



# Weatherford®

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

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

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

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				

Permanent Datum:		<u>Mean Sea Level</u>					
Log Measured From:	<u>Drill Floor</u>	Elev:	<u>4993.0 ft</u>	above perm. datum			
Depth Reference:	<u>Drillers Tally</u>	Total Depth:		<u>14488 ft</u>			
Depth Logged:	6873 ft	to	14488 ft	Runs:	5		
Date Logged:	8-Jan-13	to	18-Jan-13	Spud Date:	31-Dec-12		
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		
<b>Run Number: 1 :: REAL TIME DATA LOG</b>		
<b>WFT Services Provided:</b>		
Real Time Logging: Gamma Ray and Temperature.		
Directional Services: On demand Inclination and Azimuth.		
<b>Borehole and Environmental Correction:</b>		
Collar O.D.:	6.750 in.	<b>Gamma Ray:</b> Collar O.D., collar I.D. and K1 factor.
Collar I.D.:	3.250 in.	
K1 Factor:	3.012	
KCl Concentration:	0%	
<b>Run Number: 2 :: REAL TIME DATA LOG</b>		
<b>WFT Services Provided:</b>		
Real Time Logging: Gamma Ray and Temperature.		
Directional Services: On demand Inclination and Azimuth.		
<b>Borehole and Environmental Correction:</b>		
Collar O.D.:	6.750 in.	<b>Gamma Ray:</b> Collar O.D., collar I.D. and K1 factor.
Collar I.D.:	3.250 in.	
K1 Factor:	3.012	
KCl Concentration:	0%	
<b>Run Number: 3 :: REAL TIME DATA LOG</b>		
<b>WFT Services Provided:</b>		
Real Time Logging: Gamma Ray and Temperature.		
Directional Services: On demand Inclination and Azimuth.		
<b>Borehole and Environmental Correction:</b>		
Collar O.D.:	6.750 in.	<b>Gamma Ray:</b> Collar O.D., collar I.D. and K1 factor.
Collar I.D.:	3.250 in.	
K1 Factor:	3.012	
KCl Concentration:	0%	
<b>Run Number: 4 :: REAL TIME DATA LOG</b>		
<b>WFT Services Provided:</b>		
Real Time Logging: Gamma Ray and Temperature.		
Directional Services: On demand Inclination and Azimuth.		
<b>Borehole and Environmental Correction:</b>		
Collar O.D.:	6.750 in.	<b>Gamma Ray:</b> Collar O.D., collar I.D. and K1 factor.
Collar I.D.:	3.250 in.	
K1 Factor:	3.012	
KCl Concentration:	0%	
<b>Run Number: 5 :: RECORDED DATA LOG</b>		
<b>WFT Services Provided:</b>		
Recorded and Real Time Logging: Gamma Ray, Deep, Medium and Shallow Resistivity, and Temperature.		
Directional Services: On demand Inclination and Azimuth.		
<b>Borehole and Environmental Correction:</b>		
Hole Size:	6.125 in.	<b>Gamma Ray:</b> Corrected for mud weight, hole size and KCl concentration.
Mud Weight:	10.25 ppg	<b>Resistivities:</b> 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

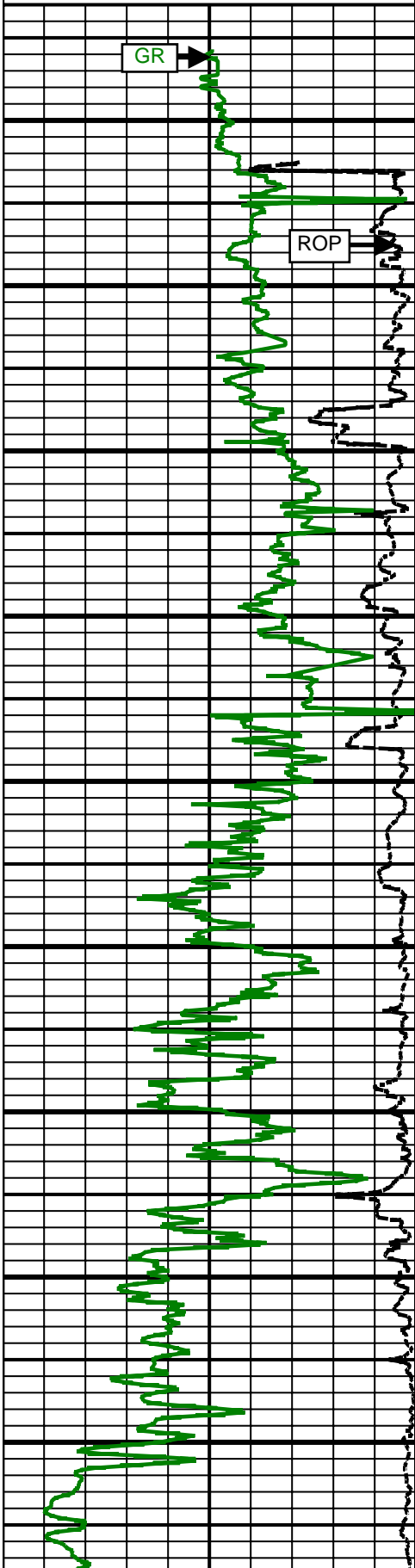
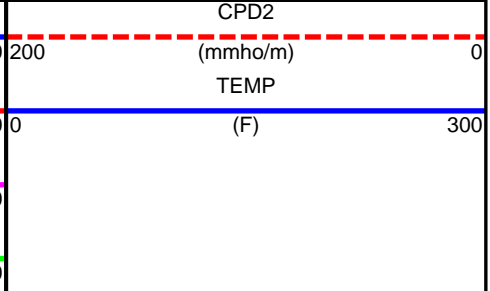
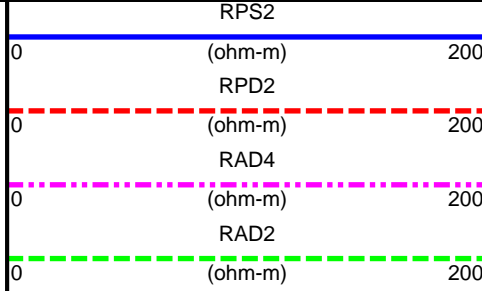
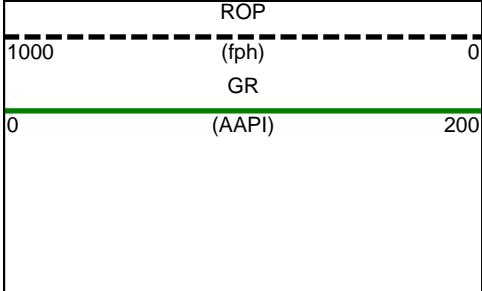
Run 05 ended drilling formation January 18, 2013 at 13:58 at 14488 MD / 7263 TVD.

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	
Deep Phase Conductivity	CPD2	mmho/m	2 MHz Deep Phase Conductivity 3.0 ft window 0.5 ft Exponential Smoothing	
Temperature	TEMP	F	Temperature 3.0 ft window 0.5 ft Exponential Smoothing	None

**1 Inch - Measured Depth**



6700 MD

6800 MD

6900 MD

7000 MD

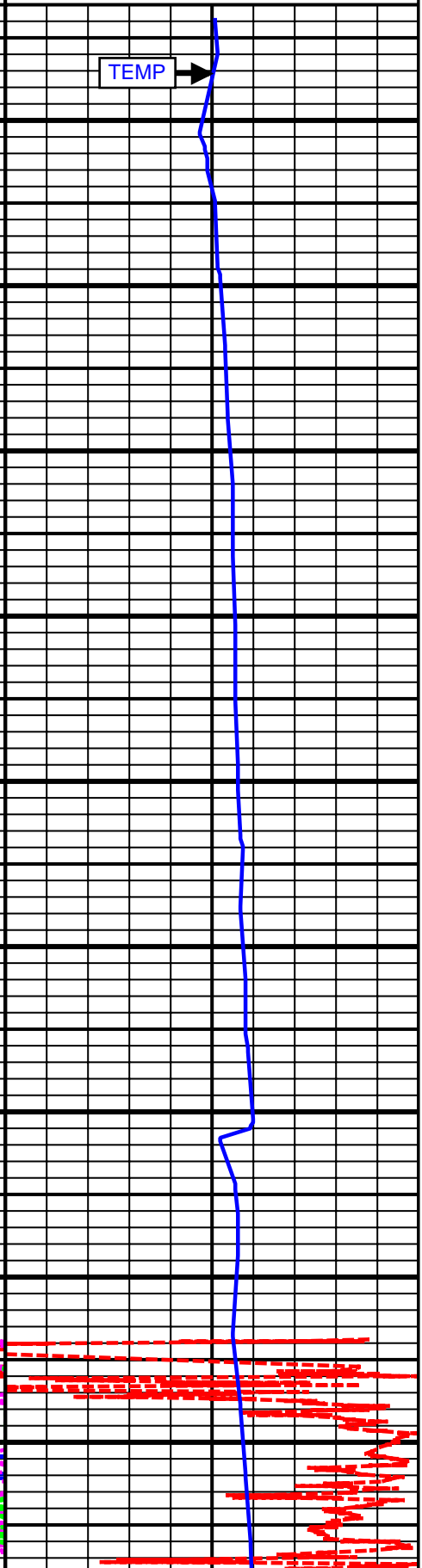
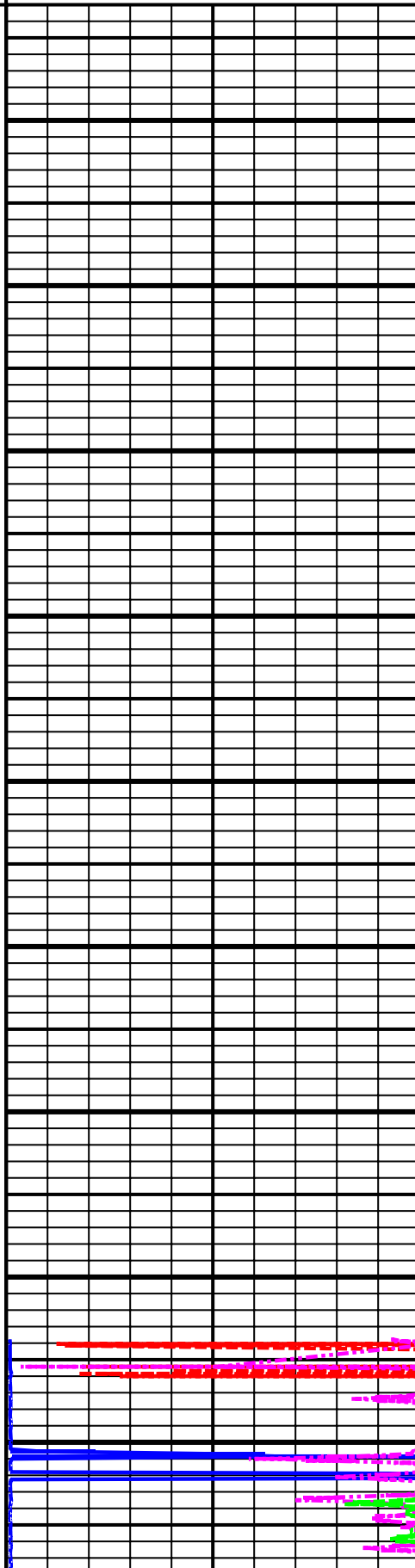
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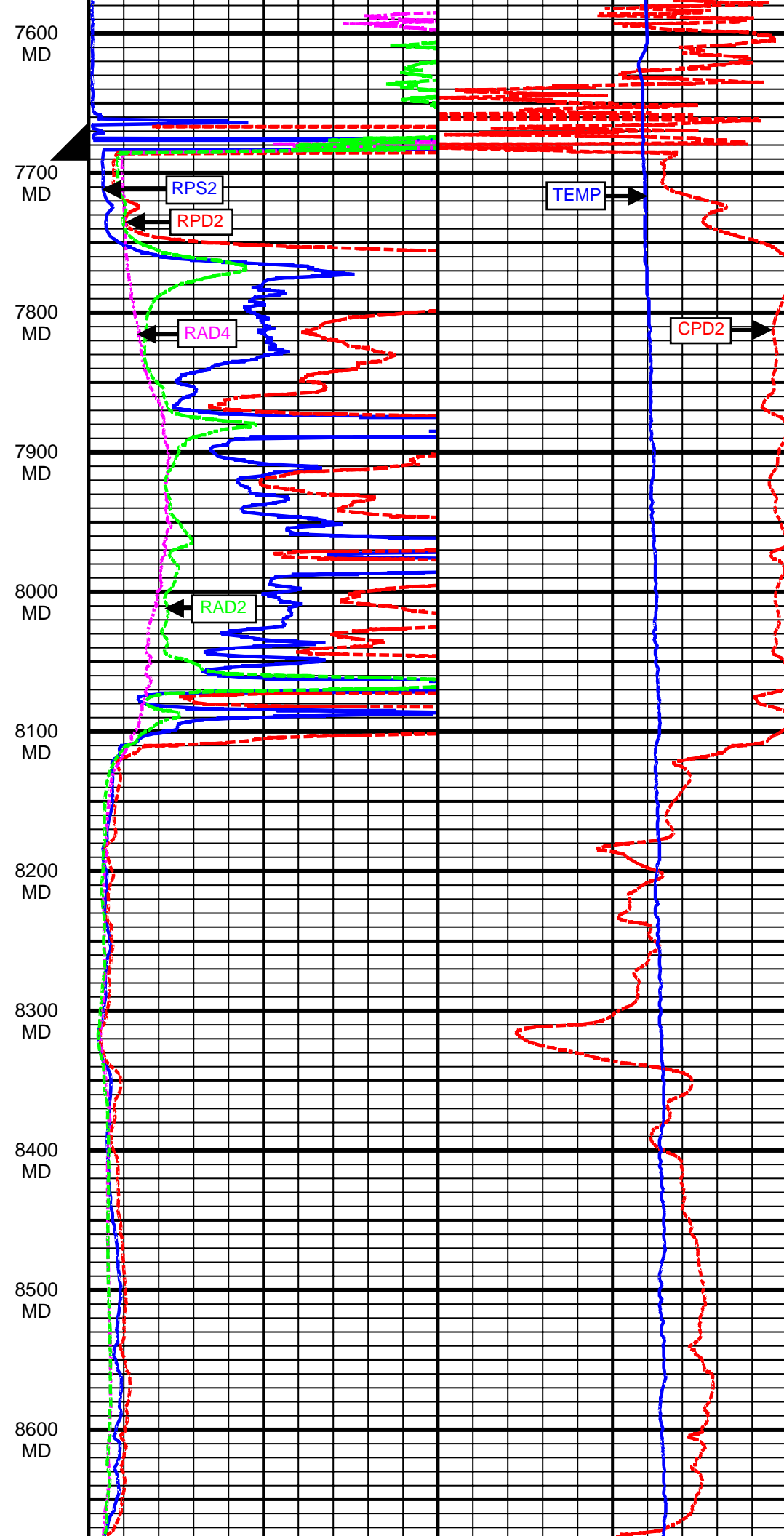
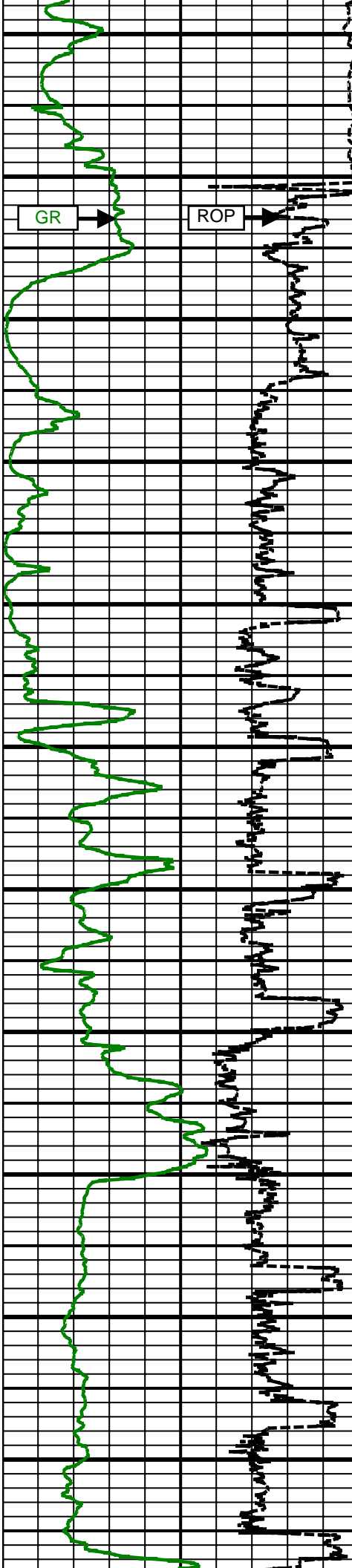
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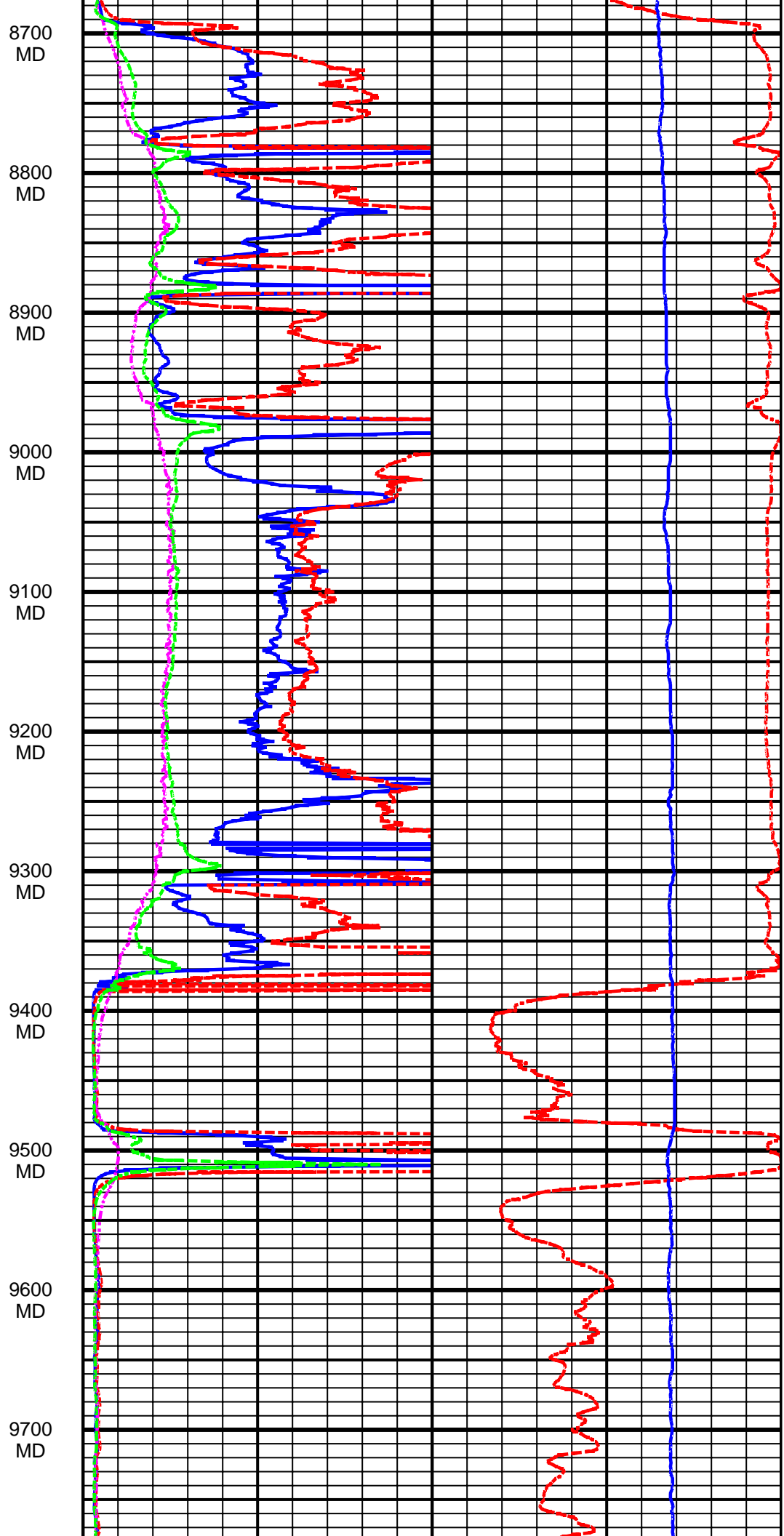
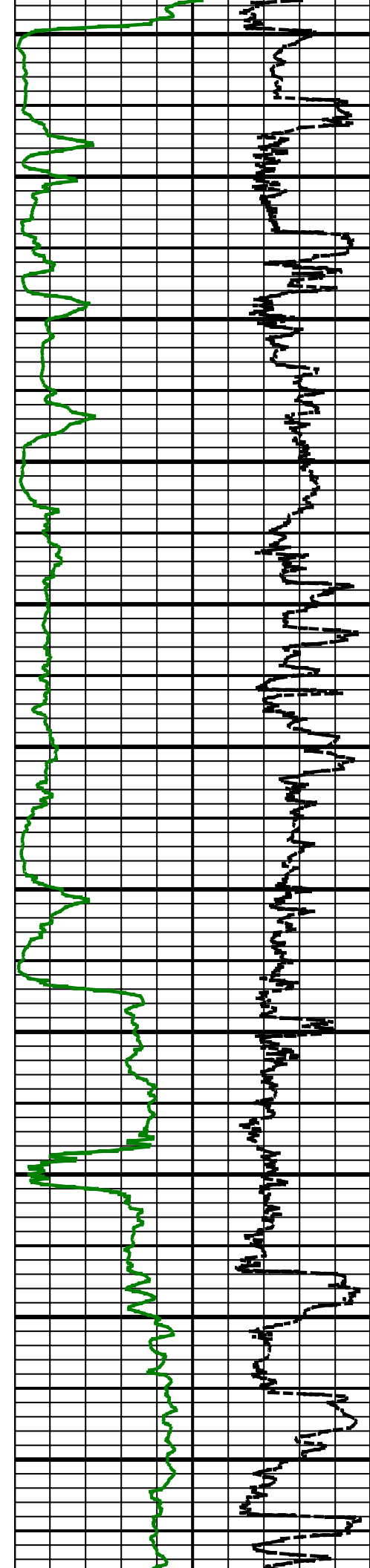
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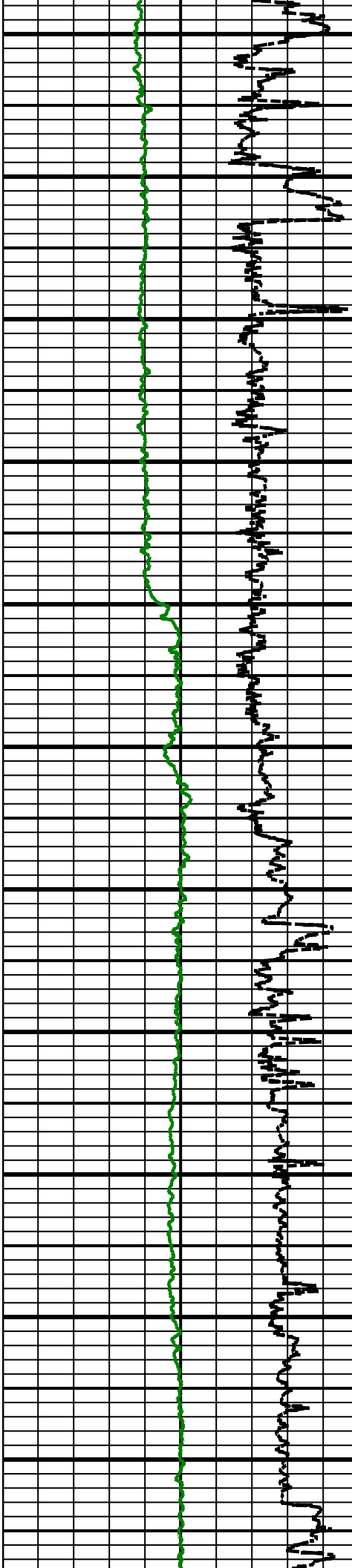
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7500 MD



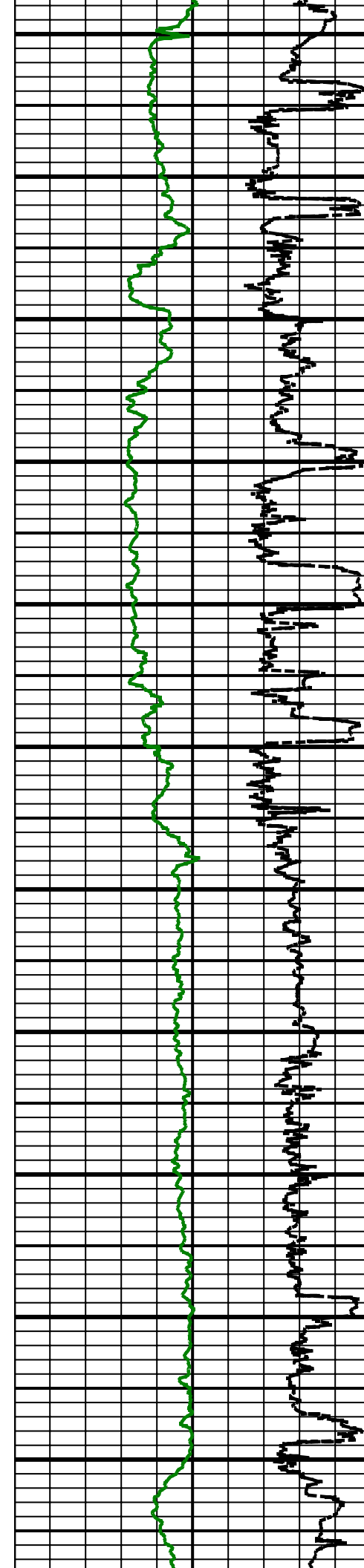






9800 MD  
9900 MD  
10000 MD  
10100 MD  
10200 MD  
10300 MD  
10400 MD  
10500 MD  
10600 MD  
10700 MD  
10800 MD





10900 MD

11000 MD

11100 MD

11200 MD

11300 MD

11400 MD

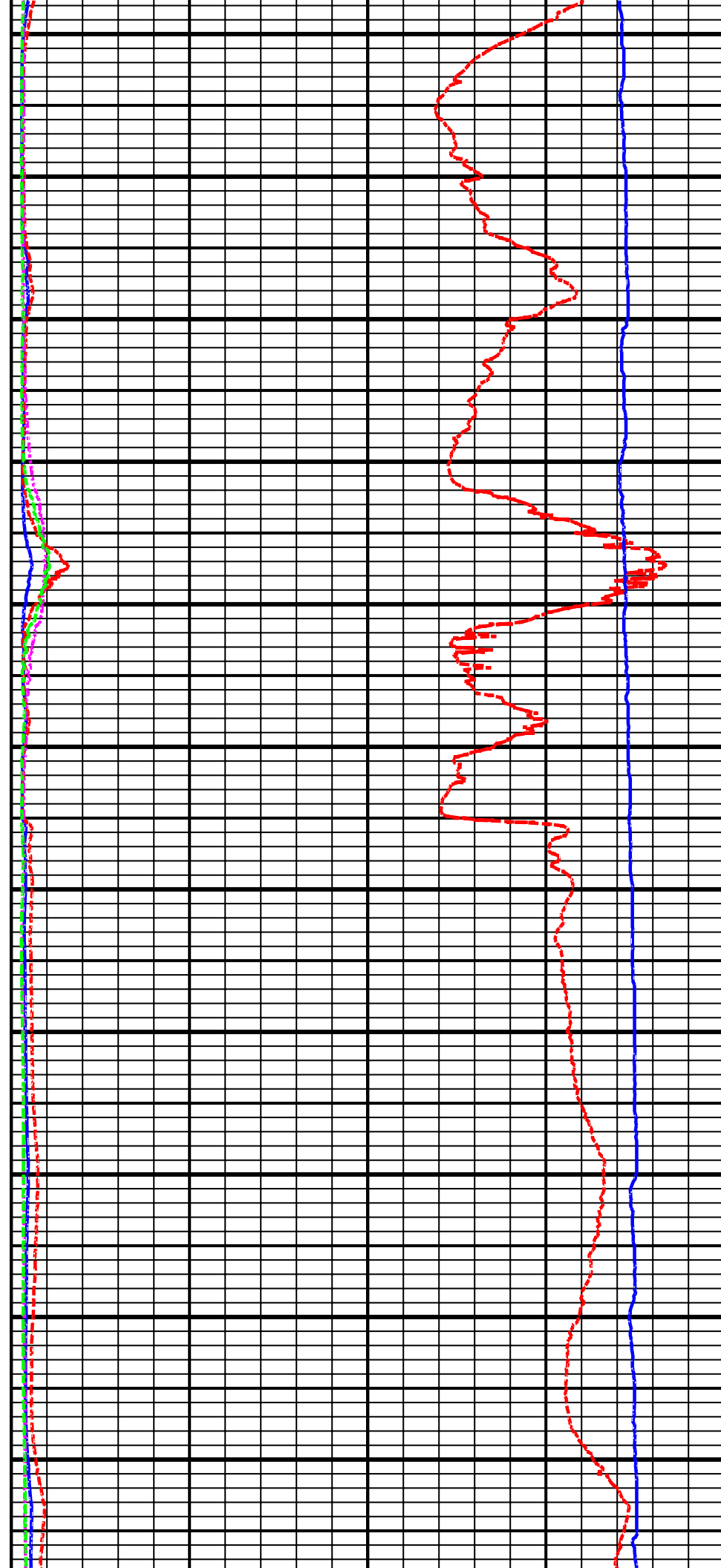
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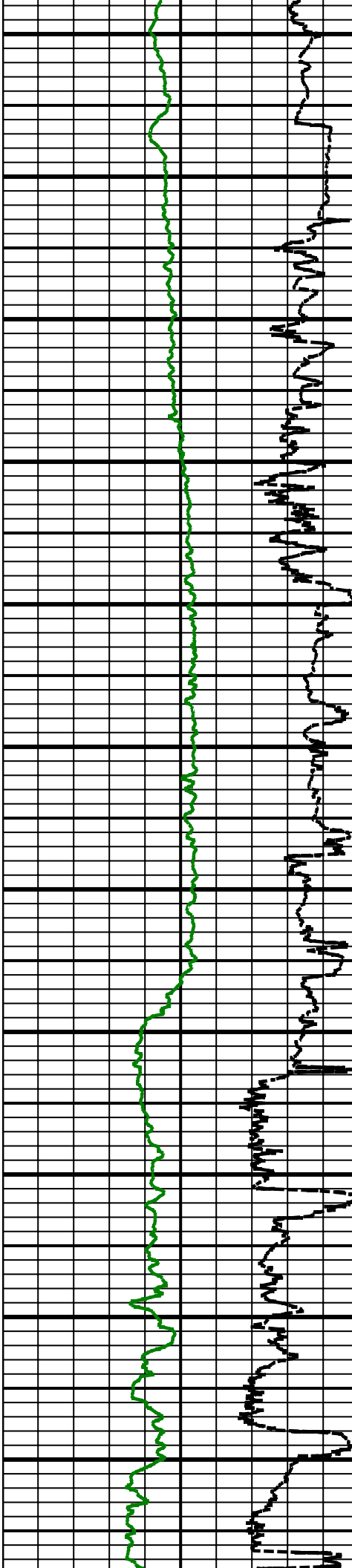
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11900 MD





12000 MD

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12200 MD

12300 MD

12400 MD

12500 MD

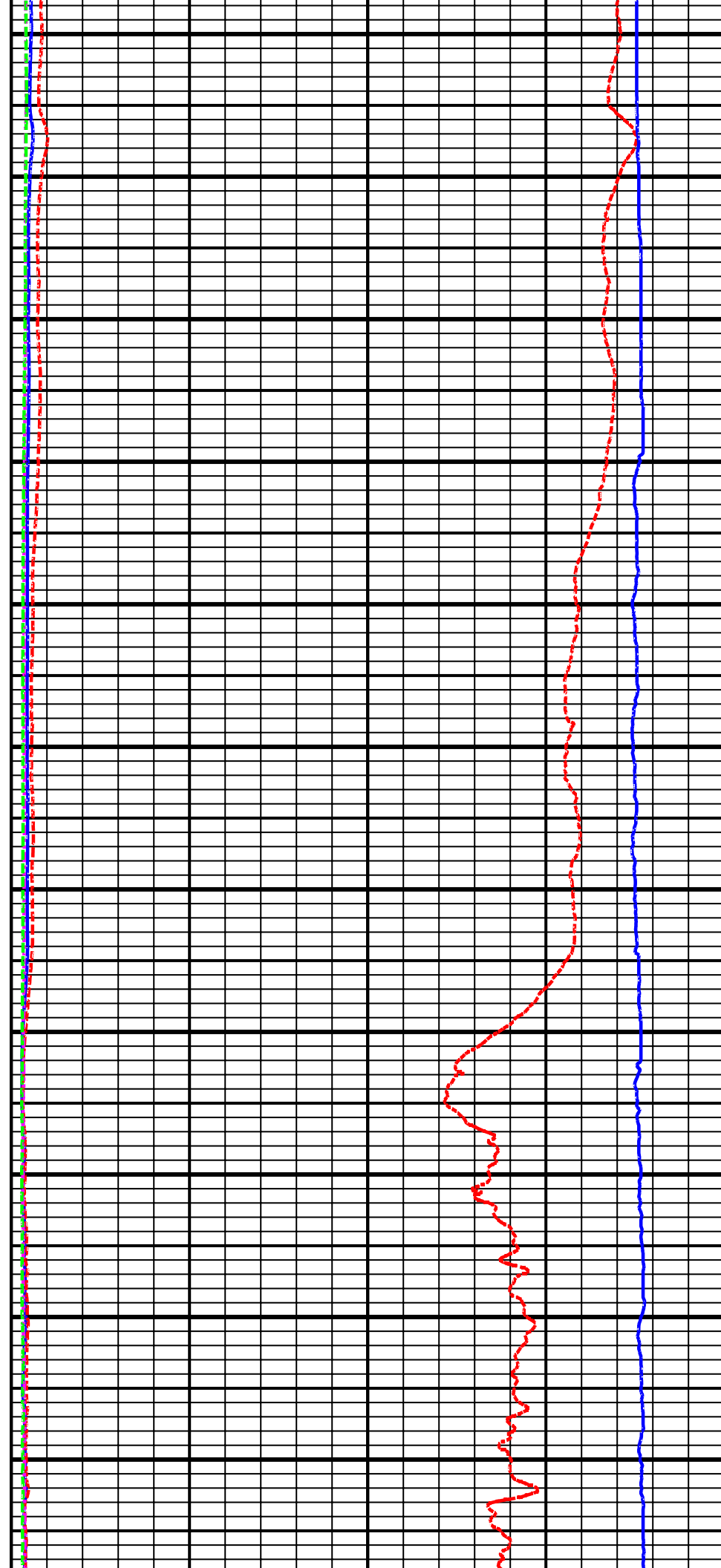
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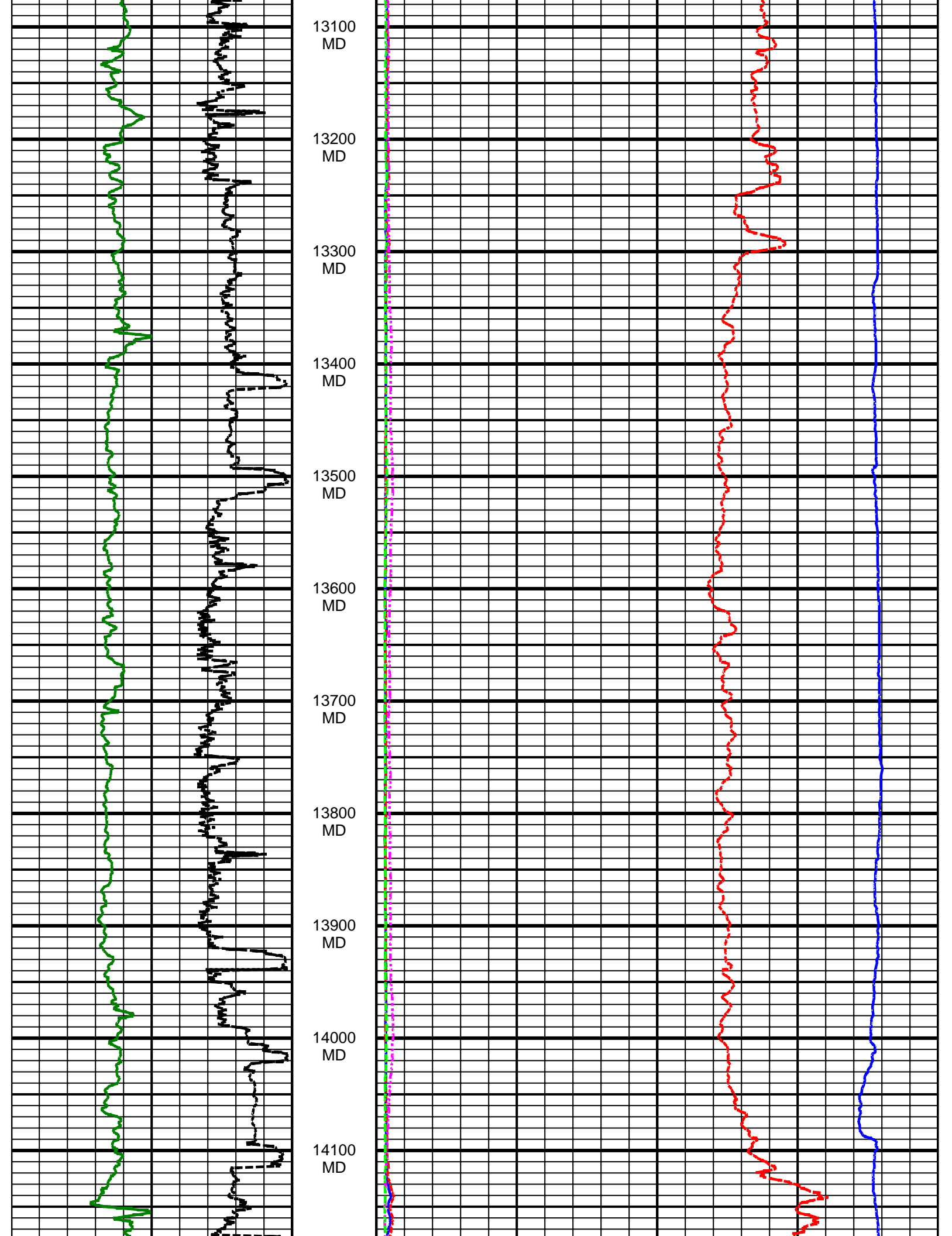
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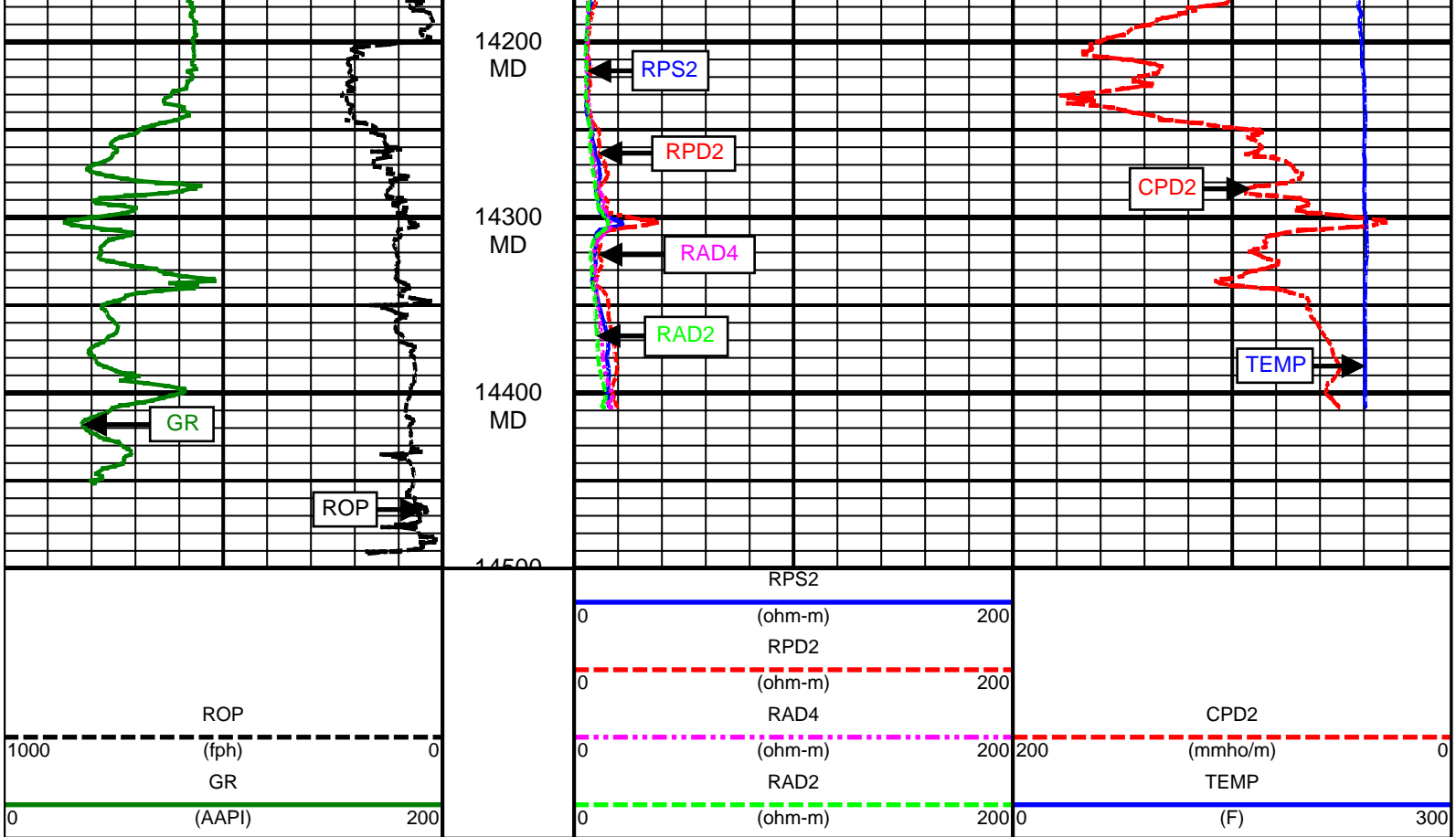
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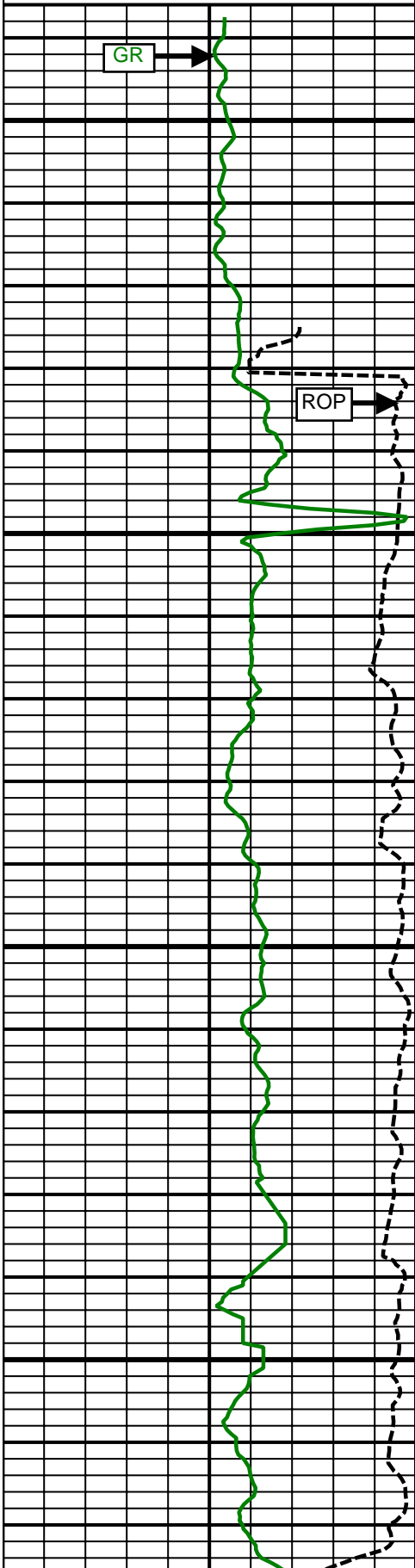
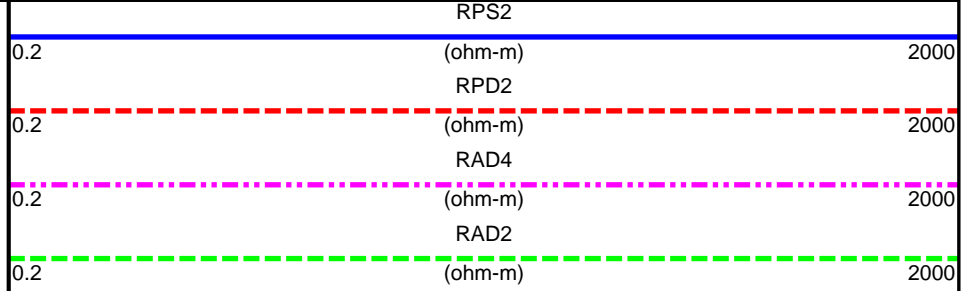
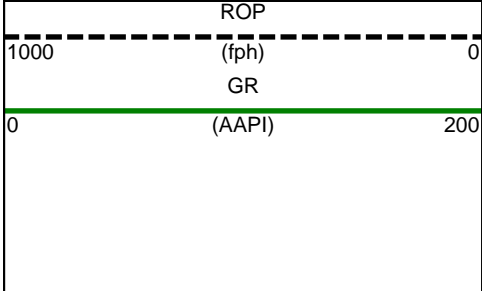








**5 Inch - Measured Depth**

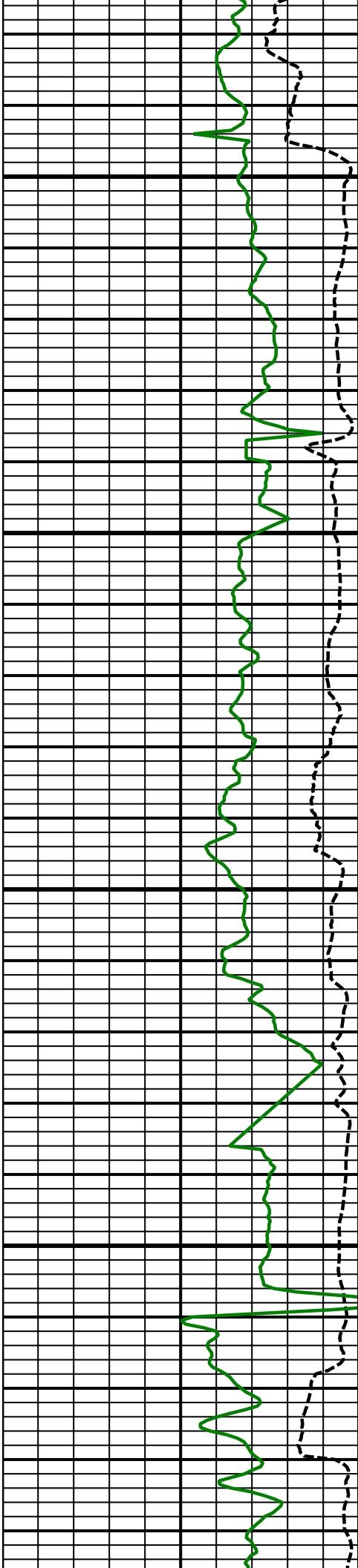


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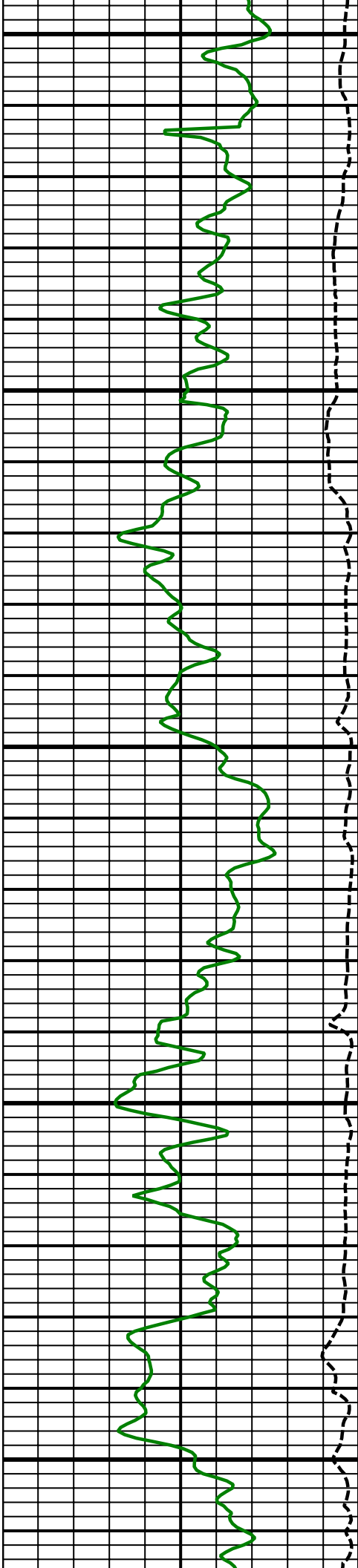
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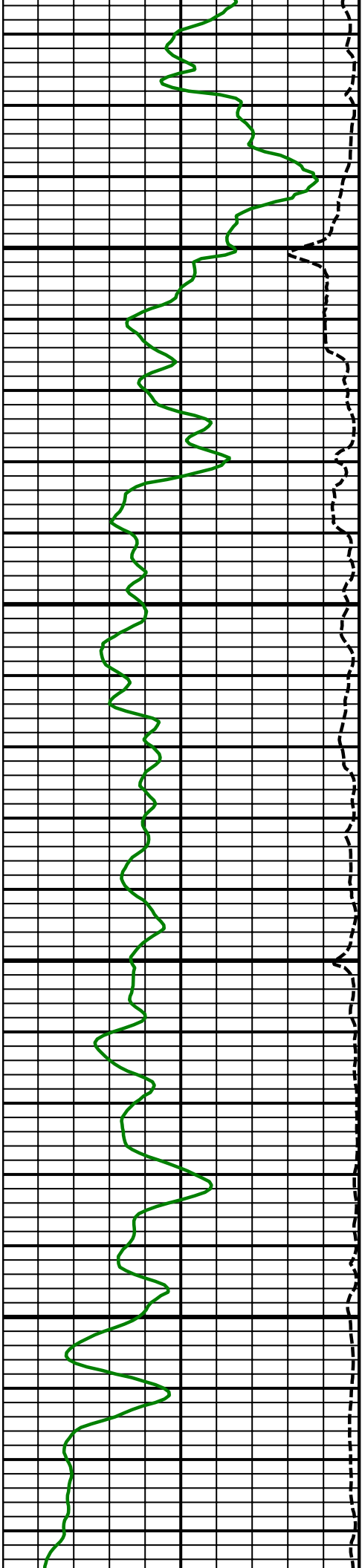
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MD

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7300  
MD



Comment  
No. 2-2

Comment  
No. 3-1

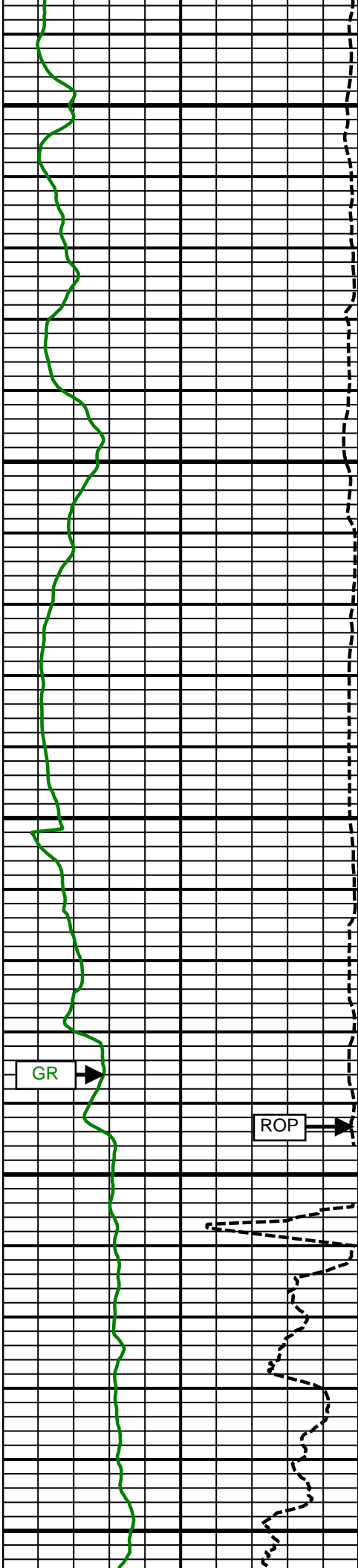
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No. 3-2

Comment  
No. 4-1

7500  
MD



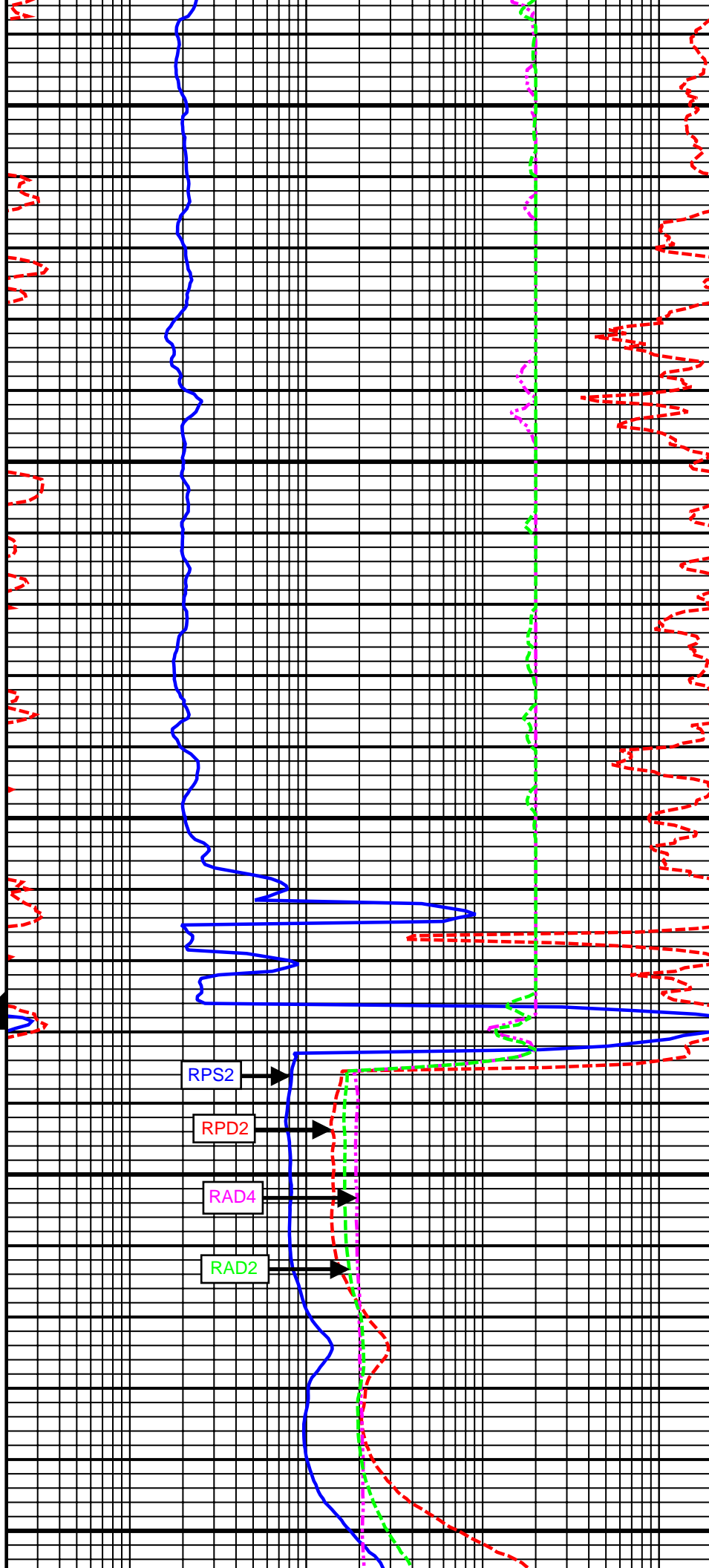


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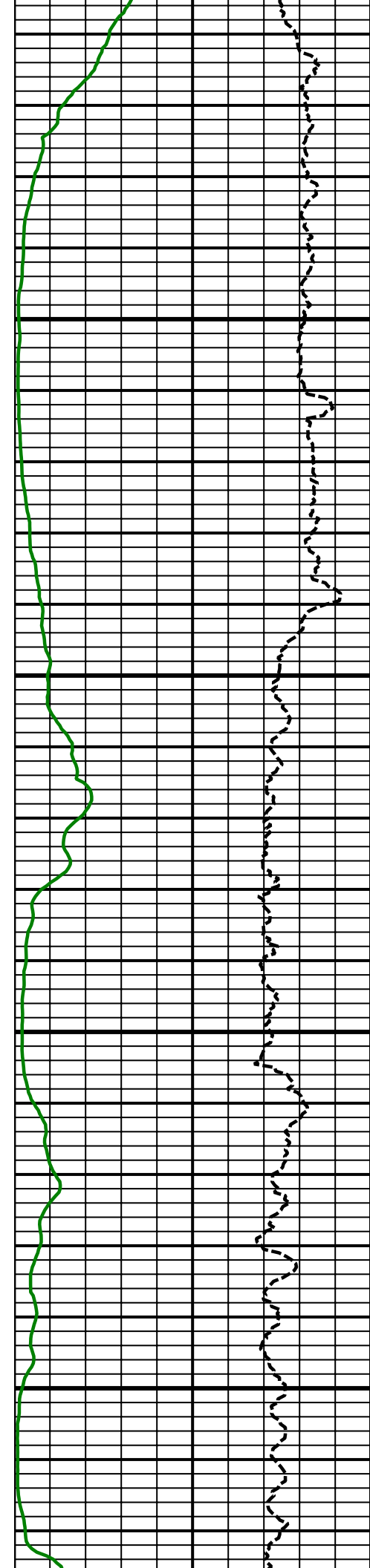
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No. 5-1

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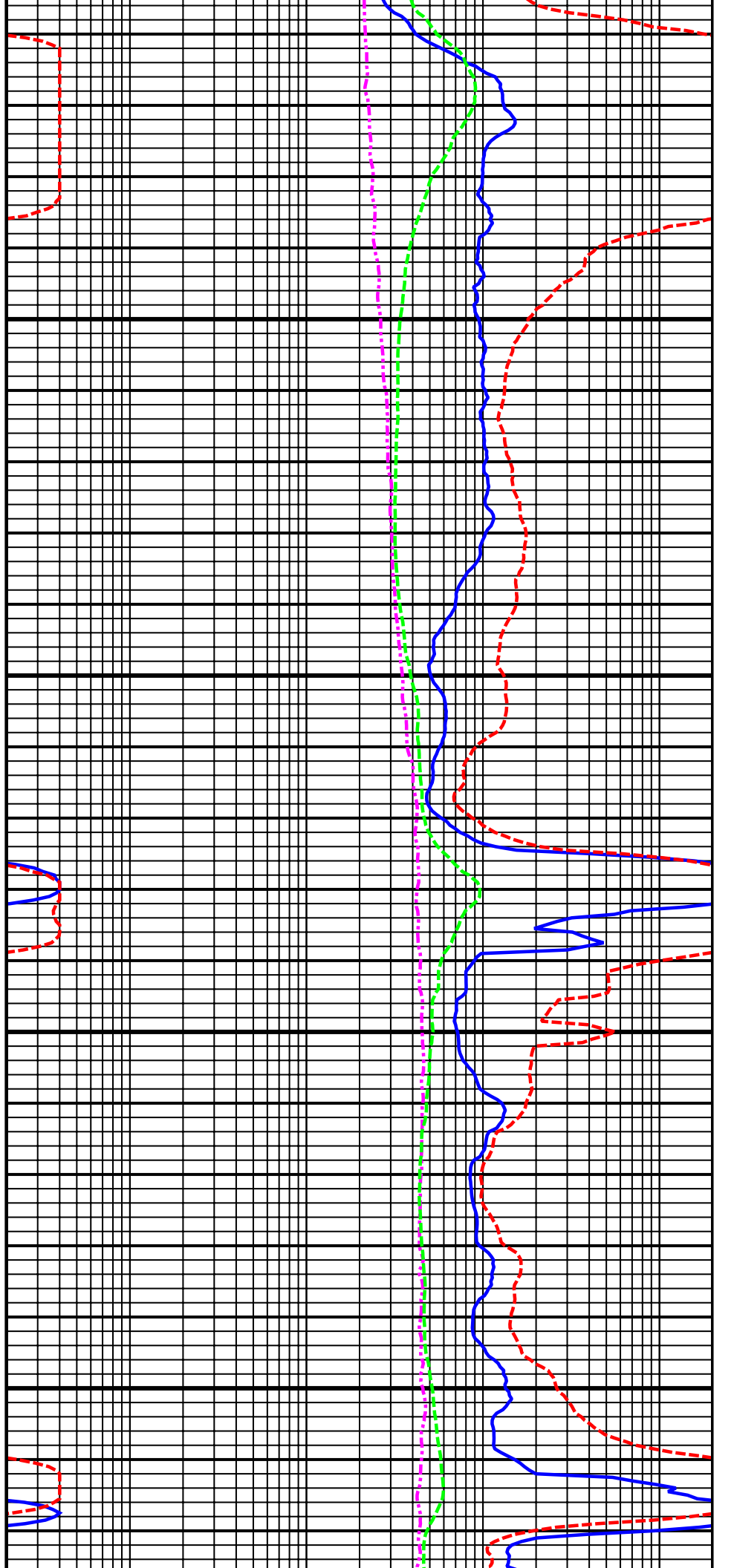


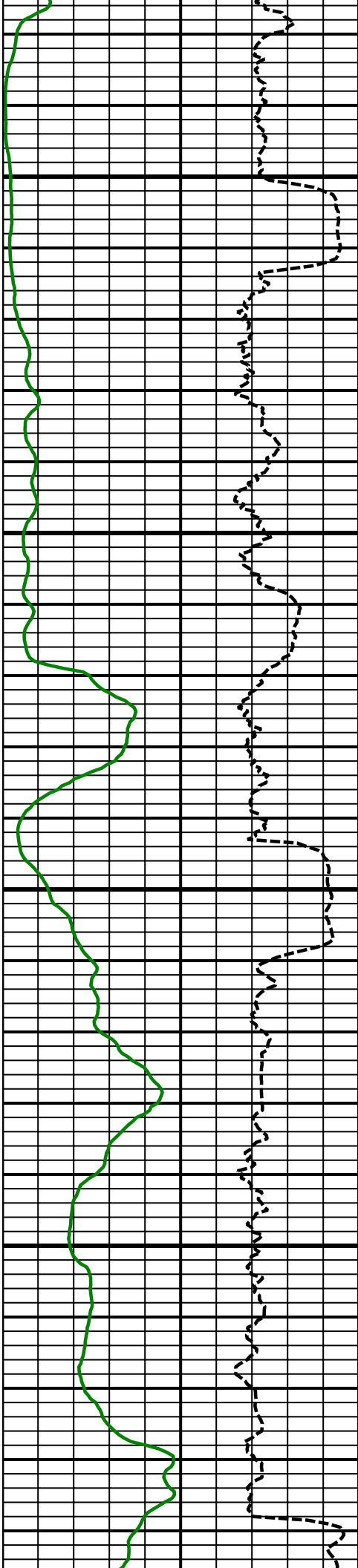




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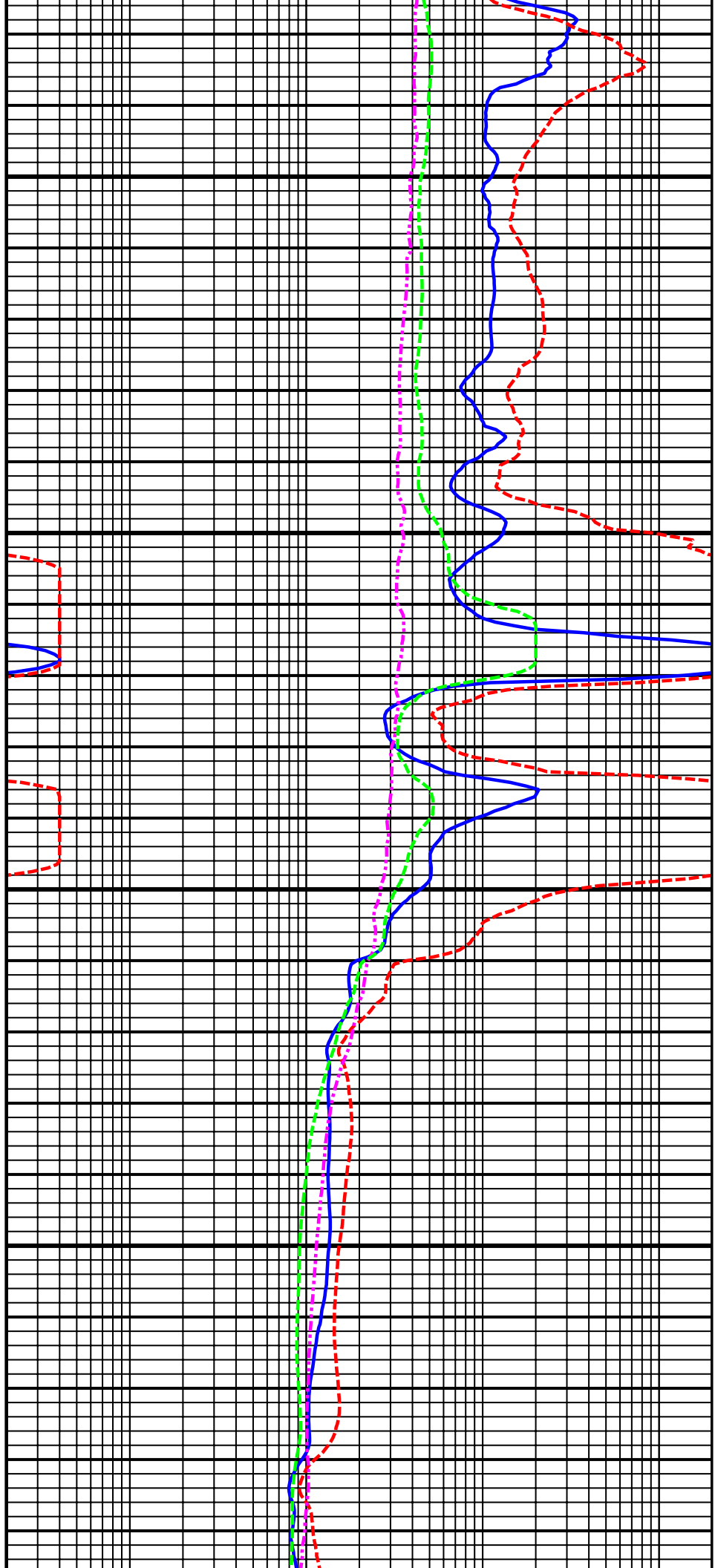
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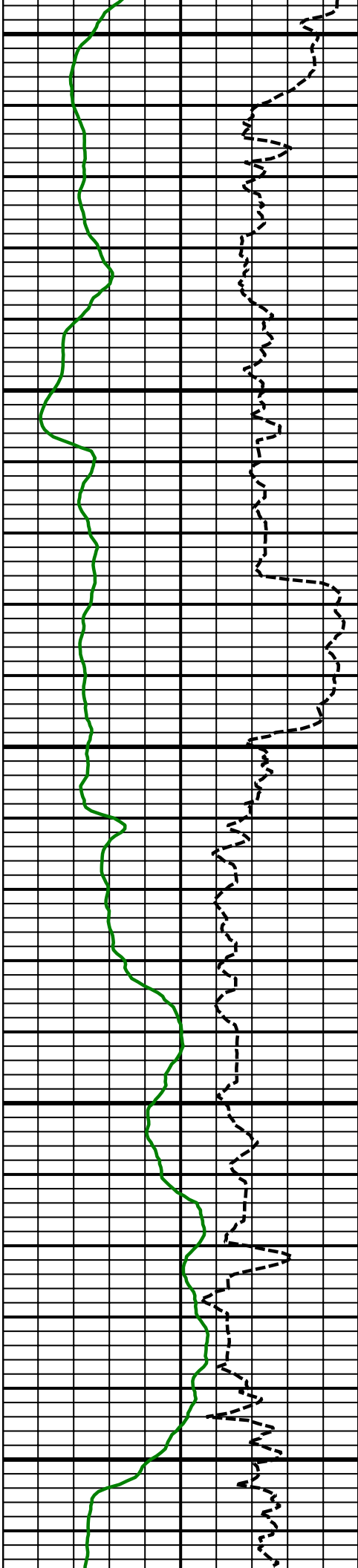




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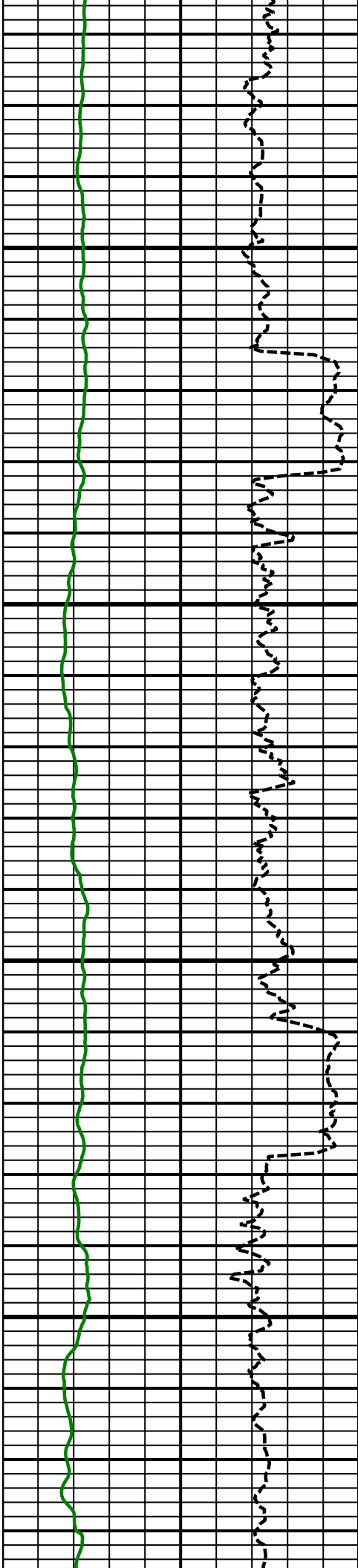


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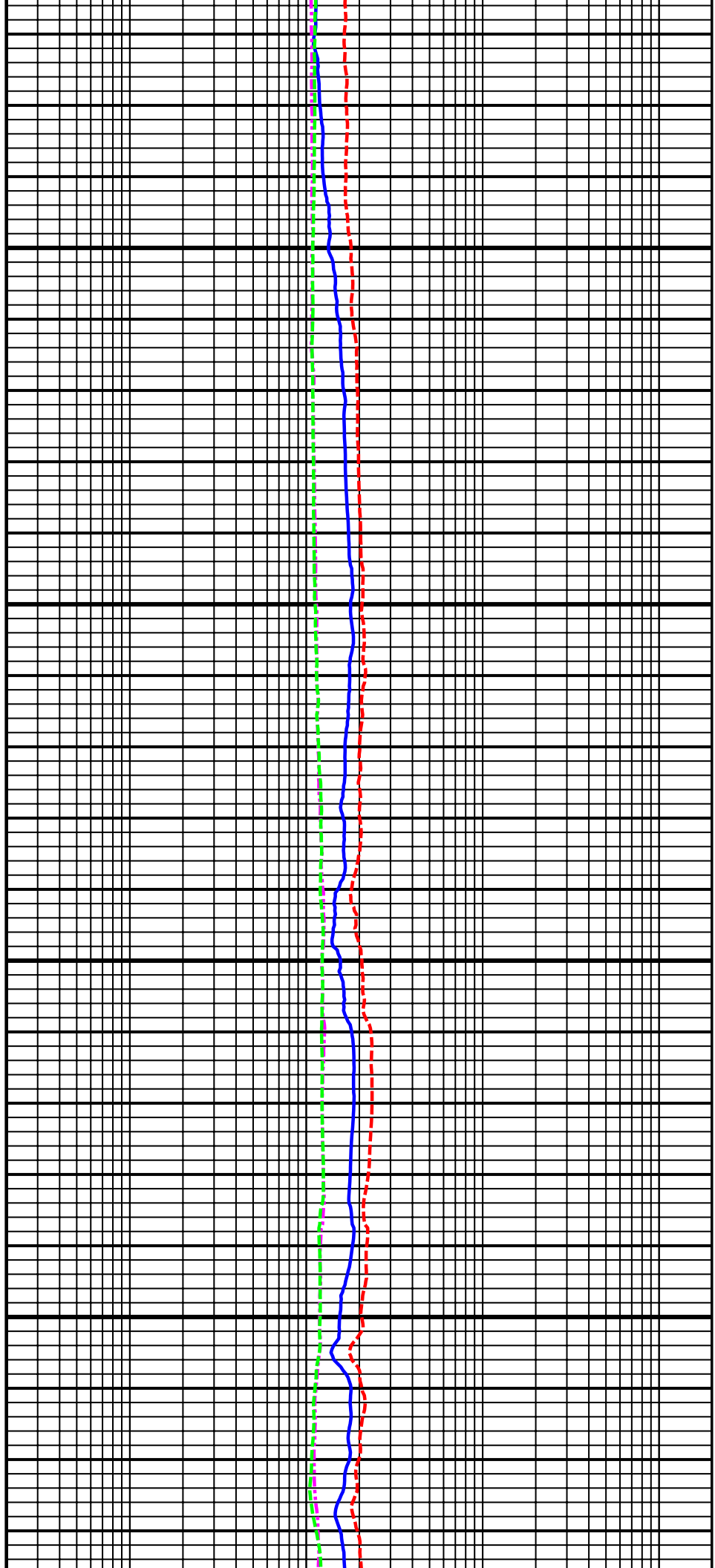
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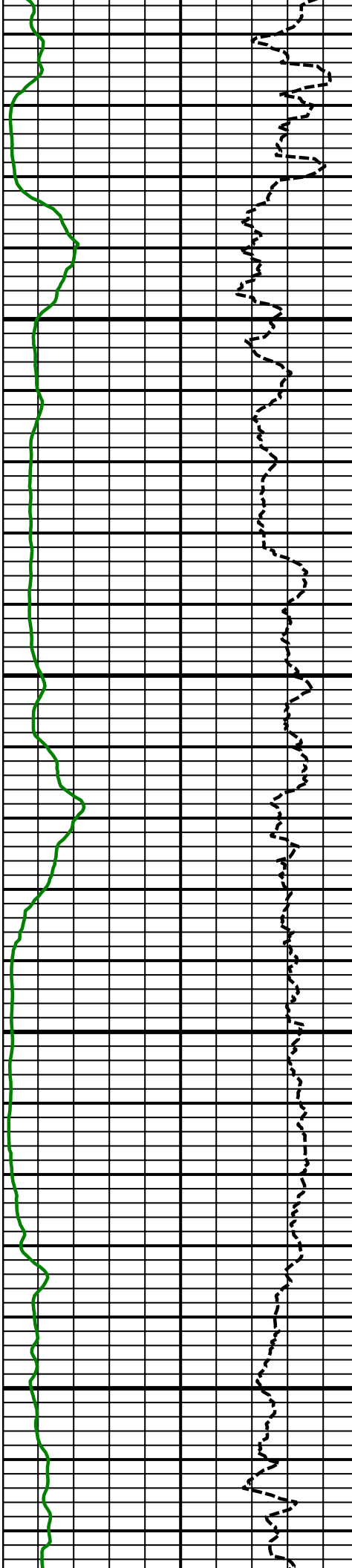


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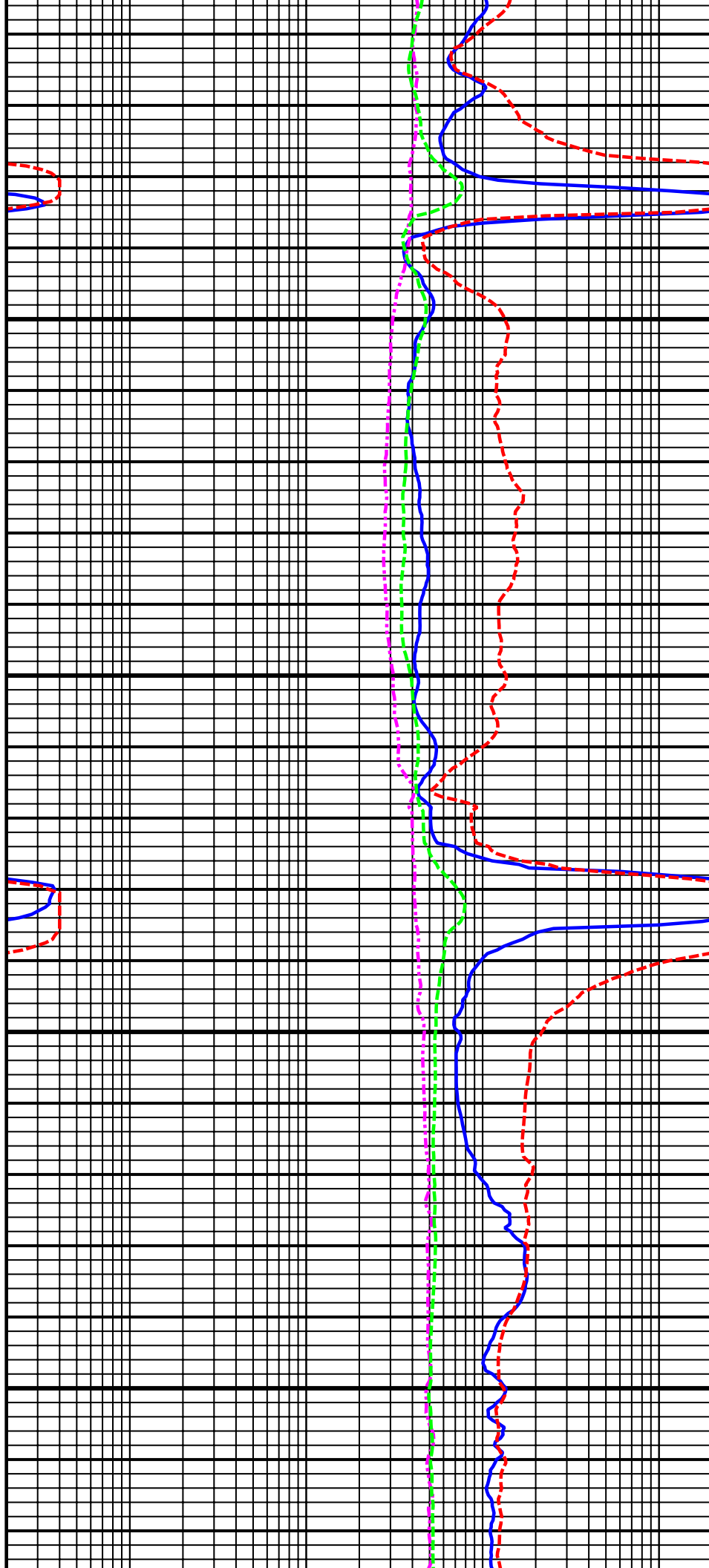


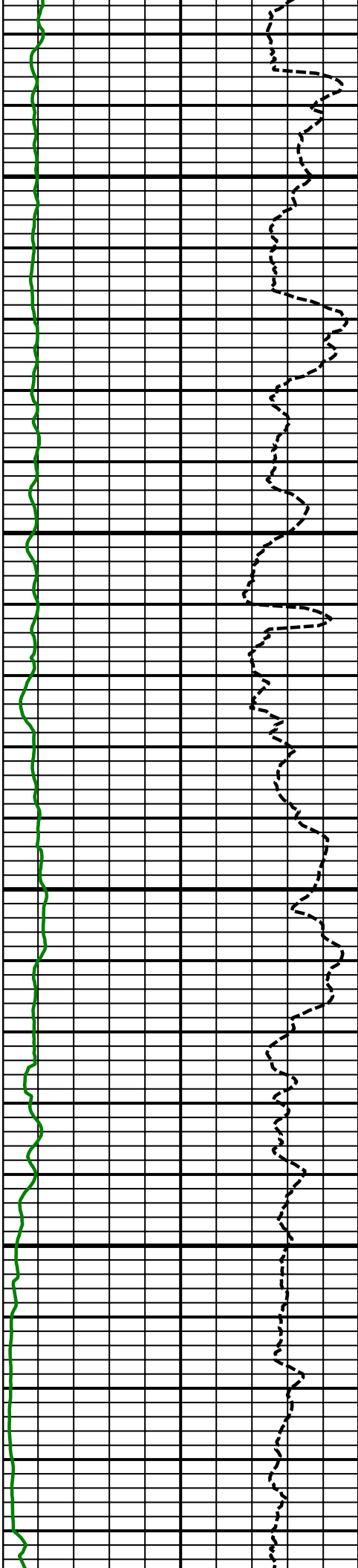




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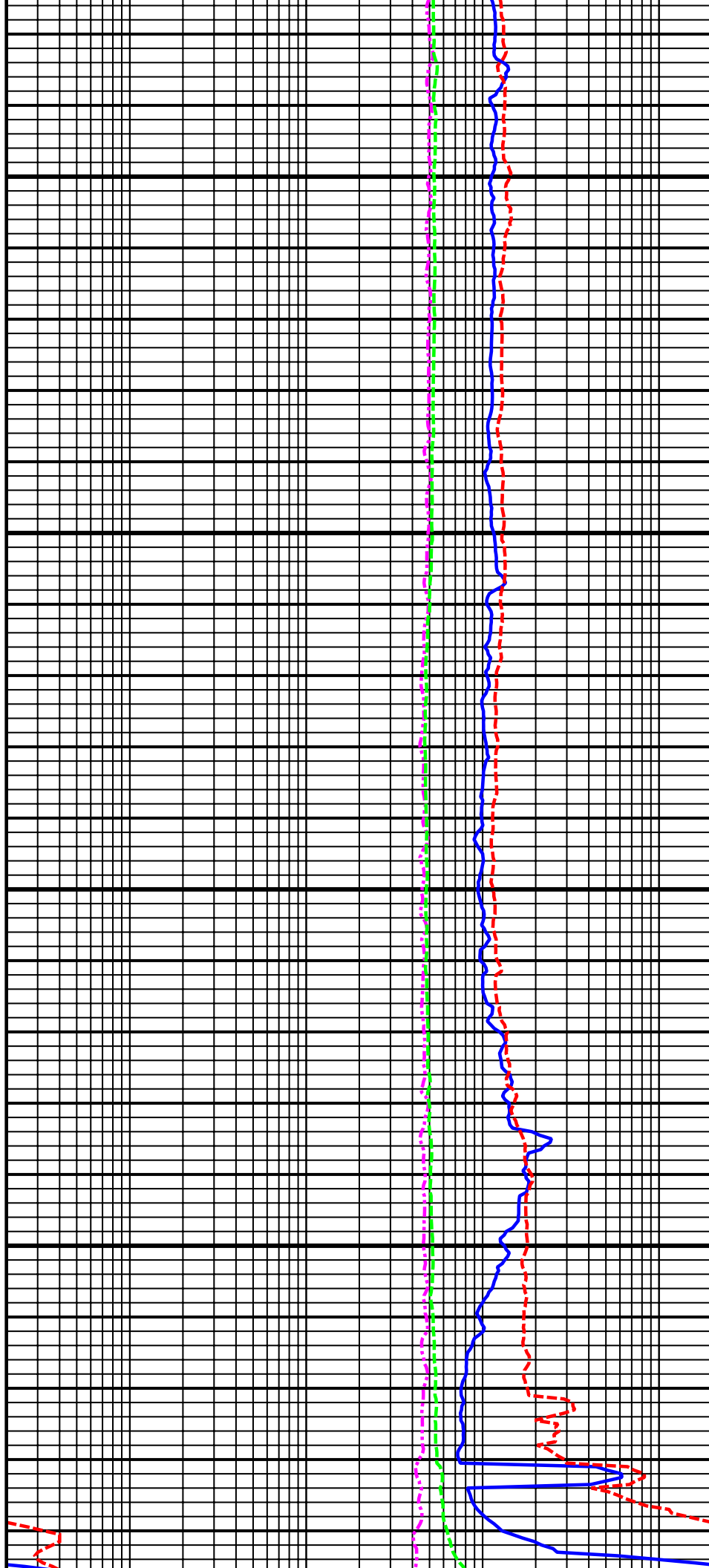
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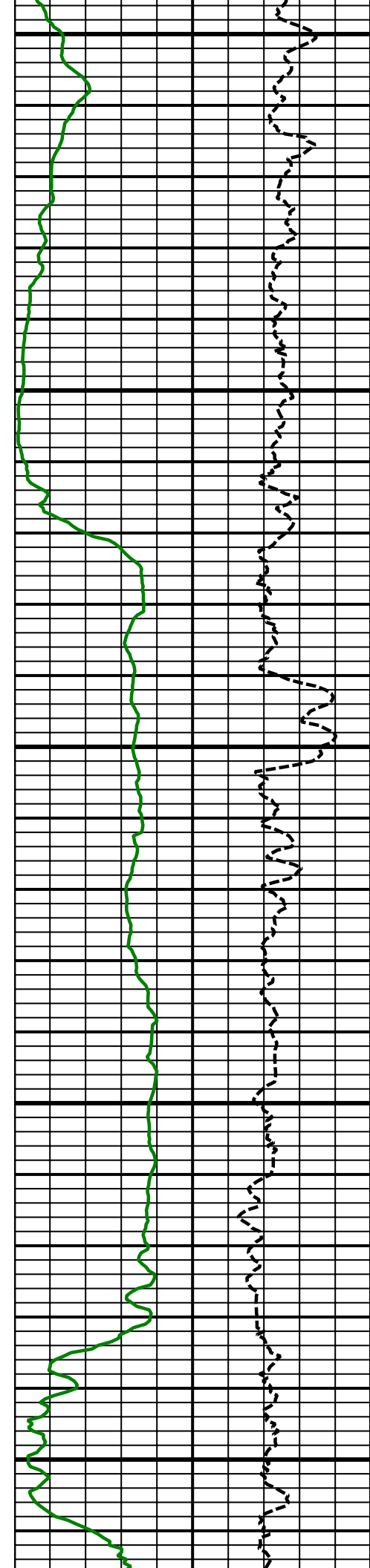




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MD

9200  
MD

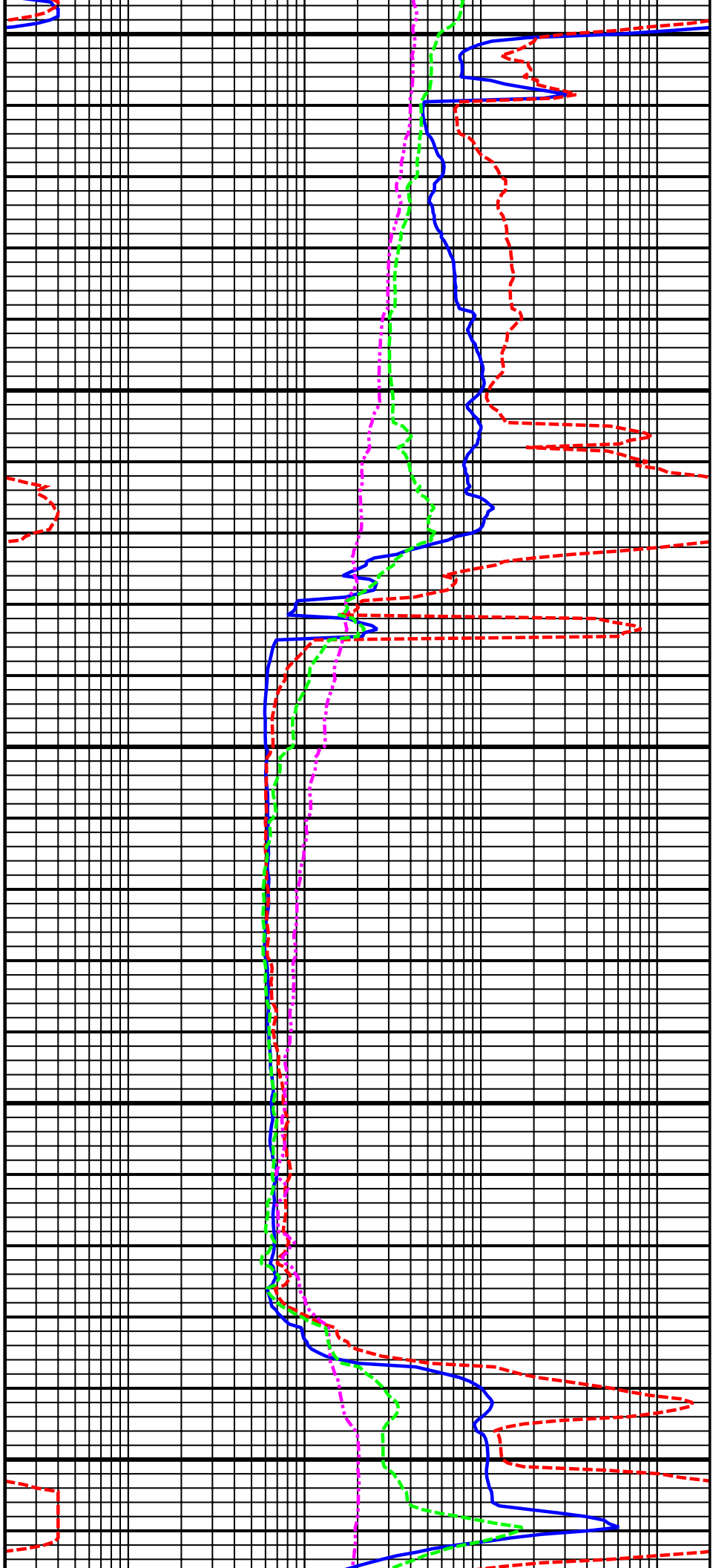




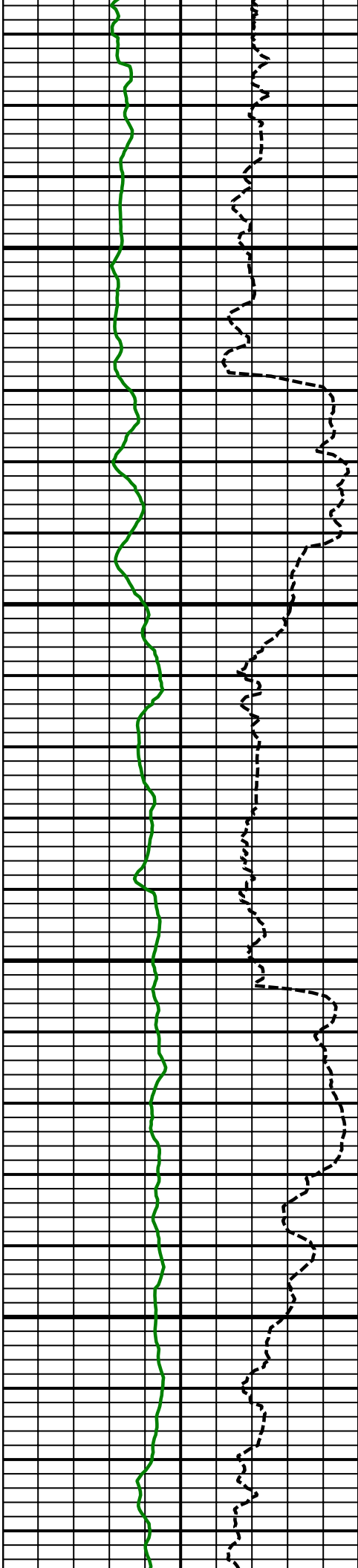
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9500  
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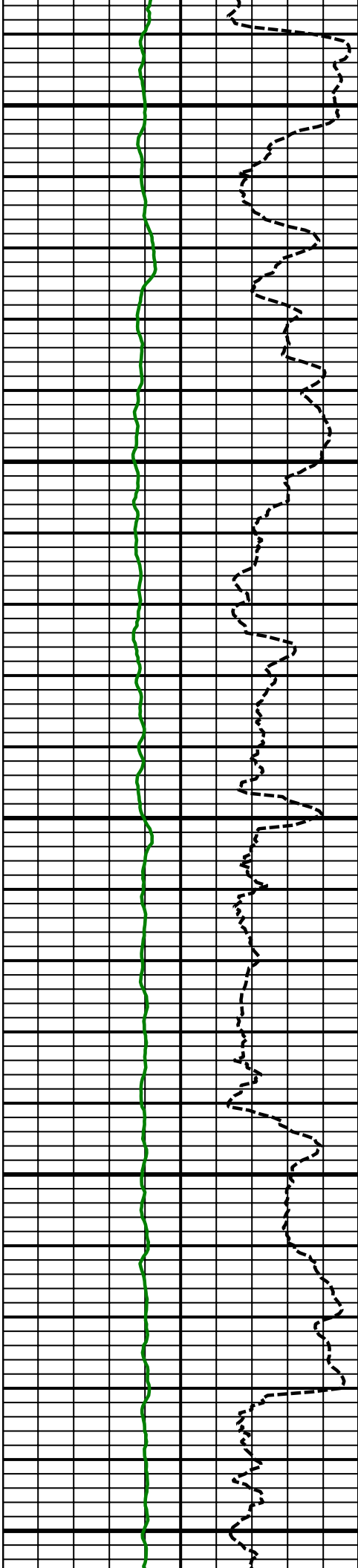




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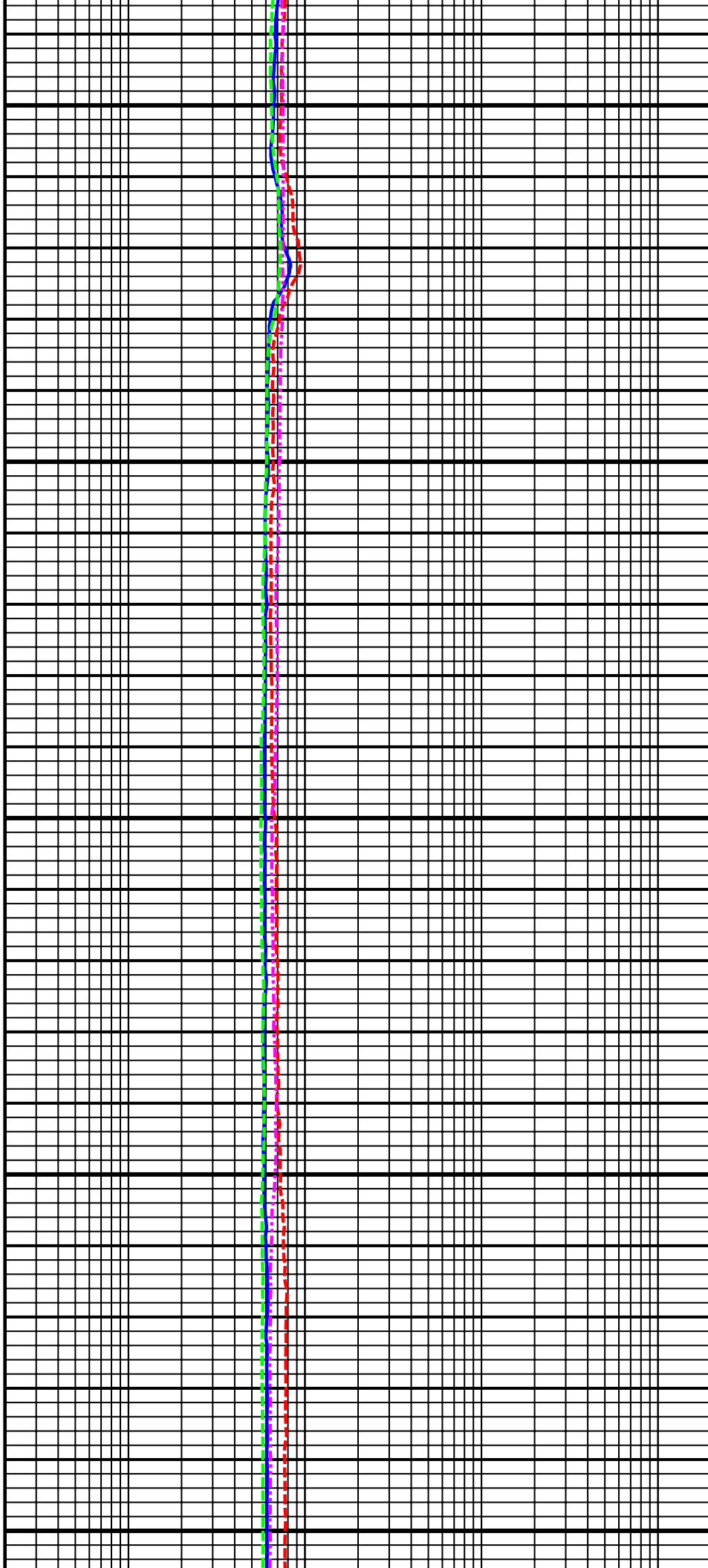
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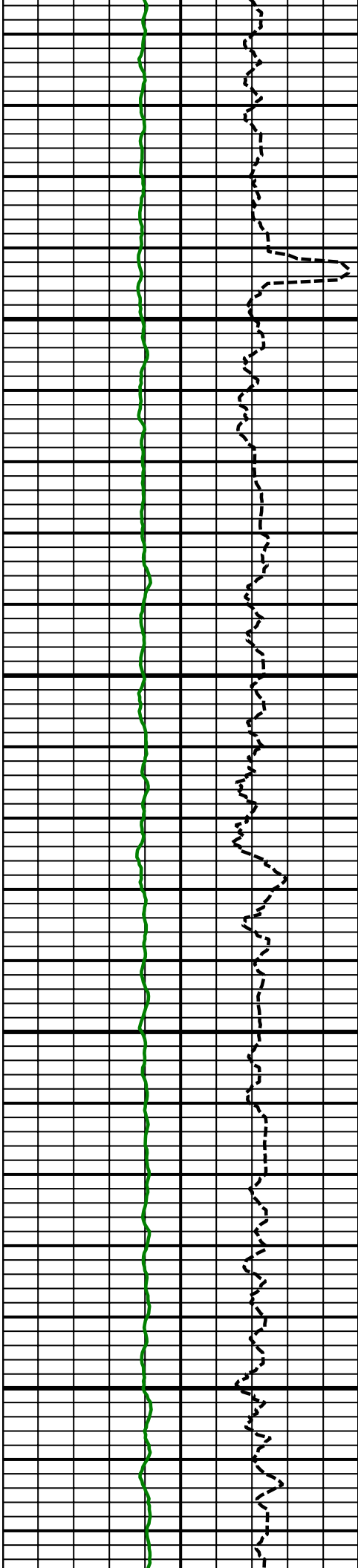




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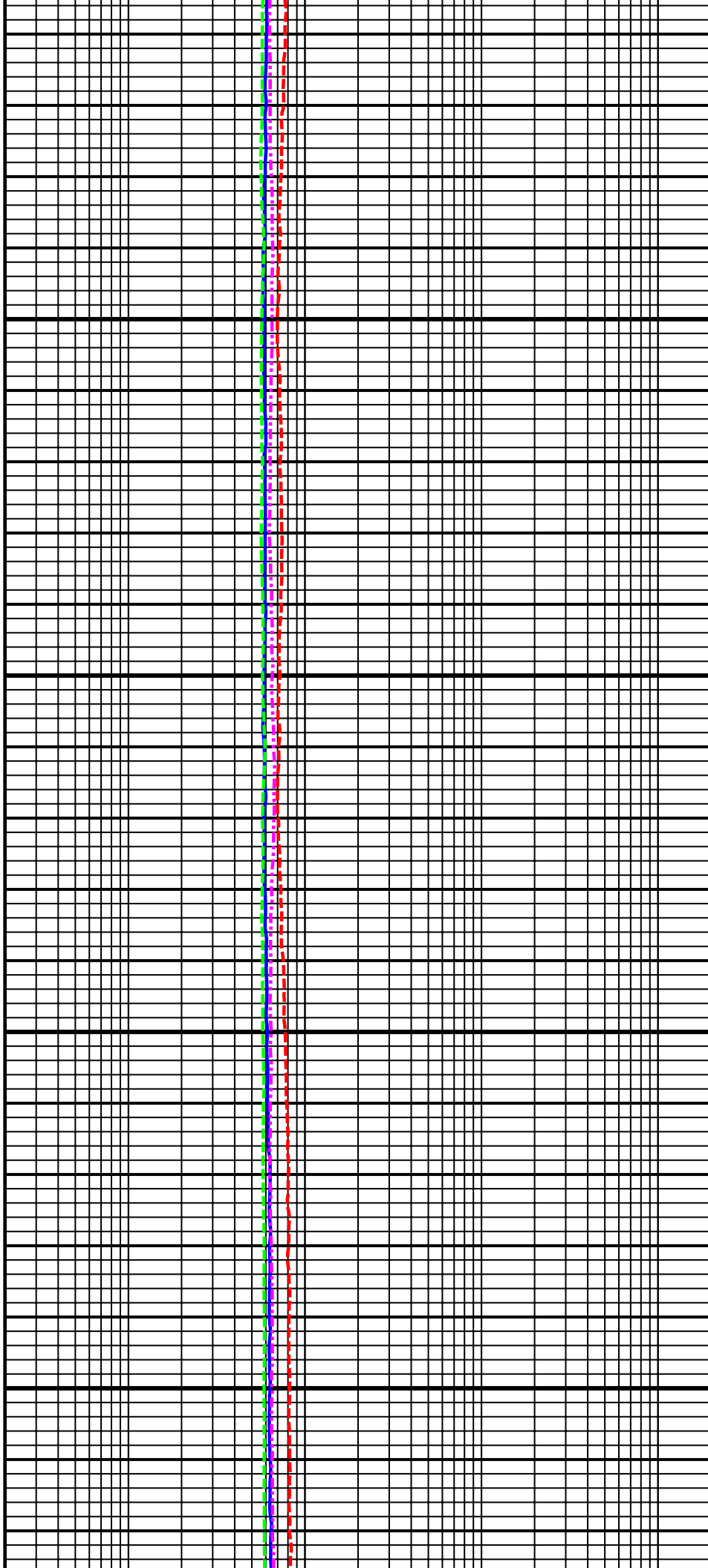
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MD

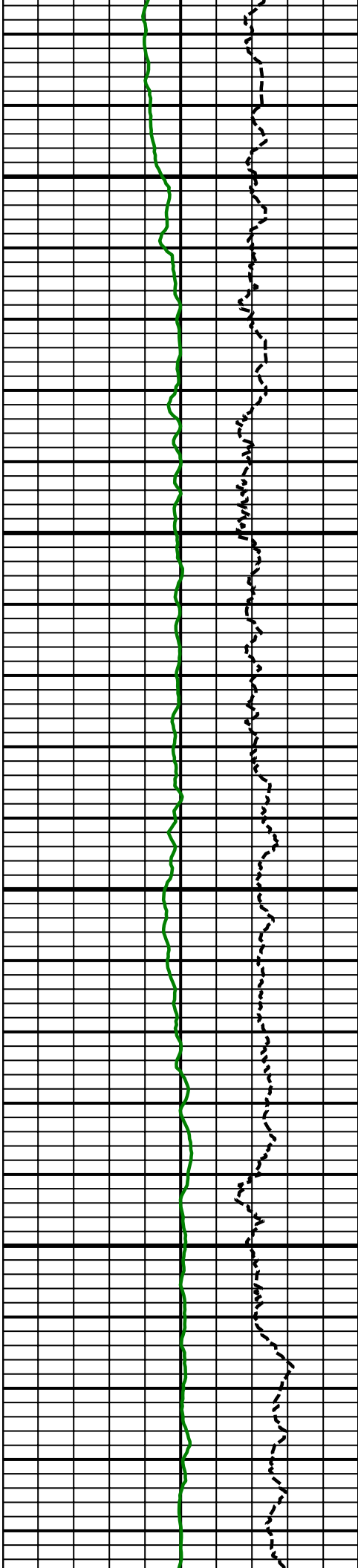




10000  
MD

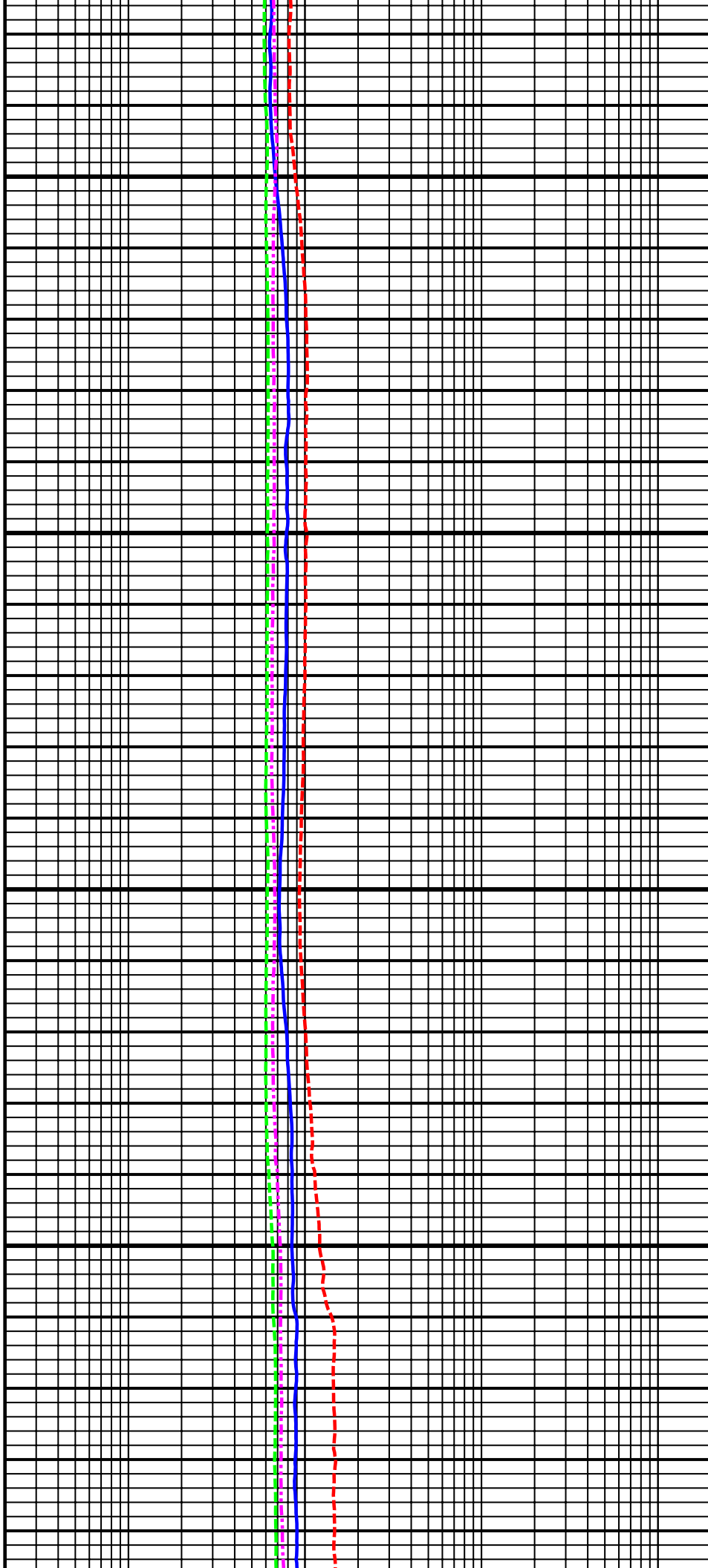
10100  
MD

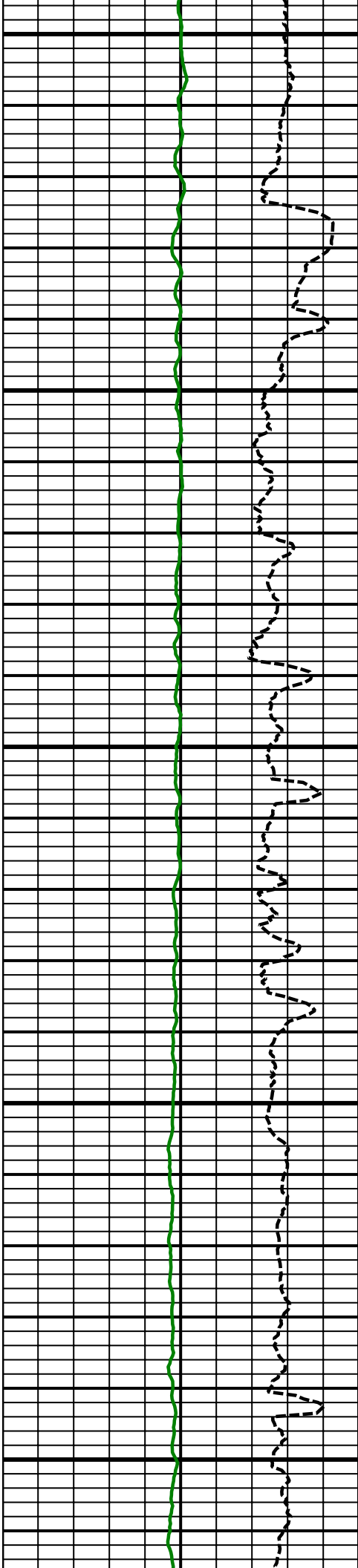




10200  
MD

10300  
MD

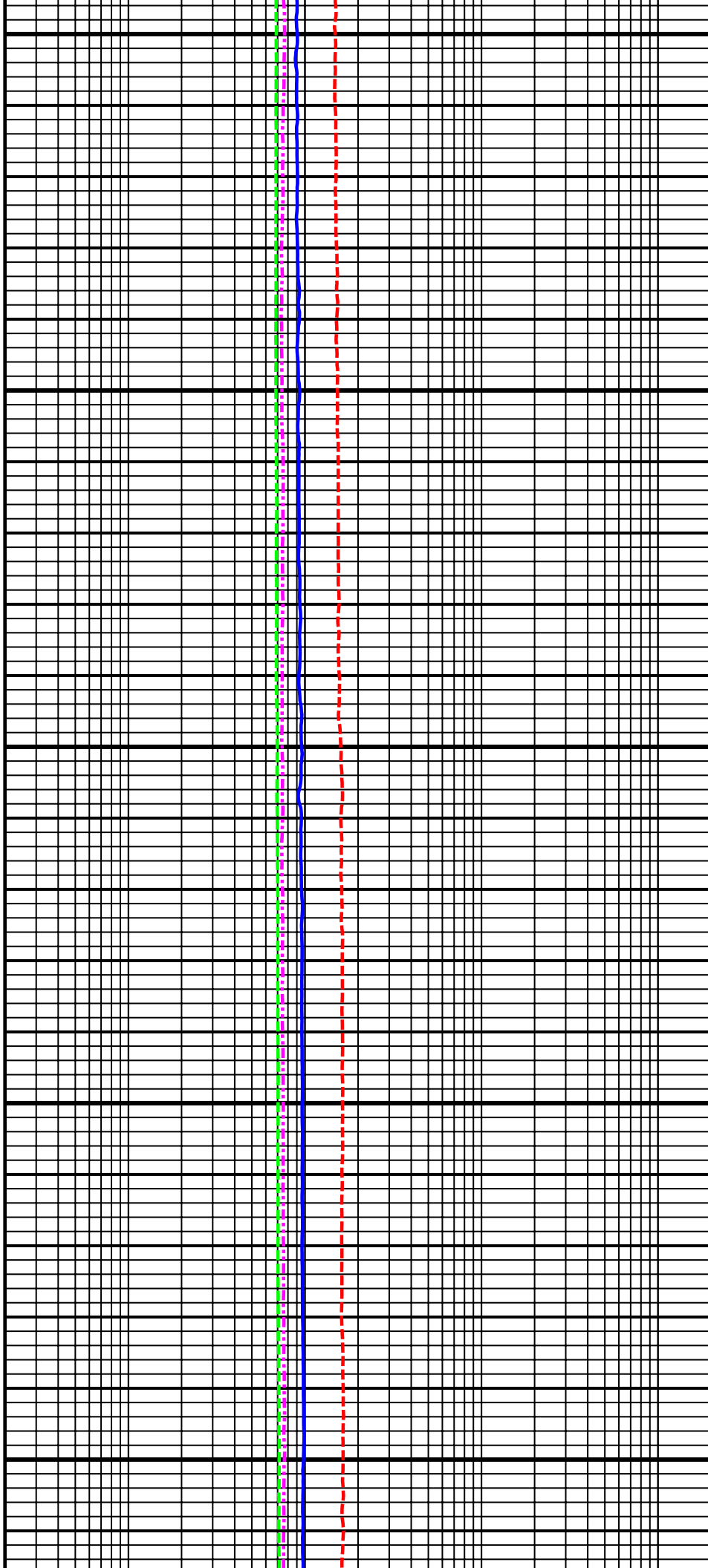


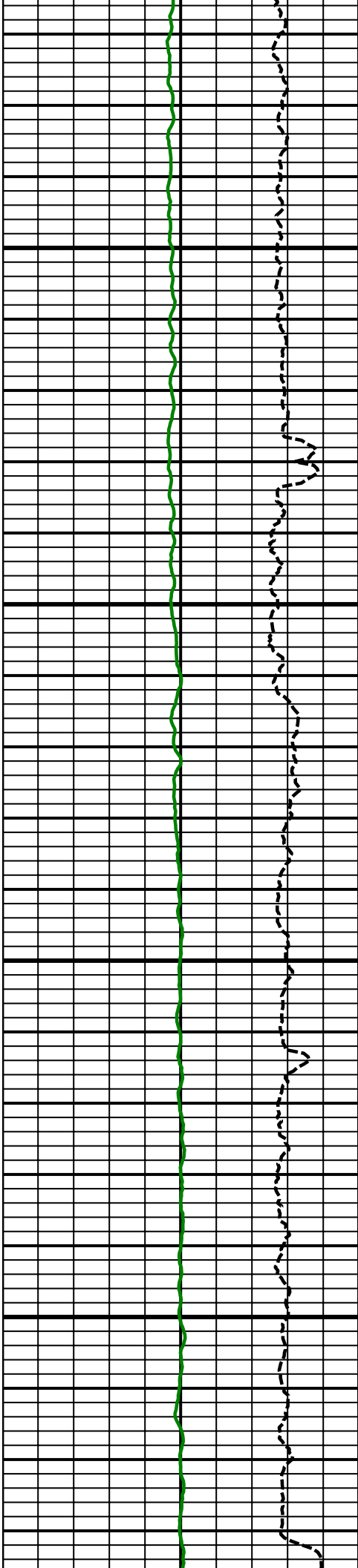


10400  
MD

10500  
MD

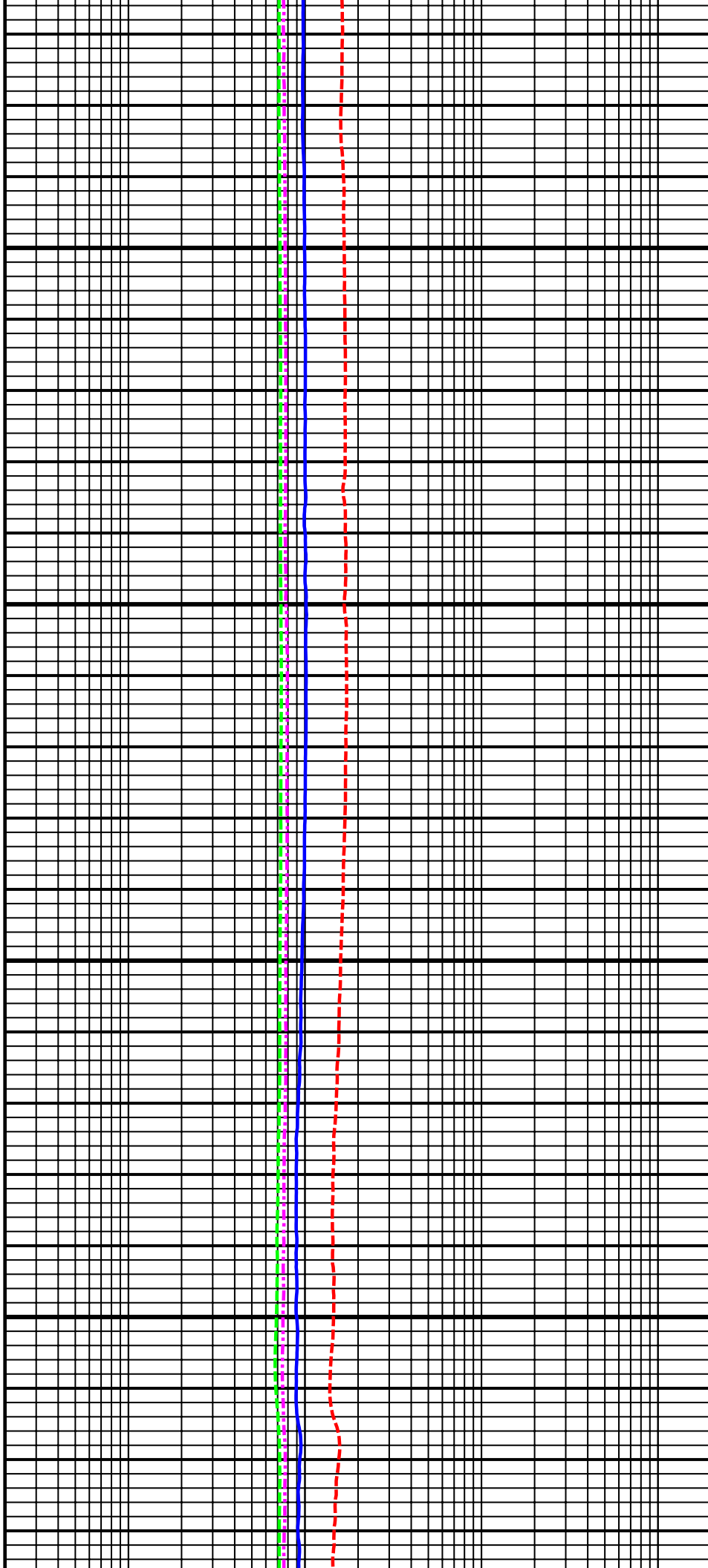
10600  
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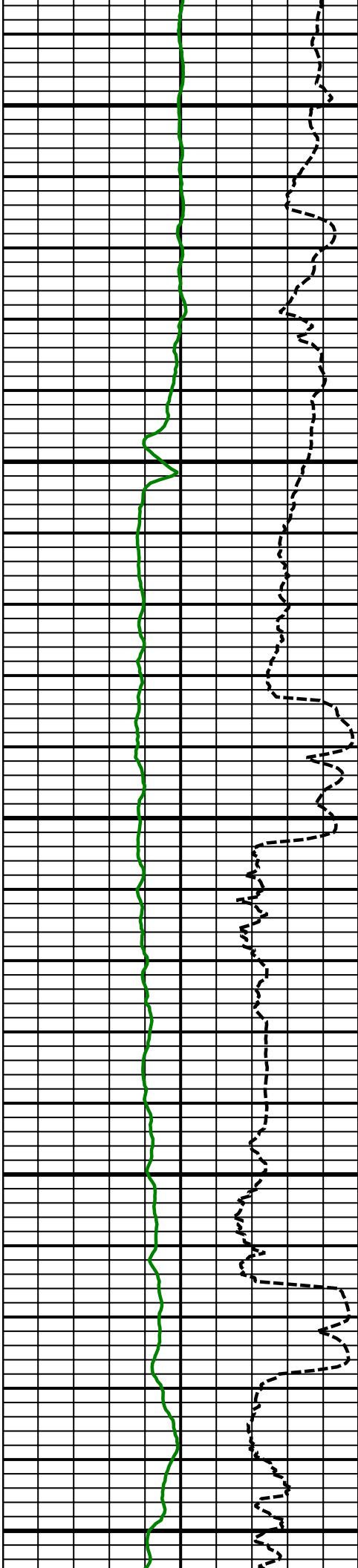




10700  
MD

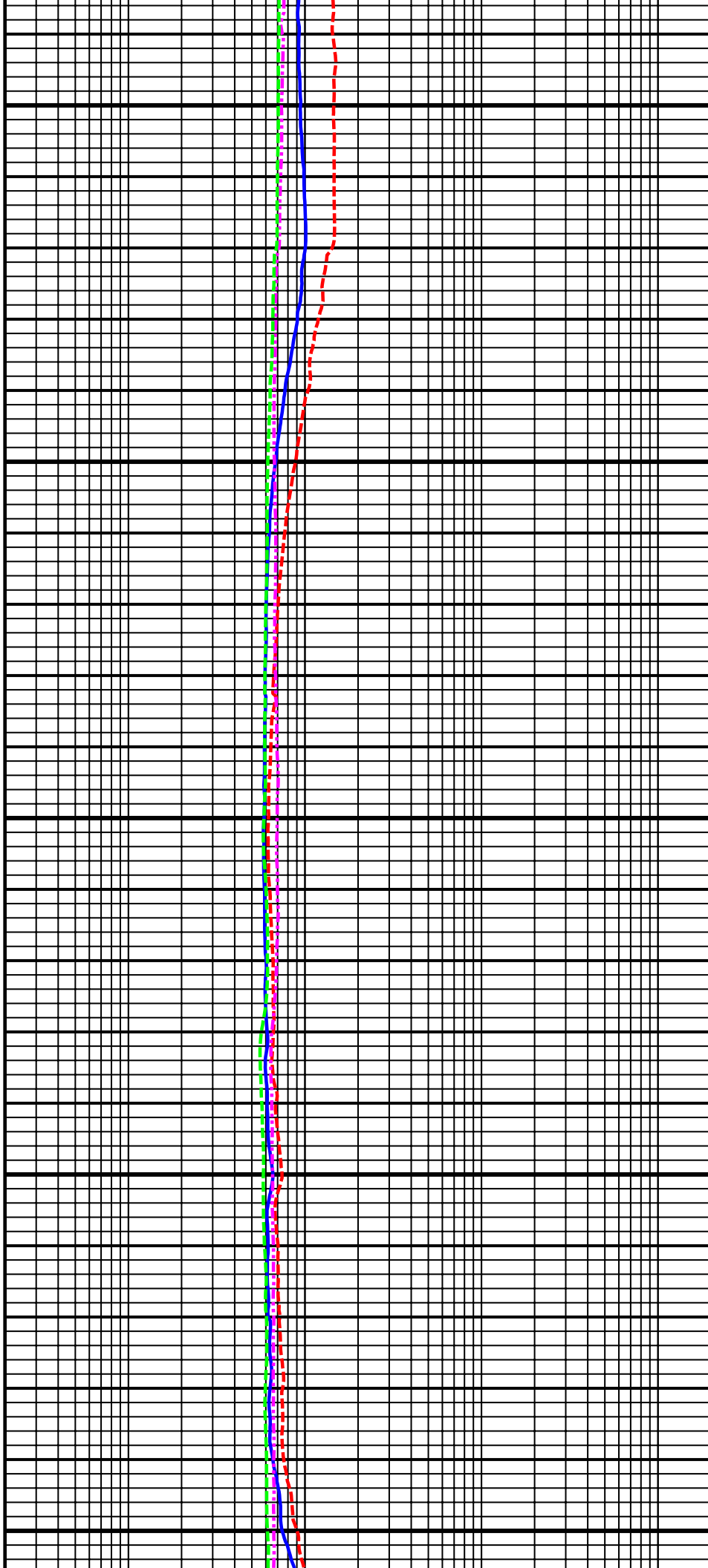
10800  
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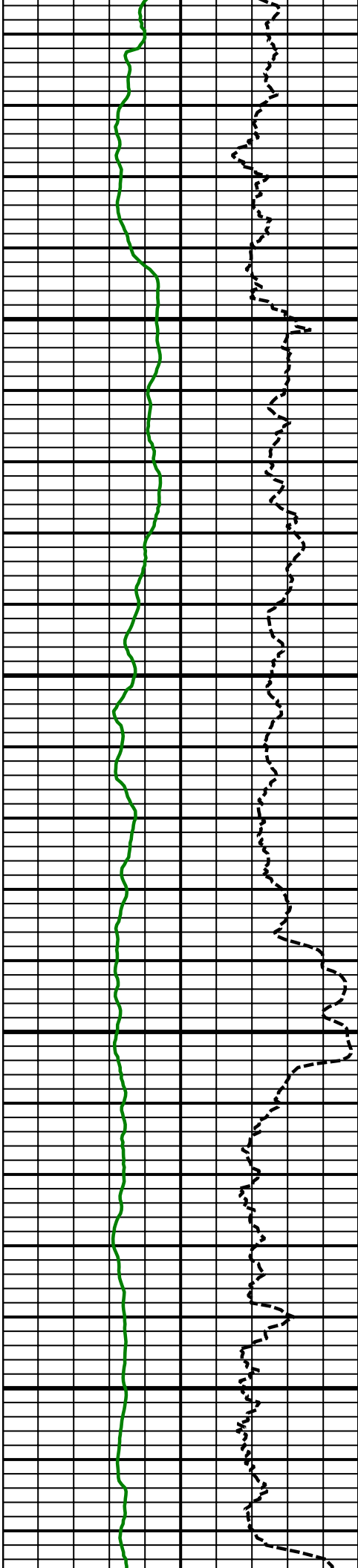




10900  
MD

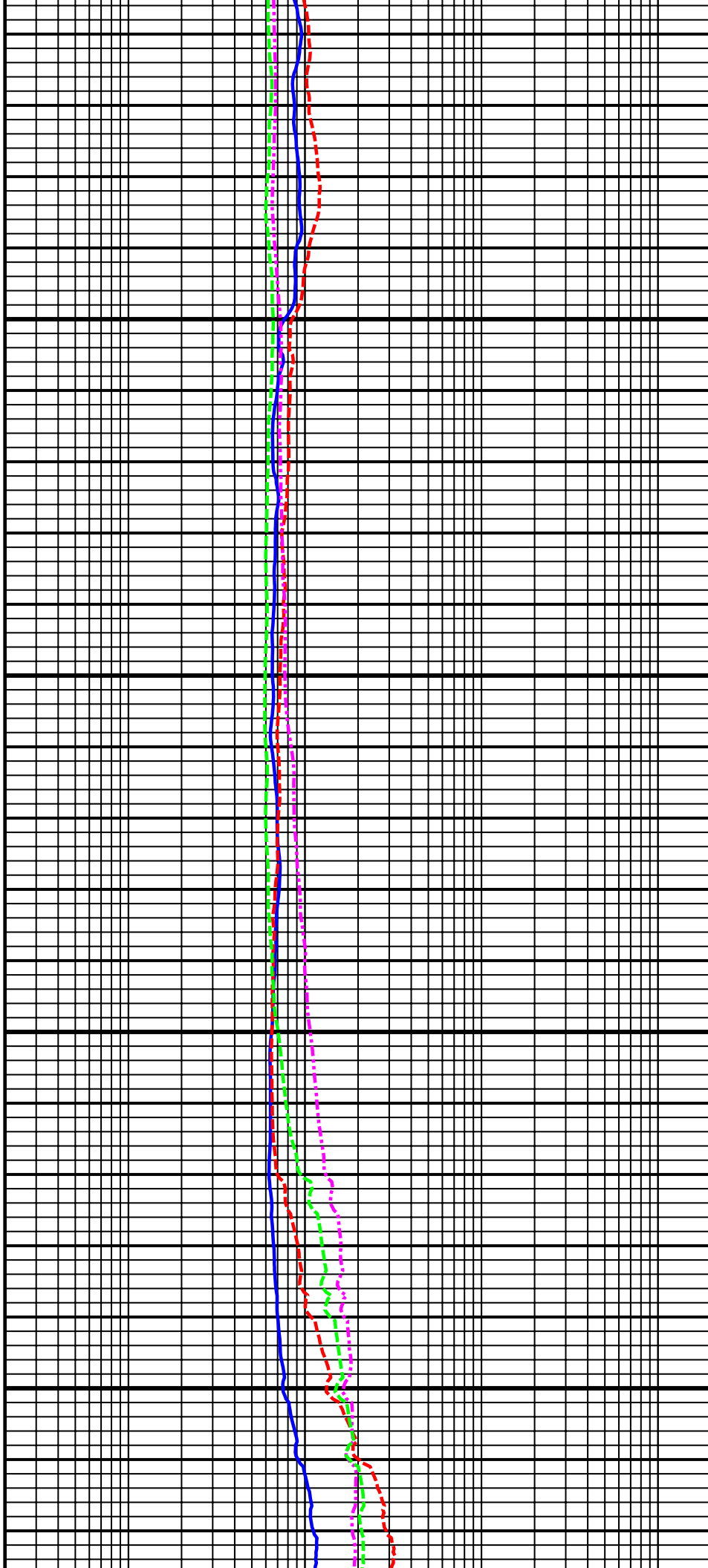
11000  
MD



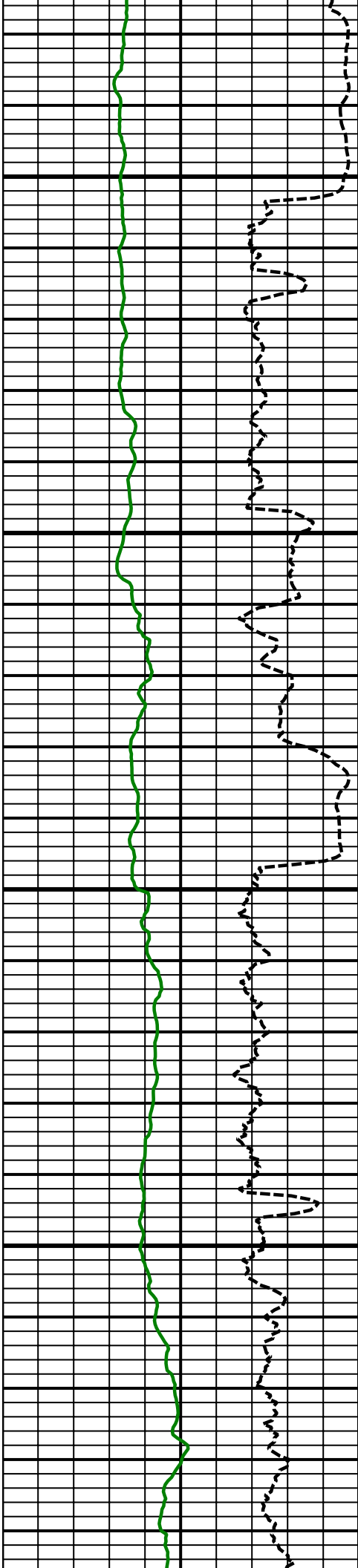


11100  
MD

11200  
MD

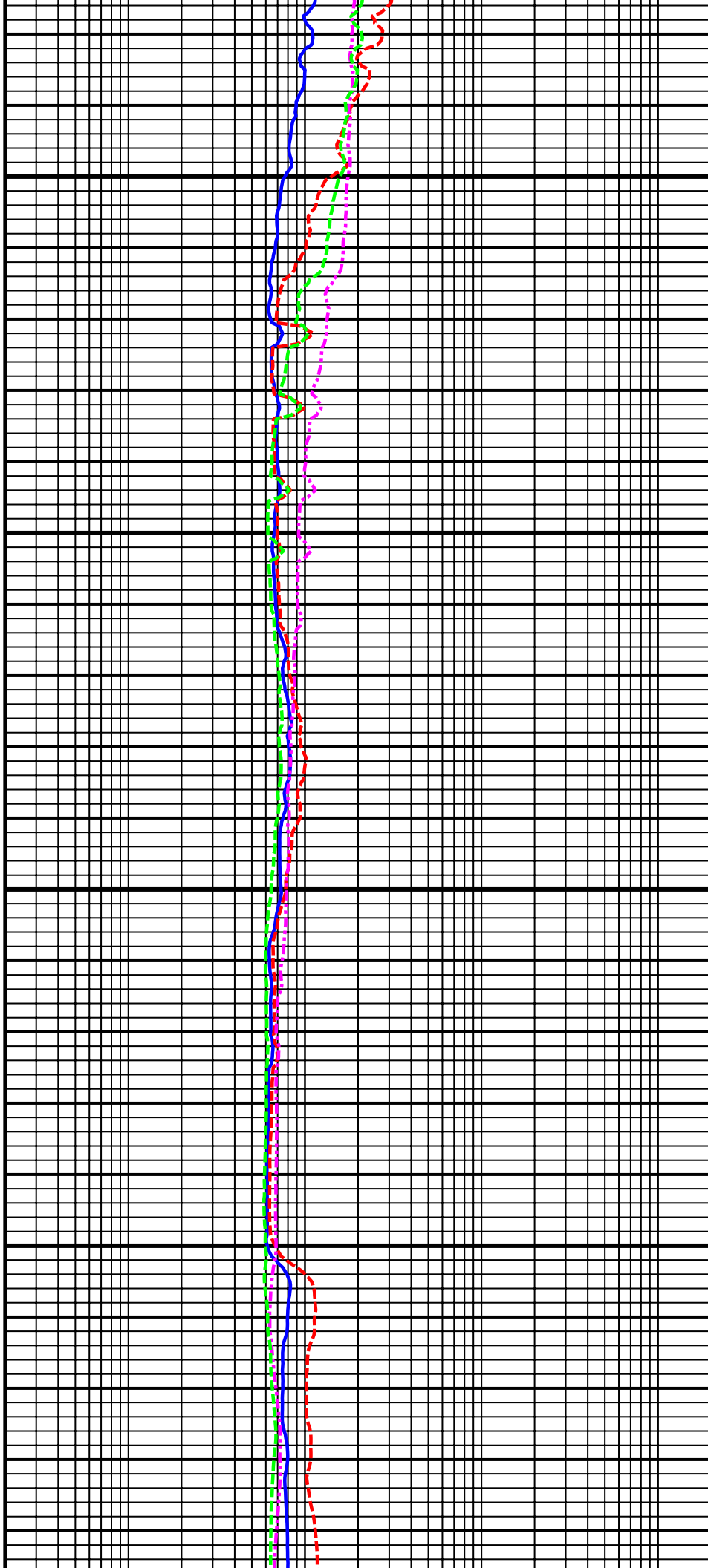


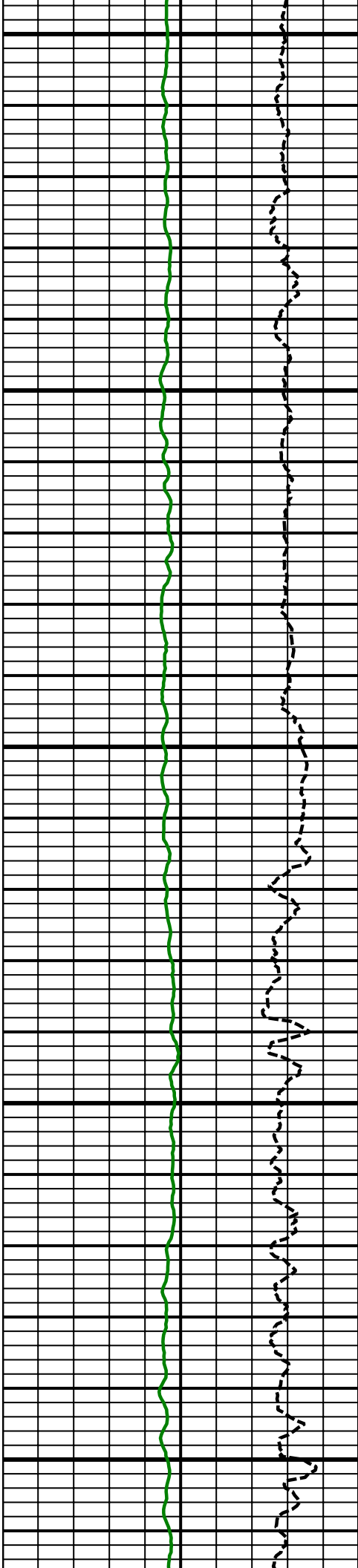




11300  
MD

11400  
MD

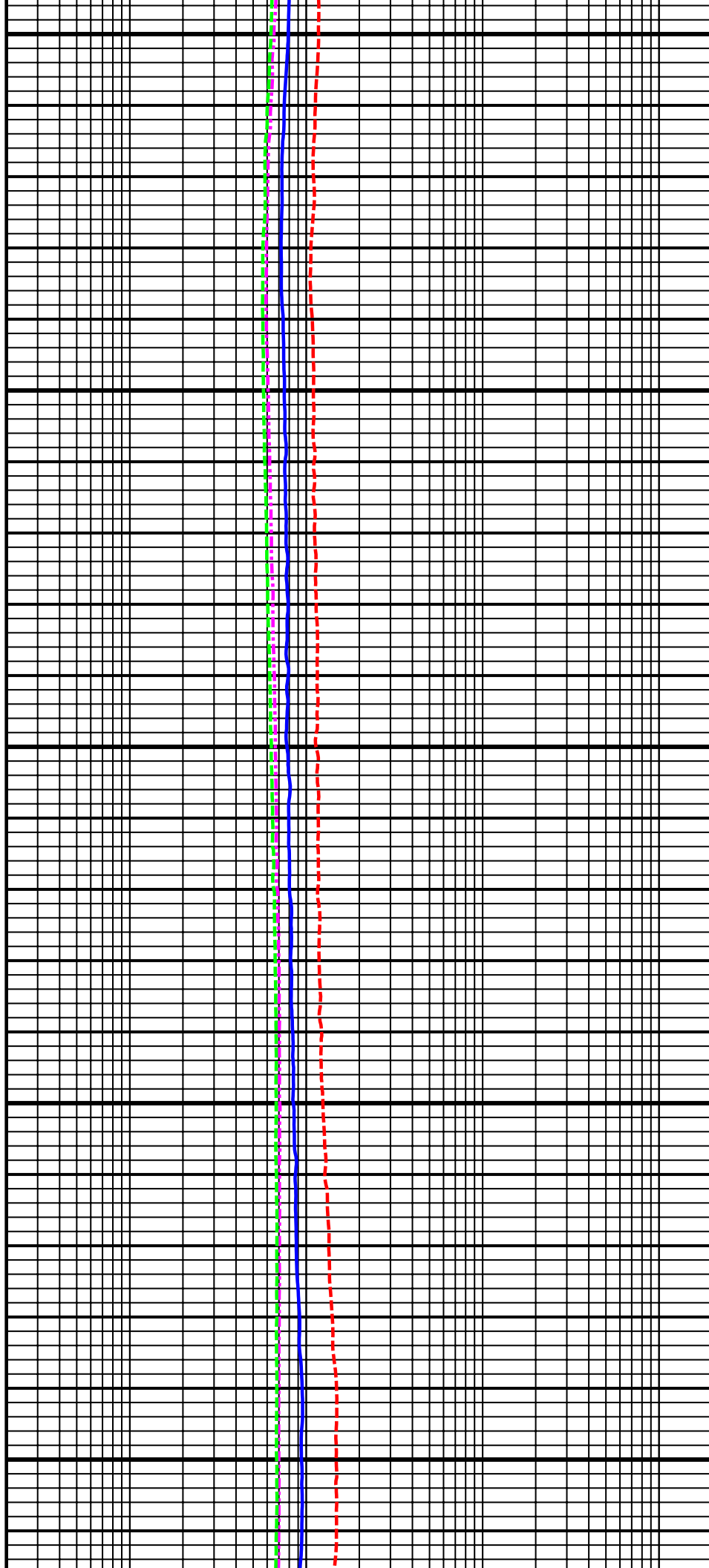


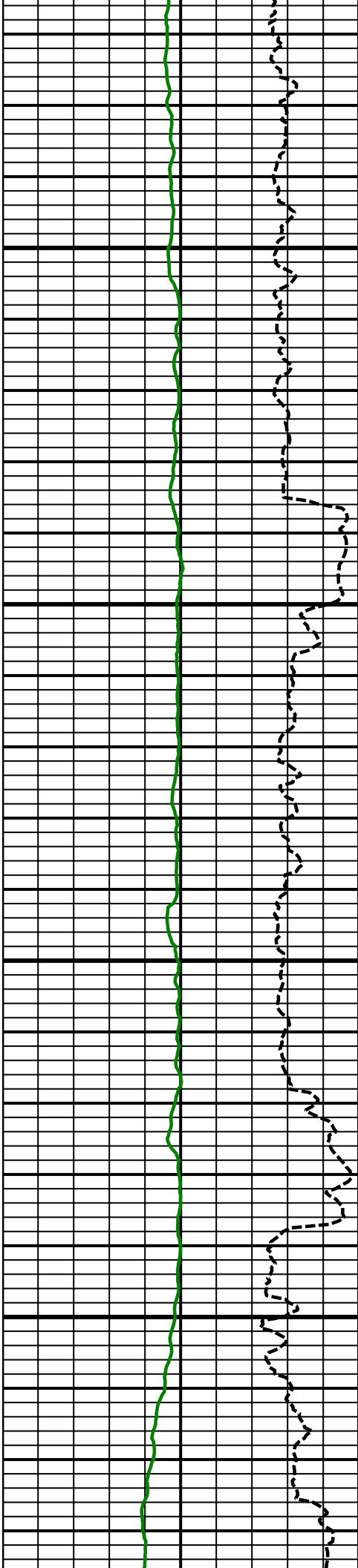


11500  
MD

11600  
MD

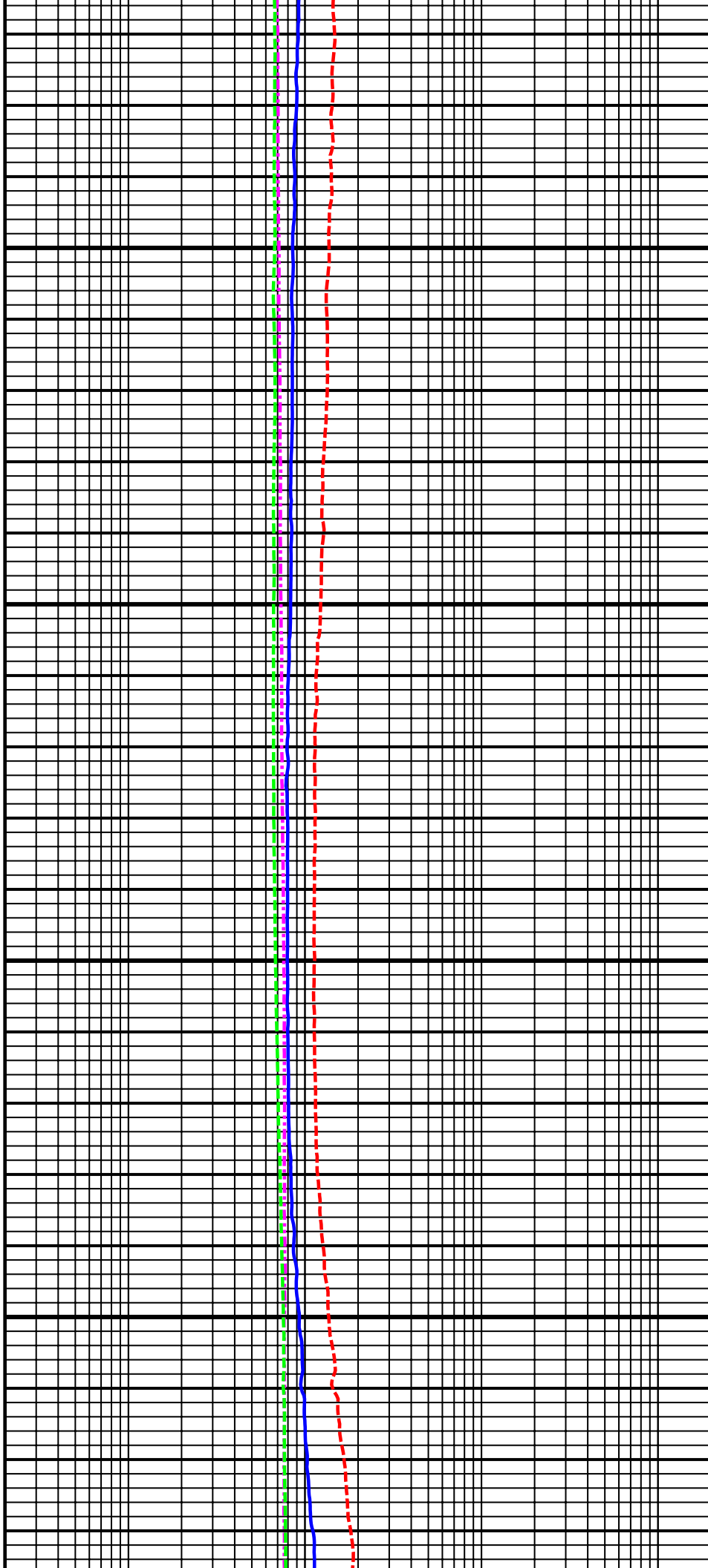
11700  
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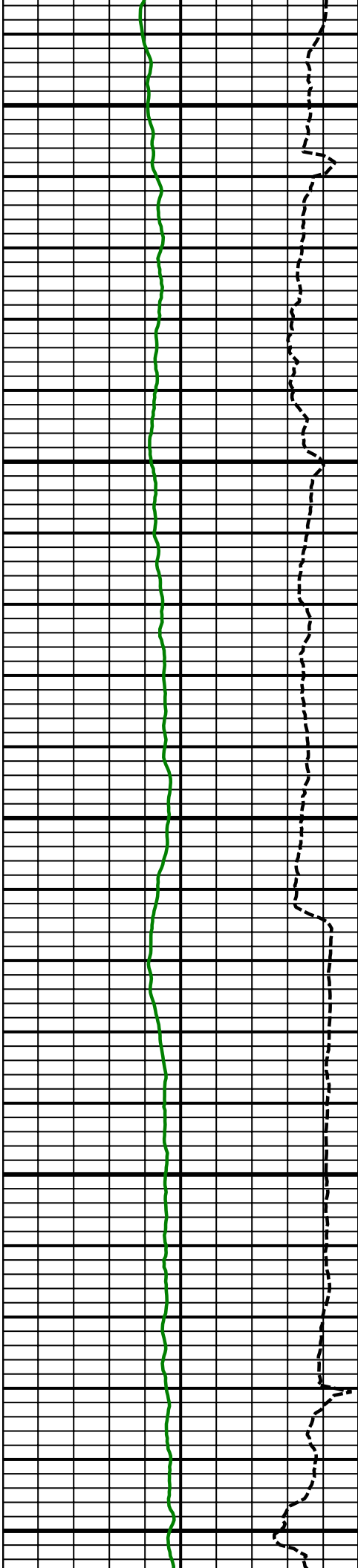




11800  
MD

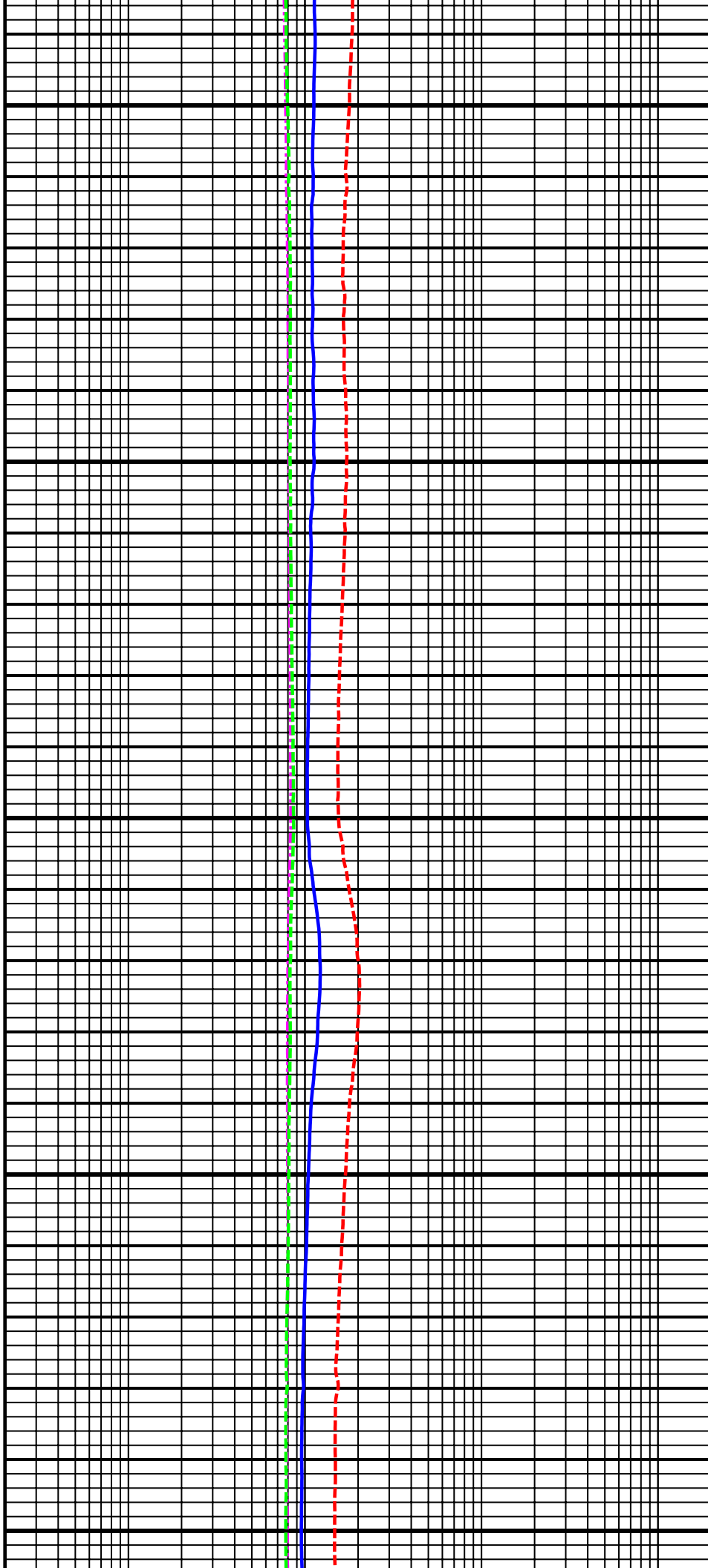
11900  
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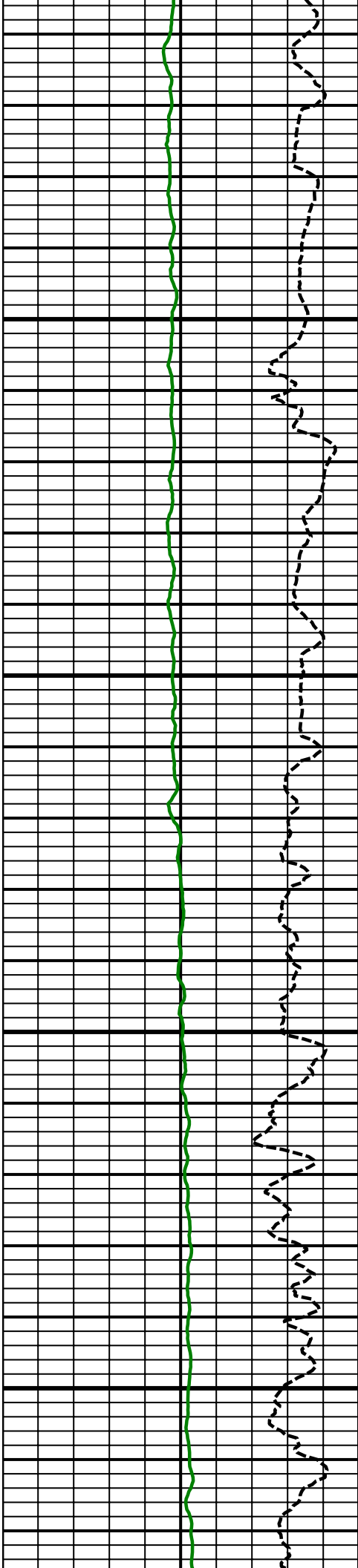




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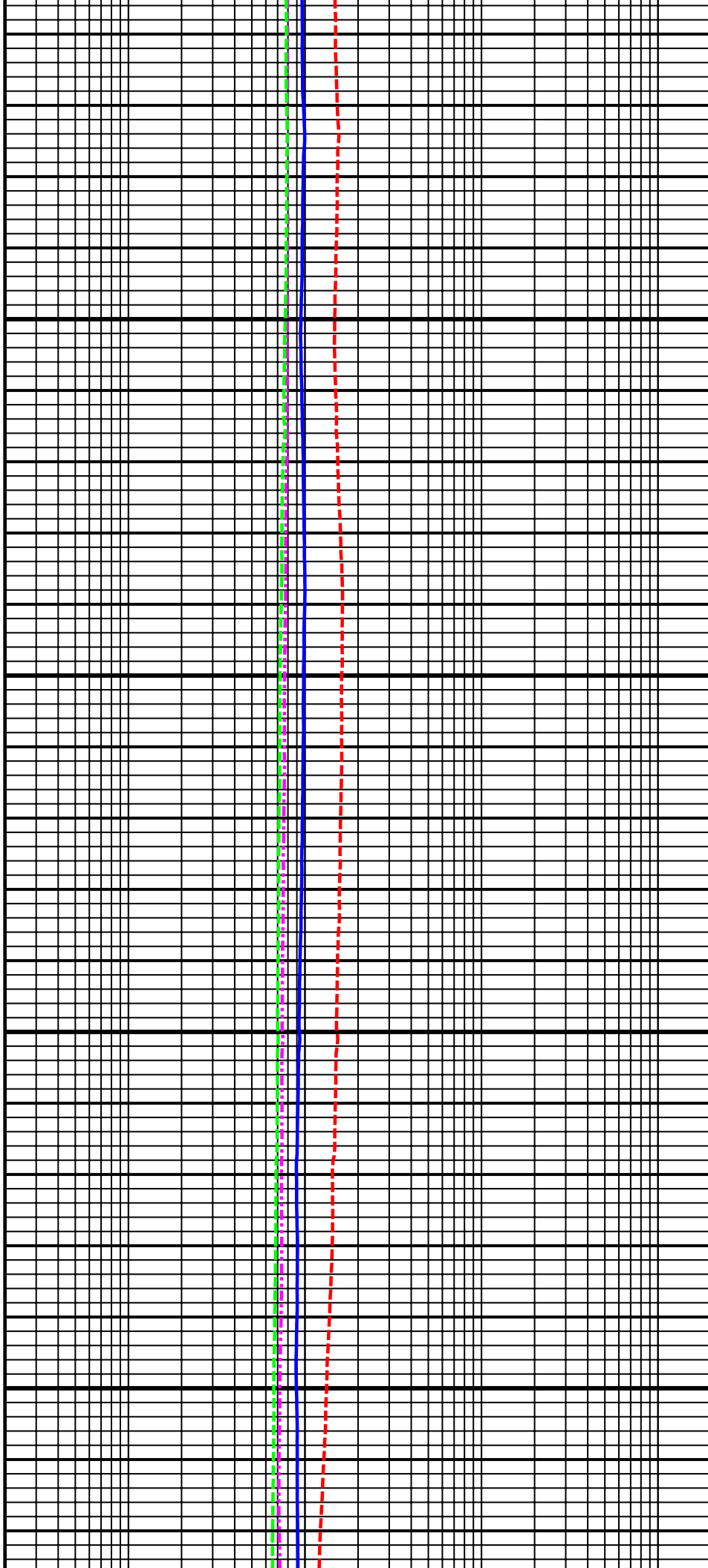
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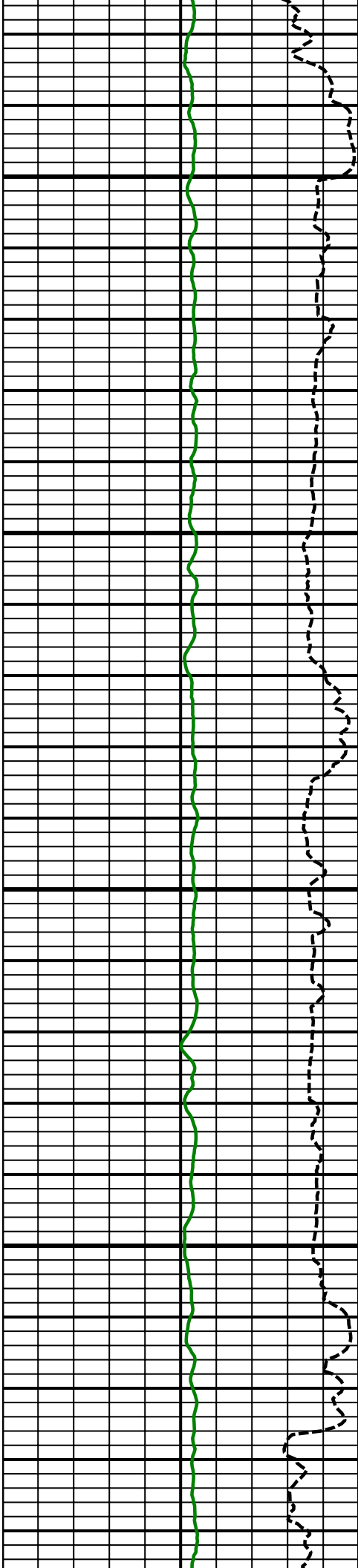




12200  
MD

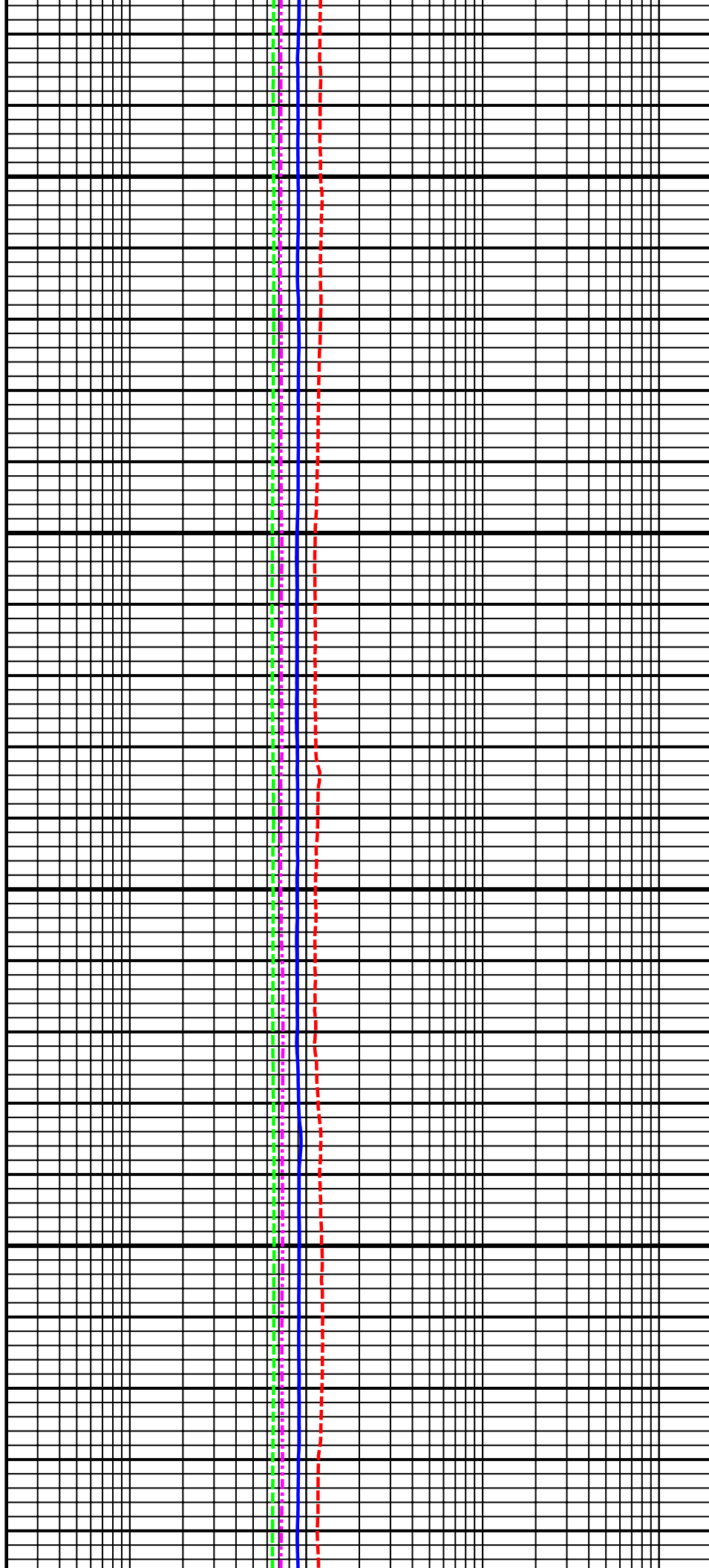
12300  
MD

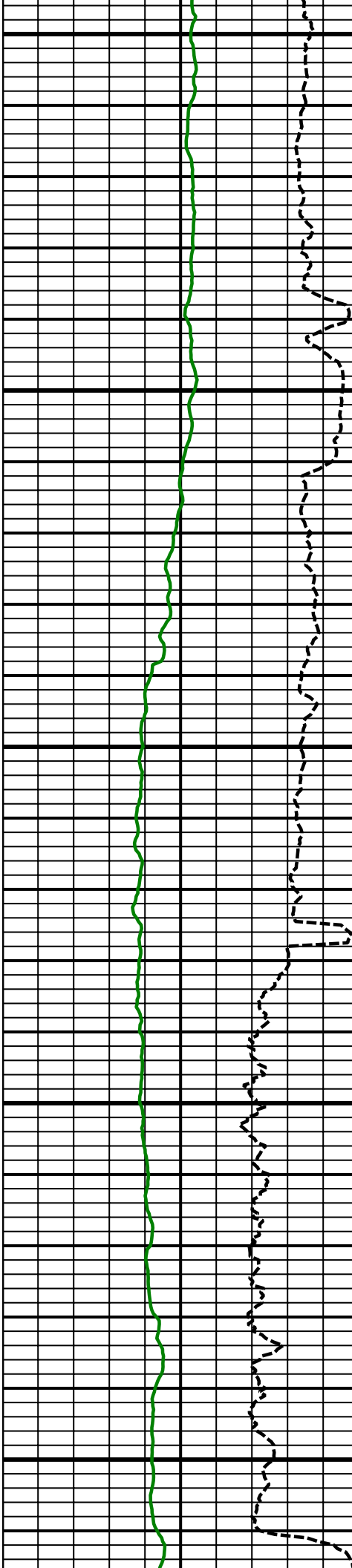




12400  
MD

12500  
MD

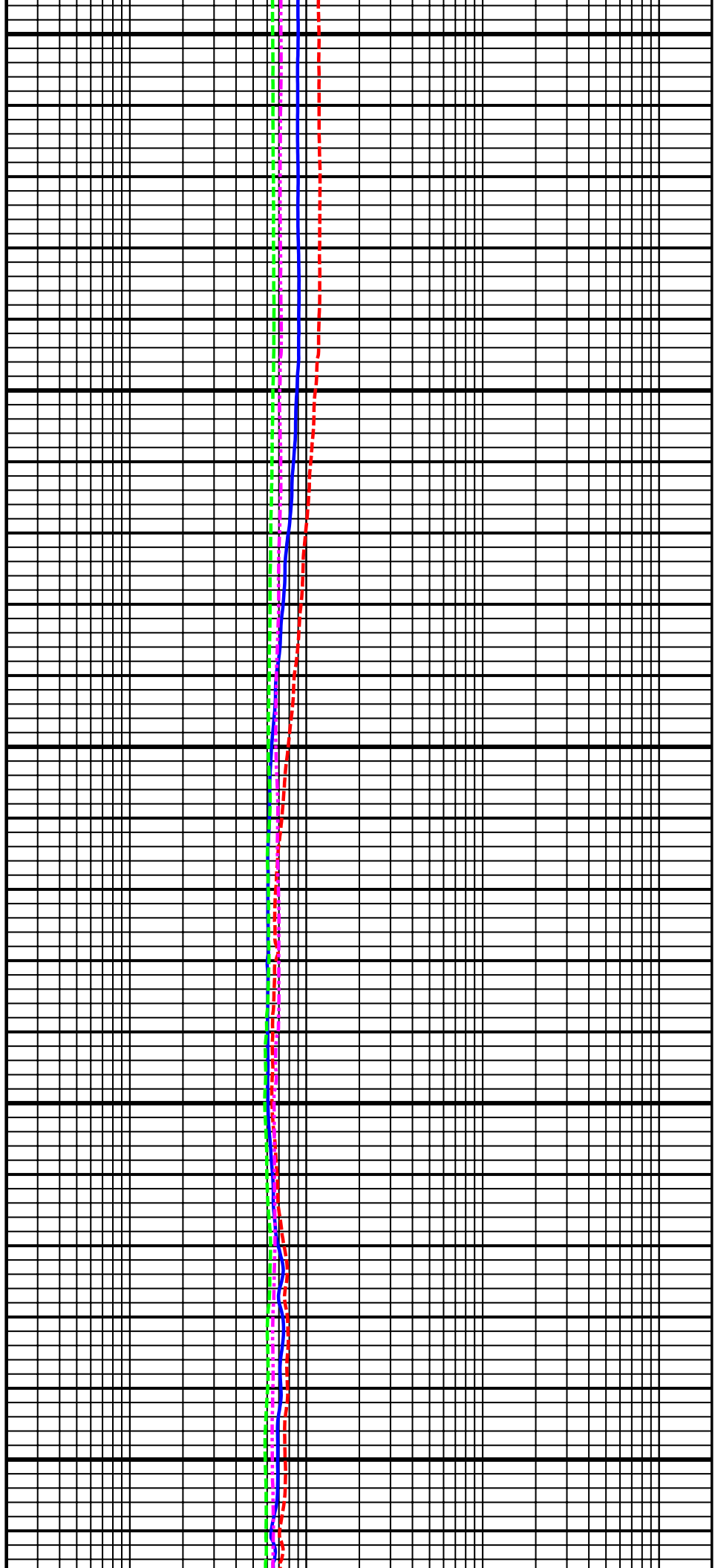


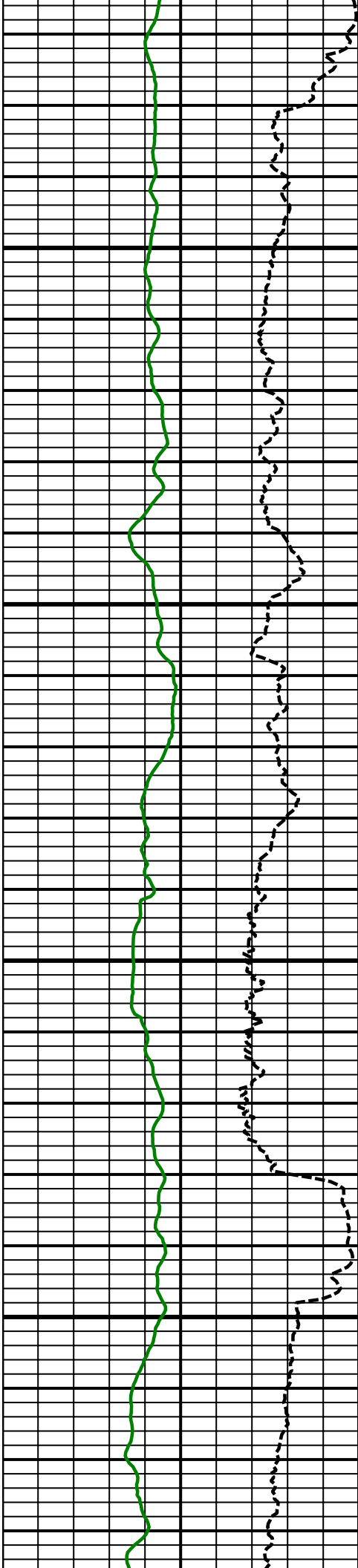


12600  
MD

12700  
MD

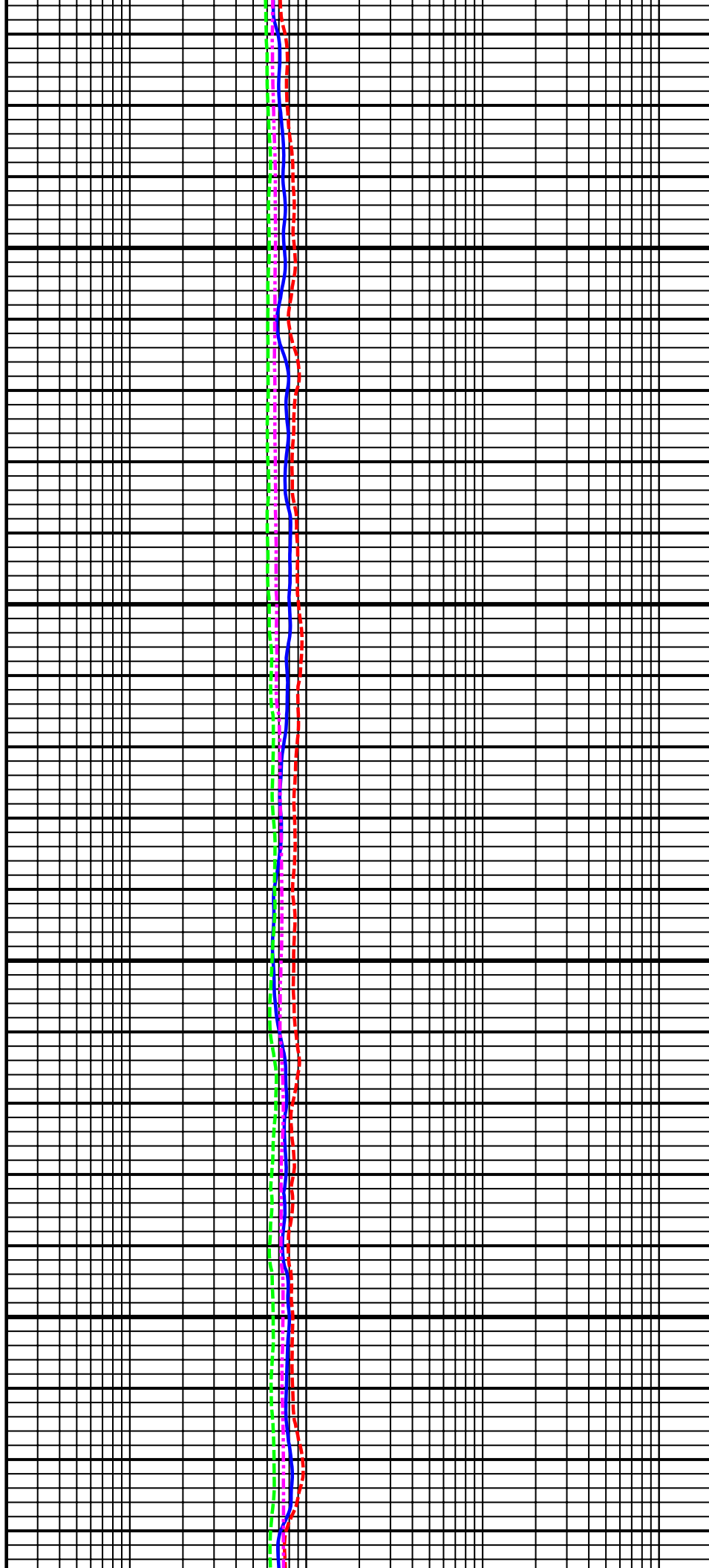
12800  
MD



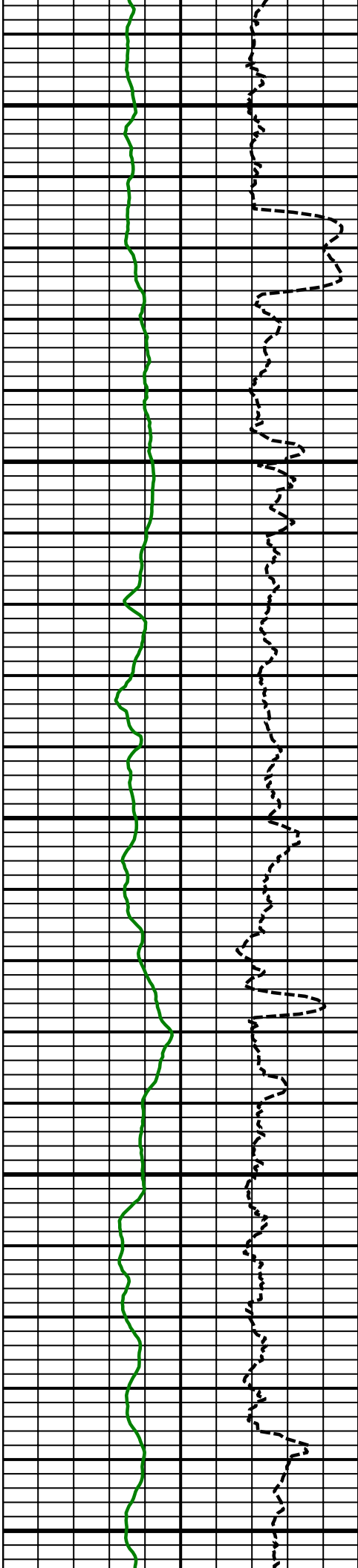


12900  
MD

13000  
MD

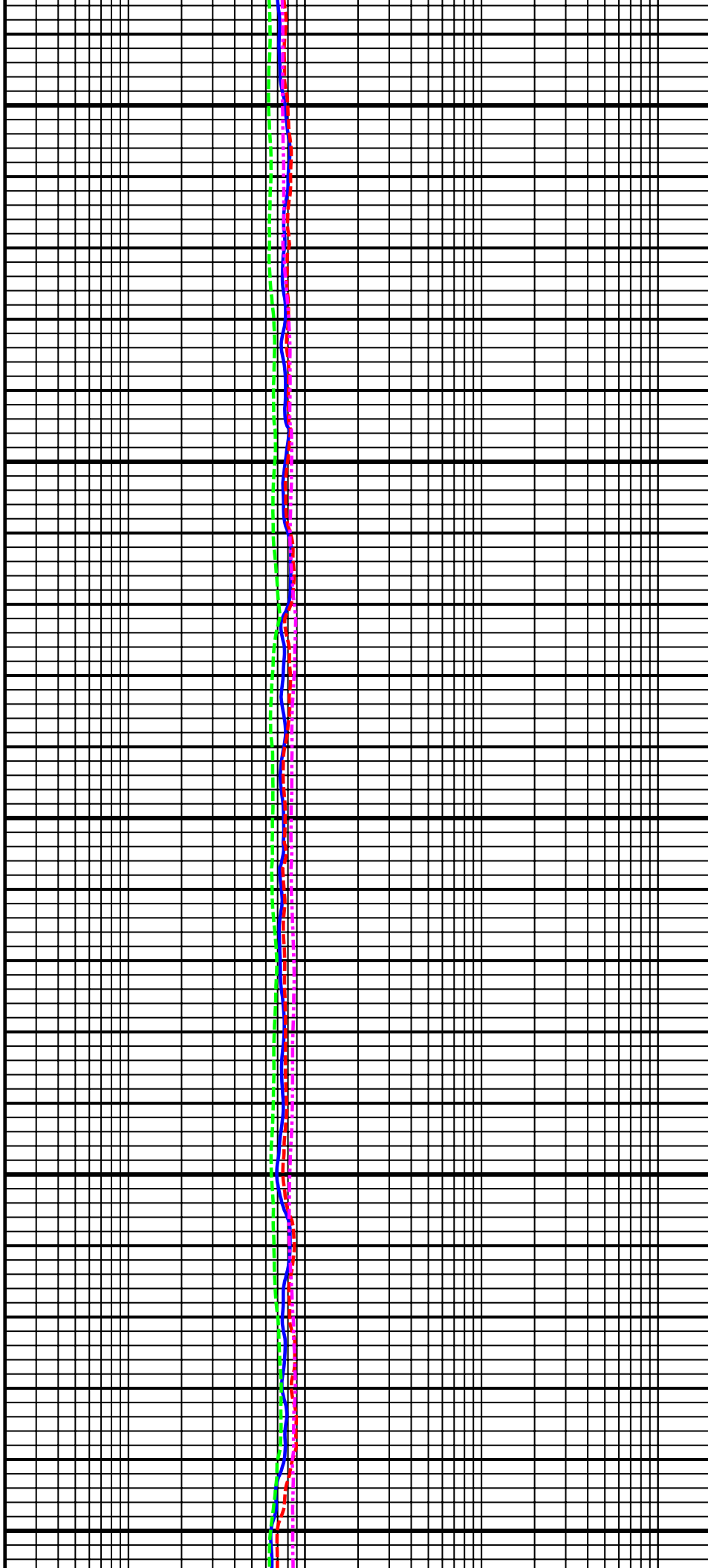


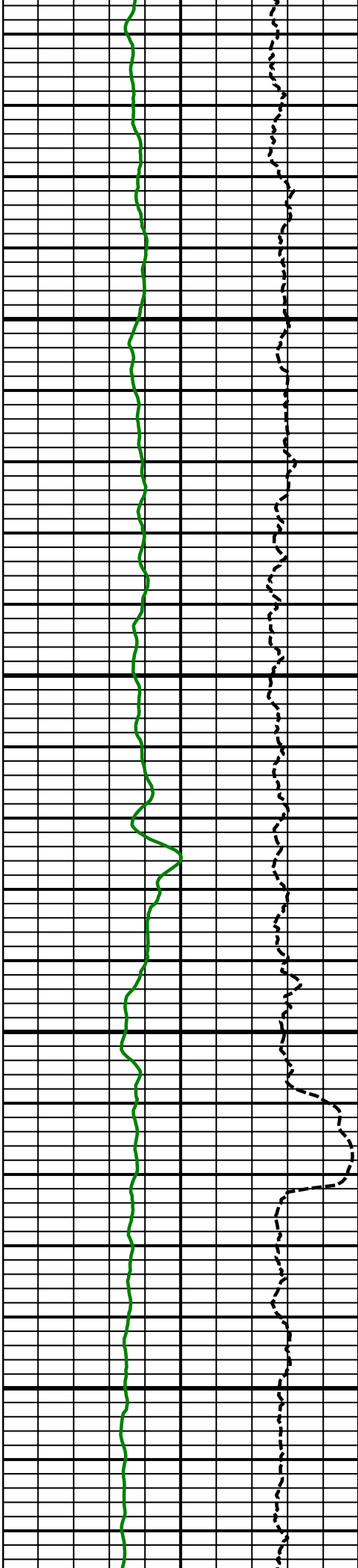




13100  
MD

13200  
MD

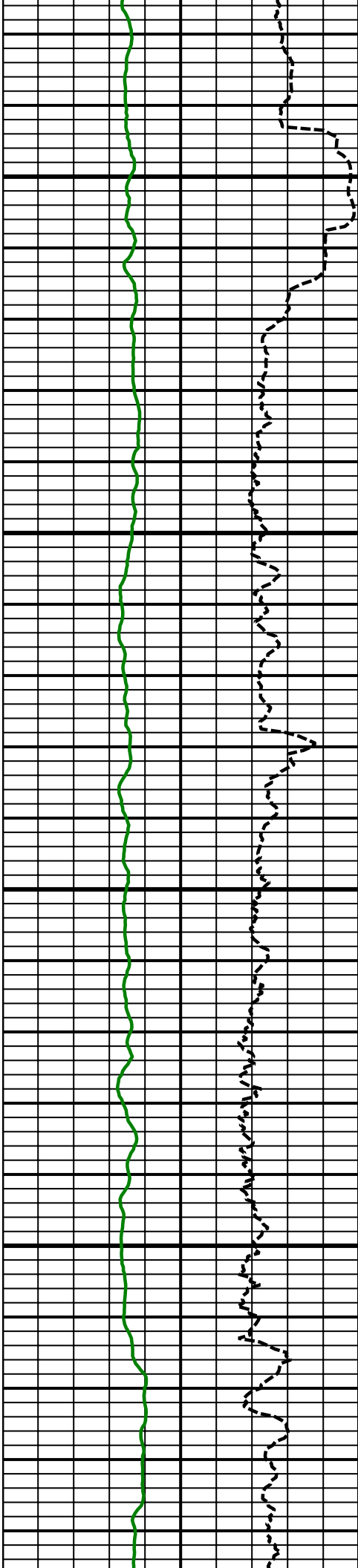




13300  
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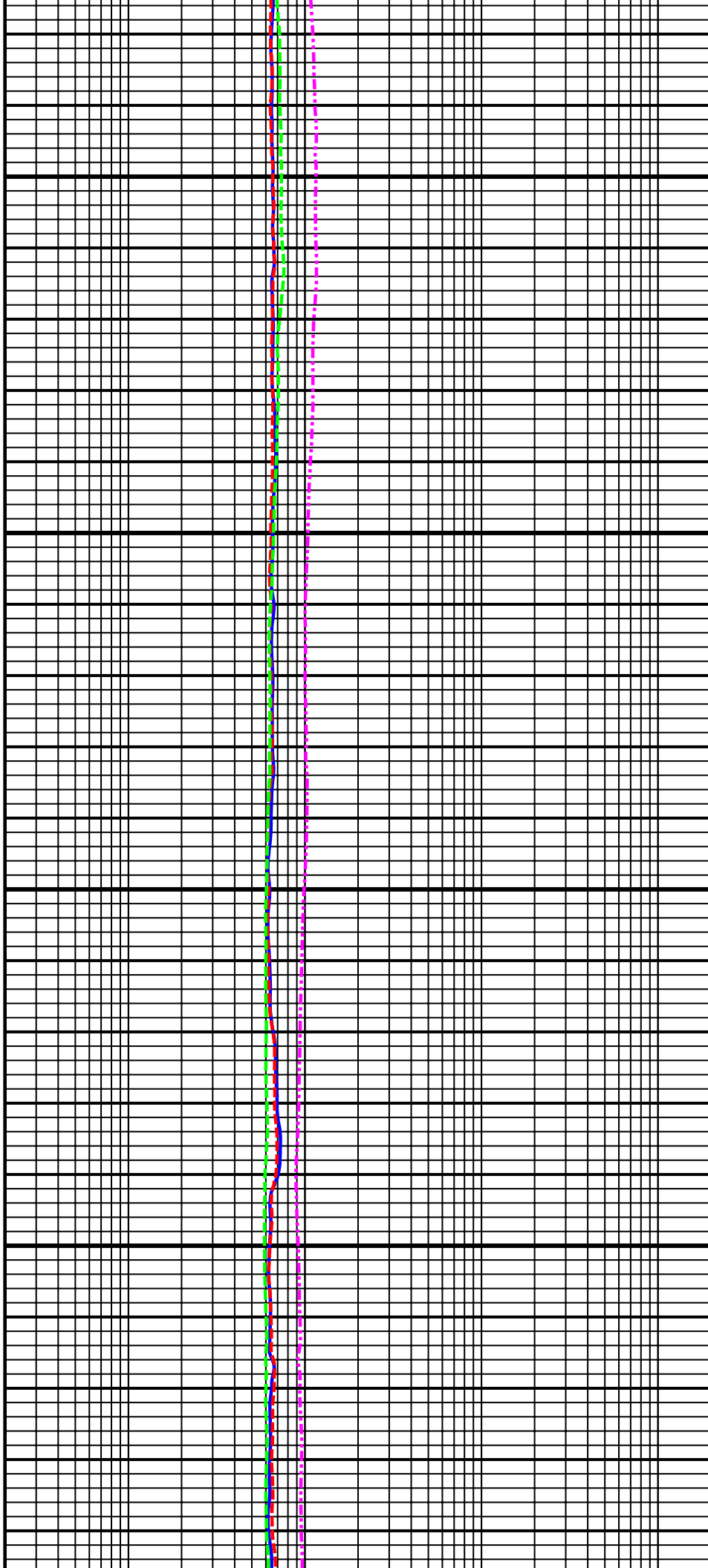
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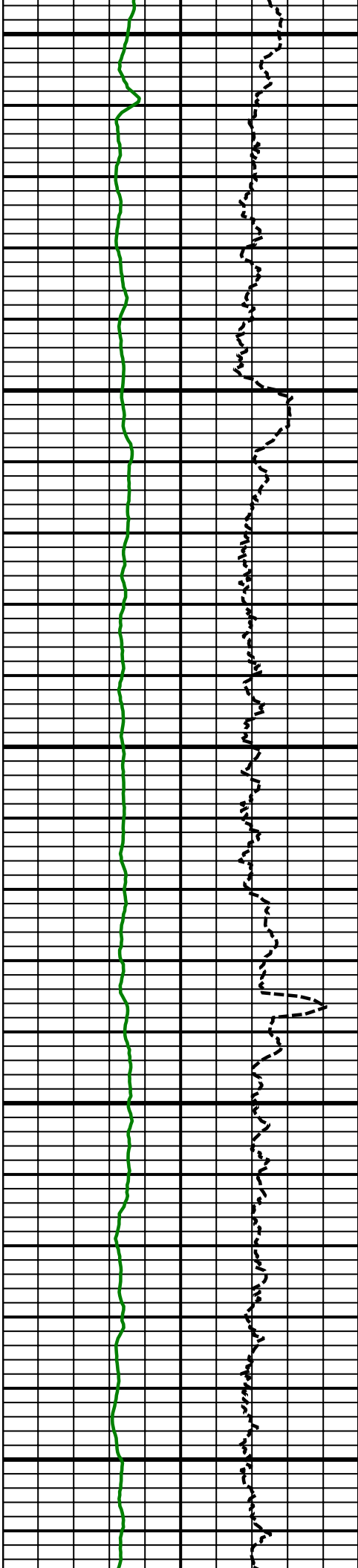




13500  
MD

13600  
MD

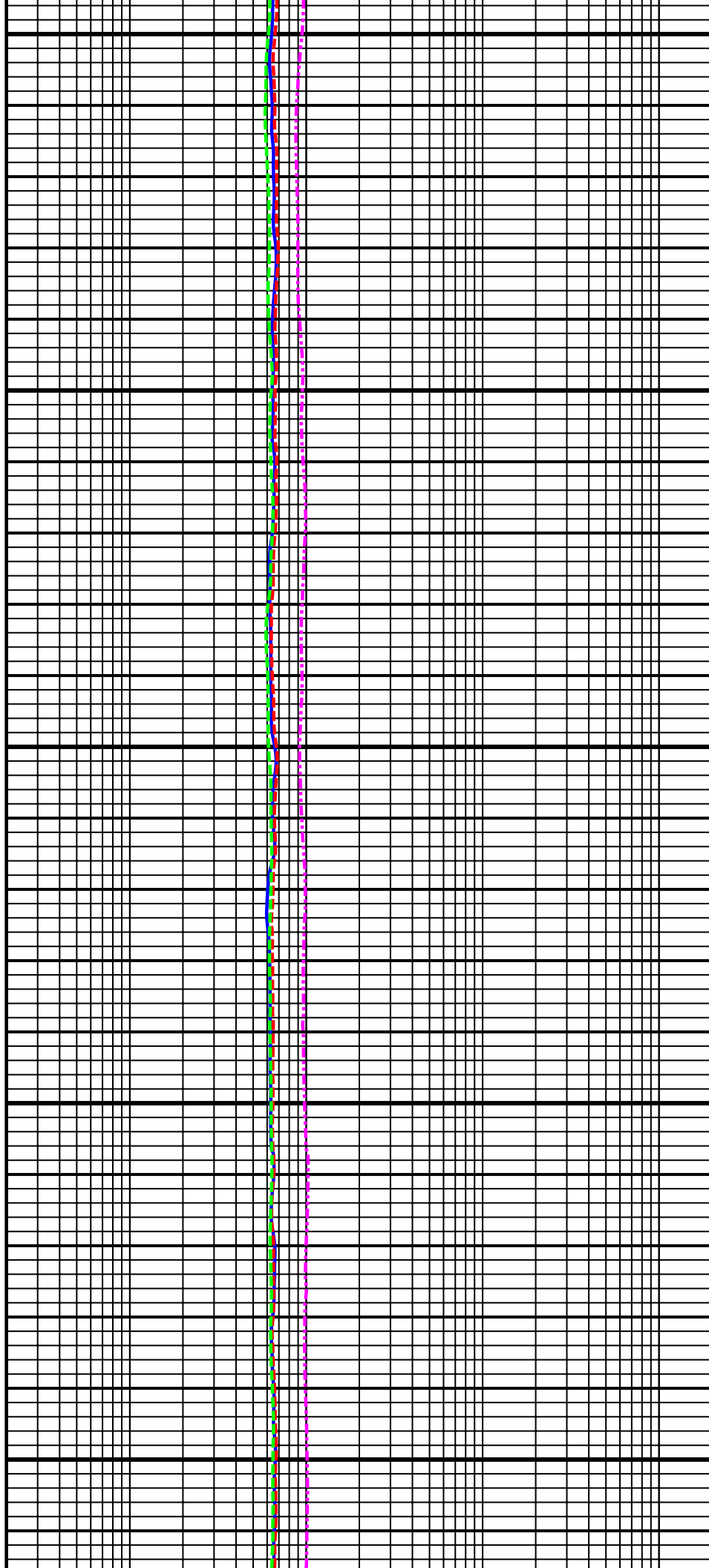


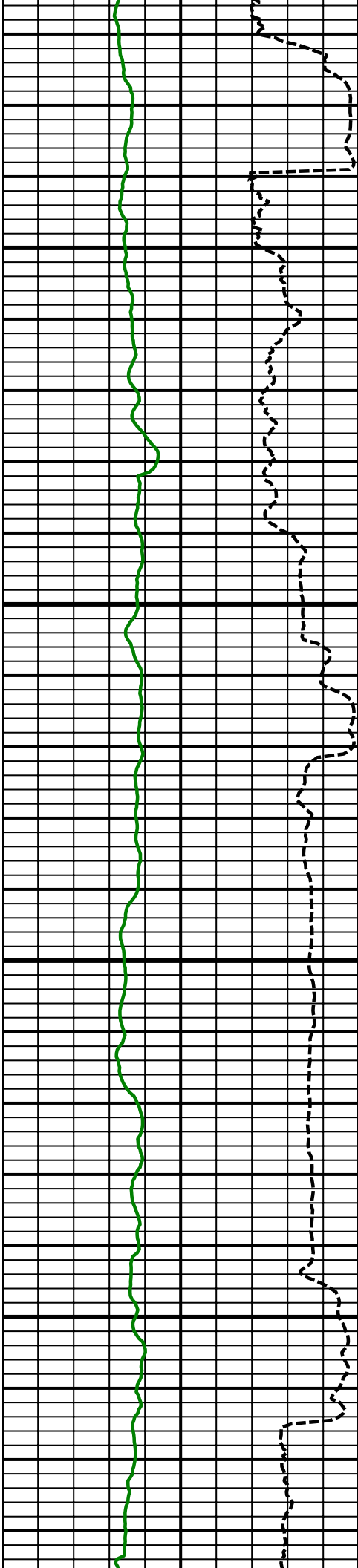


13700  
MD

13800  
MD

13900  
MD

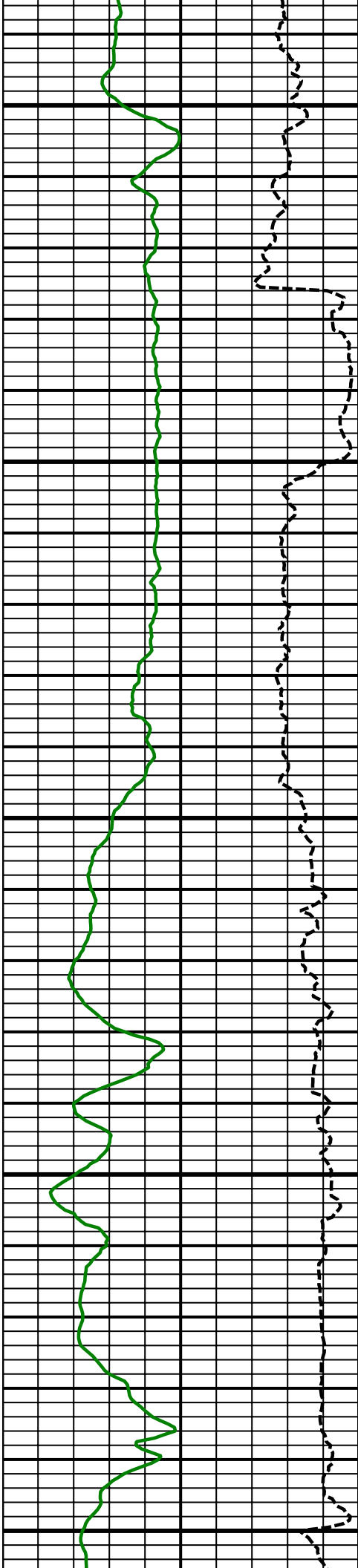




14000  
MD

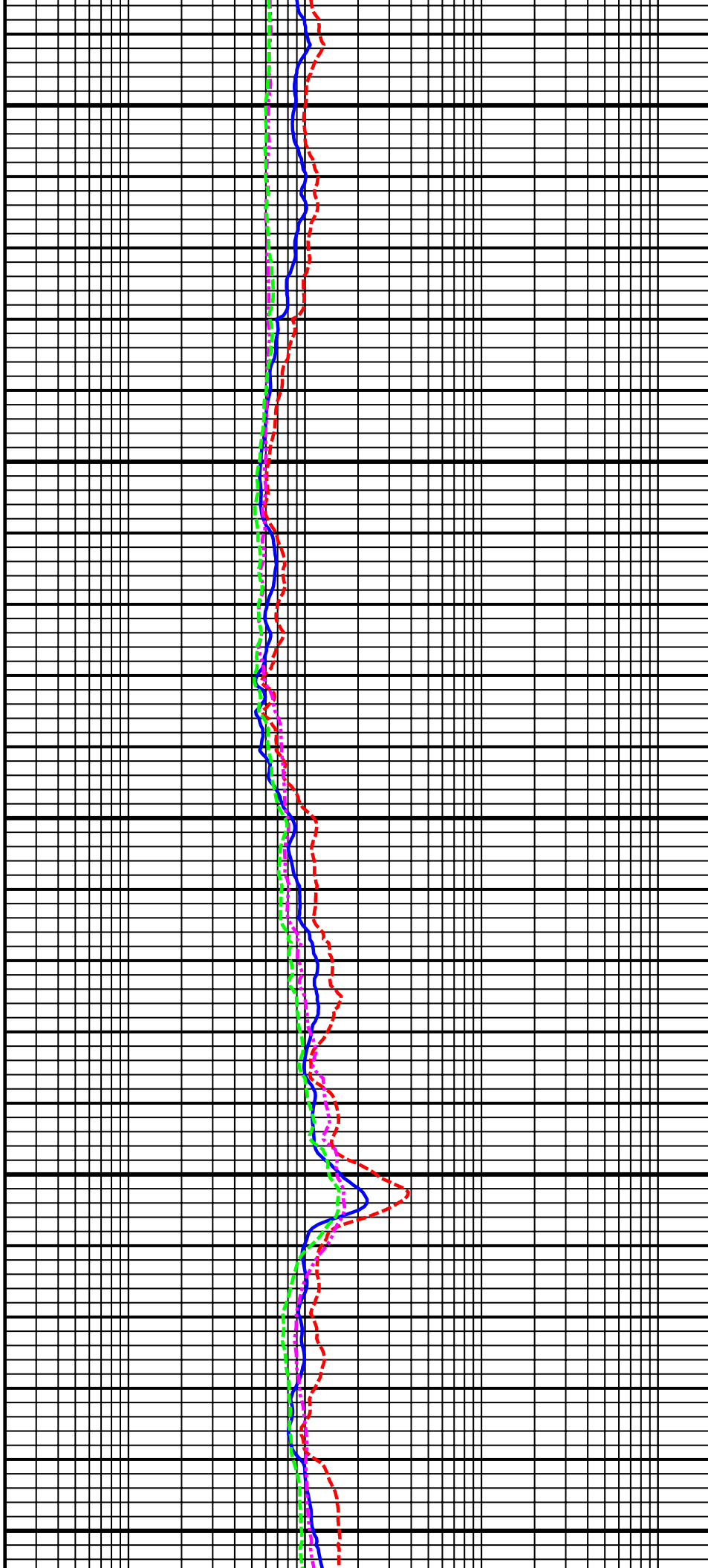
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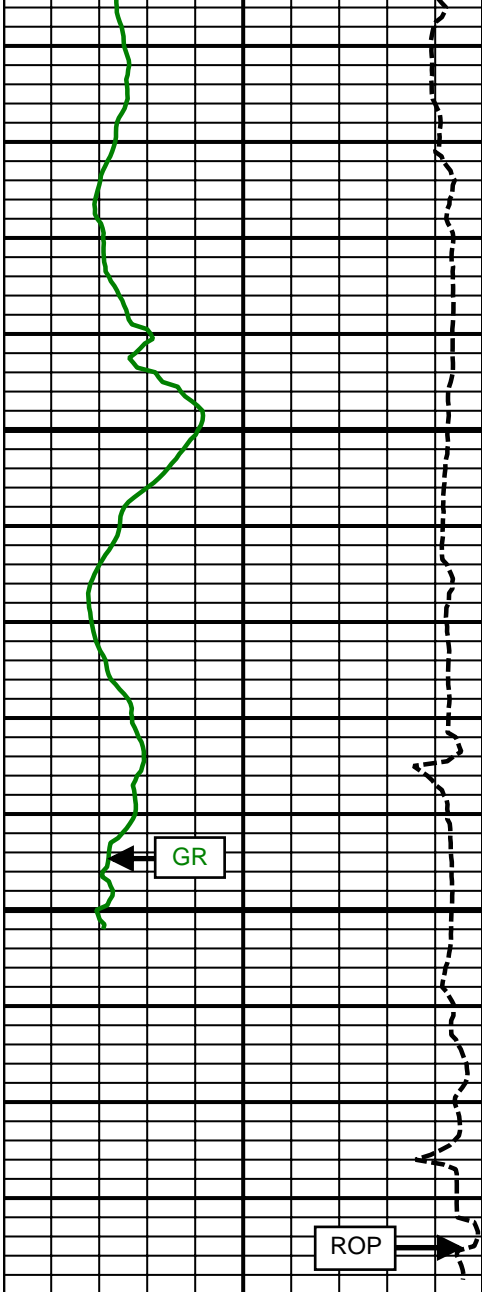




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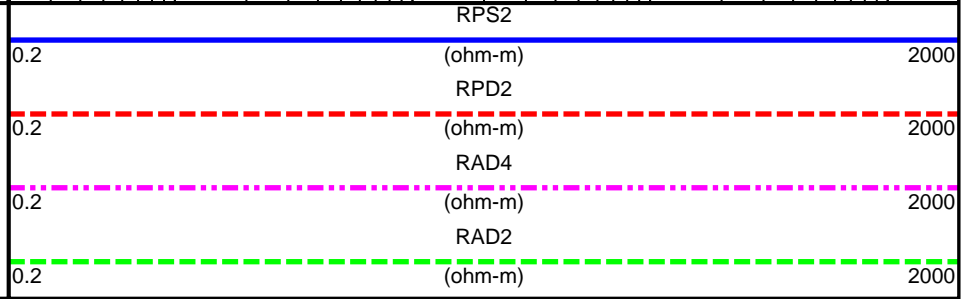
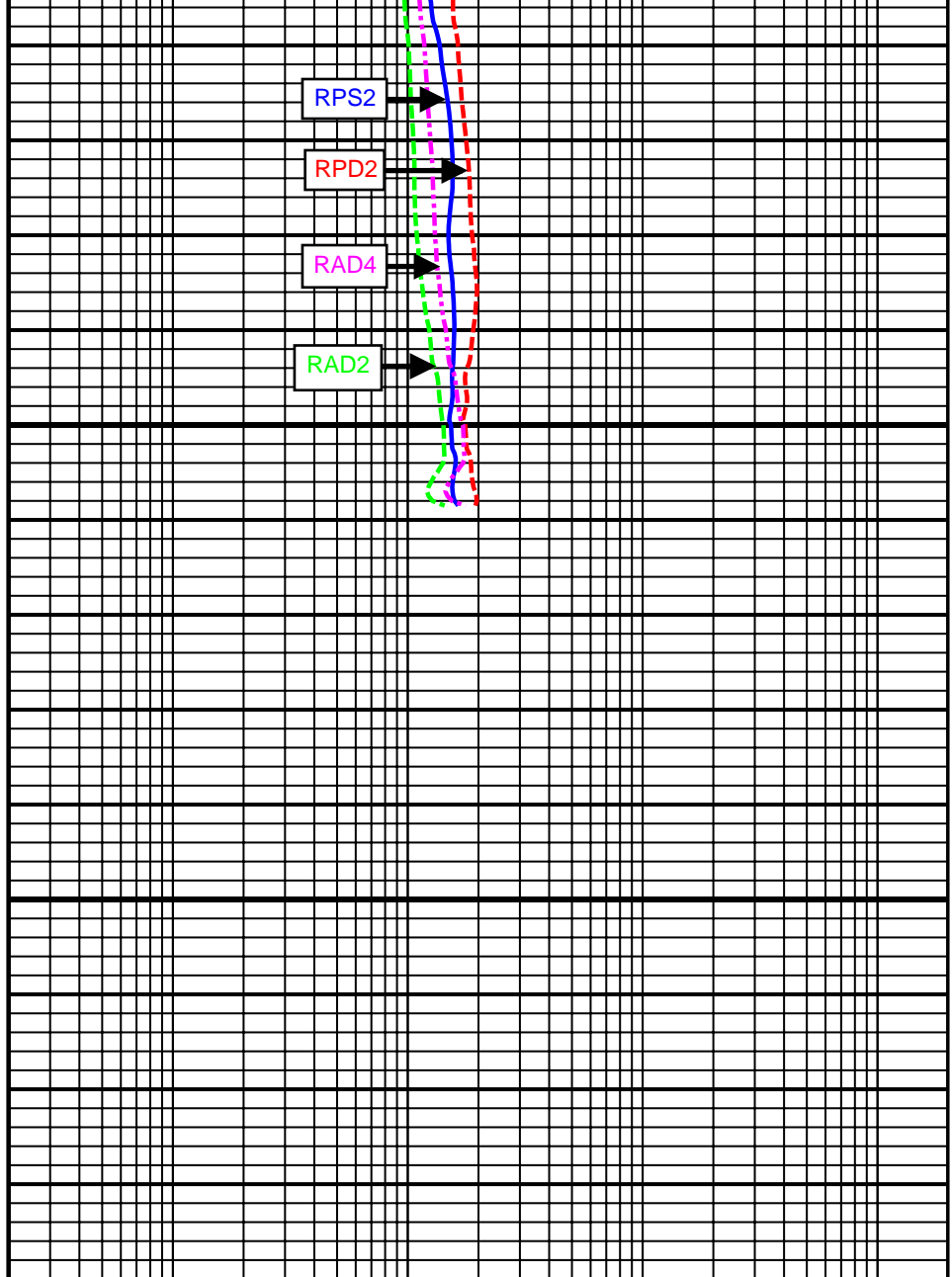
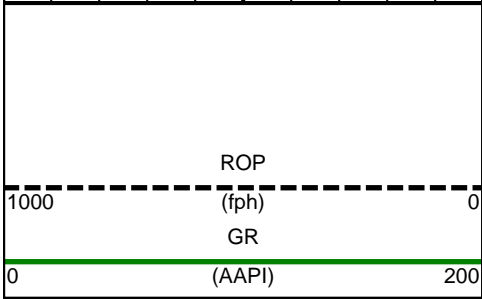
14300  
MD





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>