


LWD MEMORY LOG											
<div><div><div>BAKER HUGHES</div><div>a GE company</div></div><div></div></div>				Gamma Ray							
Scale:		Company: Noble Energy									
True Vertical Depth		1:240		Well: Vogler State D21-790							
				Field: Wattenberg							
				County: Weld		Country: United States					
Depth Reference:		Driller's Depth		State: Colorado							
Status:		Final Print		Surface Location:				Other Services:			
API No:		05-123-48561-00		Latitude: 040° 12' 21.600" N				Directional			
Job ID:		109752805		Longitude: 104° 32' 55.932" W							
Permanent Datum (P.D.):		Ground Level		Elevation:		4820.00 ft		Elev. KB:		N/A	
Log Measured From:		Rig Floor		Above P.D.:		30.00 ft		Elev. DF:		4850.00 ft	
								Elev. GL:		4820.00 ft	
Dates				Interval				Magnetic Field Reference			
From: 2019-04-19		Drilled (ft)		Logged (ft)		Azi Reference North:		Grid		Dip Angle: (deg)	
To: 2019-04-22		Top: 1973.00		Top: 1973.00		Total Magnetic Field Strength: (nT)				66.67	
Spud: 2019-04-13		Bottom: 17660.00		Bottom: 17647.00		Mag to Reference North Correction: (deg)				52060	
										7.48	
Borehole Record				Casing Record							
Hole Size (in)		From (ft)		To (ft)		Size (in)		Weight (lb/ft)		From (ft)	
13.500		30.00		1973.00		9.625		36.00		30.00	
8.500		1973.00		17660.00							

	Wellsite	Wellsite		Wellsite	Wellsite		Wellsite	Wellsite
Adam Schlenz	2019-04-18	2019-04-22	Andrew Hays	2019-04-22	2019-04-23			

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+ (%)
2019-04-19 01:00	1	1973.00	Oil Based Mud	9.3	16	N/A	22.8	74/14	Active Pit	24295	0.00
2019-04-19 13:00	1	5423.00	Oil Based Mud	9.1	16	N/A	15.0	72.5/15	Active Pit	25267	0.00
2019-04-20 01:00	1	7941.00	Oil Based Mud	9.5	12	N/A	15.0	73/16	Active Pit	24295	0.00
2019-04-20 12:30	1	11034.51	Oil Based Mud	9.4	12	N/A	16.0	72.5/16	Active Pit	23810	0.00
2019-04-21 04:45	2	13194.35	Oil Based Mud	9.6	14	N/A	18.0	72/15.5	Active Pit	23324	0.00
2019-04-21 12:30	2	13747.00	Oil Based Mud	9.7	13	N/A	21.4	71/16	Active Pit	23810	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	12124244	Near Bit Inclination	5.93	6.73	7.000	4.330
1	AutoTrak Curve Steering Unit	12124244	Near Bit VSS	5.93	6.73	7.000	4.330
1	AutoTrak Curve MWD	12332940	Gamma (single)	2.75	12.90	7.000	3.250
1	AutoTrak Curve MWD	12332940	Directional (mag)	12.27	22.42	7.000	3.250
2	AutoTrak Curve Steering Unit	14709049	Near Bit VSS	5.93	6.73	7.000	4.330
2	AutoTrak Curve Steering Unit	14709049	Near Bit Inclination	5.93	6.73	7.000	4.330
2	AutoTrak Curve MWD	14381954	Gamma (single)	2.78	12.90	7.000	3.250
2	AutoTrak Curve MWD	14381954	Directional (mag)	12.27	22.39	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

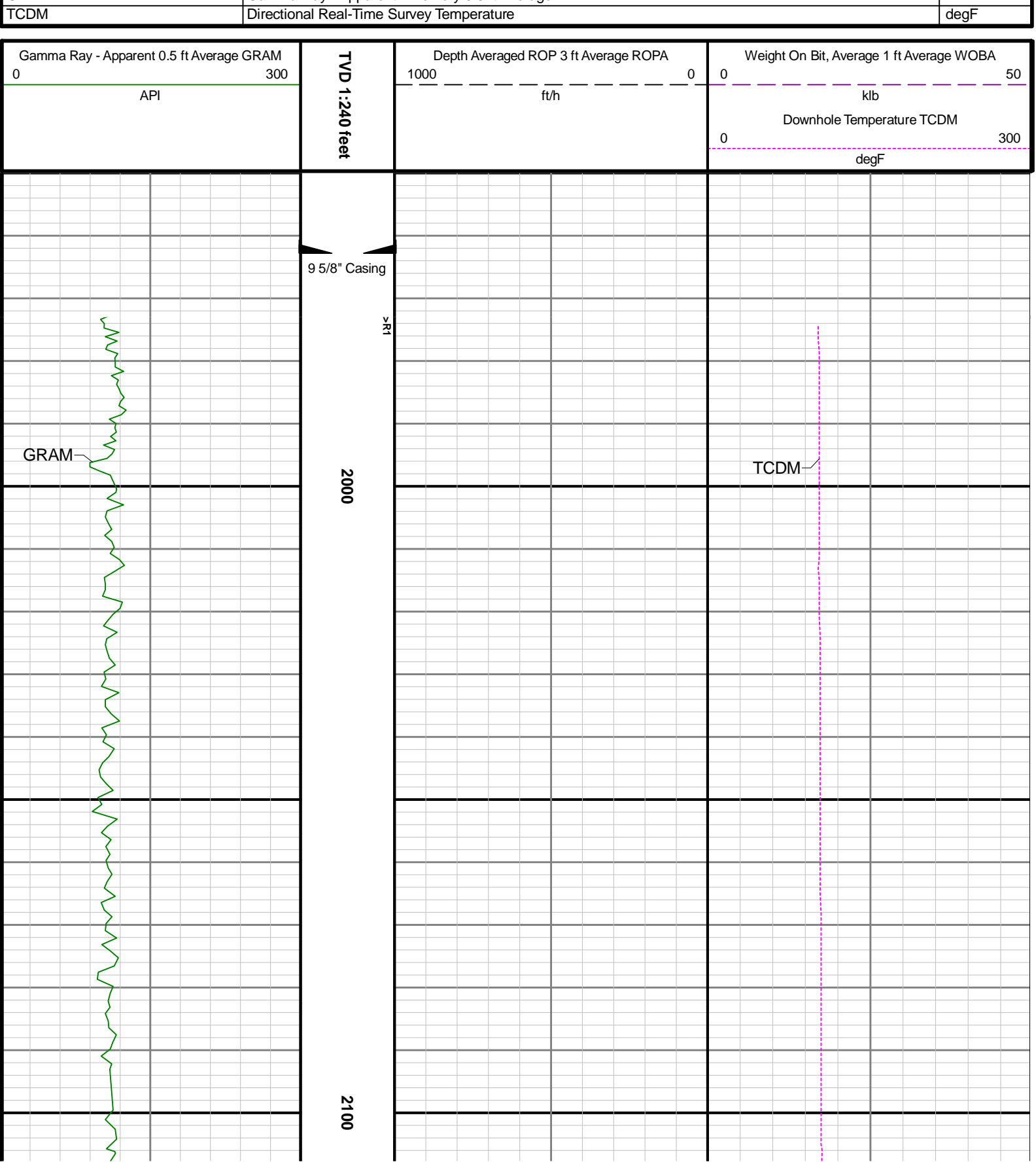
1	Depth measurements were obtained from a depth control system not supplied or operated by Baker Hughes. Due to the lack of control by Baker Hughes, depth calibrations and measurements could not be independently verified.
2	Baker Hughes LWD runs 1 and 2 utilized a 6.75 inch NaviGamma service (Directional and Gamma Ray) behind a 8.5 inch bit and rotary steerable assembly from 1973 to 17660 feet MD (1973 to 6794 feet TVD).
3	The Gamma Ray Apparent (GRAM) data is presented 0 to 300 API, per the customer's request.

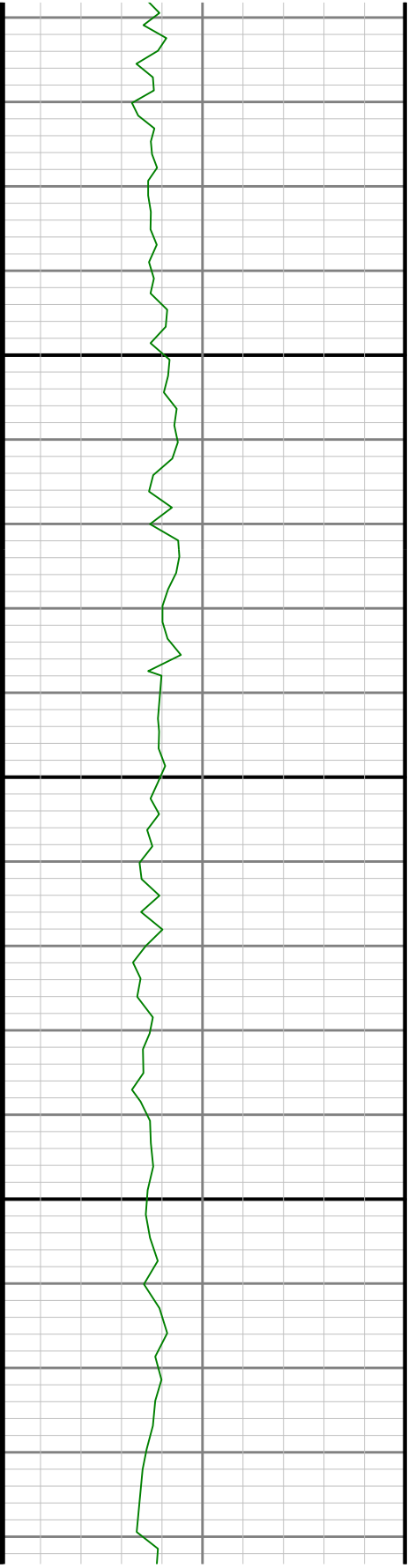
Remarks

Number	Depth (ft)	Hole Section (in)	Run No.	Remark
1	2395.00	8.500	1	The interval from 2351 to 2382 feet MD (2351 to 2382 feet TVD) has gaps in gamma ray data, due to a downlinking while drilling ahead and terminating power to LWD tool.
2	3815.00	8.500	1	The interval from 3753 to 3802 feet MD (3709 to 3754 feet TVD) has gaps in gamma ray data, due to a downlinking while drilling ahead and terminating power to LWD tool.
3	5668.00	8.500	1	The interval from 5618 to 5655 feet MD (5389 to 5422 feet TVD) has gaps in gamma ray data, due to a downlinking while drilling ahead and terminating power to LWD tool.

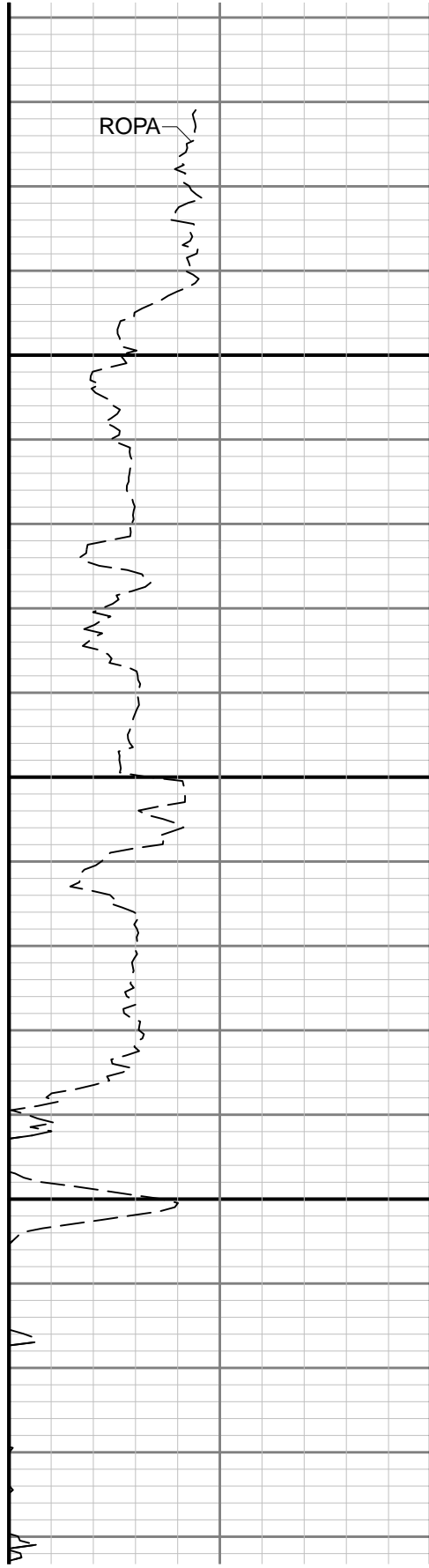
Curve Mnemonics

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

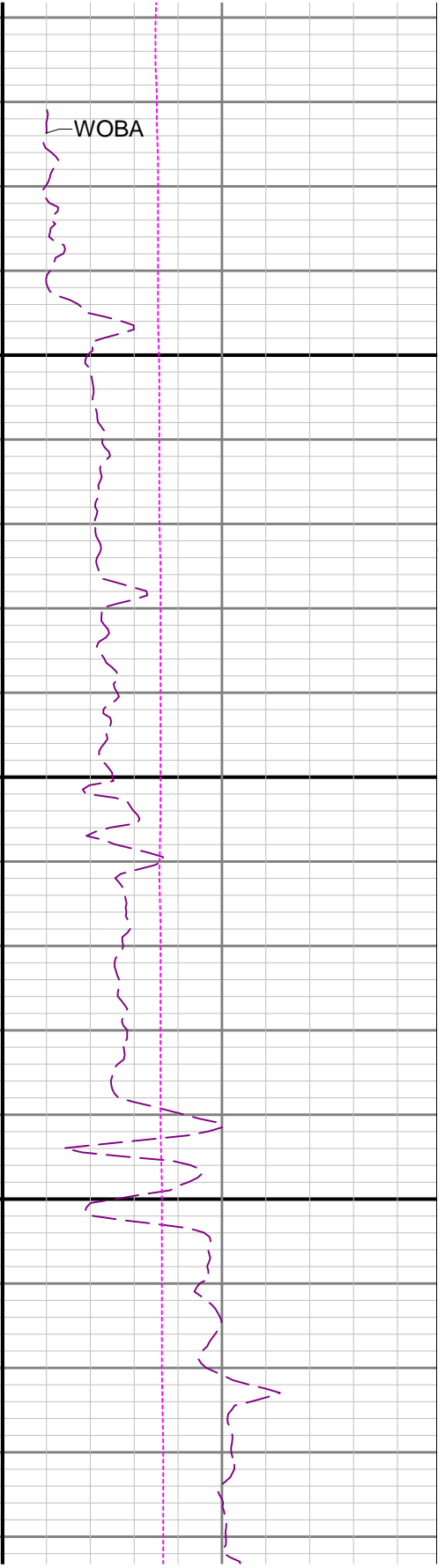




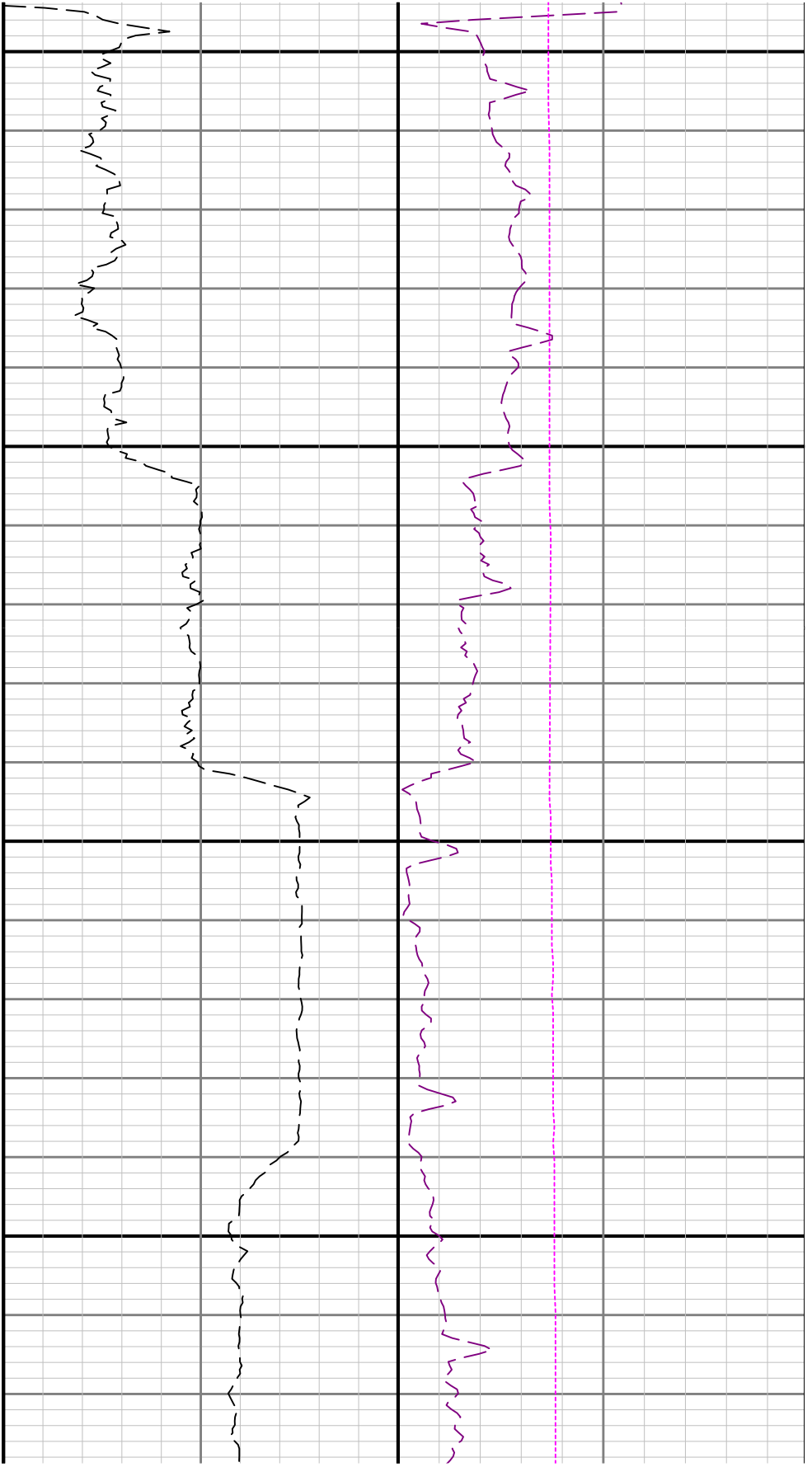
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ROPA



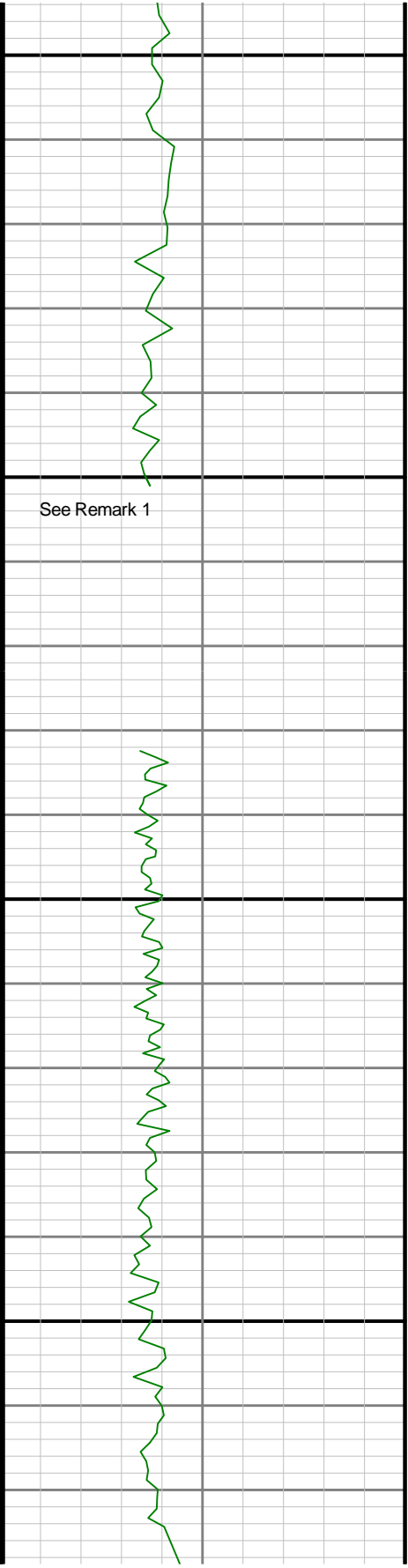
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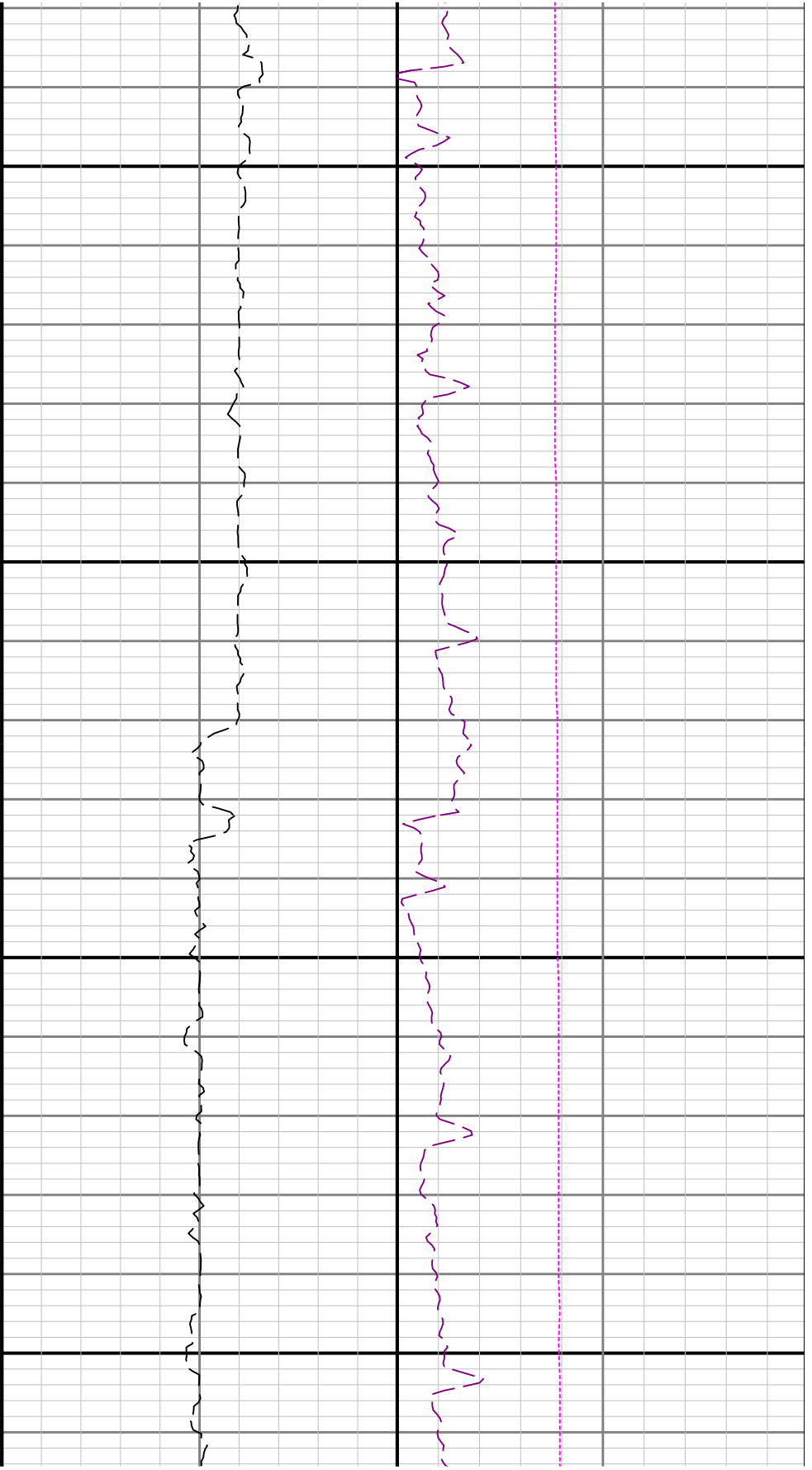


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2400

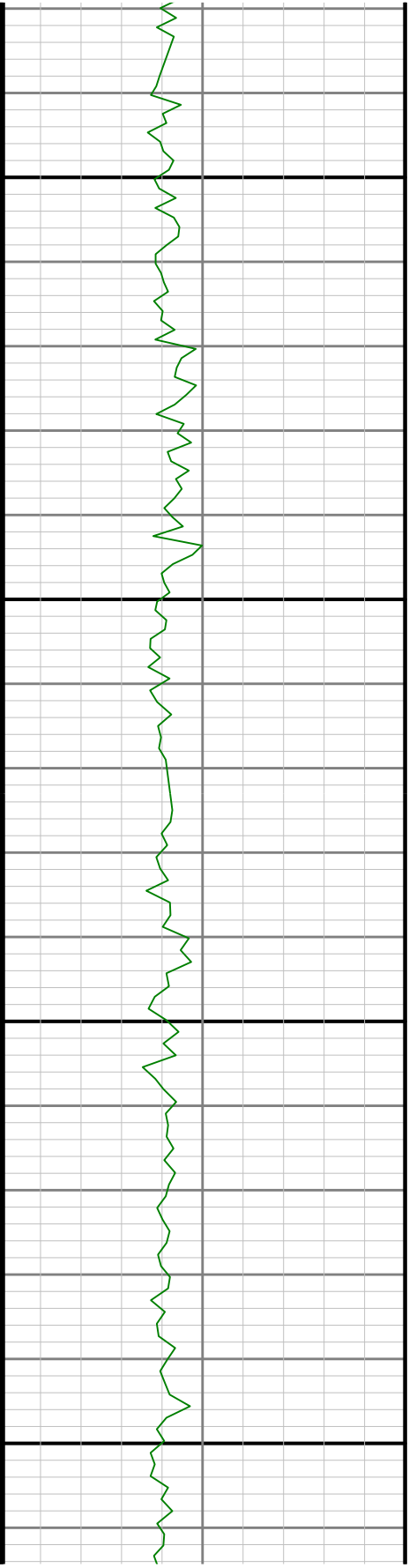
See Remark 1





2500

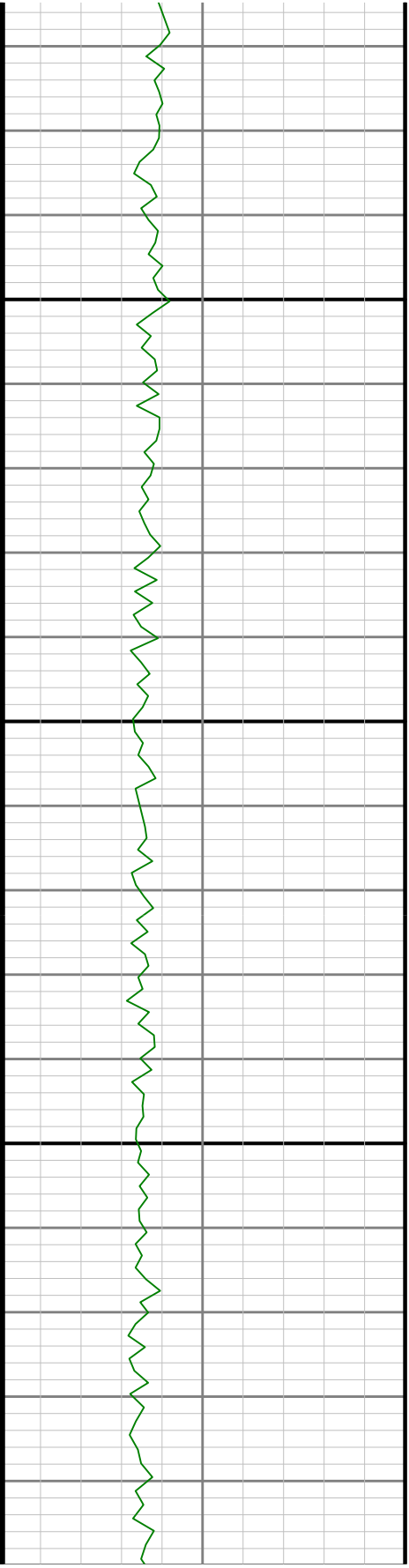
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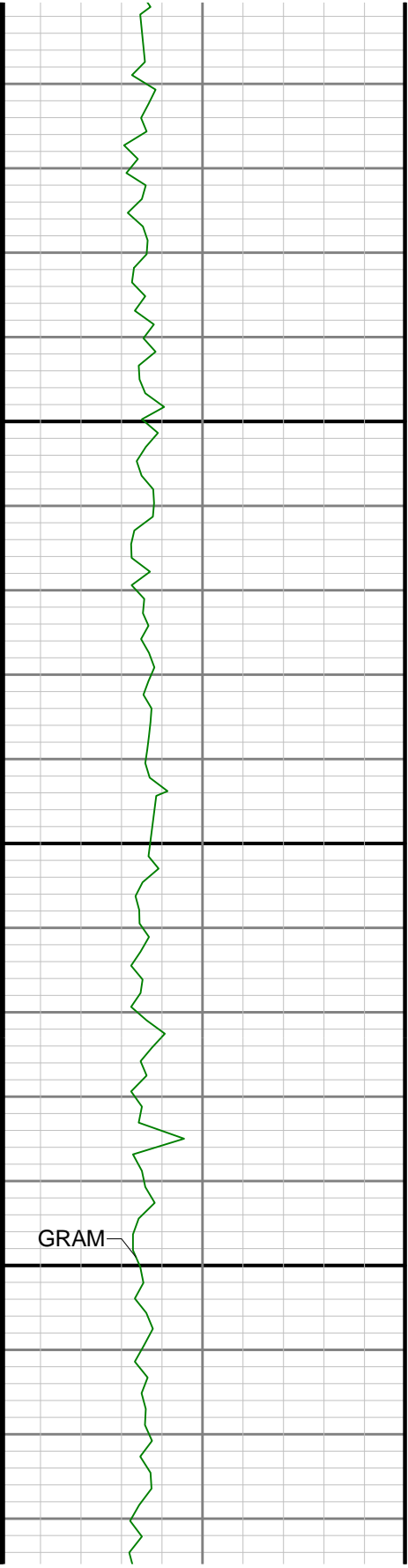




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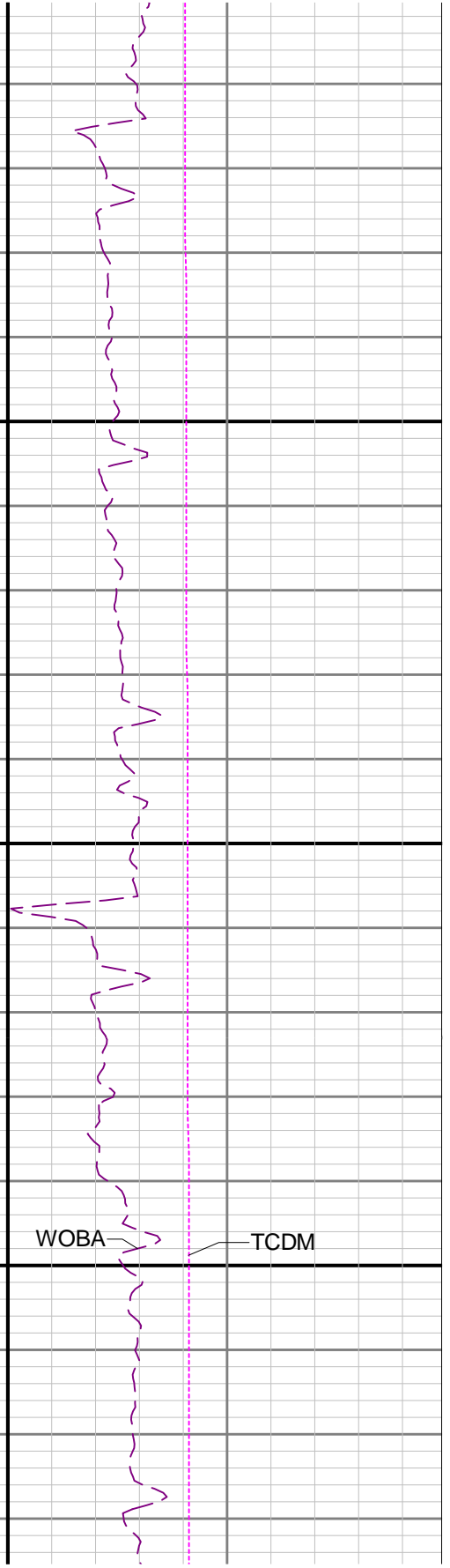
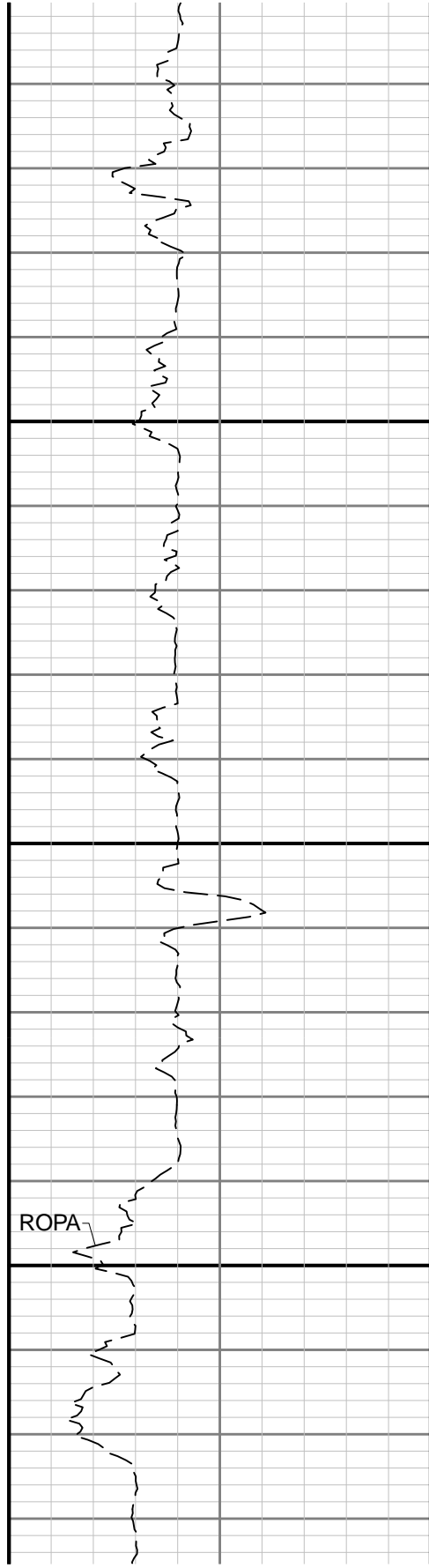
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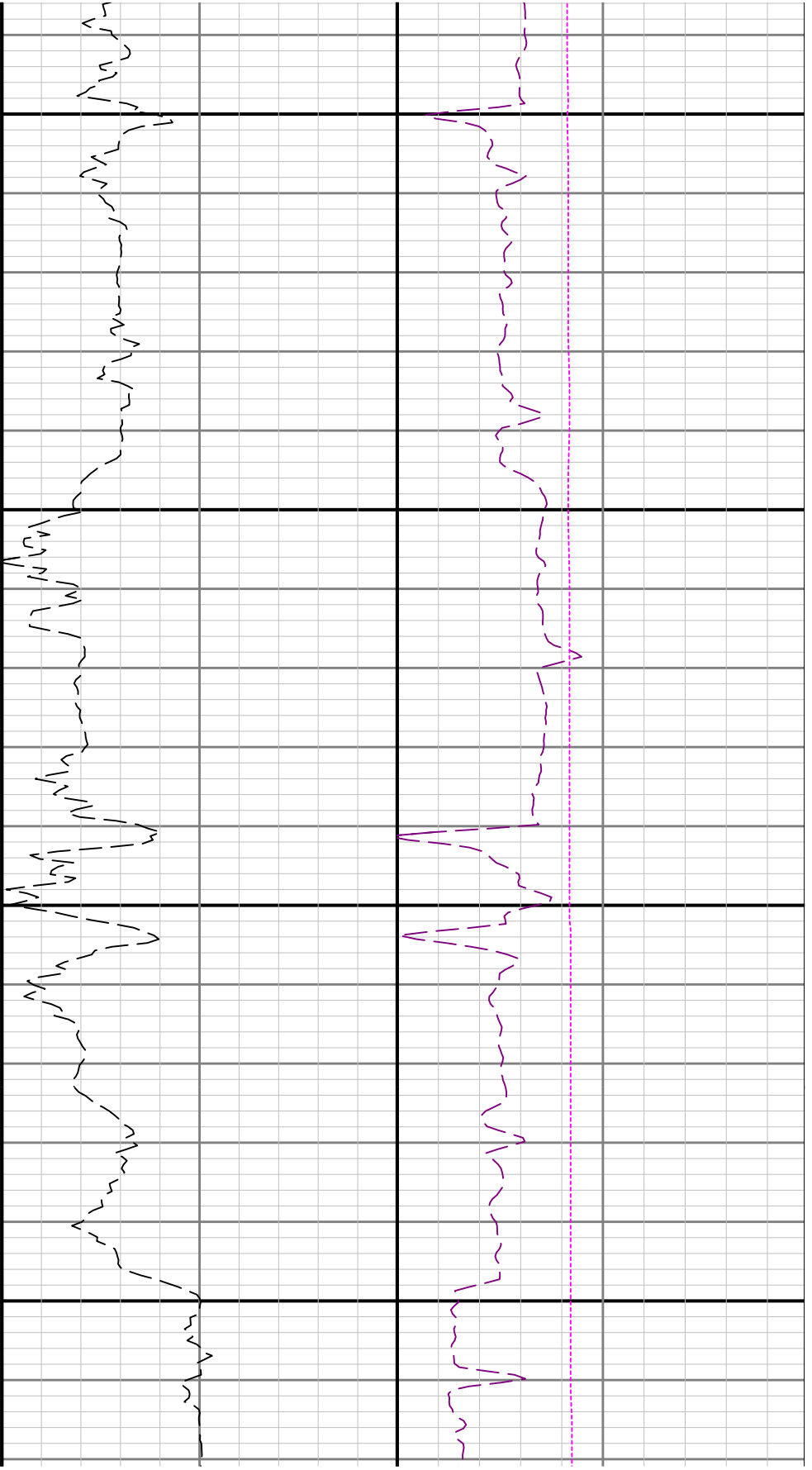




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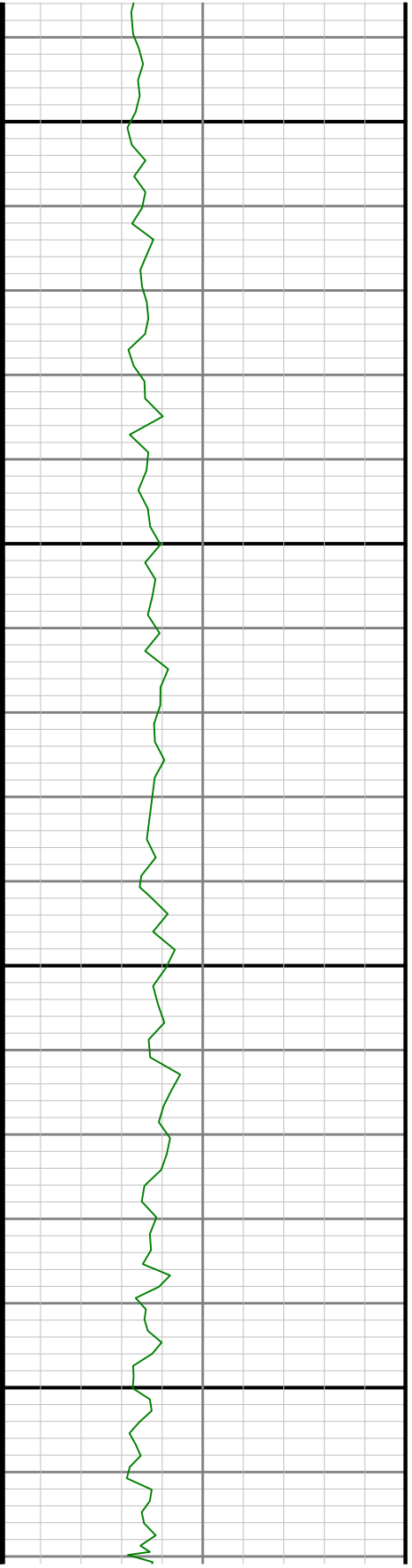
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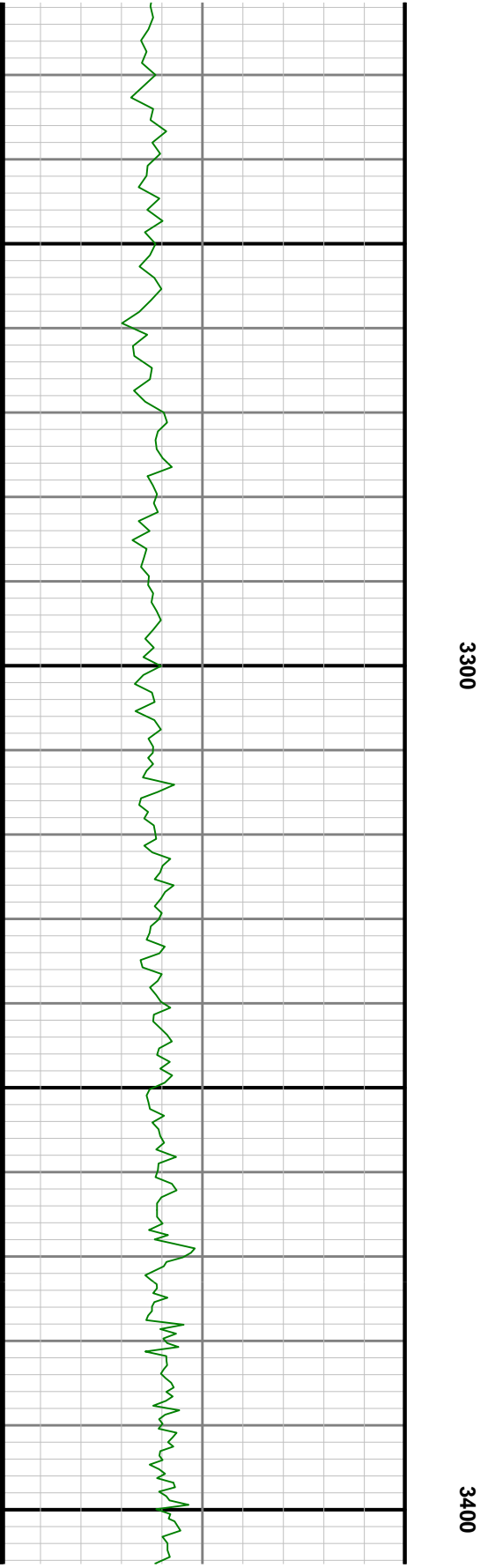
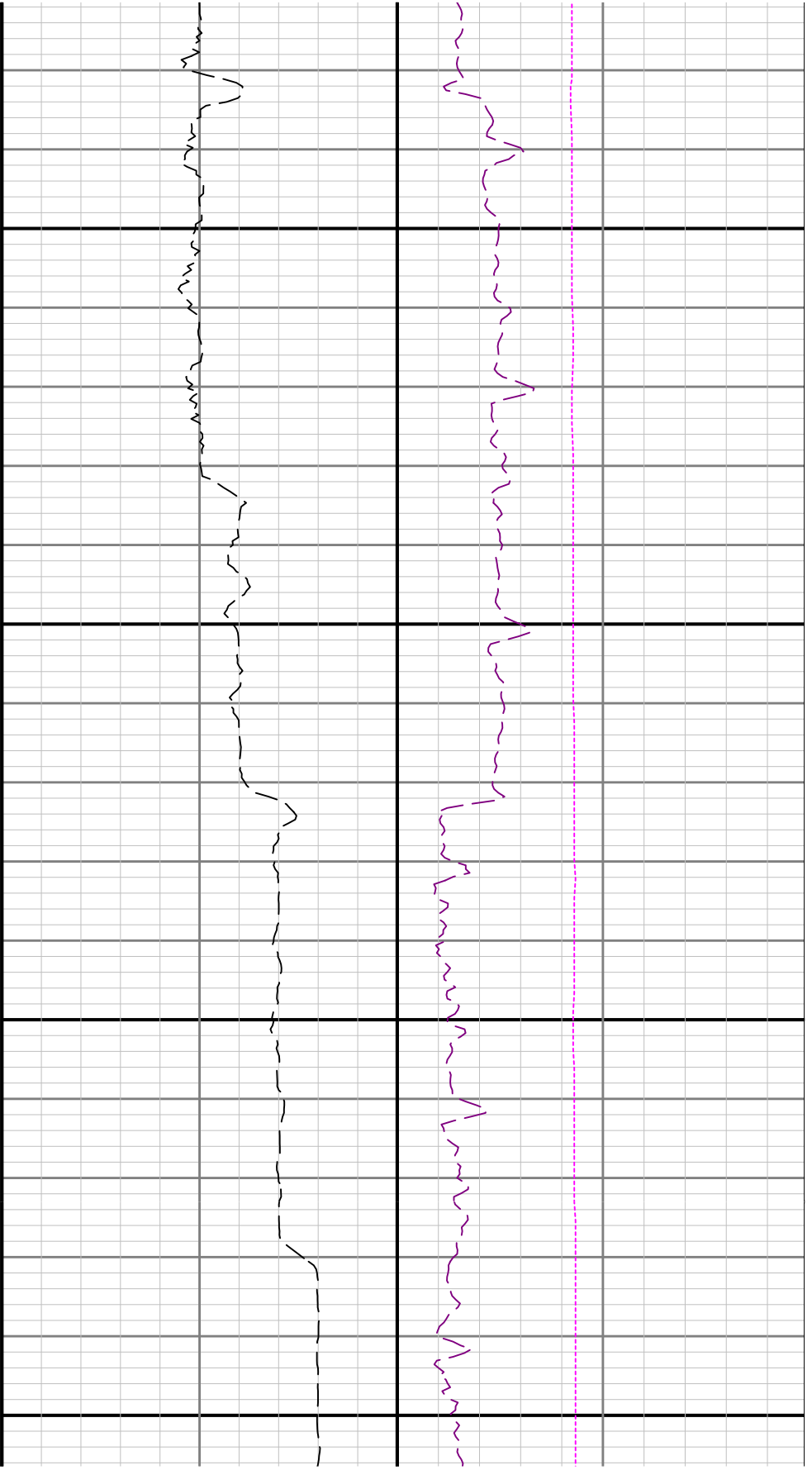


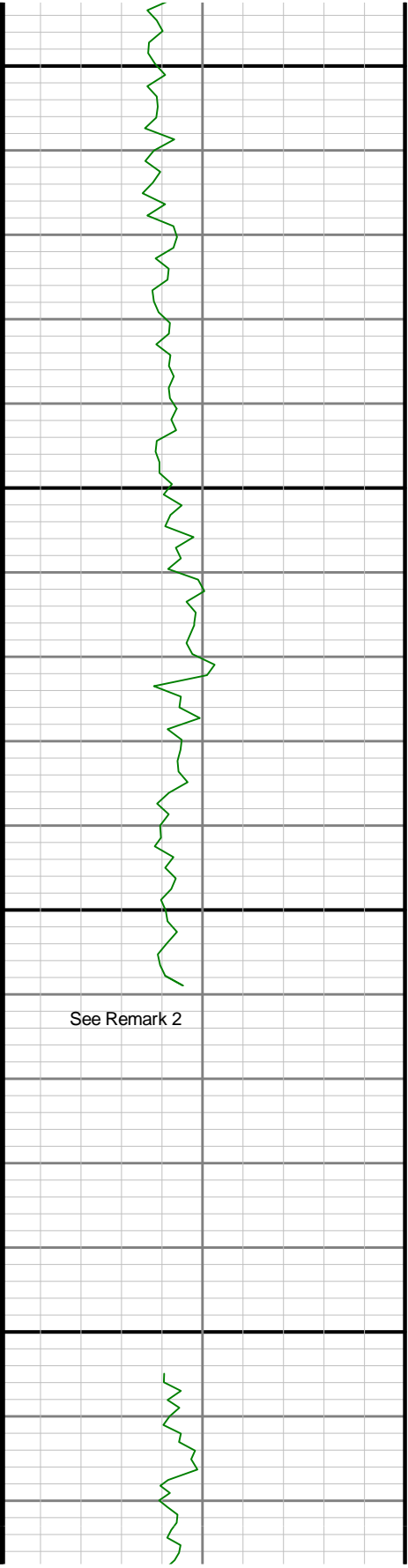
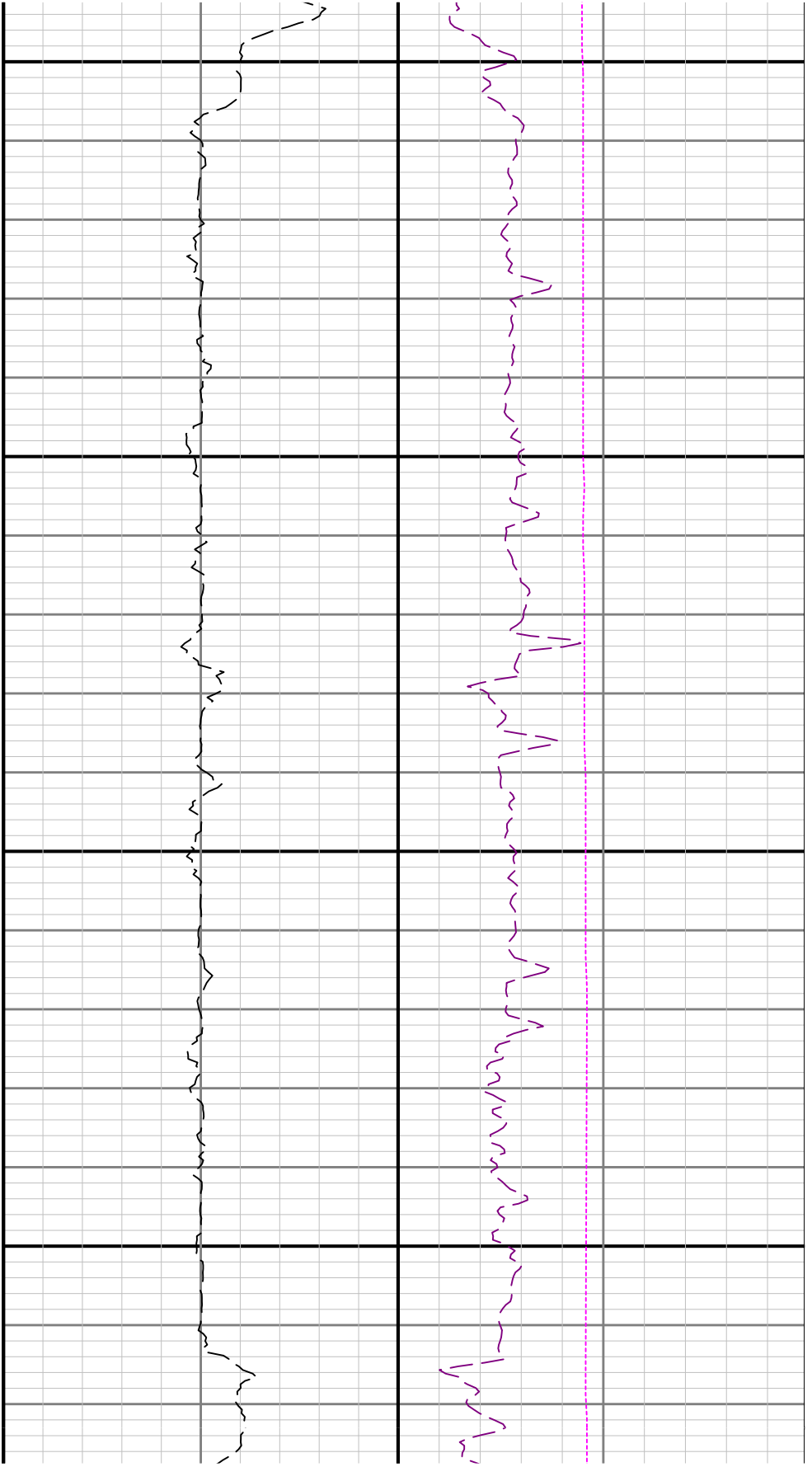


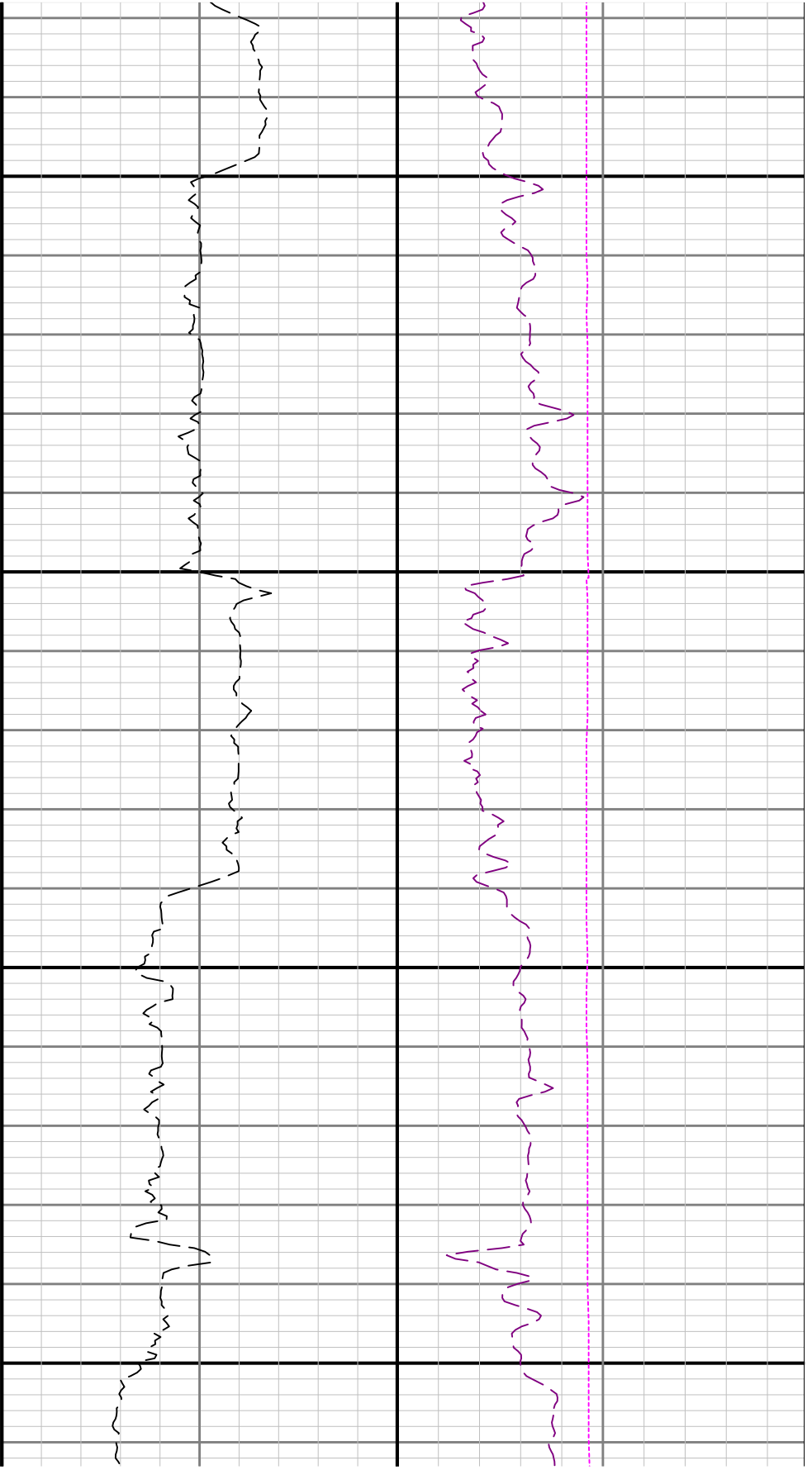
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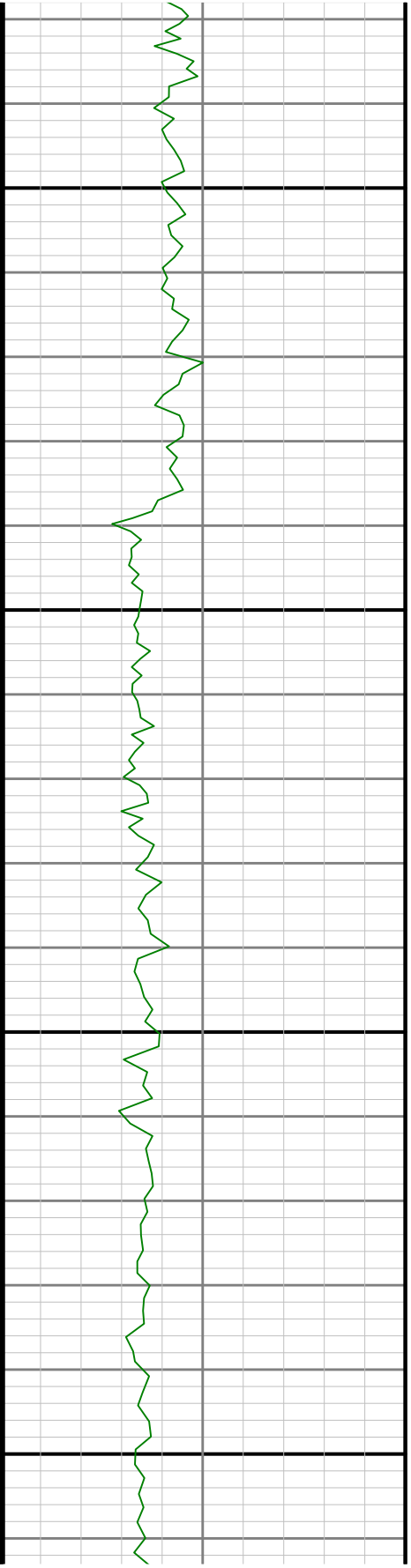


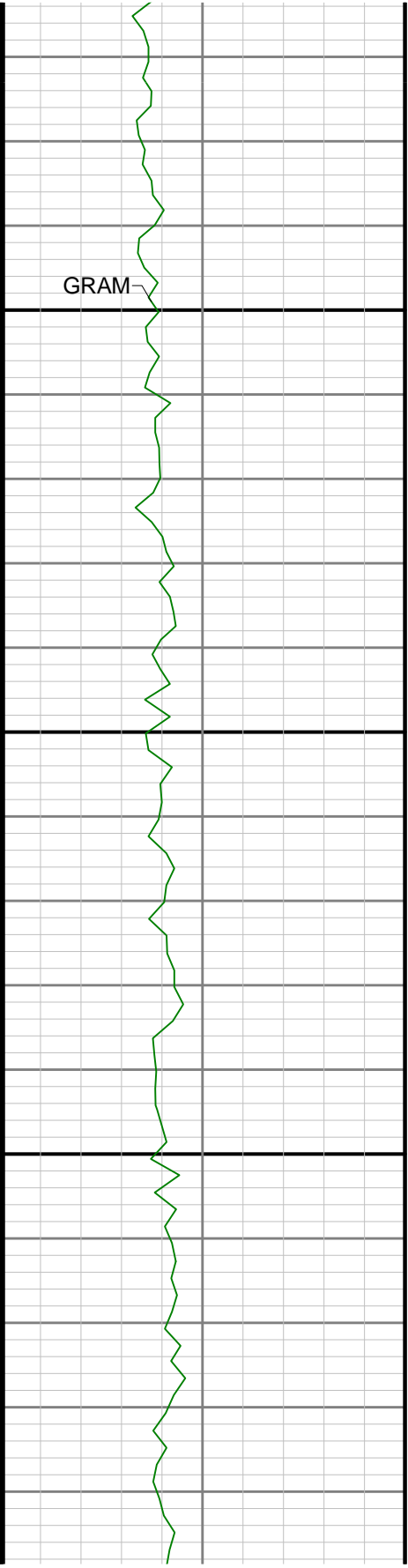




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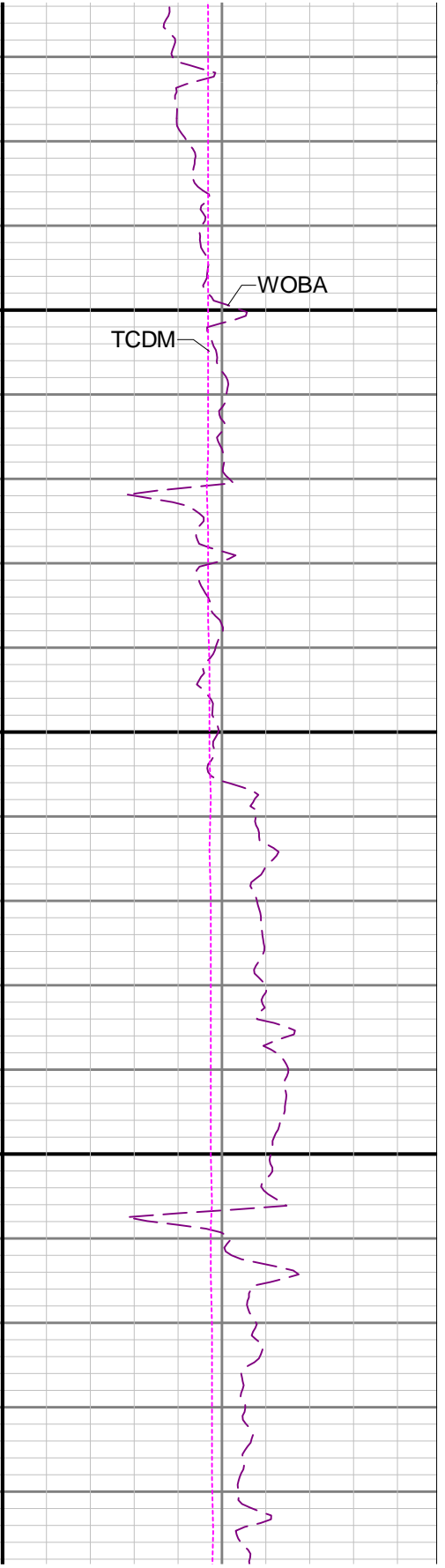
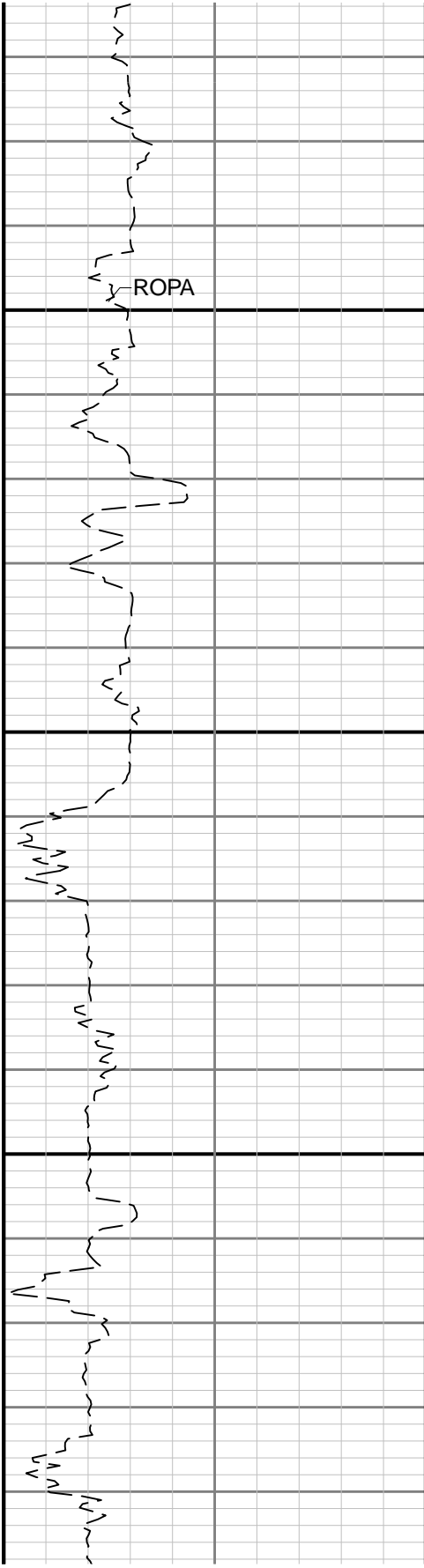
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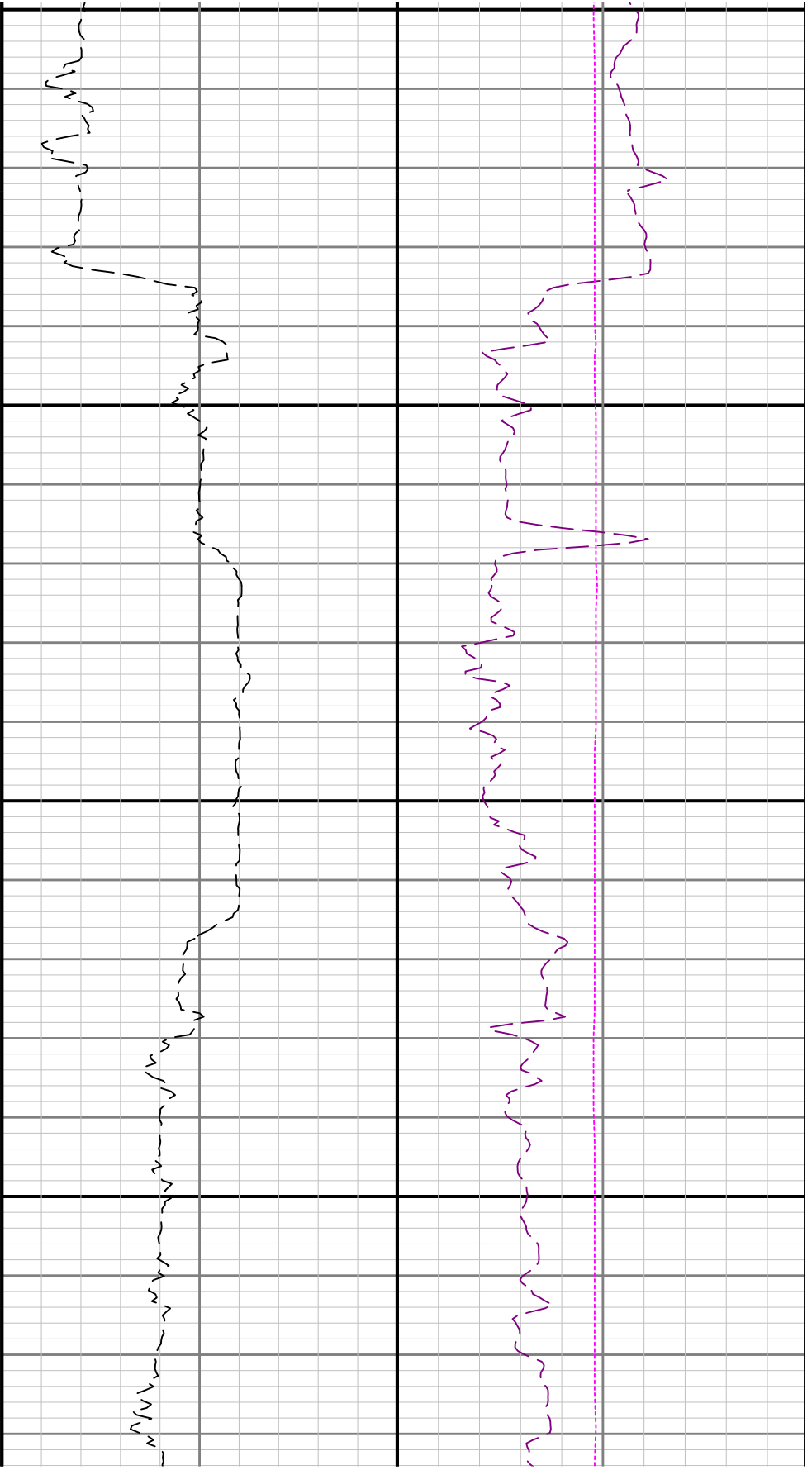




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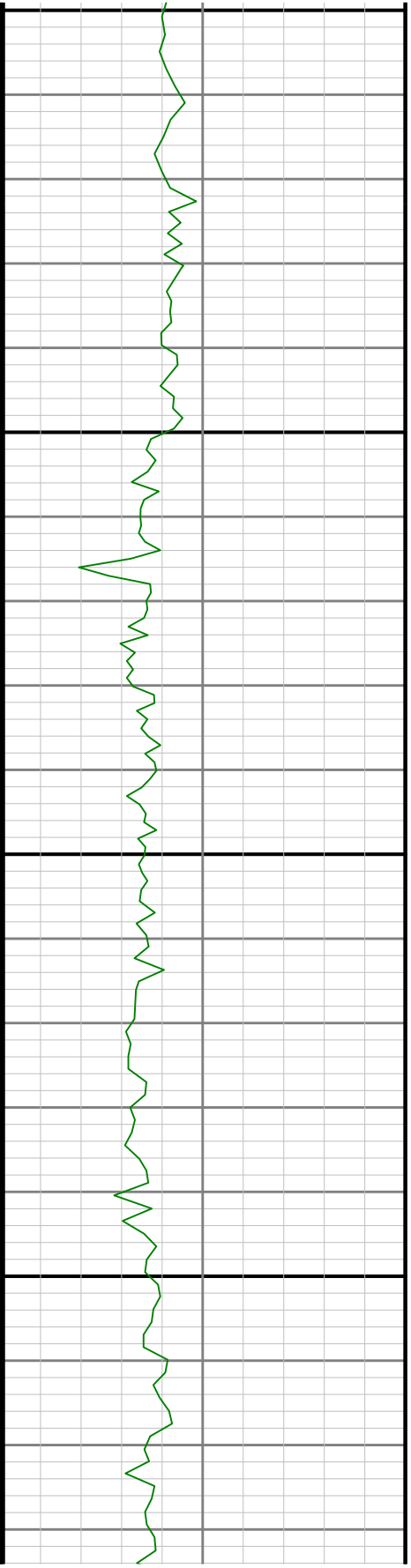
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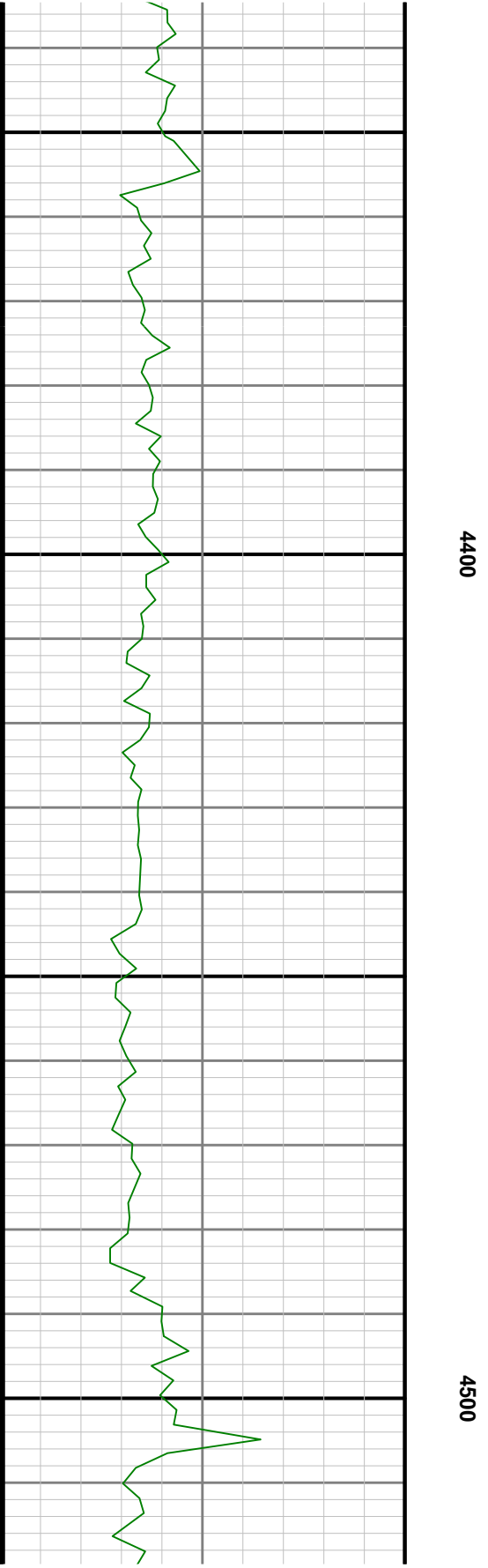
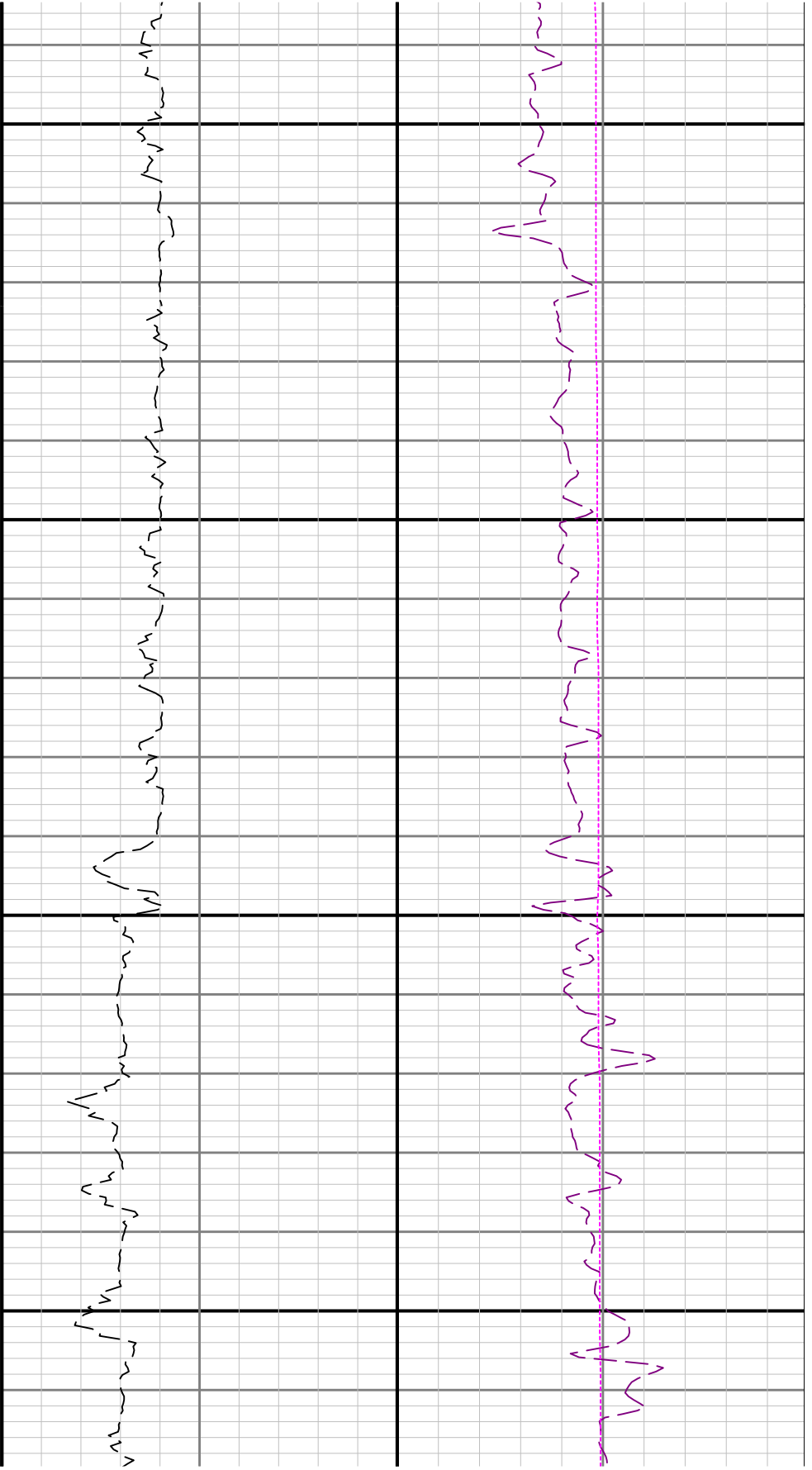


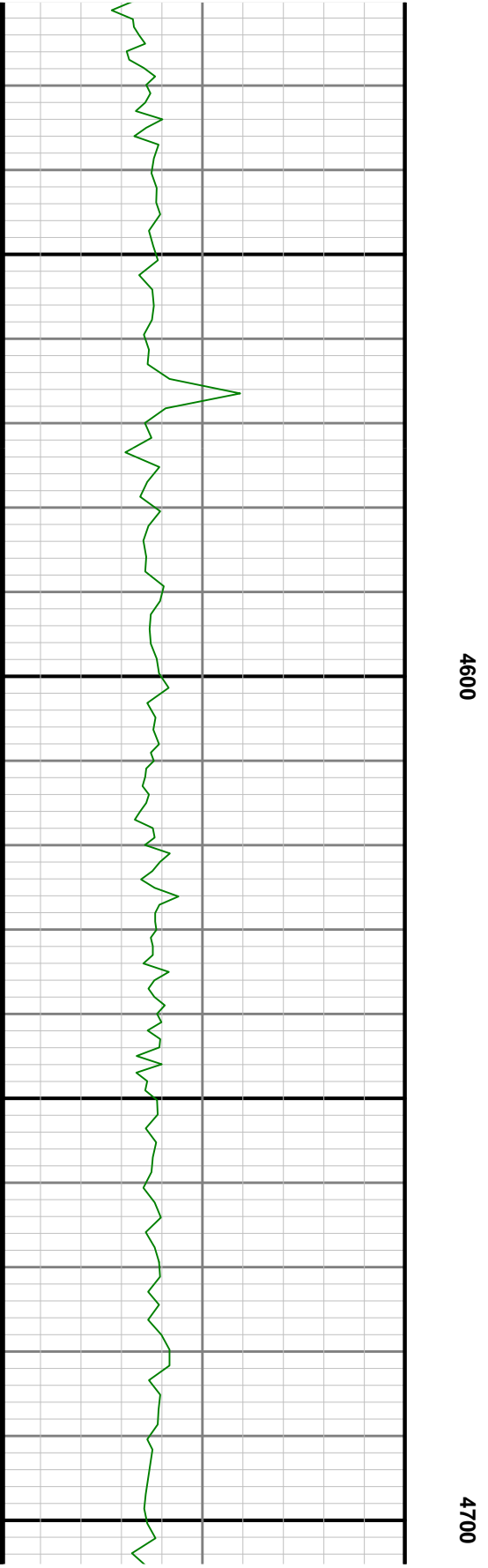
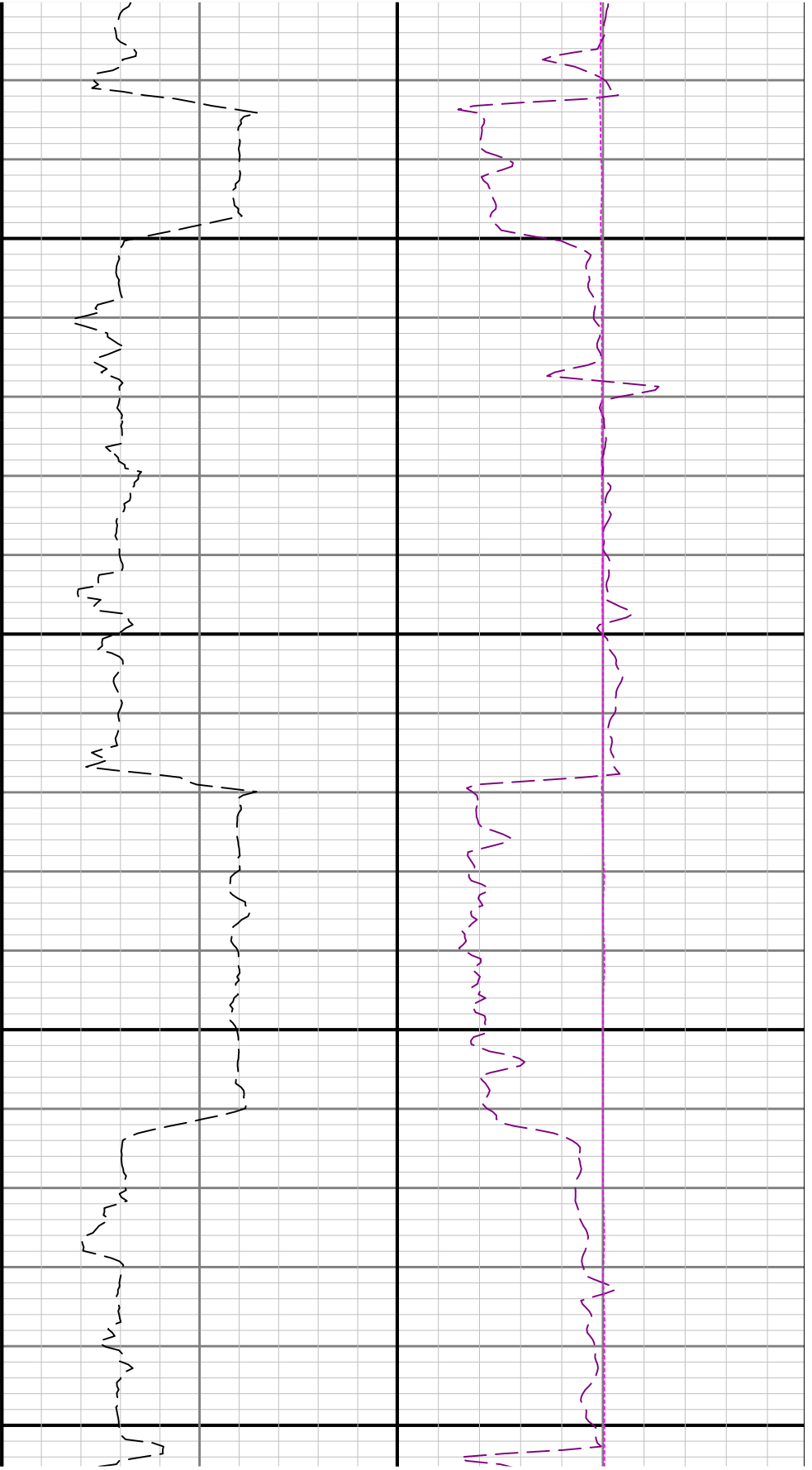


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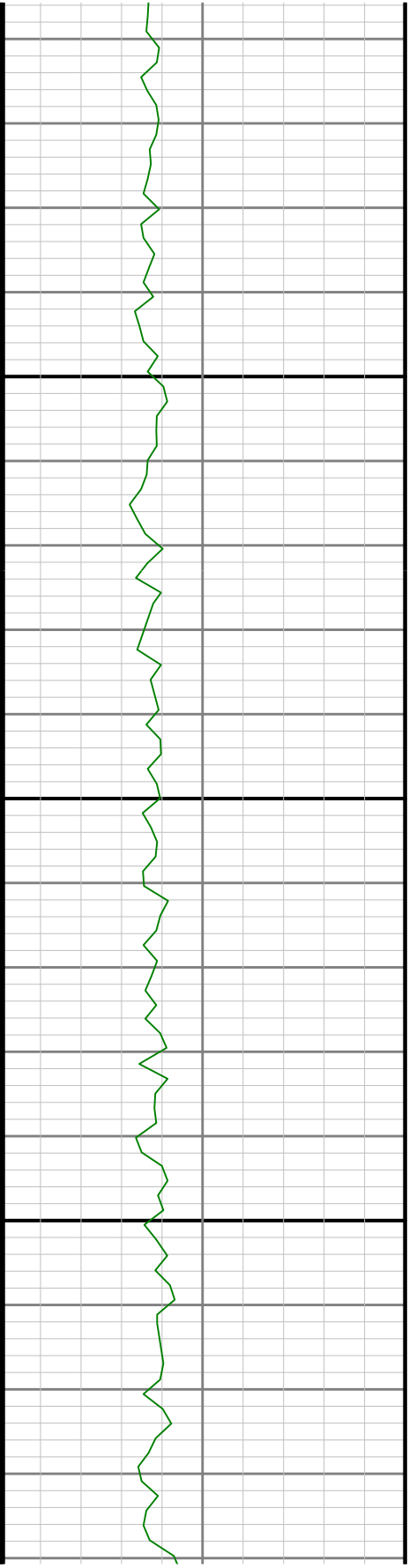


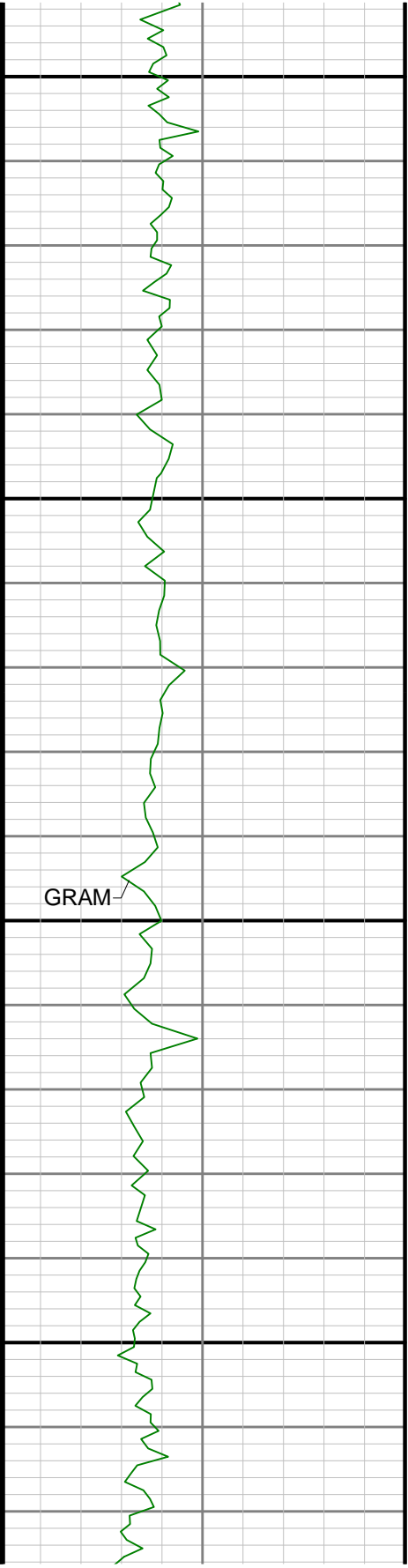






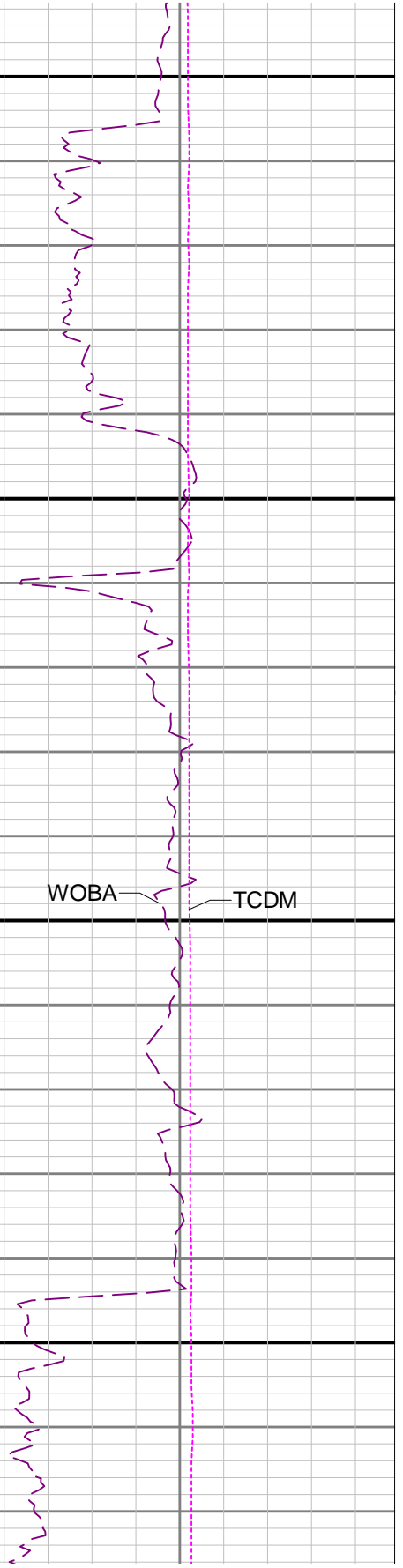
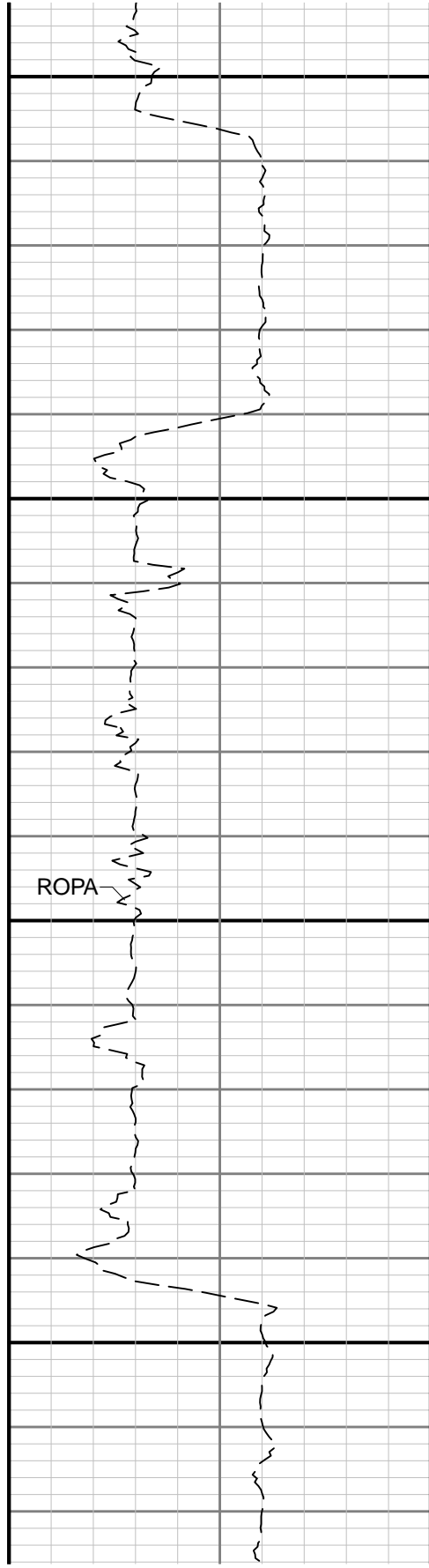
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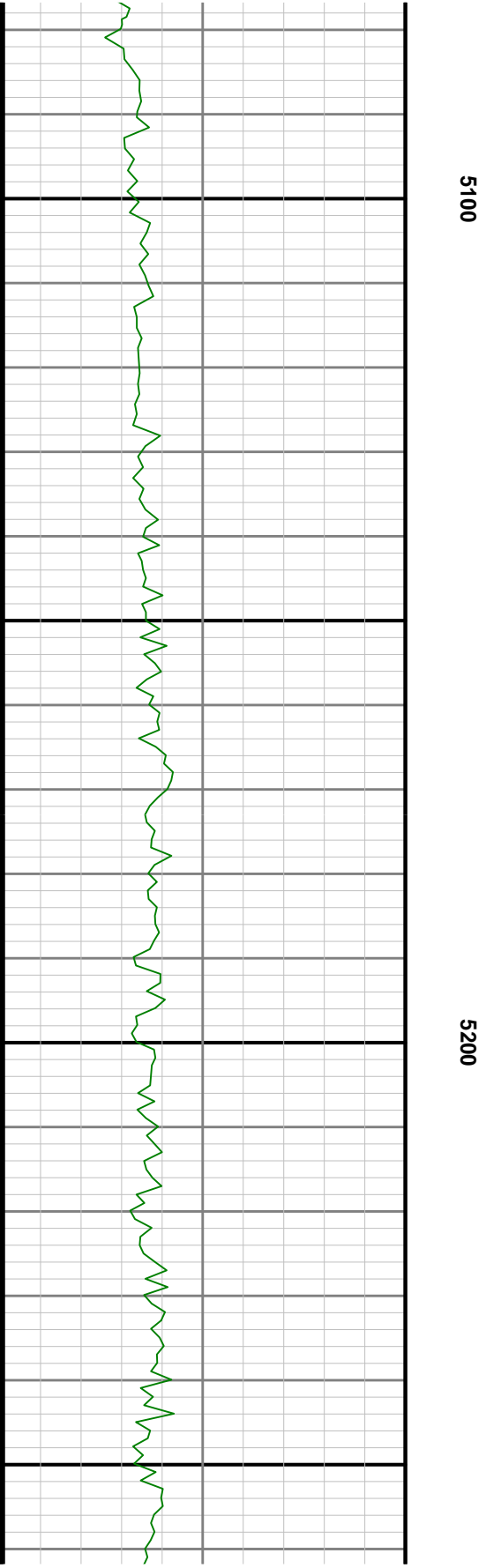
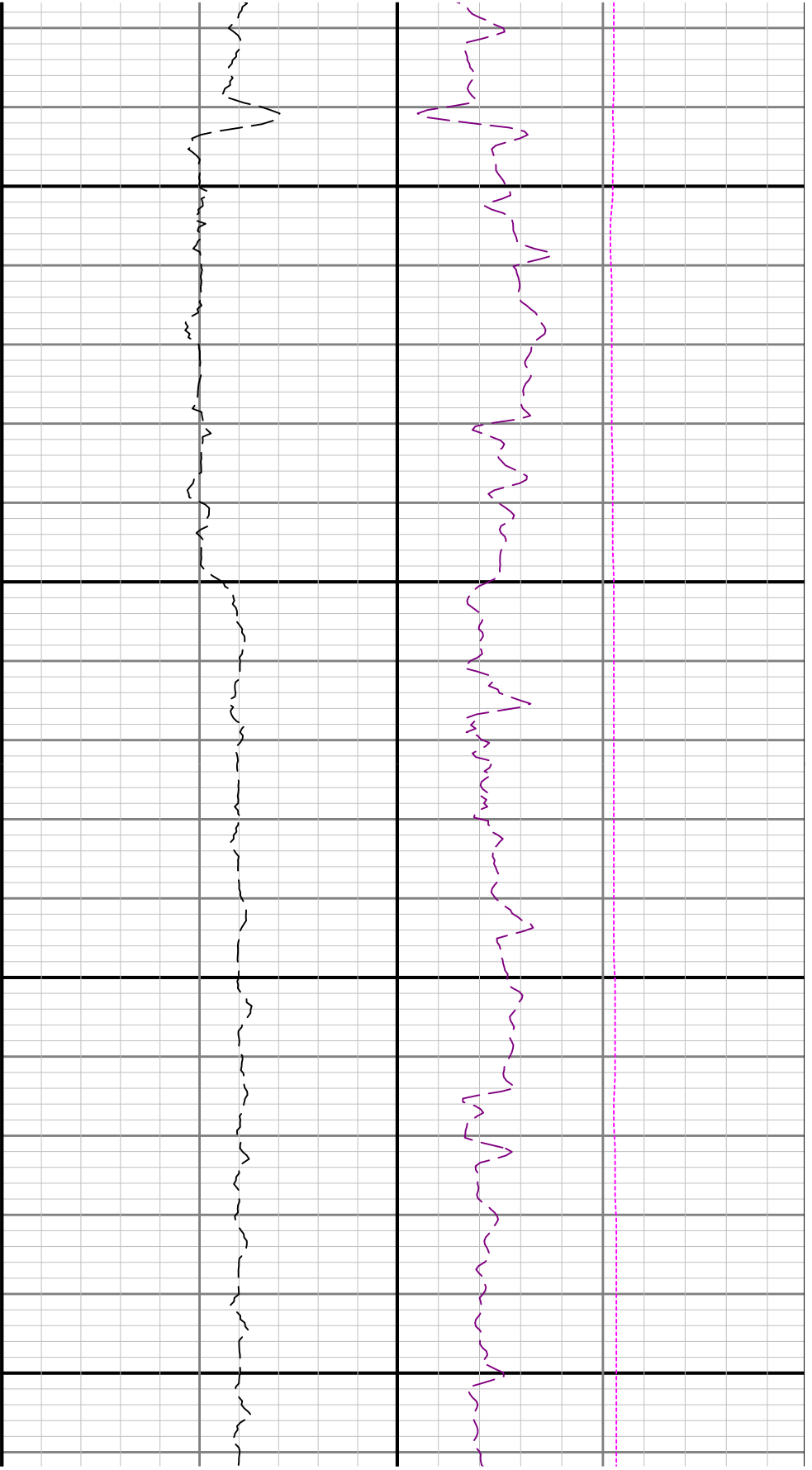


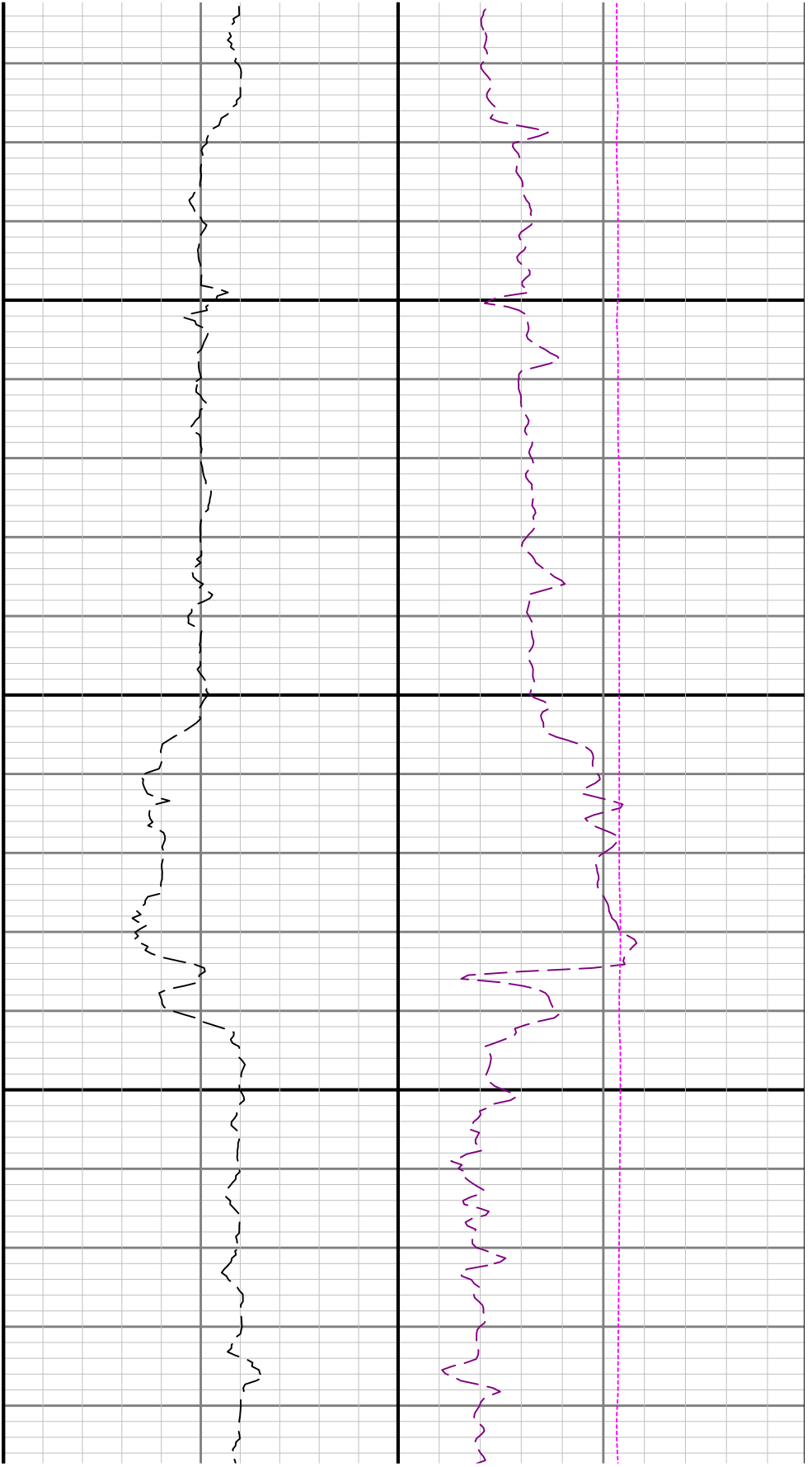


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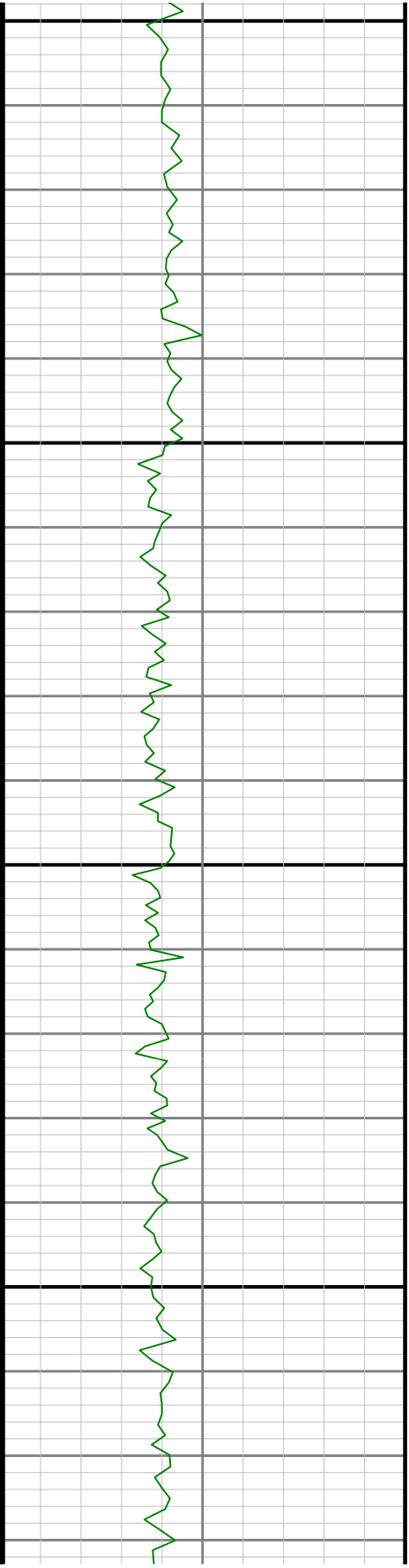




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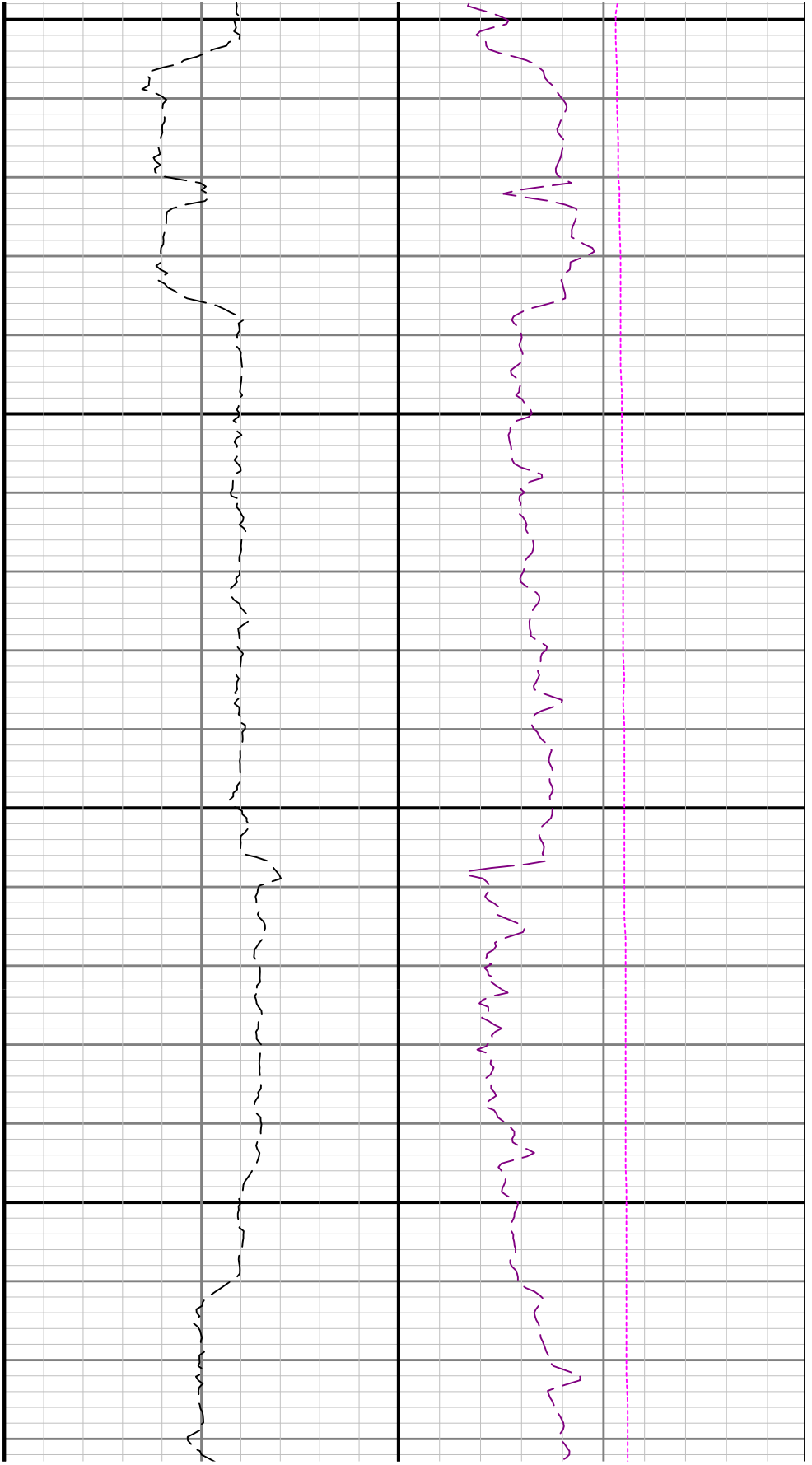
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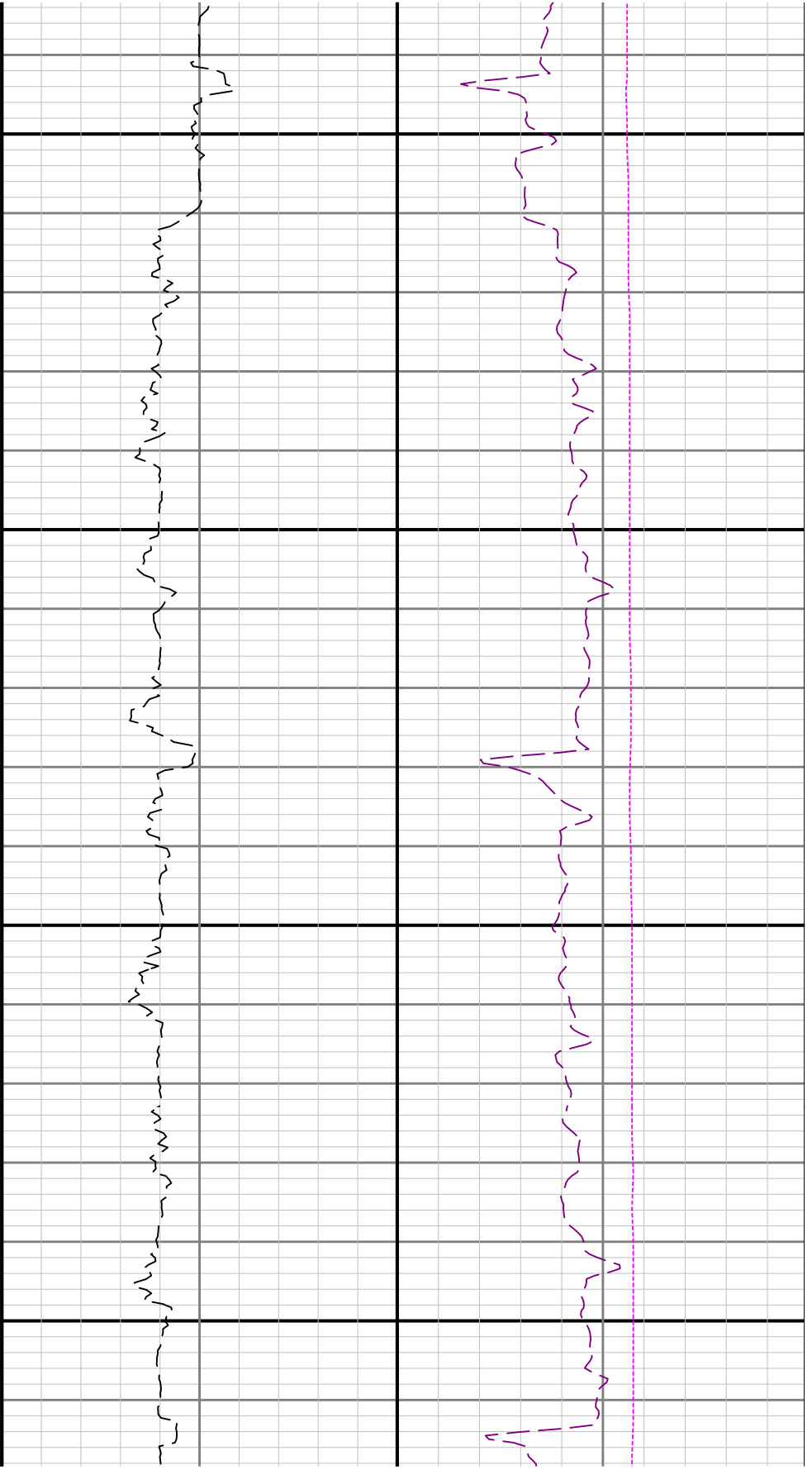
See Remark 3



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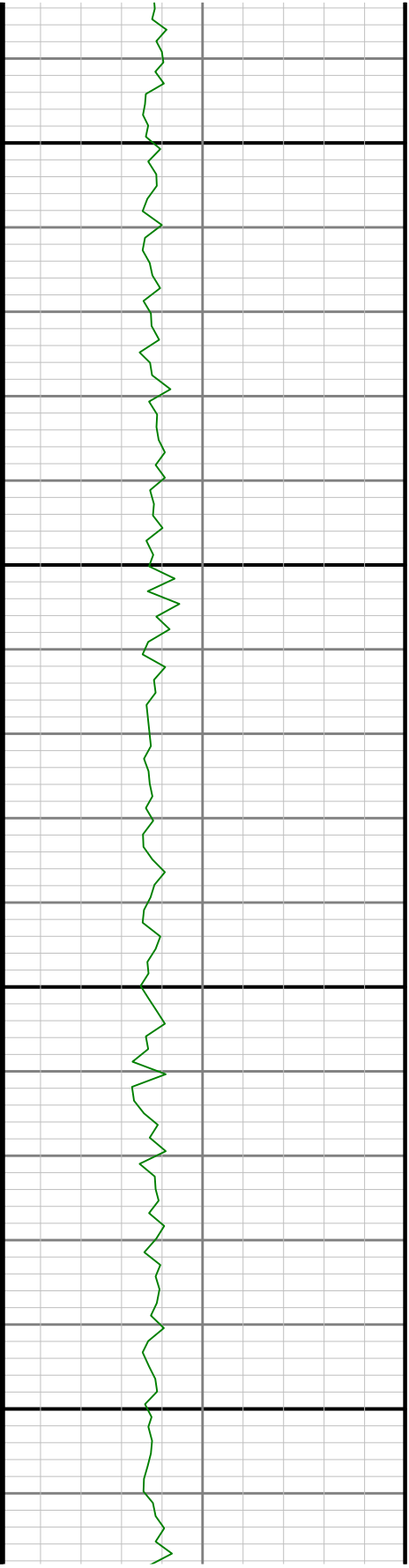
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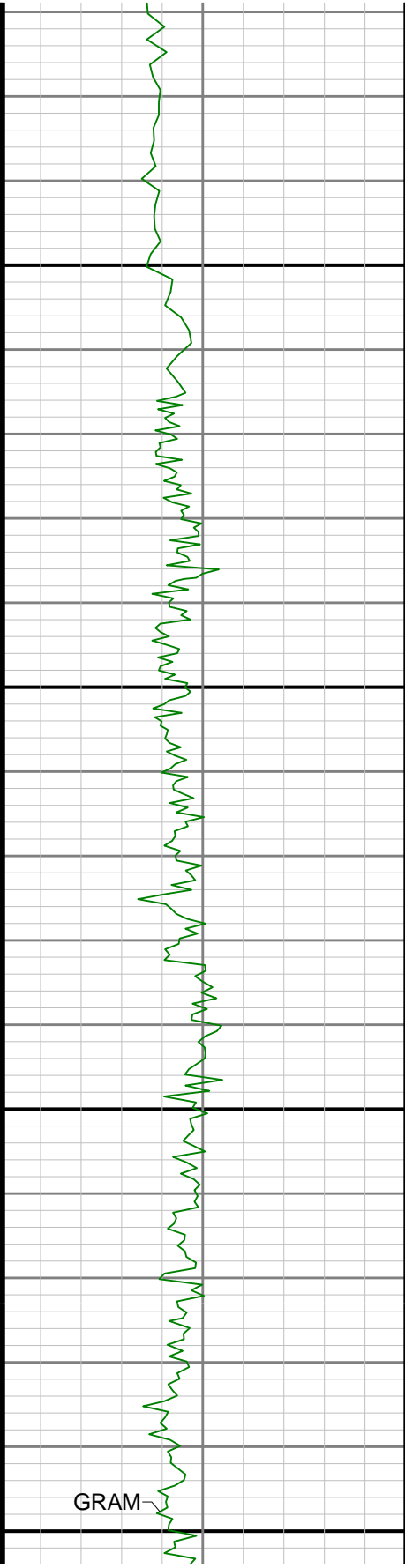




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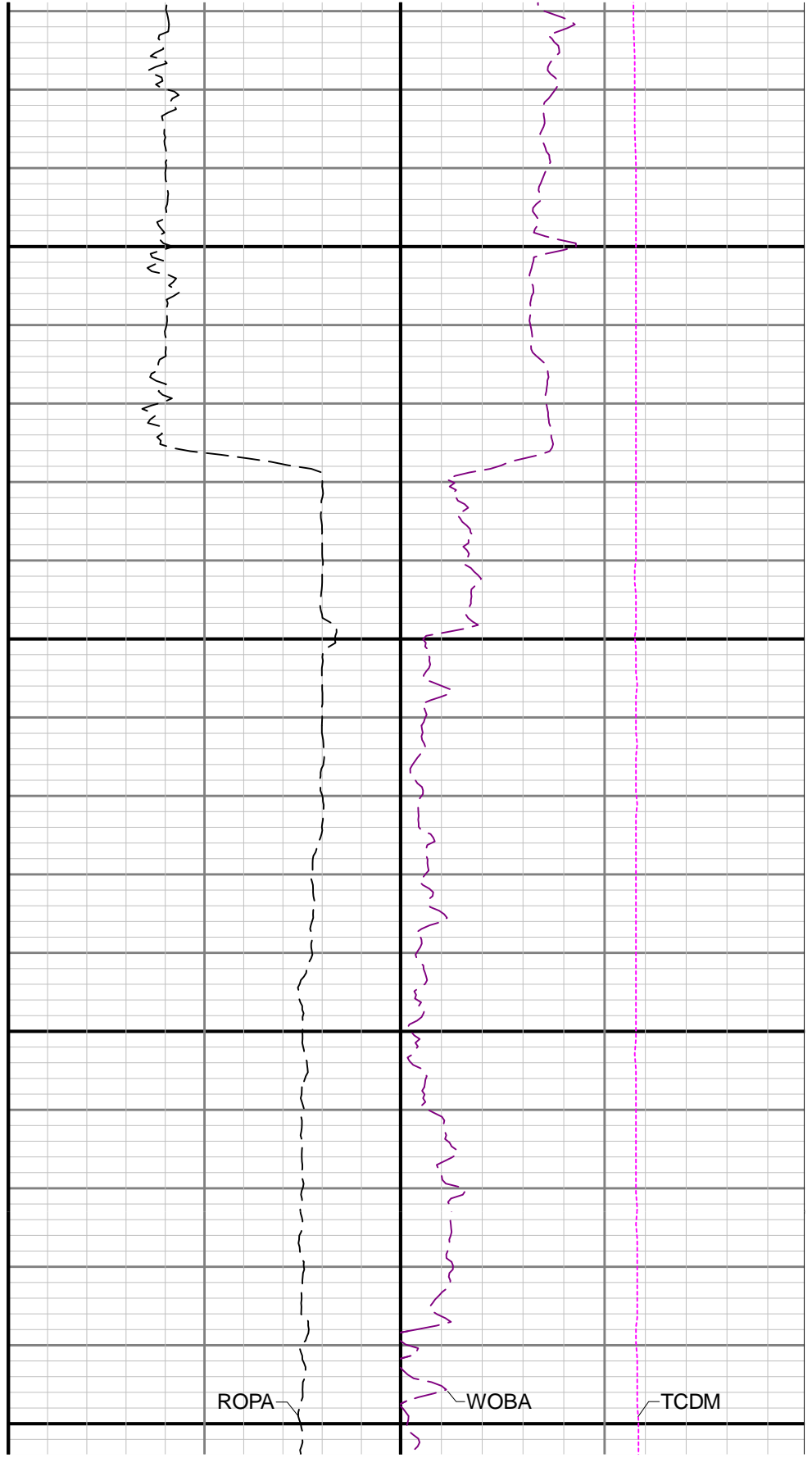




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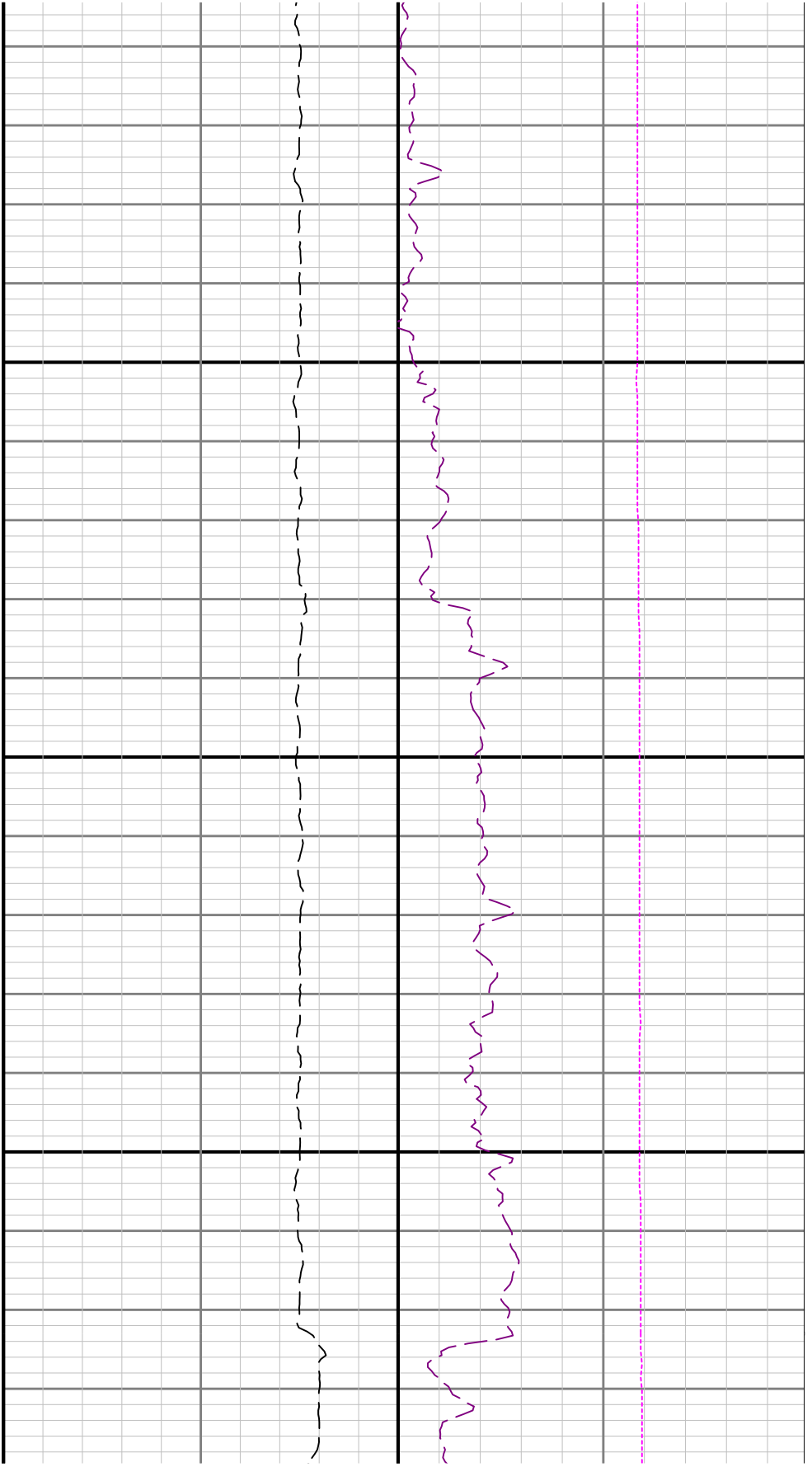
GRAM



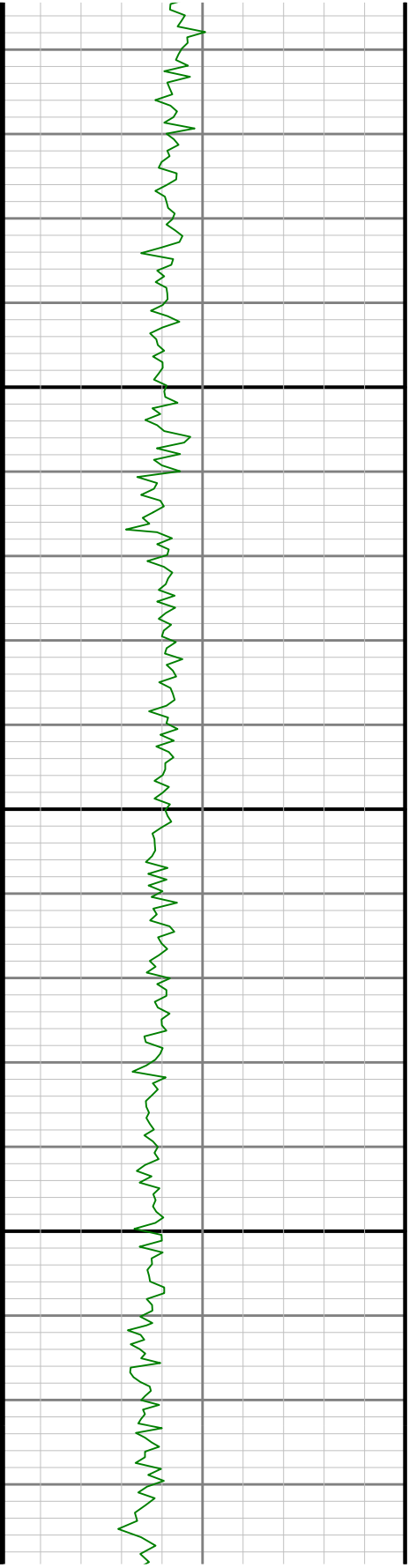
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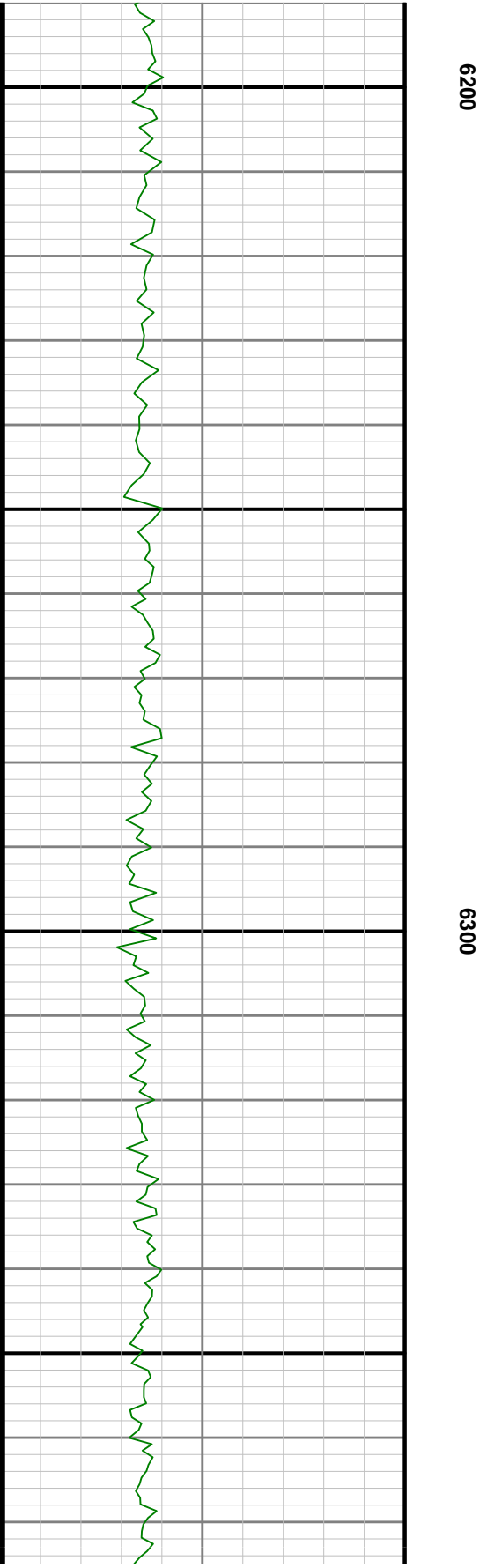
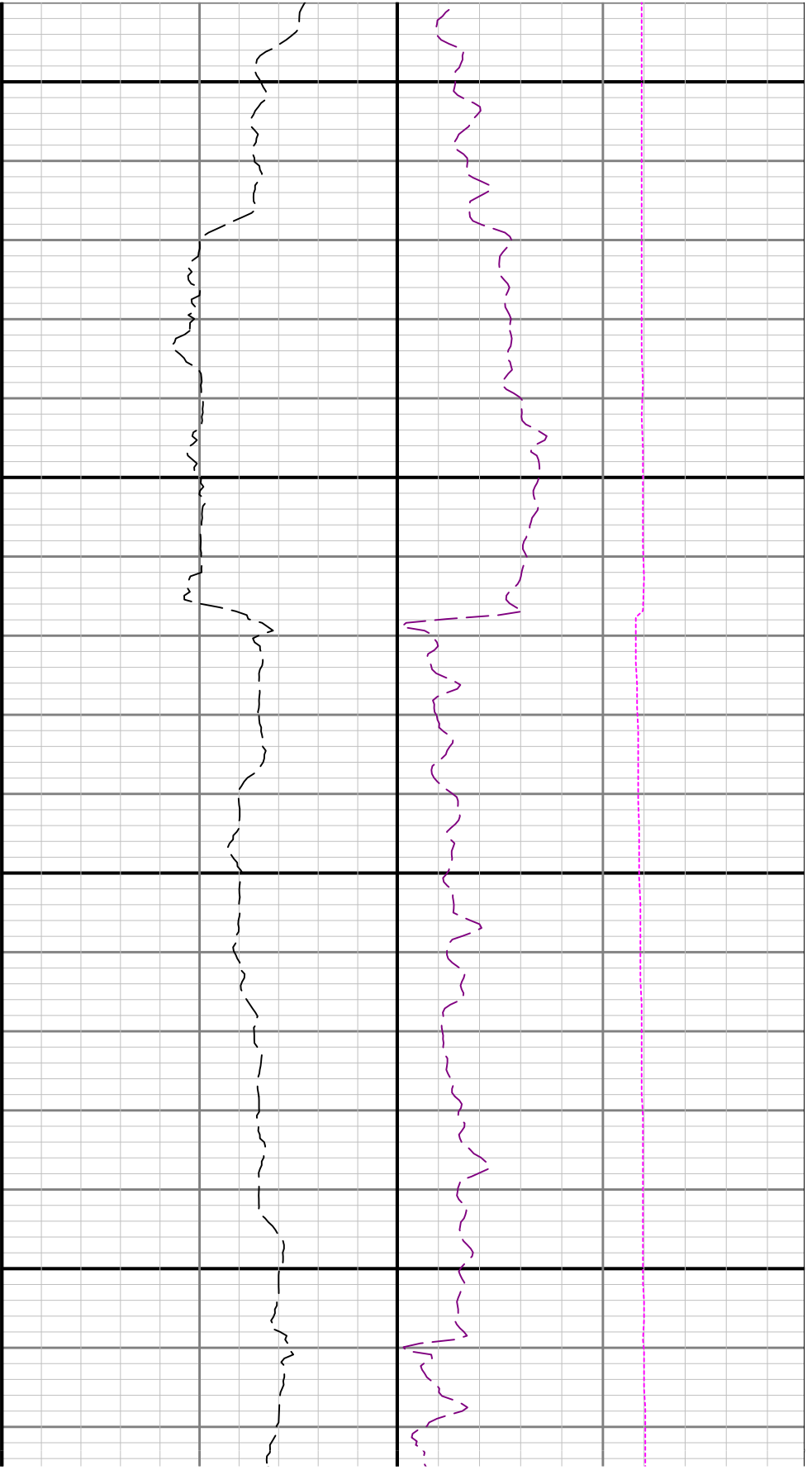
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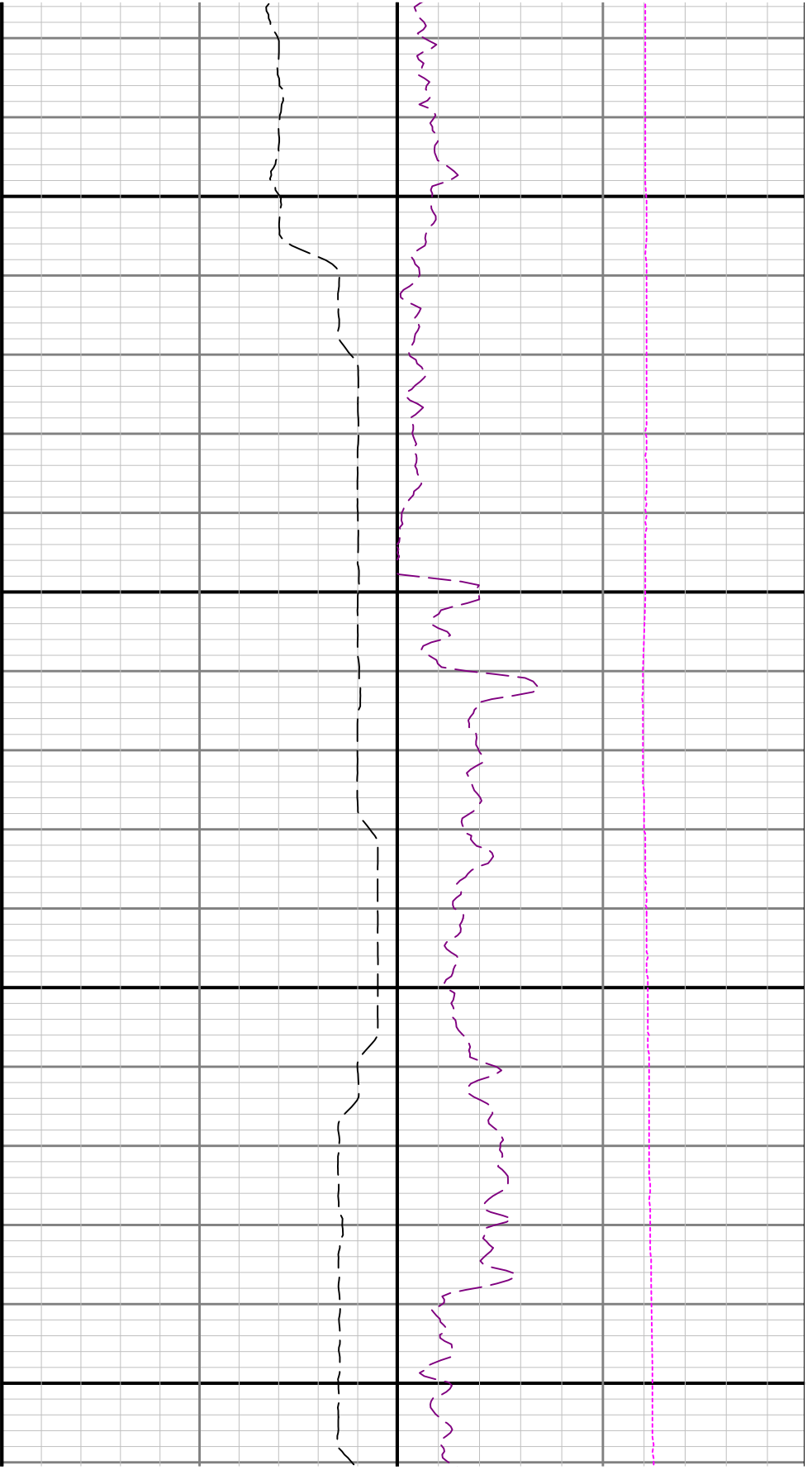
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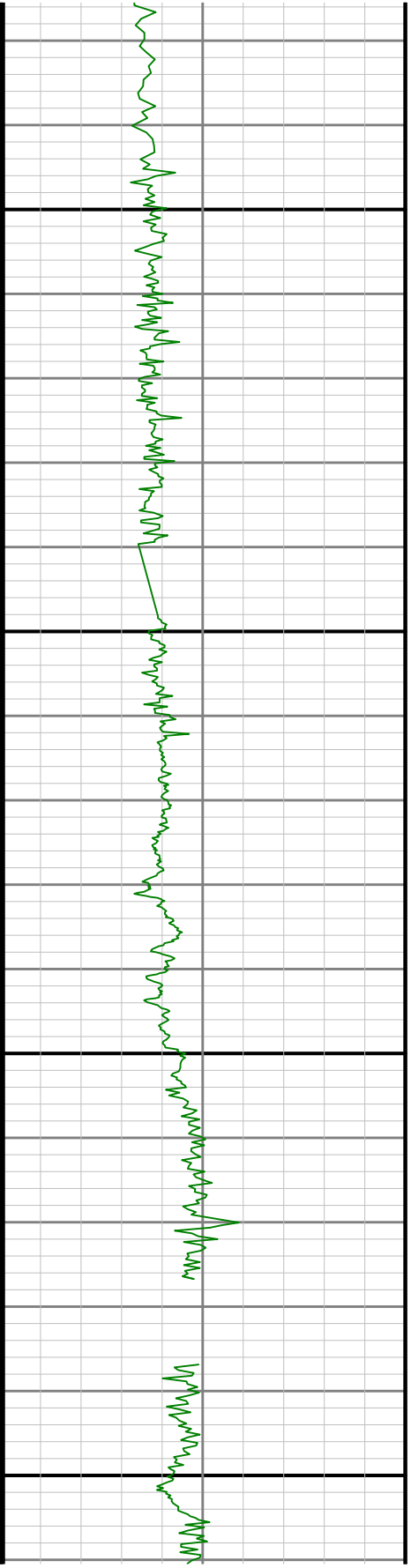


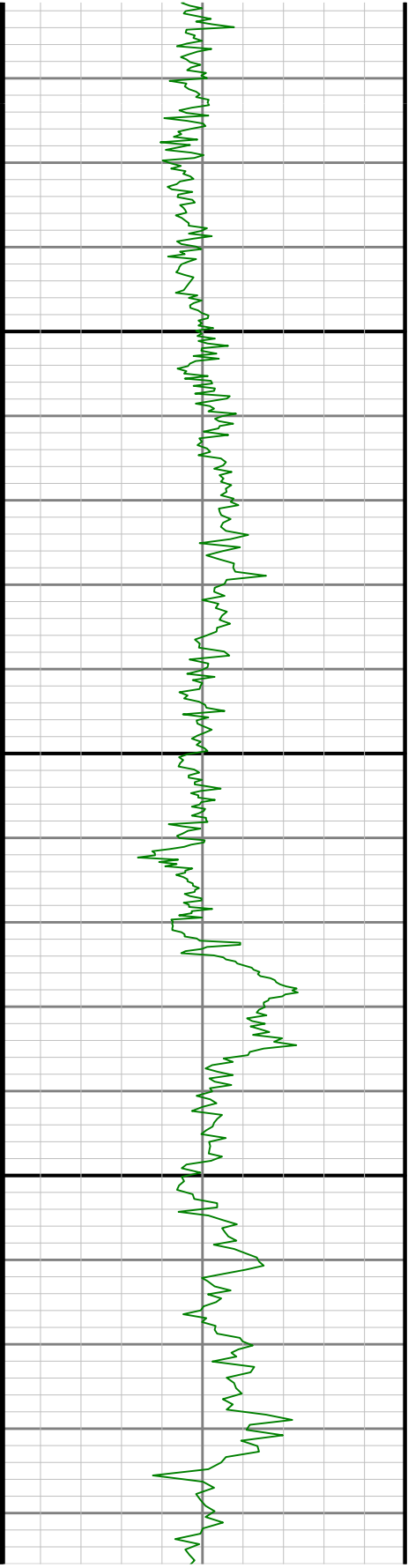




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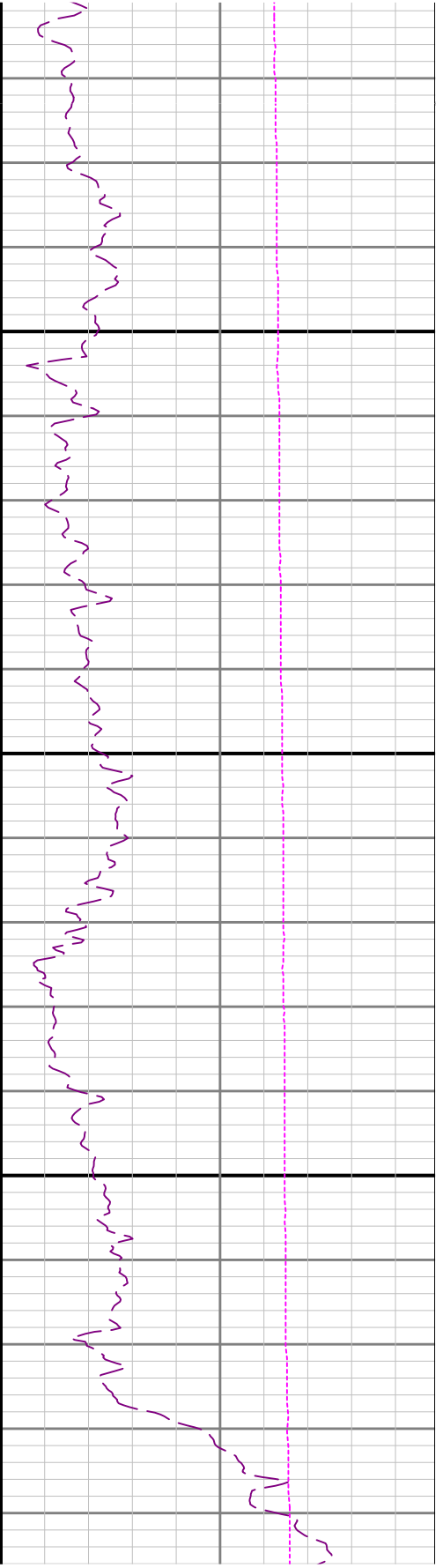
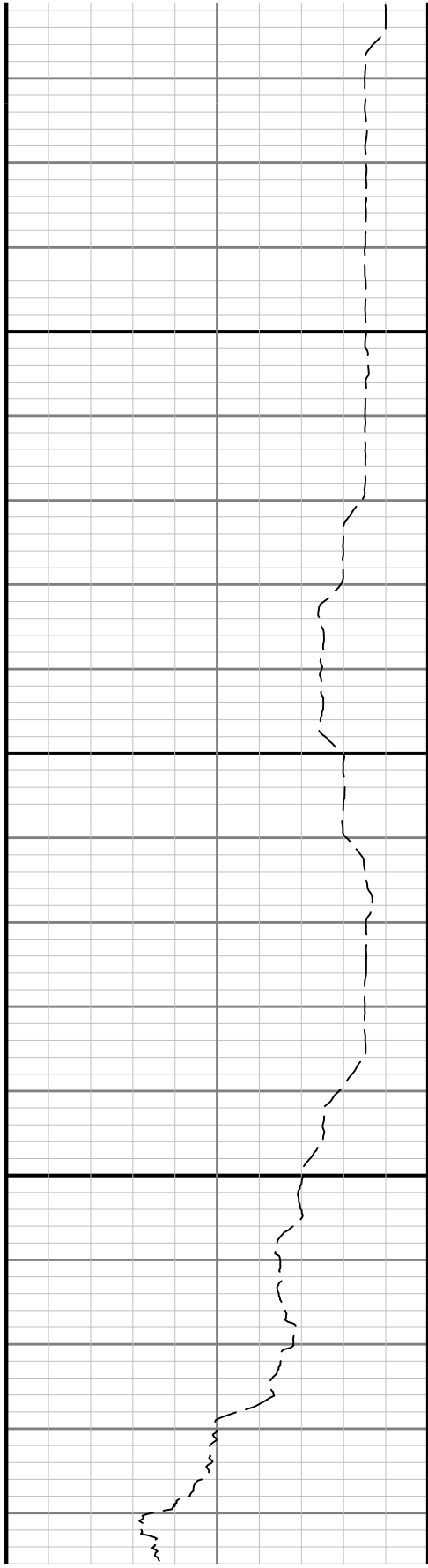
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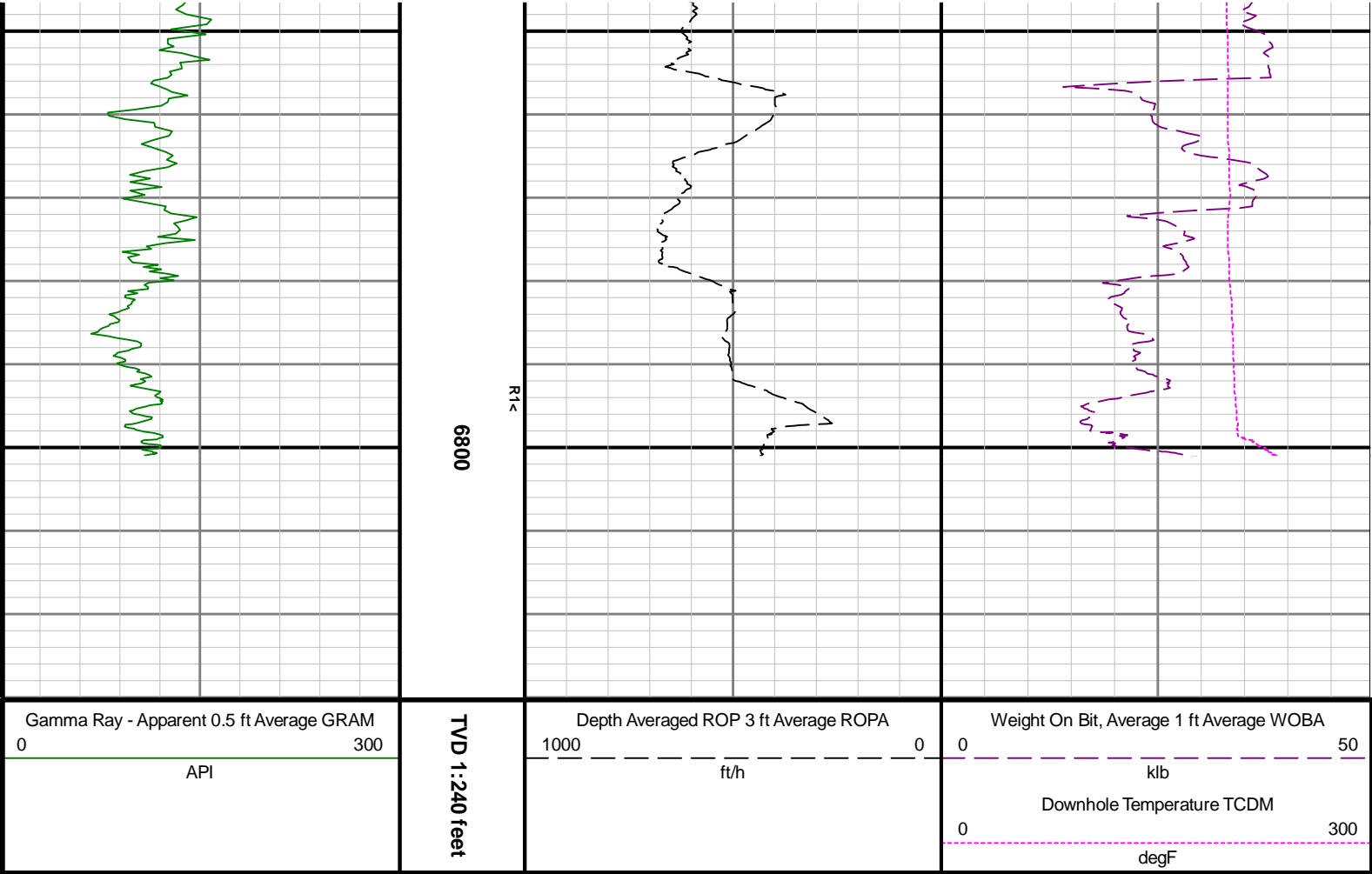




6700

0069





Directional Survey Summary					
Latitude:	040° 12' 21.600" N		Longitude:	104° 32' 55.932" 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)	2.97				
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)	52060	
Local Magnetic Dip Angle: (deg)	66.67		Local Gravity Field: (m/s2)	9.801	

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	-4850.00	0.00	0.00	0.00	0.00	0.00
	85.00	0.22	59.59	N/A	0.08	0.14	85.00	-4765.00	0.09	85.00	0.26	0.26	70.11
	179.00	0.50	62.82	N/A	0.36	0.66	179.00	-4671.00	0.40	94.00	0.30	0.30	3.44
	270.00	0.20	33.89	N/A	0.67	1.10	270.00	-4580.00	0.73	91.00	0.37	-0.33	-31.79
	365.00	0.17	169.76	N/A	0.67	1.22	365.00	-4485.00	0.74	95.00	0.36	-0.03	143.02
	460.00	0.22	50.16	N/A	0.65	1.39	460.00	-4390.00	0.72	95.00	0.36	0.05	-125.89
	554.00	0.10	269.15	N/A	0.77	1.44	554.00	-4296.00	0.84	94.00	0.32	-0.13	-150.01
	649.00	0.26	259.98	N/A	0.73	1.15	648.99	-4201.01	0.79	95.00	0.17	0.17	-9.65
	743.00	0.23	327.19	N/A	0.85	0.83	742.99	-4107.01	0.89	94.00	0.29	-0.03	71.50
	838.00	0.14	30.71	N/A	1.11	0.79	837.99	-4012.01	1.15	95.00	0.22	-0.09	66.86
	933.00	0.25	157.98	N/A	1.02	0.93	932.99	-3917.01	1.06	95.00	0.37	0.12	133.97
	1027.00	0.18	129.27	N/A	0.73	1.12	1026.99	-3823.01	0.79	94.00	0.13	-0.07	-30.54

		1122.00	0.13	223.67	N/A	0.56	1.16	1121.99	-3728.01	0.62	95.00	0.24	-0.05	99.37
		1199.00	0.20	238.44	N/A	0.43	0.99	1198.99	-3661.01	0.48	77.00	0.11	0.09	19.18
		1311.00	0.38	215.46	N/A	0.02	0.60	1310.99	-3639.01	0.05	112.00	0.19	0.16	-20.52
		1406.00	0.22	240.42	N/A	-0.32	0.26	1405.99	-3444.01	-0.31	95.00	0.21	-0.17	26.27
		1501.00	0.35	290.02	N/A	-0.32	-0.17	1500.99	-3349.01	-0.32	95.00	0.28	0.14	52.21
		1595.00	0.09	194.65	N/A	-0.29	-0.46	1594.99	-3255.01	-0.31	94.00	0.39	-0.28	-101.46
		1690.00	0.19	265.31	N/A	-0.37	-0.63	1689.99	-3160.01	-0.41	95.00	0.19	0.11	74.38
		1785.00	0.42	202.67	N/A	-0.71	-0.92	1784.99	-3065.01	-0.75	95.00	0.39	0.24	-65.94
		1880.00	0.53	182.27	N/A	-1.47	-1.08	1879.98	-2970.02	-1.52	95.00	0.21	0.12	-21.47
Ti-In		1959.00	1.42	160.90	N/A	-2.76	-0.77	1958.97	-2891.03	-2.79	79.00	1.20	1.13	-27.05
		1993.00	1.01	184.86	104.1	-3.45	-0.66	1992.96	-2857.04	-3.48	34.00	1.90	-1.21	70.47
		2088.00	0.07	195.33	106.8	-4.34	-0.74	2087.96	-2762.04	-4.38	95.00	0.99	-0.99	11.02
		2183.00	0.07	35.37	106.8	-4.35	-0.73	2182.96	-2667.04	-4.39	95.00	0.15	0.00	-168.38
		2277.00	0.18	327.11	106.8	-4.18	-0.77	2276.96	-2573.04	-4.22	94.00	0.18	0.12	-72.62
		2466.00	2.10	143.96	112.2	-6.73	1.10	2465.92	-2384.08	-6.67	189.00	1.21	1.02	93.57
		2561.00	5.14	142.54	114.9	-11.52	4.72	2560.72	-2289.28	-11.26	95.00	3.20	3.20	-1.49
		2656.00	6.47	142.90	117.6	-19.17	10.53	2655.23	-2194.77	-18.60	95.00	1.40	1.40	0.38
		2751.00	8.47	142.57	120.3	-28.99	18.02	2749.42	-2100.58	-28.02	95.00	2.11	2.11	-0.35
		2846.00	11.12	142.08	120.3	-41.78	27.90	2843.03	-2006.97	-40.28	95.00	2.79	2.79	-0.52
		2940.00	13.39	146.68	123.0	-58.03	39.45	2934.88	-1915.12	-55.90	94.00	2.63	2.41	4.89
		3035.00	15.16	151.38	123.0	-78.12	51.44	3026.95	-1823.05	-75.35	95.00	2.23	1.86	4.95
		3130.00	15.41	155.92	125.7	-100.55	62.54	3118.59	-1731.41	-97.18	95.00	1.29	0.26	4.78
		3224.00	14.77	157.93	125.7	-123.06	72.14	3209.35	-1640.65	-119.16	94.00	0.88	-0.68	2.14
		3319.00	15.39	161.92	128.4	-146.27	80.61	3301.08	-1548.92	-141.89	95.00	1.27	0.65	4.20
		3414.00	15.71	164.41	128.4	-170.64	87.97	3392.60	-1457.40	-165.85	95.00	0.78	0.34	2.62
		3508.00	18.70	161.89	133.8	-197.23	96.08	3482.39	-1367.61	-191.98	94.00	3.28	3.18	-2.68
		3603.00	21.81	159.52	133.8	-228.24	106.99	3571.50	-1278.50	-222.39	95.00	3.39	3.27	-2.49
		3698.00	23.97	160.10	136.5	-262.92	119.74	3659.02	-1190.98	-256.37	95.00	2.29	2.27	0.61
		3792.00	23.46	161.99	136.5	-298.67	132.02	3745.08	-1104.92	-291.43	94.00	0.97	-0.54	2.01
		3887.00	25.57	166.21	139.2	-336.57	142.76	3831.52	-1018.48	-328.72	95.00	2.88	2.22	4.44
		3981.00	26.05	164.40	139.2	-376.15	153.14	3916.14	-933.86	-367.71	94.00	0.98	0.51	-1.93
		4076.00	25.79	161.03	141.9	-415.79	165.47	4001.59	-848.41	-406.66	95.00	1.57	-0.27	-3.55
		4171.00	25.67	159.19	141.9	-454.57	179.50	4087.17	-762.83	-444.66	95.00	0.85	-0.13	-1.94
		4266.00	24.24	161.84	144.6	-492.34	192.89	4173.30	-676.70	-481.68	95.00	1.91	-1.51	2.79
		4361.00	26.01	162.32	144.6	-530.72	205.29	4259.31	-590.69	-519.37	95.00	1.88	1.86	0.51
		4455.00	26.03	160.46	144.6	-569.79	218.45	4343.78	-506.22	-557.71	94.00	0.87	0.02	-1.98
		4550.00	26.17	156.63	144.6	-608.67	233.74	4429.10	-420.90	-595.74	95.00	1.78	0.15	-4.03
		4645.00	26.12	153.93	147.3	-646.69	251.24	4514.39	-335.61	-632.80	95.00	1.25	-0.05	-2.84
		4739.00	26.07	150.20	150.0	-683.20	270.60	4598.81	-251.19	-668.26	94.00	1.75	-0.05	-3.97
		4834.00	25.84	147.98	150.0	-718.87	291.95	4684.23	-165.77	-702.78	95.00	1.05	-0.24	-2.34
		4928.00	26.08	145.62	152.7	-753.29	314.48	4768.75	-81.25	-735.99	94.00	1.13	0.26	-2.51
		5023.00	26.09	144.68	155.4	-787.57	338.35	4854.07	4.07	-768.98	95.00	0.44	0.01	-0.99
		5118.00	26.00	144.23	155.4	-821.51	362.60	4939.42	89.42	-801.62	95.00	0.23	-0.09	-0.47
		5213.00	26.08	144.82	158.1	-855.47	386.80	5024.78	174.78	-834.28	95.00	0.29	0.08	0.62
		5308.00	26.04	145.54	155.4	-889.73	410.63	5110.12	260.12	-867.26	95.00	0.34	-0.04	0.76
		5403.00	25.96	148.31	158.1	-924.62	433.35	5195.51	345.51	-900.93	95.00	1.28	-0.08	2.92
		5497.00	25.74	152.10	160.8	-960.17	453.71	5280.11	430.11	-935.37	94.00	1.77	-0.23	4.03
		5592.00	25.90	158.16	160.8	-997.67	471.09	5365.64	515.64	-971.92	95.00	2.78	0.17	6.38
		5687.00	23.50	162.69	160.8	-1035.02	484.44	5451.95	601.95	-1008.53	95.00	3.22	-2.53	4.77
		5781.00	24.98	166.23	163.5	-1072.19	494.75	5537.67	687.67	-1045.12	94.00	2.21	1.57	3.77
		5876.00	25.92	163.77	166.2	-1111.61	505.32	5623.45	773.45	-1083.94	95.00	1.49	0.99	-2.59
		5971.00	26.03	159.59	168.9	-1151.09	518.40	5708.86	858.86	-1122.68	95.00	1.93	0.12	-4.40
		6065.00	25.91	156.60	171.6	-1189.27	533.75	5793.37	943.37	-1160.01	94.00	1.40	-0.13	-3.18
		6160.00	26.05	153.74	174.3	-1227.02	551.22	5878.78	1028.78	-1196.82	95.00	1.33	0.15	-3.01
		6255.00	18.76	148.96	174.3	-1258.87	568.35	5966.55	1116.55	-1227.73	95.00	7.90	-7.67	-5.03
		6349.00	10.49	145.46	177.0	-1278.90	581.02	6057.43	1207.43	-1247.08	94.00	8.84	-8.80	-3.72
		6444.00	3.00	79.13	177.0	-1285.57	588.38	6151.79	1301.79	-1253.36	95.00	10.19	-7.88	-69.82
		6539.00	9.84	358.68	179.7	-1276.97	590.64	6246.26	1396.26	-1244.65	95.00	10.31	7.20	-84.68
		6633.00	15.91	345.30	177.0	-1256.45	587.18	6337.87	1487.87	-1224.34	94.00	7.15	6.46	-14.23
		6728.00	22.38	332.83	179.7	-1227.72	575.60	6427.61	1577.61	-1196.25	95.00	8.02	6.81	-13.13
		6823.00	32.71	333.48	182.5	-1188.56	555.83	6511.73	1661.73	-1158.16	95.00	10.88	10.87	0.68
		6917.00	41.48	343.09	187.9	-1135.90	535.38	6586.70	1736.70	-1106.64	94.00	11.16	9.33	10.22

	7012.00	49.63	355.88	190.6	-1069.45	523.58	6653.30	1803.30	-1040.89	95.00	12.85	8.58	13.46
	7107.00	59.61	0.13	196.0	-992.16	521.07	6708.25	1858.25	-963.83	95.00	11.12	10.51	4.47
	7201.00	69.38	359.29	196.0	-907.43	520.61	6748.68	1898.68	-879.24	94.00	10.42	10.39	-0.89
	7296.00	78.14	358.63	198.7	-816.33	518.95	6775.22	1925.22	-788.34	95.00	9.25	9.22	-0.69
	7391.00	81.82	356.97	201.4	-722.86	515.35	6791.75	1941.75	-695.19	95.00	4.24	3.87	-1.75
	7486.00	89.85	355.74	204.1	-628.38	509.32	6798.64	1948.64	-601.15	95.00	8.55	8.45	-1.29
	7581.00	89.97	355.10	206.8	-533.69	501.74	6798.79	1948.79	-506.98	95.00	0.69	0.13	-0.67
	7675.00	89.97	357.29	209.5	-439.90	495.50	6798.84	1948.84	-413.64	94.00	2.33	-0.00	2.33
	7770.00	89.85	0.35	209.5	-344.93	493.55	6798.99	1948.99	-318.90	95.00	3.22	-0.13	3.22
	7865.00	90.00	358.99	212.2	-249.94	493.00	6799.12	1949.12	-224.06	95.00	1.44	0.16	-1.43
	7959.00	90.15	359.42	212.2	-155.95	491.69	6798.99	1948.99	-130.26	94.00	0.48	0.16	0.46
	8054.00	89.94	2.43	214.9	-60.97	493.23	6798.92	1948.92	-35.33	95.00	3.18	-0.22	3.17
	8149.00	89.75	3.49	214.9	33.90	498.13	6799.17	1949.17	59.67	95.00	1.13	-0.20	1.12
	8244.00	90.18	7.04	217.6	128.49	506.85	6799.23	1949.23	154.57	95.00	3.76	0.45	3.74
	8339.00	89.88	9.66	220.3	222.47	520.64	6799.18	1949.18	249.15	95.00	2.78	-0.32	2.76
	8433.00	89.82	6.68	214.9	315.50	534.00	6799.43	1949.43	342.75	94.00	3.17	-0.06	-3.17
	8528.00	89.91	0.29	217.6	410.28	539.77	6799.65	1949.65	437.70	95.00	6.73	0.09	-6.73
	8623.00	89.88	355.35	220.3	505.18	536.16	6799.83	1949.83	532.28	95.00	5.20	-0.03	-5.20
	8718.00	90.00	355.95	220.3	599.91	528.95	6799.93	1949.93	626.51	95.00	0.64	0.13	0.63
	8813.00	89.94	357.33	220.3	694.74	523.39	6799.98	1949.98	720.93	95.00	1.45	-0.06	1.45
	8907.00	90.03	3.47	223.0	788.69	524.04	6800.00	1950.00	814.79	94.00	6.53	0.10	6.53
	9002.00	90.09	5.91	223.0	883.37	531.81	6799.90	1949.90	909.74	95.00	2.57	0.06	2.57
	9097.00	89.79	1.88	223.0	978.13	538.26	6800.00	1950.00	1004.71	95.00	4.25	-0.32	-4.24
	9192.00	89.88	358.55	223.0	1073.12	538.62	6800.28	1950.28	1099.58	95.00	3.51	0.09	-3.51
	9287.00	90.00	356.37	225.7	1168.02	534.41	6800.37	1950.37	1194.14	95.00	2.30	0.13	-2.29
	9381.00	89.88	353.83	225.7	1261.67	526.38	6800.47	1950.47	1287.24	94.00	2.71	-0.13	-2.70
	9476.00	89.88	355.66	228.4	1356.26	517.68	6800.67	1950.67	1381.26	95.00	1.93	0.00	1.93
	9571.00	90.09	357.82	228.4	1451.10	512.28	6800.70	1950.70	1475.70	95.00	2.28	0.22	2.27
	9666.00	89.79	358.41	228.4	1546.05	509.15	6800.80	1950.80	1570.35	95.00	0.70	-0.32	0.62
	9760.00	89.94	358.10	231.1	1640.01	506.29	6801.02	1951.02	1664.04	94.00	0.37	0.16	-0.33
	9855.00	89.94	356.49	233.8	1734.90	501.81	6801.12	1951.12	1758.57	95.00	1.69	0.00	-1.69
	9950.00	90.16	355.76	233.8	1829.68	495.39	6801.03	1951.03	1852.89	95.00	0.80	0.23	-0.77
	10045.00	90.19	357.01	236.5	1924.49	489.40	6800.74	1950.74	1947.26	95.00	1.32	0.03	1.32
	10139.00	90.12	0.54	236.5	2018.45	487.39	6800.49	1950.49	2040.99	94.00	3.76	-0.07	3.76
	10234.00	90.06	5.00	236.5	2113.32	491.98	6800.34	1950.34	2135.97	95.00	4.70	-0.06	4.69
	10329.00	89.66	3.35	225.7	2208.06	498.89	6800.57	1950.57	2230.94	95.00	1.79	-0.42	-1.74
	10424.00	90.40	0.78	228.4	2302.99	502.32	6800.52	1950.52	2325.92	95.00	2.82	0.78	-2.71
	10518.00	90.46	359.73	231.1	2396.99	502.73	6799.82	1949.82	2419.81	94.00	1.12	0.06	-1.12
	10613.00	90.56	358.33	233.8	2491.97	501.13	6798.97	1948.97	2514.58	95.00	1.48	0.11	-1.47
	10707.00	90.34	357.93	236.5	2585.91	498.06	6798.23	1948.23	2608.24	94.00	0.49	-0.23	-0.43
	10802.00	90.46	357.49	236.5	2680.83	494.26	6797.57	1947.57	2702.84	95.00	0.48	0.13	-0.46
	10897.00	90.28	359.12	239.2	2775.79	491.45	6796.96	1946.96	2797.52	95.00	1.73	-0.19	1.72
	10991.00	90.31	358.41	239.2	2869.76	489.43	6796.47	1946.47	2891.27	94.00	0.76	0.03	-0.76
	11086.00	89.88	358.73	241.9	2964.73	487.06	6796.32	1946.32	2985.99	95.00	0.56	-0.45	0.34
	11181.00	89.85	359.96	244.6	3059.72	485.97	6796.54	1946.54	3080.79	95.00	1.30	-0.03	1.29
	11275.00	89.97	0.39	247.3	3153.72	486.26	6796.69	1946.69	3174.68	94.00	0.47	0.13	0.46
	11370.00	90.00	359.55	250.0	3248.72	486.21	6796.71	1946.71	3269.55	95.00	0.88	0.03	-0.88
	11465.00	90.00	358.43	250.0	3343.71	484.53	6796.71	1946.71	3364.32	95.00	1.18	0.00	-1.18
	11559.00	90.12	359.15	250.0	3437.69	482.55	6796.61	1946.61	3458.07	94.00	0.78	0.13	0.77
	11654.00	90.16	355.68	250.0	3532.57	478.26	6796.38	1946.38	3552.61	95.00	3.65	0.04	-3.65
	11749.00	90.06	356.56	250.0	3627.36	471.84	6796.20	1946.20	3646.93	95.00	0.93	-0.11	0.93
	11844.00	90.12	359.02	250.0	3722.28	468.17	6796.05	1946.05	3741.53	95.00	2.59	0.06	2.59
	11938.00	90.06	358.56	252.7	3816.26	466.19	6795.90	1945.90	3835.28	94.00	0.49	-0.06	-0.49
	12033.00	90.03	359.60	252.7	3911.24	464.66	6795.83	1945.83	3930.06	95.00	1.10	-0.03	1.09
	12128.00	89.88	359.90	252.7	4006.24	464.25	6795.90	1945.90	4024.91	95.00	0.35	-0.16	0.32
	12222.00	90.25	359.65	252.7	4100.24	463.88	6795.80	1945.80	4118.77	94.00	0.48	0.39	-0.27
	12317.00	90.28	6.66	252.7	4195.04	469.10	6795.36	1945.36	4213.71	95.00	7.38	0.03	7.38
	12412.00	90.06	4.80	250.0	4289.56	478.59	6795.07	1945.07	4308.59	95.00	1.97	-0.23	-1.96
	12506.00	90.06	0.68	255.4	4383.43	483.08	6794.97	1944.97	4402.57	94.00	4.38	0.00	-4.38
	12601.00	89.94	357.15	255.4	4478.40	481.28	6794.97	1944.97	4497.32	95.00	3.72	-0.13	-3.72
	12696.00	89.94	357.02	255.4	4573.27	476.45	6795.07	1945.07	4591.82	95.00	0.14	0.00	-0.14
	12790.00	89.85	3.90	258.1	4667.21	477.21	6795.25	1945.25	4685.67	94.00	7.32	-0.10	7.32

	12885.00	89.91	5.11	258.1	4761.92	484.67	6795.45	1945.45	4780.63	95.00	1.28	0.06	1.27
	12980.00	89.94	1.69	260.8	4856.74	490.30	6795.57	1945.57	4875.62	95.00	3.60	0.03	-3.60
	13075.00	90.12	359.32	260.8	4951.73	491.14	6795.52	1945.52	4970.52	95.00	2.50	0.19	-2.49
	13158.00	89.82	0.67	239.2	5034.72	491.13	6795.56	1945.56	5053.41	83.00	1.67	-0.36	1.63
	13253.00	90.00	0.69	250.0	5129.72	492.26	6795.71	1945.71	5148.33	95.00	0.19	0.19	0.02
	13348.00	90.06	359.61	250.0	5224.72	492.51	6795.66	1945.66	5243.22	95.00	1.14	0.06	-1.14
	13442.00	90.06	358.74	250.0	5318.71	491.15	6795.57	1945.57	5337.01	94.00	0.93	-0.00	-0.93
	13537.00	90.18	357.47	252.7	5413.65	488.01	6795.37	1945.37	5431.67	95.00	1.34	0.13	-1.34
	13632.00	90.00	356.45	250.0	5508.52	482.97	6795.22	1945.22	5526.14	95.00	1.09	-0.19	-1.07
	13726.00	89.78	356.01	252.7	5602.31	476.79	6795.40	1945.40	5619.49	94.00	0.52	-0.23	-0.47
	13821.00	89.94	355.13	247.3	5697.03	469.46	6795.63	1945.63	5713.70	95.00	0.94	0.17	-0.93
	13916.00	90.00	353.13	252.7	5791.52	459.74	6795.68	1945.68	5807.57	95.00	2.11	0.06	-2.11
	14011.00	90.06	352.27	252.7	5885.75	447.67	6795.63	1945.63	5901.04	95.00	0.91	0.06	-0.91
	14106.00	89.78	353.81	252.7	5980.05	436.16	6795.76	1945.76	5994.62	95.00	1.65	-0.29	1.62
	14200.00	89.97	355.66	-18457.9	6073.65	427.53	6795.97	1945.97	6087.64	94.00	1.98	0.20	1.97
	14295.00	89.78	356.98	255.4	6168.45	421.44	6796.17	1946.17	6182.00	95.00	1.40	-0.20	1.39
	14390.00	89.94	1.72	252.7	6263.42	420.36	6796.41	1946.41	6276.78	95.00	4.99	0.17	4.99
	14485.00	89.75	6.08	250.0	6358.17	426.82	6796.66	1946.66	6371.75	95.00	4.59	-0.20	4.59
	14579.00	89.78	9.99	252.7	6451.23	439.95	6797.05	1947.05	6465.36	94.00	4.16	0.03	4.16
	14674.00	89.88	10.79	252.7	6544.67	457.09	6797.33	1947.33	6559.57	95.00	0.85	0.11	0.84
	14769.00	90.34	9.06	255.4	6638.25	473.46	6797.15	1947.15	6653.86	95.00	1.88	0.48	-1.82
	14864.00	90.31	6.66	258.1	6732.35	486.45	6796.61	1946.61	6748.51	95.00	2.53	-0.03	-2.53
	14958.00	90.09	5.60	258.1	6825.81	496.49	6796.28	1946.28	6842.36	94.00	1.15	-0.23	-1.13
	15053.00	90.22	2.60	258.1	6920.55	503.28	6796.02	1946.02	6937.33	95.00	3.16	0.14	-3.16
	15148.00	89.82	359.74	260.8	7015.52	505.22	6795.99	1945.99	7032.28	95.00	3.04	-0.42	-3.01
	15243.00	90.43	358.90	260.8	7110.52	504.09	6795.78	1945.78	7127.08	95.00	1.09	0.64	-0.88
	15338.00	89.94	359.68	260.8	7205.51	502.91	6795.48	1945.48	7221.89	95.00	0.97	-0.52	0.82
	15432.00	90.31	0.16	260.8	7299.51	502.78	6795.27	1945.27	7315.75	94.00	0.64	0.39	0.51
	15527.00	90.15	358.93	260.8	7394.50	502.03	6794.89	1944.89	7410.58	95.00	1.31	-0.17	-1.29
	15622.00	90.06	358.95	263.5	7489.48	500.27	6794.72	1944.72	7505.34	95.00	0.10	-0.09	0.02
	15717.00	89.97	357.52	263.5	7584.44	497.35	6794.69	1944.69	7600.02	95.00	1.51	-0.09	-1.51
	15811.00	89.66	353.67	266.2	7678.14	490.13	6795.00	1945.00	7693.22	94.00	4.11	-0.33	-4.10
	15906.00	89.97	354.77	266.2	7772.66	480.56	6795.30	1945.30	7787.11	95.00	1.20	0.33	1.16
	16001.00	89.88	357.10	266.2	7867.41	473.83	6795.43	1945.43	7881.39	95.00	2.45	-0.09	2.45
	16095.00	90.00	357.91	266.2	7961.32	469.73	6795.53	1945.53	7974.96	94.00	0.87	0.13	0.86
	16190.00	90.06	357.88	269.0	8056.26	466.24	6795.48	1945.48	8069.59	95.00	0.07	0.06	-0.03
	16285.00	89.97	358.98	269.0	8151.22	463.64	6795.45	1945.45	8164.29	95.00	1.16	-0.09	1.16
	16379.00	90.12	0.31	258.1	8245.21	463.06	6795.38	1945.38	8258.13	94.00	1.42	0.16	1.41
	16474.00	90.06	0.20	260.8	8340.21	463.48	6795.23	1945.23	8353.03	95.00	0.13	-0.06	-0.12
	16569.00	90.09	1.73	263.5	8435.20	465.08	6795.10	1945.10	8447.96	95.00	1.61	0.03	1.61
	16663.00	89.97	0.37	263.5	8529.18	466.80	6795.05	1945.05	8541.91	94.00	1.45	-0.13	-1.45
	16758.00	90.12	359.24	263.5	8624.18	466.48	6794.98	1944.98	8636.76	95.00	1.20	0.16	-1.19
	16852.00	89.78	357.88	263.5	8718.14	464.12	6795.06	1945.06	8730.48	94.00	1.49	-0.36	-1.45
	16947.00	90.12	358.52	266.2	8813.10	461.14	6795.14	1945.14	8825.15	95.00	0.76	0.36	0.67
	17042.00	90.25	358.73	266.2	8908.07	458.86	6794.84	1944.84	8919.88	95.00	0.26	0.14	0.22
	17136.00	89.78	0.01	241.9	9002.06	457.82	6794.81	1944.81	9013.69	94.00	1.45	-0.50	1.36
	17231.00	90.00	1.23	266.2	9097.05	458.85	6795.00	1945.00	9108.61	95.00	1.30	0.23	1.28
	17326.00	89.91	3.09	266.2	9191.98	462.43	6795.07	1945.07	9203.60	95.00	1.96	-0.09	1.96
	17420.00	90.28	2.40	266.2	9285.87	466.93	6794.91	1944.91	9297.59	94.00	0.83	0.39	-0.73
	17515.00	90.31	2.88	266.2	9380.77	471.31	6794.43	1944.43	9392.59	95.00	0.51	0.03	0.51
	17610.00	90.00	4.06	266.2	9475.59	477.06	6794.17	1944.17	9487.58	95.00	1.28	-0.33	1.24
Projection	17660.00	90.00	4.06	N/A	9525.47	480.60	6794.17	1944.17	9537.58	50.00	0.00	0.00	0.08