

Company: Lamont Doherty
Well: IODP Exp 305 Site U1309D
Field: Atlantis Massif
Rig: Joides Resolution

Ocean: Atlantic Ocean

Dual-Laterolog Tool			
Gamma Ray			
Mid-Atlantic Ridge	Elev.: K.B. 11.3 m G.L. -1656 m D.F. 11 m		
Permanent Datum: _____ Log Measured From: _____ Drilling Measured From: _____	Mean Sea Level _____ Drill Floor _____ Drill Floor _____		
Elev.: 0 m _____ 11.3 m above Perm. Datum			
API Serial No.	Max. Hole Devi.	Longitude	Latitude

Logging Date	24-Feb-2005		
Run Number	Three		
Depth Driller	3071.5 m		
Schlumberger Depth	3070 m		
Bottom Log Interval	3065 m		
Top Log Interval	1850 m		
Casing Driller Size @ Depth	0.000 in @ 1850 m		
Casing Schlumberger	1850 m		
Bit Size	9.875 in		
Type Fluid In Hole	Fresh Water		
Density	1.2 g/cm3		
Fluid Loss	PH		
Source Of Sample			
RM @ Measured Temperature	0.322 ohm.m @ 50 degC		
RMF @ Measured Temperature	@ @		
RMC @ Measured Temperature	@ @		
Source RMF	RMC		
RM @ MRT	0.190 @ 118 @ 118		
Maximum Recorded Temperatures	100 degC 118 15:00		
Circulation Stopped	23-Feb-2005 Time 3:47		
Logger On Bottom	24-Feb-2005 Time		
Unit Number	2082 Houston		
Recorded By	Javier Espinosa		
Witnessed By	Heike Delius, Margarete Linek		

	Run 1	Run 2	
Logging Date			
Run Number			
Depth Driller			
Schlumberger Depth			
Bottom Log Interval			
Top Log Interval			
Casing Driller Size @ Depth			
Casing Schlumberger			
Bit Size			
Type Fluid In Hole			
Density			
Fluid Loss			
Source Of Sample			
RM @ Measured Temperature			
RMF @ Measured Temperature			
RMC @ Measured Temperature			
Source RMF			
RM @ MRT			
Maximum Recorded Temperatures			
Circulation Stopped			
Logger On Bottom			
Unit Number			
Recorded By			
Witnessed By			

DISCLAIMER

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OTHER SERVICES1
 OS1: HNGS/HLDS/APS
 OS2: MEST/DSI
 OS3: WST
 OS4: UBI
 OS5:

OTHER SERVICES2
 OS1:
 OS2:
 OS3:
 OS4:
 OS5:

REMARKS: RUN NUMBER 1
 Tool ran as per sketch below
 Parameters as per IODP standards
 Fresh water circulated before logging operation

REMARKS: RUN NUMBER 2

RUN 1		
SERVICE ORDER #:		
PROGRAM VERSION:	12C0-301	
FLUID LEVEL:		
LOGGED INTERVAL	START	STOP


RUN 2		
SERVICE ORDER #:		
PROGRAM VERSION:		
FLUID LEVEL:		
LOGGED INTERVAL	START	STOP


EQUIPMENT DESCRIPTION


RUN 1
SURFACE EQUIPMENT
 WITM (DTS)-A
 LCM-AA
 SFT-281 6250
 SFT-178 6250
 GSR-U 135

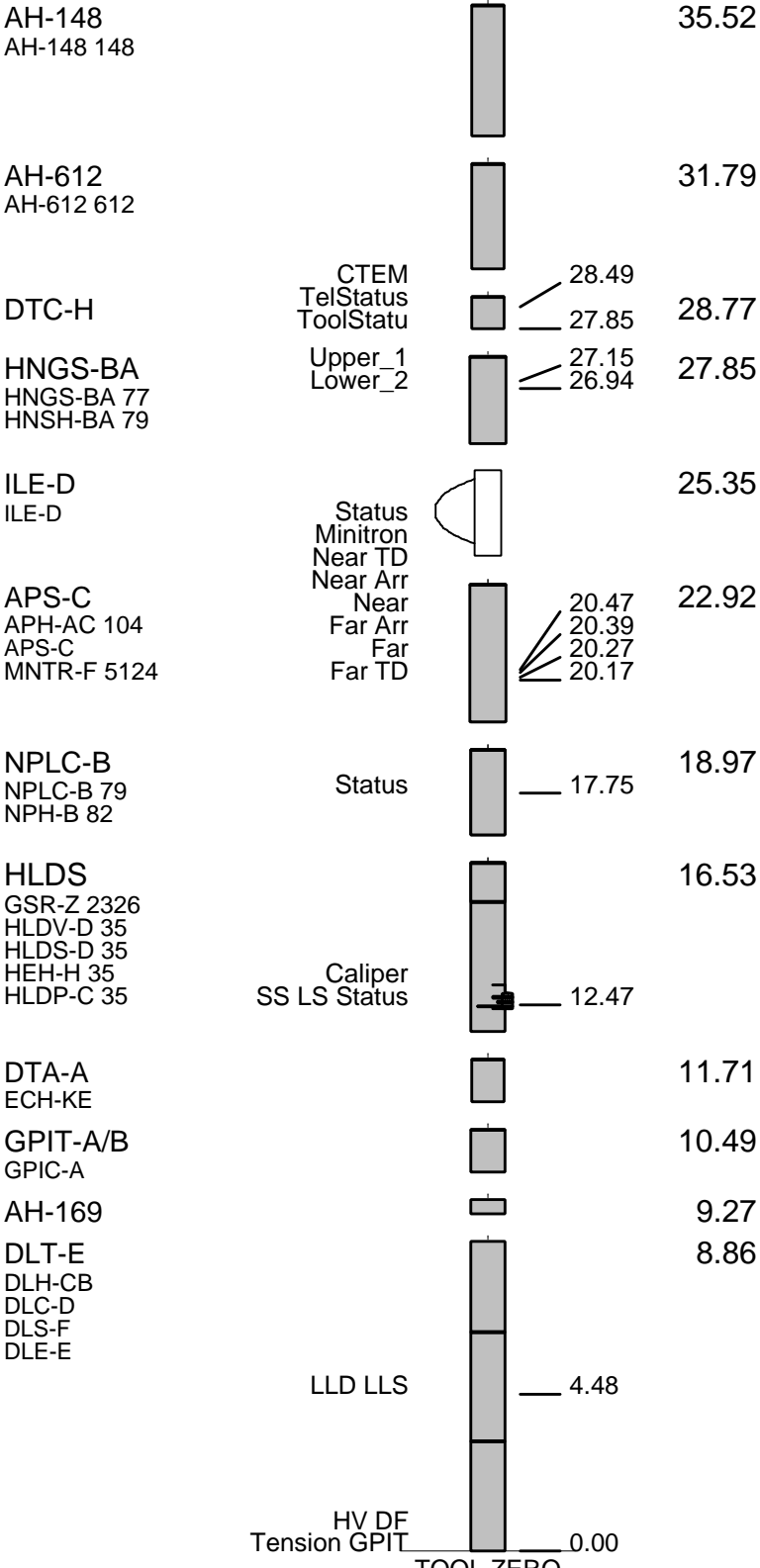
RUN 2

DOWNHOLE EQUIPMENT

BSP  60.80
 BRT-S

SP SPARC  39.74

LEH-QT  36.41



TOOL ZERO
 MAXIMUM STRING DIAMETER 3.88 IN
 MEASUREMENTS RELATIVE TO TOOL ZERO
 ALL LENGTHS IN METERS

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

Kelly Bushing Elevation
Derrick Floor Elevation

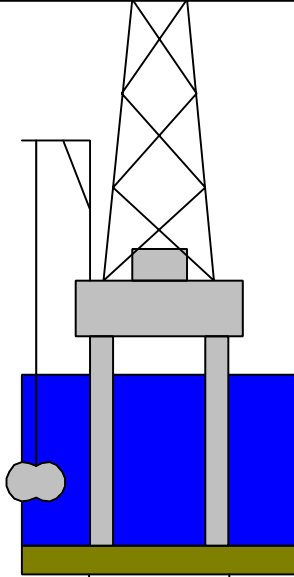
11.3
11.0

Mean Sea Level

0.0

Seismic Gun depth below MSL

2.0



0.0 5.000

Casing String

1656.0 9.875

Borehole Segment

1850.0 5.000

Casing Shoe

Schlumberger

MAIN PASS

MAXIS Field Log

Company: Lamont Doherty

Well: IODP Exp 305 Site U1309D

Output DLIS Files

DEFAULT	DLL_LDL_APS_NGS_020LUP	FN:22	PRODUCER	24-Feb-2005 04:05	3072.4 M	1810.5 M
REDUCED	DLL_LDL_APS_NGS_020LUP	FN:23	PRODUCER	24-Feb-2005 04:05	3072.4 M	1811.9 M

OP System Version: 12C0-301 MCM

DLT-E	12C0-301	GPIT-A/B	12C0-301
DTA-A	12C0-301	HLDS	12C0-301
NPLC-B	12C0-301	APS-C	12C0-301
HNGS-BA	12C0-301	DTC-H	12C0-301
BSP	12C0-301		

Changed Parameter Summary

DLIS Name

New Value

Previous Value

Depth & Time

LLOO

OFF
BOTH
OFF
BOTH
OFF
BOTH
OFF
OFF

BOTH
OFF
BOTH
OFF
BOTH
OFF
BOTH

3071.3 04:06:34
3069.7 04:06:55
3053.5 04:10:26
3052.0 04:10:47
1913.1 08:18:57
1911.3 08:19:37
1858.6 08:31:27

PIP SUMMARY

Time Mark Every 60 S

Tension (TENS)
10000 (LBF) 0

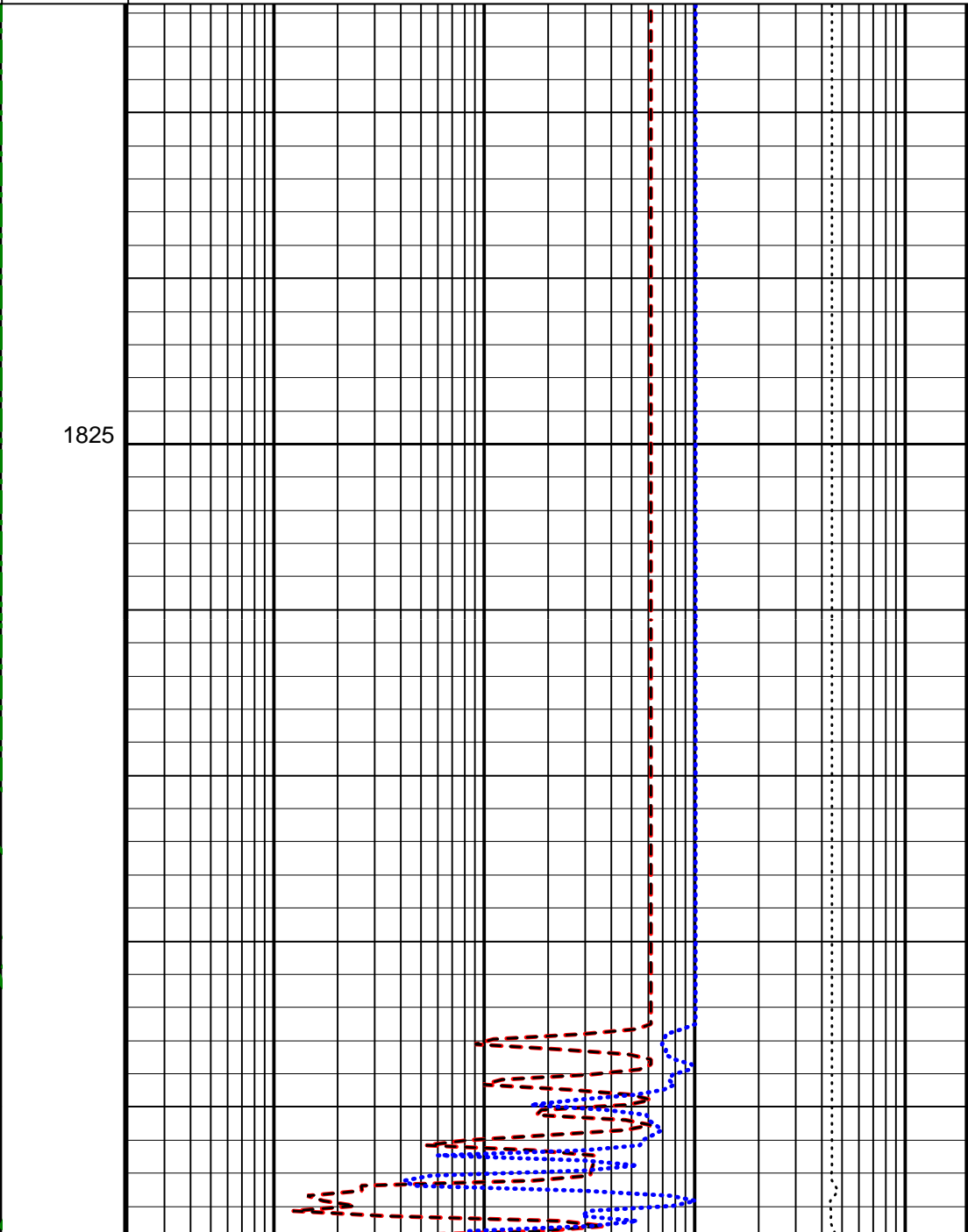
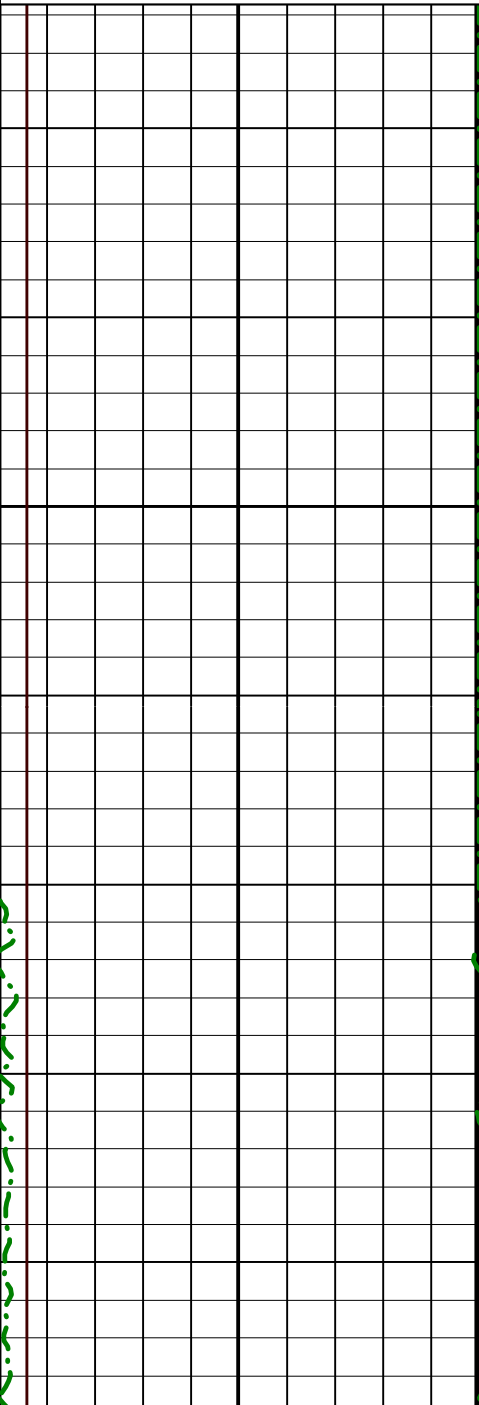
HNGS Spectroscopy Gamma Ray
(HSGR)
(GAPI) 0 15

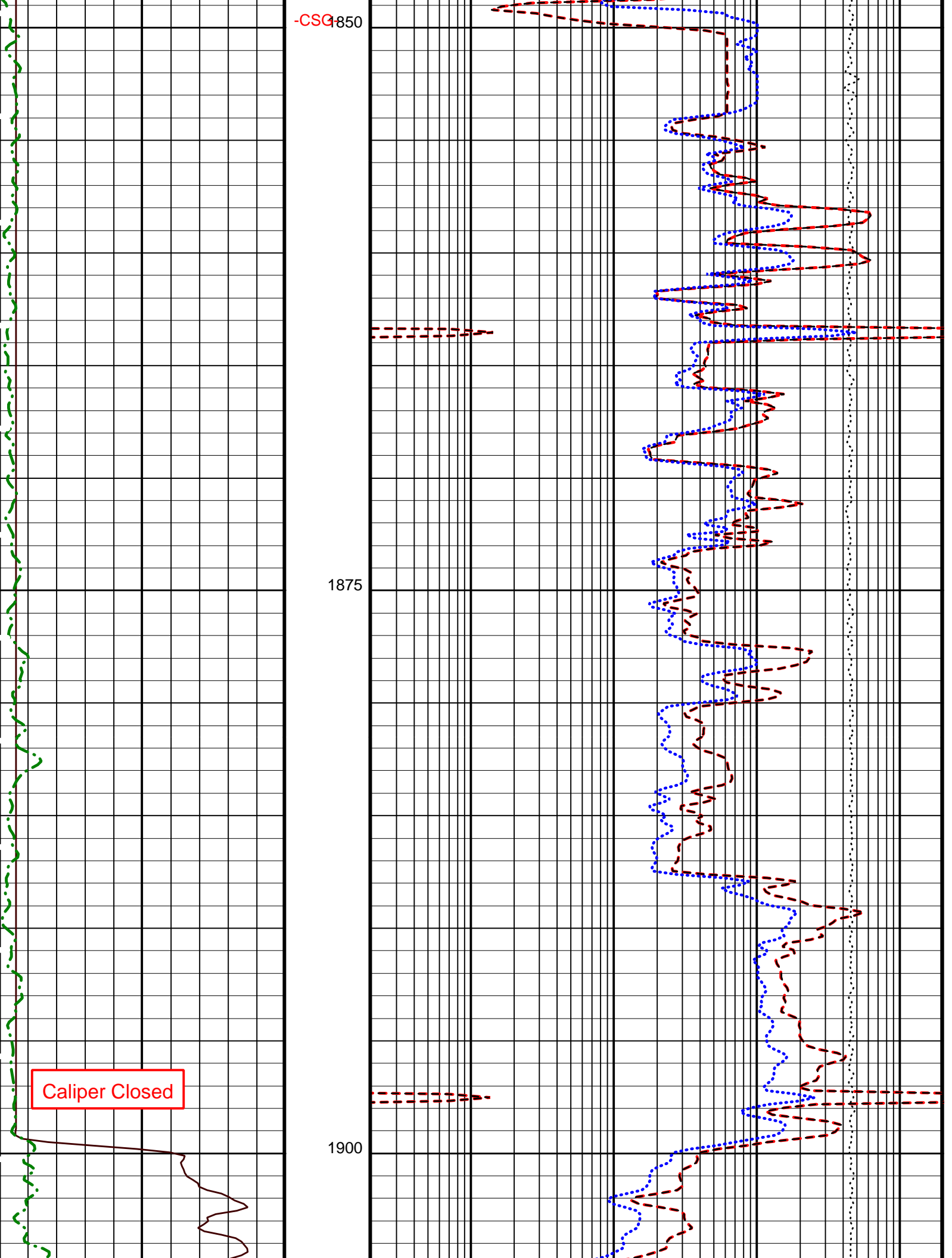
HLDS Caliper (LCAL)
(IN) 0 20

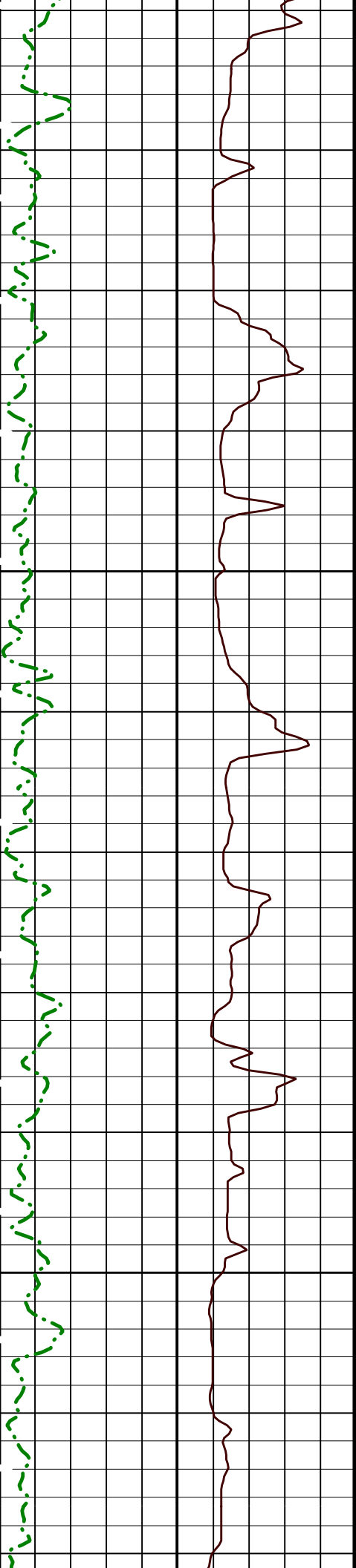
Laterolog Shallow Resistivity (LLS)
0.2 (OHMM) 2000

Laterolog Groningen Resistivity (LLG)
0.2 (OHMM) 2000

Laterolog Deep Resistivity (LLD)
0.2 (OHMM) 2000

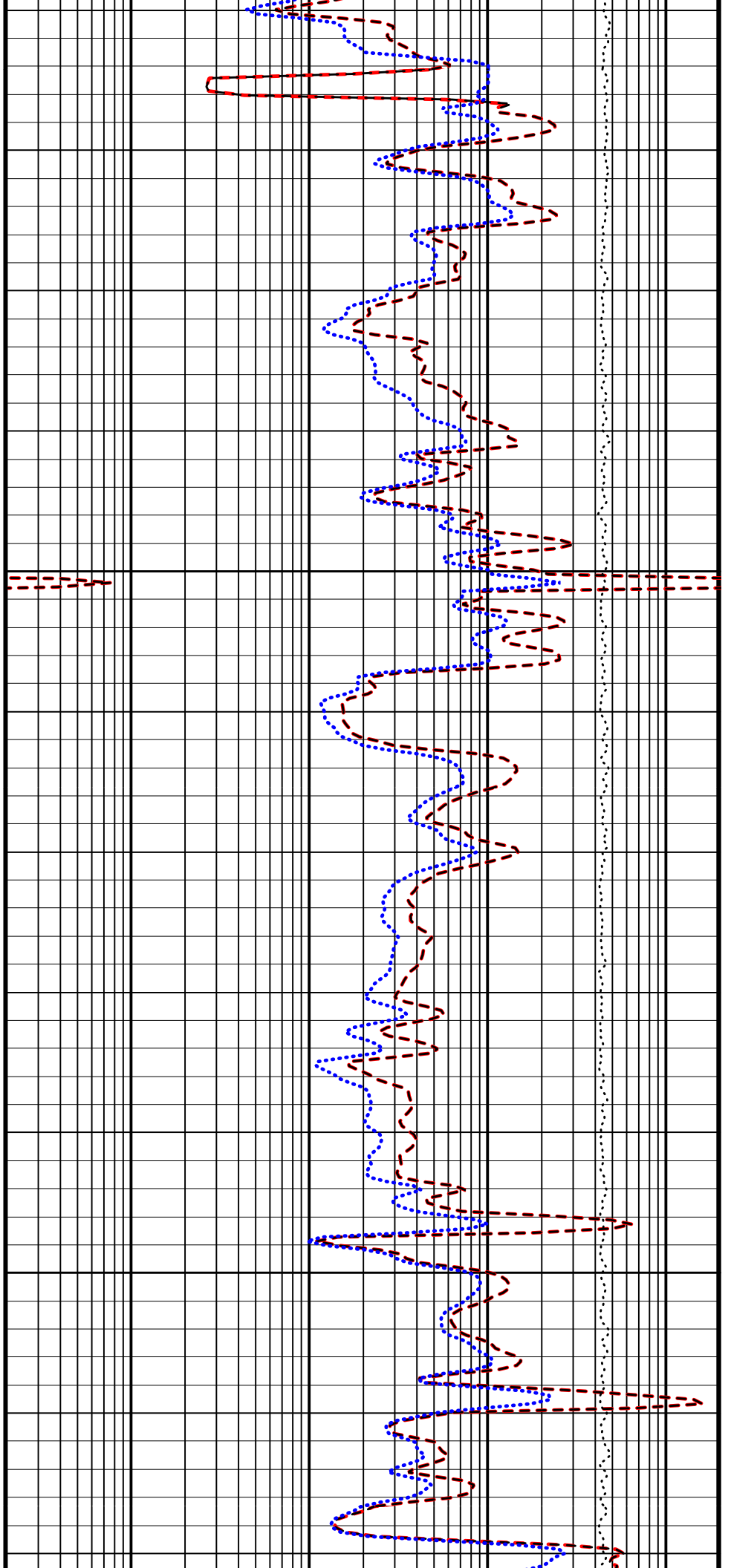


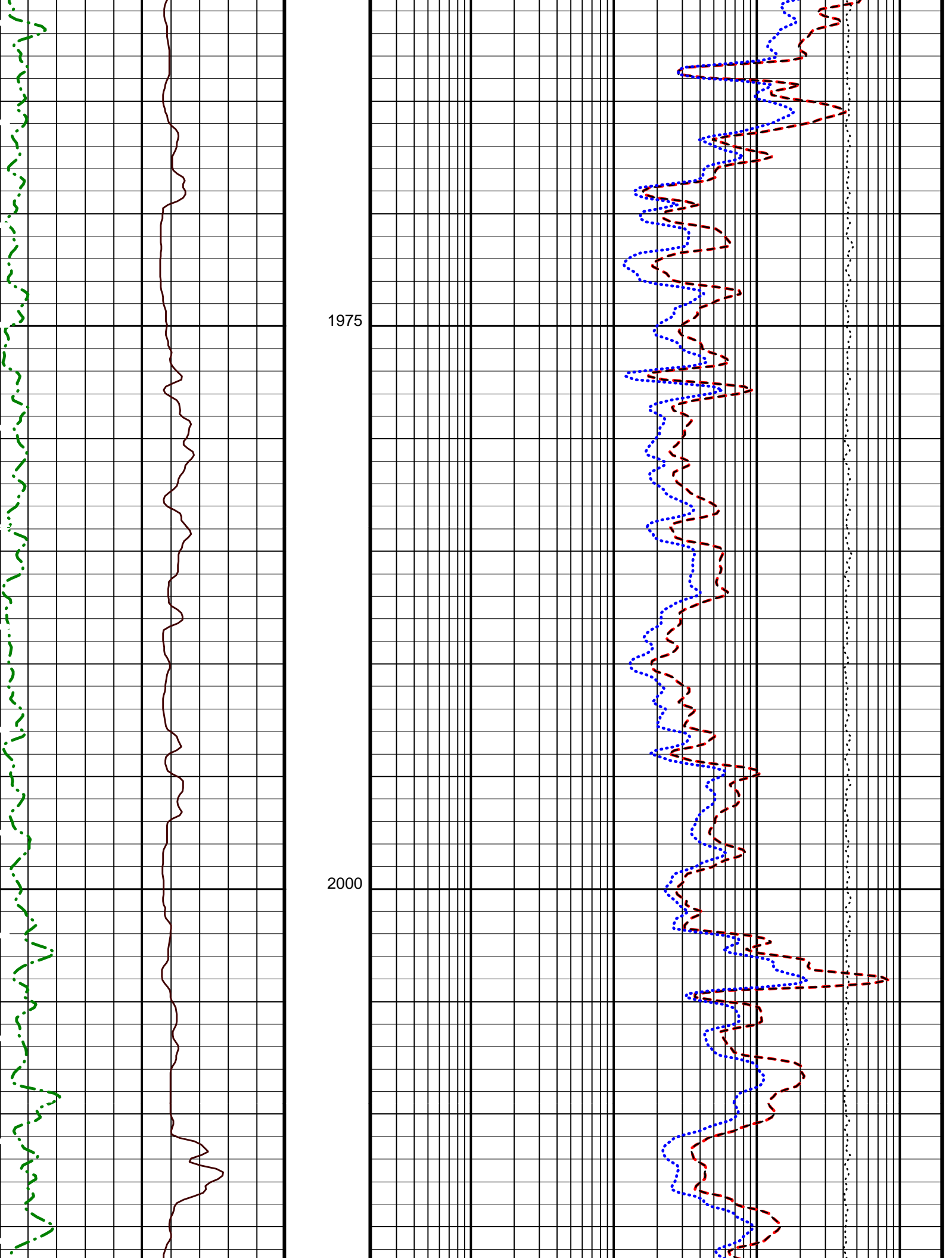


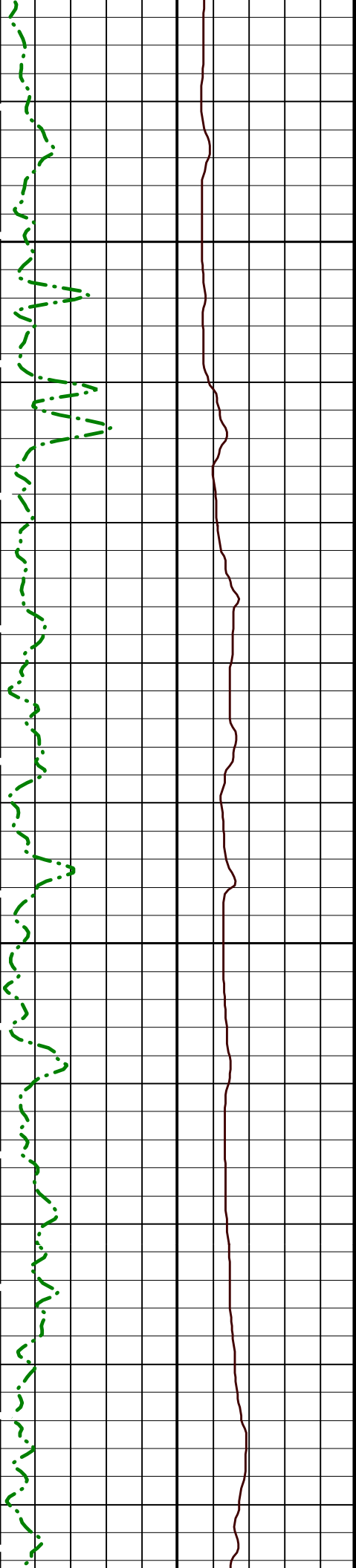


1925

1950

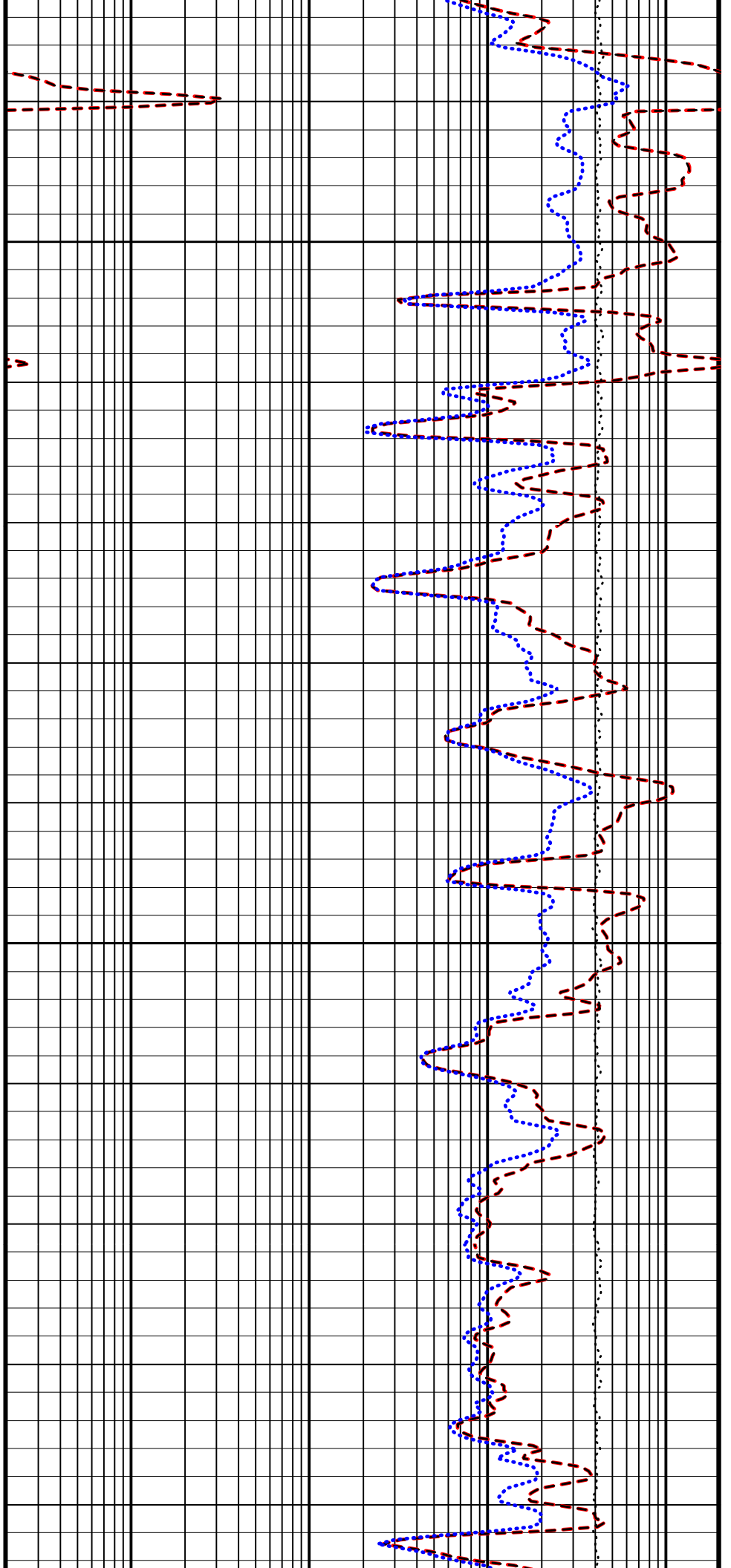


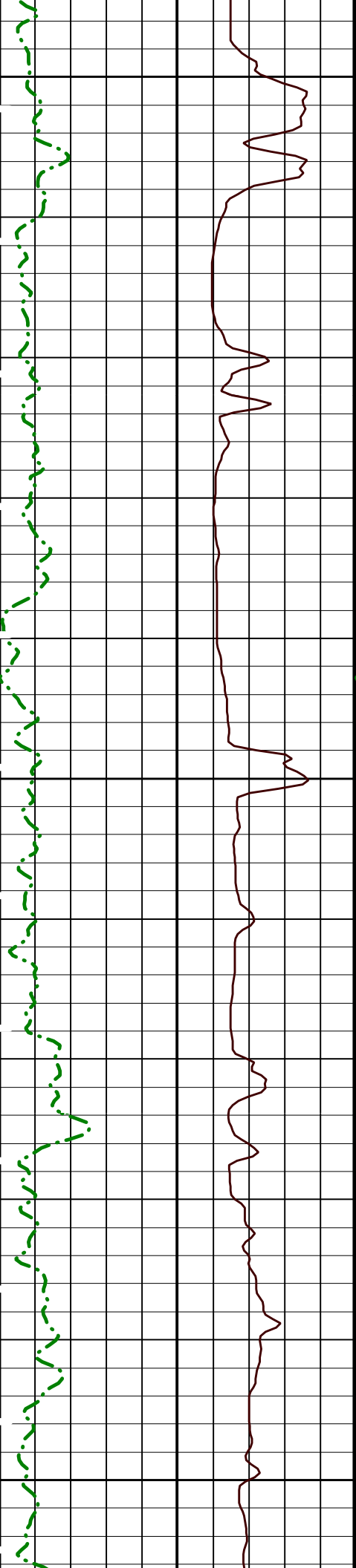




2025

2050

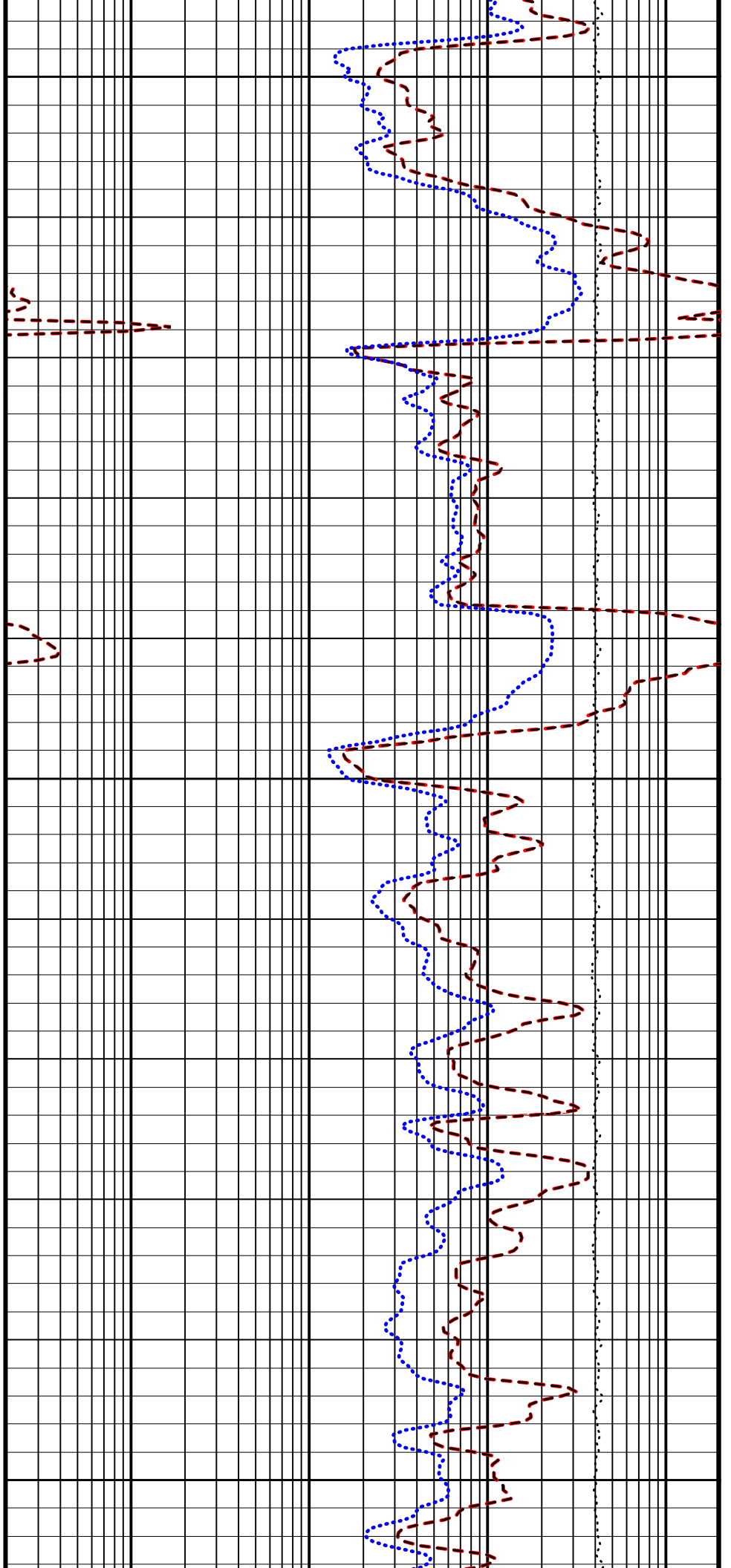


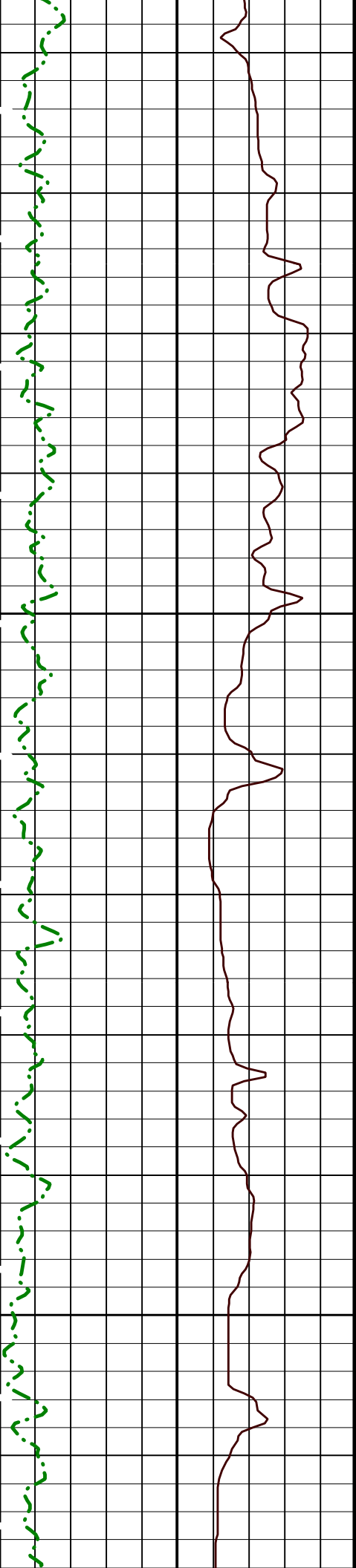


2075

2100

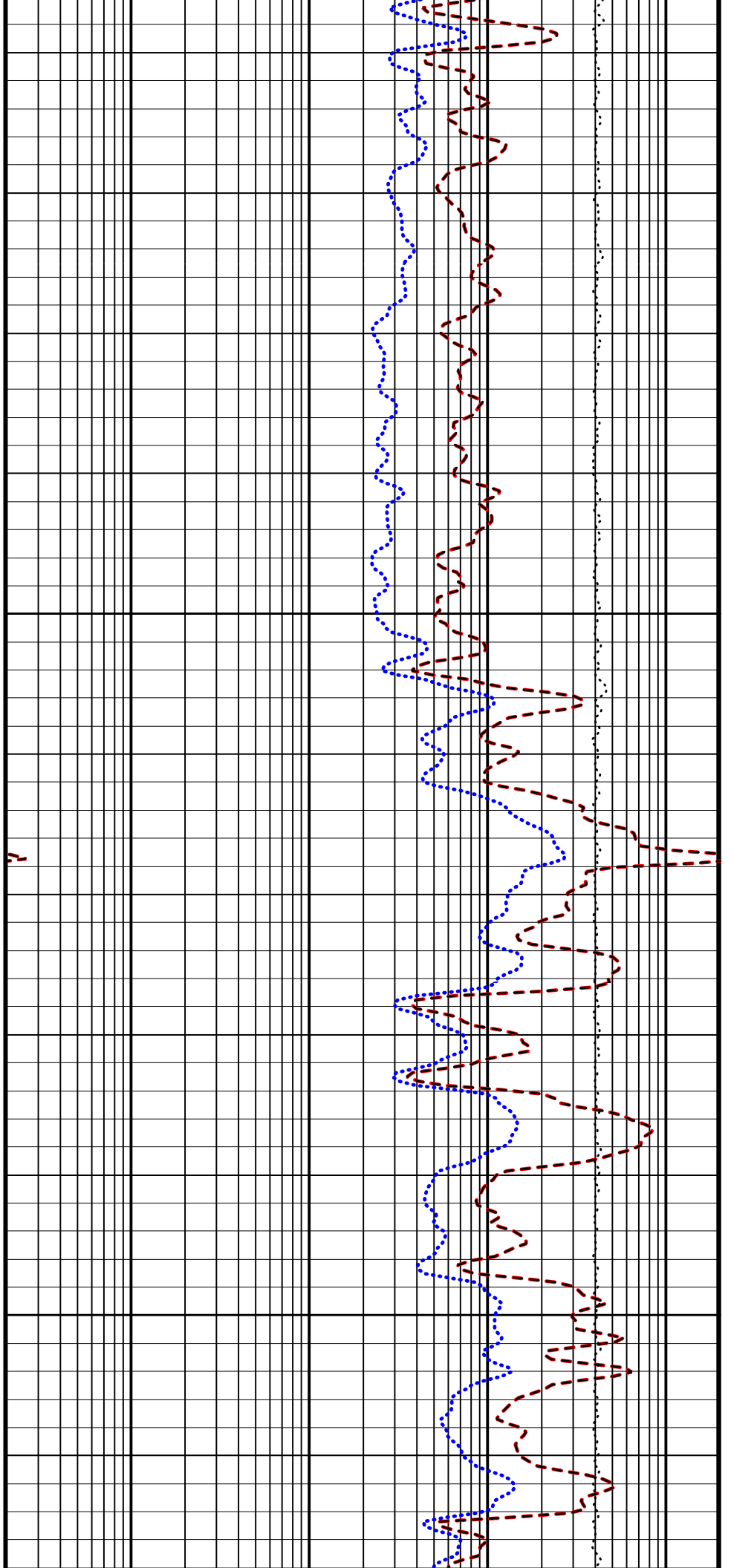
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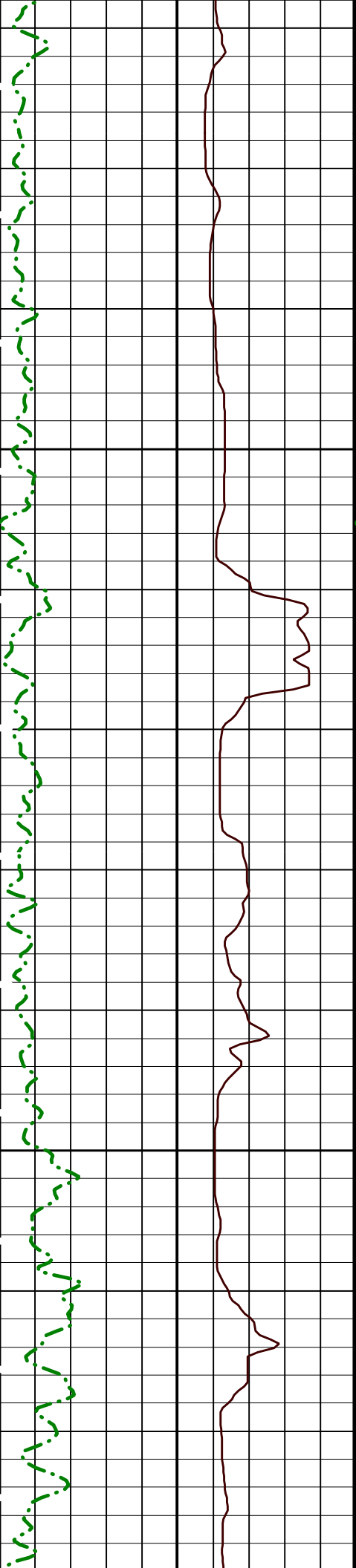




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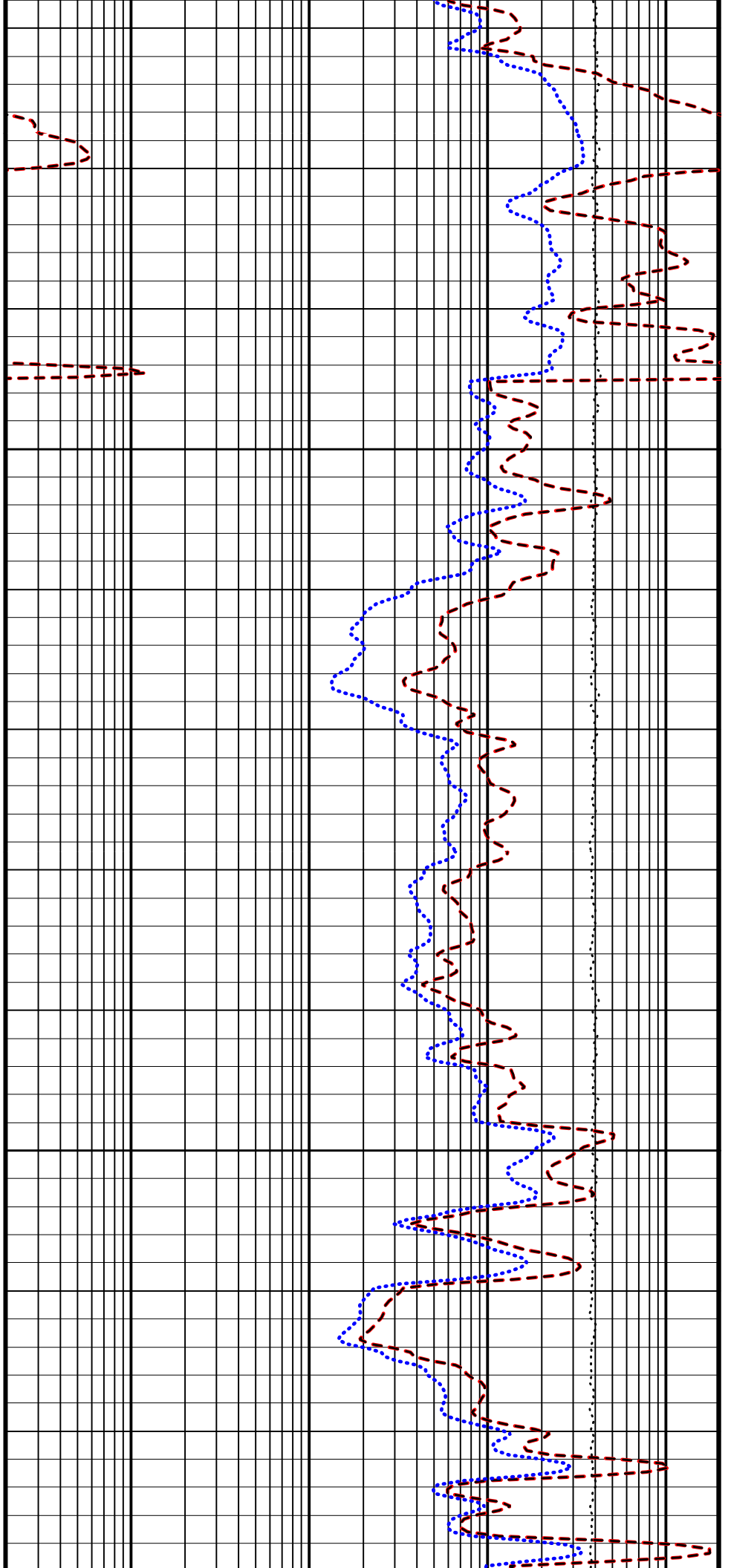
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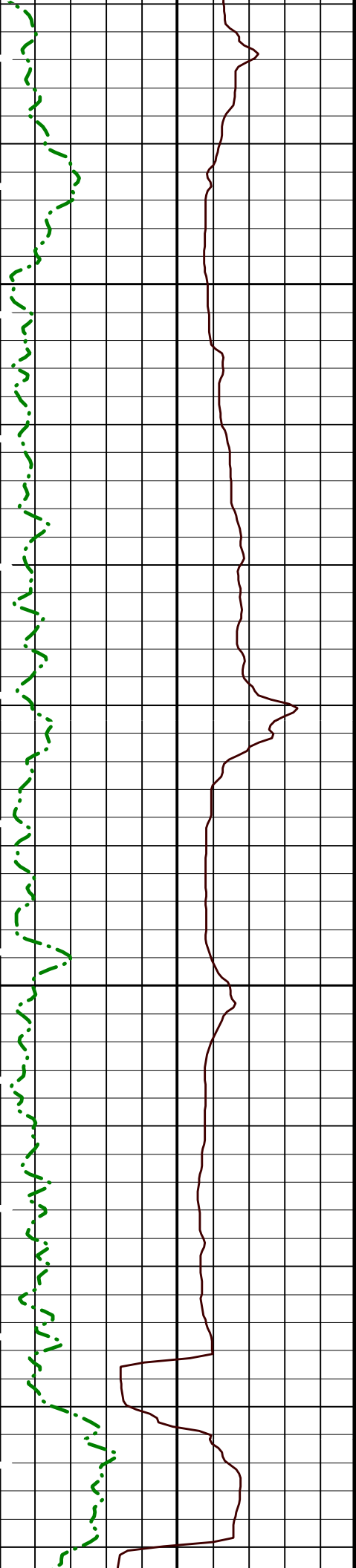




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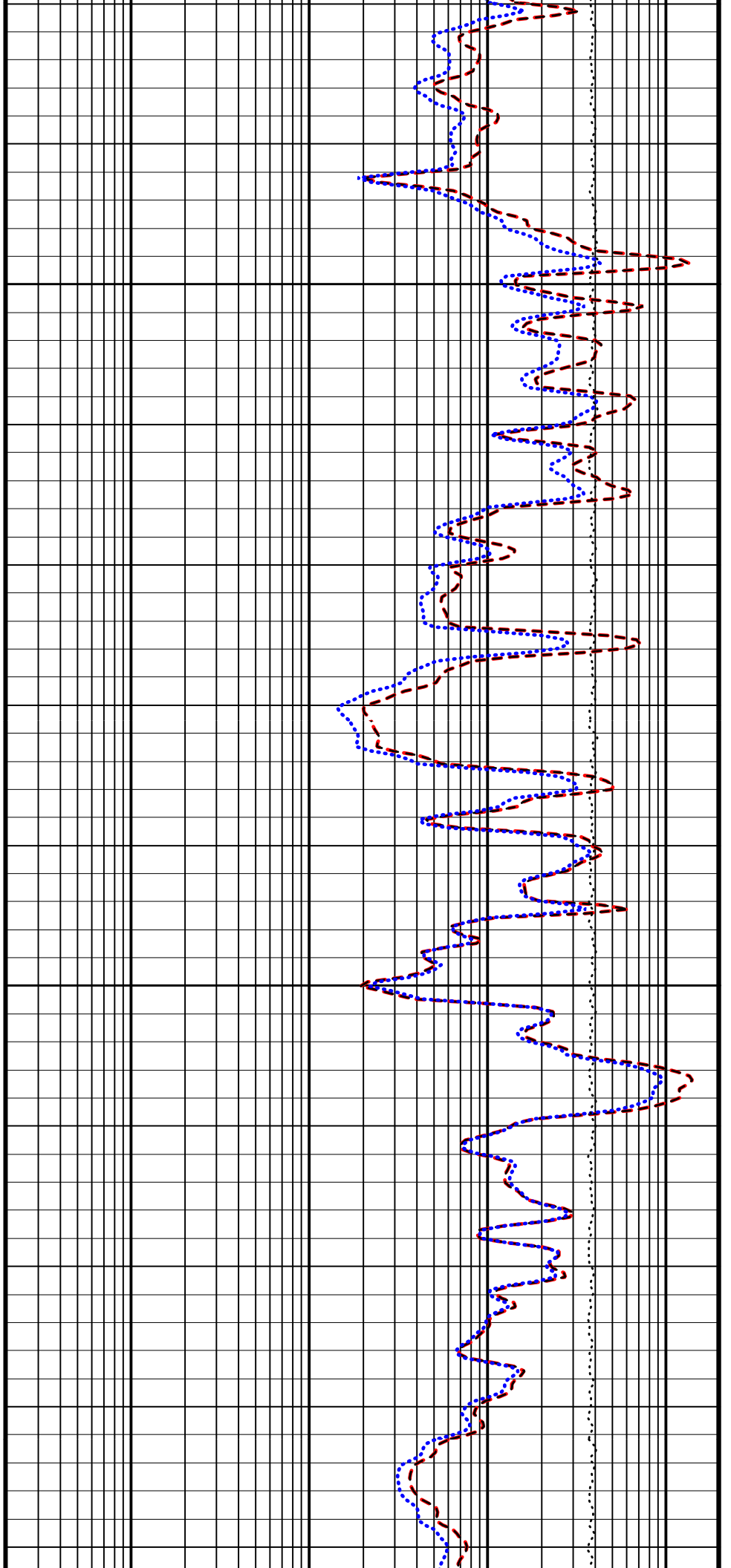
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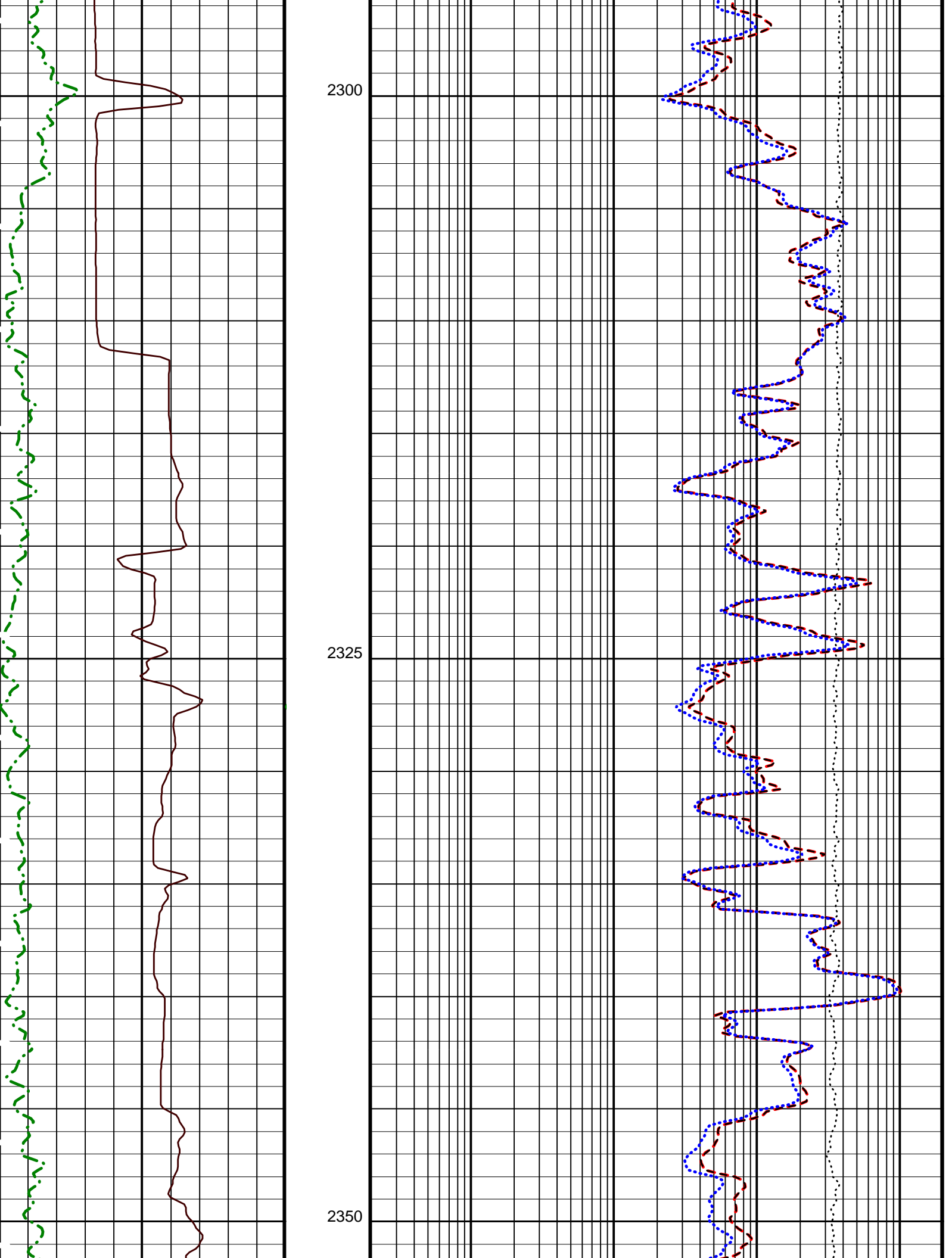


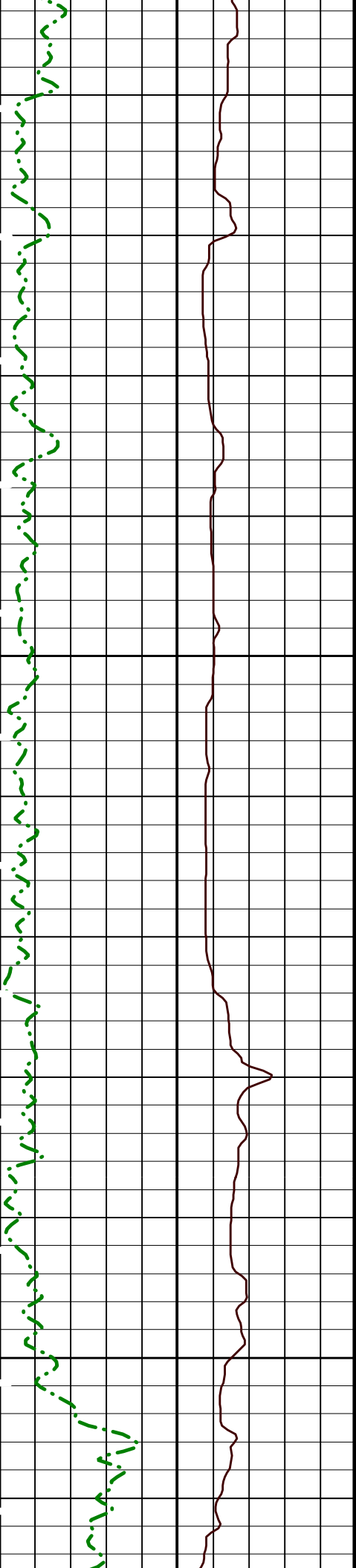


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2275

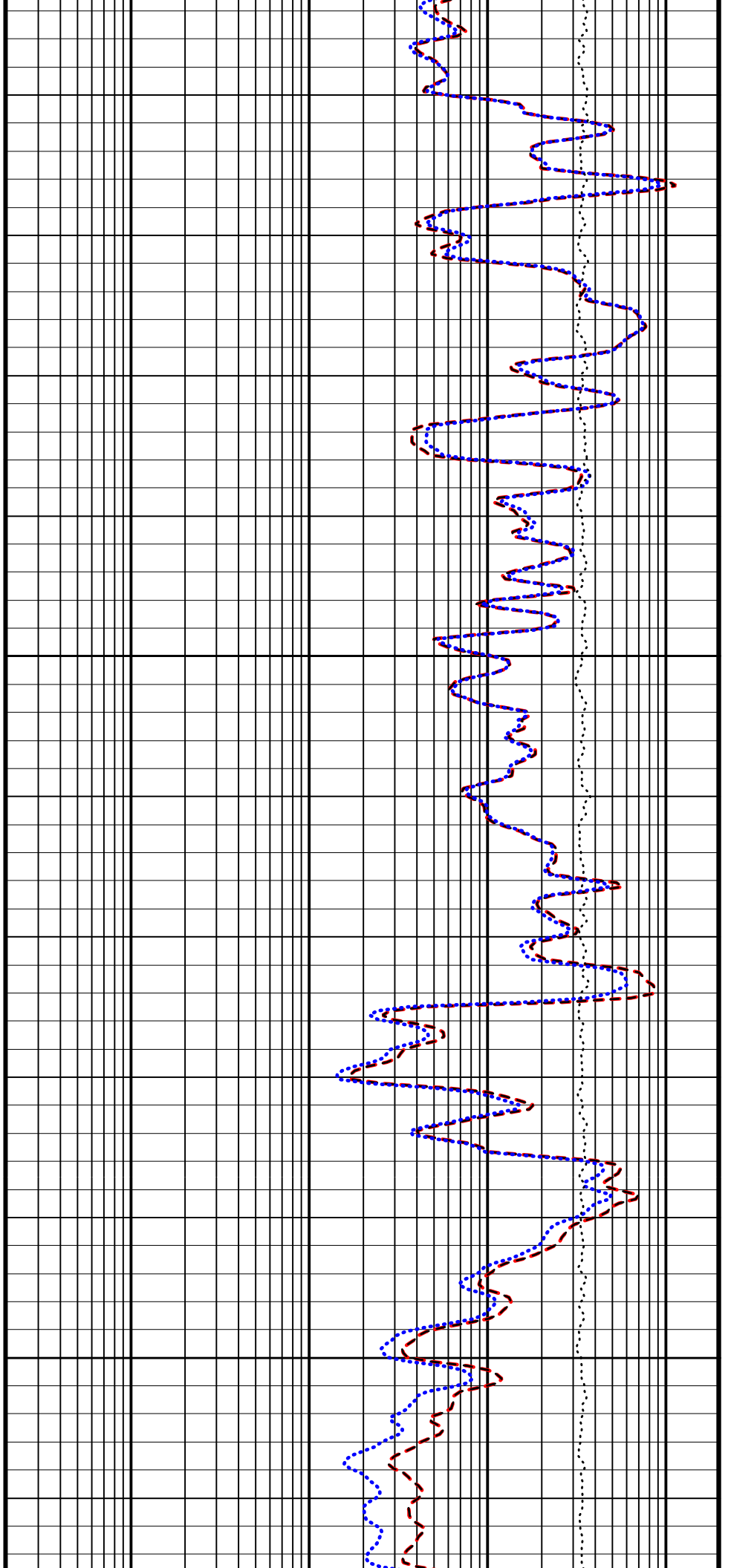


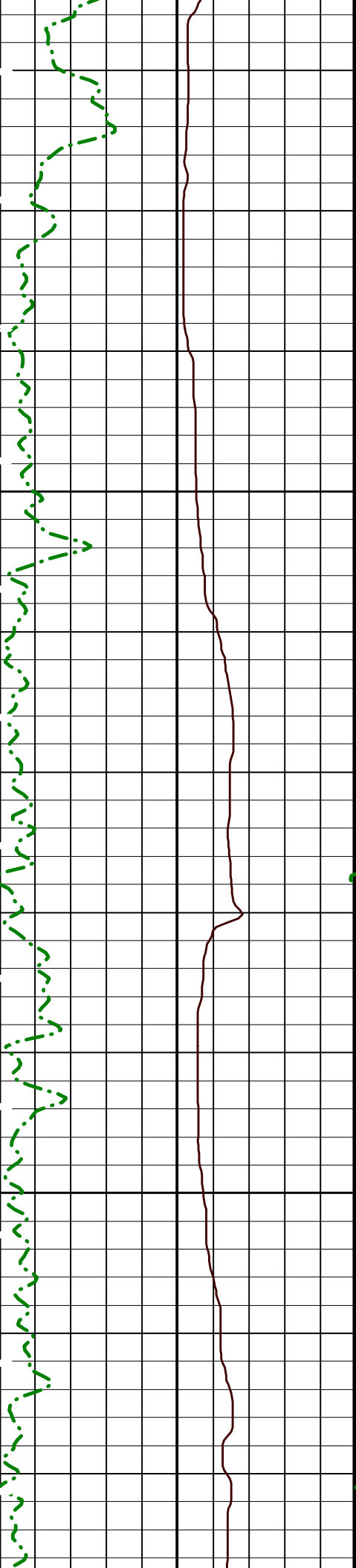




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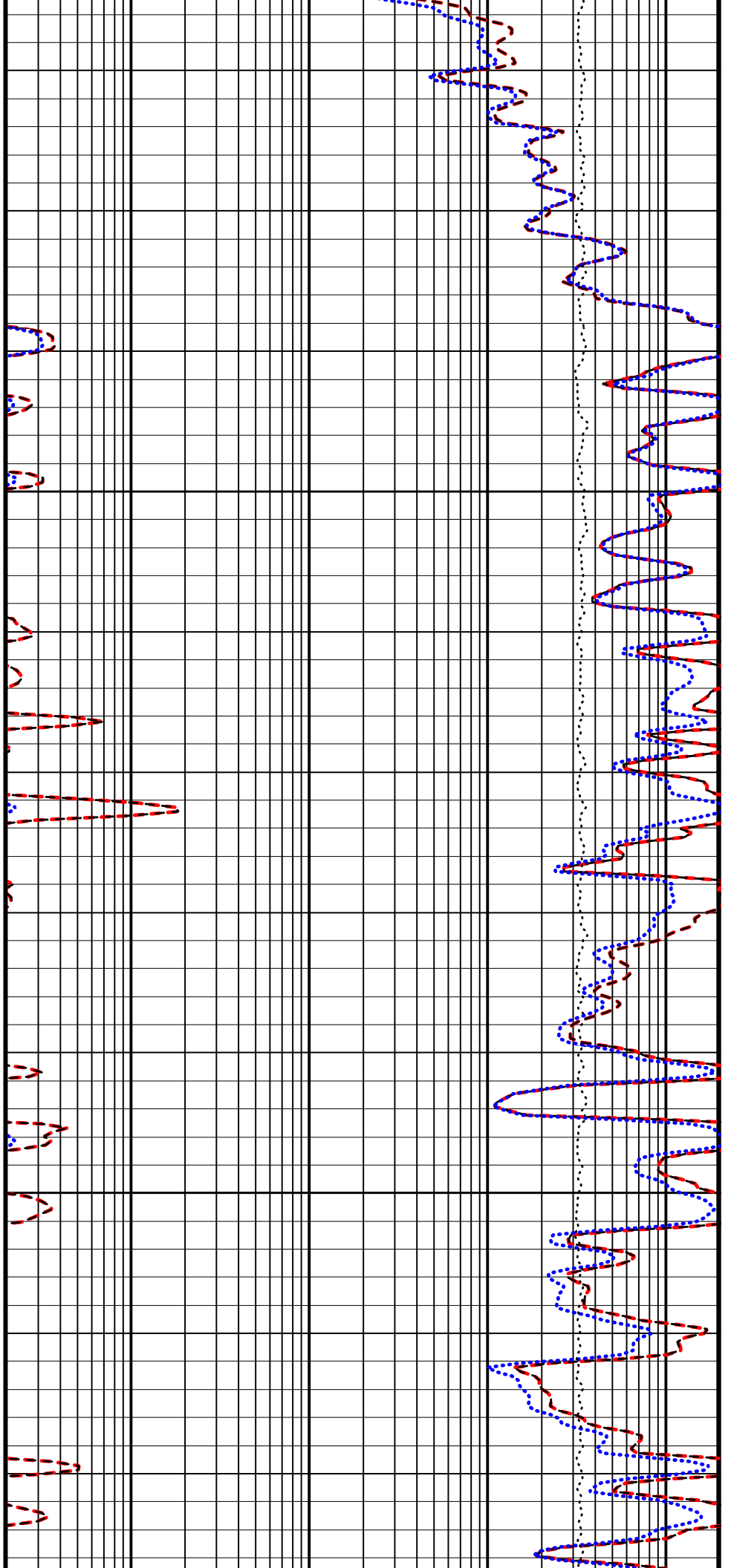
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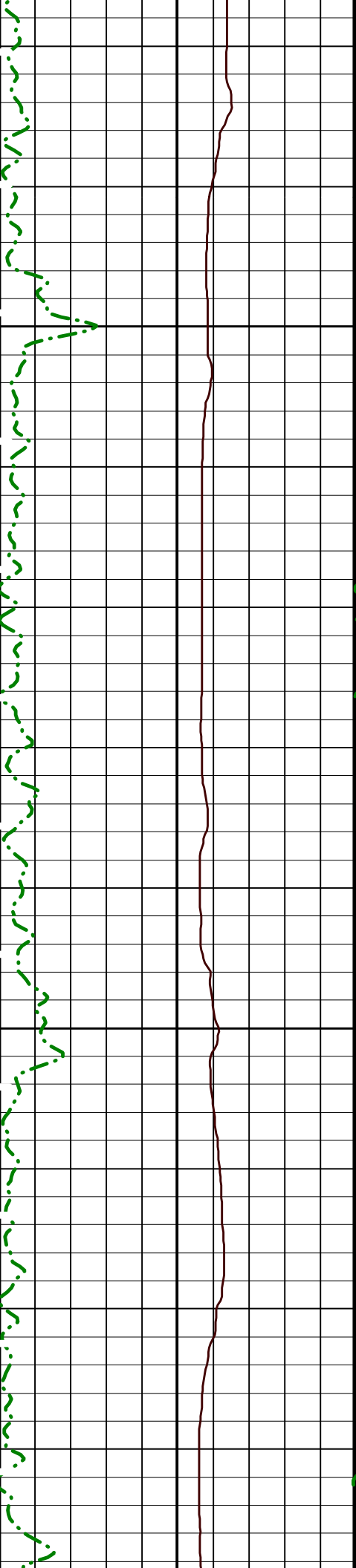




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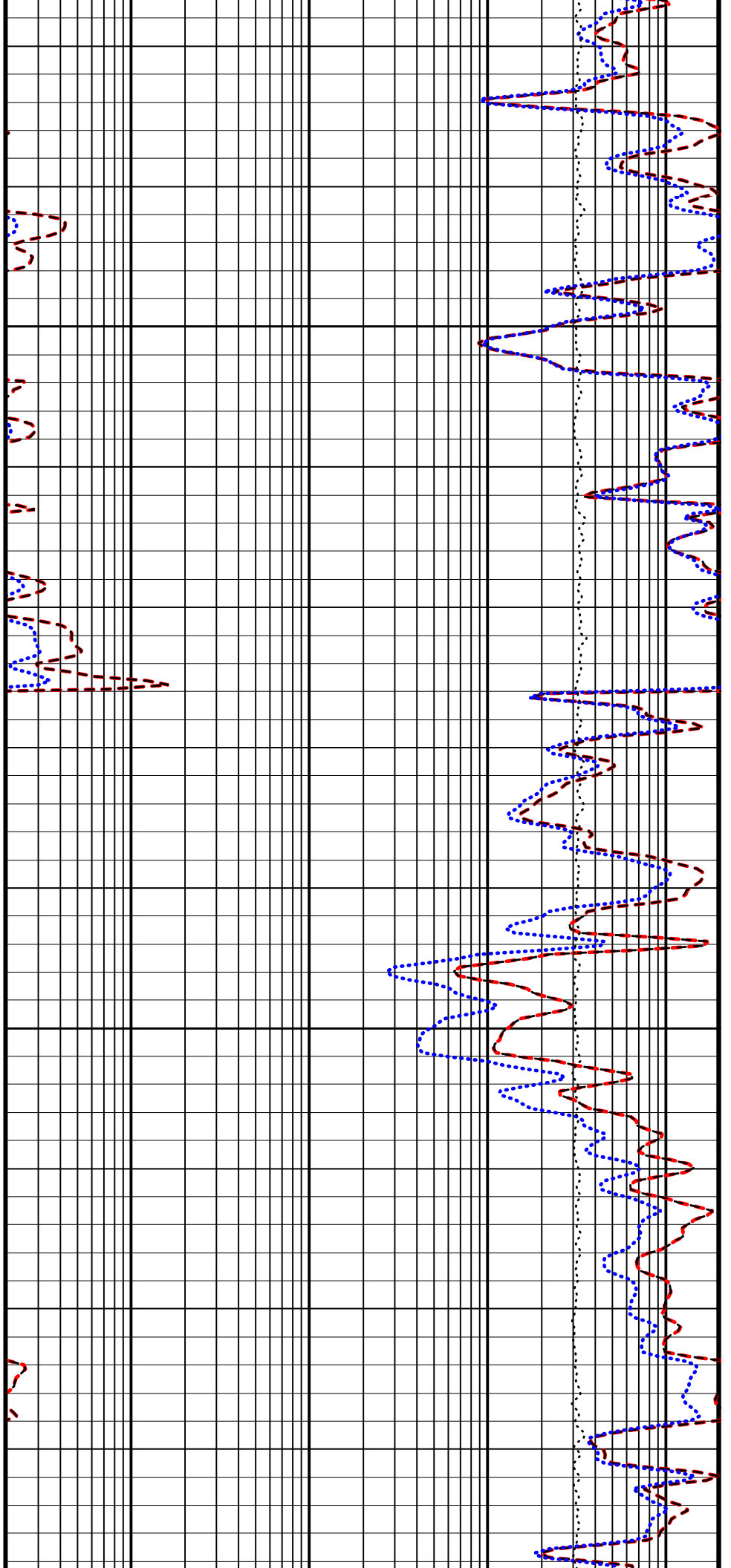
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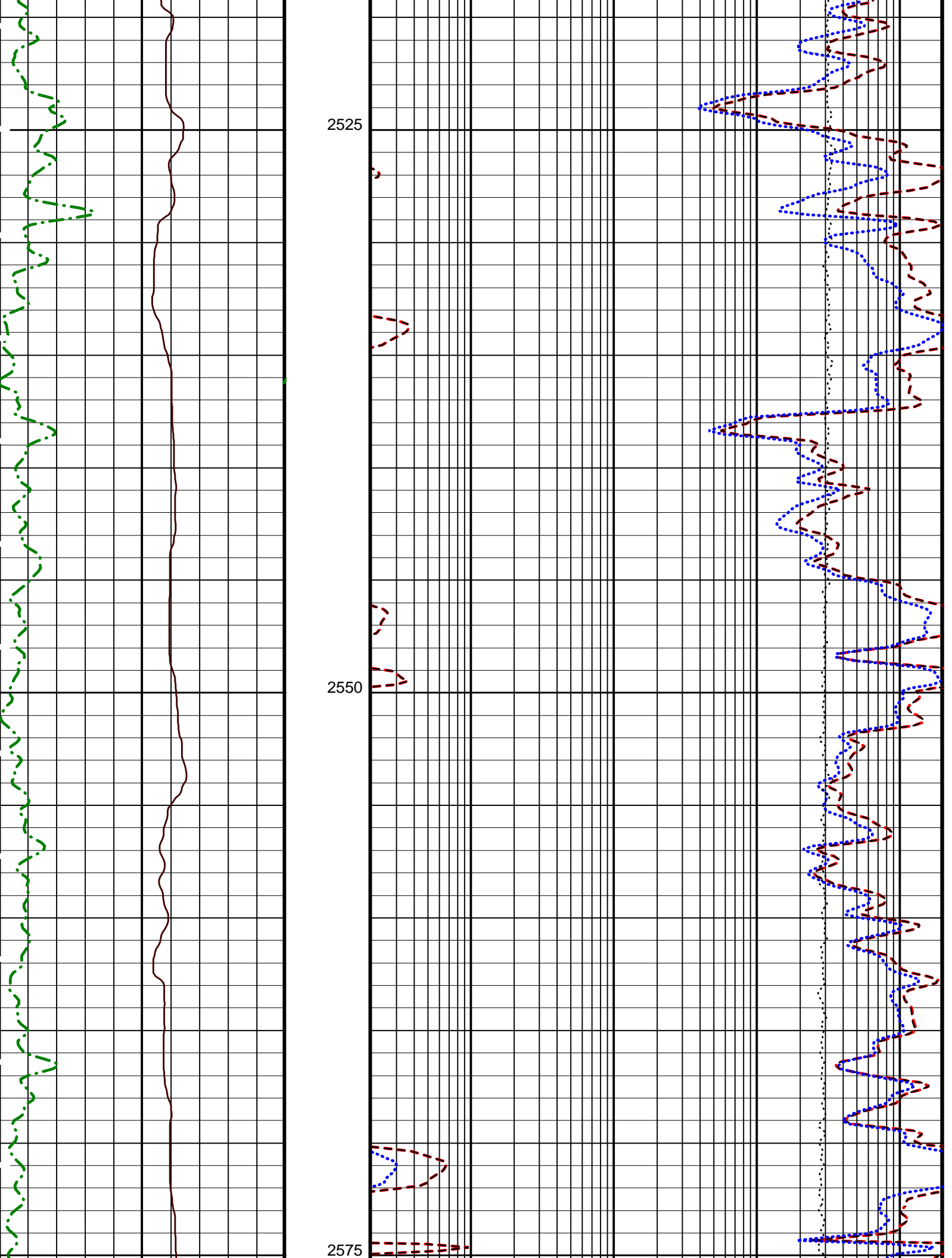


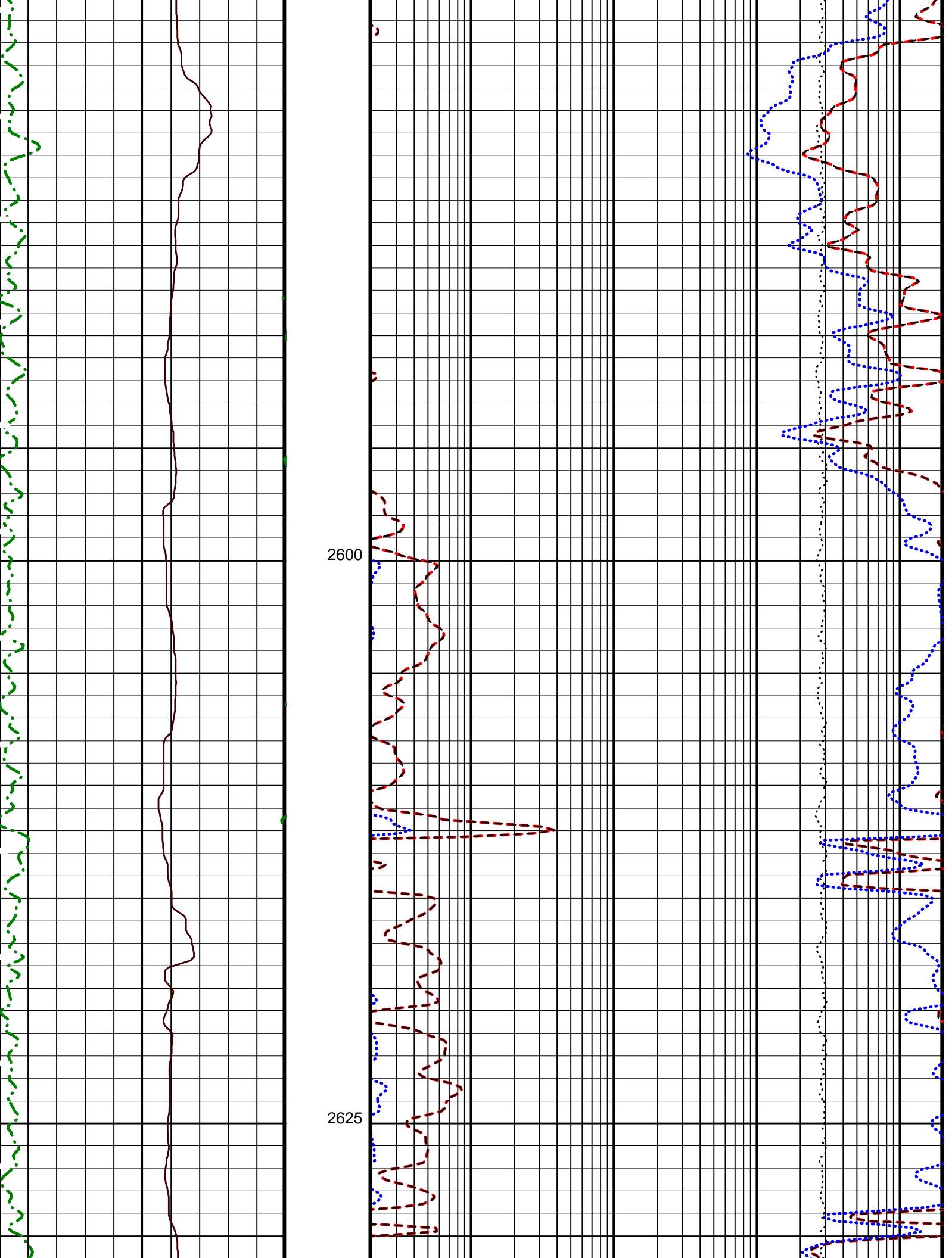


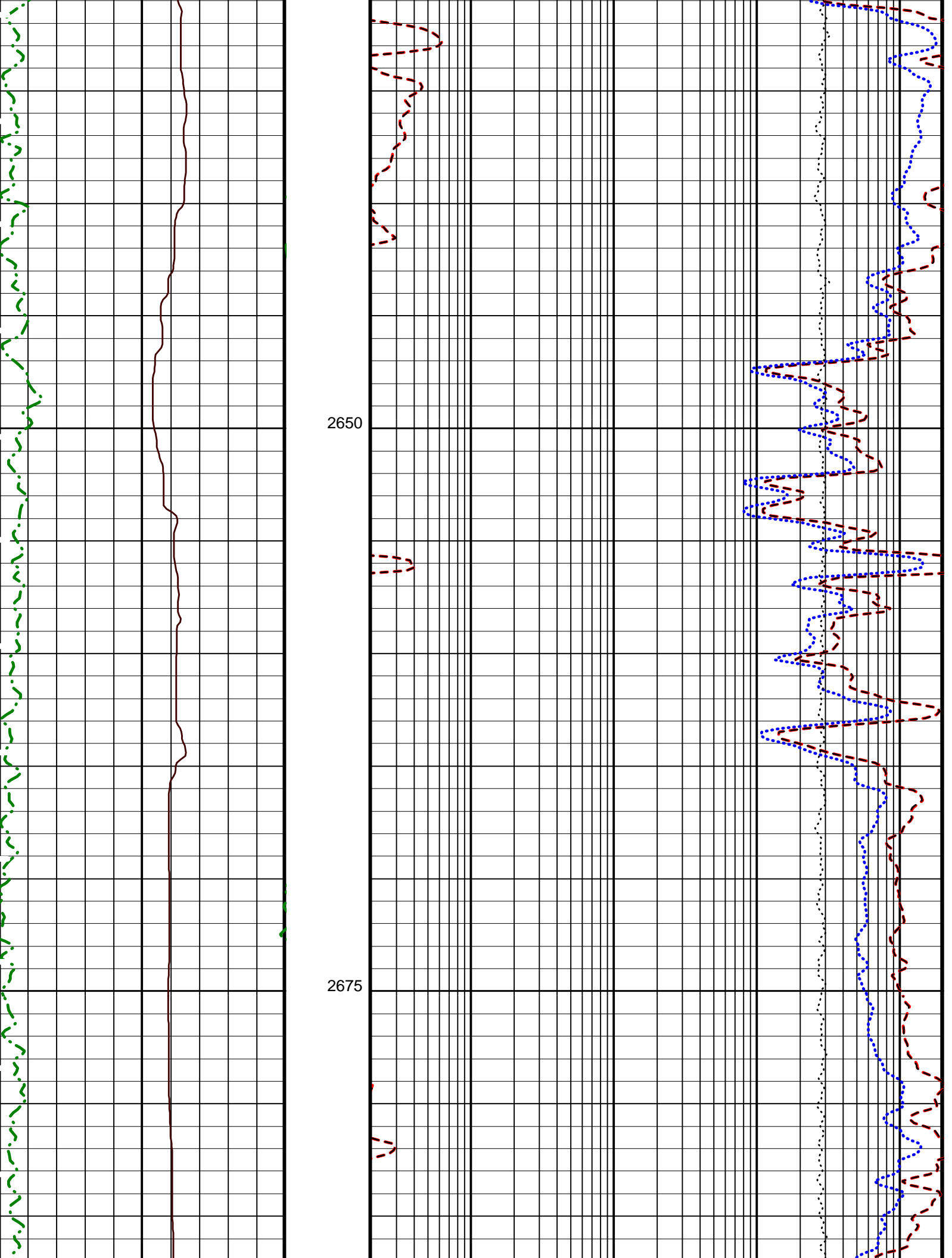
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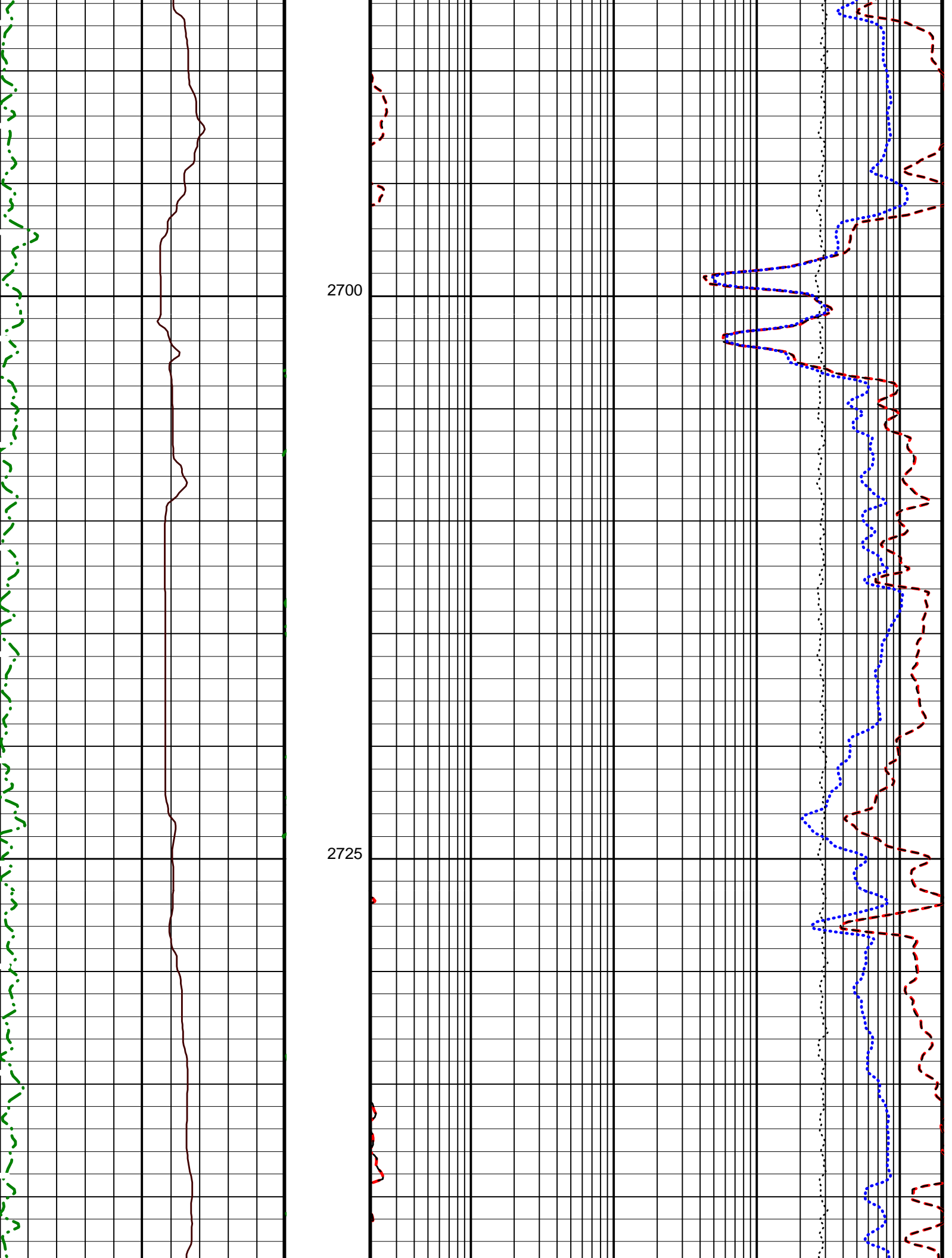
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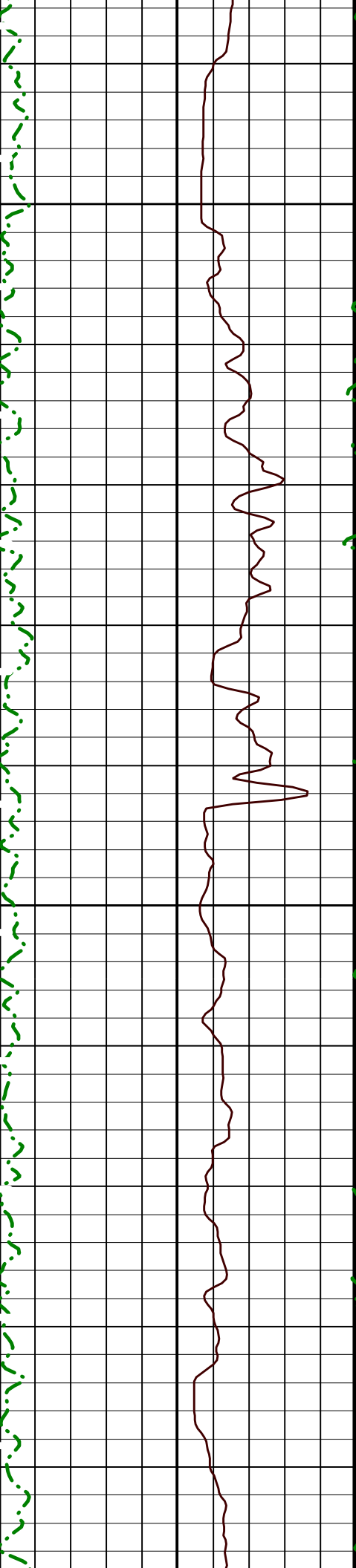






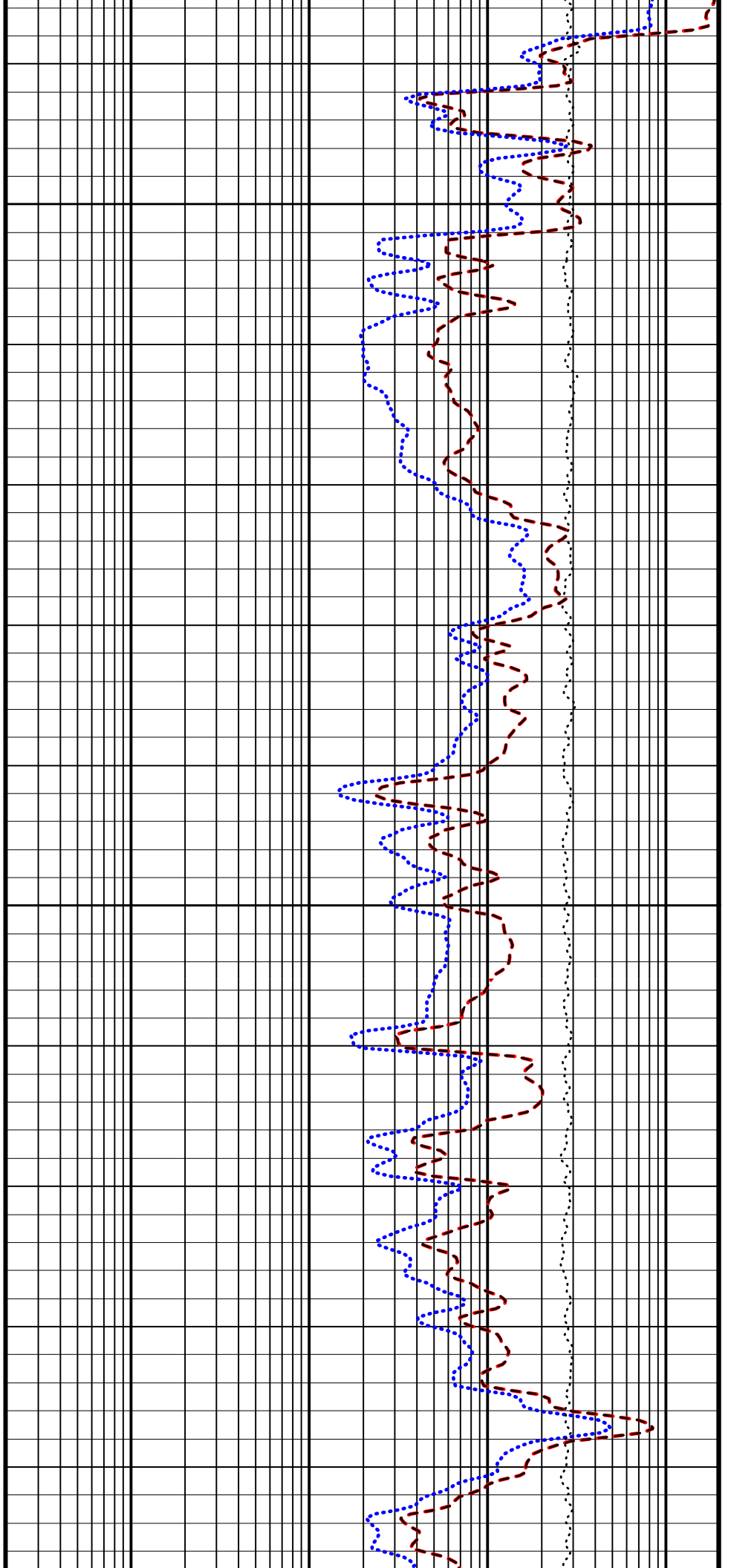


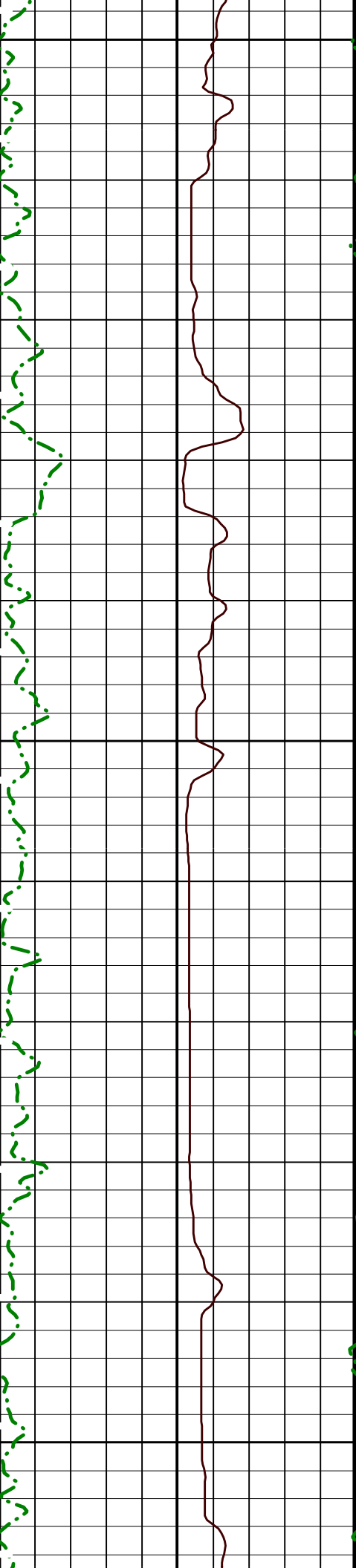




2750

2775

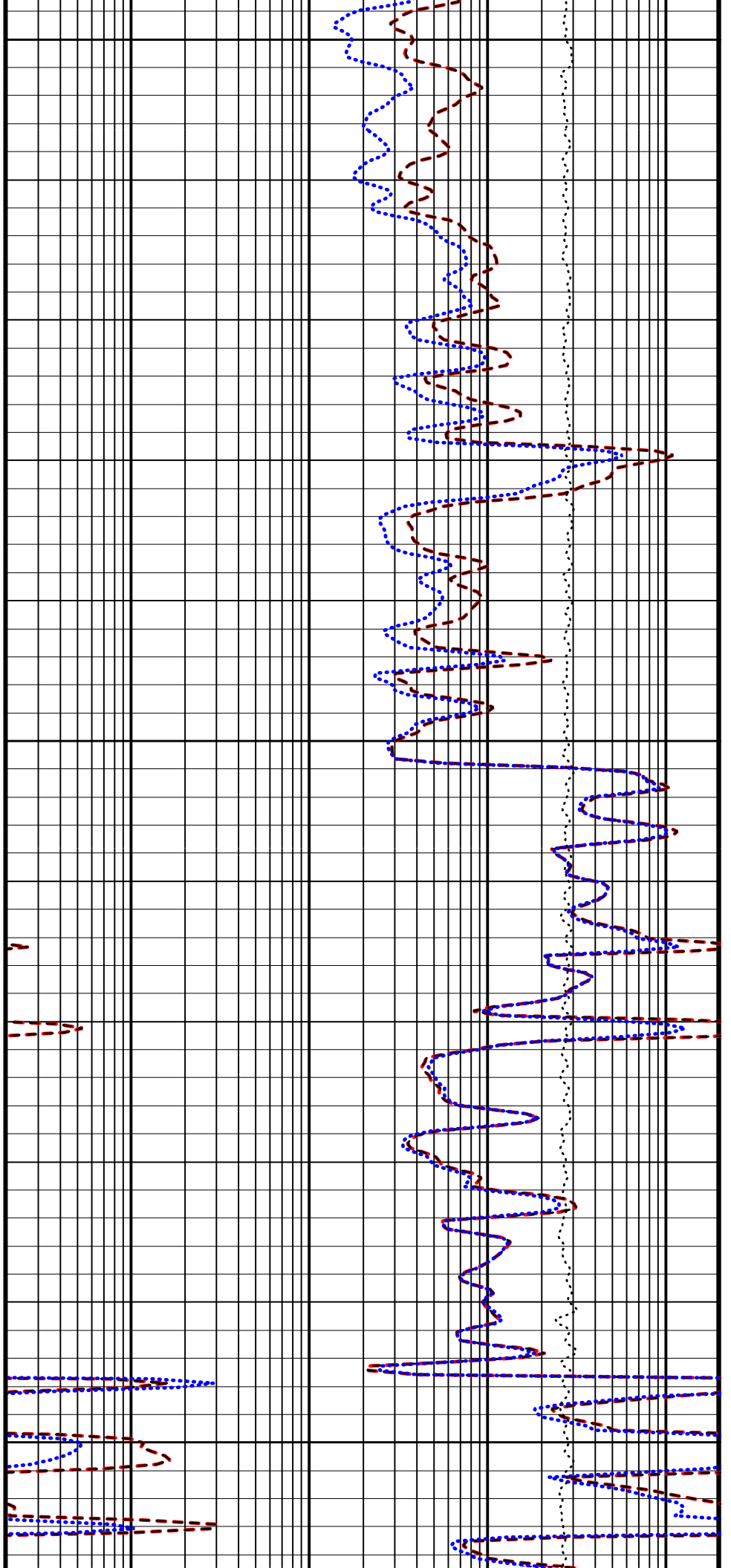


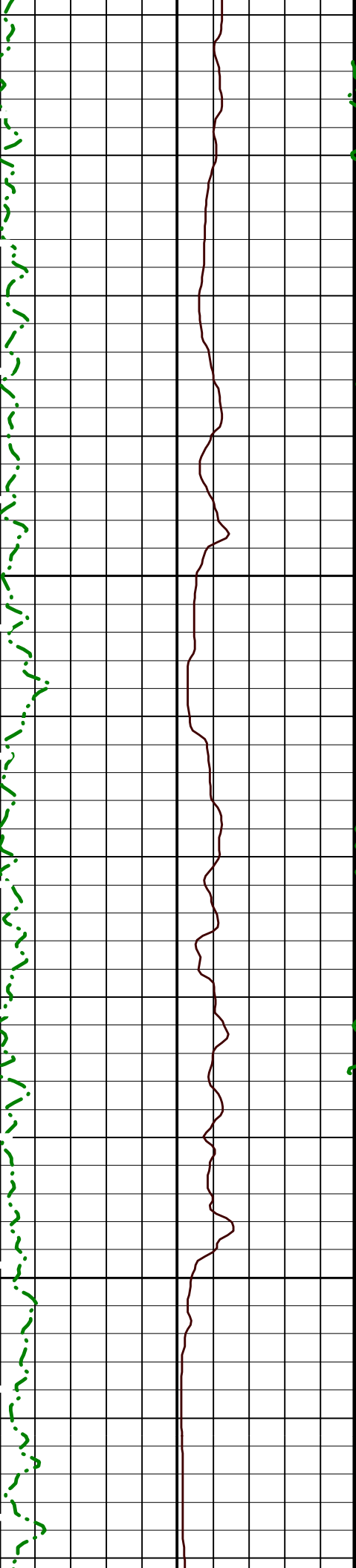


2800

2825

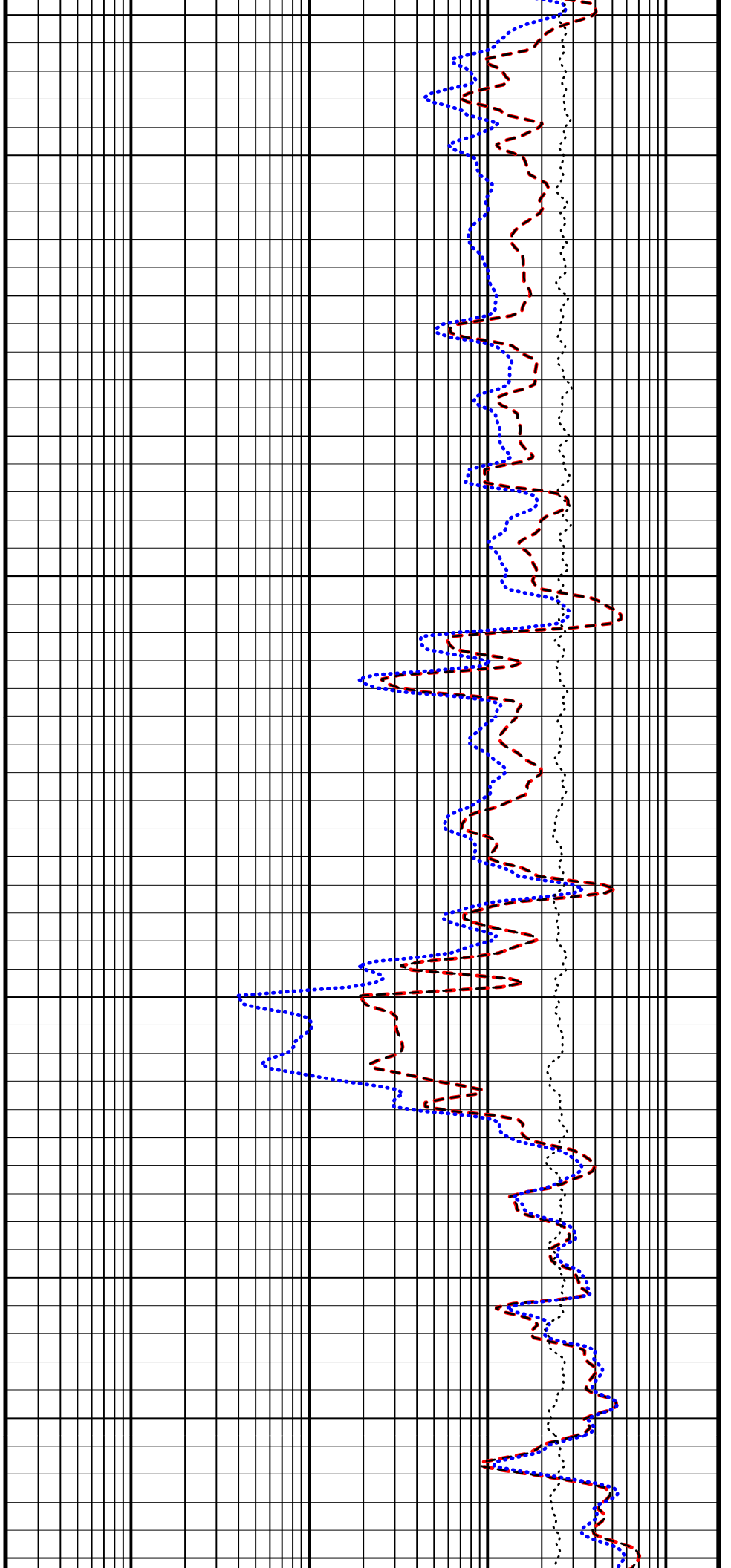
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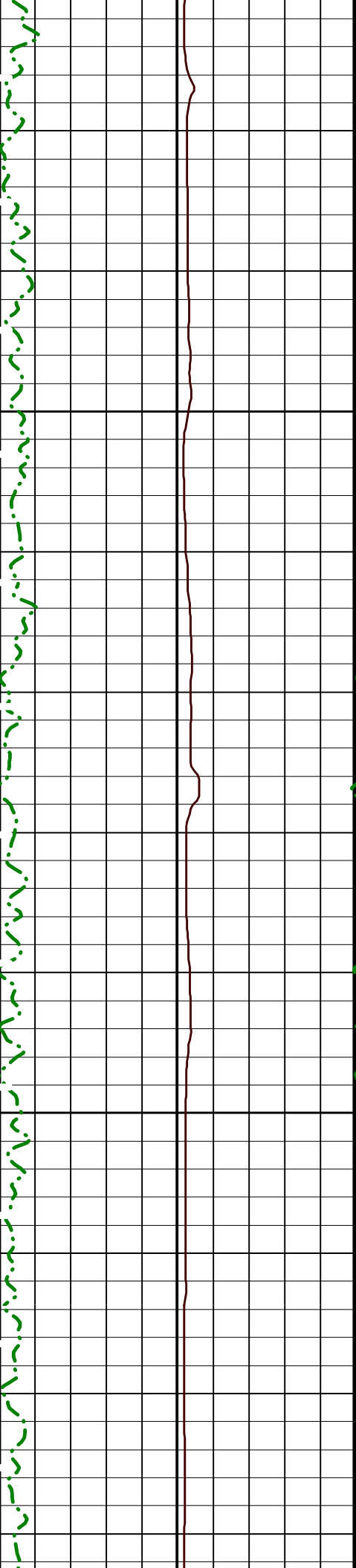




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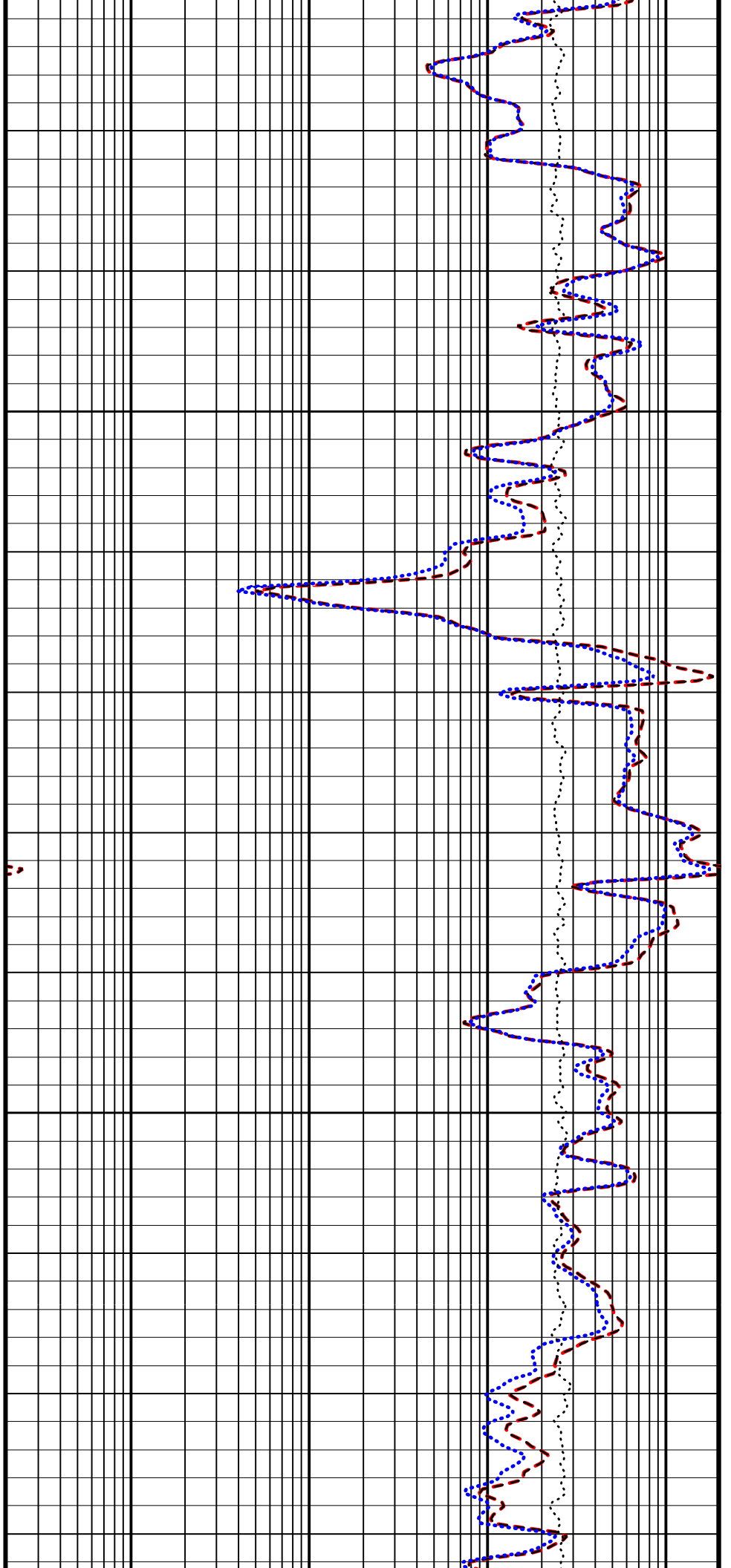
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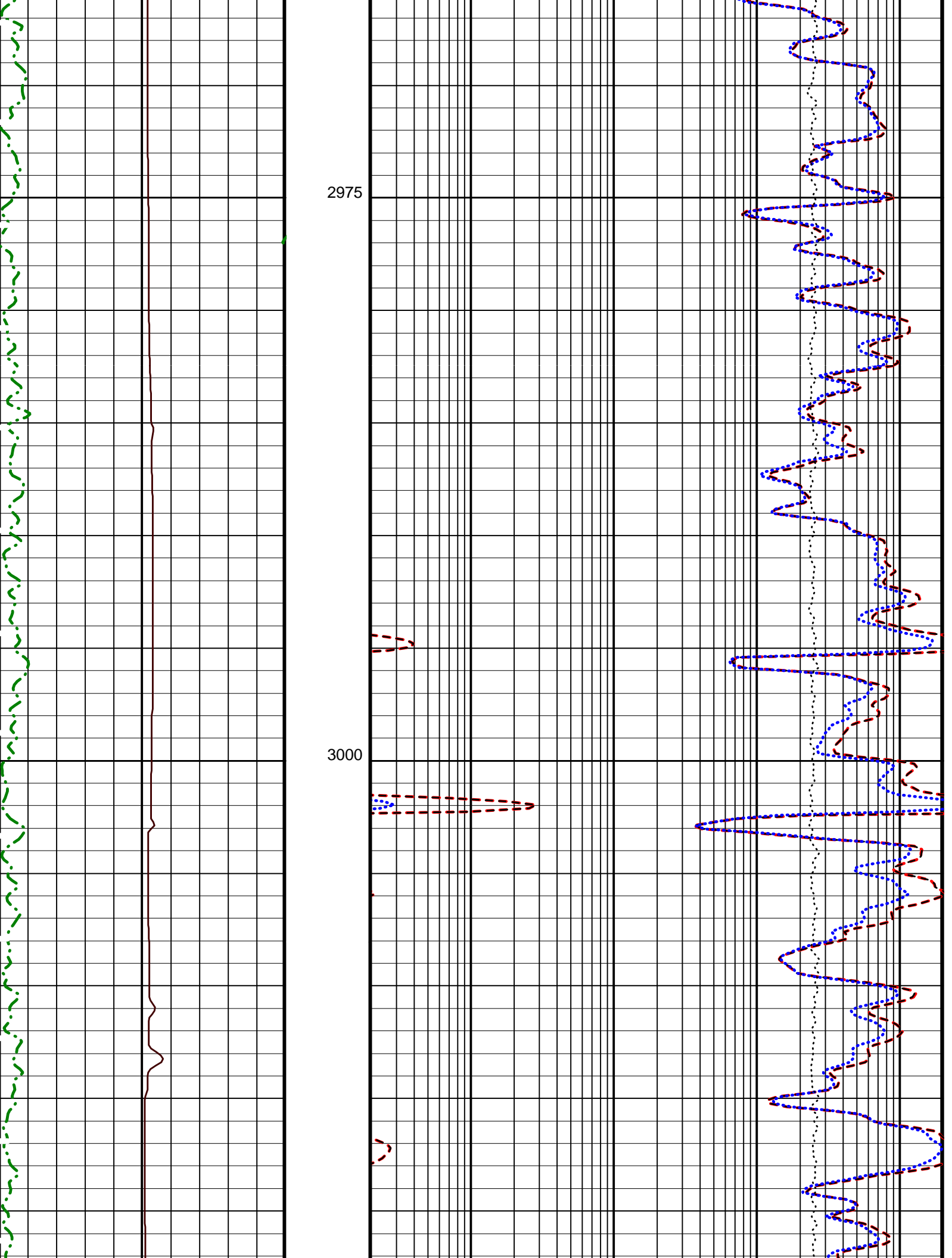


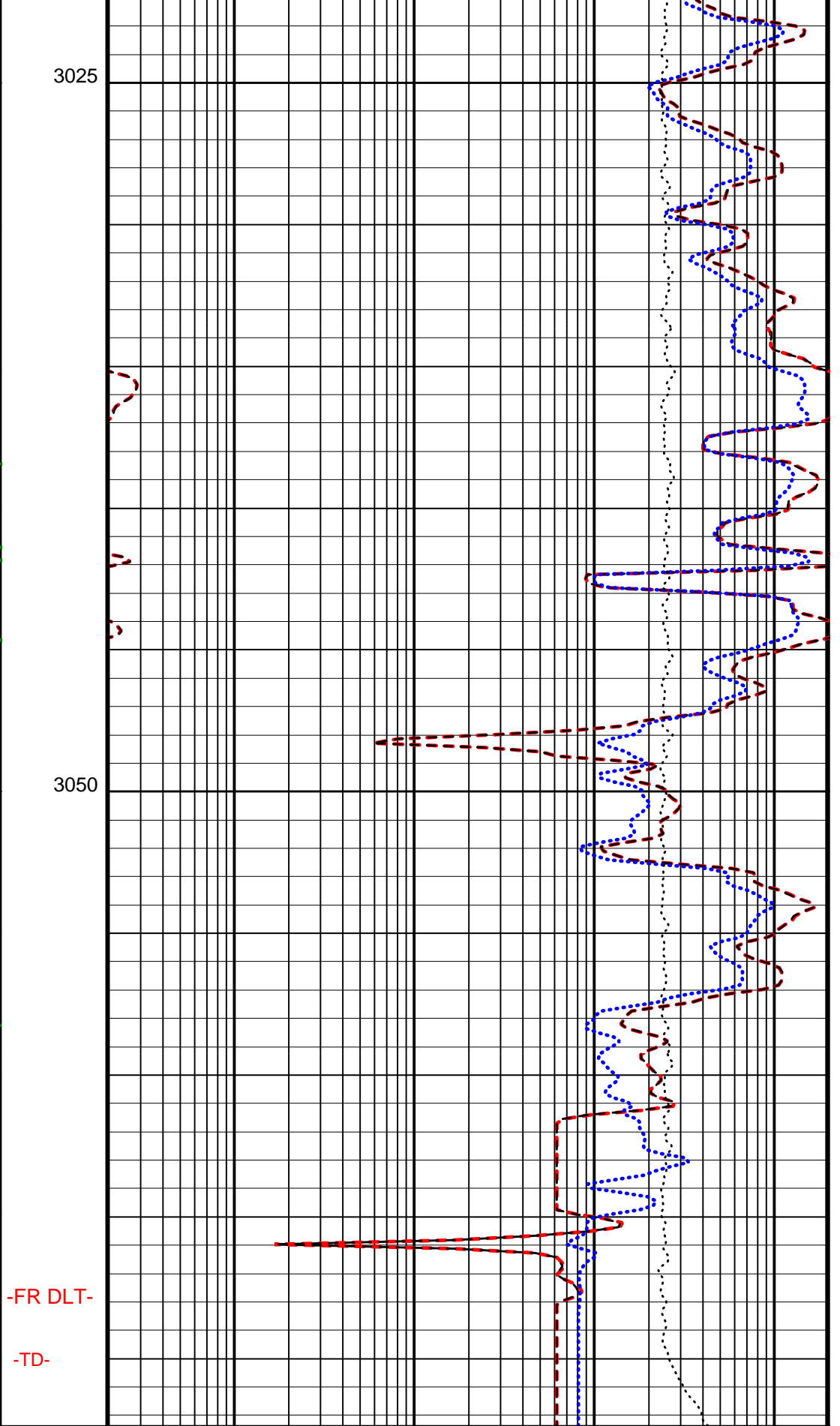


2925

2950







HLDS Caliper (LCAL)
(IN) 0 20

HNGS Spectroscopy Gamma Ray
(HSGR)
(GAPI) 0 15

-FR DLT-
-TD-

Laterolog Deep Resistivity (LLD)
(OHMM) 0.2 2000

Laterolog Groningen Resistivity (LLG)
(OHMM) 0.2 2000

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value	
DLT-E: DUAL LATEROLOG - E			
DPRF	DEEP REFERENCE POWER	550	NW
KFAC	K FACTOR	SOND	
LLOO	LATEROLOG LOOP	BOTH	
PLRM	POWER LOOP REFERENCE MODE	DEEP	
SPRF	SHALLOW REFERENCE POWER	550	NW
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	
HALF	HNGS Alpha Filter Length	60	IN
HCRB	HNGS Apply Borehole Potassium Correction	NONE	
HMWM	Mud Weighting Material	NATU	
HNPE	HNGS Processing Enable	YES	
S1BI	HNGS Detector 1 Calibration Bismuth Count Rate	1.3	CPS
S2BI	HNGS Detector 2 Calibration Bismuth Count Rate	1.3	CPS
SGRC	HNGS Standard Gamma-Ray Correction Flag	YES	
TPOS	Tool Position	ECCE	
VBA1	HNGS Detector 1 Variable Barite Factor Running Average	0	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	0	
System and Miscellaneous			
BS	Bit Size	9.875	IN
DFD	Drilling Fluid Density	1.20	G/C3

Format: DLT_DST Vertical Scale: 1:200 Graphics File Created: 24-Feb-2005 04:05

OP System Version: 12C0-301
MCM

DLT-E	12C0-301	GPIT-A/B	12C0-301
DTA-A	12C0-301	HLDS	12C0-301
NPLC-B	12C0-301	APS-C	12C0-301
HNGS-BA	12C0-301	DTC-H	12C0-301
BSP	12C0-301		

Output DLIS Files

DEFAULT	DLL_LDL_APS_NGS_020LUP	FN:22	PRODUCER	24-Feb-2005 04:05
REDUCED	DLL_LDL_APS_NGS_020LUP	FN:23	PRODUCER	24-Feb-2005 04:05



REPEAT SECTION

Output DLIS Files

DEFAULT	DLL_LDL_APS_NGS_021LUP	FN:24	PRODUCER	24-Feb-2005 09:03	2939.8 M	2722.6 M
REDUCED	DLL_LDL_APS_NGS_021LUP	FN:25	PRODUCER	24-Feb-2005 09:03	2939.8 M	2722.7 M

OP System Version: 12C0-301

MCM

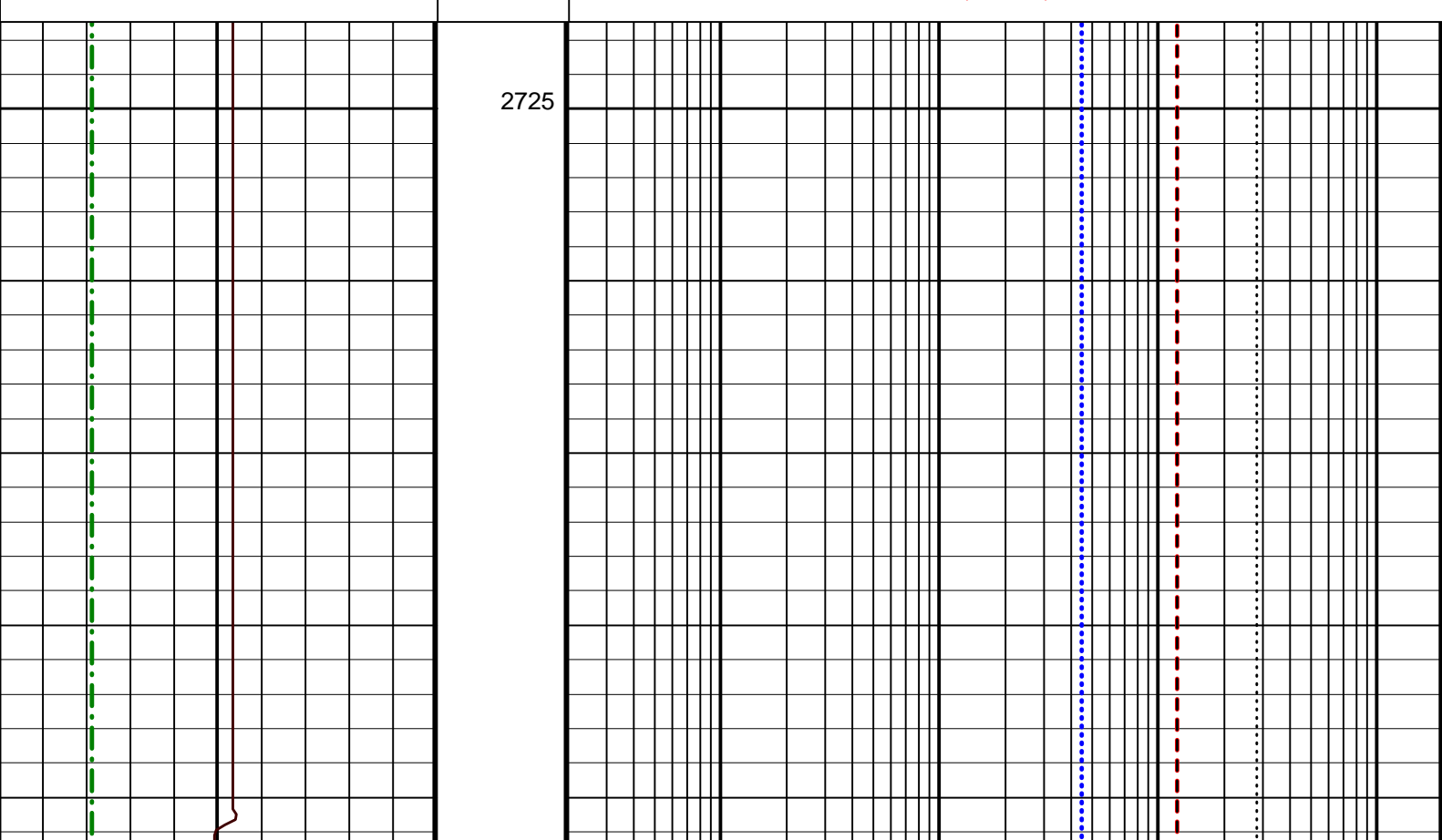
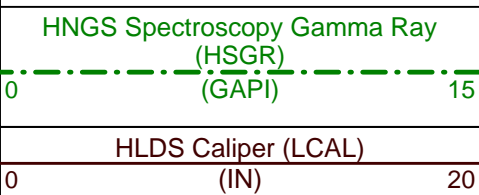
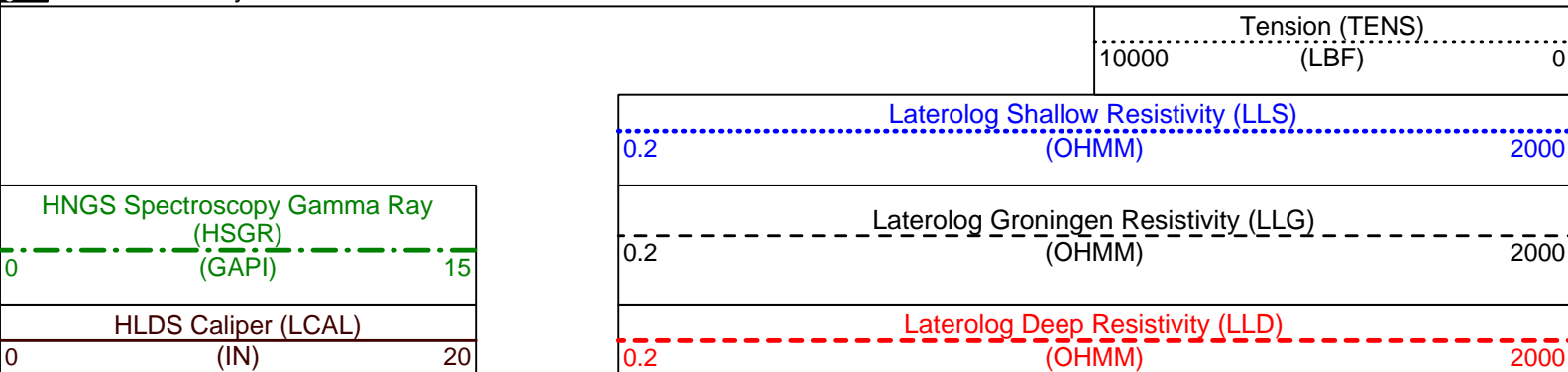
DLT-E	12C0-301	GPIT-A/B	12C0-301
DTA-A	12C0-301	HLDS	12C0-301
NPLC-B	12C0-301	APS-C	12C0-301
HNGS-BA	12C0-301	DTC-H	12C0-301
BSP	12C0-301		

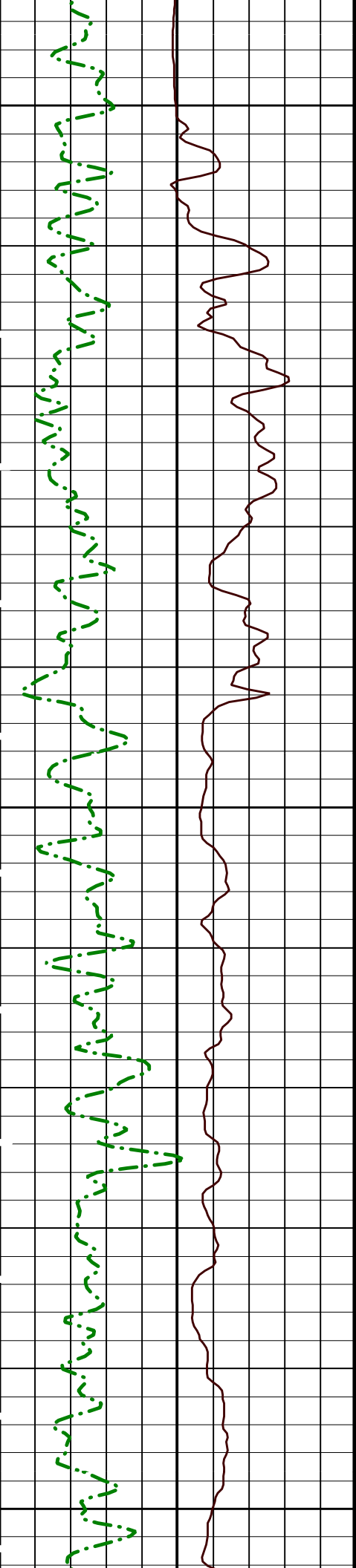
Changed Parameter Summary

DLIS Name	New Value	Previous Value	Depth & Time
LLOO	OFF BOTH	BOTH OFF	2938.3 09:04:29 2936.9 09:04:46

PIP SUMMARY

Time Mark Every 60 S

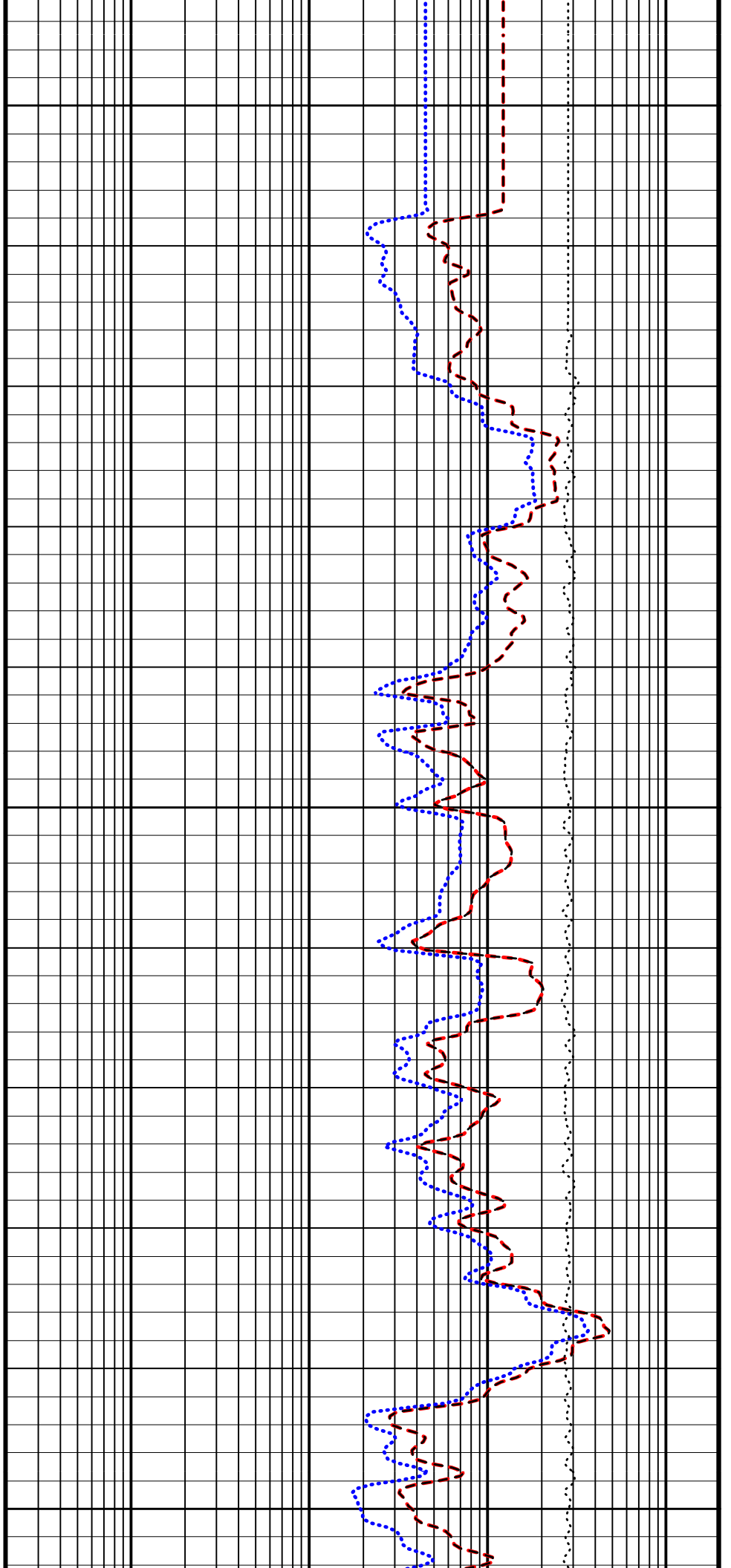


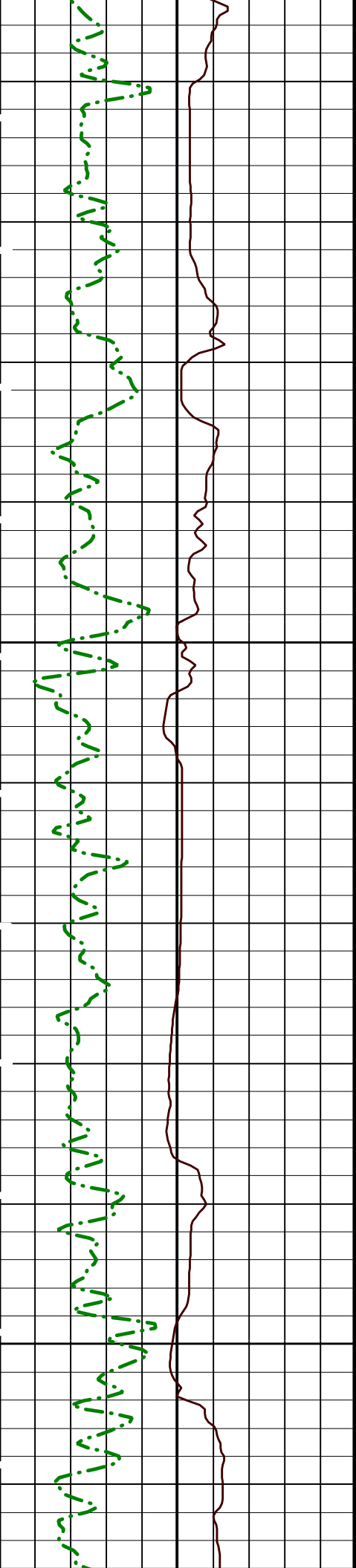


2750

2775

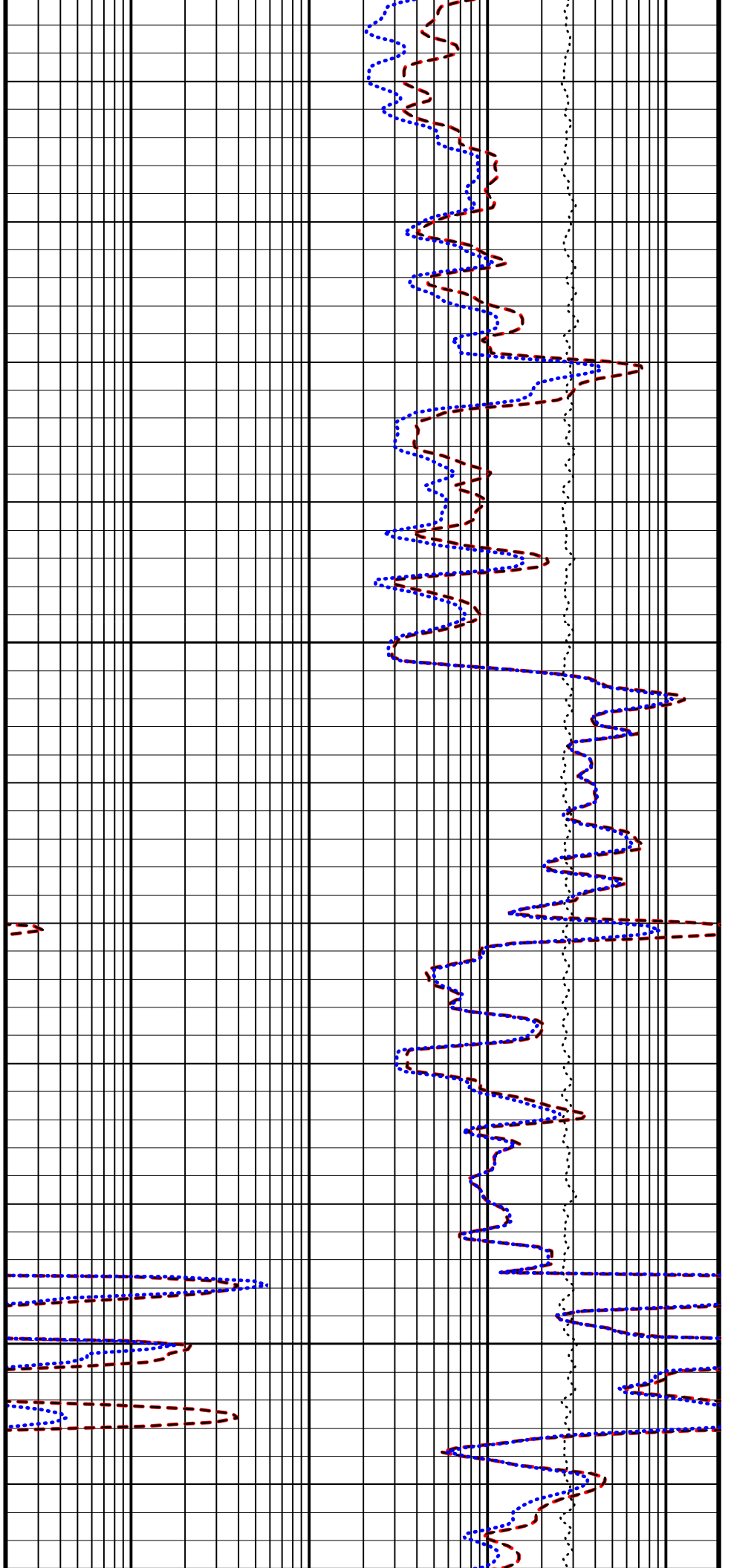
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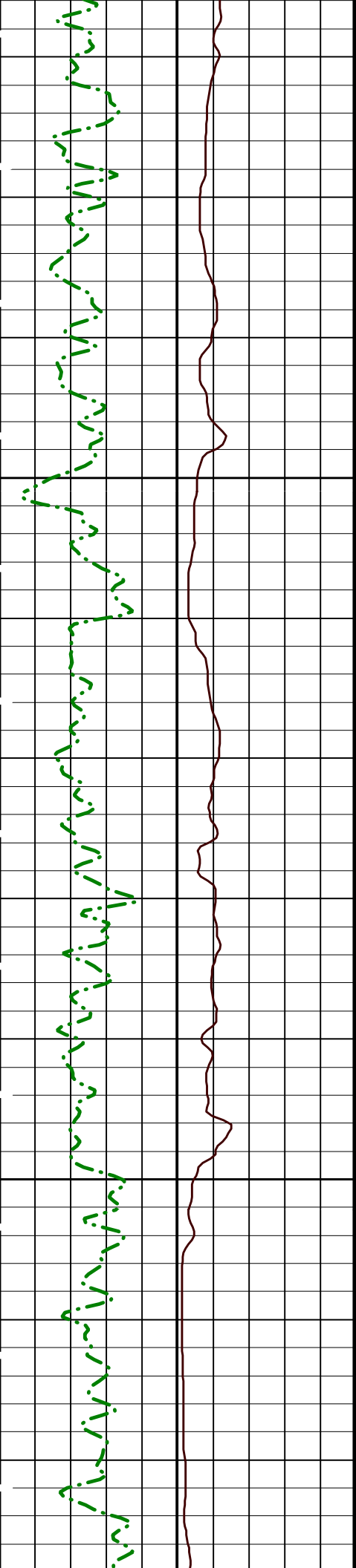




2825

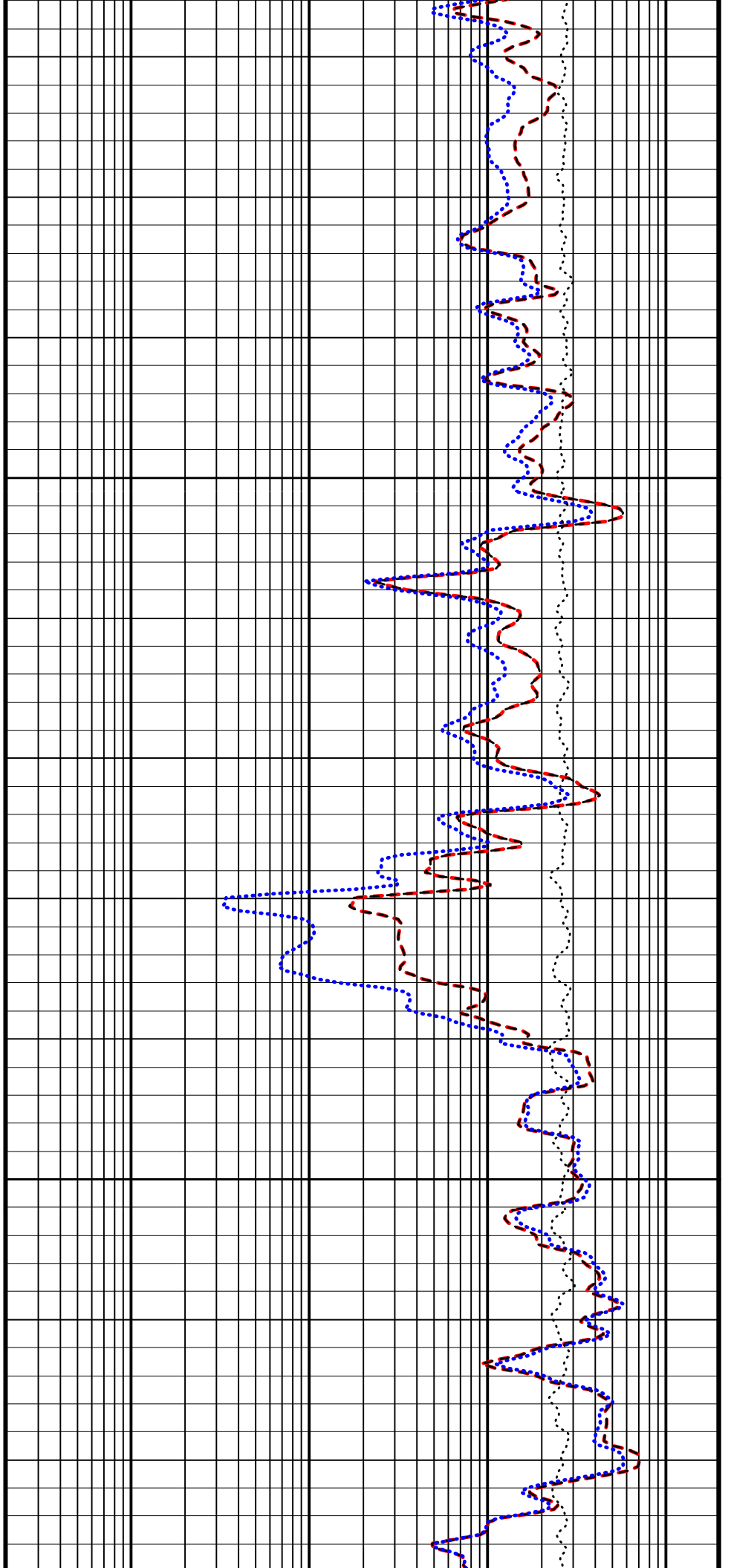
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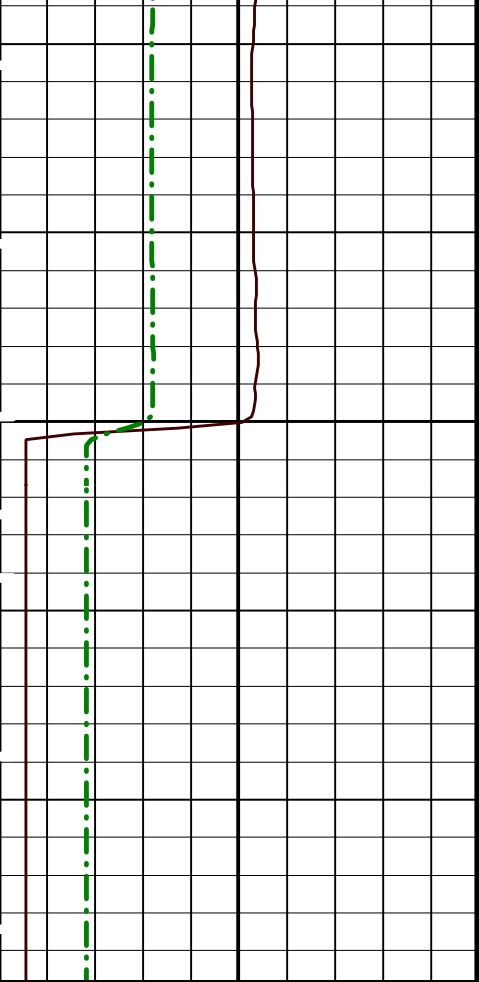




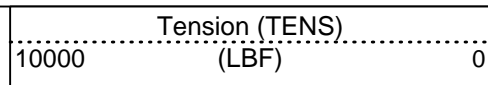
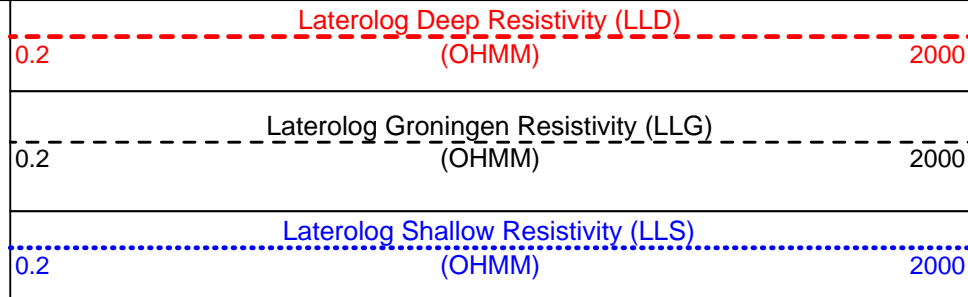
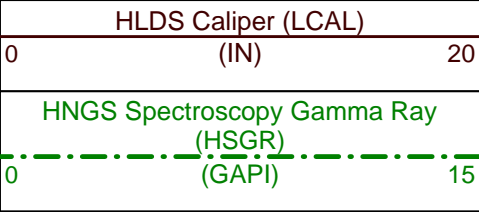
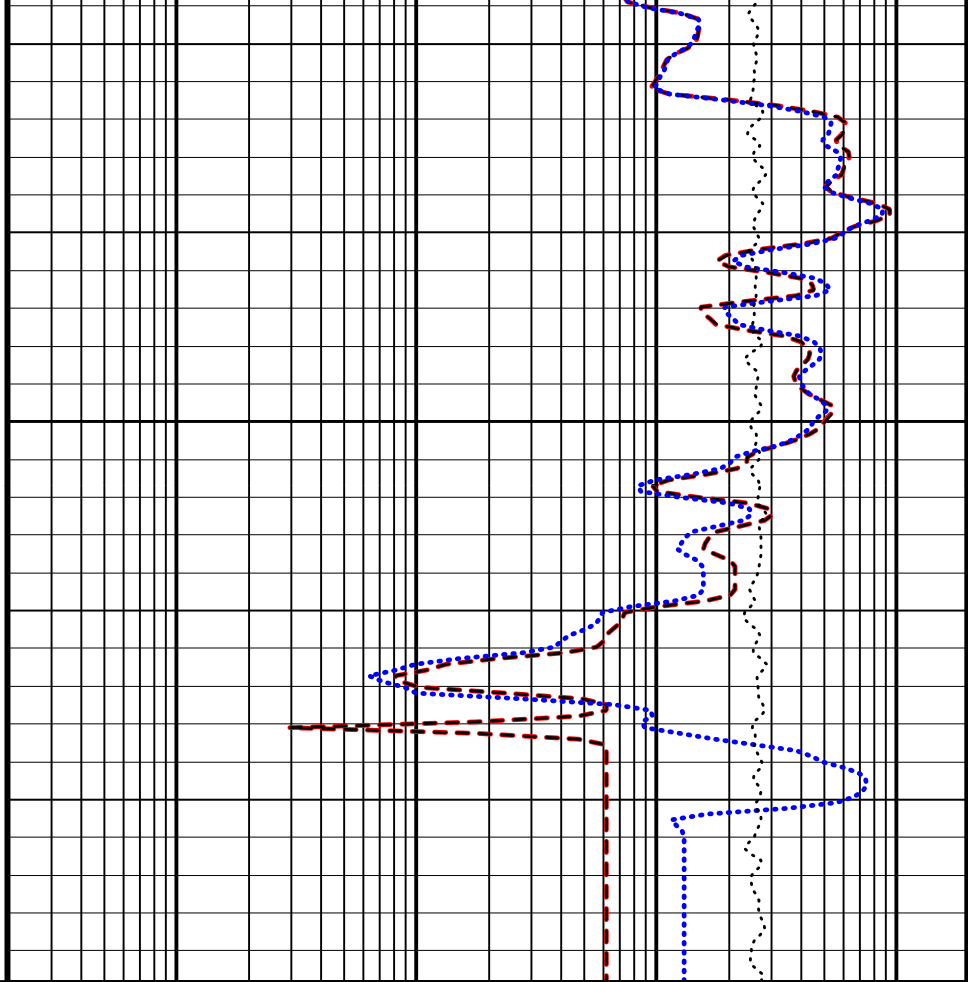
2875

2900





2925



PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
DLT-E: DUAL LATEROLOG - E		
DPRF	DEEP REFERENCE POWER	550 NW
KFAC	K FACTOR	SOND
LLOO	LATEROLOG LOOP	BOTH
PLRM	POWER LOOP REFERENCE MODE	DEEP
SPRF	SHALLOW REFERENCE POWER	550 NW
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	-0.0037973	
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	1.502	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	1.02099	
System and Miscellaneous			
BS	Bit Size	9.875	IN
DFD	Drilling Fluid Density	1.20	G/C3

Format: DLT_DST Vertical Scale: 1:200 Graphics File Created: 24-Feb-2005 09:03

OP System Version: 12C0-301 MCM

DLT-E	12C0-301	GPIT-A/B	12C0-301
DTA-A	12C0-301	HLDS	12C0-301
NPLC-B	12C0-301	APS-C	12C0-301
HNGS-BA	12C0-301	DTC-H	12C0-301
BSP	12C0-301		

Output DLIS Files

DEFAULT	DLL_LDL_APS_NGS_021LUP	FN:24	PRODUCER	24-Feb-2005 09:03
REDUCED	DLL_LDL_APS_NGS_021LUP	FN:25	PRODUCER	24-Feb-2005 09:03



CALIBRATIONS

MAXIS Field Log

Calibration and Check Summary

Measurement	Nominal	Master	Before	After	Change	Limit	Units
DUAL LATEROLOG - E Wellsite Calibration - DLT ELECTRONICS CALIBRATION Laterolog Measurement							
Before: 24-Feb-2005 3:10							
MEASURED LLD	31.62	N/A	31.98	N/A	N/A	0.9000	OHMM
MEASURED LLS	31.62	N/A	31.24	N/A	N/A	0.9000	OHMM
General Purpose Inclinomometer Wellsite Calibration - CROUZET ACCELEROMETER PROM HAS BEEN READ CORRECTLY							
Before: 24-Feb-2005 1:37							
TEMPERATURE REFERENCE :	N/A	N/A	20	N/A	N/A	N/A	DEGC
YEAR OF CALIBRATION :	N/A	N/A	92	N/A	N/A	N/A	
MONTH OF CALIBRATION :	N/A	N/A	10	N/A	N/A	N/A	
SERIAL NUMBER :	N/A	N/A	448	N/A	N/A	N/A	
General Purpose Inclinomometer Wellsite Calibration - CROUZET MAGNETOMETER PROM HAS BEEN READ CORRECTLY							
Before: 24-Feb-2005 1:37							
TEMPERATURE REFERENCE :	N/A	N/A	19	N/A	N/A	N/A	DEGC
YEAR OF CALIBRATION :	N/A	N/A	99	N/A	N/A	N/A	
MONTH OF CALIBRATION :	N/A	N/A	12	N/A	N/A	N/A	
SERIAL NUMBER :	N/A	N/A	428	N/A	N/A	N/A	
Hostile Litho-Density Sonde Wellsite Calibration - Background Measurement							
Master: 18-Jan-2005 10:17 Before: 20-Feb-2005 10:56							
SS Cs Resolution Bkg	9.000	8.392	8.337	N/A	N/A	1.800	%
LS Cs Resolution Bkg	9.000	8.031	8.107	N/A	N/A	1.800	%
LSW1 Background	100.0	82.46	81.17	N/A	N/A	3.000	CPS
LSW2 Background	100.0	74.35	75.22	N/A	N/A	3.000	CPS

LSW2 Background	100.0	74.65	75.30	N/A	N/A	3.000	CPS
LSW3 Background	200.0	168.0	165.7	N/A	N/A	6.000	CPS
LSW4 Background	250.0	211.4	206.4	N/A	N/A	7.500	CPS
LSW5 Background	600.0	472.3	466.4	N/A	N/A	18.00	CPS
SSW1 Background	100.0	79.79	79.68	N/A	N/A	3.000	CPS
SSW2 Background	200.0	142.9	139.9	N/A	N/A	6.000	CPS
SSW3 Background	500.0	377.8	378.5	N/A	N/A	15.00	CPS
SSW4 Background	270.0	202.0	201.6	N/A	N/A	8.100	CPS
SSW5 Background	200.0	147.1	145.6	N/A	N/A	6.000	CPS

Hostile Litho-Density Sonde Wellsite Calibration - Aluminum Measurement

Master: 18-Jan-2005 11:11

LSW1 Aluminum	600.0	548.6	N/A	N/A	N/A	N/A	CPS
LSW2 Aluminum	900.0	836.5	N/A	N/A	N/A	N/A	CPS
LSW3 Aluminum	1100	1031	N/A	N/A	N/A	N/A	CPS
LSW4 Aluminum	580.0	521.0	N/A	N/A	N/A	N/A	CPS
LSW5 Aluminum	570.0	484.2	N/A	N/A	N/A	N/A	CPS
SSW1 Aluminum	2800	2443	N/A	N/A	N/A	N/A	CPS
SSW2 Aluminum	8000	7110	N/A	N/A	N/A	N/A	CPS
SSW3 Aluminum	11600	10290	N/A	N/A	N/A	N/A	CPS
SSW4 Aluminum	5000	4376	N/A	N/A	N/A	N/A	CPS
SSW5 Aluminum	660.0	601.1	N/A	N/A	N/A	N/A	CPS

Hostile Litho-Density Sonde Wellsite Calibration - Lithology Measurement

Master: 18-Jan-2005 10:52

LSW1 Iron	400.0	384.7	N/A	N/A	N/A	N/A	CPS
LSW2 Iron	730.0	686.2	N/A	N/A	N/A	N/A	CPS
LSW3 Iron	1000	913.5	N/A	N/A	N/A	N/A	CPS
LSW4 Iron	520.0	468.3	N/A	N/A	N/A	N/A	CPS
LSW5 Iron	470.0	445.5	N/A	N/A	N/A	N/A	CPS
SSW1 Iron	2100	1801	N/A	N/A	N/A	N/A	CPS
SSW2 Iron	6800	5868	N/A	N/A	N/A	N/A	CPS
SSW3 Iron	10800	9265	N/A	N/A	N/A	N/A	CPS
SSW4 Iron	4600	3942	N/A	N/A	N/A	N/A	CPS
SSW5 Iron	580.0	520.1	N/A	N/A	N/A	N/A	CPS

Hostile Litho-Density Sonde Wellsite Calibration - Caliper Calibration

Before: 18-Feb-2005 16:27

HLDS Caliper Small Ring	8.000	N/A	10.65	N/A	N/A	N/A	IN
HLDS Caliper Large Ring	12.00	N/A	14.80	N/A	N/A	N/A	IN

Accelerator-Porosity Tool Wellsite Calibration - Detector Background

Master: 12-Feb-2005 18:09 Before: 20-Feb-2005 10:59

Near Det Bkg Cntrate	30.00	25.38	25.14	N/A	N/A	N/A	CPS
Far Det Bkg Cntrate	30.00	26.80	27.30	N/A	N/A	N/A	CPS
Array-1 Det Bkg Cntrate	30.00	26.94	26.94	N/A	N/A	N/A	CPS
Array-2 Det Bkg Cntrate	30.00	25.86	26.56	N/A	N/A	N/A	CPS
Array Therm Det Bkg Cntrate	30.00	24.64	24.09	N/A	N/A	N/A	CPS

Accelerator-Porosity Tool Wellsite Calibration - Calibration Ratios

Master: 12-Feb-2005 18:09

Near/Far Calibration Ratio	0.9250	0.9545	N/A	N/A	N/A	N/A	
Near/Array Calibration Ratio	1.030	0.9888	N/A	N/A	N/A	N/A	
Near/Array Cal Ratio Up/Down	1.000	1.009	N/A	N/A	N/A	N/A	

Accelerator-Porosity Tool Wellsite Calibration - Tank Check

Master: 12-Feb-2005 18:09

Array-1 Standoff Porosity	11.75	11.83	N/A	N/A	N/A	N/A	PU
Array-2 Standoff Porosity	11.75	11.75	N/A	N/A	N/A	N/A	PU
Average Slowing Down Time	6.000	5.819	N/A	N/A	N/A	N/A	US
Array-1 SDT Ratio Up/Down	1.000	0.9860	N/A	N/A	N/A	N/A	
Array-2 SDT Ratio Up/Down	1.000	0.9957	N/A	N/A	N/A	N/A	
Sigma Formation	27.50	27.16	N/A	N/A	N/A	N/A	CU

Accelerator-Porosity Tool Wellsite Calibration - CCR7 signal boxes

Master: 12-Feb-2005 18:09

Near Detector Plateau Setting	1650	1738	N/A	N/A	N/A	N/A	V
Far Detector Plateau Setting	2000	2081	N/A	N/A	N/A	N/A	V
Array Detector Plateau Setting	2000	1968	N/A	N/A	N/A	N/A	V

Hostile Natural Gamma Ray Sonde Wellsite Calibration - Detector 1 Check

Master: 18-Feb-2005 16:19 Before: 20-Feb-2005 10:58

Na 511 Peak Loc	40.00	40.57	40.57	N/A	N/A	1.000	
Na 511 Peak Res	15.50	18.51	18.56	N/A	N/A	2.000	%
High Voltage	1150	1254	1254	N/A	N/A	N/A	V
Na 1785 Peak Loc	142.6	144.9	145.2	N/A	N/A	7.000	
Na 1785 Peak Res	8.500	9.816	10.75	N/A	N/A	2.000	%
Temperature	15.50	24.76	25.56	N/A	N/A	N/A	DEGC
Na Count Rate	45.00	45.52	45.16	N/A	N/A	8.000	CPS

Hostile Natural Gamma Ray Sonde Wellsite Calibration - Detector 2 Check

Master: 18-Feb-2005 16:19 Before: 20-Feb-2005 10:58

Na 511 Peak Loc	40.00	40.56	40.73	N/A	N/A	1.000	
Na 511 Peak Res	15.50	17.19	17.71	N/A	N/A	2.000	%
High Voltage	1150	1274	1275	N/A	N/A	N/A	V
Na 1785 Peak Loc	142.6	144.5	144.4	N/A	N/A	7.000	
Na 1785 Peak Res	8.500	9.803	10.85	N/A	N/A	2.000	%
Temperature	15.50	24.17	24.75	N/A	N/A	N/A	DEGC
Na Count Rate	45.00	45.69	45.29	N/A	N/A	8.000	CPS

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

Master: 18-Feb-2005 16:19 Before: 20-Feb-2005 10:58

Coincidence Count Rate Ratio	1.000	0.9968	0.9962	N/A	N/A	0.05000	
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Hostile Natural Gamma Ray Sonde Master Calibration - Detector 1 Calibration

Master: 18-Feb-2005 16:04

Na 511 Peak Set Point	40.00	41.00	--	--	--	--	
Th Peak Loc	209.6	209.0	--	--	--	--	
Th Peak Res	7.000	8.459	--	--	--	--	%
Background Count Rate	142.5	38.37	--	--	--	--	CPS
Gain Ratio	1.000	0.9803	--	--	--	--	

Hostile Natural Gamma Ray Sonde Master Calibration - Detector 2 Calibration

Master: 18-Feb-2005 16:04

Na 511 Peak Set Point	40.00	41.00	--	--	--	--	
Th Peak Loc	209.6	207.7	--	--	--	--	
Th Peak Res	7.000	8.551	--	--	--	--	%
Background Count Rate	142.5	40.08	--	--	--	--	CPS
Gain Ratio	1.000	0.9743	--	--	--	--	

Accelerator-Porosity Tool - Detector Plateau Settings :

Near Detector Plateau Setting 1738 V

Far Detector Plateau Setting 2081 V

Array Detector Plateau Setting 1968 V

DUAL LATEROLOG - E / Equipment Identification

Primary Equipment:

Auxiliary Equipment:

Dual Laterolog Electrode	DLE - E
Dual Laterolog Sonde	DLS - F
Dual Laterolog Housing	DLH - CB
Dual Laterolog Cartridge	DLC - D
Laterolog Control Module	LCM - AA

DUAL LATEROLOG - E Wellsite Calibration

DLT ELECTRONICS CALIBRATION Laterolog Measurement

Phase	MEASURED LLD OHMM	Value	Phase	MEASURED LLS OHMM	Value	
Before		31.98	Before		31.24	
	29.00 (Minimum)	31.62 (Nominal)	40.00 (Maximum)	29.00 (Minimum)	31.62 (Nominal)	40.00 (Maximum)

Before: 24-Feb-2005 3:10

DUAL LATEROLOG - E Wellsite Calibration

DLT Electronics Calibration Plus Measurement

Phase	Deep Current Plus UA	Value	Phase	Deep Voltage Plus MV	Value	Phase	Groningen Voltage Plus MV	Value	
Before		341.2	Before		10.91	Before		11.39	
	317.5 (Minimum)	342.5 (Nominal)	367.5 (Maximum)	9.830 (Minimum)	10.83 (Nominal)	11.83 (Maximum)	9.830 (Minimum)	10.83 (Nominal)	11.83 (Maximum)
Phase	Shallow Current Plus UA	Value	Phase	Shallow Voltage Plus MV	Value				
Before		344.0	Before		10.75				
	317.5 (Minimum)	342.5 (Nominal)	367.5 (Maximum)	9.830 (Minimum)	10.83 (Nominal)	11.83 (Maximum)			

Before: 24-Feb-2005 3:10

DUAL LATEROLOG - E Wellsite Calibration

DLT Electronics Calibration Zero Measurement

Phase	Deep Current Zero UA	Value	Phase	Deep Voltage Zero MV	Value	Phase	Groningen Voltage Zero MV	Value

Before		-0.09438	Before		-0.01155	Before		-0.004639
	-1.000 (Minimum) 0 (Nominal) 1.000 (Maximum)			-0.1000 (Minimum) 0 (Nominal) 0.1000 (Maximum)			-0.1000 (Minimum) 0 (Nominal) 0.1000 (Maximum)	
Phase	Shallow Current Zero UA	Value	Phase	Shallow Voltage Zero MV	Value			
Before		-0.1288	Before		-0.007723			
	-1.000 (Minimum) 0 (Nominal) 1.000 (Maximum)			-0.1000 (Minimum) 0 (Nominal) 0.1000 (Maximum)				

Before: 24-Feb-2005 3:09

General Purpose Incliner / Equipment Identification

Primary Equipment:
 GPIT Cartridge - A GPIC - A
 Auxiliary Equipment:
 GPIT Housing GPIH - A

Hostile Litho-Density Sonde / Equipment Identification

Primary Equipment:
 Hostile Litho Density Sonde HLDS - D 35
 Hostile Litho Density High Voltage HLDV - D 35
 Gamma Source Radioactive GSR - Z 2326
 Auxiliary Equipment:
 Hostile Litho Density Pad HLDP - C 35
 Hostile Litho Density High Voltage Housi HEH - H 35

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		8.392	Master		8.031	Master		82.46
Before		8.337	Before		8.107	Before		81.17
	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		74.65	Master		168.0	Master		211.4
Before		75.30	Before		165.7	Before		206.4
	50.00 (Minimum) 100.0 (Nominal) 140.0 (Maximum)			110.0 (Minimum) 200.0 (Nominal) 290.0 (Maximum)			140.0 (Minimum) 250.0 (Nominal) 360.0 (Maximum)	
Phase	LSW5 Background CPS	Value	Phase	SSW1 Background CPS	Value	Phase	SSW2 Background CPS	Value
Master		472.3	Master		79.79	Master		142.9
Before		466.4	Before		79.68	Before		139.9
	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		377.8	Master		202.0	Master		147.1
Before		378.5	Before		201.6	Before		145.6
	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: 18-Jan-2005 10:17

Before: 20-Feb-2005 10:56

Hostile Litho-Density Sonde Master Calibration

Detector Background Measurement

Phase	LSW1 Background CPS	Value	Phase	LSW2 Background CPS	Value	Phase	LSW3 Background CPS	Value
Master		82.46	Master		74.65	Master		168.0
	55.00 (Minimum) 100.0 (Nominal) 150.0 (Maximum)			50.00 (Minimum) 100.0 (Nominal) 140.0 (Maximum)			110.0 (Minimum) 200.0 (Nominal) 290.0 (Maximum)	
Phase	LSW4 Background CPS	Value	Phase	LSW5 Background CPS	Value	Phase	LS Cs Resolution Bkg %	Value
Master		211.4	Master		472.3	Master		8.031
	140.0 (Minimum) 250.0 (Nominal) 360.0 (Maximum)			330.0 (Minimum) 600.0 (Nominal) 830.0 (Maximum)			7.000 (Minimum) 9.000 (Nominal) 11.000 (Maximum)	

Phase	SSW1 Background CPS	Value	Phase	SSW2 Background CPS	Value	Phase	SSW3 Background CPS	Value	
Master		79.79	Master		142.9	Master		377.8	
	55.00 (Minimum)	100.0 (Nominal)	150.0 (Maximum)	100.0 (Minimum)	200.0 (Nominal)	260.0 (Maximum)	280.0 (Minimum)	500.0 (Nominal)	700.0 (Maximum)
Phase	SSW4 Background CPS	Value	Phase	SSW5 Background CPS	Value	Phase	SS Cs Resolution Bkg %	Value	
Master		202.0	Master		147.1	Master		8.392	
	150.0 (Minimum)	270.0 (Nominal)	380.0 (Maximum)	110.0 (Minimum)	200.0 (Nominal)	270.0 (Maximum)	7.000 (Minimum)	9.000 (Nominal)	11.00 (Maximum)

Master: 18-Jan-2005 10:17

Hostile Litho-Density Sonde Master Calibration									
Detector Aluminum Measurement (bkgd-subtracted)									
Phase	LSW1 Aluminum CPS	Value	Phase	LSW2 Aluminum CPS	Value	Phase	LSW3 Aluminum CPS	Value	
Master		548.6	Master		836.5	Master		1031	
	420.0 (Minimum)	600.0 (Nominal)	700.0 (Maximum)	650.0 (Minimum)	900.0 (Nominal)	1050 (Maximum)	800.0 (Minimum)	1100 (Nominal)	1300 (Maximum)
Phase	LSW4 Aluminum CPS	Value	Phase	LSW5 Aluminum CPS	Value	Phase	SSW1 Aluminum CPS	Value	
Master		521.0	Master		484.2	Master		2443	
	410.0 (Minimum)	580.0 (Nominal)	670.0 (Maximum)	410.0 (Minimum)	570.0 (Nominal)	660.0 (Maximum)	2000 (Minimum)	2800 (Nominal)	3200 (Maximum)
Phase	SSW2 Aluminum CPS	Value	Phase	SSW3 Aluminum CPS	Value	Phase	SSW4 Aluminum CPS	Value	
Master		7110	Master		10290	Master		4376	
	5800 (Minimum)	8000 (Nominal)	9300 (Maximum)	8300 (Minimum)	11600 (Nominal)	13500 (Maximum)	3500 (Minimum)	5000 (Nominal)	5800 (Maximum)
Phase	SSW5 Aluminum CPS	Value							
Master		601.1							
	470.0 (Minimum)	660.0 (Nominal)	770.0 (Maximum)						

Master: 18-Jan-2005 11:11

Hostile Litho-Density Sonde Master Calibration									
Detector Litholog Measurement (bkgd-subtracted)									
Phase	LSW1 Iron CPS	Value	Phase	LSW2 Iron CPS	Value	Phase	LSW3 Iron CPS	Value	
Master		384.7	Master		686.2	Master		913.5	
	290.0 (Minimum)	400.0 (Nominal)	470.0 (Maximum)	520.0 (Minimum)	730.0 (Nominal)	850.0 (Maximum)	720.0 (Minimum)	1000 (Nominal)	1160 (Maximum)
Phase	LSW4 Iron CPS	Value	Phase	LSW5 Iron CPS	Value	Phase	SSW1 Iron CPS	Value	
Master		468.3	Master		445.5	Master		1801	
	370.0 (Minimum)	520.0 (Nominal)	600.0 (Maximum)	340.0 (Minimum)	470.0 (Nominal)	550.0 (Maximum)	1500 (Minimum)	2100 (Nominal)	2400 (Maximum)
Phase	SSW2 Iron CPS	Value	Phase	SSW3 Iron CPS	Value	Phase	SSW4 Iron CPS	Value	
Master		5868	Master		9265	Master		3942	
	4900 (Minimum)	6800 (Nominal)	7900 (Maximum)	7800 (Minimum)	10800 (Nominal)	12600 (Maximum)	3300 (Minimum)	4600 (Nominal)	5400 (Maximum)
Phase	SSW5 Iron CPS	Value							
Master		520.1							
	420.0 (Minimum)	580.0 (Nominal)	680.0 (Maximum)						

Master: 18-Jan-2005 10:52

Hostile Litho-Density Sonde Master Calibration									
Quality Ratios									
Phase	AL CALIBRATION RATIO 1	Value	Phase	AL CALIBRATION RATIO 2	Value	Phase	AL CALIBRATION RATIO 3	Value	
Master		1.025	Master		2.067	Master		0.5457	
	0.9000 (Minimum)	1.000 (Nominal)	1.100 (Maximum)	1.900 (Minimum)	2.100 (Nominal)	2.300 (Maximum)	0.4500 (Minimum)	0.5500 (Nominal)	0.6500 (Maximum)
Phase	AL CALIBRATION RATIO 4	Value	Phase	Pad-Wear SS Ratio	Value	Phase	Pad-Wear LS Ratio	Value	
Master		0.4909	Master		0.9881	Master		0.9884	
	0.4500 (Minimum)	0.5500 (Nominal)	0.6500 (Maximum)	0.9800 (Minimum)	0.9880 (Nominal)	0.9960 (Maximum)	0.9800 (Minimum)	0.9880 (Nominal)	0.9960 (Maximum)
Phase	Pad-Position SS Ratio	Value	Phase	Pad-Position LS Ratio	Value				
Master		1.001	Master		1.001				
	0.9900 (Minimum)	0.9940 (Nominal)	1.015 (Maximum)	0.9850 (Minimum)	0.9940 (Nominal)	1.010 (Maximum)			

Master: 18-Jan-2005 10:43

Nuclear Porosity Lithology Cartridge - B / Equipment Identification

Primary Equipment: NPLC Cartridge	NPLC - B	79
Auxiliary Equipment: NPLC Housing	NPH - B	82

Accelerator-Porosity Tool / Equipment Identification

Primary Equipment: Accelerator-Porosity Sonde APS Minitron	APS - C MNTR - F	202 5124
Auxiliary Equipment: Accelerator-Porosity Housing APS Calibration Water Tank APS Aluminum Calibrator Sleeve	APH - AC SFT - 178 SFT - 281	104 6250 6250

Accelerator-Porosity Tool Wellsite Calibration

Detector Background

Phase	Near Det Bkg Cntrate CPS	Value	Phase	Far Det Bkg Cntrate CPS	Value	Phase	Array-1 Det Bkg Cntrate CPS	Value
Master		25.38	Master		26.80	Master		26.94
Before		25.14	Before		27.30	Before		26.94
	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		25.86	Master		24.64			
Before		26.56	Before		24.09			
	1.000 (Minimum) 30.00 (Nominal) 50.00 (Maximum)			1.000 (Minimum) 30.00 (Nominal) 50.00 (Maximum)				

Master: 12-Feb-2005 18:09

Before: 20-Feb-2005 10:59

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		0.9545	Master		0.9888	Master		1.009
	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: 12-Feb-2005 18:09

Accelerator-Porosity Tool Wellsite Calibration

Tank Check

Phase	Array-1 Standoff Porosity PU	Value	Phase	Array-2 Standoff Porosity PU	Value	Phase	Average Slowing Down Time US	Value
Master		11.83	Master		11.75	Master		5.819
	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		0.9860	Master		0.9957	Master		27.16
	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: 12-Feb-2005 18:09

Accelerator-Porosity Tool Master Calibration

Detector Calibration

Phase	Near/Far Calibration Ratio	Value	Phase	Near/Array Calibration Ratio	Value	Phase	Near/Array Cal Ratio Up/Down	Value
Master		0.9545	Master		0.9888	Master		1.009
	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)	

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Accelerator-Porosity Tool Master Calibration

Tank Check

Phase	Array-1 Standoff Porosity PU	Value	Phase	Array-2 Standoff Porosity PU	Value	Phase	Average Slowing Down Time US	Value
Master		11.83	Master		11.75	Master		5.819
	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		0.9860	Master		0.9957	Master		27.16
	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)	

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Hostile Natural Gamma Ray Sonde / Equipment Identification

Primary Equipment:
HNGS Sonde

HNGS - BA 77

Auxiliary Equipment:
HNGS Sonde Housing
Gamma Source Radioactive

HNSH - BA 79
GSR - U 135

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		40.57	Master		18.51	Master		1254
Before		40.57	Before		18.56	Before		1254
	37.50 (Minimum) 40.00 (Nominal) 42.50 (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		144.9	Master		9.816	Master		24.76
Before		145.2	Before		10.75	Before		25.56
	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		45.52						
Before		45.16						
	10.00 (Minimum) 45.00 (Nominal) 100.0 (Maximum)							

Master: 18-Feb-2005 16:19

Before: 20-Feb-2005 10:58

Hostile Natural Gamma Ray Sonde Wellsite Calibration

Detector 2 Check

Phase	Na 511 Peak Loc	Value	Phase	Na 511 Peak Res %	Value	Phase	High Voltage V	Value
Master		40.56	Master		17.19	Master		1274
Before		40.73	Before		17.71	Before		1275
	37.50 (Minimum) 40.00 (Nominal) 42.50 (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		144.5	Master		9.803	Master		24.17
Before		144.4	Before		10.85	Before		24.75
	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		45.69						
Before		45.29						
	10.00 (Minimum) 45.00 (Nominal) 100.0 (Maximum)							

Master: 18-Feb-2005 16:19

Before: 20-Feb-2005 10:58

Hostile Natural Gamma Ray Sonde Wellsite Calibration

Ratio Of Detector 1 To Detector 2

Phase	Coincidence Count Rate Ratio	Value
Master		0.9860

Master		0.9968
Before		0.9962
	0.9500 (Minimum) 1.000 (Nominal) 1.050 (Maximum)	
Master: 18-Feb-2005 16:19		
Before: 20-Feb-2005 10:58		

Hostile Natural Gamma Ray Sonde Master Calibration														
Detector 1 Calibration														
Phase	Na 511 Peak Set Point			Value	Phase	Th Peak Loc			Value	Phase	Th Peak Res %			Value
Master				41.00	Master				209.0	Master				8.459
	38.00 (Minimum)	40.00 (Nominal)	42.00 (Maximum)		201.0 (Minimum)	209.6 (Nominal)	218.3 (Maximum)			5.000 (Minimum)	7.000 (Nominal)	9.000 (Maximum)		
Phase	Background Count Rate CPS			Value	Phase	Gain Ratio			Value					
Master				38.37	Master				0.9803					
	20.00 (Minimum)	142.5 (Nominal)	265.0 (Maximum)		0.9400 (Minimum)	1.000 (Nominal)	1.060 (Maximum)							
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Hostile Natural Gamma Ray Sonde Master Calibration														
Detector 2 Calibration														
Phase	Na 511 Peak Set Point			Value	Phase	Th Peak Loc			Value	Phase	Th Peak Res %			Value
Master				41.00	Master				207.7	Master				8.551
	38.00 (Minimum)	40.00 (Nominal)	42.00 (Maximum)		201.0 (Minimum)	209.6 (Nominal)	218.3 (Maximum)			5.000 (Minimum)	7.000 (Nominal)	9.000 (Maximum)		
Phase	Background Count Rate CPS			Value	Phase	Gain Ratio			Value					
Master				40.08	Master				0.9743					
	20.00 (Minimum)	142.5 (Nominal)	265.0 (Maximum)		0.9400 (Minimum)	1.000 (Nominal)	1.060 (Maximum)							
Master: 18-Feb-2005 16:04														

Company: Lamont Doherty

Schlumberger

Well: IODP Exp 305 Site U1309D

Field: Atlantis Massif

Rig: Joides Resolution

Ocean: Atlantic Ocean

Dual-Laterolog Tool

Gamma Ray