



Gamma Ray

LWD MEMORY LOG

Scale:	Company: Noble Energy	
1:240	Well: Rampart A33-770	
True Vertical Depth	Field: Wattenberg	
Depth Reference:	County:	Country: United States
Driller's Depth	State: Colorado	
Status:	Surface Location:	
Final Print	Latitude:	40° 27' 57.763" N
API No: 05-123-50928-00	Longitude:	104° 33' 40.167" W
Job ID: 110958227	SEC: 21	TWN: 6N RGE: 64W
Permanent Datum (P.D.):	Mean Sea Level	Elevation: 0.00 ft
Log Measured From:	Rig Floor	Above P.D.: 4757.00 ft
		Elev. KB: 4757.00 ft
		Elev. DF: 4727.00 ft
		Elev. GL: 4727.00 ft
Dates		Magnetic Field Reference
From: 2021-07-30	Drilled (ft)	Logged (ft)
To: 2021-08-02	Top: 1935.00	Top: 1935.00
Spud: 2021-07-29	Bottom: 16873.00	Bottom: 16860.00
		Total Magnetic Field Strength: (nT) 51908
		Mag to Reference North Correction: (deg) 7.00
Borehole Record		Casing Record
Hole Size (in)	From (ft)	To (ft)
13.500	30.00	1935.00
8.500	1935.00	16873.00
Mud Record		Deviation Record
Type	From (ft)	To (ft)
Oil Based Mud	1935.00	16873.00
Acquisition System		Software Version
Cadence	RT 6.1	
Plot Studio	6.1.9289.2	
		Rig: H&P 517
		Contractor: Helmerich & Payne Drilling Co
		District: RMA
		Unit: D&E
		Other

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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	3.00	AutoTrak Curve	1935.00	2092.00	1935.00	2105.00	2021-07-30 21:30	2021-07-30 22:52	3.21
2	2	8.500	PDC	3.00	AutoTrak Curve	2092.00	12860.00	2105.00	16873.00	2021-07-31 04:33	2021-08-02 05:20	44.64

Crew

Name	Arrive Wellsite	Depart Wellsite	Name	Arrive Wellsite	Depart Wellsite	Name	Arrive Wellsite	Depart Wellsite
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Dallata Dinh	2021-07-29	2021-08-02	Jeremiah Samson	2021-07-29	2021-08-02	Marcos Favela	2021-07-29	2021-08-02
Rizwan Khan	2021-07-29	2021-08-02	Tien Bui	2021-07-29	2021-08-02			

Witness

Name	Run
Charles Collver	1,2

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+ (%)
2021-07-30 11:11	1	1935.00	Oil Based Mud	9.3	10	N/A	20.0	79.5/20.5	Active Pit	25500	0.00
2021-07-31 03:20	2	2105.00	Oil Based Mud	9.3	10	N/A	20.0	79.5/20.5	Active Pit	25500	0.00
2021-07-31 18:41	2	6154.00	Oil Based Mud	9.1	11	N/A	4.0	79.1/20.9	Active Pit	30405	0.00
2021-08-02 02:12	2	12948.00	Oil Based Mud	9.6	12	N/A	4.0	79.3/20.7	Active Pit	27211	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	14236901	Near Bit Inclination	5.93	6.74	7.000	4.330
1	AutoTrak Curve Steering Unit	14236901	Near Bit VSS	5.93	6.74	7.000	4.330
1	AutoTrak Curve MWD	14367858	Gamma (single)	2.79	12.91	7.000	3.250
1	AutoTrak Curve MWD	14367858	Directional (mag)	12.27	22.39	7.000	3.250
2	AutoTrak Curve Steering Unit	15208060	Near Bit Inclination	5.93	6.74	7.000	4.330
2	AutoTrak Curve Steering Unit	15208060	Near Bit VSS	5.93	6.74	7.000	4.330
2	AutoTrak Curve MWD	14219765	Gamma (single)	2.75	12.91	7.000	3.250
2	AutoTrak Curve MWD	14219765	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 lack of control by Baker Hughes logging engineers, depth calibrations and measurements could not be independently verified.
2	Baker Hughes LWD Run 1 and 2 utilized 6 ¾ inch NaviGamma service (Gamma Ray and Directional) behind a 8 1/2 inch bit and rotary steerable assembly from 1935 to 16873 feet MD (1935 to 6874 feet TVD).
3	The Gamma Ray Apparent (GRAM) data is presented 0 to 300 API, per the customer's request.
4	Several gaps appear in the log due to drilling ahead before the assembly had time to properly power on.

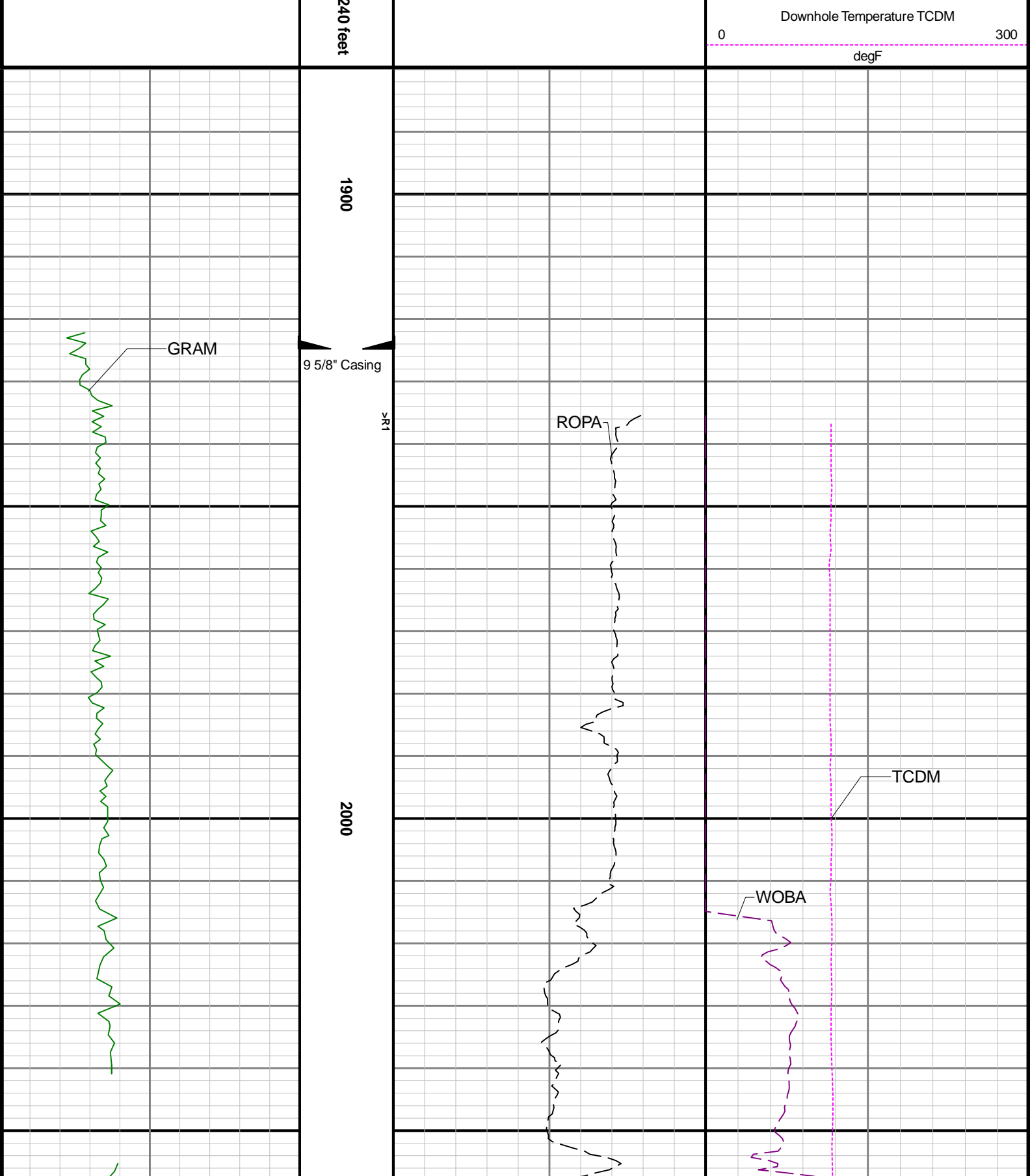
Remarks

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

Gamma Ray - Apparent 0.5 ft Average GRAM	TVD 1:	Depth Averaged ROP 3 ft Average ROPA	Weight On Bit, Average 1 ft Average WOBA
0 300		1000 0	0 50
API		ft/h	klb

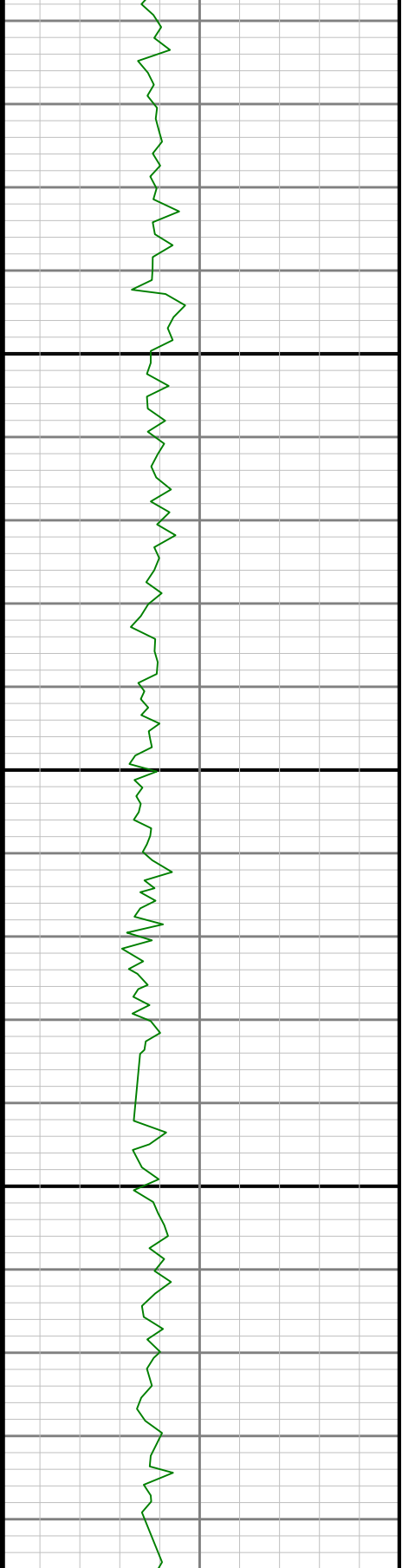


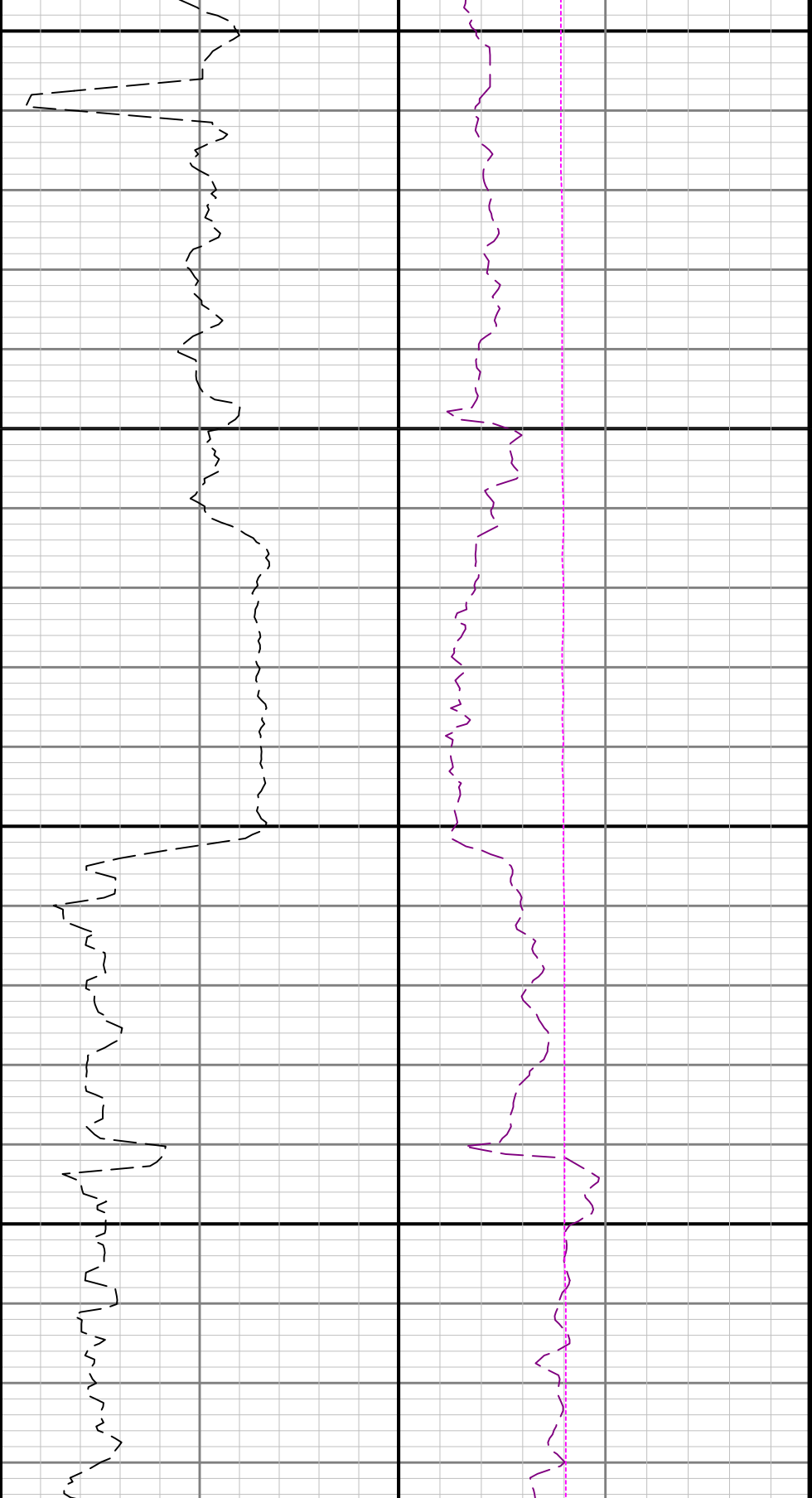


R1 \diamond R2

2100

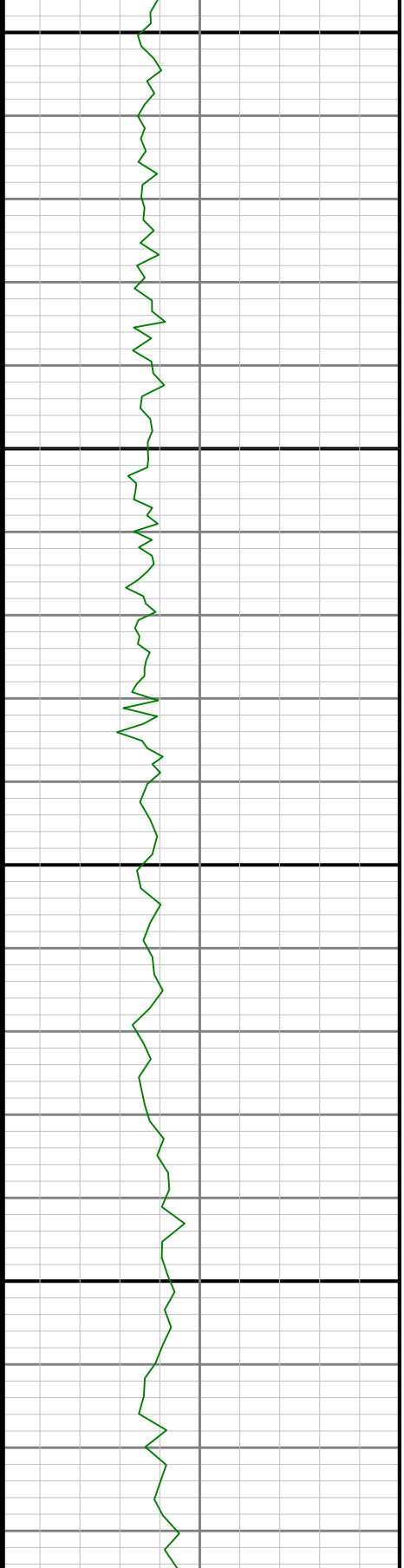
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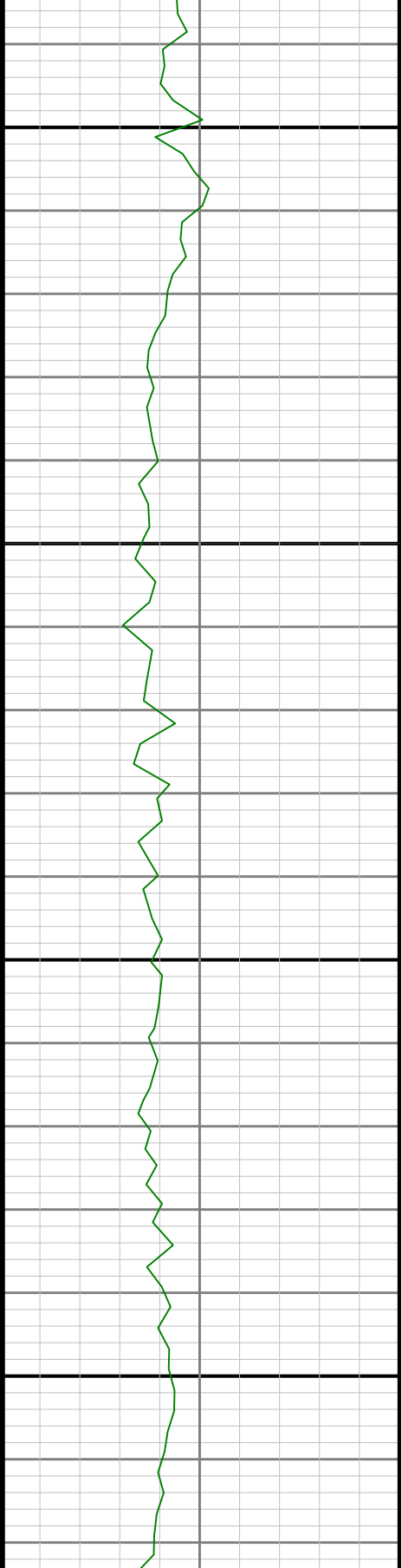
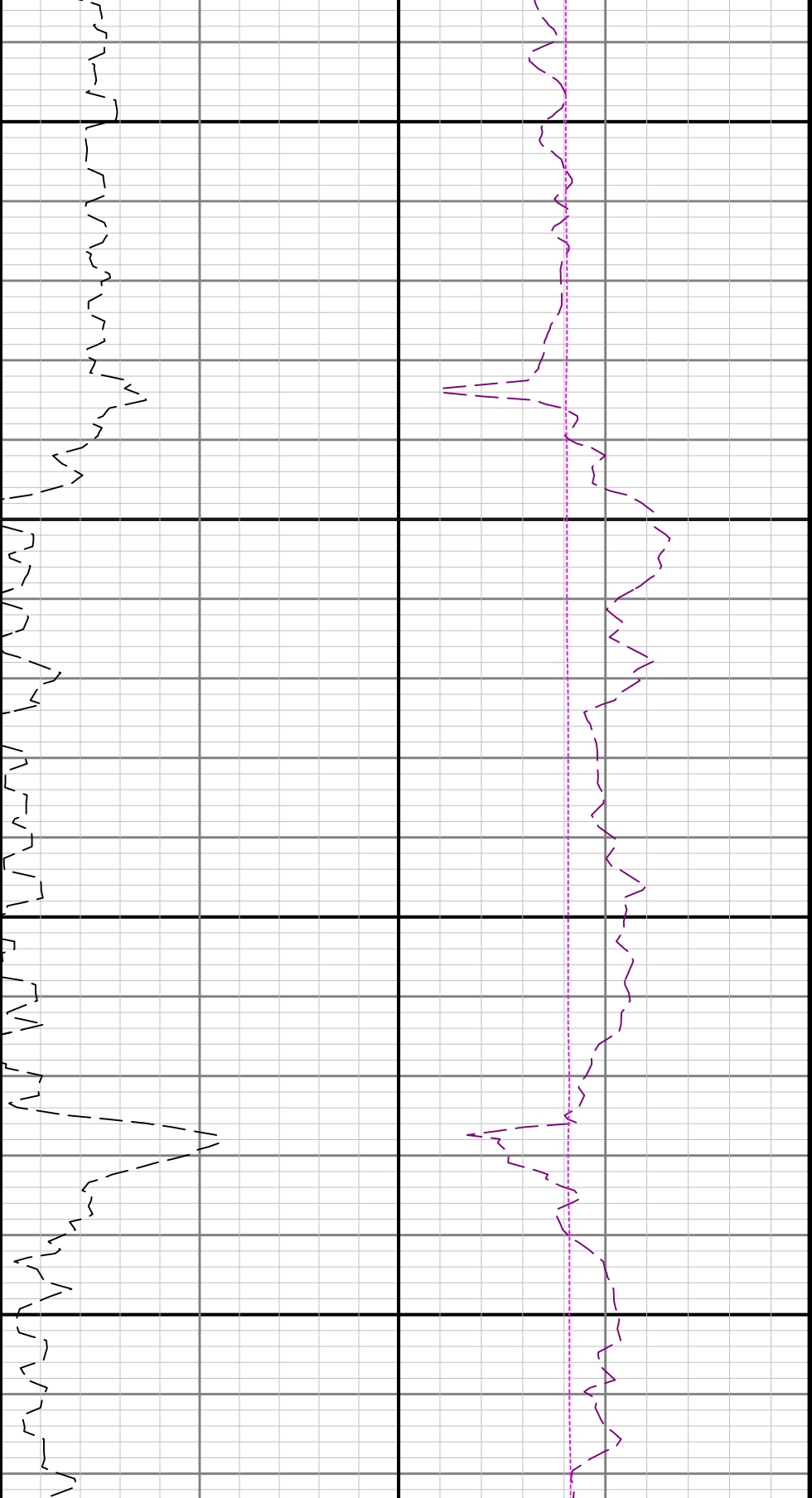
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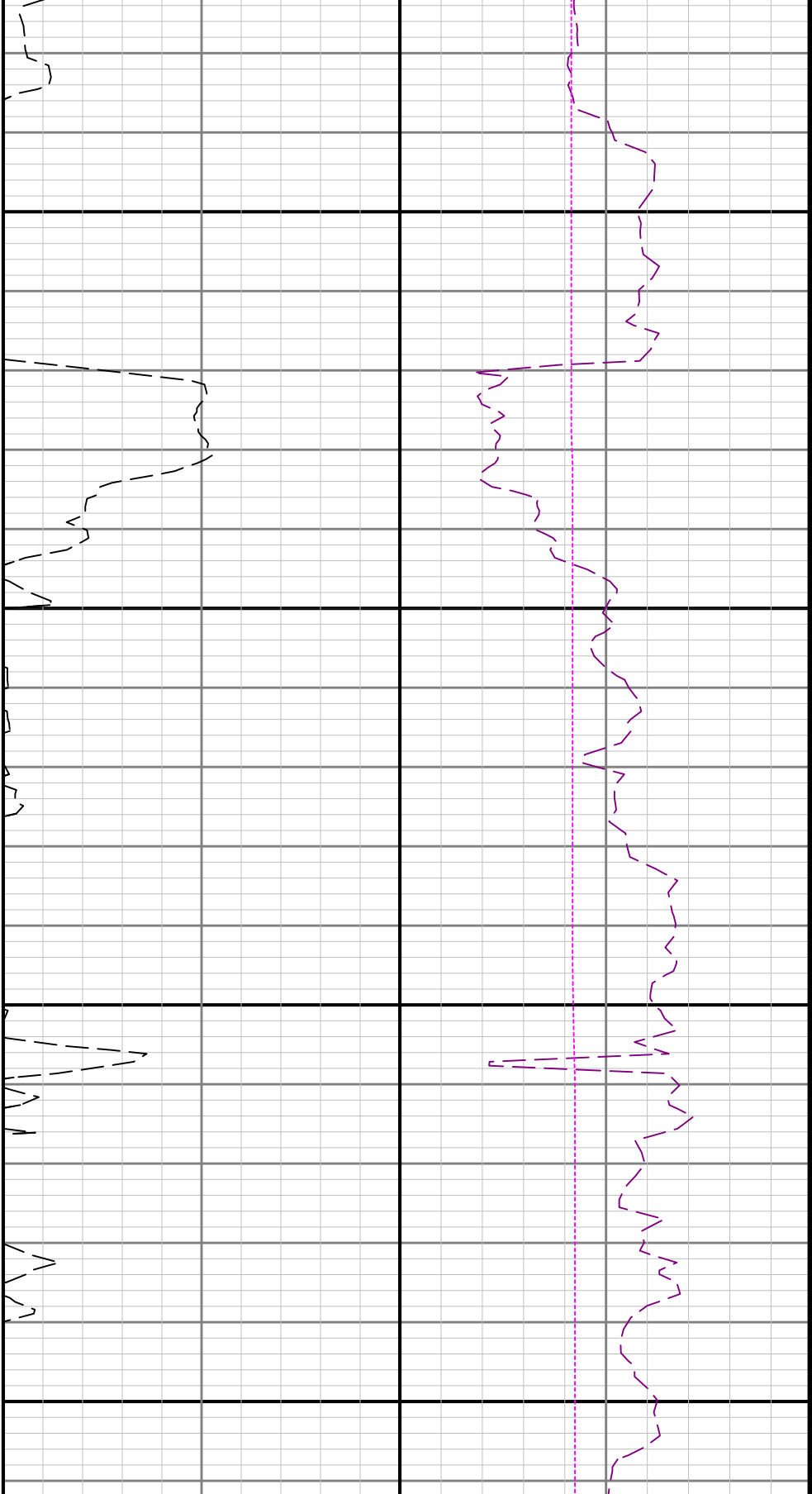




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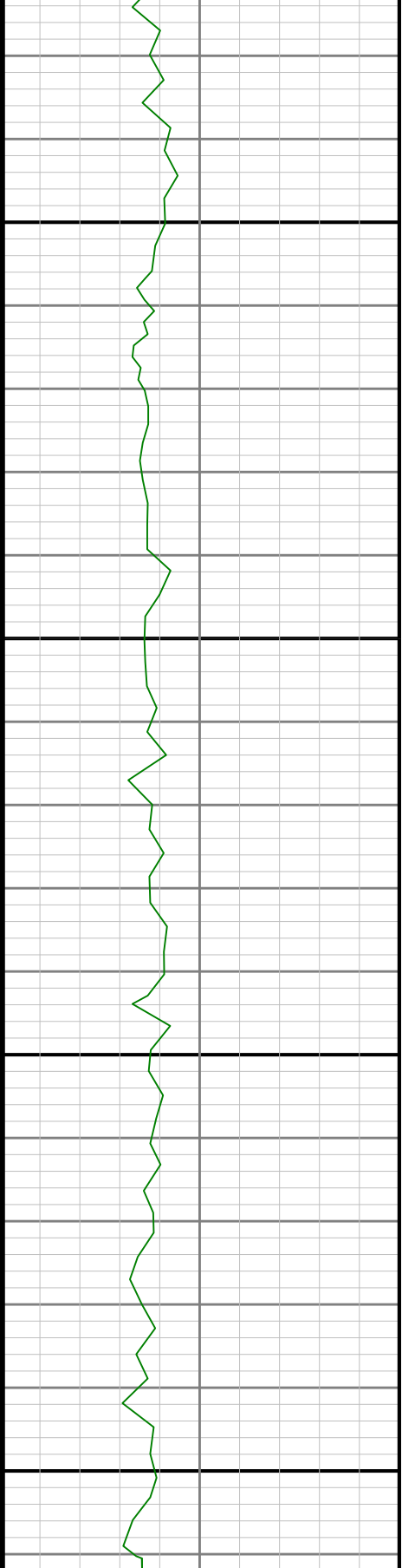
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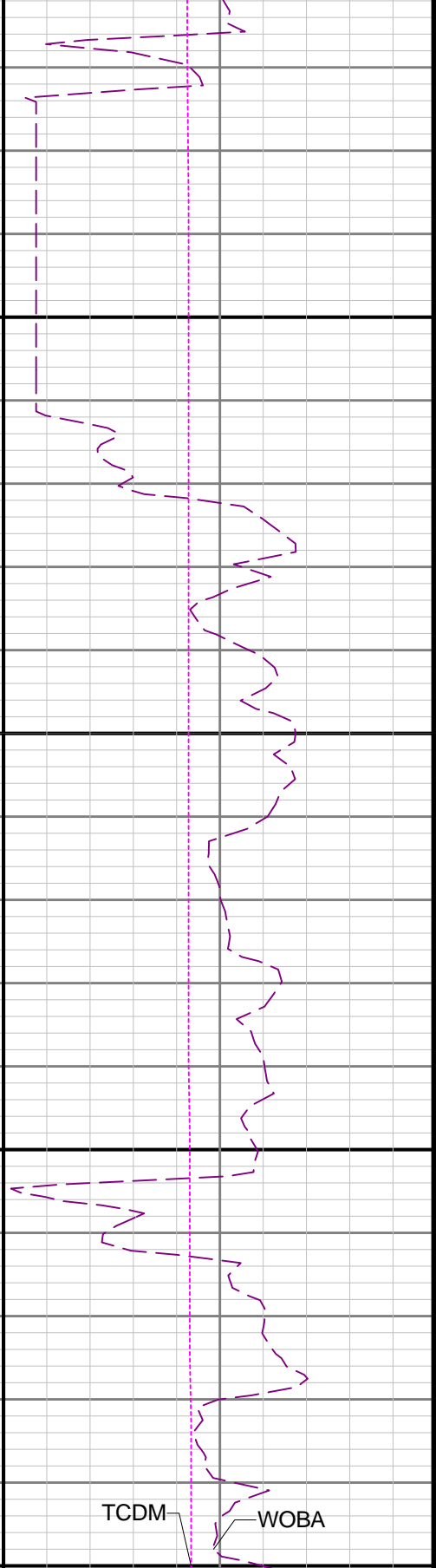
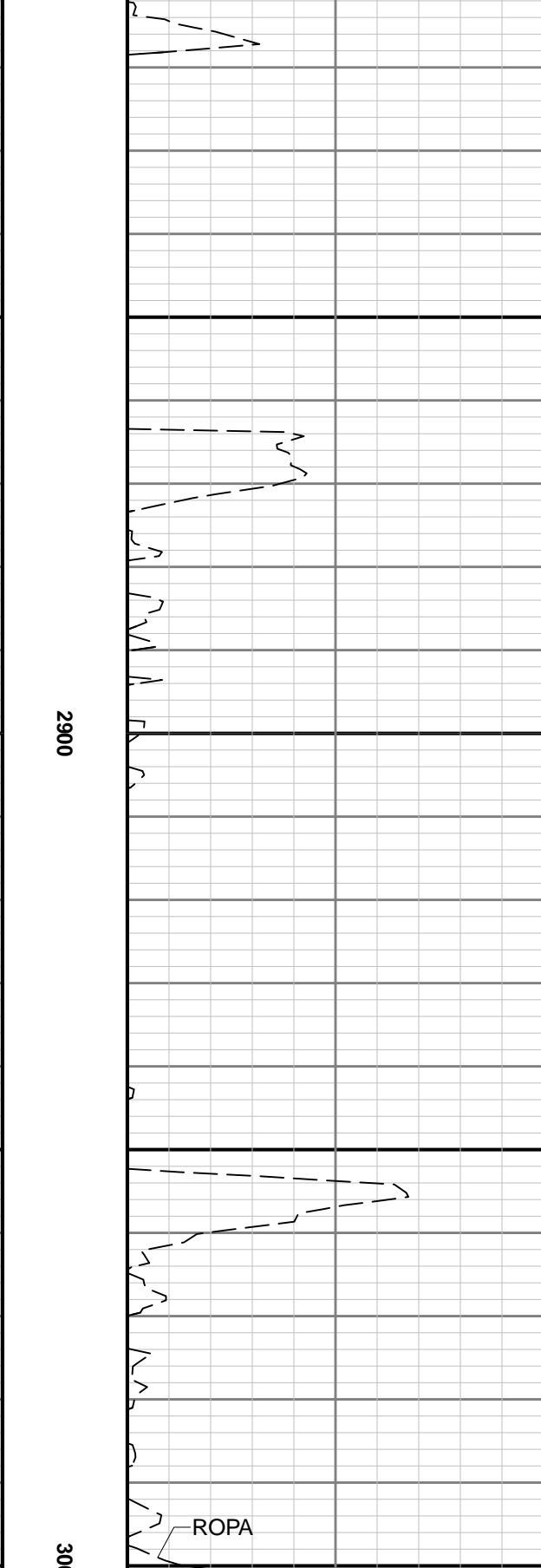
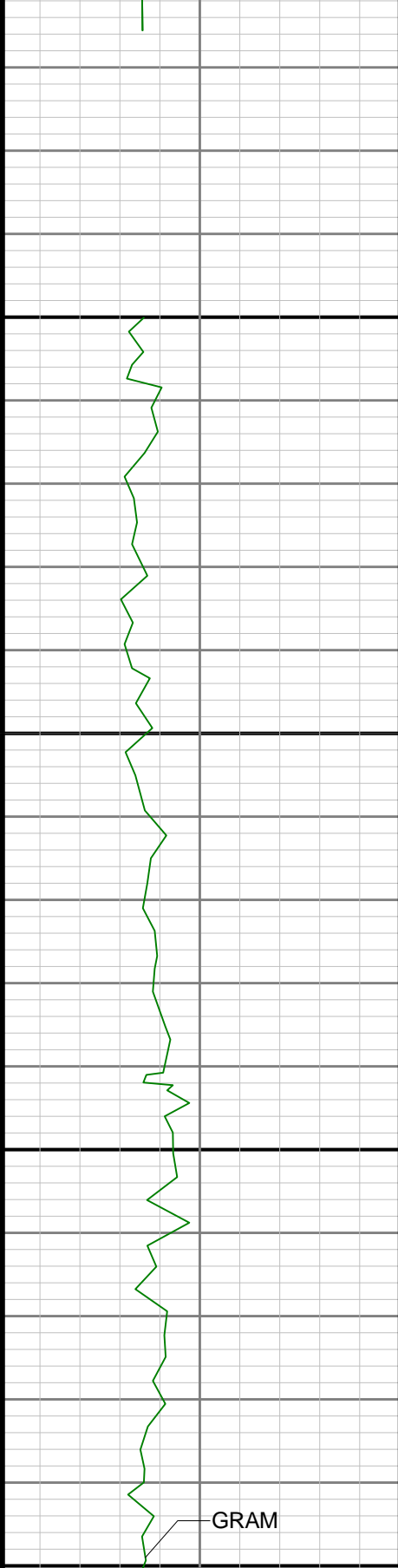


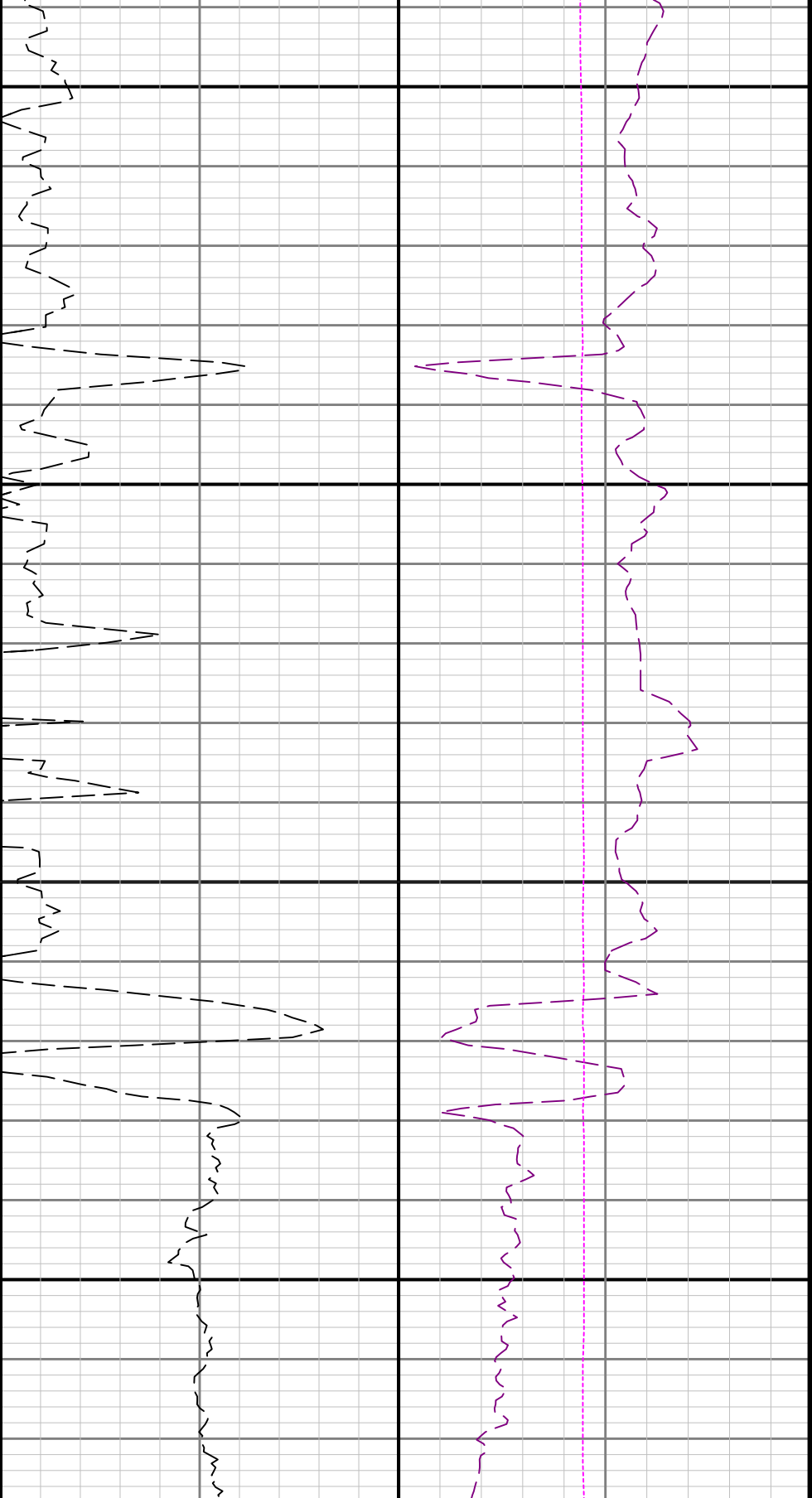


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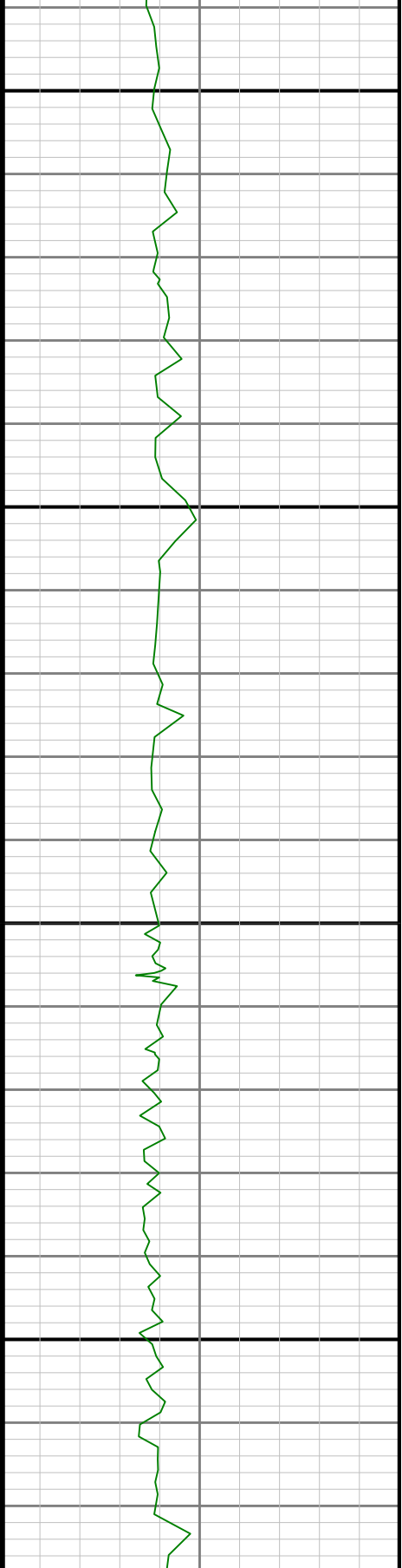


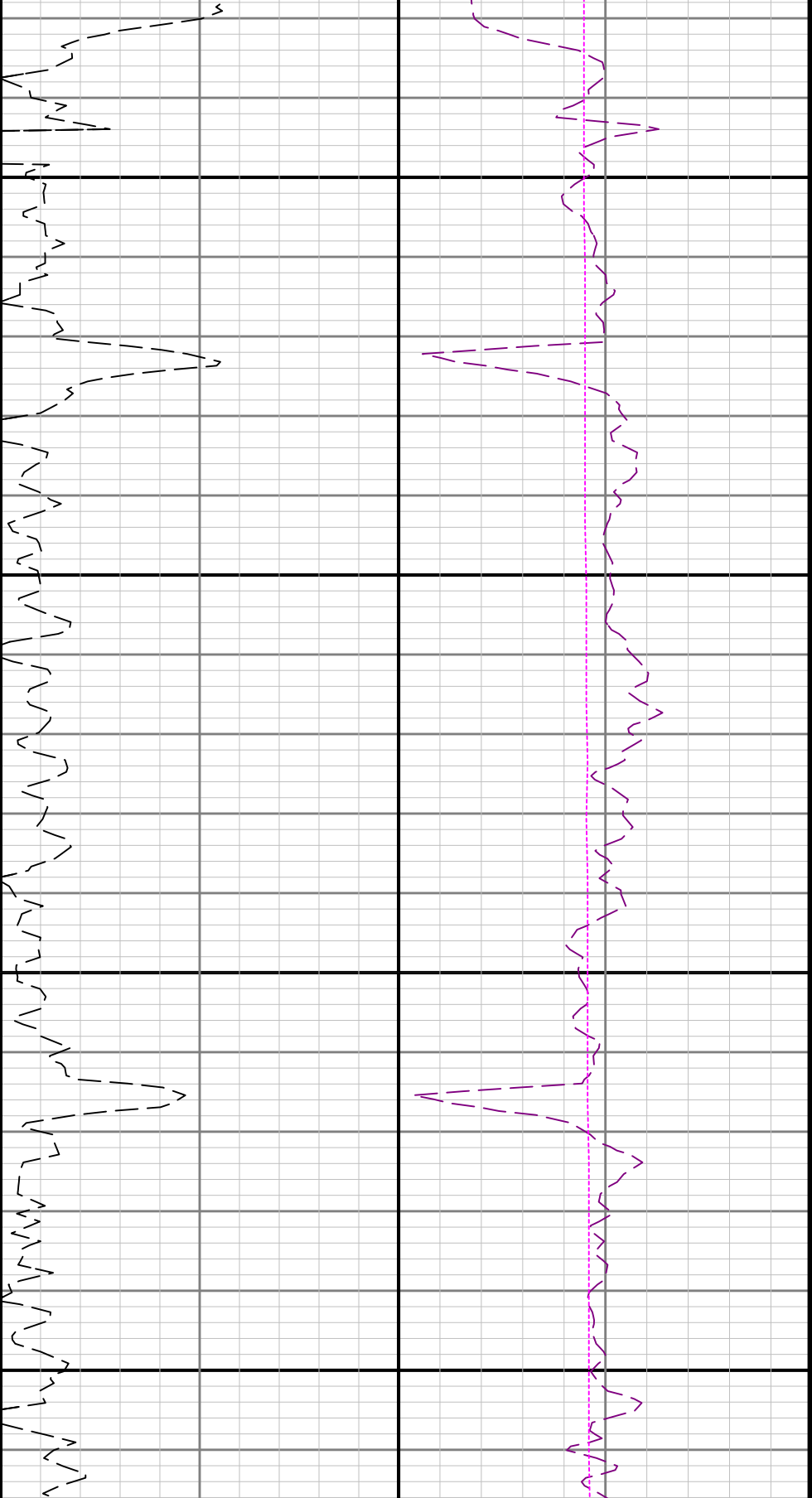




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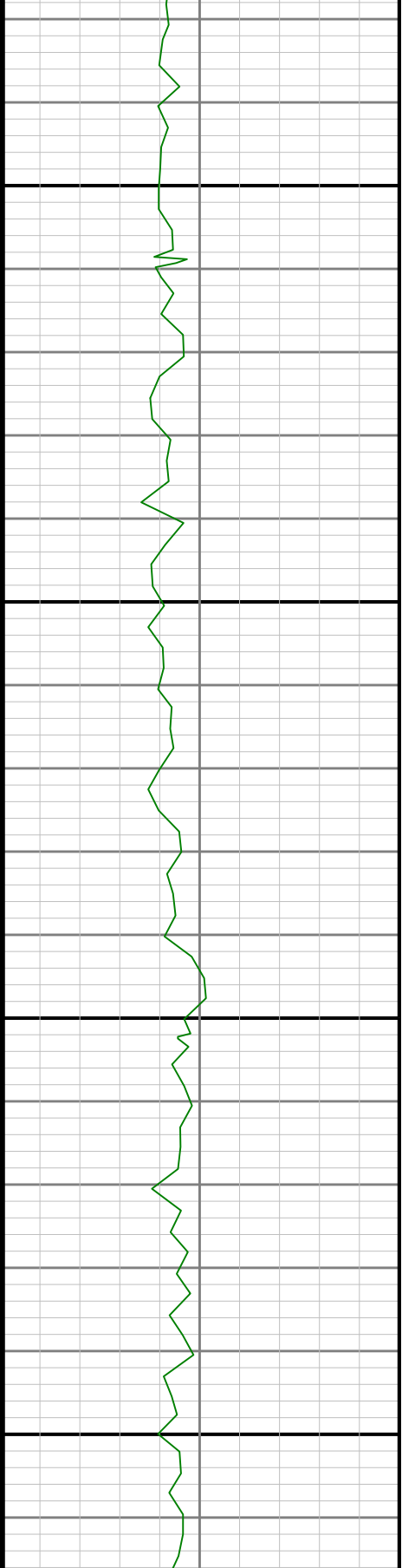
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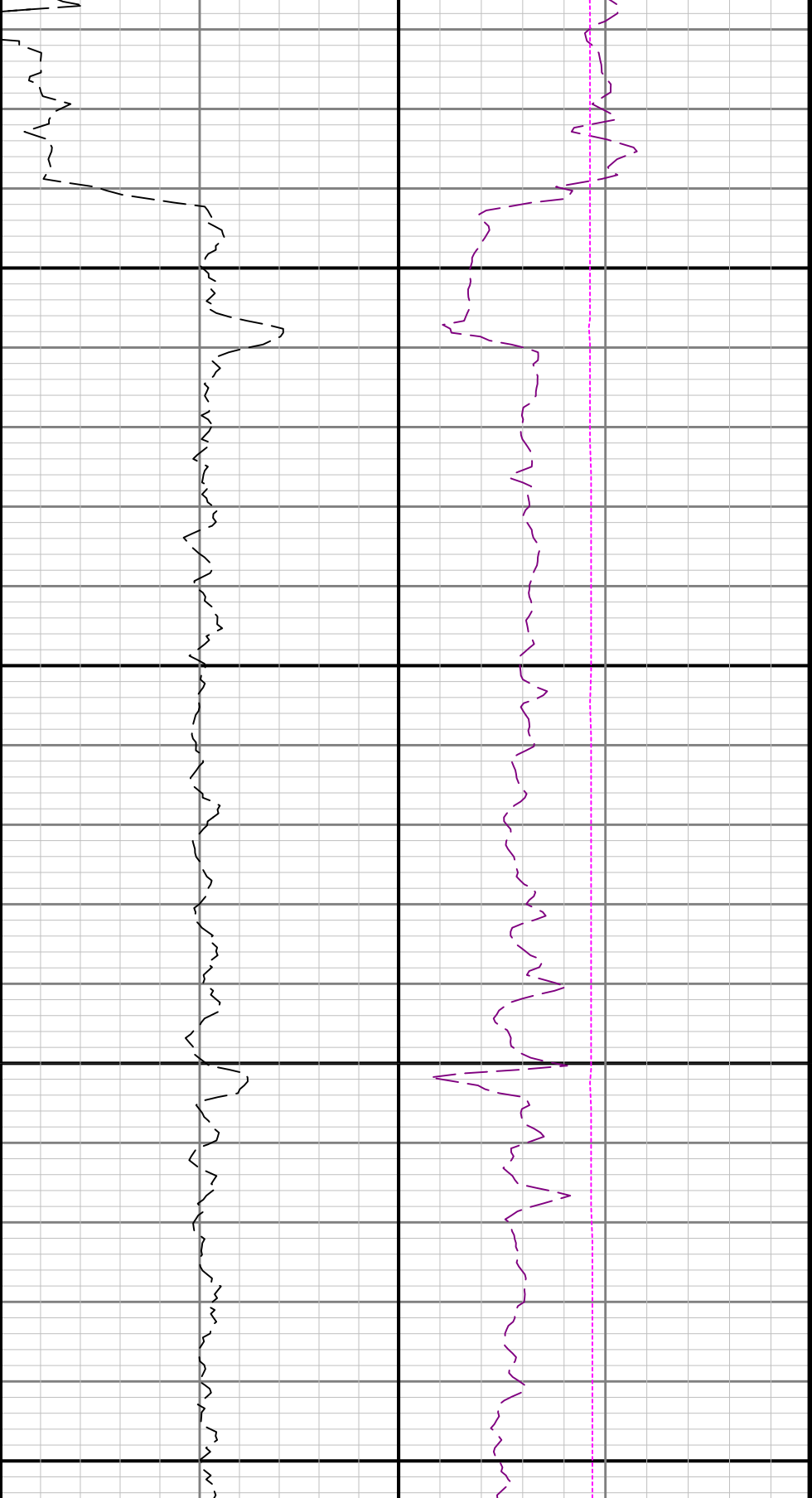




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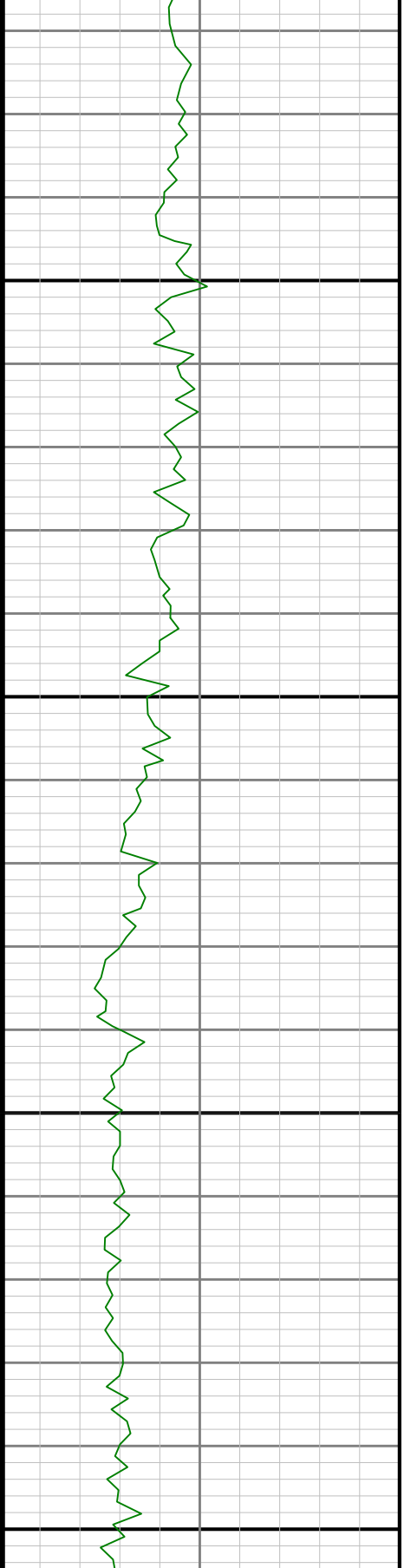
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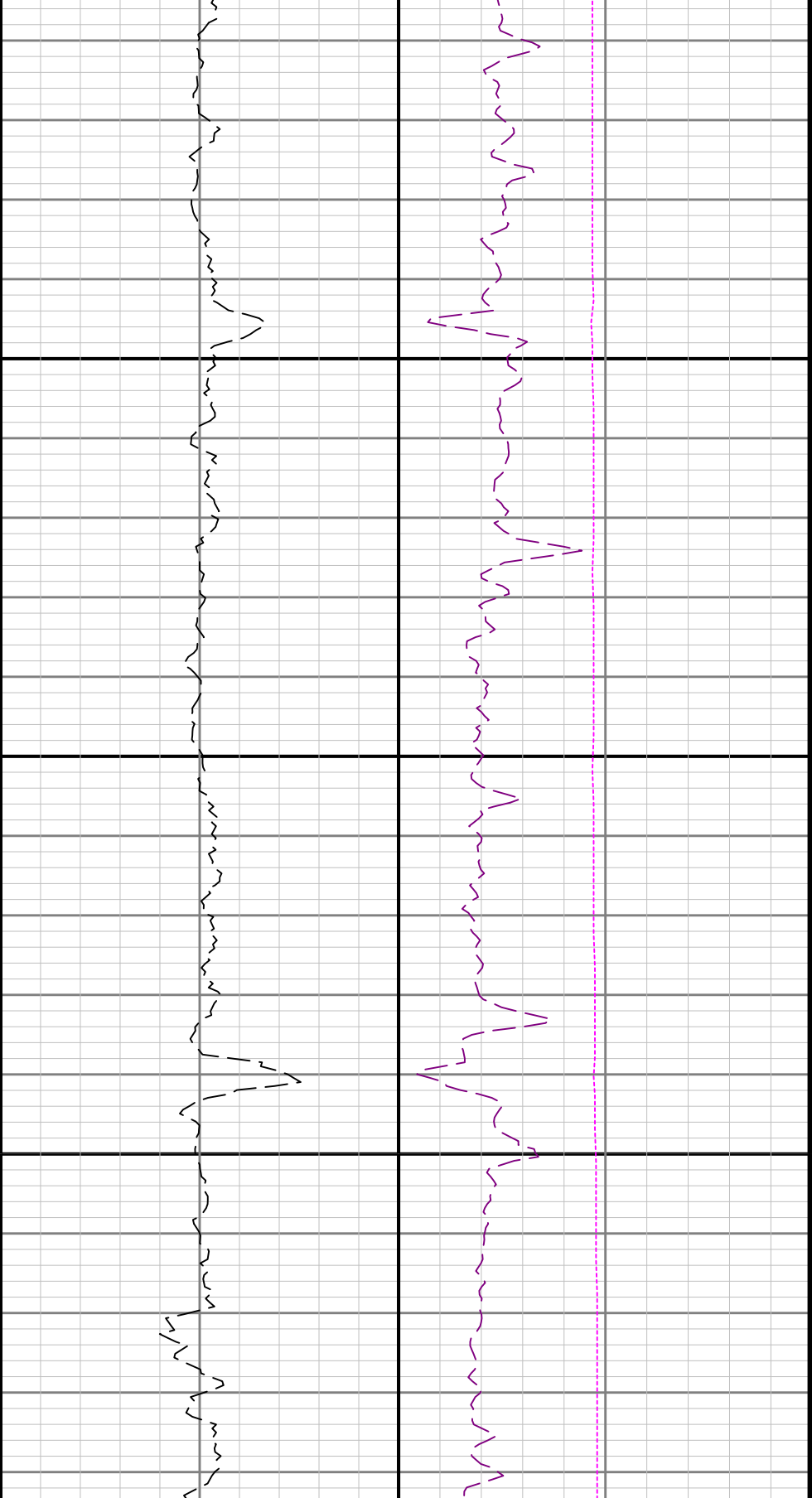




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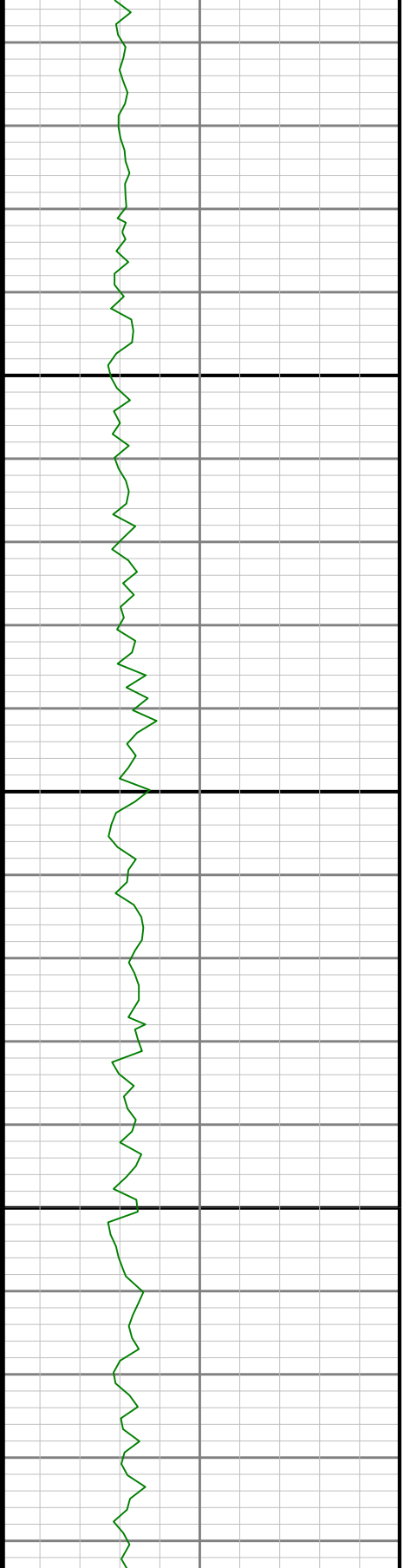
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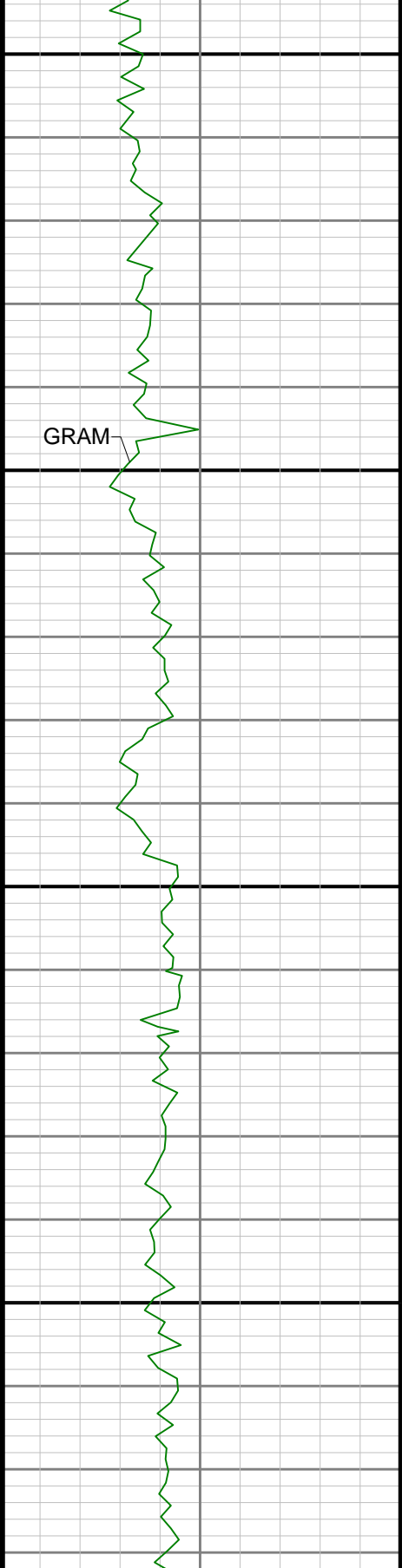




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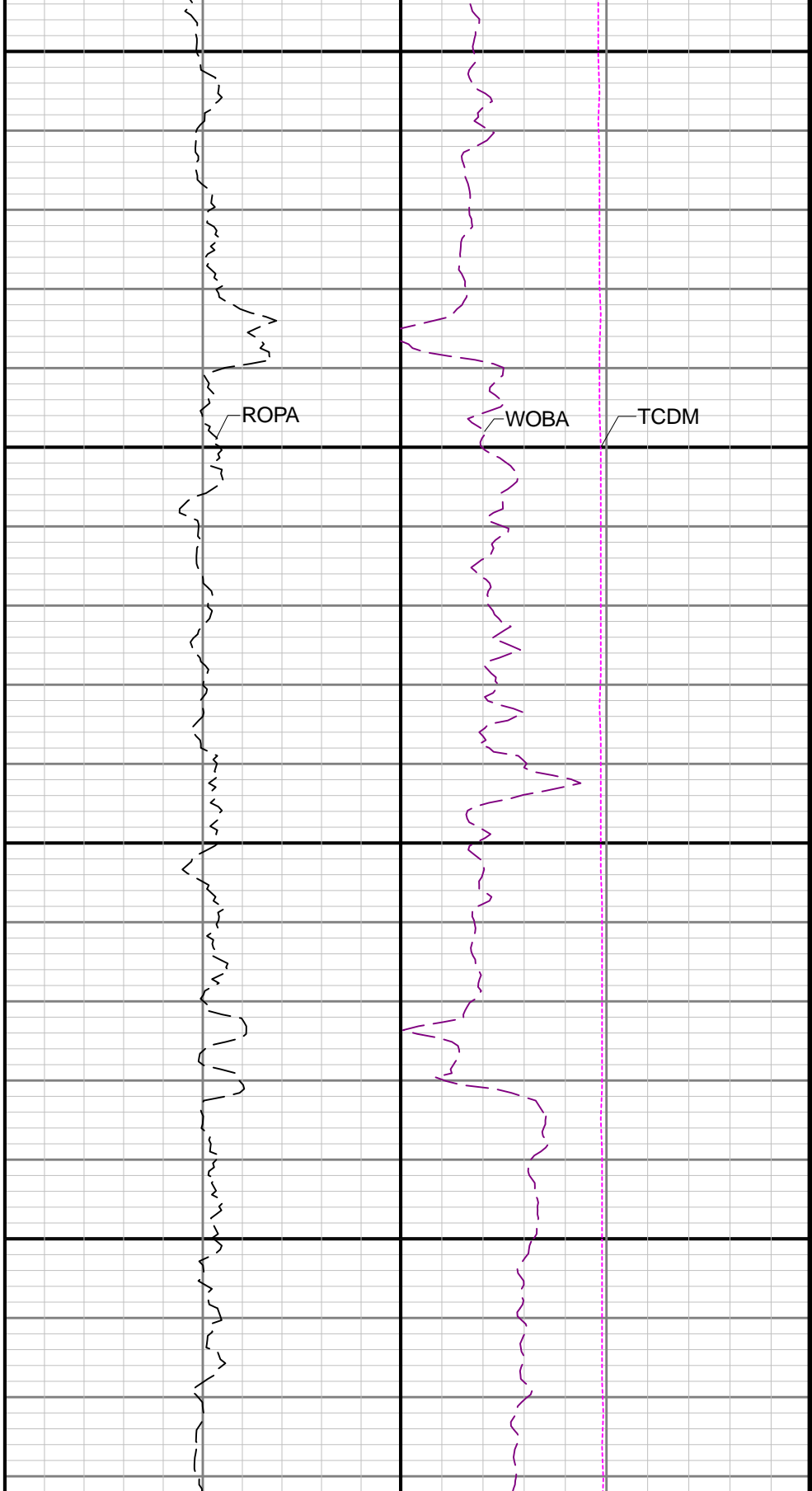
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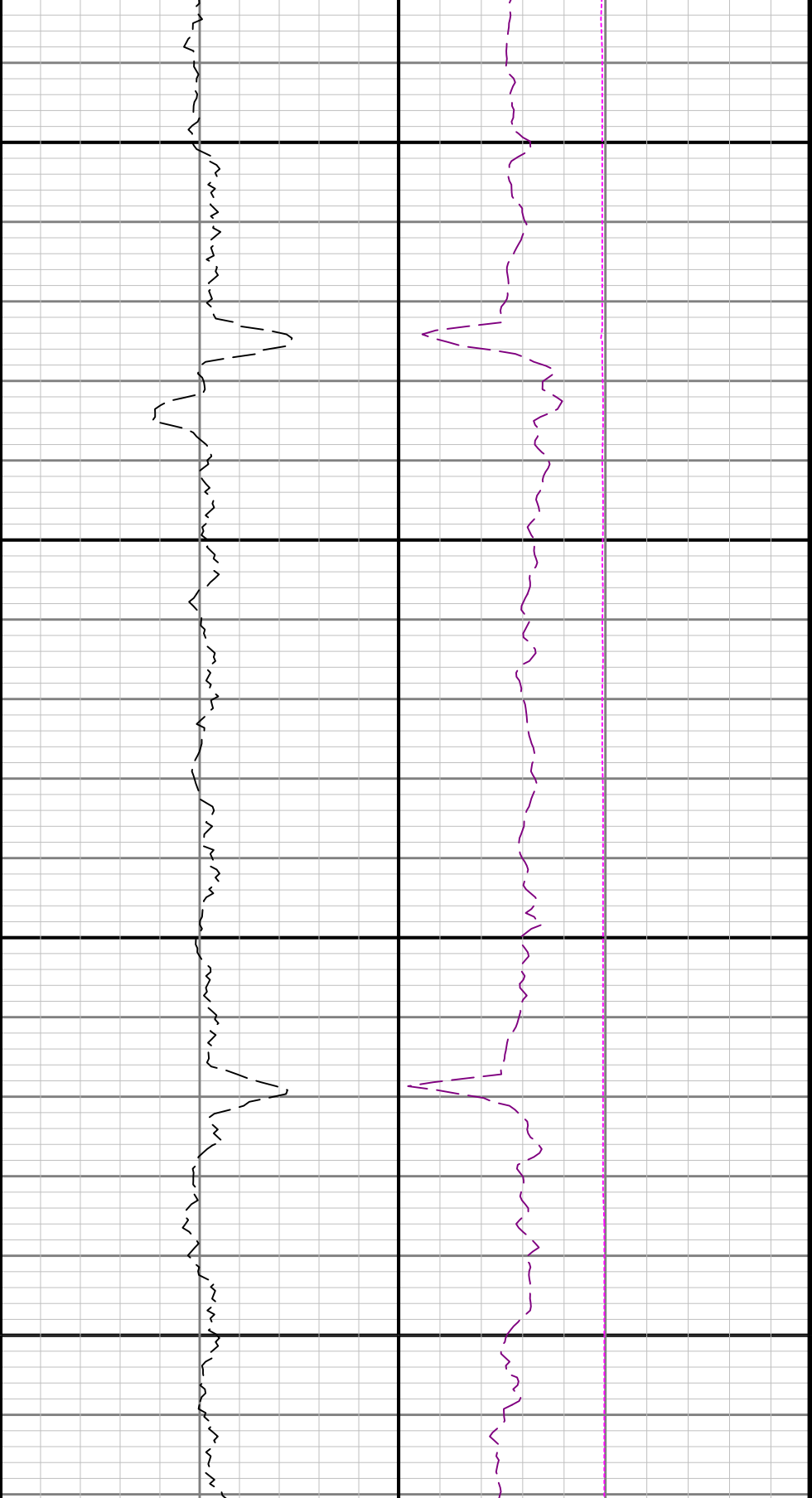




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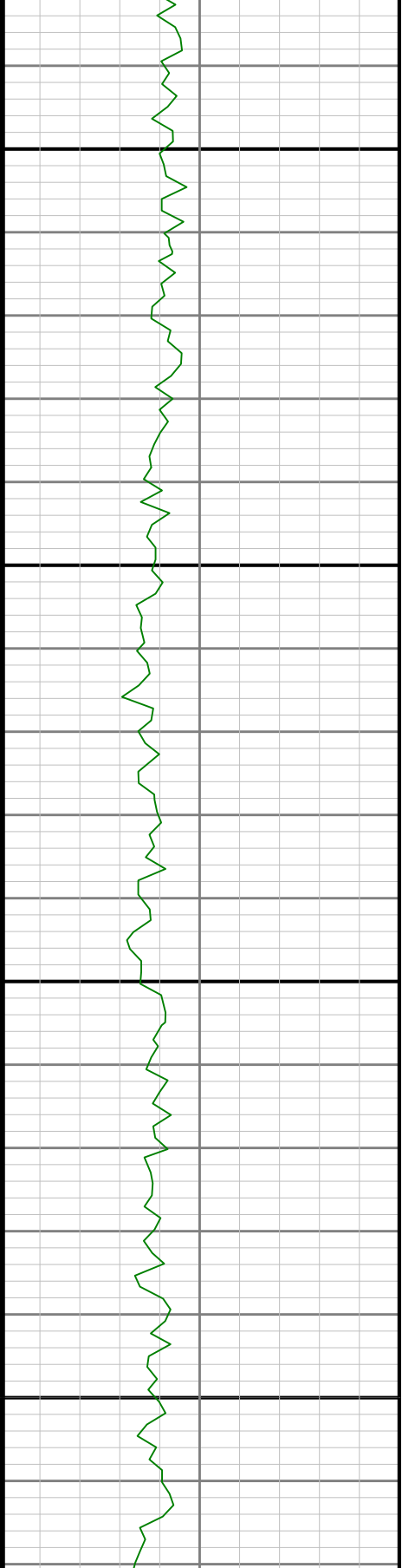
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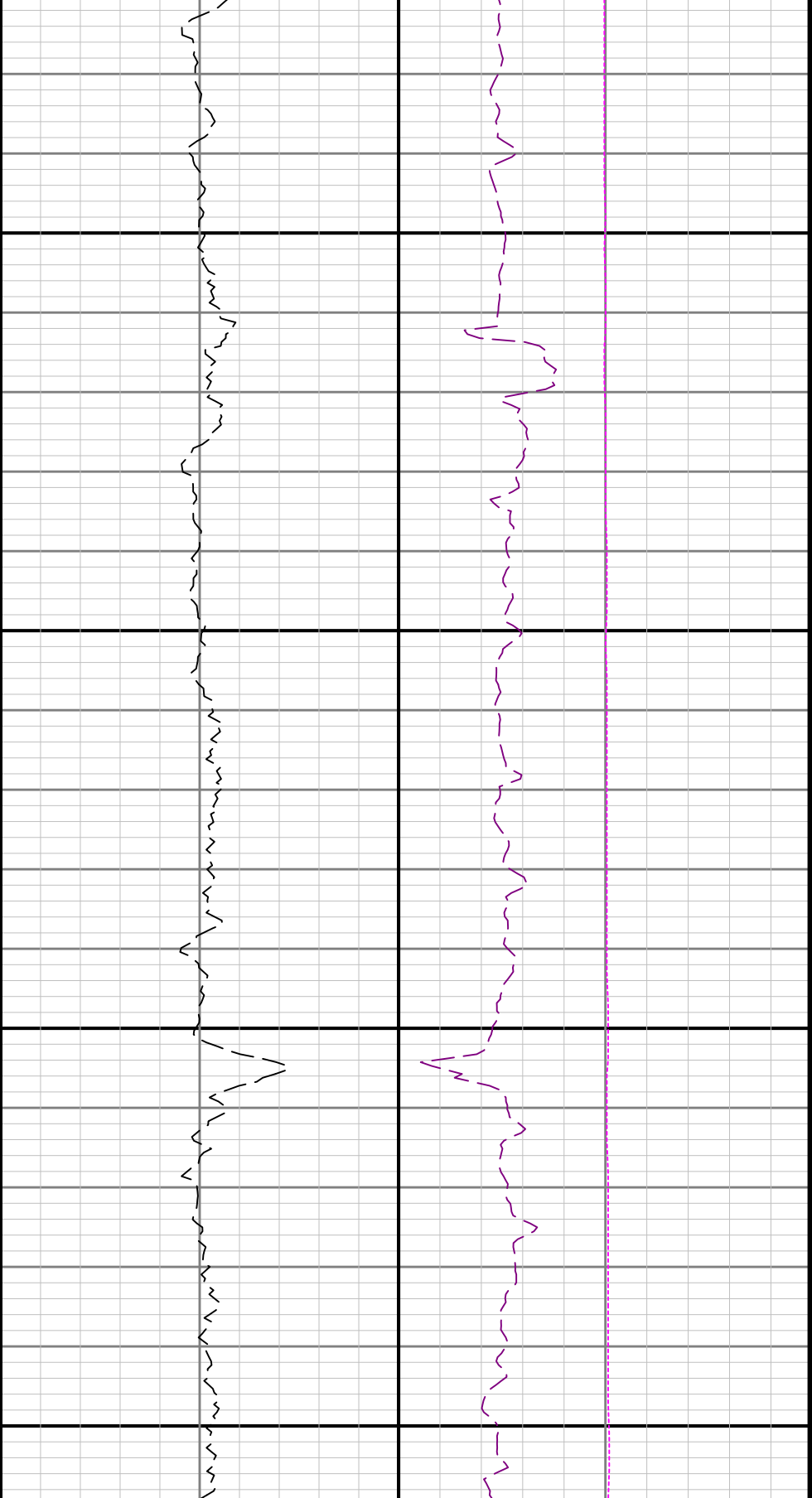




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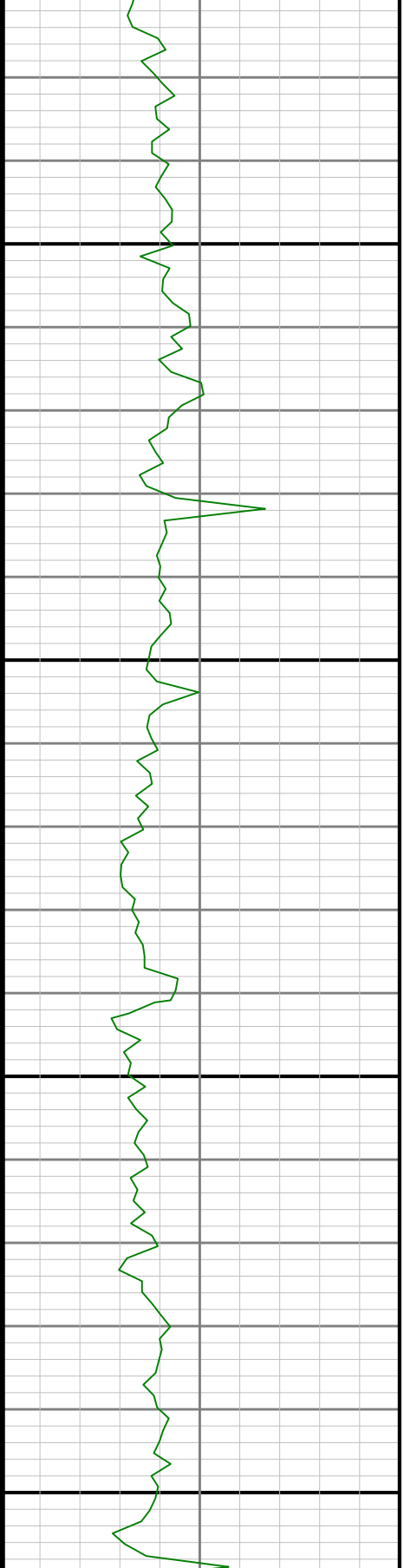
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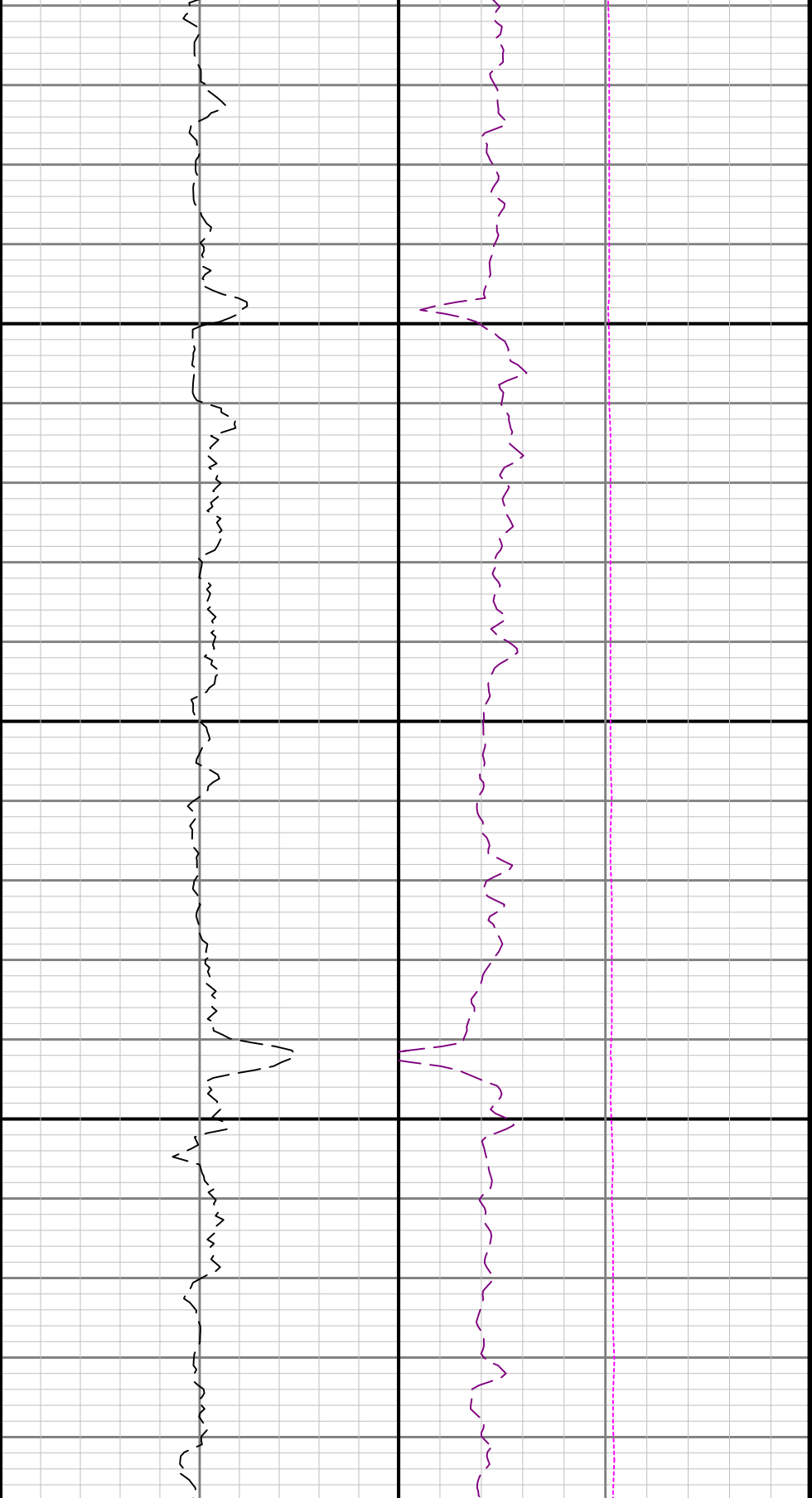




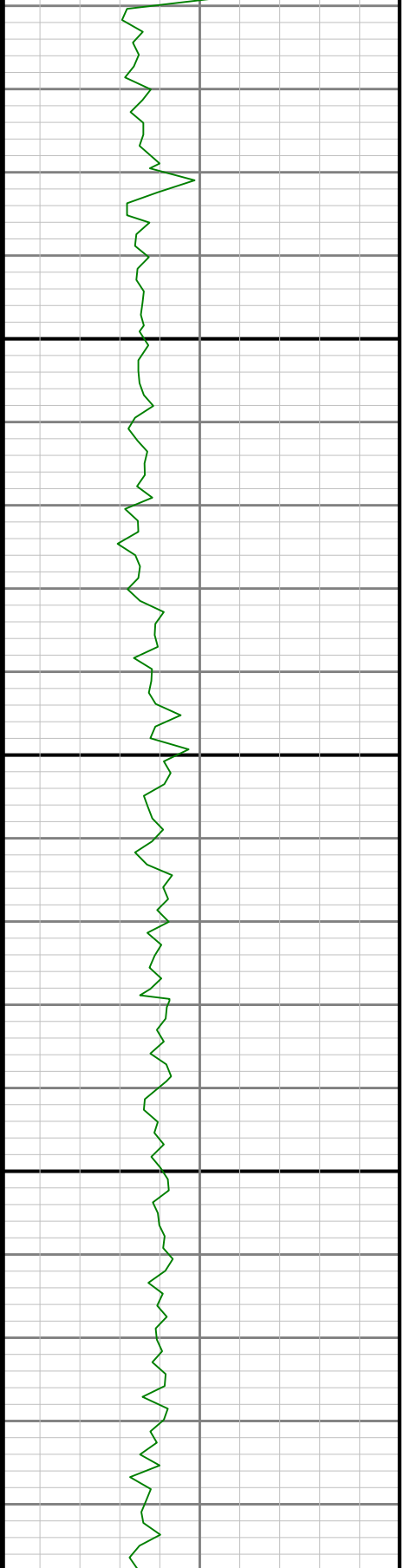
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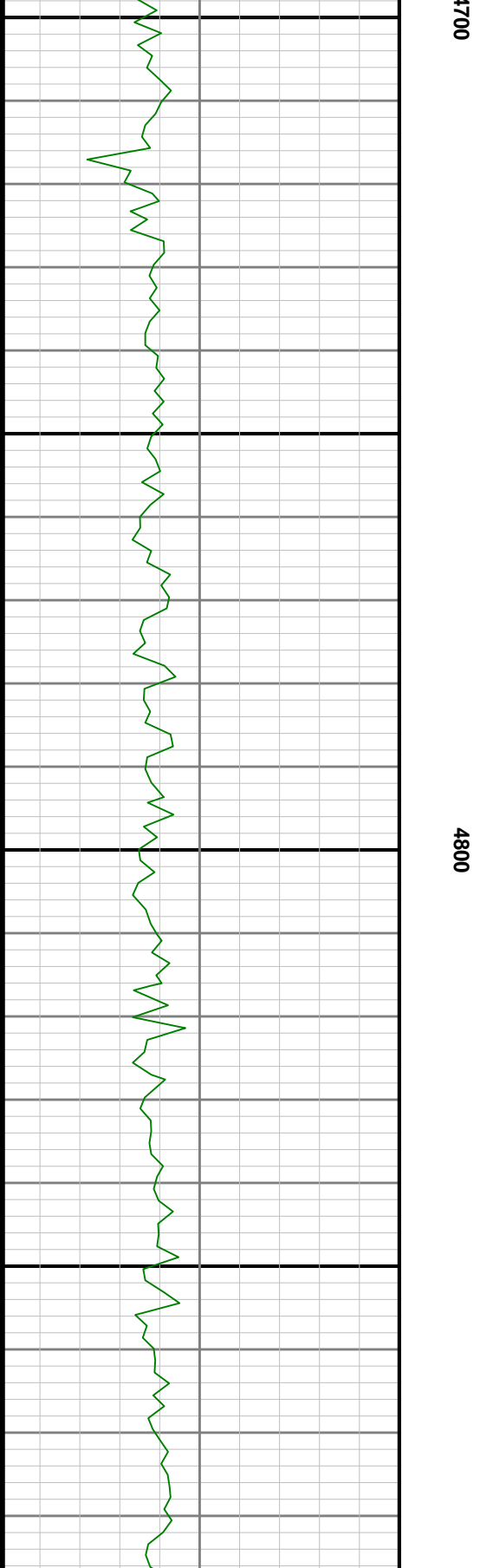
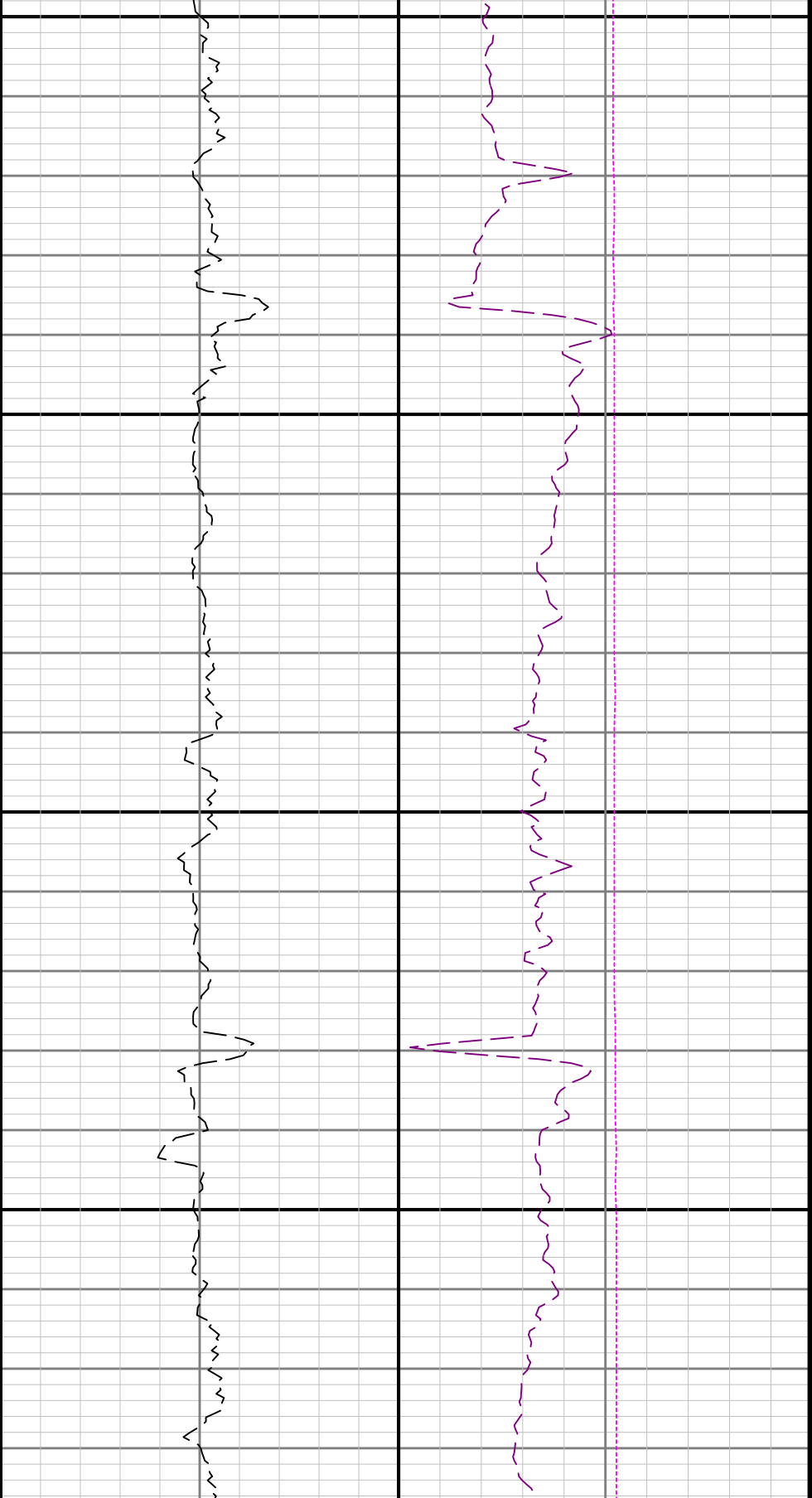
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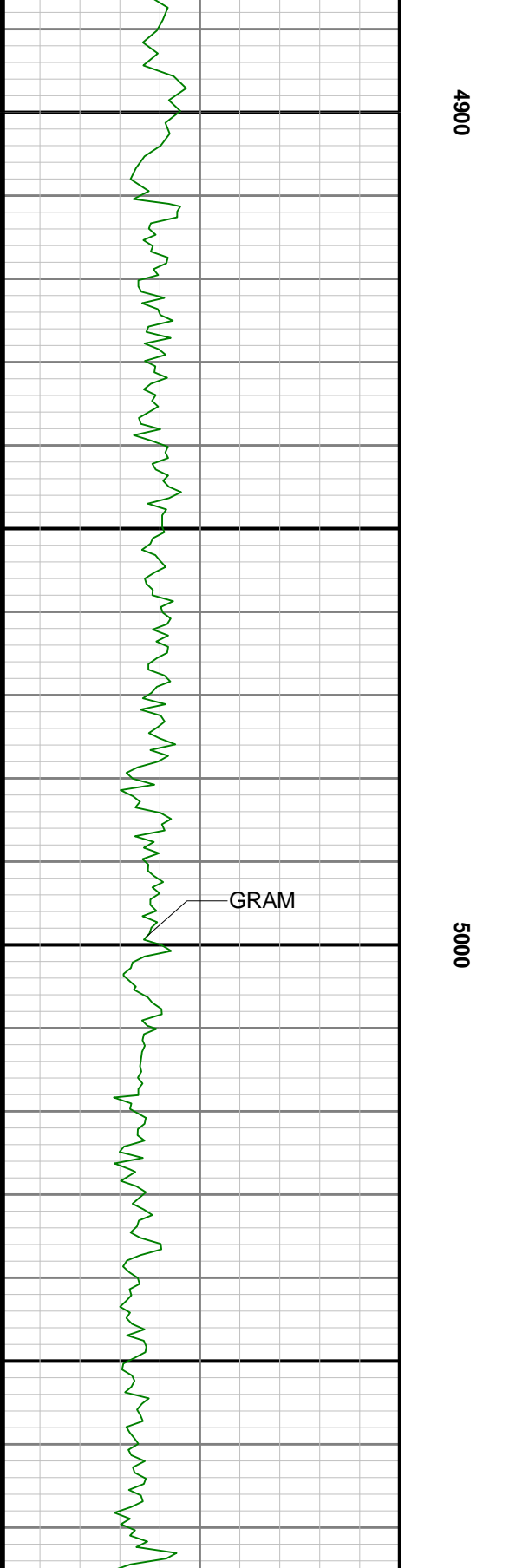
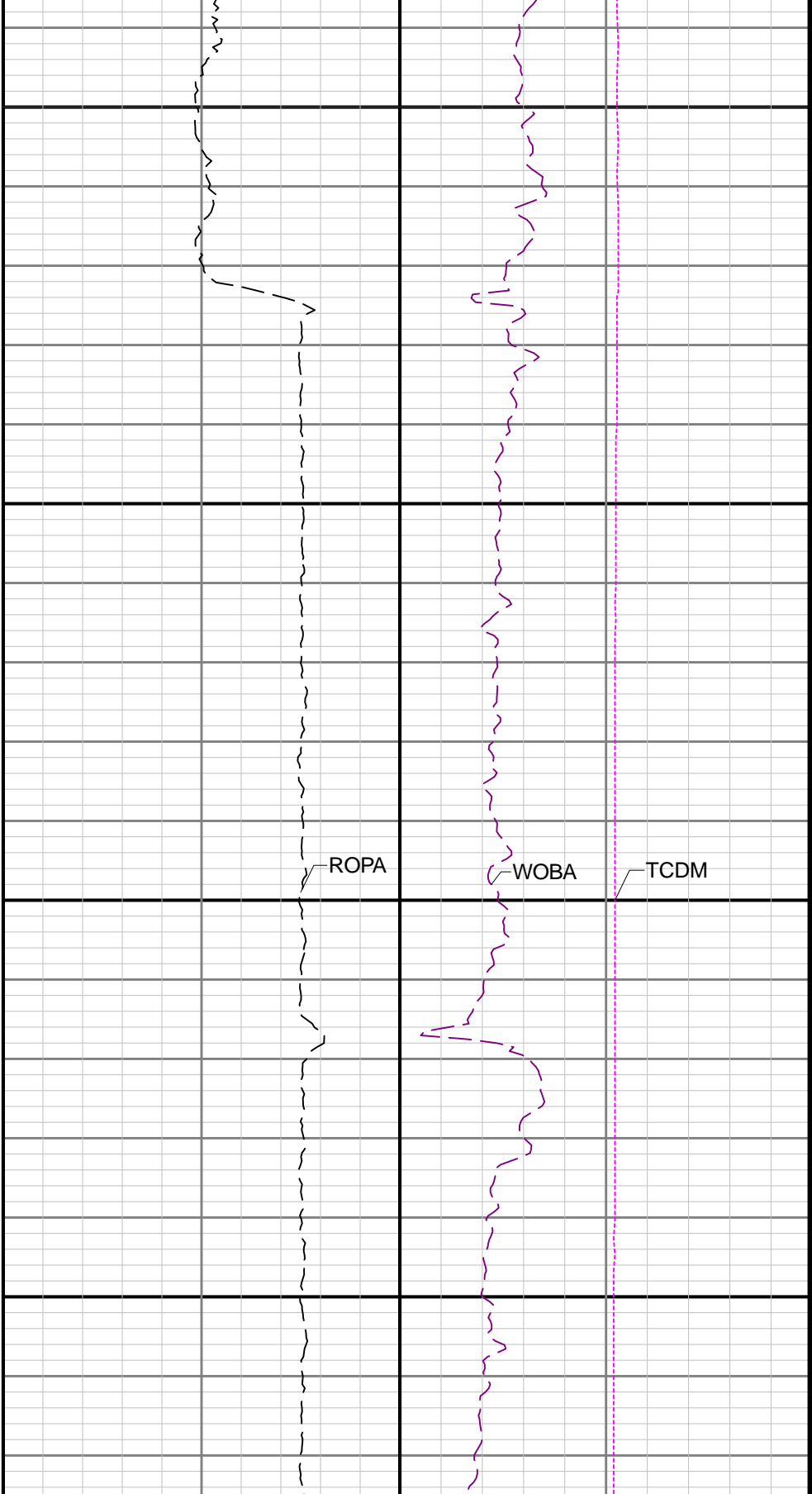


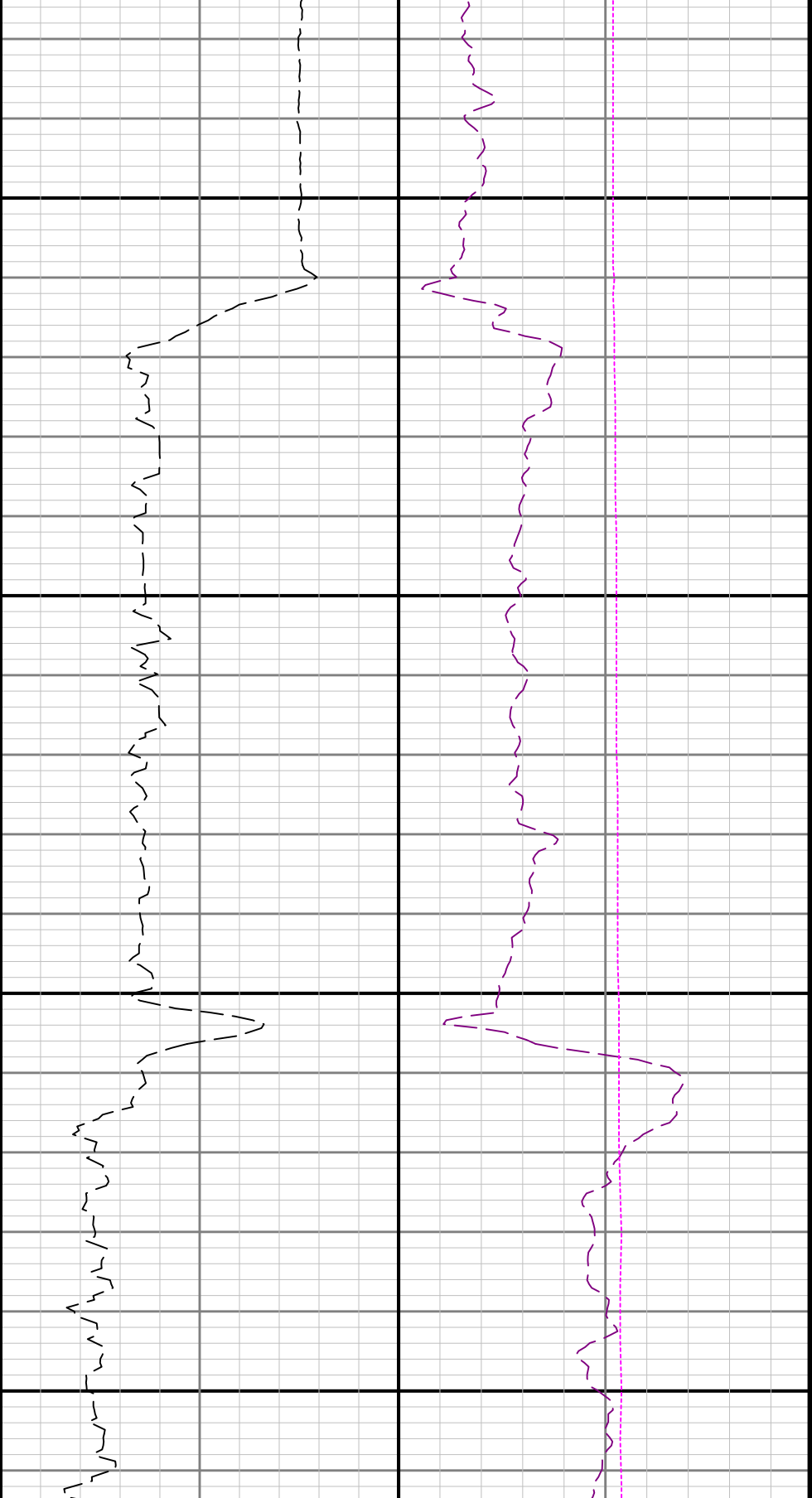


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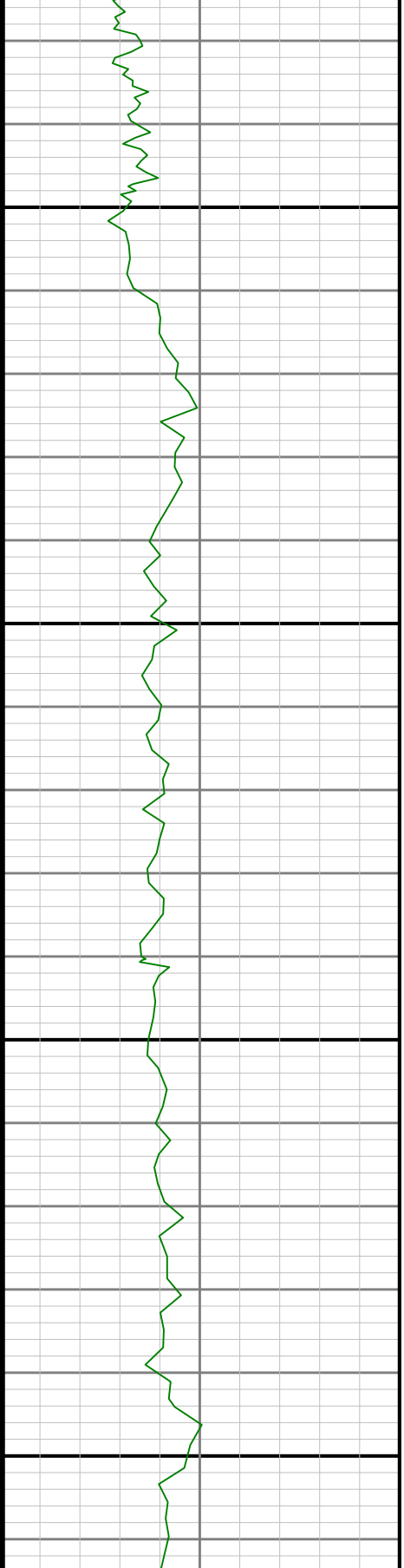


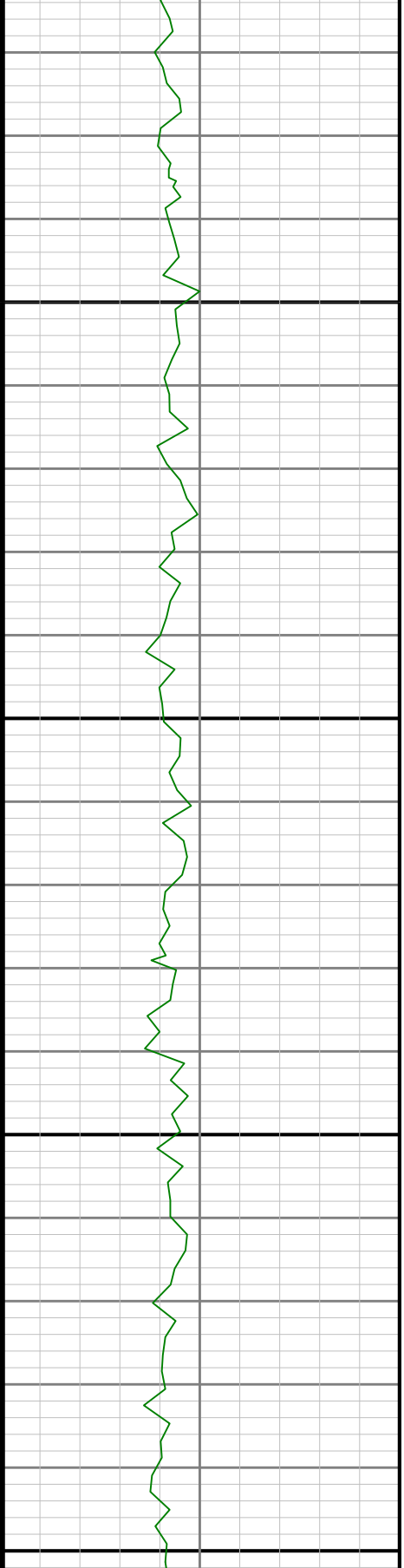
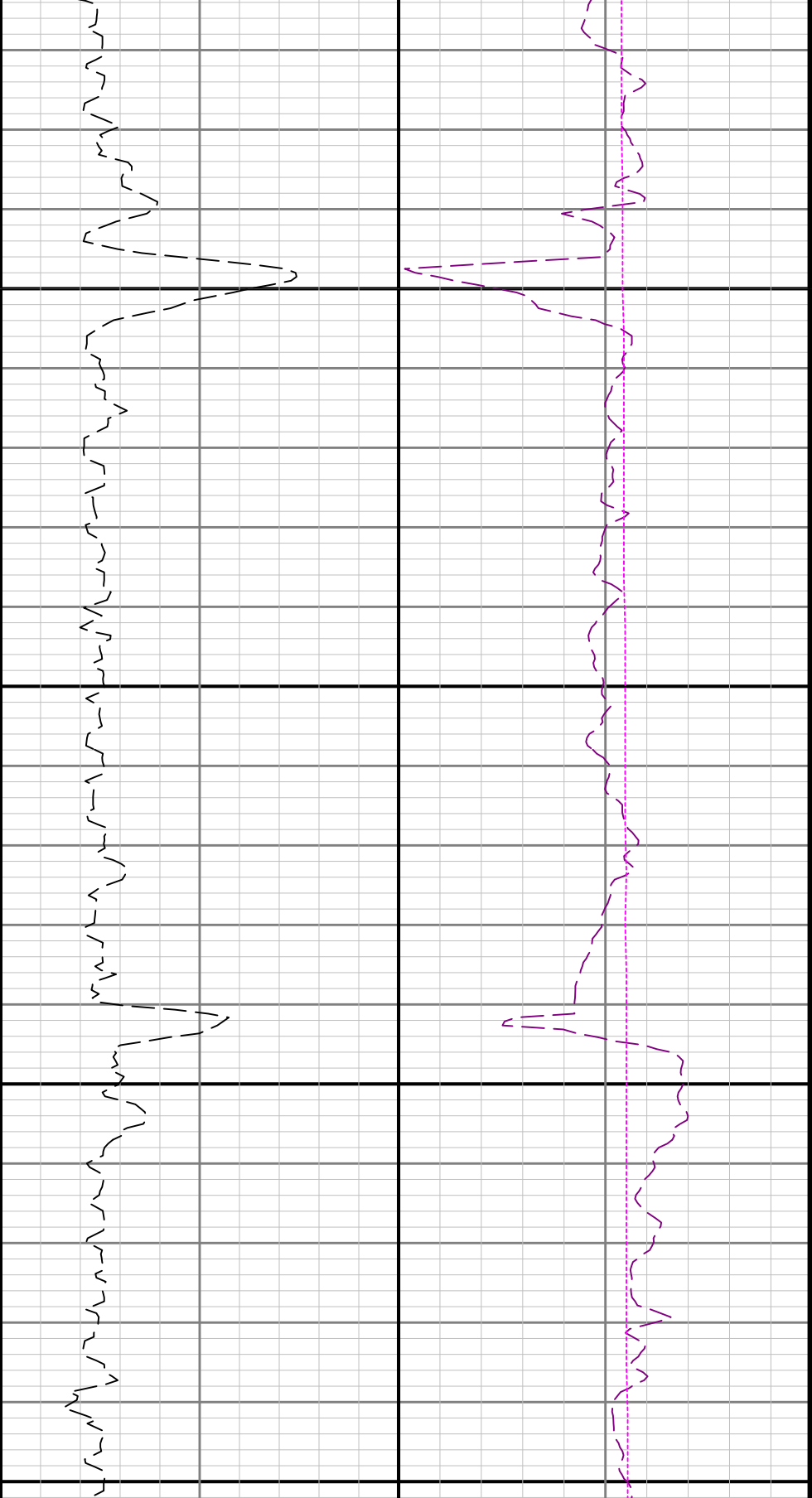


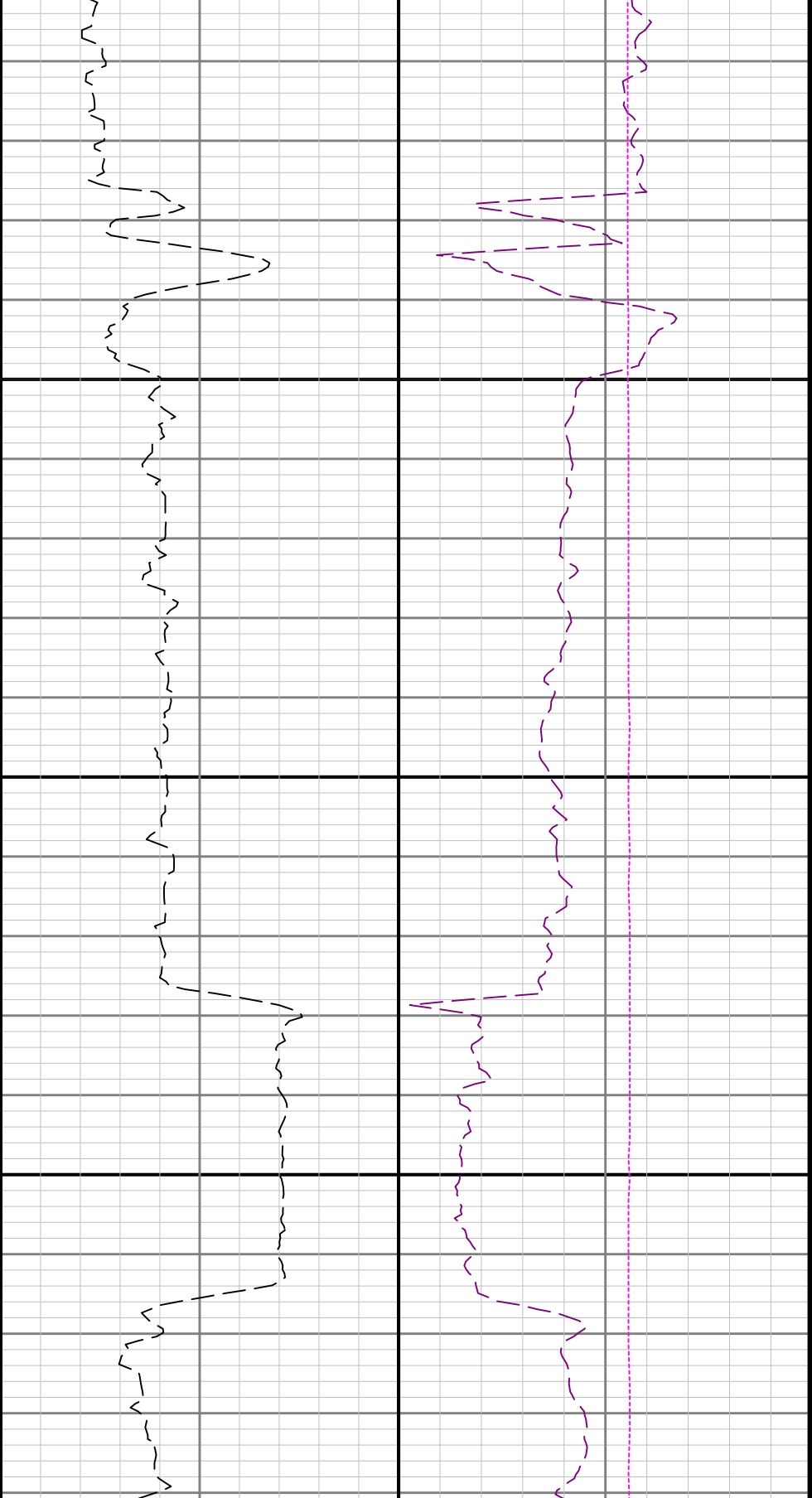


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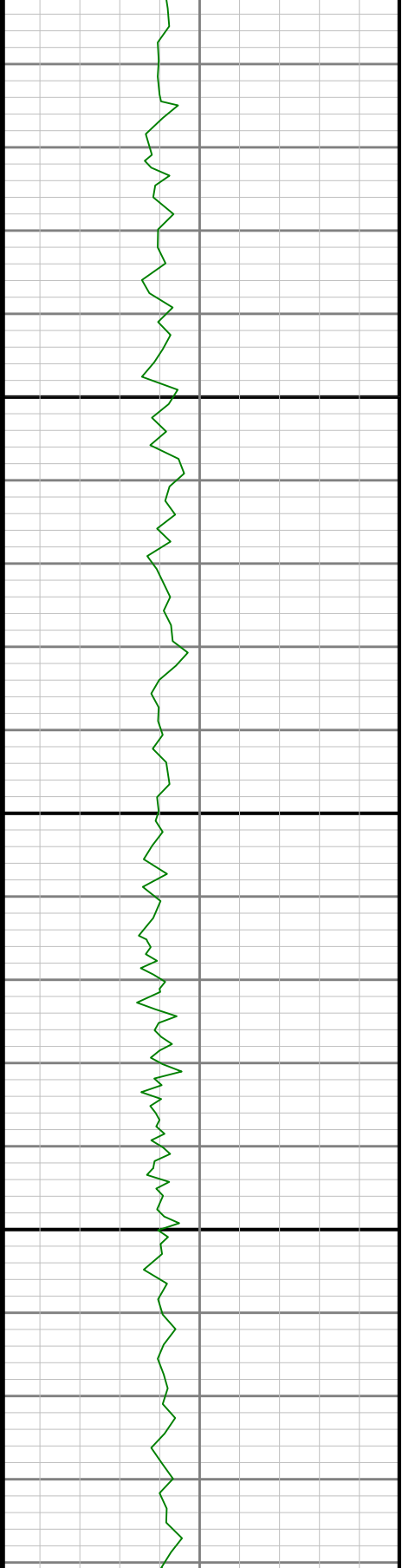


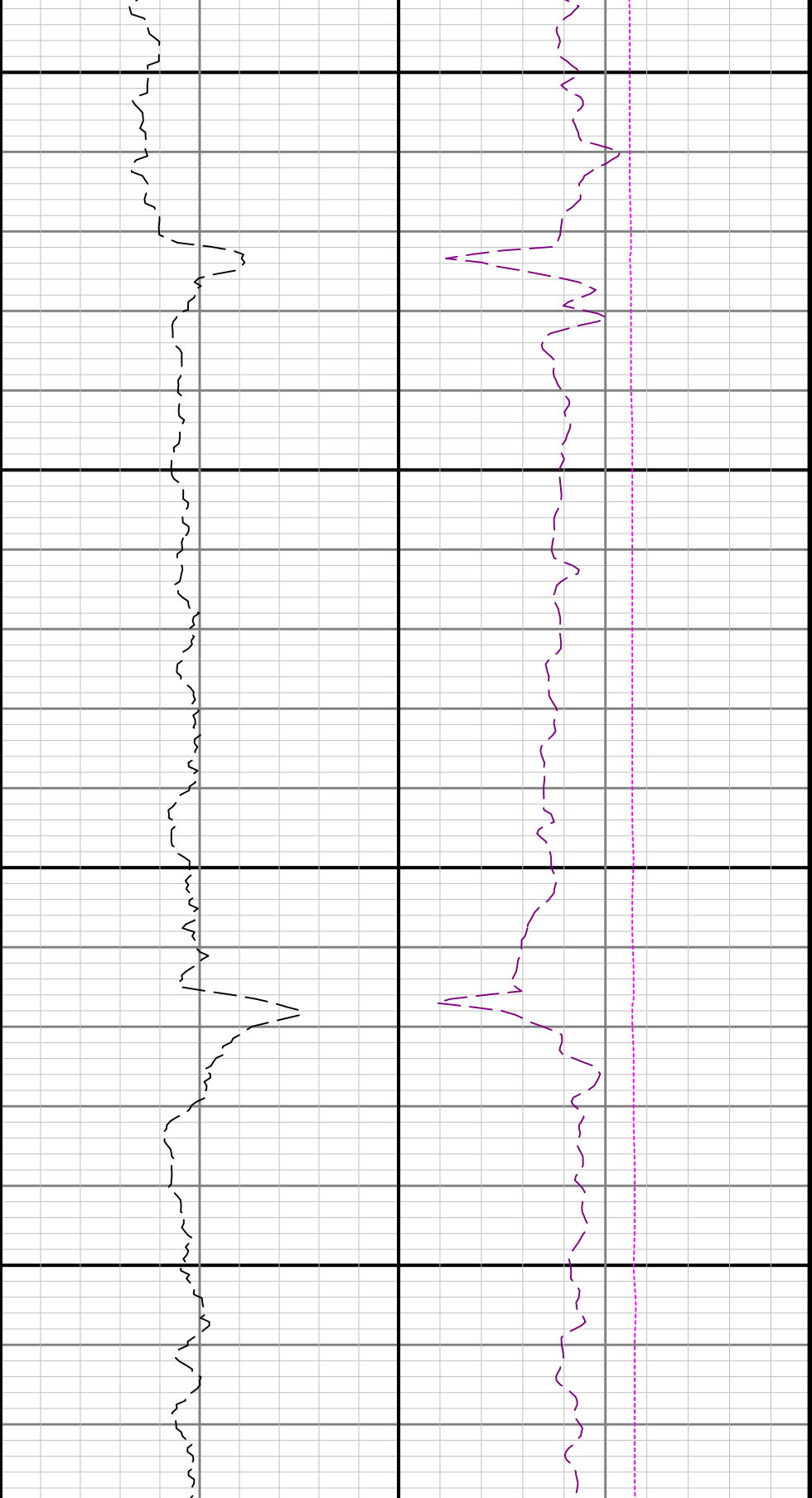




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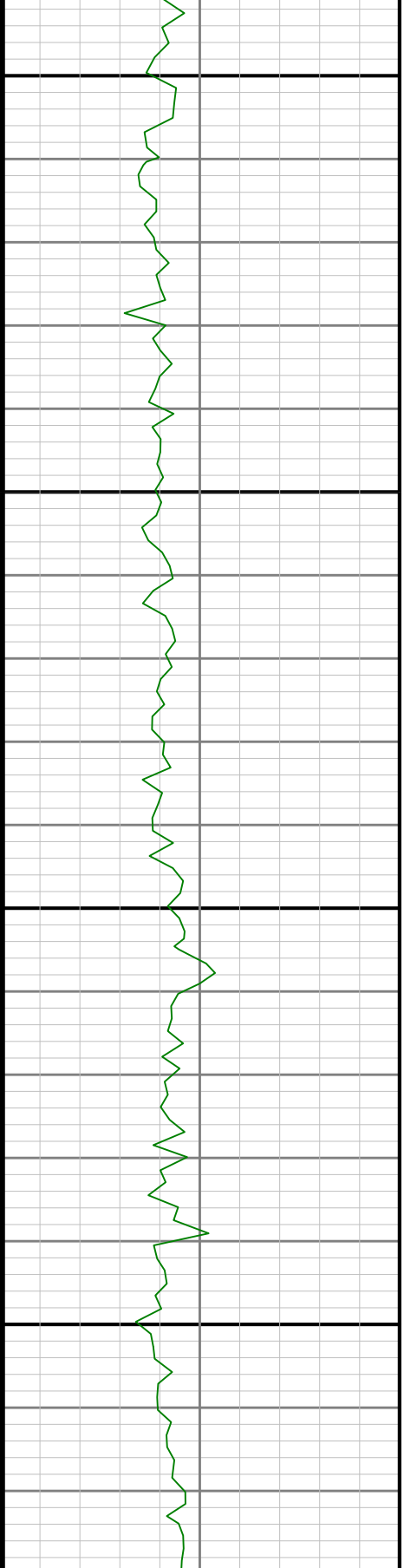
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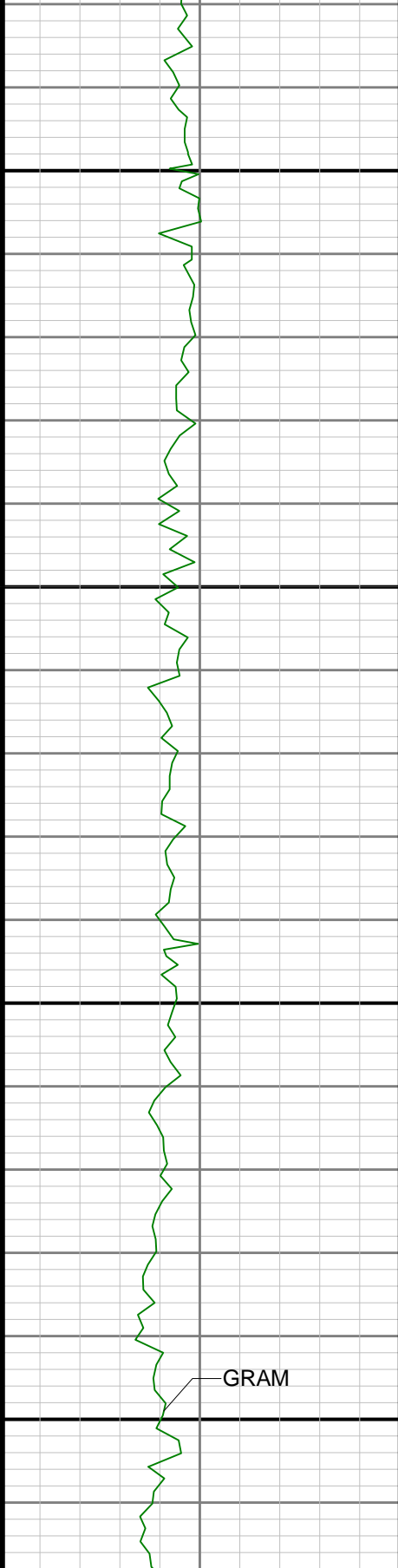




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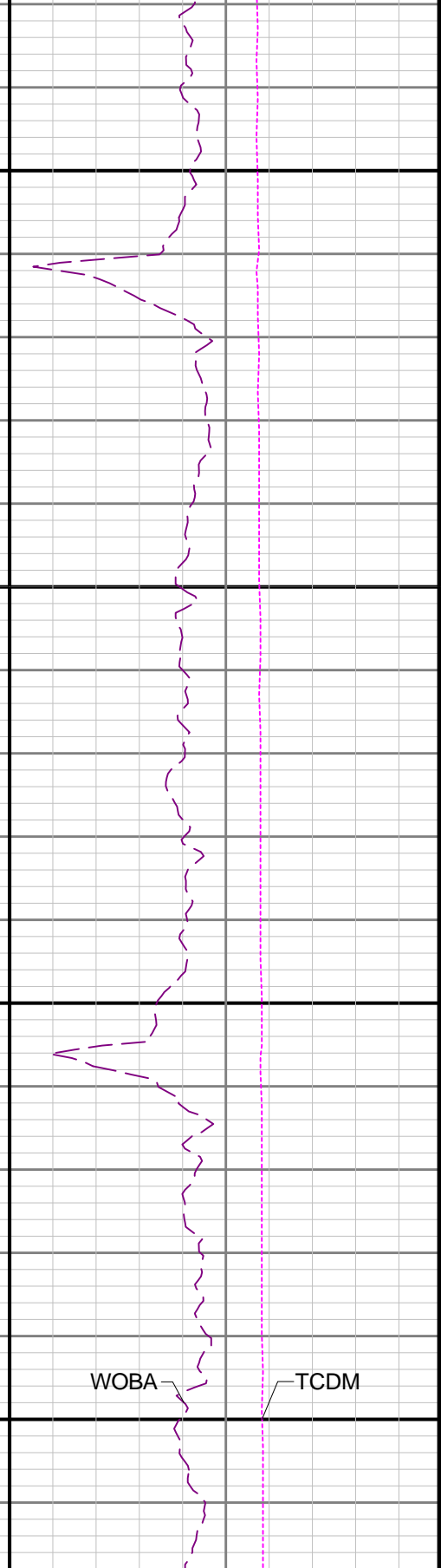
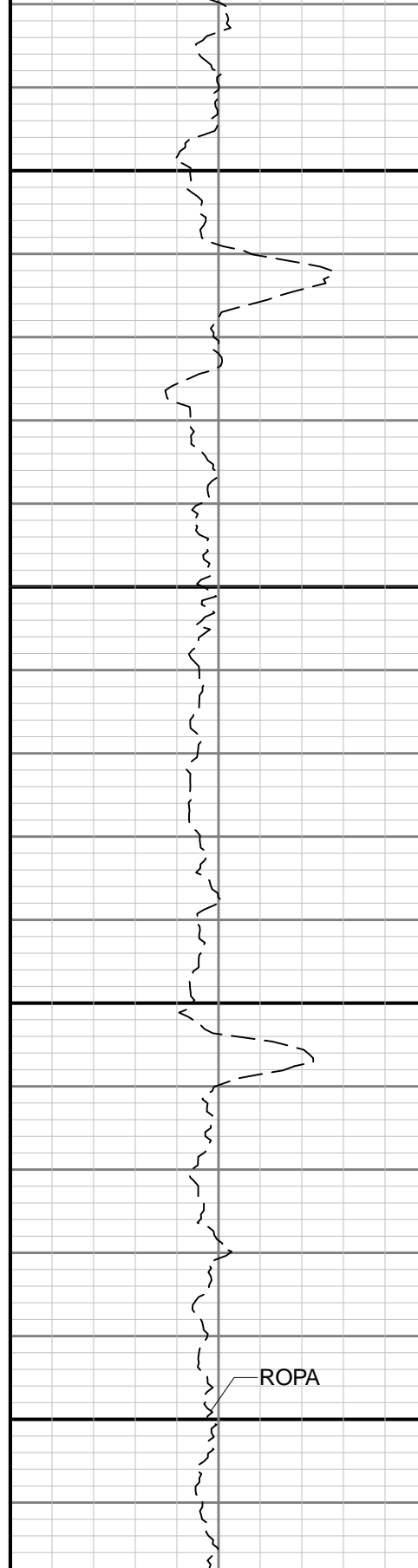
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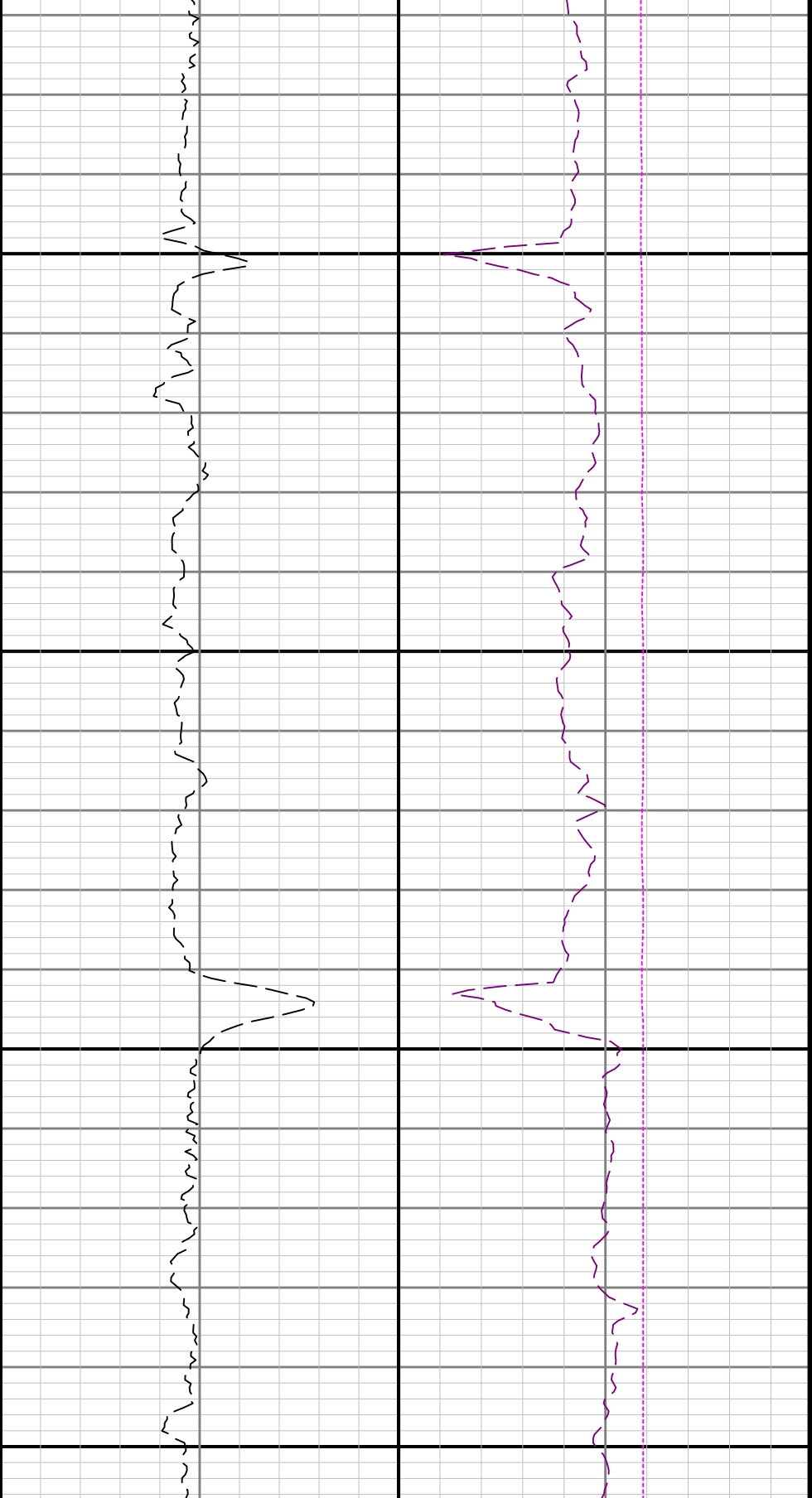




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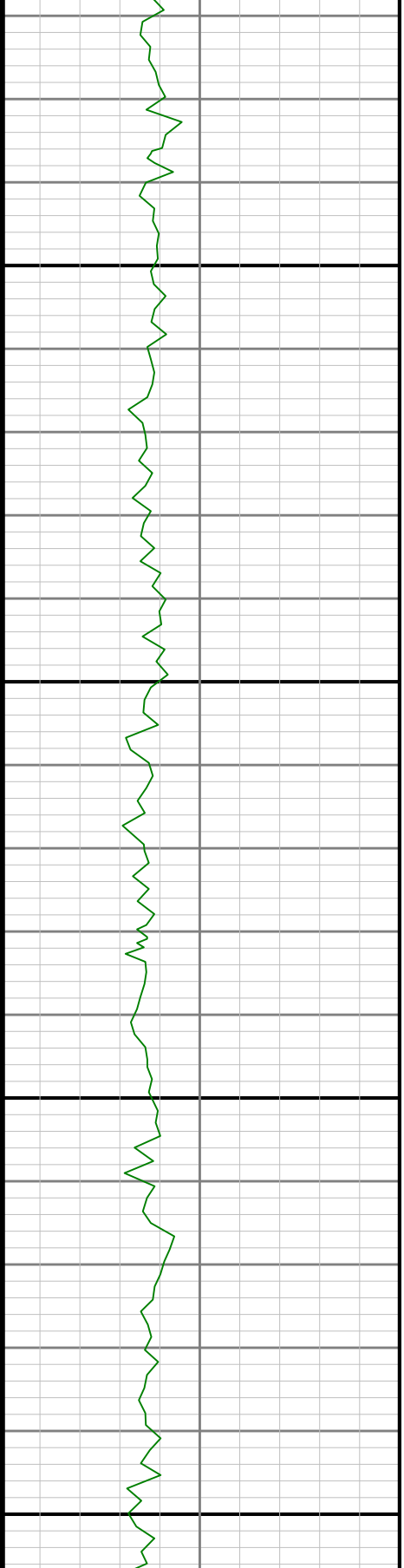
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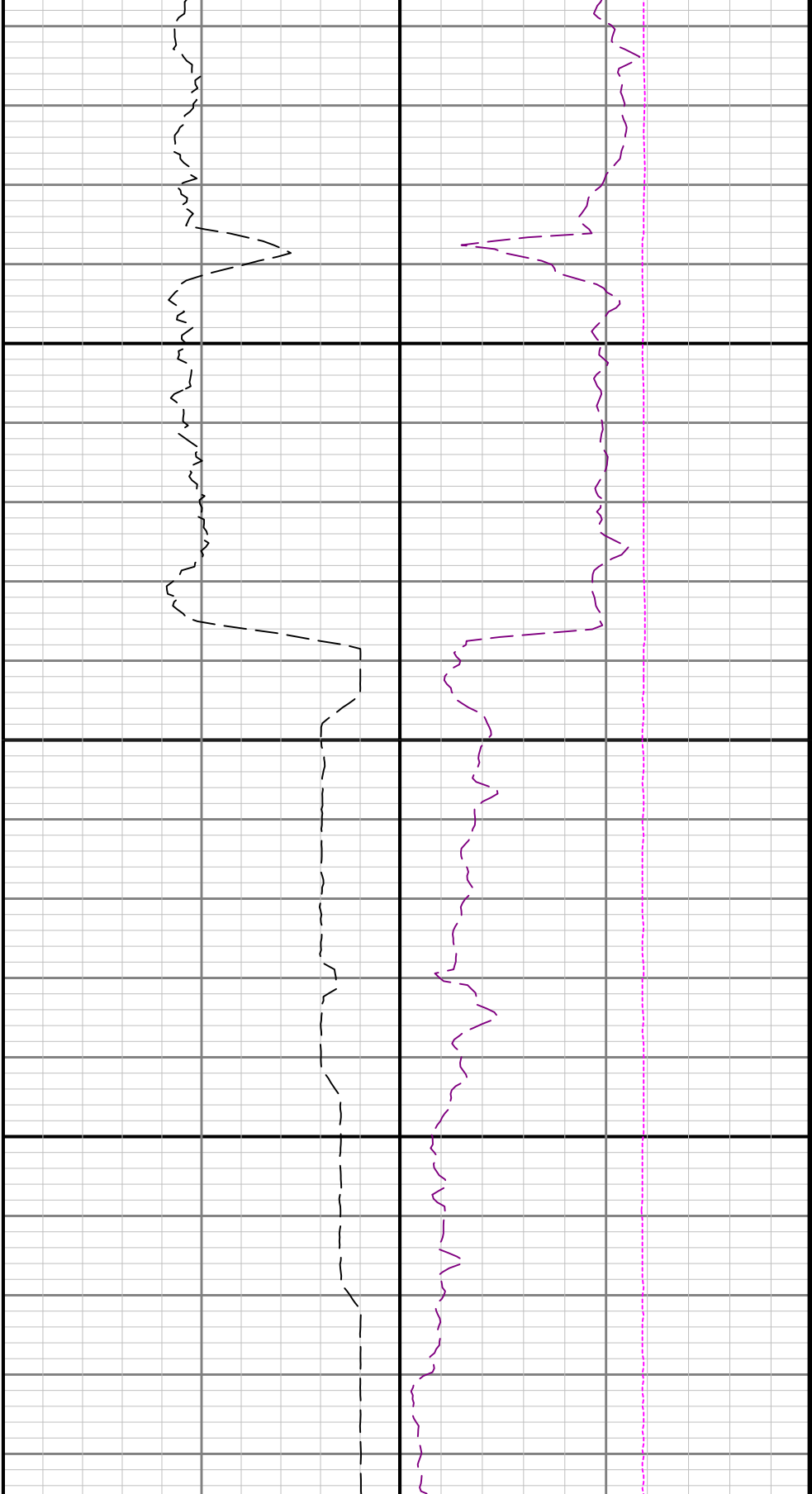




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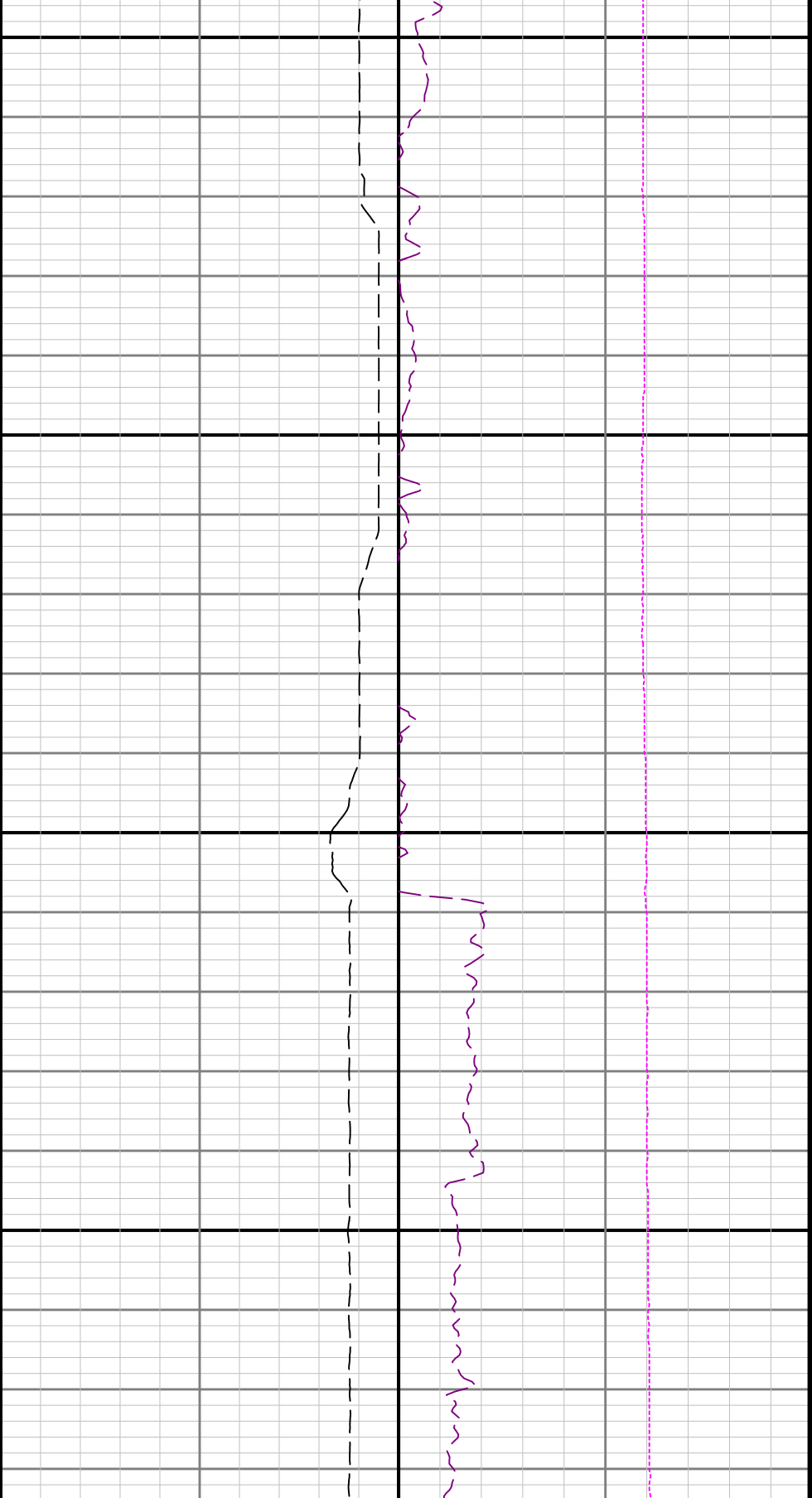
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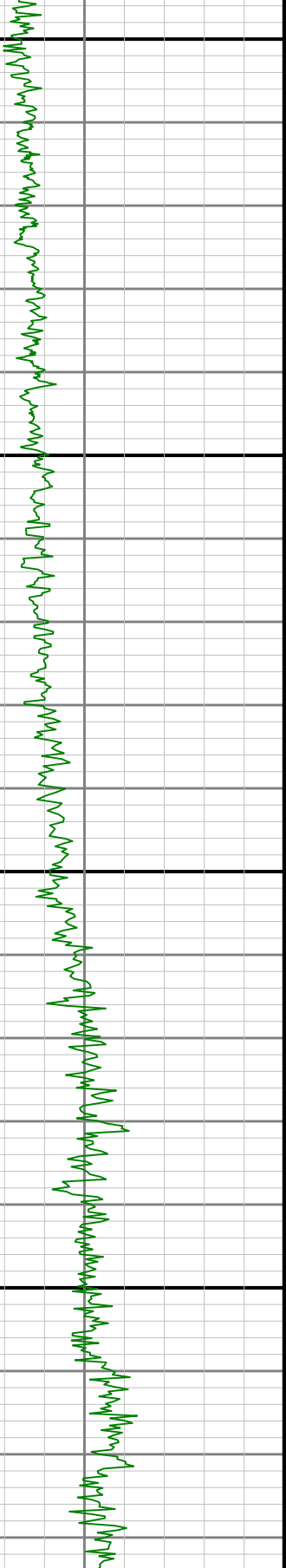
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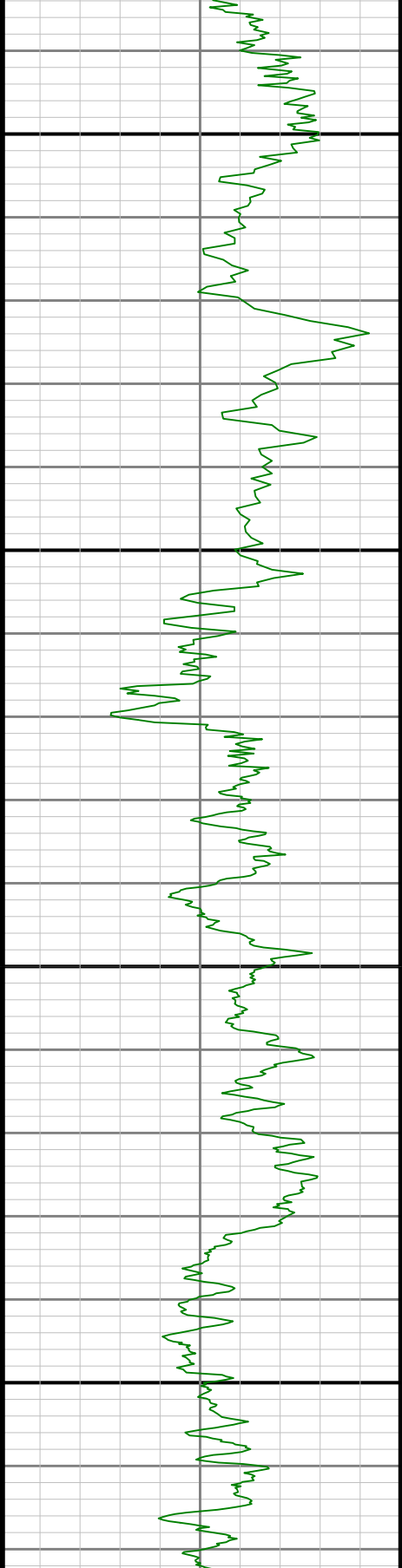




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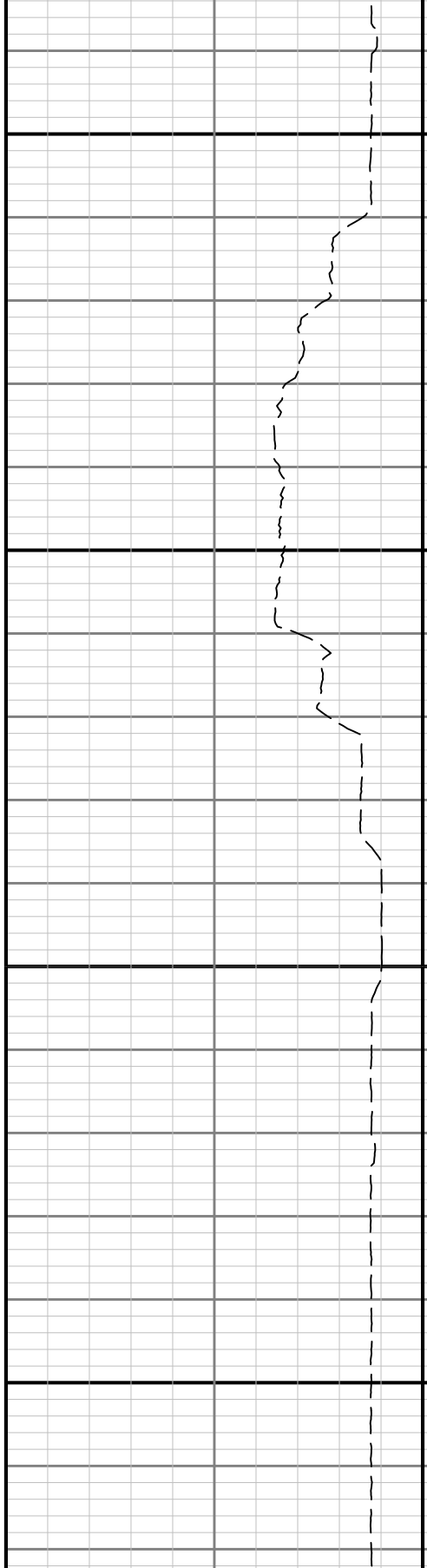
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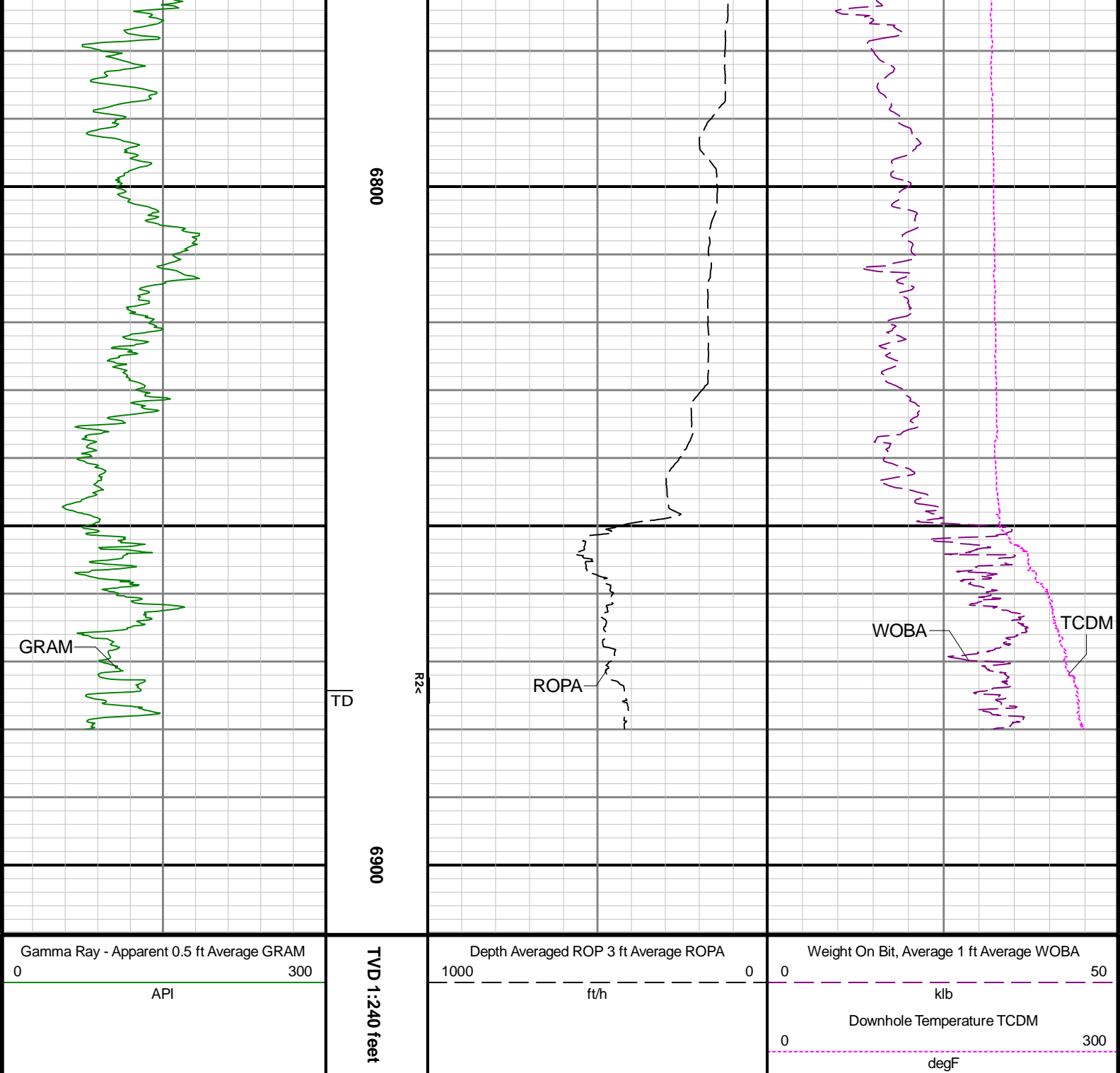




6690

6700





Directional Survey Summary

Latitude:	40° 27' 57.763" N	Longitude:	104° 33' 40.167" W
North Reference:	Grid	Drill Depth Zero:	Rig Floor
Vertical Datum is:	Mean Sea Level	Vertical Datum to DDZ: (ft)	4757.00
Vertical Section North: (ft)	0.00	Vertical Section East: (ft)	0.00
Vertical Section Azimuth: (deg)	177.62		
Grid Convergence: (deg)	-0.61	Magnetic Declination: (deg)	7.61
Total Correction: (deg)	7.00	TVD Calculation Method:	Minimum Curvature
Magnetic Correction:	Off	Local Magnetic Field: (nT)	54008

Magnetic Correction:		On		Local Magnetic Field: (mT)		9.500		Local Gravity Field: (m/s2)		9.800			
Local Magnetic Dip Angle: (deg)		66.80											
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	-4757.00	0.00	0.00	0.00	0.00	0.00
	78.00	0.22	149.84	N/A	-0.13	0.08	78.00	-4679.00	0.13	78.00	0.28	0.28	192.10
	171.00	0.58	145.38	N/A	-0.67	0.43	171.00	-4586.00	0.69	93.00	0.39	0.39	-4.80
	262.00	0.23	178.50	N/A	-1.23	0.70	262.00	-4495.00	1.26	91.00	0.45	-0.38	36.40
	357.00	0.22	101.41	N/A	-1.46	0.88	356.99	-4400.01	1.49	95.00	0.30	-0.01	-81.15
	451.00	0.32	324.89	N/A	-1.28	0.91	450.99	-4306.01	1.32	94.00	0.54	0.11	-145.23
	546.00	0.35	339.64	N/A	-0.79	0.65	545.99	-4211.01	0.82	95.00	0.10	0.03	15.53
	640.00	0.18	267.79	N/A	-0.53	0.41	639.99	-4117.01	0.54	94.00	0.36	-0.18	-76.44
	735.00	0.03	158.08	N/A	-0.56	0.27	734.99	-4022.01	0.57	95.00	0.20	-0.16	-115.48
	829.00	0.17	208.50	N/A	-0.70	0.21	828.99	-3928.01	0.71	94.00	0.16	0.15	53.64
	924.00	0.36	225.54	N/A	-1.04	-0.07	923.99	-3833.01	1.03	95.00	0.21	0.20	17.94
	1019.00	0.19	154.78	N/A	-1.39	-0.22	1018.99	-3738.01	1.38	95.00	0.37	-0.18	-74.48
	1113.00	0.27	251.99	N/A	-1.60	-0.36	1112.99	-3644.01	1.58	94.00	0.37	0.09	103.41
	1208.00	0.27	252.17	N/A	-1.73	-0.79	1207.99	-3549.01	1.70	95.00	0.00	0.00	0.19
	1302.00	0.03	353.18	N/A	-1.78	-1.00	1301.99	-3455.01	1.73	94.00	0.29	-0.26	107.46
	1397.00	0.15	81.64	N/A	-1.73	-0.88	1396.99	-3360.01	1.70	95.00	0.16	0.13	93.12
	1491.00	0.26	87.01	N/A	-1.71	-0.54	1490.99	-3266.01	1.68	94.00	0.12	0.12	5.71
	1586.00	0.56	100.79	N/A	-1.78	0.13	1585.98	-3171.02	1.78	95.00	0.33	0.32	14.51
	1680.00	0.75	110.76	N/A	-2.09	1.15	1679.98	-3077.02	2.13	94.00	0.23	0.20	10.61
	1775.00	0.77	126.61	N/A	-2.69	2.25	1774.97	-2982.03	2.78	95.00	0.22	0.02	16.68
	1869.00	0.75	159.48	N/A	-3.64	2.97	1868.96	-2888.04	3.76	94.00	0.46	-0.02	34.97
	1913.00	0.84	170.04	N/A	-4.23	3.13	1912.96	-2844.04	4.35	44.00	0.39	0.20	24.00
	2086.00	5.55	130.93	114.9	-10.96	9.67	2085.65	-2671.35	11.35	173.00	2.85	2.72	-22.61
	2181.00	4.55	149.97	117.6	-17.23	15.03	2180.29	-2576.71	17.84	95.00	2.04	-1.05	20.04
	2275.00	5.16	156.31	117.6	-24.33	18.59	2273.95	-2483.05	25.08	94.00	0.86	0.65	6.74
	2370.00	7.09	147.26	120.3	-33.18	23.48	2368.40	-2388.60	34.12	95.00	2.27	2.03	-9.53
	2464.00	6.97	147.02	123.0	-42.84	29.72	2461.70	-2295.30	44.04	94.00	0.13	-0.13	-0.26
	2559.00	6.40	144.46	123.0	-51.98	35.94	2556.05	-2200.95	53.43	95.00	0.68	-0.60	-2.69
	2654.00	6.78	144.27	125.7	-60.84	42.29	2650.42	-2106.58	62.55	95.00	0.40	0.40	-0.20
	2748.00	6.87	145.27	125.7	-69.97	48.73	2743.76	-2013.24	71.93	94.00	0.16	0.10	1.06
	2843.00	7.50	159.76	158.1	-80.46	54.11	2838.02	-1918.98	82.63	95.00	2.01	0.66	15.25
	2937.00	6.41	142.57	128.4	-90.38	59.43	2931.34	-1825.66	92.77	94.00	2.49	-1.16	-18.29
	3032.00	7.20	145.84	131.1	-99.52	65.99	3025.67	-1731.33	102.17	95.00	0.93	0.83	3.44
	3127.00	6.48	142.81	131.1	-108.72	72.58	3119.99	-1637.01	111.64	95.00	0.85	-0.76	-3.19
	3222.00	7.15	149.10	133.8	-118.06	78.85	3214.32	-1542.68	121.23	95.00	1.05	0.71	6.62
	3316.00	6.81	144.53	133.8	-127.62	85.09	3307.62	-1449.38	131.04	94.00	0.69	-0.36	-4.86
	3411.00	7.57	147.85	136.5	-137.50	91.69	3401.88	-1355.12	141.19	95.00	0.91	0.80	3.49
	3506.00	7.25	146.08	136.5	-147.78	98.36	3496.08	-1260.92	151.73	95.00	0.41	-0.34	-1.86
	3600.00	7.57	144.11	139.2	-157.71	105.30	3589.30	-1167.70	161.95	94.00	0.43	0.34	-2.10
	3695.00	7.74	145.46	139.2	-168.05	112.60	3683.45	-1073.55	172.58	95.00	0.26	0.18	1.42
	3789.00	7.80	145.40	141.9	-178.52	119.81	3776.59	-980.41	183.34	94.00	0.06	0.06	-0.06
	3884.00	8.15	144.73	141.9	-189.32	127.36	3870.67	-886.33	194.45	95.00	0.38	0.37	-0.71
	3979.00	8.13	145.60	144.6	-200.36	135.04	3964.71	-792.29	205.80	95.00	0.13	-0.02	0.92
	4073.00	7.96	145.54	144.6	-211.21	142.48	4057.79	-699.21	216.95	94.00	0.18	-0.18	-0.06
	4168.00	8.10	146.49	147.3	-222.22	149.90	4151.86	-605.14	228.25	95.00	0.20	0.15	1.00
	4262.00	8.15	145.80	147.3	-233.25	157.30	4244.91	-512.09	239.58	94.00	0.12	0.05	-0.73
	4357.00	8.11	146.80	150.0	-244.43	164.75	4338.96	-418.04	251.06	95.00	0.15	-0.04	1.05
	4451.00	8.36	146.51	150.0	-255.67	172.15	4431.99	-325.01	262.60	94.00	0.27	0.27	-0.31
	4546.00	8.20	146.30	152.7	-267.07	179.72	4526.00	-231.00	274.30	95.00	0.17	-0.17	-0.22
	4640.00	7.80	147.27	155.4	-278.01	186.89	4619.08	-137.92	285.53	94.00	0.45	-0.43	1.03
	4735.00	7.71	148.04	155.4	-288.84	193.75	4713.21	-43.79	296.64	95.00	0.14	-0.09	0.81
	4829.00	7.98	146.34	158.1	-299.62	200.71	4806.33	49.33	307.70	94.00	0.38	0.29	-1.81
	4924.00	8.39	146.82	366.3	-310.91	208.15	4900.37	143.37	319.29	95.00	0.44	0.43	0.51
	5018.00	8.77	146.79	155.4	-322.65	215.83	4993.31	236.31	331.33	94.00	0.40	0.40	-0.03
	5113.00	8.71	146.64	155.4	-334.71	223.75	5087.21	330.21	343.72	95.00	0.07	-0.06	-0.16
	5207.00	8.59	148.82	160.8	-346.66	231.30	5180.14	423.14	355.97	94.00	0.37	-0.13	2.32
	5302.00	7.47	151.18	160.8	-358.15	237.95	5274.21	517.21	367.72	95.00	1.23	-1.18	2.48
	5397.00	7.83	149.64	163.5	-369.14	244.20	5368.36	611.36	378.96	95.00	0.44	0.38	-1.62

	5491.00	7.23	146.55	166.2	-379.60	250.70	5461.55	704.55	389.68	94.00	0.77	-0.64	-3.29
	5586.00	6.70	147.70	168.9	-389.27	256.95	5555.85	798.85	399.61	95.00	0.58	-0.56	1.21
	5681.00	7.63	144.88	168.9	-399.12	263.54	5650.11	893.11	409.72	95.00	1.05	0.98	-2.97
	5775.00	7.91	146.15	168.9	-409.59	270.74	5743.25	986.25	420.48	94.00	0.35	0.30	1.35
	5870.00	8.26	147.60	171.6	-420.78	278.03	5837.30	1080.30	431.97	95.00	0.43	0.37	1.53
	5964.00	8.02	146.79	174.3	-431.97	285.24	5930.35	1173.35	443.44	94.00	0.28	-0.26	-0.86
	6059.00	8.47	144.96	177.0	-443.24	292.89	6024.37	1267.37	455.02	95.00	0.55	0.47	-1.93
	6154.00	8.26	146.19	177.0	-454.64	300.70	6118.36	1361.36	466.74	95.00	0.29	-0.22	1.29
	6248.00	8.26	146.86	177.0	-465.91	308.15	6211.39	1454.39	478.30	94.00	0.10	0.00	0.71
	6343.00	9.17	146.24	177.0	-477.91	316.09	6305.29	1548.29	490.63	95.00	0.96	0.96	-0.65
	6437.00	15.35	156.75	177.0	-495.59	325.17	6397.11	1640.11	508.67	94.00	6.96	6.57	11.18
	6532.00	23.60	170.72	179.7	-525.98	333.22	6486.65	1729.65	539.36	95.00	9.92	8.68	14.71
	6626.00	33.69	171.27	179.7	-570.43	340.23	6569.03	1812.03	584.07	94.00	10.74	10.73	0.59
	6721.00	43.21	173.96	185.2	-628.96	347.67	6643.35	1886.35	642.85	95.00	10.17	10.02	2.83
	6815.00	50.26	176.99	187.9	-697.14	352.96	6707.75	1950.75	711.20	94.00	7.86	7.50	3.22
	6910.00	59.30	177.22	190.6	-774.57	356.87	6762.48	2005.48	788.73	95.00	9.52	9.52	0.24
	7004.00	68.17	176.52	193.3	-858.66	361.49	6804.03	2047.03	872.93	94.00	9.46	9.44	-0.74
	7099.00	76.92	178.10	193.3	-949.09	365.70	6832.50	2075.50	963.46	95.00	9.35	9.21	1.66
	7194.00	85.75	181.70	196.0	-1042.90	365.83	6846.81	2089.81	1057.19	95.00	10.02	9.29	3.79
	7288.00	89.72	178.24	198.7	-1136.79	365.89	6850.52	2093.52	1151.01	94.00	5.60	4.22	-3.68
	7383.00	89.48	178.32	204.1	-1231.75	368.74	6851.19	2094.19	1246.00	95.00	0.27	-0.25	0.08
	7477.00	89.66	177.99	206.8	-1325.70	371.76	6851.89	2094.89	1339.99	94.00	0.40	0.19	-0.35
	7572.00	89.75	178.93	206.8	-1420.66	374.32	6852.38	2095.38	1434.98	95.00	0.99	0.09	0.99
	7761.00	89.97	179.29	212.2	-1609.64	377.25	6852.84	2095.84	1623.91	189.00	0.22	0.12	0.19
	7856.00	89.91	179.55	214.9	-1704.63	378.21	6852.94	2095.94	1718.87	95.00	0.28	-0.06	0.27
	7951.00	89.72	179.14	214.9	-1799.62	379.30	6853.25	2096.25	1813.82	95.00	0.48	-0.20	-0.43
	8045.00	89.82	178.59	217.6	-1893.60	381.16	6853.63	2096.63	1907.80	94.00	0.59	0.11	-0.59
	8140.00	90.00	179.85	217.6	-1988.59	382.46	6853.77	2096.77	2002.76	95.00	1.34	0.19	1.33
	8235.00	90.71	179.04	217.6	-2083.59	383.38	6853.19	2096.19	2097.71	95.00	1.13	0.75	-0.85
	8329.00	89.66	179.87	220.3	-2177.58	384.27	6852.88	2095.88	2191.66	94.00	1.42	-1.12	0.88
	8424.00	88.31	180.29	220.3	-2272.56	384.14	6854.57	2097.57	2286.55	95.00	1.49	-1.42	0.44
	8518.00	89.85	178.96	223.0	-2366.54	384.75	6856.07	2099.07	2380.48	94.00	2.16	1.64	-1.41
	8612.00	89.69	181.16	220.3	-2460.54	384.65	6856.45	2099.45	2474.39	94.00	2.35	-0.17	2.34
	8707.00	90.15	179.37	223.0	-2555.53	384.22	6856.58	2099.58	2569.28	95.00	1.95	0.48	-1.88
	8801.00	89.91	181.59	225.7	-2649.52	383.43	6856.54	2099.54	2663.16	94.00	2.38	-0.26	2.36
	8896.00	90.43	179.44	225.7	-2744.51	382.57	6856.25	2099.25	2758.03	95.00	2.33	0.55	-2.26
	8990.00	88.40	179.87	228.4	-2838.50	383.14	6857.21	2100.21	2851.96	94.00	2.21	-2.16	0.46
	9085.00	90.15	181.71	225.7	-2933.48	381.83	6858.42	2101.42	2946.80	95.00	2.67	1.84	1.94
	9179.00	90.06	181.13	228.4	-3027.45	379.50	6858.24	2101.24	3040.59	94.00	0.62	-0.10	-0.62
	9274.00	90.06	181.60	231.1	-3122.42	377.24	6858.14	2101.14	3135.39	95.00	0.49	-0.00	0.49
	9369.00	89.88	180.00	231.1	-3217.41	375.91	6858.19	2101.19	3230.24	95.00	1.69	-0.19	-1.68
	9464.00	89.75	179.61	231.1	-3312.41	376.23	6858.50	2101.50	3325.17	95.00	0.43	-0.14	-0.41
	9558.00	89.66	181.25	233.8	-3406.40	375.53	6858.98	2101.98	3419.05	94.00	1.75	-0.10	1.74
	9653.00	90.34	180.90	233.8	-3501.38	373.75	6858.98	2101.98	3513.88	95.00	0.81	0.72	-0.37
	9748.00	89.63	182.06	236.5	-3596.35	371.29	6859.01	2102.01	3608.66	95.00	1.43	-0.75	1.22
	9842.00	90.06	180.43	236.5	-3690.32	369.25	6859.26	2102.26	3702.47	94.00	1.79	0.46	-1.73
	9937.00	89.85	180.97	236.5	-3785.31	368.09	6859.34	2102.34	3797.33	95.00	0.61	-0.22	0.57
	10031.00	89.78	180.88	236.5	-3879.30	366.57	6859.64	2102.64	3891.18	94.00	0.12	-0.07	-0.10
	10126.00	89.85	180.68	239.2	-3974.29	365.28	6859.95	2102.95	3986.03	95.00	0.22	0.07	-0.21
	10220.00	89.60	181.70	239.2	-4068.27	363.33	6860.40	2103.40	4079.85	94.00	1.12	-0.27	1.09
	10315.00	89.63	182.11	241.9	-4163.21	360.17	6861.04	2104.04	4174.58	95.00	0.43	0.03	0.43
	10410.00	89.51	178.71	241.9	-4258.19	359.49	6861.75	2104.75	4269.45	95.00	3.58	-0.13	-3.58
	10504.00	89.69	179.08	241.9	-4352.17	361.30	6862.41	2105.41	4363.42	94.00	0.44	0.19	0.39
	10599.00	89.35	179.13	241.9	-4447.16	362.79	6863.20	2106.20	4458.39	95.00	0.36	-0.36	0.05
	10693.00	89.51	179.49	244.6	-4541.15	363.92	6864.14	2107.14	4552.34	94.00	0.42	0.17	0.38
	10788.00	89.63	179.15	244.6	-4636.14	365.05	6864.85	2107.85	4647.30	95.00	0.38	0.13	-0.36
	10883.00	89.94	180.22	244.6	-4731.13	365.57	6865.21	2108.21	4742.23	95.00	1.17	0.33	1.13
	11072.00	89.54	173.46	247.3	-4919.74	375.98	6866.07	2109.07	4931.11	189.00	3.58	-0.21	-3.58
	11261.00	90.58	179.85	250.0	-5108.31	387.00	6865.87	2108.87	5119.98	189.00	3.43	0.55	3.38
	11355.00	88.74	180.22	247.3	-5202.31	386.94	6866.43	2109.43	5213.89	94.00	2.00	-1.96	0.39
	11450.00	89.57	181.28	250.0	-5297.29	385.70	6867.83	2110.83	5308.73	95.00	1.42	0.87	1.12
	11544.00	90.12	178.89	250.0	-5391.28	385.56	6868.08	2111.08	5402.64	94.00	2.61	0.59	-2.54
	11639.00	89.57	181.59	252.7	-5486.27	385.16	6868.34	2111.34	5497.53	95.00	2.90	-0.58	2.84

	11733.00	89.48	179.07	252.7	-5580.26	384.62	6869.12	2112.12	5591.41	94.00	2.68	-0.10	-2.68
	11828.00	89.08	180.16	252.7	-5675.24	385.26	6870.31	2113.31	5686.35	95.00	1.22	-0.42	1.15
	11923.00	89.97	178.35	252.7	-5770.23	386.50	6871.10	2114.10	5781.30	95.00	2.12	0.94	-1.91
	12017.00	89.51	181.41	255.4	-5864.22	386.69	6871.53	2114.53	5875.22	94.00	3.29	-0.49	3.26
	12112.00	89.85	179.86	255.4	-5959.21	385.64	6872.06	2115.06	5970.08	95.00	1.67	0.36	-1.63
	12206.00	90.34	180.38	255.4	-6053.20	385.44	6871.90	2114.90	6063.99	94.00	0.76	0.52	0.55
	12301.00	90.06	180.45	255.4	-6148.20	384.76	6871.57	2114.57	6158.88	95.00	0.30	-0.29	0.07
	12395.00	89.97	180.51	258.1	-6242.20	383.97	6871.54	2114.54	6252.76	94.00	0.12	-0.10	0.06
	12490.00	89.94	179.57	258.1	-6337.20	383.90	6871.62	2114.62	6347.67	95.00	0.99	-0.03	-0.99
	12585.00	89.82	179.70	258.1	-6432.20	384.51	6871.82	2114.82	6442.61	95.00	0.19	-0.13	0.14
	12679.00	89.88	179.83	258.1	-6526.19	384.89	6872.06	2115.06	6536.55	94.00	0.15	0.06	0.14
	12774.00	89.82	177.26	260.8	-6621.16	387.30	6872.31	2115.31	6631.53	95.00	2.71	-0.06	-2.71
	12868.00	90.00	177.60	258.1	-6715.06	391.52	6872.46	2115.46	6725.53	94.00	0.41	0.19	0.36
	12963.00	90.95	177.81	255.4	-6809.98	395.32	6871.67	2114.67	6820.52	95.00	1.02	1.00	0.22
	13152.00	90.03	182.06	258.1	-6998.93	395.54	6870.06	2113.06	7009.32	189.00	2.30	-0.49	2.25
	13247.00	89.78	181.46	260.8	-7093.88	392.62	6870.21	2113.21	7104.07	95.00	0.68	-0.26	-0.63
	13342.00	89.45	181.66	258.1	-7188.84	390.03	6870.85	2113.85	7198.84	95.00	0.41	-0.35	0.21
	13436.00	89.48	182.28	258.1	-7282.78	386.80	6871.73	2114.73	7292.56	94.00	0.66	0.03	0.66
	13531.00	89.23	180.79	260.8	-7377.74	384.26	6872.80	2115.80	7387.33	95.00	1.59	-0.26	-1.57
	13625.00	89.82	182.78	260.8	-7471.69	381.33	6873.58	2116.58	7481.08	94.00	2.21	0.63	2.12
	13720.00	89.66	182.21	263.5	-7566.60	377.19	6874.01	2117.01	7575.73	95.00	0.62	-0.17	-0.60
	13814.00	89.54	180.65	263.5	-7660.56	374.85	6874.67	2117.67	7669.52	94.00	1.66	-0.13	-1.66
	13909.00	89.20	179.90	263.5	-7755.55	374.39	6875.71	2118.71	7764.41	95.00	0.87	-0.36	-0.79
	14004.00	89.20	179.77	263.5	-7850.54	374.67	6877.04	2120.04	7859.33	95.00	0.14	-0.00	-0.14
	14193.00	89.66	180.00	266.2	-8039.53	375.05	6878.92	2121.92	8048.17	189.00	0.27	0.24	0.12
	14287.00	89.88	179.85	266.2	-8133.53	375.17	6879.29	2122.29	8142.10	94.00	0.28	0.23	-0.16
	14382.00	89.94	179.25	266.2	-8228.53	375.91	6879.44	2122.44	8237.04	95.00	0.63	0.06	-0.63
	14477.00	89.94	177.63	269.0	-8323.49	378.50	6879.54	2122.54	8332.03	95.00	1.71	0.00	-1.71
	14571.00	89.48	179.51	269.0	-8417.46	380.85	6880.02	2123.02	8426.01	94.00	2.06	-0.49	2.00
	14665.00	90.25	179.56	269.0	-8511.45	381.61	6880.24	2123.24	8519.96	94.00	0.82	0.82	0.05
	14760.00	90.00	178.11	269.0	-8606.43	383.54	6880.03	2123.03	8614.93	95.00	1.55	-0.26	-1.53
	14855.00	90.06	178.10	269.0	-8701.38	386.68	6879.98	2122.98	8709.93	95.00	0.06	0.06	-0.01
	14950.00	90.22	178.46	271.7	-8796.33	389.53	6879.75	2122.75	8804.92	95.00	0.41	0.17	0.38
	15044.00	90.28	179.21	271.7	-8890.31	391.44	6879.34	2122.34	8898.90	94.00	0.80	0.06	0.80
	15139.00	90.40	179.72	271.7	-8985.31	392.33	6878.78	2121.78	8993.85	95.00	0.55	0.13	0.54
	15233.00	90.34	178.70	271.7	-9079.29	393.63	6878.17	2121.17	9087.81	94.00	1.09	-0.06	-1.09
	15327.00	90.25	180.11	271.7	-9173.29	394.60	6877.69	2120.69	9181.76	94.00	1.50	-0.10	1.50
	15422.00	90.18	180.94	271.7	-9268.28	393.73	6877.33	2120.33	9276.64	95.00	0.88	-0.07	0.87
	15517.00	90.12	179.77	271.7	-9363.28	393.14	6877.08	2120.08	9371.53	95.00	1.23	-0.06	-1.23
	15611.00	90.25	180.67	271.7	-9457.27	392.78	6876.78	2119.78	9465.43	94.00	0.97	0.14	0.96
	15800.00	90.22	180.56	271.7	-9646.26	390.76	6876.00	2119.00	9654.17	189.00	0.06	-0.02	-0.06
	15894.00	90.06	180.19	274.4	-9740.26	390.14	6875.77	2118.77	9748.06	94.00	0.43	-0.17	-0.39
	15989.00	90.22	179.10	274.4	-9835.26	390.73	6875.54	2118.54	9843.00	95.00	1.16	0.17	-1.15
	16084.00	90.12	177.69	274.4	-9930.22	393.39	6875.26	2118.26	9937.99	95.00	1.49	-0.11	-1.48
	16178.00	90.15	178.10	274.4	-10024.15	396.84	6875.04	2118.04	10031.98	94.00	0.44	0.03	0.44
	16272.00	89.88	177.41	274.4	-10118.08	400.52	6875.01	2118.01	10125.98	94.00	0.79	-0.29	-0.73
	16367.00	89.97	177.87	274.4	-10213.00	404.44	6875.14	2118.14	10220.98	95.00	0.49	0.09	0.48
	16462.00	89.94	178.70	274.4	-10307.95	407.28	6875.21	2118.21	10315.98	95.00	0.87	-0.03	0.87
	16556.00	90.52	178.74	277.1	-10401.93	409.38	6874.83	2117.83	10409.96	94.00	0.62	0.62	0.04
	16651.00	89.85	178.23	277.1	-10496.90	411.89	6874.53	2117.53	10504.95	95.00	0.89	-0.71	-0.54
	16746.00	89.94	177.21	277.1	-10591.82	415.67	6874.70	2117.70	10599.94	95.00	1.08	0.09	-1.07
	16840.00	90.06	177.70	274.4	-10685.73	419.84	6874.70	2117.70	10693.94	94.00	0.54	0.13	0.52
Projection	16873.00	90.06	177.70	N/A	-10718.70	421.17	6874.67	2117.67	10726.94	33.00	0.00	-0.00	0.32