

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+ (%)
2019-03-08 13:00	1	1959.00	Oil Based Mud	9.0	11	N/A	17.8	74/17	Active Pit	21380	0.00
2019-03-09 02:00	1	4958.00	Oil Based Mud	9.0	13	N/A	13.6	71/20	Active Pit	23324	0.00
2019-03-10 04:00	1	11769.00	Oil Based Mud	9.5	14	N/A	15.0	72/16	Active Pit	22352	0.00
2019-03-10 15:00	1	15011.00	Oil Based Mud	9.5	16	N/A	16.0	72/16	Active Pit	21380	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	AutoTrak Curve Steering Unit	11994997	Near Bit Inclination	5.93	6.73	7.000	4.330
1	AutoTrak Curve Steering Unit	11994997	Near Bit VSS	5.93	6.73	7.000	4.330
1	AutoTrak Curve MWD	14305965	Gamma (single)	2.77	12.90	7.000	3.250
1	AutoTrak Curve MWD	14305965	Directional (mag)	12.27	22.40	7.000	3.250

Service and Tool Mnemonics

Mnemonic	Name	Description
ATC SU	AutoTrak Curve SU	Auto Trak Curve Steering Unit
ATC MWD	AutoTrak Curve MWD	Auto Trak Curve MWD
ATC LCPM	AutoTrak Curve 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 run 1 utilized a 6.75 inch NaviGamma service (Directional and Gamma Ray) behind a 8.5 inch bit and rotary steerable assembly from 1959 to 17761 feet MD (1959 to 6902 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

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



Company

Well

Interval

Created

Noble Energy

Vogler State D21-760

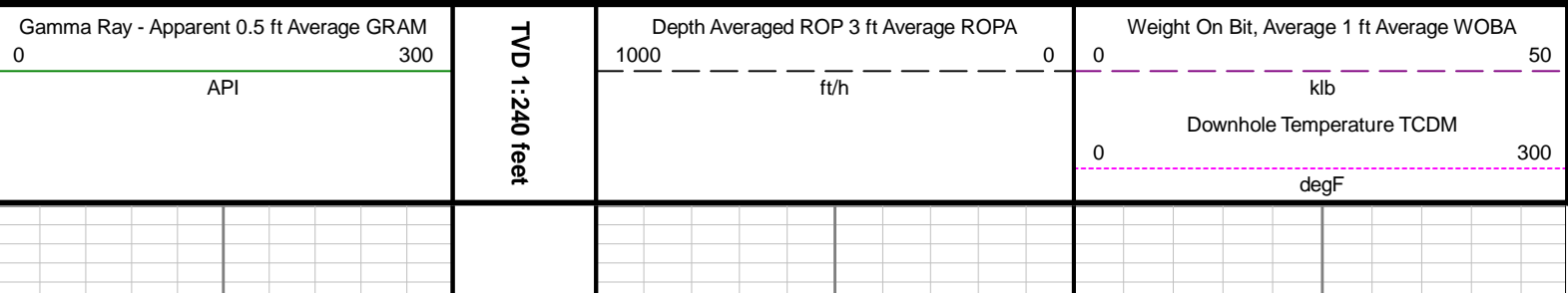
Date From: 2019-03-08 14:31

Date To: 2019-03-11 08:56

2019-03-11 14:59:25

Top: 1959.00 ft

Bottom: 17761.00 ft



9 5/8" Casing

RI

2000

2100

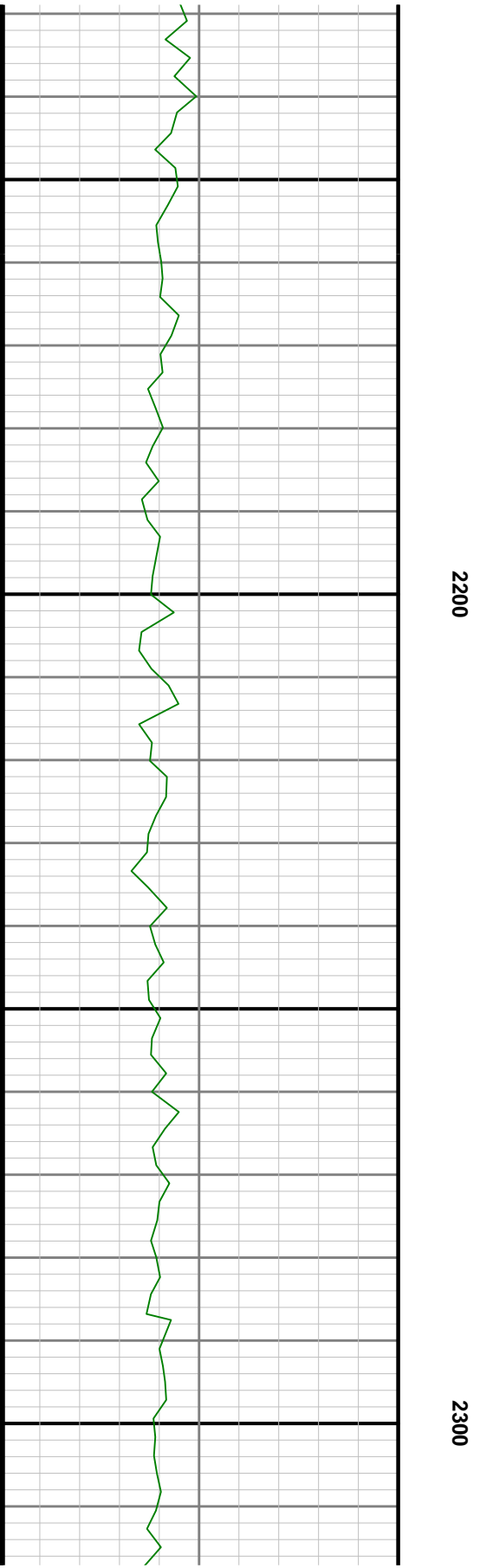
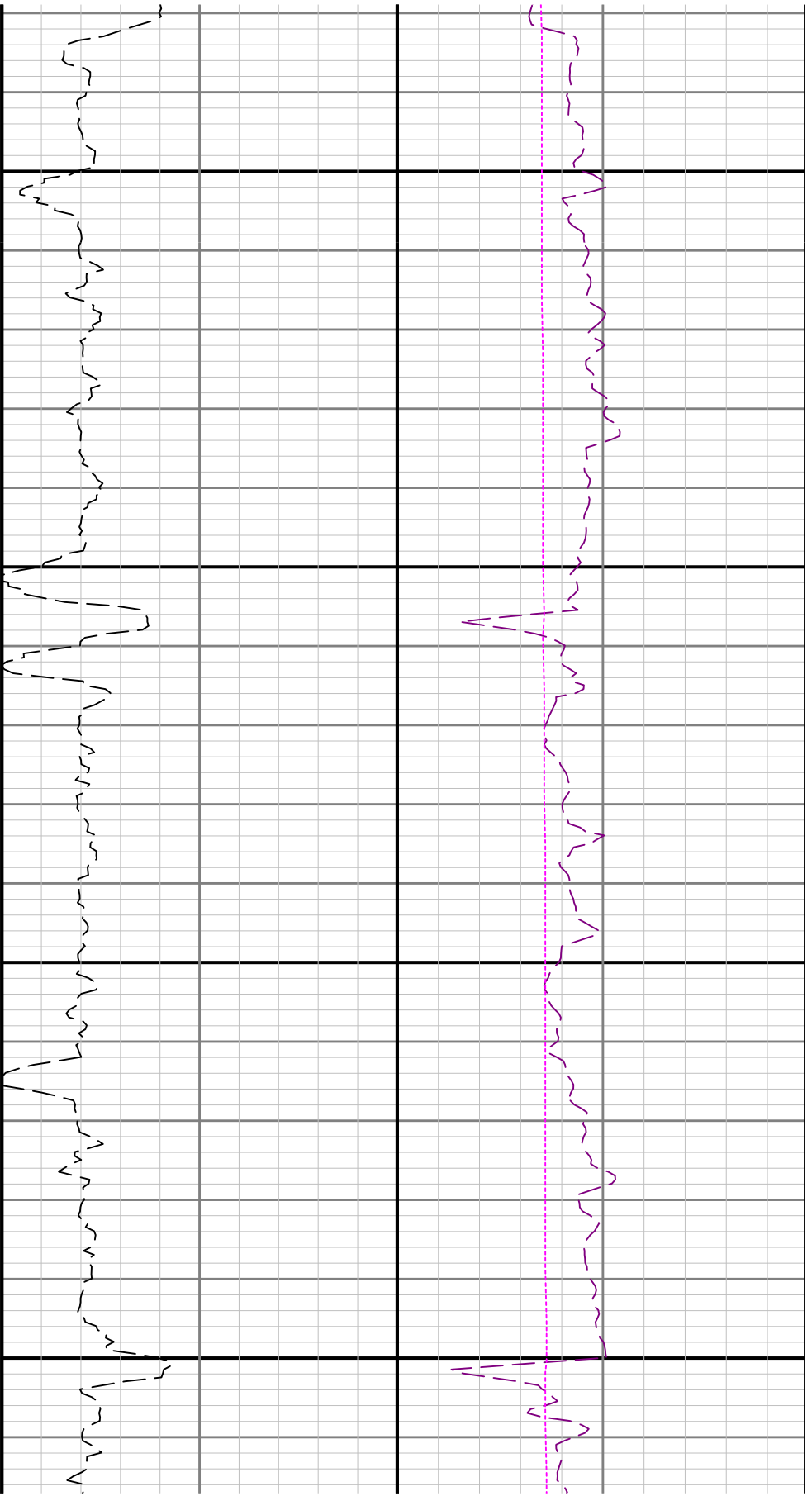
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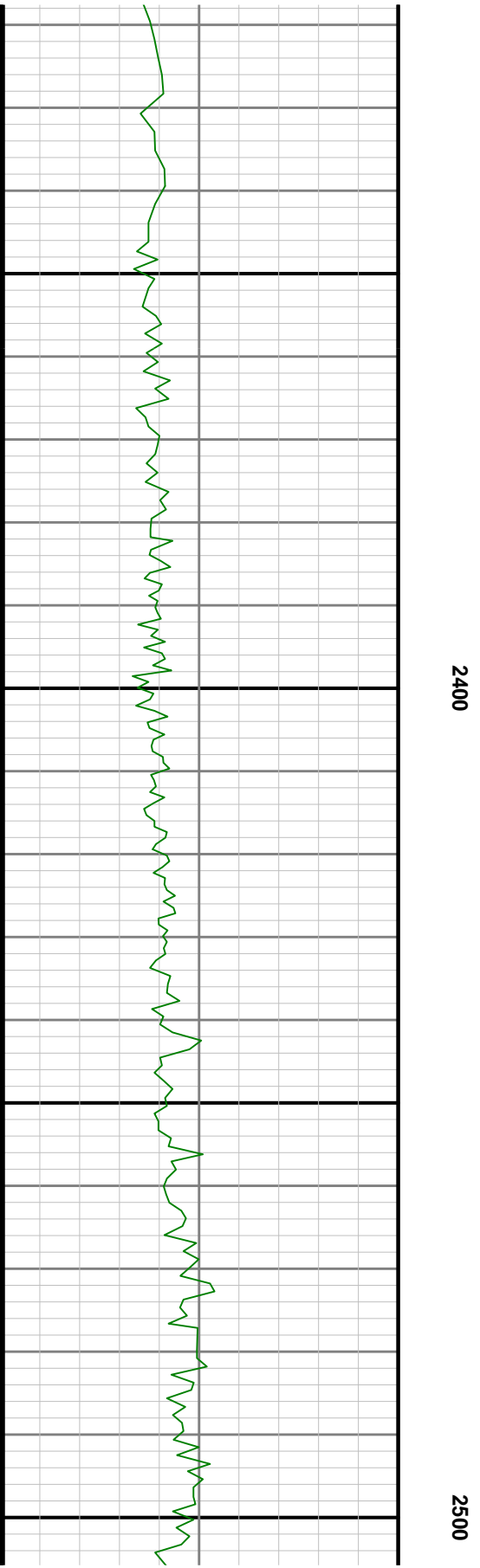
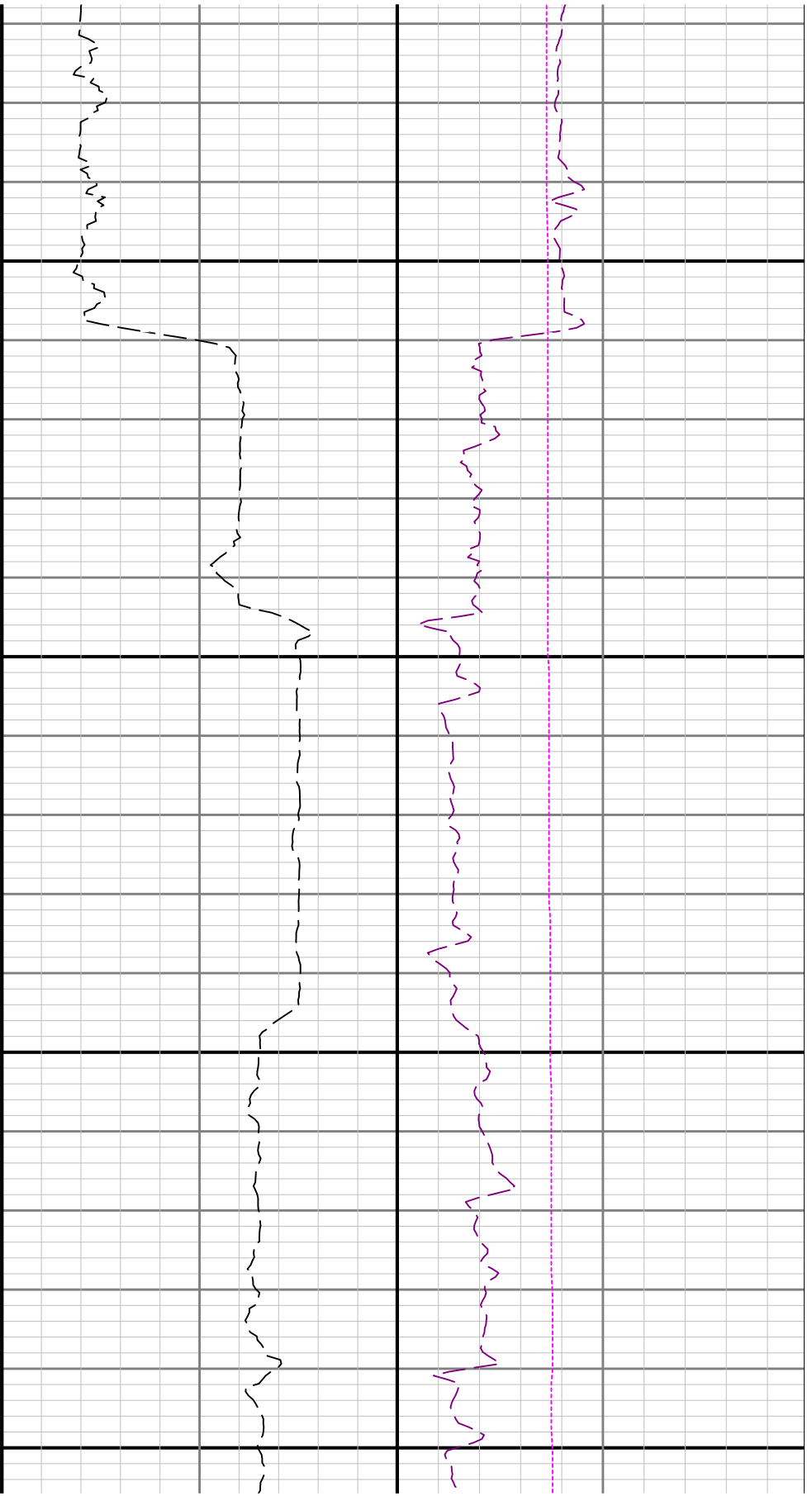
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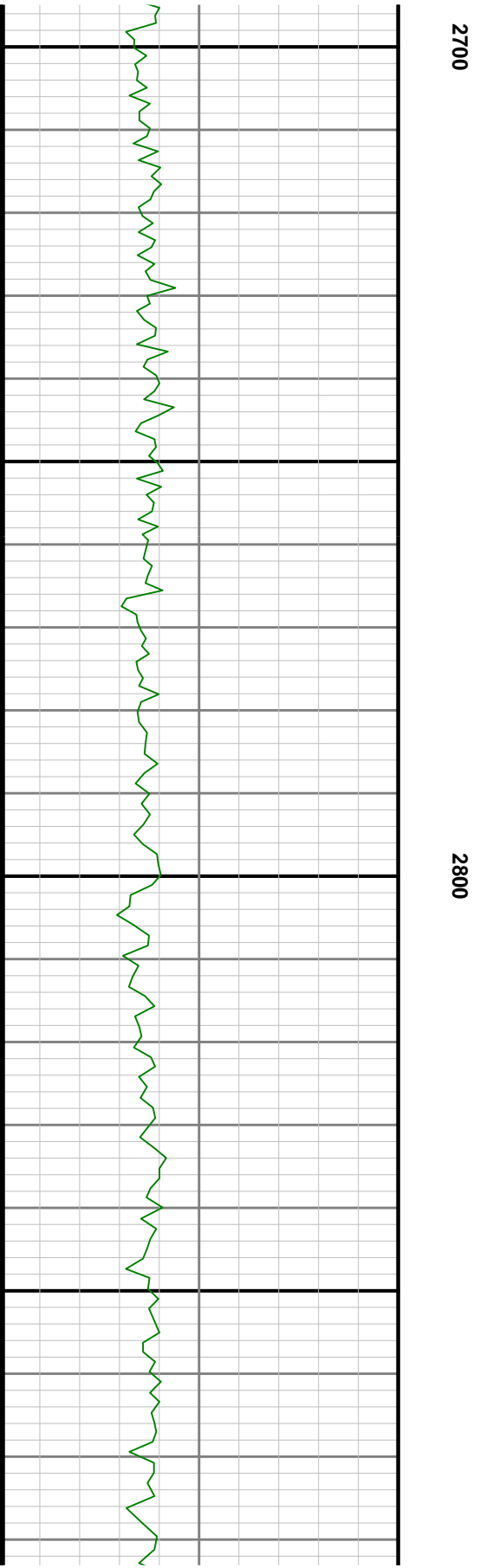
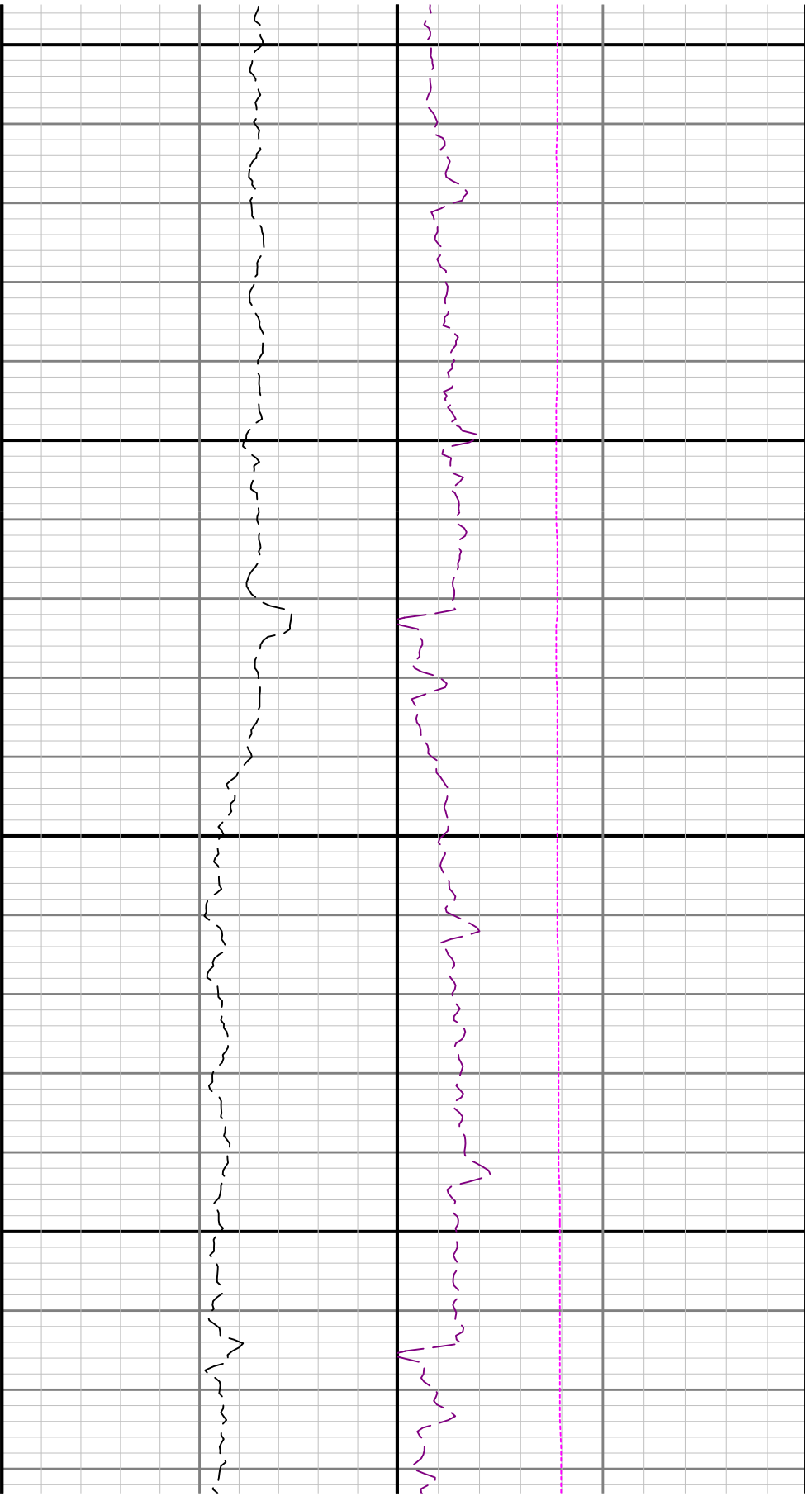
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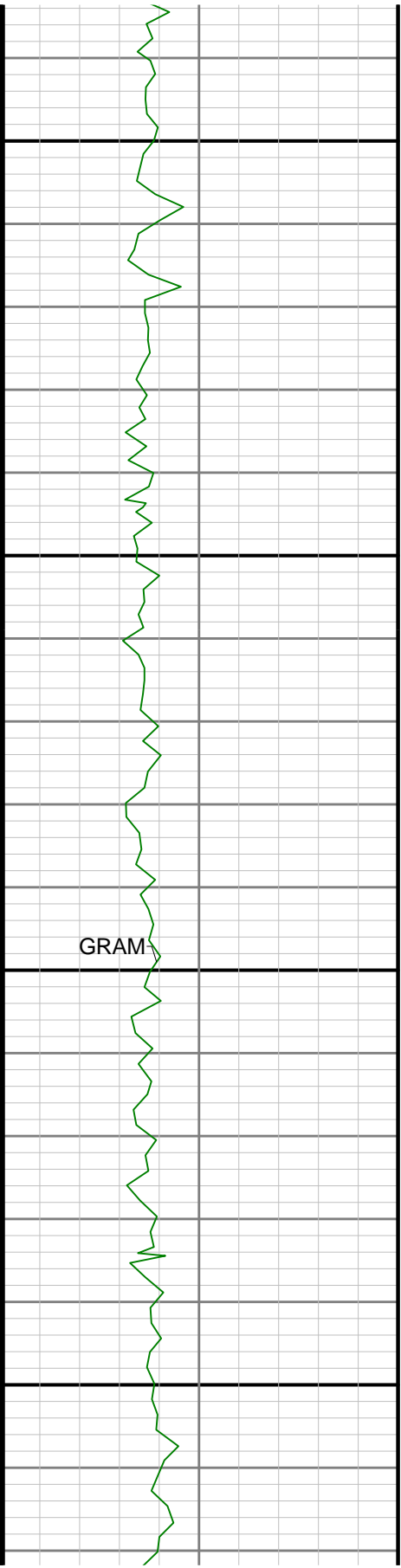
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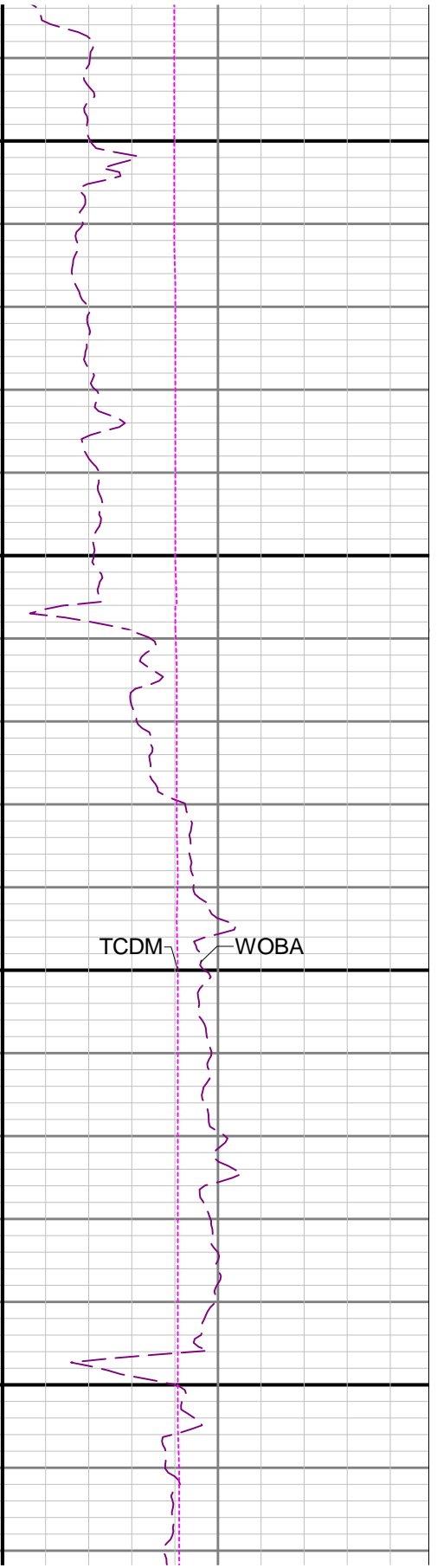
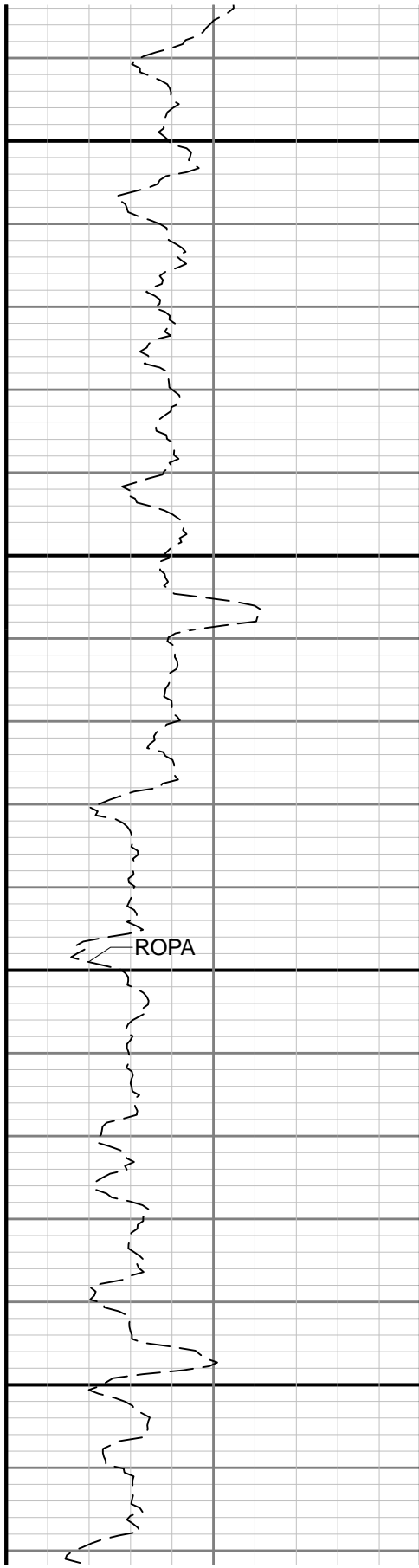


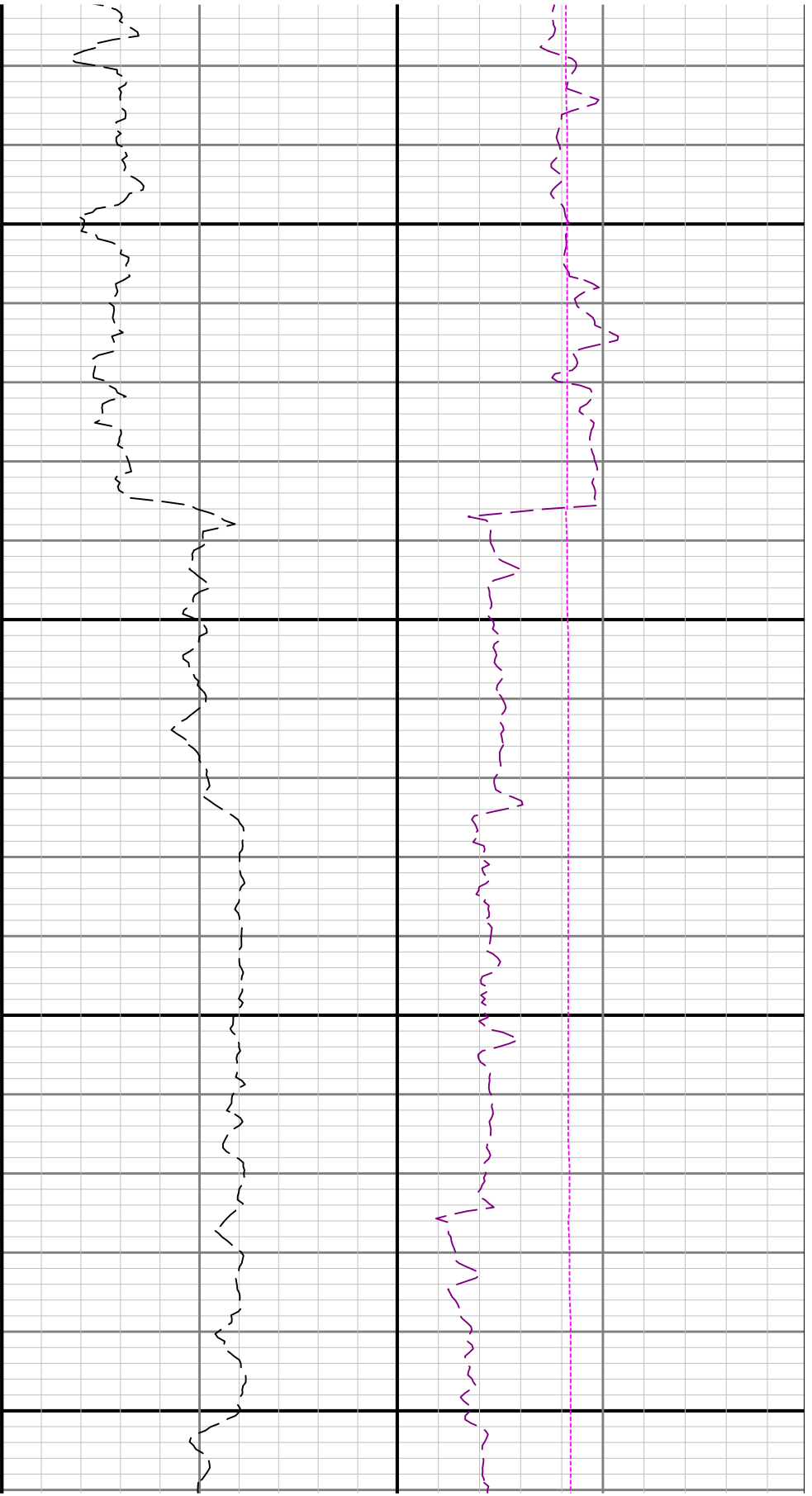




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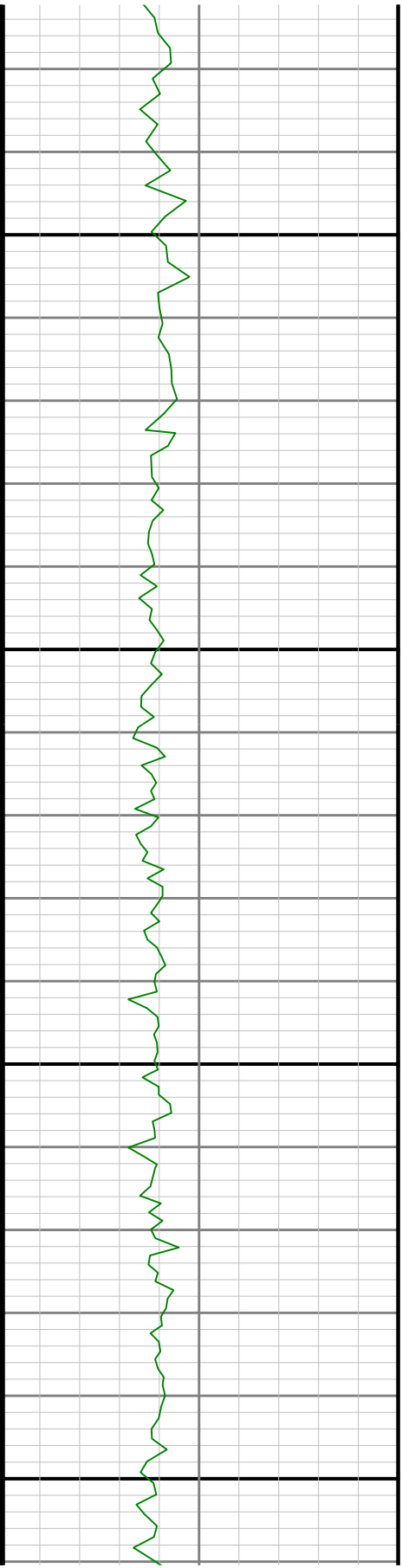
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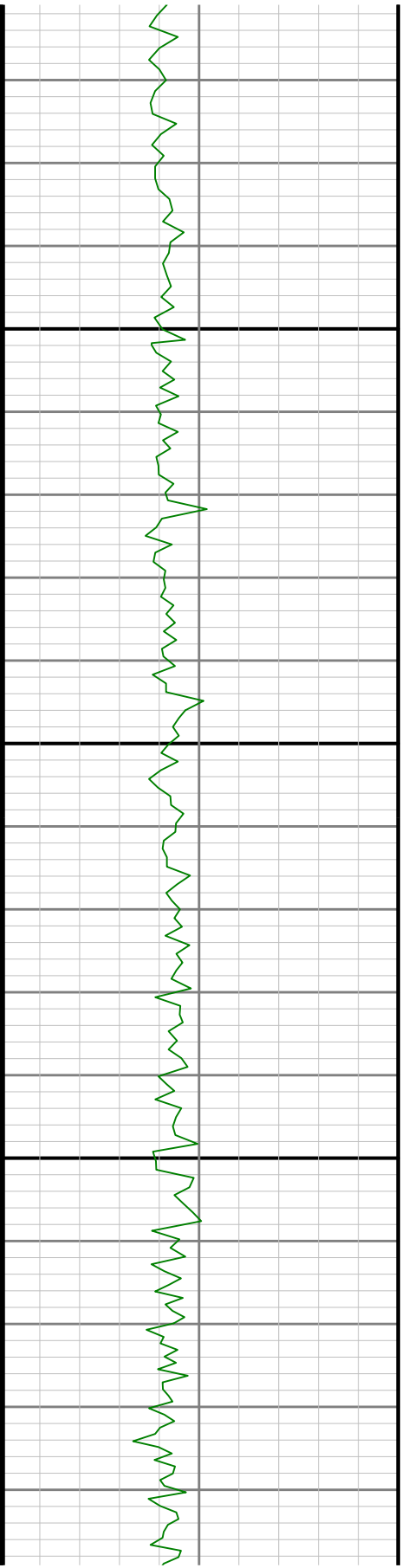
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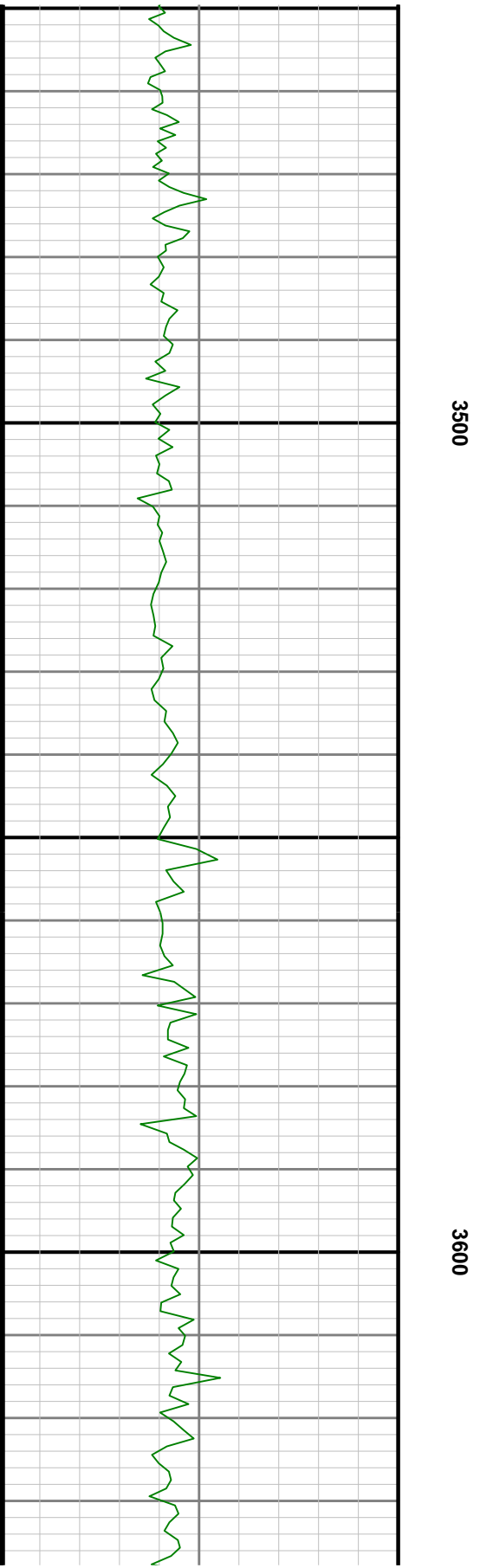
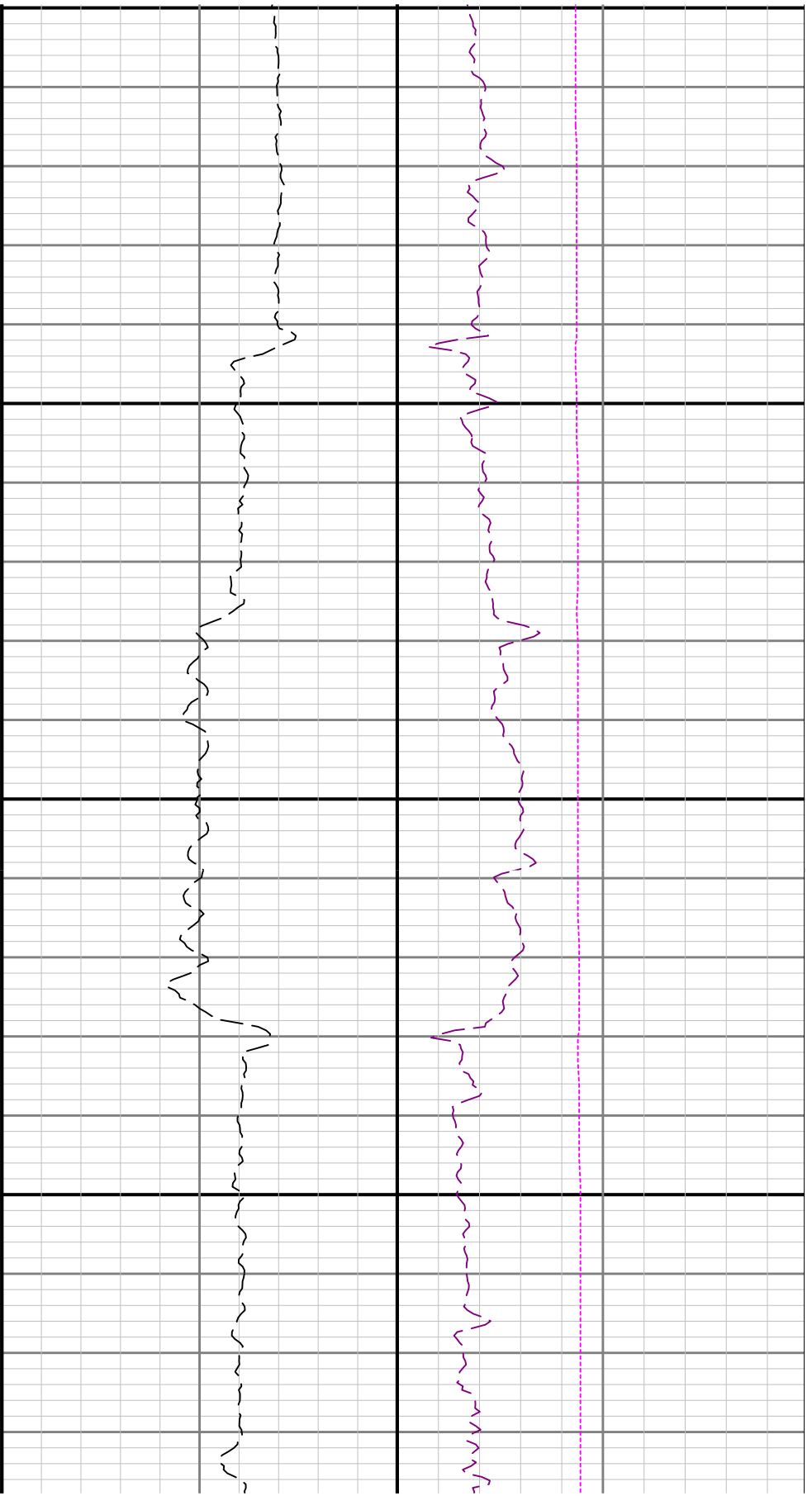


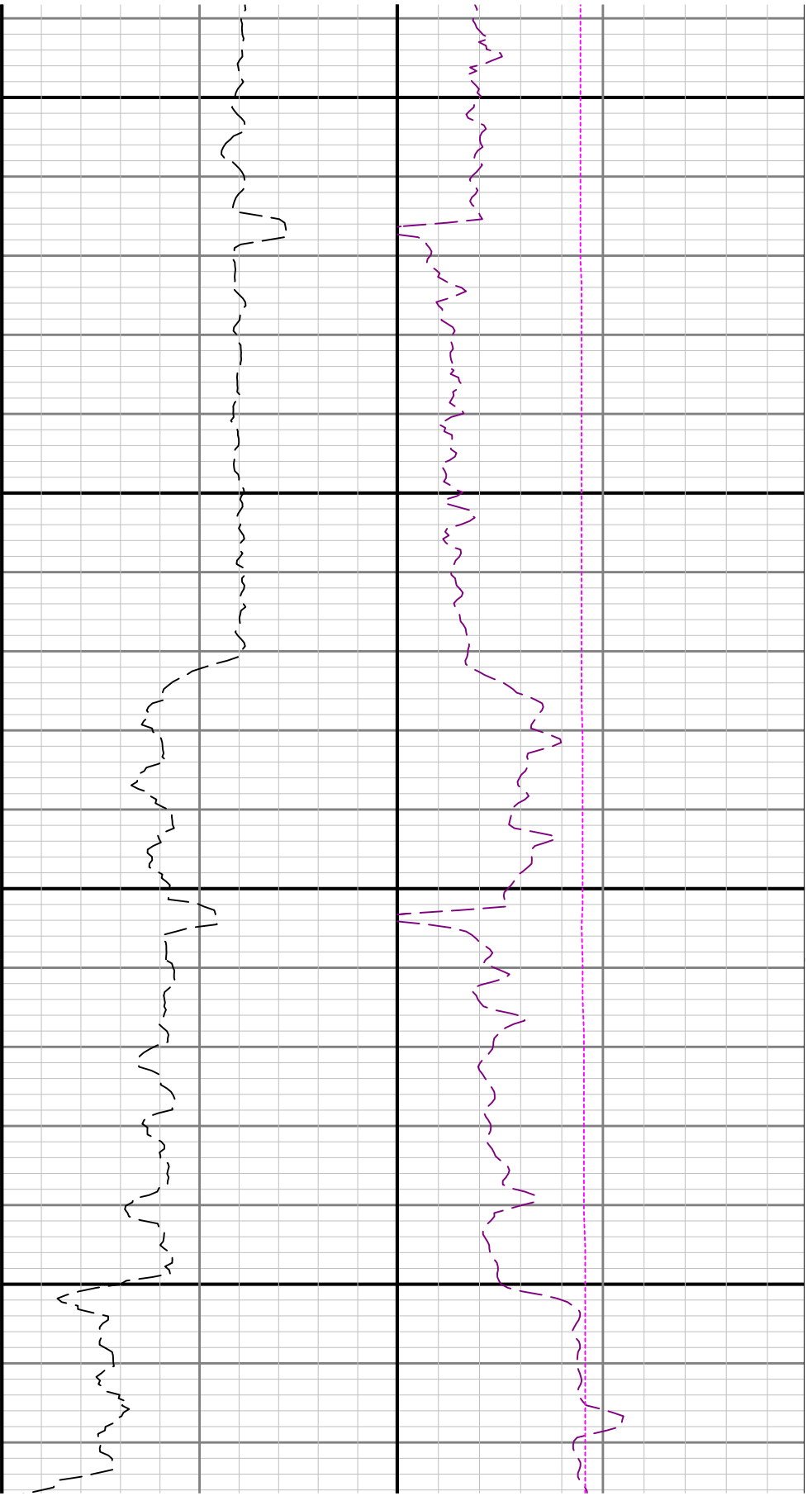


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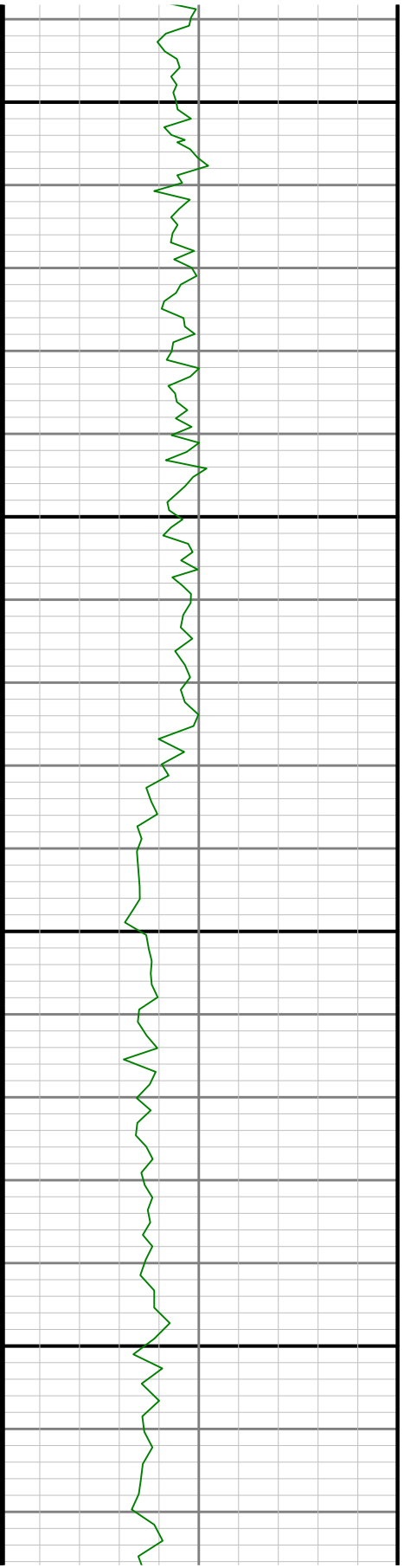


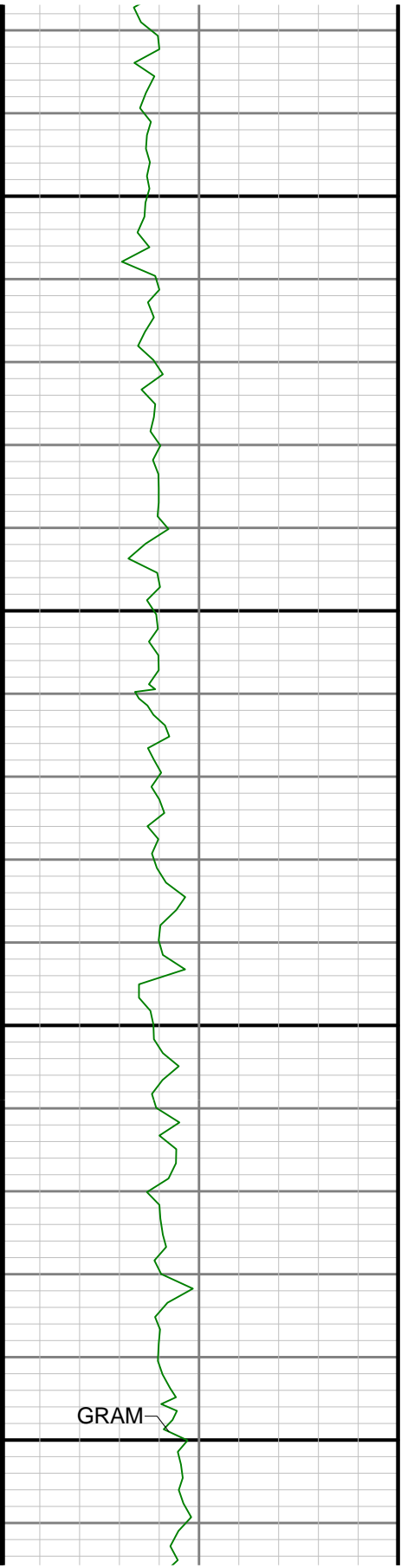




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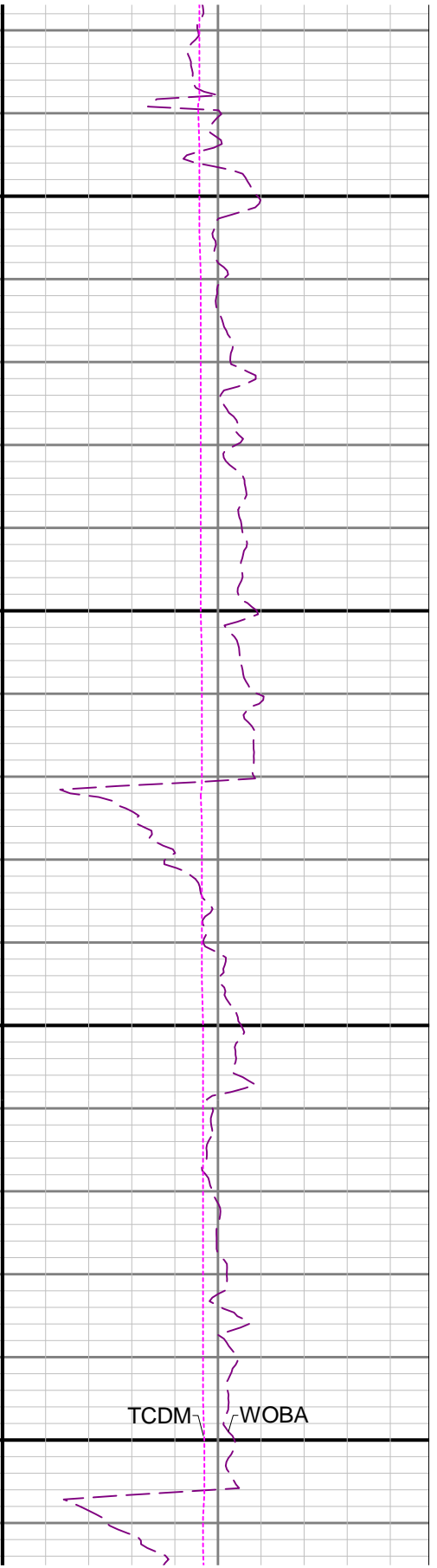
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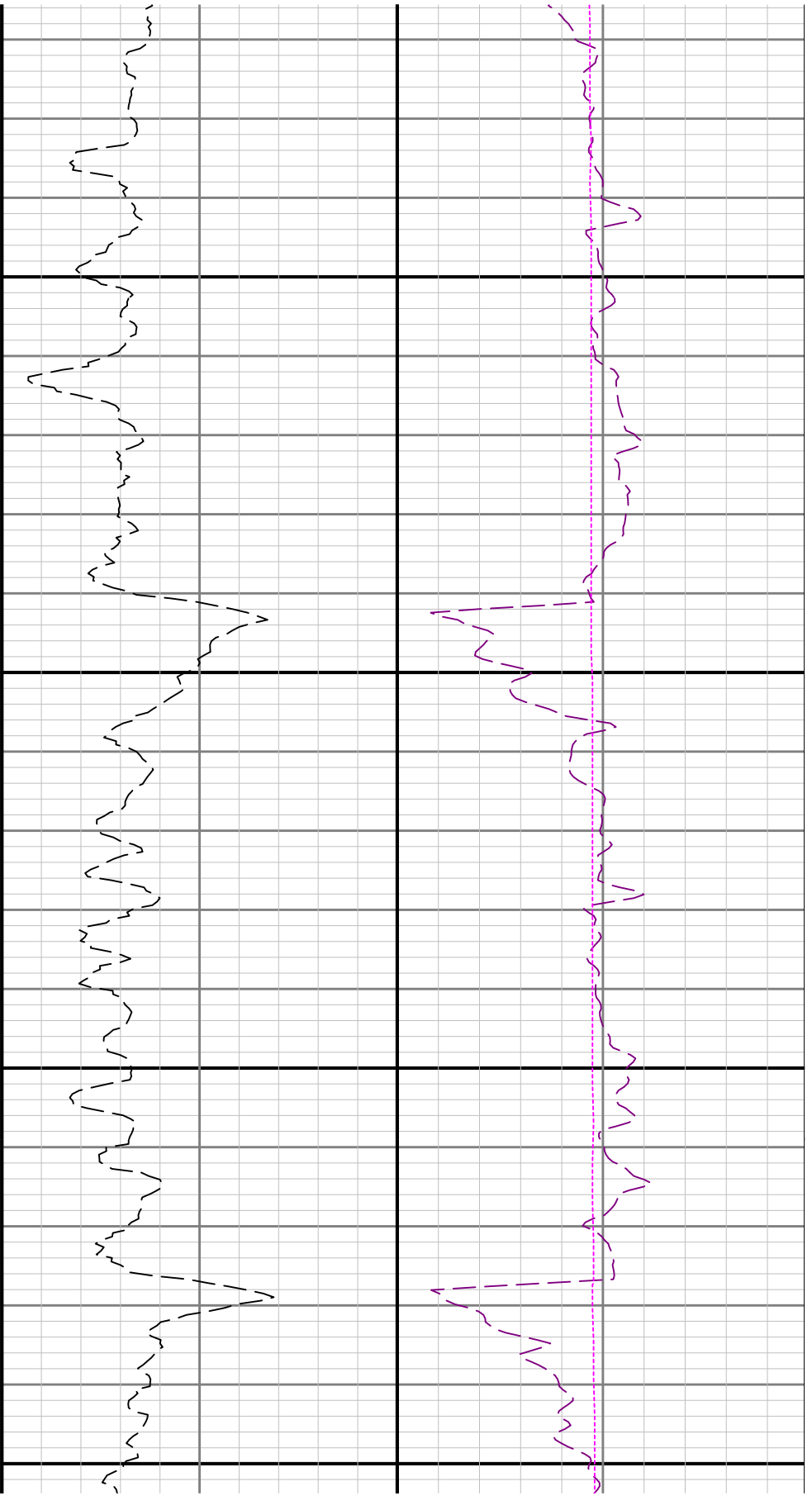




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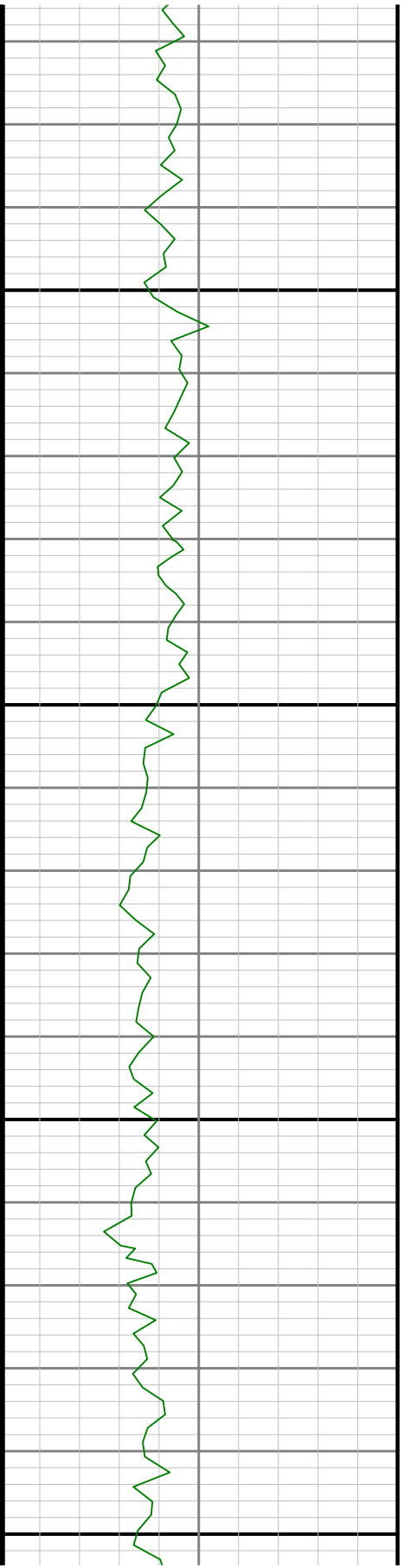
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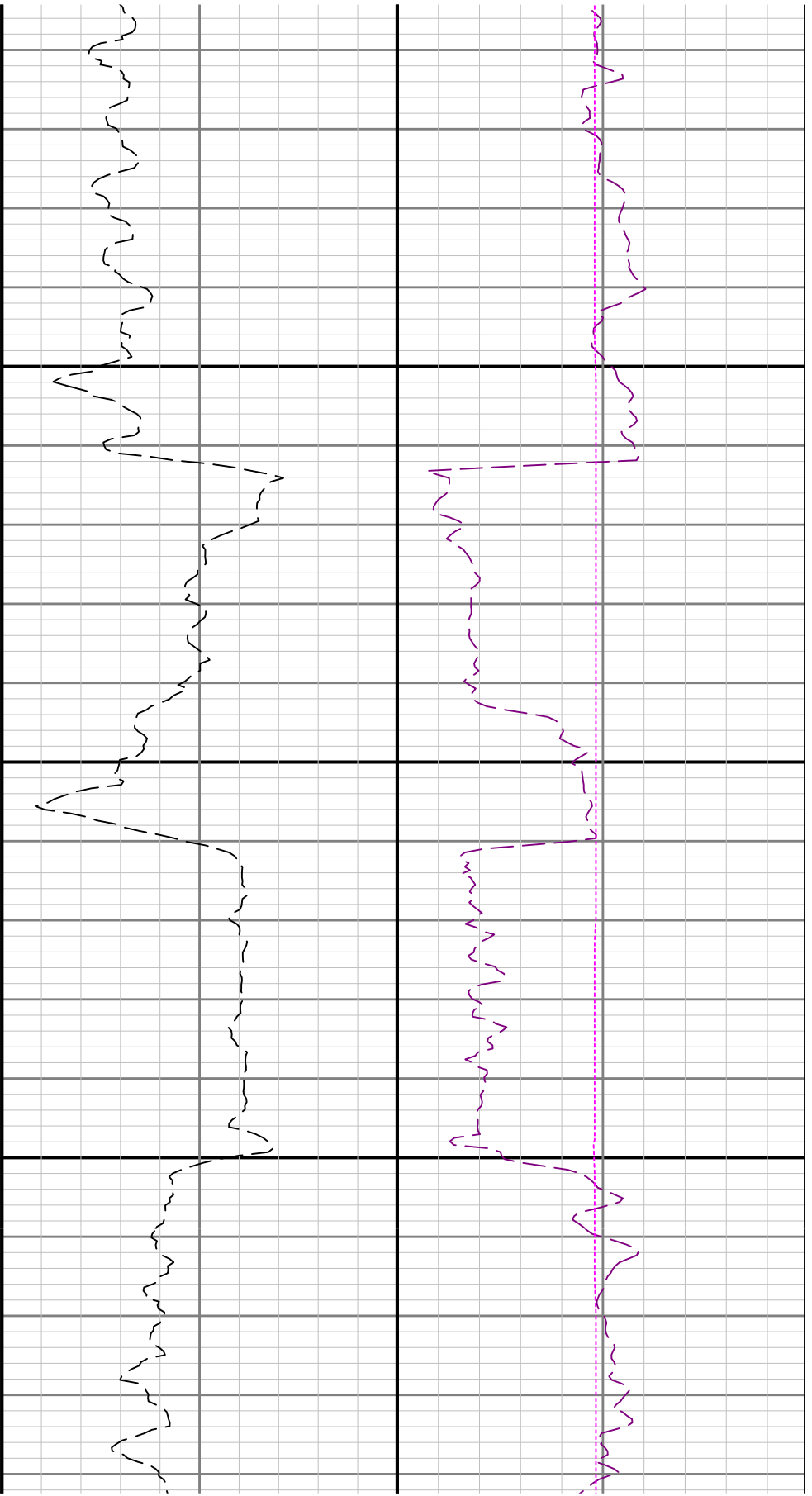




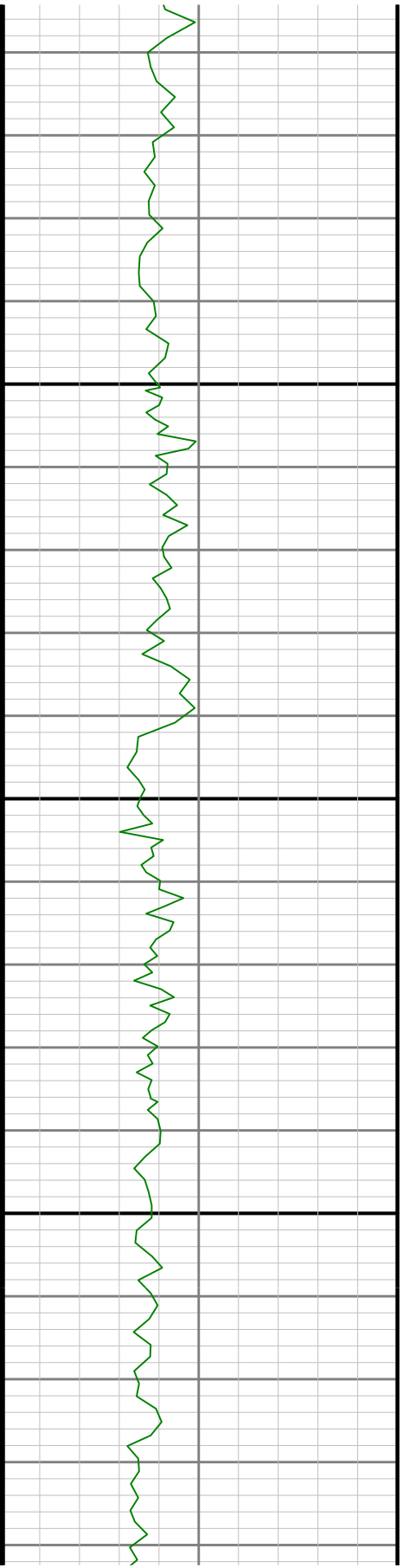
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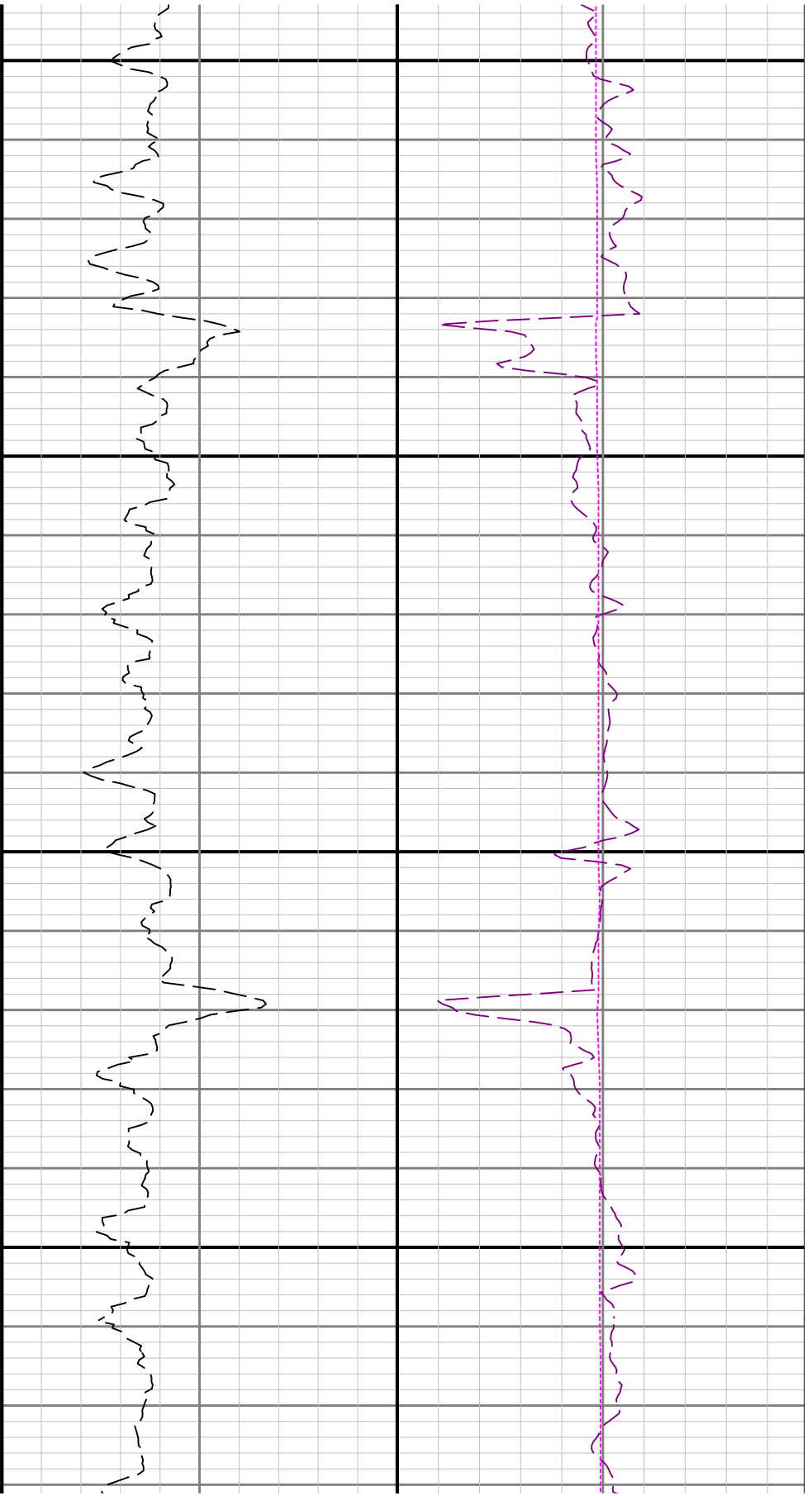
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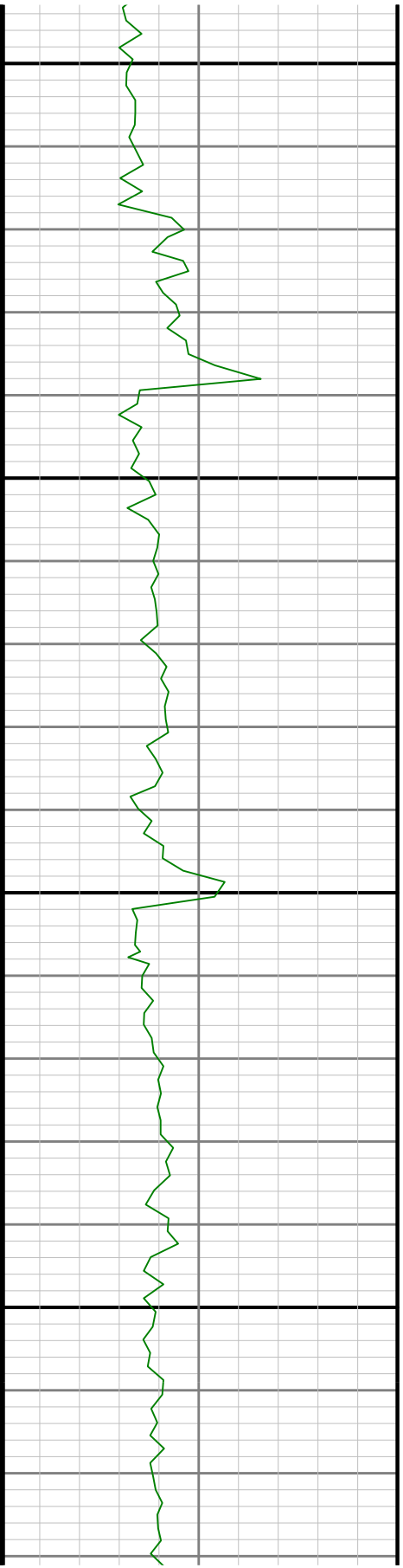
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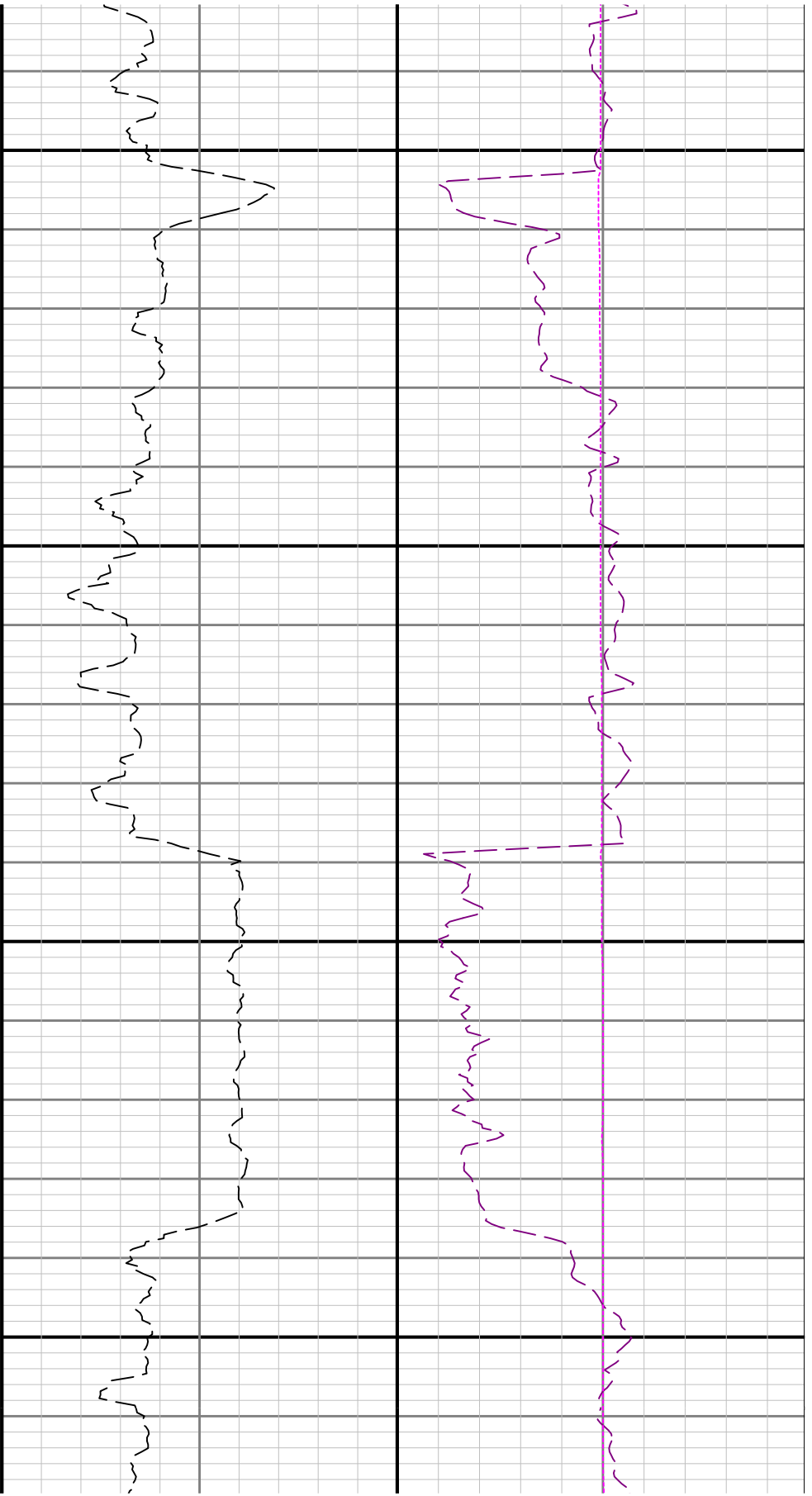




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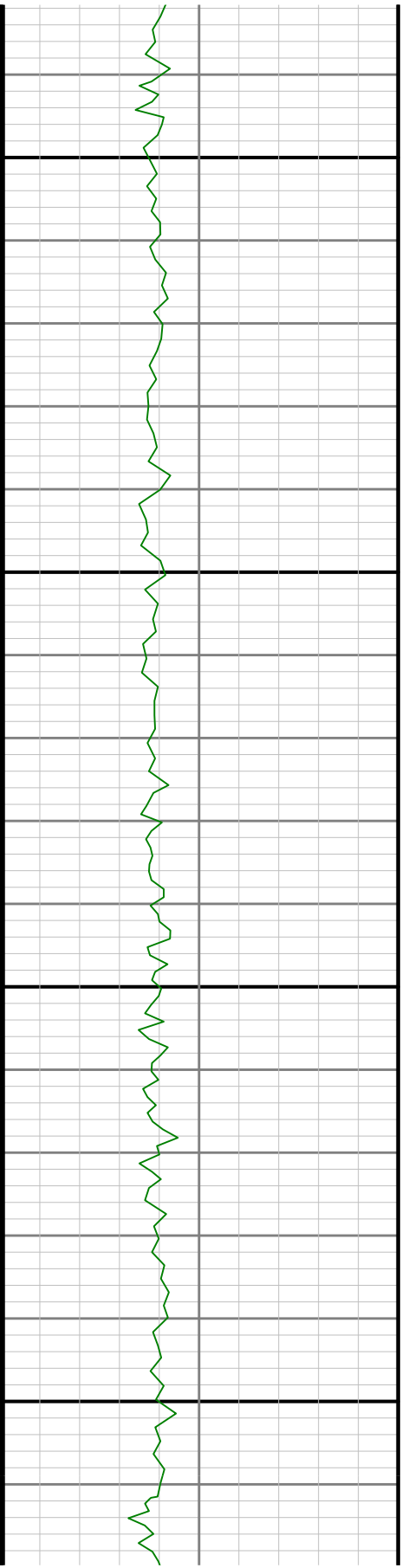
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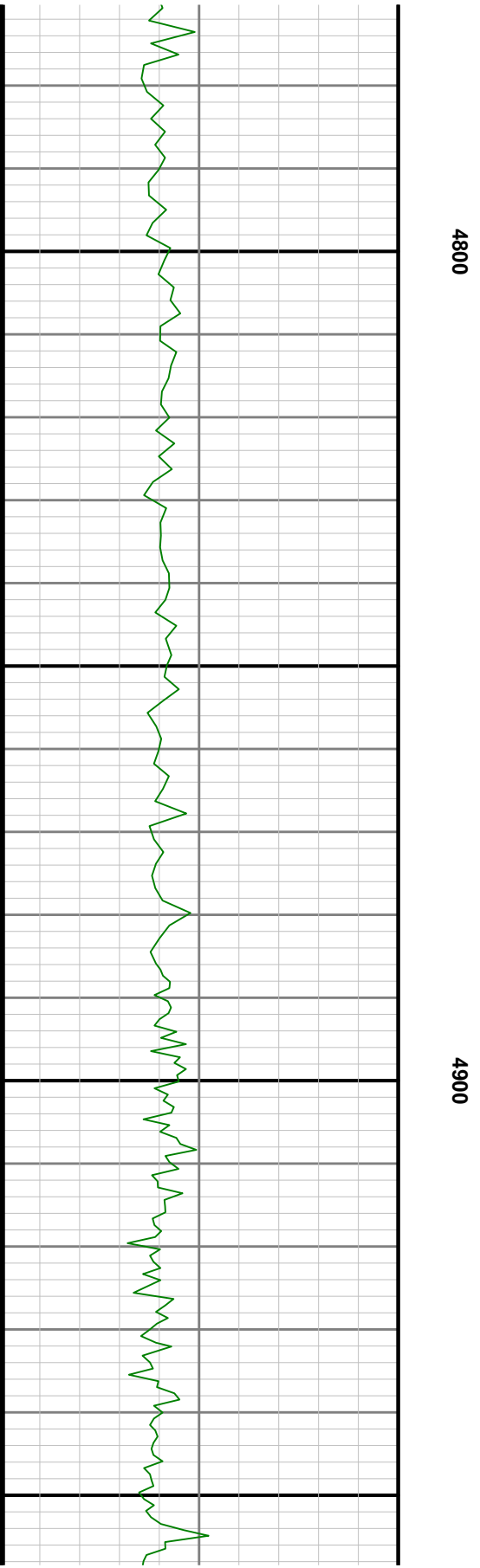
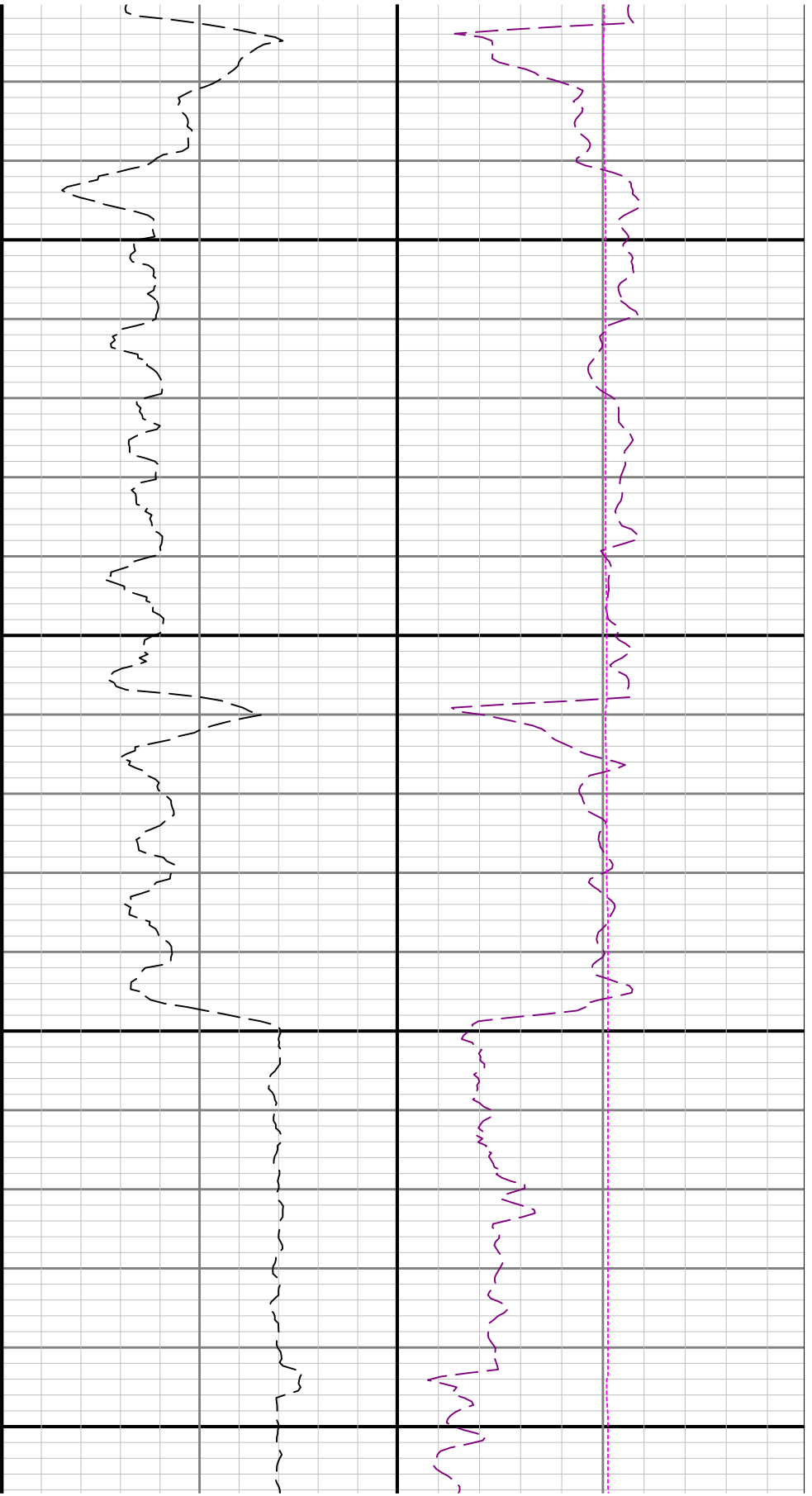


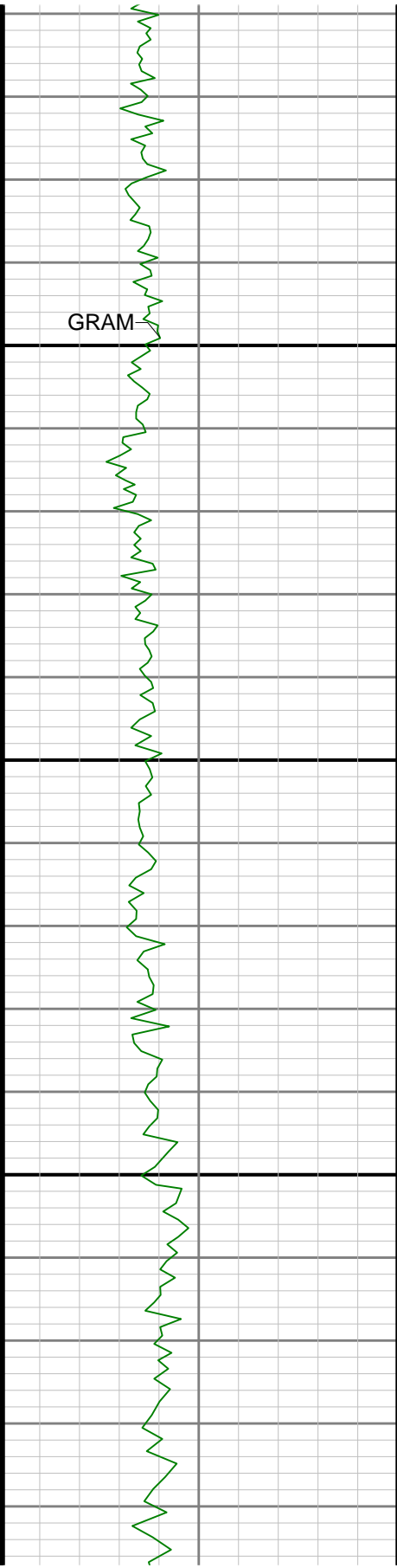


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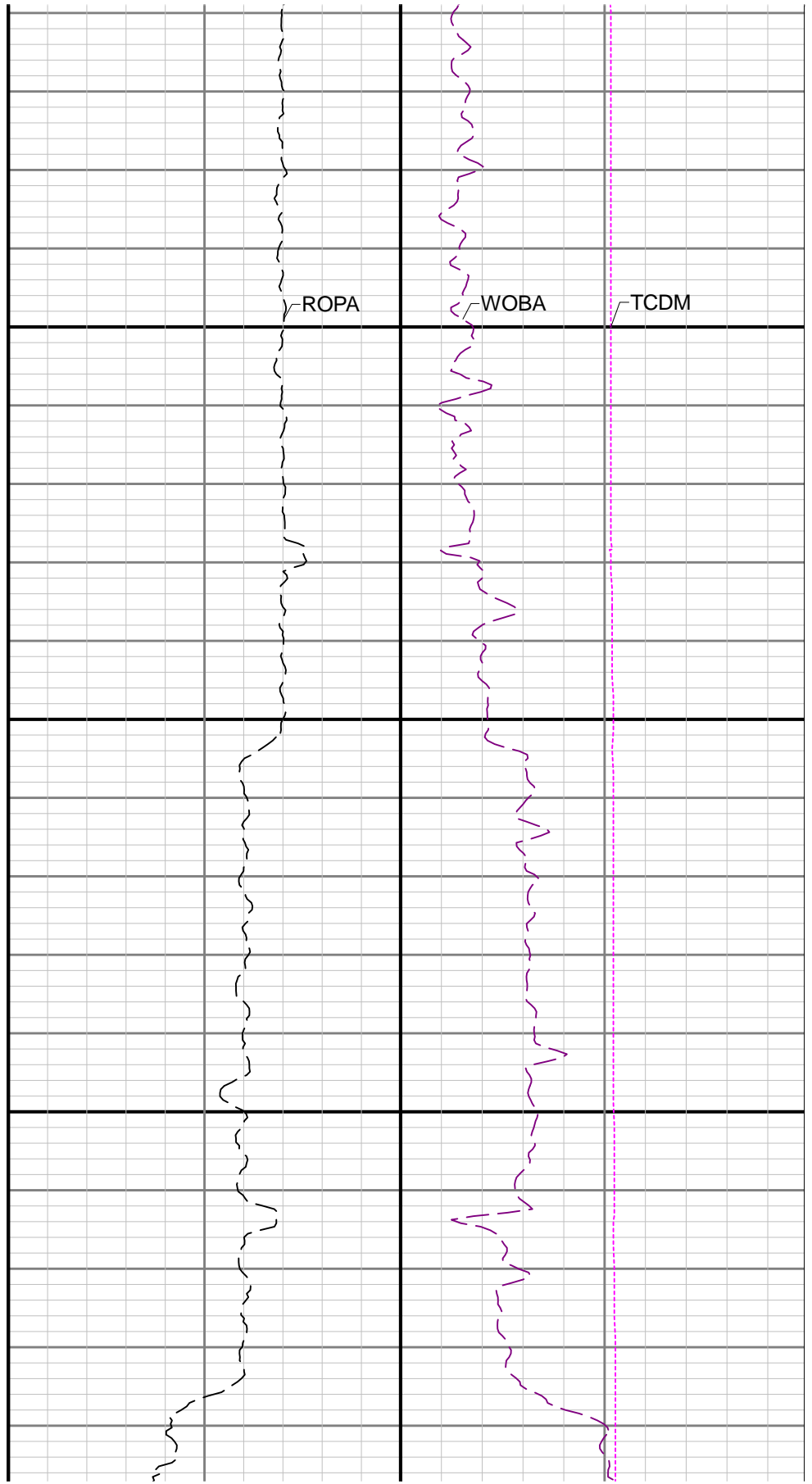


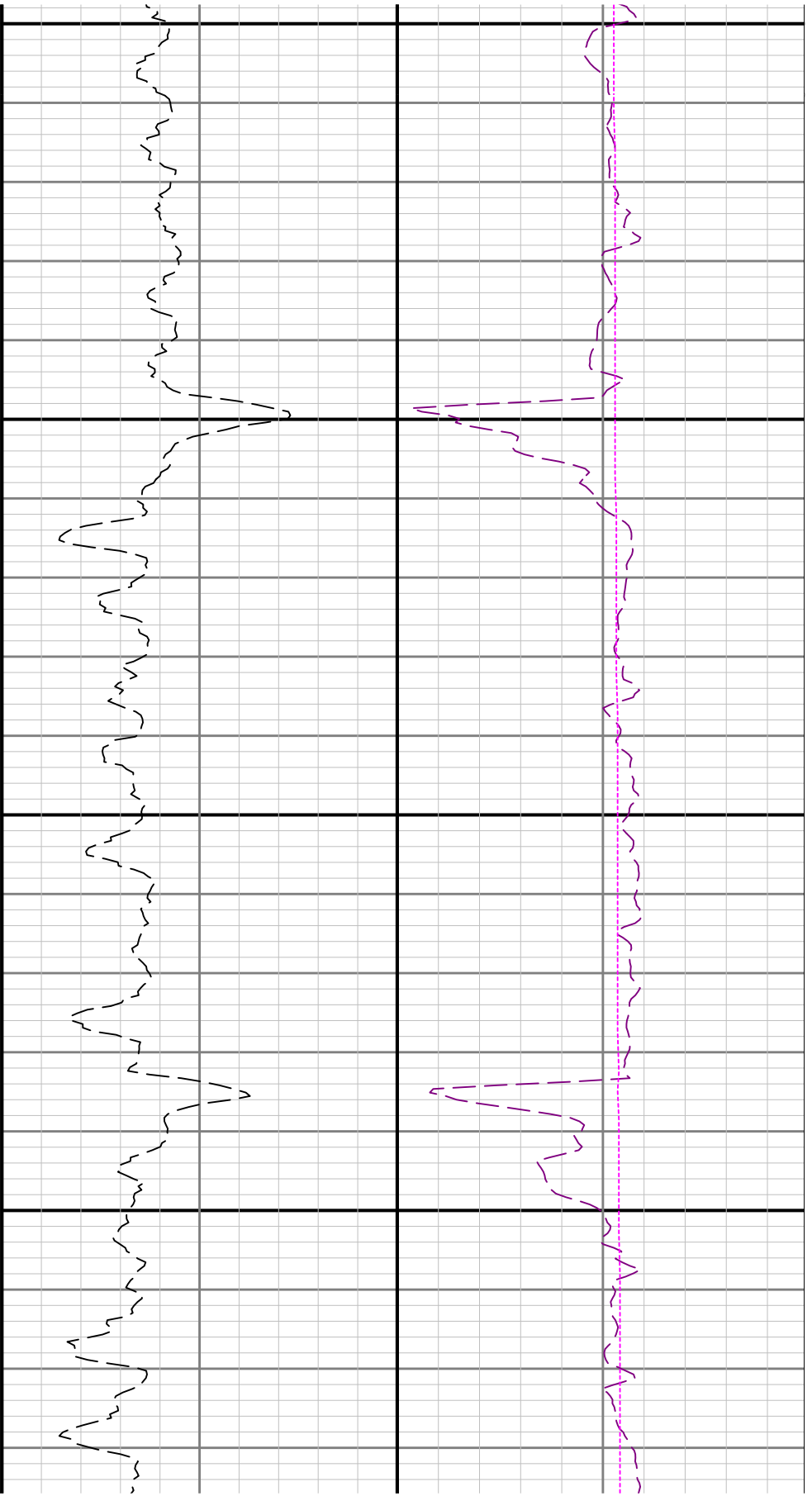




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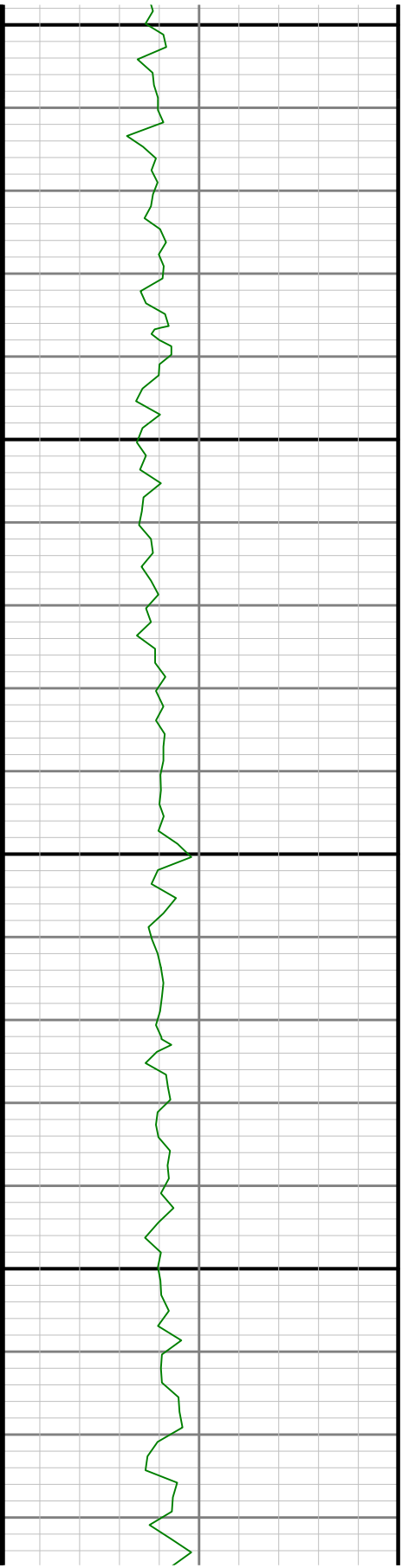
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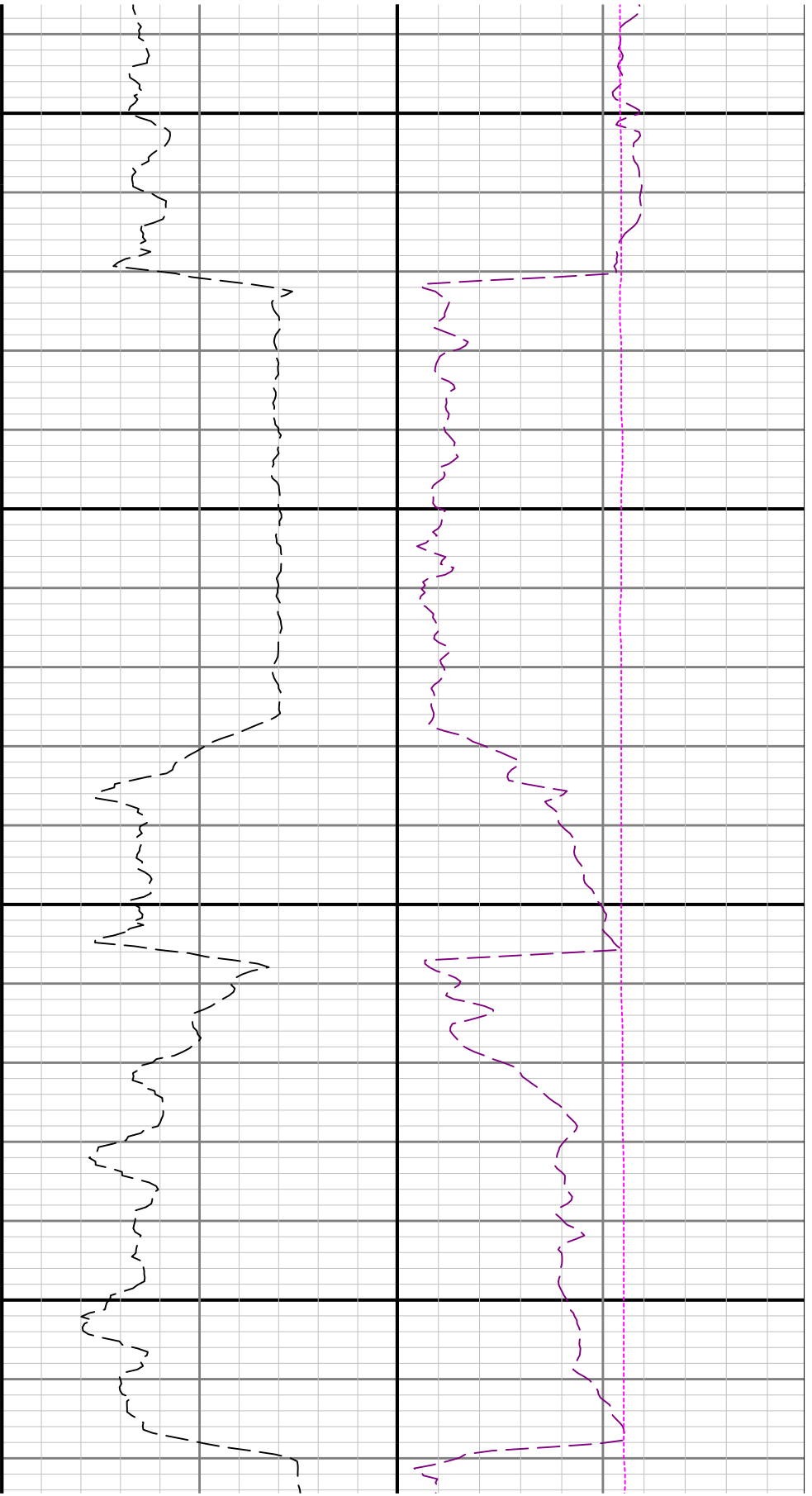




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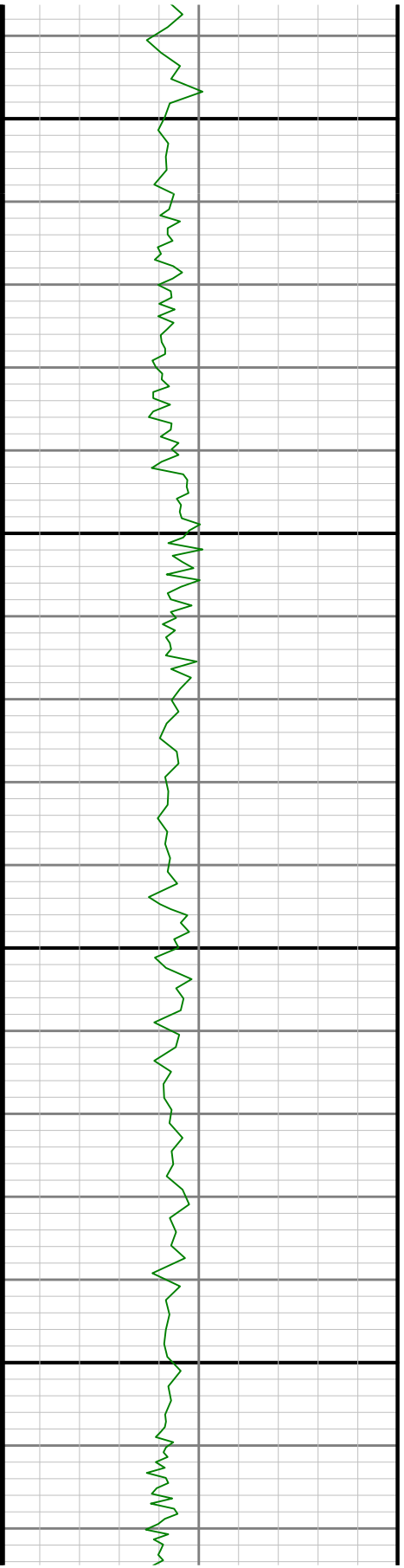
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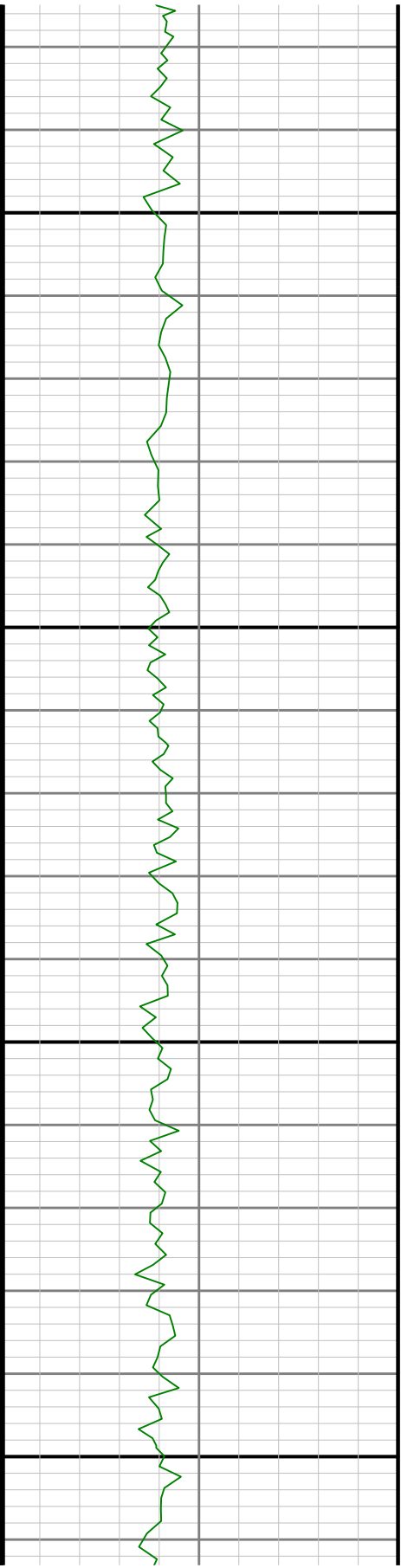




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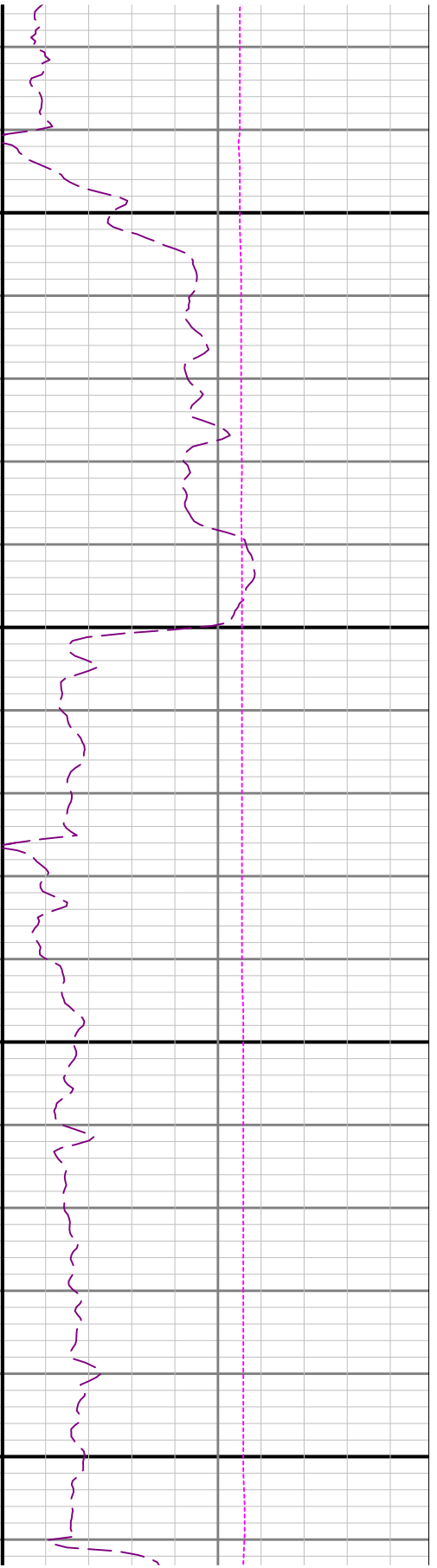
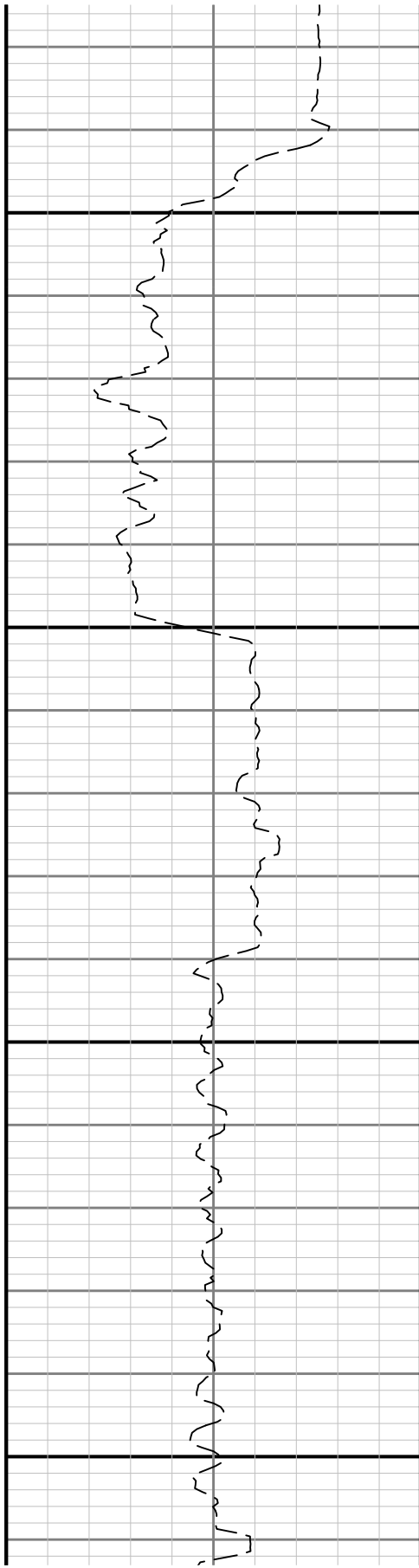
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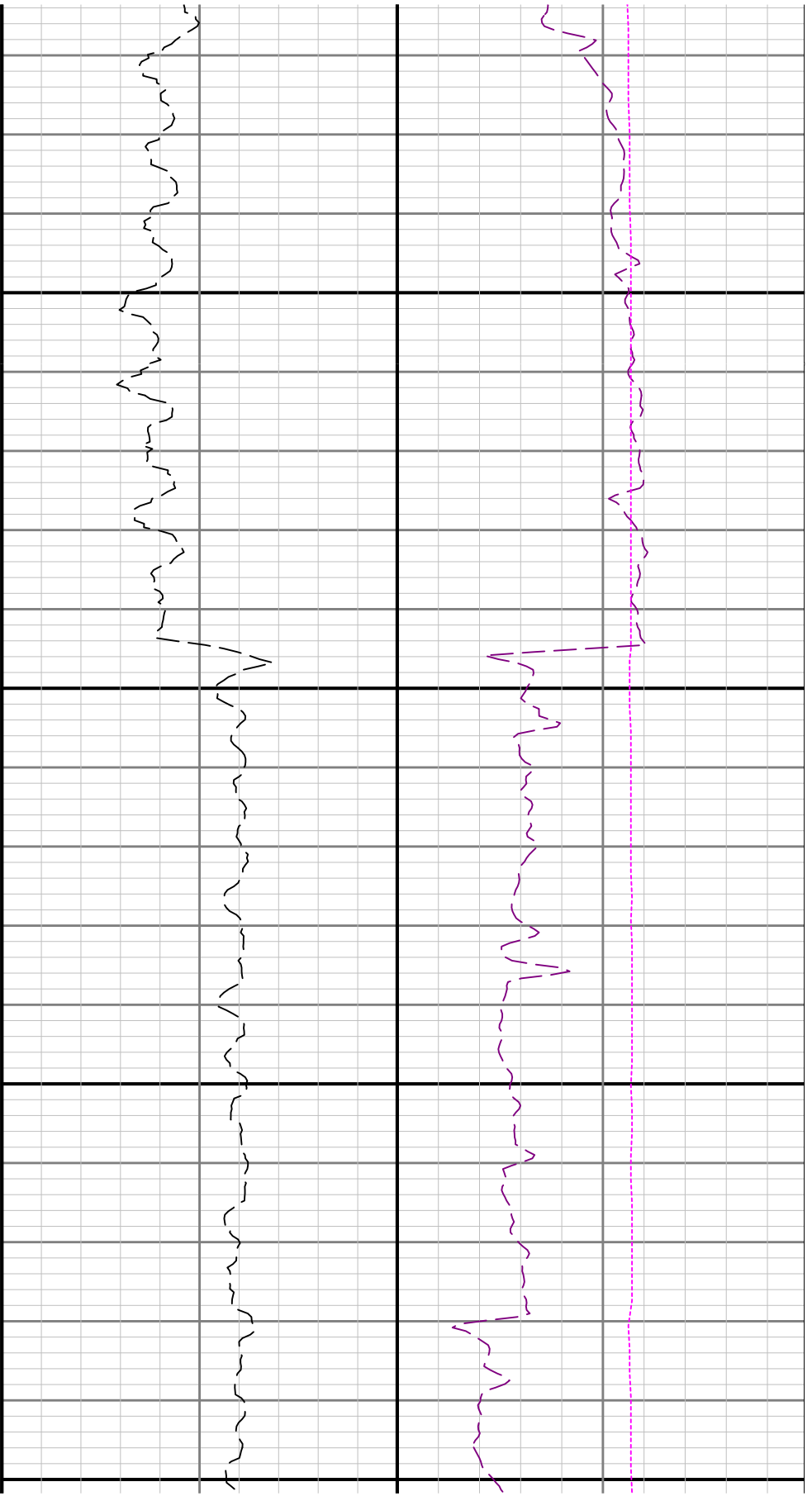




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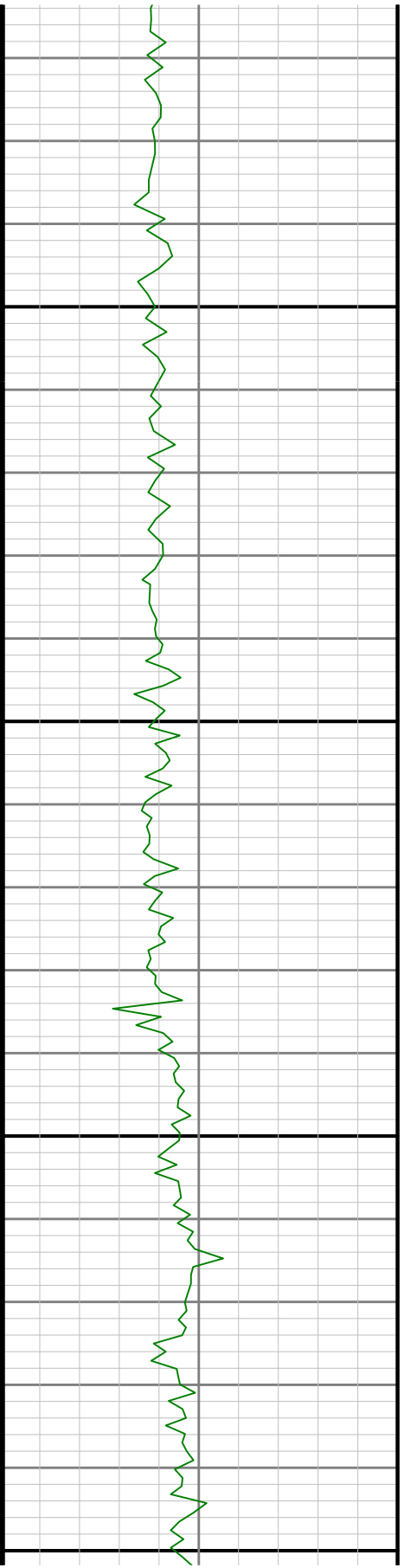
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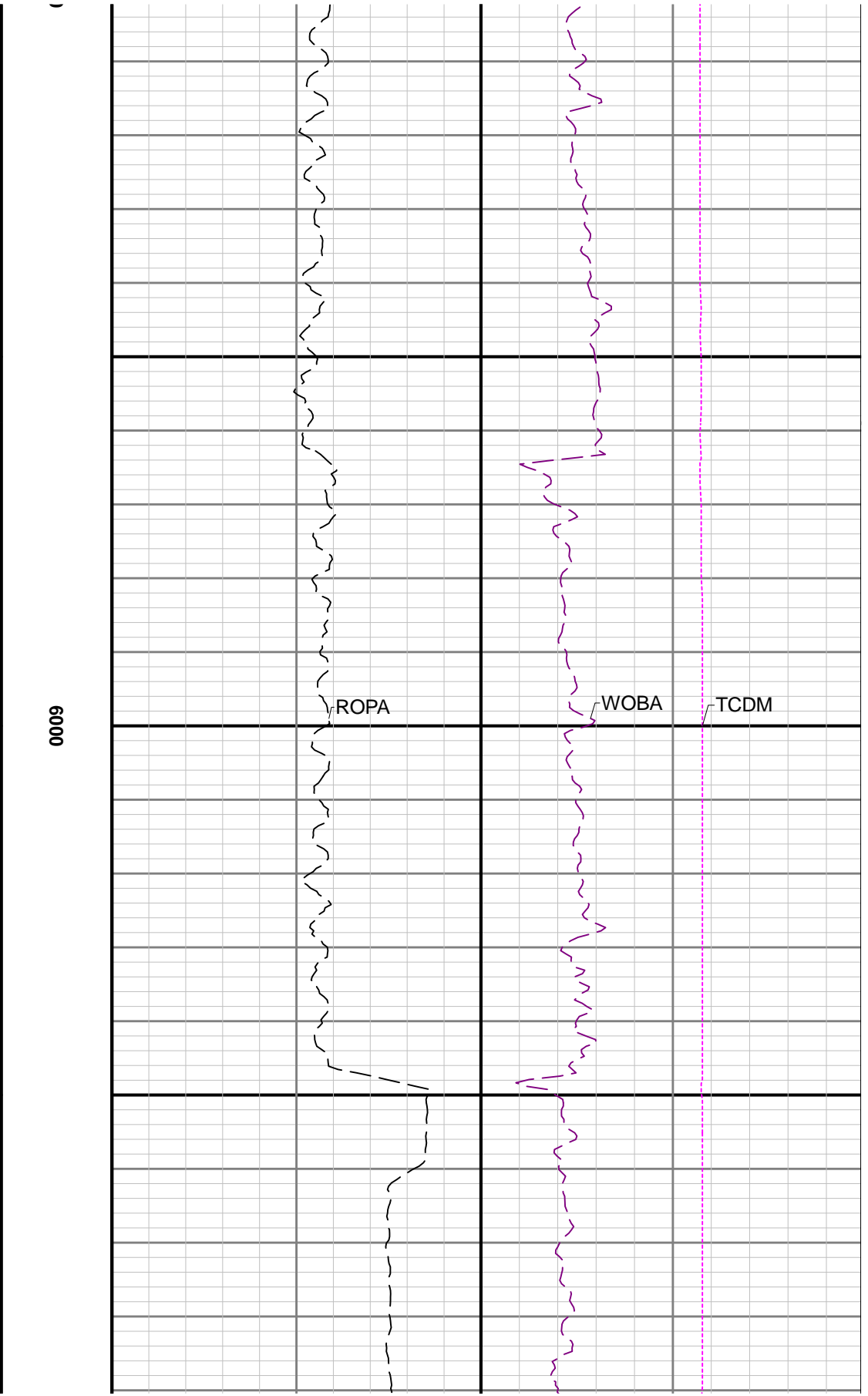
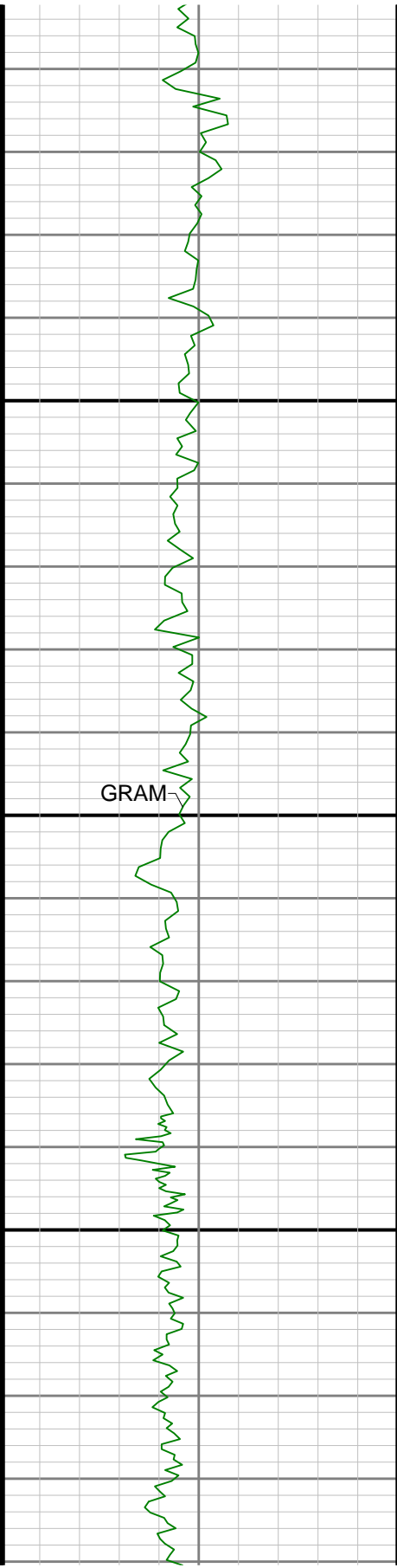


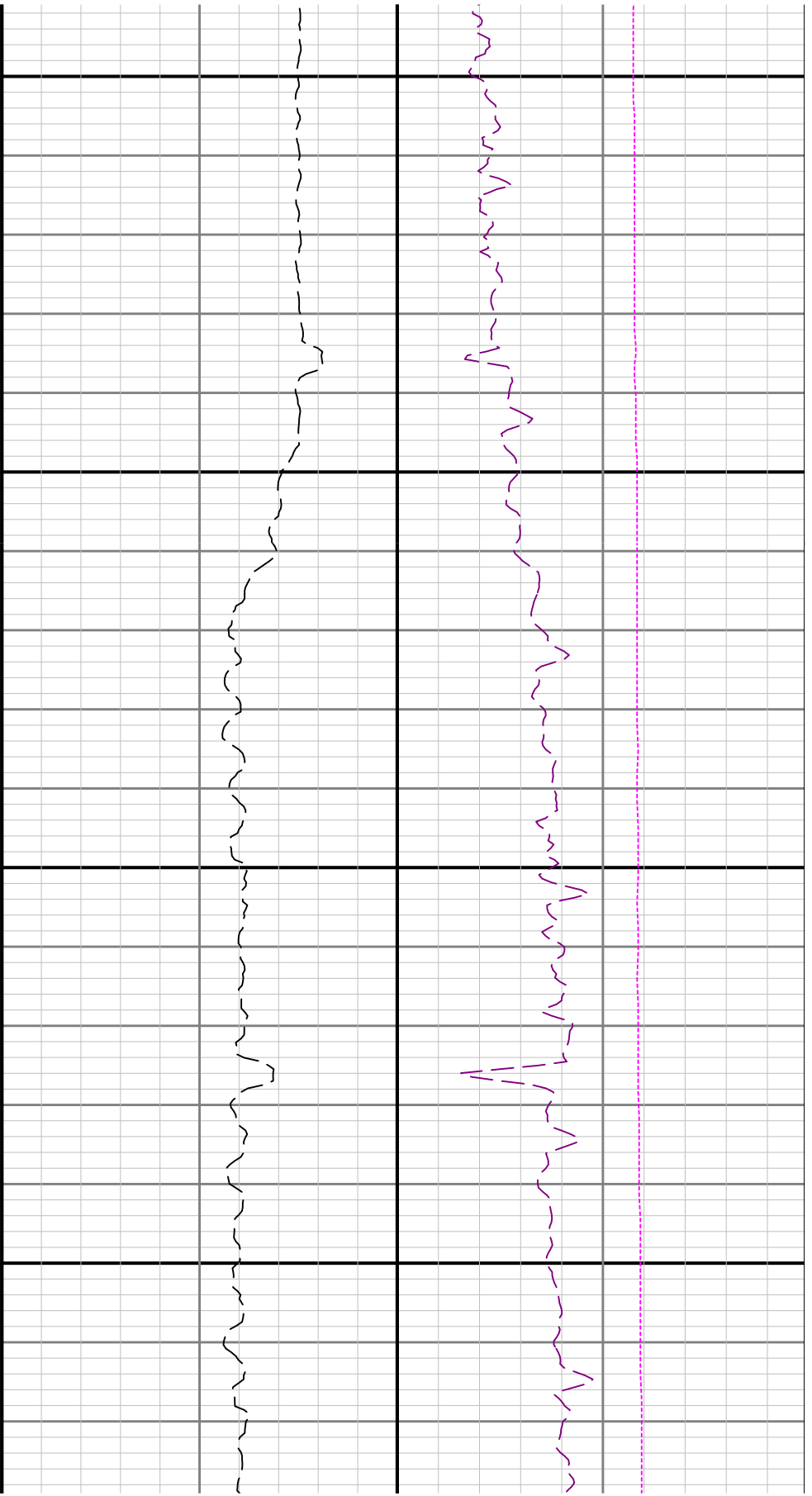


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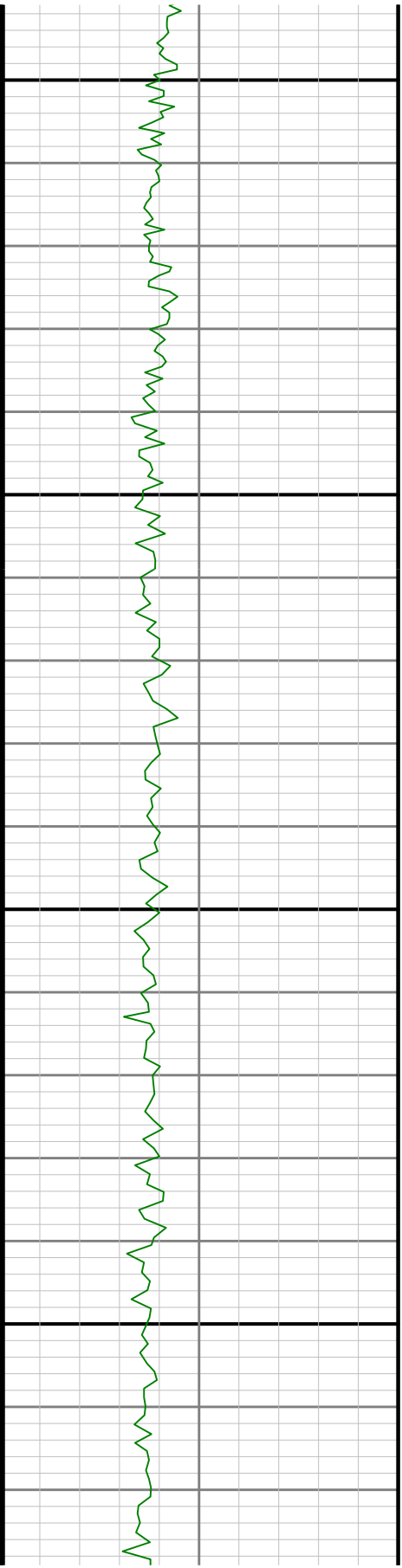


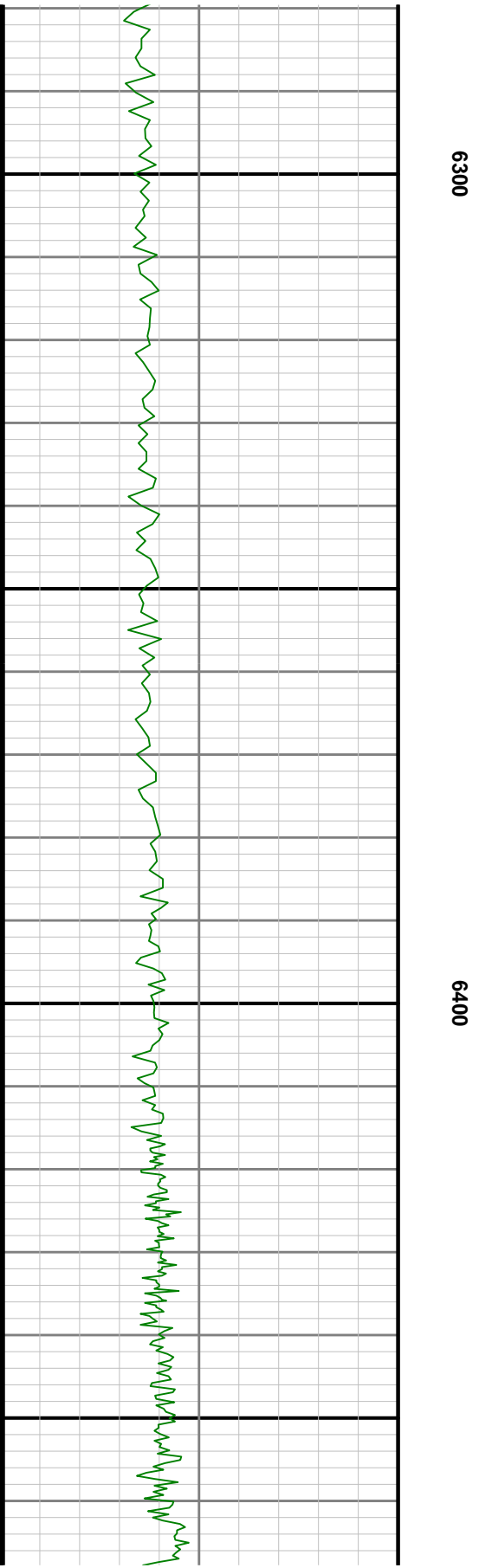
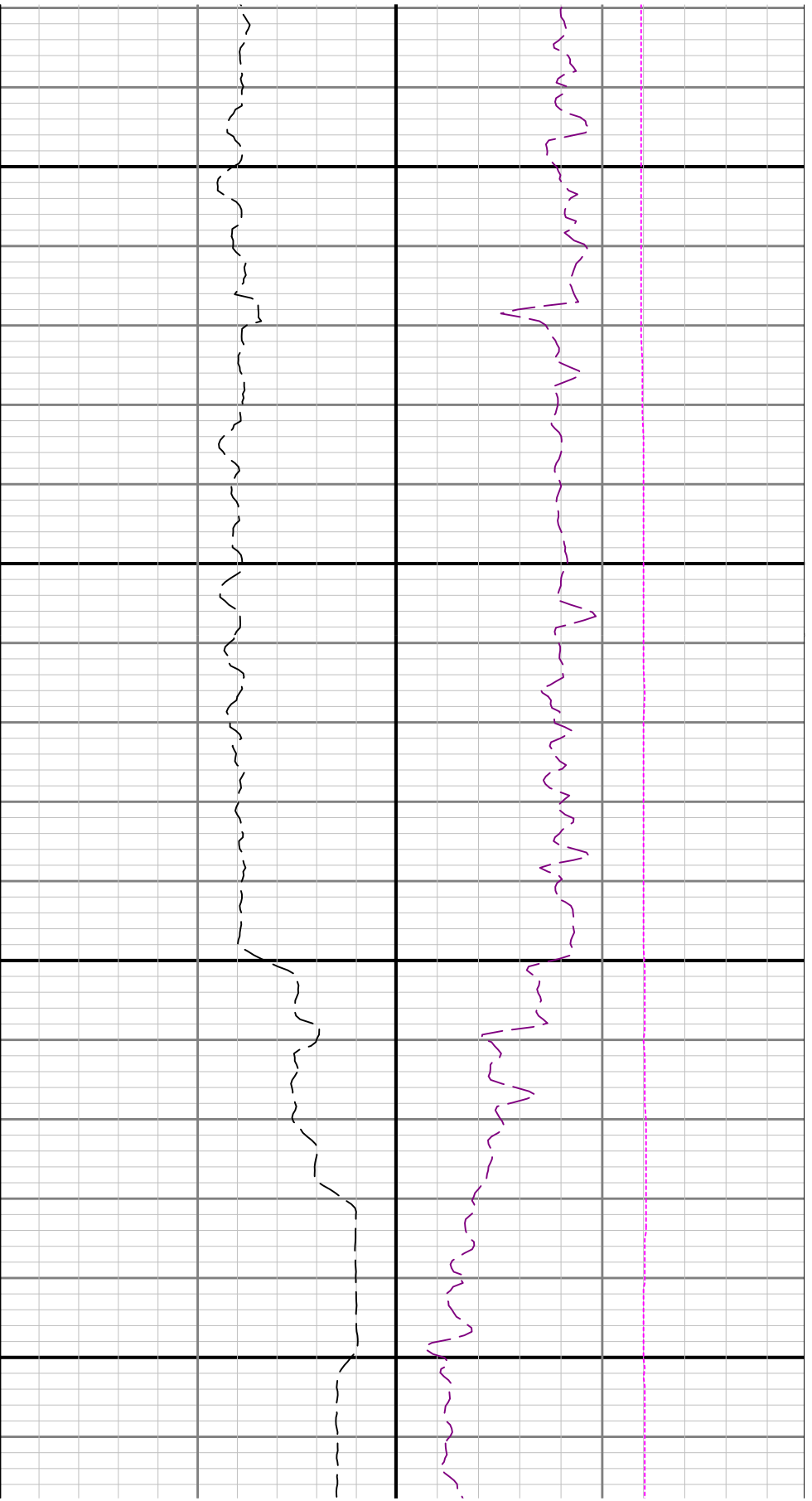


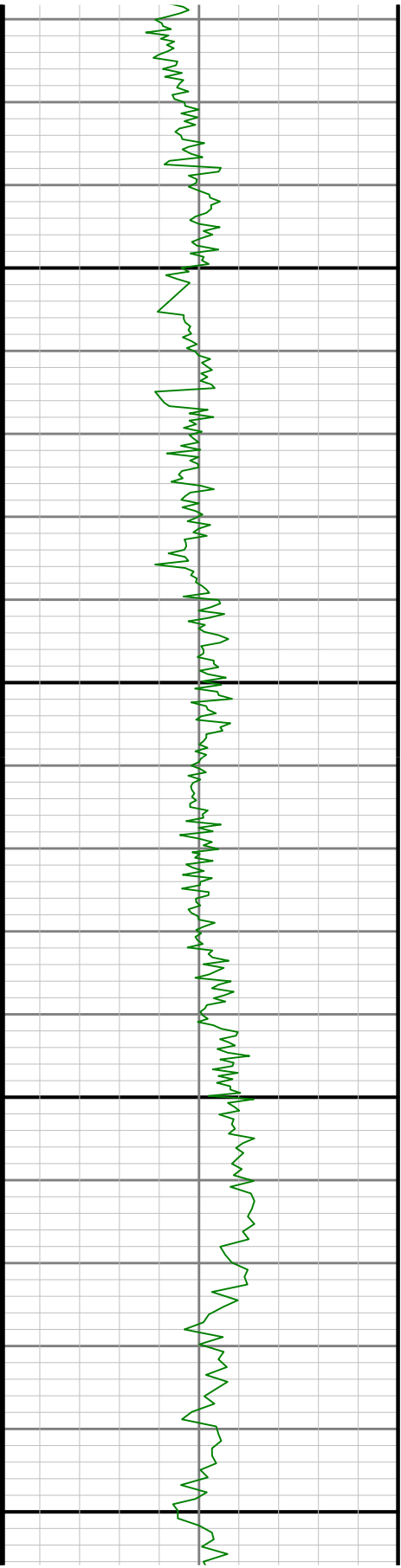


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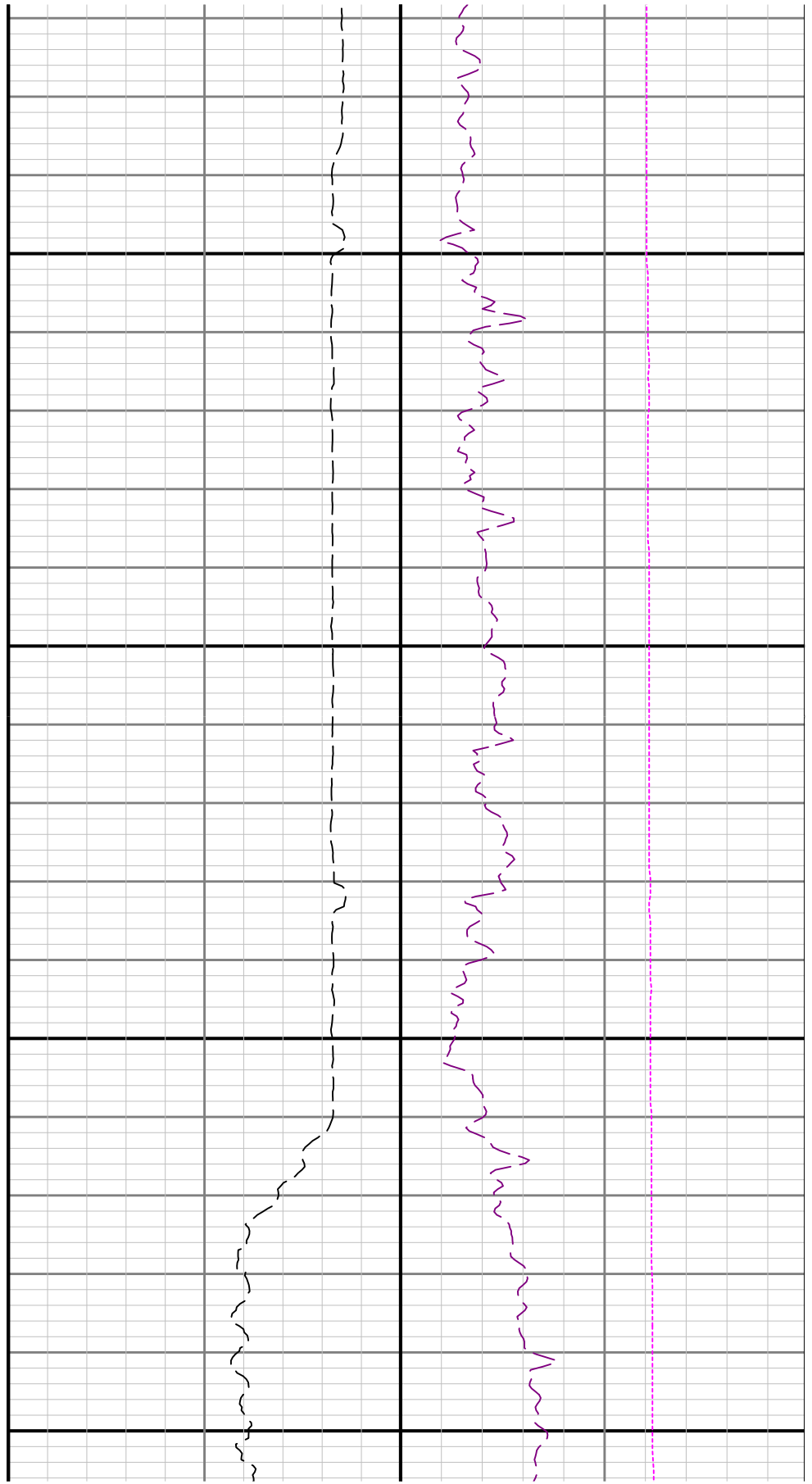


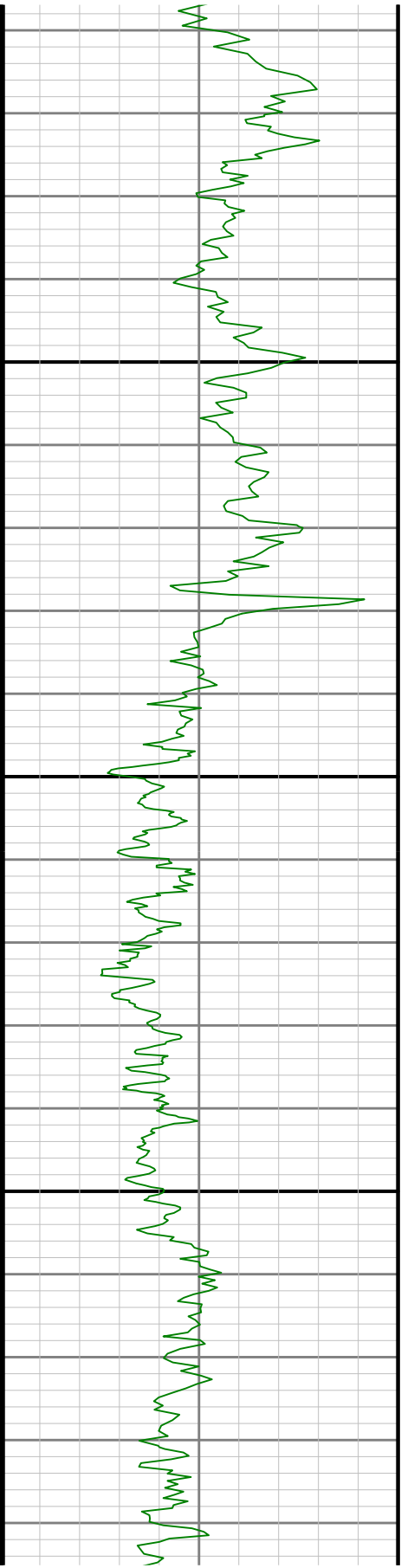




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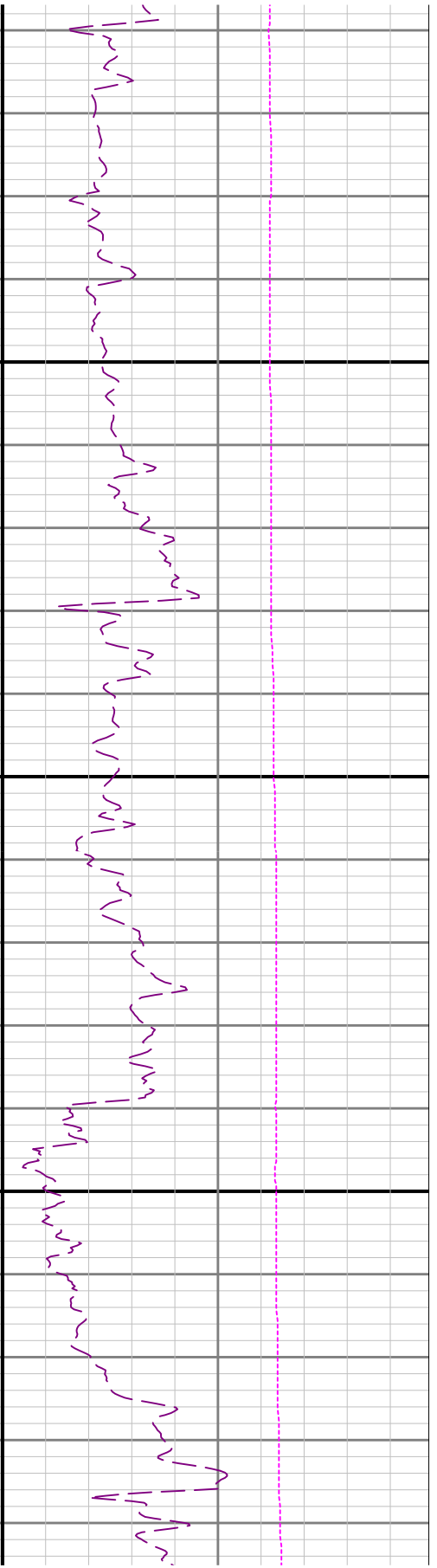
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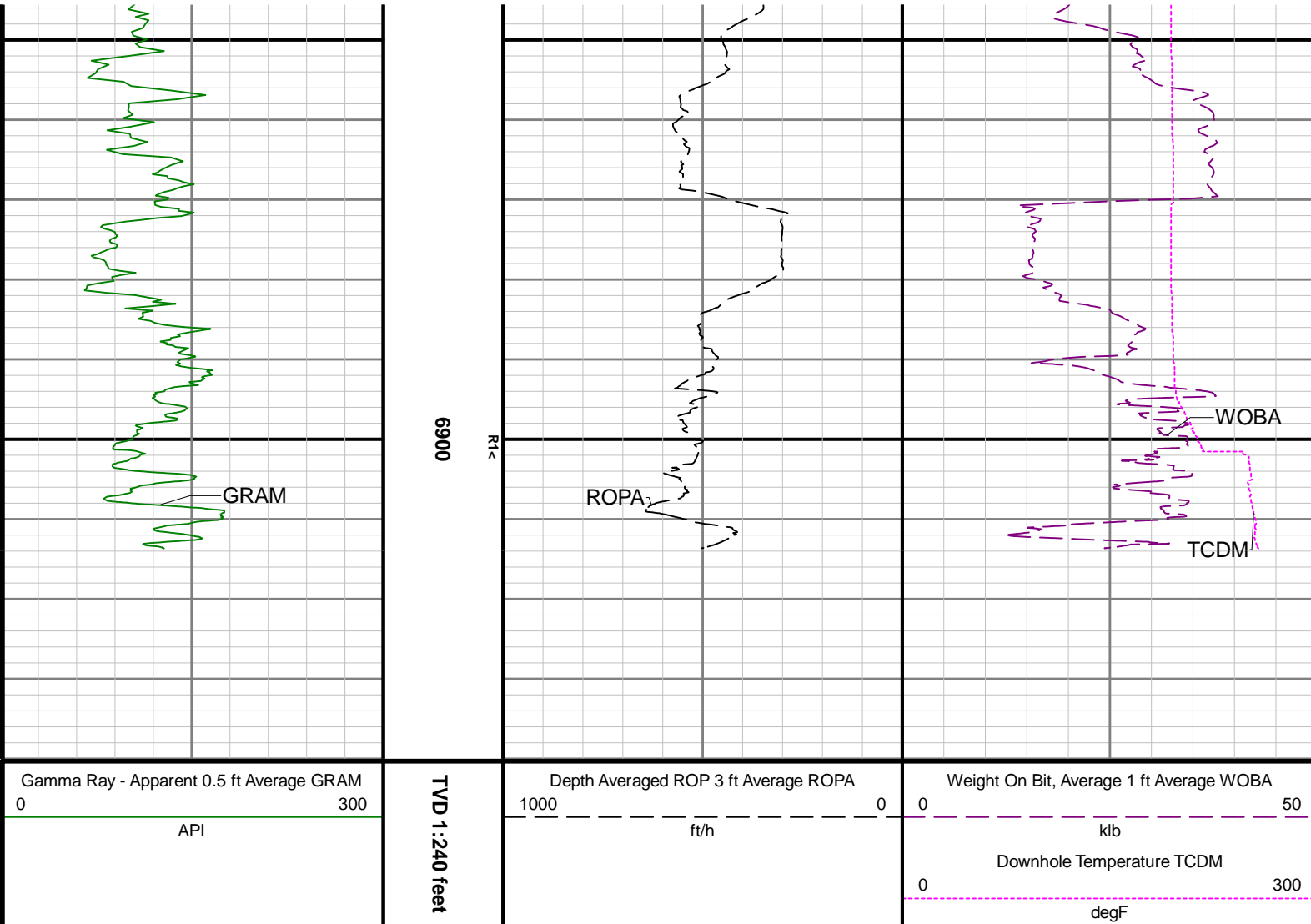




6700

6800





Directional Survey Summary

Latitude:	040° 12' 22.464" N	Longitude:	104° 33' 43.056" W
North Reference:	Grid	Drill Depth Zero:	Rig Floor
Vertical Datum is:	Ground Level	Vertical Datum to DDZ: (ft)	30.00
Vertical Section North: (ft)	0.00	Vertical Section East: (ft)	0.00
Vertical Section Azimuth: (deg)	5.29		
Grid Convergence: (deg)	-0.61	Magnetic Declination: (deg)	8.09
Total Correction: (deg)	7.48	TVD Calculation Method:	Minimum Curvature
Magnetic Correction:	On	Local Magnetic Field: (nT)	52064
Local Magnetic Dip Angle: (deg)	66.68	Local Gravity Field: (m/s2)	9.800

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	-4824.00	0.00	0.00	0.00	0.00	0.00
	86.00	0.40	308.18	N/A	0.19	-0.24	86.00	-4738.00	0.16	86.00	0.47	0.47	-60.26
	179.00	0.47	290.92	N/A	0.52	-0.85	179.00	-4645.00	0.44	93.00	0.16	0.08	-18.56
	271.00	0.58	309.51	N/A	0.95	-1.56	270.99	-4553.01	0.81	92.00	0.22	0.12	20.21
	366.00	0.75	323.19	N/A	1.76	-2.30	365.99	-4458.01	1.54	95.00	0.24	0.18	14.40
	450.00	0.47	288.78	N/A	2.31	-2.96	449.98	-4374.02	2.03	84.00	0.53	-0.33	-40.96
	555.00	0.47	289.40	N/A	2.59	-3.77	554.98	-4269.02	2.23	105.00	0.00	0.00	0.59
	656.00	0.41	282.06	N/A	2.80	-4.52	655.98	-4168.02	2.37	101.00	0.08	-0.06	-7.27
	744.00	0.21	46.40	N/A	2.98	-4.71	743.97	-4080.03	2.53	88.00	0.63	-0.23	141.30
	828.00	0.46	298.50	N/A	2.74	-4.70	828.03	-3995.03	2.30	95.00	0.60	0.00	160.94

	839.00	0.46	200.53	N/A	2.74	-4.72	838.97	-3985.03	2.30	95.00	0.69	0.26	162.24
	934.00	0.40	233.38	N/A	2.19	-5.11	933.97	-3890.03	1.71	95.00	0.26	-0.06	34.58
	1028.00	0.25	147.42	N/A	1.82	-5.27	1027.97	-3796.03	1.33	94.00	0.49	-0.16	-91.45
	1123.00	0.05	338.39	N/A	1.68	-5.17	1122.97	-3701.03	1.20	95.00	0.31	-0.21	-177.93
	1218.00	0.16	347.11	N/A	1.85	-5.22	1217.97	-3606.03	1.36	95.00	0.12	0.12	9.18
	1312.00	0.27	335.42	N/A	2.18	-5.34	1311.97	-3512.03	1.68	94.00	0.13	0.12	-12.44
	1407.00	0.41	51.03	N/A	2.60	-5.17	1406.97	-3417.03	2.11	95.00	0.45	0.15	79.59
	1502.00	0.33	58.83	N/A	2.95	-4.67	1501.97	-3322.03	2.51	95.00	0.10	-0.08	8.21
	1596.00	0.54	13.97	N/A	3.52	-4.33	1595.96	-3228.04	3.11	94.00	0.41	0.22	-47.72
	1691.00	0.57	289.65	N/A	4.12	-4.67	1690.96	-3133.04	3.67	95.00	0.78	0.03	-88.76
	1786.00	0.77	278.57	N/A	4.37	-5.74	1785.95	-3038.05	3.82	95.00	0.25	0.21	-11.66
	1880.00	0.31	276.02	N/A	4.49	-6.62	1879.95	-2944.05	3.86	94.00	0.49	-0.49	-2.71
Tie-In	1946.00	0.17	253.69	N/A	4.48	-6.89	1945.95	-2878.05	3.83	66.00	0.25	-0.21	-33.83
	1994.00	0.06	99.47	101.4	4.46	-6.94	1993.95	-2830.05	3.80	48.00	0.47	-0.23	-321.29
	2089.00	0.09	192.00	101.4	4.38	-6.90	2088.95	-2735.05	3.72	95.00	0.12	0.03	97.40
	2184.00	0.07	37.15	106.8	4.35	-6.88	2183.95	-2640.05	3.70	95.00	0.16	-0.02	-163.00
	2279.00	0.09	167.30	106.8	4.32	-6.83	2278.95	-2545.05	3.68	95.00	0.15	0.02	137.00
	2373.00	0.07	128.96	109.5	4.22	-6.77	2372.95	-2451.05	3.57	94.00	0.06	-0.02	-40.79
	2468.00	2.68	135.33	112.2	2.60	-5.16	2467.91	-2356.09	2.11	95.00	2.75	2.75	6.71
	2563.00	4.54	139.49	114.9	-1.84	-1.16	2562.72	-2261.28	-1.94	95.00	1.98	1.96	4.38
	2657.00	6.59	147.87	114.9	-9.24	4.13	2656.27	-2167.73	-8.82	94.00	2.34	2.18	8.91
	2752.00	10.03	151.70	117.6	-21.14	10.95	2750.26	-2073.74	-20.04	95.00	3.67	3.62	4.03
	2846.00	13.42	150.61	117.6	-37.86	20.19	2842.29	-1981.71	-35.83	94.00	3.61	3.61	-1.16
	2941.00	16.65	150.09	120.3	-59.26	32.39	2934.02	-1889.98	-56.03	95.00	3.40	3.40	-0.55
	3036.00	18.65	149.14	123.0	-84.10	46.97	3024.55	-1799.45	-79.42	95.00	2.13	2.11	-1.00
	3131.00	18.22	146.62	123.0	-109.55	62.93	3114.67	-1709.33	-103.28	95.00	0.95	-0.45	-2.65
	3225.00	19.69	145.34	125.7	-134.84	80.02	3203.57	-1620.43	-126.89	94.00	1.63	1.56	-1.36
	3320.00	20.03	146.98	125.7	-161.65	97.99	3292.93	-1531.07	-151.93	95.00	0.69	0.36	1.73
	3415.00	19.34	148.11	128.4	-188.65	115.17	3382.37	-1441.63	-177.23	95.00	0.83	-0.73	1.19
	3509.00	21.32	148.22	131.1	-216.39	132.39	3470.51	-1353.49	-203.27	94.00	2.11	2.11	0.12
	3604.00	22.89	148.05	131.1	-246.75	151.26	3558.53	-1265.47	-231.76	95.00	1.65	1.65	-0.18
	3699.00	23.81	149.41	133.8	-278.94	170.80	3645.75	-1178.25	-262.00	95.00	1.12	0.97	1.43
	3793.00	25.74	150.28	133.8	-313.00	190.58	3731.09	-1092.91	-294.10	94.00	2.09	2.05	0.93
	3888.00	25.71	149.96	136.5	-348.75	211.12	3816.68	-1007.32	-327.80	95.00	0.15	-0.03	-0.34
	3983.00	25.87	148.65	139.2	-384.29	232.22	3902.21	-921.79	-361.25	95.00	0.62	0.17	-1.38
	4077.00	25.66	147.81	139.2	-419.03	253.73	3986.87	-837.13	-393.85	94.00	0.45	-0.22	-0.89
	4172.00	25.46	152.44	141.9	-454.54	274.14	4072.58	-751.42	-427.33	95.00	2.11	-0.21	4.87
	4266.00	25.78	154.46	141.9	-490.90	292.30	4157.34	-666.66	-461.86	94.00	0.99	0.34	2.15
	4361.00	25.67	157.26	144.6	-528.52	309.16	4242.93	-581.07	-497.76	95.00	1.28	-0.12	2.95
	4456.00	25.63	157.76	144.6	-566.51	324.89	4328.57	-495.43	-534.15	95.00	0.23	-0.04	0.53
	4550.00	26.11	157.25	144.6	-604.41	340.58	4413.15	-410.85	-570.43	94.00	0.56	0.51	-0.54
	4645.00	25.85	154.87	147.3	-642.44	357.46	4498.55	-325.45	-606.74	95.00	1.13	-0.27	-2.51
	4740.00	25.79	154.61	147.3	-679.86	375.12	4584.06	-239.94	-642.38	95.00	0.13	-0.06	-0.27
	4834.00	25.82	157.23	147.3	-717.21	391.81	4668.69	-155.31	-678.03	94.00	1.21	0.03	2.79
	4929.00	25.98	158.43	150.0	-755.63	407.47	4754.15	-69.85	-714.85	95.00	0.58	0.17	1.26
	5023.00	25.46	161.29	152.7	-793.92	421.52	4838.84	14.84	-751.67	94.00	1.43	-0.55	3.04
	5118.00	26.14	164.12	152.7	-833.39	433.80	4924.37	100.37	-789.84	95.00	1.48	0.72	2.98
	5212.00	26.23	159.39	155.4	-872.75	446.77	5008.74	184.74	-827.84	94.00	2.22	0.10	-5.03
	5307.00	26.14	153.57	155.4	-911.15	463.48	5094.00	270.00	-864.54	95.00	2.70	-0.09	-6.13
	5401.00	26.21	147.80	158.1	-947.26	483.76	5178.38	354.38	-898.63	94.00	2.71	0.07	-6.14
	5496.00	24.68	144.45	160.8	-981.16	506.48	5264.16	440.16	-930.28	95.00	2.21	-1.61	-3.53
	5590.00	23.19	145.47	163.5	-1012.37	528.38	5350.08	526.08	-959.35	94.00	1.65	-1.59	1.09
	5685.00	26.98	140.55	163.5	-1044.44	552.69	5436.11	612.11	-989.03	95.00	4.55	3.99	-5.18
	5779.00	26.83	137.58	166.2	-1076.56	580.55	5519.94	695.94	-1018.45	94.00	1.44	-0.16	-3.16
	5874.00	25.40	138.29	166.2	-1107.60	608.56	5605.24	781.24	-1046.78	95.00	1.54	-1.51	0.75
	5969.00	27.09	140.96	168.9	-1139.62	635.75	5690.45	866.45	-1076.15	95.00	2.17	1.78	2.81
	6064.00	25.57	144.68	171.6	-1173.15	661.23	5775.59	951.59	-1107.19	95.00	2.36	-1.60	3.92
	6158.00	27.03	148.51	171.6	-1207.92	684.12	5859.87	1035.87	-1139.70	94.00	2.38	1.55	4.07
	6253.00	26.99	147.54	171.6	-1244.52	706.96	5944.51	1120.51	-1174.04	95.00	0.47	-0.04	-1.02
	6347.00	27.16	148.32	174.3	-1280.77	729.68	6028.20	1204.20	-1208.04	94.00	0.42	0.18	0.83
	6442.00	21.76	134.29	174.3	-1311.57	753.71	6114.72	1290.72	-1236.49	95.00	8.31	-5.68	-14.77
	6537.00	15.81	108.93	174.3	-1328.11	778.62	6204.77	1380.77	-1250.66	95.00	10.50	-6.26	-26.69
	6632.00	14.05	79.33	177.0	-1330.17	802.23	6296.69	1472.69	-1250.54	95.00	8.14	-1.85	-31.16

	6726.00	16.74	60.55	179.7	-1321.40	825.25	6387.36	1563.36	-1239.68	94.00	5.99	2.86	-19.98
	6821.00	21.86	36.30	179.7	-1300.37	847.68	6477.14	1653.14	-1216.68	95.00	9.90	5.39	-25.53
	6916.00	29.26	20.74	182.5	-1264.31	866.42	6562.87	1738.87	-1179.05	95.00	10.46	7.79	-16.38
	7010.00	37.27	14.72	185.2	-1215.21	881.82	6641.43	1817.43	-1128.73	94.00	9.21	8.52	-6.40
	7105.00	44.75	16.70	185.2	-1155.27	898.76	6713.07	1889.07	-1067.49	95.00	7.99	7.87	2.08
	7200.00	52.73	9.72	190.6	-1085.82	914.79	6775.71	1951.71	-996.86	95.00	10.04	8.40	-7.35
	7295.00	62.58	3.46	190.6	-1006.22	923.74	6826.51	2002.51	-916.77	95.00	11.76	10.37	-6.59
	7390.00	71.49	1.10	193.3	-918.92	927.16	6863.54	2039.54	-829.52	95.00	9.65	9.38	-2.48
	7484.00	80.22	1.26	193.3	-827.87	929.04	6886.49	2062.49	-738.69	94.00	9.29	9.29	0.17
	7579.00	89.54	2.88	196.0	-733.42	932.46	6894.96	2070.96	-644.33	95.00	9.96	9.81	1.71
	7674.00	89.48	1.34	201.4	-638.49	935.96	6895.78	2071.78	-549.48	95.00	1.62	-0.06	-1.62
	7768.00	89.48	359.31	204.1	-544.50	936.49	6896.63	2072.63	-455.84	94.00	2.16	0.00	-2.16
	7863.00	89.69	359.10	204.1	-449.52	935.17	6897.32	2073.32	-361.38	95.00	0.31	0.22	-0.22
	7958.00	89.63	359.26	206.8	-354.53	933.82	6897.88	2073.88	-266.92	95.00	0.18	-0.06	0.17
	8052.00	89.54	0.19	209.5	-260.53	933.36	6898.56	2074.56	-173.37	94.00	0.99	-0.10	0.99
	8147.00	89.78	1.26	212.2	-165.54	934.57	6899.13	2075.13	-78.67	95.00	1.15	0.25	1.13
	8242.00	89.66	0.16	212.2	-70.55	935.74	6899.59	2075.59	16.02	95.00	1.16	-0.13	-1.16
	8337.00	89.72	0.19	214.9	24.45	936.03	6900.10	2076.10	110.64	95.00	0.07	0.06	0.03
	8431.00	89.69	359.64	214.9	118.44	935.89	6900.59	2076.59	204.23	94.00	0.59	-0.03	-0.59
	8526.00	89.78	359.57	214.9	213.44	935.24	6901.03	2077.03	298.76	95.00	0.12	0.09	-0.07
	8621.00	89.75	358.60	217.6	308.43	933.72	6901.42	2077.42	393.20	95.00	1.02	-0.03	-1.02
	8716.00	90.15	358.11	217.6	403.39	930.99	6901.50	2077.50	487.50	95.00	0.67	0.42	-0.52
	8810.00	90.12	357.96	220.3	497.33	927.77	6901.28	2077.28	580.75	94.00	0.16	-0.03	-0.16
	8905.00	89.97	359.48	220.3	592.31	925.65	6901.20	2077.20	675.12	95.00	1.61	-0.16	1.60
	9000.00	90.00	1.48	79.7	687.30	926.45	6901.23	2077.23	769.79	95.00	2.11	0.03	2.11
	9094.00	89.97	2.09	223.0	781.25	929.37	6901.25	2077.25	863.61	94.00	0.65	-0.03	0.65
	9189.00	90.15	2.41	223.0	876.18	933.10	6901.15	2077.15	958.47	95.00	0.39	0.19	0.34
	9284.00	90.12	0.15	223.0	971.15	935.23	6900.93	2076.93	1053.24	95.00	2.38	-0.03	-2.38
	9378.00	90.09	357.15	223.0	1065.11	933.01	6900.76	2076.76	1146.59	94.00	3.19	-0.03	-3.19
	9473.00	90.12	357.44	225.7	1160.00	928.53	6900.58	2076.58	1240.67	95.00	0.31	0.03	0.31
	9568.00	90.00	0.89	225.7	1254.98	927.14	6900.48	2076.48	1335.11	95.00	3.63	-0.13	3.63
	9663.00	90.12	359.21	228.4	1349.98	927.23	6900.38	2076.38	1429.71	95.00	1.77	0.13	-1.77
	9757.00	90.06	357.98	228.4	1443.95	924.92	6900.24	2076.24	1523.07	94.00	1.31	-0.06	-1.31
	9852.00	89.97	358.07	231.1	1538.89	921.65	6900.21	2076.21	1617.31	95.00	0.13	-0.09	0.09
	9947.00	90.00	357.76	231.1	1633.83	918.19	6900.24	2076.24	1711.52	95.00	0.33	0.03	-0.33
	10041.00	90.03	357.07	231.1	1727.73	913.95	6900.21	2076.21	1804.64	94.00	0.73	0.03	-0.73
	10136.00	89.88	358.27	233.8	1822.65	910.09	6900.29	2076.29	1898.79	95.00	1.27	-0.16	1.26
	10231.00	89.97	359.31	233.8	1917.63	908.08	6900.41	2076.41	1993.18	95.00	1.10	0.09	1.09
	10326.00	89.94	0.60	233.8	2012.63	908.01	6900.49	2076.49	2087.77	95.00	1.36	-0.03	1.36
	10420.00	89.94	359.58	233.8	2106.62	908.16	6900.58	2076.58	2181.38	94.00	1.09	0.00	-1.09
	10515.00	89.88	358.74	233.8	2201.61	906.76	6900.73	2076.73	2275.84	95.00	0.89	-0.06	-0.88
	10610.00	89.88	359.79	233.8	2296.60	905.54	6900.93	2076.93	2370.31	95.00	1.11	0.00	1.11
	10705.00	89.97	0.89	236.5	2391.60	906.11	6901.06	2077.06	2464.95	95.00	1.16	0.09	1.16
	10800.00	89.91	1.73	236.5	2486.57	908.28	6901.16	2077.16	2559.72	95.00	0.89	-0.06	0.88
	10894.00	89.91	2.77	236.5	2580.50	911.97	6901.30	2077.30	2653.59	94.00	1.11	0.00	1.11
	10989.00	90.06	2.96	236.5	2675.38	916.72	6901.33	2077.33	2748.51	95.00	0.25	0.16	0.20
	11084.00	90.06	4.19	236.5	2770.20	922.64	6901.23	2077.23	2843.46	95.00	1.29	0.00	1.29
	11179.00	90.00	3.07	236.5	2865.00	928.66	6901.18	2077.18	2938.42	95.00	1.18	-0.06	-1.18
	11274.00	89.97	0.16	239.2	2959.96	931.33	6901.20	2077.20	3033.21	95.00	3.06	-0.03	-3.06
	11369.00	90.06	359.42	239.2	3054.95	930.99	6901.18	2077.18	3127.78	95.00	0.78	0.09	-0.78
	11464.00	90.06	0.51	239.2	3149.95	930.93	6901.08	2077.08	3222.36	95.00	1.15	0.00	1.15
	11558.00	89.94	1.29	244.6	3243.94	932.40	6901.08	2077.08	3316.09	94.00	0.84	-0.13	0.83
	11653.00	89.97	1.24	244.6	3338.92	934.50	6901.15	2077.15	3410.85	95.00	0.06	0.03	-0.05
	11748.00	89.97	359.21	241.9	3433.91	934.88	6901.20	2077.20	3505.48	95.00	2.14	0.00	-2.14
	11842.00	90.09	357.89	231.1	3527.88	932.50	6901.15	2077.15	3598.83	94.00	1.41	0.13	-1.40
	11937.00	90.00	357.84	239.2	3622.81	928.96	6901.08	2077.08	3693.03	95.00	0.11	-0.09	-0.05
	12032.00	89.97	357.41	239.2	3717.73	925.02	6901.11	2077.11	3787.18	95.00	0.45	-0.03	-0.45
	12127.00	89.91	358.05	241.9	3812.66	921.26	6901.20	2077.20	3881.35	95.00	0.68	-0.06	0.67
	12221.00	89.91	357.61	241.9	3906.59	917.70	6901.35	2077.35	3974.56	94.00	0.47	0.00	-0.47
	12316.00	89.94	356.57	244.6	4001.46	912.88	6901.48	2077.48	4068.59	95.00	1.10	0.03	-1.09
	12411.00	89.91	358.12	247.3	4096.36	908.48	6901.60	2077.60	4162.67	95.00	1.63	-0.03	1.63
	12506.00	89.88	359.36	247.3	4191.33	906.39	6901.78	2077.78	4257.05	95.00	1.31	-0.03	1.31
	12600.00	89.91	0.16	247.3	4285.33	905.99	6901.95	2077.95	4350.61	94.00	0.85	0.03	0.85

	12695.00	89.97	359.90	250.0	4380.33	906.04	6902.05	2078.05	4445.21	95.00	0.28	0.06	-0.27
	12790.00	89.94	359.69	250.0	4475.33	905.70	6902.12	2078.12	4539.77	95.00	0.22	-0.03	-0.22
	12885.00	89.02	358.67	250.0	4570.32	904.34	6902.98	2078.98	4634.23	95.00	1.45	-0.97	-1.07
	12979.00	88.86	357.53	250.0	4664.25	901.23	6904.72	2080.72	4727.47	94.00	1.22	-0.17	-1.21
	13074.00	88.86	357.18	250.0	4759.13	896.84	6906.61	2082.61	4821.54	95.00	0.37	0.00	-0.37
	13169.00	88.98	357.43	304.1	4854.00	892.38	6908.40	2084.40	4915.60	95.00	0.29	0.13	0.26
	13263.00	89.23	353.02	255.4	4947.64	884.56	6909.87	2085.87	5008.12	94.00	4.70	0.27	-4.69
	13358.00	88.89	356.89	255.4	5042.24	876.20	6911.43	2087.43	5101.55	95.00	4.09	-0.36	4.07
	13453.00	89.14	357.01	255.4	5137.10	871.15	6913.06	2089.06	5195.53	95.00	0.29	0.26	0.13
	13548.00	90.18	358.29	258.1	5232.01	867.26	6913.63	2089.63	5289.69	95.00	1.74	1.09	1.35
	13642.00	90.03	359.43	258.1	5325.99	865.39	6913.46	2089.46	5383.09	94.00	1.22	-0.16	1.21
	13737.00	90.03	0.24	258.1	5420.99	865.11	6913.41	2089.41	5477.66	95.00	0.85	0.00	0.85
	13832.00	89.97	1.81	260.8	5515.97	866.81	6913.41	2089.41	5572.39	95.00	1.65	-0.06	1.65
	13926.00	89.97	1.25	260.8	5609.94	869.32	6913.46	2089.46	5666.19	94.00	0.60	0.00	-0.60
	14021.00	90.12	2.15	263.5	5704.89	872.14	6913.38	2089.38	5761.00	95.00	0.96	0.16	0.95
	14116.00	89.94	3.12	263.5	5799.79	876.51	6913.33	2089.33	5855.90	95.00	1.04	-0.19	1.02
	14211.00	89.97	0.27	263.5	5894.74	879.32	6913.41	2089.41	5950.70	95.00	3.00	0.03	-3.00
	14305.00	89.97	0.43	263.5	5988.74	879.89	6913.46	2089.46	6044.36	94.00	0.17	0.00	0.17
	14400.00	90.00	1.09	263.5	6083.73	881.15	6913.48	2089.48	6139.06	95.00	0.70	0.03	0.69
	14495.00	90.06	1.55	263.5	6178.71	883.34	6913.43	2089.43	6233.83	95.00	0.49	0.06	0.48
	14589.00	90.00	1.39	263.5	6272.67	885.75	6913.38	2089.38	6327.62	94.00	0.18	-0.06	-0.17
	14684.00	90.03	1.34	263.5	6367.65	888.01	6913.36	2089.36	6422.40	95.00	0.06	0.03	-0.05
	14779.00	90.18	2.43	263.5	6462.59	891.14	6913.18	2089.18	6517.23	95.00	1.16	0.16	1.15
	14874.00	89.91	359.38	263.5	6557.57	892.64	6913.11	2089.11	6611.94	95.00	3.22	-0.28	-3.21
	14969.00	90.00	357.07	266.2	6652.52	889.70	6913.18	2089.18	6706.21	95.00	2.43	0.09	-2.43
	15063.00	90.03	355.82	263.5	6746.34	883.87	6913.16	2089.16	6799.09	94.00	1.33	0.03	-1.33
	15158.00	90.55	356.29	266.2	6841.11	877.33	6912.68	2088.68	6892.86	95.00	0.74	0.55	0.49
	15253.00	90.62	356.59	269.0	6935.92	871.43	6911.71	2087.71	6986.72	95.00	0.32	0.07	0.32
	15348.00	90.68	357.65	269.0	7030.79	866.66	6910.63	2086.63	7080.75	95.00	1.12	0.06	1.12
	15537.00	90.65	359.85	269.0	7219.72	862.54	6908.44	2084.44	7268.50	189.00	1.16	-0.02	1.16
	15632.00	90.71	0.48	269.0	7314.72	862.81	6907.31	2083.31	7363.11	95.00	0.67	0.06	0.66
	15726.00	90.65	0.41	260.8	7408.71	863.54	6906.19	2082.19	7456.77	94.00	0.10	-0.06	-0.07
	15821.00	90.68	1.02	266.2	7503.69	864.73	6905.09	2081.09	7551.46	95.00	0.64	0.03	0.64
	15916.00	90.62	1.68	266.2	7598.66	866.96	6904.01	2080.01	7646.23	95.00	0.70	-0.06	0.69
	16011.00	90.71	2.20	269.0	7693.60	870.18	6902.91	2078.91	7741.06	95.00	0.56	0.09	0.55
	16106.00	90.62	0.80	266.2	7788.56	872.67	6901.81	2077.81	7835.84	95.00	1.48	-0.09	-1.47
	16201.00	90.37	0.51	266.2	7883.55	873.75	6900.99	2076.99	7930.53	95.00	0.40	-0.26	-0.31
	16295.00	89.94	359.85	266.2	7977.55	874.05	6900.73	2076.73	8024.15	94.00	0.84	-0.46	-0.70
	16390.00	90.00	359.84	269.0	8072.55	873.79	6900.78	2076.78	8118.72	95.00	0.06	0.06	-0.01
	16485.00	90.00	359.02	269.0	8167.54	872.85	6900.78	2076.78	8213.23	95.00	0.86	0.00	-0.86
	16579.00	90.12	358.93	269.0	8261.53	871.16	6900.68	2076.68	8306.66	94.00	0.16	0.13	-0.10
	16674.00	90.12	358.80	269.0	8356.51	869.28	6900.48	2076.48	8401.06	95.00	0.14	0.00	-0.14
	16769.00	90.03	359.81	220.3	8451.50	868.13	6900.36	2076.36	8495.54	95.00	1.07	-0.09	1.06
	16864.00	89.88	0.89	269.0	8546.49	868.71	6900.43	2076.43	8590.19	95.00	1.15	-0.16	1.14
	16958.00	89.91	1.98	269.0	8640.46	871.07	6900.61	2076.61	8683.97	94.00	1.16	0.03	1.16
	17053.00	90.00	2.01	269.0	8735.41	874.37	6900.68	2076.68	8778.81	95.00	0.10	0.09	0.03
	17148.00	89.82	2.78	269.0	8830.32	878.34	6900.83	2076.83	8873.69	95.00	0.83	-0.19	0.81
	17242.00	89.78	3.03	271.7	8924.20	883.11	6901.16	2077.16	8967.61	94.00	0.27	-0.04	0.27
	17337.00	89.94	2.66	274.4	9019.08	887.82	6901.39	2077.39	9062.52	95.00	0.42	0.17	-0.39
	17432.00	89.88	2.31	274.4	9113.99	891.94	6901.54	2077.54	9157.41	95.00	0.37	-0.06	-0.37
	17526.00	89.78	2.51	277.1	9207.91	895.89	6901.82	2077.82	9251.29	94.00	0.24	-0.11	0.21
	17621.00	89.85	2.52	277.1	9302.82	900.06	6902.13	2078.13	9346.18	95.00	0.07	0.07	0.01
	17716.00	89.85	2.78	277.1	9397.72	904.45	6902.37	2078.37	9441.08	95.00	0.27	0.00	0.27
Projection	17761.00	89.85	2.78	N/A	9442.66	906.64	6902.49	2078.49	9486.03	45.00	0.00	0.00	0.00