

Company: Lamont Doherty

Well: Expedition 309 Site U1256D

Field: Superfast Spreading Crust

Rig: Joides Resolution Ocean: Pacific Ocean

Dual Laterolog Tool

Gamma Ray

LOCATION			Elev.: K.B. 11.3 m G.L. -3645 m D.F. 11 m
Permanent Datum: _____	Mean Sea Level _____		
Log Measured From: _____	Rig Floor _____	Elev.: 0 m _____ 11.0 m above Perm. Datum	
Drilling Measured From: _____	Rig Floor _____		

API Serial No. _____	Max. Hole Devi. _____	Longitude 91° 56.0612 W	Latitude 6° 44.1631 N
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Rig: Joides Resolution
Field: Superfast Spreading Crust
Location: Expedition 309 Site U1256D
Company: Lamont Doherty

Logging Date	21-Aug-2005		
Run Number	Two		
Depth Driller	4900 m		
Schlumberger Depth	4900 m		
Bottom Log Interval	4871 m		
Top Log Interval	4200 m		
Casing Driller Size @ Depth	0.000 in @ 3914 m		
Casing Schlumberger	3914 m		
Bit Size	9.875 in		
Type Fluid In Hole	Sea water		
Density	1.07 g/cm3		
Fluid Loss	PH		
Source Of Sample			
RM @ Measured Temperature	@ @		
RMF @ Measured Temperature	@ @		
RMC @ Measured Temperature	@ @		
Source RMF	RMC		
RM @ MRT	@ @ @		
Maximum Recorded Temperatures			
Circulation Stopped	Time	20-Aug-2005 20:00	
Logger On Bottom	Time	21-Aug-2005 16:20	
Unit Number	Location	2082 Webster, TX	
Recorded By	Javier Espinosa		
Witnessed By	Florence Einaudi, Akram Belghoui		

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DISCLAIMER
 THE USE OF AND RELIANCE UPON THIS RECORDED-DATA BY THE HEREIN NAMED COMPANY (AND ANY OF ITS AFFILIATES, PARTNERS, REPRESENTATIVES, AGENTS, CONSULTANTS AND EMPLOYEES) IS SUBJECT TO THE TERMS AND CONDITIONS AGREED UPON BETWEEN SCHLUMBERGER AND THE COMPANY, INCLUDING: (a) RESTRICTIONS ON USE OF THE RECORDED-DATA; (b) DISCLAIMERS AND WAIVERS OF WARRANTIES AND REPRESENTATIONS REGARDING COMPANY'S USE OF AND RELIANCE UPON THE RECORDED-DATA; AND (c) CUSTOMER'S FULL AND SOLE RESPONSIBILITY FOR ANY INFERENCE DRAWN OR DECISION MADE IN CONNECTION WITH THE USE OF THIS RECORDED-DATA.

OTHER SERVICES1
 OS1: HLDS, APS, HNGS
 OS2: MEST, DSI
 OS3: TAP
 OS4:
 OS5:

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

REMARKS: RUN NUMBER 1
 All parameters and presentations as per IODP standards
 Tool ran as per tool sketch below.
 Casing and sea floor depth information provided by IODP
 TD not reached due to hole conditions
 Hole top section logged in ODP leg 206 and Exp 309.
 Log correlated with run One.

REMARKS: RUN NUMBER 2

RUN 1
 SERVICE ORDER #:
 PROGRAM VERSION: 12C0-301
 FLUID LEVEL:

RUN 2
 SERVICE ORDER #:
 PROGRAM VERSION:
 FLUID LEVEL:

LOGGED INTERVAL	START	STOP

LOGGED INTERVAL	START	STOP

EQUIPMENT DESCRIPTION

RUN 1

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

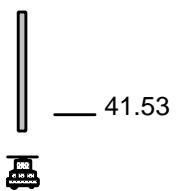
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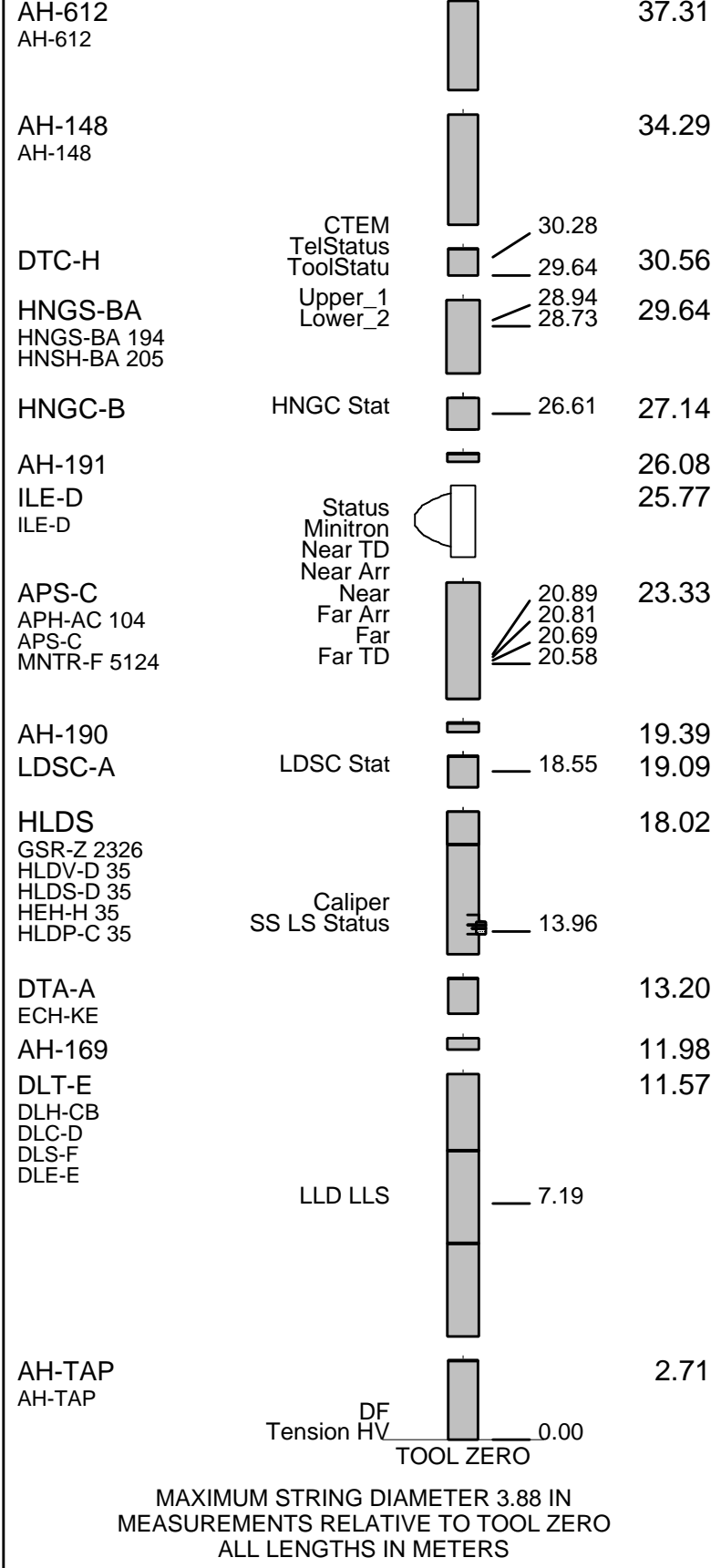
DOWNHOLE EQUIPMENT

BSP 62.59
 BRT-S

SP SPARC 41.53

LEH-QT 38.20





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

Kelly Bushing Elevation
Derrick Floor Elevation

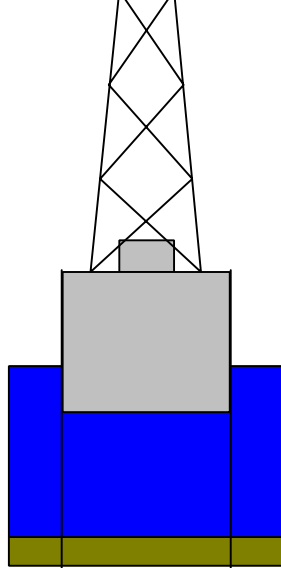
11.8
11.8

0.0 6.000

Casing String

Mean Sea Level

0.0



3645.0 9.875
3914.0 6.000

Borehole Segment
Casing Shoe

Schlumberger

MAIN PASS

MAXIS Field Log

Company: Lamont Doherty

Well: Expedition 309 Site U1256D

Output DLIS Files

DEFAULT	DLL_LDL_APS_NGS_031LUP	FN:32	PRODUCER	21-Aug-2005 16:11	4871.5 M	4165.4 M
REDUCED	DLL_LDL_APS_NGS_031LUP	FN:33	PRODUCER	21-Aug-2005 16:11	4871.5 M	4165.4 M

OP System Version: 12C0-301

MCM

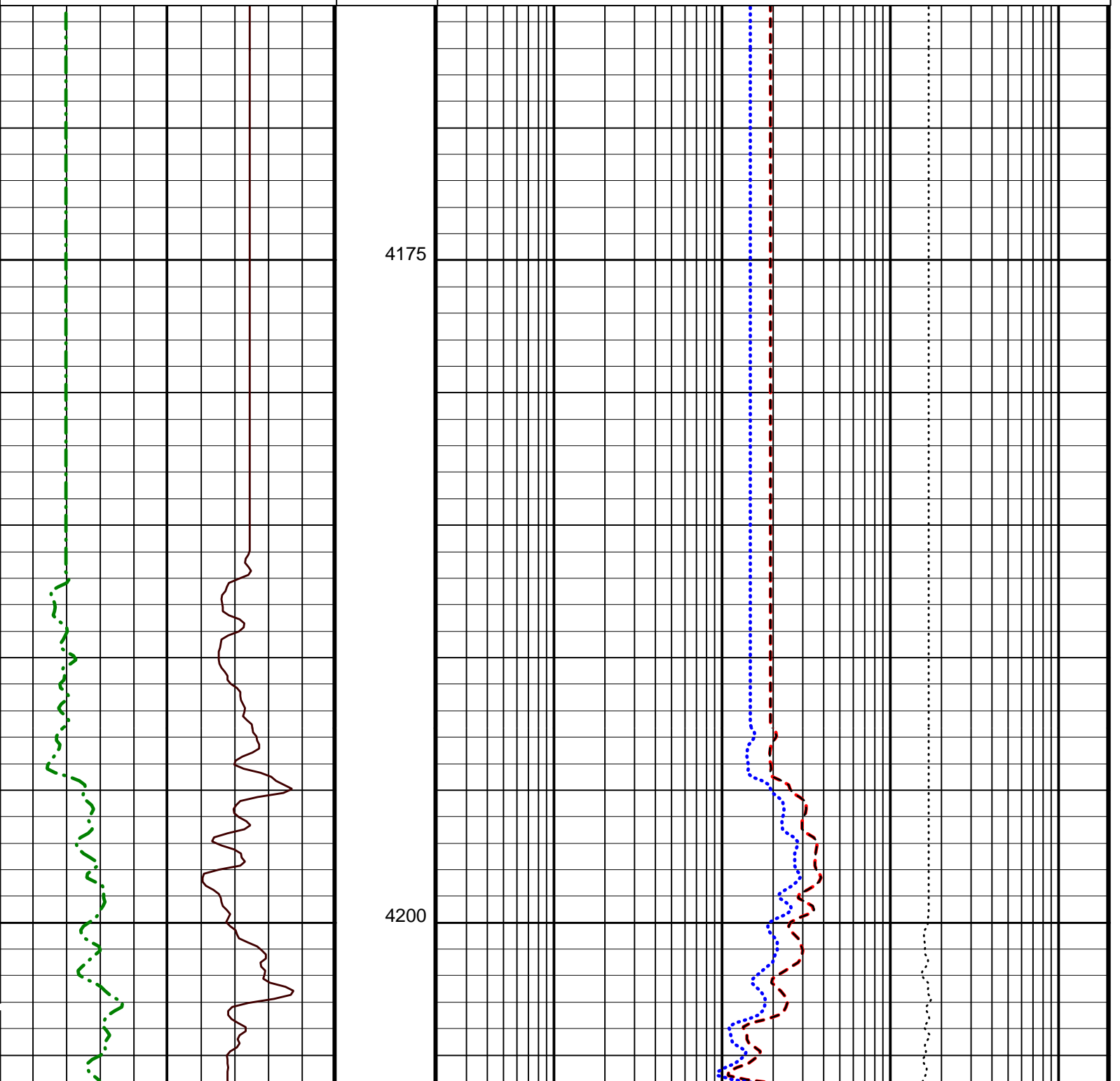
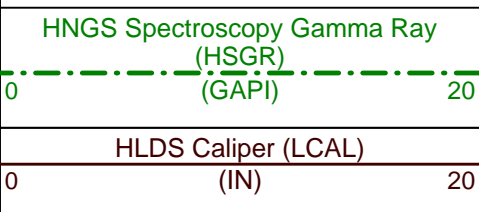
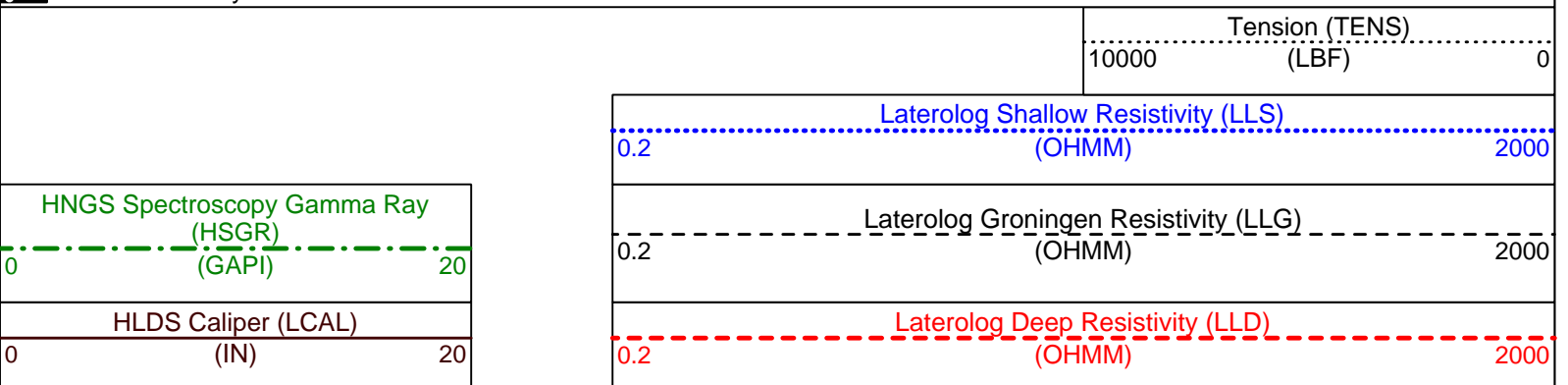
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HLDS	SPC-2602-NUCL_b	LDSC-A	SPC-2602-NUCL_b
APS-C	SPC-2602-NUCL_b	HNGC-B	SPC-2602-NUCL_b
HNGS-BA	SPC-2602-NUCL_b	DTC-H	12C0-301
BSP	12C0-301		

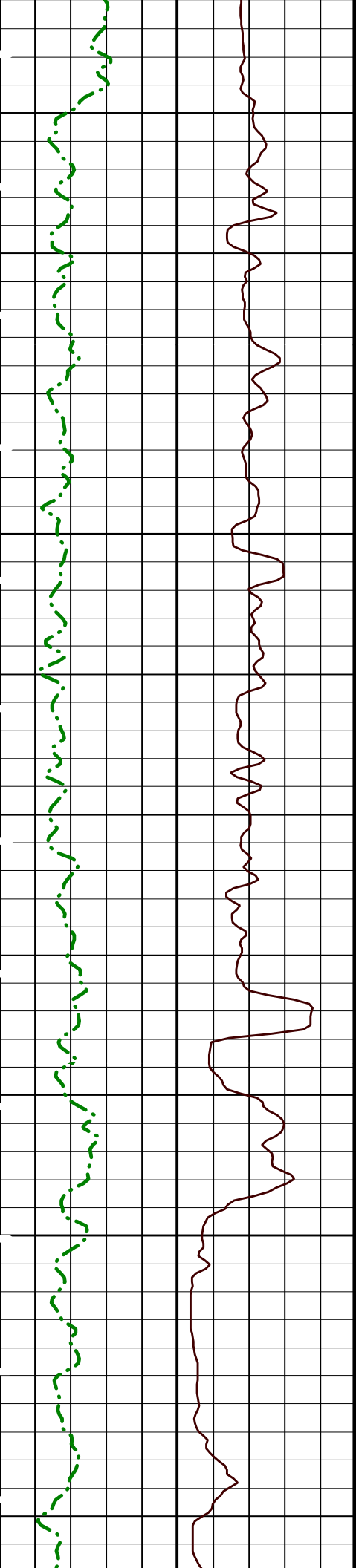
Changed Parameter Summary

LLOO OFF BOTH 4868.8 16:22:00
 BOTH OFF 4867.4 16:22:18

PIP SUMMARY

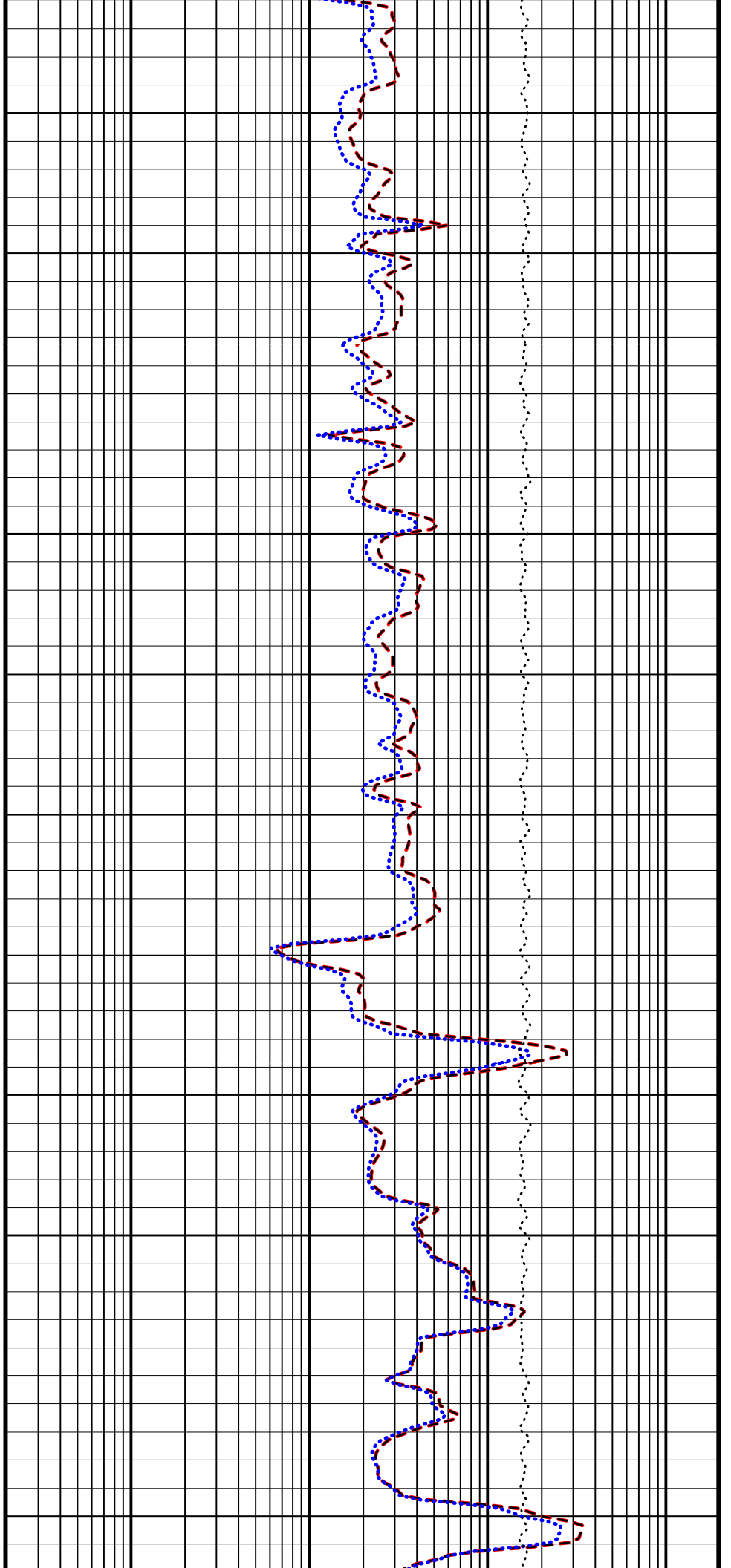
▶ Time Mark Every 60 S

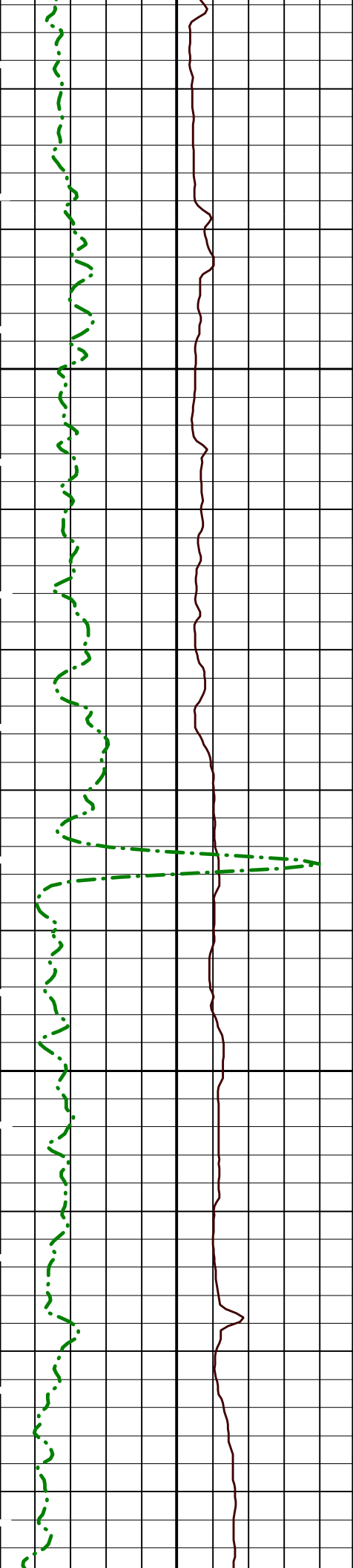




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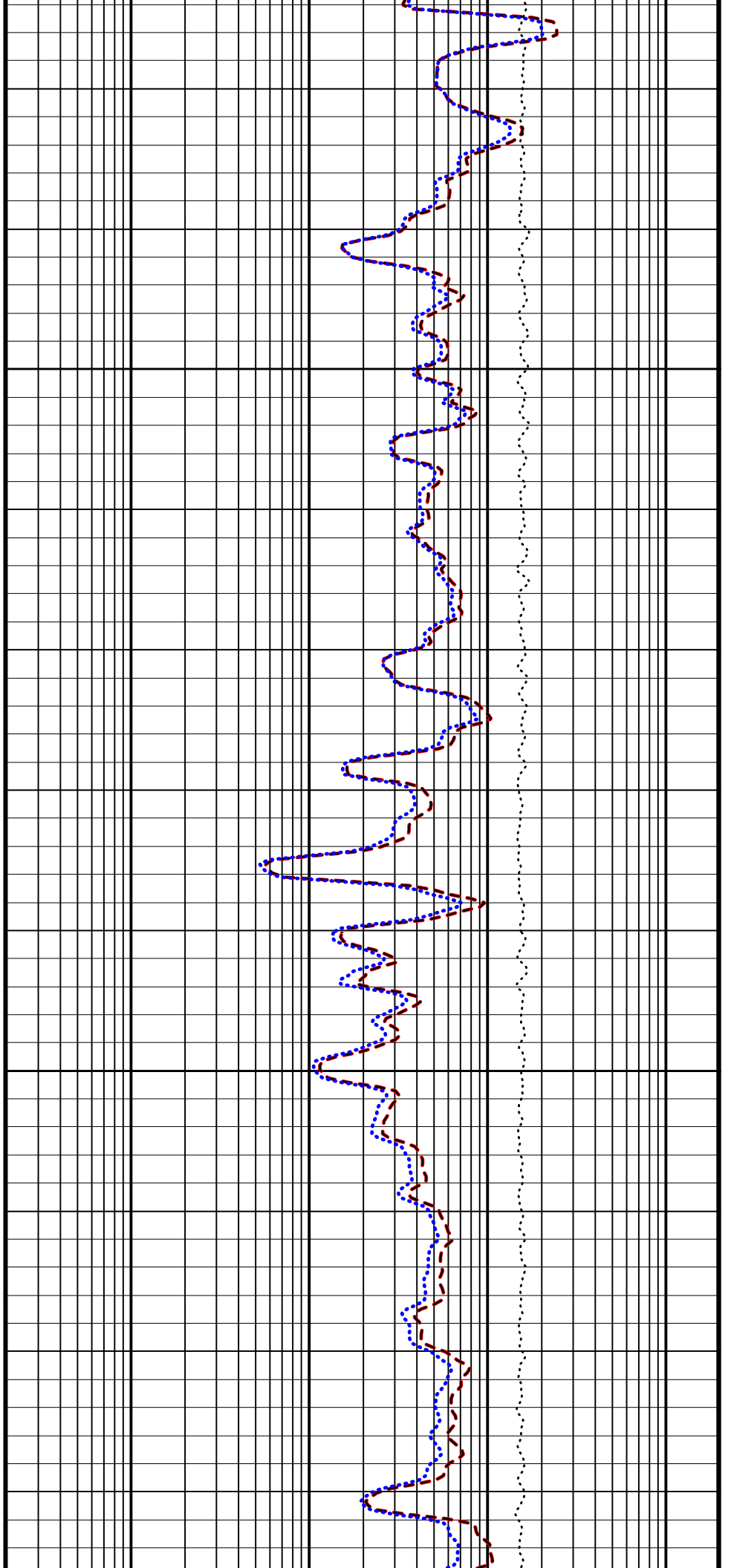
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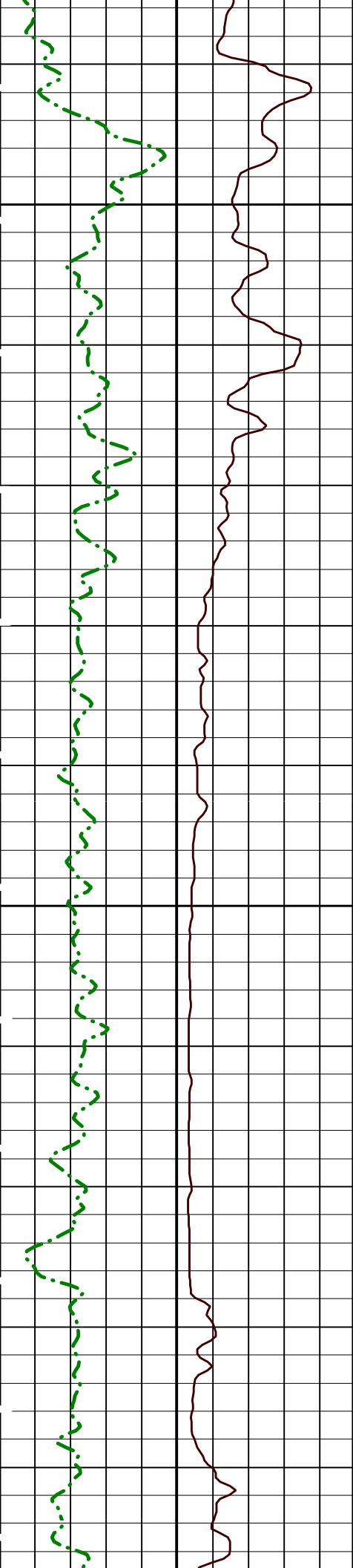




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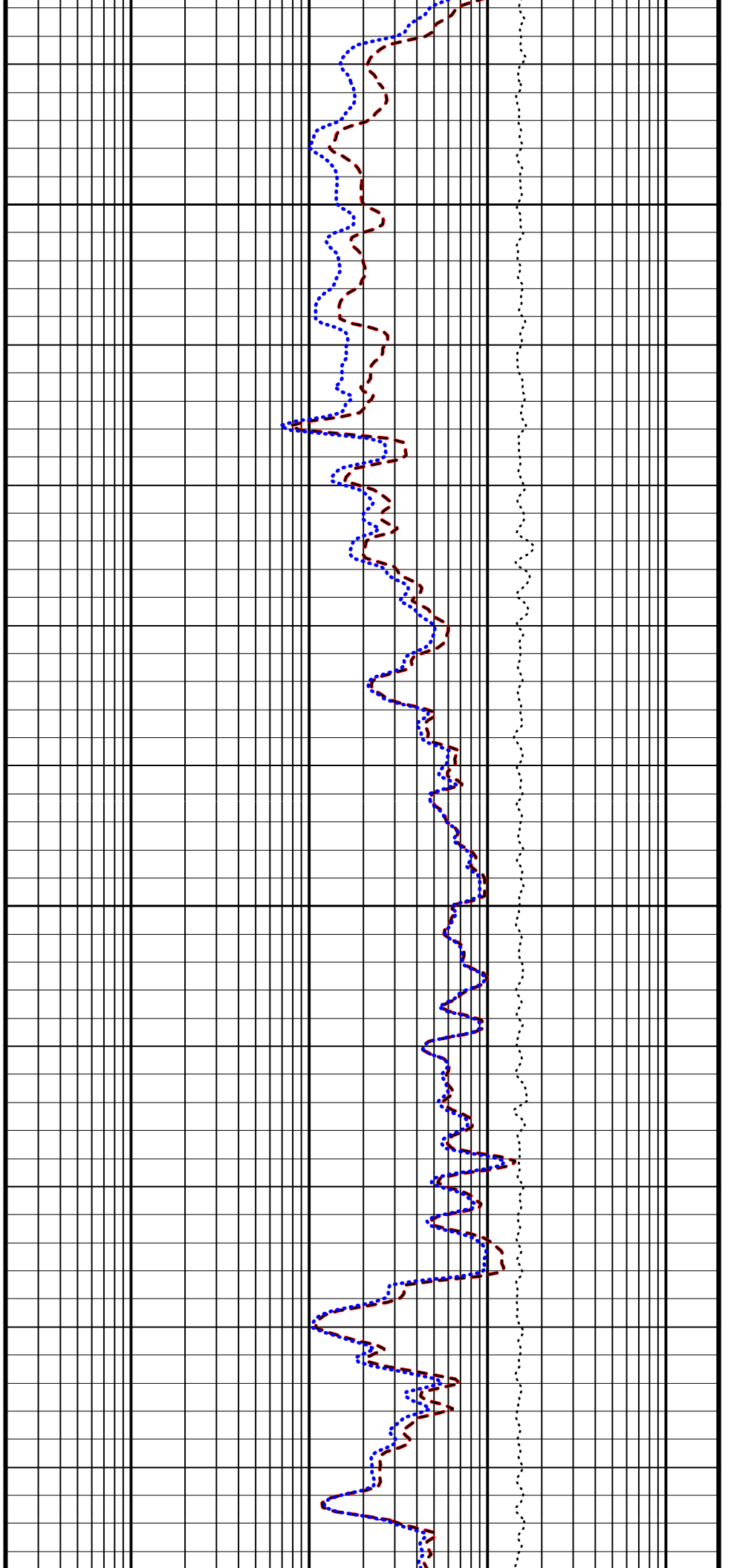
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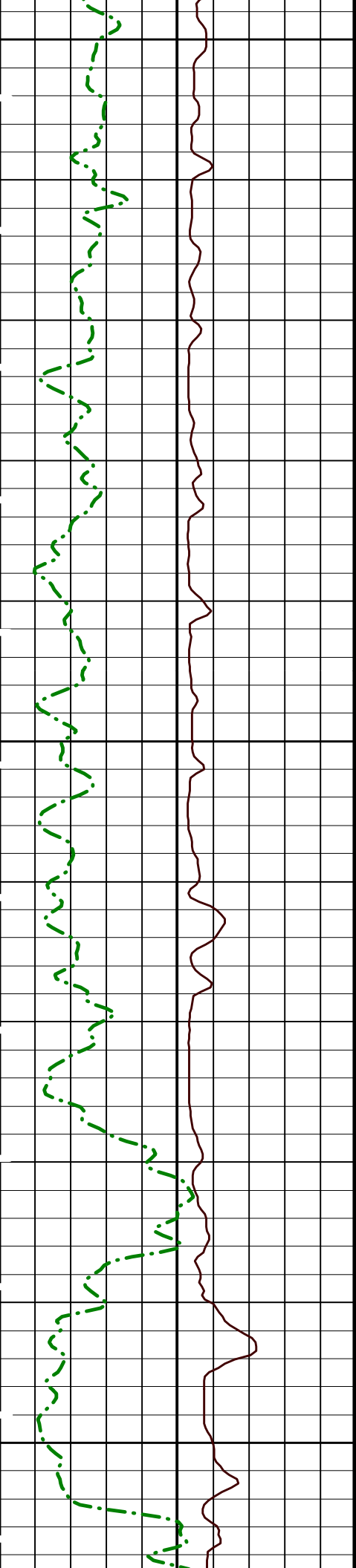




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4350

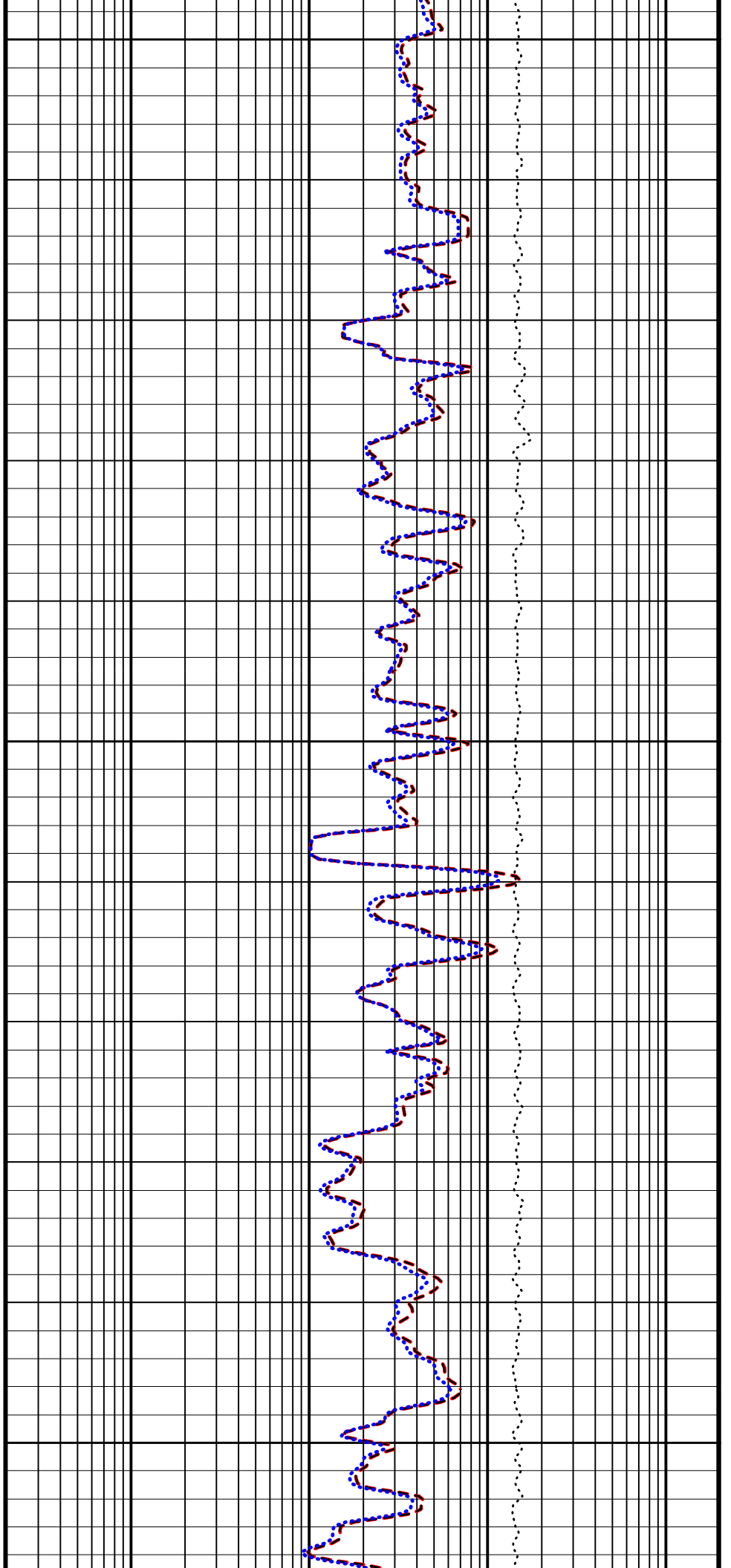


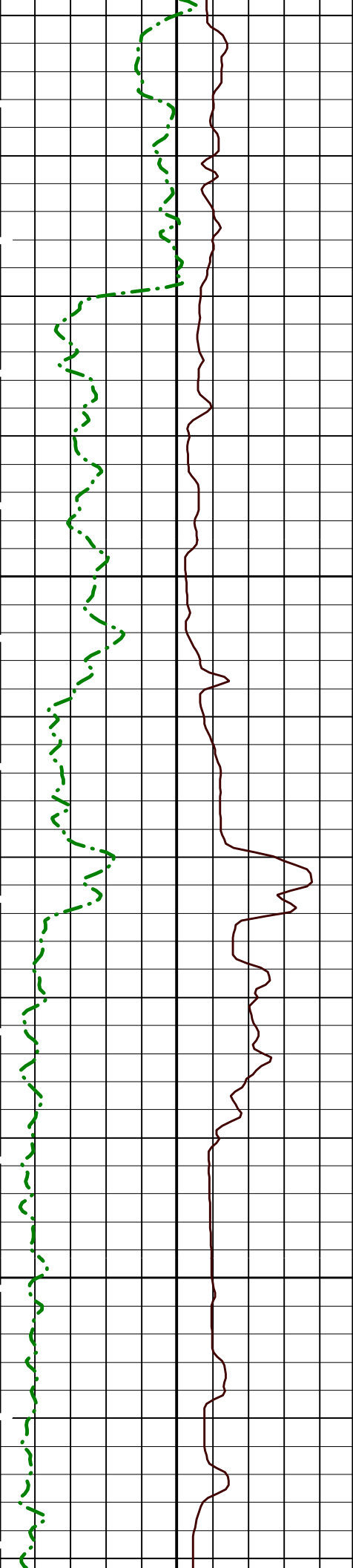


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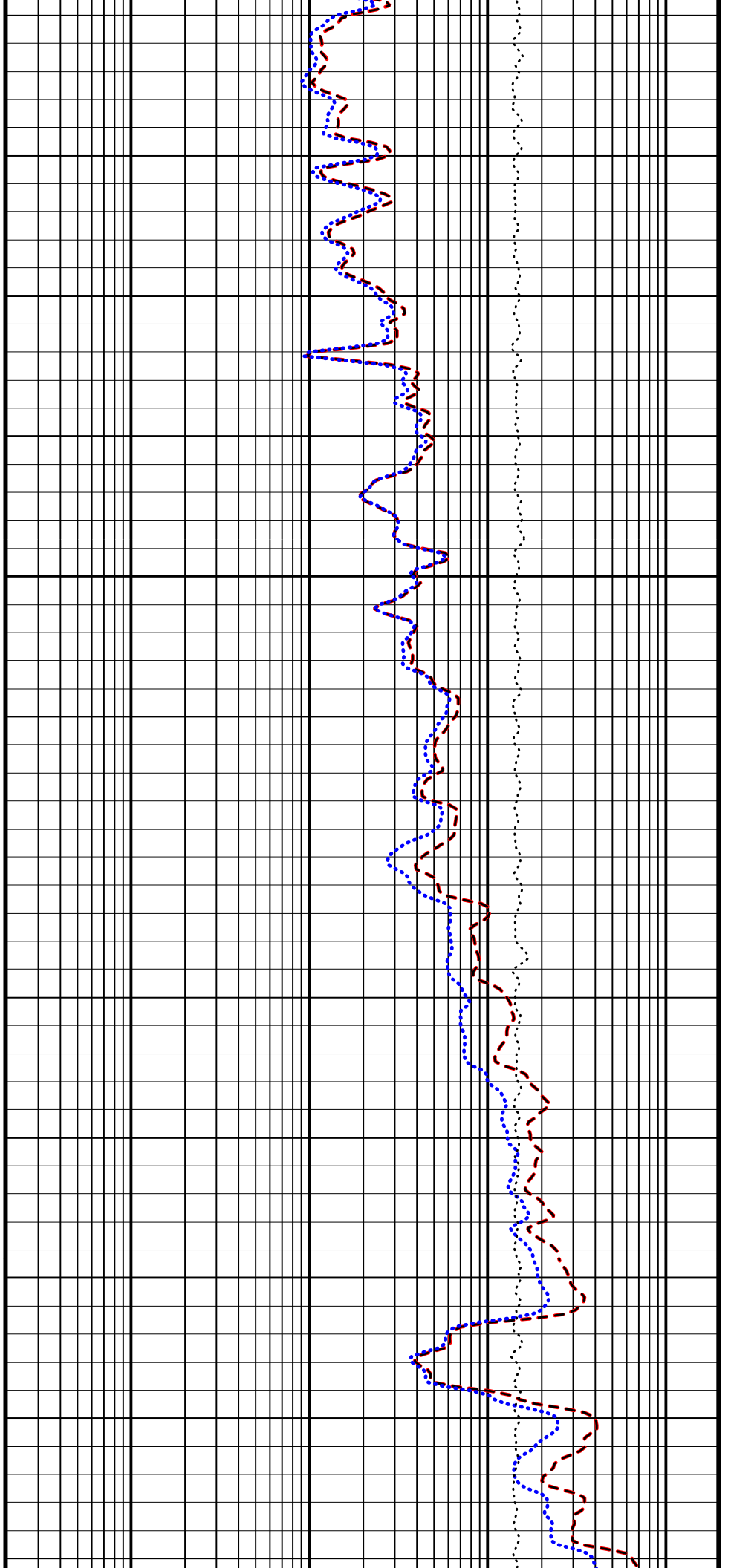
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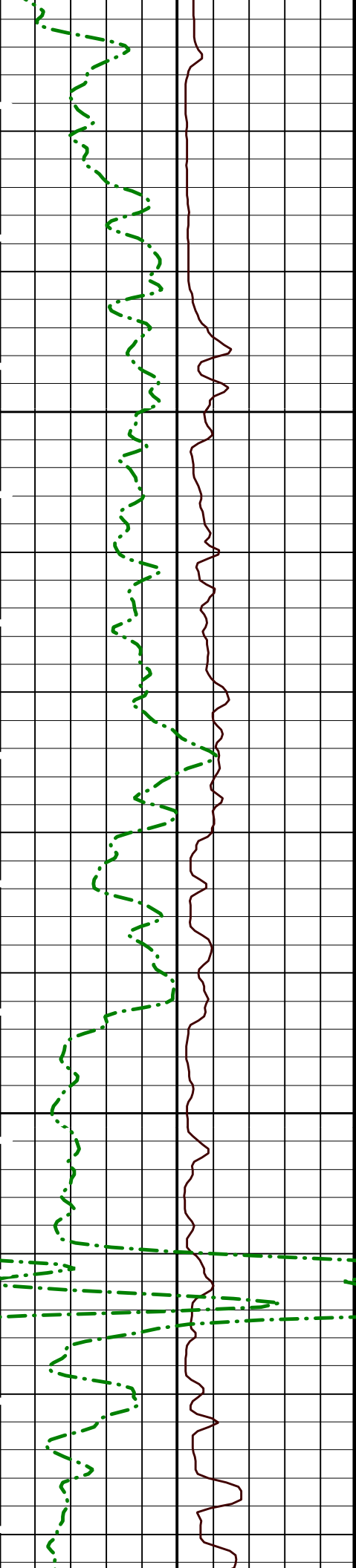




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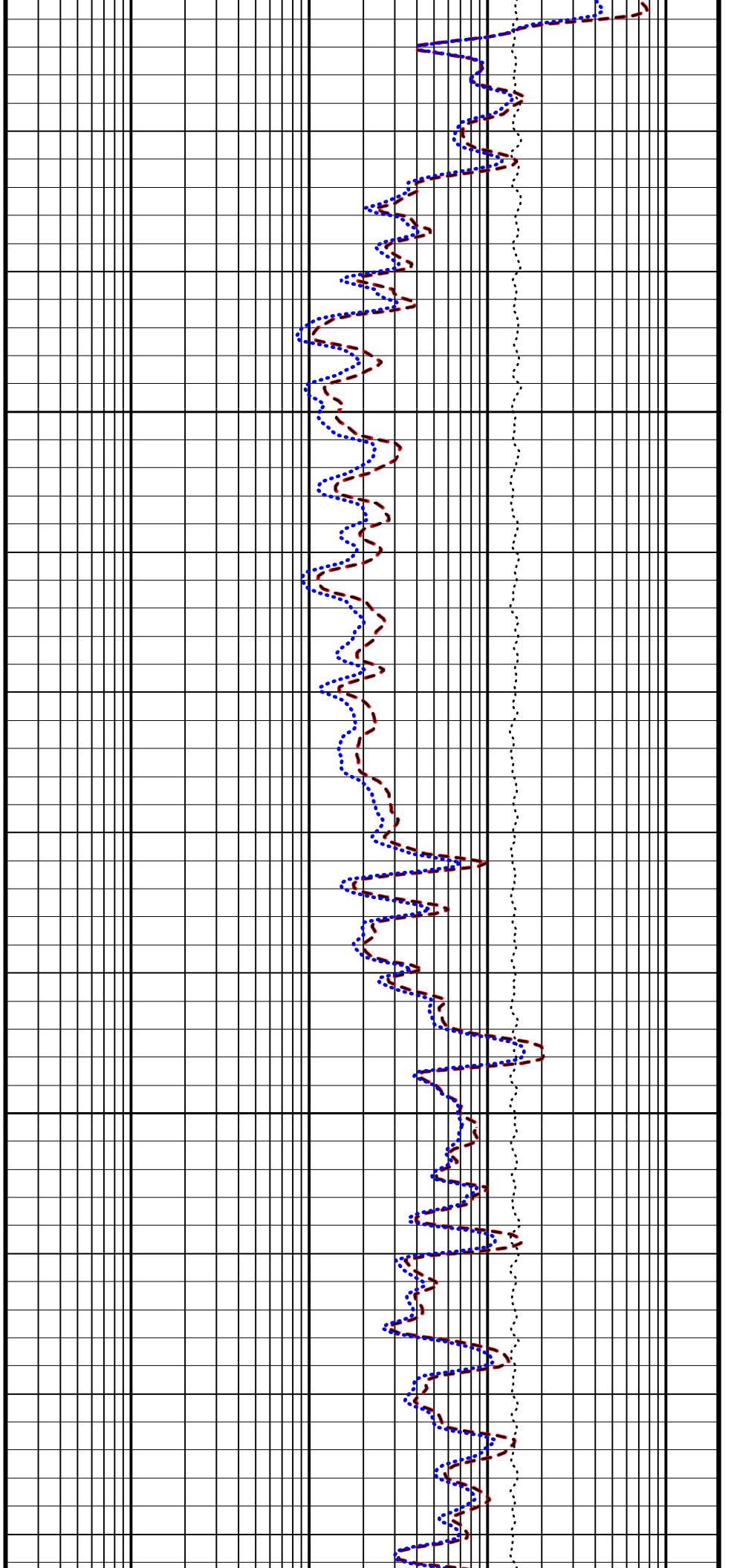
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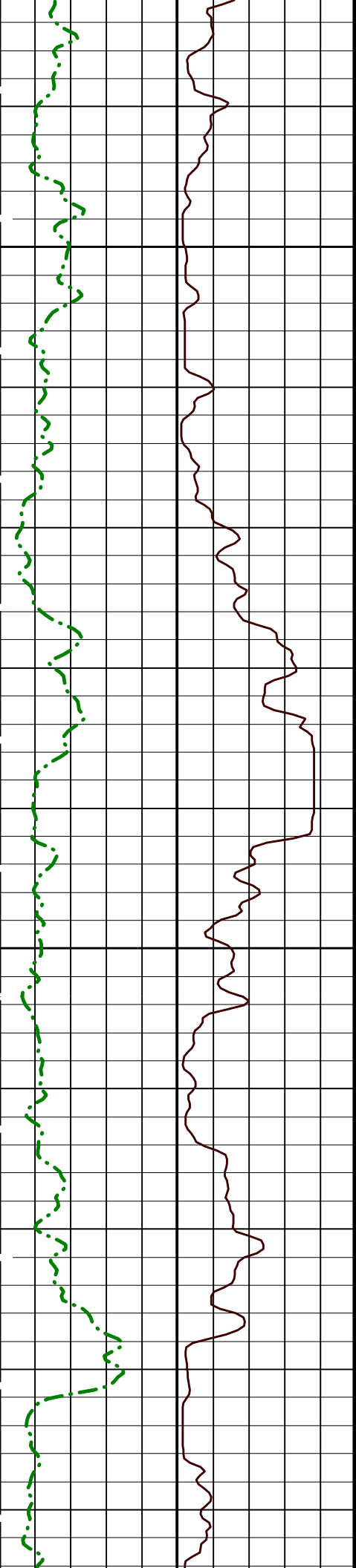




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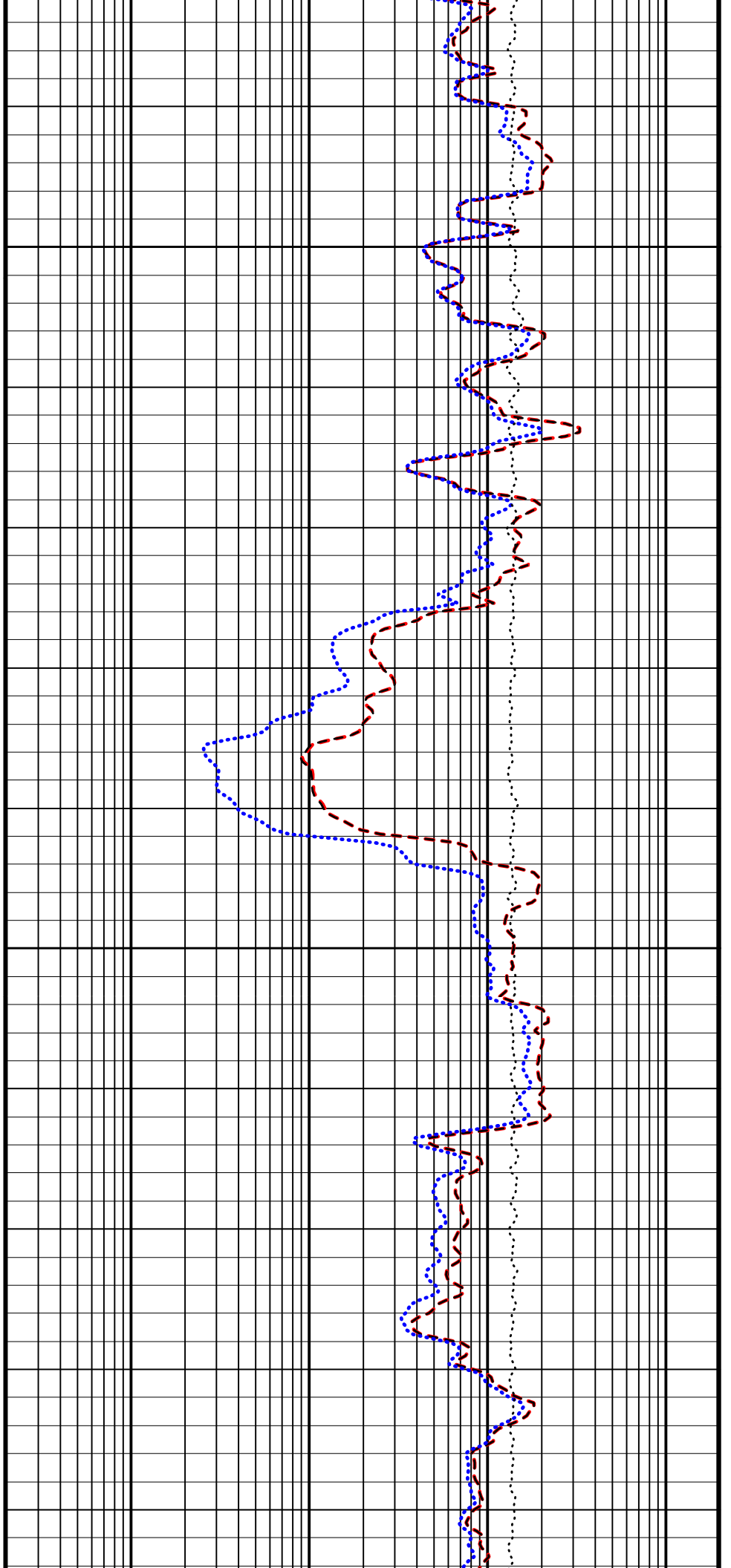
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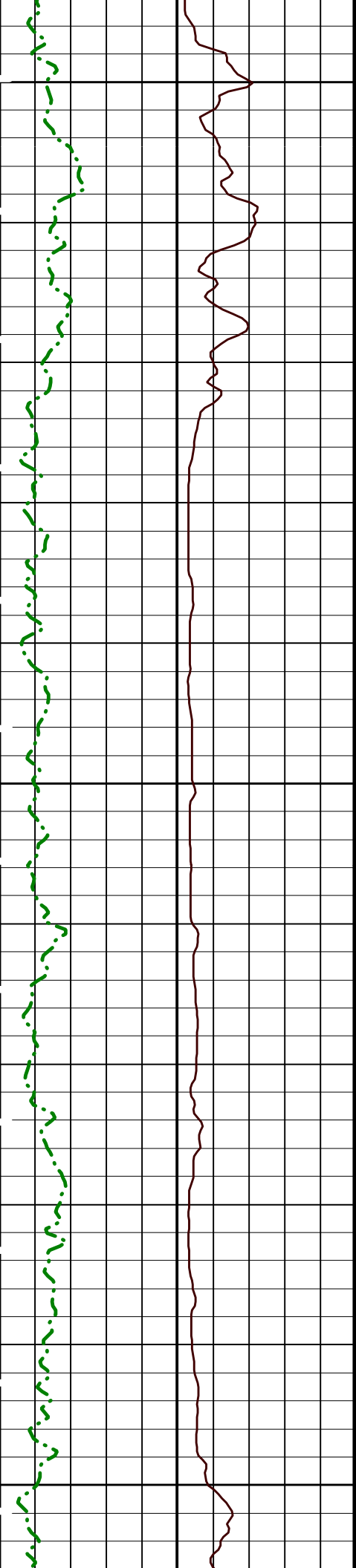




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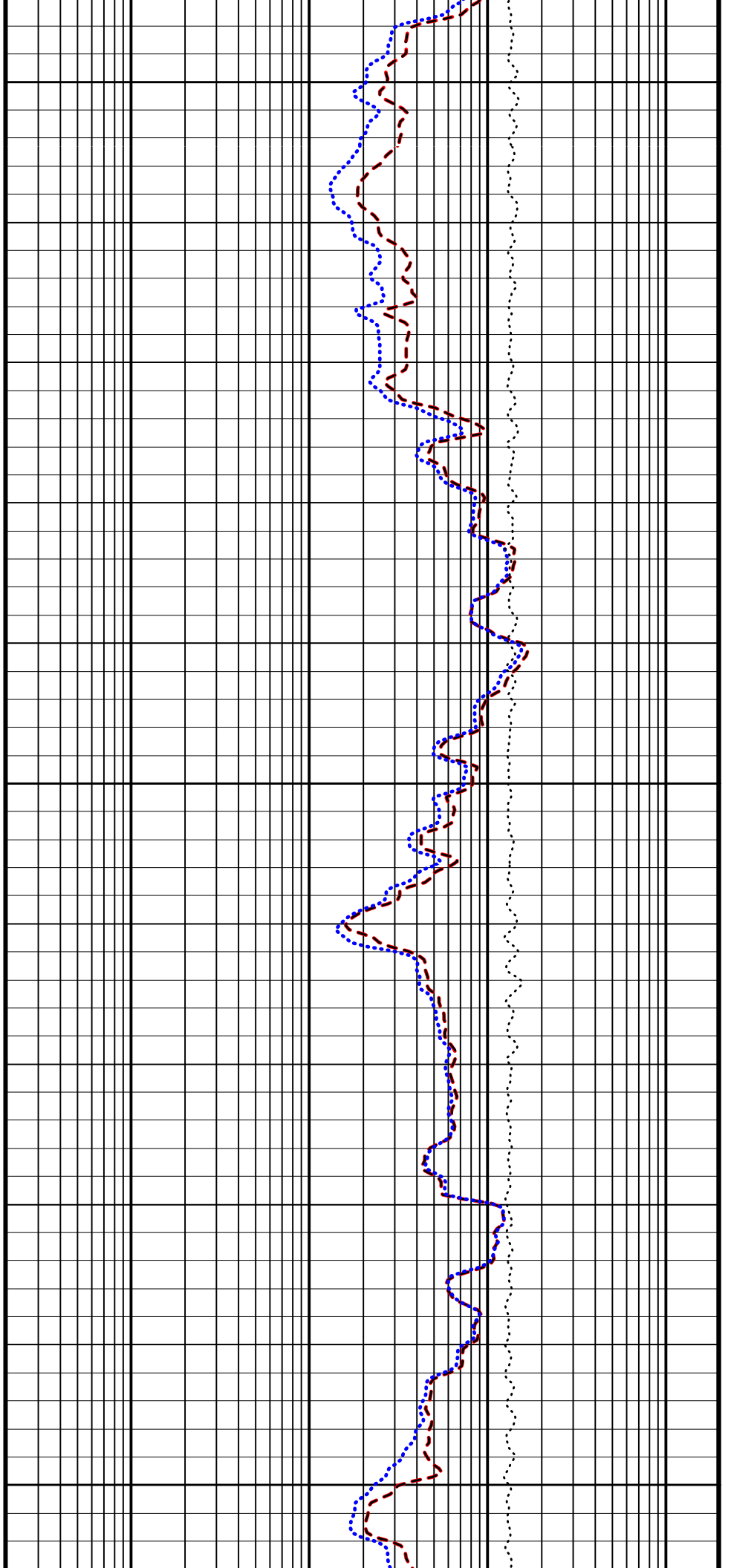


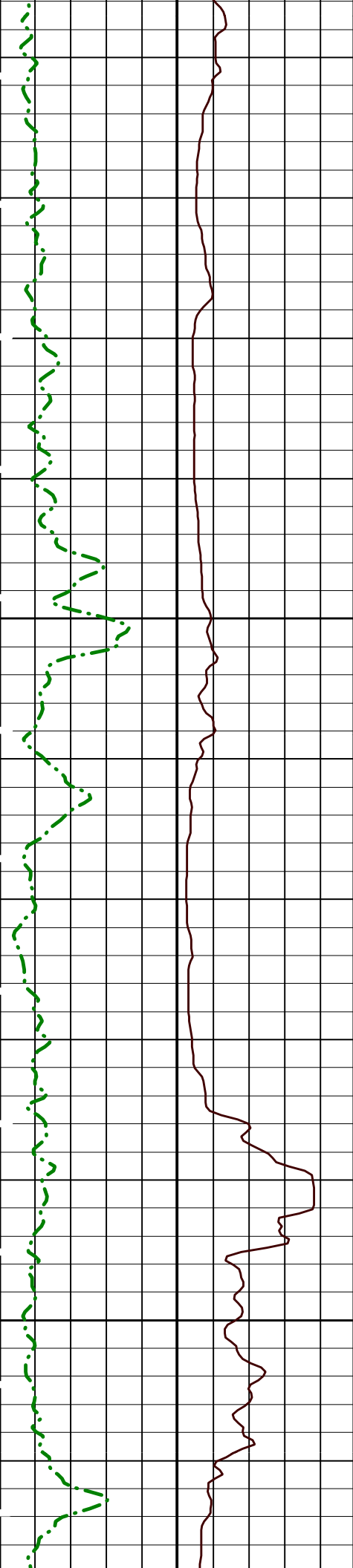


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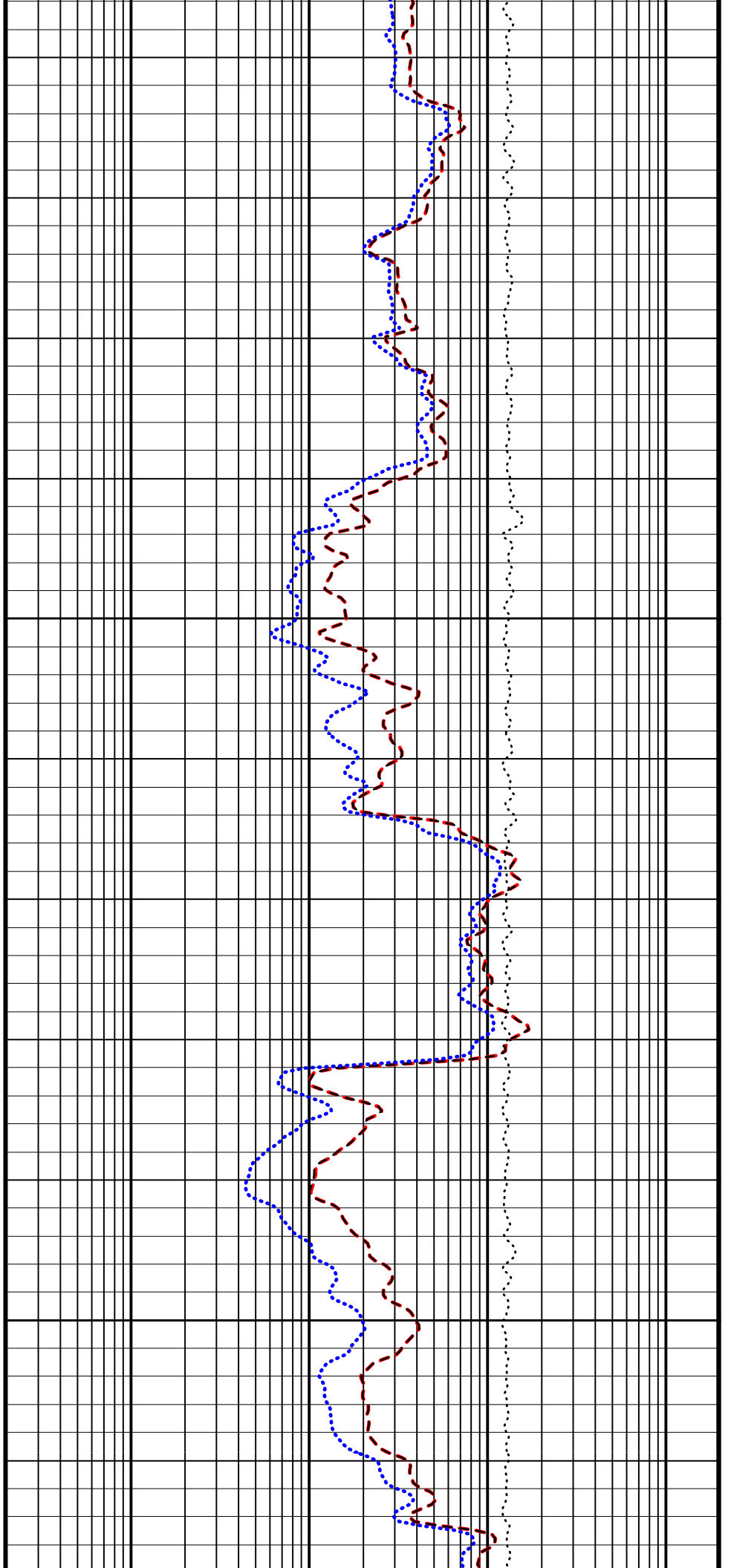
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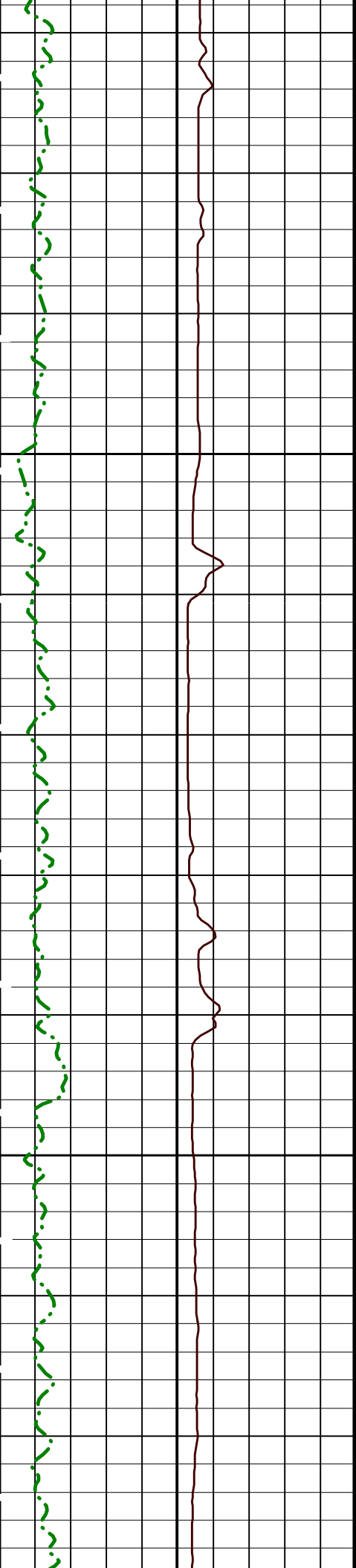




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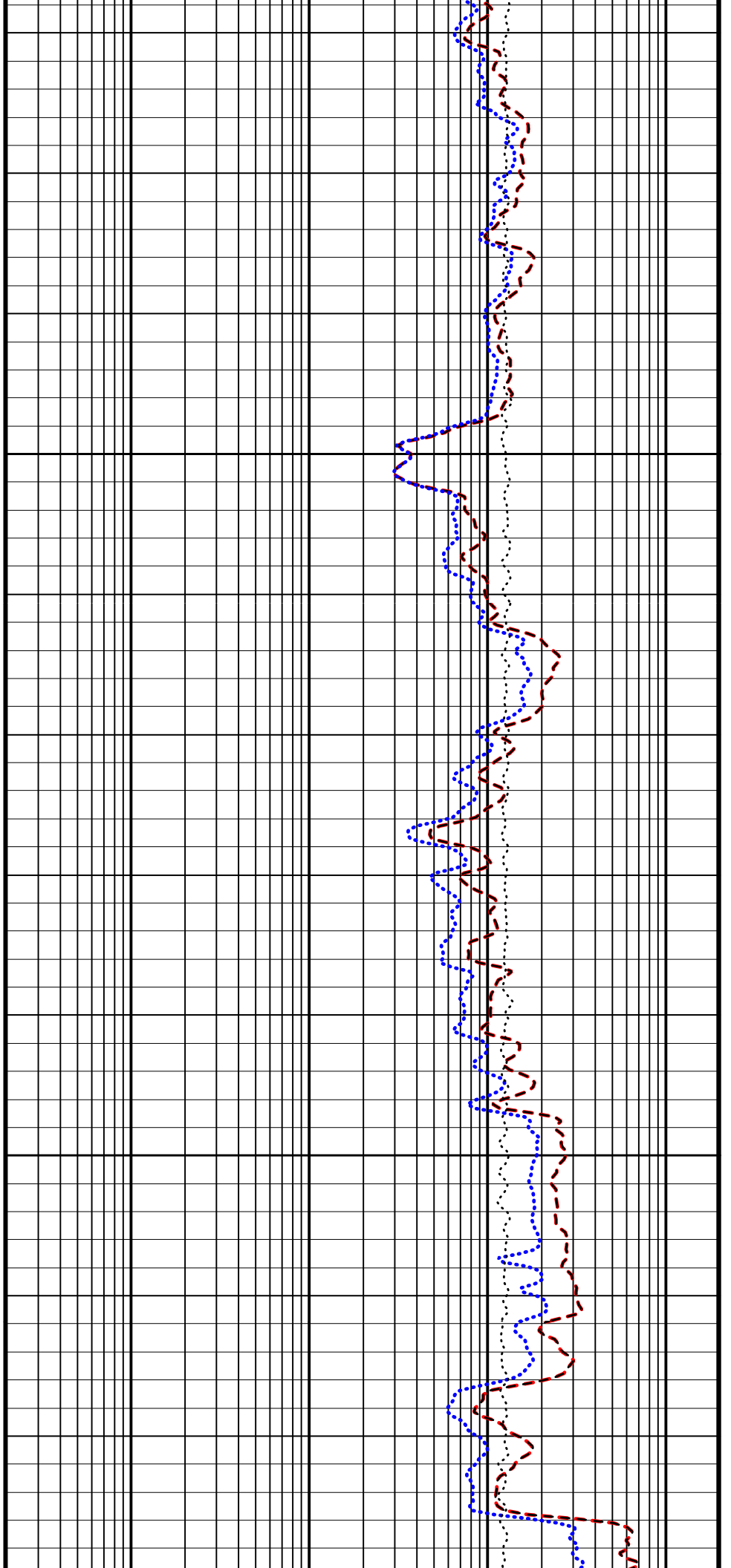
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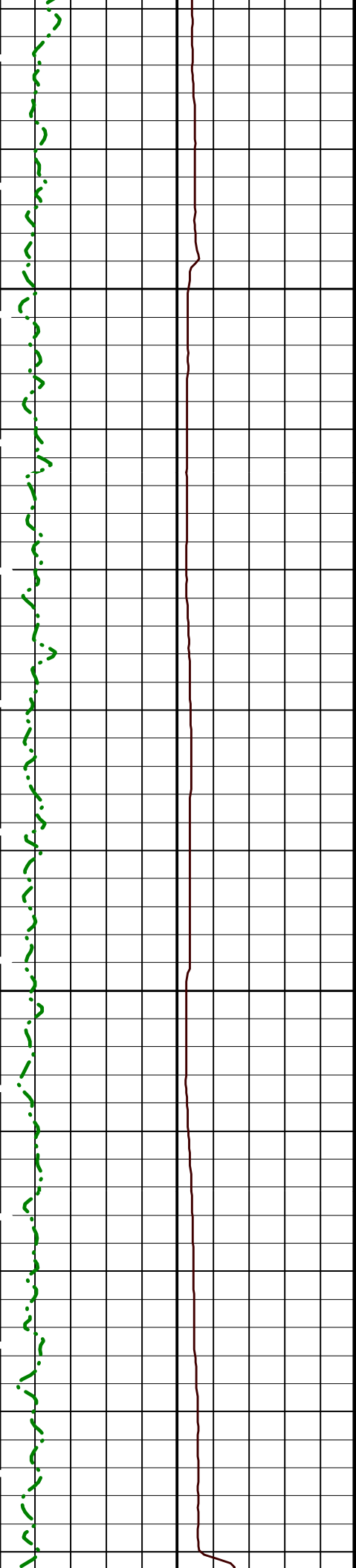




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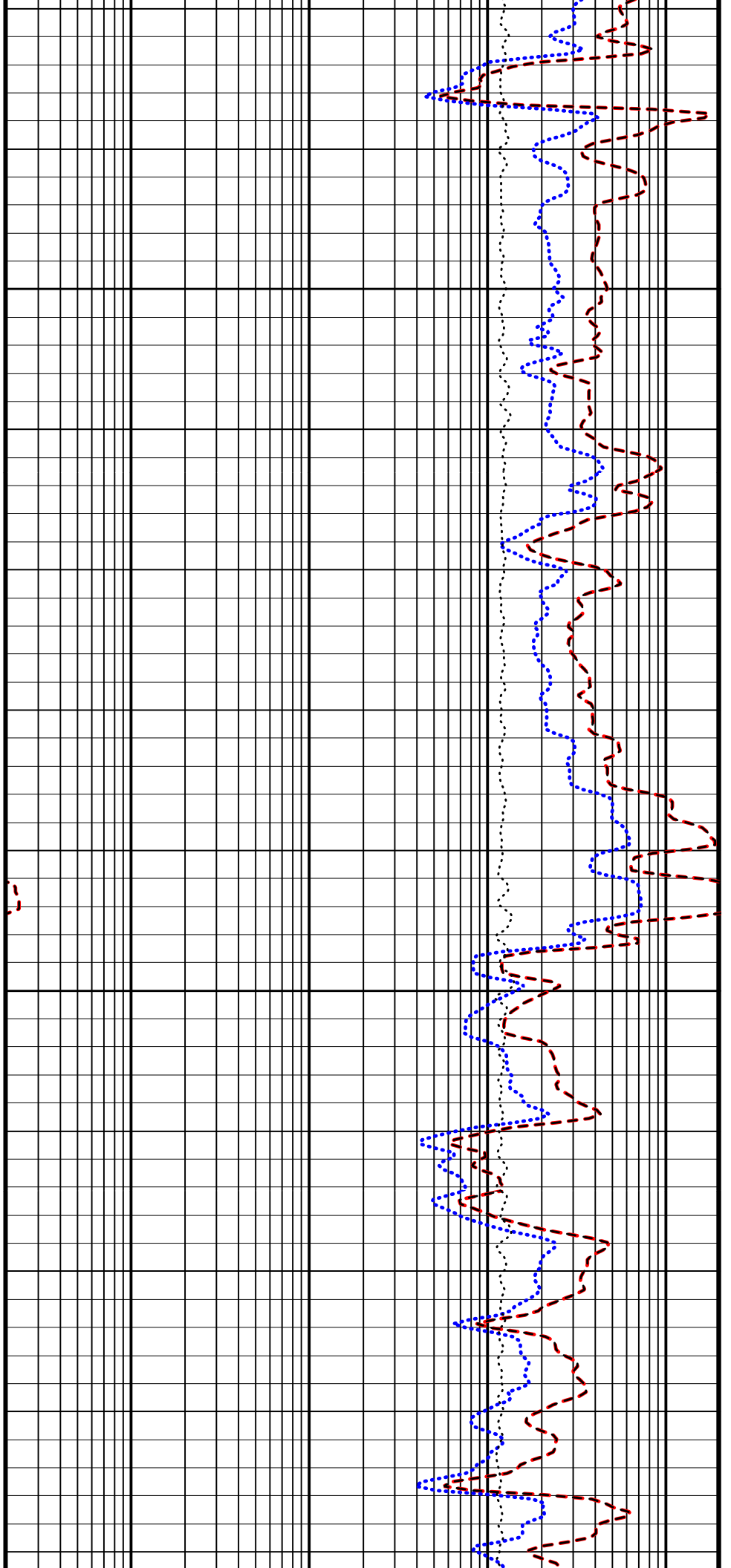
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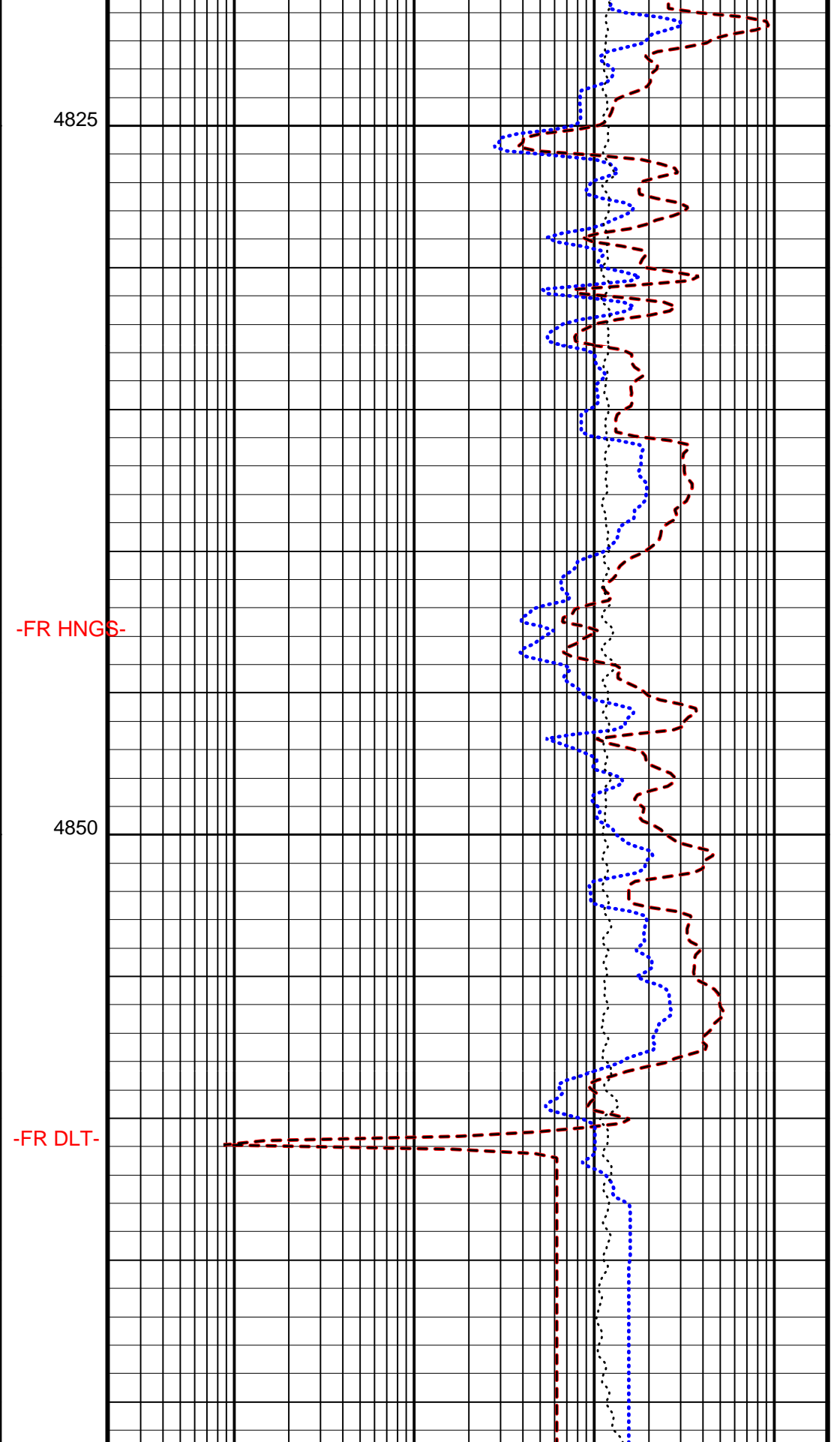
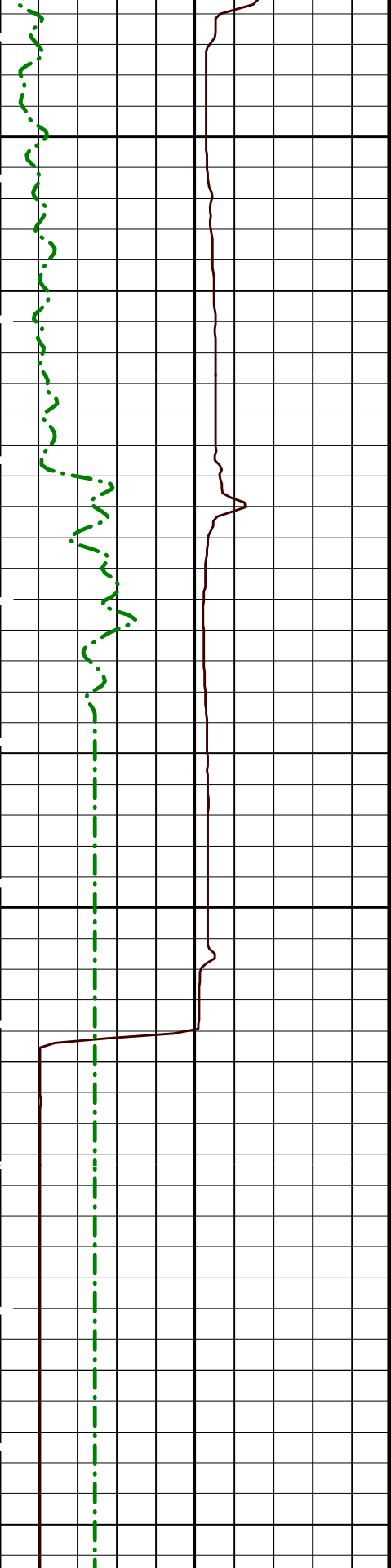




4775

4800





HLDS Caliper (LCAL)
 (IN) 0 20

HNGS Spectroscopy Gamma Ray
 (HSGR)
 (GAPI) 0 20

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	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	-0.00127533
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	1.10974
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	1.1427
System and Miscellaneous		
BS	Bit Size	9.875 IN
DFD	Drilling Fluid Density	1.07 G/C3

Format: DLT_DST Vertical Scale: 1:200 Graphics File Created: 21-Aug-2005 16:11

OP System Version: 12C0-301
MCM

DLT-E	12C0-301	DTA-A	12C0-301
HLDS	SPC-2602-NUCL_b	LDSC-A	SPC-2602-NUCL_b
APS-C	SPC-2602-NUCL_b	HNGC-B	SPC-2602-NUCL_b
HNGS-BA	SPC-2602-NUCL_b	DTC-H	12C0-301
BSP	12C0-301		

Output DLIS Files

DEFAULT	DLL_LDL_APS_NGS_031LUP	FN:32	PRODUCER	21-Aug-2005 16:11
REDUCED	DLL_LDL_APS_NGS_031LUP	FN:33	PRODUCER	21-Aug-2005 16:11



CALIBRATIONS

Calibration and Check Summary

Measurement	Nominal	Master	Before	After	Change	Limit	Units
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DUAL LATEROLOG - E Wellsite Calibration - DLT ELECTRONICS CALIBRATION Laterolog Measurement

Before: 21-Aug-2005 15:10

MEASURED LLD	31.62	N/A	31.91	N/A	N/A	0.9000	OHMM
MEASURED LLS	31.62	N/A	35.15	N/A	N/A	0.9000	OHMM

Hostile Litho-Density Sonde Wellsite Calibration - Background Measurement

Master: 8-Aug-2005 5:15 Before: 19-Aug-2005 14:12

SS Cs Resolution Bkg	9.000	8.500	8.513	N/A	N/A	1.800	%
LS Cs Resolution Bkg	9.000	8.161	8.134	N/A	N/A	1.800	%
LSW1 Background	100.0	82.14	82.13	N/A	N/A	3.000	CPS
LSW2 Background	100.0	74.99	73.91	N/A	N/A	3.000	CPS
LSW3 Background	200.0	169.1	165.4	N/A	N/A	6.000	CPS
LSW4 Background	250.0	207.4	206.5	N/A	N/A	7.500	CPS
LSW5 Background	600.0	464.2	464.6	N/A	N/A	18.00	CPS
SSW1 Background	100.0	79.48	80.15	N/A	N/A	3.000	CPS
SSW2 Background	200.0	141.1	139.4	N/A	N/A	6.000	CPS
SSW3 Background	500.0	376.6	373.7	N/A	N/A	15.00	CPS
SSW4 Background	270.0	198.6	199.3	N/A	N/A	8.100	CPS
SSW5 Background	200.0	143.3	143.2	N/A	N/A	6.000	CPS

Hostile Litho-Density Sonde Wellsite Calibration - Aluminum Measurement

Master: 8-Aug-2005 7:18

LSW1 Aluminum	600.0	547.9	N/A	N/A	N/A	N/A	CPS
LSW2 Aluminum	900.0	848.8	N/A	N/A	N/A	N/A	CPS
LSW3 Aluminum	1100	1044	N/A	N/A	N/A	N/A	CPS
LSW4 Aluminum	580.0	519.9	N/A	N/A	N/A	N/A	CPS
LSW5 Aluminum	570.0	481.0	N/A	N/A	N/A	N/A	CPS
SSW1 Aluminum	2800	2413	N/A	N/A	N/A	N/A	CPS
SSW2 Aluminum	8000	6977	N/A	N/A	N/A	N/A	CPS
SSW3 Aluminum	11600	10160	N/A	N/A	N/A	N/A	CPS
SSW4 Aluminum	5000	4265	N/A	N/A	N/A	N/A	CPS
SSW5 Aluminum	660.0	578.6	N/A	N/A	N/A	N/A	CPS

Hostile Litho-Density Sonde Wellsite Calibration - Lithology Measurement

Master: 8-Aug-2005 7:13

LSW1 Iron	400.0	371.2	N/A	N/A	N/A	N/A	CPS
LSW2 Iron	730.0	670.4	N/A	N/A	N/A	N/A	CPS
LSW3 Iron	1000	911.2	N/A	N/A	N/A	N/A	CPS
LSW4 Iron	520.0	473.6	N/A	N/A	N/A	N/A	CPS
LSW5 Iron	470.0	442.6	N/A	N/A	N/A	N/A	CPS
SSW1 Iron	2100	1806	N/A	N/A	N/A	N/A	CPS
SSW2 Iron	6800	5840	N/A	N/A	N/A	N/A	CPS
SSW3 Iron	10800	9264	N/A	N/A	N/A	N/A	CPS
SSW4 Iron	4600	3901	N/A	N/A	N/A	N/A	CPS
SSW5 Iron	580.0	507.2	N/A	N/A	N/A	N/A	CPS

Hostile Litho-Density Sonde Wellsite Calibration - Caliper Calibration

Before: 19-Aug-2005 14:15

HLDS Caliper Small Ring	8.000	N/A	10.80	N/A	N/A	N/A	IN
HLDS Caliper Large Ring	12.00	N/A	15.00	N/A	N/A	N/A	IN

Accelerator-Porosity Tool Wellsite Calibration - Detector Background

Master: 15-Aug-2005 4:57 Before: 19-Aug-2005 14:13

Near Det Bkg Cntrate	30.00	25.36	24.74	N/A	N/A	N/A	CPS
Far Det Bkg Cntrate	30.00	26.40	25.53	N/A	N/A	N/A	CPS
Array-1 Det Bkg Cntrate	30.00	27.15	26.46	N/A	N/A	N/A	CPS
Array-2 Det Bkg Cntrate	30.00	26.59	25.96	N/A	N/A	N/A	CPS
Array Therm Det Bkg Cntrate	30.00	26.22	24.09	N/A	N/A	N/A	CPS

Accelerator-Porosity Tool Wellsite Calibration - Calibration Ratios

Master: 15-Aug-2005 4:57

Near/Far Calibration Ratio	0.9250	0.9630	N/A	N/A	N/A	N/A	
Near/Array Calibration Ratio	1.030	0.9878	N/A	N/A	N/A	N/A	
Near/Array Cal Ratio Up/Down	1.000	1.011	N/A	N/A	N/A	N/A	

Accelerator-Porosity Tool Wellsite Calibration - Tank Check

Master: 15-Aug-2005 4:57

Array-1 Standoff Porosity	11.75	12.31	N/A	N/A	N/A	N/A	PU
Array-2 Standoff Porosity	11.75	11.98	N/A	N/A	N/A	N/A	PU
Average Slowing Down Time	6.000	5.772	N/A	N/A	N/A	N/A	US

Average Slowing Down Time	6.000	5.772	N/A	N/A	N/A	N/A	US
Array-1 SDT Ratio Up/Down	1.000	1.001	N/A	N/A	N/A	N/A	
Array-2 SDT Ratio Up/Down	1.000	0.9963	N/A	N/A	N/A	N/A	
Sigma Formation	27.50	27.56	N/A	N/A	N/A	N/A	CU

Accelerator-Porosity Tool Wellsite Calibration - CCR7 signal boxes

Master: 15-Aug-2005 4:57

Near Detector Plateau Setting	1650	1738	N/A	N/A	N/A	N/A	V
Far Detector Plateau Setting	2000	2083	N/A	N/A	N/A	N/A	V
Array Detector Plateau Setting	2000	1970	N/A	N/A	N/A	N/A	V

Hostile Natural Gamma Ray Sonde Wellsite Calibration - Detector 1 Check

Master: 19-Aug-2005 13:45 Before: 19-Aug-2005 14:13

Na 511 Peak Loc	40.00	39.55	39.60	N/A	N/A	1.000	
Na 511 Peak Res	15.50	16.41	16.70	N/A	N/A	2.000	%
High Voltage	1150	1122	1123	N/A	N/A	N/A	V
Na 1785 Peak Loc	142.6	142.5	142.4	N/A	N/A	7.000	
Na 1785 Peak Res	8.500	9.106	8.805	N/A	N/A	2.000	%
Temperature	15.50	34.58	34.64	N/A	N/A	N/A	DEGC
Na Count Rate	45.00	47.00	46.61	N/A	N/A	8.000	CPS

Hostile Natural Gamma Ray Sonde Wellsite Calibration - Detector 2 Check

Master: 19-Aug-2005 13:45 Before: 19-Aug-2005 14:13

Na 511 Peak Loc	40.00	39.60	39.60	N/A	N/A	1.000	
Na 511 Peak Res	15.50	16.71	16.38	N/A	N/A	2.000	%
High Voltage	1150	1200	1201	N/A	N/A	N/A	V
Na 1785 Peak Loc	142.6	142.6	142.3	N/A	N/A	7.000	
Na 1785 Peak Res	8.500	8.264	8.445	N/A	N/A	2.000	%
Temperature	15.50	33.67	33.88	N/A	N/A	N/A	DEGC
Na Count Rate	45.00	46.77	46.05	N/A	N/A	8.000	CPS

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

Master: 19-Aug-2005 13:45 Before: 19-Aug-2005 14:13

Coincidence Count Rate Ratio	1.000	1.005	1.013	N/A	N/A	0.05000	
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Hostile Natural Gamma Ray Sonde Master Calibration - Detector 1 Calibration

Master: 19-Aug-2005 13:45

Na 511 Peak Set Point	40.00	41.00	--	--	--	--	
Th Peak Loc	209.6	209.4	--	--	--	--	
Th Peak Res	7.000	7.421	--	--	--	--	%
Background Count Rate	142.5	22.21	--	--	--	--	CPS
Gain Ratio	1.000	1.007	--	--	--	--	

Hostile Natural Gamma Ray Sonde Master Calibration - Detector 2 Calibration

Master: 19-Aug-2005 13:45

Na 511 Peak Set Point	40.00	41.00	--	--	--	--	
Th Peak Loc	209.6	209.7	--	--	--	--	
Th Peak Res	7.000	7.313	--	--	--	--	%
Background Count Rate	142.5	20.37	--	--	--	--	CPS
Gain Ratio	1.000	1.007	--	--	--	--	

Accelerator-Porosity Tool - Detector Plateau Settings :

Near Detector Plateau Setting	1738 V
Far Detector Plateau Setting	2083 V
Array Detector Plateau Setting	1970 V

DUAL LATEROLOG - E / Equipment Identification

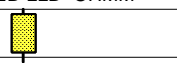
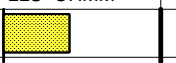
Primary Equipment:

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		31.91	Before		35.15	
	29.00 (Minimum)	31.62 (Nominal)	40.00 (Maximum)	29.00 (Minimum)	31.62 (Nominal)	40.00 (Maximum)

Before: 21-Aug-2005 15:10

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			341.5	Before			10.90	Before			11.38
	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			330.7	Before			11.63				
	317.5 (Minimum)	342.5 (Nominal)	367.5 (Maximum)		9.830 (Minimum)	10.83 (Nominal)	11.83 (Maximum)				

Before: 21-Aug-2005 15:10

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			-0.08586	Before			-0.007697	Before			-0.003849
	-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			-0.08586	Before			0.007697				
	-1.000 (Minimum)	0 (Nominal)	1.000 (Maximum)		-0.1000 (Minimum)	0 (Nominal)	0.1000 (Maximum)				

Before: 21-Aug-2005 15:09

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			8.500	Master			8.161	Master			82.14
Before			8.513	Before			8.134	Before			82.13
	7.000 (Minimum)	9.000 (Nominal)	11.00 (Maximum)		7.000 (Minimum)	9.000 (Nominal)	11.00 (Maximum)		55.00 (Minimum)	100.0 (Nominal)	150.0 (Maximum)
Phase	LSW2 Background CPS		Value	Phase	LSW3 Background CPS		Value	Phase	LSW4 Background CPS		Value
Master			74.99	Master			169.1	Master			207.4
Before			73.91	Before			165.4	Before			206.5
	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			464.2	Master			79.48	Master			141.1
Before			464.6	Before			80.15	Before			139.4
	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			376.6	Master			198.6	Master			143.3
Before			373.7	Before			199.3	Before			143.2
	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)

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Before: 19-Aug-2005 14:12

Hostile Litho-Density Sonde Master Calibration									
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Detector Aluminum Measurement

Phase	LSW1 Background CPS	Value	Phase	LSW2 Background CPS	Value	Phase	LSW3 Background CPS	Value
Master		82.14	Master		74.99	Master		169.1
	55.00 (Minimum) 100.0 (Nominal) 150.0 (Maximum)			50.00 (Minimum) 100.0 (Nominal) 140.0 (Maximum)			110.0 (Minimum) 200.0 (Nominal) 290.0 (Maximum)	
Phase	LSW4 Background CPS	Value	Phase	LSW5 Background CPS	Value	Phase	LS Cs Resolution Bkg %	Value
Master		207.4	Master		464.2	Master		8.161
	140.0 (Minimum) 250.0 (Nominal) 360.0 (Maximum)			330.0 (Minimum) 600.0 (Nominal) 830.0 (Maximum)			7.000 (Minimum) 9.000 (Nominal) 11.00 (Maximum)	
Phase	SSW1 Background CPS	Value	Phase	SSW2 Background CPS	Value	Phase	SSW3 Background CPS	Value
Master		79.48	Master		141.1	Master		376.6
	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		198.6	Master		143.3	Master		8.500
	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)	

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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		547.9	Master		848.8	Master		1044
	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		519.9	Master		481.0	Master		2413
	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		6977	Master		10160	Master		4265
	5800 (Minimum) 8000 (Nominal) 9300 (Maximum)			8300 (Minimum) 11600 (Nominal) 13500 (Maximum)			3500 (Minimum) 5000 (Nominal) 5800 (Maximum)	
Phase	SSW5 Aluminum CPS	Value						
Master		578.6						
	470.0 (Minimum) 660.0 (Nominal) 770.0 (Maximum)							

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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		371.2	Master		670.4	Master		911.2
	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		473.6	Master		442.6	Master		1806
	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		5840	Master		9264	Master		3901
	4900 (Minimum) 6800 (Nominal) 7900 (Maximum)			7800 (Minimum) 10800 (Nominal) 12600 (Maximum)			3300 (Minimum) 4600 (Nominal) 5400 (Maximum)	
Phase	SSW5 Iron CPS	Value						
Master		507.2						
	420.0 (Minimum) 580.0 (Nominal) 680.0 (Maximum)							

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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		1.043	Master		2.098	Master		0.5474
	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		0.4982	Master		0.9898	Master		0.9886
	0.4000 (Minimum)			0.9800 (Minimum)			0.9800 (Minimum)	
	0.5500 (Nominal)			0.9880 (Nominal)			0.9880 (Nominal)	
	0.6500 (Maximum)			0.9960 (Maximum)			0.9960 (Maximum)	
Phase	Pad-Position SS Ratio	Value	Phase	Pad-Position LS Ratio	Value			
Master		1.002	Master		0.9860			
	0.9900 (Minimum)			0.9850 (Minimum)				
	0.9940 (Nominal)			0.9940 (Nominal)				
	1.015 (Maximum)			1.010 (Maximum)				

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Litho-Density Spectroscopy Cartridge - A / Equipment Identification

Primary Equipment:			
LDSC Cartridge	LDSC - A	16	
Auxiliary Equipment:			
LDSC Housing	LDSH - A	52	

Accelerator-Porosity Tool / Equipment Identification

Primary Equipment:			
Accelerator-Porosity Sonde	APS - C	202	
APS Minitron	MNTR - F	5124	
Auxiliary Equipment:			
Accelerator-Porosity Housing	APH - AC	104	
APS Calibration Water Tank	SFT - 178	6250	
APS Aluminum Calibrator Sleeve	SFT - 281	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		25.36	Master		26.40	Master		27.15
Before		24.74	Before		25.53	Before		26.46
	1.000 (Minimum)			1.000 (Minimum)			1.000 (Minimum)	
	30.00 (Nominal)			30.00 (Nominal)			30.00 (Nominal)	
	50.00 (Maximum)			50.00 (Maximum)			50.00 (Maximum)	
Phase	Array-2 Det Bkg Cntrate CPS	Value	Phase	Array Therm Det Bkg Cntrate CPS	Value			
Master		26.59	Master		26.22			
Before		25.96	Before		24.09			
	1.000 (Minimum)			1.000 (Minimum)				
	30.00 (Nominal)			30.00 (Nominal)				
	50.00 (Maximum)			50.00 (Maximum)				

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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		0.9630	Master		0.9878	Master		1.011
	0.8000 (Minimum)			0.9000 (Minimum)			0.9700 (Minimum)	
	0.9250 (Nominal)			1.030 (Nominal)			1.000 (Nominal)	
	1.050 (Maximum)			1.170 (Maximum)			1.030 (Maximum)	

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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		12.31	Master		11.98	Master		5.772
	9.900 (Minimum)			9.900 (Minimum)			5.500 (Minimum)	
	11.75 (Nominal)			11.75 (Nominal)			6.000 (Nominal)	
	13.60 (Maximum)			13.60 (Maximum)			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		1.001	Master		0.9963	Master		27.56
	0.9500 (Minimum)			0.9500 (Minimum)			20.00 (Minimum)	
	1.000 (Nominal)			1.000 (Nominal)			27.50 (Nominal)	
	1.050 (Maximum)			1.050 (Maximum)			35.00 (Maximum)	

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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		0.9630	Master		0.9878	Master		1.011
	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		12.31	Master		11.98	Master		5.772
	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		1.001	Master		0.9963	Master		27.56
	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: 15-Aug-2005 4:57

Hostile Natural Gamma Ray Cartridge - B / Equipment Identification

Primary Equipment:	HNGC Cartridge	HNGC - B	300
Auxiliary Equipment:	HNGC Housing	HNGH - A	115

Hostile Natural Gamma Ray Sonde / Equipment Identification

Primary Equipment:	HNGS Sonde	HNGS - BA	194
Auxiliary Equipment:	HNGS Sonde Housing	HNSH - BA	205
	Gamma Source Radioactive	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		39.55	Master		16.41	Master		1122
Before		39.60	Before		16.70	Before		1123
	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		142.5	Master		9.106	Master		34.58
Before		142.4	Before		8.805	Before		34.64
	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		47.00						
Before		46.61						
	10.00 (Minimum) 45.00 (Nominal) 100.0 (Maximum)							

Master: 19-Aug-2005 13:45

Before: 19-Aug-2005 14:13

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		39.60	Master		16.71	Master		1200
Before		39.60	Before		16.38	Before		1201

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		142.6	Master		8.264	Master		33.67	
Before		142.3	Before		8.445	Before		33.88	
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		46.77							
Before		46.05							
10.00 (Minimum) 45.00 (Nominal) 100.0 (Maximum)									
Master: 19-Aug-2005 13:45				Before: 19-Aug-2005 14:13					

Hostile Natural Gamma Ray Sonde Wellsite Calibration		
Ratio Of Detector 1 To Detector 2		
Phase	Coincidence Count Rate Ratio	Value
Master		1.005
Before		1.013
0.9500 (Minimum) 1.000 (Nominal) 1.050 (Maximum)		
Master: 19-Aug-2005 13:45		
Before: 19-Aug-2005 14:13		

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		209.4	Master		7.421
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		22.21	Master		1.007			
20.00 (Minimum) 142.5 (Nominal) 265.0 (Maximum)			0.9400 (Minimum) 1.000 (Nominal) 1.060 (Maximum)					
Master: 19-Aug-2005 13:45								

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		209.7	Master		7.313
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		20.37	Master		1.007			
20.00 (Minimum) 142.5 (Nominal) 265.0 (Maximum)			0.9400 (Minimum) 1.000 (Nominal) 1.060 (Maximum)					
Master: 19-Aug-2005 13:45								

Company: Lamont Doherty



Well: Expedition 309 Site U1256D

Field: Superfast Spreading Crust

Rig: Joides Resolution

Ocean: Pacific Ocean

Ocean.

Pacific Ocean

Dual Laterolog Tool

Gamma Ray