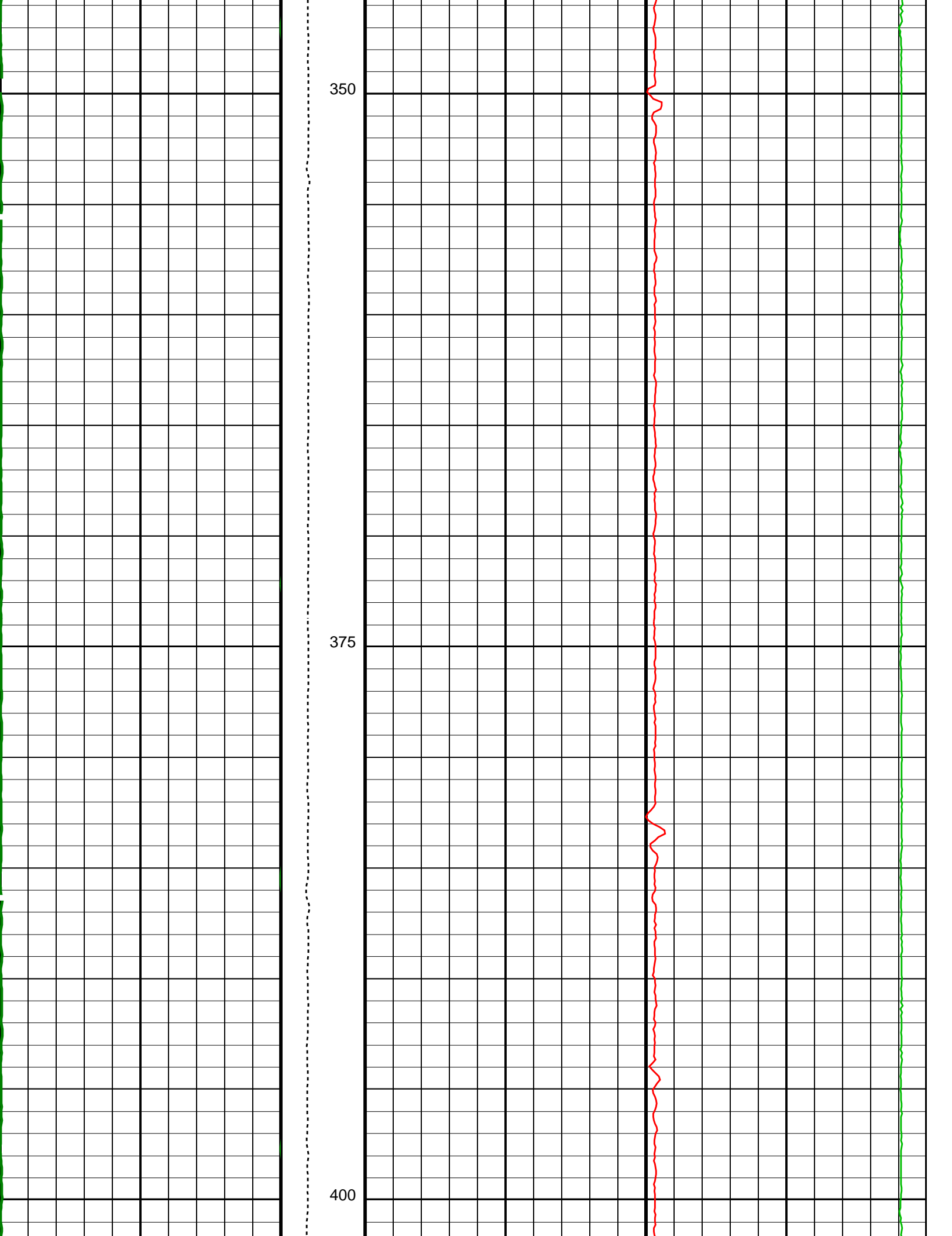


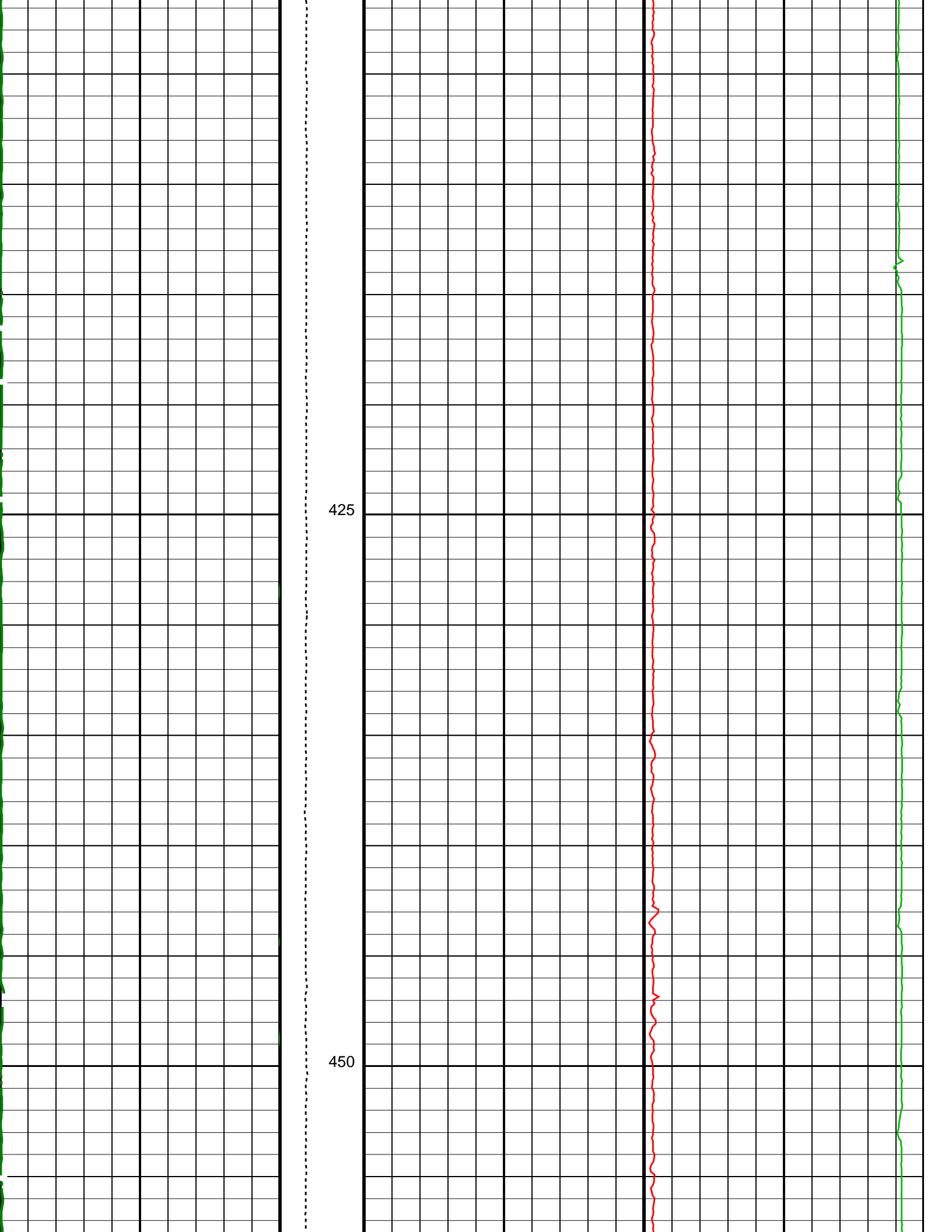


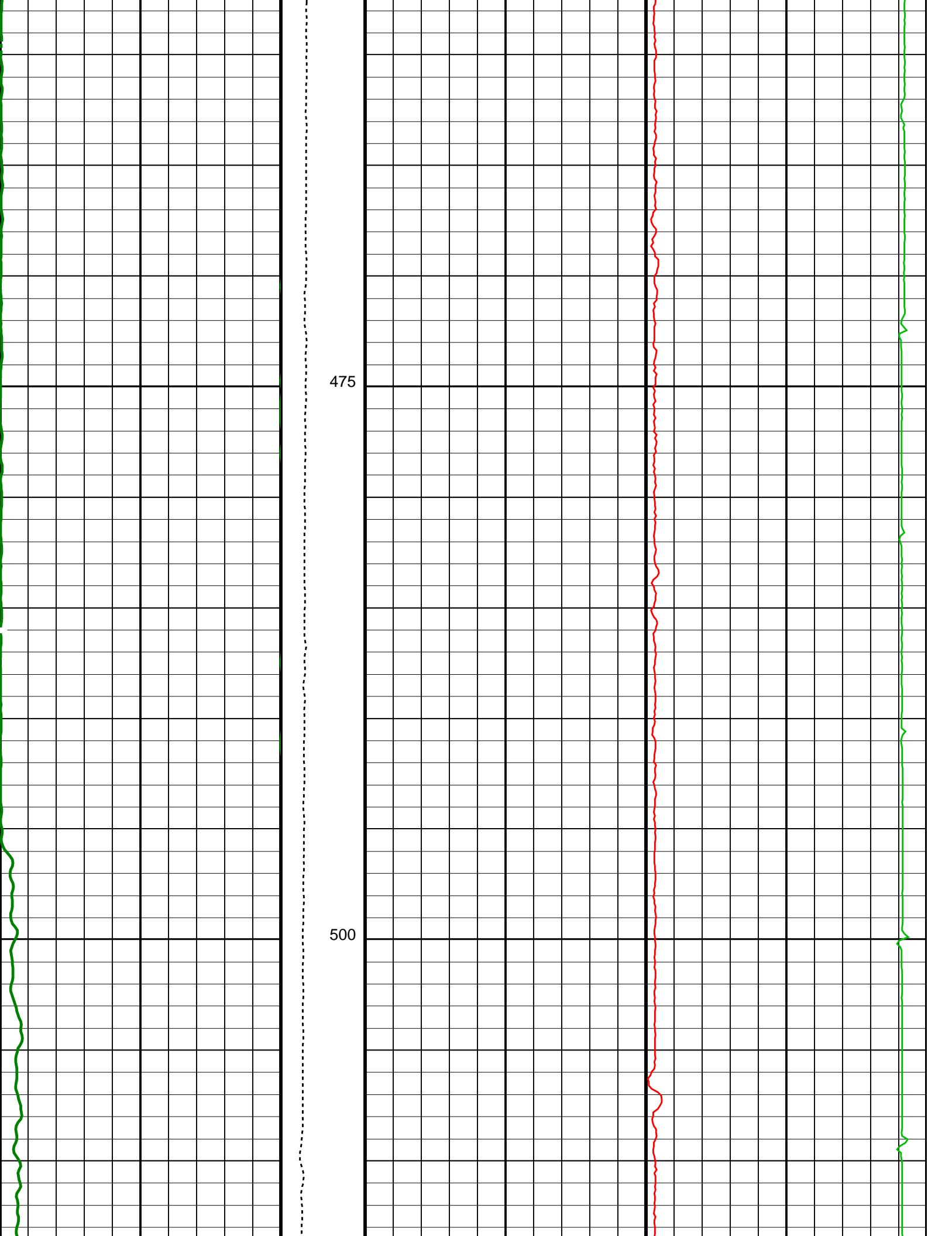


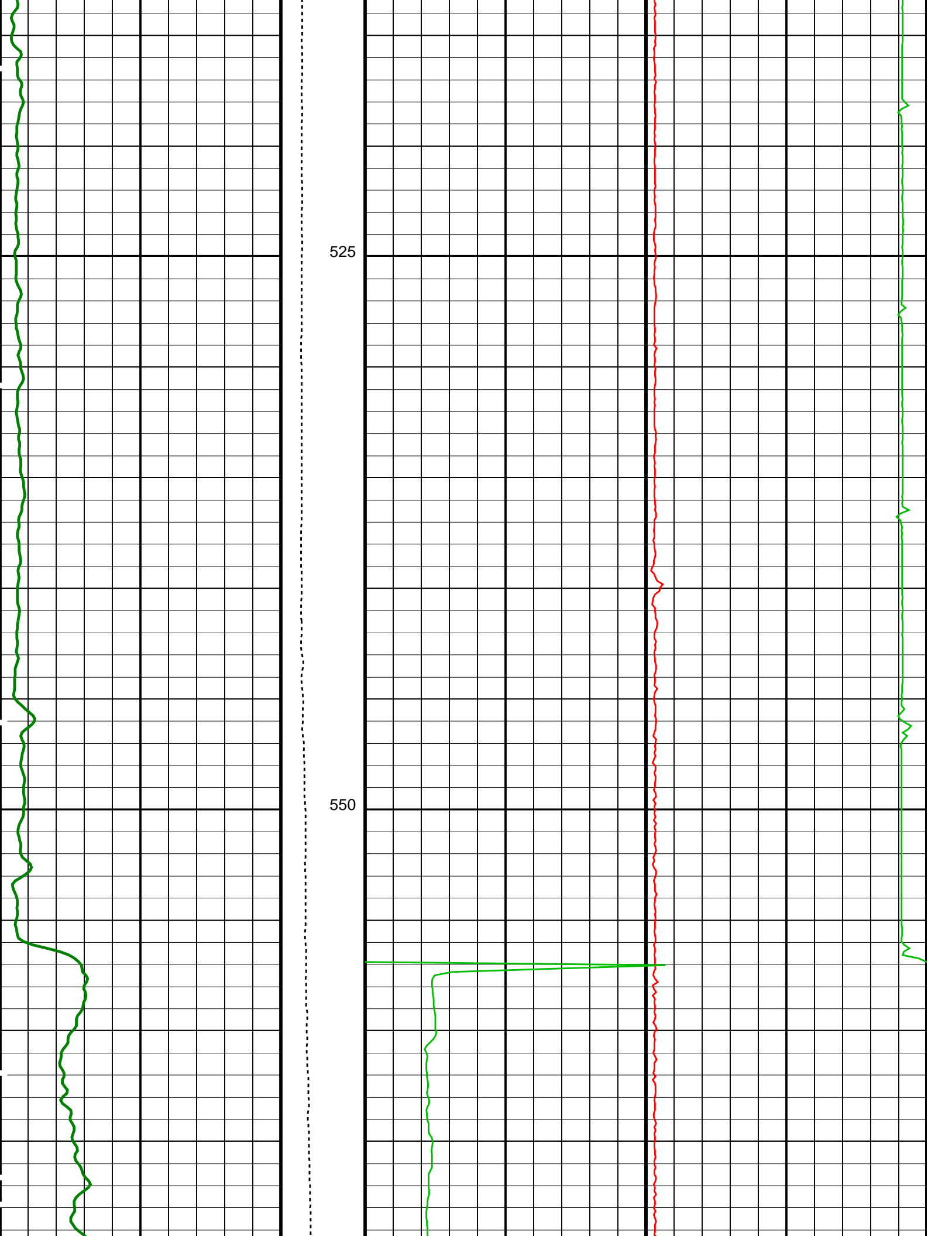


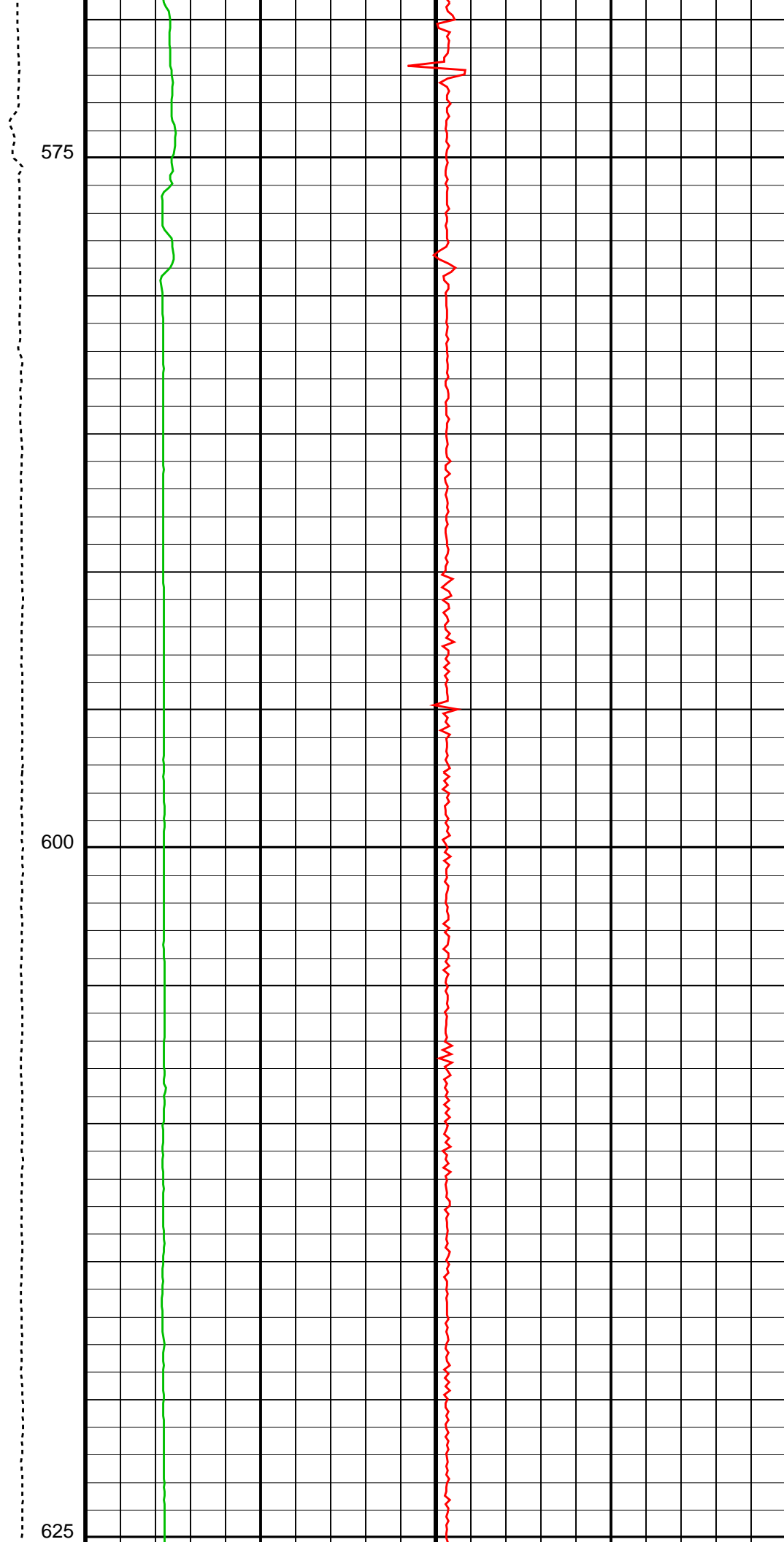
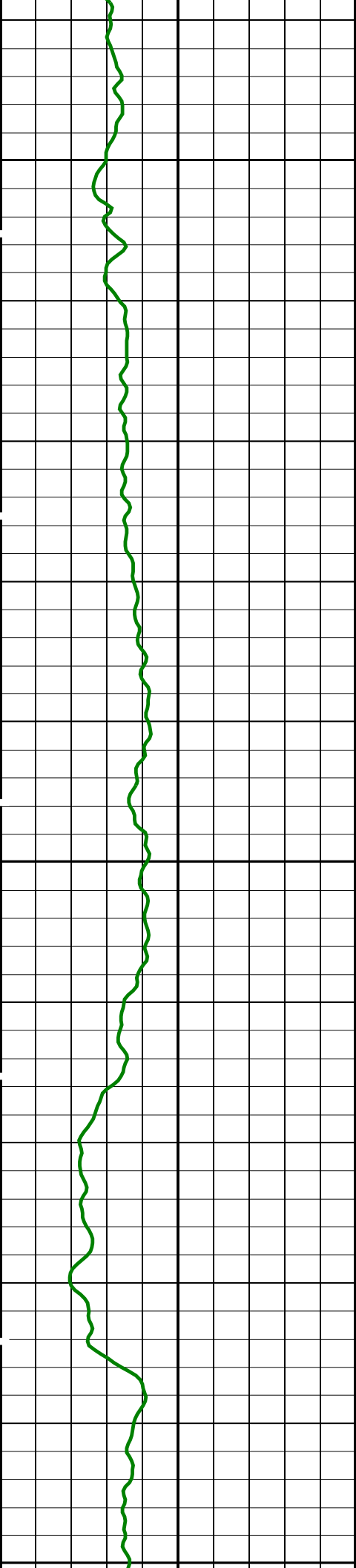


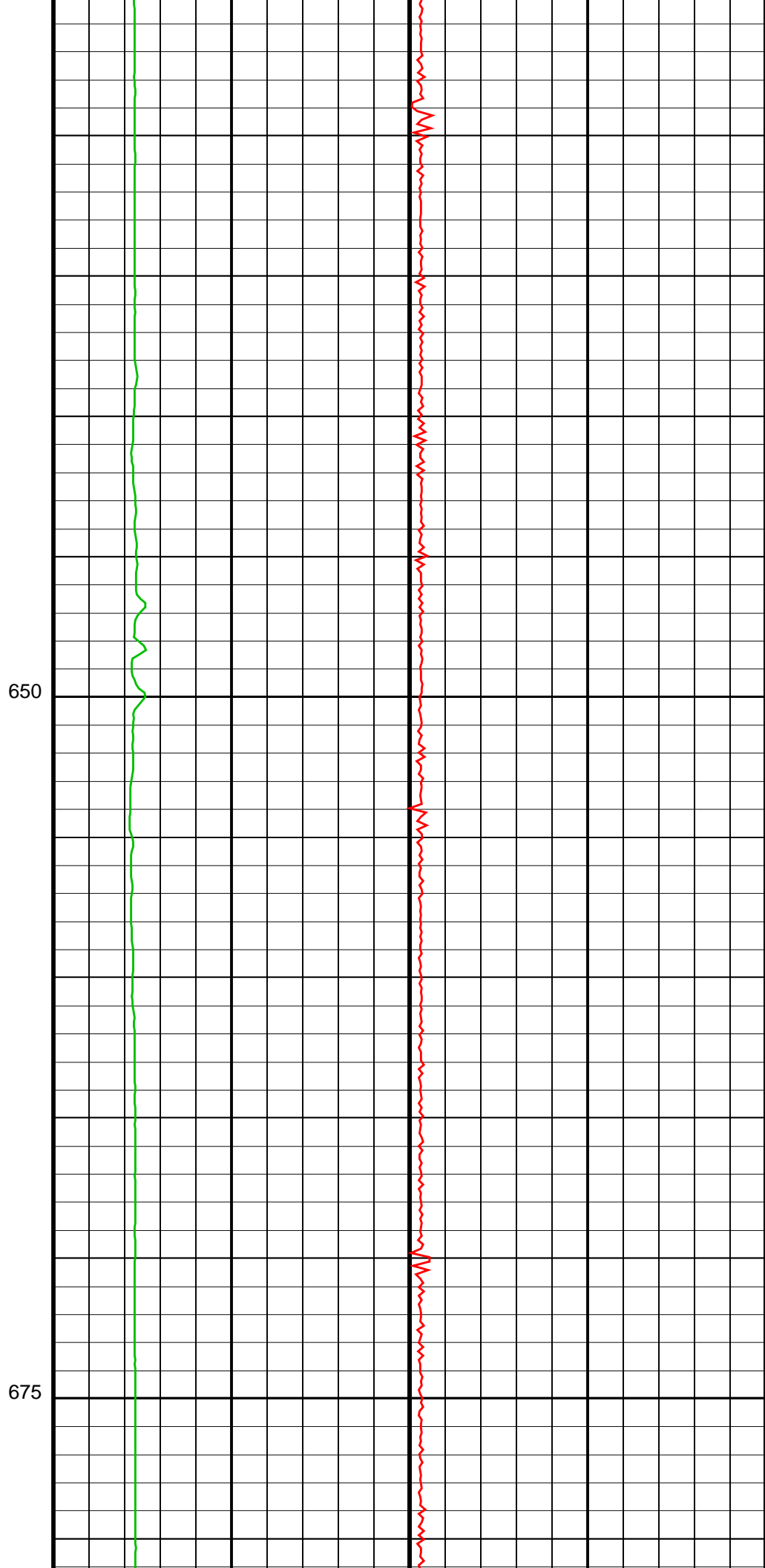
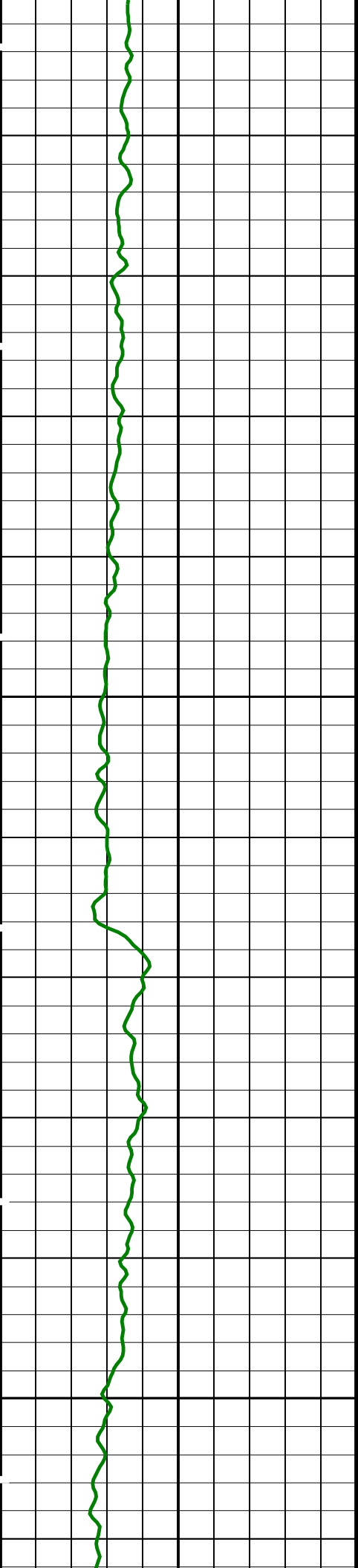


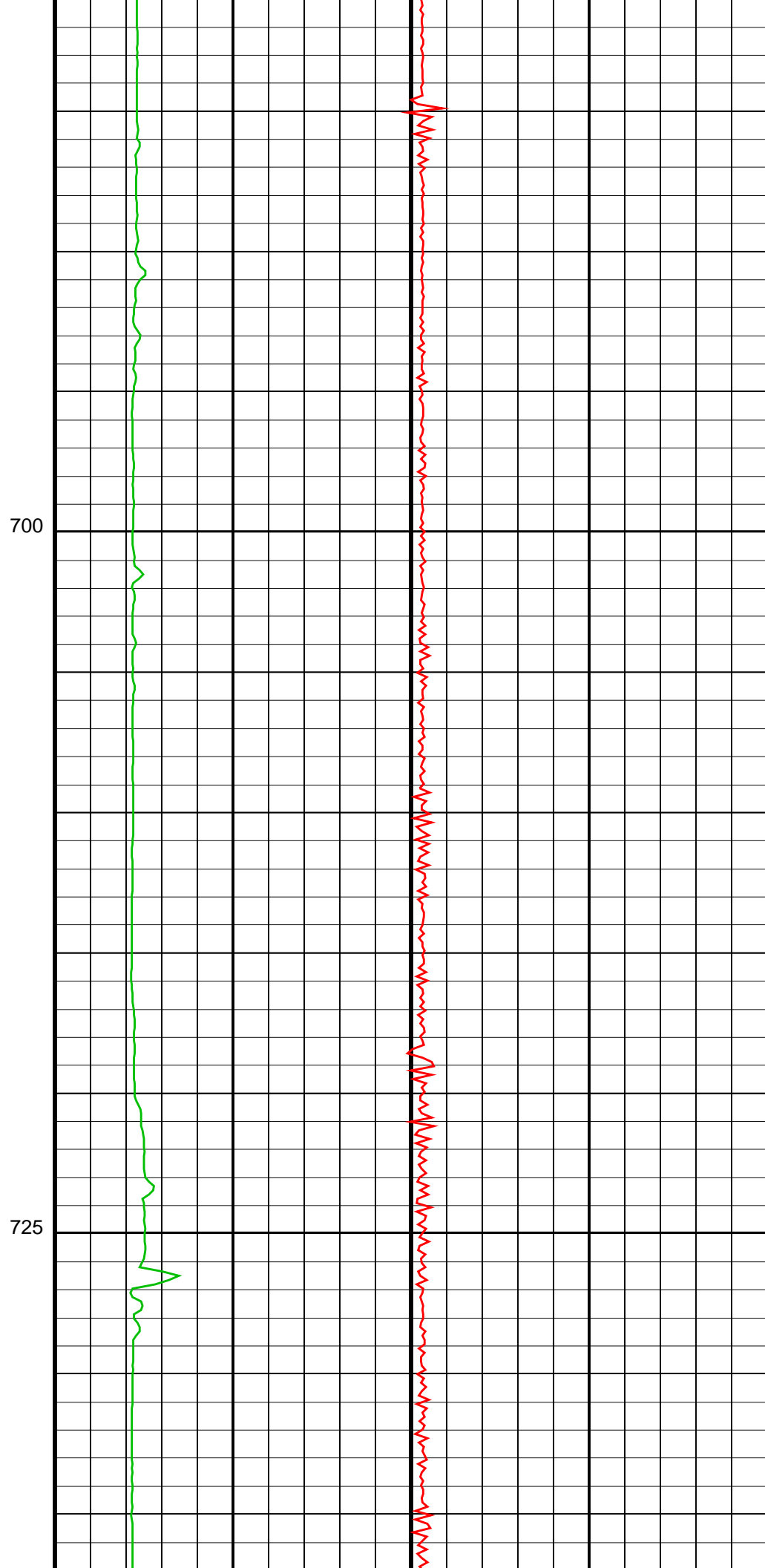
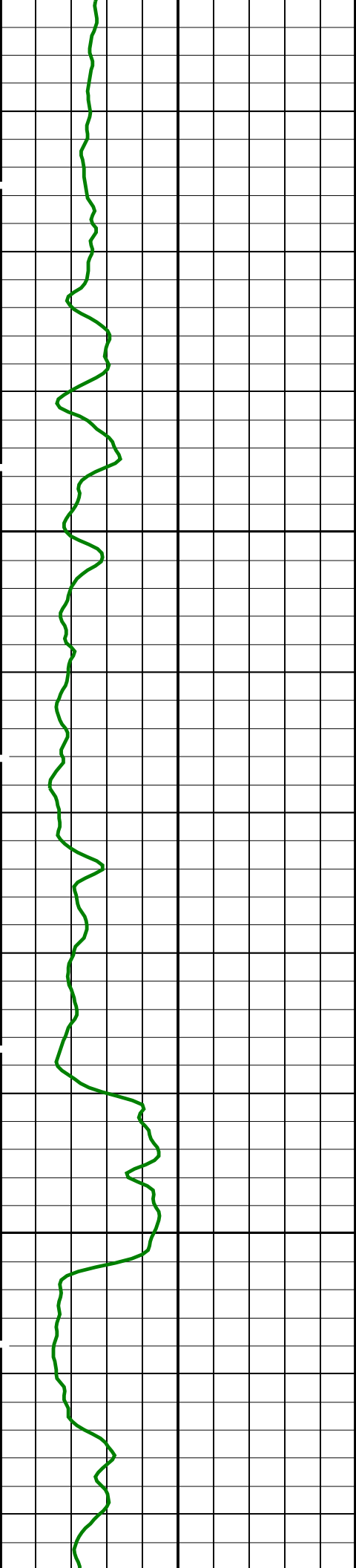


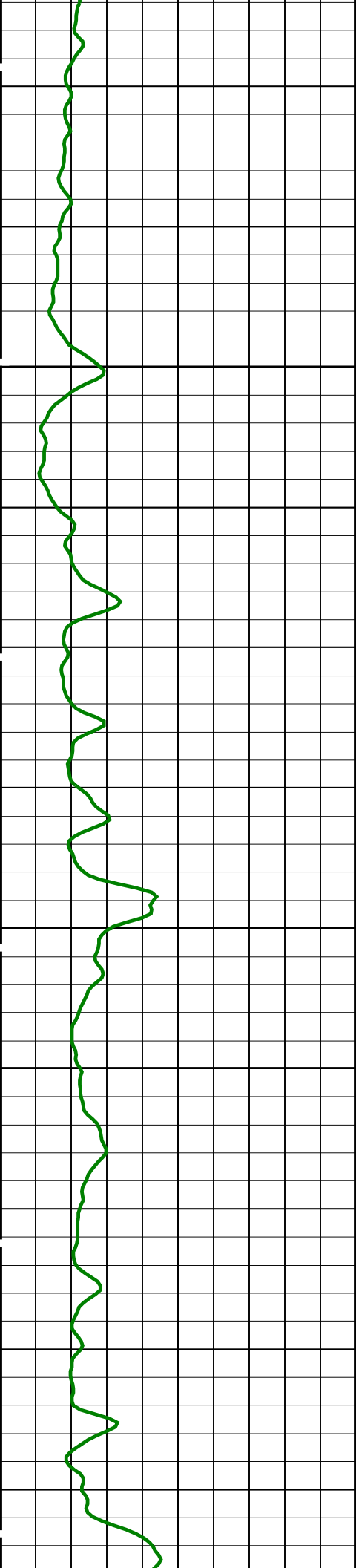






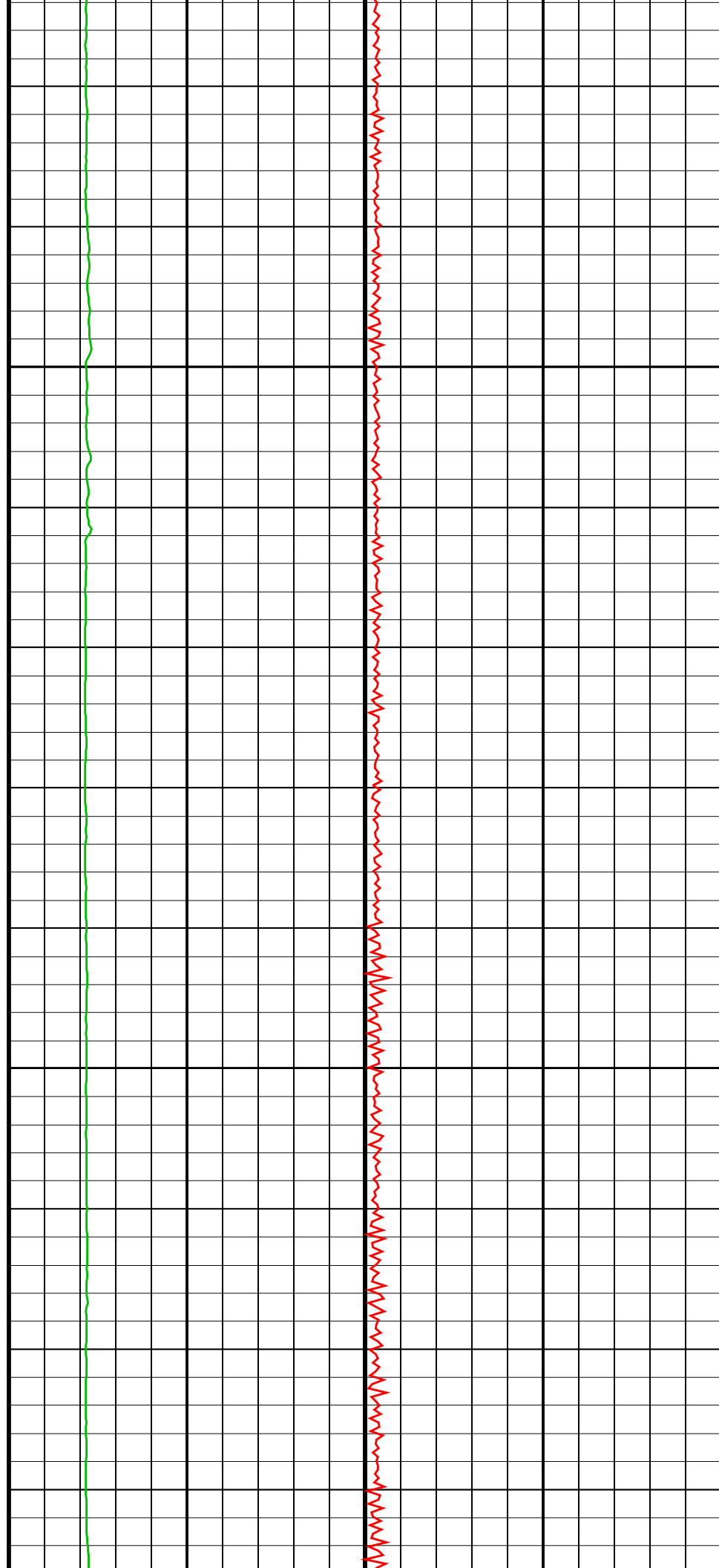


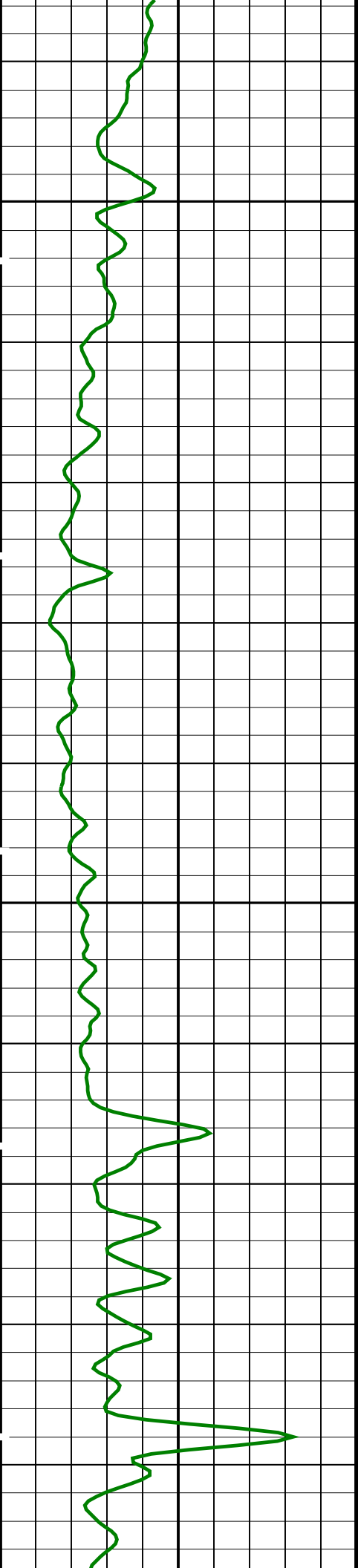




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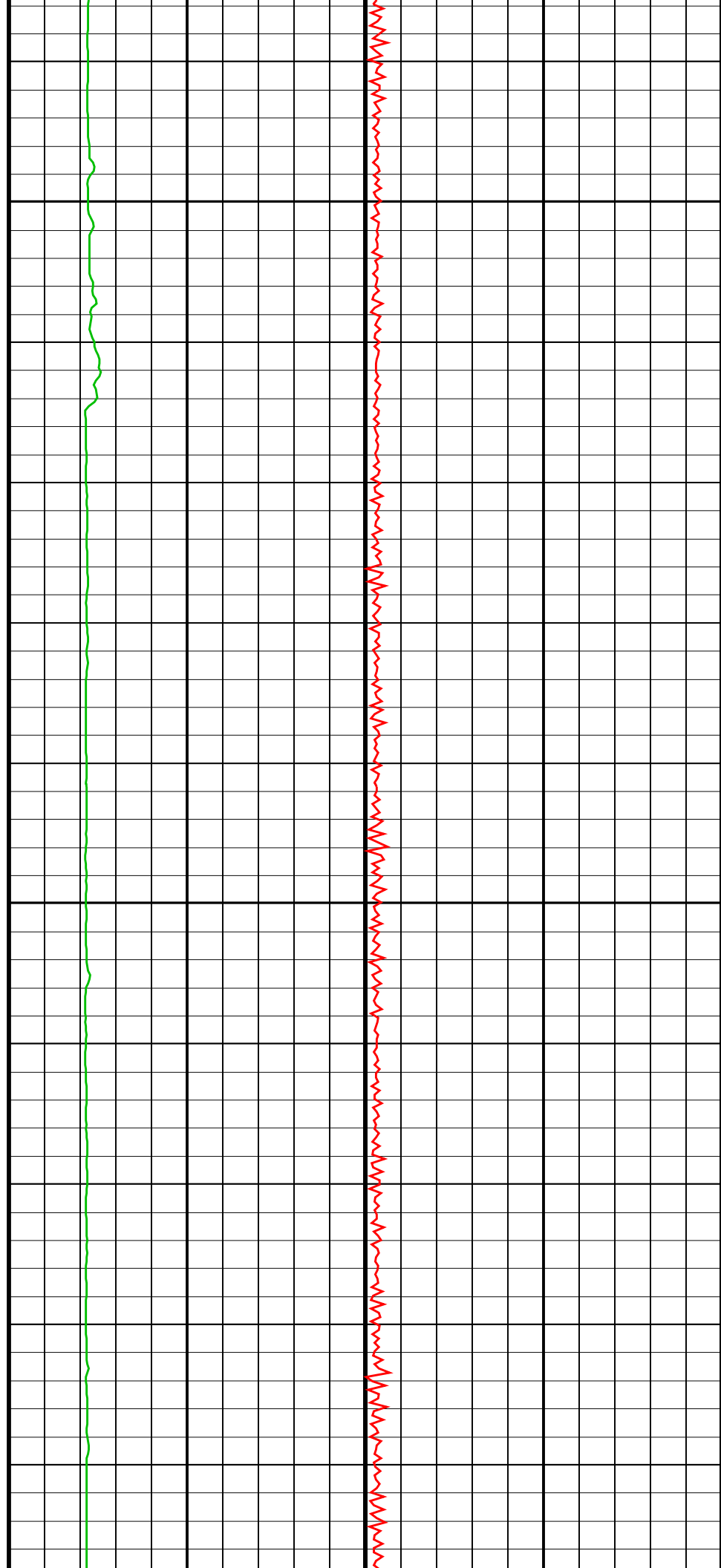
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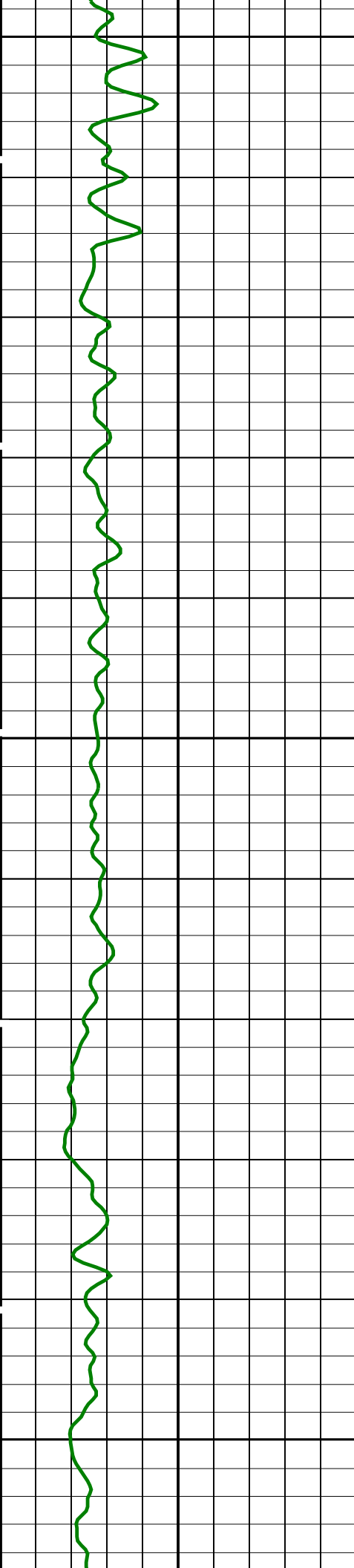




800

825

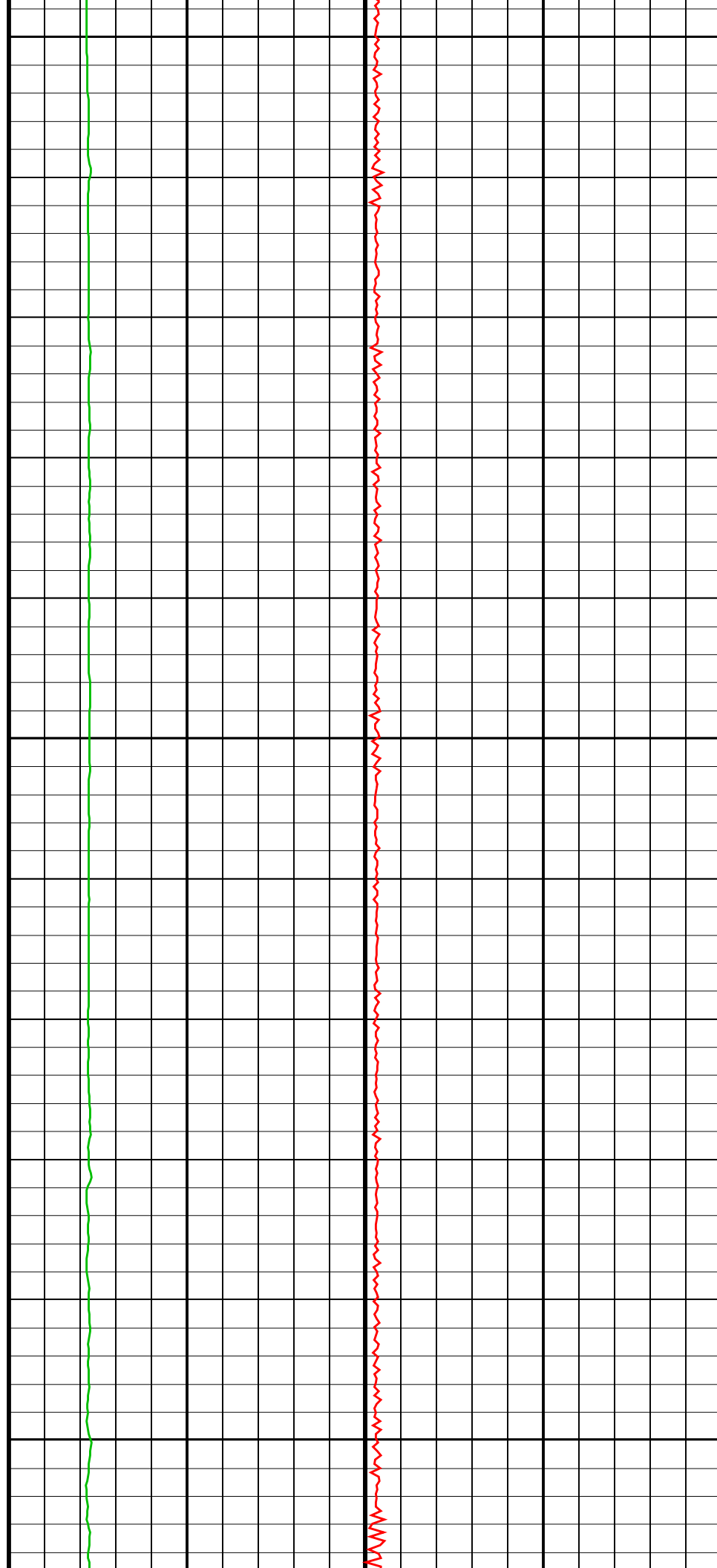


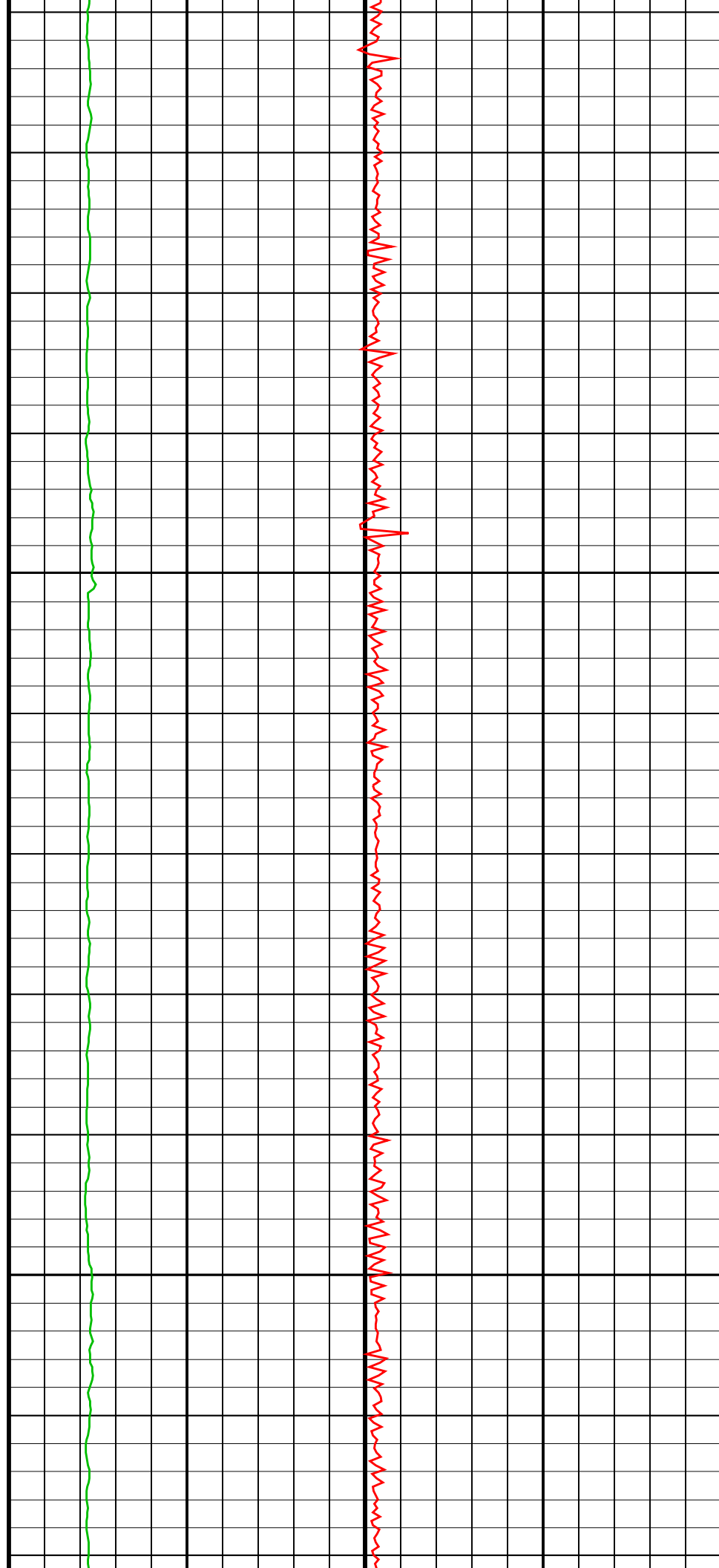
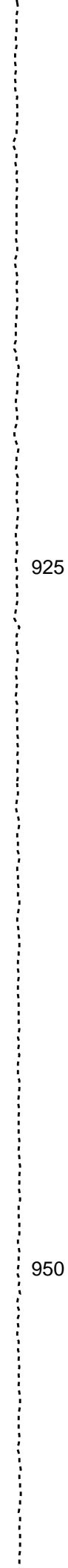
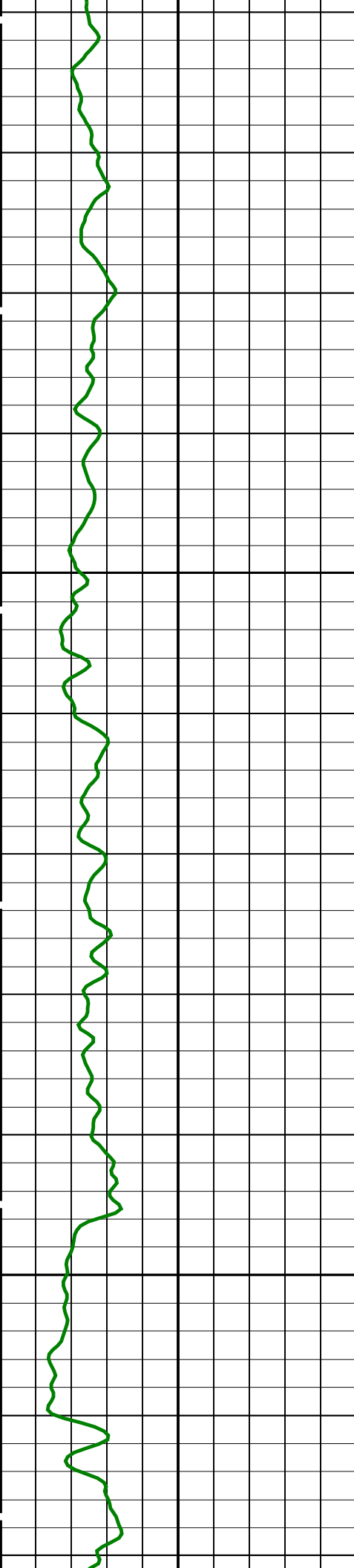


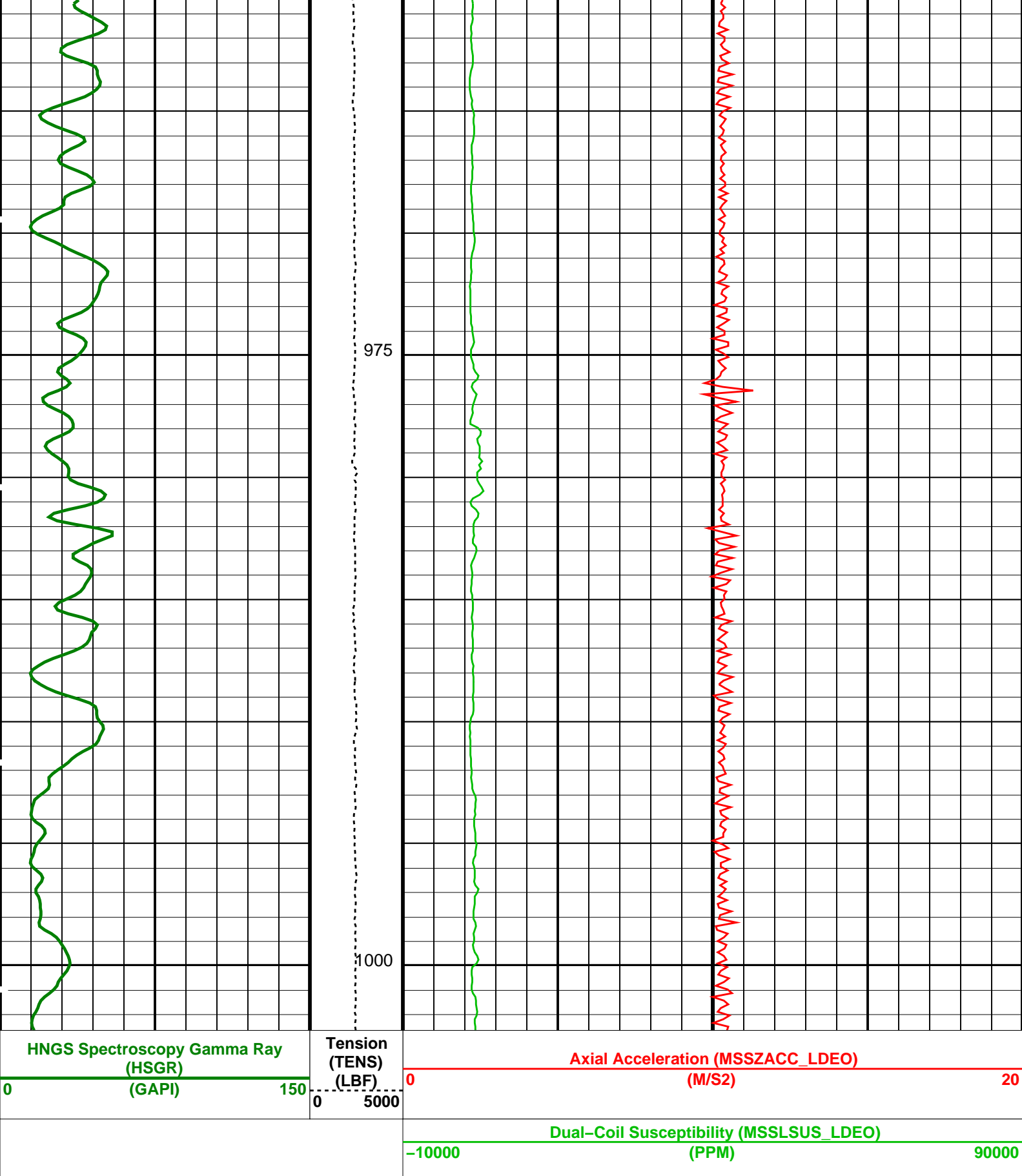
850

875

900







Time Mark Every 60 S

PIP SUMMARY


Parameters		
DLIS Name	Description	Value
BHS GCSE	HRLT-B: High Resolution Laterolog Array – B Borehole Status Generalized Caliper Selection	OPEN BS

HNGS–BA: Hostile Natural Gamma Ray Sonde			
BAR1	HNGS Detector 1 Barite Constant	1	
BAR2	HNGS Detector 2 Barite Constant	1	
BHK	HNGS Borehole Potassium Correction Concentration	0	
BHS	Borehole Status	OPEN	
CSD1	Inner Casing Outer Diameter	0	IN
CSD2	Outer Casing Outer Diameter	0	IN
CSW1	Inner Casing Weight	0	LB/F
CSW2	Outer Casing Weight	0	LB/F
DBCC	HNGS Barite Constant Correction Flag	NONE	
GCSE	Generalized Caliper Selection	BS	
H1P	HNGS Detector 1 Allow/Disallow In Processing	ALLOW	
H2P	HNGS Detector 2 Allow/Disallow In Processing	ALLOW	
HABK	HNGS Borehole Potassium Running Average	–0.0016371	
HALF	HNGS Alpha Filter Length	60	IN
HCRB	HNGS Apply Borehole Potassium Correction	NONE	
HMWM	Mud Weighting Material	NATU	
HNPE	HNGS Processing Enable	YES	
S1BI	HNGS Detector 1 Calibration Bismuth Count Rate	1.3	CPS
S2BI	HNGS Detector 2 Calibration Bismuth Count Rate	1.3	CPS
SGRC	HNGS Standard Gamma–Ray Correction Flag	YES	
TPOS	Tool Position	ECCE	
VBA1	HNGS Detector 1 Variable Barite Factor Running Average	0.993868	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	1.00721	
EDTC–B: Enhanced DTS Cartridge			
BHS	Borehole Status	OPEN	
GCSE	Generalized Caliper Selection	BS	
System and Miscellaneous			
BS	Bit Size	9.875	IN
DO	Depth Offset for Playback	0.0	M
PP	Playback Processing	NORMAL	

Format: MSS_Logging
Vertical Scale: 1:200
Graphics File Created: 01–Jan–2023 21:09

OP System Version: 19C0–187			
MSS_LDEO–A	19C0–187	HRLT–B	19C0–187
HLDS–DA	19C0–187	LDSC–AA	19C0–187
HNGC–B	19C0–187	HNGS–BA	19C0–187
EDTC–B	SKK-5169–EDTCB		

Input DLIS Files					
DEFAULT	Flip_MSS_LDEO_HRLA_052PUP	PRODUCER	01–Jan–2023 21:09	1002.6 M	68.6 M
Output DLIS Files					
DEFAULT	MSS_LDEO_HRLA_LDL_053PUP	FN:43	PRODUCER	01–Jan–2023 21:09	



First Up Pass

MAXIS Field Log

Company: International Ocean Discovery Program
Well: Expedition 398, Site U1589C

Output DLIS Files					
DEFAULT	MSS_LDEO_HRLA_LDL_008LUP	FN:7	PRODUCER	29–Dec–2022 15:12	1035.6 M 854.5 M

OP System Version: 19C0–187			
MSS_LDEO–A	19C0–187	HRLT–B	19C0–187
HLDS–DA	19C0–187	LDSC–AA	19C0–187
HNGC–B	19C0–187	HNGS–BA	19C0–187
EDTC–B	SKK-5169–EDTCB		

PIP SUMMARY

Time Mark Every 60 S

HNGS Spectroscopy Gamma Ray (HSGR)
(GAPI) 0 100

Area1
From HCGR to HSGR

HNGS Computed Gamma Ray (HCGR)
(GAPI) 0 100

HLDS Caliper (LCAL)
(IN) 0 20

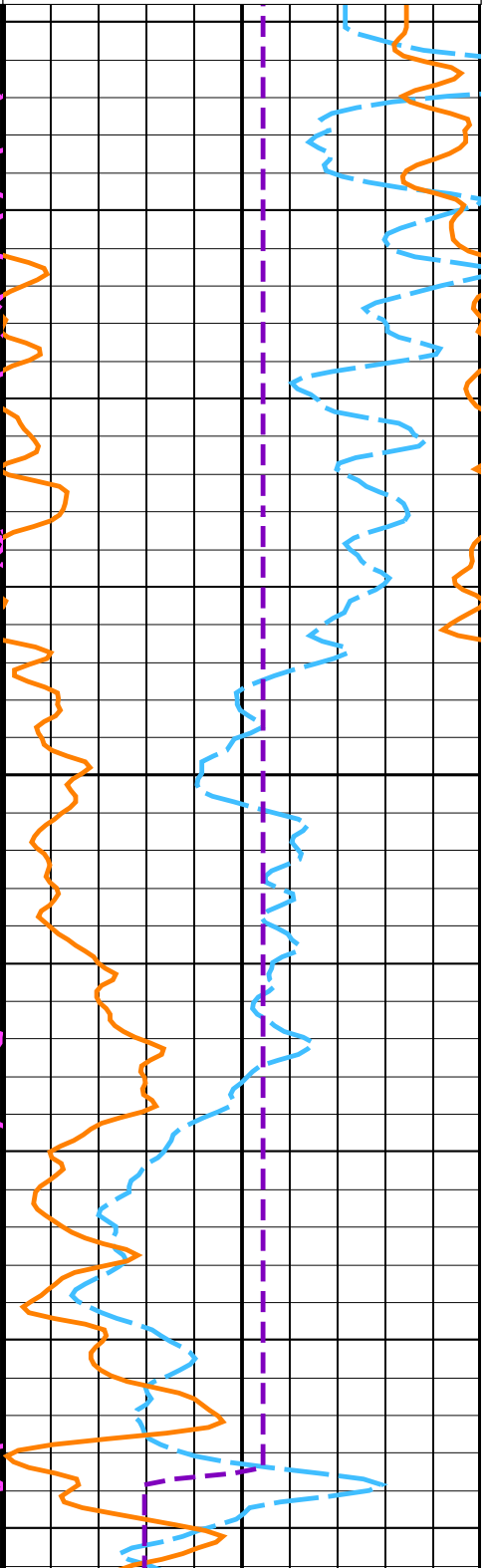
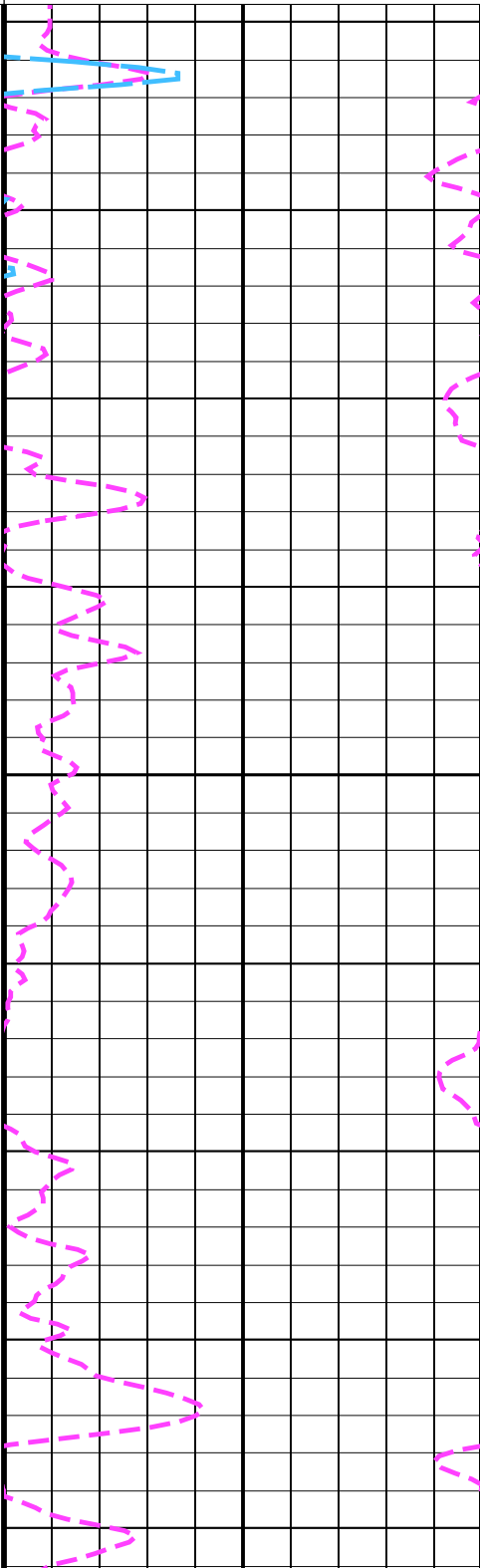
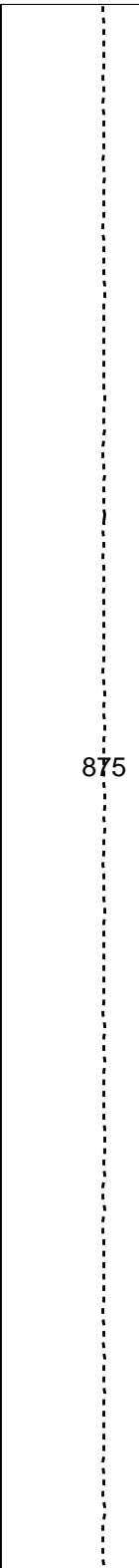
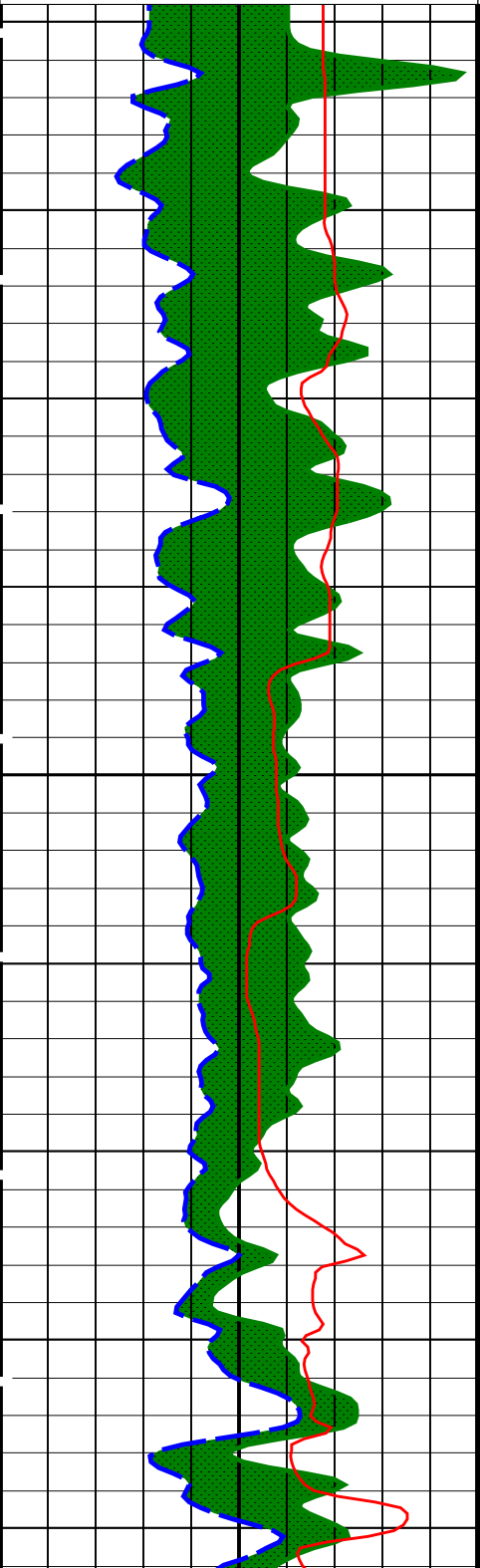
Tension
(TENS)
(LBF) 10000 0

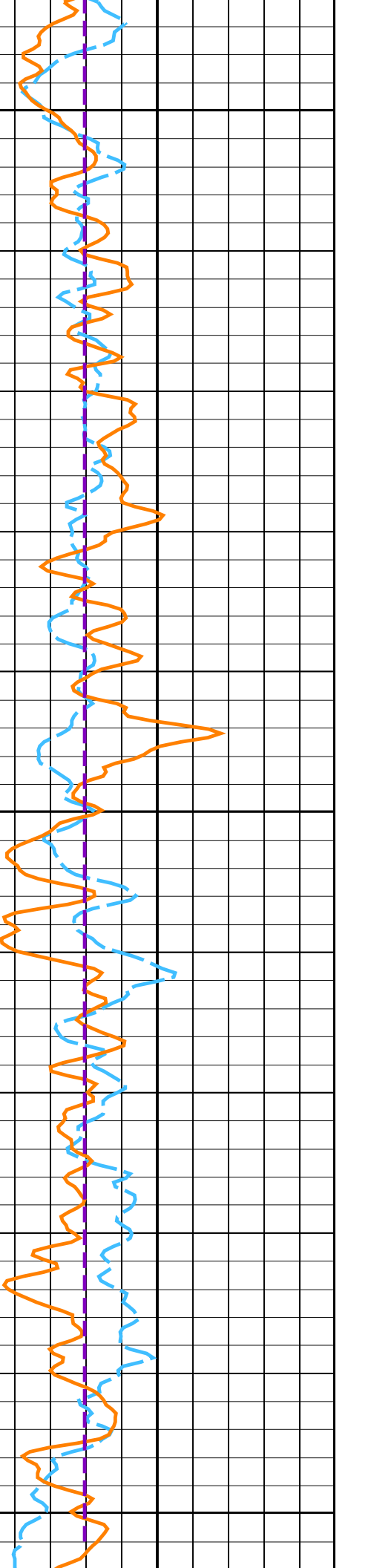
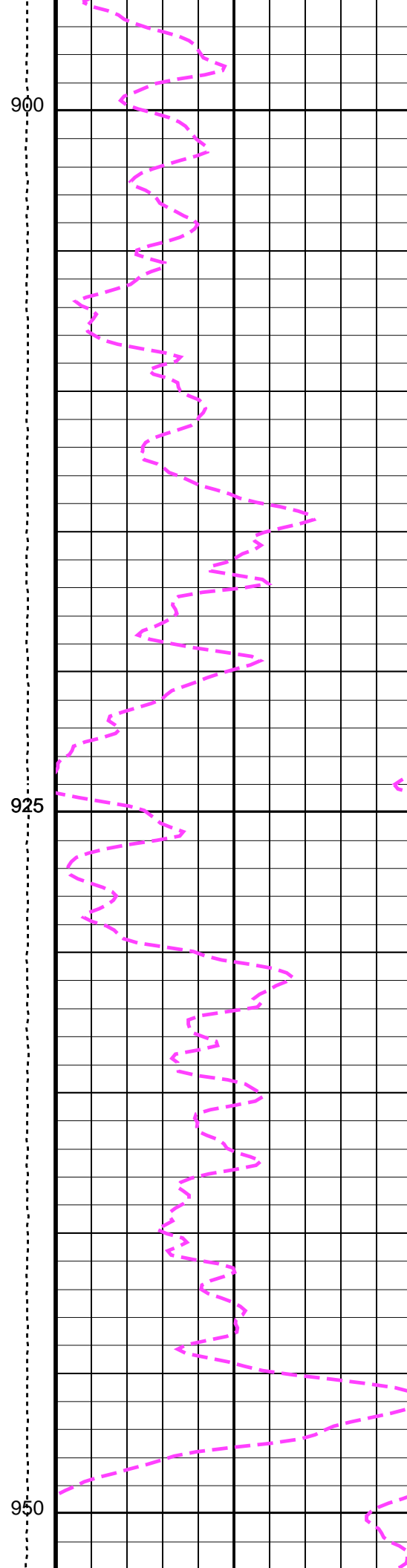
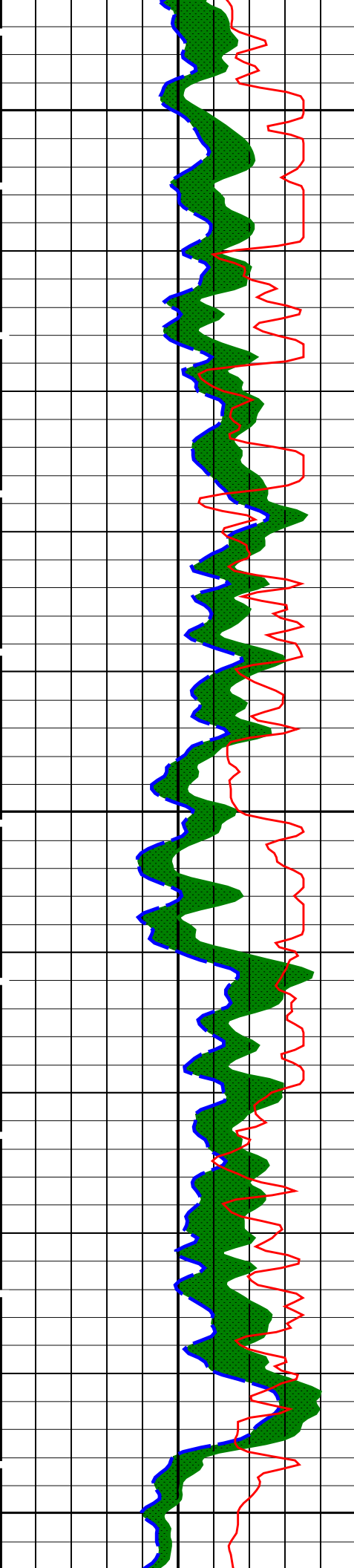
HNGS Borehole Potassium (HBHK)
(V/V) -0.01 0.01

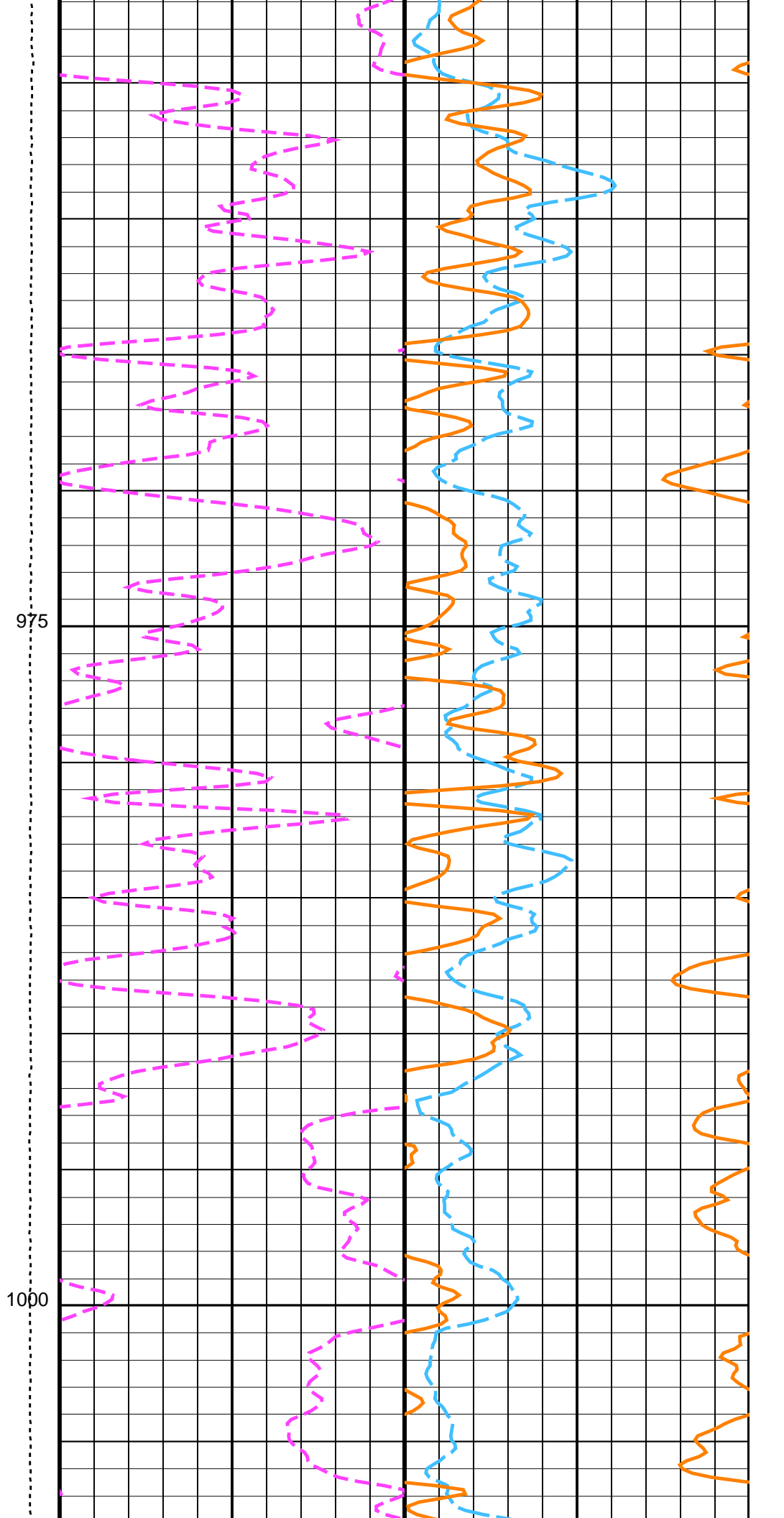
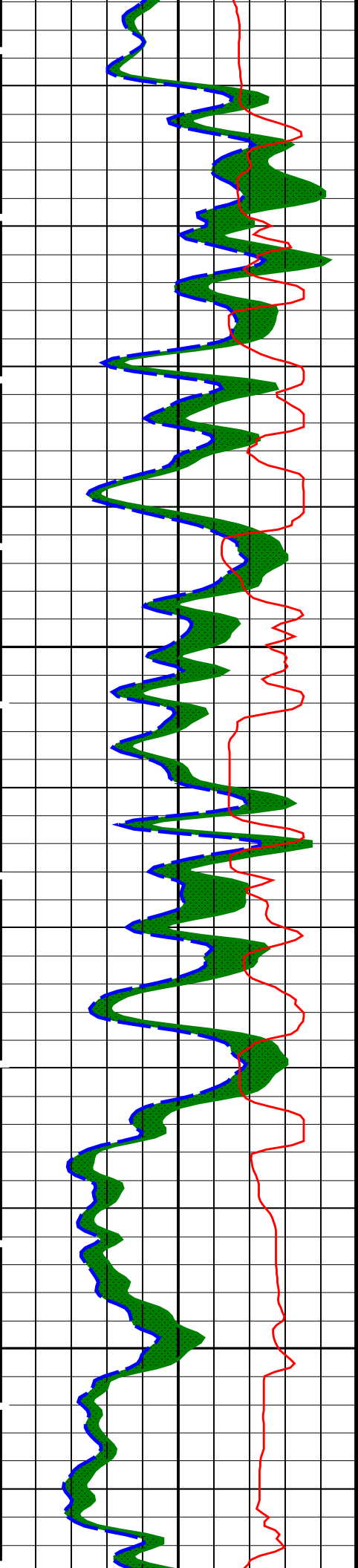
HNGS Uranium (HURA)
(PPM) -5 5

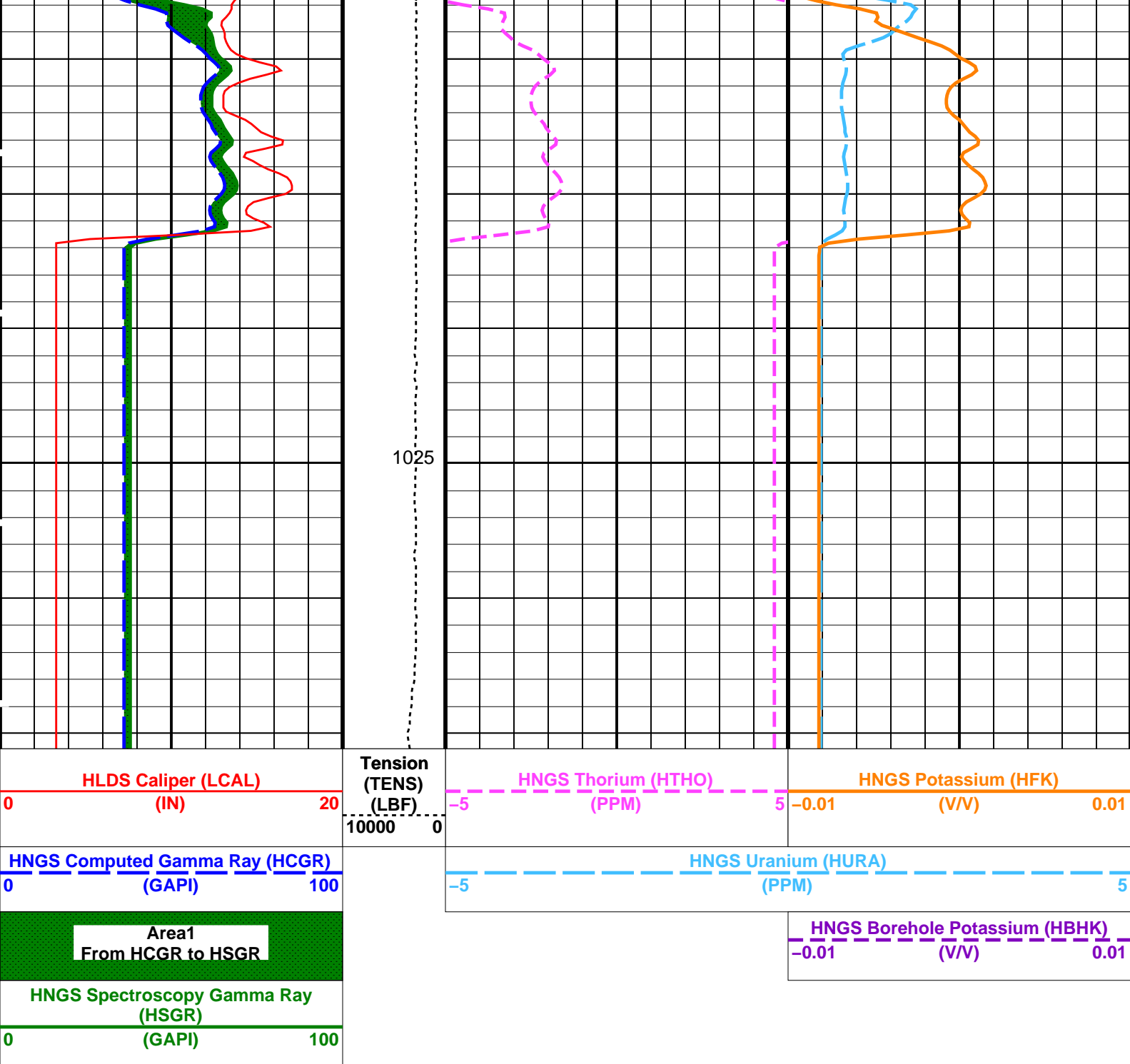
HNGS Thorium (HTHO)
(PPM) -5 5

HNGS Potassium (HFK)
(V/V) -0.01 0.01



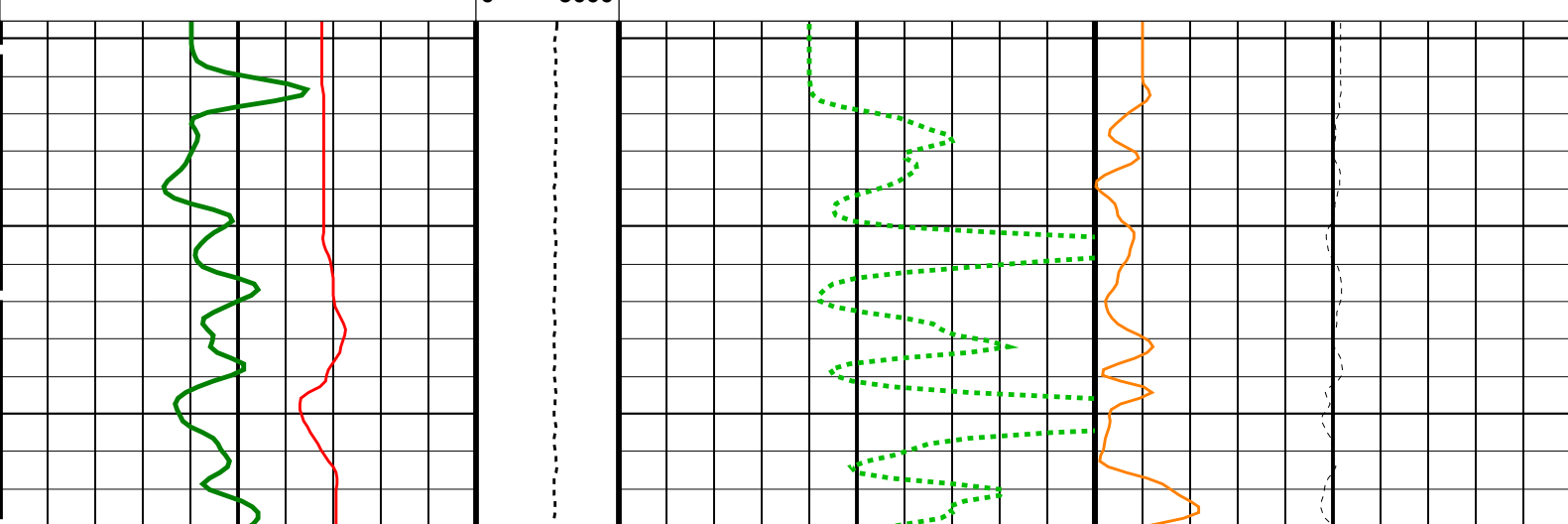


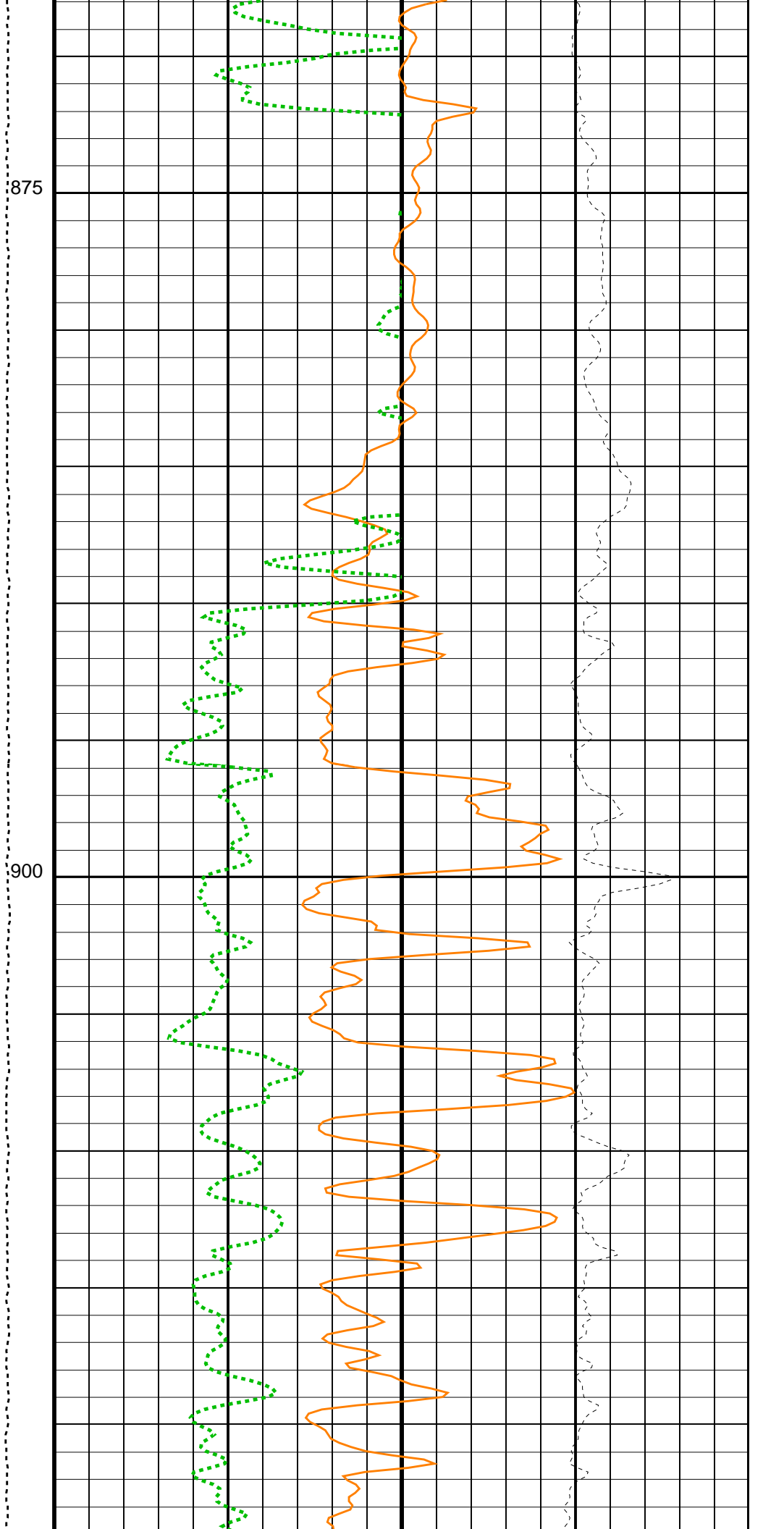
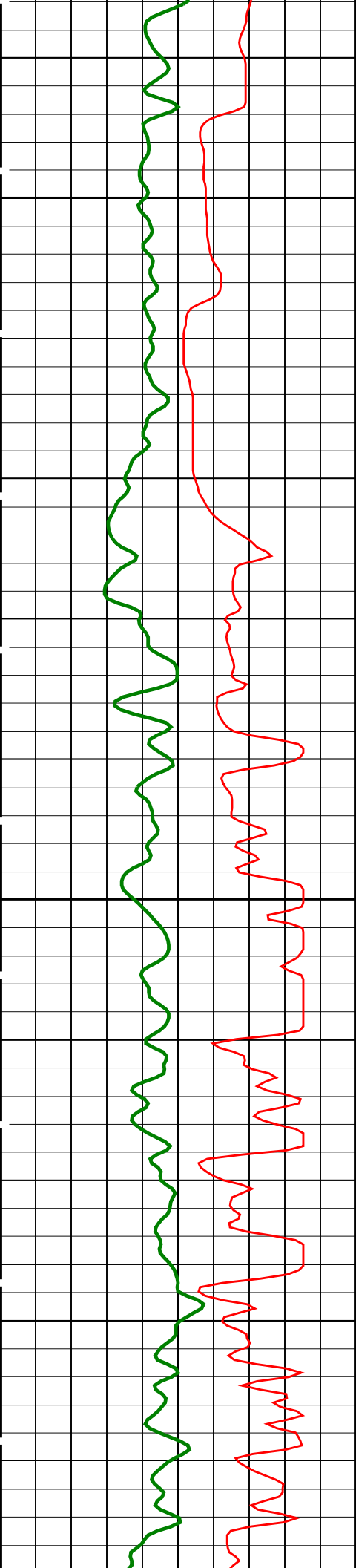


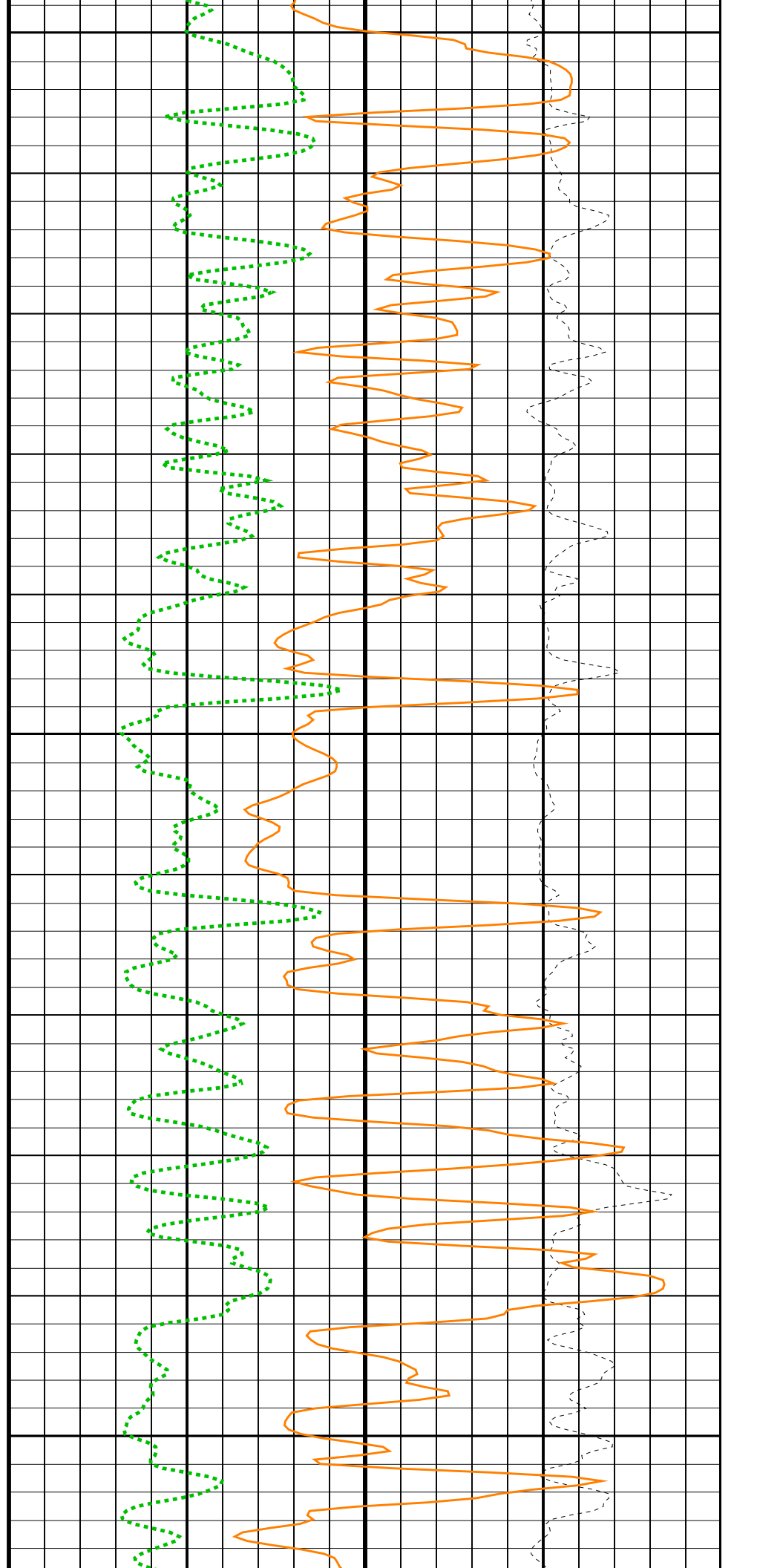
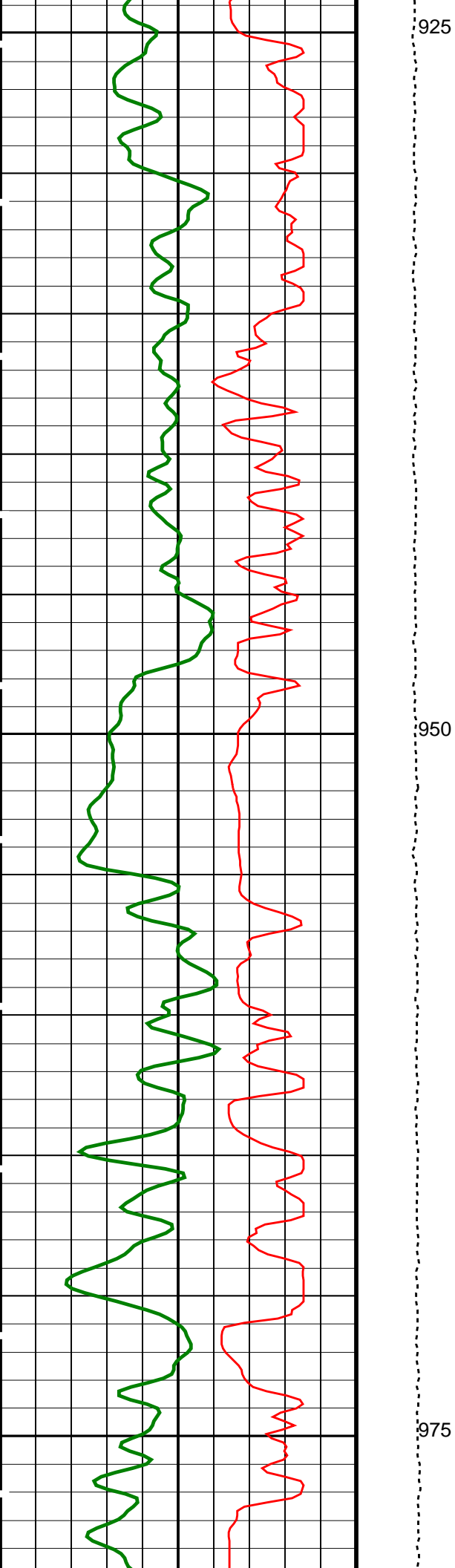


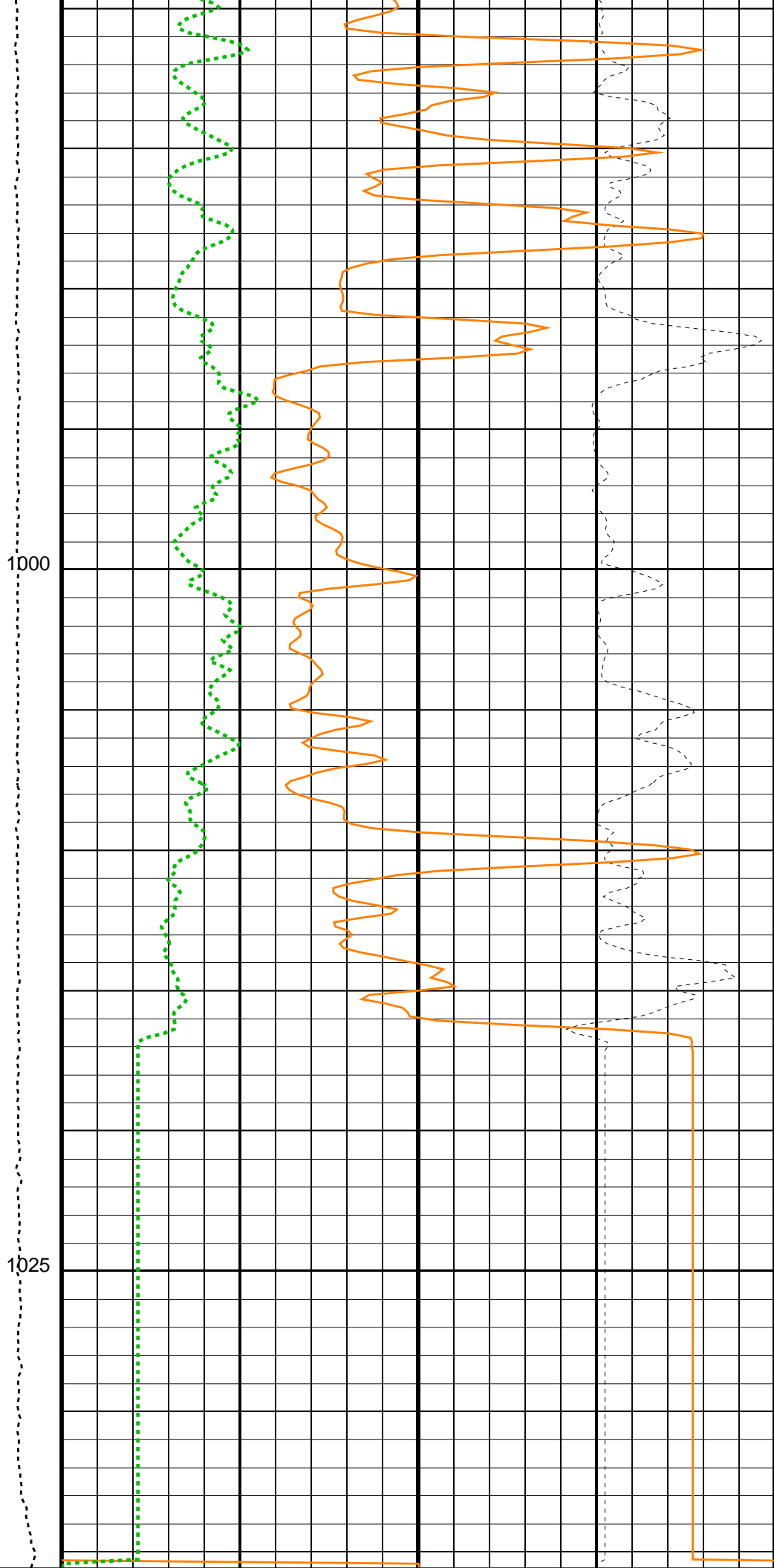
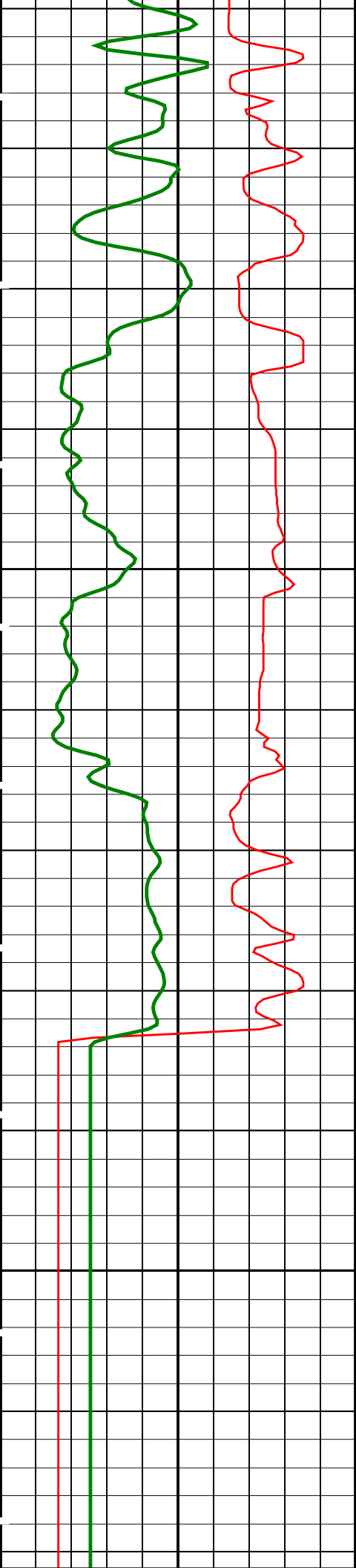
Time Mark Every 60 S

Parameters		
DLIS Name	Description	Value
BHS	HRLT-B: High Resolution Laterolog Array – B	
GCSE	Borehole Status	OPEN
	Generalized Caliper Selection	LCAL
	HNGS-BA: Hostile Natural Gamma Ray Sonde	
BAR1	HNGS Detector 1 Barite Constant	1
BAR2	HNGS Detector 2 Barite Constant	1
BHK	HNGS Borehole Potassium Correction Concentration	0
BHS	Borehole Status	OPEN
CSD1	Inner Casing Outer Diameter	0 IN
CSD2	Outer Casing Outer Diameter	0 IN
CSW1	Inner Casing Weight	0 LB/F
CSW2	Outer Casing Weight	0 LB/F
DBCC	HNGS Barite Constant Correction Flag	NONE
GCSE	Generalized Caliper Selection	LCAL
H1P	HNGS Detector 1 Allow/Disallow In Processing	ALLOW
H2P	HNGS Detector 2 Allow/Disallow In Processing	ALLOW









HLDS Caliper (LCAL)		Tension (TENS) (LBF)	HLDS Bulk Density (RHOM)	
0	(IN)	20	3	(G/C3)
		0 5000		1
HNGS Spectroscopy Gamma Ray (HSGR)			HLDS Long Spaced Photoelectric Effect (PEFL)	HLDS Bulk Density Correction (DRH)
0	(GAPI)	150	0	(G/C3)
			(-----)	10
			-0.25	0.25

PIP SUMMARY				
Time Mark Every 60 S				

Parameters			
DLIS Name	Description	Value	
HRLT-B: High Resolution Laterolog Array – B			
BHS	Borehole Status	OPEN	
GCSE	Generalized Caliper Selection	LCAL	
HLDS-DA: Hostile Litho-Density Sonde			
DHC	Density Hole Correction	CALIPER	
DPPM	Density Porosity Processing Mode	HIRS	
FD	Fluid Density	1	G/C3
LATC	HLDS Activation Correction	ON	
MDEN	Matrix Density	2.6	G/C3
HNGS-BA: Hostile Natural Gamma Ray Sonde			
BAR1	HNGS Detector 1 Barite Constant	1	
BAR2	HNGS Detector 2 Barite Constant	1	
BHK	HNGS Borehole Potassium Correction Concentration	0	
BHS	Borehole Status	OPEN	
CSD1	Inner Casing Outer Diameter	0	IN
CSD2	Outer Casing Outer Diameter	0	IN
CSW1	Inner Casing Weight	0	LB/F
CSW2	Outer Casing Weight	0	LB/F
DBCC	HNGS Barite Constant Correction Flag	NONE	
GCSE	Generalized Caliper Selection	LCAL	
H1P	HNGS Detector 1 Allow/Disallow In Processing	ALLOW	
H2P	HNGS Detector 2 Allow/Disallow In Processing	ALLOW	
HABK	HNGS Borehole Potassium Running Average	-0.00233169	
HALF	HNGS Alpha Filter Length	60	IN
HCRB	HNGS Apply Borehole Potassium Correction	NONE	
HMWM	Mud Weighting Material	NATU	
HNPE	HNGS Processing Enable	YES	
S1BI	HNGS Detector 1 Calibration Bismuth Count Rate	1.3	CPS
S2BI	HNGS Detector 2 Calibration Bismuth Count Rate	1.3	CPS
SGRC	HNGS Standard Gamma-Ray Correction Flag	YES	
TPOS	Tool Position	ECCE	
VBA1	HNGS Detector 1 Variable Barite Factor Running Average	-18.4795	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	4.07858	
EDTC-B: Enhanced DTS Cartridge			
BHS	Borehole Status	OPEN	
DPPM	Density Porosity Processing Mode	HIRS	
GCSE	Generalized Caliper Selection	LCAL	
System and Miscellaneous			
BS	Bit Size	9.875	IN
DFD	Drilling Fluid Density	1.26	G/C3

Format: HLDSDensityPE	Vertical Scale: 1:200	Graphics File Created: 29-Dec-2022 15:12
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OP System Version: 19C0-187			
MSS_LDEO-A	19C0-187	HRLT-B	19C0-187
HLDS-DA	19C0-187	LDSC-AA	19C0-187
HNGC-B	19C0-187	HNGS-BA	19C0-187
EDTC-B	SKK-5169-EDTCB		

Output DLIS Files				
DEFAULT	MSS_LDEO_HRLA_LDL_008LUP	FN:7	PRODUCER	29-Dec-2022 15:12

Company: International Ocean Discovery Program	Well: Expedition 398, Site U1589C
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Output DLIS Files					
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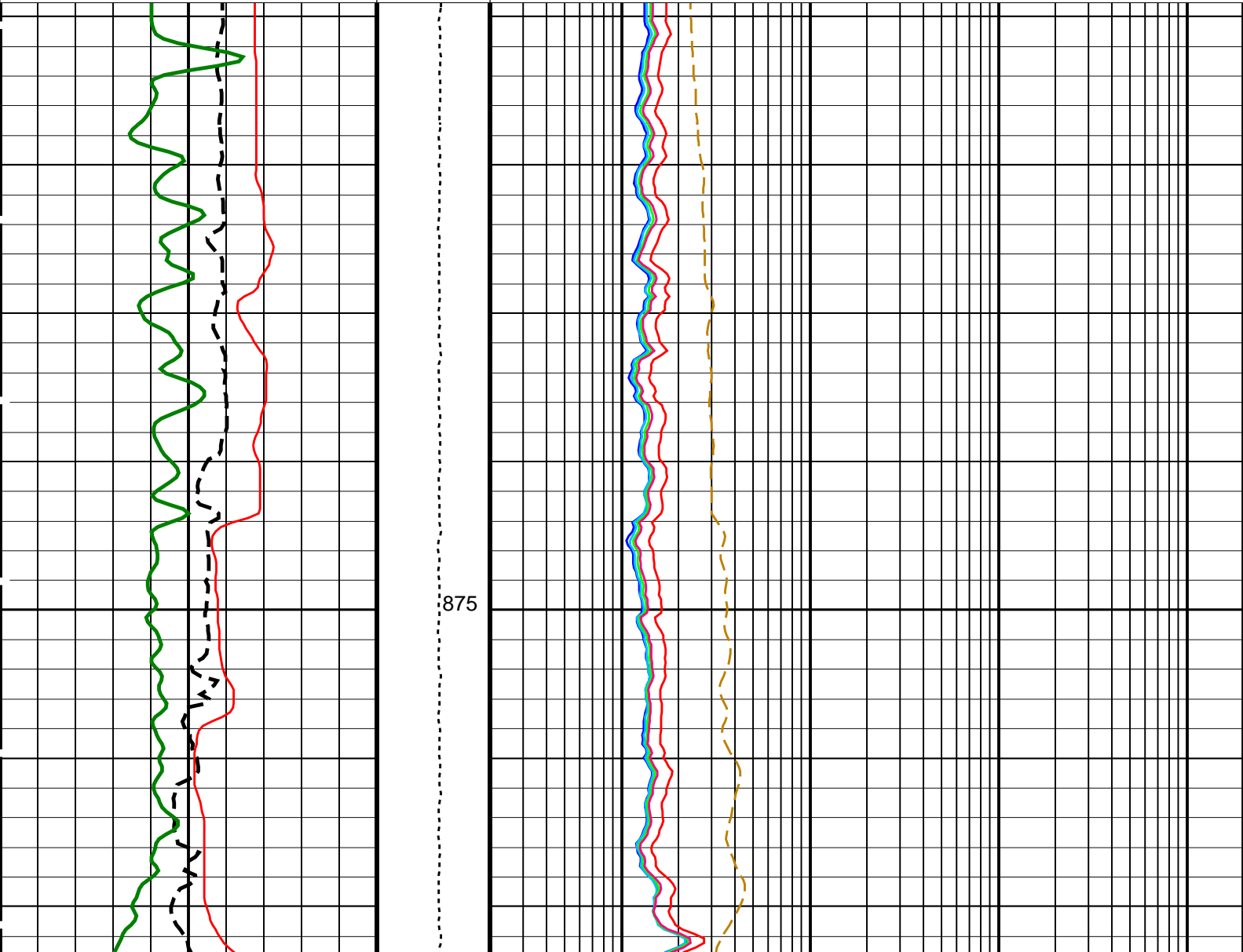
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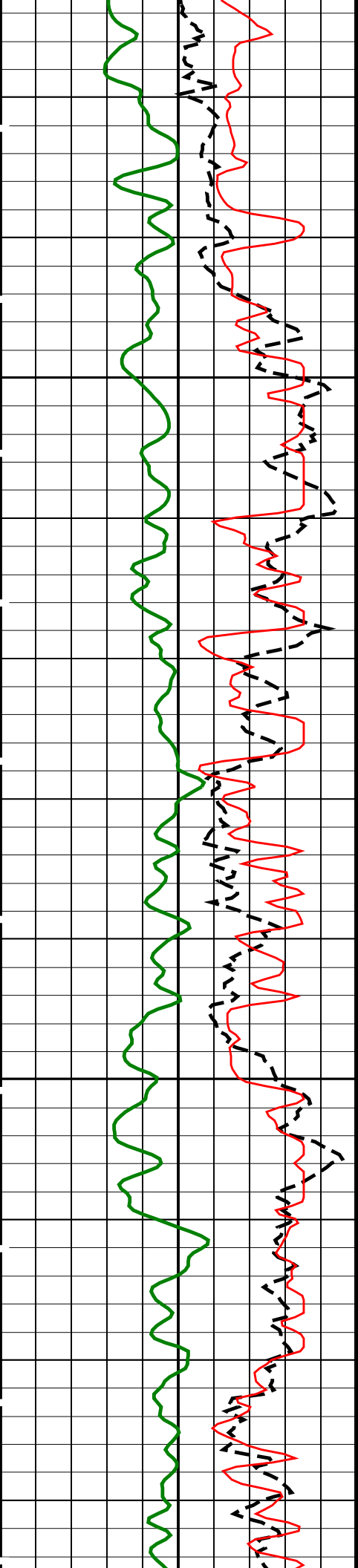
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EDTC-B	SKK-5169-EDTCB		

PIP SUMMARY

☐ Time Mark Every 60 S

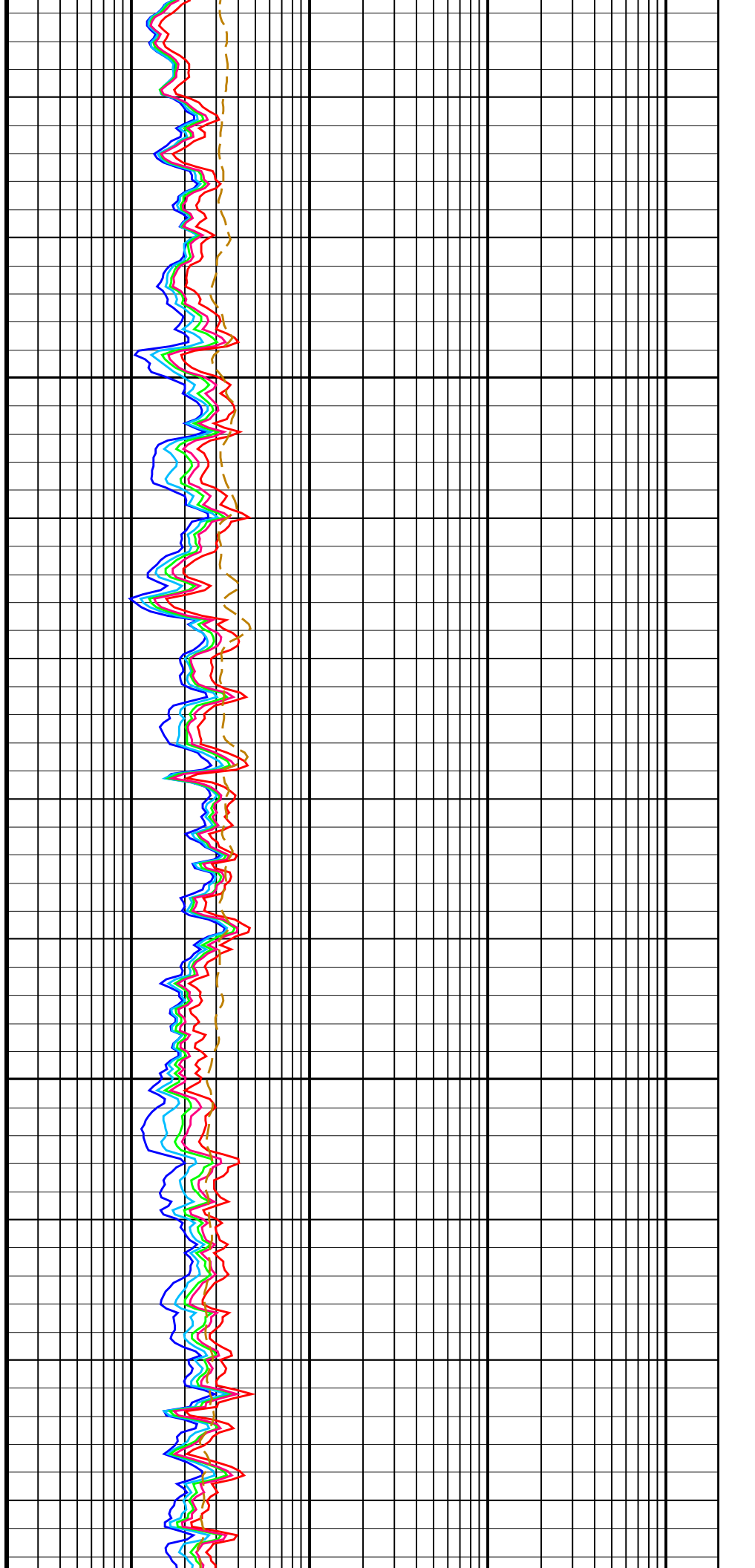
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		HRLT Resistivity 5 (RLA5) (OHMM)0.22000	
		HRLT Resistivity 4 (RLA4) (OHMM)0.22000	
		HRLT Resistivity 3 (RLA3) (OHMM)0.22000	
		HRLT Resistivity 2 (RLA2) (OHMM)0.22000	
HLDS Caliper (LCAL) (IN)020	Tension (TENS) (LBF)05000	HRLT Resistivity 1 (RLA1) (OHMM)0.22000	

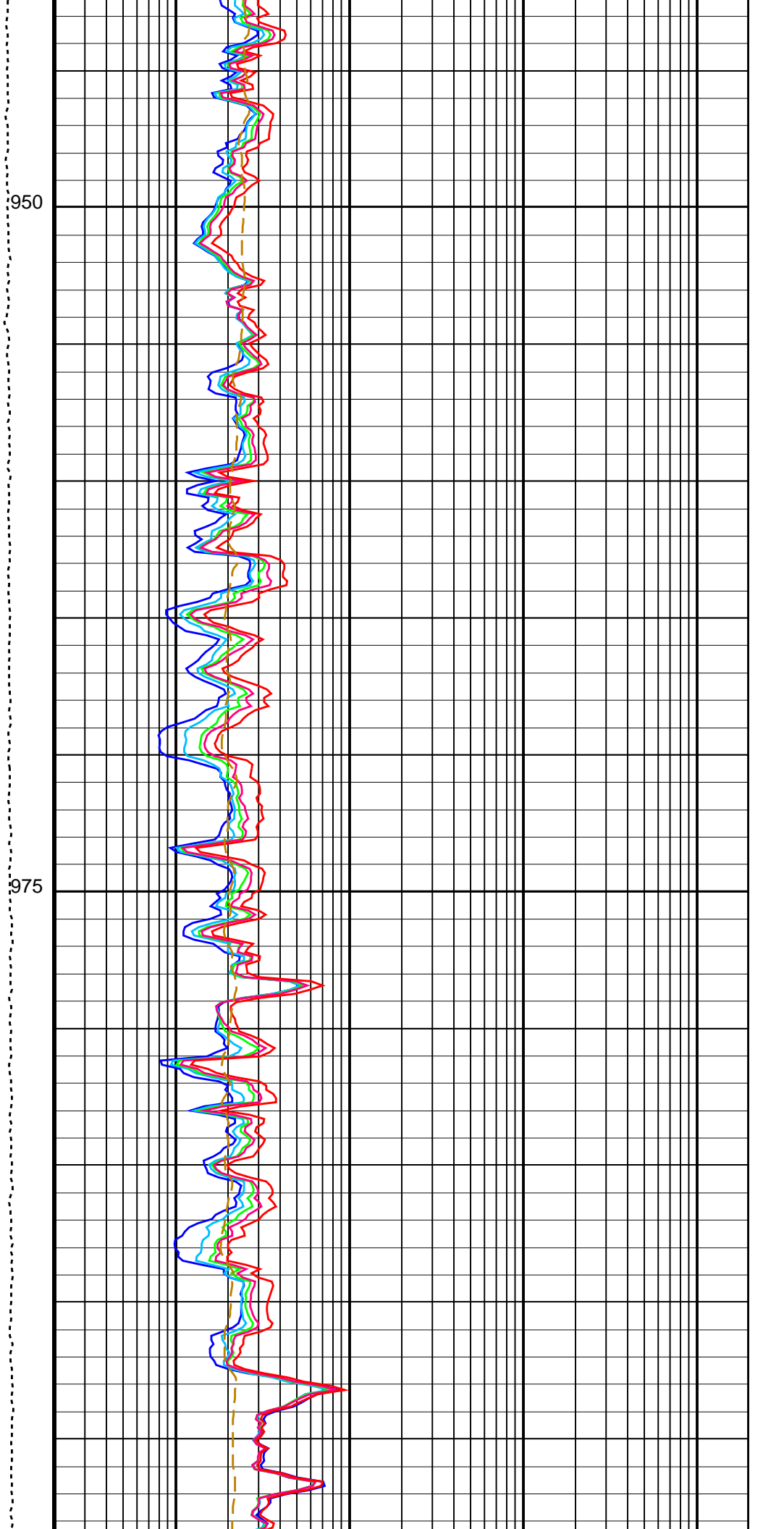
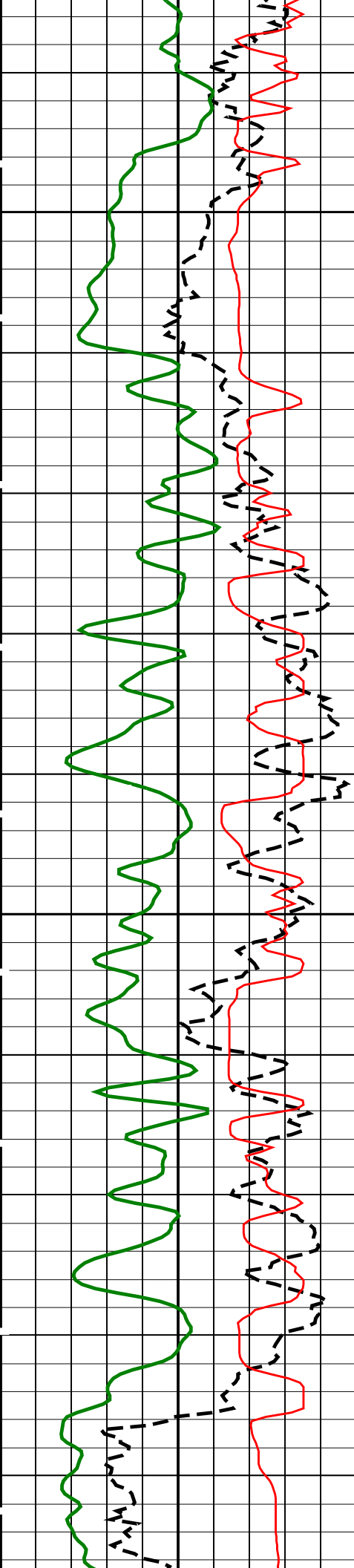


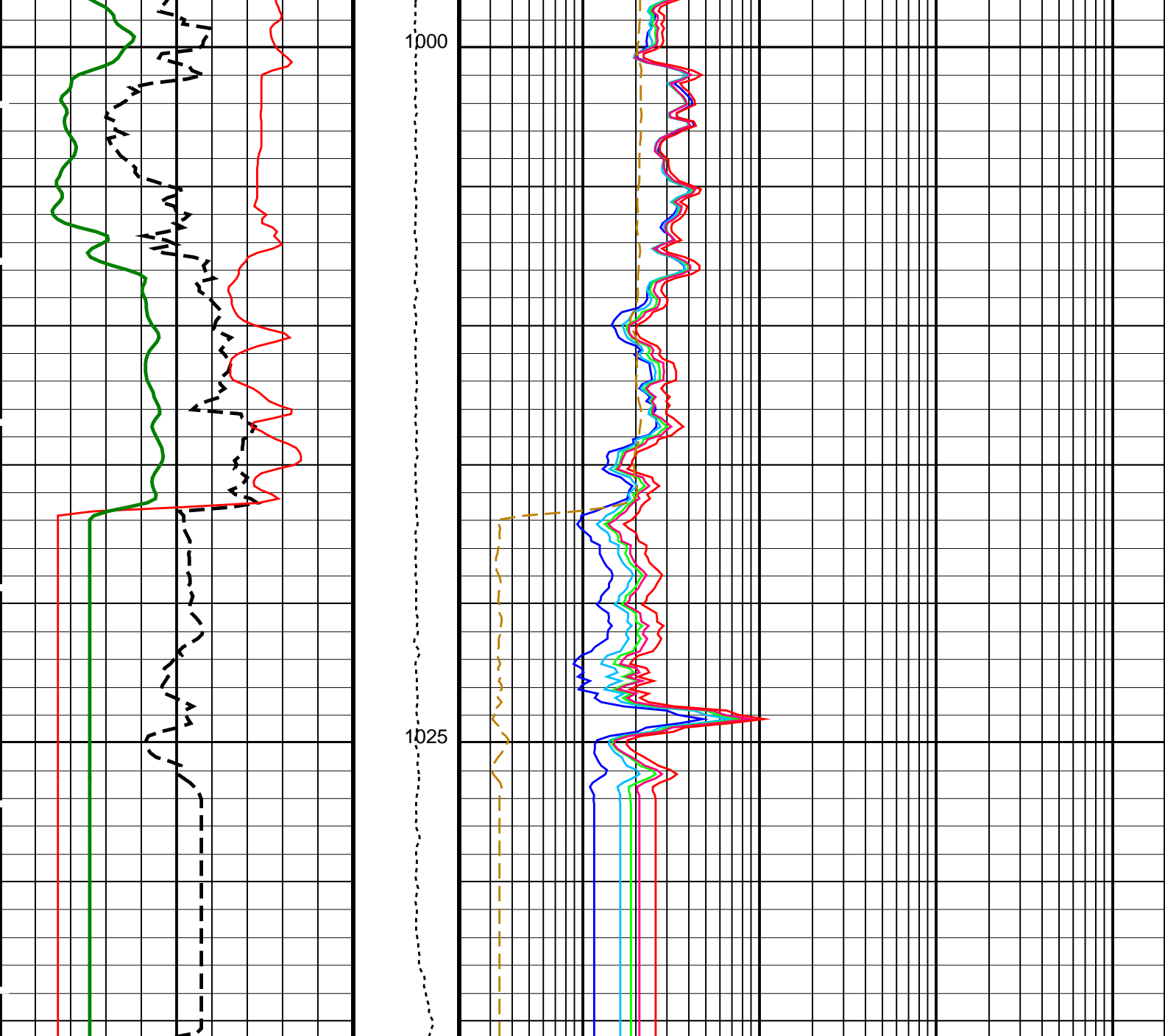


900

925







<div>HLDS Caliper (LCAL)</div> <div>020</div> <div>(IN)</div>	<div>Tension (TENS)</div> <div>(LBF)</div> <div>05000</div>	<div>HRLT Resistivity 1 (RLA1)</div> <div>0.22000</div> <div>(OHMM)</div>
<div>Invasion Diameter (DI_HRLT)</div> <div>050</div> <div>(IN)</div>		<div>HRLT Resistivity 2 (RLA2)</div> <div>0.22000</div> <div>(OHMM)</div>
<div>HNGS Spectroscopy Gamma Ray (HSGR)</div> <div>0150</div> <div>(GAPI)</div>		<div>HRLT Resistivity 3 (RLA3)</div> <div>0.22000</div> <div>(OHMM)</div>
		<div>HRLT Resistivity 4 (RLA4)</div> <div>0.22000</div> <div>(OHMM)</div>
		<div>HRLT Resistivity 5 (RLA5)</div> <div>0.22000</div> <div>(OHMM)</div>
		<div>HRLT Mud Resistivity (RM_HRLT)</div> <div>0.02200</div> <div>(OHMM)</div>

PIP SUMMARY

Parameters

DLIS Name	Description	Value	
HRLT-B: High Resolution Laterolog Array – B			
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	70	DEGF
GCSE	Generalized Caliper Selection	LCAL	
GGRD	Geothermal Gradient	0.01	DF/F
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
KFAC_HRLT	HRLT K Factor Option	SONDE	
PROCINV	Inversion Selection	ON	
PROCMFL	Inversion Micro-Resistivity Selection	NO_EXTERNAL_RXO	
PROCMSO	Mechanical Standoff Fin Size	0	IN
PROCRM	Processing Mud Resistivity Select	HRLT_Compute	
PROCSP0	Sonde Position	Centered	
SHT	Surface Hole Temperature	20	DEGF
HNGS-BA: Hostile Natural Gamma Ray Sonde			
BAR1	HNGS Detector 1 Barite Constant	1	
BAR2	HNGS Detector 2 Barite Constant	1	
BHK	HNGS Borehole Potassium Correction Concentration	0	
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	70	DEGF
CSD1	Inner Casing Outer Diameter	0	IN
CSD2	Outer Casing Outer Diameter	0	IN
CSW1	Inner Casing Weight	0	LB/F
CSW2	Outer Casing Weight	0	LB/F
DBCC	HNGS Barite Constant Correction Flag	NONE	
GCSE	Generalized Caliper Selection	LCAL	
GGRD	Geothermal Gradient	0.01	DF/F
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
H1P	HNGS Detector 1 Allow/Disallow In Processing	ALLOW	
H2P	HNGS Detector 2 Allow/Disallow In Processing	ALLOW	
HABK	HNGS Borehole Potassium Running Average	-0.00233169	
HALF	HNGS Alpha Filter Length	60	IN
HCRB	HNGS Apply Borehole Potassium Correction	NONE	
HMWM	Mud Weighting Material	NATU	
HNPE	HNGS Processing Enable	YES	
S1BI	HNGS Detector 1 Calibration Bismuth Count Rate	1.3	CPS
S2BI	HNGS Detector 2 Calibration Bismuth Count Rate	1.3	CPS
SGRC	HNGS Standard Gamma-Ray Correction Flag	YES	
SHT	Surface Hole Temperature	20	DEGF
TPOS	Tool Position	ECCE	
VBA1	HNGS Detector 1 Variable Barite Factor Running Average	-18.4795	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	4.07858	
EDTC-B: Enhanced DTS Cartridge			
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	70	DEGF
GCSE	Generalized Caliper Selection	LCAL	
GGRD	Geothermal Gradient	0.01	DF/F
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
SHT	Surface Hole Temperature	20	DEGF
System and Miscellaneous			
BS	Bit Size	9.875	IN
DFD	Drilling Fluid Density	1.26	G/C3
TD	Total Depth	1115.5	M

Format: HRLT Vertical Scale: 1:200 Graphics File Created: 29-Dec-2022 15:12

OP System Version: 19C0-187

MSS_LDEO-A	19C0-187	HRLT-B	19C0-187
HLDS-DA	19C0-187	LDSC-AA	19C0-187
HNGC-B	19C0-187	HNGS-BA	19C0-187
EDTC-B	SKK-5169-EDTCB		

Output DLIS Files

DEFAULT MSS_LDEO_HRLA_LDL_008LUP FN:7 PRODUCER 29-Dec-2022 15:12

Company: International Ocean Discovery Program Well: Expedition 398, Site U1589C

Output DLIS Files

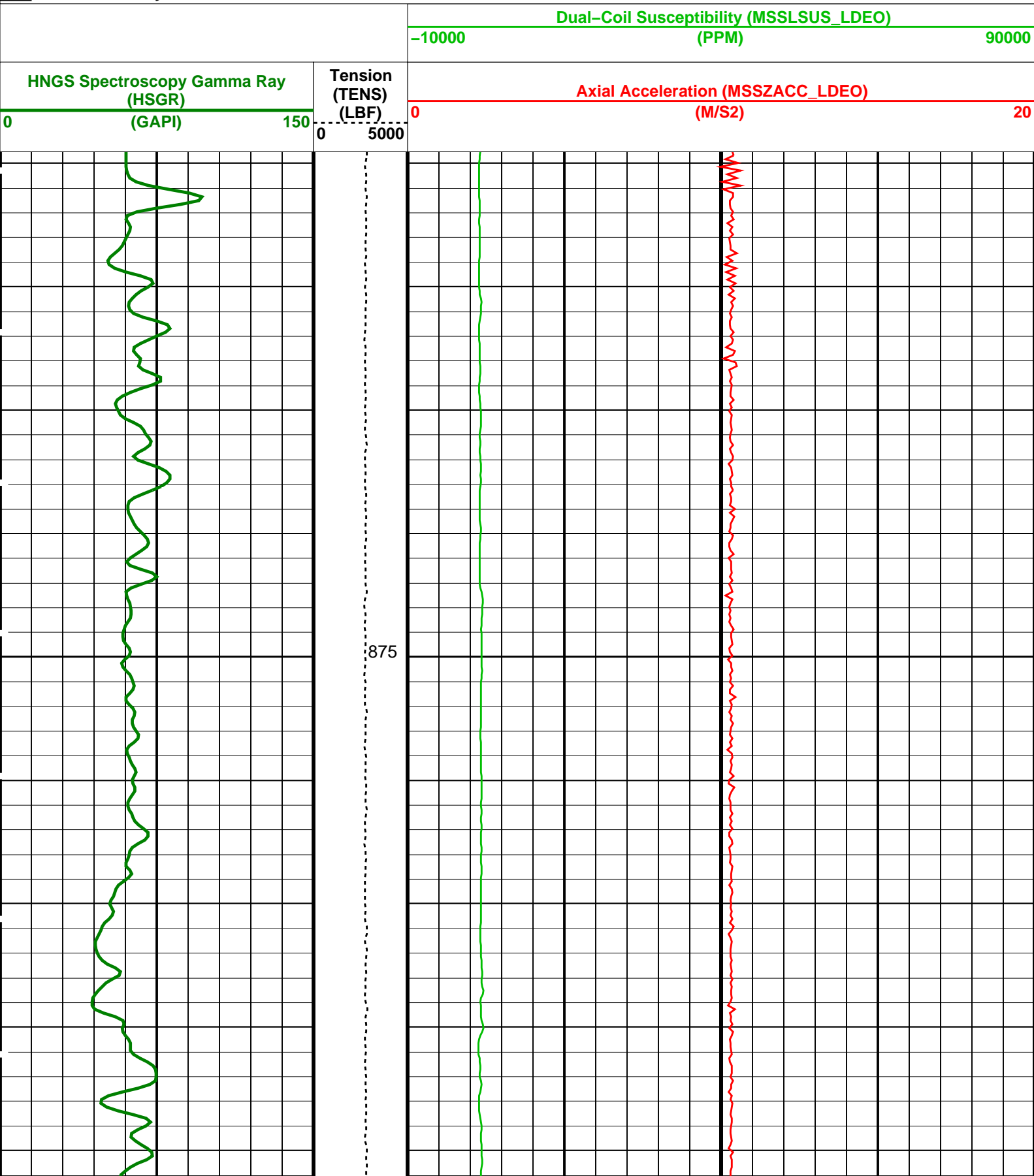
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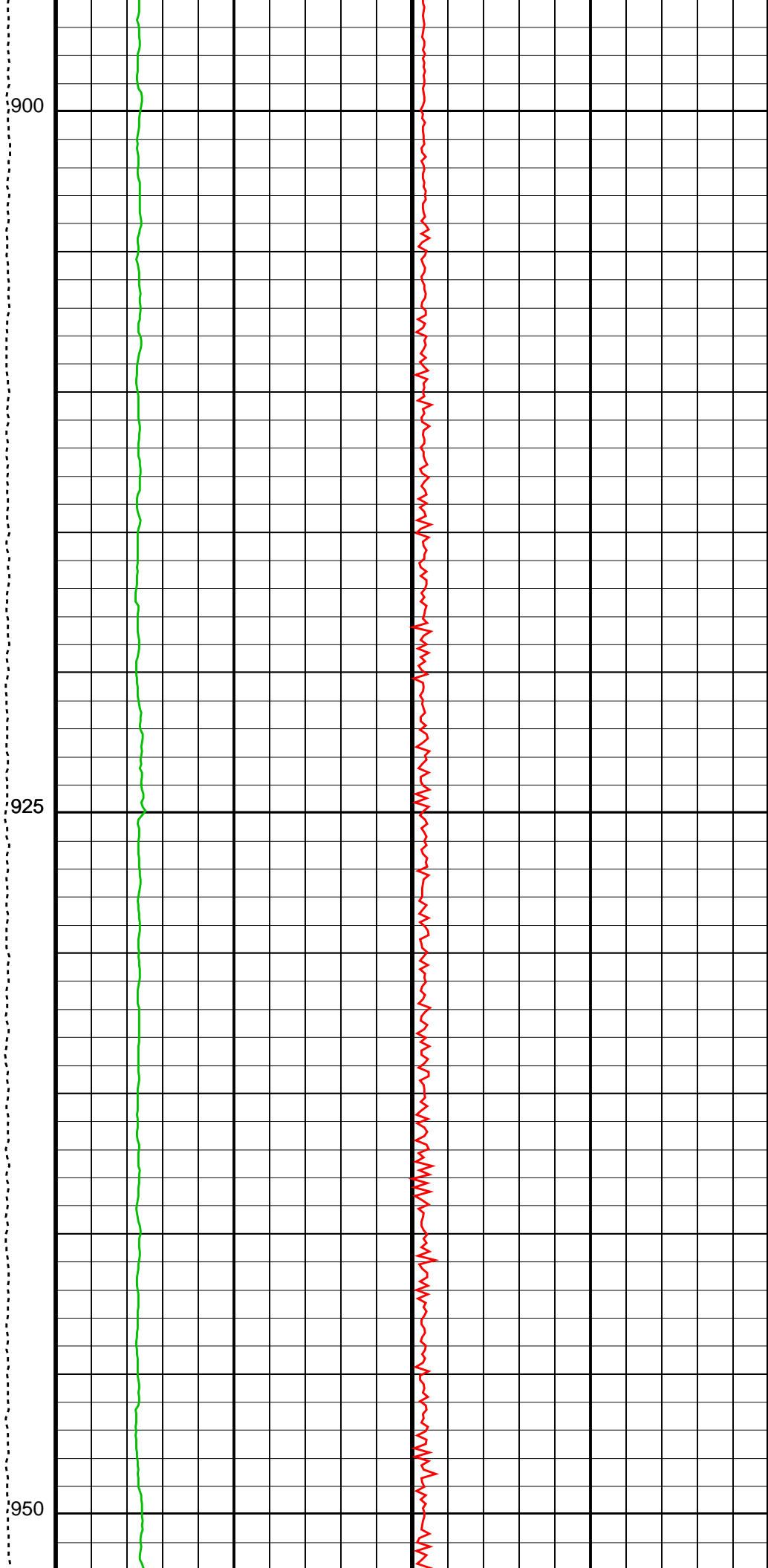
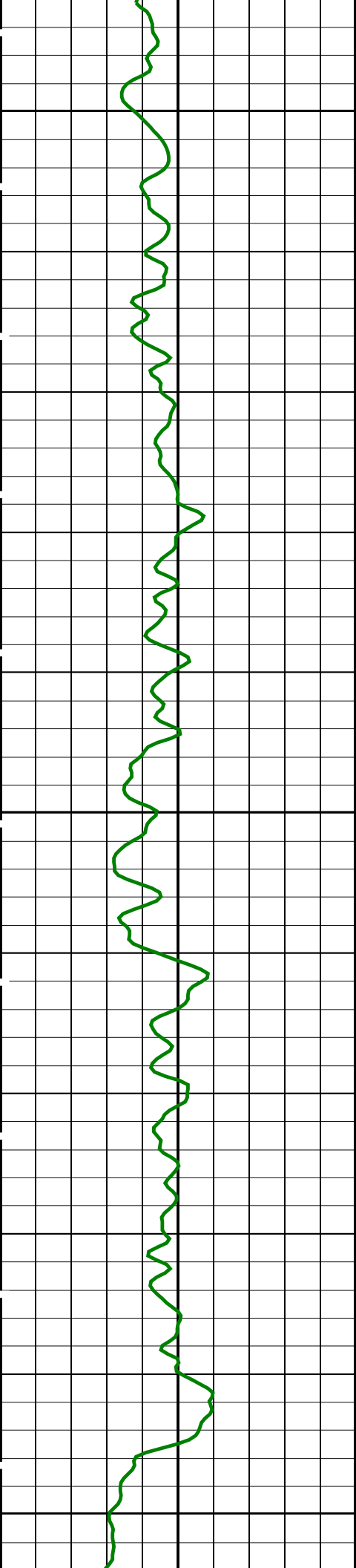
OP System Version: 19C0-187

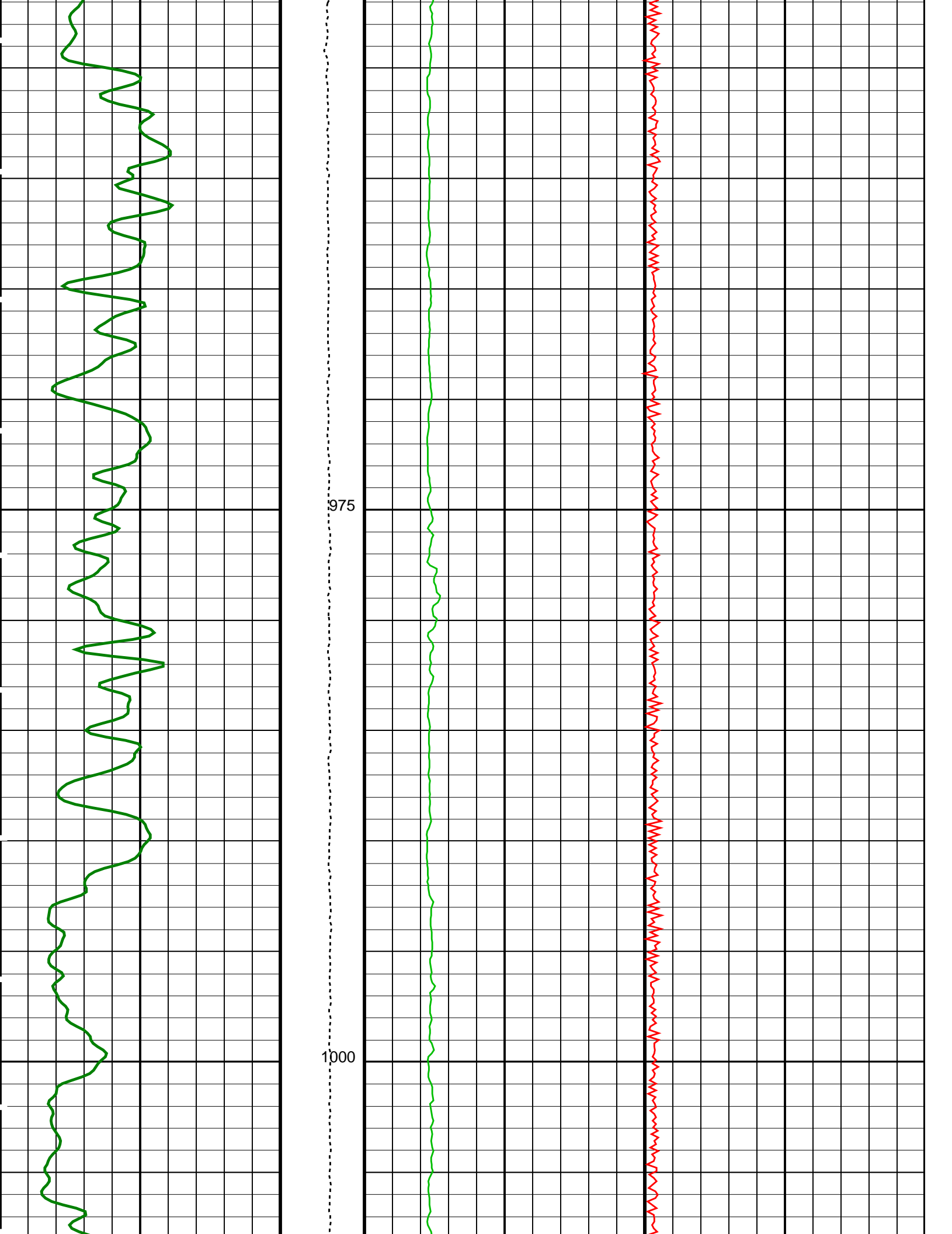
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EDTC-B	SKK-5169-EDTCB		

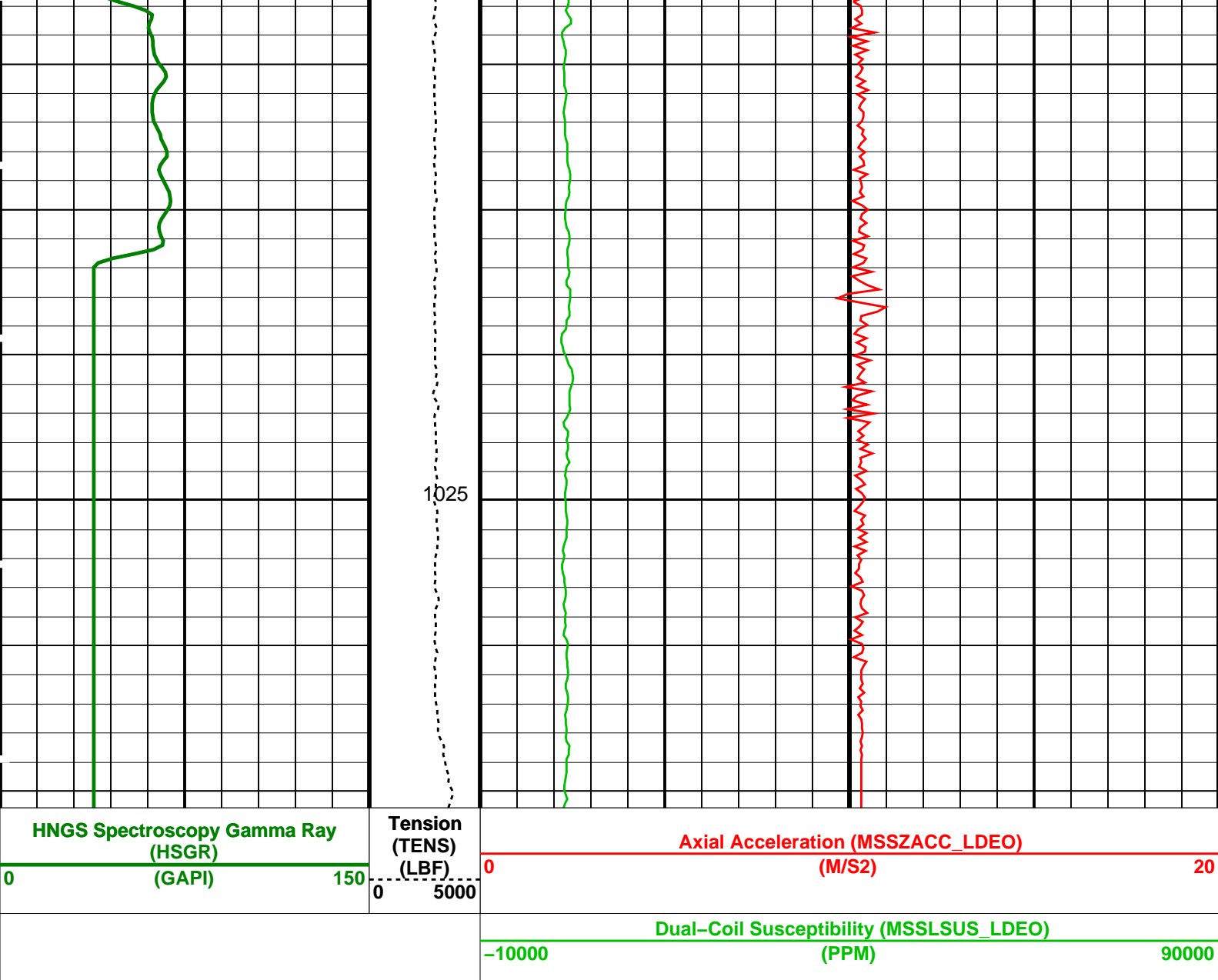
PIP SUMMARY

Time Mark Every 60 S









Time Mark Every 60 S

Parameters

DLIS Name	Description	Value	
HRLT-B: High Resolution Laterolog Array – B			
BHS	Borehole Status	OPEN	
GCSE	Generalized Caliper Selection	LCAL	
HNGS-BA: Hostile Natural Gamma Ray Sonde			
BAR1	HNGS Detector 1 Barite Constant	1	
BAR2	HNGS Detector 2 Barite Constant	1	
BHK	HNGS Borehole Potassium Correction Concentration	0	
BHS	Borehole Status	OPEN	
CSD1	Inner Casing Outer Diameter	0	IN
CSD2	Outer Casing Outer Diameter	0	IN
CSW1	Inner Casing Weight	0	LB/F
CSW2	Outer Casing Weight	0	LB/F
DBCC	HNGS Barite Constant Correction Flag	NONE	
GCSE	Generalized Caliper Selection	LCAL	
H1P	HNGS Detector 1 Allow/Disallow In Processing	ALLOW	
H2P	HNGS Detector 2 Allow/Disallow In Processing	ALLOW	
HABK	HNGS Borehole Potassium Running Average	-0.00233169	
HALF	HNGS Alpha Filter Length	60	IN
HCRB	HNGS Apply Borehole Potassium Correction	NONE	
HMWM	Mud Weighting Material	NATU	
HNPE	HNGS Processing Enable	YES	
S1BI	HNGS Detector 1 Calibration Bismuth Count Rate	1.3	CPS
S2BI	HNGS Detector 2 Calibration Bismuth Count Rate	1.3	CPS
SGRC	HNGS Standard Gamma-Ray Correction Flag	YES	
TPOS	Tool Position	ECCE	

Format: MSS_Logging Vertical Scale: 1:200 Graphics File Created: 29-Dec-2022 15:12

MSS_LDEO-A	19C0-187	HRLT-B	19C0-187
HLDS-DA	19C0-187	LDSC-AA	19C0-187
HNGC-B	19C0-187	HNGS-BA	19C0-187
EDTC-B	SKK-5169-EDTCB		

DEFAULT MSS_LDEO_HRLA_LDL_008LUP FN:7 PRODUCER 29-Dec-2022 15:12

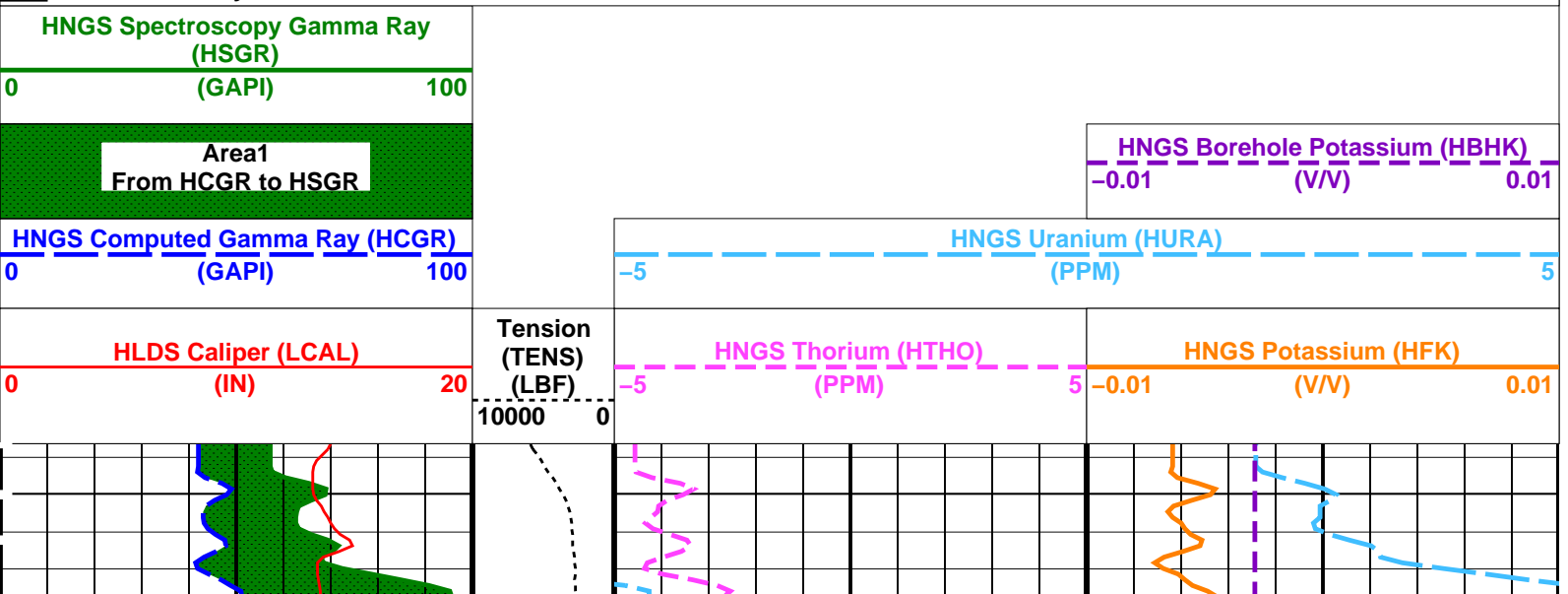


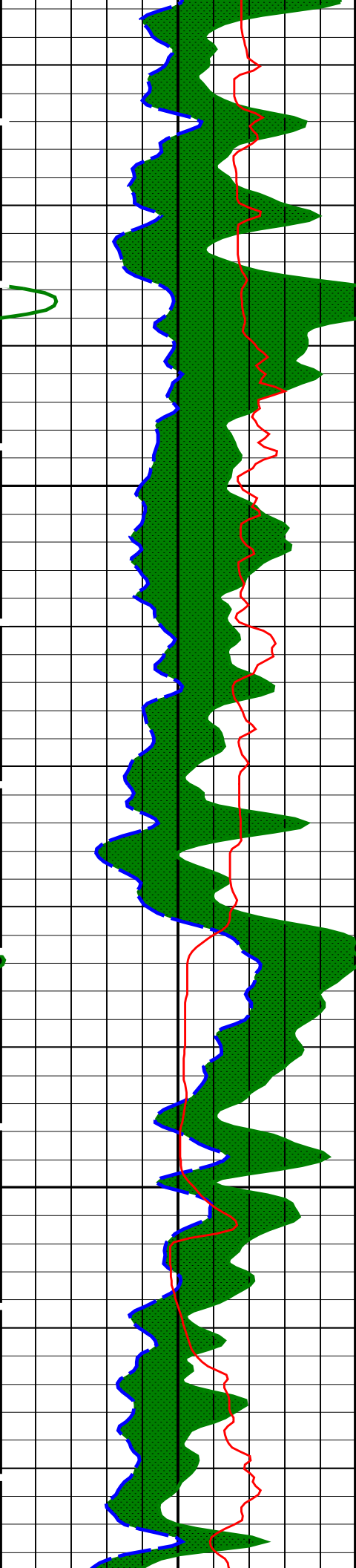
Well: Expedition 398, Site U1589C

DEFAULT	MSS_LDEO_HRLA_LDL_010LUP	FN:9	PRODUCER	29-Dec-2022 16:01	1035.6 M	753.6 M
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MSS_LDEO-A	19C0-187	HRLT-B	19C0-187
HLDS-DA	19C0-187	LDSC-AA	19C0-187
HNGC-B	19C0-187	HNGS-BA	19C0-187
EDTC-B	SKK-5169-EDTCB		

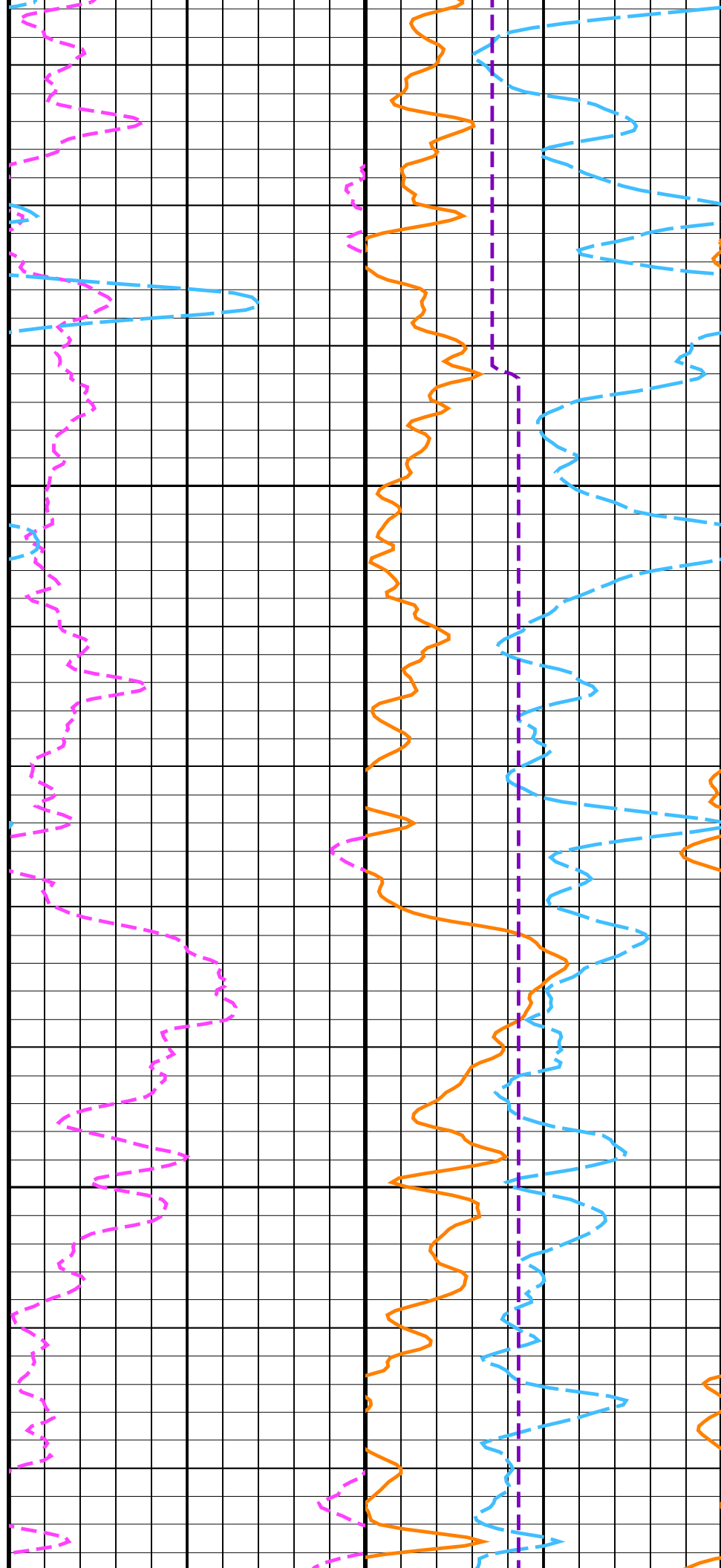
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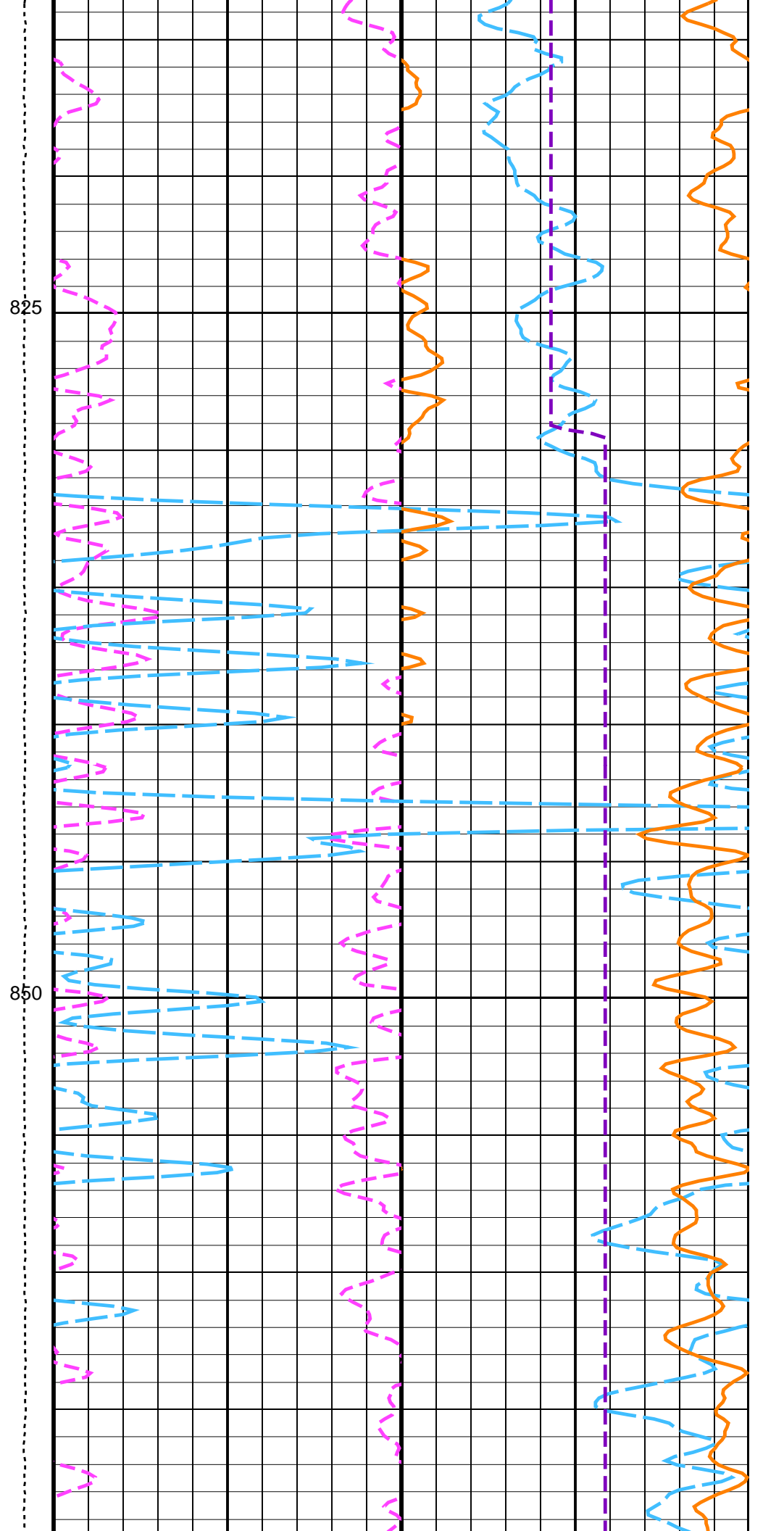
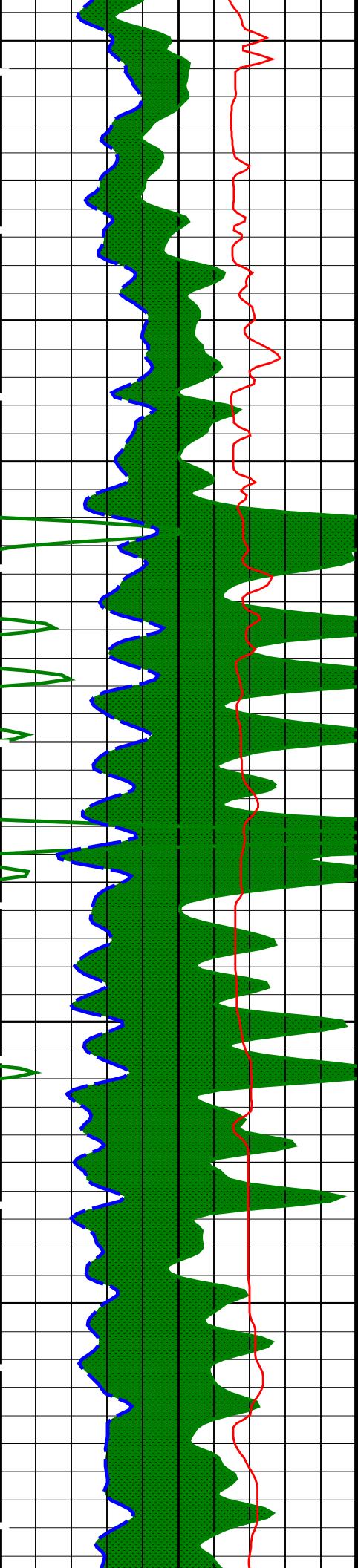


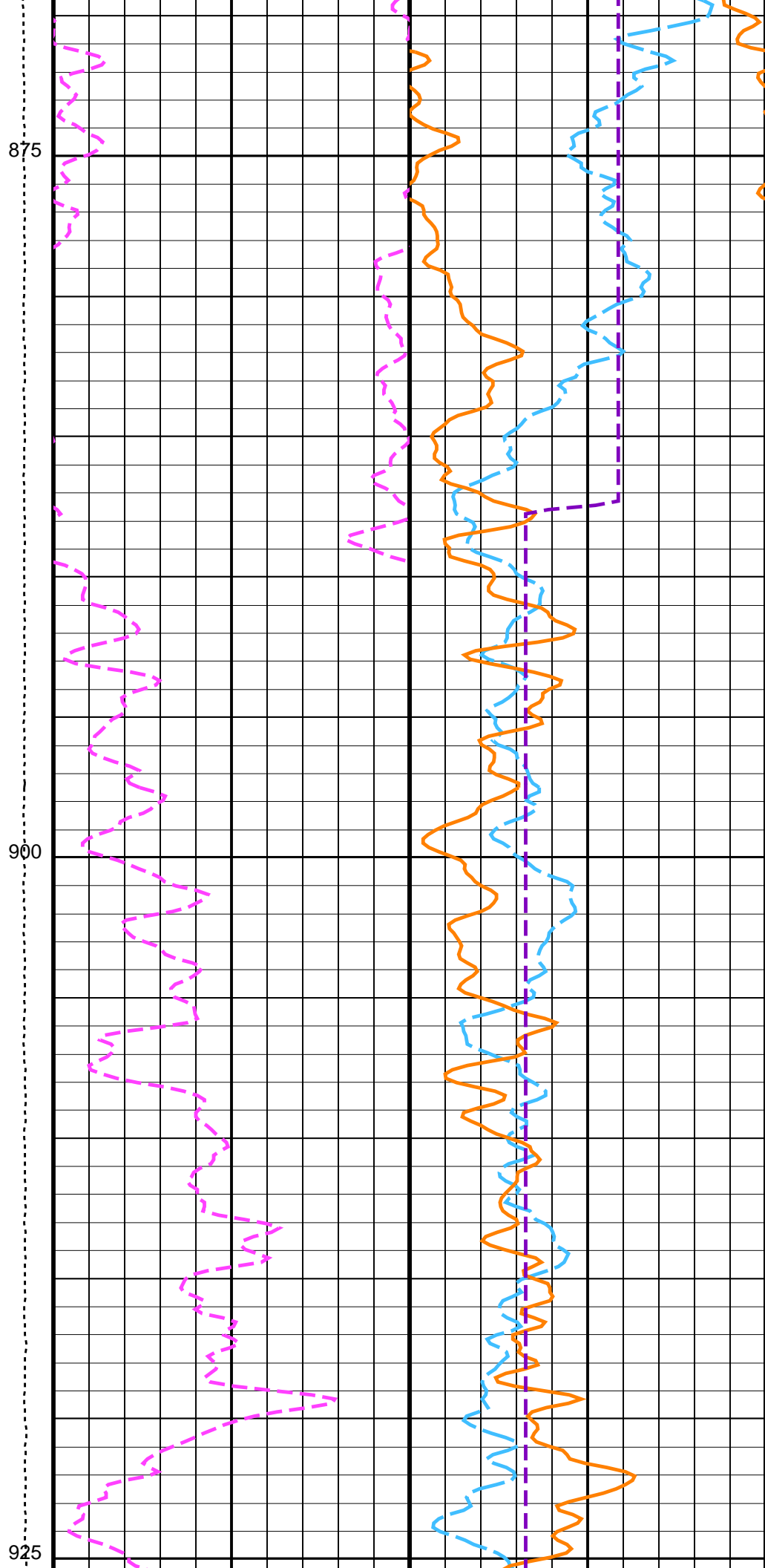
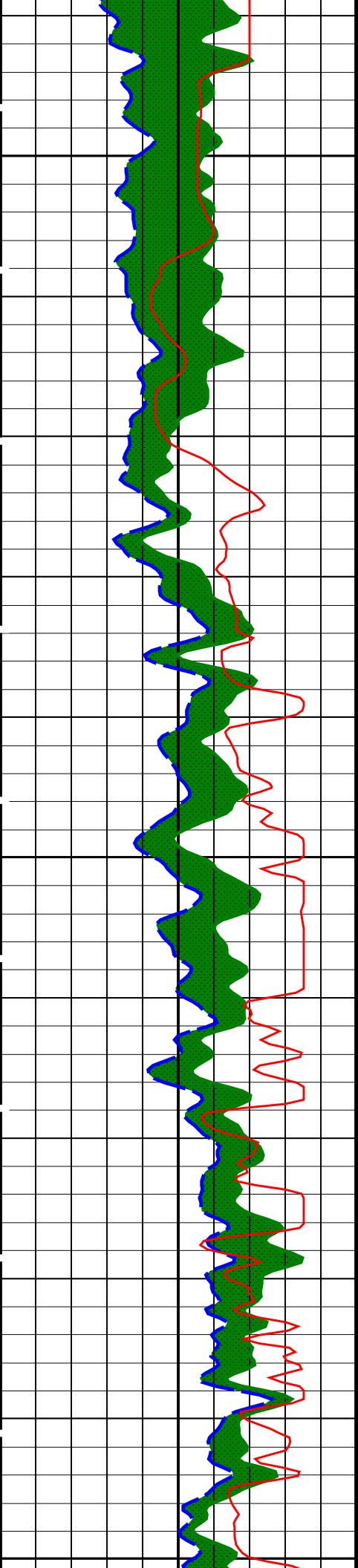


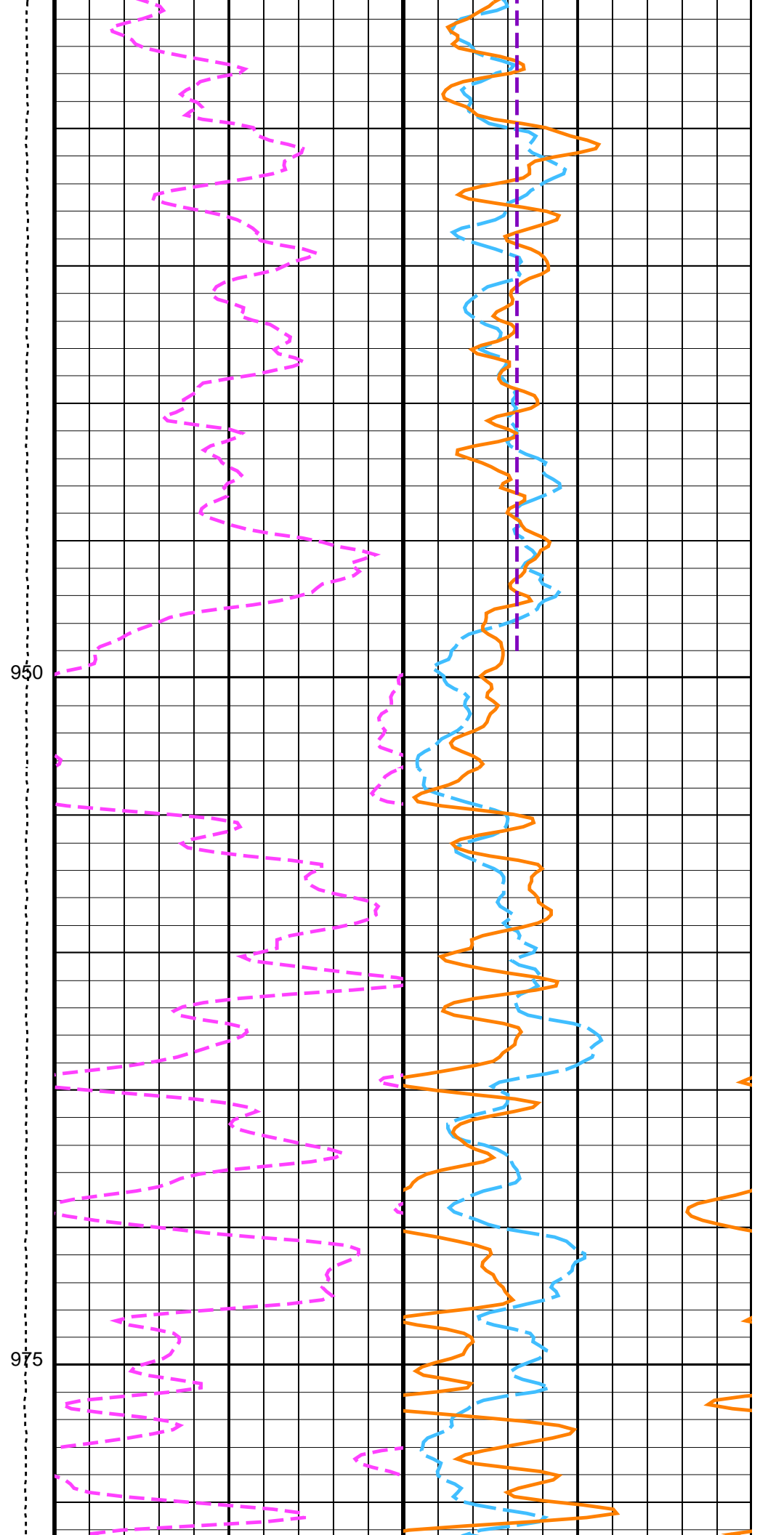
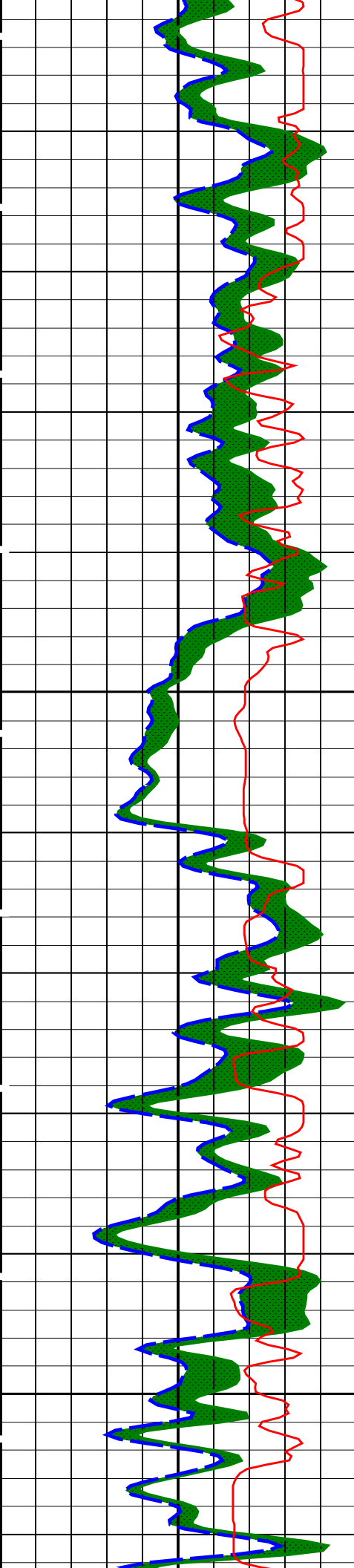
775

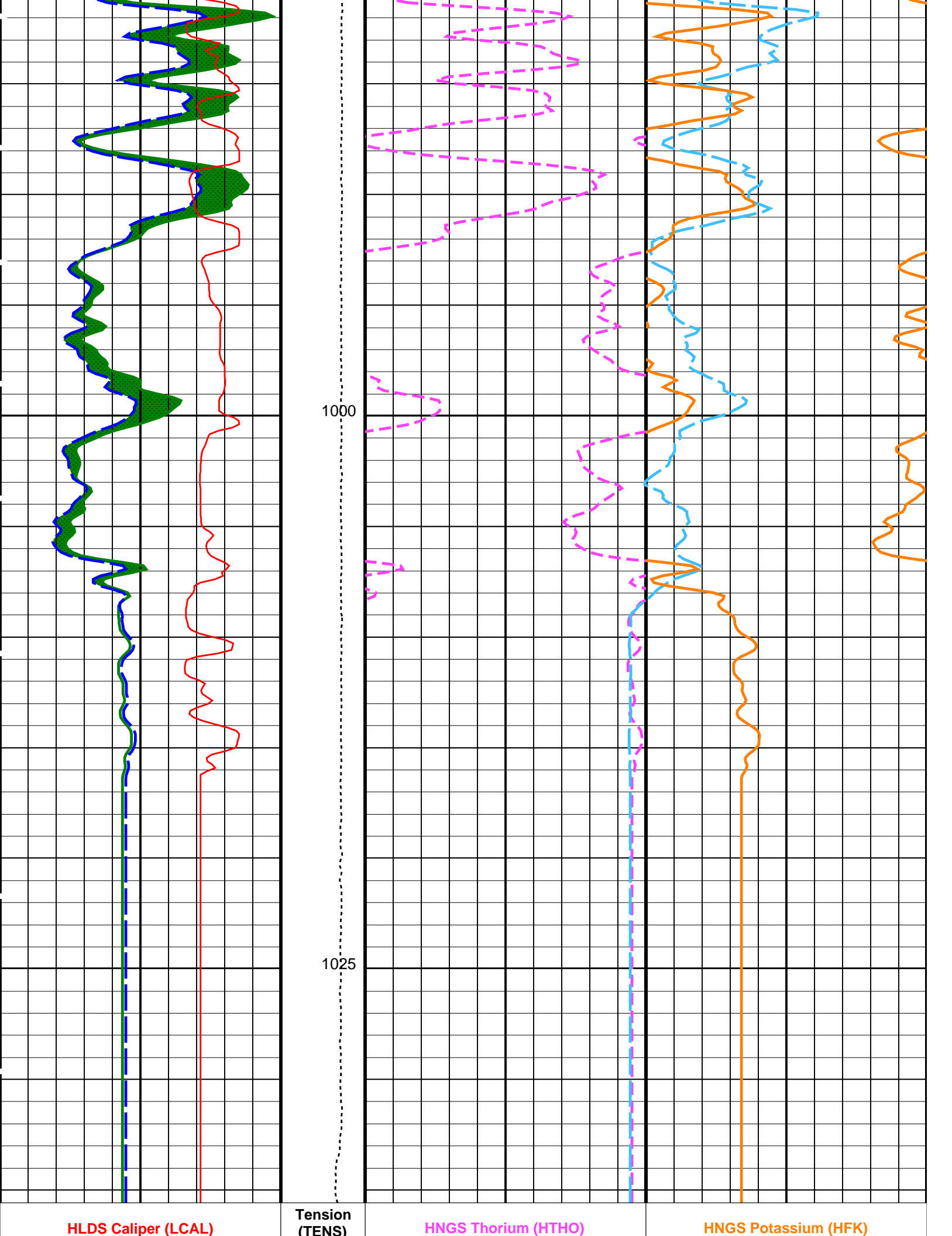
800











0	(IN)	20	(LBF)	5	-0.01	(V/V)	0.01
10000	0						
HNGS Computed Gamma Ray (HCGR)			HNGS Uranium (HURA)				
0	(GAPI)	100	-5		(PPM)		5
Area1 From HCGR to HSGR			HNGS Borehole Potassium (HBHK)				
HNGS Spectroscopy Gamma Ray (HSGR)			-0.01 (V/V) 0.01				
0	(GAPI)	100					

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value	
HRLT-B: High Resolution Laterolog Array – B			
BHS	Borehole Status	OPEN	
GCSE	Generalized Caliper Selection	LCAL	
HNGS-BA: Hostile Natural Gamma Ray Sonde			
BAR1	HNGS Detector 1 Barite Constant	1	
BAR2	HNGS Detector 2 Barite Constant	1	
BHK	HNGS Borehole Potassium Correction Concentration	0	
BHS	Borehole Status	OPEN	
CSD1	Inner Casing Outer Diameter	0	IN
CSD2	Outer Casing Outer Diameter	0	IN
CSW1	Inner Casing Weight	0	LB/F
CSW2	Outer Casing Weight	0	LB/F
DBCC	HNGS Barite Constant Correction Flag	NONE	
GCSE	Generalized Caliper Selection	LCAL	
H1P	HNGS Detector 1 Allow/Disallow In Processing	ALLOW	
H2P	HNGS Detector 2 Allow/Disallow In Processing	ALLOW	
HABK	HNGS Borehole Potassium Running Average	-0.0016371	
HALF	HNGS Alpha Filter Length	60	IN
HCRB	HNGS Apply Borehole Potassium Correction	NONE	
HMWM	Mud Weighting Material	NATU	
HNPE	HNGS Processing Enable	YES	
S1BI	HNGS Detector 1 Calibration Bismuth Count Rate	1.3	CPS
S2BI	HNGS Detector 2 Calibration Bismuth Count Rate	1.3	CPS
SGRC	HNGS Standard Gamma-Ray Correction Flag	YES	
TPOS	Tool Position	ECCE	
VBA1	HNGS Detector 1 Variable Barite Factor Running Average	0.993868	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	1.00721	
EDTC-B: Enhanced DTS Cartridge			
BHS	Borehole Status	OPEN	
GCSE	Generalized Caliper Selection	LCAL	
System and Miscellaneous			
BS	Bit Size	9.875	IN
DFD	Drilling Fluid Density	1.26	G/C3

Format: HNGSYields Vertical Scale: 1:200 Graphics File Created: 29-Dec-2022 16:01

OP System Version: 19C0-187

MSS_LDEO-A	19C0-187	HRLT-B	19C0-187
HLDS-DA	19C0-187	LDSC-AA	19C0-187
HNGC-B	19C0-187	HNGS-BA	19C0-187
EDTC-B	SKK-5169-EDTCB		

Output DLIS Files

DEFAULT MSS_LDEO_HRLA_LDL_010LUP FN:9 PRODUCER 29-Dec-2022 16:01

Company: International Ocean Discovery Program Well: Expedition 398, Site U1589C

Output DLIS Files

DEFAULT MSS_LDEO_HRLA_LDL_010LUP FN:9 PRODUCER 29-Dec-2022 16:01 1035.6 M 753.6 M

OP System Version: 19C0-187

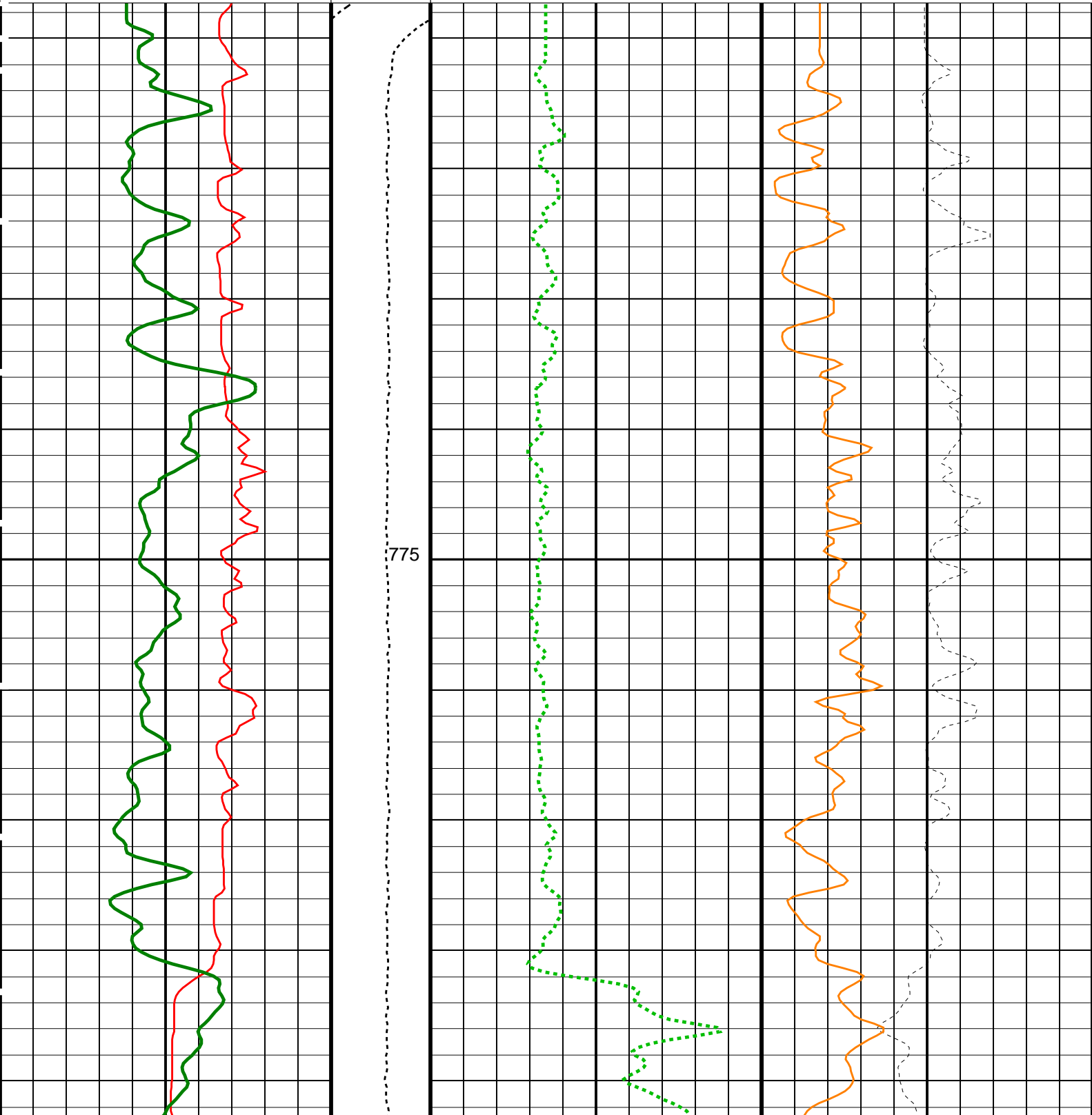
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HLDS-DA	19C0-187	LDSC-AA	19C0-187
HNGC-B	19C0-187	HNGS-BA	19C0-187
EDTC-B	SKK-5169-EDTCB		

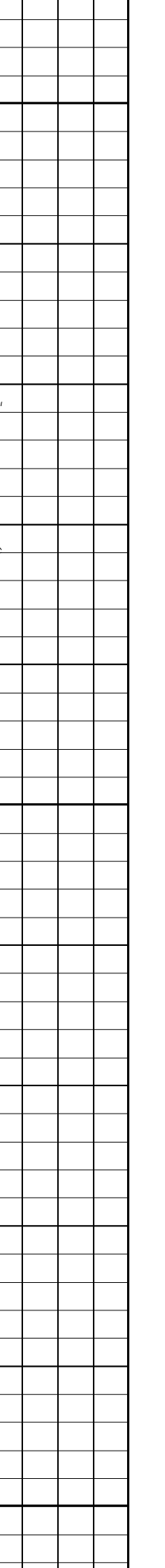
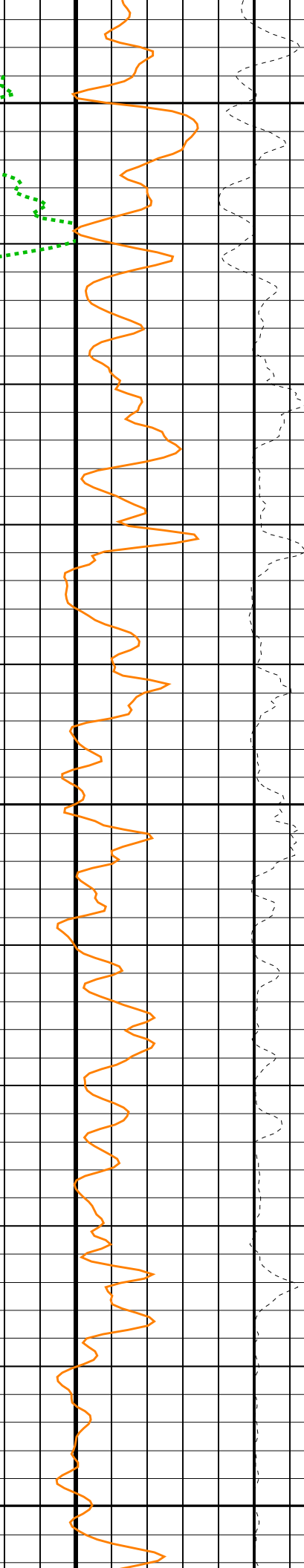
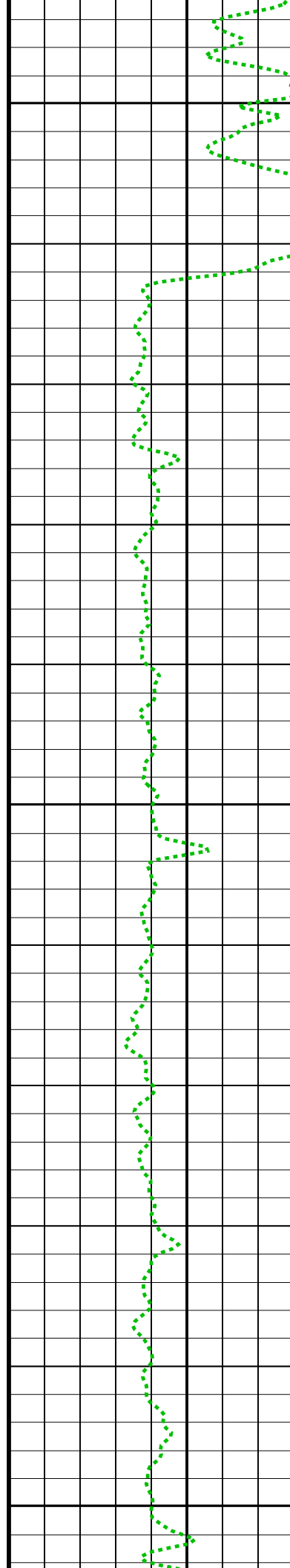
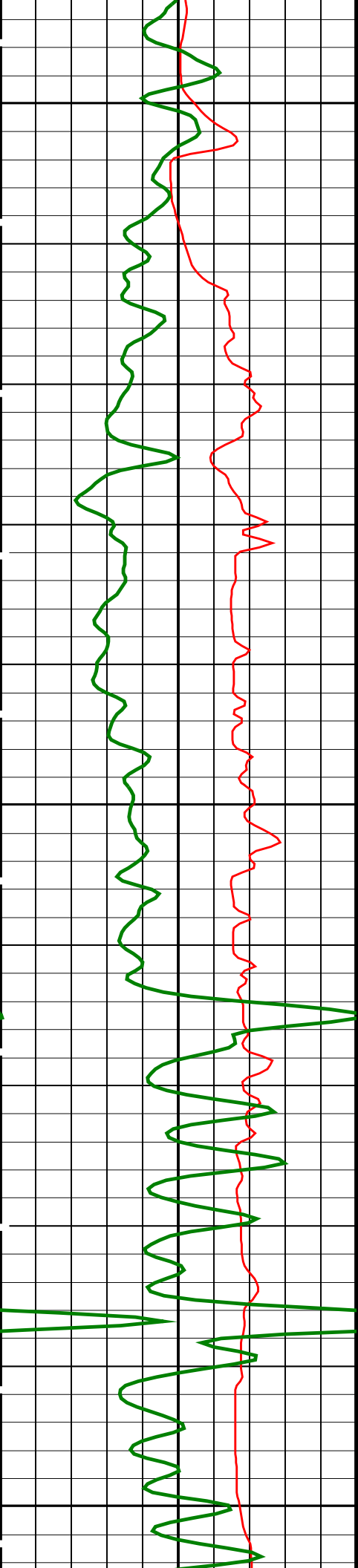
PIP SUMMARY

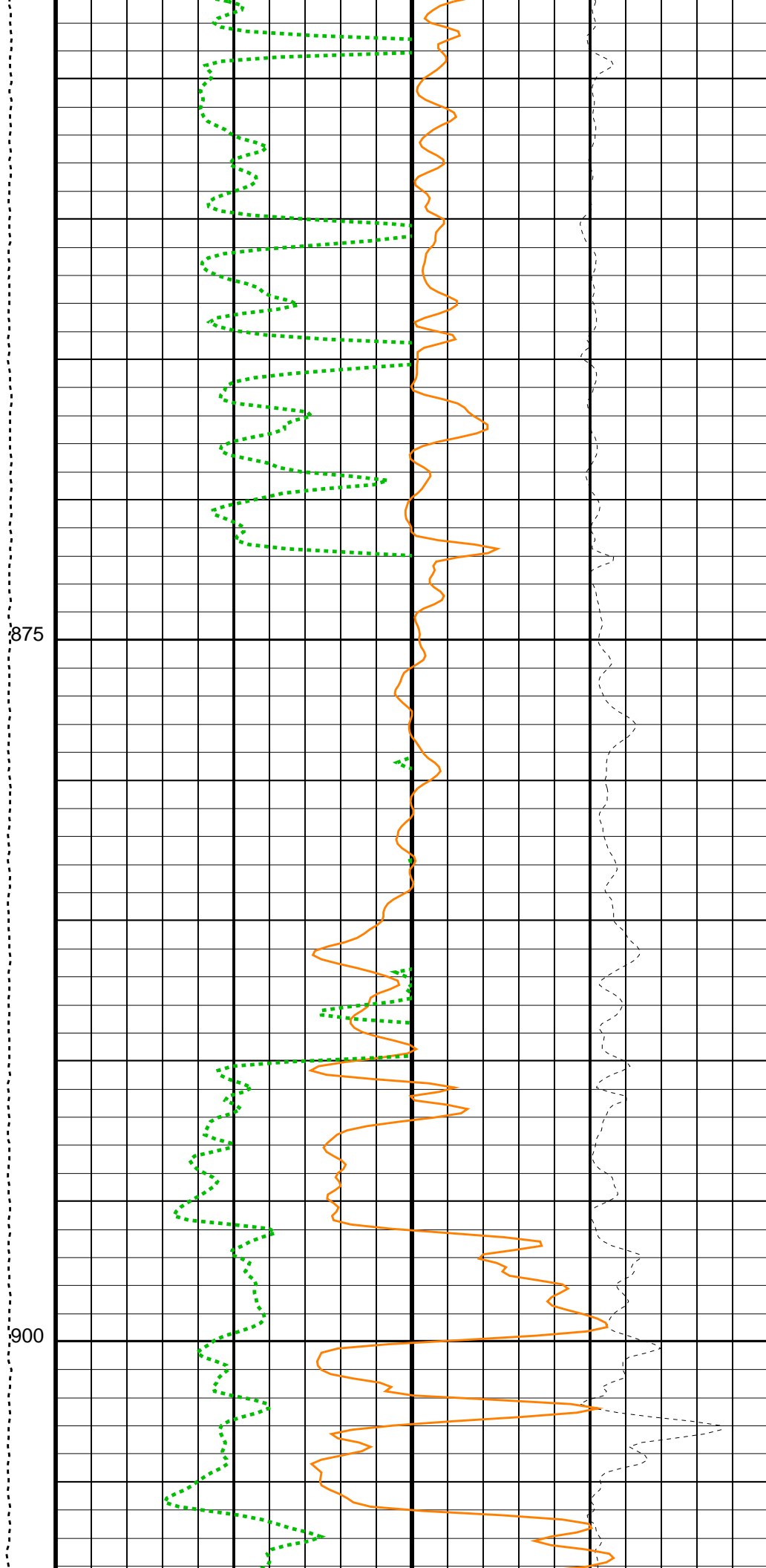
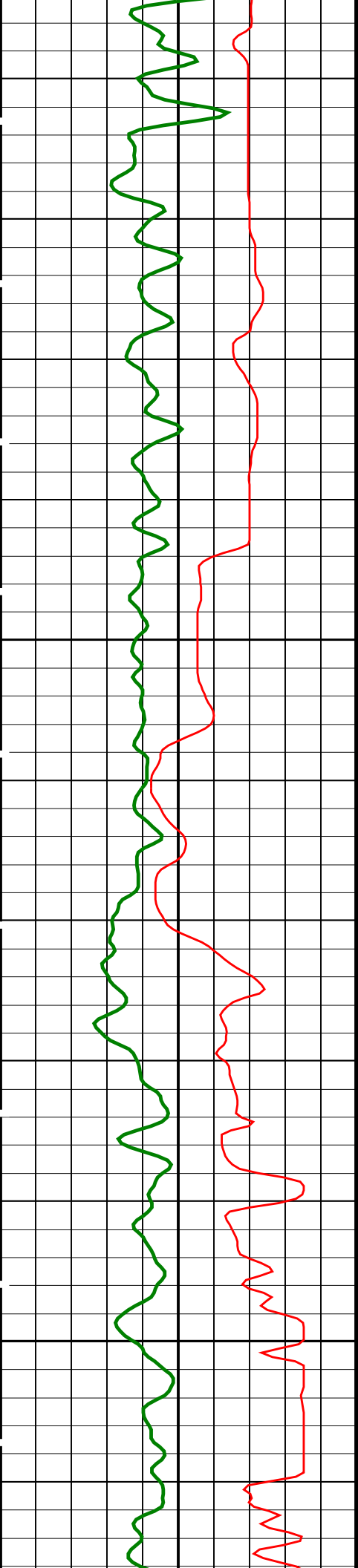
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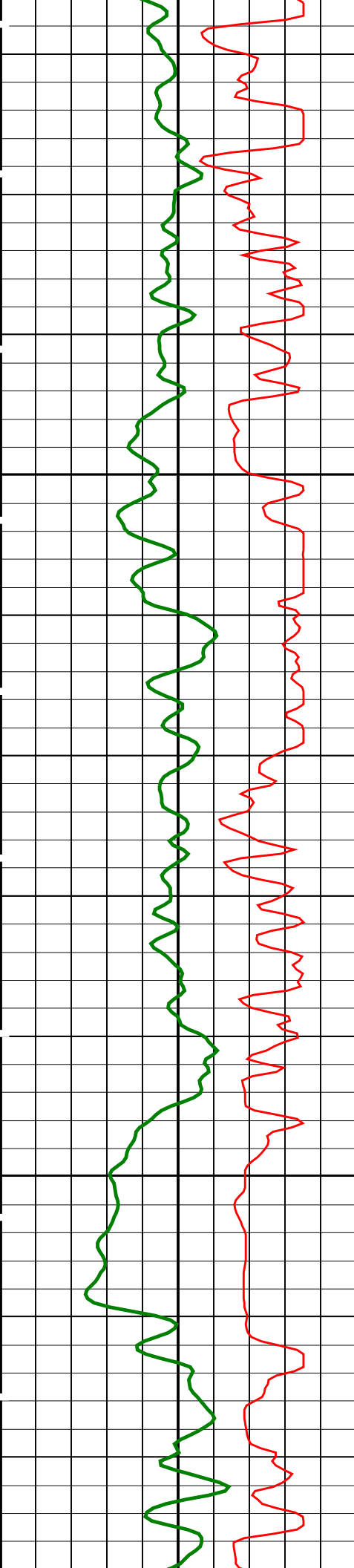
HNGS Spectroscopy Gamma Ray (HSGR) (GAPI)	HLDS Long Spaced Photoelectric Effect (PEFL) (----)	HLDS Bulk Density Correction (DRH) (G/C3)
0150	010	-0.250.25

HLDS Caliper (LCAL) (IN)	Tension (TENS) (LBF)	HLDS Bulk Density (RHOM) (G/C3)
020	05000	31



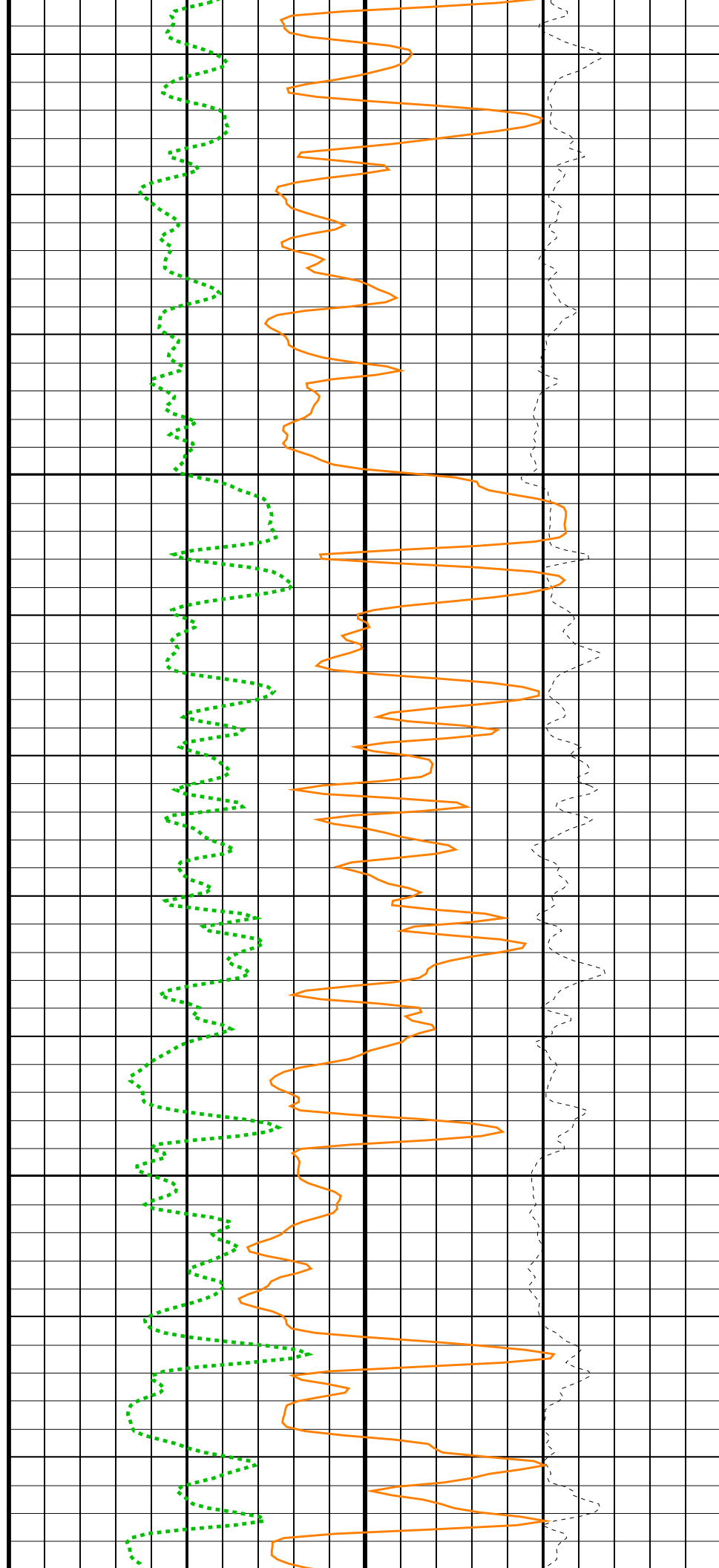


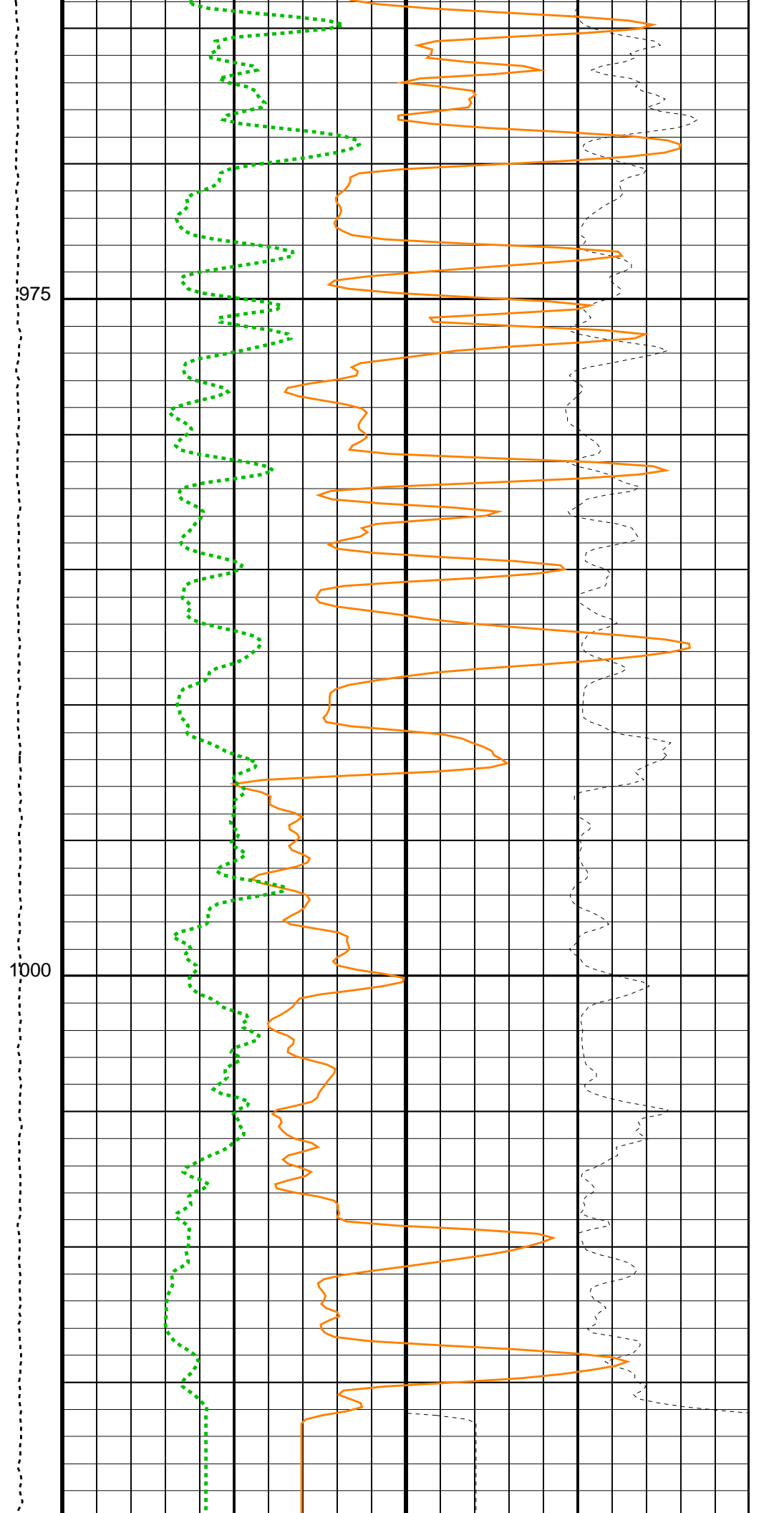
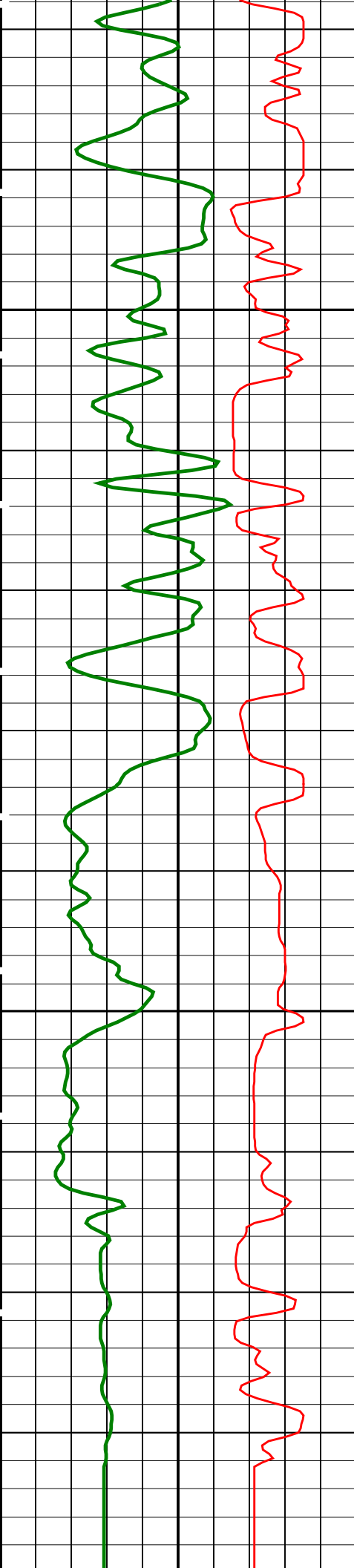


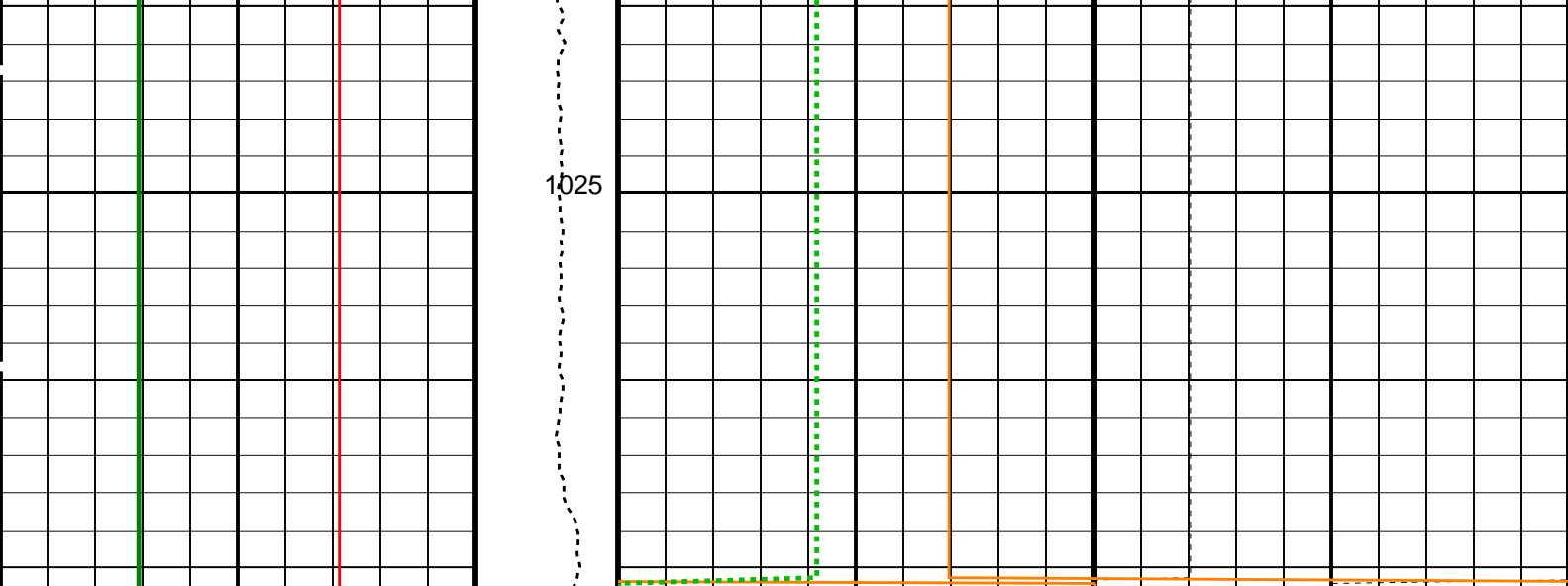


925

950







HLDS Caliper (LCAL) (IN)		Tension (TENS) (LBF)	HLDS Bulk Density (RHOM) (G/C3)	
0	20	0 5000	3	1
HNGS Spectroscopy Gamma Ray (HSGR) (GAPI)			HLDS Long Spaced Photoelectric Effect (PEFL) (----	HLDS Bulk Density Correction (DRH) (G/C3)
0	150		0 10	-0.25 0.25

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value	
HRLT-B: High Resolution Laterolog Array – B			
BHS	Borehole Status	OPEN	
GCSE	Generalized Caliper Selection	LCAL	
HLDS-DA: Hostile Litho-Density Sonde			
DHC	Density Hole Correction	CALIPER	
DPPM	Density Porosity Processing Mode	HIRS	
FD	Fluid Density	1	G/C3
LATC	HLDS Activation Correction	ON	
MDEN	Matrix Density	2.6	G/C3
HNGS-BA: Hostile Natural Gamma Ray Sonde			
BAR1	HNGS Detector 1 Barite Constant	1	
BAR2	HNGS Detector 2 Barite Constant	1	
BHK	HNGS Borehole Potassium Correction Concentration	0	
BHS	Borehole Status	OPEN	
CSD1	Inner Casing Outer Diameter	0	IN
CSD2	Outer Casing Outer Diameter	0	IN
CSW1	Inner Casing Weight	0	LB/F
CSW2	Outer Casing Weight	0	LB/F
DBCC	HNGS Barite Constant Correction Flag	NONE	
GCSE	Generalized Caliper Selection	LCAL	
H1P	HNGS Detector 1 Allow/Disallow In Processing	ALLOW	
H2P	HNGS Detector 2 Allow/Disallow In Processing	ALLOW	
HABK	HNGS Borehole Potassium Running Average	-0.0016371	
HALF	HNGS Alpha Filter Length	60	IN
HCRB	HNGS Apply Borehole Potassium Correction	NONE	
HMWM	Mud Weighting Material	NATU	
HNPE	HNGS Processing Enable	YES	
S1BI	HNGS Detector 1 Calibration Bismuth Count Rate	1.3	CPS
S2BI	HNGS Detector 2 Calibration Bismuth Count Rate	1.3	CPS
SGRC	HNGS Standard Gamma-Ray Correction Flag	YES	
TPOS	Tool Position	ECCE	
VBA1	HNGS Detector 1 Variable Barite Factor Running Average	0.993868	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	1.00721	
EDTC-B: Enhanced DTS Cartridge			
BHS	Borehole Status	OPEN	
DPPM	Density Porosity Processing Mode	HIRS	
GCSE	Generalized Caliper Selection	LCAL	
System and Miscellaneous			
BS	Bit Size	9.875	IN
DFD	Drilling Fluid Density	1.26	G/C3

OP System Version: 19C0-187

MSS_LDEO-A	19C0-187	HRLT-B	19C0-187
HLDS-DA	19C0-187	LDSC-AA	19C0-187
HNGC-B	19C0-187	HNGS-BA	19C0-187
EDTC-B	SKK-5169-EDTCB		

Output DLIS Files

DEFAULT MSS_LDEO_HRLA_LDL_010LUP FN:9 PRODUCER 29-Dec-2022 16:01

Company: International Ocean Discovery Program Well: Expedition 398, Site U1589C

Output DLIS Files

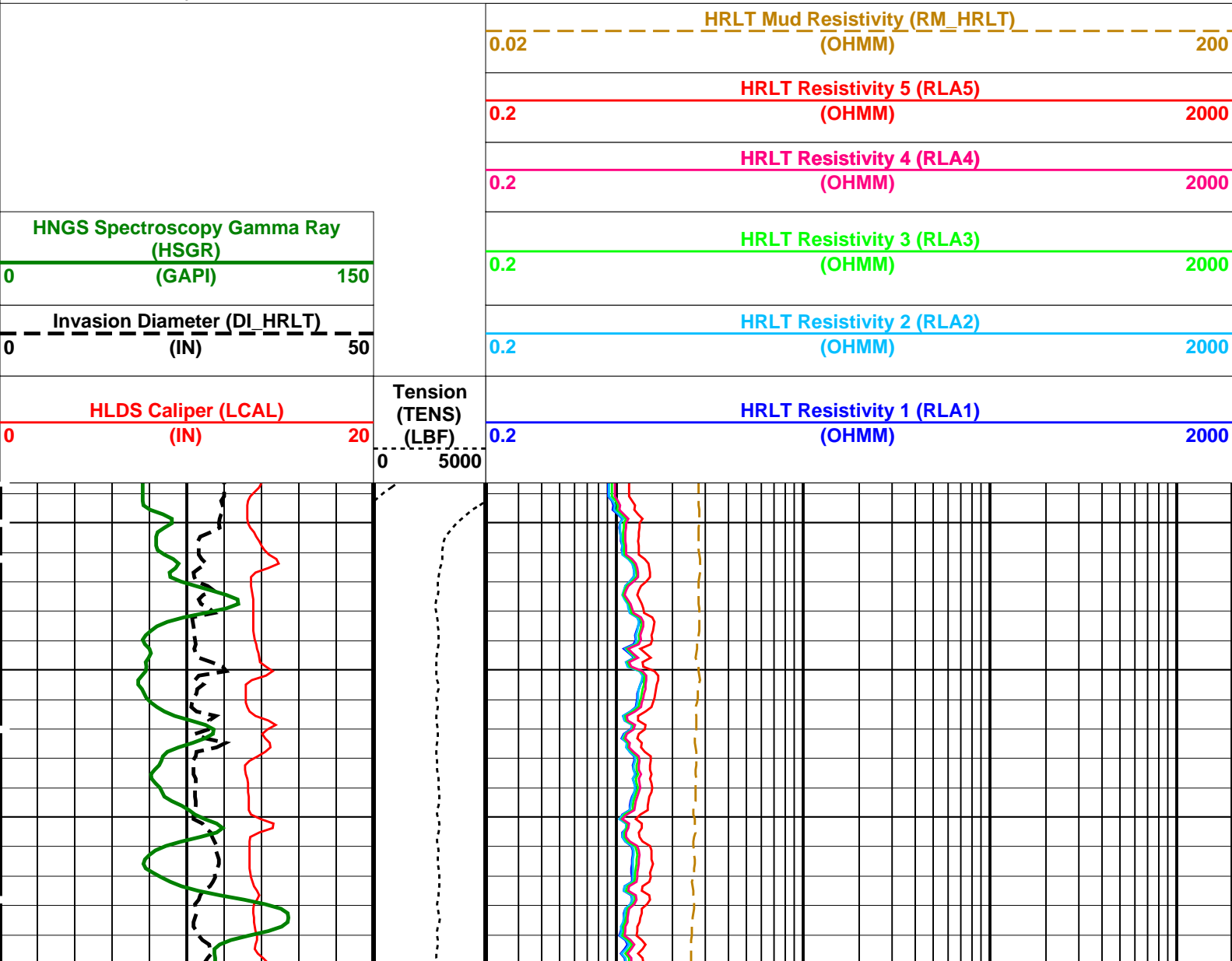
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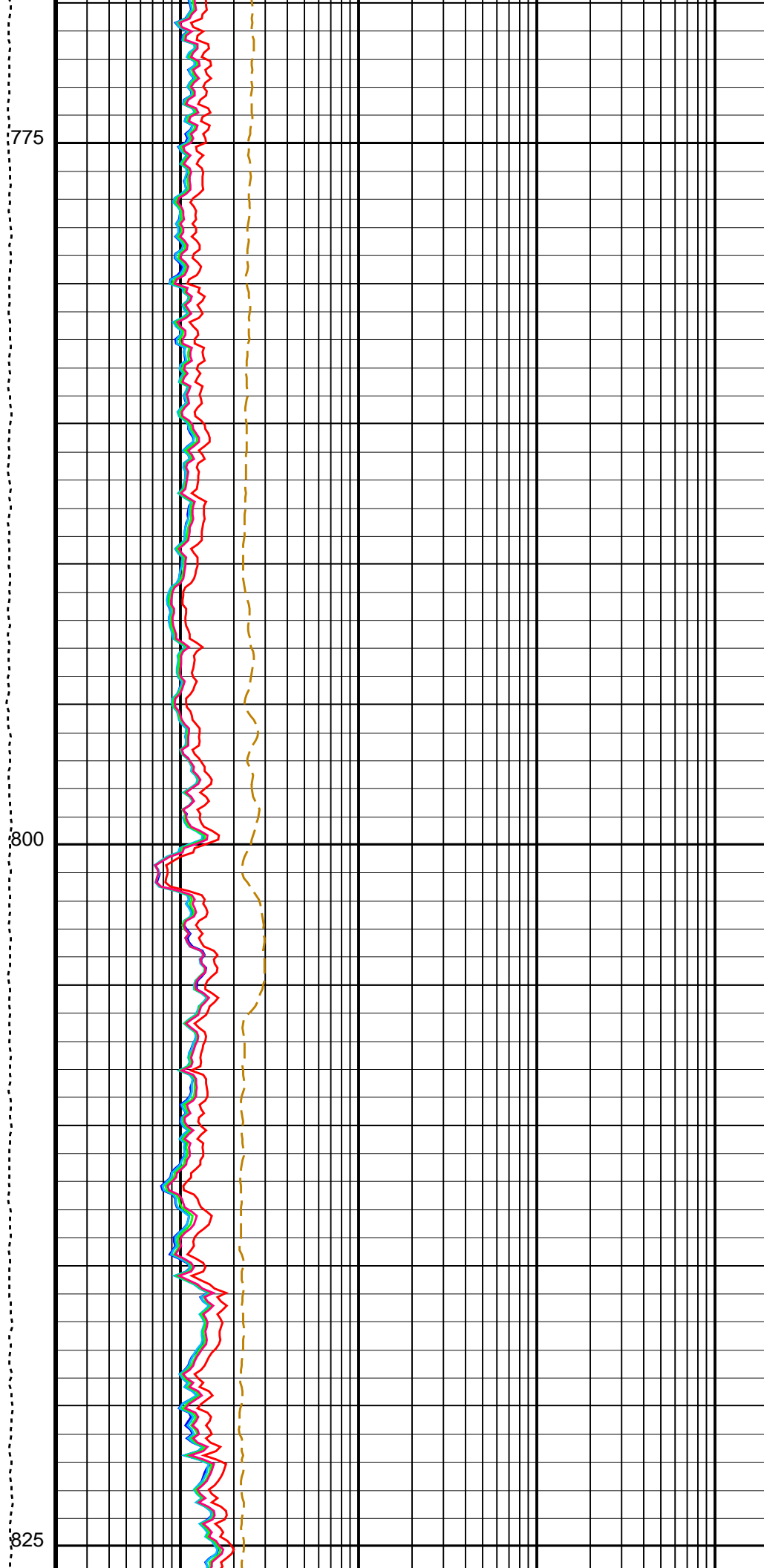
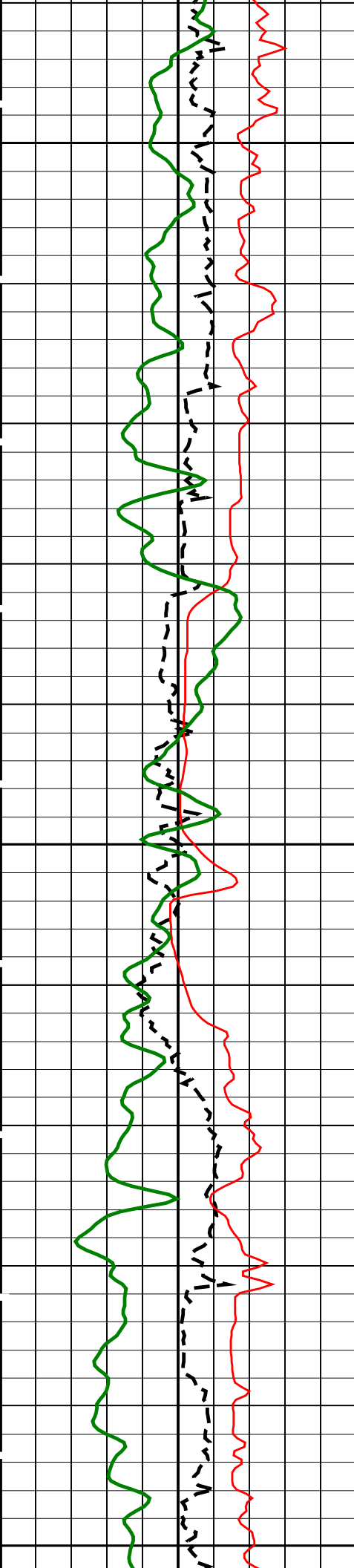
OP System Version: 19C0-187

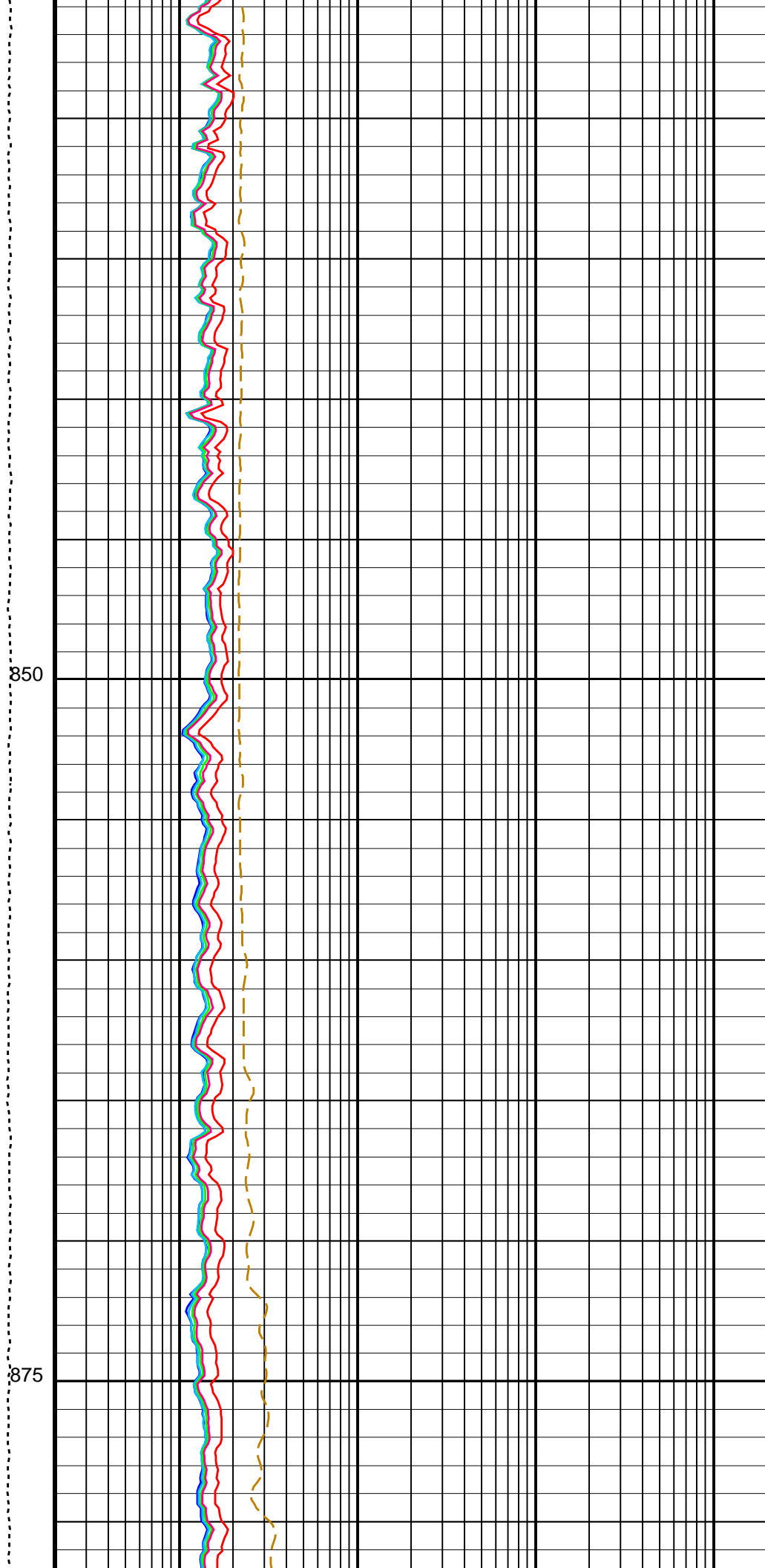
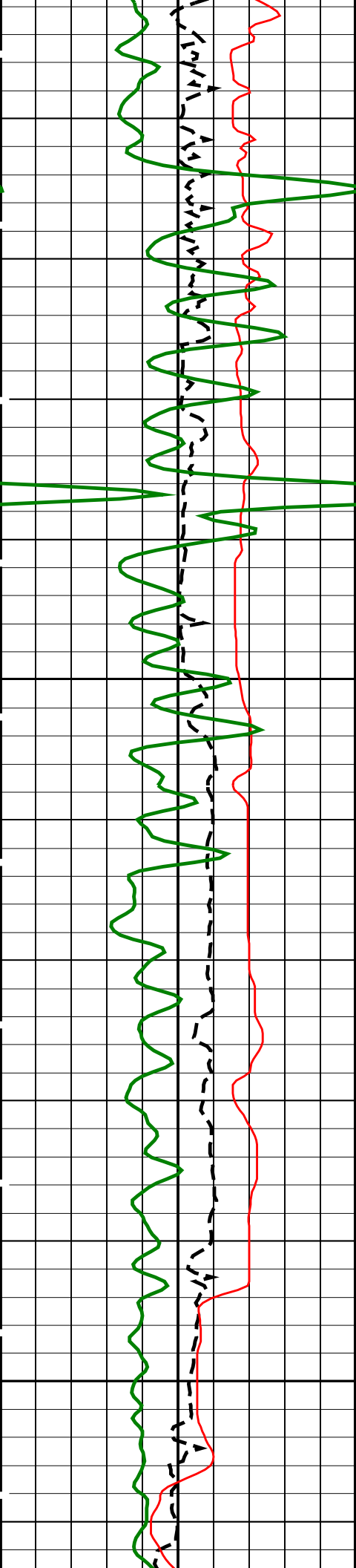
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HLDS-DA	19C0-187	LDSC-AA	19C0-187
HNGC-B	19C0-187	HNGS-BA	19C0-187
EDTC-B	SKK-5169-EDTCB		

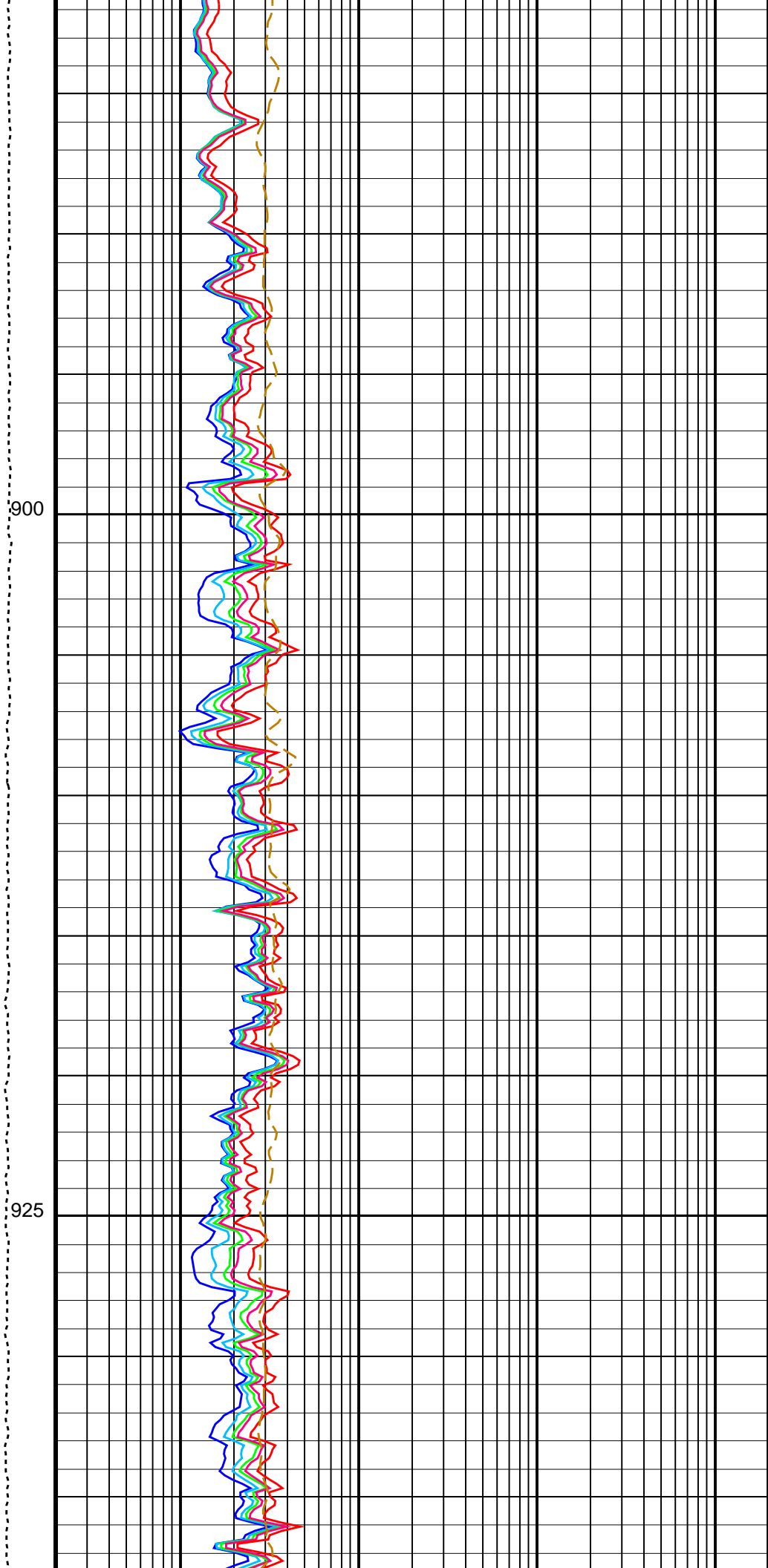
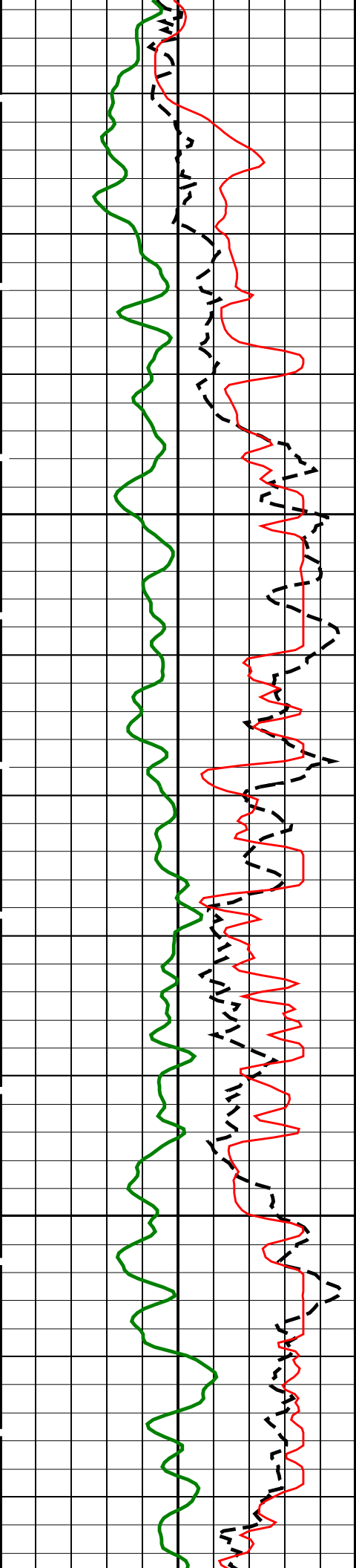
PIP SUMMARY

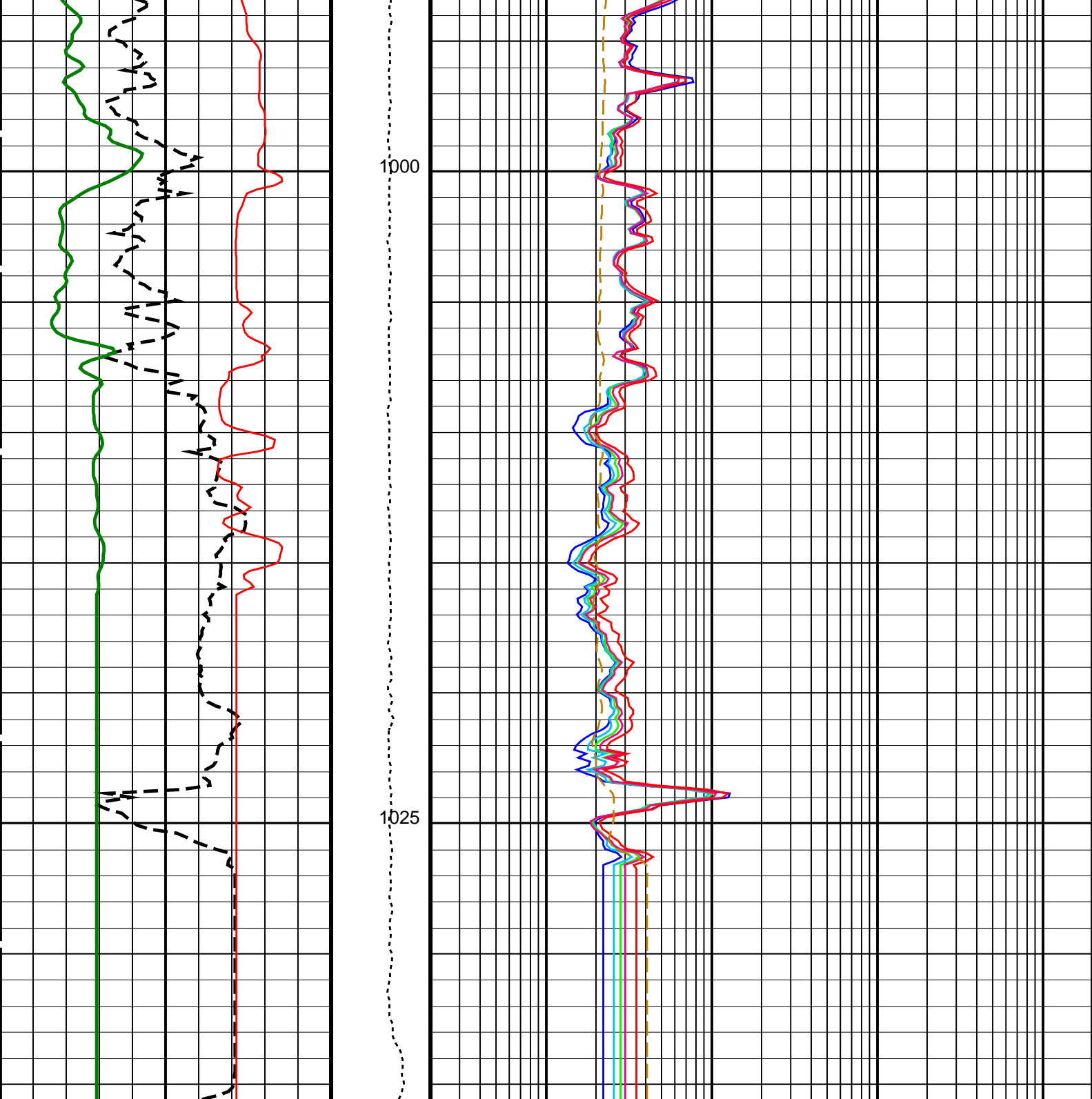
Time Mark Every 60 S











<div>HLDS Caliper (LCAL)</div> <div>020</div> <div>(IN)</div>	<div>Tension (TENS)</div> <div>05000</div> <div>(LBF)</div>	<div>HRLT Resistivity 1 (RLA1)</div> <div>0.22000</div> <div>(OHMM)</div>
<div>Invasion Diameter (DI_HRLT)</div> <div>050</div> <div>(IN)</div>		<div>HRLT Resistivity 2 (RLA2)</div> <div>0.22000</div> <div>(OHMM)</div>
<div>HNGS Spectroscopy Gamma Ray (HSGR)</div> <div>0150</div> <div>(GAPI)</div>		<div>HRLT Resistivity 3 (RLA3)</div> <div>0.22000</div> <div>(OHMM)</div>
		<div>HRLT Resistivity 4 (RLA4)</div> <div>0.22000</div> <div>(OHMM)</div>
		<div>HRLT Resistivity 5 (RLA5)</div> <div>0.22000</div> <div>(OHMM)</div>

		HRLT Mud Resistivity (RM_HRLT) (OHMM)		200
0.02				
PIP SUMMARY				
Time Mark Every 60 S				
Parameters				
DLIS Name	Description	Value		
HRLT-B: High Resolution Laterolog Array - B				
BHS	Borehole Status	OPEN		
BHT	Bottom Hole Temperature (used in calculations)	70	DEGF	
GCSE	Generalized Caliper Selection	LCAL		
GGRD	Geothermal Gradient	0.01	DF/F	
GRSE	Generalized Mud Resistivity Selection	CHART_GEN 9		
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE		
KFAC_HRLT	HRLT K Factor Option	SONDE		
PROCVN	Inversion Selection	ON		
PROCMFL	Inversion Micro-Resistivity Selection	NO_EXTERNAL_RXO		
PROCMSO	Mechanical Standoff Fin Size	0	IN	
PROCRM	Processing Mud Resistivity Select	HRLT_Compute		
PROCSPO	Sonde Position	Centered		
SHT	Surface Hole Temperature	20	DEGF	
HNGS-BA: Hostile Natural Gamma Ray Sonde				
BAR1	HNGS Detector 1 Barite Constant	1		
BAR2	HNGS Detector 2 Barite Constant	1		
BHK	HNGS Borehole Potassium Correction Concentration	0		
BHS	Borehole Status	OPEN		
BHT	Bottom Hole Temperature (used in calculations)	70	DEGF	
CSD1	Inner Casing Outer Diameter	0	IN	
CSD2	Outer Casing Outer Diameter	0	IN	
CSW1	Inner Casing Weight	0	LB/F	
CSW2	Outer Casing Weight	0	LB/F	
DBCC	HNGS Barite Constant Correction Flag	NONE		
GCSE	Generalized Caliper Selection	LCAL		
GGRD	Geothermal Gradient	0.01	DF/F	
GRSE	Generalized Mud Resistivity Selection	CHART_GEN 9		
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE		
H1P	HNGS Detector 1 Allow/Disallow In Processing	ALLOW		
H2P	HNGS Detector 2 Allow/Disallow In Processing	ALLOW		
HABK	HNGS Borehole Potassium Running Average	-0.0016371		
HALF	HNGS Alpha Filter Length	60	IN	
HCRB	HNGS Apply Borehole Potassium Correction	NONE		
HMWM	Mud Weighting Material	NATU		
HNPE	HNGS Processing Enable	YES		
S1BI	HNGS Detector 1 Calibration Bismuth Count Rate	1.3	CPS	
S2BI	HNGS Detector 2 Calibration Bismuth Count Rate	1.3	CPS	
SGRC	HNGS Standard Gamma-Ray Correction Flag	YES		
SHT	Surface Hole Temperature	20	DEGF	
TPOS	Tool Position	ECCE		
VBA1	HNGS Detector 1 Variable Barite Factor Running Average	0.993868		
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	1.00721		
EDTC-B: Enhanced DTS Cartridge				
BHS	Borehole Status	OPEN		
BHT	Bottom Hole Temperature (used in calculations)	70	DEGF	
GCSE	Generalized Caliper Selection	LCAL		
GGRD	Geothermal Gradient	0.01	DF/F	
GRSE	Generalized Mud Resistivity Selection	CHART_GEN 9		
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE		
SHT	Surface Hole Temperature	20	DEGF	
System and Miscellaneous				
BS	Bit Size	9.875	IN	
DFD	Drilling Fluid Density	1.26	G/C3	
TD	Total Depth	1115.5	M	
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OP System Version: 19C0-187				
MSS_LDEO-A	19C0-187	HRLT-B	19C0-187	
HLDS-DA	19C0-187	LDSC-AA	19C0-187	
HNGC-B	19C0-187	HNGS-BA	19C0-187	
EDTC-B	SKK-5169-EDTCB			
Output DLIS Files				
DEFAULT	MSS_LDEO_HRLA_LDL_010LUP	FN:9	PRODUCER	29-Dec-2022 16:01

Output DLIS Files

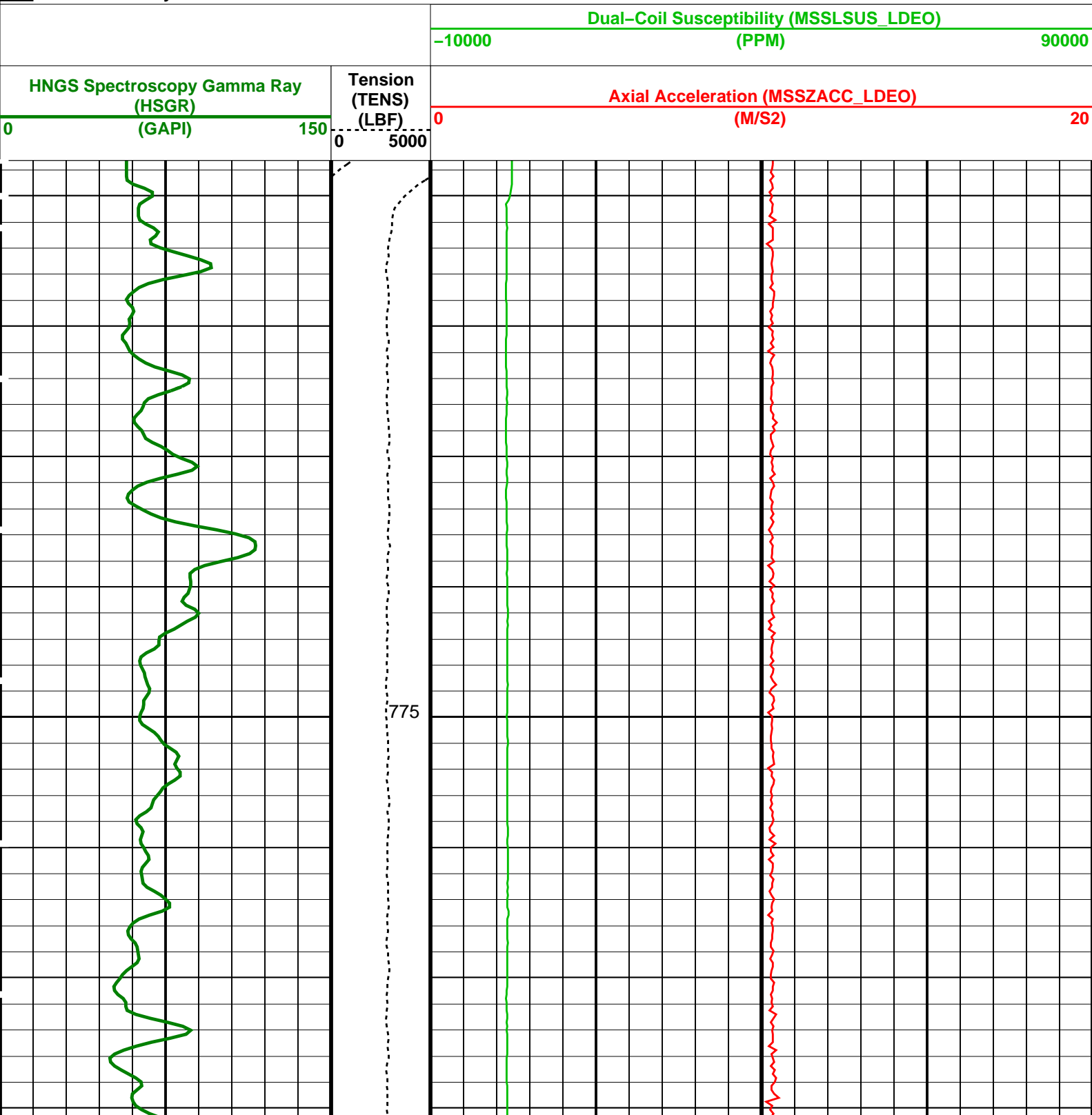
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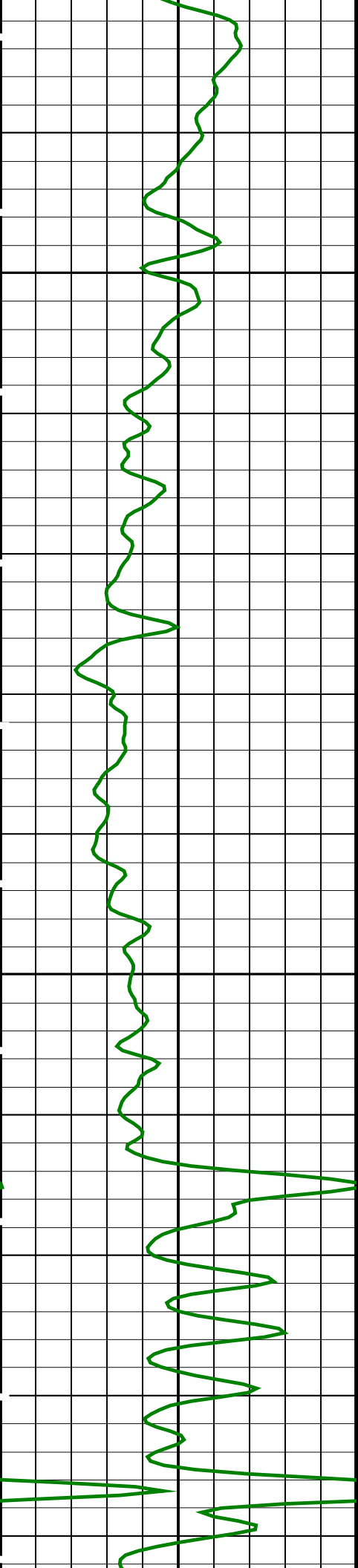
OP System Version: 19C0-187

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EDTC-BSKK-5169-EDTCB

PIP SUMMARY

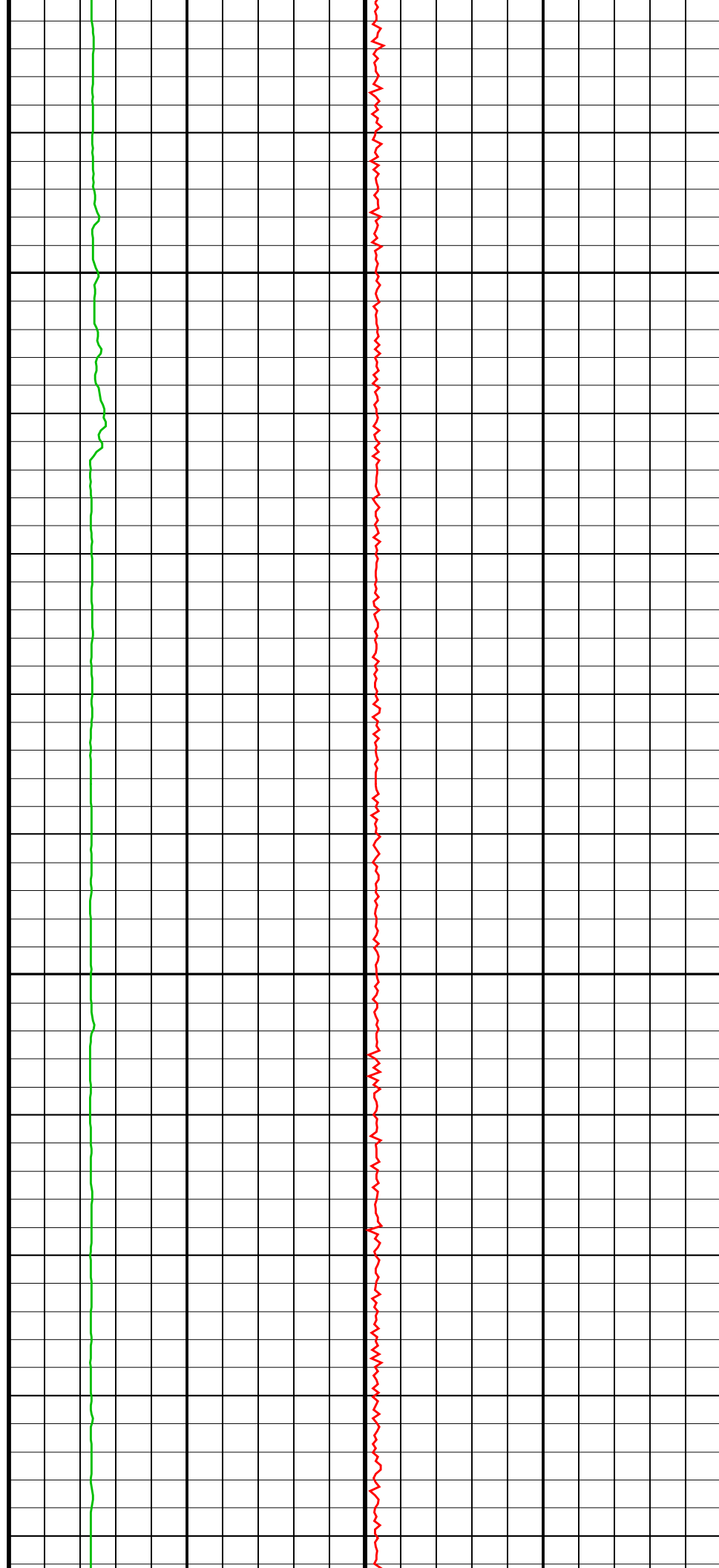
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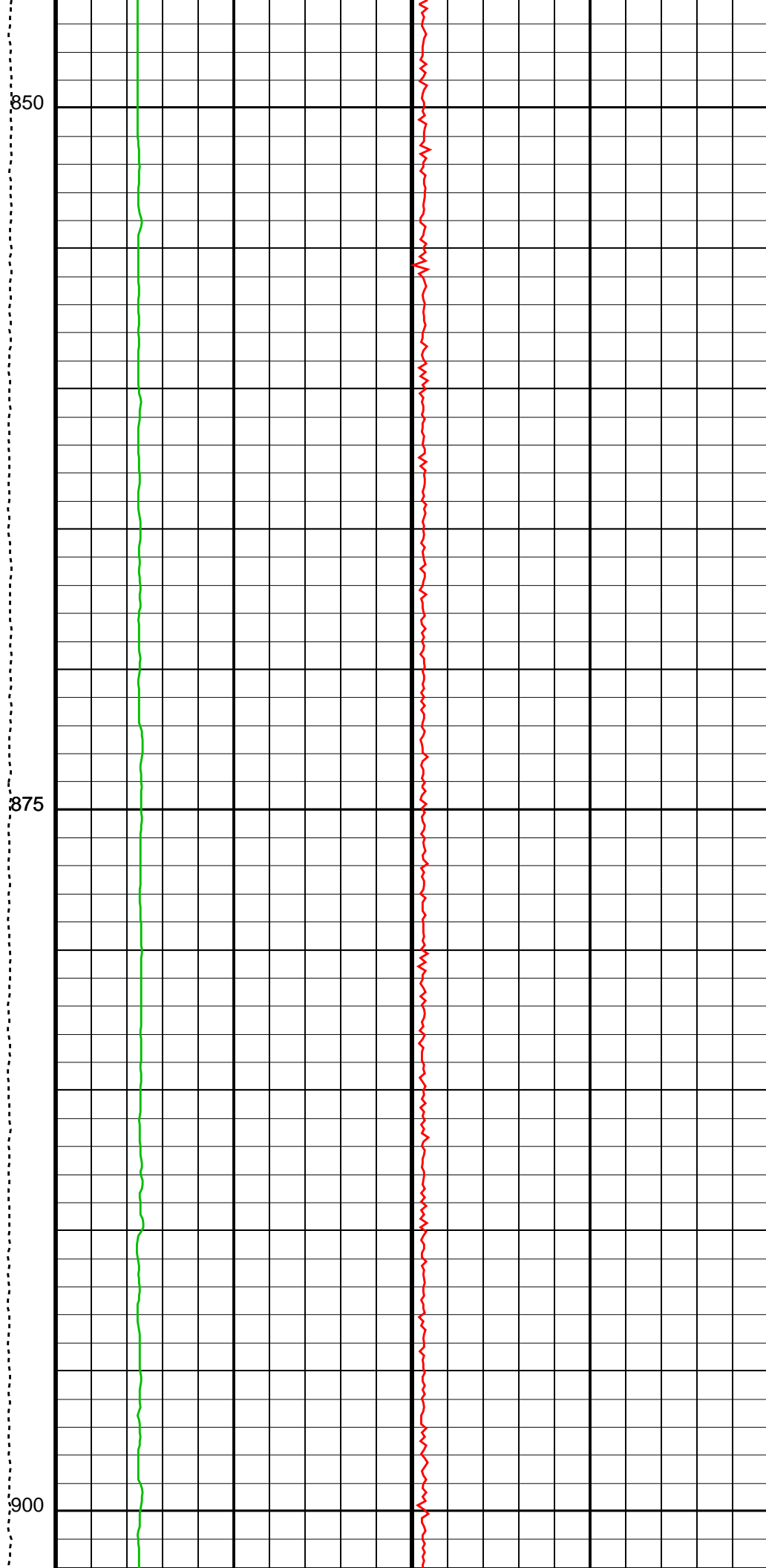
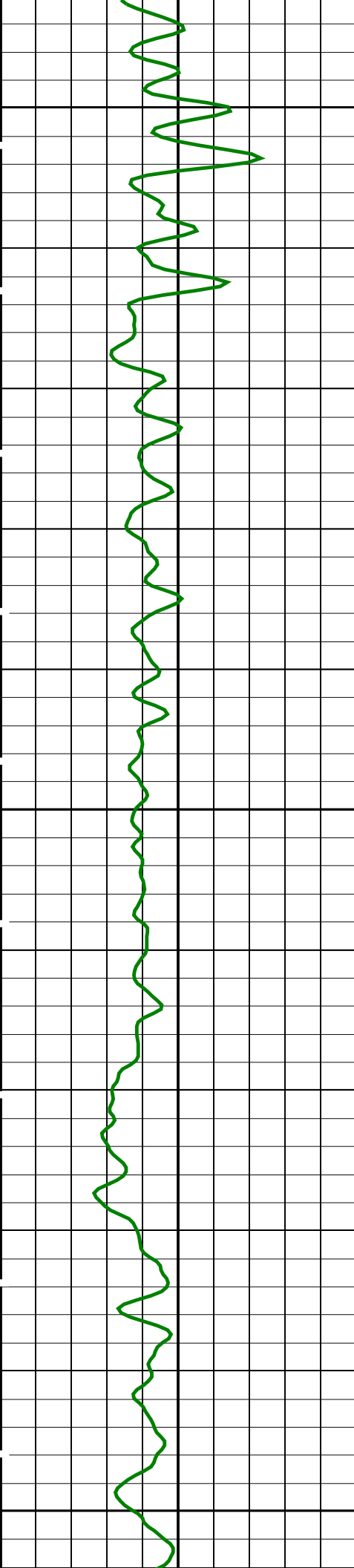


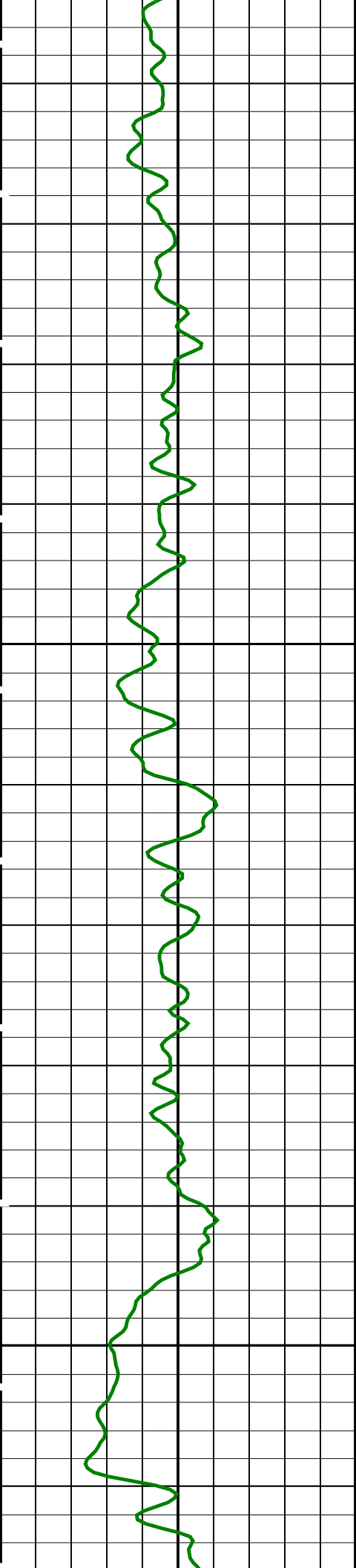


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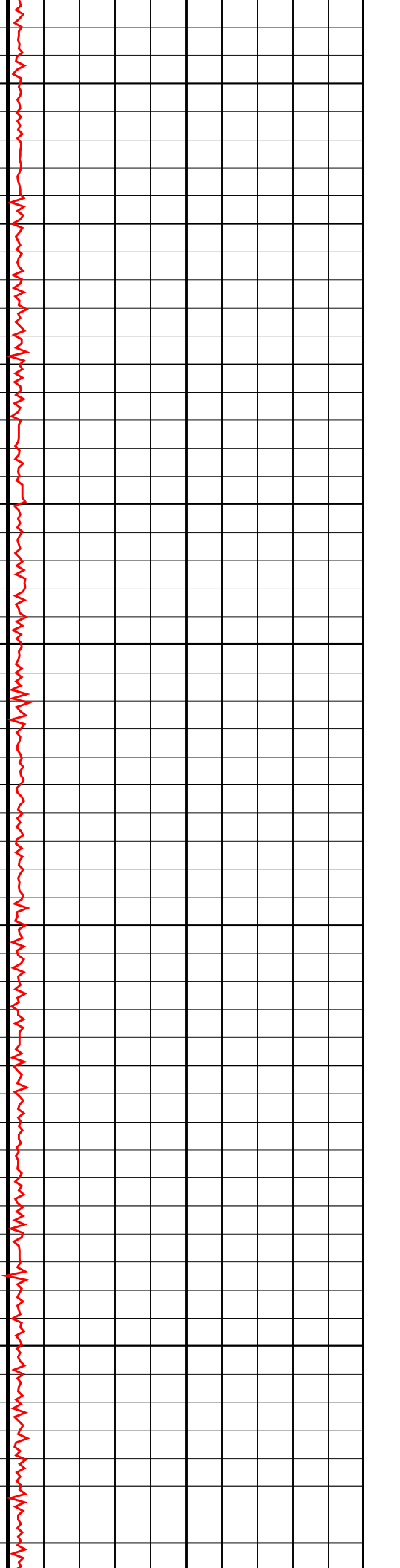
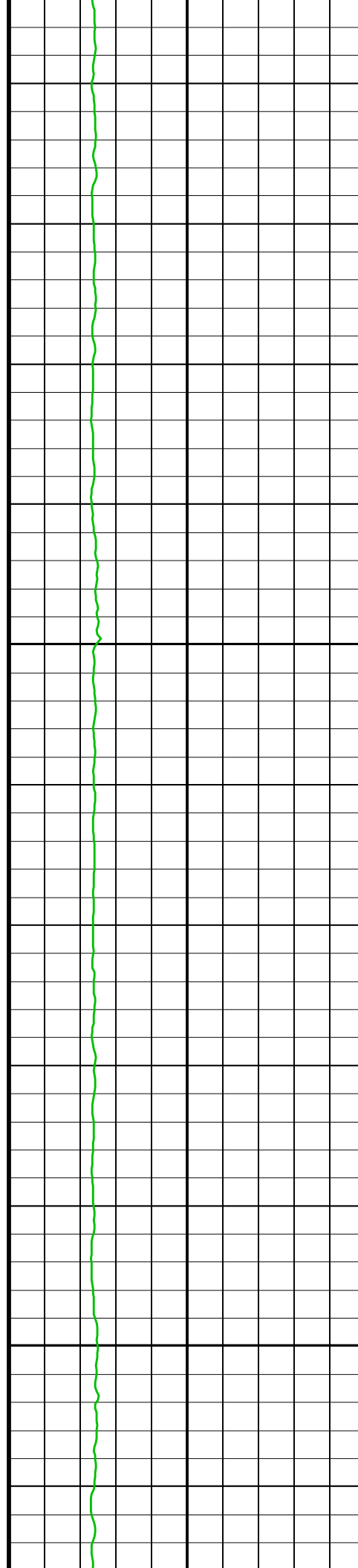
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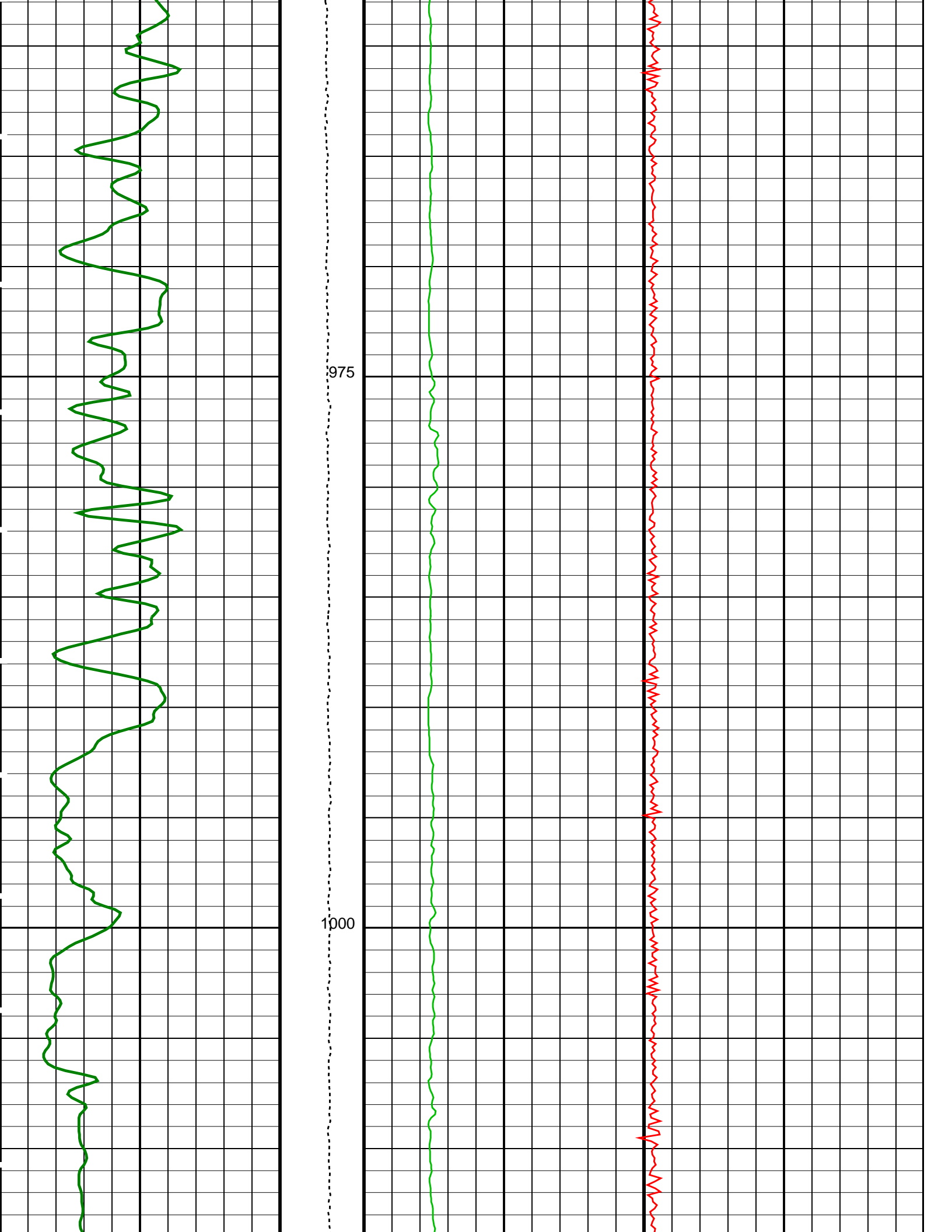


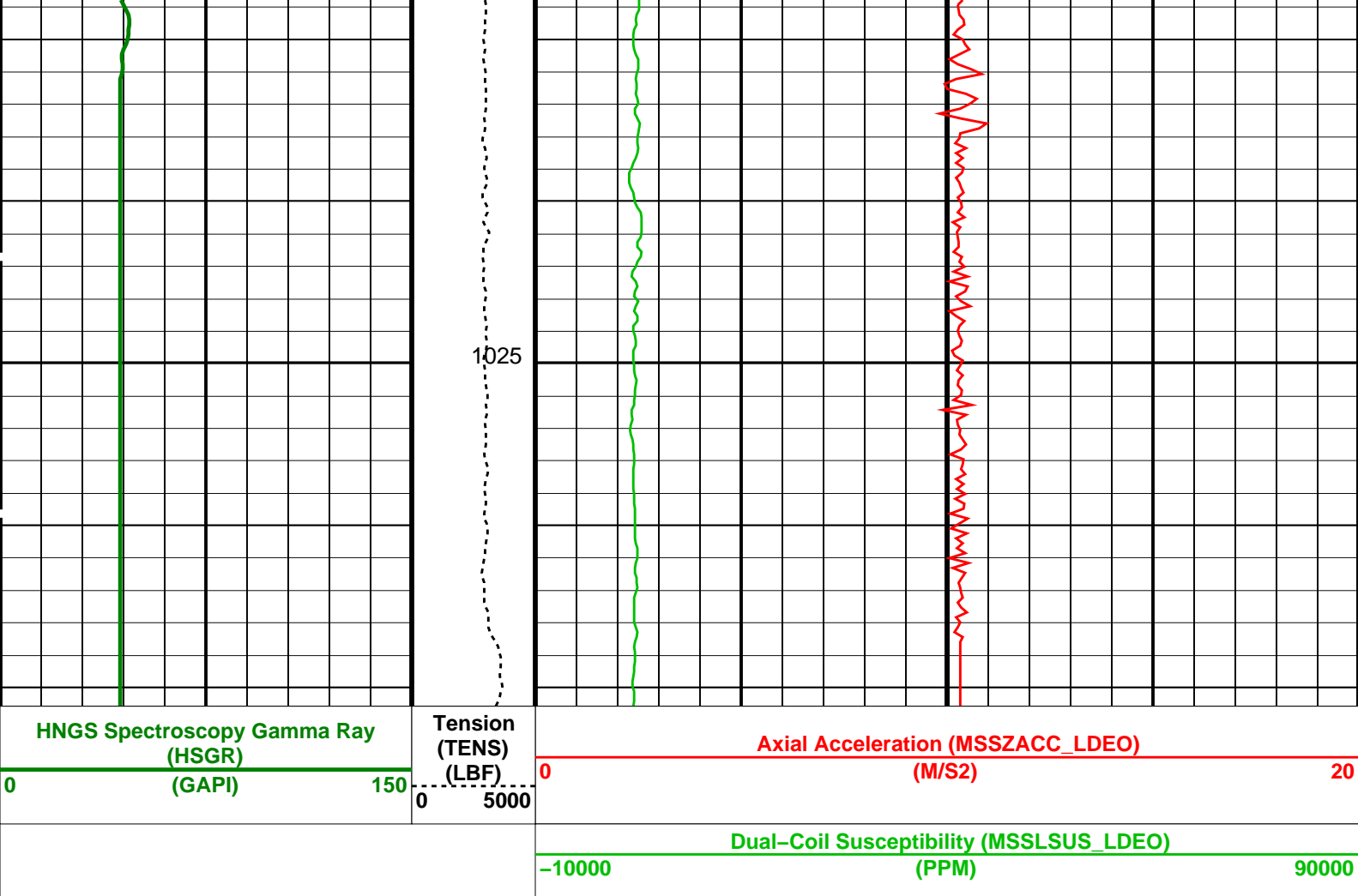




925







PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value	
HRLT-B: High Resolution Laterolog Array – B			
BHS	Borehole Status	OPEN	
GCSE	Generalized Caliper Selection	LCAL	
HNGS-BA: Hostile Natural Gamma Ray Sonde			
BAR1	HNGS Detector 1 Barite Constant	1	
BAR2	HNGS Detector 2 Barite Constant	1	
BHK	HNGS Borehole Potassium Correction Concentration	0	
BHS	Borehole Status	OPEN	
CSD1	Inner Casing Outer Diameter	0	IN
CSD2	Outer Casing Outer Diameter	0	IN
CSW1	Inner Casing Weight	0	LB/F
CSW2	Outer Casing Weight	0	LB/F
DBCC	HNGS Barite Constant Correction Flag	NONE	
GCSE	Generalized Caliper Selection	LCAL	
H1P	HNGS Detector 1 Allow/Disallow In Processing	ALLOW	
H2P	HNGS Detector 2 Allow/Disallow In Processing	ALLOW	
HABK	HNGS Borehole Potassium Running Average	-0.0016371	
HALF	HNGS Alpha Filter Length	60	IN
HCRB	HNGS Apply Borehole Potassium Correction	NONE	
HMWM	Mud Weighting Material	NATU	
HNPE	HNGS Processing Enable	YES	
S1BI	HNGS Detector 1 Calibration Bismuth Count Rate	1.3	CPS
S2BI	HNGS Detector 2 Calibration Bismuth Count Rate	1.3	CPS
SGRC	HNGS Standard Gamma-Ray Correction Flag	YES	
TPOS	Tool Position	ECCE	
VBA1	HNGS Detector 1 Variable Barite Factor Running Average	0.993868	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	1.00721	
EDTC-B: Enhanced DTS Cartridge			
BHS	Borehole Status	OPEN	
GCSE	Generalized Caliper Selection	LCAL	
System and Miscellaneous			
BS	Bit Size	9.875	IN
DFD	Drilling Fluid Density	1.26	G/C3

OP System Version: 19C0-187

MSS_LDEO-A	19C0-187	HRLT-B	19C0-187
HLDS-DA	19C0-187	LDSC-AA	19C0-187
HNGC-B	19C0-187	HNGS-BA	19C0-187
EDTC-B	SKK-5169-EDTCB		

Output DLIS Files

DEFAULT MSS_LDEO_HRLA_LDL_010LUP FN:9 PRODUCER 29-Dec-2022 16:01



Calibrations

MAXIS Field Log

Calibration and Check Summary

Measurement	Nominal	Master	Before	After	Change	Limit	Units
High Resolution Laterolog Array – B Wellsite Calibration – HRLT M01							
Before: 29-Dec-2022 13:16							
HRLT M0-M1 Voltage Plus – 0	0	N/A	-318.9	N/A	N/A	9.681	UV
HRLT M0-M1 Voltage Plus – 1	0	N/A	-333.6	N/A	N/A	9.681	UV
HRLT M0-M1 Voltage Plus – 2	0	N/A	-340.3	N/A	N/A	9.681	UV
HRLT M0-M1 Voltage Plus – 3	0	N/A	-330.4	N/A	N/A	9.681	UV
HRLT M0-M1 Voltage Plus – 4	0	N/A	-320.3	N/A	N/A	9.681	UV
HRLT M0-M1 Voltage Plus – 5	0	N/A	-321.8	N/A	N/A	9.681	UV
HRLT M0-M1 Voltage Plus – 6	0	N/A	323.8	N/A	N/A	9.681	UV
HRLT M0-M1 Voltage Plus – 7	0	N/A	-322.7	N/A	N/A	9.681	UV
High Resolution Laterolog Array – B Wellsite Calibration – HRLT M12							
Before: 29-Dec-2022 13:16							
HRLT M1-M2 Voltage Plus – 0	0	N/A	1742	N/A	N/A	53.42	UV
HRLT M1-M2 Voltage Plus – 1	0	N/A	1824	N/A	N/A	53.42	UV
HRLT M1-M2 Voltage Plus – 2	0	N/A	1855	N/A	N/A	53.42	UV
HRLT M1-M2 Voltage Plus – 3	0	N/A	1802	N/A	N/A	53.42	UV
HRLT M1-M2 Voltage Plus – 4	0	N/A	1748	N/A	N/A	53.42	UV
HRLT M1-M2 Voltage Plus – 5	0	N/A	1758	N/A	N/A	53.42	UV
HRLT M1-M2 Voltage Plus – 6	0	N/A	-1777	N/A	N/A	53.42	UV
HRLT M1-M2 Voltage Plus – 7	0	N/A	1781	N/A	N/A	53.42	UV
High Resolution Laterolog Array – B Wellsite Calibration – HRLT M23							
Before: 29-Dec-2022 13:16							
HRLT M2-M3 Voltage Plus – 0	0	N/A	1733	N/A	N/A	53.42	UV
HRLT M2-M3 Voltage Plus – 1	0	N/A	1826	N/A	N/A	53.42	UV
HRLT M2-M3 Voltage Plus – 2	0	N/A	1859	N/A	N/A	53.42	UV
HRLT M2-M3 Voltage Plus – 3	0	N/A	1809	N/A	N/A	53.42	UV
HRLT M2-M3 Voltage Plus – 4	0	N/A	1750	N/A	N/A	53.42	UV
HRLT M2-M3 Voltage Plus – 5	0	N/A	1760	N/A	N/A	53.42	UV
HRLT M2-M3 Voltage Plus – 6	0	N/A	-1769	N/A	N/A	53.42	UV
HRLT M2-M3 Voltage Plus – 7	0	N/A	1781	N/A	N/A	53.42	UV
High Resolution Laterolog Array – B Wellsite Calibration – HRLT V34							
Before: 29-Dec-2022 13:16							
HRLT A3-A4 Voltage Plus – 0	0	N/A	68660	N/A	N/A	2100	UV
HRLT A3-A4 Voltage Plus – 1	0	N/A	72170	N/A	N/A	2100	UV
HRLT A3-A4 Voltage Plus – 2	0	N/A	73760	N/A	N/A	2100	UV
HRLT A3-A4 Voltage Plus – 3	0	N/A	72050	N/A	N/A	2100	UV
HRLT A3-A4 Voltage Plus – 4	0	N/A	69640	N/A	N/A	2100	UV
HRLT A3-A4 Voltage Plus – 5	0	N/A	70090	N/A	N/A	2100	UV
HRLT A3-A4 Voltage Plus – 6	0	N/A	-68890	N/A	N/A	2100	UV
HRLT A3-A4 Voltage Plus – 7	0	N/A	72170	N/A	N/A	2100	UV

HRLT A3-A4 Voltage Plus - 7	0		70000	N/A	N/A	2100	UV
High Resolution Laterolog Array - B Wellsite Calibration - HRLT V45							
Before: 29-Dec-2022 13:16							
HRLT A4-A5 Voltage Plus - 0	0	N/A	68750	N/A	N/A	2100	UV
HRLT A4-A5 Voltage Plus - 1	0	N/A	72390	N/A	N/A	2100	UV
HRLT A4-A5 Voltage Plus - 2	0	N/A	73950	N/A	N/A	2100	UV
HRLT A4-A5 Voltage Plus - 3	0	N/A	72180	N/A	N/A	2100	UV
HRLT A4-A5 Voltage Plus - 4	0	N/A	69740	N/A	N/A	2100	UV
HRLT A4-A5 Voltage Plus - 5	0	N/A	70180	N/A	N/A	2100	UV
HRLT A4-A5 Voltage Plus - 6	0	N/A	-69100	N/A	N/A	2100	UV
HRLT A4-A5 Voltage Plus - 7	0	N/A	70000	N/A	N/A	2100	UV

High Resolution Laterolog Array - B Wellsite Calibration - HRLT V56							
Before: 29-Dec-2022 13:16							
HRLT A5-A6 Voltage Plus - 0	0	N/A	68610	N/A	N/A	2100	UV
HRLT A5-A6 Voltage Plus - 1	0	N/A	72220	N/A	N/A	2100	UV
HRLT A5-A6 Voltage Plus - 2	0	N/A	73820	N/A	N/A	2100	UV
HRLT A5-A6 Voltage Plus - 3	0	N/A	72060	N/A	N/A	2100	UV
HRLT A5-A6 Voltage Plus - 4	0	N/A	69600	N/A	N/A	2100	UV
HRLT A5-A6 Voltage Plus - 5	0	N/A	70050	N/A	N/A	2100	UV
HRLT A5-A6 Voltage Plus - 6	0	N/A	-68940	N/A	N/A	2100	UV
HRLT A5-A6 Voltage Plus - 7	0	N/A	70000	N/A	N/A	2100	UV

High Resolution Laterolog Array - B Wellsite Calibration - HRLT VTP							
Before: 29-Dec-2022 13:16							
HRLT Torpedo-M0 Voltage - 0	0	N/A	-68110	N/A	N/A	2100	UV
HRLT Torpedo-M0 Voltage - 1	0	N/A	-72020	N/A	N/A	2100	UV
HRLT Torpedo-M0 Voltage - 2	0	N/A	-73630	N/A	N/A	2100	UV
HRLT Torpedo-M0 Voltage - 3	0	N/A	-71950	N/A	N/A	2100	UV
HRLT Torpedo-M0 Voltage - 4	0	N/A	-69550	N/A	N/A	2100	UV
HRLT Torpedo-M0 Voltage - 5	0	N/A	-70000	N/A	N/A	2100	UV
HRLT Torpedo-M0 Voltage - 6	0	N/A	68690	N/A	N/A	2100	UV
HRLT Torpedo-M0 Voltage - 7	0	N/A	-70000	N/A	N/A	2100	UV

High Resolution Laterolog Array - B Wellsite Calibration - HRLT VBD							
Before: 29-Dec-2022 13:16							
HRLT Bridle#9-M0 Voltage - 0	0	N/A	-68150	N/A	N/A	2100	UV
HRLT Bridle#9-M0 Voltage - 1	0	N/A	-72100	N/A	N/A	2100	UV
HRLT Bridle#9-M0 Voltage - 2	0	N/A	-73720	N/A	N/A	2100	UV
HRLT Bridle#9-M0 Voltage - 3	0	N/A	-72030	N/A	N/A	2100	UV
HRLT Bridle#9-M0 Voltage - 4	0	N/A	-69590	N/A	N/A	2100	UV
HRLT Bridle#9-M0 Voltage - 5	0	N/A	-70040	N/A	N/A	2100	UV
HRLT Bridle#9-M0 Voltage - 6	0	N/A	68790	N/A	N/A	2100	UV
HRLT Bridle#9-M0 Voltage - 7	0	N/A	-70000	N/A	N/A	2100	UV

High Resolution Laterolog Array - B Wellsite Calibration - HRLT ISO							
Before: 29-Dec-2022 13:16							
HRLT Source Current Plus - 0	0	N/A	284.3	N/A	N/A	8.520	UA
HRLT Source Current Plus - 1	0	N/A	281.1	N/A	N/A	8.520	UA
HRLT Source Current Plus - 2	0	N/A	281.1	N/A	N/A	8.520	UA
HRLT Source Current Plus - 3	0	N/A	281.1	N/A	N/A	8.520	UA
HRLT Source Current Plus - 4	0	N/A	281.1	N/A	N/A	8.520	UA
HRLT Source Current Plus - 5	0	N/A	281.1	N/A	N/A	8.520	UA
HRLT Source Current Plus - 6	0	N/A	281.1	N/A	N/A	8.520	UA
HRLT Source Current Plus - 7	0	N/A	281.1	N/A	N/A	8.520	UA

High Resolution Laterolog Array - B Wellsite Calibration - HRLT MV							
Before: 29-Dec-2022 13:16							
HRLT Vertical Voltage PI - 0	0	N/A	-320.5	N/A	N/A	9.681	UV
HRLT Vertical Voltage PI - 1	0	N/A	-327.3	N/A	N/A	9.681	UV
HRLT Vertical Voltage PI - 2	0	N/A	-332.9	N/A	N/A	9.681	UV
HRLT Vertical Voltage PI - 3	0	N/A	-321.7	N/A	N/A	9.681	UV
HRLT Vertical Voltage PI - 4	0	N/A	-309.4	N/A	N/A	9.681	UV
HRLT Vertical Voltage PI - 5	0	N/A	-326.0	N/A	N/A	9.681	UV
HRLT Vertical Voltage PI - 6	0	N/A	330.1	N/A	N/A	9.681	UV
HRLT Vertical Voltage PI - 7	0	N/A	-322.7	N/A	N/A	9.681	UV

Hostile Litho-Density Sonde Wellsite Calibration - Background Measurement							
Master: 6-Oct-2022 3:52 Before: 29-Dec-2022 13:22							
SS Cs Resolution Bkg	9.000	7.725	7.676	N/A	N/A	1.800	%
LS Cs Resolution Bkg	9.000	8.105	8.027	N/A	N/A	1.800	%
LSW1 Background	100.0	68.70	67.04	N/A	N/A	3.000	CPS
LSW2 Background	100.0	62.53	61.38	N/A	N/A	3.000	CPS
LSW3 Background	200.0	140.4	137.6	N/A	N/A	6.000	CPS
LSW4 Background	250.0	176.1	175.1	N/A	N/A	7.500	CPS
LSW5 Background	600.0	415.7	411.7	N/A	N/A	18.00	CPS
SSW1 Background	100.0	66.65	65.12	N/A	N/A	3.000	CPS
SSW2 Background	200.0	114.0	113.8	N/A	N/A	6.000	CPS
SSW3 Background	500.0	320.7	318.5	N/A	N/A	15.00	CPS
SSW4 Background	270.0	174.7	172.5	N/A	N/A	8.100	CPS
SSW5 Background	200.0	124.9	124.8	N/A	N/A	6.000	CPS

Hostile Litho-Density Sonde Wellsite Calibration – Aluminum Measurement							
Master: 6-Oct-2022 4:14							
LSW1 Aluminum	600.0	408.9	N/A	N/A	N/A	N/A	CPS
LSW2 Aluminum	900.0	599.6	N/A	N/A	N/A	N/A	CPS
LSW3 Aluminum	1100	730.9	N/A	N/A	N/A	N/A	CPS
LSW4 Aluminum	580.0	372.2	N/A	N/A	N/A	N/A	CPS
LSW5 Aluminum	570.0	336.4	N/A	N/A	N/A	N/A	CPS
SSW1 Aluminum	2800	1969	N/A	N/A	N/A	N/A	CPS
SSW2 Aluminum	8000	5433	N/A	N/A	N/A	N/A	CPS
SSW3 Aluminum	11600	7673	N/A	N/A	N/A	N/A	CPS
SSW4 Aluminum	5000	3059	N/A	N/A	N/A	N/A	CPS
SSW5 Aluminum	660.0	345.4	N/A	N/A	N/A	N/A	CPS
Hostile Litho-Density Sonde Wellsite Calibration – Lithology Measurement							
Master: 6-Oct-2022 4:09							
LSW1 Iron	400.0	286.6	N/A	N/A	N/A	N/A	CPS
LSW2 Iron	730.0	496.9	N/A	N/A	N/A	N/A	CPS
LSW3 Iron	1000	664.2	N/A	N/A	N/A	N/A	CPS
LSW4 Iron	520.0	346.6	N/A	N/A	N/A	N/A	CPS
LSW5 Iron	470.0	319.5	N/A	N/A	N/A	N/A	CPS
SSW1 Iron	2100	1485	N/A	N/A	N/A	N/A	CPS
SSW2 Iron	6800	4660	N/A	N/A	N/A	N/A	CPS
SSW3 Iron	10800	7197	N/A	N/A	N/A	N/A	CPS
SSW4 Iron	4600	2890	N/A	N/A	N/A	N/A	CPS
SSW5 Iron	580.0	319.4	N/A	N/A	N/A	N/A	CPS
Hostile Litho-Density Sonde Wellsite Calibration – Caliper Calibration							
Before: 19-Dec-2022 20:02							
HLDS Caliper Small Ring	12.00	N/A	16.13	N/A	N/A	N/A	IN
HLDS Caliper Large Ring	15.19	N/A	20.15	N/A	N/A	N/A	IN
Hostile Natural Gamma Ray Sonde Wellsite Calibration – Detector 1 Check							
Master: Calibration out of date 13-Feb-2022 21:25 Before: 29-Dec-2022 13:24							
Na 511 Peak Loc	40.00	39.60	39.75	N/A	N/A	1.000	
Na 511 Peak Res	15.50	17.00	16.72	N/A	N/A	2.000	%
High Voltage	1150	1202	1195	N/A	N/A	N/A	V
Na 1785 Peak Loc	142.6	142.6	143.5	N/A	N/A	7.000	
Na 1785 Peak Res	8.500	9.539	7.610	N/A	N/A	2.000	%
Temperature	15.50	27.53	20.60	N/A	N/A	N/A	DEGC
Na Count Rate	45.00	10.98	6.754	N/A	N/A	8.000	CPS
Hostile Natural Gamma Ray Sonde Wellsite Calibration – Detector 2 Check							
Master: Calibration out of date 13-Feb-2022 21:25 Before: 29-Dec-2022 13:24							
Na 511 Peak Loc	40.00	40.51	39.49	N/A	N/A	1.000	
Na 511 Peak Res	15.50	16.47	15.82	N/A	N/A	2.000	%
High Voltage	1150	1129	1075	N/A	N/A	N/A	V
Na 1785 Peak Loc	142.6	145.0	142.5	N/A	N/A	7.000	
Na 1785 Peak Res	8.500	9.043	9.727	N/A	N/A	2.000	%
Temperature	15.50	28.33	19.58	N/A	N/A	N/A	DEGC
Na Count Rate	45.00	11.22	6.722	N/A	N/A	8.000	CPS
Hostile Natural Gamma Ray Sonde Wellsite Calibration – Ratio Of Detector 1 To Detector 2							
Master: Calibration out of date 13-Feb-2022 21:25 Before: 29-Dec-2022 13:24							
Coincidence Count Rate Ratio	1.000	0.9687	1.010	N/A	N/A	0.05000	
Enhanced DTS Cartridge Wellsite Calibration – EDTC Accelerometer Calibration							
Before: Calibration out of date 29-Nov-2022 7:51							
EDTC Z-Axis Acceleration	9.810	N/A	9.871	N/A	N/A	N/A	M/S2
Enhanced DTS Cartridge Wellsite Calibration – Detector Calibration							
Before: Calibration out of date 29-Nov-2022 7:50							
Gamma Ray (Jig – Bkg)	112.1	N/A	112.1	N/A	N/A	10.19	GAPI
Gamma Ray (Calibrated)	165.0	N/A	160.4	N/A	N/A	15.00	GAPI

High Resolution Laterolog Array – B / Equipment Identification

Primary Equipment:

HRLT Sonde

HRLS – B

768

Auxiliary Equipment:

HRLT lower Housing

HRLH – B

1869

HRLT Lower Cartridge

HRLC – B

1897

HRLT upper Housing

HRUH – B









975









HRLT Upper Cartridge









HRUC – B






964




High Resolution Laterolog Array – B Wellsite Calibration

HRLT M01						
Idx	Phase	HRLT M0–M1 Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		–318.9	–322.7	–280.7	–379.7
1	Before		–333.6	–322.7	–280.7	–379.7
2	Before		–340.3	–322.7	–280.7	–379.7
3	Before		–330.4	–322.7	–280.7	–379.7
4	Before		–320.3	–322.7	–280.7	–379.7
5	Before		–321.8	–322.7	–280.7	–379.7
6	Before		323.8	322.7	379.7	280.7
7	Before		–322.7	–322.7	–280.7	–379.7
(Minimum) (Nominal) (Maximum)						
Before: 29–Dec–2022 13:16						









High Resolution Laterolog Array – B Wellsite Calibration						
HRLT M12						
Idx	Phase	HRLT M1–M2 Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		1742	1781	2095	1549
1	Before		1824	1781	2095	1549
2	Before		1855	1781	2095	1549
3	Before		1802	1781	2095	1549
4	Before		1748	1781	2095	1549
5	Before		1758	1781	2095	1549
6	Before		–1777	–1781	–1549	–2095
7	Before		1781	1781	2095	1549
(Minimum) (Nominal) (Maximum)						
Before: 29–Dec–2022 13:16						

High Resolution Laterolog Array – B Wellsite Calibration						
HRLT M23						
Idx	Phase	HRLT M2–M3 Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		1733	1781	2095	1549
1	Before		1826	1781	2095	1549
2	Before		1859	1781	2095	1549
3	Before		1809	1781	2095	1549
4	Before		1750	1781	2095	1549
5	Before		1760	1781	2095	1549
6	Before		–1769	–1781	–1549	–2095
7	Before		1781	1781	2095	1549
(Minimum) (Nominal) (Maximum)						
Before: 29–Dec–2022 13:16						









High Resolution Laterolog Array – B Wellsite Calibration						
HRLT V34						
Idx	Phase	HRLT A3–A4 Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		68660	70000	82360	60900
1	Before		72170	70000	82360	60900
2	Before		73760	70000	82360	60900
3	Before		72050	70000	82360	60900
4	Before		69640	70000	82360	60900

5	Before		70090	70000	82360	60900
6	Before		-68890	-70000	-60900	-82360
7	Before		70000	70000	82360	60900
(Minimum) (Nominal) (Maximum)						









Before: 29-Dec-2022 13:16

High Resolution Laterolog Array – B Wellsite Calibration						
HRLT V45						
Idx	Phase	HRLT A4–A5 Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		68750	70000	82360	60900
1	Before		72390	70000	82360	60900
2	Before		73950	70000	82360	60900
3	Before		72180	70000	82360	60900
4	Before		69740	70000	82360	60900
5	Before		70180	70000	82360	60900
6	Before		-69100	-70000	-60900	-82360
7	Before		70000	70000	82360	60900
(Minimum) (Nominal) (Maximum)						

Before: 29-Dec-2022 13:16

High Resolution Laterolog Array – B Wellsite Calibration						
HRLT V56						
Idx	Phase	HRLT A5–A6 Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		68610	70000	82360	60900
1	Before		72220	70000	82360	60900
2	Before		73820	70000	82360	60900
3	Before		72060	70000	82360	60900
4	Before		69600	70000	82360	60900
5	Before		70050	70000	82360	60900
6	Before		-68940	-70000	-60900	-82360
7	Before		70000	70000	82360	60900
(Minimum) (Nominal) (Maximum)						

Before: 29-Dec-2022 13:16

High Resolution Laterolog Array – B Wellsite Calibration						
HRLT VTP						
Idx	Phase	HRLT Torpedo–M0 Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		-68110	-70000	-60900	-82360
1	Before		-72020	-70000	-60900	-82360
2	Before		-73630	-70000	-60900	-82360
3	Before		-71950	-70000	-60900	-82360
4	Before		-69550	-70000	-60900	-82360
5	Before		-70000	-70000	-60900	-82360
6	Before		68690	70000	82360	60900
7	Before		-70000	-70000	-60900	-82360
(Minimum) (Nominal) (Maximum)						

Before: 29-Dec-2022 13:16

High Resolution Laterolog Array – B Wellsite Calibration						
HRLT VBD						

Idx	Phase	HRLT Bridge#9-M0 Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		-68150	-70000	-60900	-82360
1	Before		-72100	-70000	-60900	-82360
2	Before		-73720	-70000	-60900	-82360
3	Before		-72030	-70000	-60900	-82360
4	Before		-69590	-70000	-60900	-82360
5	Before		-70040	-70000	-60900	-82360
6	Before		68790	70000	82360	60900
7	Before		-70000	-70000	-60900	-82360
(Minimum) (Nominal) (Maximum)						
Before: 29-Dec-2022 13:16						

High Resolution Laterolog Array – B Wellsite Calibration						
HRLT ISO						
Idx	Phase	HRLT Source Current Plus UA	Value	Nominal	Maximum	Minimum
0	Before		284.3	284.0	334.1	247.0
1	Before		281.1	281.1	330.7	244.4
2	Before		281.1	281.1	330.7	244.4
3	Before		281.1	281.1	330.7	244.4
4	Before		281.1	281.1	330.7	244.4
5	Before		281.1	281.1	330.7	244.4
6	Before		281.1	281.1	330.7	244.4
7	Before		281.1	281.1	330.7	244.4
(Minimum) (Nominal) (Maximum)						
Before: 29-Dec-2022 13:16						

High Resolution Laterolog Array – B Wellsite Calibration						
HRLT MV						
Idx	Phase	HRLT Vertical Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		-320.5	-322.7	-280.7	-379.7
1	Before		-327.3	-322.7	-280.7	-379.7
2	Before		-332.9	-322.7	-280.7	-379.7
3	Before		-321.7	-322.7	-280.7	-379.7
4	Before		-309.4	-322.7	-280.7	-379.7
5	Before		-326.0	-322.7	-280.7	-379.7
6	Before		330.1	322.7	379.7	280.7
7	Before		-322.7	-322.7	-280.7	-379.7
(Minimum) (Nominal) (Maximum)						
Before: 29-Dec-2022 13:16						

Hostile Litho-Density Sonde / Equipment Identification

Primary Equipment:

Gamma Source Radioactive
Hostile Litho Density Sonde
Hostile Litho Density High Voltage

GSR – ZA 2945
HLDS – D 77
HLDV – DA 67

Auxiliary Equipment:

Hostile Litho Density High Voltage Housi
Hostile Litho Density Pad

HEH – H 67
HLDP – C 83

Background Measurement											
Phase	SS Cs Resolution Bkg %		Value	Phase	LS Cs Resolution Bkg %		Value	Phase	LSW1 Background CPS		Value
Master	<div><div></div></div>		7.725	Master	<div><div></div></div>		8.105	Master	<div><div></div></div>		68.70
Before	<div><div></div></div>		7.676	Before	<div><div></div></div>		8.027	Before	<div><div></div></div>		67.04
7.000 (Minimum) 9.000 (Nominal) 11.00 (Maximum)				7.000 (Minimum) 9.000 (Nominal) 11.00 (Maximum)				55.00 (Minimum) 100.0 (Nominal) 150.0 (Maximum)			
Phase	LSW2 Background CPS		Value	Phase	LSW3 Background CPS		Value	Phase	LSW4 Background CPS		Value
Master	<div><div></div></div>		62.53	Master	<div><div></div></div>		140.4	Master	<div><div></div></div>		176.1
Before	<div><div></div></div>		61.38	Before	<div><div></div></div>		137.6	Before	<div><div></div></div>		175.1
50.00 (Minimum) 100.0 (Nominal) 140.0 (Maximum)				110.0 (Minimum) 200.0 (Nominal) 290.0 (Maximum)				140.0 (Minimum) 250.0 (Nominal) 360.0 (Maximum)			
Phase	LSW5 Background CPS		Value	Phase	SSW1 Background CPS		Value	Phase	SSW2 Background CPS		Value
Master	<div><div></div></div>		415.7	Master	<div><div></div></div>		66.65	Master	<div><div></div></div>		114.0
Before	<div><div></div></div>		411.7	Before	<div><div></div></div>		65.12	Before	<div><div></div></div>		113.8
330.0 (Minimum) 600.0 (Nominal) 830.0 (Maximum)				55.00 (Minimum) 100.0 (Nominal) 150.0 (Maximum)				100.0 (Minimum) 200.0 (Nominal) 260.0 (Maximum)			
Phase	SSW3 Background CPS		Value	Phase	SSW4 Background CPS		Value	Phase	SSW5 Background CPS		Value
Master	<div><div></div></div>		320.7	Master	<div><div></div></div>		174.7	Master	<div><div></div></div>		124.9
Before	<div><div></div></div>		318.5	Before	<div><div></div></div>		172.5	Before	<div><div></div></div>		124.8
280.0 (Minimum) 500.0 (Nominal) 700.0 (Maximum)				150.0 (Minimum) 270.0 (Nominal) 380.0 (Maximum)				110.0 (Minimum) 200.0 (Nominal) 270.0 (Maximum)			
Master: 6-Oct-2022 3:52				Before: 29-Dec-2022 13:22							

Litho-Density Spectroscopy Cartridge – B / Equipment Identification

Primary Equipment:
LDSC Cartridge

LDSC – AA 521

Auxiliary Equipment:
LDSC Housing

LDSH – A 319

Hostile Natural Gamma Ray Cartridge – B / Equipment Identification

Primary Equipment:
HNGC Cartridge

HNGC – B 304

Auxiliary Equipment:
HNGC Housing

HNGH – A 3

Hostile Natural Gamma Ray Sonde / Equipment Identification

Primary Equipment:
HNGS Sonde

HNGS – BA 99















Auxiliary Equipment:
HNGS Sonde Housing
Gamma Source Radioactive

HNSH – BA 102
GSR – U 6098




Hostile Natural Gamma Ray Sonde Wellsite Calibration

Detector 1 Check

Na 511 Peak														
Phase	Na 511 Peak Loc			Value	Phase	Na 511 Peak Res %			Value	Phase	High Voltage V			Value
Master				39.60	Master				17.00	Master				1202
Before				39.75	Before				16.72	Before				1195
37.50 (Minimum) 40.00 (Nominal) 43.50 (Maximum)					12.00 (Minimum) 15.50 (Nominal) 19.00 (Maximum)					900.0 (Minimum) 1150 (Nominal) 1600 (Maximum)				
Phase	Na 1785 Peak Loc			Value	Phase	Na 1785 Peak Res %			Value	Phase	Temperature DEGC			Value
Master				142.6	Master				9.539	Master				27.53
Before				143.5	Before				7.610	Before				20.60
135.0 (Minimum) 142.6 (Nominal) 150.3 (Maximum)					7.000 (Minimum) 8.500 (Nominal) 11.00 (Maximum)					-28.89 (Minimum) 15.50 (Nominal) 60.00 (Maximum)				

Hostile Natural Gamma Ray Sonde Wellsite Calibration												
Detector 2 Check												
Phase	Na 511 Peak Loc		Value	Phase	Na 511 Peak Res %		Value	Phase	High Voltage V		Value	
Master			40.51	Master			16.47	Master			1129	
Before			39.49	Before			15.82	Before			1075	
37.50 (Minimum)			40.00 (Nominal)	43.50 (Maximum)			12.00 (Minimum)			15.50 (Nominal)	19.00 (Maximum)	
900.0 (Minimum)			1150 (Nominal)	1600 (Maximum)								
Phase	Na 1785 Peak Loc		Value	Phase	Na 1785 Peak Res %		Value	Phase	Temperature DEGC		Value	
Master			145.0	Master			9.043	Master			28.33	
Before			142.5	Before			9.727	Before			19.58	
135.0 (Minimum)			142.6 (Nominal)	150.3 (Maximum)			7.000 (Minimum)			8.500 (Nominal)	11.00 (Maximum)	
-28.89 (Minimum)			15.50 (Nominal)	60.00 (Maximum)								
Phase	Na Count Rate CPS		Value									
Master			11.22									
Before			6.722									
10.00 (Minimum)			45.00 (Nominal)									100.0 (Maximum)
Master: Calibration out of date 13-Feb-2022 21:25 Before: 29-Dec-2022 13:24												

Enhanced DTS Cartridge / Equipment Identification			
Primary Equipment:			
EDTC Gamma Ray Detector	EDTG – A/B	77693	
Enhanced DTS Cartridge	EDTC – B	8529	
Auxiliary Equipment:			
EDTC Housing	EDTH – B	8528	

Enhanced DTS Cartridge Wellsite Calibration											
Detector Calibration											
Phase	Gamma Ray Background GAPI		Value	Phase	Gamma Ray (Jig – Bkg) GAPI		Value	Phase	Gamma Ray (Calibrated) GAPI		Value
Before			4.974	Before			112.1	Before			160.4
	0 (Minimum)	30.00 (Nominal)	120.0 (Maximum)		101.9 (Minimum)	112.1 (Nominal)	122.3 (Maximum)		150.0 (Minimum)	165.0 (Nominal)	180.0 (Maximum)
Before: Calibration out of date 29-Nov-2022 7:50											

Company: **International Ocean Discovery Program**

Schlumberger

Well: **Expedition 398, Site U1589C**

Field: **Hellenic Arc Volcanic Field**

Rig: **JOIDES Resolution**

Country: **Greece**

High Resolution Laterolog (HRLA)

Litho Density (HLDS)

Natural Gamma / MSS (HNGS/MSS)