



Weatherford®

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

Company: Anadarko
Well: Dechant State 36N-E1HZ
Field: Wattenburg
Rig: H&P 307
County: Weld

Location

Latitude: 40.18839° N X = 3248388.95ft Mag Decl: 8.66°
Longitude: 104.61091° W Y = 131719.83 ft Mag Dip: 66.93°

Other Services: Directional, Temperature and SAGR

COMPANY Anadarko
WELL Dechant State 36N-E1HZ
FIELD Wattenburg
RIG H&P 307
COUNTY Weld STATE Colorado
API # 05-123-36408

Permanent Datum: Mean Sea Level

Log Measured From: Drill Floor Elev: 4833 ft above perm. datum

Depth Reference: Drillers Tally Total Depth: 16517 ft

Depth Logged: 6318 ft to 16517 ft Runs: 5

Date Logged: 7-Feb-13 to 23-Mar-13 Spud Date: 5-Feb-13

Elevation
K.B. Top Drive
G.L. 4808 ft
D.F. 4833 ft
W.D. Land

Borehole Record

Casing Record

Hole Size	From	To	Size	Weight	From	To
8.750 in.	754 ft	7284 ft	7.000 in.	26.0 lb/ft	Surface	7273 ft
6.125 in.	7284 ft	16517 ft				

Borehole Deviation Record

Mud Record

Hole Size	Min. Inc.	Max. Inc.	Type	Weight	From	To
8.750 in.	0.07°	82.51°	WBM	8.75 - 9.40 ppq	754 ft	7284 ft
6.125 in.	85.37°	93.83°	OBM	9.40 - 9.70	7284 ft	16517 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	6.125	6.125	6.125		
Bit Type		PDC	PDC	PDC	PDC	PDC		
Bit TFA	sq.in.	1.240	1.240	0.980	0.980	0.980		
Bit Start Depth	ft	754	6362	7284	10954	16034		
Bit End Depth	ft	6362	7284	10954	16034	16517		
Top Log Interval	ft	N/A	6318	7247	10918	15998		
Bottom Log Interval	ft	N/A	7284	10954	16034	16517		
Begin Log Time	hrs	N/A	3:30	2:15	17:30	18:45		
Begin Log Date	DD-MMM-YY	N/A	7-Feb-13	16-Mar-13	18-Mar-13	23-Mar-13		
End Log Time	hrs	N/A	21:40	19:15	10:50	21:25		
End Log Date	DD-MMM-YY	N/A	7-Feb-13	17-Mar-13	22-Mar-13	23-Mar-13		
Drill or Wipe		Drill	Drill	Drill	Drill	Drill		
Flow Rate	gal/min	560	530	296	296	265		
Max AV / CV @ MWD	ft/min	443 / 162	419 / 168	485 / 386	469 / 359	434 / 359		
Min Inc @ Depth	deg @ ft	0.07 @ 5167	3.98 @ 6397	87.35 @10816	85.37 @ 14937	89.20 @ 16261		
Max Inc @ Depth	deg @ ft	8.98 @ 3559	82.51 @ 7225	92.10 @ 10084	93.83 @ 12383	89.88 @ 16167		

MUD DATA

Depth	ft	6362	7284	10954	16034	16517		
Fluid Type		WBM	WBM	OBM	OBM	OBM		
Mud Weight	ppg	9.40	8.75	9.40	9.70	9.70		
Plastic Viscosity	cP	1	1	11	11	11		
Solids / Sand	%	4.40 / 1.50	3.00 / 1.10	11 / .25	10.9 / .25	10.9 / .25		
NaCl Equiv. Chlorides	ppm	1650	1650	95370	70290	62700		
pH		9.1	8.7	OBM	OBM	OBM		
Oil:Water Ratio	% Vol	6.2 : 93.8	4.7 : 95.3	65.0 : 35.0	69.0 : 31.0	77.0 : 23.0		
KCl	% Vol	0	0	0	0	0		
Client Representative		C. Jones	C. Jones	C. Jones	D. Barone	D. Barone		
WeatherfordLWD Engineer		S. Coulter	S. Coulter	A. Danna	A. Danna	A. Danna		

EQUIPMENT SUMMARY

M/LWD Run Number	1	2	3	4	5
BTR / CDS Serial Number	849 / 983	849 / 983	N/A	N/A	N/A
Battery Serial Number	403468132	403468132	N/A	N/A	N/A
Gamma Ray Serial Number	2657	2657	N/A	N/A	N/A
CMS Serial Number	2015	2015	N/A	N/A	N/A
Pulser Serial Number	43924	43924	N/A	N/A	N/A
HEL Serial Number	N/A	N/A	NW130540PDBBI4.75	NW130540PDBBI4.75	NW130540PDBBI4.75
SAGR Serial Number	N/A	N/A	NW130553JB4.75	NW130553JB4.75	NW130553JB4.75
Sensor to Bit Offsets / Acquisition Rates					
Directional	ft / sec	58.53 / RT	57.72 / RT	51.99 / RT	53.24 / RT
Gamma Ray	ft / sec	44.32 / 10	43.51 / 10	37.55 / 5	38.80 / 5
Other Information					
Total BHA Length	ft	98.56	97.38	111.06	112.31
BHA Assembly Type		Steerable	Steerable	Steerable	Steerable
Stabilizer Location	ft	N/A	N/A	28.03	29.28
Stabilizer Location	ft	N/A	N/A	65.78	67.03
Stabilizer Location	ft	N/A	N/A	N/A	N/A
Run Circulating Time	hr	26.82	18.23	43.65	10.77
Run Drilling Time	hr	16.48	9.35	25.37	1.72

MUD SUMMARY

Date and Time	Run	Bit Depth	Mud Weight	% K	Rm @ Temp	Rmf @ Temp	Rmc @ Temp	BHCT
06 Feb 13 @ 20:00	01	6362 ft	9.40 ppg	0	N/A	N/A	N/A	166 F
07 Feb 13 @ 21:40	02	7284 ft	8.75 ppg	0	N/A	N/A	N/A	179 F
17 Mar 13 @ 19:15	03	10954 ft	9.40 ppg	0	N/A	N/A	N/A	231 F
22 Mar 13 @ 10:50	04	16034 ft	9.70 ppg	0	N/A	N/A	N/A	260 F
23 Mar 13 @ 21:25	05	16517 ft	9.70 ppg	0	N/A	N/A	N/A	260 F

MWD RUN REMARKS

Run Number: 1 :: RECORDED DATA LOG

WFT Services Provided:

Recorded and Real Time Logging: No logging during Run 01.

Directional Services: On demand Inclination and Azimuth.

Run Number: 2 :: RECORDED DATA LOG

WFT Services Provided:

Recorded and Real Time Logging: Gamma Ray and Temperature.

Directional Services: On demand Inclination and Azimuth.

Borehole and Environmental Correction:

Hole Size: 8.750 in.

Gamma Ray: Hole size, mudweight, Collar O.D., Collar I.D. and K1 factor.

Mud Weight: 8.75 ppg

Collar O.D.: 6.750 in.

K1 Factor: 3.958

Collar I.D.: 3.250 in.

Run Number: 3 :: RECORDED DATA LOG

WFT Services Provided:

Recorded and Real Time Logging: Gamma Ray and Temperature.

Directional Services: On demand Inclination and Azimuth.

Borehole and Environmental Correction:

Hole Size: 6.125 in.

Mud Weight: 9.40 ppg

KCl Concentration: 0%

Run Number: 4 :: RECORDED DATA LOG

WFT Services Provided:

Recorded and Real Time Logging: Gamma Ray and Temperature.

Directional Services: On demand Inclination and Azimuth.

Borehole and Environmental Correction:

Hole Size: 6.125 in.

Mud Weight: 9.70 ppg

KCl Concentration: 0%

Run Number: 5 :: RECORDED DATA LOG

WFT Services Provided:

Recorded and Real Time Logging: Gamma Ray and Temperature.

Directional Services: On demand Inclination and Azimuth.

Borehole and Environmental Correction:

Hole Size: 6.125 in.

Mud Weight: 9.70 ppg

KCl Concentration: 0%

M/LWD LOG COMMENTS

Comment No. 1-1

No logging occurred during Run 01.

Comment No. 2-1

RECORDED DATA LOG

Start of M/LWD Drilling Run 02

Weatherford International provided 6 3/4 in. Directional, and Temperature for Run 02.

Run 02 started formation drilling February 7, 2013 at 03:30 at 6362 MD / 6356 TVD. Weatherford International logged the 8.750 in. borehole.

The WBM at the start of drilling was 8.75 ppg.

Comment No. 2-2

End of M/LWD Drilling Run 02

Run 02 ended drilling formation February 7, 2013 at 21:40 at 7284 MD / 6945 TVD.

The WBM at the end of drilling was 8.75 ppg.

Comment No. 3-1

RECORDED DATA LOG

Start of LWD Drilling Run 03

Weatherford International provided 4 3/4 in. Directional, Spectral Gamma Ray, and Temperature for Run 03.

Run 03 started formation drilling March 16, 2013 at 02:15 at 7284 MD / 6945 TVD. Weatherford International logged the 6.125 in. borehole.

The OBM at the start of drilling was 9.50 ppg.

Comment No. 3-2

End of LWD Drilling Run 03

Run 03 ended drilling formation drilling March 17, 2013 at 19:15 at 10954 MD / 6946 TVD.

The OBM at the end of drilling was 9.40 ppg.

Comment No. 4-1

RECORDED DATA LOG

Start of LWD Drilling Run 04

Weatherford International provided 4 3/4 in. Directional, Spectral Gamma Ray, and Temperature for Run 04.

Run 04 started formation drilling March 18, 2013 at 17:30 at 10954 MD / 6946 TVD. Weatherford International logged the 6.125 in. borehole.

The OBM at the start of drilling was 9.60 ppg.

Comment No. 4-2

End of LWD Drilling Run 04

Run 04 ended drilling formation drilling March 22, 2013 at 10:50 at 16034 MD / 6997 TVD.

The OBM at the end of drilling was 9.70 ppg.

Comment No. 5-1

RECORDED DATA LOG

Start of LWD Drilling Run 05

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

Run 05 started formation drilling March 23, 2013 at 18:45 at 16034 MD / 6997 TVD. Weatherford International logged the 6.125 in. borehole.

The OBM at the start of drilling was 9.70 ppg.

Comment No. 5-2

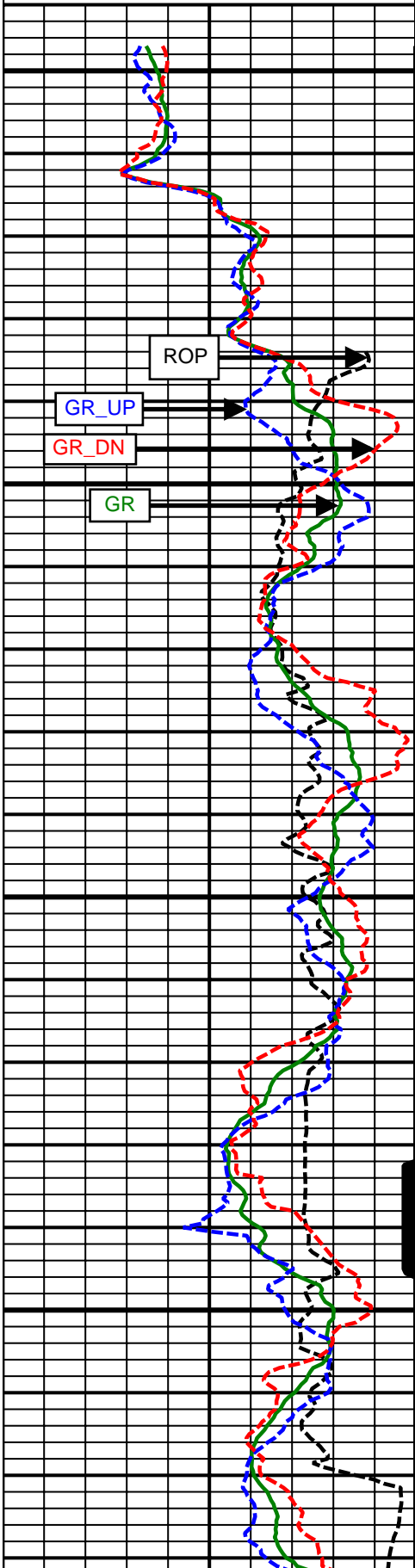
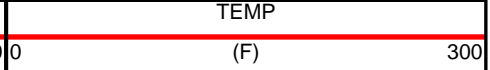
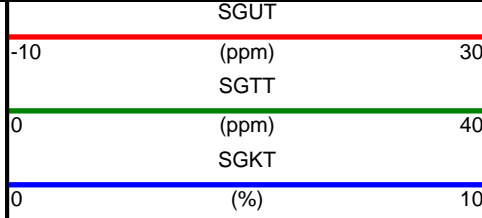
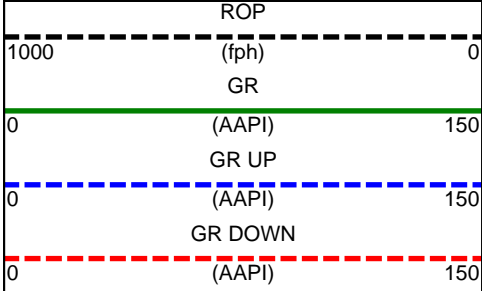
End of LWD Drilling Run 05

Run 05 ended drilling formation drilling March 23, 2013 at 21:25 at 16517 MD / 7002 TVD.

The OBM at the end of drilling was 9.70 ppg.

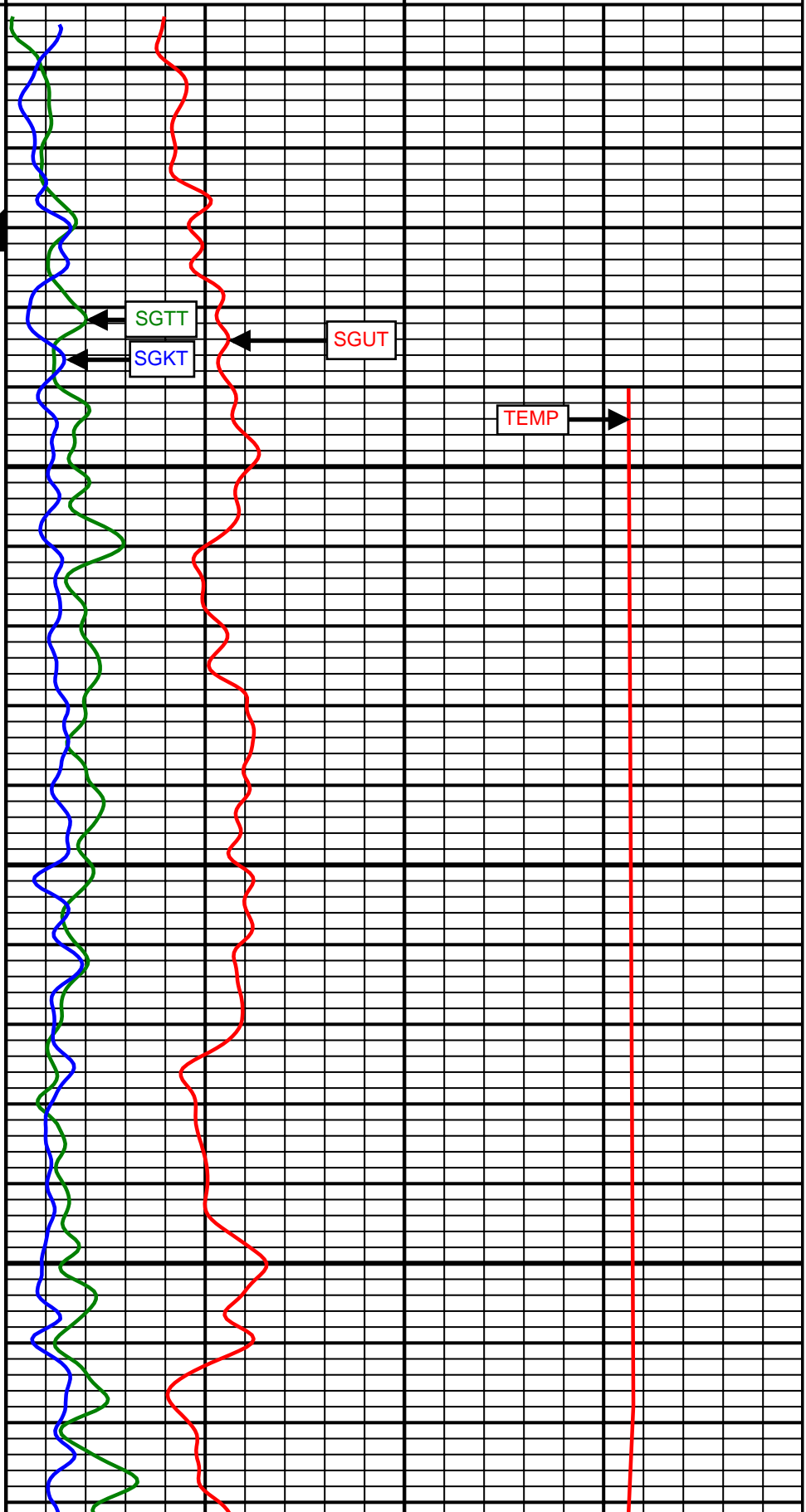
CURVE SPECIFICATIONS				
CURVE TYPE	MNEMONIC	UNITS	COMMENTS	CORRECTIONS
Rate of Penetration	ROP	fph	Rate of Penetration 3.0 ft window 0.5 ft Exponential Smoothing	None
Gamma Ray	GR	AAPI	Gamma Ray 3.0 ft window 0.5 ft Exponential Smoothing	See M/LWD Run Remarks
Gamma Ray Up	GR_UP	AAPI	Gamma Ray 3.0 ft window 0.5 ft Exponential Smoothing	
Gamma Ray Down	GR_DN	AAPI	Gamma Ray 3.0 ft window 0.5 ft Exponential Smoothing	
Potassium Total	SGKT	%	Potassium Concentration 3.0 ft window 0.5 ft Two Stage Adaptive Smoothing	
Thorium Total	SGTT	ppm	Thorium Concentration 3.0 ft window 0.5 ft Two Stage Adaptive Smoothing	
Uranium Total	SGUT	ppm	Uranium Concentration 3.0 ft window 0.5 ft Two Stage Adaptive Smoothing	

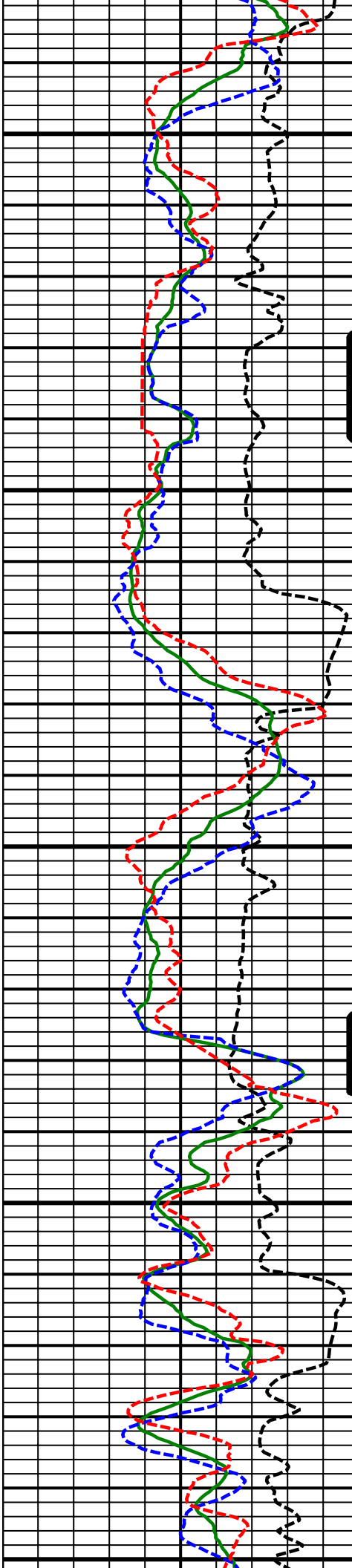
5 Inch - Measured Depth



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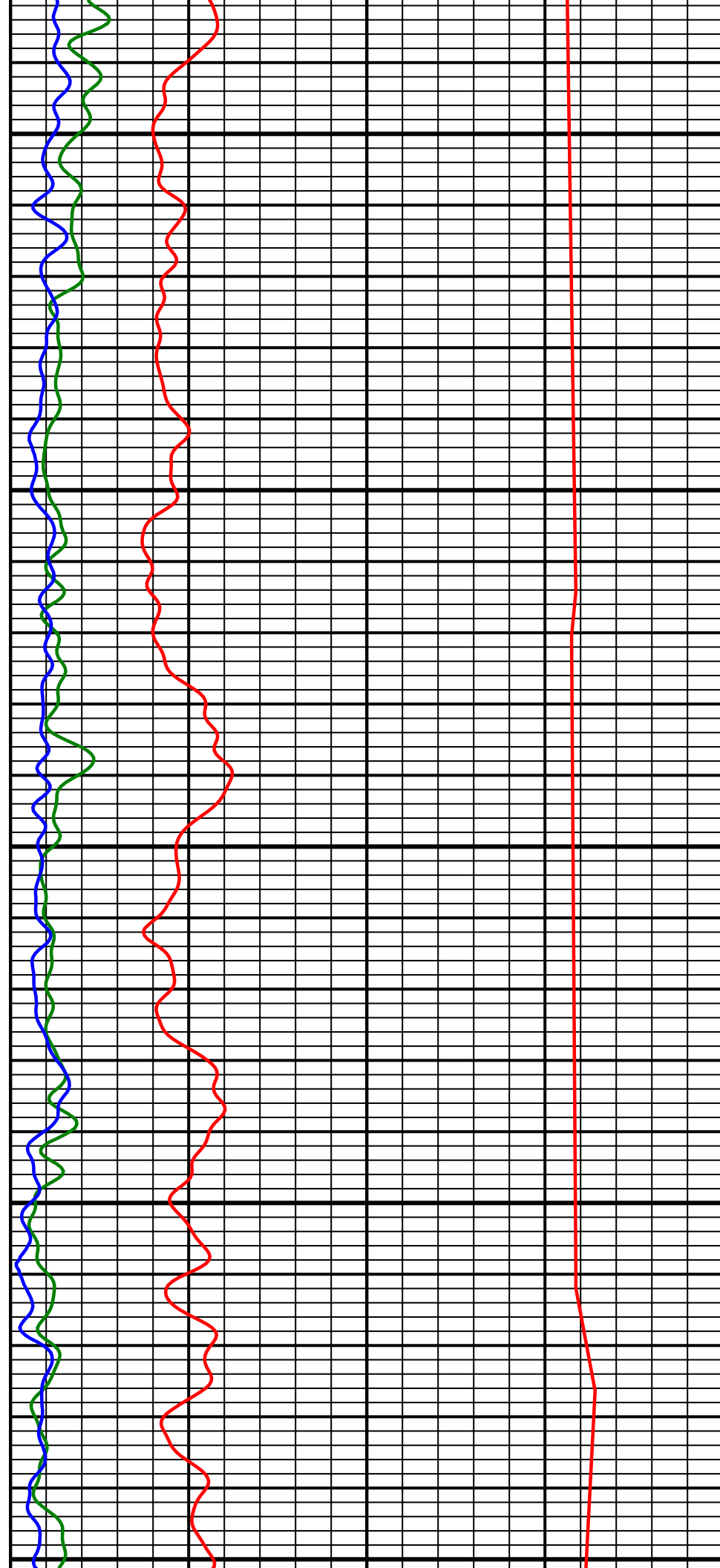
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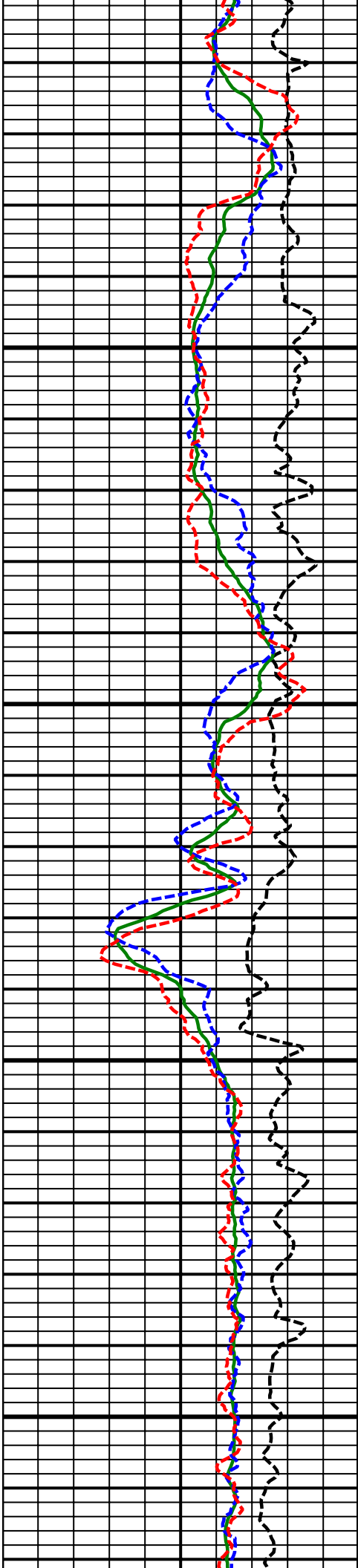




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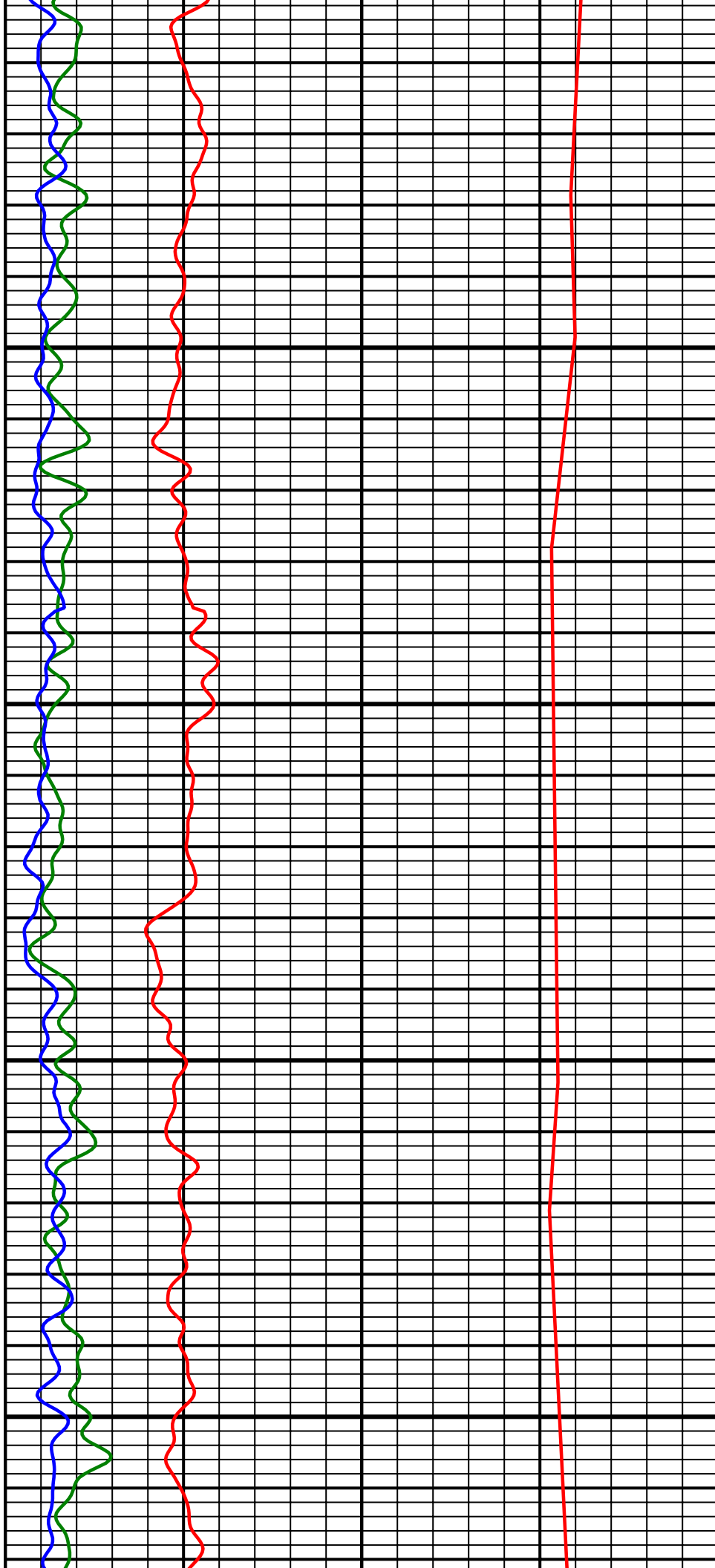
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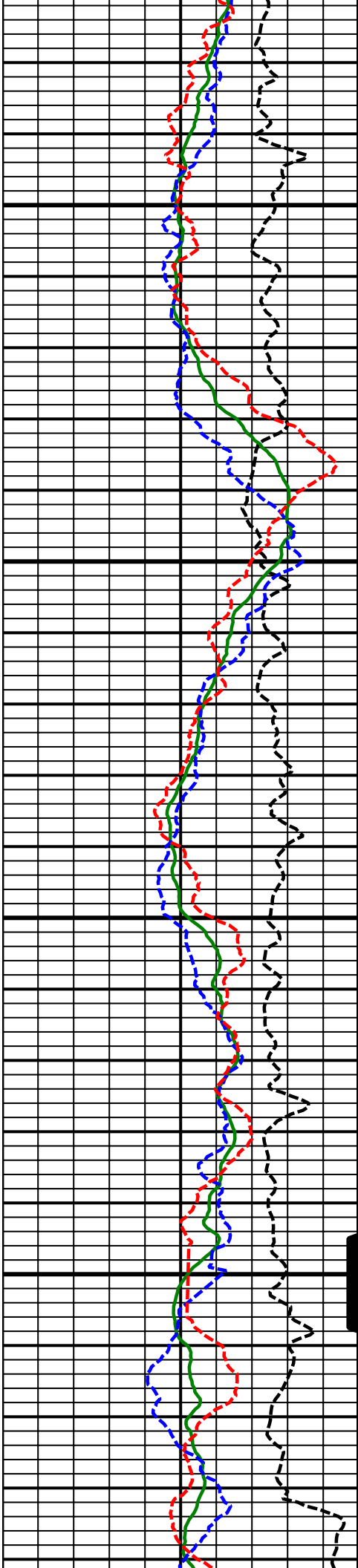




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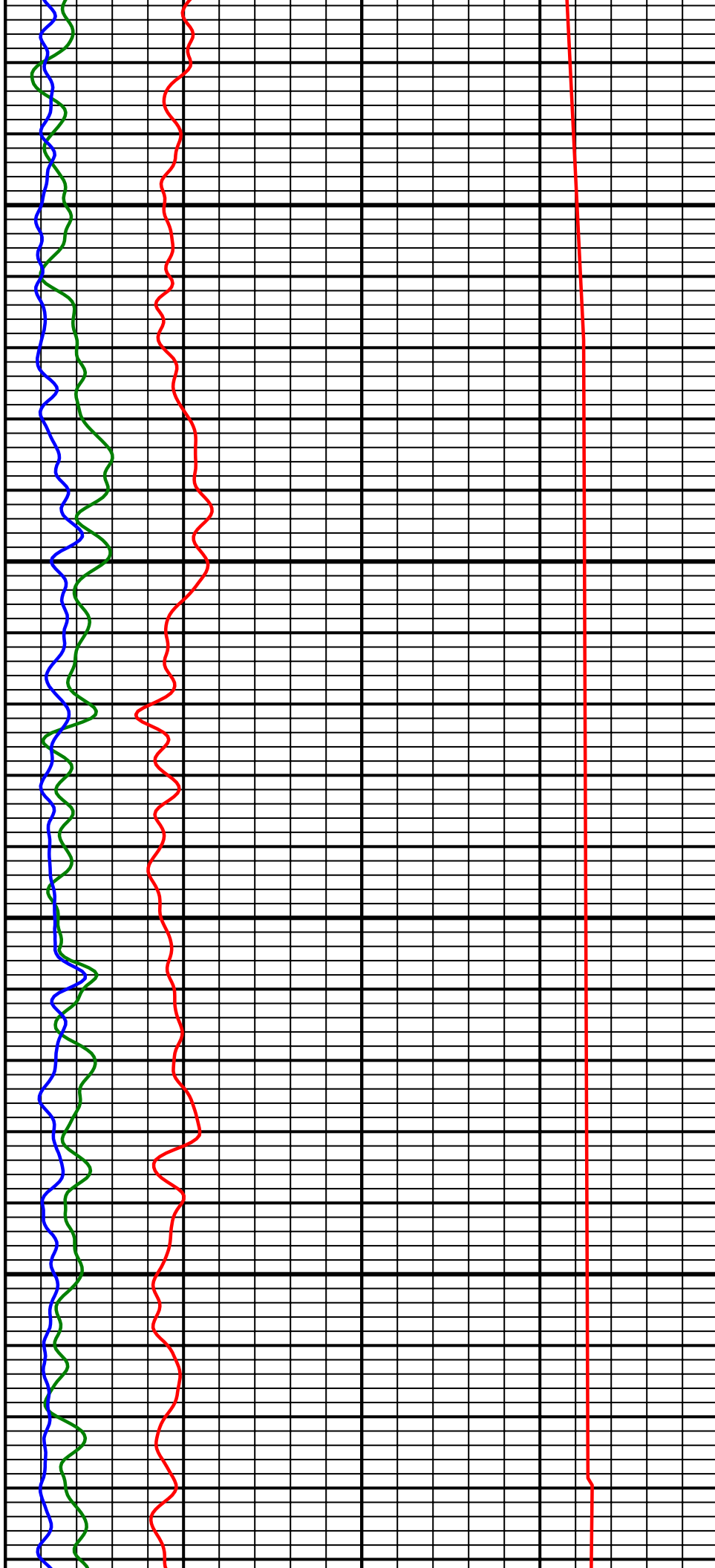
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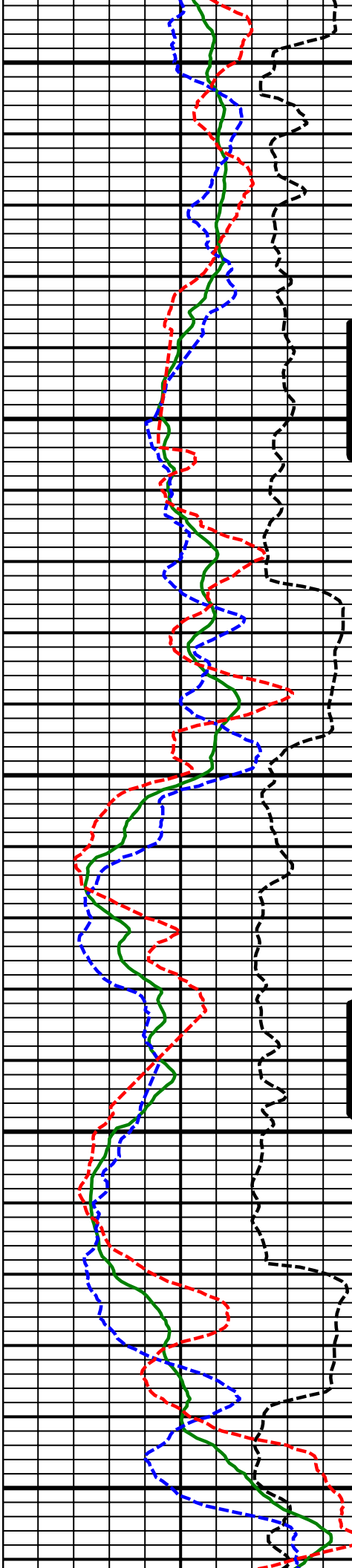




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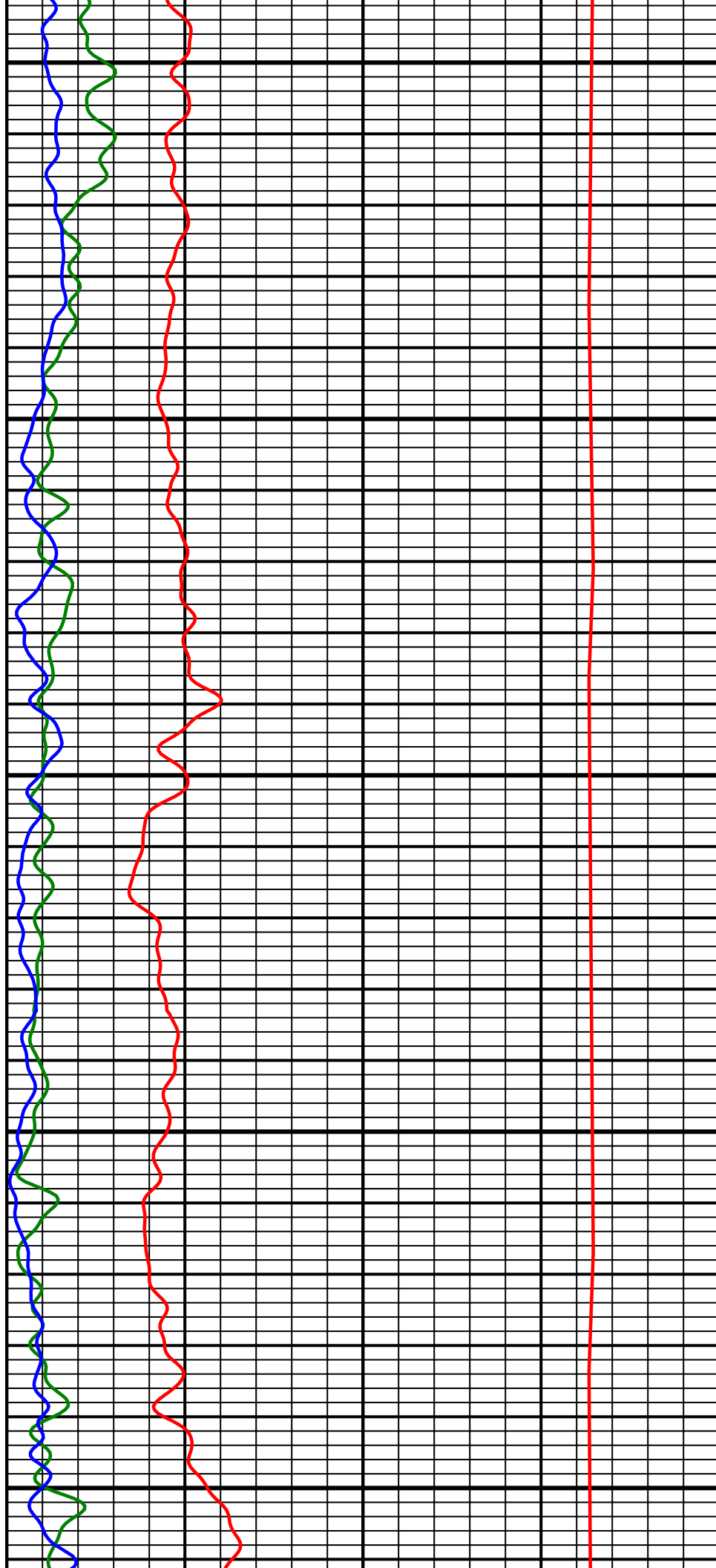


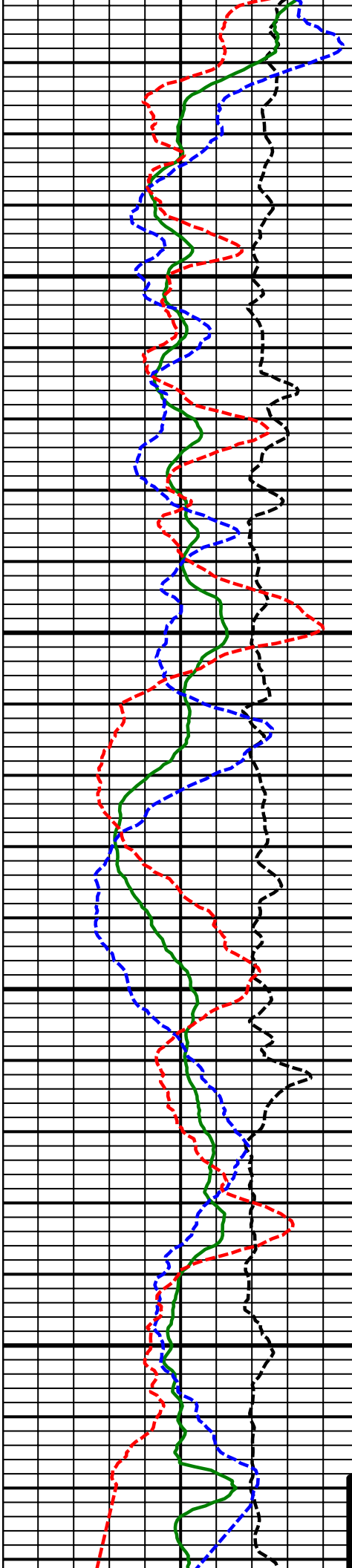


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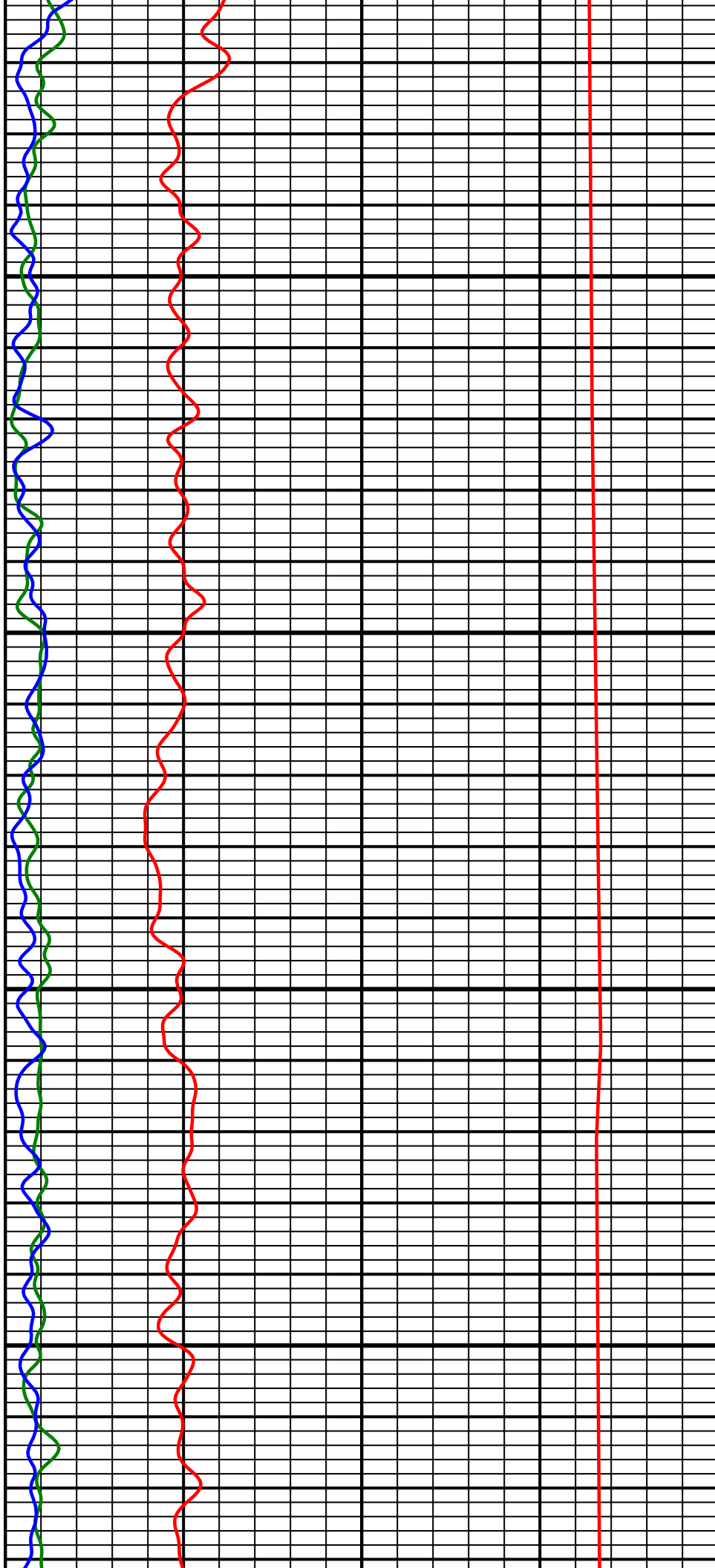
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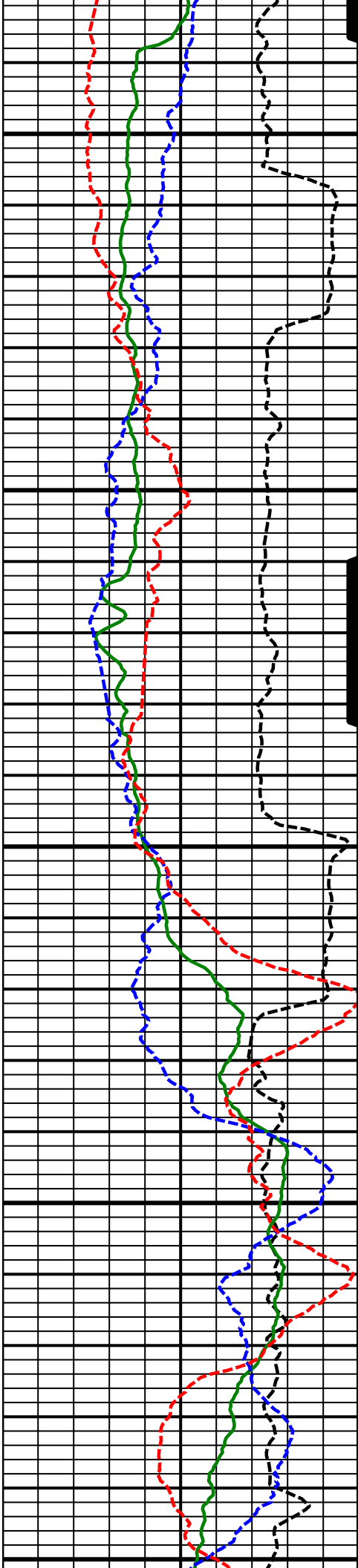




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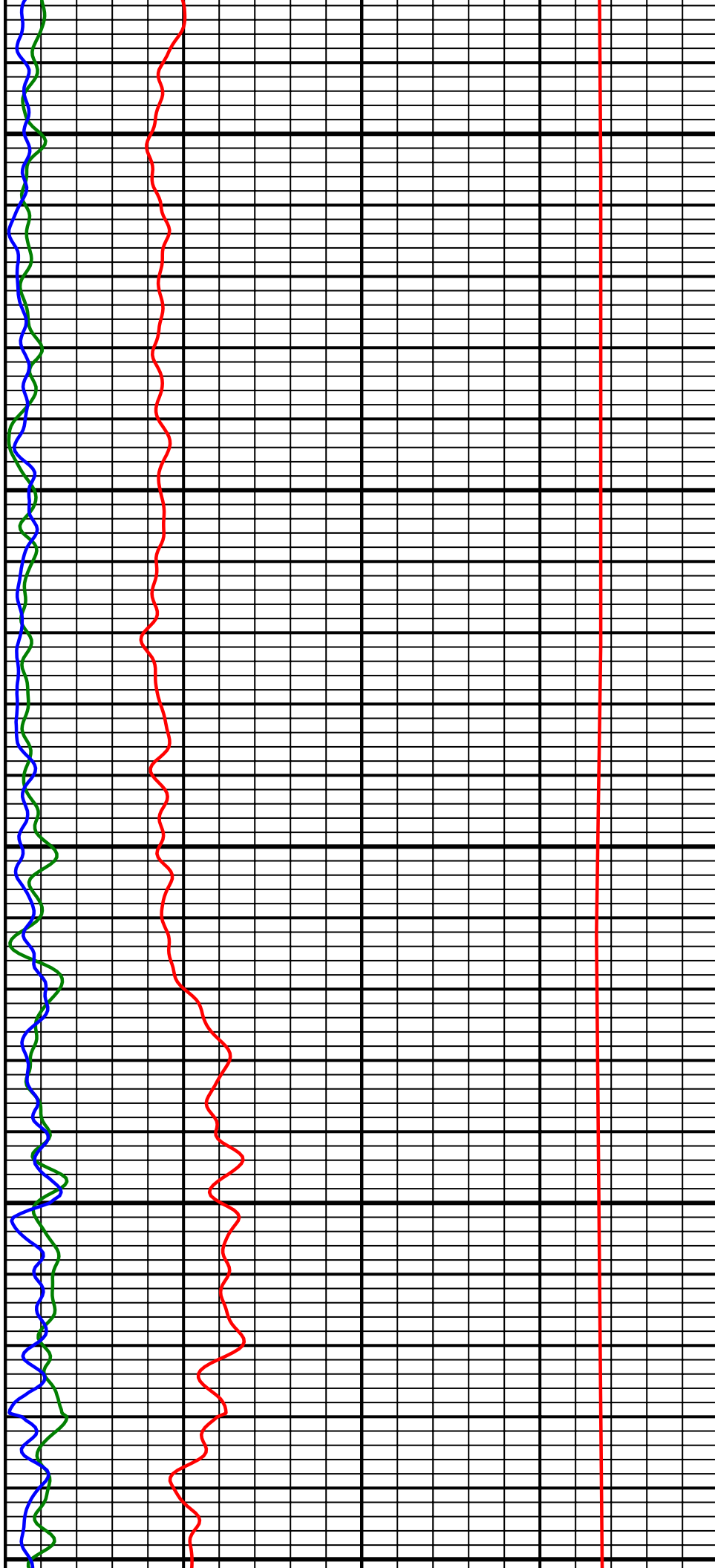
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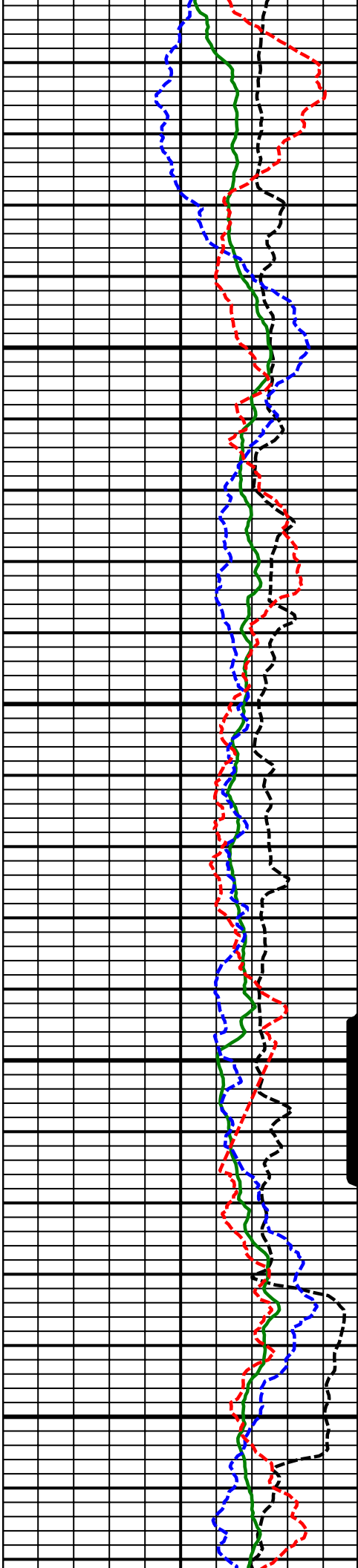




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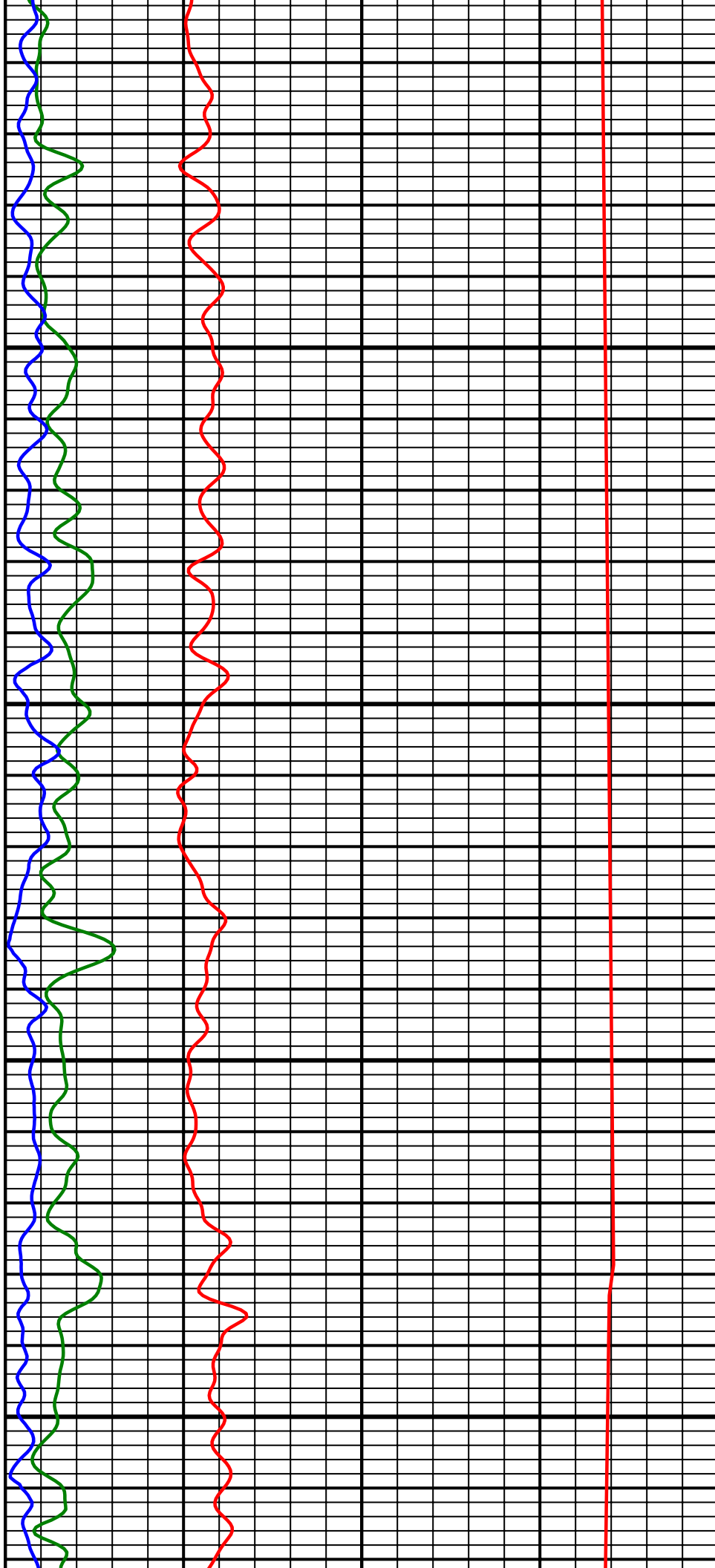
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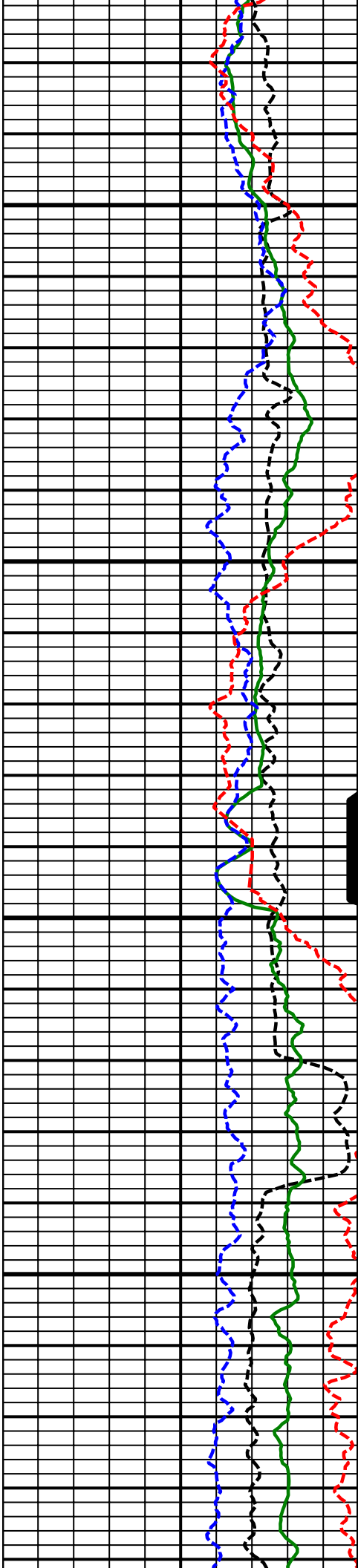




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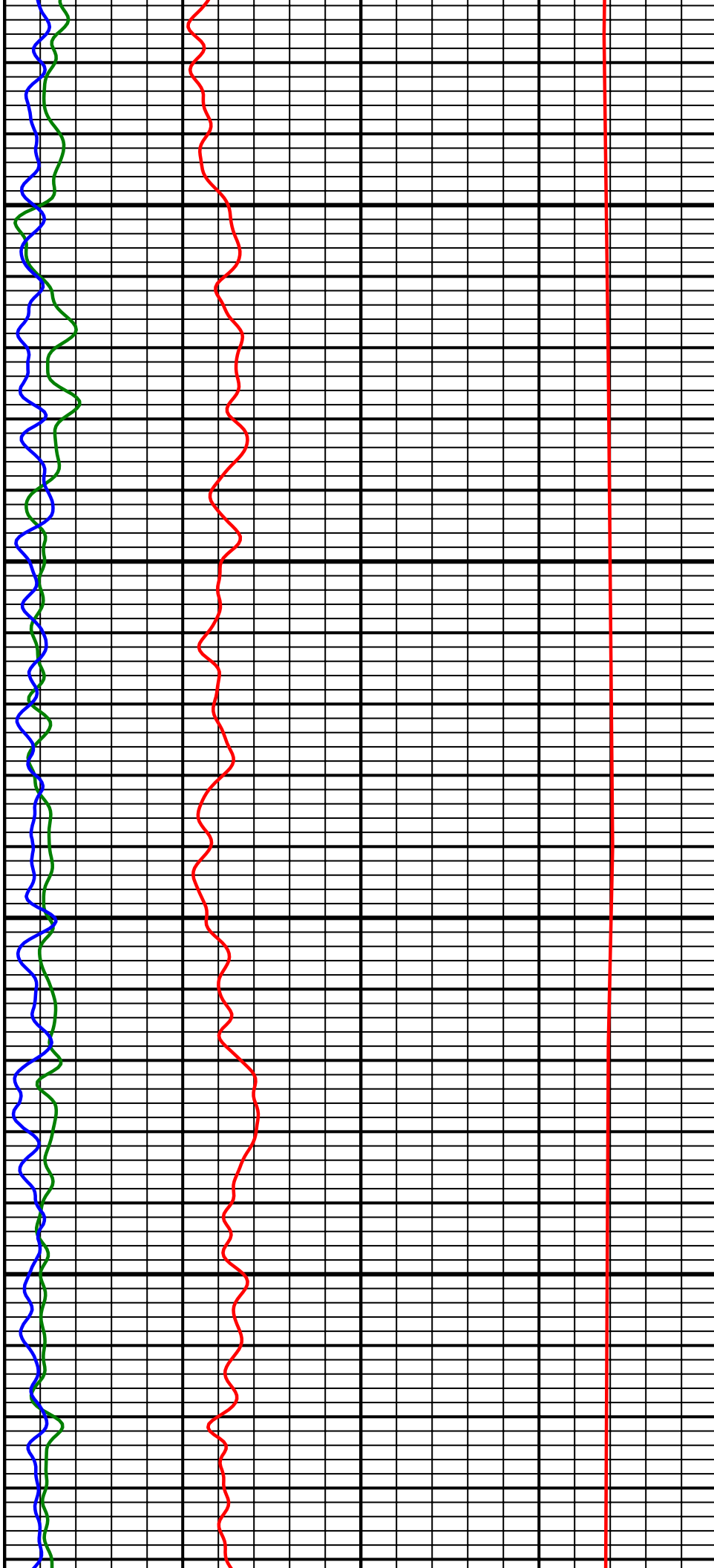
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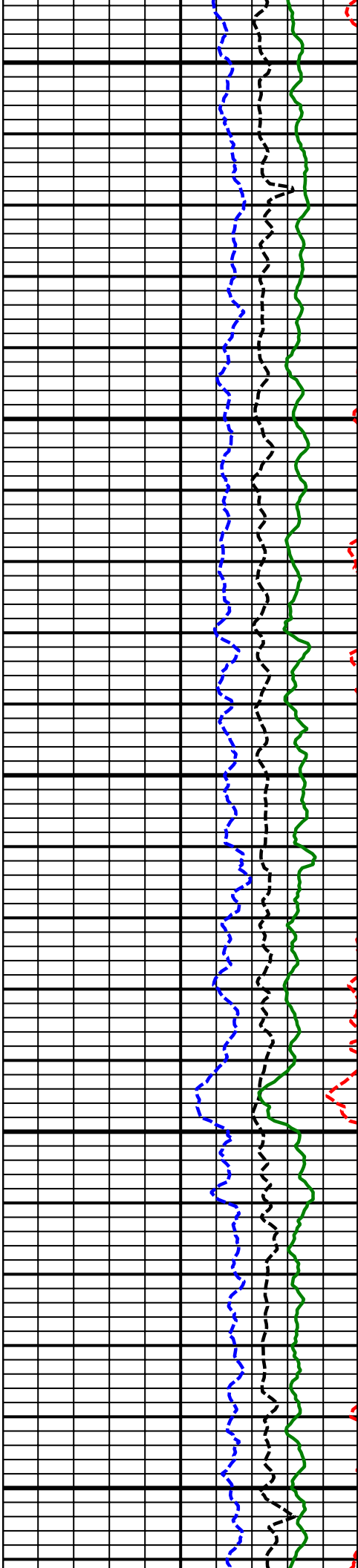




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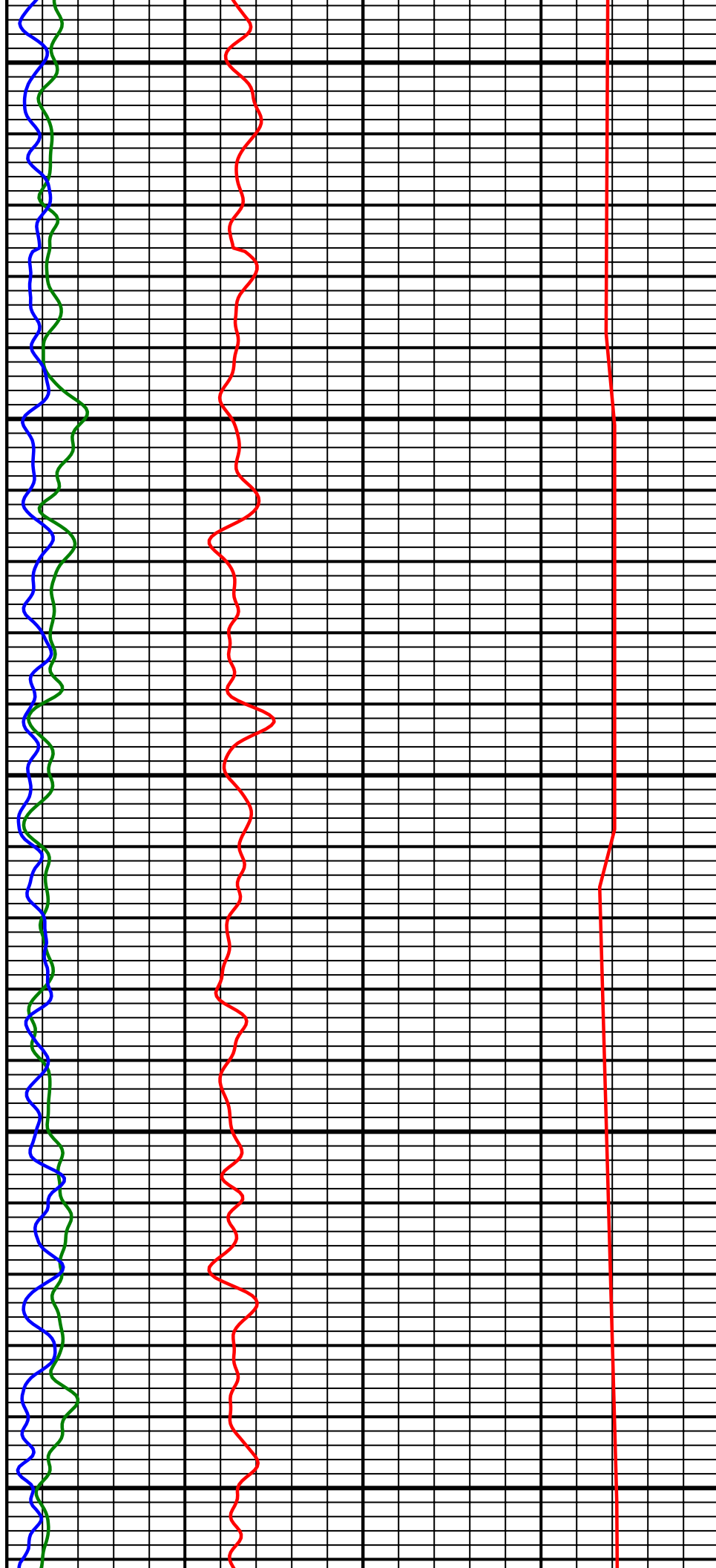


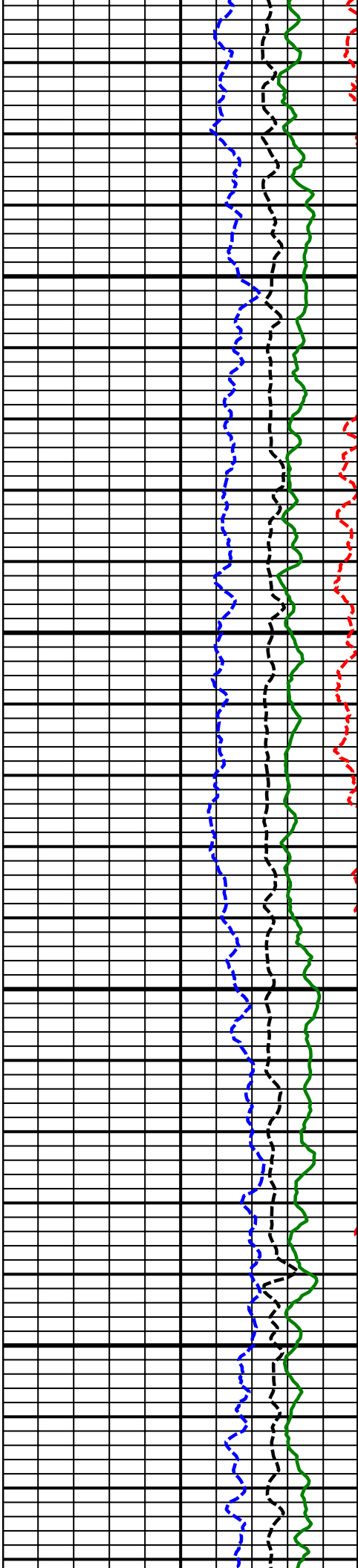


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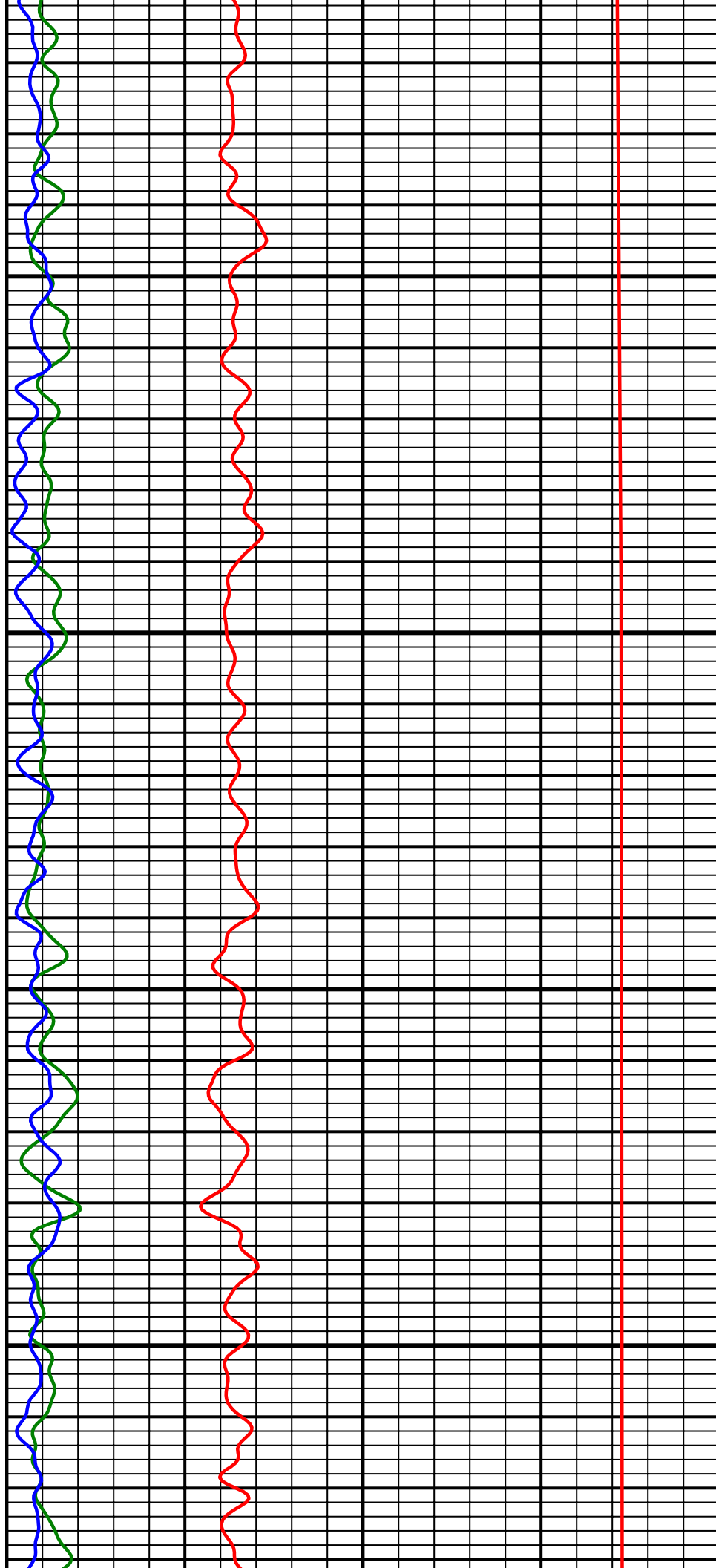
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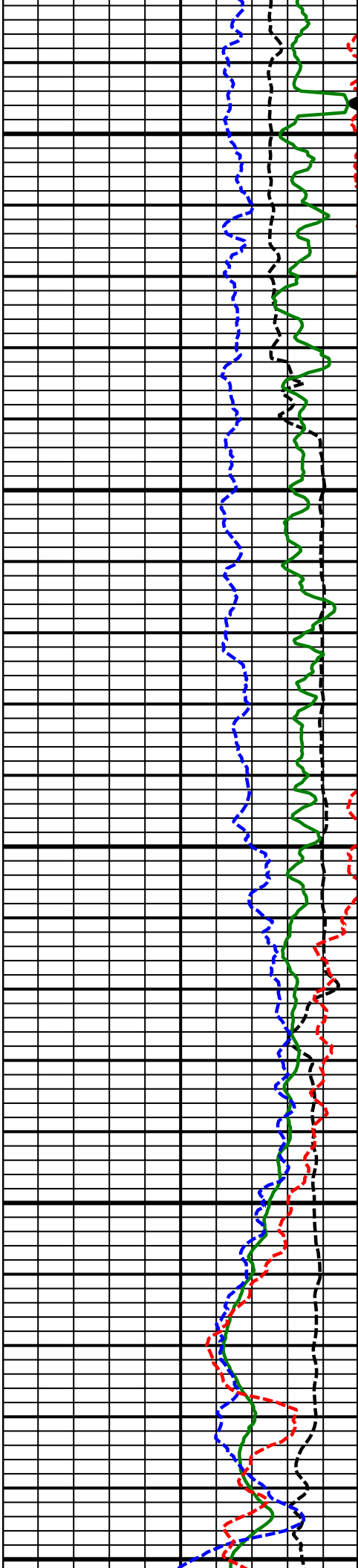




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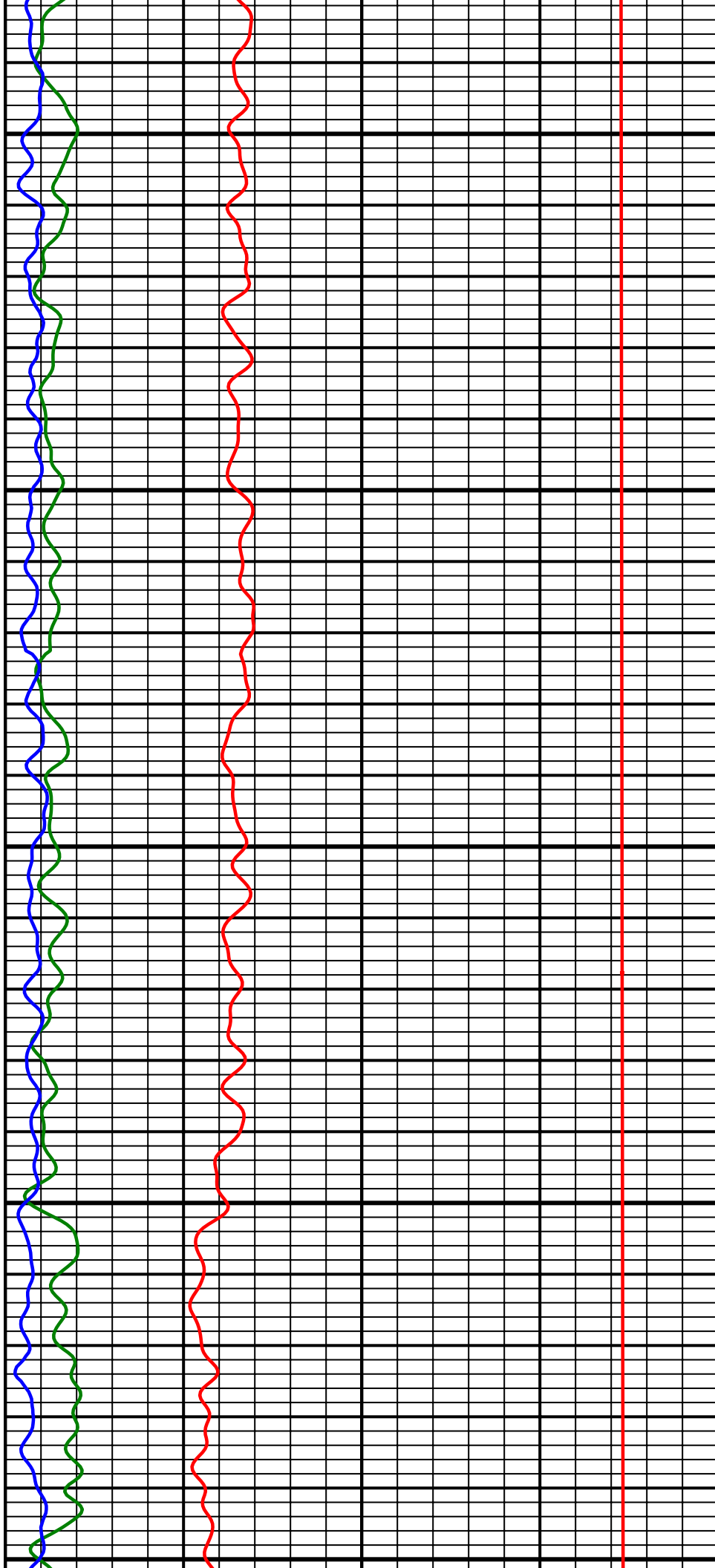
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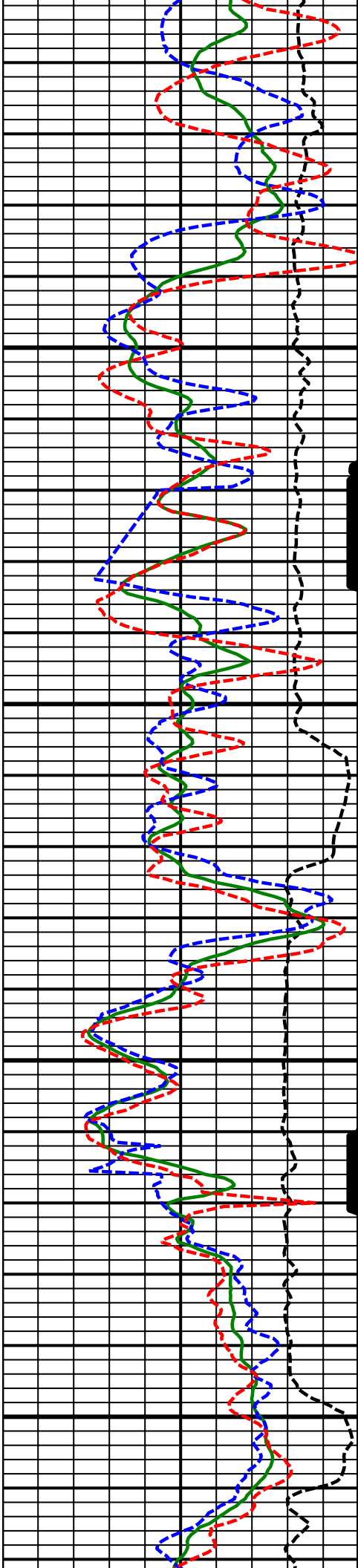




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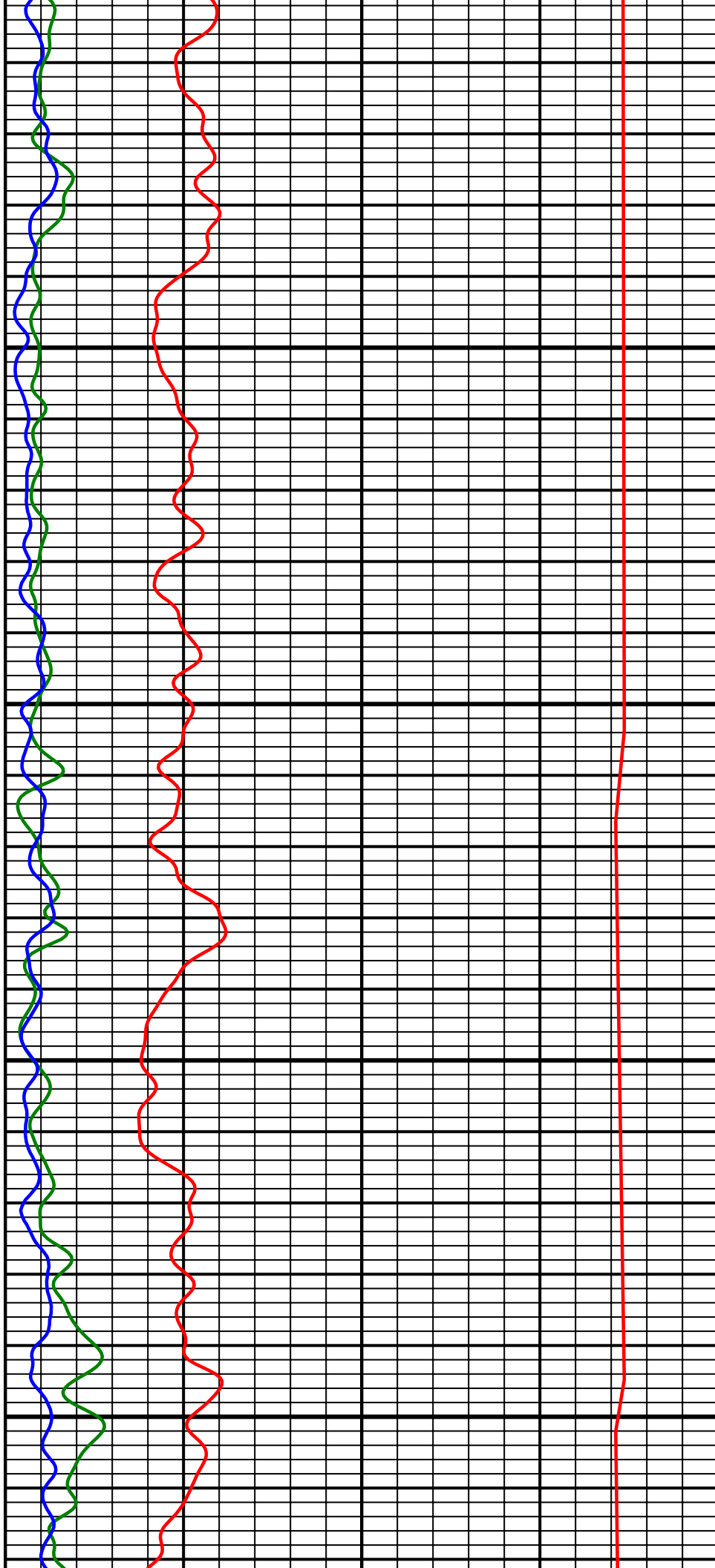
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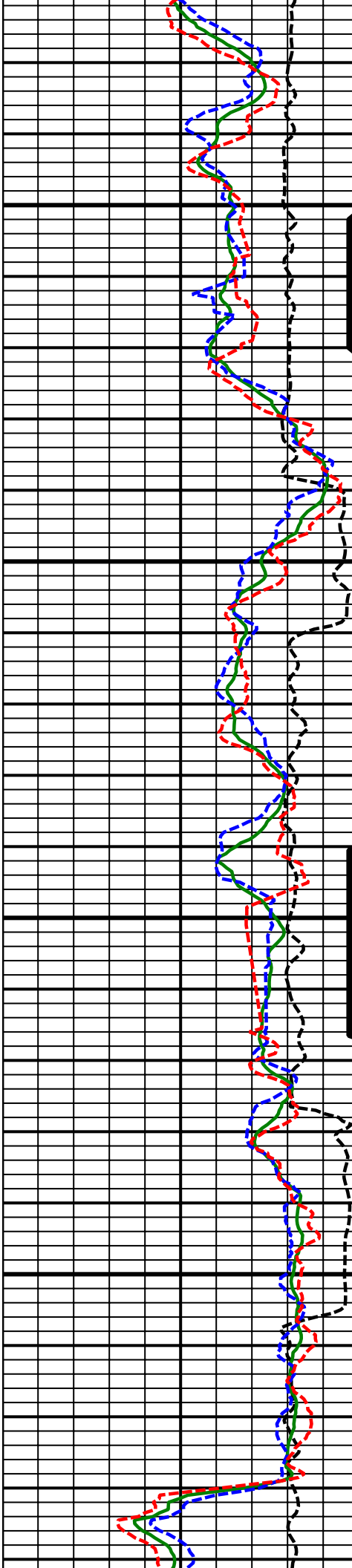




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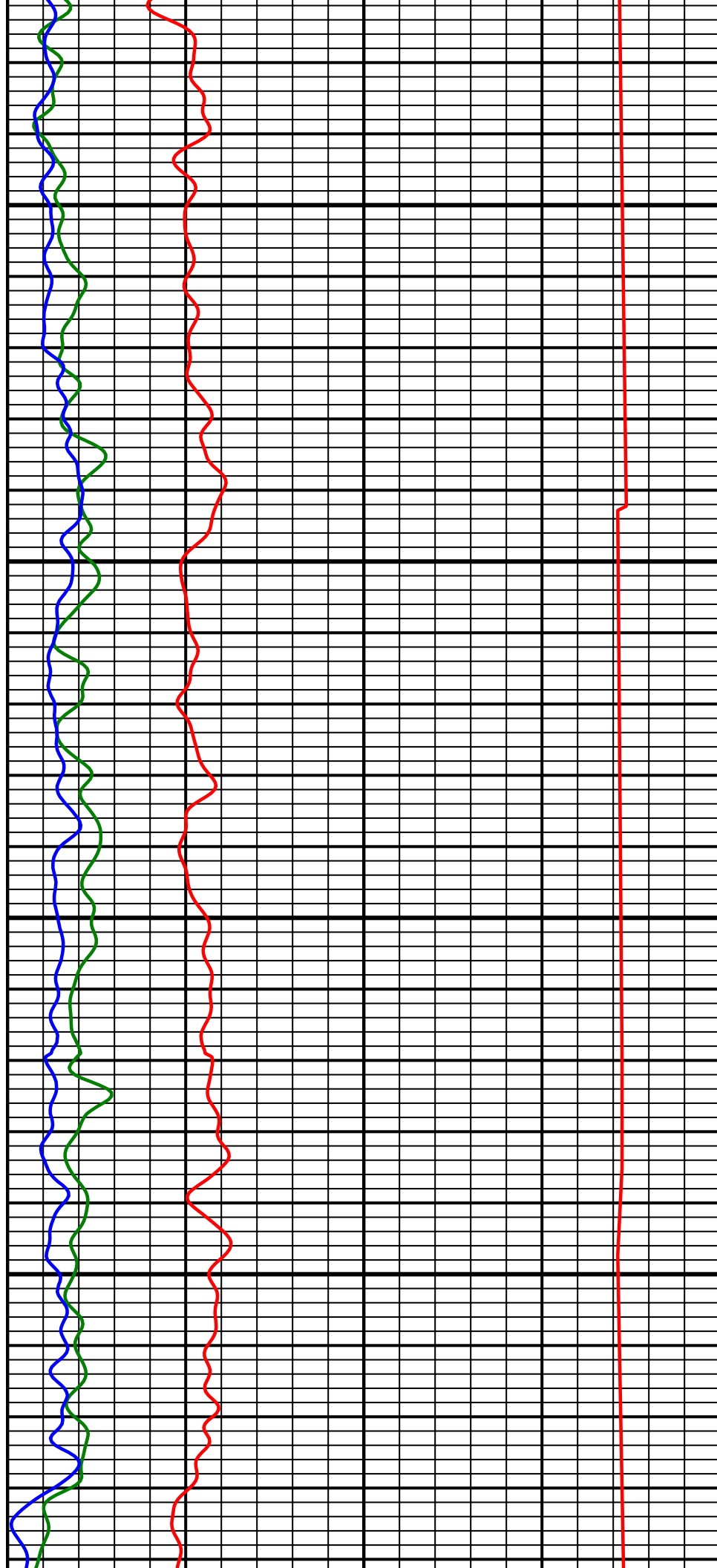
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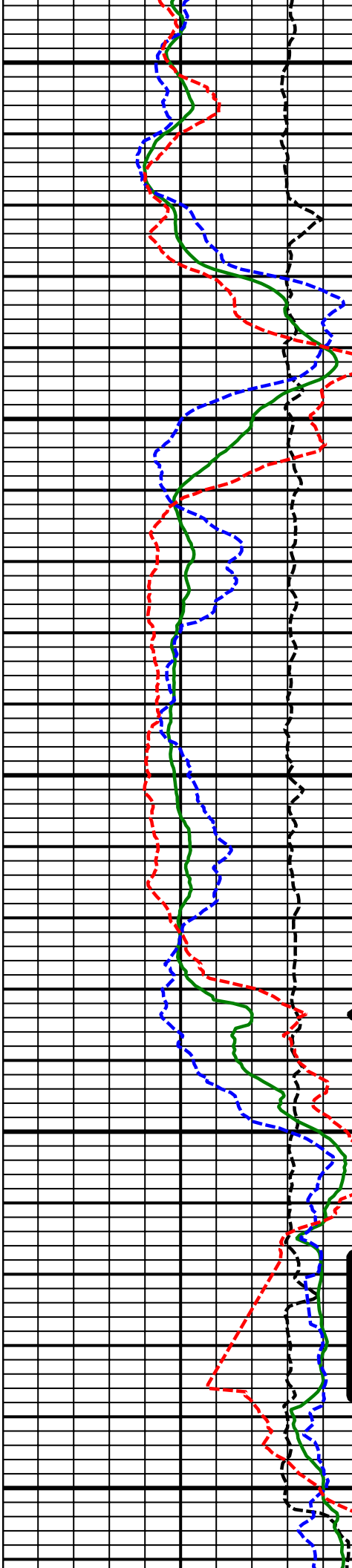




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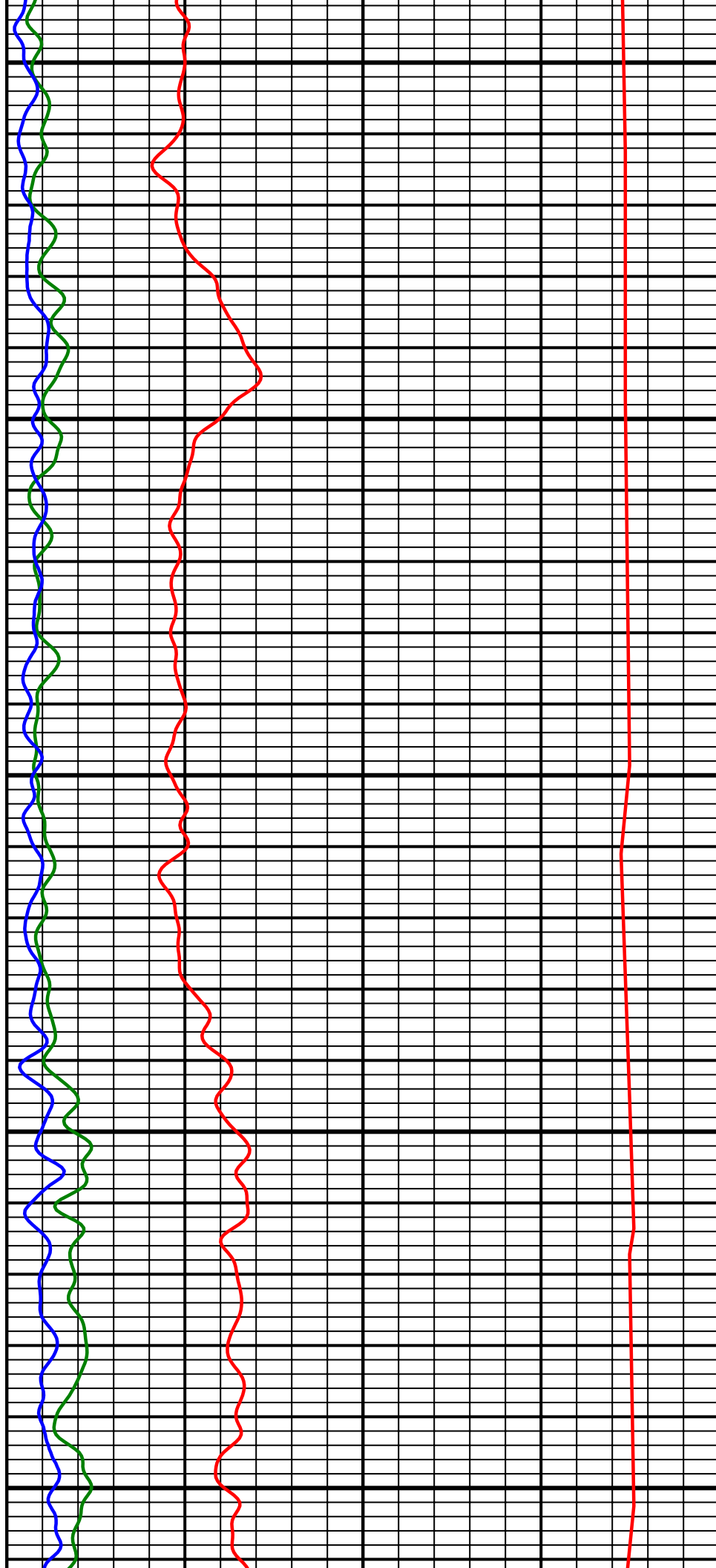


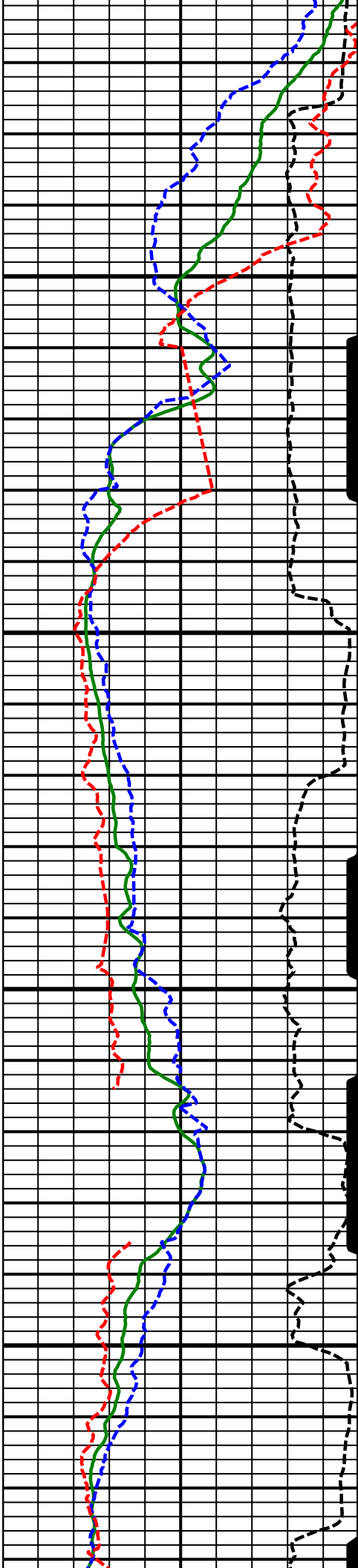


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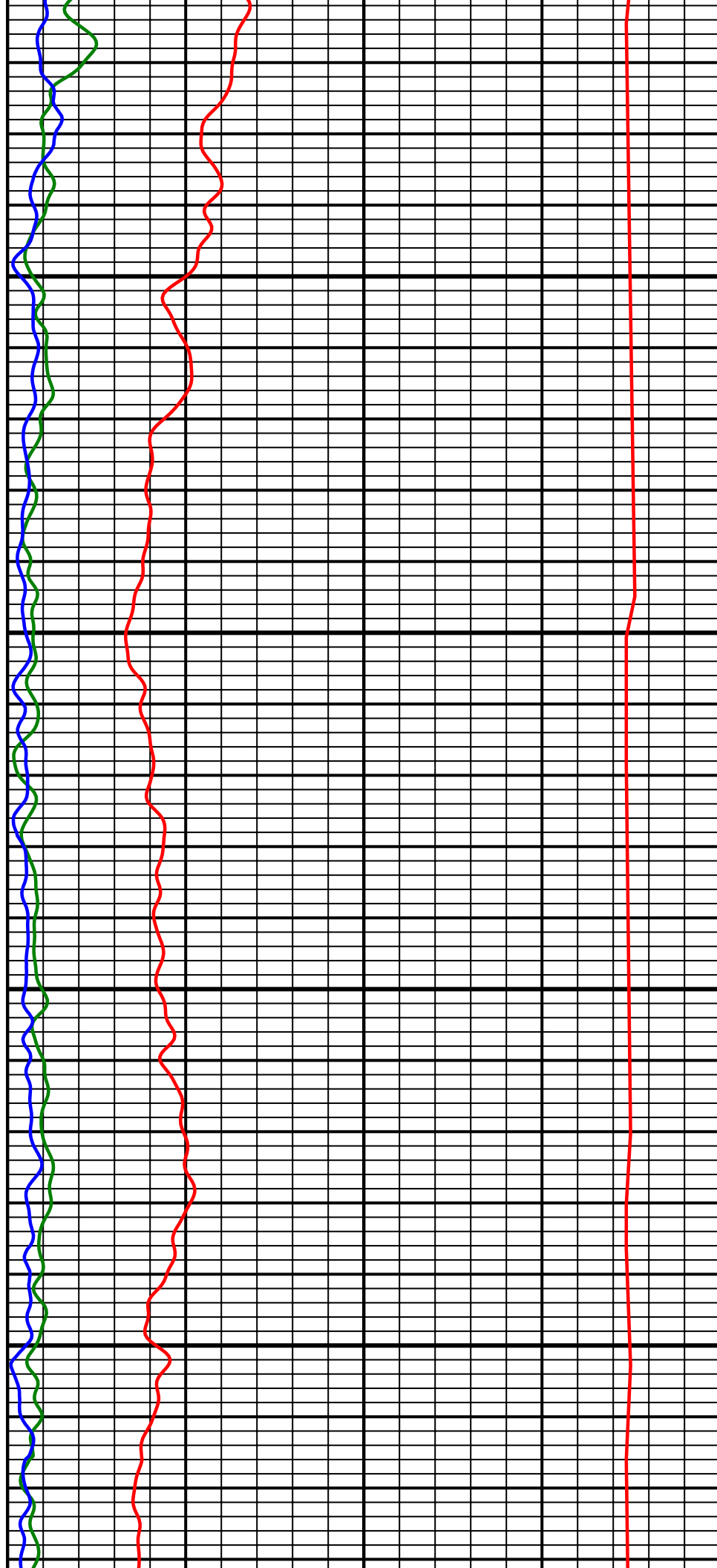
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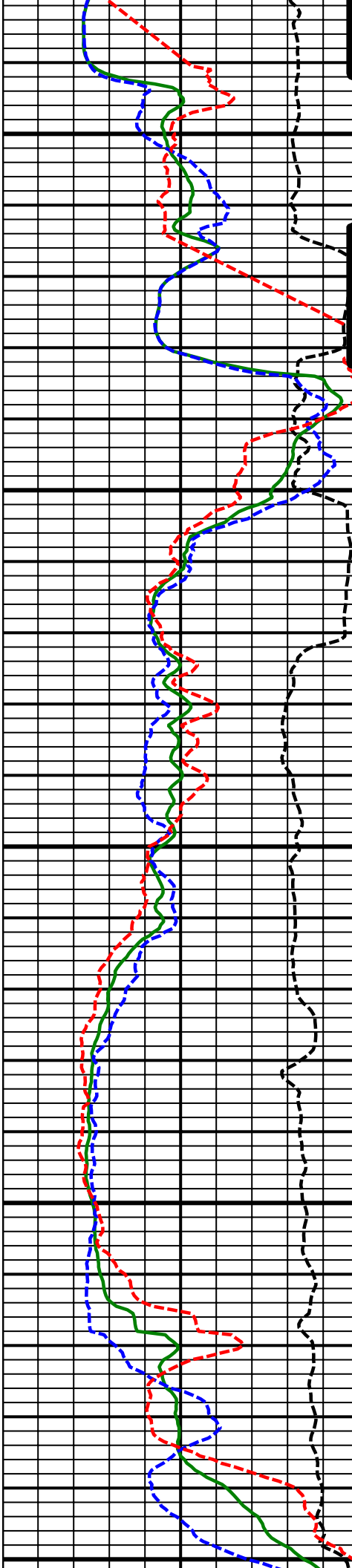




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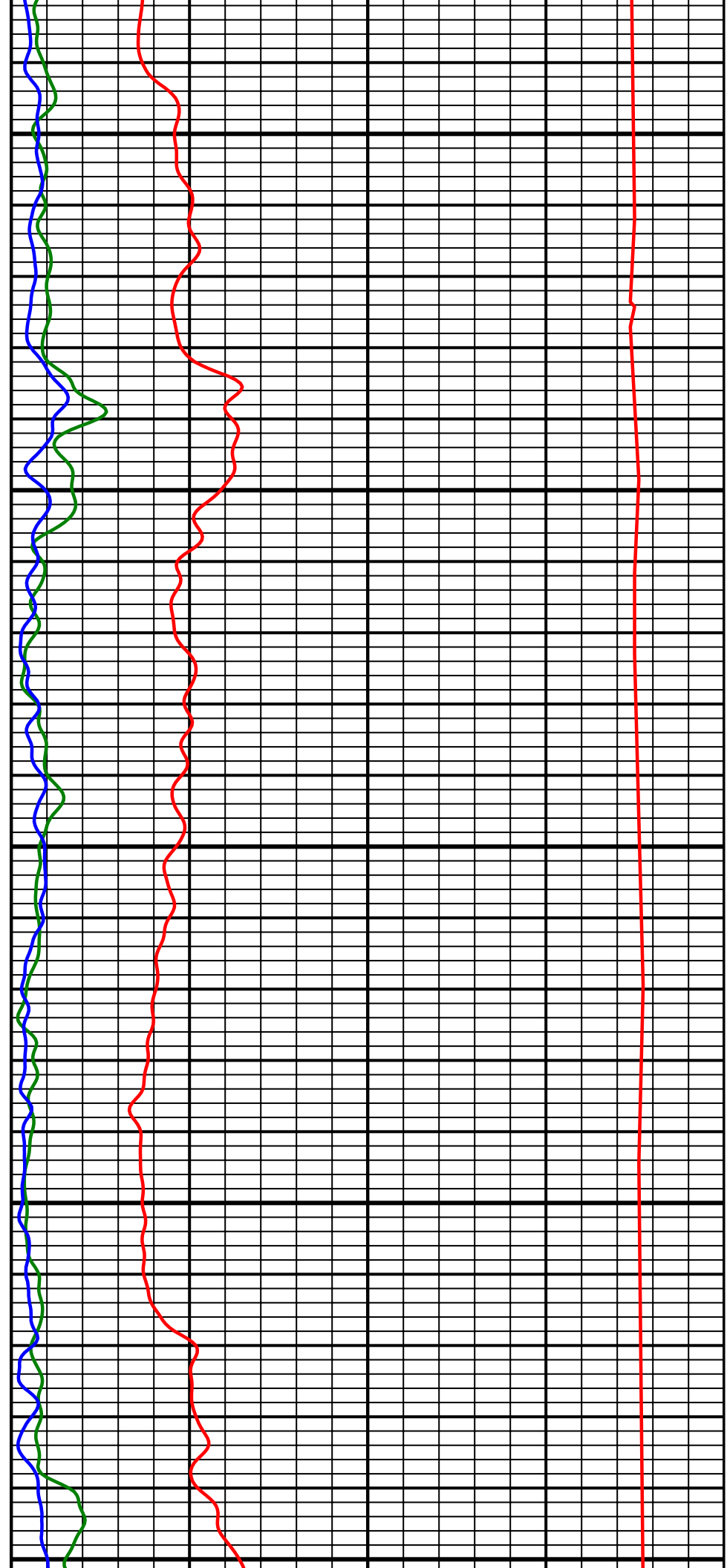
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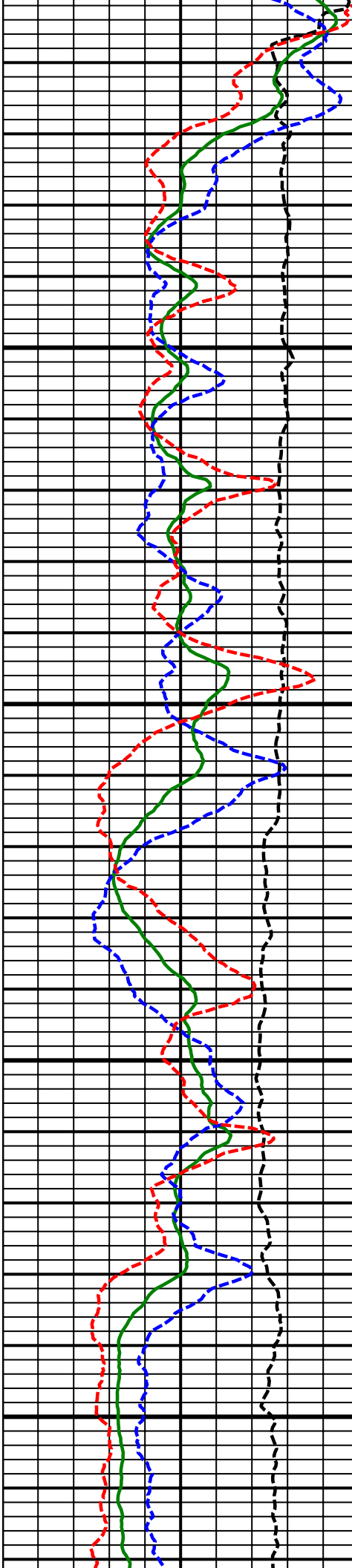




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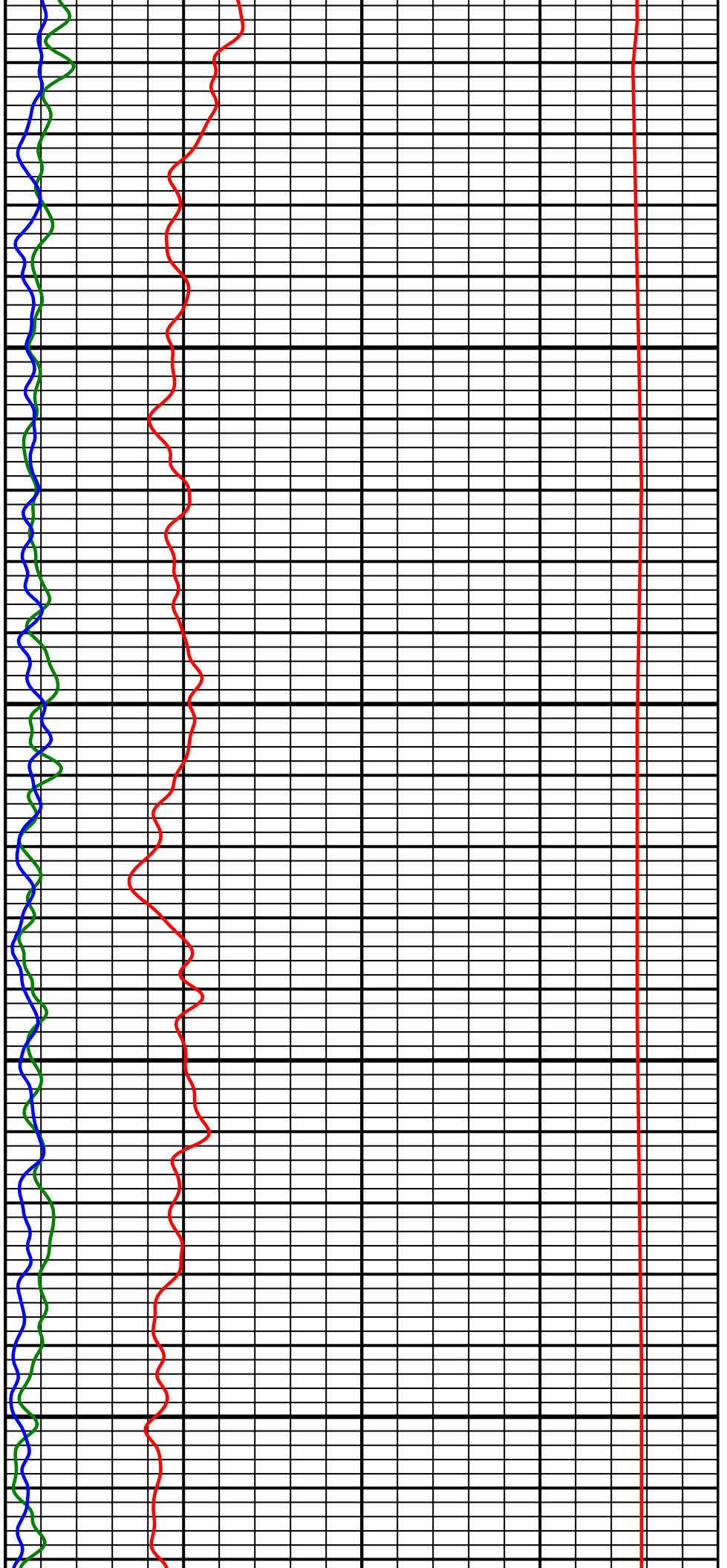
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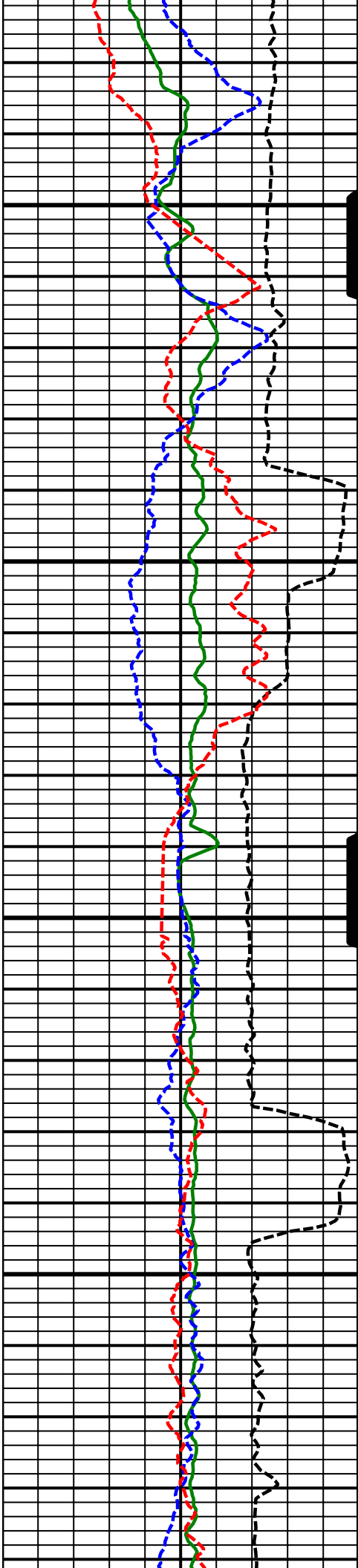




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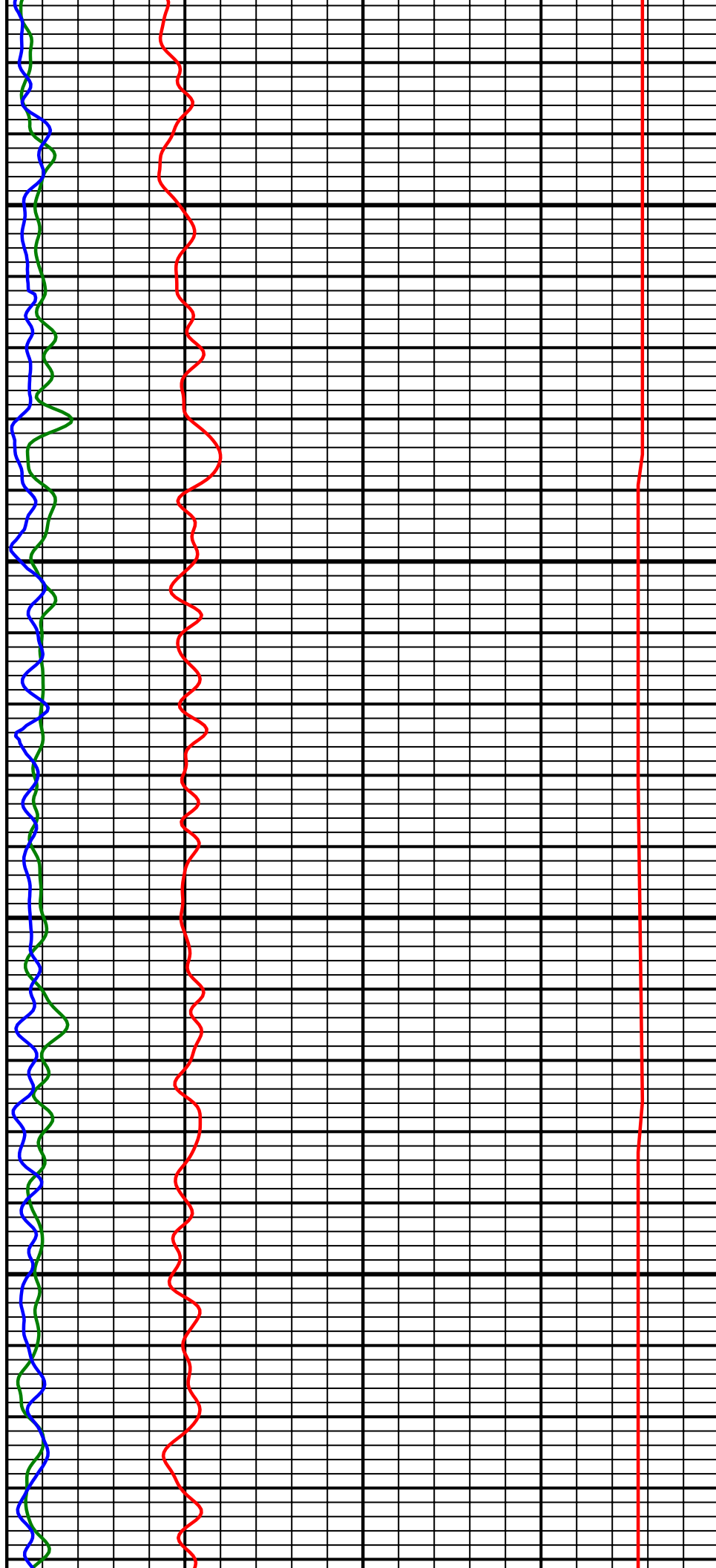
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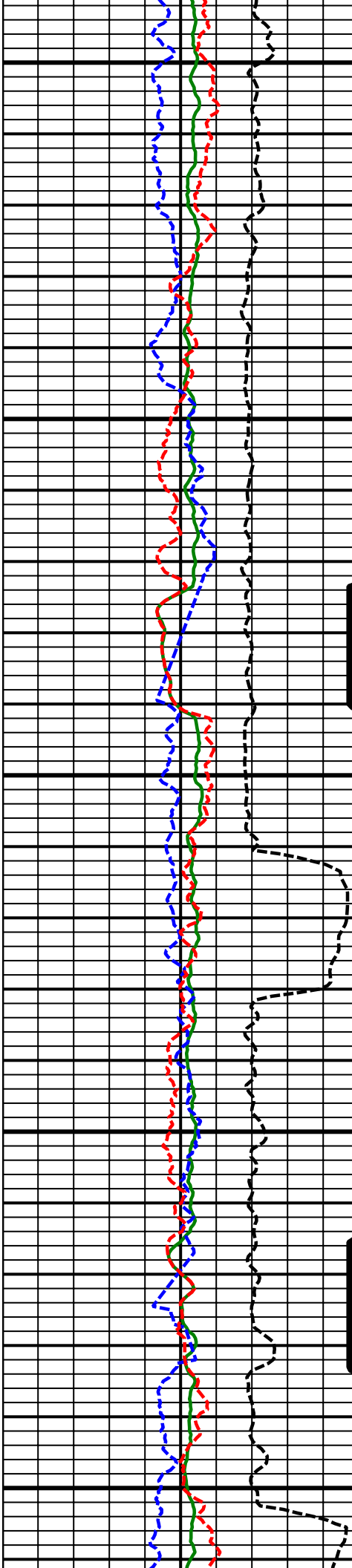




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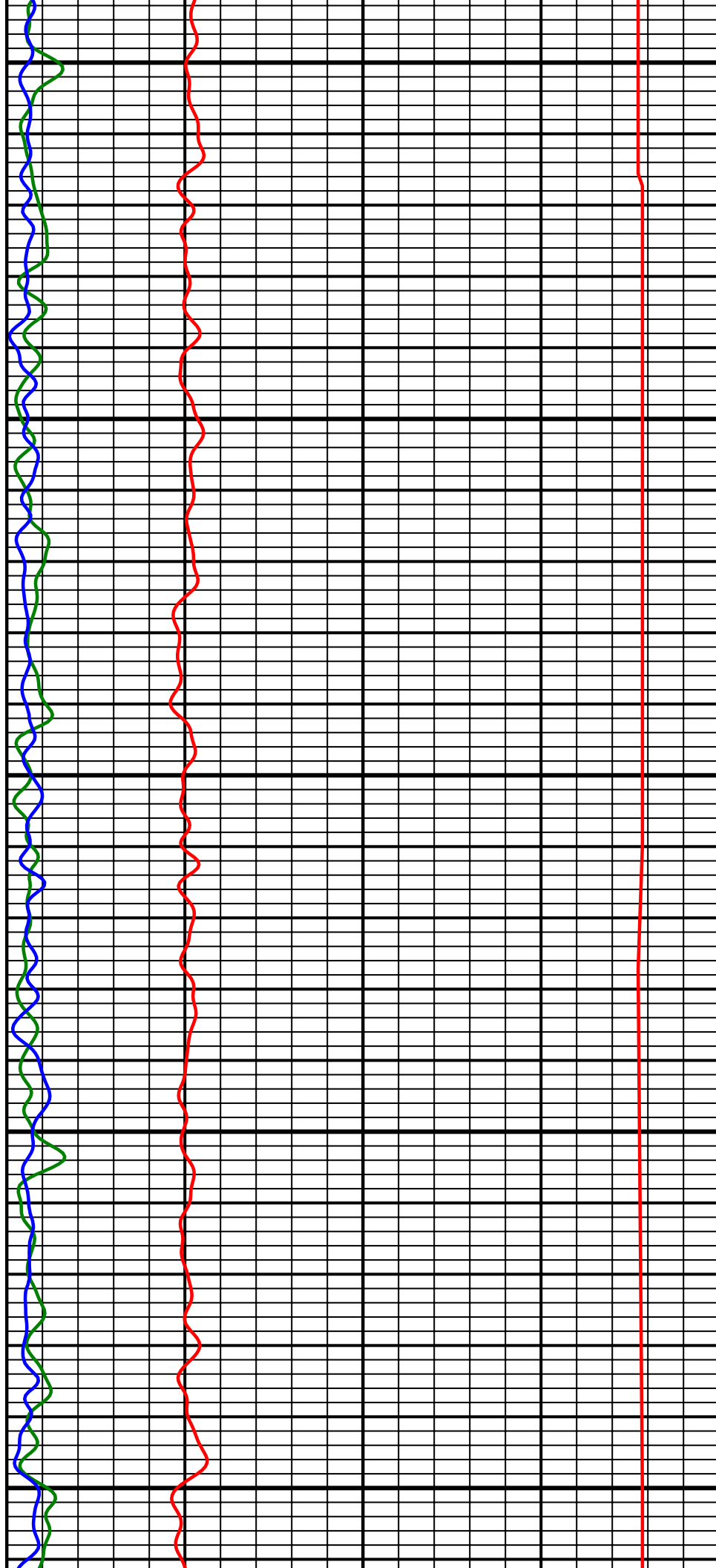


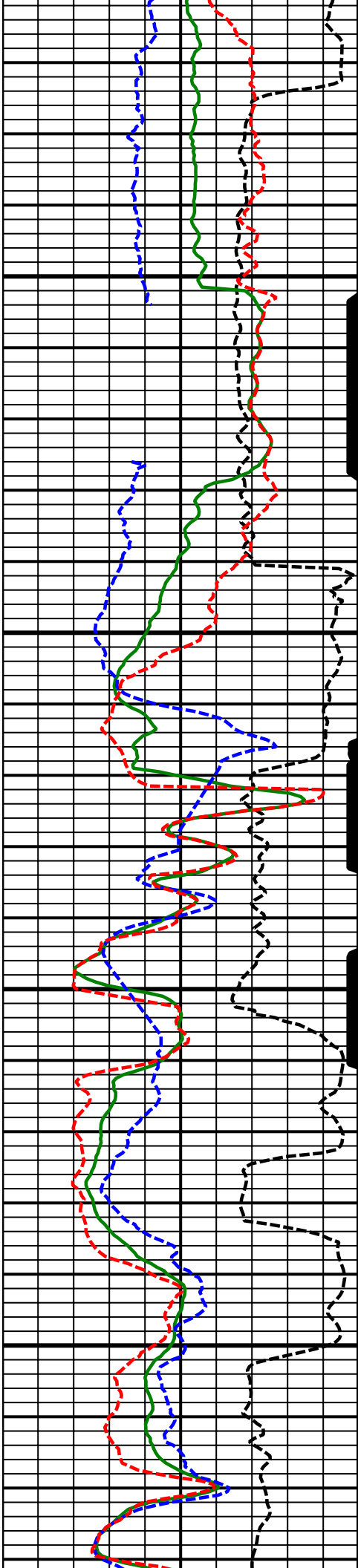


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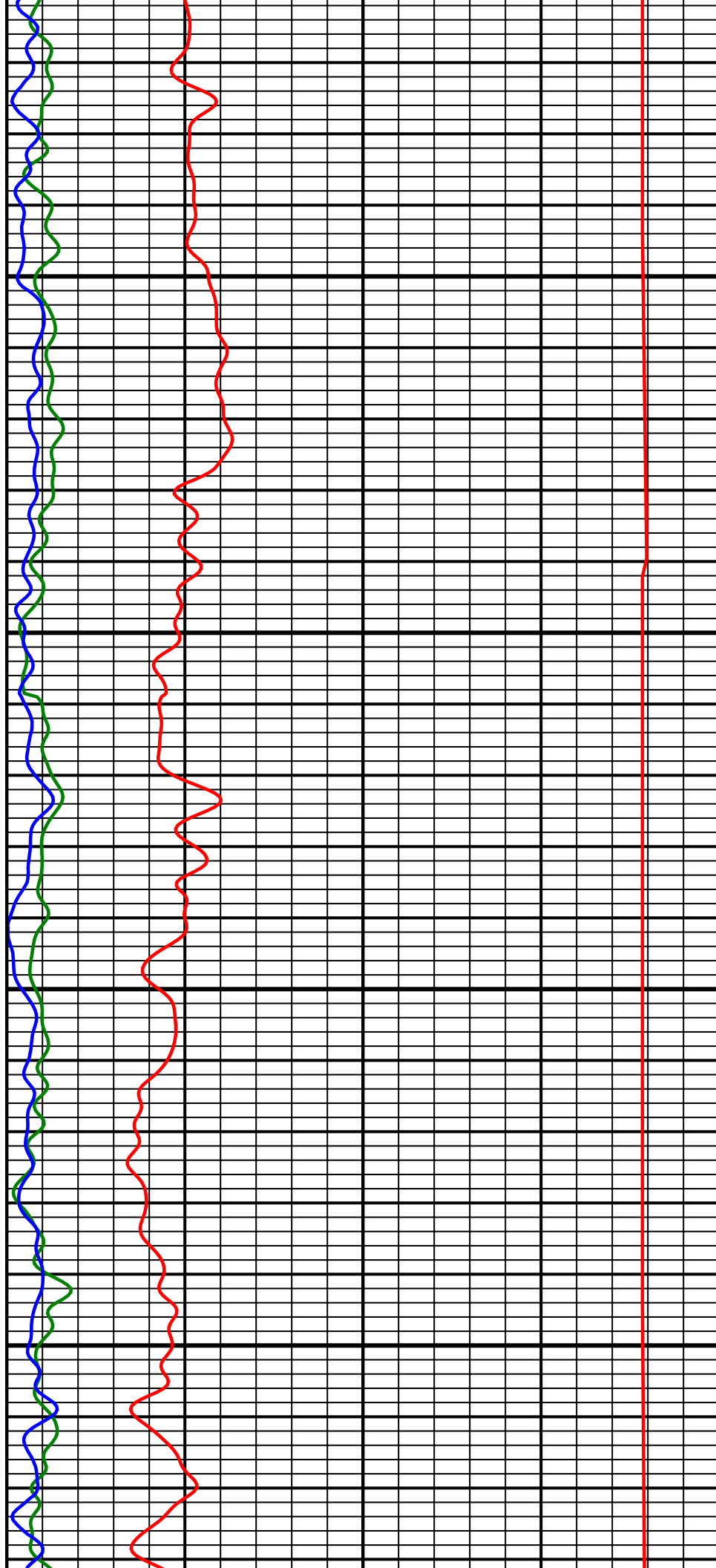
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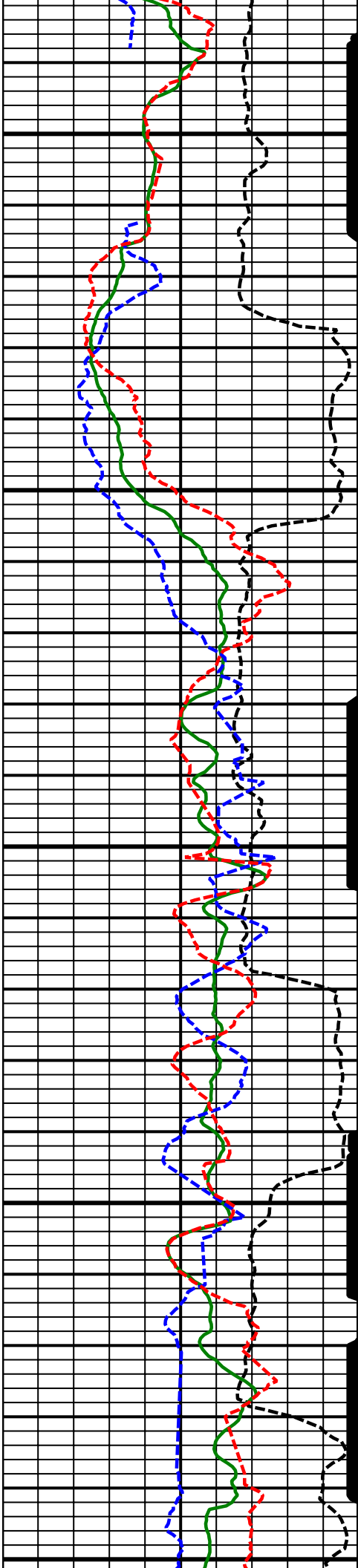




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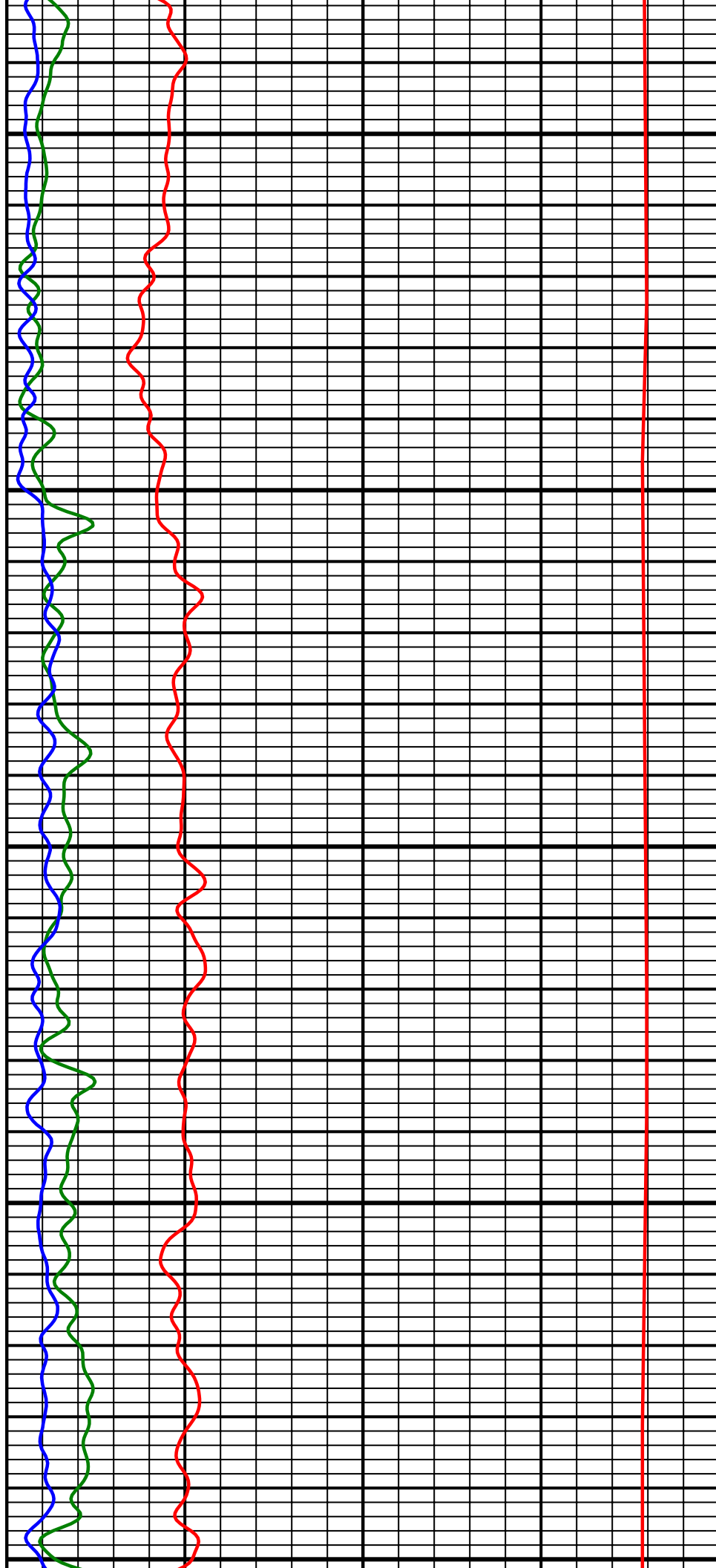
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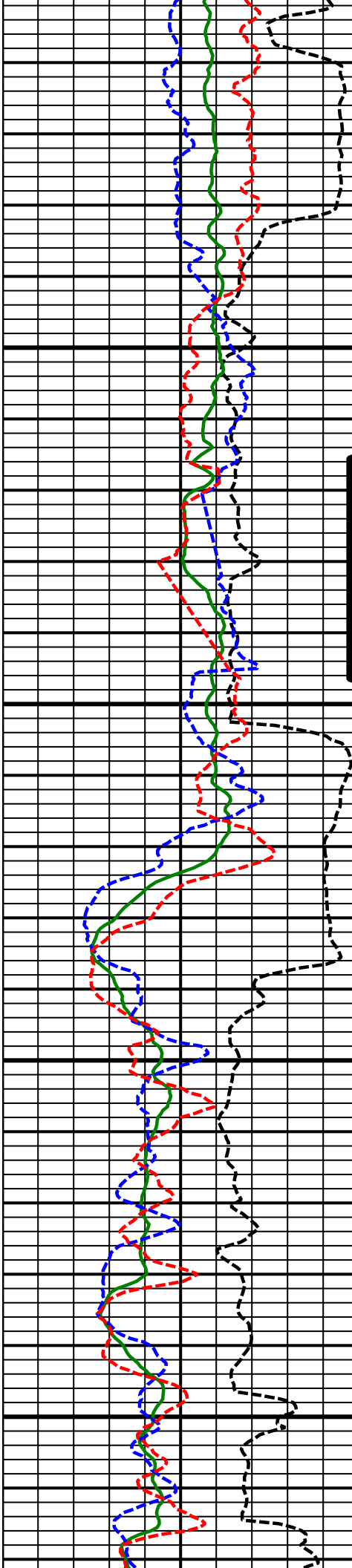




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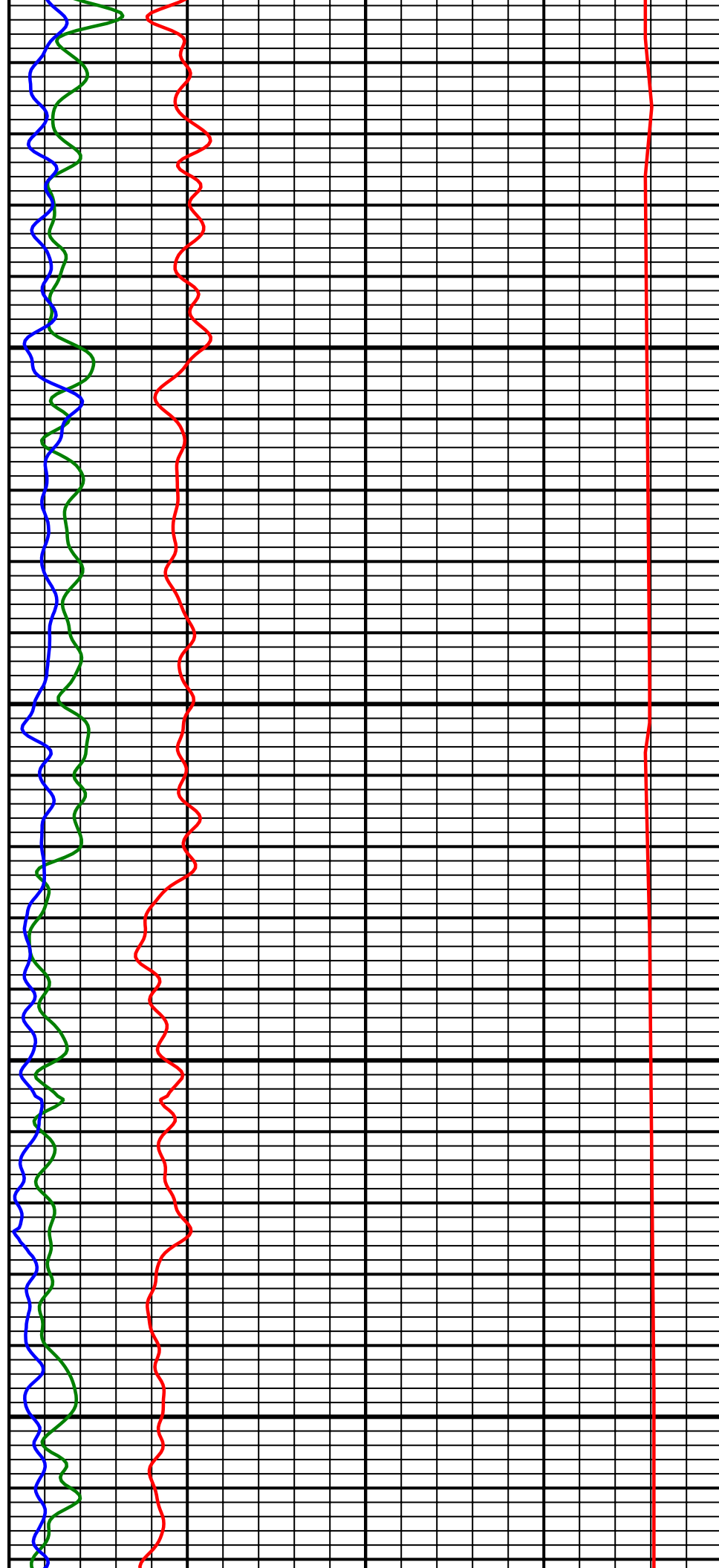
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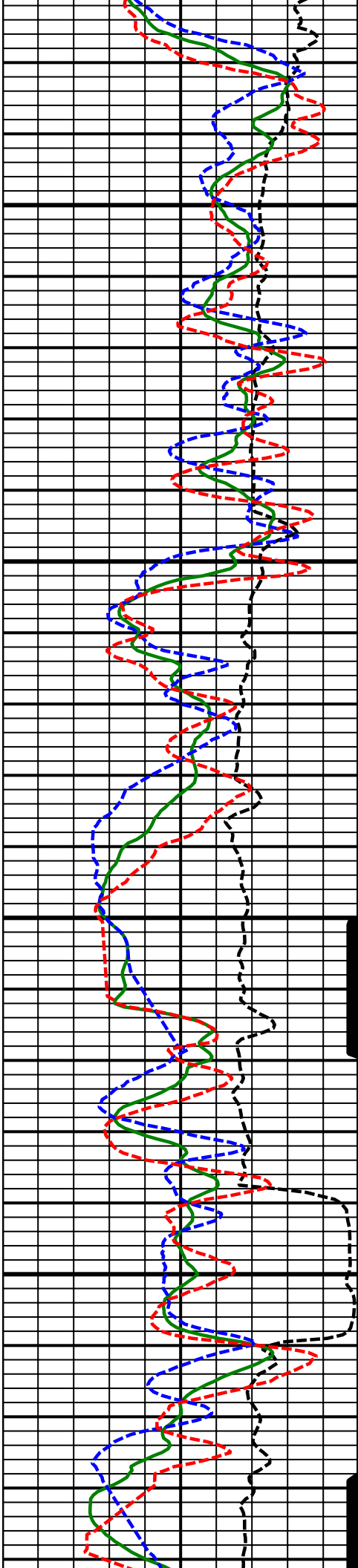




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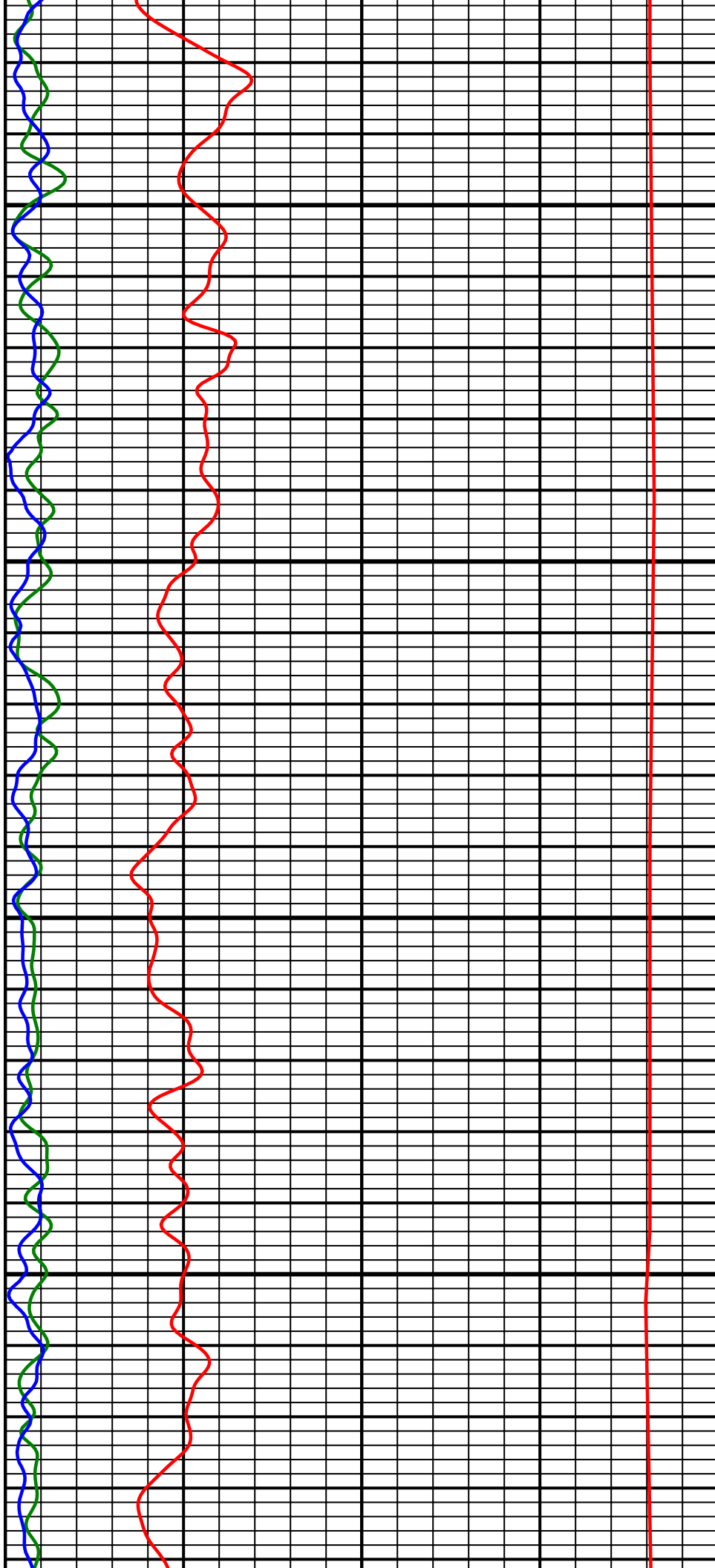
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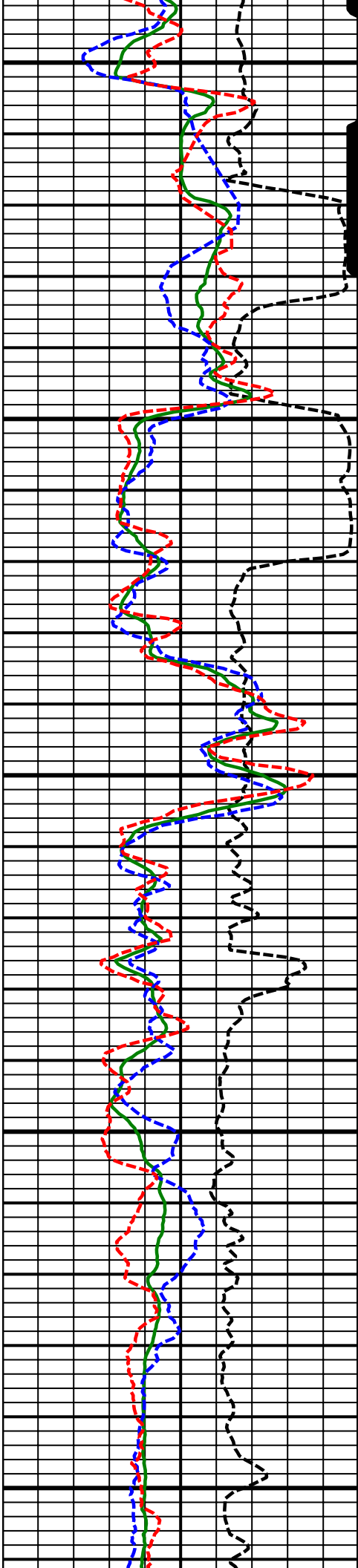




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12400
MD

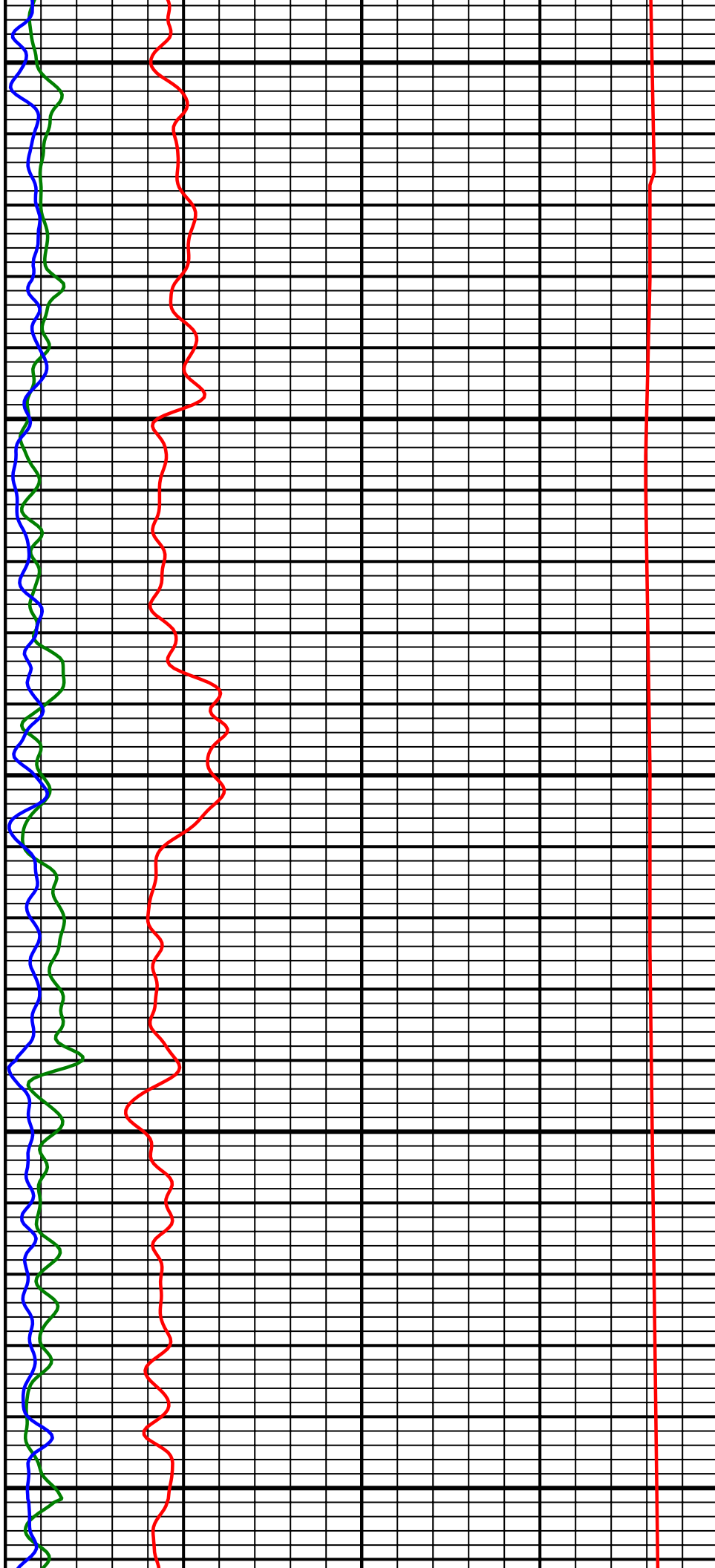


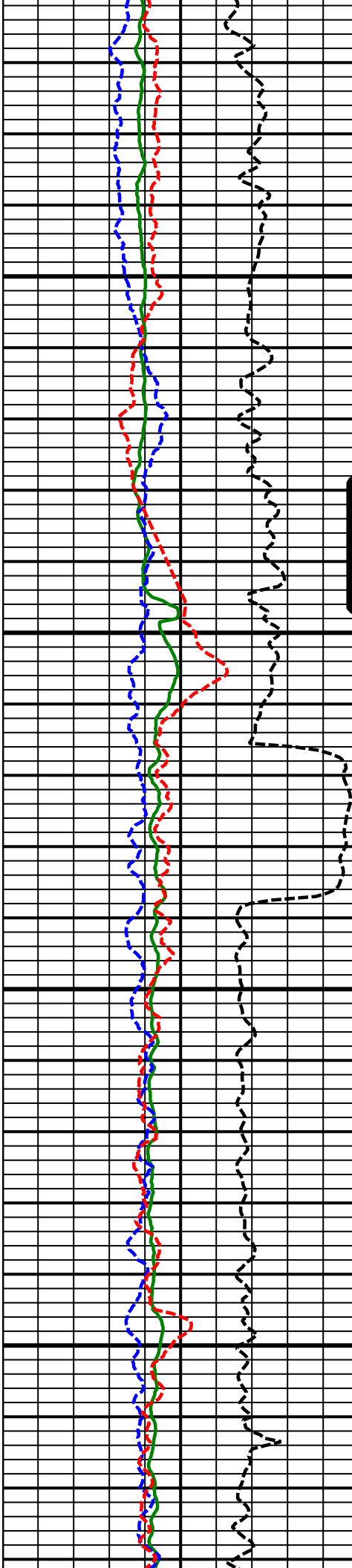


12500
MD

12600
MD

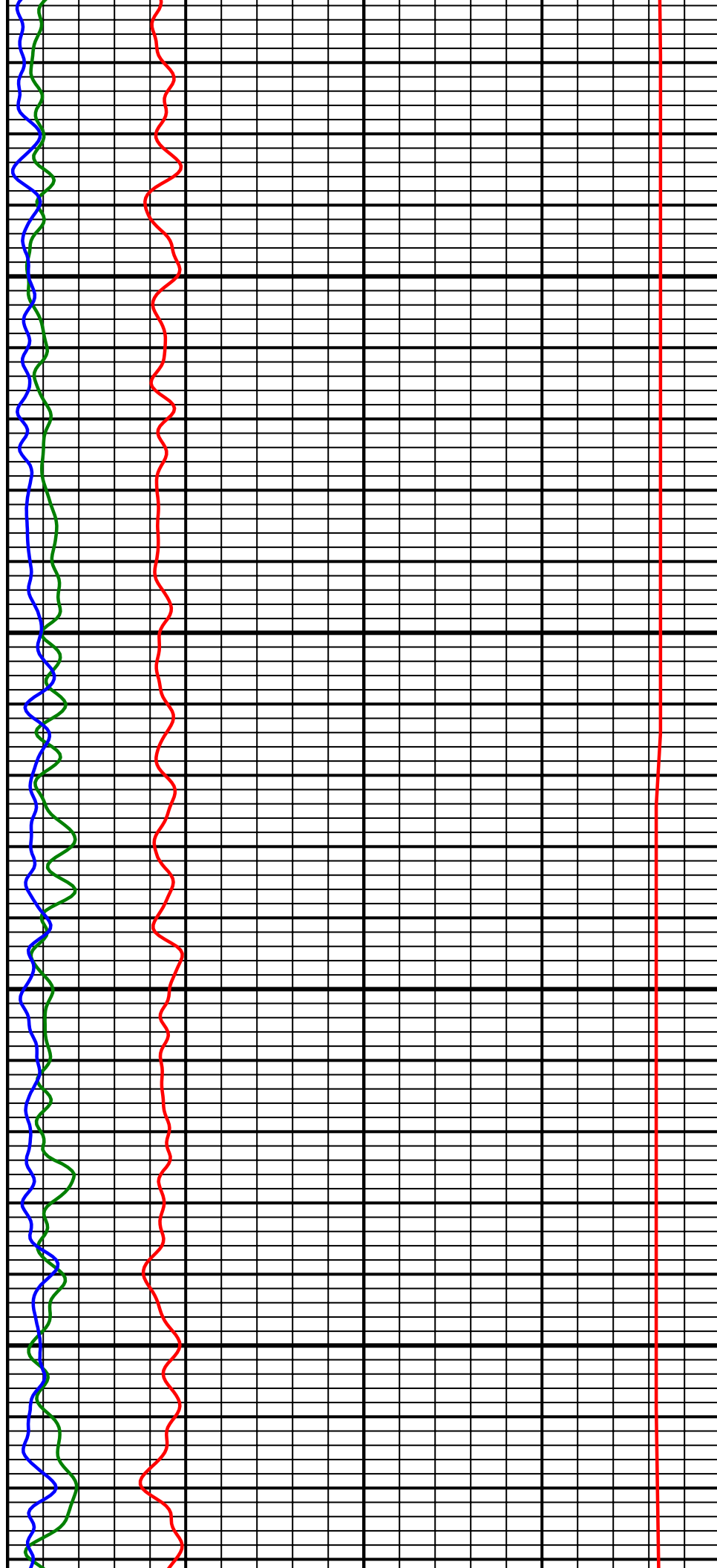
12700
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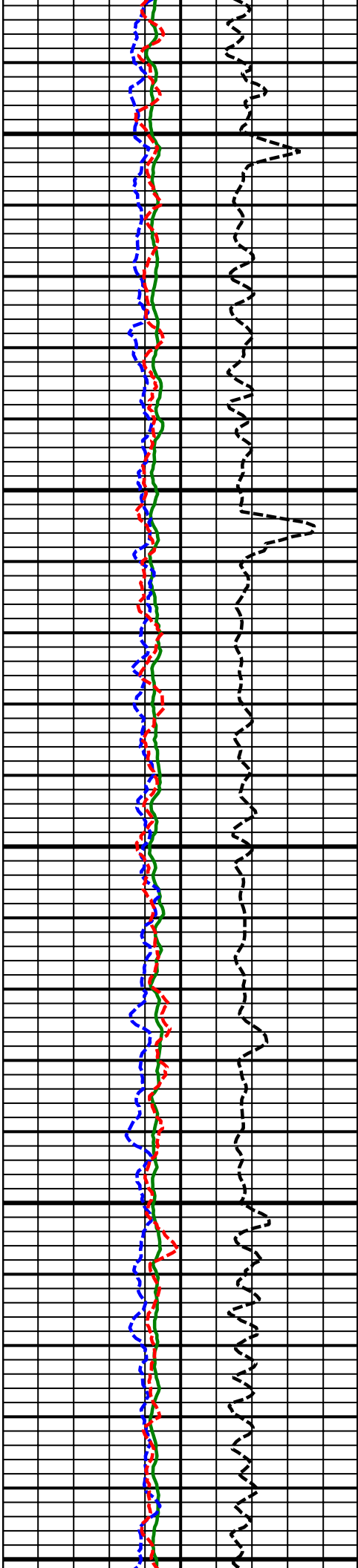




12800
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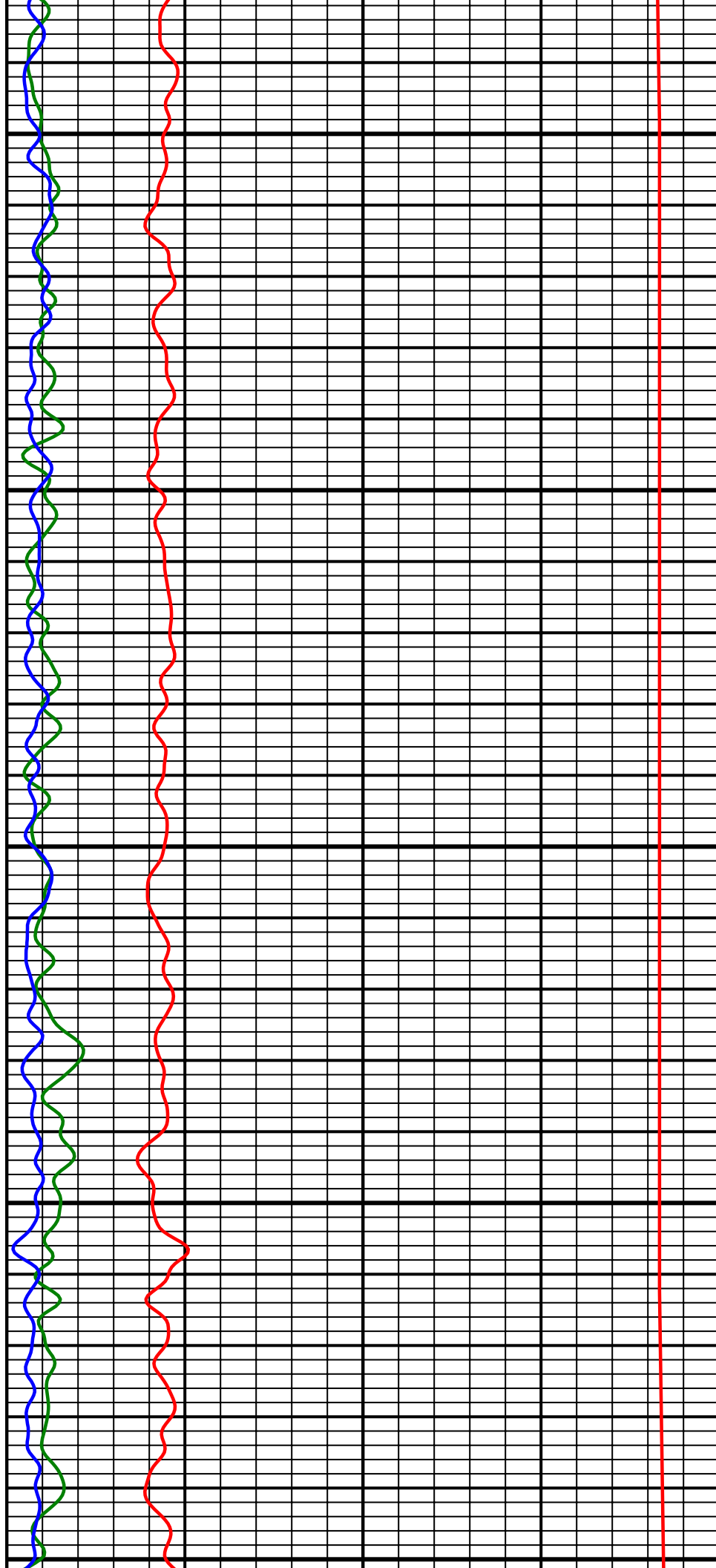
12900
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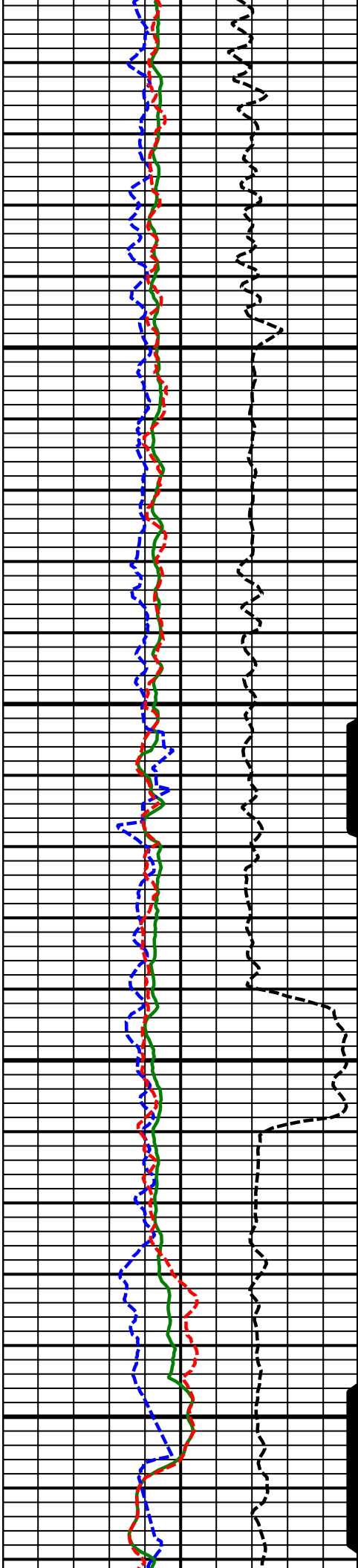




13000
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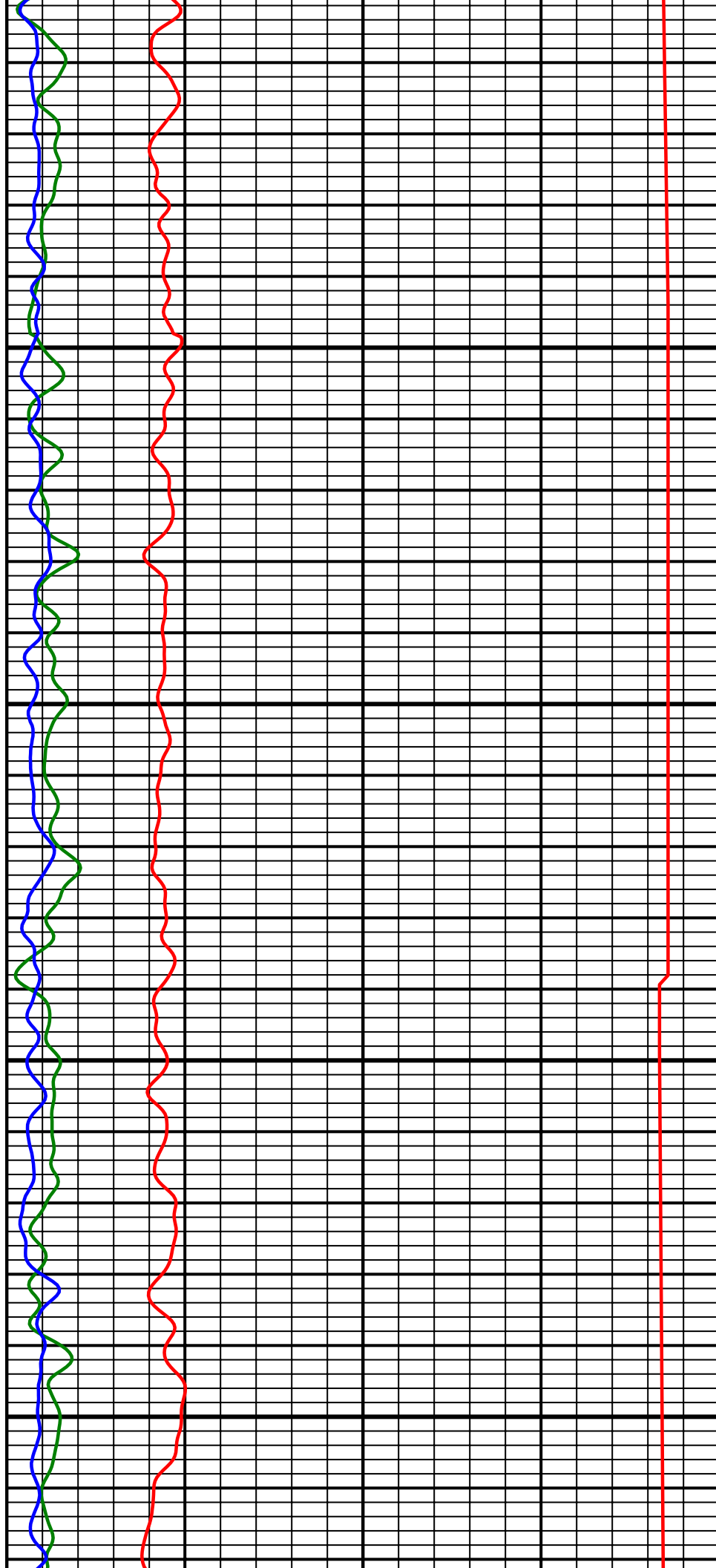
13100
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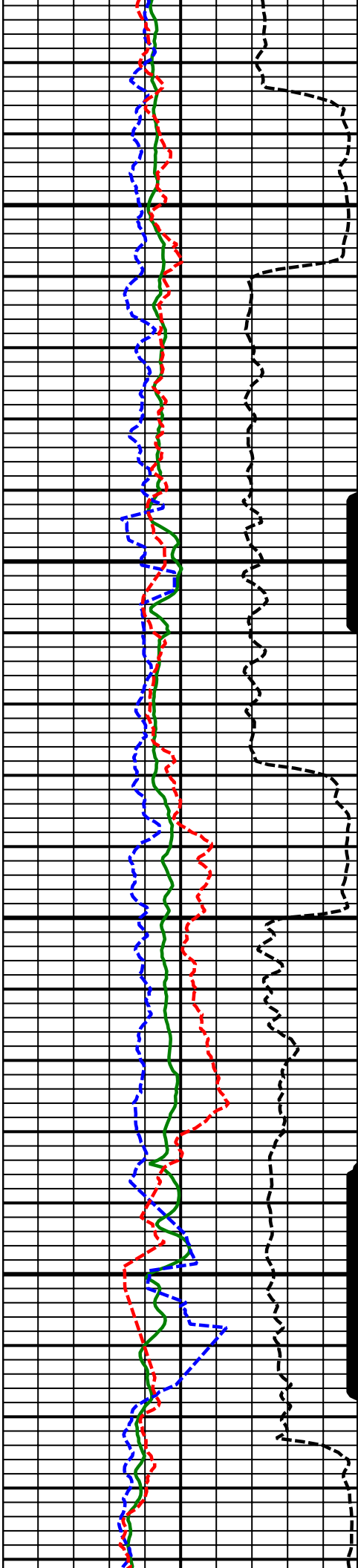




13200
MD

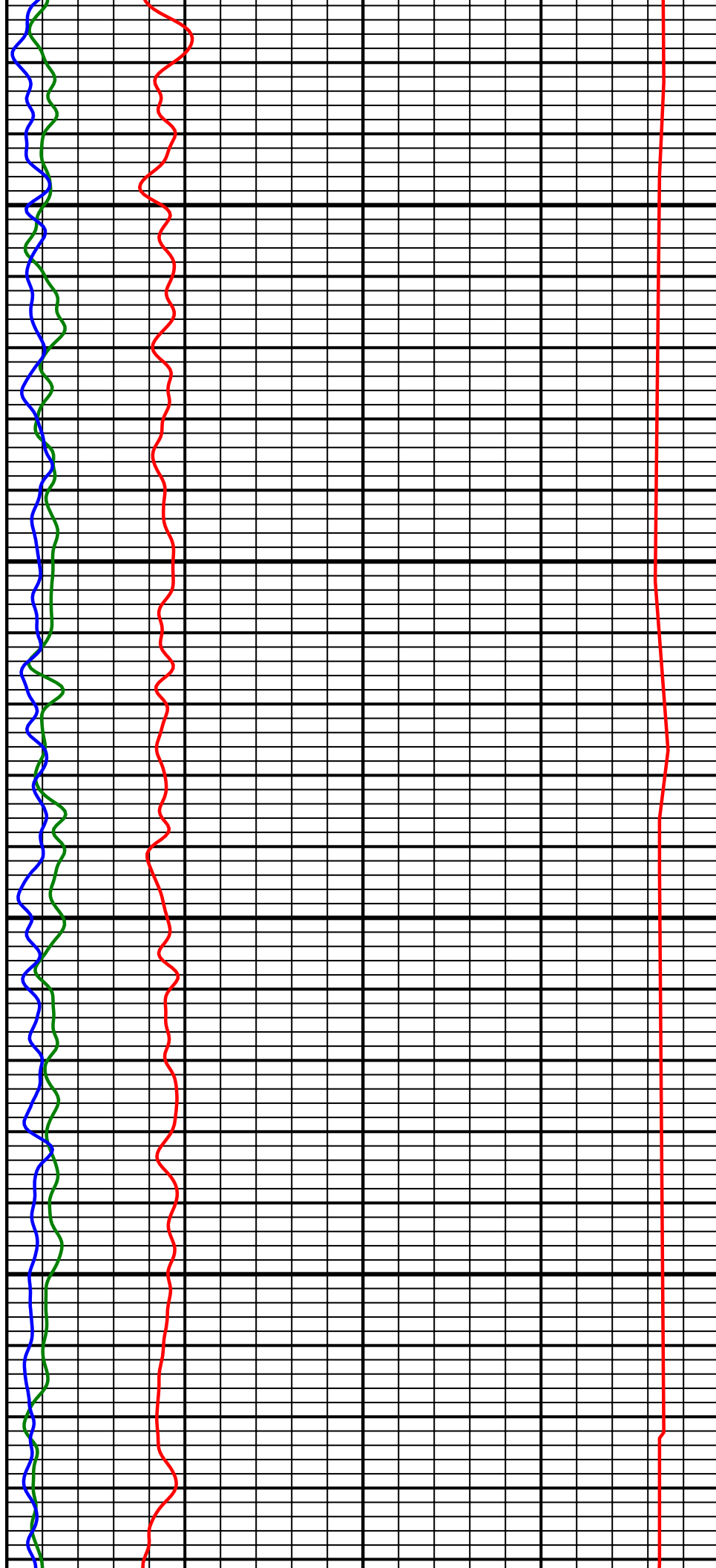
13300
MD

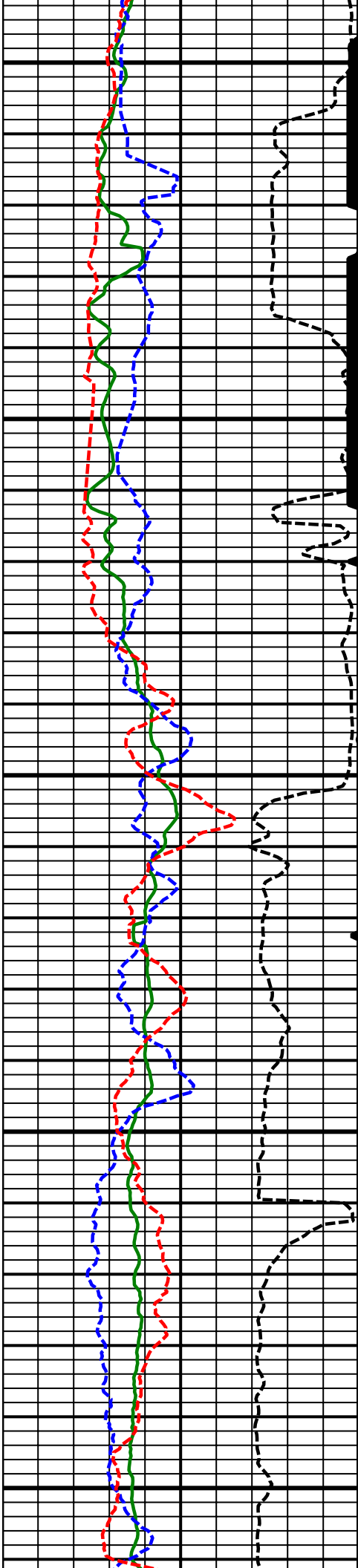




13400
MD

13500
MD

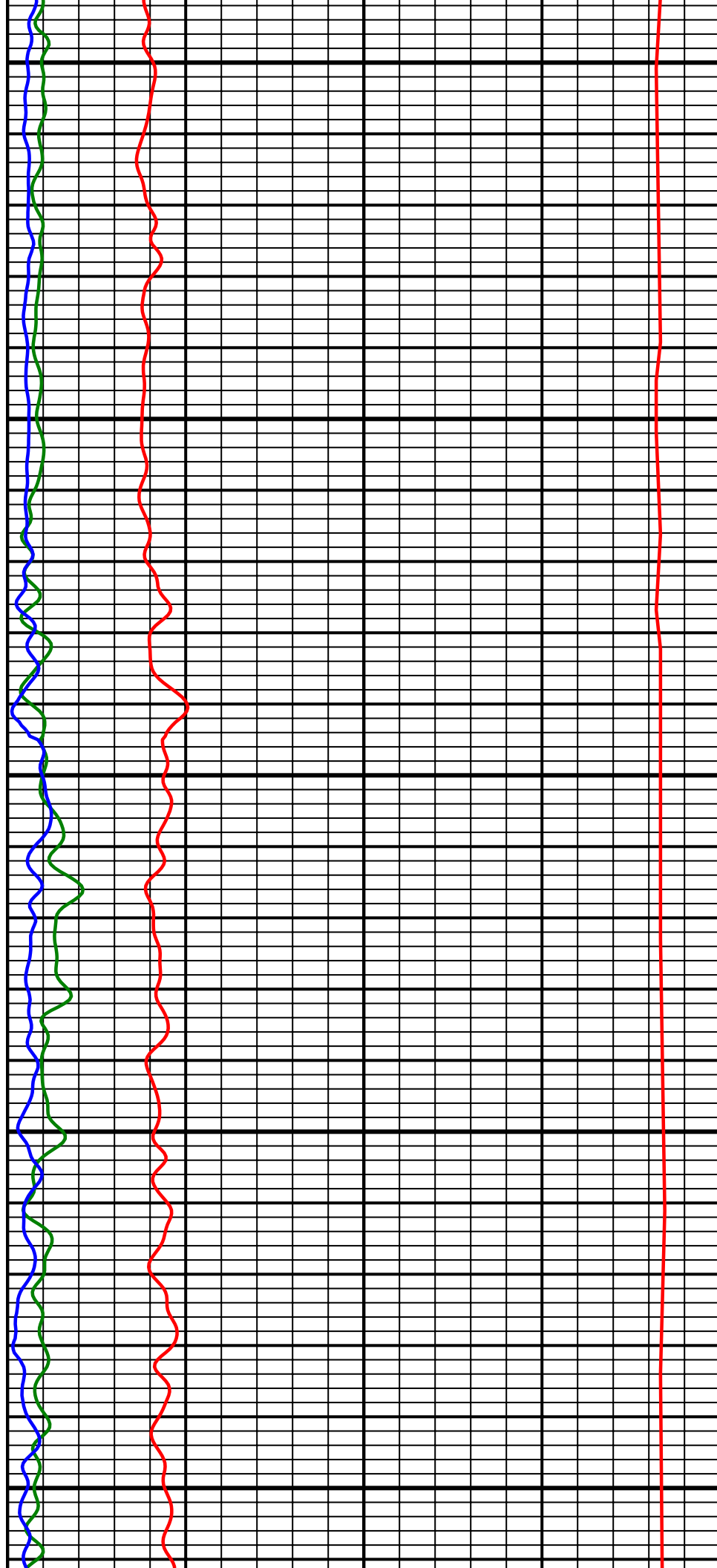


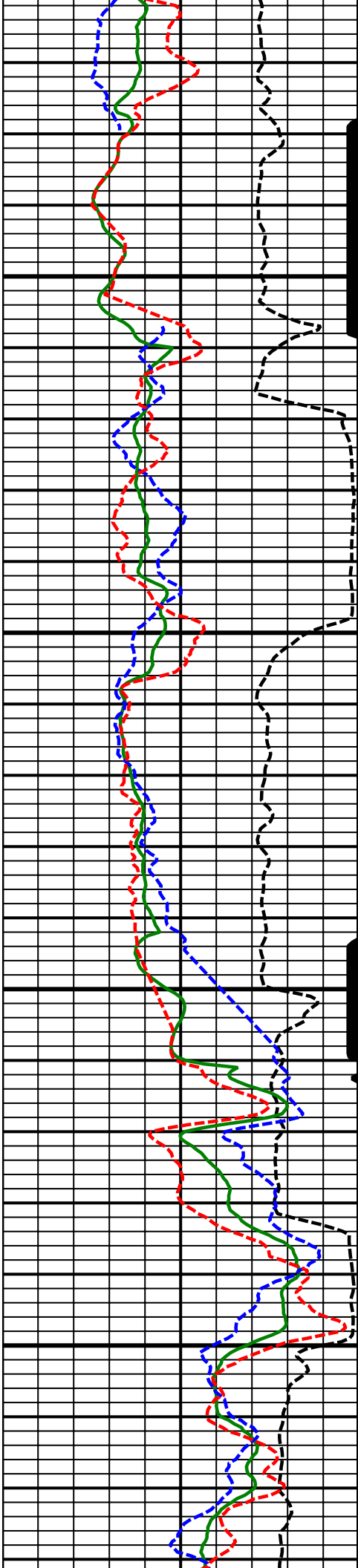


13600
MD

13700
MD

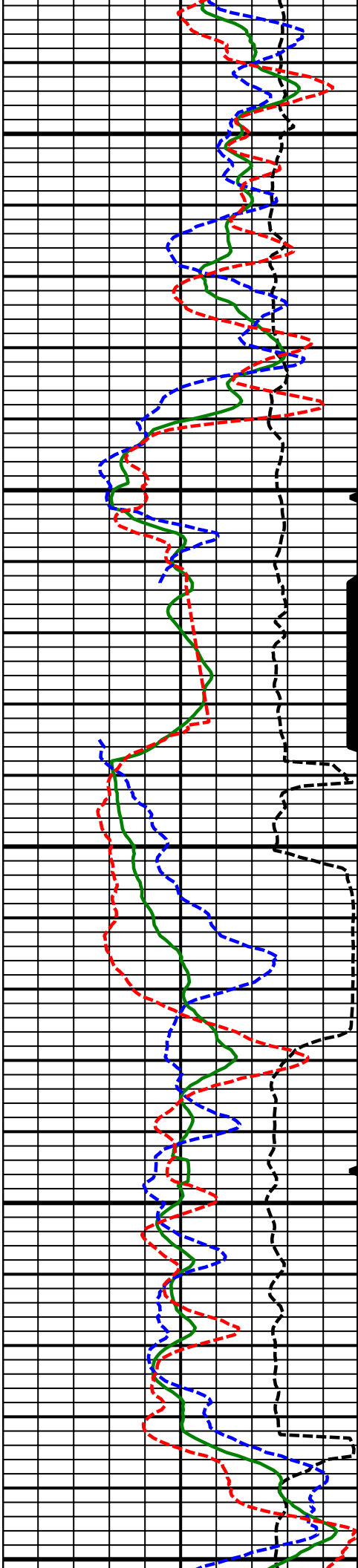
13800
MD





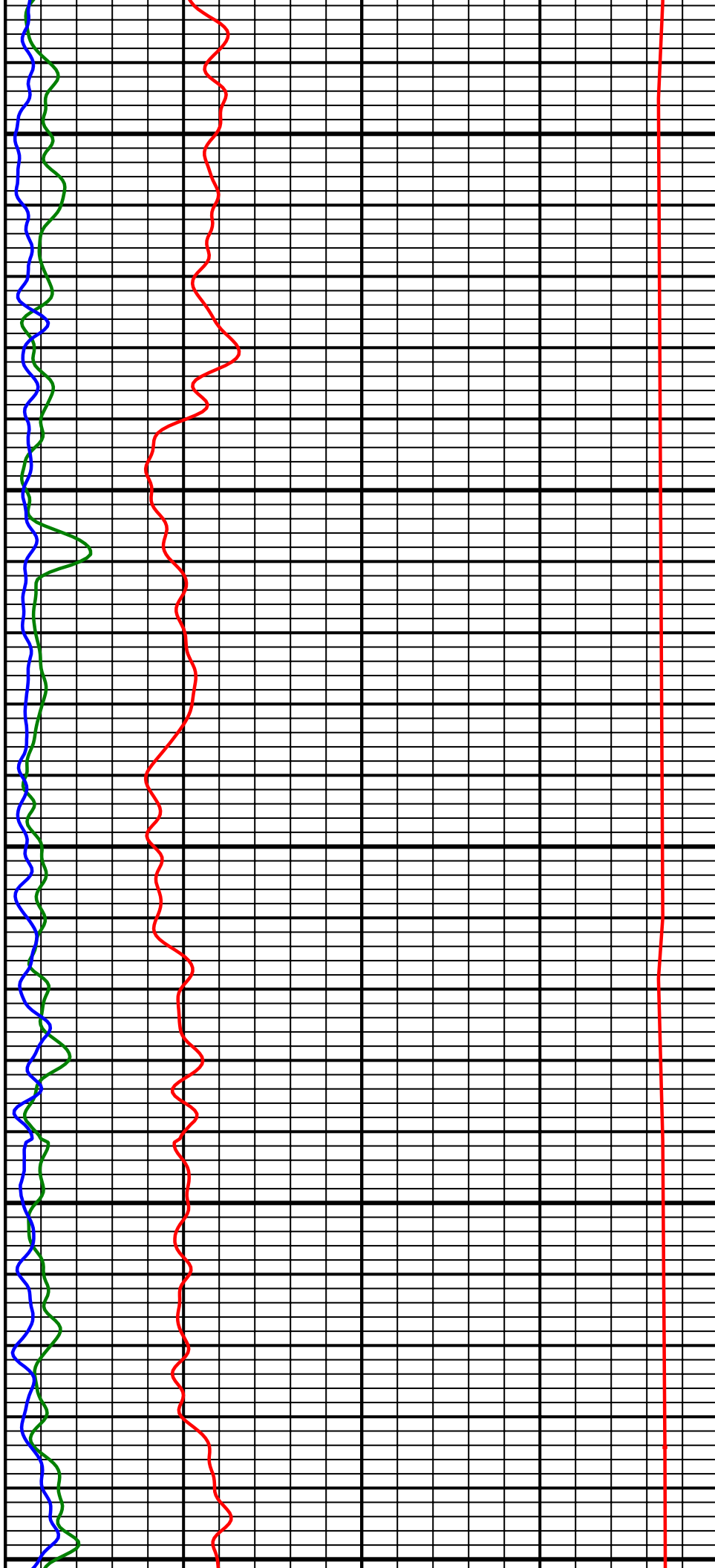
13900
MD

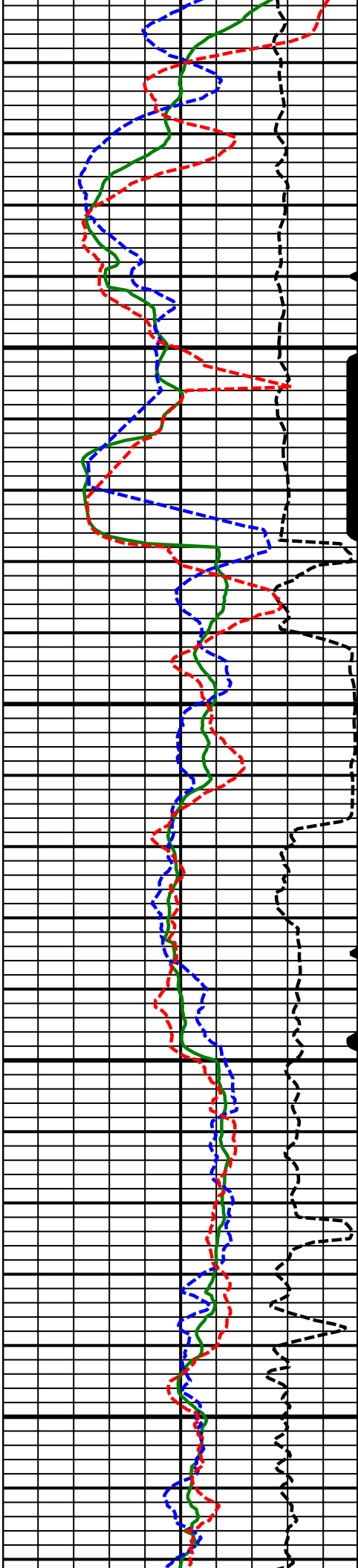
14000
MD



14100
MD

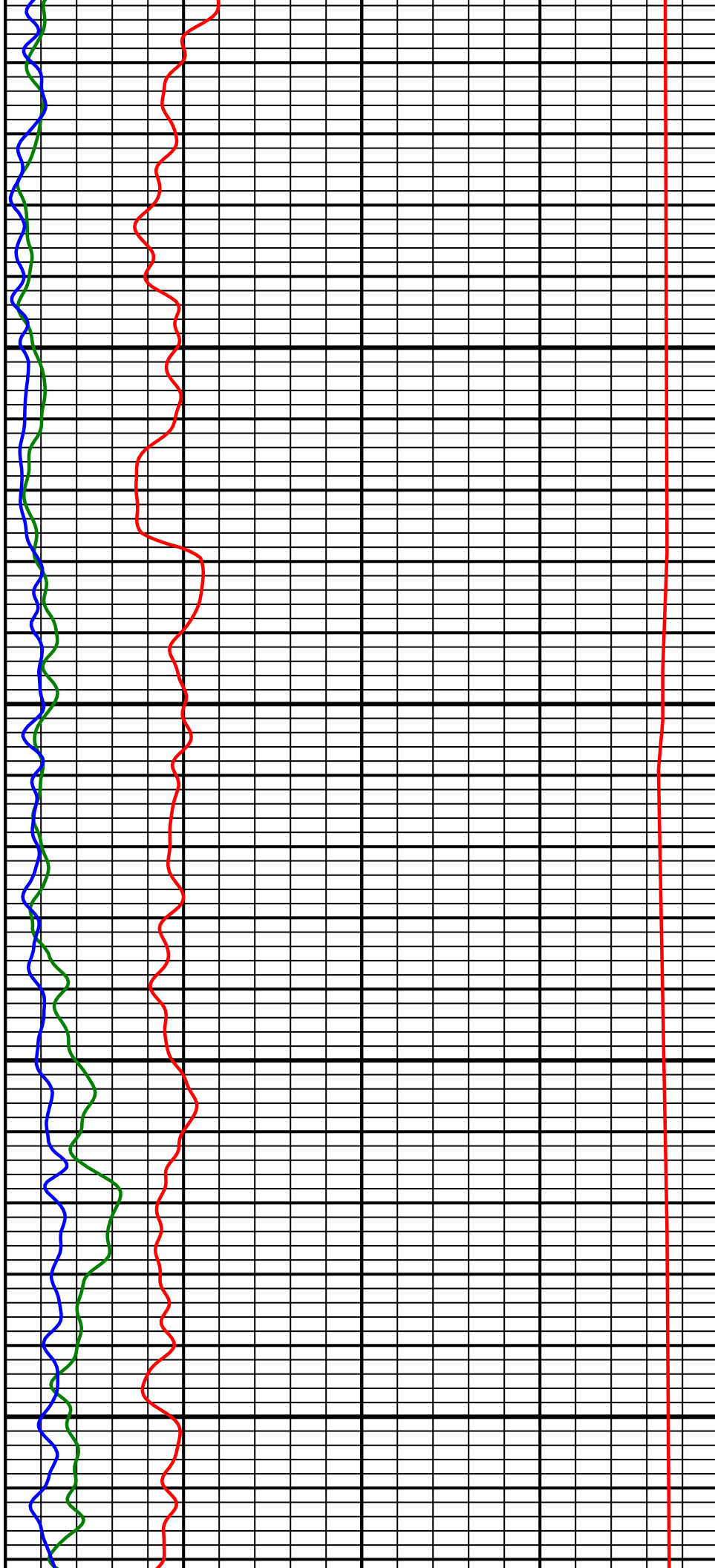
14200
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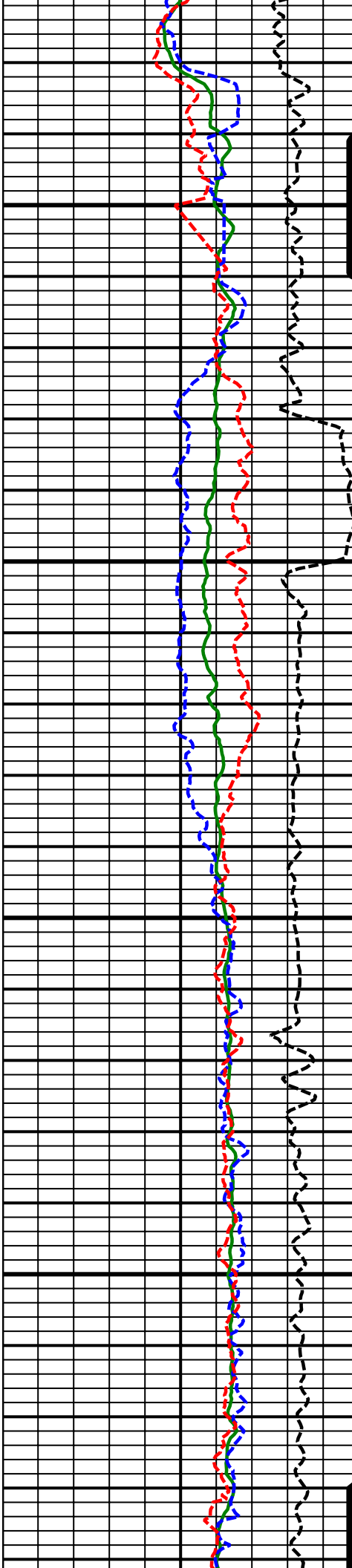




14300
MD

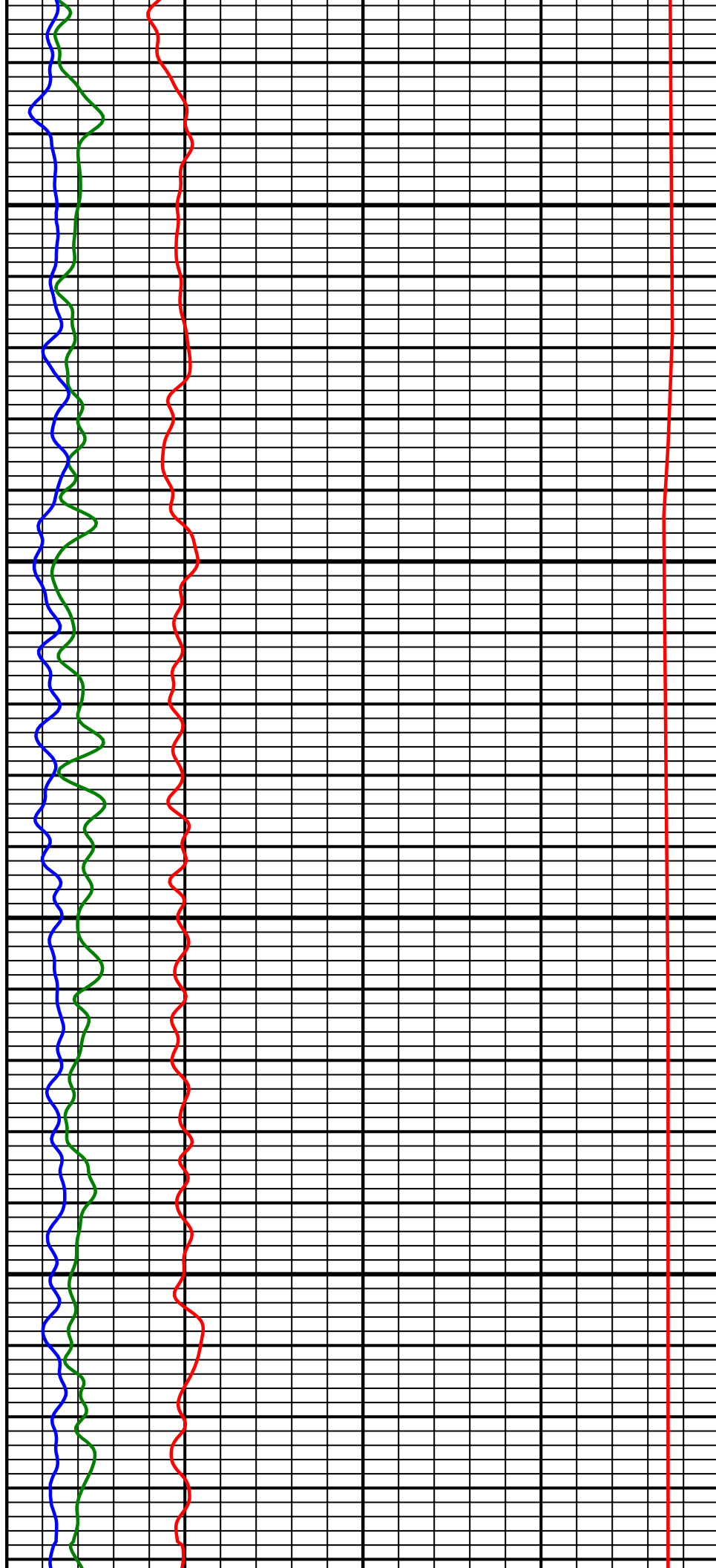
14400
MD

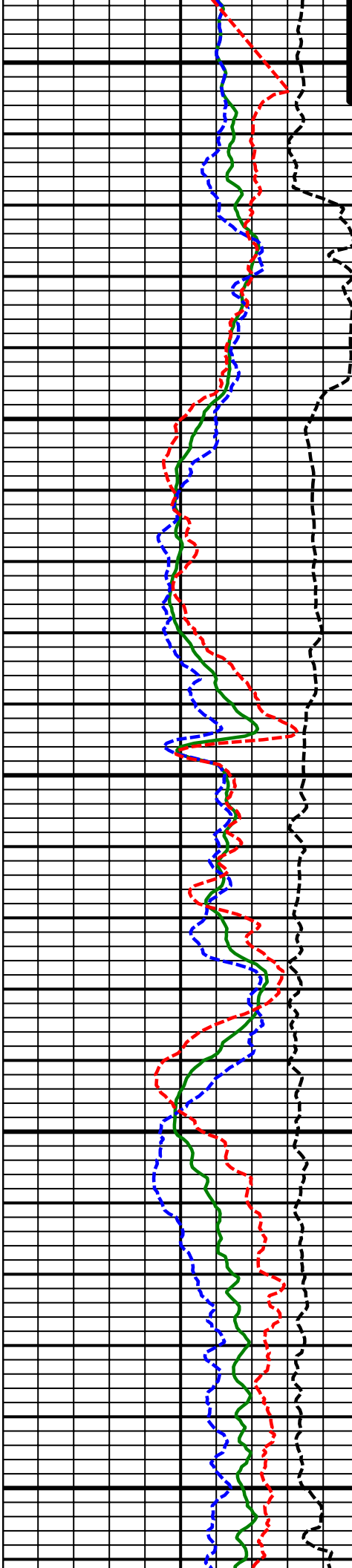




14500
MD

14600
MD

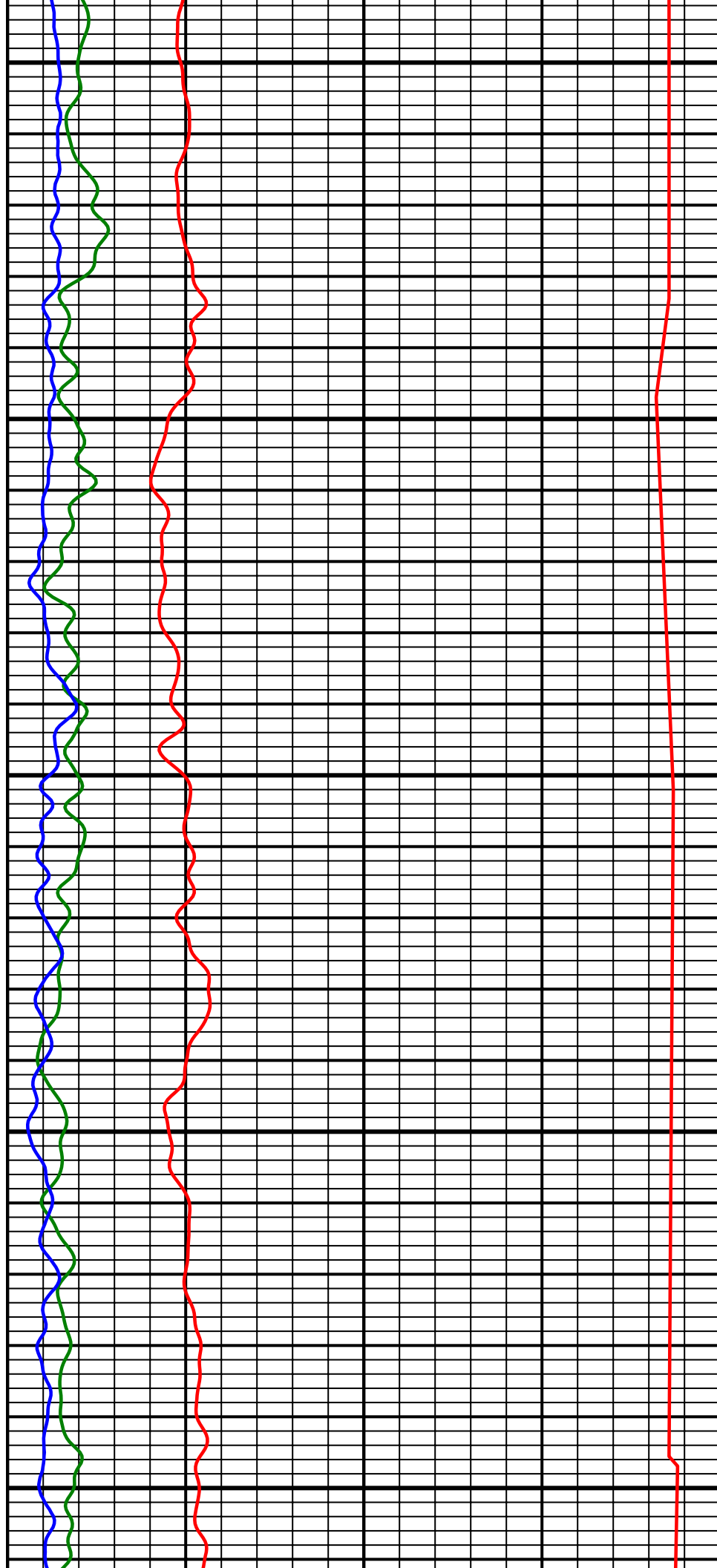


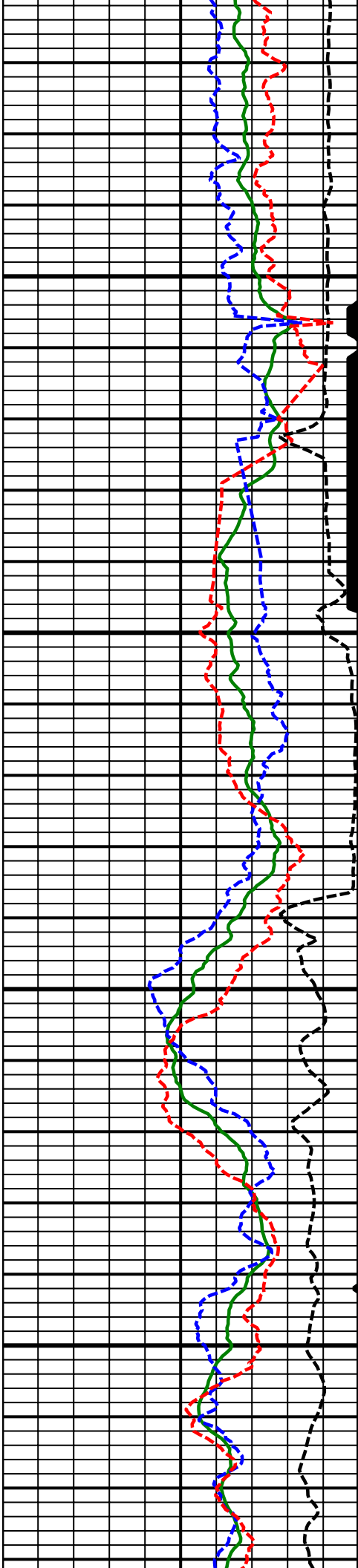


14700
MD

14800
MD

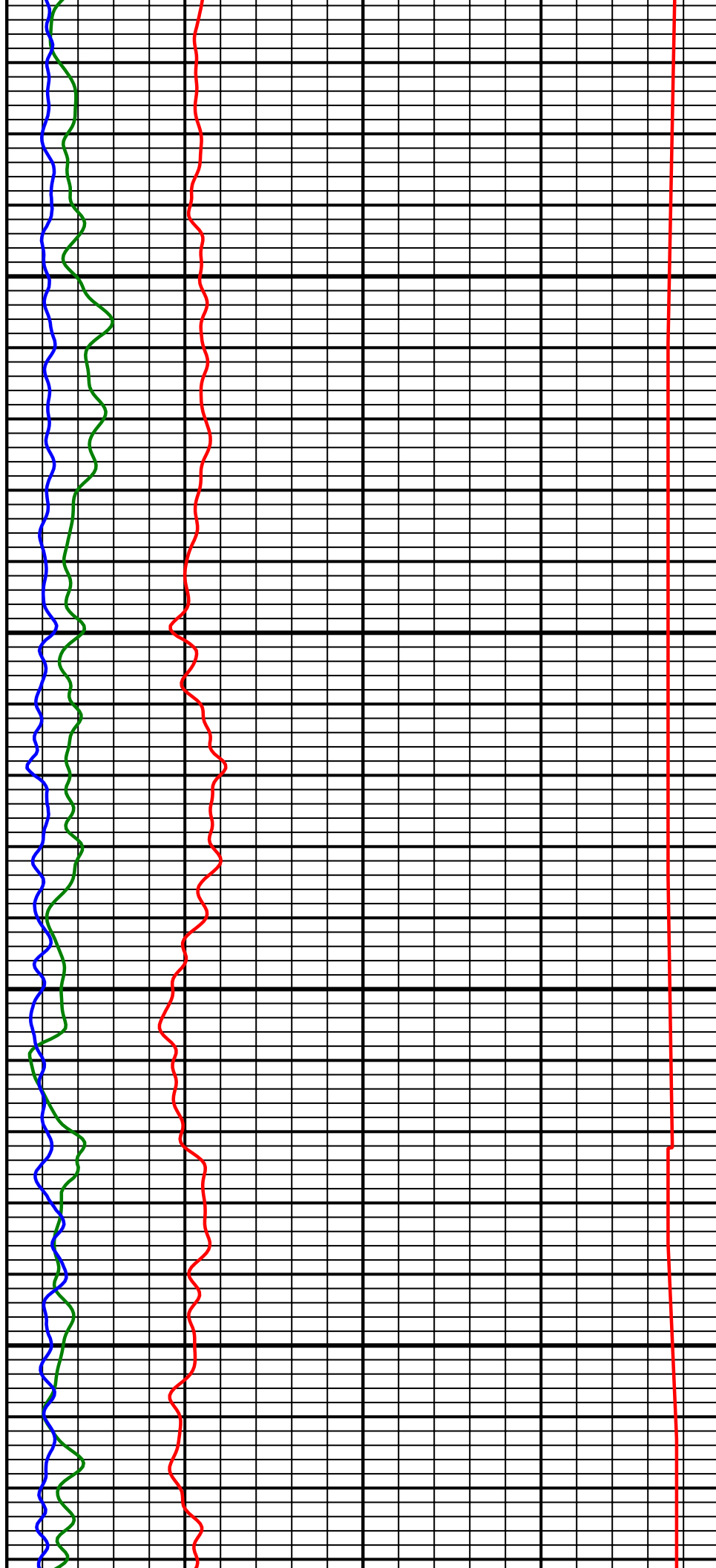
14900
MD

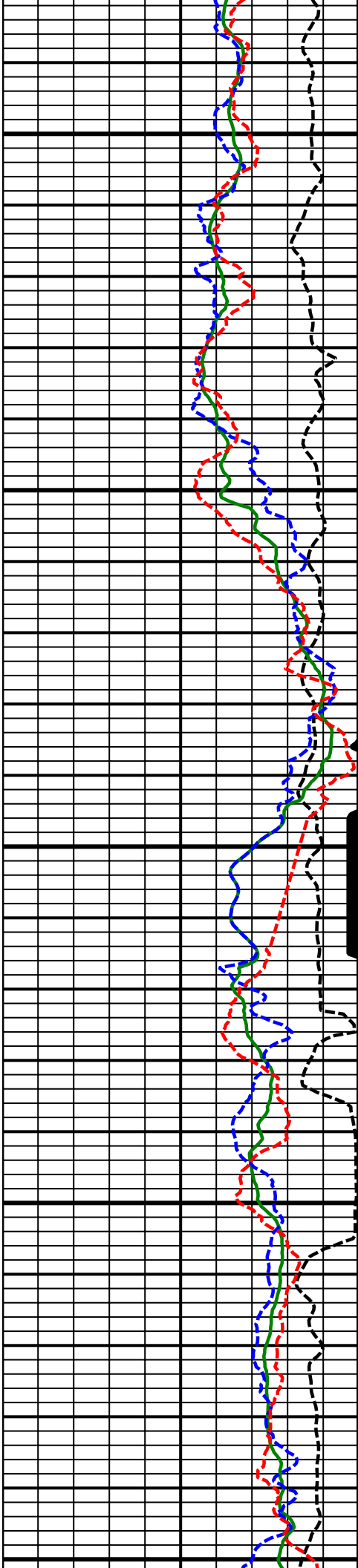




15000
MD

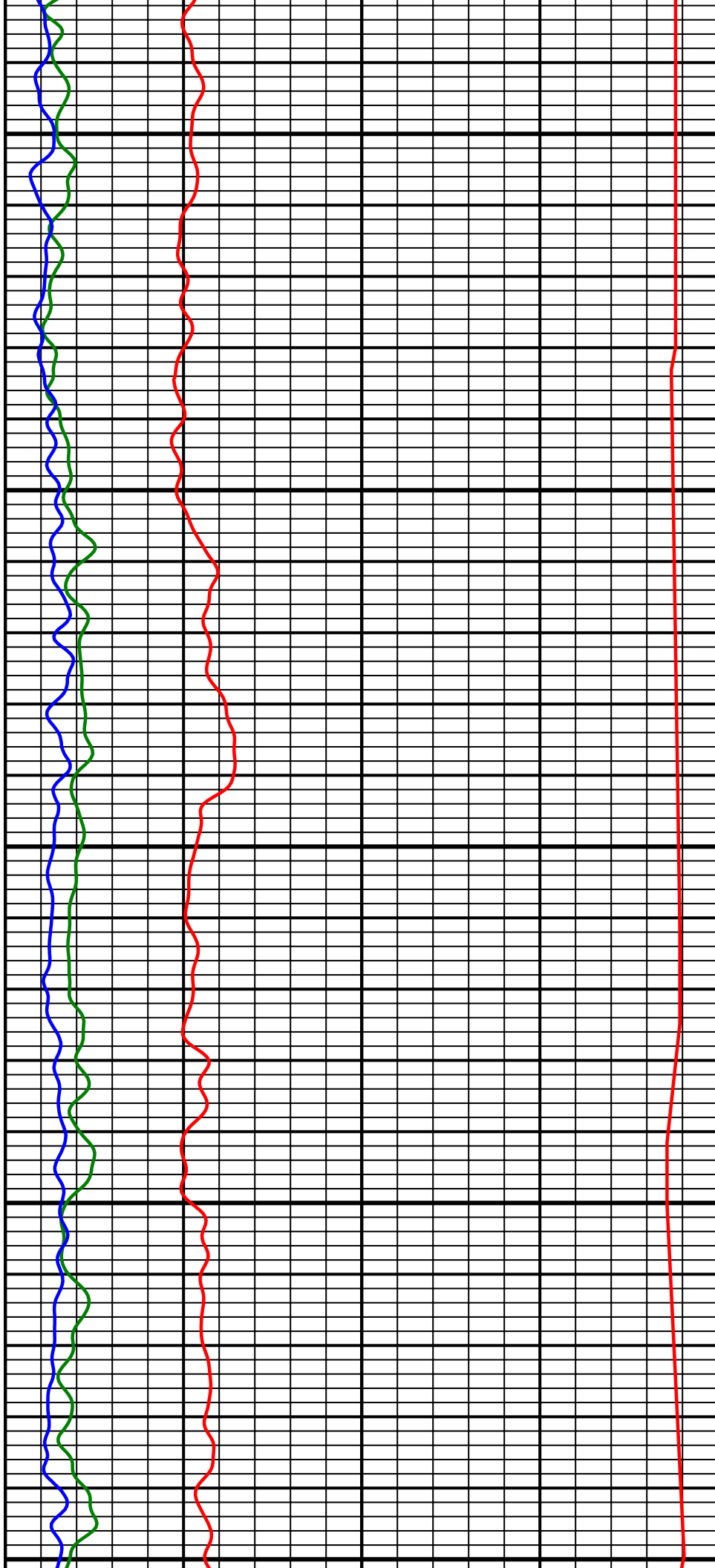
15100
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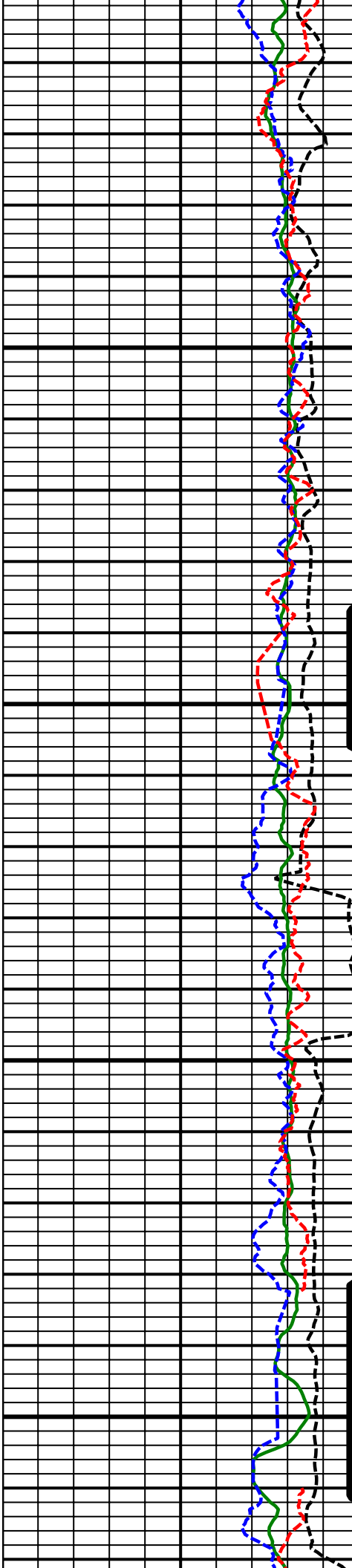




15200
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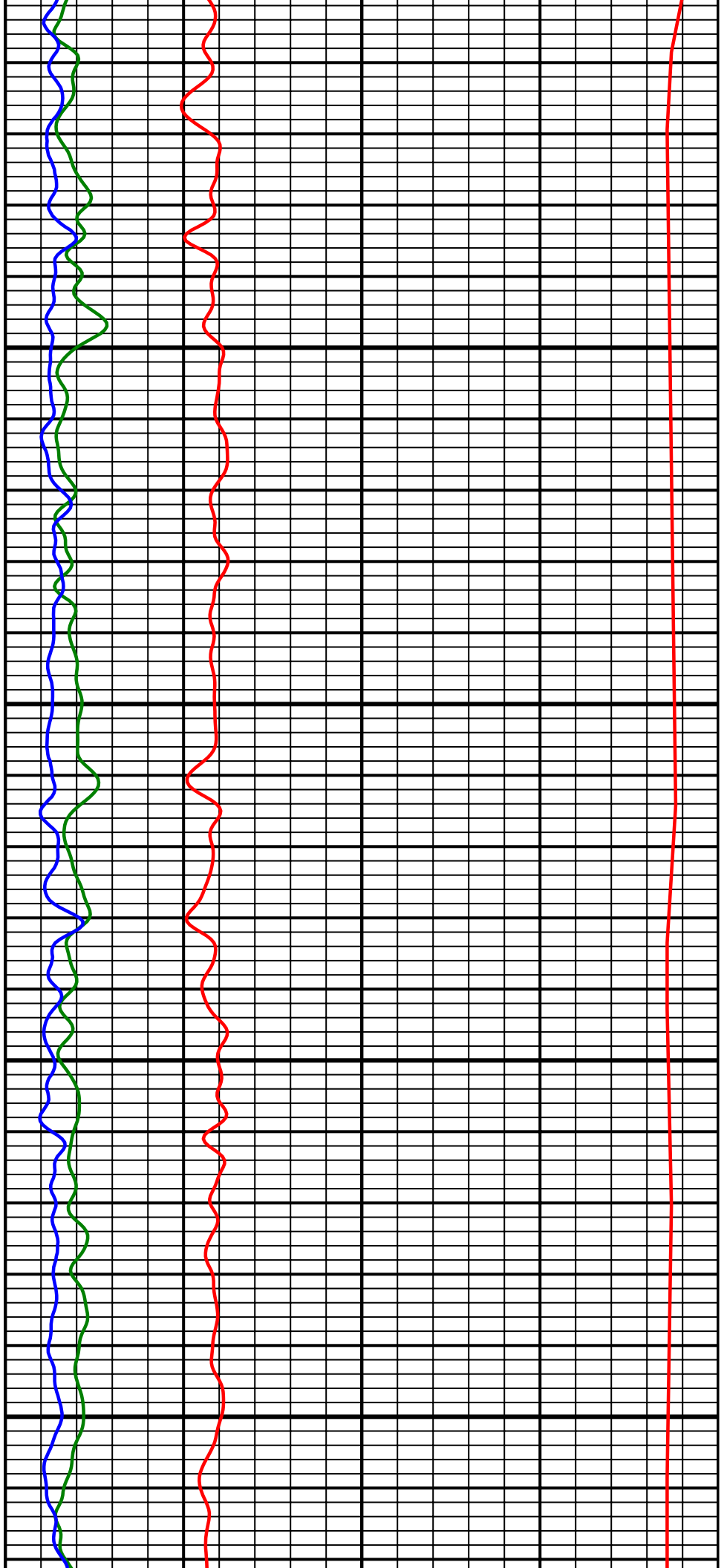
15300
MD

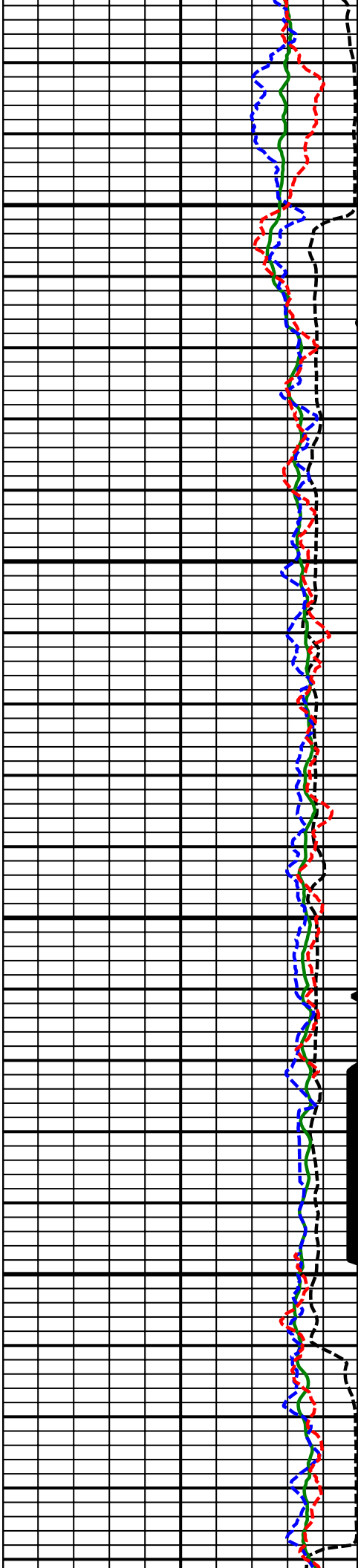




15400
MD

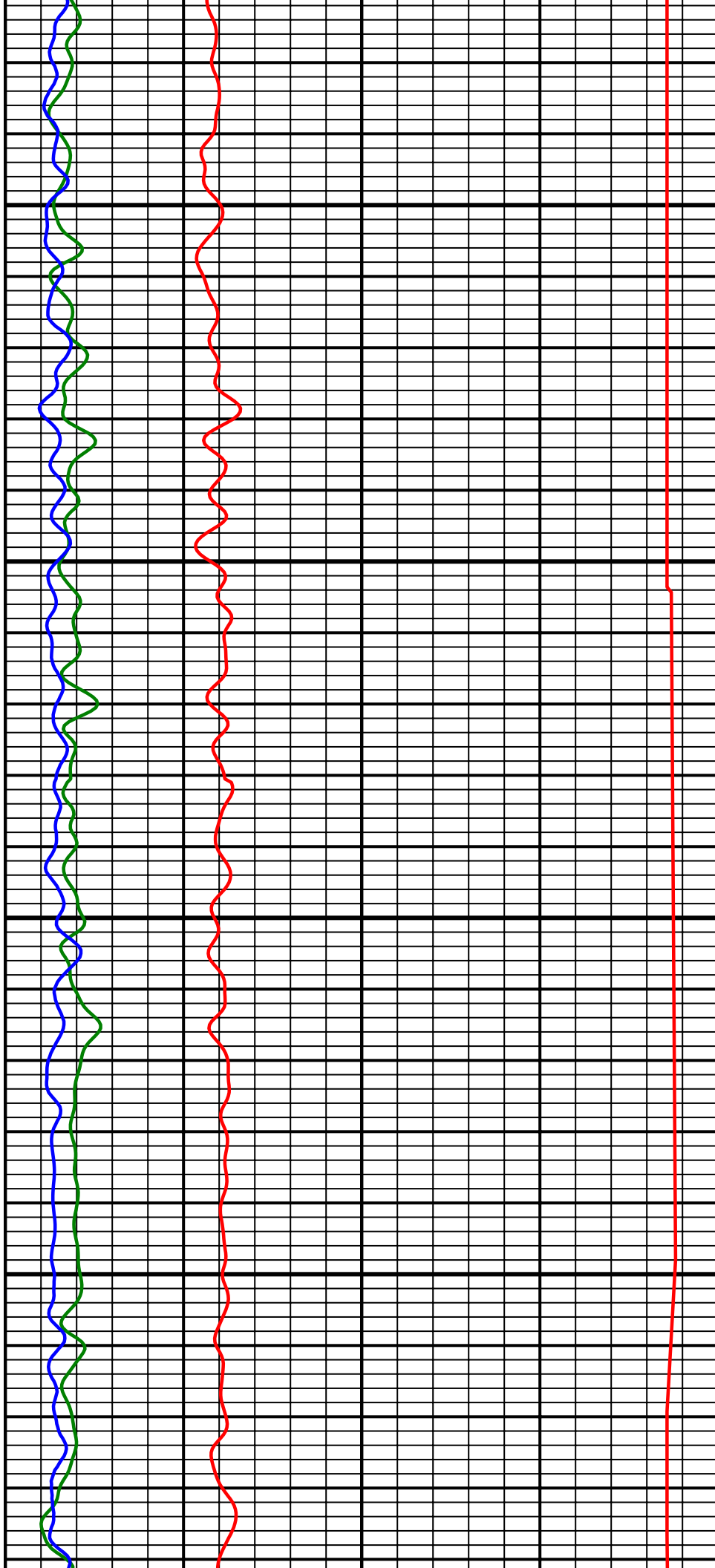
15500
MD

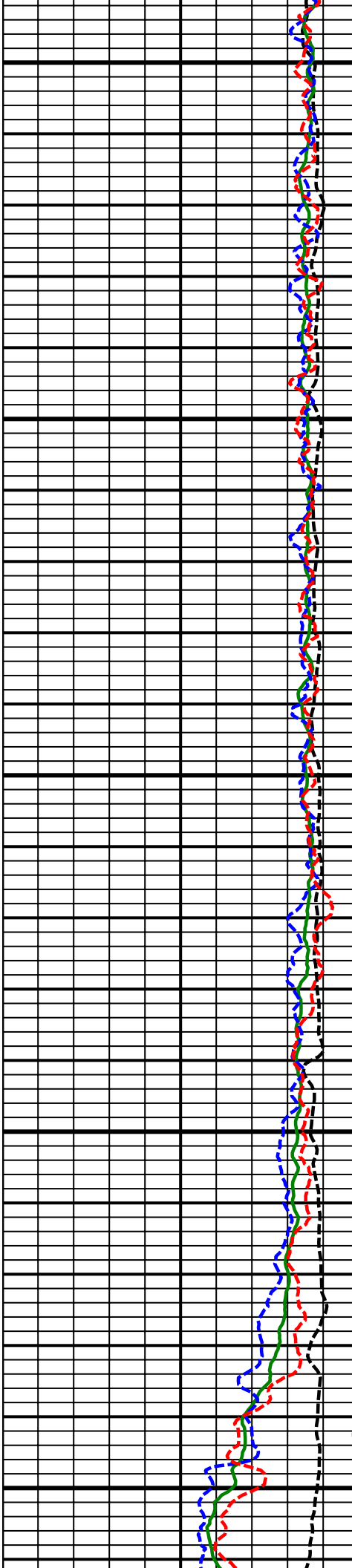




15600
MD

15700
MD

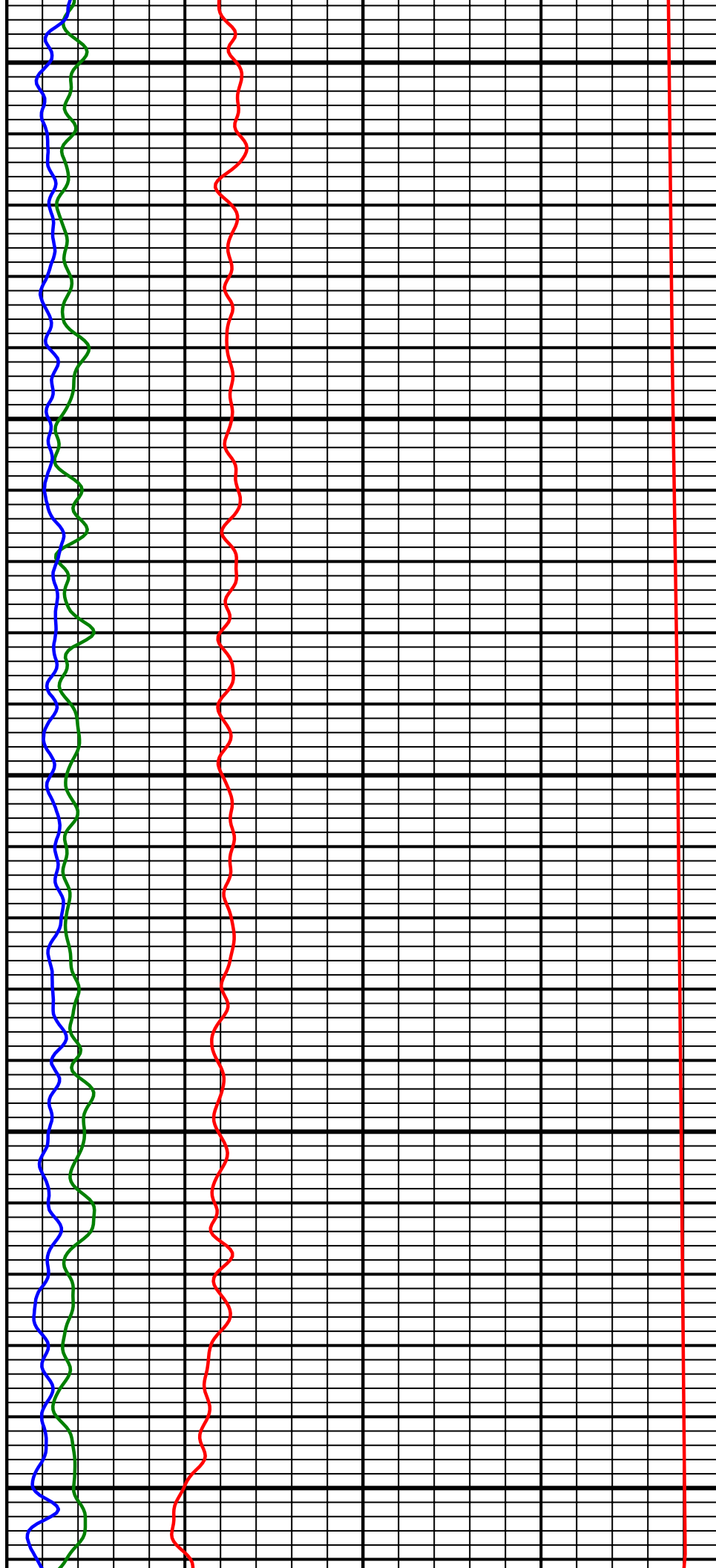


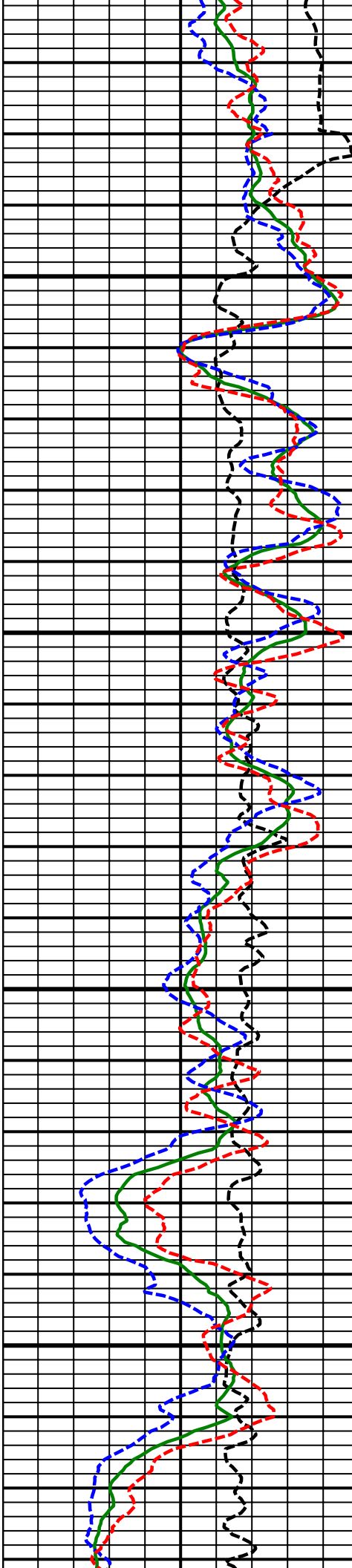


15800
MD

15900
MD

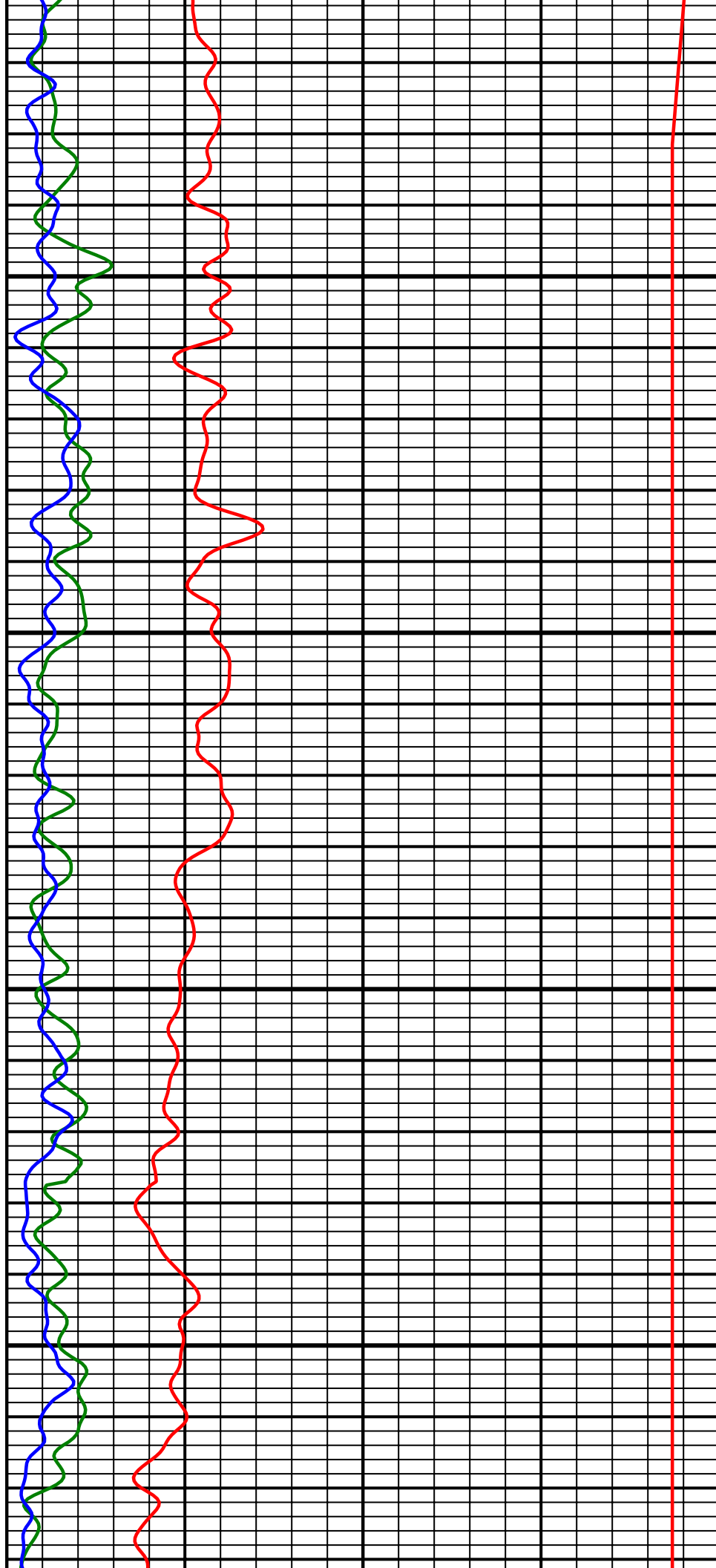
16000
MD

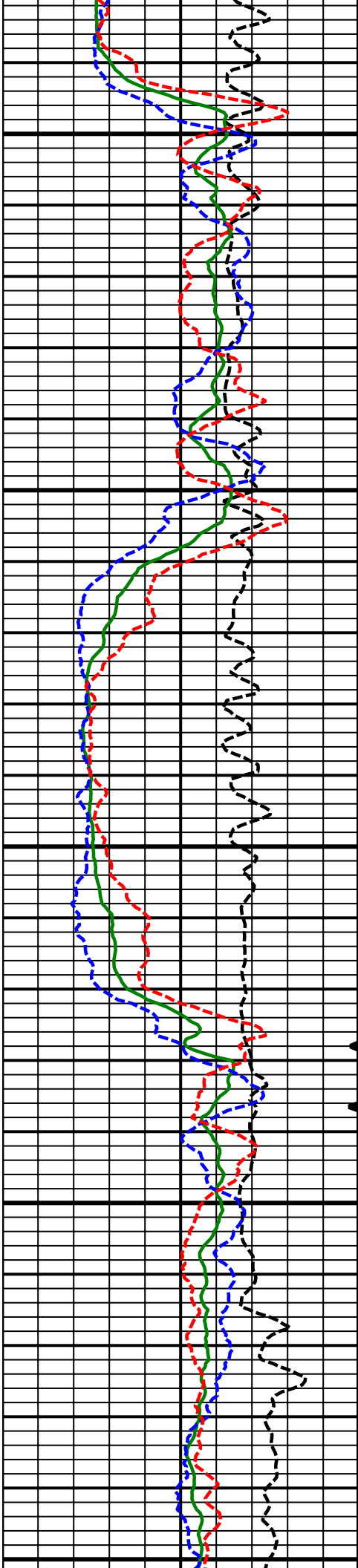




16100
MD

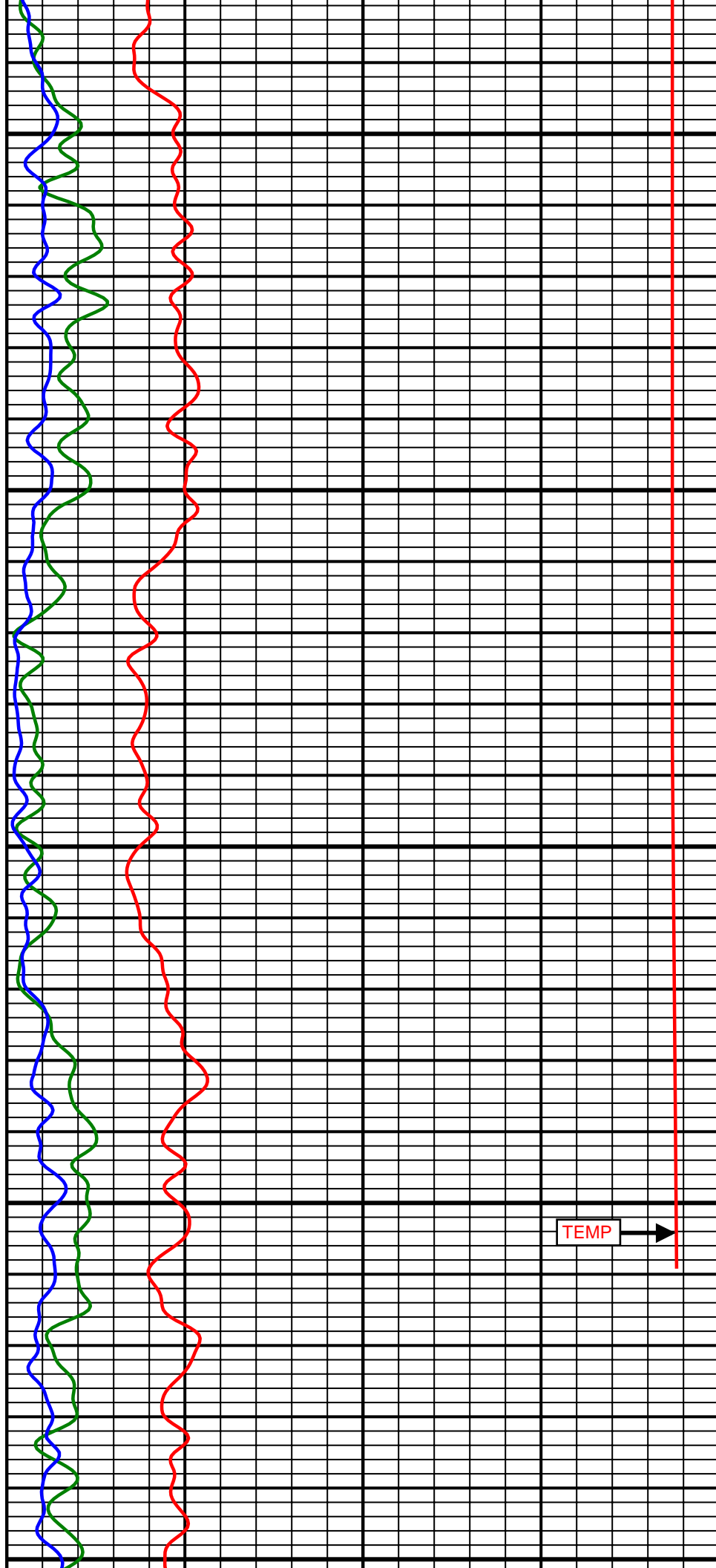
16200
MD



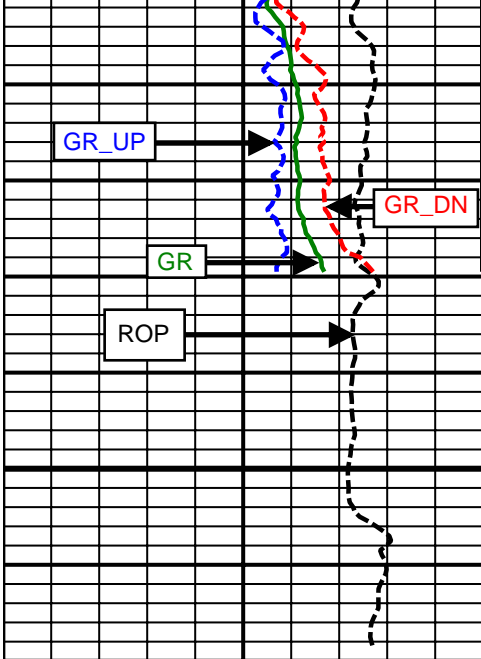


16300
MD

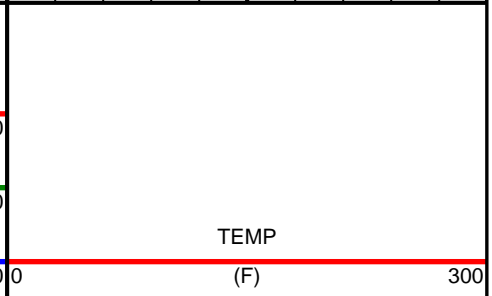
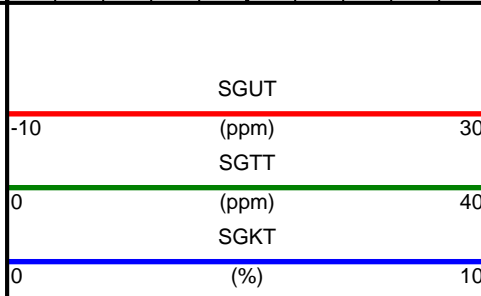
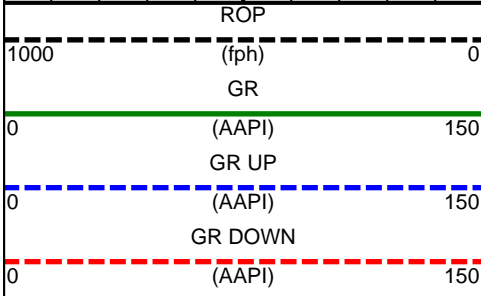
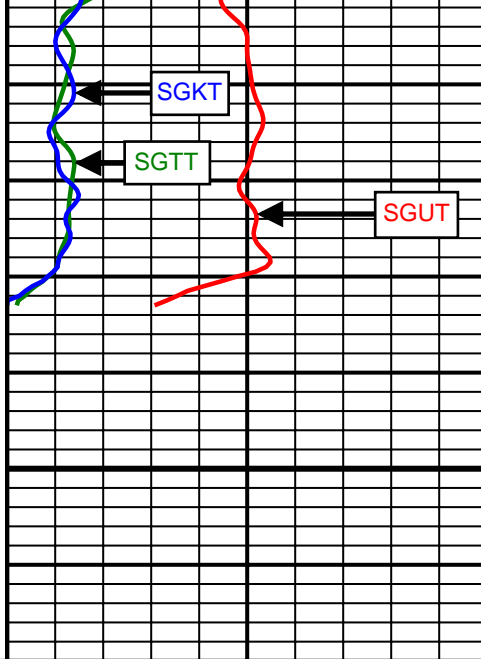
16400
MD



TEMP →



16500
MD



SURVEY						
Survey Calculation Method: Minimum Curvature						
Magnetic Reference	Target Direction	Total Magnetic Field	Magnetic Dip Angle	Magnetic Declination	Grid Convergence	Total Correction
True North	179.94 deg	52870 nT	66.93 deg	8.66 deg	0.00 deg	8.66 deg
Survey Tie-On	Depth	INC	AZ	TVD	NS	EW
	637.00 ft	0.09 deg	281.23 deg	637.00 ft	0.24 ft	-1.42 ft

Well Head							
Depth (ft)	Inc (deg)	Azm (deg)	TVD (ft)	NS (ft)	EW (ft)	VSect (ft)	Dogleg (deg/100ft)
774.00	0.16	168.62	774.00	0.07	-1.49	-0.07	0.15
866.00	0.16	89.66	866.00	-0.05	-1.33	0.05	0.22
958.00	0.36	99.83	958.00	-0.10	-0.92	0.10	0.22
1050.00	0.29	90.21	1050.00	-0.15	-0.40	0.15	0.10
1142.00	0.22	100.13	1142.00	-0.18	0.00	0.18	0.09
1233.00	0.31	63.96	1232.99	-0.11	0.40	0.11	0.20
1325.00	0.16	109.45	1324.99	-0.04	0.74	0.04	0.25
1417.00	0.25	266.06	1416.99	-0.10	0.66	0.10	0.44
1508.00	0.22	225.27	1507.99	-0.23	0.34	0.23	0.18
1598.00	0.20	269.31	1597.99	-0.36	0.06	0.36	0.18
1690.00	0.35	264.76	1689.99	-0.38	-0.38	0.38	0.16
1780.00	0.36	256.26	1779.99	-0.48	-0.93	0.47	0.06
1872.00	0.51	261.96	1871.99	-0.60	-1.61	0.60	0.17
1963.00	0.69	271.88	1962.98	-0.64	-2.56	0.64	0.23
2054.00	0.22	253.55	2053.98	-0.67	-3.28	0.67	0.53
2146.00	0.69	13.83	2145.98	-0.18	-3.32	0.18	0.89
2238.00	0.93	340.12	2237.97	1.06	-3.44	-1.06	0.57
2329.00	1.34	342.33	2328.95	2.77	-4.01	-2.77	0.45
2424.00	0.64	243.21	2423.94	3.58	-4.82	-3.59	1.66
2518.00	1.16	298.47	2517.93	3.80	-6.13	-3.81	1.01
2613.00	1.54	318.75	2612.90	5.22	-7.81	-5.23	0.64
2707.00	1.40	226.86	2706.88	5.38	-9.48	-5.39	2.25
2802.00	1.24	242.23	2801.86	4.11	-11.24	-4.12	0.41
2897.00	1.37	252.01	2896.83	3.28	-13.23	-3.30	0.27
2991.00	1.73	257.76	2990.80	2.63	-15.69	-2.65	0.42
3086.00	1.44	264.10	3085.76	2.21	-18.28	-2.23	0.36
3181.00	3.29	276.27	3180.68	2.38	-22.17	-2.41	2.01
3275.00	4.20	268.92	3274.48	2.61	-28.30	-2.64	1.09
3370.00	5.48	284.86	3369.14	3.71	-36.16	-3.75	1.94
3464.00	7.99	292.46	3462.49	7.36	-46.54	-7.41	2.83
3559.00	8.98	290.12	3556.45	12.43	-59.60	-12.49	1.10
3653.00	7.23	285.30	3649.50	16.52	-72.20	-16.59	2.00
3748.00	7.09	278.96	3743.76	19.01	-83.75	-19.09	0.84
3842.00	5.56	275.77	3837.19	20.37	-94.01	-20.47	1.67
3937.00	4.94	255.71	3931.80	19.82	-102.56	-19.93	2.03
4032.00	3.52	245.92	4026.54	17.62	-109.18	-17.73	1.67
4126.00	1.48	223.43	4120.45	15.56	-112.65	-15.68	2.37
4221.00	0.55	147.40	4215.43	14.29	-113.25	-14.40	1.53
4315.00	0.41	134.65	4309.43	13.67	-112.77	-13.79	0.19
4410.00	0.36	354.23	4404.43	13.73	-112.56	-13.85	0.76
4505.00	0.56	355.63	4499.43	14.49	-112.62	-14.61	0.21
4599.00	0.62	10.21	4593.42	15.45	-112.57	-15.56	0.17

4694.00	0.31	38.54	4688.42	16.15	-112.32	-16.27	0.40
4789.00	0.35	156.46	4783.42	16.09	-112.04	-16.21	0.60
4883.00	0.35	212.91	4877.42	15.58	-112.08	-15.70	0.35
4978.00	0.28	101.03	4972.41	15.30	-112.01	-15.41	0.55
5073.00	0.30	111.50	5067.41	15.16	-111.55	-15.28	0.06
5167.00	0.07	335.78	5161.41	15.12	-111.35	-15.24	0.38
5262.00	0.22	349.36	5256.41	15.35	-111.40	-15.47	0.16
5356.00	0.50	339.81	5350.41	15.92	-111.58	-16.03	0.30
5451.00	0.66	334.96	5445.41	16.80	-111.95	-16.92	0.18
5545.00	1.16	268.42	5539.40	17.27	-113.13	-17.38	1.15
5640.00	1.08	75.27	5634.39	17.47	-113.23	-17.59	2.34
5735.00	1.04	18.00	5729.38	18.51	-112.10	-18.63	1.07
5829.00	1.06	352.06	5823.36	20.19	-111.95	-20.30	0.50
5924.00	0.97	230.62	5918.35	20.55	-112.70	-20.67	1.86
6018.00	0.73	309.75	6012.35	20.43	-113.77	-20.54	1.17
6113.00	1.19	335.73	6107.33	21.71	-114.64	-21.83	0.65
6208.00	1.12	289.43	6202.32	22.92	-115.92	-23.04	0.96
6302.00	0.88	244.21	6296.30	22.91	-117.44	-23.03	0.85
6350.00	2.09	183.43	6344.29	21.88	-117.83	-22.00	3.81
6397.00	3.98	176.31	6391.22	19.39	-117.77	-19.52	4.09
6444.00	14.18	176.26	6437.57	12.00	-117.29	-12.12	21.70
6492.00	20.49	177.22	6483.37	-2.27	-116.50	2.15	13.16
6539.00	22.10	174.40	6527.16	-19.29	-115.24	19.17	4.06
6586.00	25.21	173.48	6570.20	-38.04	-113.24	37.92	6.66
6633.00	30.55	175.65	6611.73	-59.91	-111.19	59.79	11.56
6681.00	35.18	180.42	6652.05	-85.92	-110.37	85.80	11.04
6728.00	36.94	180.65	6690.04	-113.58	-110.63	113.46	3.76
6775.00	39.63	181.09	6726.93	-142.69	-111.07	142.58	5.75
6822.00	44.23	178.90	6761.89	-174.09	-111.04	173.97	10.27
6870.00	50.26	177.89	6794.46	-209.30	-110.04	209.19	12.66
6917.00	52.80	179.03	6823.70	-246.08	-109.06	245.97	5.73
6965.00	56.99	179.57	6851.29	-285.34	-108.58	285.23	8.78
7012.00	63.00	179.83	6874.79	-326.02	-108.37	325.91	12.80
7059.00	68.81	180.65	6893.97	-368.91	-108.56	368.79	12.46
7106.00	70.81	181.54	6910.19	-413.01	-109.41	412.89	4.61
7154.00	73.77	181.63	6924.79	-458.71	-110.67	458.59	6.17
7201.00	79.47	182.53	6935.66	-504.38	-112.33	504.27	12.27
7225.00	82.51	182.86	6939.42	-528.06	-113.45	527.94	12.74
7364.00	88.83	184.85	6949.91	-666.27	-122.77	666.14	4.77
7458.00	89.88	183.34	6950.97	-760.02	-129.48	759.89	1.96
7553.00	90.12	181.72	6950.97	-854.93	-133.68	854.79	1.72
7647.00	90.19	180.07	6950.71	-948.91	-135.14	948.77	1.76
7742.00	90.74	179.62	6949.94	-1043.91	-134.89	1043.76	0.75
7836.00	91.23	179.49	6948.32	-1137.89	-134.16	1137.75	0.54
7931.00	91.50	179.32	6946.06	-1232.86	-133.17	1232.72	0.34
8026.00	92.10	179.13	6943.08	-1327.80	-131.89	1327.66	0.66
8120.00	91.23	178.94	6940.35	-1421.75	-130.31	1421.61	0.95
8215.00	90.43	179.51	6938.97	-1516.73	-129.02	1516.59	1.03
8309.00	89.44	180.05	6939.08	-1610.73	-128.66	1610.59	1.20
8404.00	89.88	180.07	6939.64	-1705.72	-128.76	1705.59	0.46
8499.00	90.49	179.69	6939.33	-1800.72	-128.56	1800.59	0.76
8593.00	90.49	180.26	6938.53	-1894.72	-128.52	1894.58	0.61
8688.00	88.89	180.15	6939.04	-1989.71	-128.86	1989.58	1.69
8782.00	89.32	180.45	6940.51	-2083.70	-129.35	2083.56	0.56
8877.00	90.43	180.26	6940.72	-2178.70	-129.94	2178.56	1.19
8971.00	89.20	180.26	6941.02	-2272.69	-130.37	2272.56	1.31
9066.00	89.75	180.45	6941.89	-2367.69	-130.95	2367.55	0.61
9161.00	89.88	179.73	6942.20	-2462.69	-131.10	2462.55	0.77
9255.00	89.74	179.32	6942.51	-2556.68	-130.32	2556.54	0.46
9347.00	89.69	179.40	6942.97	-2648.67	-129.30	2648.54	0.10
9439.00	89.44	179.21	6943.67	-2740.67	-128.18	2740.53	0.34

9531.00	89.57	178.97	6944.46	-2832.65	-126.72	2832.52	0.30
9623.00	88.83	177.99	6945.75	-2924.61	-124.28	2924.48	1.33
9716.00	88.95	177.60	6947.55	-3017.52	-120.70	3017.39	0.44
9808.00	89.32	177.28	6948.94	-3109.42	-116.59	3109.29	0.53
9900.00	90.37	177.34	6949.19	-3201.31	-112.28	3201.20	1.14
9992.00	91.73	178.78	6947.50	-3293.24	-109.16	3293.13	2.15
10084.00	92.10	179.51	6944.43	-3385.18	-107.79	3385.06	0.89
10175.00	91.11	180.54	6941.88	-3476.14	-107.83	3476.03	1.57
10267.00	89.32	181.00	6941.53	-3568.13	-109.07	3568.01	2.01
10359.00	90.06	181.12	6942.03	-3660.11	-110.77	3659.99	0.81
10451.00	91.91	181.69	6940.45	-3752.07	-113.02	3751.94	2.10
10543.00	91.05	181.56	6938.07	-3844.00	-115.63	3843.87	0.95
10635.00	90.25	181.80	6937.03	-3935.95	-118.33	3935.82	0.91
10726.00	88.40	181.70	6938.10	-4026.90	-121.11	4026.77	2.04
10816.00	87.35	179.40	6941.44	-4116.82	-121.97	4116.69	2.81
10907.00	88.09	179.50	6945.06	-4207.75	-121.10	4207.62	0.82
10998.00	88.46	179.72	6947.80	-4298.70	-120.48	4298.58	0.47
11089.00	88.52	180.05	6950.20	-4389.67	-120.30	4389.54	0.37
11181.00	91.05	181.23	6950.54	-4481.66	-121.32	4481.53	3.03
11272.00	89.08	179.75	6950.44	-4572.65	-122.10	4572.52	2.71
11364.00	89.38	176.17	6951.67	-4664.56	-118.83	4664.44	3.90
11456.00	88.71	173.76	6953.21	-4756.19	-110.76	4756.07	2.72
11547.00	89.08	172.96	6954.96	-4846.56	-100.24	4846.45	0.97
11638.00	87.78	172.91	6957.46	-4936.83	-89.05	4936.74	1.43
11729.00	86.24	174.74	6962.20	-5027.18	-79.27	5027.09	2.63
11822.00	86.61	176.44	6968.00	-5119.72	-72.13	5119.64	1.87
11913.00	85.75	177.34	6974.06	-5210.38	-67.21	5210.31	1.37
12005.00	87.41	178.70	6979.55	-5302.16	-64.04	5302.09	2.33
12099.00	88.09	180.23	6983.24	-5396.08	-63.16	5396.01	1.78
12194.00	91.23	181.60	6983.81	-5491.05	-64.68	5490.98	3.61
12288.00	92.53	181.80	6980.72	-5584.95	-67.46	5584.88	1.40
12383.00	93.83	182.20	6975.45	-5679.75	-70.77	5679.67	1.43
12477.00	93.53	181.78	6969.42	-5773.50	-74.03	5773.42	0.55
12572.00	90.62	181.78	6965.98	-5868.38	-76.98	5868.29	3.06
12666.00	89.57	181.94	6965.83	-5962.33	-80.03	5962.24	1.13
12761.00	88.27	180.17	6967.62	-6057.29	-81.78	6057.20	2.31
12856.00	89.14	179.56	6969.76	-6152.26	-81.56	6152.17	1.12
12950.00	89.63	179.82	6970.77	-6246.26	-81.05	6246.17	0.59
13045.00	90.00	179.45	6971.08	-6341.25	-80.44	6341.17	0.55
13140.00	90.31	178.92	6970.82	-6436.24	-79.09	6436.16	0.65
13234.00	90.06	178.15	6970.52	-6530.21	-76.69	6530.13	0.86
13329.00	89.88	178.93	6970.57	-6625.18	-74.27	6625.10	0.84
13423.00	89.26	180.06	6971.27	-6719.17	-73.44	6719.09	1.37
13518.00	88.21	178.53	6973.37	-6814.14	-72.27	6814.06	1.95
13613.00	89.14	178.25	6975.57	-6909.07	-69.60	6909.00	1.02
13707.00	92.34	180.21	6974.35	-7003.04	-68.34	7002.96	3.99
13802.00	90.80	178.78	6971.75	-7097.99	-67.50	7097.92	2.21
13897.00	91.48	180.16	6969.86	-7192.97	-66.62	7192.89	1.62
13991.00	91.67	180.75	6967.28	-7286.93	-67.37	7286.86	0.66
14086.00	92.84	181.29	6963.54	-7381.84	-69.06	7381.76	1.36
14180.00	90.93	182.06	6960.45	-7475.74	-71.80	7475.66	2.19
14275.00	91.30	181.67	6958.60	-7570.67	-74.90	7570.59	0.57
14370.00	90.18	182.48	6957.37	-7665.60	-78.34	7665.52	1.45
14464.00	90.31	183.07	6956.97	-7759.49	-82.89	7759.40	0.64
14559.00	87.84	182.27	6958.50	-7854.37	-87.31	7854.27	2.73
14653.00	88.15	183.69	6961.79	-7948.18	-92.19	7948.08	1.55
14748.00	87.47	181.60	6965.42	-8043.00	-96.58	8042.90	2.31
14843.00	86.67	181.61	6970.28	-8137.84	-99.23	8137.73	0.84
14937.00	85.37	180.72	6976.80	-8231.59	-101.14	8231.48	1.67
15032.00	89.21	182.31	6981.29	-8326.43	-103.65	8326.32	4.37
15126.00	89.26	182.69	6982.55	-8420.33	-107.75	8420.22	0.41

15221.00	89.07	183.50	6983.93	-8515.18	-112.88	8515.06	0.88
15316.00	88.40	182.05	6986.03	-8610.05	-117.48	8609.92	1.68
15410.00	87.47	182.08	6989.42	-8703.92	-120.86	8703.79	0.99
15505.00	88.64	182.14	6992.64	-8798.80	-124.36	8798.67	1.23
15599.00	89.38	180.62	6994.27	-8892.76	-126.62	8892.62	1.80
15694.00	88.83	181.41	6995.75	-8987.73	-128.30	8987.59	1.01
15789.00	89.69	180.33	6996.98	-9082.71	-129.75	9082.57	1.45
15883.00	89.88	181.61	6997.33	-9176.69	-131.34	9176.55	1.38
15978.00	89.81	183.14	6997.59	-9271.61	-135.27	9271.46	1.61
16072.00	89.32	183.75	6998.30	-9365.44	-140.92	9365.28	0.83
16167.00	89.88	183.68	6998.96	-9460.23	-147.08	9460.07	0.59
16261.00	89.20	183.63	6999.72	-9554.04	-153.07	9553.87	0.73
16356.00	89.38	183.48	7000.90	-9648.85	-158.96	9648.68	0.25
16450.00	89.29	183.72	7001.99	-9742.66	-164.86	9742.48	0.27
16463.00	89.32	184.01	7002.14	-9755.63	-165.74	9755.45	2.24
16517.00	89.32	184.01	7002.79	-9809.49	-169.51	9809.31	0.00

Weatherford M/LWD Surveys from 774.0 to 16463.0 MD.

TD at 16517.0 MD.

The total correction is 8.66 deg relative to True North.



Weatherford®

Final Print

COMPANY	<u>Anadarko</u>		
WELL	<u>Dechant State 36N-E1HZ</u>		
FIELD	<u>Wattenburg</u>		
RIG	<u>H&P 307</u>		
LOC.	<u>Colorado</u>	COUNTY	<u>Weld</u>