



LWD MEMORY LOG

Gamma Ray

Company: Noble Energy

Well: Hurley H26-783

Field: Wattenberg

County: Weld Country: United States

State: Colorado

Surface Location:

Latitude:

Longitude:

040° 11' 49.560" N

104° 38' 08.340" W

Other Services:

API No:

05-123-46764-00

Job ID:

9176903

SEC:

26

TWN:

3N

RGE:

6SW

Permanent Datum (P.D.):

Ground Level

Elevation:

4821.00 ft

Log Measured From:

Rig Floor

Above P.D.

30.00 ft

Elev. KB:

4851.00 ft

Elev. DF:

4821.00 ft

Elev. GL:

4821.00 ft

Interval Drilled

Magnetic Field Reference

Date From:

2018-06-17

Top: (ft)

1954.00

Azi Reference North: Grid

Dip Angle: (deg)

66.73

Date To:

2018-06-21

Bottom: (ft)

16075.00

Total Magnetic Field Strength: (nT)

52116

Spud Date:

2018-06-16

Mag to Reference North Correction: (deg)

7.55

Borehole Record

Casing Record

Hole Size (in)

From (ft)

To (ft)

Size (in)

Weight (lb/ft)

From (ft)

To (ft)

13.500

30.00

1954.00

9.625

36.00

30.00

1944.00

8.500

1954.00

16075.00

Mud Record

Deviation Record

Type

From (ft)

To (ft)

Hole Size (in)

Interval (ft)

Inc | Azi (Start)

Inc | Azi (End)

Oil Based Mud

1954.00

16075.00

8.500

14121.00

0.501

345.49

89.91

0.18

Acquisition System

Software Version

Other

Baker Hughes Cadence

RT 4.2

4.2.8155.1

Rig:

H&P 517

Contractor:

Helmerich & Payne Drilling Co

District:

RMA

Unit:

D&E

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Log Run Summary

Run No	Bit Run No.	Bit Size (in)	Bit Type	Bit Gauge Length (in)	Assembly Type	Logged Interval		Bit Depth Interval		Date / Time		Circ. Hours (h)
						Top (ft)	Bottom (ft)	From (ft)	To (ft)	Start Logging	End Logging	
1	1	8.500	PDC	4.50	Rotary Steerable	1954.00	2011.00	1954.00	2024.00	2018-06-17 04:28	2018-06-17 05:00	2.78
2	1RR	8.500	PDC	4.50	Rotary Steerable	2011.00	16062.00	2024.00	16075.00	2018-06-17 10:18	2018-06-19 20:03	64.86

Crew

Name	Arrive Wellsite	Depart Wellsite	Name	Arrive Wellsite	Depart Wellsite	Name	Arrive Wellsite	Depart Wellsite
Adam Schlenz	2018-06-16	2018-06-20						

Mud Properties Record											
Date / Time	Run No.	Measured Depth (ft)	Mud Type	Density (ppg)	Viscosity (cP)	pH	Fluid Loss (cm3)	Oil / Water	Source	Total Chlorides (ppm)	K+ (%)
2018-06-16 19:31	1	1954.00	Oil Based Mud	9.3	11	N/A	14.4	72.5/16	Active Pit	25000	0.00
2018-06-17 02:45	2	2024.00	Oil Based Mud	9.3	11	N/A	14.4	72.5/16	Active Pit	25000	0.00
2018-06-17 12:15	2	2300.00	Oil Based Mud	9.4	11	N/A	14.0	72.5/16	Active Pit	23000	0.00
2018-06-18 02:00	2	5759.00	Oil Based Mud	9.1	10	N/A	14.0	75/15	Active Pit	23000	0.00
2018-06-18 12:15	2	7566.00	Oil Based Mud	9.3	11	N/A	14.0	75/14.5	Active Pit	22000	0.00
2018-06-19 02:15	2	11592.00	Oil Based Mud	9.5	13	N/A	20.0	71.8/16	Active Pit	22000	0.00

Equipment and Service Data								
Run No.	Tool	Serial Number	Measurement	Sensor Offset (ft)	Bit Offset (ft)	Max O.D. (in)	Min I.D. (in)	
1	ATC_SU	14292977	Near Bit VSS	5.93	6.73	7.000	4.330	
1	ATC_SU	14292977	Near Bit Inclination	5.93	6.73	7.000	4.330	
1	ATC_MWD	14367853	Gamma (single)	2.76	12.90	7.000	3.250	
1	ATC_MWD	14367853	Directional (mag)	12.27	22.41	7.000	3.250	
2	ATC_SU	12273686	Near Bit Inclination	5.93	6.73	7.000	4.330	
2	ATC_SU	12273686	Near Bit VSS	5.93	6.73	7.000	4.330	
2	ATC_MWD	14179565	Gamma (single)	2.75	12.90	7.000	3.250	
2	ATC_MWD	14179565	Directional (mag)	12.27	22.42	7.000	3.250	

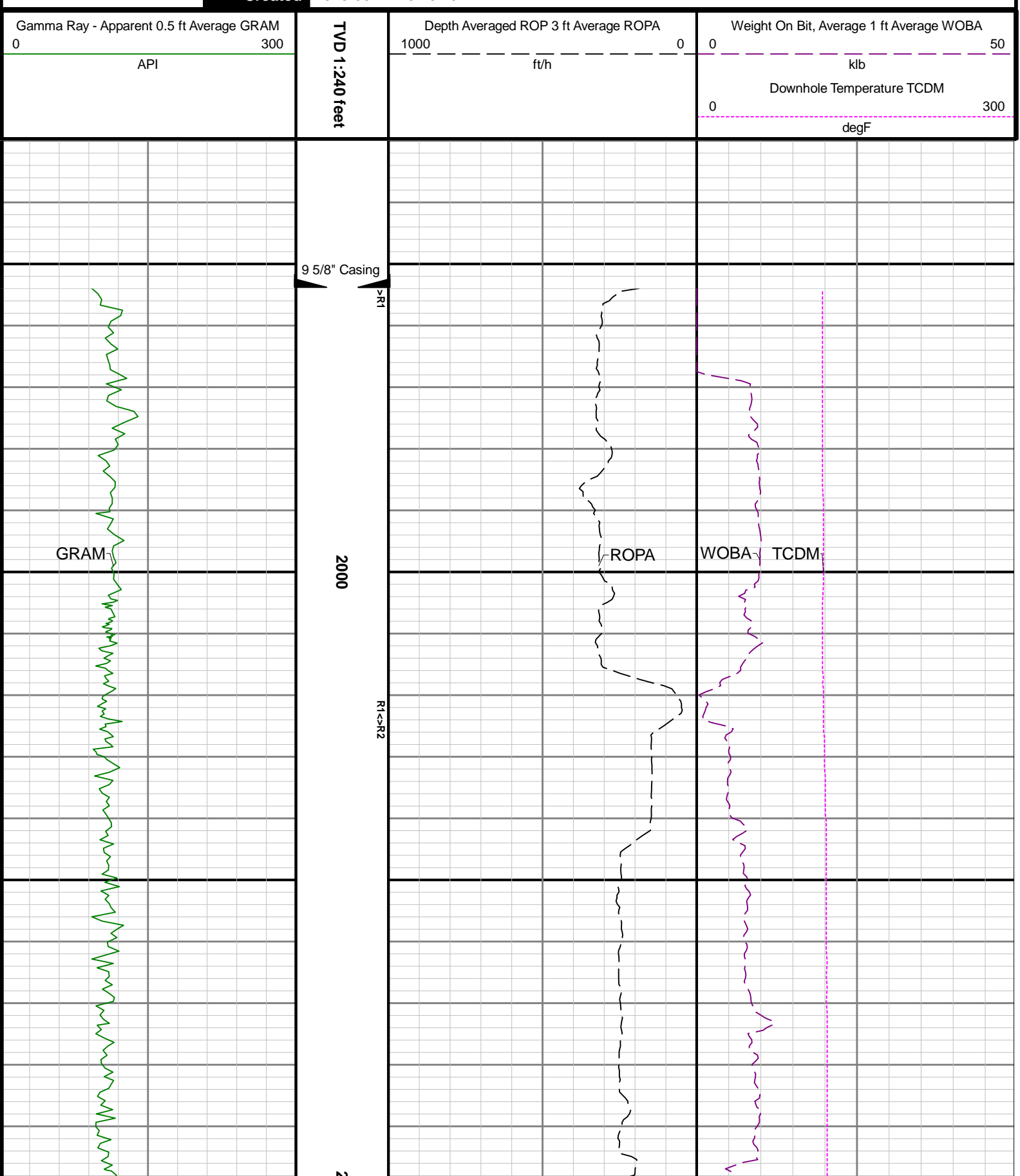
Service and Tool Mnemonics		
Mnemonic	Name	Description
ATC_SU	ATC_SU	Auto Trak Curve Steering Unit
ATC_MWD	ATC_MWD	Auto Trak Curve MWD
ATC_LCPM	ATC_LCPM	Auto Trak Curve LCPM

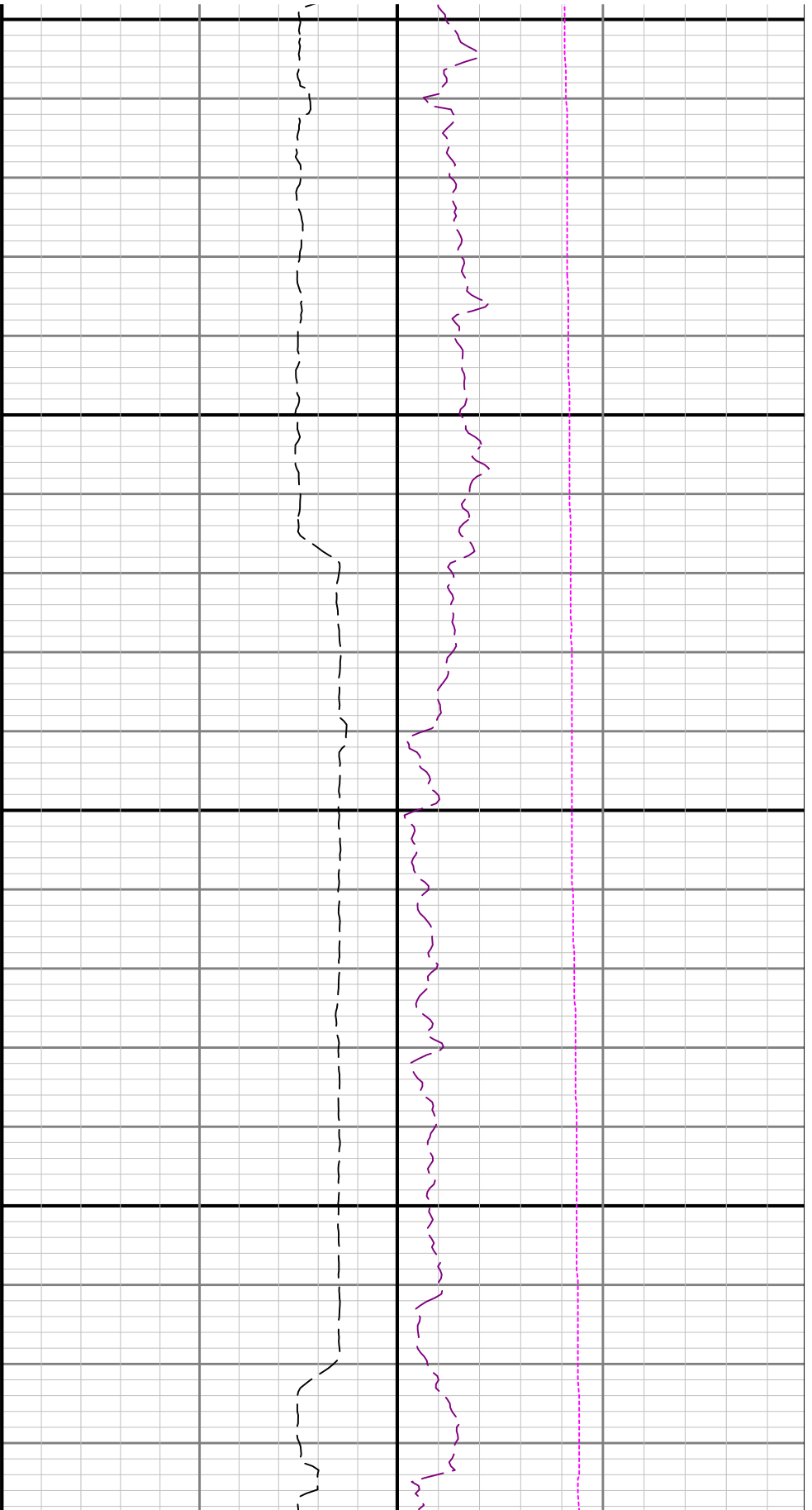
Comments	
1	Depth measurements were obtained from a depth control system not supplied or operated by Baker Hughes. Due to the lack of control by Baker Hughes, depth calibrations and measurements could not be independently verified.
2	Baker Hughes LWD runs 1 and 2 utilized a 6.75 inch NaviGamma service (Directional and Gamma Ray) behind a 8.5 inch bit and rotary steerable assembly from 1954 to 16075 feet MD (1954 to 6983 feet TVD).
3	The Gamma Ray Apparent (GRAM) data is presented 0 to 300 API, per the customer's request.

Remarks				
Number	Measured Depth (ft)	Hole Section (in)	Run No.	Remark
1	4988.00	8.500	2	The interval from 4934 to 4988 feet MD ( 4892 to 4946 feet TVD) does not have gamma ray data, due to a failed downlink terminating power to the rotary steerable assembly.

Curve Mnemonics		
Presented Curves	Description	Units
ROPA	Depth Averaged ROP 3 ft Average	ft/h
WOBA	Weight On Bit, Average 1 ft Average	klb
GRAM	Gamma Ray - Apparent - Memory 0.5 ft Average	API
TCDM	Directional Real-Time Survey Temperature	degF

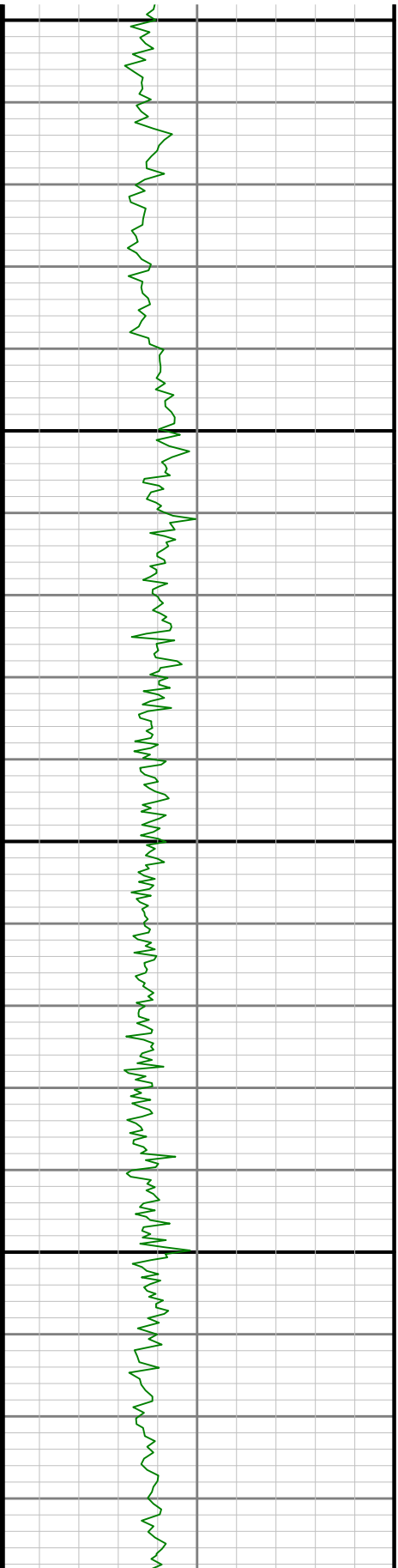
<div> <div>BAKER HUGHES</div> <div>a GE company</div> </div>	Company		Noble Energy	
	Well		Hurley H26-783	
	Interval		Date From: 2018-06-17 03:22	Top: 1954.00 ft
	Created		Date To: 2018-06-21 06:38	Bottom: 16075.00 ft
		2018-06-21 07:07:52		

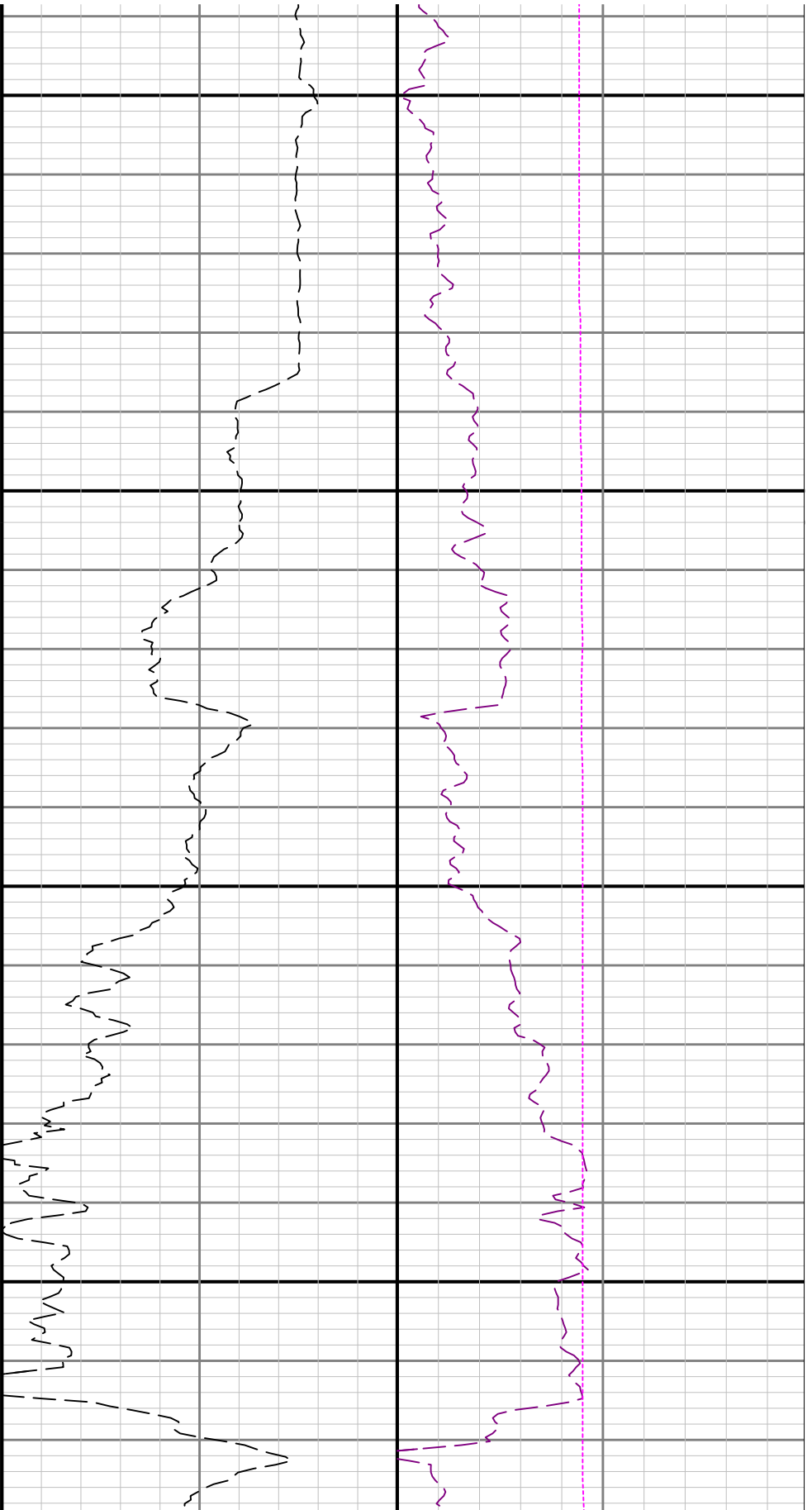




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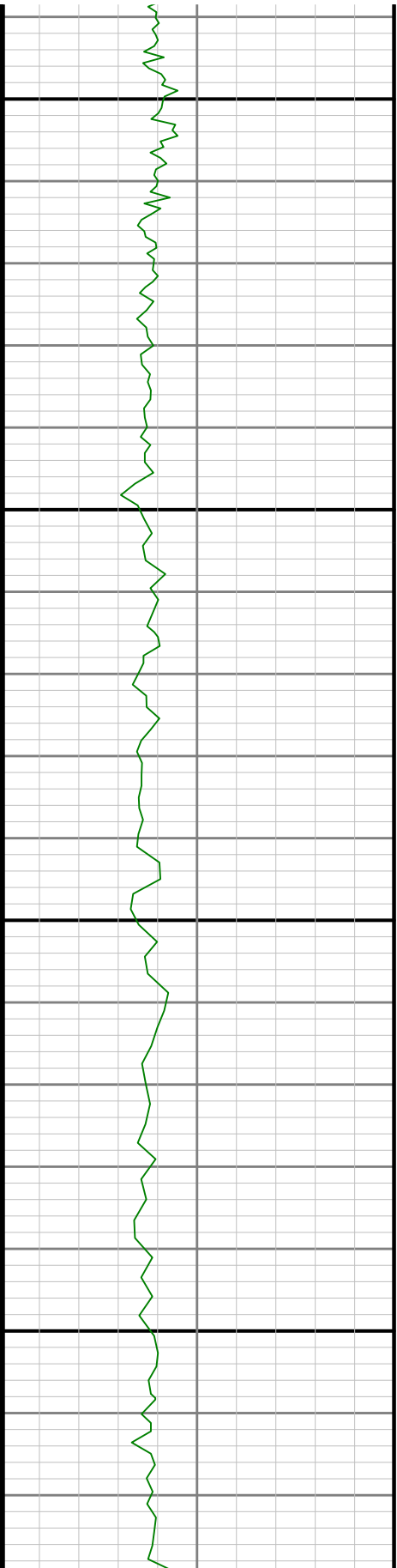
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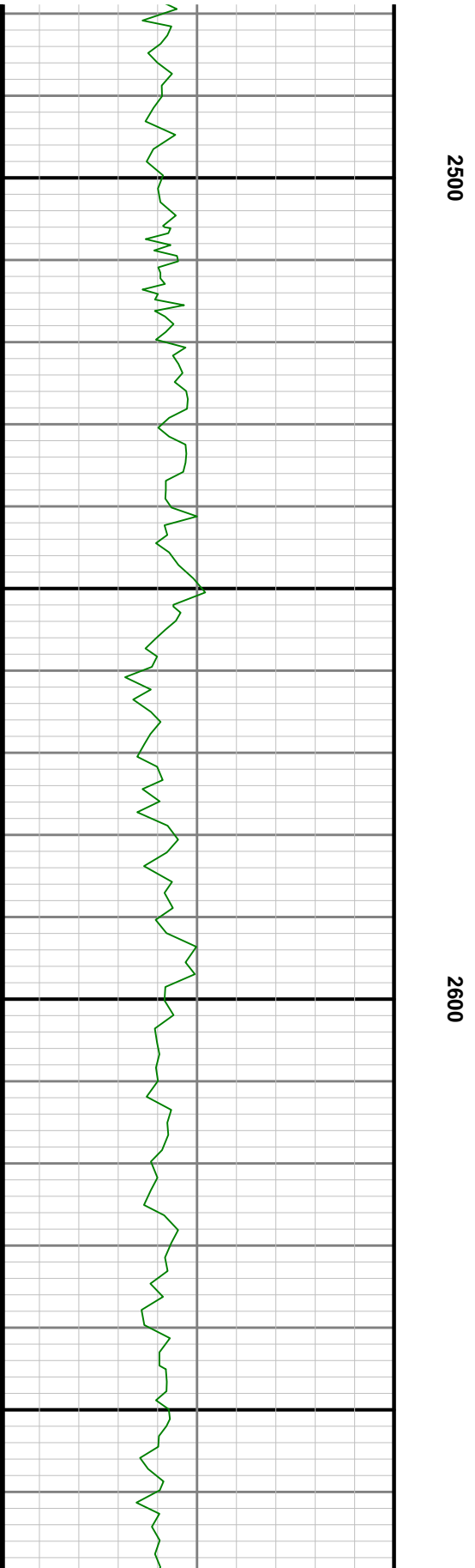
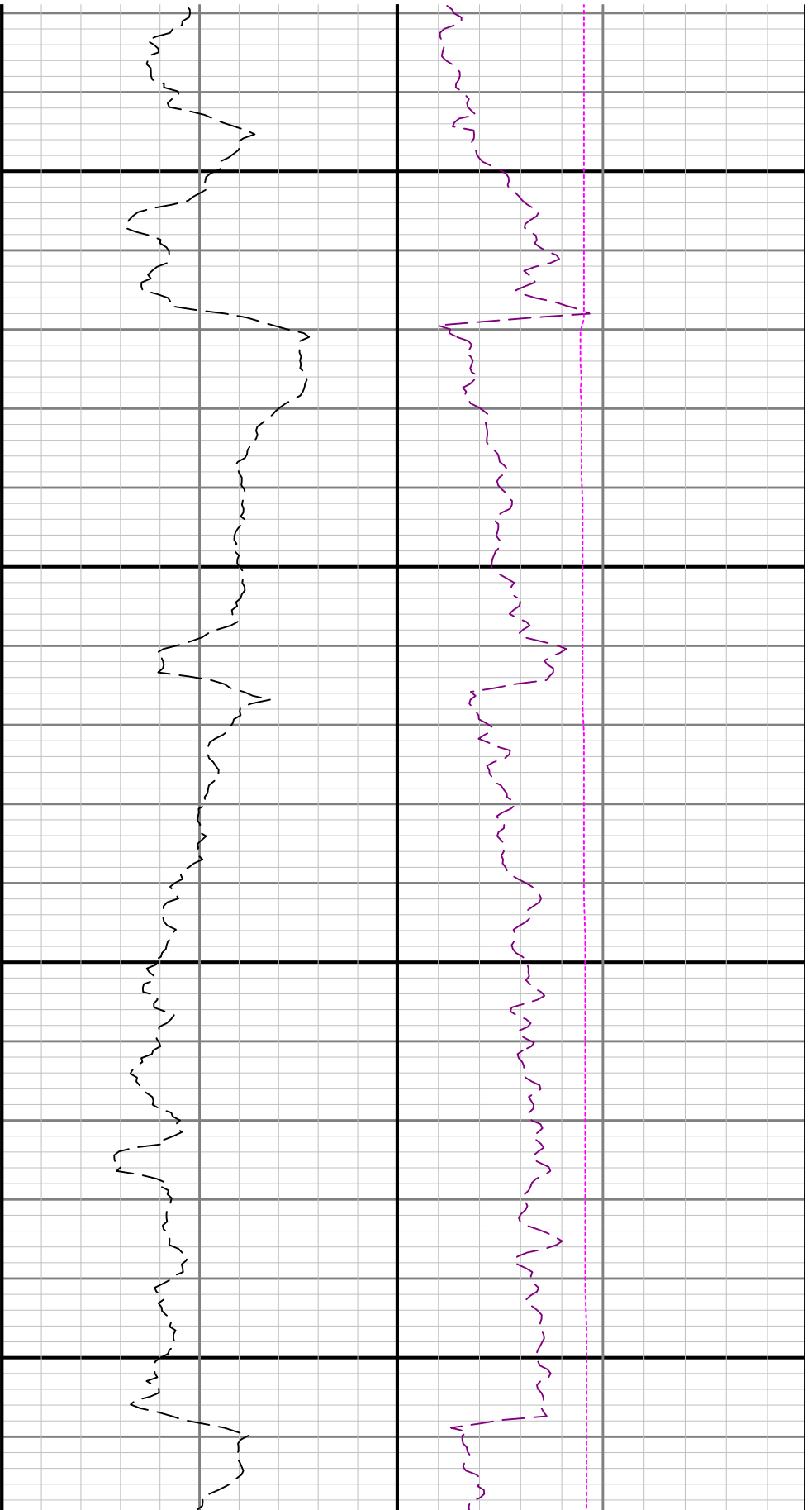


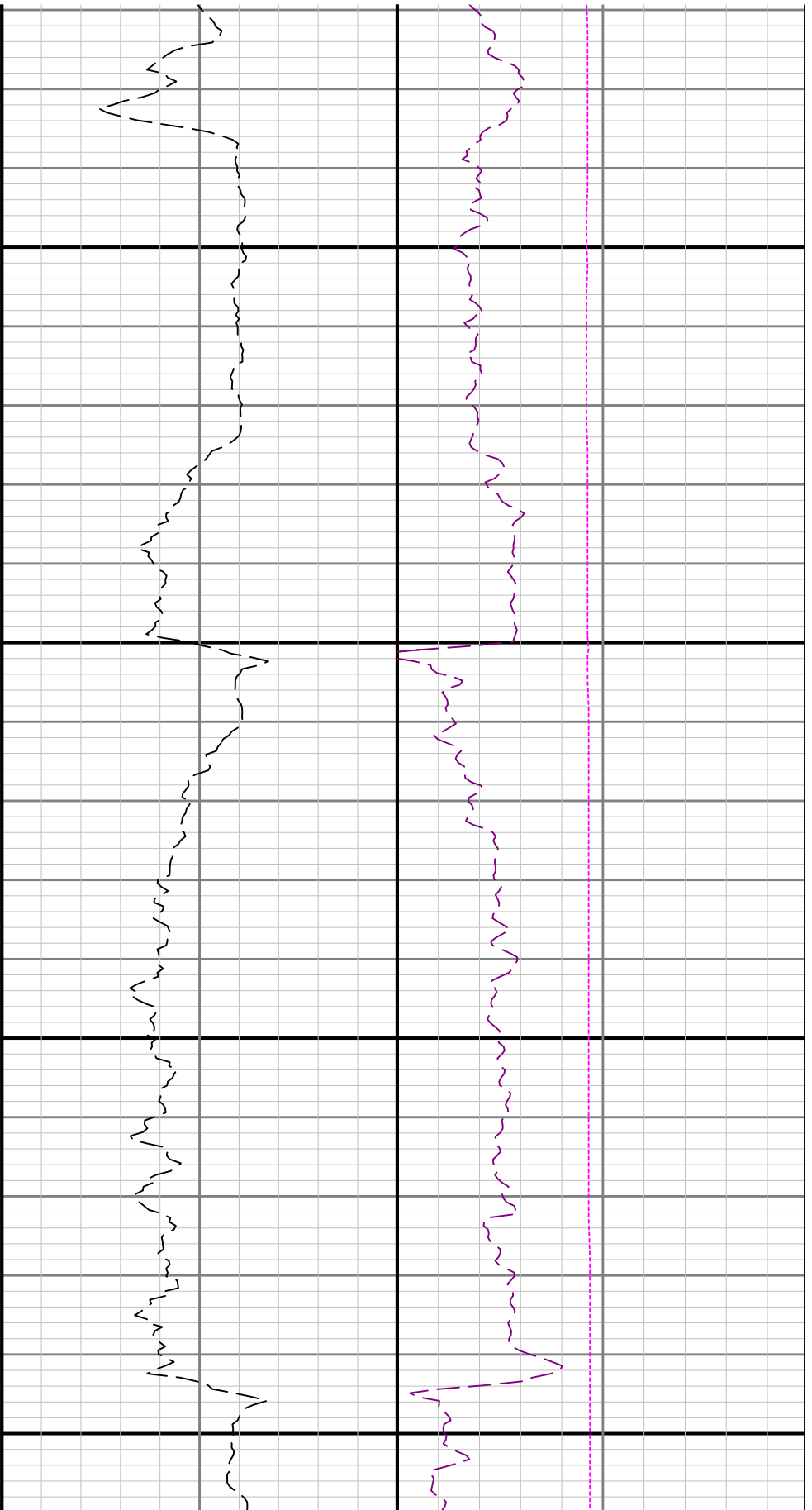


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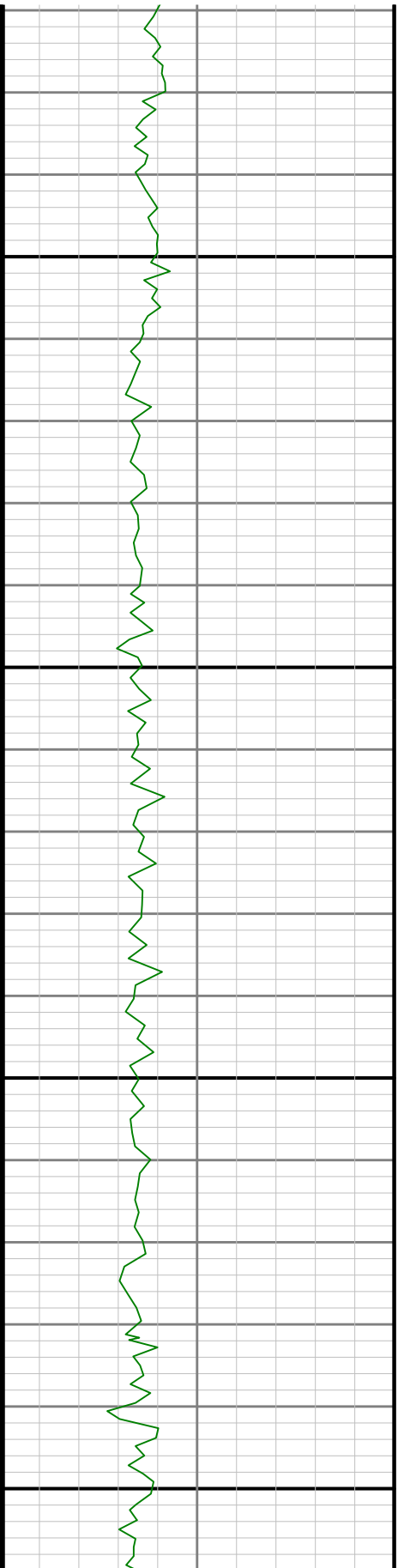


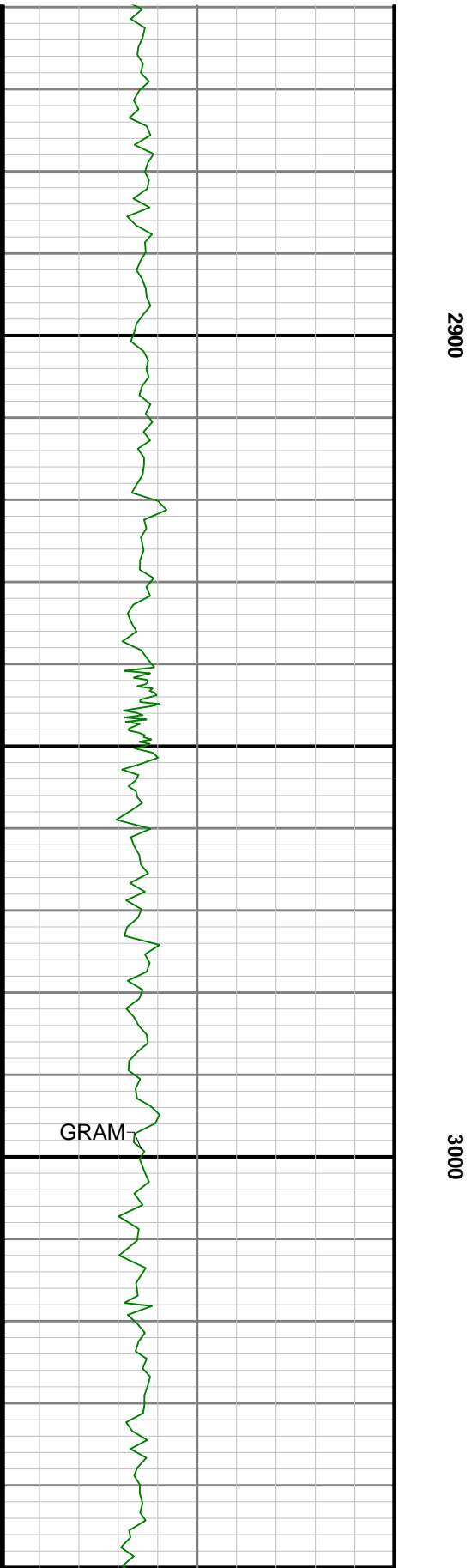
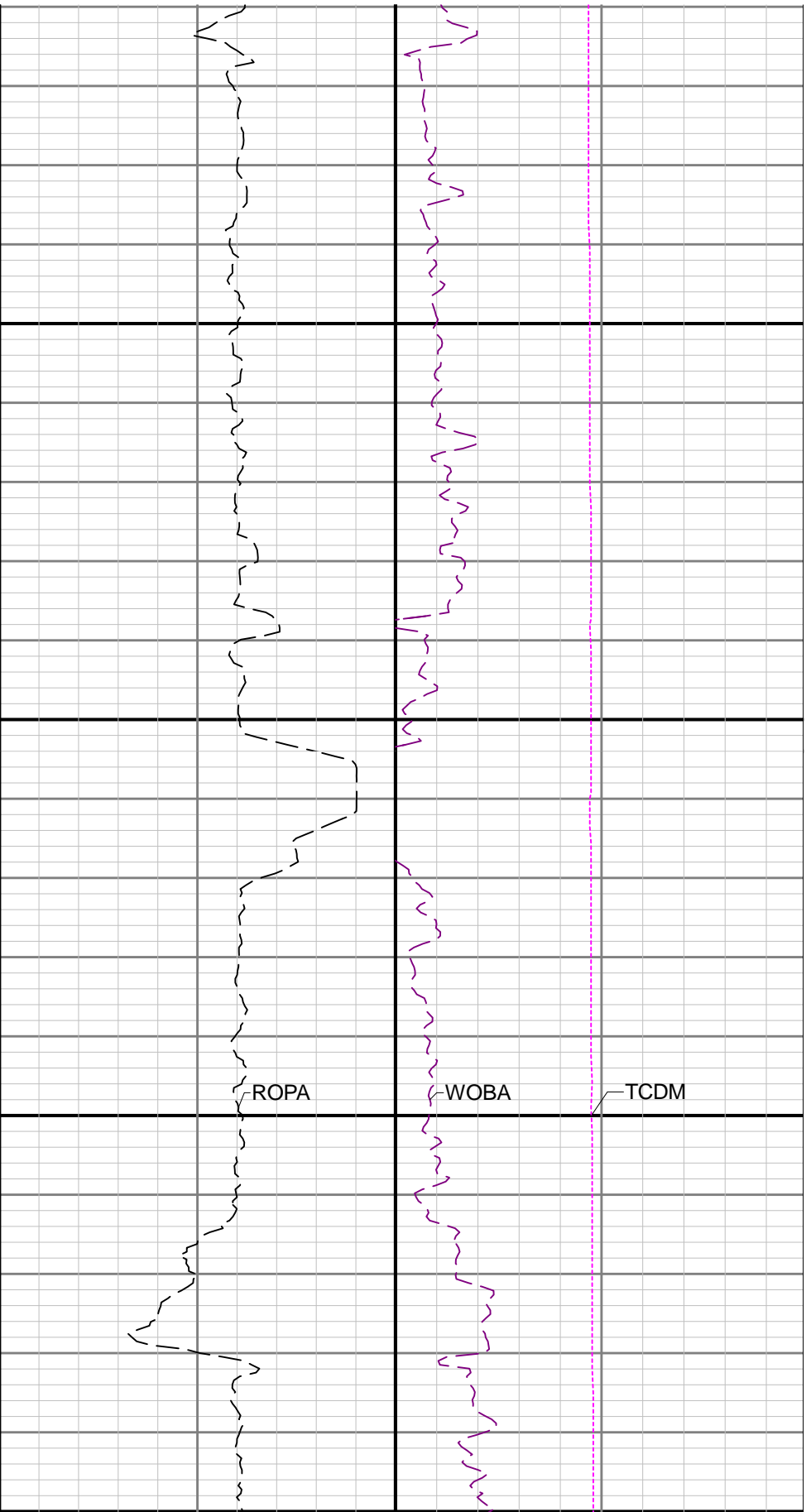




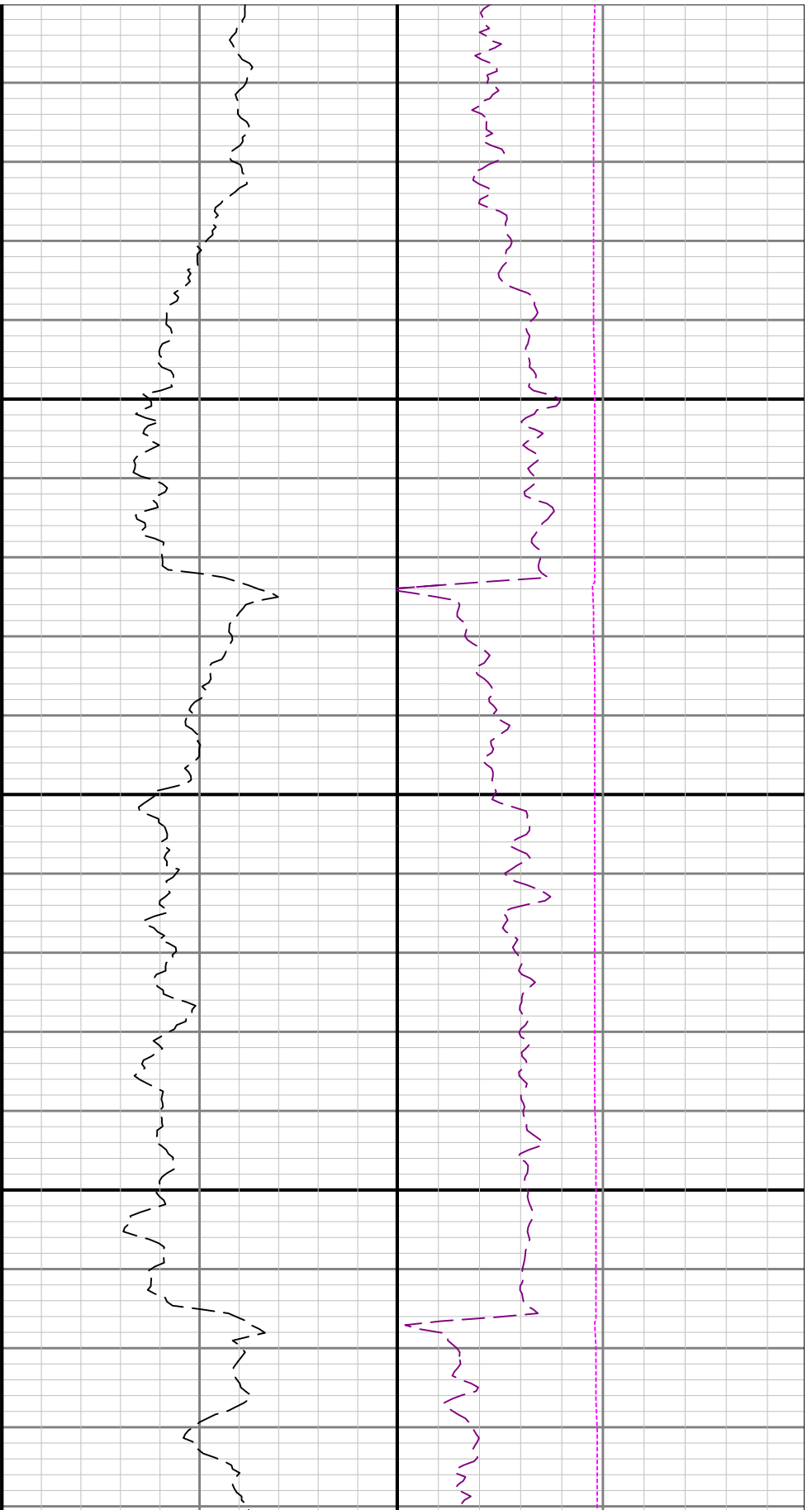
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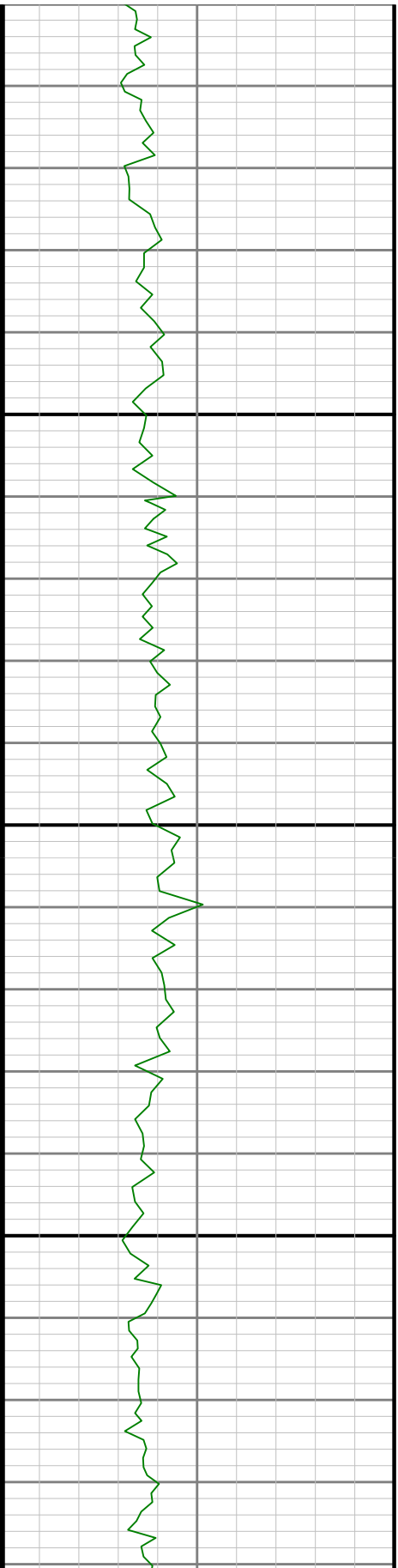


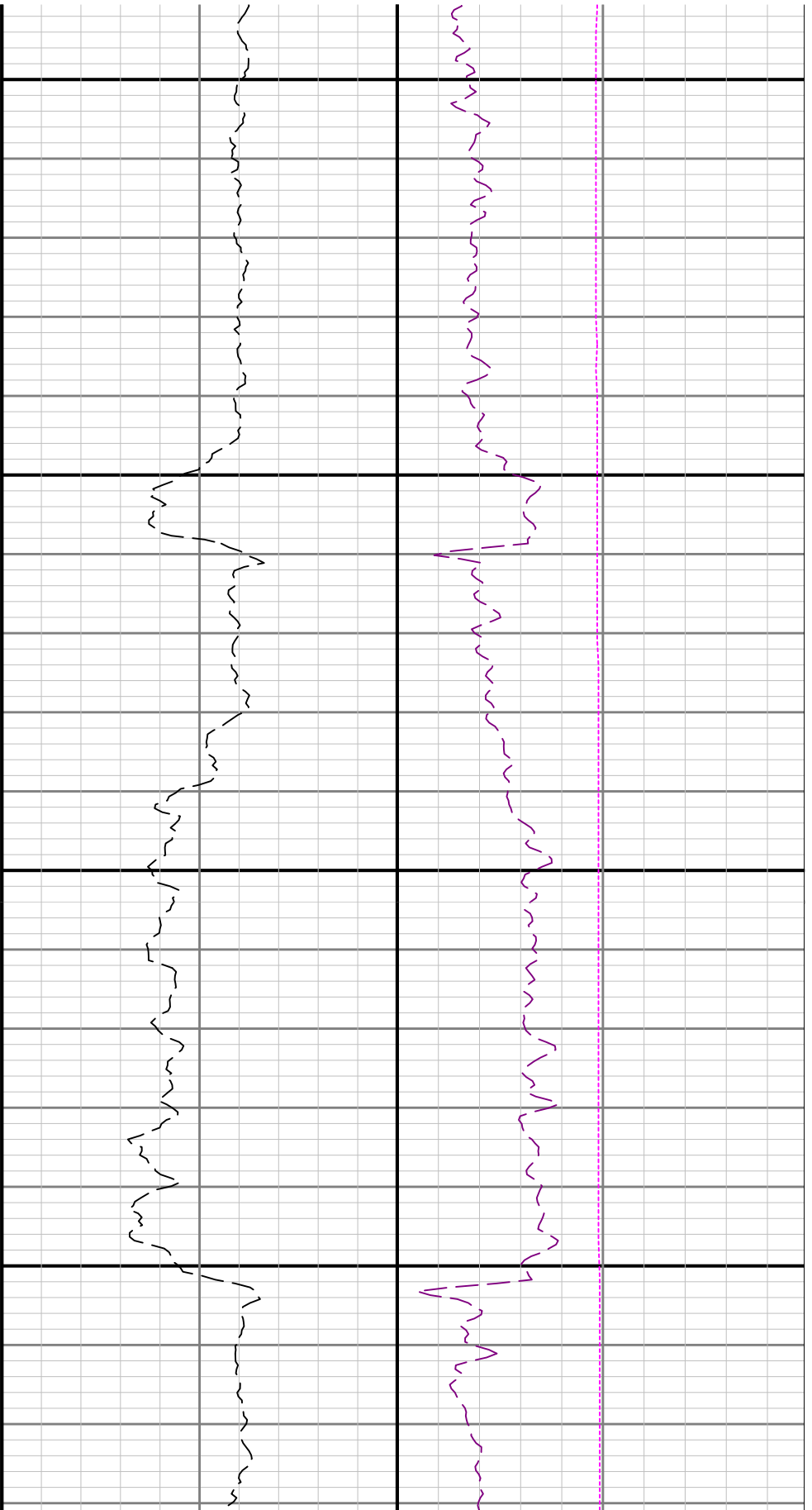




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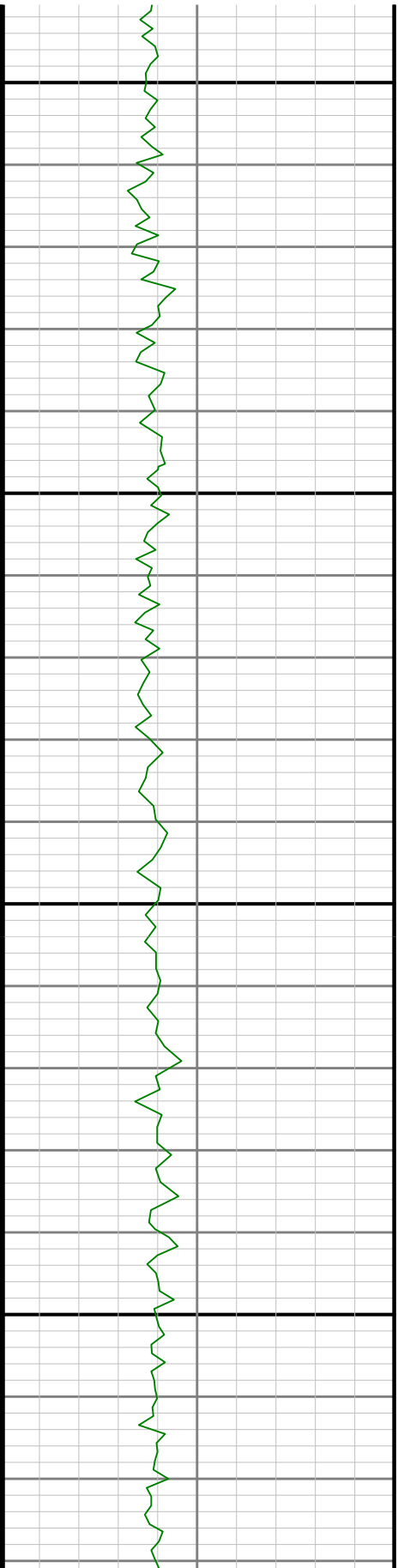
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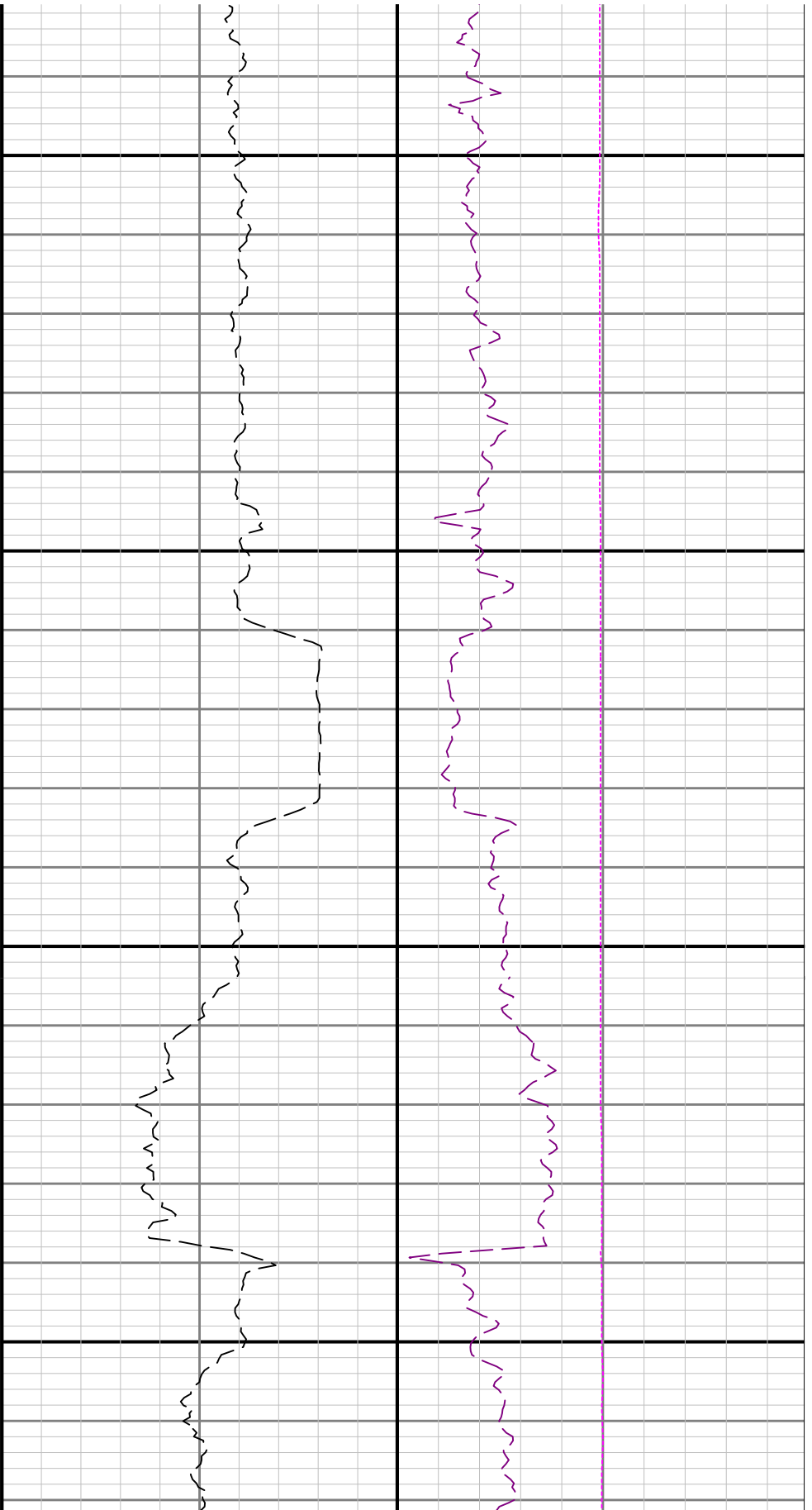




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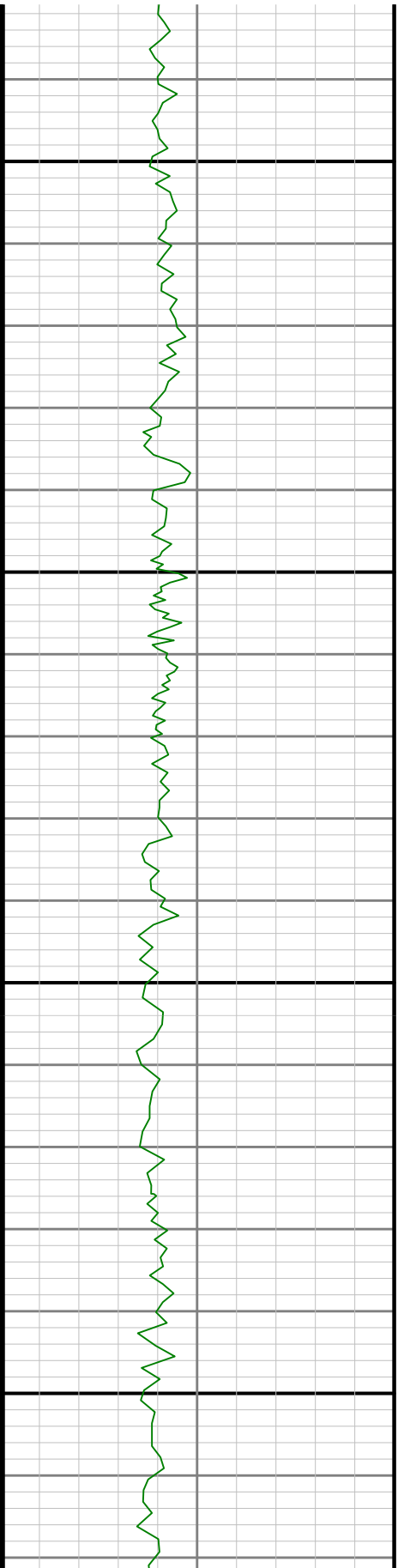
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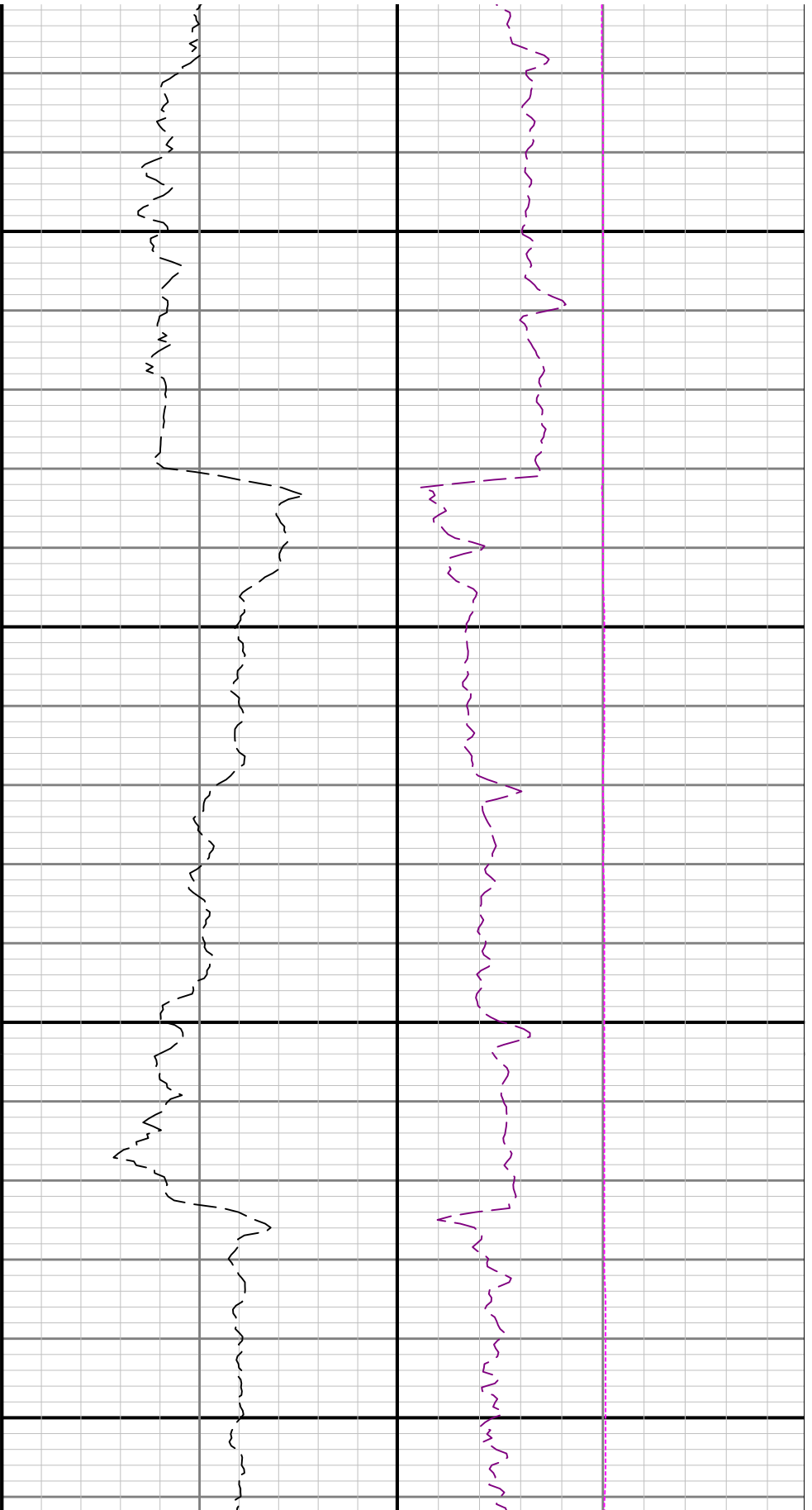




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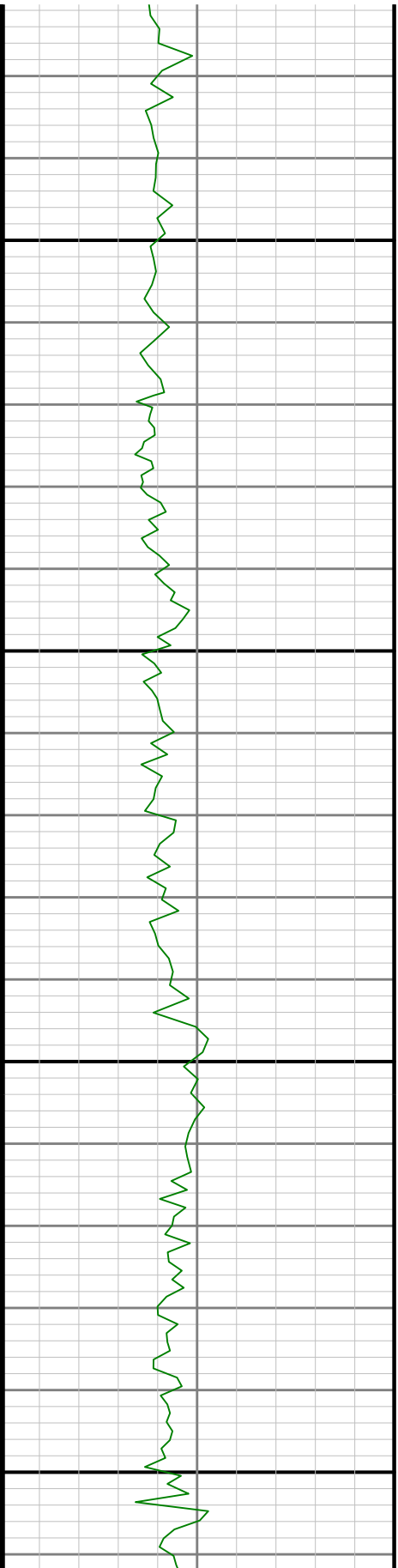
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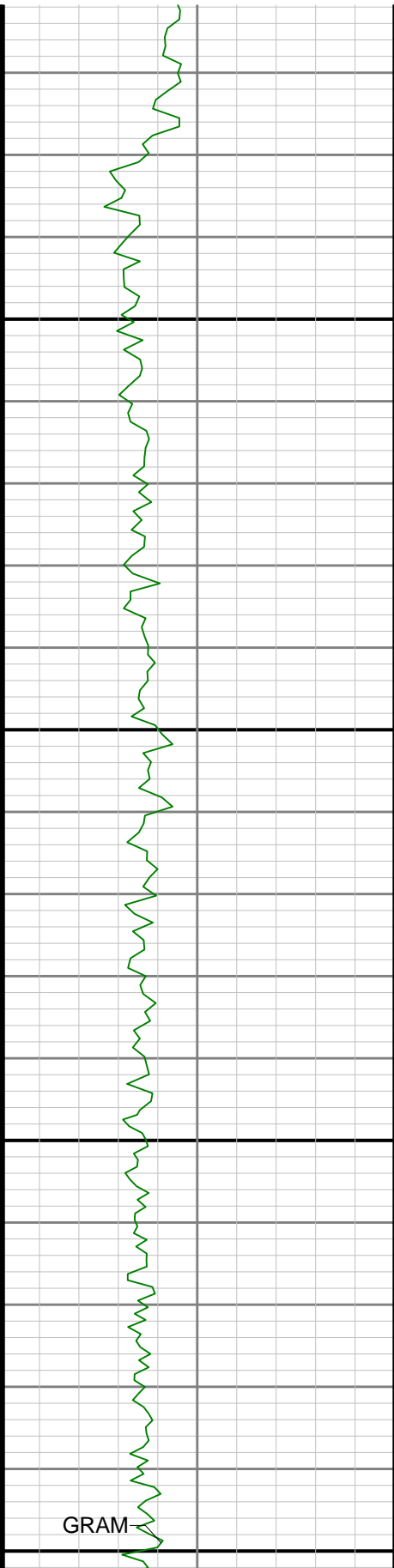




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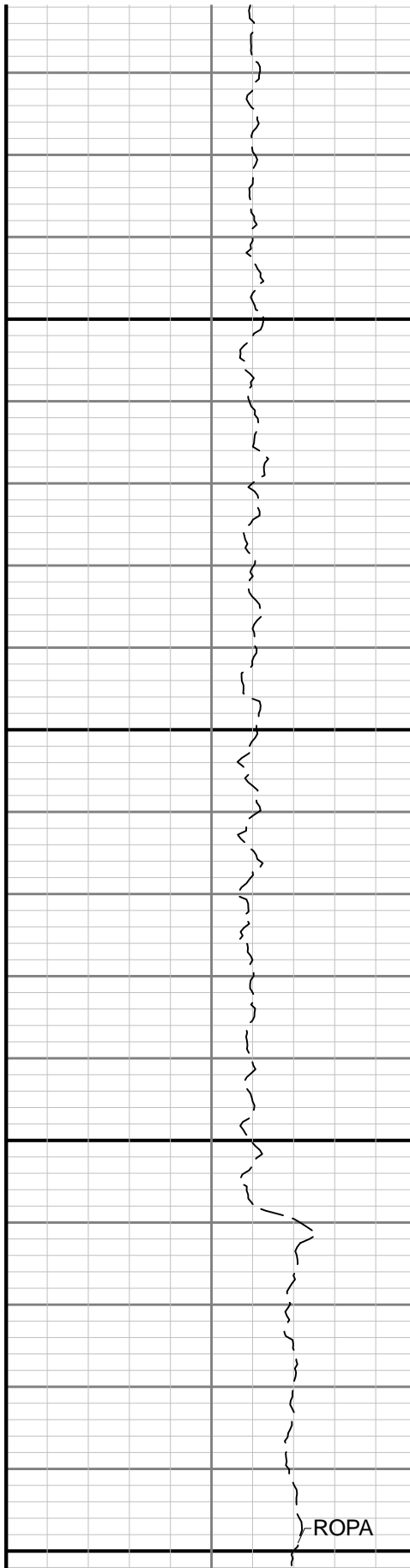
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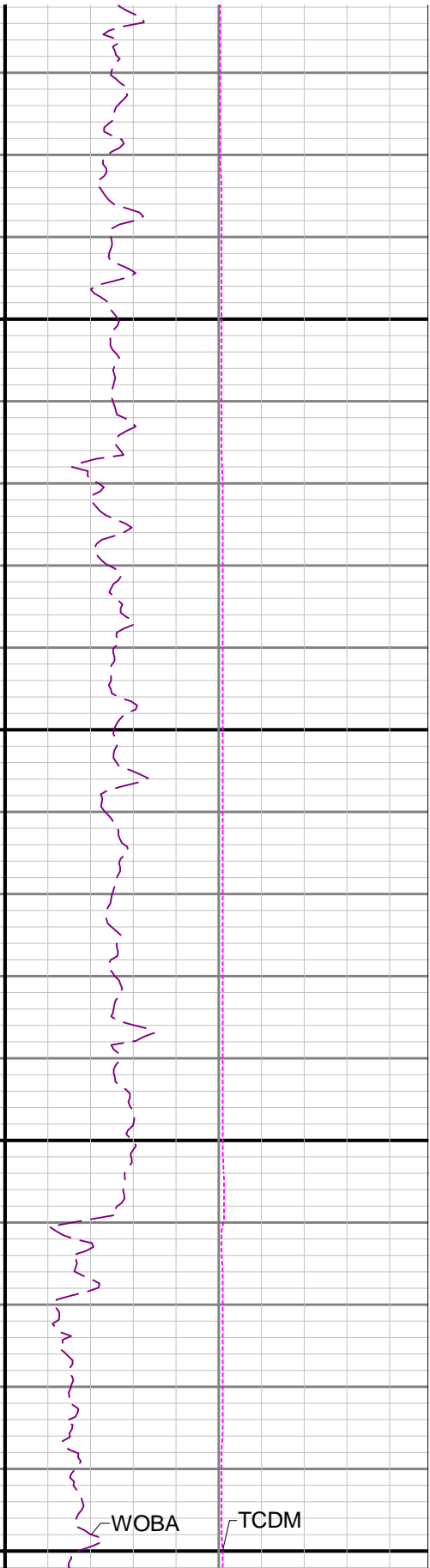


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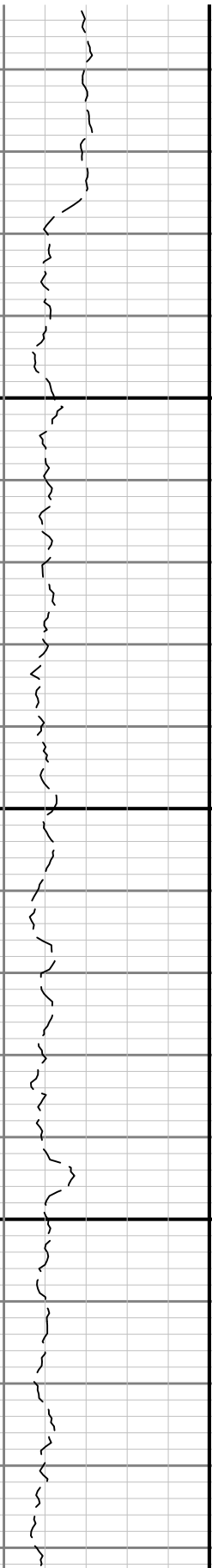
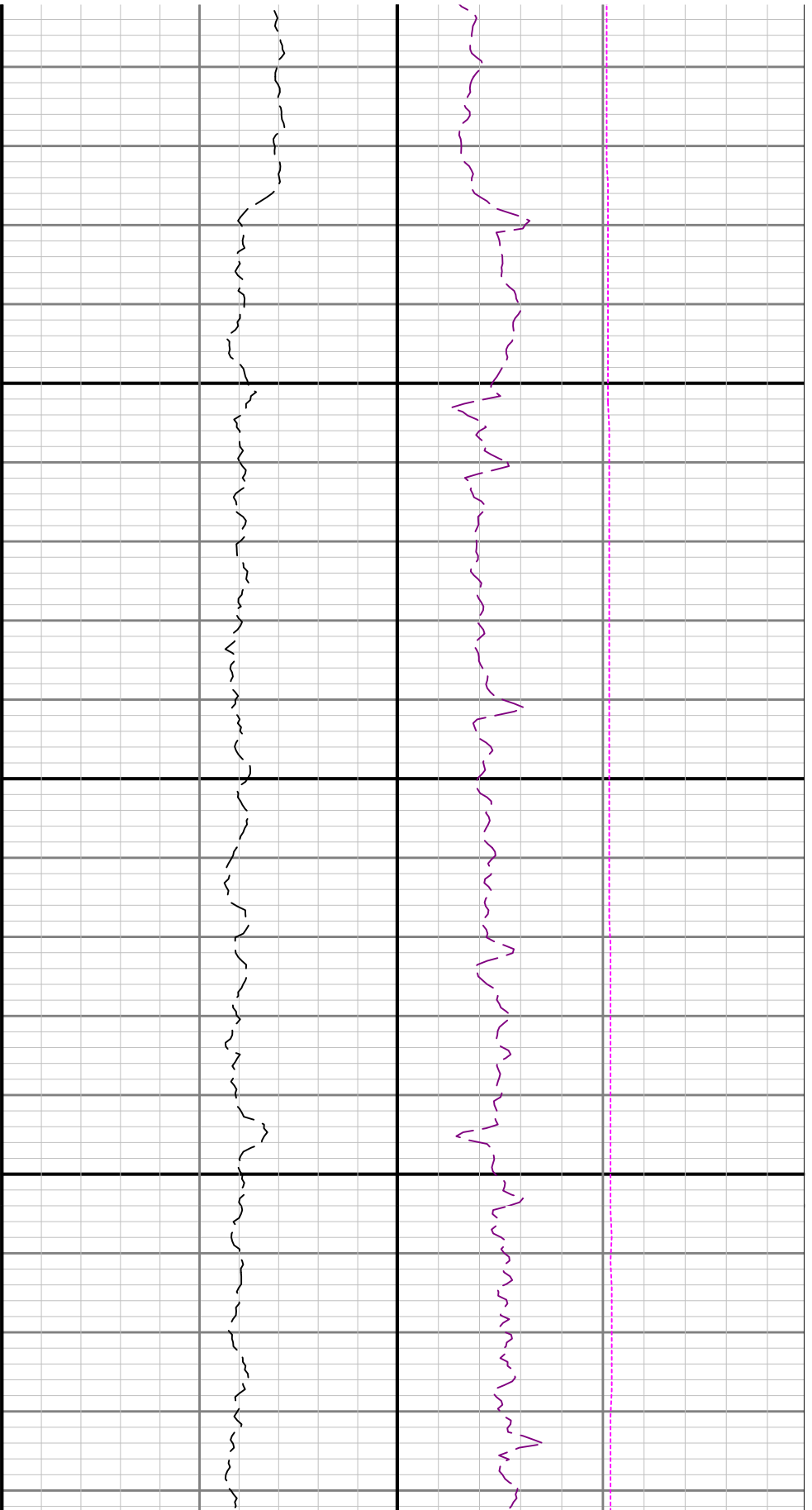


ROPA

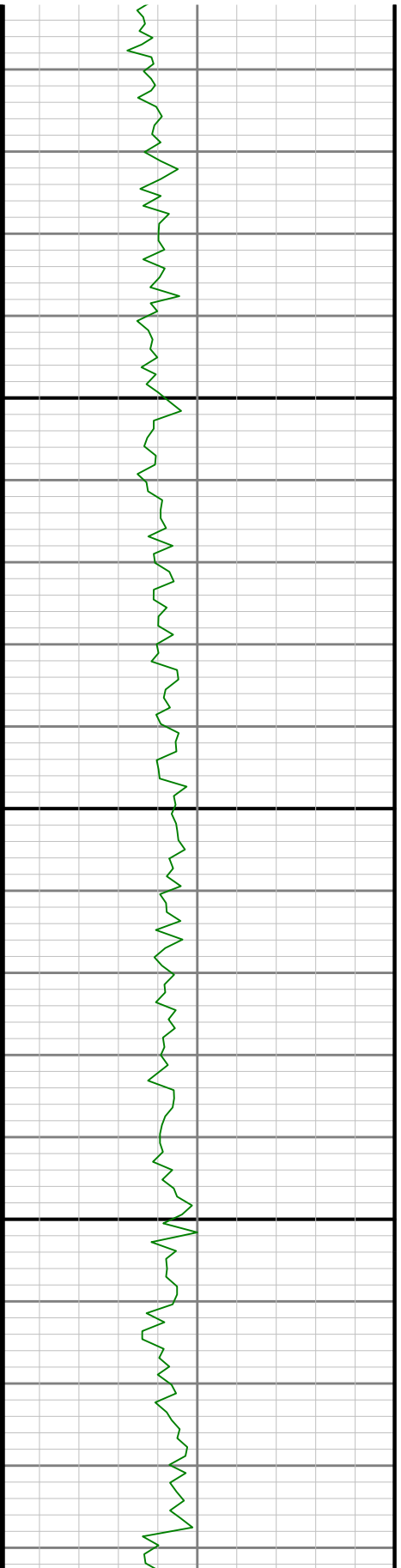


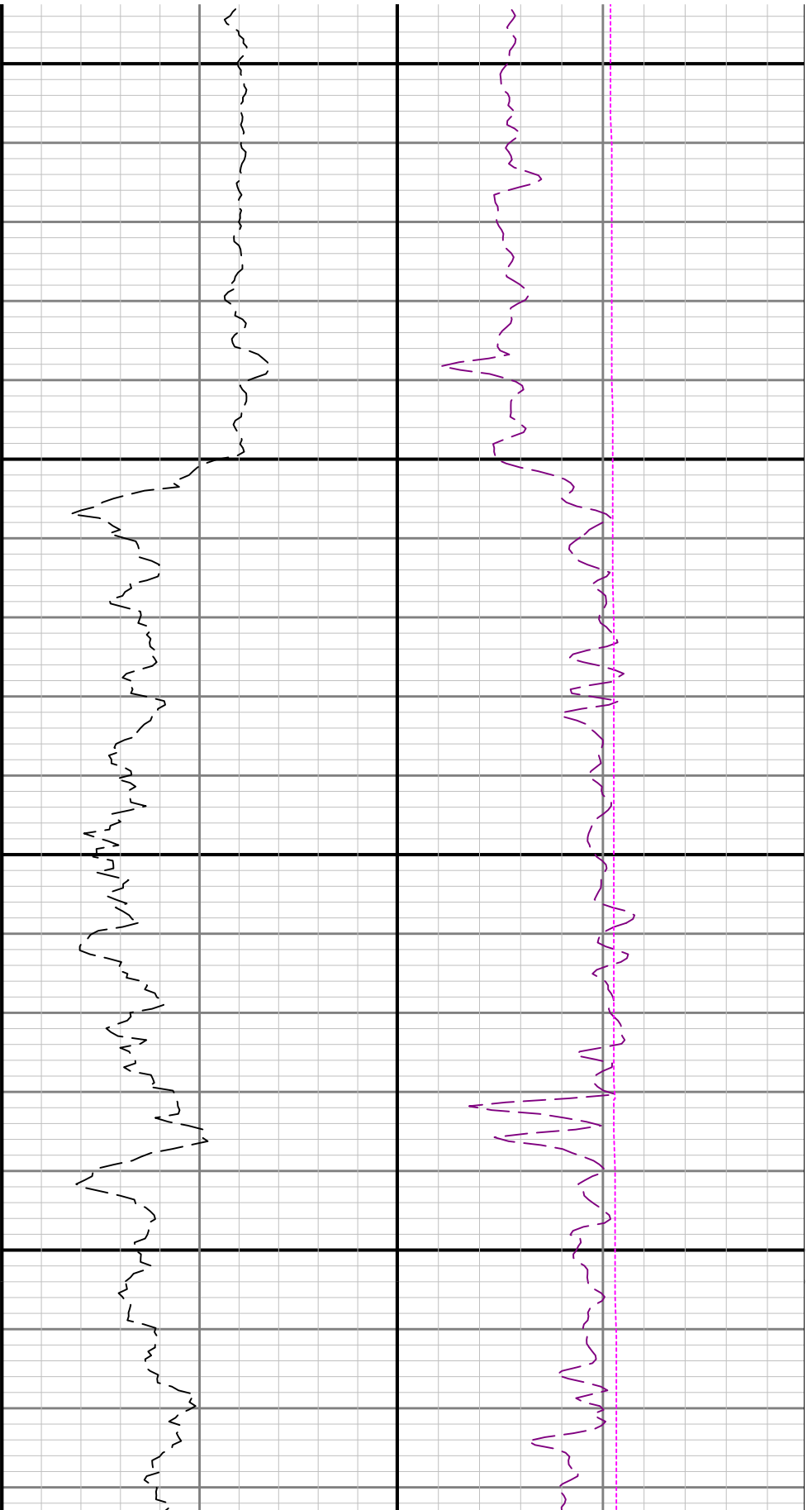
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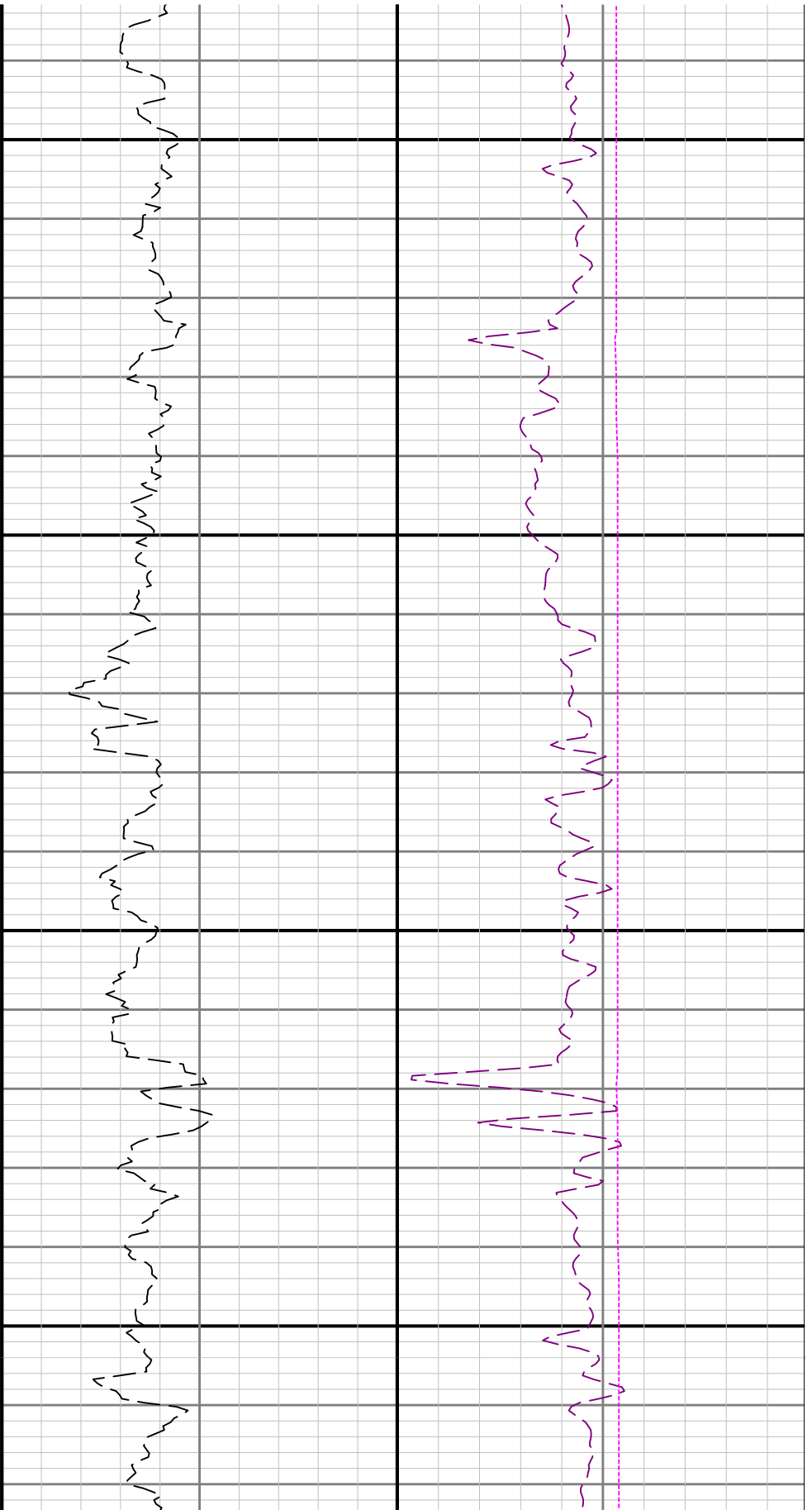
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4100

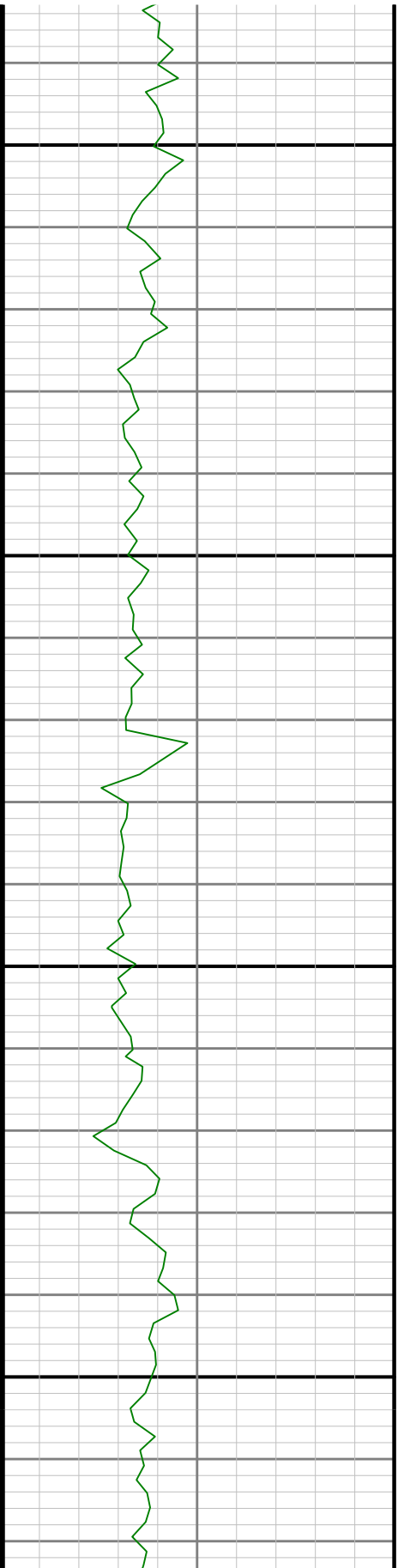




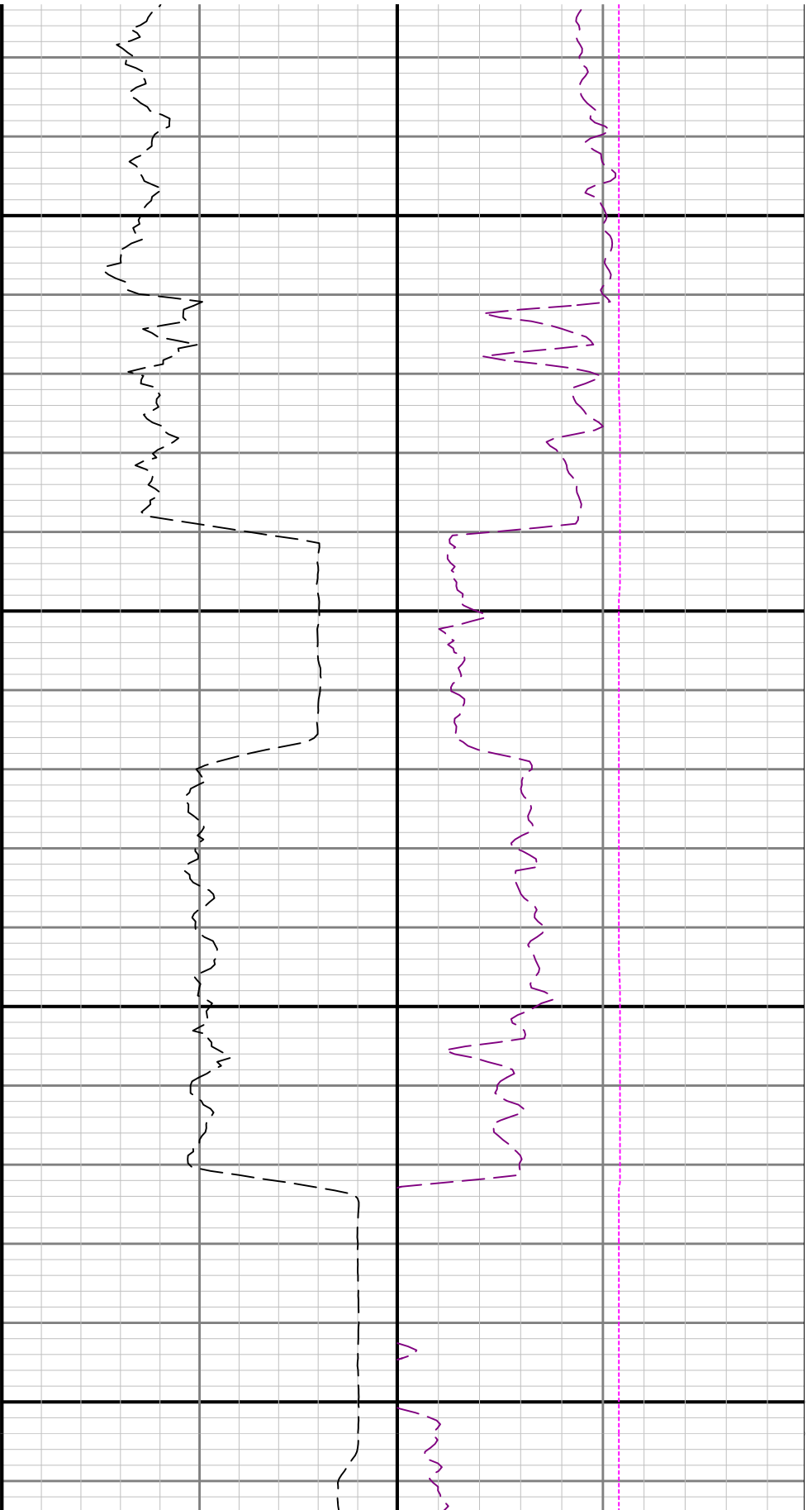


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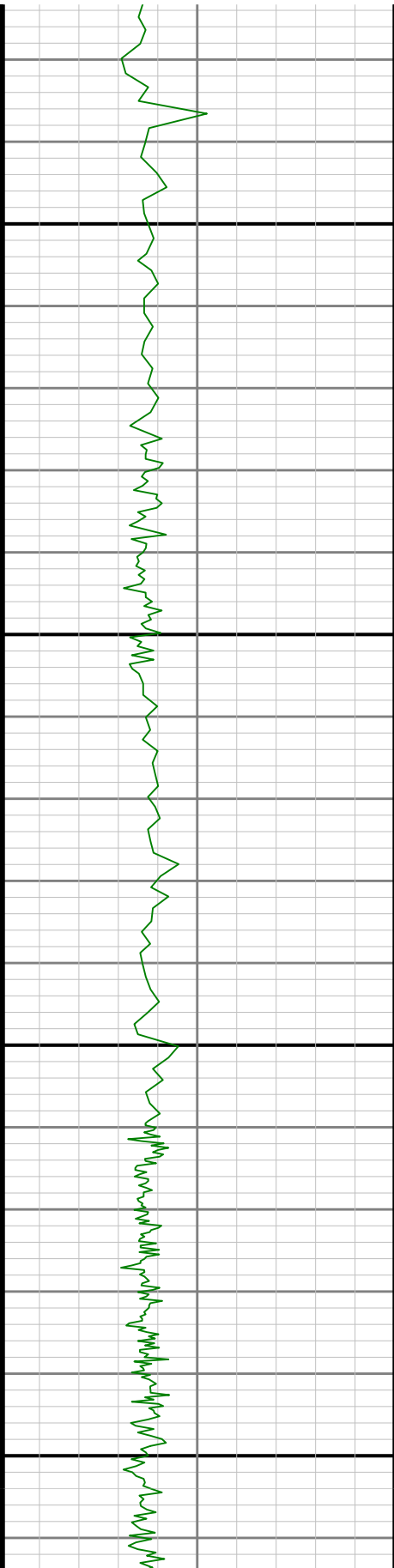




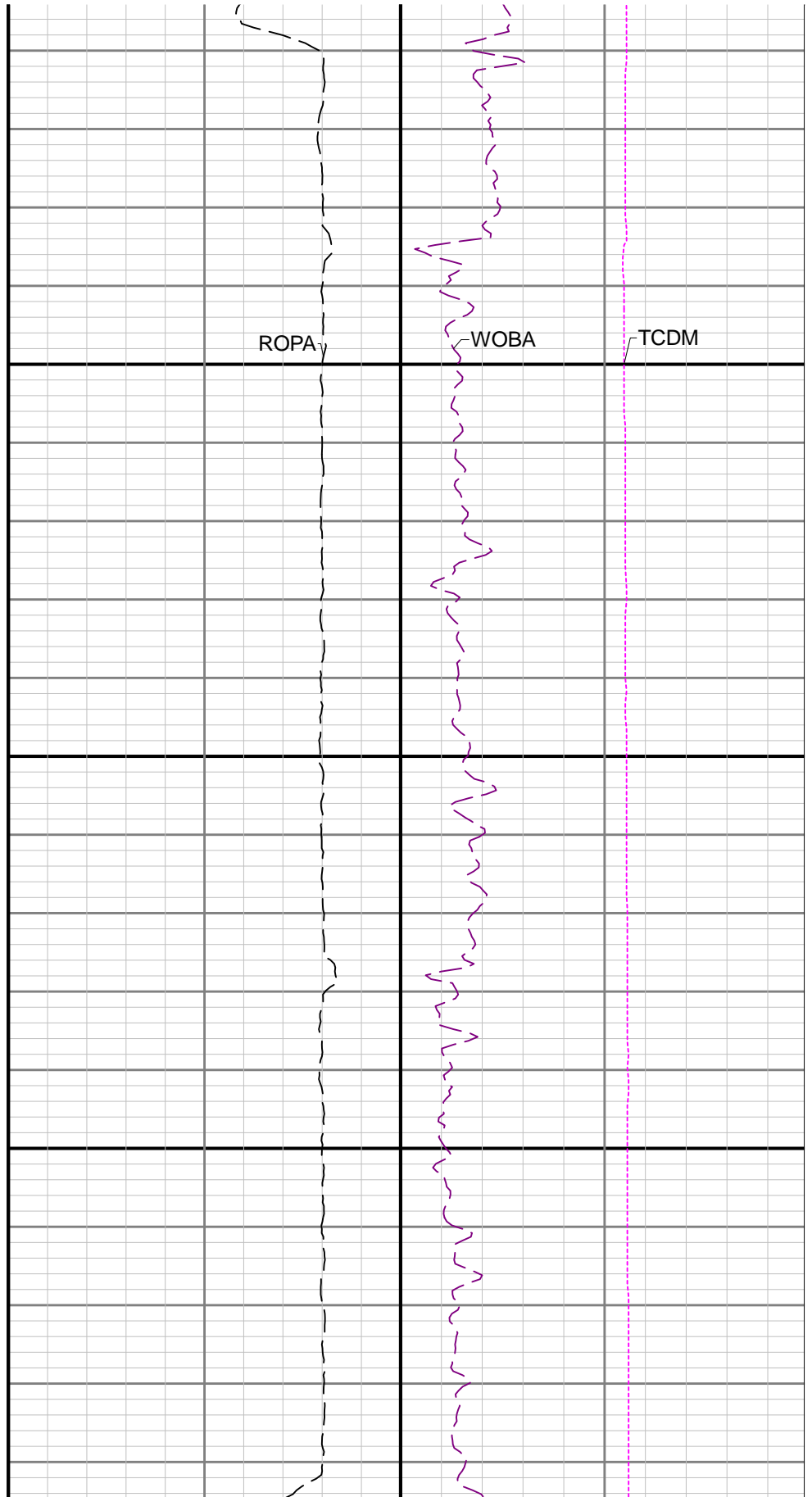
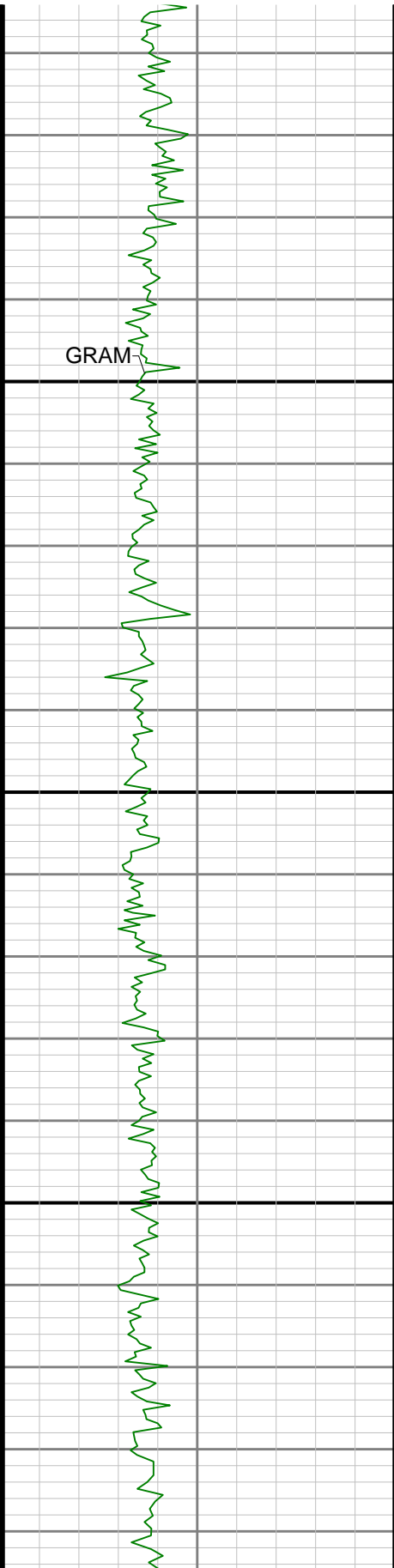


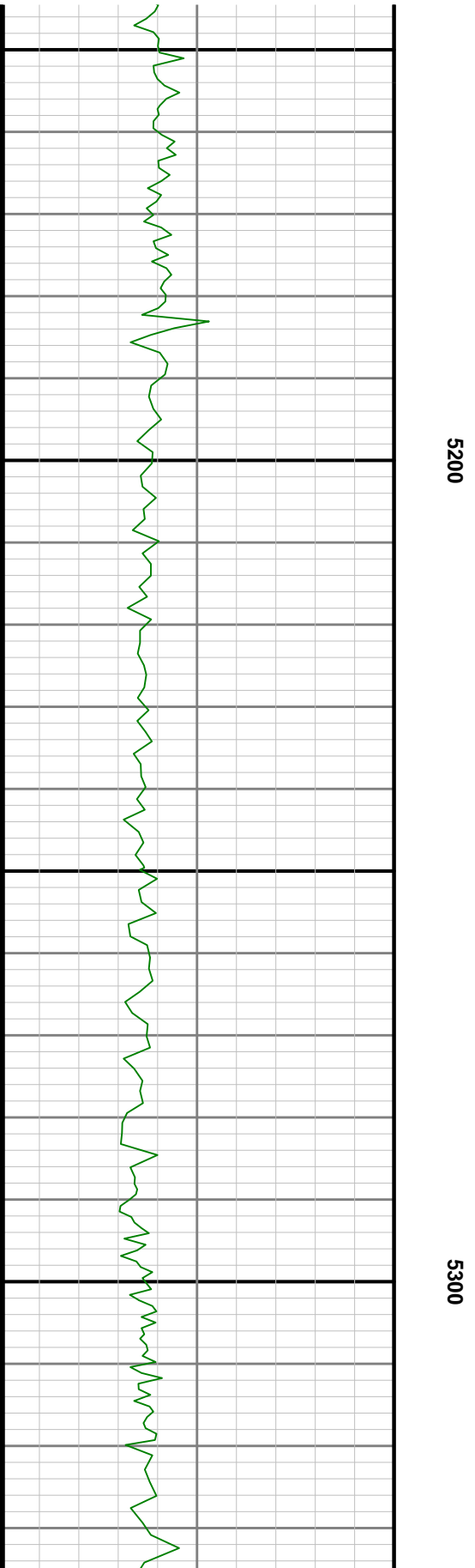
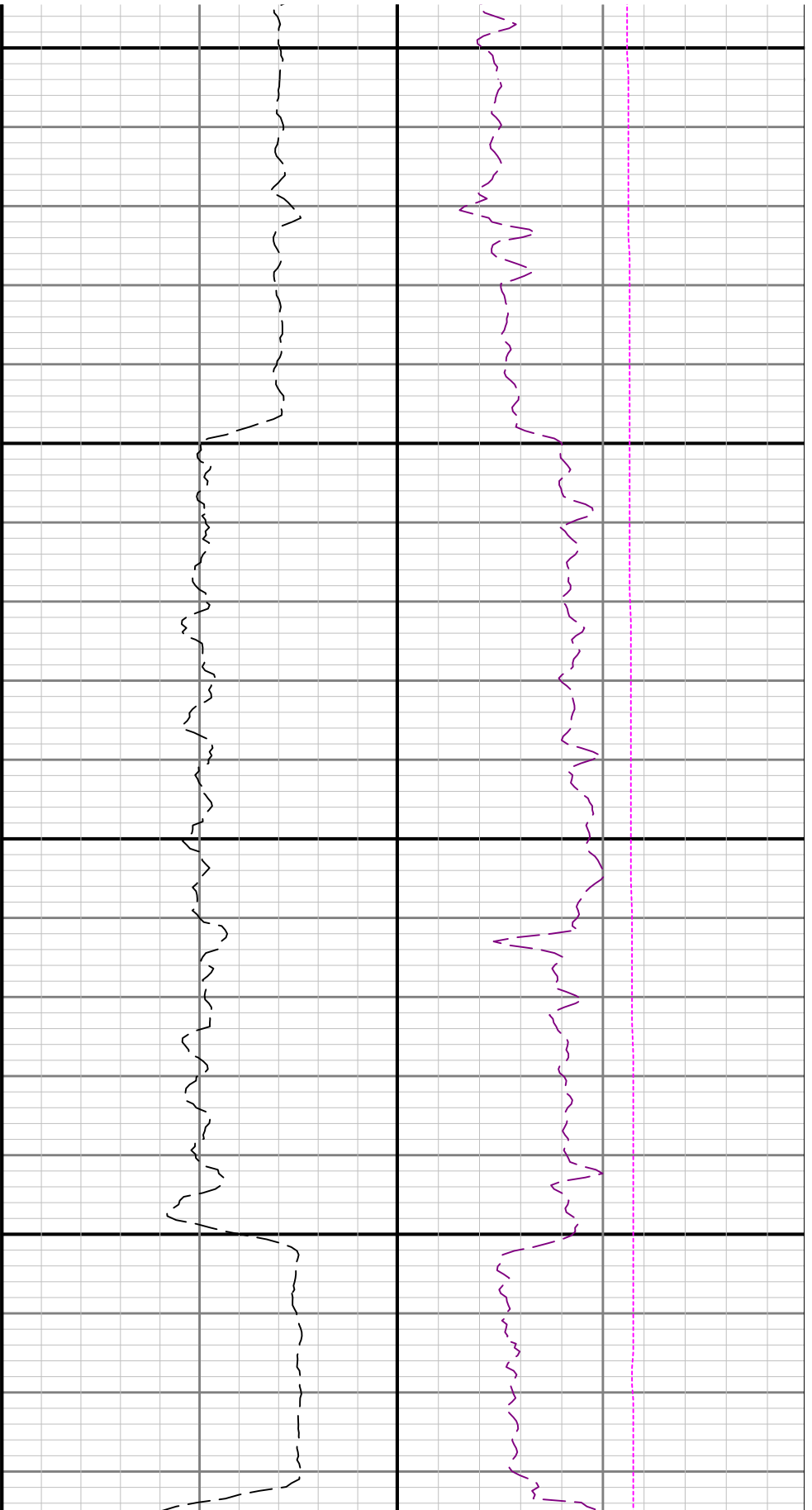
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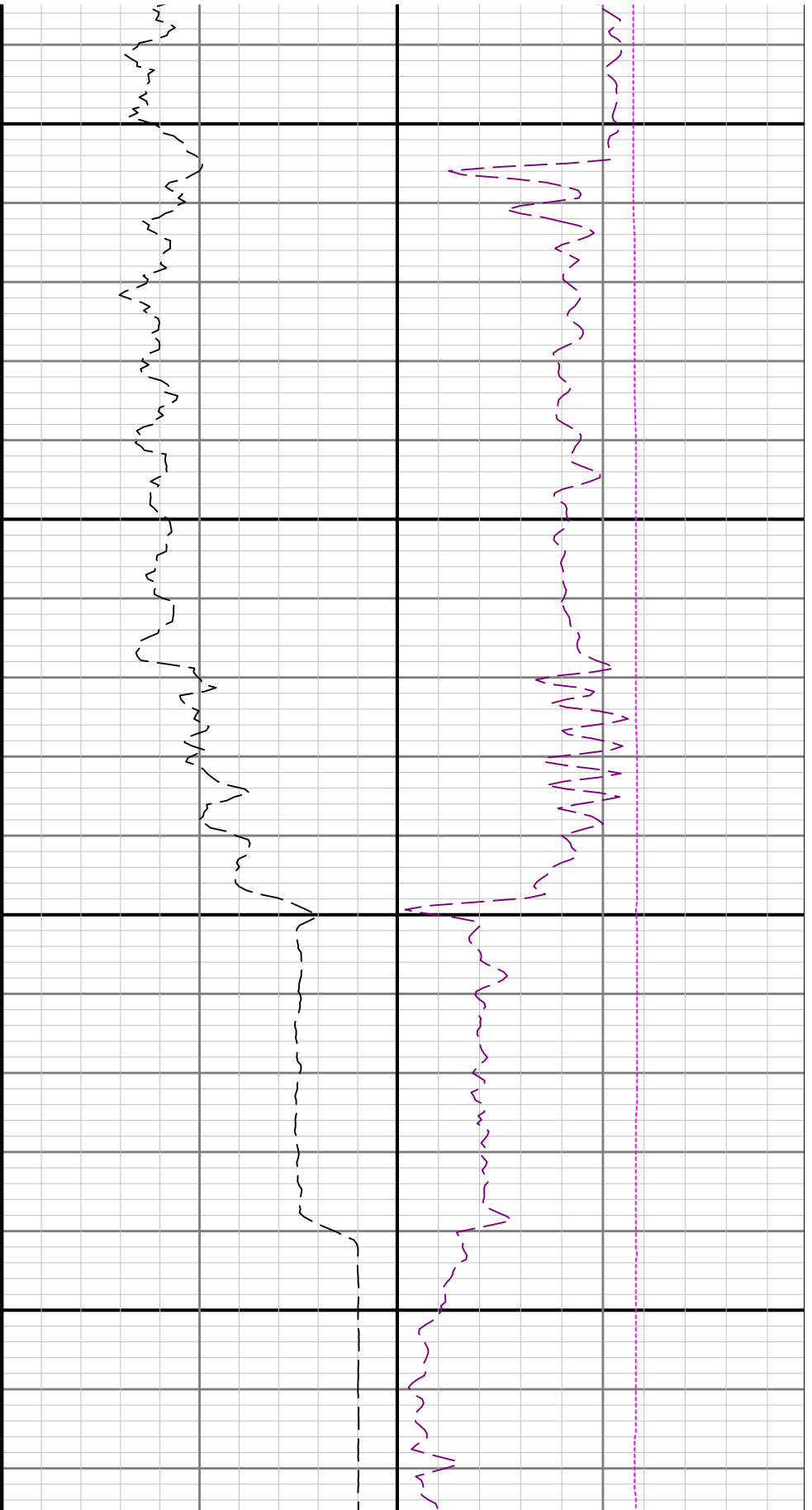
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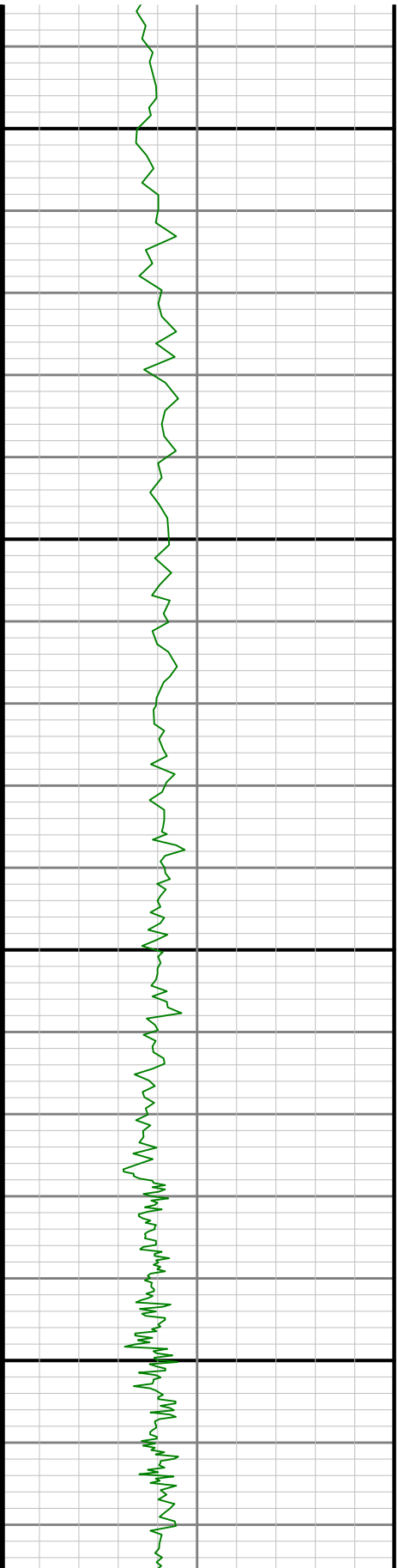


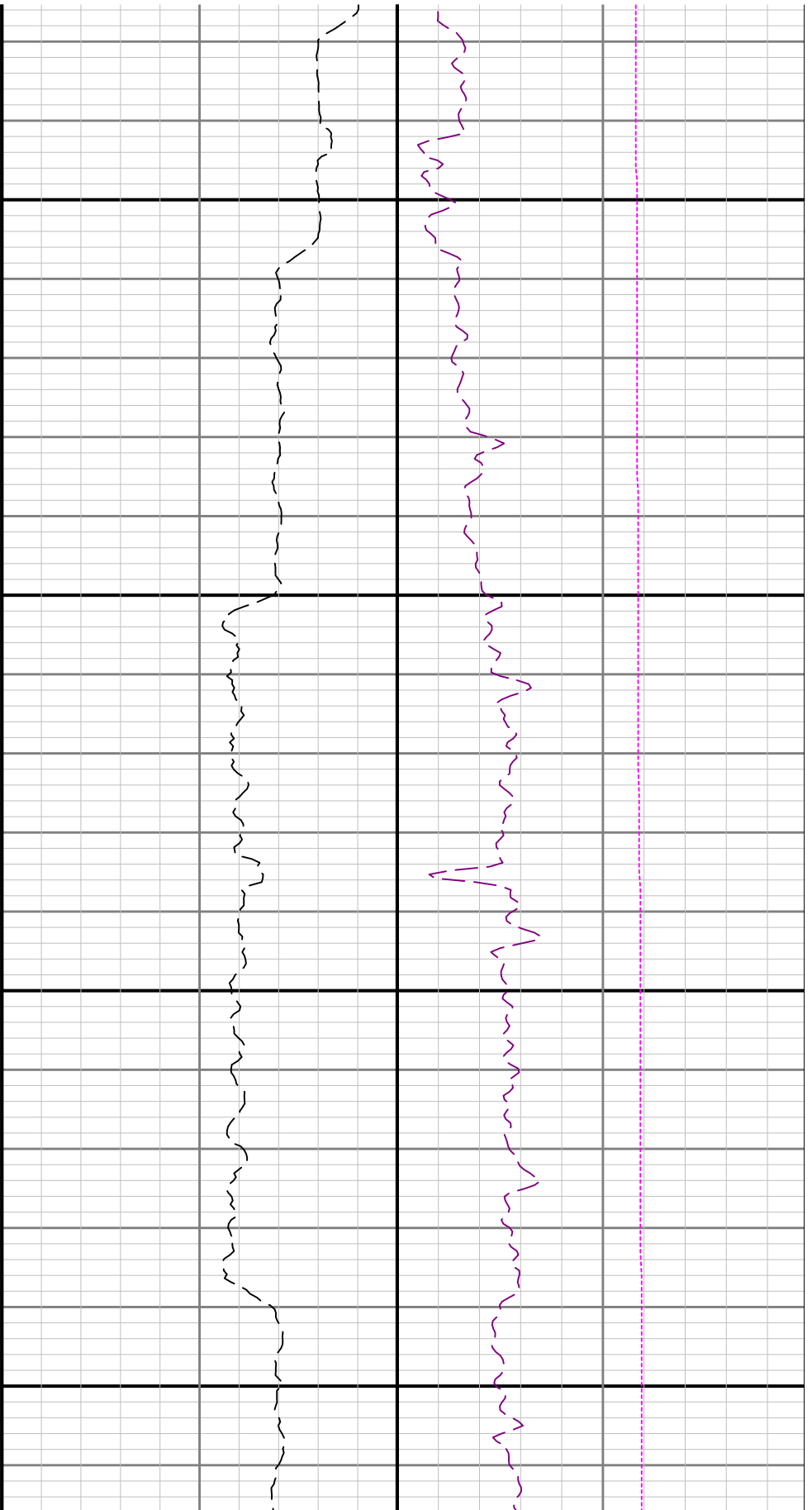




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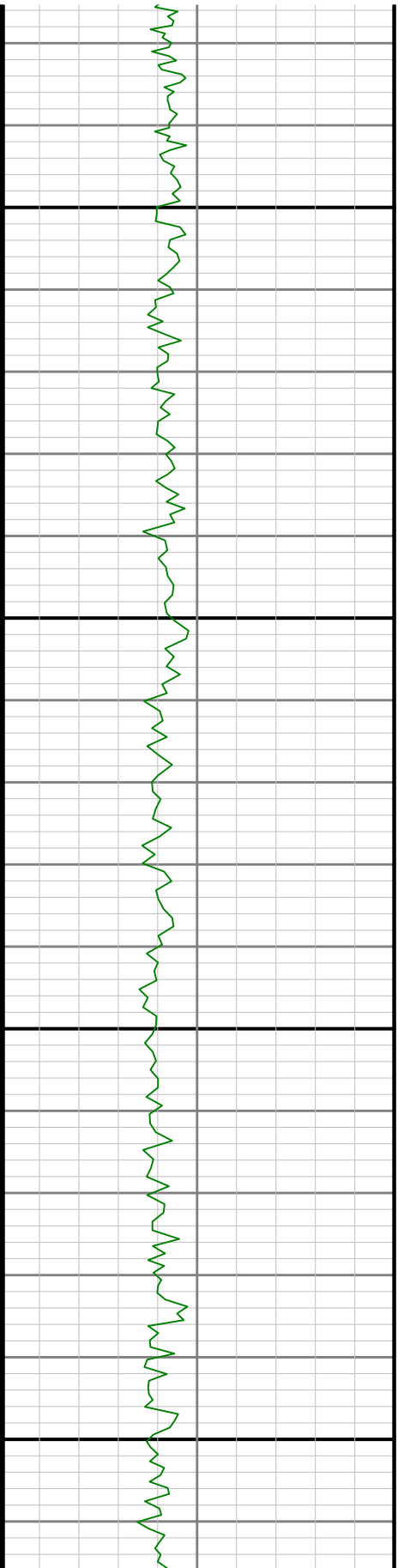
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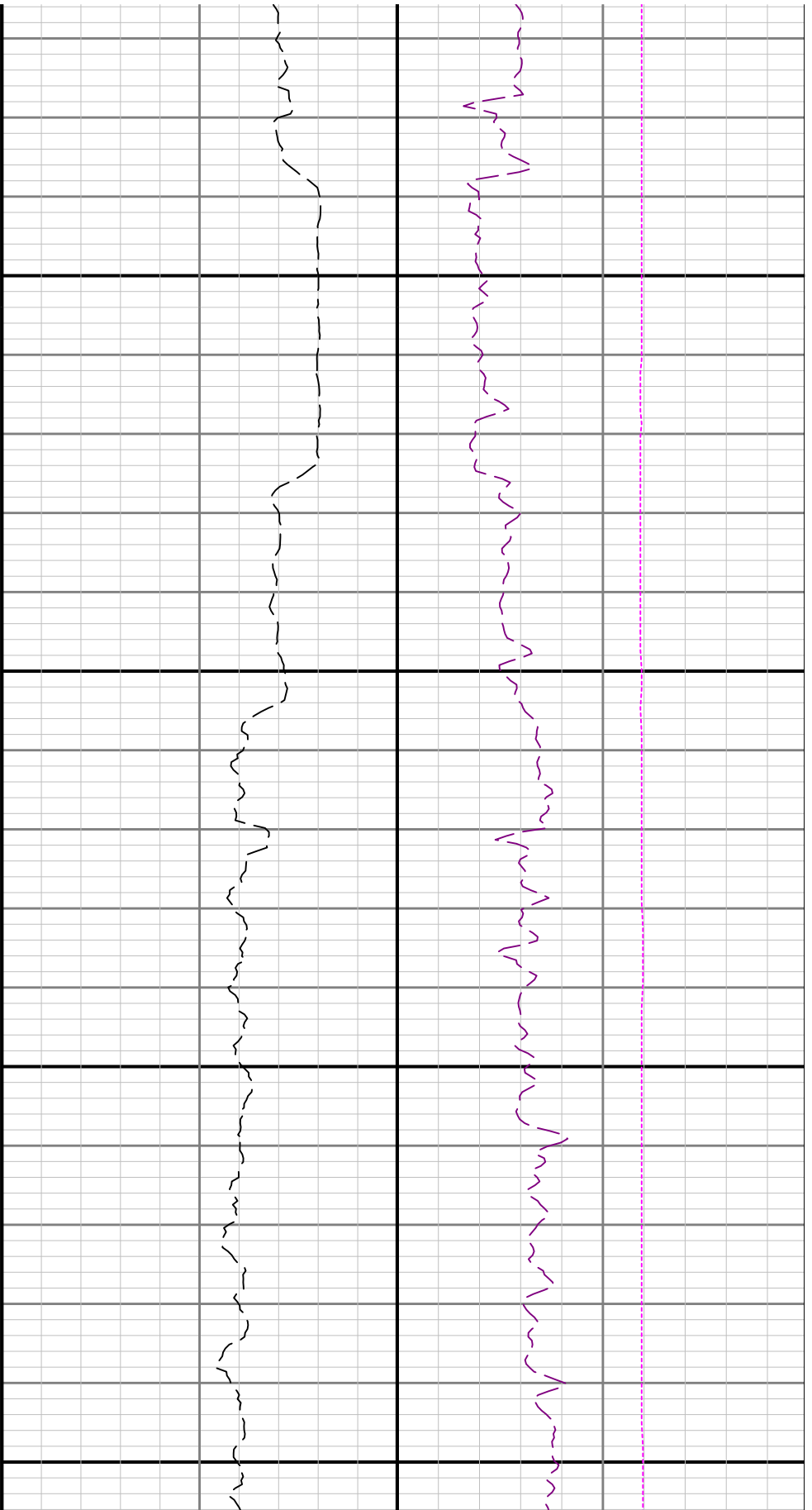




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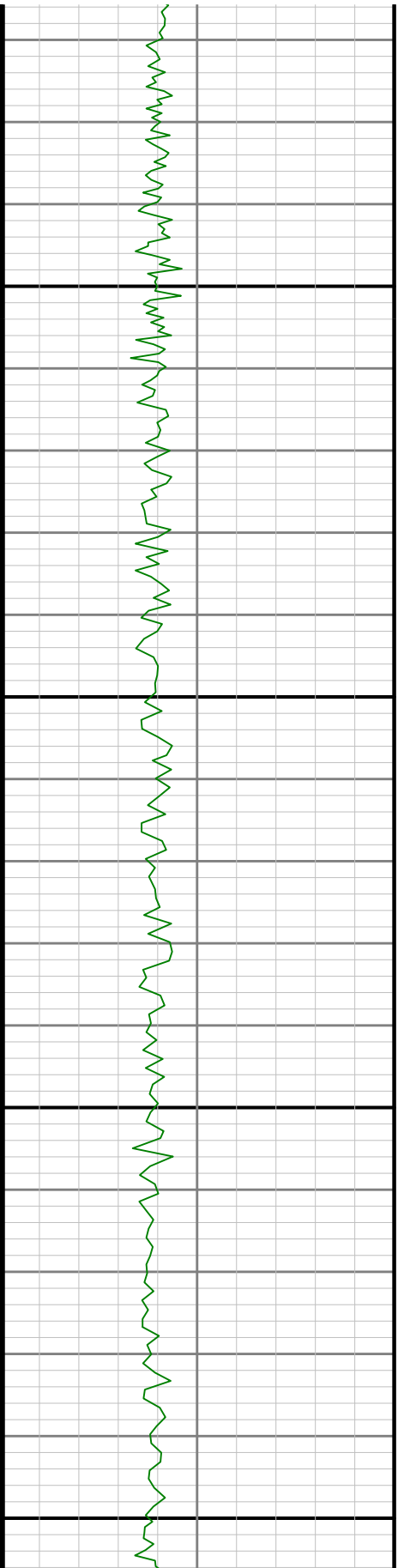
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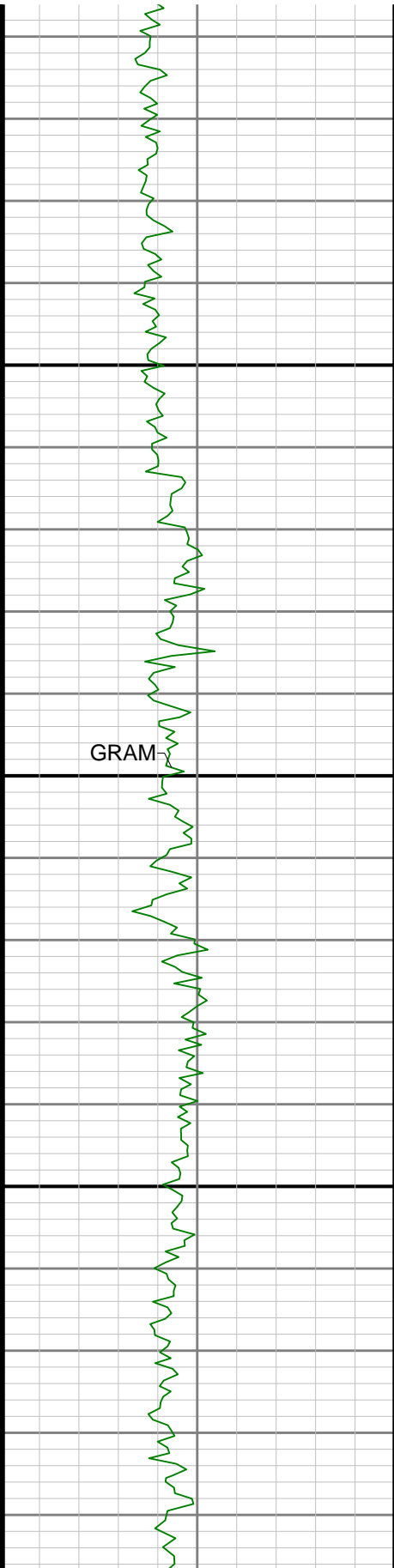




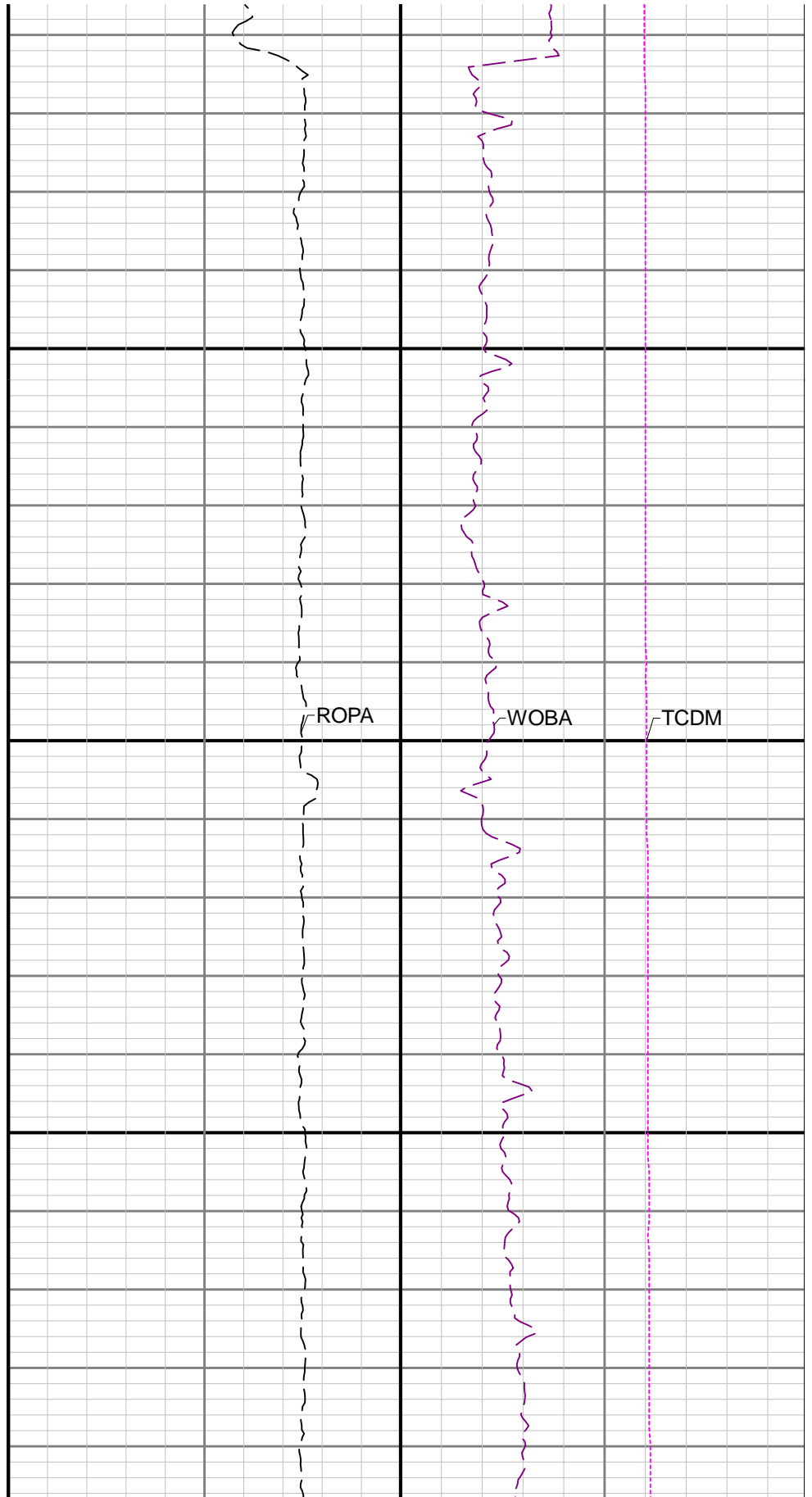
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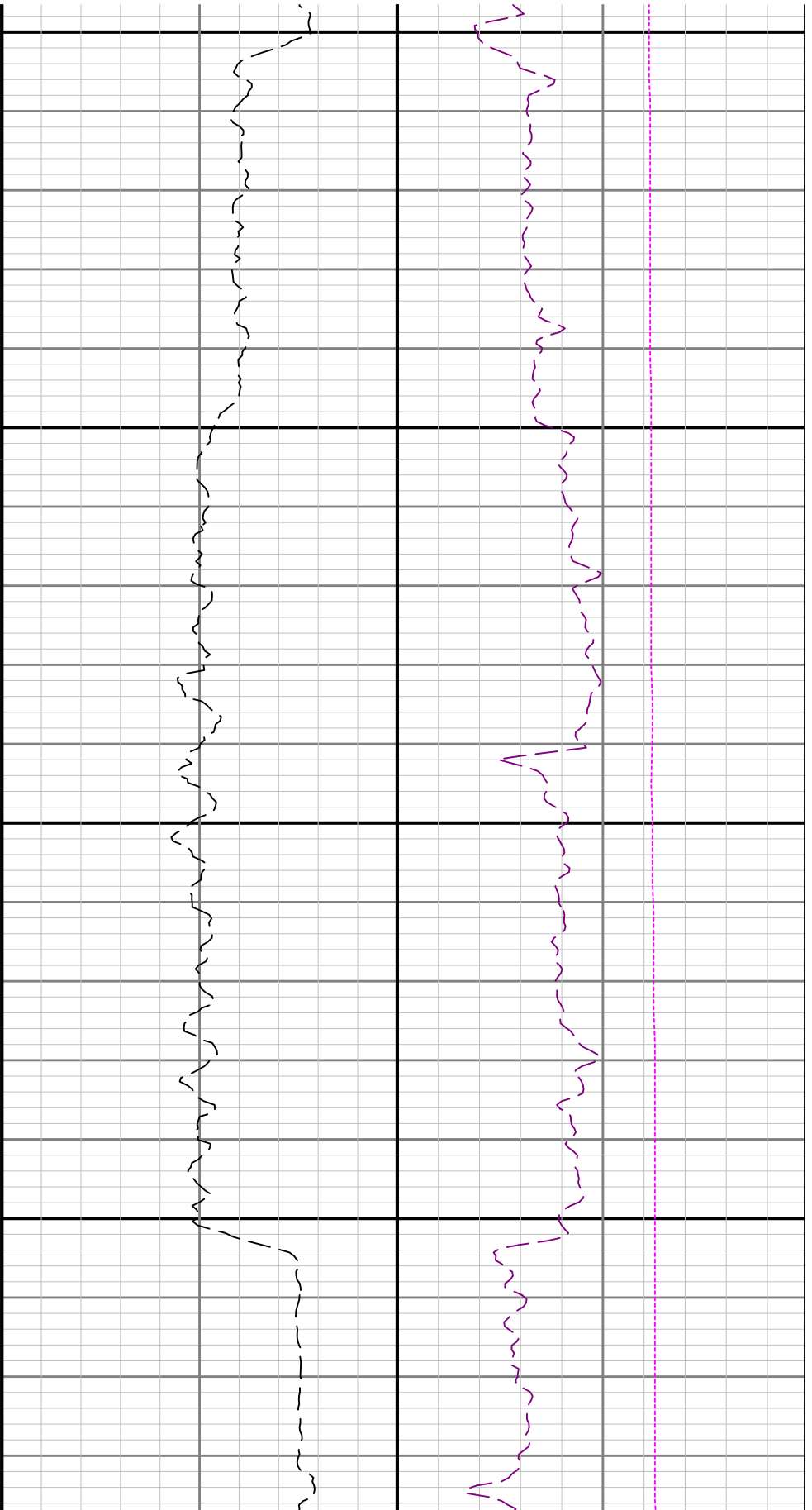




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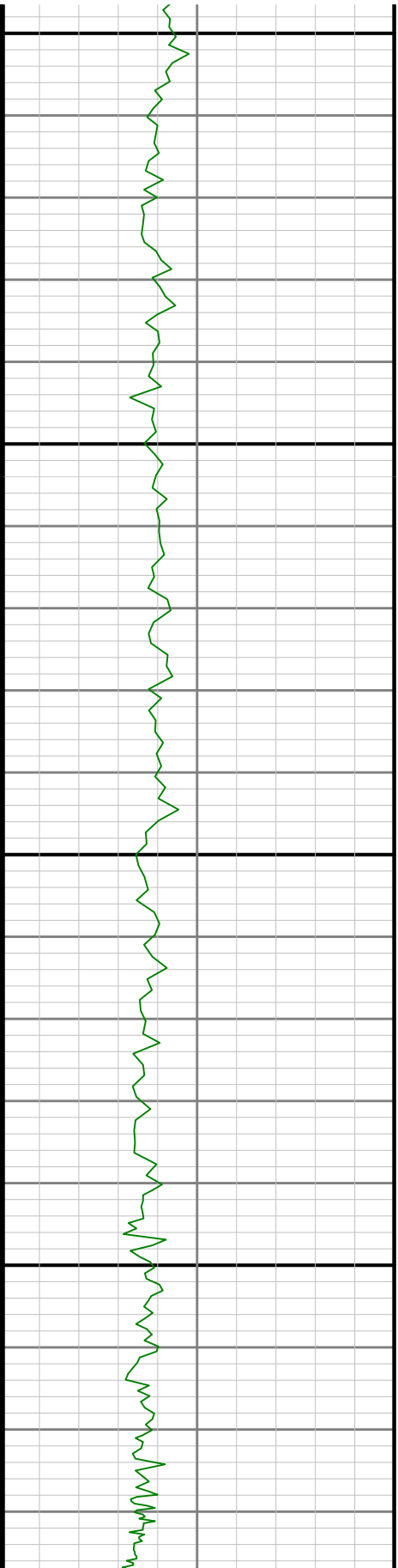


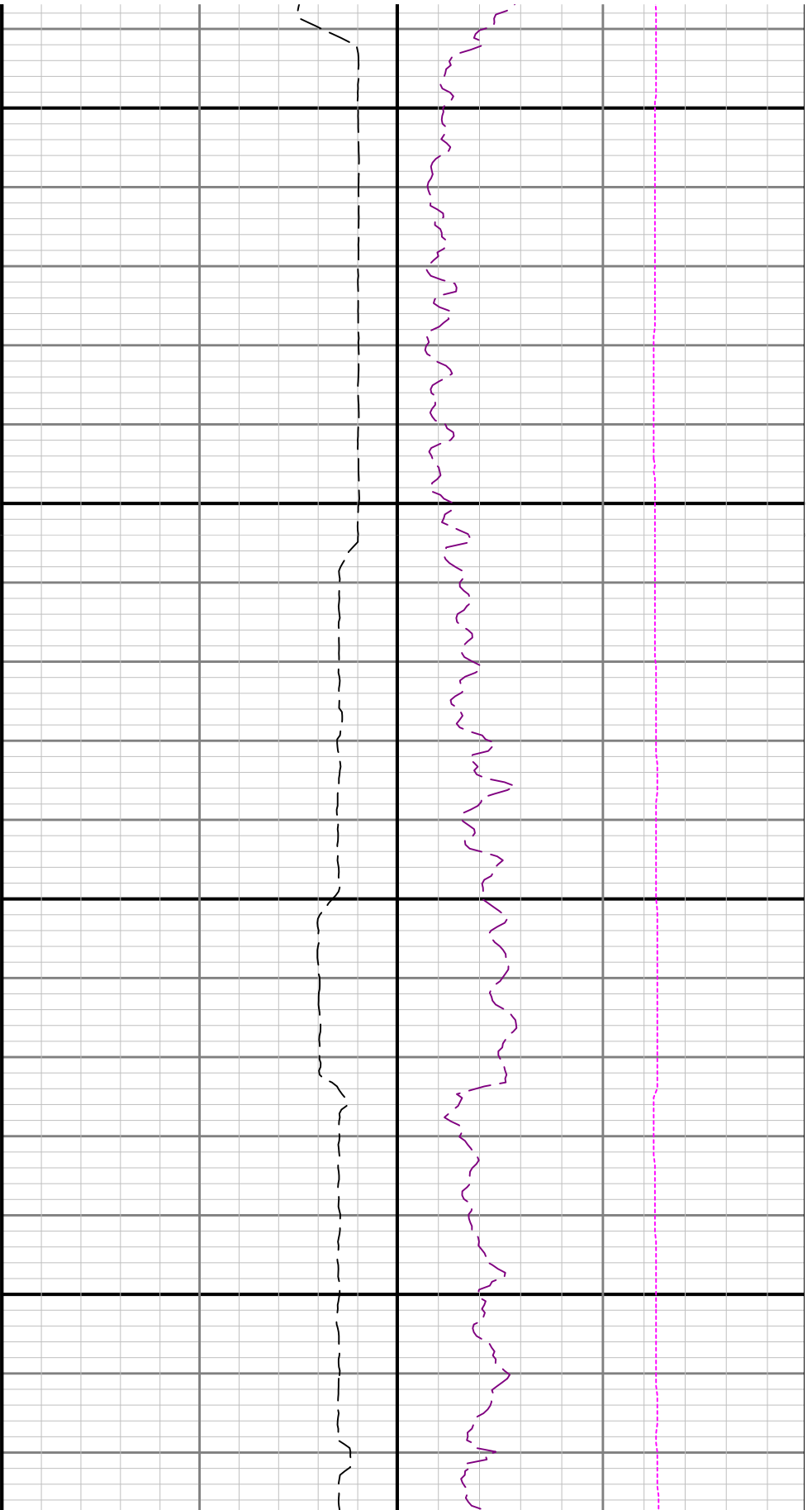




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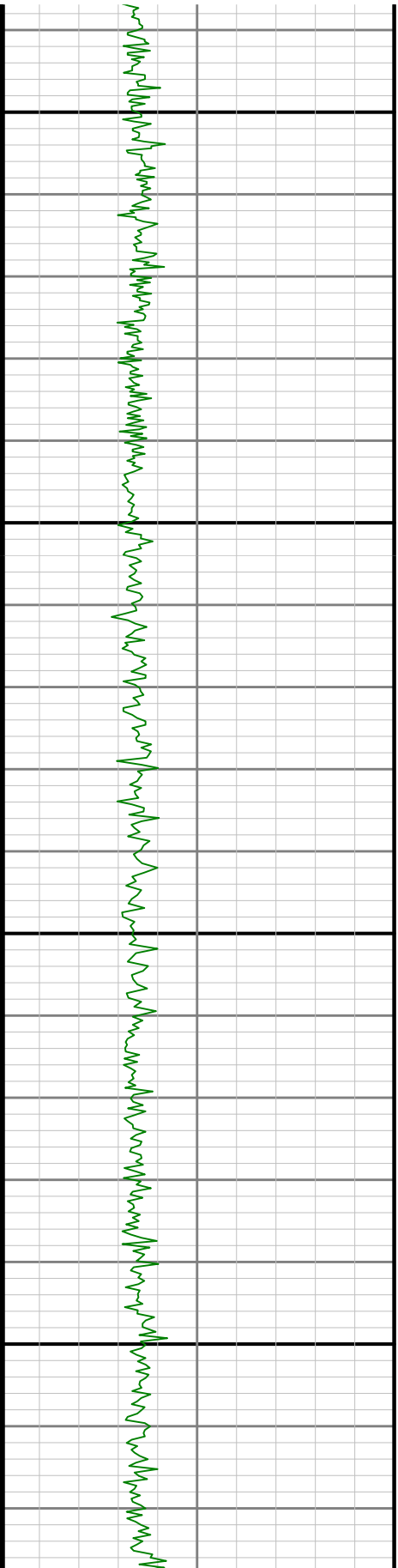
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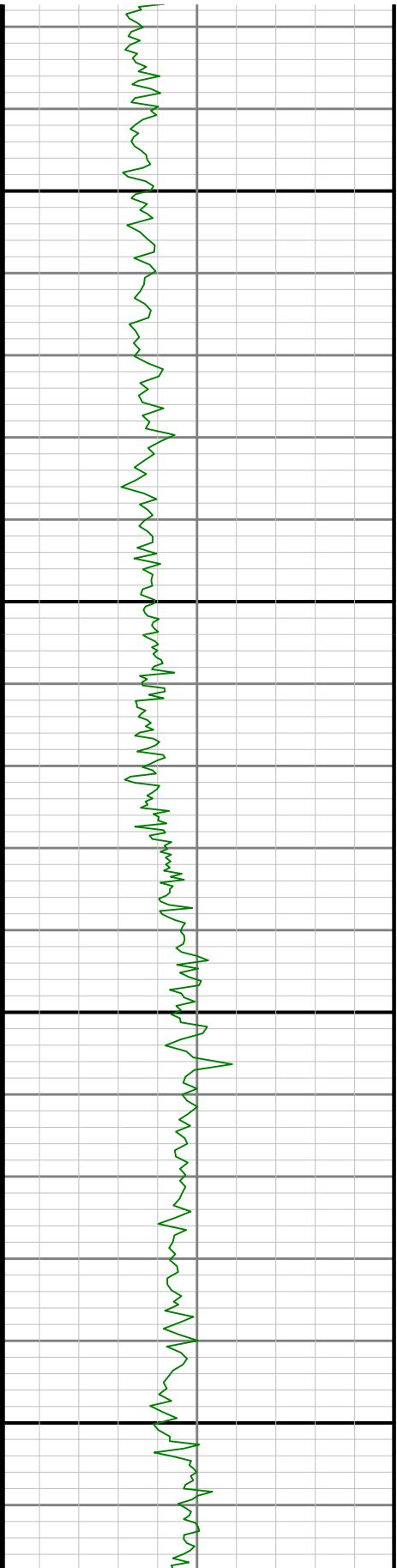




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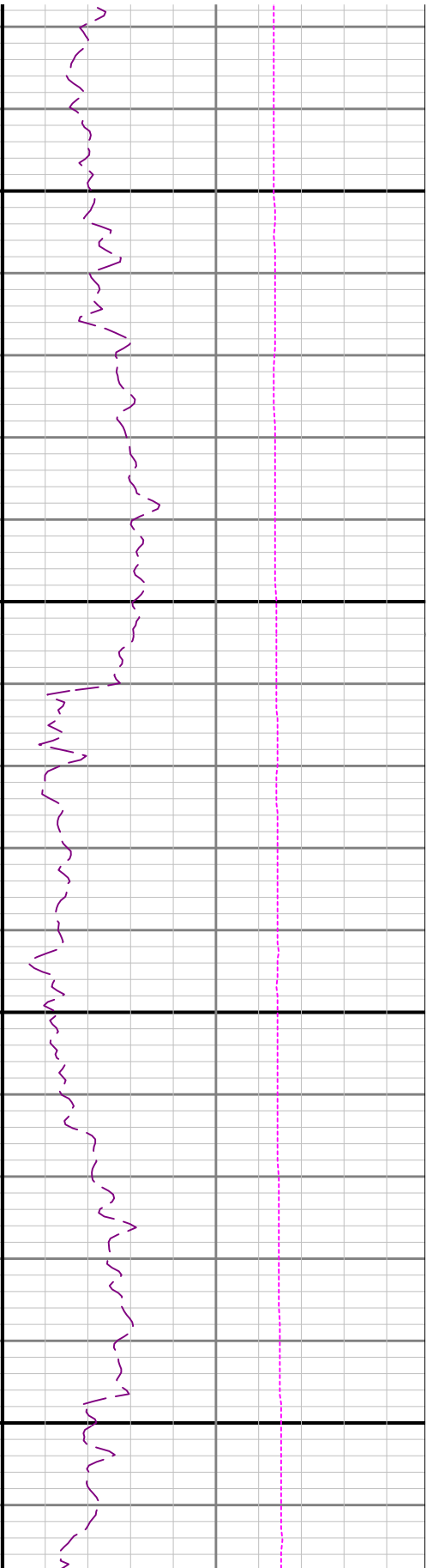
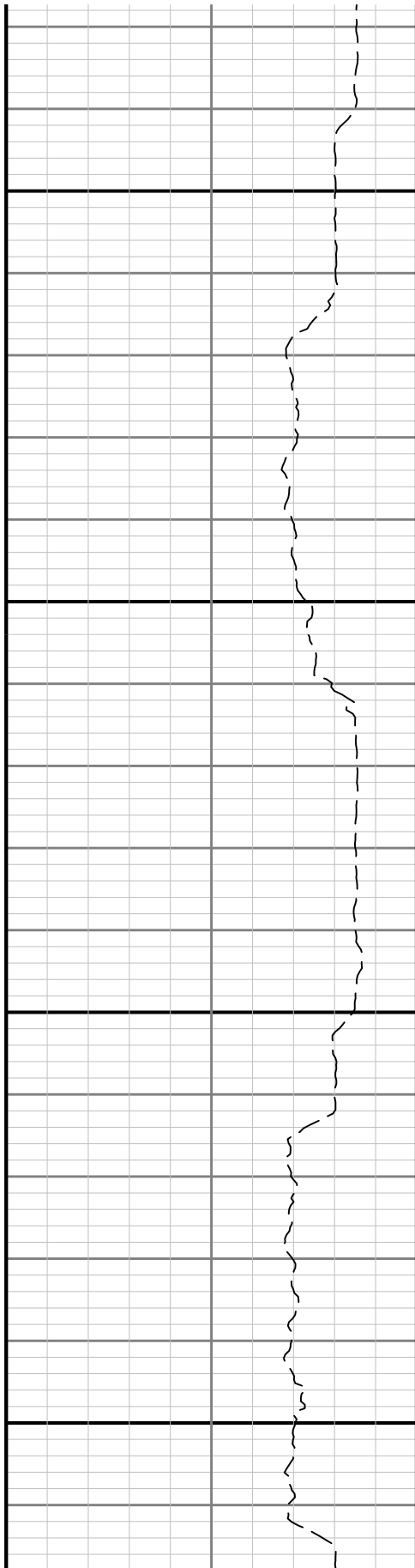
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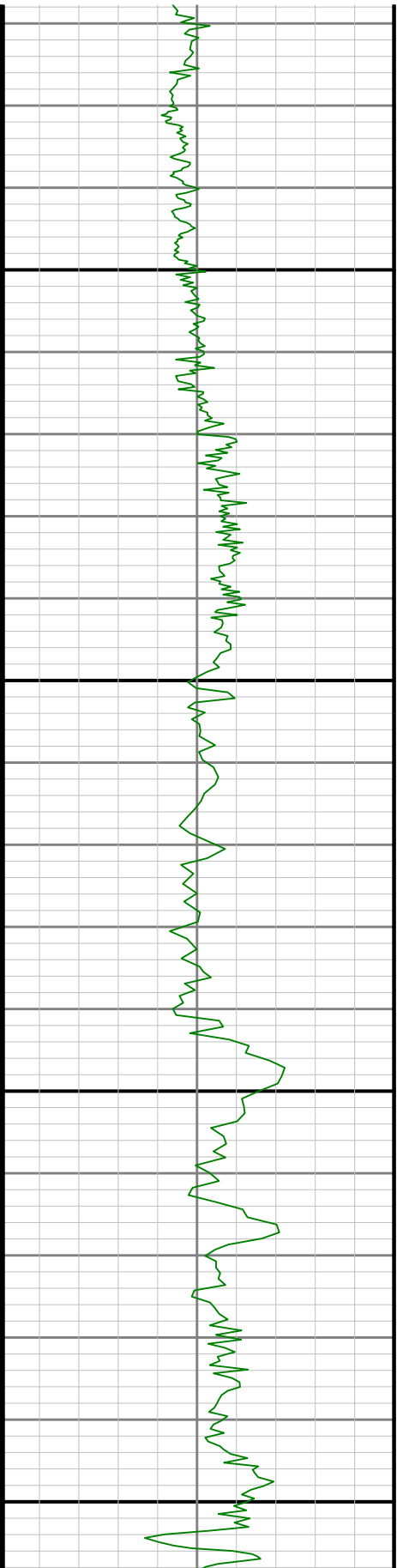




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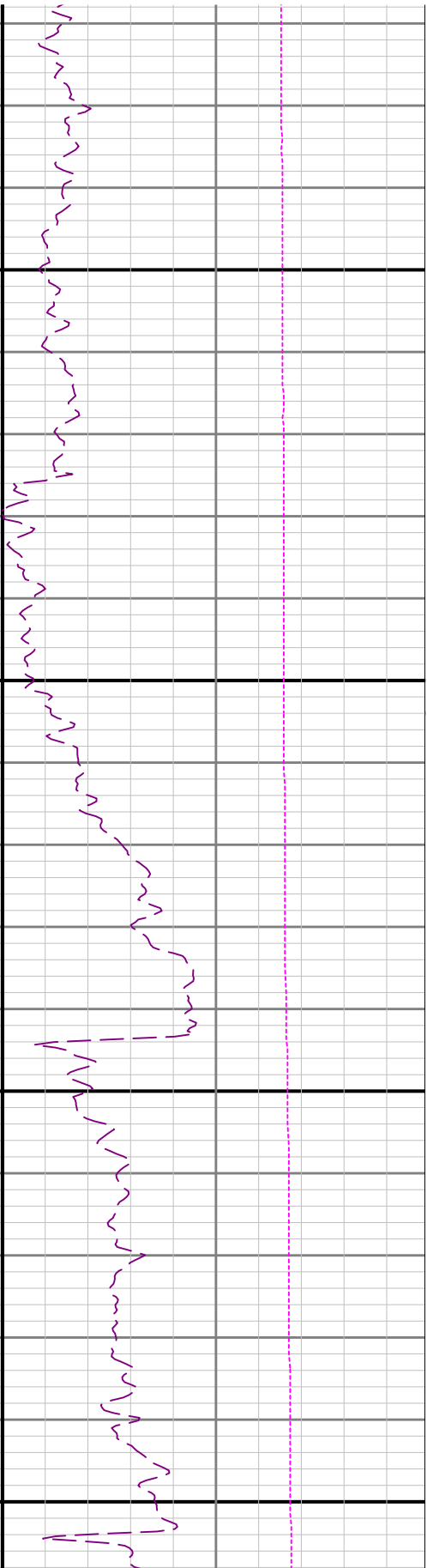
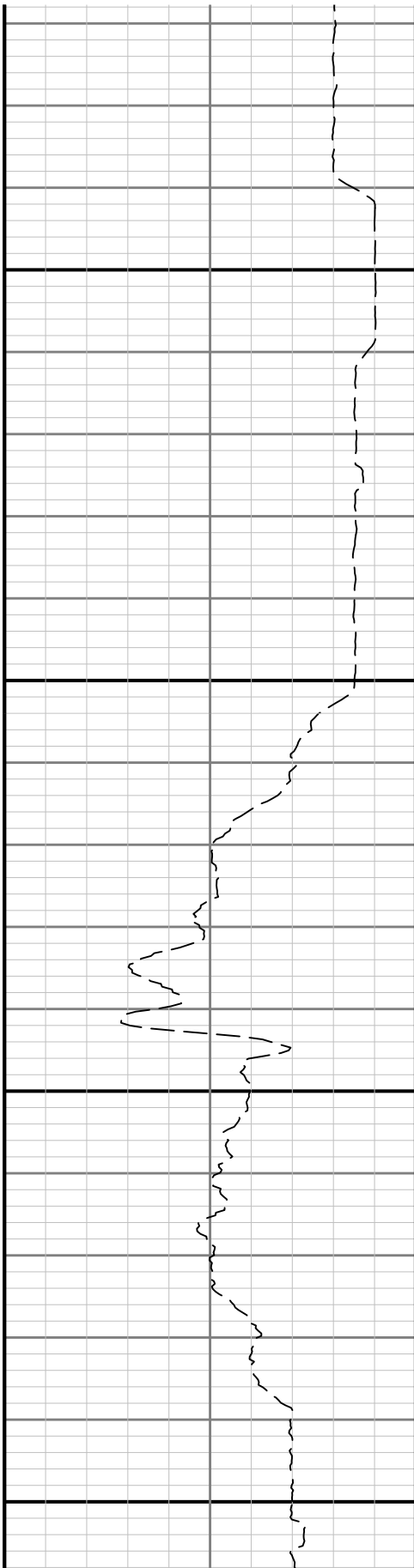
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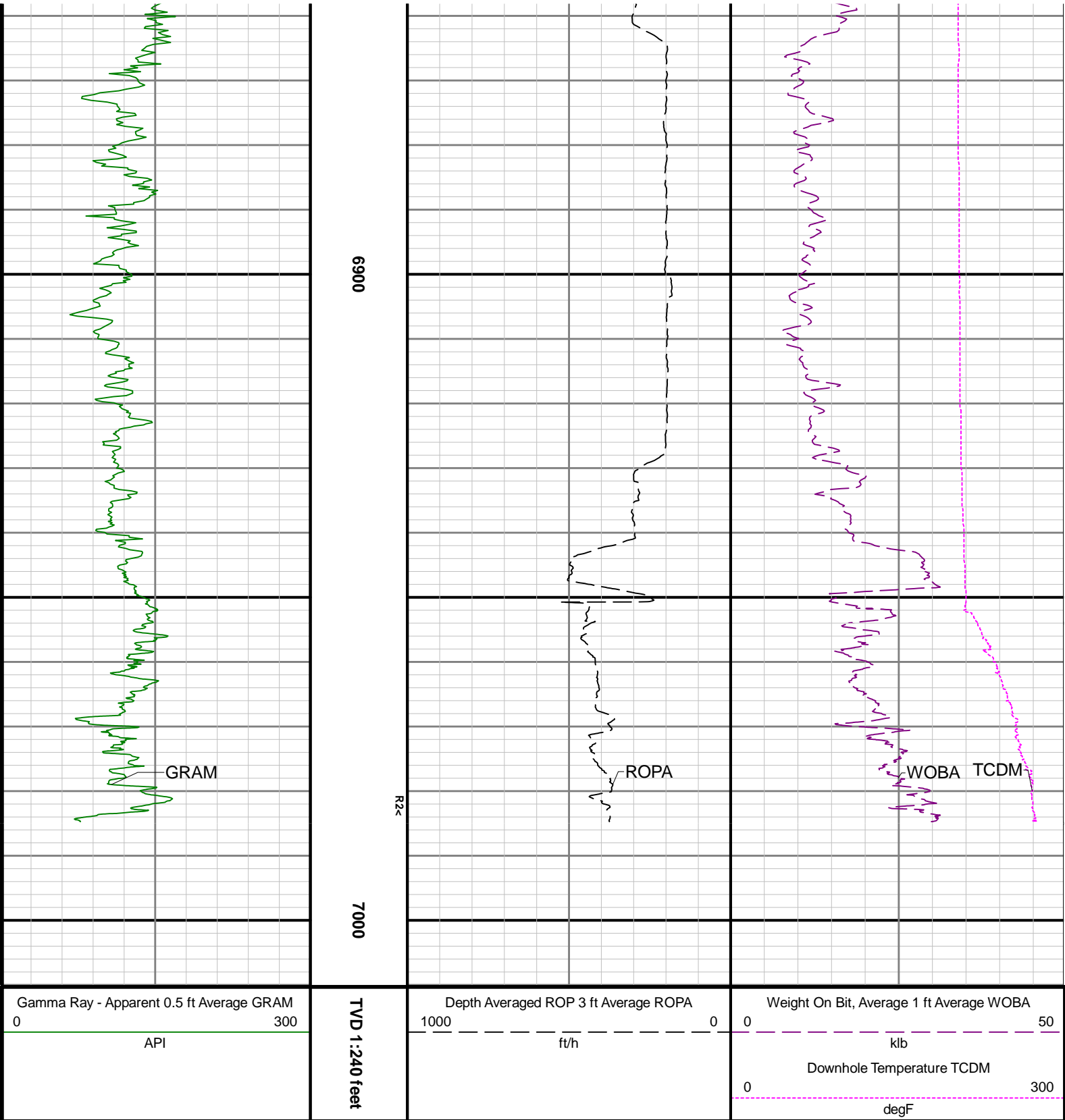




6700

6800





### Directional Survey Summary

Latitude:	040° 11' 49.560" N	Longitude:	104° 38' 08.340" W
North Reference:	Grid	Drill Depth Zero:	Rig Floor
Vertical Datum is:	Ground Level	Vertical Datum to DDZ: (ft)	30.00
Horizontal Datum:	North (ft)	Horizontal Datum:	East (ft)

Vertical Section North: (ft)					Vertical Section East: (ft)					0.00			
Vertical Section Azimuth: (deg)					Magnetic Declination: (deg)					8.11			
Grid Convergence: (deg)					TVD Calculation Method:					Minimum Curvature			
Total Correction: (deg)					Local Magnetic Field: (nT)					52116			
Magnetic Correction:					Local Gravity Field: (m/s2)					9.800			
Local Magnetic Dip Angle: (deg)													
Tie-In / Projection	Measured Depth (ft)	Inclination (deg)	Azimuth (deg)	Temperature (degF)	North (ft)	East (ft)	True Vertical Depth (ft)	TVD Subsea (ft)	Vertical Section (ft)	Course Length (ft)	Dog Leg Severity (deg/100ft)	Build Rate (deg/100ft)	Turn Rate (deg/100ft)
Tie-In	0.00	0.00	0.00	N/A	0.00	0.00	0.00	-4851.00	0.00	0.00	0.00	0.00	0.00
	85.80	0.54	265.73	N/A	-0.03	-0.40	85.80	-4765.20	0.00	85.80	0.63	0.63	-109.87
	181.33	0.59	207.58	N/A	-0.50	-1.08	181.32	-4669.68	-0.40	95.53	0.58	0.05	-60.87
	275.71	0.71	258.93	N/A	-1.04	-1.88	275.70	-4575.30	-0.88	94.38	0.61	0.13	54.41
	370.27	0.76	254.10	N/A	-1.33	-3.06	370.25	-4480.75	-1.06	94.56	0.08	0.05	-5.11
	464.90	0.45	253.90	N/A	-1.60	-4.02	464.88	-4386.12	-1.25	94.63	0.33	-0.33	-0.21
	559.42	0.20	231.96	N/A	-1.81	-4.50	559.39	-4291.61	-1.41	94.52	0.29	-0.26	-23.21
	653.85	0.07	296.28	N/A	-1.88	-4.69	653.82	-4197.18	-1.47	94.43	0.19	-0.14	68.11
	748.40	0.05	55.74	N/A	-1.83	-4.70	748.37	-4102.63	-1.42	94.55	0.11	-0.02	126.35
	843.08	0.20	179.90	N/A	-1.98	-4.67	843.05	-4007.95	-1.57	94.68	0.24	0.16	131.14
	937.60	0.13	240.03	N/A	-2.19	-4.76	937.57	-3913.43	-1.78	94.52	0.19	-0.07	63.62
	1031.57	0.27	213.34	N/A	-2.43	-4.98	1031.54	-3819.46	-1.99	93.97	0.18	0.15	-28.40
	1126.53	0.38	253.88	N/A	-2.71	-5.40	1126.50	-3724.50	-2.23	94.96	0.26	0.12	42.69
	1221.04	0.29	222.49	N/A	-2.97	-5.86	1221.01	-3629.99	-2.45	94.51	0.21	-0.10	-33.21
	1315.31	0.33	214.44	N/A	-3.37	-6.18	1315.28	-3535.72	-2.83	94.27	0.06	0.04	-8.54
	1409.80	0.29	225.81	N/A	-3.76	-6.50	1409.77	-3441.23	-3.19	94.49	0.08	-0.04	12.03
	1505.01	0.24	227.94	N/A	-4.06	-6.82	1504.98	-3346.02	-3.46	95.21	0.05	-0.05	2.24
	1598.98	0.36	263.43	N/A	-4.23	-7.26	1598.95	-3252.05	-3.59	93.97	0.23	0.13	37.77
	1693.51	0.18	283.83	N/A	-4.23	-7.70	1693.47	-3157.53	-3.55	94.53	0.21	-0.19	21.58
	1788.05	0.21	288.98	N/A	-4.13	-8.01	1788.01	-3062.99	-3.43	94.54	0.04	0.03	5.45
	1882.66	0.32	343.23	N/A	-3.83	-8.25	1882.62	-2968.38	-3.10	94.61	0.28	0.12	57.34
Tie-In	1941.20	0.50	345.49	N/A	-3.42	-8.36	1941.16	-2909.84	-2.69	58.54	0.31	0.31	3.86
	1981.00	0.46	325.03	193.3	-3.12	-8.50	1980.96	-2870.04	-2.38	39.80	0.44	-0.10	-51.41
	2075.00	2.39	245.46	131.1	-3.63	-10.50	2074.93	-2776.07	-2.71	94.00	2.50	2.05	-84.65
	2170.00	4.67	242.12	125.7	-6.26	-15.72	2169.74	-2681.26	-4.88	95.00	2.41	2.40	-3.52
	2264.00	8.23	228.56	133.8	-12.50	-24.15	2263.14	-2587.86	-10.38	94.00	4.09	3.79	-14.43
	2359.00	10.37	225.05	133.8	-23.05	-35.30	2356.89	-2494.11	-19.92	95.00	2.33	2.25	-3.69
	2454.00	9.56	230.01	136.5	-34.16	-47.39	2450.45	-2400.55	-29.95	95.00	1.24	-0.85	5.22
	2548.00	9.58	237.38	136.5	-43.39	-59.96	2543.15	-2307.85	-38.07	94.00	1.30	0.02	7.84
	2643.00	10.26	240.09	139.2	-51.87	-73.95	2636.73	-2214.27	-45.31	95.00	0.87	0.72	2.85
	2737.00	10.20	240.29	139.2	-60.17	-88.44	2729.23	-2121.77	-52.33	94.00	0.07	-0.06	0.21
	2832.00	10.39	217.12	141.9	-71.17	-100.92	2822.75	-2028.25	-62.22	95.00	4.33	0.20	-24.39
	2926.00	10.06	196.78	141.9	-85.80	-108.41	2915.28	-1935.72	-76.14	94.00	3.84	-0.35	-21.64
	3020.00	10.11	210.33	141.9	-100.78	-114.95	3007.84	-1843.16	-90.51	94.00	2.52	0.05	14.41
	3115.00	10.08	224.55	144.6	-113.90	-124.99	3101.39	-1749.61	-102.72	95.00	2.62	-0.03	14.97
	3209.00	10.12	234.44	144.6	-124.57	-137.48	3193.94	-1657.06	-112.27	94.00	1.84	0.04	10.52
	3303.00	9.96	236.46	144.6	-133.86	-150.97	3286.50	-1564.50	-120.37	94.00	0.41	-0.17	2.15
	3398.00	9.97	238.23	147.3	-142.73	-164.81	3380.07	-1470.93	-128.01	95.00	0.32	0.01	1.86
	3493.00	9.97	239.78	147.3	-151.20	-178.91	3473.63	-1377.37	-135.23	95.00	0.28	0.00	1.63
	3587.00	10.06	234.69	147.3	-160.04	-192.64	3566.20	-1284.80	-142.86	94.00	0.95	0.10	-5.41
	3682.00	10.06	233.63	150.0	-169.76	-206.09	3659.74	-1191.26	-151.38	95.00	0.19	0.00	-1.12
	3776.00	9.88	232.55	150.0	-179.53	-219.11	3752.32	-1098.68	-160.00	94.00	0.28	-0.19	-1.15
	3871.00	10.21	232.35	152.7	-189.63	-232.24	3845.86	-1005.14	-168.93	95.00	0.35	0.35	-0.21
	3965.00	10.22	221.24	152.7	-200.99	-244.34	3938.38	-912.62	-179.20	94.00	2.09	0.01	-11.82
	4059.00	9.96	210.46	152.7	-214.27	-253.96	4030.94	-820.06	-191.61	94.00	2.03	-0.28	-11.47
	4154.00	10.00	223.41	155.4	-227.35	-263.79	4124.51	-726.49	-203.79	95.00	2.36	0.04	13.63
	4248.00	10.12	230.46	155.4	-238.53	-275.77	4217.07	-633.93	-213.90	94.00	1.32	0.13	7.50
	4343.00	10.00	213.64	158.1	-250.72	-286.78	4310.63	-540.37	-225.09	95.00	3.08	-0.13	-17.71
	4437.00	10.09	219.56	160.8	-263.86	-296.54	4403.19	-447.81	-237.34	94.00	1.10	0.10	6.30
	4532.00	10.17	210.60	160.8	-277.50	-306.11	4496.72	-354.28	-250.10	95.00	1.66	0.08	-9.43
	4626.00	10.31	189.38	160.8	-292.94	-311.71	4589.25	-261.75	-265.01	94.00	3.99	0.15	-22.57
	4721.00	9.61	169.02	160.8	-309.12	-311.59	4682.85	-168.15	-281.14	95.00	3.76	-0.74	-21.43
	4815.00	9.92	182.18	160.8	-324.92	-310.40	4775.50	-75.50	-296.98	94.00	2.39	0.33	14.00
	4910.00	9.82	187.48	163.5	-341.13	-311.77	4869.09	18.09	-313.01	95.00	0.96	-0.11	5.58

	5005.00	7.50	197.26	163.5	-355.08	-314.66	4963.01	112.01	-326.67	95.00	2.88	-2.44	10.29
	5099.00	10.66	208.88	166.2	-368.56	-320.68	5055.83	204.83	-339.57	94.00	3.87	3.36	12.36
	5194.00	11.94	221.54	168.9	-383.61	-331.44	5149.00	298.00	-353.64	95.00	2.93	1.35	13.33
	5289.00	12.00	233.42	168.9	-396.85	-345.89	5241.95	390.95	-365.59	95.00	2.59	0.06	12.51
	5383.00	11.96	248.09	171.6	-406.31	-362.78	5333.92	482.92	-373.56	94.00	3.23	-0.04	15.61
	5478.00	9.84	257.28	174.3	-411.77	-379.84	5427.21	576.21	-377.54	95.00	2.88	-2.23	9.67
	5572.00	11.73	258.28	174.3	-415.48	-397.03	5519.55	668.55	-379.75	94.00	2.02	2.01	1.06
	5667.00	10.86	251.39	174.3	-420.30	-414.97	5612.71	761.71	-383.01	95.00	1.69	-0.92	-7.25
	5761.00	11.00	248.87	177.0	-426.36	-431.72	5705.00	854.00	-387.60	94.00	0.53	0.15	-2.68
	5856.00	11.06	240.36	177.0	-434.14	-448.10	5798.26	947.26	-393.94	95.00	1.71	0.06	-8.96
	5951.00	10.86	242.56	179.7	-442.77	-463.96	5891.52	1040.52	-401.17	95.00	0.49	-0.21	2.32
	6045.00	11.03	237.46	179.7	-451.68	-479.40	5983.82	1132.82	-408.72	94.00	1.05	0.18	-5.43
	6140.00	10.95	228.60	182.5	-462.54	-493.83	6077.08	1226.08	-418.30	95.00	1.78	-0.08	-9.33
	6234.00	10.89	225.11	185.2	-474.71	-506.82	6169.38	1318.38	-429.30	94.00	0.71	-0.06	-3.71
	6329.00	11.11	226.64	187.9	-487.33	-519.83	6262.63	1411.63	-440.75	95.00	0.38	0.23	1.61
	6423.00	7.73	288.29	187.9	-491.57	-532.45	6355.56	1504.56	-443.90	94.00	10.69	-3.60	65.59
	6517.00	11.40	342.01	187.9	-480.73	-541.34	6448.41	1597.41	-432.33	94.00	9.80	3.90	57.15
	6612.00	18.58	350.44	190.6	-456.84	-546.76	6540.13	1689.13	-408.06	95.00	7.88	7.56	8.87
	6707.00	27.30	356.42	193.3	-420.10	-550.64	6627.54	1776.54	-371.12	95.00	9.49	9.18	6.29
	6801.00	35.61	2.45	198.7	-371.14	-550.82	6707.68	1856.68	-322.33	94.00	9.44	8.84	6.41
	6895.00	46.59	359.56	198.7	-309.47	-549.91	6778.41	1927.41	-260.96	94.00	11.85	11.68	-3.07
	6990.00	51.90	2.03	201.4	-237.55	-548.85	6840.41	1989.41	-189.40	95.00	5.93	5.59	2.60
	7085.00	62.42	356.42	204.1	-157.90	-550.16	6891.89	2040.89	-109.94	95.00	12.13	11.07	-5.91
	7179.00	73.20	349.22	204.1	-71.77	-561.22	6927.38	2076.38	-23.18	94.00	13.48	11.47	-7.66
	7274.00	83.34	351.32	209.5	19.79	-576.89	6946.67	2095.67	69.39	95.00	10.89	10.67	2.21
	7368.00	89.91	352.75	209.5	112.66	-589.88	6952.20	2101.20	163.04	94.00	7.15	6.99	1.52
	7463.00	89.94	353.96	393.3	207.02	-600.87	6952.32	2101.32	258.00	95.00	1.27	0.03	1.27
	7557.00	89.94	357.22	214.9	300.73	-608.10	6952.42	2101.42	351.98	94.00	3.47	0.00	3.47
	7652.00	89.66	0.12	214.9	395.70	-610.31	6952.75	2101.75	446.78	95.00	3.07	-0.29	3.05
	7747.00	89.63	359.48	217.6	490.69	-610.64	6953.34	2102.34	541.46	95.00	0.67	-0.03	-0.67
	7841.00	89.69	358.57	220.3	584.68	-612.24	6953.90	2102.90	635.23	94.00	0.97	0.06	-0.97
	7936.00	89.69	358.64	220.3	679.65	-614.55	6954.41	2103.41	730.04	95.00	0.07	0.00	0.07
	8031.00	89.45	358.91	223.0	774.62	-616.58	6955.13	2104.13	824.84	95.00	0.38	-0.25	0.28
	8125.00	89.42	359.60	223.0	868.61	-617.80	6956.05	2105.05	918.58	94.00	0.73	-0.03	0.73
	8220.00	90.03	359.94	225.7	963.61	-618.18	6956.51	2105.51	1013.26	95.00	0.74	0.64	0.36
	8314.00	89.75	0.05	228.4	1057.61	-618.19	6956.69	2105.69	1106.91	94.00	0.32	-0.30	0.12
	8408.00	89.69	359.53	228.4	1151.61	-618.54	6957.15	2106.15	1200.59	94.00	0.56	-0.06	-0.55
	8503.00	89.88	0.20	231.1	1246.60	-618.76	6957.51	2106.51	1295.26	95.00	0.73	0.20	0.71
	8597.00	89.82	0.09	231.1	1340.60	-618.52	6957.75	2106.75	1388.89	94.00	0.13	-0.06	-0.12
	8692.00	89.78	358.92	223.0	1435.60	-619.34	6958.08	2107.08	1483.60	95.00	1.23	-0.04	-1.23
	8787.00	89.69	357.91	228.4	1530.56	-621.97	6958.52	2107.52	1578.43	95.00	1.07	-0.09	-1.06
	8881.00	89.78	357.58	228.4	1624.49	-625.67	6958.96	2107.96	1672.33	94.00	0.36	0.10	-0.35
	8976.00	90.03	356.99	231.1	1719.38	-630.17	6959.11	2108.11	1767.26	95.00	0.67	0.26	-0.62
	9070.00	89.91	357.05	233.8	1813.25	-635.06	6959.16	2108.16	1861.20	94.00	0.14	-0.13	0.06
	9165.00	89.54	357.36	233.8	1908.14	-639.69	6959.62	2108.62	1956.13	95.00	0.51	-0.39	0.33
	9259.00	89.94	357.45	236.5	2002.04	-643.94	6960.05	2109.05	2050.05	94.00	0.44	0.43	0.10
	9354.00	89.72	358.39	236.5	2096.98	-647.39	6960.33	2109.33	2144.93	95.00	1.02	-0.23	0.99
	9448.00	89.66	359.28	236.5	2190.95	-649.30	6960.84	2109.84	2238.73	94.00	0.95	-0.06	0.95
	9543.00	89.88	359.67	239.2	2285.95	-650.17	6961.22	2110.22	2333.45	95.00	0.47	0.23	0.41
	9637.00	89.72	359.16	239.2	2379.94	-651.13	6961.55	2110.55	2427.17	94.00	0.57	-0.17	-0.54
	9732.00	89.78	359.20	239.2	2474.93	-652.49	6961.96	2110.96	2521.93	95.00	0.08	0.06	0.04
	9826.00	89.72	358.60	241.9	2568.91	-654.30	6962.37	2111.37	2615.71	94.00	0.64	-0.06	-0.64
	9920.00	89.72	358.45	241.9	2662.88	-656.72	6962.83	2111.83	2709.54	94.00	0.16	0.00	-0.16
	10015.00	89.72	357.81	241.9	2757.83	-659.82	6963.29	2112.29	2804.40	95.00	0.67	0.00	-0.67
	10110.00	89.78	357.33	244.6	2852.74	-663.85	6963.71	2112.71	2899.31	95.00	0.51	0.06	-0.51
	10204.00	89.85	357.16	241.9	2946.63	-668.36	6964.01	2113.01	2993.24	94.00	0.20	0.07	-0.18
	10299.00	89.82	358.40	244.6	3041.56	-672.04	6964.29	2113.29	3088.13	95.00	1.31	-0.03	1.31
	10393.00	89.78	359.00	244.6	3135.53	-674.18	6964.61	2113.61	3181.94	94.00	0.64	-0.04	0.64
	10488.00	89.72	359.73	247.3	3230.53	-675.23	6965.03	2114.03	3276.67	95.00	0.77	-0.06	0.77
	10583.00	89.85	0.23	247.3	3325.53	-675.26	6965.39	2114.39	3371.32	95.00	0.54	0.14	0.53
	10677.00	89.75	0.22	247.3	3419.52	-674.89	6965.71	2114.71	3464.94	94.00	0.11	-0.11	-0.01
	10772.00	89.91	0.44	247.3	3514.52	-674.35	6966.00	2115.00	3559.54	95.00	0.29	0.17	0.23
	10867.00	89.69	0.66	250.0	3609.52	-673.43	6966.33	2115.33	3654.10	95.00	0.33	-0.23	0.23
	10961.00	89.82	0.69	250.0	3703.51	-672.33	6966.73	2115.73	3747.65	94.00	0.14	0.14	0.03

	10057.00	89.82	0.55	255.9	3798.49	-670.66	6967.11	2116.11	3842.12	95.00	0.92	-0.11	0.92
	11056.00	89.72	1.55	250.0	3892.45	-667.91	6967.57	2116.57	3935.51	94.00	0.01	0.00	-0.01
	11245.00	89.78	0.79	250.0	3987.43	-665.97	6967.98	2116.98	4029.97	95.00	0.80	0.06	-0.80
	11339.00	89.75	359.64	250.0	4081.43	-665.62	6968.37	2117.37	4123.59	94.00	1.22	-0.03	-1.22
	11434.00	89.91	359.14	252.7	4176.42	-666.63	6968.65	2117.65	4218.32	95.00	0.55	0.17	-0.53
	11529.00	89.91	357.13	252.7	4271.37	-669.72	6968.80	2117.80	4313.17	95.00	2.12	0.00	-2.12
	11624.00	89.88	354.84	255.4	4366.13	-676.37	6968.98	2117.98	4408.15	95.00	2.41	-0.03	-2.41
	11718.00	89.72	355.47	255.4	4459.79	-684.31	6969.30	2118.30	4502.15	94.00	0.69	-0.17	0.67
	11812.00	89.78	356.84	255.4	4553.58	-690.61	6969.71	2118.71	4596.13	94.00	1.46	0.06	1.46
	11907.00	89.45	358.82	255.4	4648.50	-694.21	6970.35	2119.35	4691.01	95.00	2.11	-0.35	2.08
	12001.00	89.82	1.64	255.4	4742.49	-693.83	6970.95	2119.95	4784.62	94.00	3.03	0.39	3.00
	12096.00	89.78	3.41	255.4	4837.39	-689.65	6971.28	2120.28	4878.81	95.00	1.86	-0.04	1.86
	12191.00	89.75	2.66	252.7	4932.26	-684.62	6971.67	2120.67	4972.89	95.00	0.79	-0.03	-0.79
	12285.00	89.78	0.00	255.4	5026.22	-682.44	6972.06	2121.06	5066.32	94.00	2.83	0.03	-2.83
	12380.00	89.78	359.06	255.4	5121.22	-683.22	6972.42	2121.42	5161.03	95.00	0.99	0.00	-0.99
	12474.00	89.78	358.49	258.1	5215.20	-685.23	6972.78	2121.78	5254.83	94.00	0.61	0.00	-0.61
	12569.00	89.85	358.40	258.1	5310.16	-687.80	6973.09	2122.09	5349.66	95.00	0.12	0.07	-0.09
	12664.00	89.75	358.40	258.1	5405.12	-690.46	6973.42	2122.42	5444.50	95.00	0.11	-0.11	0.00
	12759.00	89.75	358.36	258.1	5500.08	-693.14	6973.84	2122.84	5539.34	95.00	0.04	0.00	-0.04
	12853.00	89.75	358.08	258.1	5594.04	-696.06	6974.25	2123.25	5633.20	94.00	0.30	0.00	-0.30
	12948.00	89.72	358.62	258.1	5689.00	-698.80	6974.69	2123.69	5728.04	95.00	0.57	-0.03	0.57
	13042.00	89.82	358.19	260.8	5782.96	-701.41	6975.06	2124.06	5821.88	94.00	0.47	0.11	-0.46
	13137.00	89.85	357.05	260.8	5877.88	-705.36	6975.34	2124.34	5916.78	95.00	1.20	0.03	-1.20
	13231.00	89.54	358.54	263.5	5971.80	-708.98	6975.84	2124.84	6010.67	94.00	1.62	-0.33	1.59
	13326.00	89.82	2.49	263.5	6066.78	-708.12	6976.37	2125.37	6105.22	95.00	4.17	0.29	4.16
	13420.00	89.82	3.51	263.5	6160.65	-703.20	6976.66	2125.66	6198.32	94.00	1.09	0.00	1.09
	13515.00	90.06	2.02	263.5	6255.53	-698.62	6976.76	2125.76	6292.46	95.00	1.59	0.25	-1.57
	13609.00	89.94	359.39	266.2	6349.52	-697.46	6976.76	2125.76	6385.99	94.00	2.80	-0.13	-2.80
	13703.00	90.40	356.77	266.2	6443.46	-700.61	6976.48	2125.48	6479.85	94.00	2.83	0.49	-2.79
	13798.00	89.66	357.52	266.2	6538.34	-705.34	6976.43	2125.43	6574.79	95.00	1.11	-0.78	0.79
	13893.00	89.75	358.77	269.0	6633.28	-708.42	6976.92	2125.92	6669.65	95.00	1.32	0.09	1.32
	13987.00	89.72	356.61	269.0	6727.20	-712.21	6977.36	2126.36	6763.54	94.00	2.30	-0.03	-2.30
	14082.00	89.66	355.96	266.2	6822.00	-718.36	6977.87	2126.87	6858.52	95.00	0.69	-0.06	-0.68
	14176.00	89.88	354.96	269.0	6915.70	-725.80	6978.25	2127.25	6952.52	94.00	1.09	0.23	-1.06
	14271.00	89.78	352.07	269.0	7010.09	-736.53	6978.53	2127.53	7047.47	95.00	3.04	-0.11	-3.04
	14366.00	89.66	353.92	269.0	7104.37	-748.12	6979.00	2128.00	7142.40	95.00	1.95	-0.13	1.95
	14460.00	89.38	355.64	269.0	7197.97	-756.67	6979.78	2128.78	7236.40	94.00	1.85	-0.30	1.83
	14555.00	88.21	359.13	269.0	7292.84	-761.00	6981.78	2130.78	7331.28	95.00	3.87	-1.23	3.67
	14650.00	90.06	2.79	269.0	7387.79	-759.41	6983.22	2132.22	7425.75	95.00	4.32	1.95	3.85
	14744.00	89.82	3.35	271.7	7481.66	-754.38	6983.31	2132.31	7518.83	94.00	0.65	-0.26	0.60
	14838.00	89.63	2.28	271.7	7575.54	-749.76	6983.77	2132.77	7611.97	94.00	1.16	-0.20	-1.14
	14933.00	89.85	1.54	271.7	7670.49	-746.59	6984.20	2133.20	7706.29	95.00	0.81	0.23	-0.78
	15028.00	89.78	359.85	271.7	7765.48	-745.44	6984.50	2133.50	7800.82	95.00	1.78	-0.07	-1.78
	15122.00	90.06	357.71	271.7	7859.45	-747.44	6984.63	2133.63	7894.62	94.00	2.30	0.30	-2.28
	15217.00	90.00	357.01	271.7	7954.35	-751.82	6984.59	2133.59	7989.54	95.00	0.74	-0.06	-0.74
	15312.00	89.91	357.99	271.7	8049.26	-755.96	6984.66	2133.66	8084.45	95.00	1.04	-0.09	1.03
	15406.00	90.00	358.09	274.4	8143.20	-759.18	6984.73	2133.73	8178.33	94.00	0.14	0.10	0.11
	15500.00	90.12	359.09	274.4	8237.17	-761.49	6984.64	2133.64	8272.15	94.00	1.07	0.13	1.06
	15690.00	89.94	0.57	274.4	8427.17	-762.05	6984.54	2133.54	8461.48	190.00	0.78	-0.09	0.78
	15784.00	89.91	0.39	274.4	8521.16	-761.27	6984.66	2133.66	8555.06	94.00	0.19	-0.03	-0.19
	15879.00	90.52	0.79	277.1	8616.16	-760.29	6984.30	2133.30	8649.62	95.00	0.77	0.64	0.42
	15973.00	90.09	0.05	279.8	8710.15	-759.60	6983.80	2132.80	8743.21	94.00	0.91	-0.46	-0.79
	16051.00	89.94	0.18	279.8	8788.15	-759.44	6983.78	2132.78	8820.90	78.00	0.25	-0.19	0.17
Projection	16075.00	89.94	0.18	N/A	8812.15	-759.37	6983.81	2132.81	8844.81	24.00	0.00	0.00	0.00