

Schlumberger

Company: International Ocean Discovery Program

Well: **Expedition 395C, Site U1554F**

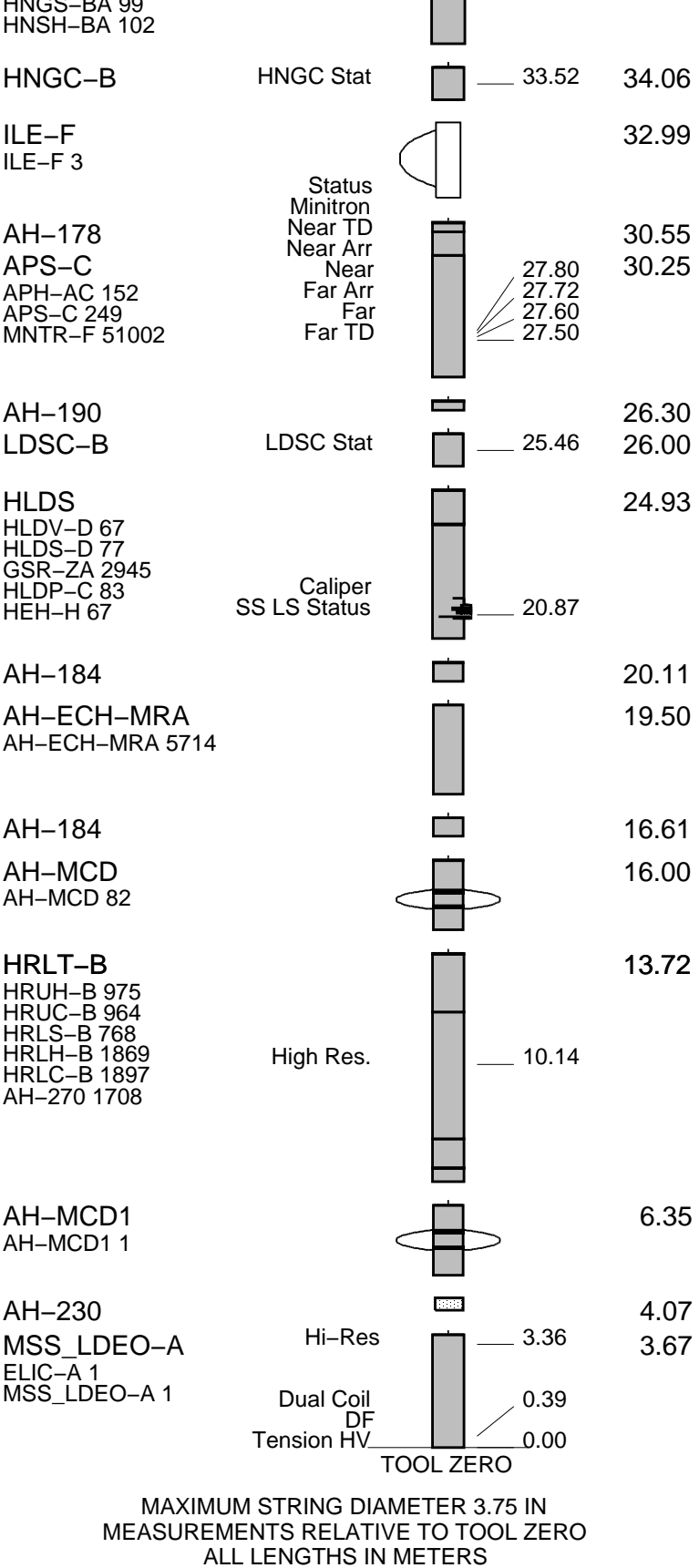
Field: **North Atlantic Mantle Convection&Climate**Rig: **JOIDES Resolution** Ocean: **Atlantic**

Rig:	JOIDES Resolution				
Field:	North Atlantic Mantle Convection				
Location:	Latitude: N 60.12539				
Well:	Expedition 395C, Site U1554F				
Company:	International Ocean Discovery Program				
LOCATION		High Resolution Laterolog (HRLA) Litho Density (HLDS) / (APS) Porosity Natural Gamma / MSS (HNGS)			
		Latitude: N 60.12539 Longitude: W 26.7022		Elev.: K.B. 0.00 m G.L. -1880.80 m D.F. 0.00 m	
		Permanent Datum: <u>Sea Floor</u>		Elev.: <u>-1880.80 m</u>	
		Log Measured From: <u>Rig Floor</u>		1880.80 m above Perm. Datum	
		Drilling Measured From: <u>Rig Floor</u>			
API Serial No.		Max. Hole Devi. 5 deg	Longitude W 26.7022	Latitude N 60.12539	

Logging Date			8-Jul-2021					
Run Number			1					
Depth Driller			2660.7 m					
Schlumberger Depth			2661 m					
Bottom Log Interval			2660 m					
Top Log Interval			1879 m					
Casing Driller Size @ Depth			10.750 in @ 2482 m			@		
Casing Schlumberger			2484 m					
Bit Size			9.875 in					
Type Fluid In Hole			Sea Water					
MUD	Density	Viscosity	1.023 g/cm3					
	Fluid Loss	PH		8.07				
	Source Of Sample		Mudpit					
	RM @ Measured Temperature		0.220 ohm.m @ 23 degC				@	
	RMF @ Measured Temperature		@				@	
RMC @ Measured Temperature		@				@		
Source RMF	RMC	N/A	N/A					
RM @ MRT	RMF @ MRT	0.369 @ 5	@ 5	@ 5	@		@	
Maximum Recorded Temperatures			5 degC					
Circulation Stopped		Time	8-Jul-2021		9:00			
Logger On Bottom		Time	8-Jul-2021		17:15			
Unit Number		Location	627314 Larose, LA					
Recorded By			K. Swain					
Witnessed By			Z. Mateo					

[illegible]

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



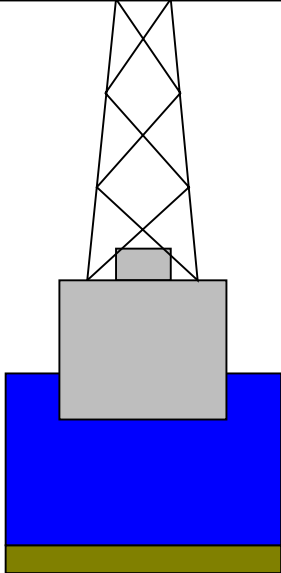
Production String	(in)	(M)	Well Schematic	(M)	(in)	Casing String
	OD	ID	MD	MD	OD	ID

Kelly Bushing Elevation
Derrick Floor Elevation

Mean Sea Level

0
0

11



4.1



1880.8 4.1
2469.5 9.875

2482.9 CSG 10 3/4"
2660.7

Sea Floor
Open Hole

Total Depth

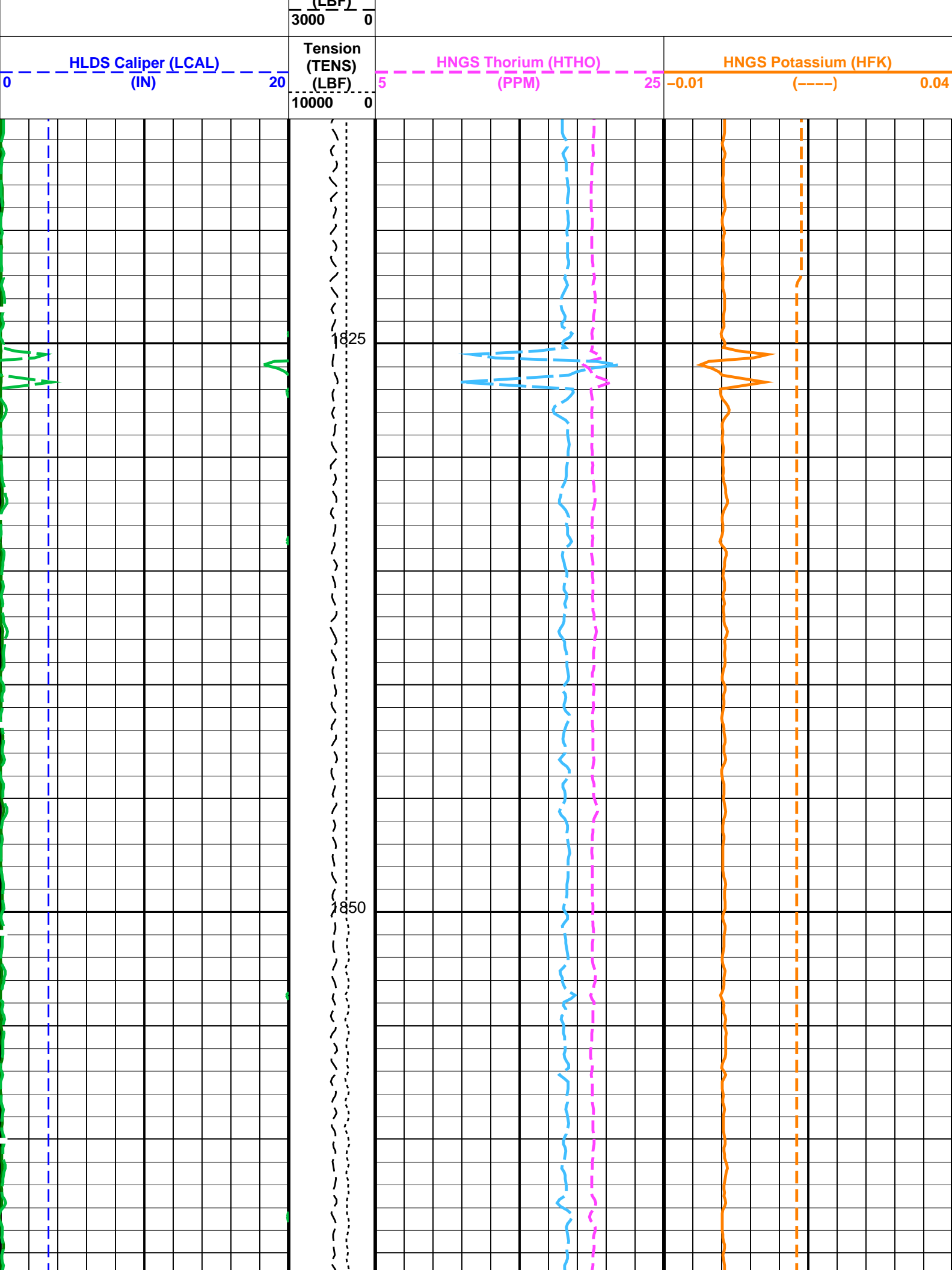


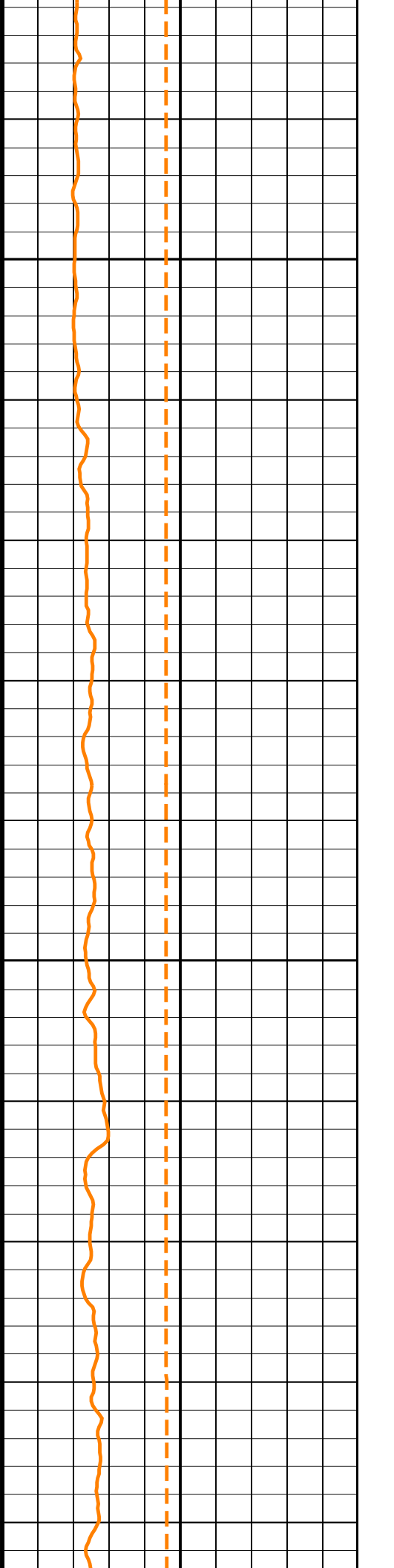
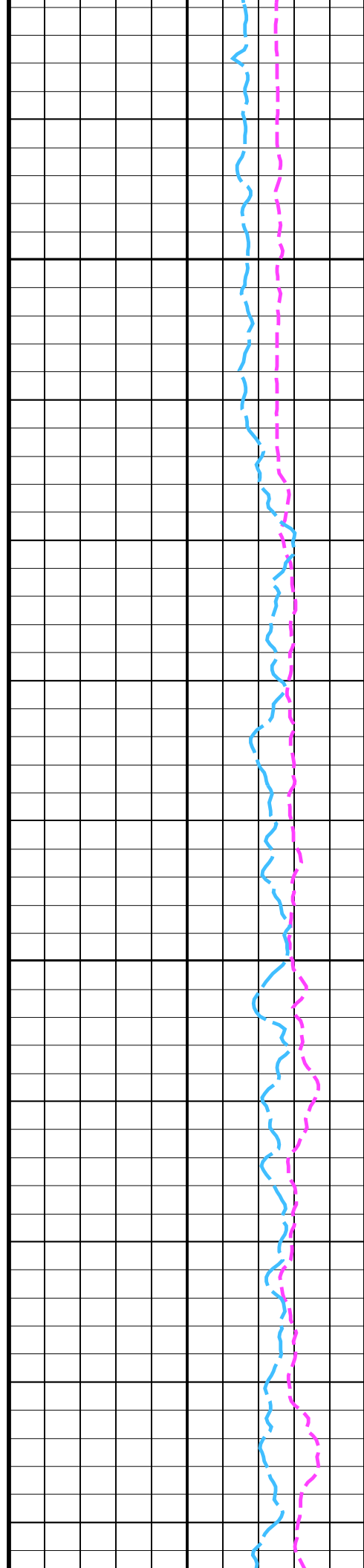
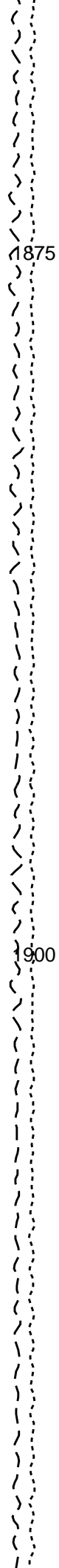
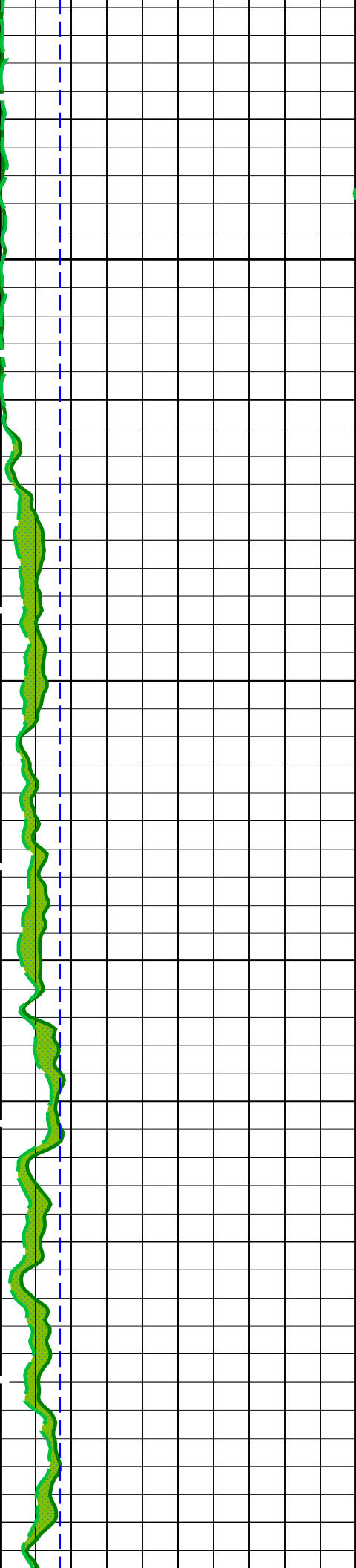
Input DLIS Files					
DEFAULT	Flip_MSS_LDEO_HRLA_052PUP	PRODUCER	10-Jul-2021 20:36	2619.6 M	1815.1 M
Output DLIS Files					
DEFAULT	MSS_LDEO_HRLA_LDL_053PUP	FN:86	PRODUCER	10-Jul-2021 20:40	2619.6 M 1815.1 M

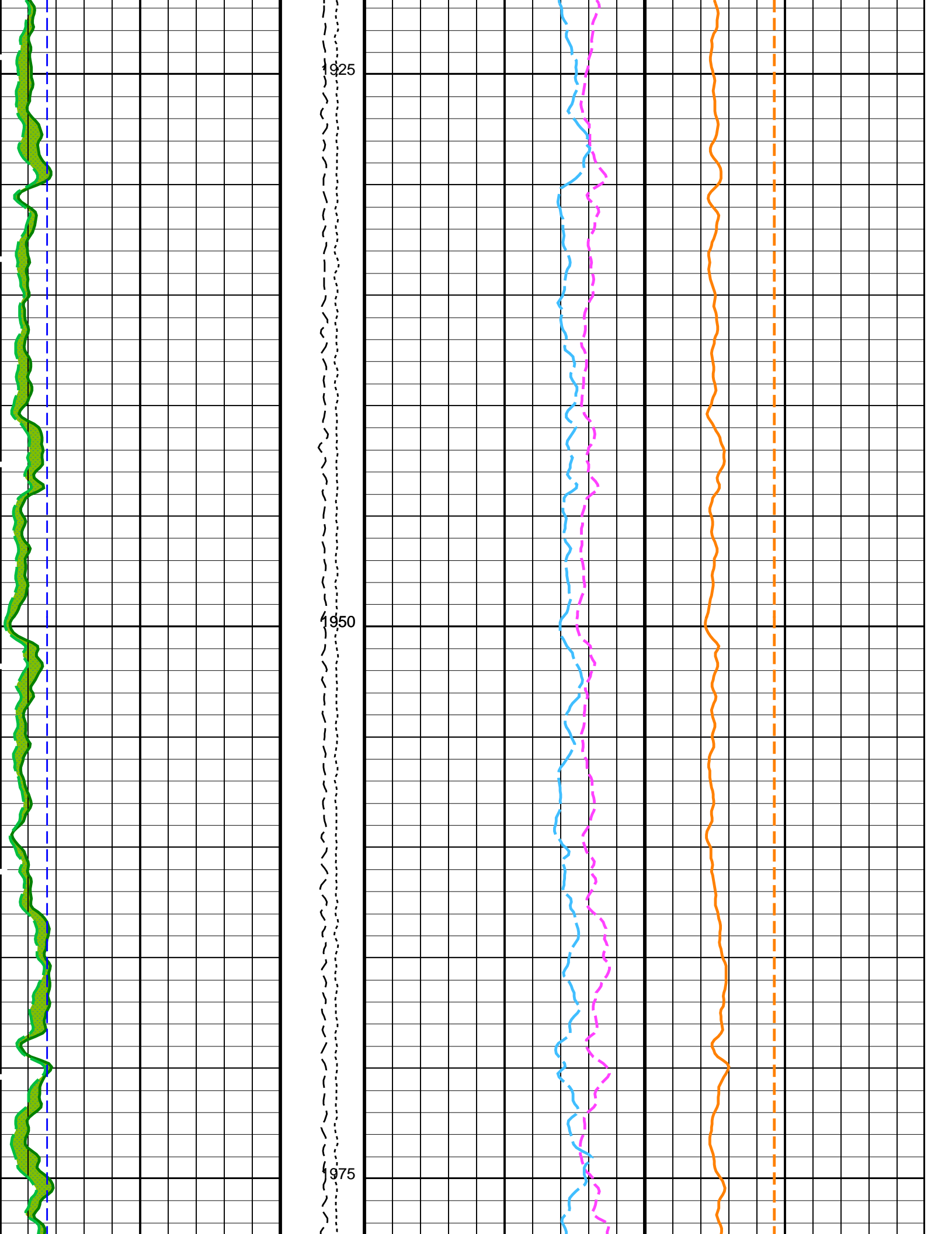
OP System Version: 19C0-187					
MSS_LDEO-A	19C0-187		HRLT-B	19C0-187	
HLDS	19C0-187		LDSC-B	19C0-187	
APS-C	19C0-187		HNGC-B	19C0-187	
HNGS-BA	19C0-187		DTC-H	19C0-187	

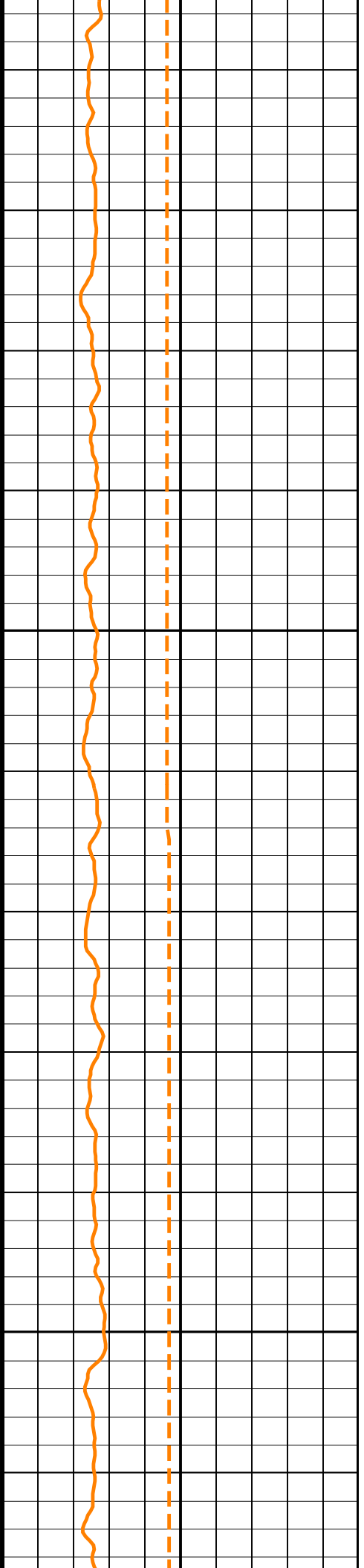
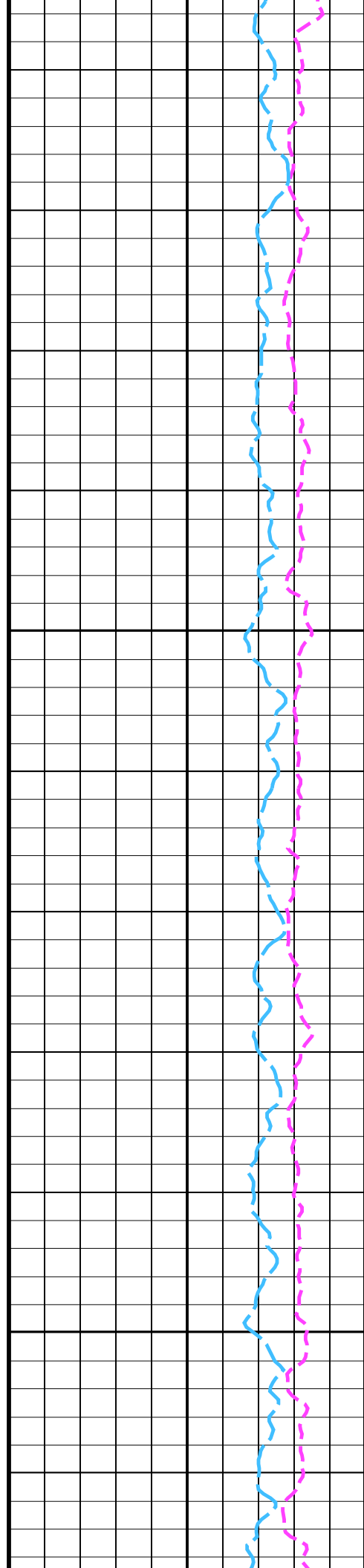
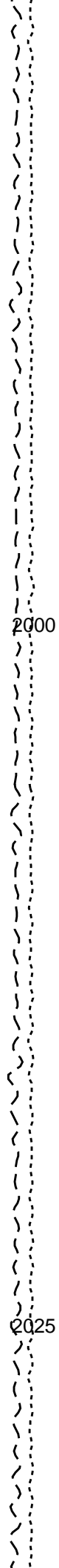
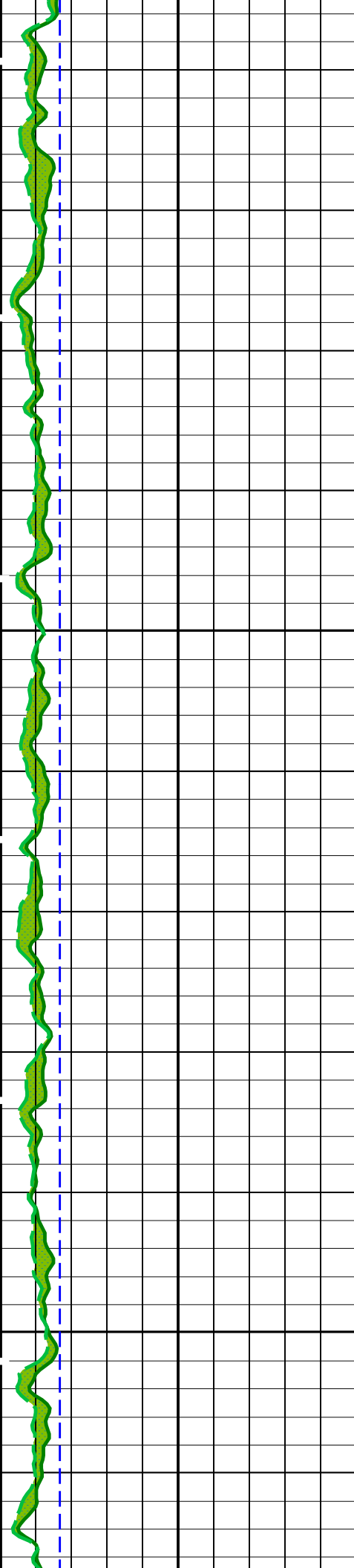
PIP SUMMARY	
 Time Mark Every 60 S	

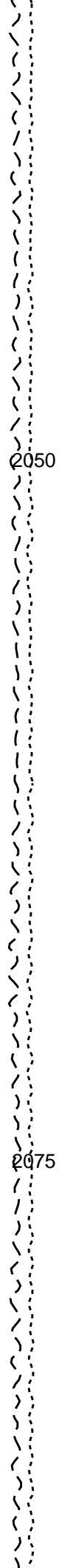
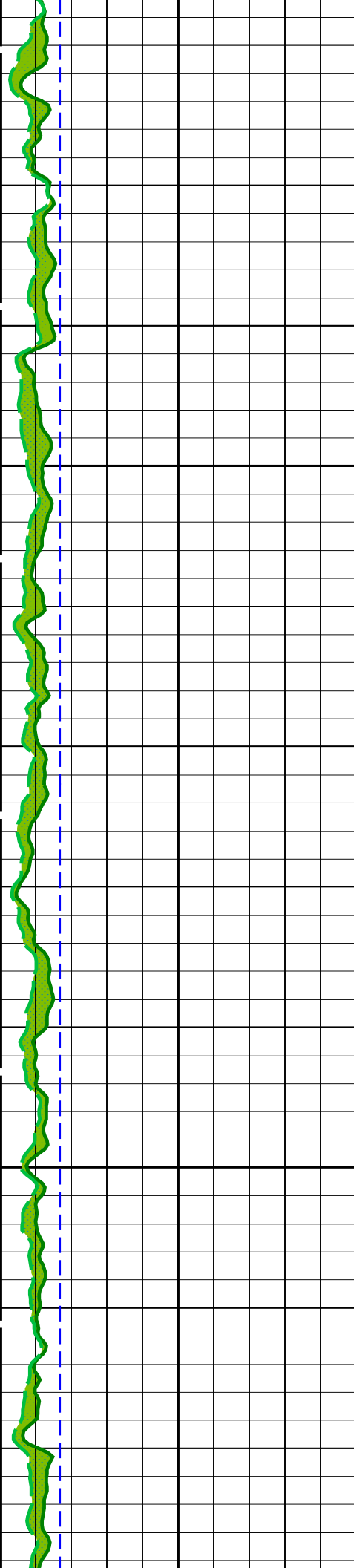






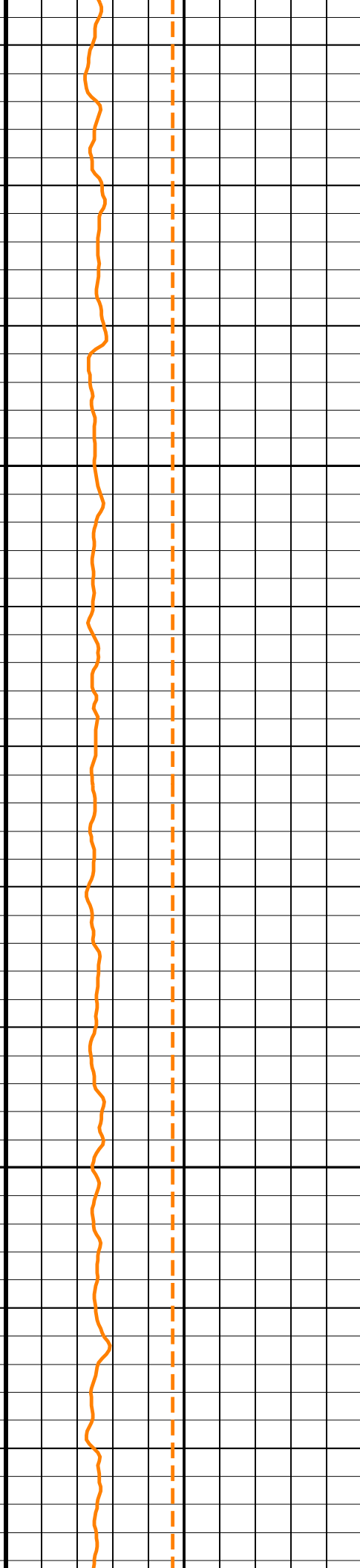
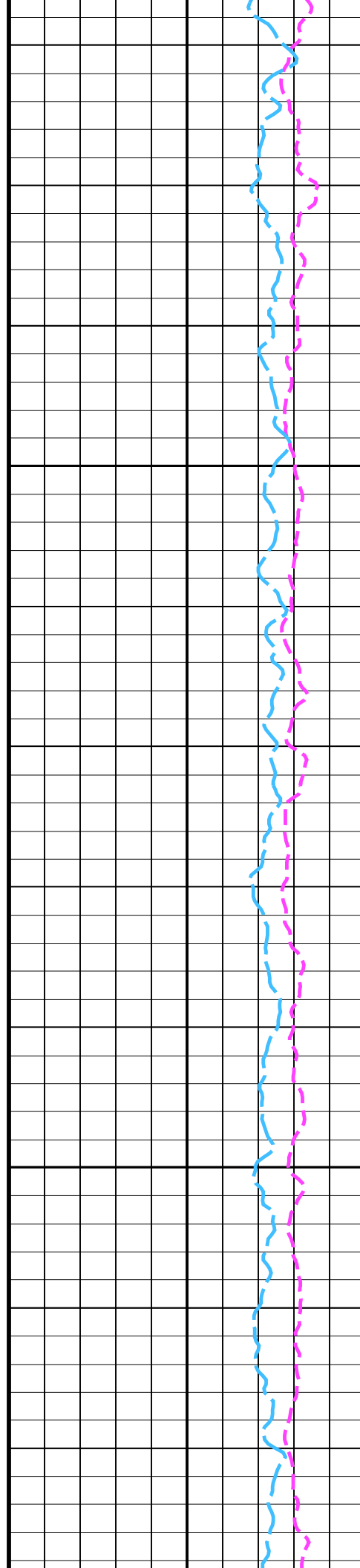


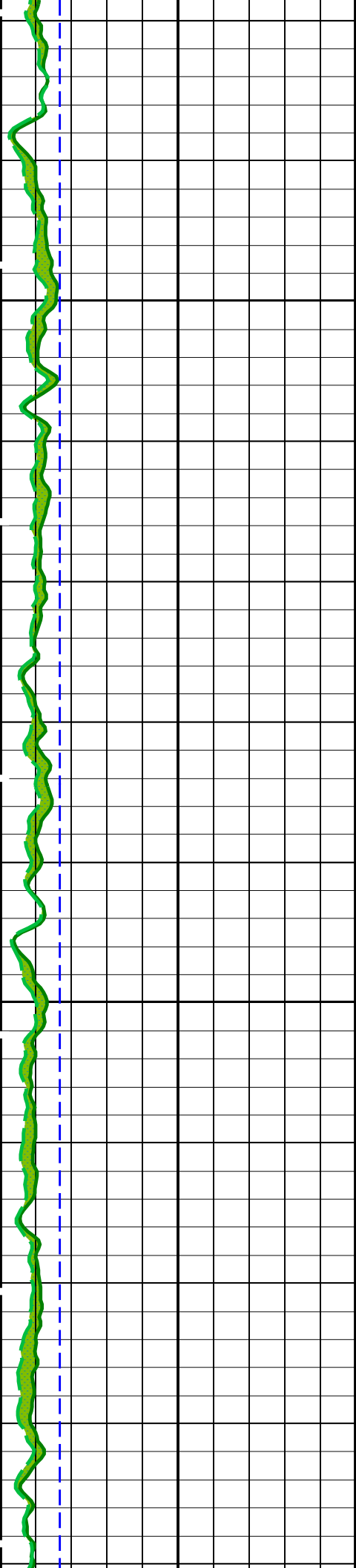




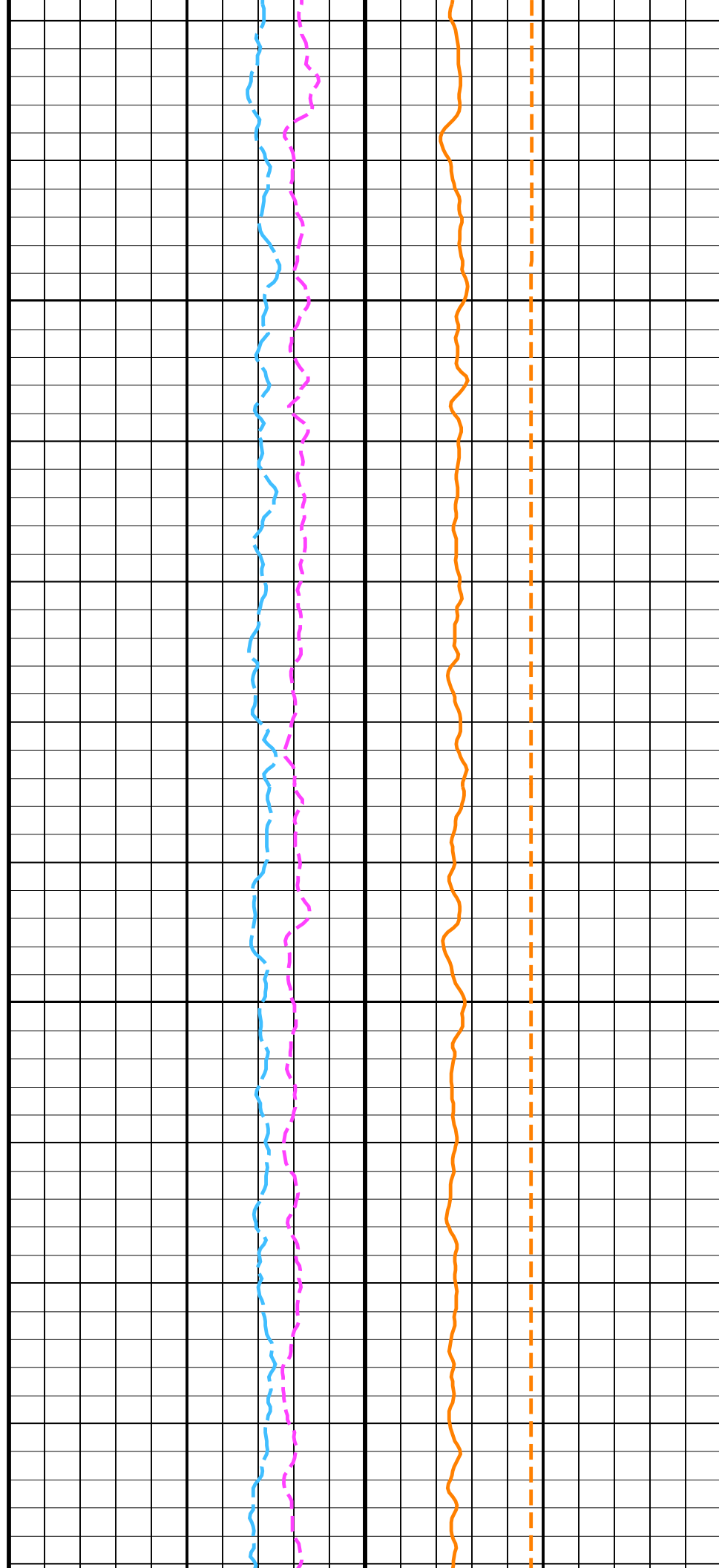
2050

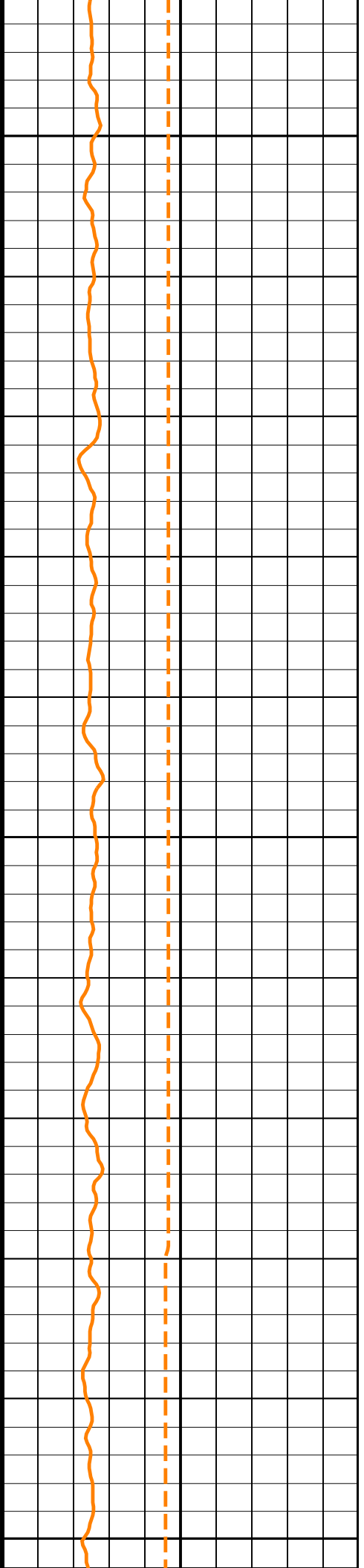
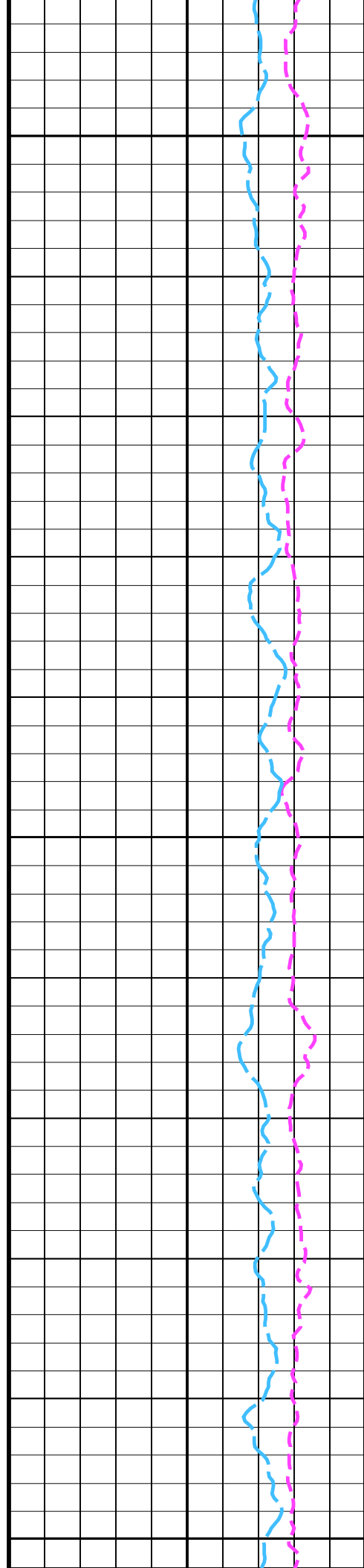
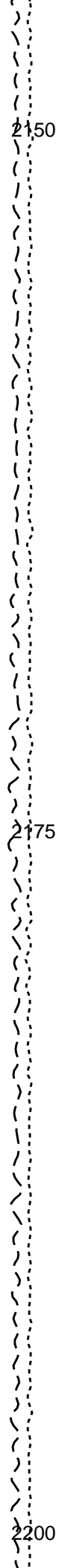
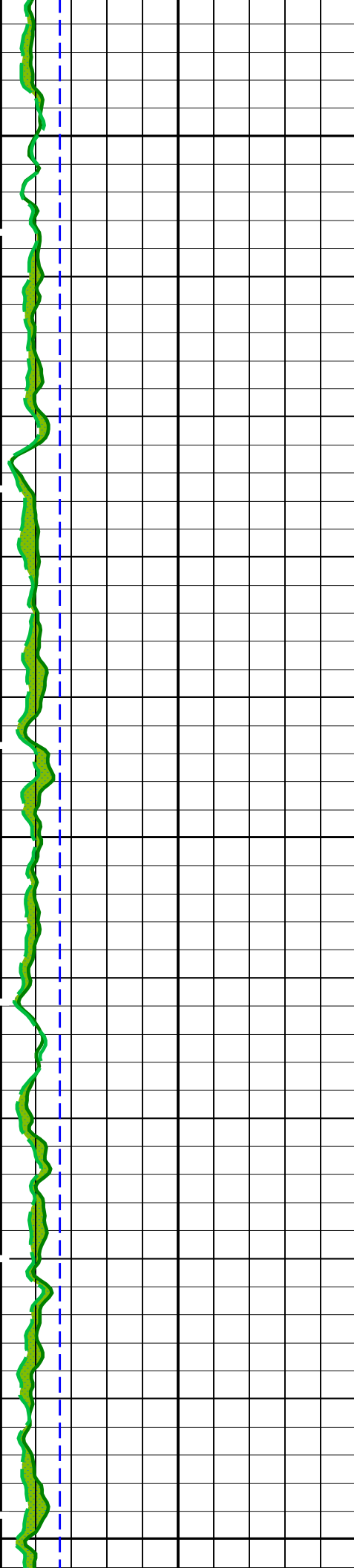
2075

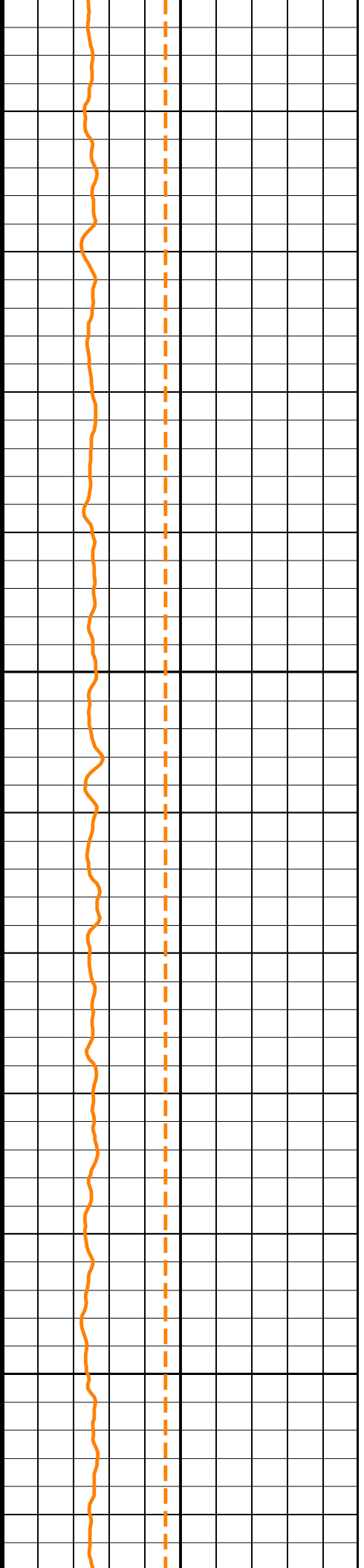
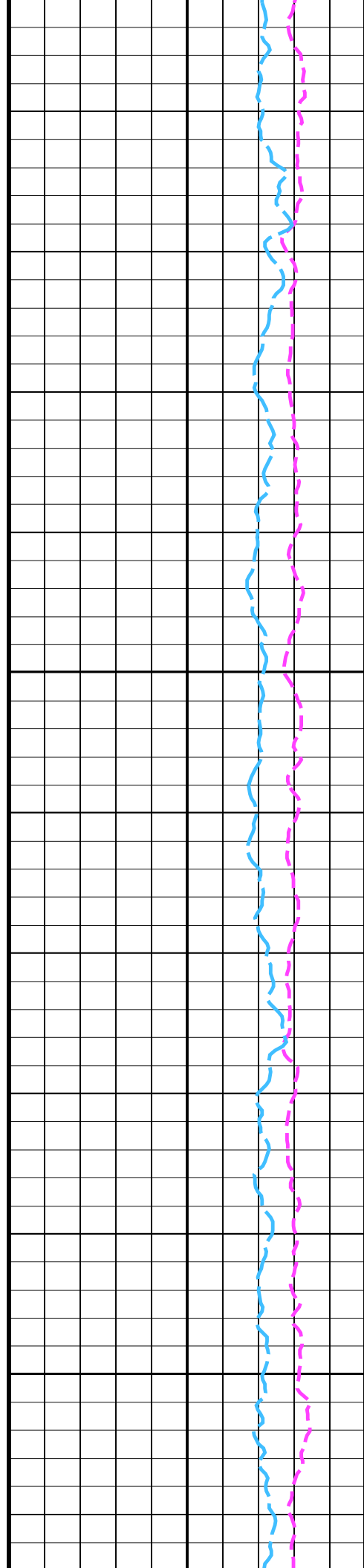
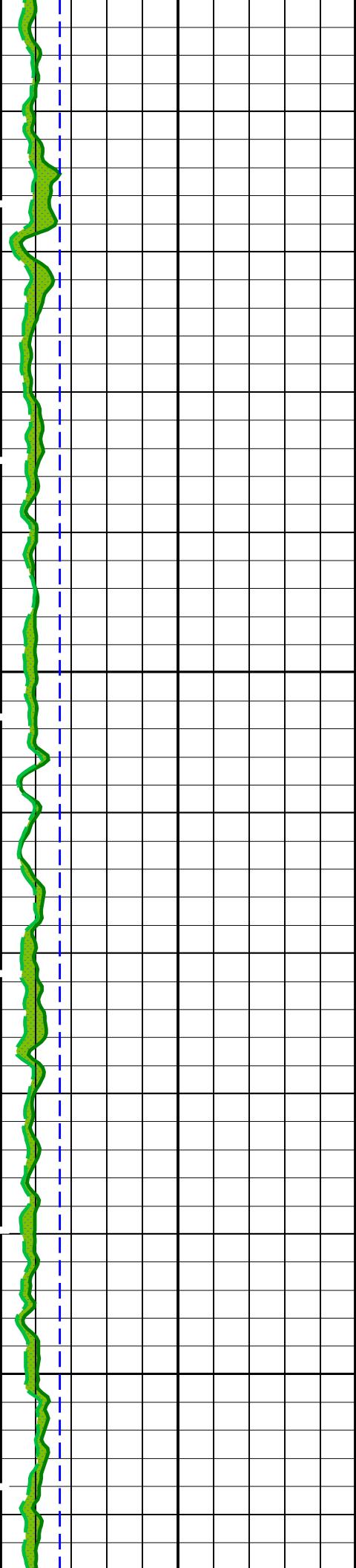


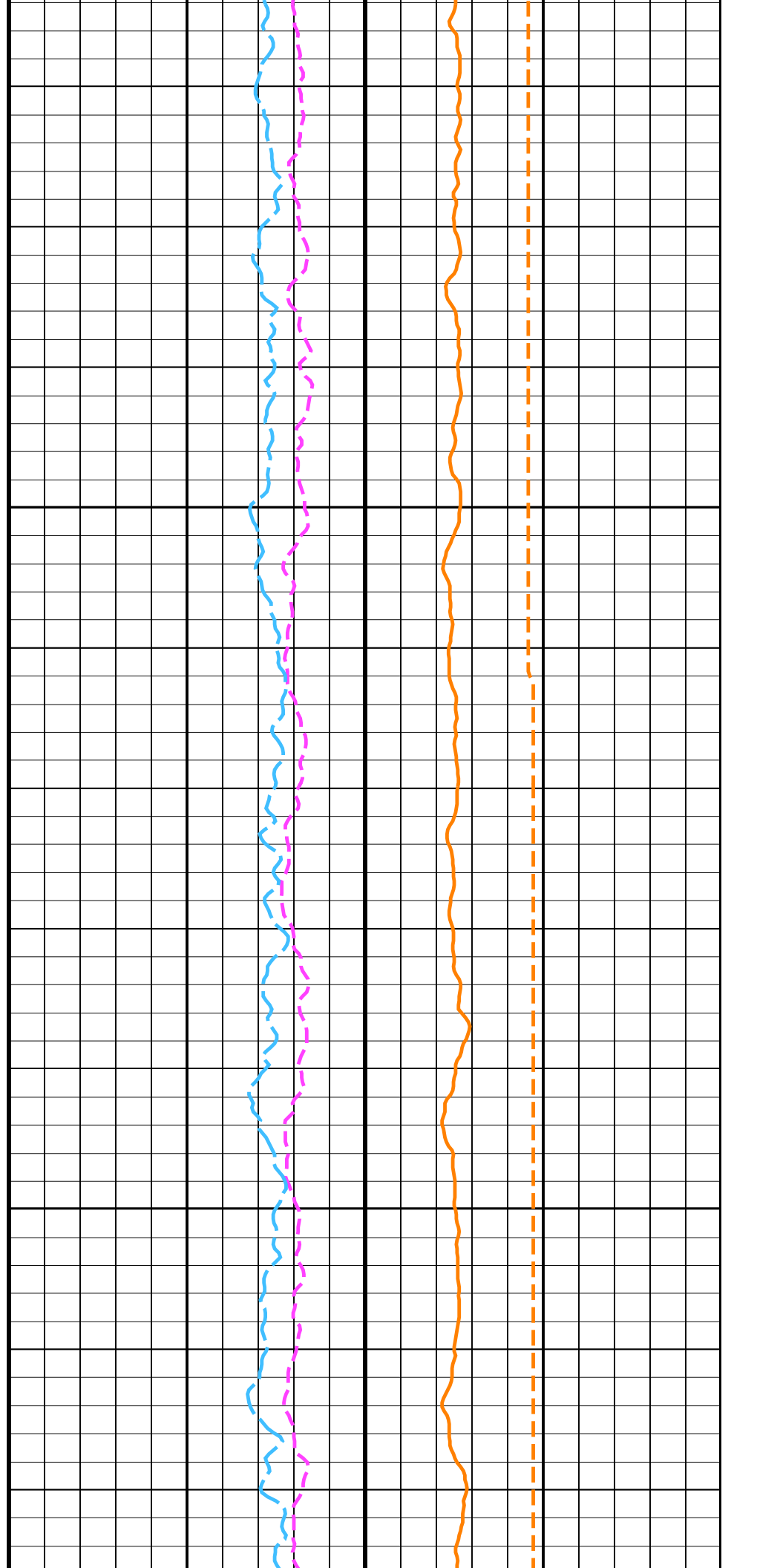
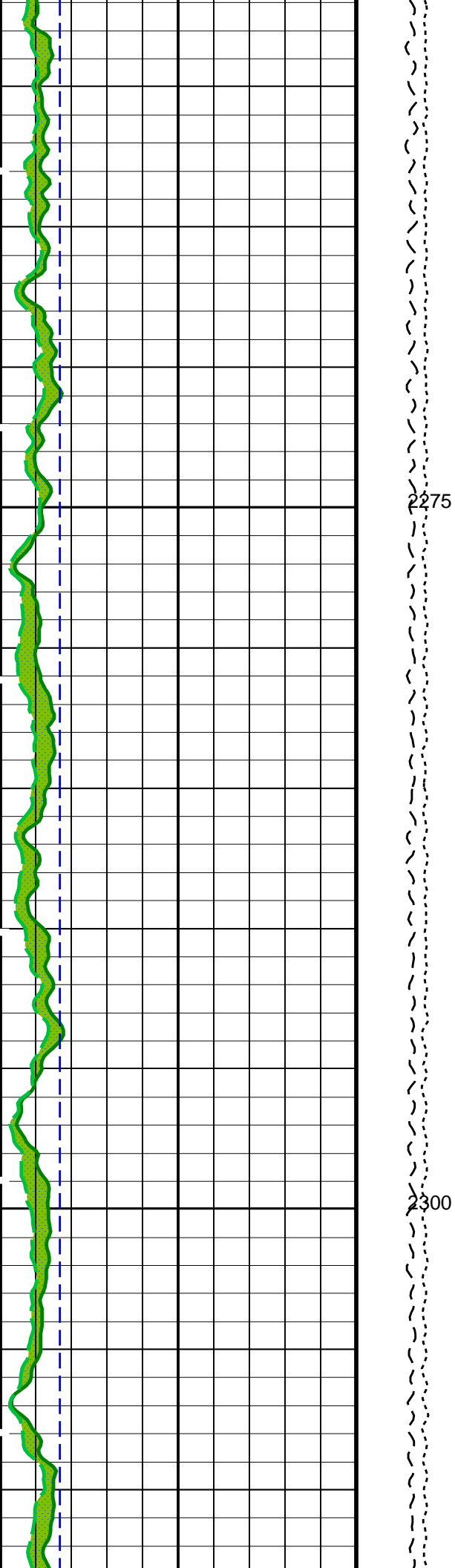


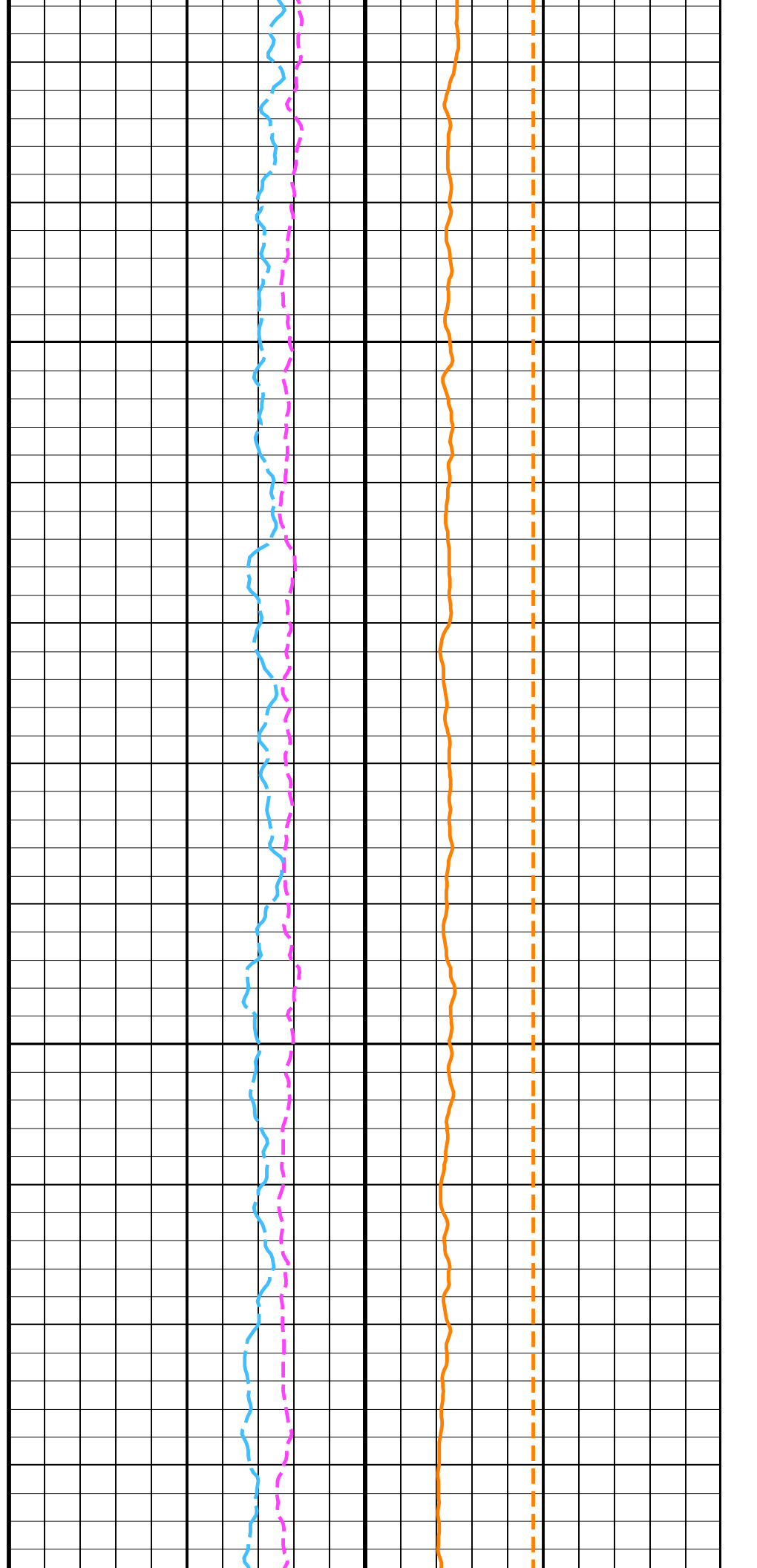
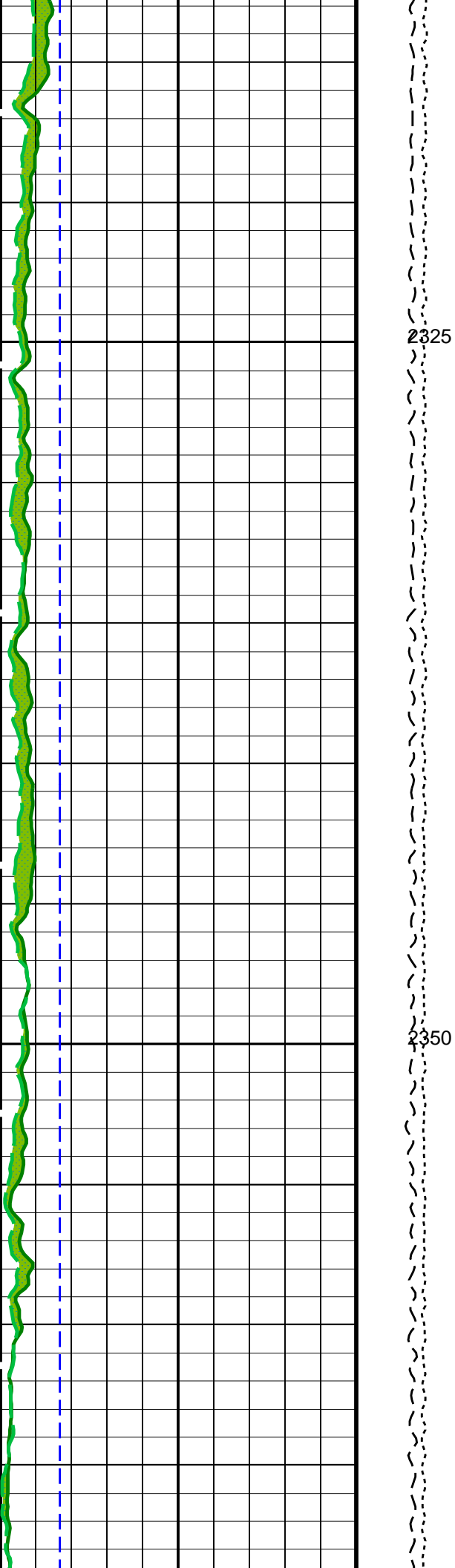
100
125

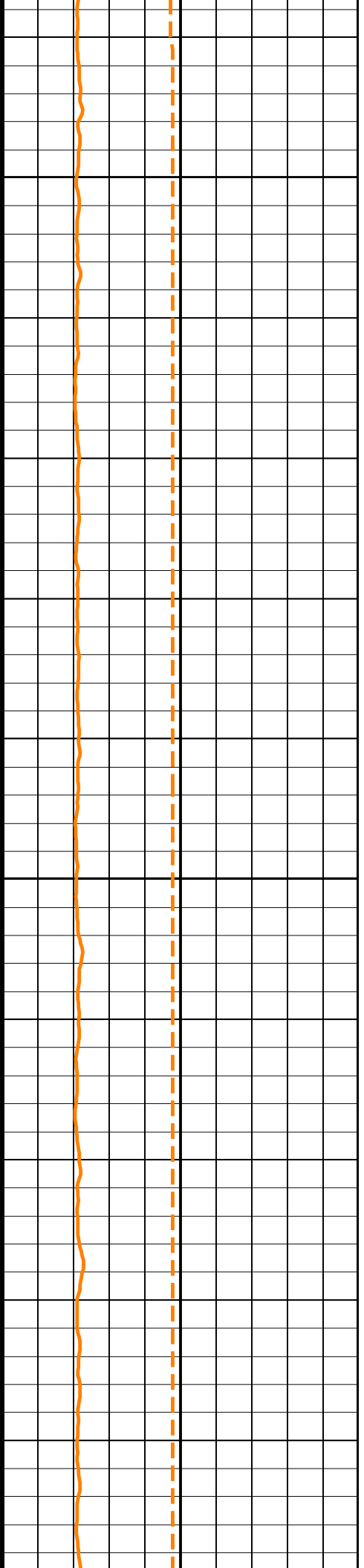
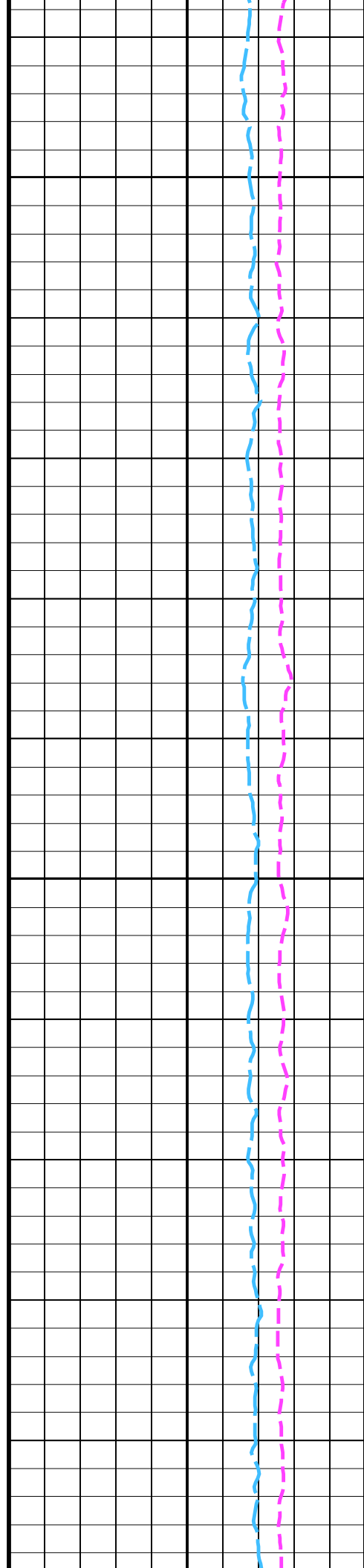
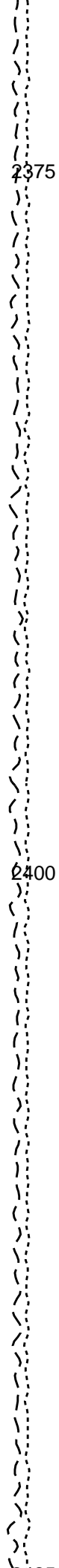
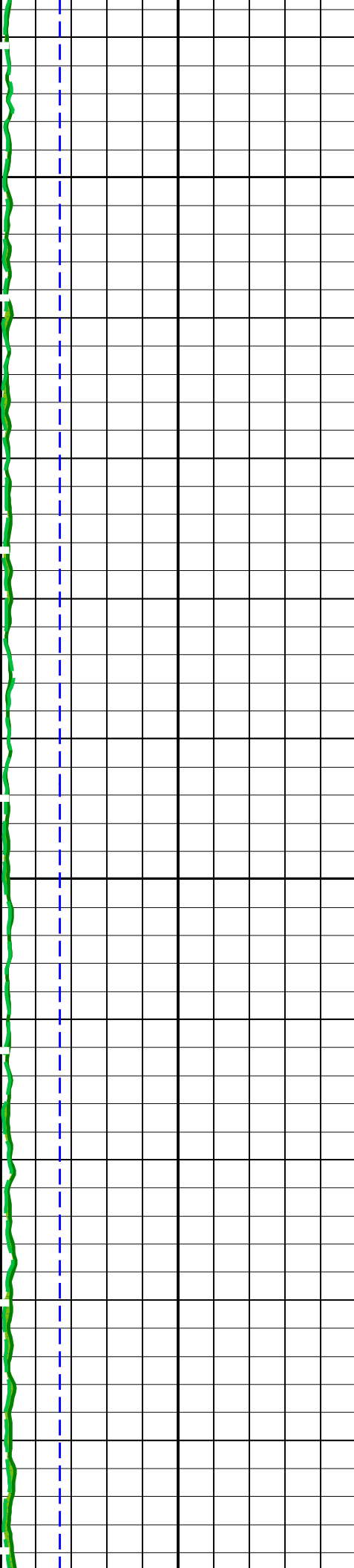


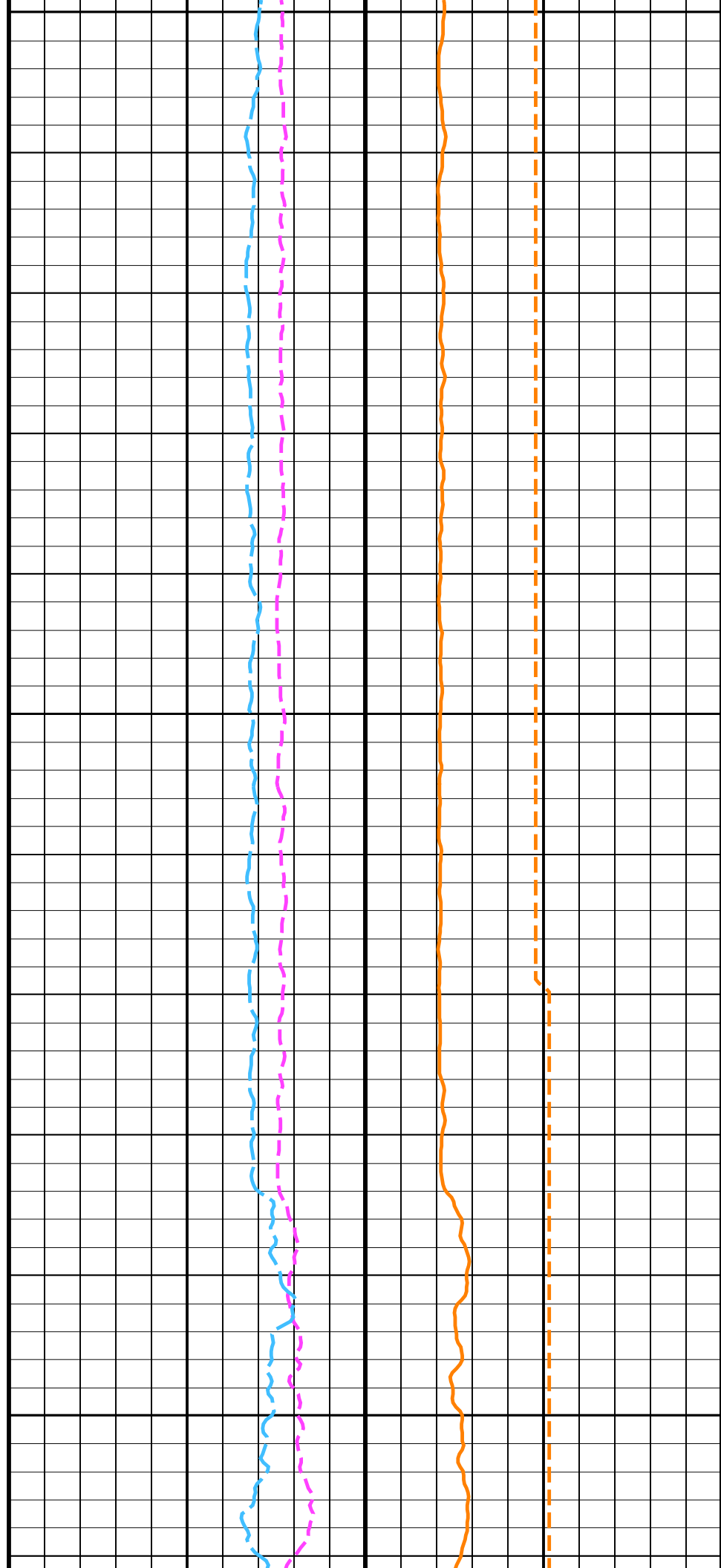
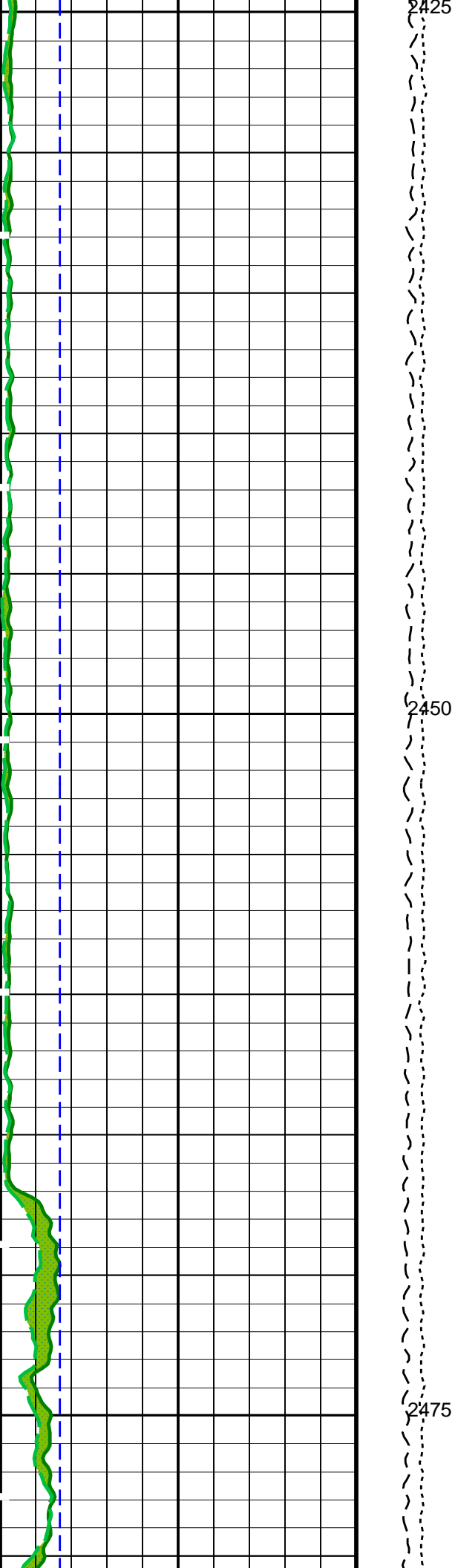


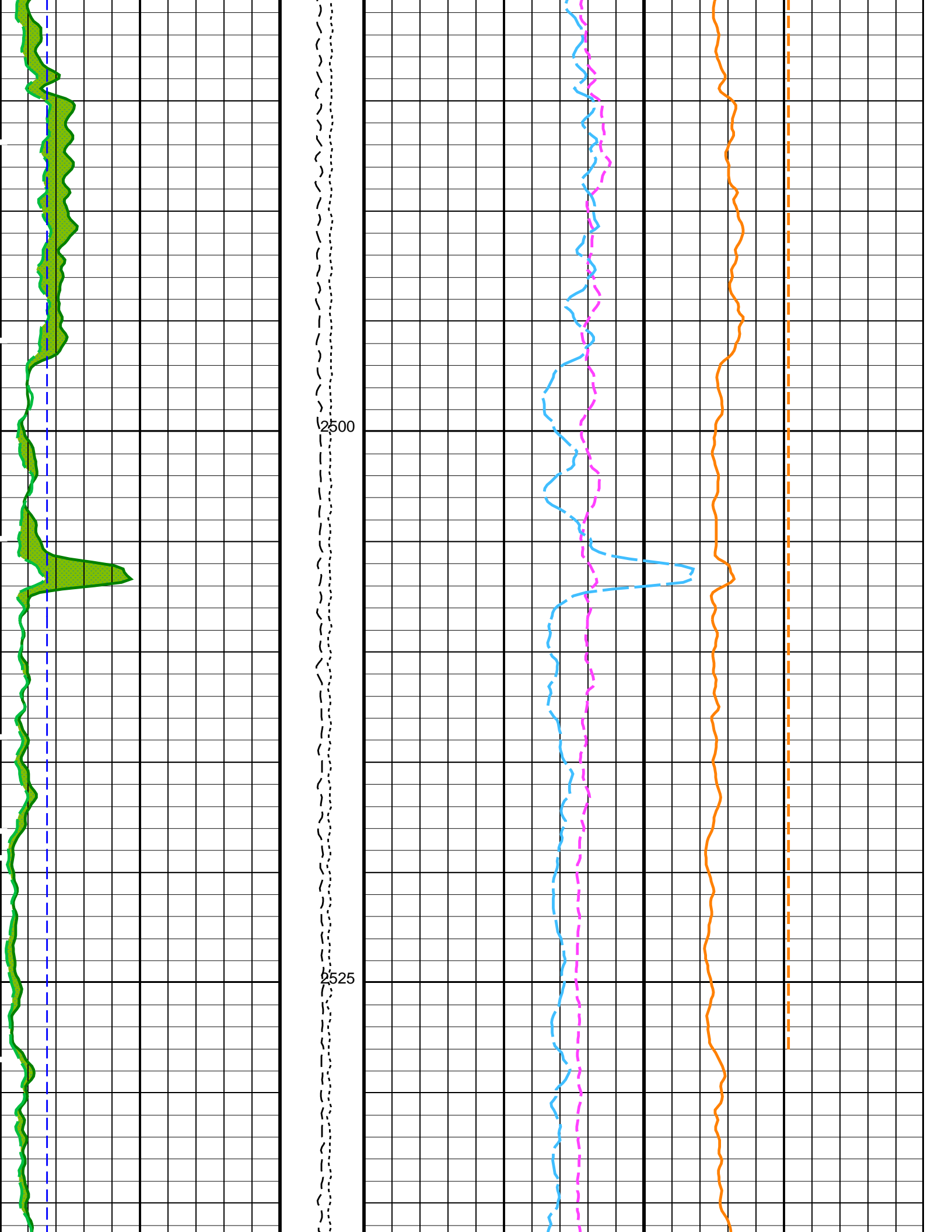


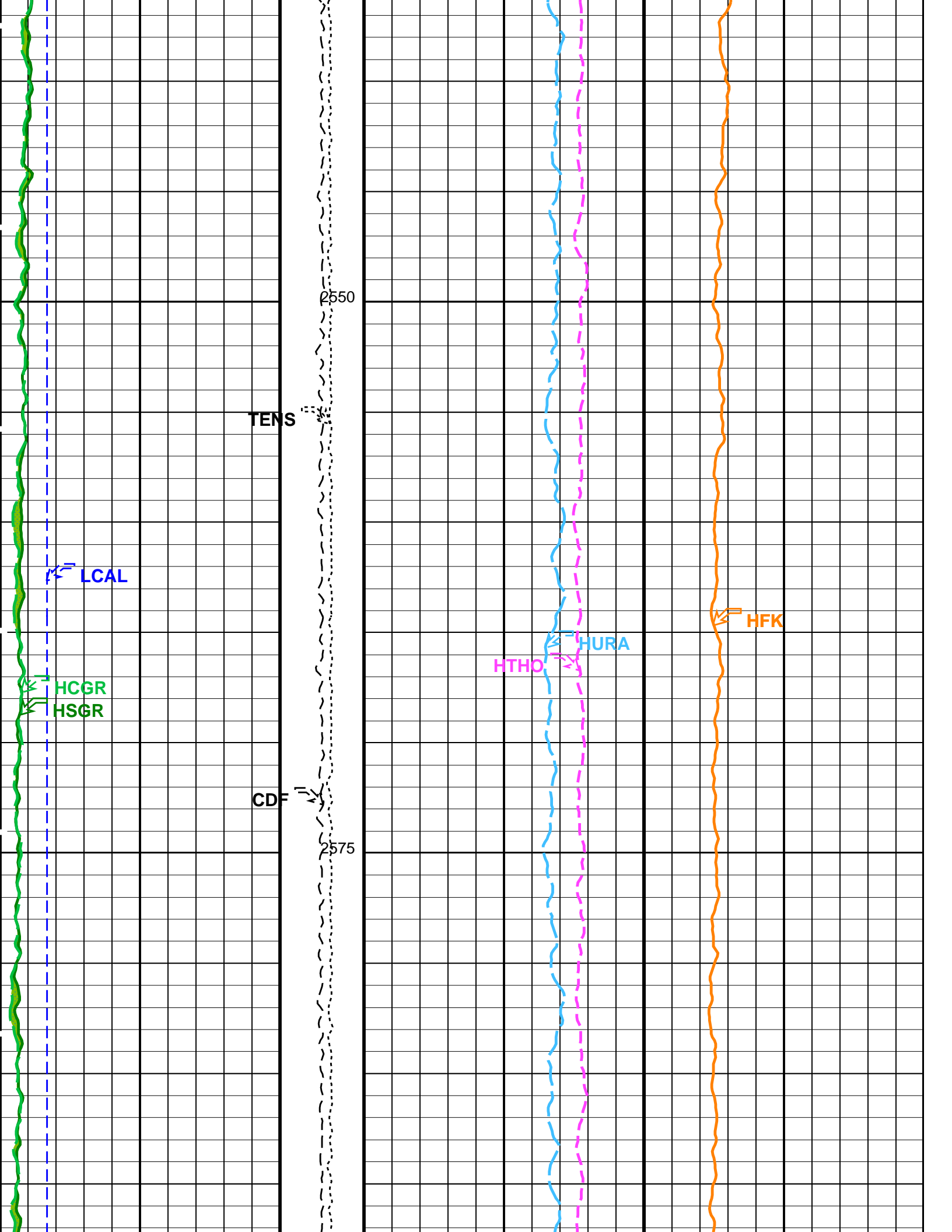


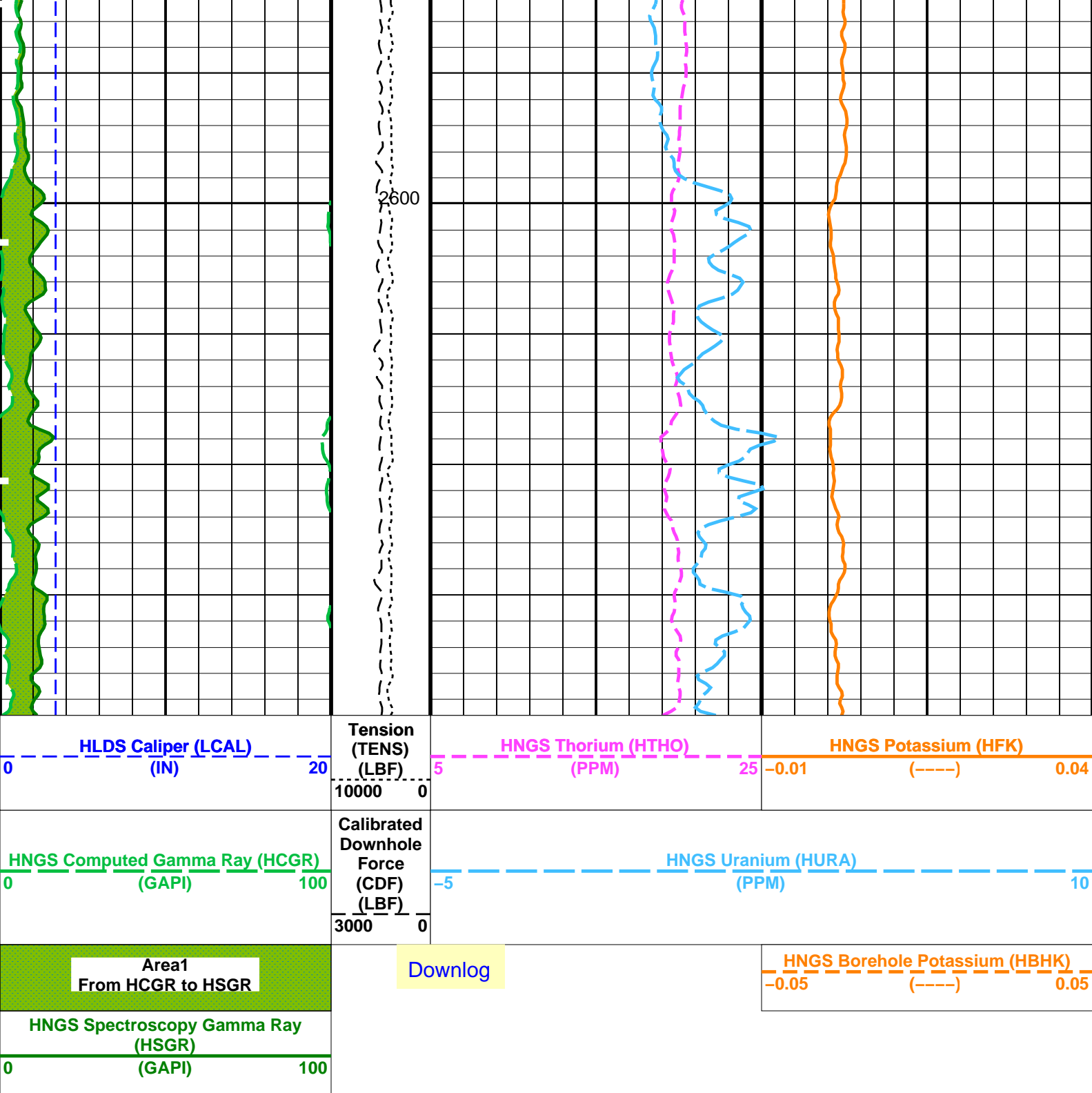












Time Mark Every 60 S

Parameters		
DLIS Name	Description	Value
BHS	HRLT-B: High Resolution Laterolog Array - B	
GCSE	Borehole Status	OPEN
	Generalized Caliper Selection	BS
BHS	APS-C: Accelerator-Porosity Tool	
GCSE	Borehole Status	OPEN
	Generalized Caliper Selection	BS
BAR1	HNGS-BA: Hostile Natural Gamma Ray Sonde	
BAR2	HNGS Detector 1 Barite Constant	1
BHK	HNGS Detector 2 Barite Constant	1
BHS	HNGS Borehole Potassium Correction Concentration	0
CSD1	Borehole Status	OPEN
CSD2	Inner Casing Outer Diameter	0 IN
CSD3	Outer Casing Outer Diameter	0 IN

CSDZ	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	-0.00303066	
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	0.993303	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	1.04242	
System and Miscellaneous			
BS	Bit Size	9.875	IN
DFD	Drilling Fluid Density	1.02	G/C3
DO	Depth Offset for Playback	0.0	M
PP	Playback Processing	RECOMPUTE	

Format: HNGSYields Vertical Scale: 1:200 Graphics File Created: 10-Jul-2021 20:40

OP System Version: 19C0-187

MSS_LDEO-A	19C0-187	HRLT-B	19C0-187
HLDS	19C0-187	LDSC-B	19C0-187
APS-C	19C0-187	HNGC-B	19C0-187
HNGS-BA	19C0-187	DTC-H	19C0-187

Input DLIS Files

DEFAULT	Flip_MSS_LDEO_HRLA_052PUP	PRODUCER	10-Jul-2021 20:36	2619.6 M	1815.1 M
---------	---------------------------	----------	-------------------	----------	----------

Output DLIS Files

DEFAULT	MSS_LDEO_HRLA_LDL_053PUP	FN:86	PRODUCER	10-Jul-2021 20:40
---------	--------------------------	-------	----------	-------------------

Company: International Ocean Discovery Program Well: Expedition 395C, Site U1554F

Input DLIS Files

DEFAULT	Flip_MSS_LDEO_HRLA_052PUP	PRODUCER	10-Jul-2021 20:36	2619.6 M	1815.1 M
---------	---------------------------	----------	-------------------	----------	----------

Output DLIS Files

DEFAULT	MSS_LDEO_HRLA_LDL_053PUP	FN:86	PRODUCER	10-Jul-2021 20:40	2619.6 M	1815.1 M
---------	--------------------------	-------	----------	-------------------	----------	----------

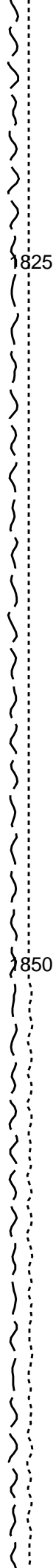
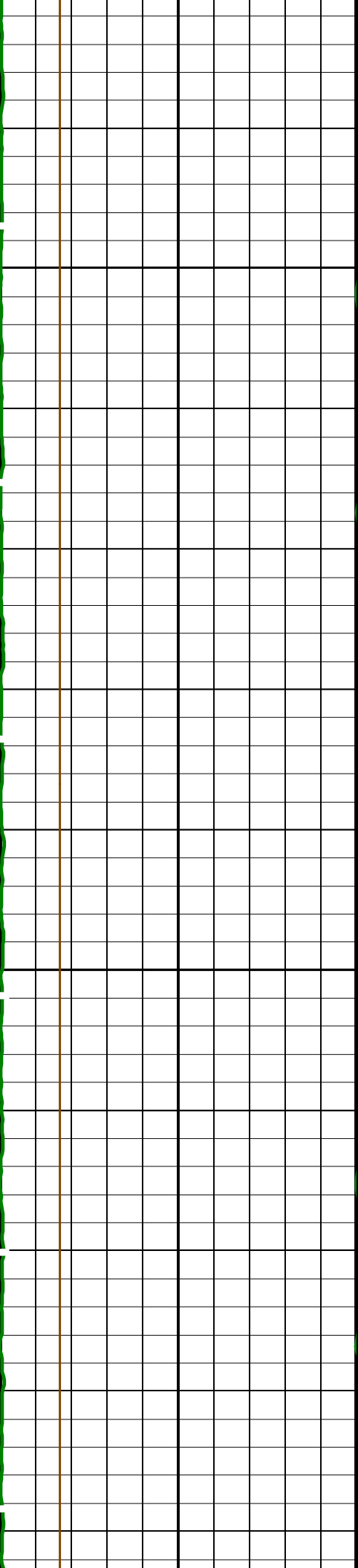
OP System Version: 19C0-187

MSS_LDEO-A	19C0-187	HRLT-B	19C0-187
HLDS	19C0-187	LDSC-B	19C0-187
APS-C	19C0-187	HNGC-B	19C0-187
HNGS-BA	19C0-187	DTC-H	19C0-187

PIP SUMMARY

 Time Mark Every 60 S

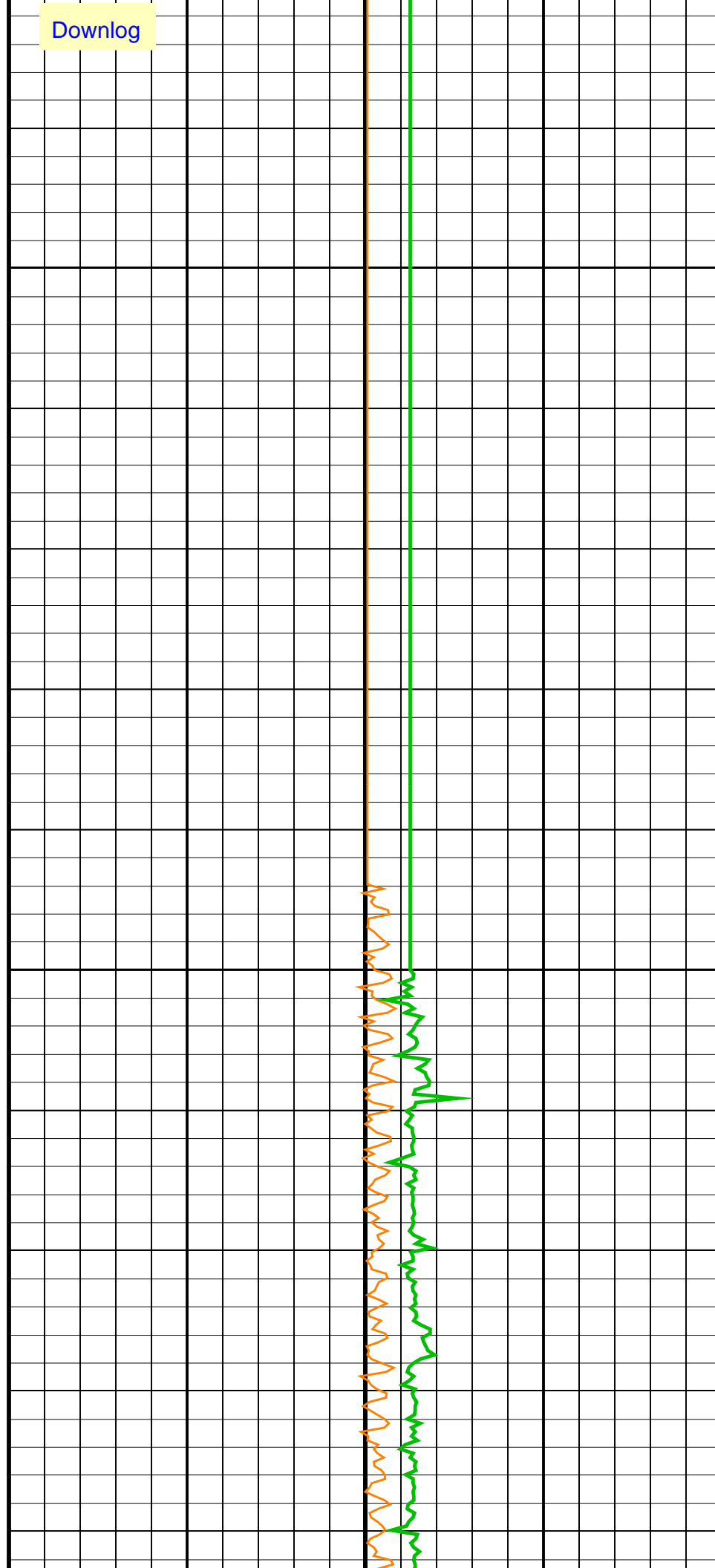
HNGS Spectroscopy Gamma Ray (HSGR)		Calibrated Downhole Force (CDF) (LBF)	Dual-Coil Susceptibility (MSSL SUS_LDEO)	
0	100		-10000	10000
(GAPI)		3000	(PPM)	
		0		
HLDS Caliper (LCAL)		Tension (TENS) (LBF)	Axial Acceleration (MSSZACC_LDEO)	
0	20		0	20
(IN)		10000	(M/S2)	
		0		

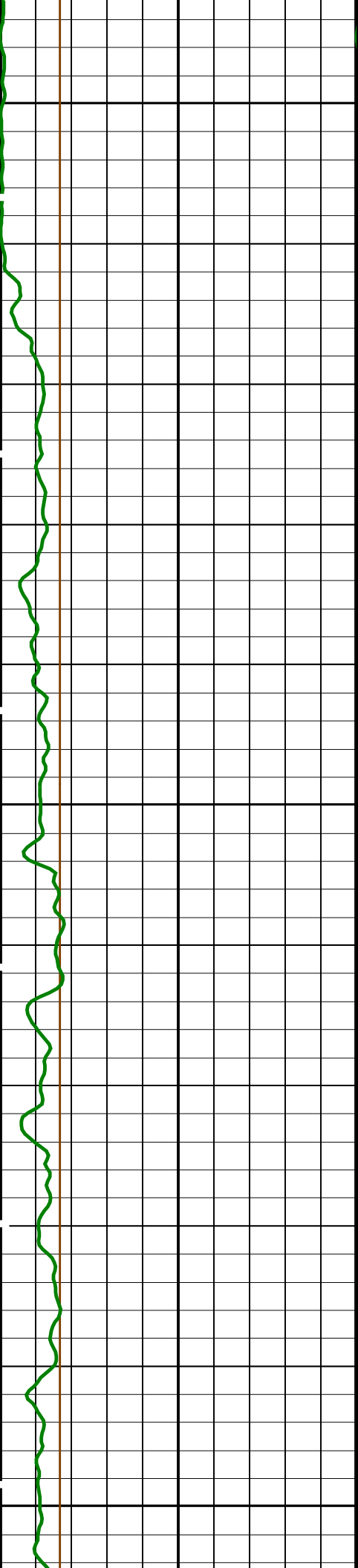


825

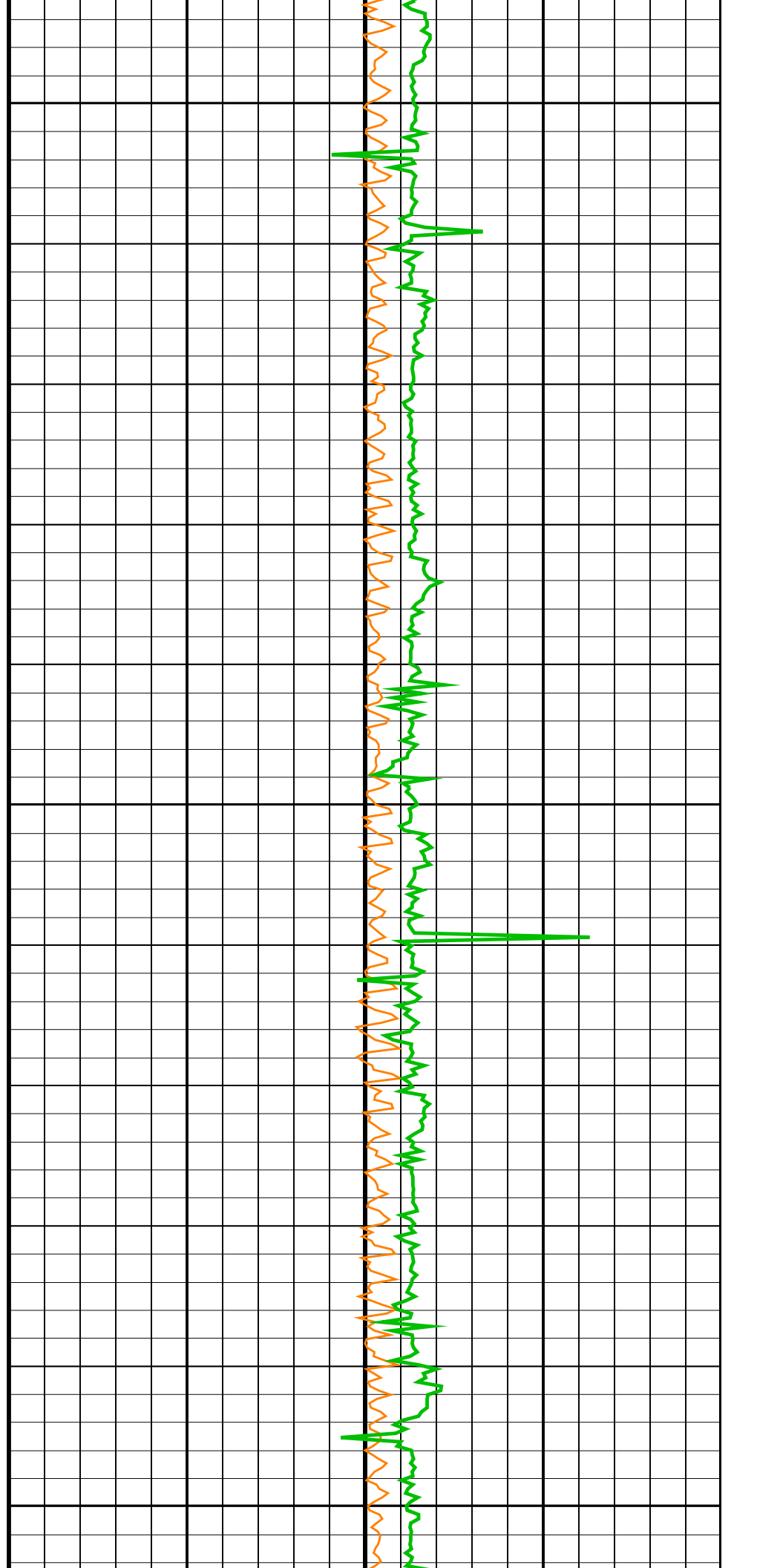
850

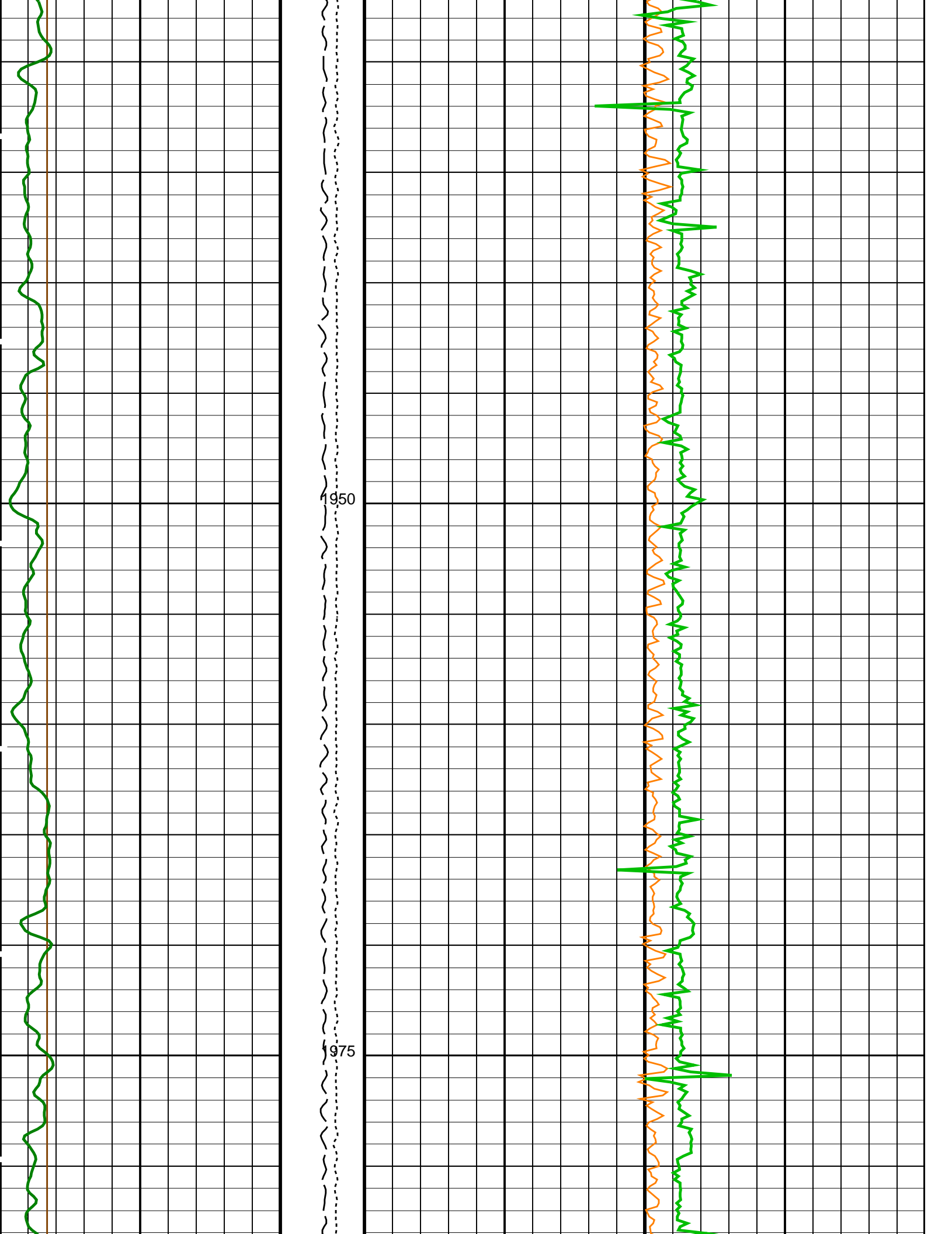
Downlog

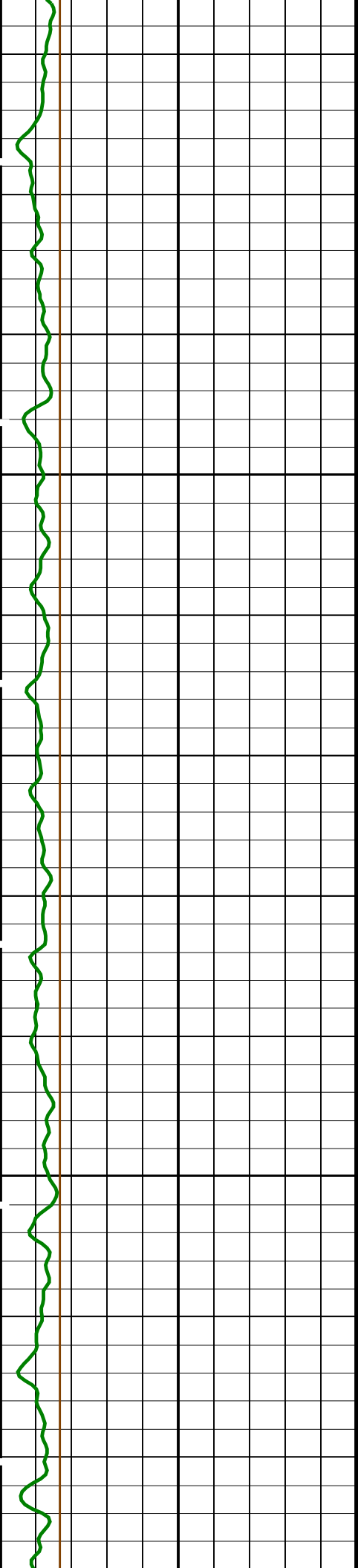




875
900
925

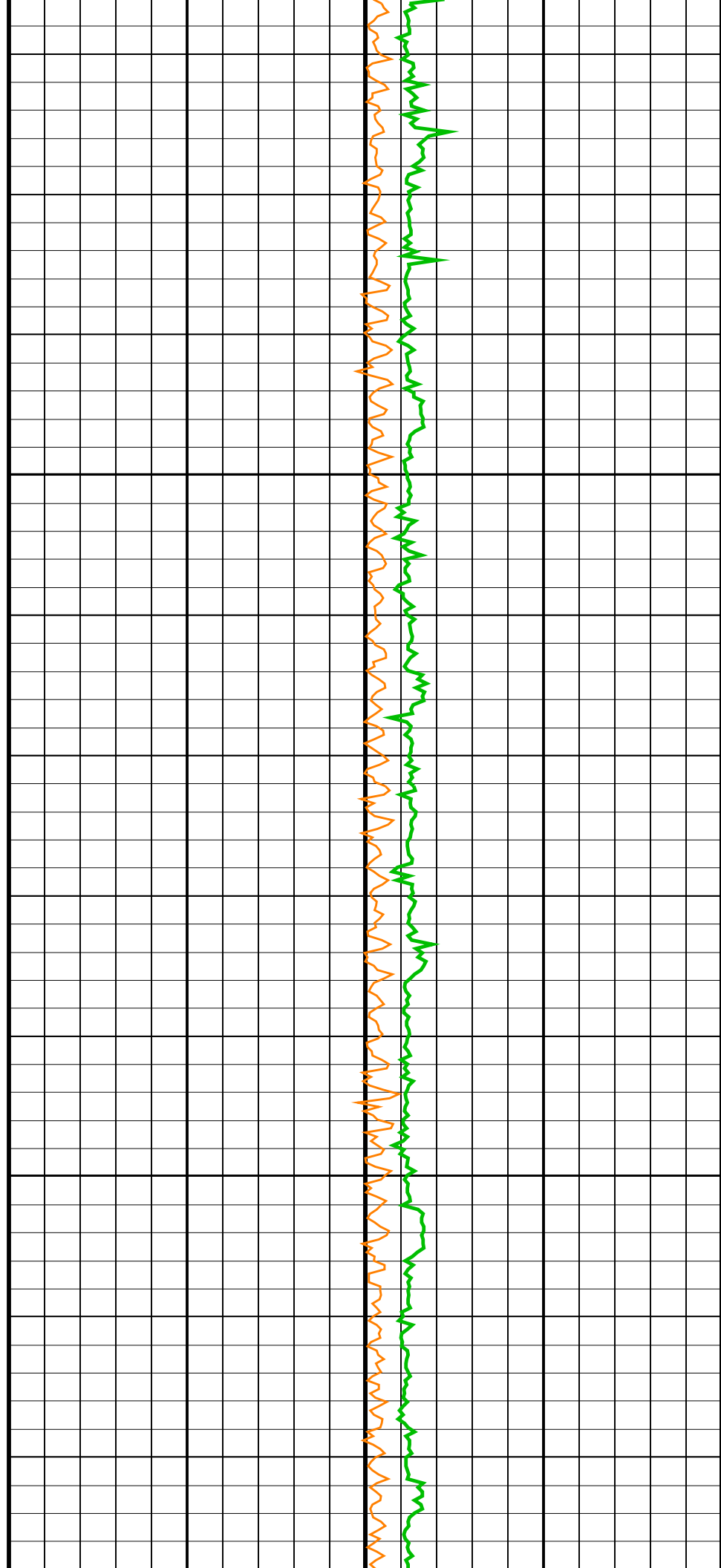


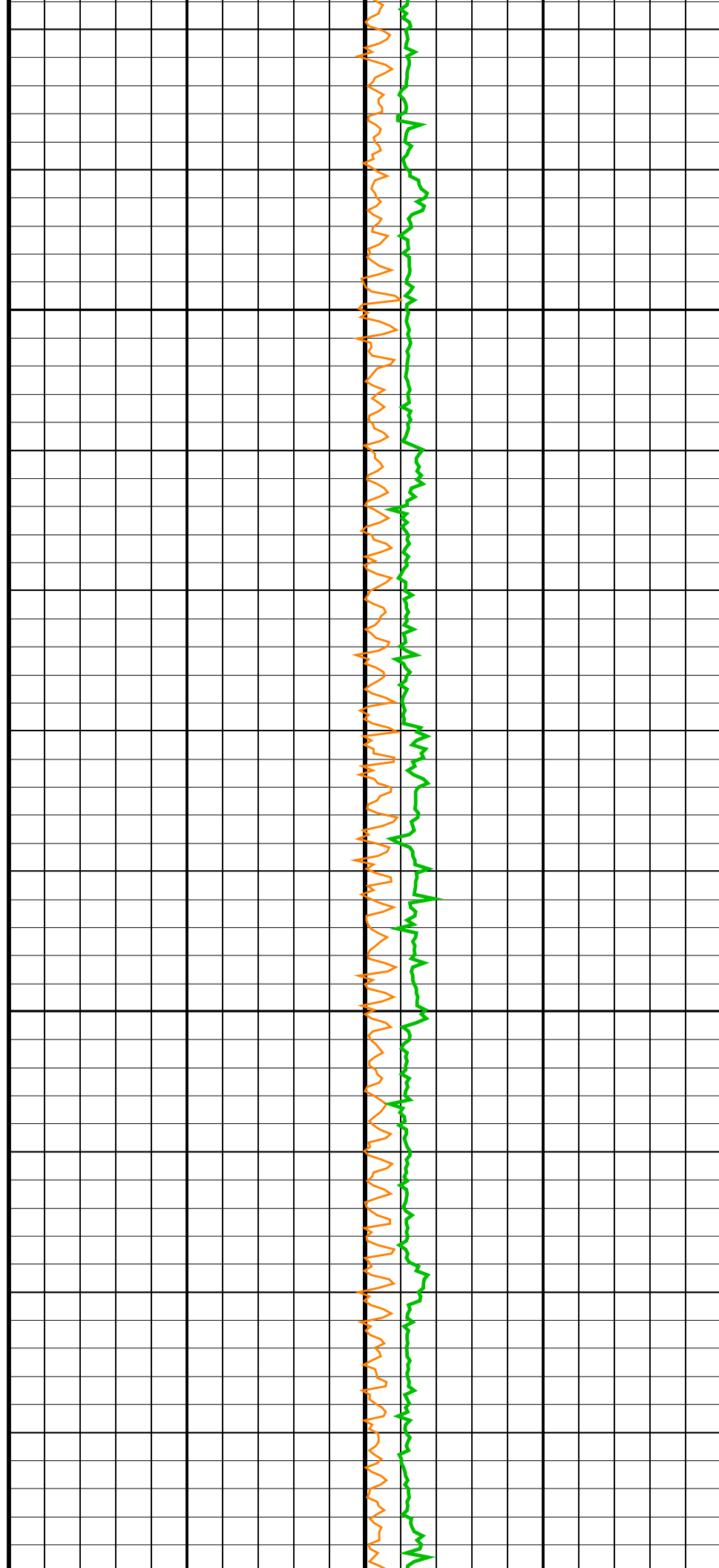
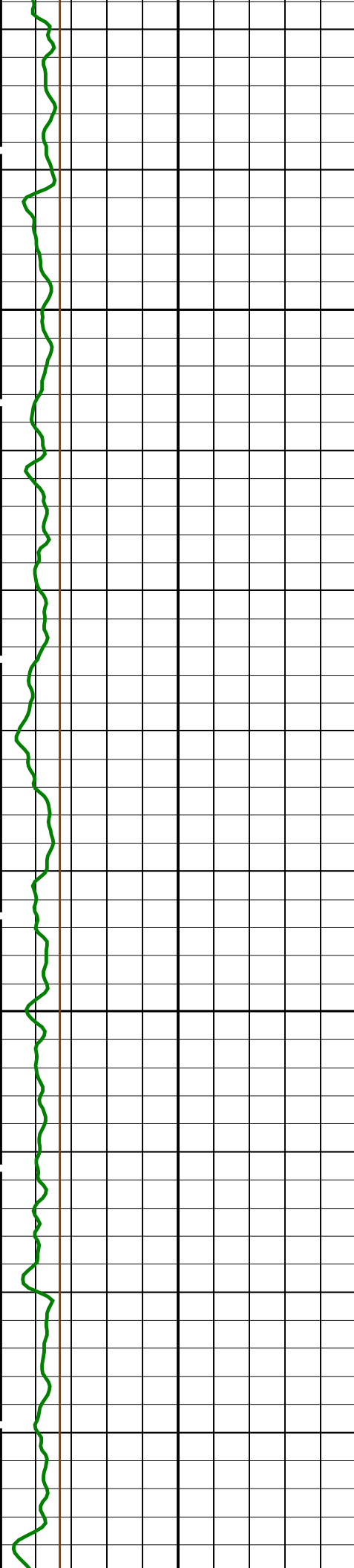


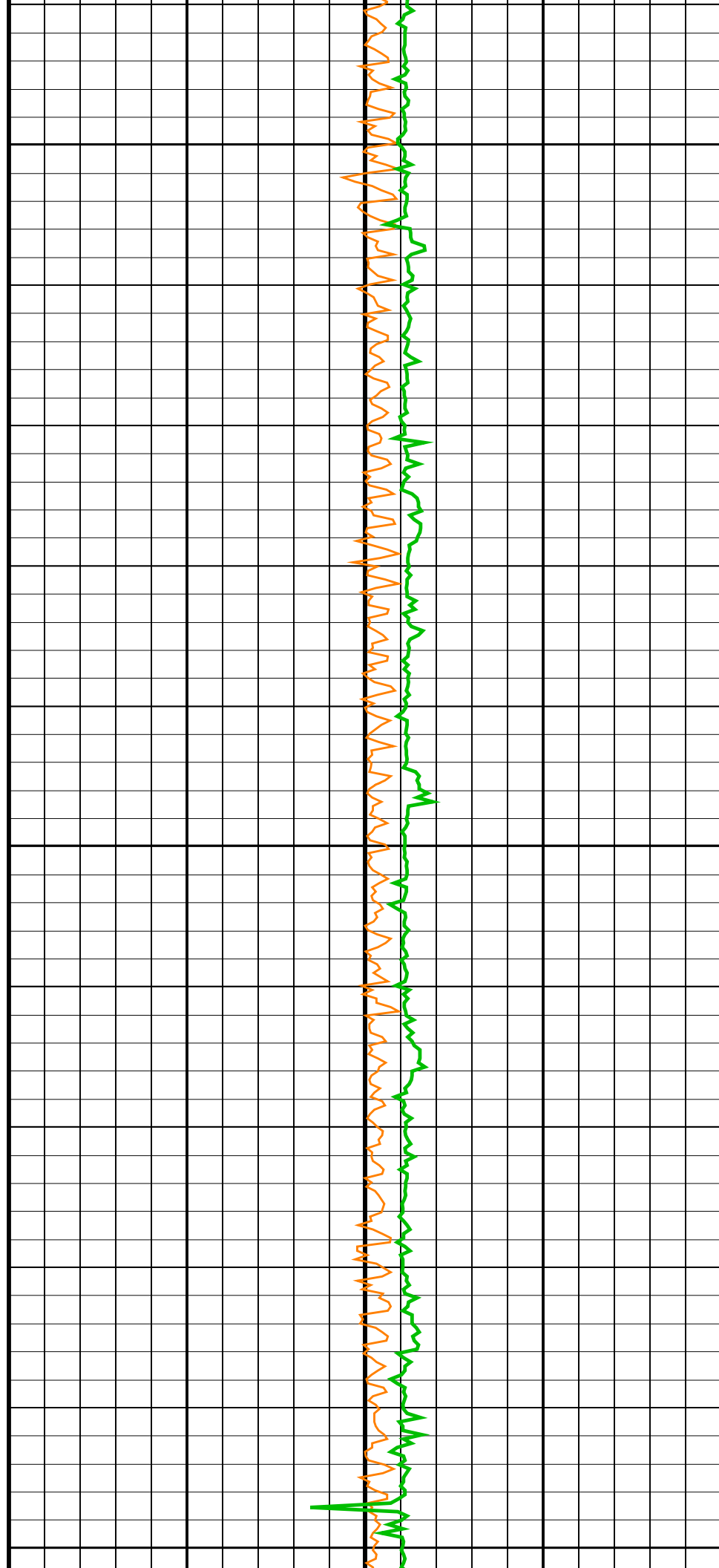
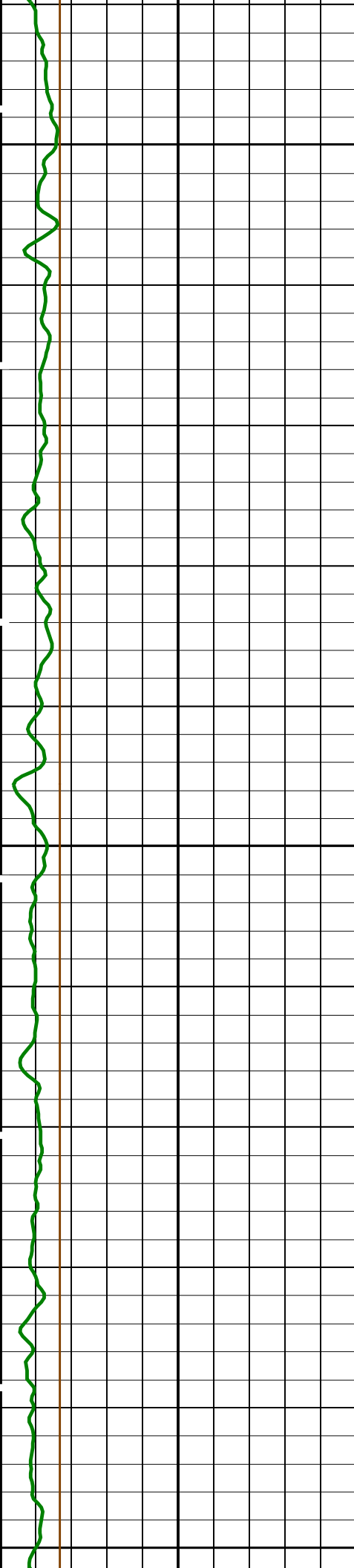


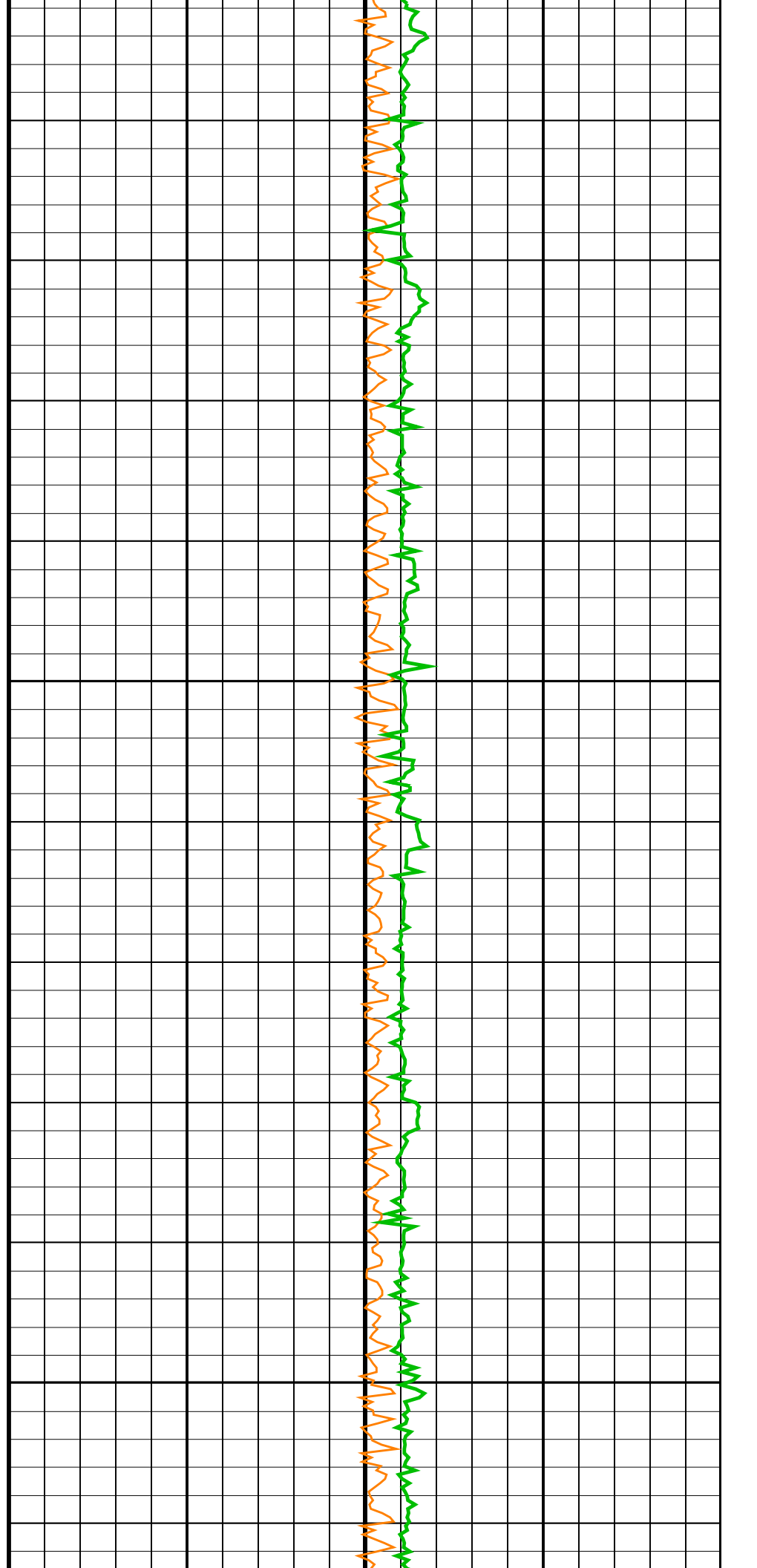
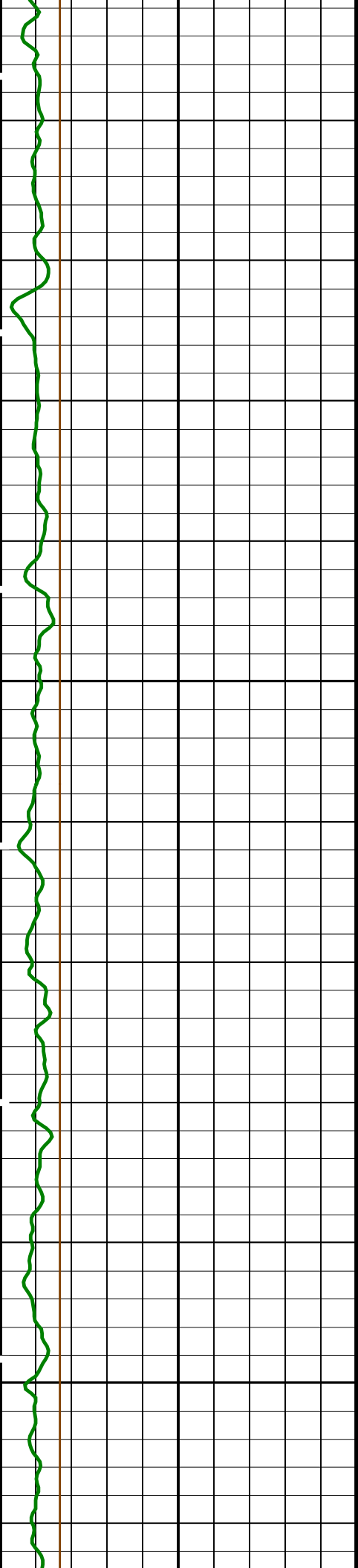
2000

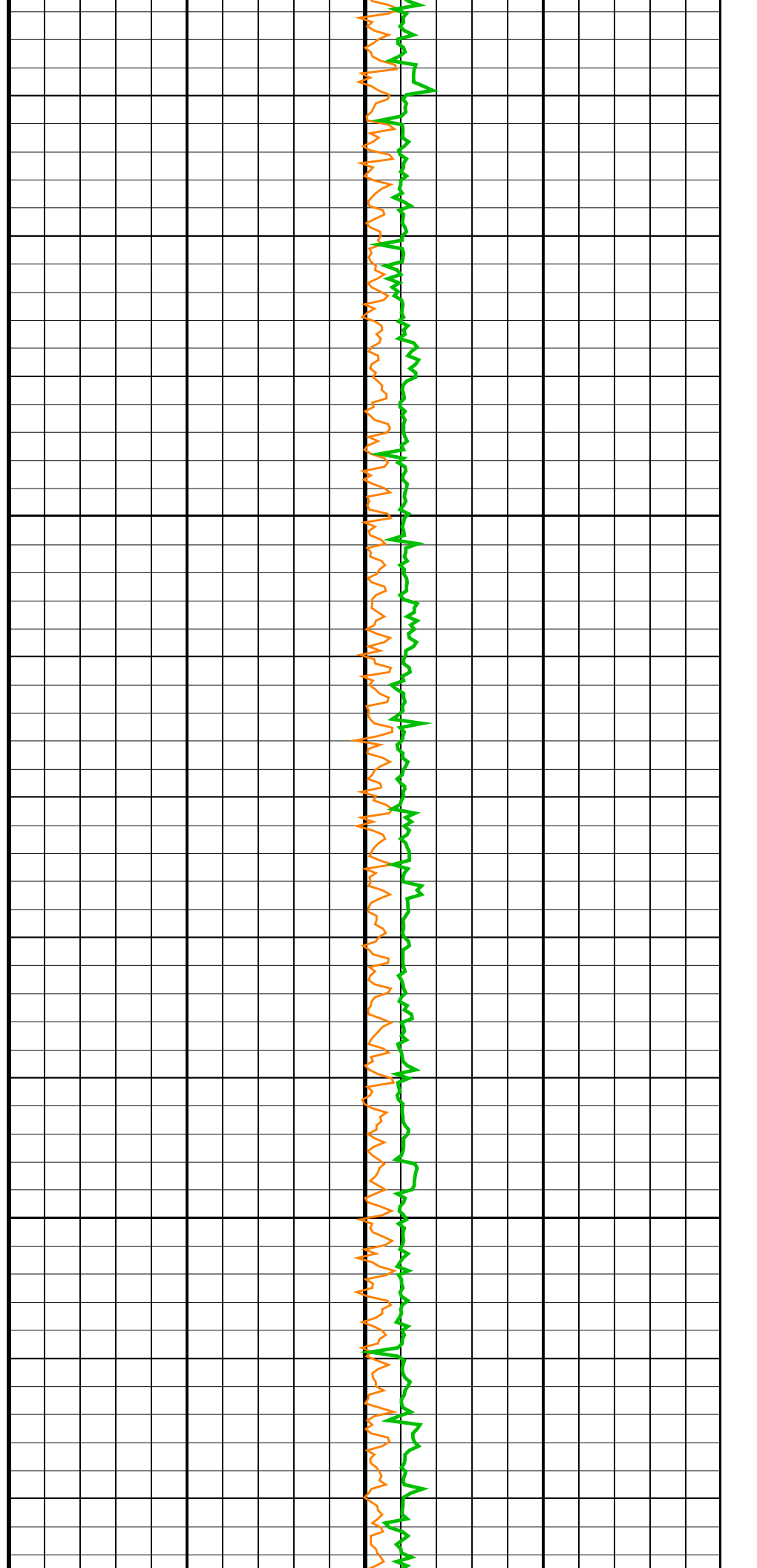
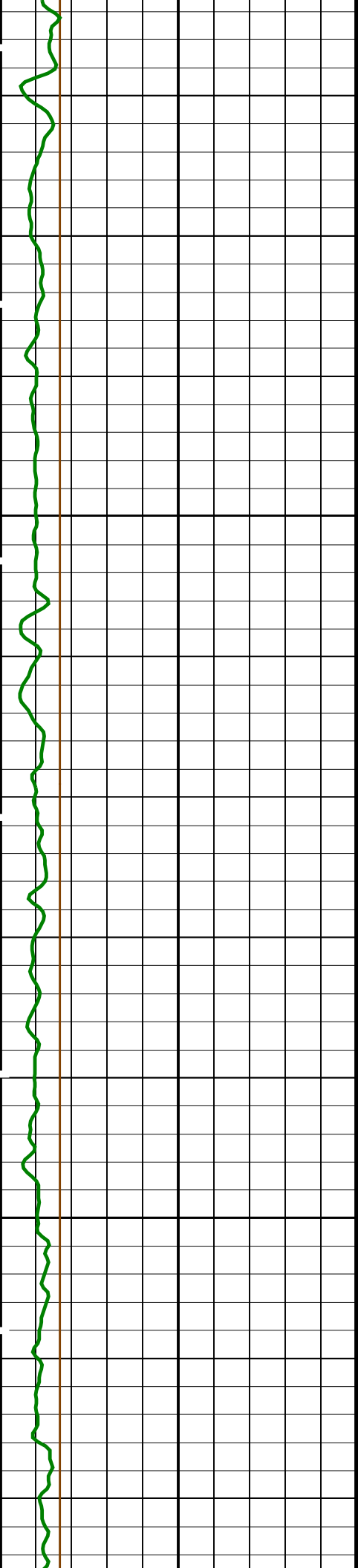
2025

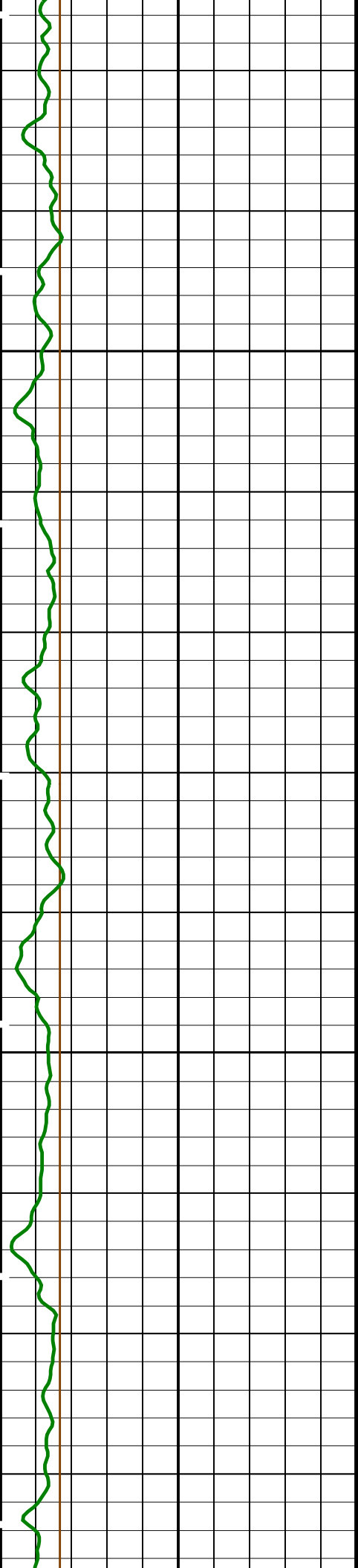






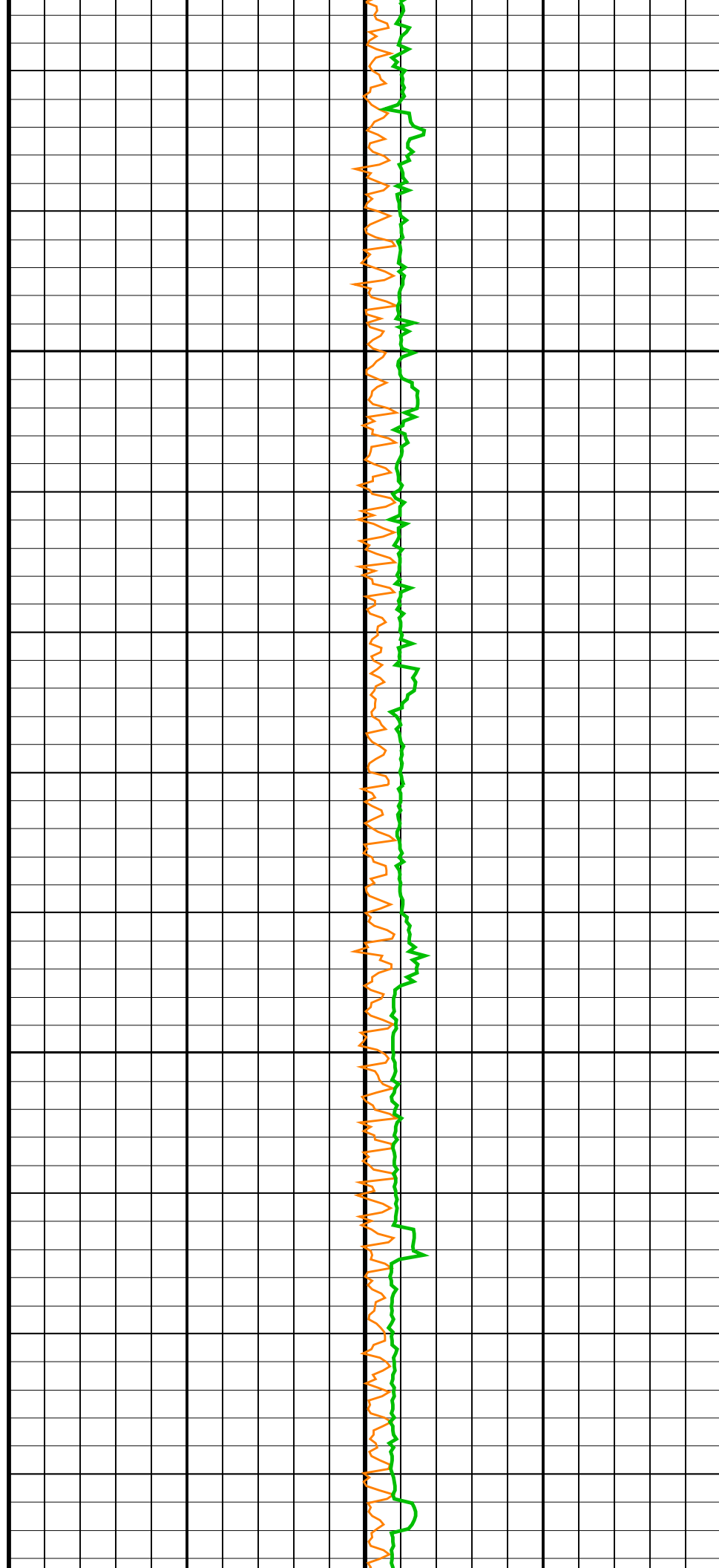


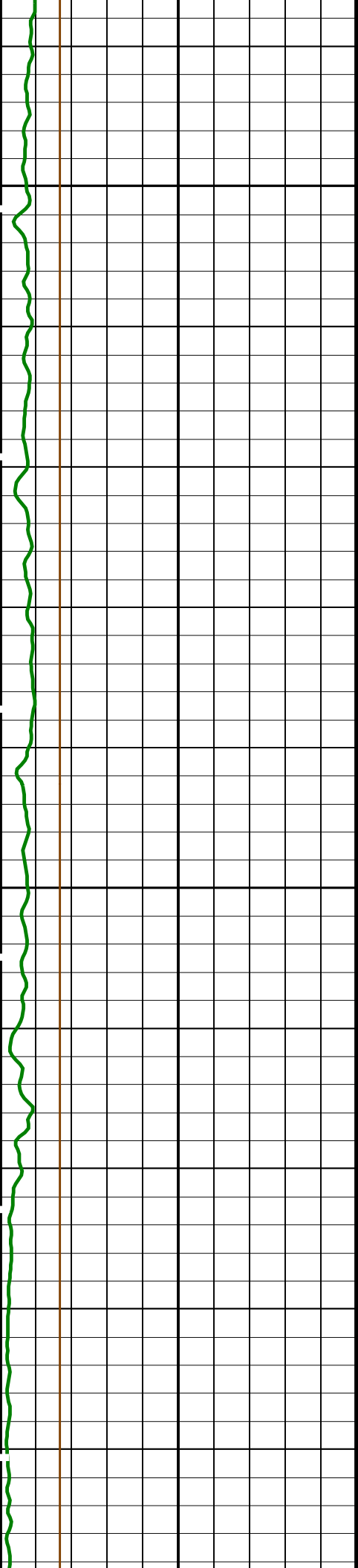




2275

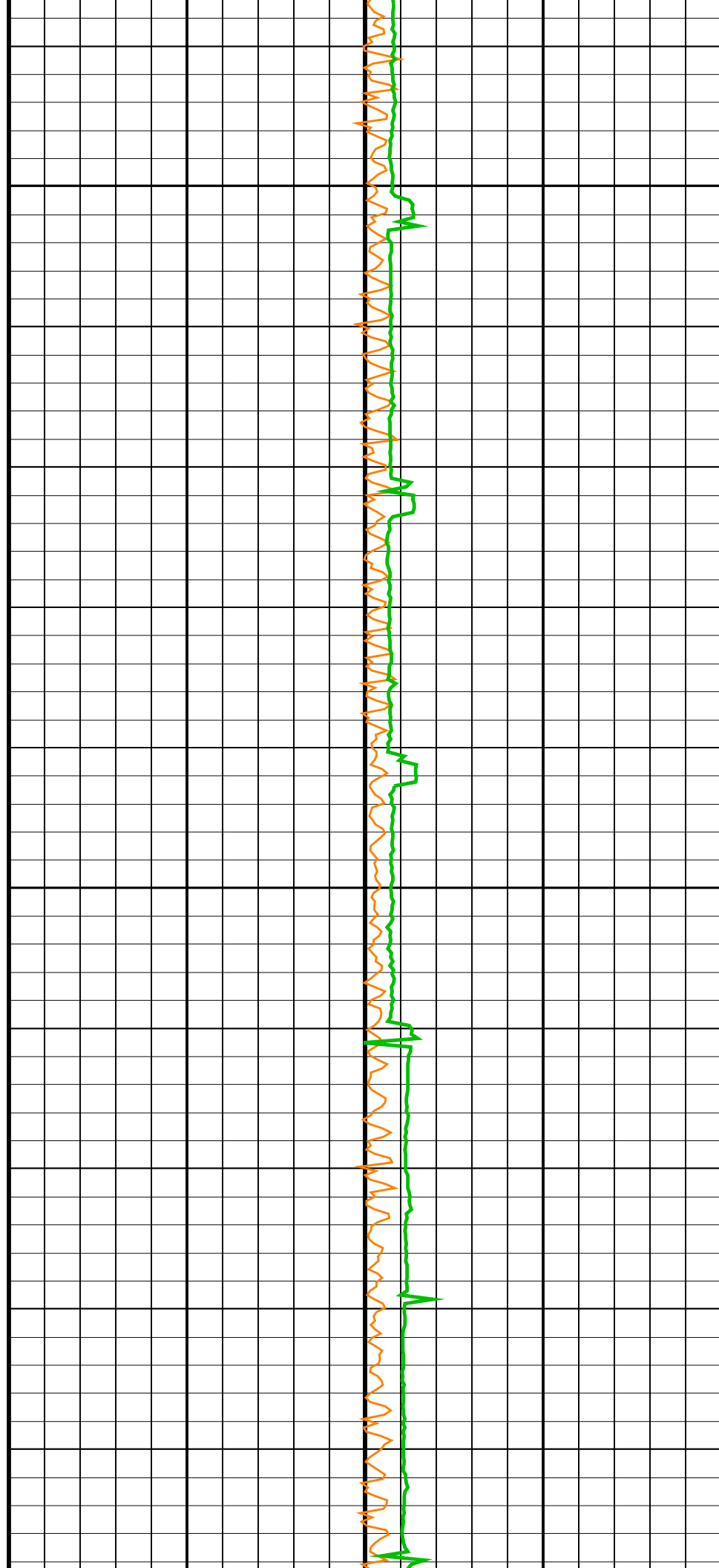
2300

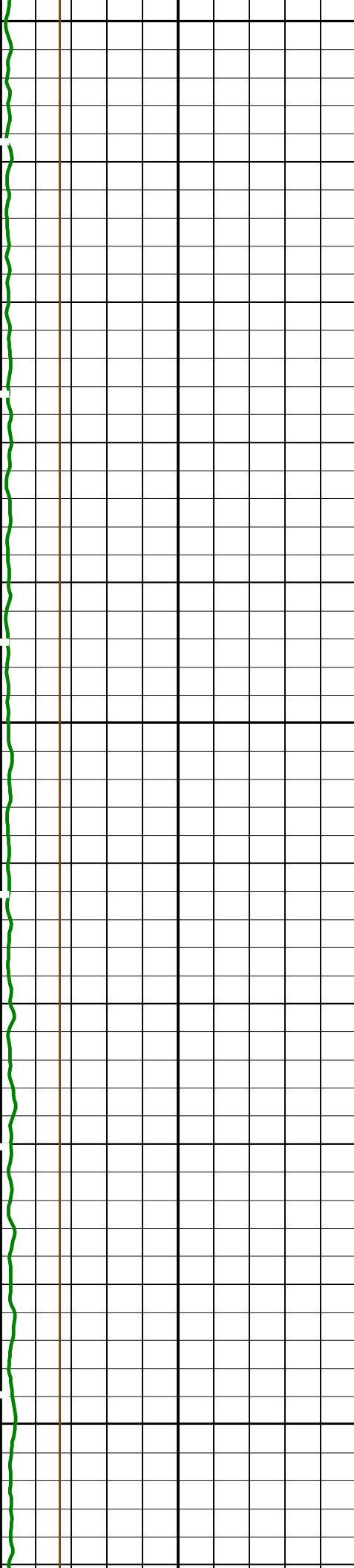




2325

2350

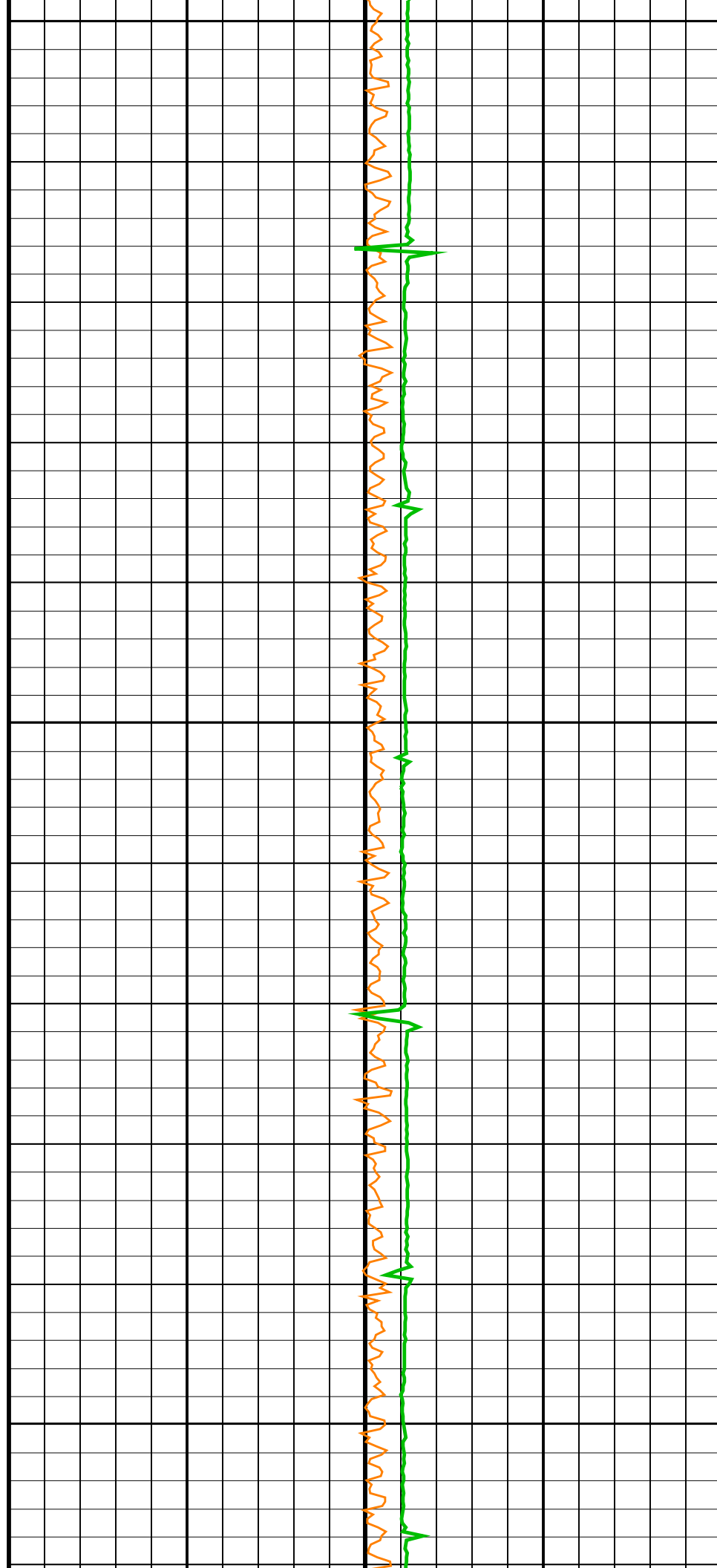


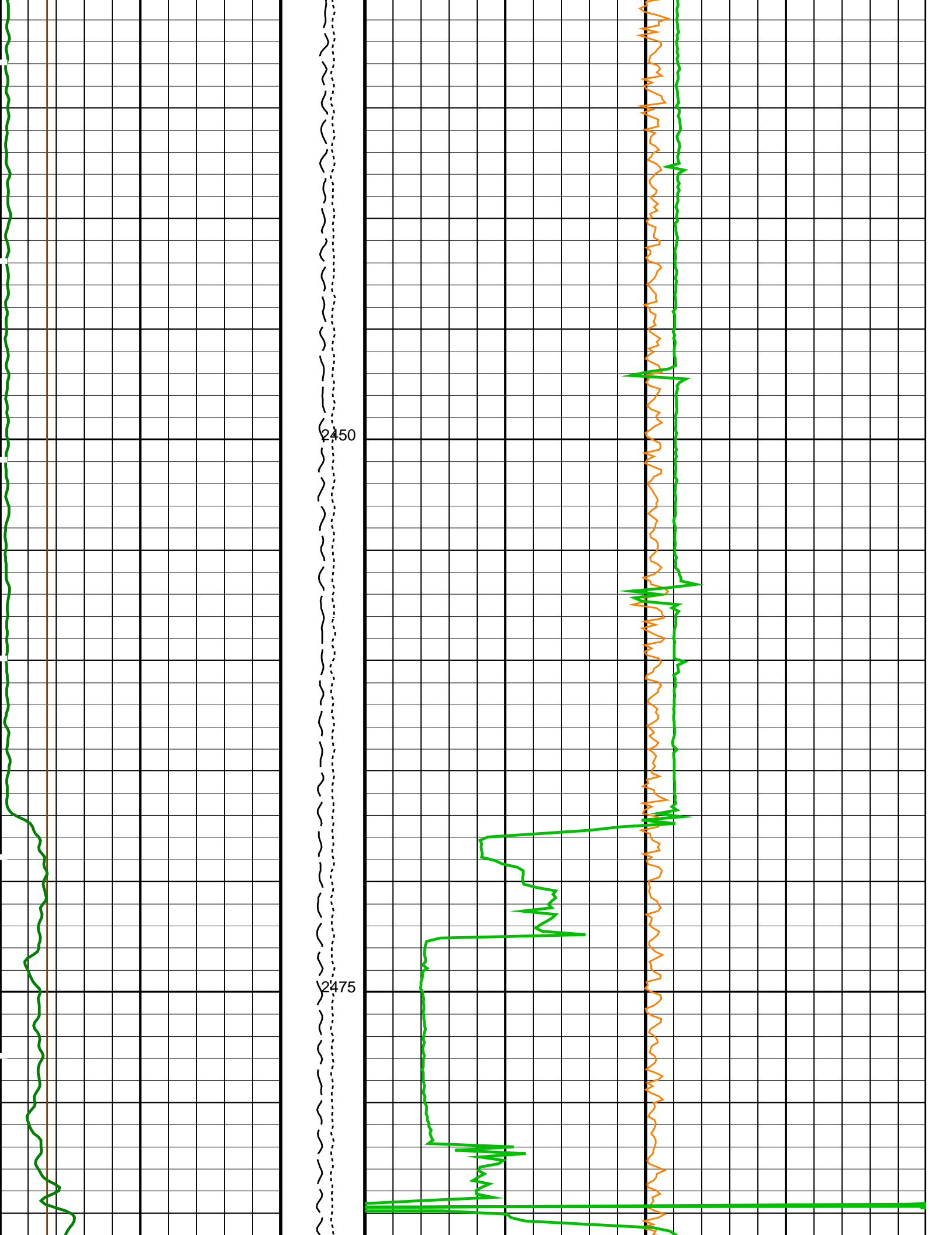


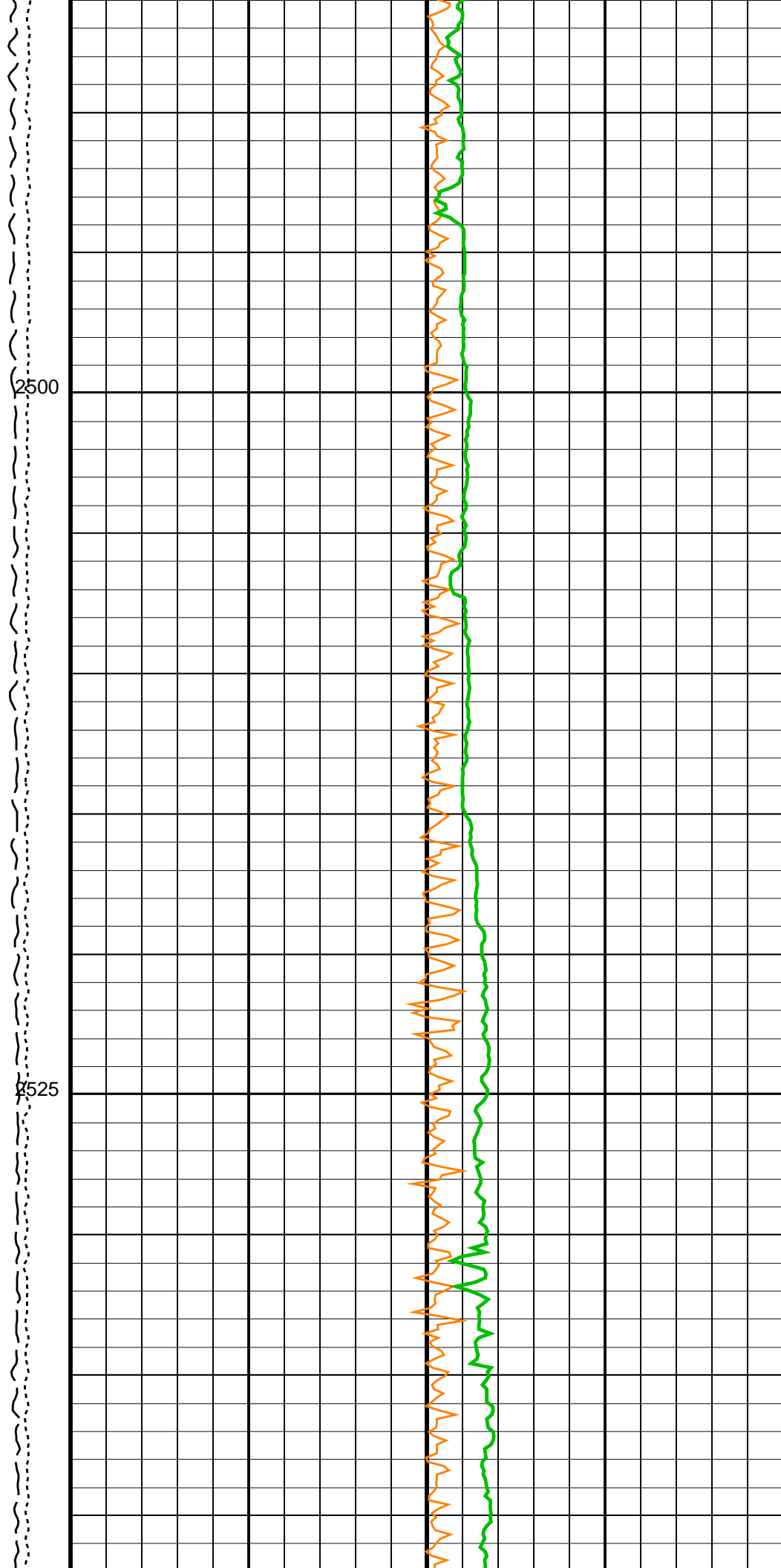
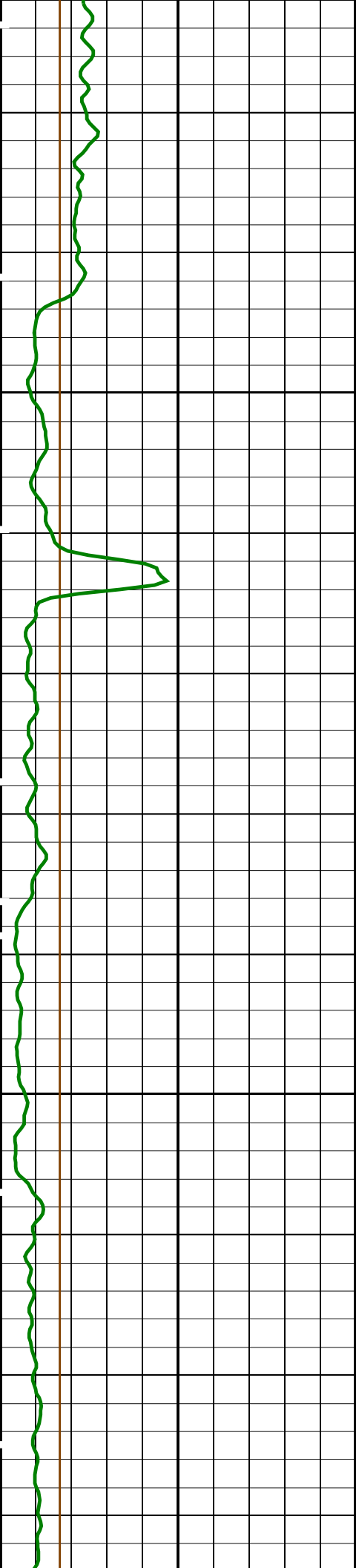
2375

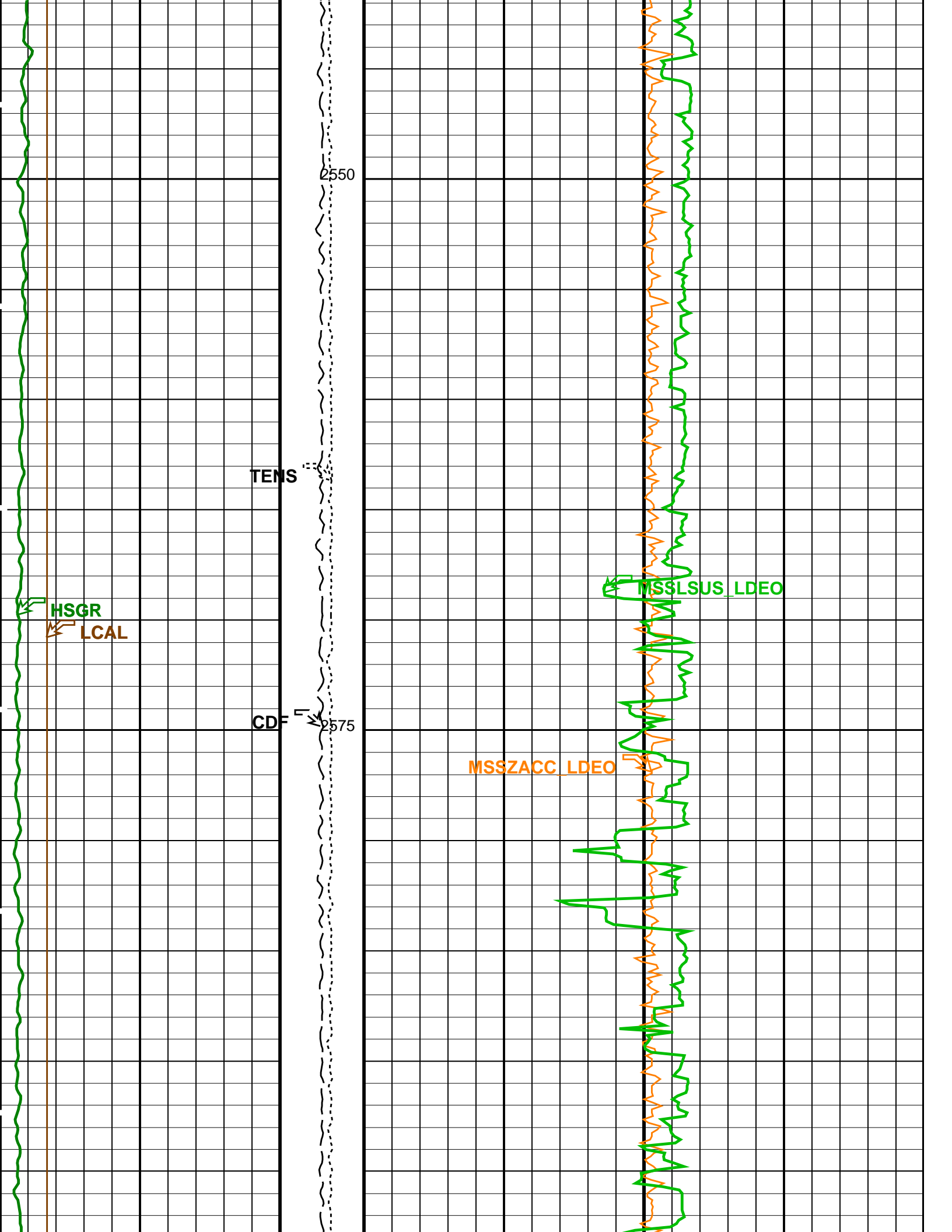
2400

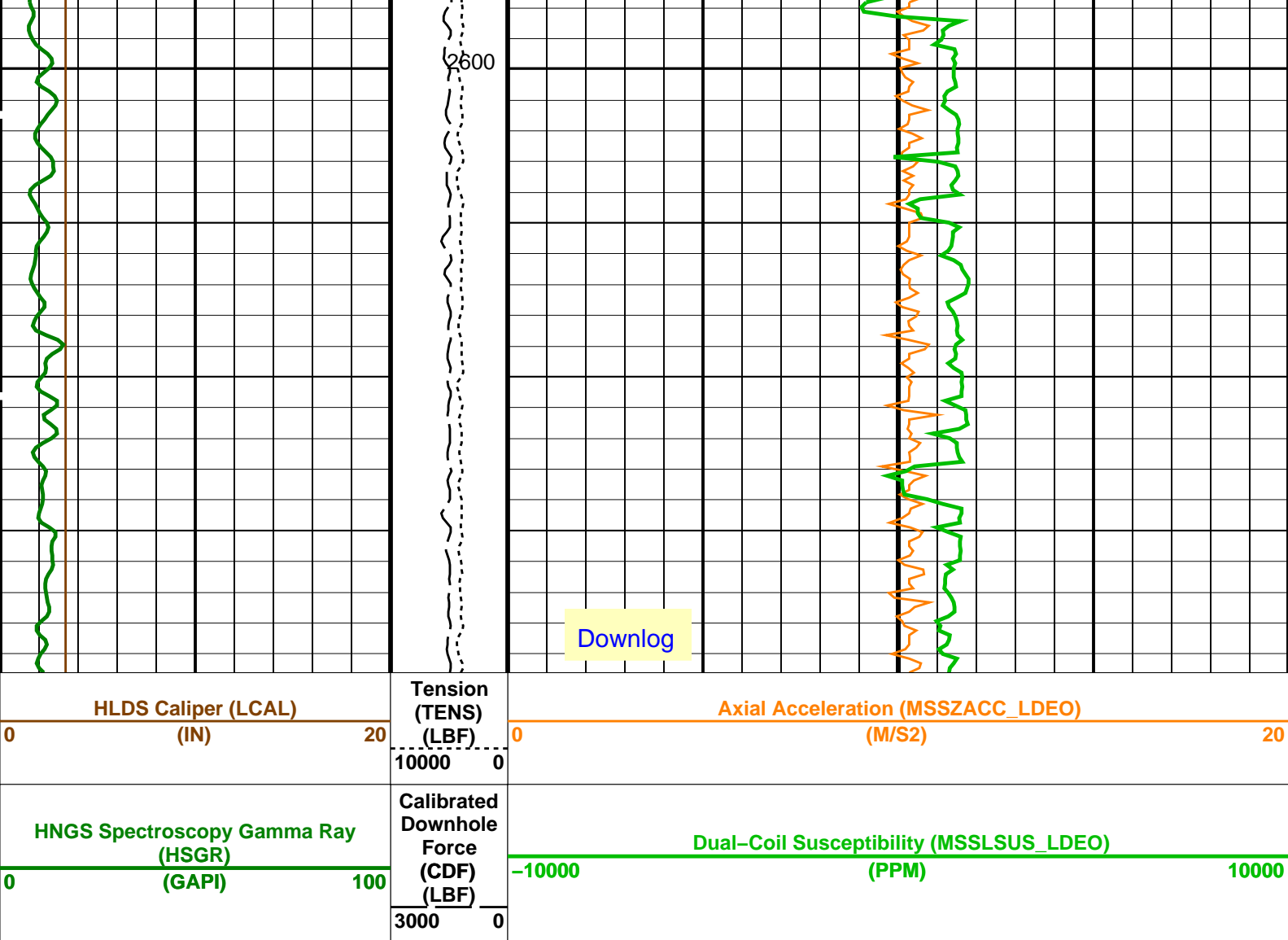
2425











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)	25	DEGC
CALSTAT	HRLTB Calibration Status	SHALLOW_DONE	
CALTEMP	HRLTB Calibration Temperature	10.6916	DEGC
FREQ0	HRLT Frequency Index for Mode 0	32	
FREQ1	HRLT Frequency Index for Mode 1	128	
FREQ2	HRLT Frequency Index for Mode 2	104	
FREQ3	HRLT Frequency Index for Mode 3	86	
FREQ4	HRLT Frequency Index for Mode 4	56	
FREQ5	HRLT Frequency Index for Mode 5	44	
FREQ6	HRLT Frequency Index for Mode 6	116	
GCSE	Generalized Caliper Selection	BS	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
ISSBAR	Barite Mud Switch	NOBARITE	
KFAC_HRLT	HRLT K Factor Option	SONDE	
LOOPCOEF_S	HRLT Loop Coefficient for Shallow Modes	LOW	
LOOPMOD0	HRLT Mode 0 Loop Mode	AUTO	
LOOPMOD1	HRLT Mode 1 Loop Mode	AUTO	
LOOPMOD2	HRLT Mode 2 Loop Mode	AUTO	
LOOPMOD3	HRLT Mode 3 Loop Mode	AUTO	
LOOPMOD4	HRLT Mode 4 Loop Mode	AUTO	
LOOPMOD5	HRLT Mode 5 Loop Mode	AUTO	
LOOPMOD6	HRLT Mode 6 Loop Mode	AUTO	
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
PROCINV	Inversion Selection	ON	
PROCMEI	Inversion Micro Resistivity Selection	NO_EXTERNAL_PXC	

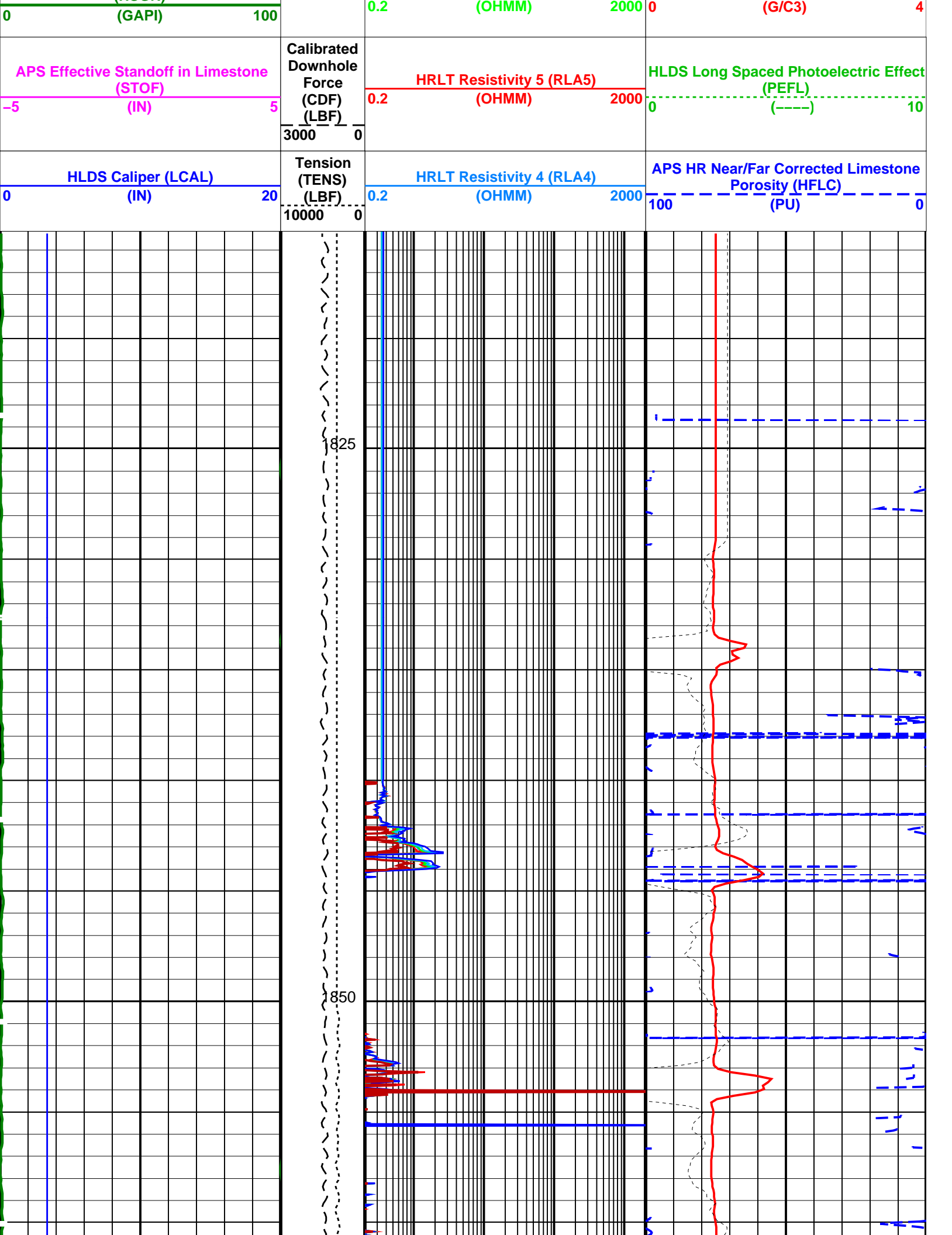
PROCMFL	Inversion Micro-Resistivity Selection	NO_EXTERNAL_RXO	0	IN
PROCMSO	Mechanical Standoff Fin Size			
PROCRM	Processing Mud Resistivity Select	HRLT_Compute		
PROCSPO	Sonde Position	Centered		
SHT	Surface Hole Temperature	20		DEGC
HLDS: Hostile Litho-Density Sonde				
CLCL	HLDS LS Control Loop Controller Mode	AUTO_DEFAULT		
CLCS	HLDS SS Control Loop Controller Mode	AUTO_DEFAULT		
CLLS	HLDS Mode Loop Long Spacing	AUTO		
CLSS	HLDS Mode Loop Short Spacing	AUTO		
DHC	Density Hole Correction	BS		
DPPM	Density Porosity Processing Mode	HIRS		
FD	Fluid Density	1		G/C3
LATC	HLDS Activation Correction	OFF		
LLDL	HLDS LS Low Level Discriminator DAC	14000		
LLDS	HLDS SS Low Level Discriminator DAC	14000		
LLML	HLDS LS Low Level Discriminator Mode	AUTO		
LLMS	HLDS SS Low Level Discriminator Mode	AUTO		
MDEN	Matrix Density	2.6		G/C3
PHVL	HLDS Long Spacing High Voltage Setting	1000		V
PHVS	HLDS Short Spacing High Voltage Setting	1500		V
PSDL	HLDS LS Pulse Shape Compensation DAC	30000		
PSDS	HLDS SS Pulse Shape Compensation DAC	30000		
PSML	HLDS LS Pulse Shape Compensation Mode	AUTO		
PSMS	HLDS SS Pulse Shape Compensation Mode	AUTO		
APS-C: Accelerator-Porosity Tool				
	APS Software Version	5		
AASD	APS Thermal and Array Detectors High Voltage Setting	1976.24		V
ADSO	APS Array Detectors Data Source Switch	Both		
AFSD	APS Far Detector High Voltage Setting	2067.55		V
AHCS	APS Holesize Correction Source	GCSE		
AHSS	APS Holesize Correction Switch	ON		
AMTY	APS Environmental Corrections Mud Type	WaterBaseBarite		
ANSD	APS Near Detector High Voltage Setting	1737.8		V
ASOS	APS Standoff Correction Switch	ON		
ATSS	APS Temperature-Pressure-Salinity Correction Switch	ON		
BHFL_APS	APS TNPH Borehole Fluid Type	WATER		
BHS	Borehole Status	OPEN		
BHT	Bottom Hole Temperature (used in calculations)	25		DEGC
BSCO_APS	APS TNPH Borehole Salinity Correction Option	NO		
DPPM	Density Porosity Processing Mode	HIRS		
DSCO_APS	APS TNPH Density Source Correction Option	MEASURED		
FSAL	Formation Salinity	-50000		PPM
FSCO_APS	APS TNPH Formation Salinity Correction Option	NO		
GCSE	Generalized Caliper Selection	BS		
GDEV	Average Angular Deviation of Borehole from Normal	0		DEG
GRD	Geothermal Gradient	0.018227		DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN 9		
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE		
HSCO_APS	APS TNPH Hole Size Correction Option	YES		
ISSBAR	Barite Mud Switch	NOBARITE		
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE		
MCCO_APS	APS TNPH Mud Cake Correction Option	YES		
MCOR_APS	APS TNPH Mud Correction	NATU		
MWCO_APS	APS TNPH Mud Weight Correction Option	YES		
NARC	APS Near/Array Calibration Ratio	1.08341		
NFRC	APS Near/Far Calibration Ratio	0.942369		
PTCO_APS	APS TNPH Pressure/Temperature Correction Option	NO		
SHT	Surface Hole Temperature	20		DEGC
TNCO_APS	APS TNPH Computation Option	YES		
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)	25		DEGC
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		
GDEV	Average Angular Deviation of Borehole from Normal	0		DEG
GRD	Geothermal Gradient	0.018227		DC/M
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	-0.00303066		
HALF	HNGS Alpha Filter Length	60		IN
HCRB	HNGS Apply Borehole Potassium Correction	NONE		
HMWM	Mud Weighting Material	NATU		
HNPE	HNGS Processing Enable	YES		
ISSBAR	Barite Mud Switch	NOBARITE		
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE		

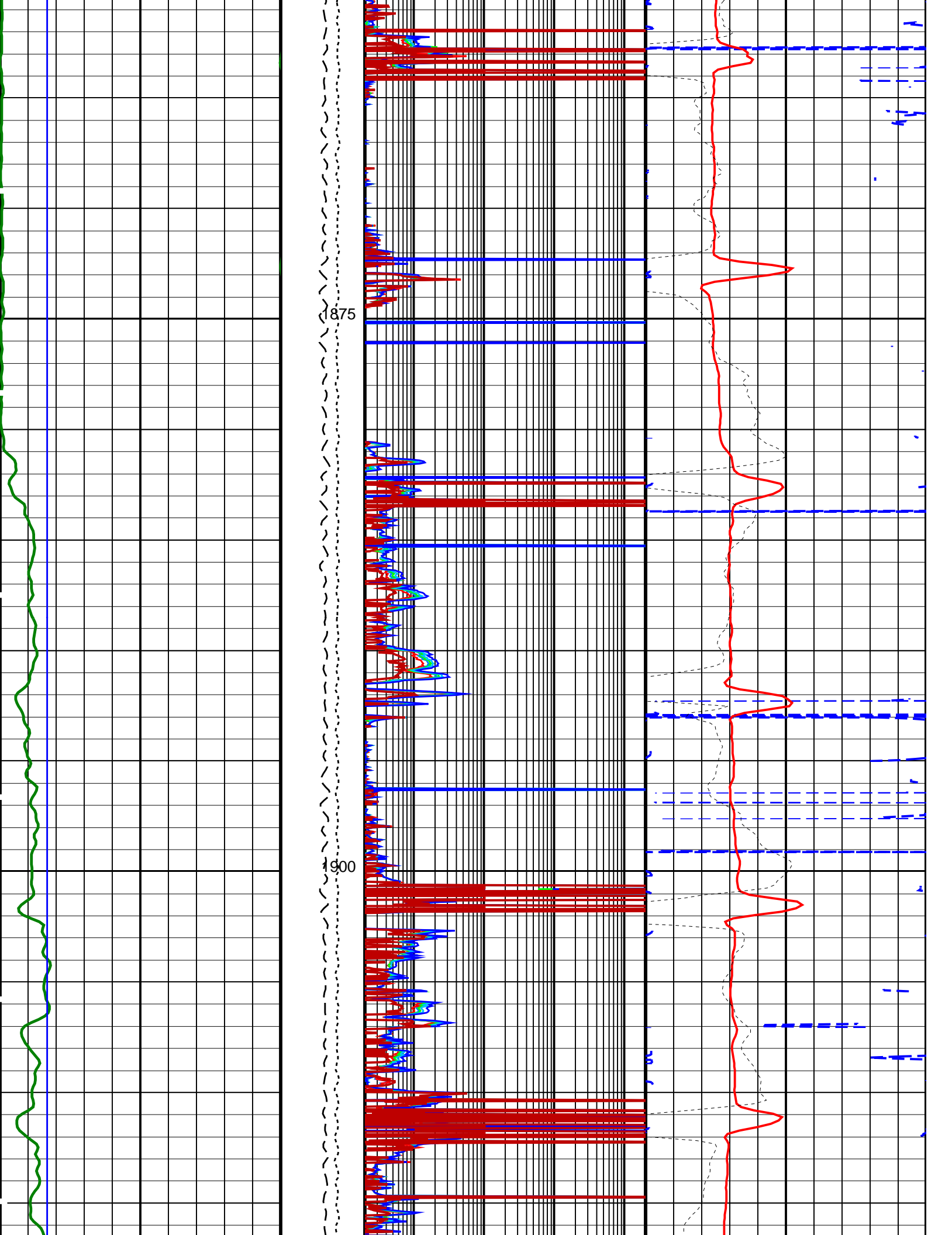
SBI	HNGS Detector 1 Calibration Bismuth Count Rate	1.3	CPS
S2BI	HNGS Detector 2 Calibration Bismuth Count Rate	1.3	CPS
SGRC	HNGS Standard Gamma-Ray Correction Flag	YES	
SHT	Surface Hole Temperature	20	DEGC
TPOS	Tool Position	ECCE	
VBA1	HNGS Detector 1 Variable Barite Factor Running Average	0.993303	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	1.04242	
System and Miscellaneous			
ALTDCHAN	Name of alternate depth channel	SpeedCorrectedDepth	
BS	Bit Size	9.875	IN
BSAL	Borehole Salinity	38000.00	PPM
CSIZ	Current Casing Size	10.750	IN
CWEI	Casing Weight	168.00	LB/F
DFD	Drilling Fluid Density	1.02	G/C3
DO	Depth Offset for Playback	0.0	M
FLEV	Fluid Level	-50000.00	M
MST	Mud Sample Temperature	23.00	DEGC
PBVSADP	Use alternate depth channel for playback	NO	
PP	Playback Processing	RECOMPUTE	
RMFS	Resistivity of Mud Filtrate Sample	-50000.0000	OHMM
RW	Resistivity of Connate Water	1.0000	OHMM
TD	Total Depth	8729.3	FT
TDD	Total Depth - Driller	2660.70	M
TDL	Total Depth - Logger	2661.00	M
TWS	Temperature of Connate Water Sample	37.78	DEGC

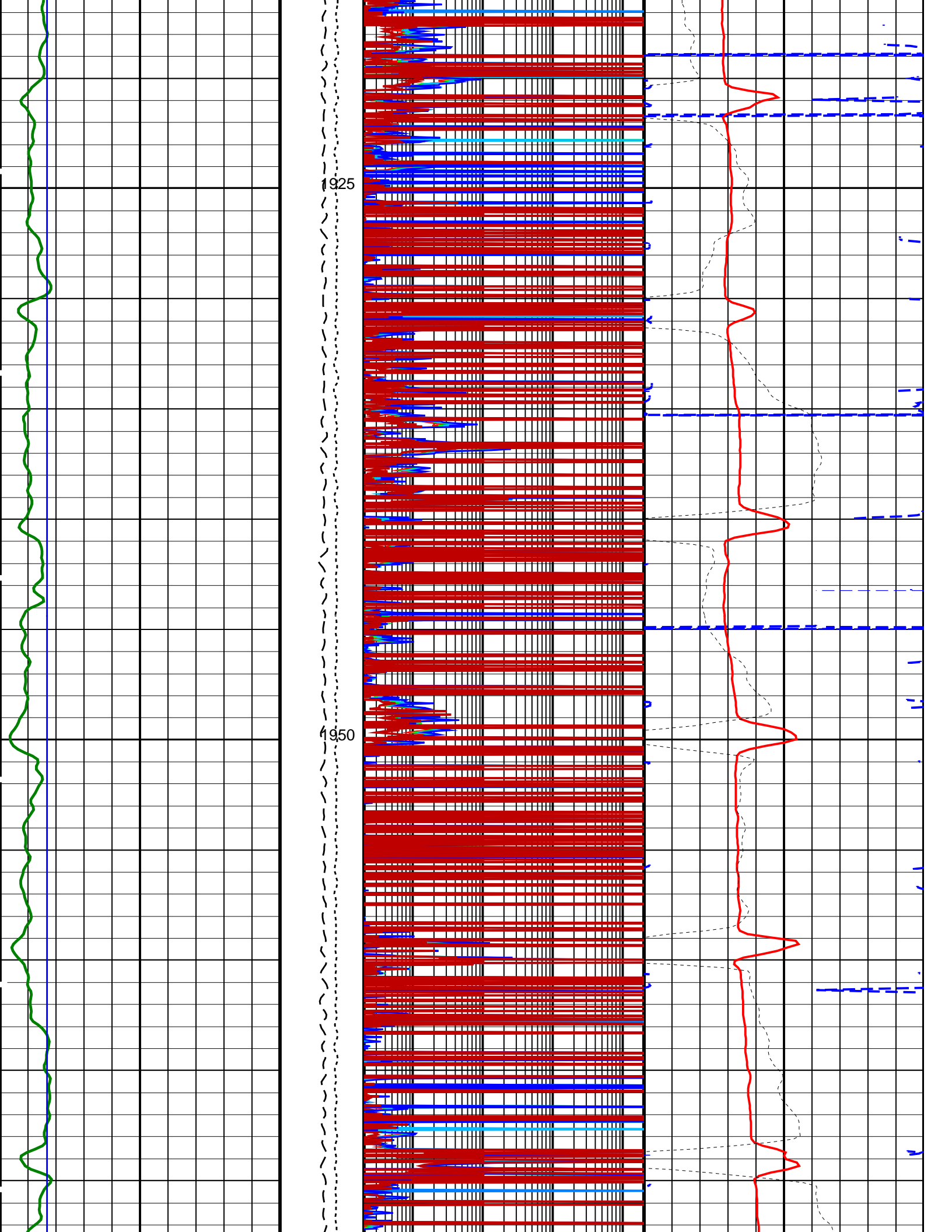
Format: MSS_Logging		Vertical Scale: 1:200		Graphics File Created: 10-Jul-2021 20:40		
OP System Version: 19C0-187						
MSS_LDEO-A	19C0-187		HRLT-B	19C0-187		
HLDS	19C0-187		LDSC-B	19C0-187		
APS-C	19C0-187		HNGC-B	19C0-187		
HNGS-BA	19C0-187		DTC-H	19C0-187		
Input DLIS Files						
DEFAULT	Flip_MSS_LDEO_HRLA_052PUP	PRODUCER	10-Jul-2021 20:36	2619.6 M	1815.1 M	
Output DLIS Files						
DEFAULT	MSS_LDEO_HRLA_LDL_053PUP	FN:86	PRODUCER	10-Jul-2021 20:40		

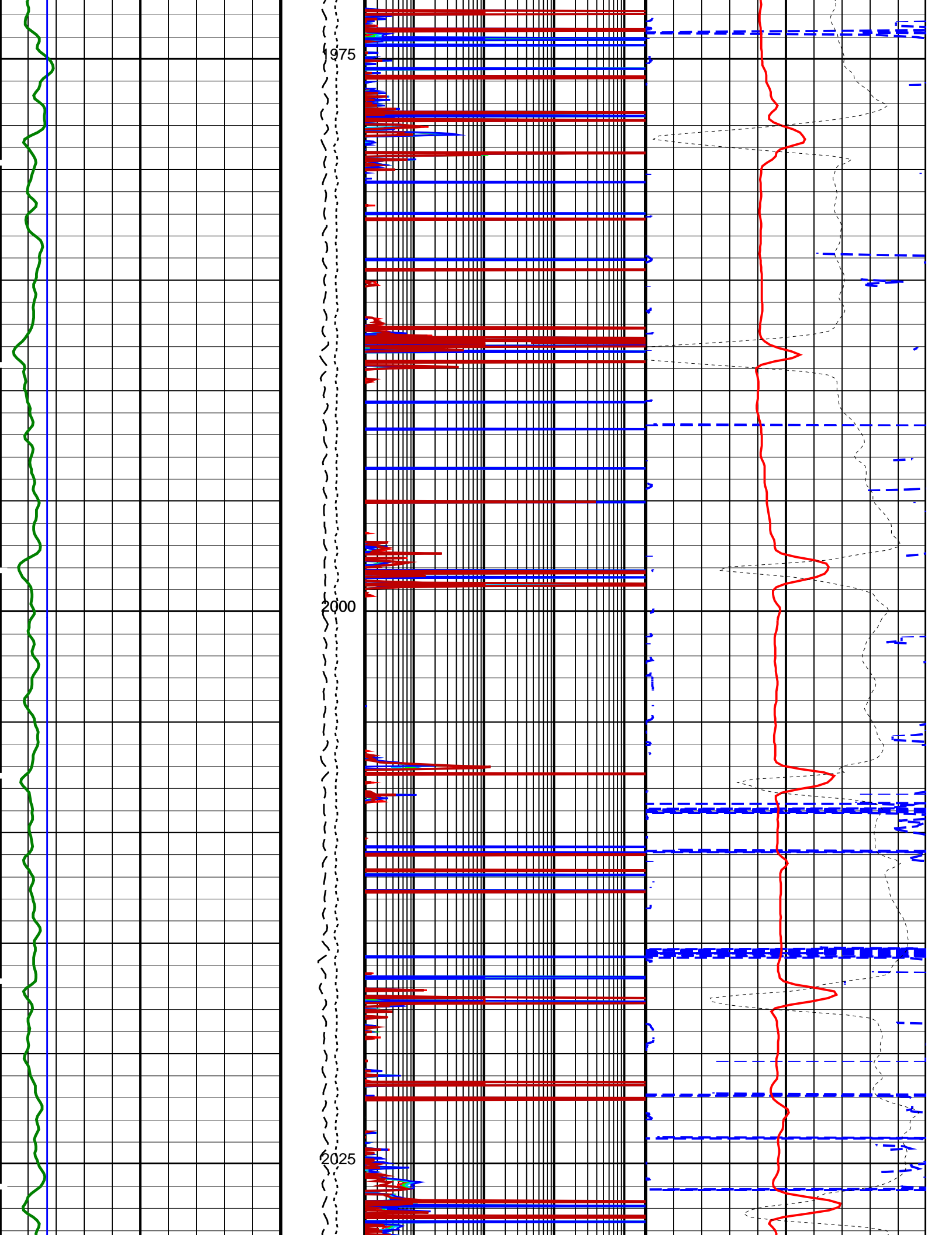
Input DLIS Files					
DEFAULT	Flip_MSS_LDEO_HRLA_052PUP	PRODUCER	10-Jul-2021 20:36	2619.6 M	1815.1 M
Output DLIS Files					
DEFAULT	MSS_LDEO_HRLA_LDL_053PUP	FN:86	PRODUCER	10-Jul-2021 20:40	2619.6 M
OP System Version: 19C0-187					
MSS_LDEO-A	19C0-187	HRLT-B	19C0-187		
HLDS	19C0-187	LDSC-B	19C0-187		
APS-C	19C0-187	HNGC-B	19C0-187		
HNGS-BA	19C0-187	DTC-H	19C0-187		

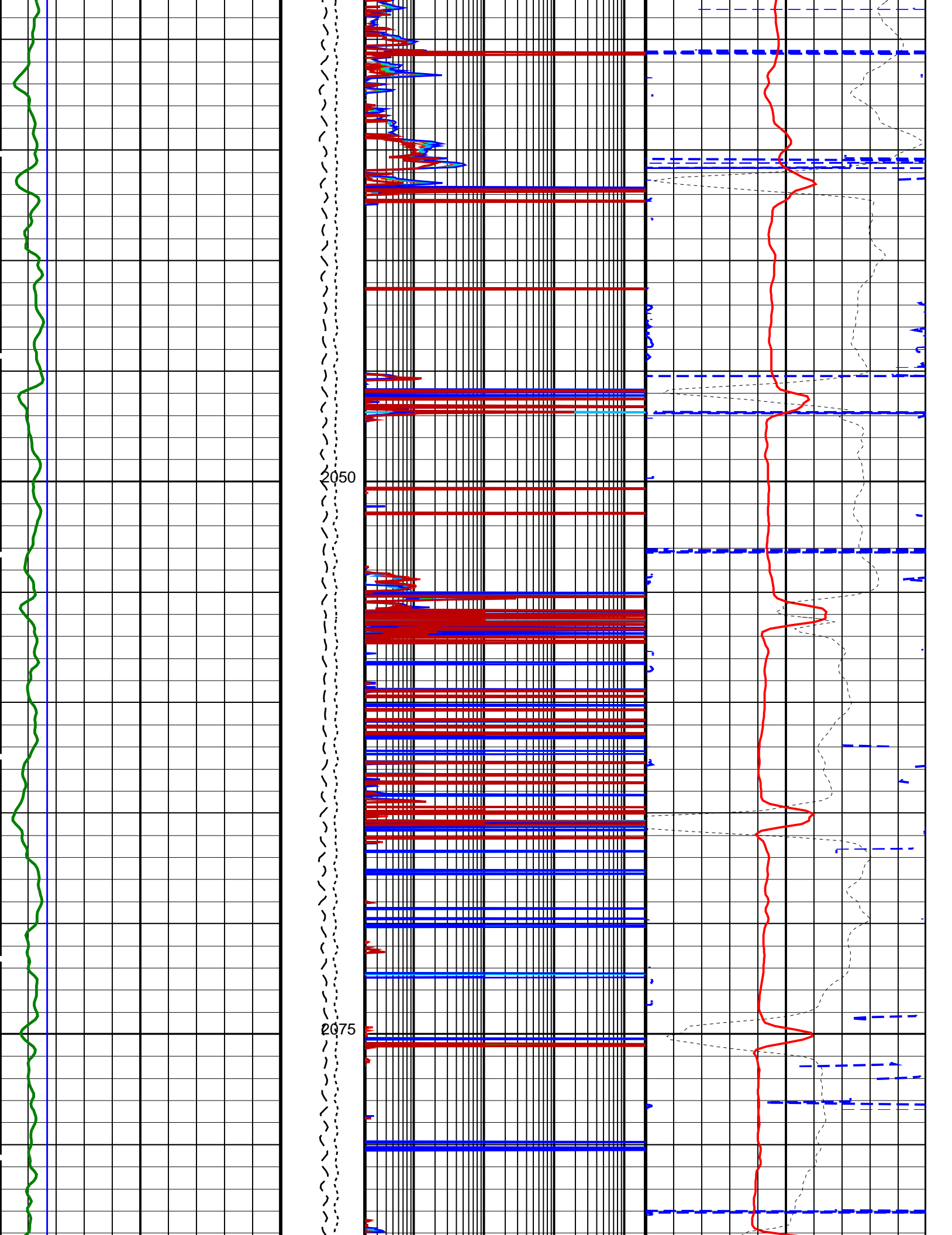
PIP SUMMARY					
Time Mark Every 60 S					
<div>Downlog</div> <div>HNGS Spectroscopy Gamma Ray (HSGR)</div>	HRLT True Resistivity (RT_HRLT)				
	0.2	(OHMM)			
	HRLT Resistivity 1 (RLA1)				
	0.2	(OHMM)			
	HRLT Resistivity 2 (RLA2)		HLDS Bulk Density Correction (DRH)		
0.2	(OHMM)	2000	-0.25	(G/C3)	0.25
	HRLT Resistivity 3 (RLA3)		HLDS Bulk Density (RHOM)		

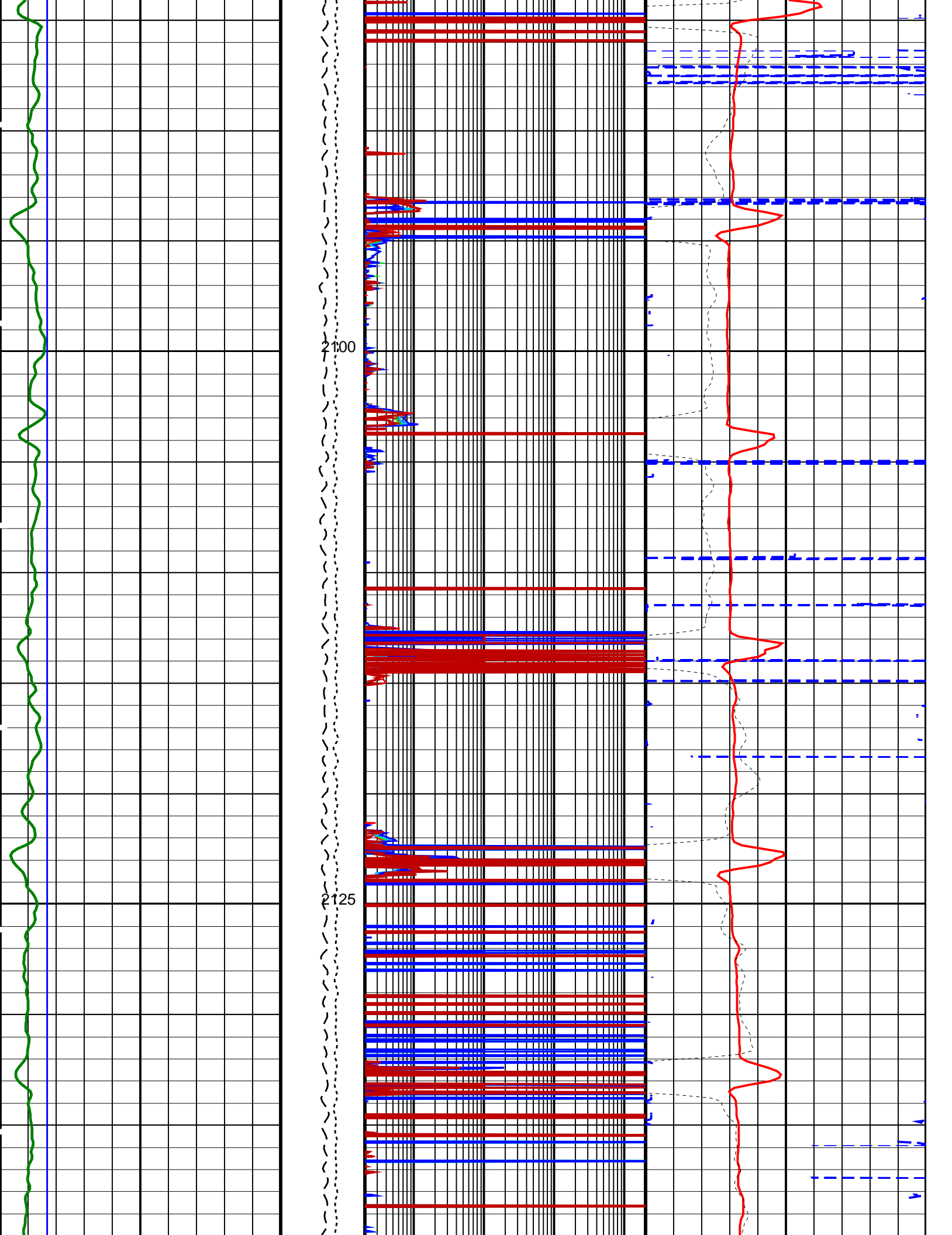


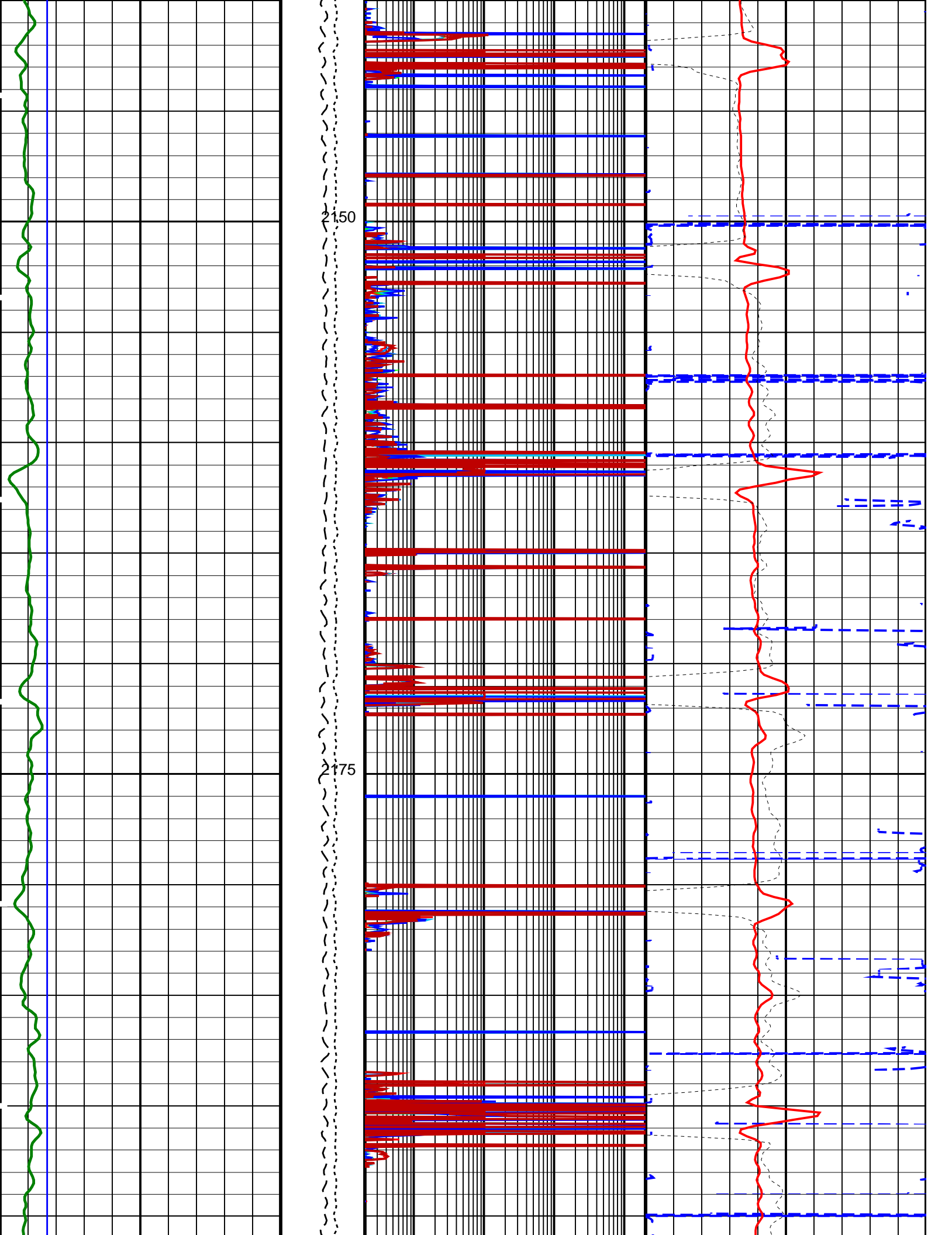


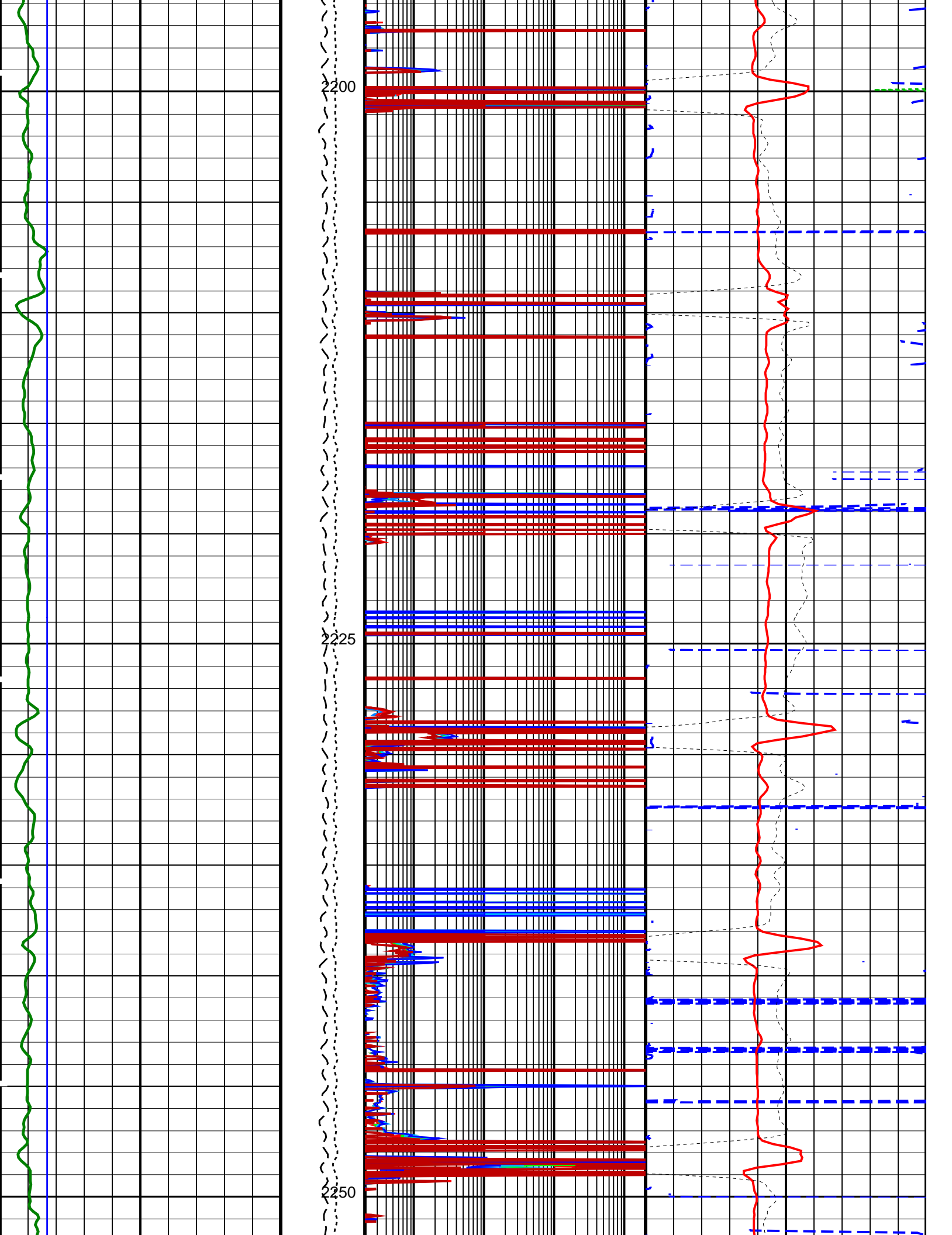


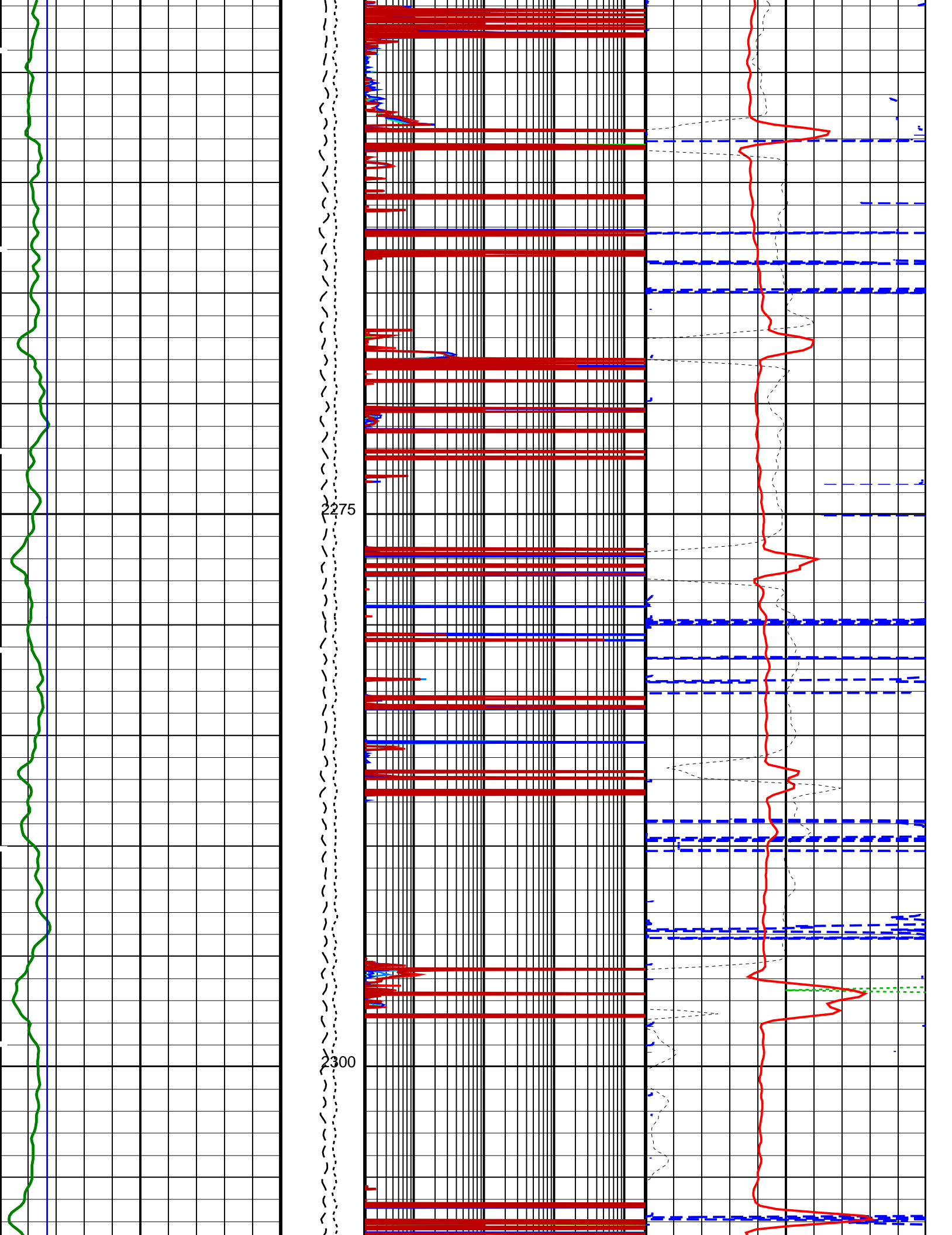


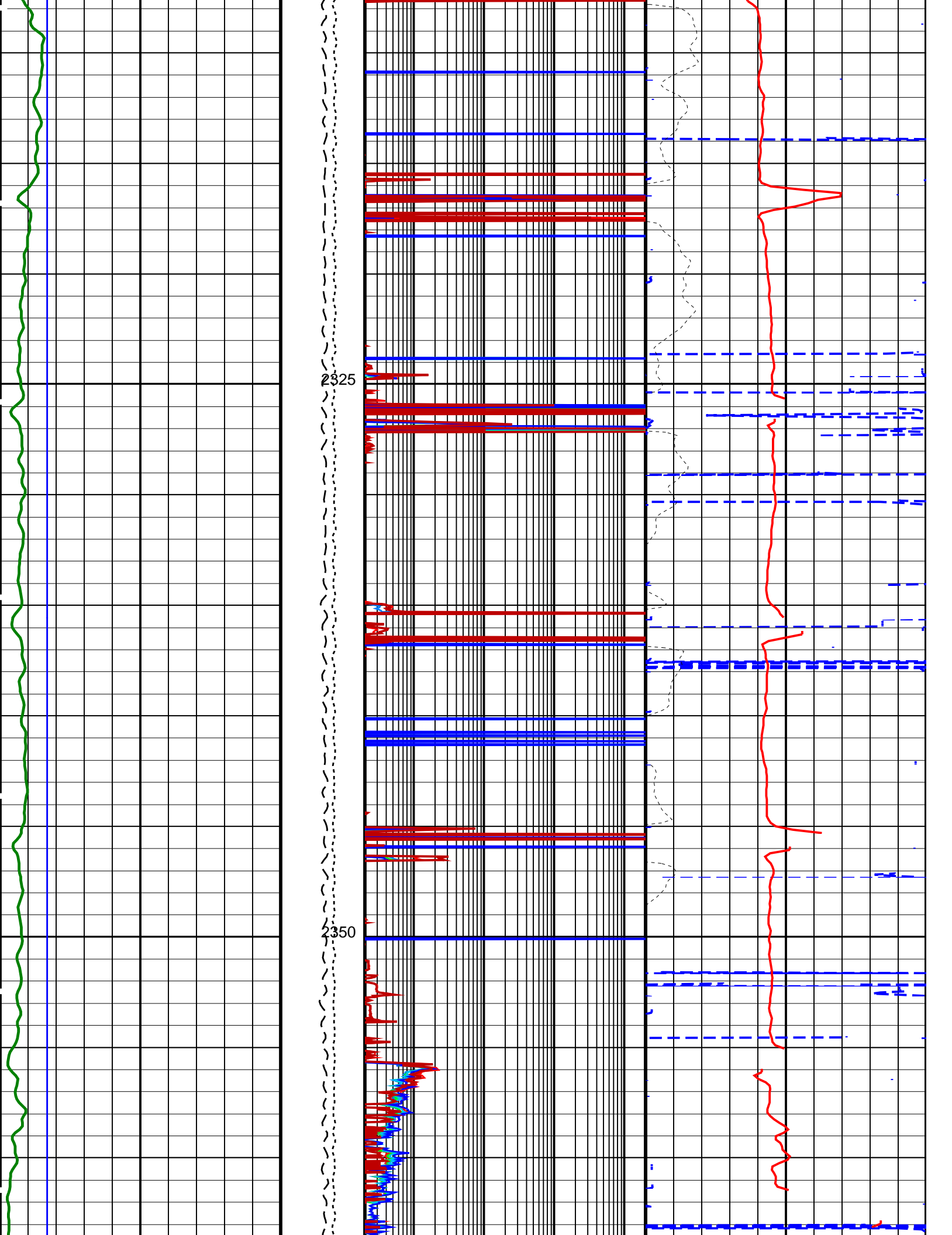


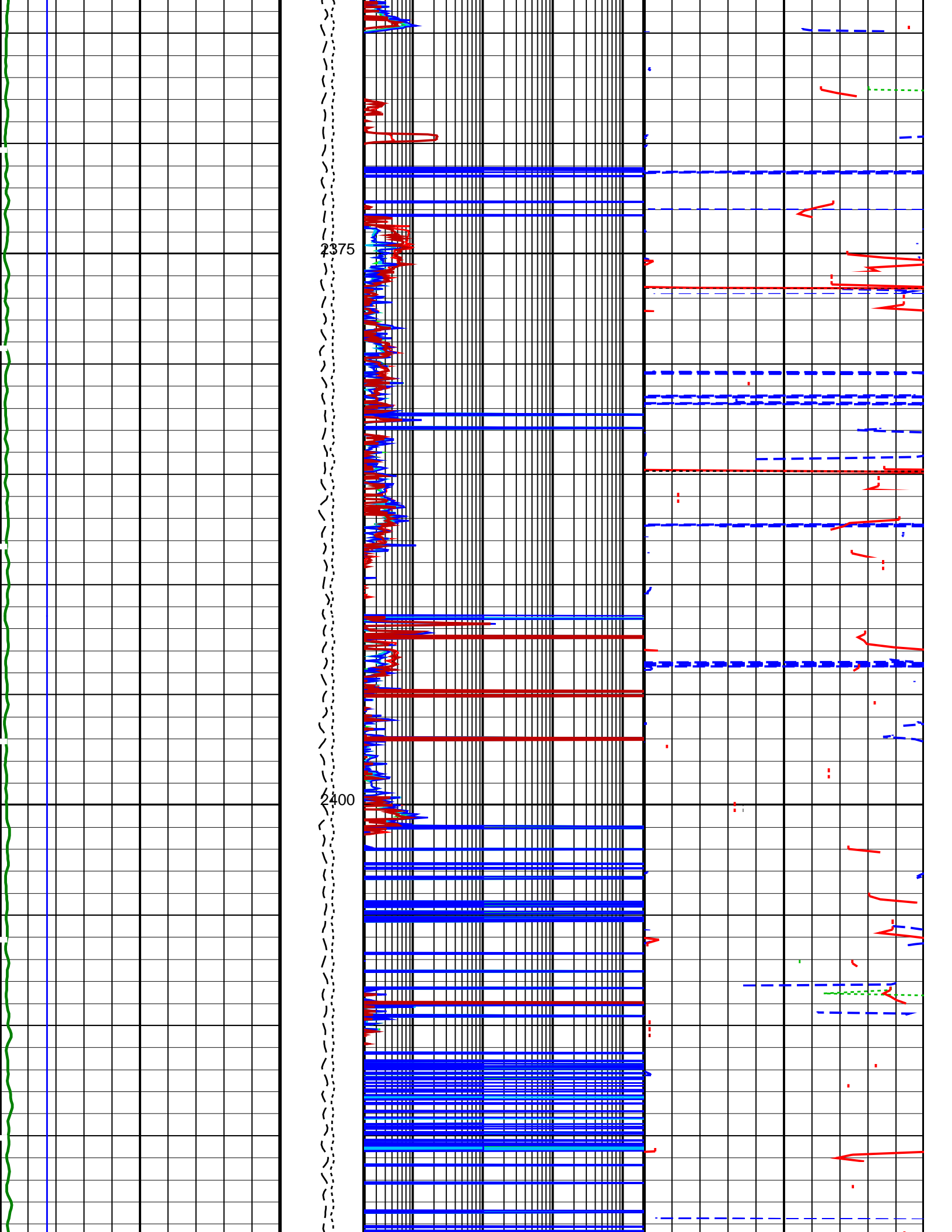


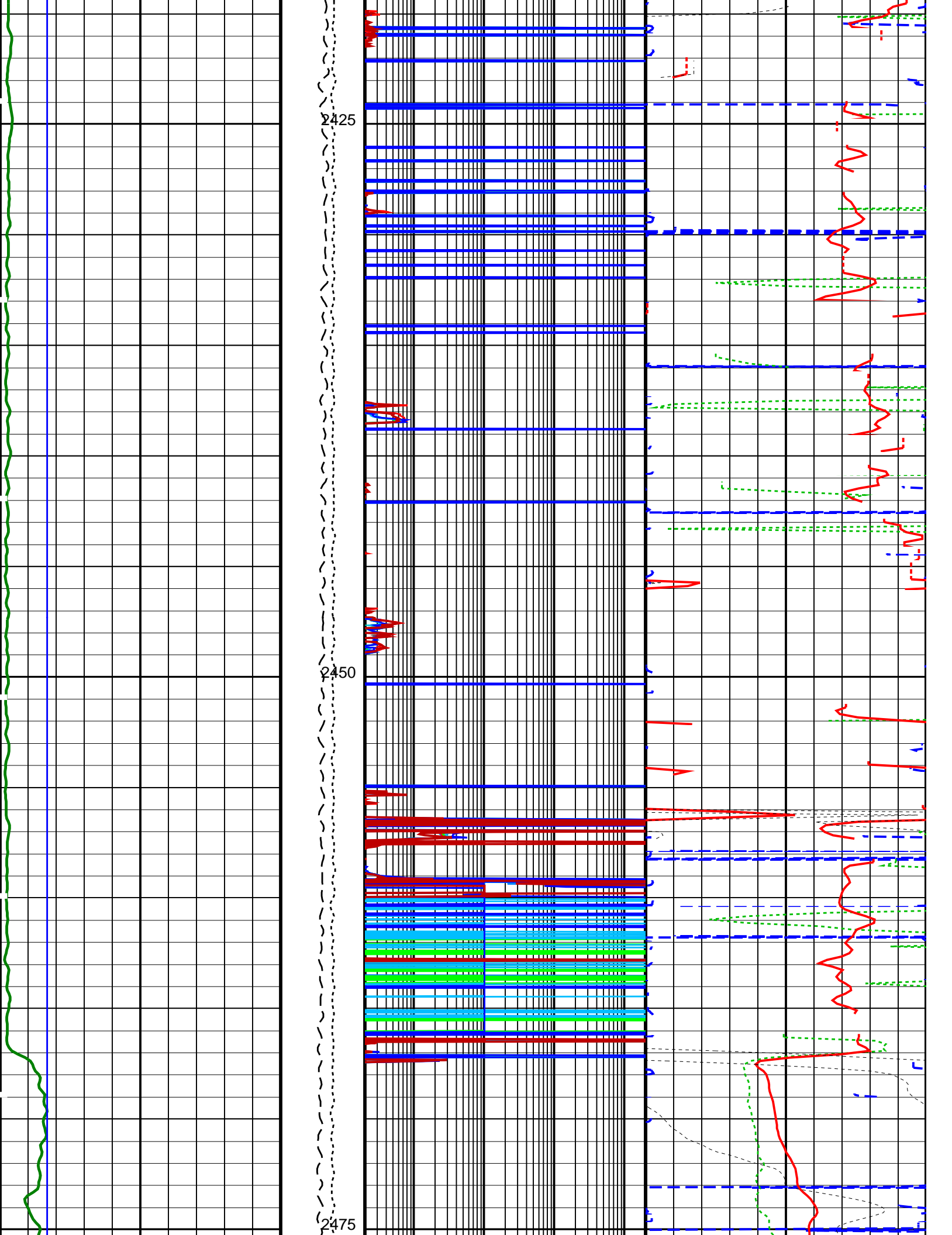


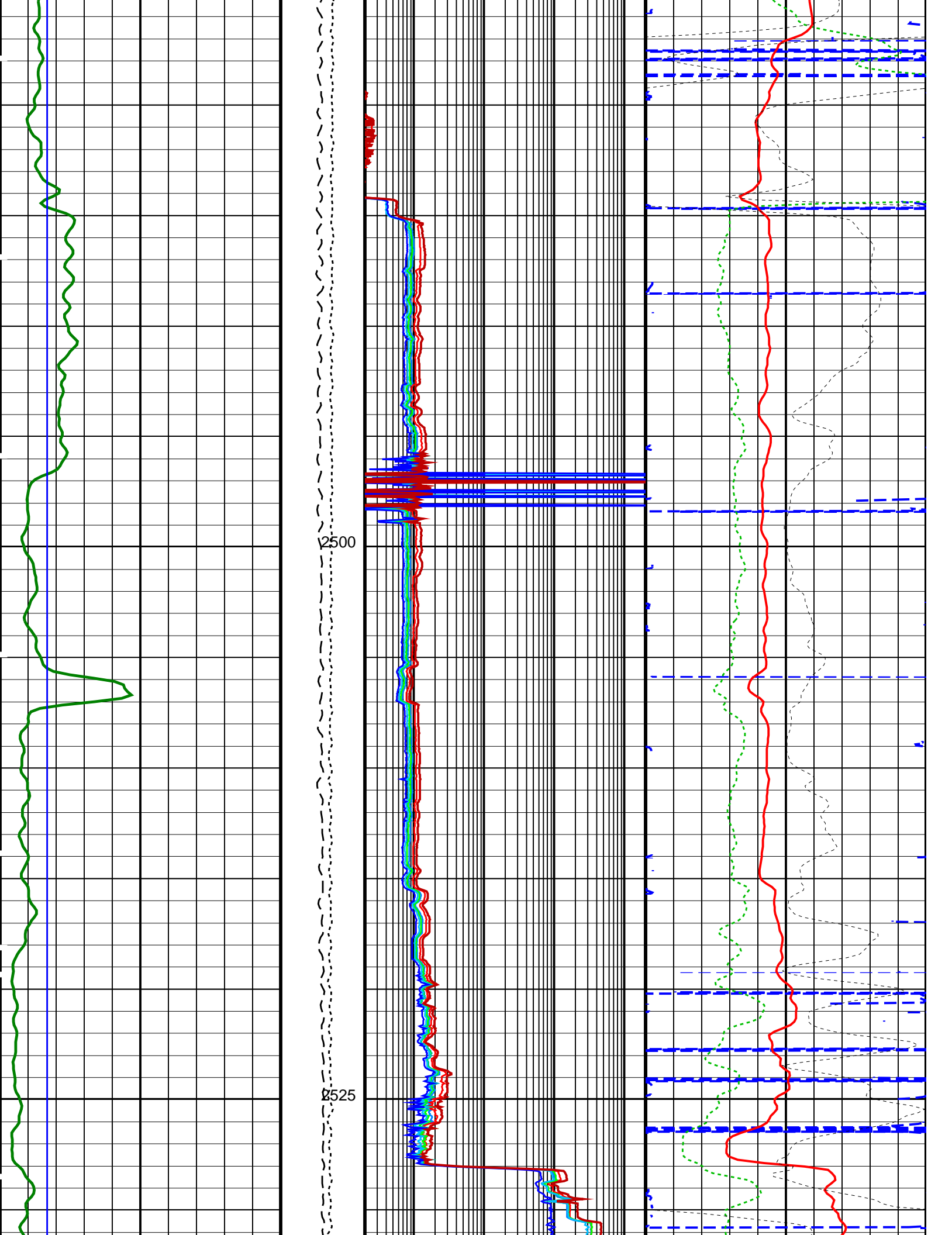


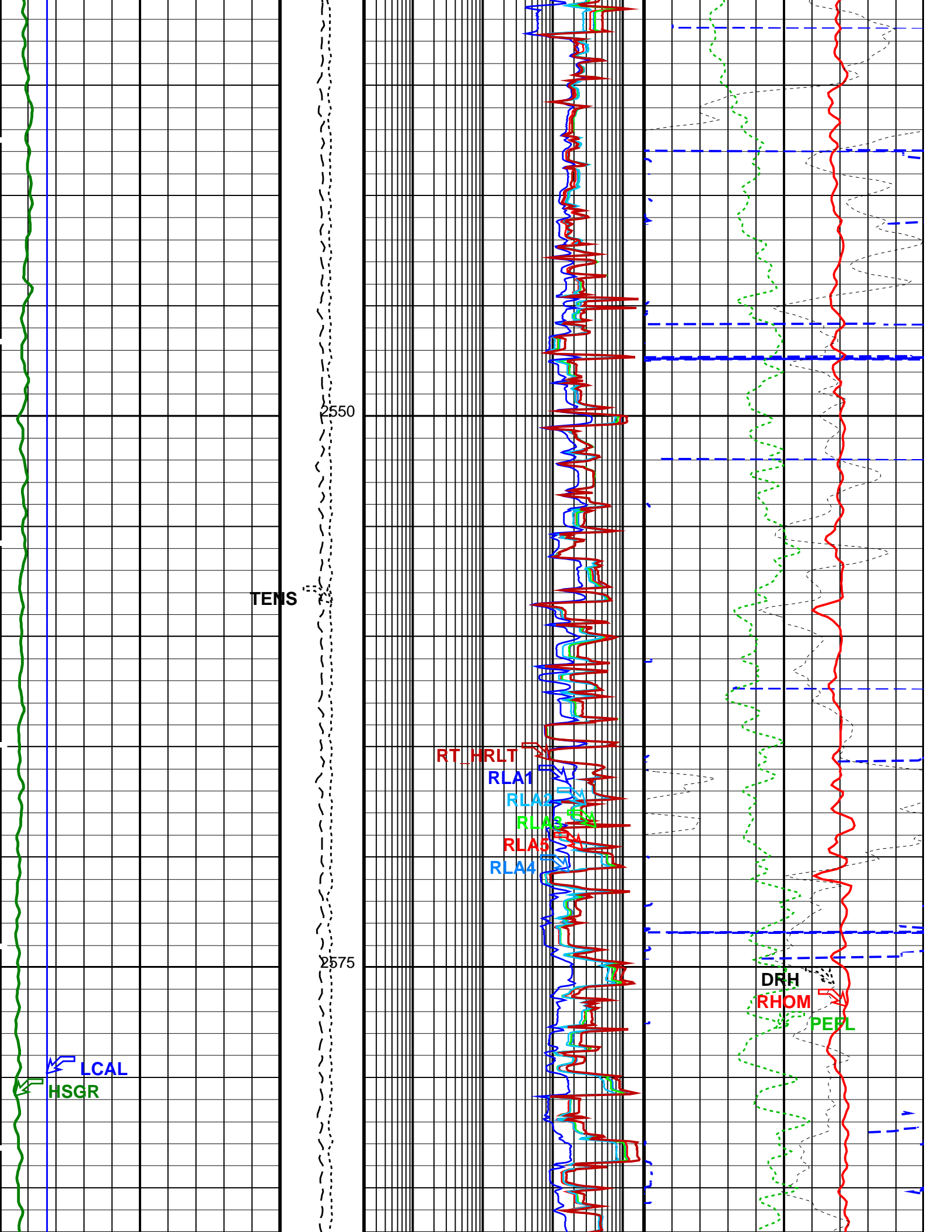


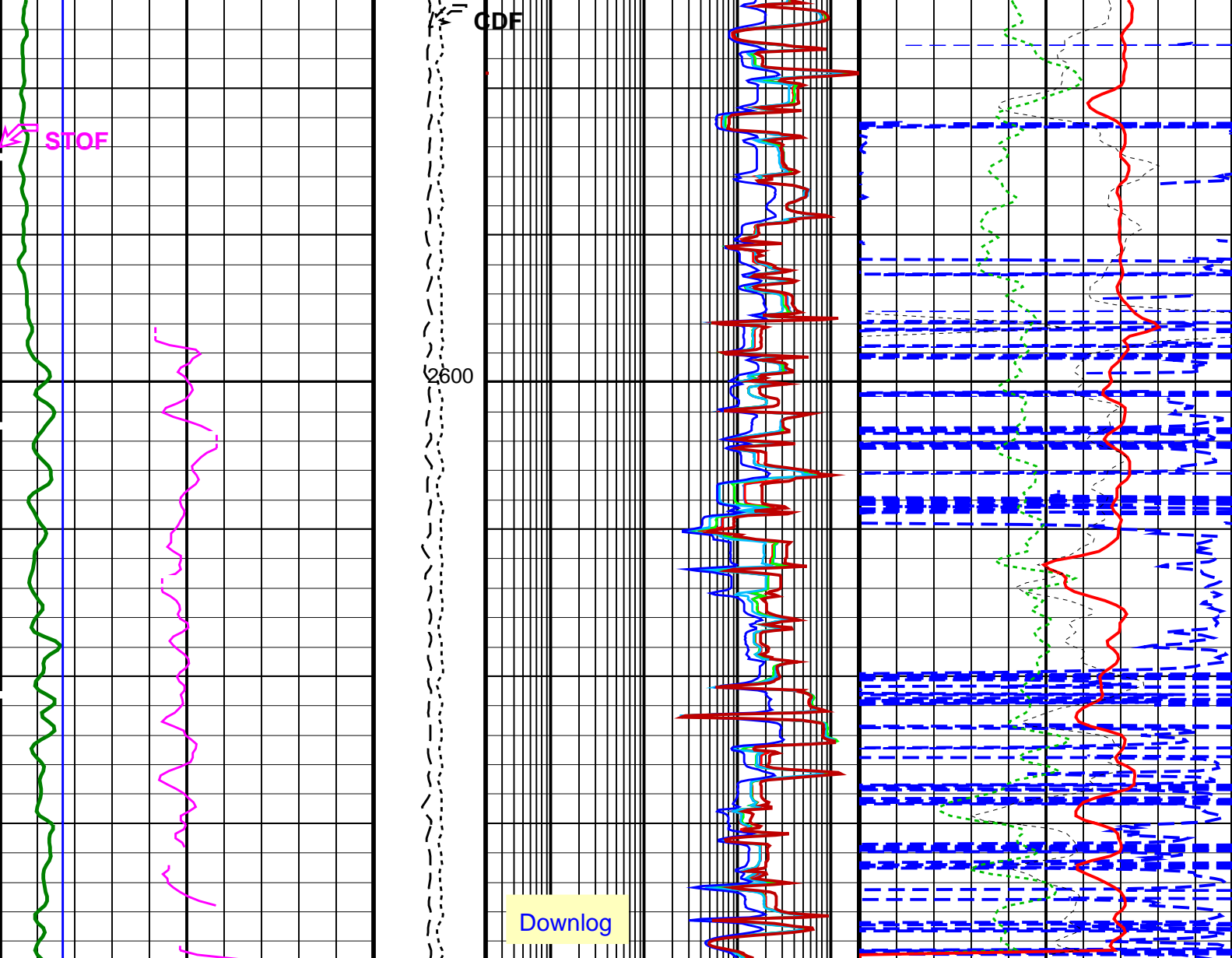












<div>HLDS Caliper (LCAL)</div> <div>0 (IN) 20</div>	<div>Tension (TENS) (LBF)</div> <div>10000 0</div>	<div>HRLT Resistivity 4 (RLA4)</div> <div>0.2 (OHMM) 2000</div>	<div>APS HR Near/Far Corrected Limestone Porosity (HFLC) (PU)</div> <div>100 0</div>
<div>APS Effective Standoff in Limestone (STOF)</div> <div>-5 (IN) 5</div>	<div>Calibrated Downhole Force (CDF) (LBF)</div> <div>3000 0</div>	<div>HRLT Resistivity 5 (RLA5)</div> <div>0.2 (OHMM) 2000</div>	<div>HLDS Long Spaced Photoelectric Effect (PEFL) (----)</div> <div>0 10</div>
<div>HNGS Spectroscopy Gamma Ray (HSGR)</div> <div>0 (GAPI) 100</div>		<div>HRLT Resistivity 3 (RLA3)</div> <div>0.2 (OHMM) 2000</div>	<div>HLDS Bulk Density (RHOM) (G/C3)</div> <div>0 4</div>
		<div>HRLT Resistivity 2 (RLA2)</div> <div>0.2 (OHMM) 2000</div>	<div>HLDS Bulk Density Correction (DRH) (G/C3)</div> <div>-0.25 0.25</div>
		<div>HRLT Resistivity 1 (RLA1)</div> <div>0.2 (OHMM) 2000</div>	
		<div>HRLT True Resistivity (RT_HRLT)</div> <div>0.2 (OHMM) 2000</div>	

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)	25	DEGC
CALSTAT	HRLTB Calibration Status	SHALLOW_DONE	
CALTEMP	HRLTB Calibration Temperature	10.6916	DEGC
FREQ0	HRLT Frequency Index for Mode 0	32	
FREQ1	HRLT Frequency Index for Mode 1	128	
FREQ2	HRLT Frequency Index for Mode 2	104	
FREQ3	HRLT Frequency Index for Mode 3	86	
FREQ4	HRLT Frequency Index for Mode 4	56	
FREQ5	HRLT Frequency Index for Mode 5	44	
FREQ6	HRLT Frequency Index for Mode 6	116	
GCSE	Generalized Caliper Selection	BS	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
ISSBAR	Barite Mud Switch	NOBARITE	
KFAC_HRLT	HRLT K Factor Option	SONDE	
LOOPCOEF_S	HRLT Loop Coefficient for Shallow Modes	LOW	
LOOPMOD0	HRLT Mode 0 Loop Mode	AUTO	
LOOPMOD1	HRLT Mode 1 Loop Mode	AUTO	
LOOPMOD2	HRLT Mode 2 Loop Mode	AUTO	
LOOPMOD3	HRLT Mode 3 Loop Mode	AUTO	
LOOPMOD4	HRLT Mode 4 Loop Mode	AUTO	
LOOPMOD5	HRLT Mode 5 Loop Mode	AUTO	
LOOPMOD6	HRLT Mode 6 Loop Mode	AUTO	
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
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	DEGC
HLDS: Hostile Litho-Density Sonde			
CLCL	HLDS LS Control Loop Controller Mode	AUTO_DEFAULT	
CLCS	HLDS SS Control Loop Controller Mode	AUTO_DEFAULT	
CLLS	HLDS Mode Loop Long Spacing	AUTO	
CLSS	HLDS Mode Loop Short Spacing	AUTO	
DHC	Density Hole Correction	BS	
DPPM	Density Porosity Processing Mode	HIRS	
FD	Fluid Density	1	G/C3
LATC	HLDS Activation Correction	OFF	
LLDL	HLDS LS Low Level Discriminator DAC	14000	
LLDS	HLDS SS Low Level Discriminator DAC	14000	
LLML	HLDS LS Low Level Discriminator Mode	AUTO	
LLMS	HLDS SS Low Level Discriminator Mode	AUTO	
MDEN	Matrix Density	2.6	G/C3
PHVL	HLDS Long Spacing High Voltage Setting	1000	V
PHVS	HLDS Short Spacing High Voltage Setting	1500	V
PSDL	HLDS LS Pulse Shape Compensation DAC	30000	
PSDS	HLDS SS Pulse Shape Compensation DAC	30000	
PSML	HLDS LS Pulse Shape Compensation Mode	AUTO	
PSMS	HLDS SS Pulse Shape Compensation Mode	AUTO	
APS-C: Accelerator-Porosity Tool			
	APS Software Version	5	
AASD	APS Thermal and Array Detectors High Voltage Setting	1976.24	V
ADSO	APS Array Detectors Data Source Switch	Both	
AFSD	APS Far Detector High Voltage Setting	2067.55	V
AHCS	APS Holesize Correction Source	GCSE	
AHSS	APS Holesize Correction Switch	ON	
AMTY	APS Environmental Corrections Mud Type	WaterBaseBarite	
ANSO	APS Near Detector High Voltage Setting	1737.8	V
ASOS	APS Standoff Correction Switch	ON	
ATSS	APS Temperature-Pressure-Salinity Correction Switch	ON	
BHFL_APS	APS TNPH Borehole Fluid Type	WATER	
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	25	DEGC
BSCO_APS	APS TNPH Borehole Salinity Correction Option	NO	
DPPM	Density Porosity Processing Mode	HIRS	
DSCO_APS	APS TNPH Density Source Correction Option	MEASURED	
FSAL	Formation Salinity	-50000	PPM
FSCO_APS	APS TNPH Formation Salinity Correction Option	NO	
GCSE	Generalized Caliper Selection	BS	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
HSCO_APS	APS TNPH Hole Size Correction Option	YES	
ISSBAR	Barite Mud Switch	NOBARITE	
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
MCCO_APS	APS TNPH Mud Cake Correction Option	YES	

MCOR_APS	APS TNPH Mud Correction	NATU	
MWCO_APS	APS TNPH Mud Weight Correction Option	YES	
NARC	APS Near/Array Calibration Ratio	1.08341	
NFRC	APS Near/Far Calibration Ratio	0.942369	
PTCO_APS	APS TNPH Pressure/Temperature Correction Option	NO	
SHT	Surface Hole Temperature	20	DEGC
TNCO_APS	APS TNPH Computation Option	YES	
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)	25	DEGC
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	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
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	-0.00303066	
HALF	HNGS Alpha Filter Length	60	IN
HCRB	HNGS Apply Borehole Potassium Correction	NONE	
HMWM	Mud Weighting Material	NATU	
HNPE	HNGS Processing Enable	YES	
ISSBAR	Barite Mud Switch	NOBARITE	
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
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	DEGC
TPOS	Tool Position	ECCE	
VBA1	HNGS Detector 1 Variable Barite Factor Running Average	0.993303	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	1.04242	
System and Miscellaneous			
ALTDCHAN	Name of alternate depth channel	SpeedCorrectedDepth	
BS	Bit Size	9.875	IN
BSAL	Borehole Salinity	38000.00	PPM
CSIZ	Current Casing Size	10.750	IN
CWEI	Casing Weight	168.00	LB/F
DFD	Drilling Fluid Density	1.02	G/C3
DO	Depth Offset for Playback	0.0	M
FLEV	Fluid Level	-50000.00	M
MST	Mud Sample Temperature	23.00	DEGC
PBVSADP	Use alternate depth channel for playback	NO	
PP	Playback Processing	RECOMPUTE	
RMFS	Resistivity of Mud Filtrate Sample	-50000.0000	OHMM
RW	Resistivity of Connate Water	1.0000	OHMM
TD	Total Depth	8729.3	FT
TDD	Total Depth - Driller	2660.70	M
TDL	Total Depth - Logger	2661.00	M
TWS	Temperature of Connate Water Sample	37.78	DEGC

Format: TripleCombo Vertical Scale: 1:200 Graphics File Created: 10-Jul-2021 20:40

OP System Version: 19C0-187

MSS_LDEO-A	19C0-187	HRLT-B	19C0-187
HLDS	19C0-187	LDSC-B	19C0-187
APS-C	19C0-187	HNGC-B	19C0-187
HNGS-BA	19C0-187	DTC-H	19C0-187

Input DLIS Files

DEFAULT	Flip_MSS_LDEO_HRLA_052PUP	PRODUCER	10-Jul-2021 20:36	2619.6 M	1815.1 M
---------	---------------------------	----------	-------------------	----------	----------

Output DLIS Files

DEFAULT	MSS_LDEO_HRLA_LDL_053PUP	FN:86	PRODUCER	10-Jul-2021 20:40
---------	--------------------------	-------	----------	-------------------

Input DLIS Files

DEFAULT	MSS_LDEO_HRLA_LDL_008LUP	FN:13	PRODUCER	08-Jul-2021 16:58	2660.9 M	2534.8 M
---------	--------------------------	-------	----------	-------------------	----------	----------

Output DLIS Files

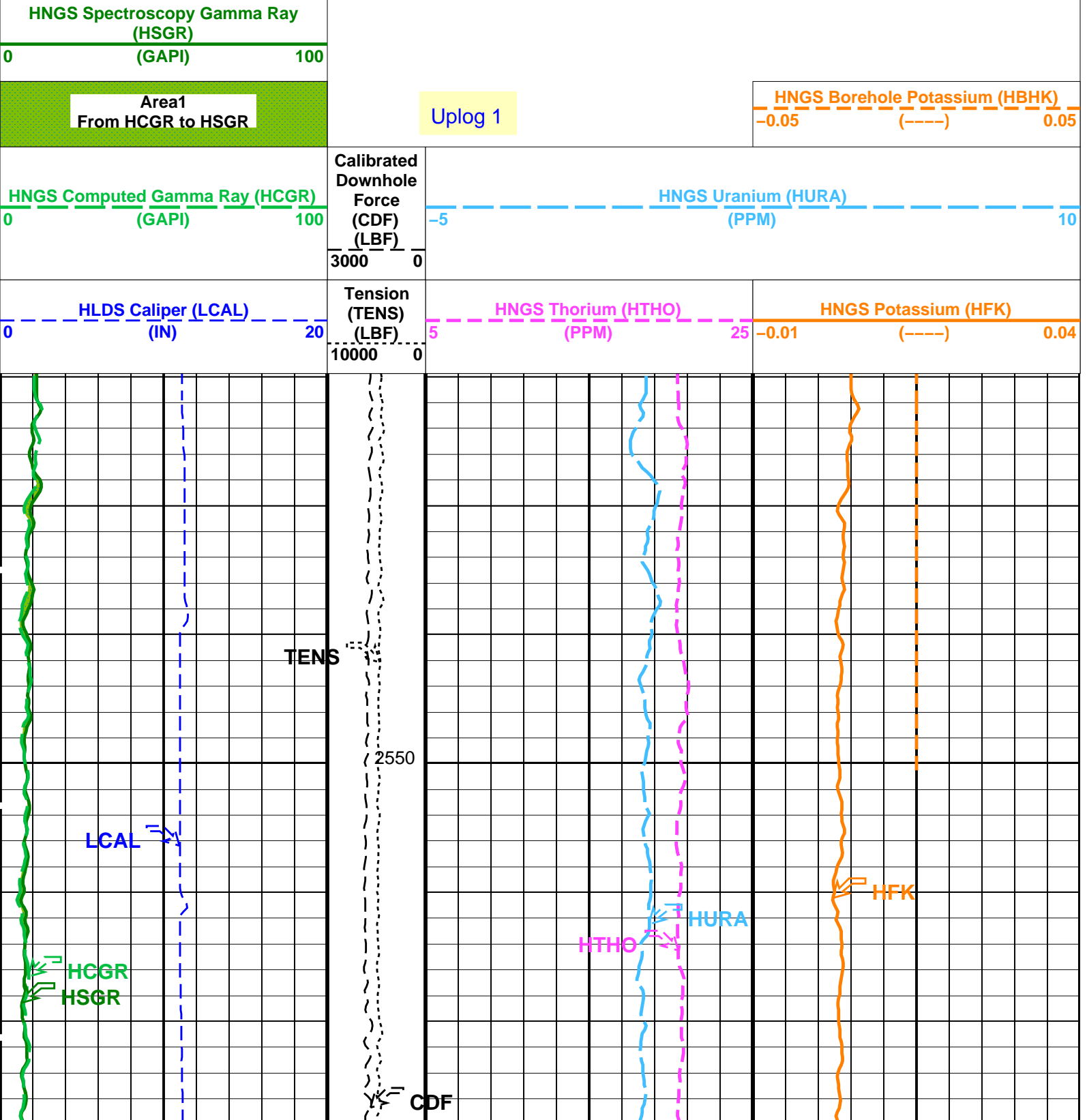
DEFAULT MSS_LDEO_HRLA_LDL_054PUP FN:87 PRODUCER 10-Jul-2021 20:45 2660.9 M 2534.9 M

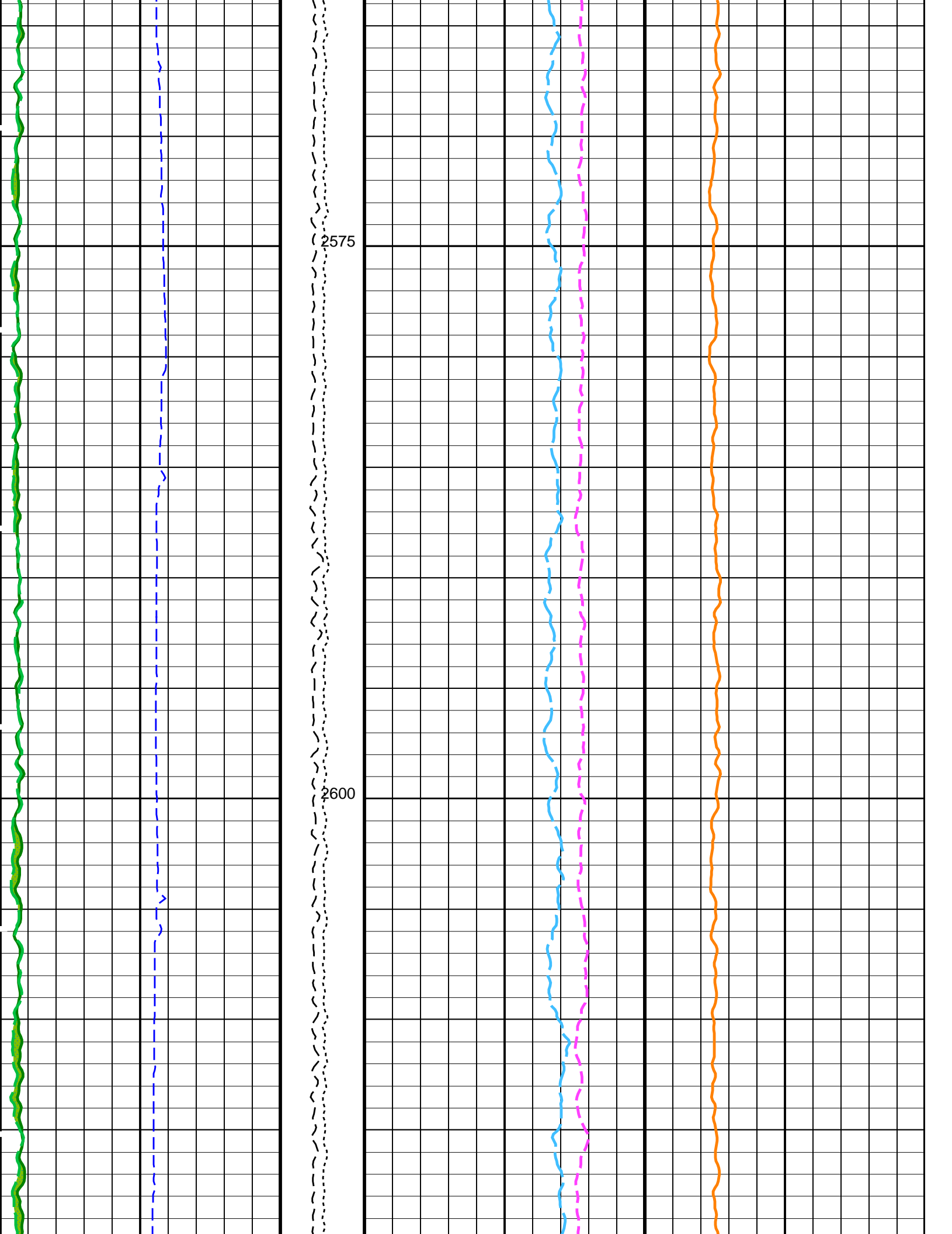
OP System Version: 19C0-187

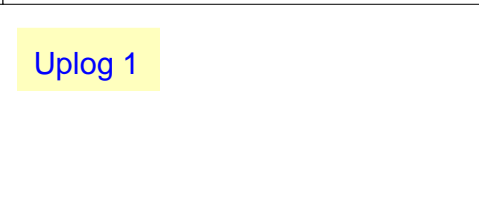
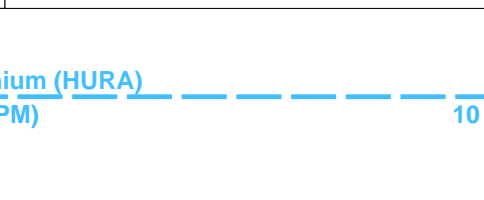
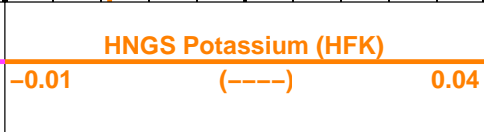
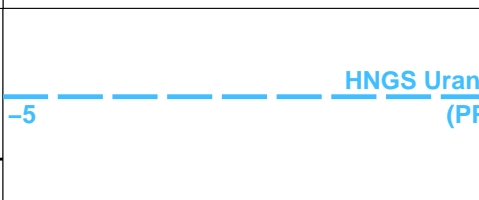
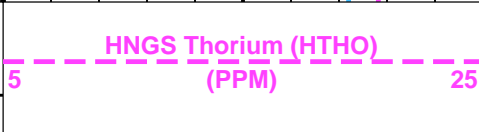
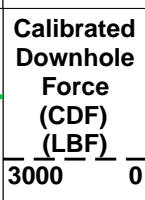
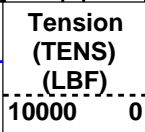
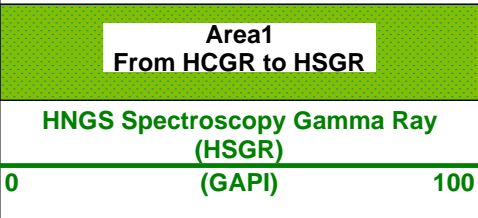
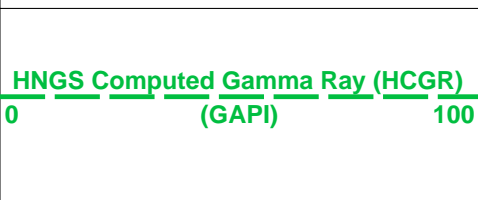
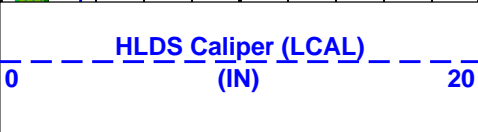
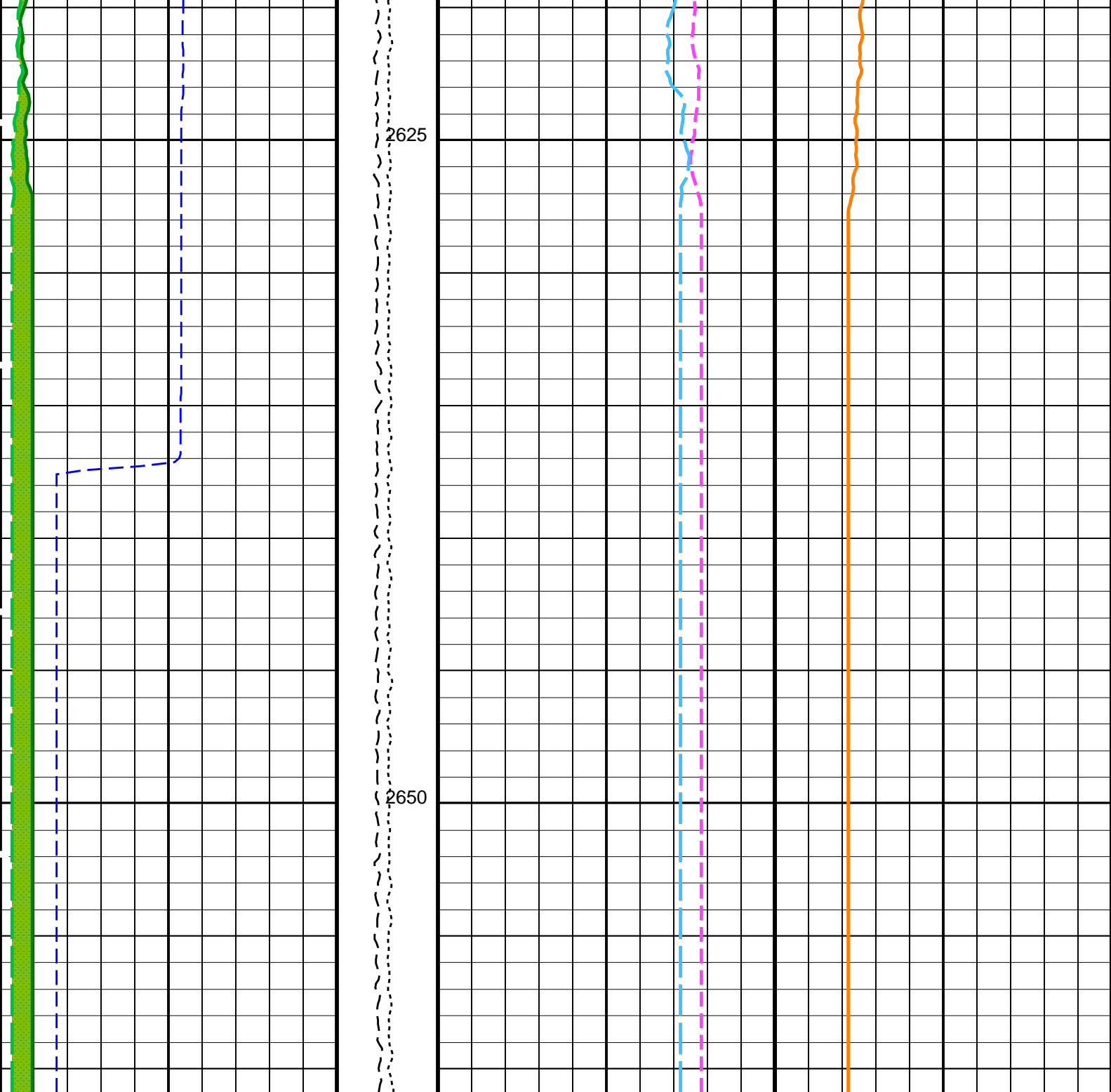
MSS_LDEO-A	19C0-187	HRLT-B	19C0-187
HLDS	19C0-187	LDSC-B	19C0-187
APS-C	19C0-187	HNGC-B	19C0-187
HNGS-BA	19C0-187	DTC-H	19C0-187

PIP SUMMARY

Time Mark Every 60 S







Time Mark Every 60 S

PIP SUMMARY

Parameters

DLIS Name	Description	Value
HRLT-B: High Resolution Laterolog Array – B		
BHS	Borehole Status	OPEN
GCSE	Generalized Caliper Selection	BS
APS-C: Accelerator-Porosity Tool		
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
CSD2	Outer Casing Outer Diameter	0
CSW1	Inner Casing Weight	0
CSW2	Outer Casing Weight	0
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	-0.00293115
HALF	HNGS Alpha Filter Length	60
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
S2BI	HNGS Detector 2 Calibration Bismuth Count Rate	1.3
SGRC	HNGS Standard Gamma-Ray Correction Flag	YES
TPOS	Tool Position	ECCE
VBA1	HNGS Detector 1 Variable Barite Factor Running Average	0.980155
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	1.03841
System and Miscellaneous		
BS	Bit Size	9.875
DFD	Drilling Fluid Density	1.02
DO	Depth Offset for Playback	0.0
PP	Playback Processing	RECOMPUTE

Format: HNGSYields Vertical Scale: 1:200 Graphics File Created: 10-Jul-2021 20:45

OP System Version: 19C0-187

MSS_LDEO-A	19C0-187	HRLT-B	19C0-187
HLDS	19C0-187	LDSC-B	19C0-187
APS-C	19C0-187	HNGC-B	19C0-187
HNGS-BA	19C0-187	DTC-H	19C0-187

Input DLIS Files

DEFAULT	MSS_LDEO_HRLA_LDL_008LUP	FN:13	PRODUCER	08-Jul-2021 16:58	2660.9 M	2534.8 M
---------	--------------------------	-------	----------	-------------------	----------	----------

Output DLIS Files

DEFAULT	MSS_LDEO_HRLA_LDL_054PUP	FN:87	PRODUCER	10-Jul-2021 20:45		
---------	--------------------------	-------	----------	-------------------	--	--

Company: International Ocean Discovery Program

Well: Expedition 395C, Site U1554F

Input DLIS Files

DEFAULT	MSS_LDEO_HRLA_LDL_008LUP	FN:13	PRODUCER	08-Jul-2021 16:58	2660.9 M	2534.8 M
---------	--------------------------	-------	----------	-------------------	----------	----------

Output DLIS Files

DEFAULT	MSS_LDEO_HRLA_LDL_054PUP	FN:87	PRODUCER	10-Jul-2021 20:45	2660.9 M	2534.9 M
---------	--------------------------	-------	----------	-------------------	----------	----------

OP System Version: 19C0-187

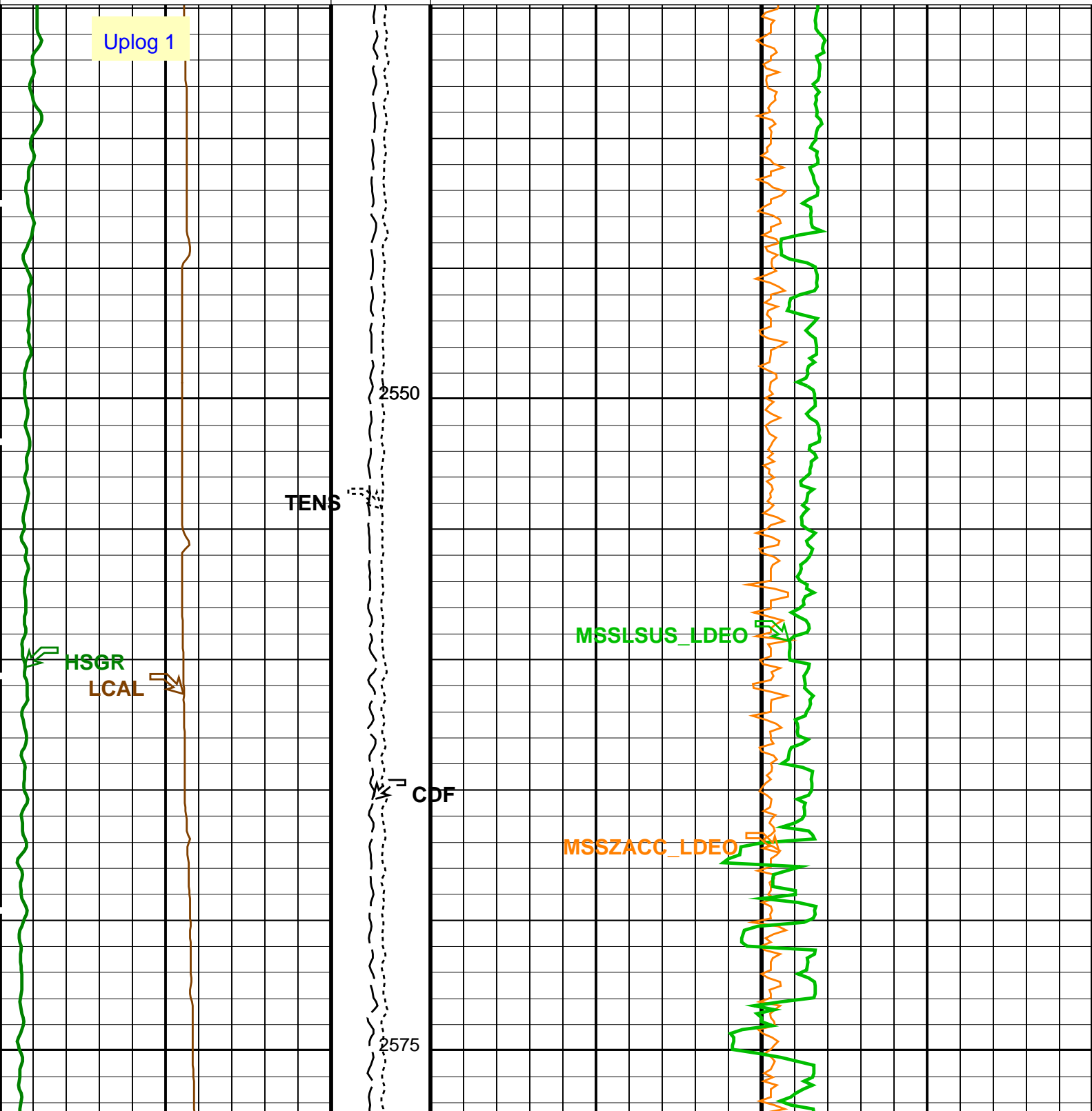
MSS_LDEO-A	19C0-187	HRLT-B	19C0-187
HLDS	19C0-187	LDSC-B	19C0-187

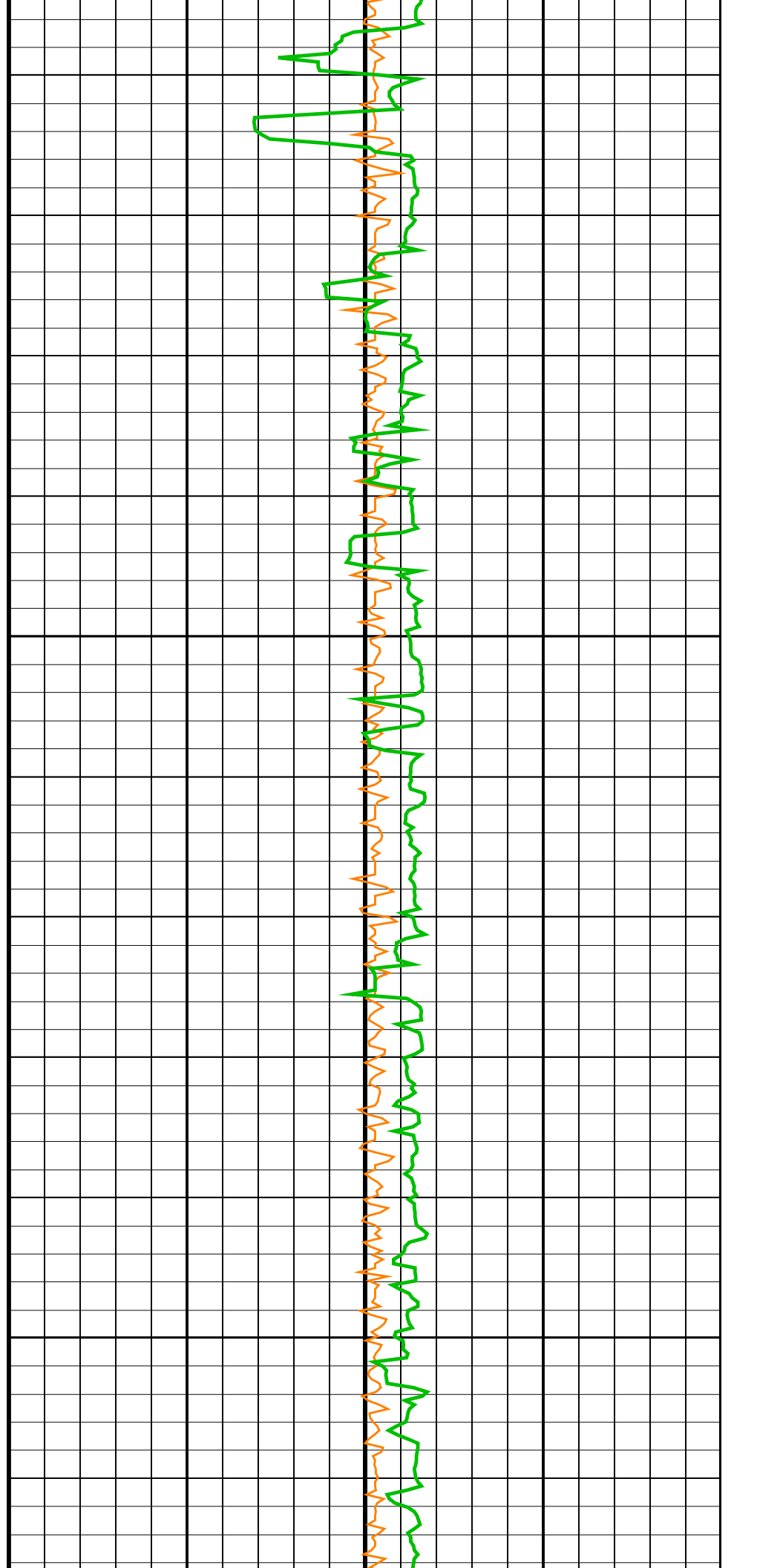
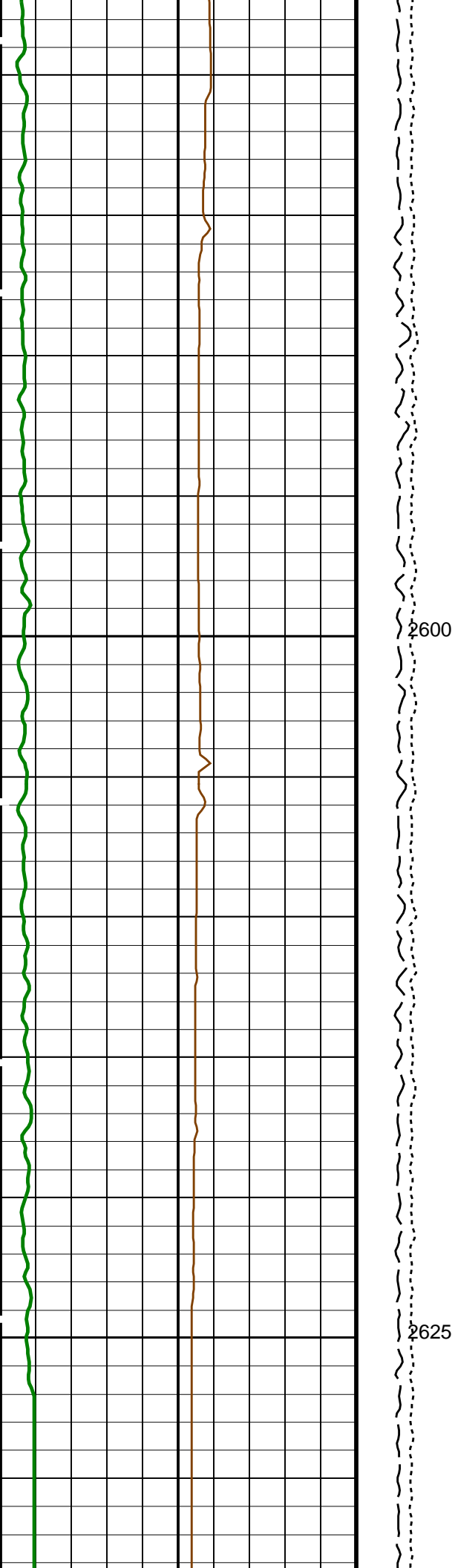
HLDS	19C0-187	LDSC-B	19C0-187
APS-C	19C0-187	HNGC-B	19C0-187
HNGS-BA	19C0-187	DTC-H	19C0-187

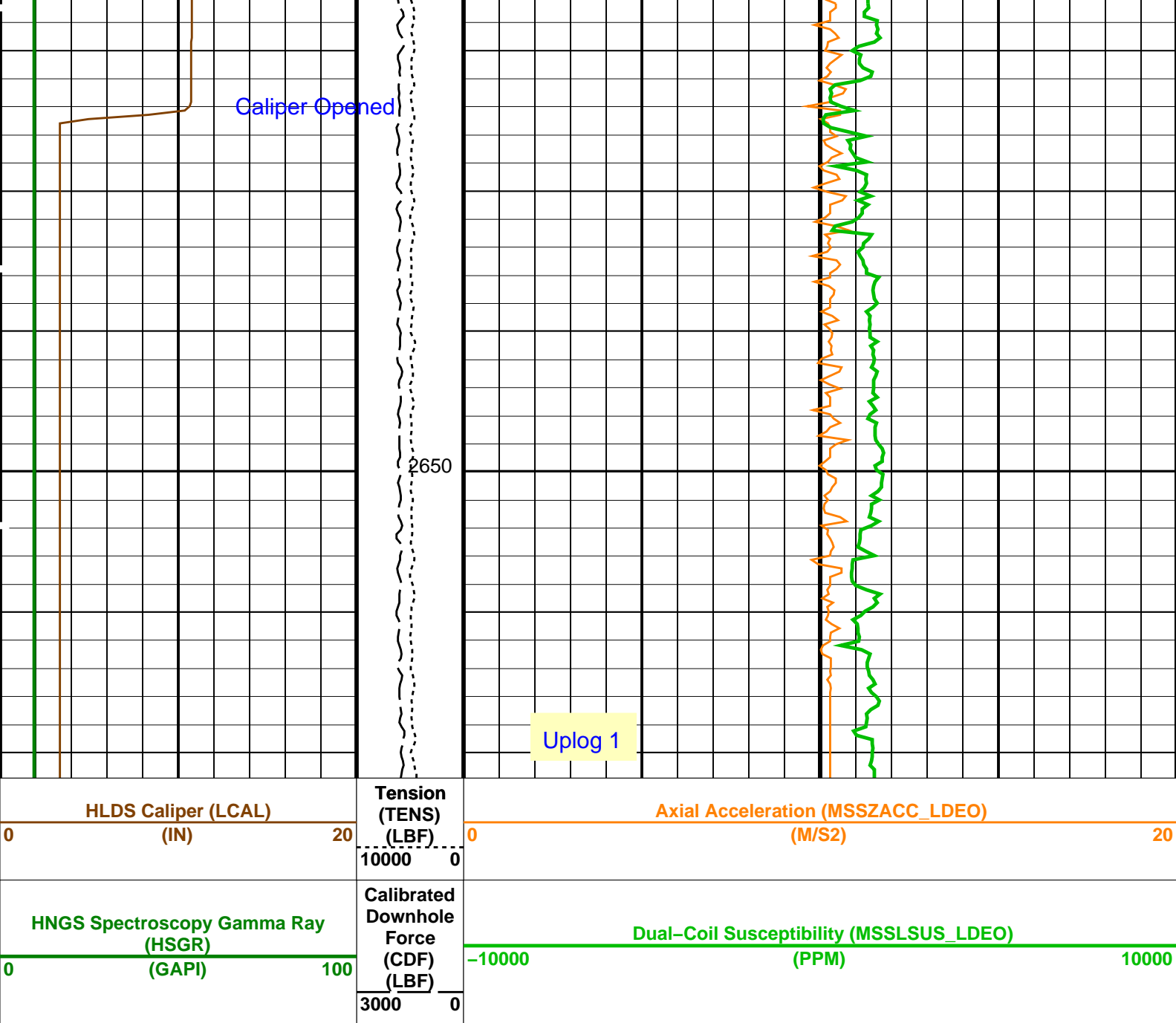
PIP SUMMARY

Time Mark Every 60 S

HNGS Spectroscopy Gamma Ray (HSGR) (GAPI)	Calibrated Downhole Force (CDF) (LBF)	Dual-Coil Susceptibility (MSSL SUS_LDEO) (PPM)
0100	30000	-1000010000
HLDS Caliper (LCAL) (IN)	Tension (TENS) (LBF)	Axial Acceleration (MSSZACC_LDEO) (M/S2)
020	100000	020







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)	7	DEGC
CALSTAT	HRLTB Calibration Status	SHALLOW_DONE	
CALTEMP	HRLTB Calibration Temperature	10.6916	DEGC
FREQ0	HRLT Frequency Index for Mode 0	32	
FREQ1	HRLT Frequency Index for Mode 1	128	
FREQ2	HRLT Frequency Index for Mode 2	104	
FREQ3	HRLT Frequency Index for Mode 3	86	
FREQ4	HRLT Frequency Index for Mode 4	56	
FREQ5	HRLT Frequency Index for Mode 5	44	
FREQ6	HRLT Frequency Index for Mode 6	116	
GCSE	Generalized Caliper Selection	BS	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
ISSBAR	Barite Mud Switch	NOBARITE	
KFAC_HRLT	HRLT K Factor Option	SONDE	
LOOPCOEF_S	HRLT Loop Coefficient for Shallow Modes	LOW	
LOOPMODE	HRLT Mode 0 Loop Mode	AUTO	

LOOPMOD0	HRLT Mode 0 Loop Mode	AUTO	
LOOPMOD1	HRLT Mode 1 Loop Mode	AUTO	
LOOPMOD2	HRLT Mode 2 Loop Mode	AUTO	
LOOPMOD3	HRLT Mode 3 Loop Mode	AUTO	
LOOPMOD4	HRLT Mode 4 Loop Mode	AUTO	
LOOPMOD5	HRLT Mode 5 Loop Mode	AUTO	
LOOPMOD6	HRLT Mode 6 Loop Mode	AUTO	
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
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	DEGC
HLDS: Hostile Litho-Density Sonde			
CLCL	HLDS LS Control Loop Controller Mode	AUTO_DEFAULT	
CLCS	HLDS SS Control Loop Controller Mode	AUTO_DEFAULT	
CLLS	HLDS Mode Loop Long Spacing	AUTO	
CLSS	HLDS Mode Loop Short Spacing	AUTO	
DHC	Density Hole Correction	BS	
DPPM	Density Porosity Processing Mode	HIRS	
FD	Fluid Density	1	G/C3
LATC	HLDS Activation Correction	OFF	
LLDL	HLDS LS Low Level Discriminator DAC	14000	
LLDS	HLDS SS Low Level Discriminator DAC	14000	
LLML	HLDS LS Low Level Discriminator Mode	AUTO	
LLMS	HLDS SS Low Level Discriminator Mode	AUTO	
MDEN	Matrix Density	2.6	G/C3
PHVL	HLDS Long Spacing High Voltage Setting	1000	V
PHVS	HLDS Short Spacing High Voltage Setting	1500	V
PSDL	HLDS LS Pulse Shape Compensation DAC	30000	
PSDS	HLDS SS Pulse Shape Compensation DAC	30000	
PSML	HLDS LS Pulse Shape Compensation Mode	AUTO	
PSMS	HLDS SS Pulse Shape Compensation Mode	AUTO	
APS-C: Accelerator-Porosity Tool			
	APS Software Version	5	
AASD	APS Thermal and Array Detectors High Voltage Setting	1976.24	V
ADSO	APS Array Detectors Data Source Switch	Both	
AFSD	APS Far Detector High Voltage Setting	2067.55	V
AHCS	APS Holesize Correction Source	GCSE	
AHSS	APS Holesize Correction Switch	ON	
AMTY	APS Environmental Corrections Mud Type	WaterBaseBarite	
ANSO	APS Near Detector High Voltage Setting	1737.8	V
ASOS	APS Standoff Correction Switch	ON	
ATSS	APS Temperature-Pressure-Salinity Correction Switch	ON	
BHFL_APS	APS TNPH Borehole Fluid Type	WATER	
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	7	DEGC
BSCO_APS	APS TNPH Borehole Salinity Correction Option	NO	
DPPM	Density Porosity Processing Mode	HIRS	
DSCO_APS	APS TNPH Density Source Correction Option	MEASURED	
FSAL	Formation Salinity	-50000	PPM
FSCO_APS	APS TNPH Formation Salinity Correction Option	NO	
GCSE	Generalized Caliper Selection	BS	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
HSCO_APS	APS TNPH Hole Size Correction Option	YES	
ISSBAR	Barite Mud Switch	NOBARITE	
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
MCCO_APS	APS TNPH Mud Cake Correction Option	YES	
MCOR_APS	APS TNPH Mud Correction	NATU	
MWCO_APS	APS TNPH Mud Weight Correction Option	YES	
NARC	APS Near/Array Calibration Ratio	1.08341	
NFRC	APS Near/Far Calibration Ratio	0.942369	
PTCO_APS	APS TNPH Pressure/Temperature Correction Option	NO	
SHT	Surface Hole Temperature	20	DEGC
TNCO_APS	APS TNPH Computation Option	YES	
HNCS-BA: Hostile Natural Gamma Ray Sonde			
BAR1	HNCS Detector 1 Barite Constant	1	
BAR2	HNCS Detector 2 Barite Constant	1	
BHK	HNCS Borehole Potassium Correction Concentration	0	
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	7	DEGC
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	HNCS Barite Constant Correction Flag	NONE	
GCSE	Generalized Caliper Selection	BS	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
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	-0.00293115	
HALF	HNGS Alpha Filter Length	60	IN
HCRB	HNGS Apply Borehole Potassium Correction	NONE	
HMWM	Mud Weighting Material	NATU	
HNPE	HNGS Processing Enable	YES	
ISSBAR	Barite Mud Switch	NOBARITE	
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
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	DEGC
TPOS	Tool Position	ECCE	
VBA1	HNGS Detector 1 Variable Barite Factor Running Average	0.980155	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	1.03841	
System and Miscellaneous			
ALTDCHAN	Name of alternate depth channel	SpeedCorrectedDepth	
BS	Bit Size	9.875	IN
BSAL	Borehole Salinity	38000.00	PPM
CSIZ	Current Casing Size	10.750	IN
CWEI	Casing Weight	168.00	LB/F
DFD	Drilling Fluid Density	1.02	G/C3
DO	Depth Offset for Playback	0.0	M
FLEV	Fluid Level	-50000.00	M
MST	Mud Sample Temperature	23.00	DEGC
PBVSADP	Use alternate depth channel for playback	NO	
PP	Playback Processing	RECOMPUTE	
RMFS	Resistivity of Mud Filtrate Sample	-50000.0000	OHMM
RW	Resistivity of Connate Water	1.0000	OHMM
TD	Total Depth	8729.3	FT
TDD	Total Depth - Driller	2660.70	M
TDL	Total Depth - Logger	2661.00	M
TWS	Temperature of Connate Water Sample	37.78	DEGC

Format: MSS_Logging
Vertical Scale: 1:200
Graphics File Created: 10-Jul-2021 20:45

OP System Version: 19C0-187			
MSS_LDEO-A	19C0-187	HRLT-B	19C0-187
HLDS	19C0-187	LDSC-B	19C0-187
APS-C	19C0-187	HNGC-B	19C0-187
HNGS-BA	19C0-187	DTC-H	19C0-187

Input DLIS Files						
DEFAULT	MSS_LDEO_HRLA_LDL_008LUP	FN:13	PRODUCER	08-Jul-2021 16:58	2660.9 M	2534.8 M
Output DLIS Files						
DEFAULT	MSS_LDEO_HRLA_LDL_054PUP	FN:87	PRODUCER	10-Jul-2021 20:45		

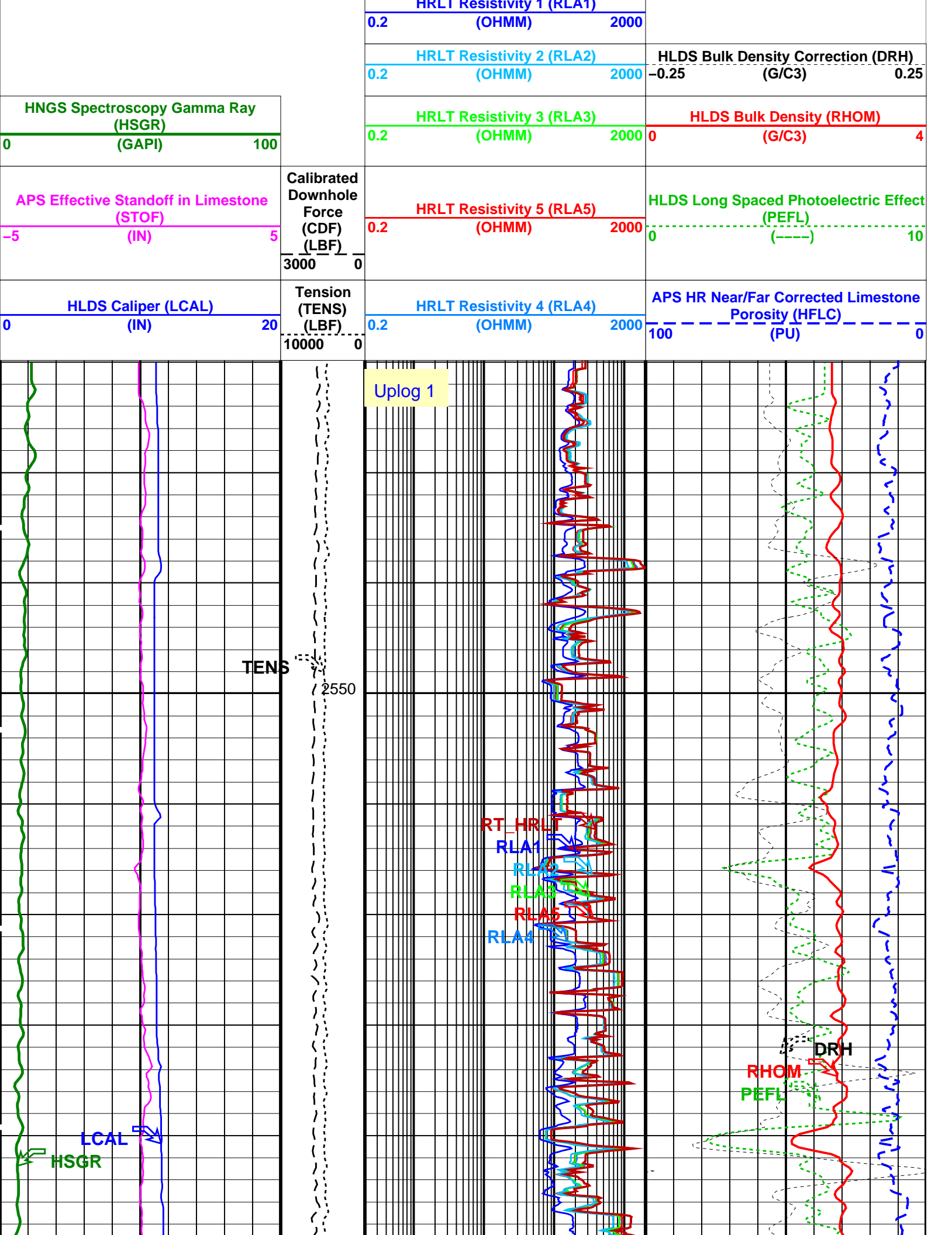
Input DLIS Files						
DEFAULT	MSS_LDEO_HRLA_LDL_008LUP	FN:13	PRODUCER	08-Jul-2021 16:58	2660.9 M	2534.8 M
Output DLIS Files						
DEFAULT	MSS_LDEO_HRLA_LDL_054PUP	FN:87	PRODUCER	10-Jul-2021 20:45	2660.9 M	2534.9 M

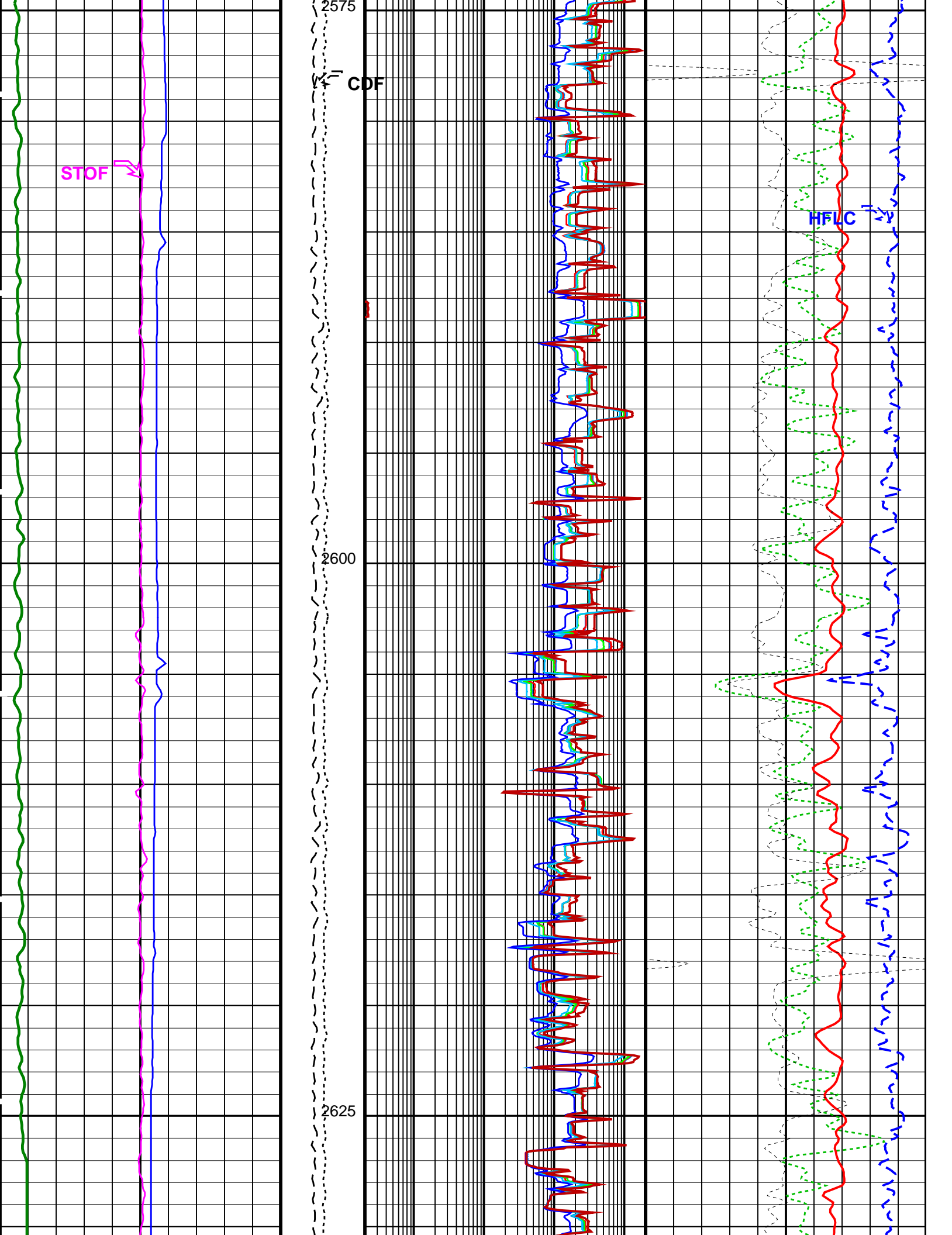
OP System Version: 19C0-187			
MSS_LDEO-A	19C0-187	HRLT-B	19C0-187
HLDS	19C0-187	LDSC-B	19C0-187
APS-C	19C0-187	HNGC-B	19C0-187
HNGS-BA	19C0-187	DTC-H	19C0-187

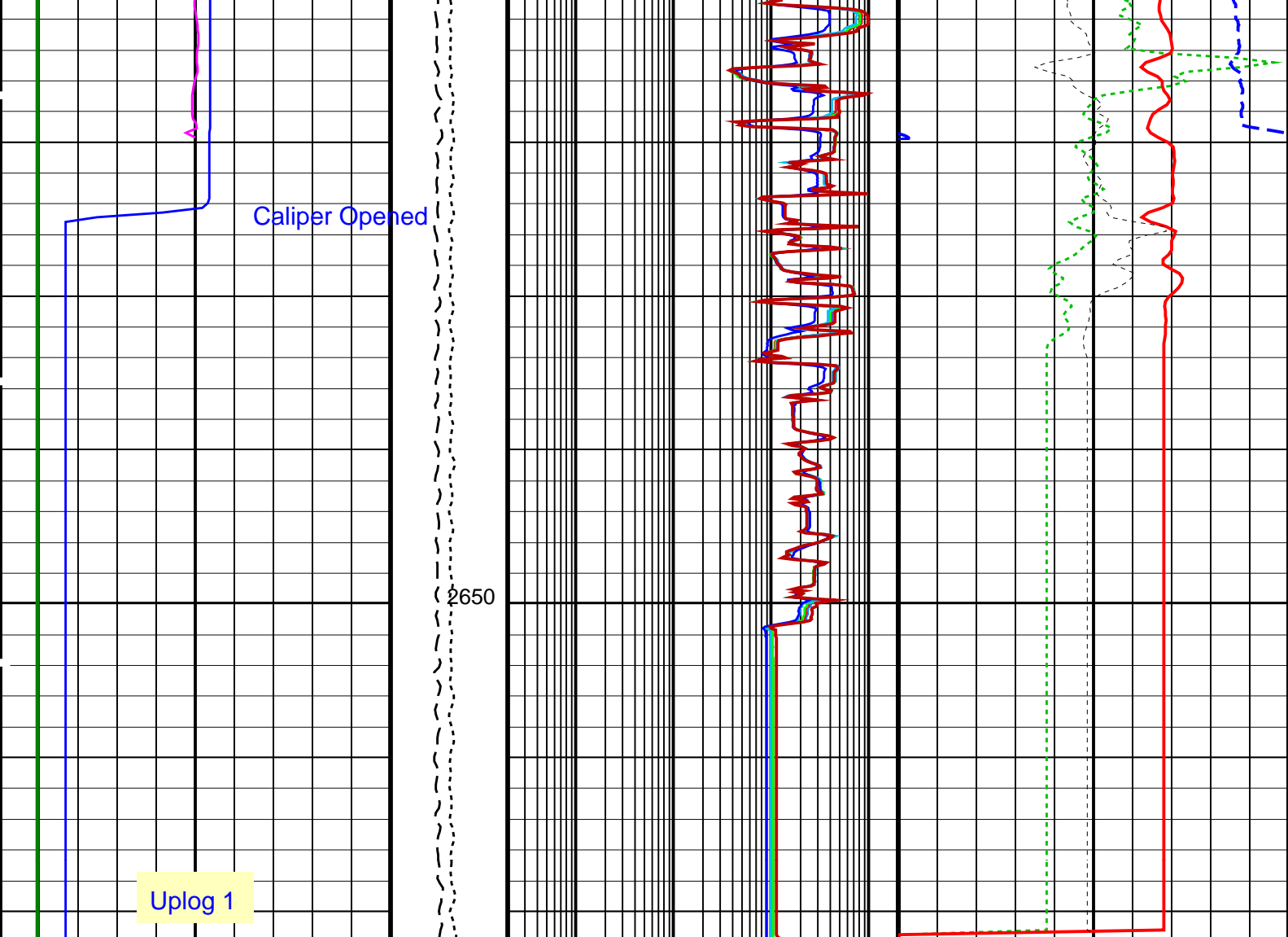
PIP SUMMARY

Time Mark Every 60 S

HRLT True Resistivity (RT_HRLT)		
0.2	(OHMM)	2000
HRLT True Resistivity (RT_HRLT)		







<div>HLDS Caliper (LCAL)</div> <div>(IN)</div> <div>020</div>	<div>Tension (TENS)</div> <div>(LBF)</div> <div>100000</div>	<div>HRLT Resistivity 4 (RLA4)</div> <div>(OHMM)</div> <div>0.22000</div>	<div>APS HR Near/Far Corrected Limestone Porosity (HFLC)</div> <div>(PU)</div> <div>1000</div>
<div>APS Effective Standoff in Limestone (STOF)</div> <div>(IN)</div> <div>-55</div>	<div>Calibrated Downhole Force (CDF)</div> <div>(LBF)</div> <div>30000</div>	<div>HRLT Resistivity 5 (RLA5)</div> <div>(OHMM)</div> <div>0.22000</div>	<div>HLDS Long Spaced Photoelectric Effect (PEFL)</div> <div>(-----)</div> <div>010</div>
<div>HNGS Spectroscopy Gamma Ray (HSGR)</div> <div>(GAPI)</div> <div>0100</div>		<div>HRLT Resistivity 3 (RLA3)</div> <div>(OHMM)</div> <div>0.22000</div>	<div>HLDS Bulk Density (RHOM)</div> <div>(G/C3)</div> <div>04</div>
		<div>HRLT Resistivity 2 (RLA2)</div> <div>(OHMM)</div> <div>0.22000</div>	<div>HLDS Bulk Density Correction (DRH)</div> <div>(G/C3)</div> <div>-0.250.25</div>
		<div>HRLT Resistivity 1 (RLA1)</div> <div>(OHMM)</div> <div>0.22000</div>	
		<div>HRLT True Resistivity (RT_HRLT)</div> <div>(OHMM)</div> <div>0.22000</div>	

PIP SUMMARY

Time Mark Every 60 S

Parameters		
DLIS Name	Description	Value
HRL T-B: High Resolution Laterolog Array - B		

BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	7	DEGC
CALSTAT	HRLTB Calibration Status	SHALLOW_DONE	
CALTEMP	HRLTB Calibration Temperature	10.6916	DEGC
FREQ0	HRLT Frequency Index for Mode 0	32	
FREQ1	HRLT Frequency Index for Mode 1	128	
FREQ2	HRLT Frequency Index for Mode 2	104	
FREQ3	HRLT Frequency Index for Mode 3	86	
FREQ4	HRLT Frequency Index for Mode 4	56	
FREQ5	HRLT Frequency Index for Mode 5	44	
FREQ6	HRLT Frequency Index for Mode 6	116	
GCSE	Generalized Caliper Selection	BS	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
ISSBAR	Barite Mud Switch	NOBARITE	
KFAC_HRLT	HRLT K Factor Option	SONDE	
LOOPCOEF_S	HRLT Loop Coefficient for Shallow Modes	LOW	
LOOPMOD0	HRLT Mode 0 Loop Mode	AUTO	
LOOPMOD1	HRLT Mode 1 Loop Mode	AUTO	
LOOPMOD2	HRLT Mode 2 Loop Mode	AUTO	
LOOPMOD3	HRLT Mode 3 Loop Mode	AUTO	
LOOPMOD4	HRLT Mode 4 Loop Mode	AUTO	
LOOPMOD5	HRLT Mode 5 Loop Mode	AUTO	
LOOPMOD6	HRLT Mode 6 Loop Mode	AUTO	
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
PROCMFL	Inversion Selection	ON	
PROCMFL	Inversion Micro-Resistivity Selection	NO_EXTERNAL_RXO	
PROCMFO	Mechanical Standoff Fin Size	0	IN
PROCRM	Processing Mud Resistivity Select	HRLT_Compute	
PROCSPO	Sonde Position	Centered	
SHT	Surface Hole Temperature	20	DEGC
HLDS: Hostile Litho-Density Sonde			
CLCL	HLDS LS Control Loop Controller Mode	AUTO_DEFAULT	
CLCS	HLDS SS Control Loop Controller Mode	AUTO_DEFAULT	
CLLS	HLDS Mode Loop Long Spacing	AUTO	
CLSS	HLDS Mode Loop Short Spacing	AUTO	
DHC	Density Hole Correction	BS	
DPPM	Density Porosity Processing Mode	HIRS	
FD	Fluid Density	1	G/C3
LATC	HLDS Activation Correction	OFF	
LLDL	HLDS LS Low Level Discriminator DAC	14000	
LLDS	HLDS SS Low Level Discriminator DAC	14000	
LLML	HLDS LS Low Level Discriminator Mode	AUTO	
LLMS	HLDS SS Low Level Discriminator Mode	AUTO	
MDEN	Matrix Density	2.6	G/C3
PHVL	HLDS Long Spacing High Voltage Setting	1000	V
PHVS	HLDS Short Spacing High Voltage Setting	1500	V
PSDL	HLDS LS Pulse Shape Compensation DAC	30000	
PSDS	HLDS SS Pulse Shape Compensation DAC	30000	
PSML	HLDS LS Pulse Shape Compensation Mode	AUTO	
PSMS	HLDS SS Pulse Shape Compensation Mode	AUTO	
APS-C: Accelerator-Porosity Tool			
AASD	APS Software Version	5	
ADSO	APS Thermal and Array Detectors High Voltage Setting	1976.24	V
AFSD	APS Array Detectors Data Source Switch	Both	
AHCS	APS Far Detector High Voltage Setting	2067.55	V
AHSS	APS Holesize Correction Source	GCSE	
AMTY	APS Holesize Correction Switch	ON	
ANSO	APS Environmental Corrections Mud Type	WaterBaseBarite	
ASOS	APS Near Detector High Voltage Setting	1737.8	V
ATSS	APS Standoff Correction Switch	ON	
BHFL_APS	APS Temperature-Pressure-Salinity Correction Switch	ON	
BHS	APS TNPH Borehole Fluid Type	WATER	
BHT	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	7	DEGC
BSCO_APS	APS TNPH Borehole Salinity Correction Option	NO	
DPPM	Density Porosity Processing Mode	HIRS	
DSCO_APS	APS TNPH Density Source Correction Option	MEASURED	
FSAL	Formation Salinity	-50000	PPM
FSCO_APS	APS TNPH Formation Salinity Correction Option	NO	
GCSE	Generalized Caliper Selection	BS	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
HSCO_APS	APS TNPH Hole Size Correction Option	YES	
ISSBAR	Barite Mud Switch	NOBARITE	
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
MCCO_APS	APS TNPH Mud Cake Correction Option	YES	
MCOR_APS	APS TNPH Mud Correction	NATU	
MWCO_APS	APS TNPH Mud Weight Correction Option	YES	
NARC	APS Near/Array Calibration Ratio	1.08341	
NFRC	APS Near/Far Calibration Ratio	0.042260	

NFRG	APS Near/Far Calibration Ratio	0.942369	NO	
PTCO_APS	APS TNPH Pressure/Temperature Correction Option	NO		
SHT	Surface Hole Temperature	20	DEGC	
TNCO_APS	APS TNPH Computation Option	YES		
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)	7	DEGC	
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		
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG	
GGRD	Geothermal Gradient	0.018227	DC/M	
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	-0.00293115		
HALF	HNGS Alpha Filter Length	60	IN	
HCRB	HNGS Apply Borehole Potassium Correction	NONE		
HMWM	Mud Weighting Material	NATU		
HNPE	HNGS Processing Enable	YES		
ISSBAR	Barite Mud Switch	NOBARITE		
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE		
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	DEGC	
TPOS	Tool Position	ECCE		
VBA1	HNGS Detector 1 Variable Barite Factor Running Average	0.980155		
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	1.03841		
System and Miscellaneous				
ALTDCHAN	Name of alternate depth channel	SpeedCorrectedDepth		
BS	Bit Size	9.875	IN	
BSAL	Borehole Salinity	38000.00	PPM	
CSIZ	Current Casing Size	10.750	IN	
CWEI	Casing Weight	168.00	LB/F	
DFD	Drilling Fluid Density	1.02	G/C3	
DO	Depth Offset for Playback	0.0	M	
FLEV	Fluid Level	-50000.00	M	
MST	Mud Sample Temperature	23.00	DEGC	
PBVSADP	Use alternate depth channel for playback	NO		
PP	Playback Processing	RECOMPUTE		
RMFS	Resistivity of Mud Filtrate Sample	-50000.0000	OHMM	
RW	Resistivity of Connate Water	1.0000	OHMM	
TD	Total Depth	8729.3	FT	
TDD	Total Depth - Driller	2660.70	M	
TDL	Total Depth - Logger	2661.00	M	
TWS	Temperature of Connate Water Sample	37.78	DEGC	

Format: TripleCombo Vertical Scale: 1:200 Graphics File Created: 10-Jul-2021 20:45

OP System Version: 19C0-187

MSS_LDEO-A	19C0-187	HRLT-B	19C0-187
HLDS	19C0-187	LDSC-B	19C0-187
APS-C	19C0-187	HNGC-B	19C0-187
HNGS-BA	19C0-187	DTC-H	19C0-187

Input DLIS Files

DEFAULT	MSS_LDEO_HRLA_LDL_008LUP	FN:13	PRODUCER	08-Jul-2021 16:58	2660.9 M	2534.8 M
---------	--------------------------	-------	----------	-------------------	----------	----------

Output DLIS Files

DEFAULT	MSS_LDEO_HRLA_LDL_054PUP	FN:87	PRODUCER	10-Jul-2021 20:45		
---------	--------------------------	-------	----------	-------------------	--	--

Input DLIS Files

DEFAULT	MSS_LDEO_HRLA_LDL_009LUP	FN:15	PRODUCER	08-Jul-2021 17:30	2660.9 M	1838.0 M
---------	--------------------------	-------	----------	-------------------	----------	----------

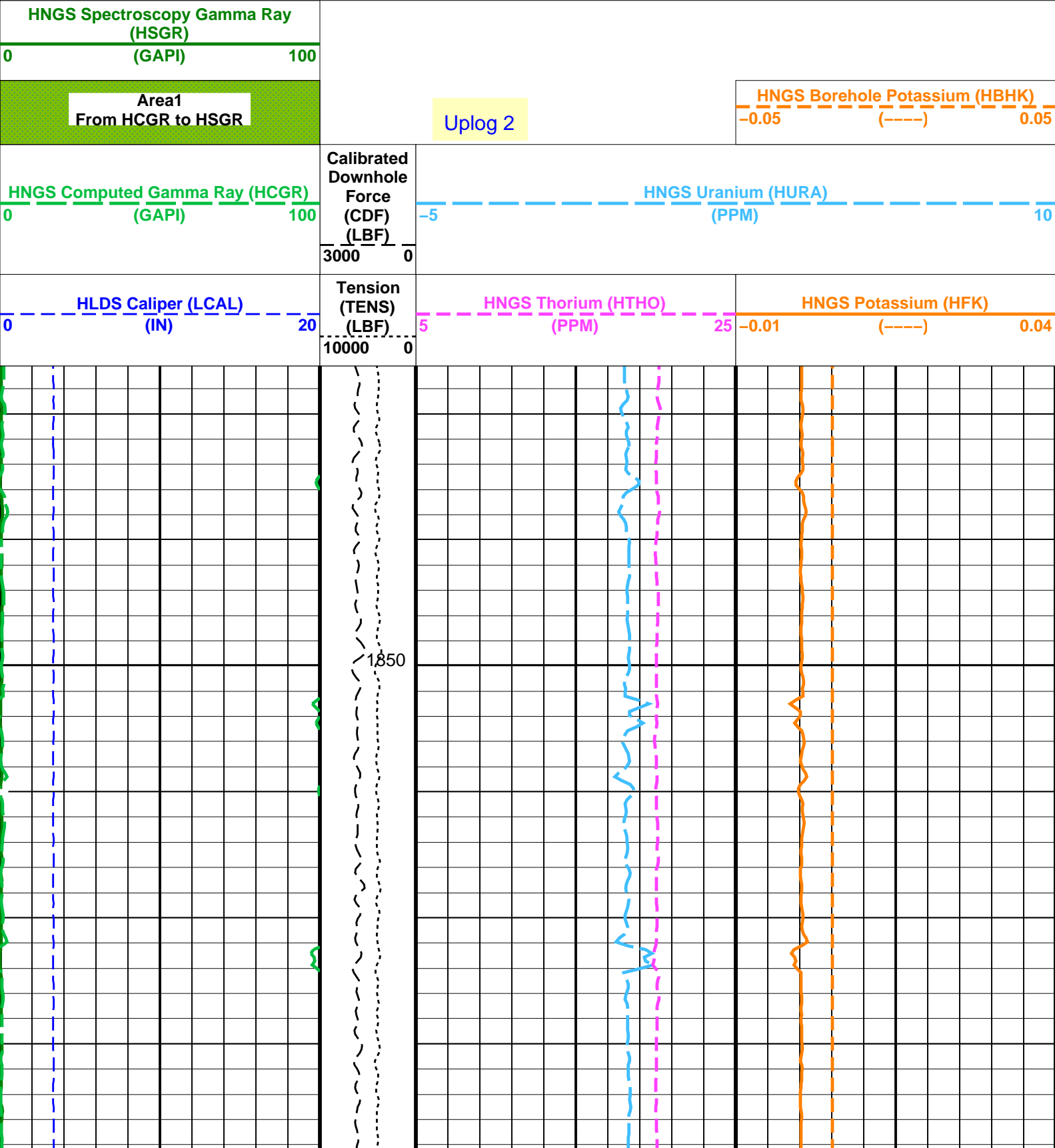
Output DLIS Files

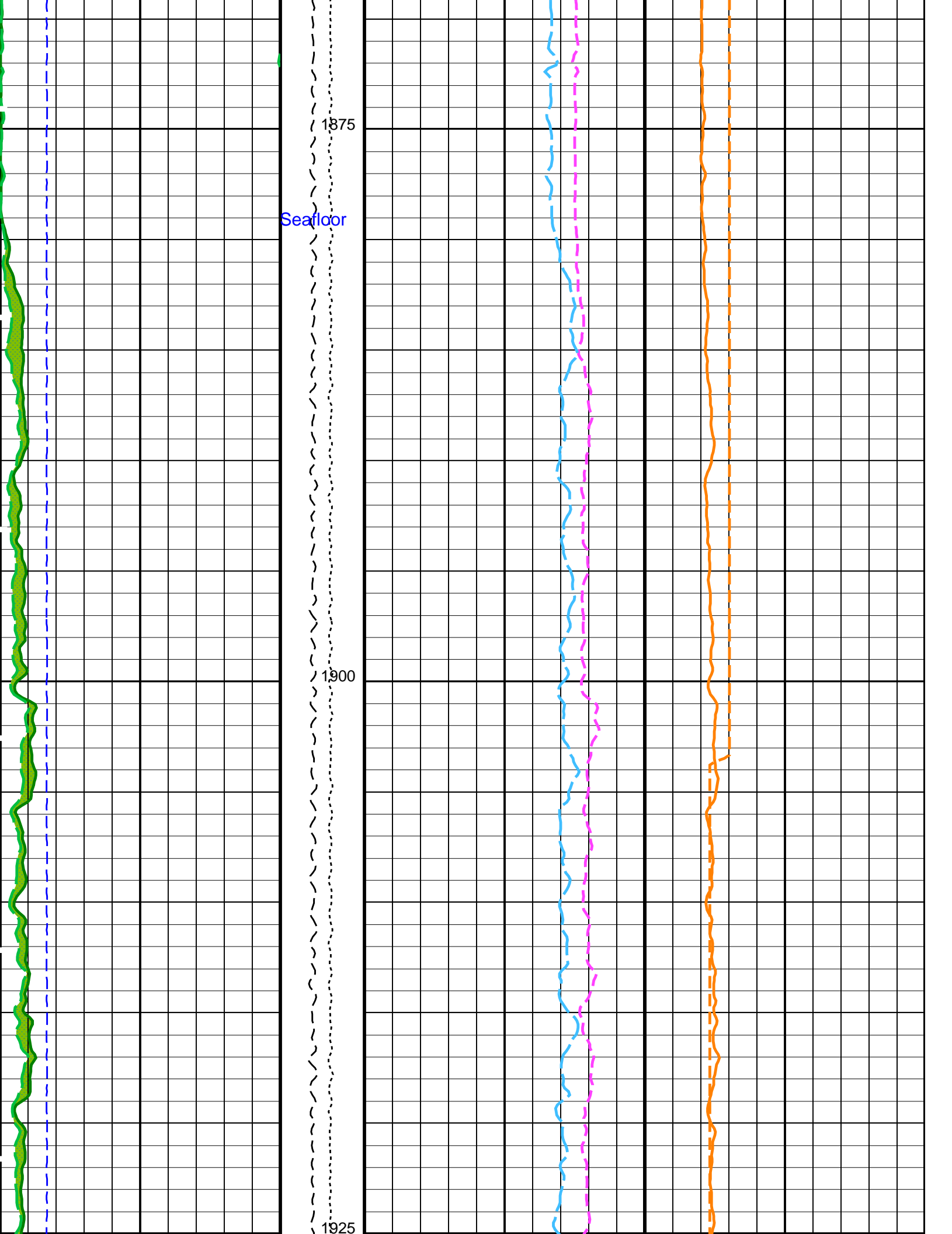
OP System Version: 19C0-187

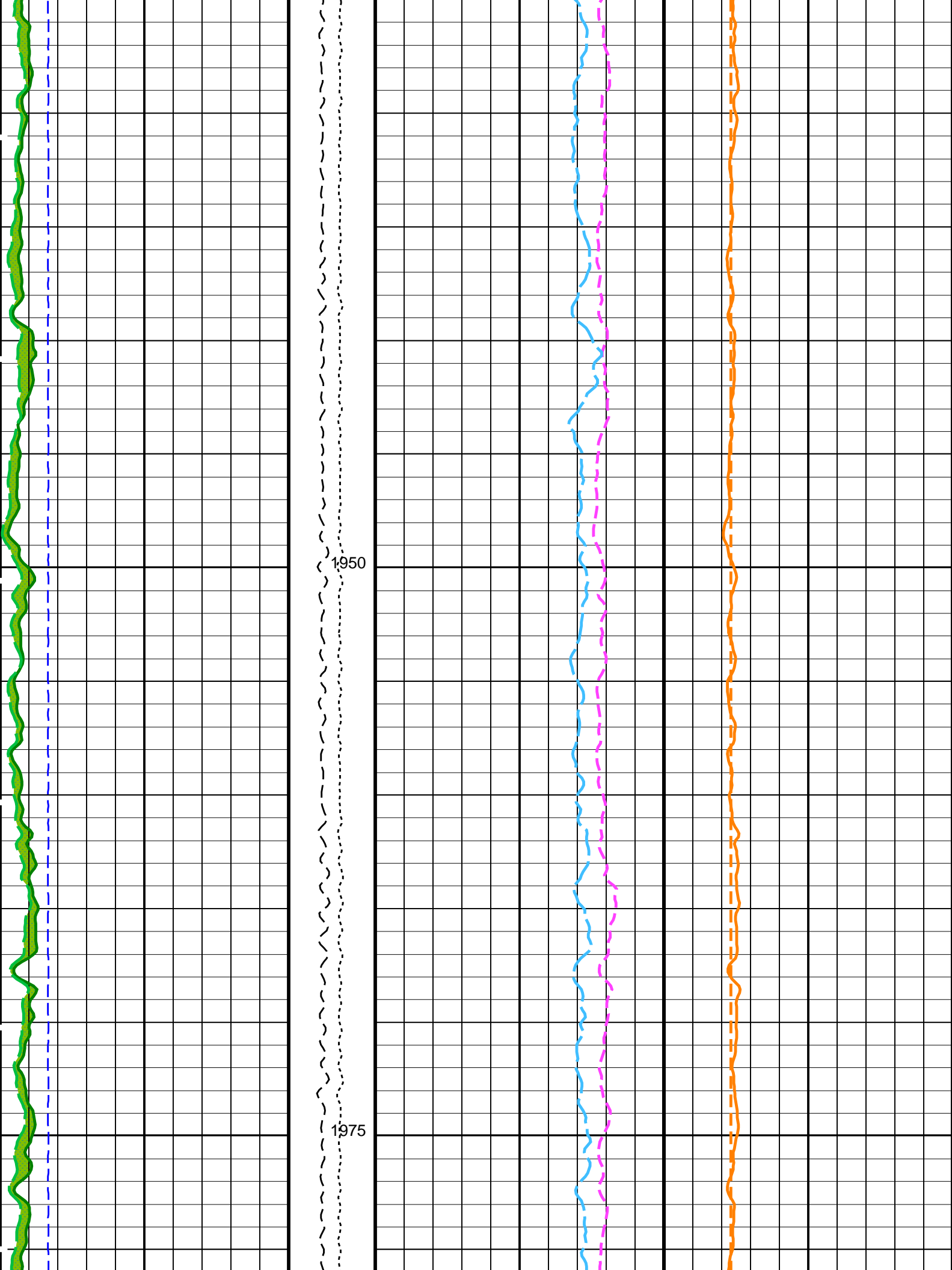
MSS_LDEO-A	19C0-187	HRLT-B	19C0-187
HLDS	19C0-187	LDSC-B	19C0-187
APS-C	19C0-187	HNGC-B	19C0-187
HNGS-BA	19C0-187	DTC-H	19C0-187

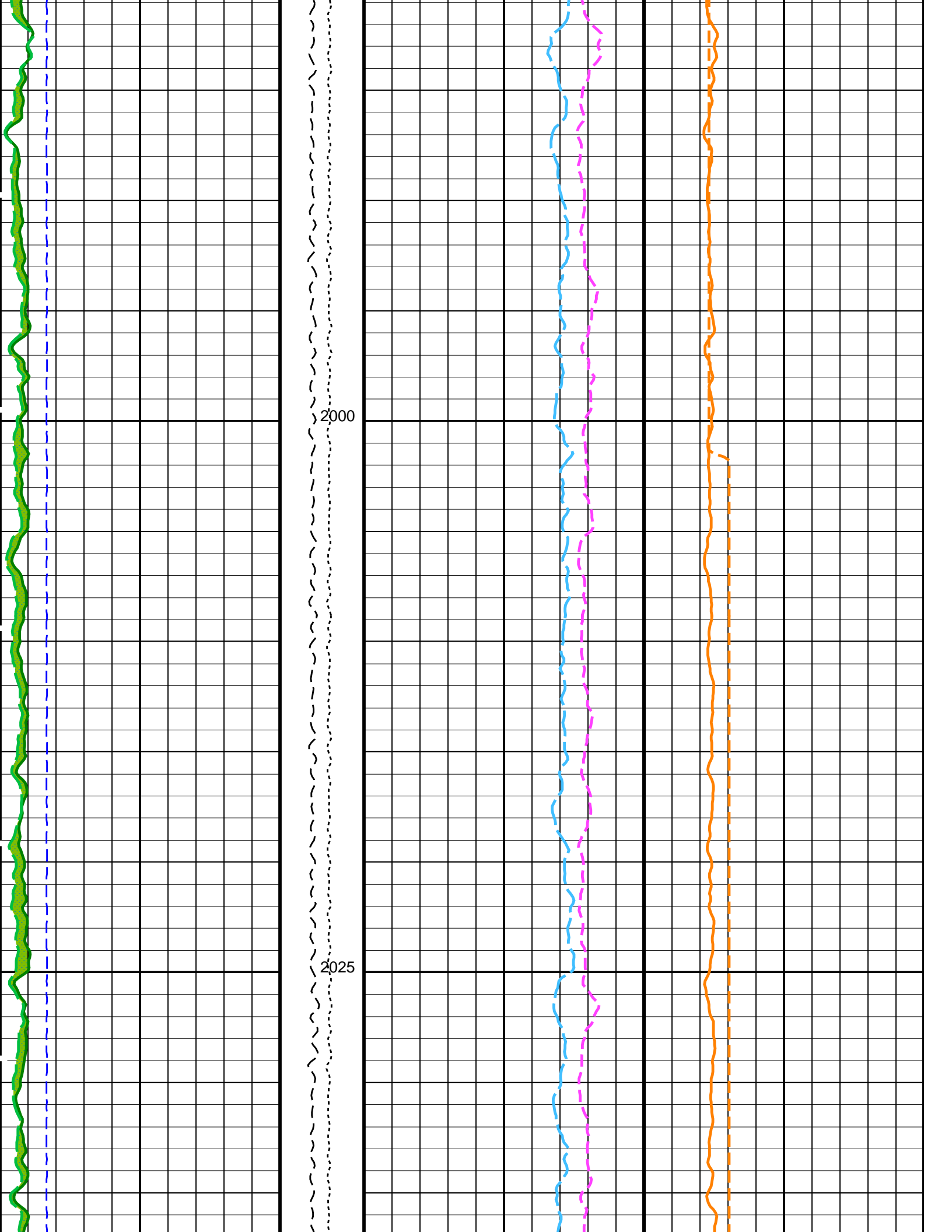
PIP SUMMARY

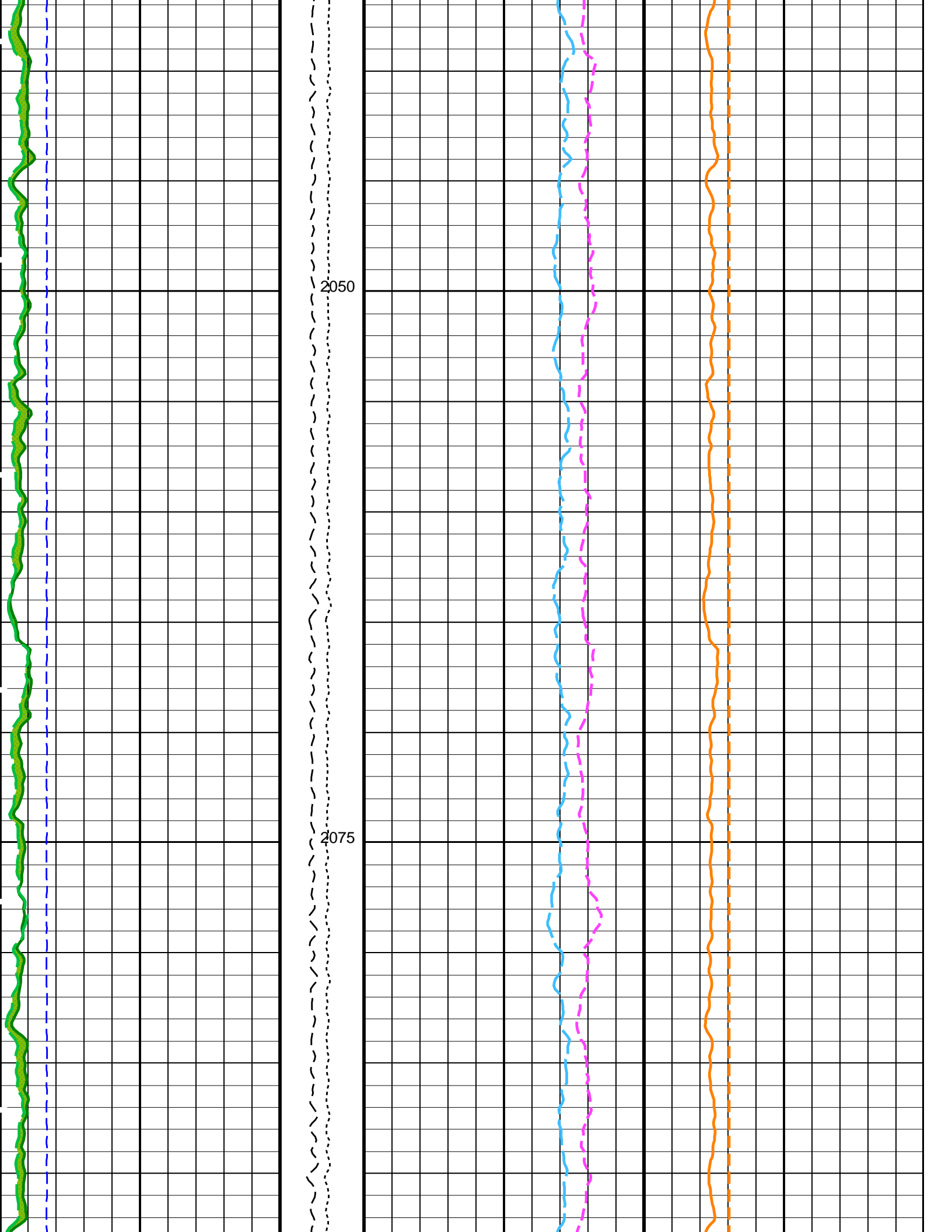
Time Mark Every 60 S

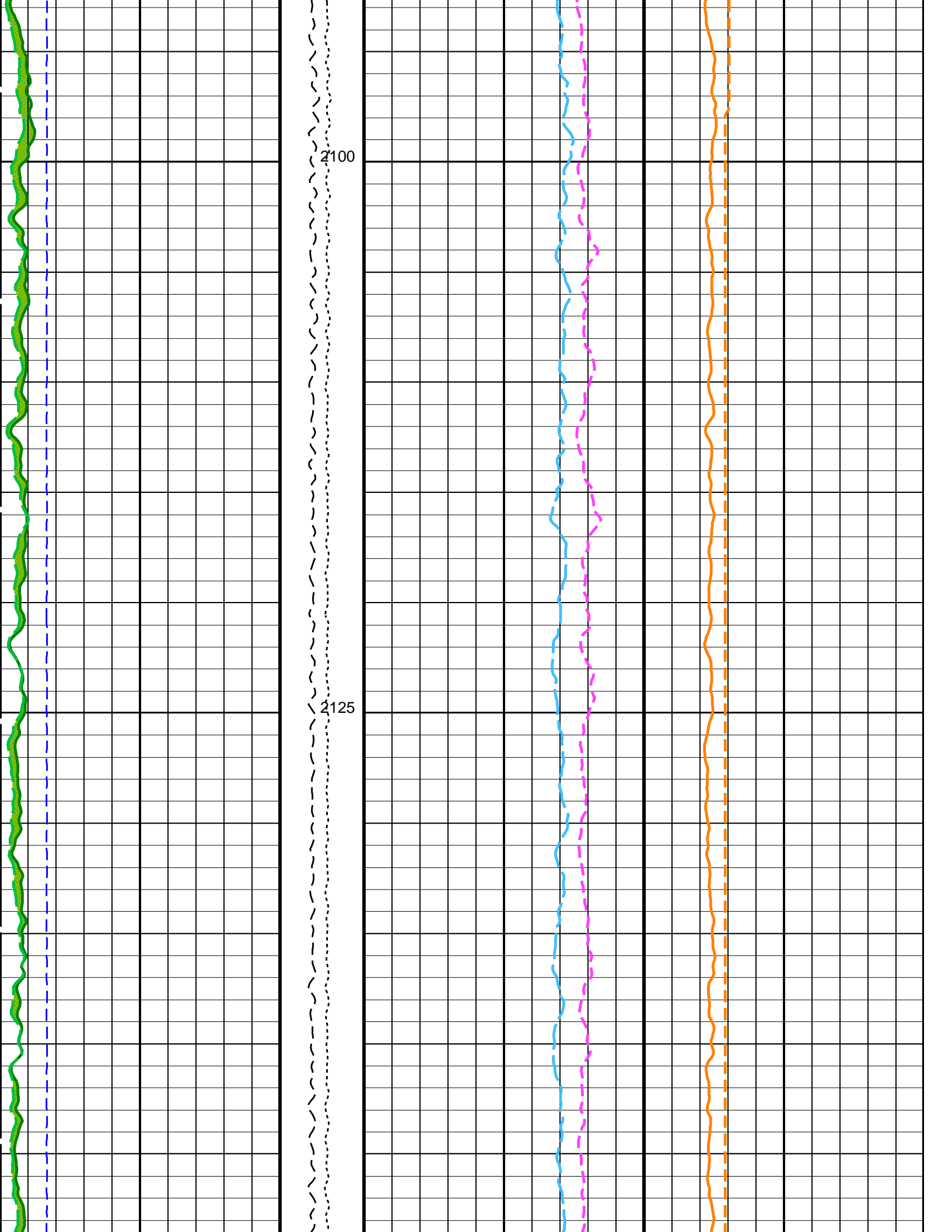


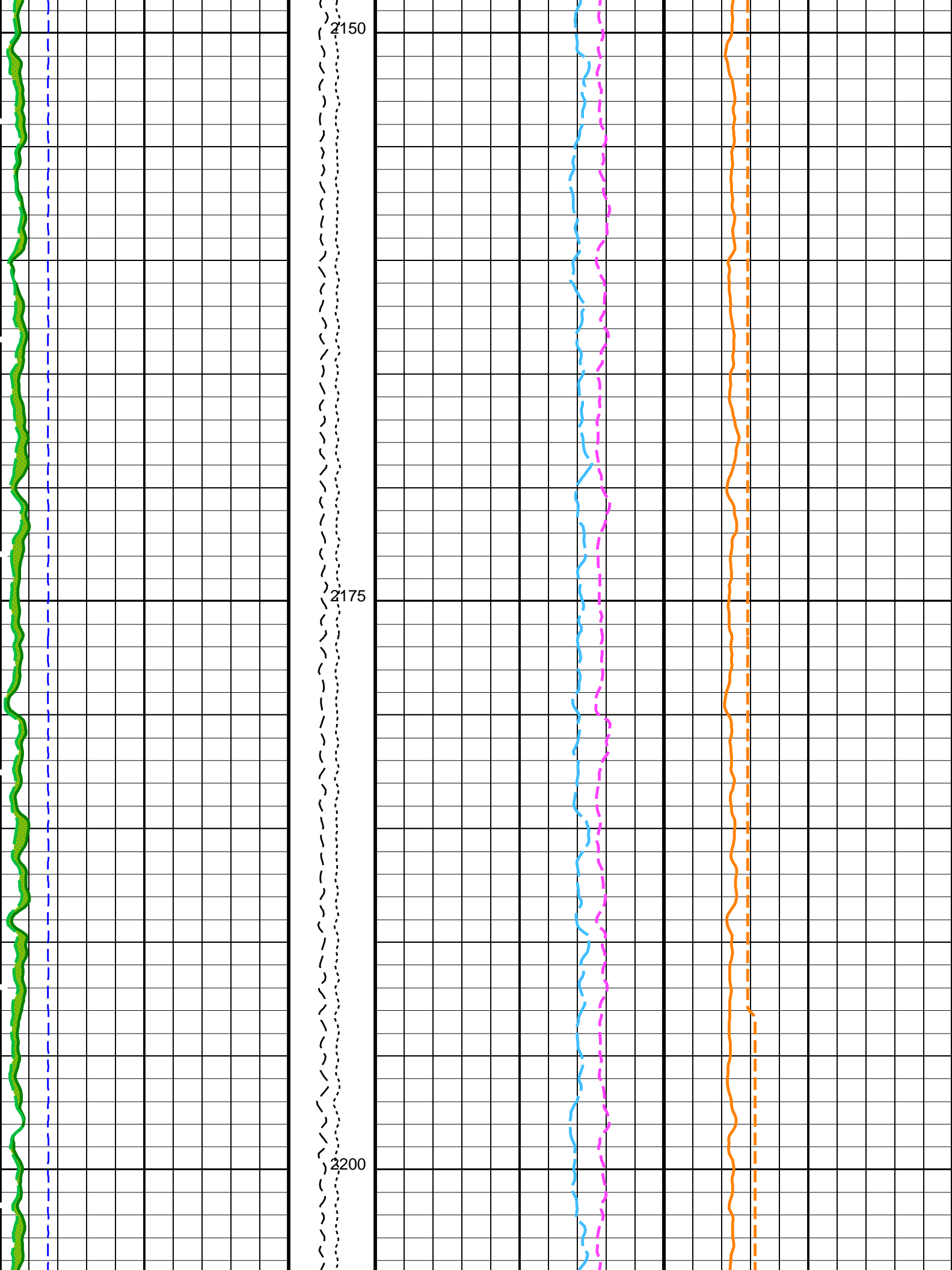


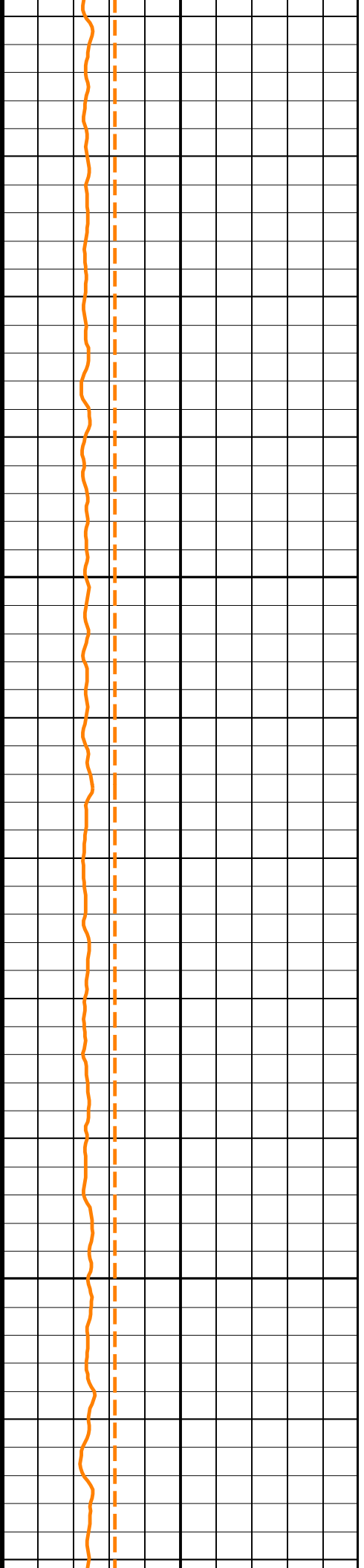
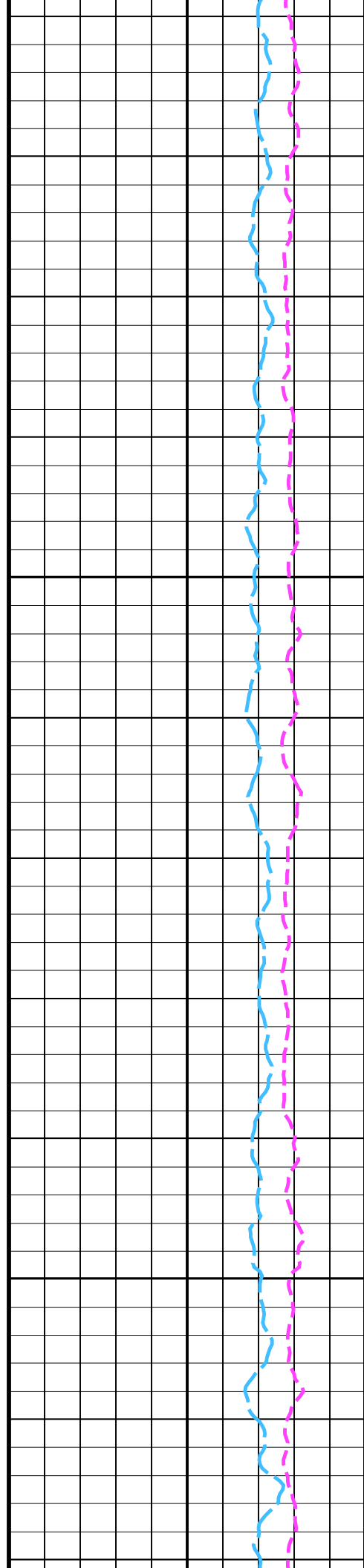
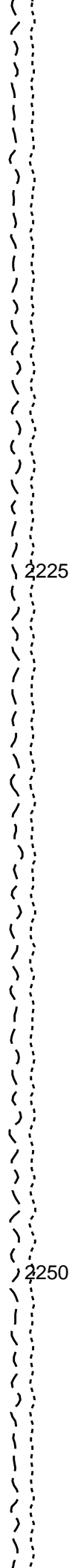
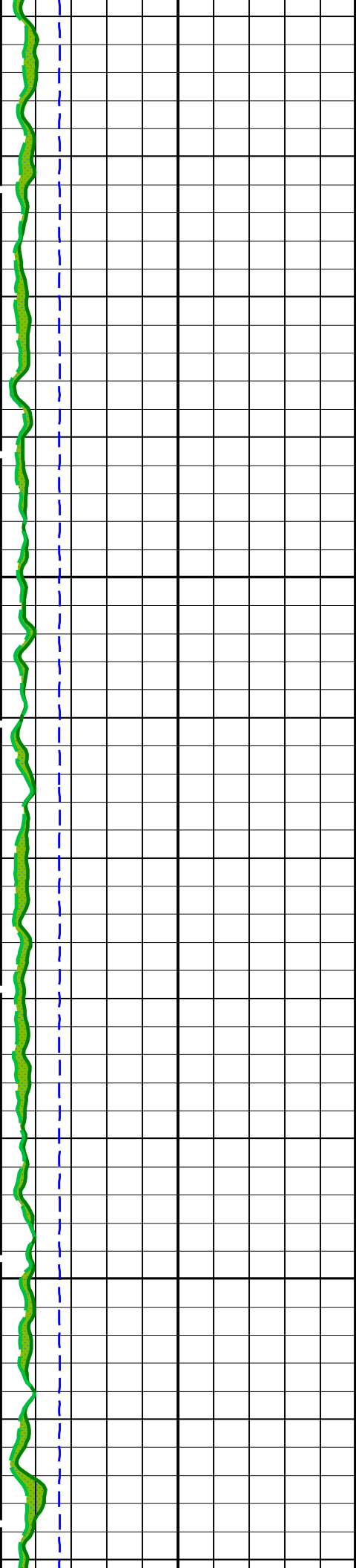


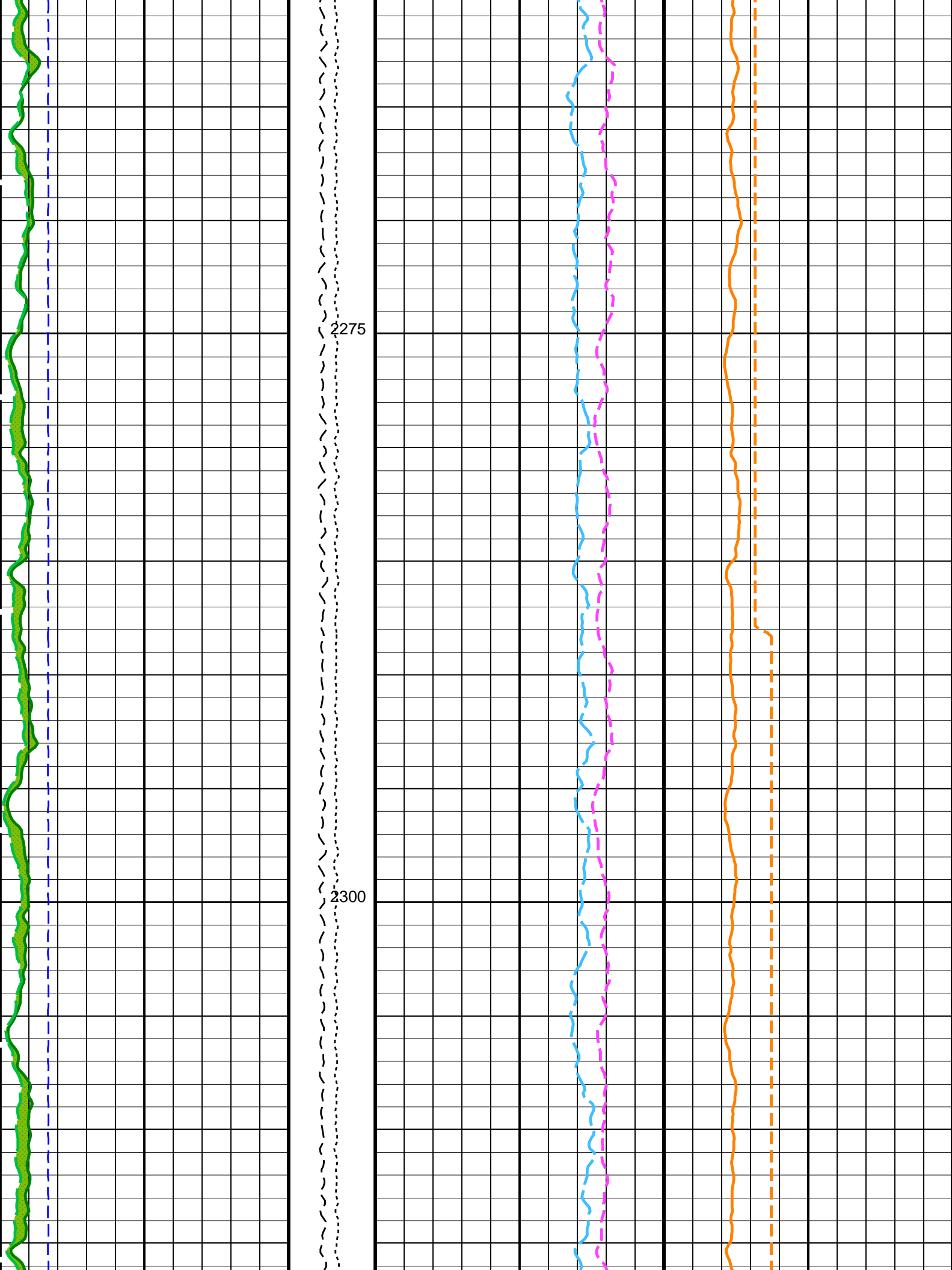


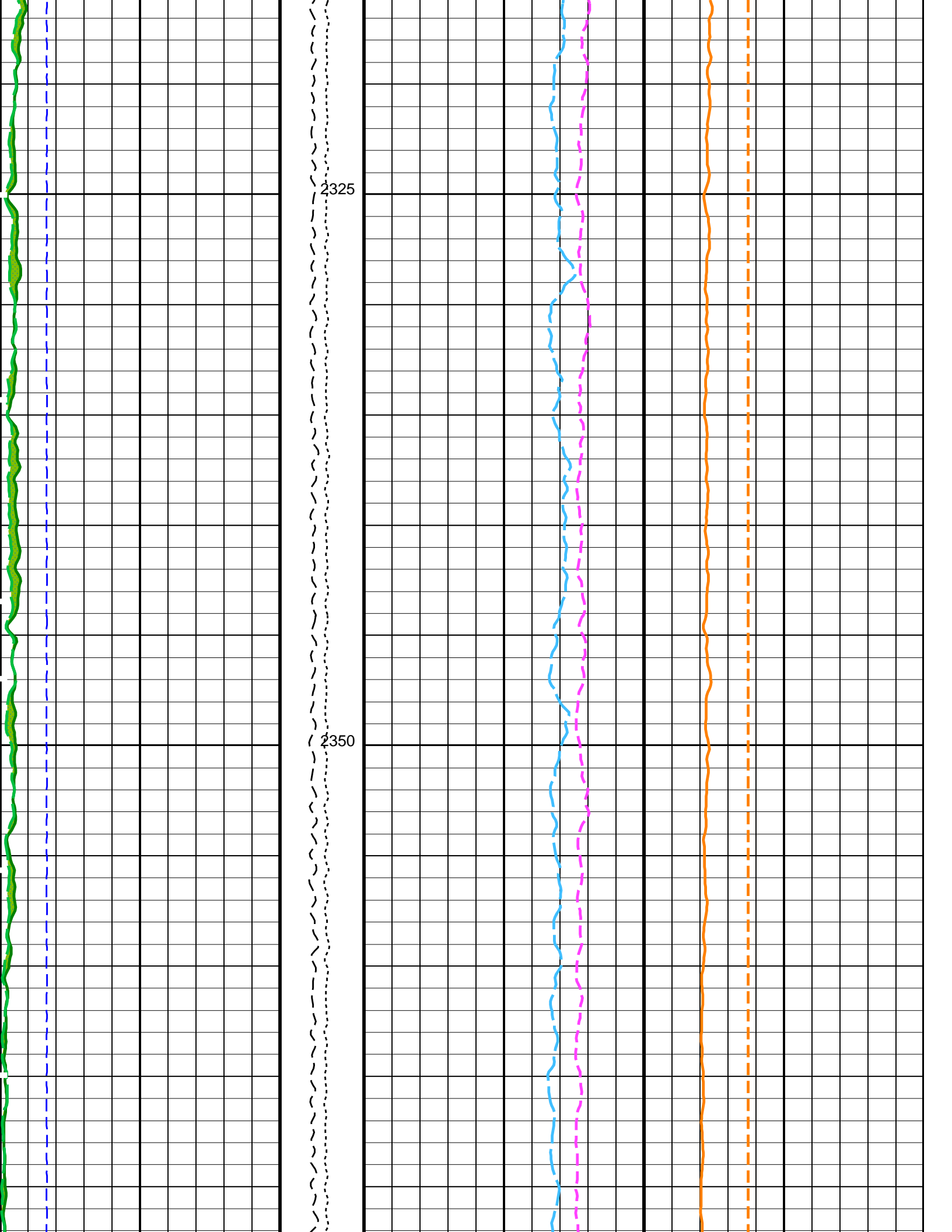


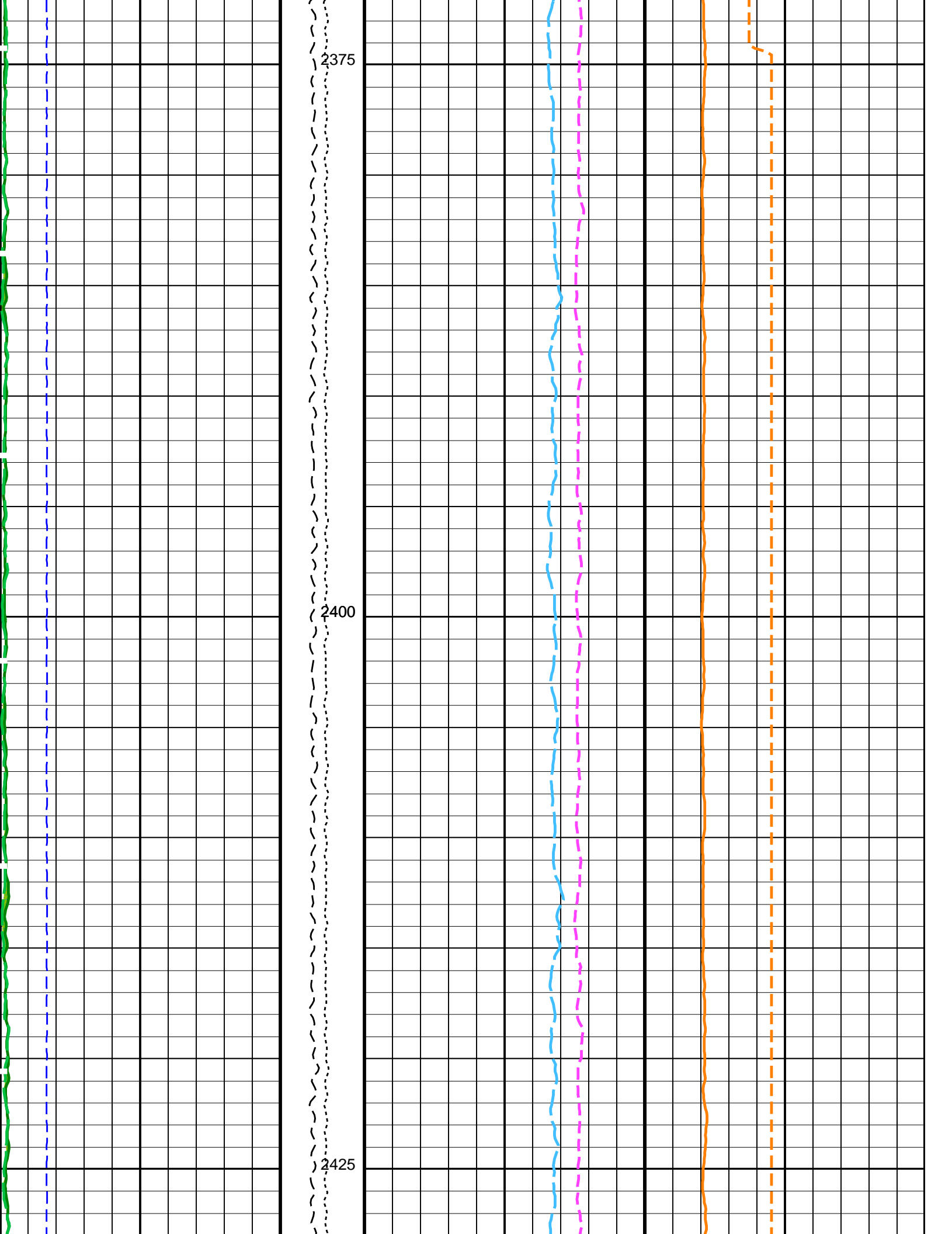


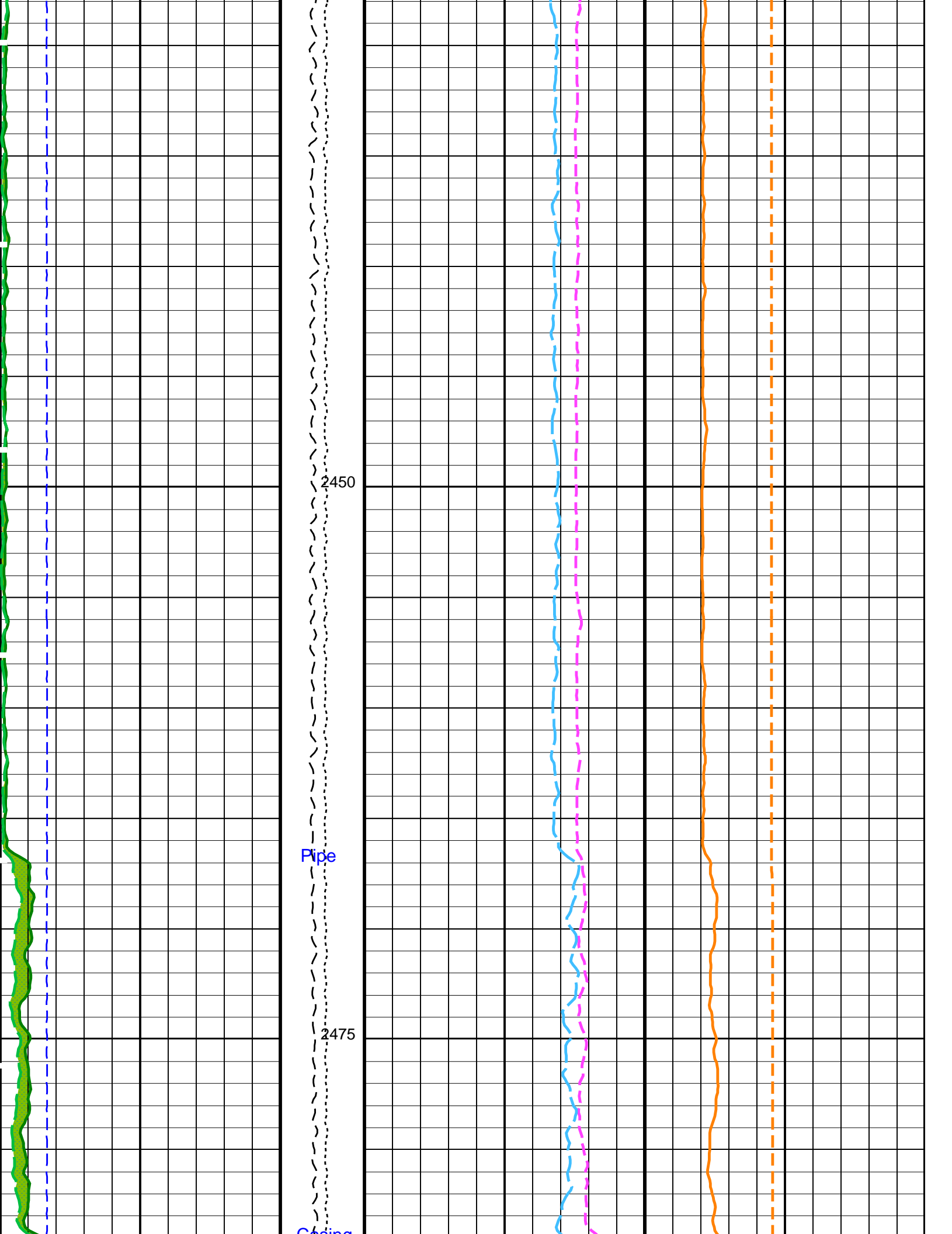


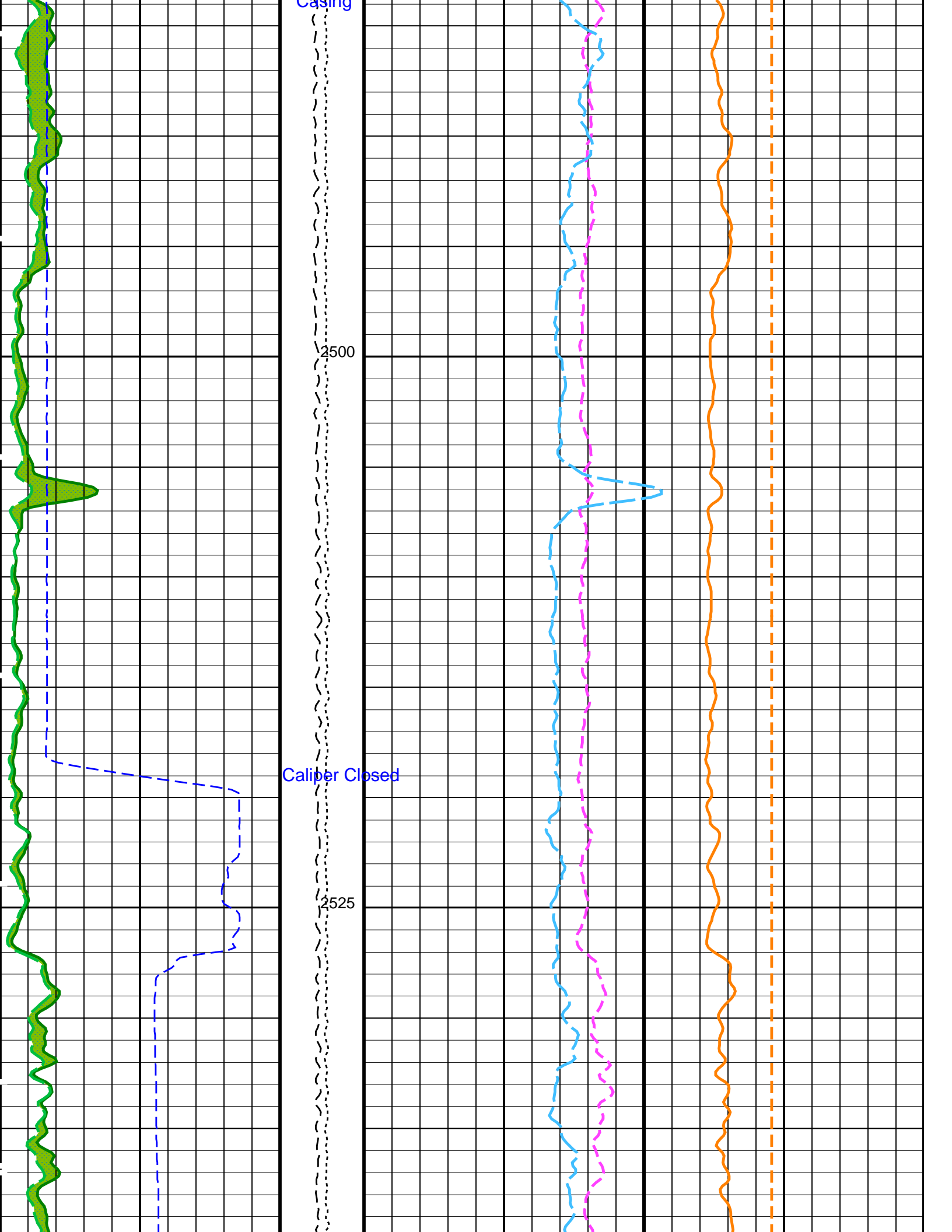


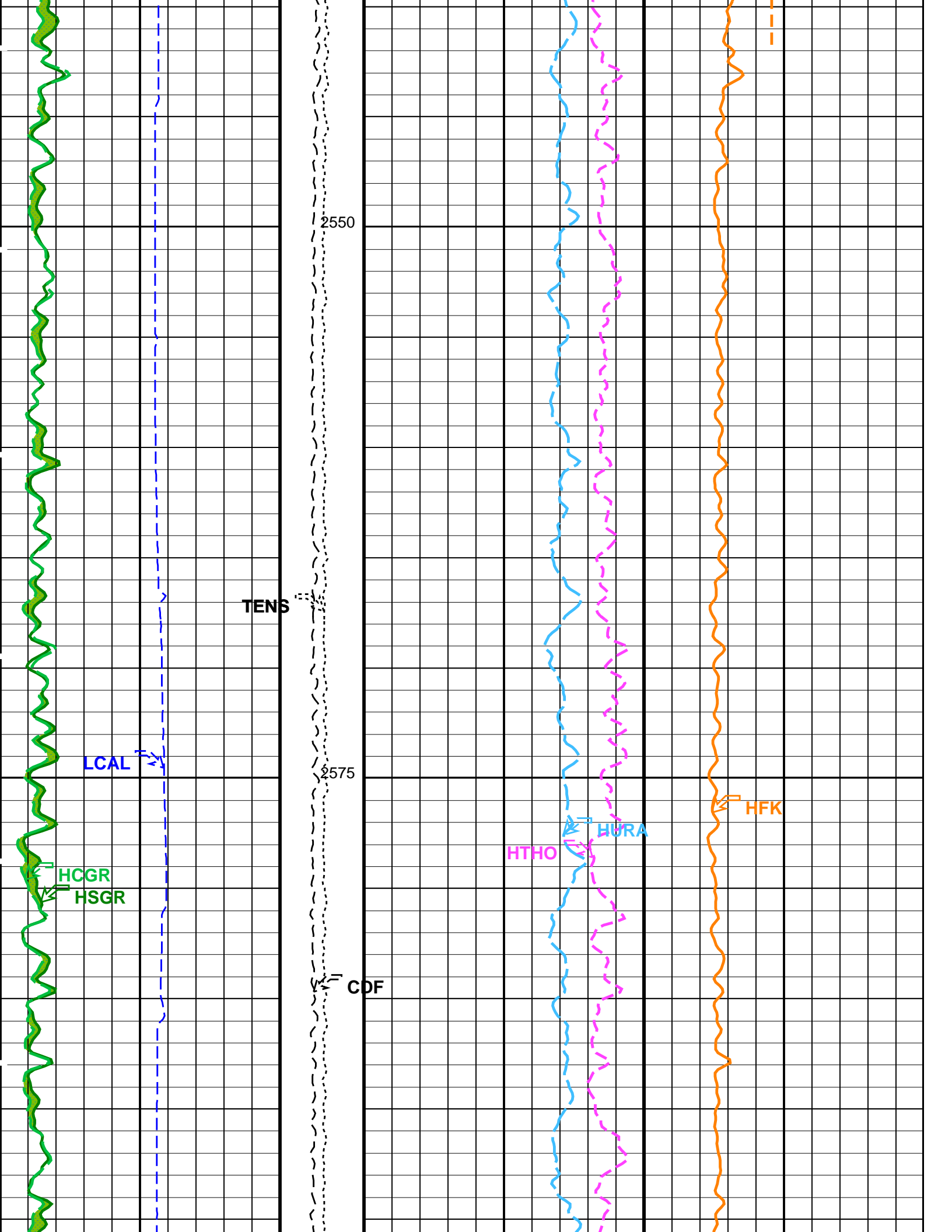


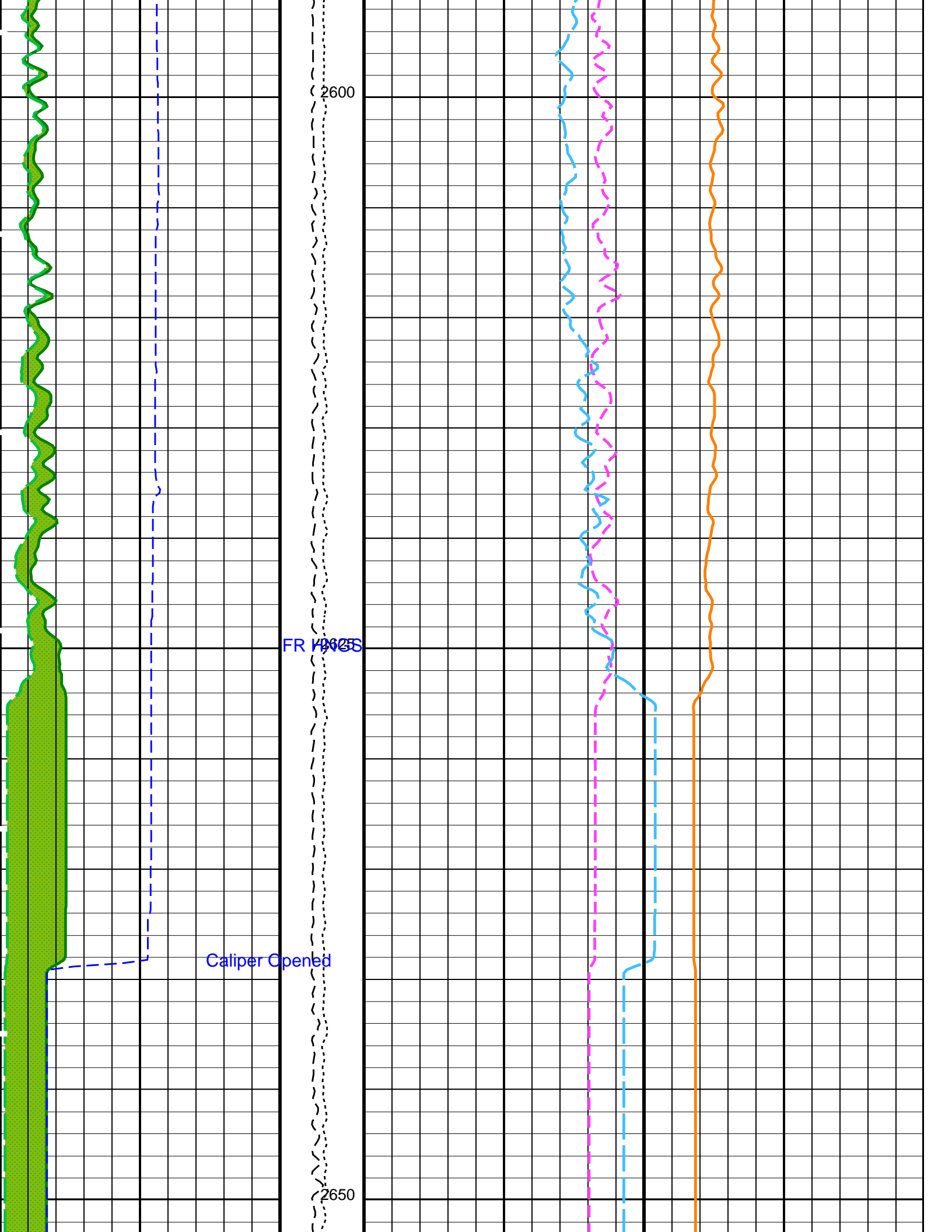


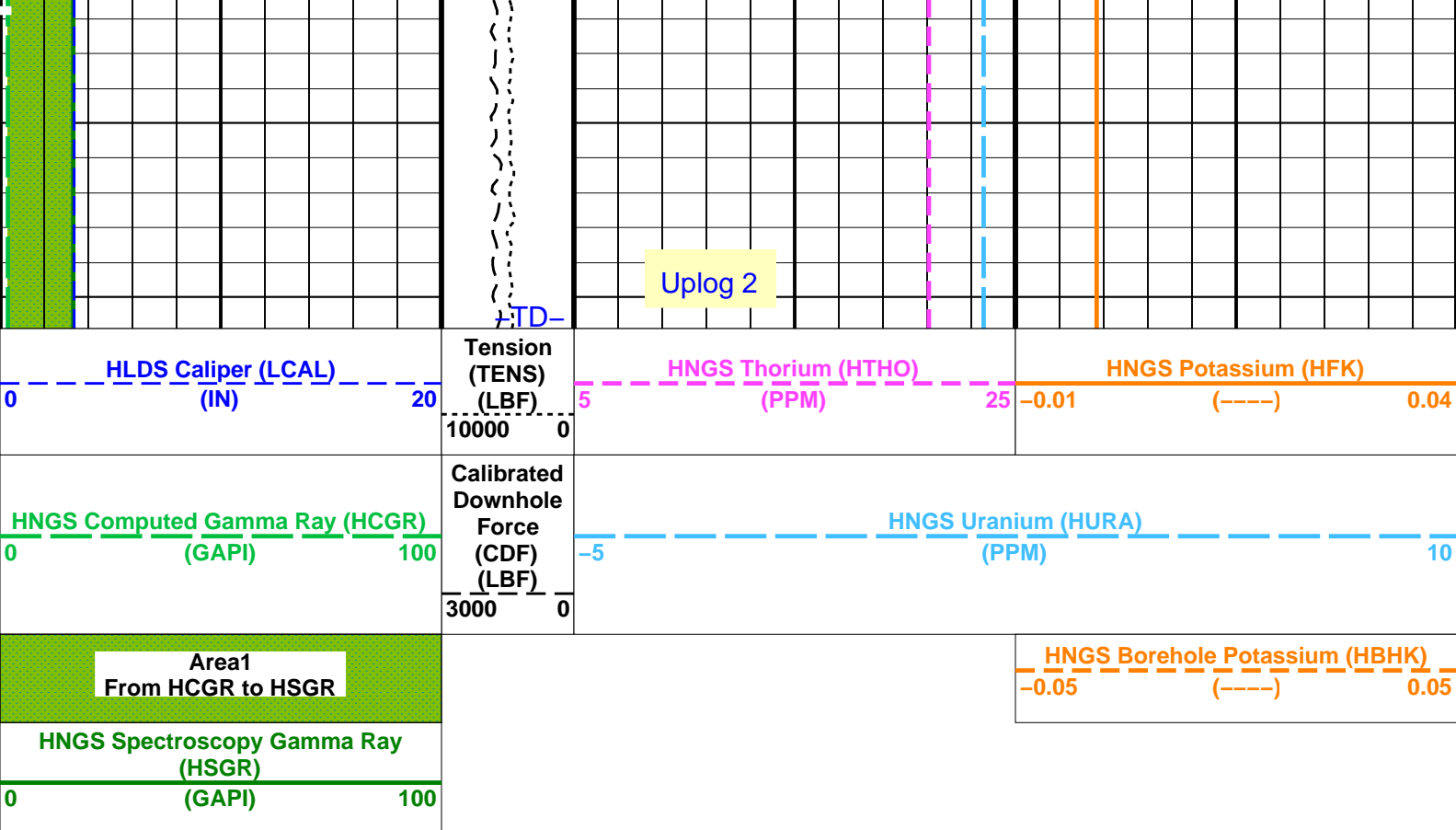












PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
BHS	HRLT-B: High Resolution Laterolog Array - B	
GCSE	Borehole Status	OPEN
GCSE	Generalized Caliper Selection	LCAL
BHS	APS-C: Accelerator-Porosity Tool	
GCSE	Borehole Status	OPEN
GCSE	Generalized Caliper Selection	LCAL
BAR1	HNGS-BA: Hostile Natural Gamma Ray Sonde	
BAR2	HNGS Detector 1 Barite Constant	1
BHK	HNGS Detector 2 Barite Constant	1
BHS	HNGS Borehole Potassium Correction Concentration	0
CSD1	Borehole Status	OPEN
CSD2	Inner Casing Outer Diameter	0 IN
CSW1	Outer Casing Outer Diameter	0 IN
CSW2	Inner Casing Weight	0 LB/F
DBCC	Outer Casing Weight	0 LB/F
GCSE	HNGS Barite Constant Correction Flag	NONE
H1P	Generalized Caliper Selection	LCAL
H2P	HNGS Detector 1 Allow/Disallow In Processing	ALLOW
HABK	HNGS Detector 2 Allow/Disallow In Processing	ALLOW
HALF	HNGS Borehole Potassium Running Average	-0.000149152
HCRB	HNGS Alpha Filter Length	60 IN
HMWM	HNGS Apply Borehole Potassium Correction	NONE
HNPE	Mud Weighting Material	NATU
S1BI	HNGS Processing Enable	YES
S2BI	HNGS Detector 1 Calibration Bismuth Count Rate	1.3 CPS
SGRC	HNGS Detector 2 Calibration Bismuth Count Rate	1.3 CPS
TPOS	HNGS Standard Gamma-Ray Correction Flag	YES
VBA1	Tool Position	ECCE
VBA2	HNGS Detector 1 Variable Barite Factor Running Average	1.02741
	HNGS Detector 2 Variable Barite Factor Running Average	1.04133
BS	System and Miscellaneous	
DFD	Bit Size	9.875 IN
DO	Drilling Fluid Density	1.02 G/C3
PP	Depth Offset for Playback	0.0 M
	Playback Processing	RECOMPUTE

Format: HNGSYields

Vertical Scale: 1:200

Graphics File Created: 10-Jul-2021 20:53

MSS_LDEO-A	19C0-187	HRLT-B	19C0-187
HLDS	19C0-187	LDSC-B	19C0-187
APS-C	19C0-187	HNGC-B	19C0-187
HNGS-BA	19C0-187	DTC-H	19C0-187

Input DLIS Files

DEFAULT	MSS_LDEO_HRLA_LDL_009LUP	FN:15	PRODUCER	08-Jul-2021 17:30	2660.9 M	1838.0 M
---------	--------------------------	-------	----------	-------------------	----------	----------

Output DLIS Files

DEFAULT	MSS_LDEO_HRLA_LDL_055PUP	FN:88	PRODUCER	10-Jul-2021 20:53		
---------	--------------------------	-------	----------	-------------------	--	--

Company: International Ocean Discovery Program	Well: Expedition 395C, Site U1554F
--	------------------------------------

Input DLIS Files

DEFAULT	MSS_LDEO_HRLA_LDL_009LUP	FN:15	PRODUCER	08-Jul-2021 17:30	2660.9 M	1838.0 M
---------	--------------------------	-------	----------	-------------------	----------	----------

Output DLIS Files

DEFAULT	MSS_LDEO_HRLA_LDL_055PUP	FN:88	PRODUCER	10-Jul-2021 20:53	2660.9 M	1838.1 M
---------	--------------------------	-------	----------	-------------------	----------	----------

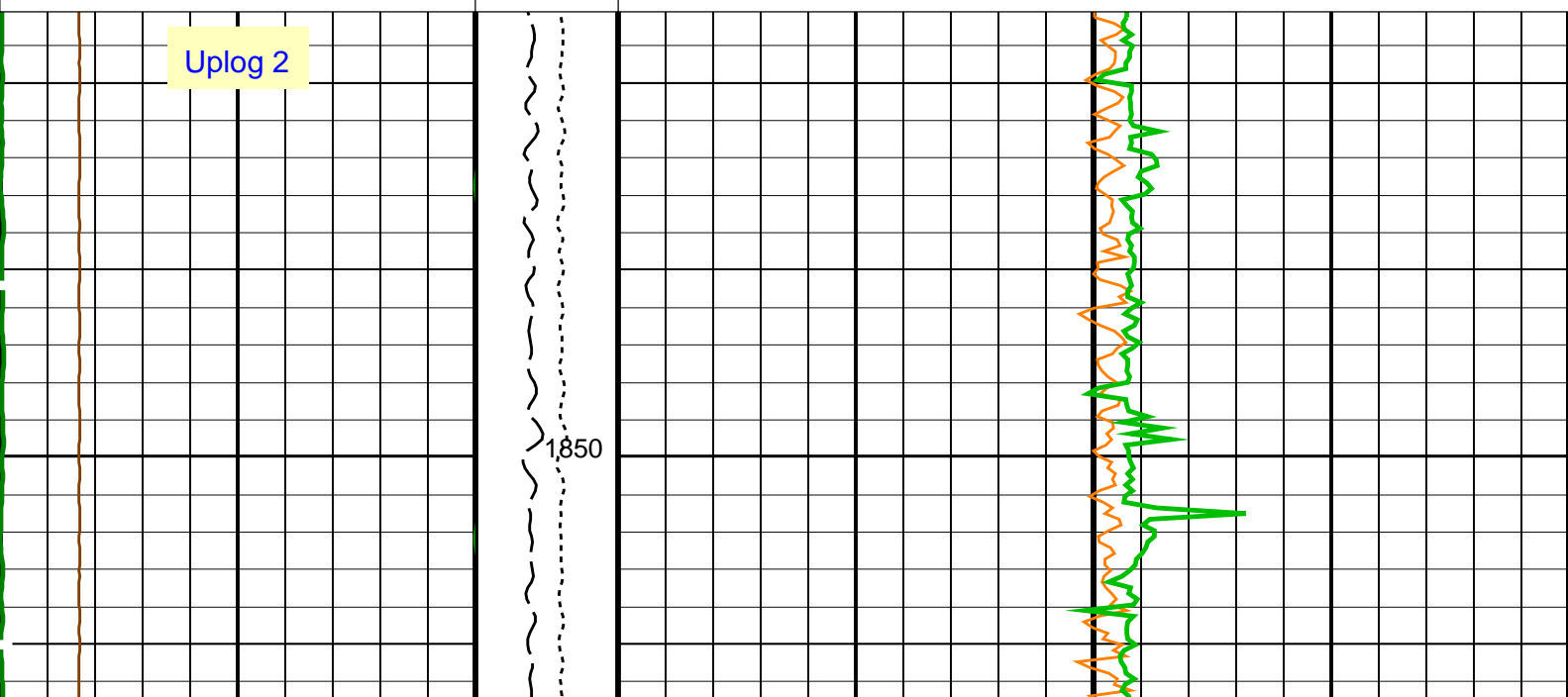
OP System Version: 19C0-187

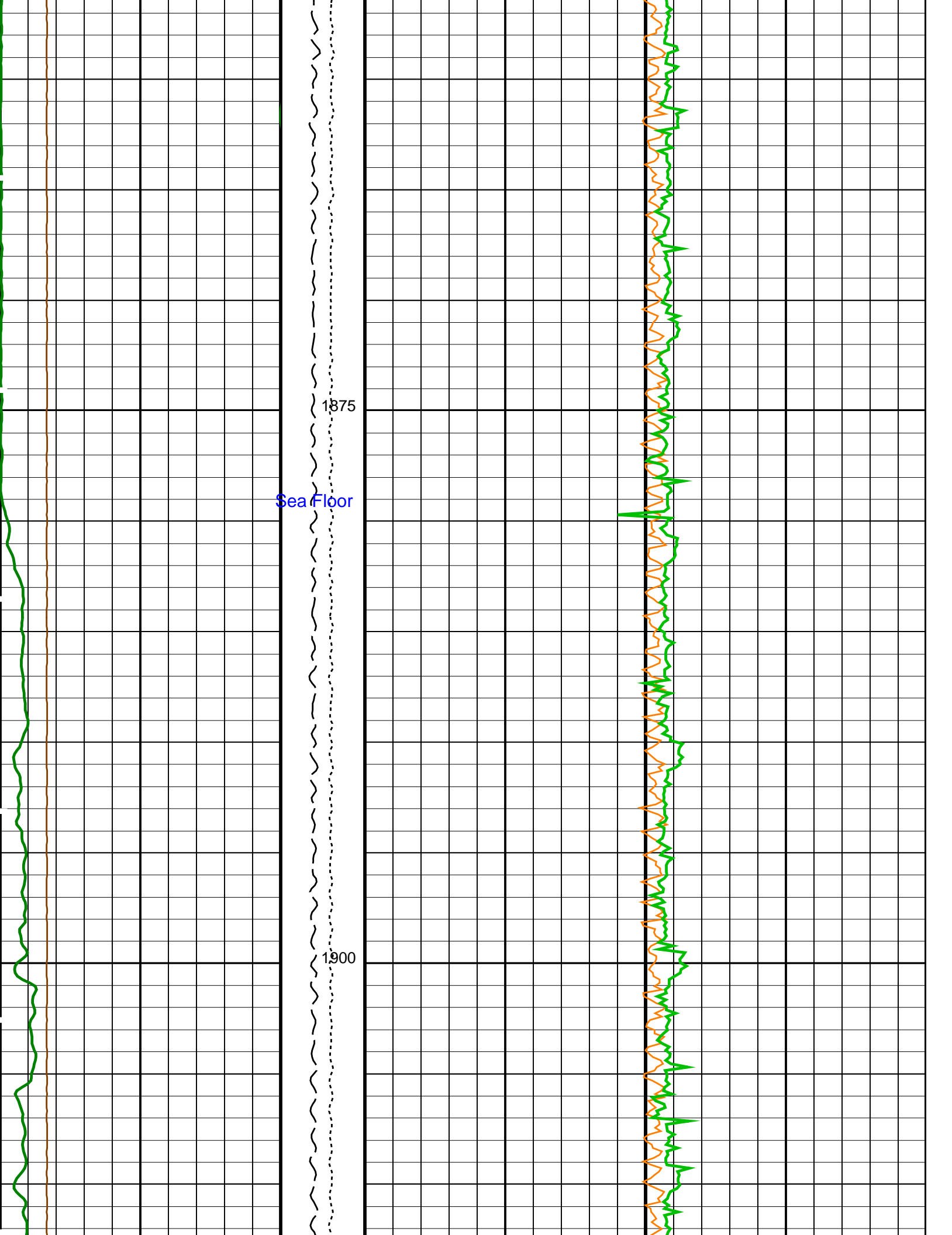
MSS_LDEO-A	19C0-187	HRLT-B	19C0-187
HLDS	19C0-187	LDSC-B	19C0-187
APS-C	19C0-187	HNGC-B	19C0-187
HNGS-BA	19C0-187	DTC-H	19C0-187

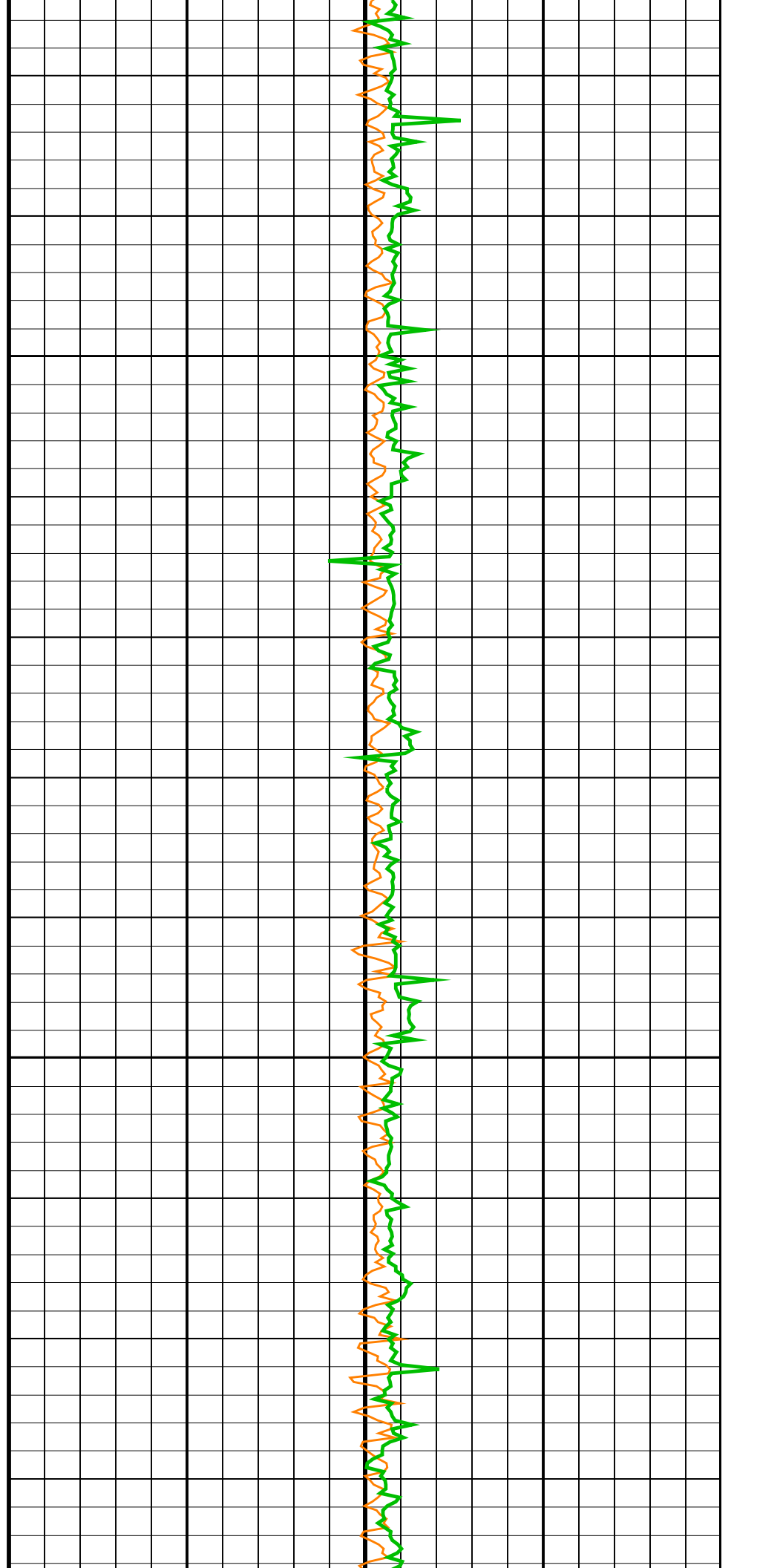
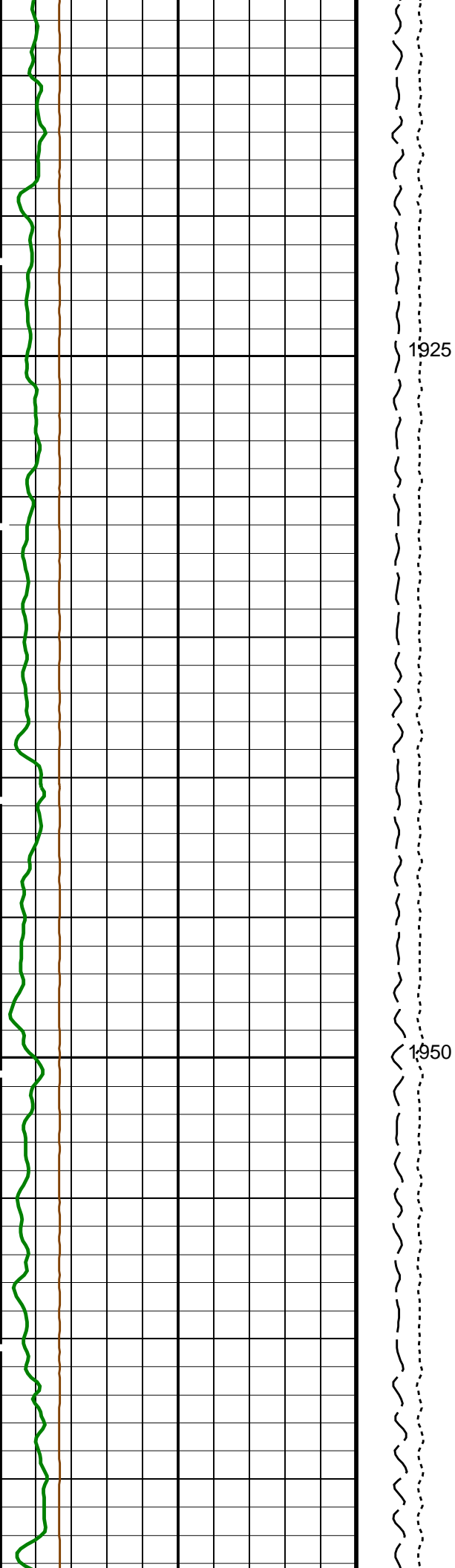
PIP SUMMARY

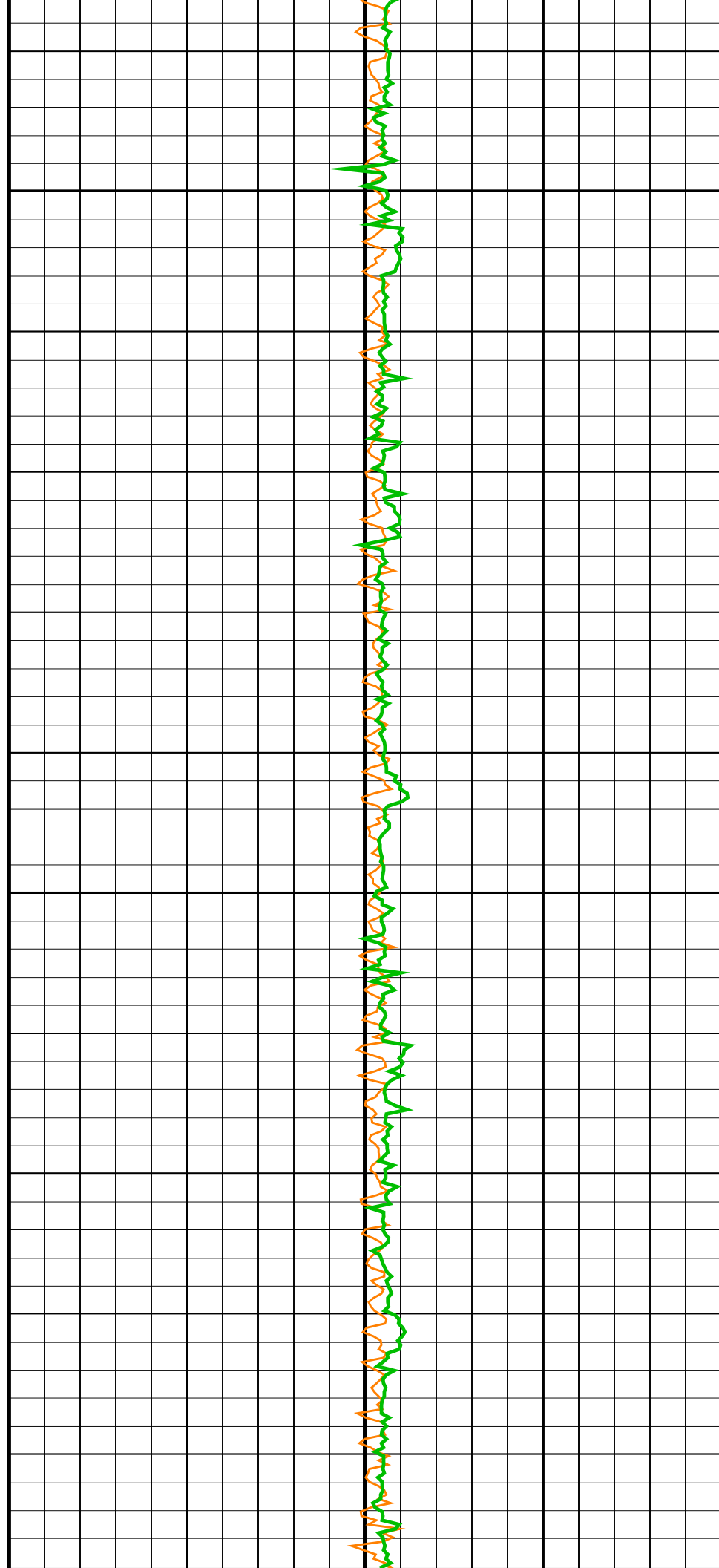
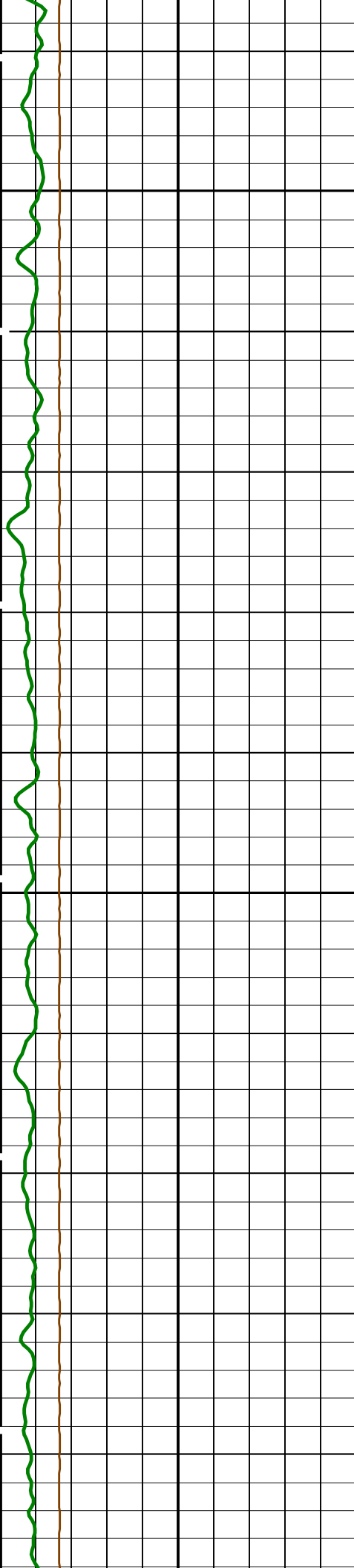
☒ Time Mark Every 60 S

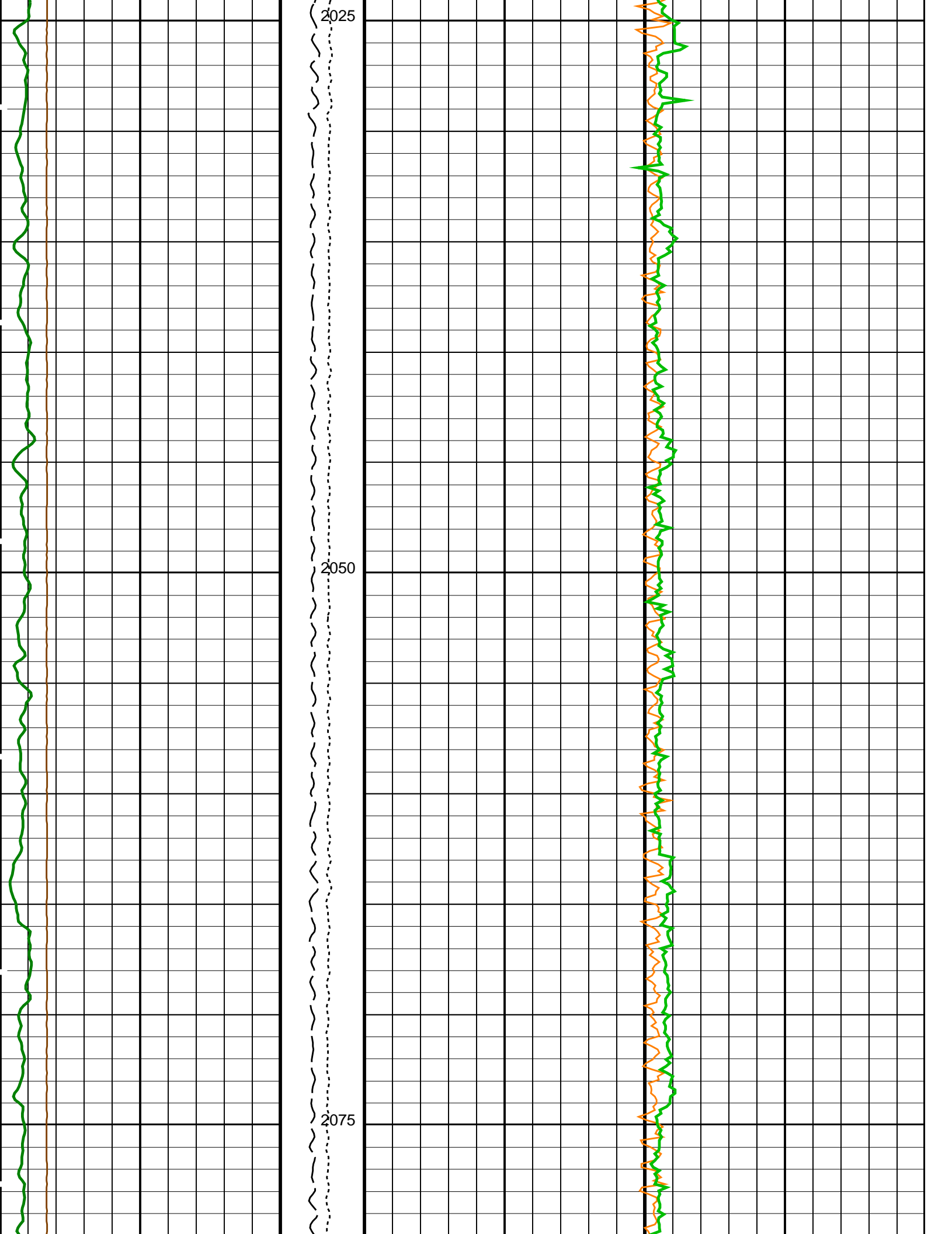
HNGS Spectroscopy Gamma Ray (HSGR) (GAPI)	0100	Calibrated Downhole Force (CDF) (LBF) 30000	Dual-Coil Susceptibility (MSSL SUS_LDEO) (PPM)	-1000010000
HLDS Caliper (LCAL) (IN)	020		Axial Acceleration (MSSZACC_LDEO) (M/S2)	020

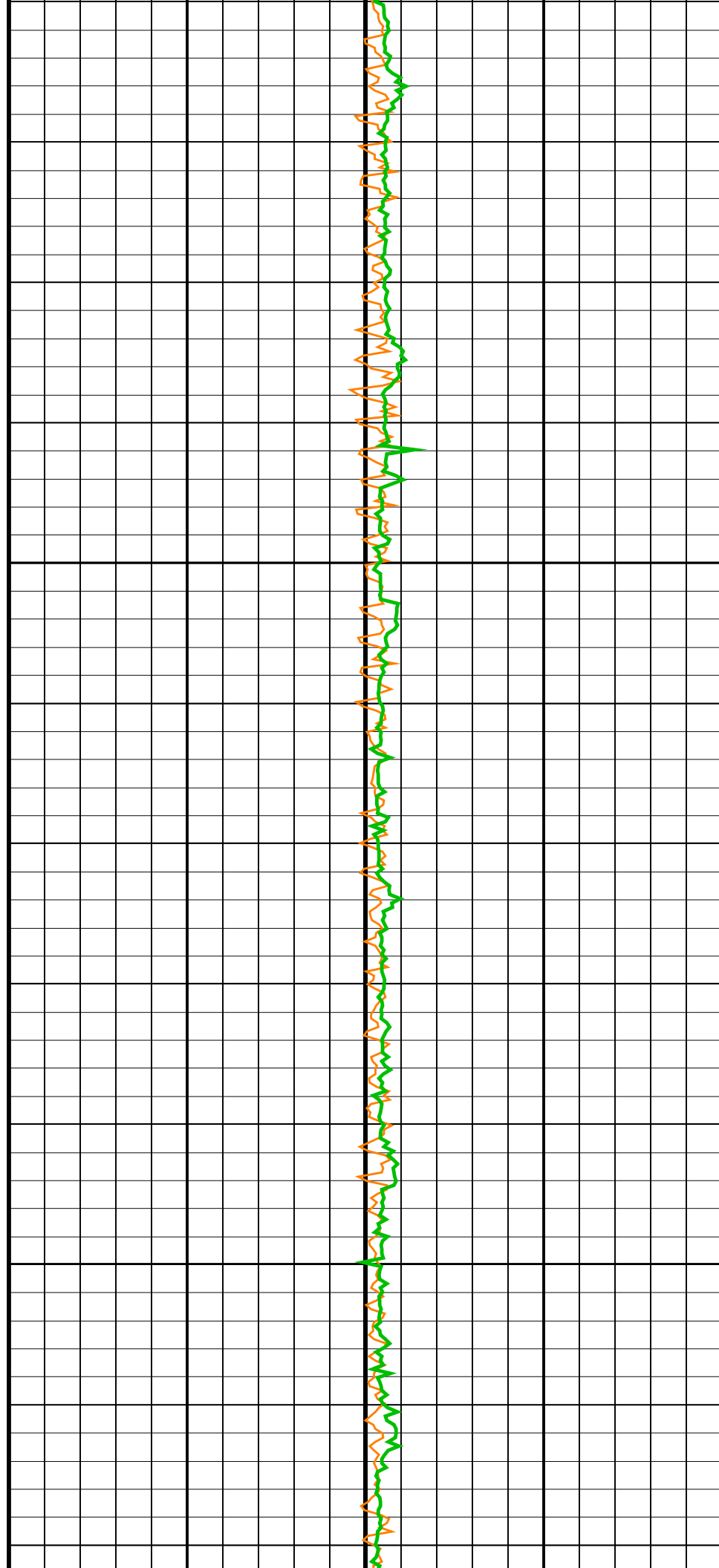
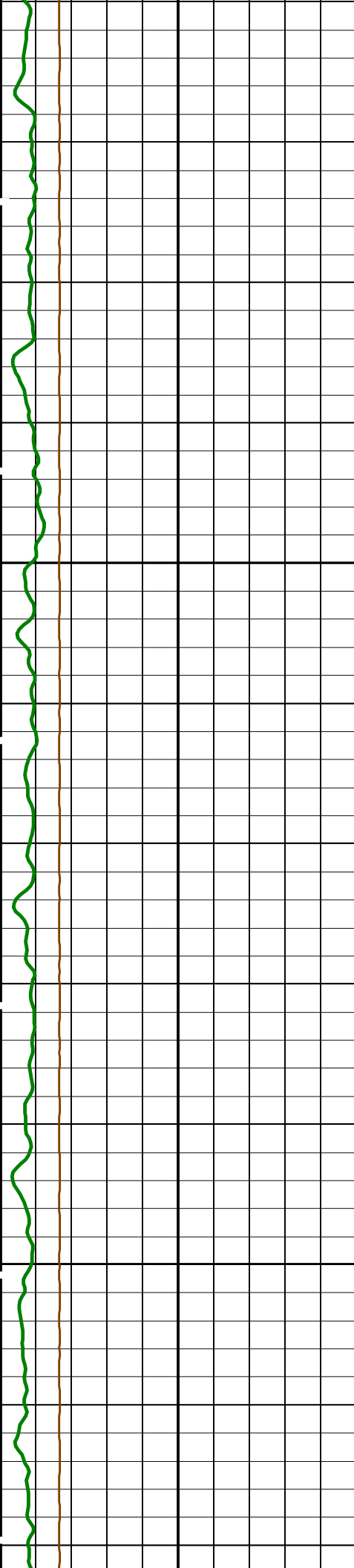


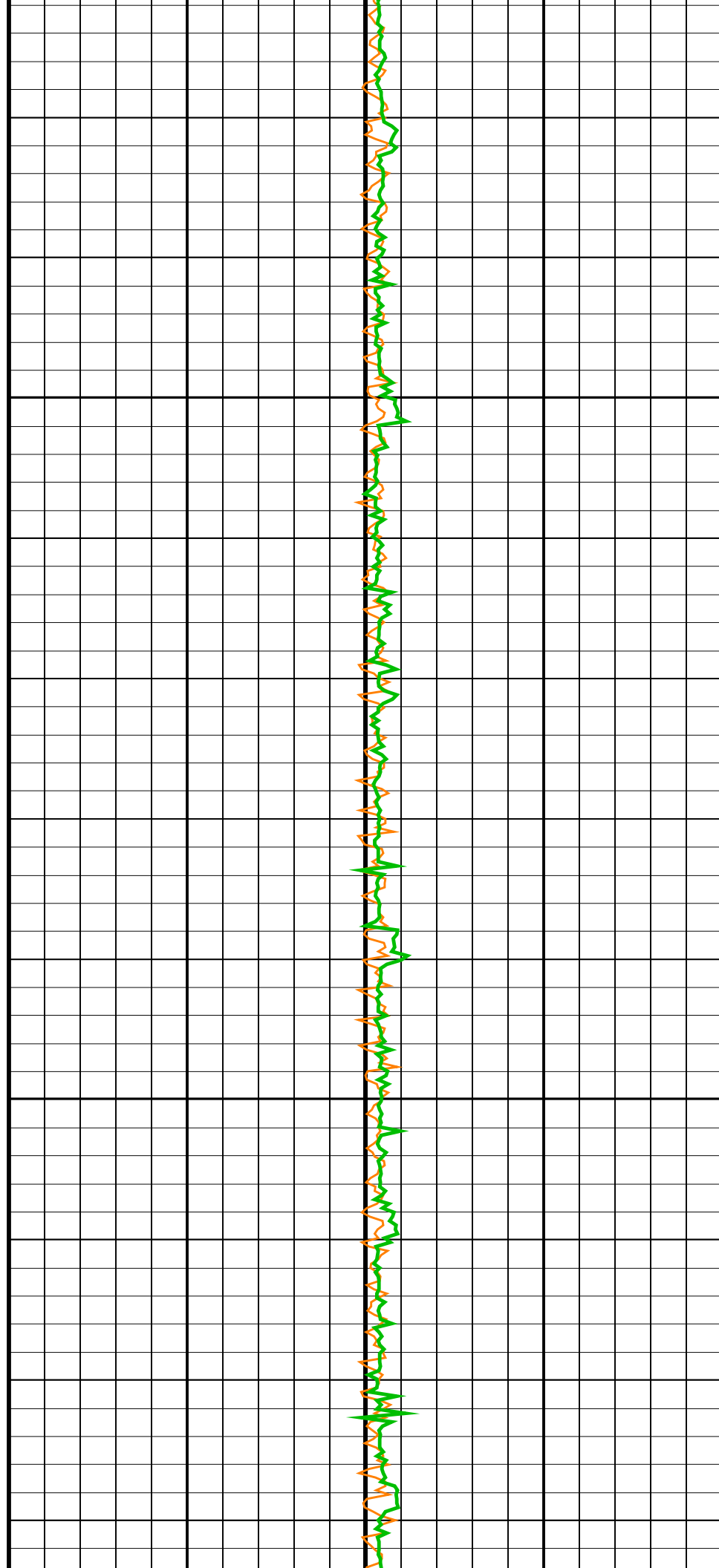
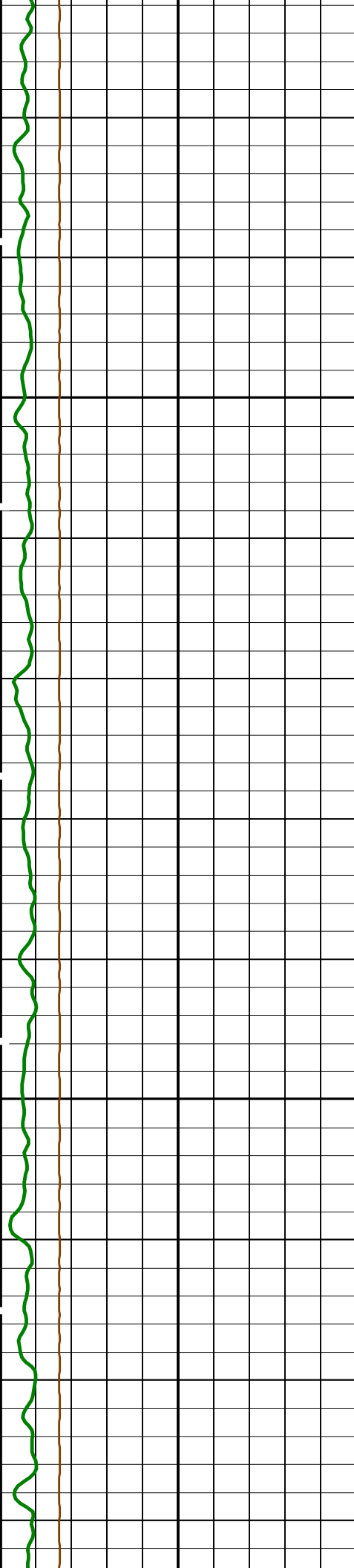


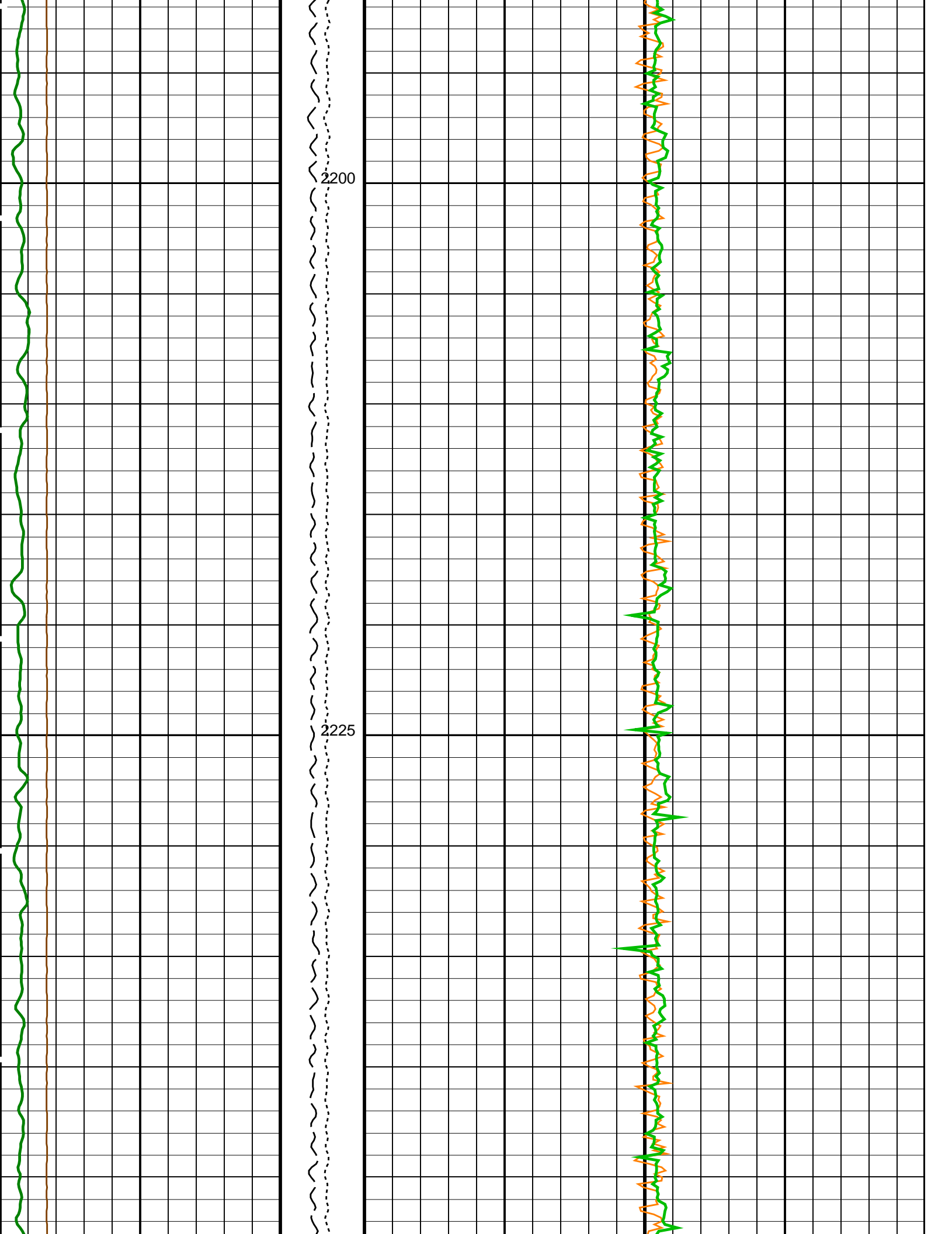


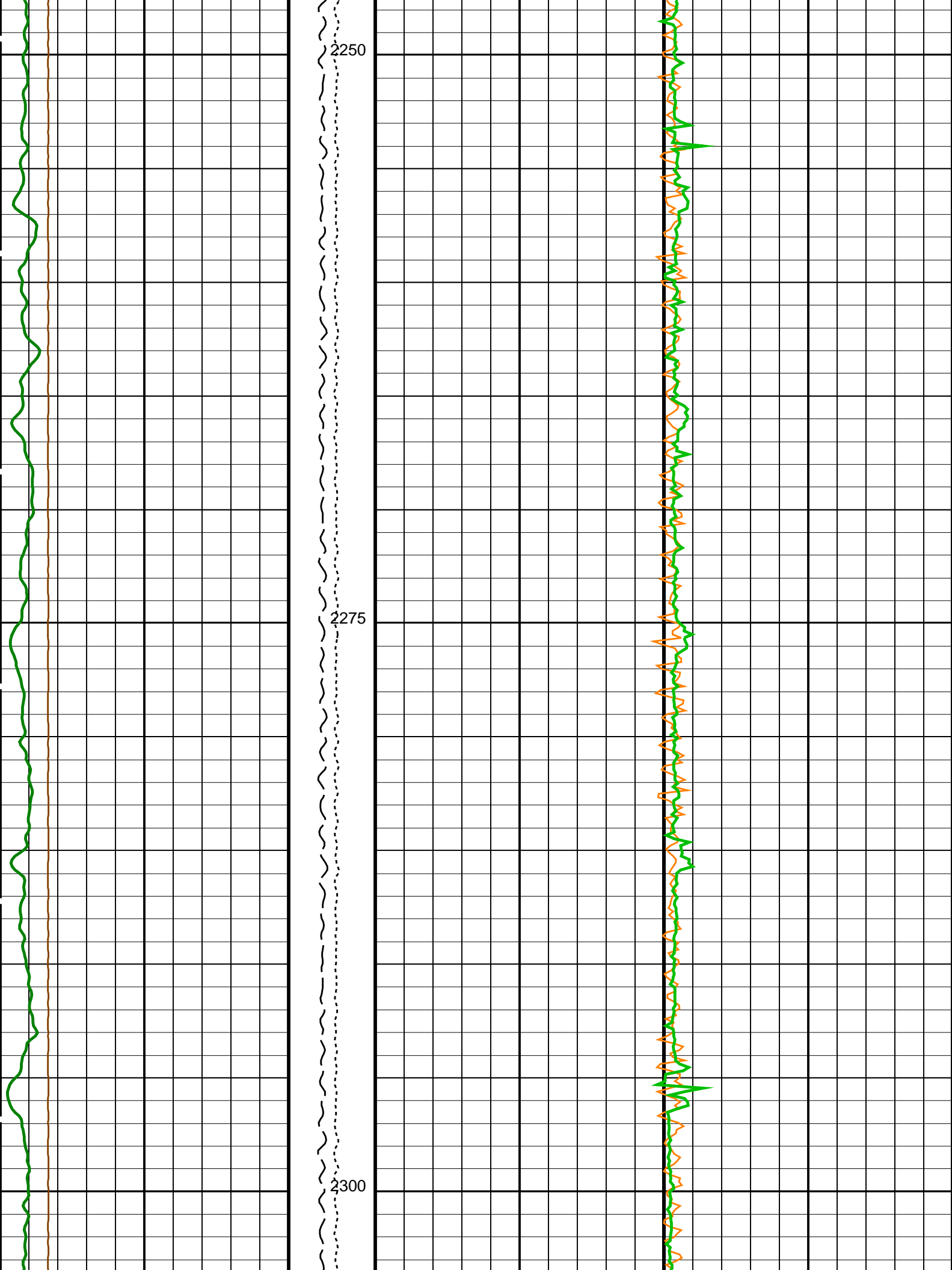


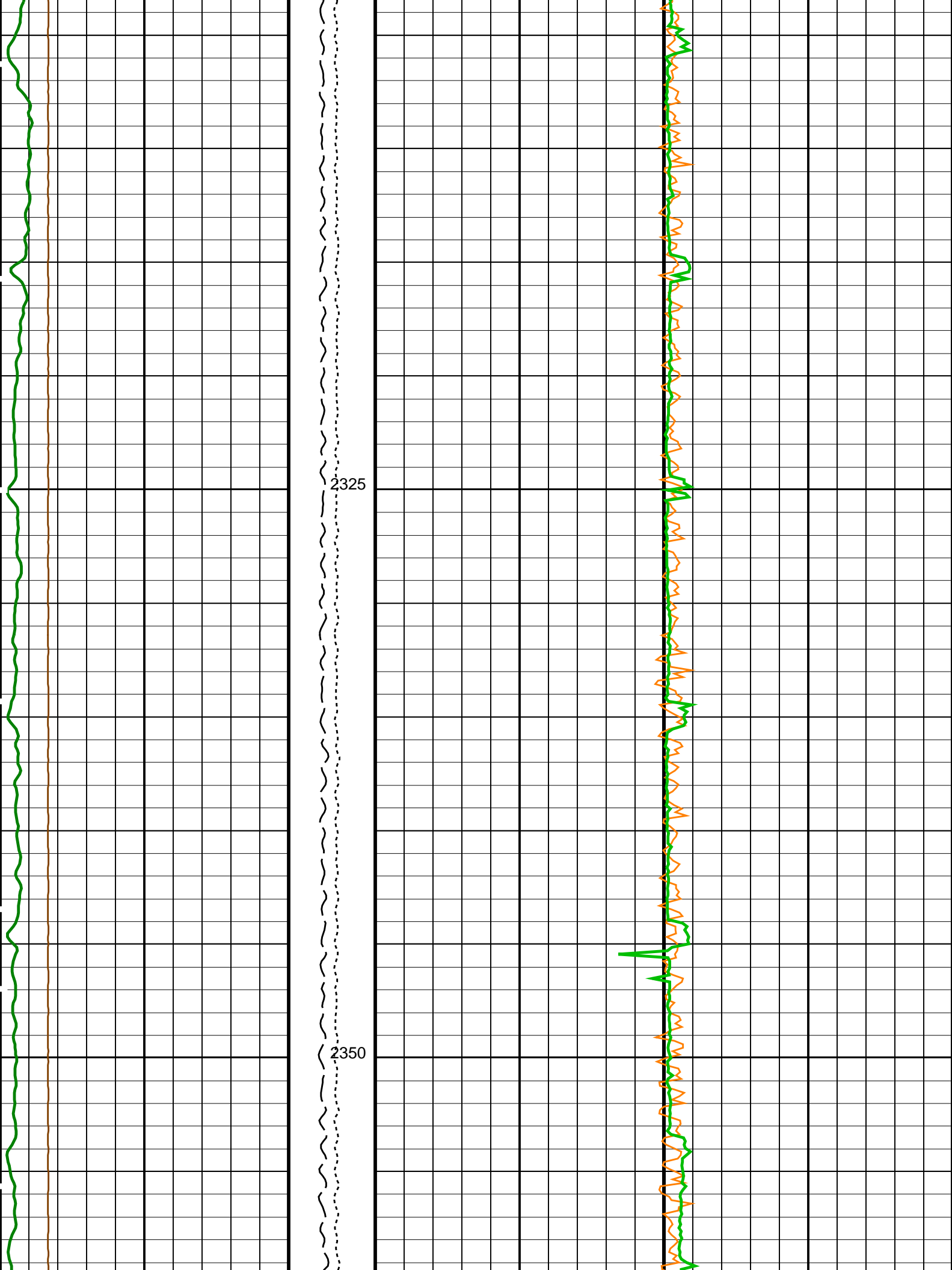


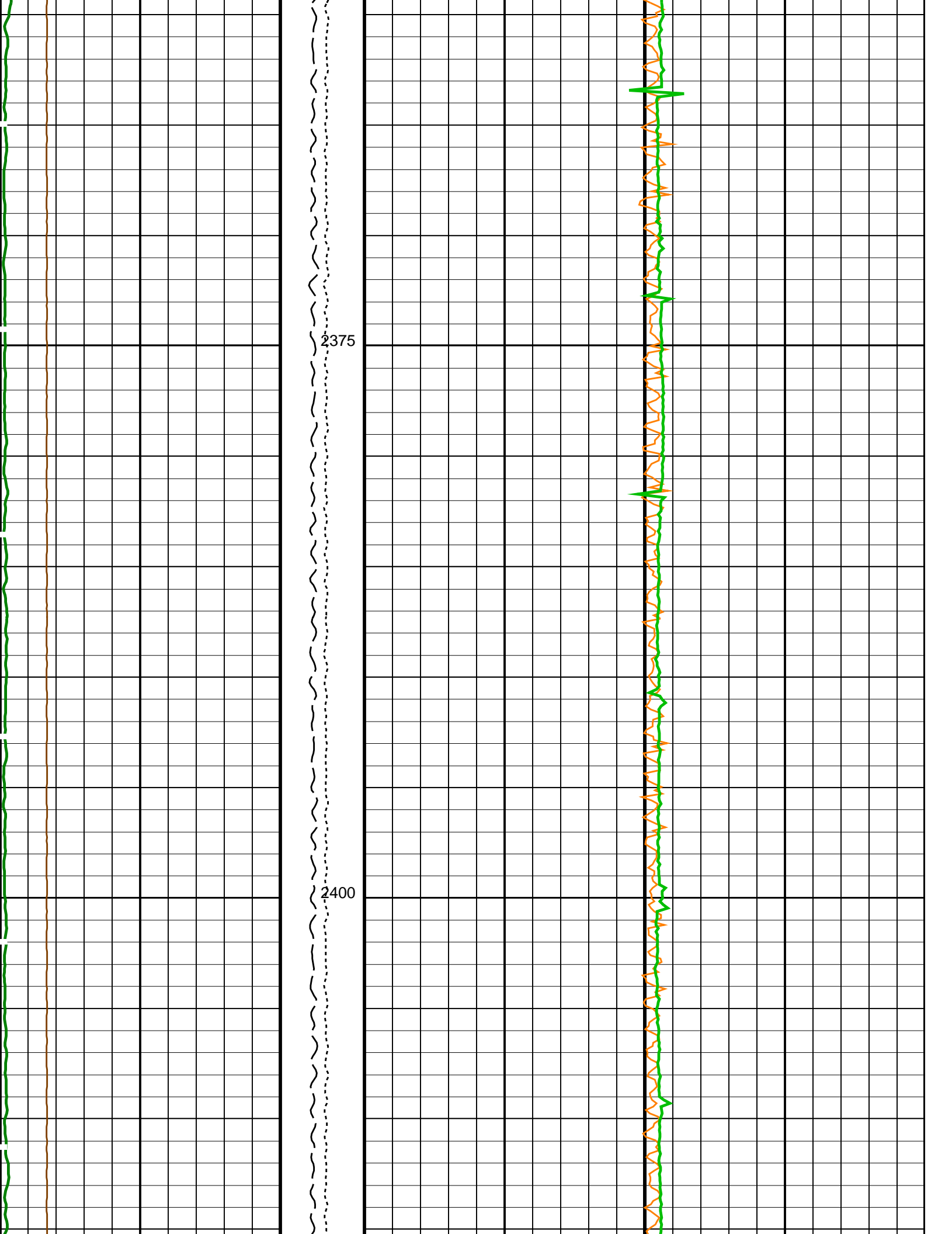


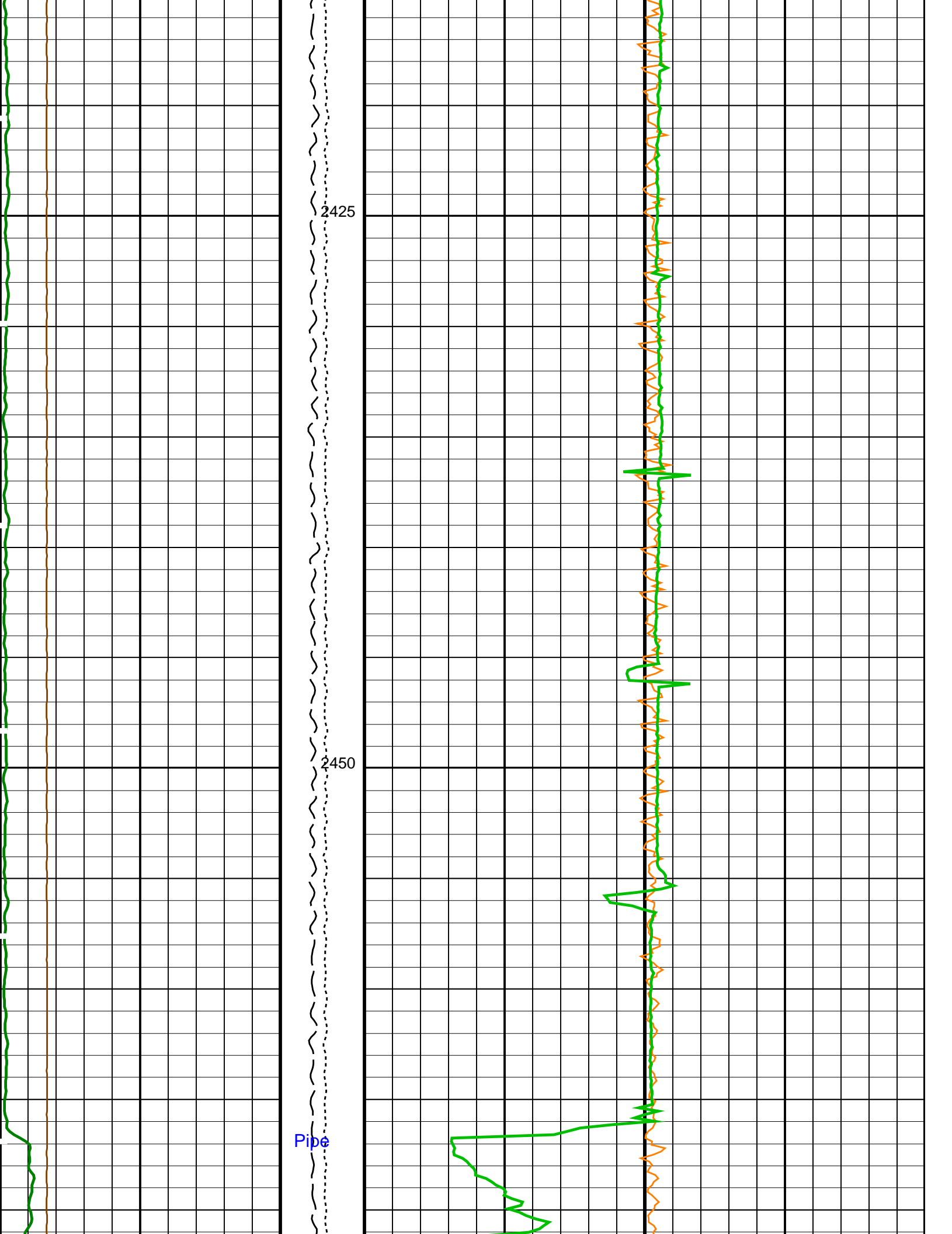


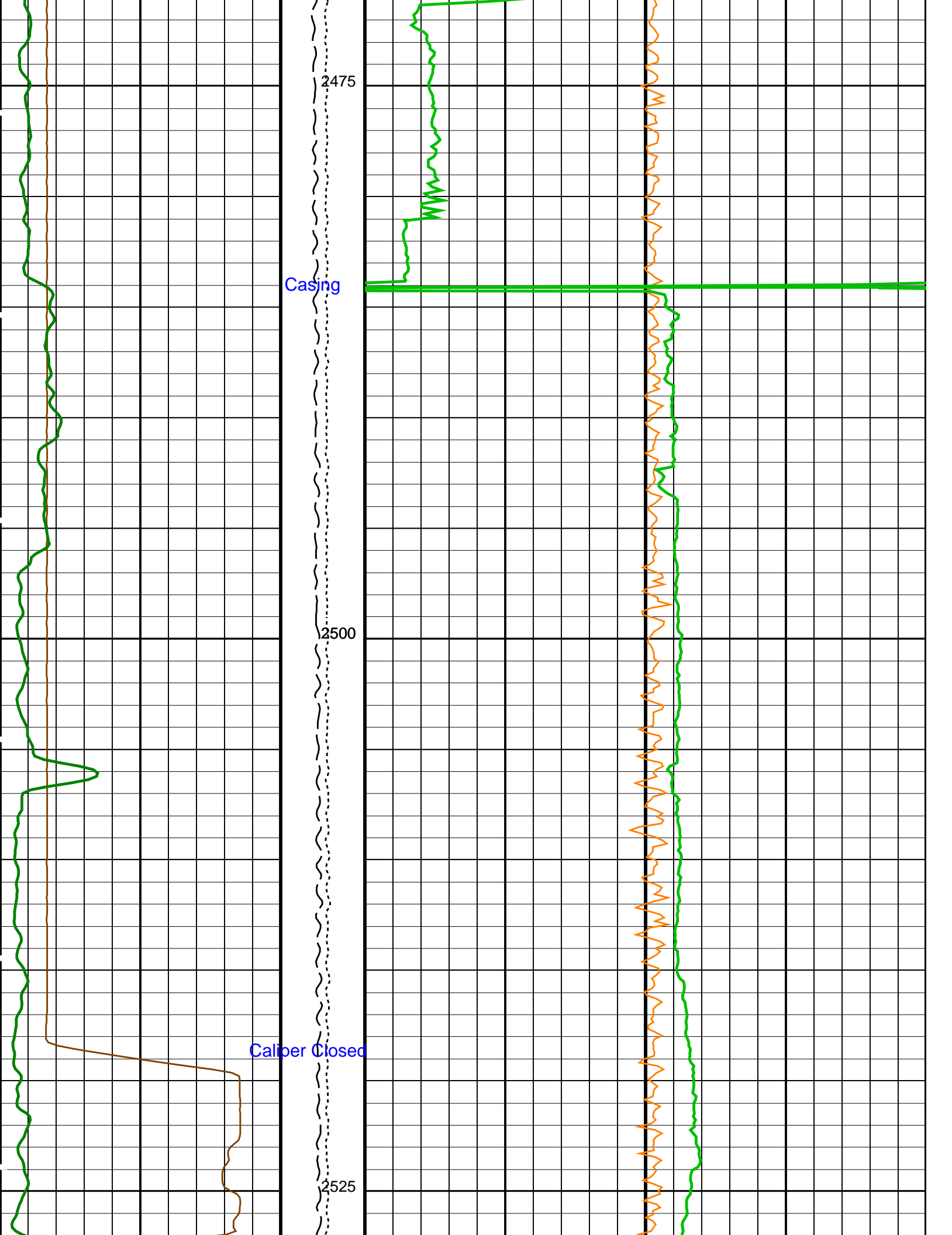


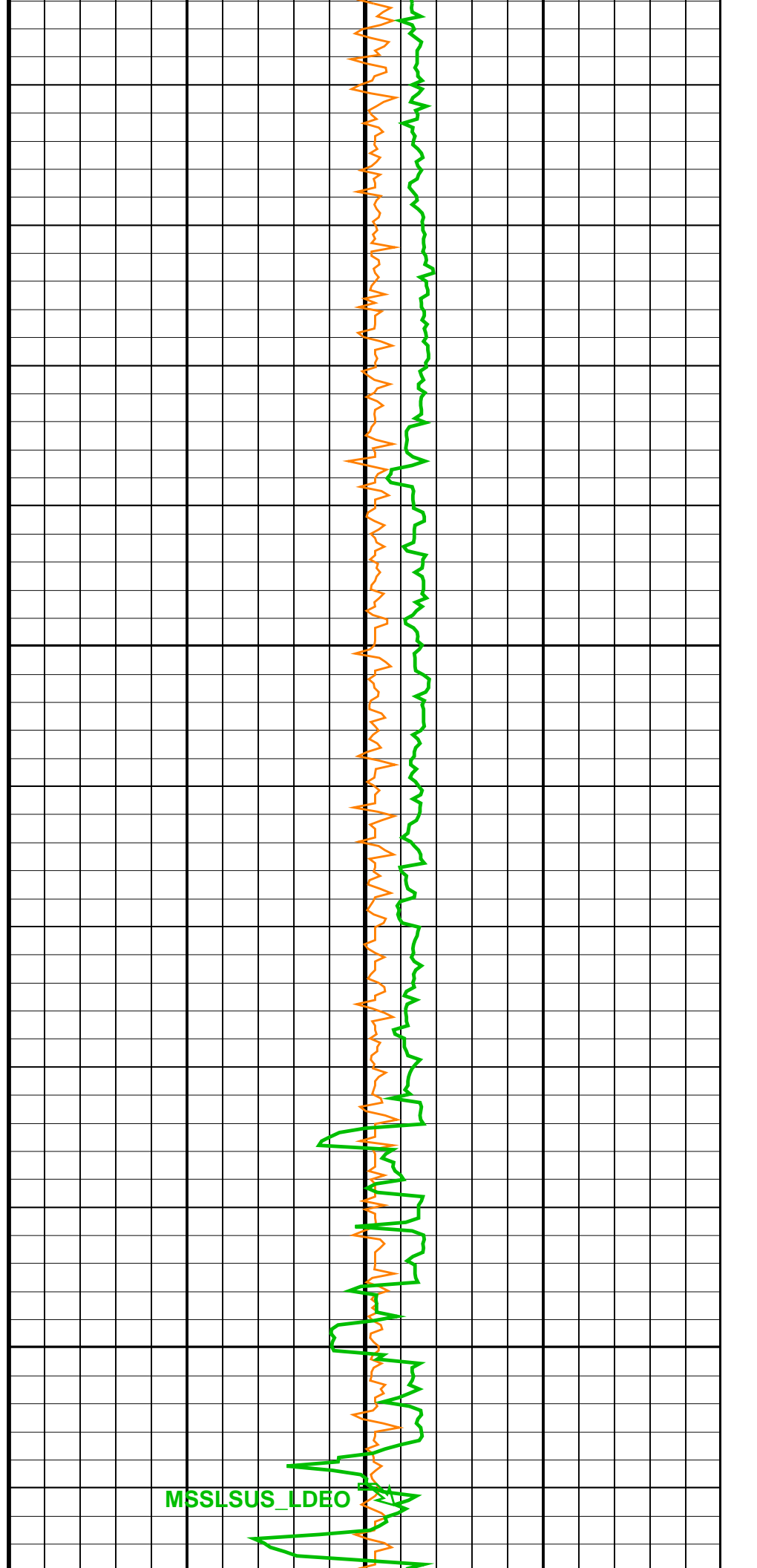
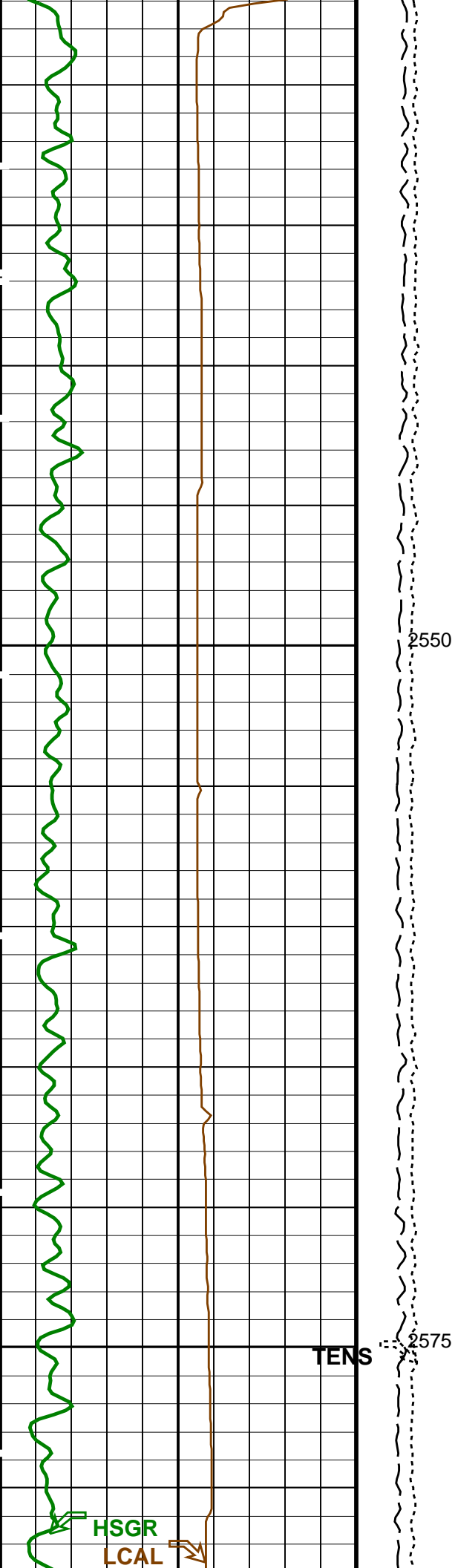


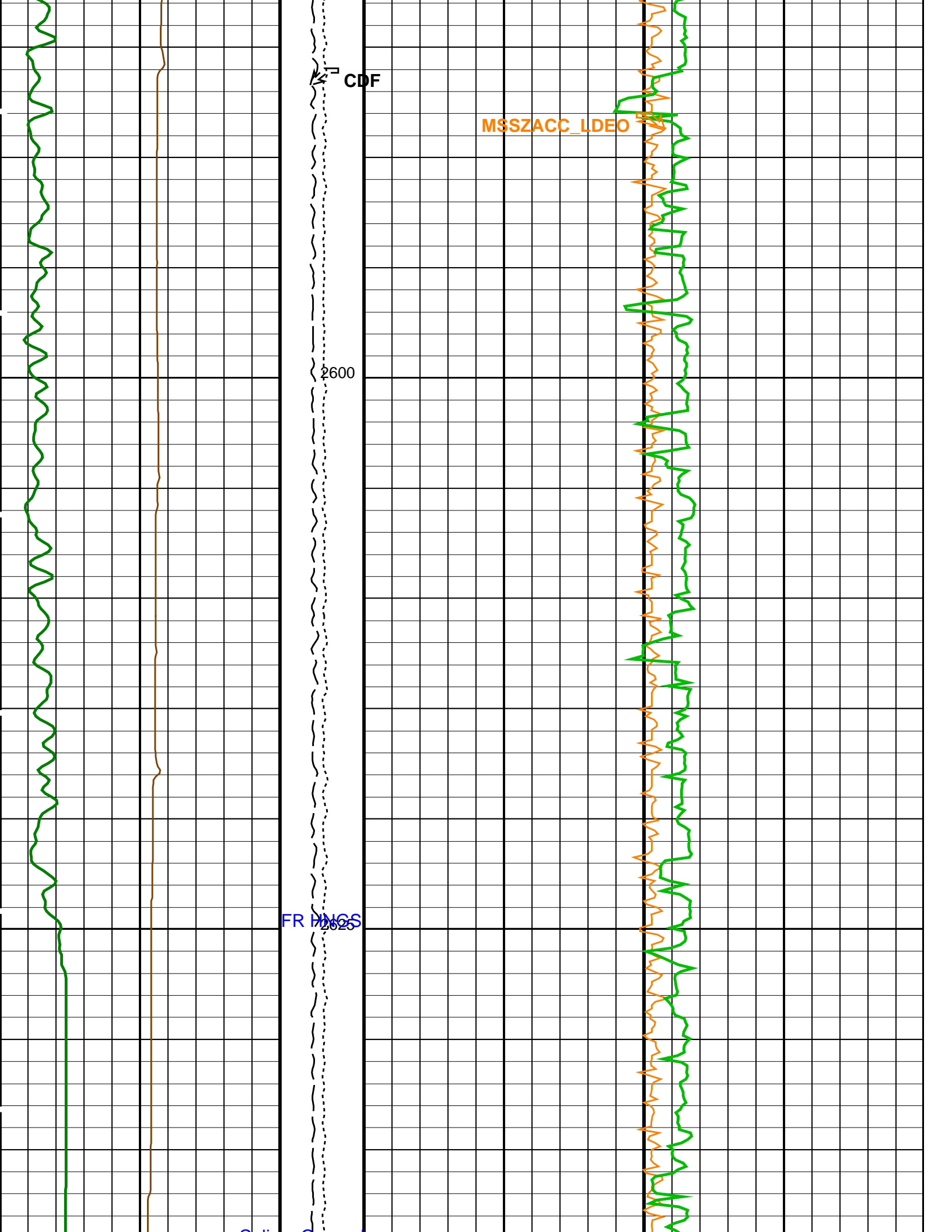


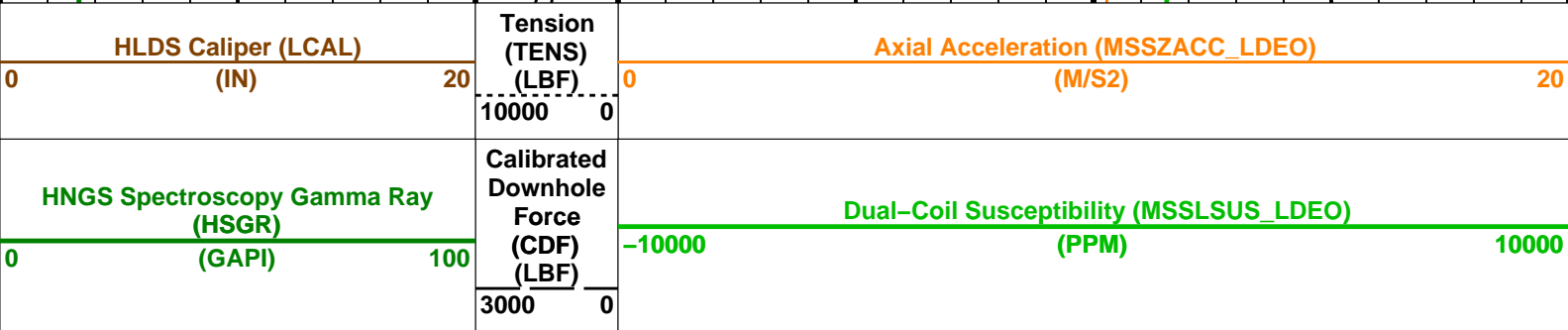
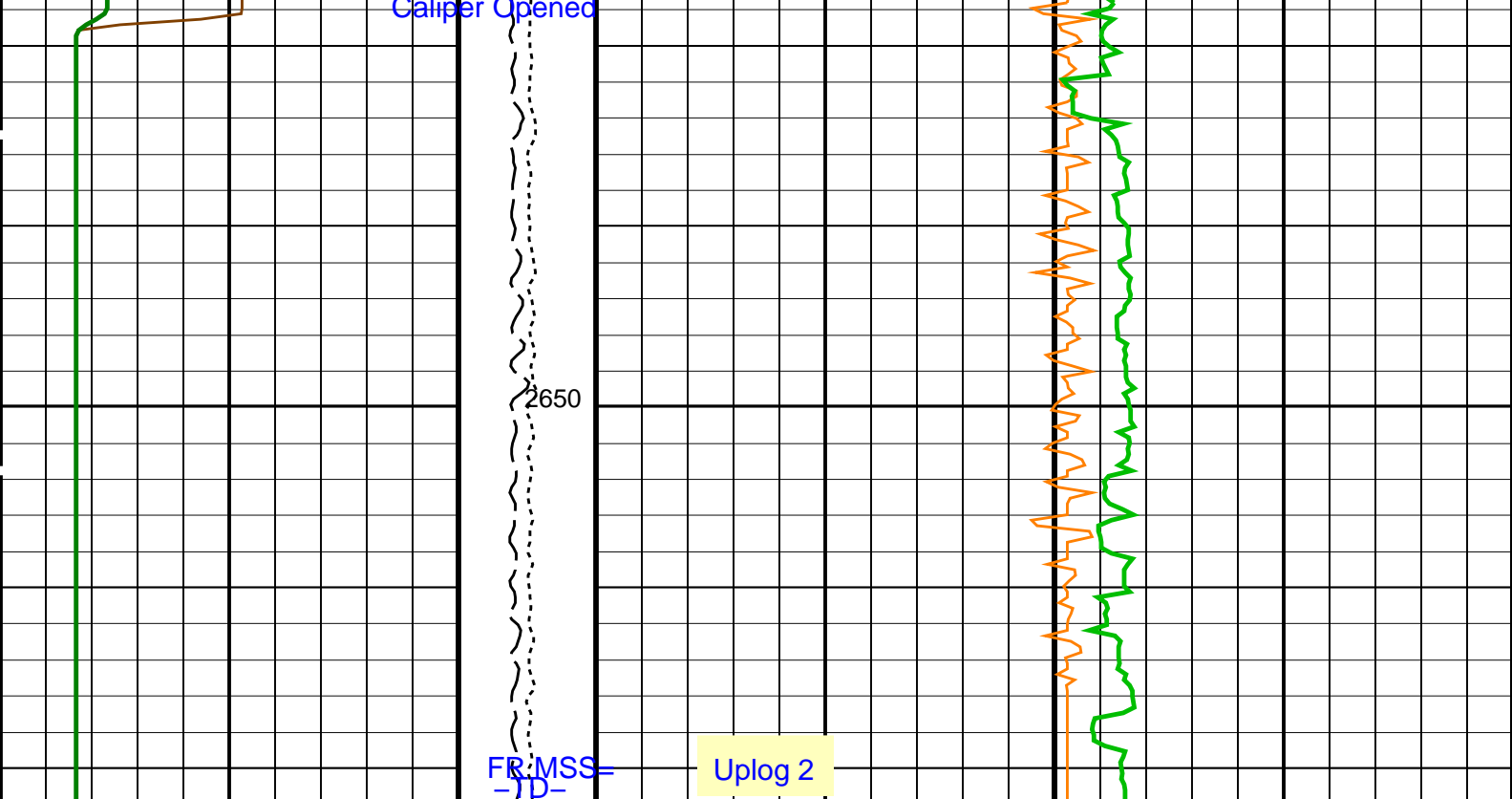












PIP SUMMARY

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)	7	DEGC
CALSTAT	HRLTB Calibration Status	SHALLOW_DONE	
CALTEMP	HRLTB Calibration Temperature	10.6916	DEGC
FREQ0	HRLT Frequency Index for Mode 0	32	
FREQ1	HRLT Frequency Index for Mode 1	128	
FREQ2	HRLT Frequency Index for Mode 2	104	
FREQ3	HRLT Frequency Index for Mode 3	86	
FREQ4	HRLT Frequency Index for Mode 4	56	
FREQ5	HRLT Frequency Index for Mode 5	44	
FREQ6	HRLT Frequency Index for Mode 6	116	
GCSE	Generalized Caliper Selection	LCAL	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
ISSBAR	Barite Mud Switch	NOBARITE	
KFAC_HRLT	HRLT K Factor Option	SONDE	
LOOPCOEF_S	HRLT Loop Coefficient for Shallow Modes	LOW	
LOOPMOD0	HRLT Mode 0 Loop Mode	AUTO	
LOOPMOD1	HRLT Mode 1 Loop Mode	AUTO	
LOOPMOD2	HRLT Mode 2 Loop Mode	AUTO	
LOOPMOD3	HRLT Mode 3 Loop Mode	AUTO	
LOOPMOD4	HRLT Mode 4 Loop Mode	AUTO	
LOOPMOD5	HRLT Mode 5 Loop Mode	AUTO	
LOOPMOD6	HRLT Mode 6 Loop Mode	AUTO	
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
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	
PROCSPO	Sonde Position	Centered	
SHT	Surface Hole Temperature	20	DEGC
HLDS: Hostile Litho-Density Sonde			
CLCL	HLDS LS Control Loop Controller Mode	AUTO_DEFAULT	
CLCS	HLDS SS Control Loop Controller Mode	AUTO_DEFAULT	
CLLS	HLDS Mode Loop Long Spacing	AUTO	
CLSS	HLDS Mode Loop Short Spacing	AUTO	
DHC	Density Hole Correction	BS	
DPPM	Density Porosity Processing Mode	HIRS	
FD	Fluid Density	1	G/C3
LATC	HLDS Activation Correction	OFF	
LLDL	HLDS LS Low Level Discriminator DAC	14000	
LLDS	HLDS SS Low Level Discriminator DAC	14000	
LLML	HLDS LS Low Level Discriminator Mode	AUTO	
LLMS	HLDS SS Low Level Discriminator Mode	AUTO	
MDEN	Matrix Density	2.6	G/C3
PHVL	HLDS Long Spacing High Voltage Setting	1000	V
PHVS	HLDS Short Spacing High Voltage Setting	1500	V
PSDL	HLDS LS Pulse Shape Compensation DAC	30000	
PSDS	HLDS SS Pulse Shape Compensation DAC	30000	
PSML	HLDS LS Pulse Shape Compensation Mode	AUTO	
PSMS	HLDS SS Pulse Shape Compensation Mode	AUTO	
APS-C: Accelerator-Porosity Tool			
AASD	APS Software Version	5	
ADSO	APS Thermal and Array Detectors High Voltage Setting	1976.24	V
AFSD	APS Array Detectors Data Source Switch	Both	
AHCS	APS Far Detector High Voltage Setting	2067.55	V
AHSS	APS Holesize Correction Source	GCSE	
AMTY	APS Holesize Correction Switch	ON	
ANSD	APS Environmental Corrections Mud Type	WaterBaseBarite	
ASOS	APS Near Detector High Voltage Setting	1737.8	V
ATSS	APS Standoff Correction Switch	ON	
BHFL_APS	APS Temperature-Pressure-Salinity Correction Switch	ON	
BHS	APS TNPH Borehole Fluid Type	WATER	
BHT	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	7	DEGC
BSCO_APS	APS TNPH Borehole Salinity Correction Option	NO	
DPPM	Density Porosity Processing Mode	HIRS	
DSCO_APS	APS TNPH Density Source Correction Option	MEASURED	
FSAL	Formation Salinity	-50000	PPM
FSCO_APS	APS TNPH Formation Salinity Correction Option	NO	
GCSE	Generalized Caliper Selection	LCAL	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
HSCO_APS	APS TNPH Hole Size Correction Option	YES	
ISSBAR	Barite Mud Switch	NOBARITE	
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
MCCO_APS	APS TNPH Mud Cake Correction Option	YES	
MCOR_APS	APS TNPH Mud Correction	NATU	
MWCO_APS	APS TNPH Mud Weight Correction Option	YES	
NARC	APS Near/Array Calibration Ratio	1.08341	
NFRC	APS Near/Far Calibration Ratio	0.942369	
PTCO_APS	APS TNPH Pressure/Temperature Correction Option	NO	
SHT	Surface Hole Temperature	20	DEGC
TNCO_APS	APS TNPH Computation Option	YES	
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)	7	DEGC
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	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
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	-0.000149152	
HALF	HNGS Alpha Filter Length	60	IN
HCRB	HNGS Apply Borehole Potassium Correction	NONE	
HMWM	Mud Weighting Material	NATU	
HNPE	HNGS Processing Enable	YES	
ISSBAR	Barite Mud Switch	NOBARITE	
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	

MATR	ROCK Matrix for Neutron Porosity Corrections	LIMESTONE	1.3	CPS
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		DEGC
TPOS	Tool Position	ECCE		
VBA1	HNGS Detector 1 Variable Barite Factor Running Average	1.02741		
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	1.04133		
System and Miscellaneous				
ALTDPCCHAN	Name of alternate depth channel	SpeedCorrectedDepth		
BS	Bit Size	9.875		IN
BSAL	Borehole Salinity	38000.00		PPM
CSIZ	Current Casing Size	10.750		IN
CWEI	Casing Weight	168.00		LB/F
DFD	Drilling Fluid Density	1.02		G/C3
DO	Depth Offset for Playback	0.0		M
FLEV	Fluid Level	-50000.00		M
MST	Mud Sample Temperature	23.00		DEGC
PBVSADP	Use alternate depth channel for playback	NO		
PP	Playback Processing	RECOMPUTE		
RMFS	Resistivity of Mud Filtrate Sample	-50000.0000		OHMM
RW	Resistivity of Connate Water	1.0000		OHMM
TD	Total Depth	8729.3		FT
TDD	Total Depth - Driller	2660.70		M
TDL	Total Depth - Logger	2661.00		M
TWS	Temperature of Connate Water Sample	37.78		DEGC
Format: MSS_Logging Vertical Scale: 1:200 Graphics File Created: 10-Jul-2021 20:53				

OP System Version: 19C0-187

MSS_LDEO-A	19C0-187	HRLT-B	19C0-187
HLDS	19C0-187	LDSC-B	19C0-187
APS-C	19C0-187	HNGC-B	19C0-187
HNGS-BA	19C0-187	DTC-H	19C0-187

Input DLIS Files

DEFAULT	MSS_LDEO_HRLA_LDL_009LUP	FN:15	PRODUCER	08-Jul-2021 17:30	2660.9 M	1838.0 M
---------	--------------------------	-------	----------	-------------------	----------	----------

Output DLIS Files

DEFAULT	MSS_LDEO_HRLA_LDL_055PUP	FN:88	PRODUCER	10-Jul-2021 20:53		
---------	--------------------------	-------	----------	-------------------	--	--

Input DLIS Files

DEFAULT	MSS_LDEO_HRLA_LDL_009LUP	FN:15	PRODUCER	08-Jul-2021 17:30	2660.9 M	1838.0 M
---------	--------------------------	-------	----------	-------------------	----------	----------

Output DLIS Files

DEFAULT	MSS_LDEO_HRLA_LDL_055PUP	FN:88	PRODUCER	10-Jul-2021 20:53	2660.9 M	1838.1 M
---------	--------------------------	-------	----------	-------------------	----------	----------

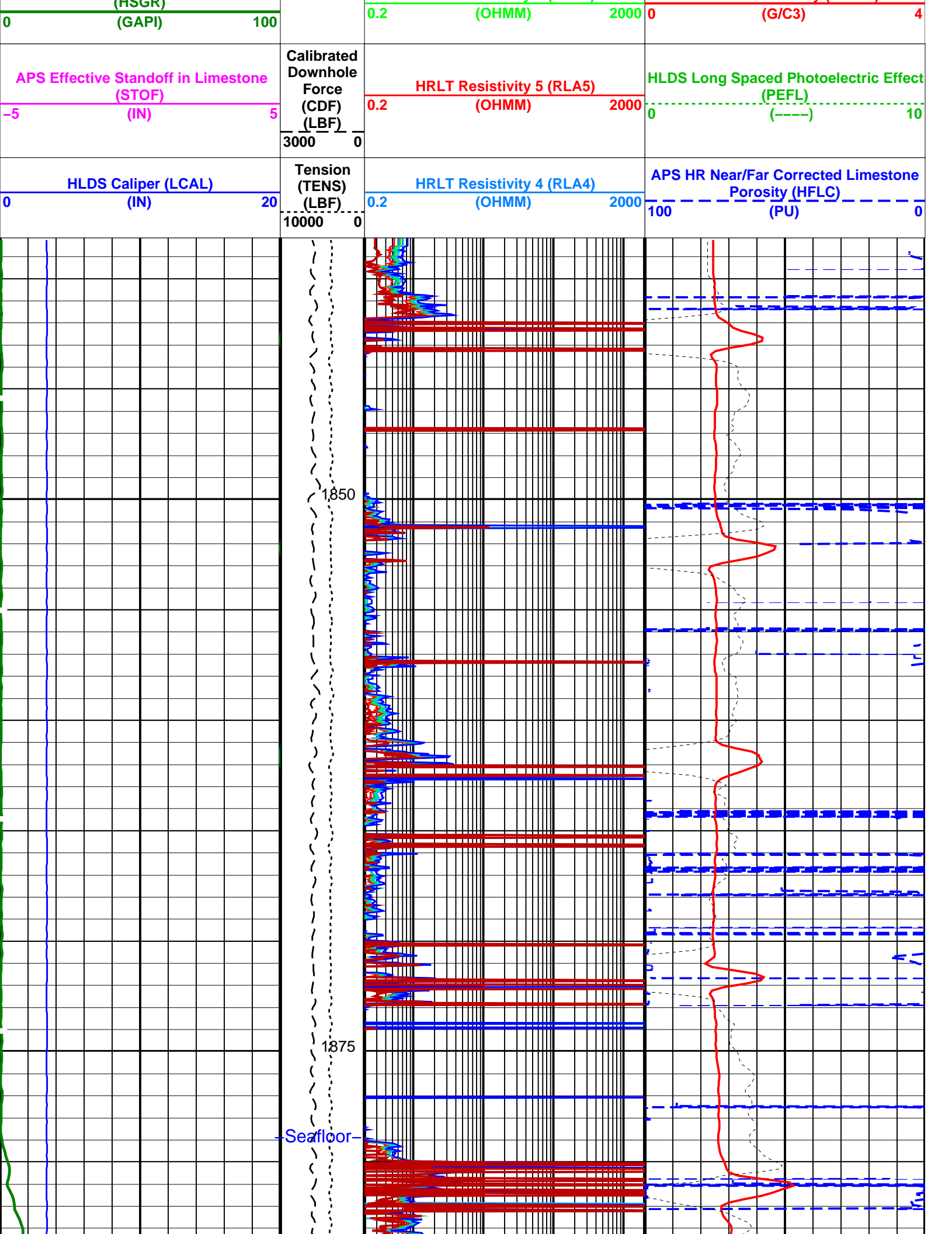
OP System Version: 19C0-187

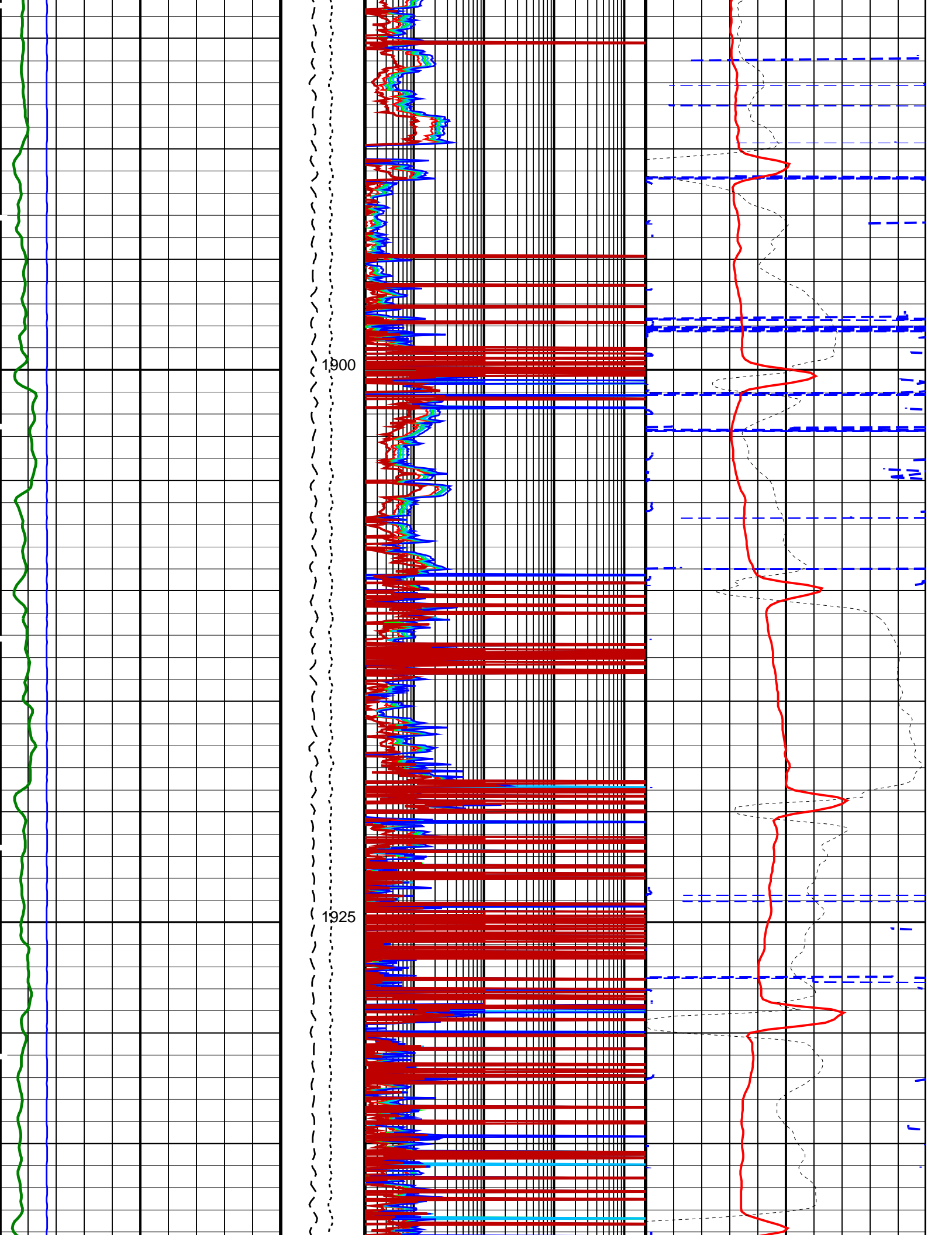
MSS_LDEO-A	19C0-187	HRLT-B	19C0-187
HLDS	19C0-187	LDSC-B	19C0-187
APS-C	19C0-187	HNGC-B	19C0-187
HNGS-BA	19C0-187	DTC-H	19C0-187

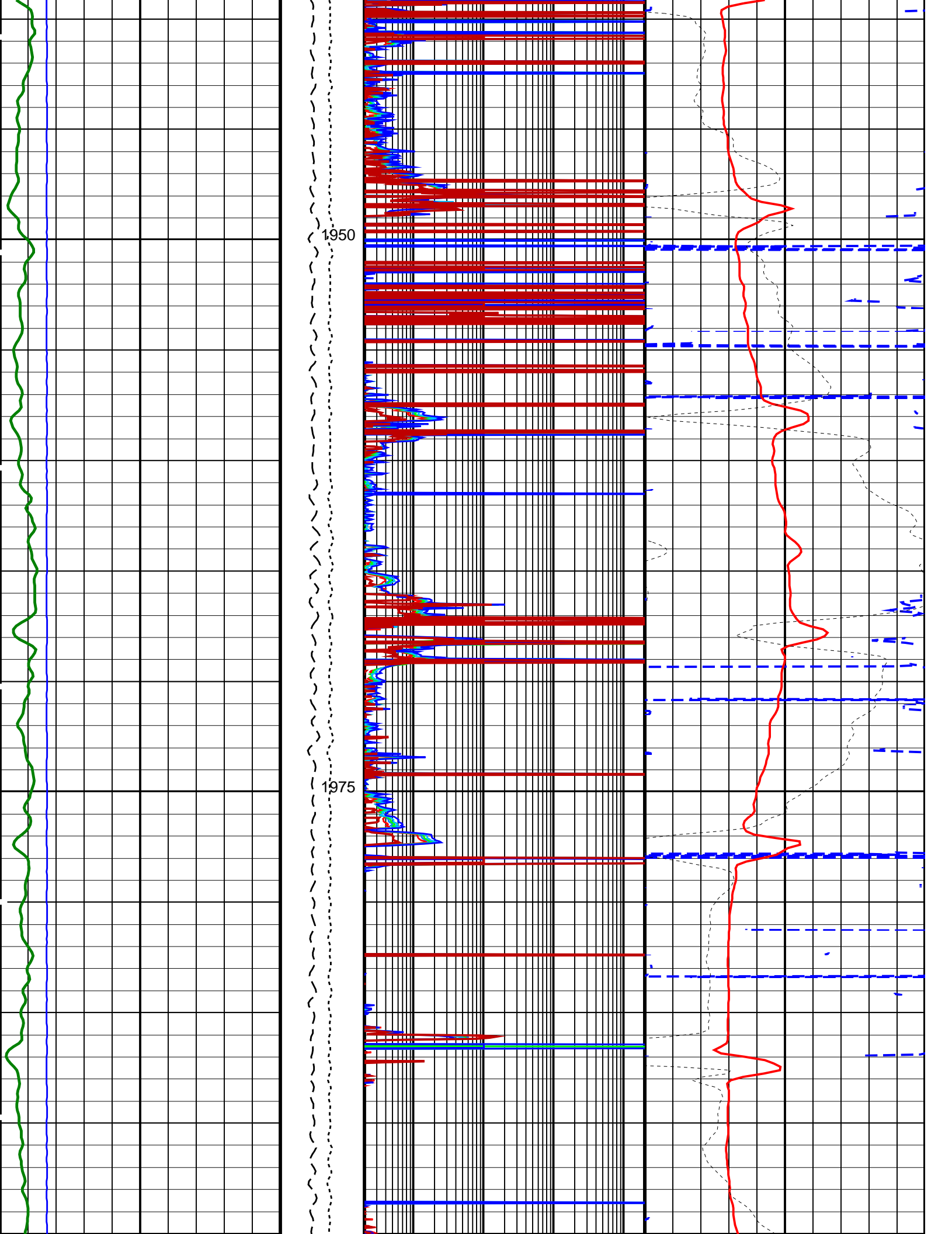
PIP SUMMARY

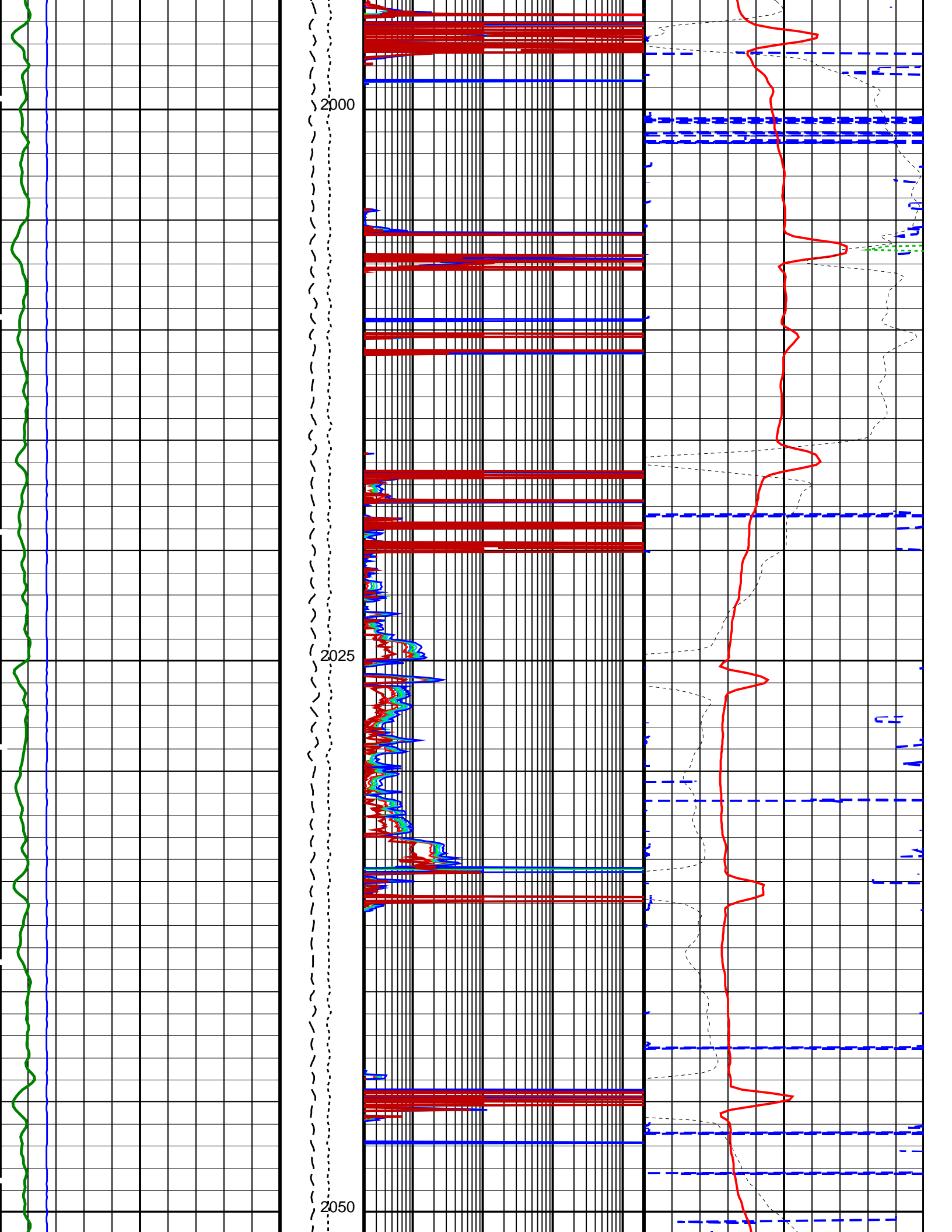
Time Mark Every 60 S

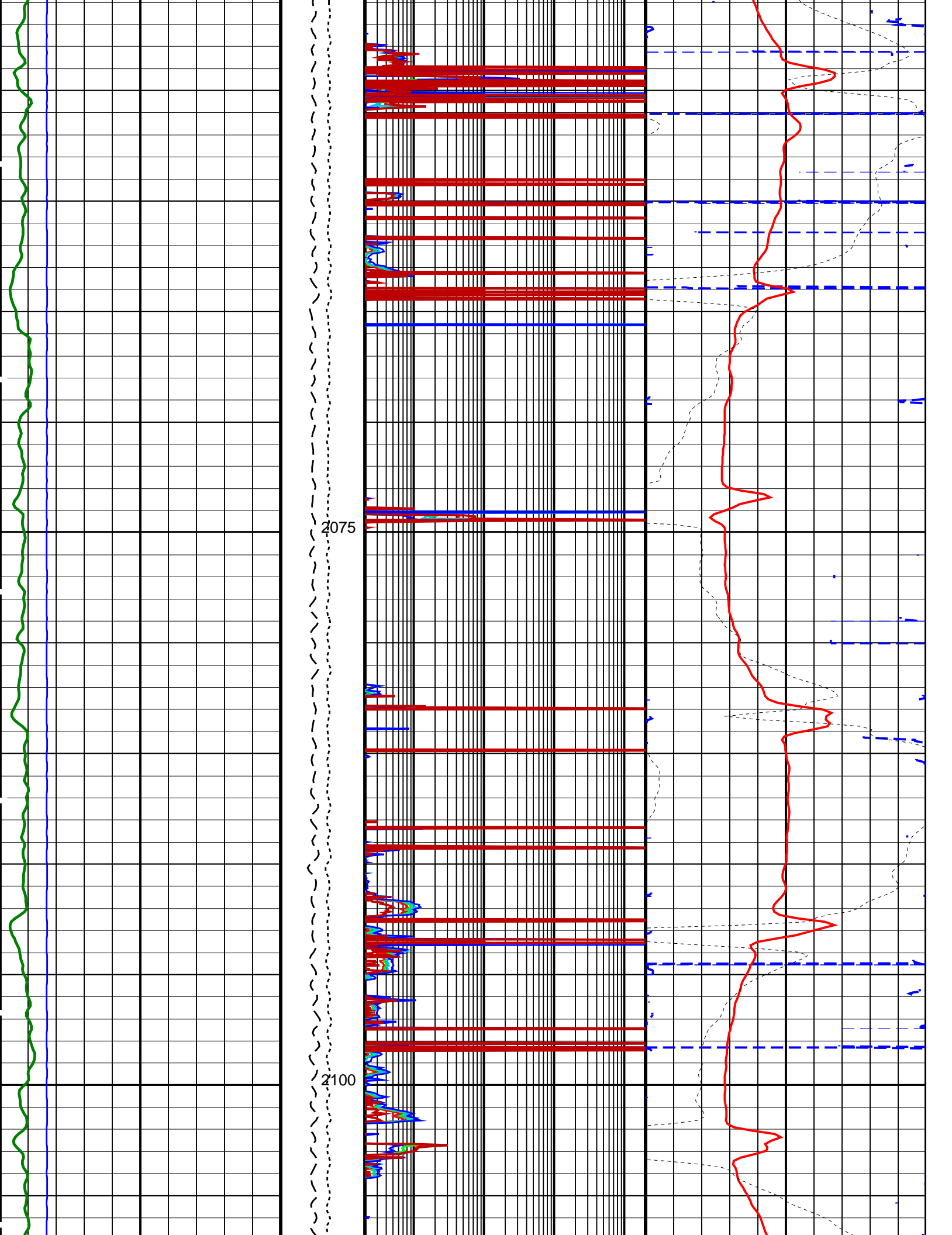
Uplug 2	HRLT True Resistivity (RT_HRLT)		HLDS Bulk Density Correction (DRH)
	0.2	(OHMM) 2000	
	HRLT Resistivity 1 (RLA1)		
	0.2	(OHMM) 2000	
	HRLT Resistivity 2 (RLA2)		
HNGS Spectroscopy Gamma Ray (HGR)	0.2	(OHMM) 2000	-0.25 (G/C3) 0.25
	HRLT Resistivity 3 (RLA3)		HLDS Bulk Density (RHOM)

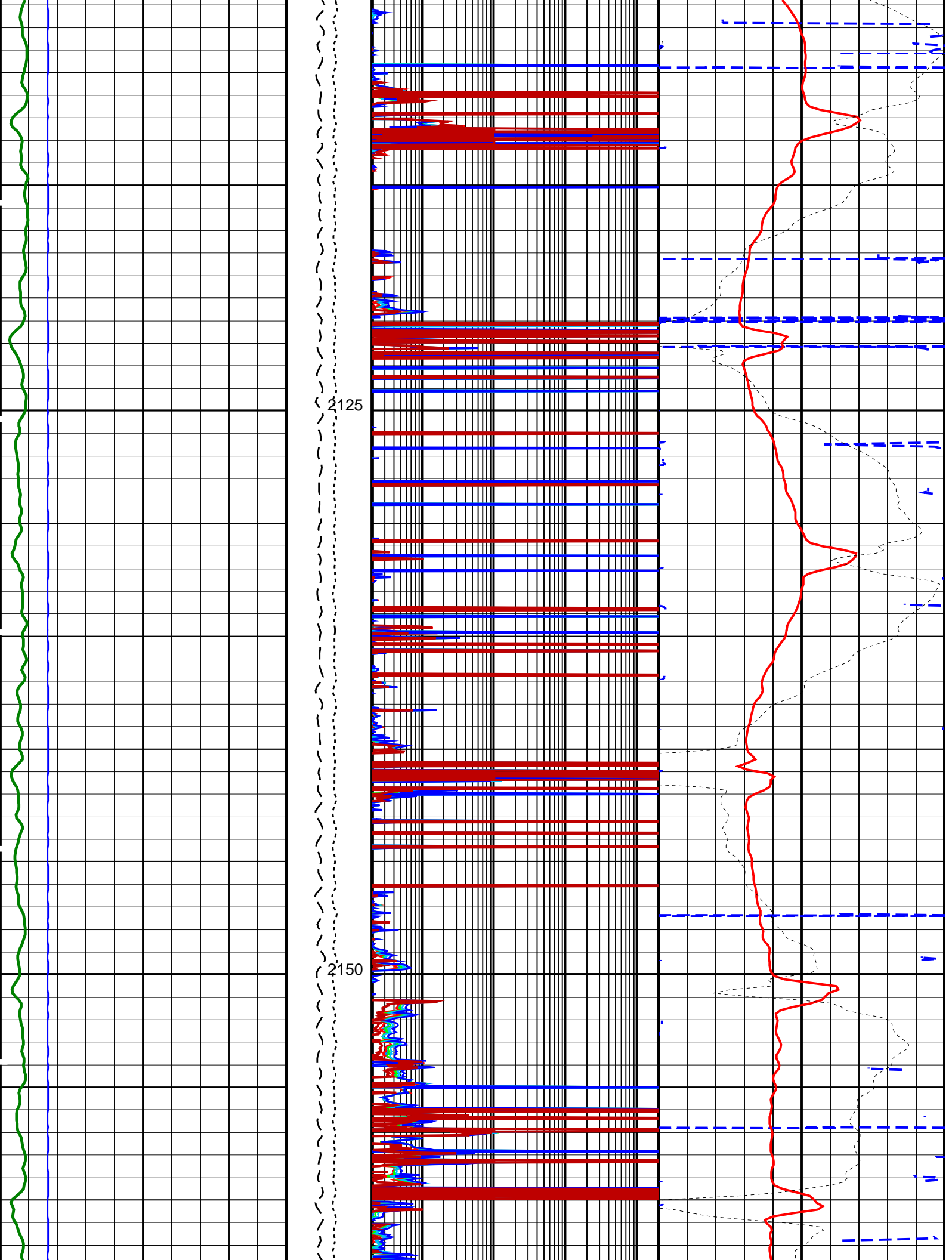


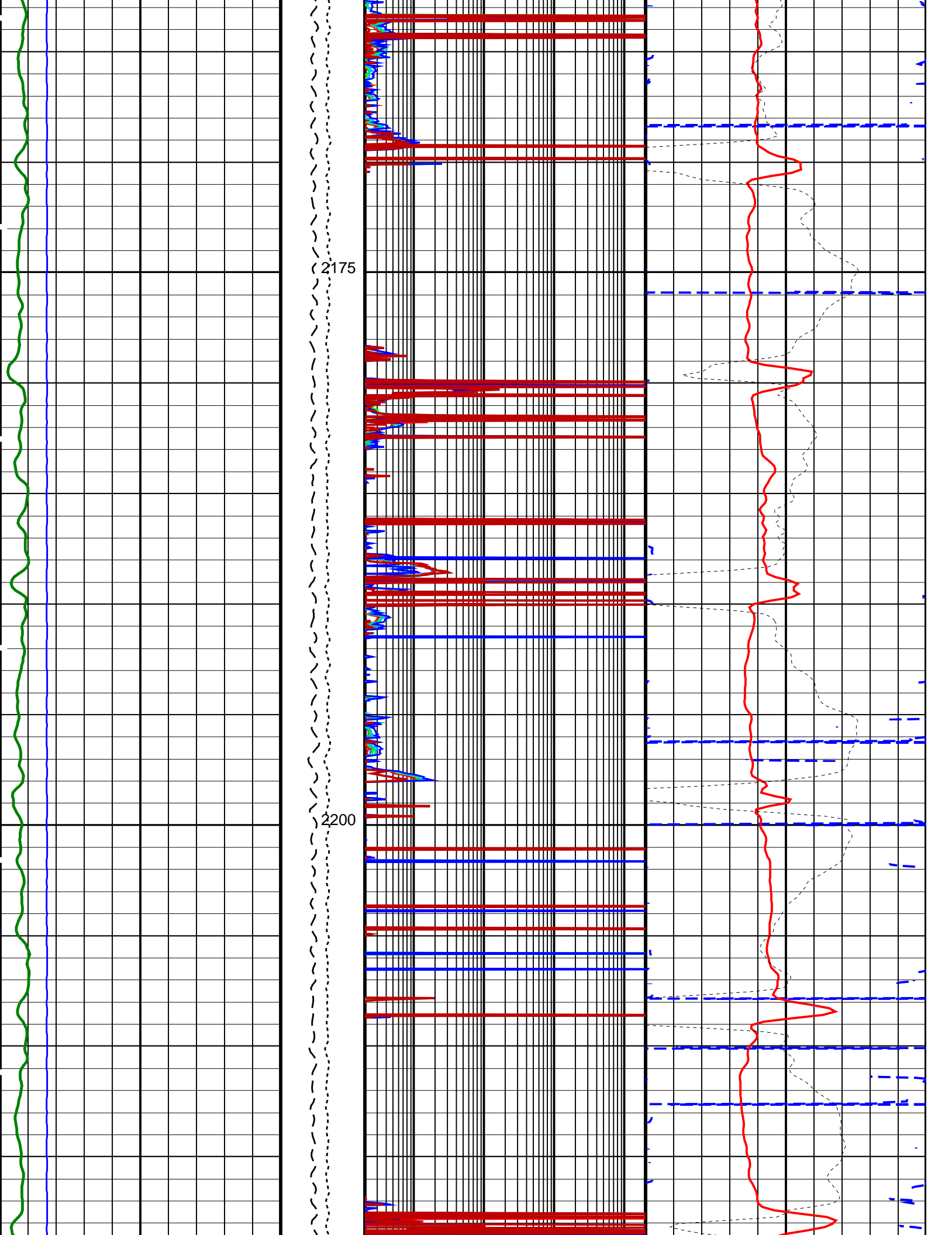


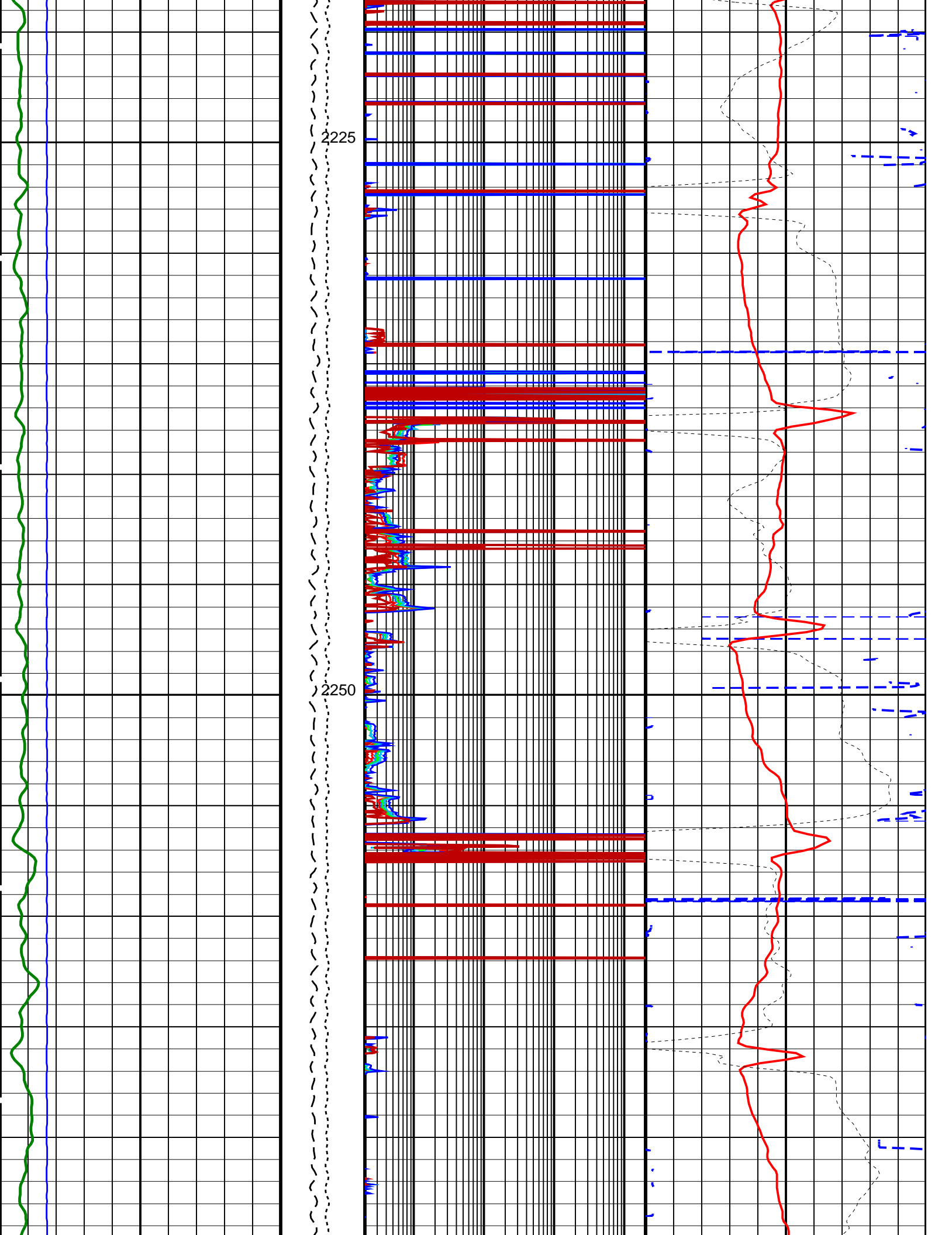


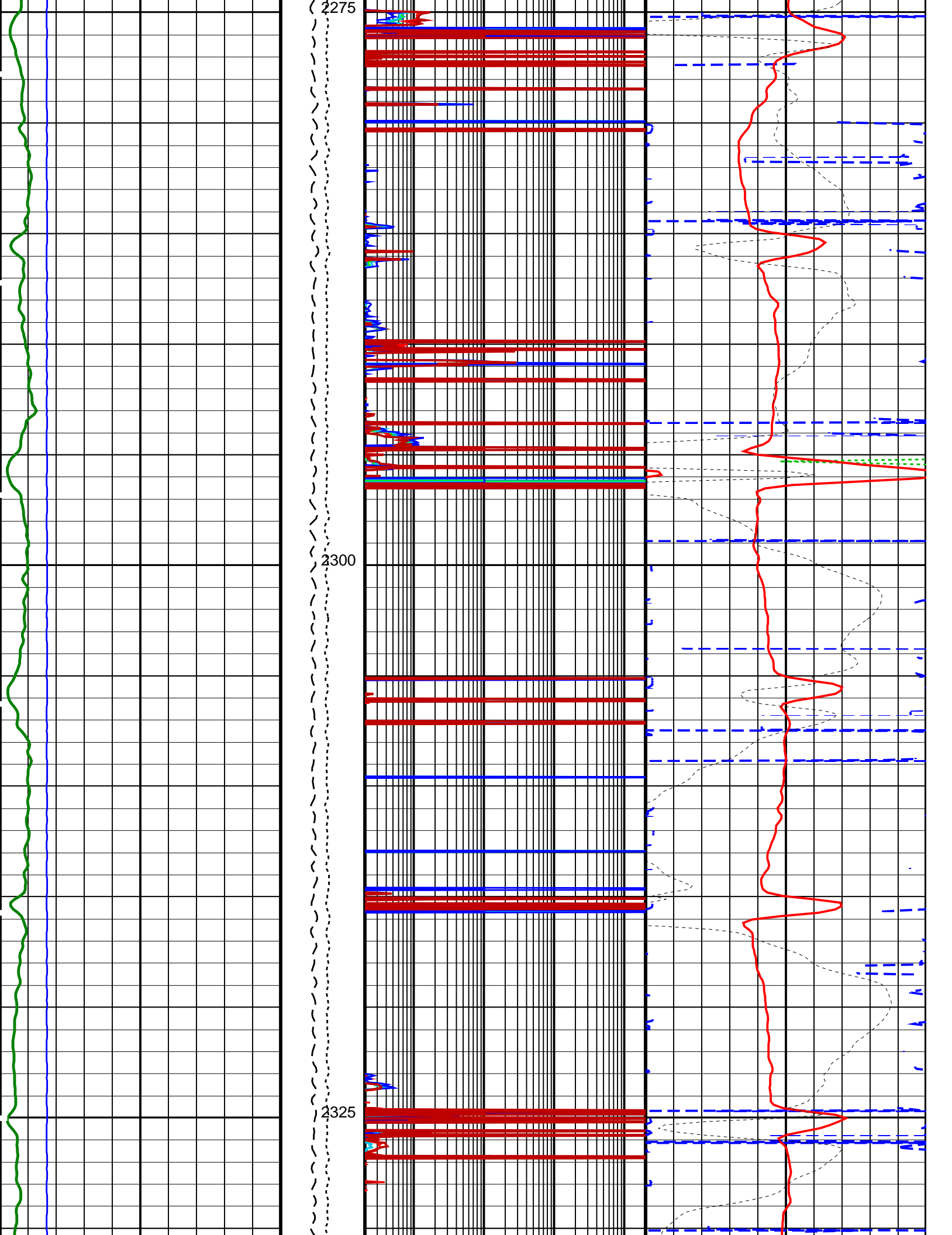


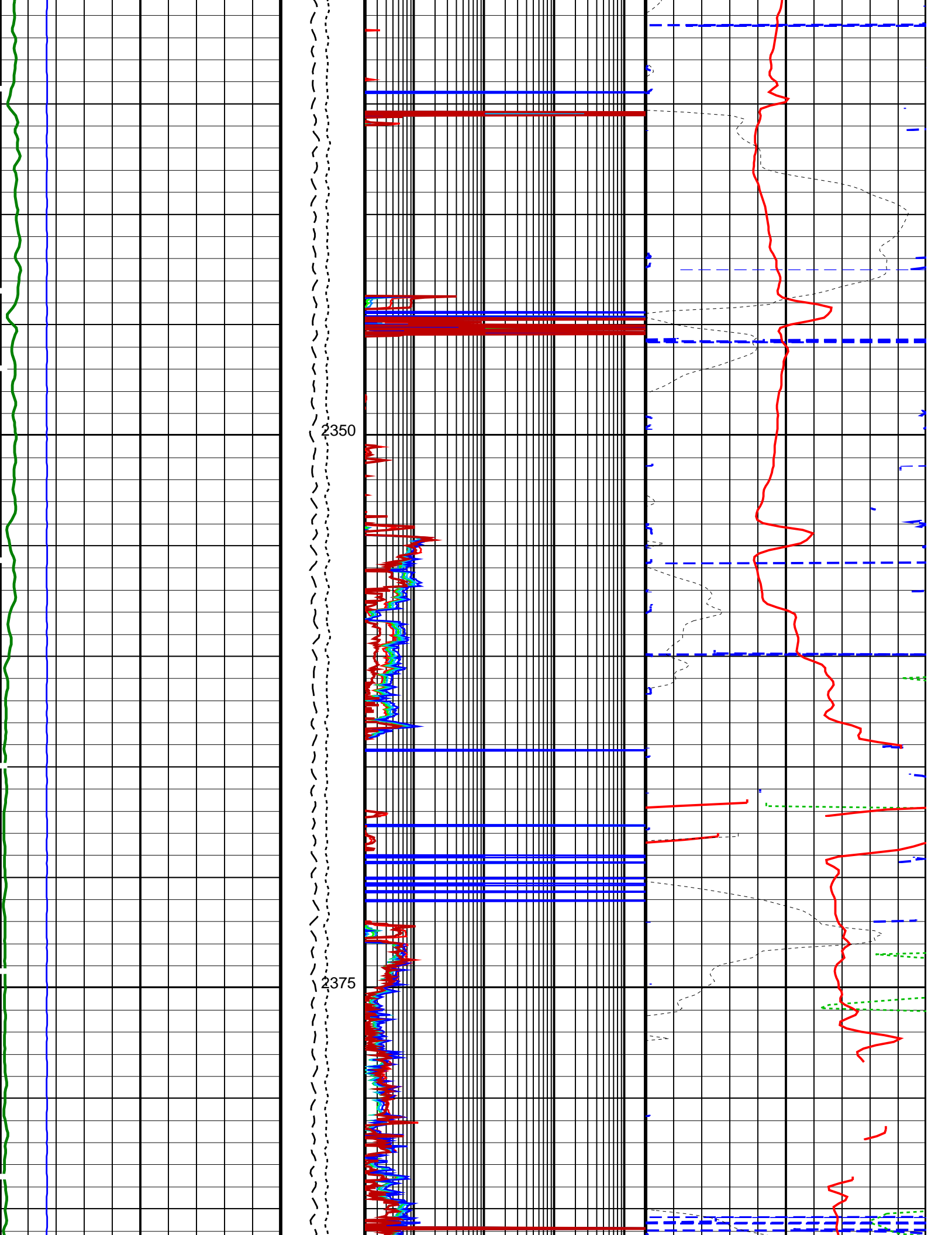


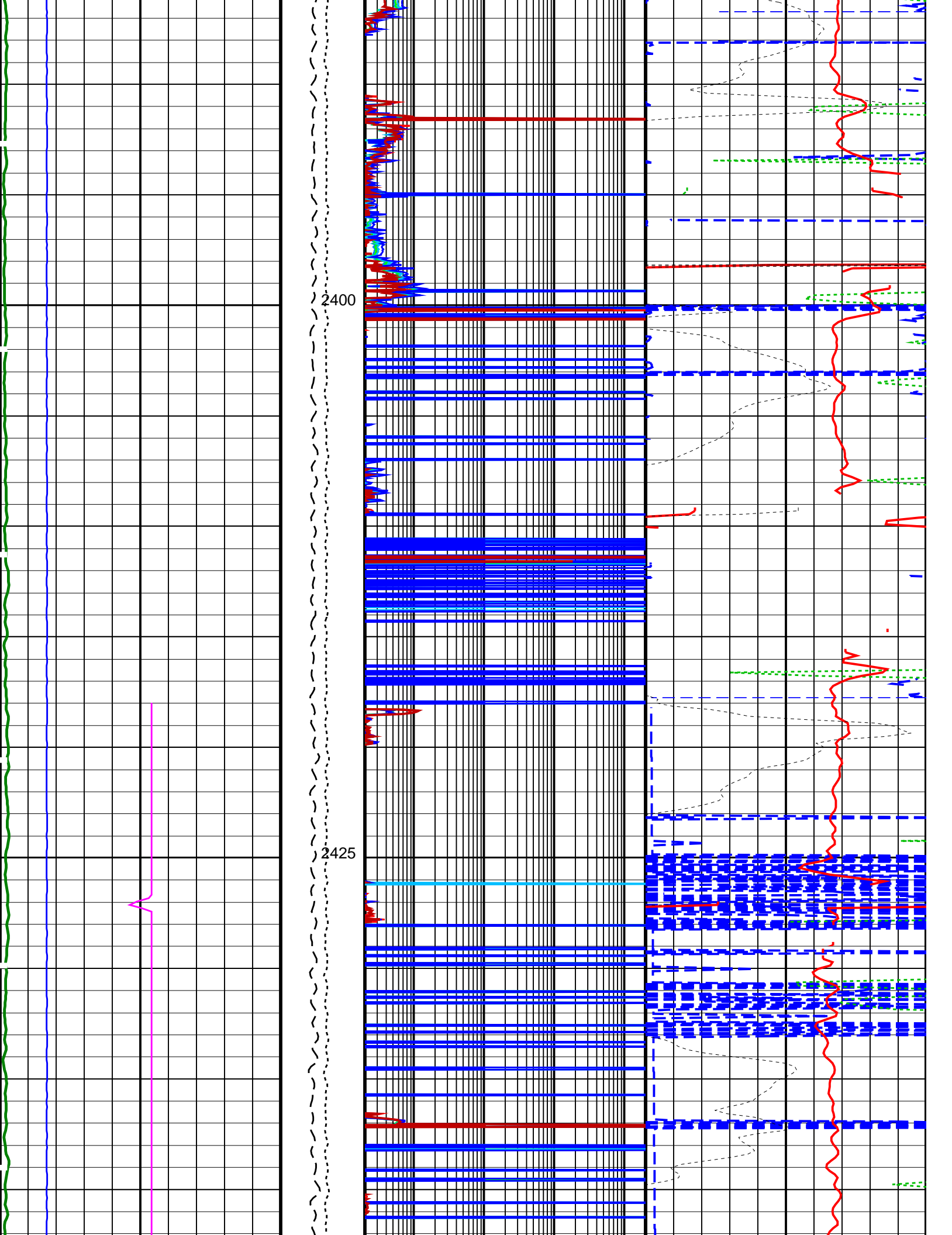


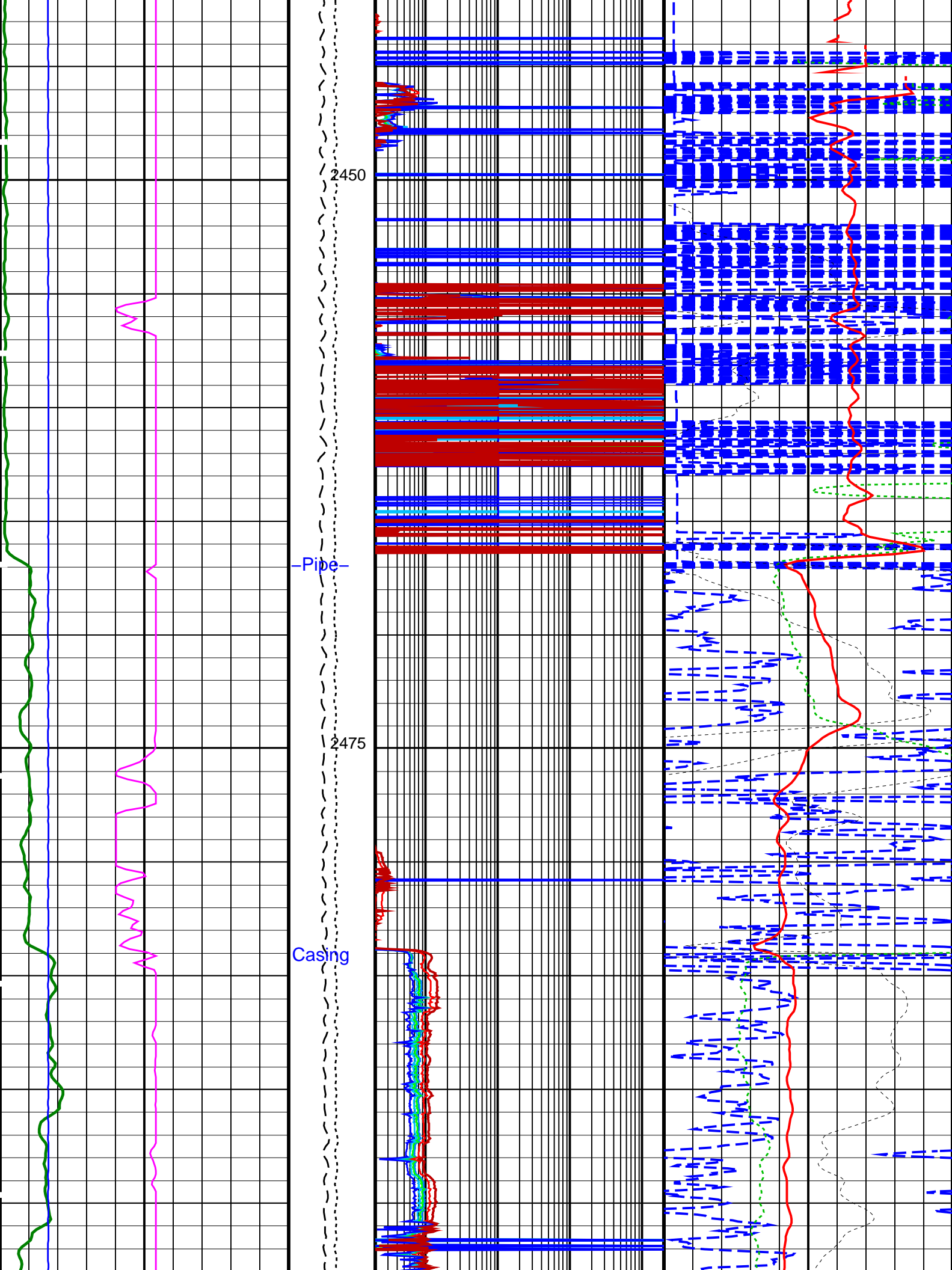


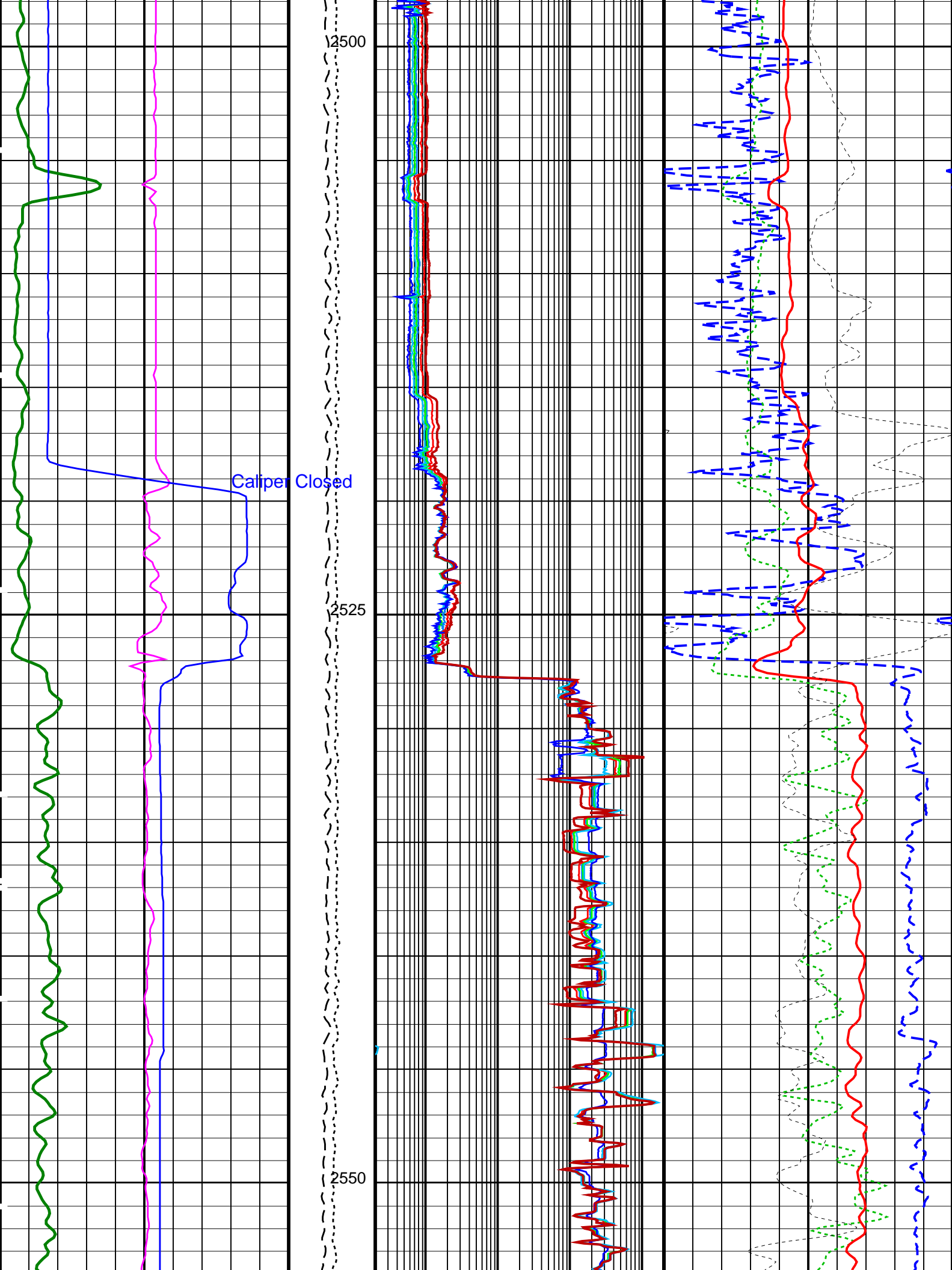


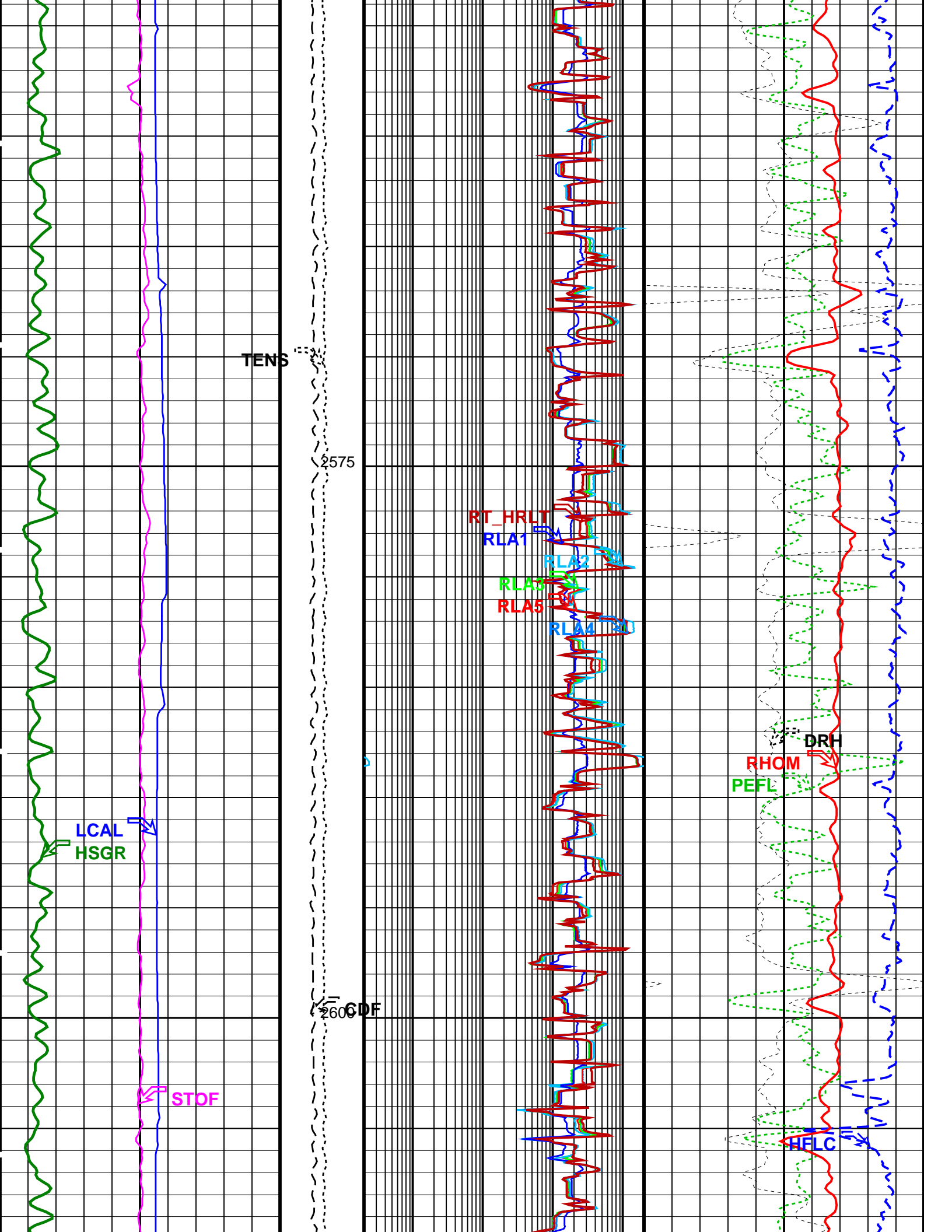


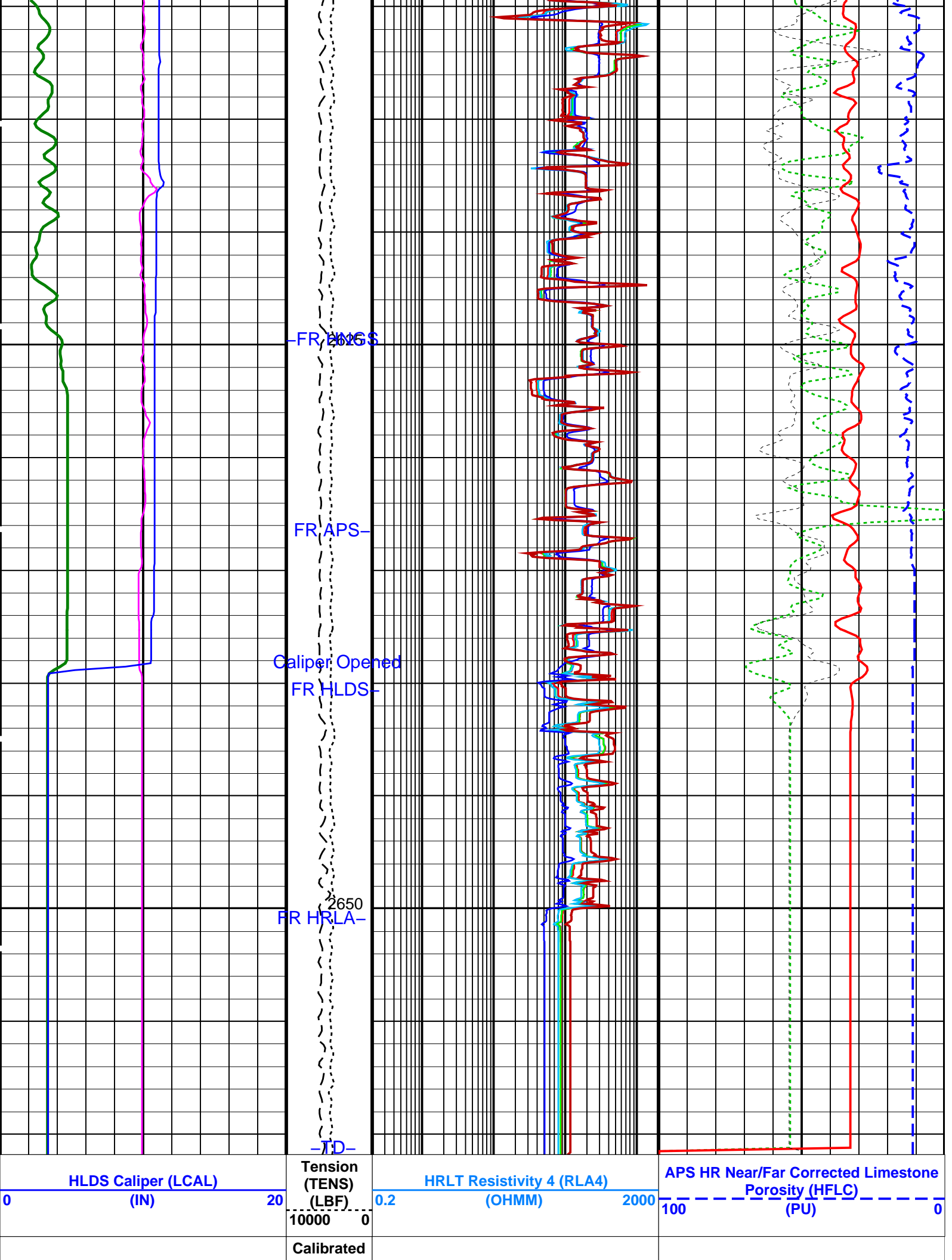












APS Effective Standoff in Limestone (STOF) -5 (IN) 5	Downhole Force (CDF) (LBF) 3000 0	HRLT Resistivity 5 (RLA5) 0.2 (OHMM) 2000	HLDS Long Spaced Photoelectric Effect (PEFL) 0 (----) 10
HNGS Spectroscopy Gamma Ray (HSGR) 0 (GAPI) 100		HRLT Resistivity 3 (RLA3) 0.2 (OHMM) 2000	HLDS Bulk Density (RHOM) 0 (G/C3) 4
Uplong 2		HRLT Resistivity 2 (RLA2) 0.2 (OHMM) 2000	HLDS Bulk Density Correction (DRH) -0.25 (G/C3) 0.25
		HRLT Resistivity 1 (RLA1) 0.2 (OHMM) 2000	
		HRLT True Resistivity (RT_HRLT) 0.2 (OHMM) 2000	

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)	7	DEGC
CALSTAT	HRLTB Calibration Status	SHALLOW_DONE	
CALTEMP	HRLTB Calibration Temperature	10.6916	DEGC
FREQ0	HRLT Frequency Index for Mode 0	32	
FREQ1	HRLT Frequency Index for Mode 1	128	
FREQ2	HRLT Frequency Index for Mode 2	104	
FREQ3	HRLT Frequency Index for Mode 3	86	
FREQ4	HRLT Frequency Index for Mode 4	56	
FREQ5	HRLT Frequency Index for Mode 5	44	
FREQ6	HRLT Frequency Index for Mode 6	116	
GCSE	Generalized Caliper Selection	LCAL	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
ISSBAR	Barite Mud Switch	NOBARITE	
KFAC_HRLT	HRLT K Factor Option	SONDE	
LOOPCOEF_S	HRLT Loop Coefficient for Shallow Modes	LOW	
LOOPMOD0	HRLT Mode 0 Loop Mode	AUTO	
LOOPMOD1	HRLT Mode 1 Loop Mode	AUTO	
LOOPMOD2	HRLT Mode 2 Loop Mode	AUTO	
LOOPMOD3	HRLT Mode 3 Loop Mode	AUTO	
LOOPMOD4	HRLT Mode 4 Loop Mode	AUTO	
LOOPMOD5	HRLT Mode 5 Loop Mode	AUTO	
LOOPMOD6	HRLT Mode 6 Loop Mode	AUTO	
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
PROGINV	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	DEGC
HLDS: Hostile Litho-Density Sonde			
CLCL	HLDS LS Control Loop Controller Mode	AUTO_DEFAULT	
CLCS	HLDS SS Control Loop Controller Mode	AUTO_DEFAULT	
CLLS	HLDS Mode Loop Long Spacing	AUTO	
CLSS	HLDS Mode Loop Short Spacing	AUTO	
DHC	Density Hole Correction	BS	
DPPM	Density Porosity Processing Mode	HIRS	
FD	Fluid Density	1	G/C3
LATC	HLDS Activation Correction	OFF	
LLDL	HLDS LS Low Level Discriminator DAC	14000	
LLDS	HLDS SS Low Level Discriminator DAC	14000	
LLML	HLDS LS Low Level Discriminator Mode	AUTO	
LLMS	HLDS SS Low Level Discriminator Mode	AUTO	
MDEN	Matrix Density	2.6	G/C3
PHVL	HLDS Long Spacing High Voltage Setting	1000	V
PHVS	HLDS Short Spacing High Voltage Setting	1500	V
PSDL	HLDS LS Pulse Shape Compensation DAC	30000	
PSDS	HLDS SS Pulse Shape Compensation DAC	30000	
PSML	HLDS LS Pulse Shape Compensation Mode	AUTO	
PSMS	HLDS SS Pulse Shape Compensation Mode	AUTO	

APS-C: Accelerator-Porosity Tool			
AASD	APS Software Version	5	
ADSO	APS Thermal and Array Detectors High Voltage Setting	1976.24	V
AFSD	APS Array Detectors Data Source Switch	Both	
AHCS	APS Far Detector High Voltage Setting	2067.55	V
AHSS	APS Holesize Correction Source	GCSE	
AMTY	APS Holesize Correction Switch	ON	
ANSD	APS Environmental Corrections Mud Type	WaterBaseBarite	
ASOS	APS Near Detector High Voltage Setting	1737.8	V
ATSS	APS Standoff Correction Switch	ON	
BHFL_APS	APS Temperature-Pressure-Salinity Correction Switch	ON	
BHS	APS TNPH Borehole Fluid Type	WATER	
BHT	Borehole Status	OPEN	
BSCO_APS	Bottom Hole Temperature (used in calculations)	7	DEGC
DPPM	APS TNPH Borehole Salinity Correction Option	NO	
DSCO_APS	Density Porosity Processing Mode	HIRS	
FSAL	APS TNPH Density Source Correction Option	MEASURED	
FSCO_APS	Formation Salinity	-50000	PPM
GCSE	APS TNPH Formation Salinity Correction Option	NO	
GDEV	Generalized Caliper Selection	LCAL	
GGRD	Average Angular Deviation of Borehole from Normal	0	DEG
GRSE	Geothermal Gradient	0.018227	DC/M
GTSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
HSCO_APS	Generalized Temperature Selection	LINEAR_ESTIMATE	
ISSBAR	APS TNPH Hole Size Correction Option	YES	
MATR	Barite Mud Switch	NOBARITE	
MCCO_APS	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
MCOR_APS	APS TNPH Mud Cake Correction Option	YES	
MWCO_APS	APS TNPH Mud Correction	NATU	
NARC	APS TNPH Mud Weight Correction Option	YES	
NFRC	APS Near/Array Calibration Ratio	1.08341	
PTCO_APS	APS Near/Far Calibration Ratio	0.942369	
SHT	APS TNPH Pressure/Temperature Correction Option	NO	
TNCO_APS	Surface Hole Temperature	20	DEGC
	APS TNPH Computation Option	YES	
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)	7	DEGC
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	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
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	-0.000149152	
HALF	HNGS Alpha Filter Length	60	IN
HCRB	HNGS Apply Borehole Potassium Correction	NONE	
HMWM	Mud Weighting Material	NATU	
HNPE	HNGS Processing Enable	YES	
ISSBAR	Barite Mud Switch	NOBARITE	
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
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	DEGC
TPOS	Tool Position	ECCE	
VBA1	HNGS Detector 1 Variable Barite Factor Running Average	1.02741	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	1.04133	
System and Miscellaneous			
ALTDPCHAN	Name of alternate depth channel	SpeedCorrectedDepth	
BS	Bit Size	9.875	IN
BSAL	Borehole Salinity	38000.00	PPM
CSIZ	Current Casing Size	10.750	IN
CWEI	Casing Weight	168.00	LB/F
DFD	Drilling Fluid Density	1.02	G/C3
DO	Depth Offset for Playback	0.0	M
FLEV	Fluid Level	-50000.00	M
MST	Mud Sample Temperature	23.00	DEGC
PBVSADP	Use alternate depth channel for playback	NO	
PP	Playback Processing	RECOMPUTE	
RMFS	Resistivity of Mud Filtrate Sample	-50000.0000	OHMM
RW	Resistivity of Connate Water	1.0000	OHMM
TD	Total Depth	8729.3	FT
TDD	Total Depth - Driller	2660.70	M
TDL	Total Depth - Logger	2661.00	M
TWS	Temperature of Connate Water Sample	37.78	DEGC

Format: TripleCombo		Vertical Scale: 1:200		Graphics File Created: 10-Jul-2021 20:53	
OP System Version: 19C0-187					
MSS_LDEO-A	19C0-187	HRLT-B	19C0-187		
HLDS	19C0-187	LDSC-B	19C0-187		
APS-C	19C0-187	HNGC-B	19C0-187		
HNGS-BA	19C0-187	DTC-H	19C0-187		
Input DLIS Files					
DEFAULT	MSS_LDEO_HRLA_LDL_009LUP	FN:15	PRODUCER	08-Jul-2021 17:30	2660.9 M 1838.0 M
Output DLIS Files					
DEFAULT	MSS_LDEO_HRLA_LDL_055PUP	FN:88	PRODUCER	10-Jul-2021 20:53	

Calibration and Check Summary							
Measurement	Nominal	Master	Before	After	Change	Limit	Units
High Resolution Laterolog Array – B Wellsite Calibration – HRLT M01							
Before: 8-Jul-2021 13:50 After: 8-Jul-2021 19:03							
HRLT M0-M1 Voltage Plus – 0	0	N/A	-318.6	-318.5	0.1793	9.681	UV
HRLT M0-M1 Voltage Plus – 1	0	N/A	-329.6	-329.7	-0.08096	9.681	UV
HRLT M0-M1 Voltage Plus – 2	0	N/A	-337.6	-337.1	0.4860	9.681	UV
HRLT M0-M1 Voltage Plus – 3	0	N/A	-328.2	-327.9	0.2156	9.681	UV
HRLT M0-M1 Voltage Plus – 4	0	N/A	-319.7	-319.5	0.1644	9.681	UV
HRLT M0-M1 Voltage Plus – 5	0	N/A	-321.3	-321.2	0.05350	9.681	UV
HRLT M0-M1 Voltage Plus – 6	0	N/A	319.2	318.7	-0.5041	9.681	UV
HRLT M0-M1 Voltage Plus – 7	0	N/A	-322.7	-322.7	0	9.681	UV
High Resolution Laterolog Array – B Wellsite Calibration – HRLT M12							
Before: 8-Jul-2021 13:50 After: 8-Jul-2021 19:03							
HRLT M1-M2 Voltage Plus – 0	0	N/A	1739	1737	-1.613	53.42	UV
HRLT M1-M2 Voltage Plus – 1	0	N/A	1807	1805	-1.542	53.42	UV
HRLT M1-M2 Voltage Plus – 2	0	N/A	1842	1838	-4.291	53.42	UV
HRLT M1-M2 Voltage Plus – 3	0	N/A	1789	1787	-2.732	53.42	UV
HRLT M1-M2 Voltage Plus – 4	0	N/A	1742	1740	-1.896	53.42	UV
HRLT M1-M2 Voltage Plus – 5	0	N/A	1751	1750	-1.663	53.42	UV
HRLT M1-M2 Voltage Plus – 6	0	N/A	-1757	-1753	4.089	53.42	UV
HRLT M1-M2 Voltage Plus – 7	0	N/A	1781	1781	0	53.42	UV
High Resolution Laterolog Array – B Wellsite Calibration – HRLT M23							
Before: 8-Jul-2021 13:50 After: 8-Jul-2021 19:03							
HRLT M2-M3 Voltage Plus – 0	0	N/A	1732	1729	-2.046	53.42	UV
HRLT M2-M3 Voltage Plus – 1	0	N/A	1809	1807	-2.330	53.42	UV
HRLT M2-M3 Voltage Plus – 2	0	N/A	1847	1842	-4.883	53.42	UV
HRLT M2-M3 Voltage Plus – 3	0	N/A	1798	1795	-2.871	53.42	UV
HRLT M2-M3 Voltage Plus – 4	0	N/A	1744	1742	-2.383	53.42	UV
HRLT M2-M3 Voltage Plus – 5	0	N/A	1755	1753	-1.831	53.42	UV
HRLT M2-M3 Voltage Plus – 6	0	N/A	-1749	-1743	5.112	53.42	UV
HRLT M2-M3 Voltage Plus – 7	0	N/A	1781	1781	0	53.42	UV
High Resolution Laterolog Array – B Wellsite Calibration – HRLT V34							
Before: 8-Jul-2021 13:50 After: 8-Jul-2021 19:03							
HRLT A3-A4 Voltage Plus – 0	0	N/A	68590	68570	-23.84	2100	UV
HRLT A3-A4 Voltage Plus – 1	0	N/A	71520	71480	-39.31	2100	UV
HRLT A3-A4 Voltage Plus – 2	0	N/A	73310	73180	-138.8	2100	UV
HRLT A3-A4 Voltage Plus – 3	0	N/A	71600	71530	-62.24	2100	UV
HRLT A3-A4 Voltage Plus – 4	0	N/A	69430	69390	-40.11	2100	UV
HRLT A3-A4 Voltage Plus – 5	0	N/A	69860	69850	-12.30	2100	UV
HRLT A3-A4 Voltage Plus – 6	0	N/A	-68150	-68010	143.0	2100	UV
HRLT A3-A4 Voltage Plus – 7	0	N/A	70000	70000	0	2100	UV
High Resolution Laterolog Array – B Wellsite Calibration – HRLT V45							
Before: 8-Jul-2021 13:50 After: 8-Jul-2021 19:03							
HRLT A4-A5 Voltage Plus – 0	0	N/A	68690	68650	-38.27	2100	UV
HRLT A4-A5 Voltage Plus – 1	0	N/A	71730	71710	-21.95	2100	UV
HRLT A4-A5 Voltage Plus – 2	0	N/A	73500	73360	-140.5	2100	UV
HRLT A4-A5 Voltage Plus – 3	0	N/A	71740	71670	-67.55	2100	UV
HRLT A4-A5 Voltage Plus – 4	0	N/A	69540	69490	-43.45	2100	UV

HRLT A4-A5 Voltage Plus - 4	0	N/A	69348	69436	-48.43	2100	UV
HRLT A4-A5 Voltage Plus - 5	0	N/A	69960	69960	-16.82	2100	UV
HRLT A4-A5 Voltage Plus - 6	0	N/A	-68350	-68220	134.4	2100	UV
HRLT A4-A5 Voltage Plus - 7	0	N/A	70000	70000	0	2100	UV

High Resolution Laterolog Array - B Wellsite Calibration - HRLT V56

Before: 8-Jul-2021 13:50 After: 8-Jul-2021 19:03

HRLT A5-A6 Voltage Plus - 0	0	N/A	68540	68490	-49.55	2100	UV
HRLT A5-A6 Voltage Plus - 1	0	N/A	71590	71530	-62.18	2100	UV
HRLT A5-A6 Voltage Plus - 2	0	N/A	73320	73200	-121.6	2100	UV
HRLT A5-A6 Voltage Plus - 3	0	N/A	71600	71550	-49.34	2100	UV
HRLT A5-A6 Voltage Plus - 4	0	N/A	69390	69360	-36.10	2100	UV
HRLT A5-A6 Voltage Plus - 5	0	N/A	69850	69800	-45.31	2100	UV
HRLT A5-A6 Voltage Plus - 6	0	N/A	-68200	-68050	144.8	2100	UV
HRLT A5-A6 Voltage Plus - 7	0	N/A	70000	70000	0	2100	UV

High Resolution Laterolog Array - B Wellsite Calibration - HRLT VTP

Before: 8-Jul-2021 13:50 After: 8-Jul-2021 19:03

HRLT Torpedo-M0 Voltage - 0	0	N/A	-68070	-68030	38.33	2100	UV
HRLT Torpedo-M0 Voltage - 1	0	N/A	-71390	-71340	46.08	2100	UV
HRLT Torpedo-M0 Voltage - 2	0	N/A	-73190	-73050	136.9	2100	UV
HRLT Torpedo-M0 Voltage - 3	0	N/A	-71520	-71450	65.10	2100	UV
HRLT Torpedo-M0 Voltage - 4	0	N/A	-69360	-69320	41.49	2100	UV
HRLT Torpedo-M0 Voltage - 5	0	N/A	-69800	-69770	27.20	2100	UV
HRLT Torpedo-M0 Voltage - 6	0	N/A	67960	67820	-139.4	2100	UV
HRLT Torpedo-M0 Voltage - 7	0	N/A	-70000	-70000	0	2100	UV

High Resolution Laterolog Array - B Wellsite Calibration - HRLT VBD

Before: 8-Jul-2021 13:50 After: 8-Jul-2021 19:03

HRLT Bridle#9-M0 Voltage - 0	0	N/A	-68110	-68080	31.15	2100	UV
HRLT Bridle#9-M0 Voltage - 1	0	N/A	-71460	-71440	20.86	2100	UV
HRLT Bridle#9-M0 Voltage - 2	0	N/A	-73260	-73140	124.4	2100	UV
HRLT Bridle#9-M0 Voltage - 3	0	N/A	-71590	-71530	54.97	2100	UV
HRLT Bridle#9-M0 Voltage - 4	0	N/A	-69410	-69370	34.47	2100	UV
HRLT Bridle#9-M0 Voltage - 5	0	N/A	-69830	-69820	18.55	2100	UV
HRLT Bridle#9-M0 Voltage - 6	0	N/A	68060	67910	-148.4	2100	UV
HRLT Bridle#9-M0 Voltage - 7	0	N/A	-70000	-70000	0	2100	UV

High Resolution Laterolog Array - B Wellsite Calibration - HRLT ISO

Before: 8-Jul-2021 13:50 After: 8-Jul-2021 19:03

HRLT Source Current Plus - 0	0	N/A	284.2	284.1	-0.06036	8.520	UA
HRLT Source Current Plus - 1	0	N/A	281.1	281.1	0	8.520	UA
HRLT Source Current Plus - 2	0	N/A	281.1	281.1	0	8.520	UA
HRLT Source Current Plus - 3	0	N/A	281.1	281.1	0	8.520	UA
HRLT Source Current Plus - 4	0	N/A	281.1	281.1	0	8.520	UA
HRLT Source Current Plus - 5	0	N/A	281.1	281.1	0	8.520	UA
HRLT Source Current Plus - 6	0	N/A	281.1	281.1	0	8.520	UA
HRLT Source Current Plus - 7	0	N/A	281.1	281.1	0	8.520	UA

High Resolution Laterolog Array - B Wellsite Calibration - HRLT MV

Before: 8-Jul-2021 13:50 After: 8-Jul-2021 19:03

HRLT Vertical Voltage PI - 0	0	N/A	-320.5	-320.1	0.4379	9.681	UV
HRLT Vertical Voltage PI - 1	0	N/A	-324.6	-324.3	0.3167	9.681	UV
HRLT Vertical Voltage PI - 2	0	N/A	-331.1	-330.3	0.7641	9.681	UV
HRLT Vertical Voltage PI - 3	0	N/A	-320.1	-319.5	0.5143	9.681	UV
HRLT Vertical Voltage PI - 4	0	N/A	-308.8	-308.4	0.3953	9.681	UV
HRLT Vertical Voltage PI - 5	0	N/A	-325.4	-325.0	0.3196	9.681	UV
HRLT Vertical Voltage PI - 6	0	N/A	326.7	325.9	-0.8242	9.681	UV
HRLT Vertical Voltage PI - 7	0	N/A	-322.7	-322.7	0	9.681	UV

Hostile Litho-Density Sonde Wellsite Calibration - Background Measurement

Master: 2-May-2021 7:20 Before: 8-Jul-2021 13:56 After: 2-May-2021 8:19

SS Cs Resolution Bkg	9.000	7.698	7.707	7.652	-0.05408	1.800	%
LS Cs Resolution Bkg	9.000	7.989	7.880	7.948	0.06831	1.800	%
LSW1 Background	100.0	71.96	71.68	71.93	0.2519	3.000	CPS
LSW2 Background	100.0	65.02	64.00	63.44	-0.5595	3.000	CPS
LSW3 Background	200.0	146.1	146.6	146.0	-0.6438	6.000	CPS
LSW4 Background	250.0	183.2	182.3	181.4	-0.9483	7.500	CPS
LSW5 Background	600.0	424.9	421.9	426.6	4.744	18.00	CPS
SSW1 Background	100.0	68.97	67.97	69.07	1.101	3.000	CPS
SSW2 Background	200.0	118.2	118.2	120.1	1.850	6.000	CPS
SSW3 Background	500.0	331.3	330.4	333.0	2.568	15.00	CPS
SSW4 Background	270.0	178.4	177.3	177.3	0.06694	8.100	CPS
SSW5 Background	200.0	127.4	127.2	127.8	0.6027	6.000	CPS

Hostile Litho-Density Sonde Wellsite Calibration - Aluminum Measurement

Master: 2-May-2021 7:46

LSW1 Aluminum	600.0	437.4	N/A	N/A	N/A	N/A	CPS
LSW2 Aluminum	900.0	651.2	N/A	N/A	N/A	N/A	CPS
LSW3 Aluminum	1100	787.2	N/A	N/A	N/A	N/A	CPS
LSW4 Aluminum	580.0	396.8	N/A	N/A	N/A	N/A	CPS
LSW5 Aluminum	570.0	364.1	N/A	N/A	N/A	N/A	CPS

SSW1 Aluminum	2800	2070	N/A	N/A	N/A	N/A	CPS
SSW2 Aluminum	8000	5832	N/A	N/A	N/A	N/A	CPS
SSW3 Aluminum	11600	8191	N/A	N/A	N/A	N/A	CPS
SSW4 Aluminum	5000	3322	N/A	N/A	N/A	N/A	CPS
SSW5 Aluminum	660.0	384.2	N/A	N/A	N/A	N/A	CPS
Hostile Litho-Density Sonde Wellsite Calibration – Lithology Measurement							
Master: 2-May-2021 7:41							
LSW1 Iron	400.0	298.6	N/A	N/A	N/A	N/A	CPS
LSW2 Iron	730.0	524.2	N/A	N/A	N/A	N/A	CPS
LSW3 Iron	1000	699.6	N/A	N/A	N/A	N/A	CPS
LSW4 Iron	520.0	360.1	N/A	N/A	N/A	N/A	CPS
LSW5 Iron	470.0	333.9	N/A	N/A	N/A	N/A	CPS
SSW1 Iron	2100	1520	N/A	N/A	N/A	N/A	CPS
SSW2 Iron	6800	4870	N/A	N/A	N/A	N/A	CPS
SSW3 Iron	10800	7479	N/A	N/A	N/A	N/A	CPS
SSW4 Iron	4600	3030	N/A	N/A	N/A	N/A	CPS
SSW5 Iron	580.0	343.3	N/A	N/A	N/A	N/A	CPS
Hostile Litho-Density Sonde Wellsite Calibration – Caliper Calibration							
Before: 2-May-2021 8:12							
HLDS Caliper Small Ring	12.00	N/A	16.10	N/A	N/A	N/A	IN
HLDS Caliper Large Ring	15.19	N/A	20.13	N/A	N/A	N/A	IN
Accelerator-Porosity Tool Wellsite Calibration – Detector Background							
Master: 3-May-2021 6:13 Before: 8-Jul-2021 13:55 After: 8-Jul-2021 19:12							
Near Det Bkg Cntrate	30.00	25.16	26.50	24.84	-1.652	N/A	CPS
Far Det Bkg Cntrate	30.00	24.05	24.80	24.71	-0.08343	N/A	CPS
Array-1 Det Bkg Cntrate	30.00	23.15	23.68	24.48	0.8006	N/A	CPS
Array-2 Det Bkg Cntrate	30.00	23.93	23.79	24.83	1.034	N/A	CPS
Array Therm Det Bkg Cntrate	30.00	26.33	25.33	24.90	-0.4273	N/A	CPS
Accelerator-Porosity Tool Wellsite Calibration – Calibration Ratios							
Master: 3-May-2021 6:15							
Near/Far Calibration Ratio	0.9250	0.9424	N/A	N/A	N/A	N/A	
Near/Array Calibration Ratio	1.030	1.083	N/A	N/A	N/A	N/A	
Near/Array Cal Ratio Up/Down	1.000	1.016	N/A	N/A	N/A	N/A	
Accelerator-Porosity Tool Wellsite Calibration – Tank Check							
Master: 3-May-2021 6:16							
Array-1 Standoff Porosity	11.75	11.04	N/A	N/A	N/A	N/A	PU
Array-2 Standoff Porosity	11.75	10.88	N/A	N/A	N/A	N/A	PU
Average Slowing Down Time	6.000	5.997	N/A	N/A	N/A	N/A	US
Array-1 SDT Ratio Up/Down	1.000	0.9943	N/A	N/A	N/A	N/A	
Array-2 SDT Ratio Up/Down	1.000	0.9896	N/A	N/A	N/A	N/A	
Sigma Formation	27.50	27.71	N/A	N/A	N/A	N/A	CU
Accelerator-Porosity Tool Wellsite Calibration – CCR7 signal boxes							
Master: 3-May-2021 5:26							
Near Detector Plateau Setting	1650	1738	N/A	N/A	N/A	N/A	V
Far Detector Plateau Setting	2000	2068	N/A	N/A	N/A	N/A	V
Array Detector Plateau Setting	2000	1976	N/A	N/A	N/A	N/A	V
Hostile Natural Gamma Ray Sonde Wellsite Calibration – Detector 1 Check							
Master: 2-May-2021 10:04 Before: 13-Jun-2021 9:44 After: 2-May-2021 10:16							
Na 511 Peak Loc	40.00	39.25	39.64	39.73	0.09286	1.000	
Na 511 Peak Res	15.50	16.53	14.84	15.11	0.2734	2.000	%
High Voltage	1150	1197	1168	1198	30.38	N/A	V
Na 1785 Peak Loc	142.6	141.8	143.3	141.2	-2.089	7.000	
Na 1785 Peak Res	8.500	8.905	7.709	9.136	1.427	2.000	%
Temperature	15.50	26.59	11.69	26.63	14.94	N/A	DEGC
Na Count Rate	45.00	12.01	12.89	12.67	-0.2204	8.000	CPS
Hostile Natural Gamma Ray Sonde Wellsite Calibration – Detector 2 Check							
Master: 2-May-2021 10:04 Before: 13-Jun-2021 9:44 After: 2-May-2021 10:16							
Na 511 Peak Loc	40.00	39.88	39.51	39.79	0.2834	1.000	
Na 511 Peak Res	15.50	15.29	15.27	15.32	0.05639	2.000	%
High Voltage	1150	1122	1090	1121	30.63	N/A	V
Na 1785 Peak Loc	142.6	142.6	140.8	142.5	1.645	7.000	
Na 1785 Peak Res	8.500	8.040	9.507	10.27	0.7659	2.000	%
Temperature	15.50	27.21	12.30	27.24	14.94	N/A	DEGC
Na Count Rate	45.00	12.32	13.60	12.95	-0.6521	8.000	CPS
Hostile Natural Gamma Ray Sonde Wellsite Calibration – Ratio Of Detector 1 To Detector 2							
Master: 2-May-2021 10:04 Before: 13-Jun-2021 9:44 After: 2-May-2021 10:16							
Coincidence Count Rate Ratio	1.000	0.9728	0.9527	0.9769	0.02428	0.05000	
Hostile Natural Gamma Ray Sonde Master Calibration – Detector 1 Calibration							
Master: 2-May-2021 10:00							
Na 511 Peak Set Point	40.00	41.00	--	--	--	--	
Th Peak Loc	209.6	209.6	--	--	--	--	
Th Peak Res	7.000	6.625	--	--	--	--	%

Th Peak Res	7.000	6.625	--	--	--	--	%
Background Count Rate	142.5	17.82	--	--	--	--	CPS
Gain Ratio	1.000	1.015	--	--	--	--	
Hostile Natural Gamma Ray Sonde Master Calibration – Detector 2 Calibration							
Master: 2–May–2021 10:00							
Na 511 Peak Set Point	40.00	41.00	--	--	--	--	
Th Peak Loc	209.6	208.8	--	--	--	--	
Th Peak Res	7.000	7.662	--	--	--	--	%
Background Count Rate	142.5	16.78	--	--	--	--	CPS
Gain Ratio	1.000	0.9961	--	--	--	--	

Accelerator–Porosity Tool – Detector Plateau Settings :















Near Detector Plateau Setting 1738 V
Far Detector Plateau Setting 2068 V
Array Detector Plateau Setting 1976 V

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		–318.6	–322.7	–280.7	–379.7
	After		–318.5			
1	Before		–329.6	–322.7	–280.7	–379.7
	After		–329.7			
2	Before		–337.6	–322.7	–280.7	–379.7
	After		–337.1			
3	Before		–328.2	–322.7	–280.7	–379.7
	After		–327.9			
4	Before		–319.7	–322.7	–280.7	–379.7
	After		–319.5			
5	Before		–321.3	–322.7	–280.7	–379.7
	After		–321.2			
6	Before		319.2	322.7	379.7	280.7
	After		318.7			
7	Before		–322.7	–322.7	–280.7	–379.7
	After		–322.7			
(Minimum) (Nominal) (Maximum)						
Before: 8–Jul–2021 13:50						
After: 8–Jul–2021 19:03						

High Resolution Laterolog Array – B Wellsite Calibration						
HRLT M12						
Idx	Phase	HRLT M1–M2 Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		1739	1781	2095	1549
	After		1737			

1	Before		1807	1781	2095	1549
	After		1805			
2	Before		1842	1781	2095	1549
	After		1838			
3	Before		1789	1781	2095	1549
	After		1787			
4	Before		1742	1781	2095	1549
	After		1740			
5	Before		1751	1781	2095	1549
	After		1750			
6	Before		-1757	-1781	-1549	-2095
	After		-1753			
7	Before		1781	1781	2095	1549
	After		1781			
(Minimum) (Nominal) (Maximum)						





Before: 8-Jul-2021 13:50













After: 8-Jul-2021 19:03

















High Resolution Laterolog Array – B Wellsite Calibration						
HRLT M23						
Idx	Phase	HRLT M2–M3 Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		1732	1781	2095	1549
	After		1729			
1	Before		1809	1781	2095	1549
	After		1807			
2	Before		1847	1781	2095	1549
	After		1842			
3	Before		1798	1781	2095	1549
	After		1795			
4	Before		1744	1781	2095	1549
	After		1742			
5	Before		1755	1781	2095	1549
	After		1753			
6	Before		-1749	-1781	-1549	-2095
	After		-1743			
7	Before		1781	1781	2095	1549
	After		1781			
(Minimum) (Nominal) (Maximum)						







Before: 8-Jul-2021 13:50

After: 8-Jul-2021 19:03

High Resolution Laterolog Array – B Wellsite Calibration						
HRLT V34						
Idx	Phase	HRLT A3–A4 Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		68590	70000	82360	60900
	After		68570			
1	Before		71520	70000	82360	60900
	After		71480			

2	Before		73310	70000	82360	60900
	After		73180			
3	Before		71600	70000	82360	60900
	After		71530			
4	Before		69430	70000	82360	60900
	After		69390			
5	Before		69860	70000	82360	60900
	After		69850			
6	Before		-68150	-70000	-60900	-82360
	After		-68010			
7	Before		70000	70000	82360	60900
	After		70000			
(Minimum) (Nominal) (Maximum)						
Before: 8-Jul-2021 13:50						
After: 8-Jul-2021 19:03						




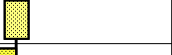

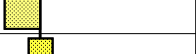
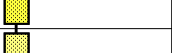
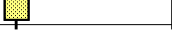
High Resolution Laterolog Array – B Wellsite Calibration						
HRLT V45						
Idx	Phase	HRLT A4–A5 Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		68690	70000	82360	60900
	After		68650			
1	Before		71730	70000	82360	60900
	After		71710			
2	Before		73500	70000	82360	60900
	After		73360			
3	Before		71740	70000	82360	60900
	After		71670			
4	Before		69540	70000	82360	60900
	After		69490			
5	Before		69960	70000	82360	60900
	After		69940			
6	Before		-68350	-70000	-60900	-82360
	After		-68220			
7	Before		70000	70000	82360	60900
	After		70000			
(Minimum) (Nominal) (Maximum)						
Before: 8-Jul-2021 13:50						
After: 8-Jul-2021 19:03						



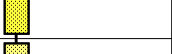
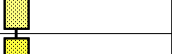
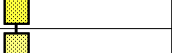
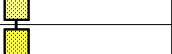
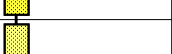

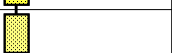
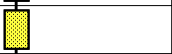



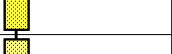
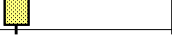
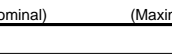
High Resolution Laterolog Array – B Wellsite Calibration						
HRLT V56						
Idx	Phase	HRLT A5–A6 Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		68540	70000	82360	60900
	After		68490			
1	Before		71590	70000	82360	60900
	After		71530			
2	Before		73320	70000	82360	60900
	After		73200			



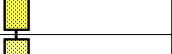
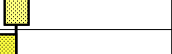
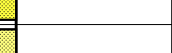
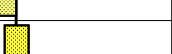
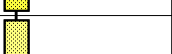
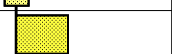

3	Before		71600	70000	82360	60900
	After		71550			
4	Before		69390	70000	82360	60900
	After		69360			
5	Before		69850	70000	82360	60900
	After		69800			
6	Before		-68200	-70000	-60900	-82360
	After		-68050			
7	Before		70000	70000	82360	60900
	After		70000			
(Minimum) (Nominal) (Maximum)						
Before: 8-Jul-2021 13:50						
After: 8-Jul-2021 19:03						







High Resolution Laterolog Array – B Wellsite Calibration						
HRLT VTP						
Idx	Phase	HRLT Torpedo-M0 Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		-68070	-70000	-60900	-82360
	After		-68030			
1	Before		-71390	-70000	-60900	-82360
	After		-71340			
2	Before		-73190	-70000	-60900	-82360
	After		-73050			
3	Before		-71520	-70000	-60900	-82360
	After		-71450			
4	Before		-69360	-70000	-60900	-82360
	After		-69320			
5	Before		-69800	-70000	-60900	-82360
	After		-69770			
6	Before		67960	70000	82360	60900
	After		67820			
7	Before		-70000	-70000	-60900	-82360
	After		-70000			
(Minimum) (Nominal) (Maximum)						
Before: 8-Jul-2021 13:50						
After: 8-Jul-2021 19:03						

High Resolution Laterolog Array – B Wellsite Calibration						
HRLT VBD						
Idx	Phase	HRLT Bridle#9-M0 Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		-68110	-70000	-60900	-82360
	After		-68080			
1	Before		-71460	-70000	-60900	-82360
	After		-71440			
2	Before		-73260	-70000	-60900	-82360
	After		-73140			
3	Before		-71590	-70000	-60900	-82360
	After		-71530			

4	Before		-69410	-70000	-60900	-82360
	After		-69370			
5	Before		-69830	-70000	-60900	-82360
	After		-69820			
6	Before		68060	70000	82360	60900
	After		67910			
7	Before		-70000	-70000	-60900	-82360
	After		-70000			
(Minimum) (Nominal) (Maximum)						
Before: 8-Jul-2021 13:50						
After: 8-Jul-2021 19:03						

High Resolution Laterolog Array – B Wellsite Calibration						
HRLT ISO						
Idx	Phase	HRLT Source Current Plus UA	Value	Nominal	Maximum	Minimum
0	Before		284.2	284.0	334.1	247.0
	After		284.1			
1	Before		281.1	281.1	330.7	244.4
	After		281.1			
2	Before		281.1	281.1	330.7	244.4
	After		281.1			
3	Before		281.1	281.1	330.7	244.4
	After		281.1			
4	Before		281.1	281.1	330.7	244.4
	After		281.1			
5	Before		281.1	281.1	330.7	244.4
	After		281.1			
6	Before		281.1	281.1	330.7	244.4
	After		281.1			
7	Before		281.1	281.1	330.7	244.4
	After		281.1			
(Minimum) (Nominal) (Maximum)						
Before: 8-Jul-2021 13:50						
After: 8-Jul-2021 19:03						

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
	After		-320.1			
1	Before		-324.6	-322.7	-280.7	-379.7
	After		-324.3			
2	Before		-331.1	-322.7	-280.7	-379.7
	After		-330.3			
3	Before		-320.1	-322.7	-280.7	-379.7
	After		-319.5			
4	Before		-308.8	-322.7	-280.7	-379.7
	After		-308.4			

5	Before		-325.4	-322.7	-280.7	-379.7
	After		-325.0			
6	Before		326.7	322.7	379.7	280.7
	After		325.9			
7	Before		-322.7	-322.7	-280.7	-379.7
	After		-322.7			
(Minimum) (Nominal) (Maximum)						
Before: 8-Jul-2021 13:50						
After: 8-Jul-2021 19:03						

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 – D 67

Auxiliary Equipment:

Hostile Litho Density High Voltage Housi
Hostile Litho Density Pad

HEH – H 67
HLDP – C 83

Hostile Litho-Density Sonde Wellsite Calibration																													
Background Measurement																													
Phase	SS Cs Resolution Bkg %		Value	Phase	LS Cs Resolution Bkg %		Value	Phase	LSW1 Background CPS		Value																		
Master	<div><div></div></div>		7.698	Master	<div><div></div></div>		7.989	Master	<div><div></div></div>		71.96																		
Before	<div><div></div></div>		7.707	Before	<div><div></div></div>		7.880	Before	<div><div></div></div>		71.68																		
After	<div><div></div></div>		7.652	After	<div><div></div></div>		7.948	After	<div><div></div></div>		71.93																		
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>		65.02	Master	<div><div></div></div>		146.1	Master	<div><div></div></div>		183.2																		
Before	<div><div></div></div>		64.00	Before	<div><div></div></div>		146.6	Before	<div><div></div></div>		182.3																		
After	<div><div></div></div>		63.44	After	<div><div></div></div>		146.0	After	<div><div></div></div>		181.4																		
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>		424.9	Master	<div><div></div></div>		68.97	Master	<div><div></div></div>		118.2																		
Before	<div><div></div></div>		421.9	Before	<div><div></div></div>		67.97	Before	<div><div></div></div>		118.2																		
After	<div><div></div></div>		426.6	After	<div><div></div></div>		69.07	After	<div><div></div></div>		120.1																		
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>		331.3	Master	<div><div></div></div>		178.4	Master	<div><div></div></div>		127.4																		
Before	<div><div></div></div>		330.4	Before	<div><div></div></div>		177.3	Before	<div><div></div></div>		127.2																		
After	<div><div></div></div>		333.0	After	<div><div></div></div>		177.3	After	<div><div></div></div>		127.8																		
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: 2-May-2021 7:20										Before: 8-Jul-2021 13:56										After: 2-May-2021 8:19									

Hostile Litho-Density Sonde Master Calibration									
Detector Background Measurement									
Phase	LSW1 Background CPS	Value	Phase	LSW2 Background CPS	Value	Phase	LSW3 Background CPS	Value	
Master		71.96	Master		65.02	Master		146.1	
55.00 (Minimum) 100.0 (Nominal) 150.0 (Maximum)			50.00 (Minimum) 100.0 (Nominal) 140.0 (Maximum)			110.0 (Minimum) 200.0 (Nominal) 290.0 (Maximum)			
Phase	LSW4 Background CPS	Value	Phase	LSW5 Background CPS	Value	Phase	LS Cs Resolution Bkg %	Value	
Master		183.2	Master		424.9	Master		7.989	

140.0 (Minimum)	250.0 (Nominal)	360.0 (Maximum)	330.0 (Minimum)	600.0 (Nominal)	830.0 (Maximum)	7.000 (Minimum)	9.000 (Nominal)	11.00 (Maximum)
Phase	SSW1 Background CPS	Value	Phase	SSW2 Background CPS	Value	Phase	SSW3 Background CPS	Value
Master		68.97	Master		118.2	Master		331.3
55.00 (Minimum)	100.0 (Nominal)	150.0 (Maximum)	100.0 (Minimum)	200.0 (Nominal)	260.0 (Maximum)	280.0 (Minimum)	500.0 (Nominal)	700.0 (Maximum)
Phase	SSW4 Background CPS	Value	Phase	SSW5 Background CPS	Value	Phase	SS Cs Resolution Bkg %	Value
Master		178.4	Master		127.4	Master		7.698
150.0 (Minimum)	270.0 (Nominal)	380.0 (Maximum)	110.0 (Minimum)	200.0 (Nominal)	270.0 (Maximum)	7.000 (Minimum)	9.000 (Nominal)	11.00 (Maximum)
Master: 2-May-2021 7:20								

Hostile Litho–Density Sonde Master Calibration												
Detector Aluminum Measurement (bkgd–subtracted)												
Phase	LSW1 Aluminum CPS		Value	Phase	LSW2 Aluminum CPS		Value	Phase	LSW3 Aluminum CPS		Value	
Master			437.4	Master			651.2	Master			787.2	
	420.0 (Minimum)	600.0 (Nominal)	770.0 (Maximum)		650.0 (Minimum)	900.0 (Nominal)	1150 (Maximum)		800.0 (Minimum)	1100 (Nominal)	1450 (Maximum)	
Phase	LSW4 Aluminum CPS		Value	Phase	LSW5 Aluminum CPS		Value	Phase	SSW1 Aluminum CPS		Value	
Master			396.8	Master			364.1	Master			2070	
	410.0 (Minimum)	580.0 (Nominal)	740.0 (Maximum)		410.0 (Minimum)	570.0 (Nominal)	740.0 (Maximum)		2000 (Minimum)	2800 (Nominal)	3200 (Maximum)	
Phase	SSW2 Aluminum CPS		Value	Phase	SSW3 Aluminum CPS		Value	Phase	SSW4 Aluminum CPS		Value	
Master			5832	Master			8191	Master			3322	
	5800 (Minimum)	8000 (Nominal)	9300 (Maximum)		8300 (Minimum)	11600 (Nominal)	13500 (Maximum)		3500 (Minimum)	5000 (Nominal)	5800 (Maximum)	
Phase	SSW5 Aluminum CPS		Value	Low count rates due to weak gamma source but density unaffected								
Master			384.2									
	430.0 (Minimum)	660.0 (Nominal)	770.0 (Maximum)									
Master: 2–May–2021 7:46												

Hostile Litho-Density Sonde Master Calibration											
Detector Litholog Measurement (bkgd-subtracted)											
Phase	LSW1 Iron CPS		Value	Phase	LSW2 Iron CPS		Value	Phase	LSW3 Iron CPS		Value
Master			298.6	Master			524.2	Master			699.6
	290.0 (Minimum)	400.0 (Nominal)	560.0 (Maximum)		520.0 (Minimum)	730.0 (Nominal)	950.0 (Maximum)		720.0 (Minimum)	1000 (Nominal)	1350 (Maximum)
Phase	LSW4 Iron CPS		Value	Phase	LSW5 Iron CPS		Value	Phase	SSW1 Iron CPS		Value
Master			360.1	Master			333.9	Master			1520
	370.0 (Minimum)	520.0 (Nominal)	700.0 (Maximum)		340.0 (Minimum)	470.0 (Nominal)	750.0 (Maximum)		1500 (Minimum)	2100 (Nominal)	2400 (Maximum)
Phase	SSW2 Iron CPS		Value	Phase	SSW3 Iron CPS		Value	Phase	SSW4 Iron CPS		Value
Master			4870	Master			7479	Master			3030
	4900 (Minimum)	6800 (Nominal)	7900 (Maximum)		7800 (Minimum)	10800 (Nominal)	12600 (Maximum)		3300 (Minimum)	4600 (Nominal)	5400 (Maximum)
Phase	SSW5 Iron CPS		Value	Low count rates due to weak gamma source but density unaffected							
Master			343.3								
	420.0 (Minimum)	580.0 (Nominal)	680.0 (Maximum)								
Master: 2-May-2021 7:41											

Hostile Litho-Density Sonde Master Calibration								
Quality Ratios								
Phase	AL CALIBRATION RATIO 1	Value	Phase	AL CALIBRATION RATIO 2	Value	Phase	AL CALIBRATION RATIO 3	Value
Master		1.035	Master		2.210	Master		0.5748
0.9000 (Minimum)	1.000 (Nominal)	1.100 (Maximum)	1.900 (Minimum)	2.100 (Nominal)	2.300 (Maximum)	0.4500 (Minimum)	0.5500 (Nominal)	0.6500 (Maximum)
Phase	AL CALIBRATION RATIO 4	Value	Phase	Pad-Wear SS Ratio	Value	Phase	Pad-Wear LS Ratio	Value
Master		0.5585	Master		0.9916	Master		0.9894
0.4000 (Minimum)	0.5500 (Nominal)	0.6500 (Maximum)	0.9800 (Minimum)	0.9880 (Nominal)	0.9960 (Maximum)	0.9800 (Minimum)	0.9880 (Nominal)	0.9960 (Maximum)
Phase	Pad-Position SS Ratio	Value	Phase	Pad-Position LS Ratio	Value			
Master		1.006	Master		0.9871			
0.9800 (Minimum)	1.000 (Nominal)	1.020 (Maximum)	0.9800 (Minimum)	0.9880 (Nominal)	0.9960 (Maximum)			

0.9900 (Minimum)	0.9940 (Nominal)	1.015 (Maximum)	0.9850 (Minimum)	0.9940 (Nominal)	1.010 (Maximum)	
Master: 2-May-2021 7:36						

Litho-Density Spectroscopy Cartridge – B / Equipment Identification

Primary Equipment:
LDSC Cartridge

LDSC – B 521

Auxiliary Equipment:
LDSC Housing

LDSH – A 319

Accelerator-Porosity Tool / Equipment Identification

Primary Equipment:
Accelerator-Porosity Sonde
APS Minitron

APS – C 249
MNTR – F 51002

Auxiliary Equipment:
Accelerator-Porosity Housing
APS Calibration Water Tank
APS Aluminum Calibrator Sleeve

APH – AC 152
SFT – 178 1
SFT – 281 1

Accelerator-Porosity Tool Wellsite Calibration														
Detector Background														
Phase	Near Det Bkg Cntrate CPS			Value	Phase	Far Det Bkg Cntrate CPS			Value	Phase	Array-1 Det Bkg Cntrate CPS			Value
Master				25.16	Master				24.05	Master				23.15
Before				26.50	Before				24.80	Before				23.68
After				24.84	After				24.71	After				24.48
1.000 (Minimum)30.00 (Nominal)50.00 (Maximum)					1.000 (Minimum)30.00 (Nominal)50.00 (Maximum)					1.000 (Minimum)30.00 (Nominal)50.00 (Maximum)				
Phase	Array-2 Det Bkg Cntrate CPS			Value	Phase	Array Therm Det Bkg Cntrate CPS			Value					
Master				23.93	Master				26.33					
Before				23.79	Before				25.33					
After				24.83	After				24.90					
1.000 (Minimum)30.00 (Nominal)50.00 (Maximum)					1.000 (Minimum)30.00 (Nominal)50.00 (Maximum)									
Master: 3-May-2021 6:13Before: 8-Jul-2021 13:55After: 8-Jul-2021 19:12														

Master: 3-May-2021 6:13

Before: 8-Jul-2021 13:55

After: 8-Jul-2021 19:12

Accelerator-Porosity Tool Wellsite Calibration														
Calibration Ratios														
Phase	Near/Far Calibration Ratio			Value	Phase	Near/Array Calibration Ratio			Value	Phase	Near/Array Cal Ratio Up/Down			Value
Master				0.9424	Master				1.083	Master				1.016
	0.8000 (Minimum)	0.9250 (Nominal)	1.050 (Maximum)			0.9000 (Minimum)	1.030 (Nominal)	1.170 (Maximum)			0.9700 (Minimum)	1.000 (Nominal)	1.030 (Maximum)	
Master: 3-May-2021 6:15														

Master: 3-May-2021 6:15

Accelerator-Porosity Tool Wellsite Calibration														
Tank Check														
Phase	Array-1 Standoff Porosity PU			Value	Phase	Array-2 Standoff Porosity PU			Value	Phase	Average Slowing Down Time US			Value
Master				11.04	Master				10.88	Master				5.997
	9.900 (Minimum)	11.75 (Nominal)	13.60 (Maximum)			9.900 (Minimum)	11.75 (Nominal)	13.60 (Maximum)			5.500 (Minimum)	6.000 (Nominal)	6.250 (Maximum)	
Phase	Array-1 SDT Ratio Up/Down			Value	Phase	Array-2 SDT Ratio Up/Down			Value	Phase	Sigma Formation CU			Value
Master				0.9943	Master				0.9896	Master				27.71
	0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)			0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)			20.00 (Minimum)	27.50 (Nominal)	35.00 (Maximum)	

Master: 3-May-2021 6:16

Accelerator-Porosity Tool Master Calibration										
Detector Calibration										
Phase	Near/Far Calibration Ratio		Value	Phase	Near/Array Calibration Ratio		Value	Phase	Near/Array Cal Ratio Up/Down	Value
Master			0.9424	Master			1.083	Master		1.016

Master	0.8000 (Minimum)	0.9250 (Nominal)	1.050 (Maximum)	Master	0.9000 (Minimum)	1.030 (Nominal)	1.170 (Maximum)	Master	0.9700 (Minimum)	1.000 (Nominal)	1.030 (Maximum)
Master: 3-May-2021 6:15											

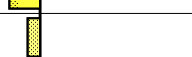
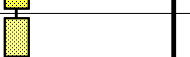
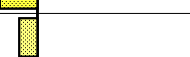












Accelerator-Porosity Tool Master Calibration											
Tank Check											
Phase	Array-1 Standoff Porosity PU		Value	Phase	Array-2 Standoff Porosity PU		Value	Phase	Average Slowing Down Time US		Value
Master			11.04	Master			10.88	Master			5.997
	9.900 (Minimum)	11.75 (Nominal)	13.60 (Maximum)		9.900 (Minimum)	11.75 (Nominal)	13.60 (Maximum)		5.500 (Minimum)	6.000 (Nominal)	6.250 (Maximum)
Phase	Array-1 SDT Ratio Up/Down		Value	Phase	Array-2 SDT Ratio Up/Down		Value	Phase	Sigma Formation CU		Value
Master			0.9943	Master			0.9896	Master			27.71
	0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)		20.00 (Minimum)	27.50 (Nominal)	35.00 (Maximum)
Master: 3-May-2021 6:16											




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 GSR – U	102 6098

Hostile Natural Gamma Ray Sonde Wellsite Calibration														
Detector 1 Check														
Phase	Na 511 Peak Loc			Value	Phase	Na 511 Peak Res %			Value	Phase	High Voltage V			Value
Master	<div><div></div></div>			39.25	Master	<div><div></div></div>			16.53	Master	<div><div></div></div>			1197
Before	<div><div></div></div>			39.64	Before	<div><div></div></div>			14.84	Before	<div><div></div></div>			1168
After	<div><div></div></div>			39.73	After	<div><div></div></div>			15.11	After	<div><div></div></div>			1198
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	<div><div></div></div>			141.8	Master	<div><div></div></div>			8.905	Master	<div><div></div></div>			26.59
Before	<div><div></div></div>			143.3	Before	<div><div></div></div>			7.709	Before	<div><div></div></div>			11.69
After	<div><div></div></div>			141.2	After	<div><div></div></div>			9.136	After	<div><div></div></div>			26.63
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	<div><div></div></div>			12.01										
Before	<div><div></div></div>			12.89										
After	<div><div></div></div>			12.67										
10.00 (Minimum)45.00 (Nominal)100.0 (Maximum)														
Master: 2–May–2021 10:04				Before: 13–Jun–2021 9:44				After: 2–May–2021 10:16						

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		39.88	Master		15.29	Master		1122
Before		39.51	Before		15.27	Before		1090

After		39.79	After		15.32	After		1121
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		8.040	Master		27.21
Before		140.8	Before		9.507	Before		12.30
After		142.5	After		10.27	After		27.24
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		12.32						
Before		13.60						
After		12.95						
10.00 (Minimum)	45.00 (Nominal)	100.0 (Maximum)						
Master: 2-May-2021 10:04			Before: 13-Jun-2021 9:44			After: 2-May-2021 10:16		

Hostile Natural Gamma Ray Sonde Wellsite Calibration			
Ratio Of Detector 1 To Detector 2			
Phase	Coincidence Count Rate Ratio	Value	
Master		0.9728	
Before		0.9527	
After		0.9769	
	0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)
Master: 2-May-2021 10:04			
Before: 13-Jun-2021 9:44			
After: 2-May-2021 10:16			

Hostile Natural Gamma Ray Sonde Master Calibration														
Detector 1 Calibration														
Phase	Na 511 Peak Set Point			Value	Phase	Th Peak Loc			Value	Phase	Th Peak Res %			Value
Master	<div><div></div></div>			41.00	Master	<div><div></div></div>			209.6	Master	<div><div></div></div>			6.625
38.00 (Minimum) 40.00 (Nominal) 43.00 (Maximum)					201.0 (Minimum) 209.6 (Nominal) 218.3 (Maximum)					5.000 (Minimum) 7.000 (Nominal) 9.000 (Maximum)				
Phase	Background Count Rate CPS			Value	Phase	Gain Ratio			Value					
Master	<div><div></div></div>			17.82	Master	<div><div></div></div>			1.015					
10.00 (Minimum) 142.5 (Nominal) 265.0 (Maximum)					0.9400 (Minimum) 1.000 (Nominal) 1.060 (Maximum)									
Master: 2-May-2021 10:00														

Hostile Natural Gamma Ray Sonde Master Calibration														
Detector 2 Calibration														
Phase	Na 511 Peak Set Point			Value	Phase	Th Peak Loc			Value	Phase	Th Peak Res %			Value
Master				41.00	Master				208.8	Master				7.662
38.00 (Minimum) 40.00 (Nominal) 43.00 (Maximum)					201.0 (Minimum) 209.6 (Nominal) 218.3 (Maximum)					5.000 (Minimum) 7.000 (Nominal) 9.000 (Maximum)				
Phase	Background Count Rate CPS			Value	Phase	Gain Ratio			Value					
Master				16.78	Master				0.9961					
10.00 (Minimum) 142.5 (Nominal) 265.0 (Maximum)					0.9400 (Minimum) 1.000 (Nominal) 1.060 (Maximum)									
Master: 2-May-2021 10:00														

DTS Telemetry Tool / Equipment Identification		
Primary Equipment:		
DTC-H Auxiliary Cartridge	DTCH - A	8799
DTC-H Telemetry Cartridge	DTCH - A	8799
Auxiliary Equipment:		
DTCH Telemetry Cartridge Housing	ECH - KC	9842

Company:	International Ocean Discovery Program	Schlumberger
Well:	Expedition 395C, Site U1554F	
Field:	North Atlantic Mantle Convection&Climate	
Rig:	JOIDES Resolution	
Ocean:	Atlantic	
High Resolution Laterolog (HRLA) Litho Density (HLDS) / (APS) Porosity Natural Gamma / MSS (HNGS)		