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OTHER SERVICES1

- OS1: FMS/DSI
- OS2: VSI
- OS3:
- OS4:
- OS5:

REMARKS: RUN NUMBER 1

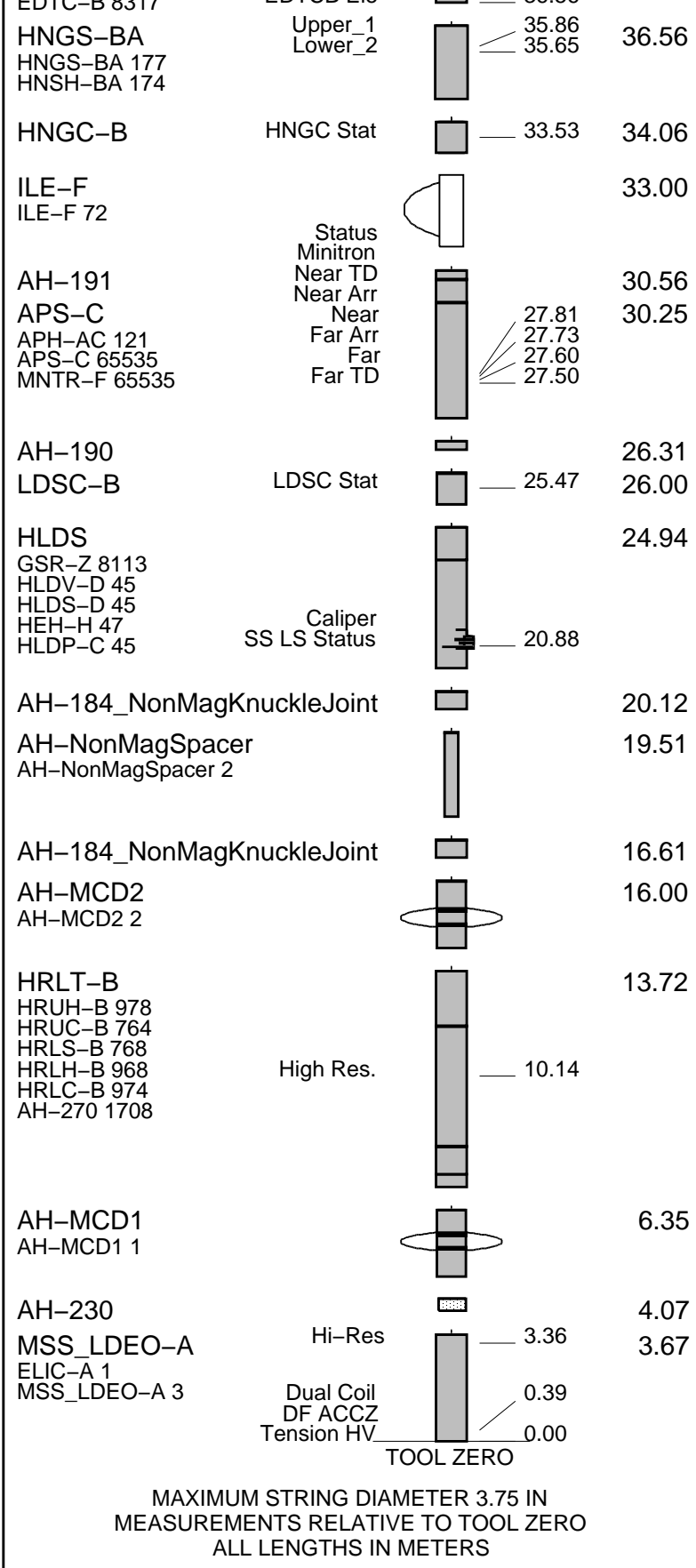
Hole drilled with tricone bottom hole assembly (BHA) specifically for logging. 9-7/8" BS
 Bit dropped at bottom of hole using MBR; pipe set at 597mbrf prior to logging.
 Drilled TD was 1212.4mbrf (714mbsf), drilled and logged with sea water as borehole fluid.
 Drill pipe set at 597mbrf (98.6mbsf) prior to logging.
 Triple-combo run with upper part eccentered using bowsprings and lower part centralized using MCDs.
 Fluid type was sea water; no barite corrections applied.
 Depth recorded from drill floor; logs presented as-logged without depth corrections or shifts, as per client instructions.
 All logs presented in wireline measured depth below rig floor (MDBRF).
 Caliper opened during upward passes; closed prior to re-entering pipe.
 Hole size corrections made using caliper measurements for upward passes; bit size for downlog.
 APS minitron off during downlog and repeat pass to avoid formation activation; turned on during main upward pass.
 Caliper closed at 630m on the fly to facilitate pipe entry; APS switched off once safely inside pipe to avoid GR contamination.

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

EQUIPMENT DESCRIPTION

RUN 1	RUN 2
SURFACE EQUIPMENT	
SFT-281 1	
SFT-178 1	
GSR-U 616008	
WITM (EDTS)-A	

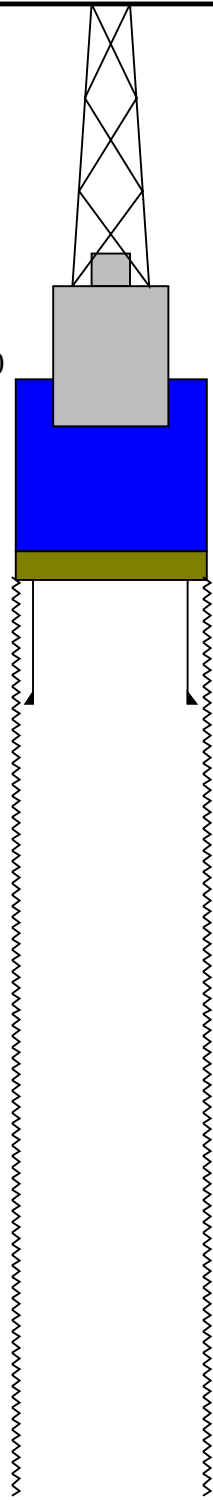
RUN 1	RUN 2
DOWNHOLE EQUIPMENT	
LEH-QT	
MDSB_EDTC	
Mud Tempe	38.54
CTEM	37.48
Gamma Ray	36.91
AH-369	38.98
EDTC-B	38.54
EFTB DIAG	
TelStatus	
EDTH-B 8303	
EDTC B 8247	36.56



Kelly Bushing Elevation 0.0

Derrick Floor Elevation 0.0

Mean Sea Level 11.0



498.475

Sea Floor

597.000125

Bit

1212.475

Total Depth - Dri

Schlumberger

Main Pass

MAXIS Field Log

Output DLIS Files

DEFAULT	MSS_LDEO_HRLA_LDL_009LUP	FN:11	PRODUCER	05-Nov-2015 21:24	1211.6 M	477.8 M
RTB	MSS_LDEO_HRLA_LDL_009LUP	FN:12	PRODUCER	05-Nov-2015 21:24	1211.6 M	477.8 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	EDTC-B	SKK-5169-EDTCB

PIP SUMMARY

Time Mark Every 60 S

HNGS Spectroscopy Gamma Ray

HNGS Spectroscopy Gamma Ray (HSGR)
(GAPI) 0 50

Area1
From HCGR to HSGR

HNGS Borehole Potassium (HBHK)
-0.05 (-----) 0.05

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

Calibrated
Downhole
Force
(CDF)
(LBF)
3000 0

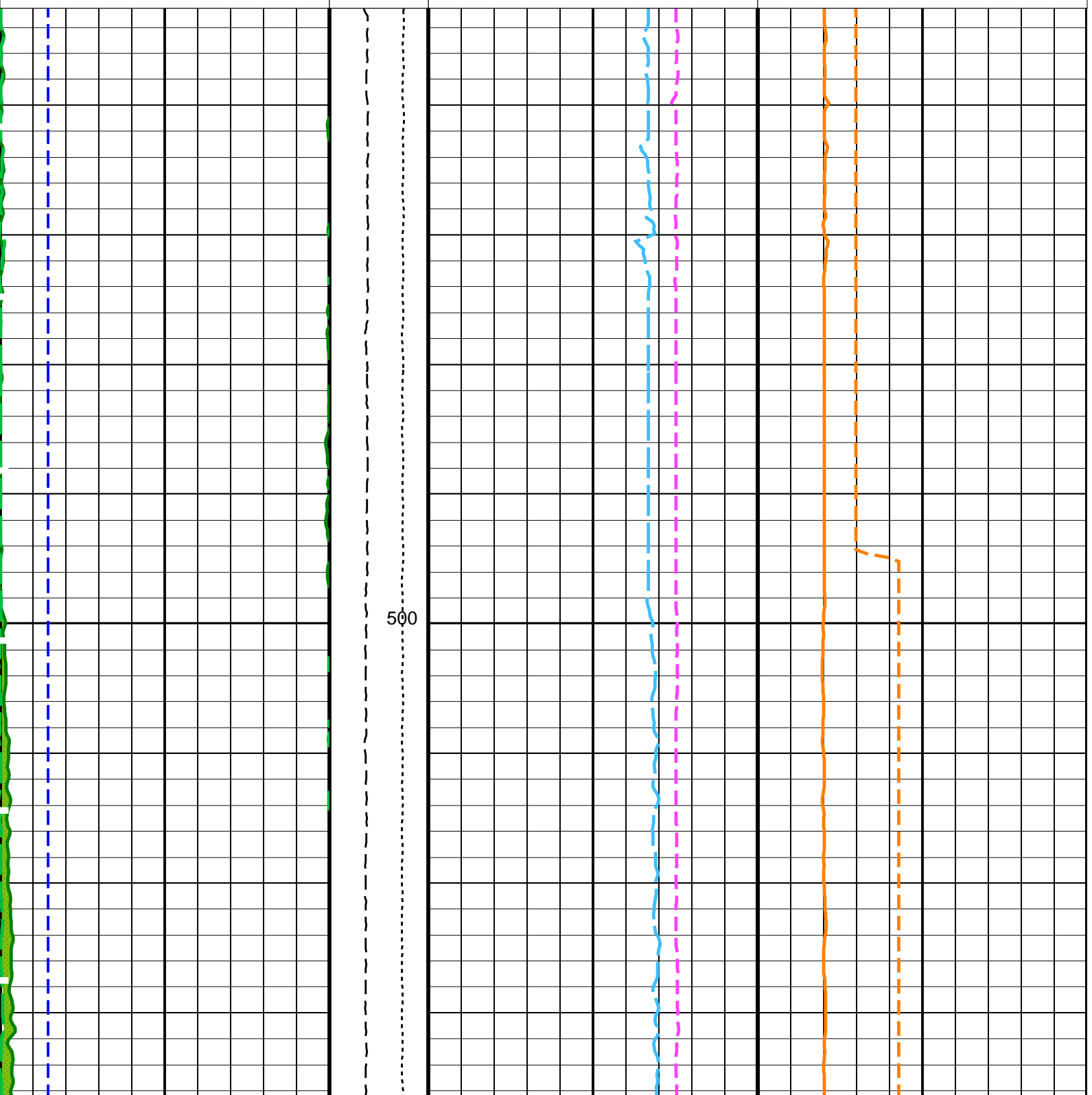
HNGS Uranium (HURA)
(PPM) -5 10

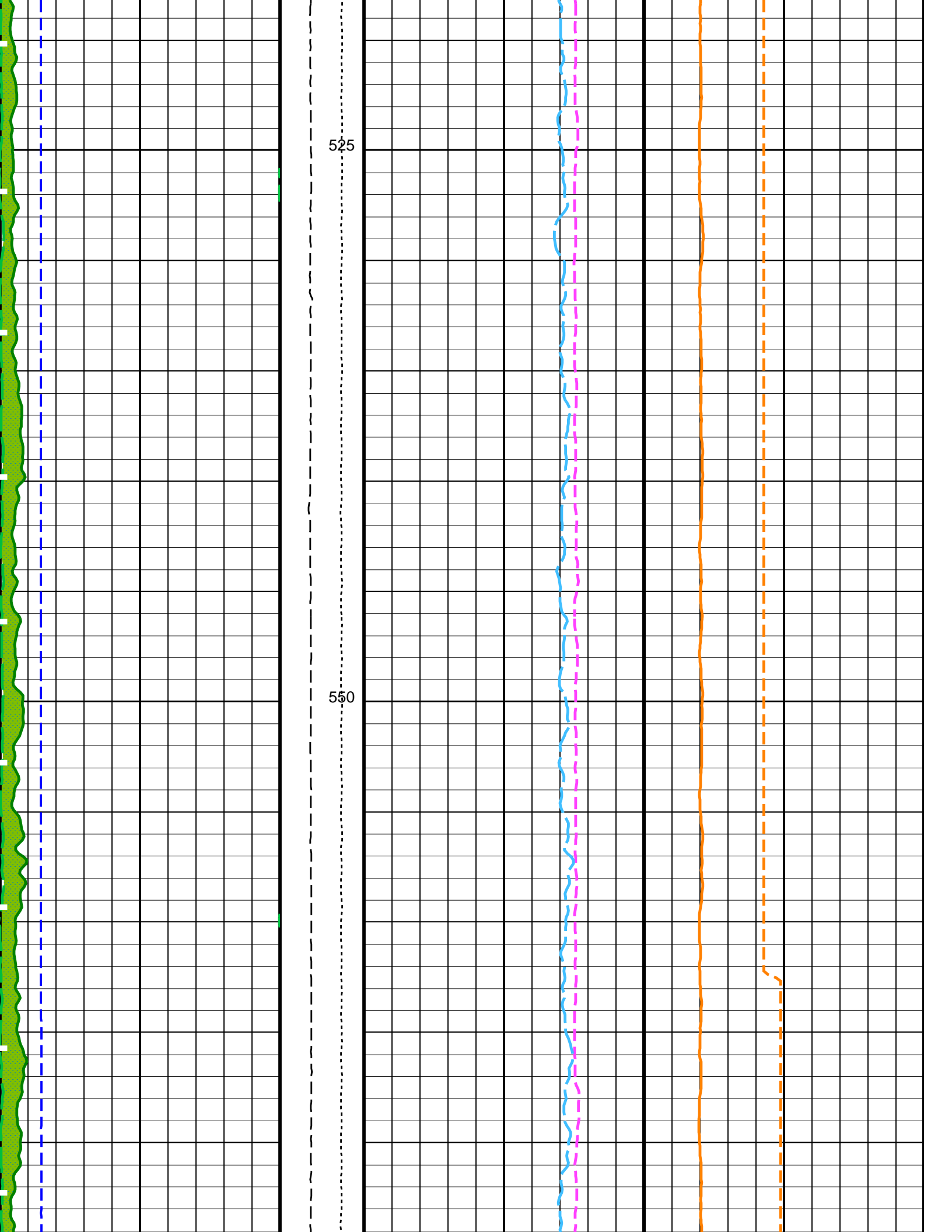
HLDS Caliper (LCAL)
(IN) 0 20

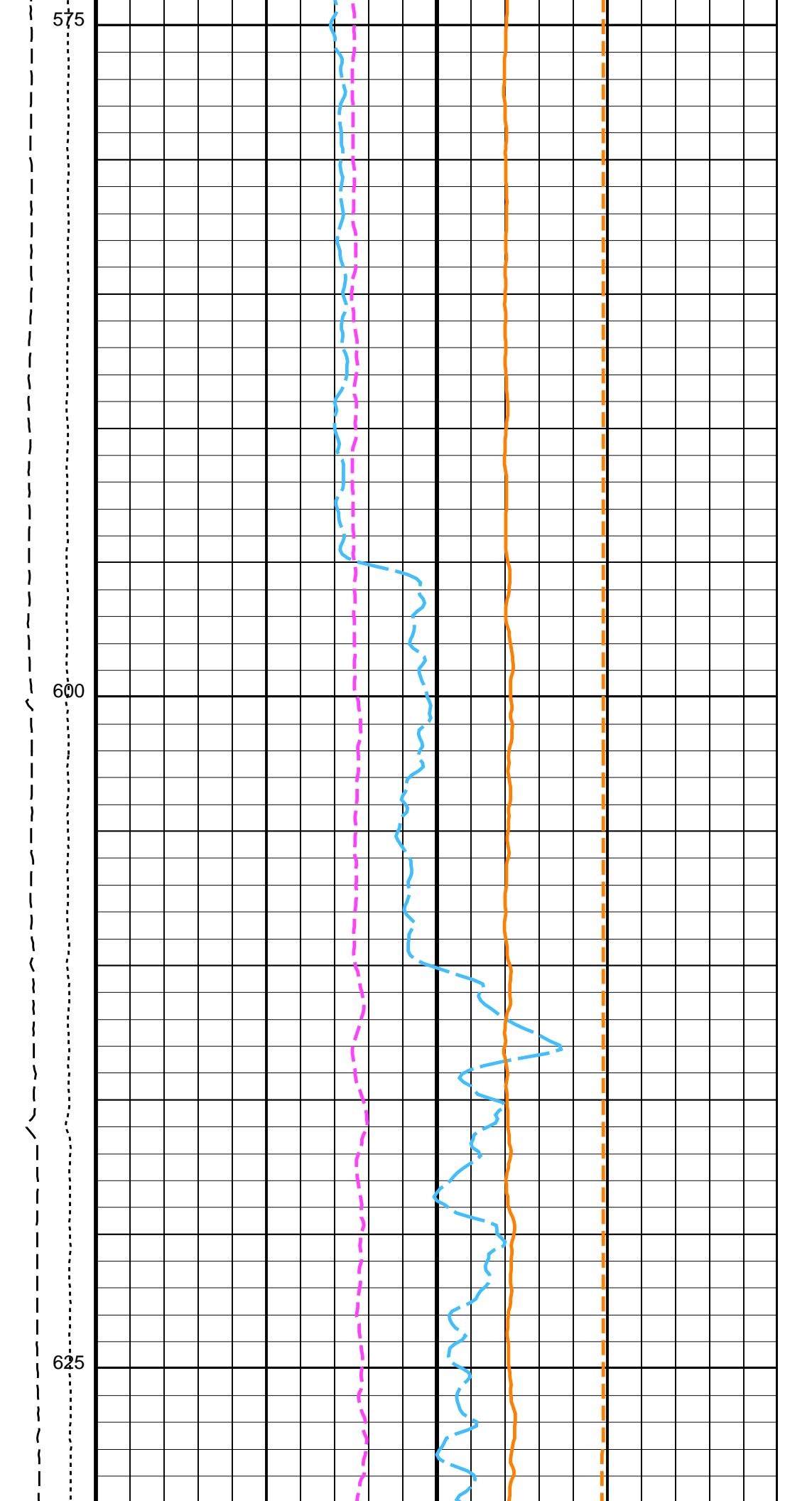
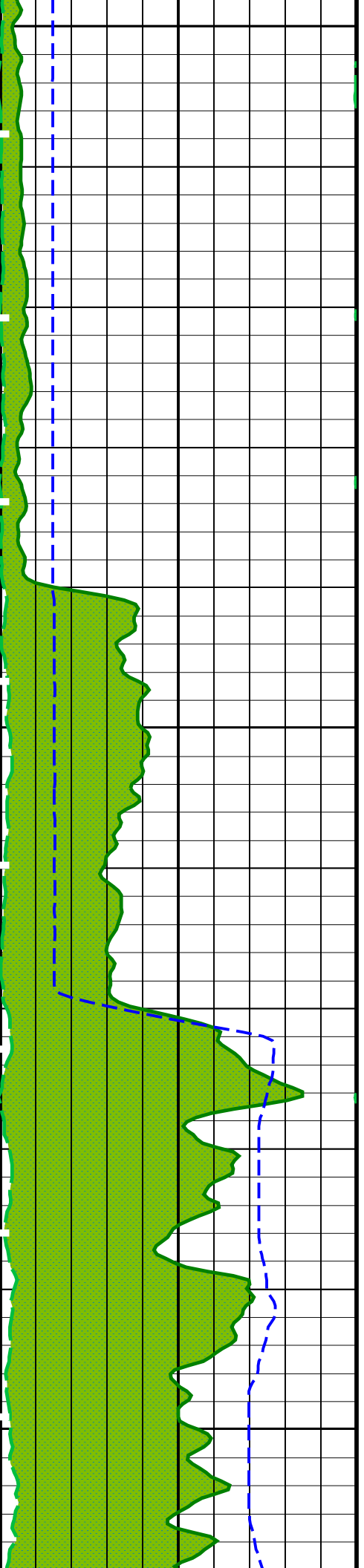
Tension
(TENS)
(LBF)
10000 0

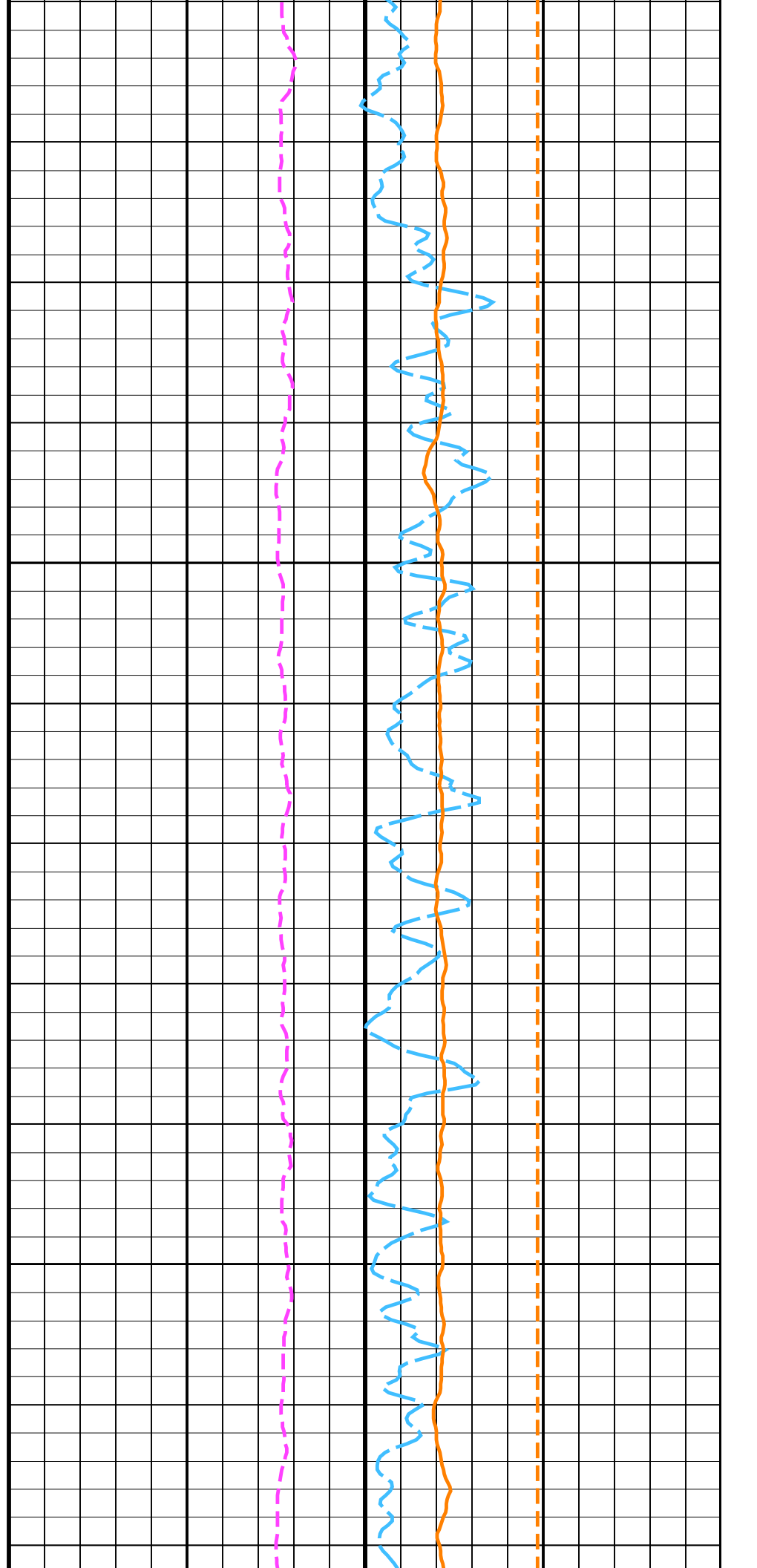
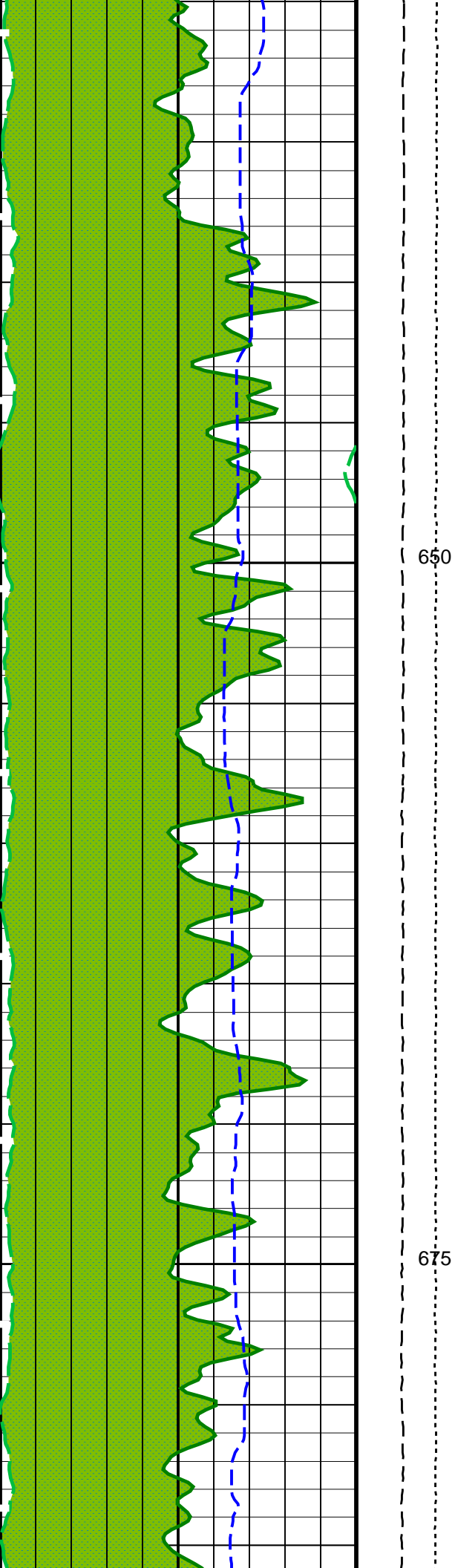
HNGS Thorium (HTHO)
(PPM) 5 25

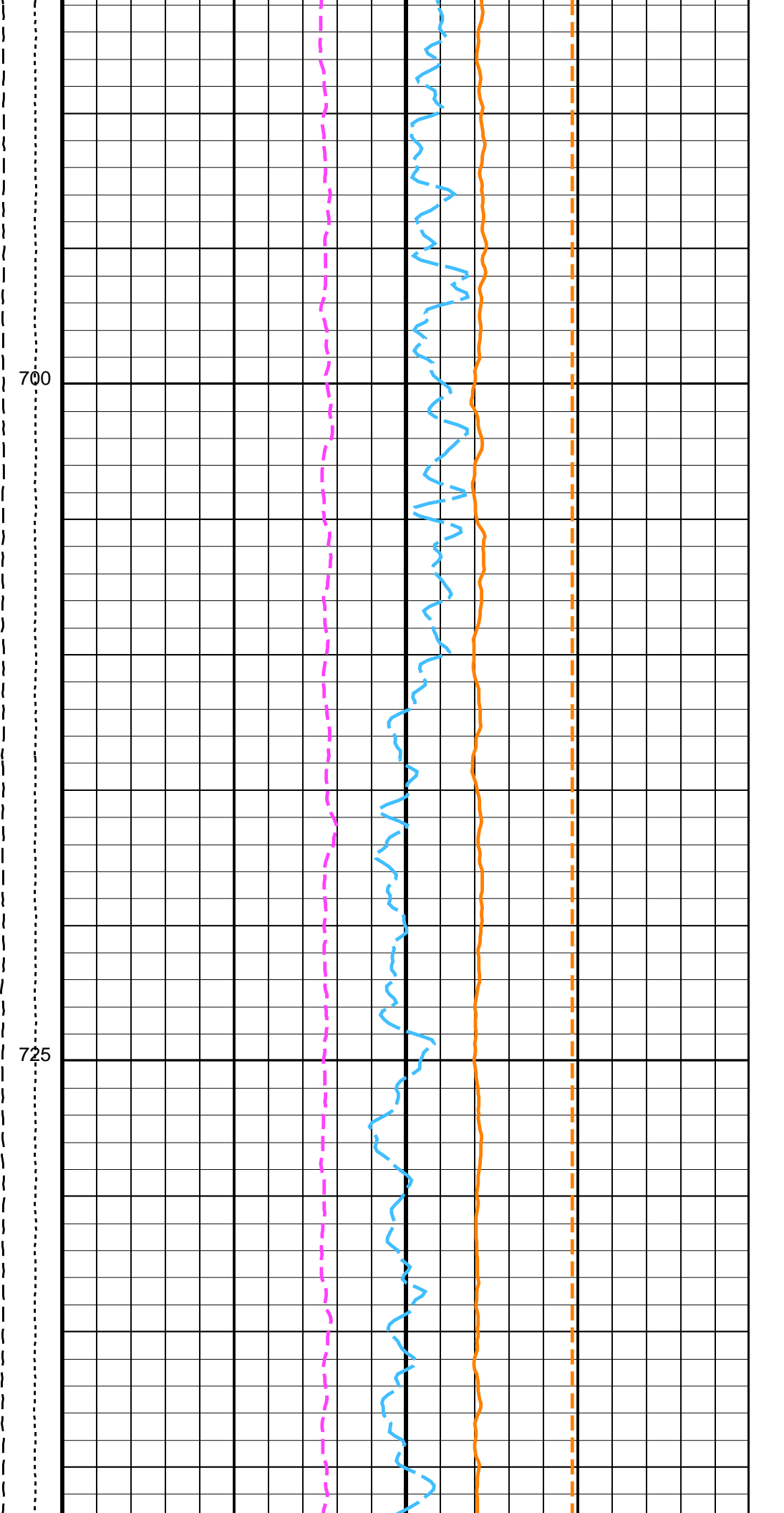
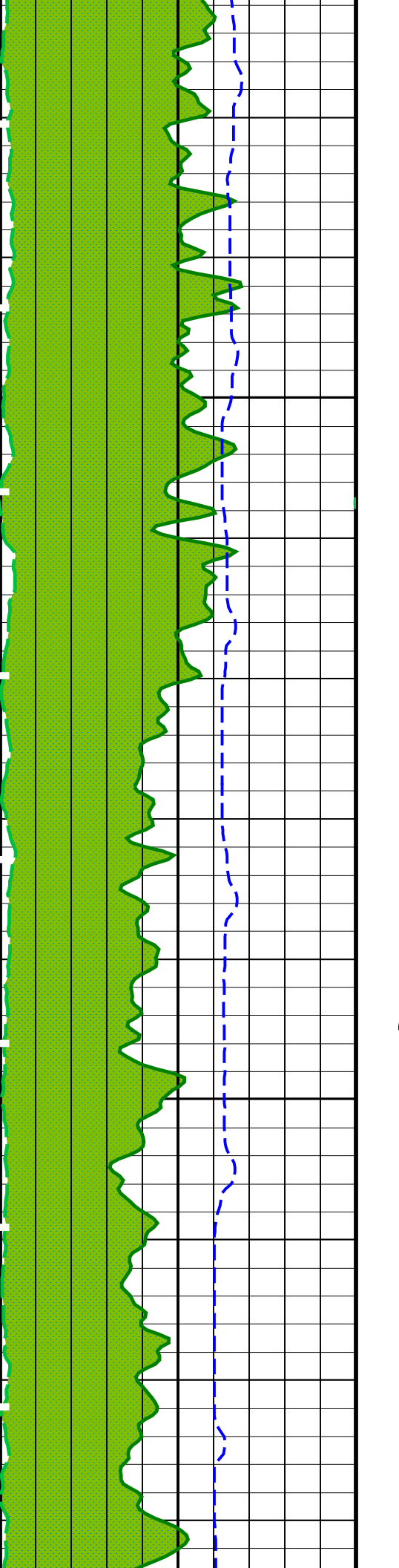
HNGS Potassium (HFK)
-0.01 (-----) 0.04

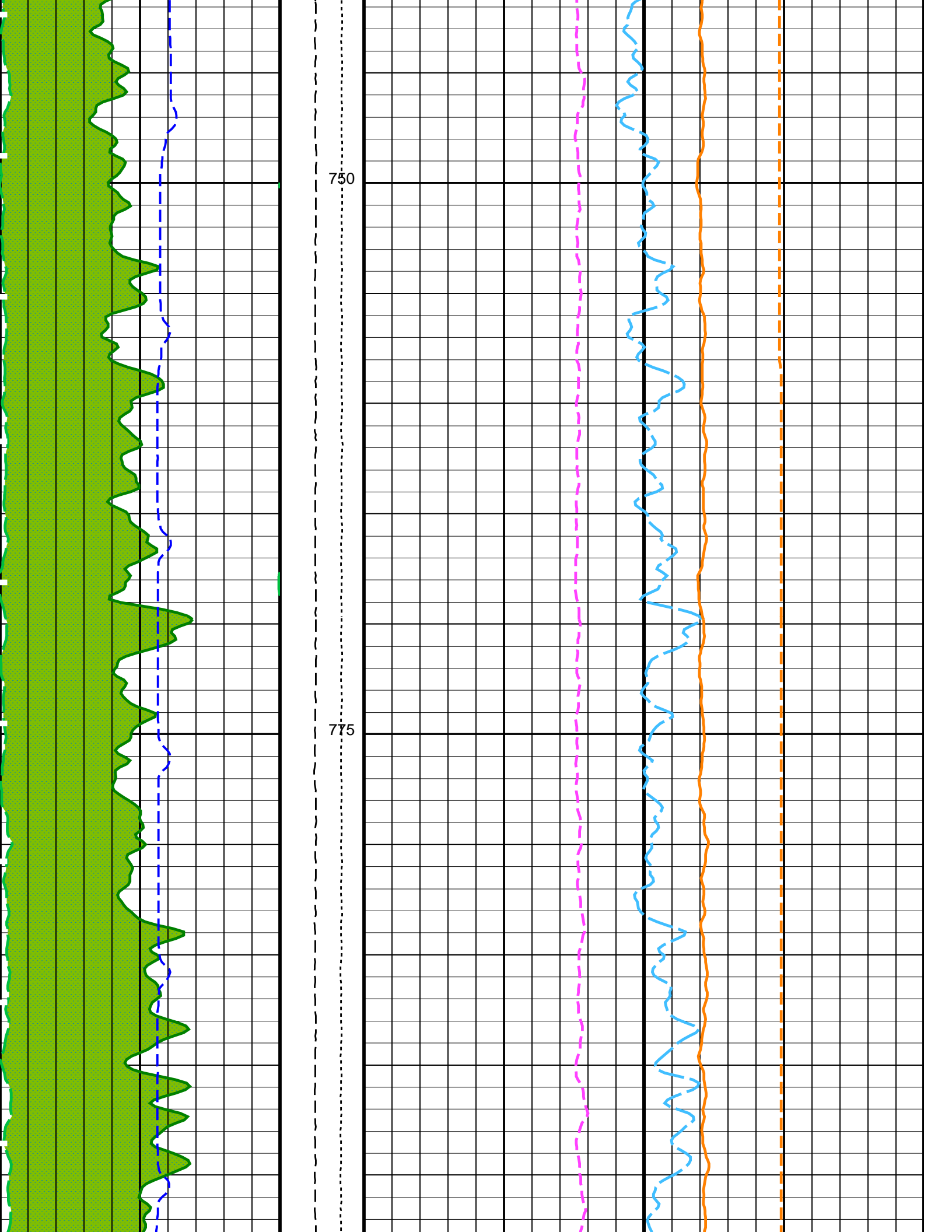


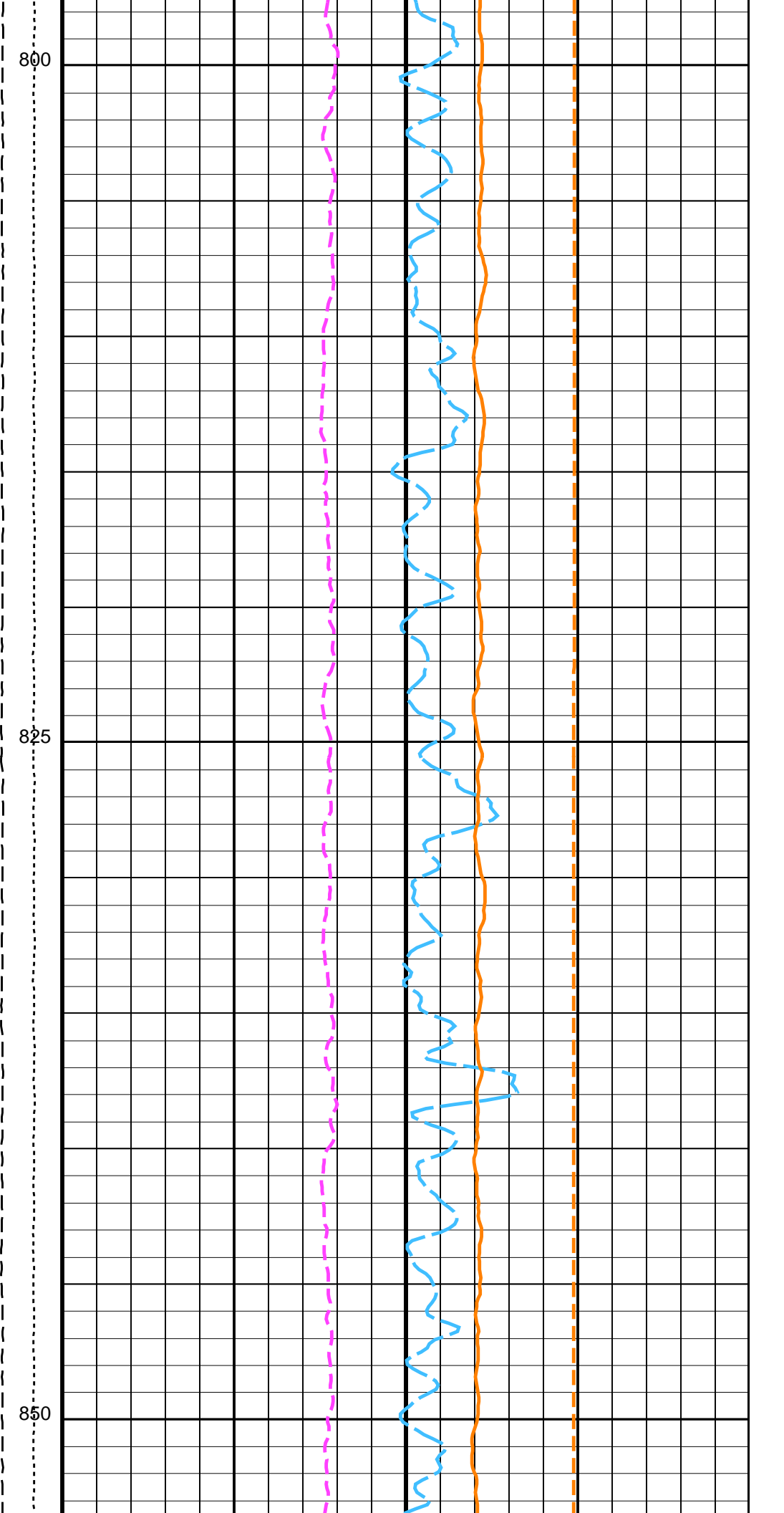
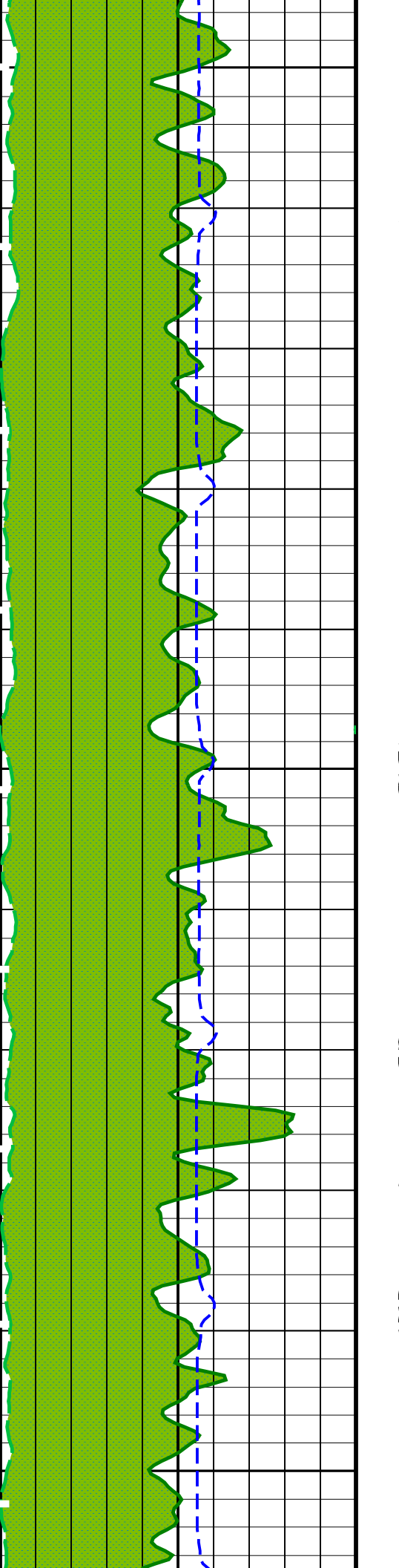


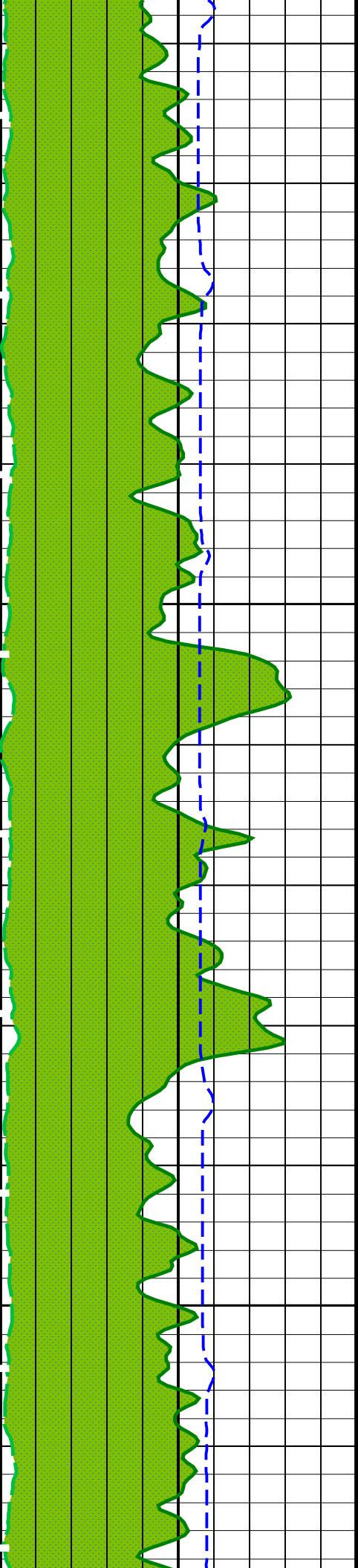






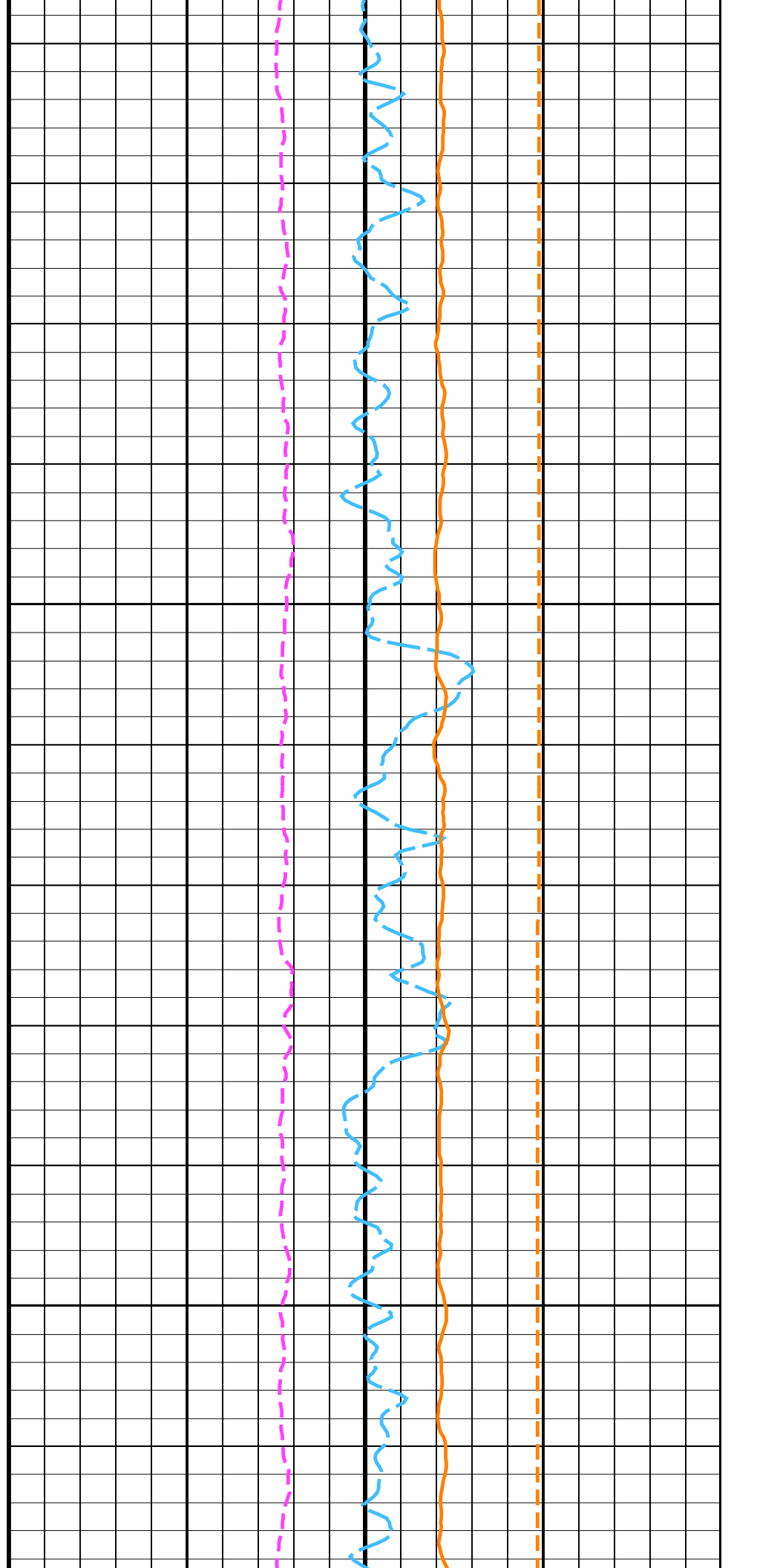


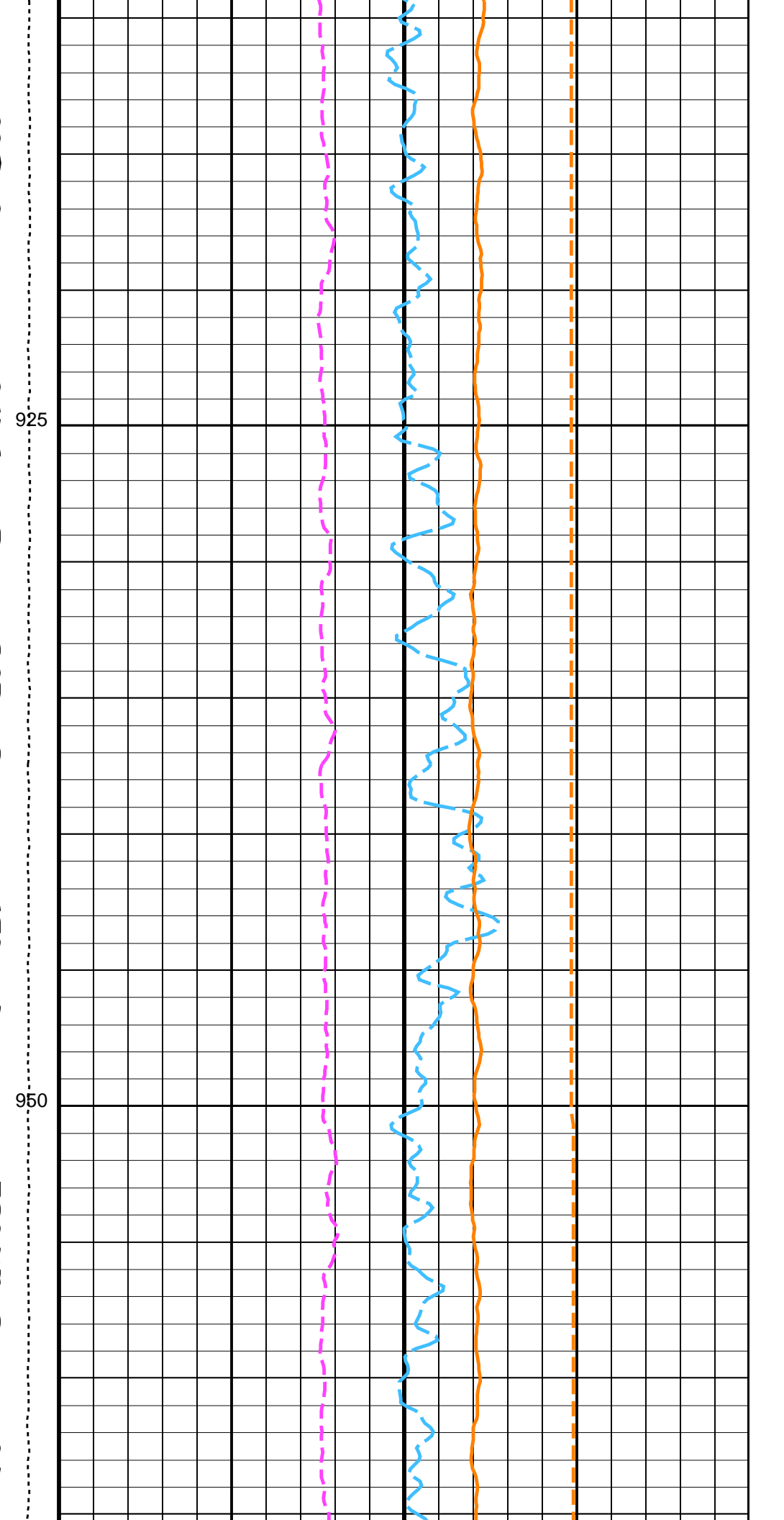
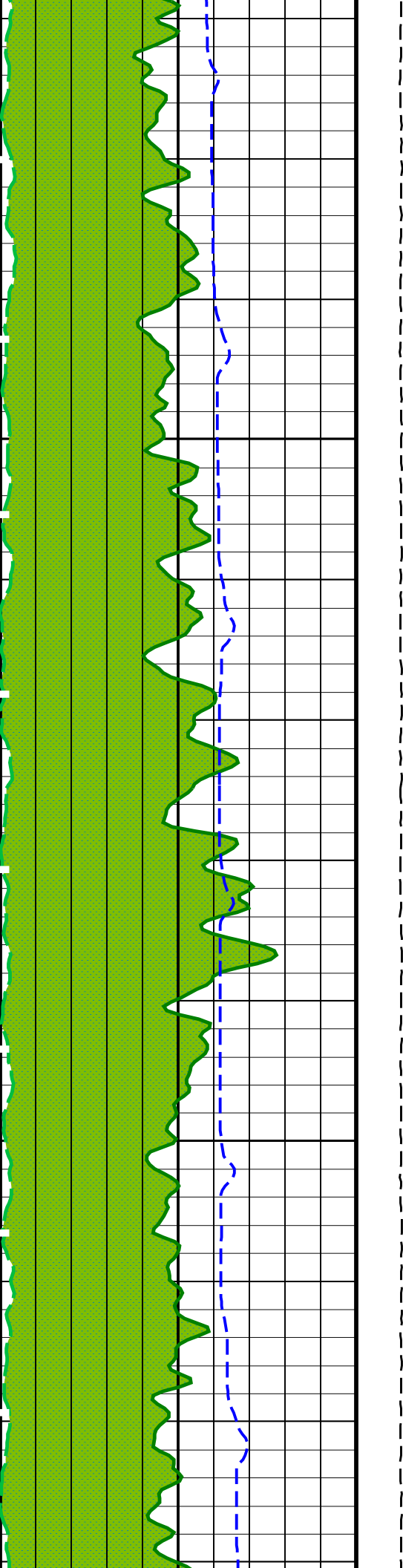


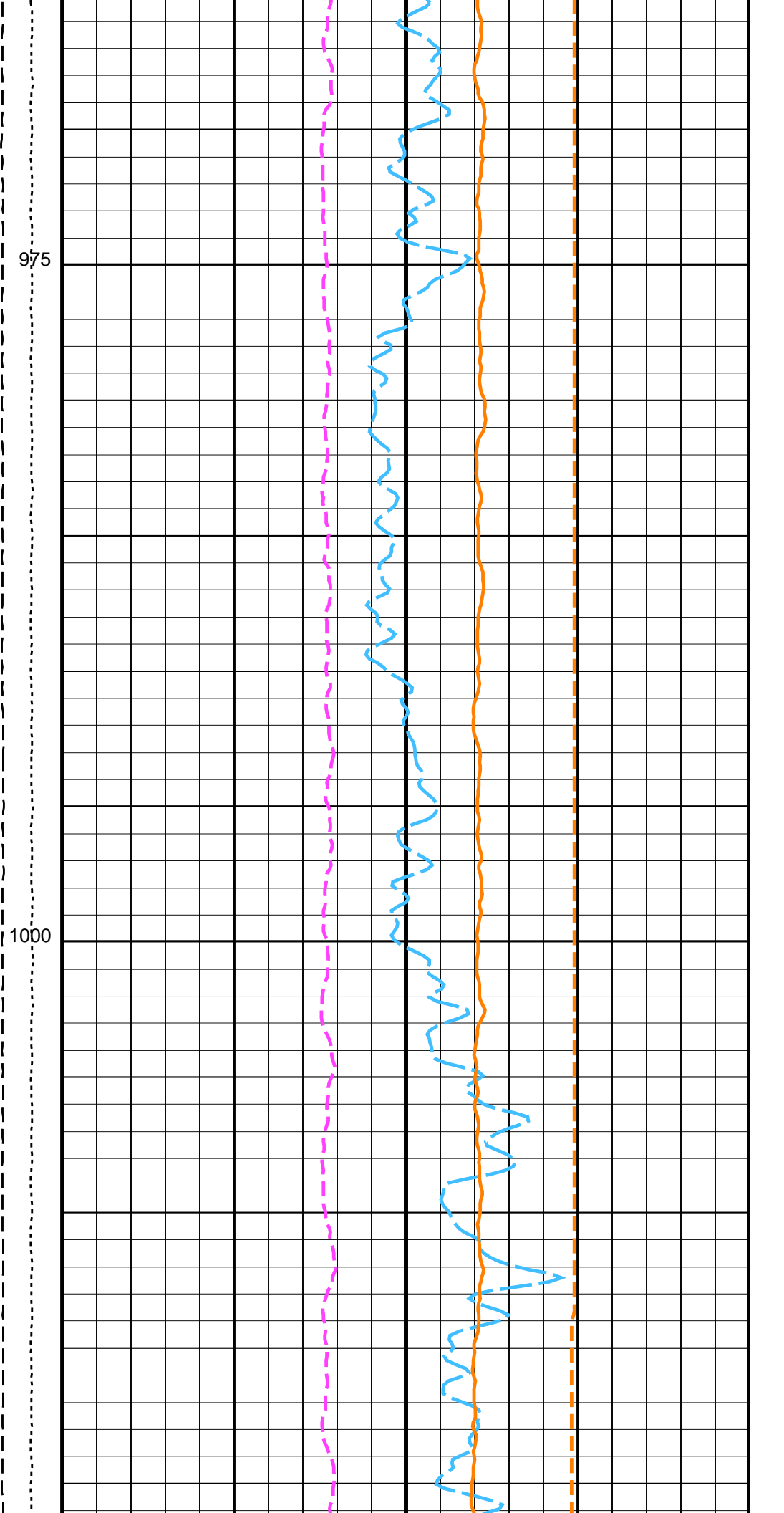
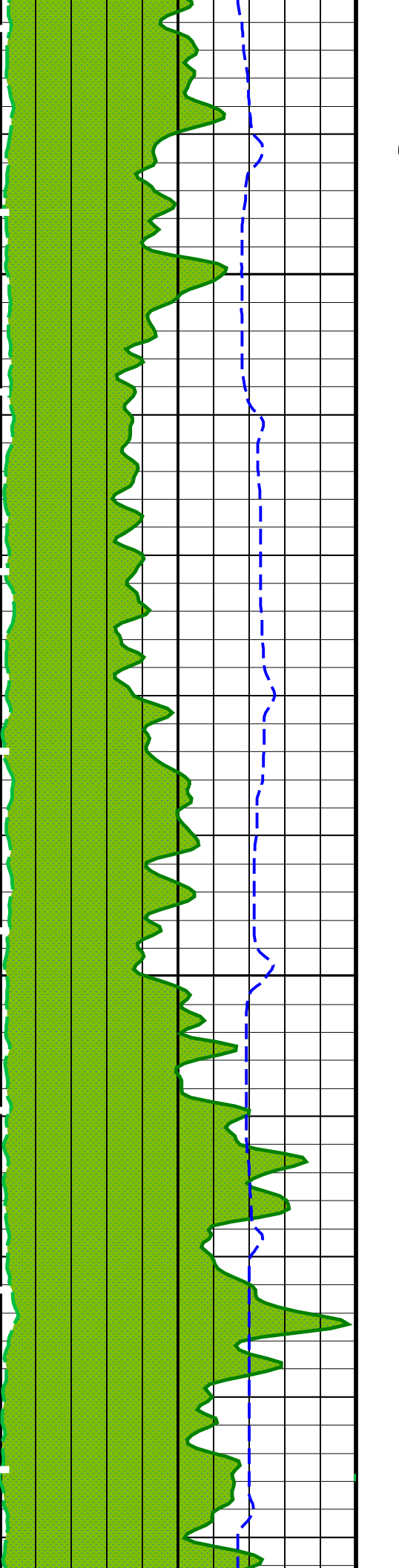


875

900

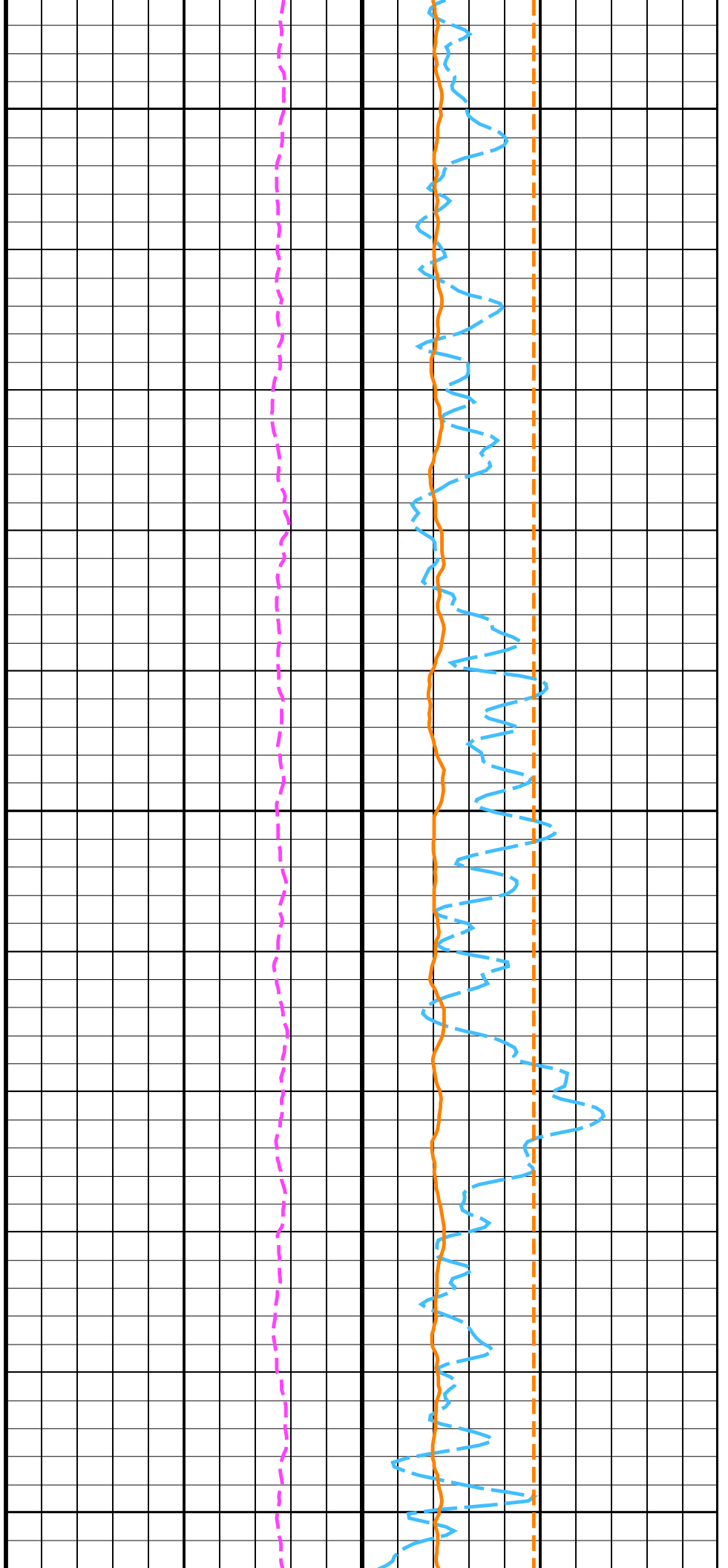
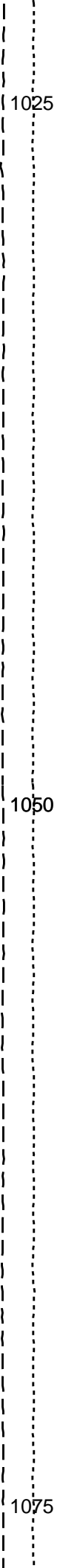
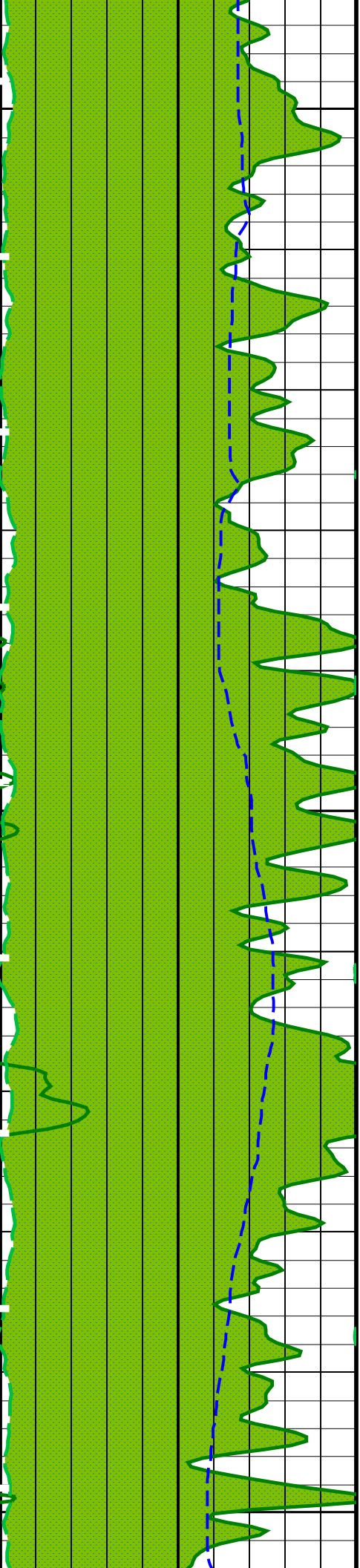


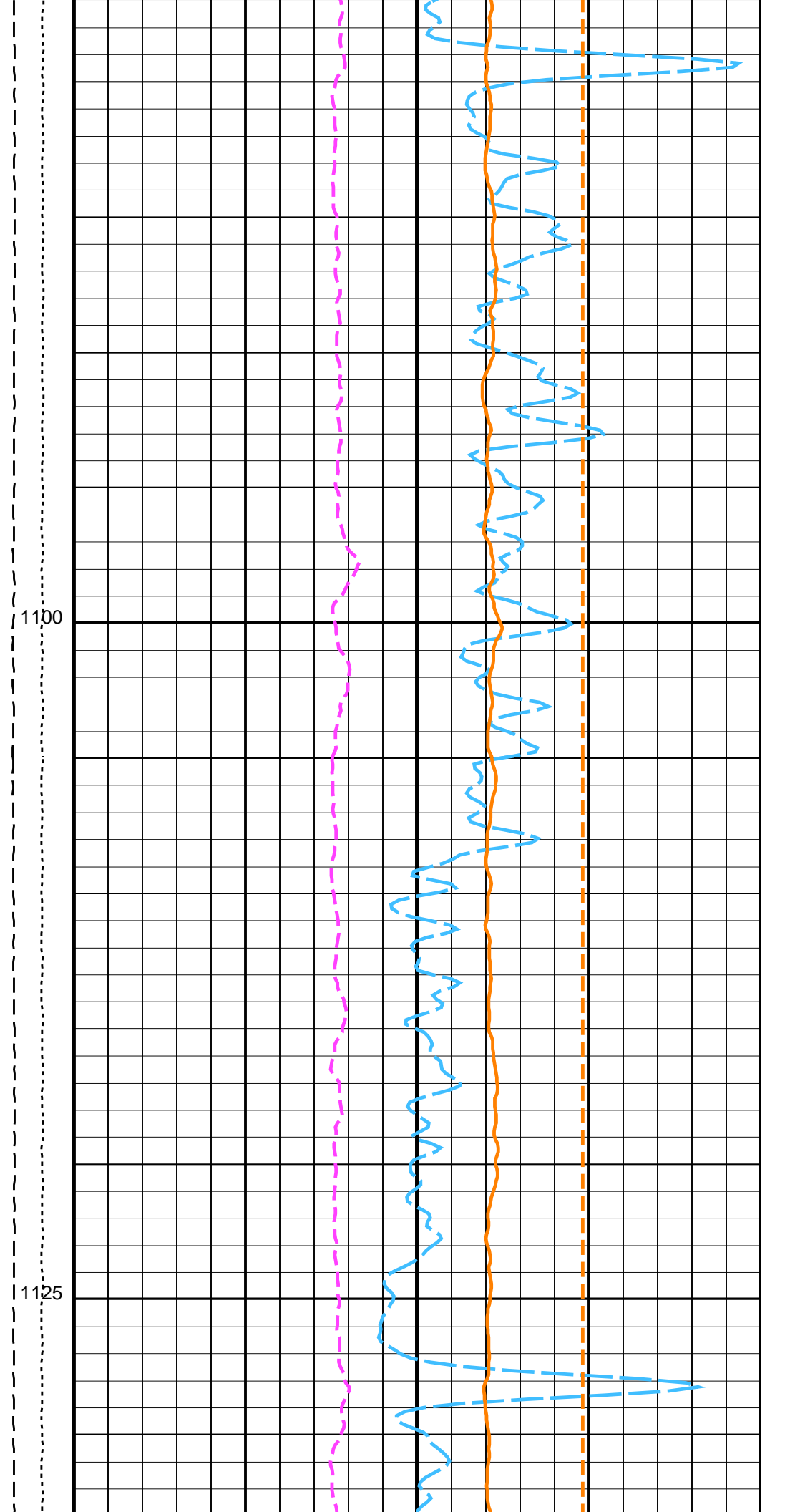
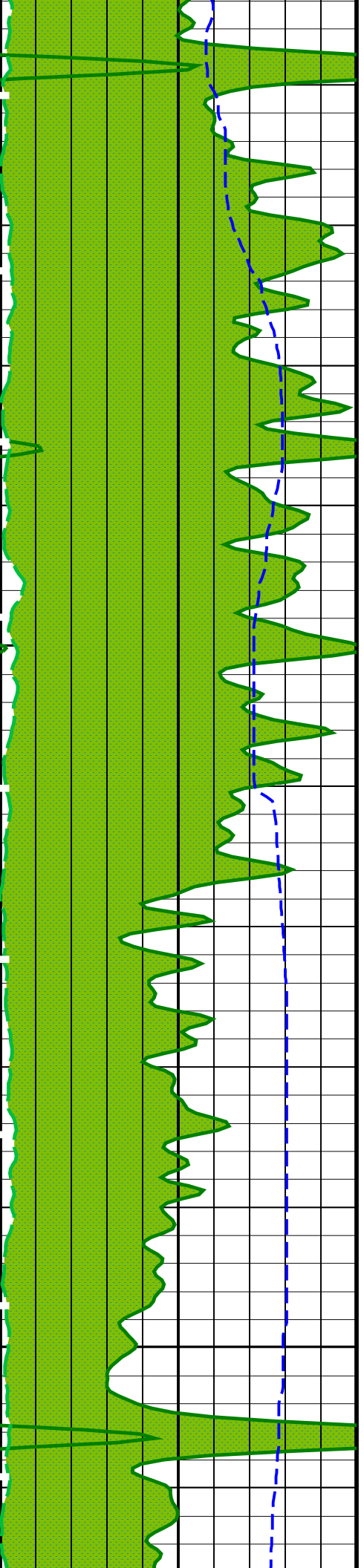


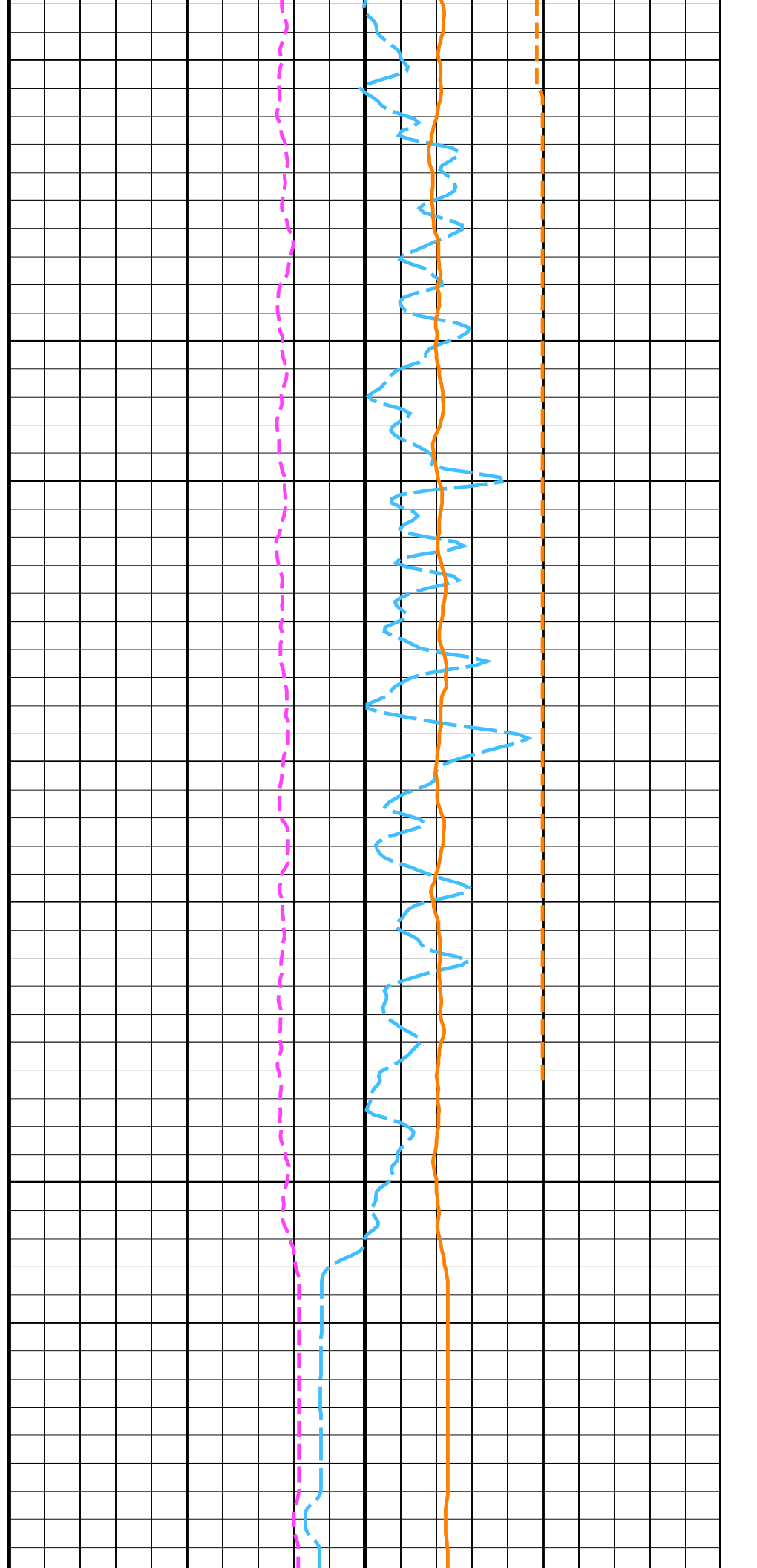
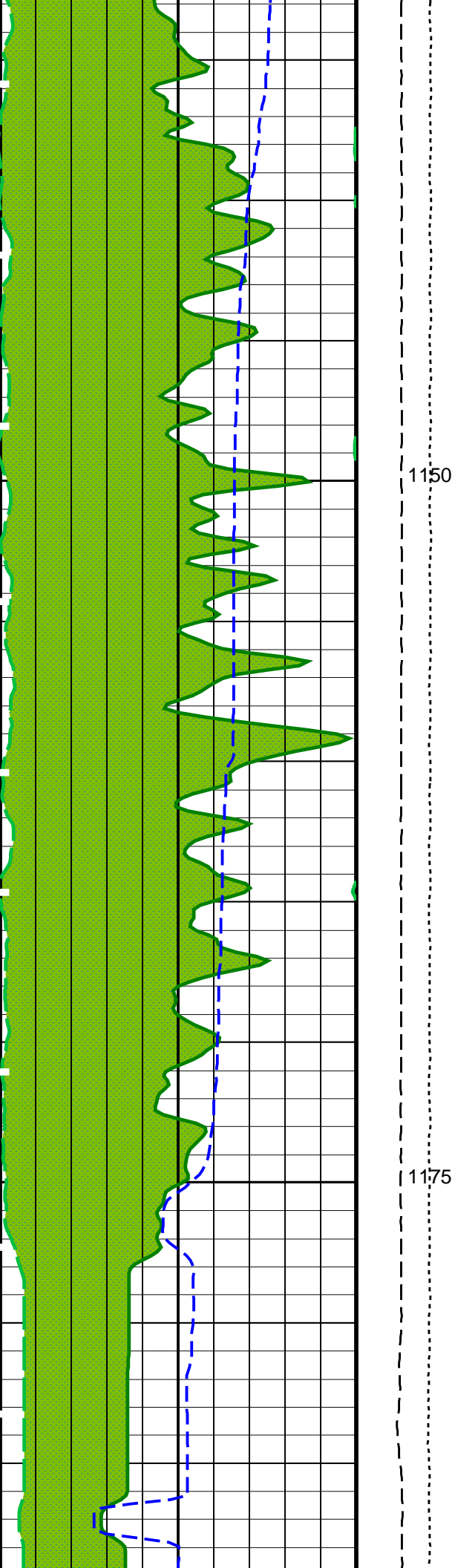


975

1000







HABK	HNGS Borehole Potassium Running Average	-0.000611808	
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	1.02304	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	1.00091	
	EDTC-B: Enhanced DTS Cartridge		
BHS	Borehole Status	OPEN	
GCSE	Generalized Caliper Selection	LCAL	
	System and Miscellaneous		
BS	Bit Size	9.875	IN
DFD	Drilling Fluid Density	1.05	G/C3

Format: HNGSYields Vertical Scale: 1:200 Graphics File Created: 05-Nov-2015 21:24

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	EDTC-B	SKK-5169-EDTCB

Output DLIS Files

DEFAULT	MSS_LDEO_HRLA_LDL_009LUP	FN:11	PRODUCER	05-Nov-2015 21:24
RTB	MSS_LDEO_HRLA_LDL_009LUP	FN:12	PRODUCER	05-Nov-2015 21:24

Output DLIS Files

DEFAULT	MSS_LDEO_HRLA_LDL_009LUP	FN:11	PRODUCER	05-Nov-2015 21:24	1211.6 M	476.3 M
RTB	MSS_LDEO_HRLA_LDL_009LUP	FN:12	PRODUCER	05-Nov-2015 21:24	1211.6 M	476.3 M

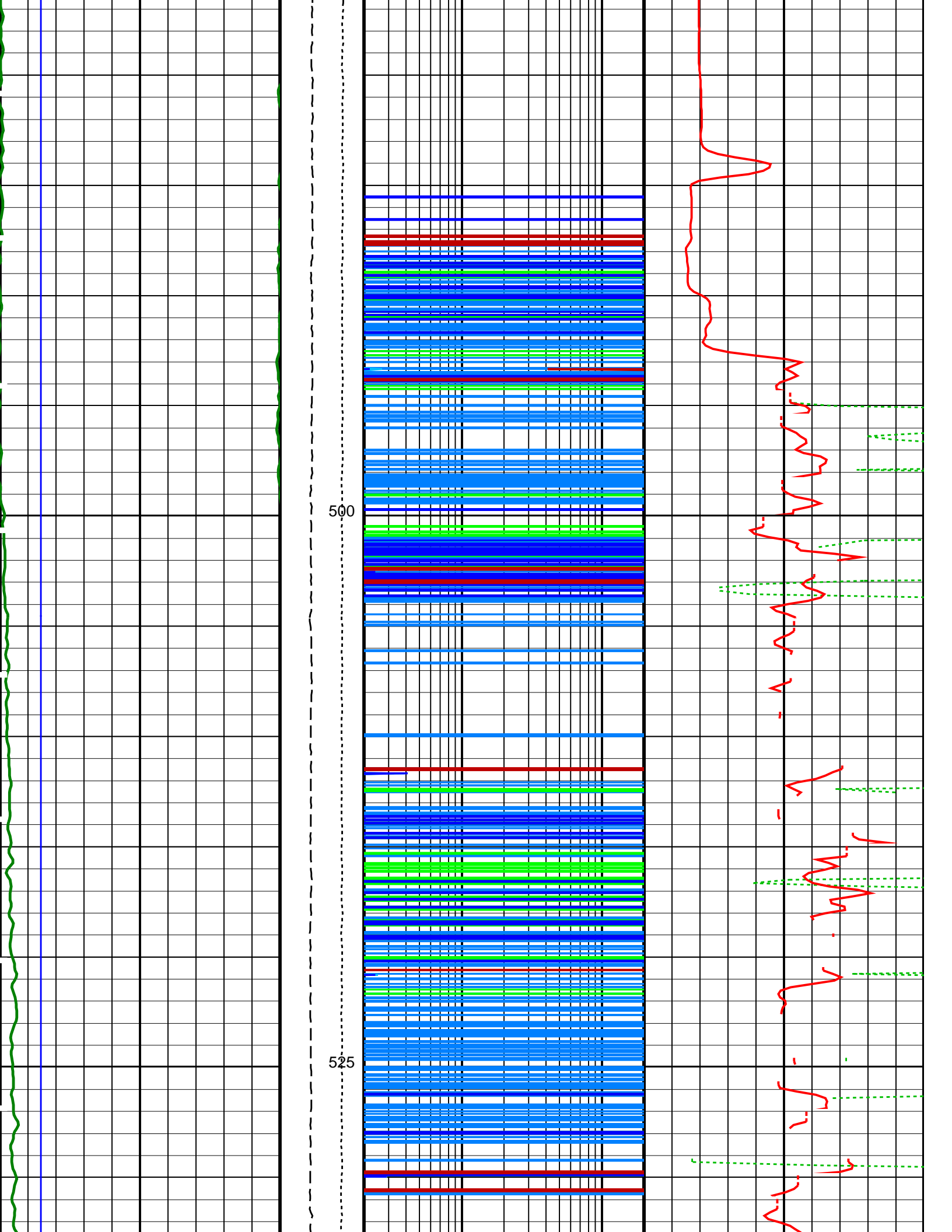
OP System Version: 19C0-187

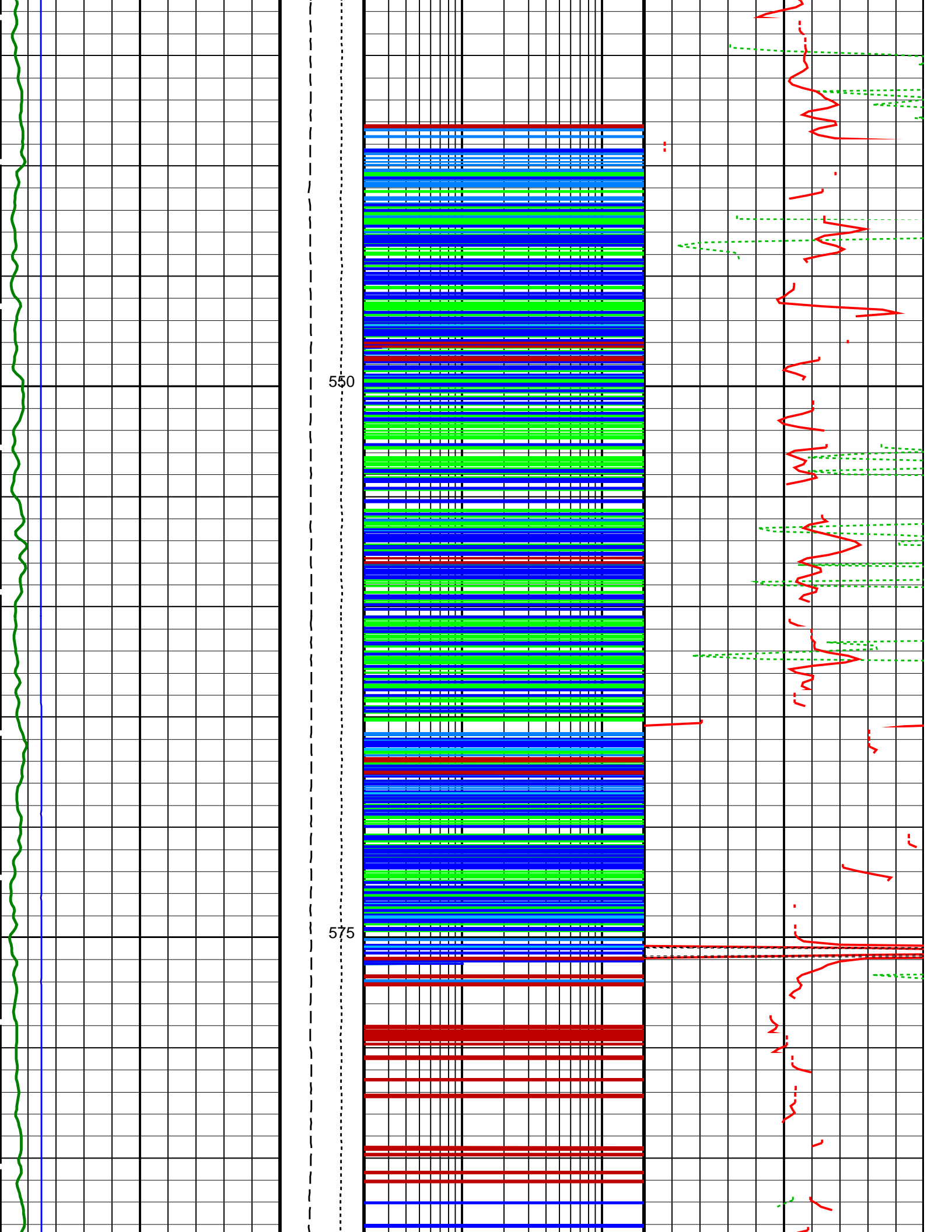
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HLDS	19C0-187	LDSC-B	19C0-187
APS-C	19C0-187	HNGC-B	19C0-187
HNGS-BA	19C0-187	EDTC-B	SKK-5169-EDTCB

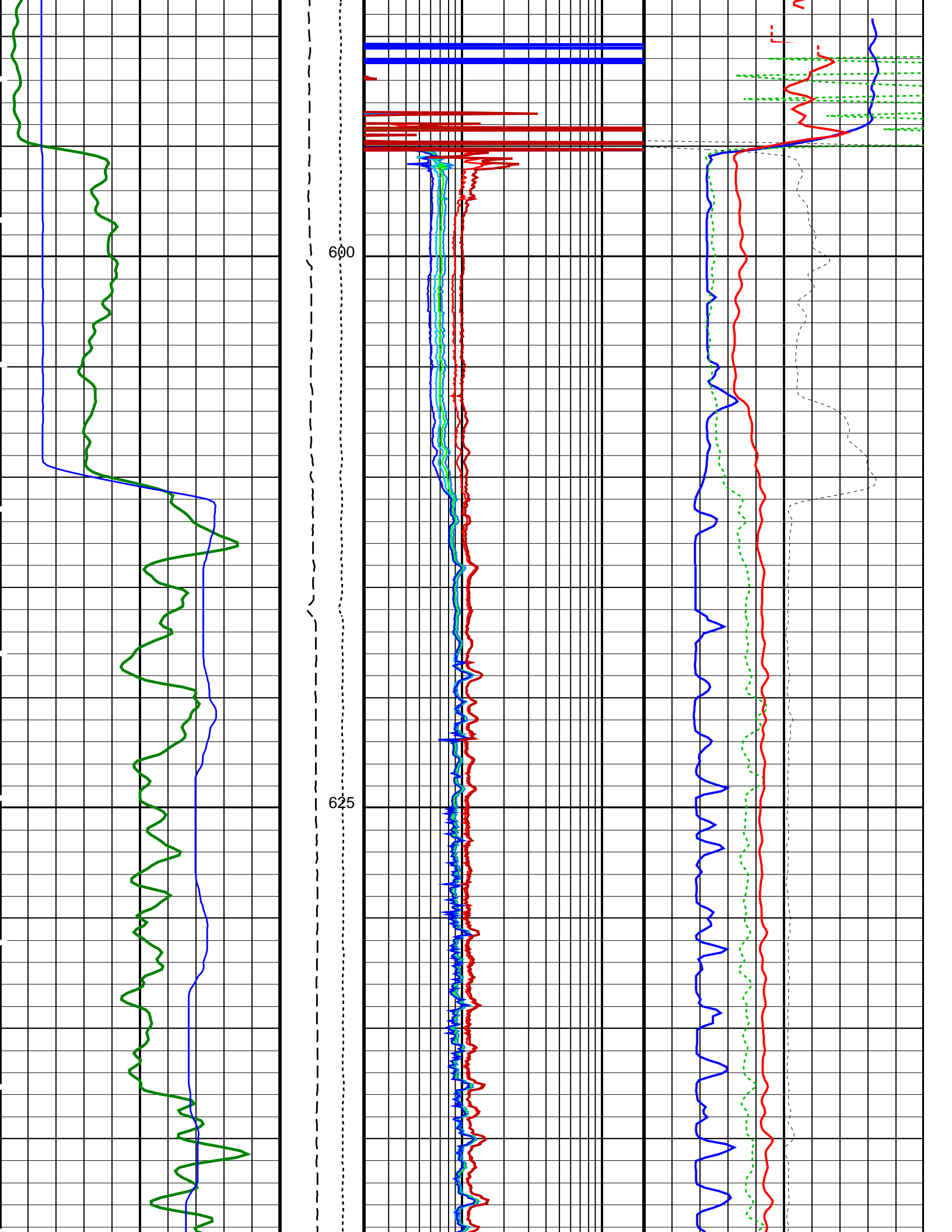
PIP SUMMARY

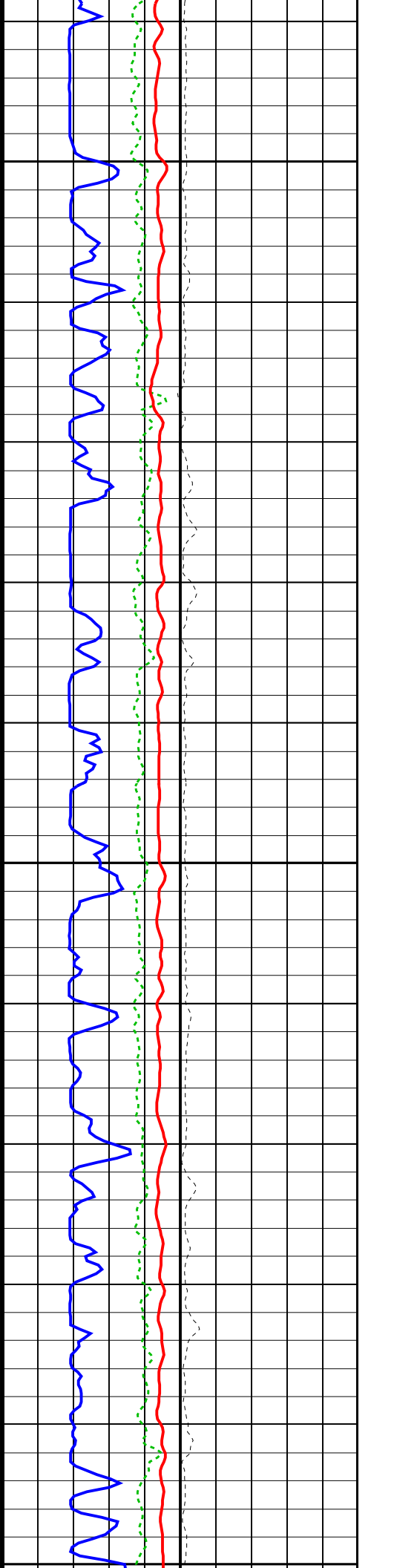
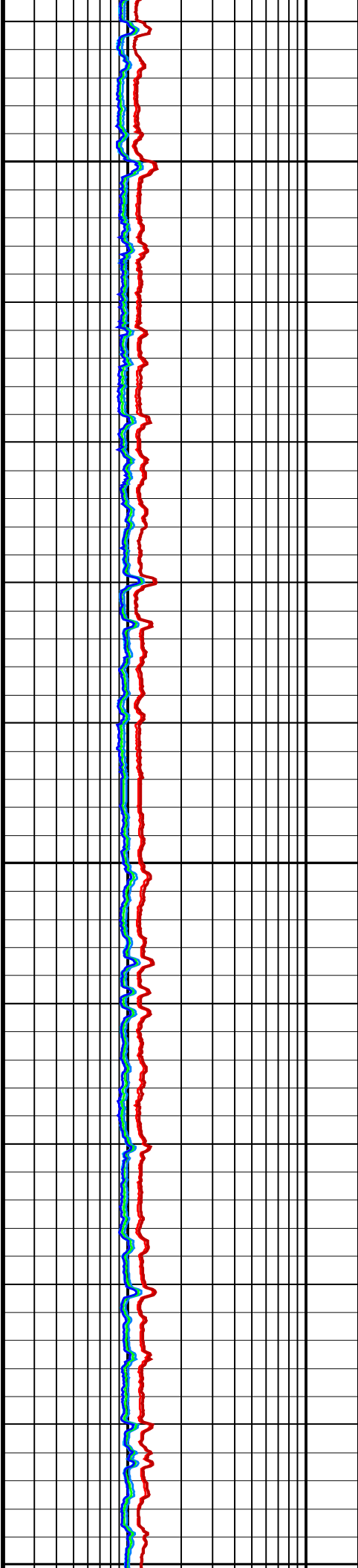
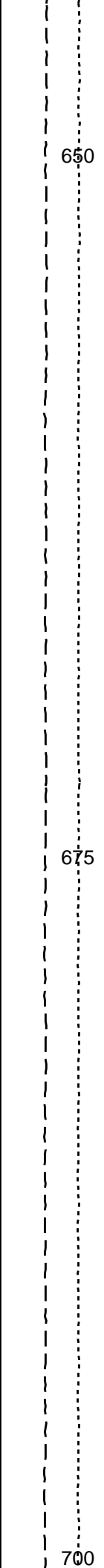
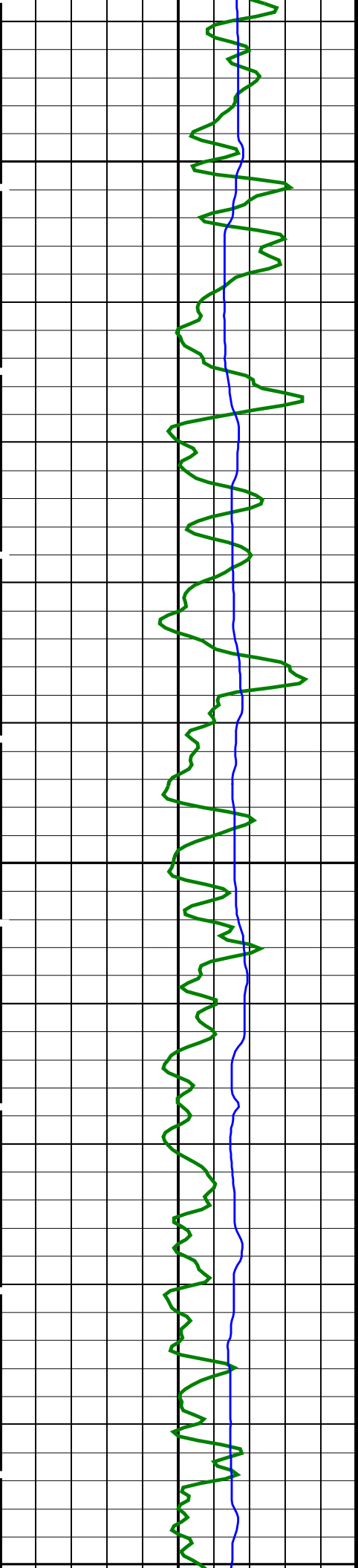
Time Mark Every 60 S

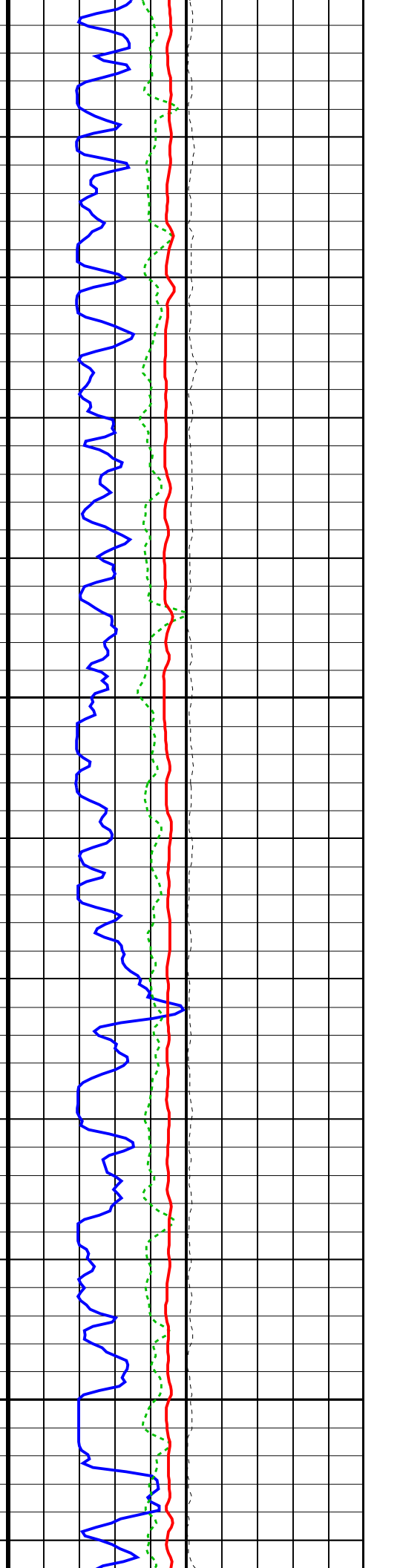
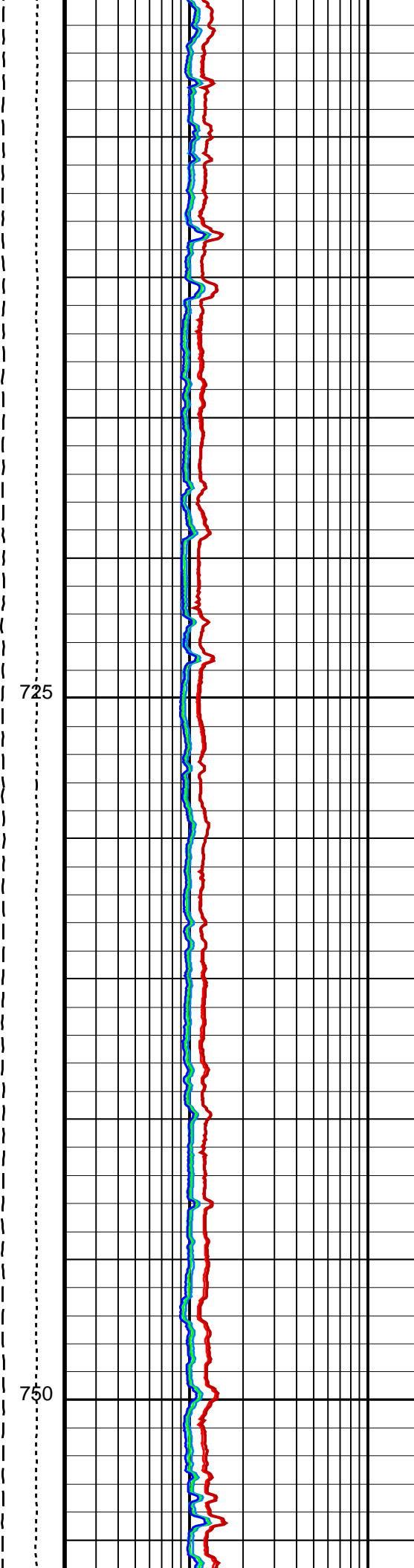
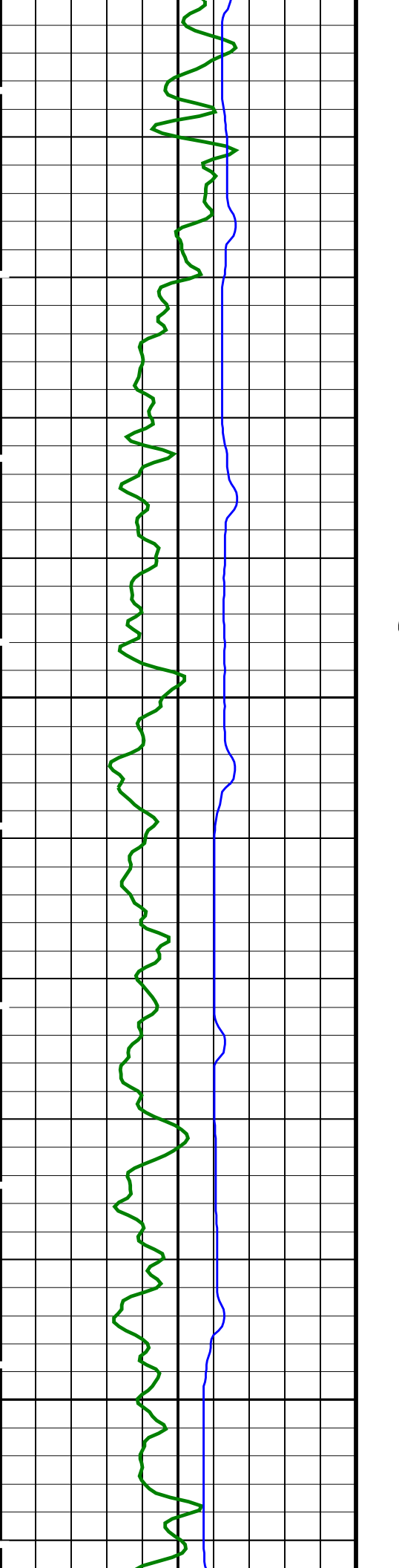
		HRLT True Resistivity (RT_HRLT)			
		0.2	(OHMM)	20	
		HRLT Resistivity 1 (RLA1)			
		0.2	(OHMM)	20	
		HRLT Resistivity 2 (RLA2)		HLDS Bulk Density Correction (DRH)	
		0.2	(OHMM)	20	-0.25 (G/C3) 0.25
		HRLT Resistivity 3 (RLA3)		HLDS Bulk Density (RHOM)	
		0.2	(OHMM)	20	0 (G/C3) 4
HNGS Spectroscopy Gamma Ray (HSGR)	Calibrated Downhole Force (CDF) (LBF)	HRLT Resistivity 5 (RLA5)		HLDS Long Spaced Photoelectric Effect (PEFL)	
0 (GAPI) 50	3000 0	0.2	(OHMM)	20	0 (----) 10
HLDS Caliper (LCAL)	Tension (TENS) (LBF)	HRLT Resistivity 4 (RLA4)		APS Corrected Standoff Porosity (STPC)	
0 (IN) 20	10000 0	0.2	(OHMM)	20	100 (PU) 0

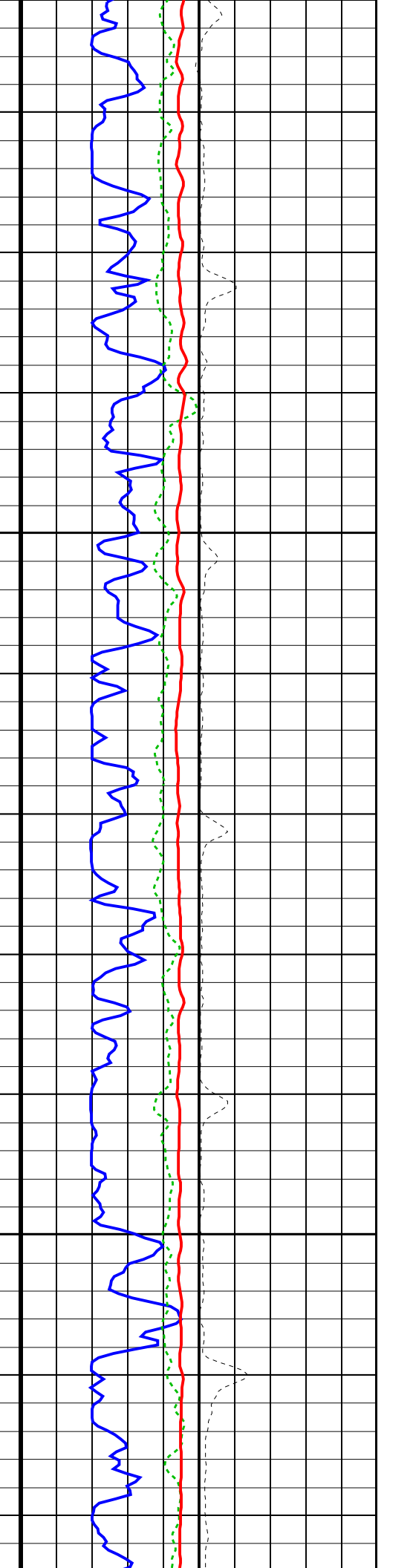
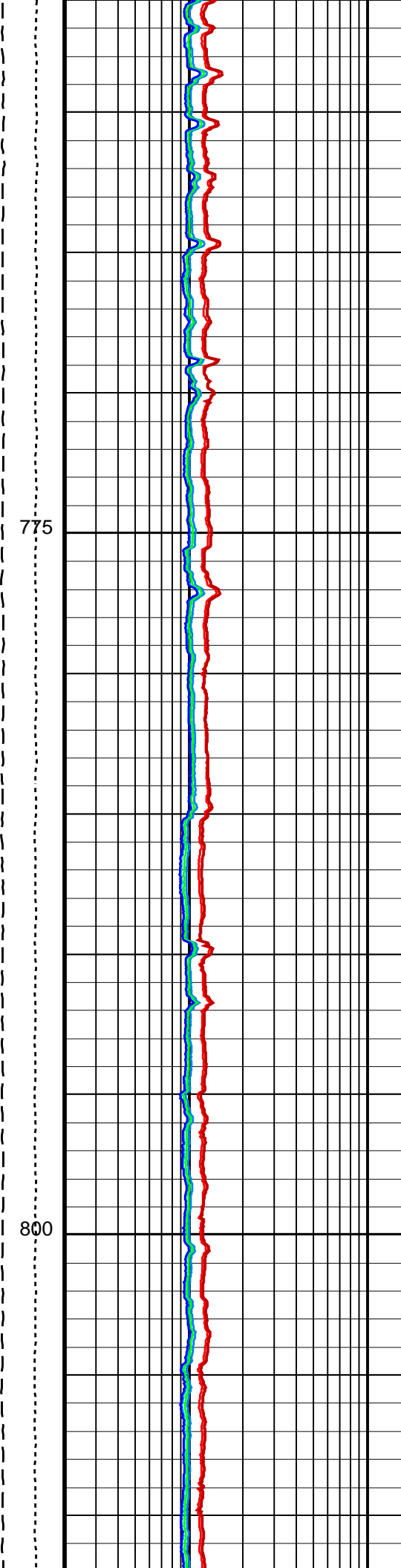
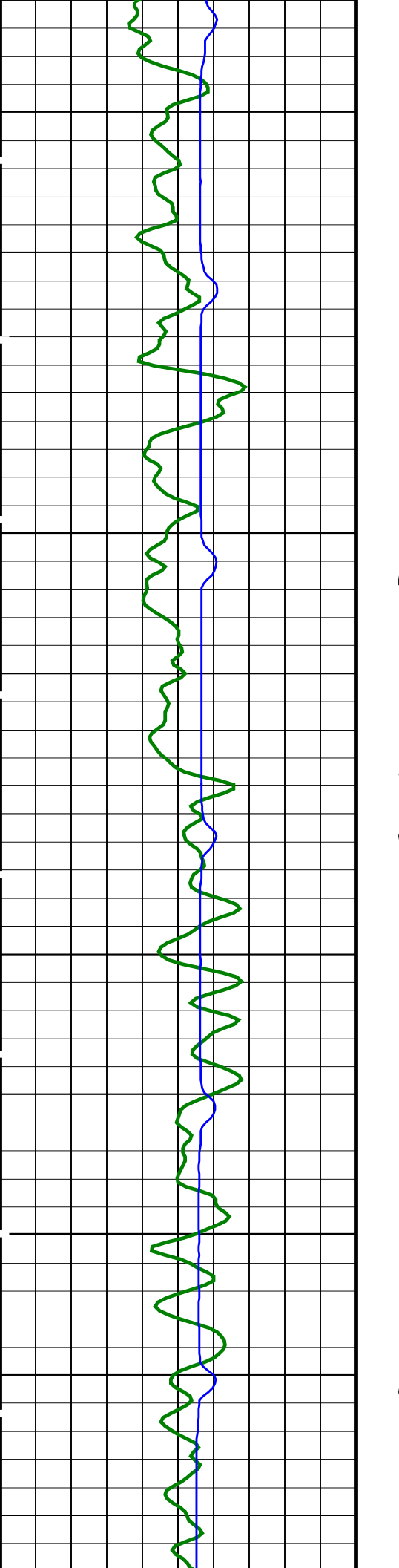


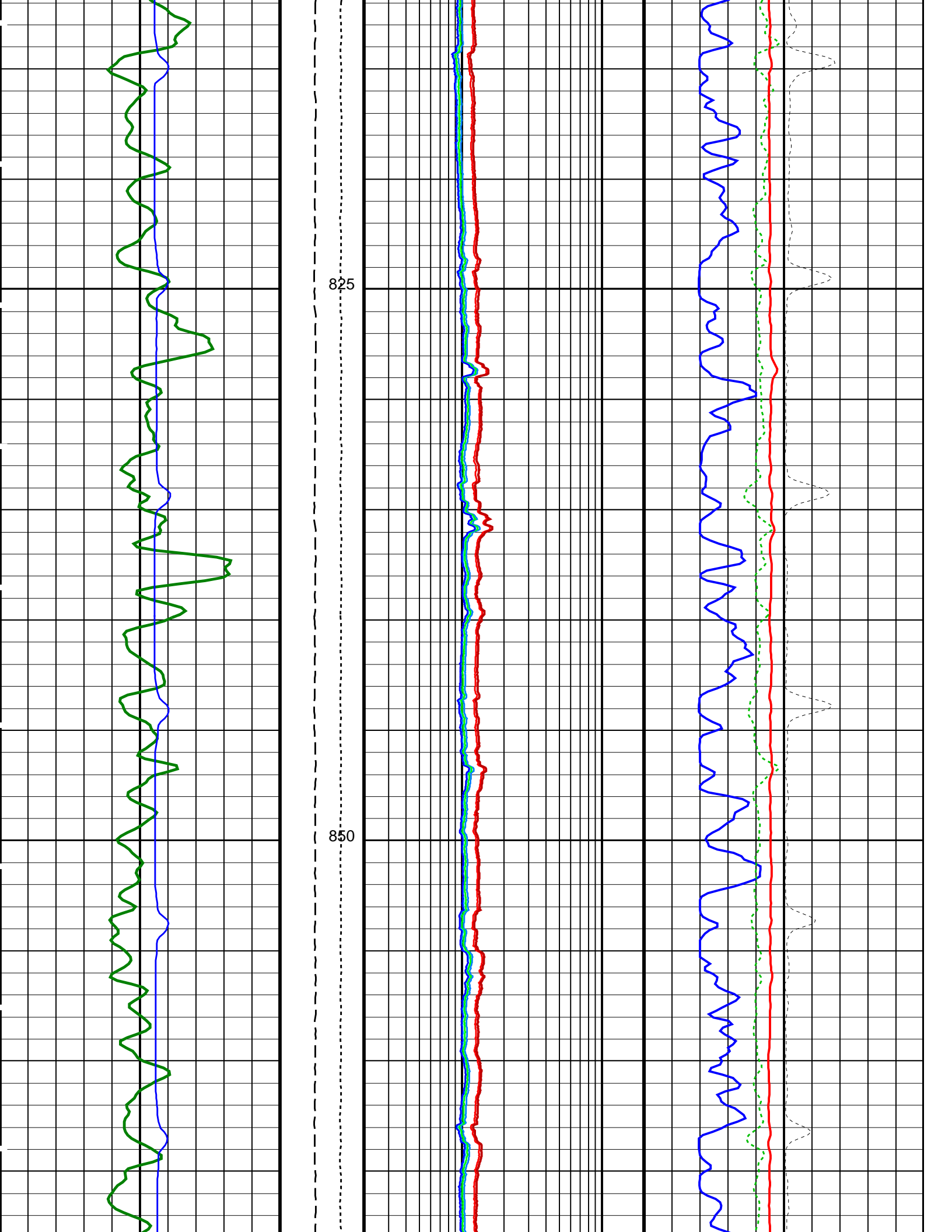


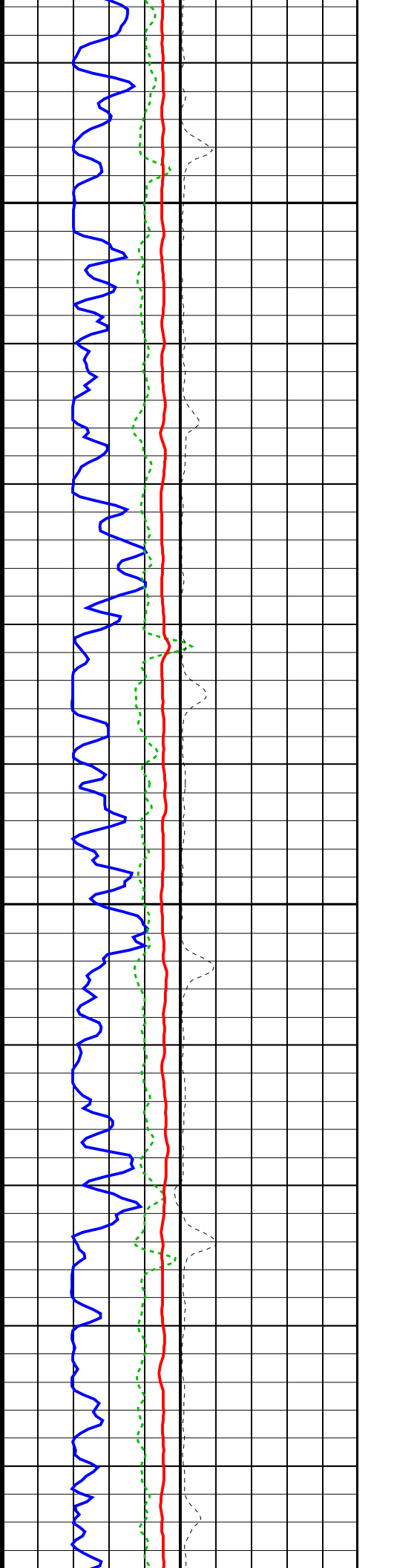
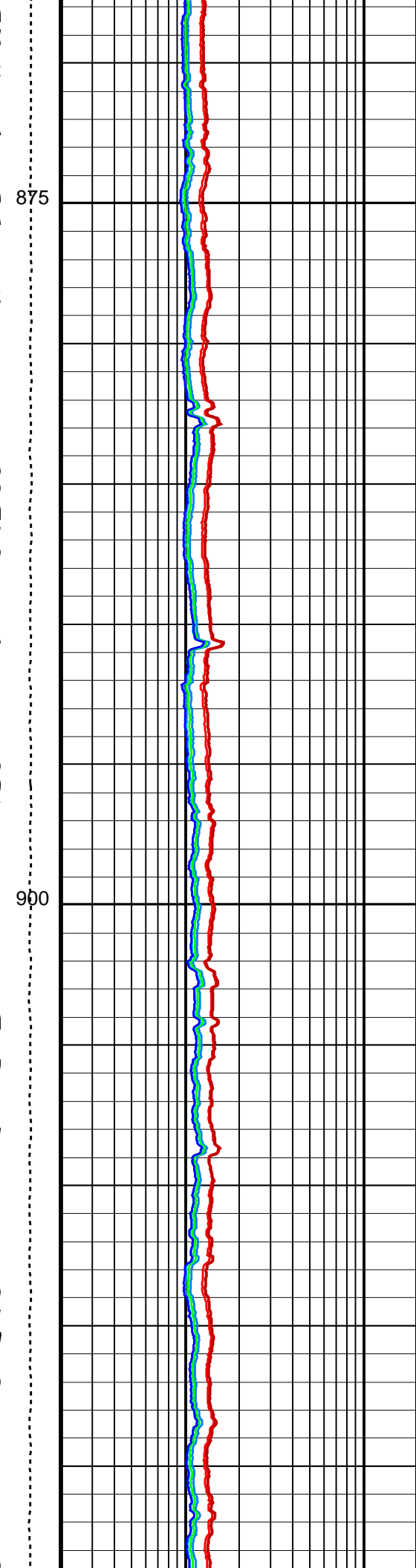
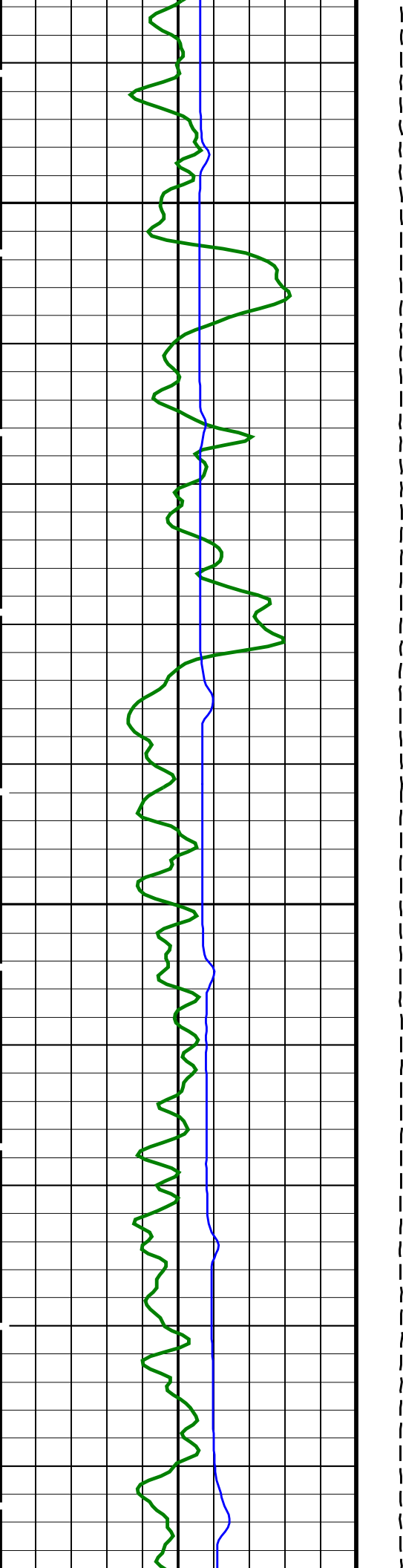


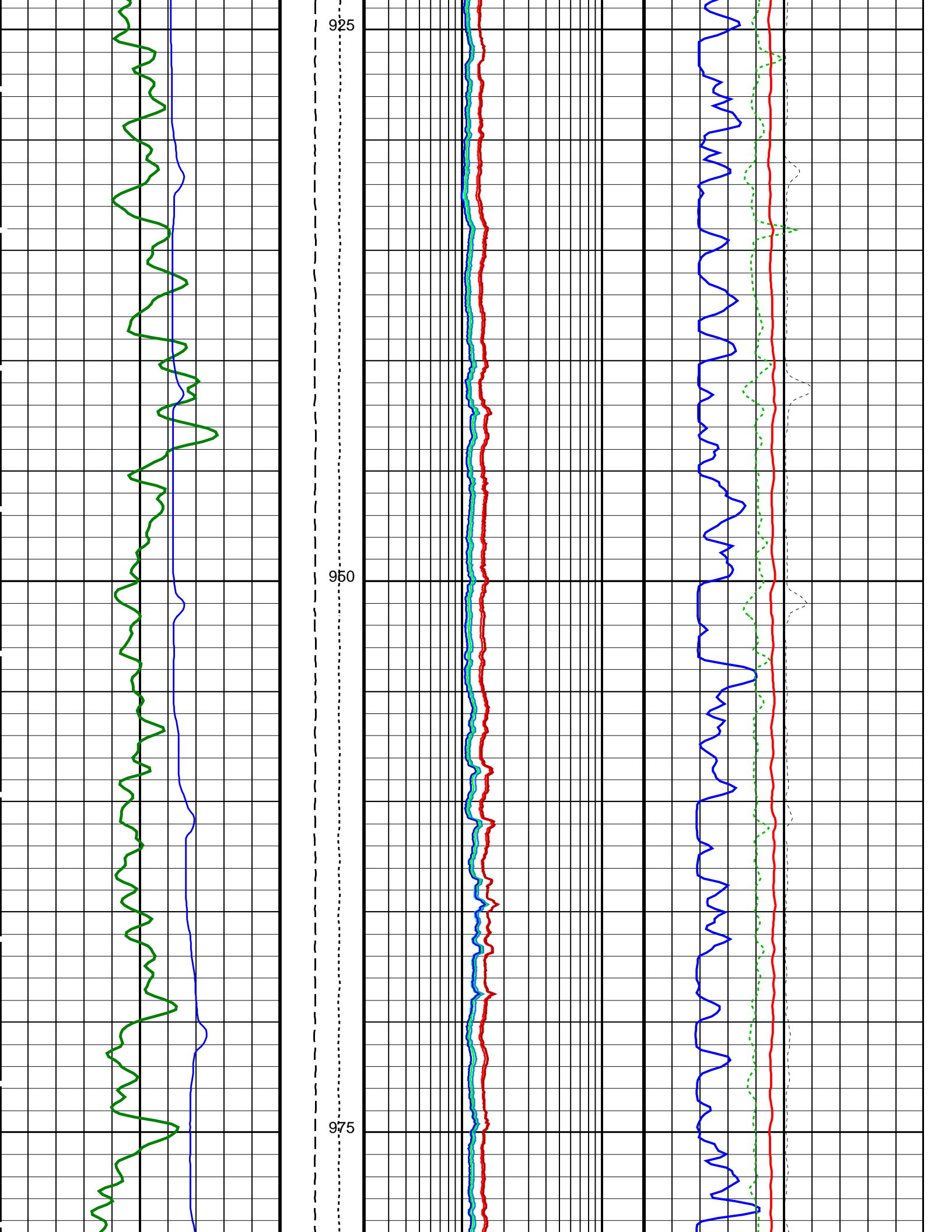


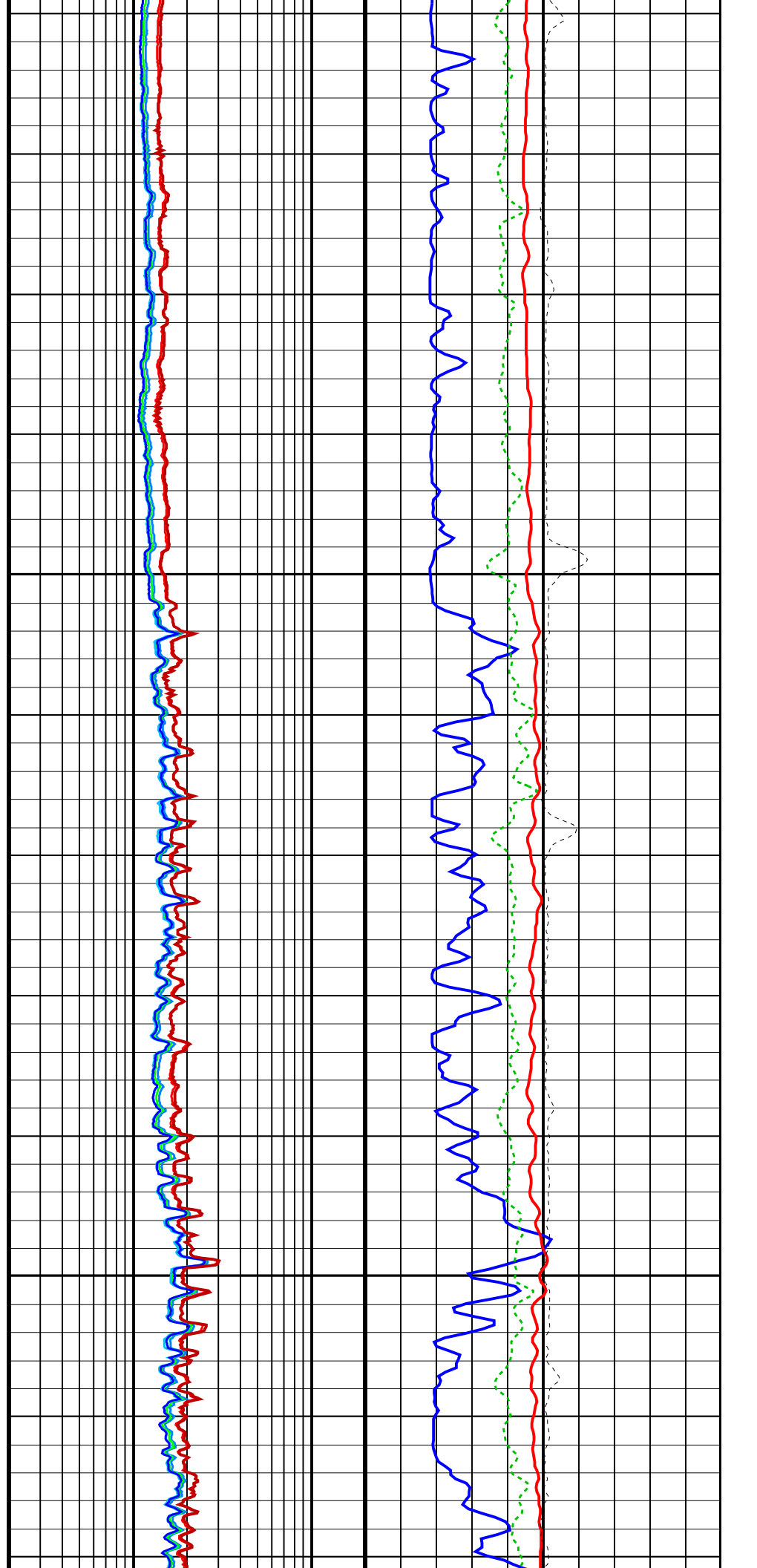
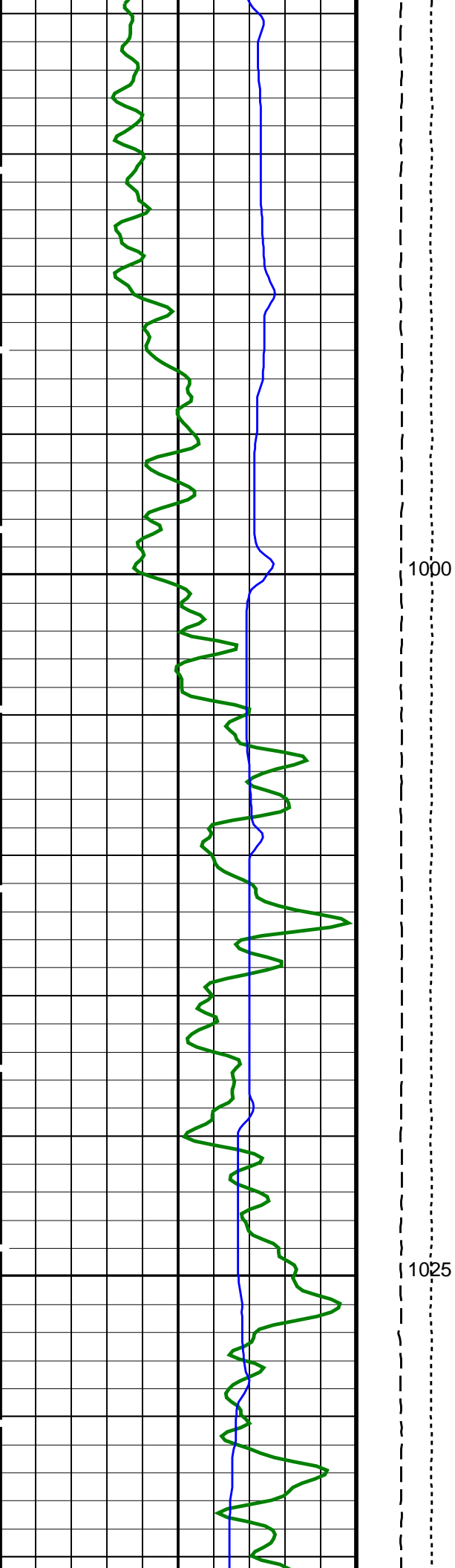


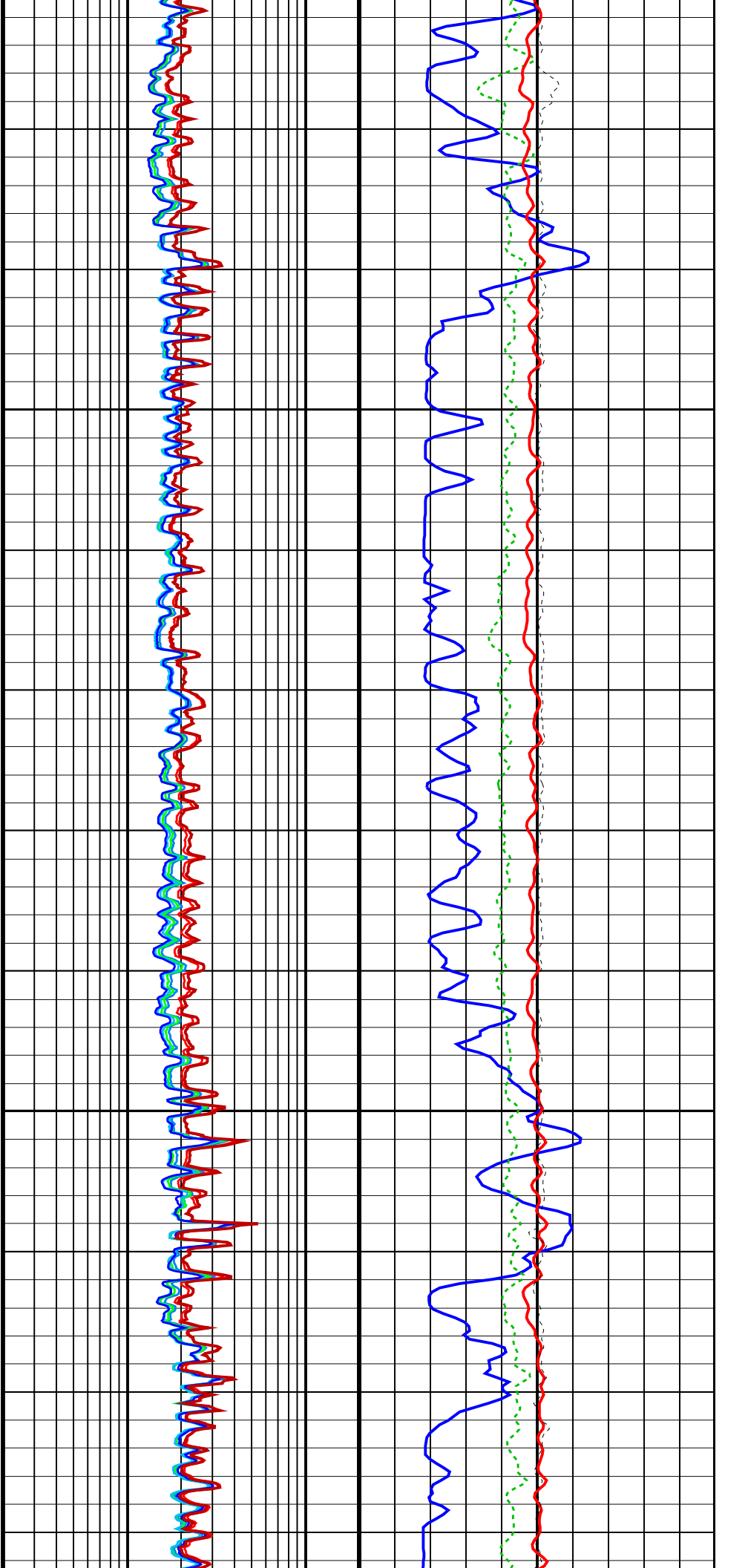
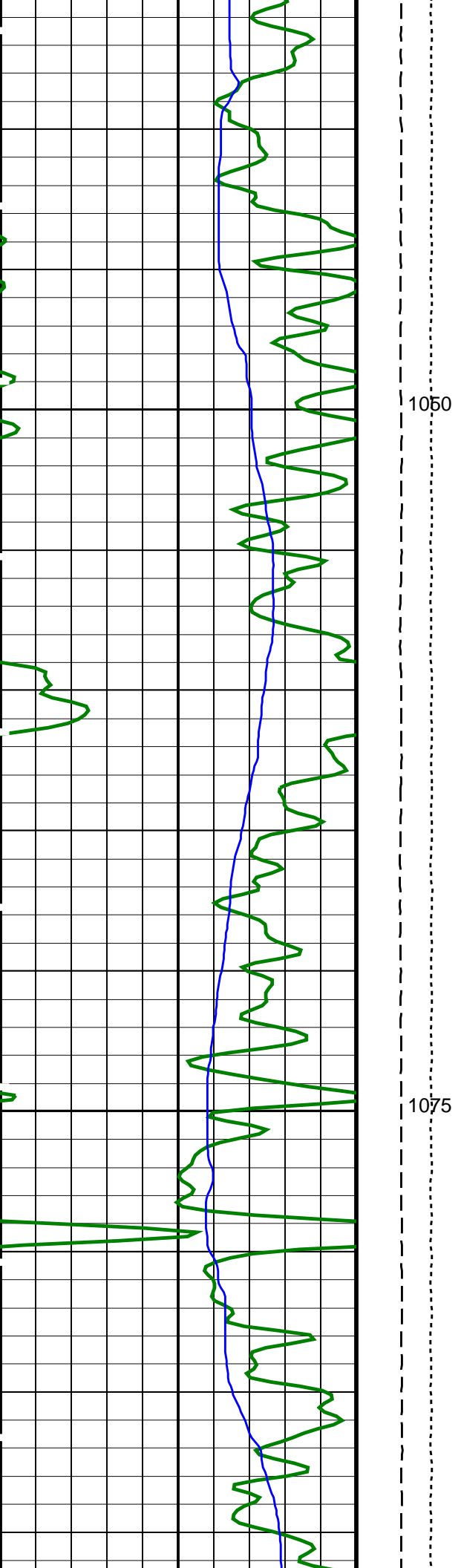


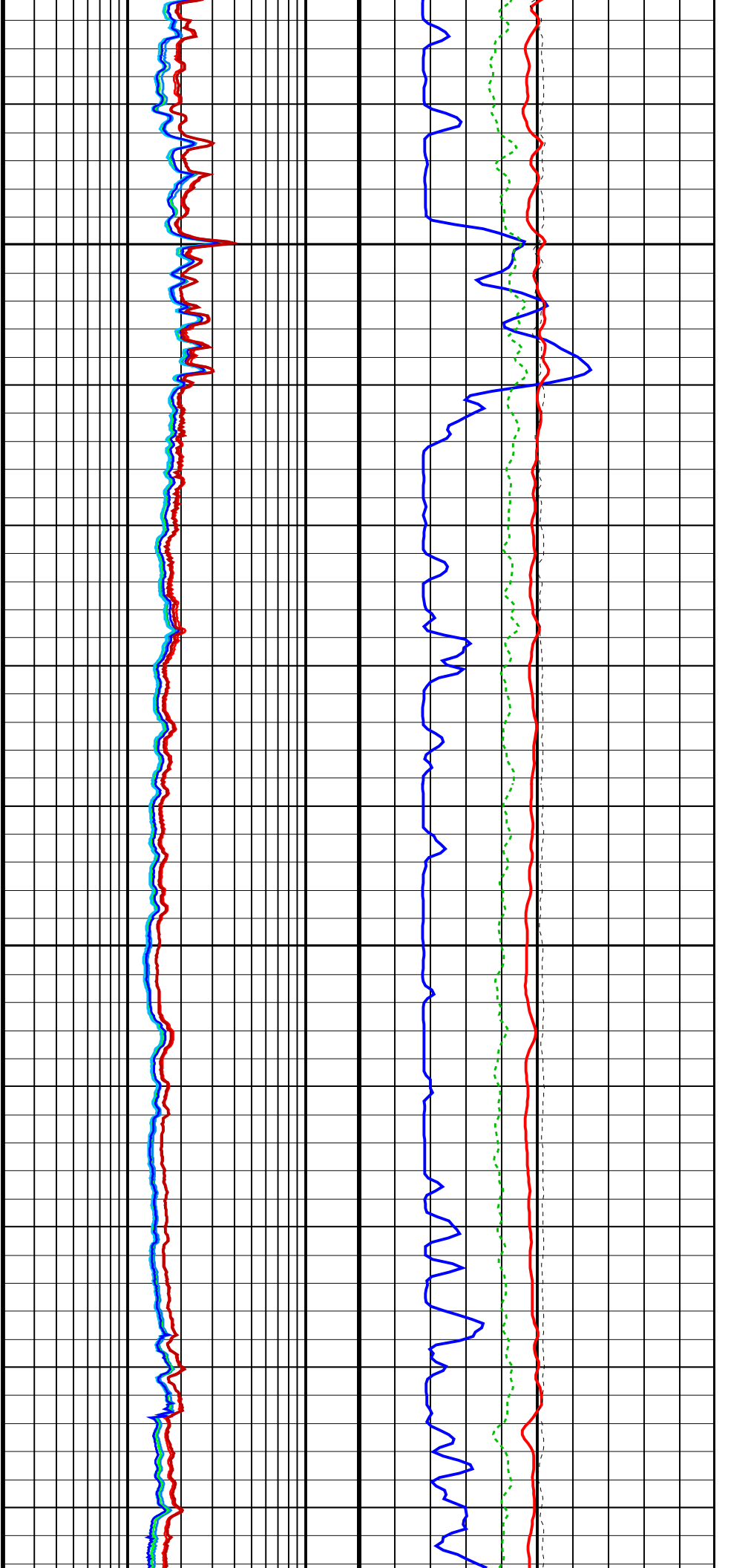
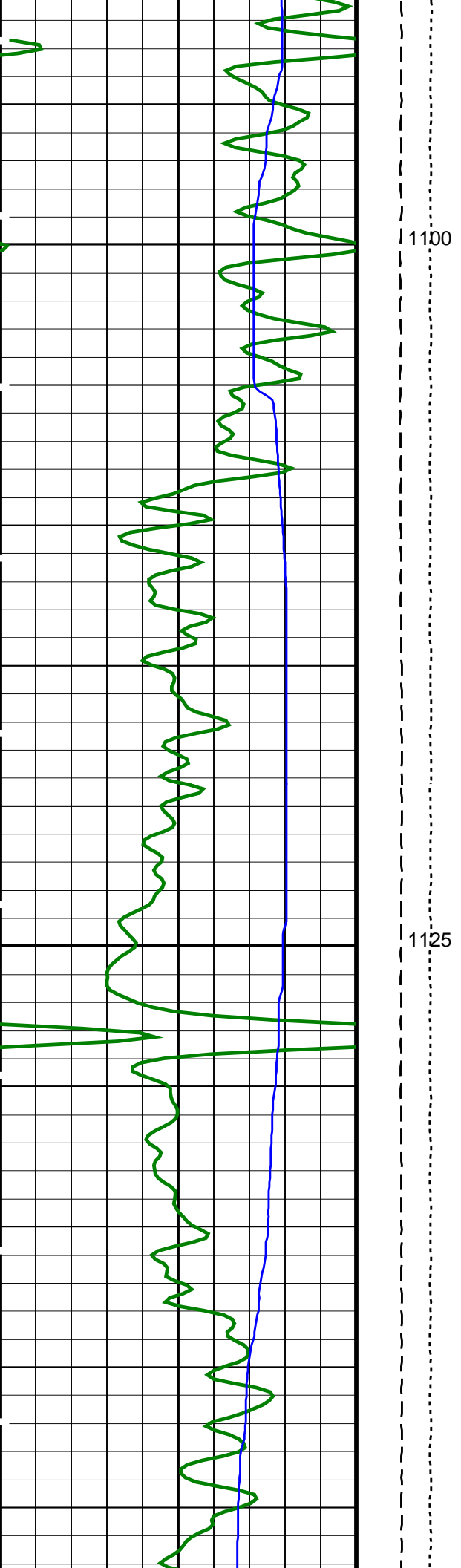


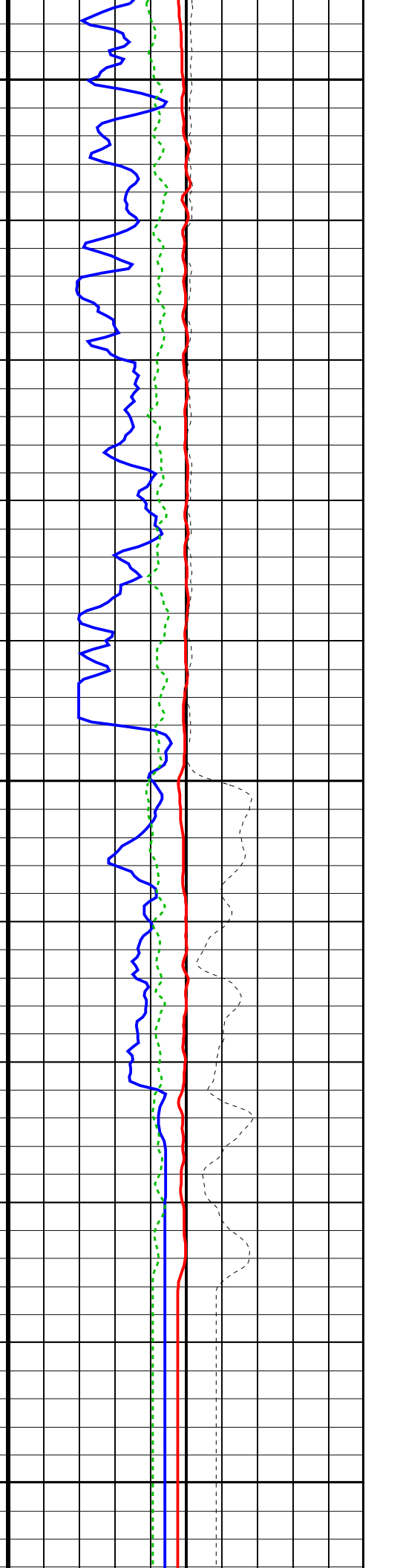
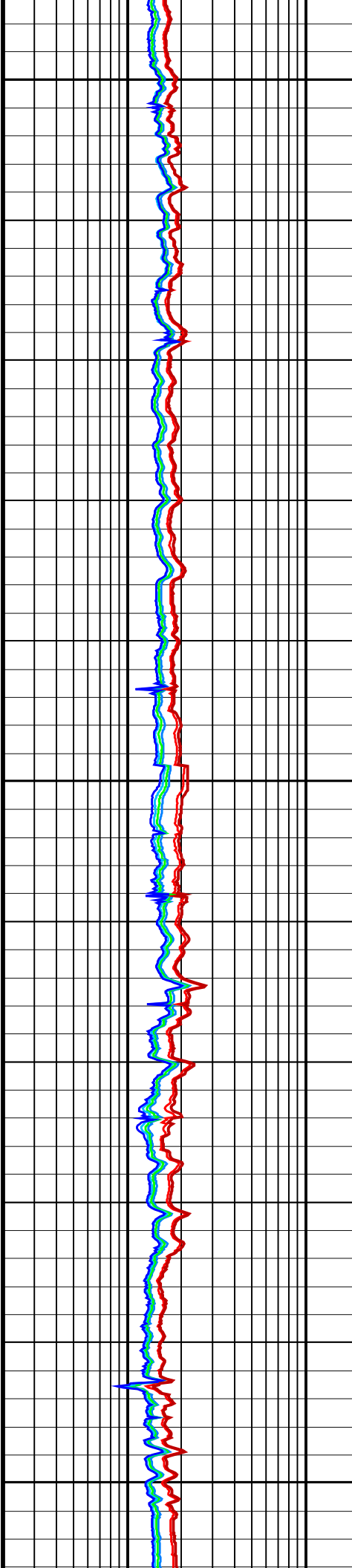
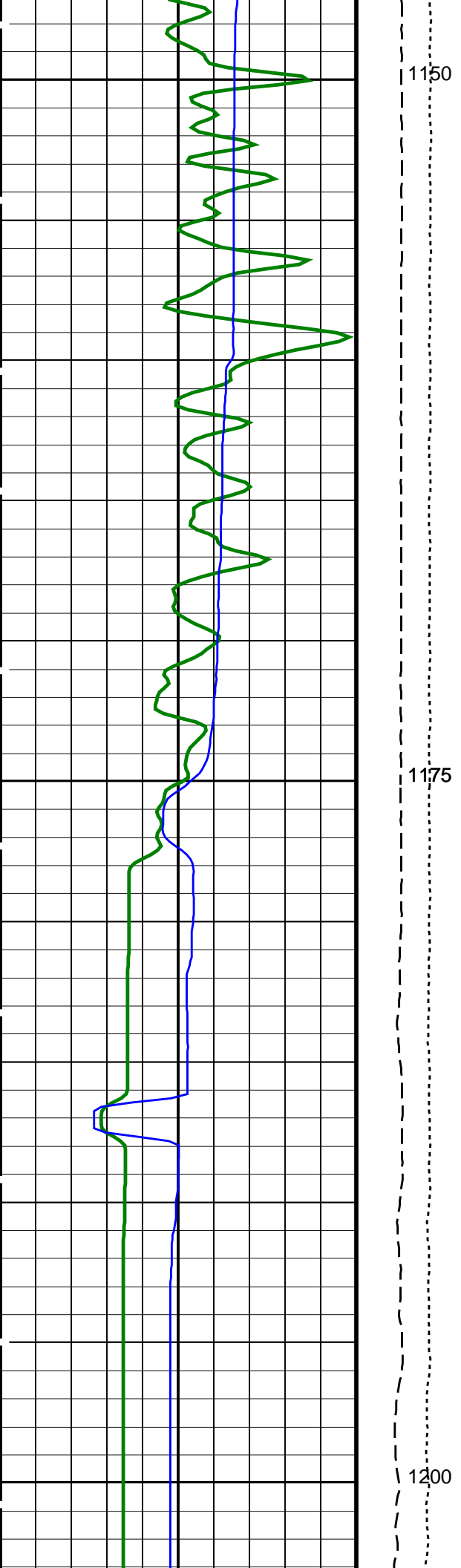


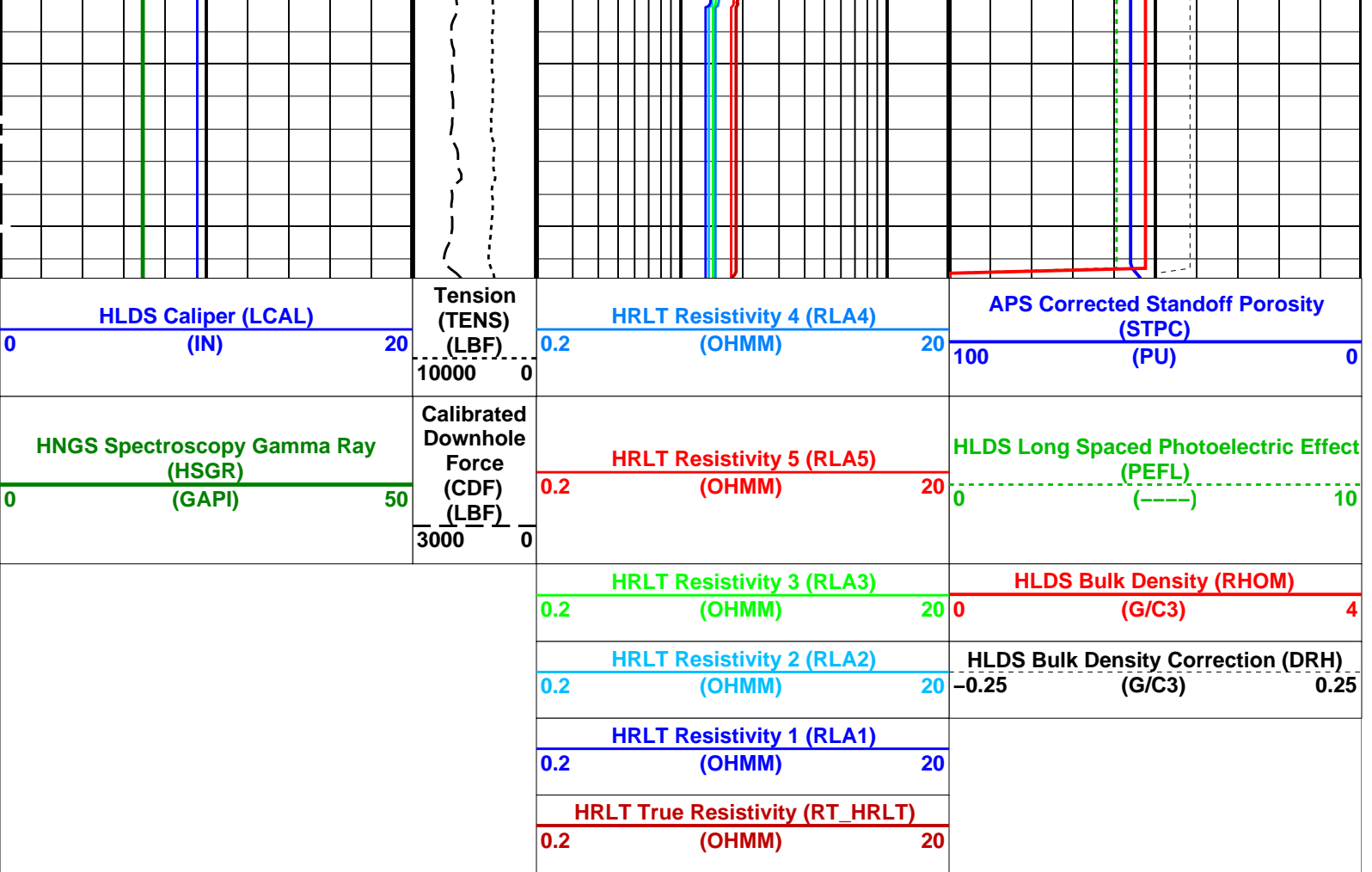












PIP SUMMARY

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)	40 DEGC
CALSTAT	HRLTB Calibration Status	SHALLOW_DONE
CALTEMP	HRLTB Calibration Temperature	18.5041 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
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 SS 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	ON	
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	1000	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	1941.83	V
AFSD	APS Array Detectors Data Source Switch	Both	
AHCS	APS Far Detector High Voltage Setting	2032.14	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	1700.66	V
ATSS	APS Standoff Correction Switch	ON	
BHFL_APS	APS Temperature-Pressure-Salinity Correction Switch	OFF	
BHS	APS TNPH Borehole Fluid Type	WATER	
BHT	Borehole Status	OPEN	
BSCO_APS	Bottom Hole Temperature (used in calculations)	40	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	NO	
MWCO_APS	APS TNPH Mud Correction	NATU	
NARC	APS TNPH Mud Weight Correction Option	YES	
NFRC	APS Near/Array Calibration Ratio	1.08475	
PTCO_APS	APS Near/Far Calibration Ratio	0.978244	
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)	40	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	-0.000611808	
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	1.02304	

VBA2	HNGS Detector 2 Variable Barite Factor Running Average	1.00091	
EDTC-B: Enhanced DTS Cartridge			
BHFL	Borehole Fluid Type	WATER	
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	40	DEGC
BSCO	Borehole Salinity Correction Option	NO	
CCCO	Casing & Cement Thickness Correction Option	NO	
DPPM	Density Porosity Processing Mode	HIRS	
FSAL	Formation Salinity	-50000	PPM
FSCO	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	Hole Size Correction Option	YES	
ISSBAR	Barite Mud Switch	NOBARITE	
ISSBAR_EDTC	Nuclear Mud Type	NOBARITE	
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
MCCO	Mud Cake Correction Option	NO	
MCOR	Mud Correction	NATU	
MWCO	Mud Weight Correction Option	YES	
PTCO	Pressure/Temperature Correction Option	NO	
SDAT	Standoff Data Source	SOCN	
SHT	Surface Hole Temperature	20	DEGC
SOCN	Standoff Distance	0.5	IN
SOCO	Standoff Correction Option	NO	
TPOS_EDTC	EDTC Tool Centered/Eccentered	Eccentered	
U-ETELM_EDTS	Telemetry Mode for eWAFE	Standard_EDTS	
U-TELM_EDTS	Telemetry Mode for WAFE	Standard_EDTS	
System and Miscellaneous			
ALTDPCAN	Name of alternate depth channel	SpeedCorrectedDepth	
BS	Bit Size	9.875	IN
BSAL	Borehole Salinity	38000.00	PPM
CSIZ	Current Casing Size	5.500	IN
CWEI	Casing Weight	168.00	LB/F
DFD	Drilling Fluid Density	1.05	G/C3
FLEV	Fluid Level	-50000.00	M
MST	Mud Sample Temperature	23.00	DEGC
PBVSADP	Use alternate depth channel for playback	NO	
RMFS	Resistivity of Mud Filtrate Sample	-50000.0000	OHMM
RW	Resistivity of Connate Water	1.0000	OHMM
TD	Total Depth	1212.2	M
TDD	Total Depth - Driller	1212.40	M
TDL	Total Depth - Logger	1211.00	M
TWS	Temperature of Connate Water Sample	37.78	DEGC

Format: TripleCombo Vertical Scale: 1:200 Graphics File Created: 05-Nov-2015 21:24

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	EDTC-B	SKK-5169-EDTCB

Output DLIS Files

DEFAULT	MSS_LDEO_HRLA_LDL_009LUP	FN:11	PRODUCER	05-Nov-2015 21:24
RTB	MSS_LDEO_HRLA_LDL_009LUP	FN:12	PRODUCER	05-Nov-2015 21:24

Company: International Ocean Discovery Program Well: Expedition 359, Site U1467E

Output DLIS Files

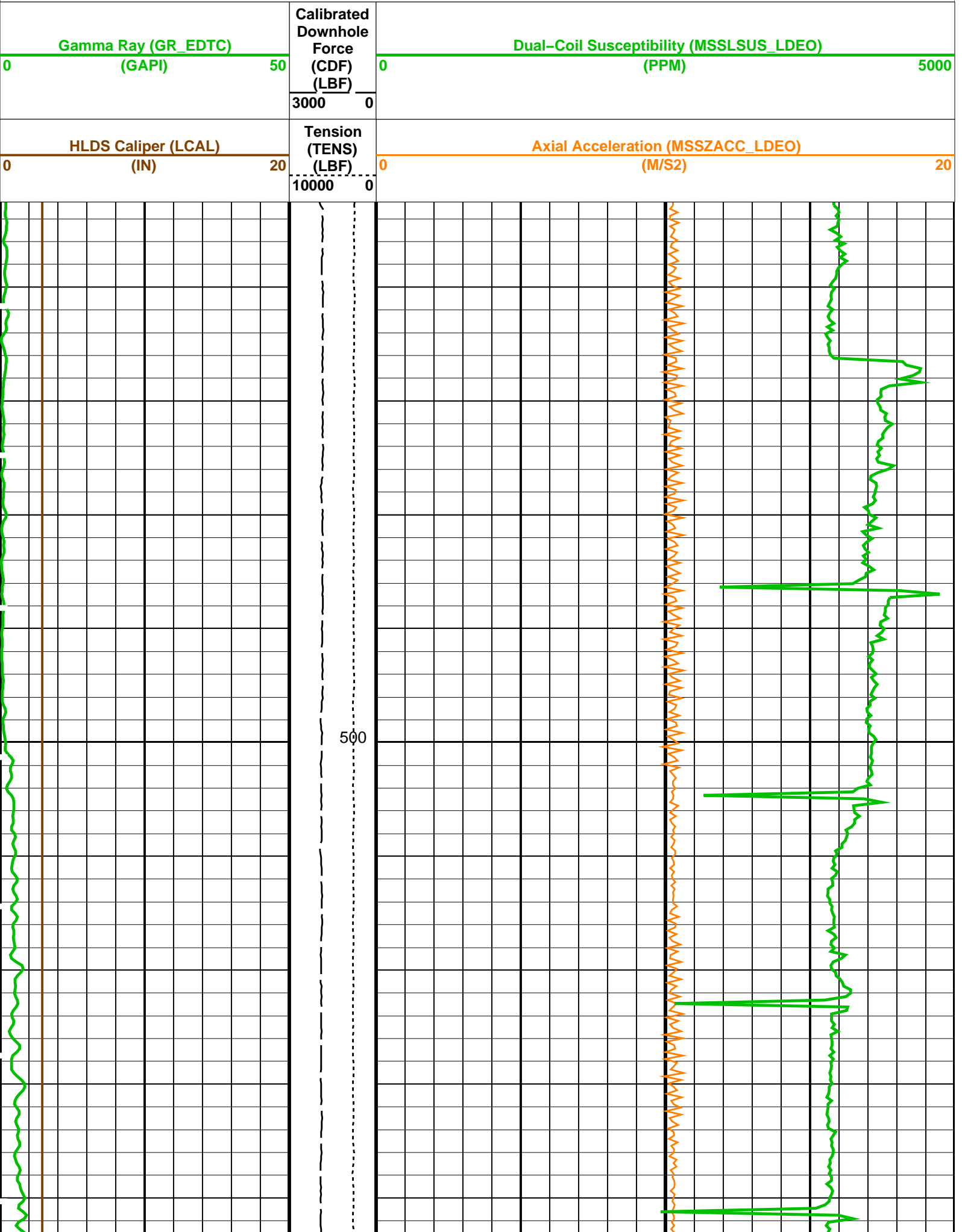
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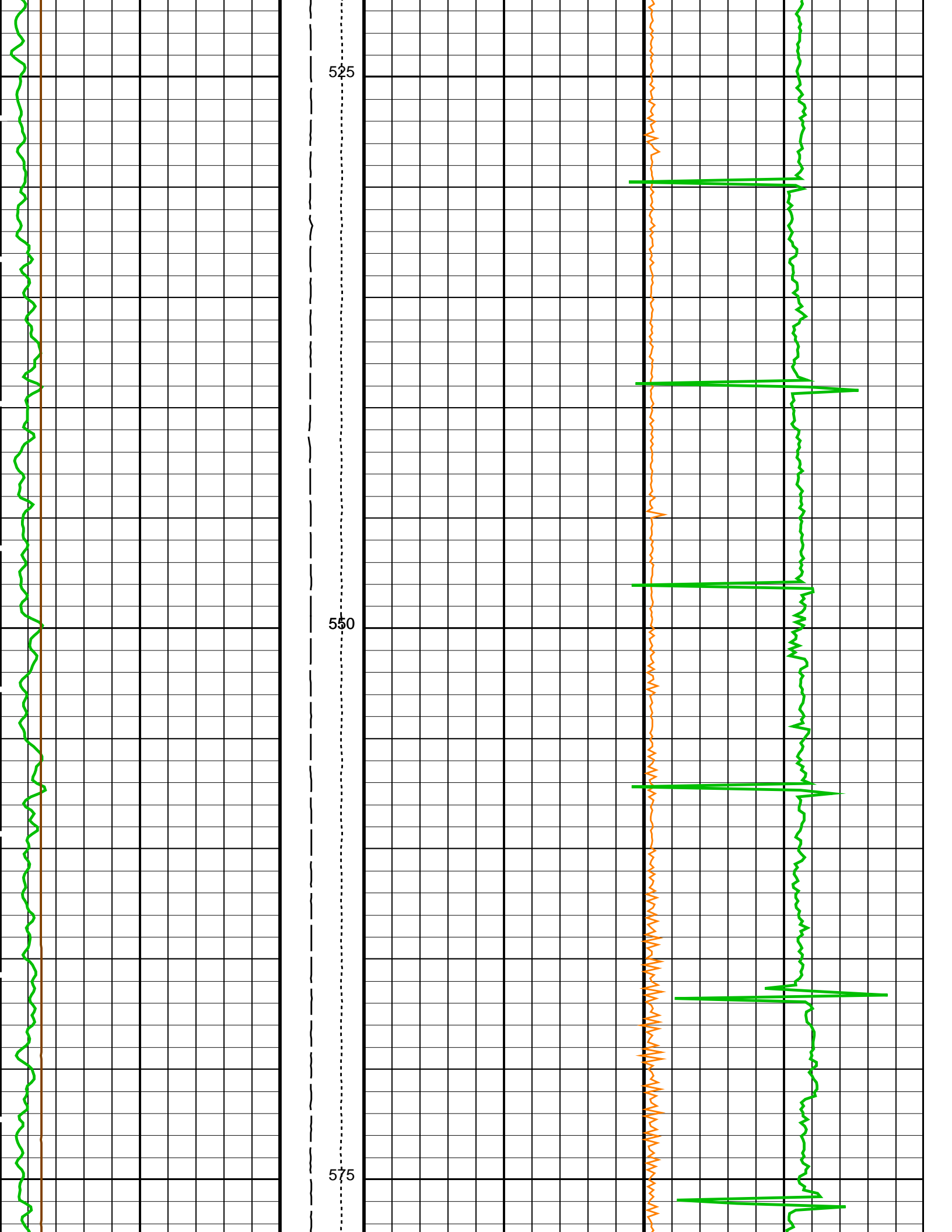
OP System Version: 19C0-187

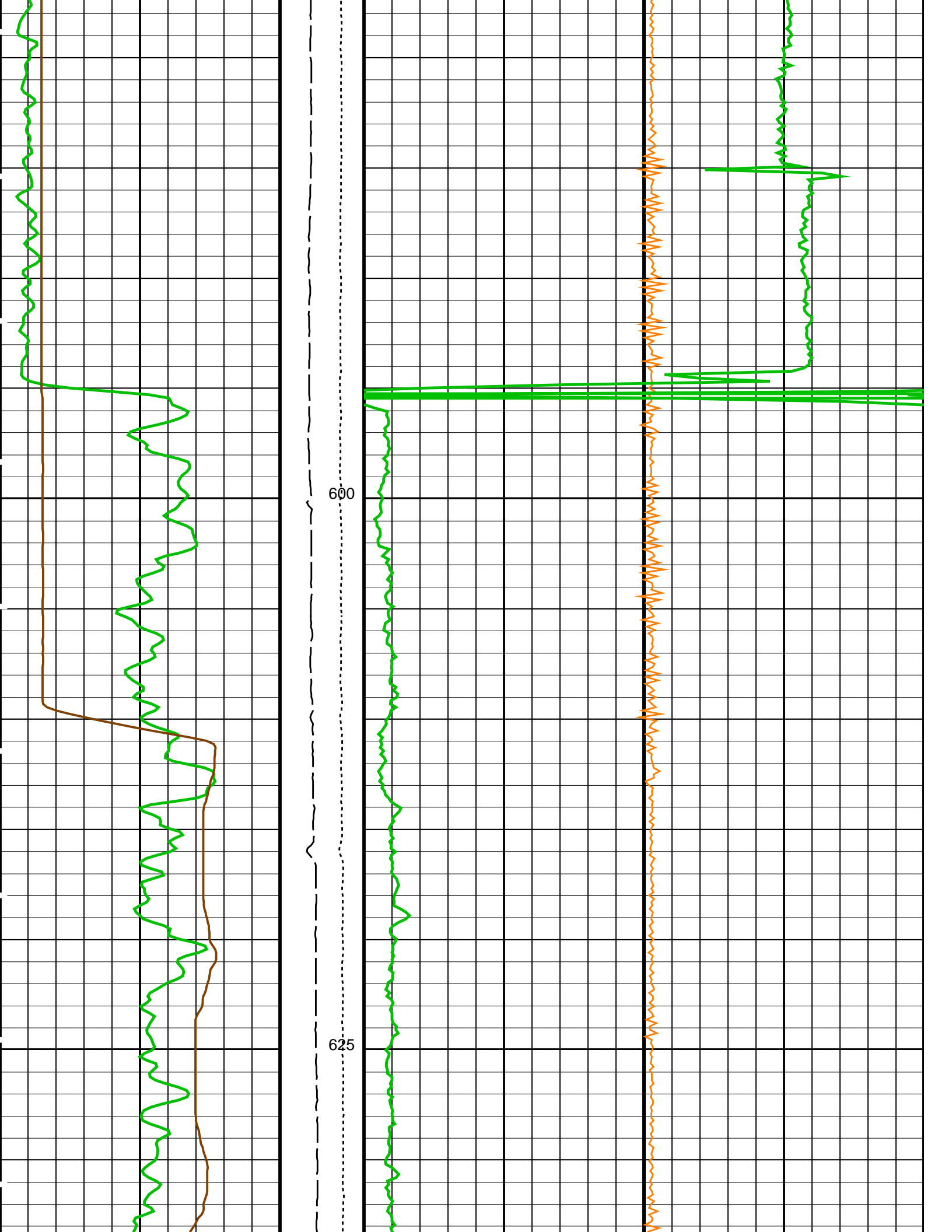
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APS-C	19C0-187	HNGC-B	19C0-187
HNGS-BA	19C0-187	EDTC-B	SKK-5169-EDTCB

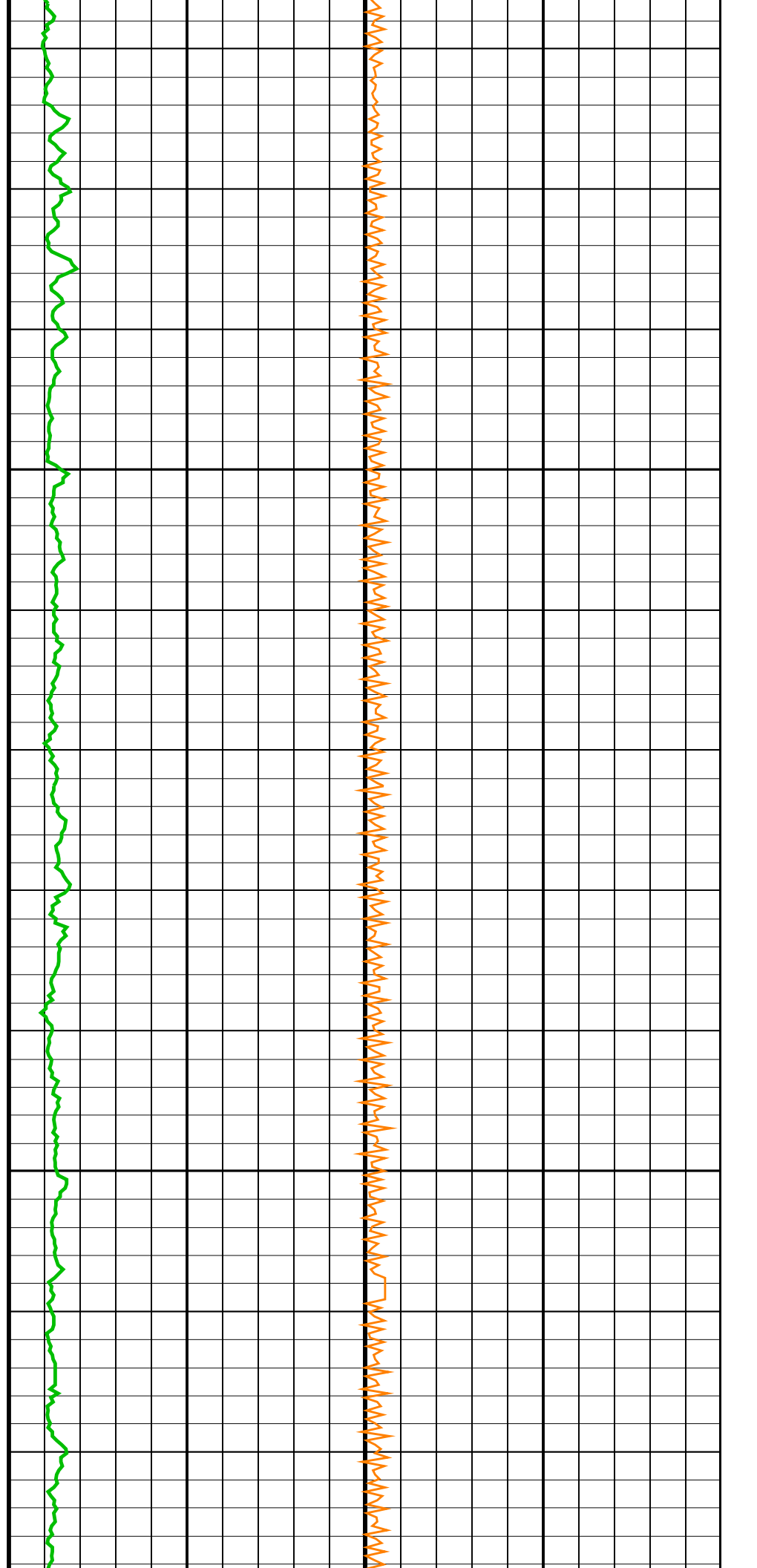
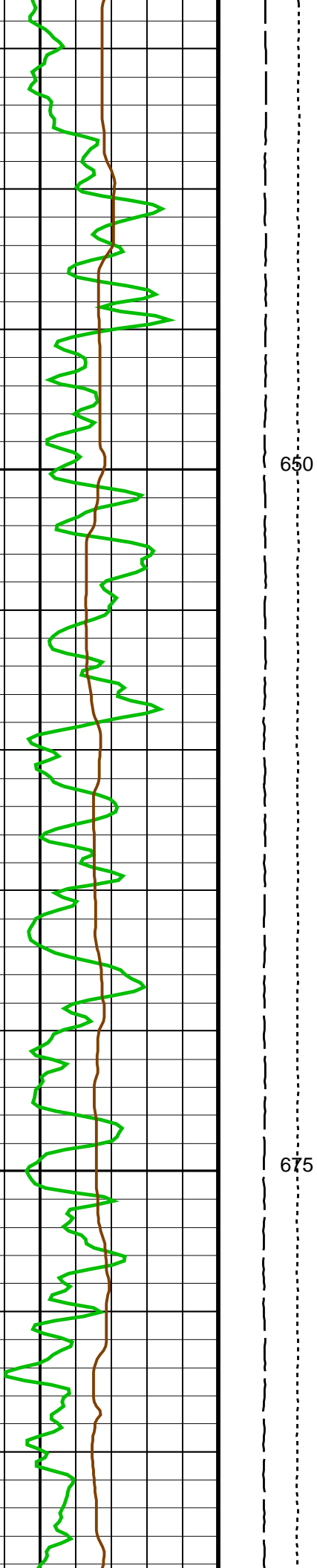
PIP SUMMARY

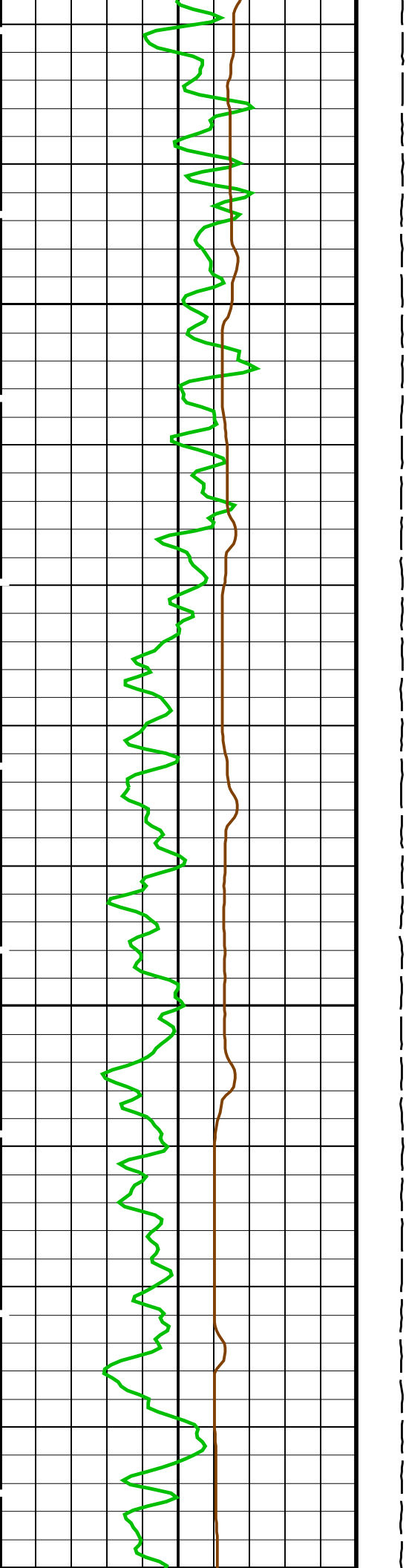
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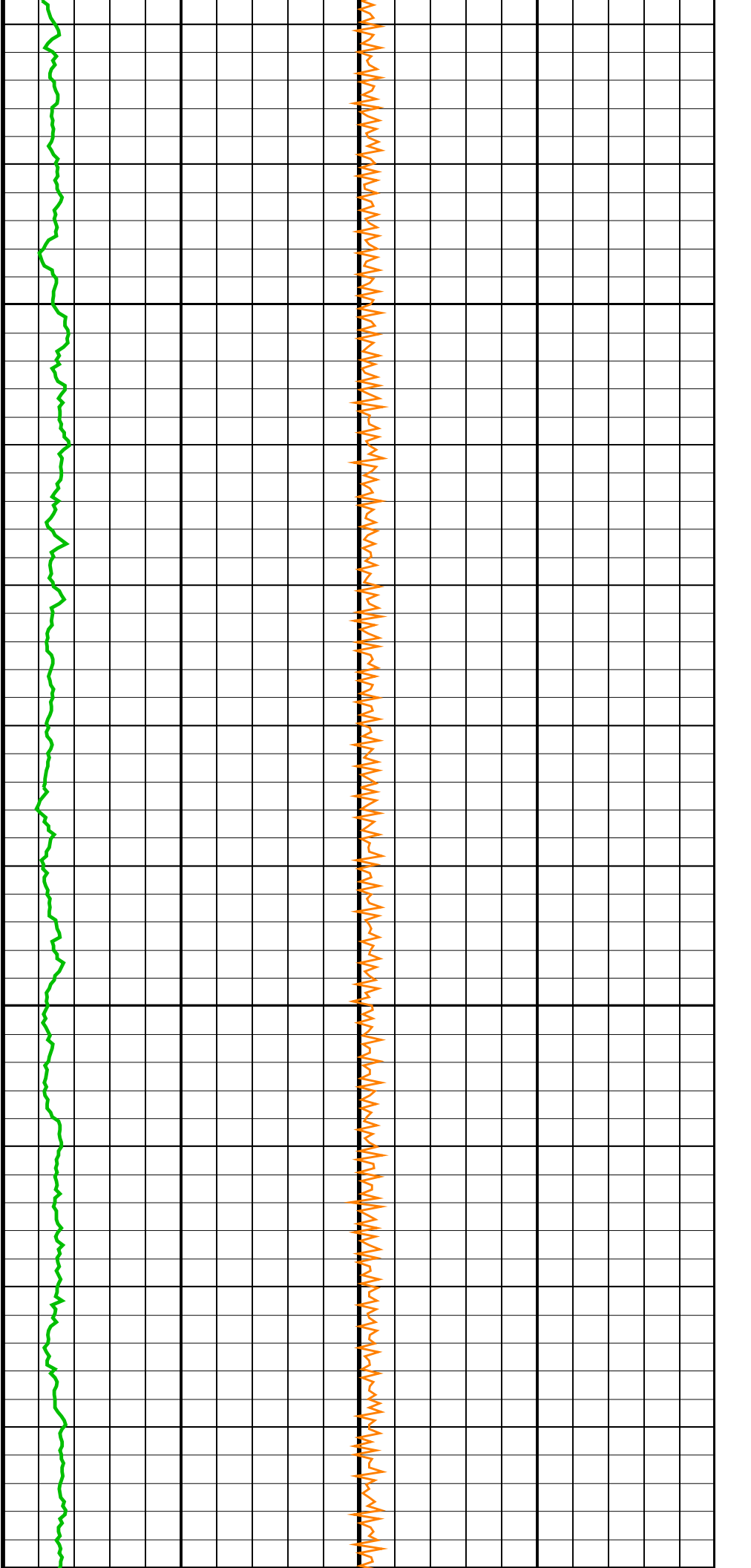


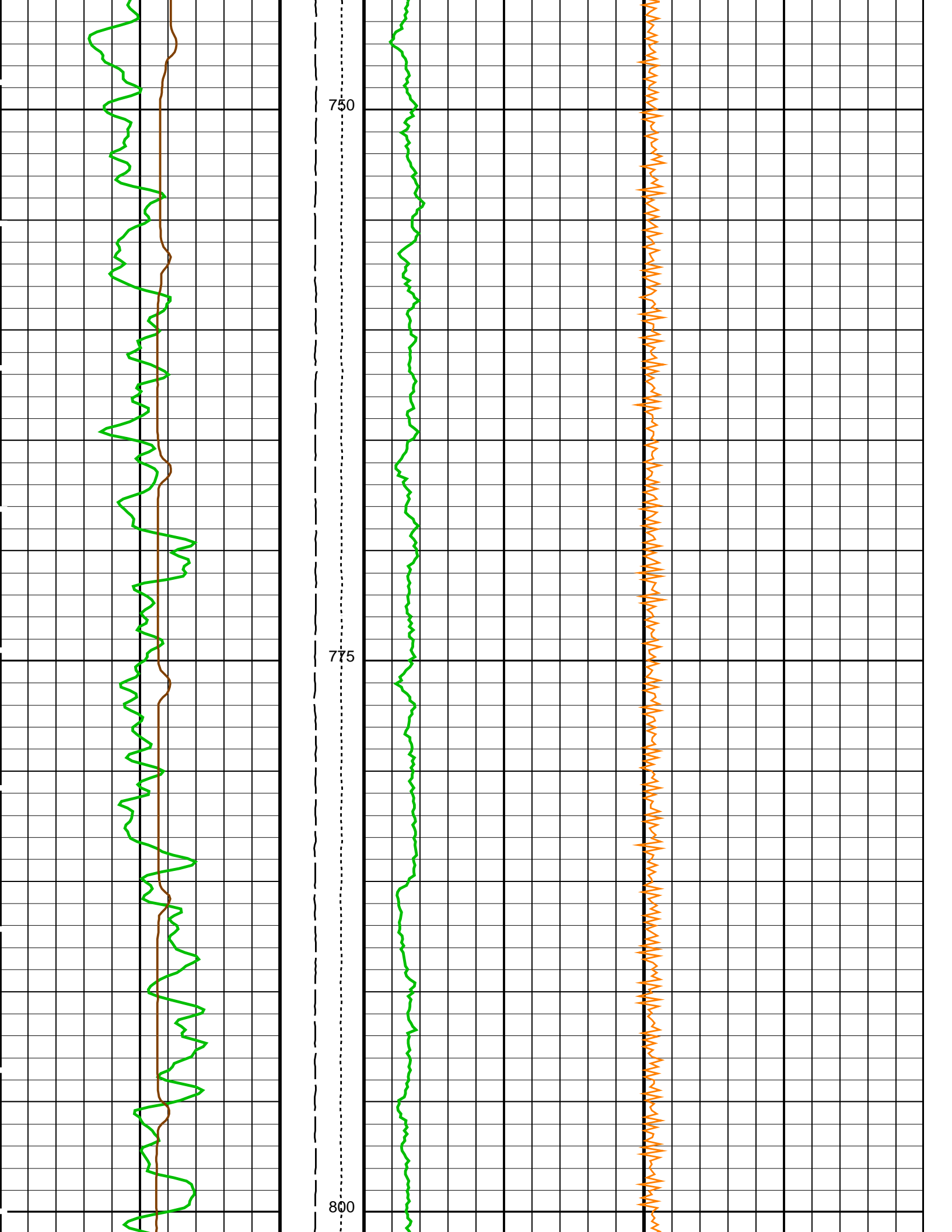


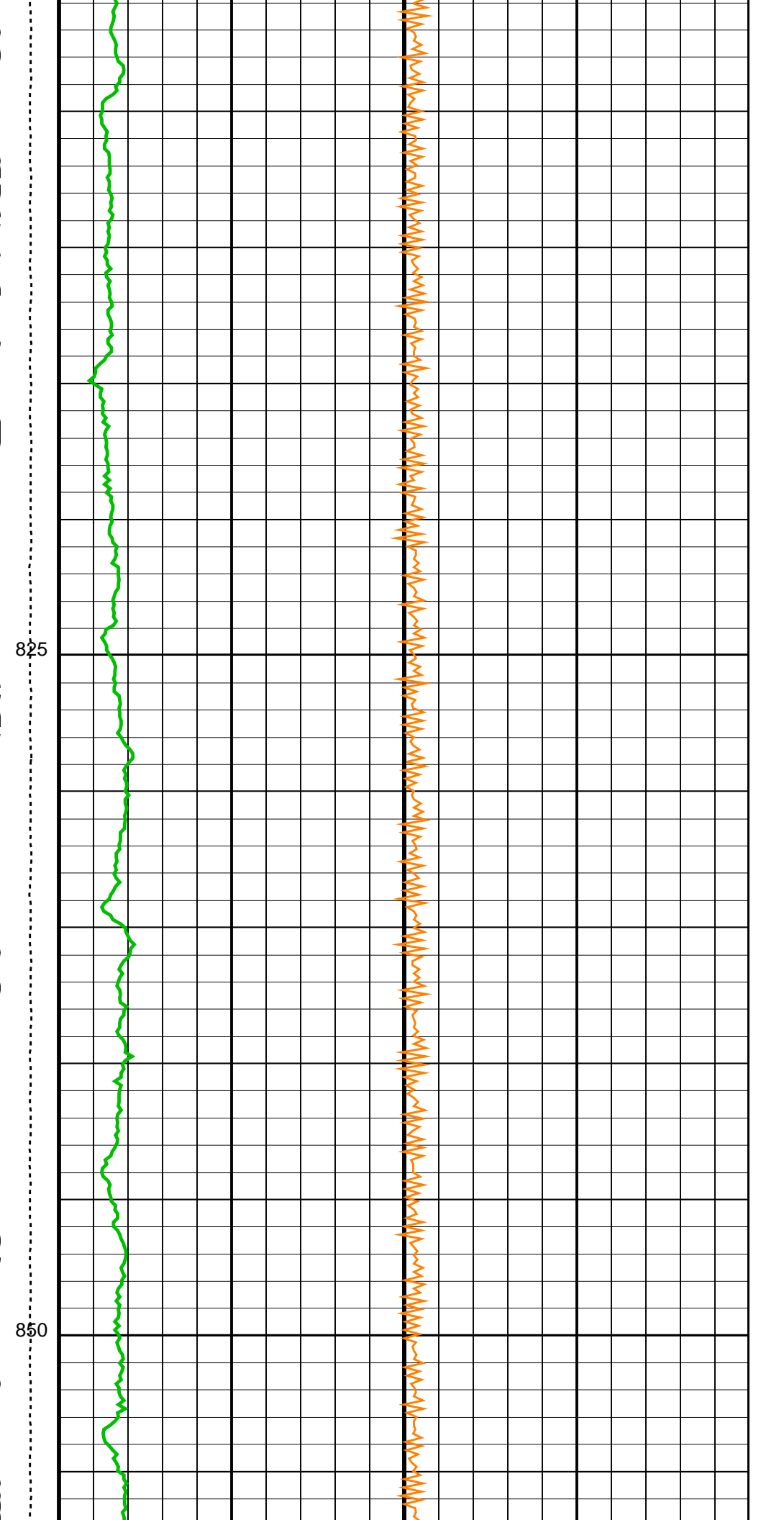
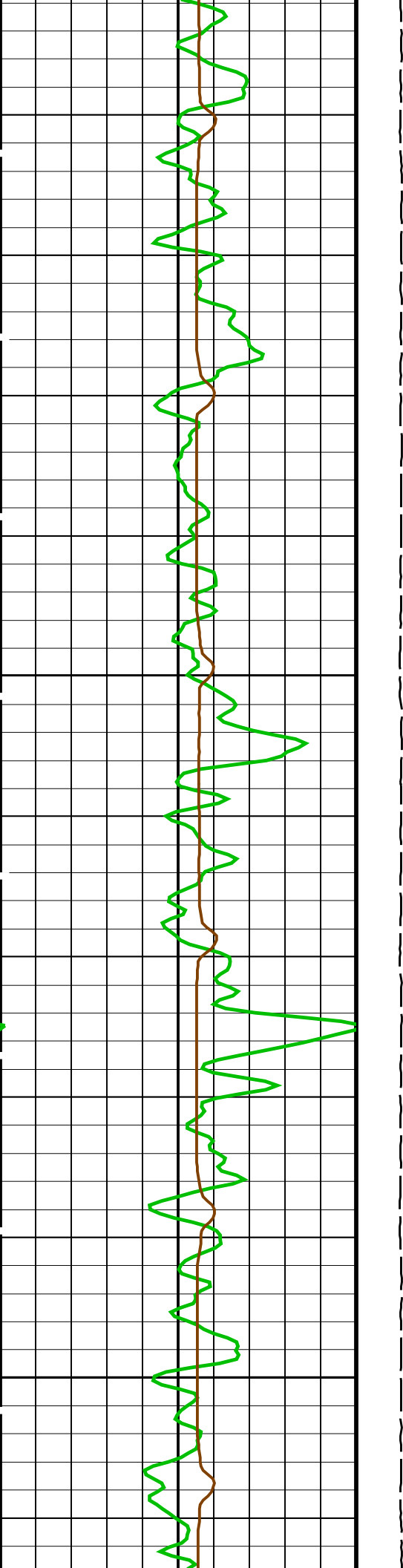


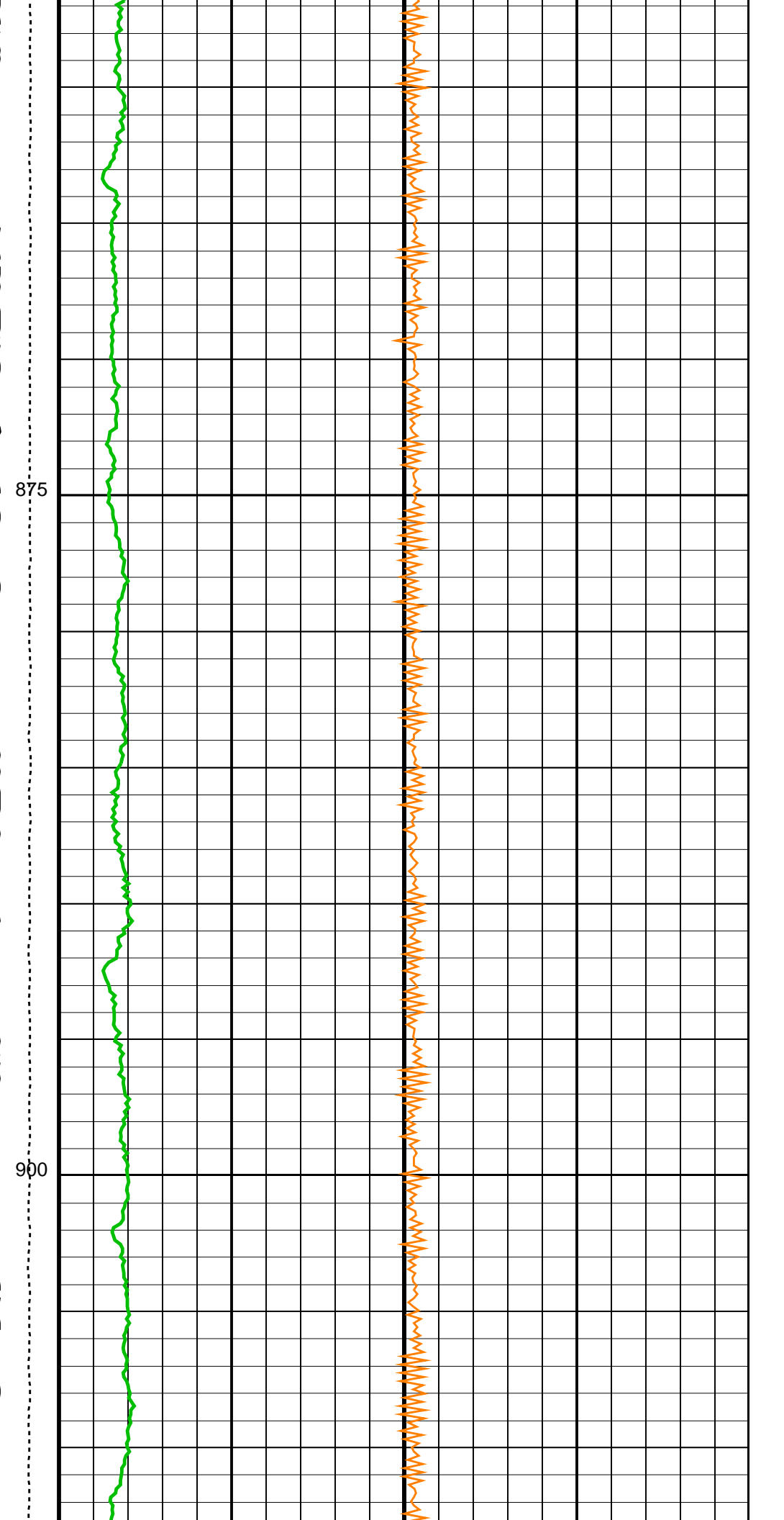
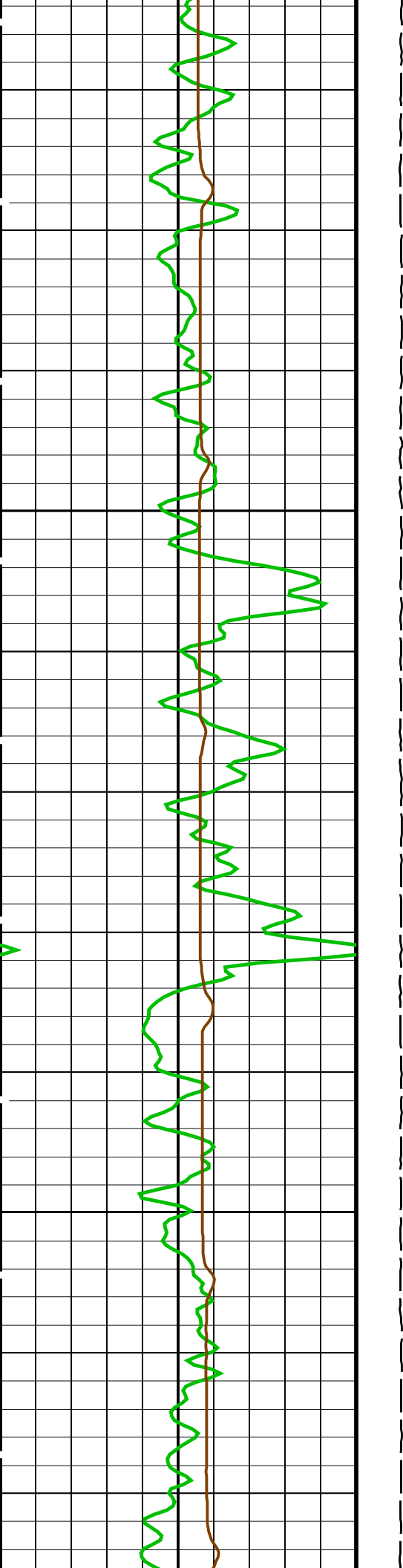


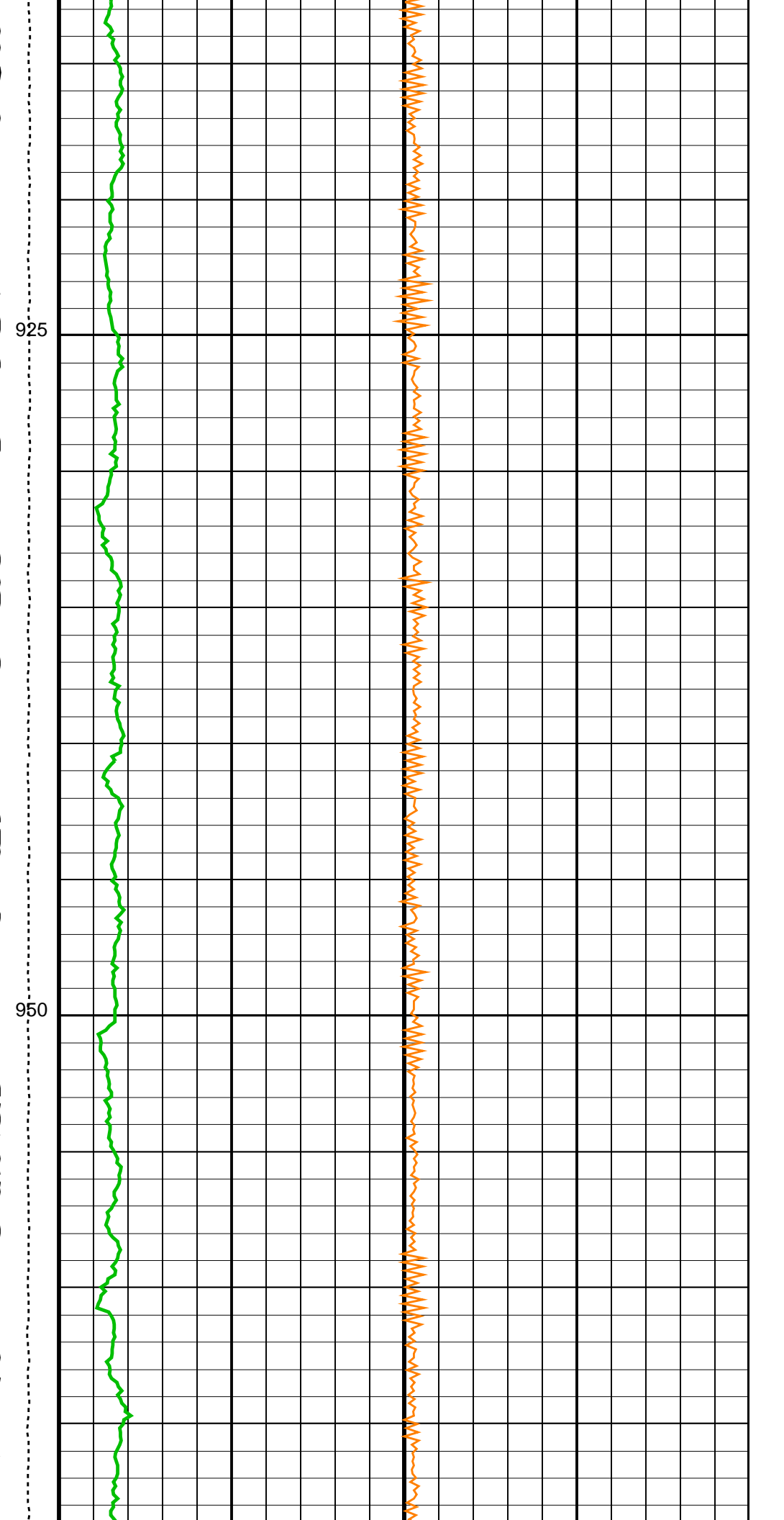
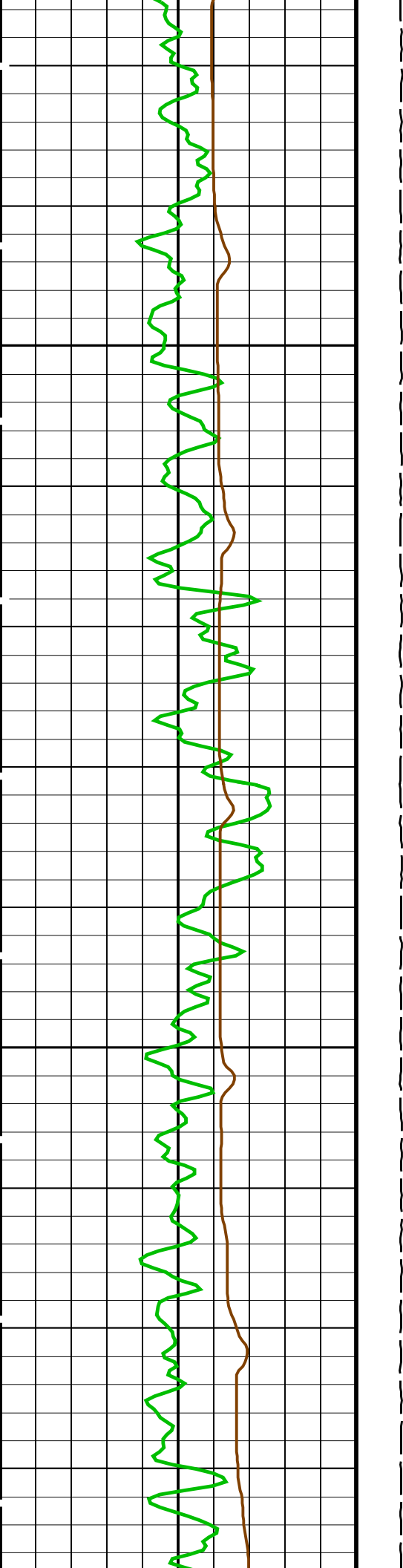
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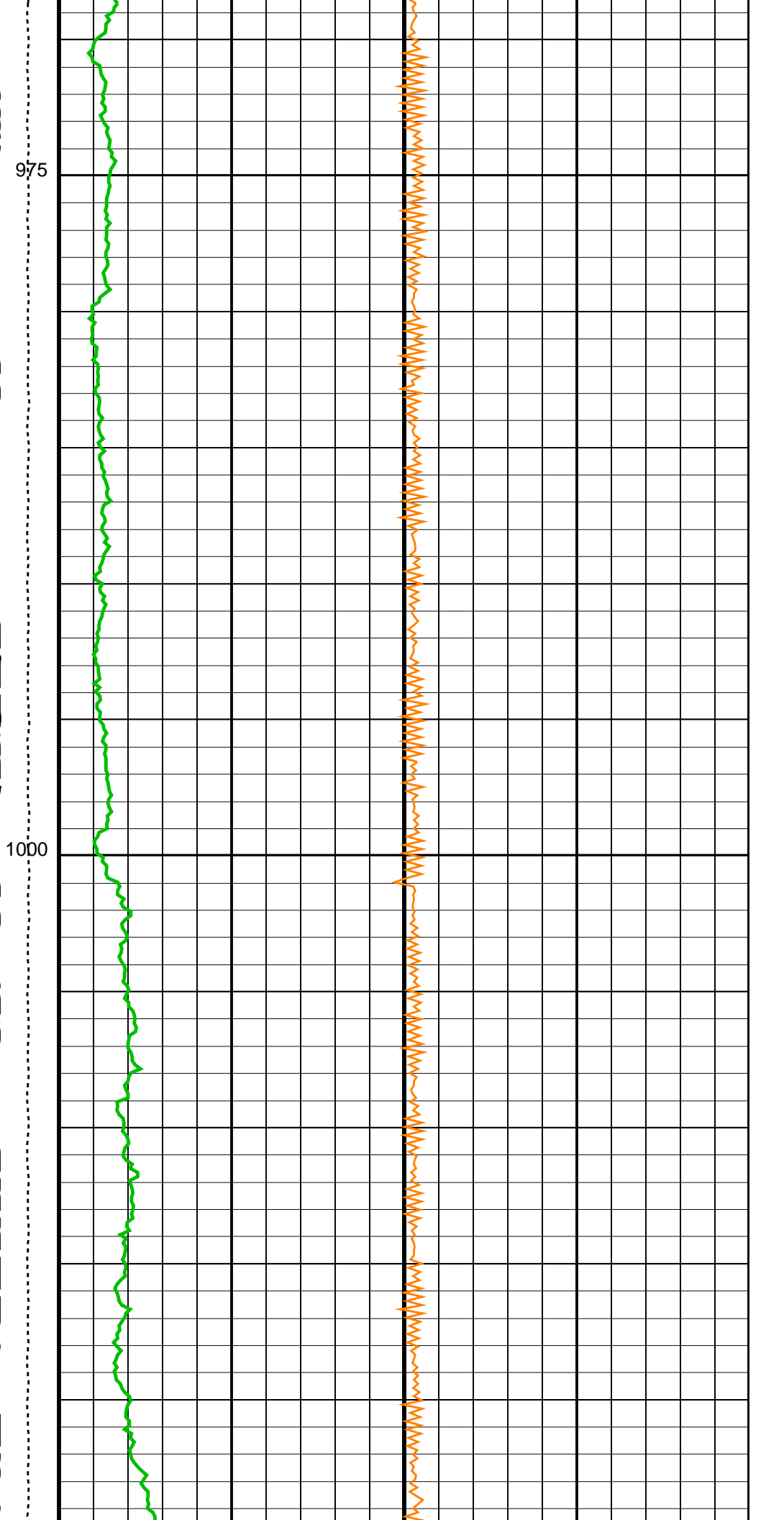
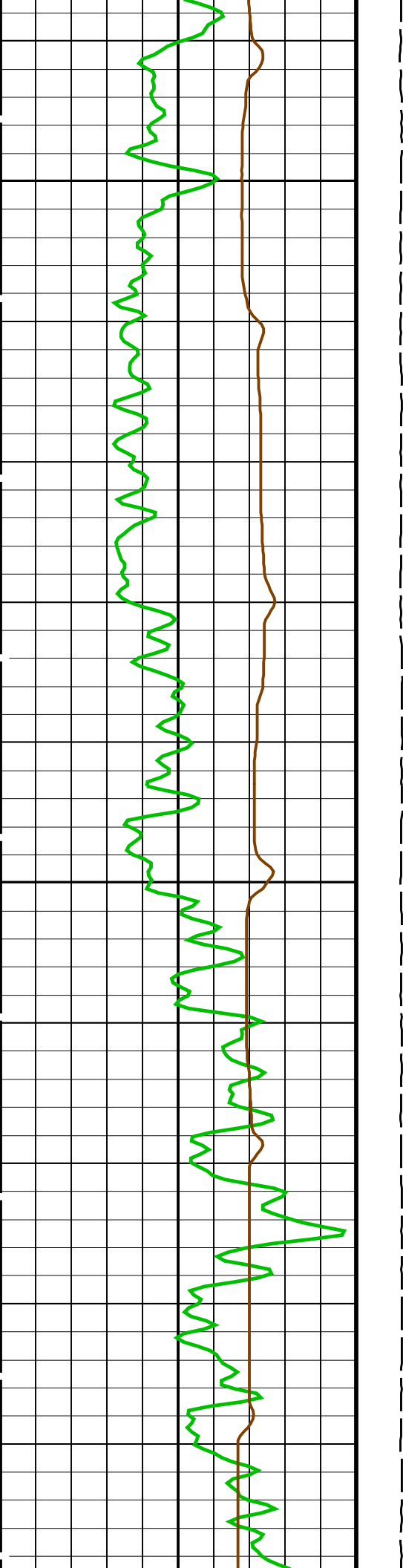


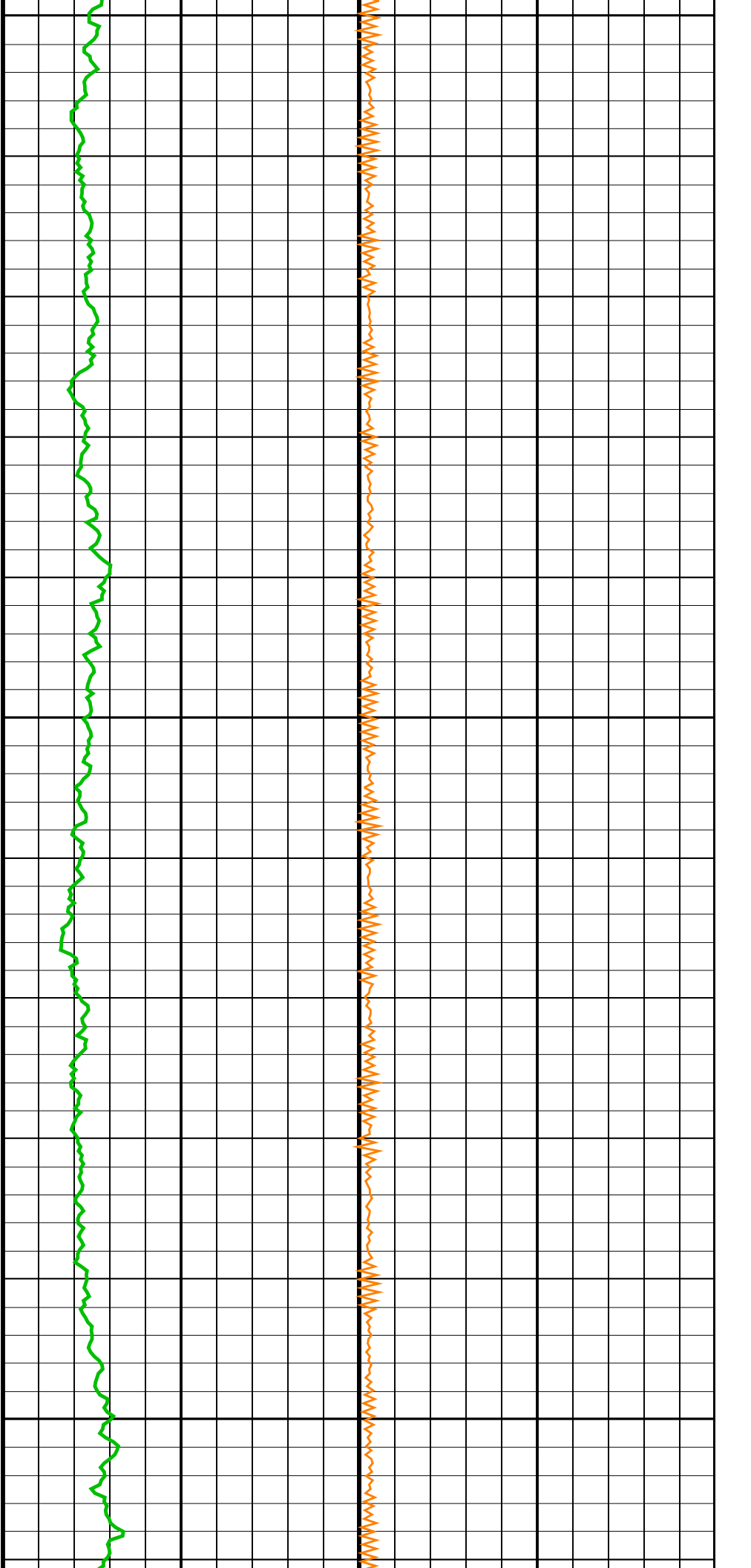
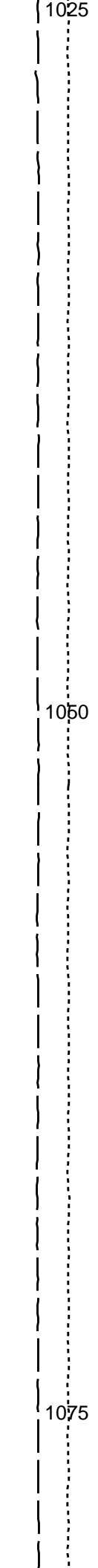
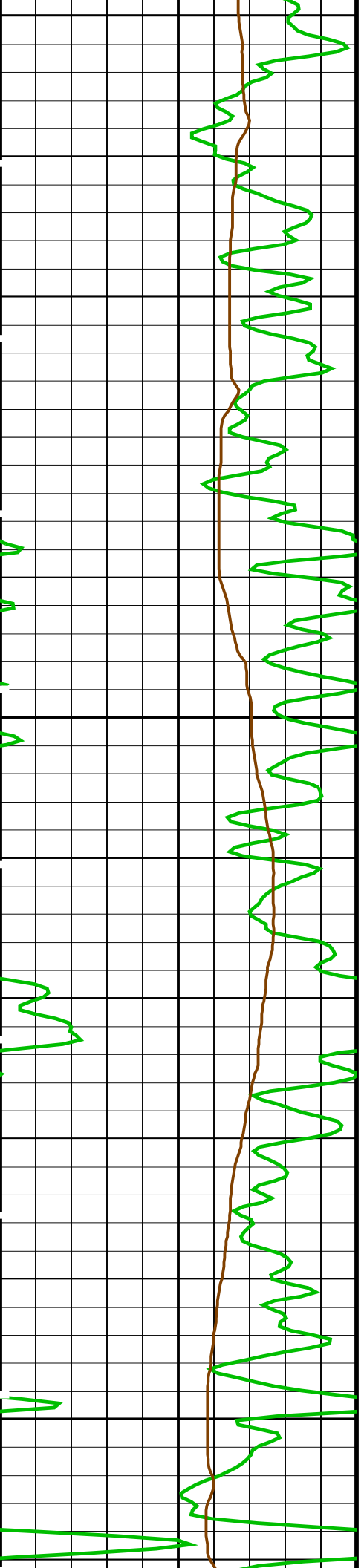


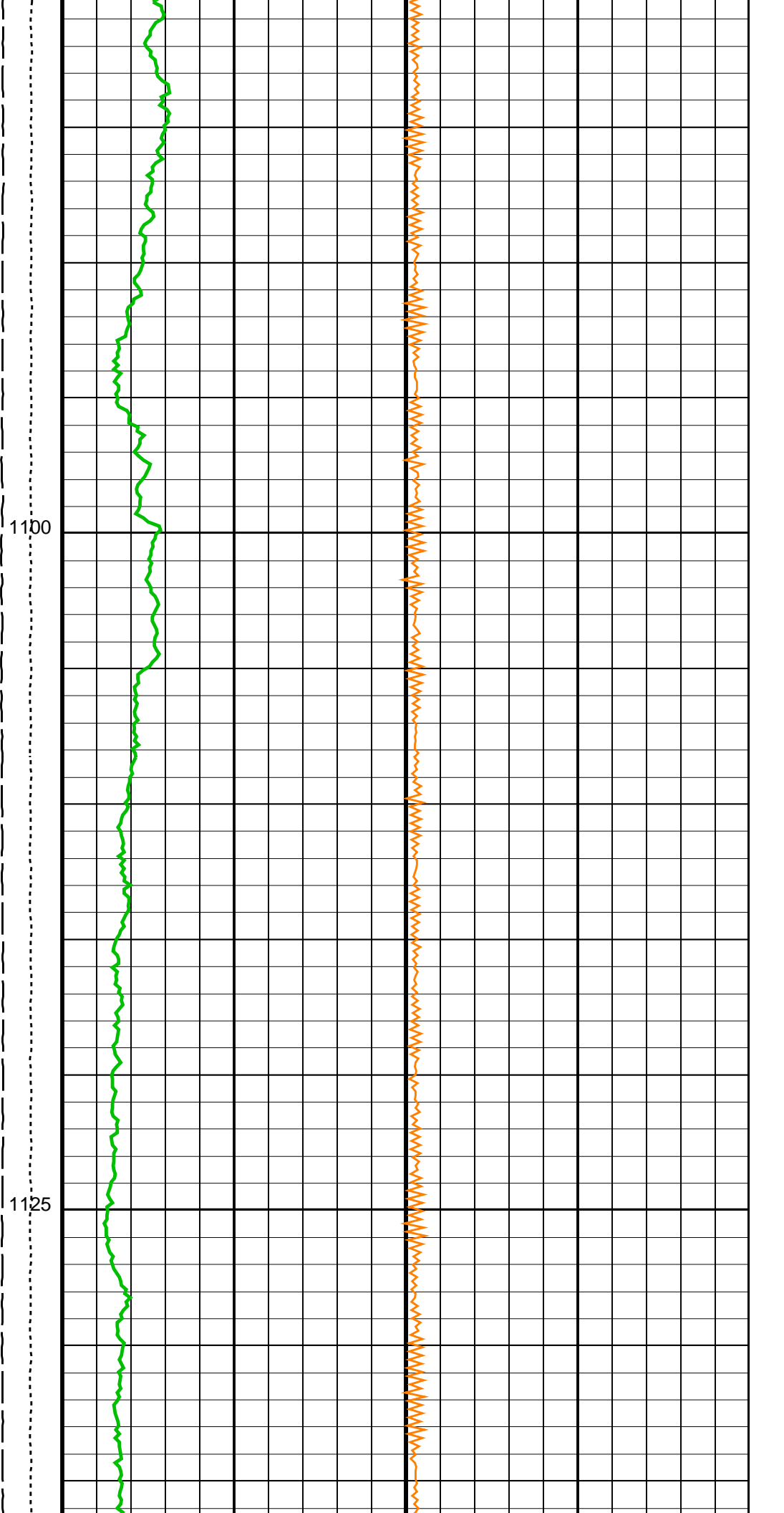
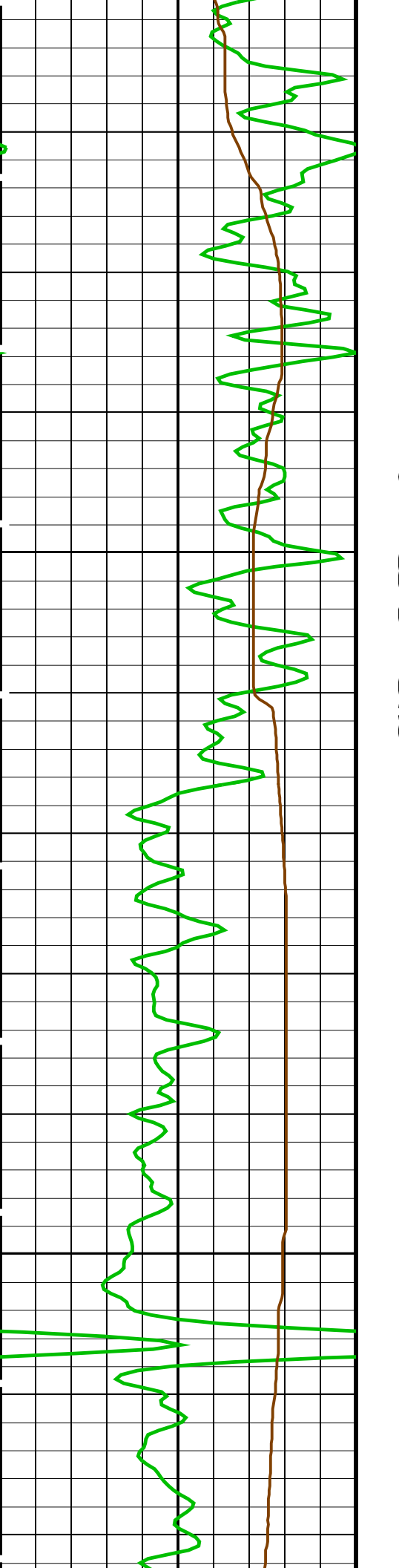


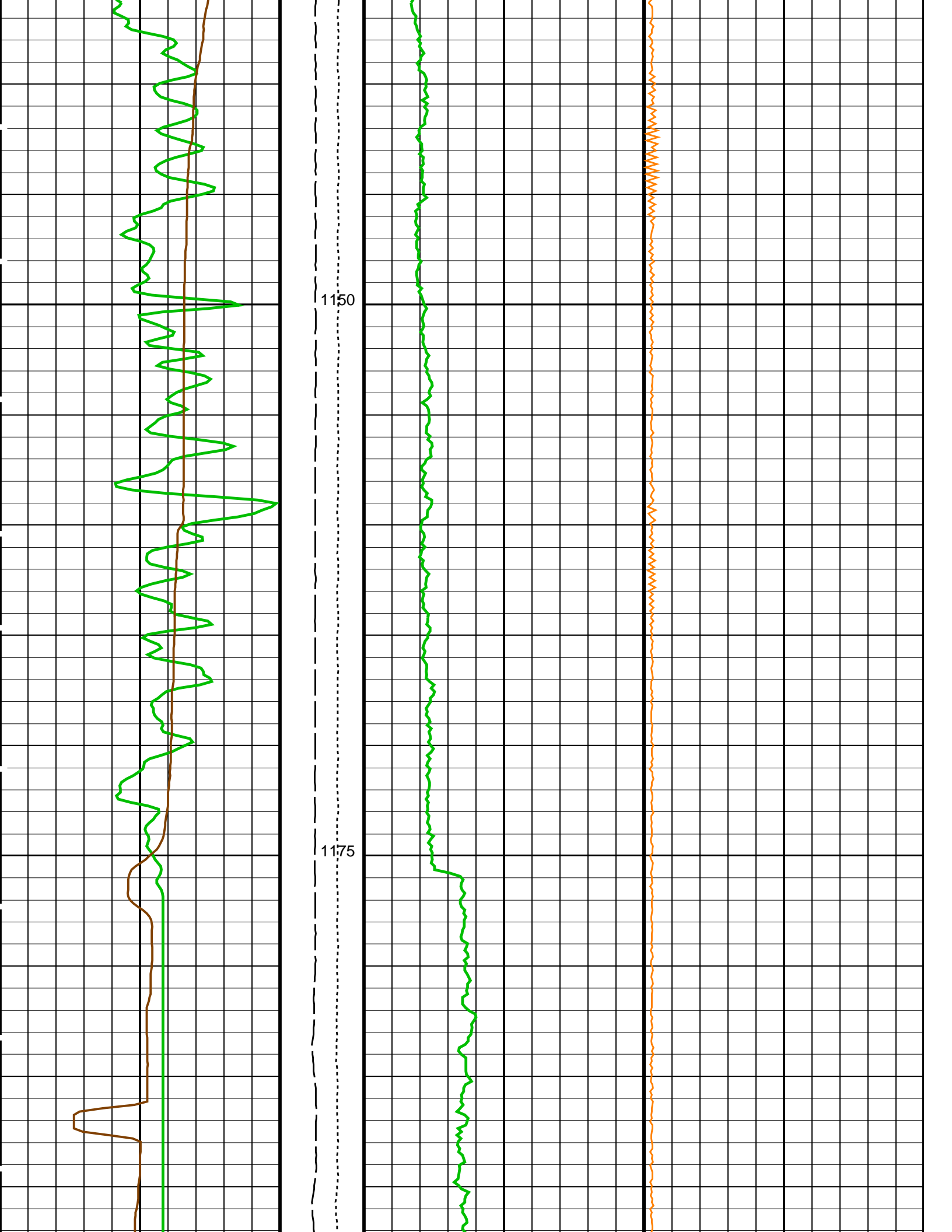


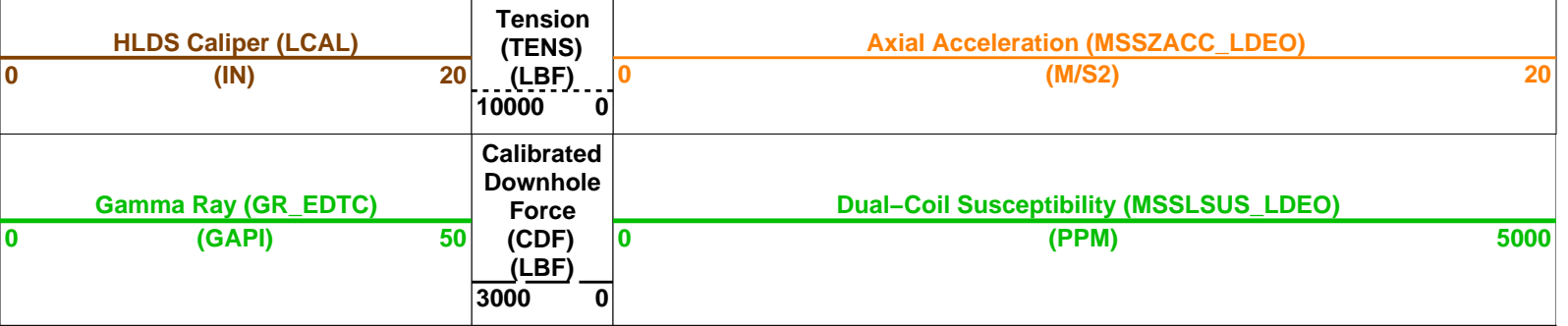
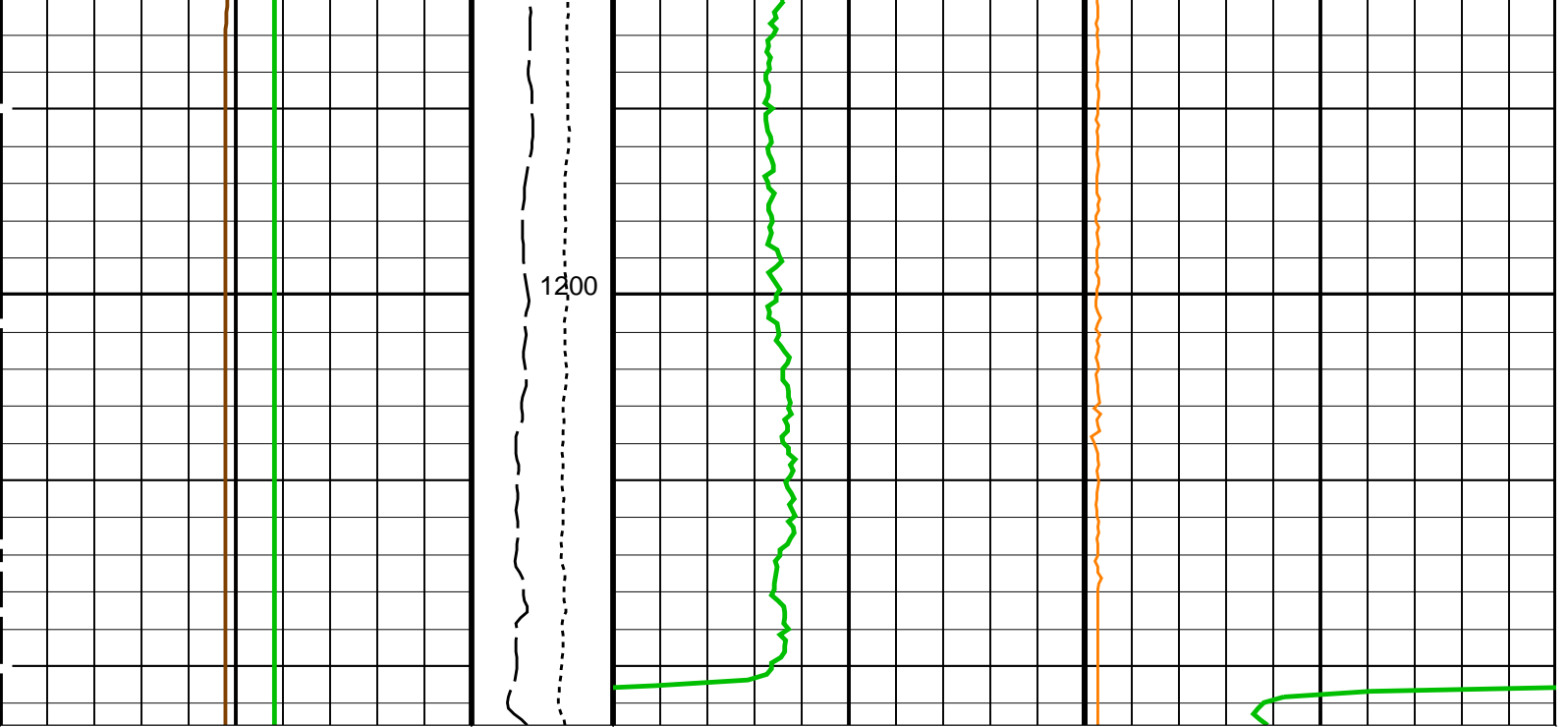












PIP SUMMARY

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)	40 DEGC
CALSTAT	HRLTB Calibration Status	SHALLOW_DONE
CALTEMP	HRLTB Calibration Temperature	18.5041 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
PROCVN	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	ON	
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	1000	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	1941.83	V
ADSO	APS Array Detectors Data Source Switch	Both	
AFSD	APS Far Detector High Voltage Setting	2032.14	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	1700.66	V
ASOS	APS Standoff Correction Switch	ON	
ATSS	APS Temperature-Pressure-Salinity Correction Switch	OFF	
BHFL_APS	APS TNPH Borehole Fluid Type	WATER	
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	40	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	NO	
MCOR_APS	APS TNPH Mud Correction	NATU	
MWCO_APS	APS TNPH Mud Weight Correction Option	YES	
NARC	APS Near/Array Calibration Ratio	1.08475	
NFRC	APS Near/Far Calibration Ratio	0.978244	
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)	40	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	-0.000611808	
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

SHT	Surface Hole Temperature	20	DEGC
TPOS	Tool Position	ECCE	
VBA1	HNGS Detector 1 Variable Barite Factor Running Average	1.02304	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	1.00091	
EDTC-B: Enhanced DTS Cartridge			
BHFL	Borehole Fluid Type	WATER	
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	40	DEGC
BSCO	Borehole Salinity Correction Option	NO	
CCCO	Casing & Cement Thickness Correction Option	NO	
DPPM	Density Porosity Processing Mode	HIRS	
FSAL	Formation Salinity	-50000	PPM
FSCO	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	Hole Size Correction Option	YES	
ISSBAR	Barite Mud Switch	NOBARITE	
ISSBAR_EDTC	Nuclear Mud Type	NOBARITE	
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
MCCO	Mud Cake Correction Option	NO	
MCOR	Mud Correction	NATU	
MWCO	Mud Weight Correction Option	YES	
PTCO	Pressure/Temperature Correction Option	NO	
SDAT	Standoff Data Source	SOCN	
SHT	Surface Hole Temperature	20	DEGC
SOCN	Standoff Distance	0.5	IN
SOCO	Standoff Correction Option	NO	
TPOS_EDTC	EDTC Tool Centered/Eccentered	Eccentered	
U-ETELM_EDTS	Telemetry Mode for eWAFE	Standard_EDTS	
U-TELM_EDTS	Telemetry Mode for WAFE	Standard_EDTS	
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	5.500	IN
CWEI	Casing Weight	168.00	LB/F
DFD	Drilling Fluid Density	1.05	G/C3
FLEV	Fluid Level	-50000.00	M
MST	Mud Sample Temperature	23.00	DEGC
PBVSADP	Use alternate depth channel for playback	NO	
RMFS	Resistivity of Mud Filtrate Sample	-50000.0000	OHMM
RW	Resistivity of Connate Water	1.0000	OHMM
TD	Total Depth	1212.2	M
TDD	Total Depth - Driller	1212.40	M
TDL	Total Depth - Logger	1211.00	M
TWS	Temperature of Connate Water Sample	37.78	DEGC

Format: MSS_Logging

Vertical Scale: 1:200

Graphics File Created: 05-Nov-2015 21:24

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	EDTC-B	SKK-5169-EDTCB

Output DLIS Files

DEFAULT	MSS_LDEO_HRLA_LDL_009LUP	FN:11	PRODUCER	05-Nov-2015 21:24
RTB	MSS_LDEO_HRLA_LDL_009LUP	FN:12	PRODUCER	05-Nov-2015 21:24



Repeat Pass

Output DLIS Files

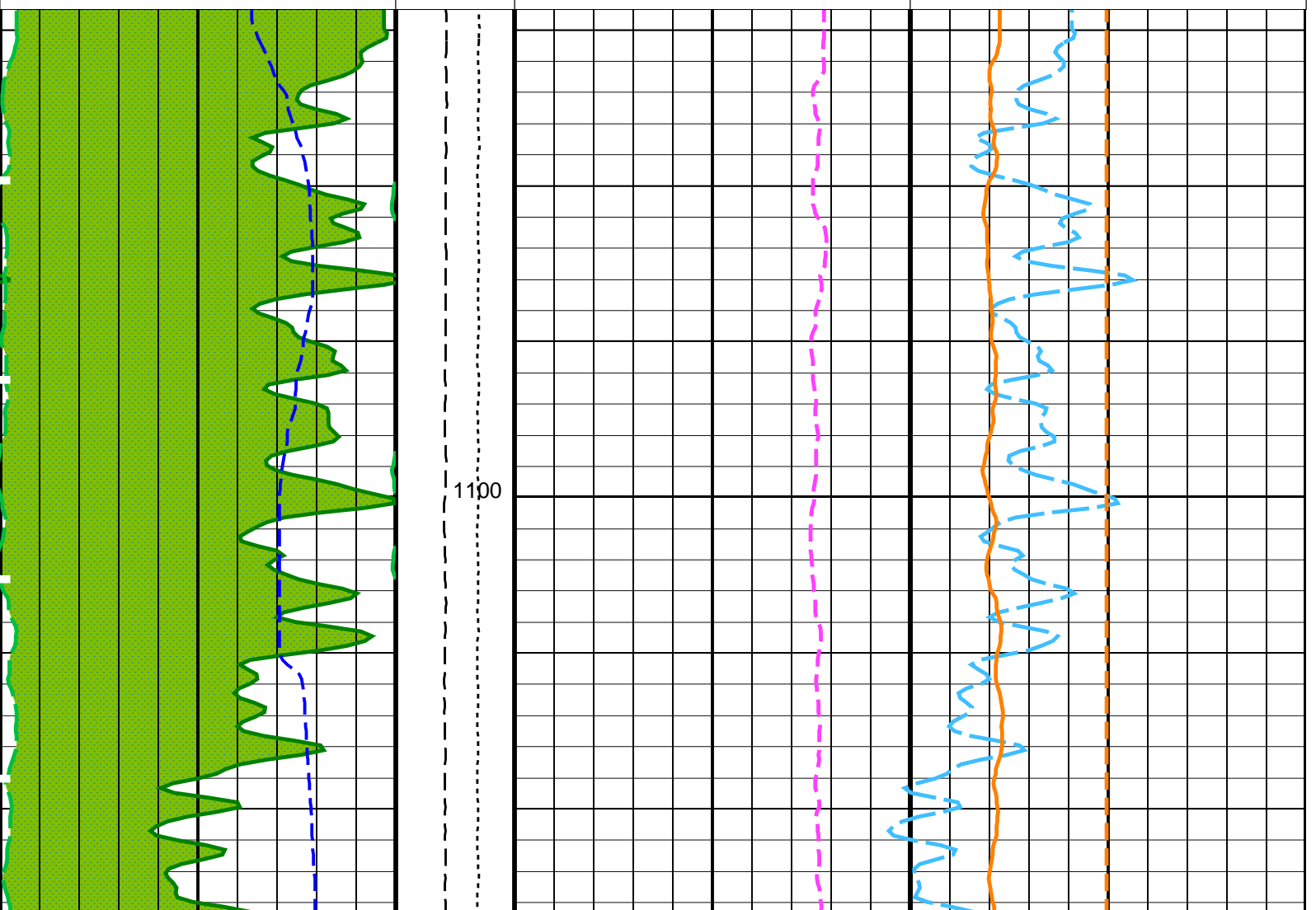
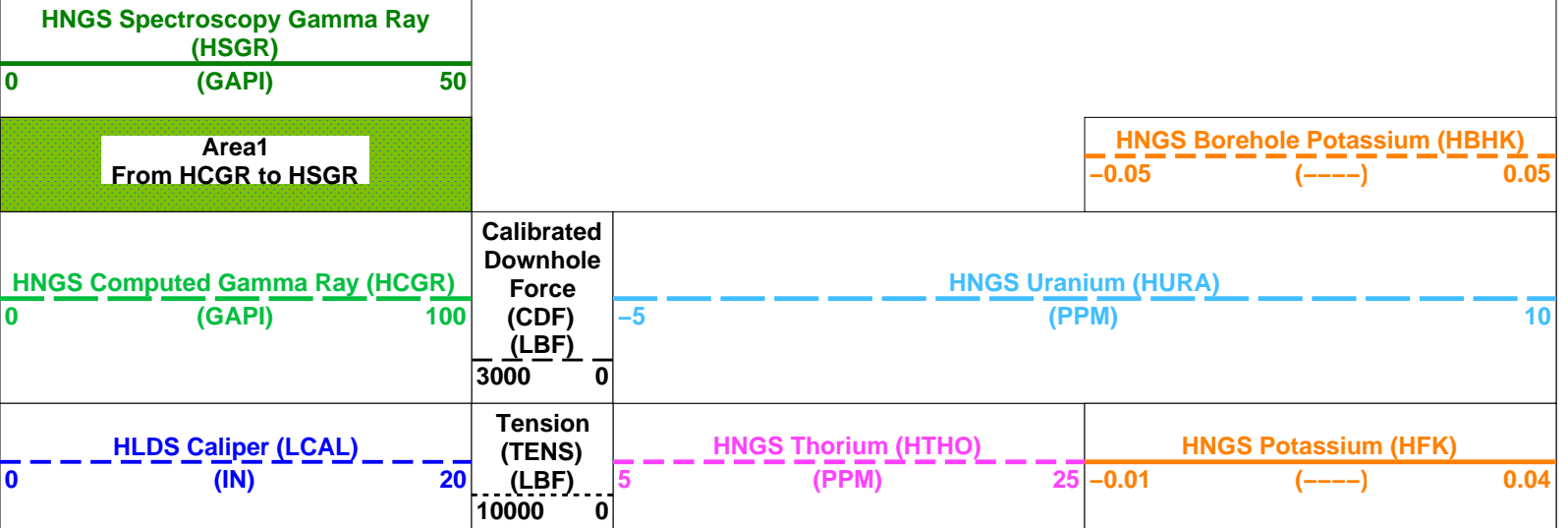
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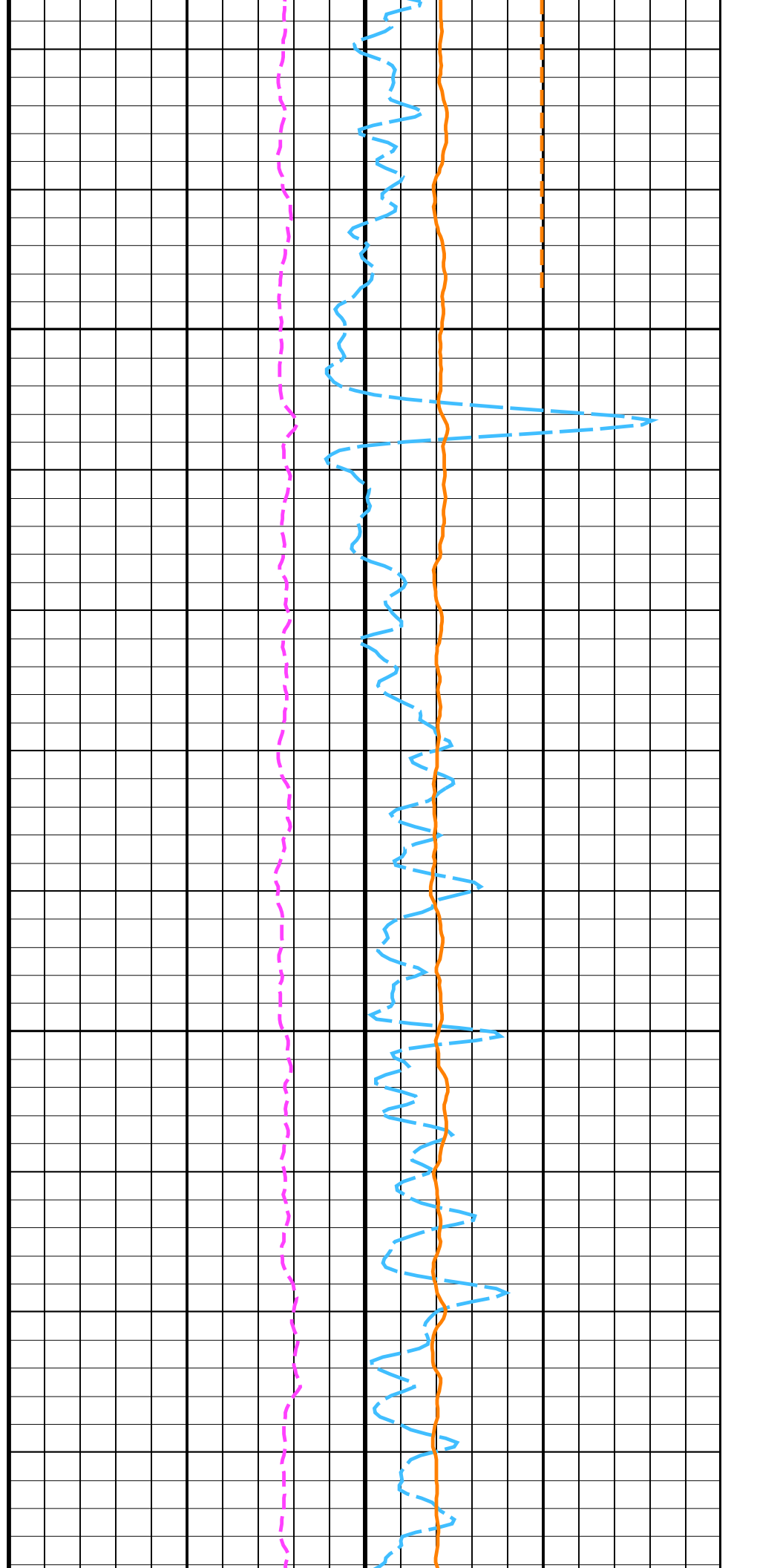
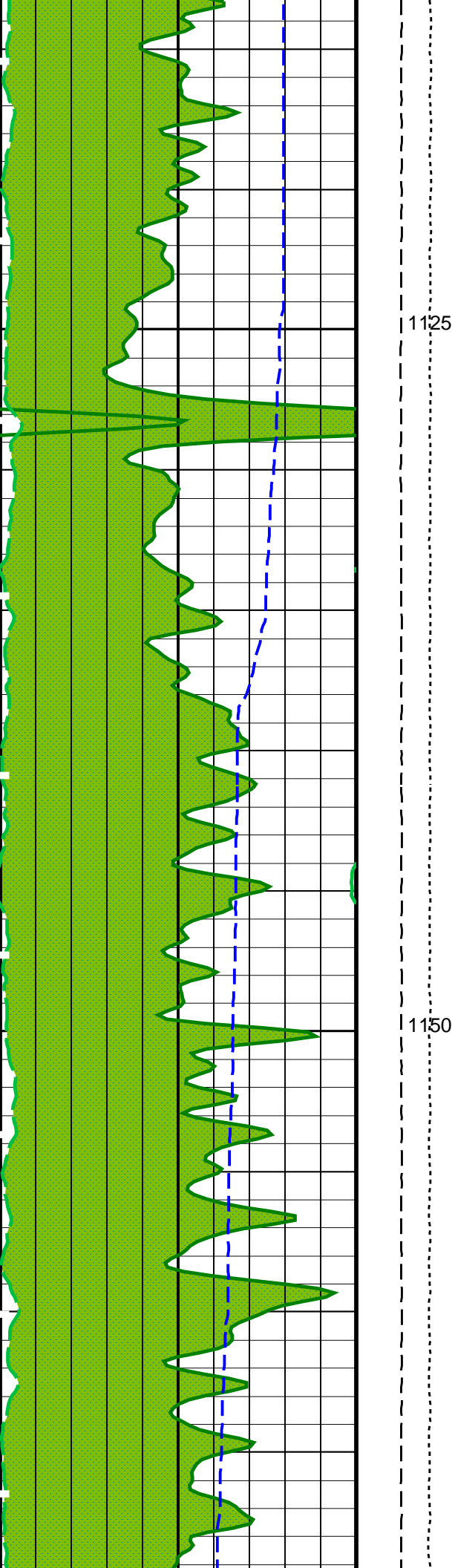
OP System Version: 19C0-187

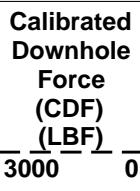
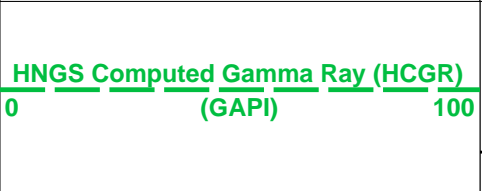
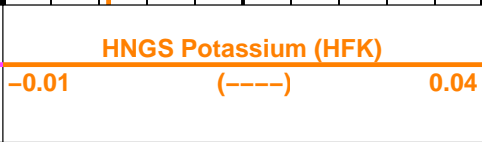
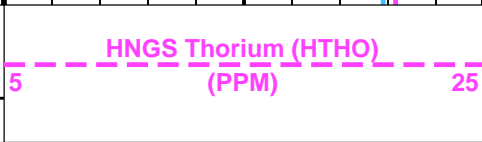
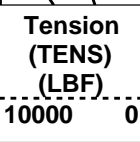
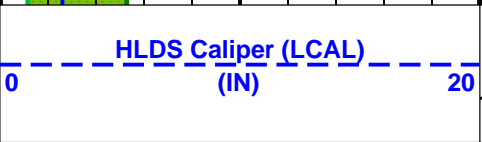
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HLDS	19C0-187	LDSC-B	19C0-187
APS-C	19C0-187	HNGC-B	19C0-187
HNGS-BA	19C0-187	EDTC-B	SKK-5169-EDTCB

PIP SUMMARY

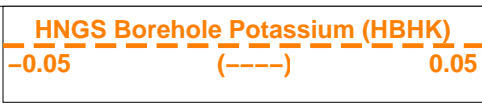
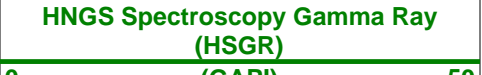
Time Mark Every 60 S







Area1
From HCGR to HSGR



PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value	
HRLT-B: High Resolution Laterolog Array - B			
BHS	Borehole Status	OPEN	
GCSE	Generalized Caliper Selection	LCAL	
APS-C: Accelerator-Porosity Tool			
BHS	Borehole Status	OPEN	
GCSE	Generalized Caliper Selection	LCAL	
HNGS-BA: Hostile Natural Gamma Ray Sonde			
BAR1	HNGS Detector 1 Barite Constant	1	
BAR2	HNGS Detector 2 Barite Constant	1	
BHK	HNGS Borehole Potassium Correction Concentration	0	
BHS	Borehole Status	OPEN	
CSD1	Inner Casing Outer Diameter	0	IN
CSD2	Outer Casing Outer Diameter	0	IN
CSW1	Inner Casing Weight	0	LB/F
CSW2	Outer Casing Weight	0	LB/F
DBCC	HNGS Barite Constant Correction Flag	NONE	
GCSE	Generalized Caliper Selection	LCAL	
H1P	HNGS Detector 1 Allow/Disallow In Processing	ALLOW	
H2P	HNGS Detector 2 Allow/Disallow In Processing	ALLOW	
HABK	HNGS Borehole Potassium Running Average	-0.0148014	
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	1.06715	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	0.996802	
EDTC-B: Enhanced DTS Cartridge			
BHS	Borehole Status	OPEN	
GCSE	Generalized Caliper Selection	LCAL	
System and Miscellaneous			
BS	Bit Size	9.875	IN
DFD	Drilling Fluid Density	1.05	G/C3

Format: HNGSYields Vertical Scale: 1:200 Graphics File Created: 05-Nov-2015 20:47

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	EDTC-B	SKK-5169-EDTCB

Output DLIS Files

DEFAULT	MSS_LDEO_HRLA_LDL_007LUP	FN:7	PRODUCER	05-Nov-2015 20:47
RTB	MSS_LDEO_HRLA_LDL_007LUP	FN:8	PRODUCER	05-Nov-2015 20:47

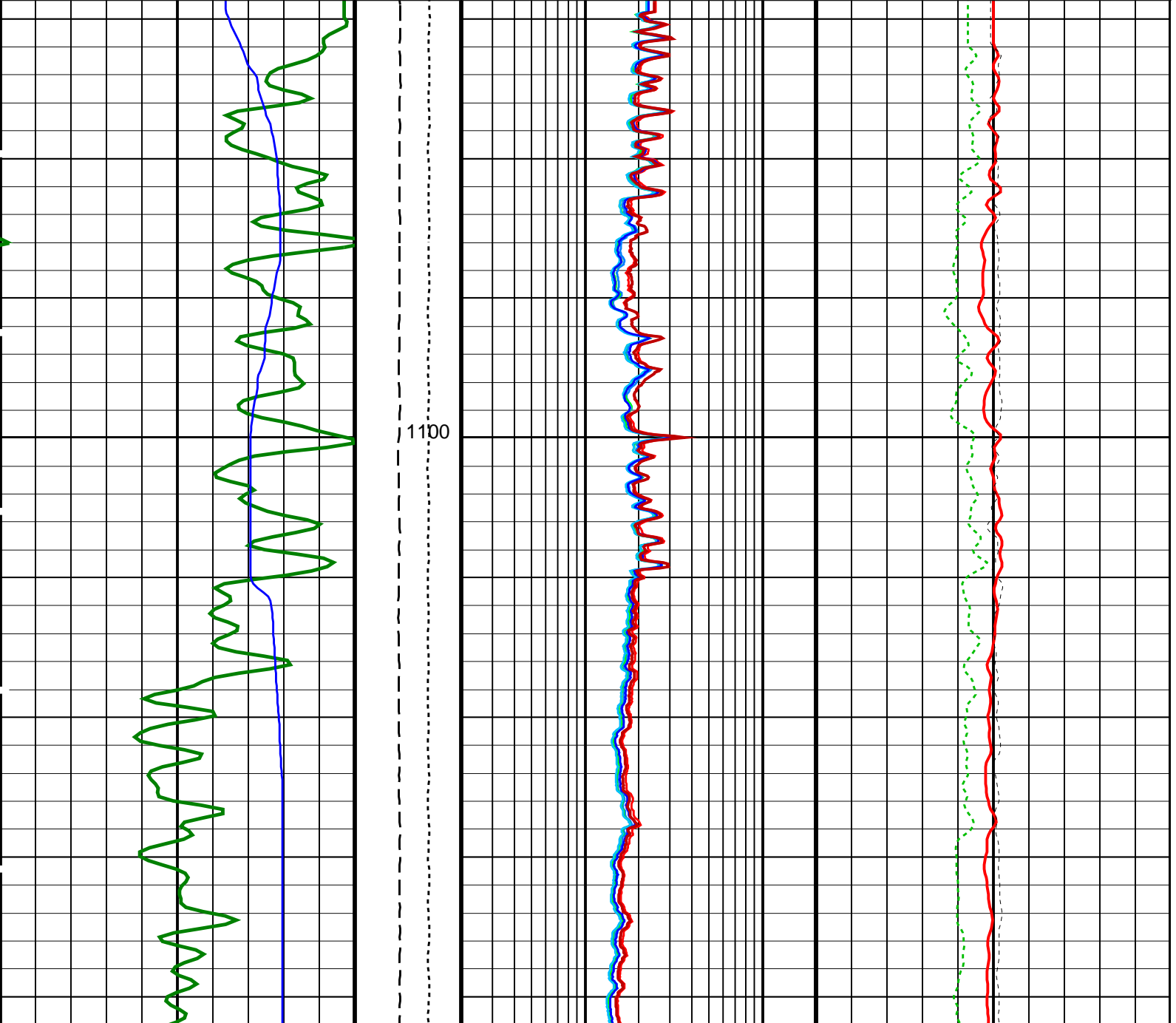
Output DLIS Files

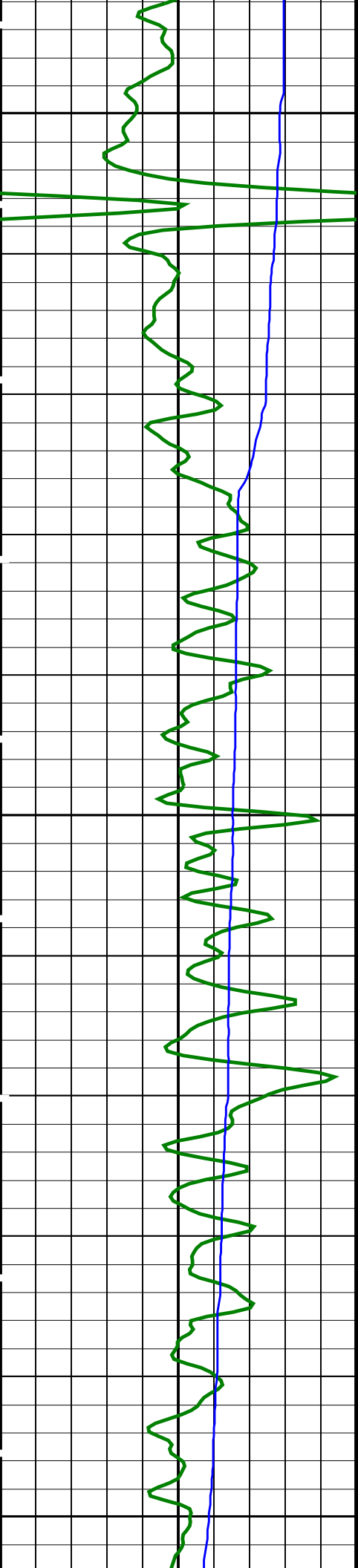
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RTB	MSS_LDEO_HRLA_LDL_007LUP	FN:8	PRODUCER	05-Nov-2015 20:47	1211.6 M	1084.3 M

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	EDTC-B	SKK-5169-EDTCB

		HRLT True Resistivity (RT_HRLT)			
		0.2	(OHMM)	20	
		HRLT Resistivity 1 (RLA1)			
		0.2	(OHMM)	20	
		HRLT Resistivity 2 (RLA2)		HLDS Bulk Density Correction (DRH)	
		0.2	(OHMM)	20	-0.25 (G/C3) 0.25
		HRLT Resistivity 3 (RLA3)		HLDS Bulk Density (RHOM)	
		0.2	(OHMM)	20	0 (G/C3) 4
HNGS Spectroscopy Gamma Ray (HSGR)		Calibrated Downhole Force (CDF) (LBF)		HRLT Resistivity 5 (RLA5)	
0 (GAPI) 50		3000 0		0.2 (OHMM) 20	
				HLDS Long Spaced Photoelectric Effect (PEFL)	
				0 (----) 10	
HLDS Caliper (LCAL)		Tension (TENS) (LBF)		HRLT Resistivity 4 (RLA4)	
0 (IN) 20		10000 0		0.2 (OHMM) 20	
				APS Corrected Standoff Porosity (STPC)	
				100 (PU) 0	

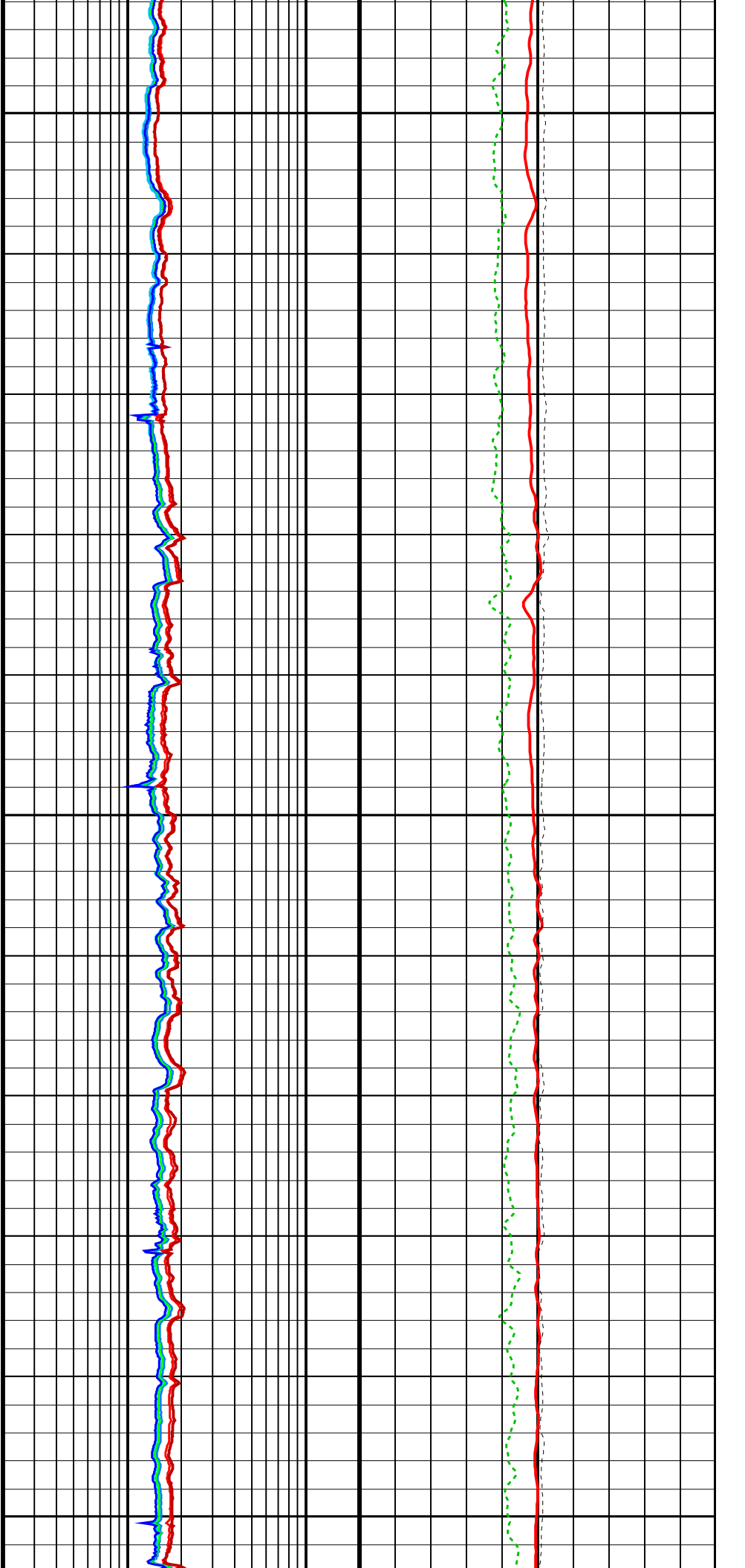


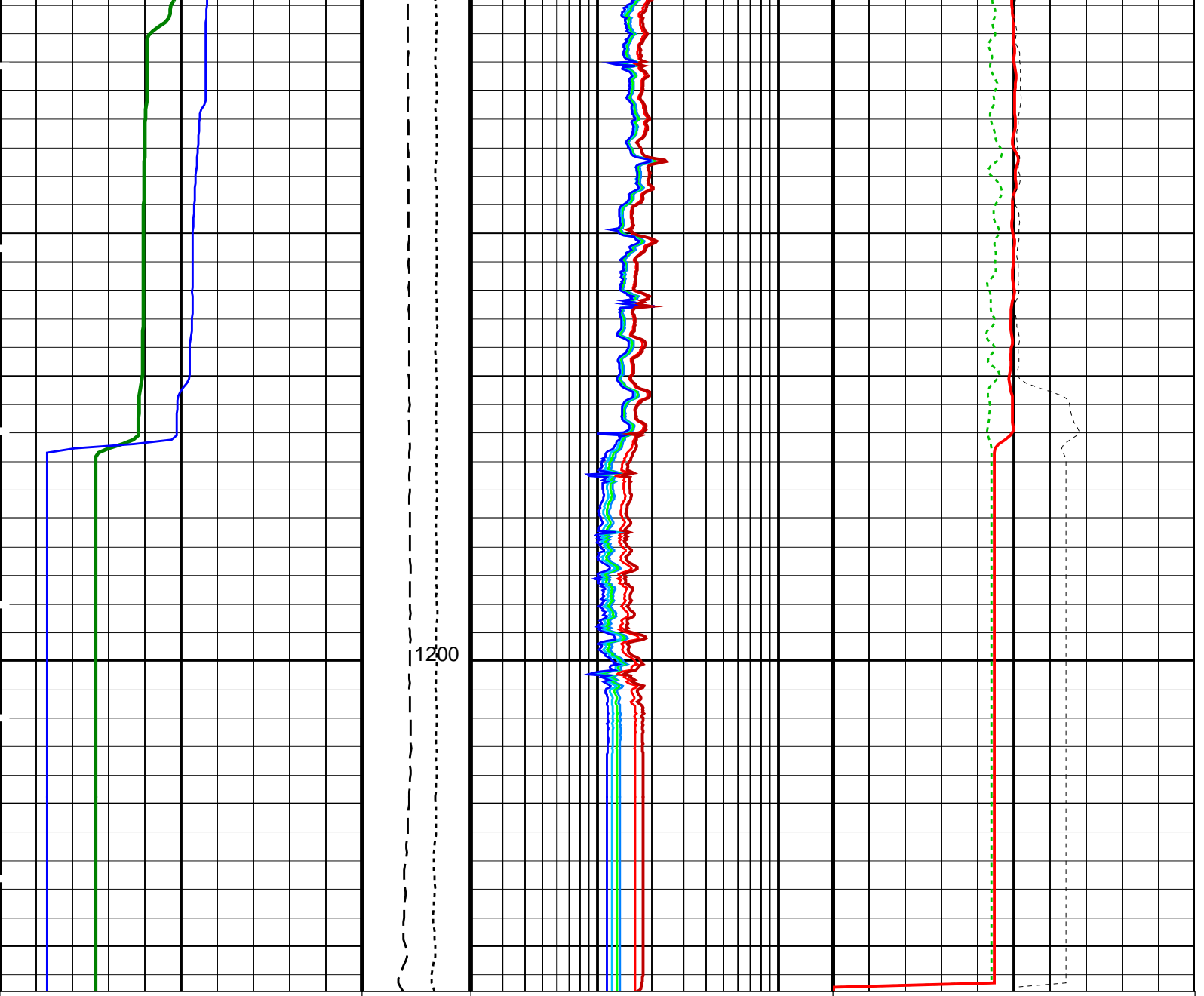


1125

1150

1175





<p>HLDS Caliper (LCAL) (IN)</p> <p>0 20</p>	<p>Tension (TENS) (LBF)</p> <p>10000 0</p>	<p>HRLT Resistivity 4 (RLA4) (OHMM)</p> <p>0.2 20</p>	<p>APS Corrected Standoff Porosity (STPC) (PU)</p> <p>100 0</p>
<p>HNGS Spectroscopy Gamma Ray (HSGR) (GAPI)</p> <p>0 50</p>	<p>Calibrated Downhole Force (CDF) (LBF)</p> <p>3000 0</p>	<p>HRLT Resistivity 5 (RLA5) (OHMM)</p> <p>0.2 20</p>	<p>HLDS Long Spaced Photoelectric Effect (PEFL) (-----)</p> <p>0 10</p>
		<p>HRLT Resistivity 3 (RLA3) (OHMM)</p> <p>0.2 20</p>	<p>HLDS Bulk Density (RHOM) (G/C3)</p> <p>0 4</p>
		<p>HRLT Resistivity 2 (RLA2) (OHMM)</p> <p>0.2 20</p>	<p>HLDS Bulk Density Correction (DRH) (G/C3)</p> <p>-0.25 0.25</p>
		<p>HRLT Resistivity 1 (RLA1) (OHMM)</p> <p>0.2 20</p>	
		<p>HRLT True Resistivity (RT_HRLT) (OHMM)</p> <p>0.2 20</p>	

PIP SUMMARY

Parameters

DLIS Name	Description	Value	
HRLT-B: High Resolution Laterolog Array - B			
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	40	DEGC
CALSTAT	HRLTB Calibration Status	SHALLOW_DONE	
CALTEMP	HRLTB Calibration Temperature	26.8049	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	ON	
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	1000	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	1941.83	V
AFSD	APS Array Detectors Data Source Switch	Both	
AHCS	APS Far Detector High Voltage Setting	2032.14	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	1700.66	V
ATSS	APS Standoff Correction Switch	ON	
BHFL_APS	APS Temperature-Pressure-Salinity Correction Switch	OFF	
BHS	APS TNPH Borehole Fluid Type	WATER	
BHT	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	40	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	NO	
MCOR_APS	APS TNPH Mud Correction	NATU	
MWCO_APS	APS TNPH Mud Weight Correction Option	YES	
NARC	APS Near/Array Calibration Ratio	1.08475	
NFRC	APS Near/Far Calibration Ratio	0.978244	
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)	40	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	-0.0148014	
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	1.06715	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	0.996802	

EDTC-B: Enhanced DTS Cartridge

BHFL	Borehole Fluid Type	WATER	
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	40	DEGC
BSCO	Borehole Salinity Correction Option	NO	
CCCO	Casing & Cement Thickness Correction Option	NO	
DPPM	Density Porosity Processing Mode	HIRS	
FSAL	Formation Salinity	-50000	PPM
FSCO	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	Hole Size Correction Option	YES	
ISSBAR	Barite Mud Switch	NOBARITE	
ISSBAR_EDTC	Nuclear Mud Type	NOBARITE	
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
MCCO	Mud Cake Correction Option	NO	
MCOR	Mud Correction	NATU	
MWCO	Mud Weight Correction Option	YES	
PTCO	Pressure/Temperature Correction Option	NO	
SDAT	Standoff Data Source	SOCN	
SHT	Surface Hole Temperature	20	DEGC
SOCN	Standoff Distance	0.5	IN
SOCO	Standoff Correction Option	NO	
TPOS_EDTC	EDTC Tool Centered/Eccentered	Eccentered	
U-ETELM_EDTS	Telemetry Mode for eWAFE	Standard_EDTS	
U-TELM_EDTS	Telemetry Mode for WAFE	Standard_EDTS	

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	5.500	IN
CWEI	Casing Weight	168.00	LB/F
DFD	Drilling Fluid Density	1.05	G/C3
FLEV	Fluid Level	-50000.00	M
MST	Mud Sample Temperature	23.00	DEGC
PBVSADP	Use alternate depth channel for playback	NO	
RMFS	Resistivity of Mud Filtrate Sample	-50000.0000	OHMM
RW	Resistivity of Connate Water	1.0000	OHMM
TD	Total Depth	1212.2	M
TDD	Total Depth - Driller	1212.40	M
TDI	Total Depth - Logger	1211.00	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	EDTC-B	SKK-5169-EDTCB

Output DLIS Files

DEFAULT	MSS_LDEO_HRLA_LDL_007LUP	FN:7	PRODUCER	05-Nov-2015 20:47
RTB	MSS_LDEO_HRLA_LDL_007LUP	FN:8	PRODUCER	05-Nov-2015 20:47

Output DLIS Files

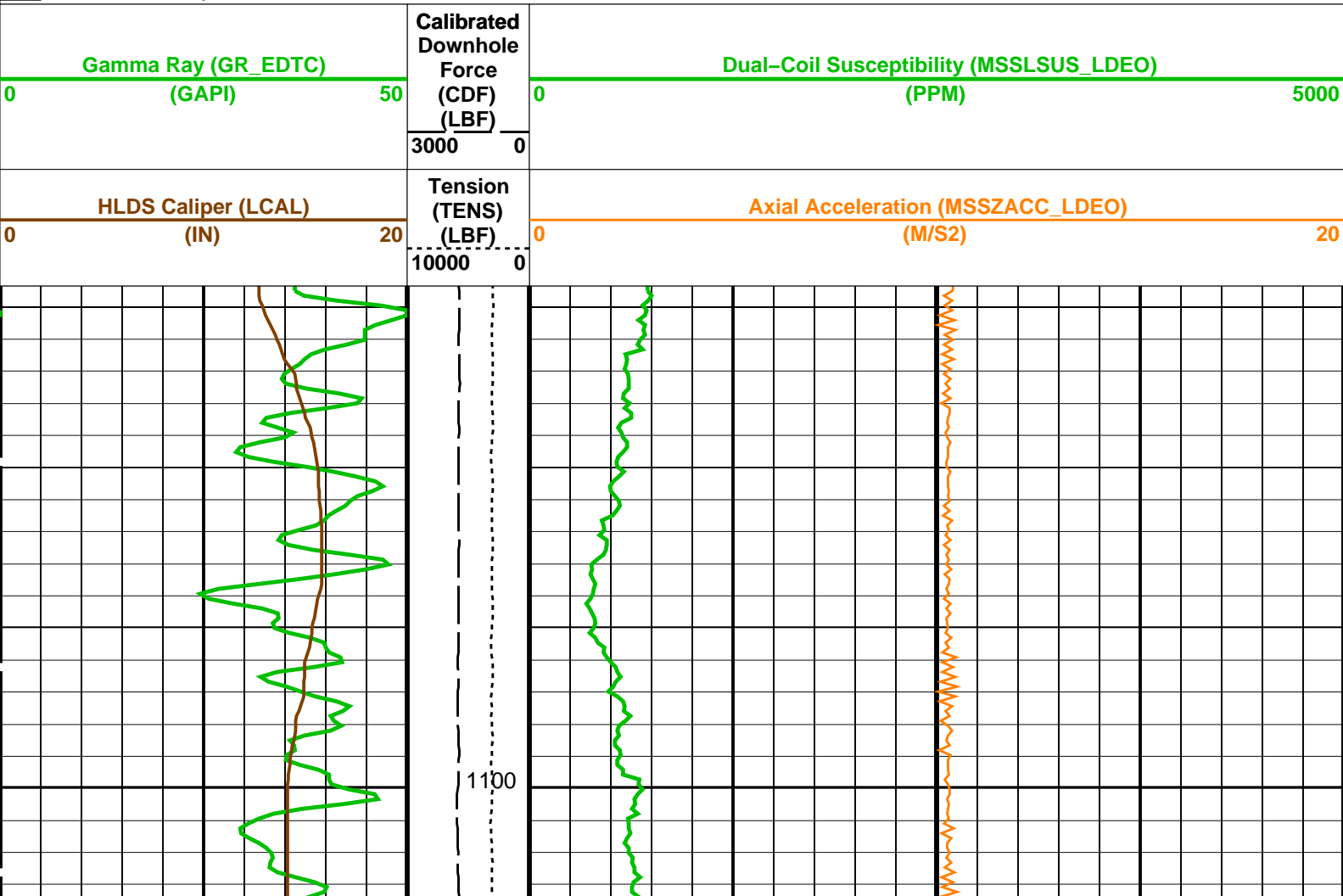
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RTB	MSS_LDEO_HRLA_LDL_007LUP	FN:8	PRODUCER	05-Nov-2015 20:47	1211.6 M	1084.4 M

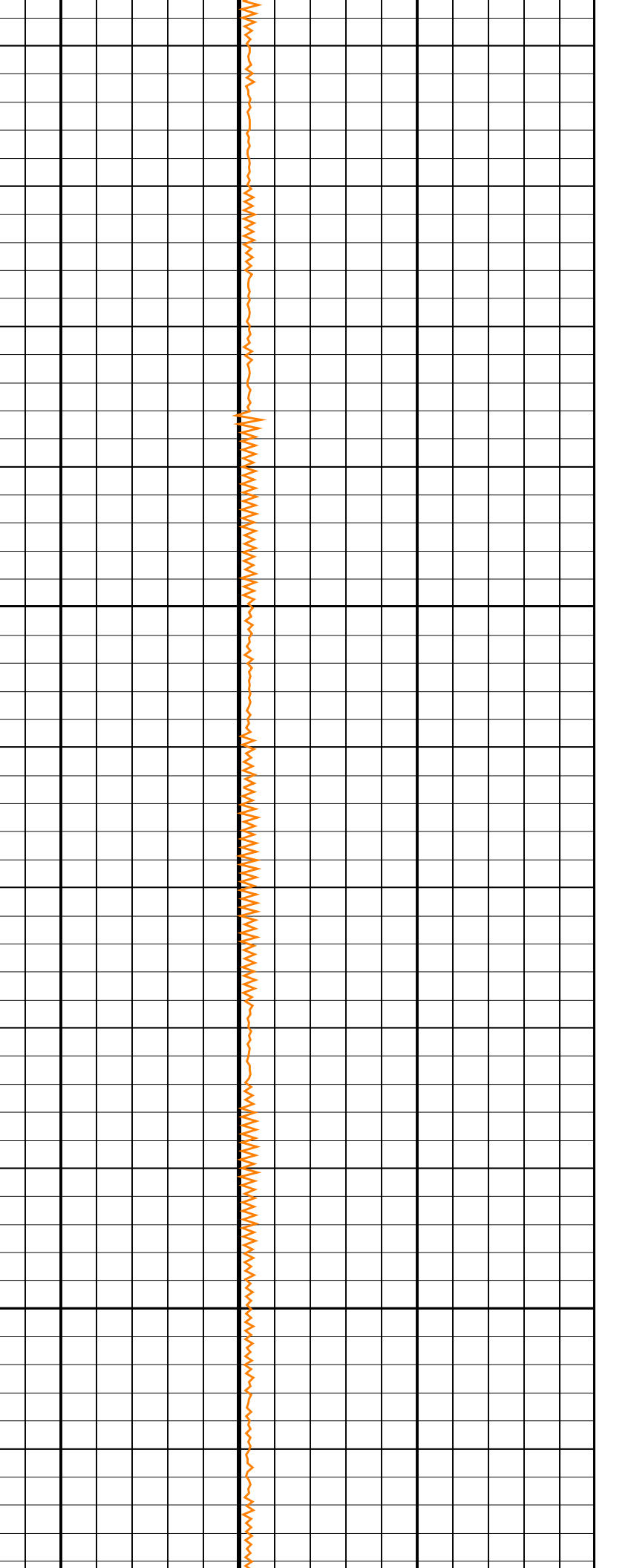
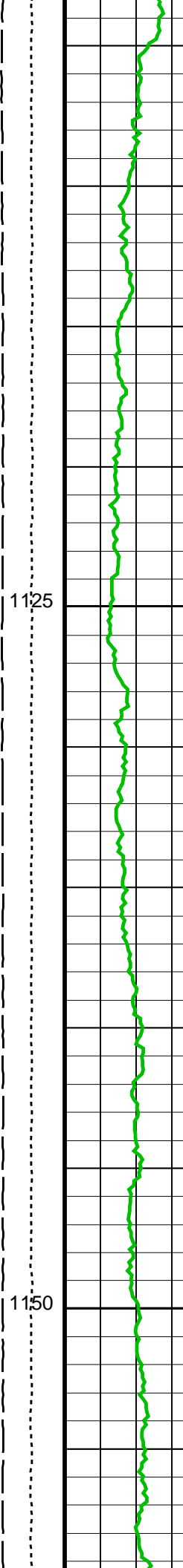
OP System Version: 19C0-187

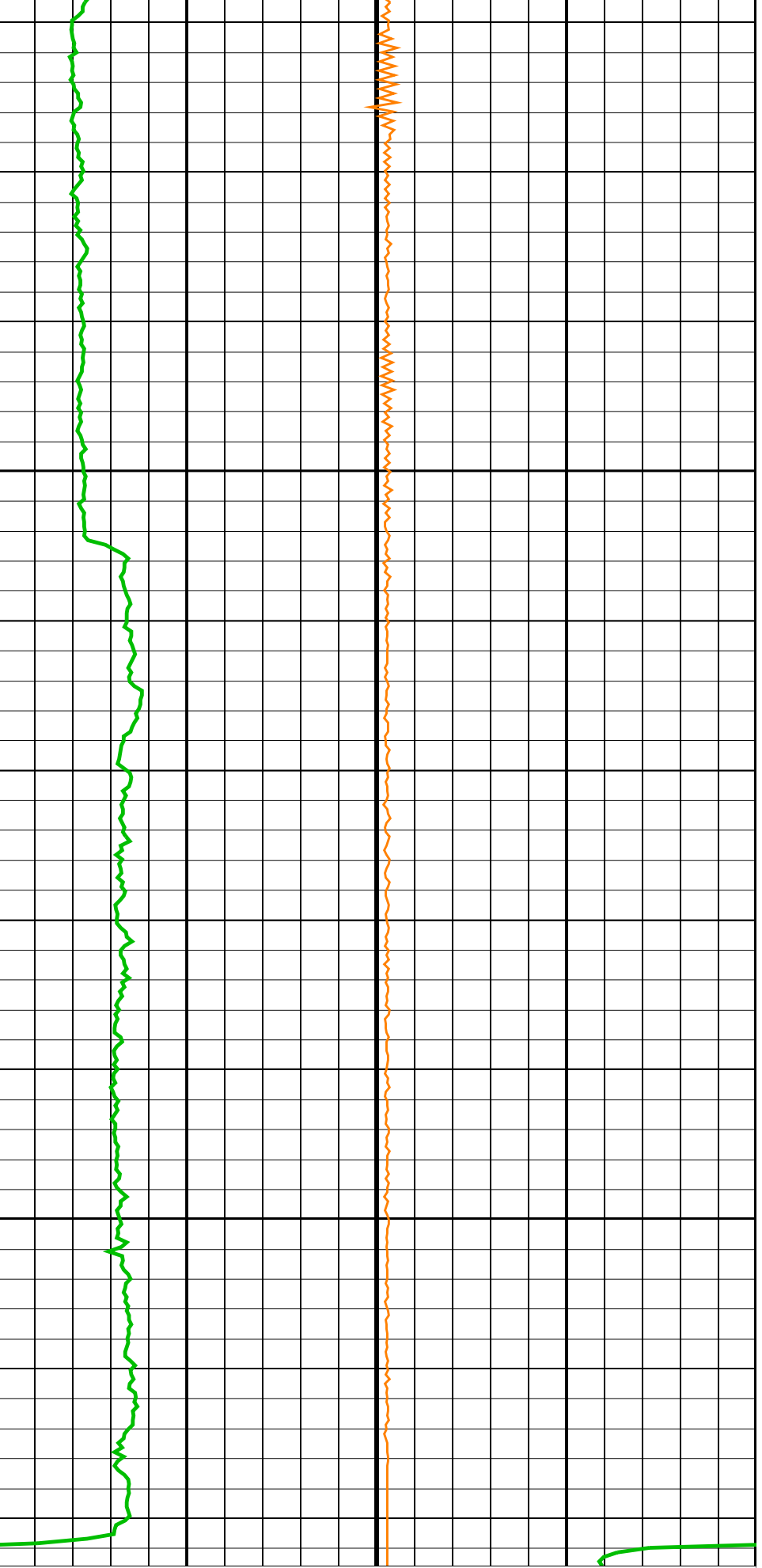
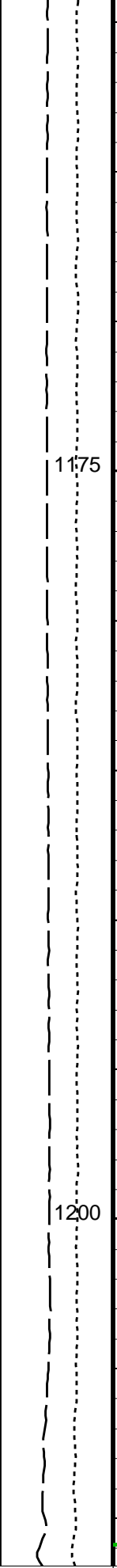
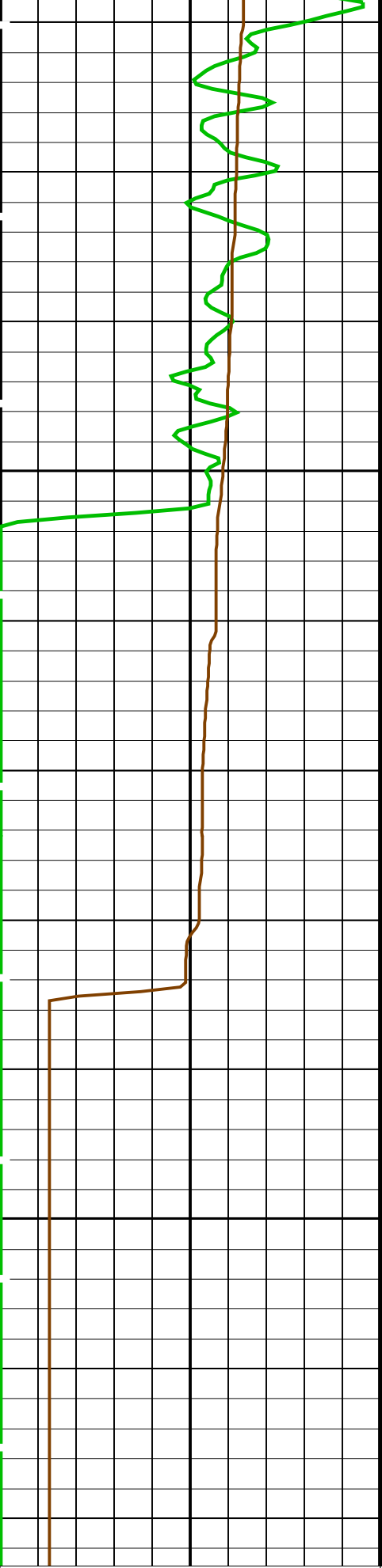
MSS_LDEO-A	19C0-187	HRLT-B	19C0-187
HLDS	19C0-187	LDSC-B	19C0-187
APS-C	19C0-187	HNGC-B	19C0-187
HNGS-BA	19C0-187	EDTC-B	SKK-5169-EDTCB

PIP SUMMARY

Time Mark Every 60 S







Tension (TENS) (LBF)

Axial Acceleration (MSSZACC_LDEO) (M/S²)

HLDS Caliper (LCAL) (IN)

10000 0

0 20

Gamma Ray (GR_EDTC)		Calibrated Downhole Force (CDF) (LBF)	Dual-Coil Susceptibility (MSSLUS_LDEO)	
0	(GAPI) 50		0	(PPM) 5000
		3000	0	

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)	40	DEGC
CALSTAT	HRLTB Calibration Status	SHALLOW_DONE	
CALTEMP	HRLTB Calibration Temperature	26.8049	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	
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	ON	
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	1000	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	1941.83	V
ADSO	APS Array Detectors Data Source Switch	Both	
AFSD	APS Far Detector High Voltage Setting	2032.14	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	1700.66	V
ASOS	APS Standoff Correction Switch	ON	
ATSS	APS Temperature-Pressure-Salinity Correction Switch	OFF	
BHFL_APS	APS TNPH Borehole Fluid Type	WATER	
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	40	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	NO	
MCOR_APS	APS TNPH Mud Correction	NATU	
MWCO_APS	APS TNPH Mud Weight Correction Option	YES	
NARC	APS Near/Array Calibration Ratio	1.08475	
NFRC	APS Near/Far Calibration Ratio	0.978244	
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)	40	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	-0.0148014	
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	1.06715	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	0.996802	
EDTC-B: Enhanced DTS Cartridge			
BHFL	Borehole Fluid Type	WATER	
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	40	DEGC
BSCO	Borehole Salinity Correction Option	NO	
CCCO	Casing & Cement Thickness Correction Option	NO	
DPPM	Density Porosity Processing Mode	HIRS	
FSAL	Formation Salinity	-50000	PPM
FSCO	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	Hole Size Correction Option	YES	
ISSBAR	Barite Mud Switch	NOBARITE	
ISSBAR_EDTC	Nuclear Mud Type	NOBARITE	
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
MCCO	Mud Cake Correction Option	NO	
MCOR	Mud Correction	NATU	
MWCO	Mud Weight Correction Option	YES	
PTCO	Pressure/Temperature Correction Option	NO	
SDAT	Standoff Data Source	SOCN	
SHT	Surface Hole Temperature	20	DEGC
SOCN	Standoff Distance	0.5	IN
SOCO	Standoff Correction Option	NO	
TPOS_EDTC	EDTC Tool Centered/Eccentered	Eccentered	
U-ETELM_EDTS	Telemetry Mode for eWAFE	Standard_EDTS	
U-TELM_EDTS	Telemetry Mode for WAFE	Standard_EDTS	
System and Miscellaneous			
ALTDPCAN	Name of alternate depth channel	SpeedCorrectedDepth	
PS	Pit Size	0.875	IN

BS	Bit Size	9.875	IN
BSAL	Borehole Salinity	38000.00	PPM
CSIZ	Current Casing Size	5.500	IN
CWEI	Casing Weight	168.00	LB/F
DFD	Drilling Fluid Density	1.05	G/C3
FLEV	Fluid Level	-50000.00	M
MST	Mud Sample Temperature	23.00	DEGC
PBVSADP	Use alternate depth channel for playback	NO	
RMFS	Resistivity of Mud Filtrate Sample	-50000.0000	OHMM
RW	Resistivity of Connate Water	1.0000	OHMM
TD	Total Depth	1212.2	M
TDD	Total Depth - Driller	1212.40	M
TDL	Total Depth - Logger	1211.00	M
TWS	Temperature of Connate Water Sample	37.78	DEGC

Format: MSS_Logging Vertical Scale: 1:200 Graphics File Created: 05-Nov-2015 20:47

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	EDTC-B	SKK-5169-EDTCB

Output DLIS Files

DEFAULT	MSS_LDEO_HRLA_LDL_007LUP	FN:7	PRODUCER	05-Nov-2015 20:47
RTB	MSS_LDEO_HRLA_LDL_007LUP	FN:8	PRODUCER	05-Nov-2015 20:47



Calibrations

MAXIS Field Log

Calibration and Check Summary

Measurement	Nominal	Master	Before	After	Change	Limit	Units
High Resolution Laterolog Array - B Wellsite Calibration - HRLT M01							
Before: 5-Nov-2015 21:15 After: 6-Nov-2015 0:05							
HRLT M0-M1 Voltage Plus - 0	0	N/A	-318.4	-318.7	-0.2703	9.681	UV
HRLT M0-M1 Voltage Plus - 1	0	N/A	-330.5	-332.2	-1.645	9.681	UV
HRLT M0-M1 Voltage Plus - 2	0	N/A	-337.9	-339.7	-1.745	9.681	UV
HRLT M0-M1 Voltage Plus - 3	0	N/A	-328.9	-329.9	-0.9798	9.681	UV
HRLT M0-M1 Voltage Plus - 4	0	N/A	-319.7	-320.1	-0.3604	9.681	UV
HRLT M0-M1 Voltage Plus - 5	0	N/A	-321.5	-322.0	-0.4225	9.681	UV
HRLT M0-M1 Voltage Plus - 6	0	N/A	319.3	321.9	2.577	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: 5-Nov-2015 21:15 After: 6-Nov-2015 0:05							
HRLT M1-M2 Voltage Plus - 0	0	N/A	1739	1742	2.845	53.42	UV
HRLT M1-M2 Voltage Plus - 1	0	N/A	1811	1822	10.79	53.42	UV
HRLT M1-M2 Voltage Plus - 2	0	N/A	1845	1856	11.13	53.42	UV
HRLT M1-M2 Voltage Plus - 3	0	N/A	1794	1801	7.058	53.42	UV
HRLT M1-M2 Voltage Plus - 4	0	N/A	1743	1747	3.341	53.42	UV
HRLT M1-M2 Voltage Plus - 5	0	N/A	1754	1757	3.817	53.42	UV
HRLT M1-M2 Voltage Plus - 6	0	N/A	-1758	-1774	-15.83	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: 5-Nov-2015 21:15 After: 6-Nov-2015 0:05							
HRLT M2-M3 Voltage Plus - 0	0	N/A	1730	1733	2.522	53.42	UV
HRLT M2-M3 Voltage Plus - 1	0	N/A	1813	1824	10.59	53.42	UV
HRLT M2-M3 Voltage Plus - 2	0	N/A	1840	1860	19.04	53.42	UV

HRLT M2-M3 Voltage Plus - 2	0	N/A	1849	1808	10.94	53.42	UV
HRLT M2-M3 Voltage Plus - 3	0	N/A	1801	1808	6.612	53.42	UV
HRLT M2-M3 Voltage Plus - 4	0	N/A	1745	1747	2.671	53.42	UV
HRLT M2-M3 Voltage Plus - 5	0	N/A	1756	1759	3.317	53.42	UV
HRLT M2-M3 Voltage Plus - 6	0	N/A	-1749	-1765	-15.72	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: 5-Nov-2015 21:15 After: 6-Nov-2015 0:05

HRLT A3-A4 Voltage Plus - 0	0	N/A	68590	68690	97.23	2100	UV
HRLT A3-A4 Voltage Plus - 1	0	N/A	71710	72110	403.2	2100	UV
HRLT A3-A4 Voltage Plus - 2	0	N/A	73390	73820	424.7	2100	UV
HRLT A3-A4 Voltage Plus - 3	0	N/A	71780	72030	253.5	2100	UV
HRLT A3-A4 Voltage Plus - 4	0	N/A	69470	69590	116.3	2100	UV
HRLT A3-A4 Voltage Plus - 5	0	N/A	69950	70090	137.9	2100	UV
HRLT A3-A4 Voltage Plus - 6	0	N/A	-68190	-68780	-590.3	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: 5-Nov-2015 21:15 After: 6-Nov-2015 0:05

HRLT A4-A5 Voltage Plus - 0	0	N/A	68690	68790	99.11	2100	UV
HRLT A4-A5 Voltage Plus - 1	0	N/A	71920	72320	393.2	2100	UV
HRLT A4-A5 Voltage Plus - 2	0	N/A	73580	74000	424.8	2100	UV
HRLT A4-A5 Voltage Plus - 3	0	N/A	71950	72190	238.3	2100	UV
HRLT A4-A5 Voltage Plus - 4	0	N/A	69590	69690	102.3	2100	UV
HRLT A4-A5 Voltage Plus - 5	0	N/A	70050	70180	136.6	2100	UV
HRLT A4-A5 Voltage Plus - 6	0	N/A	-68400	-68990	-592.0	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: 5-Nov-2015 21:15 After: 6-Nov-2015 0:05

HRLT A5-A6 Voltage Plus - 0	0	N/A	68550	68640	96.59	2100	UV
HRLT A5-A6 Voltage Plus - 1	0	N/A	71750	72150	401.4	2100	UV
HRLT A5-A6 Voltage Plus - 2	0	N/A	73450	73860	414.1	2100	UV
HRLT A5-A6 Voltage Plus - 3	0	N/A	71780	72060	275.5	2100	UV
HRLT A5-A6 Voltage Plus - 4	0	N/A	69450	69560	109.0	2100	UV
HRLT A5-A6 Voltage Plus - 5	0	N/A	69900	70050	141.1	2100	UV
HRLT A5-A6 Voltage Plus - 6	0	N/A	-68240	-68840	-593.8	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: 5-Nov-2015 21:15 After: 6-Nov-2015 0:05

HRLT Torpedo-M0 Voltage - 0	0	N/A	-68070	-68150	-83.87	2100	UV
HRLT Torpedo-M0 Voltage - 1	0	N/A	-71570	-71960	-391.2	2100	UV
HRLT Torpedo-M0 Voltage - 2	0	N/A	-73280	-73680	-405.1	2100	UV
HRLT Torpedo-M0 Voltage - 3	0	N/A	-71710	-71950	-243.8	2100	UV
HRLT Torpedo-M0 Voltage - 4	0	N/A	-69410	-69510	-97.02	2100	UV
HRLT Torpedo-M0 Voltage - 5	0	N/A	-69870	-69980	-107.6	2100	UV
HRLT Torpedo-M0 Voltage - 6	0	N/A	68010	68590	585.5	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: 5-Nov-2015 21:15 After: 6-Nov-2015 0:05

HRLT Bridle#9-M0 Voltage - 0	0	N/A	-68100	-68190	-91.05	2100	UV
HRLT Bridle#9-M0 Voltage - 1	0	N/A	-71650	-72050	-392.9	2100	UV
HRLT Bridle#9-M0 Voltage - 2	0	N/A	-73370	-73780	-412.9	2100	UV
HRLT Bridle#9-M0 Voltage - 3	0	N/A	-71770	-72040	-264.0	2100	UV
HRLT Bridle#9-M0 Voltage - 4	0	N/A	-69450	-69560	-107.9	2100	UV
HRLT Bridle#9-M0 Voltage - 5	0	N/A	-69910	-70020	-111.9	2100	UV
HRLT Bridle#9-M0 Voltage - 6	0	N/A	68100	68680	578.9	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: 5-Nov-2015 21:15 After: 6-Nov-2015 0:05

HRLT Source Current Plus - 0	0	N/A	284.1	284.5	0.3622	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: 5-Nov-2015 21:15 After: 6-Nov-2015 0:05

HRLT Vertical Voltage PI - 0	0	N/A	-320.4	-320.4	0.05725	9.681	UV
HRLT Vertical Voltage PI - 1	0	N/A	-325.3	-326.8	-1.486	9.681	UV
HRLT Vertical Voltage PI - 2	0	N/A	-331.5	-333.1	-1.597	9.681	UV
HRLT Vertical Voltage PI - 3	0	N/A	-320.8	-321.5	-0.7023	9.681	UV
HRLT Vertical Voltage PI - 4	0	N/A	-309.0	-309.0	-0.07562	9.681	UV
HRLT Vertical Voltage PI - 5	0	N/A	-325.6	-325.8	-0.1897	9.681	UV
HRLT Vertical Voltage PI - 6	0	N/A	326.9	329.4	2.477	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: 22-Sep-2015 11:04 Before: 5-Nov-2015 19:02 After: 6-Nov-2015 0:08								
SS Cs Resolution Bkg	9.000	7.976	8.029	7.991	-0.03820	1.800	%	
LS Cs Resolution Bkg	9.000	8.193	8.222	8.260	0.03844	1.800	%	
LSW1 Background	100.0	66.90	66.86	68.71	1.851	3.000	CPS	
LSW2 Background	100.0	62.57	62.46	61.67	-0.7904	3.000	CPS	
LSW3 Background	200.0	137.5	138.8	135.7	-3.050	6.000	CPS	
LSW4 Background	250.0	168.1	165.9	165.1	-0.7675	7.500	CPS	
LSW5 Background	600.0	381.5	379.6	381.6	2.026	18.00	CPS	
SSW1 Background	100.0	76.27	75.13	74.80	-0.3275	3.000	CPS	
SSW2 Background	200.0	135.1	134.4	135.7	1.275	6.000	CPS	
SSW3 Background	500.0	363.6	362.0	360.0	-2.048	15.00	CPS	
SSW4 Background	270.0	191.2	189.2	189.3	0.1648	8.100	CPS	
SSW5 Background	200.0	137.5	137.2	137.3	0.1103	6.000	CPS	
Hostile Litho-Density Sonde Wellsite Calibration - Aluminum Measurement								
Master: 22-Sep-2015 11:43								
LSW1 Aluminum	600.0	535.9	N/A	N/A	N/A	N/A	CPS	
LSW2 Aluminum	900.0	752.4	N/A	N/A	N/A	N/A	CPS	
LSW3 Aluminum	1100	887.1	N/A	N/A	N/A	N/A	CPS	
LSW4 Aluminum	580.0	436.0	N/A	N/A	N/A	N/A	CPS	
LSW5 Aluminum	570.0	402.7	N/A	N/A	N/A	N/A	CPS	
SSW1 Aluminum	2800	2334	N/A	N/A	N/A	N/A	CPS	
SSW2 Aluminum	8000	6299	N/A	N/A	N/A	N/A	CPS	
SSW3 Aluminum	11600	8758	N/A	N/A	N/A	N/A	CPS	
SSW4 Aluminum	5000	3565	N/A	N/A	N/A	N/A	CPS	
SSW5 Aluminum	660.0	429.1	N/A	N/A	N/A	N/A	CPS	
Hostile Litho-Density Sonde Wellsite Calibration - Lithology Measurement								
Master: 22-Sep-2015 11:38								
LSW1 Iron	400.0	381.3	N/A	N/A	N/A	N/A	CPS	
LSW2 Iron	730.0	637.5	N/A	N/A	N/A	N/A	CPS	
LSW3 Iron	1000	840.0	N/A	N/A	N/A	N/A	CPS	
LSW4 Iron	520.0	429.4	N/A	N/A	N/A	N/A	CPS	
LSW5 Iron	470.0	395.7	N/A	N/A	N/A	N/A	CPS	
SSW1 Iron	2100	1777	N/A	N/A	N/A	N/A	CPS	
SSW2 Iron	6800	5489	N/A	N/A	N/A	N/A	CPS	
SSW3 Iron	10800	8339	N/A	N/A	N/A	N/A	CPS	
SSW4 Iron	4600	3429	N/A	N/A	N/A	N/A	CPS	
SSW5 Iron	580.0	403.3	N/A	N/A	N/A	N/A	CPS	
Hostile Litho-Density Sonde Wellsite Calibration - Caliper Calibration								
Before: 22-Sep-2015 14:42								
HLDS Caliper Small Ring	12.00	N/A	16.37	N/A	N/A	N/A	IN	
HLDS Caliper Large Ring	15.19	N/A	20.15	N/A	N/A	N/A	IN	
Accelerator-Porosity Tool Wellsite Calibration - Detector Background								
Master: 22-Sep-2015 5:52 Before: 5-Nov-2015 19:02 After: 6-Nov-2015 0:08								
Near Det Bkg Cntrate	30.00	26.37	27.06	25.85	-1.218	N/A	CPS	
Far Det Bkg Cntrate	30.00	27.82	28.32	28.10	-0.2169	N/A	CPS	
Array-1 Det Bkg Cntrate	30.00	25.57	26.29	26.78	0.4837	N/A	CPS	
Array-2 Det Bkg Cntrate	30.00	26.87	26.34	26.88	0.5338	N/A	CPS	
Array Therm Det Bkg Cntrate	30.00	25.48	25.54	26.44	0.8973	N/A	CPS	
Accelerator-Porosity Tool Wellsite Calibration - Calibration Ratios								
Master: 22-Sep-2015 5:52								
Near/Far Calibration Ratio	0.9250	0.9782	N/A	N/A	N/A	N/A		
Near/Array Calibration Ratio	1.030	1.085	N/A	N/A	N/A	N/A		
Near/Array Cal Ratio Up/Down	1.000	1.007	N/A	N/A	N/A	N/A		
Accelerator-Porosity Tool Wellsite Calibration - Tank Check								
Master: 22-Sep-2015 5:52								
Array-1 Standoff Porosity	11.75	10.13	N/A	N/A	N/A	N/A	PU	
Array-2 Standoff Porosity	11.75	10.30	N/A	N/A	N/A	N/A	PU	
Average Slowing Down Time	6.000	6.081	N/A	N/A	N/A	N/A	US	
Array-1 SDT Ratio Up/Down	1.000	0.9680	N/A	N/A	N/A	N/A		
Array-2 SDT Ratio Up/Down	1.000	0.9638	N/A	N/A	N/A	N/A		
Sigma Formation	27.50	35.35	N/A	N/A	N/A	N/A	CU	
Accelerator-Porosity Tool Wellsite Calibration - CCR7 signal boxes								
Master: 22-Sep-2015 4:57								
Near Detector Plateau Setting	1650	1701	N/A	N/A	N/A	N/A	V	
Far Detector Plateau Setting	2000	2032	N/A	N/A	N/A	N/A	V	
Array Detector Plateau Setting	2000	1942	N/A	N/A	N/A	N/A	V	
Hostile Natural Gamma Ray Sonde Wellsite Calibration - Detector 1 Check								
Master: 28-Sep-2015 0:37 Before: 5-Nov-2015 19:03 After: 6-Nov-2015 0:09								
Na 511 Peak Loc	40.00	37.67	37.41	37.52	0.1116	1.000		
Na 511 Peak Res	15.50	16.19	16.20	16.68	0.4764	2.000	%	
U-238 Peak	11.50	12.20	12.22	12.20	0.0000	1.000	%	
U-235 Peak	11.50	12.20	12.22	12.20	0.0000	1.000	%	

High Voltage	1150	1229	1223	1226	2.696	N/A	V
Na 1785 Peak Loc	142.6	136.2	136.1	136.4	0.3274	7.000	%
Na 1785 Peak Res	8.500	9.111	9.413	9.704	0.2910	2.000	%
Temperature	15.50	32.00	32.54	31.91	-0.6373	N/A	DEGC
Na Count Rate	45.00	42.40	40.78	40.79	0.01143	8.000	CPS

Hostile Natural Gamma Ray Sonde Wellsite Calibration – Detector 2 Check

Master: 28-Sep-2015 0:37 Before: 5-Nov-2015 19:03 After: 6-Nov-2015 0:09

Na 511 Peak Loc	40.00	39.57	39.67	39.77	0.09502	1.000	
Na 511 Peak Res	15.50	16.65	17.04	15.66	-1.378	2.000	%
High Voltage	1150	1107	1105	1107	1.818	N/A	V
Na 1785 Peak Loc	142.6	143.5	143.4	143.2	-0.1757	7.000	
Na 1785 Peak Res	8.500	9.036	10.06	9.170	-0.8900	2.000	%
Temperature	15.50	31.75	32.07	32.46	0.3967	N/A	DEGC
Na Count Rate	45.00	42.43	40.78	40.89	0.1028	8.000	CPS

Hostile Natural Gamma Ray Sonde Wellsite Calibration – Ratio Of Detector 1 To Detector 2

Master: 28-Sep-2015 0:37 Before: 5-Nov-2015 19:03 After: 6-Nov-2015 0:09

Coincidence Count Rate Ratio	1.000	0.9929	0.9955	0.9906	-0.004822	0.05000	
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Enhanced DTS Cartridge Wellsite Calibration – EDTC Accelerometer Calibration

Before: 5-Nov-2015 18:59

EDTC Z-Axis Acceleration	9.810	N/A	9.817	N/A	N/A	N/A	M/S2
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Enhanced DTS Cartridge Wellsite Calibration – Detector Calibration

Before: 3-Nov-2015 12:51 After: 3-Nov-2015 17:49

Gamma Ray (Jig – Bkg)	159.8	N/A	159.8	151.2	-8.569	14.53	GAPI
Gamma Ray (Calibrated)	165.0	N/A	165.0	156.2	-8.849	15.00	GAPI

Accelerator-Porosity Tool – Detector Plateau Settings :

Near Detector Plateau Setting 1701 V
Far Detector Plateau Setting 2032 V
Array Detector Plateau Setting 1942 V



High Resolution Laterolog Array – B / Equipment Identification

















Primary Equipment:		
HRLT Sonde	HRLS – B	768
Auxiliary Equipment:		
HRLT lower Housing	HRLH – B	968
HRLT Lower Cartridge	HRLC – B	974
HRLT upper Housing	HRUH – B	978
HRLT Upper Cartridge	HRUC – B	764
















High Resolution Laterolog Array – B Wellsite Calibration

HRLT M01

Idx	Phase	HRLT M0-M1 Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		-318.4	-322.7	-280.7	-379.7
	After		-318.7			
1	Before		-330.5	-322.7	-280.7	-379.7
	After		-332.2			
2	Before		-337.9	-322.7	-280.7	-379.7
	After		-339.7			
3	Before		-328.9	-322.7	-280.7	-379.7
	After		-329.9			
4	Before		-319.7	-322.7	-280.7	-379.7
	After		-320.1			
5	Before		-321.5	-322.7	-280.7	-379.7
	After		-322.0			
6	Before		319.3	322.7	379.7	280.7
	After		321.9			

7	Before		-322.7	-322.7	-280.7	-379.7
	After		-322.7			
		(Minimum) (Nominal) (Maximum)				
Before: 5-Nov-2015 21:15						
After: 6-Nov-2015 0:05						

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		1742			
1	Before		1811	1781	2095	1549
	After		1822			
2	Before		1845	1781	2095	1549
	After		1856			
3	Before		1794	1781	2095	1549
	After		1801			
4	Before		1743	1781	2095	1549
	After		1747			
5	Before		1754	1781	2095	1549
	After		1757			
6	Before		-1758	-1781	-1549	-2095
	After		-1774			
7	Before		1781	1781	2095	1549
	After		1781			
		(Minimum) (Nominal) (Maximum)				
Before: 5-Nov-2015 21:15						
After: 6-Nov-2015 0:05						

High Resolution Laterolog Array – B Wellsite Calibration						
HRLT M23						
Idx	Phase	HRLT M2–M3 Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		1730	1781	2095	1549
	After		1733			
1	Before		1813	1781	2095	1549
	After		1824			
2	Before		1849	1781	2095	1549
	After		1860			
3	Before		1801	1781	2095	1549
	After		1808			
4	Before		1745	1781	2095	1549
	After		1747			
5	Before		1756	1781	2095	1549
	After		1759			
6	Before		-1749	-1781	-1549	-2095
	After		-1765			
7	Before		1781	1781	2095	1549
	After		1781			

After	7:04				
		(Minimum)	(Nominal)	(Maximum)	
Before: 5-Nov-2015 21:15					
After: 6-Nov-2015 0:05					

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		68690			
1	Before		71710	70000	82360	60900
	After		72110			
2	Before		73390	70000	82360	60900
	After		73820			
3	Before		71780	70000	82360	60900
	After		72030			
4	Before		69470	70000	82360	60900
	After		69590			
5	Before		69950	70000	82360	60900
	After		70090			
6	Before		-68190	-70000	-60900	-82360
	After		-68780			
7	Before		70000	70000	82360	60900
	After		70000			
		(Minimum) (Nominal) (Maximum)				
Before: 5-Nov-2015 21:15						
After: 6-Nov-2015 0:05						

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		68790			
1	Before		71920	70000	82360	60900
	After		72320			
2	Before		73580	70000	82360	60900
	After		74000			
3	Before		71950	70000	82360	60900
	After		72190			
4	Before		69590	70000	82360	60900
	After		69690			
5	Before		70050	70000	82360	60900
	After		70180			
6	Before		-68400	-70000	-60900	-82360
	After		-68990			
7	Before		70000	70000	82360	60900
	After		70000			
		(Minimum) (Nominal) (Maximum)				
Before: 5-Nov-2015 21:15						

High Resolution Laterolog Array – B Wellsite Calibration						
HRLT V56						
Idx	Phase	HRLT A5–A6 Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		68550	70000	82360	60900
	After		68640			
1	Before		71750	70000	82360	60900
	After		72150			
2	Before		73450	70000	82360	60900
	After		73860			
3	Before		71780	70000	82360	60900
	After		72060			
4	Before		69450	70000	82360	60900
	After		69560			
5	Before		69900	70000	82360	60900
	After		70050			
6	Before		-68240	-70000	-60900	-82360
	After		-68840			
7	Before		70000	70000	82360	60900
	After		70000			
(Minimum) (Nominal) (Maximum)						
Before: 5-Nov-2015 21:15						
After: 6-Nov-2015 0:05						

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		-68150			
1	Before		-71570	-70000	-60900	-82360
	After		-71960			
2	Before		-73280	-70000	-60900	-82360
	After		-73680			
3	Before		-71710	-70000	-60900	-82360
	After		-71950			
4	Before		-69410	-70000	-60900	-82360
	After		-69510			
5	Before		-69870	-70000	-60900	-82360
	After		-69980			
6	Before		68010	70000	82360	60900
	After		68590			
7	Before		-70000	-70000	-60900	-82360
	After		-70000			
(Minimum) (Nominal) (Maximum)						
Before: 5-Nov-2015 21:15						
After: 6-Nov-2015 0:05						

HRLT VBD						
Idx	Phase	HRLT Bridle#9-M0 Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		-68100	-70000	-60900	-82360
	After		-68190			
1	Before		-71650	-70000	-60900	-82360
	After		-72050			
2	Before		-73370	-70000	-60900	-82360
	After		-73780			
3	Before		-71770	-70000	-60900	-82360
	After		-72040			
4	Before		-69450	-70000	-60900	-82360
	After		-69560			
5	Before		-69910	-70000	-60900	-82360
	After		-70020			
6	Before		68100	70000	82360	60900
	After		68680			
7	Before		-70000	-70000	-60900	-82360
	After		-70000			
(Minimum) (Nominal) (Maximum)						
Before: 5-Nov-2015 21:15						
After: 6-Nov-2015 0:05						

High Resolution Laterolog Array – B Wellsite Calibration						
HRLT ISO						
Idx	Phase	HRLT Source Current Plus UA	Value	Nominal	Maximum	Minimum
0	Before		284.1	284.0	334.1	247.0
	After		284.5			
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: 5-Nov-2015 21:15						
After: 6-Nov-2015 0:05						

High Resolution Laterolog Array – B Wellsite Calibration						
HRLT MV						
Idx	Phase	HRLT Vertical Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		222.4	222.4	222.4	222.4
	After		222.4			

0	Before		-320.4	-322.7	-280.7	-379.7
	After		-320.4	-322.7	-280.7	-379.7
1	Before		-325.3	-322.7	-280.7	-379.7
	After		-326.8	-322.7	-280.7	-379.7
2	Before		-331.5	-322.7	-280.7	-379.7
	After		-333.1	-322.7	-280.7	-379.7
3	Before		-320.8	-322.7	-280.7	-379.7
	After		-321.5	-322.7	-280.7	-379.7
4	Before		-309.0	-322.7	-280.7	-379.7
	After		-309.0	-322.7	-280.7	-379.7
5	Before		-325.6	-322.7	-280.7	-379.7
	After		-325.8	-322.7	-280.7	-379.7
6	Before		326.9	322.7	379.7	280.7
	After		329.4	322.7	379.7	280.7
7	Before		-322.7	-322.7	-280.7	-379.7
	After		-322.7	-322.7	-280.7	-379.7
			(Minimum)	(Nominal)	(Maximum)	
Before: 5-Nov-2015 21:15						
After: 6-Nov-2015 0:05						

Hostile Litho-Density Sonde / Equipment Identification

Primary Equipment:

Hostile Litho Density Sonde	HLDS - D	45
Hostile Litho Density High Voltage	HLDV - D	45
Gamma Source Radioactive	GSR - Z	8113

Auxiliary Equipment:

Hostile Litho Density Pad	HLDP - C	45
Hostile Litho Density High Voltage Housi	HEH - H	47

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		7.976	Master		8.193	Master		66.90
Before		8.029	Before		8.222	Before		66.86
After		7.991	After		8.260	After		68.71
7.000 (Minimum) 9.000 (Nominal) 11.000 (Maximum)			7.000 (Minimum) 9.000 (Nominal) 11.000 (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		62.57	Master		137.5	Master		168.1
Before		62.46	Before		138.8	Before		165.9
After		61.67	After		135.7	After		165.1
50.00 (Minimum) 100.0 (Nominal) 140.0 (Maximum)			110.0 (Minimum) 200.0 (Nominal) 290.0 (Maximum)			140.0 (Minimum) 250.0 (Nominal) 360.0 (Maximum)		
Phase	LSW5 Background CPS	Value	Phase	SSW1 Background CPS	Value	Phase	SSW2 Background CPS	Value
Master		381.5	Master		76.27	Master		135.1
Before		379.6	Before		75.13	Before		134.4
After		381.6	After		74.80	After		135.7
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		363.6	Master		191.2	Master		137.5
Before		362.0	Before		189.2	Before		137.2

After		360.0	After		189.3	After		137.3
	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: 22-Sep-2015 11:04			Before: 5-Nov-2015 19:02			After: 6-Nov-2015 0:08		

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 - C	65535
	APS Minitron	MNTR - F	65535
Auxiliary Equipment:	Accelerator-Porosity Housing	APH - AC	121
	APS Calibration Water Tank	SFT - 178	1
	APS Aluminum Calibrator Sleeve	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		26.37	Master		27.82	Master		25.57
Before		27.06	Before		28.32	Before		26.29
After		25.85	After		28.10	After		26.78
	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		26.87	Master		25.48			
Before		26.34	Before		25.54			
After		26.88	After		26.44			
	1.000 (Minimum) 30.00 (Nominal) 50.00 (Maximum)			1.000 (Minimum) 30.00 (Nominal) 50.00 (Maximum)				

Master: 22-Sep-2015 5:52 Before: 5-Nov-2015 19:02 After: 6-Nov-2015 0:08

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		0.9782	Master		1.085	Master		1.007
	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: 22-Sep-2015 5:52

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		10.13	Master		10.30	Master		6.081
	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		0.9680	Master		0.9638	Master	EXCEEDS LIMIT	35.35
	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: 22-Sep-2015 5:52

Hostile Natural Gamma Ray Cartridge – B / Equipment Identification

Primary Equipment: HNGC Cartridge	HNGC – B	439
Auxiliary Equipment: HNGC Housing	HNGH – A	380

Hostile Natural Gamma Ray Sonde / Equipment Identification

Primary Equipment: HNGS Sonde	HNGS – BA	177
Auxiliary Equipment: HNGS Sonde Housing Gamma Source Radioactive	HNSH – BA GSR – U	174 616008

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		37.67	Master		16.19	Master		1229
Before		37.41	Before		16.20	Before		1223
After		37.52	After		16.68	After		1226
	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		136.2	Master		9.111	Master		32.00
Before		136.1	Before		9.413	Before		32.54
After		136.4	After		9.704	After		31.91
	135.0 (Minimum) 142.6 (Nominal) 150.3 (Maximum)			7.000 (Minimum) 8.500 (Nominal) 11.000 (Maximum)			-28.89 (Minimum) 15.50 (Nominal) 60.00 (Maximum)	
Phase	Na Count Rate CPS	Value						
Master		42.40						
Before		40.78						
After		40.79						
	10.00 (Minimum) 45.00 (Nominal) 100.0 (Maximum)							
Master: 28-Sep-2015 0:37			Before: 5-Nov-2015 19:03			After: 6-Nov-2015 0:09		

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		39.57	Master		16.65	Master		1107
Before		39.67	Before		17.04	Before		1105
After		39.77	After		15.66	After		1107
	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		143.5	Master		9.036	Master		31.75
Before		143.4	Before		10.06	Before		32.07
After		143.2	After		9.170	After		32.46
	135.0 (Minimum) 142.6 (Nominal) 150.3 (Maximum)			7.000 (Minimum) 8.500 (Nominal) 11.000 (Maximum)			-28.89 (Minimum) 15.50 (Nominal) 60.00 (Maximum)	
Phase	Na Count Rate CPS	Value						
Master		42.43						
Before		40.78						
After		40.89						
	10.00 (Minimum) 45.00 (Nominal) 100.0 (Maximum)							

Hostile Natural Gamma Ray Sonde Wellsite Calibration		
Ratio Of Detector 1 To Detector 2		
Phase	Coincidence Count Rate Ratio	Value
Master		0.9929
Before		0.9955
After		0.9906
	0.9500 (Minimum)	1.000 (Nominal)
		1.050 (Maximum)
Master: 28-Sep-2015 0:37		
Before: 5-Nov-2015 19:03		
After: 6-Nov-2015 0:09		

Enhanced DTS Cartridge / Equipment Identification

Primary Equipment:

EDTC Gamma Ray Detector

EDTG - A/B

8305

Enhanced DTS Cartridge

EDTC - B

8317

Auxiliary Equipment:

EDTC Housing

EDTH - B

8303

Enhanced DTS Cartridge Wellsite Calibration		
EDTC Accelerometer Calibration		
Phase	EDTC Z-Axis Acceleration M/S2	Value
Before		9.817
	9.610 (Minimum)	10.01 (Maximum)
	9.810 (Nominal)	
Before: 5-Nov-2015 18:59		

Enhanced DTS Cartridge Wellsite Calibration											
Detector Calibration											
Phase	Gamma Ray Background GAPI	Value	Phase	Gamma Ray (Jig - Bkg) GAPI	Value	Phase	Gamma Ray (Calibrated) GAPI	Value	Phase	Gamma Ray (Calibrated) GAPI	Value
Before		1.551	Before		159.8	Before		165.0			
After		11.13	After		151.2	After		156.2			
	0 (Minimum)	120.0 (Maximum)		145.3 (Minimum)	174.3 (Maximum)		150.0 (Minimum)	180.0 (Maximum)			
	30.00 (Nominal)			159.8 (Nominal)			165.0 (Nominal)				
Before: 3-Nov-2015 12:51				After: 3-Nov-2015 17:49							

Company: **International Ocean Discovery Program****Schlumberger**Well: **Expedition 359, Site U1467E**Field: **Maldives Monsoon & Sea Level**Rig: **JOIDES Resolution**

Country:

High Resolution Laterolog Array (HRLA)

Nuclear (HNGS, HLDS, APS)

Magnetic Susceptibility (MSS)