



Weatherford®

6 3/4 in. & 4 3/4 in. WeatherfordM/LWD™
Spectral Gamma Ray & Resistivity
5 in. MEASURED DEPTH
RECORDED DATA
FINAL PRINT

Company: Anadarko
Well: Sparboe 7C-3HZ
Field: Wattenberg
Rig: Xtreme 23
County: Weld

Location

Latitude: 40.101501° N X = 3,238,883.55 ft Mag Decl: 8.62°
Longitude: 104.646028° W Y = 1,280,971.47 ft Mag Dip: 66.75°

Other Services: Temperature and Directional

COMPANY Anadarko
WELL Sparboe 7C-3HZ
FIELD Wattenberg
RIG Xtreme 23
COUNTY Weld STATE Colorado
API # 05-123-36242

Permanent Datum: Mean Sea Level

Log Measured From: Drill Floor Elev: 4993.0 ft above perm. datum

Depth Reference: Drillers Tally Total Depth: 14488 ft

Depth Logged: 6873 ft to 14488 ft Runs: 5

Date Logged: 8-Jan-13 to 18-Jan-13 Spud Date: 31-Dec-12

Elevation
K.B. Top Drive
G.L. 4977.0 ft
D.F. 4993.0 ft
W.D. Land

Borehole Record

Casing Record

Hole Size	From	To	Size	Weight	From	To
8.750 in.	1776 ft	7695 ft	9.625 in.	53.5 lb/ft	Surface	1776 ft
6.125 in.	7695 ft	14488 ft	7.000 in.	26.0 lb/ft	Surface	7695 ft

Borehole Deviation Record

Mud Record

Hole Size	Min. Inc.	Max. Inc.	Type	Weight	From	To
8.750 in.	0.44°	83.21°	WBM	8.50 - 10.40 ppq	1776 ft	7695 ft
6.125 in.	87.66°	91.79°	WBM	9.80 - 10.25 ppq	7695 ft	14488 ft

All interpretations of log data are opinions based on inferences from electrical or other measurements. Weatherford International does not guarantee the accuracy or correctness of any interpretation or recommendation and we shall not be liable or responsible for any loss, cost, damages or expenses incurred or sustained by anyone resulting from any interpretation or recommendation made by any of our employees or agents.

RUN SUMMARY							
M/LWD Run Number		1	2	3	4	5	
Bit Size	in.	8.750	8.750	8.750	8.750	6.125	
Bit Type		PDC	PDC	PDC	Tri Cone	PDC	
Bit TFA	sq.in.	1.250	0.980	0.980	0.820	0.980	
Bit Start Depth	ft	1776	6725	7374	7448	7695	
Bit End Depth	ft	6725	7374	7448	7695	14488	
Top Log Interval	ft	No Logging	6688	7331	7407	7462	
Bottom Log Interval	ft	No Logging	7374	7448	7695	14488	
Begin Log Time	hrs	No Logging	12:21	9:13	9:29	12:45	
Begin Log Date	DD-MMM-YY	No Logging	8-Jan-13	10-Jan-13	11-Jan-13	14-Jan-13	
End Log Time	hrs	No Logging	17:37	13:41	4:28	13:58	
End Log Date	DD-MMM-YY	No Logging	9-Jan-13	10-Jan-13	12-Jan-13	18-Jan-13	
Drill or Wipe		Drill	Drill	Drill	Drill	Drill	
Flow Rate	gal/min	599	575	598	590	290	
Max AV / CV @ MWD	ft/min	473 / 171	454 / 396	473 / 427	466 / 412	475 / 380	
Min Inc @ Depth	deg @ ft	0.44 @ 1885	1.29 @ 6708	55.18 @ 7348	60.68 @ 7435	87.66 @ 11304	
Max Inc @ Depth	deg @ ft	12.54 @ 4184	52.57 @ 7306	78.82 @ 7563	83.21 @ 7637	91.79 @ 11133	
MUD DATA							
Depth	ft	6725	7374	7448	7695	14488	
Fluid Type		WBM	WBM	WBM	WBM	WBM	
Mud Weight	ppg	8.50	10.00	10.40	10.20	10.25	
Plastic Viscosity	cP	1	14	14	16	13	
Solids / Sand	%	0.7 / 0.50	0.5 / 7.80	9.7 / 0.80	8.7 / 0.80	9.2 / 0.80	
Total Chlorides	ppm	1700	1700	1700	2200	2300	
pH		8.6	10	10.2	9	8.9	
Oil:Water Ratio	% Vol	1.0:99.0	8.0:92.0	12.0:88.0	10.5:89.5	10.0:90.0	
Rm @ Temperature	ohm-m @ deg F	N/A	N/A	N/A	N/A	1.96 @ 61	
Rmc @ Temperature	ohm-m @ deg F	N/A	N/A	N/A	N/A	2.20 @ 62	
Rmf @ Temperature	ohm-m @ deg F	N/A	N/A	N/A	N/A	1.95 @ 62	
KCl	% Vol	0	0	0	0	0	
Client Representative		D. Bell	D. Bell	D. Bell	D. Bell	D. Bell	
WeatherfordM/LWD Engineer		D. Palmer	D. Palmer	D. Palmer	S. Simmons	V. Campos	

EQUIPMENT SUMMARY					
M/LWD Run Number	1	2	3	4	5
MWD Build Number	CP20808PDYBR-T1	CP20808PDYBR-T1	CP20808PDYBR-T1	CP20808PDYBR-T1	N/A
HEL Serial Number	N/A	N/A	N/A	N/A	NW22917PDBBI4.75-M1
MFR Serial Number	N/A	N/A	N/A	N/A	NW22916RBBK4.75
SAGR Serial Number	N/A	N/A	N/A	N/A	NW22918JB4.75
Sensor to Bit Offsets / Acquisition Rates					
Directional	ft / sec	63.07 / RT	57.72 / RT	58.07 / RT	56.19 / RT
Gamma Ray	ft / sec	48.86 / RT	43.51 / RT	43.51 / RT	41.98 / RT
Resistivity	ft / sec	N/A	N/A	N/A	N/A
Other Information					
Total BHA Length	ft	121.00	116.73	116.41	116.20
BHA Assembly Type		Steerable	Steerable	Steerable	Steerable
Stabilizer Location	ft	N/A	N/A	N/A	N/A
Stabilizer Location	ft	N/A	N/A	N/A	N/A
Run Circulating Time	hr	24.28	27.15	11.80	20.74
Run Drilling Time	hr	12.03	15.75	3.08	15.43

MUD SUMMARY

Date and Time	Run	Bit Depth	Mud Weight	% K	Rm @ Temp	Rmf @ Temp	Rmc @ Temp	BHCT
08 Jan 13 @ 03:30	01	6725 ft	8.50 ppg	0	N/A	N/A	N/A	111 F
09 Jan 13 @ 22:00	02	7374 ft	10.00 ppg	0	N/A	N/A	N/A	171 F
11 Jan 13 @ 00:00	03	7448 ft	10.40 ppg	0	N/A	N/A	N/A	171 F
13 Jan 13 @ 00:00	04	7695 ft	10.20 ppg	0	N/A	N/A	N/A	178 F
18 Jan 13 @ 00:00	05	14488 ft	10.25 ppg	0	1.96 ohm-m @ 61 F	2.20 ohm-m @ 62 F	1.95 ohm-m @ 62 F	237 F

M/LWD RUN REMARKS		
Run Number: 1 :: REAL TIME DATA LOG		
WFT Services Provided: Real Time Logging: Gamma Ray and Temperature. Directional Services: On demand Inclination and Azimuth.		
Borehole and Environmental Correction: Collar O.D.: 6.750 in. Gamma Ray: Collar O.D., collar I.D. and K1 factor. Collar I.D.: 3.250 in. K1 Factor: 3.012 KCl Concentration: 0%		
Run Number: 2 :: REAL TIME DATA LOG		
WFT Services Provided: Real Time Logging: Gamma Ray and Temperature. Directional Services: On demand Inclination and Azimuth.		
Borehole and Environmental Correction: Collar O.D.: 6.750 in. Gamma Ray: Collar O.D., collar I.D. and K1 factor. Collar I.D.: 3.250 in. K1 Factor: 3.012 KCl Concentration: 0%		
Run Number: 3 :: REAL TIME DATA LOG		
WFT Services Provided: Real Time Logging: Gamma Ray and Temperature. Directional Services: On demand Inclination and Azimuth.		
Borehole and Environmental Correction: Collar O.D.: 6.750 in. Gamma Ray: Collar O.D., collar I.D. and K1 factor. Collar I.D.: 3.250 in. K1 Factor: 3.012 KCl Concentration: 0%		
Run Number: 4 :: REAL TIME DATA LOG		
WFT Services Provided: Real Time Logging: Gamma Ray and Temperature. Directional Services: On demand Inclination and Azimuth.		
Borehole and Environmental Correction: Collar O.D.: 6.750 in. Gamma Ray: Collar O.D., collar I.D. and K1 factor. Collar I.D.: 3.250 in. K1 Factor: 3.012 KCl Concentration: 0%		
Run Number: 5 :: RECORDED DATA LOG		
WFT Services Provided: Recorded and Real Time Logging: Gamma Ray, Deep, Medium and Shallow Resistivity, and Temperature. Directional Services: On demand Inclination and Azimuth.		
Borehole and Environmental Correction: Hole Size: 6.125 in. Gamma Ray: Corrected for mud weight, hole size and KCl concentration. Mud Weight: 10.25 ppg Resistivities: Corrected for borehole temperature, hole size, drilling fluid resistivity Borehole Temperature: 237° F and dielectric correction. Drilling Fluid Resistivity: 1.96 ohm-m KCl Concentration: 0%		

M/LWD LOG COMMENTS	
Comment No. 1-1	No logging done during this run.
Comment No. 2-1	RECORDED DATA LOG Start of MWD Drilling Run 02 Weatherford International provided 6 3/4 in. Directional, Gamma Ray and Temperature for Run 02. Run 02 started formation drilling January 8, 2013 at 12:21 at 6725 MD / 6653 TVD. Weatherford International logged the 8.75 in. borehole. The WBM at the start of drilling was 10.00 ppg.
Comment No. 2-2	End of MWD Drilling Run 02 Run 02 ended drilling formation January 9, 2013 at 17:37 at 7374 MD / 7199 TVD. The WBM at the end of drilling was 10.00 ppg.
Comment No. 3-1	RECORDED DATA LOG Start of MWD Drilling Run 03 Weatherford International provided 6 3/4 in. Directional, Gamma Ray and Temperature for Run 03. Run 03 started formation drilling January 10, 2013 at 9:13 at 7374 MD / 7199 TVD. Weatherford International logged the 8.75 in. borehole. The WBM at the start of drilling was 10.00 ppg.
Comment No. 3-2	End of MWD Drilling Run 03 Run 03 ended drilling formation January 10, 2013 at 13:41 at 7448 MD / 7238 TVD. The WBM at the end of drilling was 10.40 ppg.
Comment No. 4-1	RECORDED DATA LOG Start of MWD Drilling Run 04 Weatherford International provided 6 3/4 in. Directional, Gamma Ray and Temperature for Run 04. Run 04 started formation drilling January 11, 2013 at 09:29 at 7448 MD / 7238 TVD. Weatherford International logged the 8.75 in. borehole. The WBM at the start of drilling was 10.20 ppg.
Comment No. 4-2	End of MWD Drilling Run 04 Run 04 ended drilling formation January 12, 2013 at 04:28 at 7695 MD / 7290 TVD. The WBM at the end of drilling was 10.20 ppg.

Comment No. 5-1

RECORDED DATA LOG

Start of LWD Drilling Run 05

Weatherford International provided 4 3/4 in. Directional, Resistivity, Gamma Ray, and Temperature for Run 05.

Run 05 started formation drilling January 14, 2013 at 12:45 at 7695 MD / 7290 TVD. Weatherford International logged the 6.125 in. borehole.

The WBM at the start of drilling was 10.25 ppg.

Comment No. 5-2

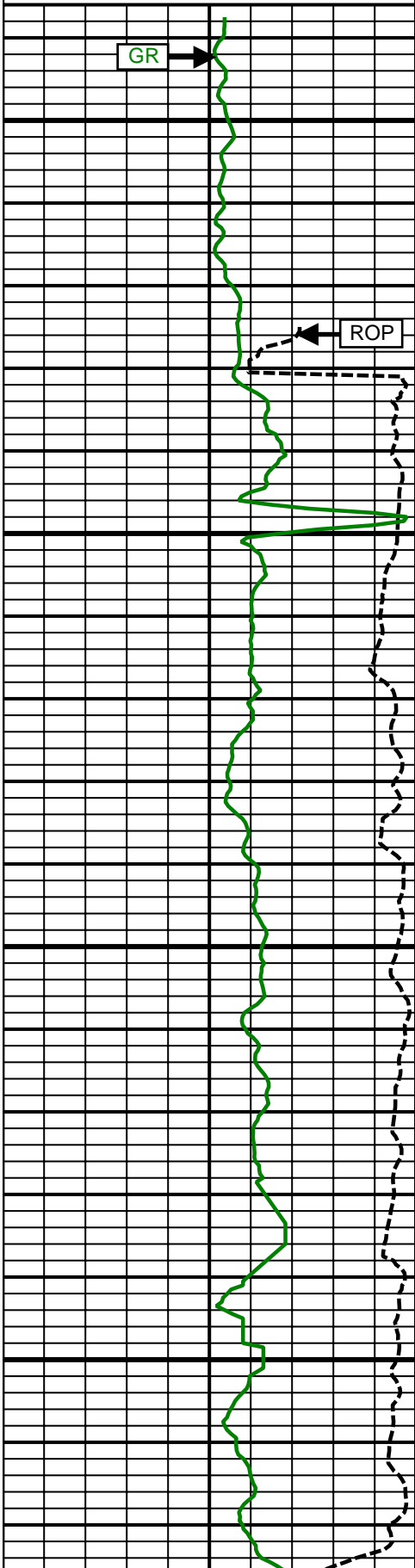
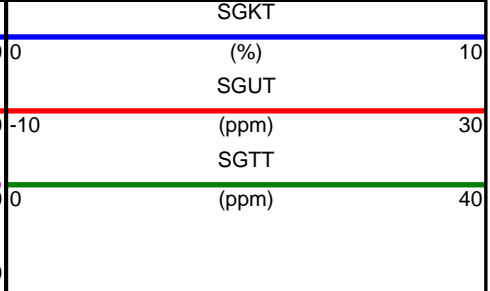
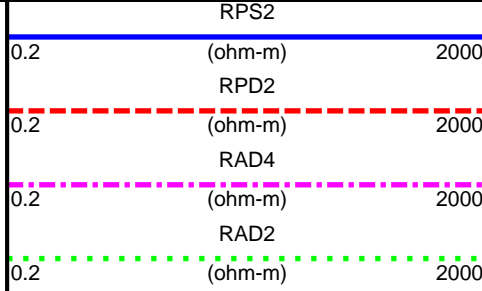
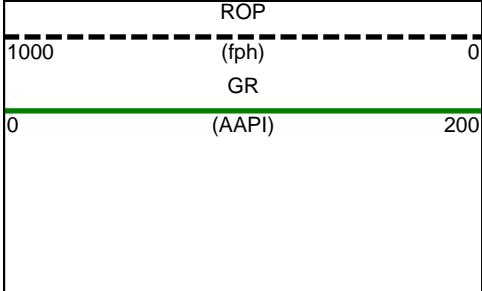
End of LWD Drilling Run 05

Run 05 ended drilling formation January 18, 2013 at 13:58 at 14488 MD / 7263 TVD.

The WBM at the end of drilling was 10.25 ppg.

CURVE SPECIFICATIONS				
CURVE TYPE	MNEMONIC	UNITS	COMMENTS	CORRECTIONS
Rate of Penetration	ROP	fph	Rate of Penetration 3.0 ft window 0.5 ft Exponential Smoothing	None
Gamma Ray	GR	AAPI	Gamma Ray 3.0 ft window 0.5 ft Exponential Smoothing	See M/LWD Run Remarks
Deep Phase Resistivity	RPD2	ohm-m	2 MHz Deep Phase Resistivity 3.0 ft window 0.5 ft Exponential Smoothing	
Deep Attenuation Resistivity	RAD2	ohm-m	2 MHz Deep Attenuation Resistivity 3.0 ft window 0.5 ft Exponential Smoothing	
Deep Attenuation Resistivity	RAD4	ohm-m	400 kHz Deep Attenuation Resistivity 3.0 ft window 0.5 ft Exponential Smoothing	
Shallow Phase Resistivity	RPS2	ohm-m	2 MHz Shallow Phase Resistivity 3.0 ft window 0.5 ft Exponential Smoothing	
Potassium Total	SGKT	%	Potassium Concentration 3.0 ft window 0.5 ft Two Stage Smoothing	
Uranium Total	SGUT	ppm	Uranium Concentration 3.0 ft window 0.5 ft Two Stage Smoothing	
Thorium Total	SGTT	ppm	Thorium Concentration 3.0 ft window 0.5 ft Two Stage Smoothing	

5 Inch - Measured Depth

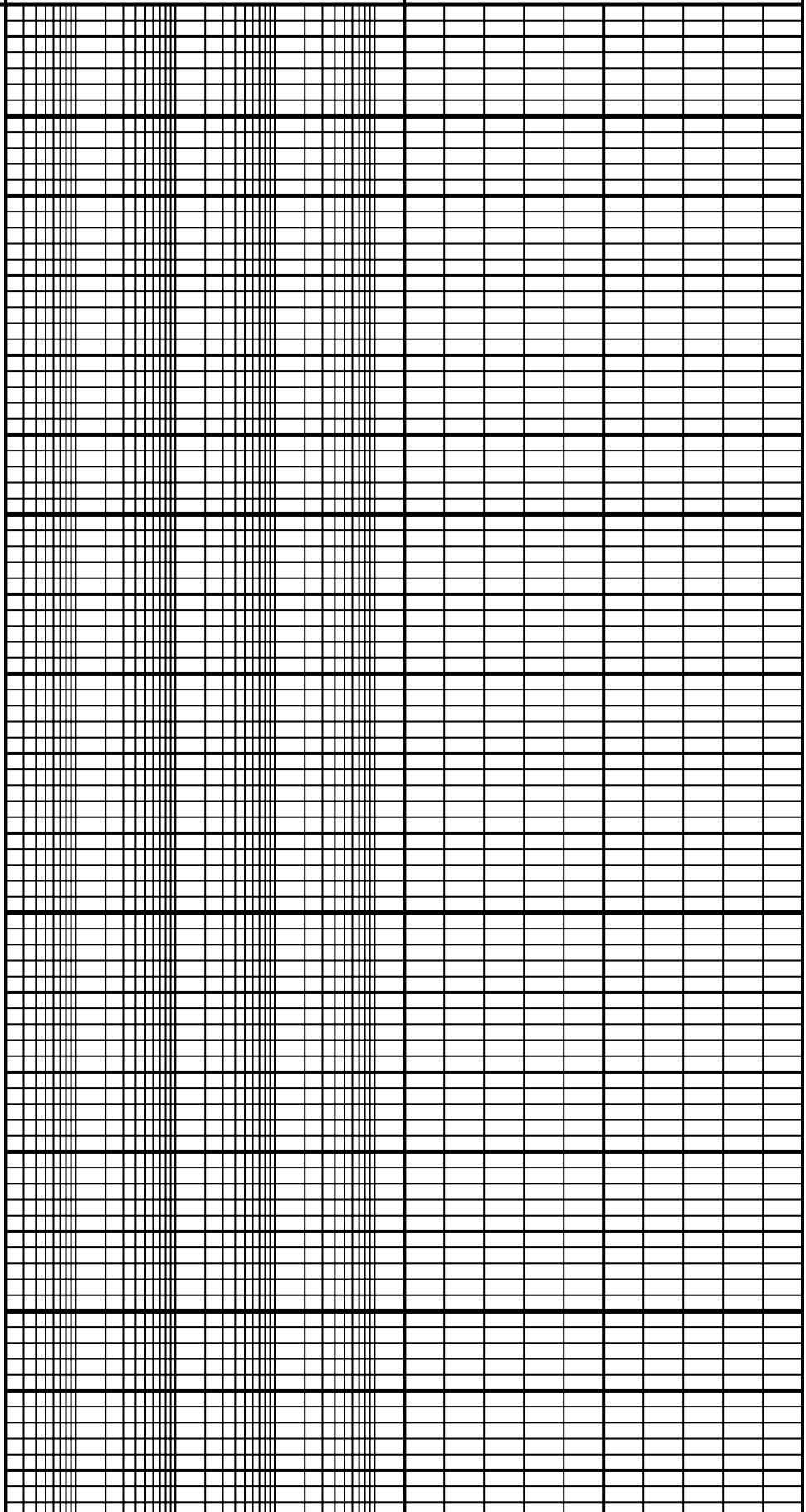


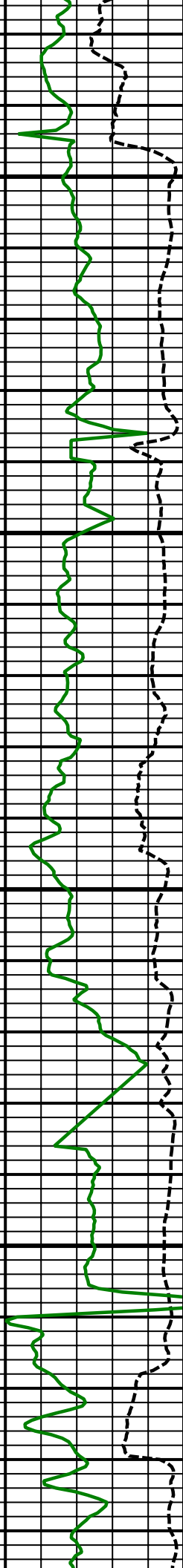
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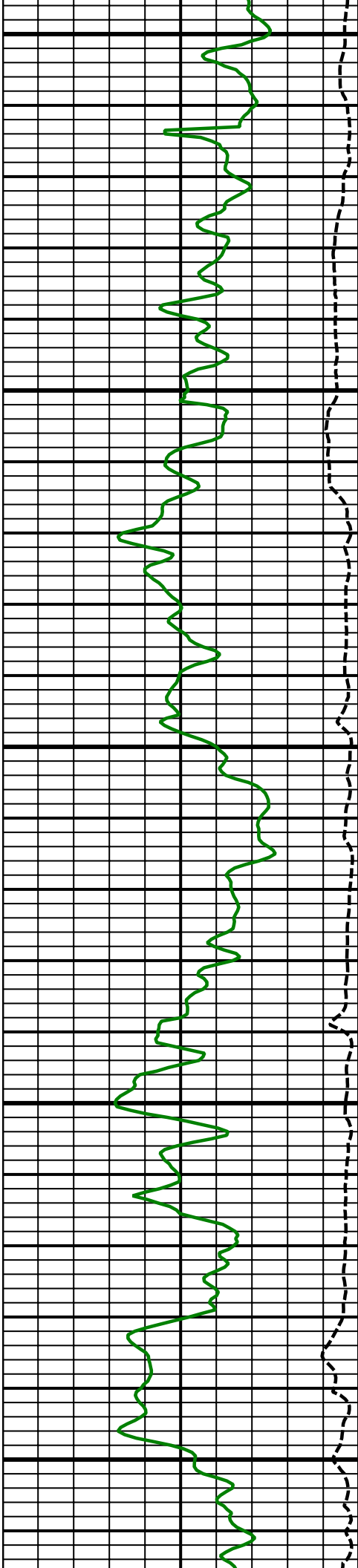
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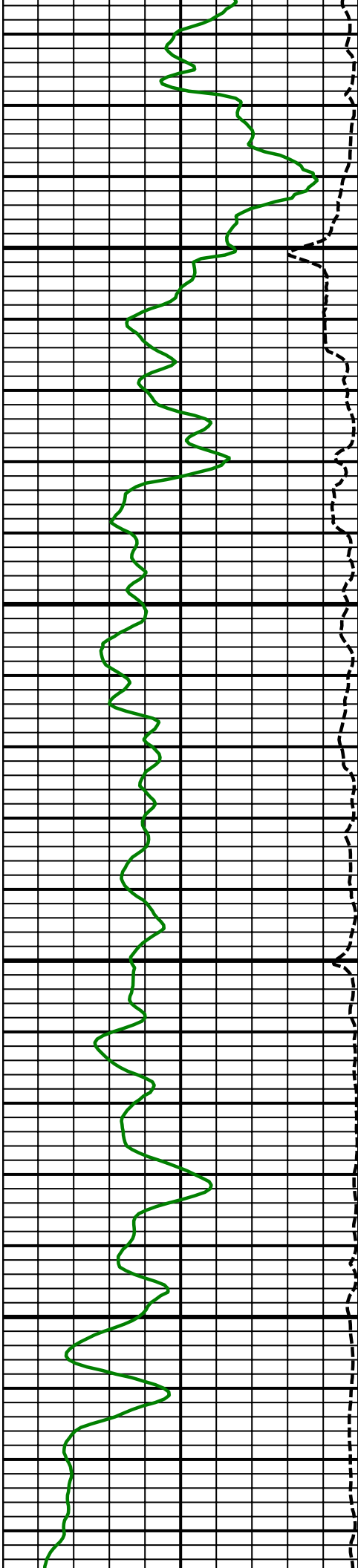
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7200
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7300
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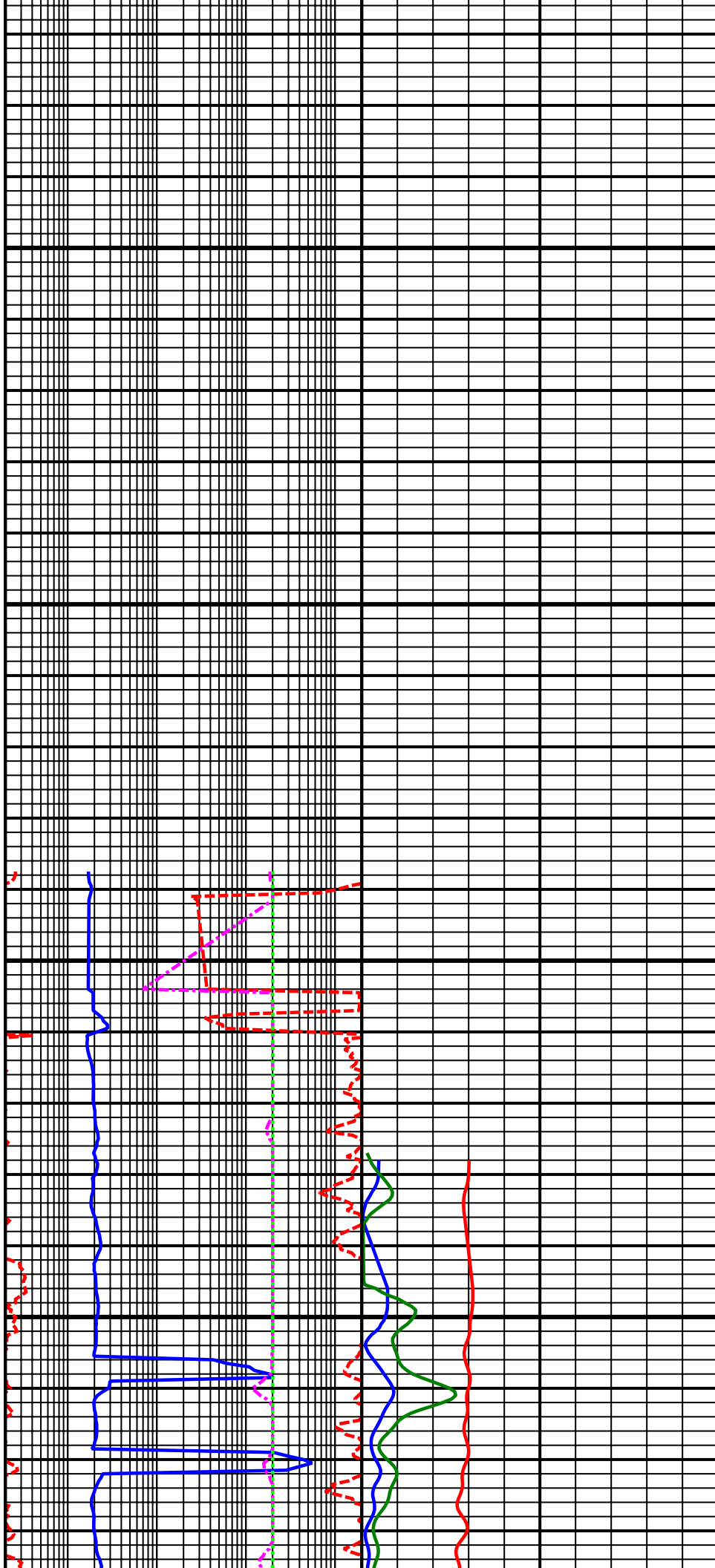
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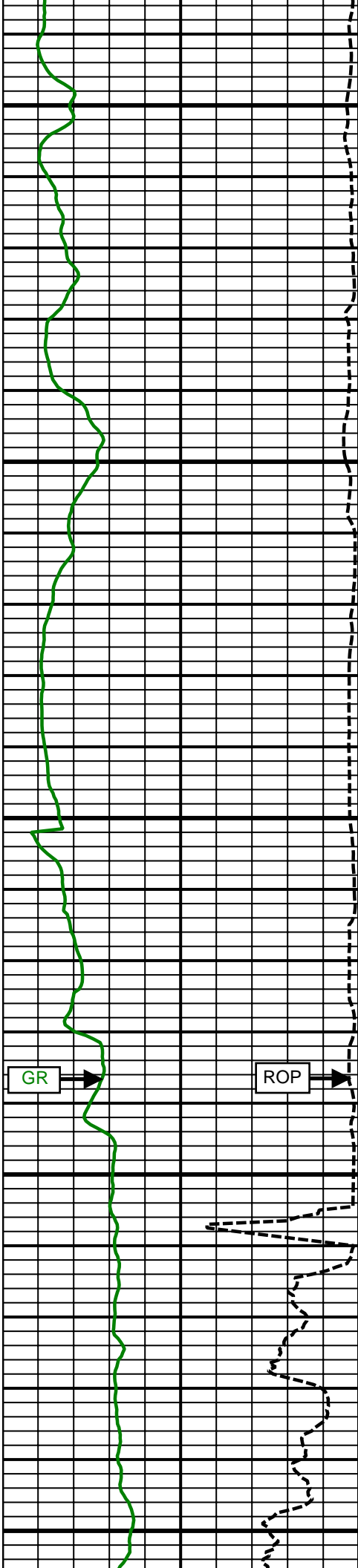
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No. 3-2

Comment
No. 4-1

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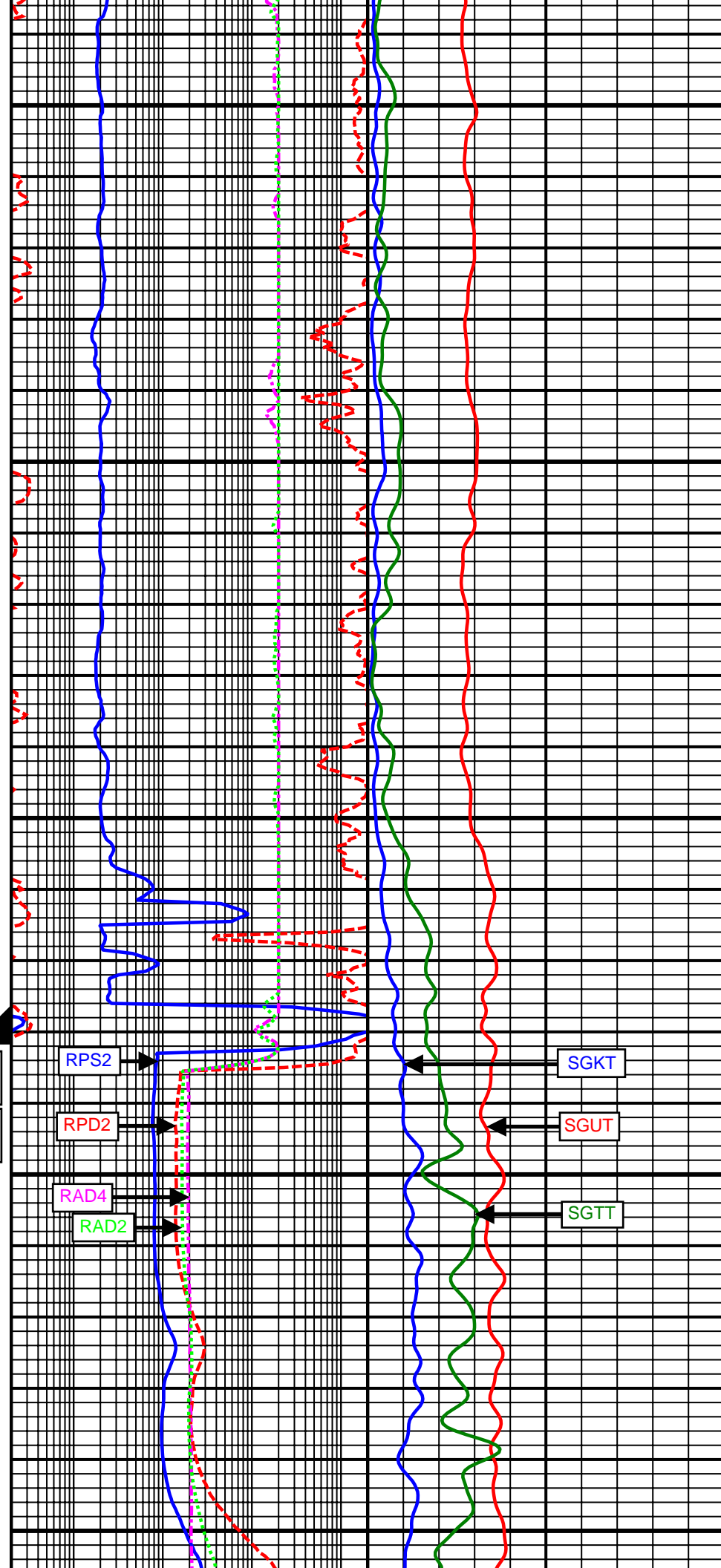


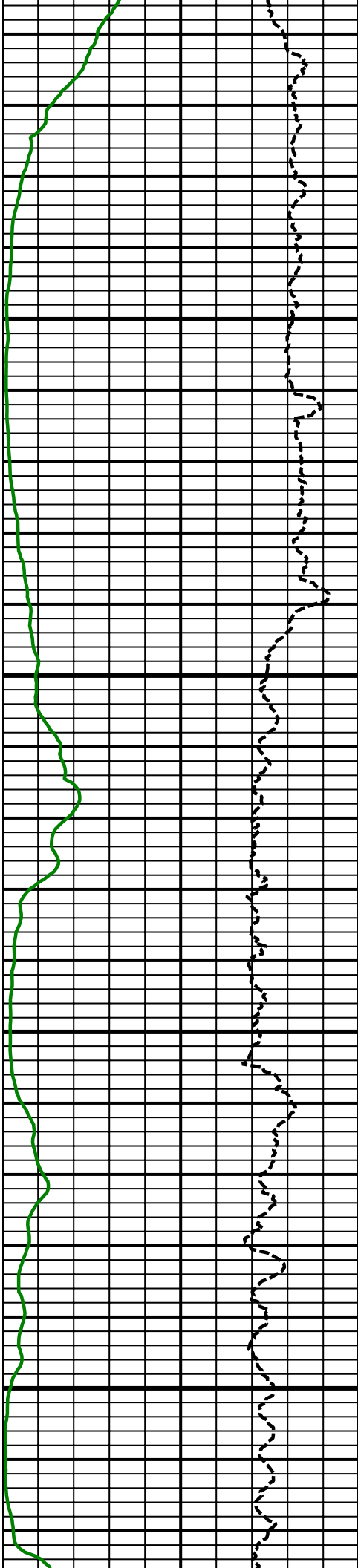
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No. 4-2

Comment
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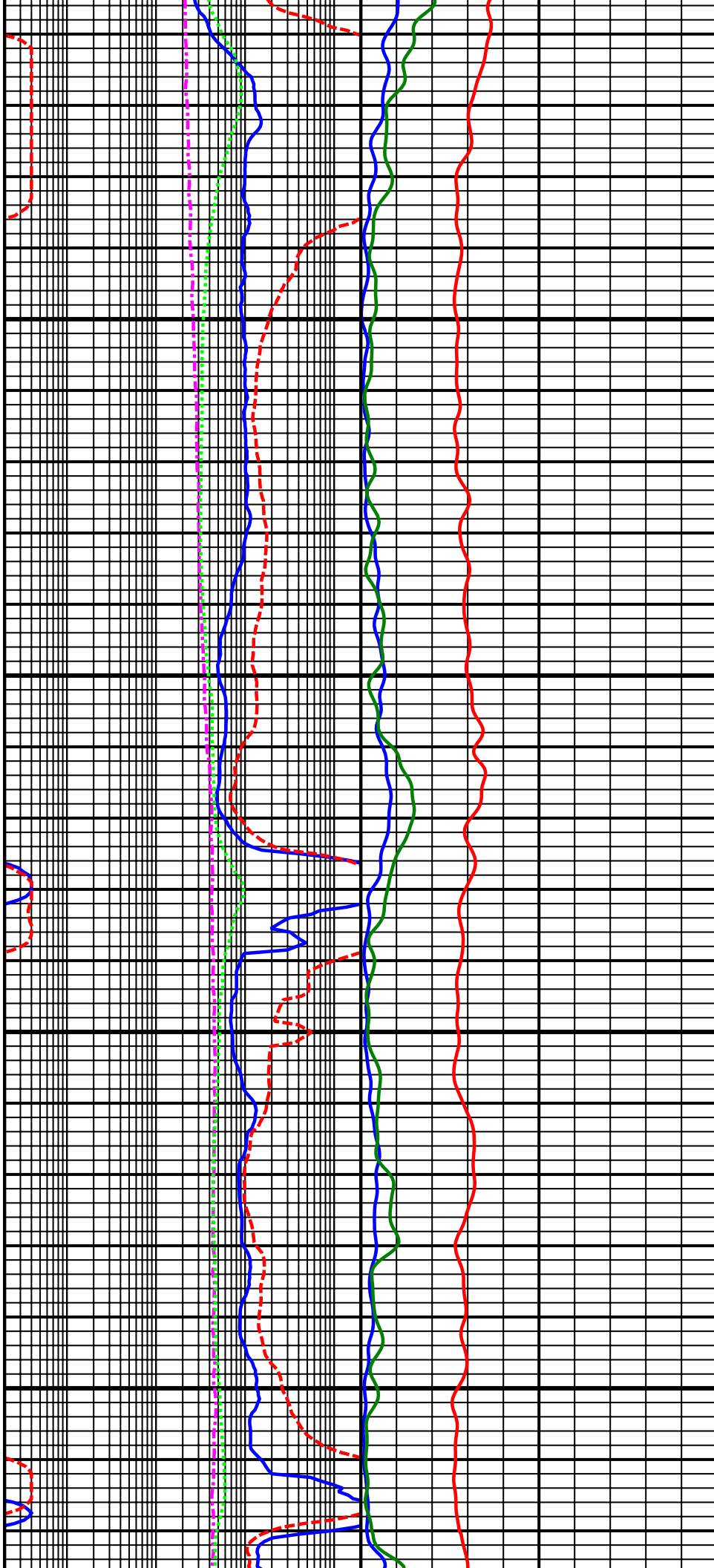
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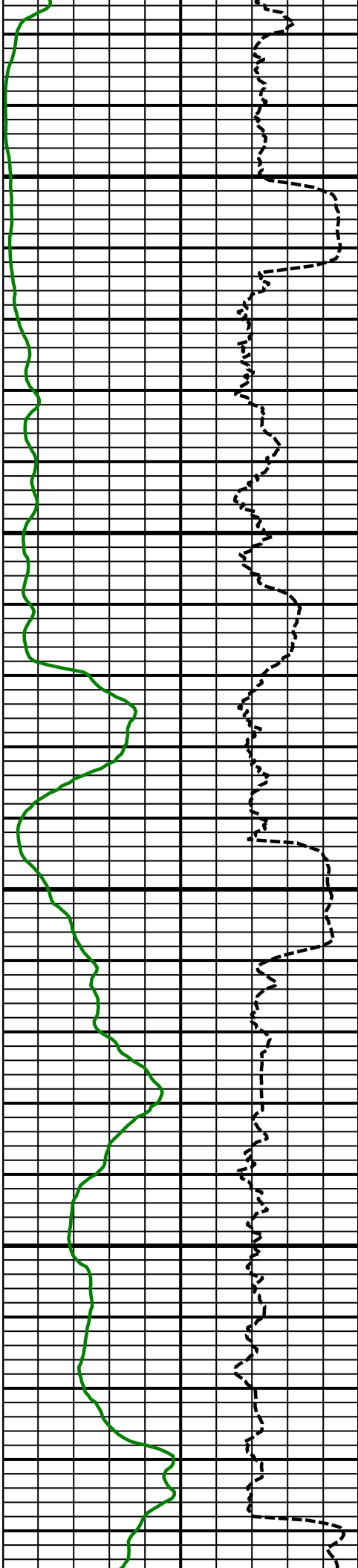




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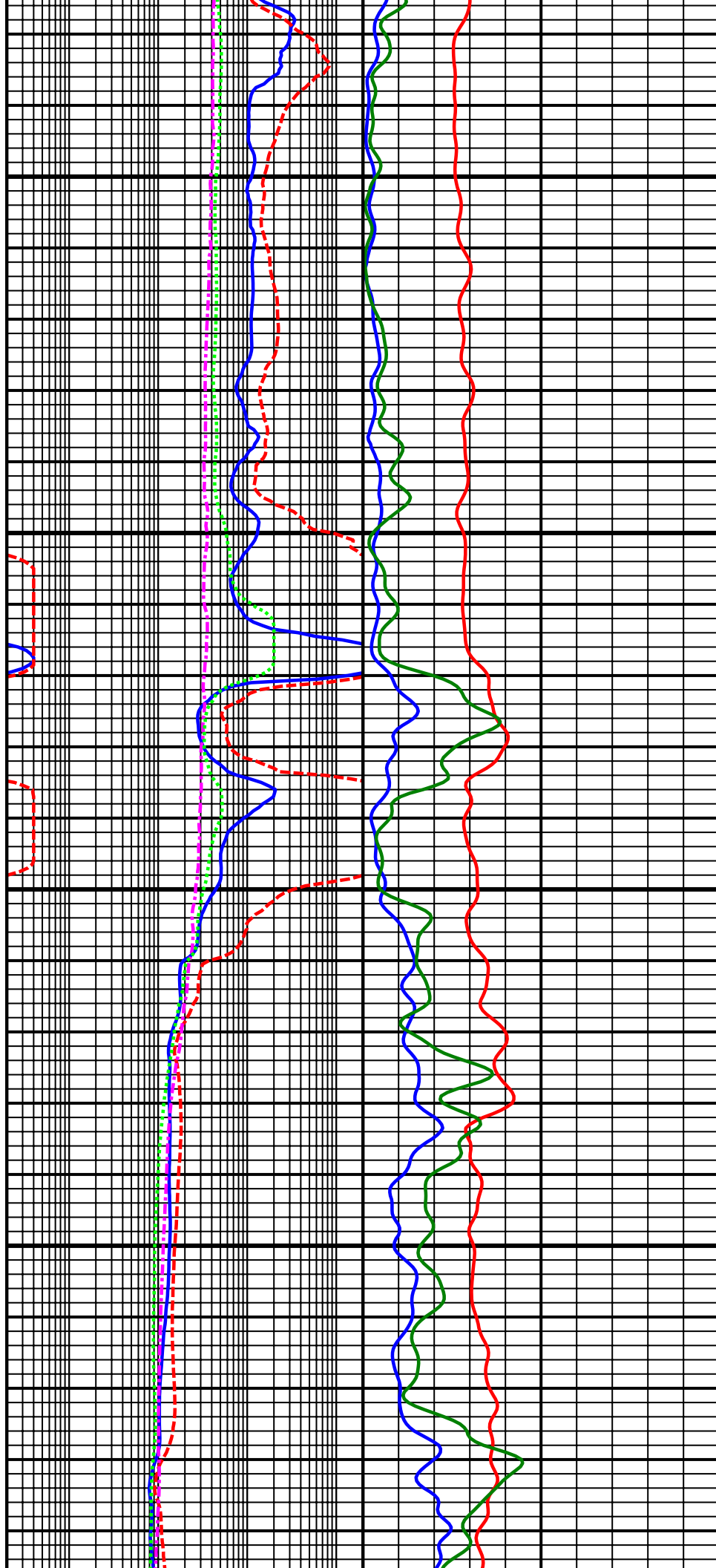
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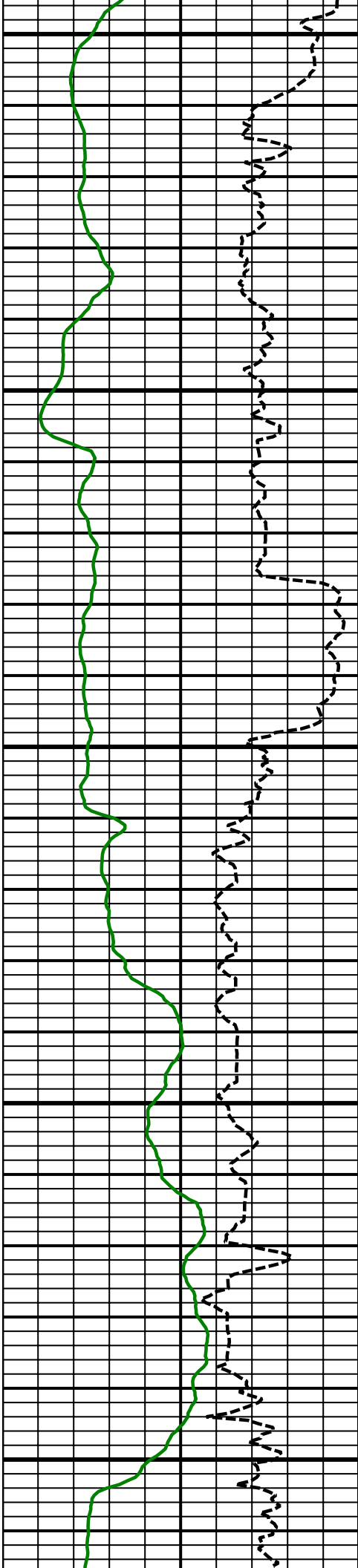




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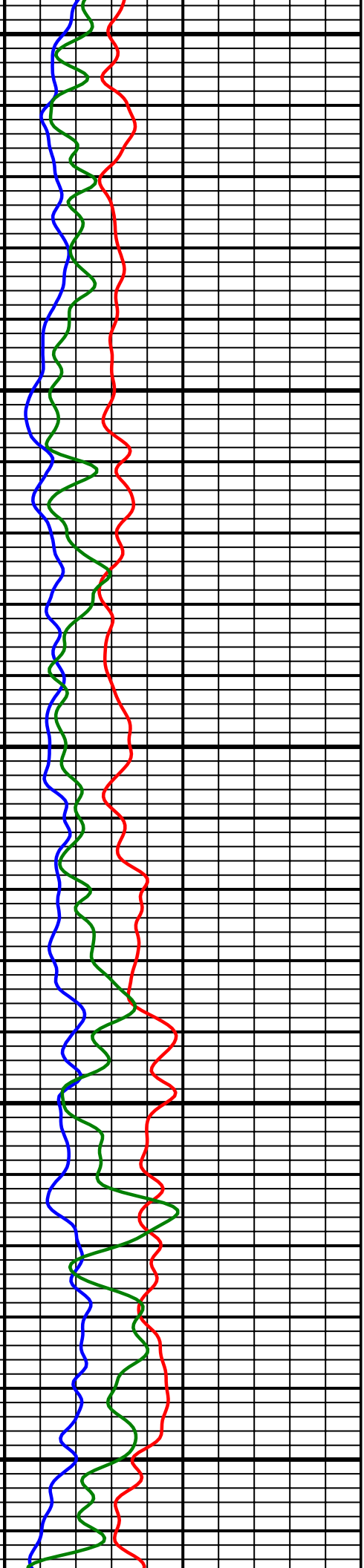
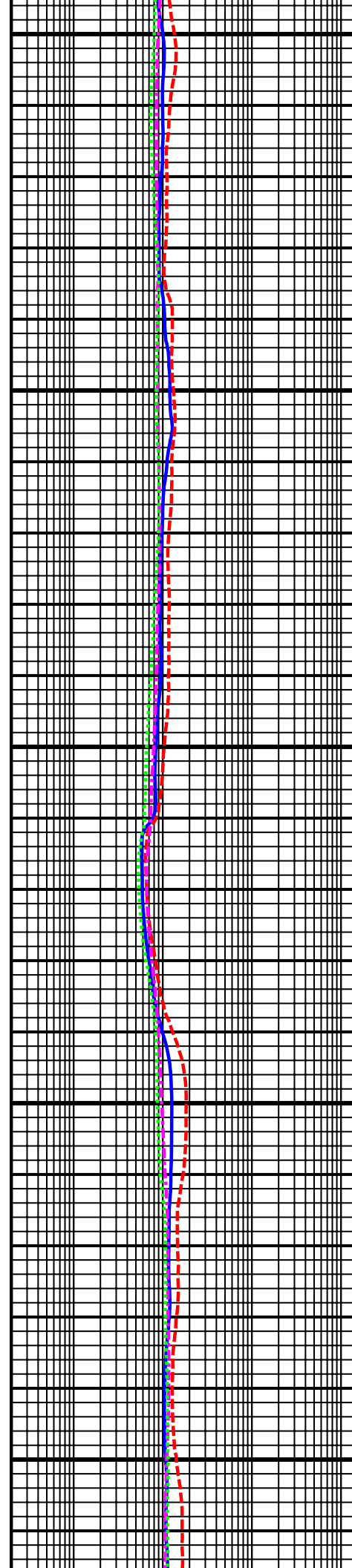


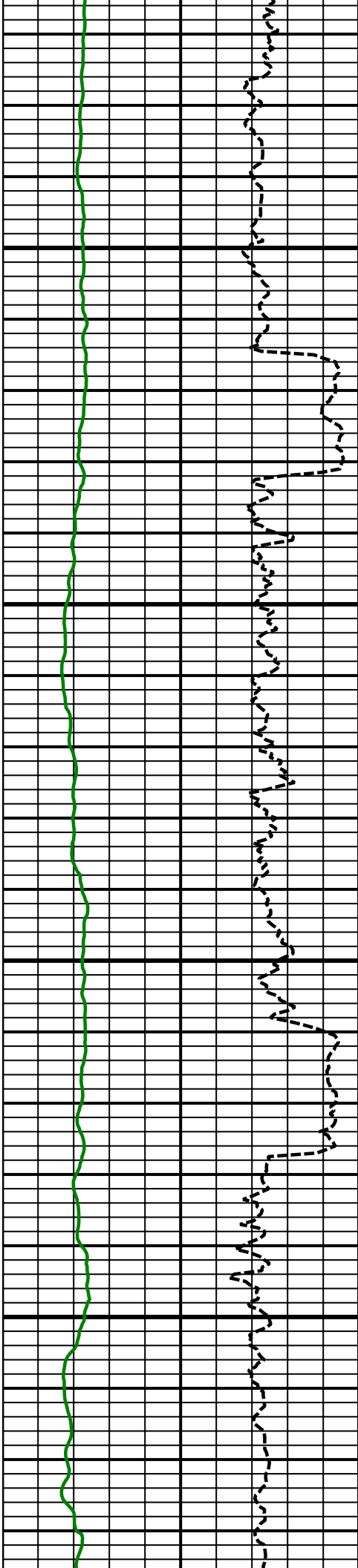


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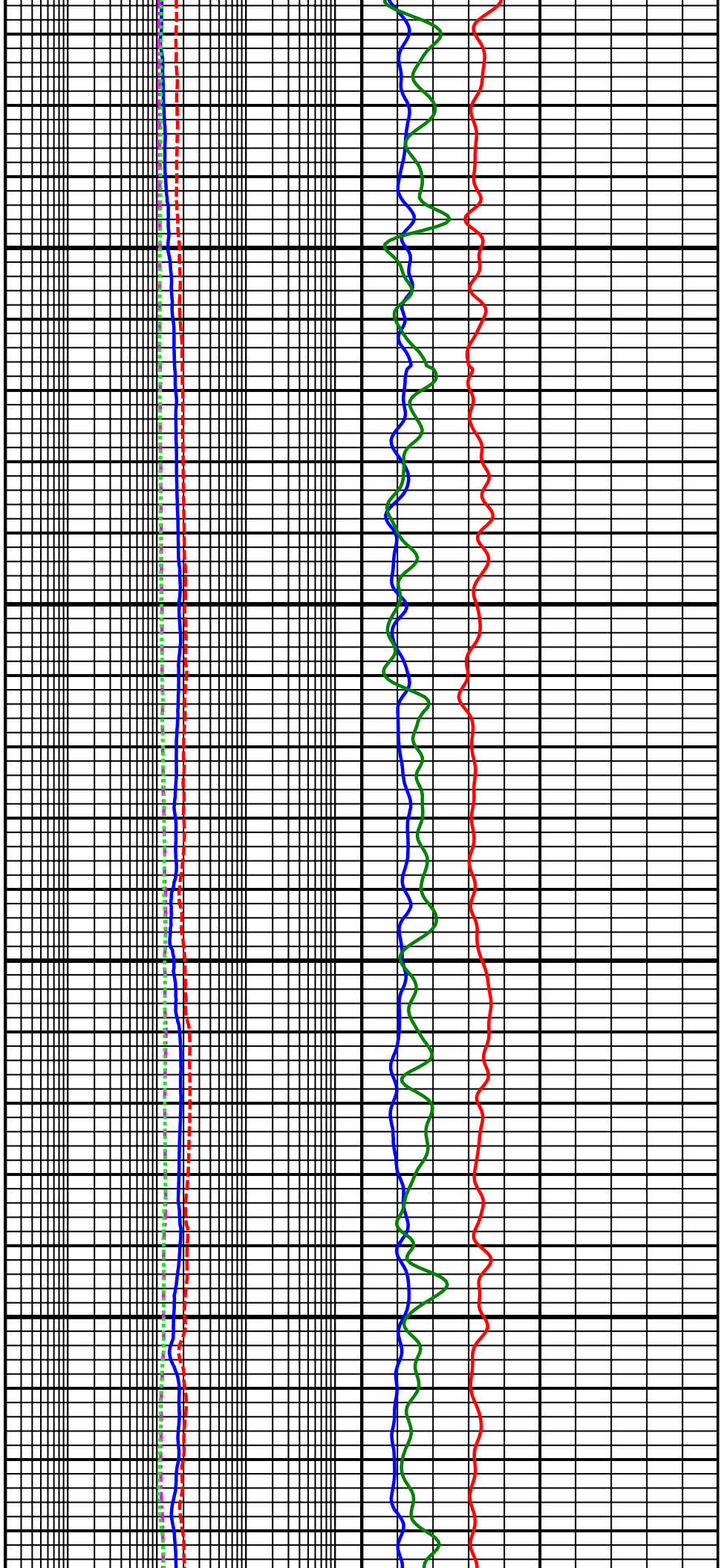
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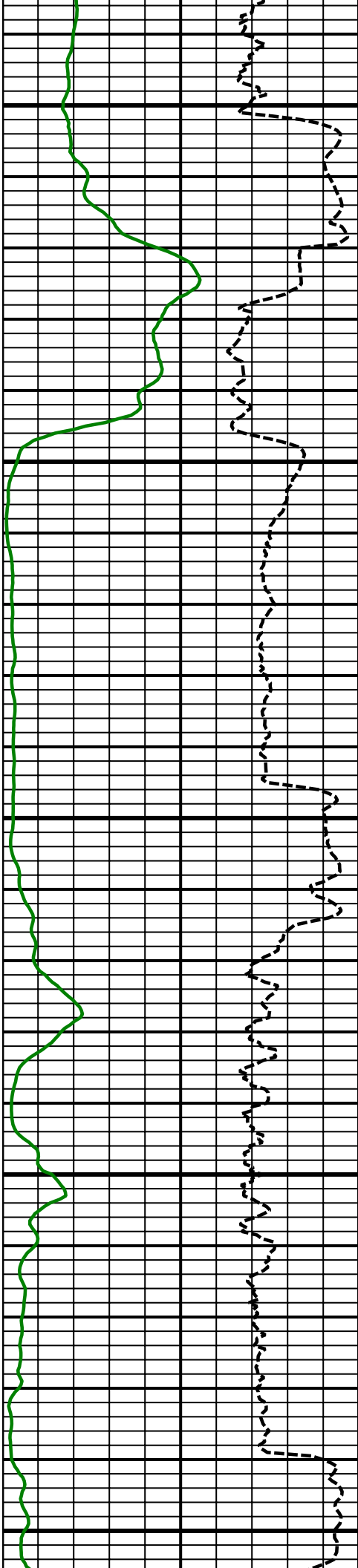




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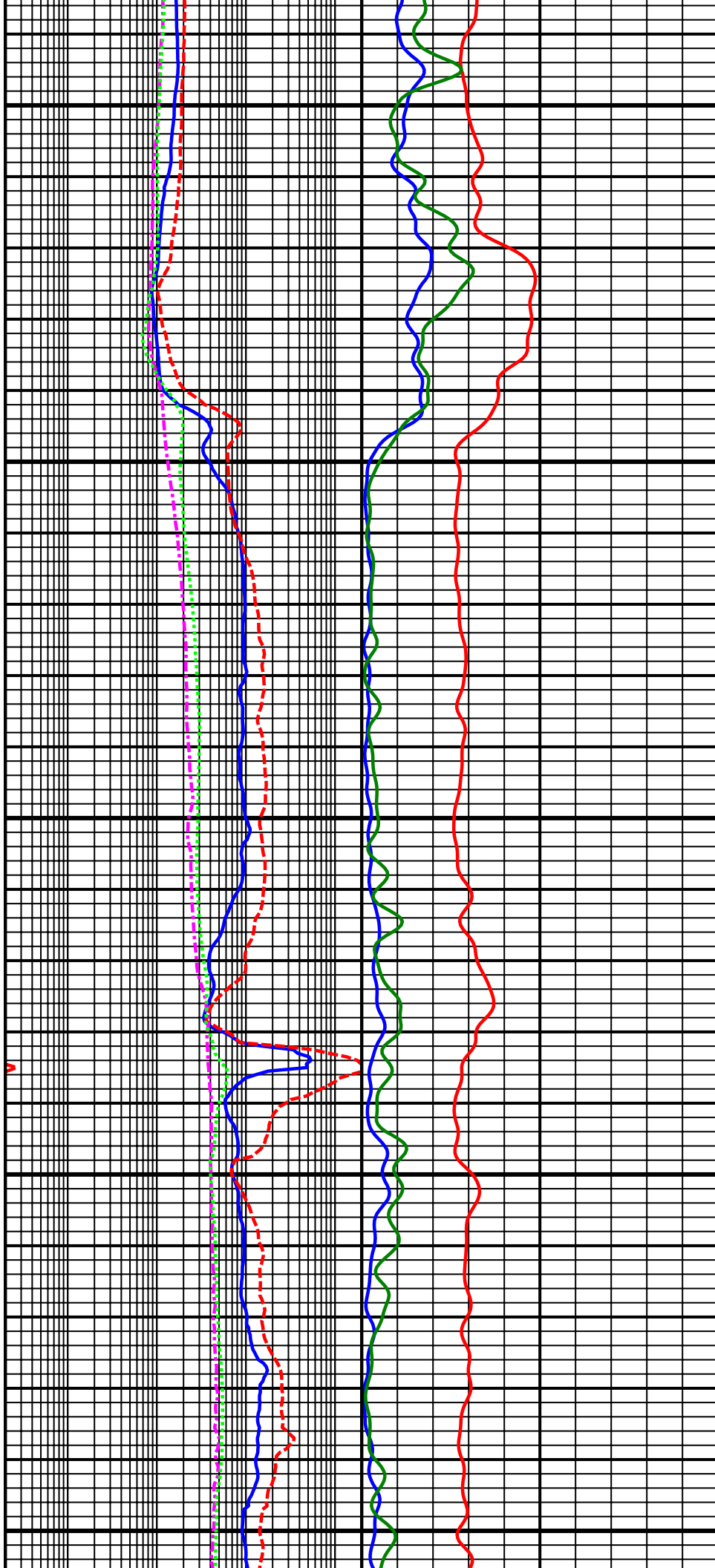
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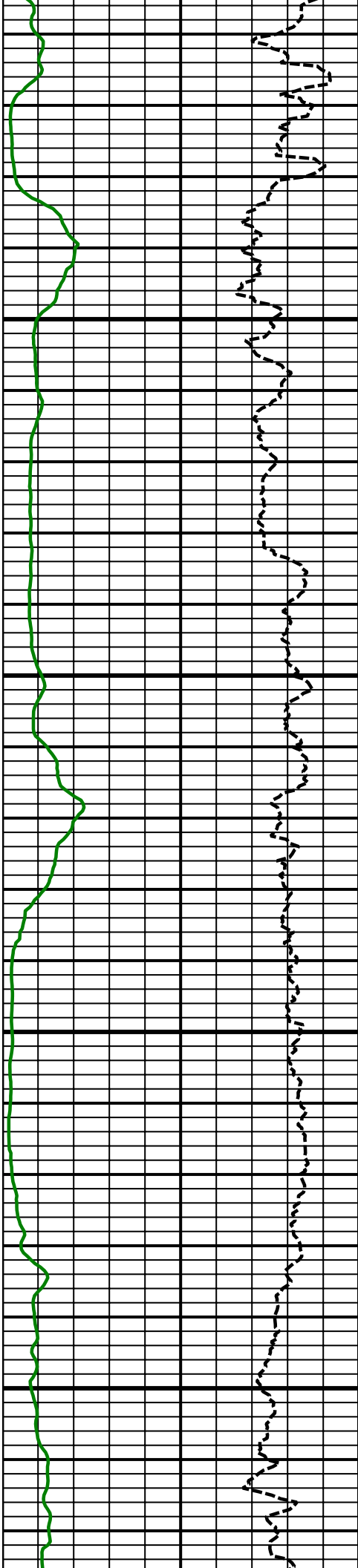




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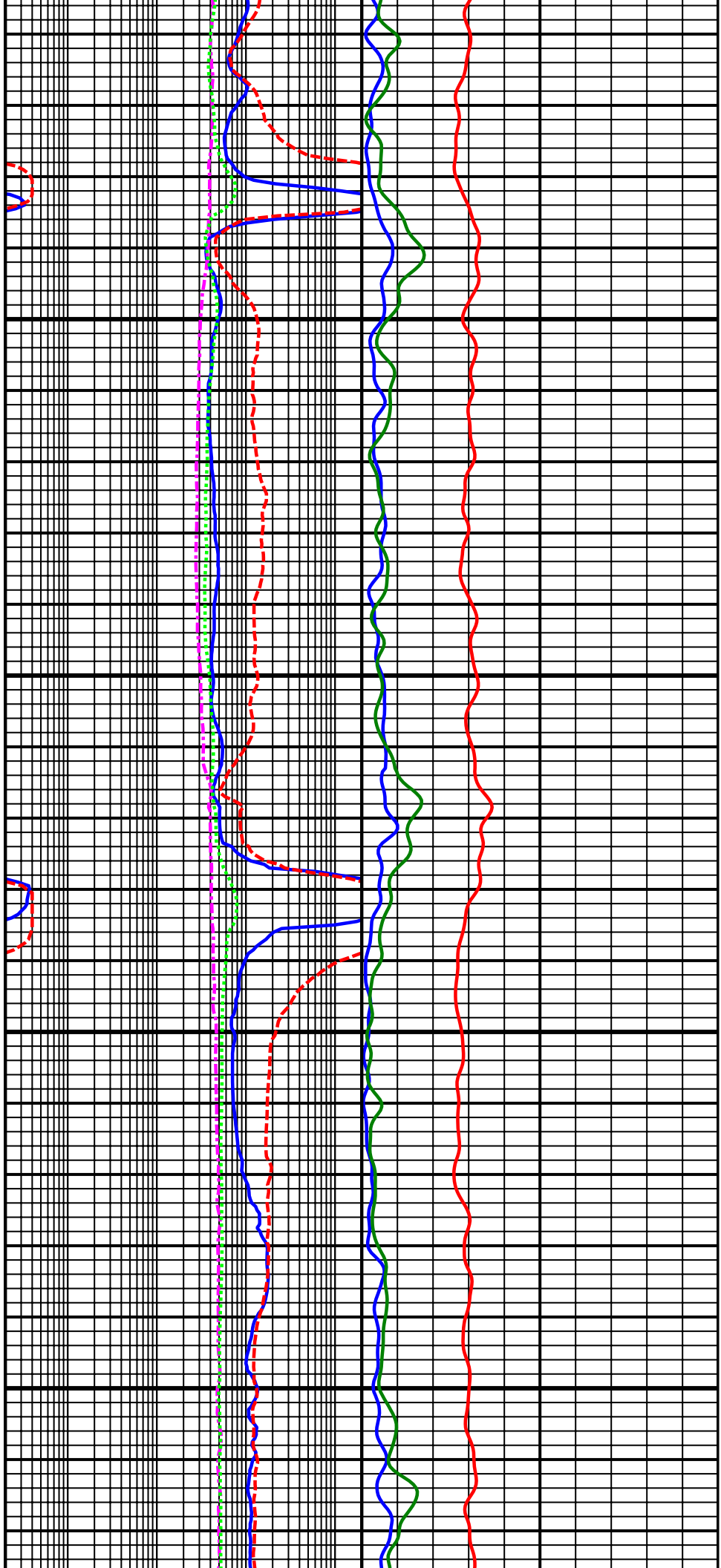
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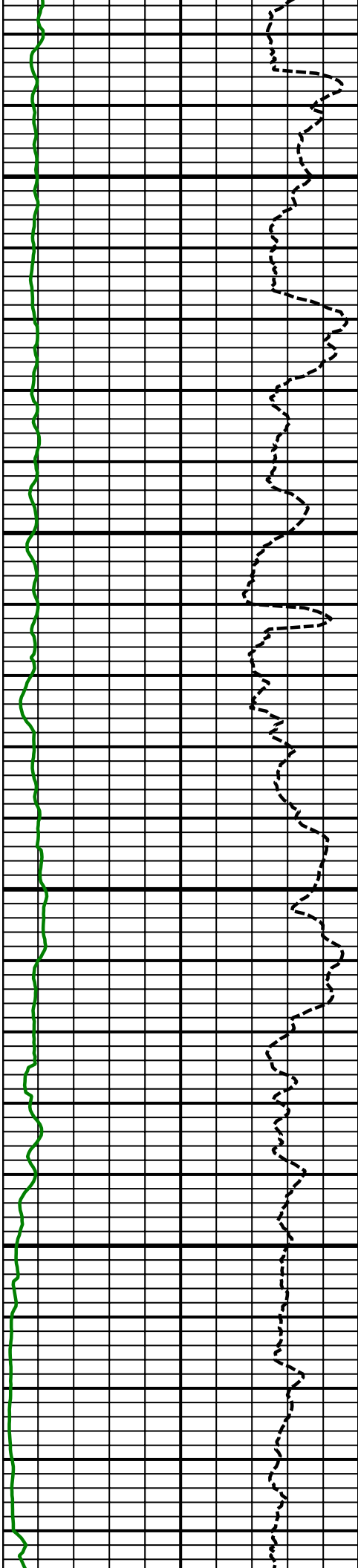




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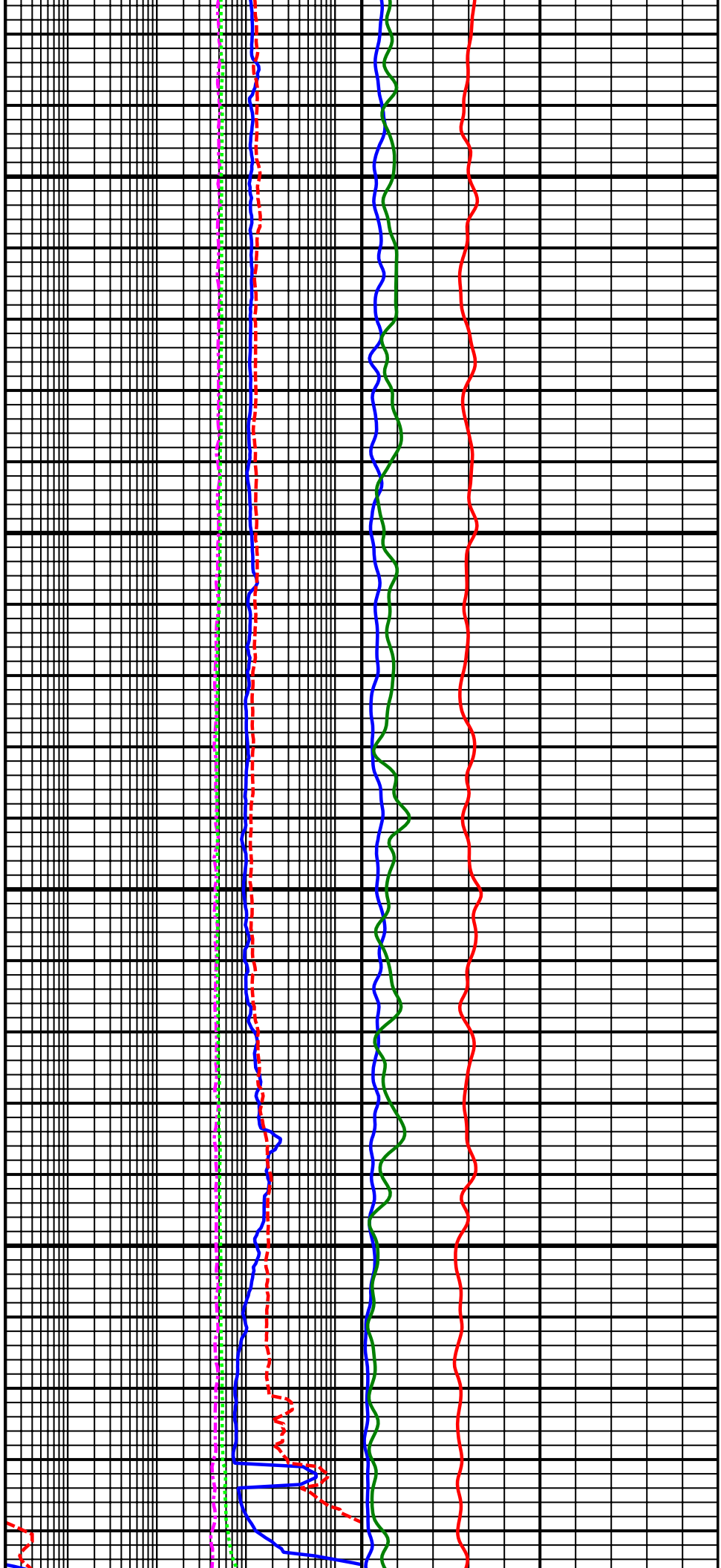
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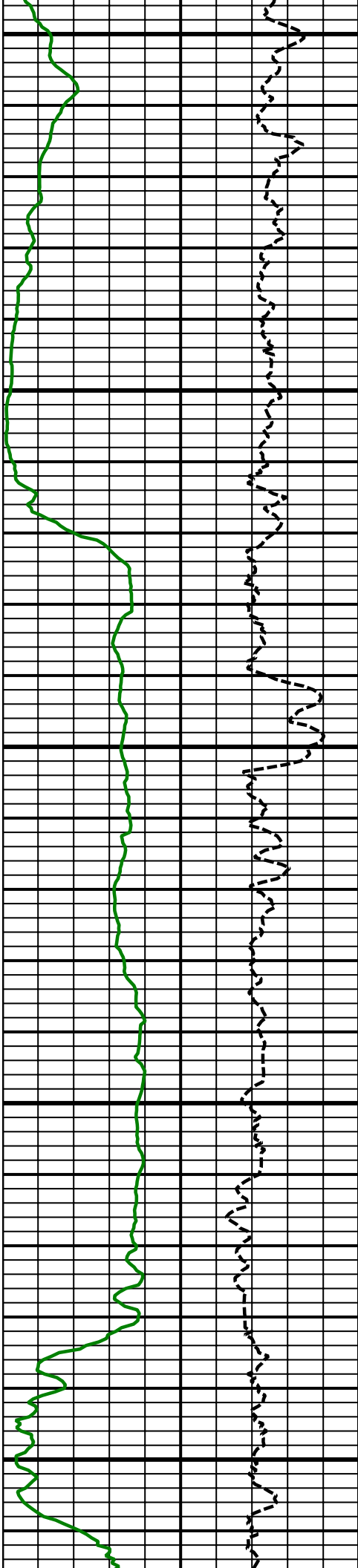




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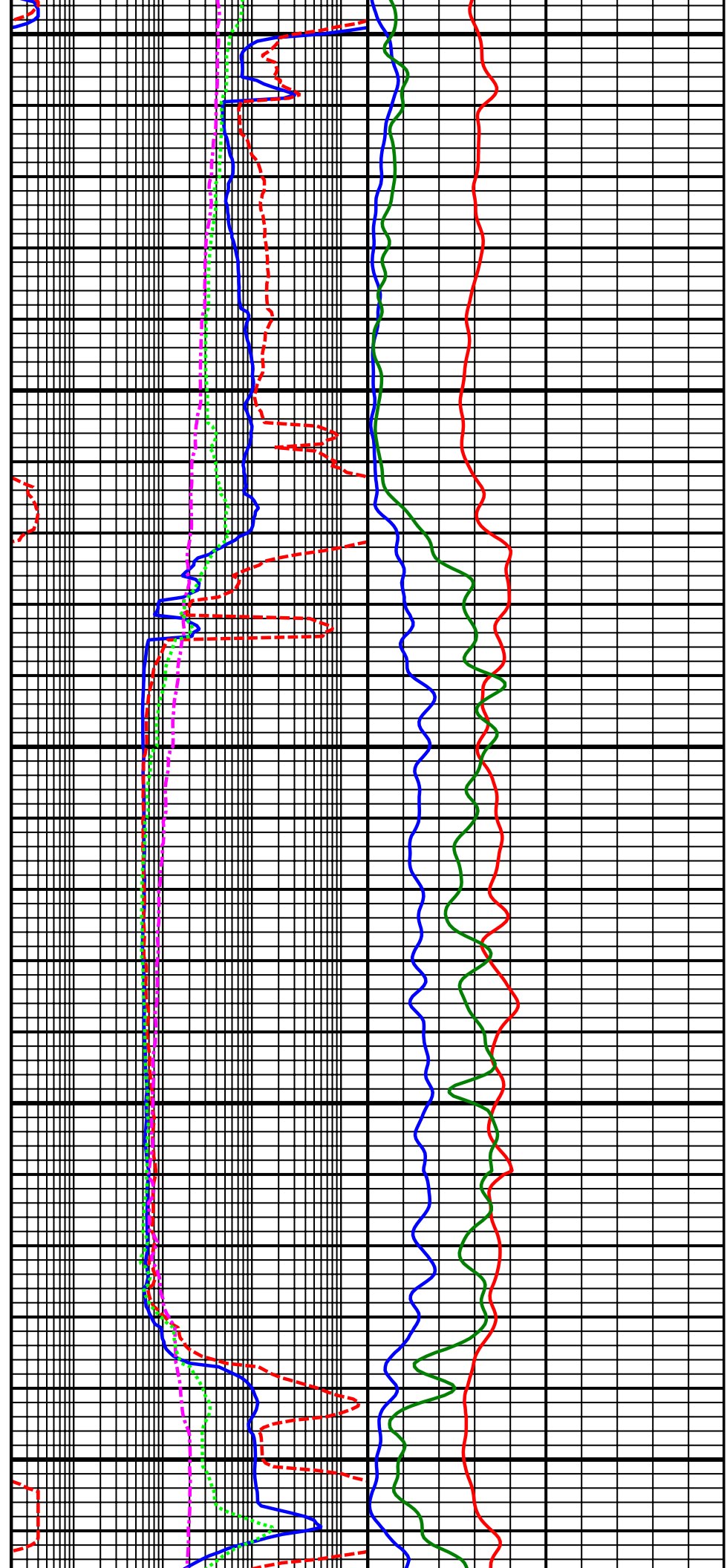


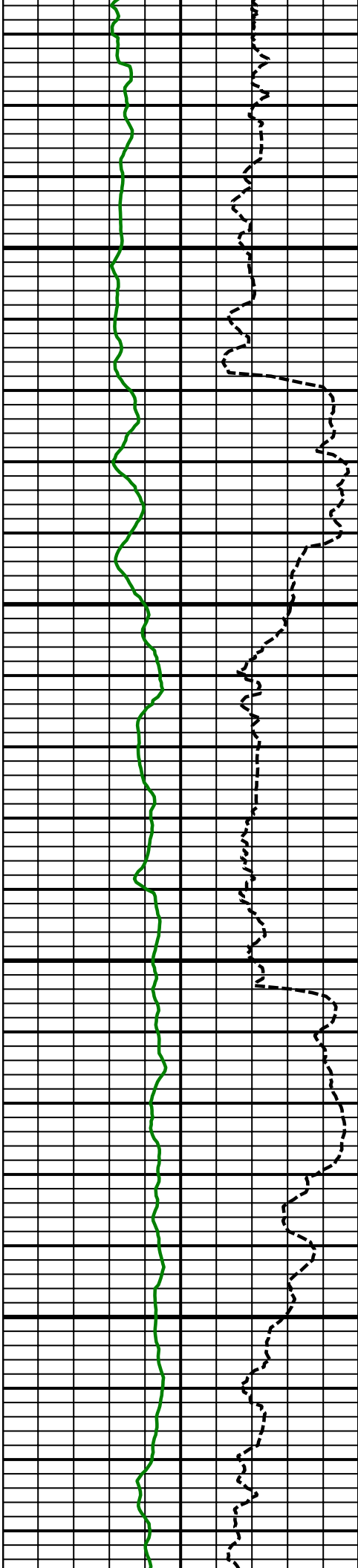


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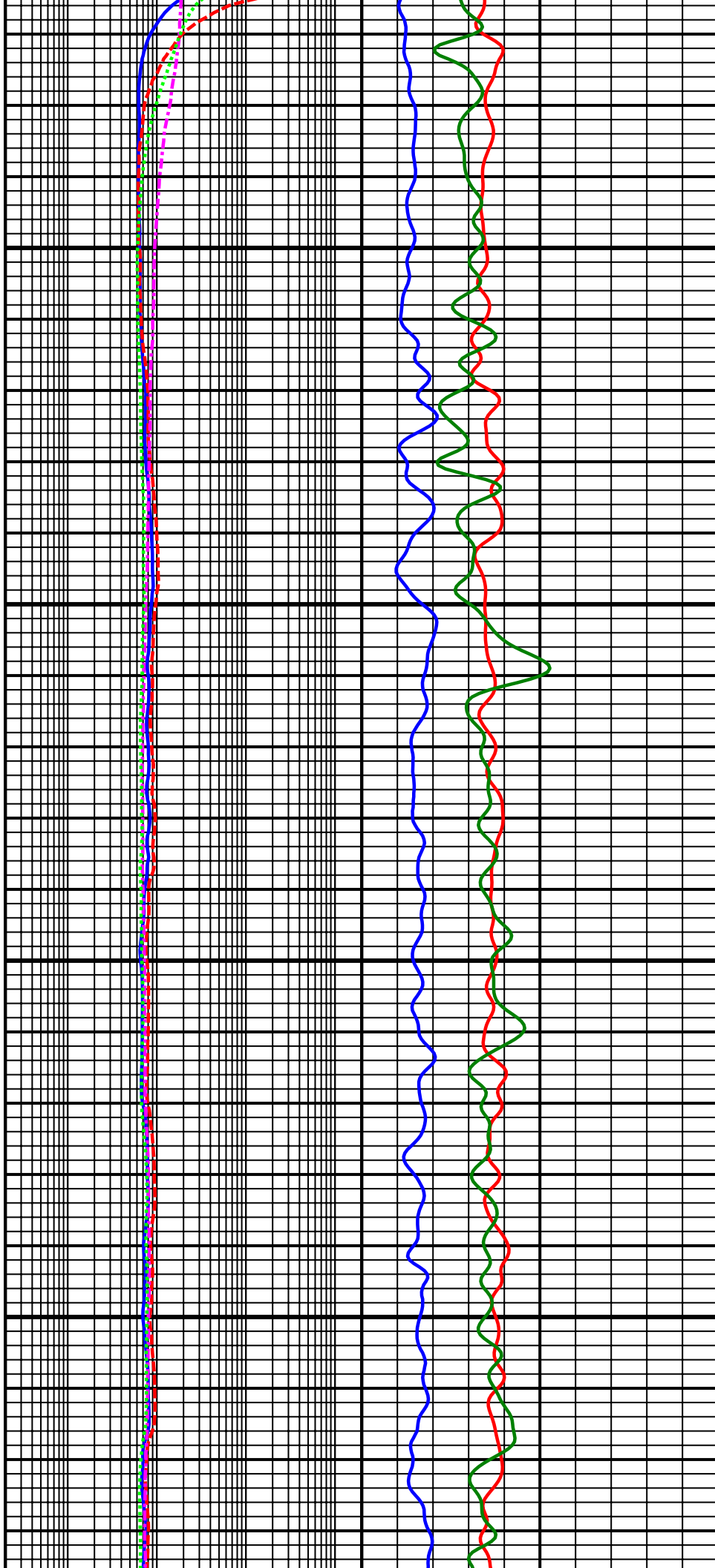
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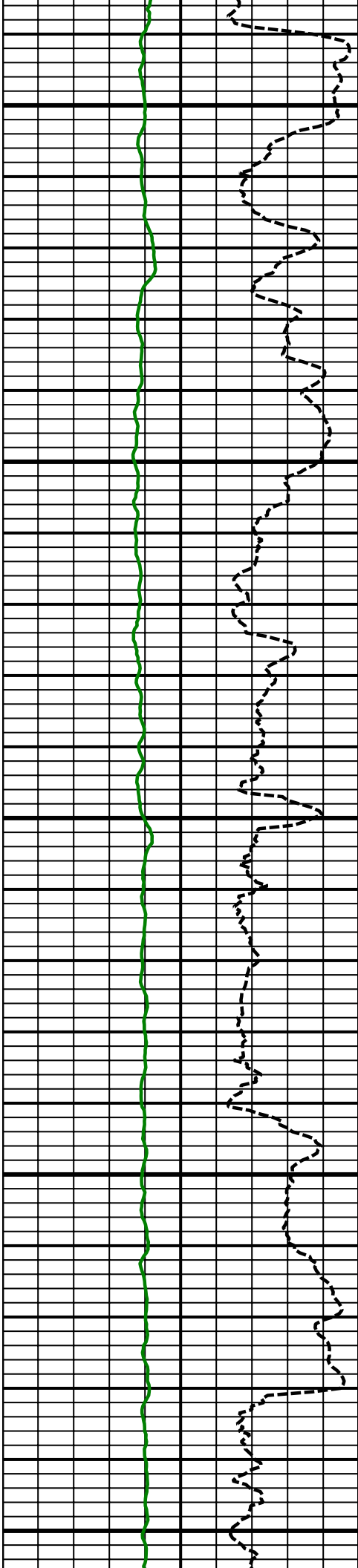




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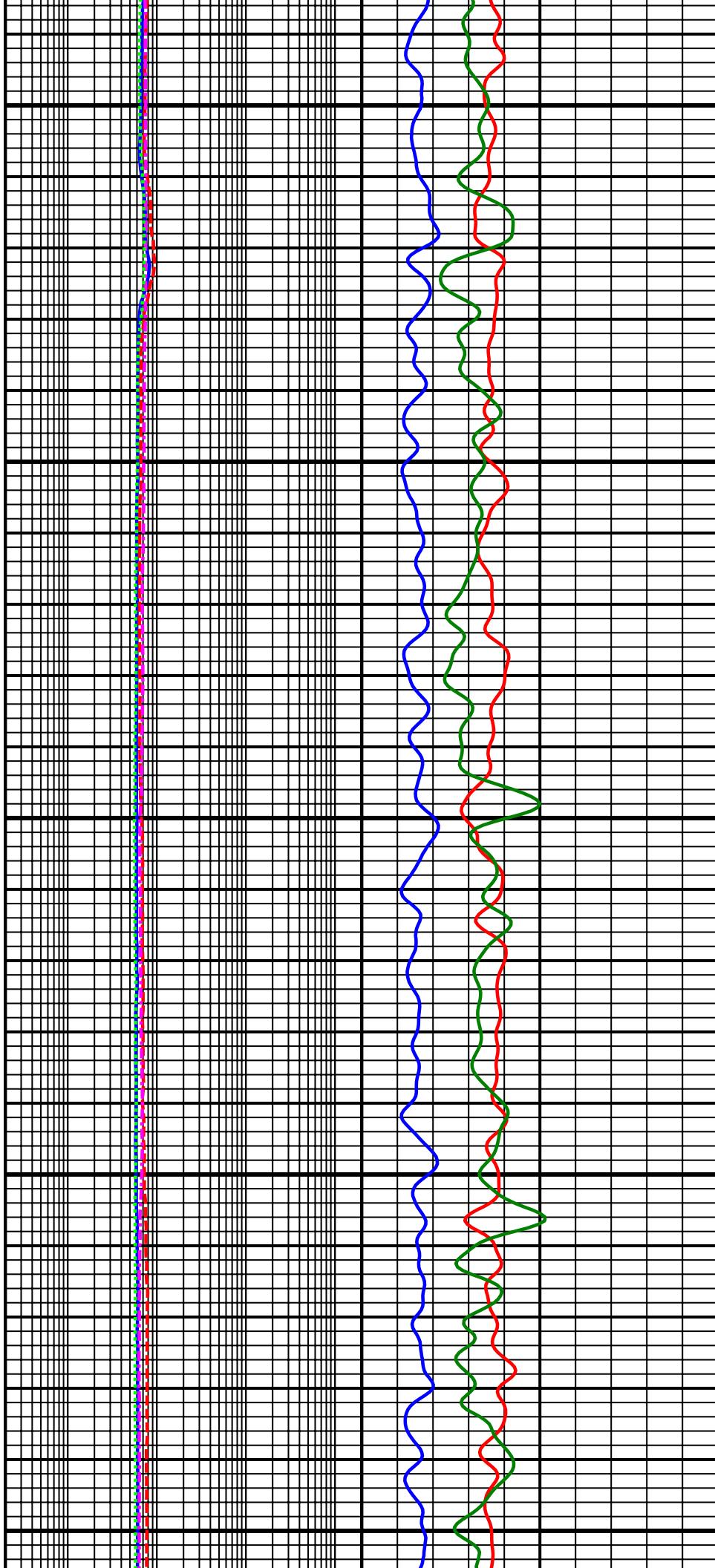
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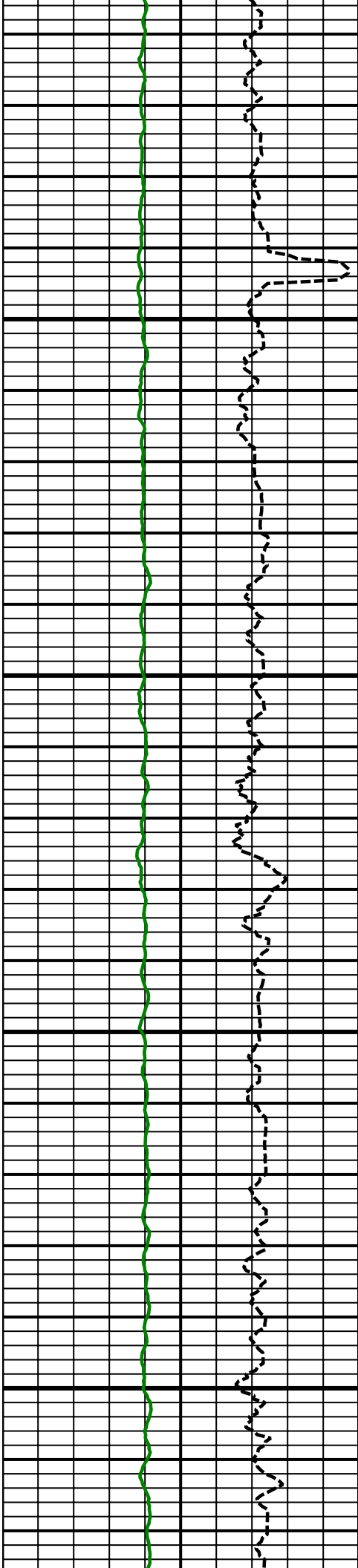




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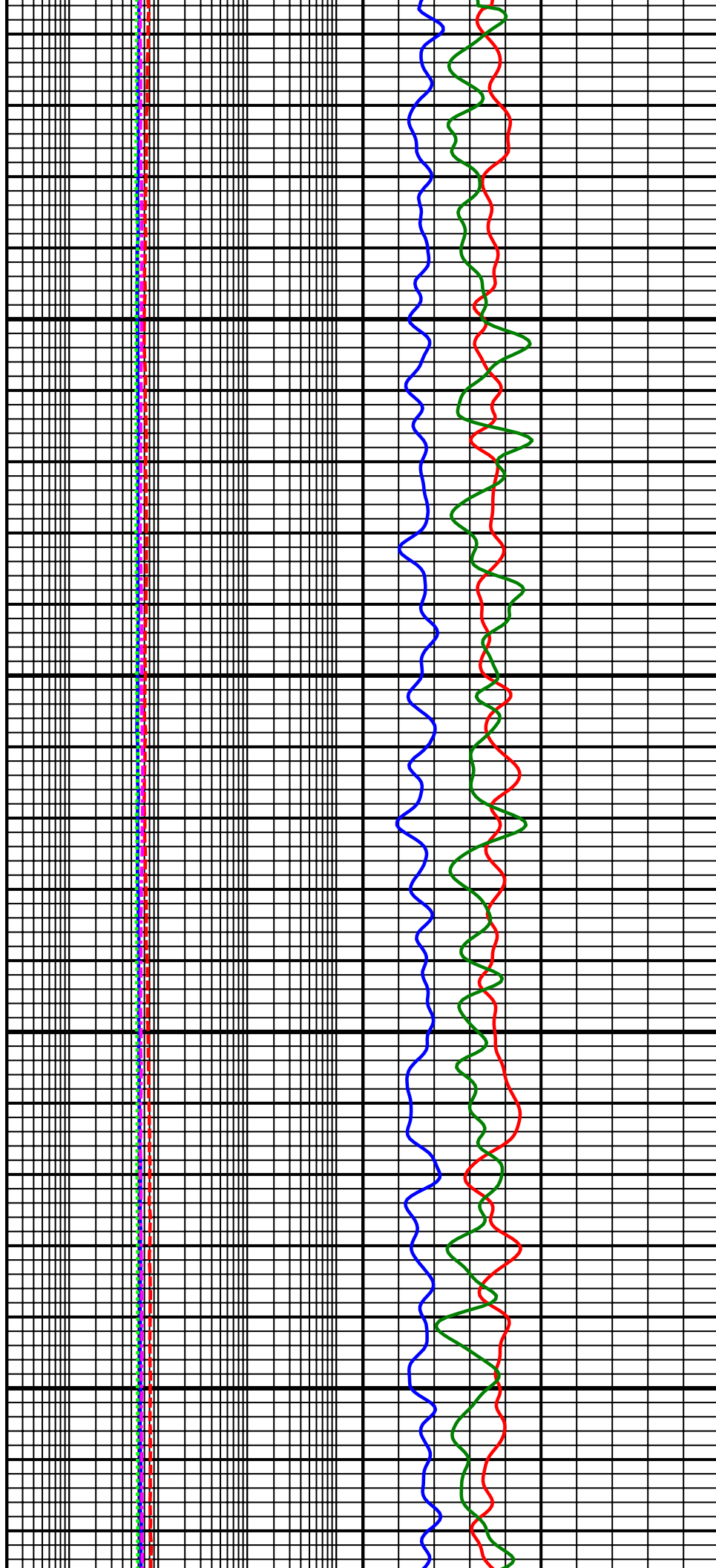
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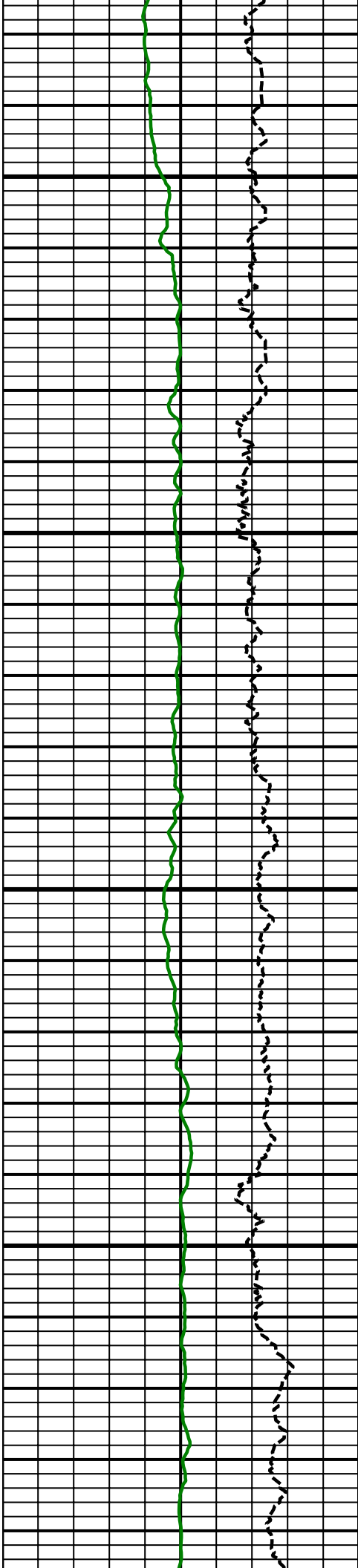




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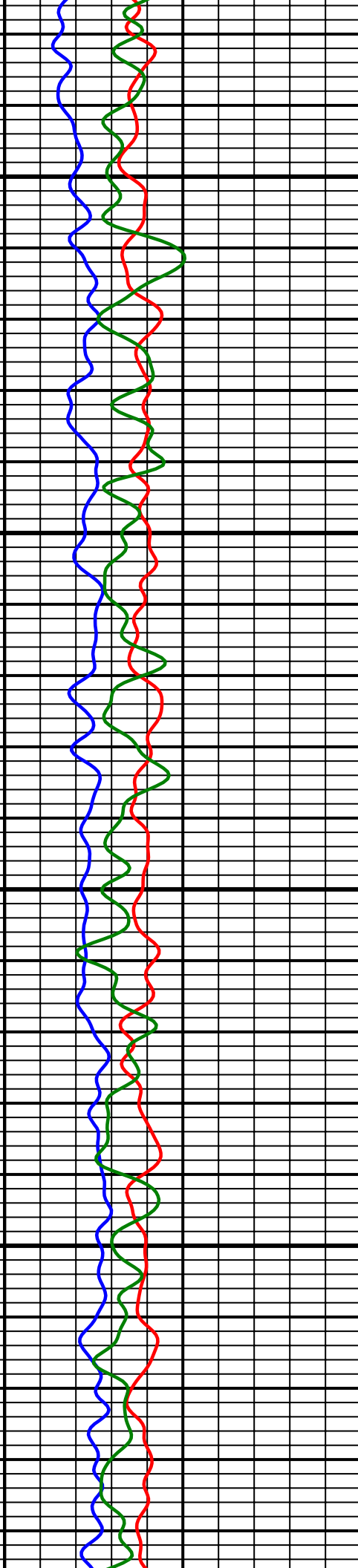
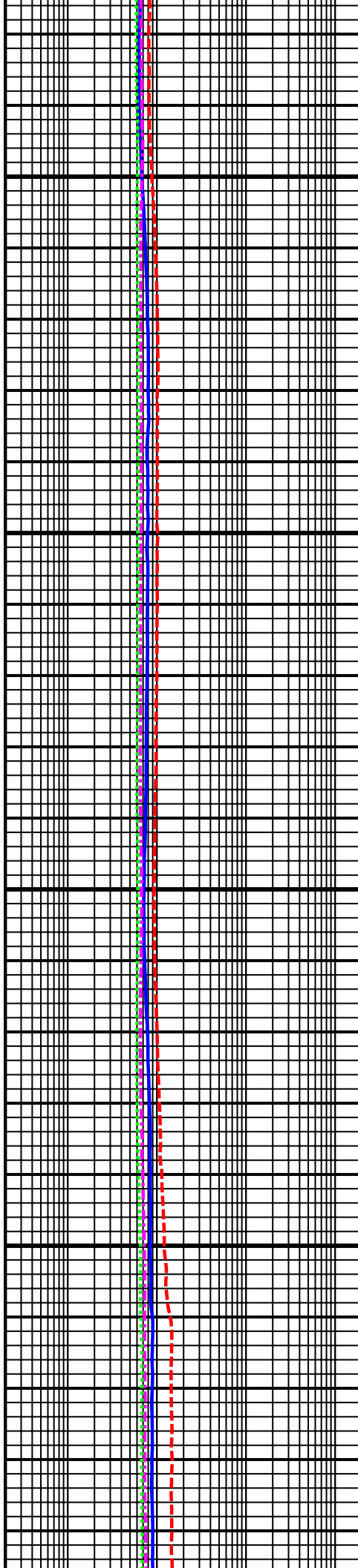
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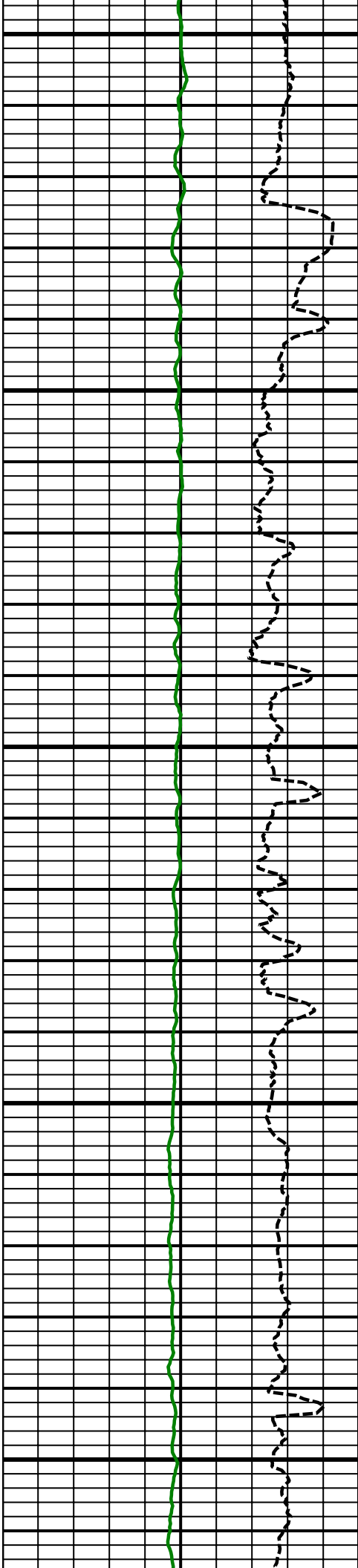




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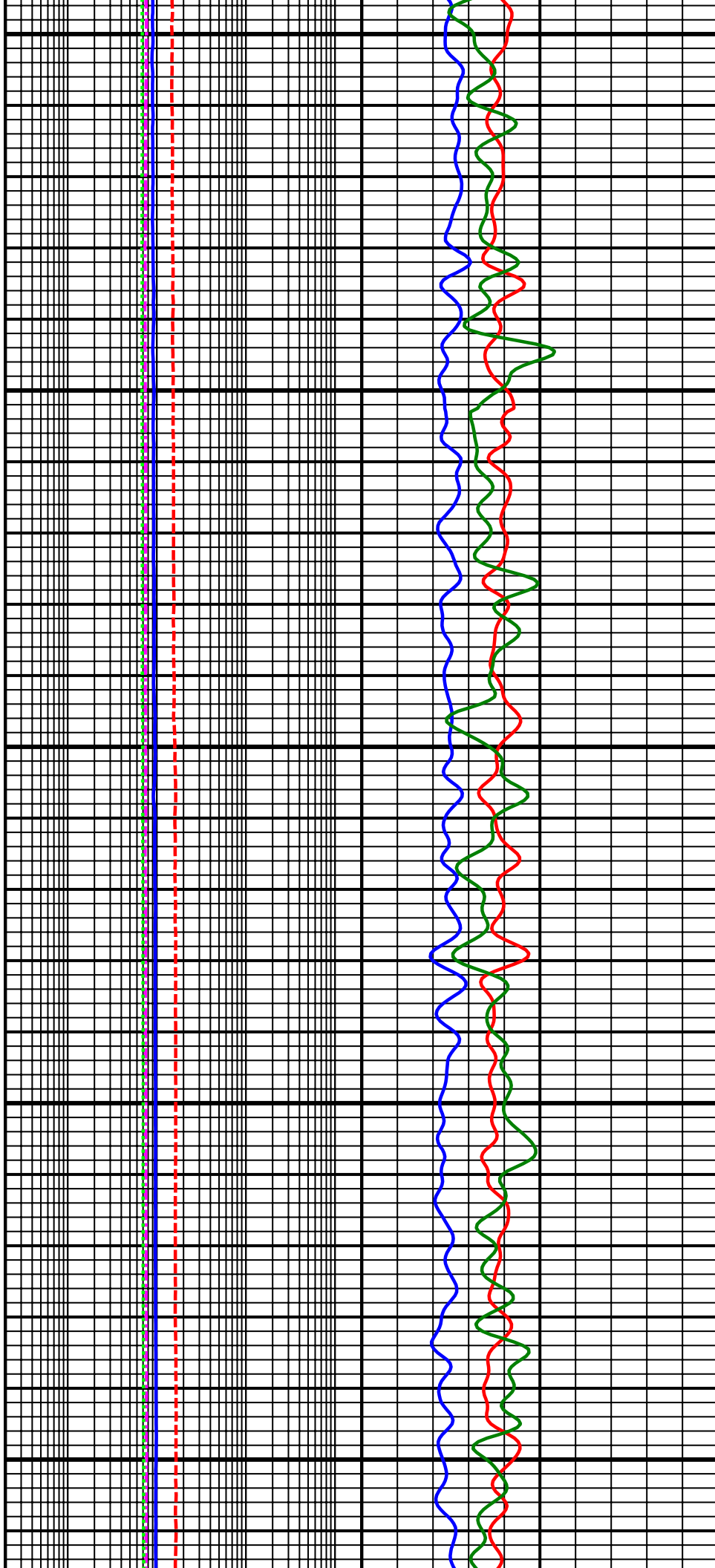


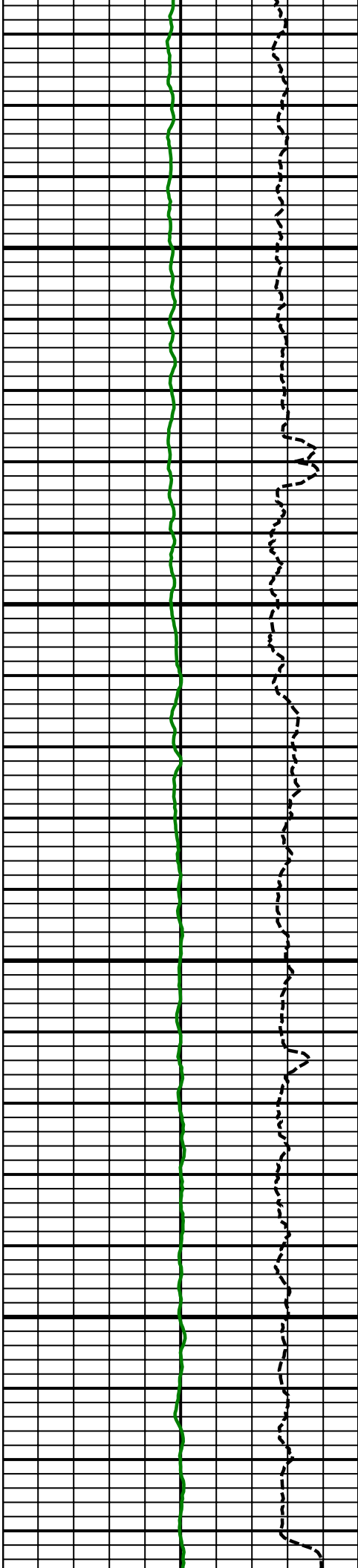


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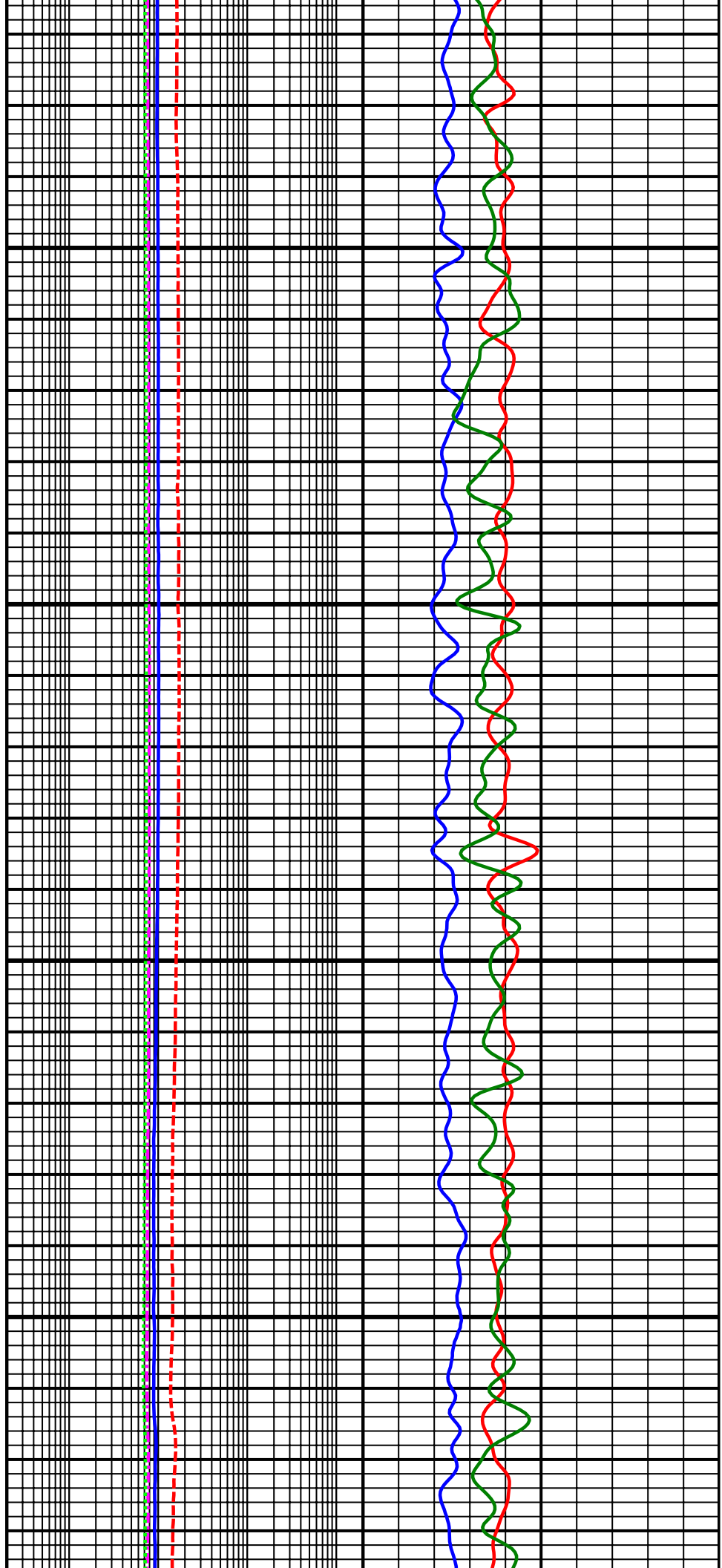
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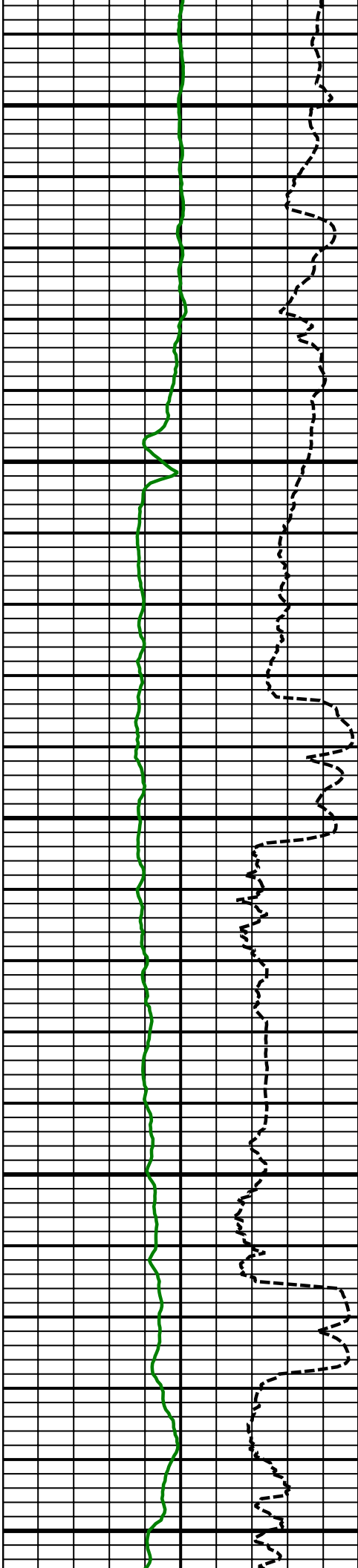




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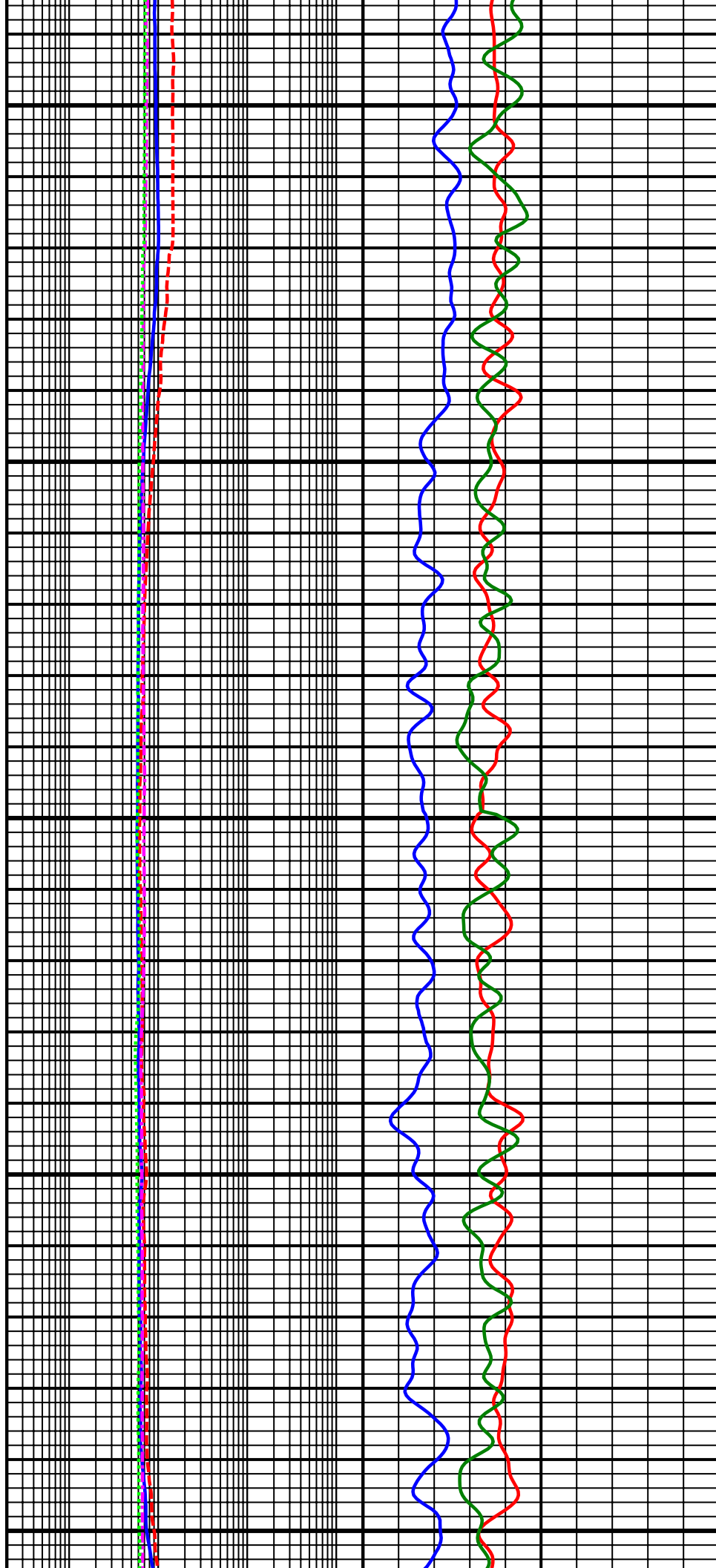
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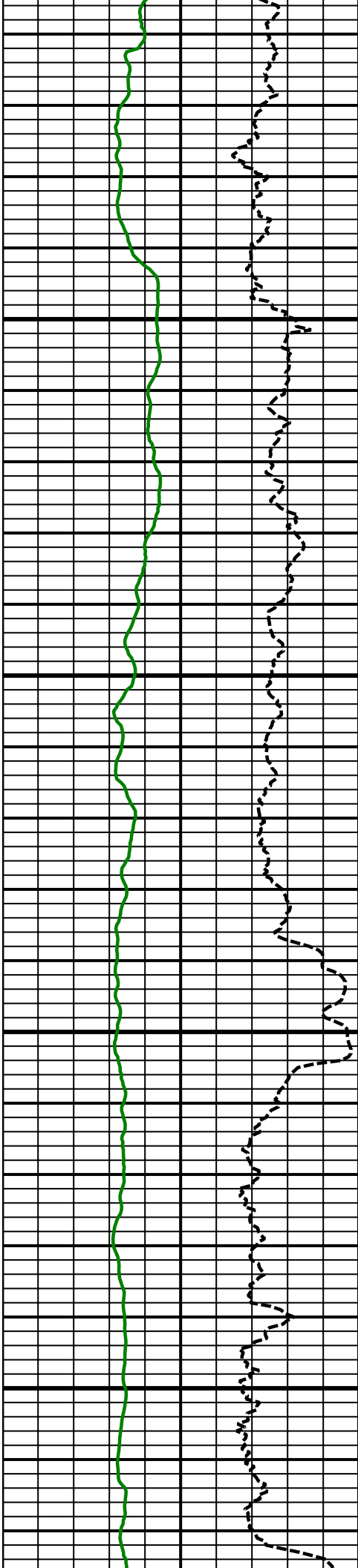




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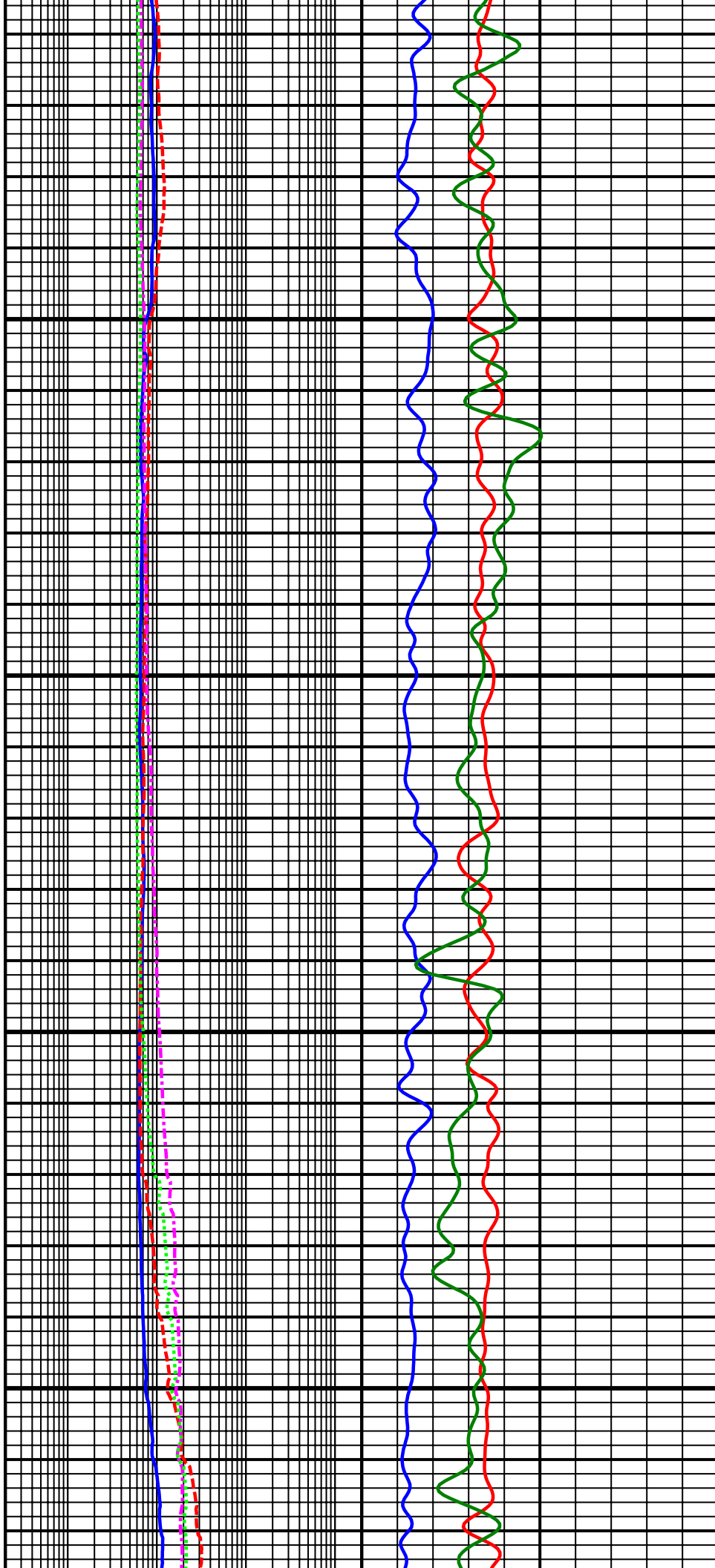
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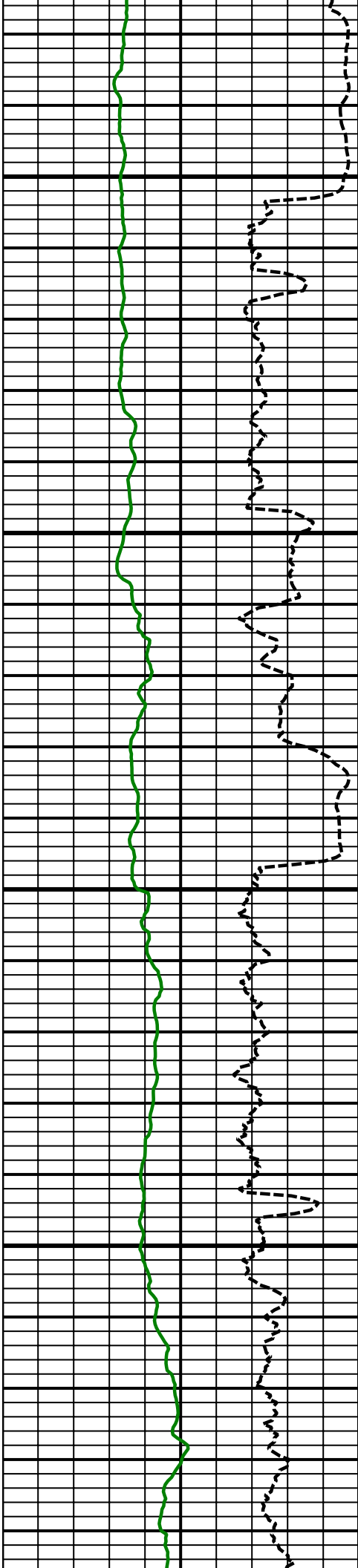




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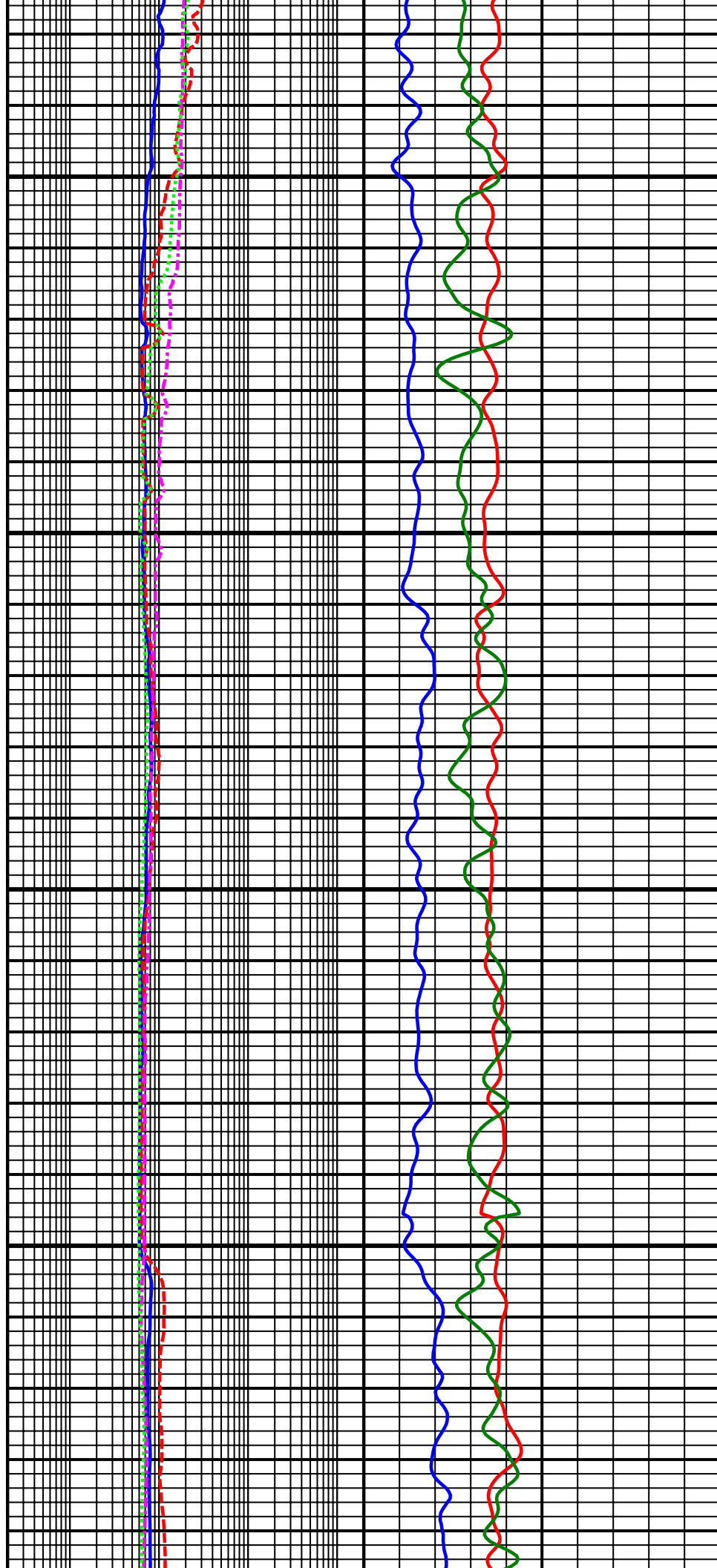
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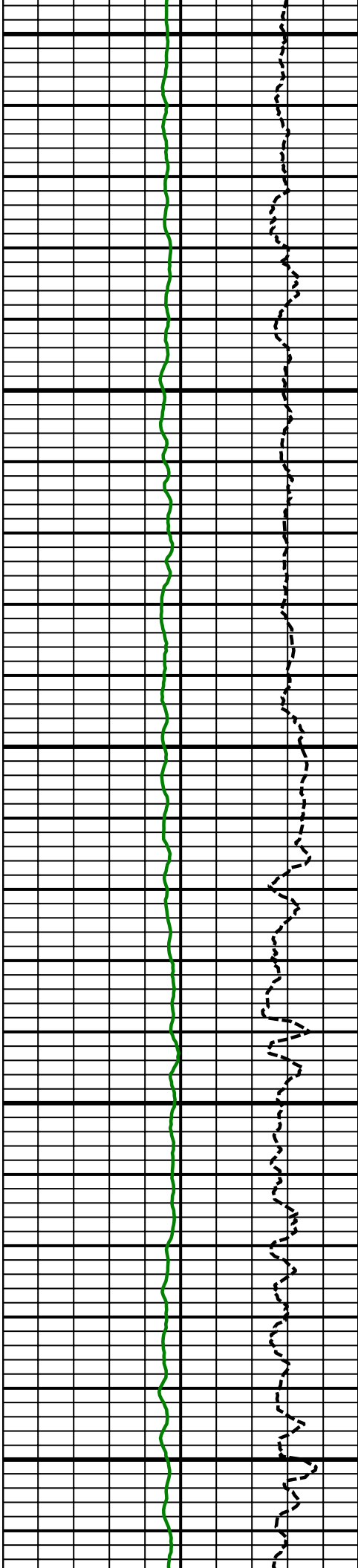




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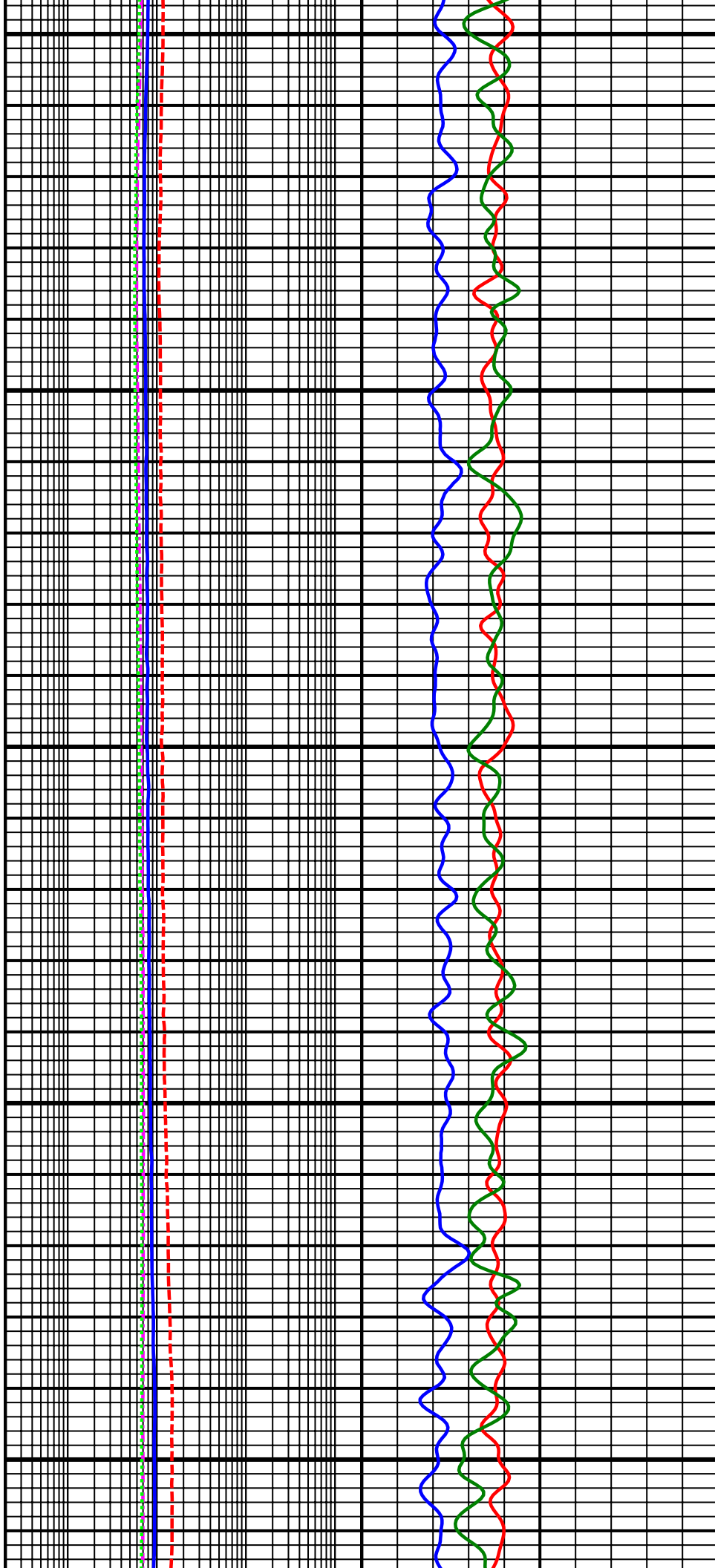


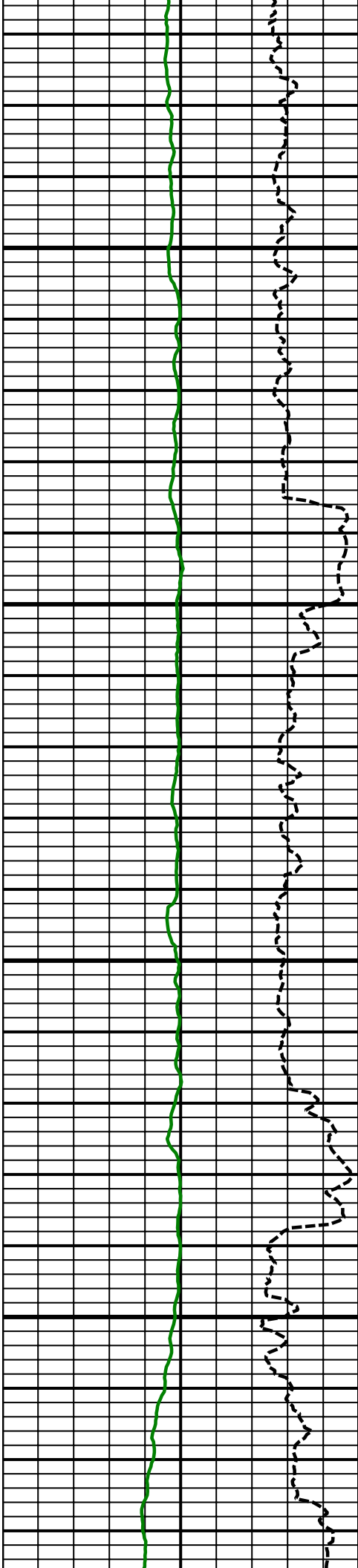


11500
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11600
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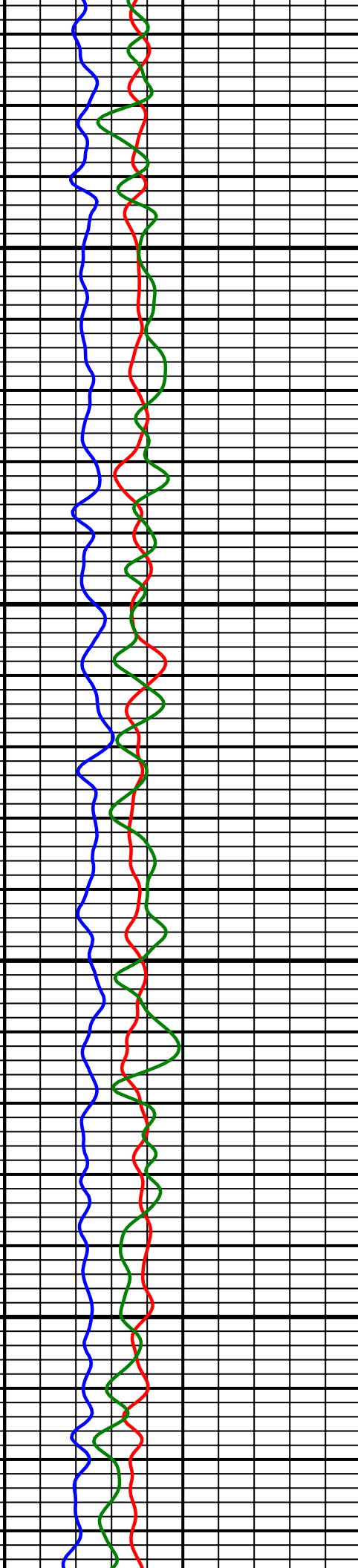
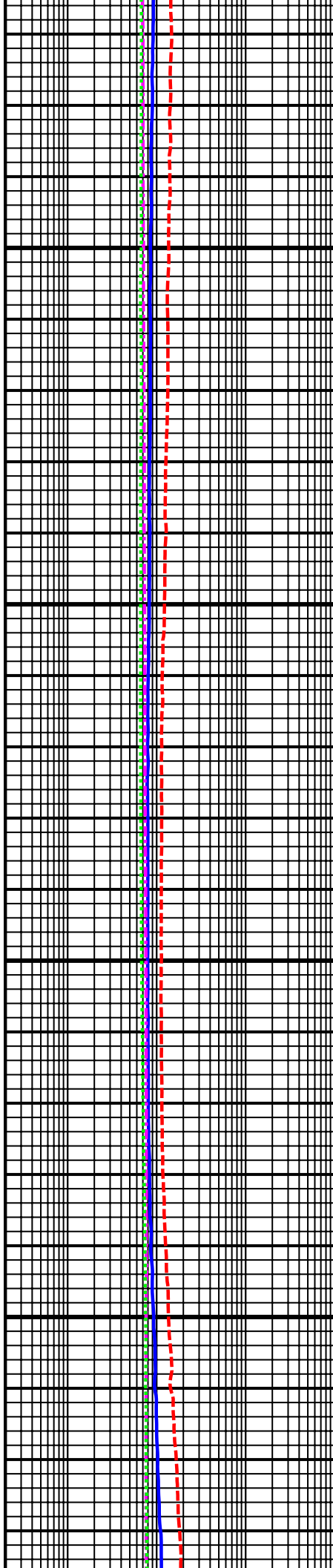
11700
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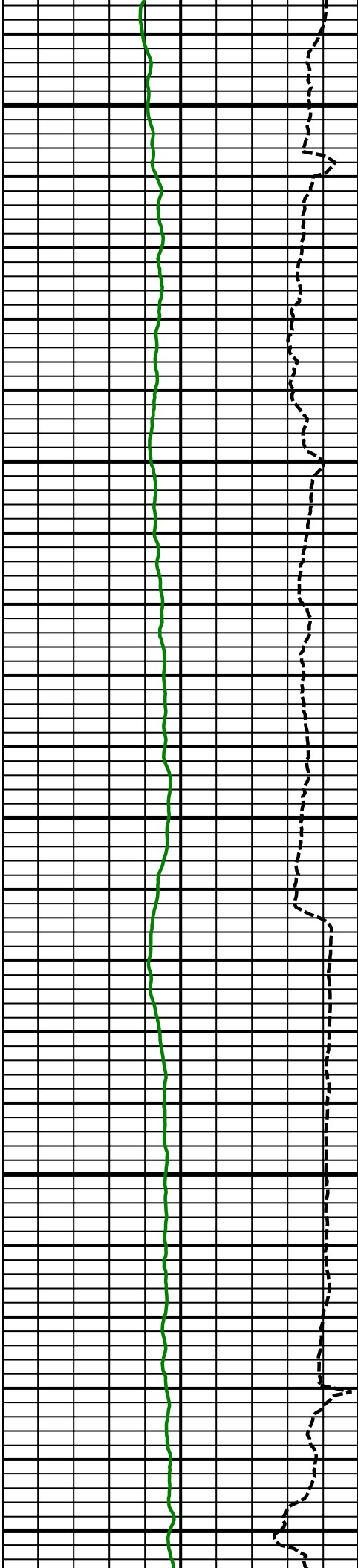




11800
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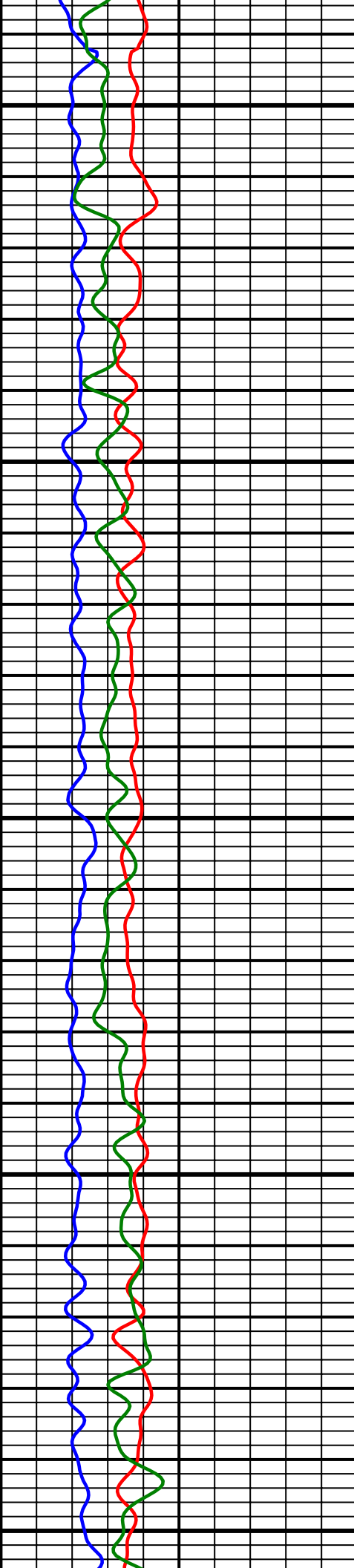
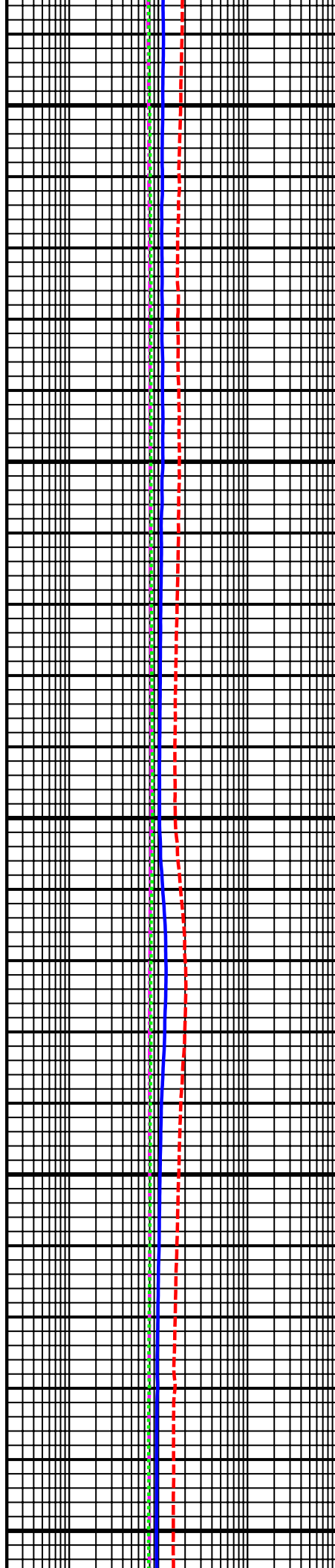
11900
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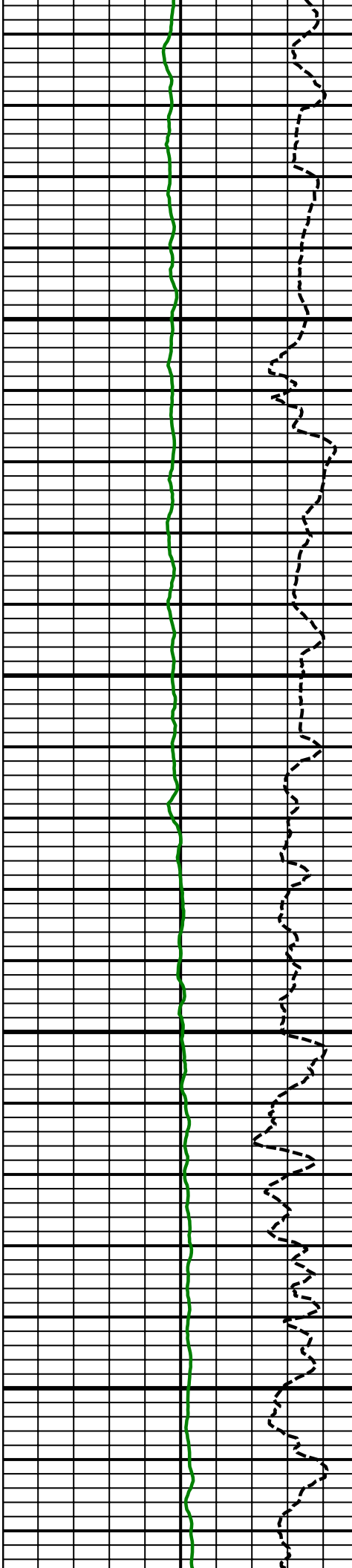




12000
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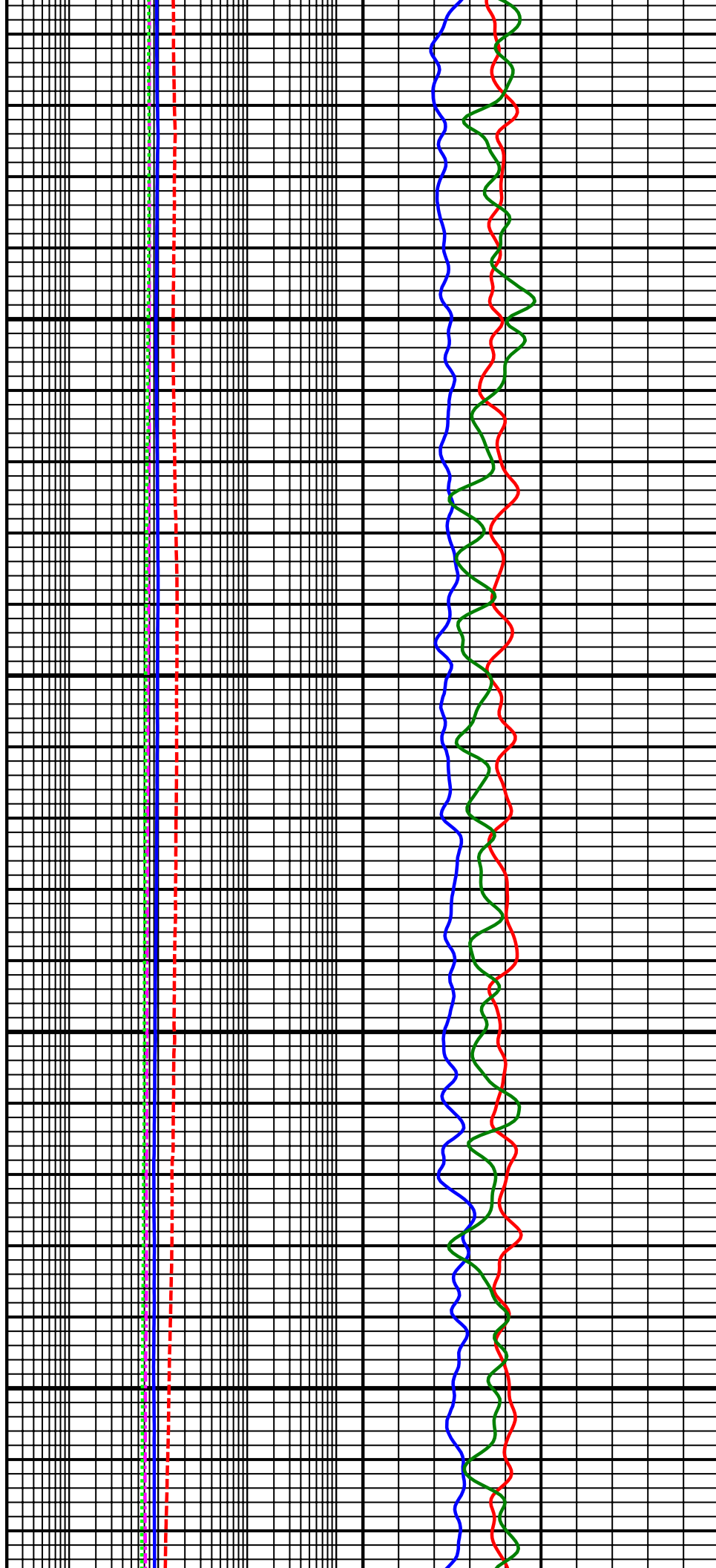
12100
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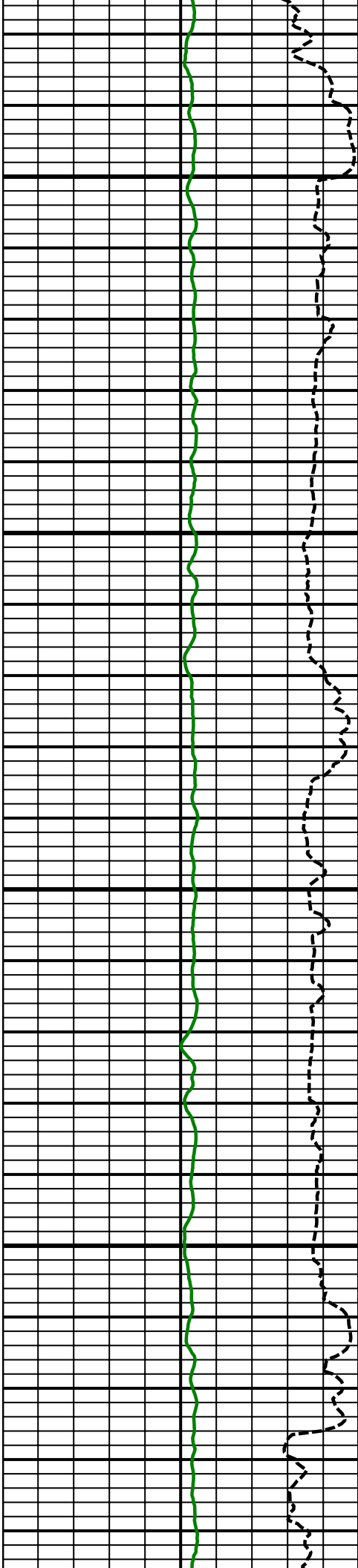




12200
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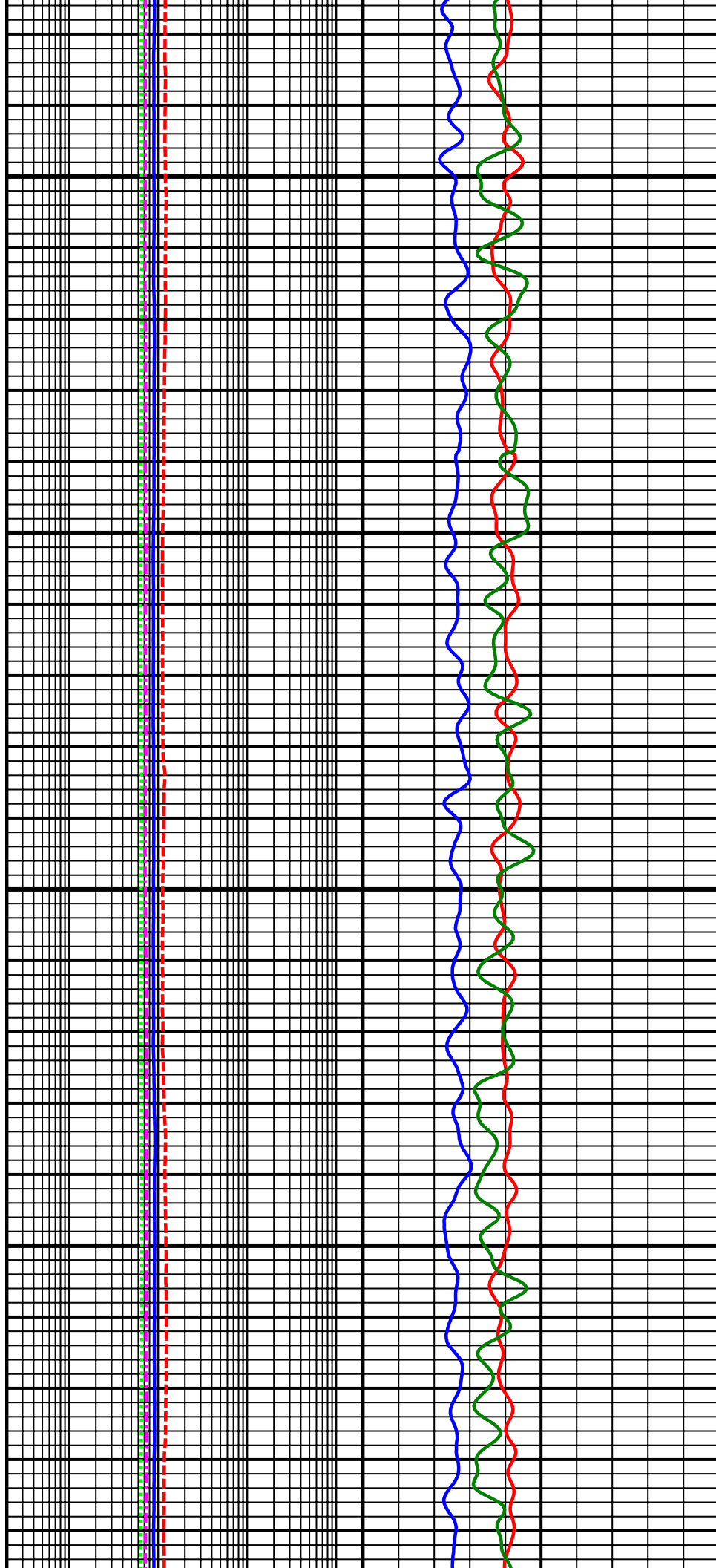
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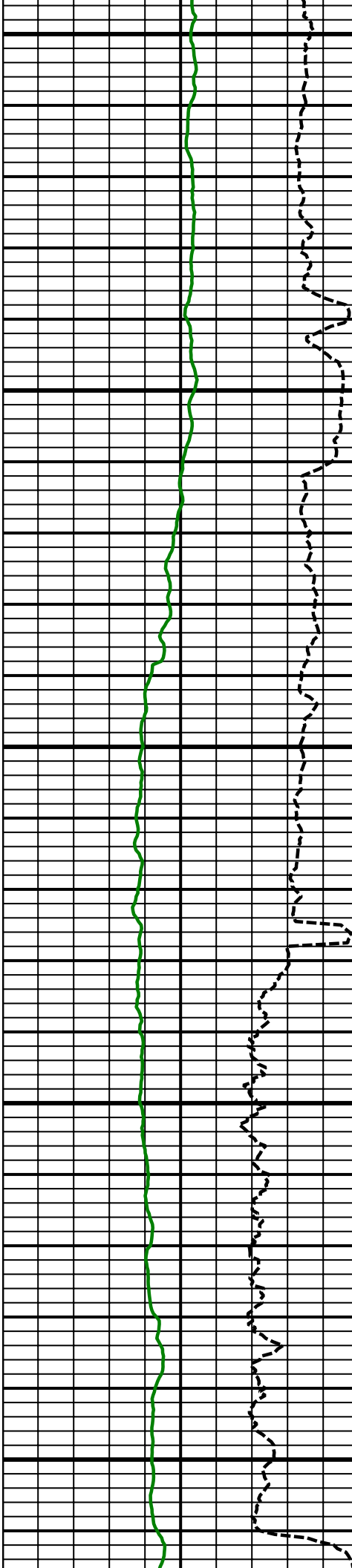




12400
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12500
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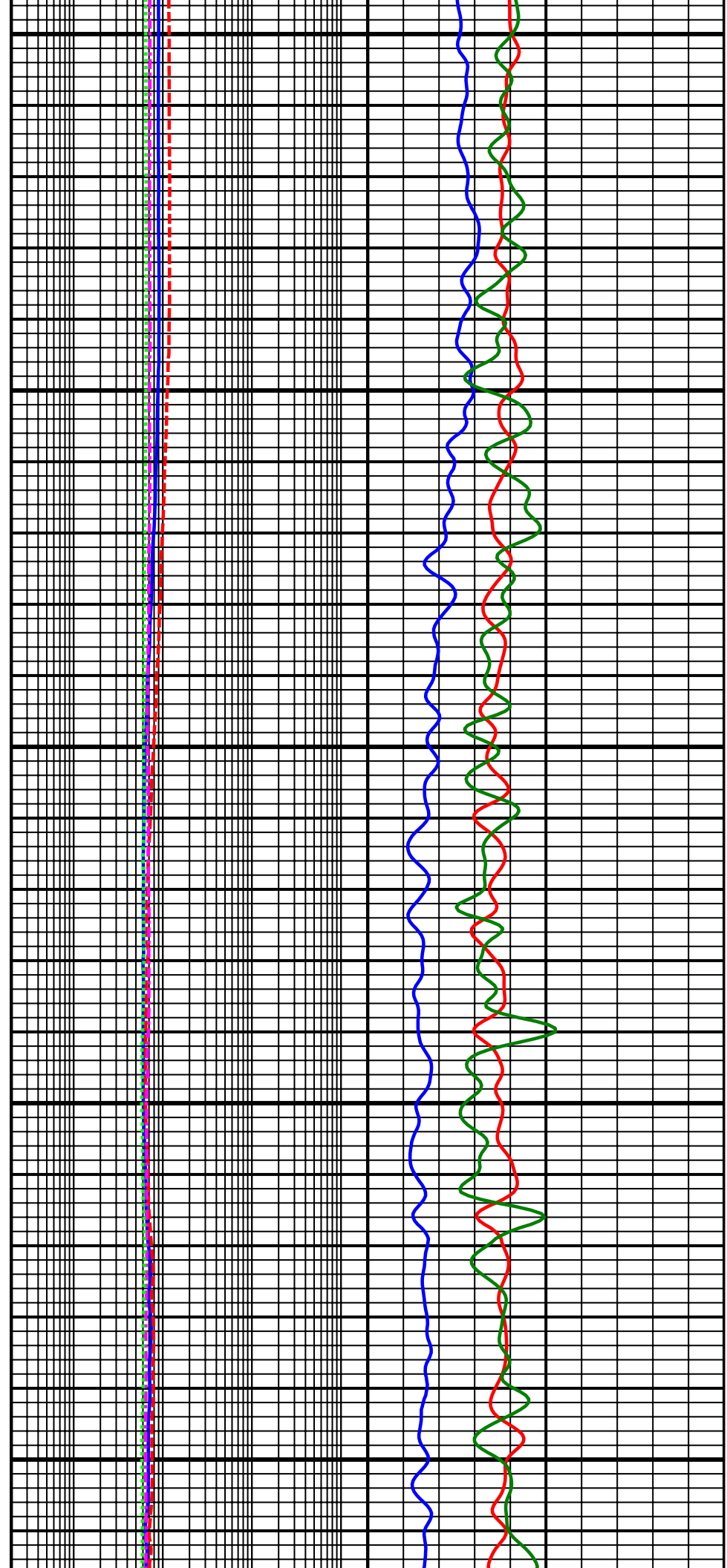


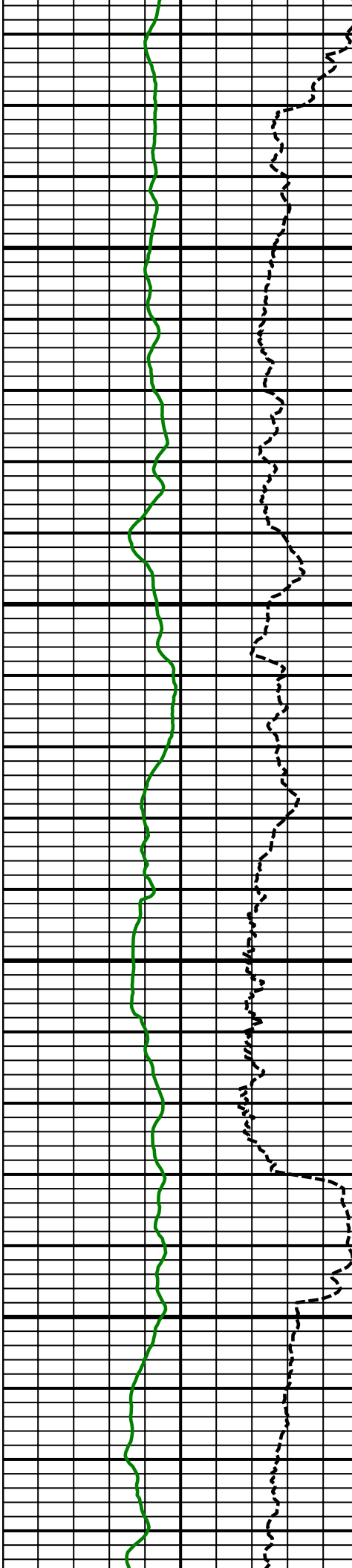


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12700
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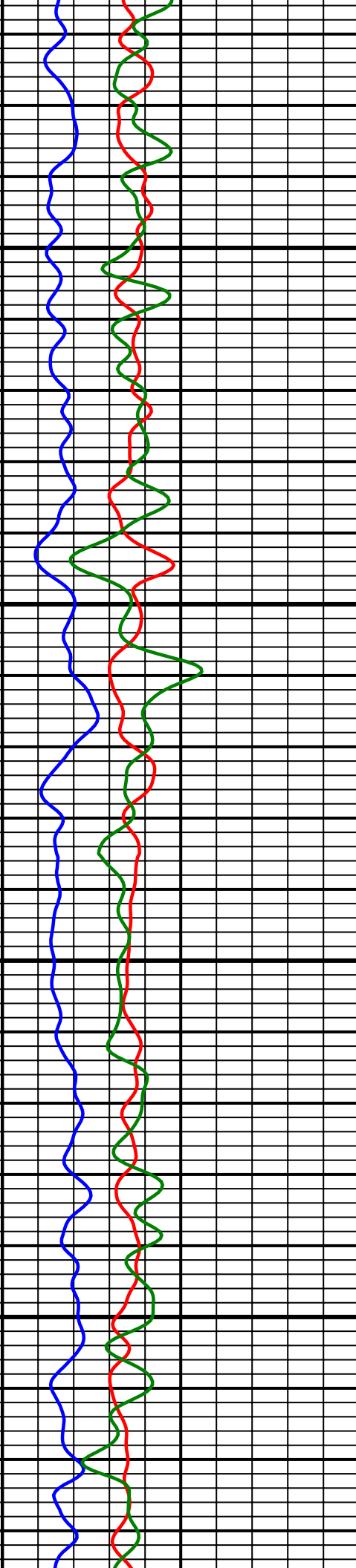
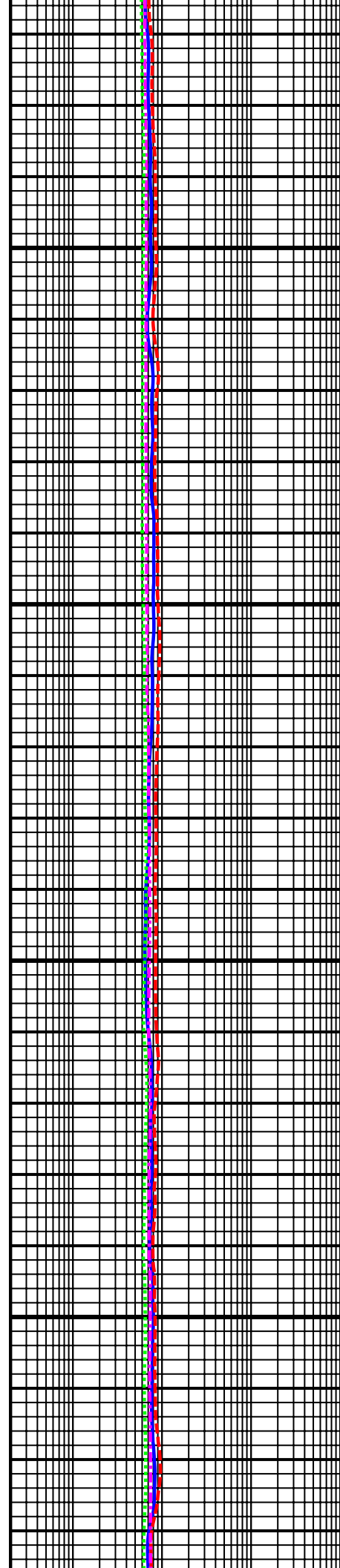
12800
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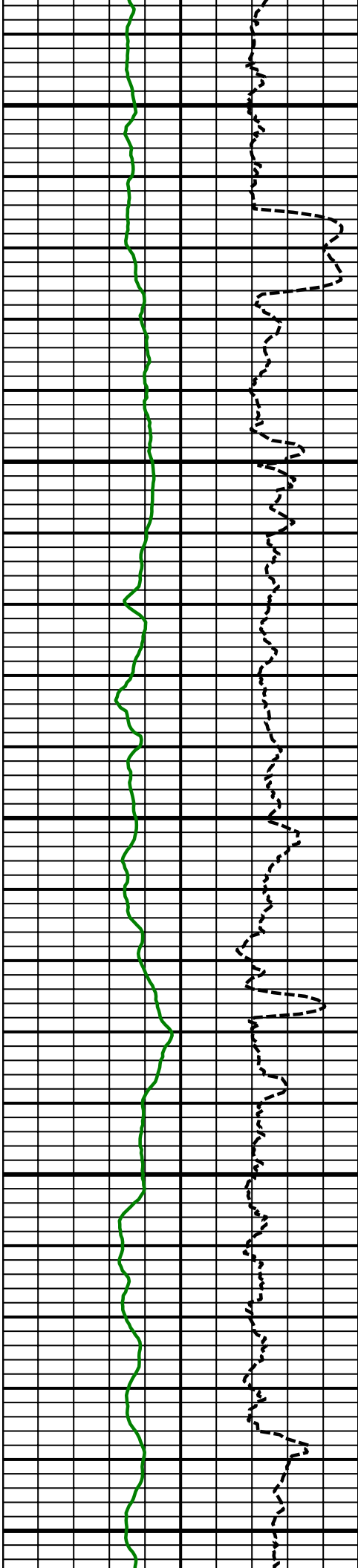




12900
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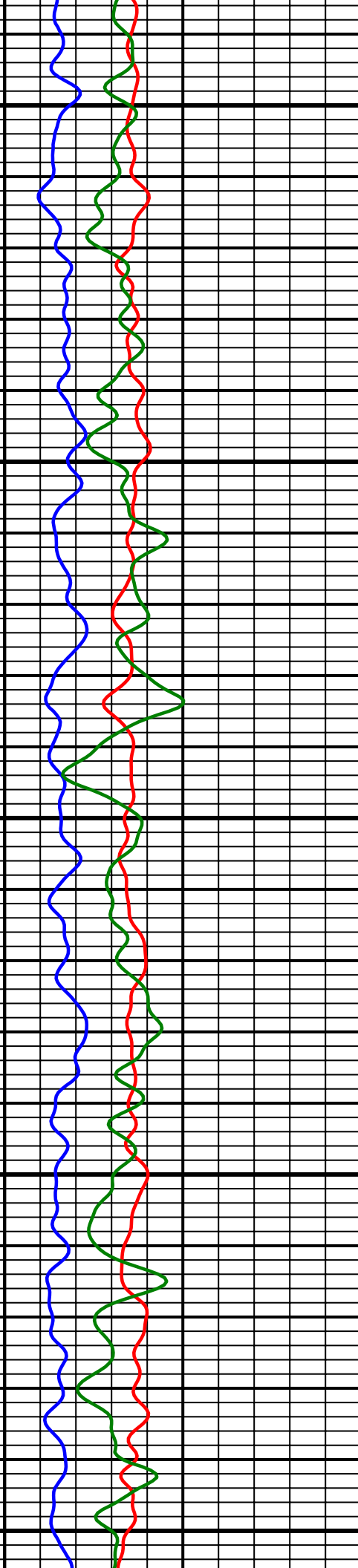
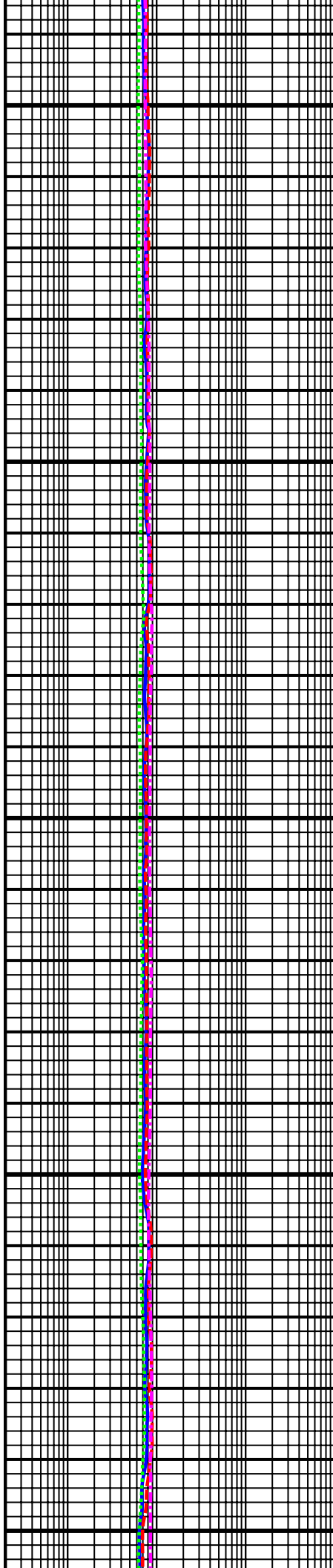
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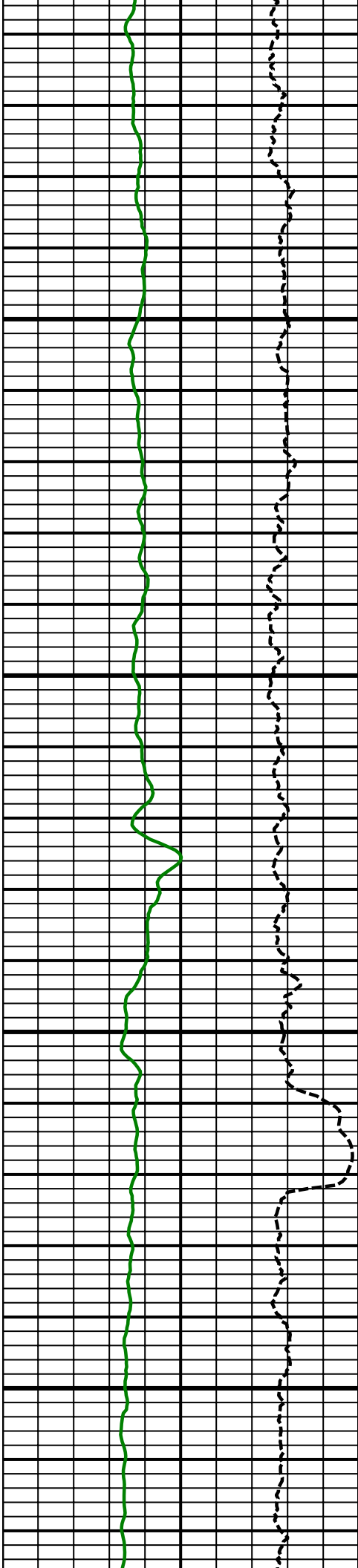




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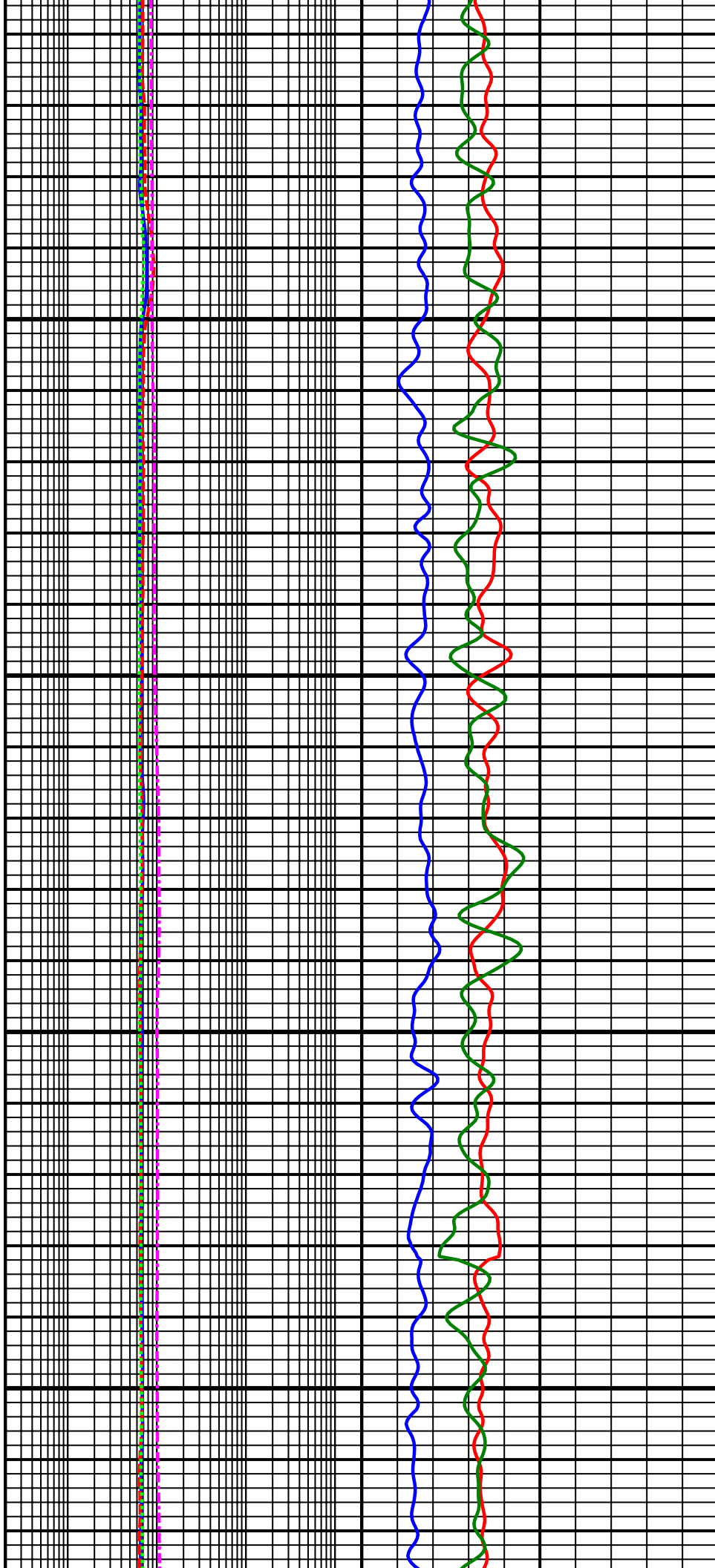
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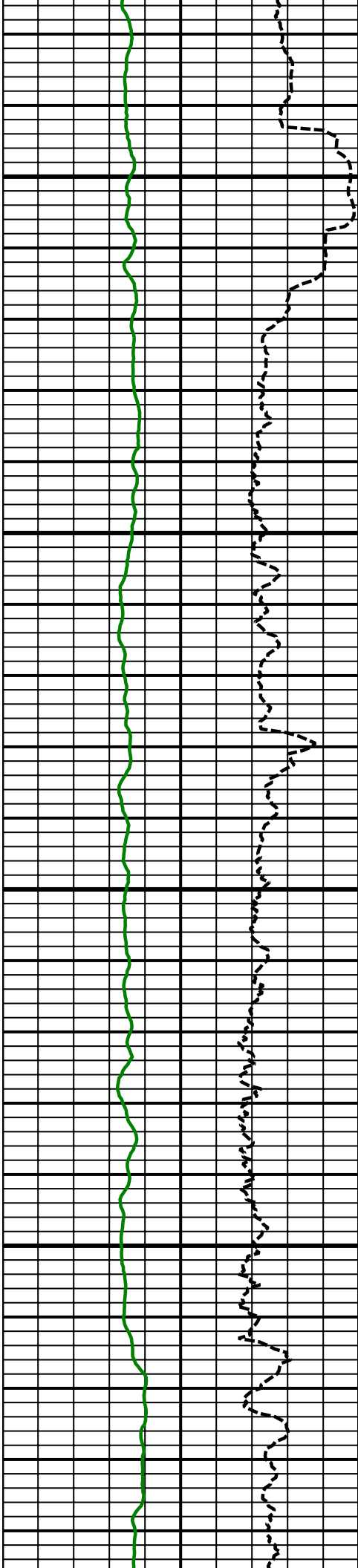




13300
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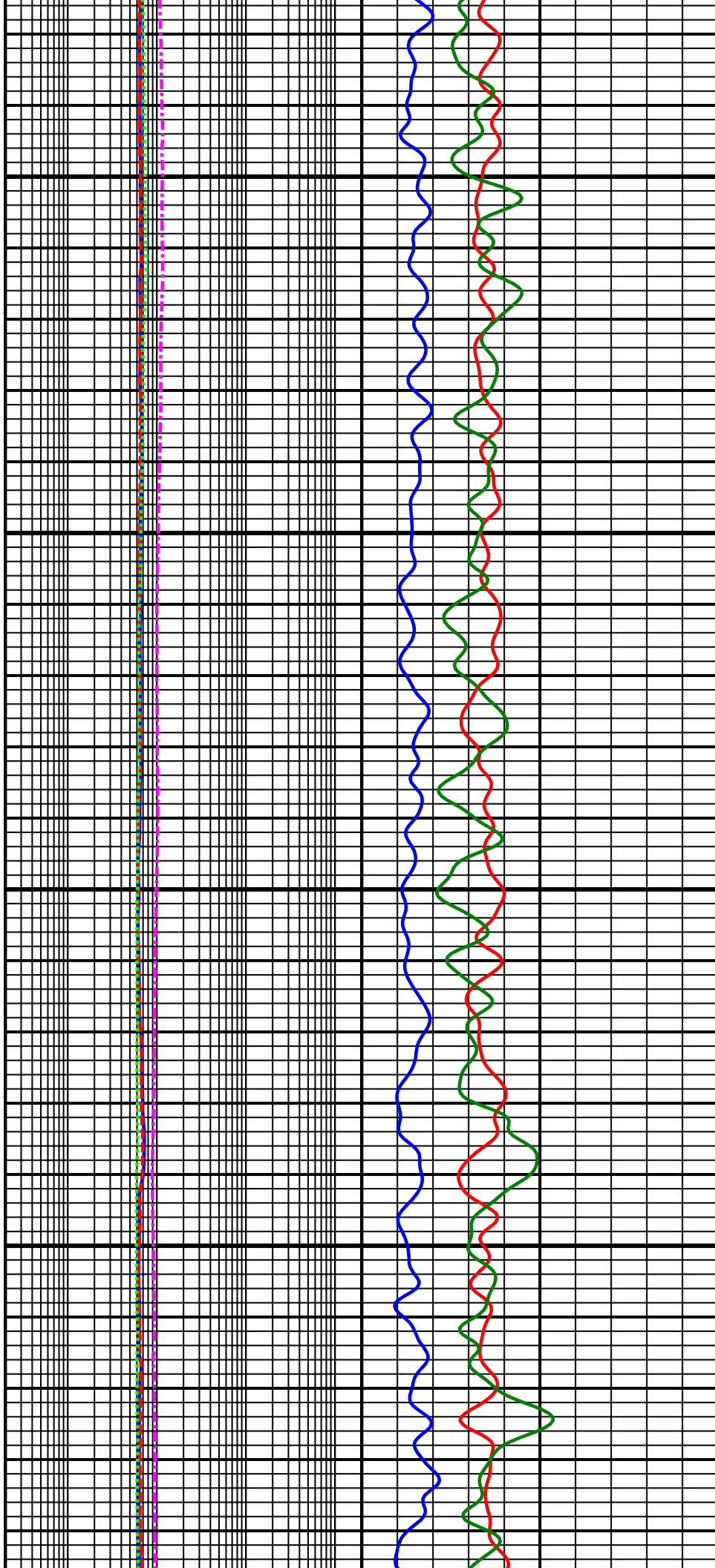
13400
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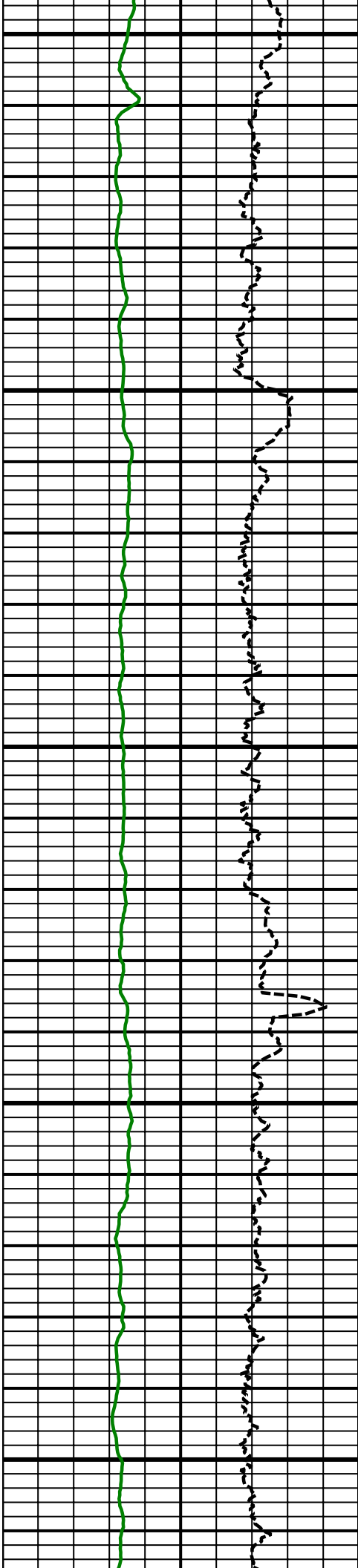




13500
MD

13600
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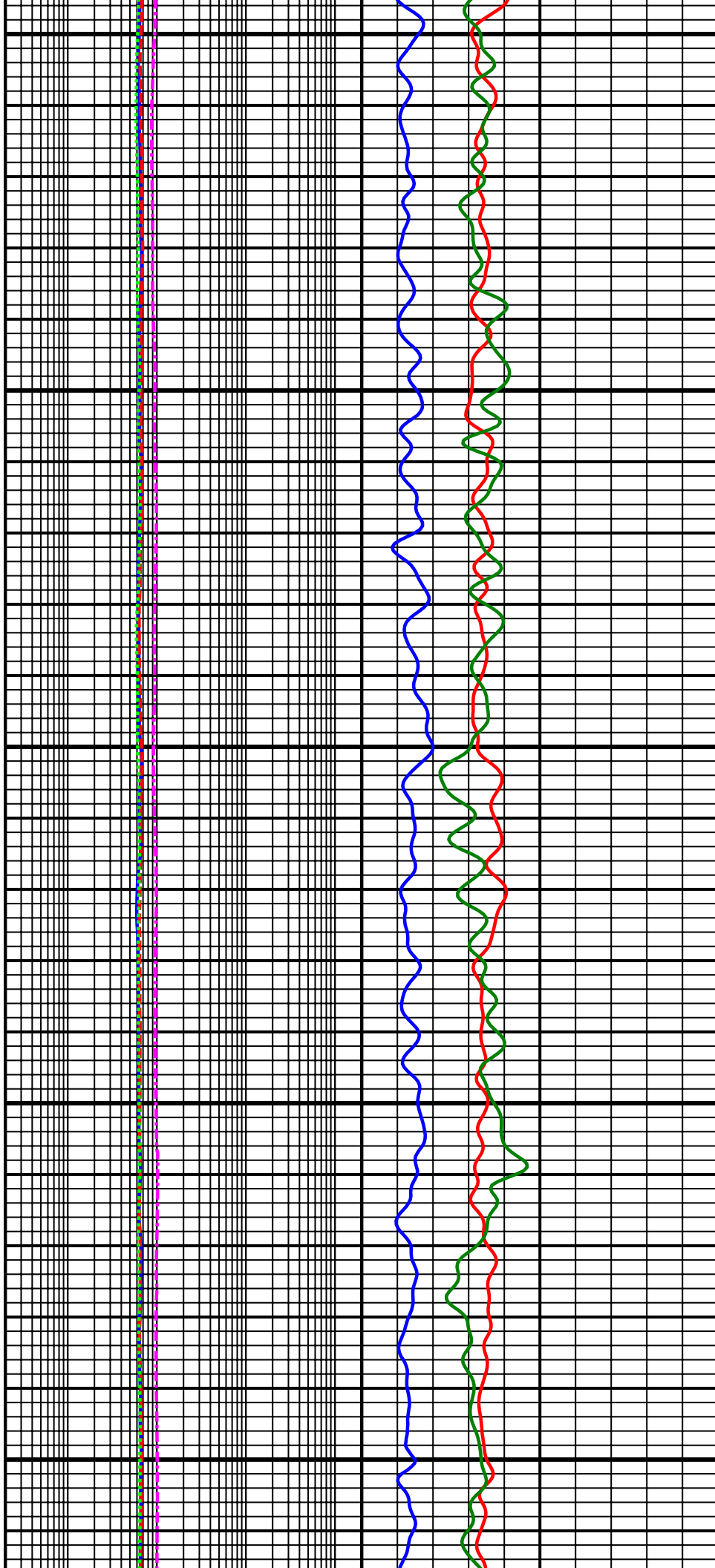


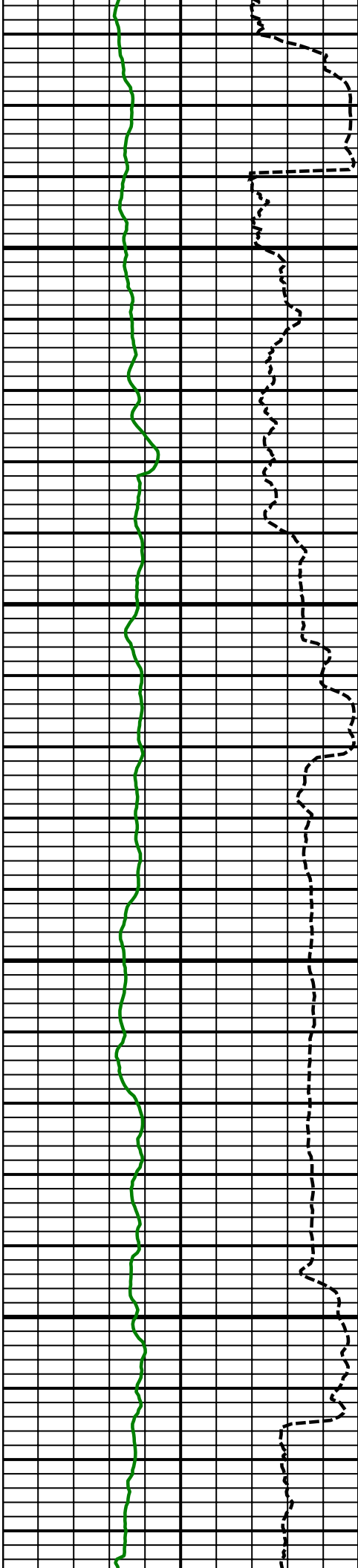


13700
MD

13800
MD

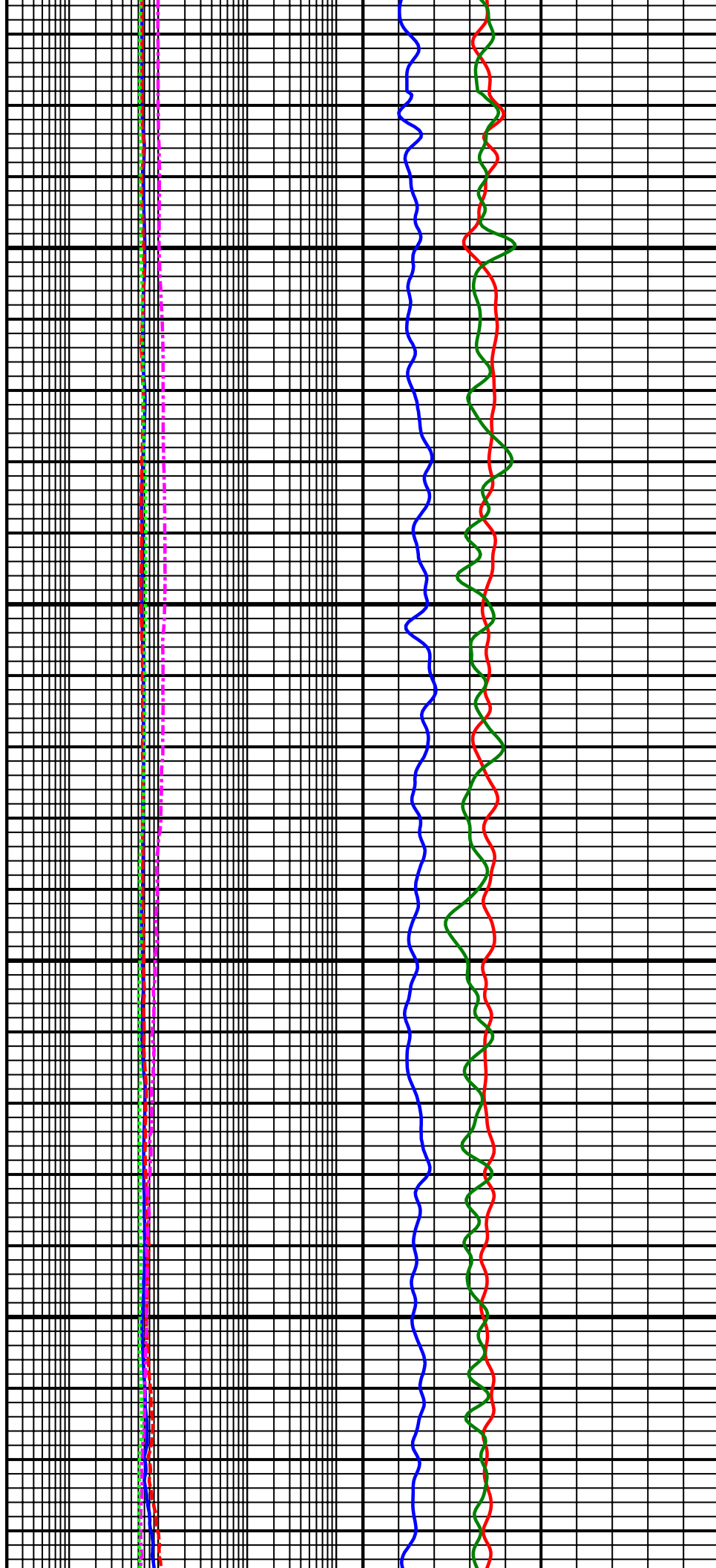
13900
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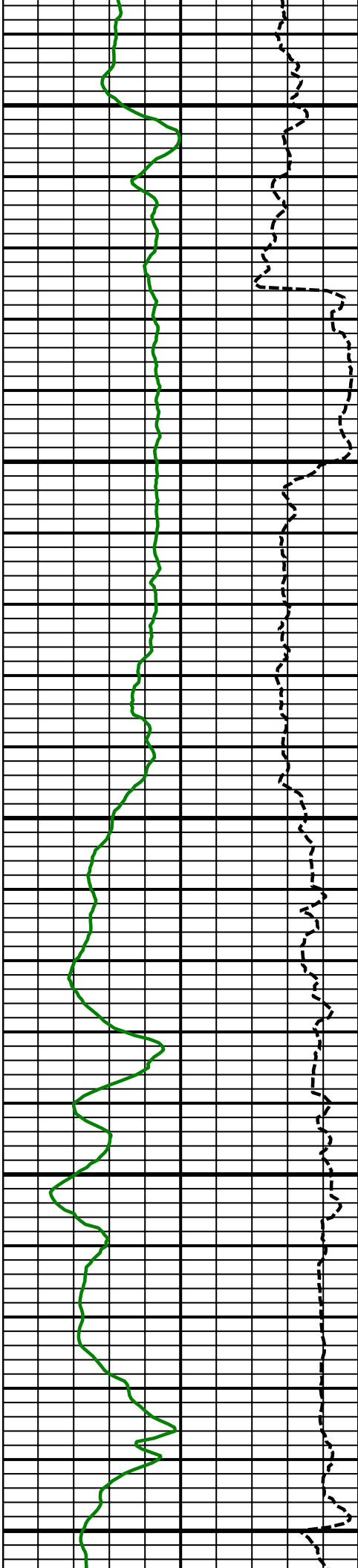




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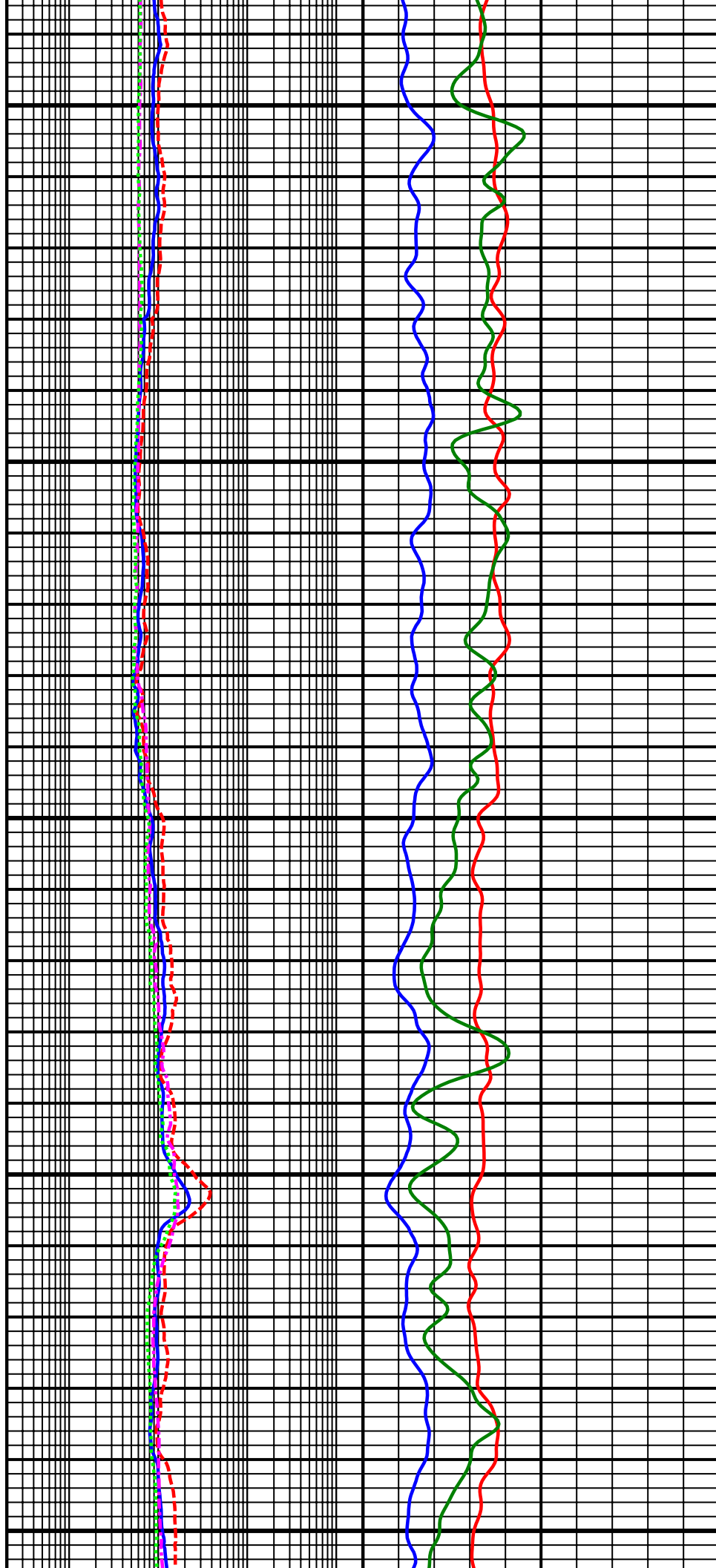
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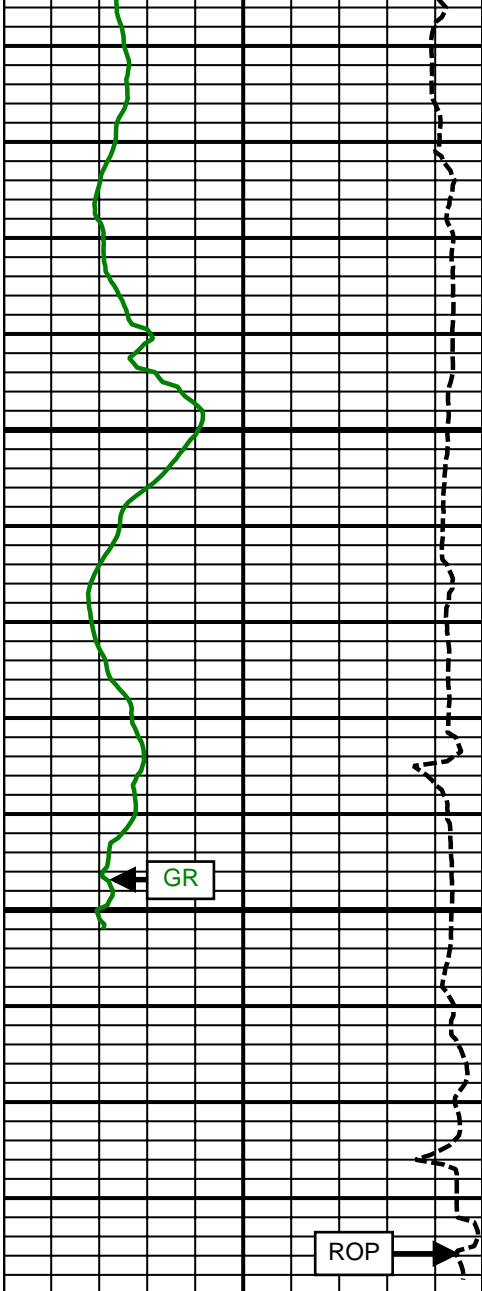




14200
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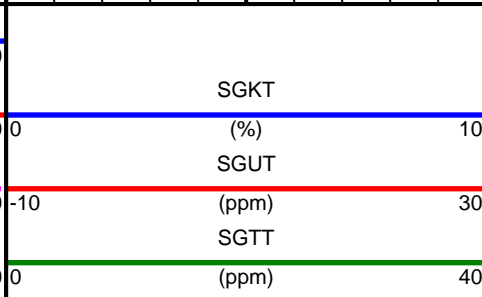
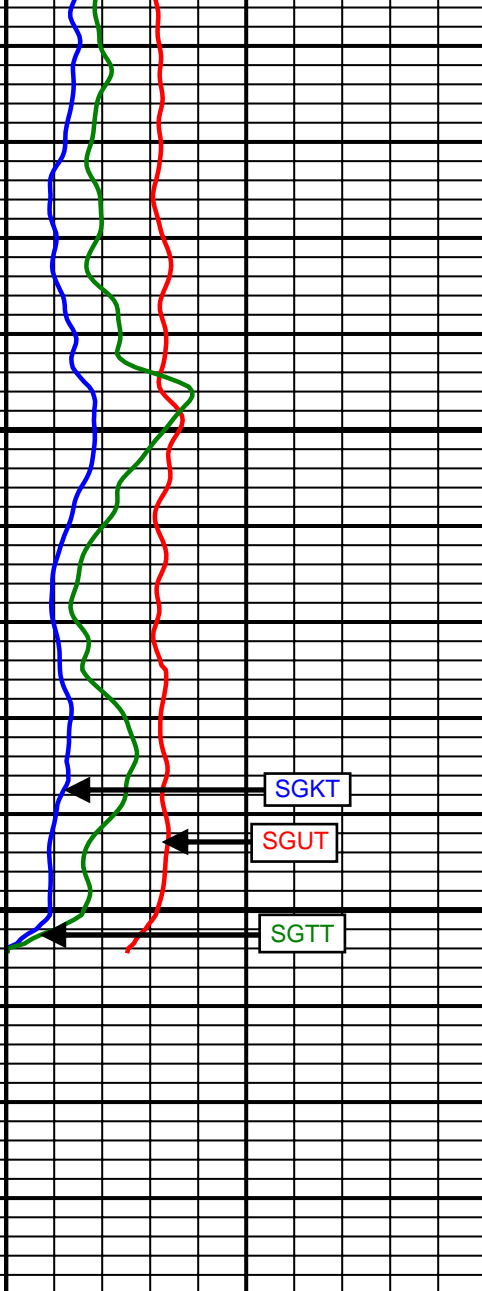
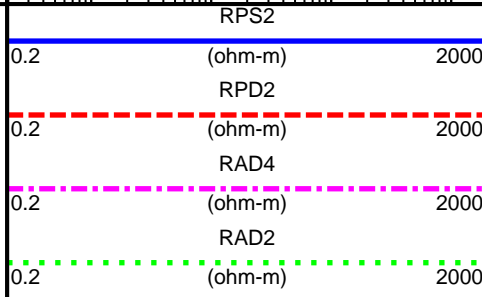
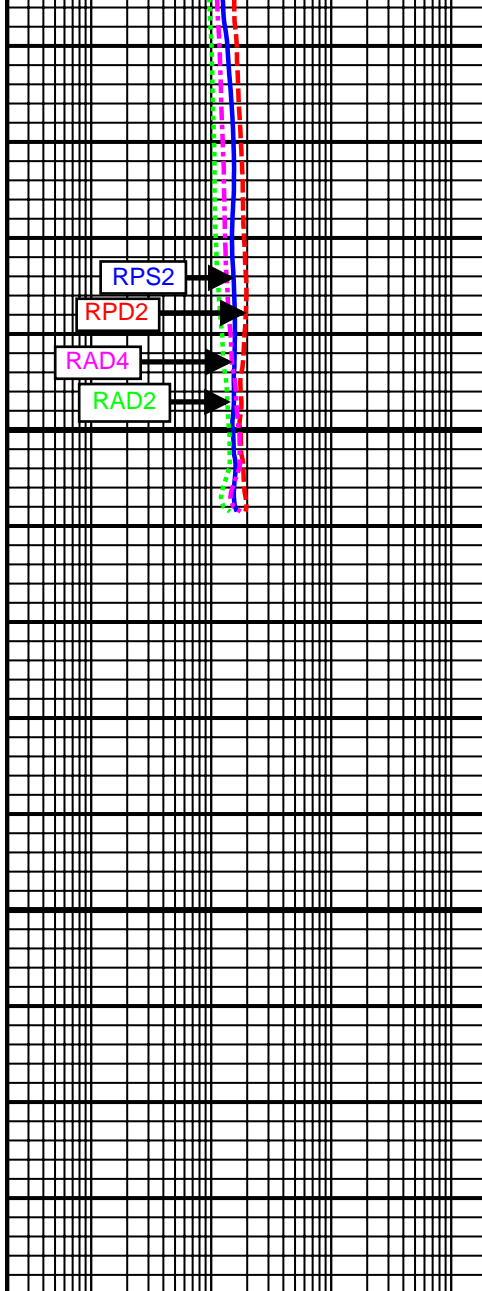
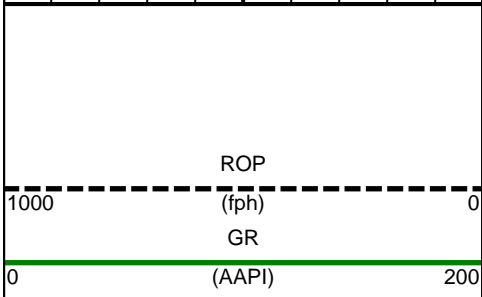
14300
MD





14400
MD

Comment
No. 5-2



SURVEY						
Survey Calculation Method: Minimum Curvature						
Magnetic Reference	Target Direction	Total Magnetic Field	Magnetic Dip Angle	Magnetic Declination	Grid Convergence	Total Correction
True North	179.83 deg	52736 nT	66.75 deg	8.62 deg	0.00 deg	8.62 deg
Survey Tie-On	Depth	INC	AZ	TVD	NS	EW
	1776.00 ft	0.27 deg	340.35 deg	1775.98 ft	1.40 ft	-1.93 ft

Well Head							
Depth (ft)	Inc (deg)	Azm (deg)	TVD (ft)	NS (ft)	EW (ft)	VSect (ft)	Dogleg (deg/100ft)
1885.00	0.44	351.60	1884.98	2.06	-2.08	-2.06	0.17
1977.00	2.36	307.07	1976.95	3.55	-3.64	-3.56	2.25
2071.00	4.72	298.50	2070.76	6.56	-8.58	-6.59	2.57
2165.00	6.76	297.25	2164.29	10.94	-16.90	-10.99	2.17
2258.00	8.07	293.63	2256.51	16.06	-27.75	-16.14	1.49
2351.00	8.87	288.15	2348.49	20.91	-40.54	-21.03	1.22
2445.00	10.05	286.09	2441.21	25.44	-55.31	-25.61	1.31
2538.00	11.63	282.19	2532.55	29.67	-72.27	-29.89	1.87
2631.00	10.56	280.72	2623.81	33.24	-89.81	-33.50	1.19
2725.00	10.71	292.23	2716.21	38.14	-106.36	-38.46	2.26
2818.00	11.55	293.86	2807.46	45.18	-122.87	-45.54	0.96
2903.00	11.49	287.50	2890.75	51.17	-138.73	-51.58	1.50
2989.00	10.78	284.85	2975.13	55.80	-154.67	-56.26	1.02
3074.00	11.20	285.57	3058.57	60.06	-170.31	-60.56	0.52
3159.00	11.86	285.89	3141.86	64.66	-186.66	-65.22	0.78
3245.00	10.66	286.12	3226.20	69.29	-202.80	-69.89	1.40
3330.00	10.82	285.50	3309.71	73.61	-218.04	-74.25	0.23
3415.00	11.53	285.78	3393.10	78.05	-233.91	-78.74	0.84
3501.00	10.25	285.08	3477.55	82.38	-249.57	-83.12	1.50
3586.00	9.43	284.14	3561.30	86.05	-263.62	-86.83	0.98
3672.00	10.35	283.75	3646.02	89.60	-277.96	-90.43	1.07
3757.00	12.16	287.36	3729.38	94.09	-293.92	-94.96	2.28
3843.00	12.36	287.88	3813.42	99.62	-311.33	-100.54	0.27
3928.00	10.85	288.05	3896.68	104.89	-327.59	-105.86	1.78
4014.00	10.94	283.39	3981.13	109.29	-343.23	-110.31	1.03
4099.00	10.57	284.38	4064.64	113.09	-358.62	-114.16	0.49
4184.00	12.54	282.47	4147.91	117.02	-375.19	-118.13	2.36
4270.00	12.32	282.63	4231.90	121.04	-393.26	-122.21	0.26
4355.00	11.52	285.99	4315.06	125.37	-410.26	-126.58	1.25
4441.00	10.51	286.07	4399.48	129.90	-426.06	-131.17	1.17
4526.00	11.05	290.84	4482.98	134.95	-441.12	-136.25	1.23
4612.00	11.77	290.40	4567.28	140.94	-457.04	-142.29	0.84
4697.00	11.34	289.68	4650.56	146.77	-473.04	-148.17	0.53
4782.00	10.69	289.56	4733.99	152.23	-488.34	-153.67	0.77
4868.00	10.77	285.38	4818.49	157.03	-503.60	-158.52	0.91
4953.00	10.92	282.80	4901.97	160.92	-519.11	-162.46	0.60
5039.00	11.41	283.66	4986.34	164.73	-535.32	-166.32	0.60
5124.00	12.17	286.84	5069.55	169.31	-552.06	-170.95	1.18
5209.00	10.11	281.93	5152.94	173.45	-567.94	-175.13	2.67
5295.00	10.61	281.59	5237.54	176.60	-583.08	-178.33	0.59
5380.00	11.50	287.41	5320.97	180.71	-598.83	-182.48	1.68
5466.00	11.27	286.05	5405.27	185.60	-615.09	-187.42	0.41

5551.00	11.34	286.12	5488.62	190.21	-631.10	-192.09	0.08
5636.00	10.23	287.27	5572.12	194.78	-646.34	-196.69	1.33
5722.00	9.17	289.37	5656.89	199.32	-660.09	-201.27	1.30
5807.00	7.73	287.96	5740.97	203.32	-671.92	-205.32	1.71
5893.00	7.75	283.81	5826.18	206.49	-683.05	-208.52	0.65
5978.00	7.91	290.23	5910.39	209.88	-694.11	-211.94	1.05
6063.00	7.79	289.22	5994.60	213.80	-705.04	-215.89	0.22
6148.00	8.11	289.29	6078.78	217.68	-716.13	-219.80	0.38
6234.00	7.39	289.25	6163.99	221.51	-727.08	-223.66	0.84
6319.00	6.31	287.92	6248.39	224.75	-736.69	-226.93	1.28
6404.00	5.56	286.34	6332.93	227.34	-745.08	-229.55	0.90
6490.00	4.16	290.97	6418.62	229.63	-751.99	-231.86	1.69
6575.00	2.51	295.74	6503.47	231.54	-756.55	-233.79	1.97
6660.00	0.98	229.52	6588.44	231.88	-758.78	-234.13	2.70
6708.00	1.29	192.84	6636.43	231.08	-759.21	-233.34	1.61
6751.00	4.71	180.98	6679.36	228.85	-759.35	-231.10	8.04
6794.00	9.34	178.58	6722.03	223.59	-759.29	-225.84	10.79
6836.00	13.82	179.30	6763.16	215.16	-759.15	-217.42	10.67
6879.00	14.49	178.97	6804.86	204.65	-758.99	-206.90	1.57
6922.00	17.53	175.59	6846.18	192.81	-758.39	-195.06	7.39
6964.00	21.10	174.48	6885.81	178.97	-757.18	-181.22	8.54
7007.00	24.47	176.13	6925.45	162.38	-755.83	-164.62	7.98
7050.00	28.51	179.40	6963.93	143.22	-755.12	-145.46	9.99
7092.00	31.89	179.59	7000.23	122.10	-754.94	-124.34	8.05
7135.00	36.22	179.27	7035.84	98.03	-754.70	-100.27	10.08
7178.00	39.27	180.71	7069.84	71.71	-754.70	-73.95	7.38
7221.00	43.89	181.42	7102.00	43.19	-755.24	-45.43	10.80
7263.00	48.90	182.16	7130.96	12.80	-756.20	-15.04	12.00
7306.00	52.57	182.50	7158.17	-20.46	-757.56	18.21	8.56
7348.00	55.18	182.80	7182.93	-54.34	-759.13	52.09	6.24
7391.00	56.87	182.12	7206.96	-89.97	-760.65	87.71	4.14
7435.00	60.68	180.78	7229.76	-127.57	-761.60	125.31	9.04
7477.00	67.27	180.04	7248.18	-165.29	-761.86	163.03	15.77
7520.00	74.88	179.97	7262.12	-205.94	-761.86	203.68	17.70
7563.00	78.82	180.03	7271.90	-247.80	-761.86	245.54	9.16
7605.00	81.45	179.61	7279.09	-289.18	-761.73	286.92	6.34
7637.00	83.21	179.28	7283.36	-320.89	-761.42	318.63	5.59
7757.00	90.88	179.10	7289.54	-440.63	-759.73	438.37	6.39
7850.00	91.05	178.55	7287.98	-533.60	-757.82	531.34	0.62
7944.00	91.05	178.24	7286.26	-627.54	-755.19	625.30	0.33
8037.00	90.18	178.93	7285.26	-720.51	-752.90	718.27	1.19
8130.00	90.35	179.28	7284.83	-813.50	-751.44	811.26	0.42
8224.00	90.99	179.81	7283.73	-907.49	-750.70	905.25	0.88
8317.00	88.95	180.61	7283.78	-1000.48	-751.04	998.25	2.36
8410.00	88.46	180.02	7285.88	-1093.45	-751.55	1091.22	0.82
8504.00	90.44	178.22	7286.78	-1187.43	-750.11	1185.20	2.85
8597.00	90.00	178.75	7286.42	-1280.40	-747.65	1278.17	0.74
8691.00	91.32	179.45	7285.34	-1374.37	-746.17	1372.15	1.59
8784.00	91.79	181.51	7282.82	-1467.33	-746.95	1465.11	2.27
8878.00	89.01	181.15	7282.16	-1561.29	-749.13	1559.07	2.98
8971.00	88.77	181.57	7283.96	-1654.25	-751.34	1652.01	0.52
9062.00	88.15	181.00	7286.41	-1745.19	-753.38	1742.95	0.93
9153.00	90.86	179.15	7287.19	-1836.18	-753.50	1833.93	3.61
9244.00	90.06	179.77	7286.46	-1927.17	-752.64	1924.93	1.11
9335.00	89.63	179.39	7286.71	-2018.17	-751.97	2015.93	0.63
9427.00	90.31	179.95	7286.76	-2110.16	-751.44	2107.93	0.96
9512.00	89.32	179.80	7287.03	-2195.16	-751.26	2192.92	1.18
9596.00	88.27	178.24	7288.80	-2279.13	-749.82	2276.89	2.24
9681.00	89.88	177.19	7290.17	-2364.05	-746.43	2361.82	2.26
9767.00	90.49	178.14	7289.89	-2449.97	-742.93	2447.76	1.31
9852.00	91.23	178.70	7288.62	-2534.93	-740.58	2532.72	1.09

9937.00	91.48	181.30	7286.61	-2619.90	-740.58	2617.69	3.07
10023.00	91.36	181.26	7284.48	-2705.85	-742.50	2703.64	0.15
10108.00	91.15	181.22	7282.61	-2790.81	-744.34	2788.59	0.25
10194.00	90.74	180.98	7281.20	-2876.78	-745.99	2874.56	0.55
10279.00	90.62	181.05	7280.19	-2961.76	-747.50	2959.53	0.16
10365.00	90.37	180.77	7279.44	-3047.75	-748.87	3045.51	0.44
10450.00	90.49	180.52	7278.81	-3132.74	-749.82	3130.50	0.33
10536.00	90.06	180.22	7278.39	-3218.74	-750.38	3216.50	0.61
10621.00	90.06	180.38	7278.30	-3303.74	-750.82	3301.49	0.19
10706.00	90.00	179.68	7278.26	-3388.74	-750.87	3386.49	0.83
10792.00	89.94	179.59	7278.31	-3474.73	-750.32	3472.49	0.13
10877.00	90.37	179.36	7278.08	-3559.73	-749.54	3557.49	0.57
10962.00	91.48	179.66	7276.70	-3644.71	-748.81	3642.48	1.35
11048.00	91.54	180.33	7274.44	-3730.68	-748.81	3728.45	0.78
11133.00	91.79	179.81	7271.97	-3815.65	-748.91	3813.41	0.68
11218.00	91.42	180.60	7269.59	-3900.61	-749.21	3898.37	1.03
11304.00	87.66	180.64	7270.28	-3986.59	-750.14	3984.35	4.37
11389.00	88.58	179.92	7273.07	-4071.54	-750.56	4069.30	1.37
11475.00	89.01	179.98	7274.87	-4157.52	-750.48	4155.28	0.50
11560.00	89.14	180.25	7276.25	-4242.51	-750.65	4240.27	0.35
11646.00	89.26	180.07	7277.45	-4328.50	-750.90	4326.26	0.25
11731.00	88.89	179.76	7278.82	-4413.49	-750.77	4411.24	0.57
11817.00	89.69	180.29	7279.88	-4499.48	-750.81	4497.24	1.12
11902.00	90.55	180.05	7279.71	-4584.48	-751.06	4582.23	1.05
11987.00	90.74	180.00	7278.75	-4669.48	-751.10	4667.23	0.23
12073.00	90.86	179.35	7277.55	-4755.47	-750.61	4753.22	0.77
12158.00	90.80	179.13	7276.32	-4840.45	-749.48	4838.20	0.27
12244.00	91.11	178.69	7274.88	-4926.42	-747.85	4924.18	0.63
12329.00	90.62	178.01	7273.60	-5011.38	-745.40	5009.14	0.99
12415.00	89.94	178.73	7273.18	-5097.34	-742.95	5095.11	1.15
12500.00	89.69	179.29	7273.46	-5182.33	-741.48	5180.10	0.72
12586.00	89.38	180.32	7274.15	-5268.32	-741.19	5266.10	1.25
12671.00	90.79	181.04	7274.03	-5353.31	-742.20	5351.09	1.86
12756.00	91.36	180.42	7272.43	-5438.29	-743.28	5436.06	0.99
12841.00	90.37	180.19	7271.15	-5523.28	-743.73	5521.05	1.20
12927.00	90.86	180.64	7270.23	-5609.27	-744.36	5607.04	0.77
13012.00	90.37	181.18	7269.31	-5694.25	-745.71	5692.02	0.86
13098.00	89.81	180.48	7269.18	-5780.24	-746.95	5778.00	1.04
13183.00	90.31	180.84	7269.09	-5865.24	-747.93	5862.99	0.72
13269.00	90.37	180.59	7268.58	-5951.23	-749.00	5948.98	0.30
13354.00	90.74	180.49	7267.76	-6036.22	-749.81	6033.97	0.45
13439.00	90.31	180.31	7266.98	-6121.22	-750.40	6118.96	0.55
13525.00	89.63	180.64	7267.02	-6207.21	-751.11	6204.96	0.88
13610.00	89.51	179.92	7267.66	-6292.21	-751.53	6289.95	0.86
13695.00	89.32	179.20	7268.53	-6377.20	-750.88	6374.94	0.88
13781.00	89.57	178.88	7269.36	-6463.18	-749.43	6460.93	0.47
13866.00	89.51	178.36	7270.04	-6548.16	-747.39	6545.91	0.62
13952.00	90.99	178.64	7269.67	-6634.12	-745.14	6631.88	1.75
14037.00	90.18	178.59	7268.80	-6719.09	-743.08	6716.86	0.95
14122.00	91.42	178.57	7267.61	-6804.06	-740.98	6801.83	1.46
14208.00	90.43	178.18	7266.23	-6890.01	-738.54	6887.79	1.24
14293.00	90.31	177.95	7265.68	-6974.96	-735.67	6972.75	0.31
14378.00	90.49	177.94	7265.08	-7059.90	-732.62	7057.70	0.21
14432.00	90.80	177.59	7264.48	-7113.86	-730.51	7111.66	0.87

Weatherford M/LWD surveys from 1885.00 ft MD to 14432.00 ft MD.

TD at 14488.00 ft MD.

The total correction is 8.62 deg relative to True North.



Weatherford®

Final Print

COMPANY	<u>Anadarko</u>		
WELL	<u>Sparboe 7C-3HZ</u>		
FIELD	<u>Wattenberg</u>		
RIG	<u>Xtreme 23</u>		
LOC.	<u>Colorado</u>	COUNTY	<u>Weld</u>