



Weatherford®

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

Company: Anadarko Petroleum
Well: Cannon 13C-10HZ
Field: Wattenberg
Rig: Xtreme 23
County: Weld

COMPANY Anadarko Petroleum
WELL Cannon 13C-10HZ
FIELD Wattenberg
RIG Xtreme 23
COUNTY Weld STATE Colorado
API # 05-123-36694

Location
Latitude: 40.1588040° N X = 3,204,451 ft Mag Decl: 8.62°
Longitude: 104.7685050° W Y = 1,301,538 ft Mag Dip: 66.78°

Other Services: Spectral Azimuthal Gamma, Directional, and Temperature

Permanent Datum: Mean Sea Level

Log Measured From: Drill Floor Elev: 4965.0 ft above perm. datum

Depth Reference: Drillers Tally Total Depth: 11899 ft

Depth Logged: 6770 ft to 11899 ft Runs: 4

Date Logged: 14-May-13 to 19-May-13 Spud Date: 12-May-13

Elevation
K.B. Top Drive
G.L. 4949.0 ft
D.F. 4965.0 ft
W.D. Onshore

Borehole Record			Casing Record		
Hole Size	From	To	Size	Weight	From To
8.750 in.	968 ft	7670 ft	7.000 in.	26.0 lb/ft	Surface 7670 ft
6.125 in.	7670 ft	11899 ft			

Borehole Deviation Record

Mud Record

Hole Size	Min. Inc.	Max. Inc.	Type	Weight	From	To
8.750 in.	0.10°	84.53°	WBM	8.45 ppg - 10.00 ppg	968 ft	11899 ft
6.125 in.	84.01°	91.85°				

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		
Bit Size	in.	8.750	8.750	6.125	6.125		
Bit Type		PDC	PDC	PDC	PDC		
Bit TFA	sq.in.	1.245	1.535	1.535	1.535		
Bit Start Depth	ft	968	6810	7670	10684		
Bit End Depth	ft	6810	7670	10684	11899		
Top Log Interval	ft	na	6770	7593	10618		
Bottom Log Interval	ft	na	7670	10684	11899		
Begin Log Time	hrs	na	17:08	13:08	5:22		
Begin Log Date	DD-MMM-YY	na	14-May-13	16-May-13	19-May-13		
End Log Time	hrs	na	4:45	14:35	17:10		
End Log Date	DD-MMM-YY	na	15-May-13	18-May-13	19-May-13		
Drill or Wipe		Drill	Drill	Drill	Drill		
Flow Rate	gal/min	560	540	293	293		
Max AV / CV @ MWD	ft/min	443 / 100	427 / 306	480 / 348	480 / 393		
Min Inc @ Depth	deg @ ft	0.10 @ 6714	0.38 @ 6793	84.01 @ 9376	87.16 @ 11847		
Max Inc @ Depth	deg @ ft	8.69 @ 5604	84.53 @ 7610	90.62 @ 10145	91.85 @ 11594		
MUD DATA							
Depth	ft	6810	7670	10684	11899		
Fluid Type		WBM	WBM	WBM	WBM		
Mud Weight	ppg	8.45	9.70	9.80	10.00		
Plastic Viscosity	cP	1	8	10	15		
Solids / Sand	%	0.70 / 0.10	7.00 / 0.25	7.7 / 0.25	8.2 / 0.50		
NaCl Equiv. Chlorides	ppm	2805	2970	2970	2970		
pH		8.6	9.2	9.7	7.9		
Oil:Water Ratio	% Vol	1.0 : 99.0	8.5 : 91.5	9.5 : 90.5	12.0 : 88.0		
Rm @ Temperature	ohm-m @ deg F	na	na	1.50 @ 70°F	1.50 @ 70°F		
Rmc @ Temperature	ohm-m @ deg F	na	na	1.30 @ 70°F	1.29 @ 70°F		
Rmf @ Temperature	ohm-m @ deg F	na	na	1.31 @ 70°F	1.30 @ 70°F		
KCl	% Vol	0	0	0	0		
Client Representative		R. McPeters	R. McPeters	R. McPeters	R. McPeters		
WeatherfordLWD Engineer		D. Palmer	D. Palmer	T. Daily	T. Daily		

EQUIPMENT SUMMARY

M/LWD Run Number	1	2	3	4	
BTR / CDS Serial Number	44702 / 44736	44702 / 44736	na	na	
Battery Serial Number	403467909	403467909	na	na	
Gamma Ray Serial Number	na	2978	na	na	
CMS Serial Number	1592	1592	na	na	
Pulser Serial Number	18705	18705	na	na	
HEL Serial Number	na	na	NW131110PDSBI4.75	NW131110PDSBI4.75	
MFR Serial Number	na	na	NW130770RBBK4.75-M1	NW130770RBBK4.75-M1	
SAGR Serial Number	na	na	NW131109JB4.75	NW131109JB4.75	
Sensor to Bit Offsets / Acquisition Rates					
Directional	ft / sec	58.77 / RT	58.77 / RT	50.15 / RT	50.02 / RT
Gamma Ray	ft / sec	na	44.56 / 16	35.54 / 5	35.41 / 5
Resistivity	ft / sec	na	na	78.44 / 5	78.31 / 5
Other Information					
Total BHA Length	ft	115.02	114.90	95.15	100.88
BHA Assembly Type		Steerable	Steerable	Steerable	Steerable
Stabilizer Location	ft	na	na	26.93	27.80
Stabilizer Location	ft	na	na	na	95.12
Run Circulating Time	hr	23.83	12.79	48.11	15.63
Run Drilling Time	hr	15.10	6.60	24.44	5.52

MUD SUMMARY

Date and Time	Run	Bit Depth	Mud Weight	% K	Rm @ Temp	Rmf @ Temp	Rmc @ Temp	BHCT
14 May 13 @ 13:00	01	6810 ft	8.45 ppg	0	na	na	na	158° F
15 May 13 @ 10:30	02	7670 ft	9.70 ppg	0	na	na	na	163° F
18 May 13 @ 20:45	03	10684 ft	9.80 ppg	0	1.50 ohm-m @ 70°F	1.31 ohm-m @ 70°F	1.30 ohm-m @ 70°F	210° F
20 May 13 @ 10:00	04	11899 ft	10.00 ppg	0	1.50 ohm-m @ 70°F	1.30 ohm-m @ 70°F	1.29 ohm-m @ 70°F	228° F

M/LWD RUN REMARKS

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: 9.70 ppg

Collar O.D.: 6.750 in.

K1 Factor: 3.179

Collar I.D.: 3.250 in.

Run Number: 3 :: RECORDED DATA LOG

WFT Services Provided:

Recorded and Real Time Logging: Spectral Azimuthal Gamma Ray, Shallow, Medium and Deep Phase 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: 9.80 ppg

Resistivities: Corrected for borehole temperature, hole size, drilling fluid resistivity and dielectric correction.

Borehole Temperature: 210° F

Drilling Fluid Resistivity: 0.536 ohm-m @ 210° F

KCl Concentration: 0%

Run Number: 4 :: RECORDED DATA LOG

WFT Services Provided:

Recorded and Real Time Logging: Spectral Azimuthal Gamma Ray, Shallow, Medium and Deep Phase 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: 10.00 ppg

Resistivities: Corrected for borehole temperature, hole size, drilling fluid resistivity and dielectric correction.

Borehole Temperature: 228° F

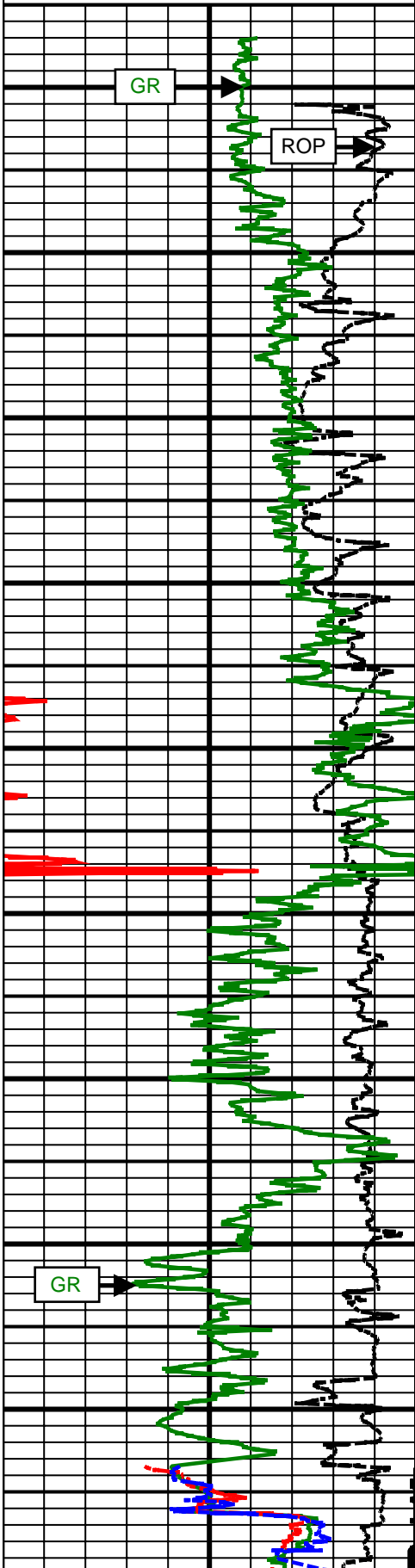
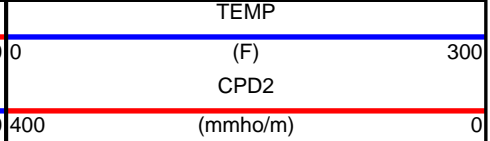
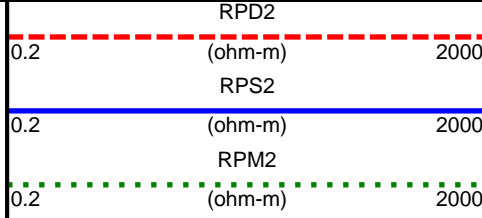
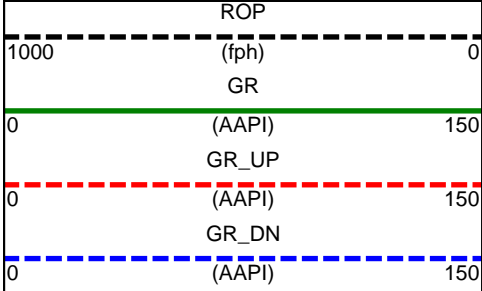
Drilling Fluid Resistivity: 0.541 ohm-m @ 228° F

KCl Concentration: 0%

M/LWD LOG COMMENTS	
Comment No. 1-1	<p>MWD Drilling Run 01</p> <p>Start of MWD Drilling Run 01</p> <p>Weatherford International provided 6 3/4 in. Directional services for Run 01. No Logging Performed.</p> <p>Run 01 ended formation drilling May 14, 2013 at 7:51 at 6810 MD / 6777 TVD.</p>
Comment No. 2-1	<p>RECORDED DATA LOG</p> <p>Start of MWD Drilling Run 02</p> <p>Weatherford International provided 6 3/4 in. Directional, Gamma Ray, and Temperature for Run 02.</p> <p>Run 02 started formation drilling May 14, 2013 at 17:08 at 6810 MD / 6777 TVD. Weatherford International logged the 8.750 in. borehole.</p> <p>The WBM at the start of drilling was 9.70 ppg.</p>
Comment No. 2-2	<p>End of MWD Drilling Run 02</p> <p>Run 02 ended drilling formation May 15, 2013 at 4:45 at 7670 MD / 7350 TVD.</p> <p>The WBM at the end of drilling was 9.70 ppg.</p>
Comment No. 3-1	<p>RECORDED DATA LOG</p> <p>Start of LWD Drilling Run 03</p> <p>Weatherford International provided 4 3/4 in. Directional, Resistivity, Azimuthal Gamma Ray, and Temperature for Run 03.</p> <p>There was a problem with one of the transmitters on the Resistivity tool causing erroneous values in the recorded memory of the Attenuated curves.</p> <p>Shallow, Medium, and Deep Phase 2 MHz Resistivity has been plotted to replace the Attenuated curves.</p> <p>Run 03 started formation drilling May 16, 2013 at 13:08 at 7670 MD / 7350 TVD. Weatherford International logged the 6.125 in. borehole.</p> <p>The WBM at the start of drilling was 9.80 ppg.</p>
Comment No. 3-2	<p>End of LWD Drilling Run 03</p> <p>Run 03 ended drilling formation May 18, 2013 at 14:35 at 10684 MD / 7455 TVD.</p> <p>The WBM at the end of drilling was 9.80 ppg.</p>
Comment No. 4-1	<p>RECORDED DATA LOG</p> <p>Start of LWD Drilling Run 04</p> <p>Weatherford International provided 4 3/4 in. Directional, Resistivity, Azimuthal Gamma Ray, and Temperature for Run 04.</p> <p>Run 04 started formation drilling May 19, 2013 at 5:22 at 10684 MD / 7455 TVD. Weatherford International logged the 6.125 in. borehole.</p> <p>The WBM at the start of drilling was 9.80 ppg.</p>
Comment No. 4-2	<p>End of LWD Drilling Run 04</p> <p>Run 04 ended drilling formation May 19, 2013 at 17:10 at 11899 MD / 7451 TVD.</p> <p>The WBM at the end of drilling was 10.00 ppg.</p>

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	Recorded Azimuthal Gamma Ray 3.0 ft window 0.5 ft Exponential Smoothing	
Gamma Ray Down	GR Down	AAPI	Recorded Azimuthal Gamma Ray 3.0 ft window 0.5 ft Exponential Smoothing	
Shallow Phase Resistivity	RPS2	ohm-m	2MHz Shallow Phase Resistivity 3.0 ft window 0.5 ft Exponential Smoothing	
Medium Phase Resistivity	RPM2	ohm-m	2MHz Medium Phase Resistivity 3.0 ft window 0.5 ft Exponential Smoothing	
Deep Phase Resistivity	RPD2	ohm-m	2MHz Deep Phase Resistivity 3.0 ft window 0.5 ft Exponential Smoothing	
Deep Phase Conductivity	CPD2	mmho/m	2MHz Deep Phase Conductivity 3.0 ft window 0.5 ft Exponential Smoothing	
Temperature	TEMP	Deg Fahrenheit	Recorded Borehole Temperature 3.0 ft window 0.5 ft Exponential Smoothing	

1 Inch - Measured Depth



6800 MD

6900 MD

7000 MD

7100 MD

7200 MD

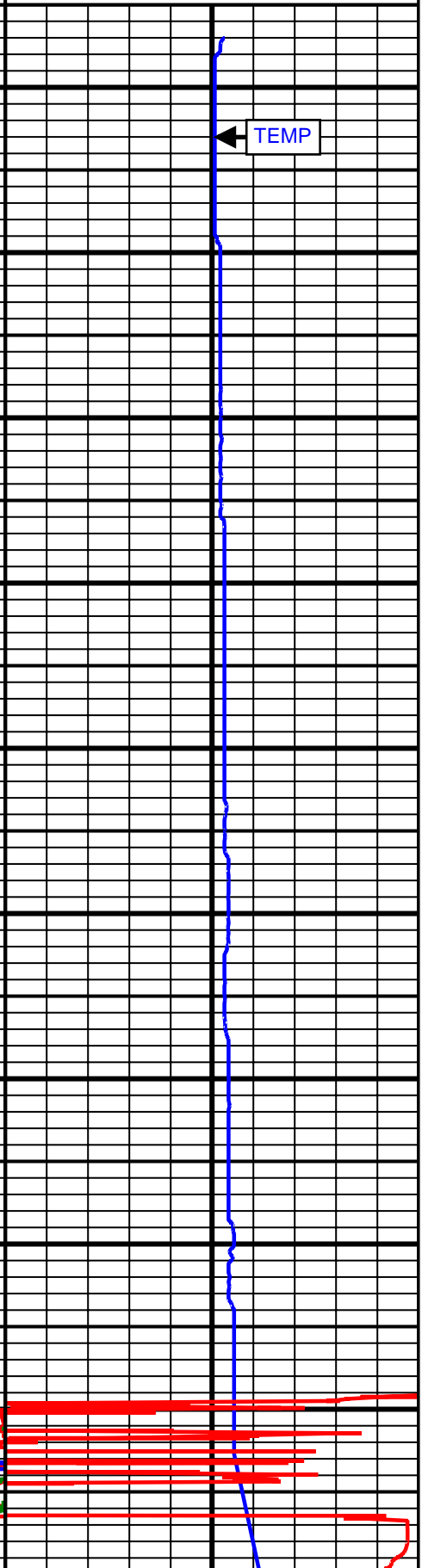
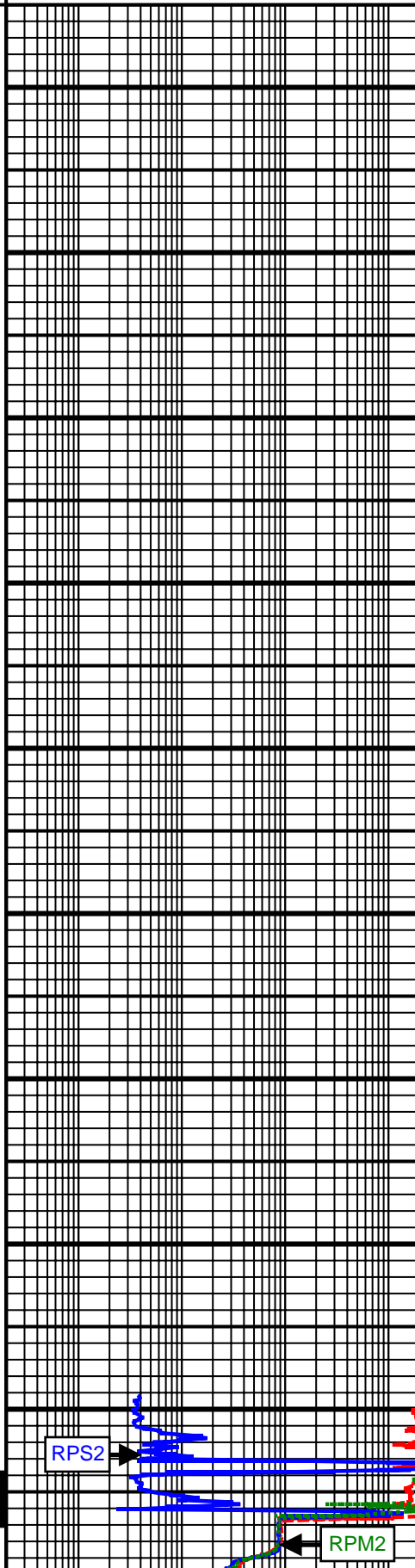
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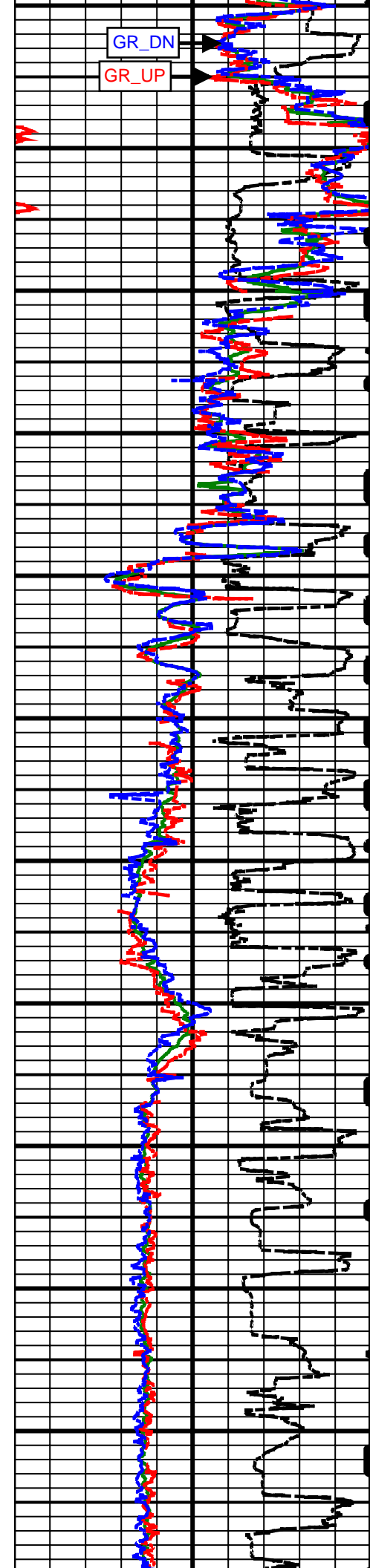
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7500 MD

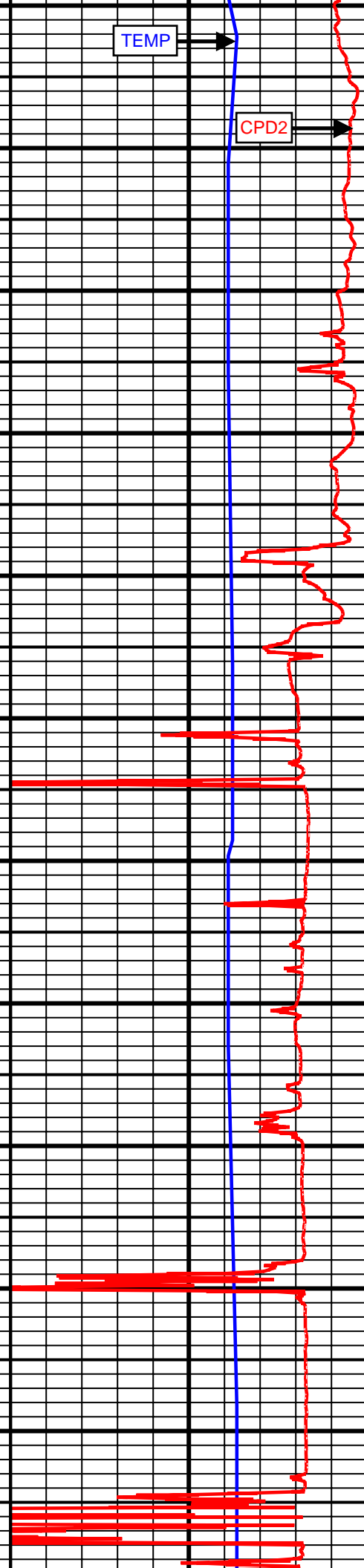
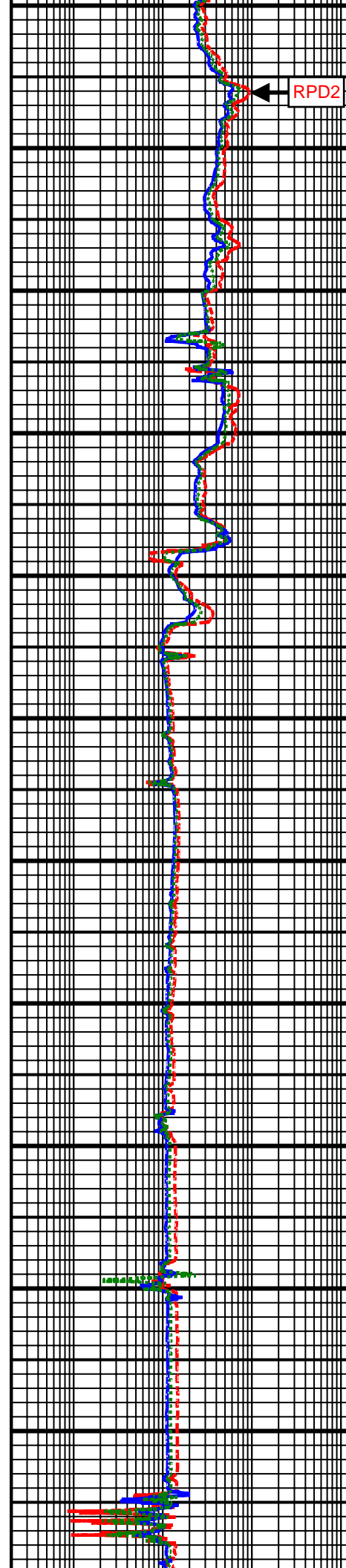
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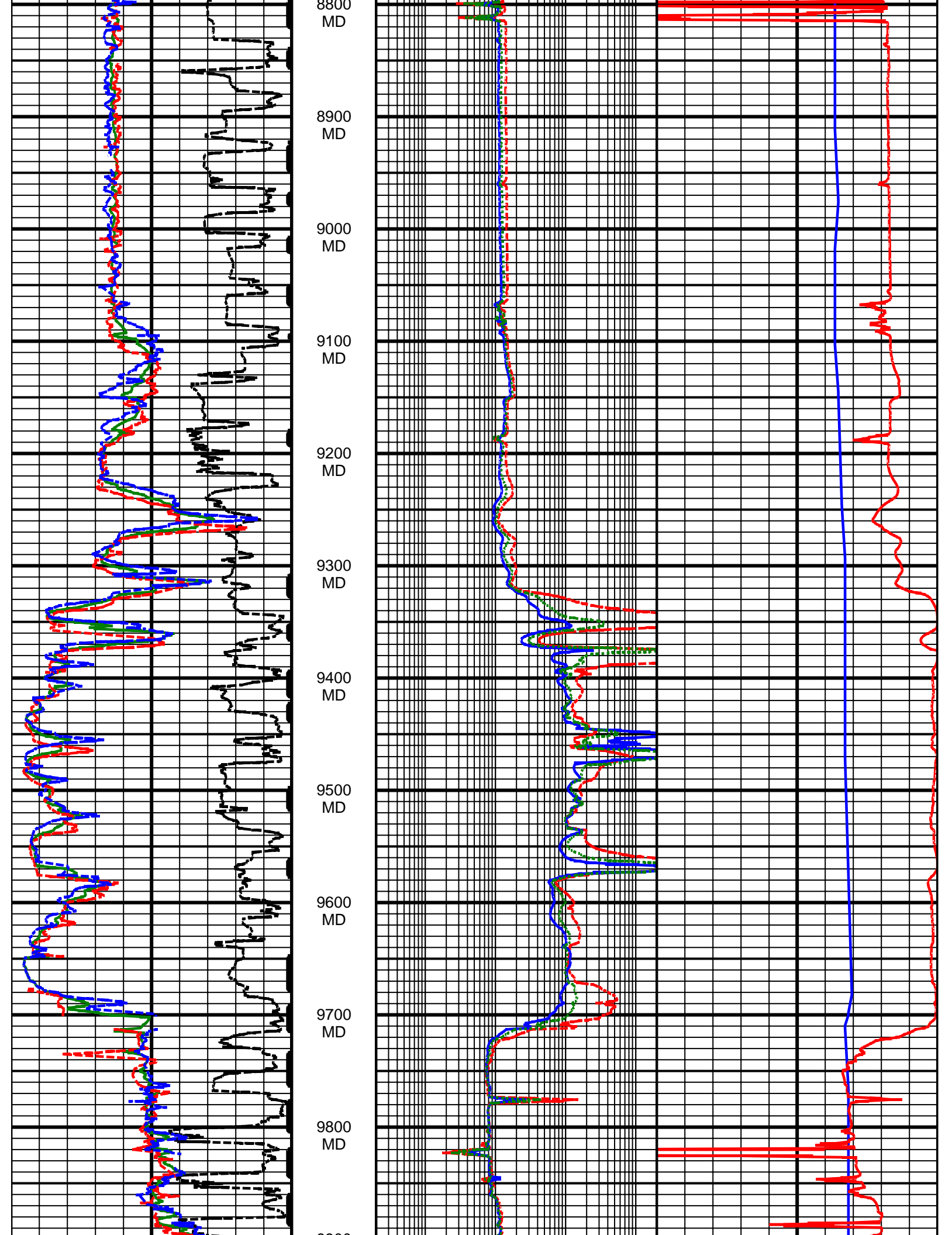
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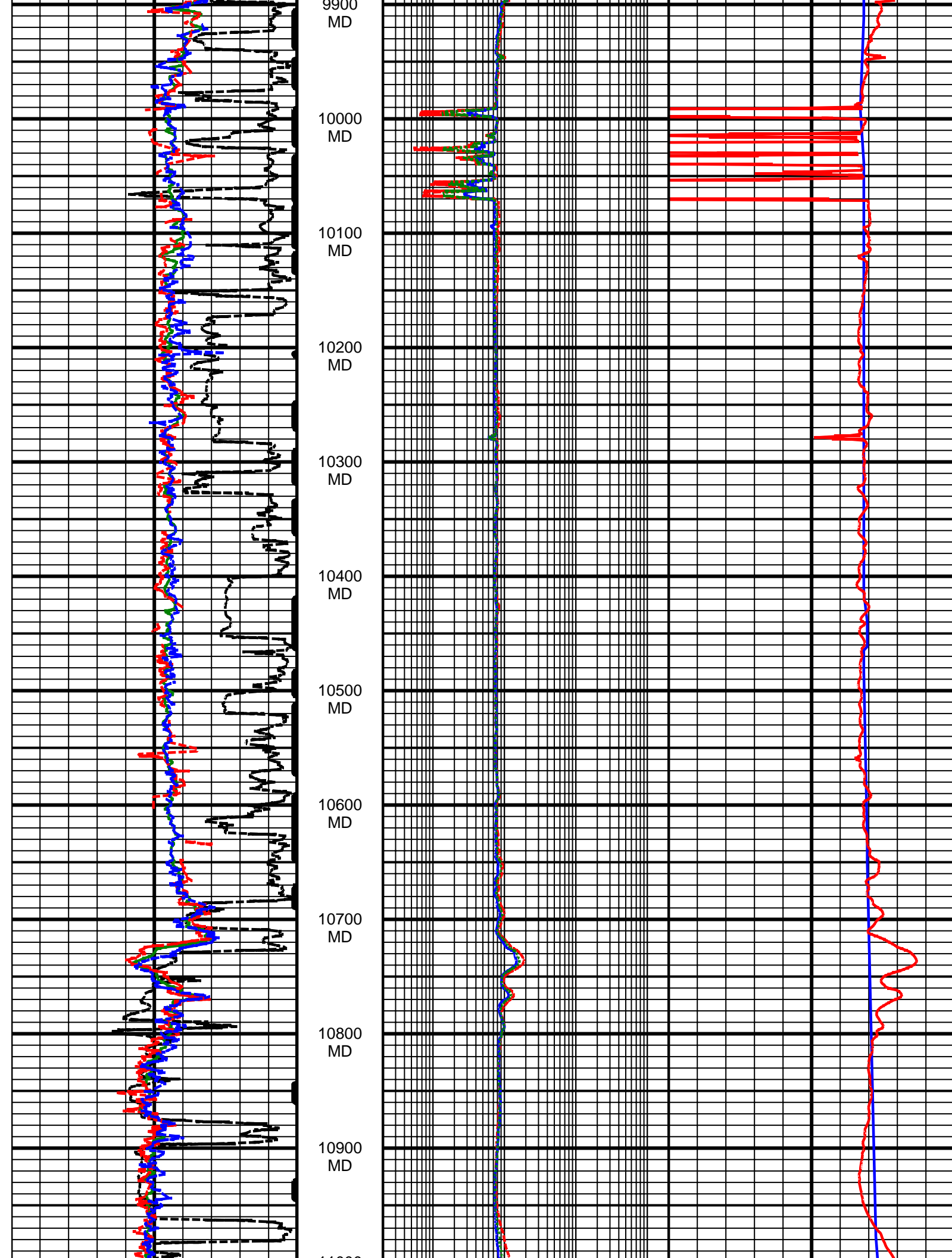


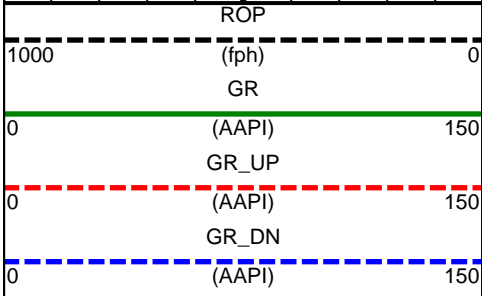
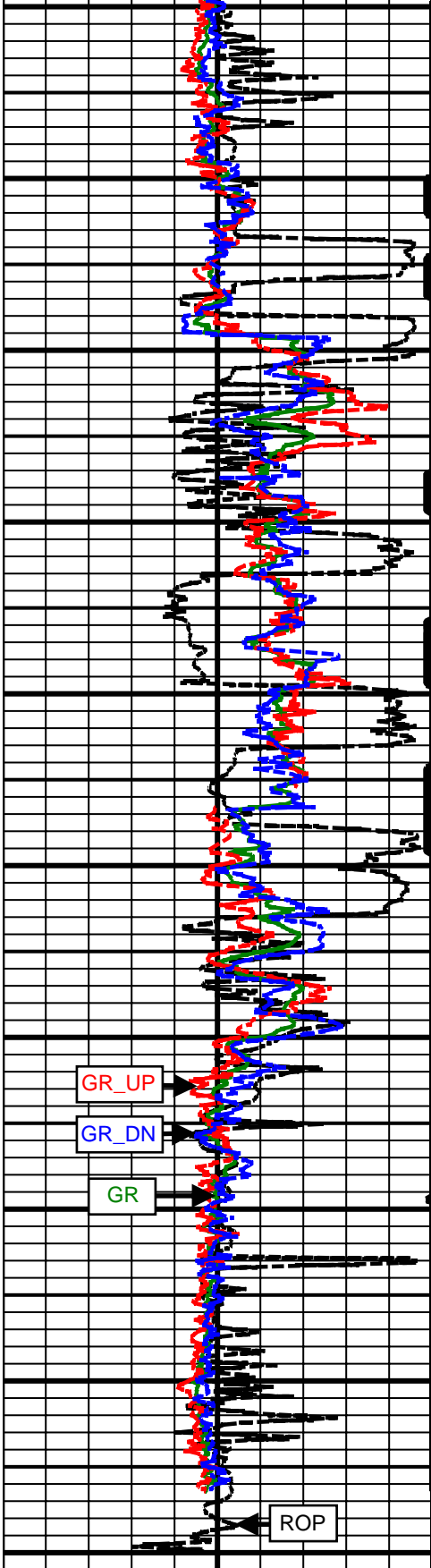


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7800 MD
7900 MD
8000 MD
8100 MD
8200 MD
8300 MD
8400 MD
8500 MD
8600 MD
8700 MD
8800 MD

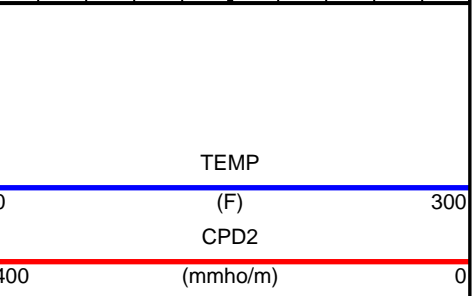
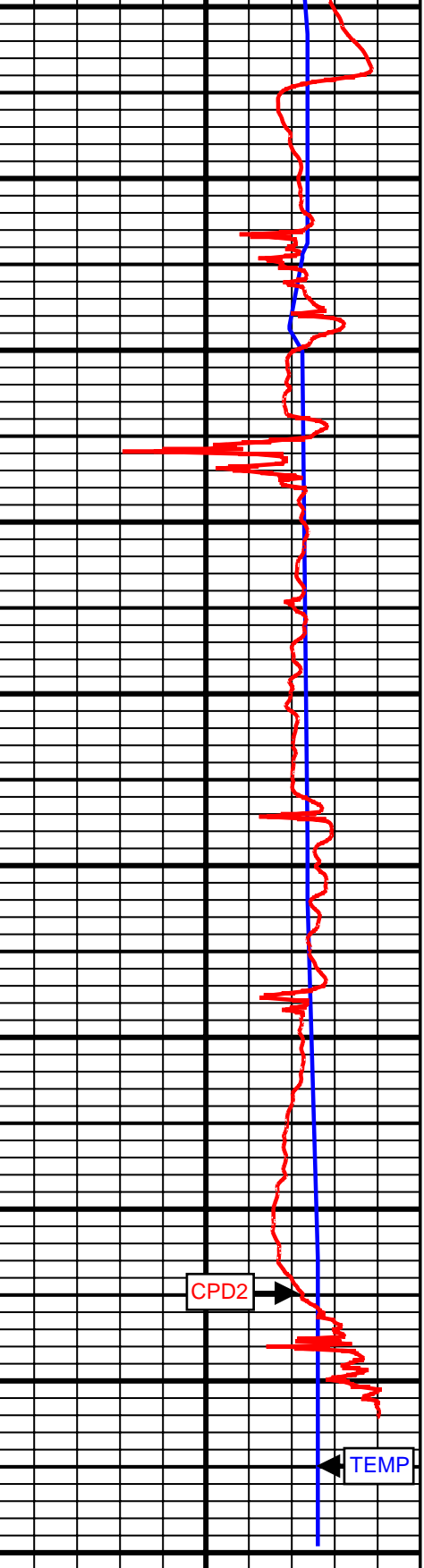
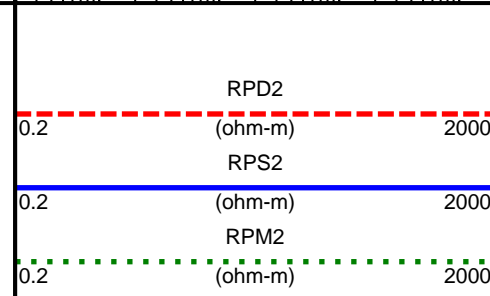
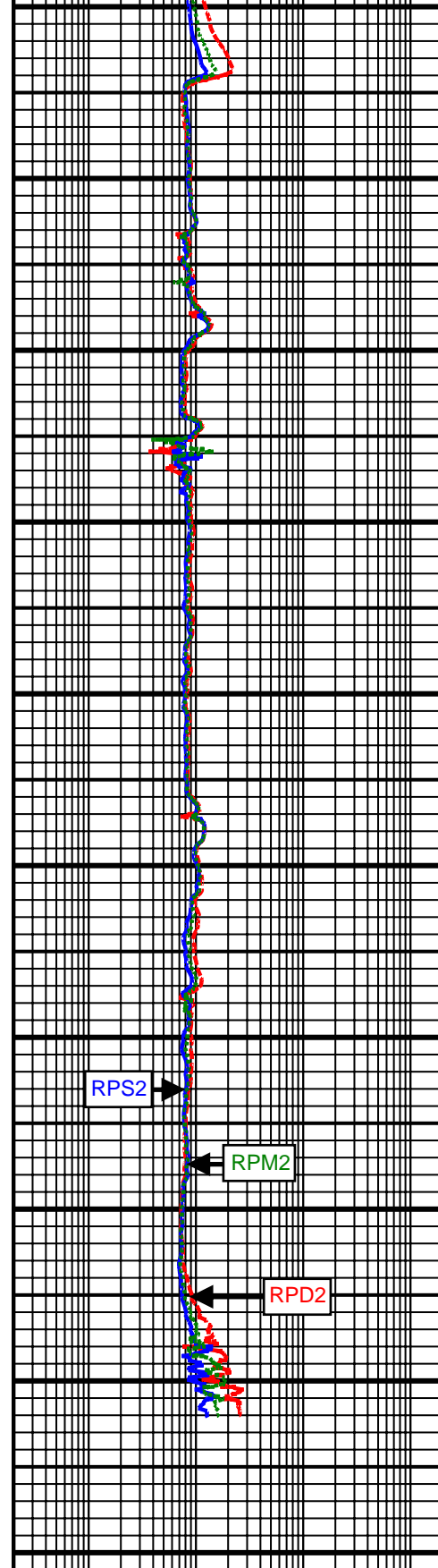




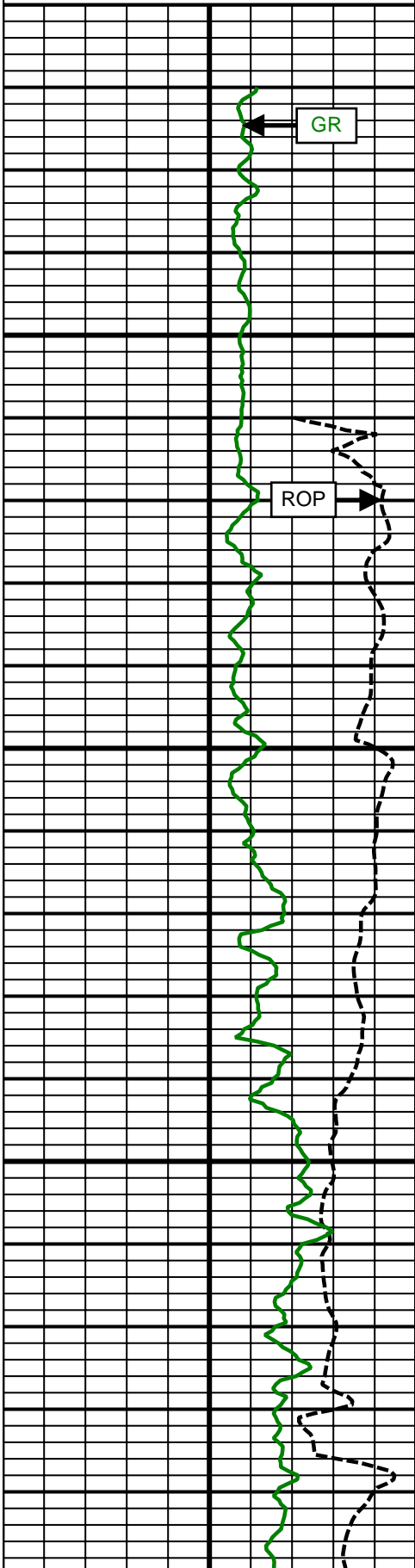
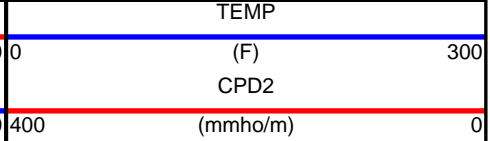
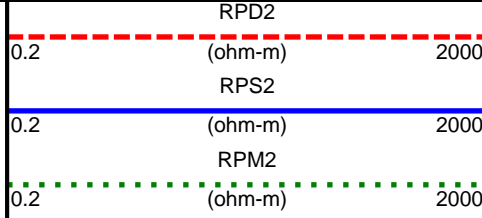
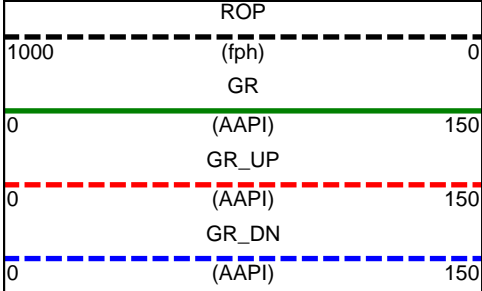




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11100 MD
11200 MD
11300 MD
11400 MD
11500 MD
11600 MD
11700 MD
11800 MD
11900



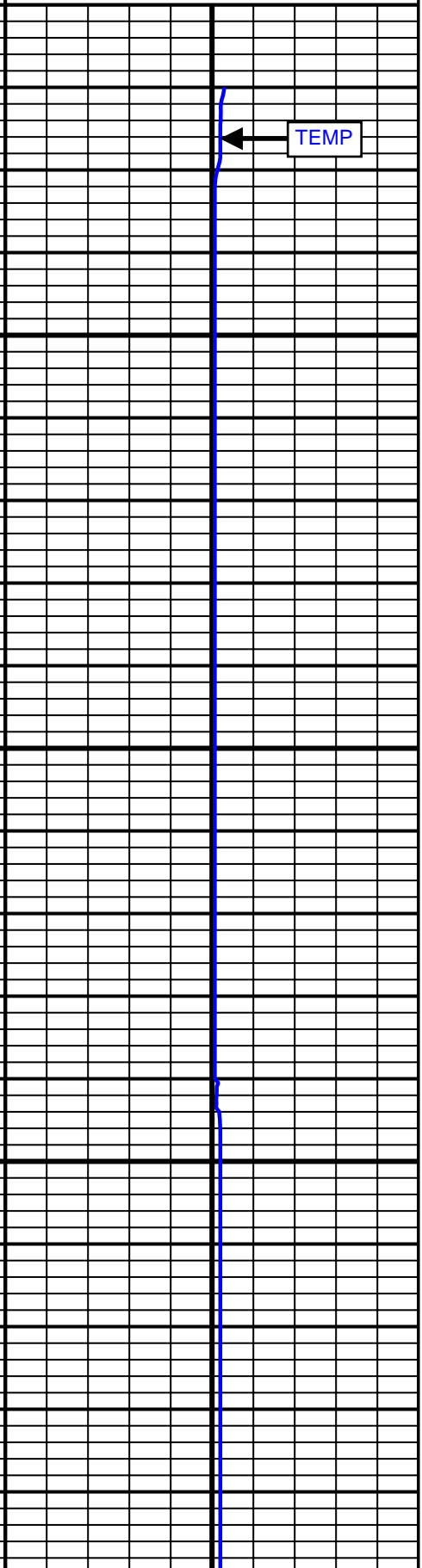
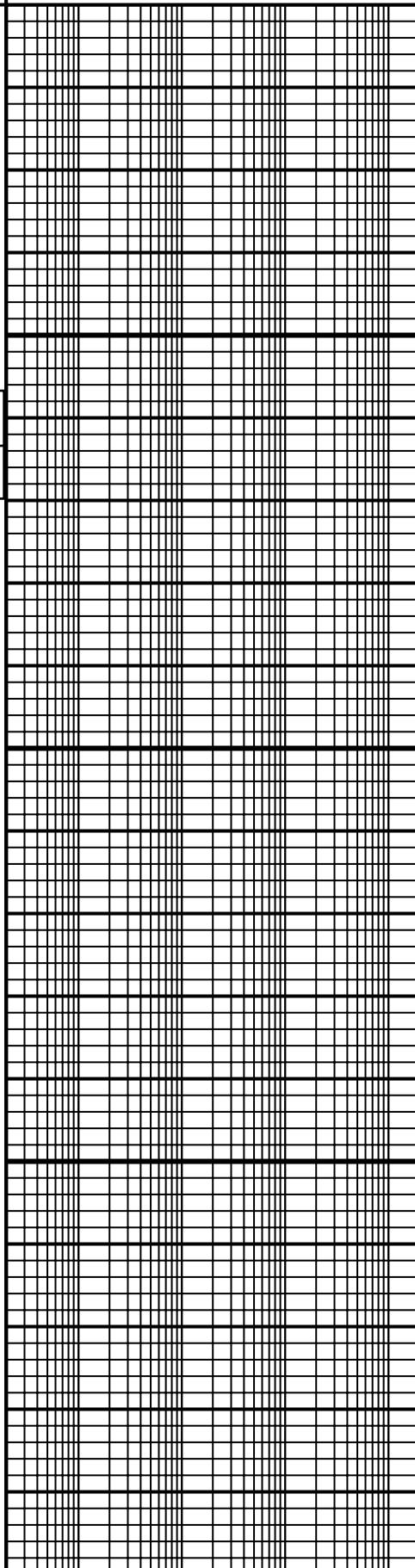
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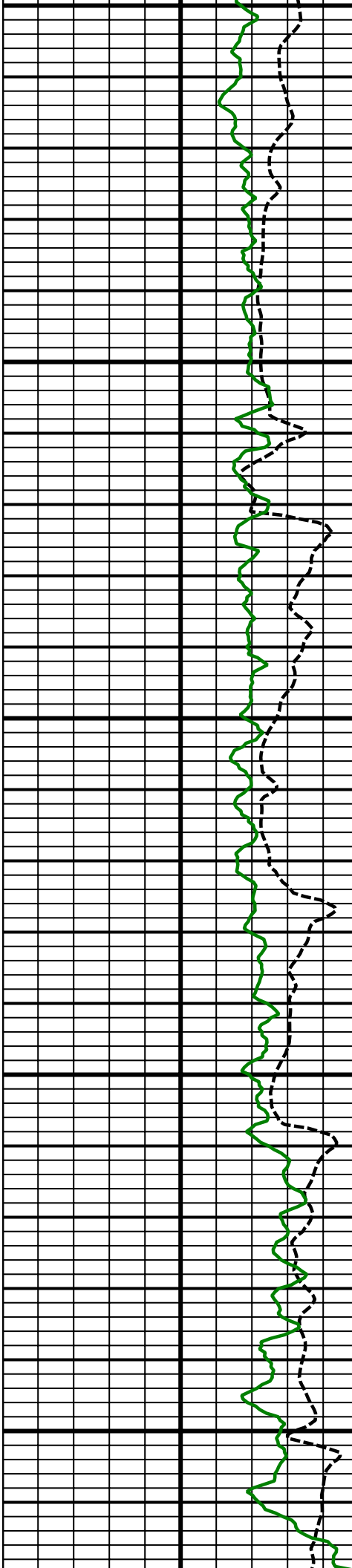
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Comment No. 1-1

Comment No. 2-1

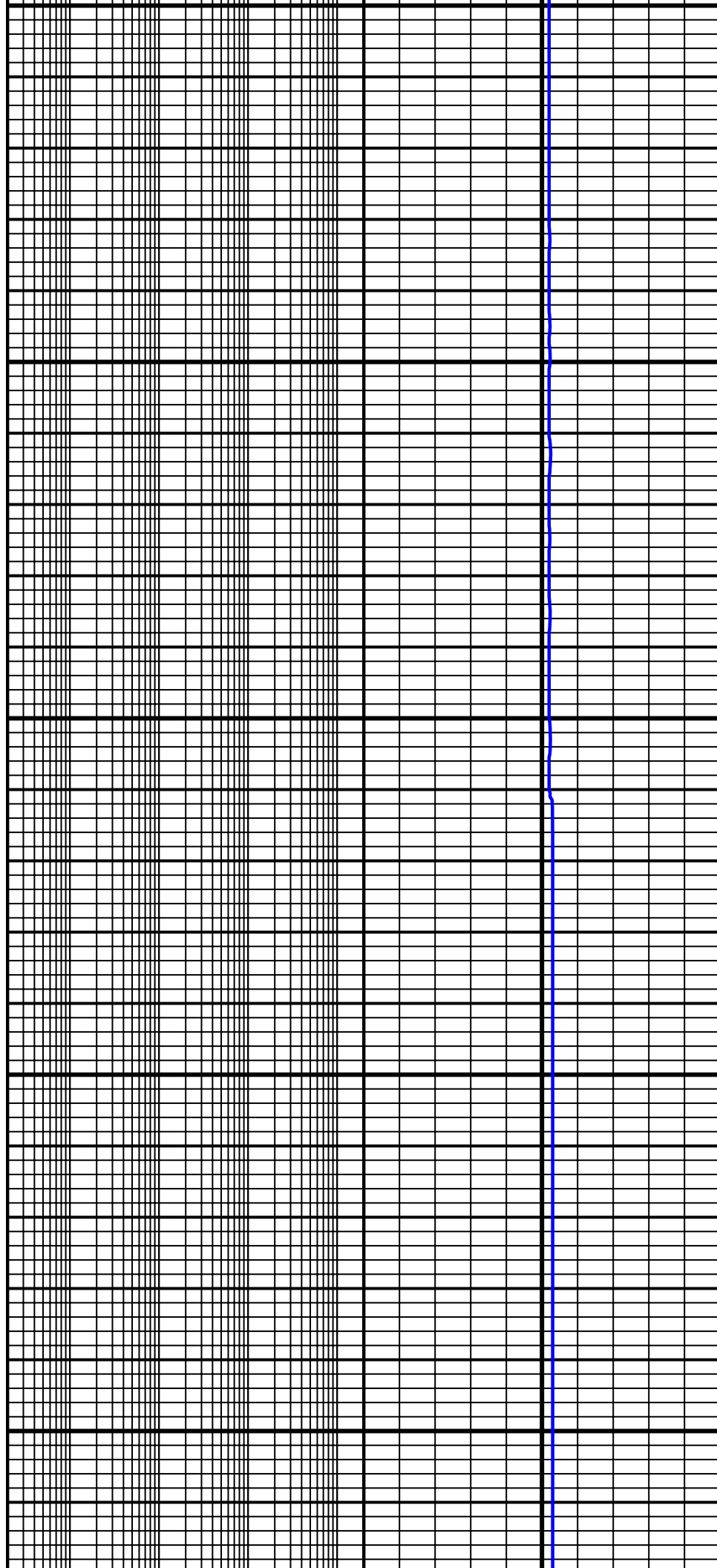


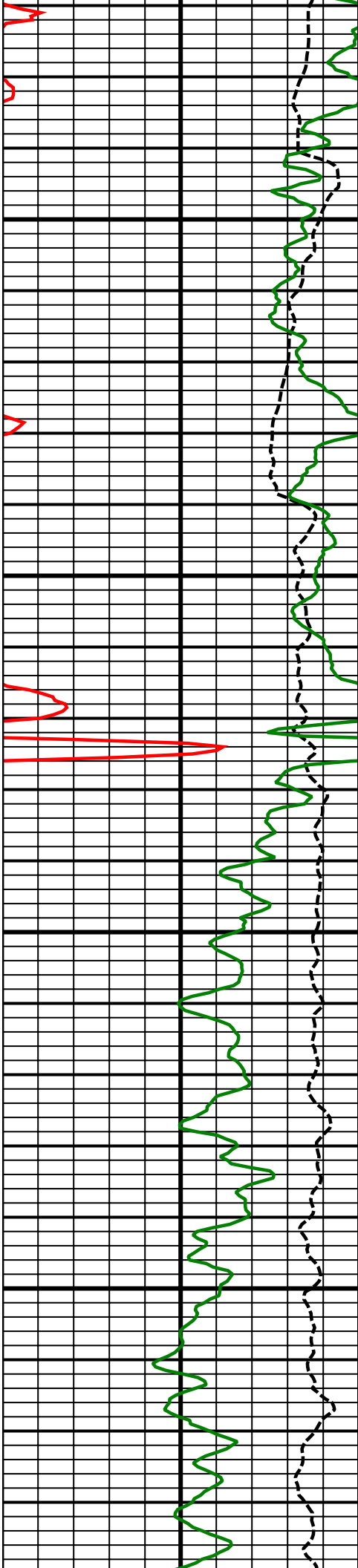
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7000
MD

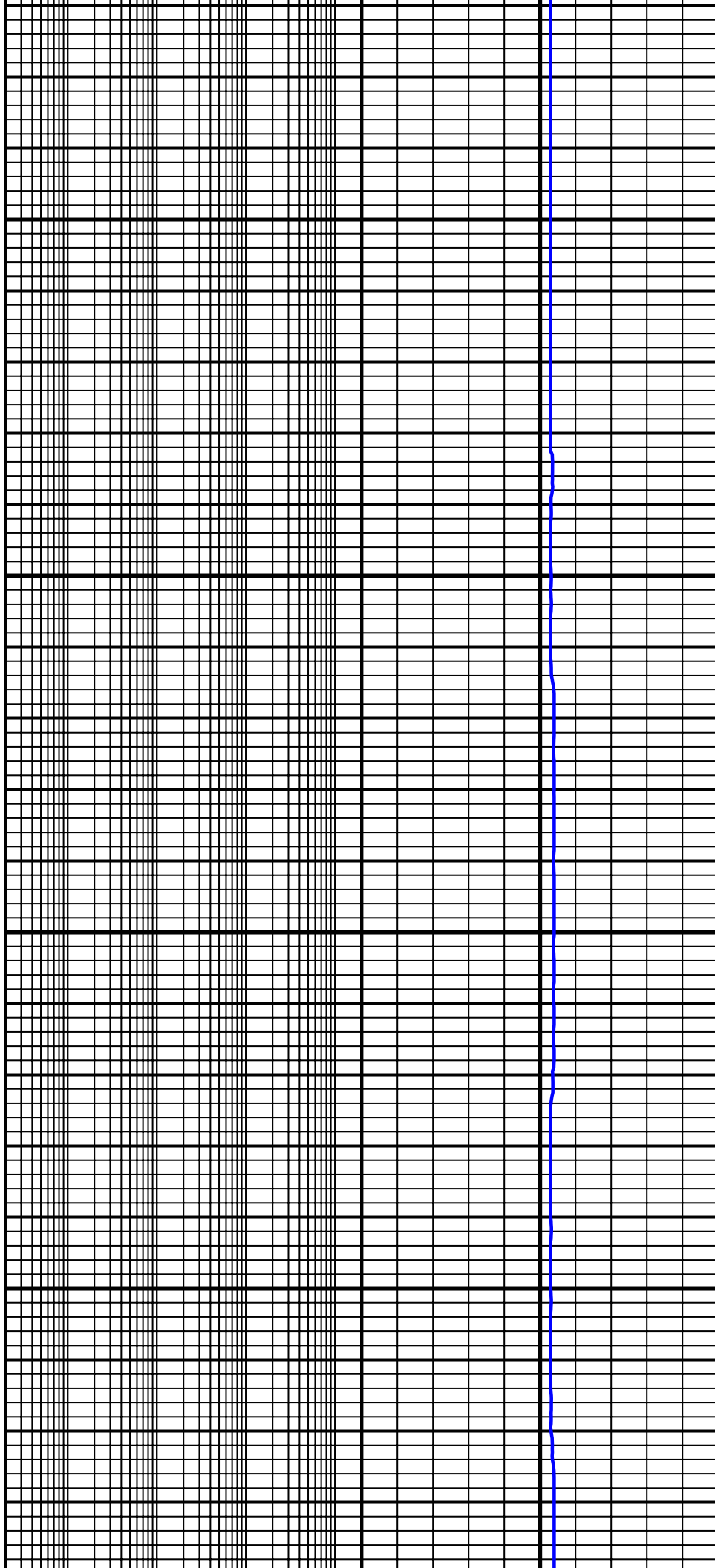
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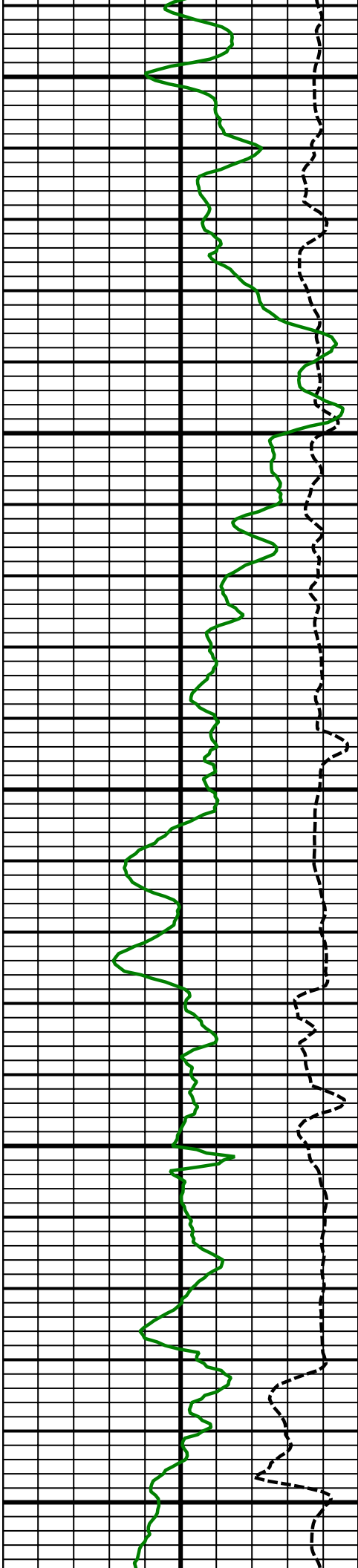




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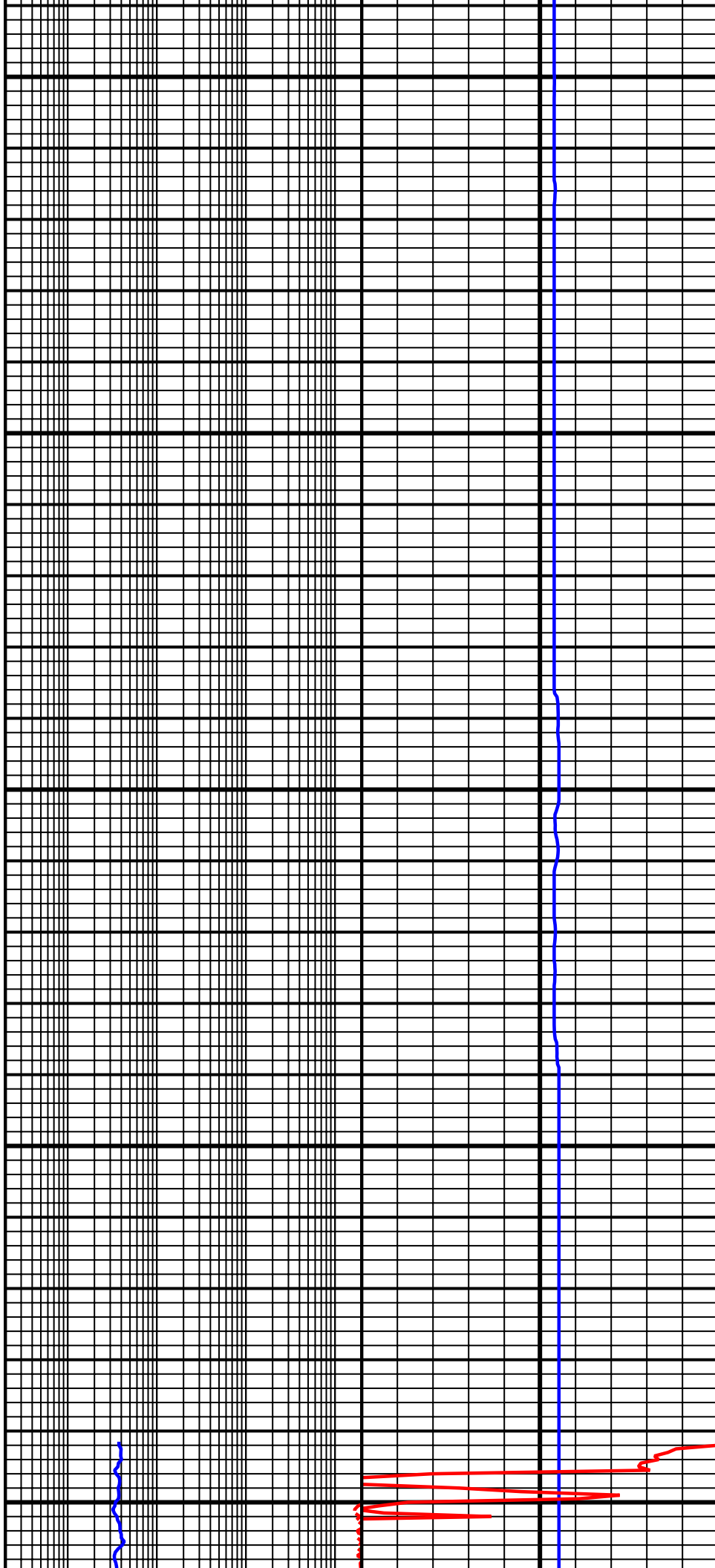


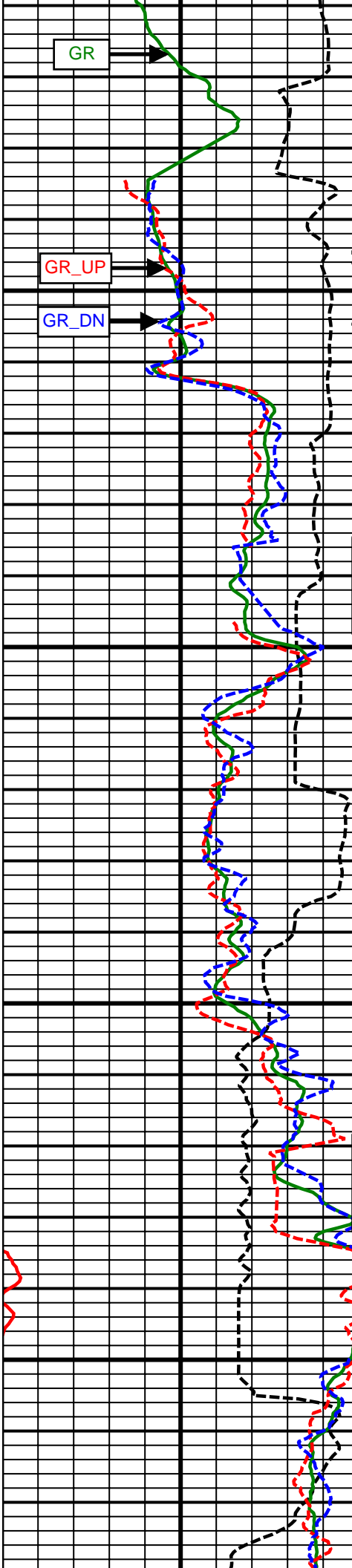


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7500
MD

7600
MD





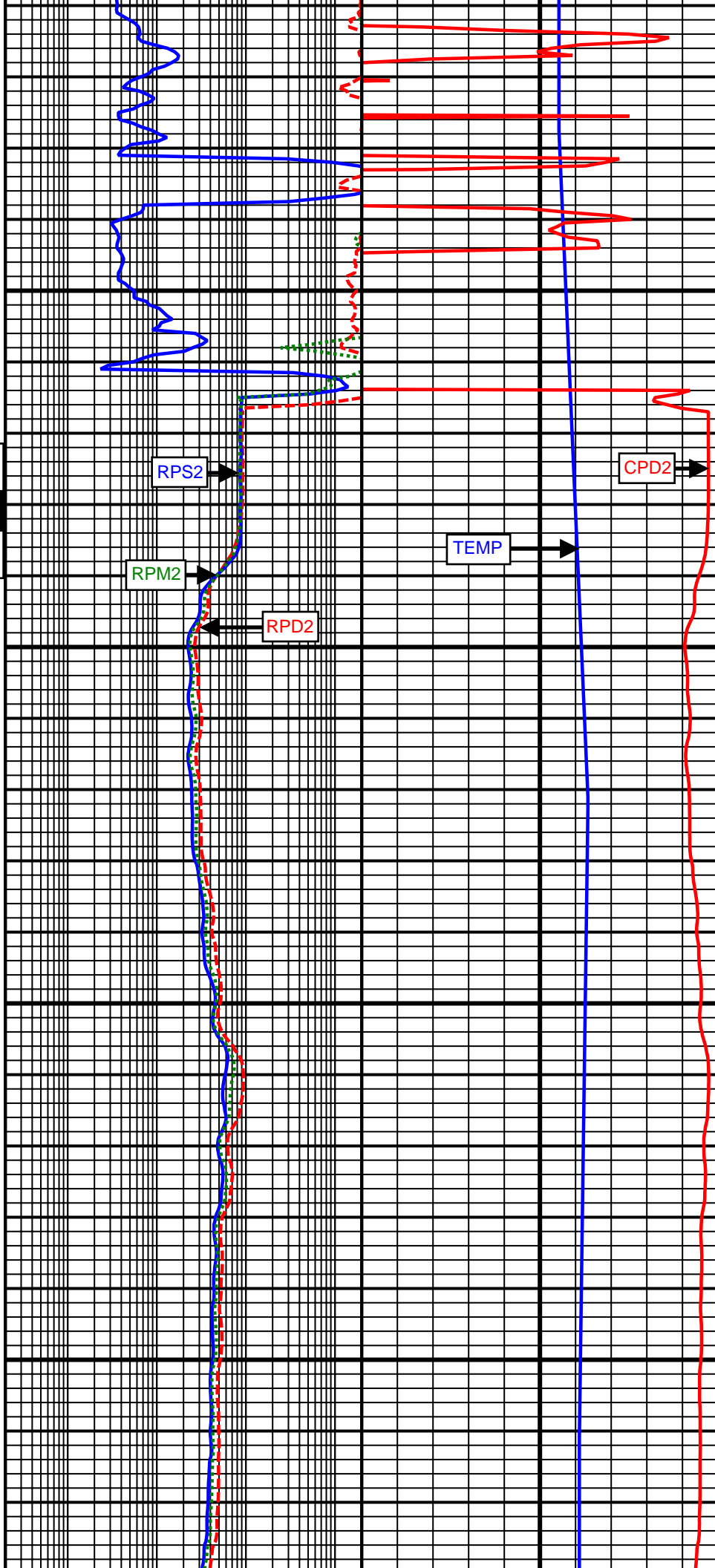
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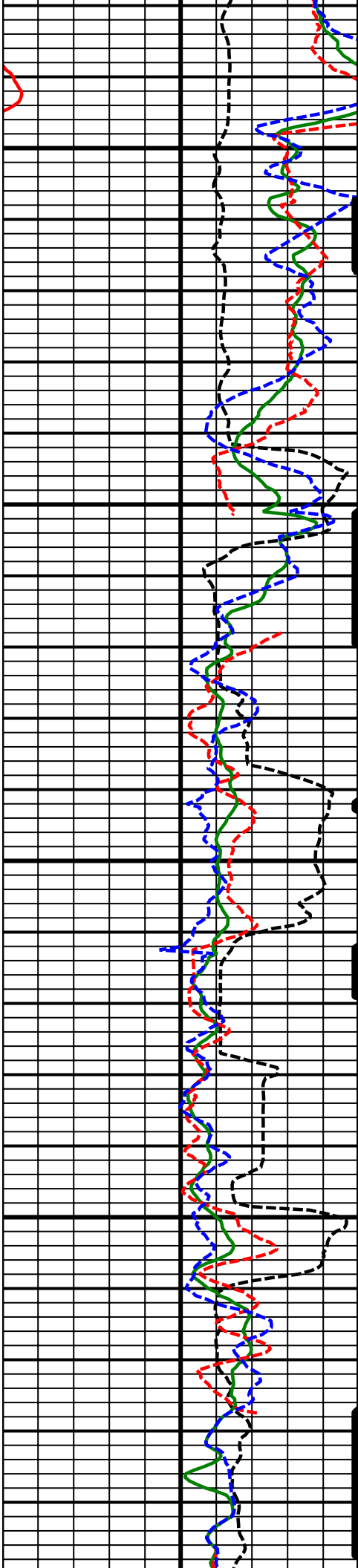
Casing

Comment
No. 3-1

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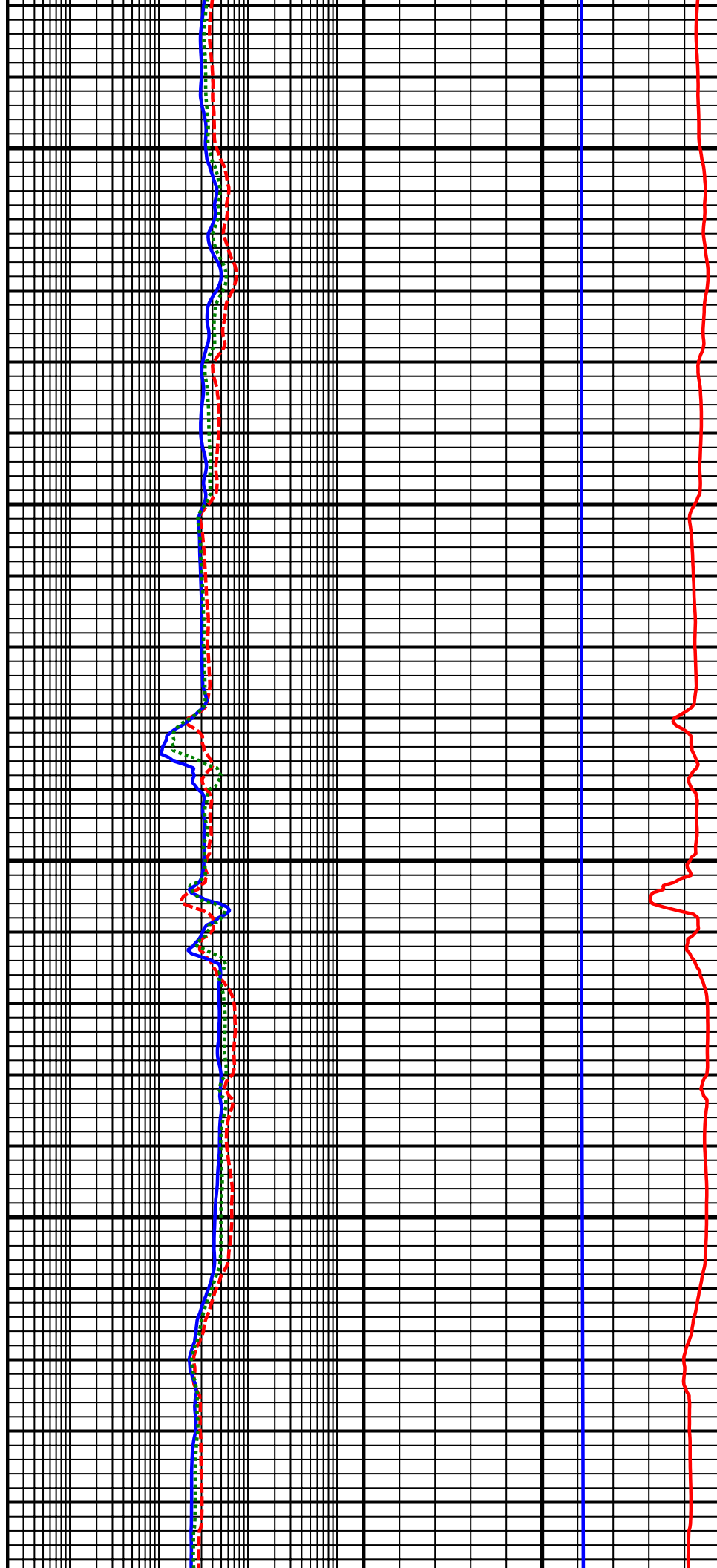
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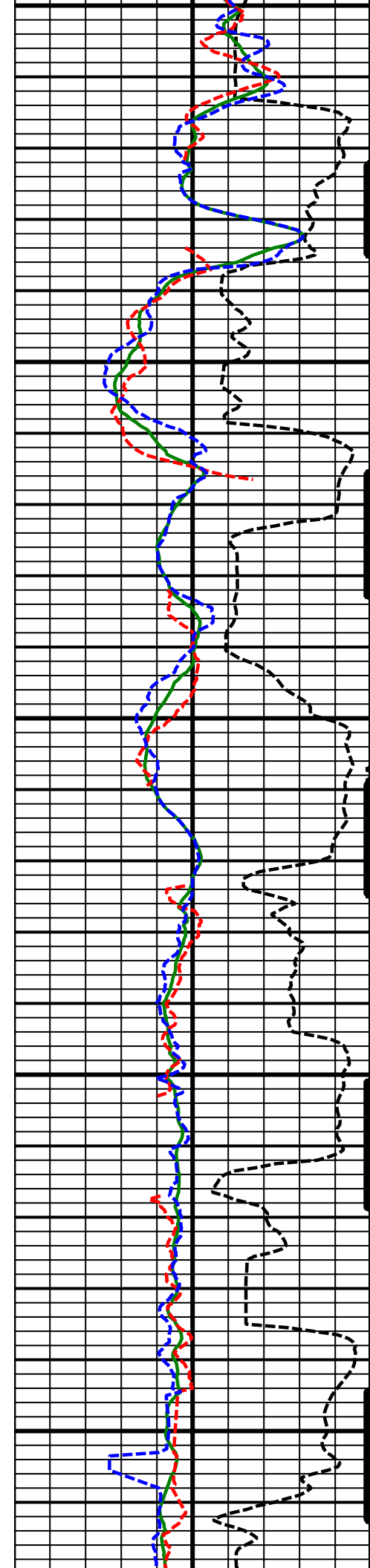




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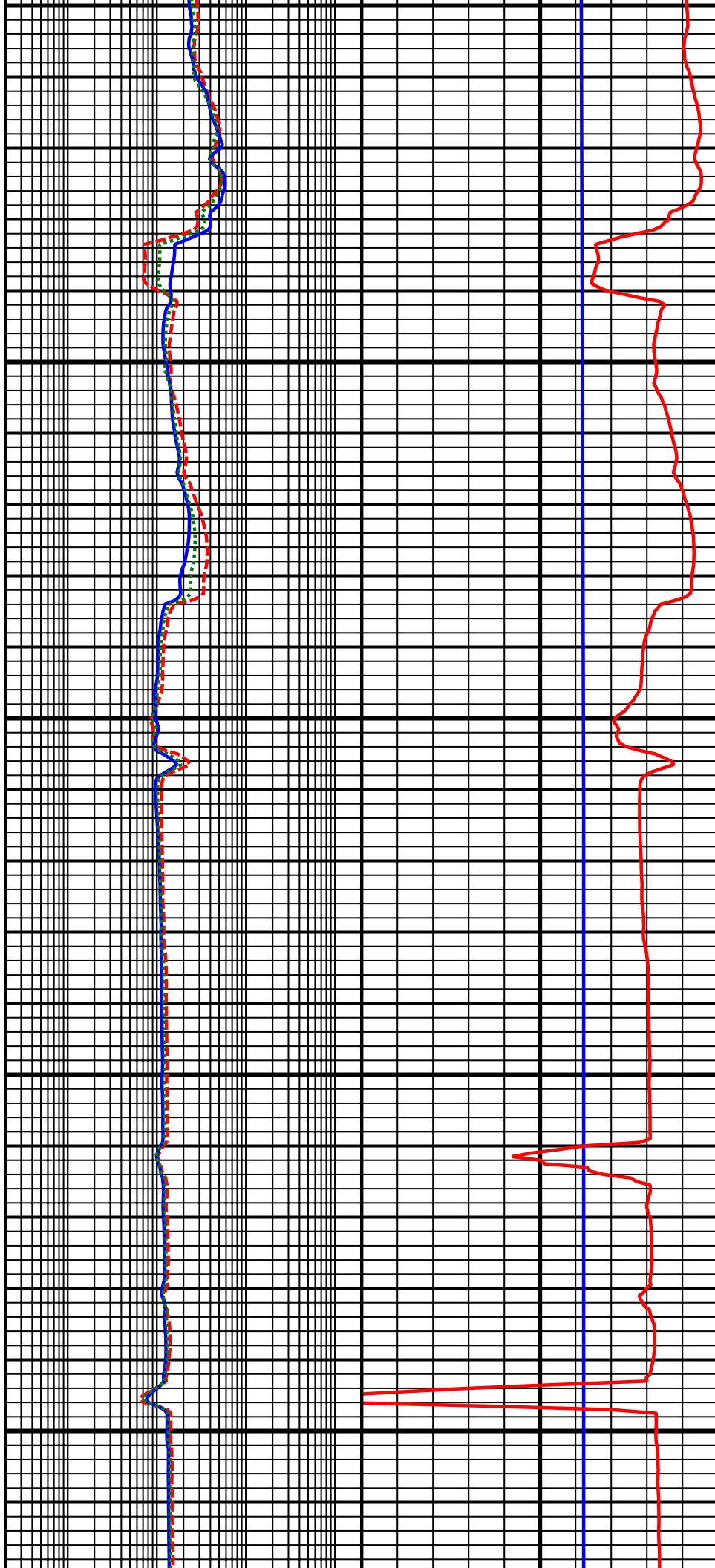
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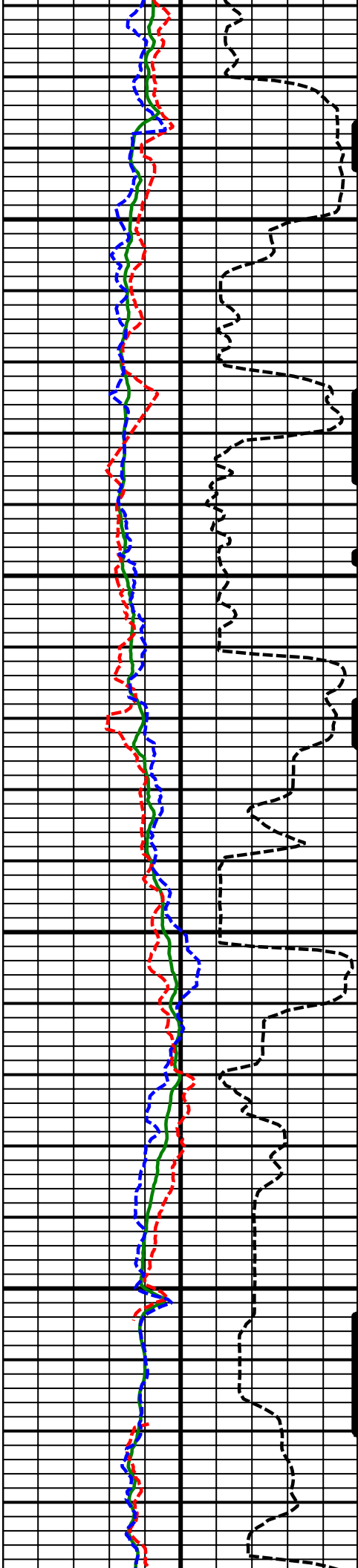




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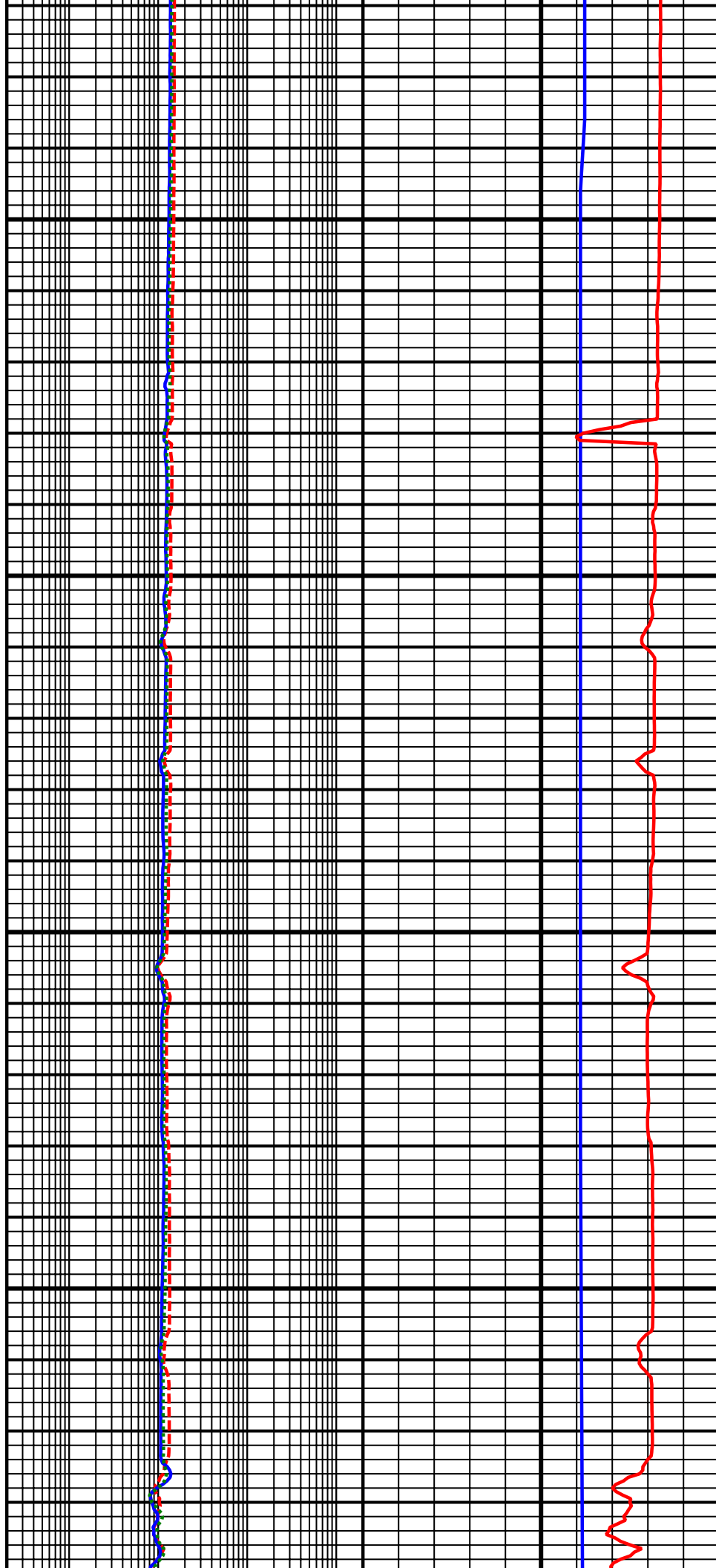
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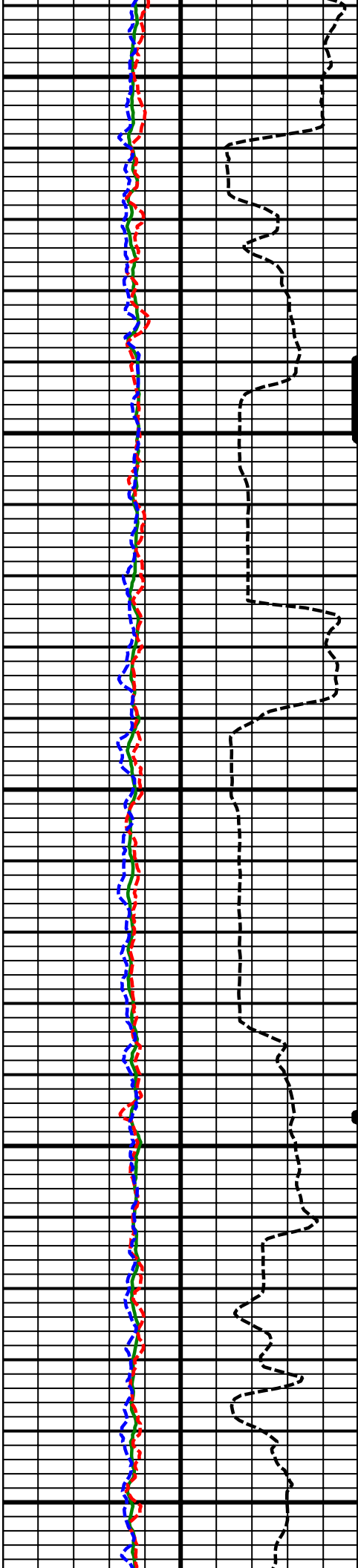




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MD

8400
MD

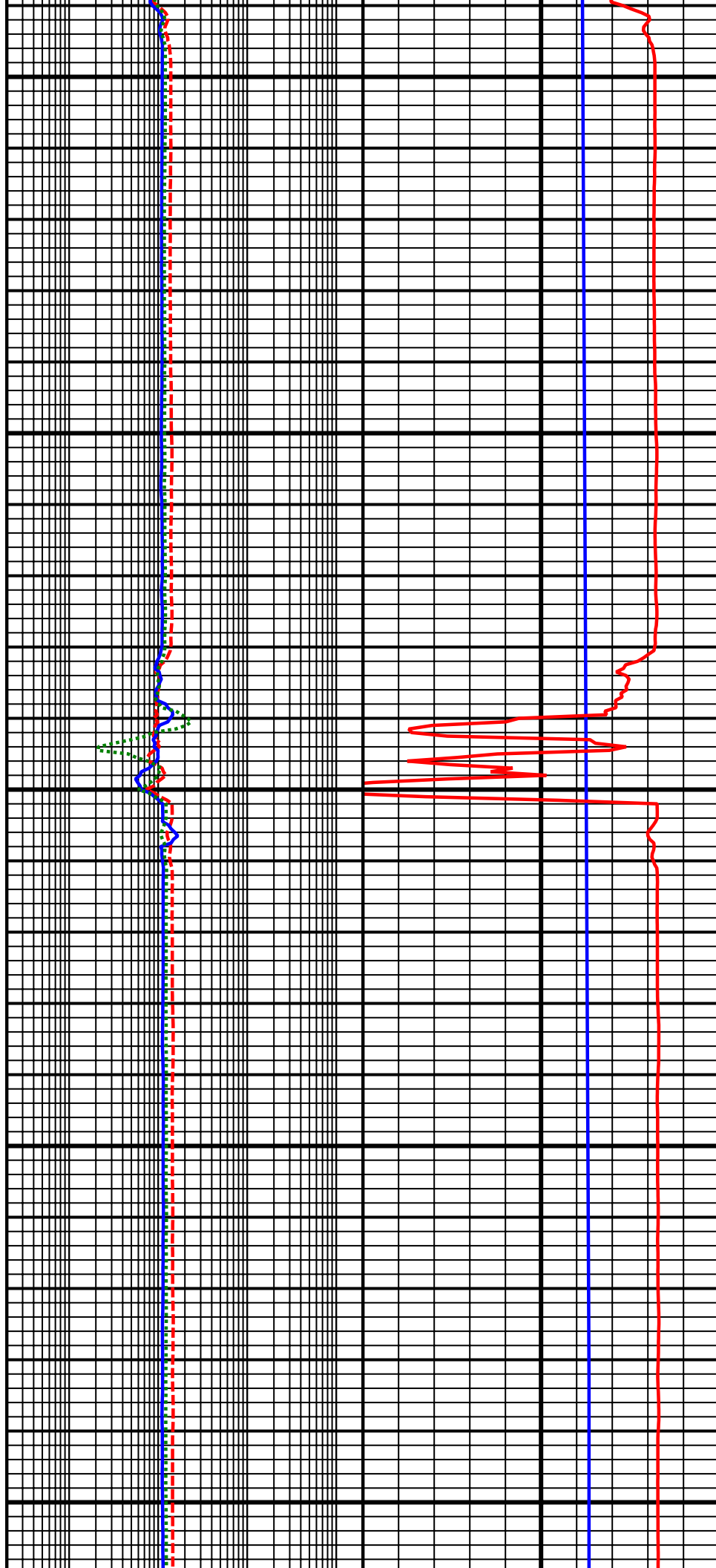


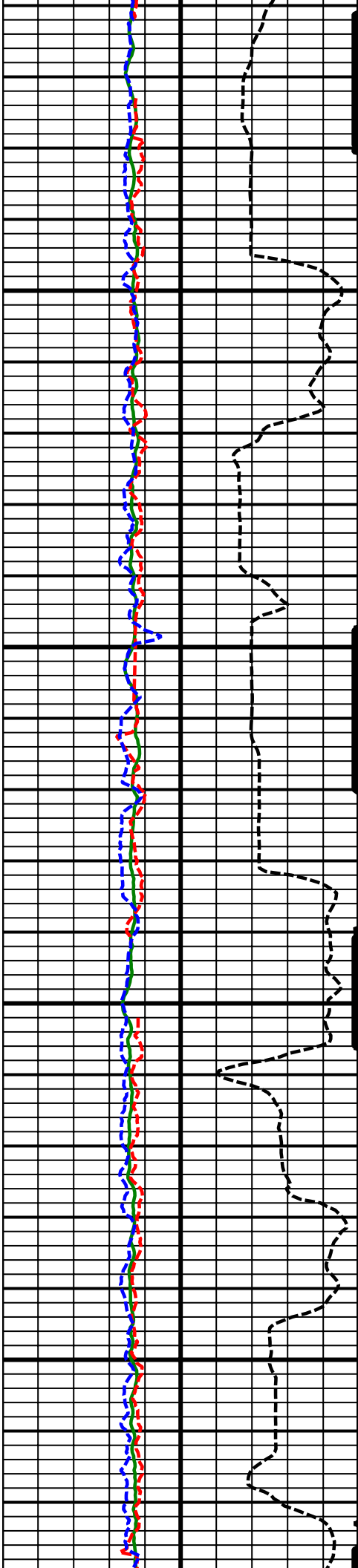


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8600
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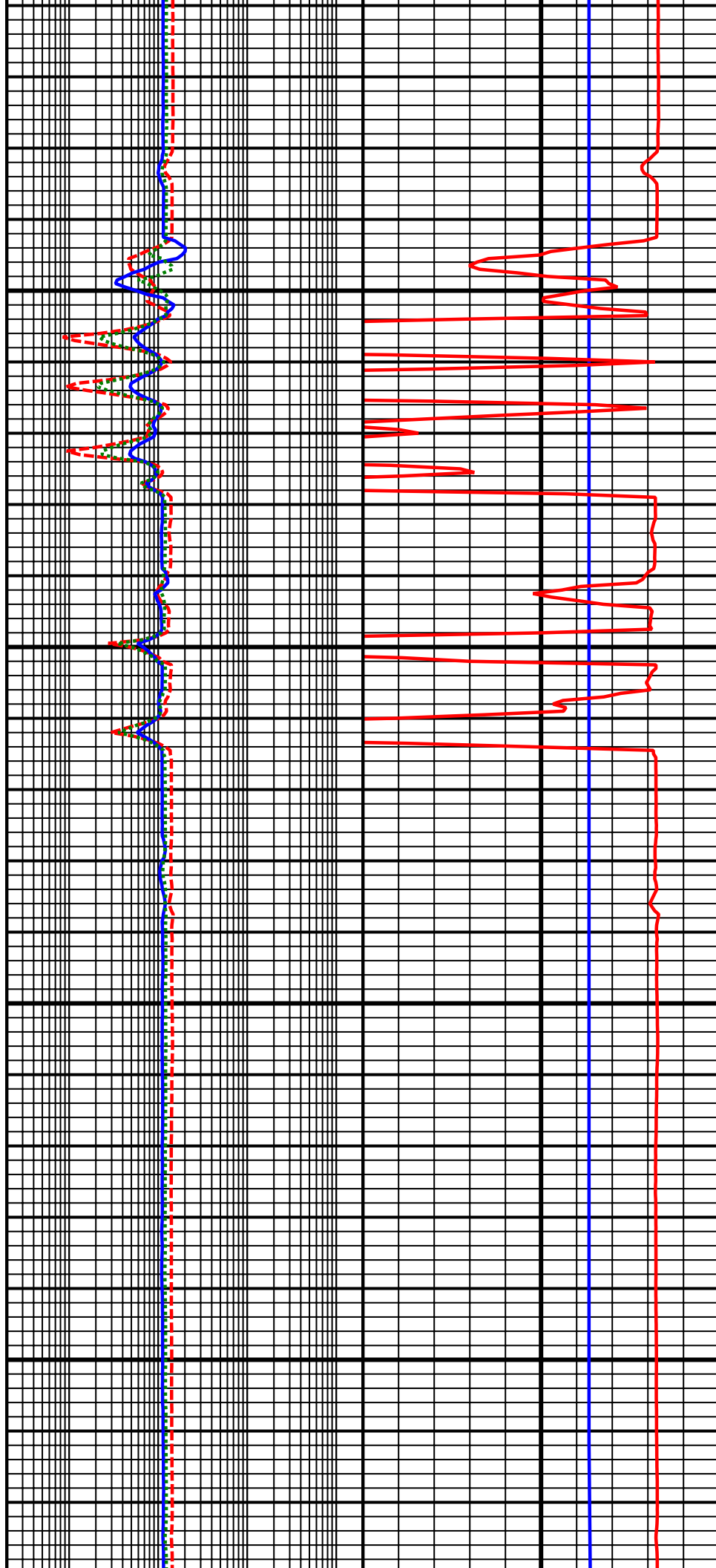
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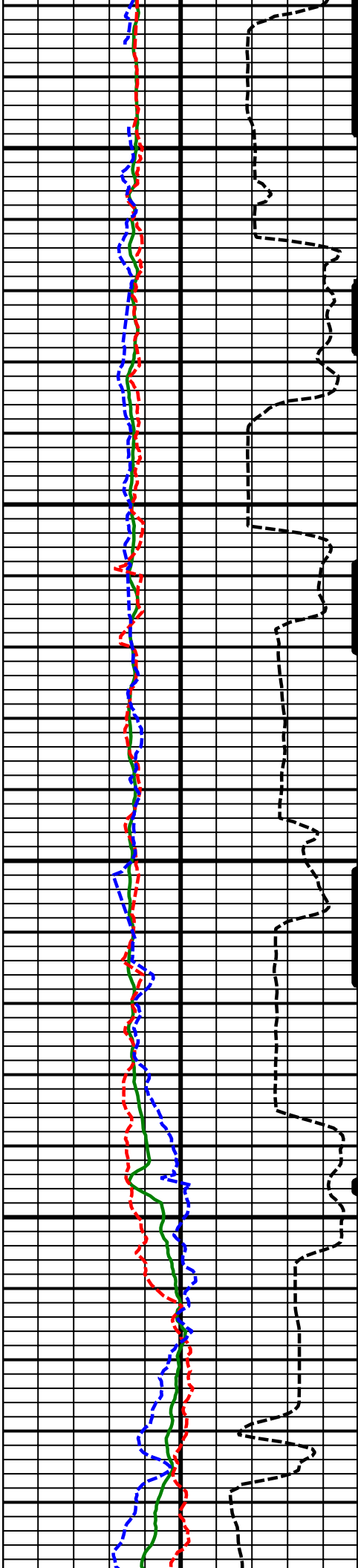




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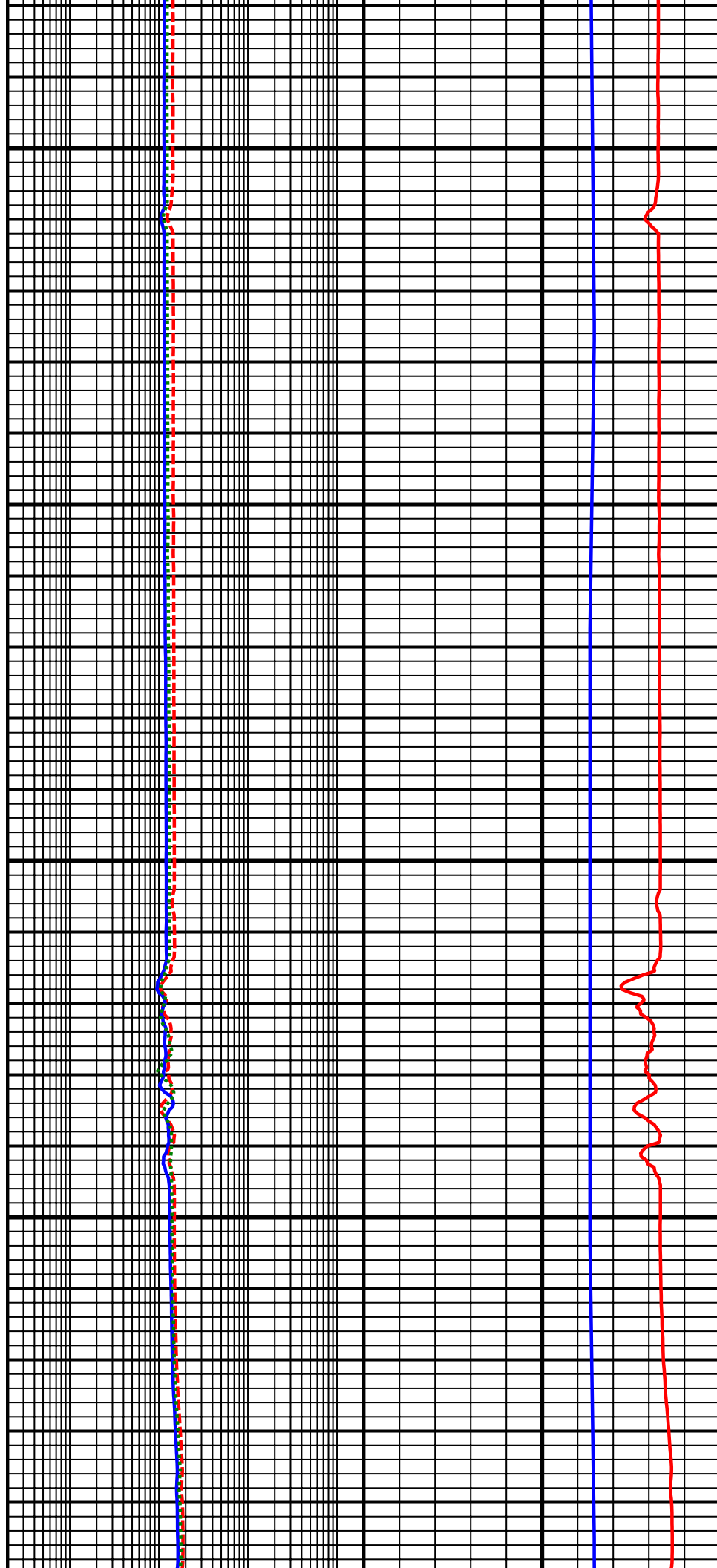
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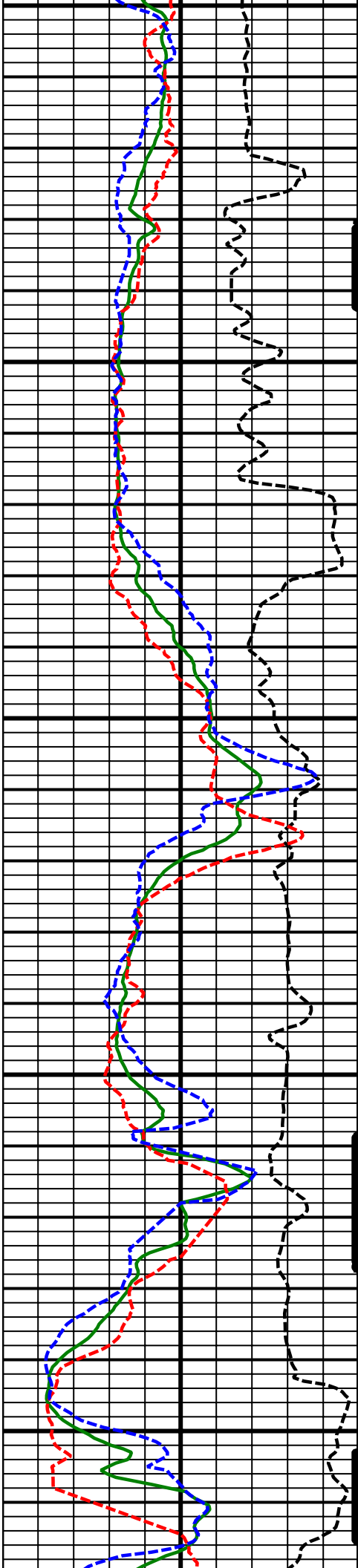




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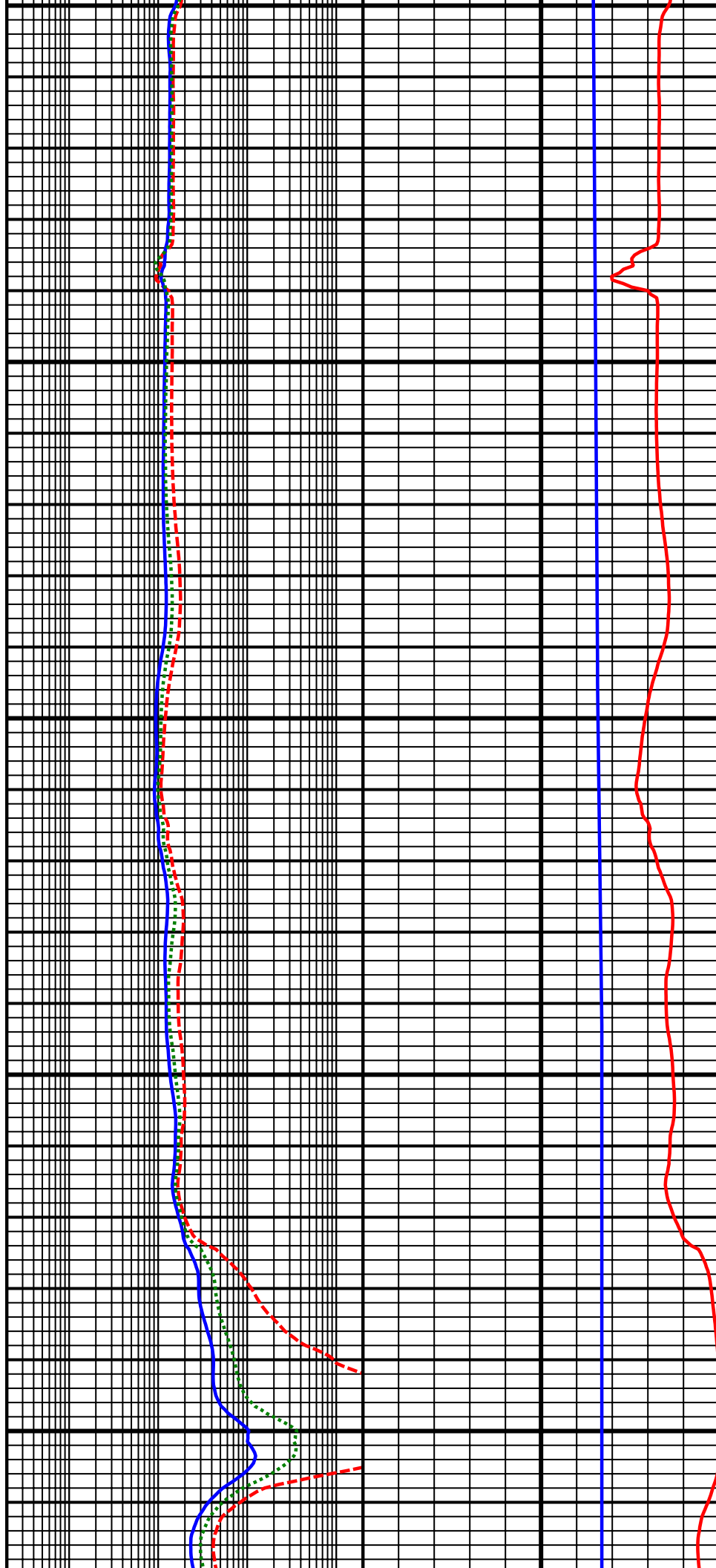
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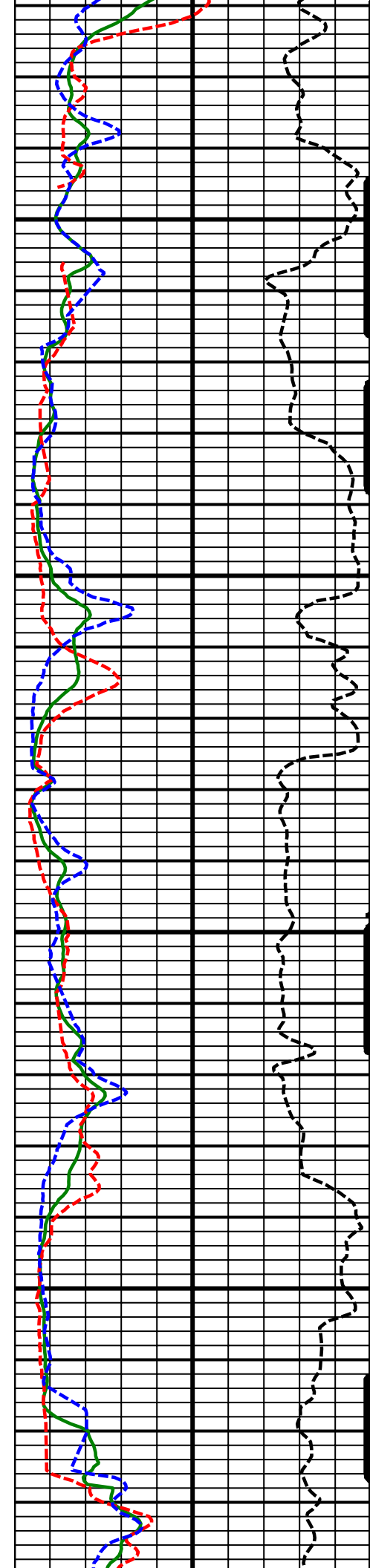




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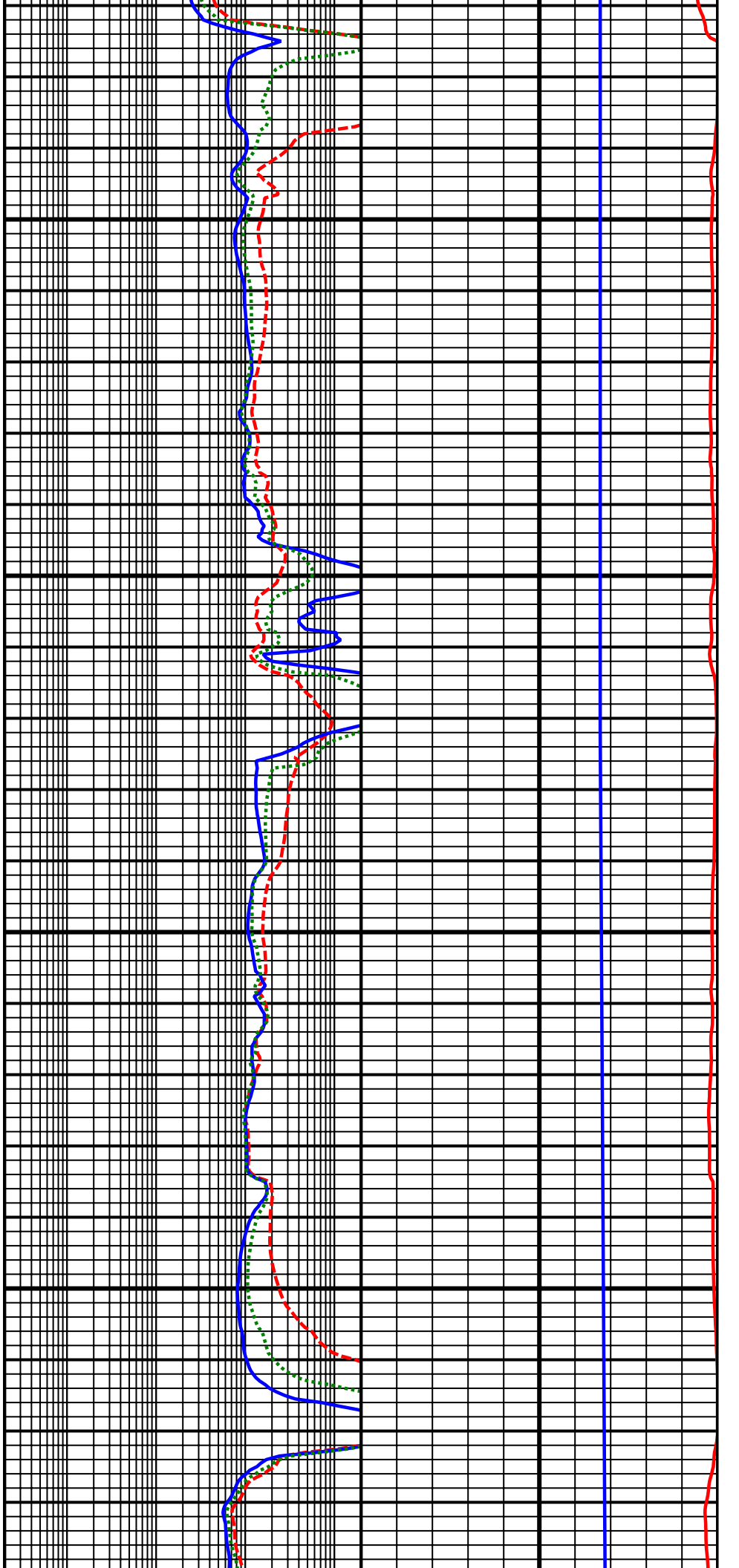
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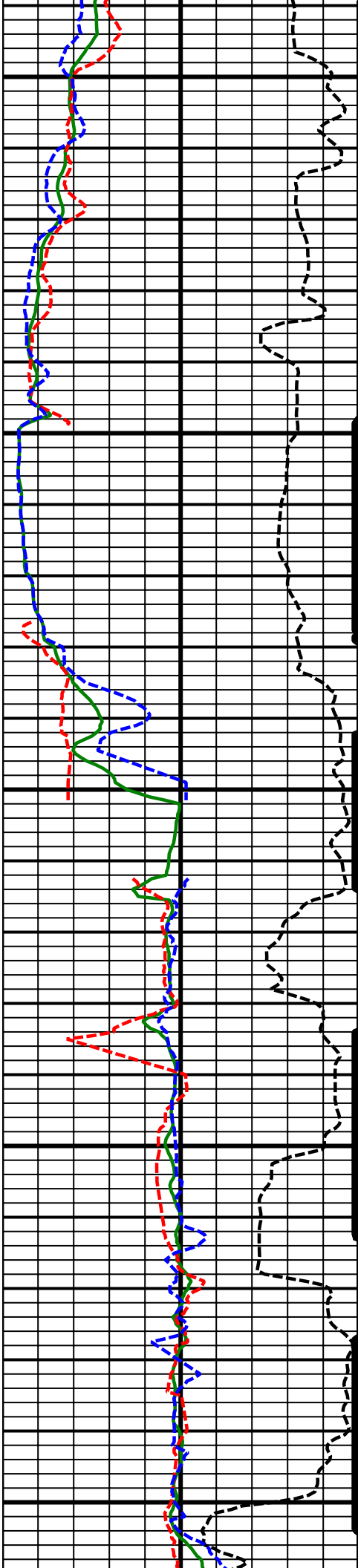




9400
MD

9500
MD

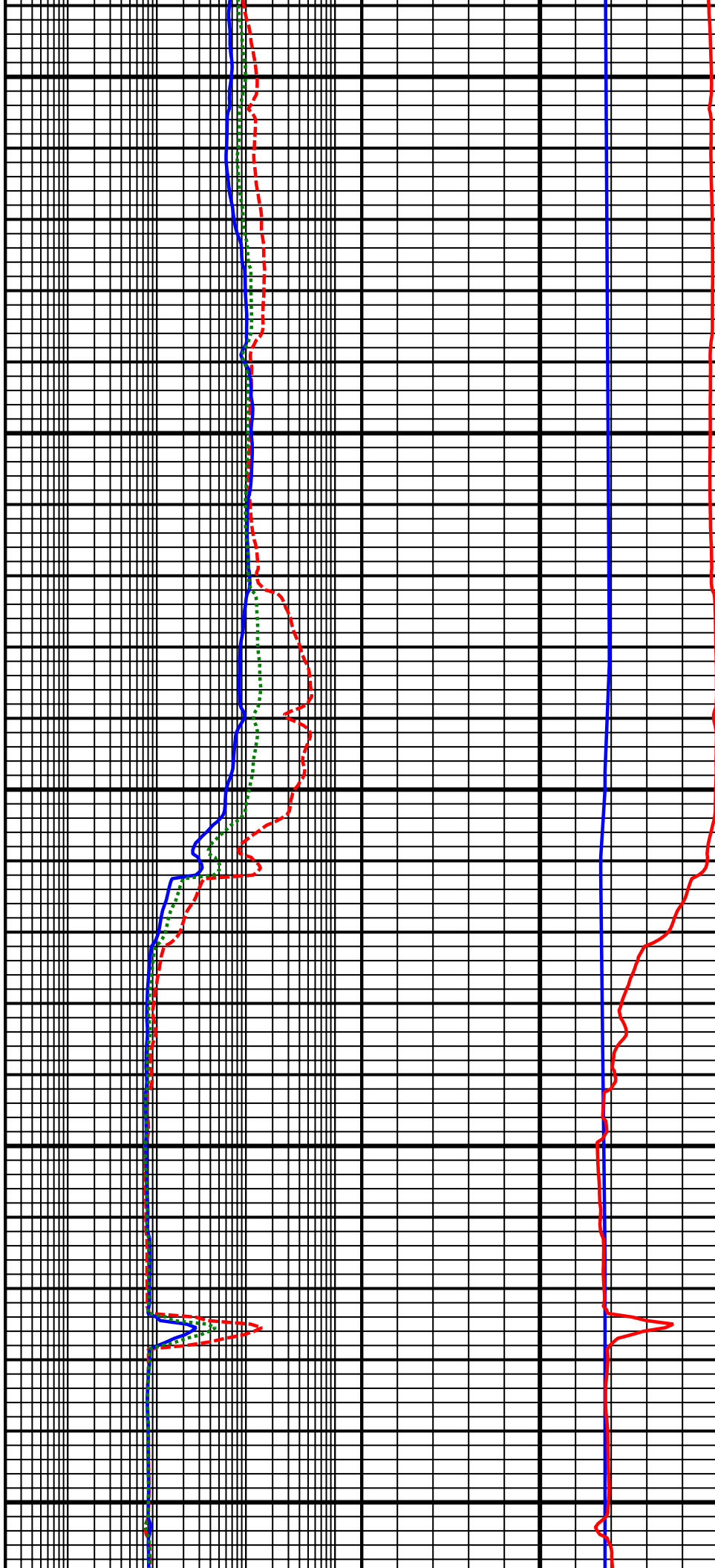


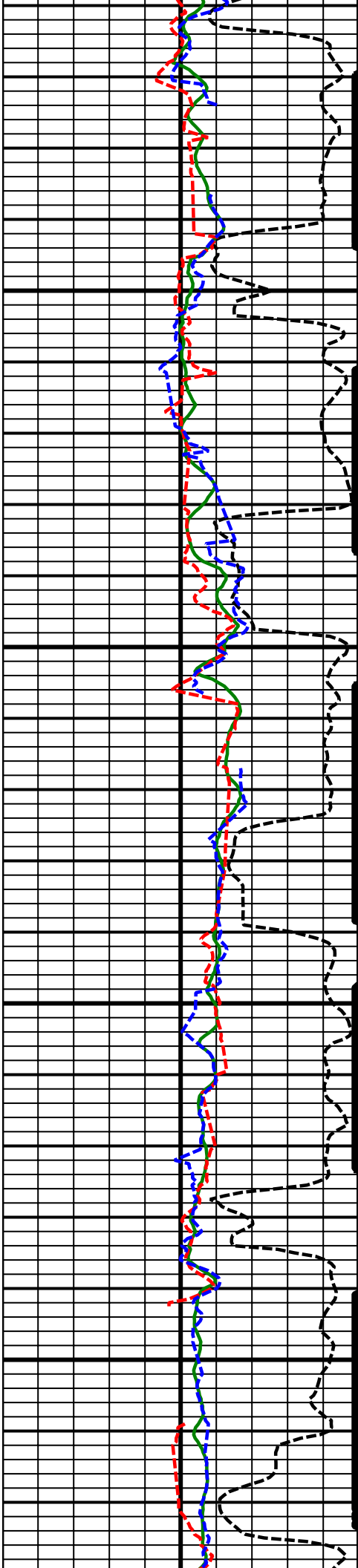


9600
MD

9700
MD

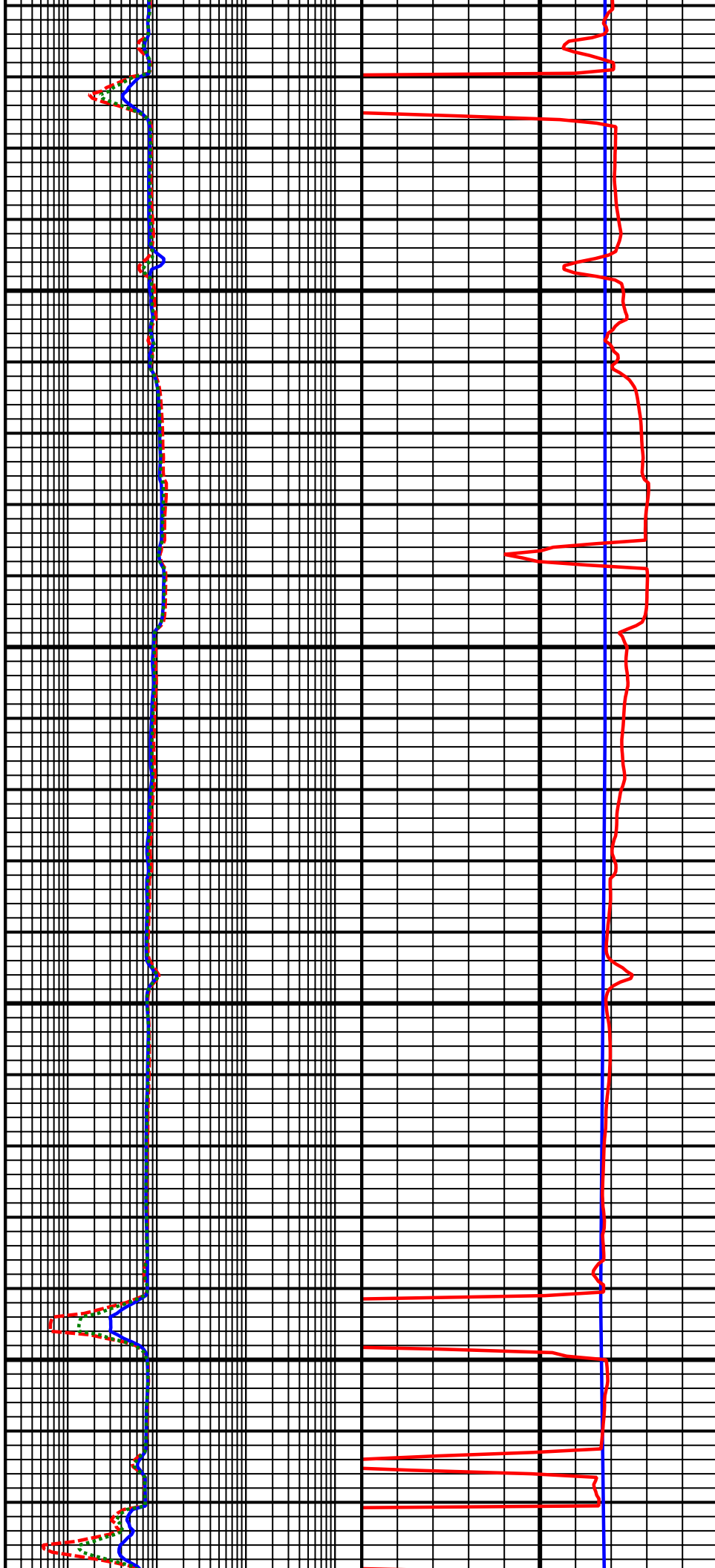
9800
MD

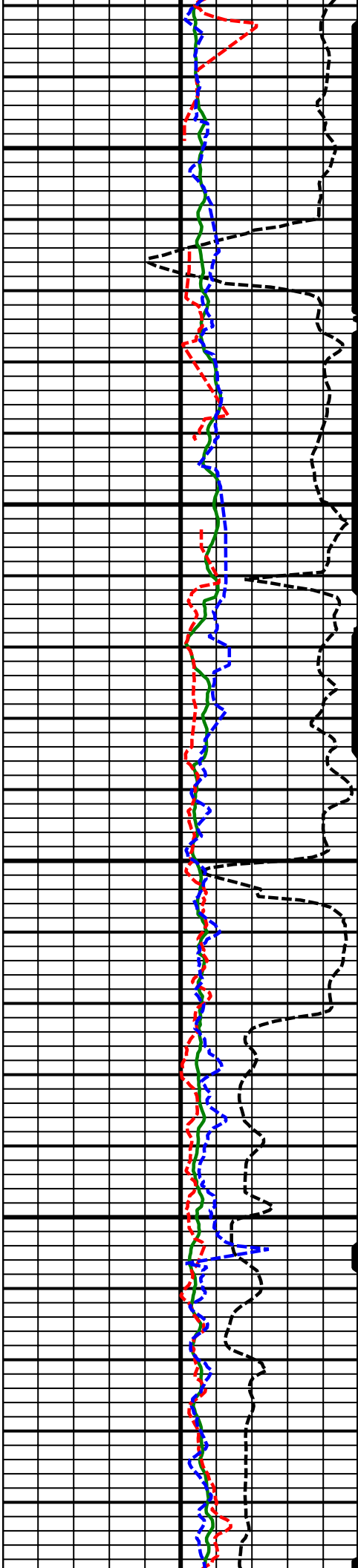




9900
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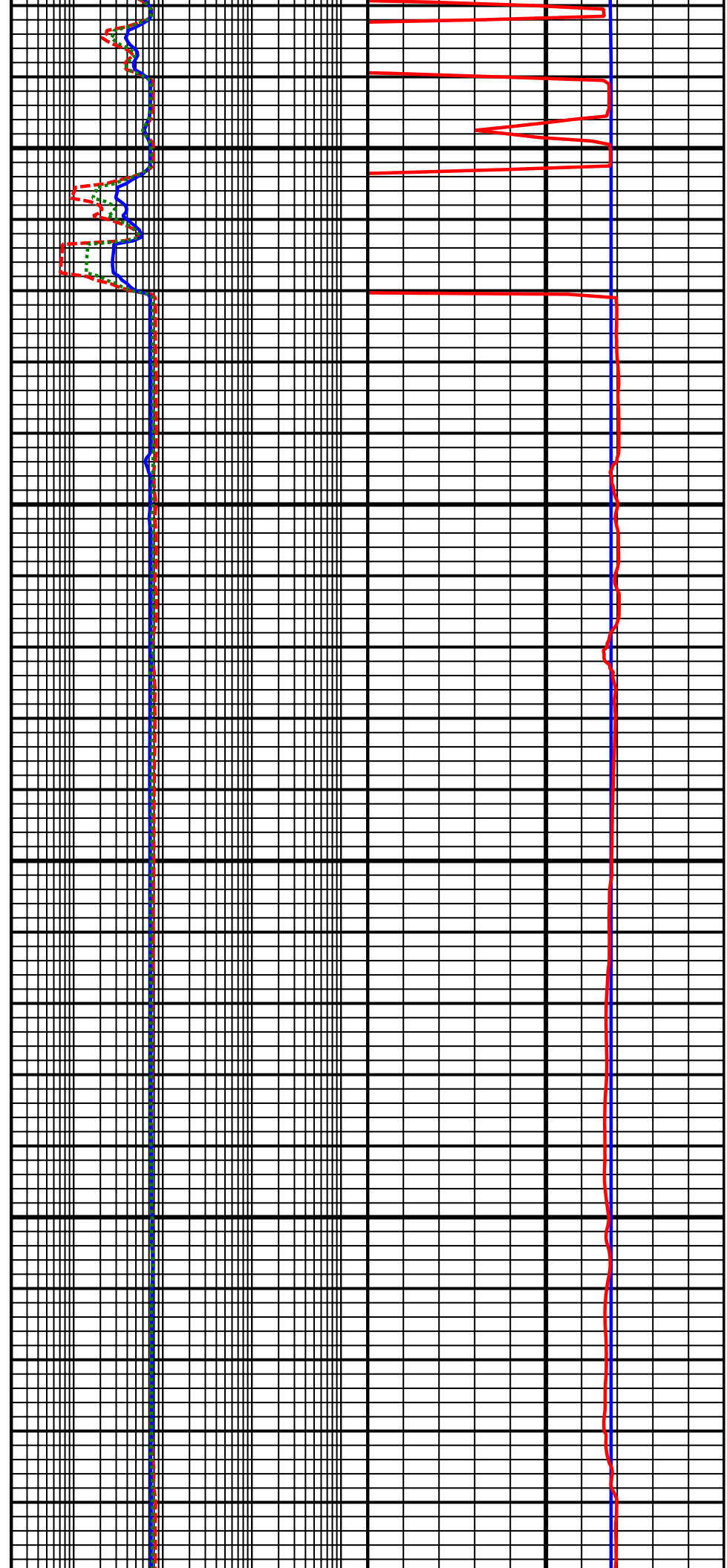
10000
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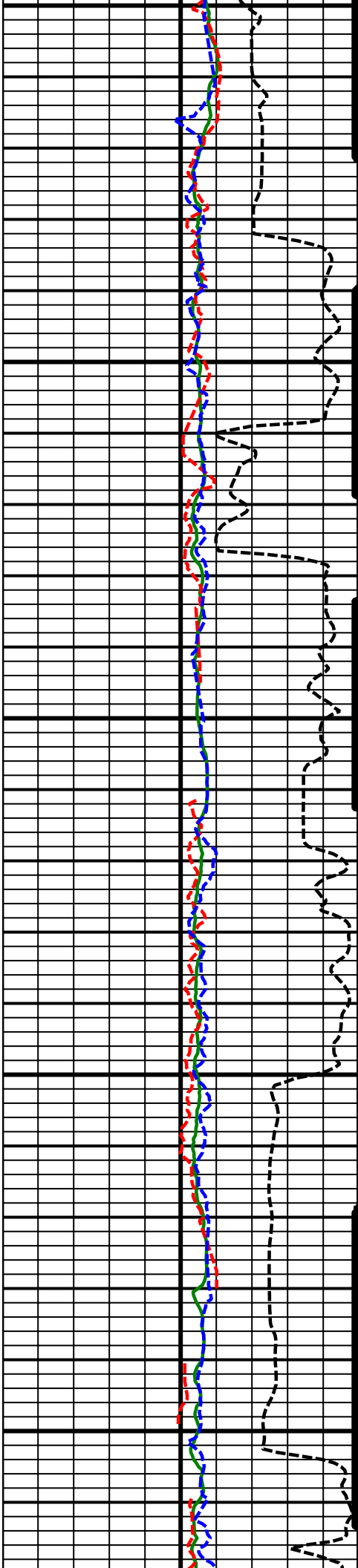




10100
MD

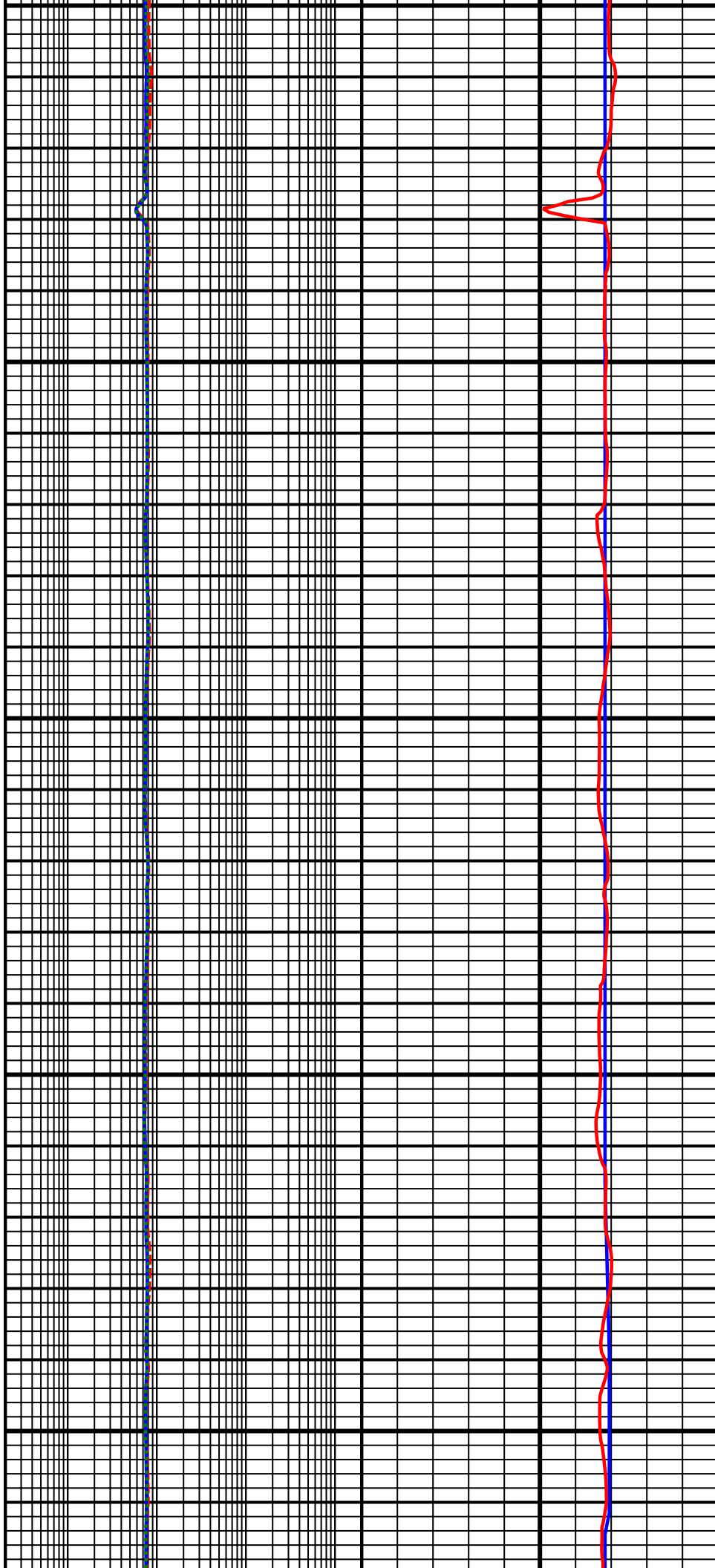
10200
MD

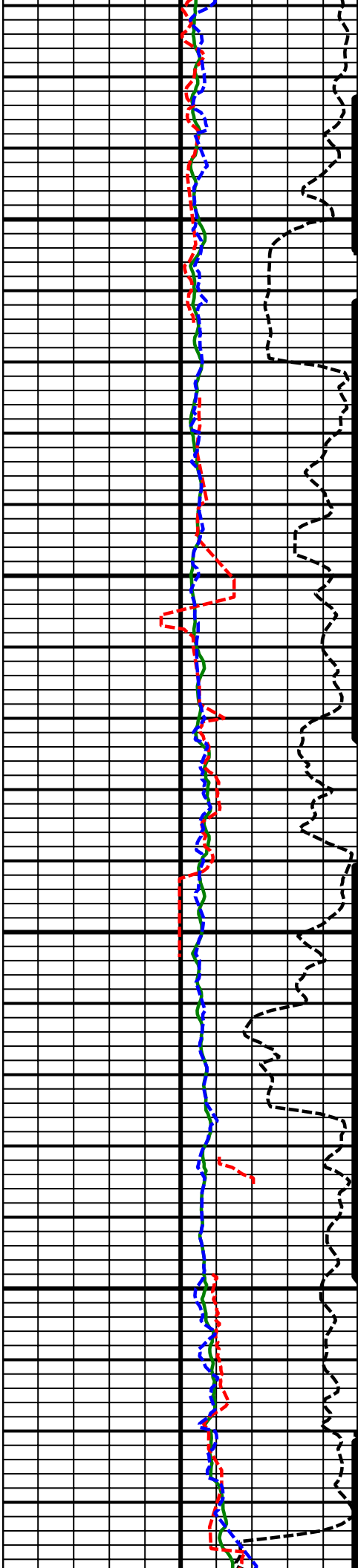




10300
MD

10400
MD

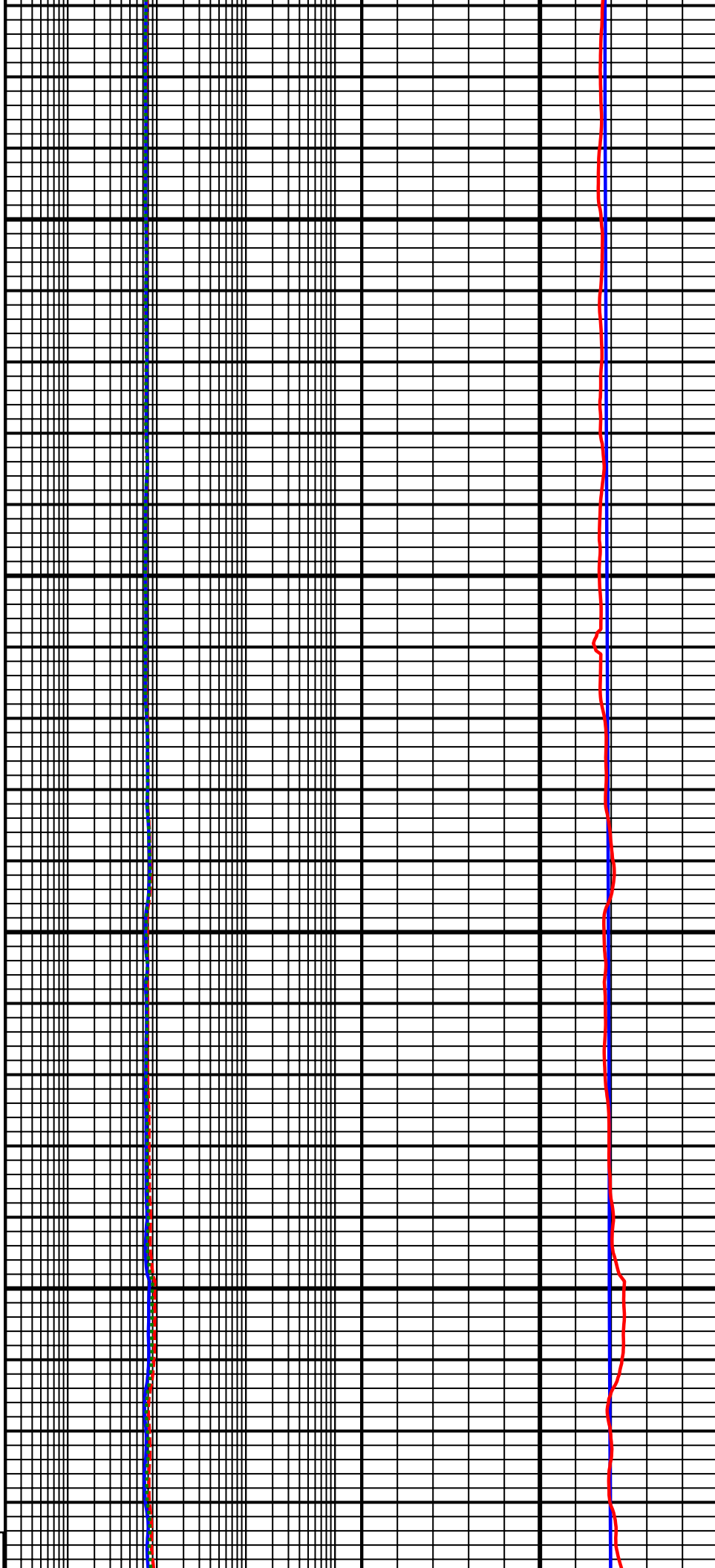




10500
MD

10600
MD

Comment
No. 3-2

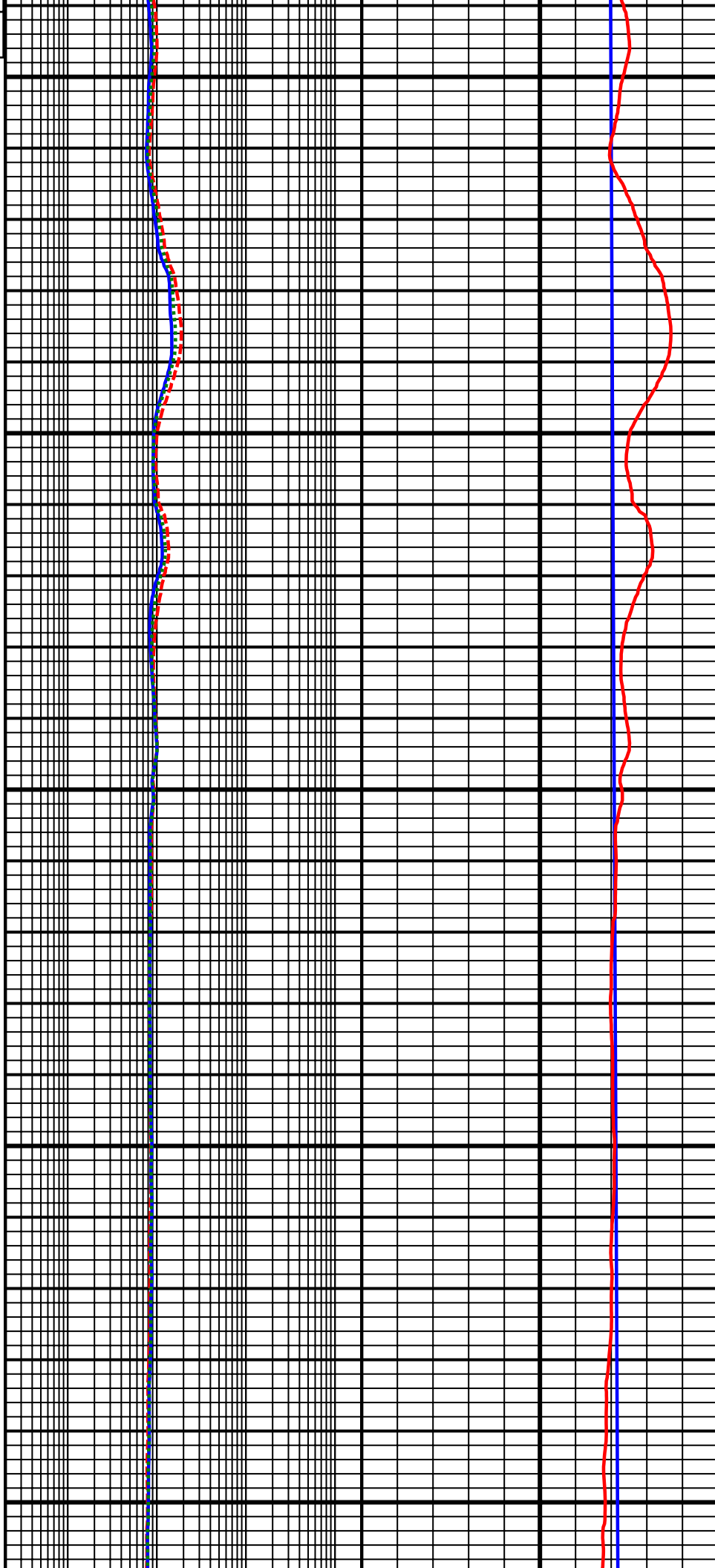
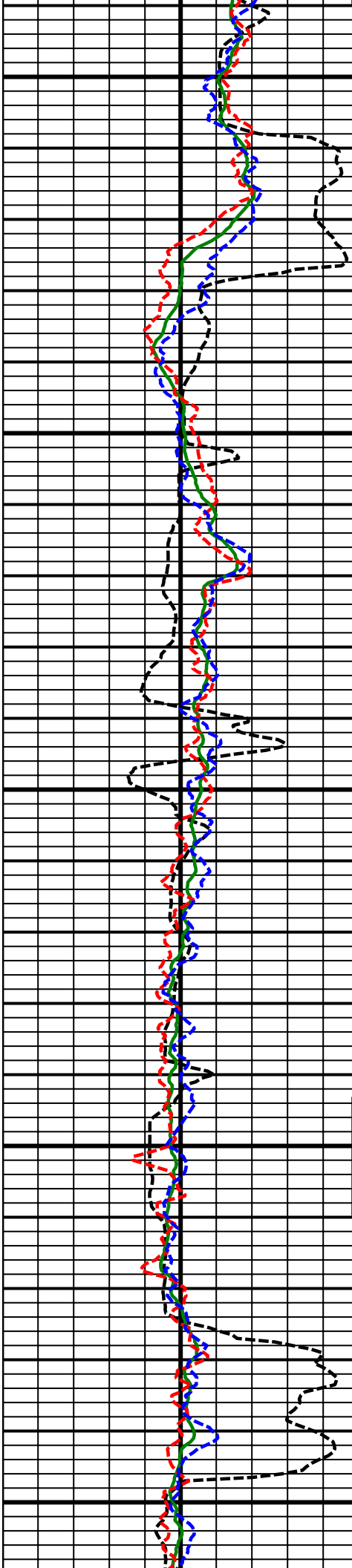


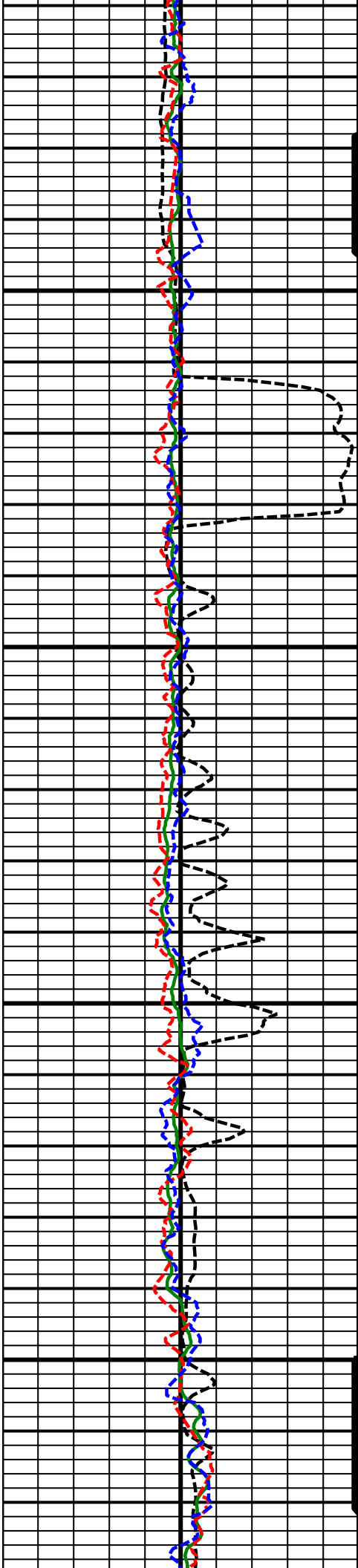
No. 3-2
Comment
No. 4-1

10700
MD

10800
MD

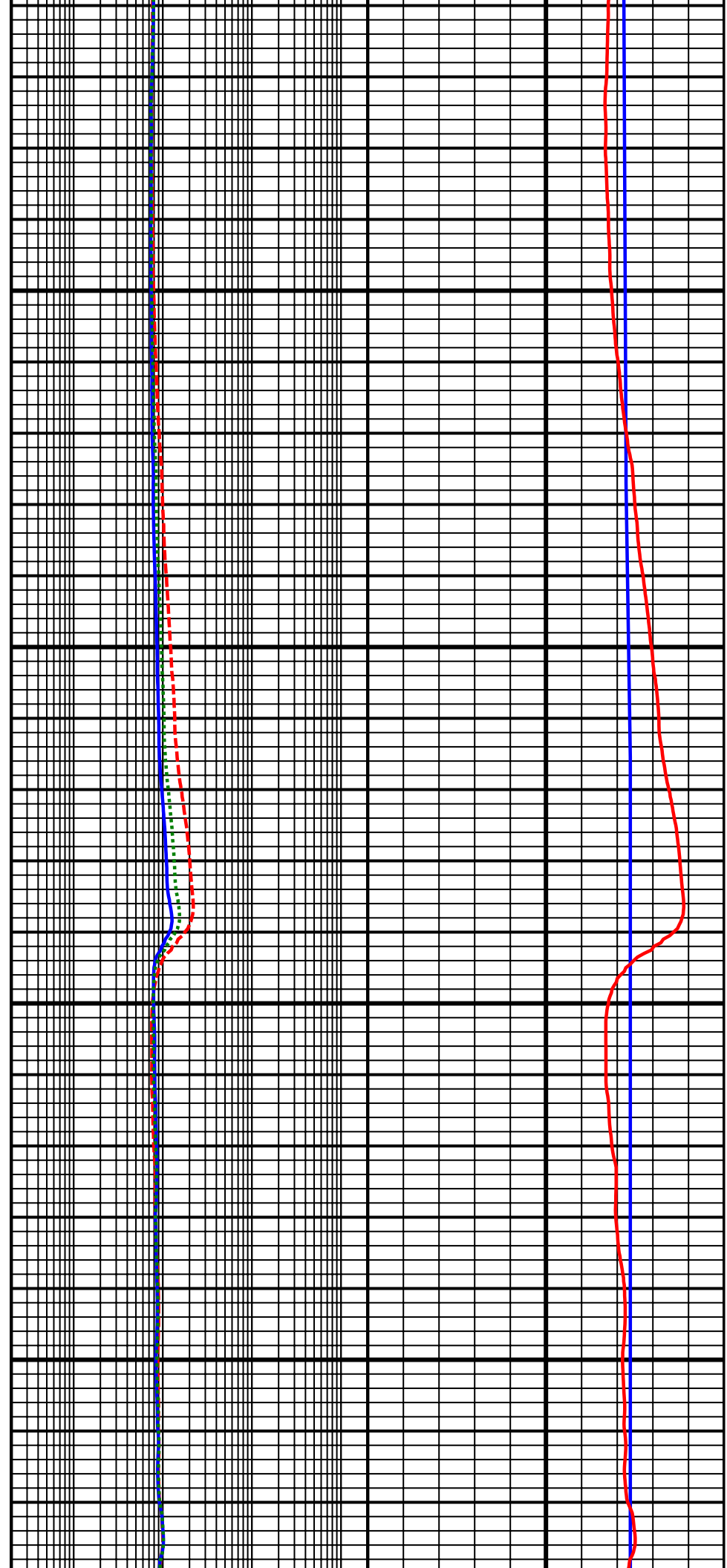
10900
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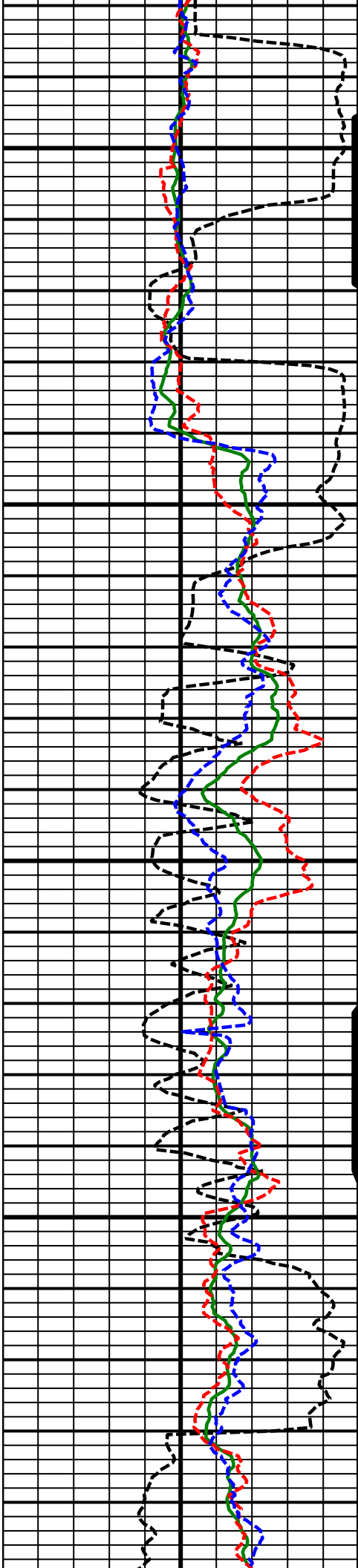




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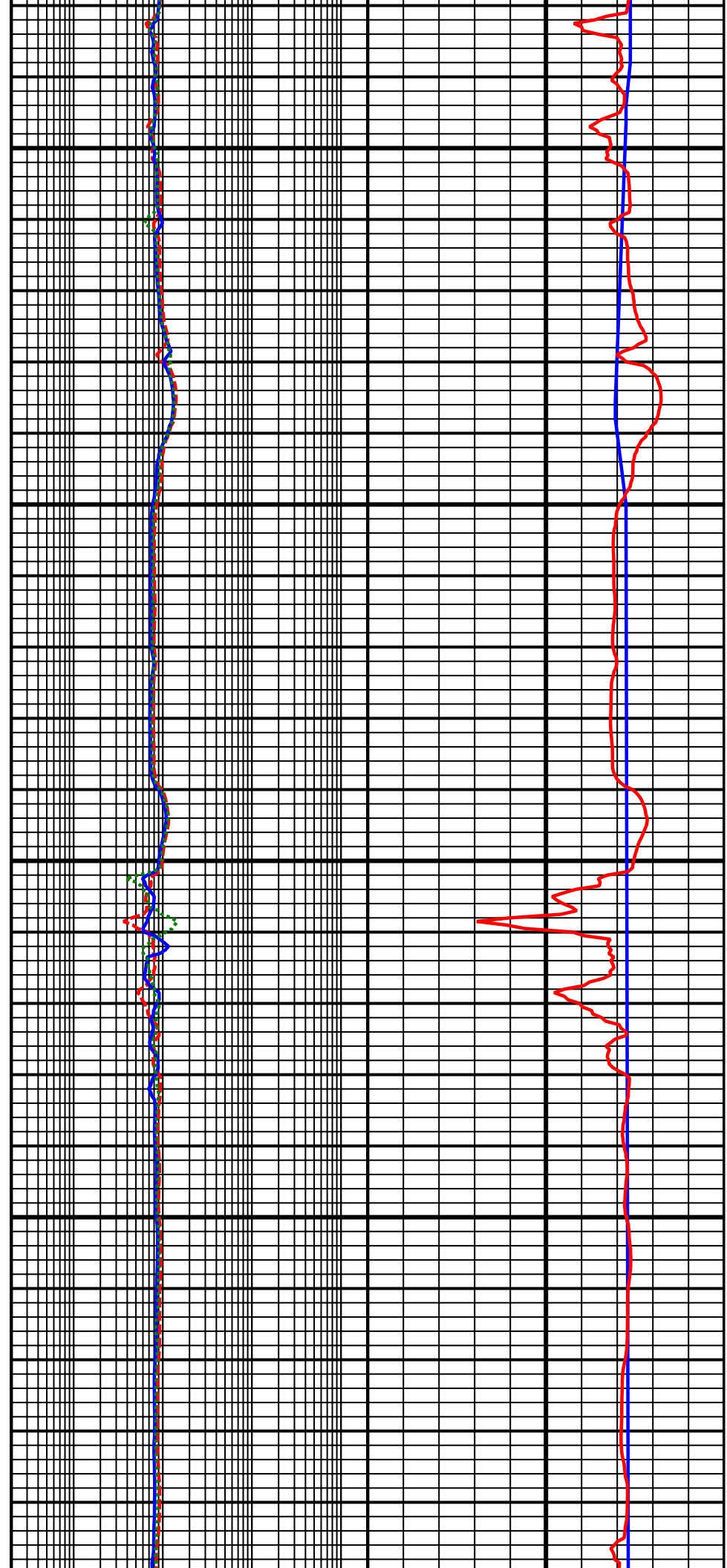
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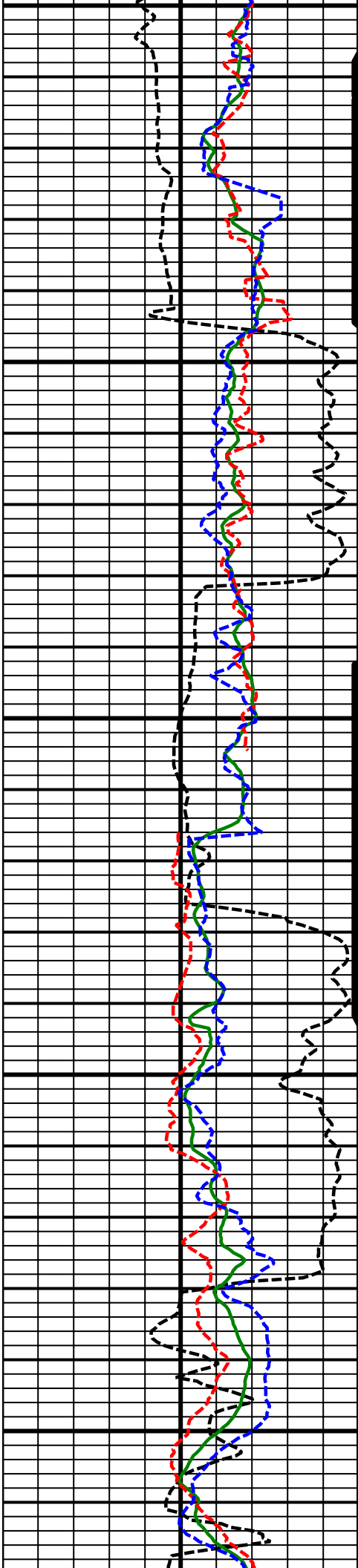




11200
MD

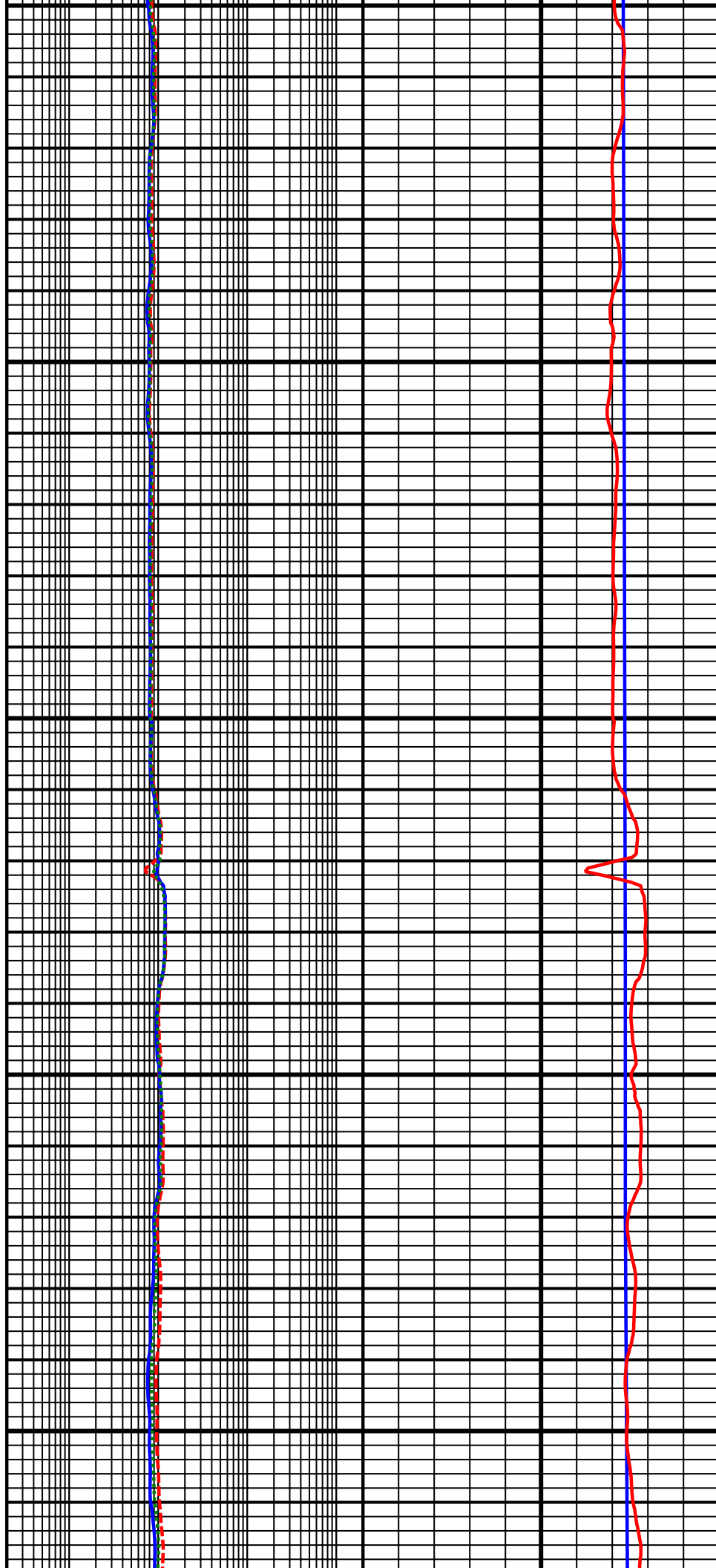
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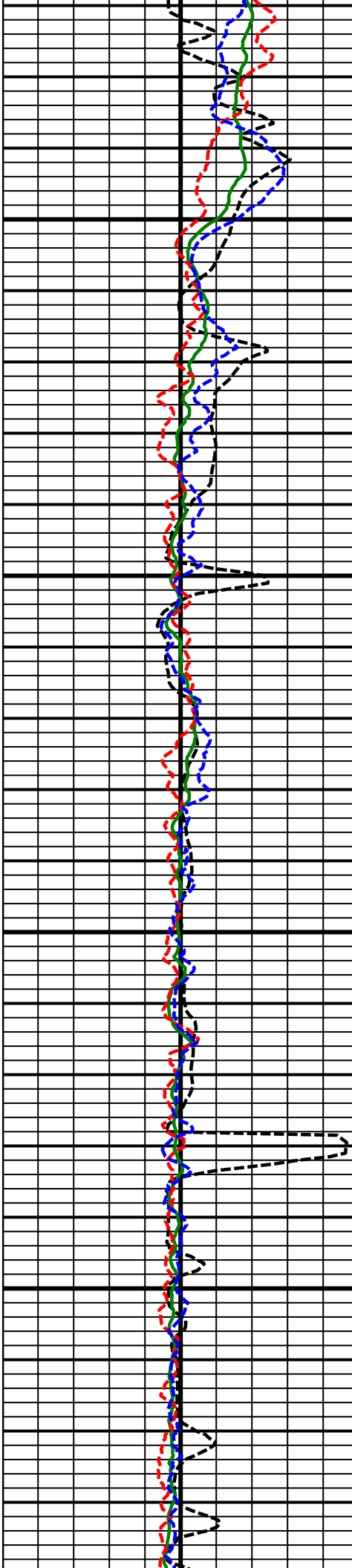




11400
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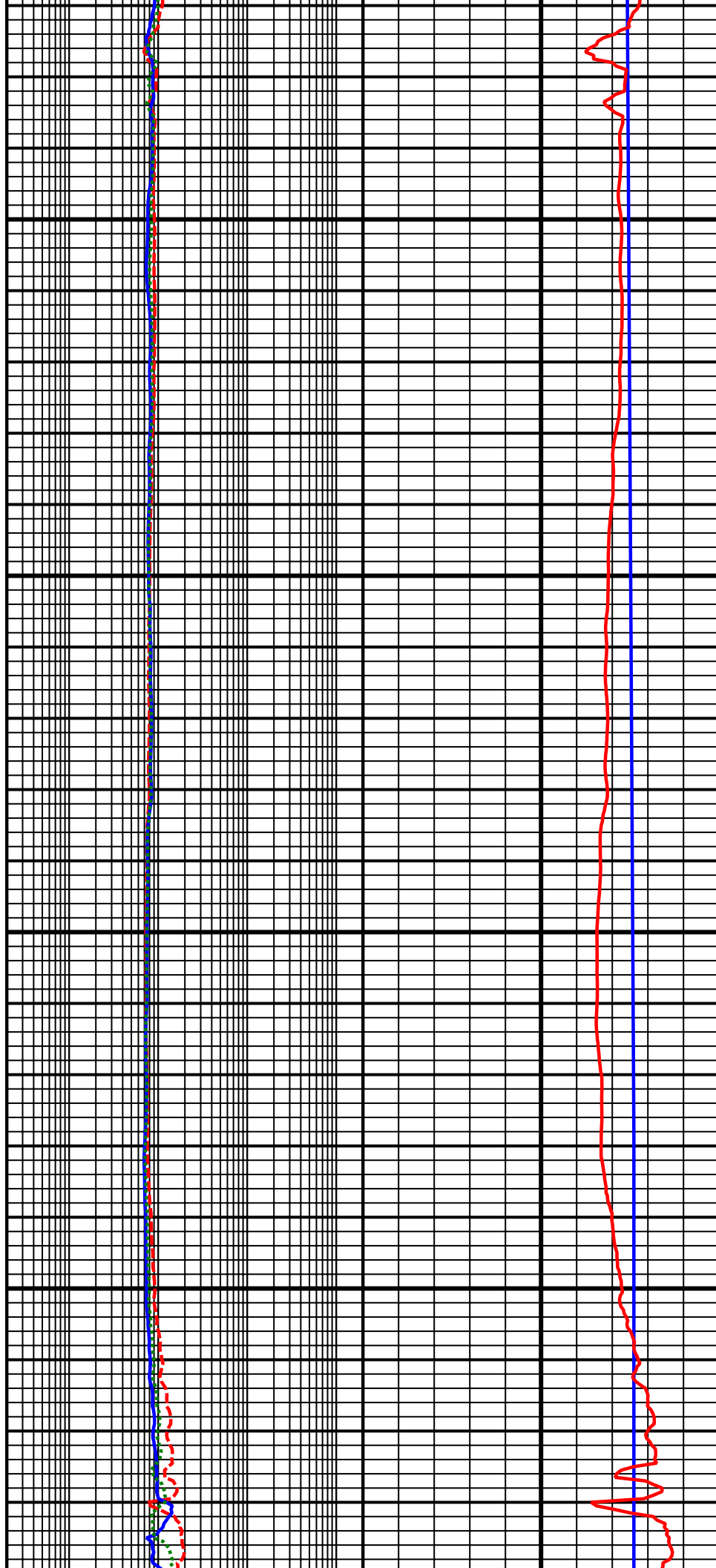
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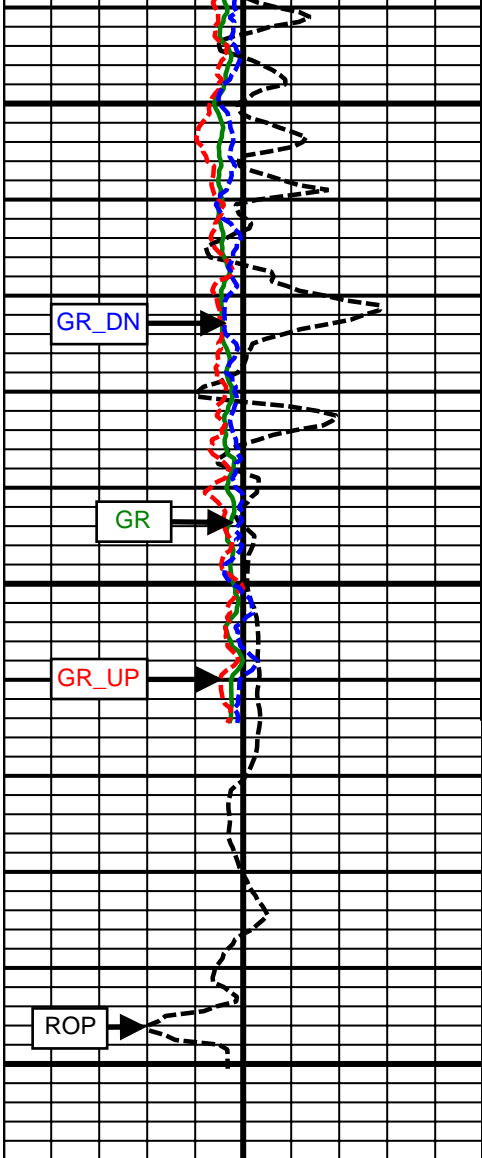




11600
MD

11700
MD

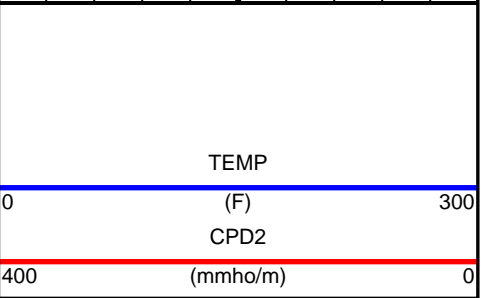
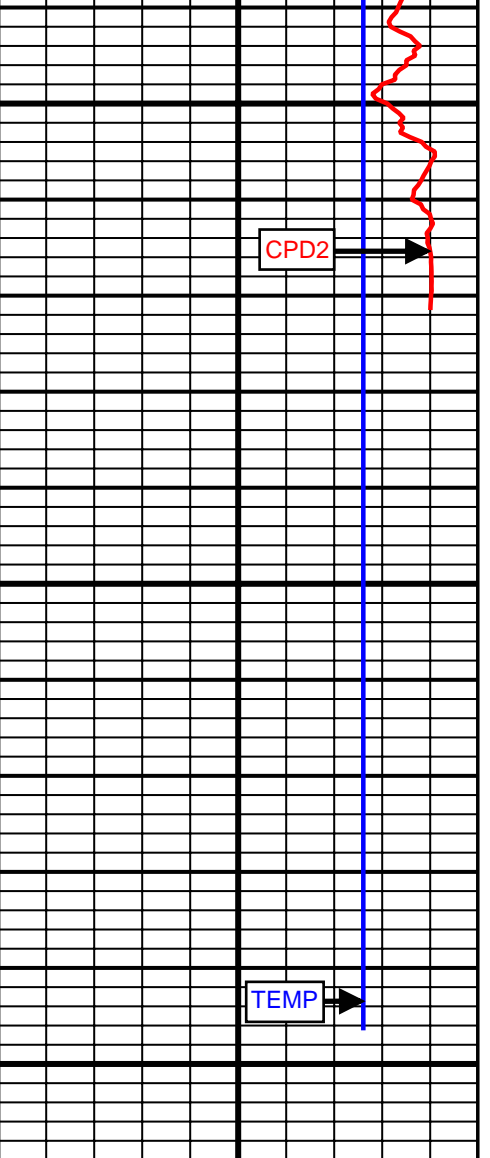
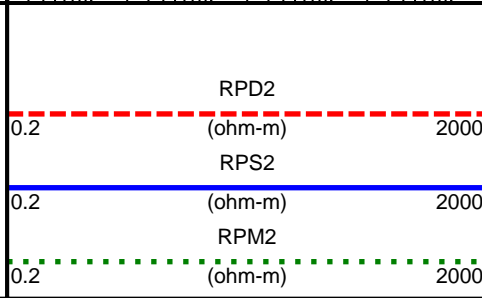
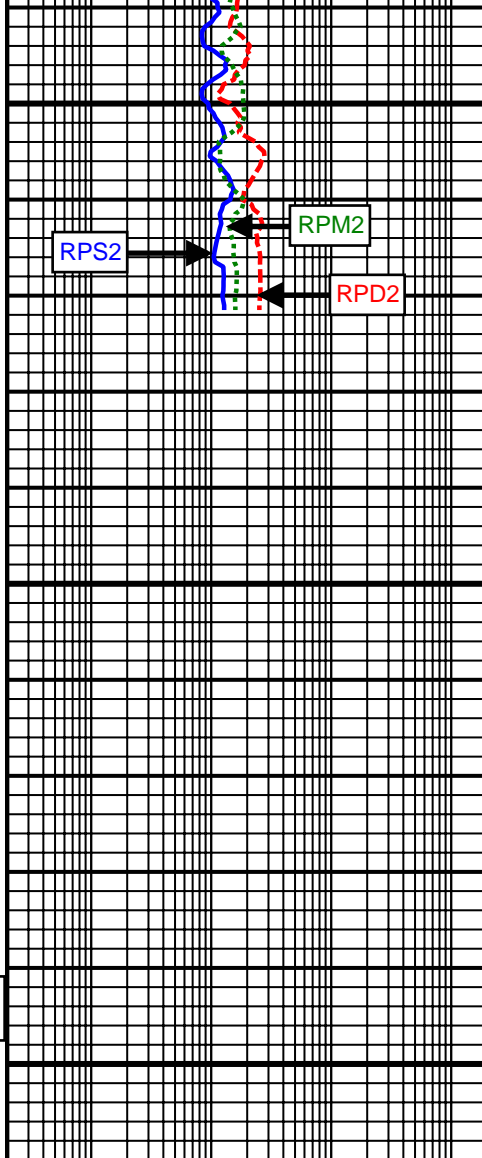
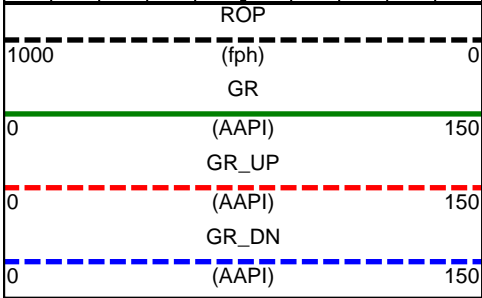




11800
MD

Comment
No. 4-2

11900
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	179.52 deg	52739 nT	66.78 deg	8.62 deg	0.00 deg	8.62 deg
Survey Tie-On	Depth	INC	AZ	TVD	NS	EW
	906.00 ft	0.10 deg	24.76 deg	905.98 ft	3.47 ft	-4.11 ft

Well Head							
Depth (ft)	Inc (deg)	Azm (deg)	TVD (ft)	NS (ft)	EW (ft)	VSect (ft)	Dogleg (deg/100ft)
1051.00	0.36	307.16	1050.98	3.86	-4.42	-3.90	0.24
1142.00	2.18	331.18	1141.95	5.55	-5.48	-5.60	2.04
1233.00	4.60	310.70	1232.79	9.45	-9.08	-9.52	2.93
1324.00	6.18	312.10	1323.38	15.11	-15.48	-15.24	1.74
1413.00	7.13	294.55	1411.79	20.62	-24.06	-20.82	2.51
1523.00	6.96	292.78	1520.96	26.03	-36.42	-26.34	0.25
1616.00	6.44	300.81	1613.33	30.89	-46.09	-31.27	1.15
1709.00	6.77	303.19	1705.71	36.56	-55.16	-37.02	0.46
1802.00	6.67	300.45	1798.07	42.30	-64.40	-42.84	0.36
1895.00	6.56	311.24	1890.46	48.54	-73.06	-49.15	1.34
1988.00	6.30	309.60	1982.87	55.29	-80.98	-55.97	0.34
2082.00	5.88	307.34	2076.34	61.50	-88.78	-62.24	0.51
2175.00	5.75	309.71	2168.86	67.37	-96.15	-68.17	0.29
2268.00	5.28	309.04	2261.43	73.04	-103.06	-73.90	0.51
2362.00	6.36	313.77	2354.95	79.36	-110.18	-80.28	1.26
2456.00	6.45	312.95	2448.36	86.56	-117.81	-87.55	0.14
2550.00	6.55	303.97	2541.76	93.16	-126.12	-94.21	1.09
2643.00	6.17	305.80	2634.19	99.04	-134.57	-100.17	0.46
2737.00	6.41	300.09	2727.62	104.63	-143.21	-105.82	0.71
2830.00	7.91	302.44	2819.89	110.66	-153.10	-111.94	1.64
2924.00	7.68	303.65	2913.03	117.61	-163.79	-118.98	0.30
3017.00	7.50	301.87	3005.21	124.26	-174.11	-125.72	0.32
3111.00	7.23	302.52	3098.44	130.68	-184.31	-132.22	0.30
3204.00	7.03	303.18	3190.72	136.94	-194.01	-138.56	0.23
3298.00	6.32	301.72	3284.08	142.81	-203.23	-144.51	0.78
3383.00	5.84	303.32	3368.60	147.65	-210.82	-149.41	0.60
3468.00	6.65	307.01	3453.10	152.98	-218.36	-154.81	1.06
3553.00	6.12	308.21	3537.57	158.75	-225.85	-160.64	0.64
3639.00	5.49	308.91	3623.13	164.17	-232.66	-166.11	0.74
3724.00	5.43	309.65	3707.74	169.29	-238.92	-171.28	0.11
3810.00	4.83	309.88	3793.40	174.21	-244.83	-176.25	0.70
3895.00	5.29	309.39	3878.06	178.99	-250.60	-181.08	0.54
3981.00	5.98	306.08	3963.65	184.14	-257.29	-186.29	0.89
4066.00	6.27	303.87	4048.16	189.34	-264.72	-191.55	0.44
4152.00	6.87	305.29	4133.60	194.92	-272.82	-197.20	0.72
4237.00	6.78	304.69	4218.00	200.72	-281.09	-203.07	0.14
4323.00	6.45	305.33	4303.42	206.40	-289.21	-208.82	0.39
4408.00	6.15	304.64	4387.91	211.75	-296.85	-214.23	0.36
4493.00	5.84	305.94	4472.44	216.88	-304.10	-219.42	0.40
4579.00	6.69	304.45	4557.93	222.28	-311.77	-224.88	1.01
4664.00	6.45	304.30	4642.37	227.77	-319.80	-230.44	0.28
4750.00	6.08	304.70	4727.86	233.08	-327.53	-235.82	0.43

4835.00	6.20	305.26	4812.37	238.30	-334.98	-241.09	0.16
4921.00	5.76	303.22	4897.90	243.34	-342.38	-246.20	0.57
5006.00	5.93	301.75	4982.46	247.99	-349.68	-250.91	0.27
5091.00	6.49	303.63	5066.96	252.96	-357.42	-255.94	0.70
5176.00	6.71	306.82	5151.40	258.60	-365.39	-261.65	0.50
5262.00	6.30	307.23	5236.84	264.46	-373.17	-267.58	0.48
5347.00	6.42	304.67	5321.32	269.99	-380.79	-273.17	0.36
5433.00	6.57	311.97	5406.77	276.01	-388.41	-279.26	0.98
5604.00	8.69	306.00	5576.25	290.15	-406.13	-293.54	1.32
5689.00	8.28	305.06	5660.32	297.44	-416.34	-300.92	0.51
5774.00	6.94	306.03	5744.57	303.98	-425.50	-307.53	1.58
5860.00	7.16	300.40	5829.92	309.74	-434.32	-313.37	0.84
5945.00	7.02	304.41	5914.27	315.36	-443.18	-319.06	0.60
6030.00	6.22	305.54	5998.70	320.97	-451.21	-324.74	0.95
6116.00	5.23	305.14	6084.27	325.94	-458.21	-329.76	1.15
6201.00	4.23	301.82	6168.98	329.82	-464.04	-333.69	1.22
6287.00	3.28	300.26	6254.80	332.73	-468.86	-336.65	1.11
6372.00	2.67	300.39	6339.68	334.96	-472.67	-338.91	0.72
6458.00	2.03	297.98	6425.61	336.69	-475.74	-340.66	0.75
6543.00	1.78	295.14	6510.56	337.95	-478.27	-341.95	0.31
6629.00	0.49	292.49	6596.54	338.66	-479.81	-342.67	1.50
6714.00	0.10	289.22	6681.54	338.82	-480.22	-342.84	0.46
6750.00	0.10	139.85	6717.54	338.81	-480.23	-342.82	0.54
6793.00	0.38	107.97	6760.54	338.74	-480.07	-342.75	0.70
6879.00	8.44	170.34	6846.22	332.42	-478.74	-336.42	9.62
6964.00	16.10	181.54	6929.23	314.46	-478.01	-318.45	9.40
7049.00	20.80	182.37	7009.84	287.58	-478.95	-291.58	5.54
7092.00	24.06	181.57	7049.58	271.19	-479.50	-275.19	7.61
7135.00	27.25	184.21	7088.34	252.60	-480.47	-256.62	7.88
7177.00	31.87	187.53	7124.86	232.01	-482.63	-236.04	11.67
7220.00	36.52	188.95	7160.42	208.10	-486.11	-212.17	10.97
7262.00	41.13	186.32	7193.14	182.01	-489.57	-186.11	11.66
7305.00	45.74	182.73	7224.36	152.55	-491.87	-156.67	12.16
7348.00	52.01	179.51	7252.63	120.19	-492.45	-124.31	15.63
7391.00	57.09	179.77	7277.56	85.18	-492.24	-89.30	11.82
7433.00	61.71	180.60	7298.93	49.04	-492.36	-53.16	11.13
7476.00	68.29	180.67	7317.10	10.09	-492.79	-14.22	15.30
7518.00	74.77	180.76	7330.40	-29.72	-493.29	25.59	15.43
7561.00	79.51	179.81	7339.96	-71.63	-493.50	67.50	11.23
7610.00	84.53	177.98	7346.76	-120.13	-492.56	116.00	10.89
7754.00	87.96	178.41	7356.19	-263.73	-488.03	259.63	2.40
7840.00	87.10	177.82	7359.90	-349.60	-485.20	345.52	1.21
7925.00	86.55	176.63	7364.61	-434.37	-481.10	430.32	1.54
8011.00	88.89	176.62	7368.03	-520.15	-476.04	516.14	2.72
8096.00	87.65	176.58	7370.60	-604.96	-471.00	600.99	1.46
8182.00	87.10	177.81	7374.53	-690.76	-466.79	686.83	1.57
8267.00	88.34	178.40	7377.92	-775.65	-463.99	771.73	1.62
8352.00	88.89	178.79	7379.97	-860.60	-461.90	856.70	0.79
8438.00	88.46	178.67	7381.96	-946.55	-460.00	942.66	0.52
8523.00	90.06	179.37	7383.06	-1031.53	-458.54	1027.65	2.05
8608.00	89.75	179.81	7383.20	-1116.53	-457.94	1112.65	0.63
8694.00	89.51	179.00	7383.75	-1202.52	-457.04	1198.65	0.98
8779.00	89.20	178.82	7384.71	-1287.50	-455.43	1283.64	0.42
8865.00	88.83	179.93	7386.19	-1373.48	-454.49	1369.62	1.36
8950.00	89.32	179.86	7387.56	-1458.47	-454.33	1454.61	0.58
9035.00	89.32	181.62	7388.57	-1543.45	-455.43	1539.58	2.07
9120.00	86.42	181.20	7391.73	-1628.36	-457.52	1624.47	3.45
9206.00	87.29	182.62	7396.45	-1714.18	-460.38	1710.26	1.93
9291.00	84.94	181.66	7402.21	-1798.91	-463.55	1794.97	2.99
9376.00	84.01	181.32	7410.39	-1883.49	-465.75	1879.52	1.16
9462.00	85.87	182.00	7417.97	-1969.11	-468.23	1965.12	2.30

9547.00	86.11	182.01	7423.92	-2053.85	-471.20	2049.84	0.28
9632.00	86.05	180.68	7429.73	-2138.63	-473.19	2134.59	1.56
9718.00	85.06	181.04	7436.39	-2224.36	-474.48	2220.31	1.22
9803.00	85.99	180.42	7443.03	-2309.09	-475.56	2305.03	1.31
9889.00	87.04	180.47	7448.25	-2394.93	-476.22	2390.86	1.22
9974.00	87.97	178.59	7451.95	-2479.84	-475.52	2475.77	2.47
10059.00	88.58	179.38	7454.51	-2564.79	-474.02	2560.73	1.17
10145.00	90.62	180.33	7455.11	-2650.78	-473.80	2646.72	2.62
10230.00	90.18	179.75	7454.52	-2735.78	-473.86	2731.71	0.86
10316.00	88.89	178.56	7455.22	-2821.76	-472.59	2817.71	2.04
10401.00	89.82	178.13	7456.17	-2906.72	-470.14	2902.68	1.21
10486.00	90.00	178.24	7456.31	-2991.68	-467.45	2987.66	0.25
10572.00	90.18	178.90	7456.17	-3077.65	-465.30	3073.65	0.80
10656.00	90.18	179.81	7455.91	-3161.64	-464.36	3157.64	1.08
10741.00	91.79	180.14	7454.45	-3246.63	-464.32	3242.63	1.93
10826.00	91.36	180.03	7452.11	-3331.60	-464.44	3327.59	0.52
10912.00	90.55	179.96	7450.68	-3417.58	-464.44	3413.57	0.95
10997.00	90.49	179.02	7449.91	-3502.58	-463.68	3498.57	1.11
11083.00	89.51	177.77	7449.91	-3588.54	-461.27	3584.55	1.85
11168.00	89.38	178.19	7450.73	-3673.48	-458.28	3669.51	0.52
11253.00	89.38	177.92	7451.65	-3758.43	-455.39	3754.48	0.32
11339.00	89.38	178.36	7452.58	-3844.38	-452.60	3840.45	0.51
11424.00	89.14	177.27	7453.68	-3929.31	-449.36	3925.41	1.31
11509.00	90.74	177.45	7453.77	-4014.21	-445.44	4010.34	1.89
11594.00	91.85	177.89	7451.85	-4099.12	-441.99	4095.27	1.40
11679.00	91.35	177.95	7449.47	-4184.03	-438.91	4180.21	0.59
11765.00	91.06	177.69	7447.66	-4269.95	-435.63	4266.15	0.45
11847.00	87.16	172.82	7448.94	-4351.62	-428.86	4347.87	7.61
11899.00	87.16	172.82	7451.52	-4403.15	-422.37	4399.46	0.00

Weatherford surveys from 1051 ft MD to 11847 ft MD.

TD at 11899 ft MD.

The total correction is 8.62 deg relative to True North.



Weatherford®

Final Print

COMPANY	<u>Anadarko Petroleum</u>		
WELL	<u>Cannon 13C-10HZ</u>		
FIELD	<u>Wattenberg</u>		
RIG	<u>Xtreme 23</u>		
LOC.	<u>Colorado</u>	COUNTY	<u>Weld</u>