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**OTHER SERVICES1**

OS1:  
OS2:  
OS3:  
OS4:  
OS5:

**REMARKS: RUN NUMBER 1**

Hole drilled with RCB coring bit and bottom hole assembly (BHA). 9.875" BS

Drilled TD was 1346mbrf; logging tools reached only 894mbsf before encountering hole obstruction.

Drill pipe set at 634mbrf (106mbsf) prior to logging.

Triple-combo run without nuclear sources due to sensitive local regulations; nuclear tools run after assessing hole condition.

Fluid type was sepiolite+barite at 10 lbs/gal. Corrections for this 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 could not be used due to adverse hole conditions / high sticking risk.

Hole size corrections made using bit size instead of caliper, as caliper remained close for all but two small zones.

Excessive tension caused depth discrepancies throughout up logs; downlog taken as "main" pass.

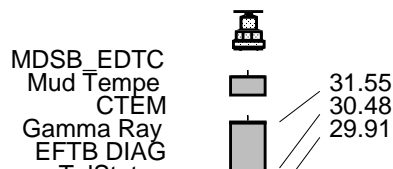
No further logging could be conducted in this hole due to adverse downhole conditions.

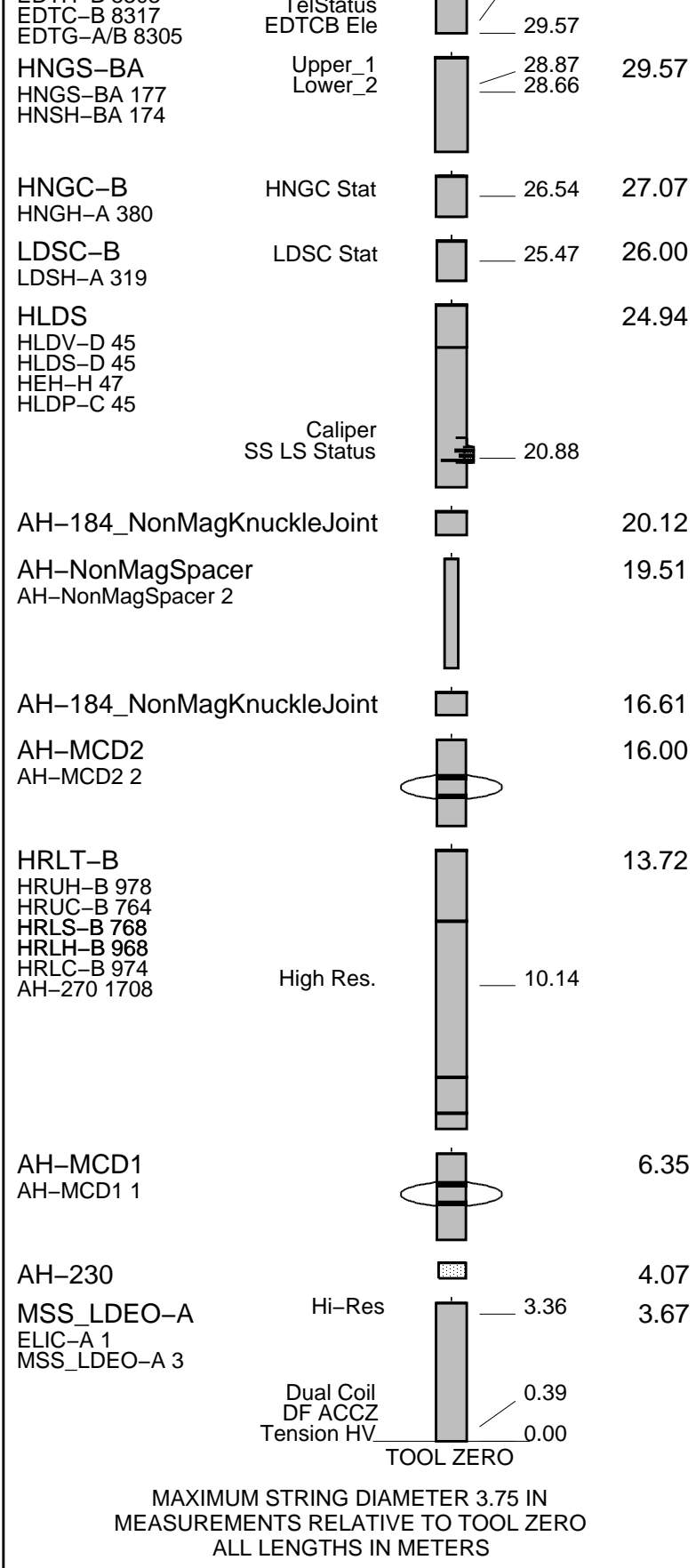
RUN 1			RUN 2		
SERVICE ORDER #: PROGRAM VERSION: FLUID LEVEL:			SERVICE ORDER #: PROGRAM VERSION: FLUID LEVEL:		
19C0-187					
LOGGED INTERVAL	START	STOP	LOGGED INTERVAL	START	STOP

**EQUIPMENT DESCRIPTION**

RUN 1	RUN 2
<b>SURFACE EQUIPMENT</b>	
GSR-U 616008 WITM (EDTS)-A	

RUN 1	RUN 2
<b>DOWNHOLE EQUIPMENT</b>	
LEH-QT LEH-QT 301	32.87
AH-369	31.55
EDTC-B	30.48
EDTH-B 8303	29.91
EDTC-B	31.55

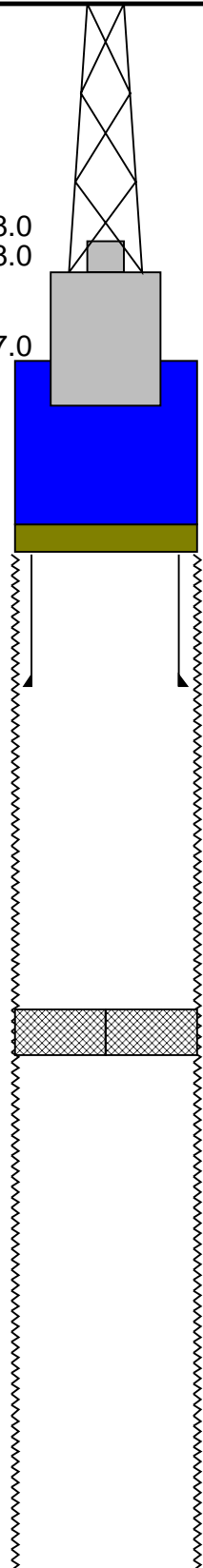




Kelly Bushing Elevation -528.0

Derrick Floor Elevation -528.0

Mean Sea Level -517.0



0.0

Sea Bed

1068.00000

Pipe Depth

366.0

Obstruction - Max L

818.0375

Total Depth - Dri

**Schlumberger**

**Main (Down) Pass**

MAXIS Field Log

**Input DLIS Files**

DEFAULT	Flip_MSS_LDEO_HRLA_020LUP	PRODUCER	29-Oct-2015 13:25	900.1 M	480.1 M
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**Output DLIS Files**

DEFAULT	MSS_LDEO_HRLA_LDL_032PUP	FN:38	PRODUCER	01-Nov-2015 10:40	871.0 M	480.1 M
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**OP System Version: 19C0-187**

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

Time Mark Every 60 S

TOP SUMMARY

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

**Area1**  
 From HCGR to HSGR

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

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

**Calibrated Downhole Force (CDF) (LBF)**  
 3000 0

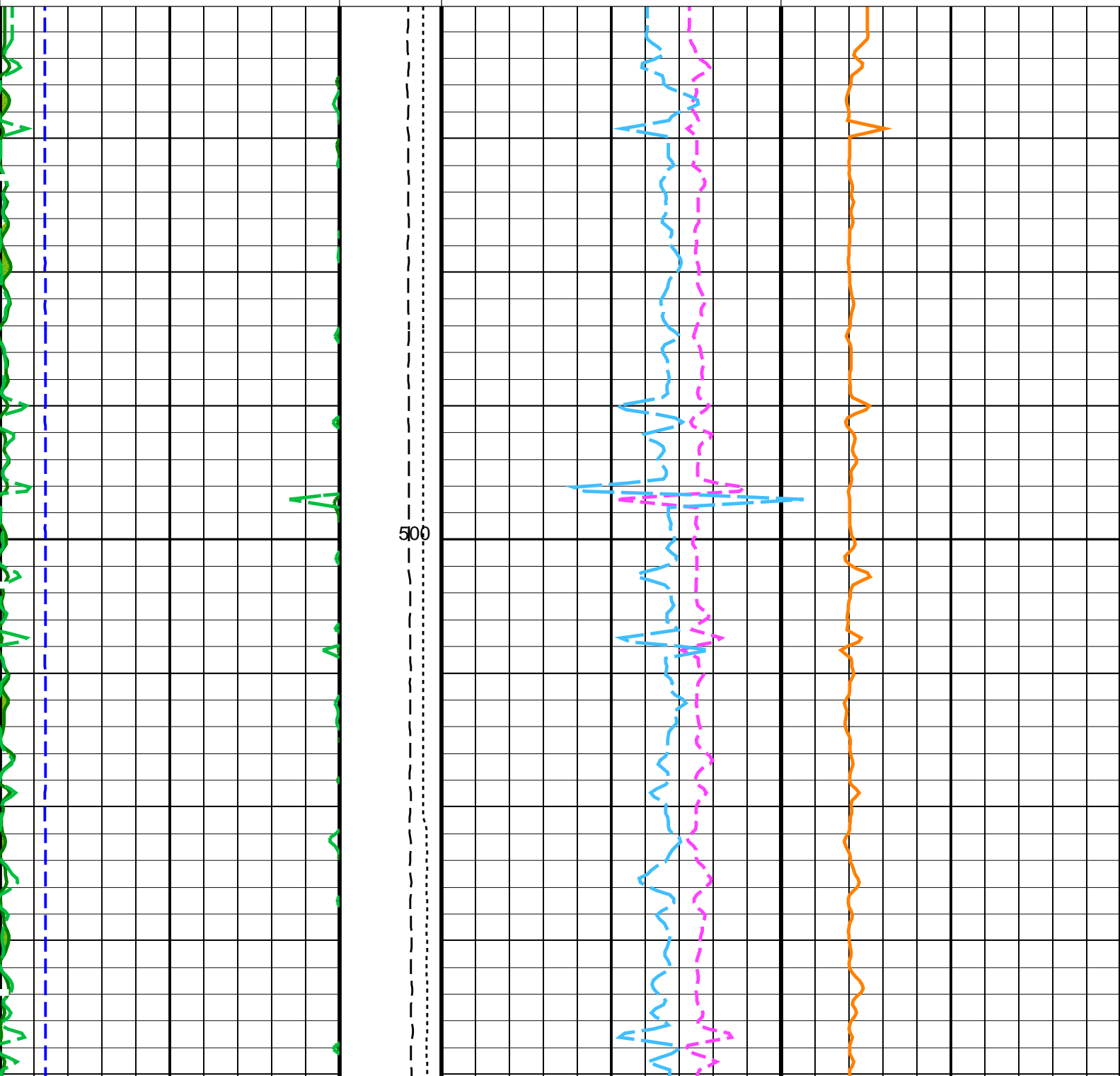
**HNGS Uranium (HURA)**  
 -5 (PPM) 10

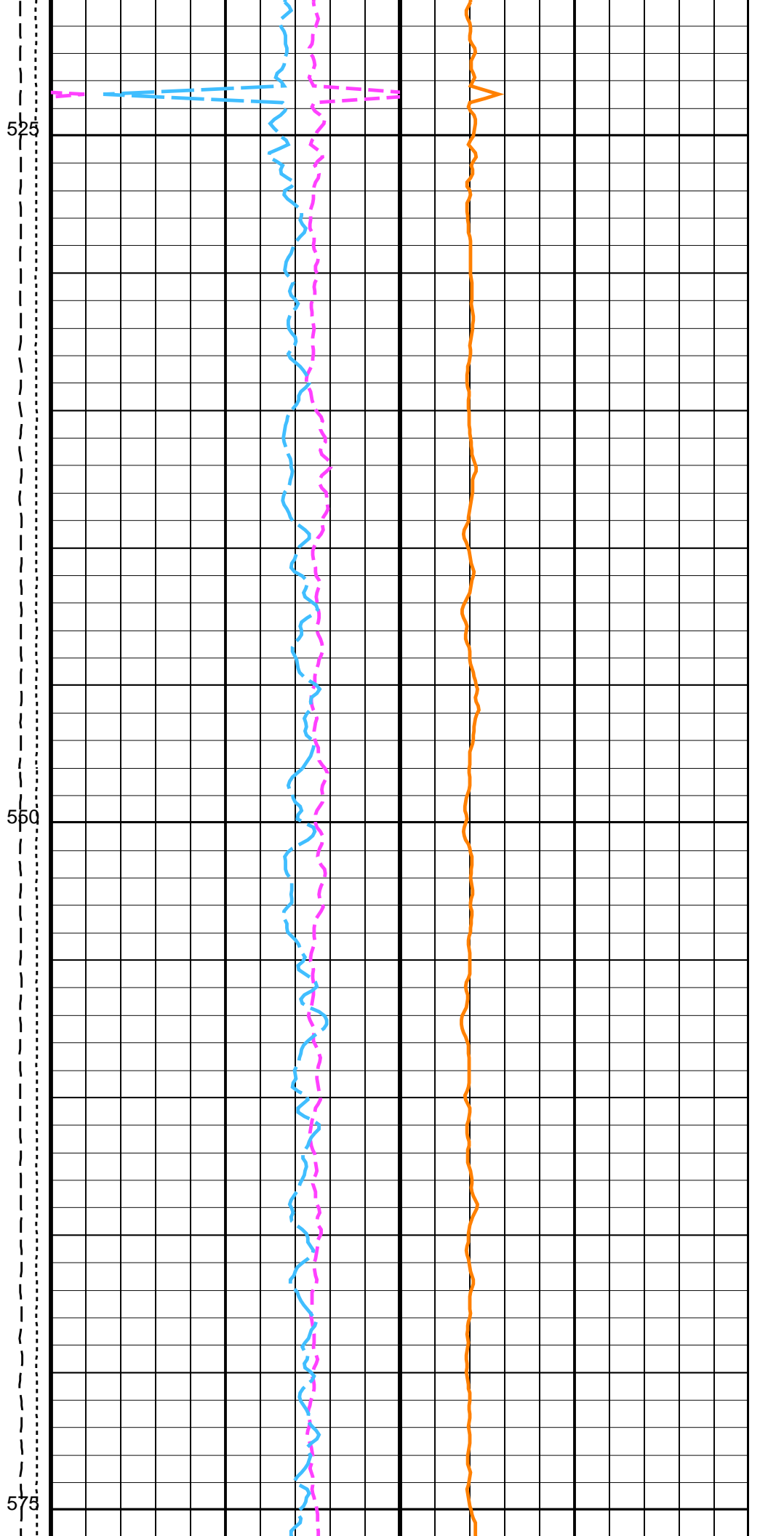
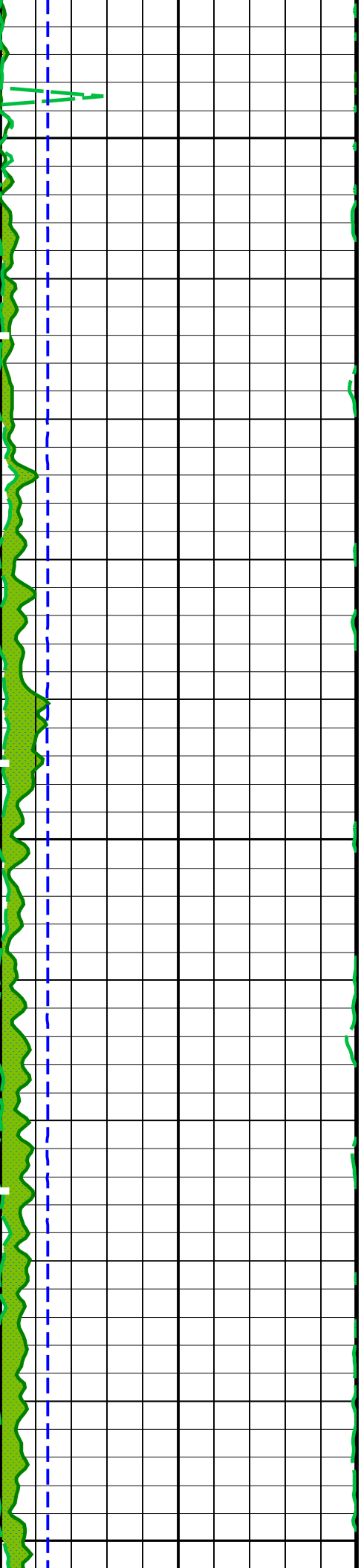
**HLDS Caliper (LCAL)**  
 0 (IN) 20

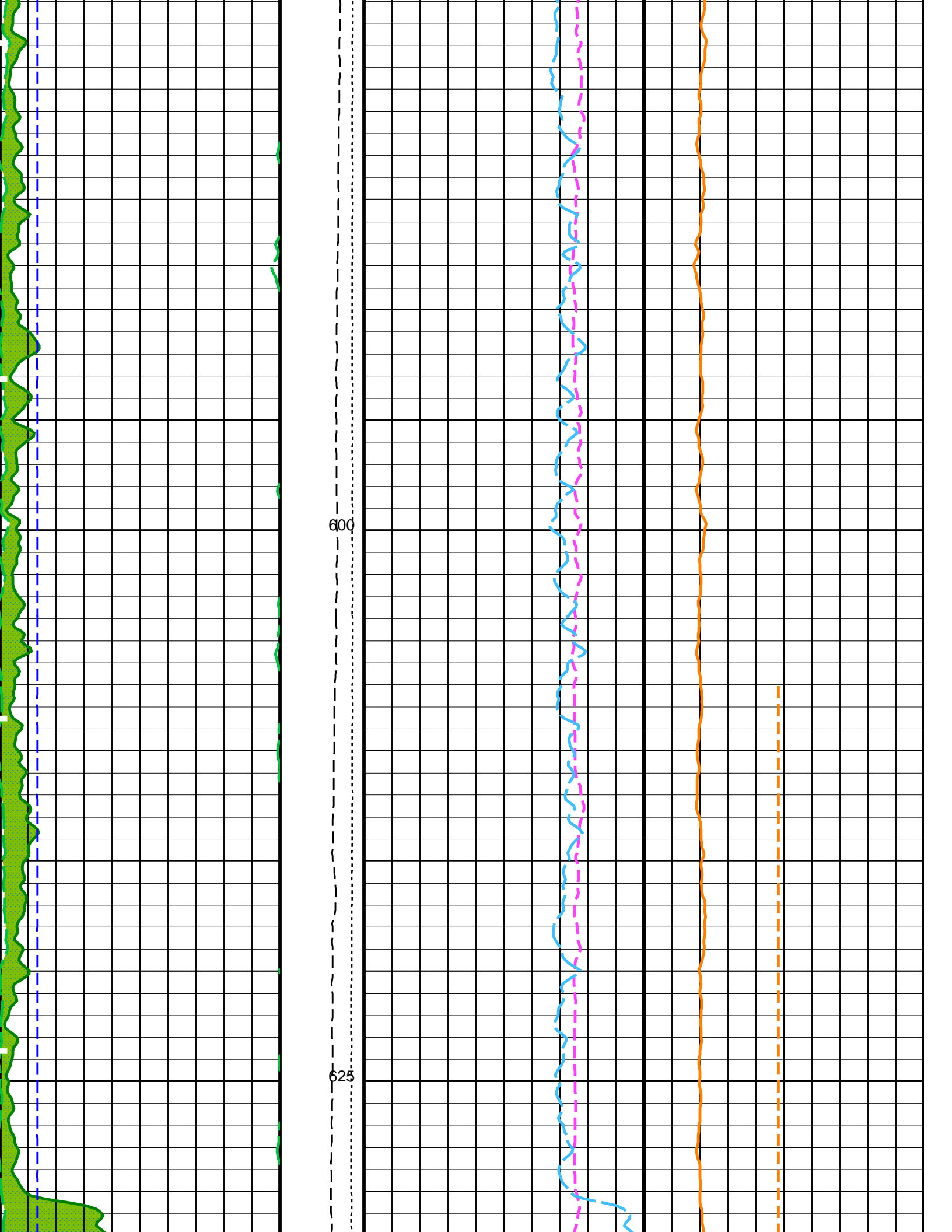
**Tension (TENS) (LBF)**  
 10000 0

**HNGS Thorium (HTHO)**  
 5 (PPM) 25

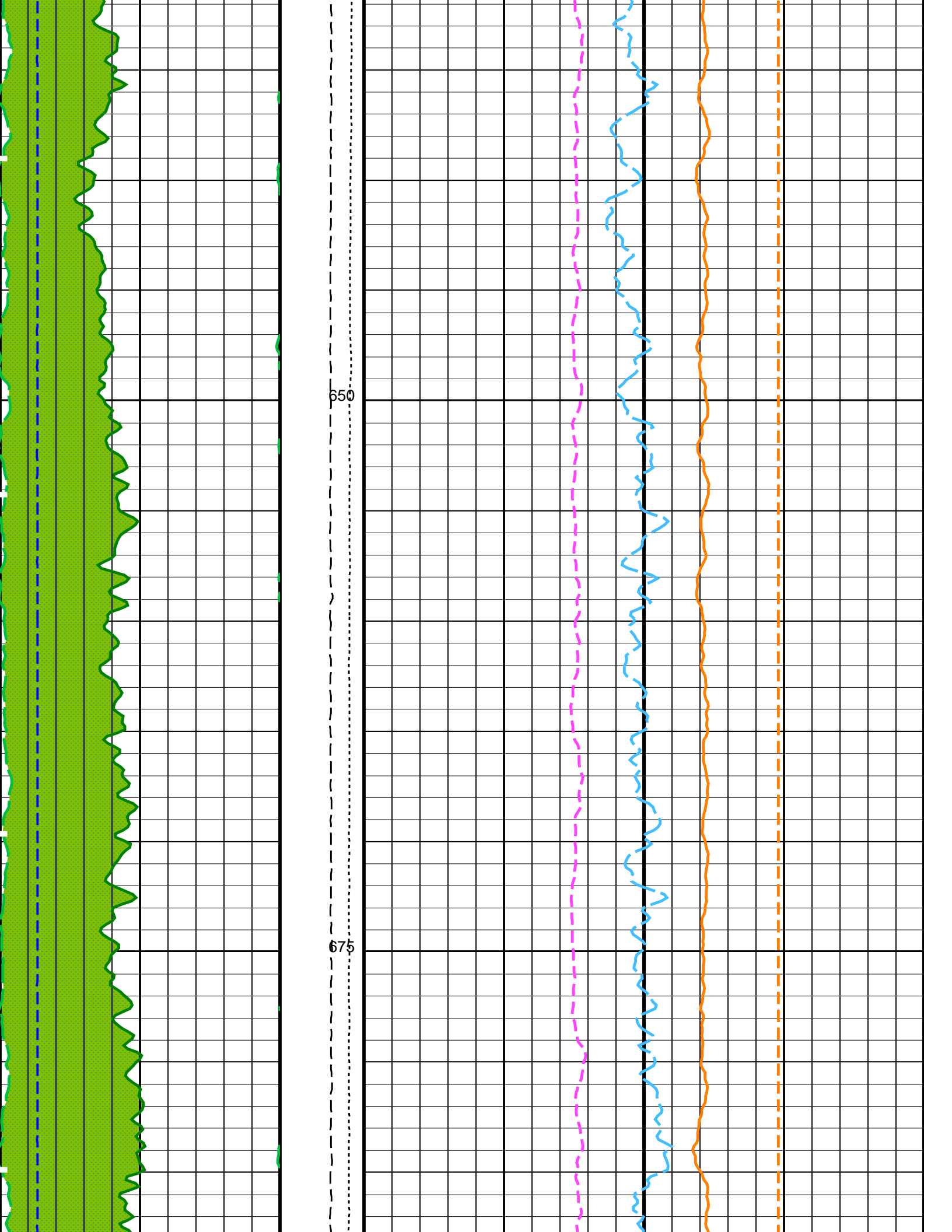
**HNGS Potassium (HFK)**  
 -0.01 (-----) 0.04

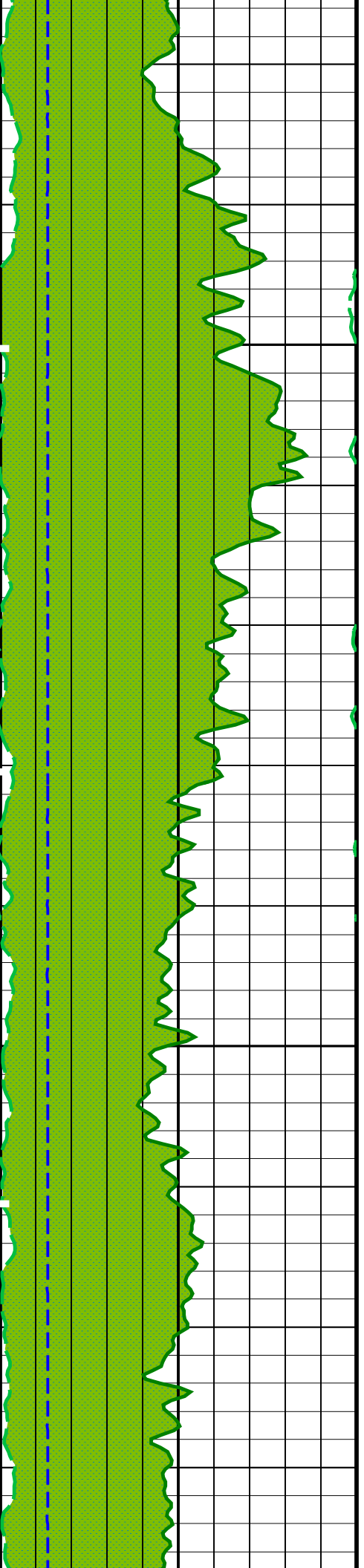






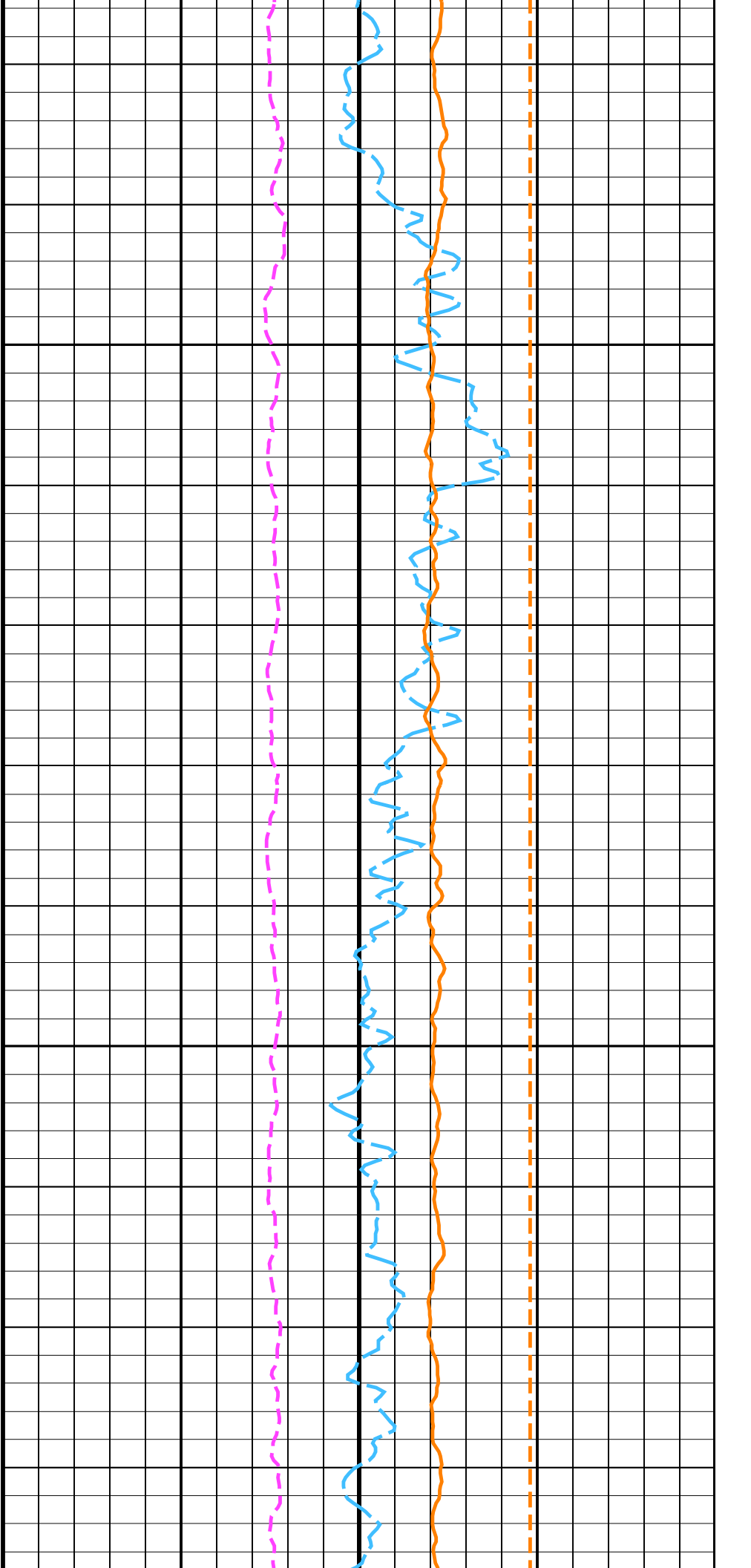


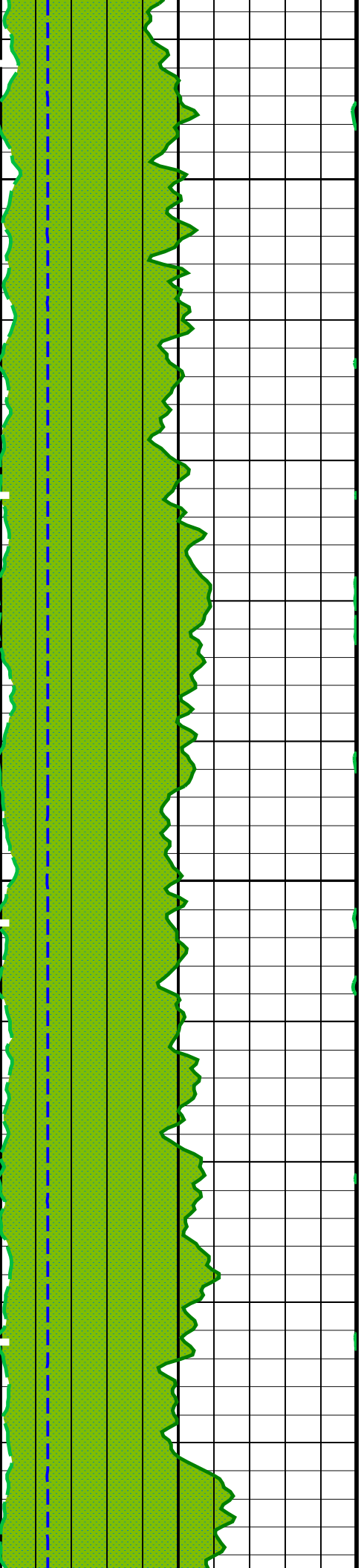




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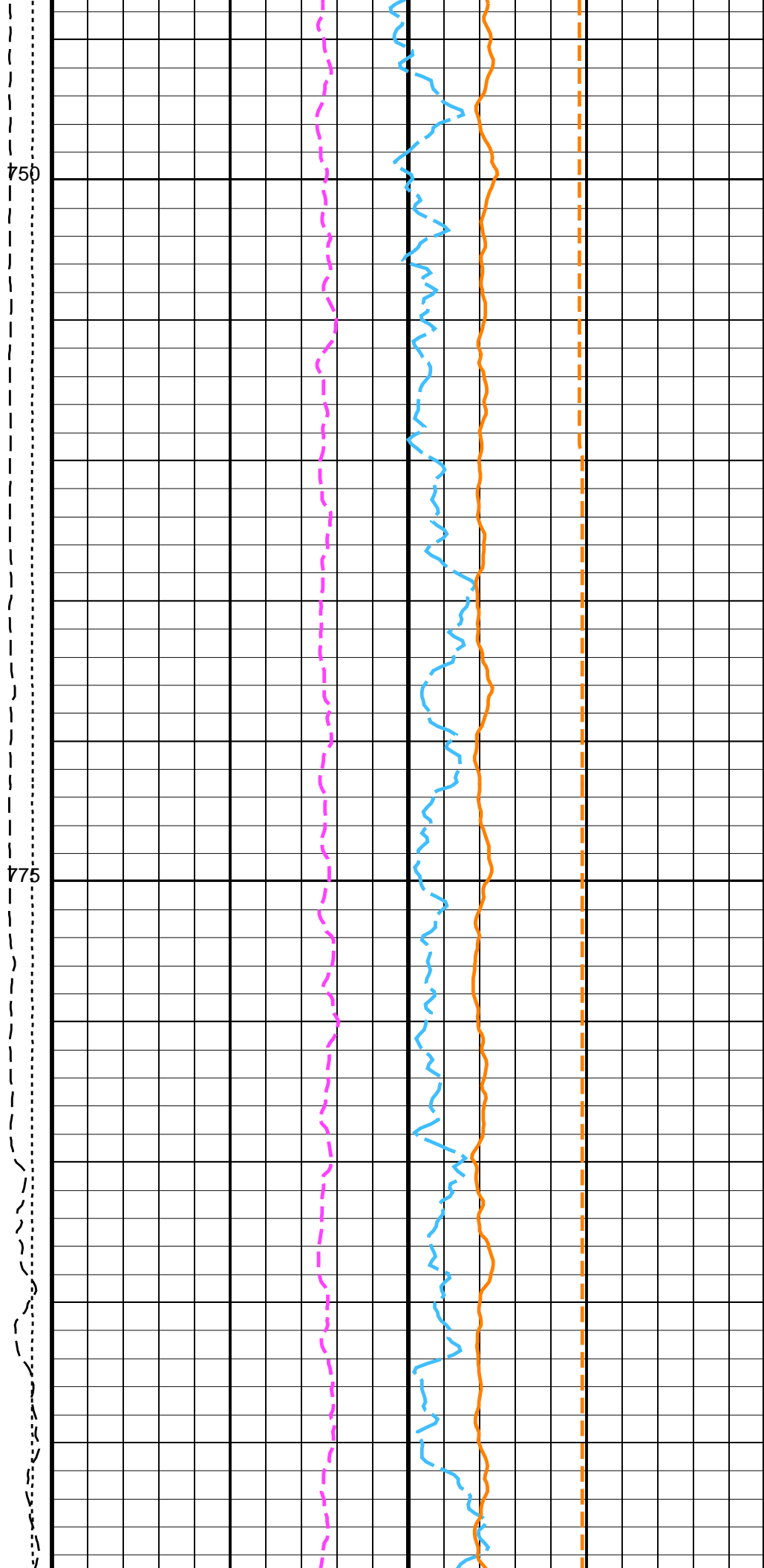
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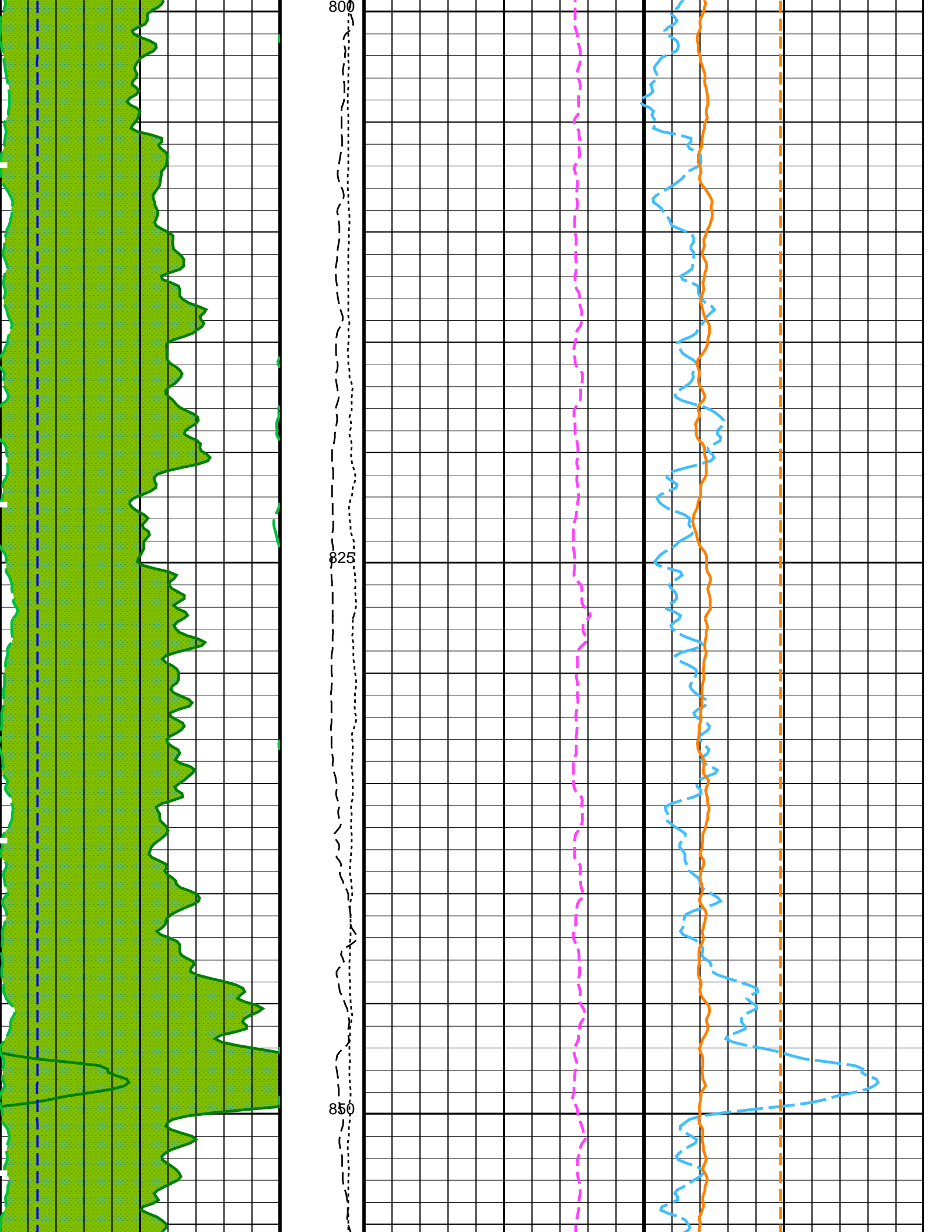


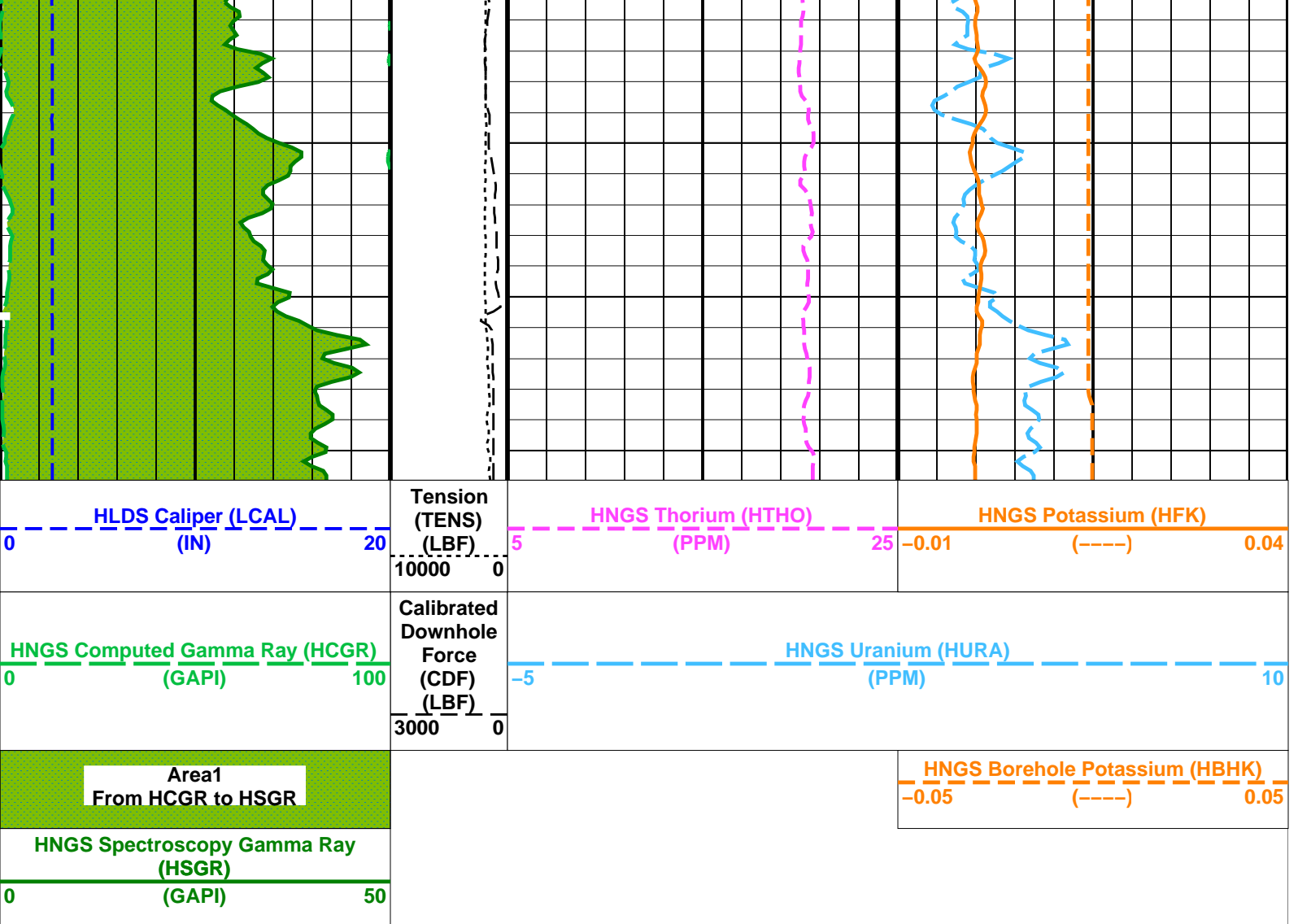


750

775







PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
HRLT-B: High Resolution Laterolog Array - B		
BHS	Borehole Status	OPEN
GCSE	Generalized Caliper Selection	BS
HNGS-BA: Hostile Natural Gamma Ray Sonde		
BAR1	HNGS Detector 1 Barite Constant	1
BAR2	HNGS Detector 2 Barite Constant	1
BHK	HNGS Borehole Potassium Correction Concentration	0
BHS	Borehole Status	OPEN
CSD1	Inner Casing Outer Diameter	0 IN
CSD2	Outer Casing Outer Diameter	0 IN
CSW1	Inner Casing Weight	0 LB/F
CSW2	Outer Casing Weight	0 LB/F
DBCC	HNGS Barite Constant Correction Flag	NONE
GCSE	Generalized Caliper Selection	BS
H1P	HNGS Detector 1 Allow/Disallow In Processing	ALLOW
H2P	HNGS Detector 2 Allow/Disallow In Processing	ALLOW
HABK	HNGS Borehole Potassium Running Average	-0.00144058
HALF	HNGS Alpha Filter Length	60 IN
HCRB	HNGS Apply Borehole Potassium Correction	NONE
HMWM	Mud Weighting Material	BARI
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	1.01207
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	0.957154
EDTC-B: Enhanced DTS Cartridge		
BHS	Borehole Status	OPEN
GCSE	Generalized Caliper Selection	BS

System and Miscellaneous

BS Bit Size  
 DFD Drilling Fluid Density  
 DO Depth Offset for Playback  
 PP Playback Processing

9.875 IN  
 1.20 G/C3  
 0.0 M  
 NORMAL

Format: HNGSYields Vertical Scale: 1:200 Graphics File Created: 01-Nov-2015 10:40

**OP System Version: 19C0-187**

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

**Input DLIS Files**

DEFAULT	Flip_MSS_LDEO_HRLA_020LUP	PRODUCER	29-Oct-2015 13:25	900.1 M	480.1 M
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**Output DLIS Files**

DEFAULT	MSS_LDEO_HRLA_LDL_032PUP	FN:38	PRODUCER	01-Nov-2015 10:40
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Company: International Ocean Discovery Program Well: Expedition 359, Site U1466B

**Input DLIS Files**

DEFAULT	Flip_MSS_LDEO_HRLA_020LUP	PRODUCER	29-Oct-2015 13:25	900.1 M	480.1 M
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**Output DLIS Files**

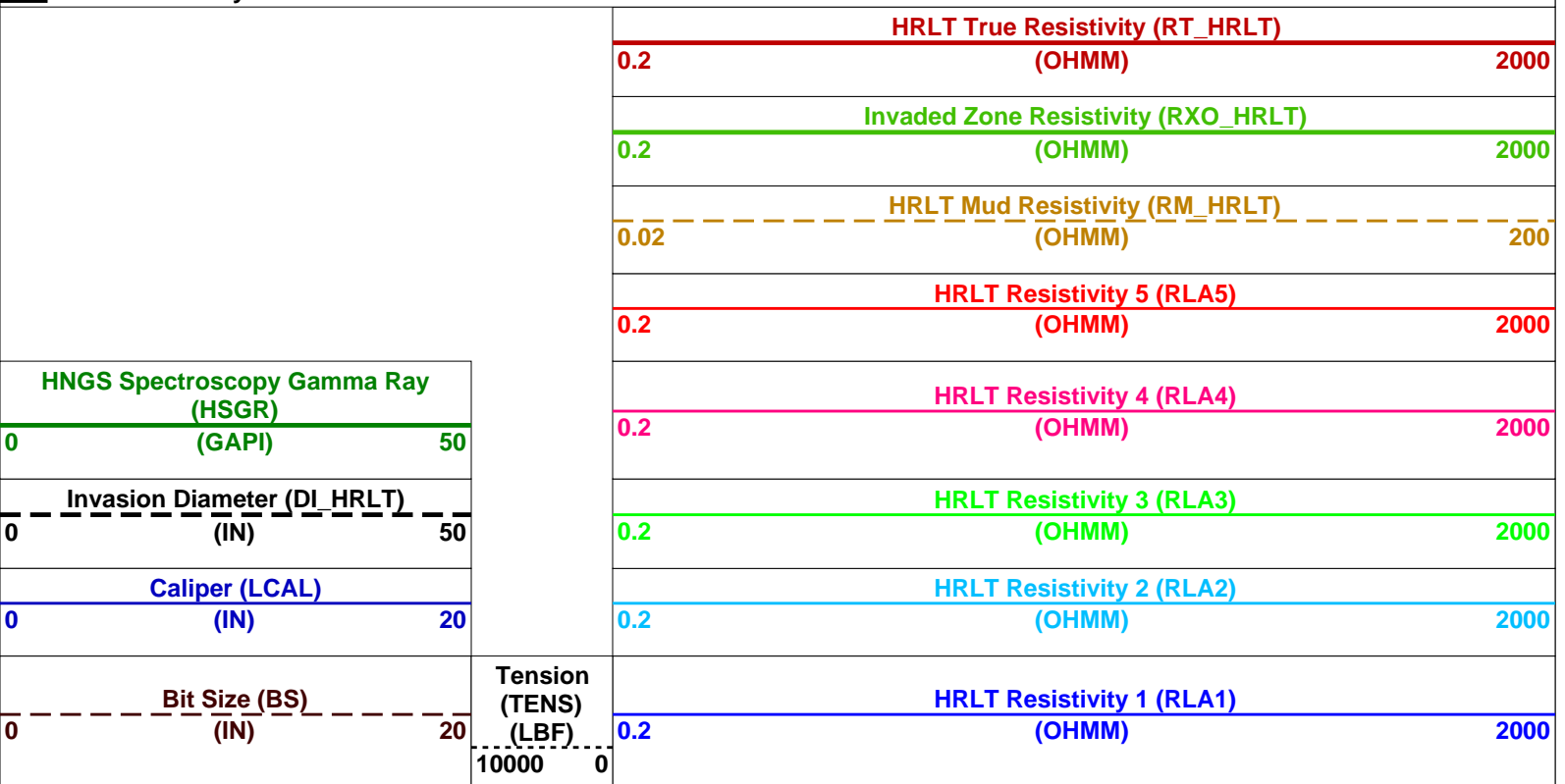
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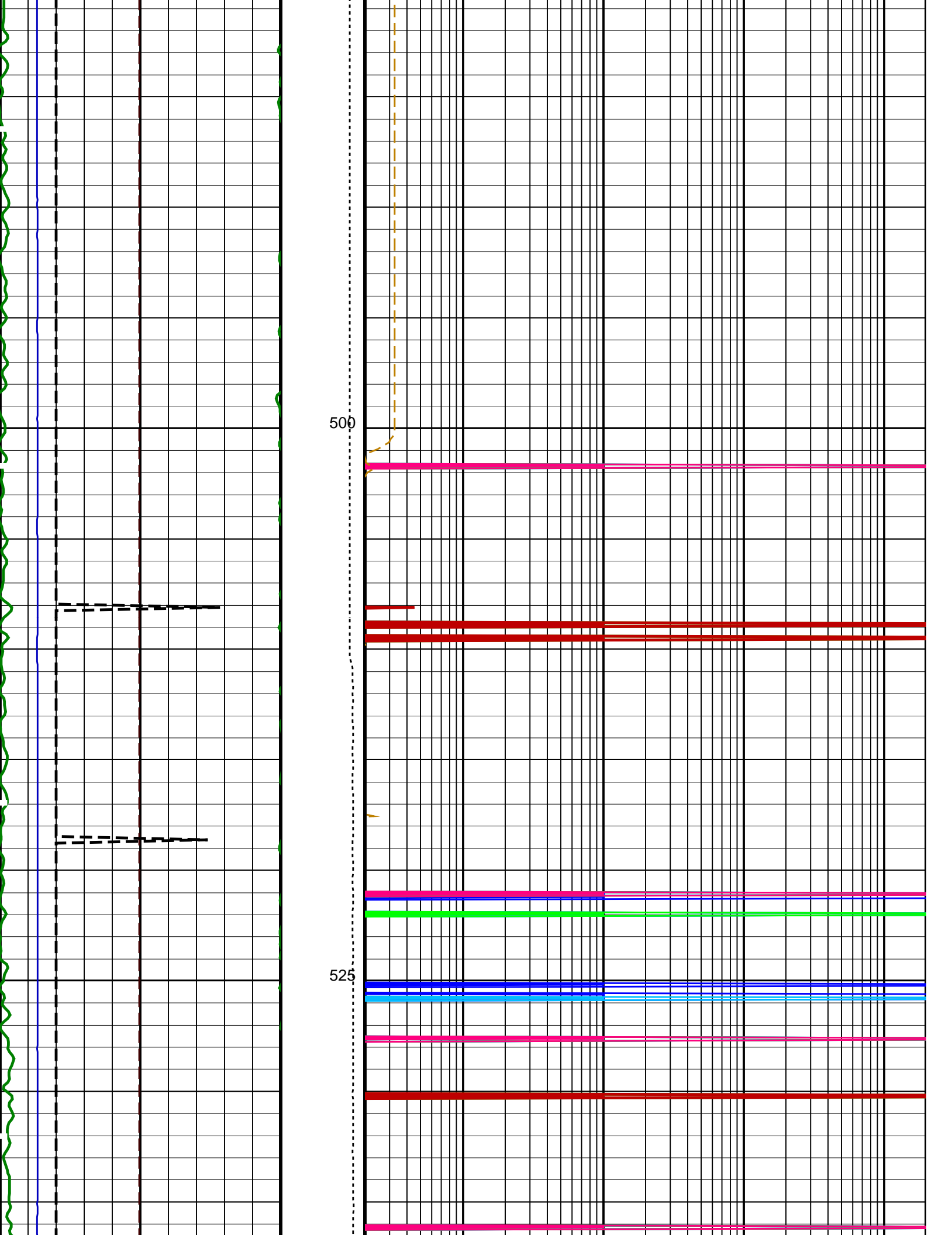
**OP System Version: 19C0-187**

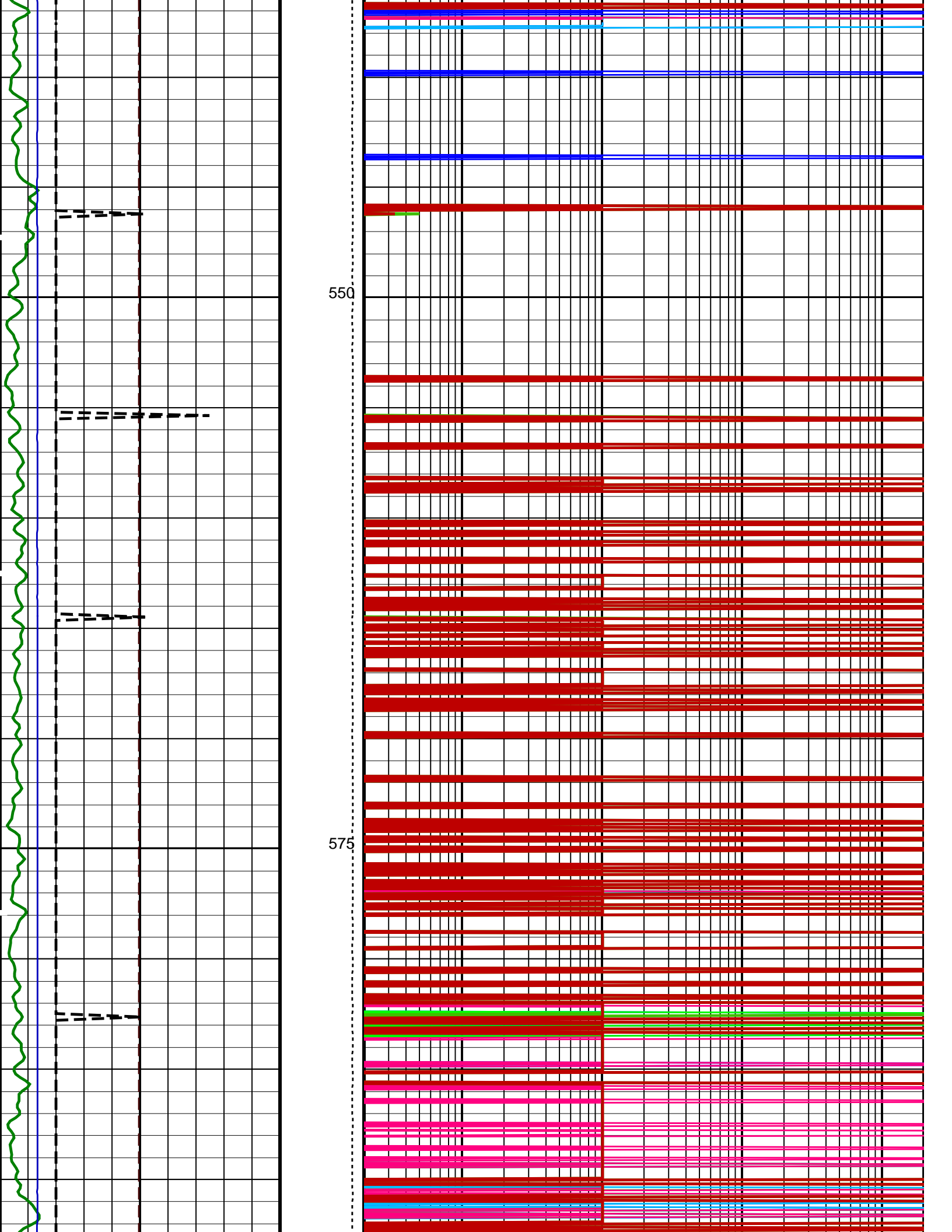
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HLDS	19C0-187	LDSC-B	19C0-187
HNGC-B	19C0-187	HNGS-BA	19C0-187
EDTC-B	SKK-5169-EDTCB		

**PIP SUMMARY**

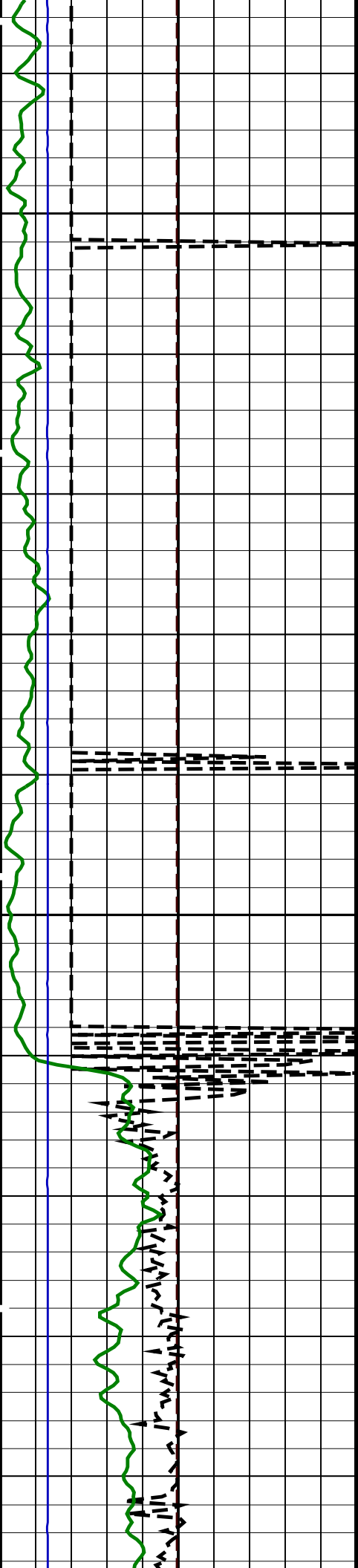
Time Mark Every 60 S





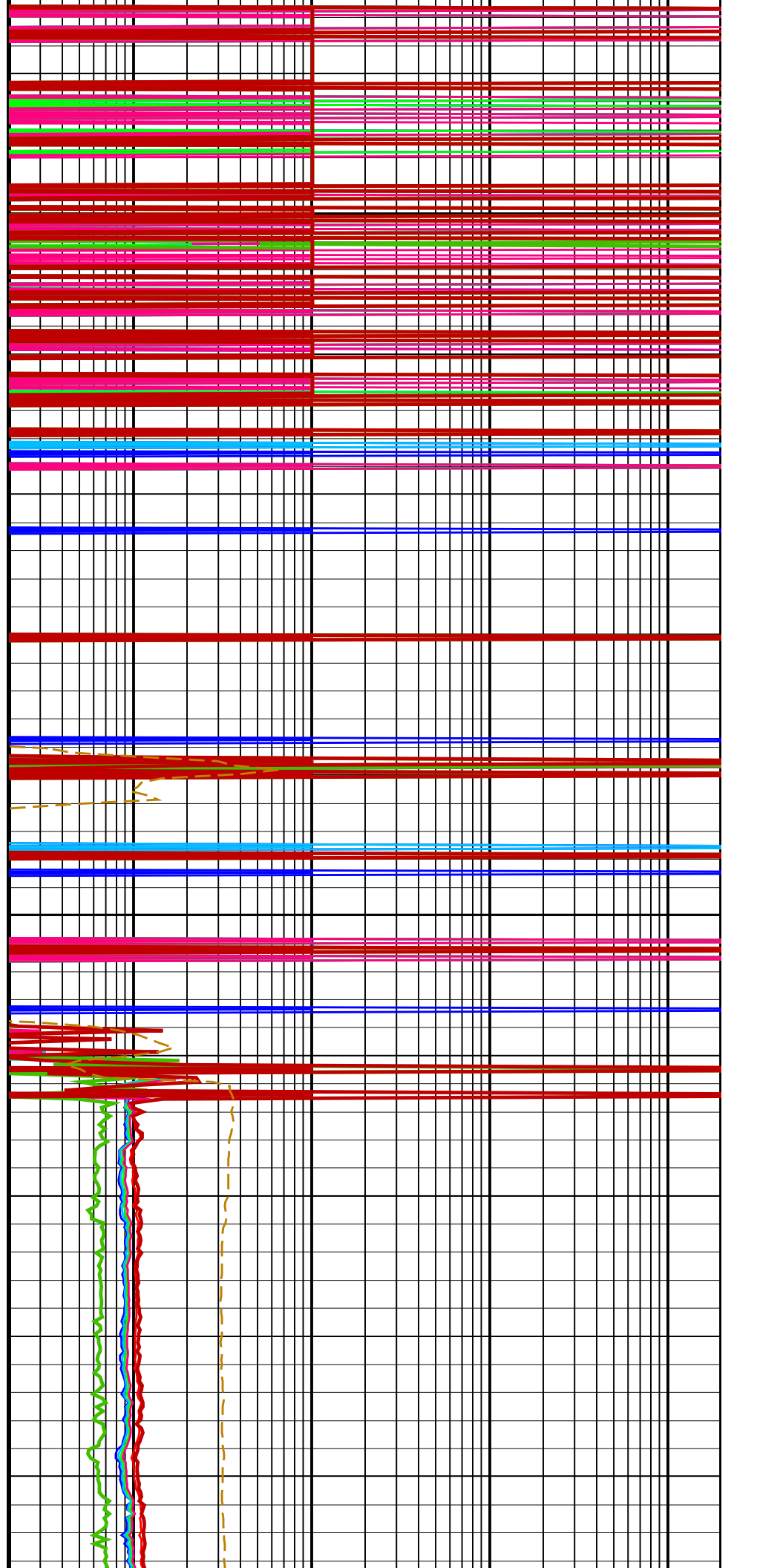


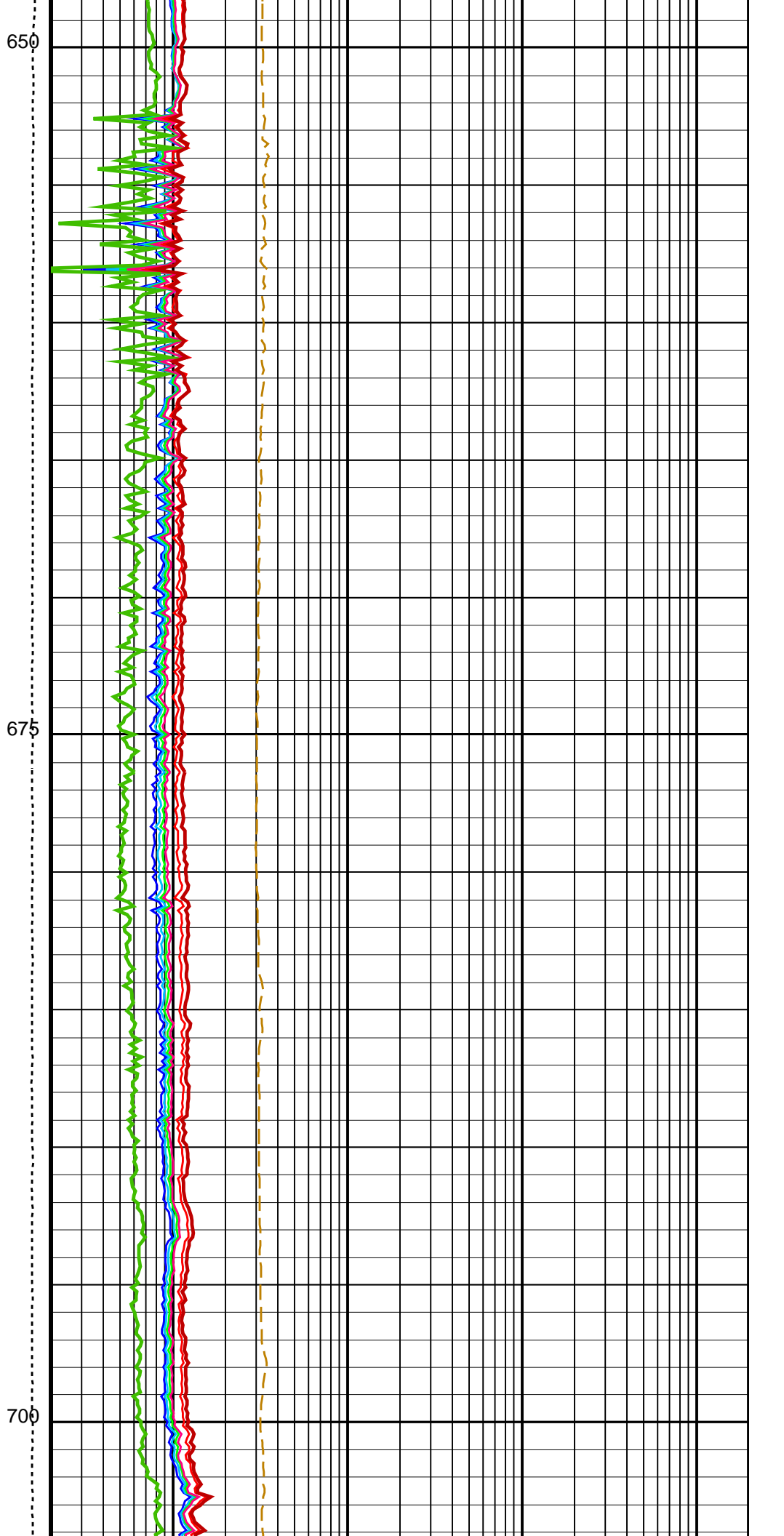
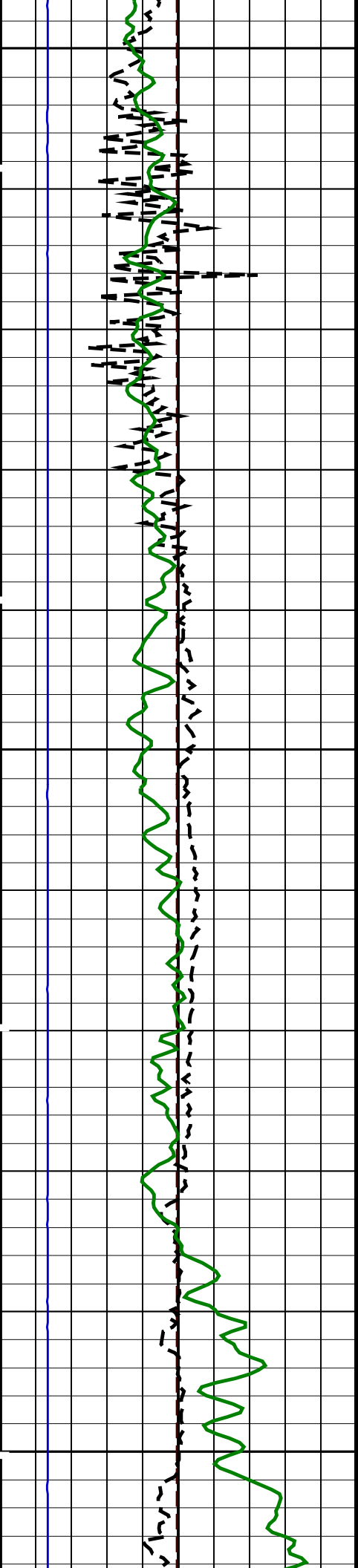


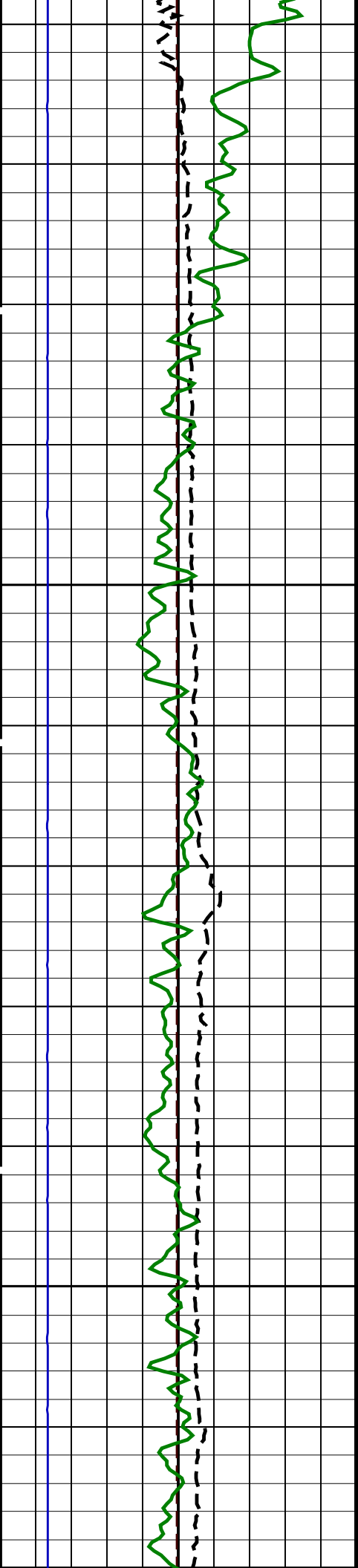


600

625

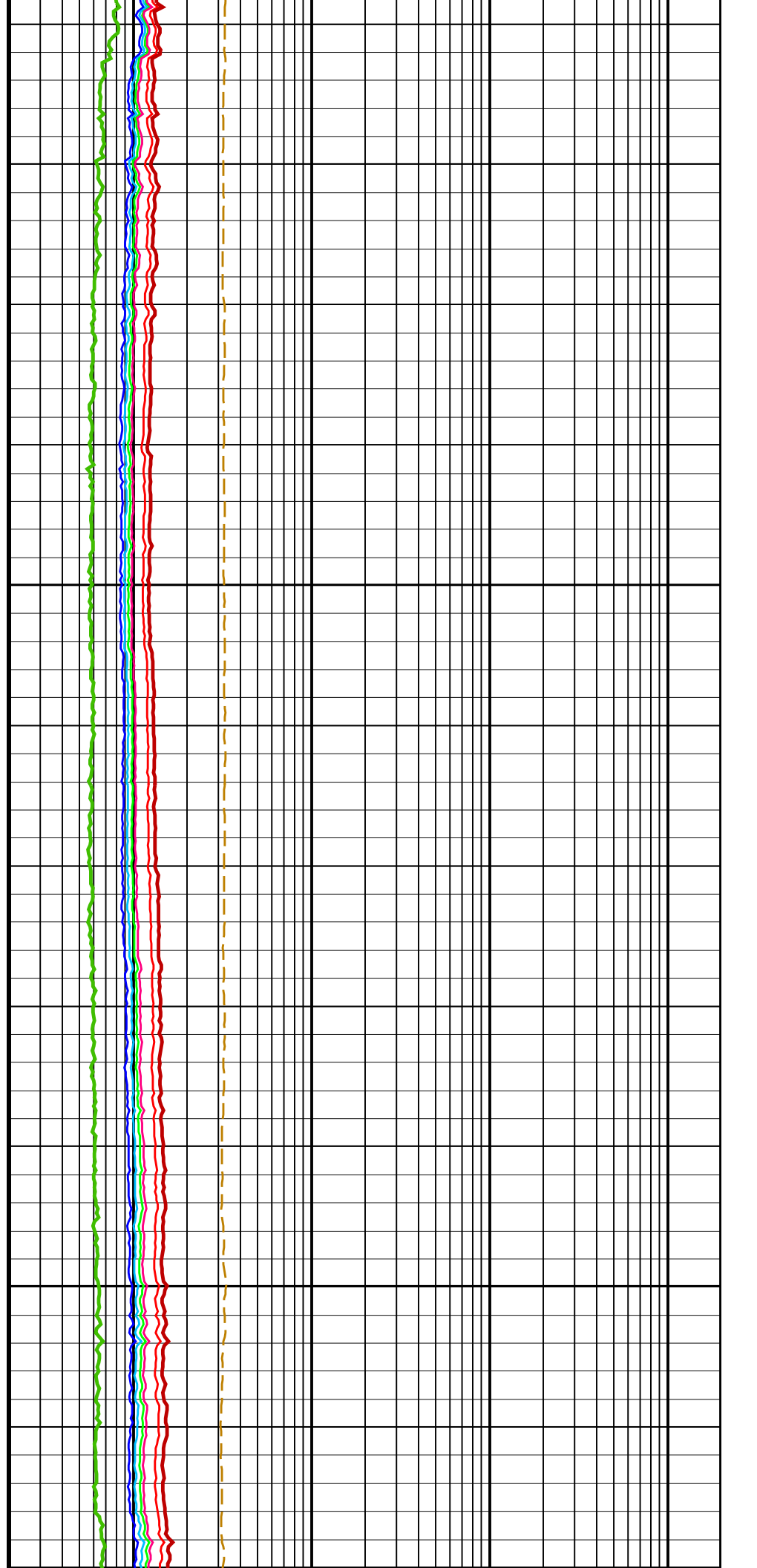


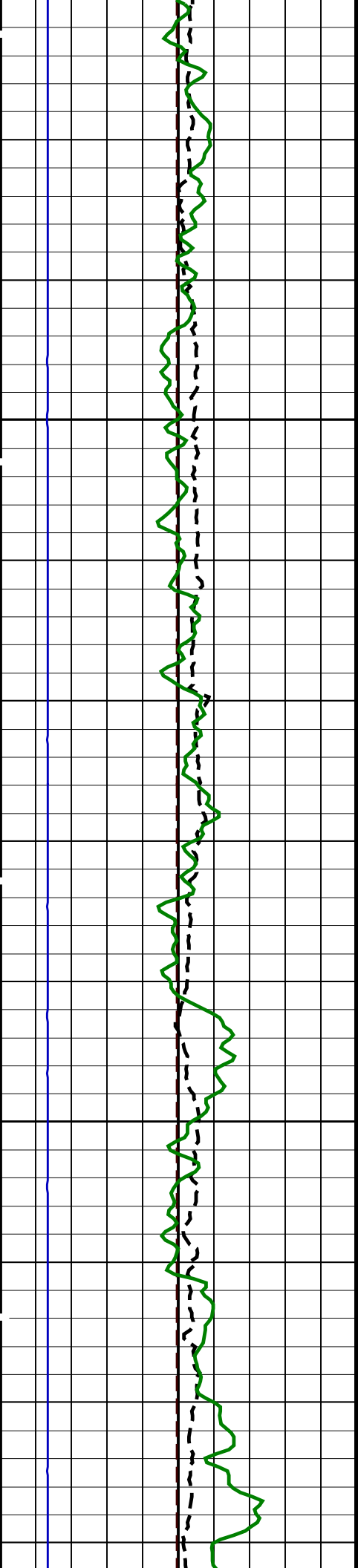




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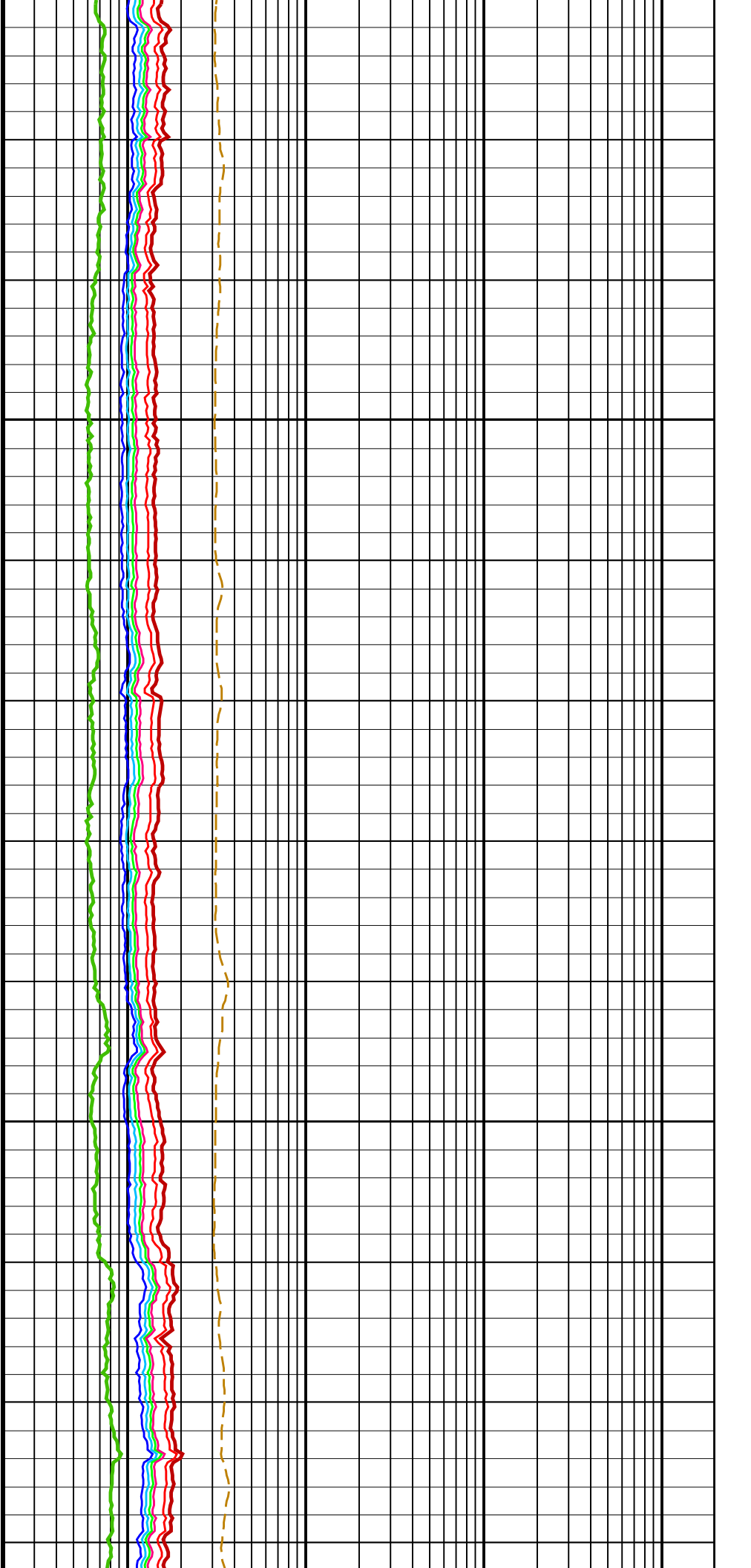
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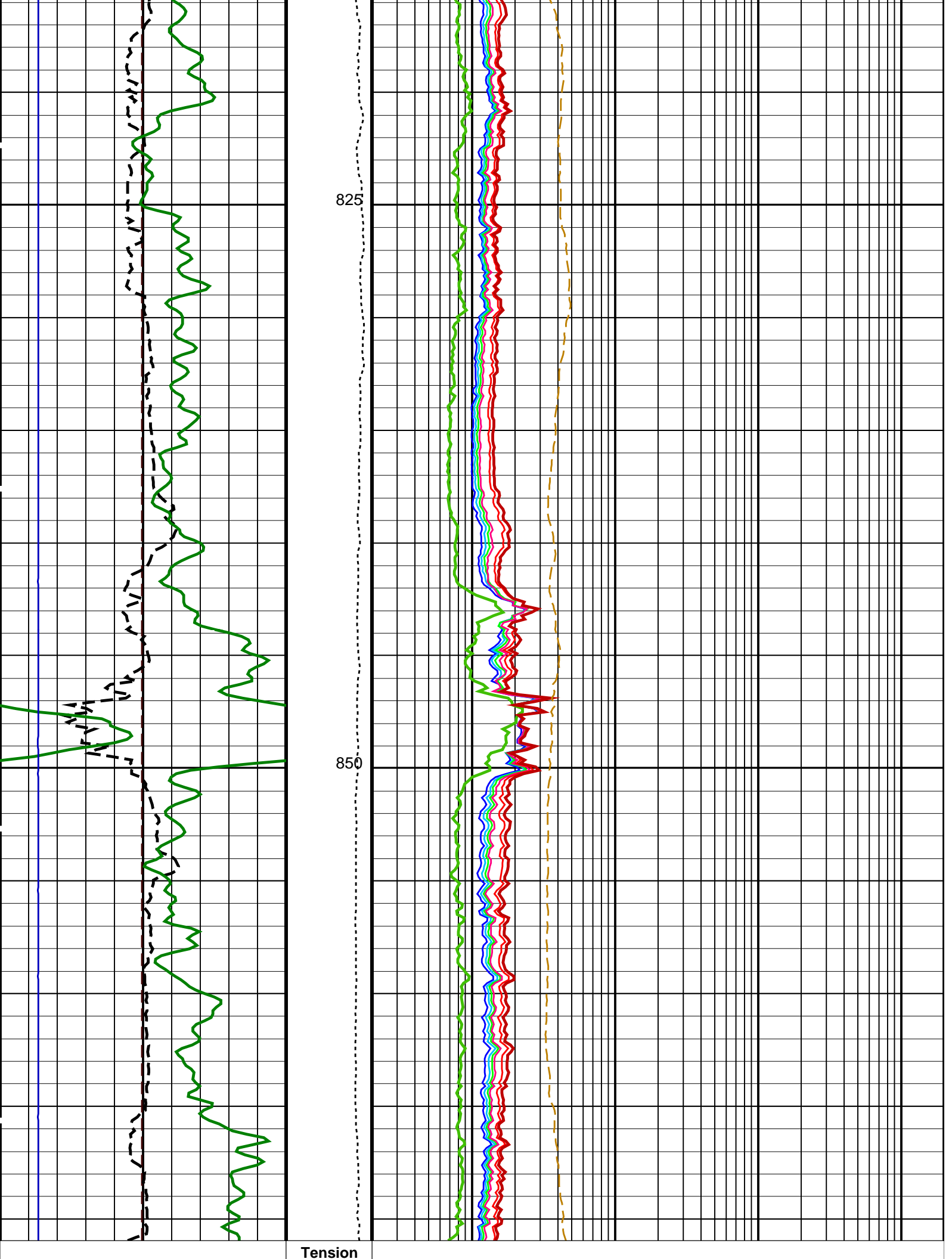




775

800





0	Bit Size (BS) (IN)	20	(TENS) (LBF)	0.2	HRLT Resistivity 1 (RLA1) (OHMM)	2000
0	Caliper (LCAL) (IN)	20	10000	0	HRLT Resistivity 2 (RLA2) (OHMM)	2000
0	Invasion Diameter (DI_HRLT) (IN)	50			HRLT Resistivity 3 (RLA3) (OHMM)	2000
0	HNGS Spectroscopy Gamma Ray (HSGR) (GAPI)	50			HRLT Resistivity 4 (RLA4) (OHMM)	2000
					HRLT Resistivity 5 (RLA5) (OHMM)	2000
				0.02	HRLT Mud Resistivity (RM_HRLT) (OHMM)	200
				0.2	Invaded Zone Resistivity (RXO_HRLT) (OHMM)	2000
				0.2	HRLT True Resistivity (RT_HRLT) (OHMM)	2000

PIP SUMMARY

Time Mark Every 60 S

### Parameters

DLIS Name	Description	Value	
<b>HRLT-B: High Resolution Laterolog Array - B</b>			
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	40	DEGC
GCSE	Generalized Caliper Selection	BS	
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN 9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
KFAC_HRLT	HRLT K Factor Option	SONDE	
PROCINV	Inversion Selection	ON	
PROCMFL	Inversion Micro-Resistivity Selection	NO_EXTERNAL_RXO	
PROCRM	Mechanical Standoff Fin Size	0	IN
PROCSPO	Processing Mud Resistivity Select	HRLT_Compute	
SHT	Sonde Position	Centered	
	Surface Hole Temperature	20	DEGC
<b>HNGS-BA: Hostile Natural Gamma Ray Sonde</b>			
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	BS	
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	-0.00144058	
HALF	HNGS Alpha Filter Length	60	IN
HCRB	HNGS Apply Borehole Potassium Correction	NONE	
HMWM	Mud Weighting Material	BARI	
HNPE	HNGS Processing Enable	YES	
S1BI	HNGS Detector 1 Calibration Bismuth Count Rate	1.3	CPS
S2BI	HNGS Detector 2 Calibration Bismuth Count Rate	1.3	CPS
SGRC	HNGS Standard Gamma-Ray Correction Flag	YES	
SHT	Surface Hole Temperature	20	DEGC
TPOS	Tool Position	ECCE	
VBA1	HNGS Detector 1 Variable Barite Factor Running Average	1.01207	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	0.957154	
<b>EDTC-B: Enhanced DTS Cartridge</b>			
BHS	Borehole Status	OPEN	

BHT	Bottom Hole Temperature (used in calculations)	40	DEGC
GCSE	Generalized Caliper Selection	BS	
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN 9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
SHT	Surface Hole Temperature	20	DEGC
<b>System and Miscellaneous</b>			
BS	Bit Size	9.875	IN
DFD	Drilling Fluid Density	1.20	G/C3
DO	Depth Offset for Playback	0.0	M
PP	Playback Processing	NORMAL	
TD	Total Depth	1120	M

Format: HRLT    Vertical Scale: 1:200    Graphics File Created: 01-Nov-2015 10:40

<b>OP System Version: 19C0-187</b>			
MSS_LDEO-A	19C0-187	HRLT-B	19C0-187
HLDS	19C0-187	LDSC-B	19C0-187
HNGC-B	19C0-187	HNGS-BA	19C0-187
EDTC-B	SKK-5169-EDTCB		

<b>Input DLIS Files</b>					
DEFAULT	Flip_MSS_LDEO_HRLA_020LUP	PRODUCER	29-Oct-2015 13:25	900.1 M	480.1 M
<b>Output DLIS Files</b>					
DEFAULT	MSS_LDEO_HRLA_LDL_032PUP	FN:38	PRODUCER	01-Nov-2015 10:40	

Company: International Ocean Discovery Program    Well: Expedition 359, Site U1466B

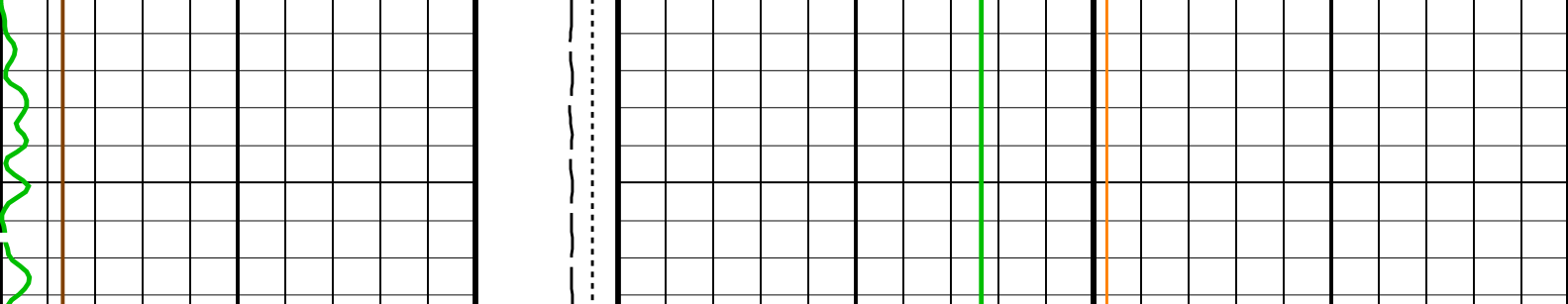
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<b>Output DLIS Files</b>					
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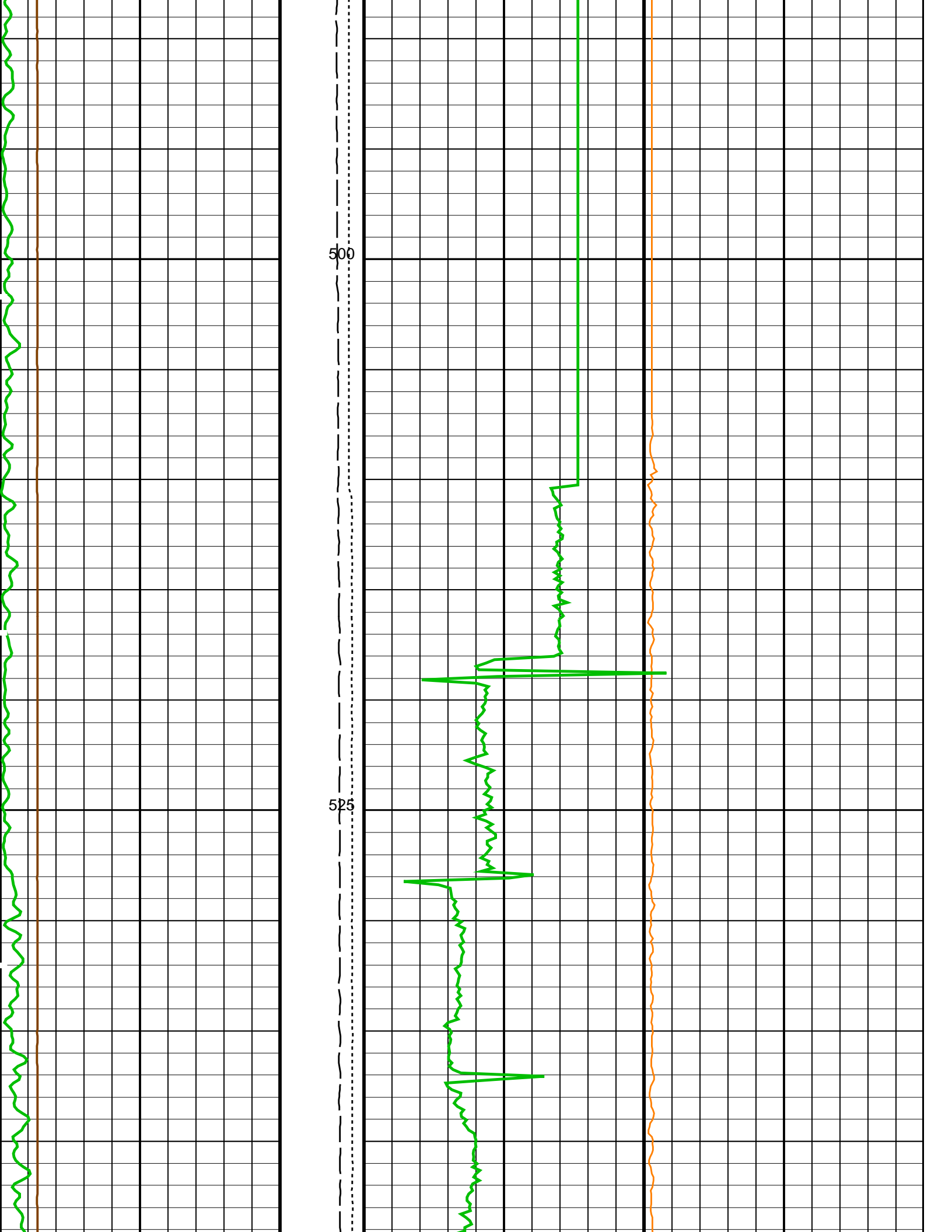
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HLDS	19C0-187	LDSC-B	19C0-187
HNGC-B	19C0-187	HNGS-BA	19C0-187
EDTC-B	SKK-5169-EDTCB		

**PIP SUMMARY**

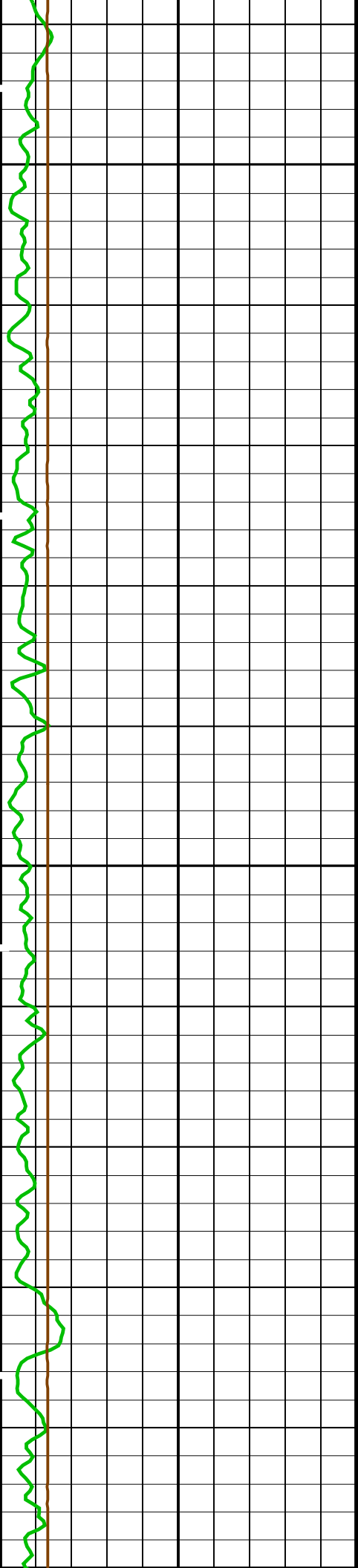
Time Mark Every 60 S

<b>Gamma Ray (GR_EDTC)</b> (GAPI)    0    50	Calibrated Downhole Force (CDF) (LBF) 3000    0	<b>Dual-Coil Susceptibility (MSSLSUS_LDEO)</b> (PPM)    0    5000
<b>HLDS Caliper (LCAL)</b> (IN)    0    20		<b>Axial Acceleration (MSSZACC_LDEO)</b> (M/S2)    0    20

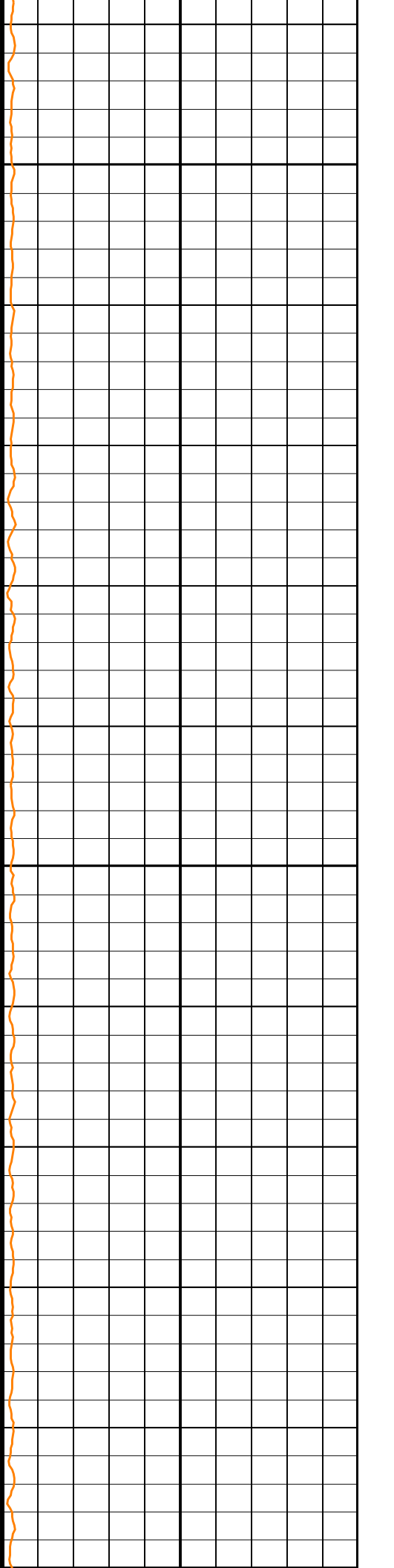
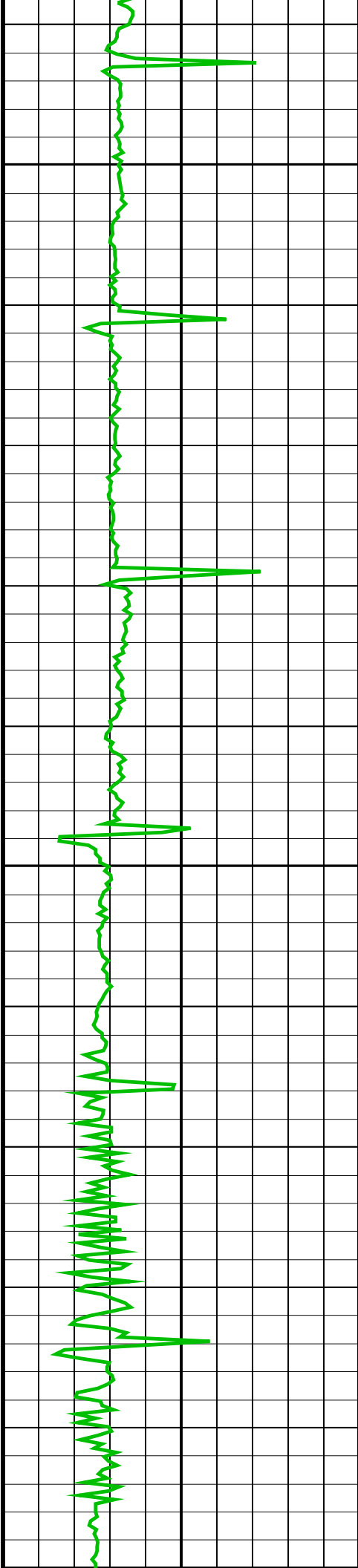


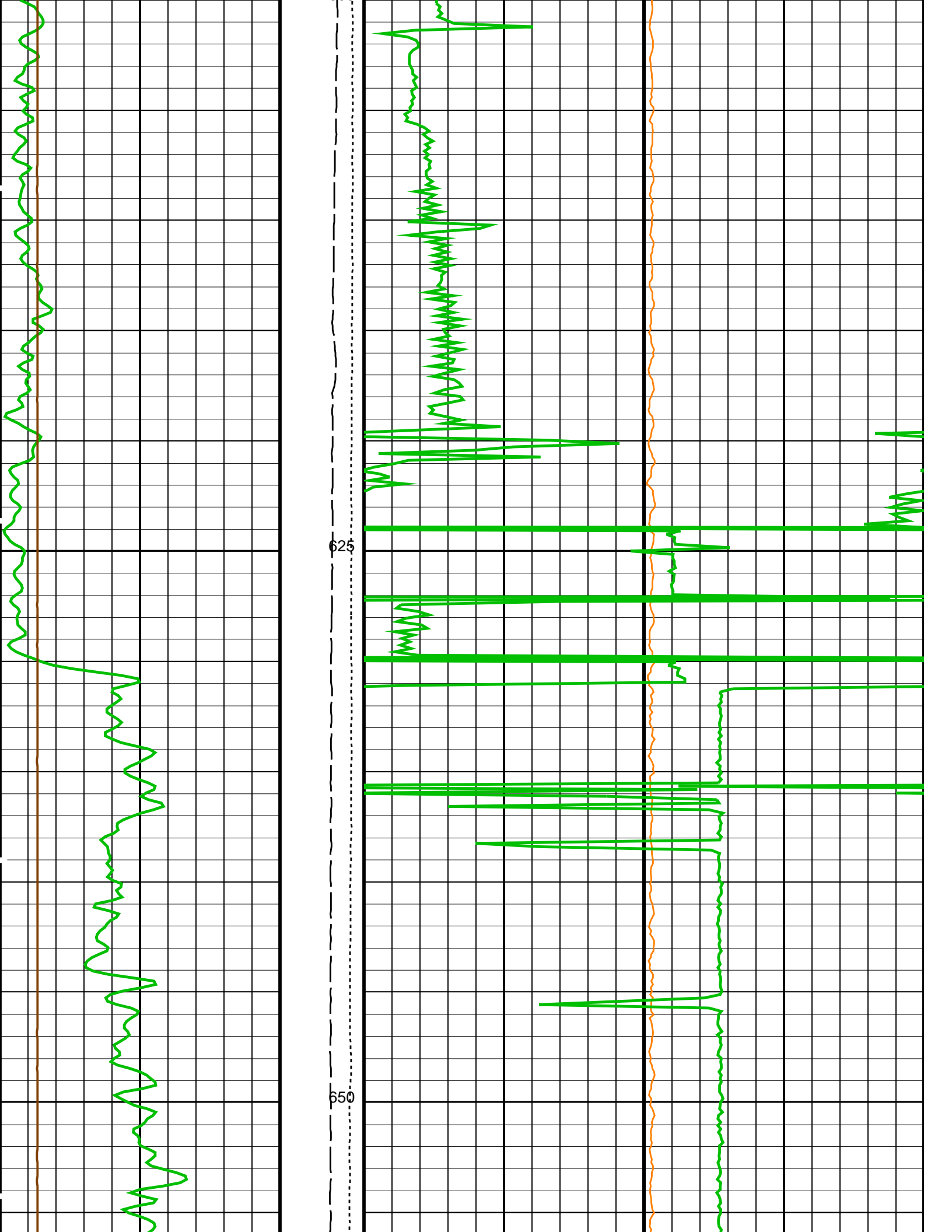


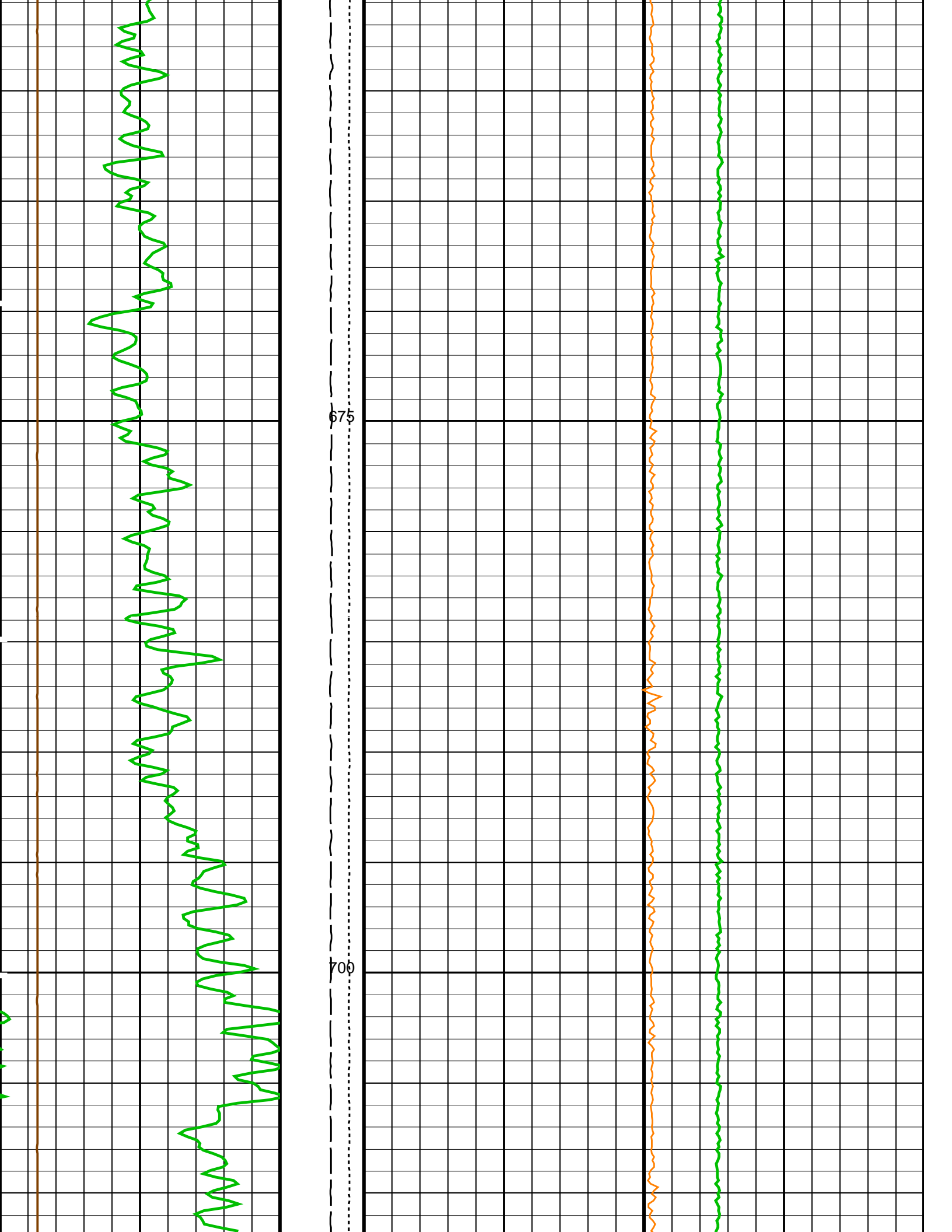


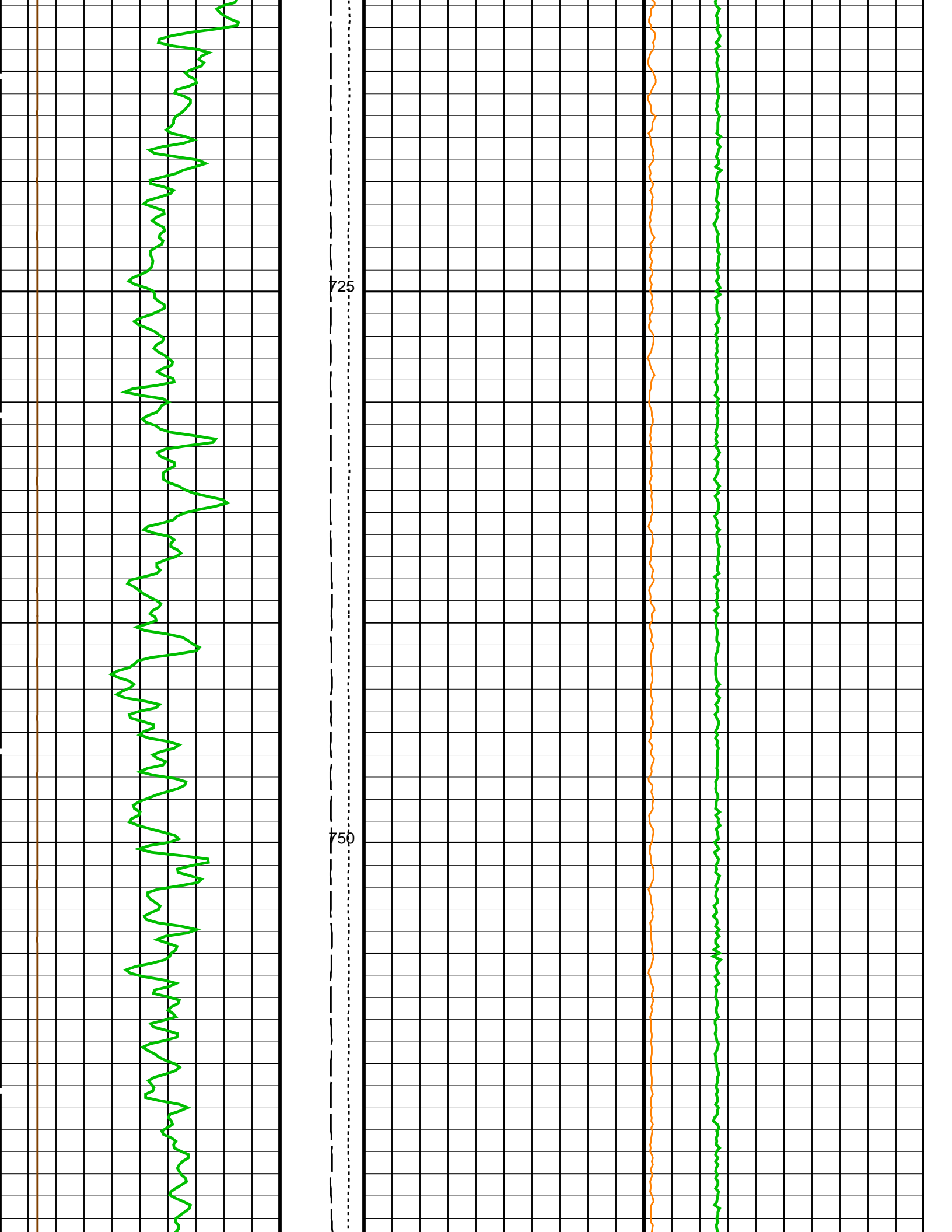


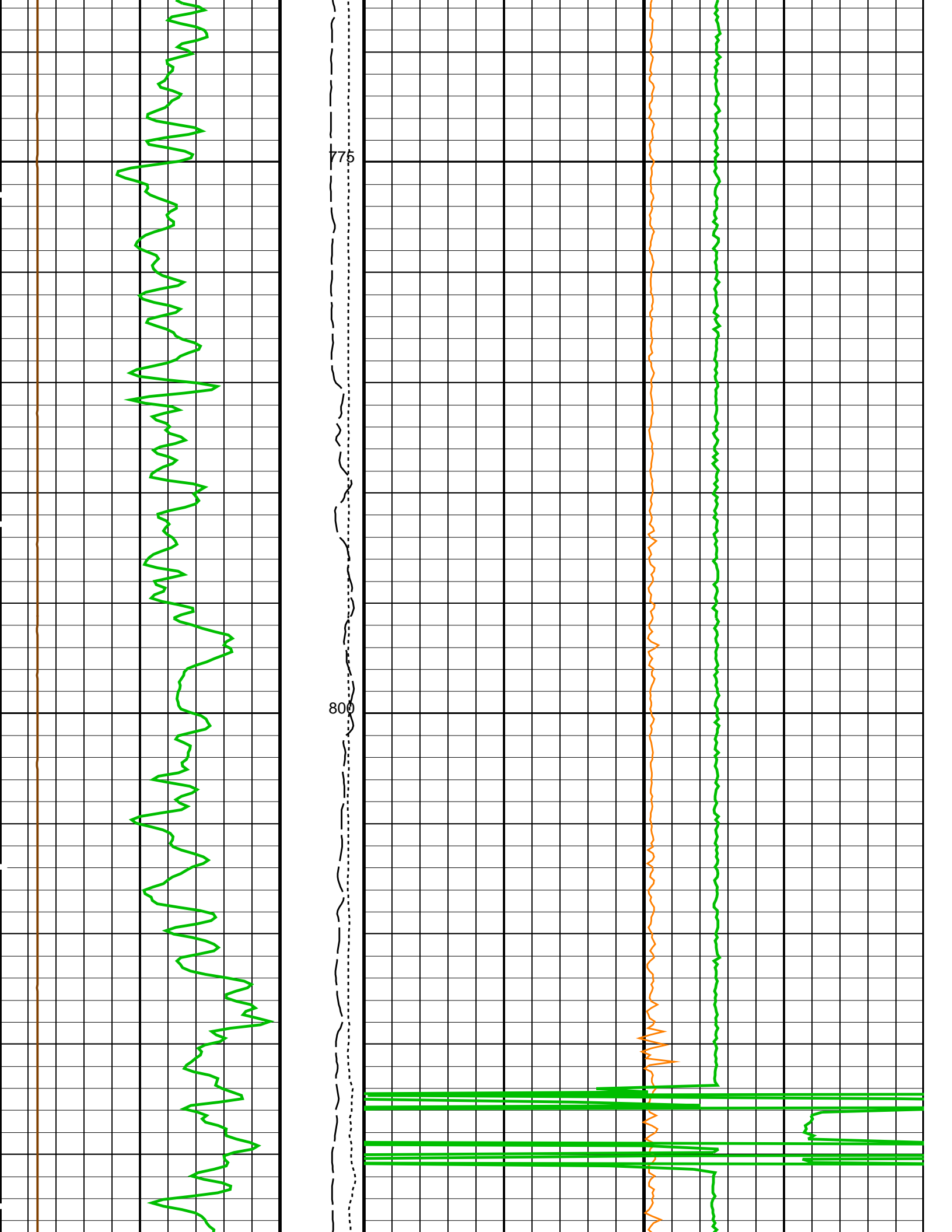
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575  
600

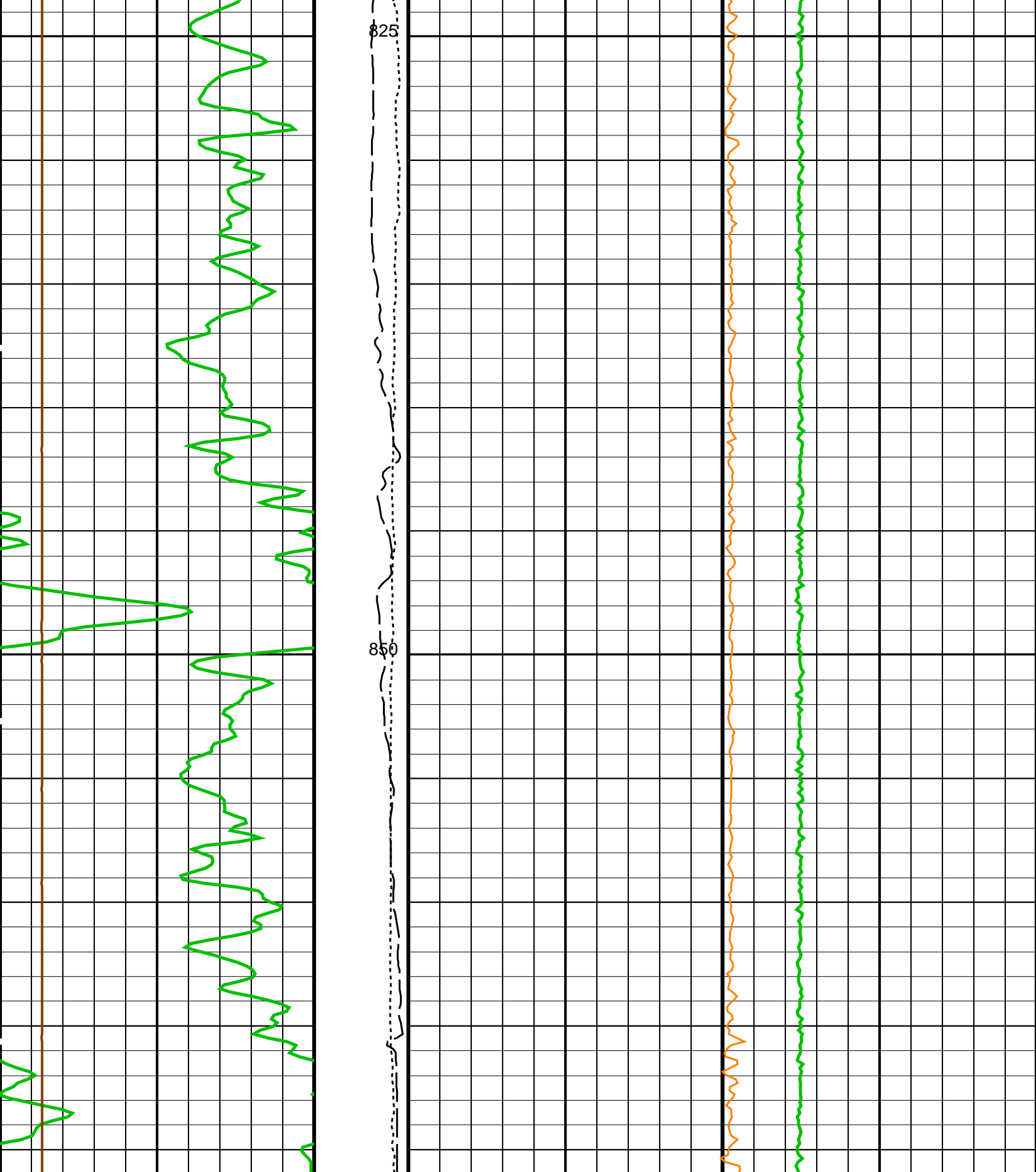












825

850

HLDS Caliper (LCAL)  
(IN) 0 20

Tension (TENS)  
(LBF) 10000 0

Axial Acceleration (MSSZACC\_LDEO)  
(M/S<sup>2</sup>) 0 20

Gamma Ray (GR\_EDTC)  
(GAPI) 0 50

Calibrated Downhole Force (CDF)  
(LBF) 3000 0

Dual-Coil Susceptibility (MSSLSUS\_LDEO)  
(PPM) 0 5000

## Parameters

DLIS Name	Description	Value	
<b>HRLT-B: High Resolution Laterolog Array - B</b>			
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	40	DEGC
CALSTAT	HRLTB Calibration Status	SHALLOW_DONE	
CALTEMP	HRLTB Calibration Temperature	30.2229	DEGC
FREQ0	HRLT Frequency Index for Mode 0	32	
FREQ1	HRLT Frequency Index for Mode 1	128	
FREQ2	HRLT Frequency Index for Mode 2	104	
FREQ3	HRLT Frequency Index for Mode 3	86	
FREQ4	HRLT Frequency Index for Mode 4	56	
FREQ5	HRLT Frequency Index for Mode 5	44	
FREQ6	HRLT Frequency Index for Mode 6	116	
GCSE	Generalized Caliper Selection	BS	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN 9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
ISSBAR	Barite Mud Switch	BARITE	
KFAC_HRLT	HRLT K Factor Option	SONDE	
LOOPCOEF_S	HRLT Loop Coefficient for Shallow Modes	LOW	
LOOPMOD0	HRLT Mode 0 Loop Mode	OFF	
LOOPMOD1	HRLT Mode 1 Loop Mode	OFF	
LOOPMOD2	HRLT Mode 2 Loop Mode	OFF	
LOOPMOD3	HRLT Mode 3 Loop Mode	OFF	
LOOPMOD4	HRLT Mode 4 Loop Mode	OFF	
LOOPMOD5	HRLT Mode 5 Loop Mode	OFF	
LOOPMOD6	HRLT Mode 6 Loop Mode	OFF	
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
<b>HLDS: Hostile Litho-Density Sonde</b>			
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	
<b>HNGS-BA: Hostile Natural Gamma Ray Sonde</b>			
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	BS	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN 9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
H1P	HNGS Detector 1 Allow/Disallow In Processing	ALLOW	
H2P	HNGS Detector 2 Allow/Disallow In Processing	ALLOW	
HABK	HNGS Borehole Potassium Running Average	-0.00144058	
HALF	HNGS Alpha Filter Length	60	IN
HCRB	HNGS Apply Borehole Potassium Correction	NONE	
HNGS	HNGS Hostile Natural Gamma Ray Sonde	BA	

HMWM	Mud Weighting Material	BARI	
HNPE	HNGS Processing Enable	YES	
ISSBAR	Barite Mud Switch	BARITE	
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	1.01207	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	0.957154	
<b>EDTC-B: Enhanced DTS Cartridge</b>			
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	BS	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
HSCO	Hole Size Correction Option	YES	
ISSBAR	Barite Mud Switch	BARITE	
ISSBAR_EDTC	Nuclear Mud Type	BARITE	
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
MCCO	Mud Cake Correction Option	NO	
MCOR	Mud Correction	BARI	
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	
<b>System and Miscellaneous</b>			
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	1.20	G/C3
DO	Depth Offset for Playback	0.0	M
FLEV	Fluid Level	-50000.00	M
MST	Mud Sample Temperature	23.00	DEGC
PBVSADP	Use alternate depth channel for playback	NO	
PP	Playback Processing	NORMAL	
RMFS	Resistivity of Mud Filtrate Sample	-50000.0000	OHMM
RW	Resistivity of Connate Water	1.0000	OHMM
TD	Total Depth	1120	M
TDD	Total Depth - Driller	1346.00	M
TDL	Total Depth - Logger	894.00	M
TWS	Temperature of Connate Water Sample	37.78	DEGC

Format: MSS\_Logging Vertical Scale: 1:200 Graphics File Created: 01-Nov-2015 10:40

### OP System Version: 19C0-187

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

### Input DLIS Files

DEFAULT	Flip_MSS_LDEO_HRLA_020LUP	PRODUCER	29-Oct-2015 13:25	900.1 M	480.1 M
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### Output DLIS Files

DEFAULT	MSS_LDEO_HRLA_LDL_032PUP	FN:38	PRODUCER	01-Nov-2015 10:40
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MAXIS Field Log

Calibrations

MAXIS Field Log

Output DLIS Files

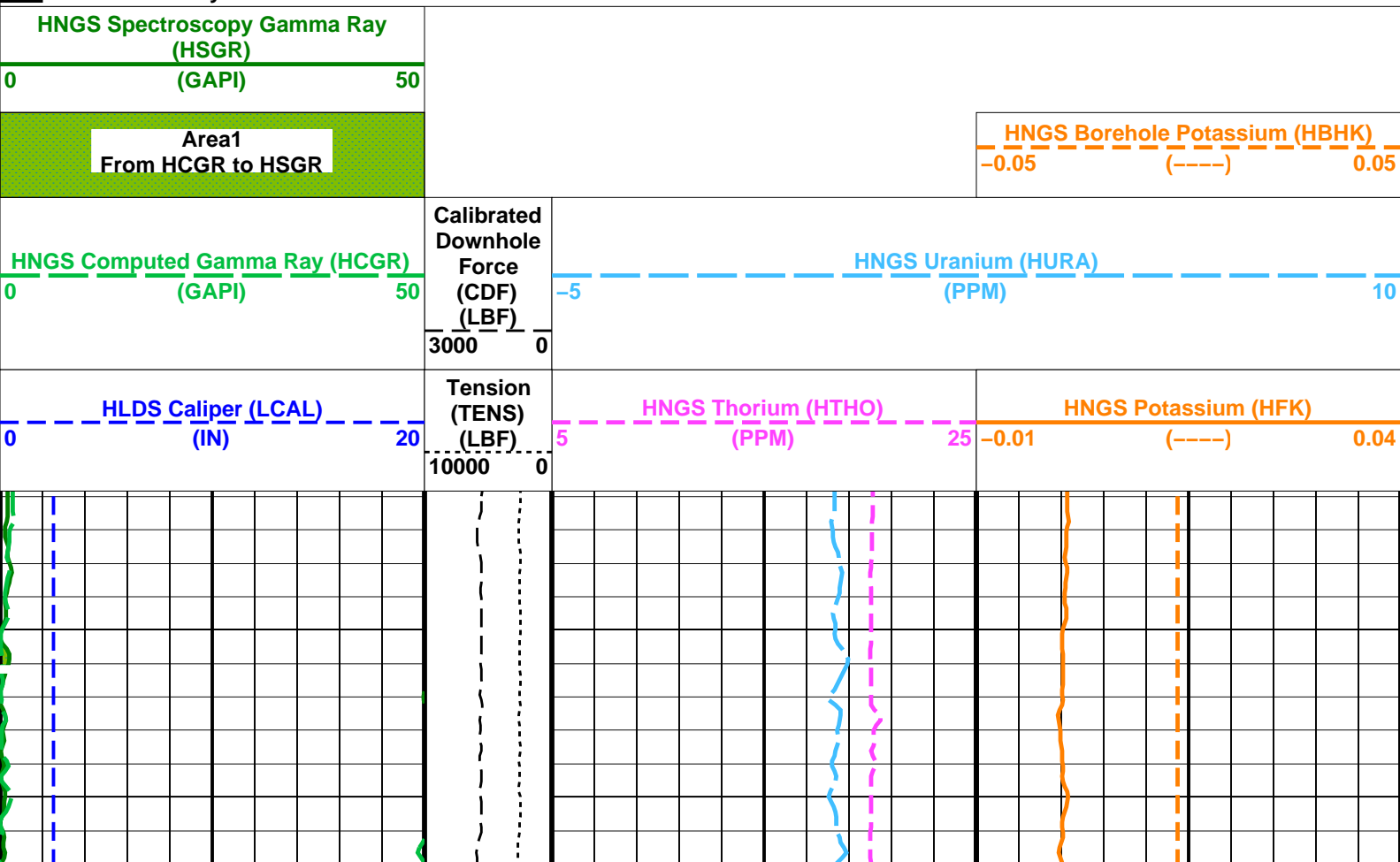
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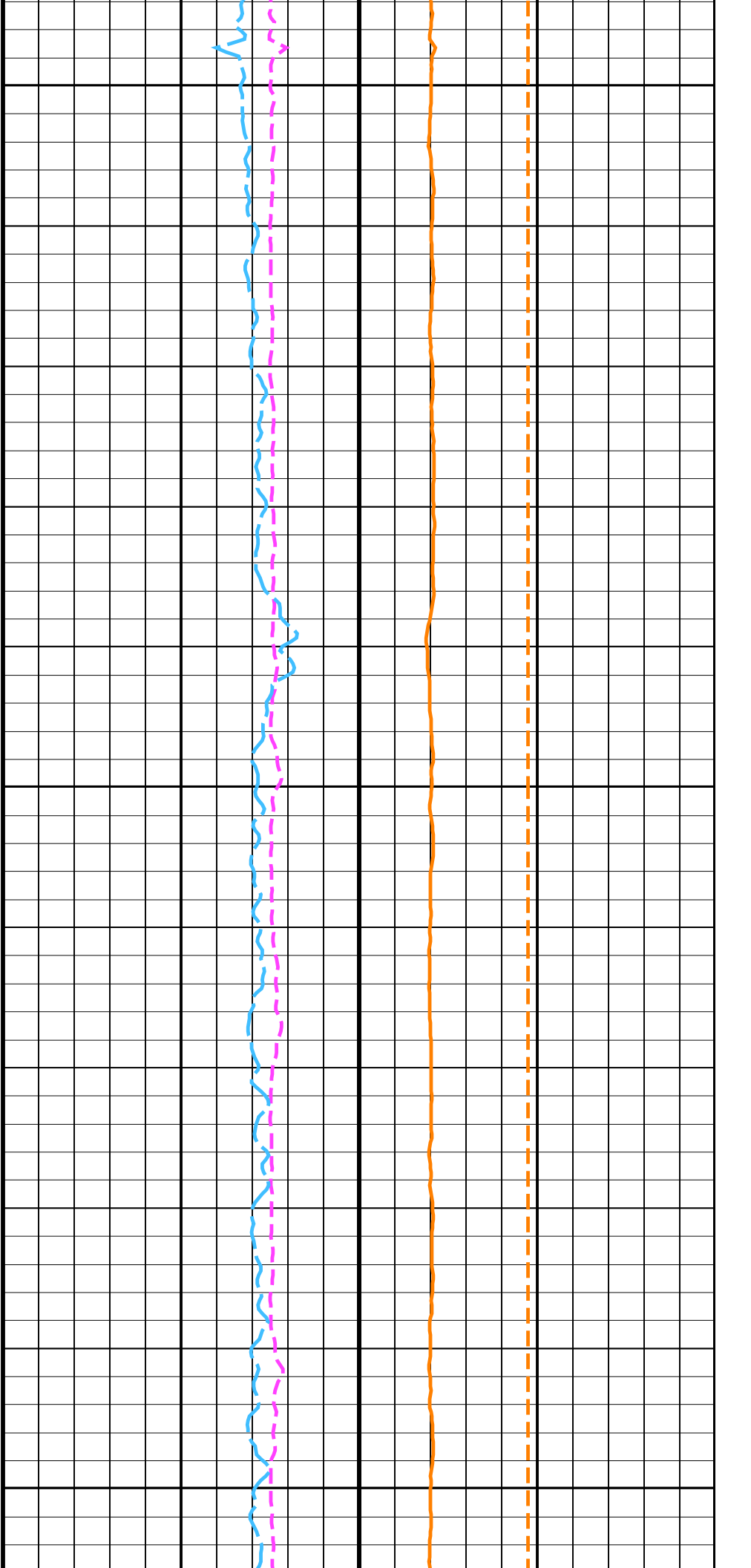
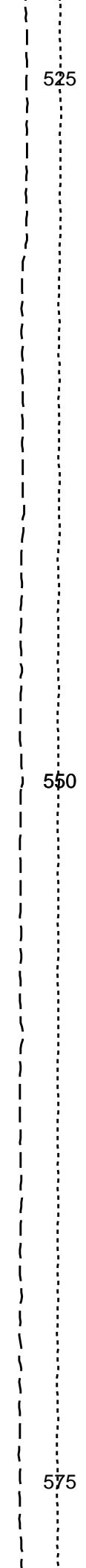
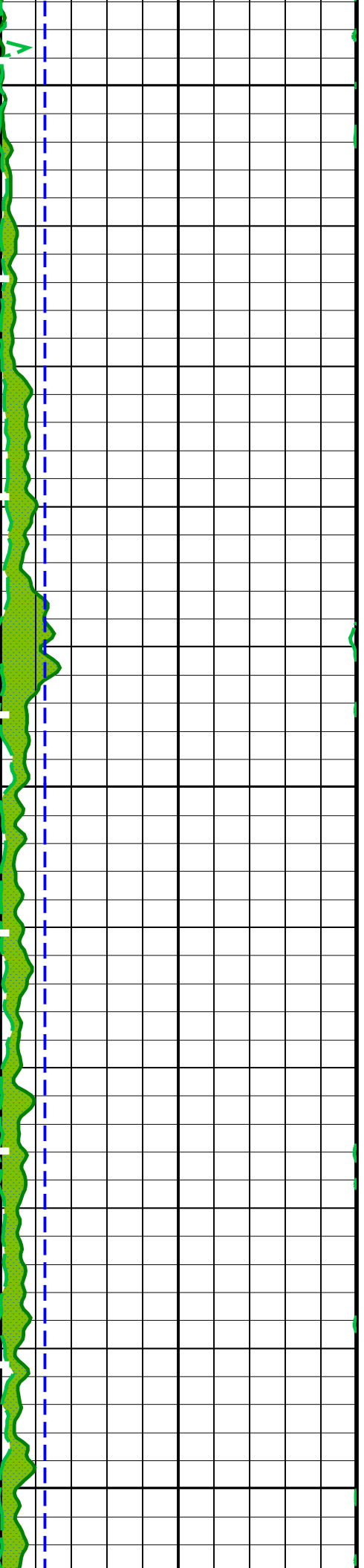
OP System Version: 19C0-187

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

PIP SUMMARY

Time Mark Every 60 S

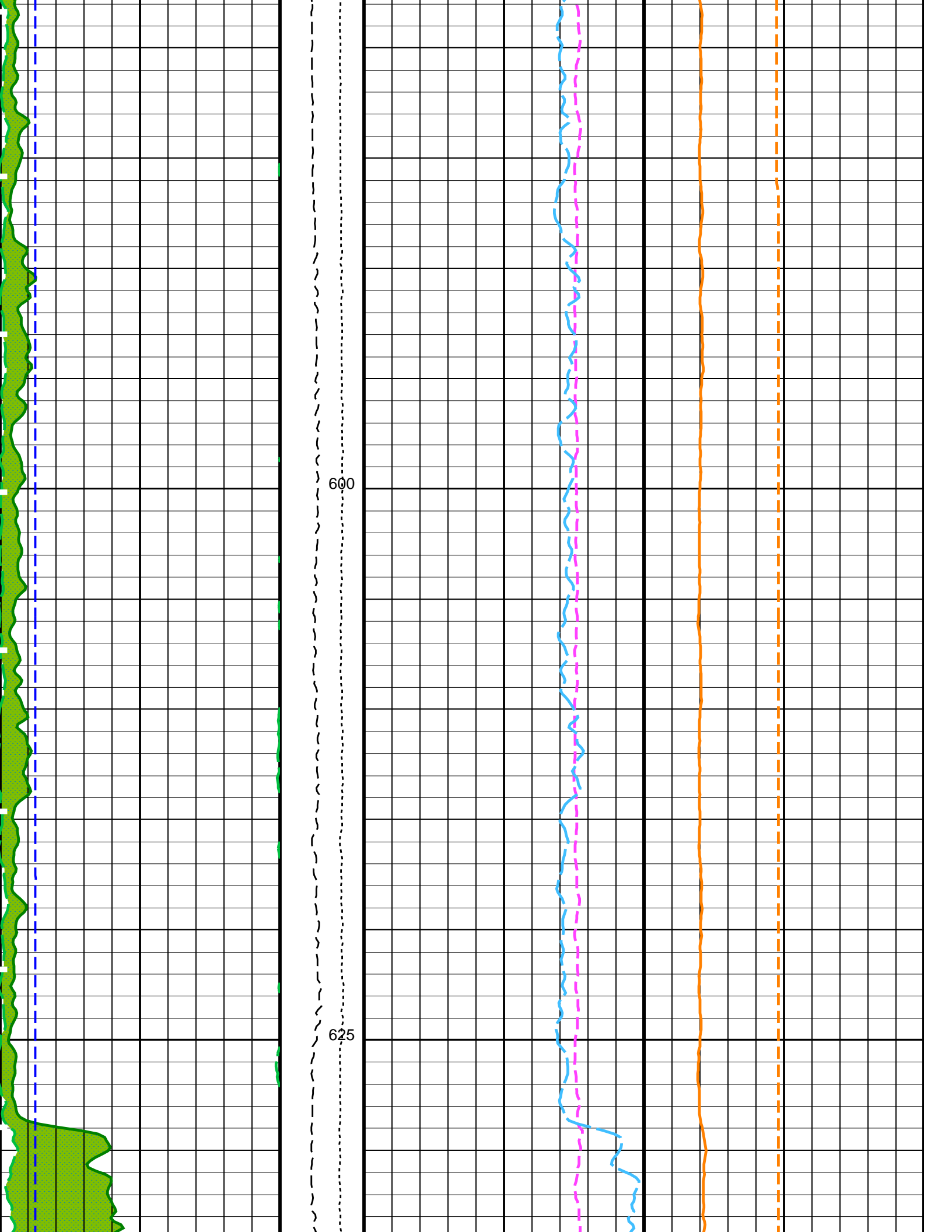


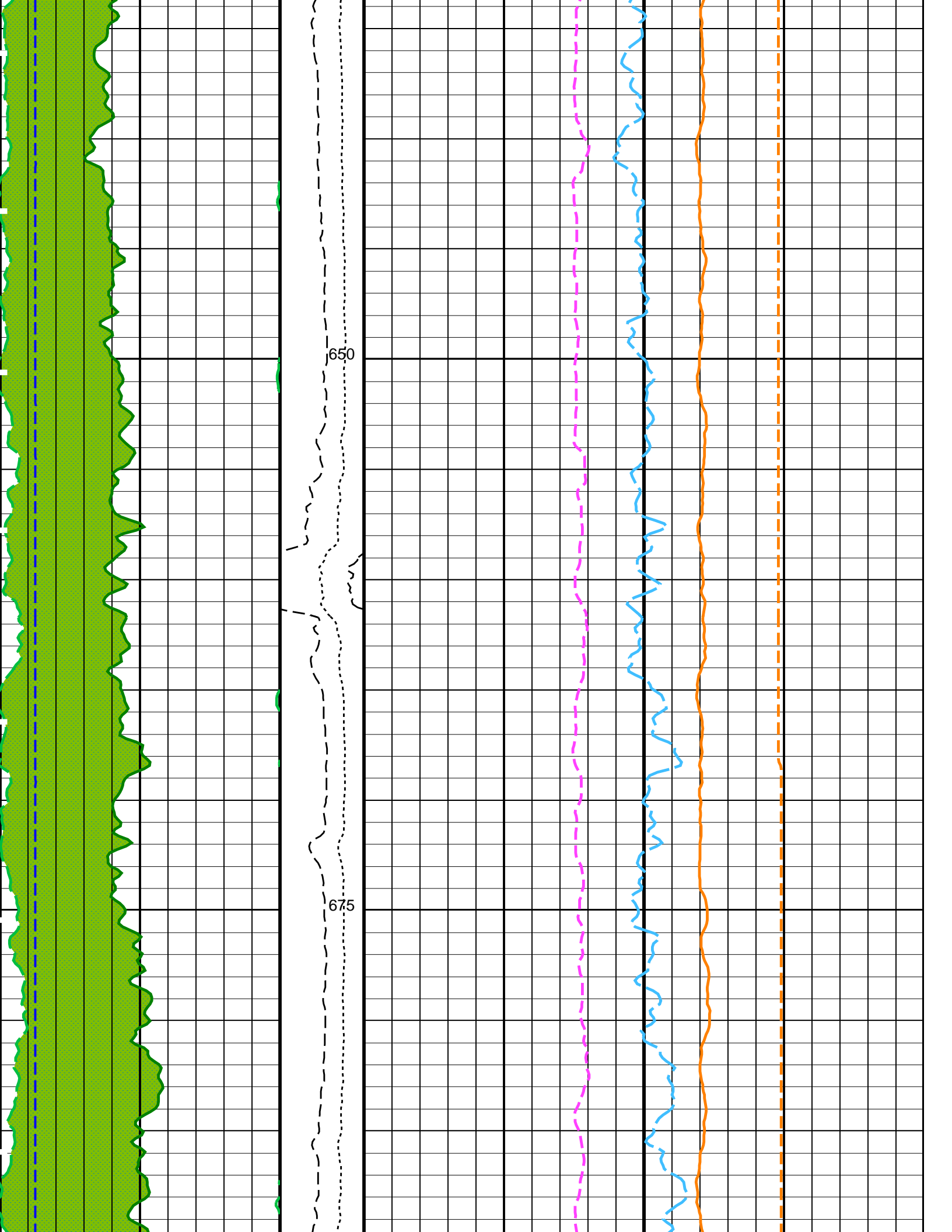


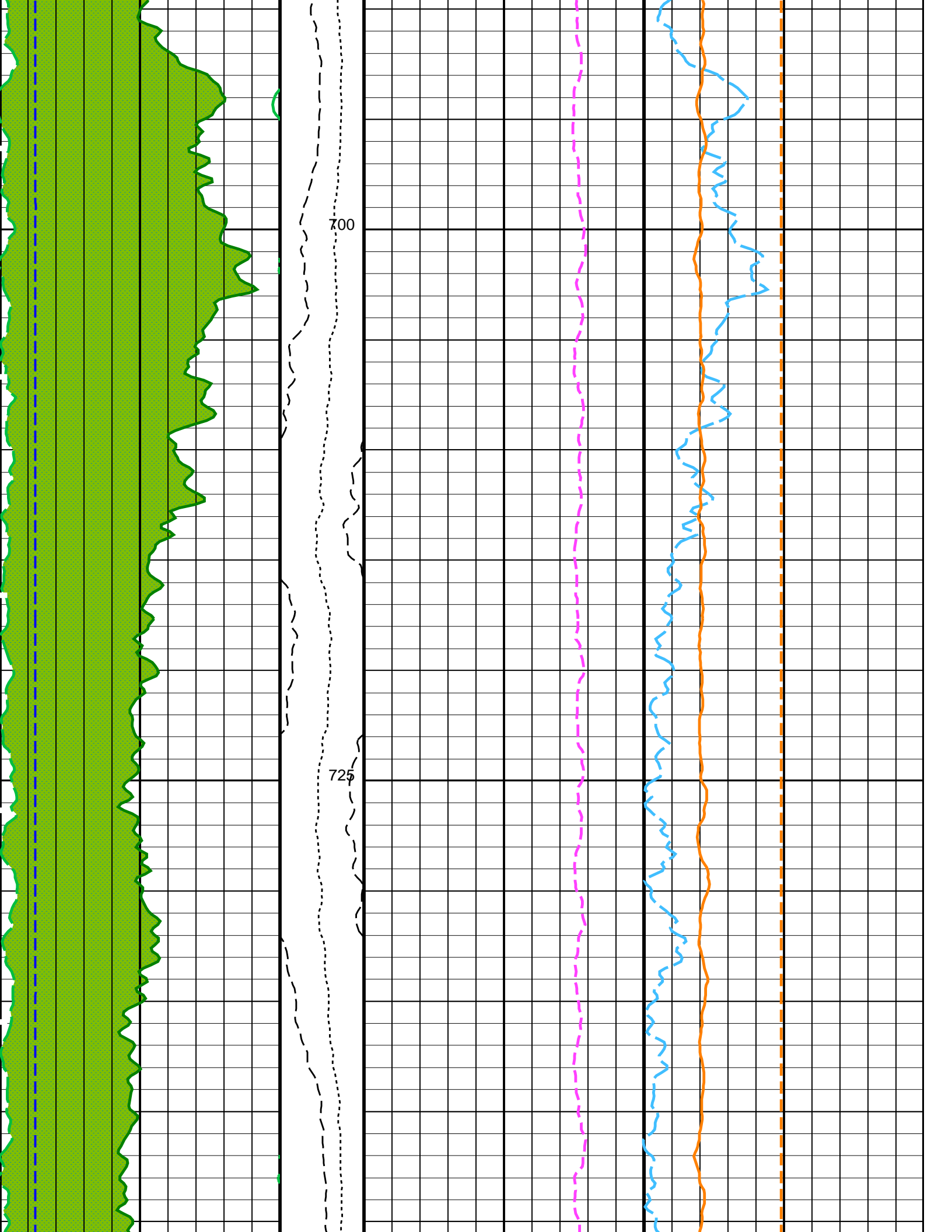
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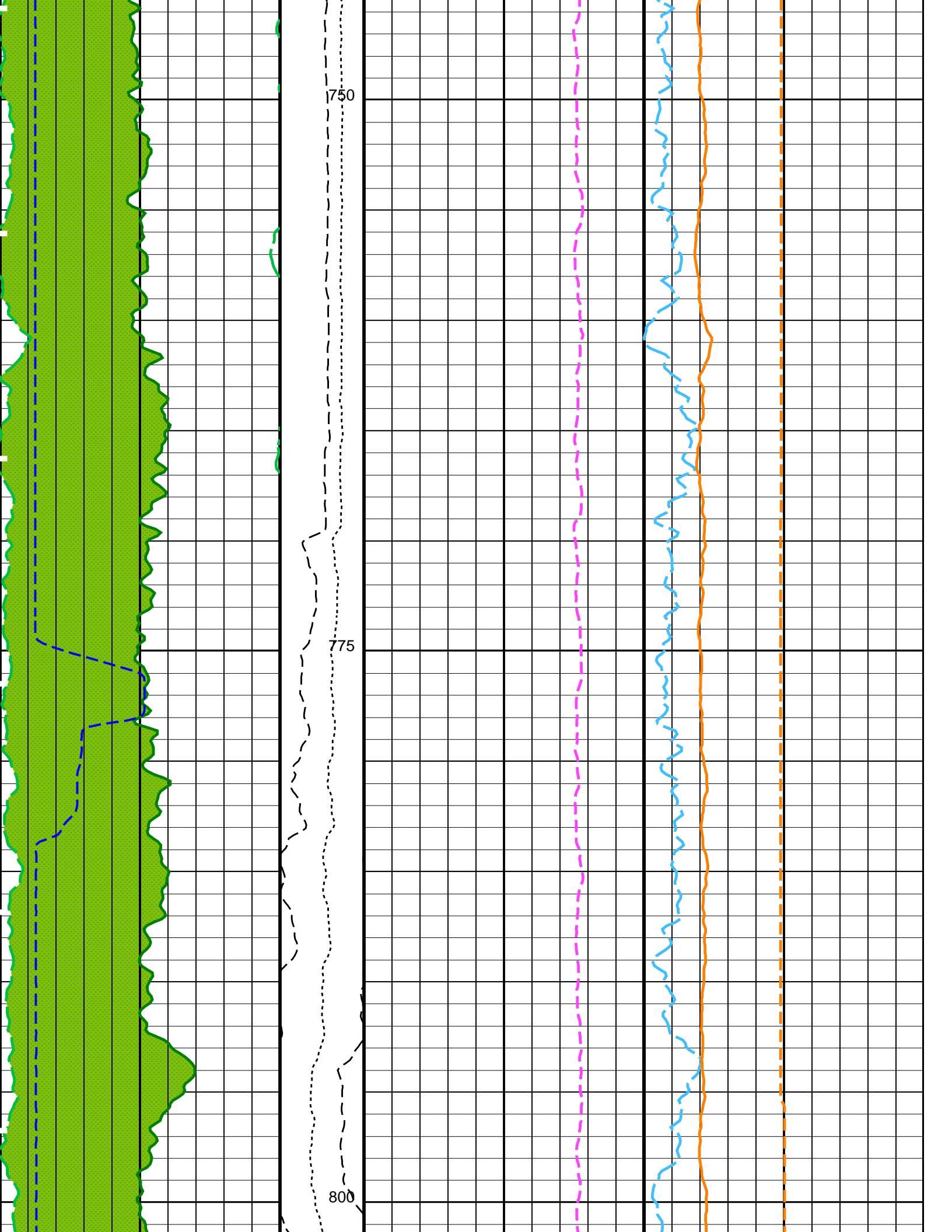
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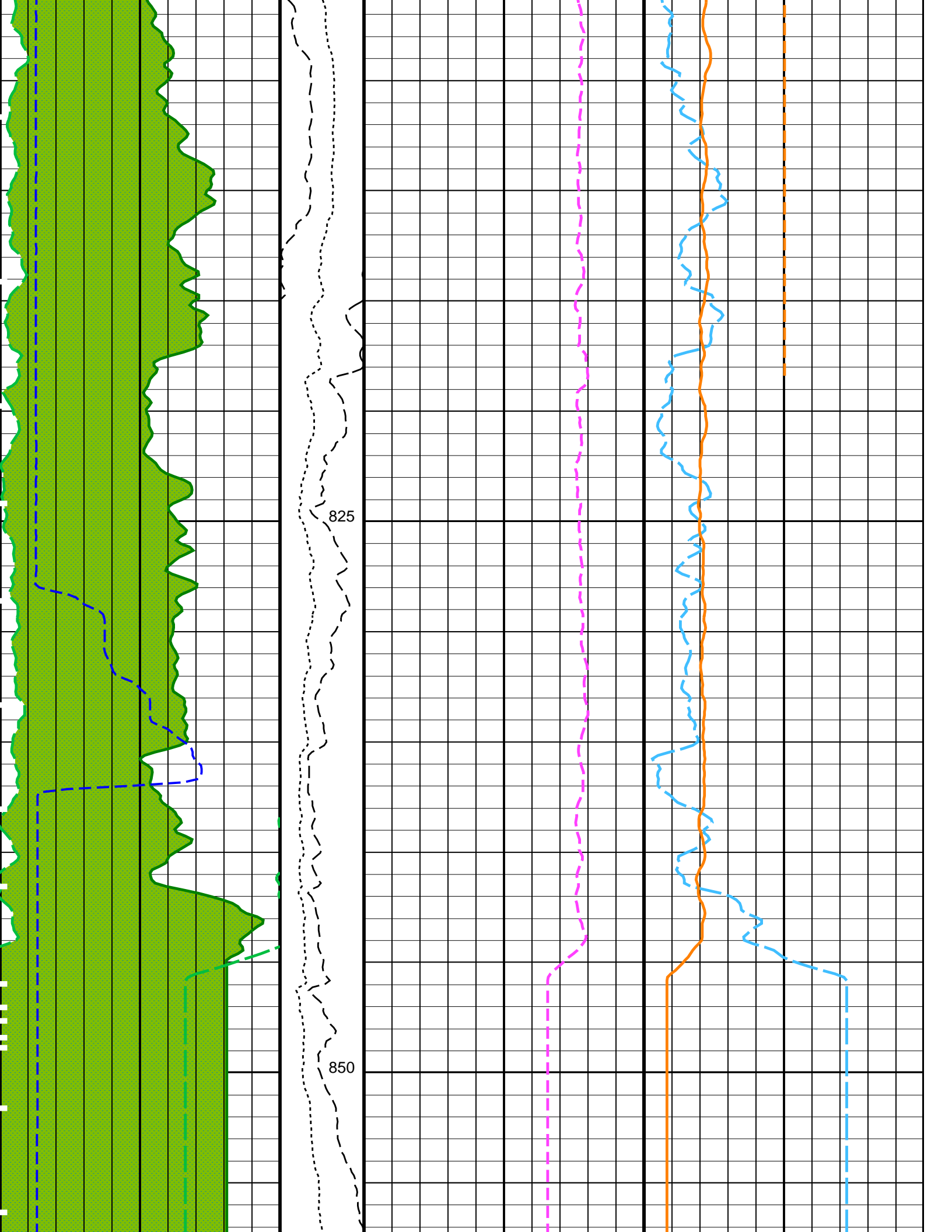
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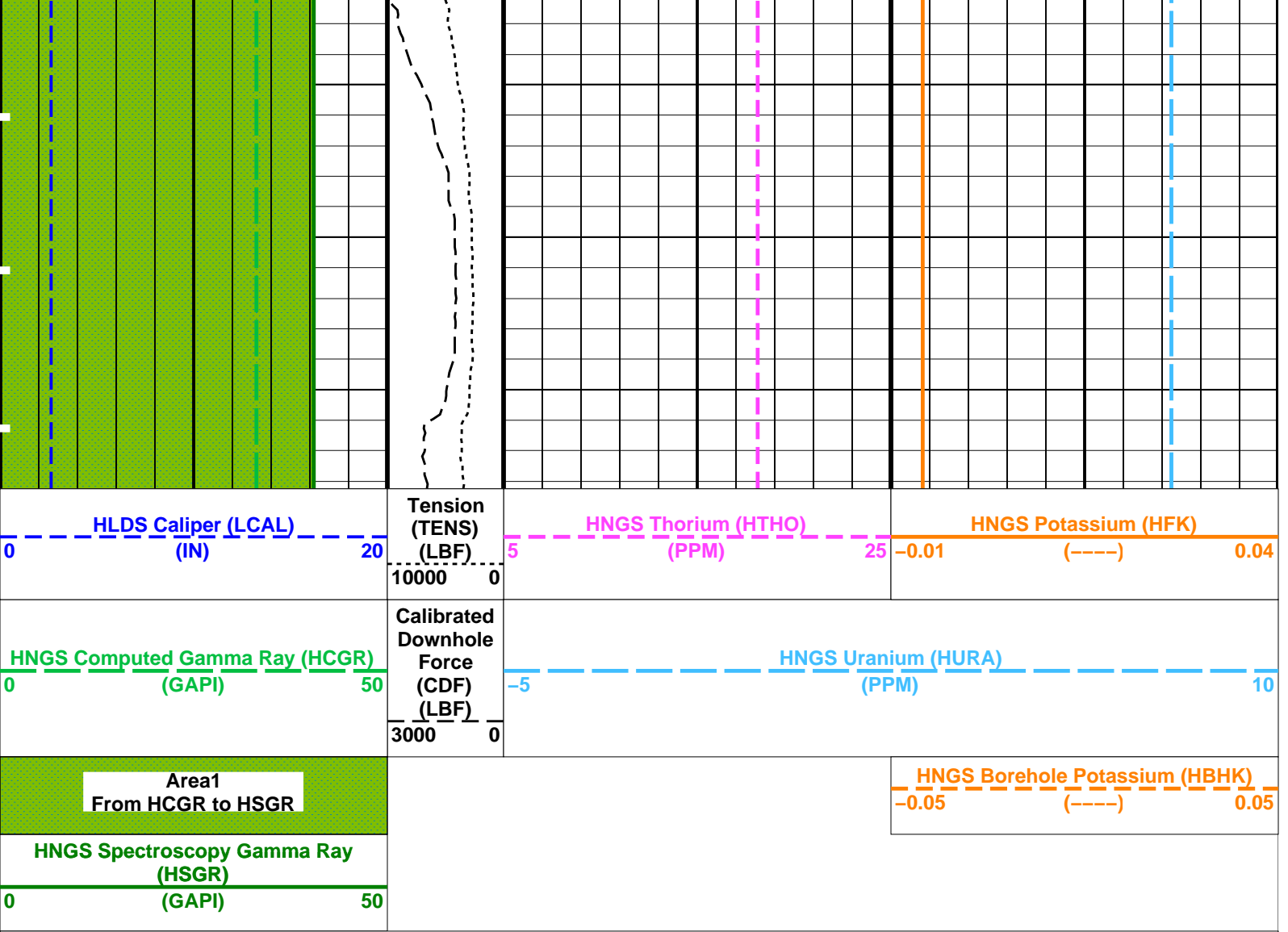












PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
HRLT-B: High Resolution Laterolog Array - B		
BHS	Borehole Status	OPEN
GCSE	Generalized Caliper Selection	BS
HNGS-BA: Hostile Natural Gamma Ray Sonde		
BAR1	HNGS Detector 1 Barite Constant	1
BAR2	HNGS Detector 2 Barite Constant	1
BHK	HNGS Borehole Potassium Correction Concentration	0
BHS	Borehole Status	OPEN
CSD1	Inner Casing Outer Diameter	0 IN
CSD2	Outer Casing Outer Diameter	0 IN
CSW1	Inner Casing Weight	0 LB/F
CSW2	Outer Casing Weight	0 LB/F
DBCC	HNGS Barite Constant Correction Flag	NONE
GCSE	Generalized Caliper Selection	BS
H1P	HNGS Detector 1 Allow/Disallow In Processing	ALLOW
H2P	HNGS Detector 2 Allow/Disallow In Processing	ALLOW
HABK	HNGS Borehole Potassium Running Average	-0.00140154
HALF	HNGS Alpha Filter Length	60 IN
HCRB	HNGS Apply Borehole Potassium Correction	NONE
HMWM	Mud Weighting Material	BARI
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	1.09728
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	0.969647
EDTC-B: Enhanced DTS Cartridge		
BHS	Borehole Status	OPEN
GCSE	Generalized Caliper Selection	BS



### OP System Version: 19C0-187

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

### Output DLIS Files

DEFAULT	MSS_LDEO_HRLA_LDL_018LUP	FN:18	PRODUCER	25-Oct-2015 14:38
RTB	MSS_LDEO_HRLA_LDL_018LUP	FN:19	PRODUCER	25-Oct-2015 14:38

### Output DLIS Files

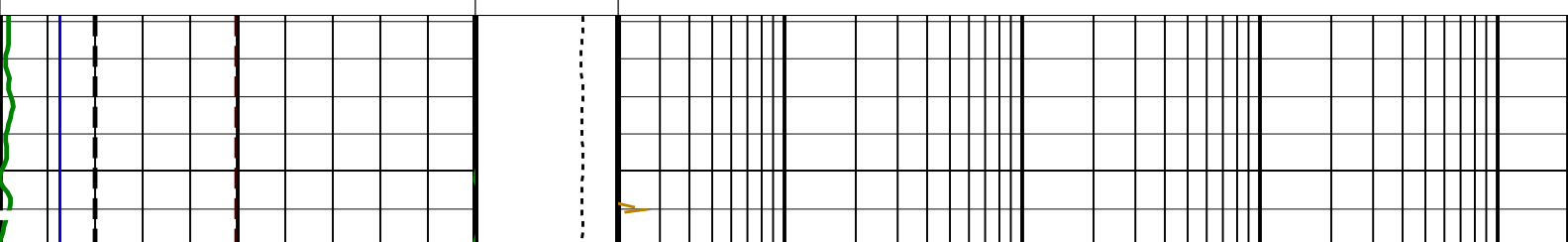
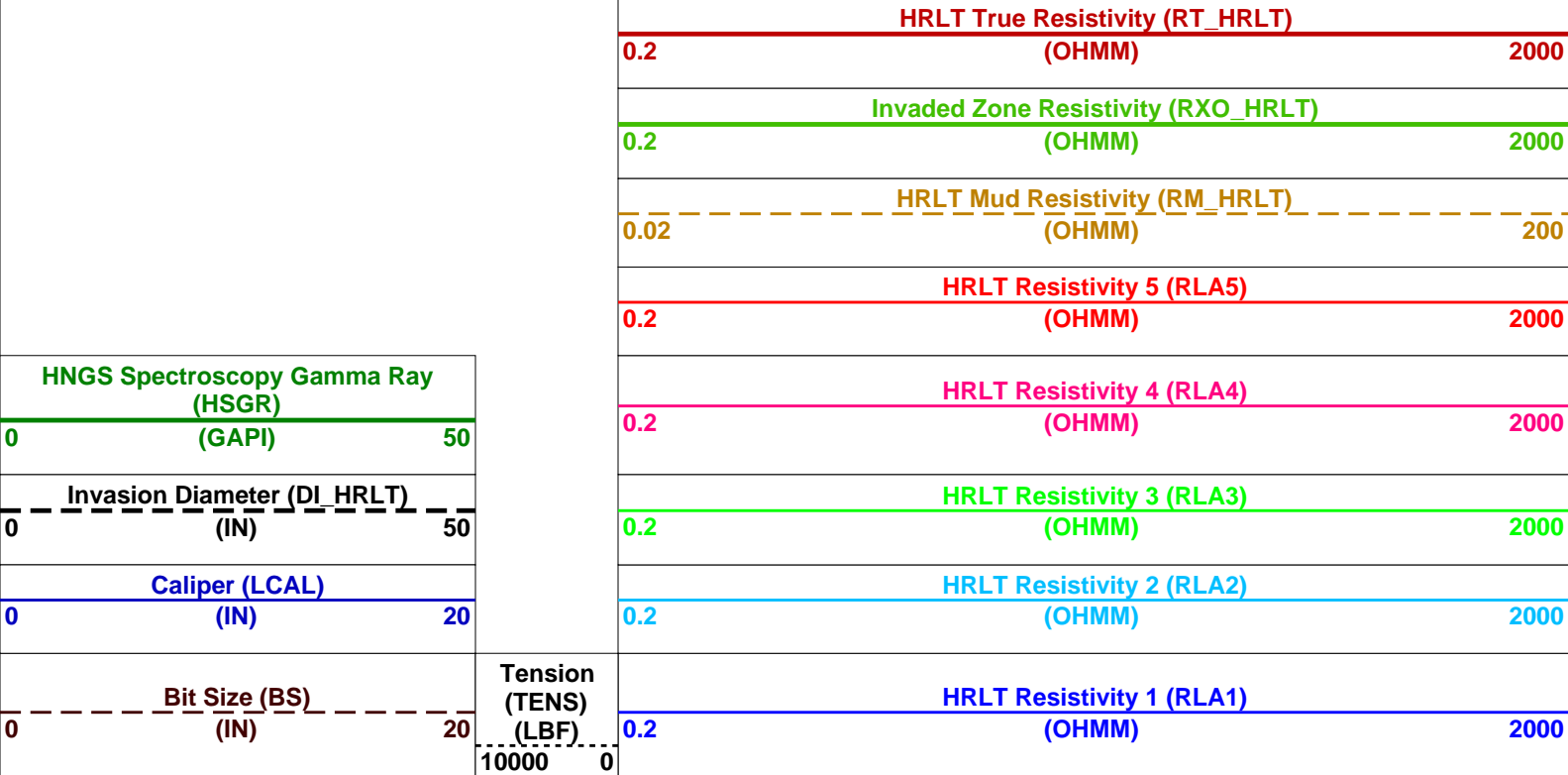
DEFAULT	MSS_LDEO_HRLA_LDL_018LUP	FN:18	PRODUCER	25-Oct-2015 14:38	873.3 M	510.8 M
RTB	MSS_LDEO_HRLA_LDL_018LUP	FN:19	PRODUCER	25-Oct-2015 14:38	873.3 M	510.8 M

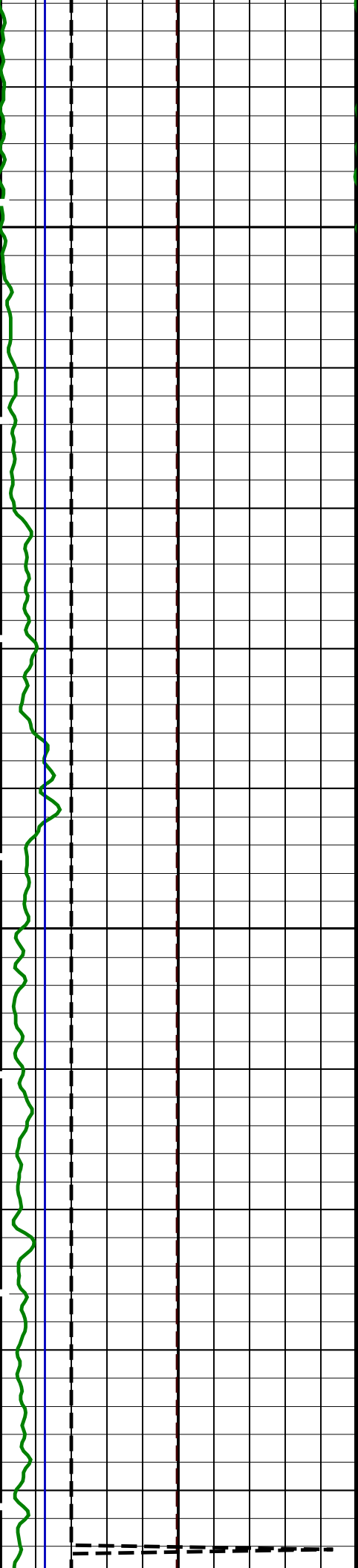
### OP System Version: 19C0-187

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

### PIP SUMMARY

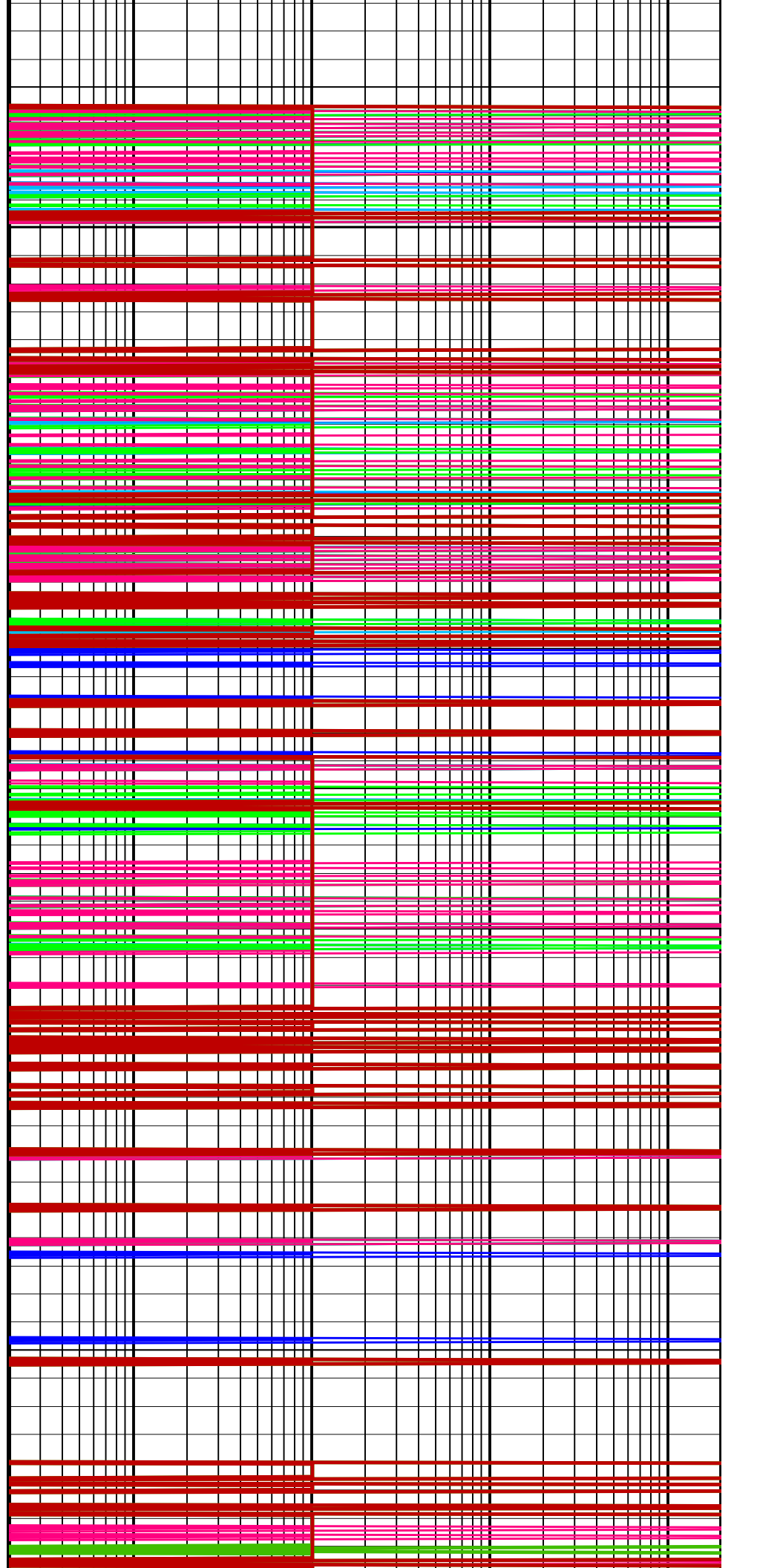
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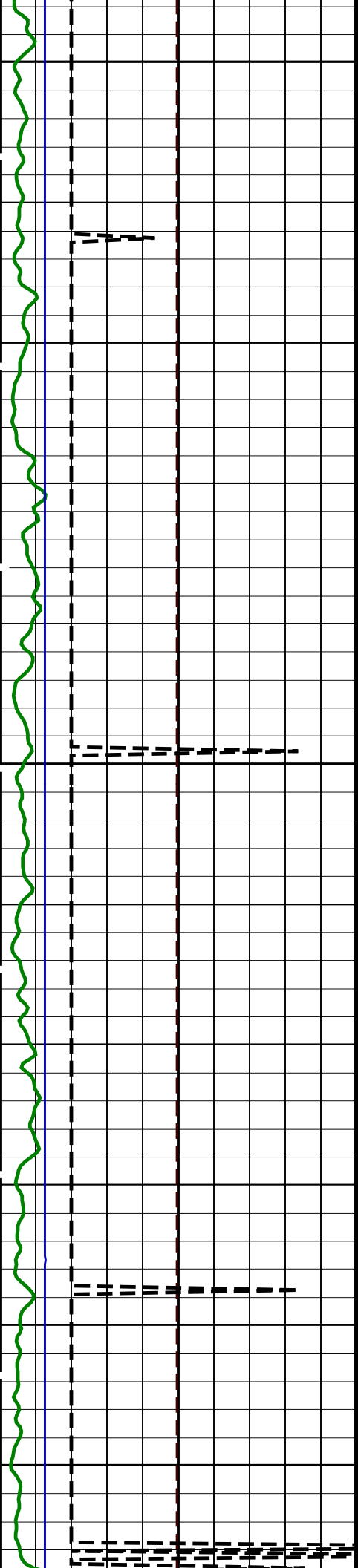




525

550

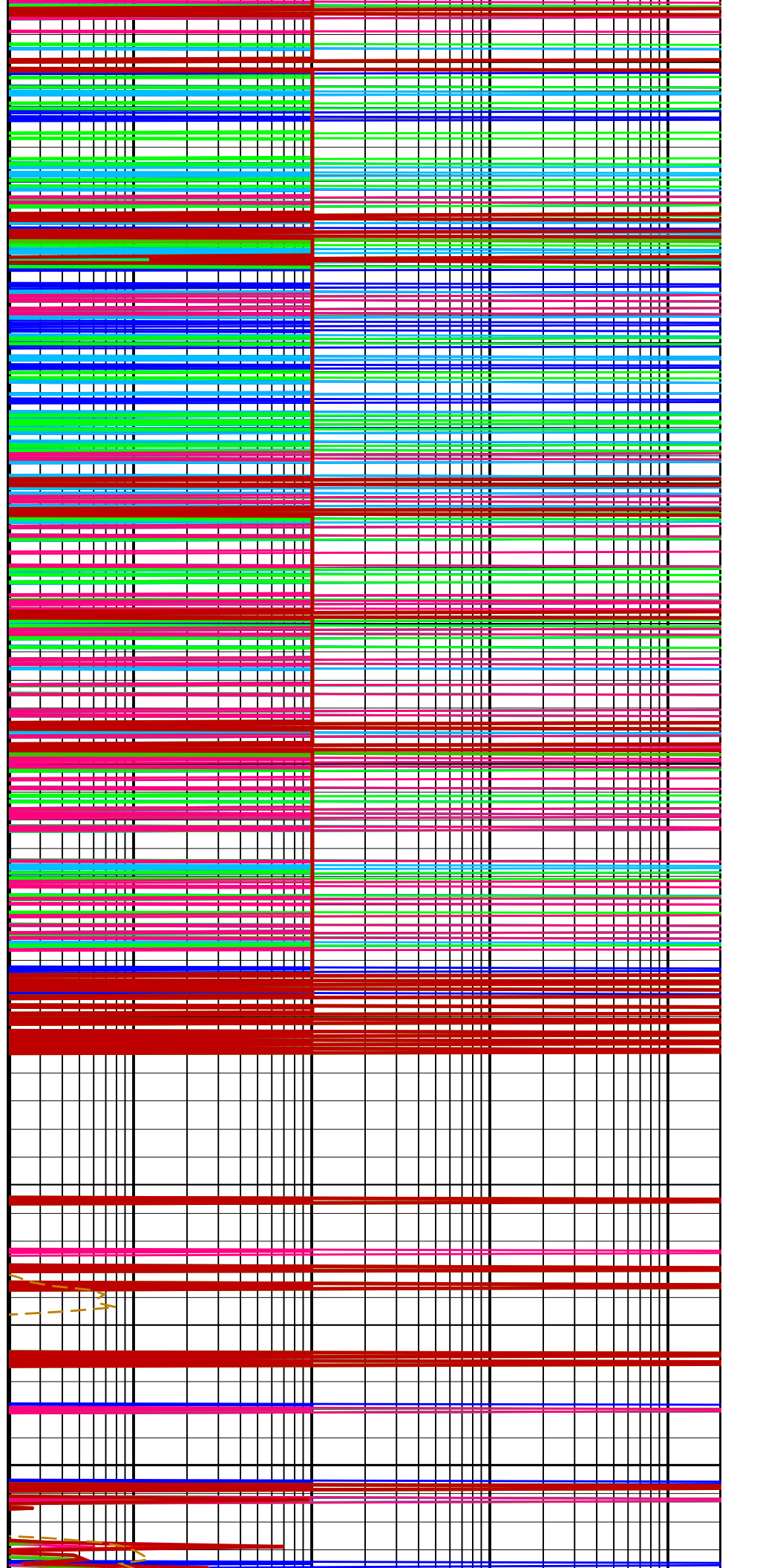


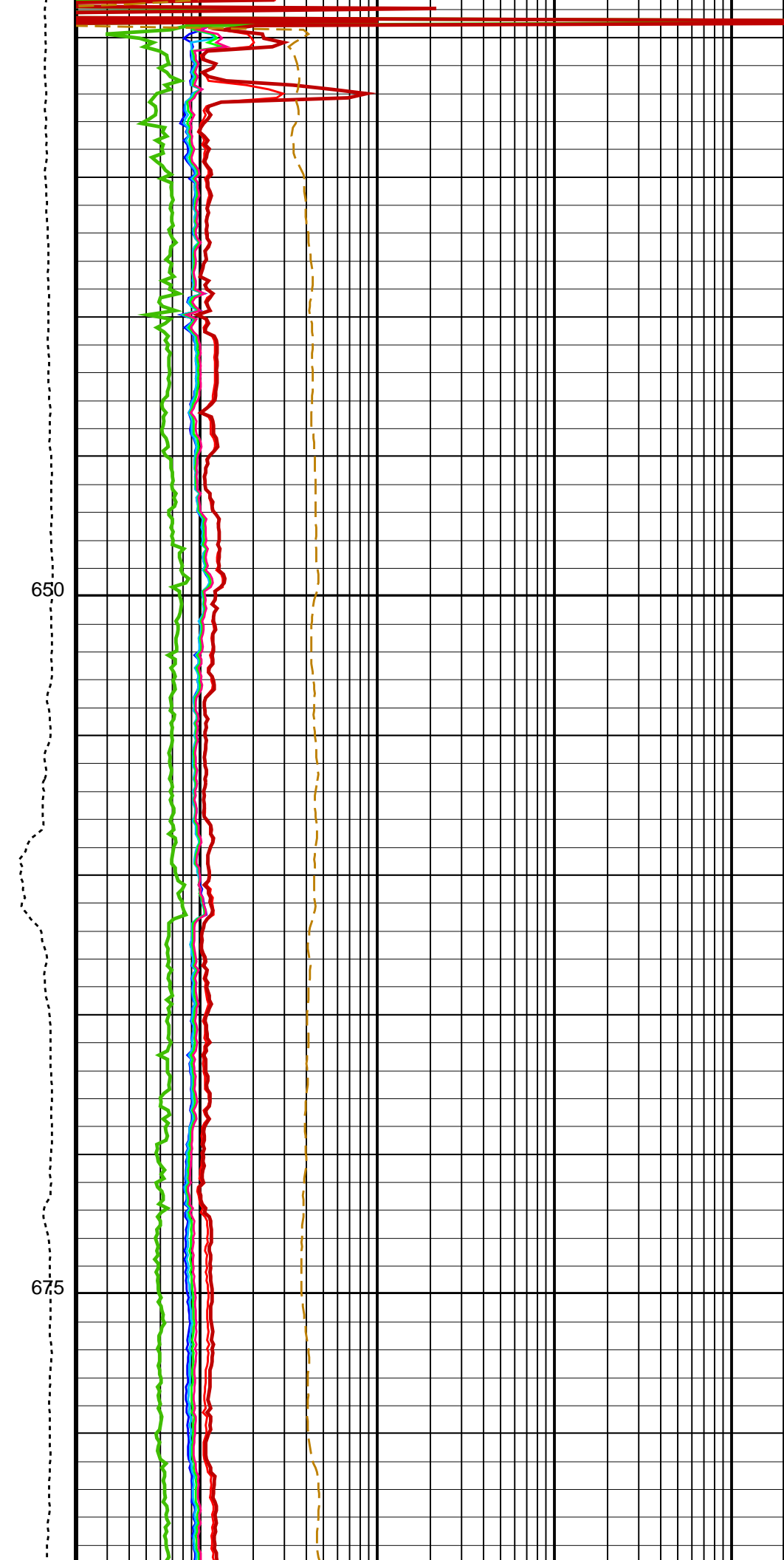
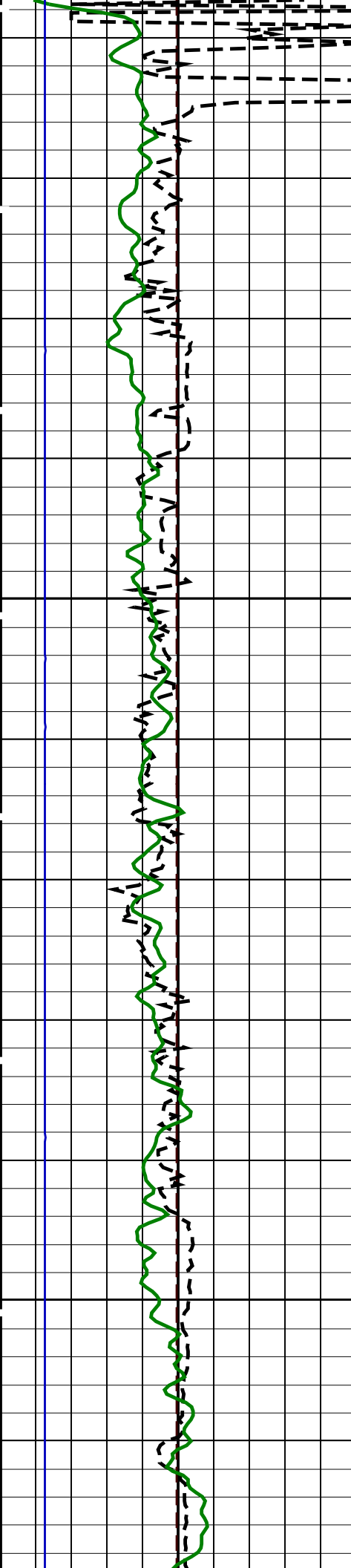


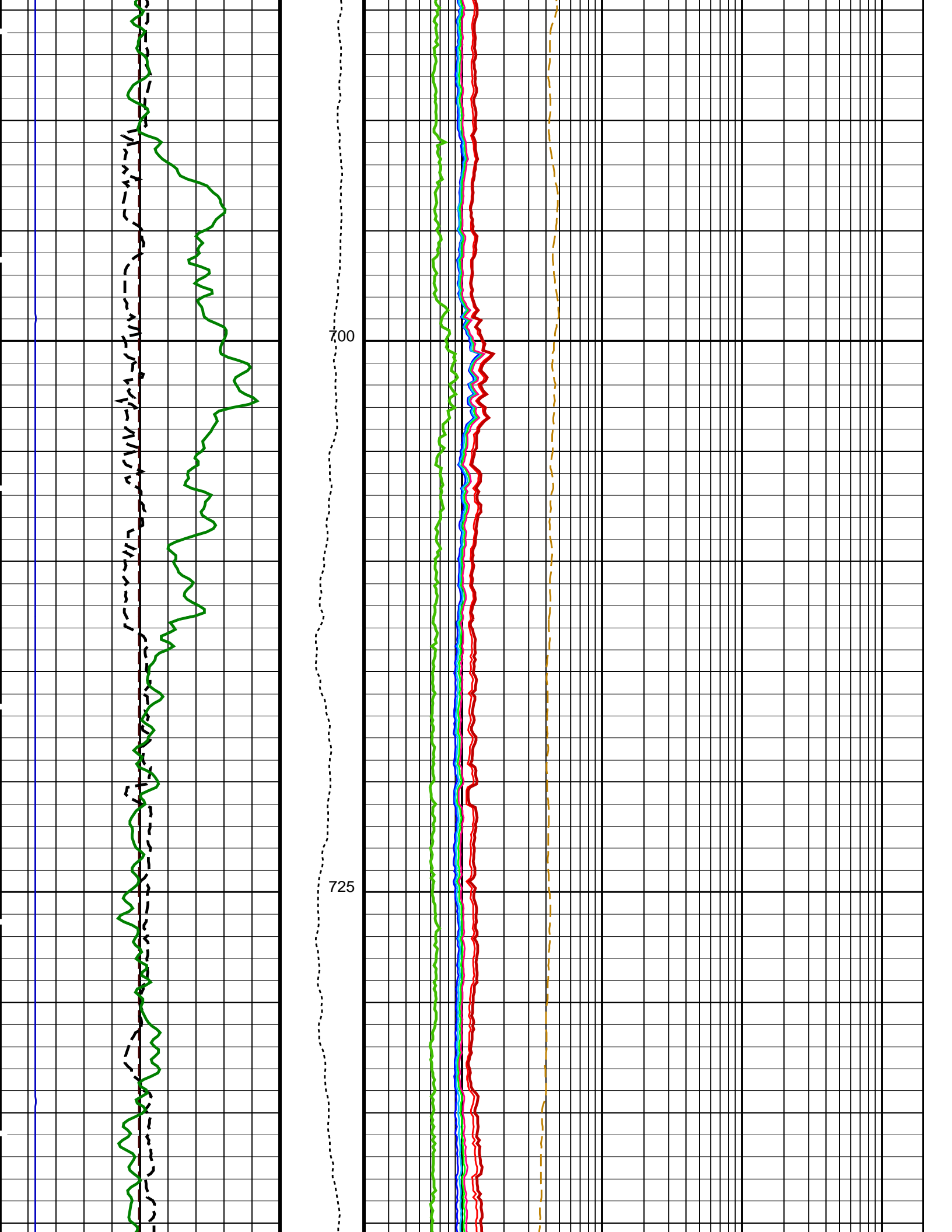
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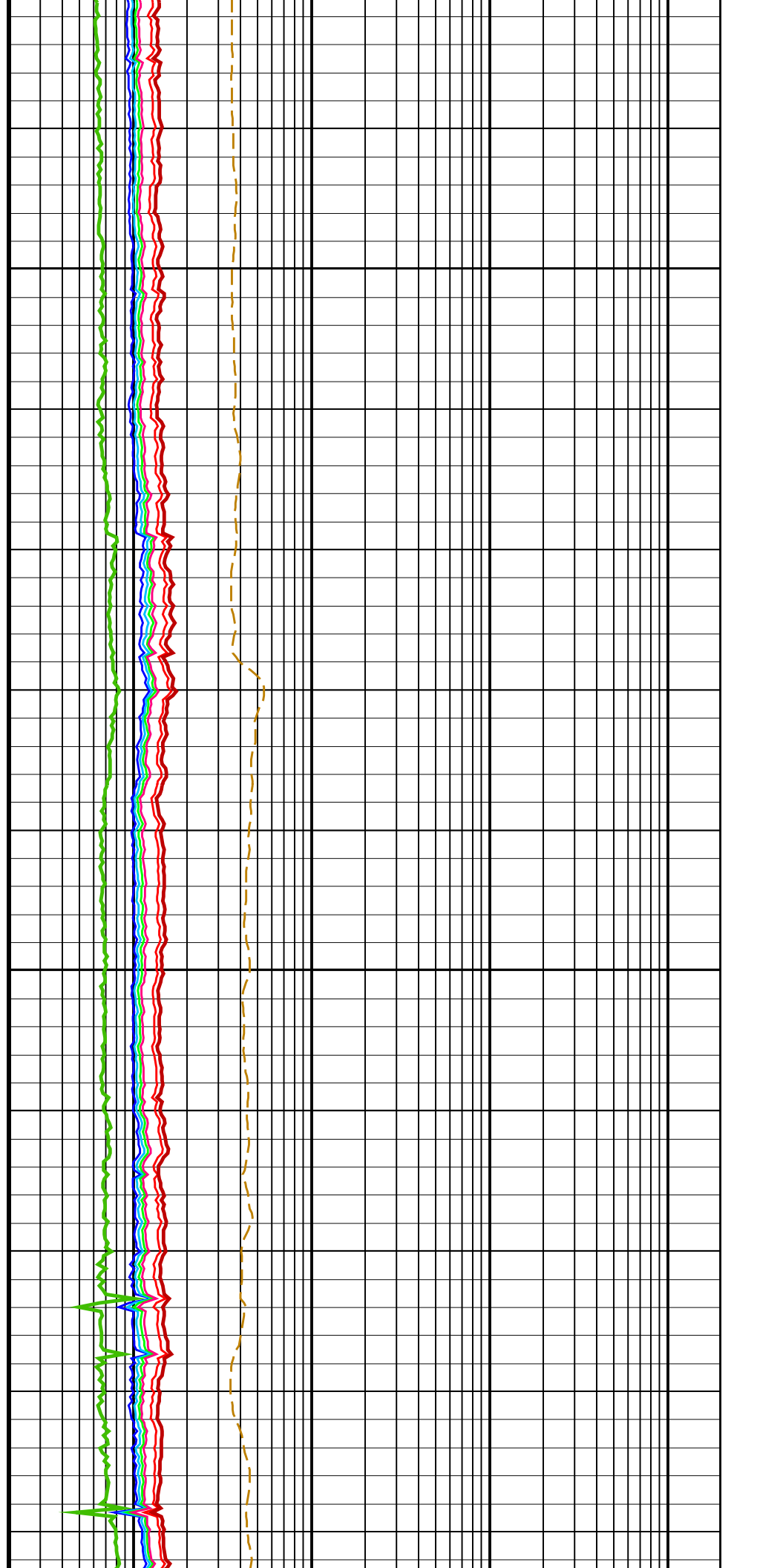
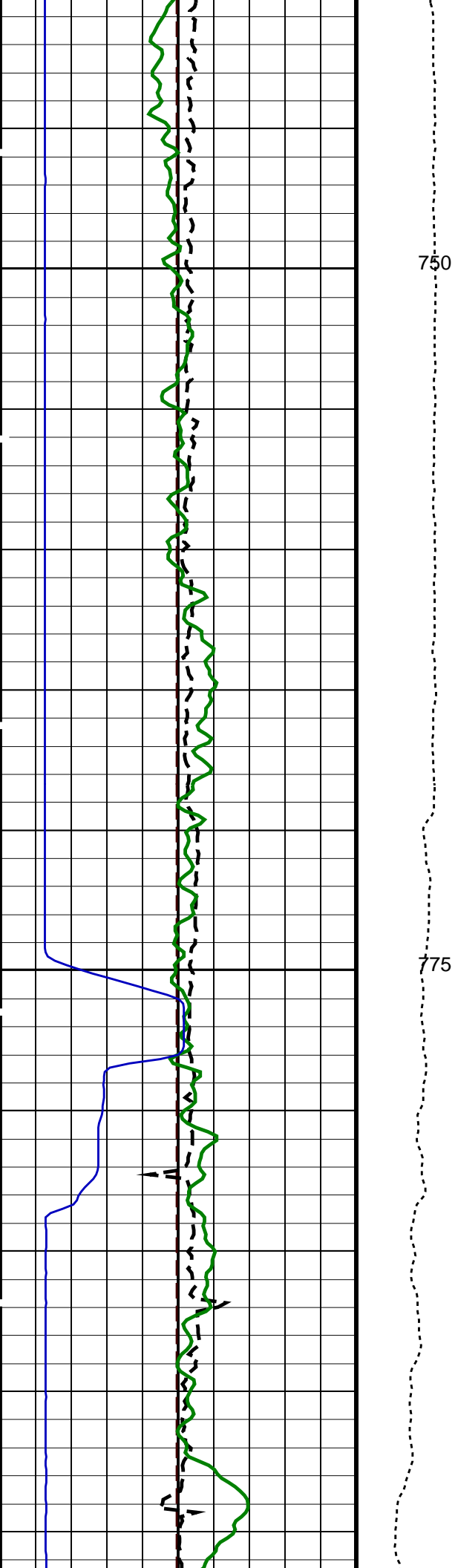
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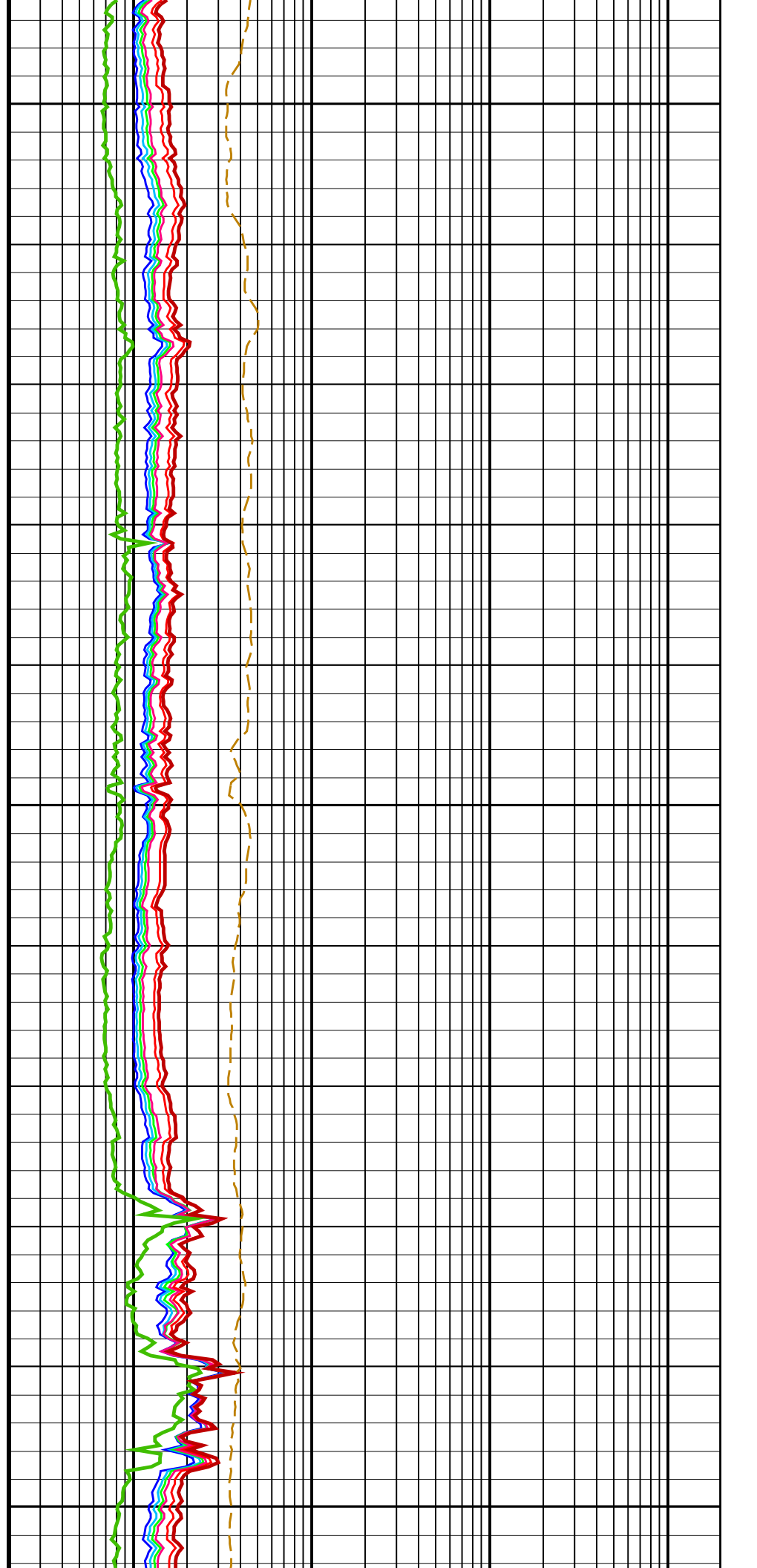
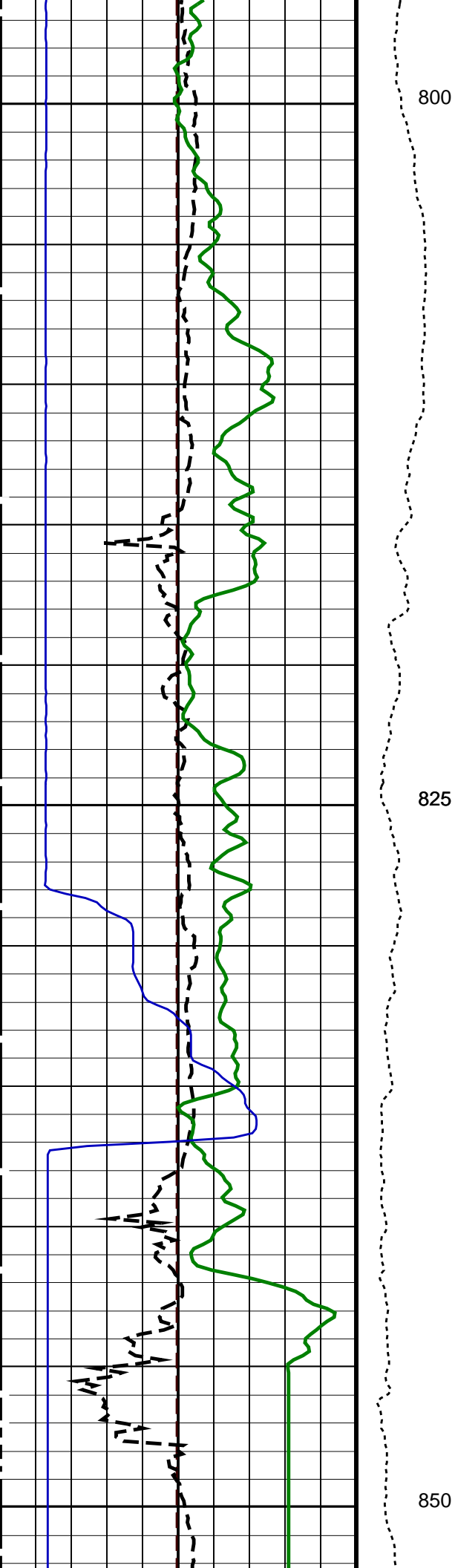
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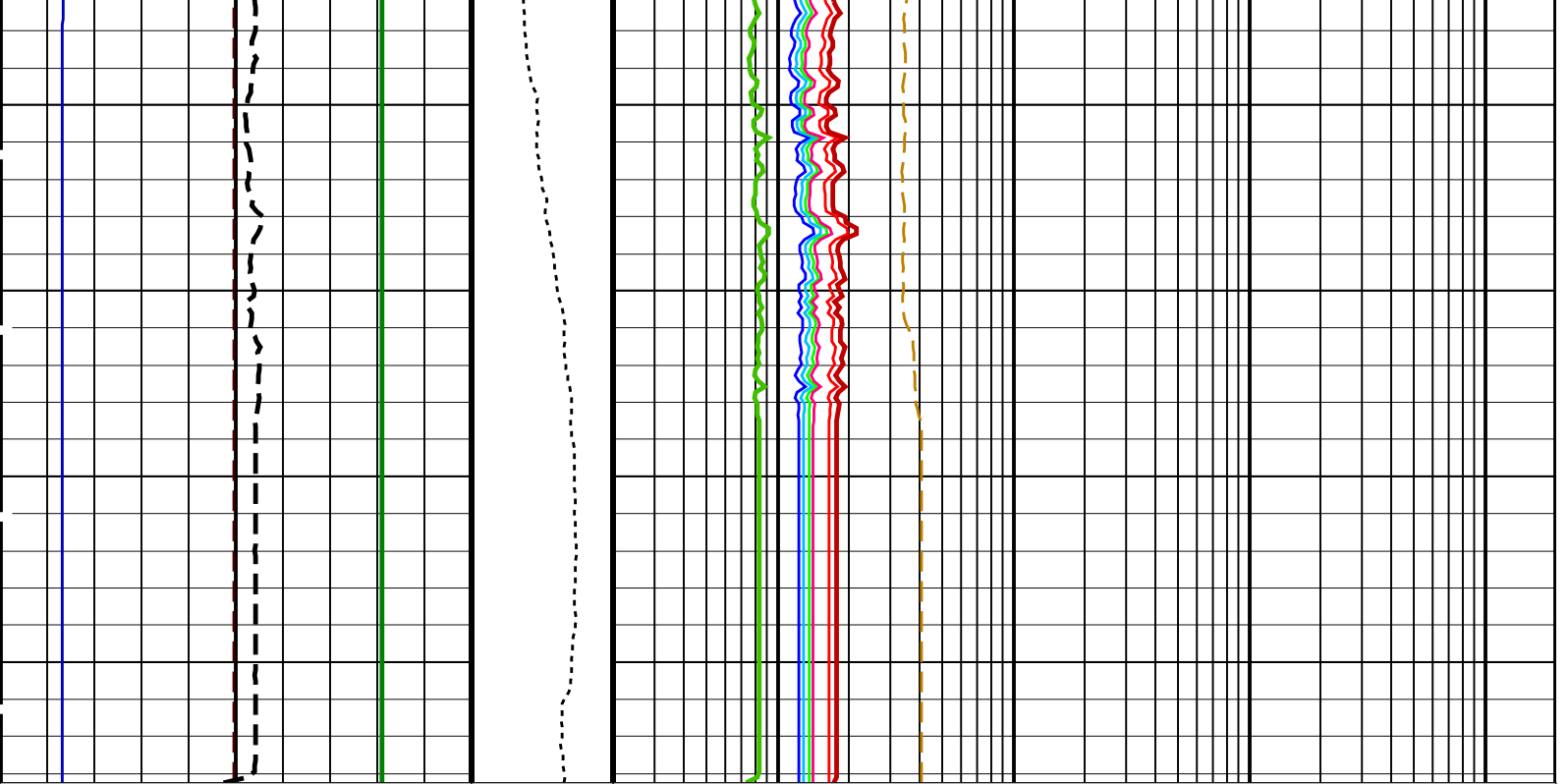












<b>Bit Size (BS)</b> (IN)	<b>Tension (TENS)</b> (LBF)	<b>HRLT Resistivity 1 (RLA1)</b> (OHMM)
0 20	10000 0	0.2 2000
<b>Caliper (LCAL)</b> (IN)		<b>HRLT Resistivity 2 (RLA2)</b> (OHMM)
0 20		0.2 2000
<b>Invasion Diameter (DI_HRLT)</b> (IN)		<b>HRLT Resistivity 3 (RLA3)</b> (OHMM)
0 50		0.2 2000
<b>HNGS Spectroscopy Gamma Ray (HSGR)</b> (GAPI)		<b>HRLT Resistivity 4 (RLA4)</b> (OHMM)
0 50		0.2 2000
		<b>HRLT Resistivity 5 (RLA5)</b> (OHMM)
		0.2 2000
		<b>HRLT Mud Resistivity (RM_HRLT)</b> (OHMM)
		0.02 200
		<b>Invaded Zone Resistivity (RXO_HRLT)</b> (OHMM)
		0.2 2000
		<b>HRLT True Resistivity (RT_HRLT)</b> (OHMM)
		0.2 2000

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
HRLT-B: High Resolution Laterolog Array - B		
BHS	Borehole Status	OPEN
BHT	Bottom Hole Temperature (used in calculations)	40 DEGC
GCSE	Generalized Caliper Selection	BS
GGRD	Geothermal Gradient	0.018227 DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE
KFAC_HRLT	HRLT K Factor Option	SONDE
PROCINV	Inversion Selection	ON
PROCMFL	Inversion Micro-Resistivity Selection	NO_EXTERNAL_RXO
PROCMSO	Mechanical Standoff Fin Size	0 IN
PROCRM	Processing Mud Resistivity Select	HRLT Compute



PROCSPO	Sonde Position	Centered	
SHT	Surface Hole Temperature	20	DEGC
	HNCS-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	BS	
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	-0.00140154	
HALF	HNGS Alpha Filter Length	60	IN
HCRB	HNGS Apply Borehole Potassium Correction	NONE	
HMWM	Mud Weighting Material	BARI	
HNPE	HNGS Processing Enable	YES	
S1BI	HNGS Detector 1 Calibration Bismuth Count Rate	1.3	CPS
S2BI	HNGS Detector 2 Calibration Bismuth Count Rate	1.3	CPS
SGRC	HNGS Standard Gamma-Ray Correction Flag	YES	
SHT	Surface Hole Temperature	20	DEGC
TPOS	Tool Position	ECCE	
VBA1	HNGS Detector 1 Variable Barite Factor Running Average	1.09728	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	0.969647	
	EDTC-B: Enhanced DTS Cartridge		
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	40	DEGC
GCSE	Generalized Caliper Selection	BS	
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
SHT	Surface Hole Temperature	20	DEGC
	System and Miscellaneous		
BS	Bit Size	9.875	IN
DFD	Drilling Fluid Density	1.20	G/C3
TD	Total Depth	1120	M

Format: HRLT Vertical Scale: 1:200 Graphics File Created: 25-Oct-2015 14:38

### OP System Version: 19C0-187

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

### Output DLIS Files

DEFAULT	MSS_LDEO_HRLA_LDL_018LUP	FN:18	PRODUCER	25-Oct-2015 14:38
RTB	MSS_LDEO_HRLA_LDL_018LUP	FN:19	PRODUCER	25-Oct-2015 14:38

Company: International Ocean Discovery Program Well: Expedition 359, Site U1466B

### Output DLIS Files

DEFAULT	MSS_LDEO_HRLA_LDL_018LUP	FN:18	PRODUCER	25-Oct-2015 14:38	873.3 M	510.8 M
RTB	MSS_LDEO_HRLA_LDL_018LUP	FN:19	PRODUCER	25-Oct-2015 14:38	873.3 M	510.8 M

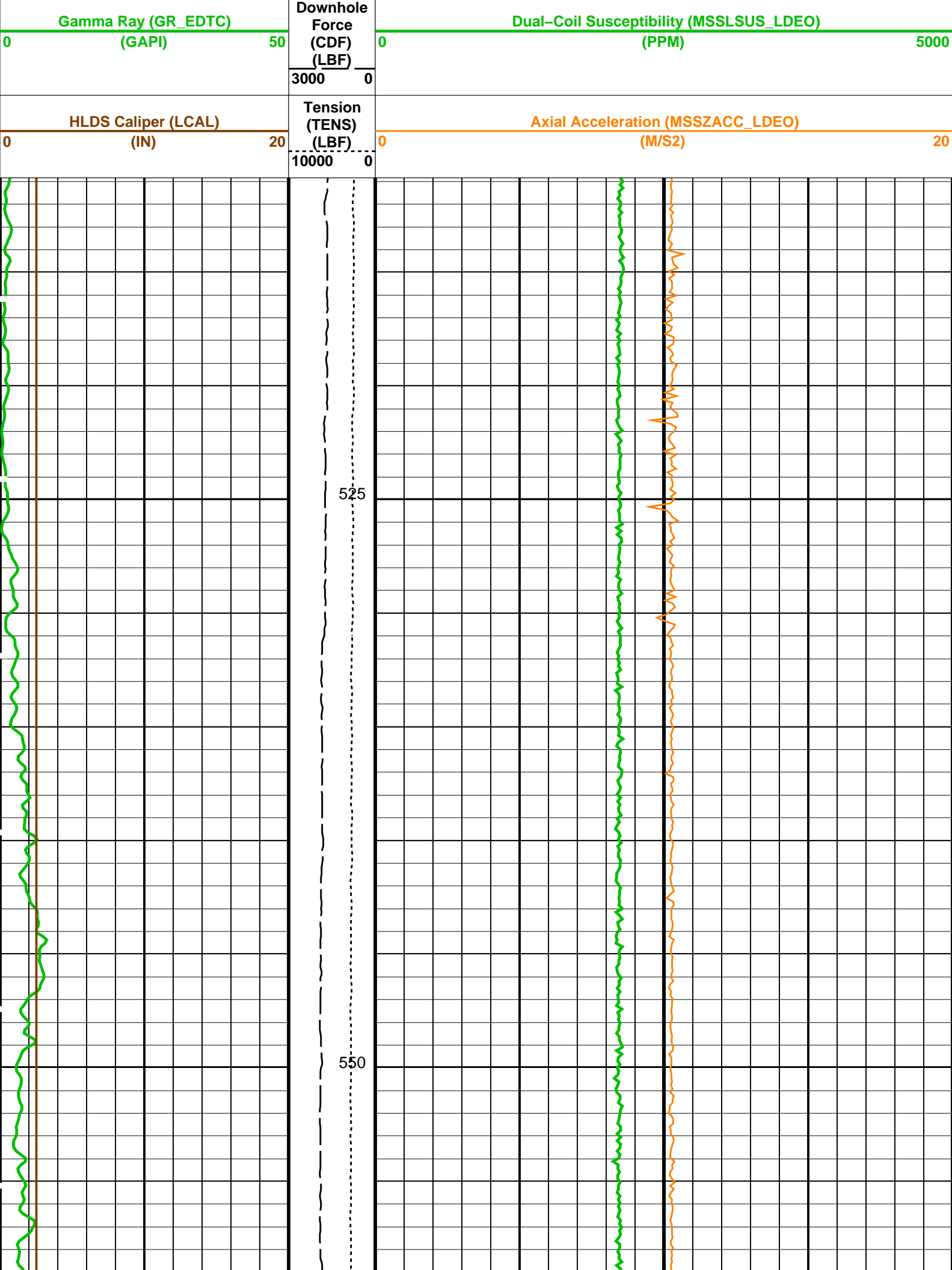
### OP System Version: 19C0-187

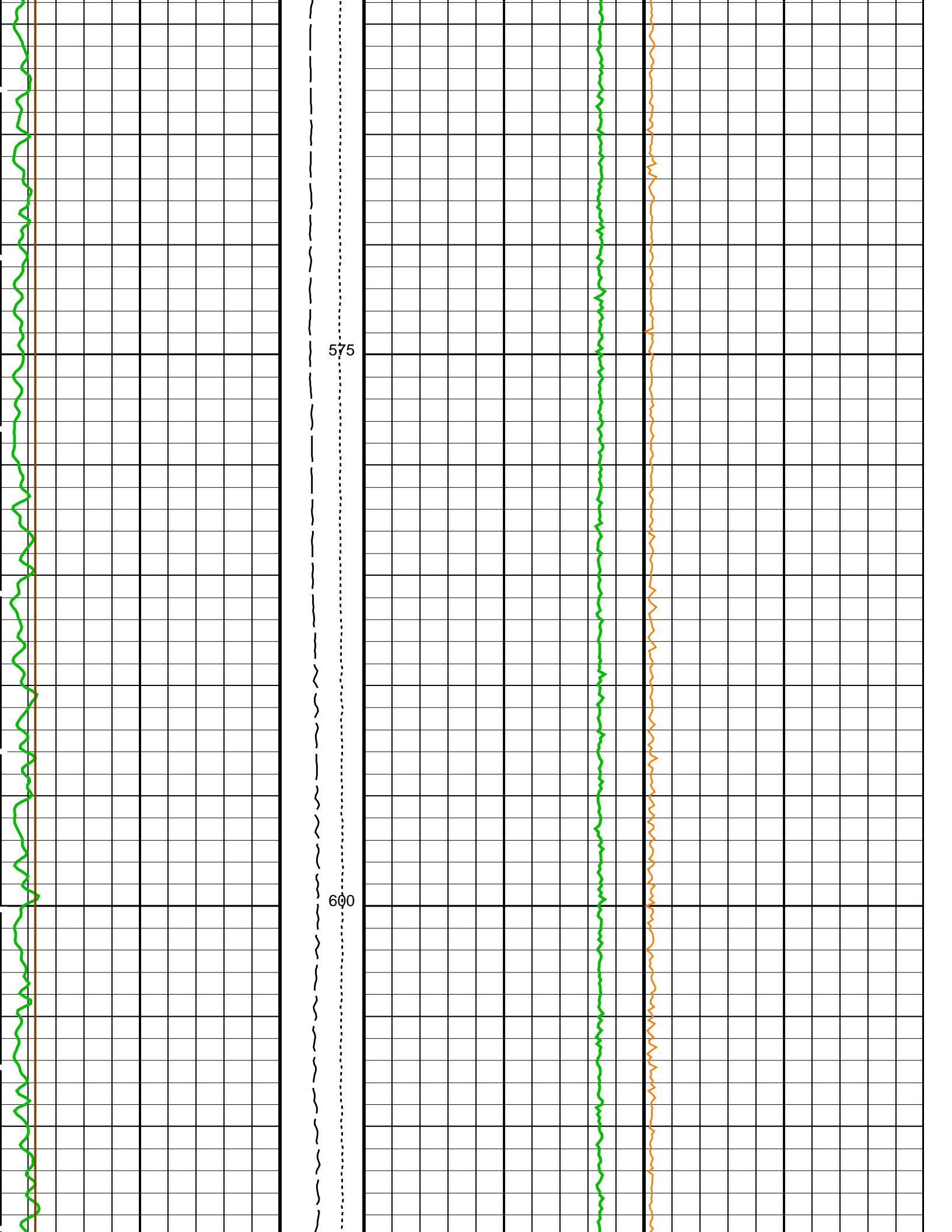
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EDTC-B	SKK-5169-EDTCB		

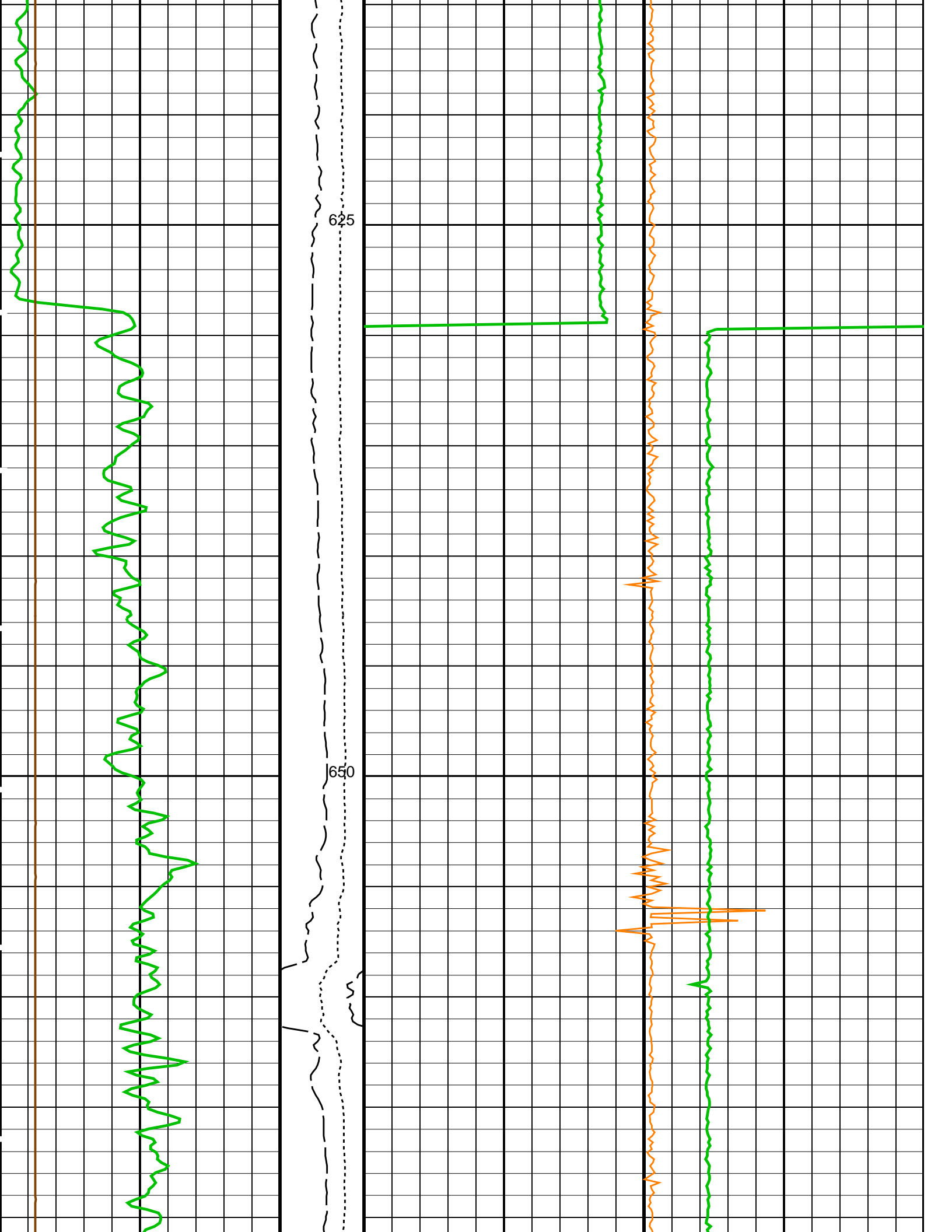
### PIP SUMMARY

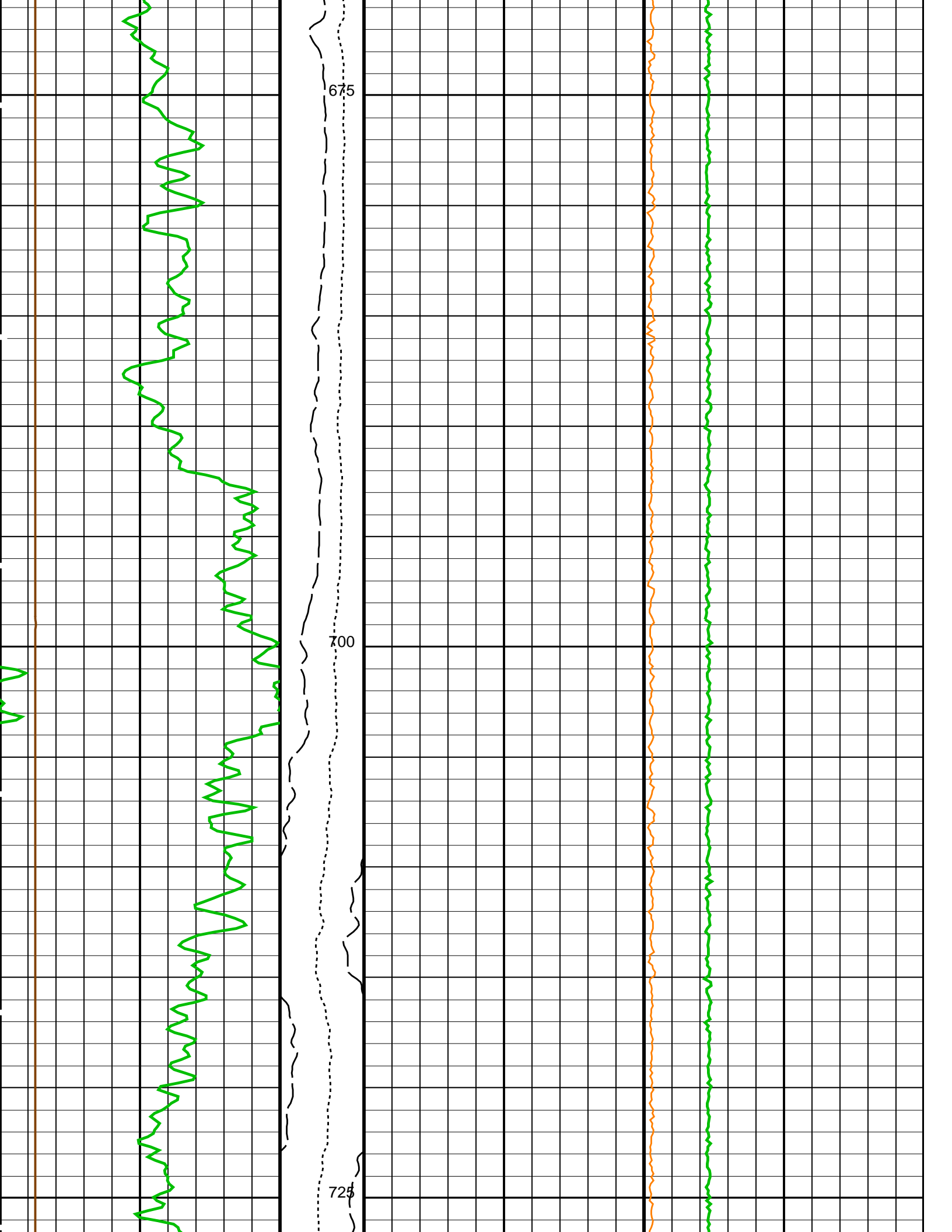
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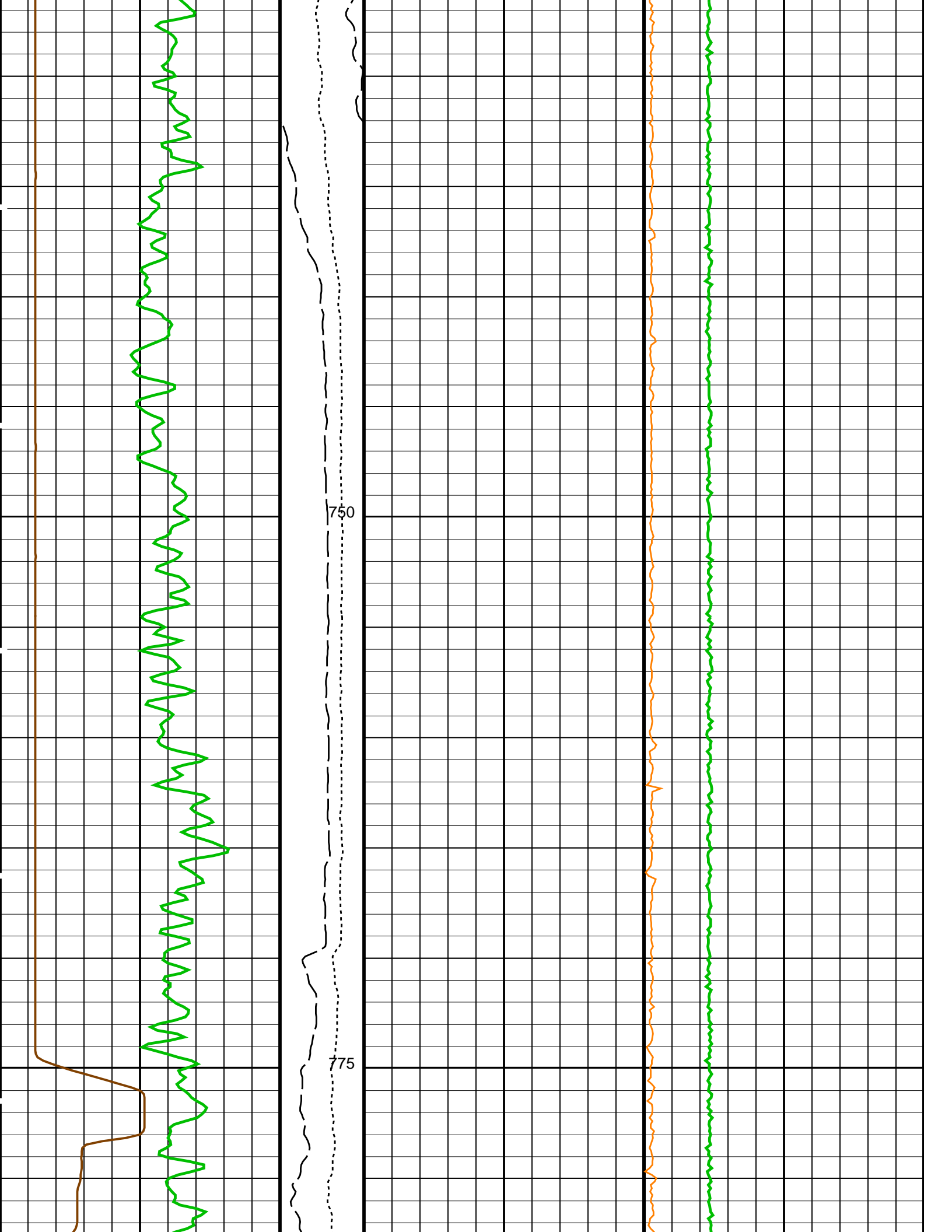
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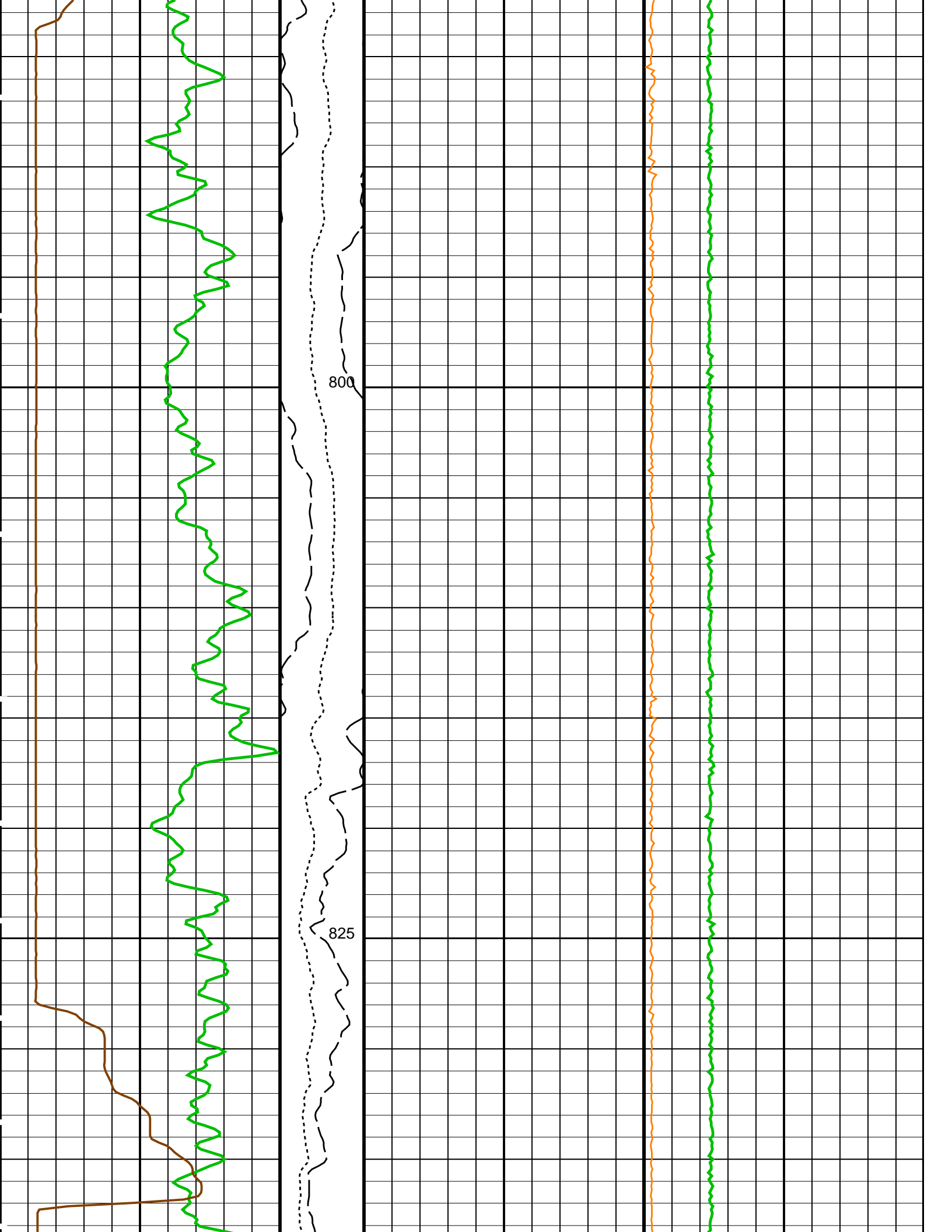


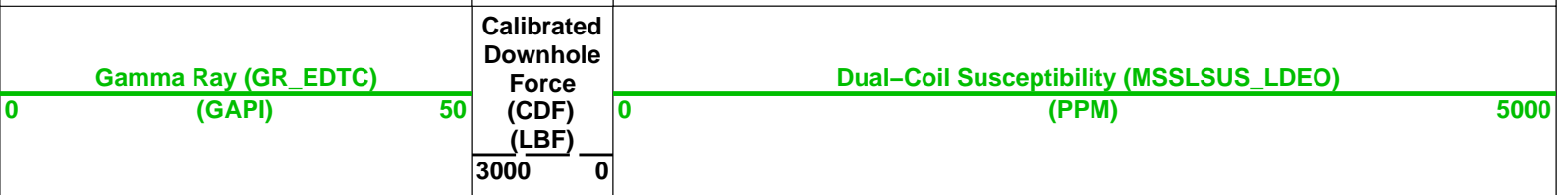
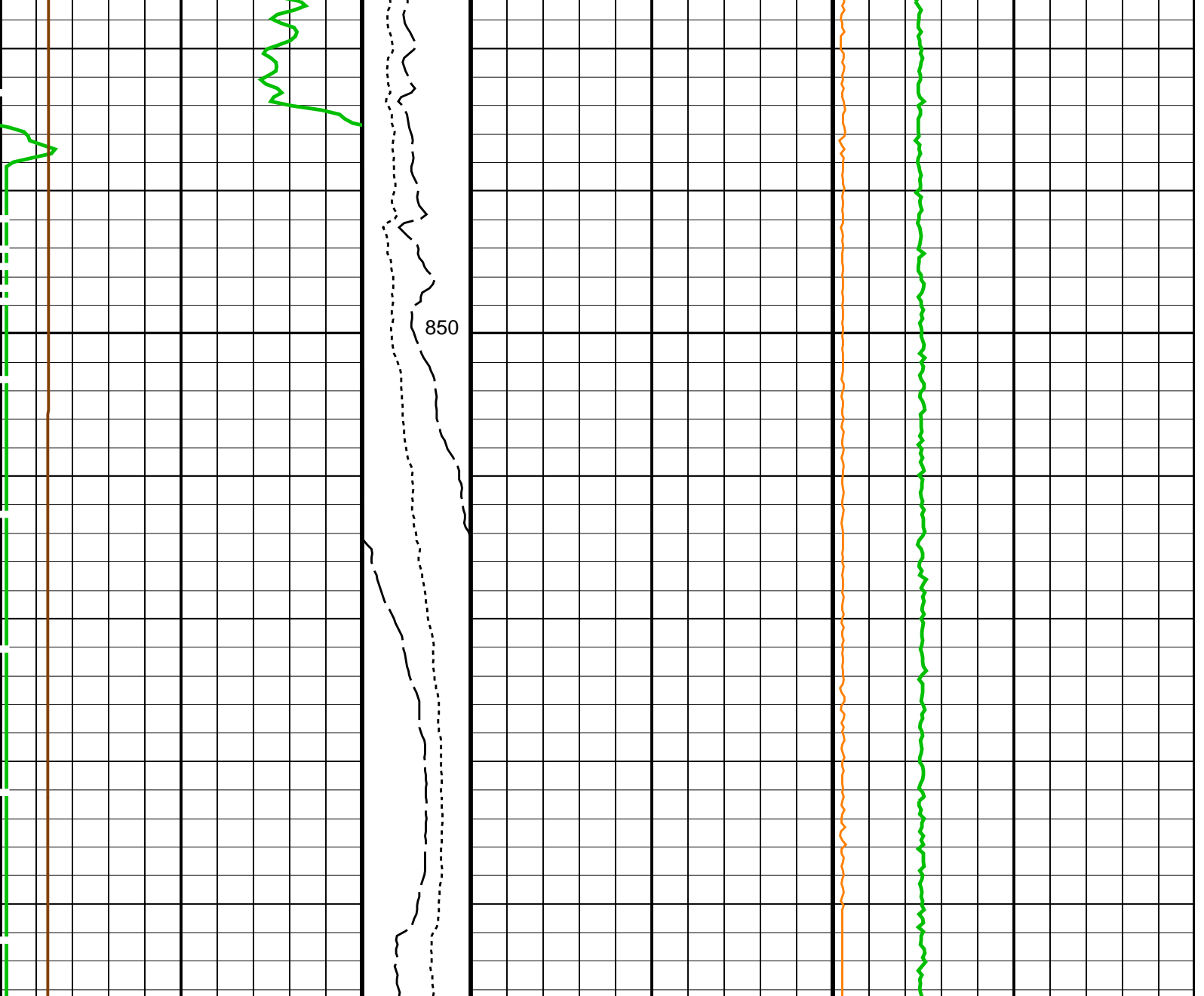












**PIP SUMMARY**

Time Mark Every 60 S

**Parameters**

DLIS Name	Description	Value
<b>HRLT-B: High Resolution Laterolog Array - B</b>		
BHS	Borehole Status	OPEN
BHT	Bottom Hole Temperature (used in calculations)	40 DEGC
CALSTAT	HRLTB Calibration Status	SHALLOW_DONE
CALTEMP	HRLTB Calibration Temperature	30.2229 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



FREQ4	HRLT Frequency Index for Mode 4		
FREQ5	HRLT Frequency Index for Mode 5		
FREQ6	HRLT Frequency Index for Mode 6	116	
GCSE	Generalized Caliper Selection	BS	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
ISSBAR	Barite Mud Switch	BARITE	
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	
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	BS	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
H1P	HNGS Detector 1 Allow/Disallow In Processing	ALLOW	
H2P	HNGS Detector 2 Allow/Disallow In Processing	ALLOW	
HABK	HNGS Borehole Potassium Running Average	-0.00140154	
HALF	HNGS Alpha Filter Length	60	IN
HCRB	HNGS Apply Borehole Potassium Correction	NONE	
HMWM	Mud Weighting Material	BARI	
HNPE	HNGS Processing Enable	YES	
ISSBAR	Barite Mud Switch	BARITE	
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	1.09728	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	0.969647	
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	BS	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN 9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
HSCO	Hole Size Correction Option	YES	
ISSBAR	Barite Mud Switch	BARITE	
ISSBAR_EDTC	Nuclear Mud Type	BARITE	
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
MCCO	Mud Cake Correction Option	NO	
MCOR	Mud Correction	BARI	
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	
<b>System and Miscellaneous</b>			
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	1.20	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	1120	M
TDD	Total Depth - Driller	809.20	M
TDL	Total Depth - Logger	809.20	M
TWS	Temperature of Connate Water Sample	37.78	DEGC

Format: MSS\_Logging    Vertical Scale: 1:200    Graphics File Created: 25-Oct-2015 14:38

### OP System Version: 19C0-187

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

### Output DLIS Files

DEFAULT	MSS_LDEO_HRLA_LDL_018LUP	FN:18	PRODUCER	25-Oct-2015 14:38
RTB	MSS_LDEO_HRLA_LDL_018LUP	FN:19	PRODUCER	25-Oct-2015 14:38

#### Calibration and Check Summary

Measurement	Nominal	Master	Before	After	Change	Limit	Units
High Resolution Laterolog Array - B Wellsite Calibration - HRLT M01							
Before: 25-Oct-2015 13:29    After: 5-Aug-2015 10:19							
HRLT M0-M1 Voltage Plus - 0	0	N/A	-318.7	-319.0	-0.3448	9.681	UV
HRLT M0-M1 Voltage Plus - 1	0	N/A	-332.9	-333.6	-0.7800	9.681	UV
HRLT M0-M1 Voltage Plus - 2	0	N/A	-340.6	-340.5	0.1147	9.681	UV
HRLT M0-M1 Voltage Plus - 3	0	N/A	-330.5	-331.0	-0.5073	9.681	UV
HRLT M0-M1 Voltage Plus - 4	0	N/A	-320.2	-320.5	-0.2739	9.681	UV
HRLT M0-M1 Voltage Plus - 5	0	N/A	-322.2	-322.3	-0.1747	9.681	UV
HRLT M0-M1 Voltage Plus - 6	0	N/A	322.8	323.4	0.6134	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: 25-Oct-2015 13:29    After: 5-Aug-2015 10:19							
HRLT M1-M2 Voltage Plus - 0	0	N/A	1743	1744	1.404	53.42	UV
HRLT M1-M2 Voltage Plus - 1	0	N/A	1827	1831	3.979	53.42	UV
HRLT M1-M2 Voltage Plus - 2	0	N/A	1863	1862	-0.8035	53.42	UV
HRLT M1-M2 Voltage Plus - 3	0	N/A	1806	1808	2.177	53.42	UV
HRLT M1-M2 Voltage Plus - 4	0	N/A	1749	1750	1.264	53.42	UV
HRLT M1-M2 Voltage Plus - 5	0	N/A	1760	1761	0.4786	53.42	UV
HRLT M1-M2 Voltage Plus - 6	0	N/A	1780	1783	3.001	53.42	UV

HRLT M1-M2 Voltage Plus - 6	0	N/A	-1780	-1783	-3.091	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: 25-Oct-2015 13:29 After: 5-Aug-2015 10:19

HRLT M2-M3 Voltage Plus - 0	0	N/A	1734	1735	0.8621	53.42	UV
HRLT M2-M3 Voltage Plus - 1	0	N/A	1829	1832	3.131	53.42	UV
HRLT M2-M3 Voltage Plus - 2	0	N/A	1866	1865	-1.258	53.42	UV
HRLT M2-M3 Voltage Plus - 3	0	N/A	1814	1815	1.428	53.42	UV
HRLT M2-M3 Voltage Plus - 4	0	N/A	1750	1750	0.6028	53.42	UV
HRLT M2-M3 Voltage Plus - 5	0	N/A	1762	1762	0.3317	53.42	UV
HRLT M2-M3 Voltage Plus - 6	0	N/A	-1772	-1773	-1.114	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: 25-Oct-2015 13:29 After: 5-Aug-2015 10:19

HRLT A3-A4 Voltage Plus - 0	0	N/A	68700	68770	64.60	2100	UV
HRLT A3-A4 Voltage Plus - 1	0	N/A	72270	72450	187.4	2100	UV
HRLT A3-A4 Voltage Plus - 2	0	N/A	74050	74010	-32.86	2100	UV
HRLT A3-A4 Voltage Plus - 3	0	N/A	72180	72300	113.9	2100	UV
HRLT A3-A4 Voltage Plus - 4	0	N/A	69640	69700	60.84	2100	UV
HRLT A3-A4 Voltage Plus - 5	0	N/A	70140	70190	41.42	2100	UV
HRLT A3-A4 Voltage Plus - 6	0	N/A	-68990	-69120	-130.9	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: 25-Oct-2015 13:29 After: 5-Aug-2015 10:19

HRLT A4-A5 Voltage Plus - 0	0	N/A	68790	68850	65.23	2100	UV
HRLT A4-A5 Voltage Plus - 1	0	N/A	72480	72670	193.9	2100	UV
HRLT A4-A5 Voltage Plus - 2	0	N/A	74240	74200	-44.36	2100	UV
HRLT A4-A5 Voltage Plus - 3	0	N/A	72350	72460	116.9	2100	UV
HRLT A4-A5 Voltage Plus - 4	0	N/A	69750	69810	62.16	2100	UV
HRLT A4-A5 Voltage Plus - 5	0	N/A	70240	70280	42.07	2100	UV
HRLT A4-A5 Voltage Plus - 6	0	N/A	-69190	-69320	-130.0	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: 25-Oct-2015 13:29 After: 5-Aug-2015 10:19

HRLT A5-A6 Voltage Plus - 0	0	N/A	68630	68710	75.27	2100	UV
HRLT A5-A6 Voltage Plus - 1	0	N/A	72330	72490	160.0	2100	UV
HRLT A5-A6 Voltage Plus - 2	0	N/A	74060	74070	6.578	2100	UV
HRLT A5-A6 Voltage Plus - 3	0	N/A	72190	72300	107.0	2100	UV
HRLT A5-A6 Voltage Plus - 4	0	N/A	69620	69690	71.53	2100	UV
HRLT A5-A6 Voltage Plus - 5	0	N/A	70100	70140	38.18	2100	UV
HRLT A5-A6 Voltage Plus - 6	0	N/A	-69040	-69160	-119.6	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: 25-Oct-2015 13:29 After: 5-Aug-2015 10:19

HRLT Torpedo-M0 Voltage - 0	0	N/A	-68130	-68210	-82.07	2100	UV
HRLT Torpedo-M0 Voltage - 1	0	N/A	-72110	-72300	-191.2	2100	UV
HRLT Torpedo-M0 Voltage - 2	0	N/A	-73890	-73880	11.73	2100	UV
HRLT Torpedo-M0 Voltage - 3	0	N/A	-72090	-72200	-118.6	2100	UV
HRLT Torpedo-M0 Voltage - 4	0	N/A	-69550	-69620	-70.22	2100	UV
HRLT Torpedo-M0 Voltage - 5	0	N/A	-70040	-70090	-46.98	2100	UV
HRLT Torpedo-M0 Voltage - 6	0	N/A	68780	68910	128.6	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: 25-Oct-2015 13:29 After: 5-Aug-2015 10:19

HRLT Bridle#9-M0 Voltage - 0	0	N/A	-68170	-68250	-79.67	2100	UV
HRLT Bridle#9-M0 Voltage - 1	0	N/A	-72220	-72390	-170.4	2100	UV
HRLT Bridle#9-M0 Voltage - 2	0	N/A	-73990	-73980	12.52	2100	UV
HRLT Bridle#9-M0 Voltage - 3	0	N/A	-72170	-72280	-111.4	2100	UV
HRLT Bridle#9-M0 Voltage - 4	0	N/A	-69600	-69670	-68.92	2100	UV
HRLT Bridle#9-M0 Voltage - 5	0	N/A	-70080	-70120	-41.42	2100	UV
HRLT Bridle#9-M0 Voltage - 6	0	N/A	68880	69000	120.4	2100	UV
HRLT Bridle#9-M0 Voltage - 7	0	N/A	-70000	-70000	0	2100	UV

High Resolution Laterolog Array - B Wellsite Calibration - HRLT ISO

Before: 25-Oct-2015 13:29 After: 5-Aug-2015 10:19

HRLT Source Current Plus - 0	0	N/A	284.3	284.7	0.4436	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: 25-Oct-2015 13:29 After: 5-Aug-2015 10:19

HRLT Vertical Voltage PI - 0	0	N/A	-320.3	-320.7	-0.3705	9.681	UV
HRLT Vertical Voltage PI - 1	0	N/A	-327.3	-328.2	-0.8906	9.681	UV
HRLT Vertical Voltage PI - 2	0	N/A	-333.8	-333.7	0.06097	9.681	UV
HRLT Vertical Voltage PI - 3	0	N/A	-322.0	-322.6	-0.5449	9.681	UV
HRLT Vertical Voltage PI - 4	0	N/A	-309.1	-309.5	-0.3231	9.681	UV
HRLT Vertical Voltage PI - 5	0	N/A	-325.9	-326.1	-0.2248	9.681	UV
HRLT Vertical Voltage PI - 6	0	N/A	330.3	331.0	0.7186	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 6:04 Before: 22-Sep-2015 9:37 After: 22-Sep-2015 9:47

SS Cs Resolution Bkg	9.000	7.976	7.974	8.061	0.08721	1.800	%
LS Cs Resolution Bkg	9.000	8.193	8.109	8.191	0.08136	1.800	%
LSW1 Background	100.0	66.90	67.60	67.34	-0.2575	3.000	CPS
LSW2 Background	100.0	62.57	62.03	62.70	0.6666	3.000	CPS
LSW3 Background	200.0	137.5	136.3	136.4	0.09737	6.000	CPS
LSW4 Background	250.0	168.1	166.2	166.2	0.02251	7.500	CPS
LSW5 Background	600.0	381.5	382.5	382.0	-0.5155	18.00	CPS
SSW1 Background	100.0	76.27	75.74	76.62	0.8772	3.000	CPS
SSW2 Background	200.0	135.1	135.9	134.7	-1.176	6.000	CPS
SSW3 Background	500.0	363.6	363.1	362.7	-0.3676	15.00	CPS
SSW4 Background	270.0	191.2	188.3	190.1	1.767	8.100	CPS
SSW5 Background	200.0	137.5	137.9	139.0	1.121	6.000	CPS

Hostile Litho-Density Sonde Wellsite Calibration - Aluminum Measurement

Master: 22-Sep-2015 6:43

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 6:38

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 9:42

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

Hostile Natural Gamma Ray Sonde Wellsite Calibration - Detector 1 Check

Master: 27-Sep-2015 19:37 Before: 25-Oct-2015 13:34 After: 27-Sep-2015 20:07

Na 511 Peak Loc	40.00	37.67	37.64	37.69	0.04608	1.000	
Na 511 Peak Res	15.50	16.19	15.54	17.48	1.939	2.000	%
High Voltage	1150	1229	1229	1229	-0.4922	N/A	V
Na 1785 Peak Loc	142.6	136.2	136.9	136.7	-0.2255	7.000	
Na 1785 Peak Res	8.500	9.111	8.600	9.867	1.266	2.000	%
Temperature	15.50	32.00	34.43	32.12	-2.307	N/A	DEGC
Na Count Rate	45.00	42.40	40.51	41.54	1.022	8.000	CPS

Hostile Natural Gamma Ray Sonde Wellsite Calibration - Detector 2 Check

Master: 27-Sep-2015 19:37 Before: 25-Oct-2015 13:34 After: 27-Sep-2015 20:07

Na 511 Peak Loc	40.00	39.57	39.63	39.60	-0.03402	1.000	
Na 511 Peak Res	15.50	16.65	16.96	16.59	-0.3690	2.000	%
High Voltage	1150	1107	1109	1107	-1.158	N/A	V
Na 1785 Peak Loc	142.6	143.5	142.7	143.3	0.5678	7.000	
Na 1785 Peak Res	8.500	9.036	9.123	8.596	-0.5268	2.000	%
Temperature	15.50	31.75	34.04	32.04	-1.998	N/A	DEGC
Na Count Rate	45.00	42.43	40.46	41.56	1.104	8.000	CPS

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

Master: 27-Sep-2015 19:37 Before: 25-Oct-2015 13:34 After: 27-Sep-2015 20:07

Coincidence Count Rate Ratio	1.000	0.9929	0.9958	0.9945	-0.001293	0.05000	
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Enhanced DTS Cartridge Wellsite Calibration - EDTC Accelerometer Calibration

Before: 25-Oct-2015 13:35

EDTC Z-Axis Acceleration	0.000	N/A	0.000	N/A	N/A	N/A	M/GS
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Enhanced DTS Cartridge Wellsite Calibration – Detector Calibration

Before: Calibration out of date	27-Sep-2015 19:52	After: Calibration out of date	27-Sep-2015 20:03				
Gamma Ray (Jig – Bkg)	149.7	N/A	149.7	152.6	2.879	13.61	GAPI
Gamma Ray (Calibrated)	164.0	N/A	164.0	167.2	3.154	15.00	GAPI

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		-318.7	-322.7	-280.7	-379.7
	After		-319.0			
1	Before		-332.9	-322.7	-280.7	-379.7
	After		-333.6			
2	Before		-340.6	-322.7	-280.7	-379.7
	After		-340.5			
3	Before		-330.5	-322.7	-280.7	-379.7
	After		-331.0			
4	Before		-320.2	-322.7	-280.7	-379.7
	After		-320.5			
5	Before		-322.2	-322.7	-280.7	-379.7
	After		-322.3			
6	Before		322.8	322.7	379.7	280.7
	After		323.4			
7	Before		-322.7	-322.7	-280.7	-379.7
	After		-322.7			

(Minimum) (Nominal) (Maximum)

Before: 25-Oct-2015 13:29

After: 5-Aug-2015 10:19

High Resolution Laterolog Array – B Wellsite Calibration

HRLT M12

Idx	Phase	HRLT M1-M2 Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		1743	1781	2095	1549
	After		1744			
1	Before		1827	1781	2095	1549
	After		1831			
2	Before		1863	1781	2095	1549
	After		1862			
3	Before		1806	1781	2095	1549
	After		1808			
Before		1749				

Idx	Phase	HRLT M2-M3 Voltage Plus UV	Value	Nominal	Maximum	Minimum
5	After		1750	1781	2095	1549
	Before		1760			
6	After		1761	-1781	-1549	-2095
	Before		-1780			
7	After		1781	1781	2095	1549
	Before		1781			
		(Minimum) (Nominal) (Maximum)				

Before: 25-Oct-2015 13:29  
After: 5-Aug-2015 10:19

High Resolution Laterolog Array – B Wellsite Calibration						
HRLT M23						
Idx	Phase	HRLT M2-M3 Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	After		1734	1781	2095	1549
	Before		1735			
1	After		1829	1781	2095	1549
	Before		1832			
2	After		1866	1781	2095	1549
	Before		1865			
3	After		1814	1781	2095	1549
	Before		1815			
4	After		1750	1781	2095	1549
	Before		1750			
5	After		1762	1781	2095	1549
	Before		1762			
6	After		-1772	-1781	-1549	-2095
	Before		-1773			
7	After		1781	1781	2095	1549
	Before		1781			
		(Minimum) (Nominal) (Maximum)				

Before: 25-Oct-2015 13:29  
After: 5-Aug-2015 10:19

High Resolution Laterolog Array – B Wellsite Calibration						
HRLT V34						
Idx	Phase	HRLT A3-A4 Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	After		68700	70000	82360	60900
	Before		68770			
1	After		72270	70000	82360	60900
	Before		72450			
2	After		74050	70000	82360	60900
	Before		74010			
3	After		72180	70000	82360	60900
	Before		72300			
4	After		69640	70000	82360	60900
	Before		69700			
5	Before		70140			

5	After		70190	70000	82360	60900
6	Before		-68990	-70000	-60900	-82360
	After		-69120			
7	Before		70000	70000	82360	60900
	After		70000			
(Minimum)                      (Nominal)                      (Maximum)						

Before: 25-Oct-2015 13:29  
 After: 5-Aug-2015 10:19

High Resolution Laterolog Array – B Wellsite Calibration						
HRLT V45						
Idx	Phase	HRLT A4–A5 Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		68790	70000	82360	60900
	After		68850			
1	Before		72480	70000	82360	60900
	After		72670			
2	Before		74240	70000	82360	60900
	After		74200			
3	Before		72350	70000	82360	60900
	After		72460			
4	Before		69750	70000	82360	60900
	After		69810			
5	Before		70240	70000	82360	60900
	After		70280			
6	Before		-69190	-70000	-60900	-82360
	After		-69320			
7	Before		70000	70000	82360	60900
	After		70000			
(Minimum)                      (Nominal)                      (Maximum)						

Before: 25-Oct-2015 13:29  
 After: 5-Aug-2015 10:19

High Resolution Laterolog Array – B Wellsite Calibration						
HRLT V56						
Idx	Phase	HRLT A5–A6 Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		68630	70000	82360	60900
	After		68710			
1	Before		72330	70000	82360	60900
	After		72490			
2	Before		74060	70000	82360	60900
	After		74070			
3	Before		72190	70000	82360	60900
	After		72300			
4	Before		69620	70000	82360	60900
	After		69690			
5	Before		70100	70000	82360	60900
	After		70140			
	Before		-69040			

6	After		-69160	-70000	-60900	-82360
7	Before		70000	70000	82360	60900
	After		70000			
			(Minimum)	(Nominal)	(Maximum)	
Before: 25-Oct-2015 13:29						
After: 5-Aug-2015 10:19						

High Resolution Laterolog Array – B Wellsite Calibration						
HRLT VTP						
Idx	Phase	HRLT Torpedo-M0 Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		-68130	-70000	-60900	-82360
	After		-68210			
1	Before		-72110	-70000	-60900	-82360
	After		-72300			
2	Before		-73890	-70000	-60900	-82360
	After		-73880			
3	Before		-72090	-70000	-60900	-82360
	After		-72200			
4	Before		-69550	-70000	-60900	-82360
	After		-69620			
5	Before		-70040	-70000	-60900	-82360
	After		-70090			
6	Before		68780	70000	82360	60900
	After		68910			
7	Before		-70000	-70000	-60900	-82360
	After		-70000			
			(Minimum)	(Nominal)	(Maximum)	
Before: 25-Oct-2015 13:29						
After: 5-Aug-2015 10:19						

High Resolution Laterolog Array – B Wellsite Calibration						
HRLT VBD						
Idx	Phase	HRLT Bridle#9-M0 Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		-68170	-70000	-60900	-82360
	After		-68250			
1	Before		-72220	-70000	-60900	-82360
	After		-72390			
2	Before		-73990	-70000	-60900	-82360
	After		-73980			
3	Before		-72170	-70000	-60900	-82360
	After		-72280			
4	Before		-69600	-70000	-60900	-82360
	After		-69670			
5	Before		-70080	-70000	-60900	-82360
	After		-70120			
6	Before		68880	70000	82360	60900
	After		69000			
7	Before		-70000			



7	After		-70000	-70000	-60900	-82360
		(Minimum) (Nominal) (Maximum)				

Before: 25-Oct-2015 13:29  
 After: 5-Aug-2015 10:19

High Resolution Laterolog Array – B Wellsite Calibration						
HRLT ISO						
Idx	Phase	HRLT Source Current Plus UA	Value	Nominal	Maximum	Minimum
0	Before		284.3	284.0	334.1	247.0
	After		284.7			
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: 25-Oct-2015 13:29  
 After: 5-Aug-2015 10:19

High Resolution Laterolog Array – B Wellsite Calibration						
HRLT MV						
Idx	Phase	HRLT Vertical Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		-320.3	-322.7	-280.7	-379.7
	After		-320.7			
1	Before		-327.3	-322.7	-280.7	-379.7
	After		-328.2			
2	Before		-333.8	-322.7	-280.7	-379.7
	After		-333.7			
3	Before		-322.0	-322.7	-280.7	-379.7
	After		-322.6			
4	Before		-309.1	-322.7	-280.7	-379.7
	After		-309.5			
5	Before		-325.9	-322.7	-280.7	-379.7
	After		-326.1			
6	Before		330.3	322.7	379.7	280.7
	After		331.0			
7	Before		-322.7	-322.7	-280.7	-379.7
	After		-322.7			
		(Minimum) (Nominal) (Maximum)				

Hostile Litho-Density Sonde / Equipment Identification

Primary Equipment:		
Hostile Litho Density Sonde	HLDS - D	45
Hostile Litho Density High Voltage	HLDV - D	45
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		7.974	Before		8.109	Before		67.60
After		8.061	After		8.191	After		67.34
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		62.03	Before		136.3	Before		166.2
After		62.70	After		136.4	After		166.2
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		382.5	Before		75.74	Before		135.9
After		382.0	After		76.62	After		134.7
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		363.1	Before		188.3	Before		137.9
After		362.7	After		190.1	After		139.0
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 6:04			Before: 22-Sep-2015 9:37			After: 22-Sep-2015 9:47		

Litho-Density Spectroscopy Cartridge - B / Equipment Identification

Primary Equipment:		
LDSC Cartridge	LDSC - B	521
Auxiliary Equipment:		
LDSC Housing	LDSH - A	319

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 174  
GSR – U 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		37.64	Before		15.54	Before		1229
After		37.69	After		17.48	After		1229
	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		136.9	Before		8.600	Before		34.43
After		136.7	After		9.867	After		32.12
	135.0 (Minimum) 142.6 (Nominal) 150.3 (Maximum)			7.000 (Minimum) 8.500 (Nominal) 11.00 (Maximum)			-28.89 (Minimum) 15.50 (Nominal) 60.00 (Maximum)	
Phase	Na Count Rate CPS	Value						
Master		42.40						
Before		40.51						
After		41.54						
	10.00 (Minimum) 45.00 (Nominal) 100.0 (Maximum)							
Master: 27-Sep-2015 19:37			Before: 25-Oct-2015 13:34			After: 27-Sep-2015 20:07		

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		39.63	Before		16.96	Before		1109
After		39.60	After		16.59	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		142.7	Before		9.123	Before		34.04
After		143.3	After		8.596	After		32.04
	135.0 (Minimum) 142.6 (Nominal) 150.3 (Maximum)			7.000 (Minimum) 8.500 (Nominal) 11.00 (Maximum)			-28.89 (Minimum) 15.50 (Nominal) 60.00 (Maximum)	
Phase	Na Count Rate CPS	Value						
Master		42.43						
Before		40.46						
After		41.56						
	10.00 (Minimum) 45.00 (Nominal) 100.0 (Maximum)							
Master: 27-Sep-2015 19:37			Before: 25-Oct-2015 13:34			After: 27-Sep-2015 20:07		

Hostile Natural Gamma Ray Sonde Wellsite Calibration		
Ratio Of Detector 1 To Detector 2		
Phase	Coincidence Count Rate Ratio	Value
Master		0.9929
Before		0.9958
After		0.9945

0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)
Master: 27-Sep-2015 19:37		
Before: 25-Oct-2015 13:34		
After: 27-Sep-2015 20:07		

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			9.800
	9.610 (Minimum)	9.810 (Nominal)	10.01 (Maximum)
Before: 25-Oct-2015 13:35			

Enhanced DTS Cartridge Wellsite Calibration											
Detector Calibration											
Phase	Gamma Ray Background	GAPI	Value	Phase	Gamma Ray (Jig - Bkg)	GAPI	Value	Phase	Gamma Ray (Calibrated)	GAPI	Value
Before			7.675	Before			149.7	Before			164.0
After			7.811	After			152.6	After			167.2
	0 (Minimum)	30.00 (Nominal)	120.0 (Maximum)		136.1 (Minimum)	149.7 (Nominal)	163.3 (Maximum)		149.0 (Minimum)	164.0 (Nominal)	179.0 (Maximum)
Before: Calibration out of date 27-Sep-2015 19:52				After: Calibration out of date 27-Sep-2015 20:03							

Company: **International Ocean Discovery Program**

**Schlumberger**

Well: **Expedition 359, Site U1466B**

Field: **Maldives Monsoon & Sea Level**

Rig: **JOIDES Resolution**

Country:

High Resolution Laterolog Array (HRLA)

\*Caliper (HLDS, no source)

Magnetic Susceptibility (MSS), (HNGS)