

DISCLAIMER

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OTHER SERVICES1
 OS1: DLT, 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 ODPLeg 206 and IODP Exp 309.
 DLL was stopped at 3955 mbrf.

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

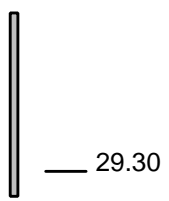
LOGGED INTERVAL	START	STOP

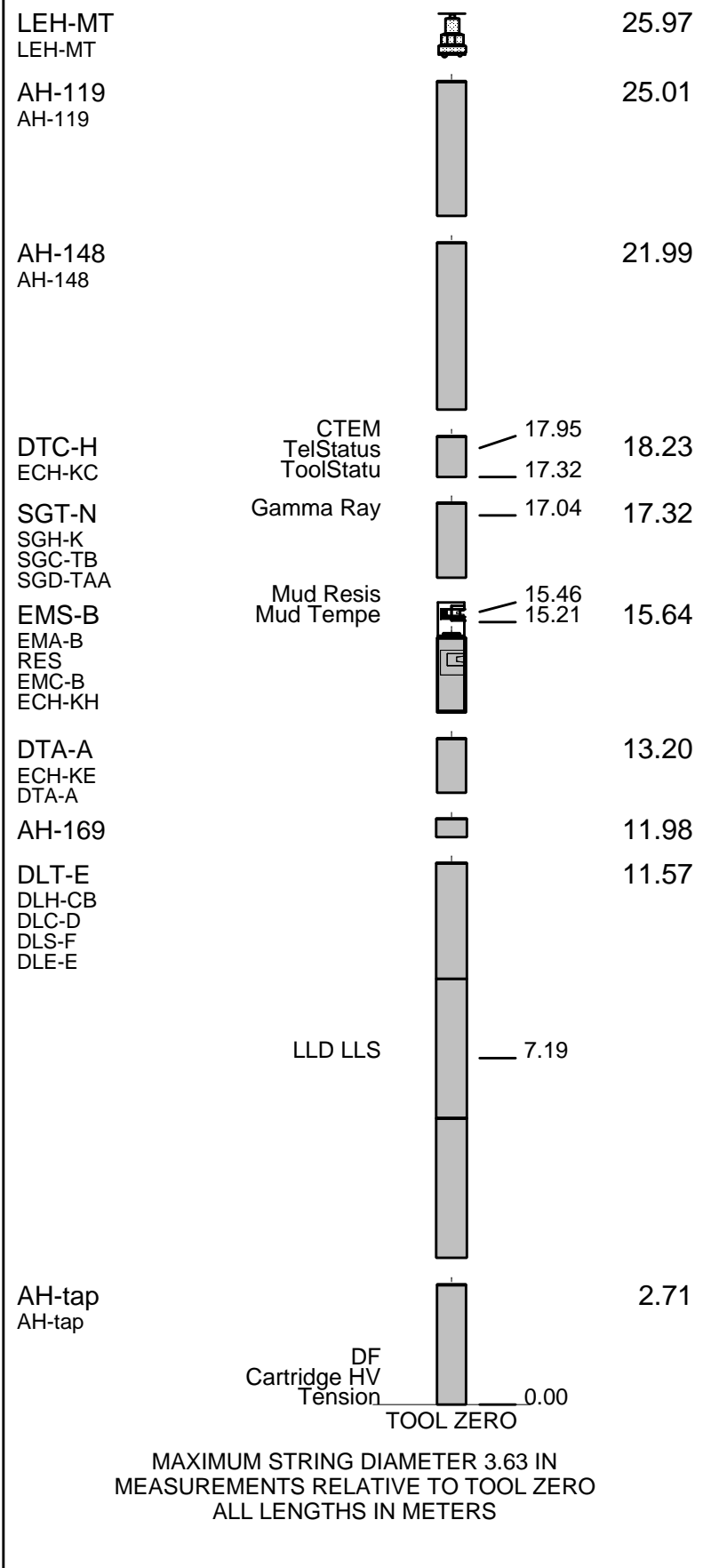
EQUIPMENT DESCRIPTION

RUN 1
SURFACE EQUIPMENT
 LCM-AA
 GSR-U/Y
 WITM (DTS)-A

RUN 2

DOWNHOLE EQUIPMENT
 BSP
 BRT-S
 SP SPARC
 50.36
 29.30





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

Kelly Bushing Elevation
Derrick Floor Elevation

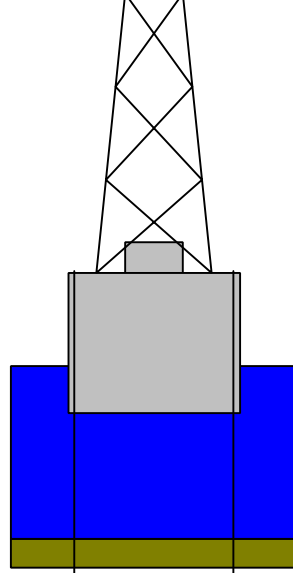
11.3
11.0

11.0 5.500

Casing String

Mean Sea Level

0.0



3645.0 9.875
3934.0 5.500

Borehole Segment
Casing Shoe

Schlumberger

MAIN PASS

MAXIS Field Log

Company: Lamont Doherty

Well: Expedition 312 Site 1256D

Output DLIS Files

DEFAULT	DLL_EMS_087LUP	FN:102	PRODUCER	23-Dec-2005 08:28	5085.3 M	3892.4 M
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OP System Version: 12C0-301

MCM

DLT-E	12C0-301	DTA-A	12C0-301
EMS-B	12C0-301	SGT-N	12C0-301
DTC-H	12C0-301	BSP	12C0-301

Changed Parameter Summary

DLIS Name	New Value	Previous Value	Depth & Time
LLOO	OFF	BOTH	3962.2 09:48:39

PIP SUMMARY

Time Mark Every 60 S

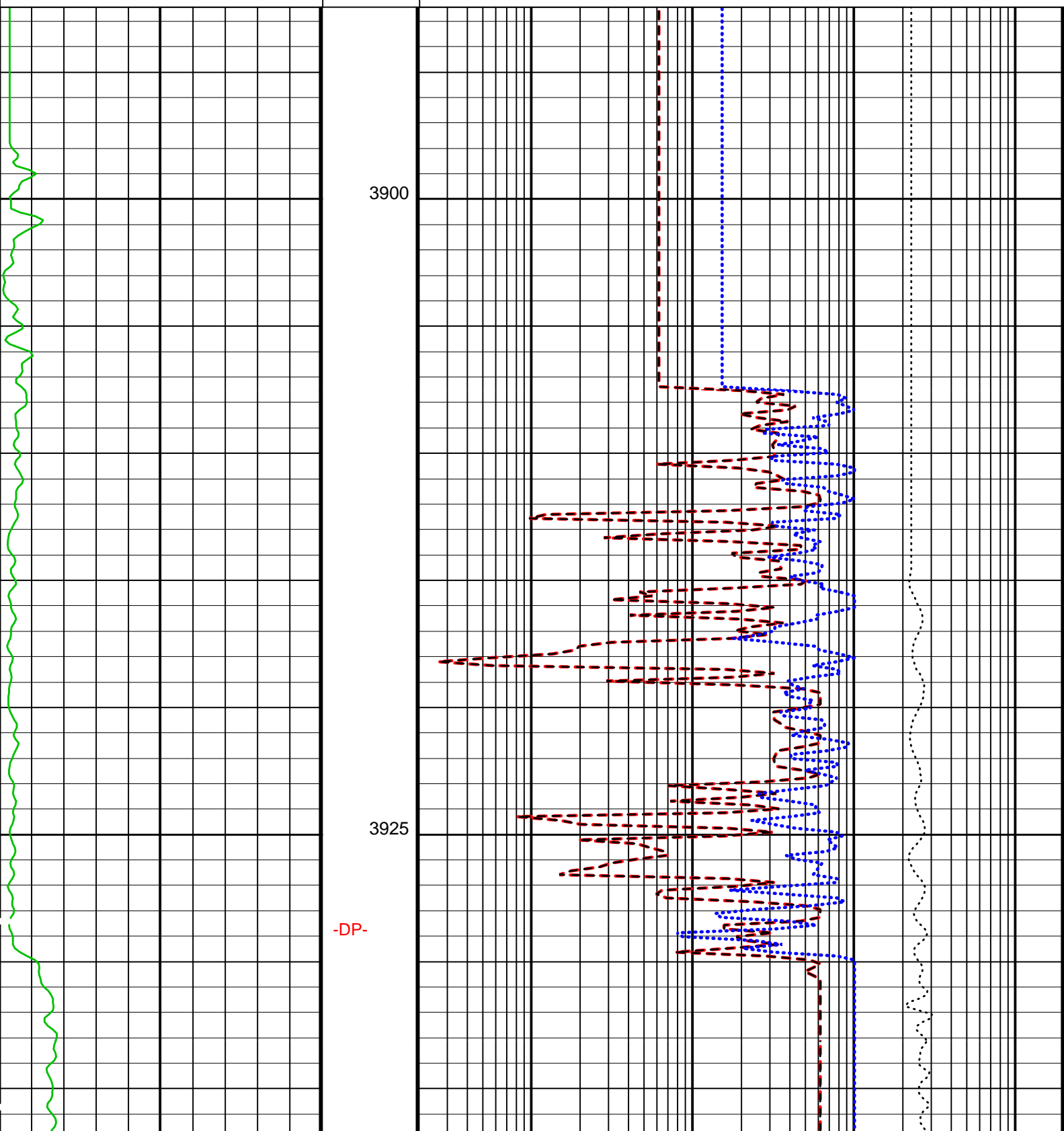
Tension (TENS)
(LBF) 10000 0

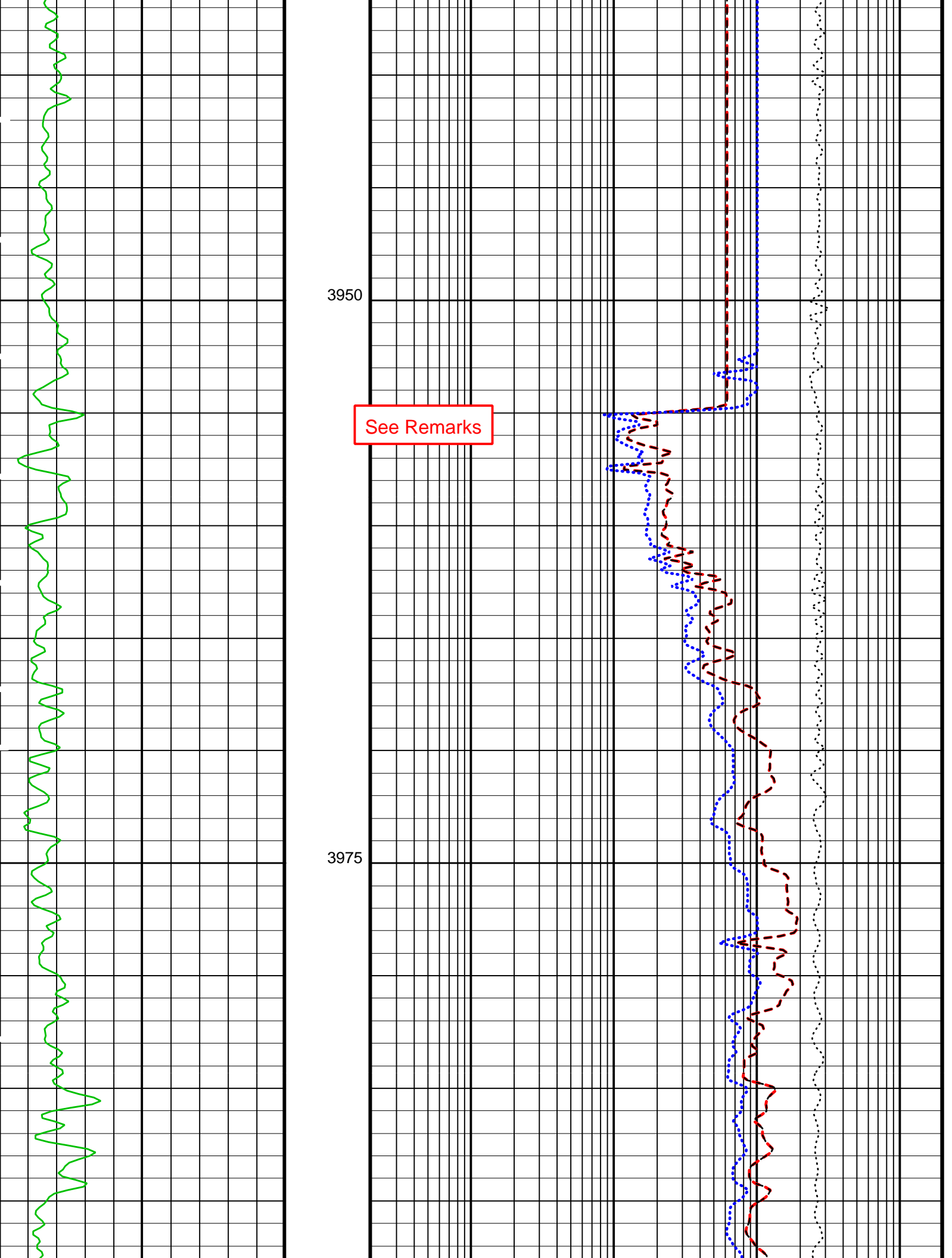
Laterolog Shallow Resistivity (LLS)
(OHMM) 0.2 2000

Laterolog Groningen Resistivity (LLG)
(OHMM) 0.2 2000

Laterolog Deep Resistivity (LLD)
(OHMM) 0.2 2000

Gamma Ray (GR)
(GAPI) 0 20

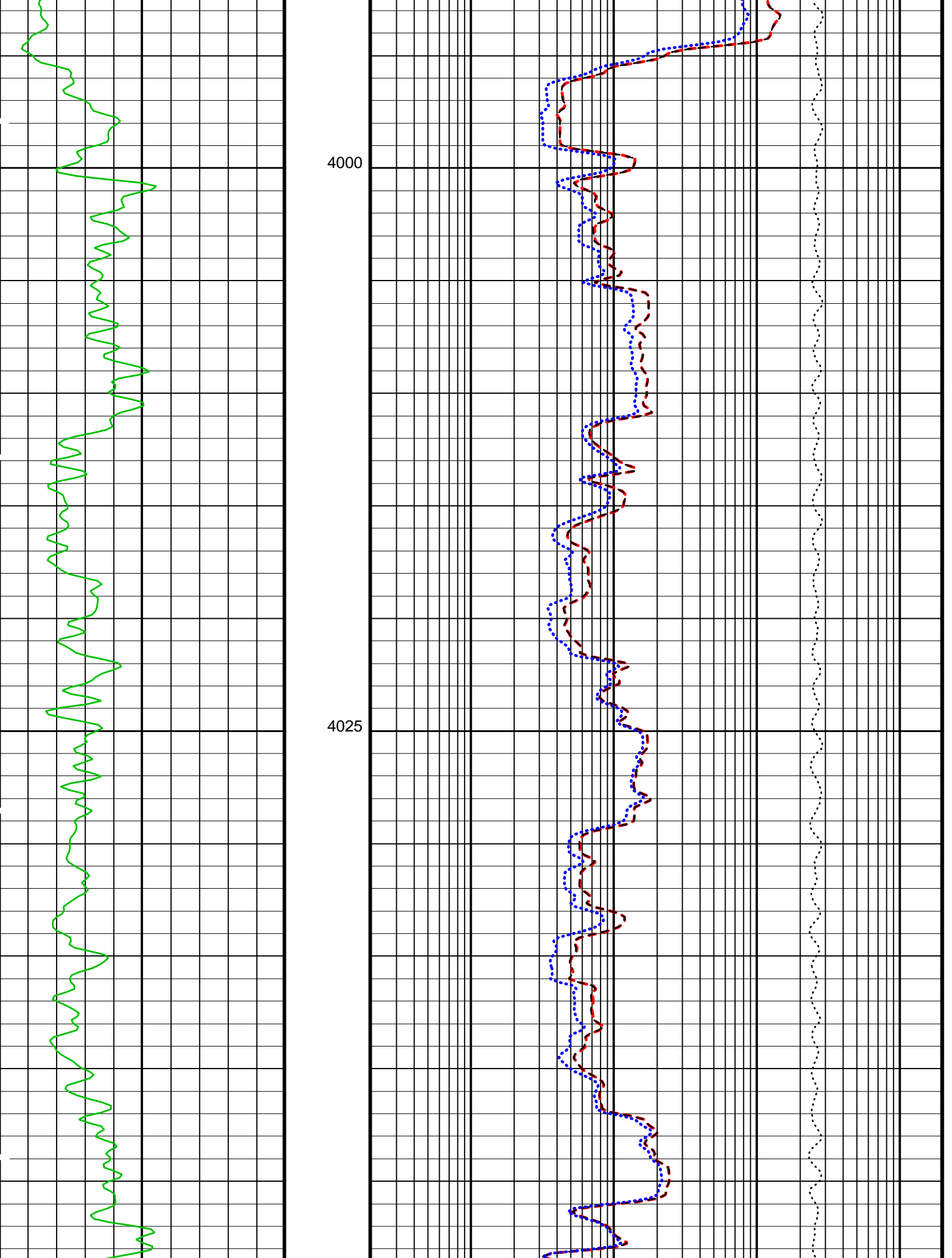


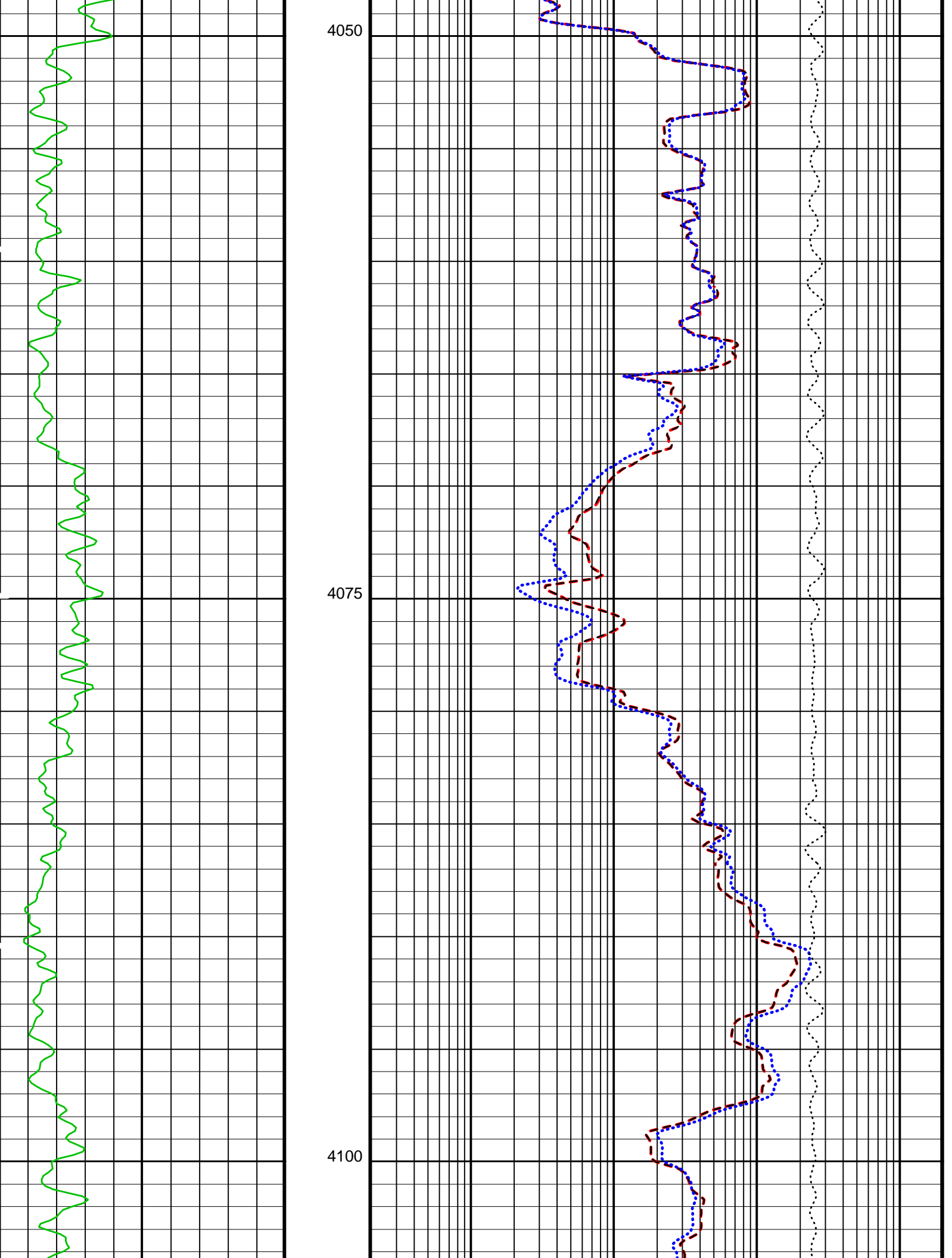


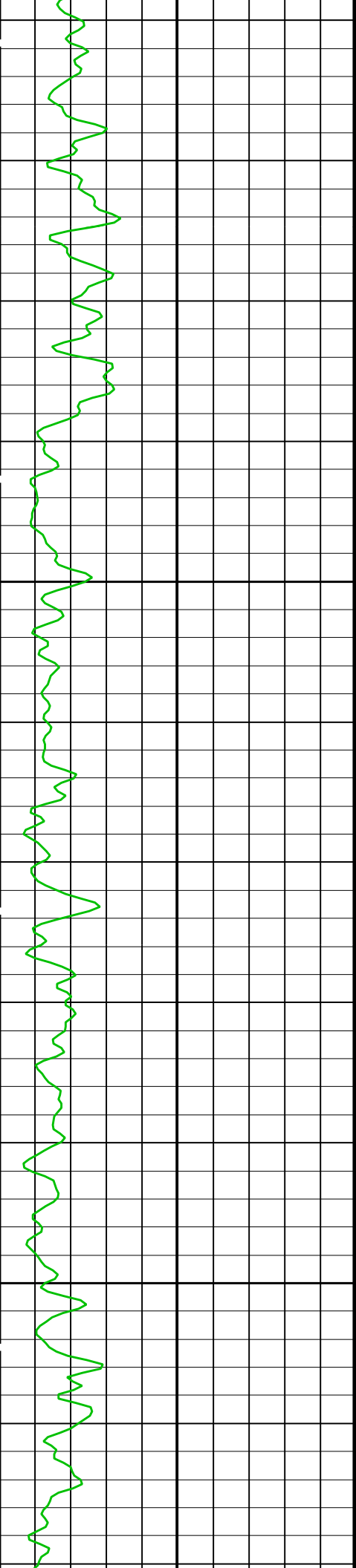
3950

See Remarks

3975

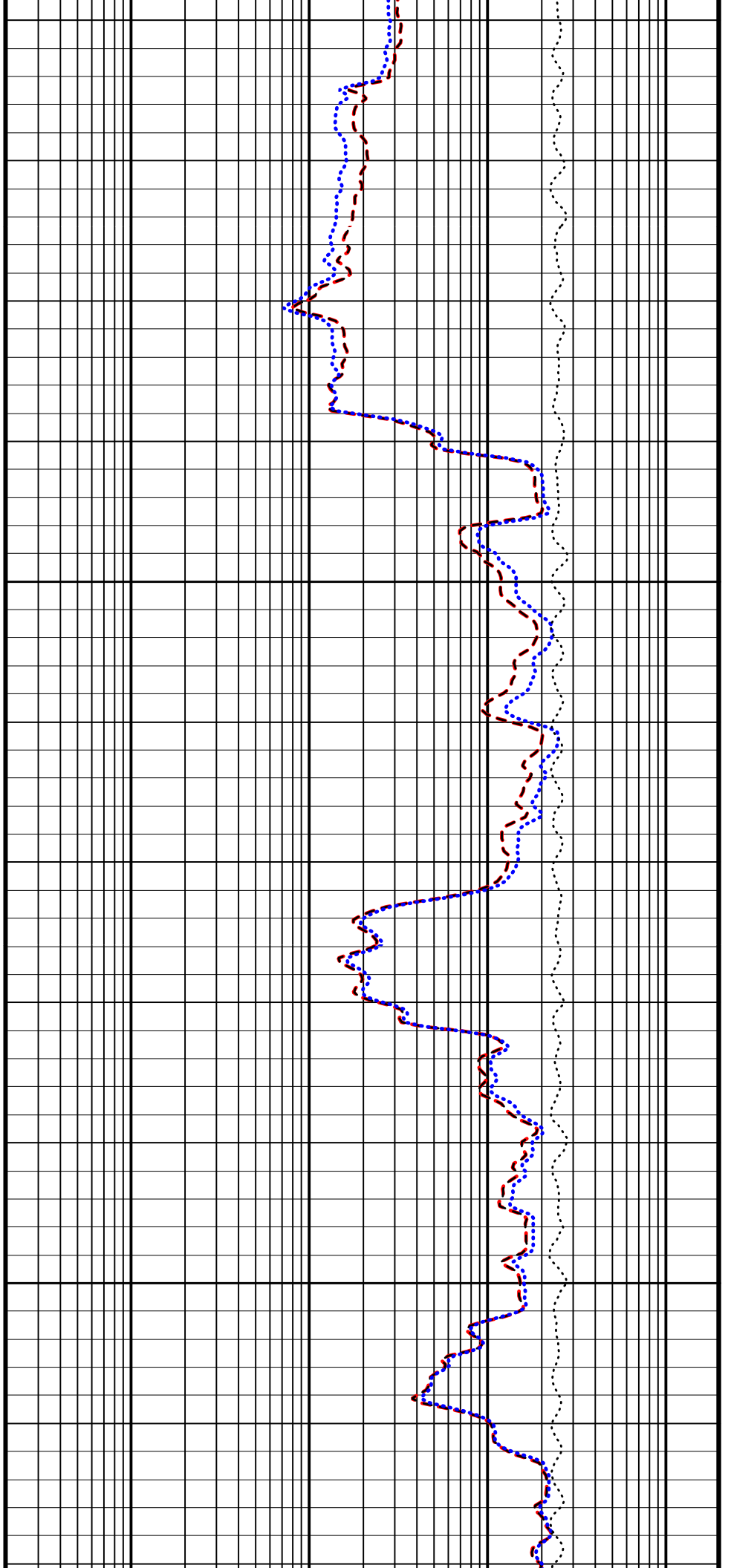


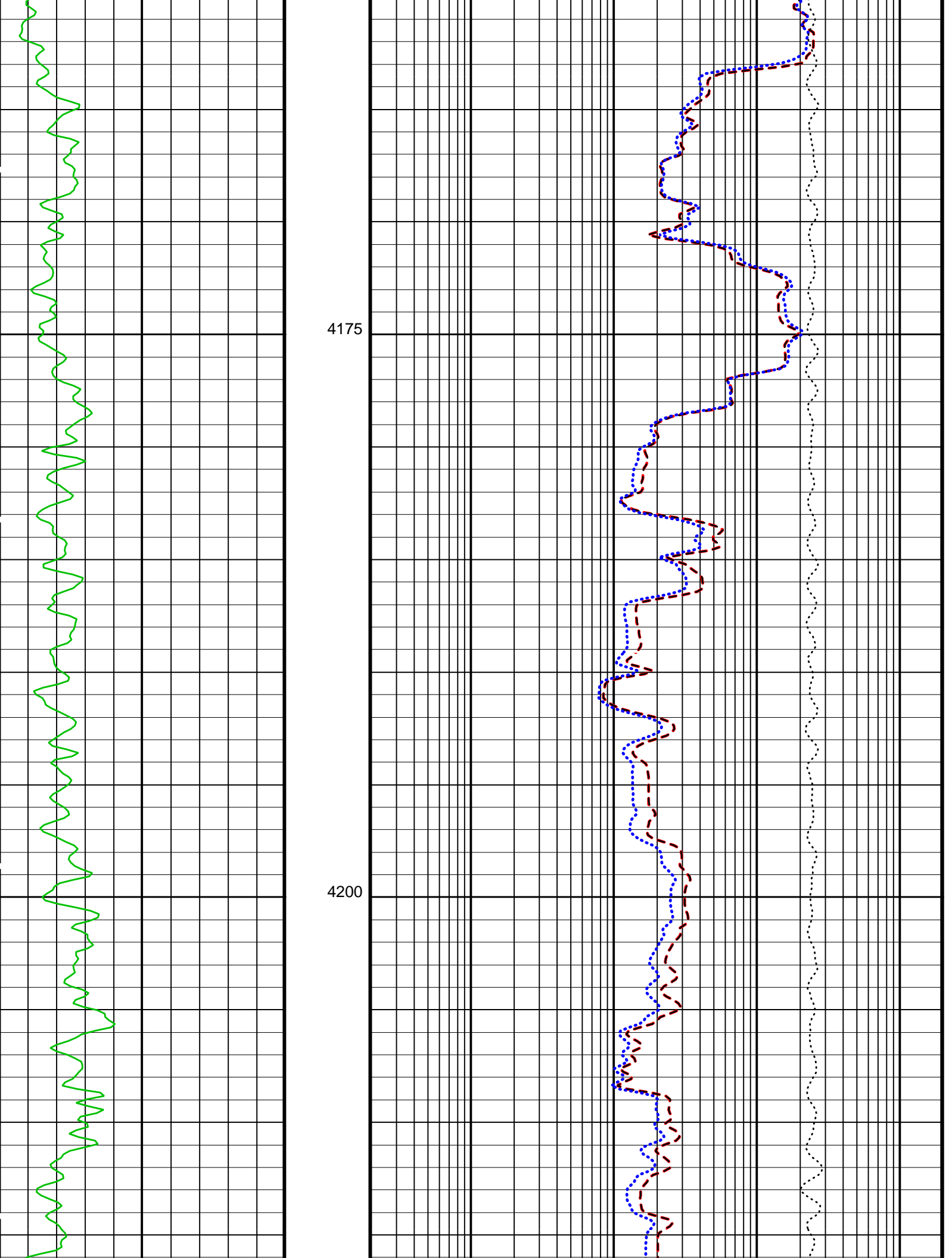




4125

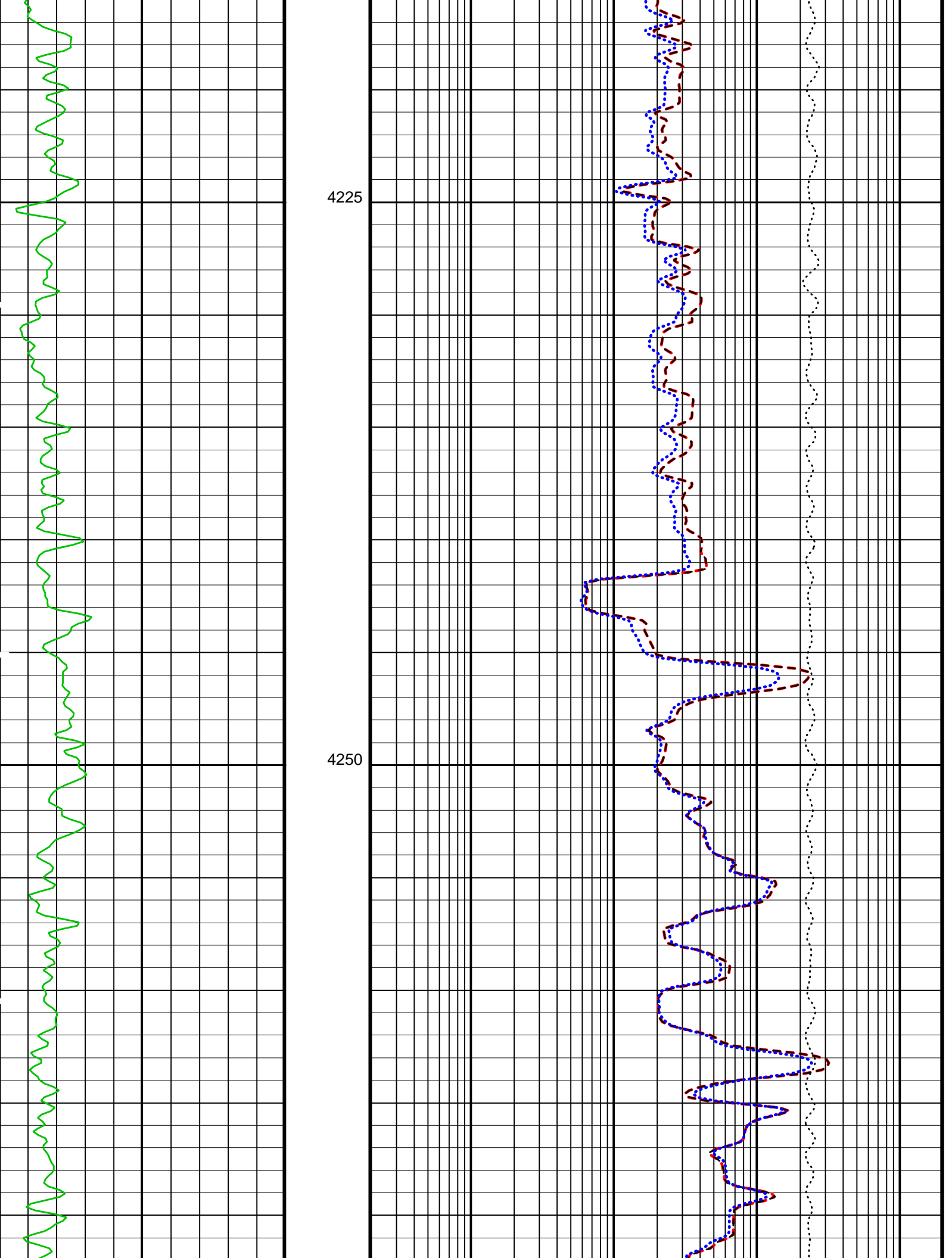
4150

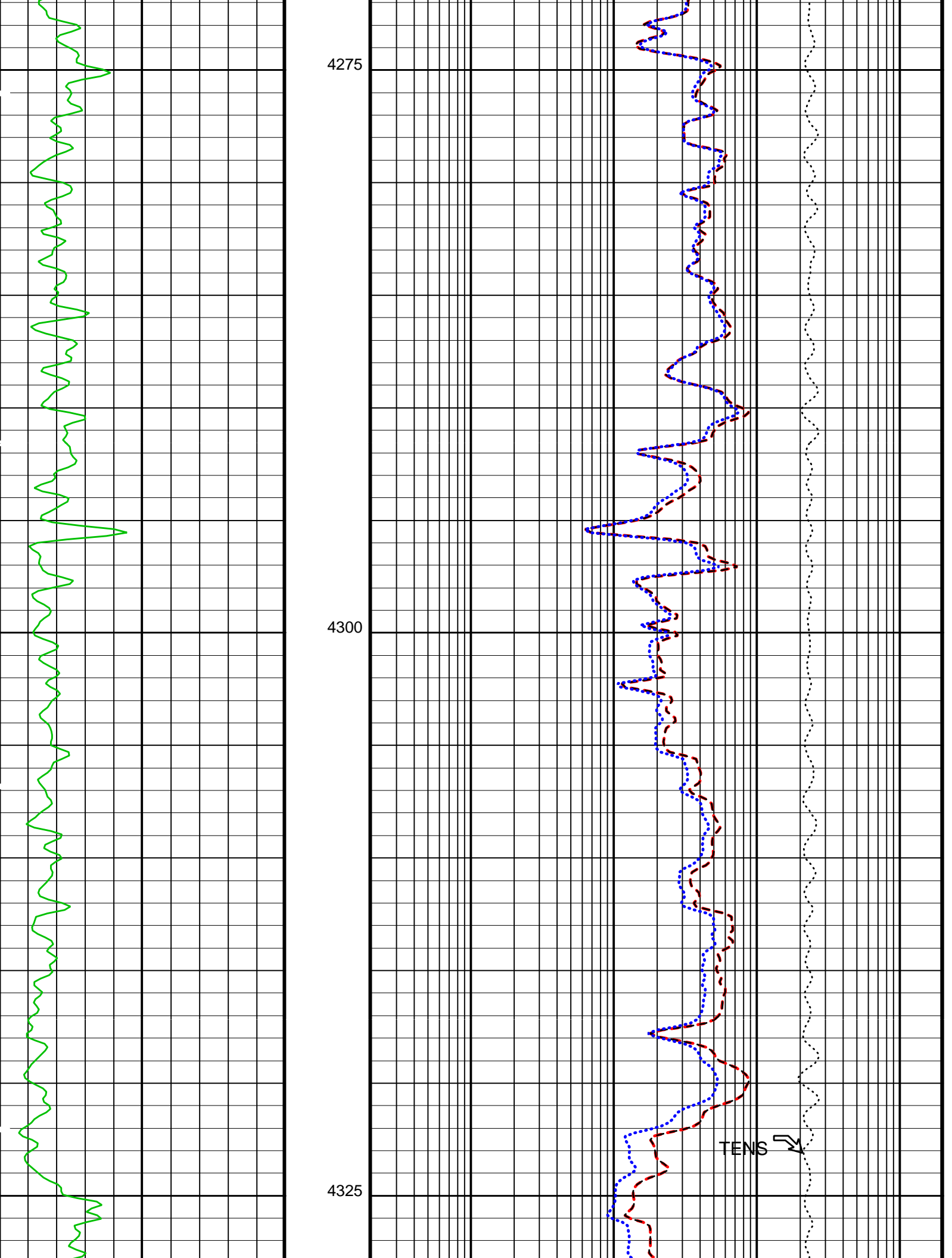


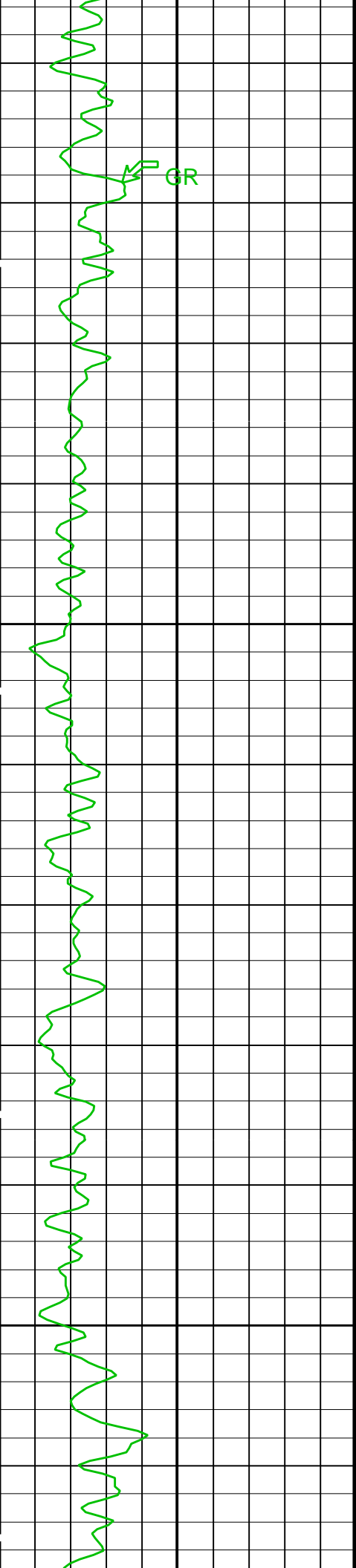


4175

4200

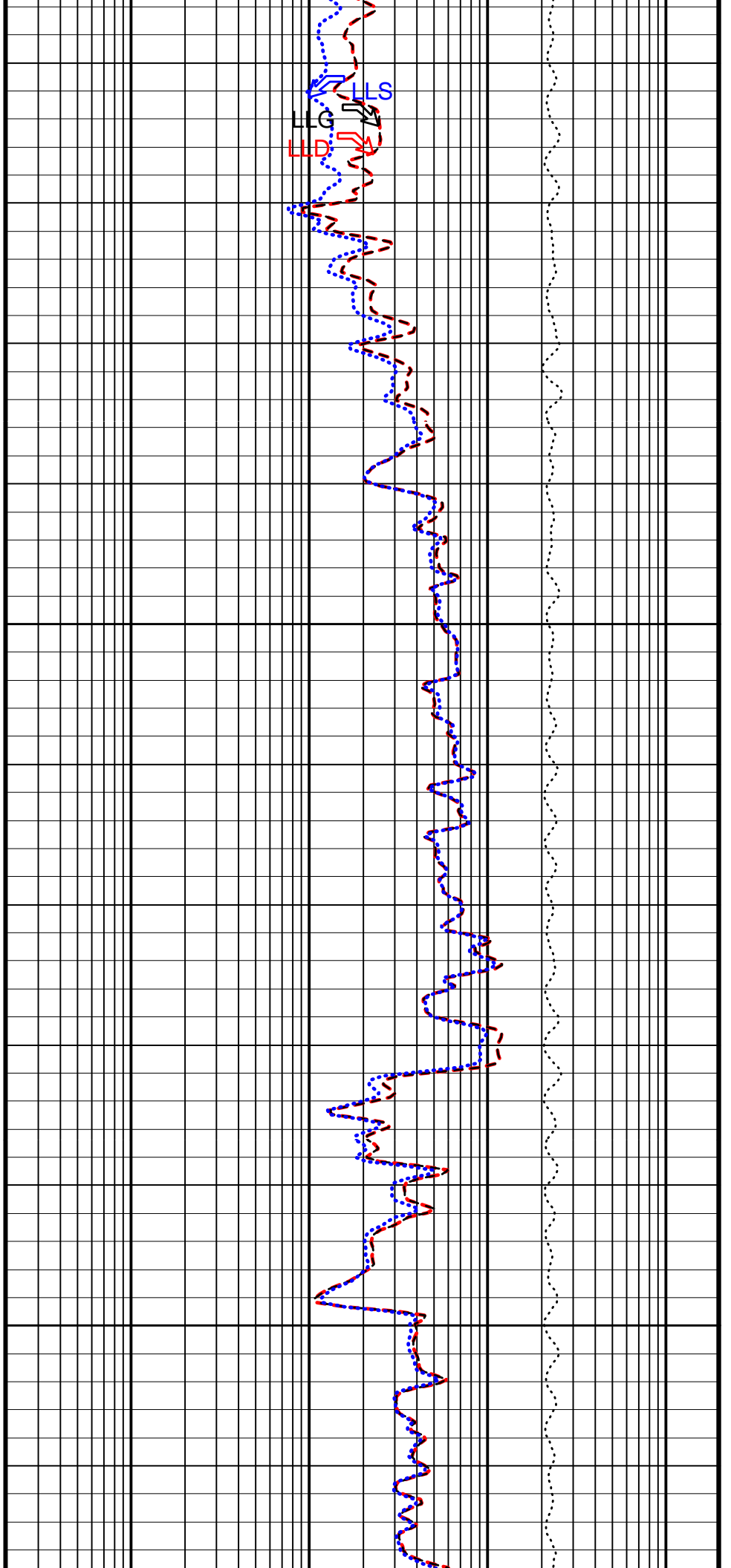


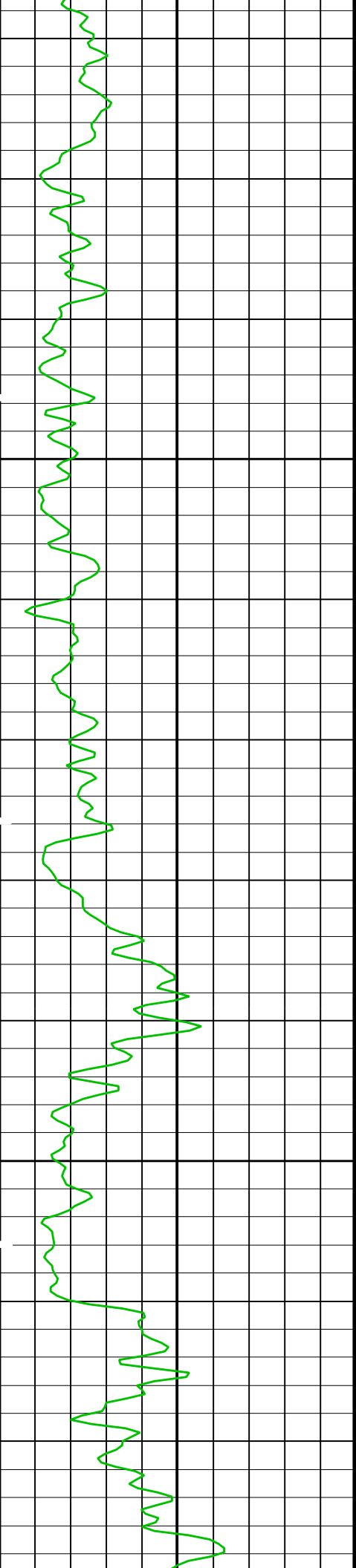




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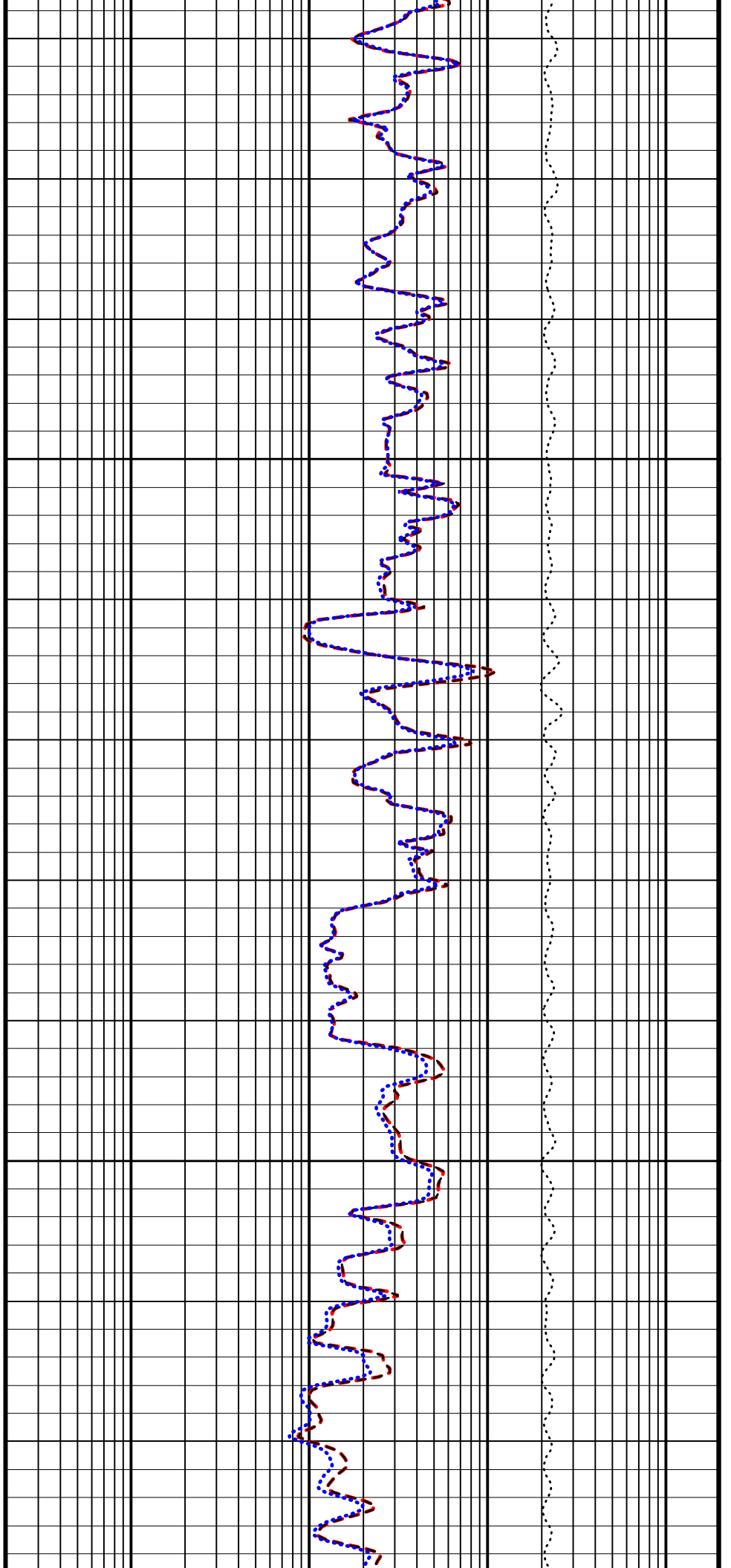
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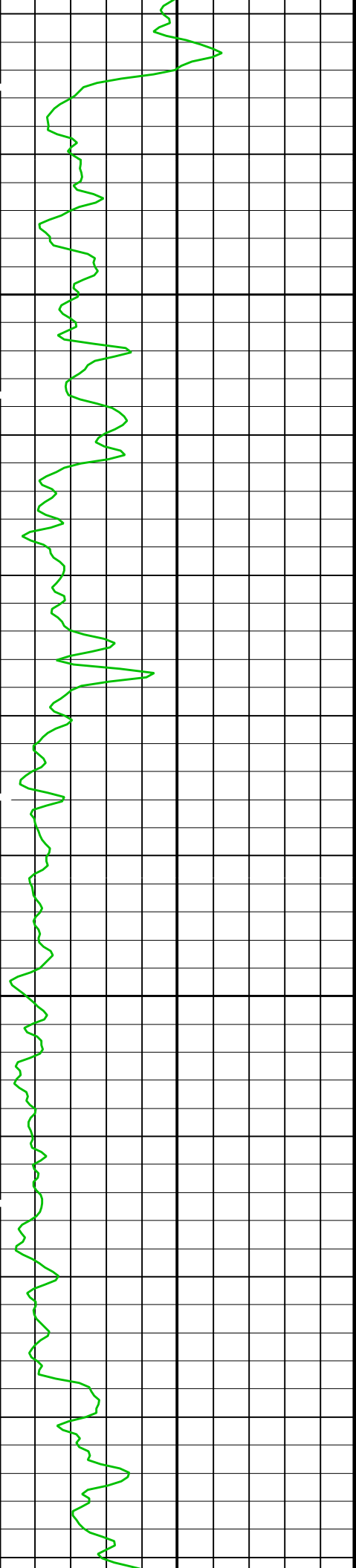




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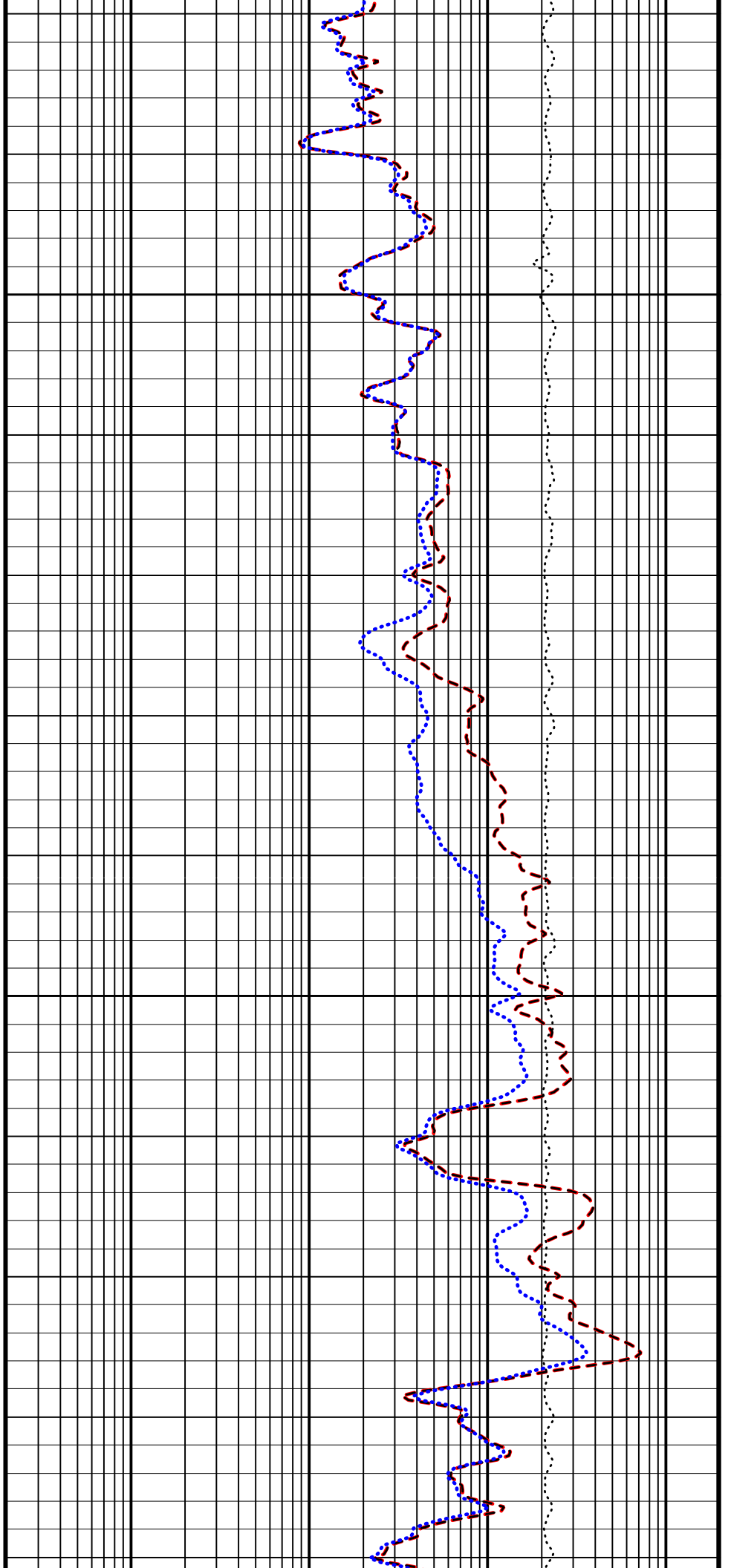
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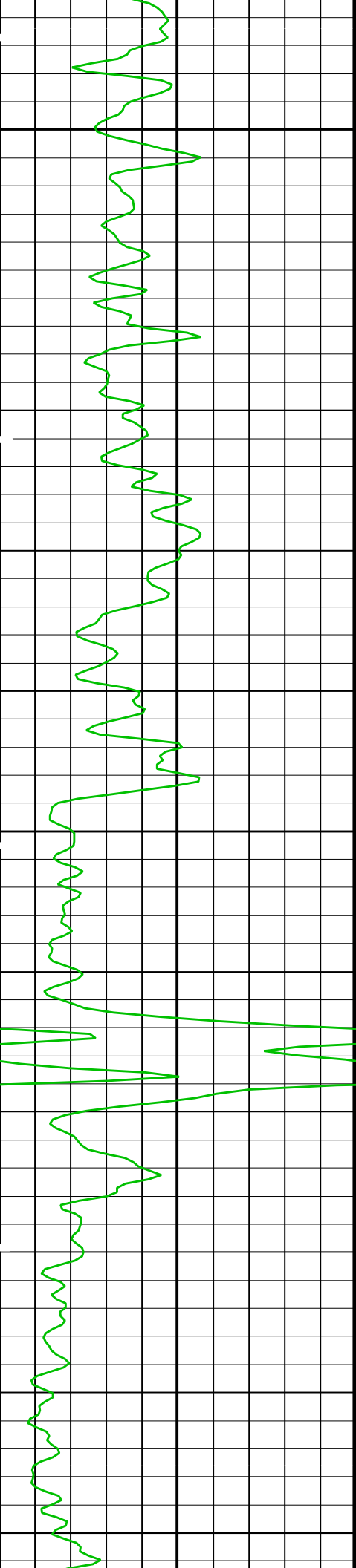




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4475

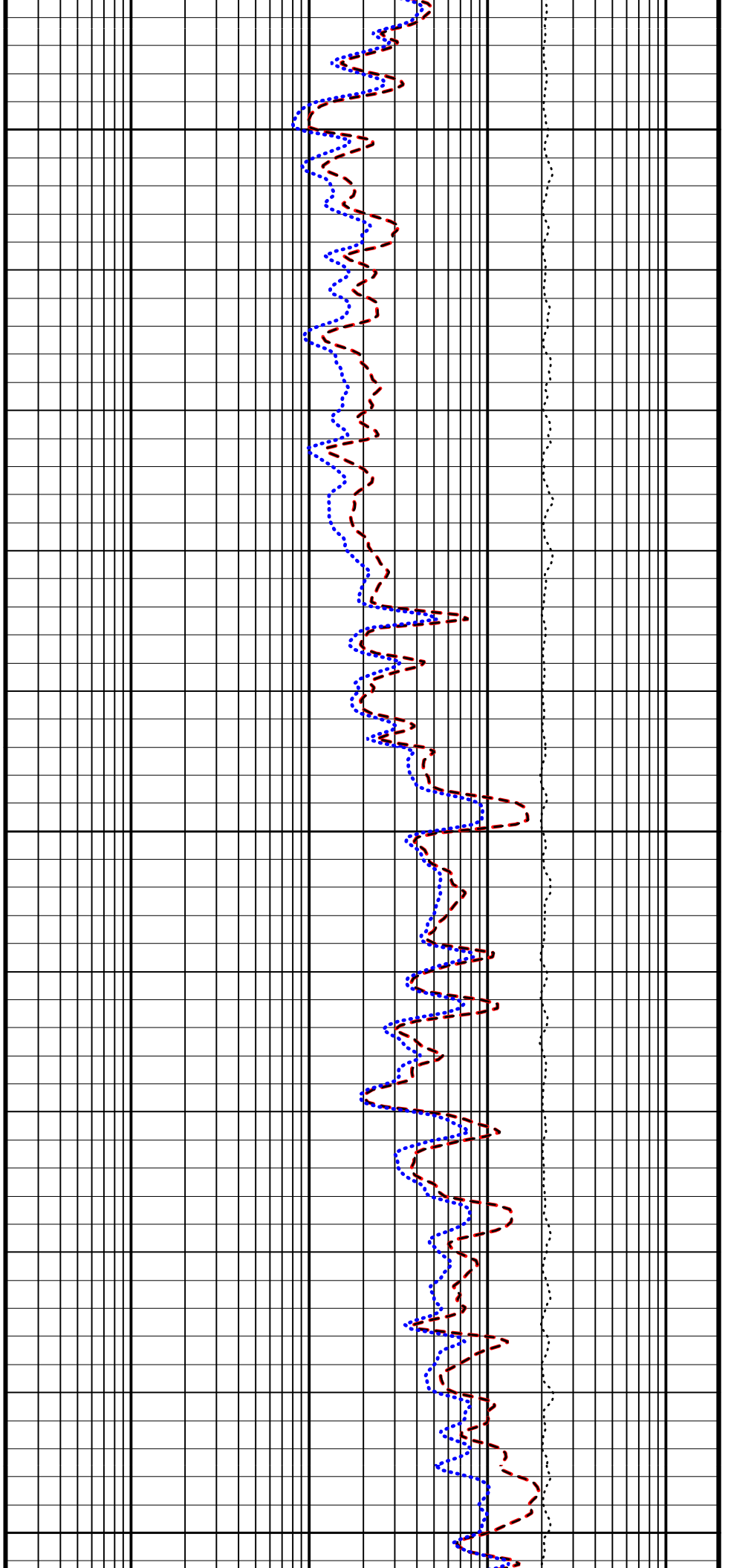


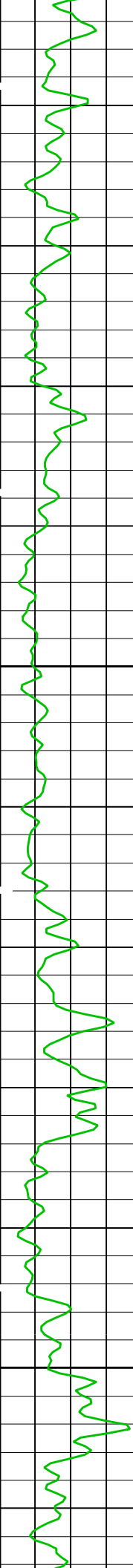


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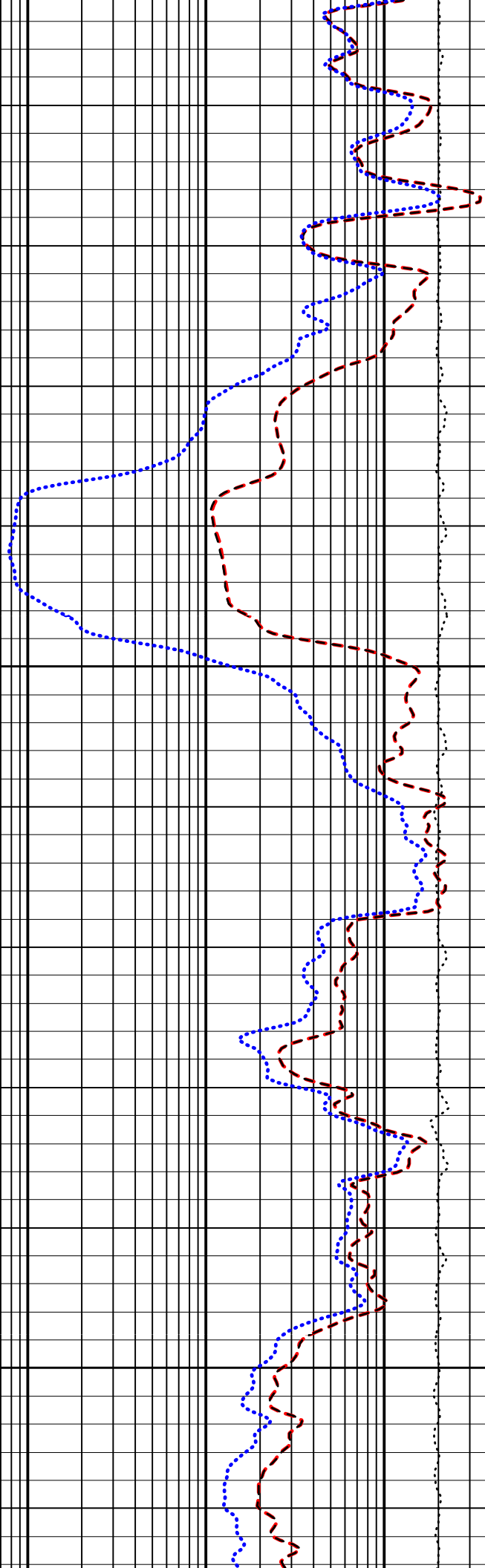
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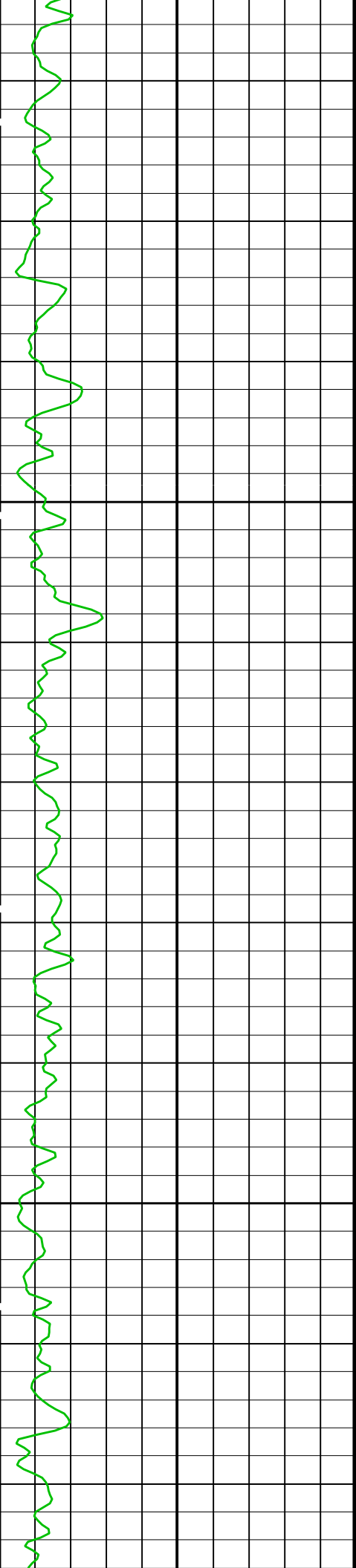




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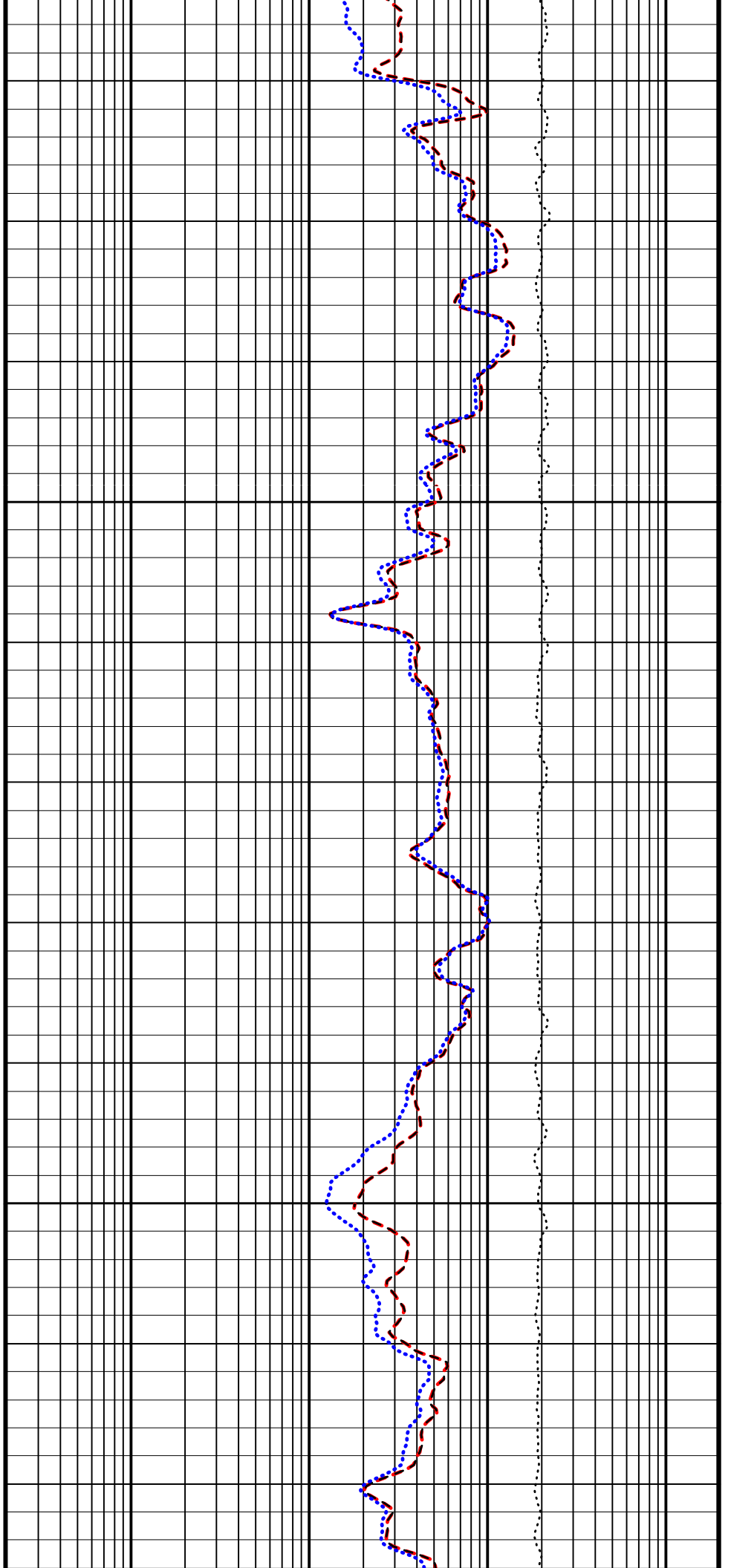
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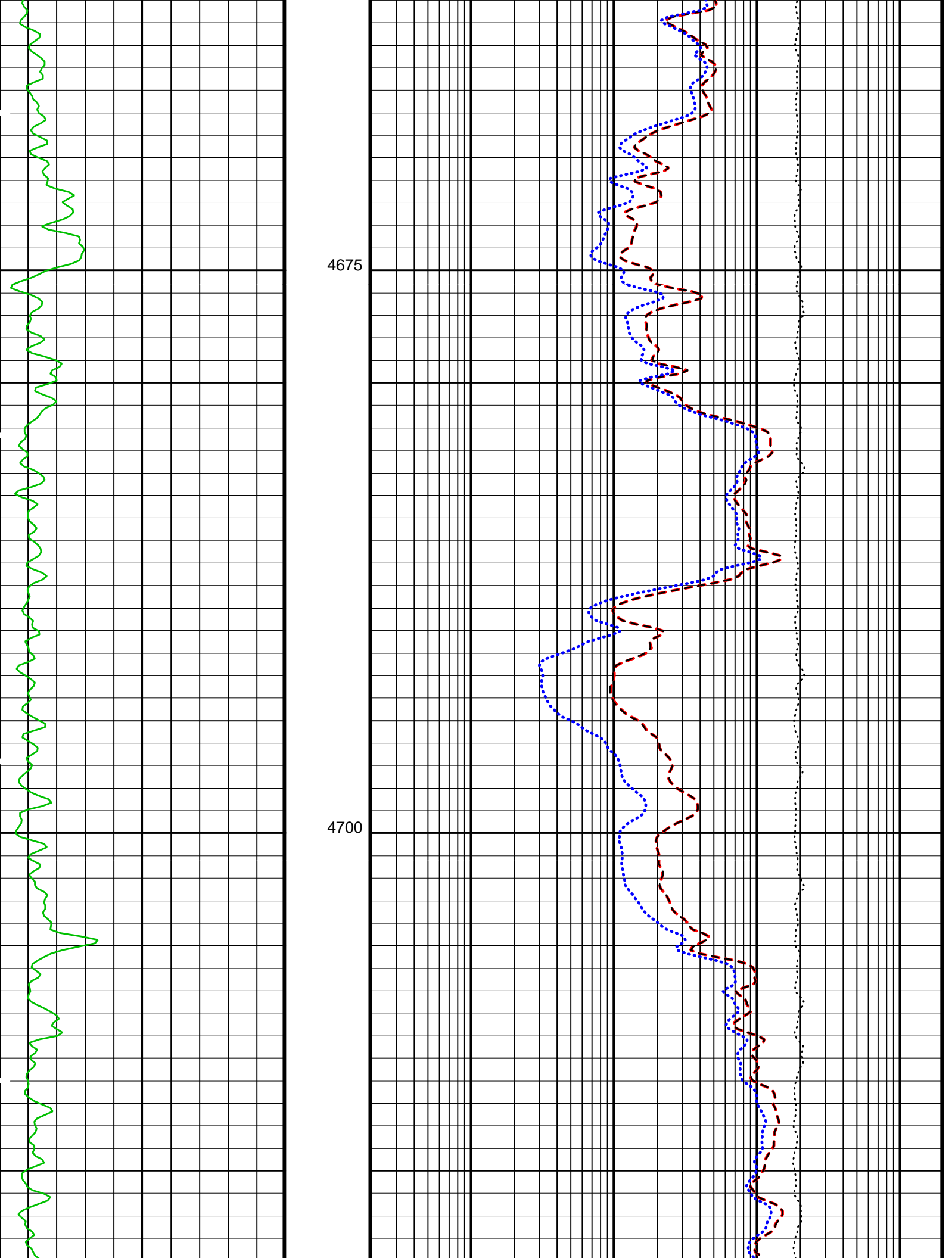




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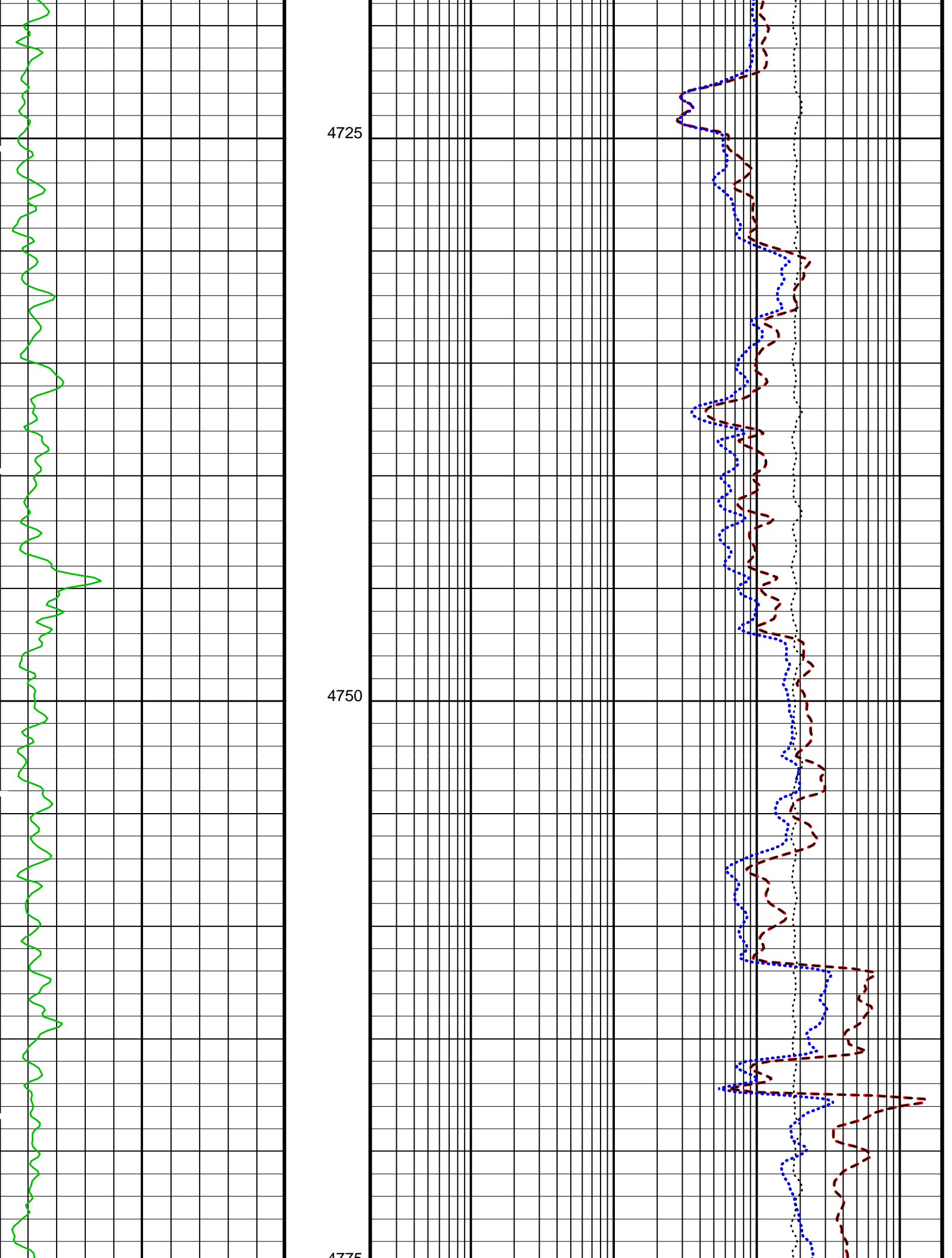
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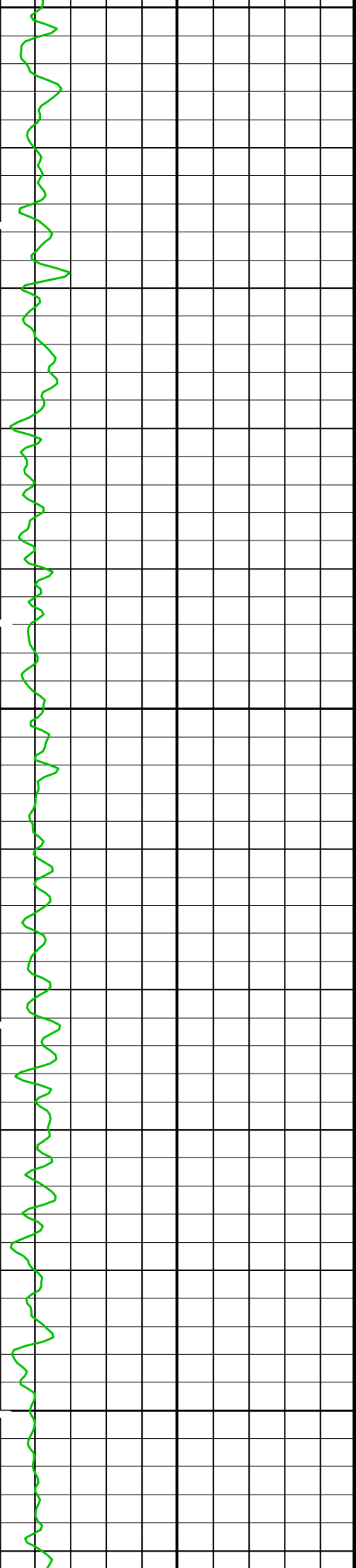




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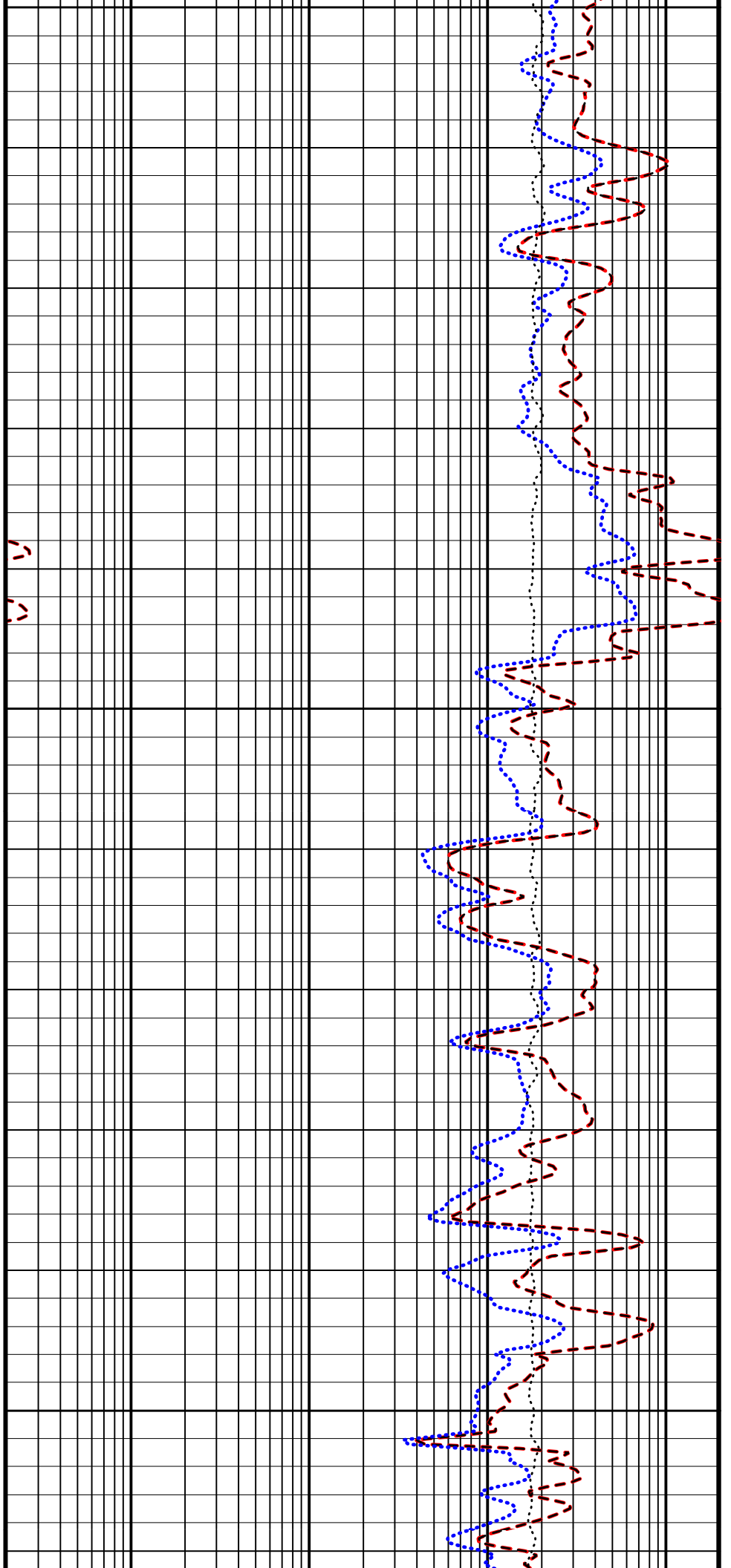


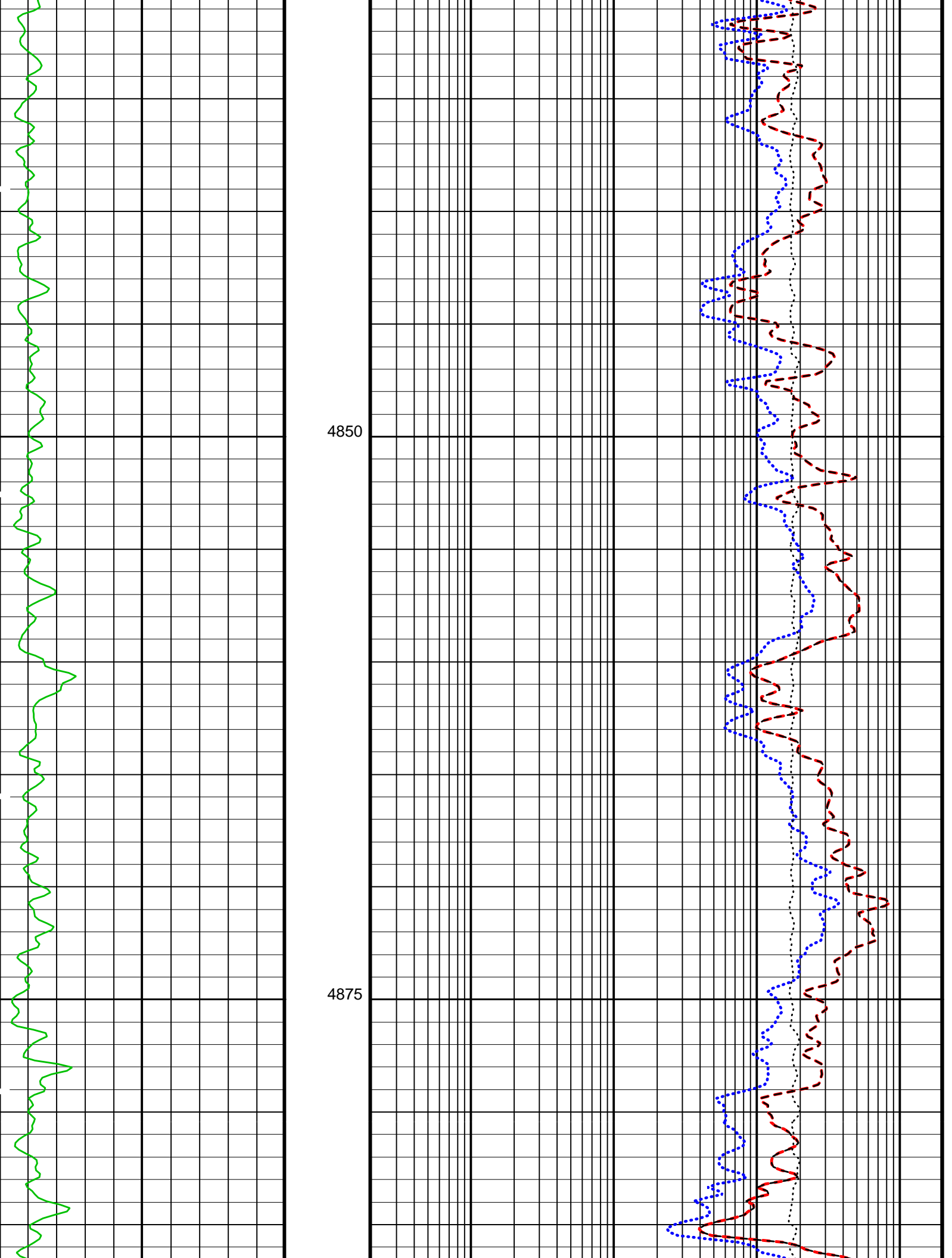


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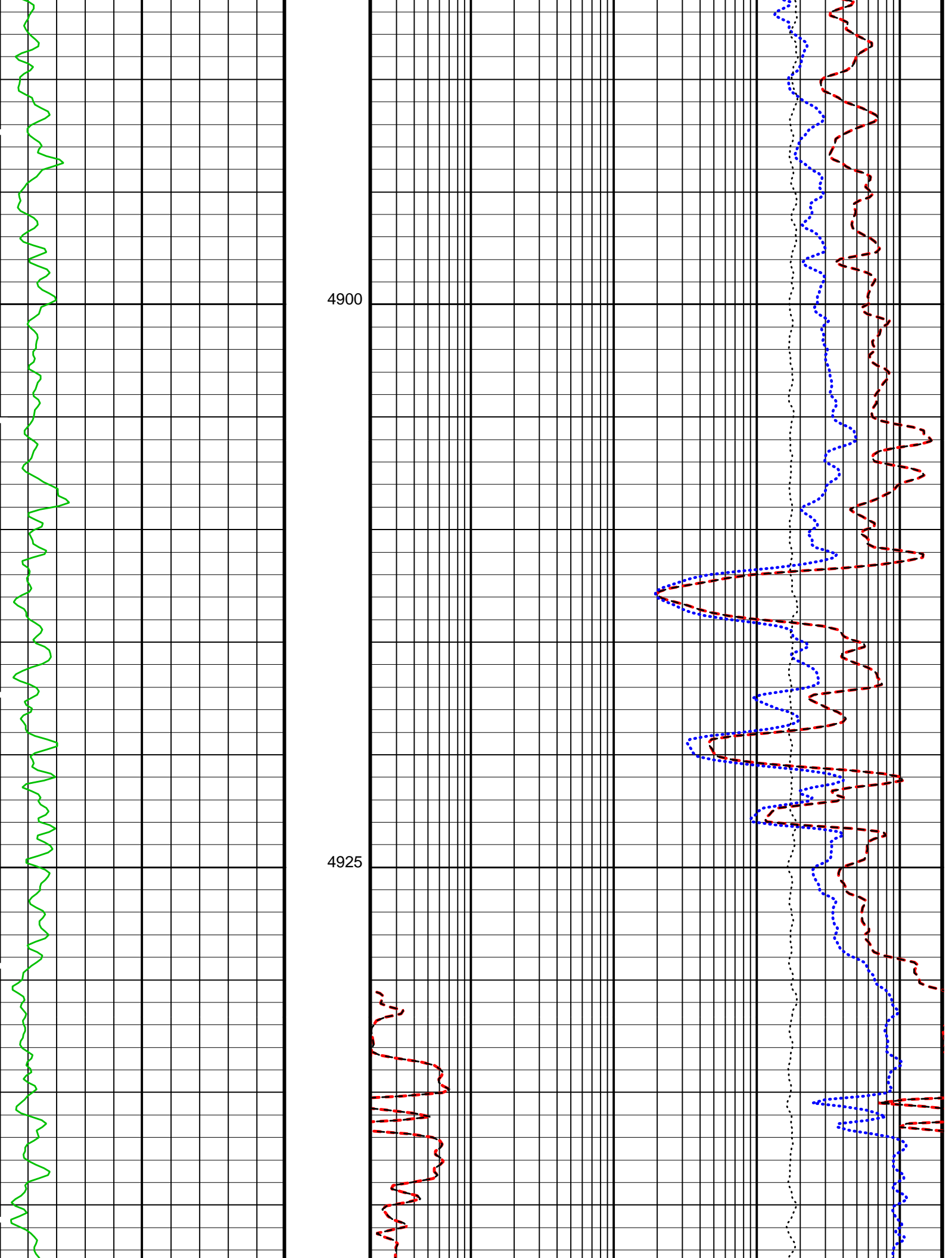
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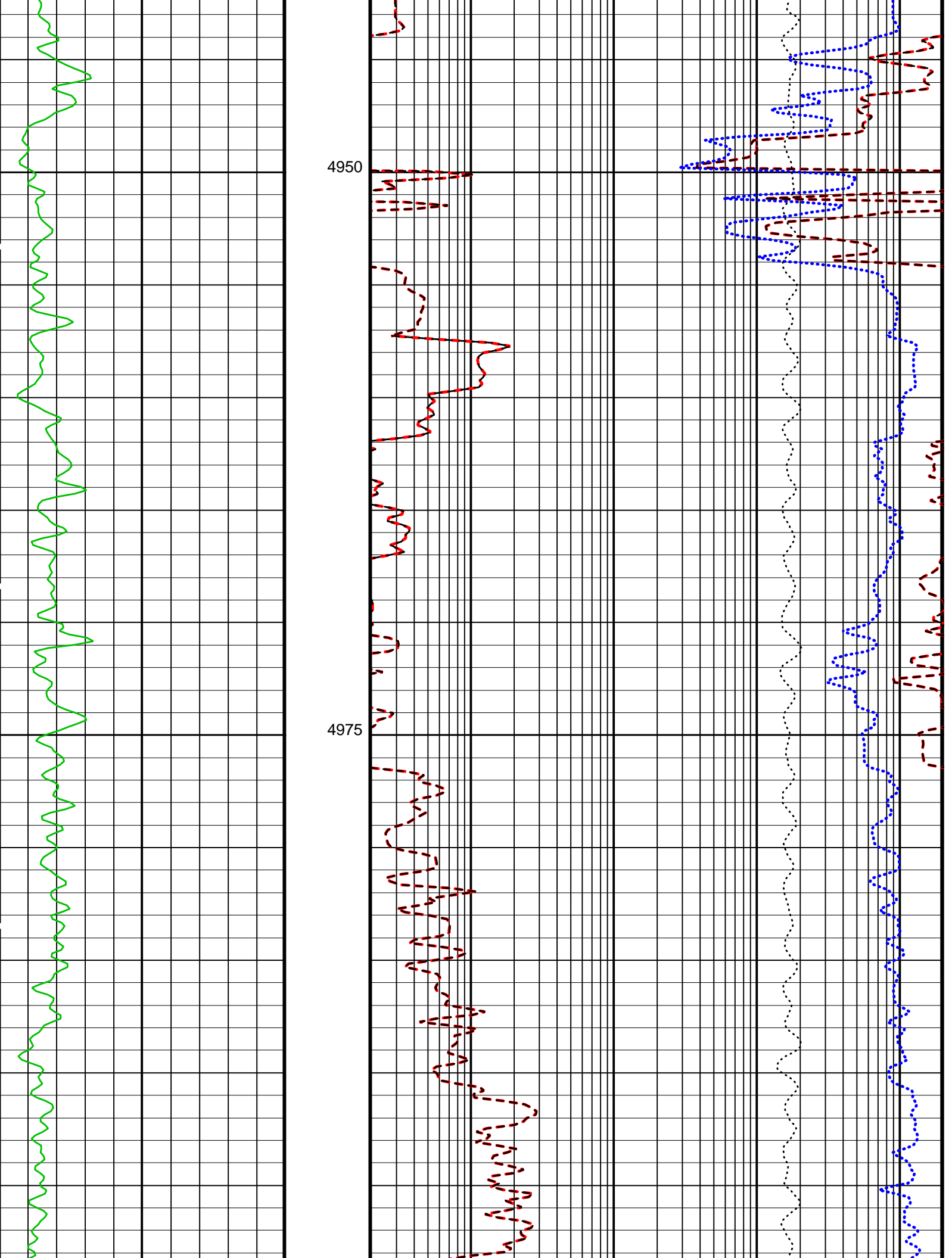


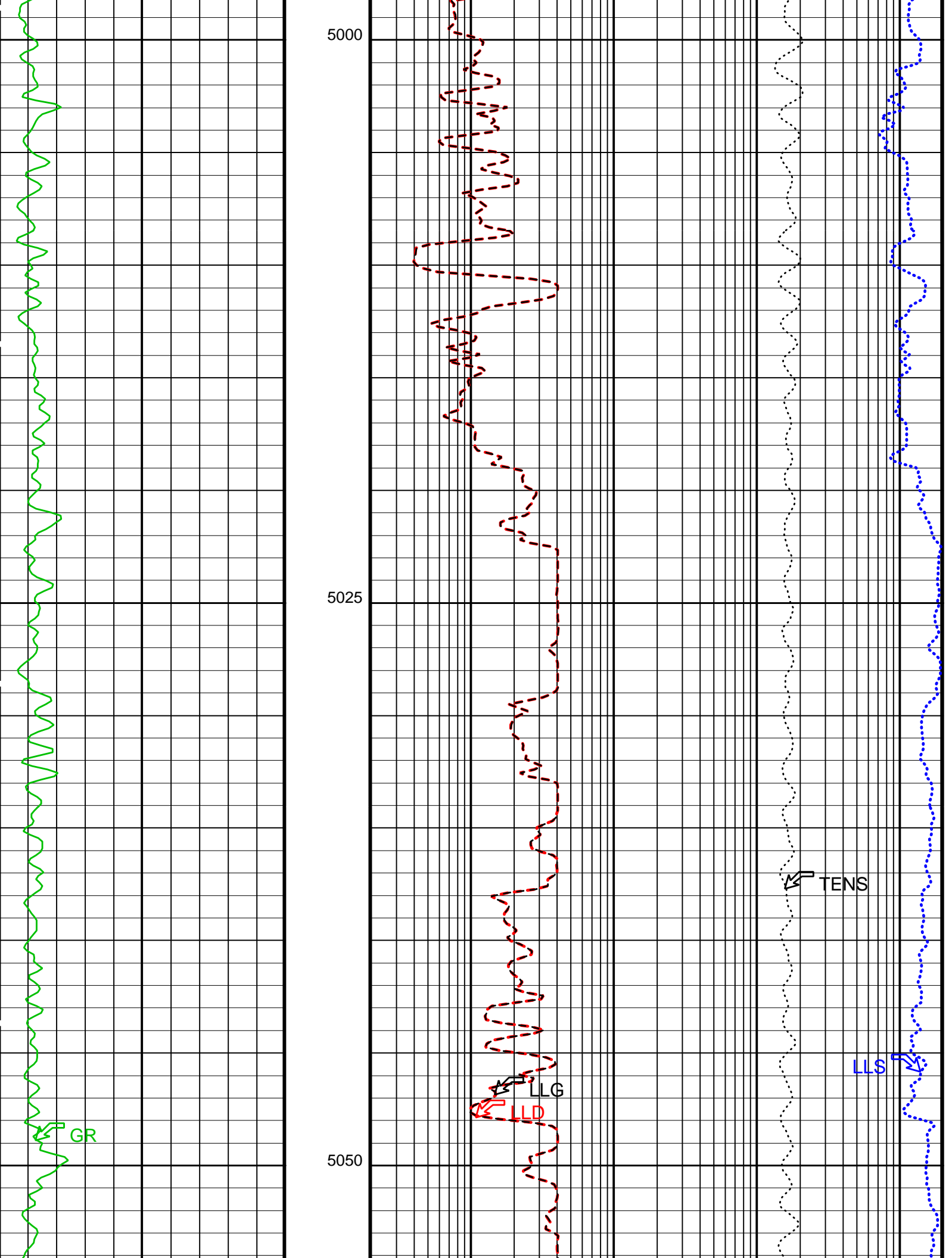


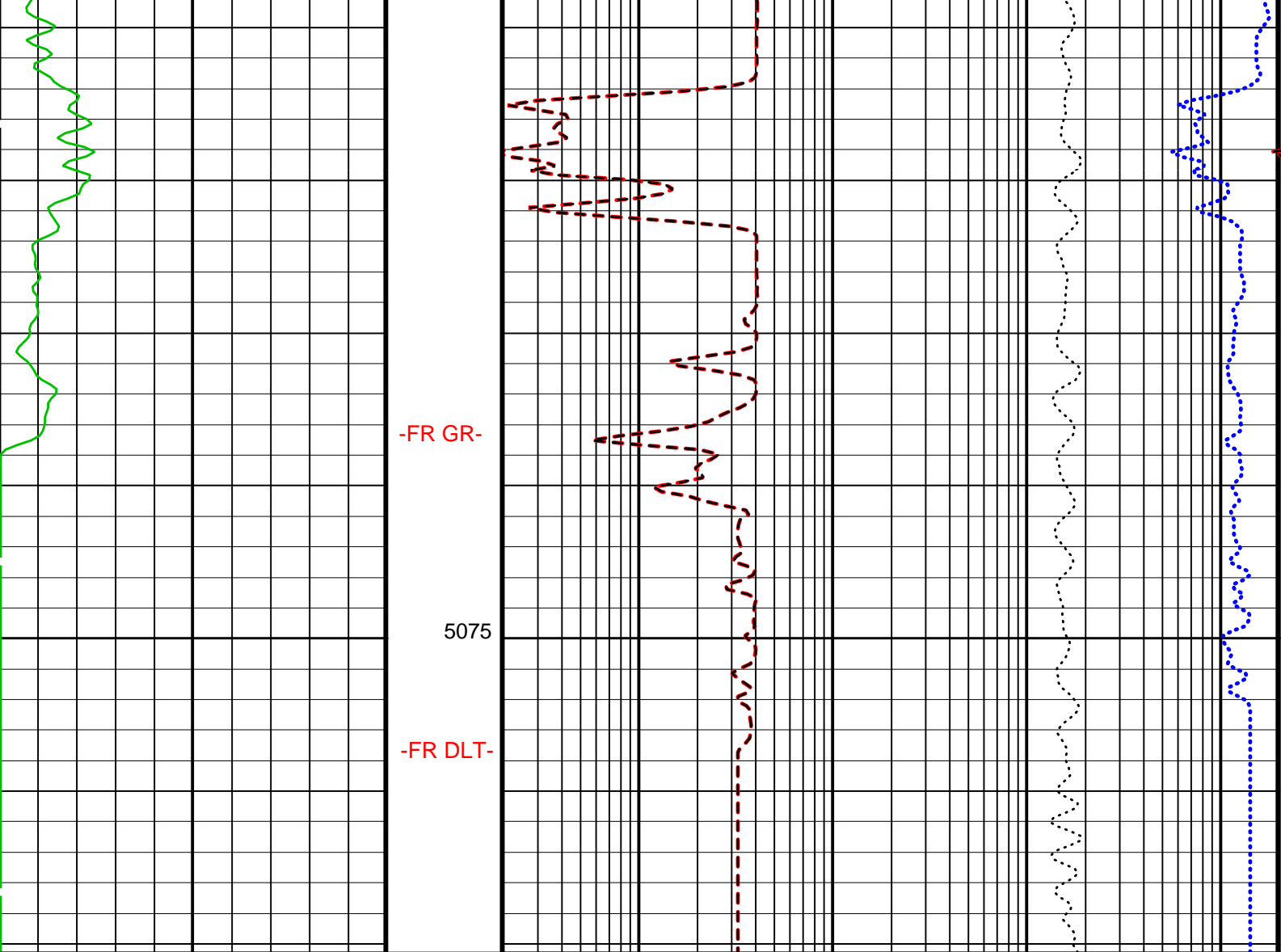
4850

4875









Gamma Ray (GR)
(GAPI) 20

Laterolog Deep Resistivity (LLD)
(OHMM) 2000

Laterolog Groningen Resistivity (LLG)
(OHMM) 2000

Laterolog Shallow Resistivity (LLS)
(OHMM) 2000

Tension (TENS)
(LBF) 10000 0

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
DLIS Name	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

Format: DLT_DST

Vertical Scale: 1:200

Graphics File Created: 23-Dec-2005 08:28

OP System Version: 12C0-301

MCM

DLT-E 12C0-301 DTA-A 12C0-301
EMS-B 12C0-301 SGT-N 12C0-301

Output DLIS Files

DEFAULT DLL_EMS_087LUP FN:102 PRODUCER 23-Dec-2005 08:28



DOWNLOG

MAXIS Field Log

Company: Lamont Doherty Well: Expedition 312 Site 1256D

Input DLIS Files

DEFAULT Flip_DLL_EMS_090LUP PRODUCER 23-Dec-2005 10:00 5067.0 M 3941.7 M

Output DLIS Files

DEFAULT DLL_EMS_091PUP FN:105 PRODUCER 23-Dec-2005 10:06 5067.0 M 3919.9 M

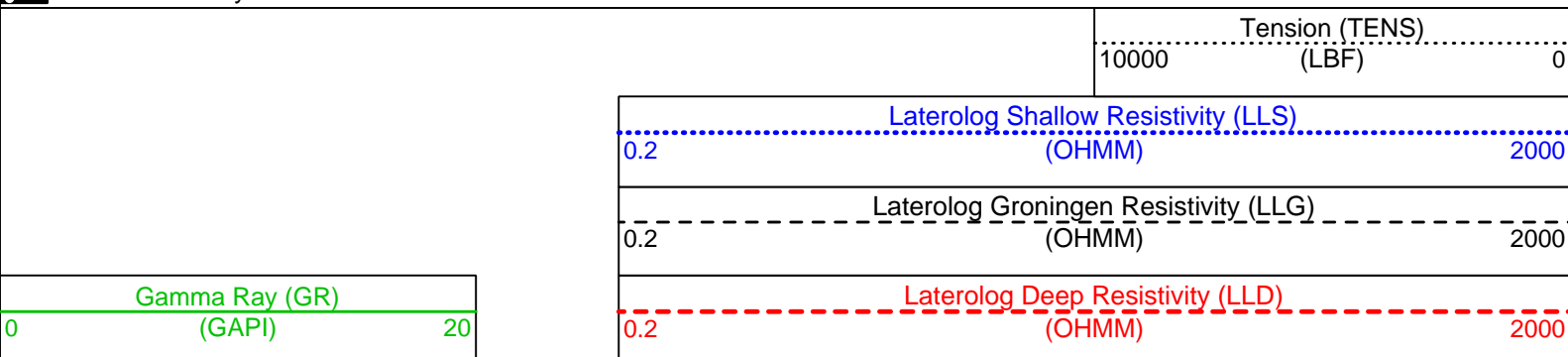
OP System Version: 12C0-301

MCM

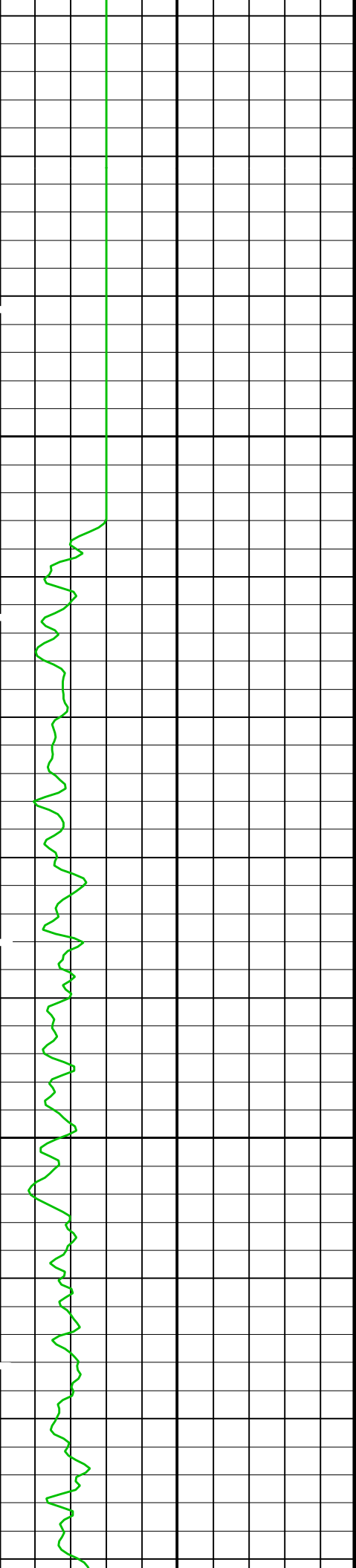
DLT-E	12C0-301	DTA-A	12C0-301
EMS-B	12C0-301	SGT-N	12C0-301
DTC-H	12C0-301	BSP	12C0-301

PIP SUMMARY

▶ Time Mark Every 60 S

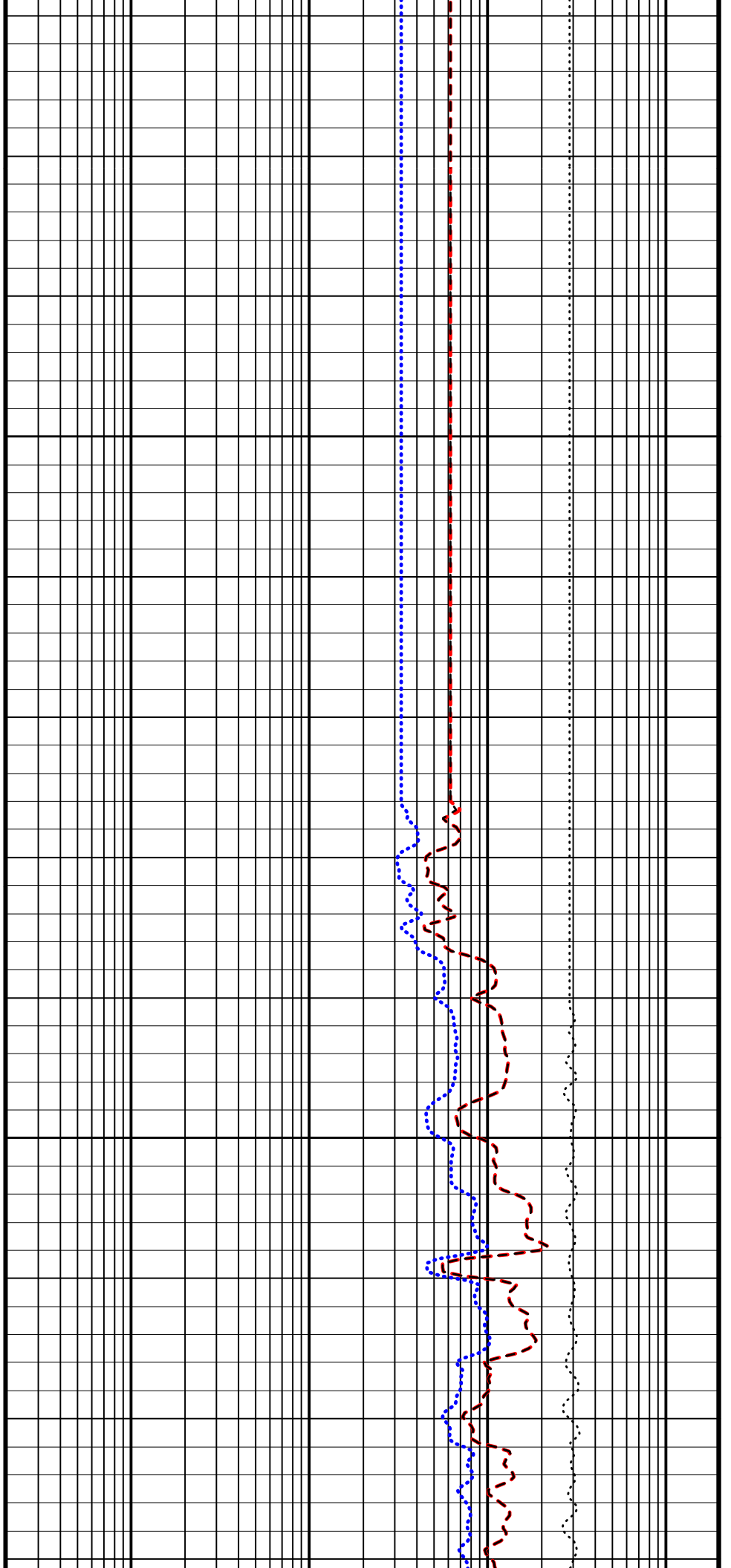


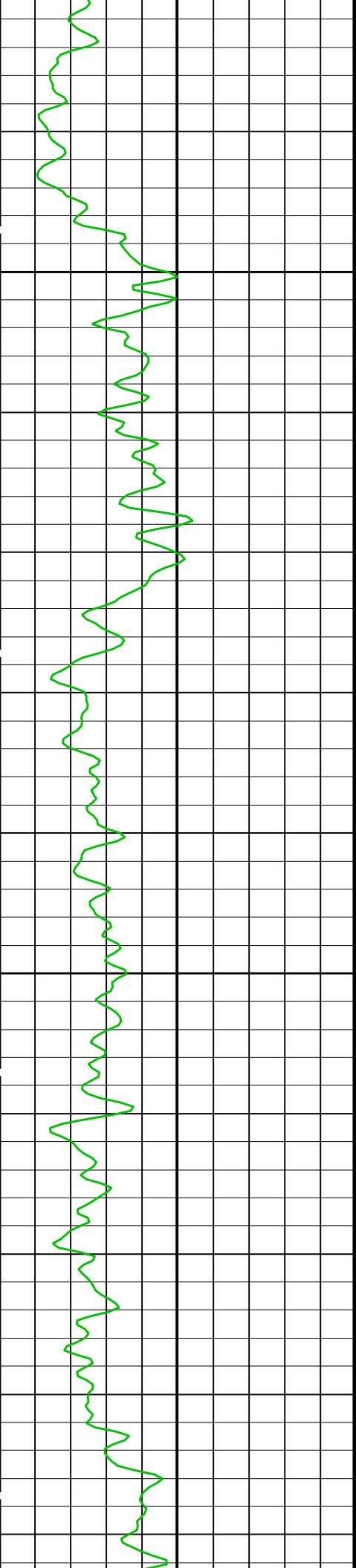
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3950

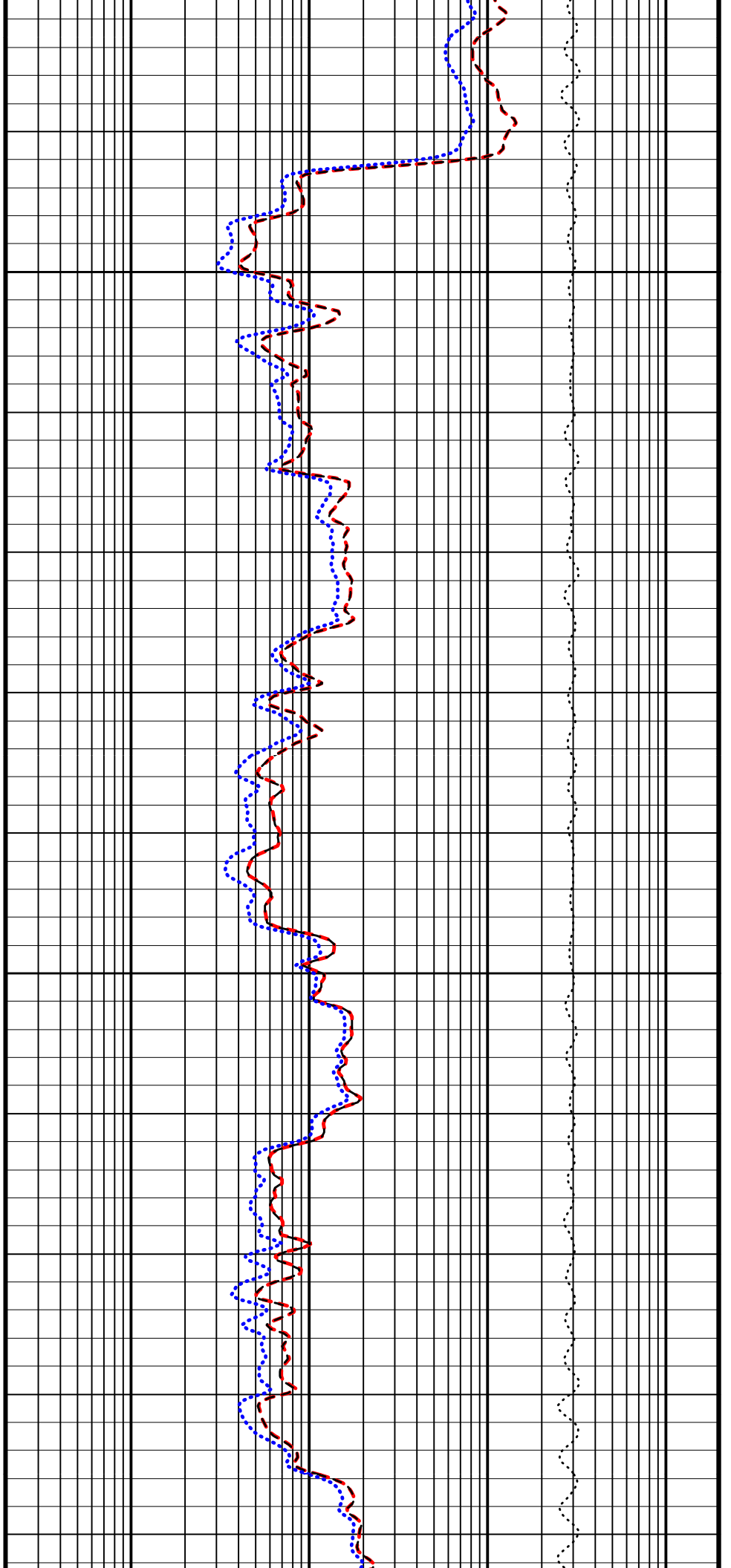
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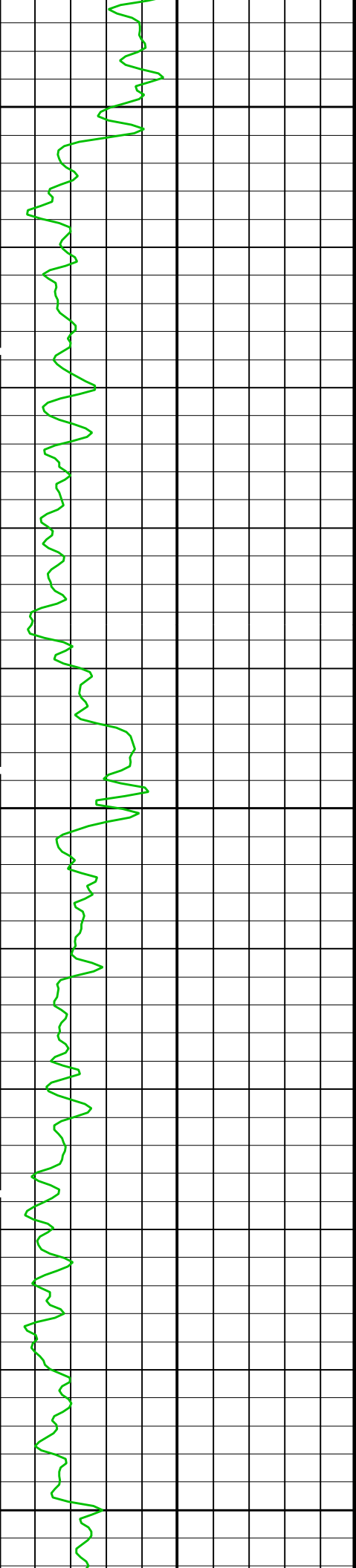




4000

4025

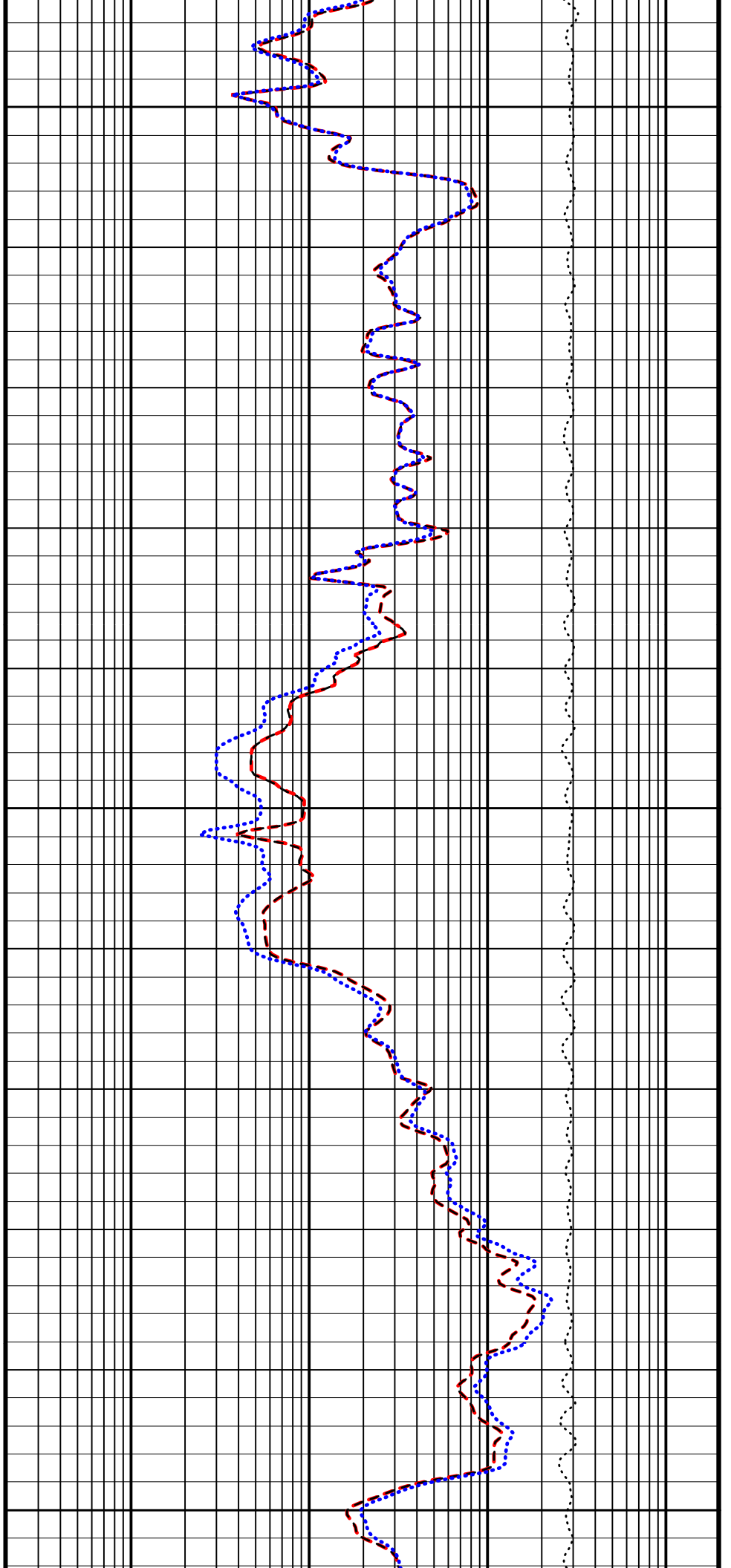


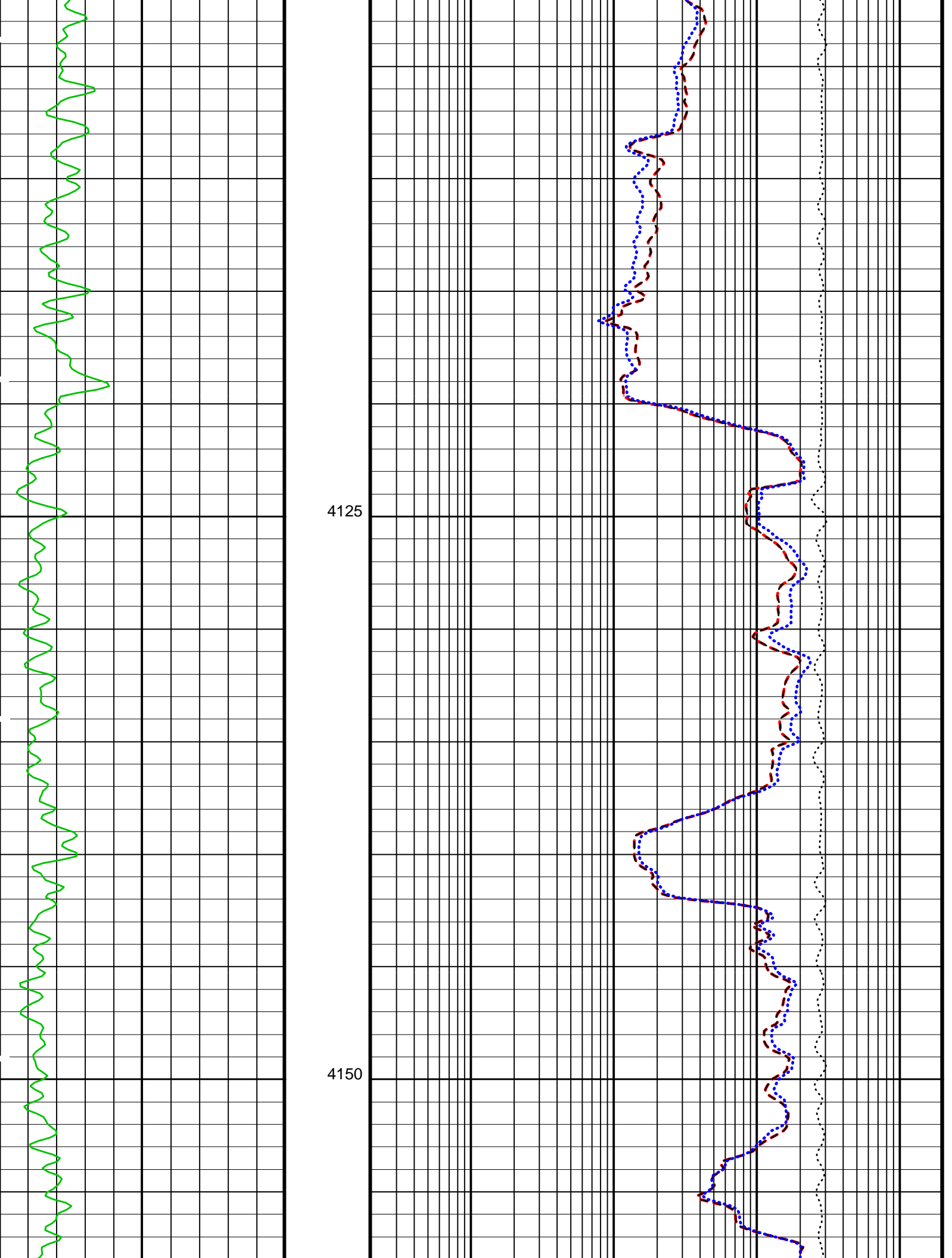


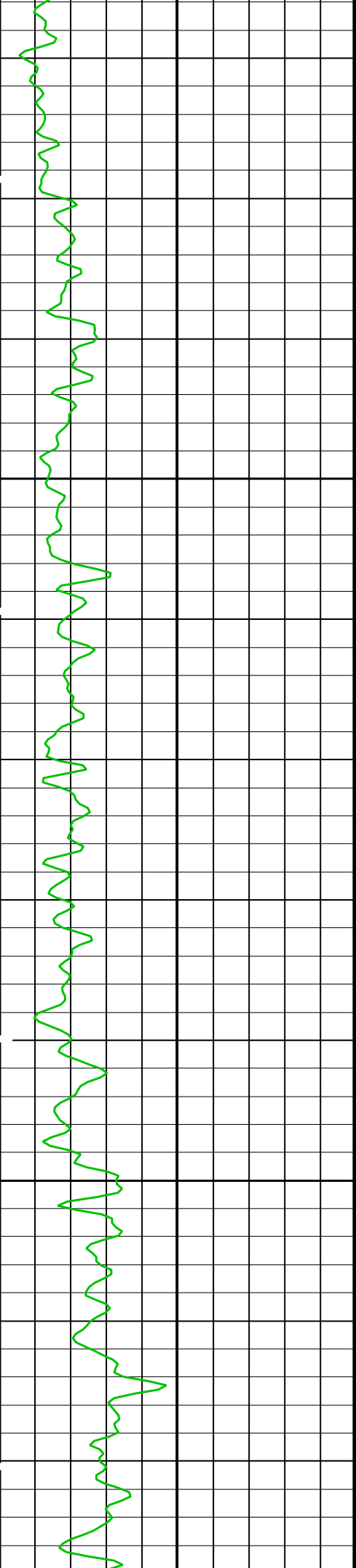
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4075

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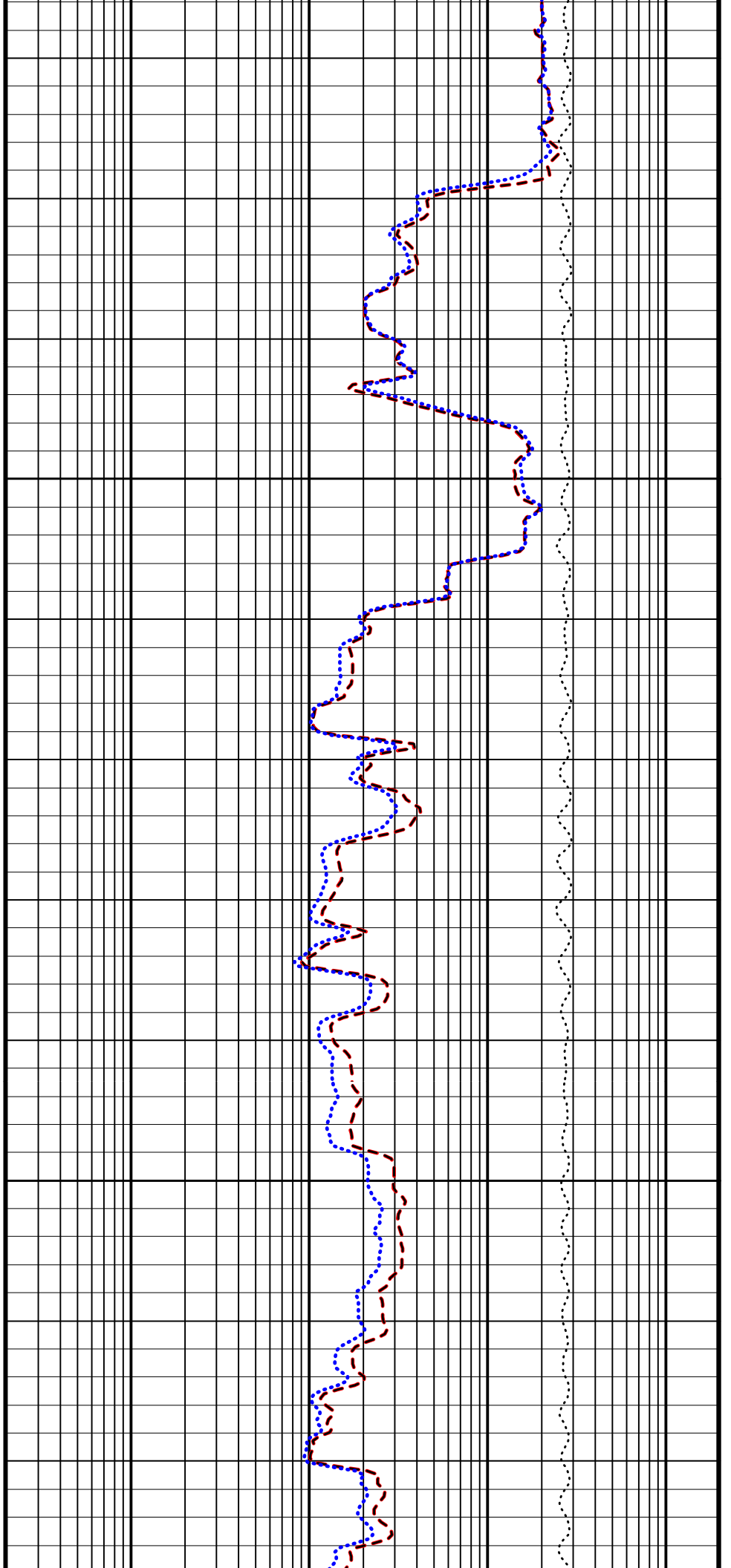


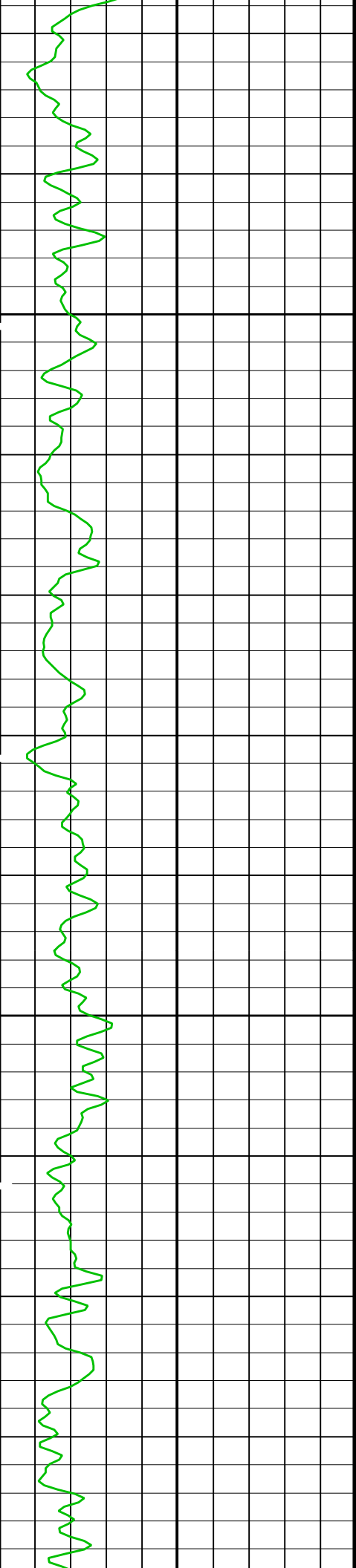




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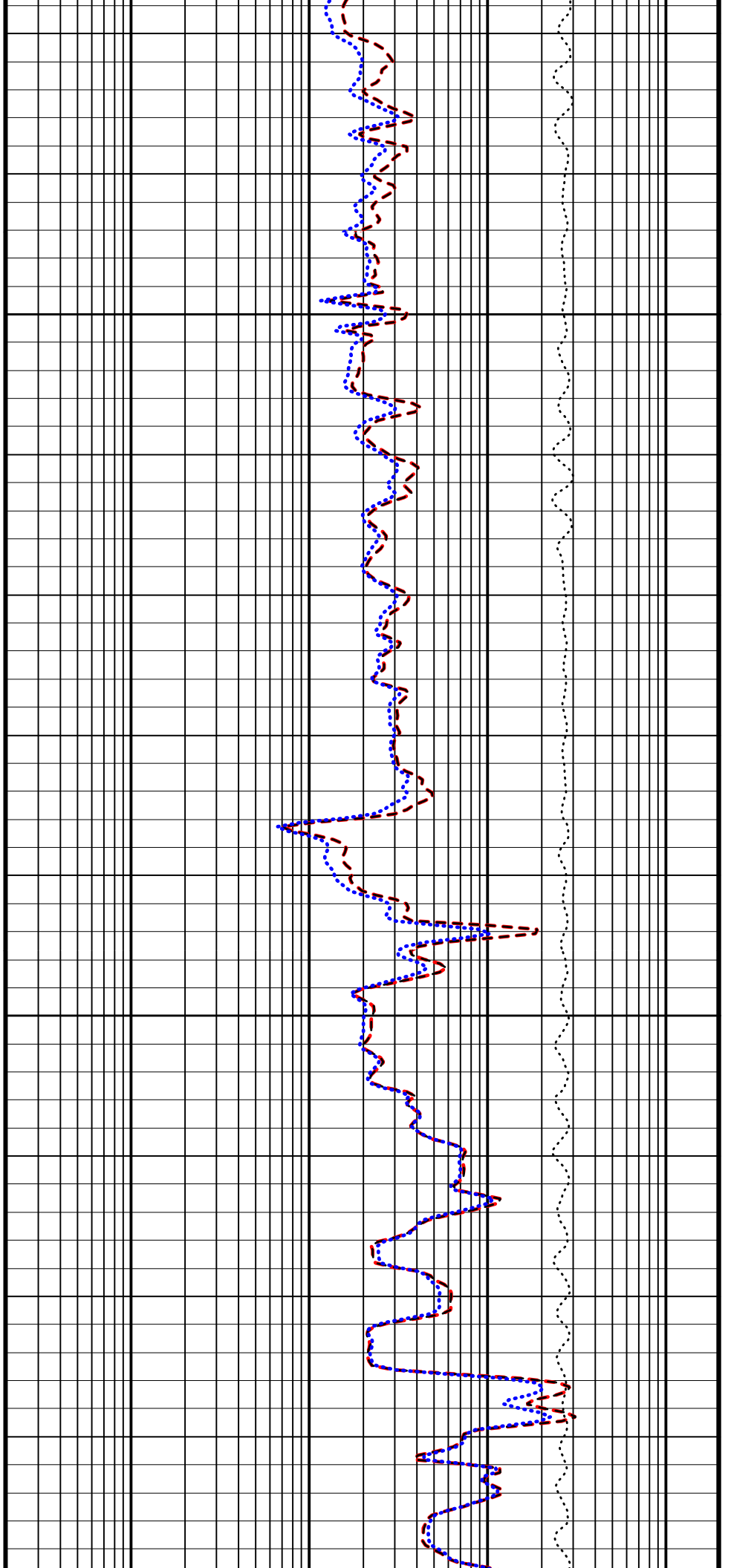
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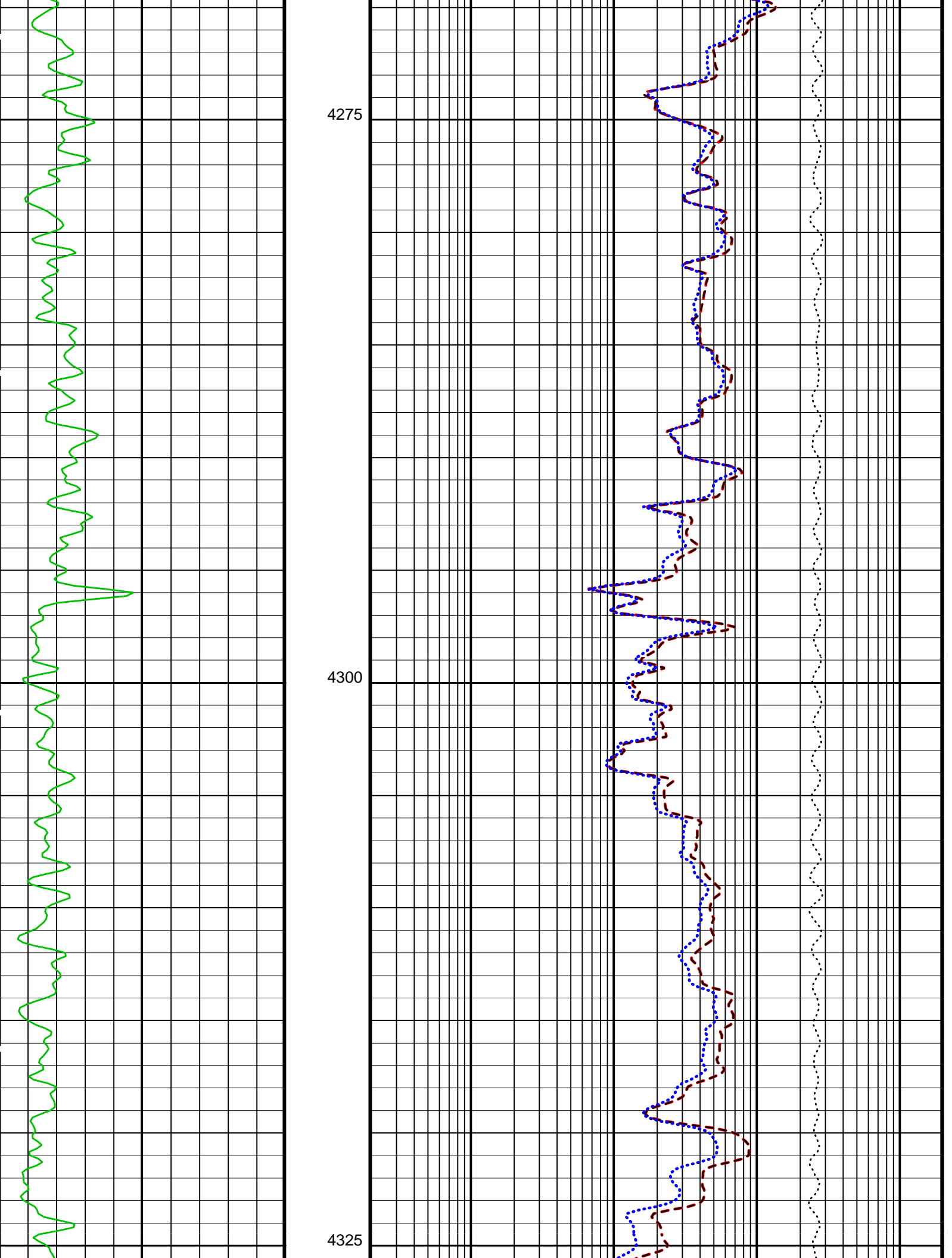


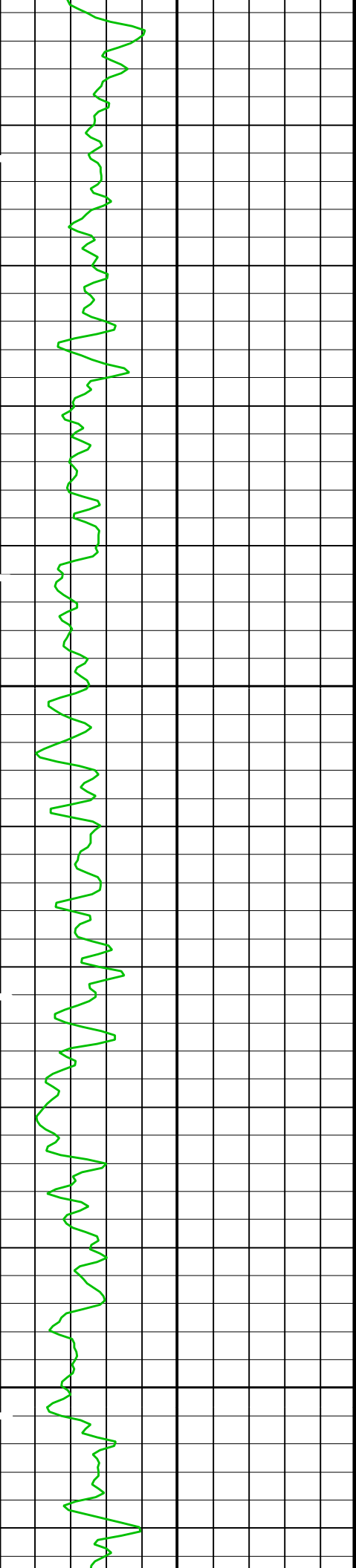


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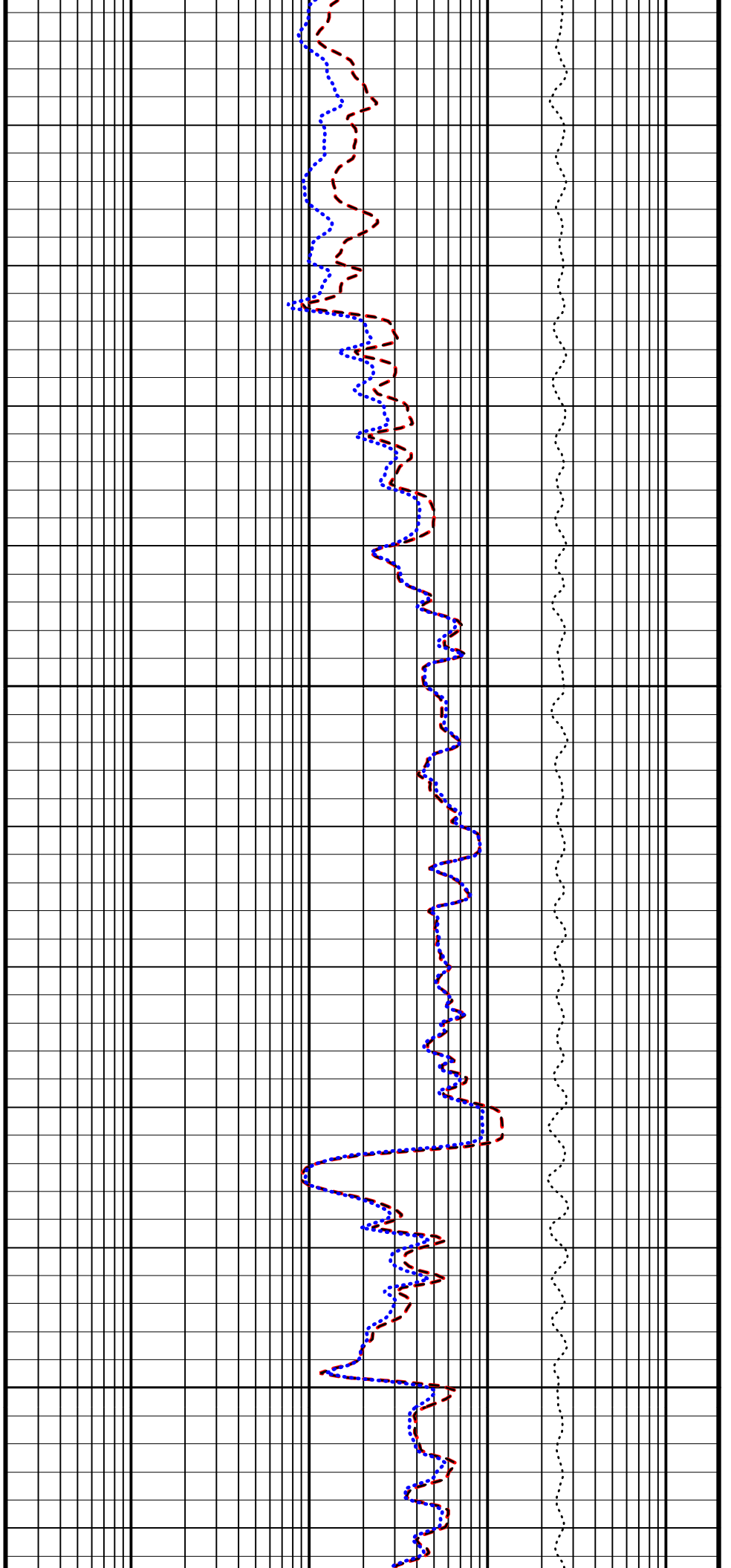


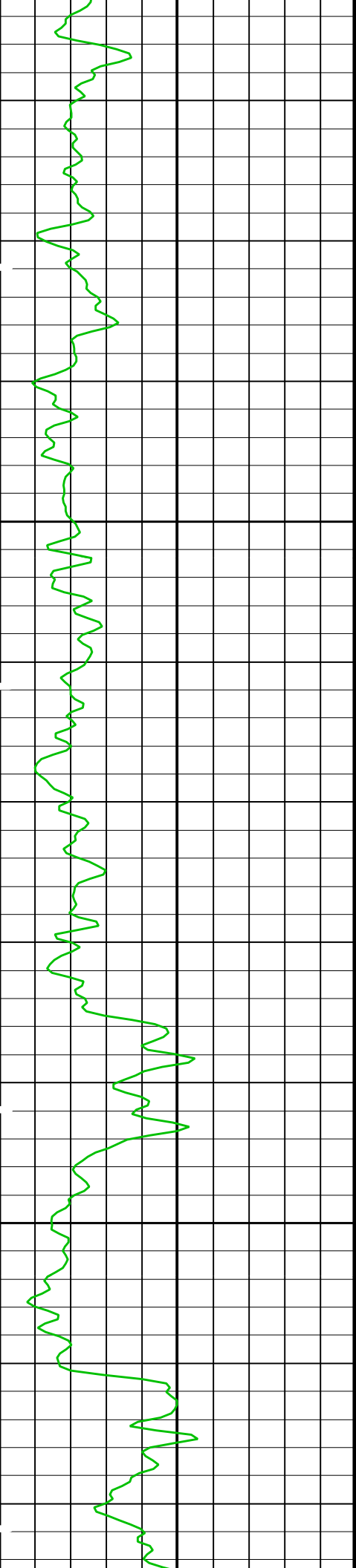




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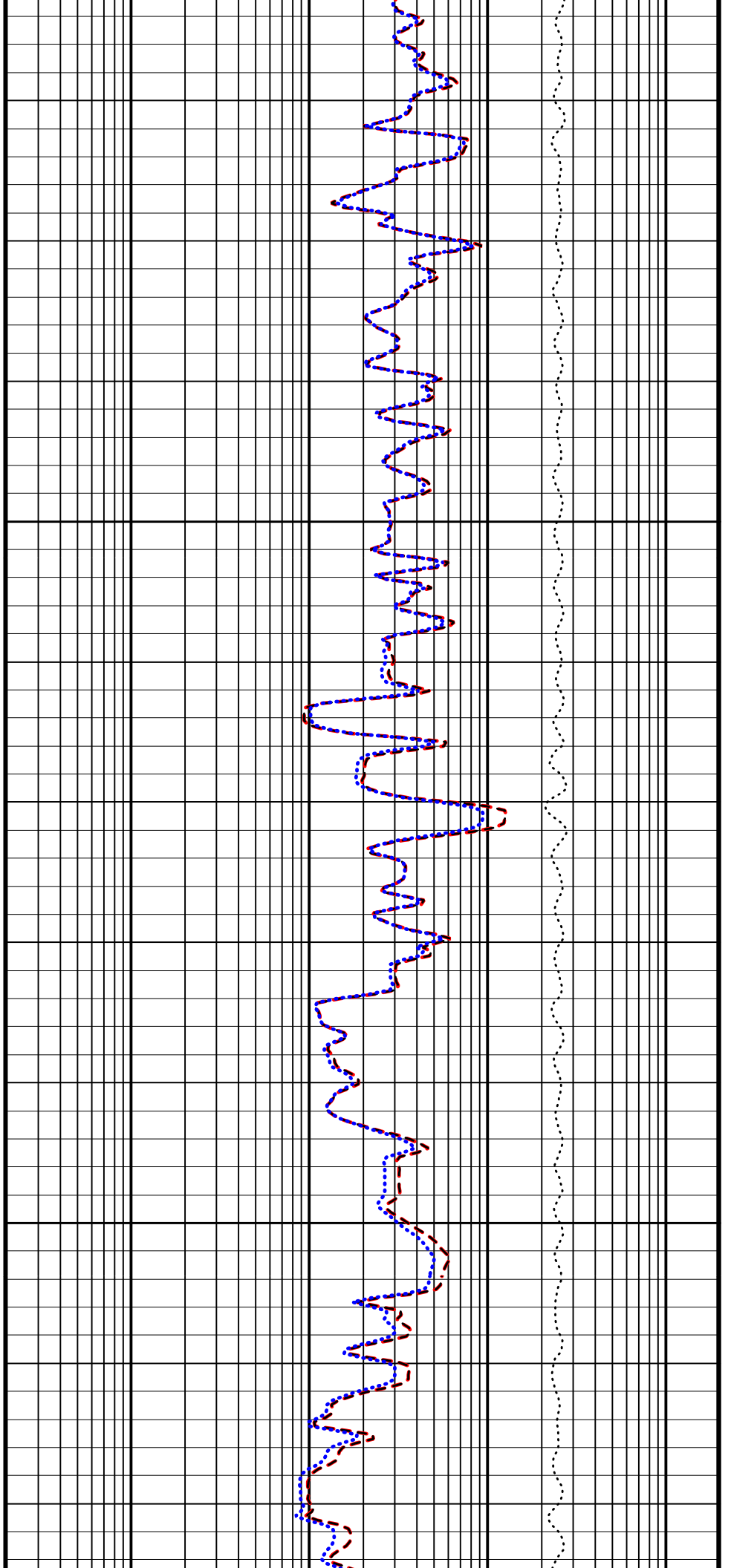
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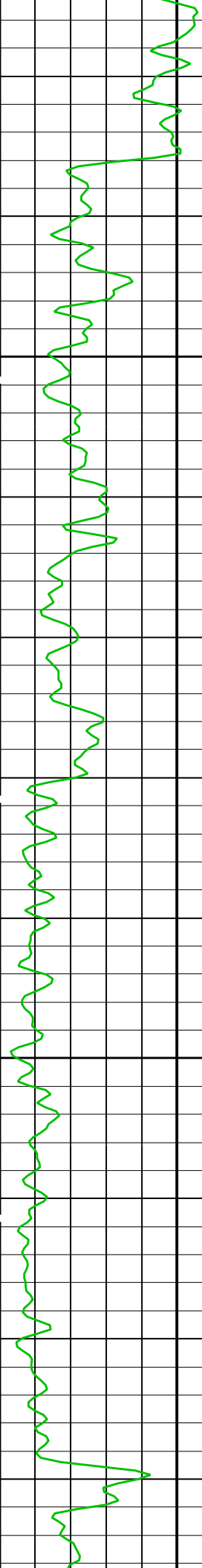




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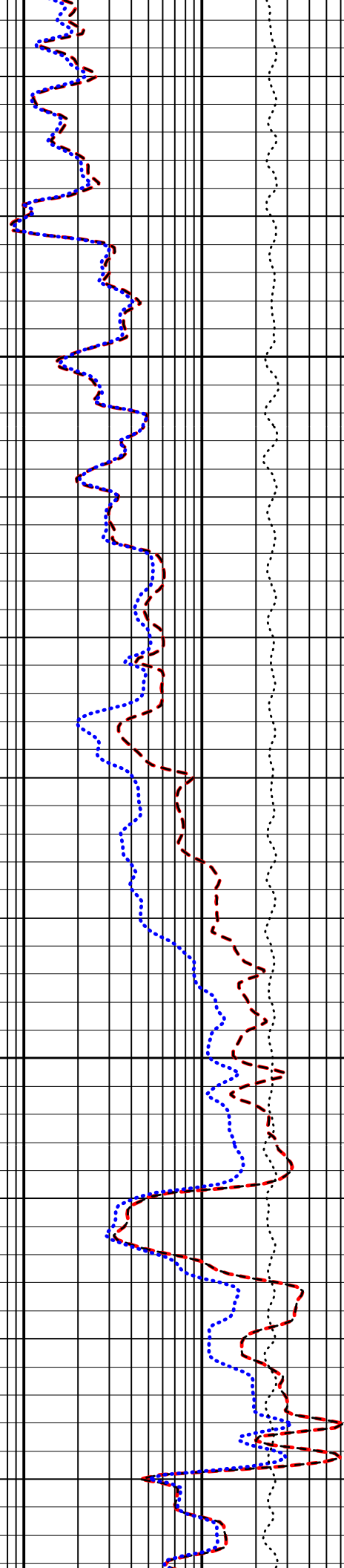
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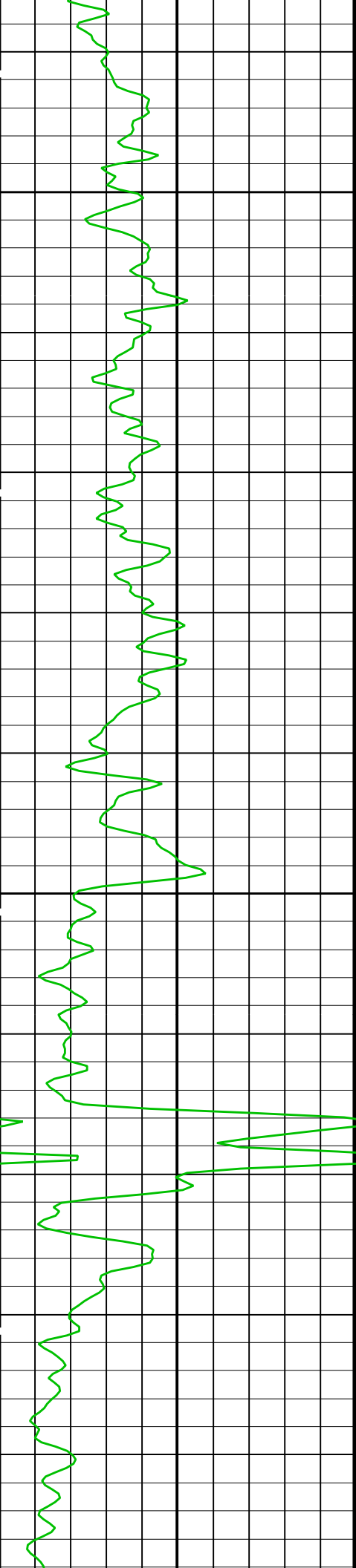




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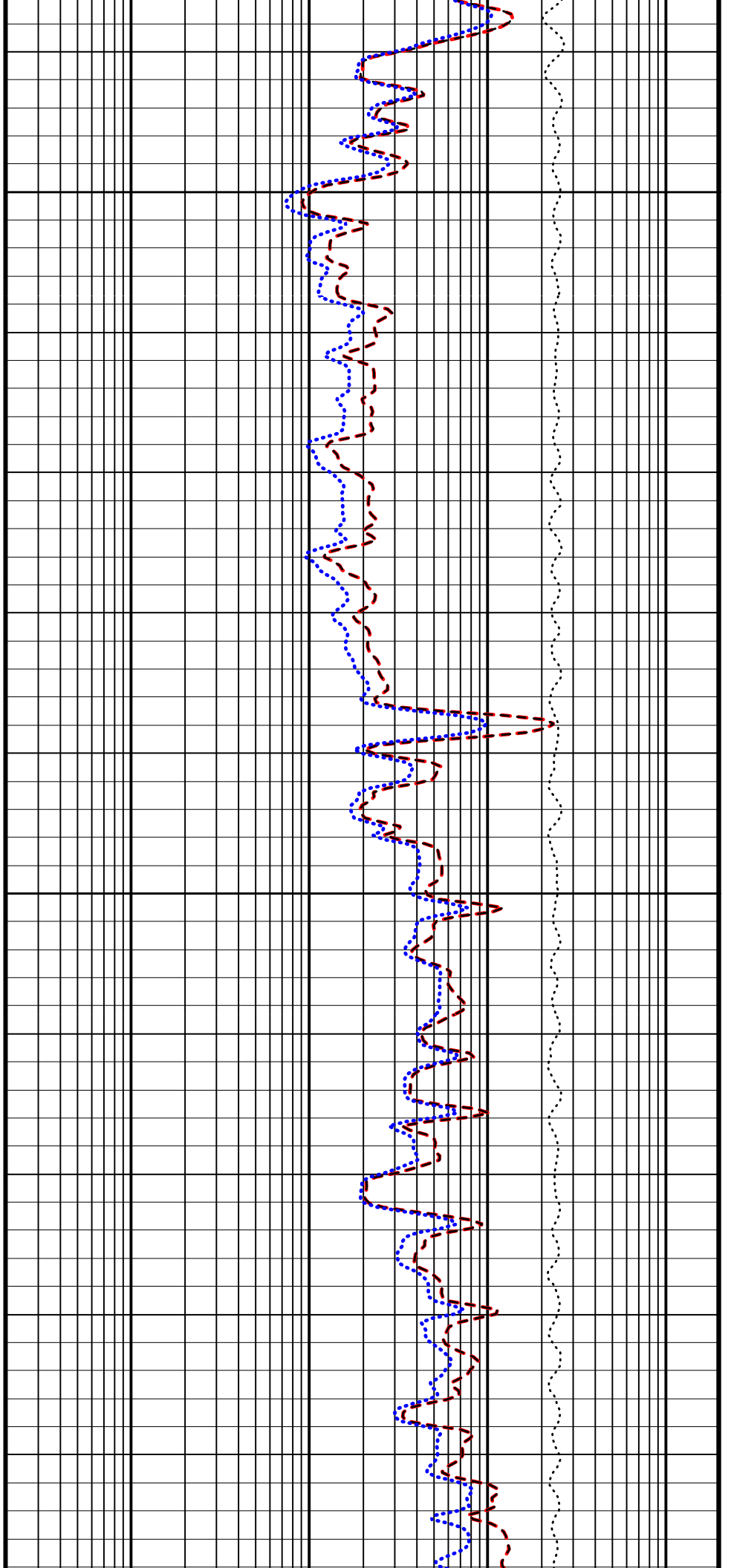
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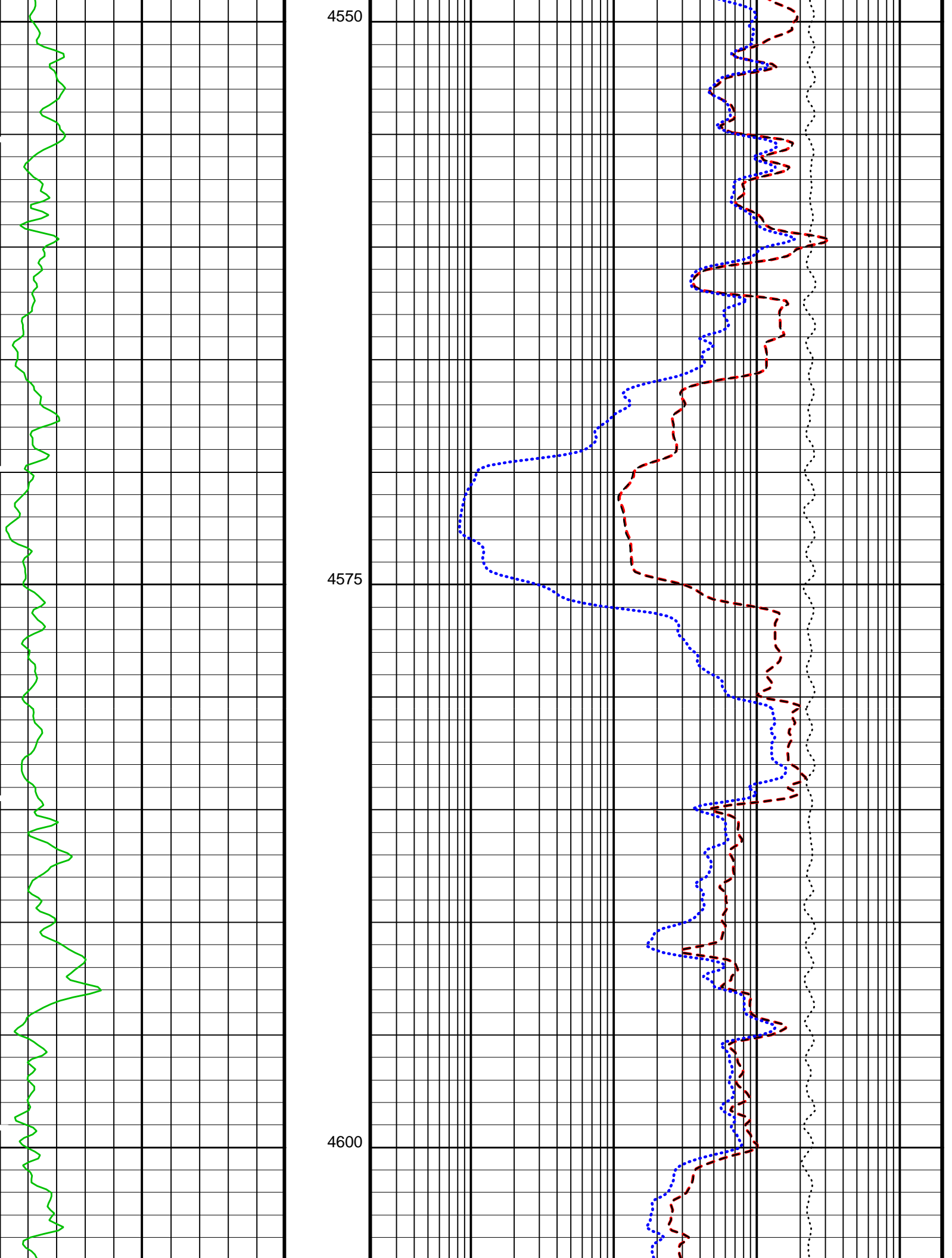


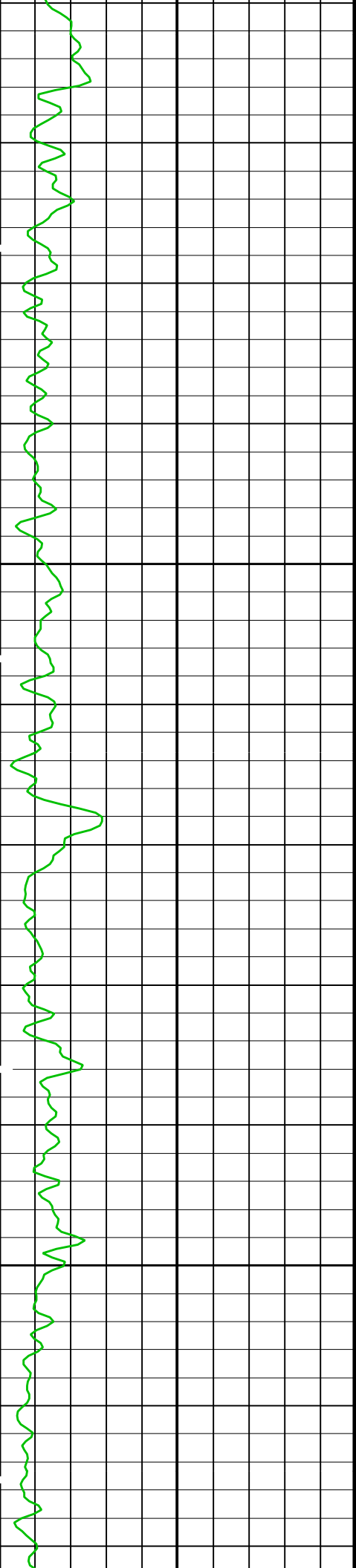


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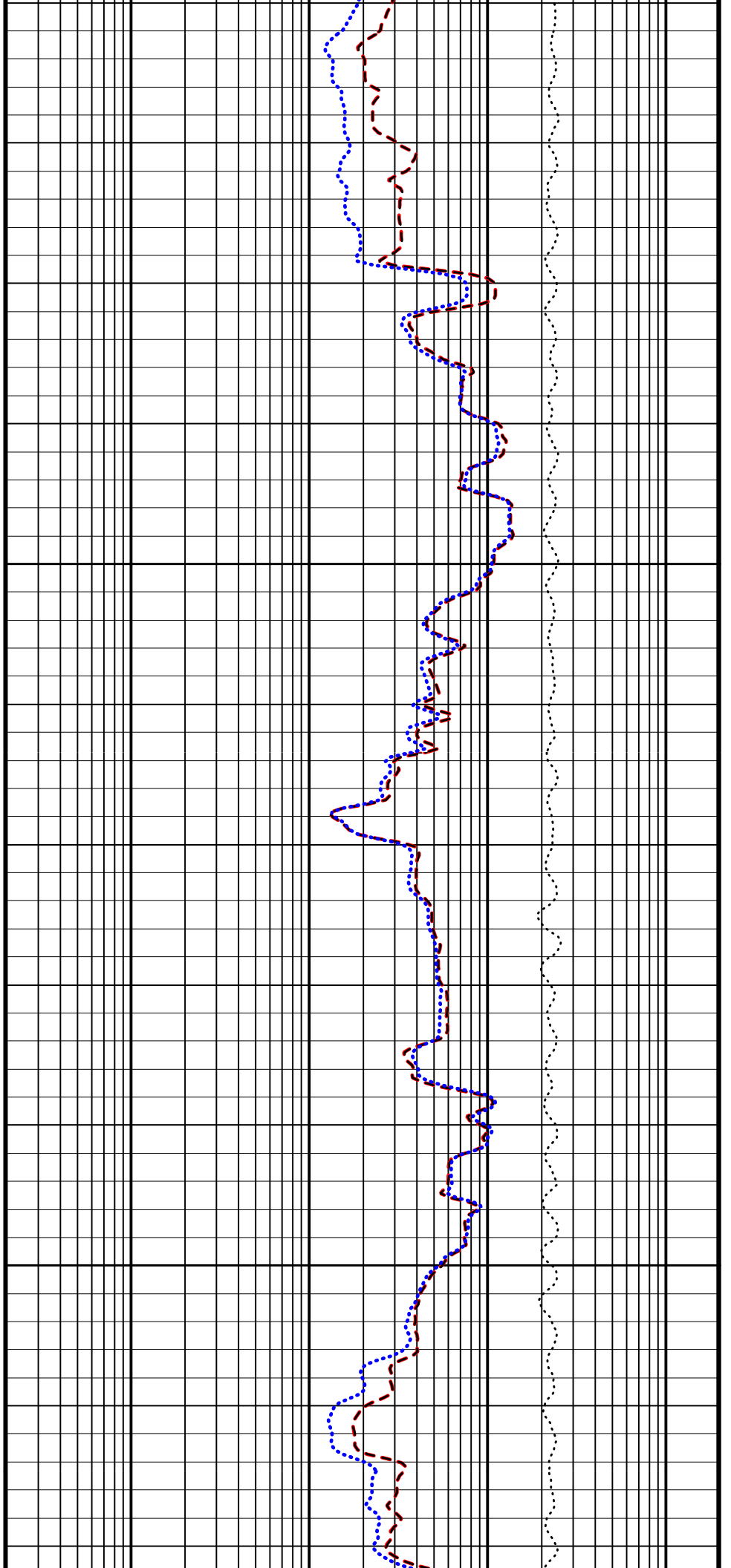


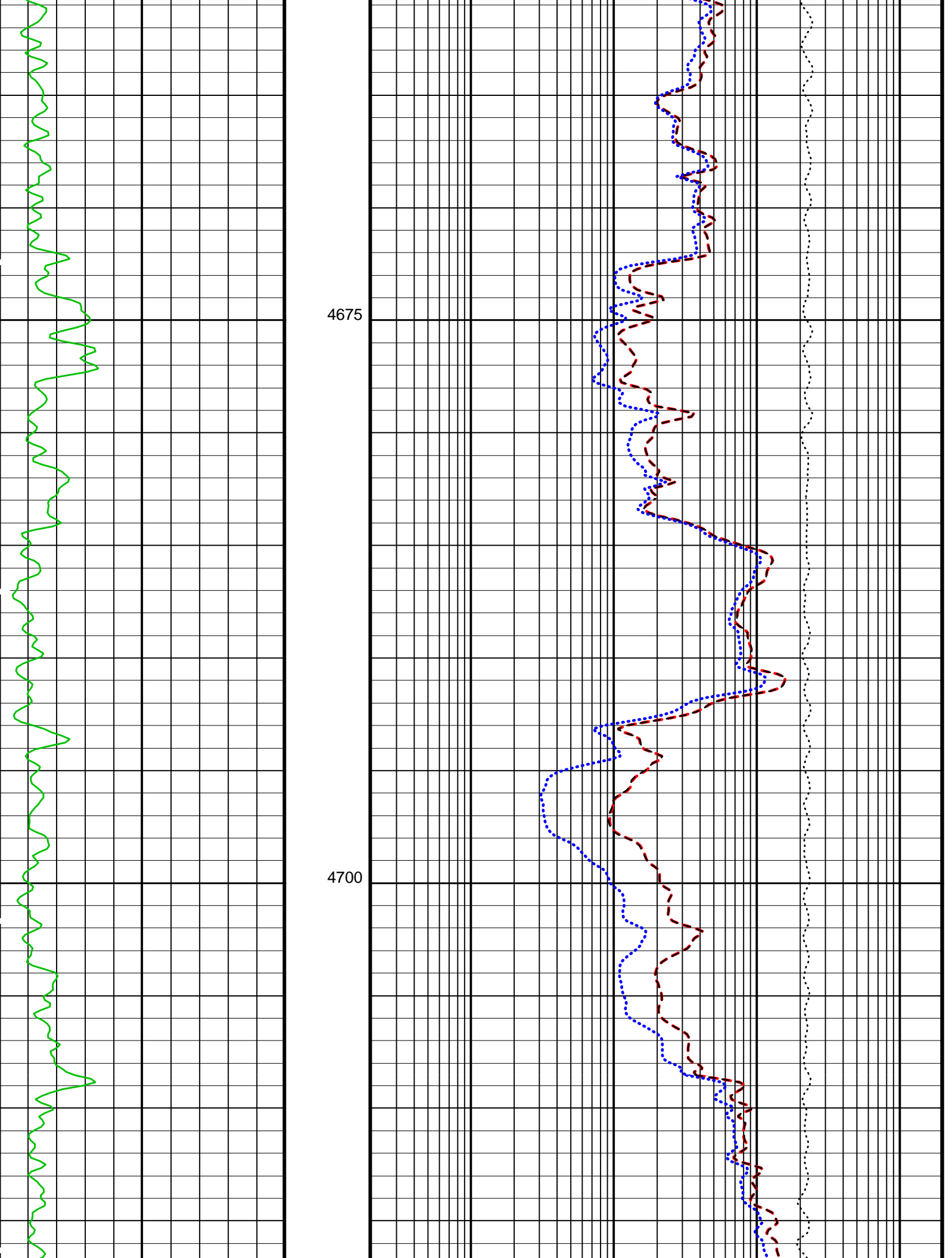


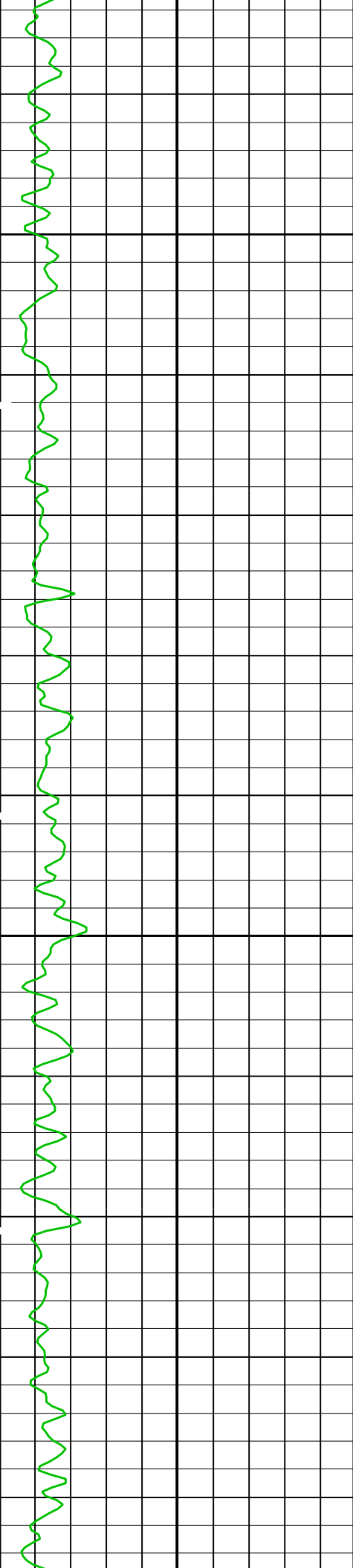


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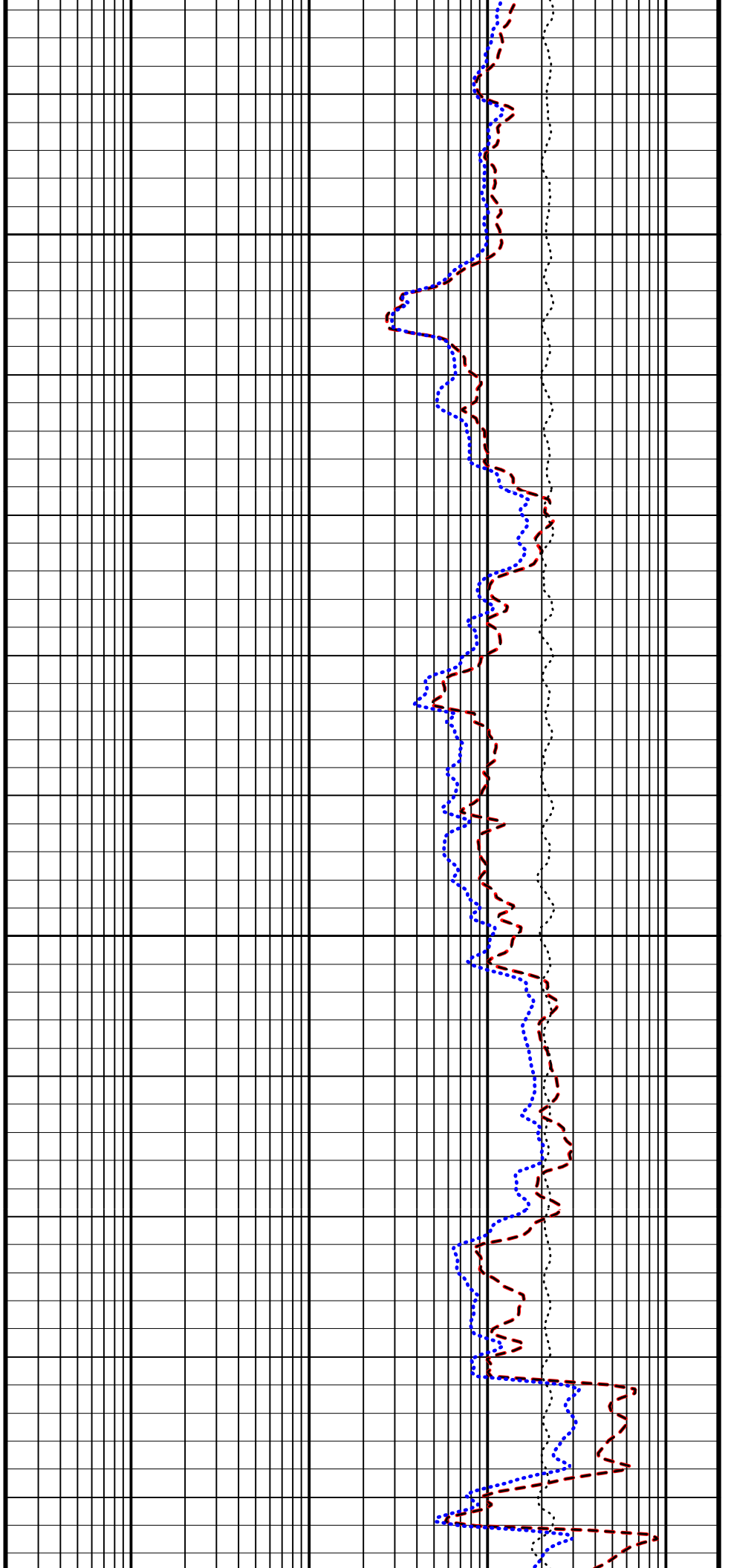


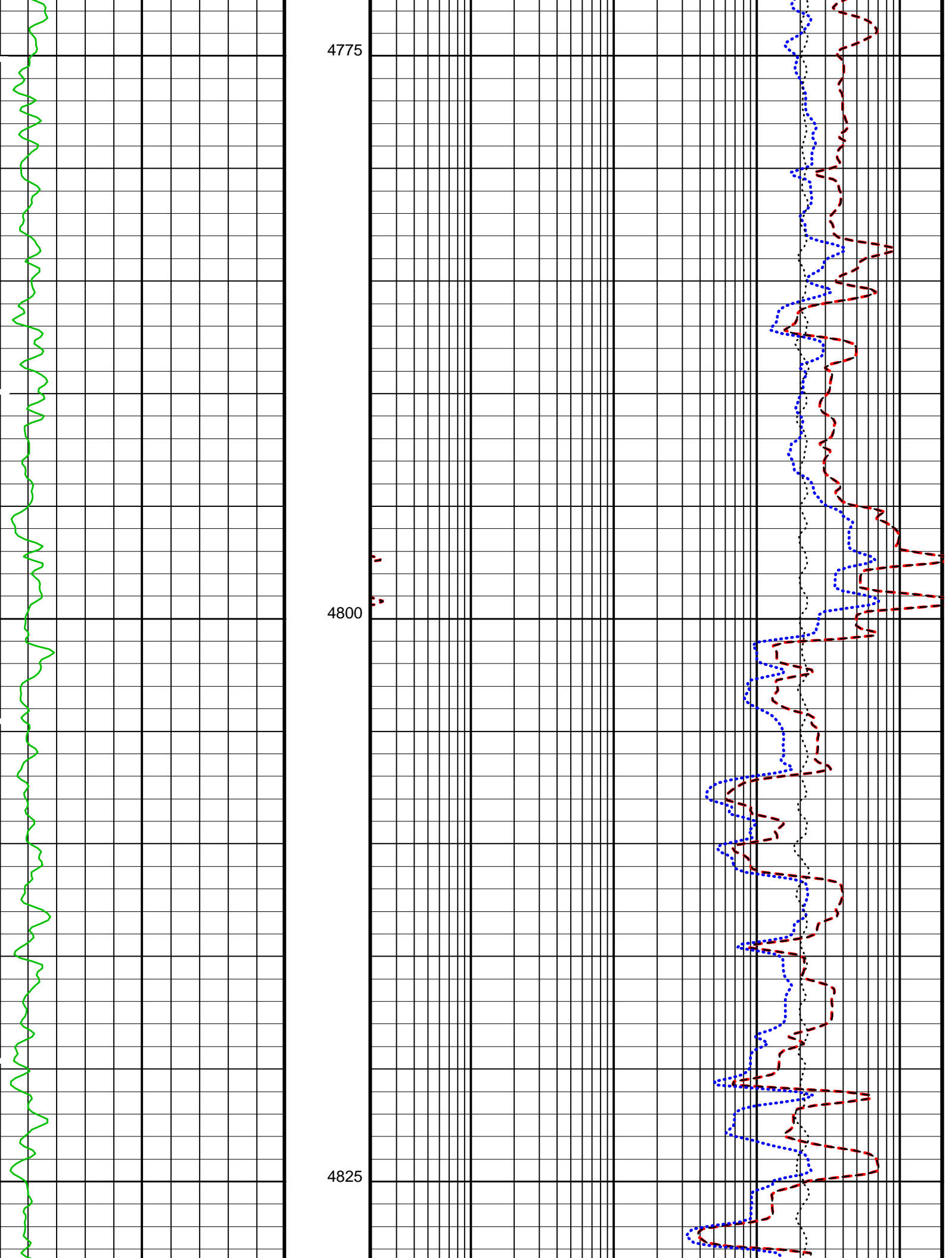


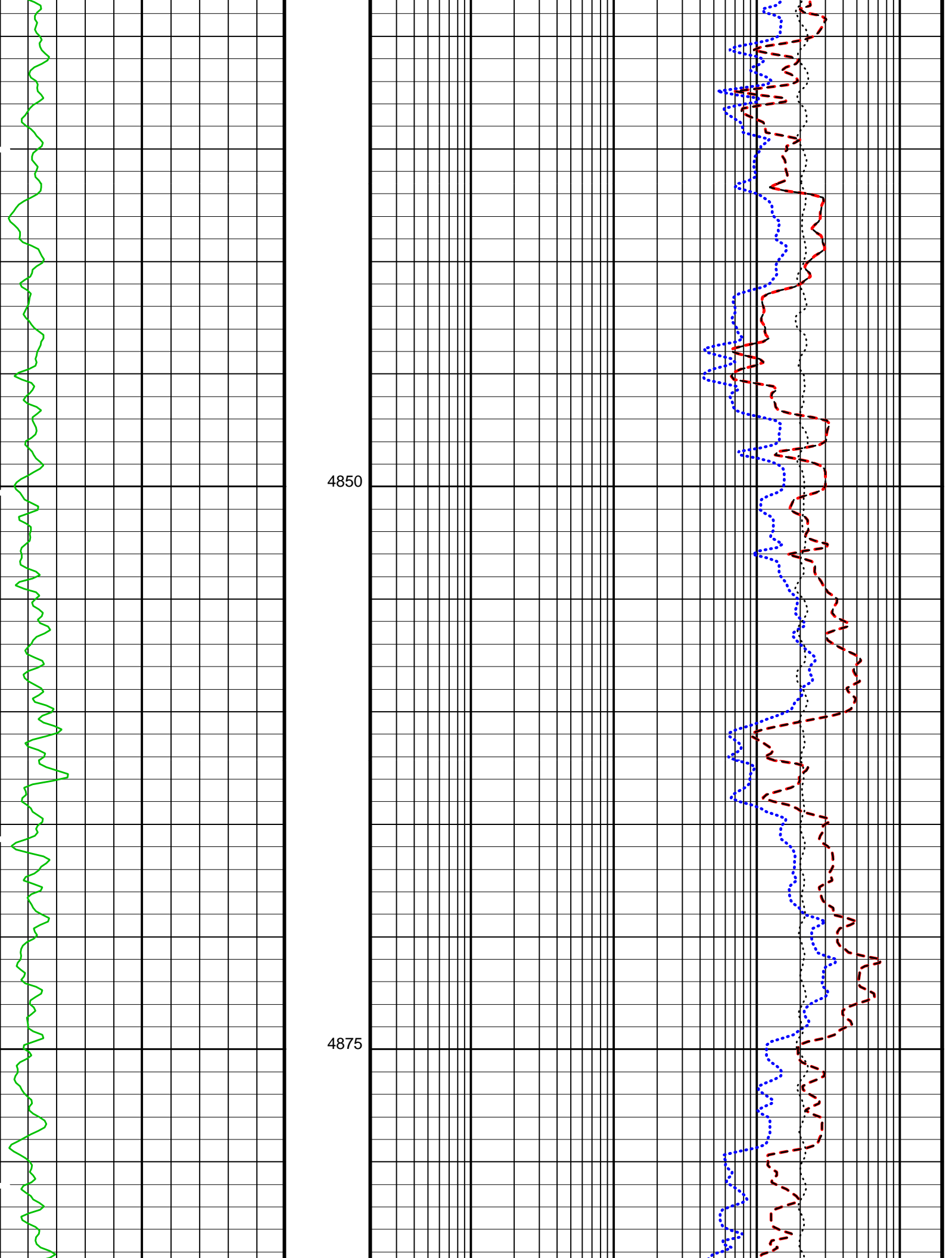


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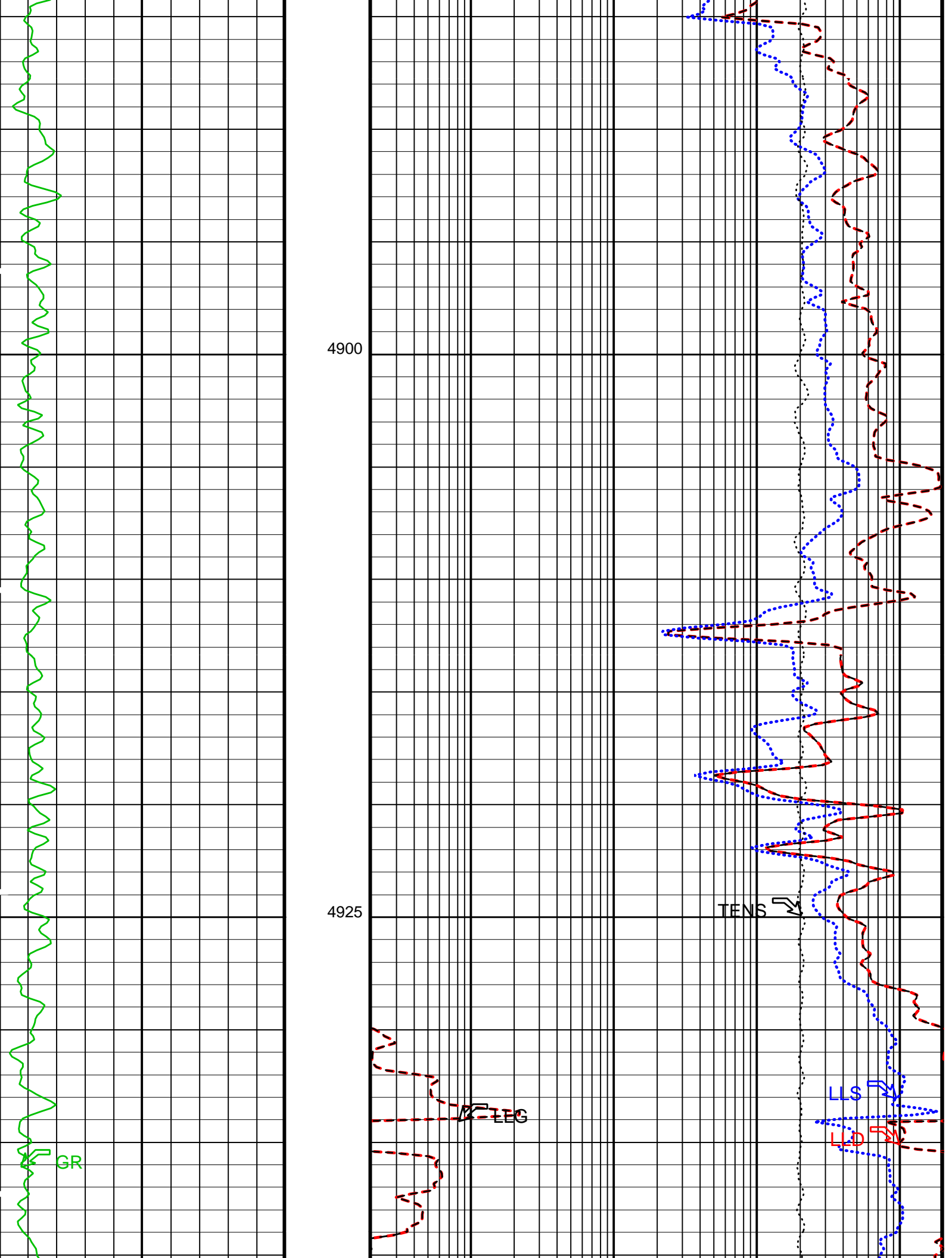






4850

4875



4900

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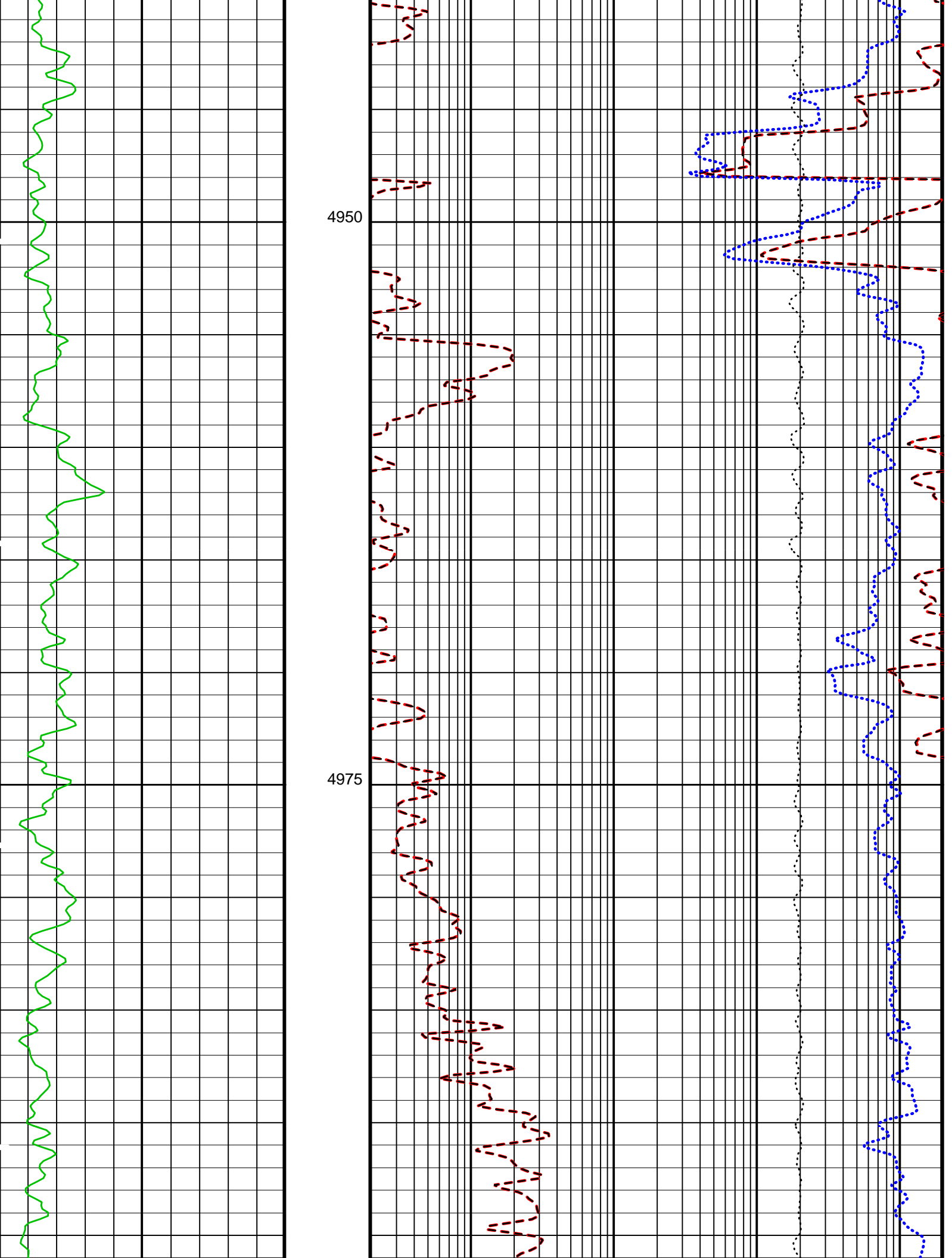
GR

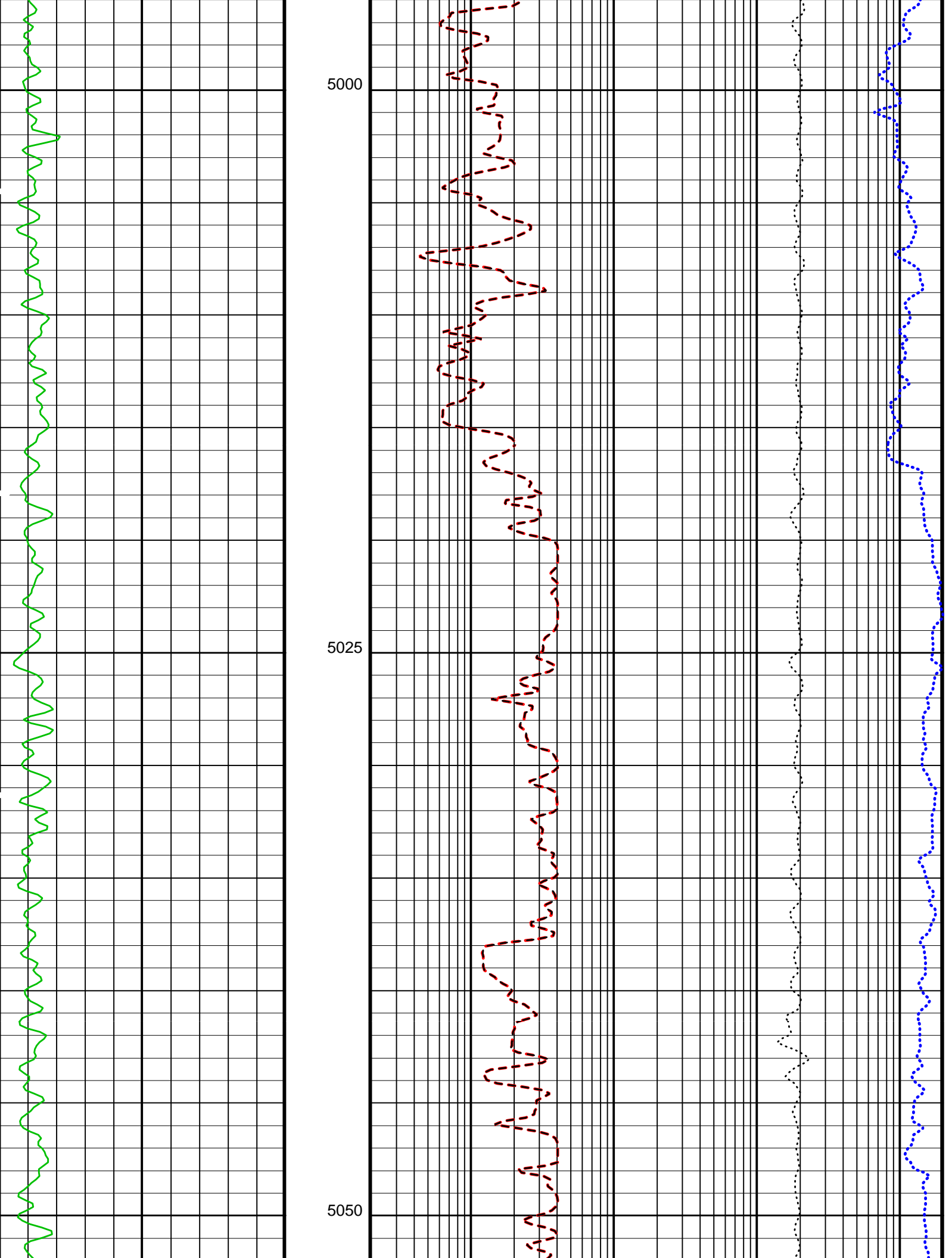
LEG

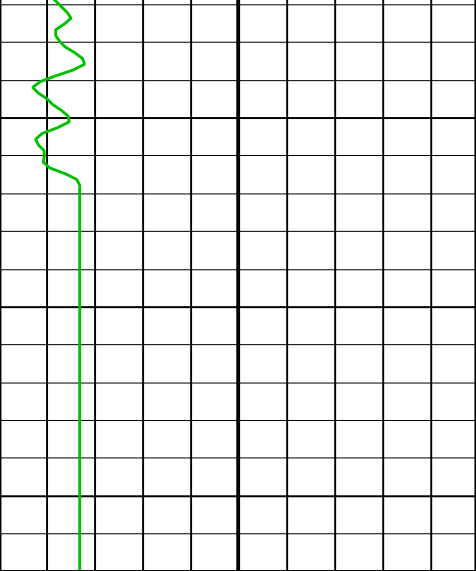
LLS

LED

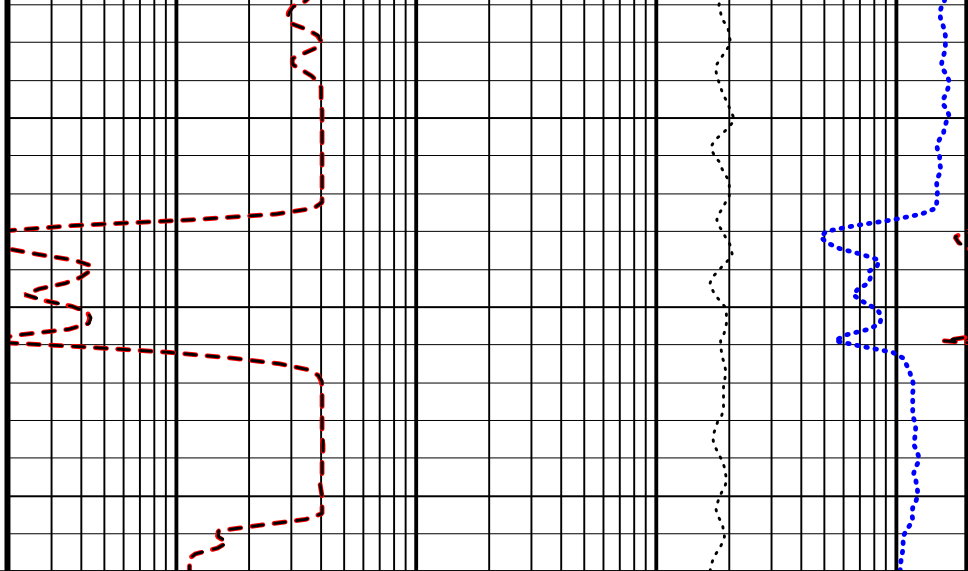
TENS







Gamma Ray (GR)
(GAPI) 0 20



Laterolog Deep Resistivity (LLD)
(OHMM) 0.2 2000

Laterolog Groningen Resistivity (LLG)
(OHMM) 0.2 2000

Laterolog Shallow Resistivity (LLS)
(OHMM) 0.2 2000

Tension (TENS)
(LBF) 10000 0

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	OFF
PLRM	POWER LOOP REFERENCE MODE	DEEP
SPRF	SHALLOW REFERENCE POWER	550 NW
System and Miscellaneous		
DO	Depth Offset for Playback	0.0 M
PP	Playback Processing	NORMAL

Format: DLT_DST Vertical Scale: 1:200

Graphics File Created: 23-Dec-2005 10:06

OP System Version: 12C0-301
MCM

DLT-E	12C0-301	DTA-A	12C0-301
EMS-B	12C0-301	SGT-N	12C0-301
DTC-H	12C0-301	BSP	12C0-301

Input DLIS Files

DEFAULT	Flip_DLL_EMS_090LUP	PRODUCER	23-Dec-2005 10:00	5067.0 M	3941.7 M
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Output DLIS Files

DEFAULT	DLL_EMS_091PUP	FN:105	PRODUCER	23-Dec-2005 10:06
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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: 23-Dec-2005 7:11							
MEASURED LLD	31.62	N/A	31.96	N/A	N/A	0.9000	OHMM
MEASURED LLS	31.62	N/A	31.14	N/A	N/A	0.9000	OHMM
Environment Measurement Sonde Wellsite Calibration - EMS Caliper Calibration							
Before: Calibration not done							
Radius 1 Short Radius	4.000	N/A	N/A	N/A	N/A	0.2000	IN
Radius 1 Long Radius	8.000	N/A	N/A	N/A	N/A	0.2000	IN
Radius 2 Short Radius	4.000	N/A	N/A	N/A	N/A	0.2000	IN
Radius 2 Long Radius	8.000	N/A	N/A	N/A	N/A	0.2000	IN
Radius 3 Short Radius	4.000	N/A	N/A	N/A	N/A	0.2000	IN
Radius 3 Long Radius	8.000	N/A	N/A	N/A	N/A	0.2000	IN
Radius 4 Short Radius	4.000	N/A	N/A	N/A	N/A	0.2000	IN
Radius 4 Long Radius	8.000	N/A	N/A	N/A	N/A	0.2000	IN
Radius 5 Short Radius	4.000	N/A	N/A	N/A	N/A	0.2000	IN
Radius 5 Long Radius	8.000	N/A	N/A	N/A	N/A	0.2000	IN
Radius 6 Short Radius	4.000	N/A	N/A	N/A	N/A	0.2000	IN
Radius 6 Long Radius	8.000	N/A	N/A	N/A	N/A	0.2000	IN
Scintillation Gamma-Ray - N Wellsite Calibration - Detector Calibration							
Before: 22-Dec-2005 15:51							
Gamma Ray (Jig - Bkg)	157.1	N/A	157.1	N/A	N/A	14.28	GAPI
Gamma Ray (Calibrated)	165.0	N/A	165.0	N/A	N/A	15.00	GAPI

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		31.96	Before		31.14
	29.00 (Minimum) 31.62 (Nominal) 40.00 (Maximum)			29.00 (Minimum) 31.62 (Nominal) 40.00 (Maximum)	

Before: 23-Dec-2005 7:11

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		341.4	Before		10.91	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		344.3	Before		10.72			
	317.5 (Minimum) 342.5 (Nominal) 367.5 (Maximum)			9.830 (Minimum) 10.83 (Nominal) 11.83 (Maximum)				

Before: 23-Dec-2005 7:11

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		-0.1039	Before		-0.01134	Before		-0.004567
	-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		-0.007697			
	-1.000 (Minimum) 0 (Nominal) 1.000 (Maximum)			-0.1000 (Minimum) 0 (Nominal) 0.1000 (Maximum)				

Before: 23-Dec-2005 7:10

Environment Measurement Sonde / Equipment Identification

Primary Equipment:

EMS Cartridge EMC - B
 EMS Adaptor EMA - B
 Resistivity Meter RES -

Auxiliary Equipment:

Electronics Cartridge Housing ECH - KH

Environment Measurement Sonde Wellsite Calibration

EMS Caliper Calibration

Phase	Radius 1 Short Radius IN	Value	Phase	Radius 1 Long Radius IN	Value
Before		N/A	Before		N/A
	3.000 (Minimum) 4.000 (Nominal) 5.000 (Maximum)			7.000 (Minimum) 8.000 (Nominal) 9.000 (Maximum)	
Phase	Radius 2 Short Radius IN	Value	Phase	Radius 2 Long Radius IN	Value
Before		N/A	Before		N/A
	3.000 (Minimum) 4.000 (Nominal) 5.000 (Maximum)			7.000 (Minimum) 8.000 (Nominal) 9.000 (Maximum)	
Phase	Radius 3 Short Radius IN	Value	Phase	Radius 3 Long Radius IN	Value
Before		N/A	Before		N/A
	3.000 (Minimum) 4.000 (Nominal) 5.000 (Maximum)			7.000 (Minimum) 8.000 (Nominal) 9.000 (Maximum)	
Phase	Radius 4 Short Radius IN	Value	Phase	Radius 4 Long Radius IN	Value
Before		N/A	Before		N/A
	3.000 (Minimum) 4.000 (Nominal) 5.000 (Maximum)			7.000 (Minimum) 8.000 (Nominal) 9.000 (Maximum)	
Phase	Radius 5 Short Radius IN	Value	Phase	Radius 5 Long Radius IN	Value
Before		N/A	Before		N/A
	3.000 (Minimum) 4.000 (Nominal) 5.000 (Maximum)			7.000 (Minimum) 8.000 (Nominal) 9.000 (Maximum)	
Phase	Radius 6 Short Radius IN	Value	Phase	Radius 6 Long Radius IN	Value
Before		N/A	Before		N/A
	3.000 (Minimum) 4.000 (Nominal) 5.000 (Maximum)			7.000 (Minimum) 8.000 (Nominal) 9.000 (Maximum)	

Before: Calibration not done

Scintillation Gamma-Ray - N / Equipment Identification

Primary Equipment:

Scintillation Gamma Cartridge SGC - TB
 Scintillation Gamma Detector SGD - TAA

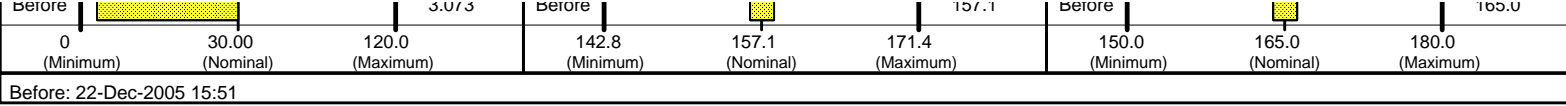
Auxiliary Equipment:

Scintillation Gamma Housing SGH - K
 Gamma Source Radioactive GSR - U/Y

Scintillation Gamma-Ray - N Wellsite Calibration

Detector Calibration

Phase	Gamma Ray Background GAPI	Value	Phase	Gamma Ray (Jig - Bkg) GAPI	Value	Phase	Gamma Ray (Calibrated) GAPI	Value
Before		2.072	Before		157.1	Before		105.0



Company: Lamont Doherty



Well: Expedition 312 Site 1256D
 Field: Superfast Spreading Crust III
 Rig: Joides Resolution
 Ocean: Pacific Ocean

Dual Laterolog Tool

Gamma Ray