



Gamma Ray

LWD MEMORY LOG

Scale:

1:240

True Vertical Depth

Depth Reference:

Driller's Depth

Final Print

API No: 05-123-50797-00
Job ID: 110697722

Permanent Datum (P.D.):
Log Measured From:

Mean Sea Level
Rig Floor

Elevation:
Above P.D.:

0.00 ft
4680.00 ft

Elev. KB:
Elev. DF:
Elev. GL:

N/A
4680.00 ft
4650.00 ft

Dates

From: 2021-01-06
To: 2021-01-09
Spud: 2021-01-06

Drilled (ft)
Top: 1944.00
Bottom: 17121.00

Logged (ft)
Top: 1944.00
Bottom: 17108.00

Azi Reference North:
Total Magnetic Field Strength: (nT)
Mag to Reference North Correction: (deg)

66.83
51975
7.11

Interval

Magnetic Field Reference

Borehole Record

Casing Record

Hole Size (in)	From (ft)	To (ft)	Size (in)	Weight (lb/ft)	From (ft)	To (ft)
13.500	30.00	1944.00	9.625	36.00	30.00	1934.00
8.500	1944.00	17121.00				

Mud Record

Deviation Record

Type	From (ft)	To (ft)	Hole Size (in)	Interval (ft)	Inc Az (Start)	Inc Az (End)
Oil Based Mud	1944.00	17121.00	8.500	15177.00	2.07 194.66	90.30 0.99

Acquisition System

Software Version

Other

Cadence	RT 5.7	Rig: H&P 517
Plot Studio	5.7.8906.1	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	2.50	Rotary Steerable	1944.00	1975.00	1944.00	1986.00	2021-01-06 03:26	2021-01-06 03:39	1.85
2	1RR	8.500	PDC	2.50	Rotary Steerable	1975.00	17108.00	1986.00	17121.00	2021-01-06 07:30	2021-01-08 21:39	57.30

Crew

Name	Arrive	Depart	Name	Arrive	Depart	Name	Arrive	Depart
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	Wellsite	Wellsite		Wellsite	Wellsite		Wellsite	Wellsite
Adam Schlenz	2021-01-05	2021-01-09						

Mud Properties Record

Date / Time	Run No.	Depth (ft)	Mud Type	Density (ppg)	Viscosity (cP)	pH	Fluid Loss (cm3)	Oil / Water	Source	Total Chlorides (ppm)	K+ (%)
2021-01-06 01:43	1	1944.00	Oil Based Mud	9.6	14	N/A	15.8	70/19	Active Pit	27992	0.00
2021-01-06 06:38	2	1986.00	Oil Based Mud	9.6	14	N/A	15.8	70/19	Active Pit	N/A	0.00
2021-01-07 04:00	2	6628.00	Oil Based Mud	9.6	16	N/A	16.8	69/19	Active Pit	28475	0.00
2021-01-07 16:00	2	7263.00	Oil Based Mud	9.6	13	N/A	17.4	69/20	Active Pit	26725	0.00
2021-01-09 04:00	2	17121.00	Oil Based Mud	9.8	15	N/A	18.6	68/18.5	Active Pit	26239	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	13867779	Near Bit Inclination	5.93	6.78	7.000	4.330
1	AutoTrak Curve Steering Unit	13867779	Near Bit VSS	5.93	6.78	7.000	4.330
1	AutoTrak Curve MWD	12603327	Gamma (single)	2.75	12.93	7.000	3.250
1	AutoTrak Curve MWD	12603327	Directional (mag)	12.27	22.45	7.000	3.250
2	AutoTrak Curve Steering Unit	14316020	Near Bit Inclination	5.93	6.78	7.000	4.330
2	AutoTrak Curve Steering Unit	14316020	Near Bit VSS	5.93	6.78	7.000	4.330
2	AutoTrak Curve MWD	12441474	Gamma (single)	2.75	12.91	7.000	3.250
2	AutoTrak Curve MWD	12441474	Directional (mag)	12.27	22.43	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 and 2 utilized a 6.75 inch NaviGamma service (Directional and Gamma Ray) behind a 8.5 inch bit and rotary steerable assembly from 1944 to 17121 feet MD (1944 to 6760 feet TVD).
3	The Gamma Ray Apparent (GRAM) data is presented 0 to 300 API, per the customer's request.

Remarks

Number	Depth (ft)	Hole Section (in)	Run No.	Remark
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Curve Mnemonics

Presented Curves	Description	Units
ROP_AVG	Rate of Penetration 3 ft Average	ft/h
WOB_AVG	Weight On Bit 1 ft Average	klb
GRAM	Gamma Ray - Apparent - Memory 0.5 ft Average	API
TCDM	Directional Real-Time Survey Temperature	degF

Gamma Ray - Apparent 0.5 ft Average GRAM 0300	TVD 1:240 feet	Rate of Penetration 3 ft Average ROP_AVG 10000	Weight On Bit 1 ft Average WOB_AVG 050
API		ft/h	klb
			Downhole Temperature TCDM 0300 degF

9 5/8" Casing

>R1

R1<R2

2000

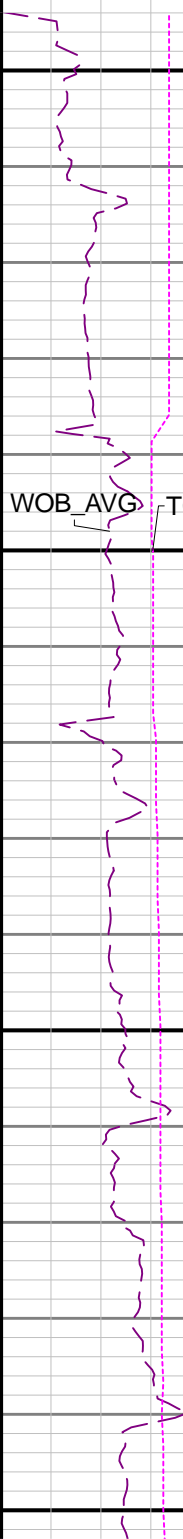
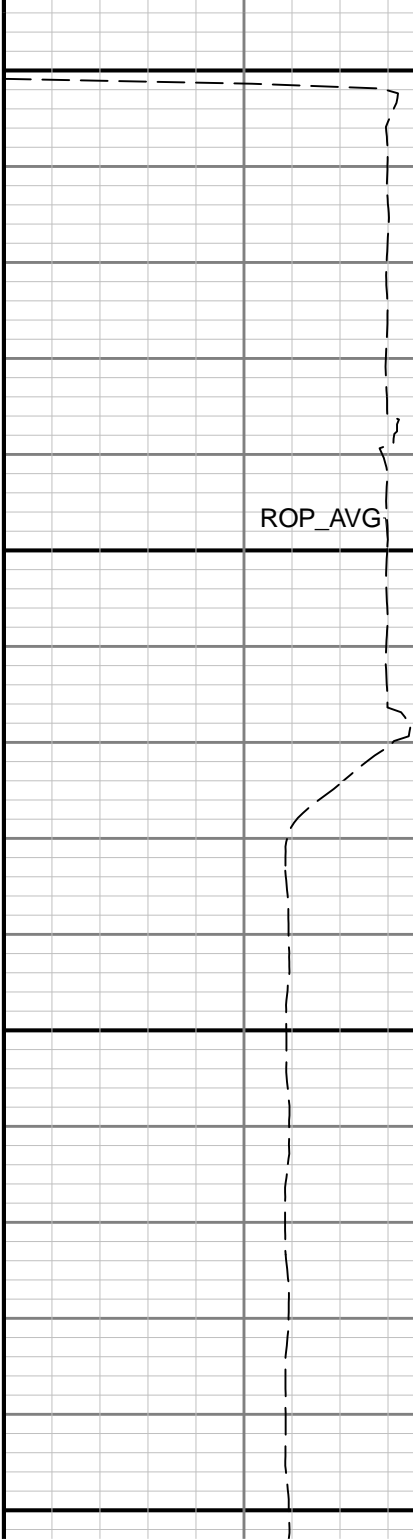
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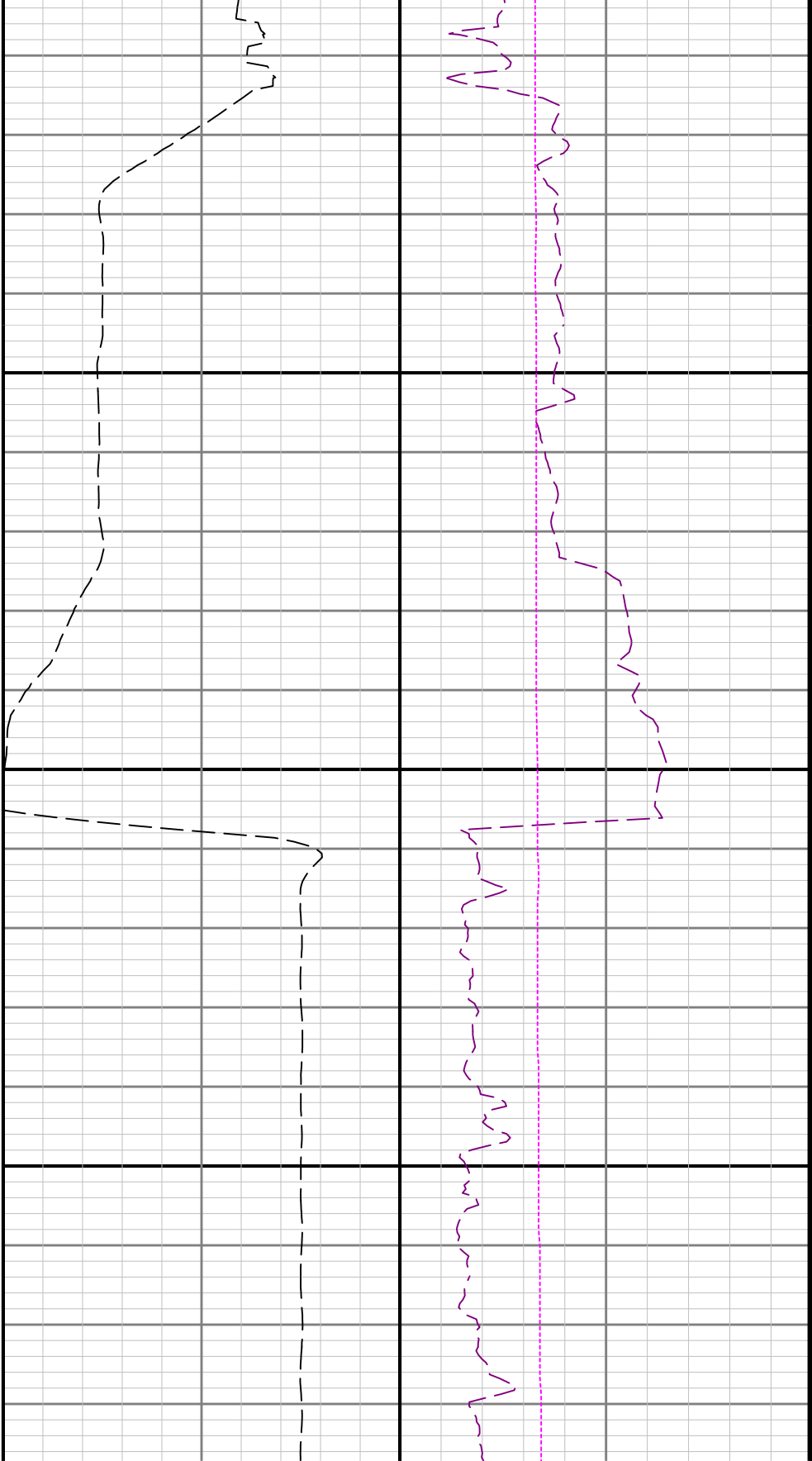
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ROP_AVG

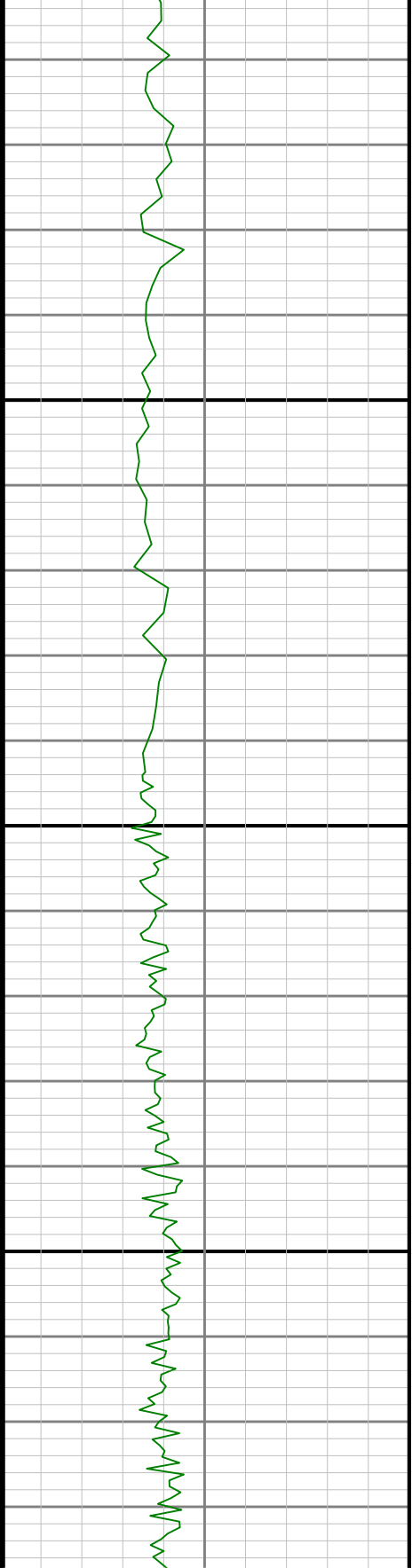
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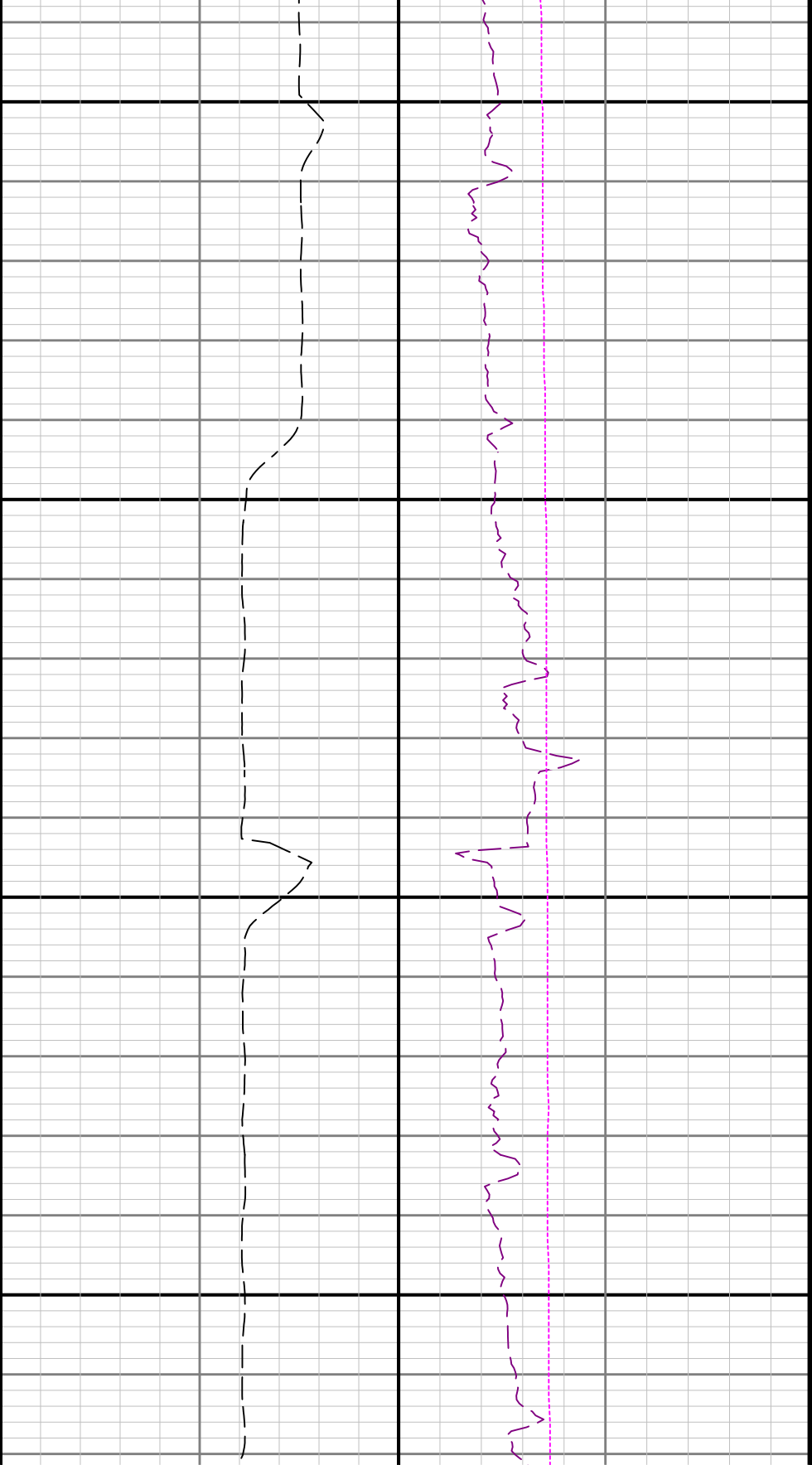
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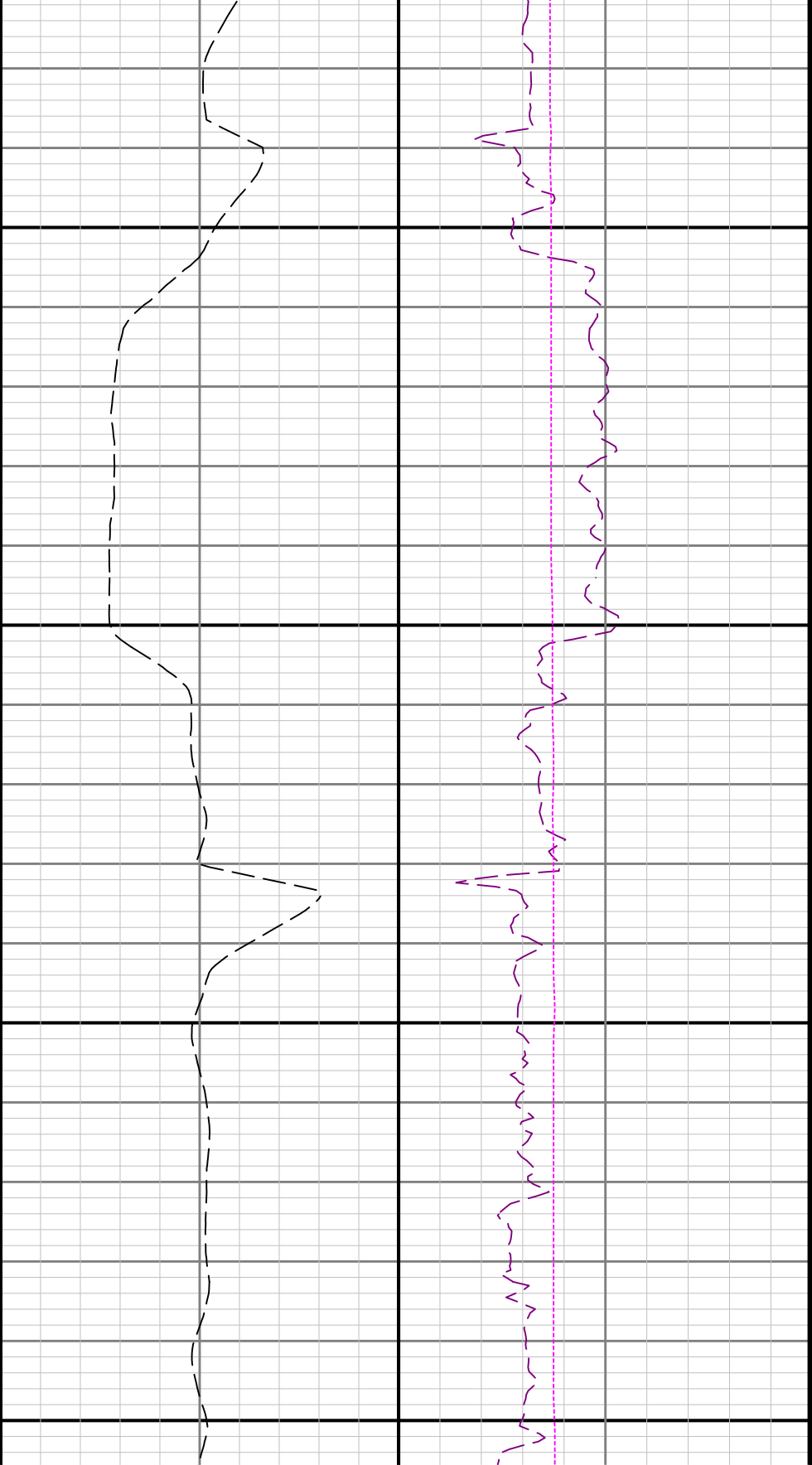
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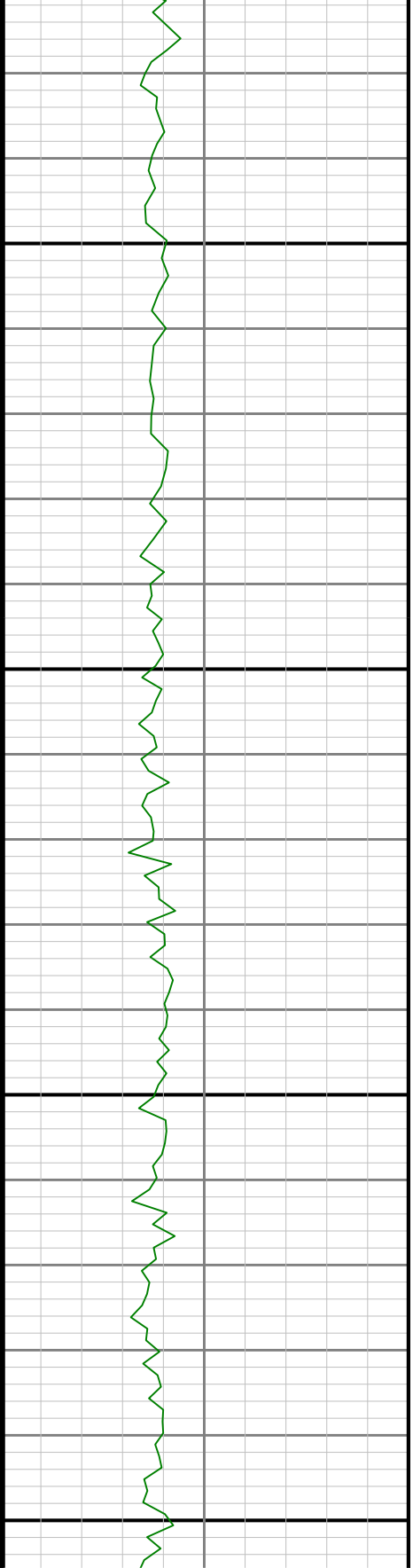
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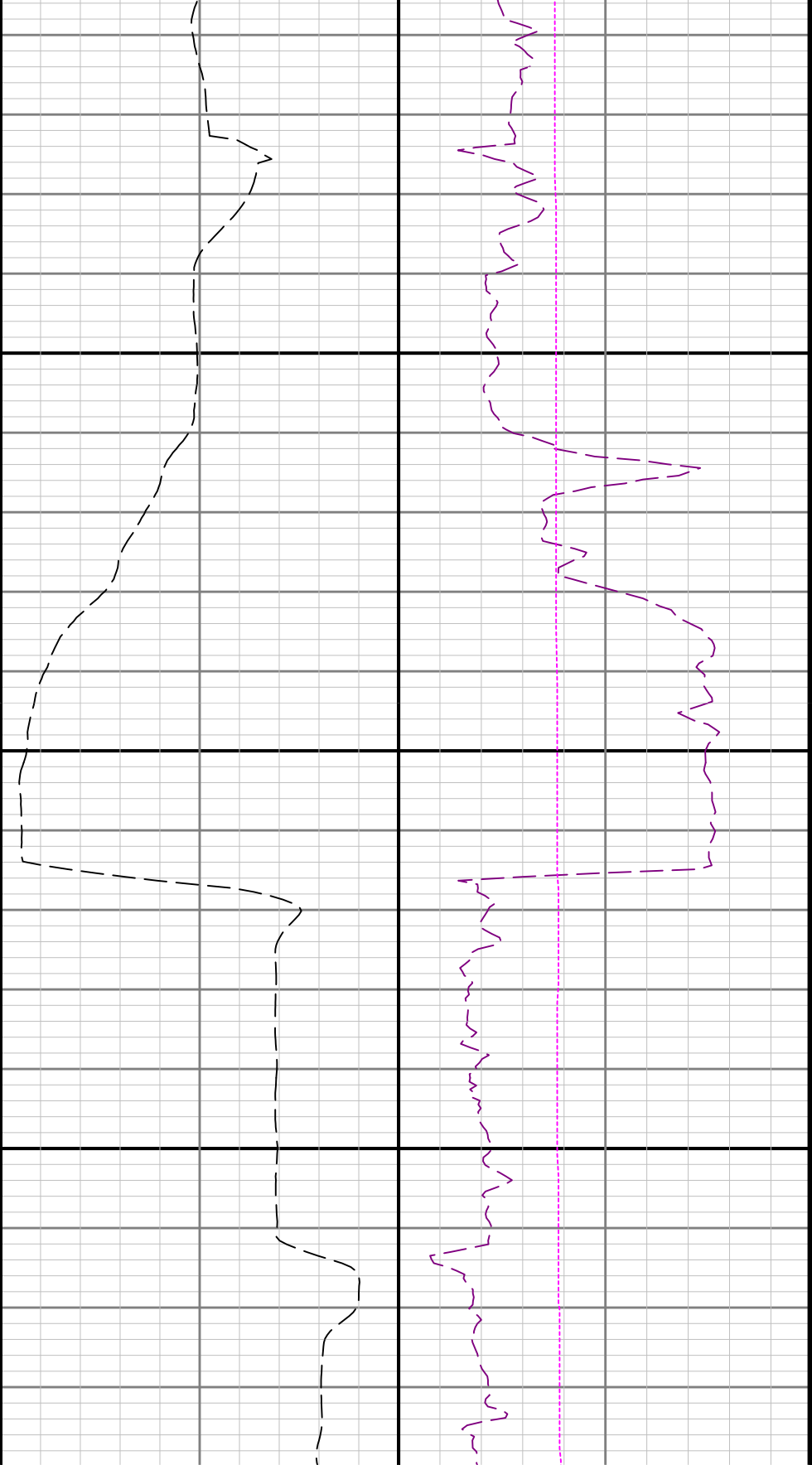
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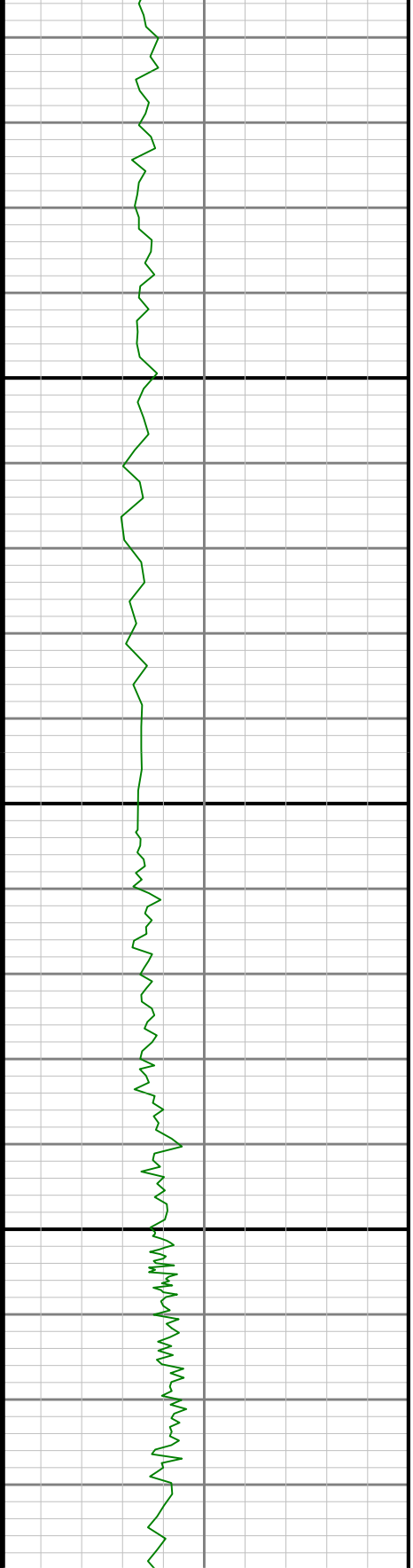
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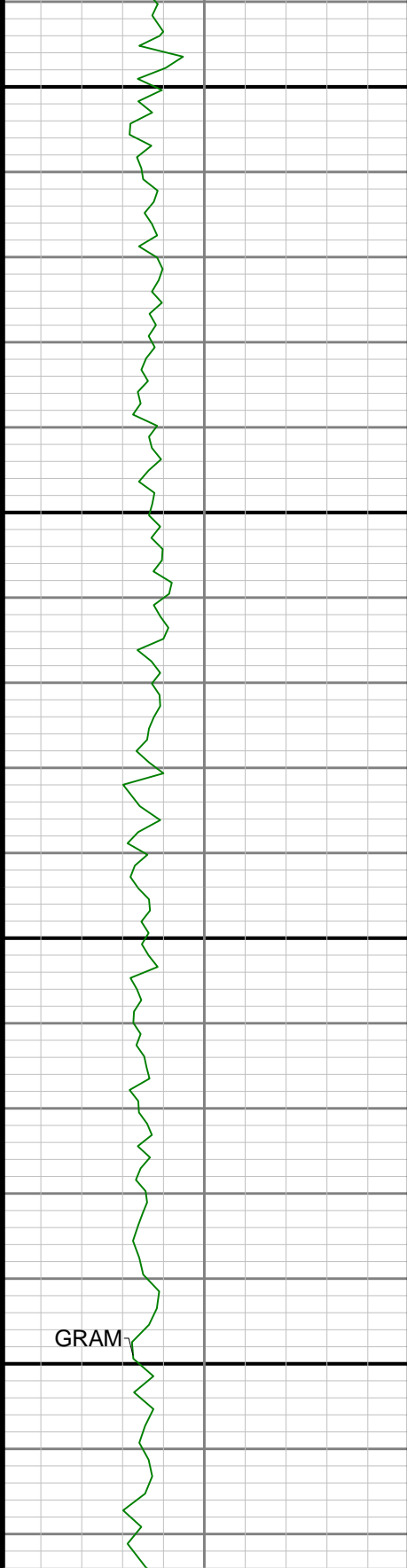




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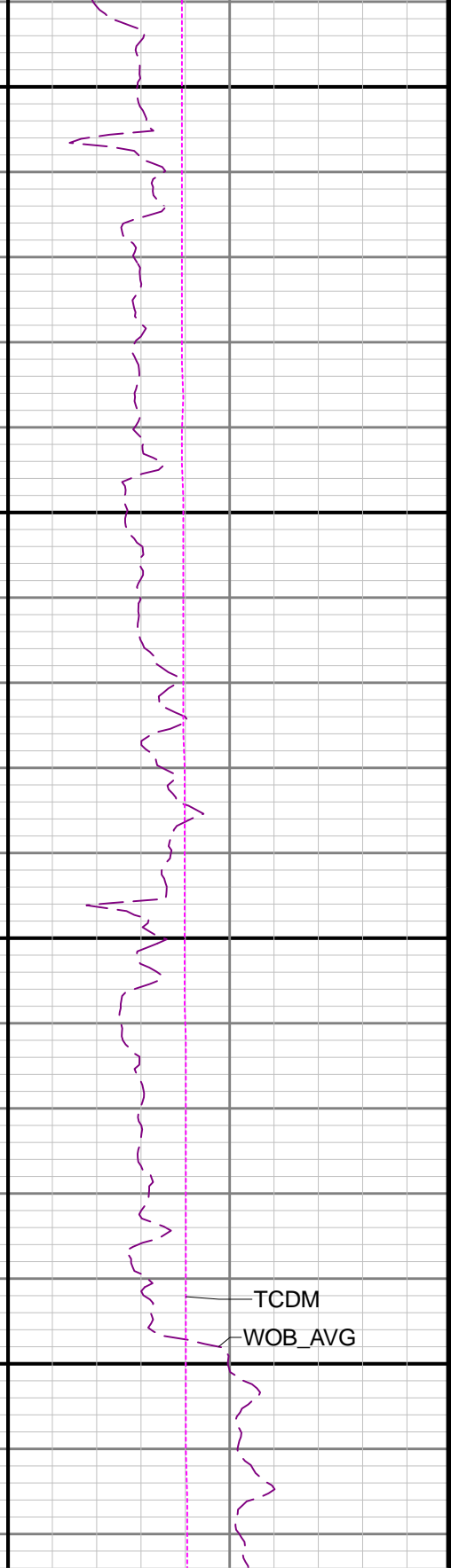
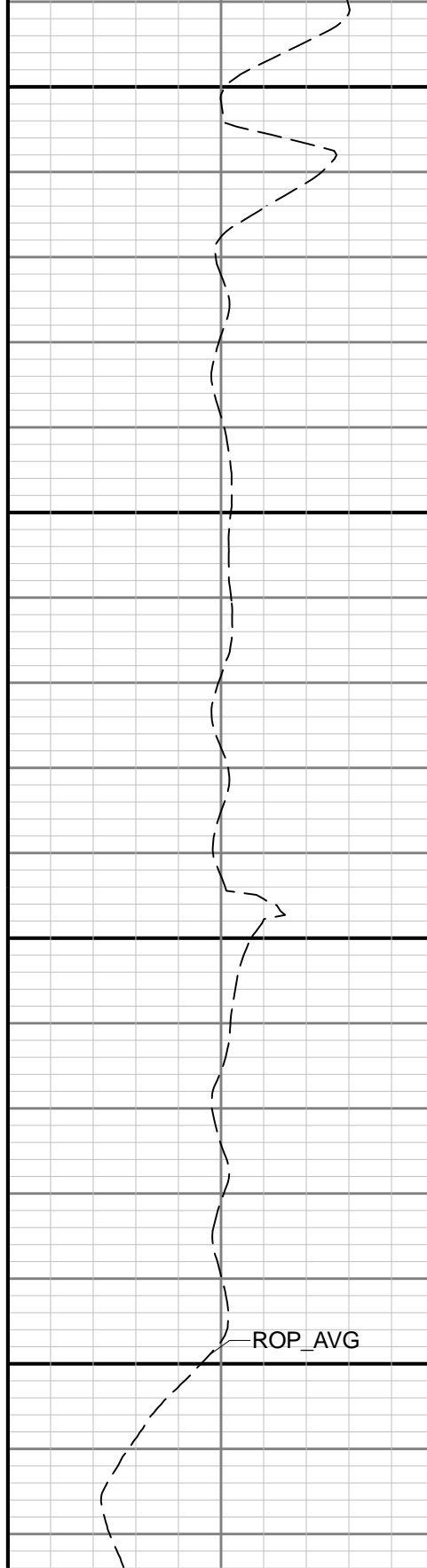
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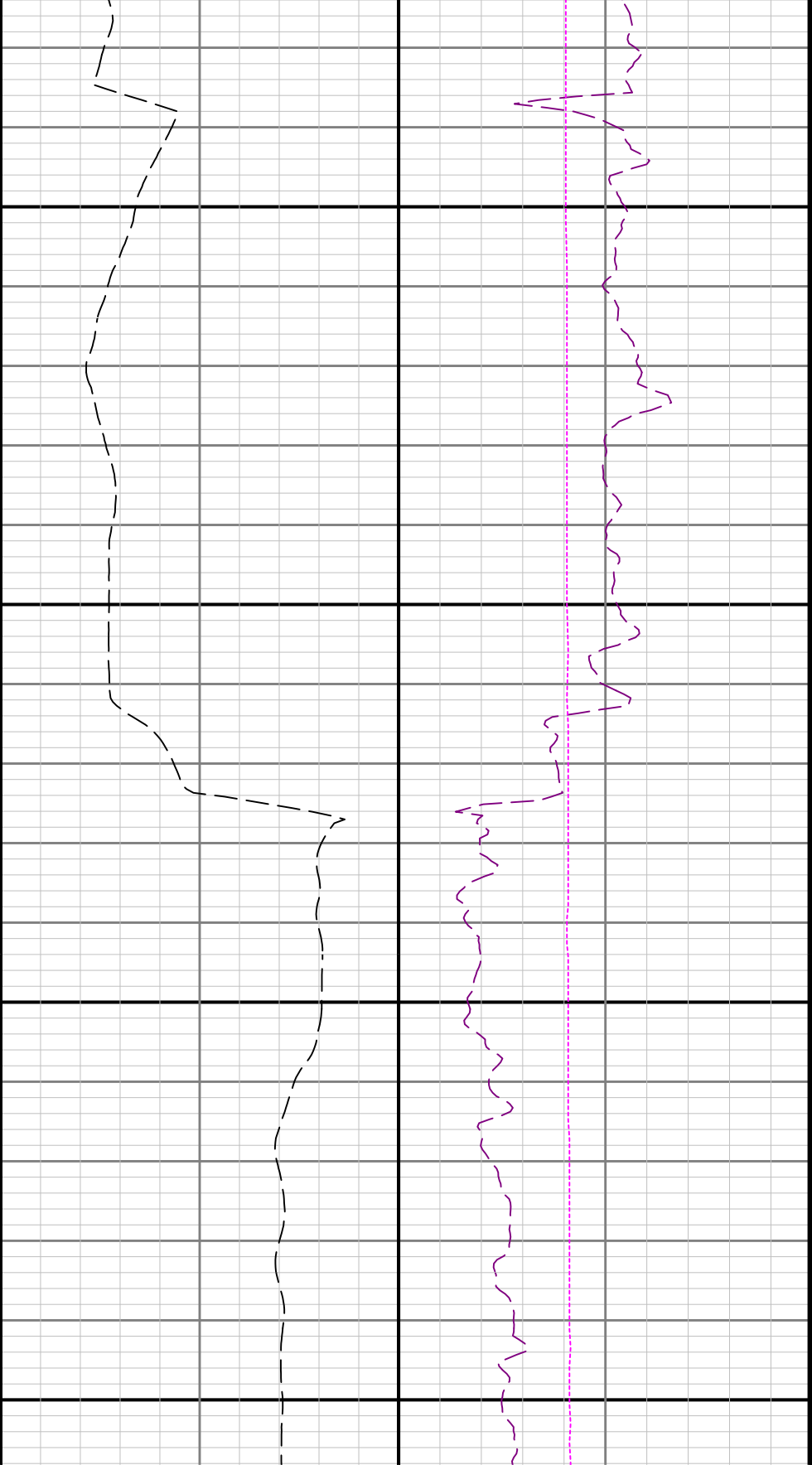




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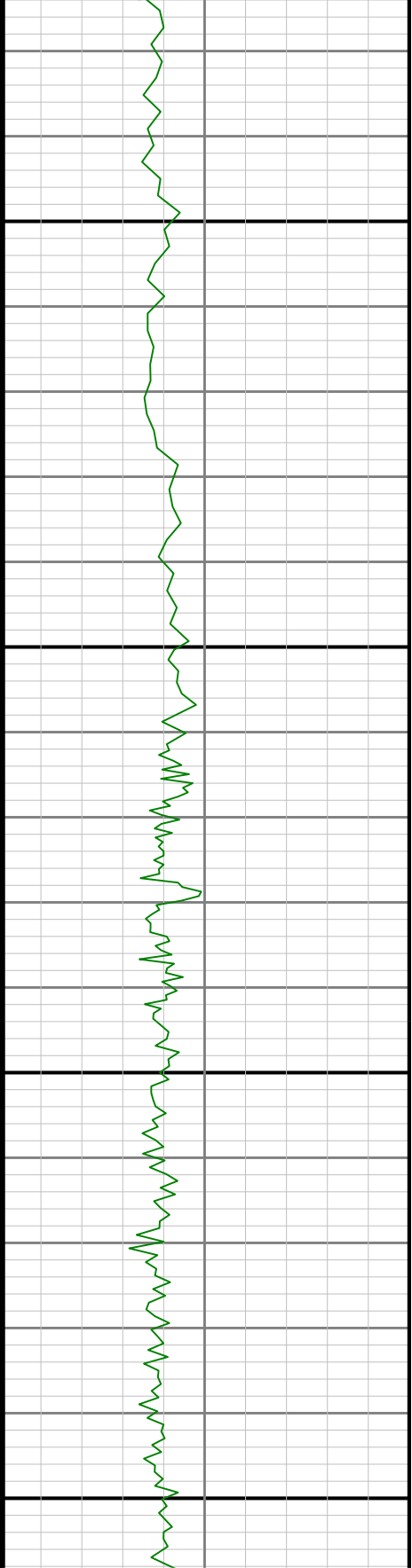
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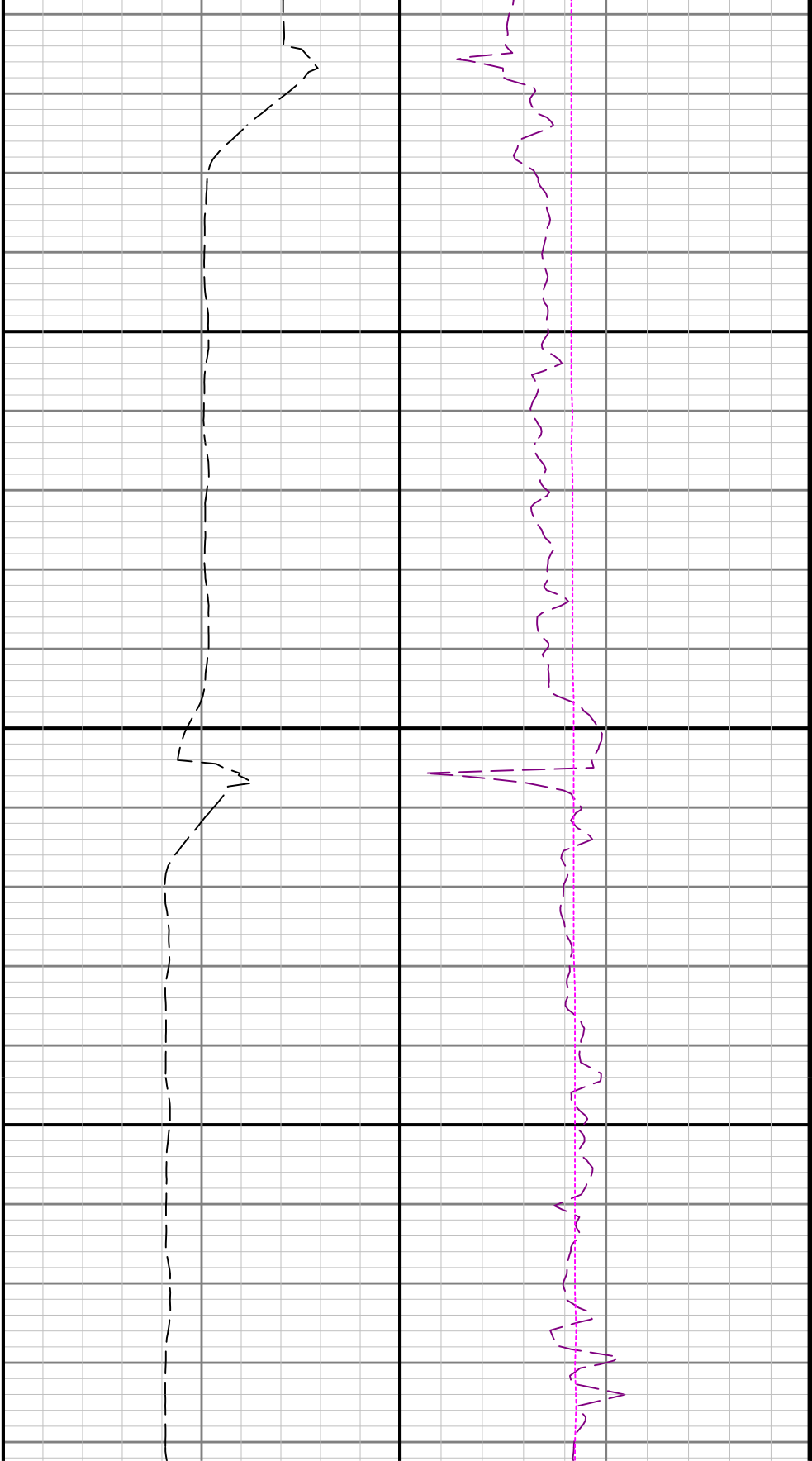




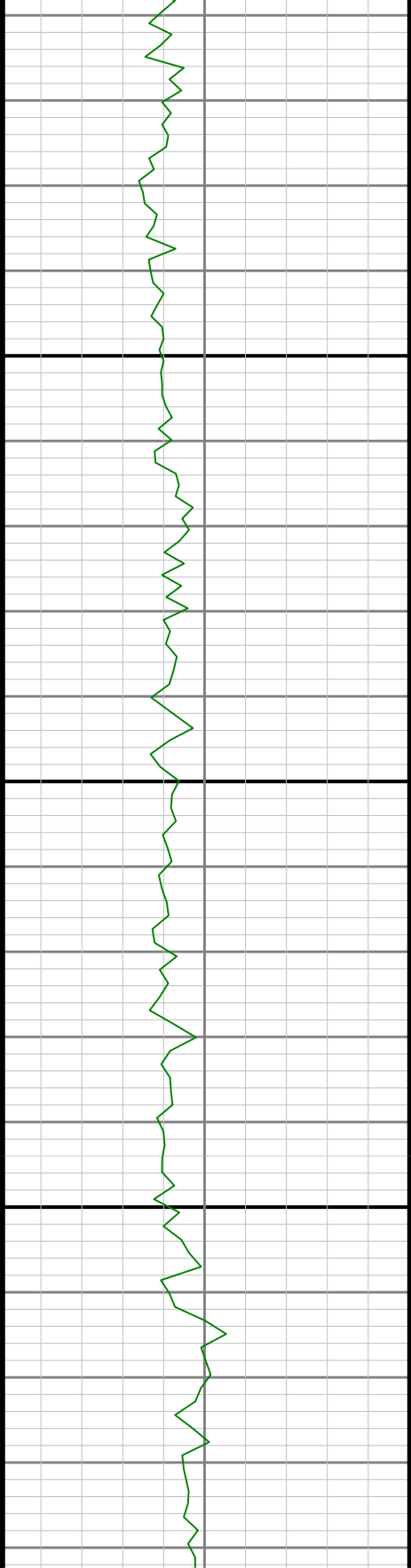
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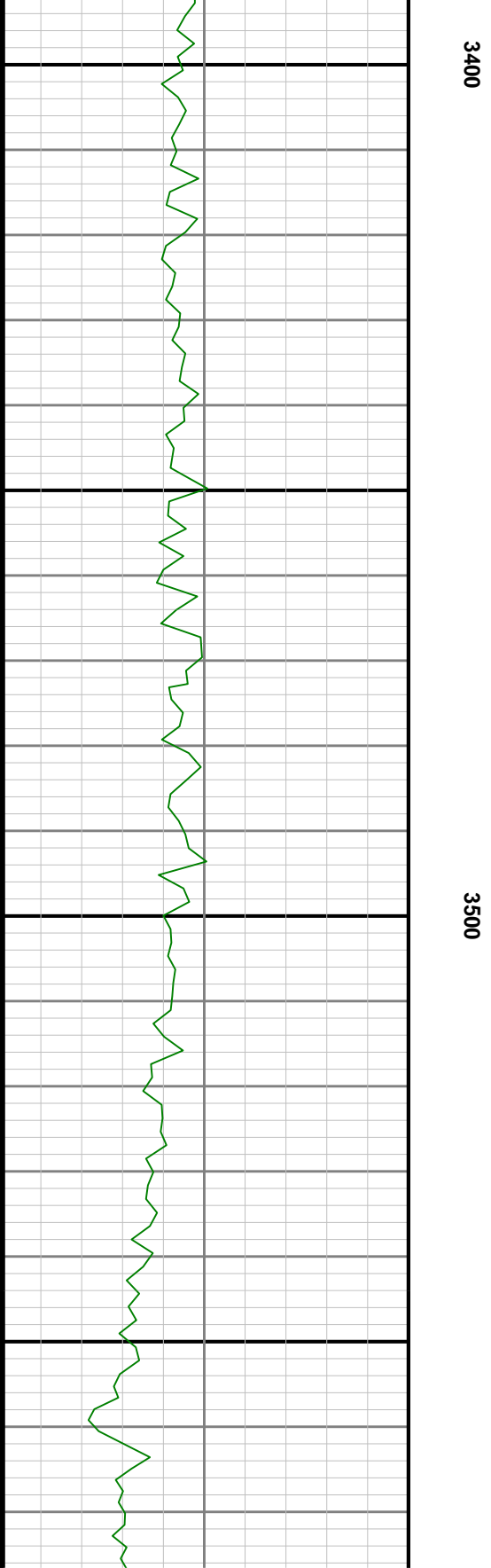
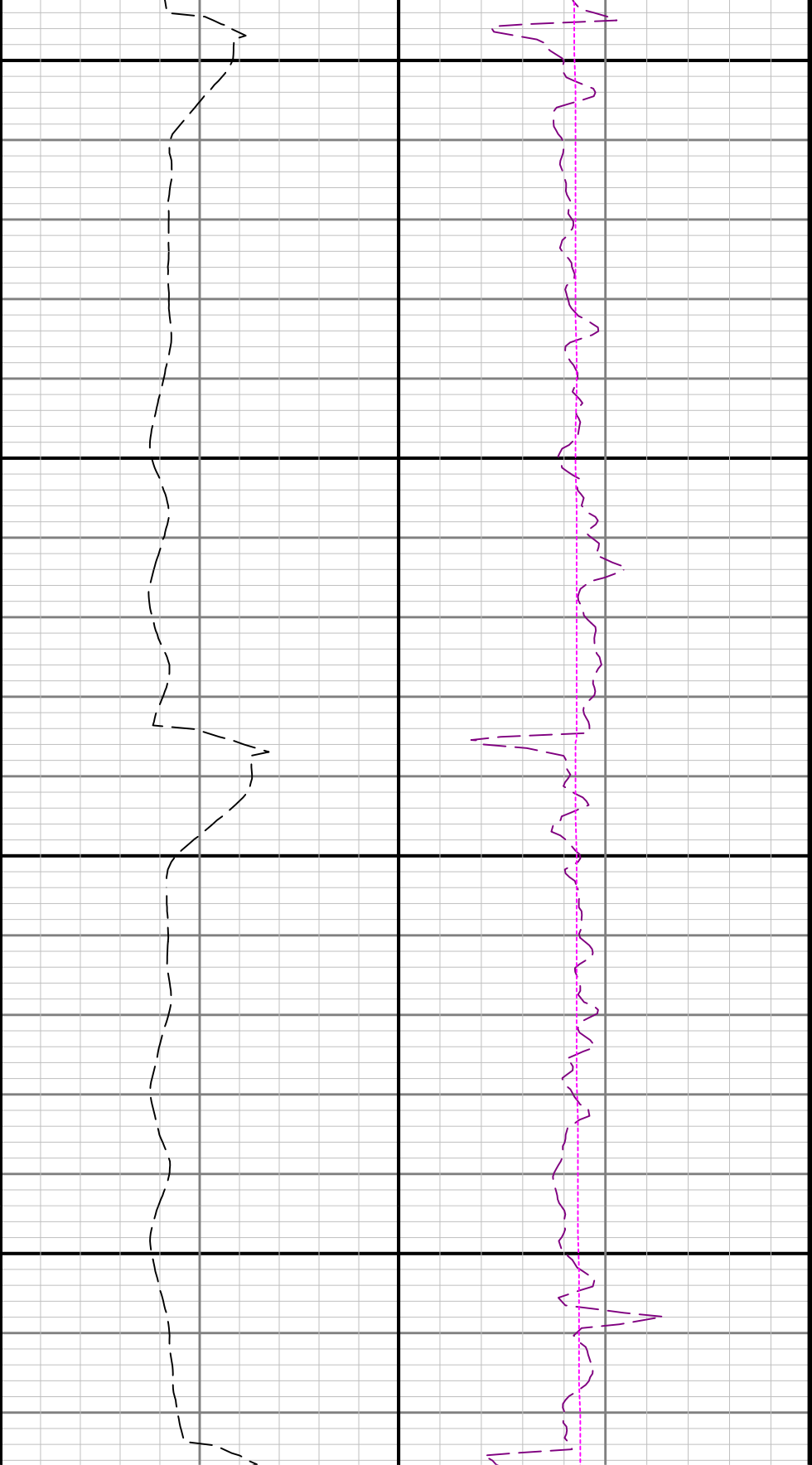
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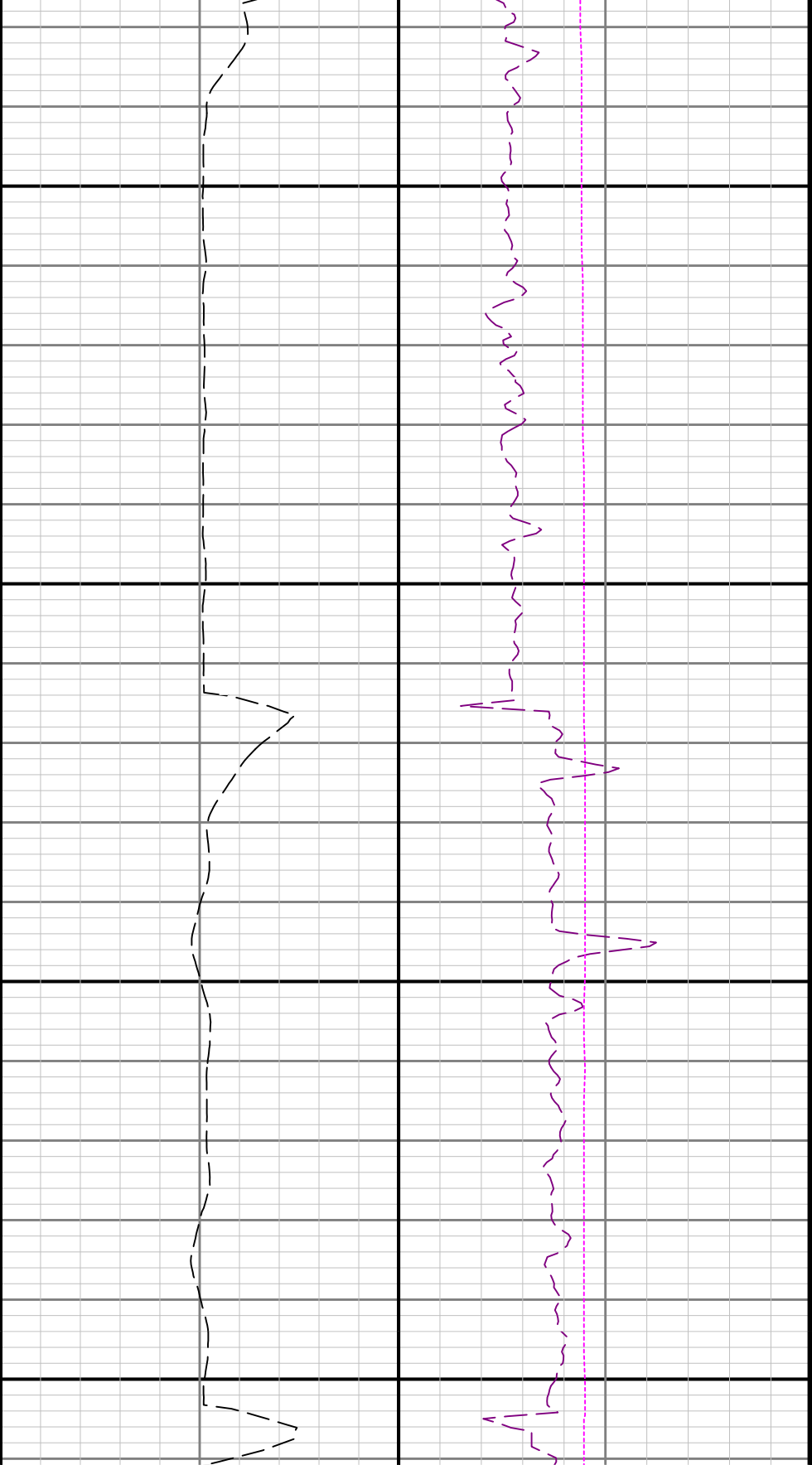




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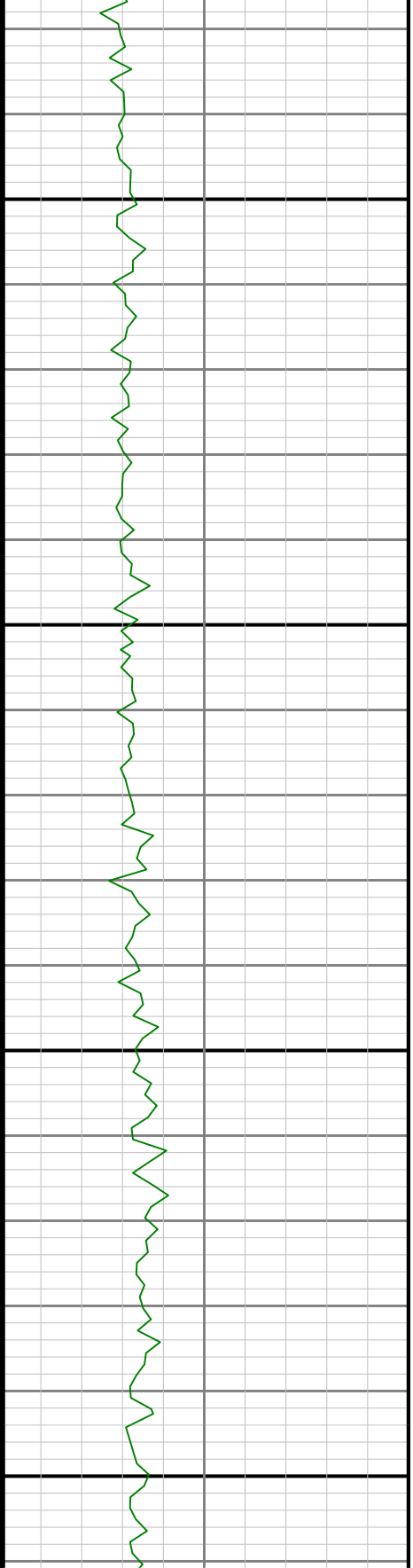


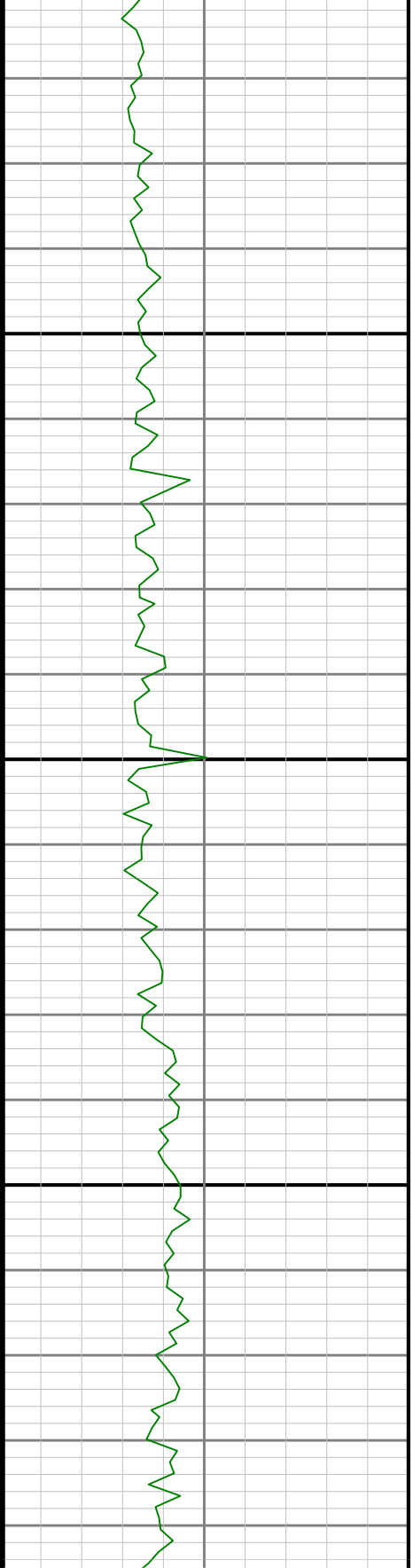
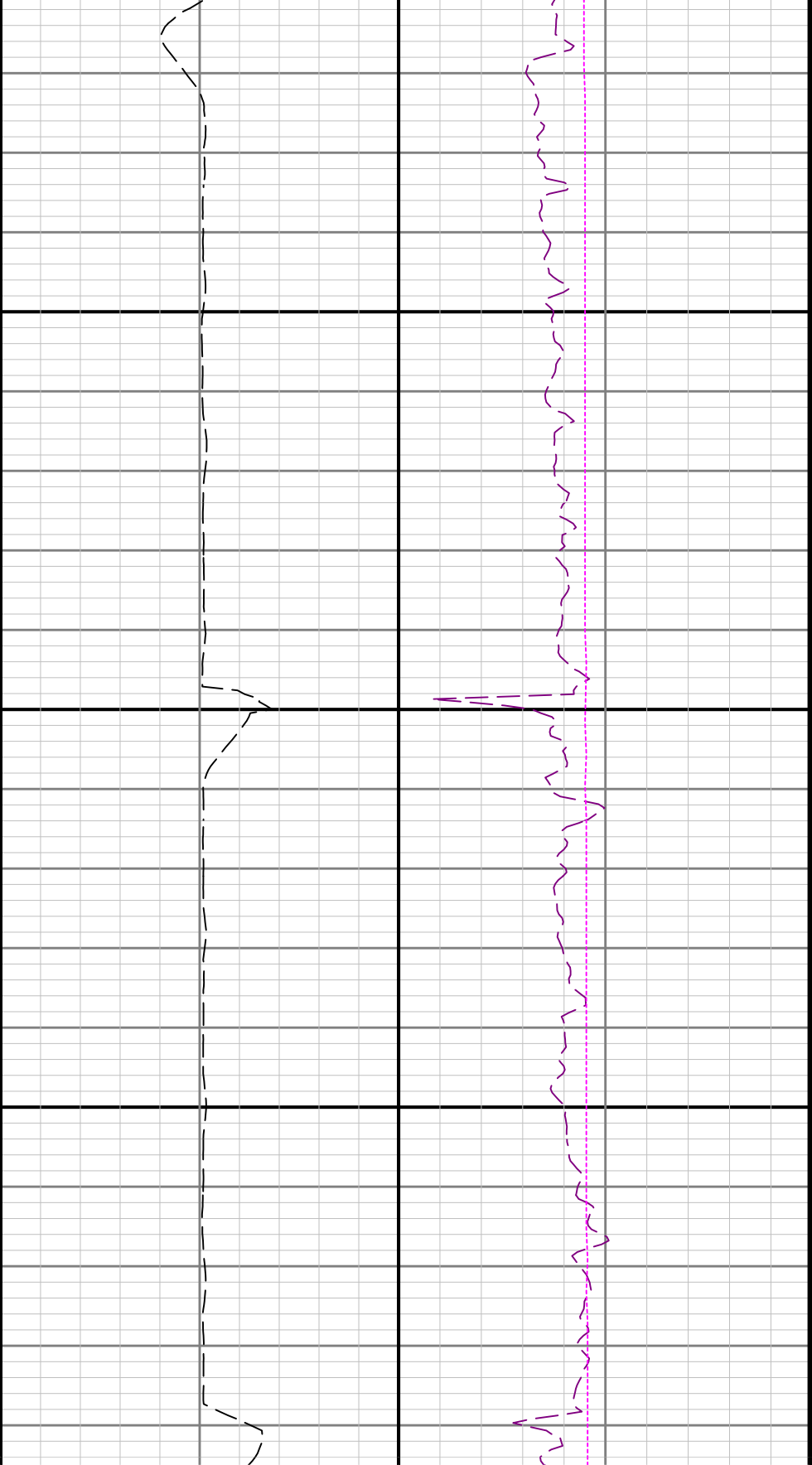


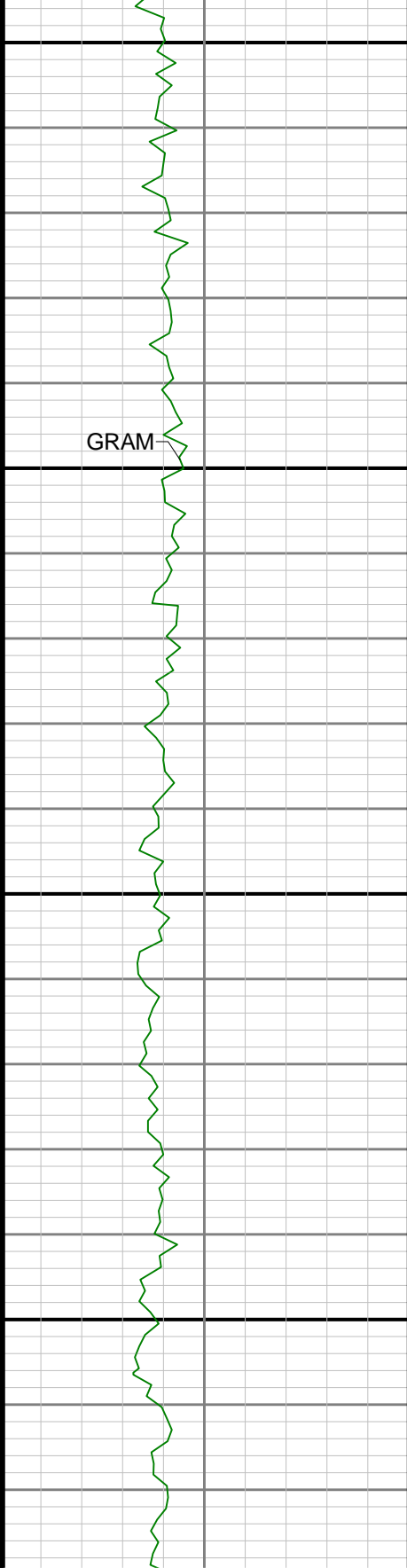


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3700





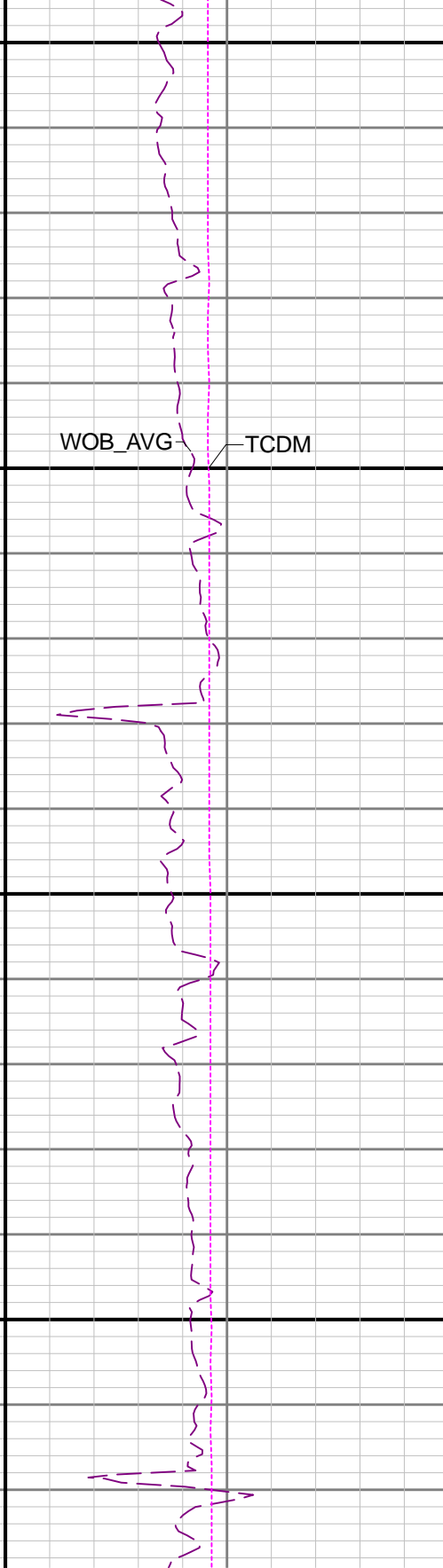


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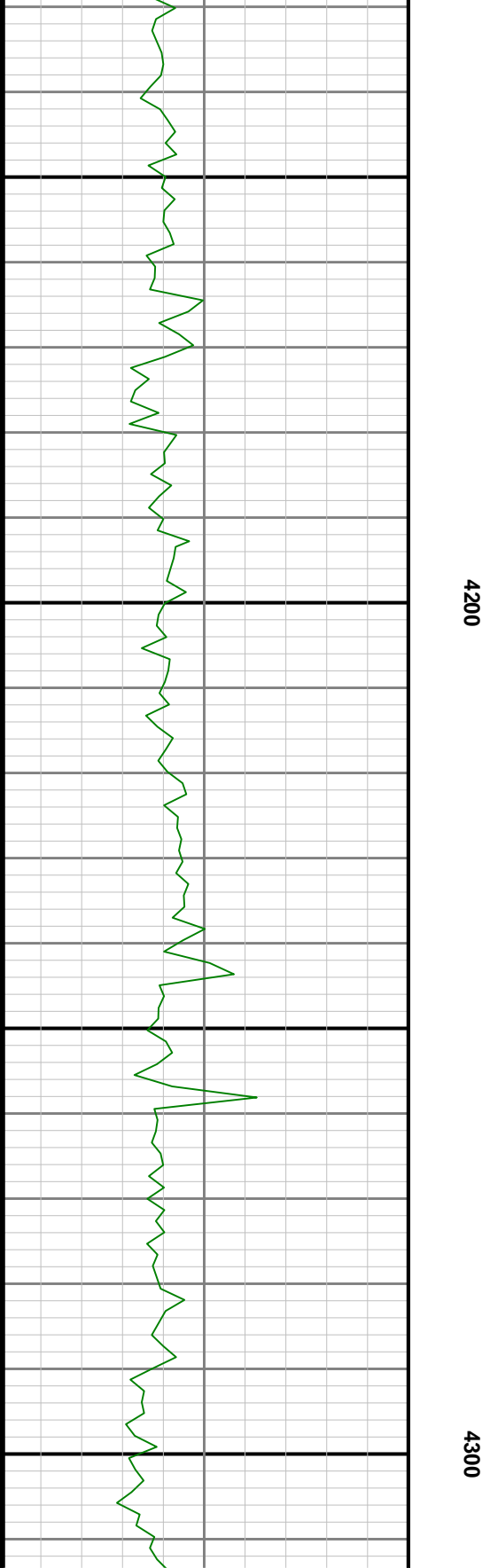
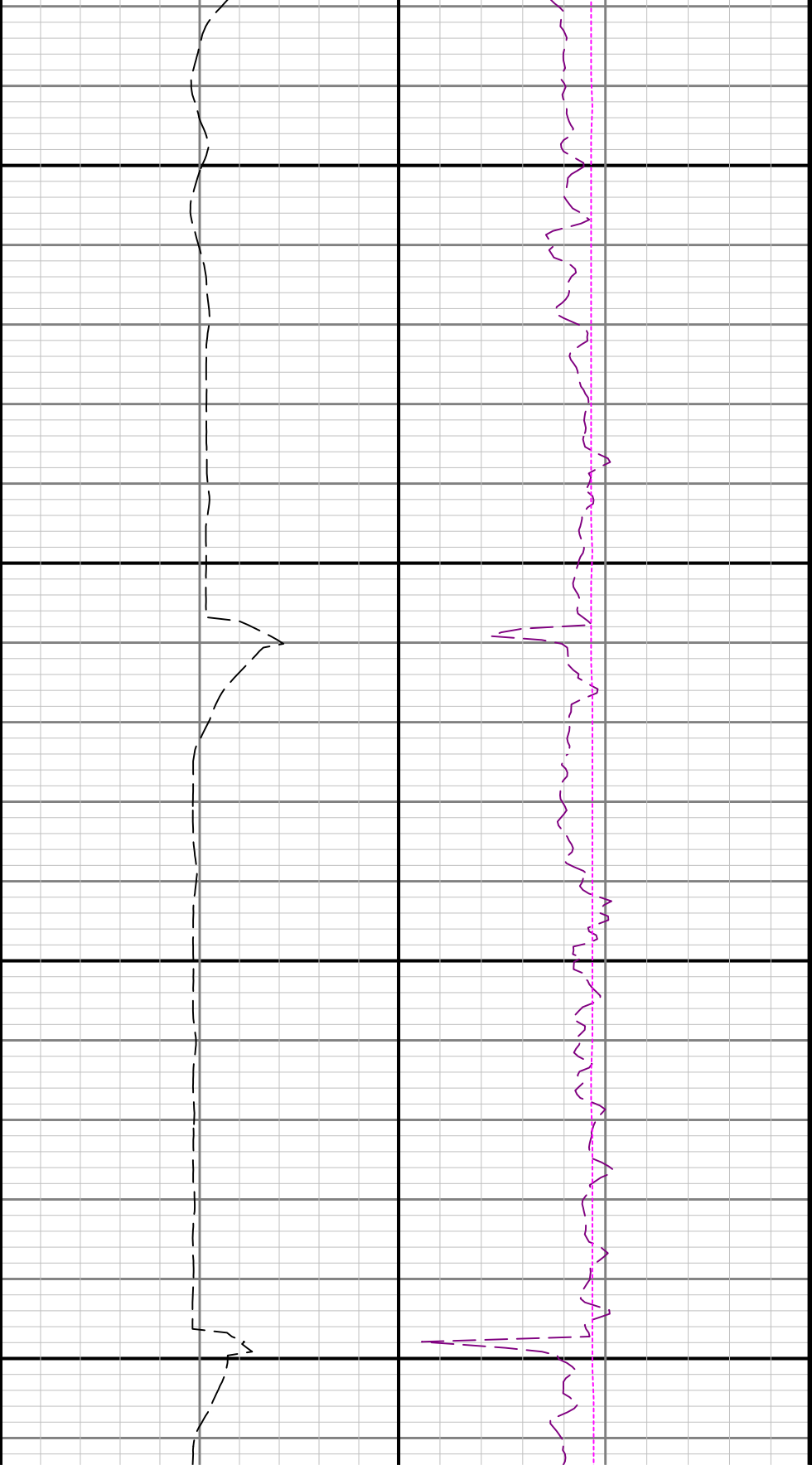


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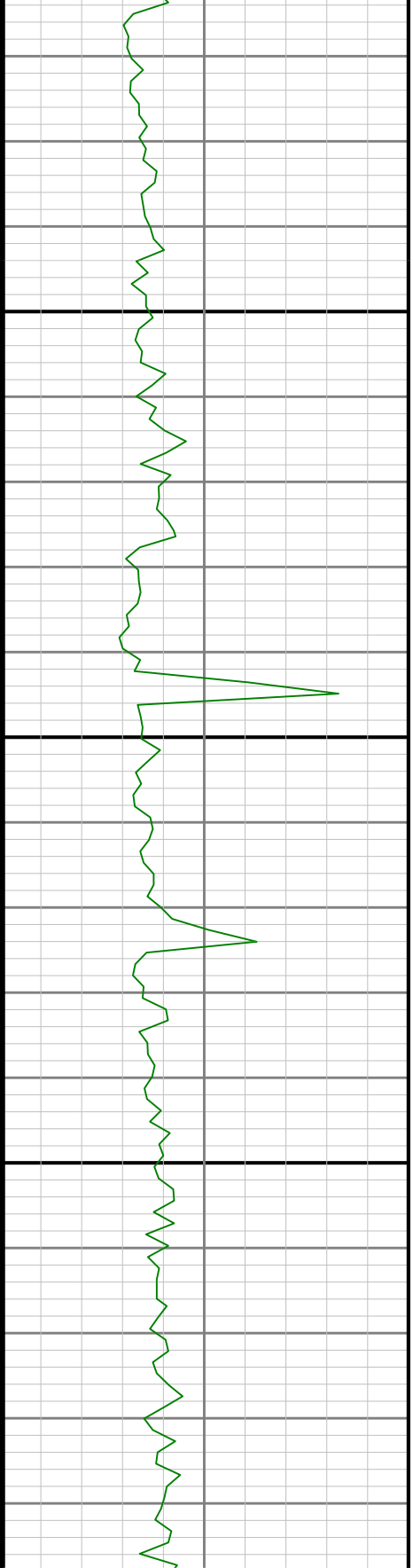
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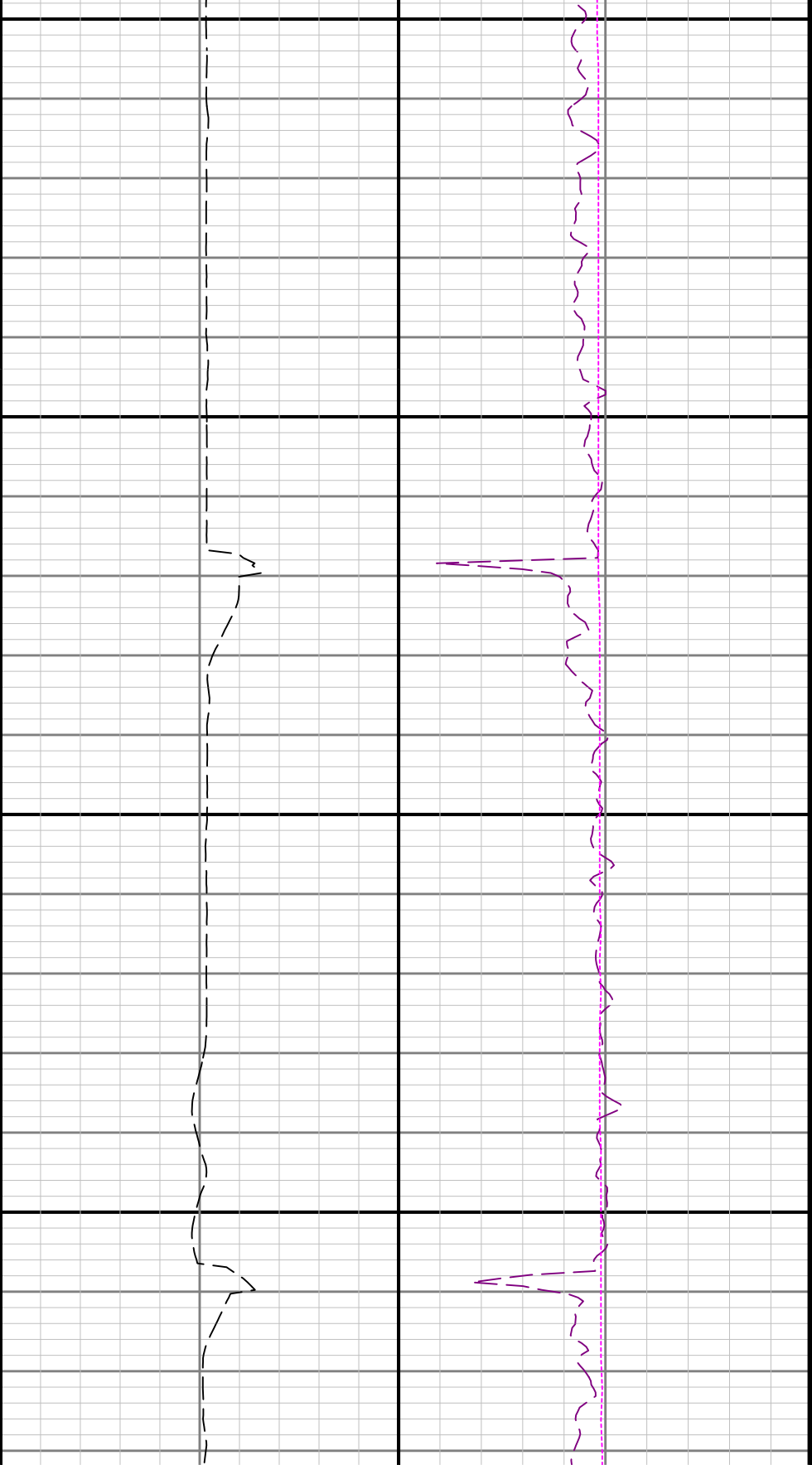
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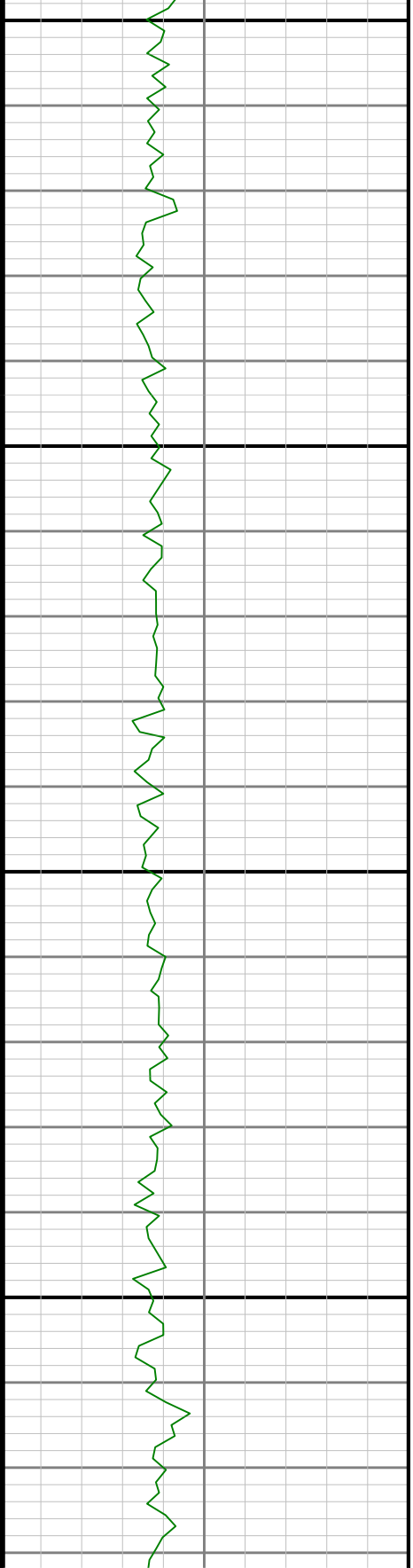
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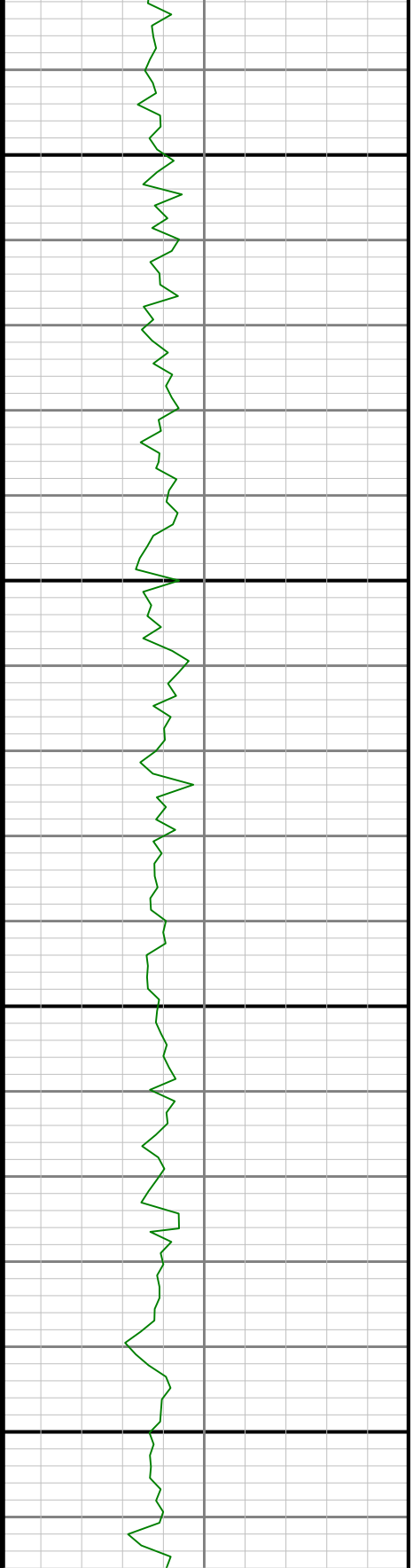
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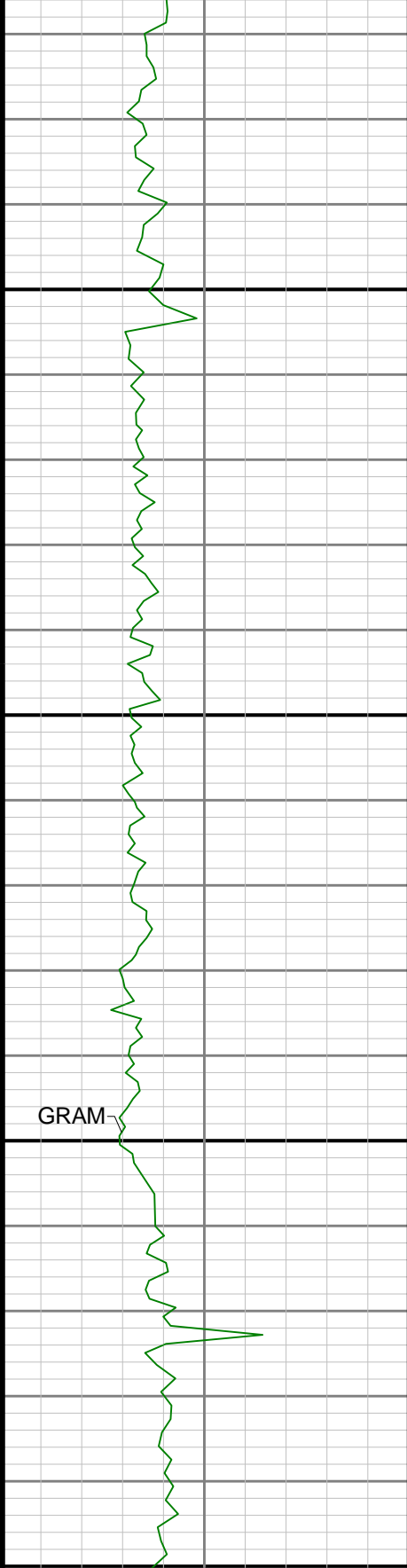




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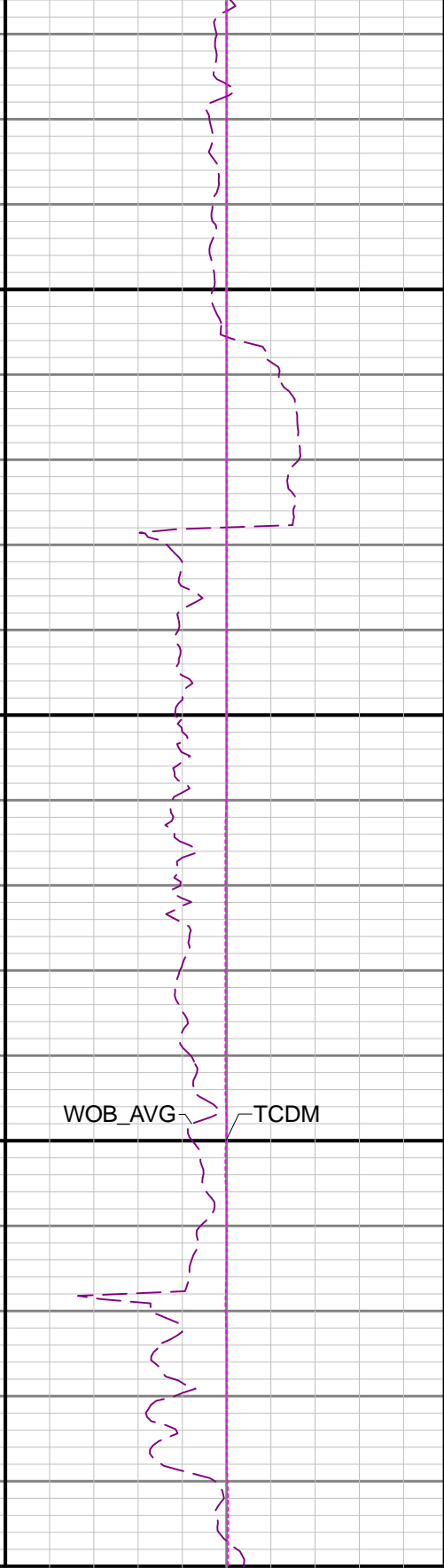
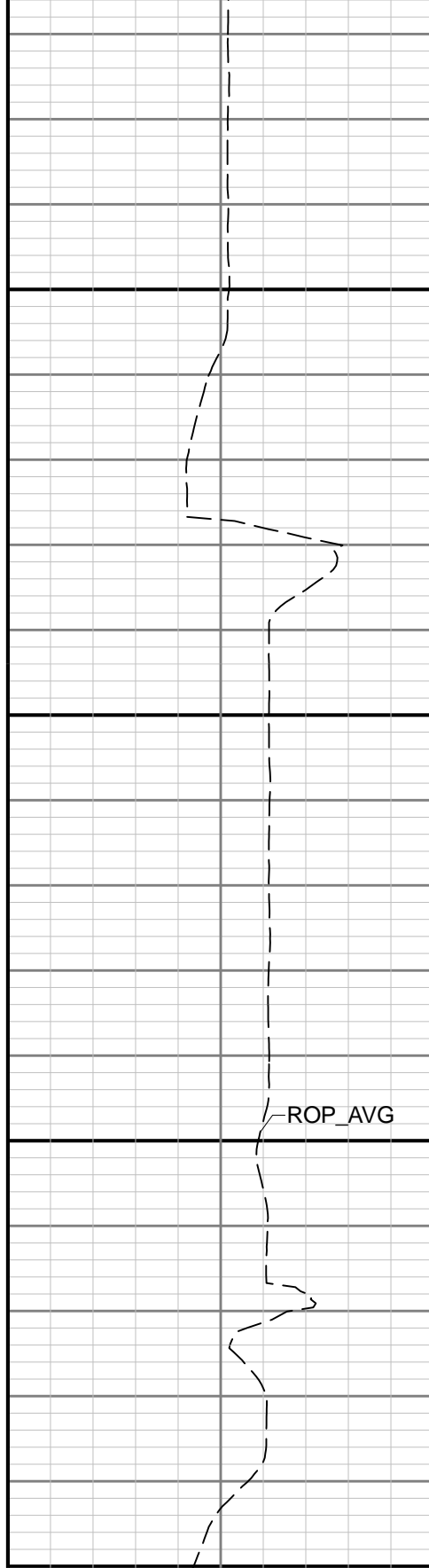
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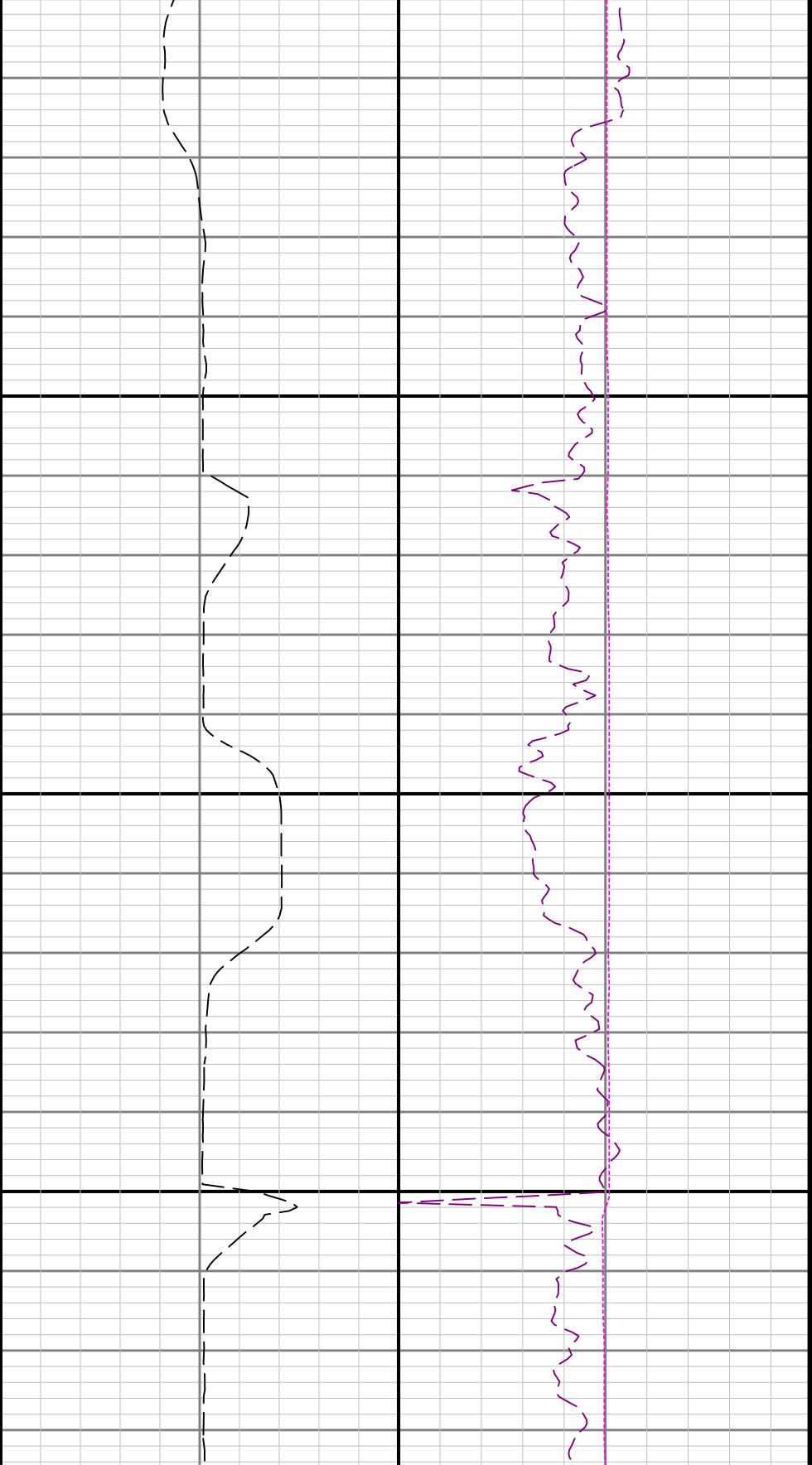




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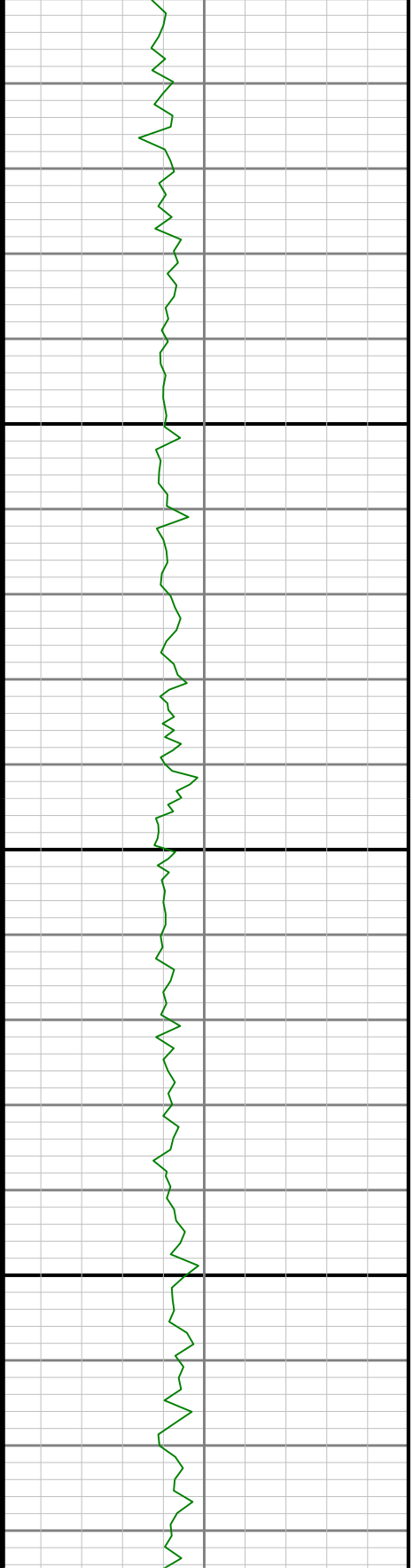
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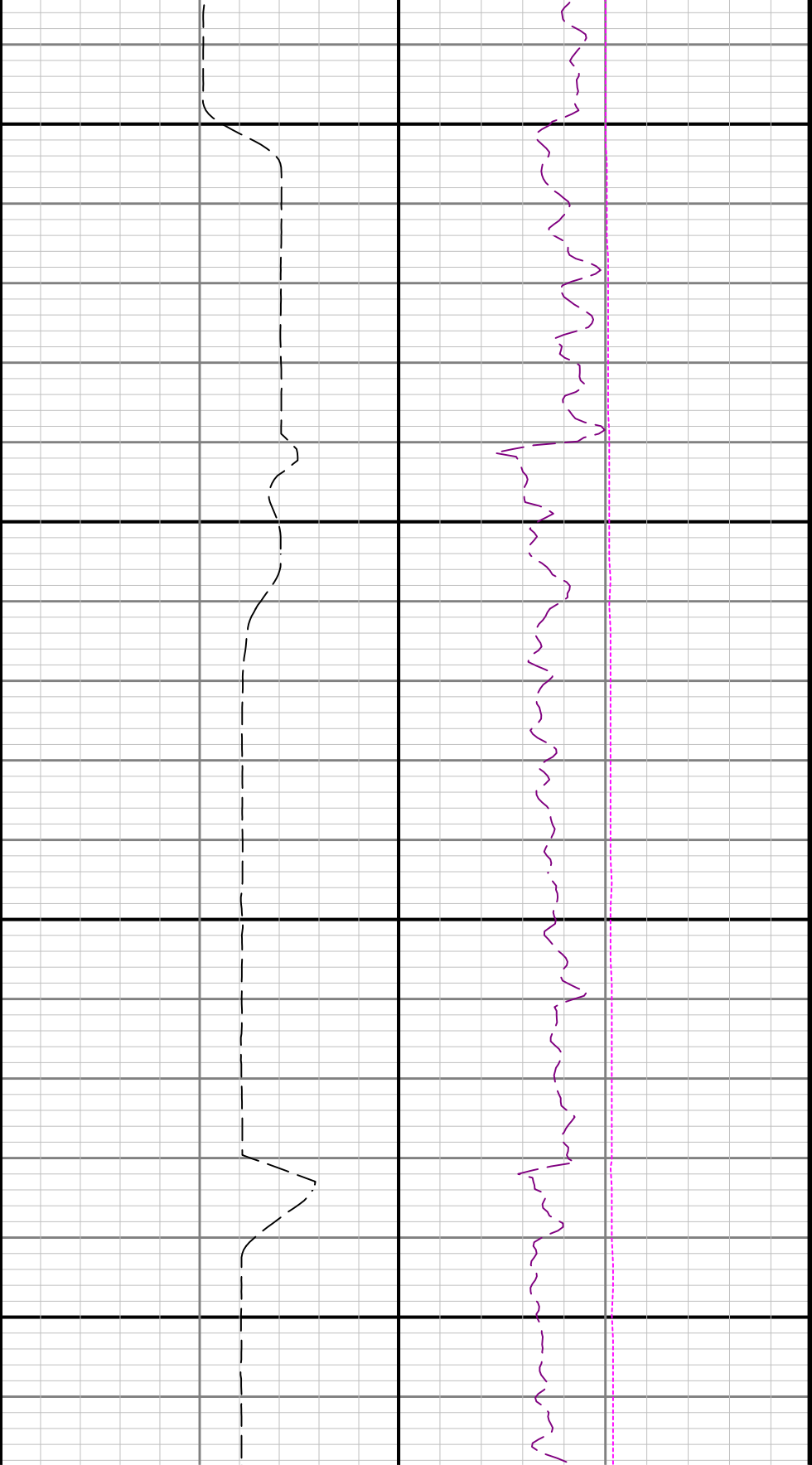




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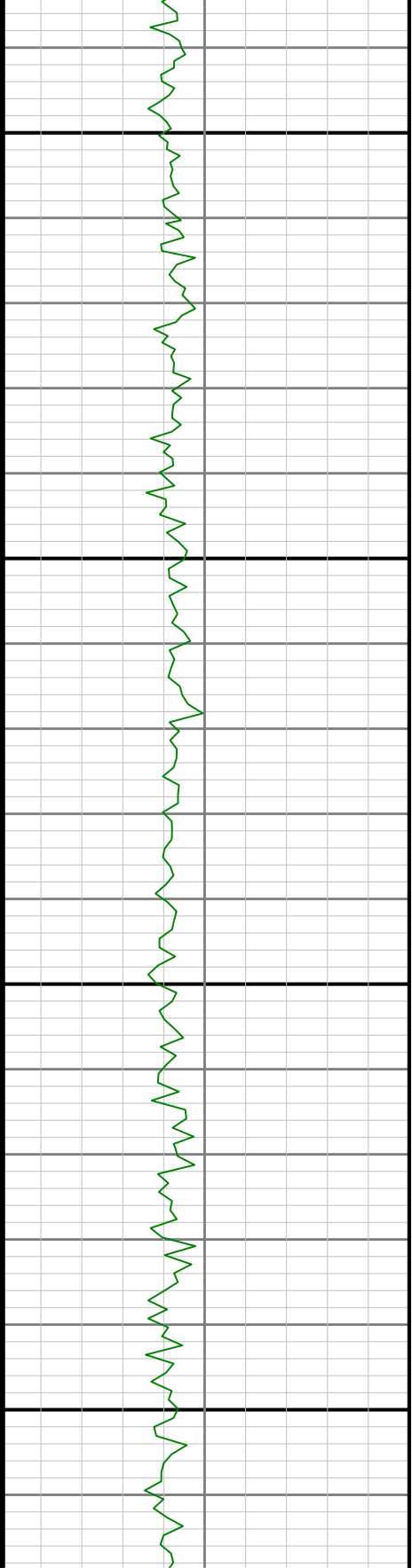
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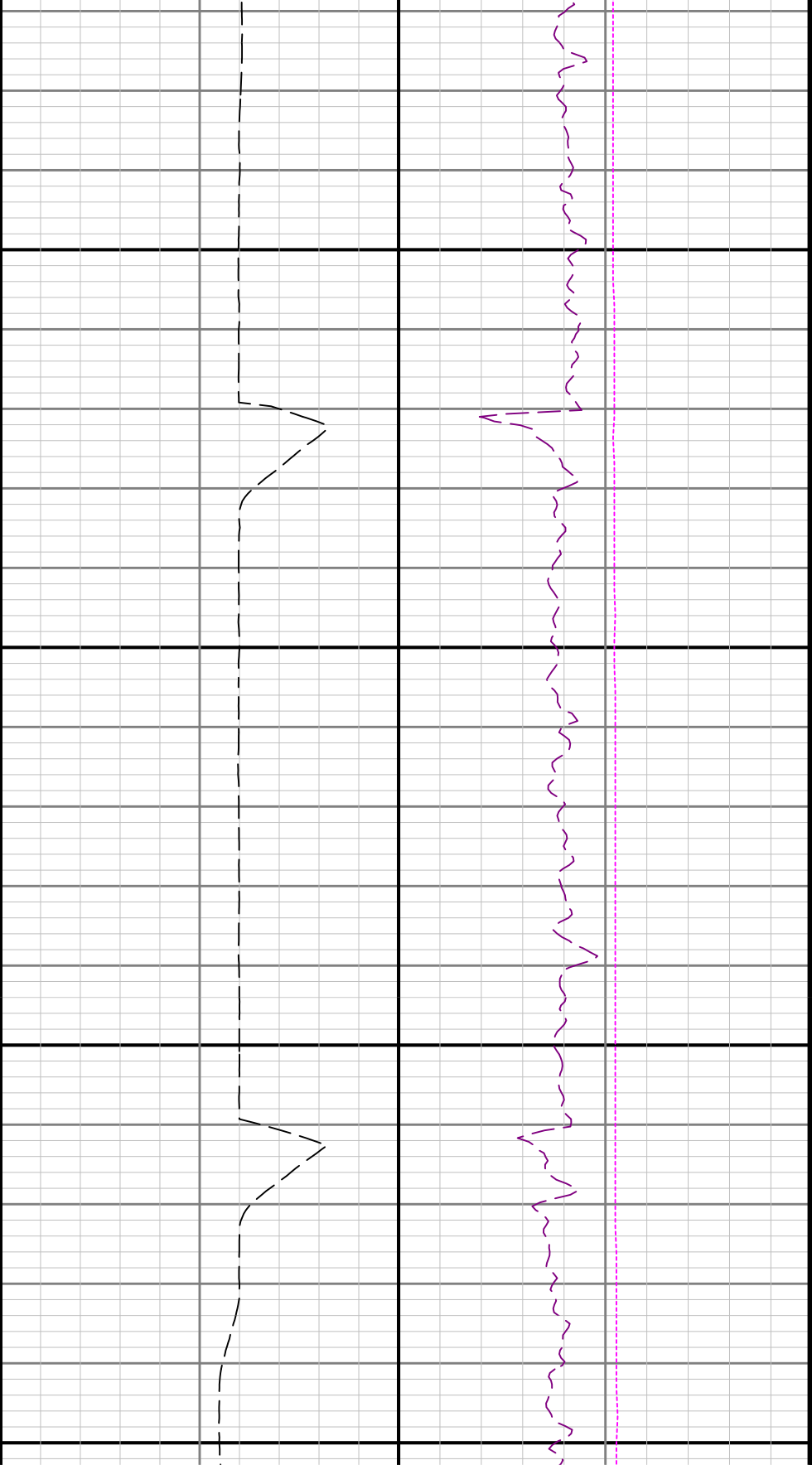




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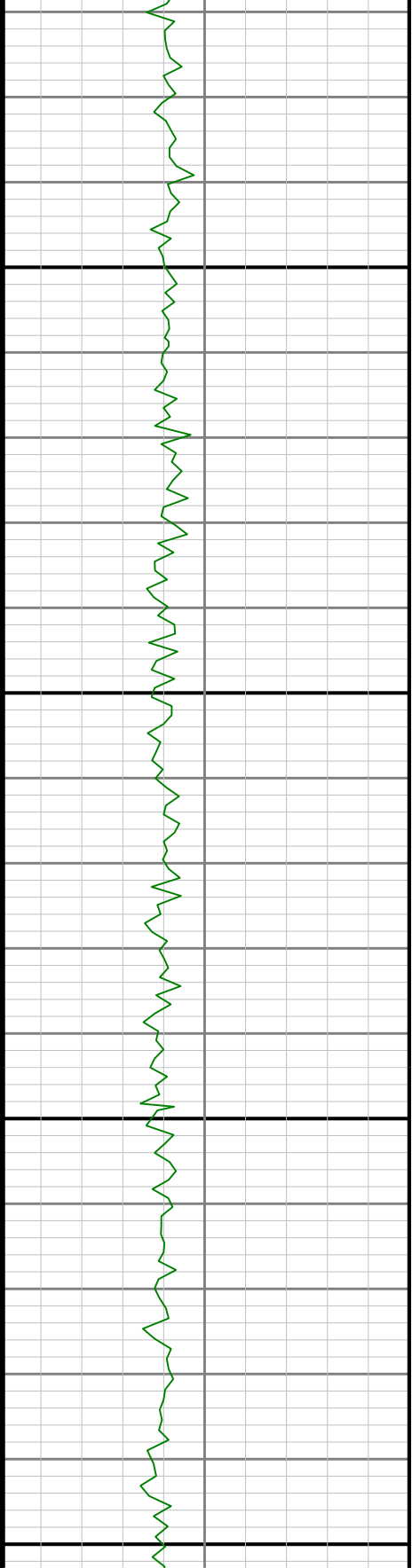
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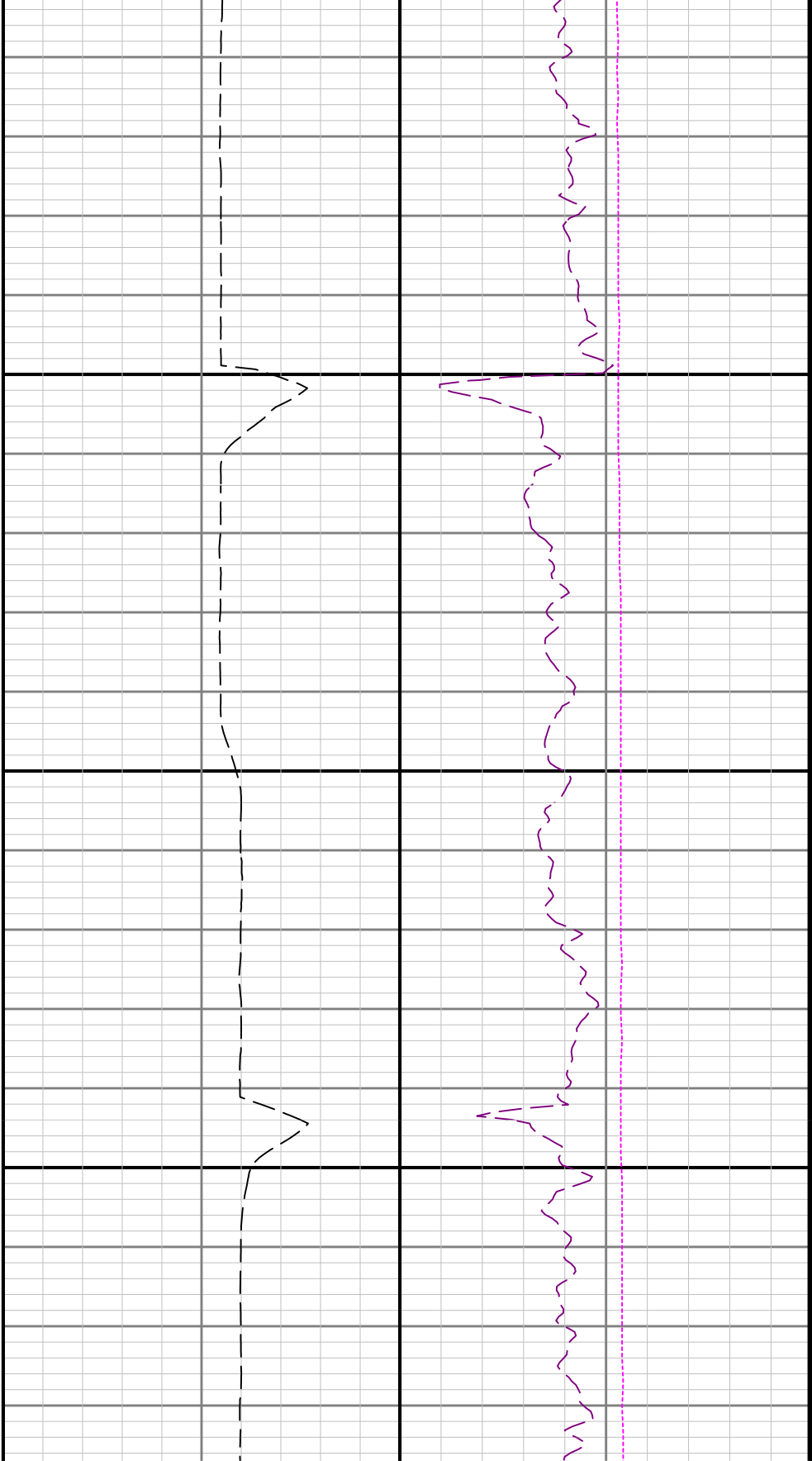




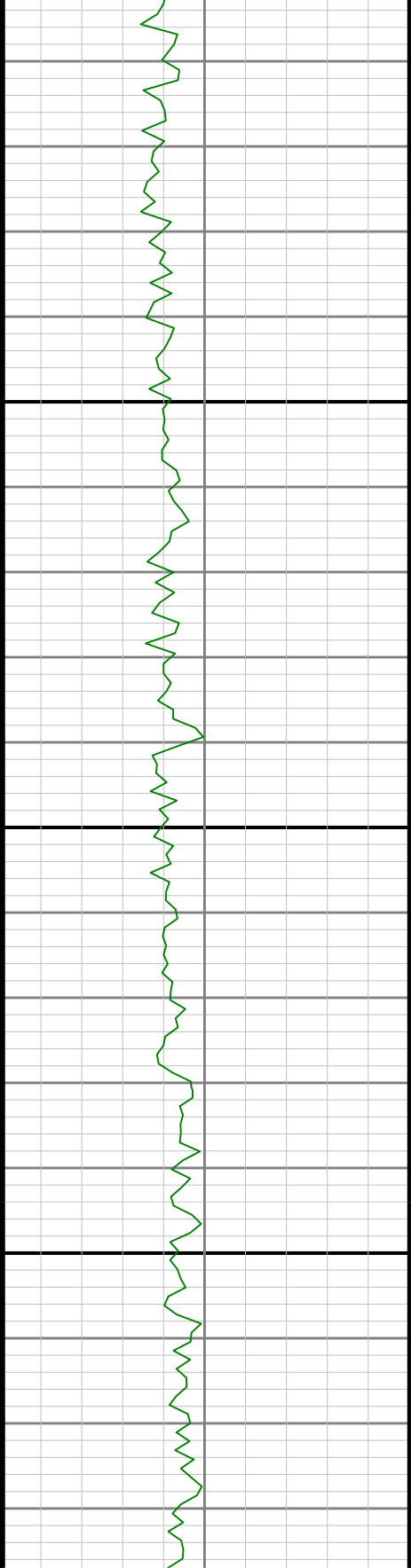
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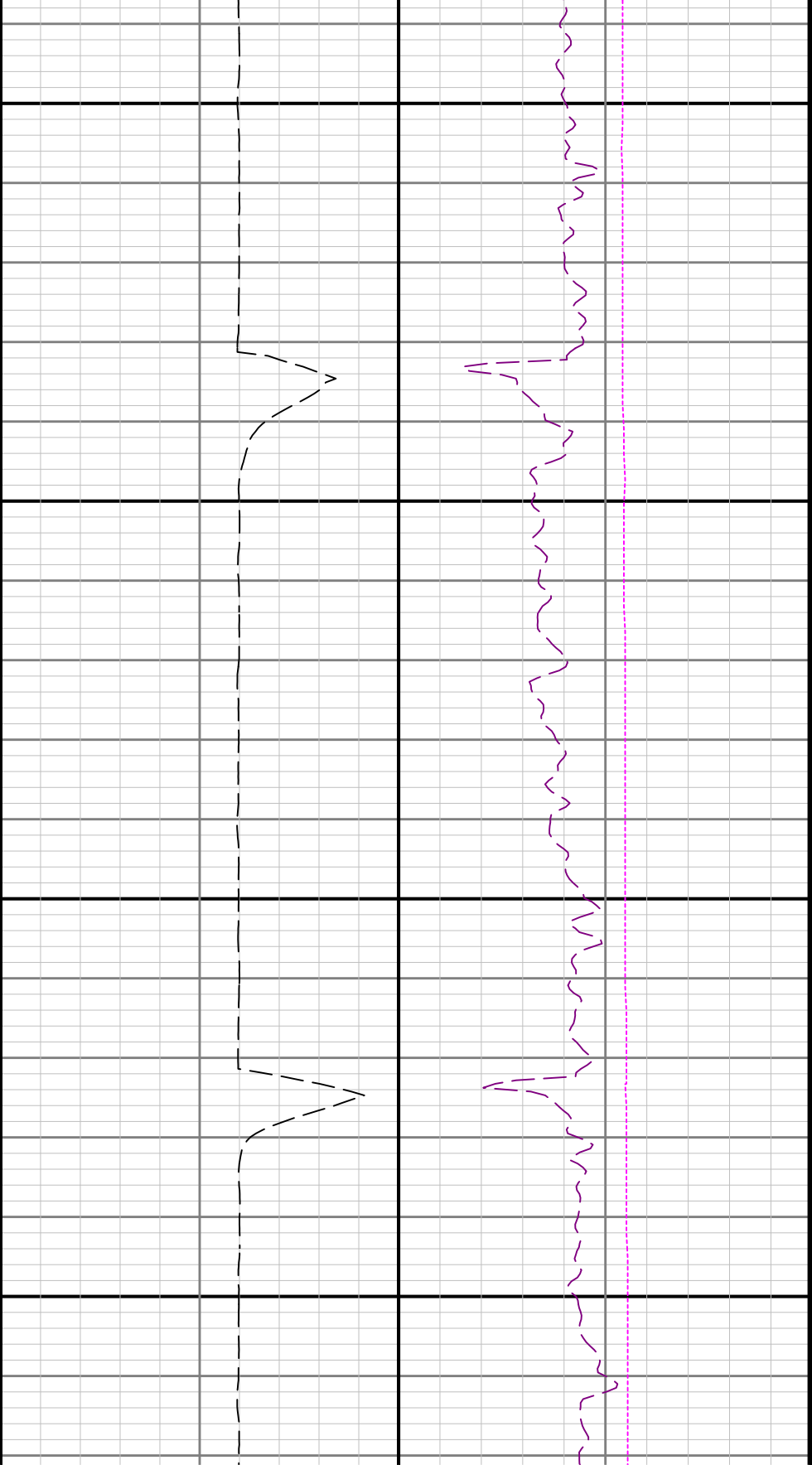
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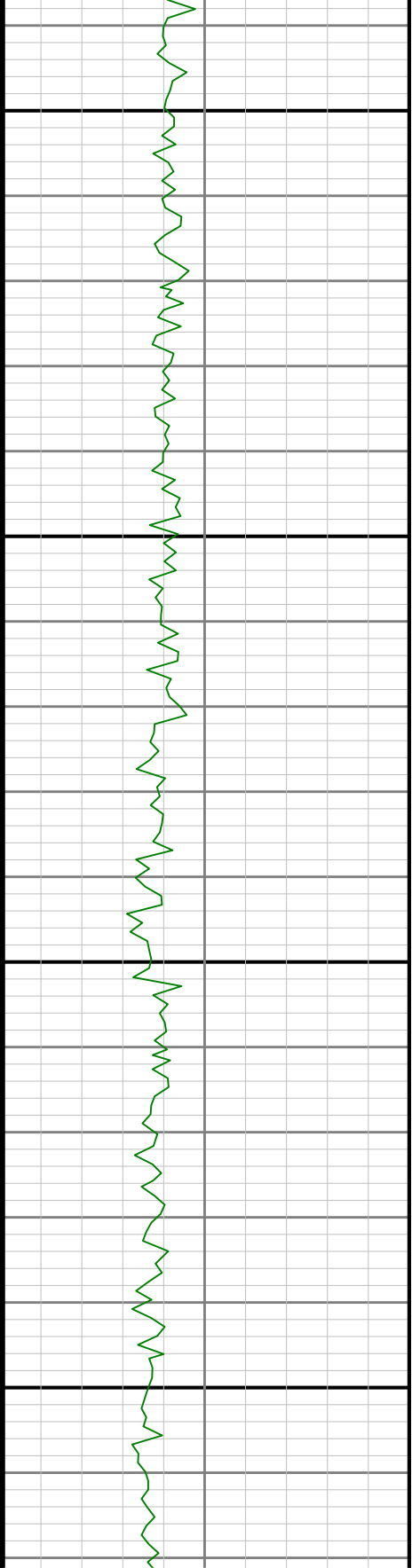
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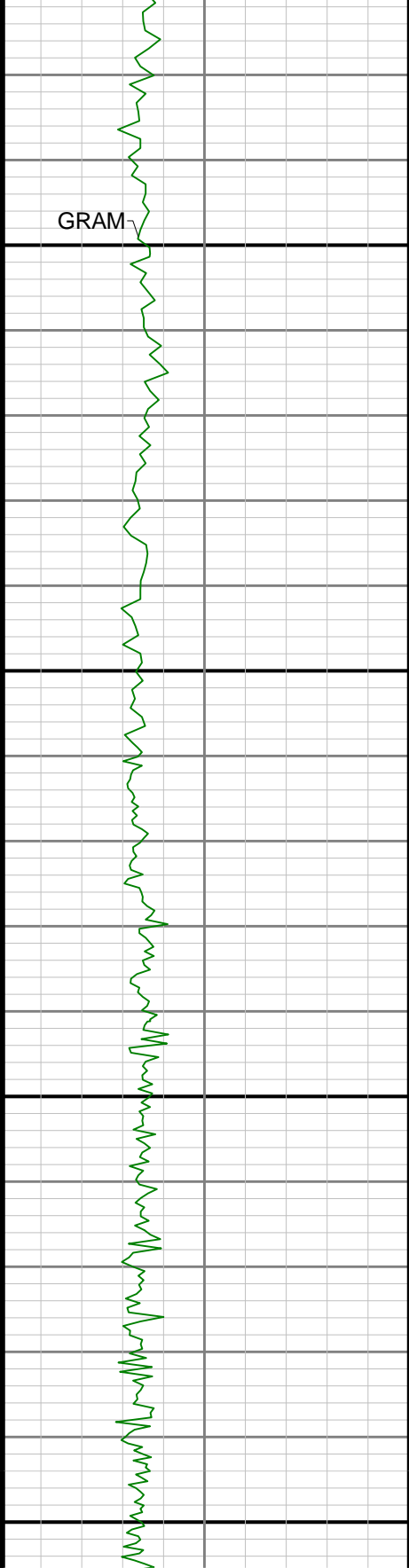




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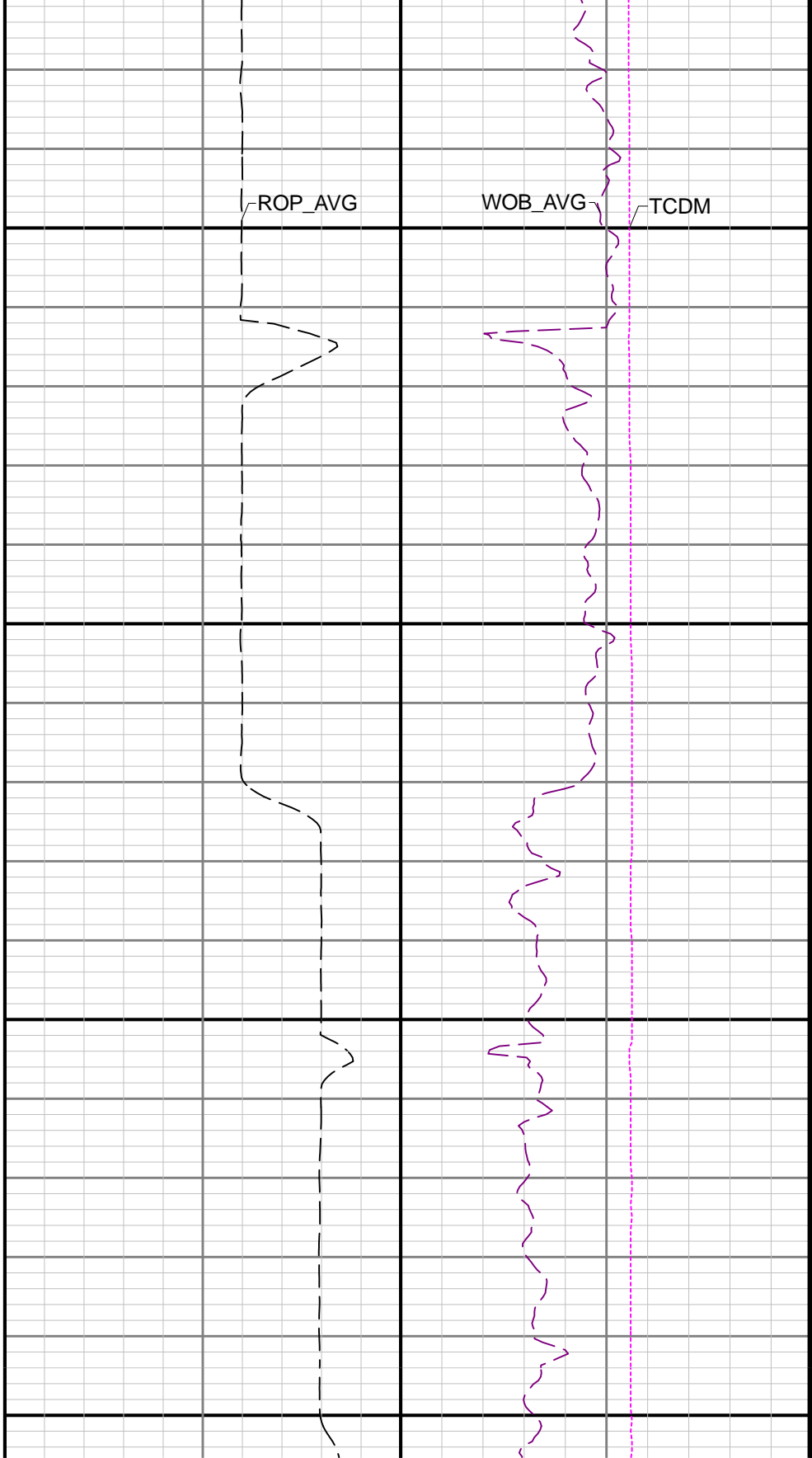
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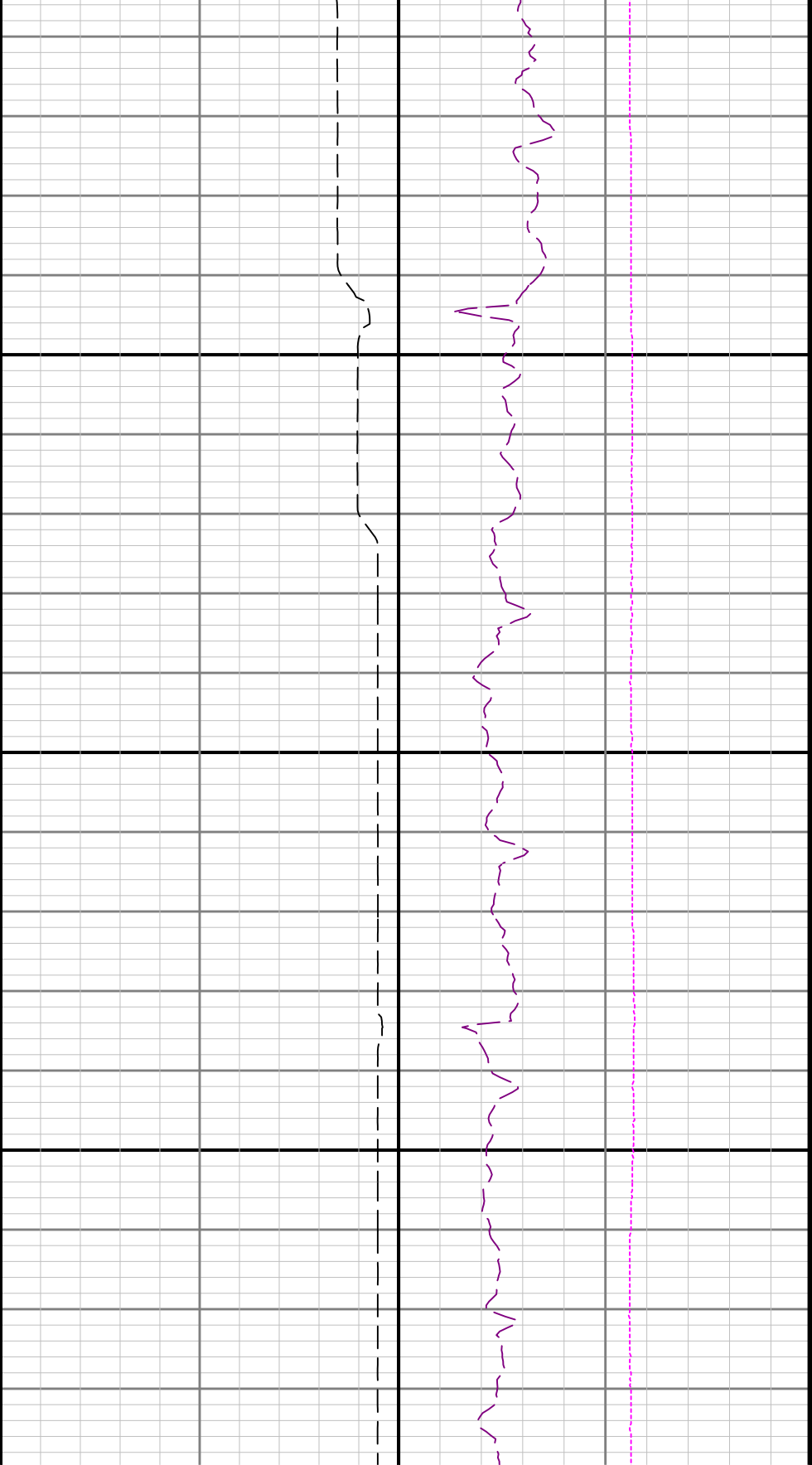




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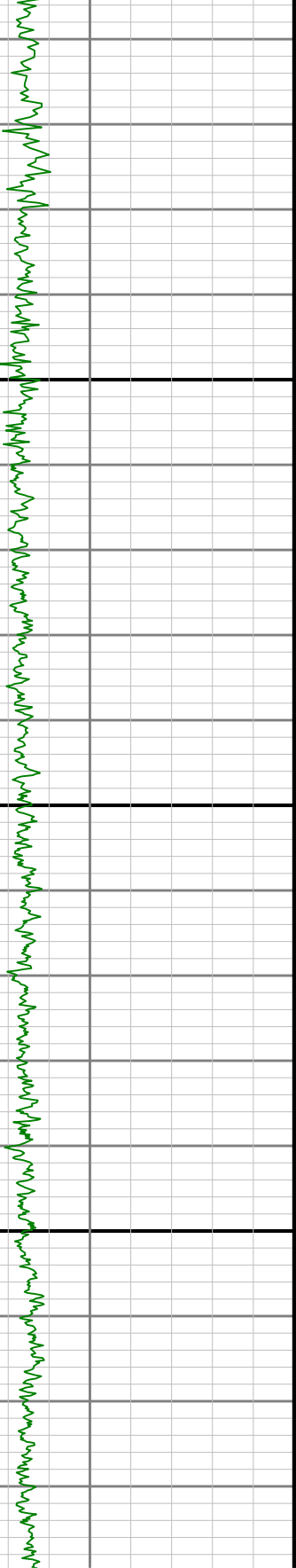
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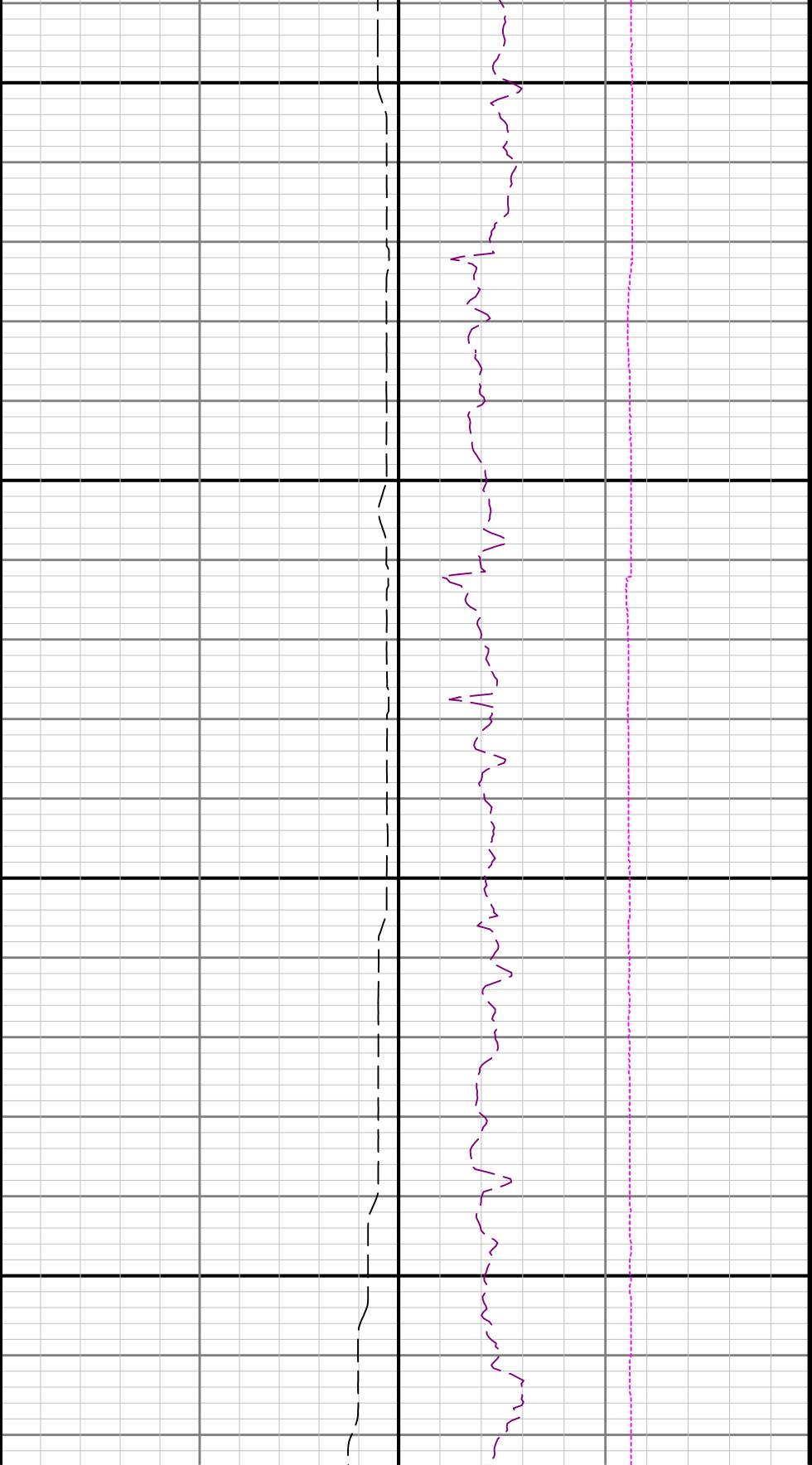




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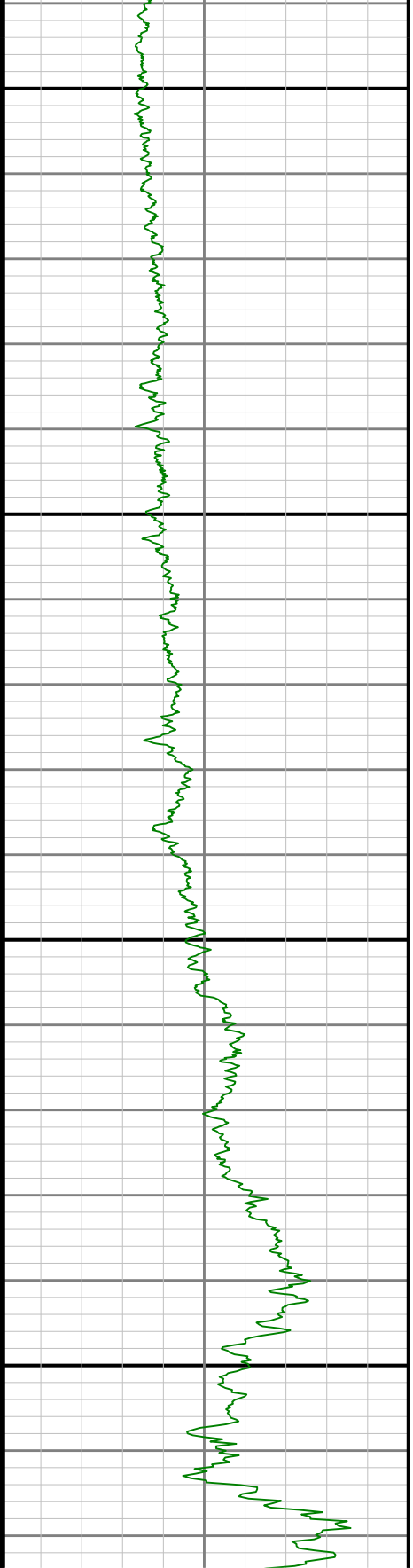
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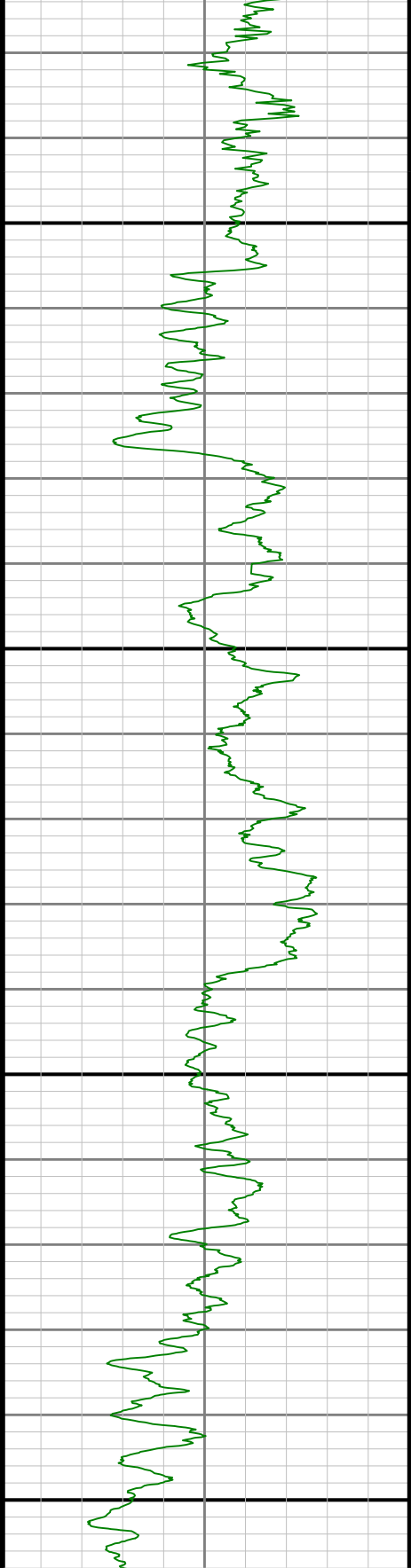




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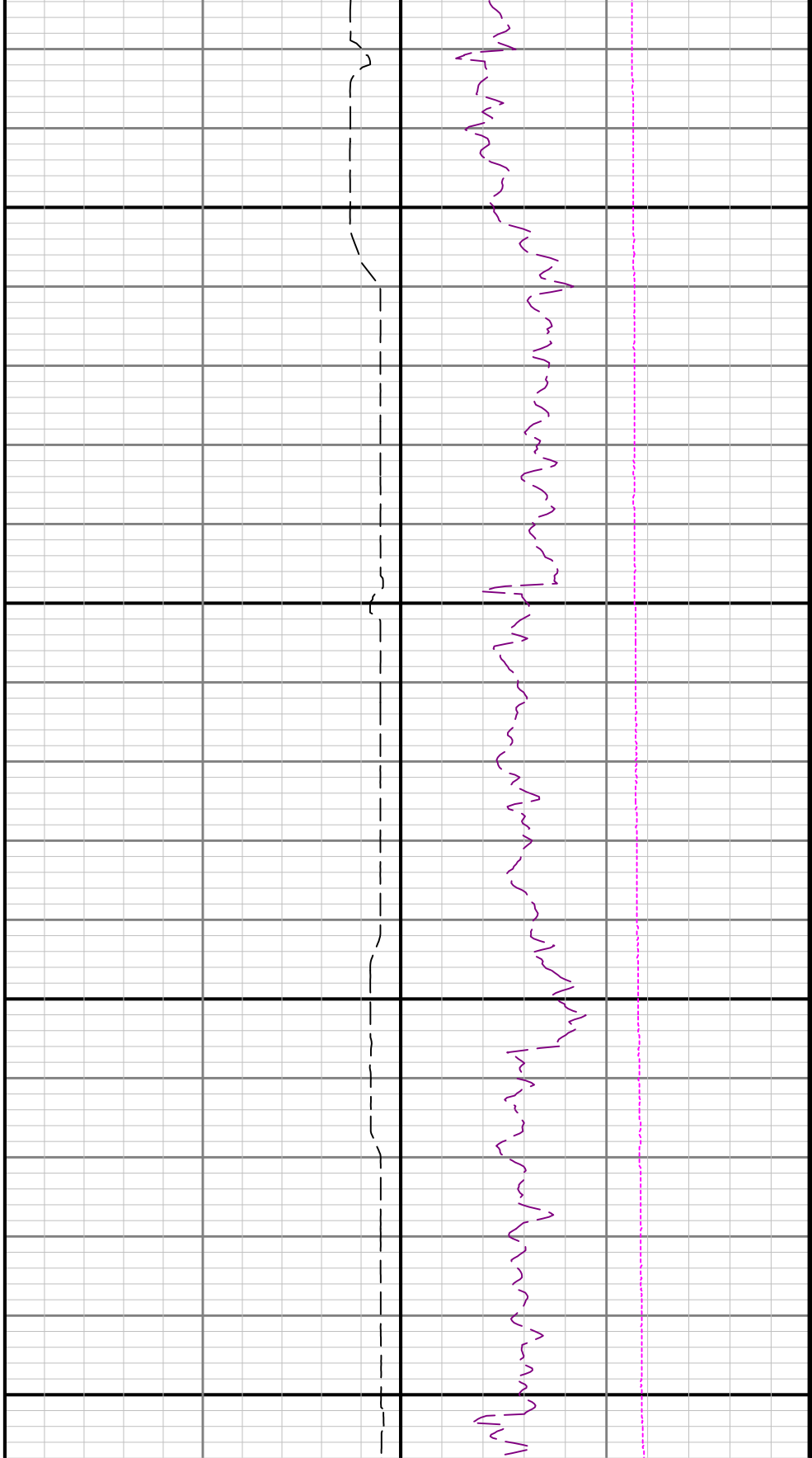
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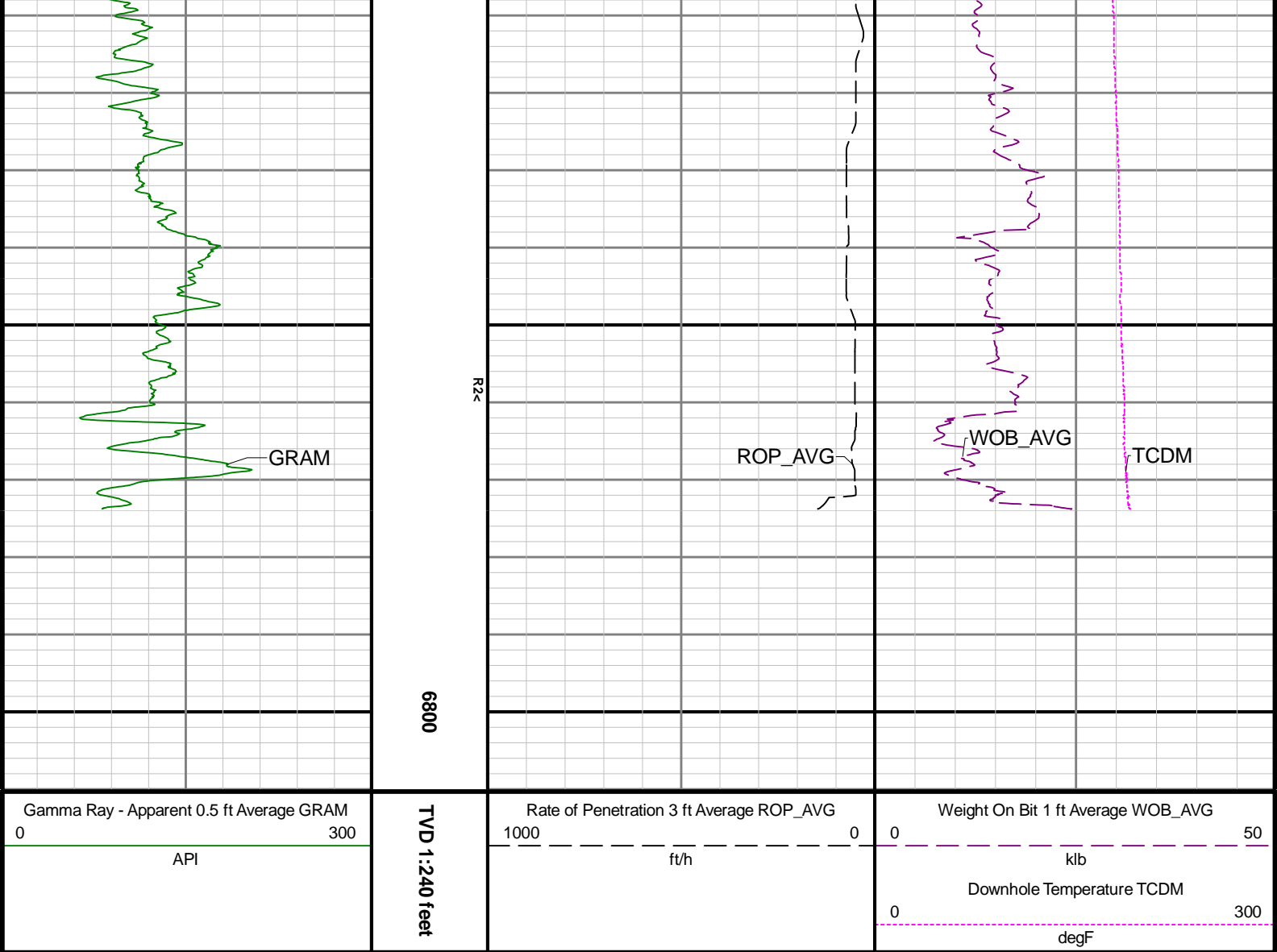




6700

0099





Directional Survey Summary													
Latitude:		40° 26' 10.786" N				Longitude:		104° 31' 32.351" W					
North Reference:		Grid				Drill Depth Zero:		Rig Floor					
Vertical Datum is:		Mean Sea Level				Vertical Datum to DDZ: (ft)		4680.00					
Vertical Section North: (ft)		0.00				Vertical Section East: (ft)		0.00					
Vertical Section Azimuth: (deg)		352.19				Magnetic Declination: (deg)		7.74					
Grid Convergence: (deg)		-0.63						Minimum Curvature					
Total Correction: (deg)		7.11											
Magnetic Correction:		N/A				Local Magnetic Field: (nT)		51975					
Local Magnetic Dip Angle: (deg)		66.83				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	-4680.00	0.00	0.00	0.00	0.00	0.00
	82.00	0.19	109.55	N/A	-0.05	0.13	82.00	-4598.00	-0.06	82.00	0.23	0.23	133.60
	175.00	0.15	150.10	N/A	-0.20	0.33	175.00	-4505.00	-0.25	93.00	0.13	-0.04	43.60
	266.00	0.15	36.00	N/A	-0.21	0.46	266.00	-4414.00	-0.27	91.00	0.28	0.00	-125.38
	361.00	0.12	315.87	N/A	-0.04	0.47	361.00	-4319.00	-0.10	95.00	0.18	-0.03	-84.35
	455.00	0.53	220.06	N/A	0.25	0.07	455.00	-4225.00	0.25	84.00	0.57	0.44	81.20

		433.00	0.33	229.96	N/A	-0.25	0.07	433.00	-4223.00	-0.23	94.00	0.37	0.44	-91.39
		550.00	0.22	267.14	N/A	-0.54	-0.45	550.00	-4130.00	-0.47	95.00	0.40	-0.33	39.14
		645.00	0.48	255.34	N/A	-0.65	-1.02	644.99	-4035.01	-0.50	95.00	0.28	0.27	-12.42
		739.00	0.16	261.92	N/A	-0.77	-1.53	738.99	-3941.01	-0.55	94.00	0.34	-0.34	7.00
		834.00	0.32	210.77	N/A	-1.01	-1.80	833.99	-3846.01	-0.76	95.00	0.27	0.17	-53.84
		928.00	0.26	181.94	N/A	-1.45	-1.94	927.99	-3752.01	-1.17	94.00	0.17	-0.06	-30.67
		1023.00	0.21	201.02	N/A	-1.83	-2.01	1022.99	-3657.01	-1.54	95.00	0.10	-0.05	20.08
		1118.00	0.06	92.46	N/A	-1.99	-2.02	1117.99	-3562.01	-1.70	95.00	0.25	-0.16	-114.27
		1213.00	0.15	221.58	N/A	-2.09	-2.05	1212.99	-3467.01	-1.79	95.00	0.20	0.09	135.92
		1307.00	0.38	212.50	N/A	-2.44	-2.30	1306.99	-3373.01	-2.11	94.00	0.25	0.24	-9.66
		1402.00	0.28	265.63	N/A	-2.73	-2.70	1401.99	-3278.01	-2.33	95.00	0.32	-0.11	55.93
		1497.00	0.33	247.44	N/A	-2.85	-3.19	1496.99	-3183.01	-2.39	95.00	0.11	0.05	-19.15
		1592.00	0.38	178.66	N/A	-3.27	-3.43	1591.98	-3088.02	-2.77	95.00	0.42	0.05	-72.40
		1686.00	0.81	197.56	N/A	-4.22	-3.63	1685.98	-2994.02	-3.68	94.00	0.50	0.46	20.11
		1781.00	1.37	196.03	N/A	-5.95	-4.14	1780.96	-2899.04	-5.33	95.00	0.59	0.59	-1.61
		1876.00	2.07	194.94	N/A	-8.70	-4.90	1875.92	-2804.08	-7.95	95.00	0.74	0.74	-1.15
Tie-In		1926.00	2.01	194.66	N/A	-10.42	-5.35	1925.89	-2754.11	-9.59	50.00	0.12	-0.12	-0.56
		1996.00	1.12	181.68	93.2	-12.29	-5.68	1995.86	-2684.14	-11.40	70.00	1.36	-1.27	-18.54
		2090.00	0.61	332.33	98.7	-12.76	-5.94	2089.85	-2590.15	-11.84	94.00	1.79	-0.54	160.27
		2185.00	5.17	281.76	98.7	-11.44	-10.37	2184.71	-2495.29	-9.93	95.00	5.06	4.80	-53.23
		2279.00	6.22	251.80	104.1	-12.17	-19.36	2278.27	-2401.73	-9.43	94.00	3.31	1.12	-31.87
		2374.00	5.66	254.70	106.8	-15.01	-28.77	2372.76	-2307.24	-10.97	95.00	0.67	-0.59	3.05
		2469.00	7.41	254.00	109.5	-17.94	-39.17	2467.14	-2212.86	-12.45	95.00	1.84	1.84	-0.74
		2563.00	8.95	256.29	112.2	-21.34	-52.10	2560.18	-2119.82	-14.06	94.00	1.67	1.64	2.44
		2658.00	11.74	253.75	112.2	-25.80	-68.57	2653.63	-2026.37	-16.24	95.00	2.98	2.94	-2.67
		2752.00	16.48	257.97	114.9	-31.26	-90.80	2744.77	-1935.23	-18.63	94.00	5.16	5.04	4.49
		2847.00	18.89	254.39	117.6	-38.21	-118.80	2835.27	-1844.73	-21.71	95.00	2.78	2.54	-3.77
		2942.00	17.93	251.62	117.6	-46.95	-147.48	2925.41	-1754.59	-26.48	95.00	1.37	-1.01	-2.92
		3036.00	18.33	252.44	120.3	-55.98	-175.31	3014.74	-1665.26	-31.64	94.00	0.50	0.43	0.87
		3226.00	17.02	251.60	123.0	-73.77	-230.18	3195.77	-1484.23	-41.81	190.00	0.70	-0.69	-0.44
		3320.00	17.81	252.71	125.7	-82.38	-256.96	3285.46	-1394.54	-46.70	94.00	0.91	0.84	1.18
		3415.00	17.77	252.37	128.4	-91.09	-284.65	3375.92	-1304.08	-51.57	95.00	0.12	-0.04	-0.36
		3509.00	17.54	254.59	128.4	-99.20	-311.97	3465.49	-1214.51	-55.89	94.00	0.76	-0.24	2.36
		3604.00	17.69	252.15	131.1	-107.43	-339.51	3556.04	-1123.96	-60.30	95.00	0.79	0.16	-2.57
		3699.00	17.77	251.47	133.8	-116.46	-367.00	3646.53	-1033.47	-65.51	95.00	0.23	0.08	-0.72
		3793.00	17.63	251.17	133.8	-125.61	-394.07	3736.08	-943.92	-70.90	94.00	0.18	-0.15	-0.32
		3888.00	17.61	251.53	136.5	-134.81	-421.32	3826.62	-853.38	-76.31	95.00	0.12	-0.02	0.38
		3982.00	17.24	251.77	136.5	-143.67	-448.04	3916.31	-763.69	-81.46	94.00	0.40	-0.39	0.26
		4077.00	17.33	251.71	136.5	-152.52	-474.84	4007.02	-672.98	-86.58	95.00	0.10	0.09	-0.06
		4171.00	17.36	251.17	139.2	-161.44	-501.41	4096.74	-583.26	-91.80	94.00	0.17	0.03	-0.57
		4266.00	17.85	251.11	139.2	-170.72	-528.60	4187.29	-492.71	-97.31	95.00	0.52	0.52	-0.06
		4361.00	17.87	252.07	141.9	-179.93	-556.24	4277.72	-402.28	-102.67	95.00	0.31	0.02	1.01
		4455.00	17.39	251.99	141.9	-188.71	-583.32	4367.30	-312.70	-107.69	94.00	0.51	-0.51	-0.09
		4550.00	17.34	252.69	144.6	-197.31	-610.34	4457.97	-222.03	-112.54	95.00	0.23	-0.05	0.74
		4645.00	17.37	252.45	144.6	-205.80	-637.38	4548.65	-131.35	-117.28	95.00	0.08	0.03	-0.25
		4739.00	17.52	252.15	144.6	-214.37	-664.22	4638.32	-41.68	-122.12	94.00	0.19	0.16	-0.32
		4928.00	17.49	253.04	150.0	-231.37	-718.47	4818.57	138.57	-131.59	189.00	0.14	-0.02	0.47
		5023.00	17.76	252.53	150.0	-239.89	-745.94	4909.11	229.11	-136.30	95.00	0.33	0.28	-0.54
		5117.00	17.80	252.16	150.0	-248.59	-773.29	4998.62	318.62	-141.20	94.00	0.13	0.04	-0.39
		5212.00	16.69	255.72	150.0	-256.40	-800.34	5089.35	409.35	-145.27	95.00	1.61	-1.17	3.75
		5306.00	17.88	257.33	150.0	-262.90	-827.50	5179.10	499.10	-148.01	94.00	1.36	1.27	1.71
		5400.00	16.76	253.58	150.0	-269.90	-854.58	5268.84	588.84	-151.27	94.00	1.68	-1.19	-3.99
		5495.00	17.62	252.44	152.7	-278.11	-881.43	5359.60	679.60	-155.75	95.00	0.97	0.91	-1.20
		5589.00	17.62	252.59	155.4	-286.66	-908.57	5449.19	769.19	-160.53	94.00	0.05	0.00	0.16
		5684.00	17.56	252.75	155.4	-295.21	-935.97	5539.75	859.75	-165.28	95.00	0.08	-0.06	0.17
		5778.00	17.68	253.30	158.1	-303.51	-963.19	5629.34	949.34	-169.81	94.00	0.22	0.13	0.59
		5873.00	16.86	256.46	160.8	-310.89	-990.40	5720.06	1040.06	-173.42	95.00	1.31	-0.86	3.33
		5968.00	17.70	251.38	160.8	-318.72	-1017.48	5810.77	1130.77	-177.50	95.00	1.82	0.88	-5.35
		6062.00	17.46	256.28	163.5	-326.63	-1044.72	5900.39	1220.39	-181.63	94.00	1.59	-0.26	5.21
		6157.00	17.16	253.10	166.2	-334.08	-1071.98	5991.09	1311.09	-185.32	95.00	1.04	-0.32	-3.35
		6252.00	17.24	252.30	168.9	-342.44	-1098.80	6081.84	1401.84	-189.95	95.00	0.26	0.08	-0.84
		6346.00	15.58	270.20	168.9	-346.63	-1124.71	6172.06	1492.06	-190.58	94.00	5.64	-1.77	19.04

	6441.00	18.61	290.43	171.6	-341.29	-1151.70	6262.94	1582.94	-181.62	95.00	6.98	3.19	21.29
	6535.00	22.20	315.18	168.9	-323.42	-1178.33	6351.19	1671.19	-160.30	94.00	9.85	3.82	26.33
	6630.00	30.38	329.17	168.9	-289.97	-1203.36	6436.37	1756.37	-123.76	95.00	10.75	8.61	14.73
	6724.00	39.18	339.40	168.9	-241.63	-1226.06	6513.57	1833.57	-72.78	94.00	11.21	9.36	10.88
	6819.00	46.35	344.20	168.9	-180.37	-1246.00	6583.28	1903.28	-9.38	95.00	8.29	7.55	5.05
	6914.00	54.84	346.89	174.3	-109.34	-1264.21	6643.54	1963.54	63.46	95.00	9.20	8.94	2.83
	7009.00	62.37	349.01	177.0	-30.09	-1281.06	6693.00	2013.00	144.27	95.00	8.15	7.93	2.23
	7103.00	70.34	353.23	182.5	54.91	-1294.24	6730.68	2050.68	230.27	94.00	9.42	8.48	4.49
	7198.00	77.37	355.89	185.2	145.69	-1302.85	6757.09	2077.09	321.38	95.00	7.87	7.40	2.80
	7293.00	85.93	359.19	187.9	239.49	-1306.85	6770.87	2090.87	414.86	95.00	9.64	9.01	3.47
	7387.00	90.59	0.42	187.9	333.42	-1307.17	6773.73	2093.73	507.96	94.00	5.13	4.96	1.31
	7482.00	90.52	0.60	193.3	428.41	-1306.32	6772.81	2092.81	601.95	95.00	0.20	-0.07	0.19
	7577.00	90.52	0.47	193.3	523.40	-1305.44	6771.94	2091.94	695.94	95.00	0.14	0.00	-0.14
	7671.00	90.49	0.48	196.0	617.40	-1304.66	6771.12	2091.12	788.96	94.00	0.03	-0.03	0.01
	7766.00	90.00	0.32	201.4	712.39	-1303.99	6770.71	2090.71	882.98	95.00	0.54	-0.52	-0.17
	7861.00	89.91	0.28	204.1	807.39	-1303.50	6770.78	2090.78	977.03	95.00	0.10	-0.09	-0.04
	7955.00	90.28	0.87	206.8	901.39	-1302.55	6770.63	2090.63	1070.03	94.00	0.74	0.39	0.63
	8050.00	89.82	0.90	209.5	996.38	-1301.09	6770.55	2090.55	1163.94	95.00	0.49	-0.48	0.03
	8145.00	90.03	0.85	212.2	1091.36	-1299.64	6770.67	2090.67	1257.85	95.00	0.23	0.22	-0.05
	8239.00	90.00	0.11	212.2	1185.36	-1298.85	6770.65	2090.65	1350.86	94.00	0.79	-0.03	-0.79
	8334.00	89.82	0.37	214.9	1280.36	-1298.45	6770.79	2090.79	1444.93	95.00	0.33	-0.19	0.27
	8429.00	90.25	0.75	214.9	1375.35	-1297.52	6770.74	2090.74	1538.92	95.00	0.60	0.45	0.40
	8523.00	90.22	0.89	217.6	1469.34	-1296.18	6770.35	2090.35	1631.85	94.00	0.15	-0.03	0.15
	8618.00	89.94	0.31	217.6	1564.34	-1295.18	6770.22	2090.22	1725.83	95.00	0.68	-0.29	-0.61
	8713.00	90.15	0.51	220.3	1659.34	-1294.50	6770.14	2090.14	1819.85	95.00	0.31	0.22	0.21
	8808.00	88.89	359.71	220.3	1754.33	-1294.32	6770.94	2090.94	1913.94	95.00	1.57	-1.33	-0.84
	8902.00	90.58	0.67	220.3	1848.32	-1294.01	6771.37	2091.37	2007.02	94.00	2.07	1.80	1.02
	8997.00	90.31	0.63	223.0	1943.31	-1292.93	6770.64	2090.64	2100.98	95.00	0.29	-0.28	-0.04
	9092.00	89.94	0.83	223.0	2038.31	-1291.72	6770.43	2090.43	2194.93	95.00	0.44	-0.39	0.21
	9186.00	90.49	0.88	225.7	2132.29	-1290.32	6770.08	2090.08	2287.86	94.00	0.59	0.59	0.05
	9281.00	90.06	0.31	225.7	2227.29	-1289.33	6769.62	2089.62	2381.83	95.00	0.75	-0.45	-0.60
	9375.00	89.90	0.24	225.7	2321.29	-1288.88	6769.65	2089.65	2474.90	94.00	0.19	-0.17	-0.07
	9470.00	90.42	0.60	228.4	2416.28	-1288.18	6769.39	2089.39	2568.92	95.00	0.67	0.55	0.38
	9564.00	89.99	0.62	228.4	2510.28	-1287.18	6769.05	2089.05	2661.91	94.00	0.46	-0.46	0.02
	9659.00	90.36	0.50	228.4	2605.27	-1286.25	6768.76	2088.76	2755.89	95.00	0.41	0.39	-0.13
	9754.00	90.21	1.01	231.1	2700.26	-1285.00	6768.29	2088.29	2849.83	95.00	0.56	-0.16	0.54
	9848.00	90.21	358.86	231.1	2794.26	-1285.11	6767.94	2087.94	2942.97	94.00	2.29	0.00	-2.29
	9943.00	90.21	359.03	231.1	2889.24	-1286.86	6767.60	2087.60	3037.31	95.00	0.18	0.00	0.18
	10037.00	90.18	358.12	231.1	2983.21	-1289.20	6767.28	2087.28	3130.72	94.00	0.97	-0.03	-0.97
	10132.00	89.84	358.48	231.1	3078.17	-1292.01	6767.26	2087.26	3225.18	95.00	0.52	-0.36	0.38
	10226.00	89.81	358.27	233.8	3172.13	-1294.68	6767.55	2087.55	3318.64	94.00	0.23	-0.03	-0.22
	10321.00	88.27	356.88	233.8	3267.02	-1298.70	6769.14	2089.14	3413.20	95.00	2.18	-1.62	-1.46
	10416.00	90.89	358.54	233.8	3361.93	-1302.49	6769.84	2089.84	3507.74	95.00	3.26	2.76	1.75
	10510.00	89.90	356.90	233.8	3455.85	-1306.23	6769.19	2089.19	3601.30	94.00	2.04	-1.05	-1.74
	10605.00	91.22	357.94	236.5	3550.75	-1310.51	6768.26	2088.26	3695.90	95.00	1.77	1.39	1.09
	10794.00	90.52	358.14	236.5	3739.62	-1316.97	6765.39	2085.39	3883.89	189.00	0.39	-0.37	0.11
	10888.00	90.30	358.33	239.2	3833.57	-1319.87	6764.72	2084.72	3977.36	94.00	0.31	-0.23	0.20
	10983.00	90.30	358.35	239.2	3928.53	-1322.62	6764.22	2084.22	4071.82	95.00	0.02	0.00	0.02
	11078.00	90.82	358.79	239.2	4023.49	-1324.99	6763.29	2083.29	4166.22	95.00	0.72	0.55	0.46
	11172.00	90.79	359.31	241.9	4117.47	-1326.55	6761.97	2081.97	4259.54	94.00	0.55	-0.03	0.55
	11267.00	90.39	359.26	241.9	4212.46	-1327.73	6760.99	2080.99	4353.81	95.00	0.42	-0.42	-0.05
	11361.00	90.02	358.74	241.9	4306.44	-1329.37	6760.65	2080.65	4447.14	94.00	0.68	-0.39	-0.55
	11456.00	89.47	357.85	244.6	4401.40	-1332.20	6761.08	2081.08	4541.60	95.00	1.10	-0.58	-0.94
	11550.00	90.21	358.57	244.6	4495.35	-1335.14	6761.34	2081.34	4635.08	94.00	1.10	0.79	0.77
	11645.00	89.32	358.24	244.6	4590.31	-1337.78	6761.73	2081.73	4729.52	95.00	1.00	-0.94	-0.35
	11739.00	89.59	358.27	244.6	4684.26	-1340.64	6762.62	2082.62	4822.99	94.00	0.29	0.29	0.03
	11834.00	89.90	359.18	244.6	4779.24	-1342.76	6763.05	2083.05	4917.37	95.00	1.01	0.33	0.96
	11929.00	90.18	359.04	247.3	4874.23	-1344.23	6762.98	2082.98	5011.68	95.00	0.33	0.29	-0.15
	12023.00	89.87	359.06	247.3	4968.21	-1345.79	6762.94	2082.94	5105.01	94.00	0.33	-0.33	0.02
	12118.00	89.35	358.78	247.3	5063.19	-1347.58	6763.59	2083.59	5199.35	95.00	0.62	-0.55	-0.29
	12212.00	89.99	359.65	250.0	5157.18	-1348.87	6764.13	2084.13	5292.64	94.00	1.15	0.68	0.93

	12307.00	89.90	359.93	250.0	5252.18	-1349.22	6764.22	2084.22	5386.81	95.00	0.31	-0.09	0.29
	12401.00	89.96	359.55	250.0	5346.18	-1349.64	6764.33	2084.33	5479.99	94.00	0.41	0.06	-0.40
	12496.00	90.02	0.62	252.7	5441.18	-1349.50	6764.35	2084.35	5574.09	95.00	1.13	0.06	1.13
	12685.00	90.55	359.40	252.7	5630.17	-1349.47	6763.41	2083.41	5761.32	189.00	0.70	0.28	-0.65
	12780.00	89.87	359.70	252.7	5725.17	-1350.22	6763.06	2083.06	5855.54	95.00	0.78	-0.72	0.32
	12874.00	90.30	359.87	255.4	5819.17	-1350.57	6762.92	2082.92	5948.72	94.00	0.49	0.46	0.18
	12969.00	90.05	359.02	255.4	5914.16	-1351.49	6762.63	2082.63	6042.95	95.00	0.93	-0.26	-0.89
	13063.00	90.27	0.17	255.4	6008.16	-1352.15	6762.37	2082.37	6136.17	94.00	1.25	0.23	1.22
	13158.00	89.35	358.91	255.4	6103.15	-1352.92	6762.68	2082.68	6230.38	95.00	1.64	-0.97	-1.33
	13252.00	90.49	359.71	258.1	6197.14	-1354.05	6762.82	2082.82	6323.66	94.00	1.48	1.21	0.85
	13347.00	89.59	358.92	258.1	6292.13	-1355.18	6762.75	2082.75	6417.92	95.00	1.26	-0.95	-0.83
	13442.00	89.44	358.54	258.1	6387.11	-1357.29	6763.55	2083.55	6512.30	95.00	0.43	-0.16	-0.40
	13536.00	89.13	359.37	258.1	6481.08	-1359.00	6764.73	2084.73	6605.64	94.00	0.94	-0.33	0.88
	13631.00	89.99	359.43	258.1	6576.07	-1360.00	6765.46	2085.46	6699.88	95.00	0.91	0.91	0.06
	13726.00	90.36	359.47	258.1	6671.07	-1360.91	6765.17	2085.17	6794.12	95.00	0.39	0.39	0.04
	13820.00	89.65	359.61	258.1	6765.06	-1361.67	6765.16	2085.16	6887.35	94.00	0.77	-0.76	0.15
	13915.00	91.19	0.36	260.8	6860.06	-1361.69	6764.46	2084.46	6981.46	95.00	1.80	1.62	0.79
	14010.00	89.19	0.38	260.8	6955.05	-1361.08	6764.15	2084.15	7075.49	95.00	2.11	-2.11	0.02
	14104.00	90.58	0.01	260.8	7049.05	-1360.76	6764.34	2084.34	7168.57	94.00	1.53	1.48	-0.39
	14199.00	90.52	0.25	260.8	7144.04	-1360.54	6763.42	2083.42	7262.66	95.00	0.26	-0.06	0.25
	14294.00	90.18	0.77	263.5	7239.04	-1359.70	6762.84	2082.84	7356.66	95.00	0.65	-0.36	0.55
	14388.00	91.13	359.91	263.5	7333.03	-1359.14	6761.77	2081.77	7449.70	94.00	1.36	1.01	-0.91
	14483.00	90.79	0.94	263.5	7428.01	-1358.43	6760.18	2080.18	7543.70	95.00	1.14	-0.36	1.08
	14578.00	89.69	0.82	263.5	7523.00	-1356.97	6759.78	2079.78	7637.61	95.00	1.16	-1.16	-0.13
	14672.00	89.07	0.52	266.2	7616.98	-1355.87	6760.80	2080.80	7730.58	94.00	0.73	-0.66	-0.32
	14767.00	89.87	0.73	266.2	7711.97	-1354.84	6761.67	2081.67	7824.54	95.00	0.87	0.84	0.22
	14862.00	90.55	359.56	266.2	7806.97	-1354.60	6761.33	2081.33	7918.63	95.00	1.42	0.72	-1.23
	14956.00	90.85	359.08	266.2	7900.96	-1355.71	6760.18	2080.18	8011.89	94.00	0.60	0.32	-0.51
	15051.00	91.32	1.33	266.2	7995.93	-1355.37	6758.38	2078.38	8105.94	95.00	2.42	0.49	2.37
	15146.00	89.75	0.34	266.2	8090.91	-1353.99	6757.49	2077.49	8199.86	95.00	1.95	-1.65	-1.04
	15241.00	89.65	359.77	266.2	8185.91	-1353.90	6757.99	2077.99	8293.96	95.00	0.61	-0.11	-0.60
	15335.00	90.67	359.16	266.2	8279.91	-1354.78	6757.73	2077.73	8387.20	94.00	1.26	1.09	-0.65
	15429.00	89.29	358.97	266.2	8373.89	-1356.31	6757.76	2077.76	8480.52	94.00	1.48	-1.47	-0.20
	15524.00	89.59	359.47	266.2	8468.88	-1357.60	6758.69	2078.69	8574.80	95.00	0.61	0.32	0.53
	15619.00	90.12	359.65	269.0	8563.87	-1358.33	6758.93	2078.93	8669.02	95.00	0.59	0.56	0.19
	15713.00	89.99	359.96	266.2	8657.87	-1358.65	6758.84	2078.84	8762.19	94.00	0.36	-0.14	0.33
	15808.00	89.69	359.13	263.5	8752.87	-1359.41	6759.10	2079.10	8856.41	95.00	0.93	-0.32	-0.87
	15903.00	89.50	359.63	266.2	8847.86	-1360.44	6759.78	2079.78	8950.66	95.00	0.56	-0.20	0.53
	15997.00	89.41	359.90	269.0	8941.86	-1360.82	6760.67	2080.67	9043.83	94.00	0.30	-0.10	0.29
	16092.00	89.87	0.17	269.0	9036.85	-1360.76	6761.27	2081.27	9137.94	95.00	0.56	0.48	0.28
	16187.00	89.87	0.28	269.0	9131.85	-1360.39	6761.48	2081.48	9232.01	95.00	0.12	0.00	0.12
	16281.00	89.22	359.47	269.0	9225.85	-1360.59	6762.23	2082.23	9325.16	94.00	1.10	-0.69	-0.86
	16376.00	89.53	359.33	271.7	9320.84	-1361.59	6763.26	2083.26	9419.40	95.00	0.36	0.33	-0.15
	16470.00	88.67	359.37	271.7	9414.82	-1362.66	6764.74	2084.74	9512.66	94.00	0.92	-0.91	0.04
	16565.00	90.76	0.21	269.0	9509.81	-1363.00	6765.21	2085.21	9606.81	95.00	2.37	2.20	0.88
	16660.00	90.61	0.09	269.0	9604.80	-1362.76	6764.08	2084.08	9700.89	95.00	0.20	-0.16	-0.13
	16754.00	90.79	359.82	271.7	9698.80	-1362.83	6762.93	2082.93	9794.02	94.00	0.35	0.19	-0.29
	16849.00	90.98	1.22	271.7	9793.78	-1361.97	6761.46	2081.46	9888.01	95.00	1.49	0.20	1.47
	16943.00	90.39	0.07	271.7	9887.76	-1360.91	6760.34	2080.34	9980.98	94.00	1.37	-0.63	-1.22
	17038.00	89.90	0.06	271.7	9982.76	-1360.80	6760.10	2080.10	10075.08	95.00	0.52	-0.52	-0.01
	17096.00	90.30	0.99	271.7	10040.76	-1360.27	6760.00	2080.00	10132.47	58.00	1.75	0.69	1.60
Projection	17121.00	90.30	0.99	N/A	10065.76	-1359.84	6759.87	2079.87	10157.17	25.00	0.00	-0.00	-0.00