

LWD MEMORY LOG



Gamma Ray

Scale: Company: Noble Energy

1:240 TVD

Well: Wells Ranch AF07-666

Depth Reference:

Field: Weld County(Noble NAD 83 Grid)

Driller's Depth

County: Weld State: Colorado

Status: Surface Location:

Other Services:

Final Print

Latitude: 040° 24' 54.972" N

Directional

API No: 05-123-44240-00

Longitude: 104° 20' 18.096" W

Job ID: 8645477

UTM: N/A

SEC: 8

TWN: 5N

RGE: 62W

Permanent Datum (P.D.): Ground Level

Elevation: 4705.00 ft

N/A

Log Measured From: Rig Floor

Above P.D.

30.00 ft

GL:

4705.00 ft

Dates Interval Logged

Magnetic Field Reference

Date From: 2017-07-21

Top: (ft) 1946.00

Azi Reference North: Grid

Dip Angle: (deg)

67.14

Date To: 2017-07-24

Bottom: (ft) 6469.00

Total Magnetic Field Strength: (nT)

52284

Spud Date: 2017-07-21

Mag to Reference North Correction: (deg)

7.13E

Borehole Record

Casing Record

Hole Size (in) From (ft) To (ft)

Size (in)

Weight (lb/ft)

13.500 0.00 1946.00

9.625

36.00

1936.00

8.500 1946.00 16540.00

Mud Record

Deviation Record

Type From (ft) To (ft)

Hole Size (in)

Interval (ft)

Inc | Az (Start)

Inc | Az (End)

Oil Based Mud 1946.00 16540.00

8.500

14594.00

0.88 | 251.42

89.82 | 268.94

Acquisition System

Software Version

Other

Baker Hughes Cadence

RT4.1

Rig:

H&P 517

Contractor:

Helmerich & Payne Drilling Co

PlotStudio

4.1.7763.3

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	Bottom	From	To	Start Logging	End Logging	
						(ft)	(ft)	(ft)	(ft)			
1	1	8.500	PDC	3.00	AutoTrak Curve	1933.10	16527.10	1946.00	16540.00	2017-07-22 04:05	2017-07-24 13:23	52.42

Crew

Name		Arrive Wellsite	Depart Wellsite	Name		Arrive Wellsite	Depart Wellsite	Name		Arrive Wellsite	Depart Wellsite
Adam Schlenz		2017-07-21	2017-07-25	Alexis Bejarano		2017-07-21	2017-07-24	Emi Iyalla		2017-07-21	2017-07-25

Mud Properties Record

Date / Time		Run No.	Measured Depth (ft)	Mud Type	Density (ppg)	Viscosity (cP)	pH	Fluid Loss (cm3)	Oil / Water	Source	Total Chlorides (ppm)	K+ (%)
2017-07-22 03:00		1	1946.00	Oil Based Mud	9.3	9	N/A	16.0	84/16	Active Pit	21500	0.00
2017-07-22 13:00		1	4520.00	Oil Based Mud	9.1	12	N/A	15.2	82/18	Active Pit	20000	0.00
2017-07-23 03:00		1	7684.00	Oil Based Mud	9.1	9	N/A	16.4	85/15	Active Pit	25000	0.00
2017-07-23 13:00		1	10228.00	Oil Based Mud	9.2	9	N/A	16.0	84/16	Active Pit	21000	0.00
2017-07-24 03:00		1	13817.00	Oil Based Mud	9.4	11	N/A	18.0	86/14	Active Pit	20000	0.00
2017-07-24 14:00		1	16540.00	Oil Based Mud	9.4	10	N/A	21.2	86/14	Active Pit	21000	0.00

Equipment and Service Data

Run No.	Tool	Serial Number	Measurement	Sensor Offset (ft)	Bit Offset (ft)	Max O.D. (in)	Min I.D. (in)
1	ATC_SU	14178991	Near Bit VSS	5.93	6.73	7.000	4.330
1	ATC_SU	14178991	Near Bit Inclination	5.93	6.73	7.000	4.330
1	ATC_MWD	12211066	Gamma (single)	2.76	12.90	7.000	3.250
1	ATC_MWD	12211066	Directional (mag)	12.28	22.42	7.000	3.250

Service and Tool Mnemonics

Mnemonic	Name	Description
ATC_SU	ATC_SU	Auto Trak Curve Steering Unit
ATC_MWD	ATC_MWD	Auto Trak Curve MWD
ATC_LCPM	ATC_LCPM	Auto Trak Curve LCPM

Comments


- 1 Depth measurements were obtained from a depth control system not supplied or operated by Baker Hughes. Due to the lack of control by Baker Hughes, depth calibrations and measurements could not be independently verified.
- 2 Baker Hughes LWD run 1 utilized a 6.75 inch NaviGamma (Directional and Gamma Ray) services behind a 8.5 inch bit and rotary steerable assembly from 1946 to 16540 feet MD (1946 to 6469 feet TVD).

Remarks

Number	Measured Depth (ft)	Hole Section (in)	Run No.	Remark
1	1946.00	8.500	1	Gamma Ray logging operations began at 1946 feet MD (1946 feet TVD) per customer request.

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	OnTrak - Gamma Ray - Apparent - Memory 0.5 ft Average	API
TCDM	Downhole Temperature	degF



Company

Well

Interval

Created

Noble Energy

Wells Ranch AF07-666

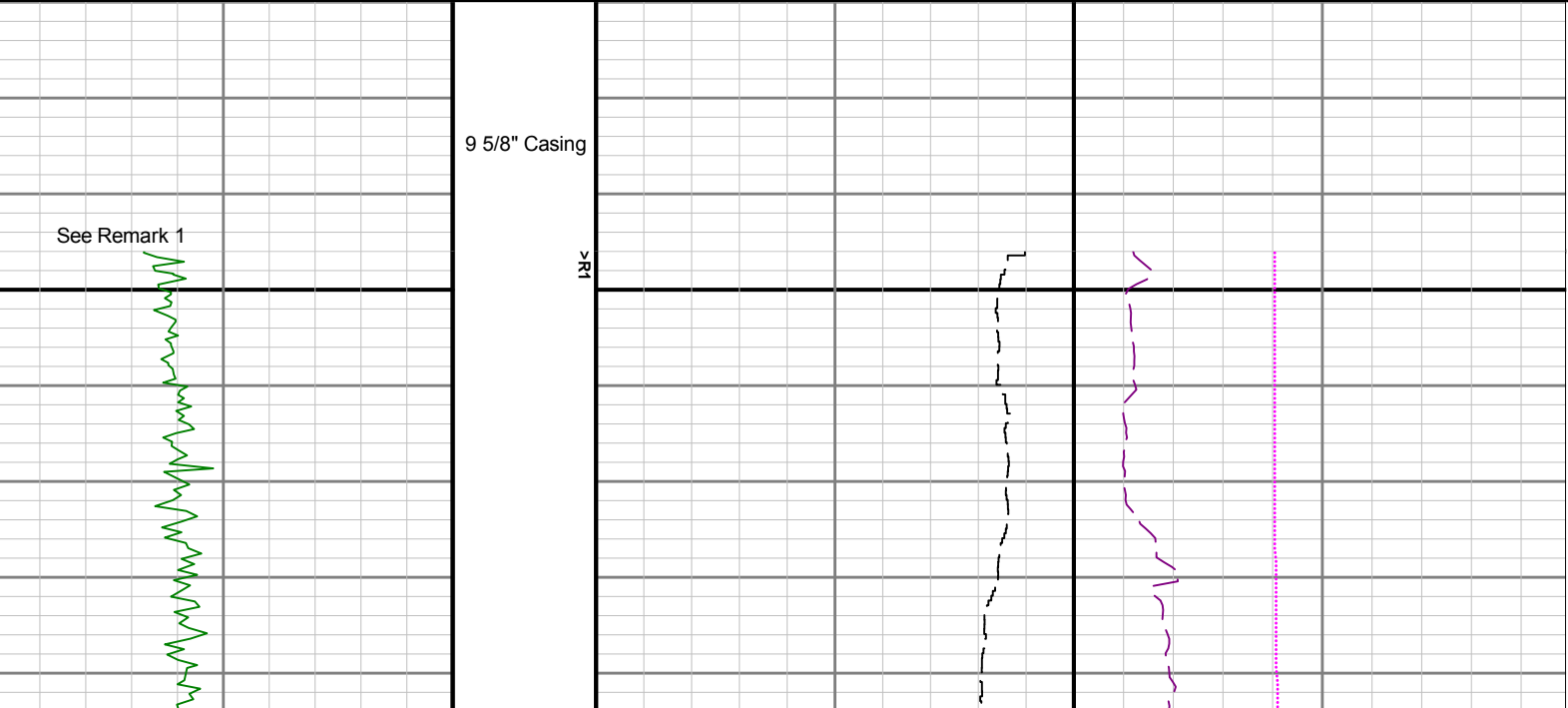
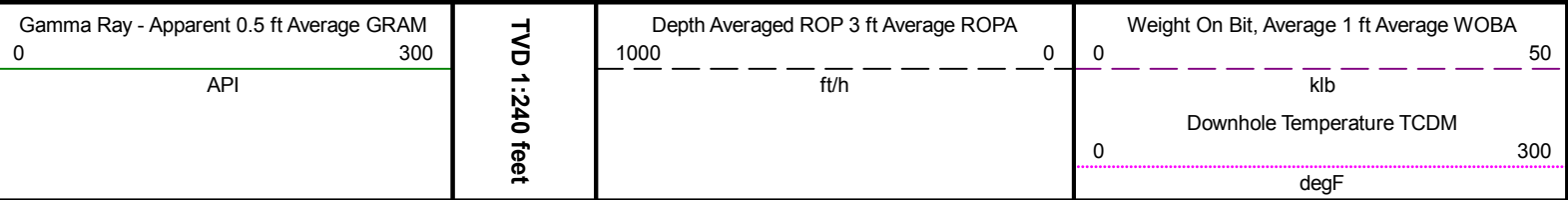
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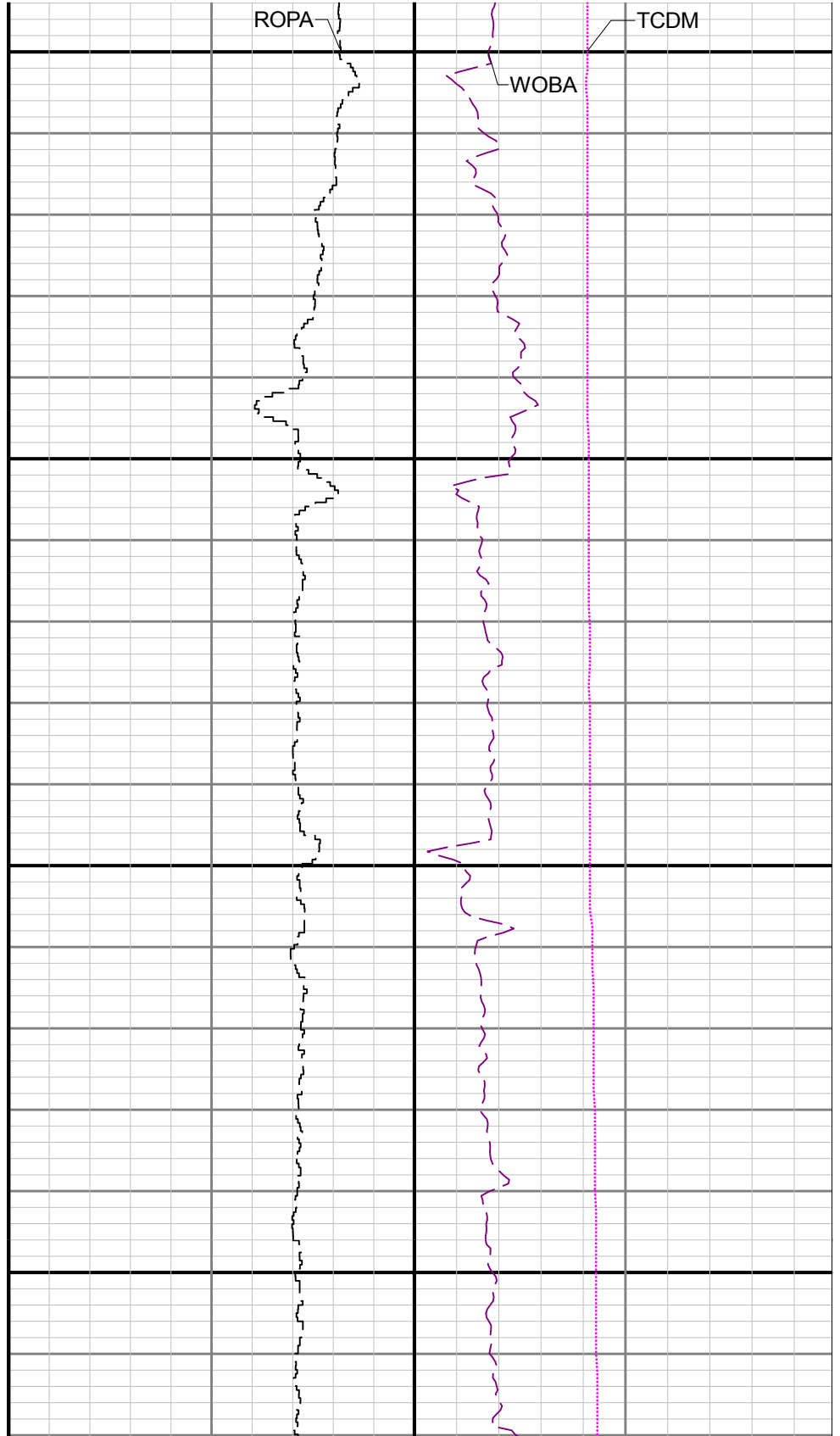
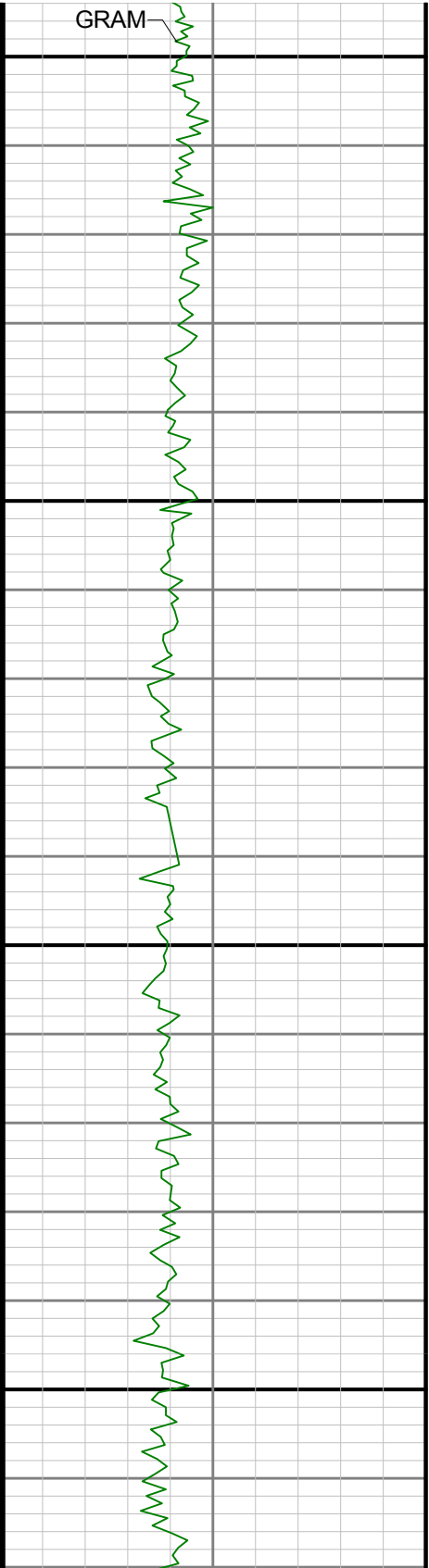
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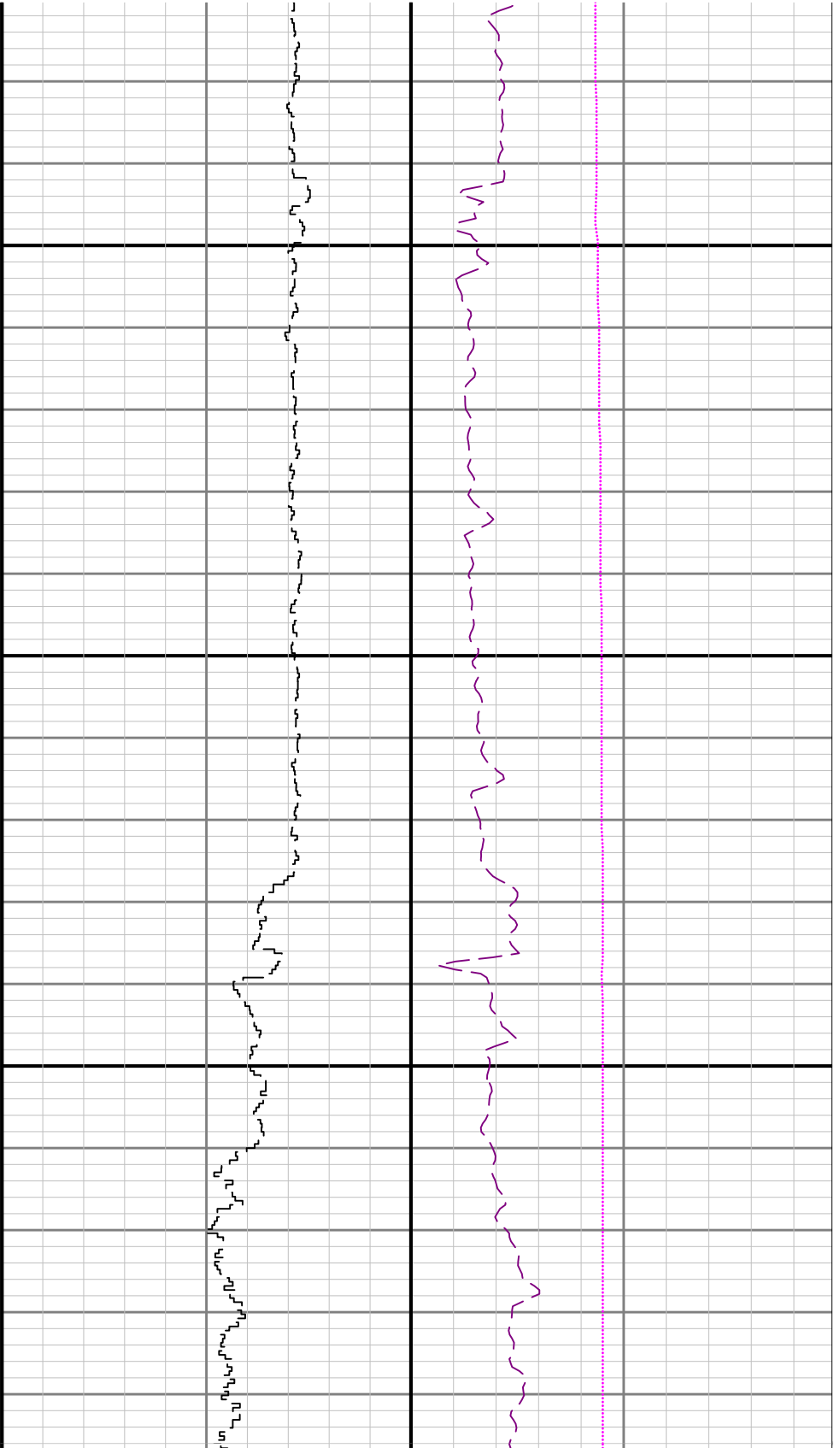
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Top: 1946.00

Bottom: 6469.00

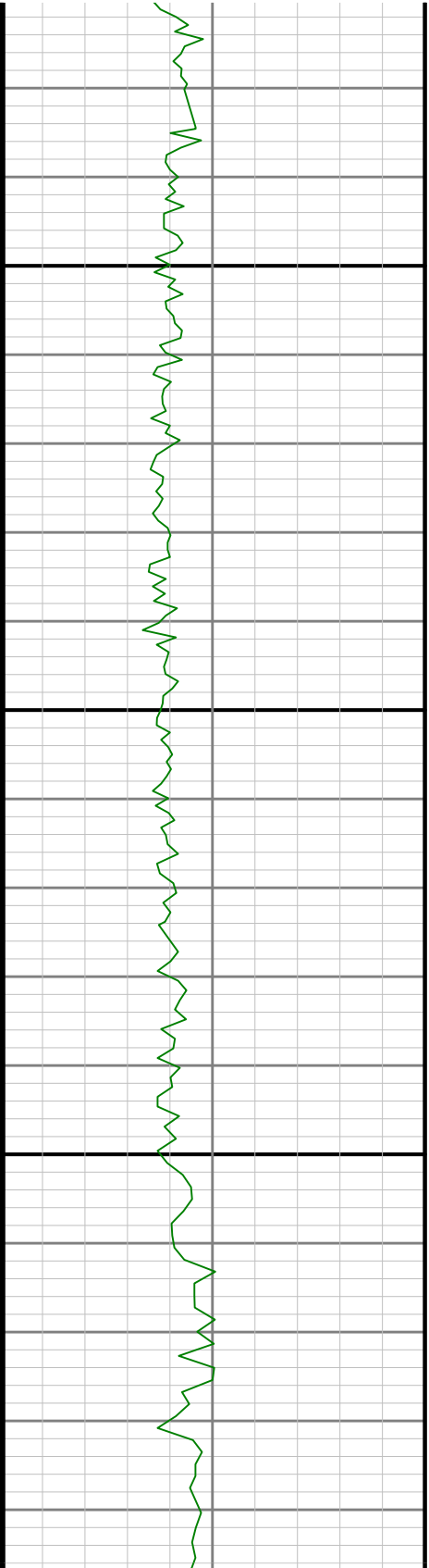


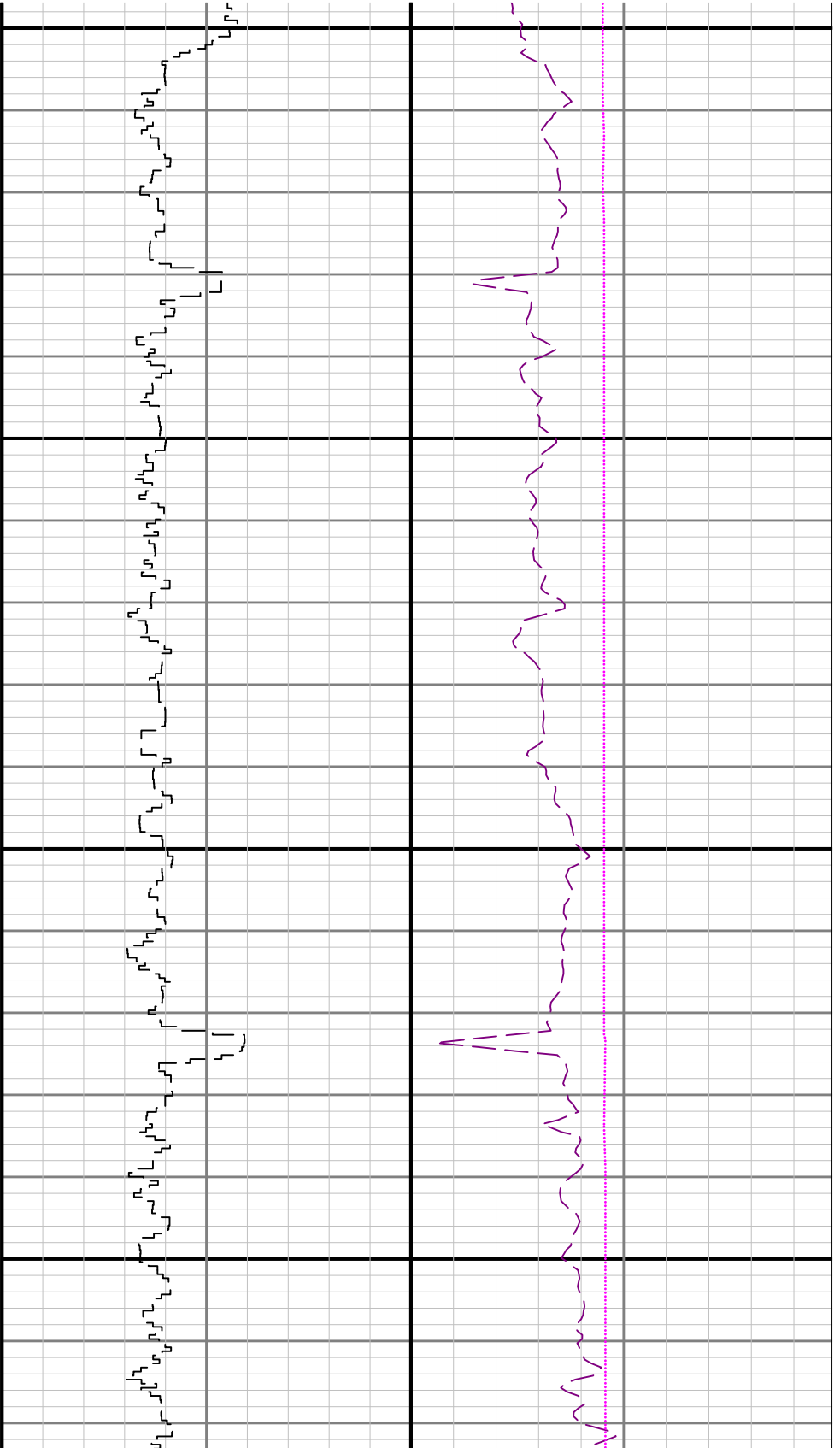


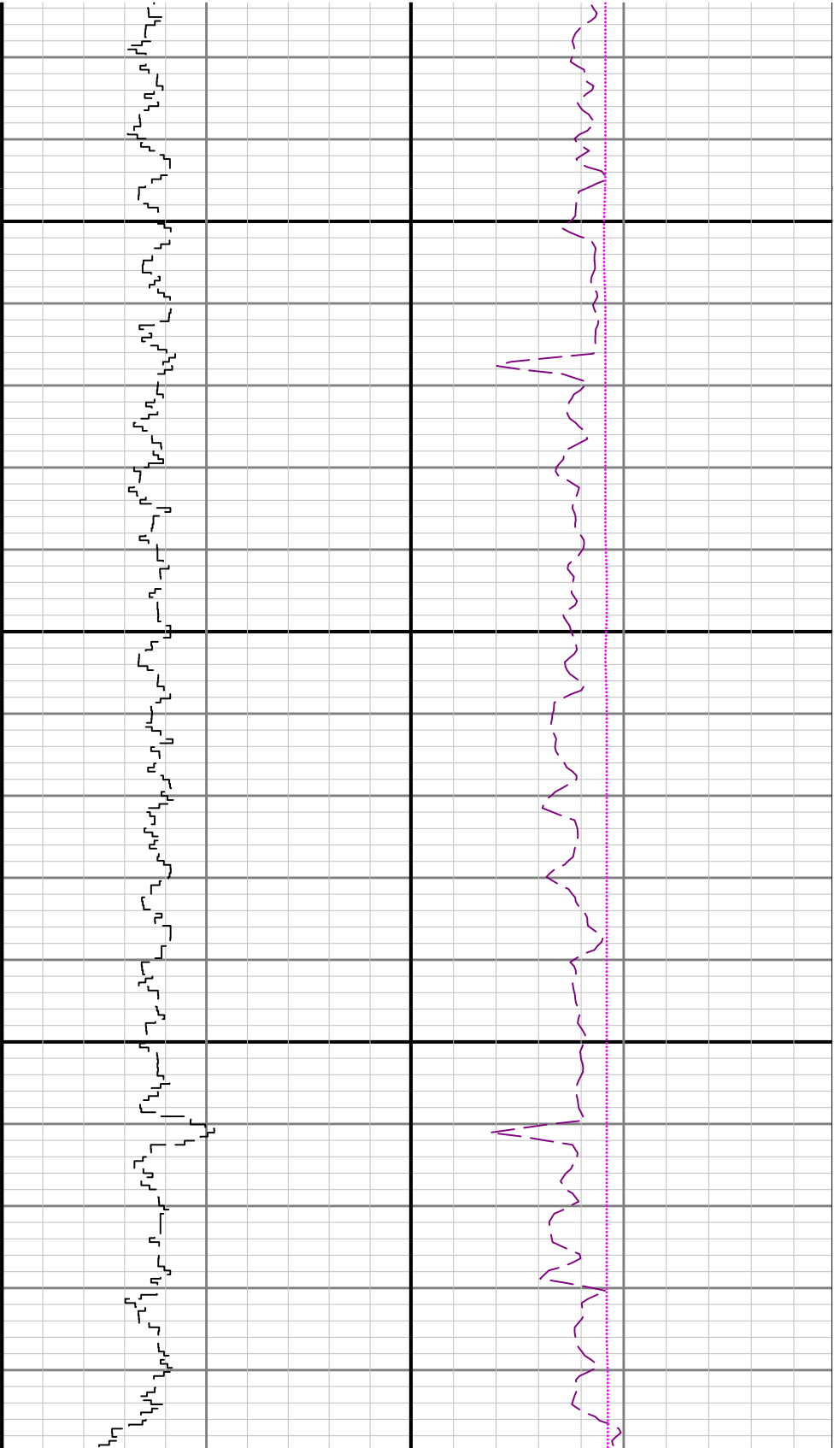


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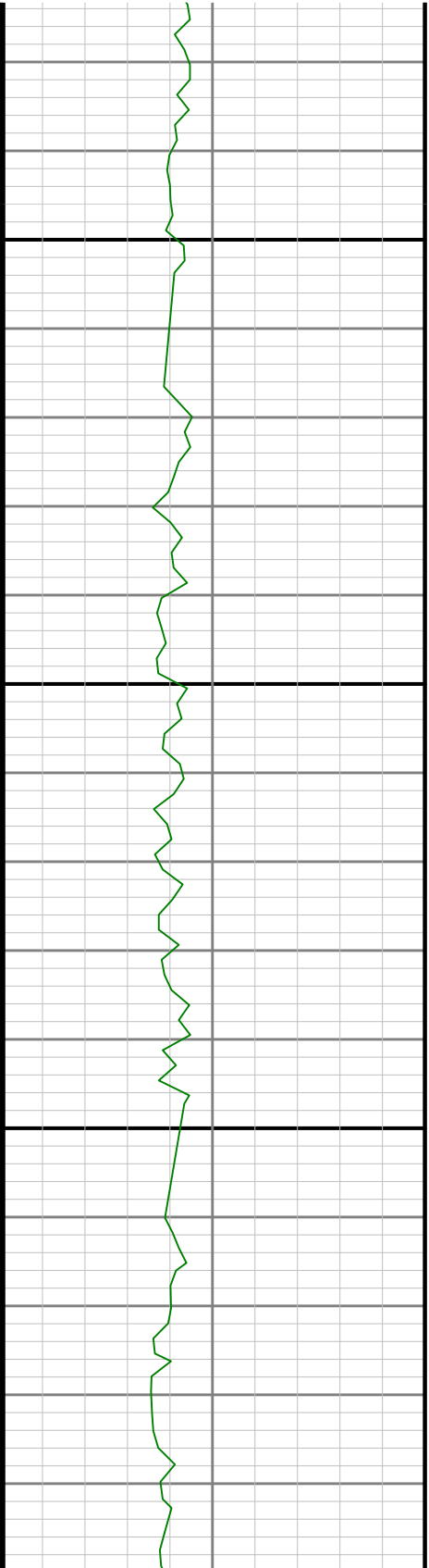


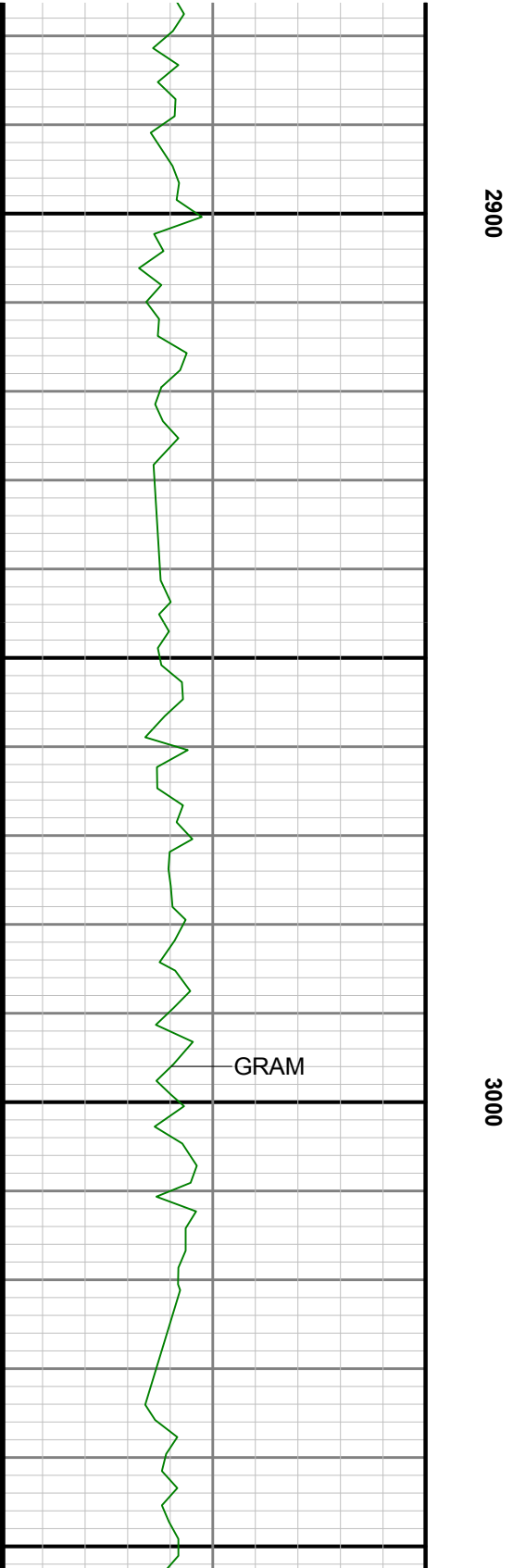
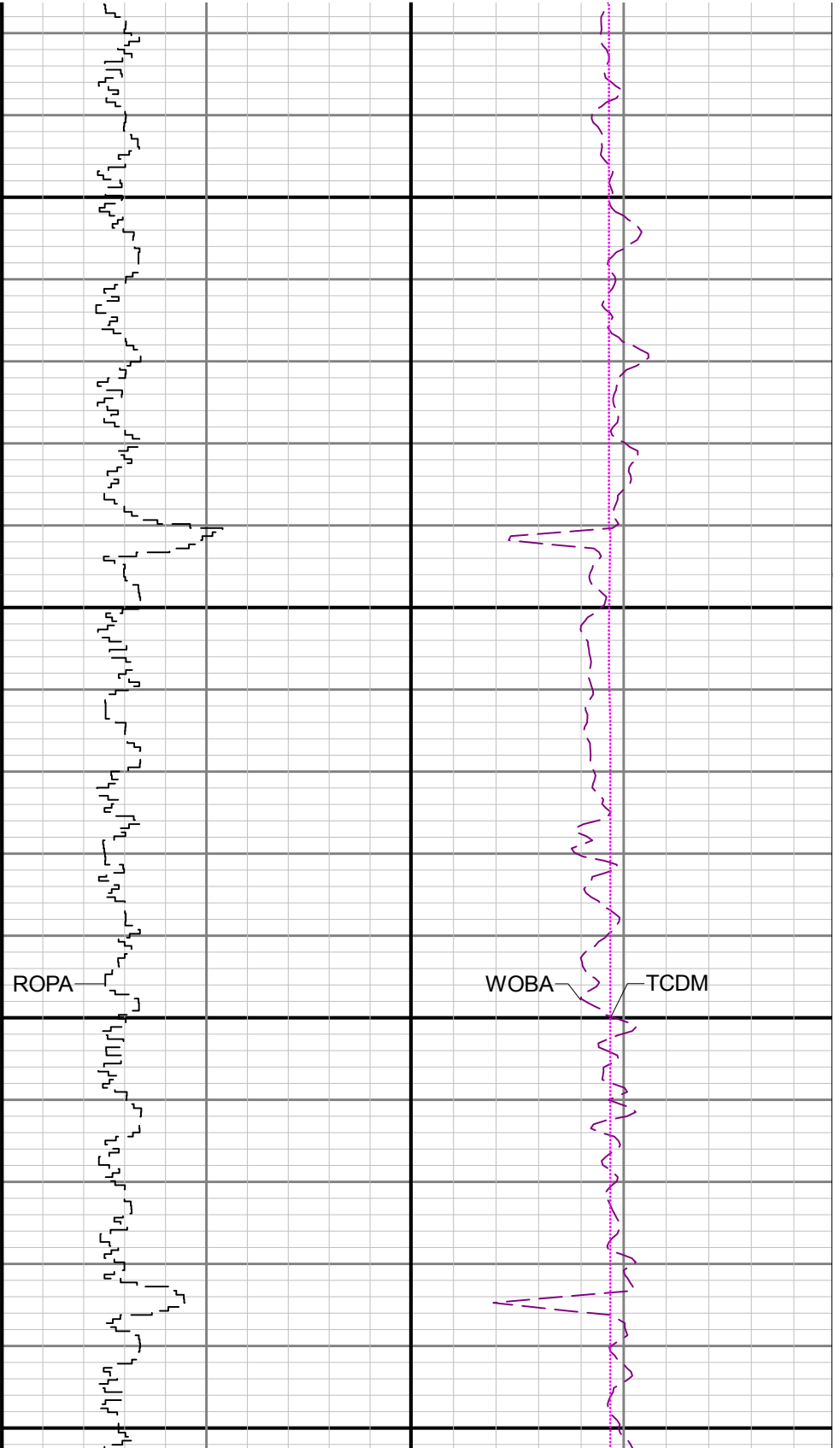


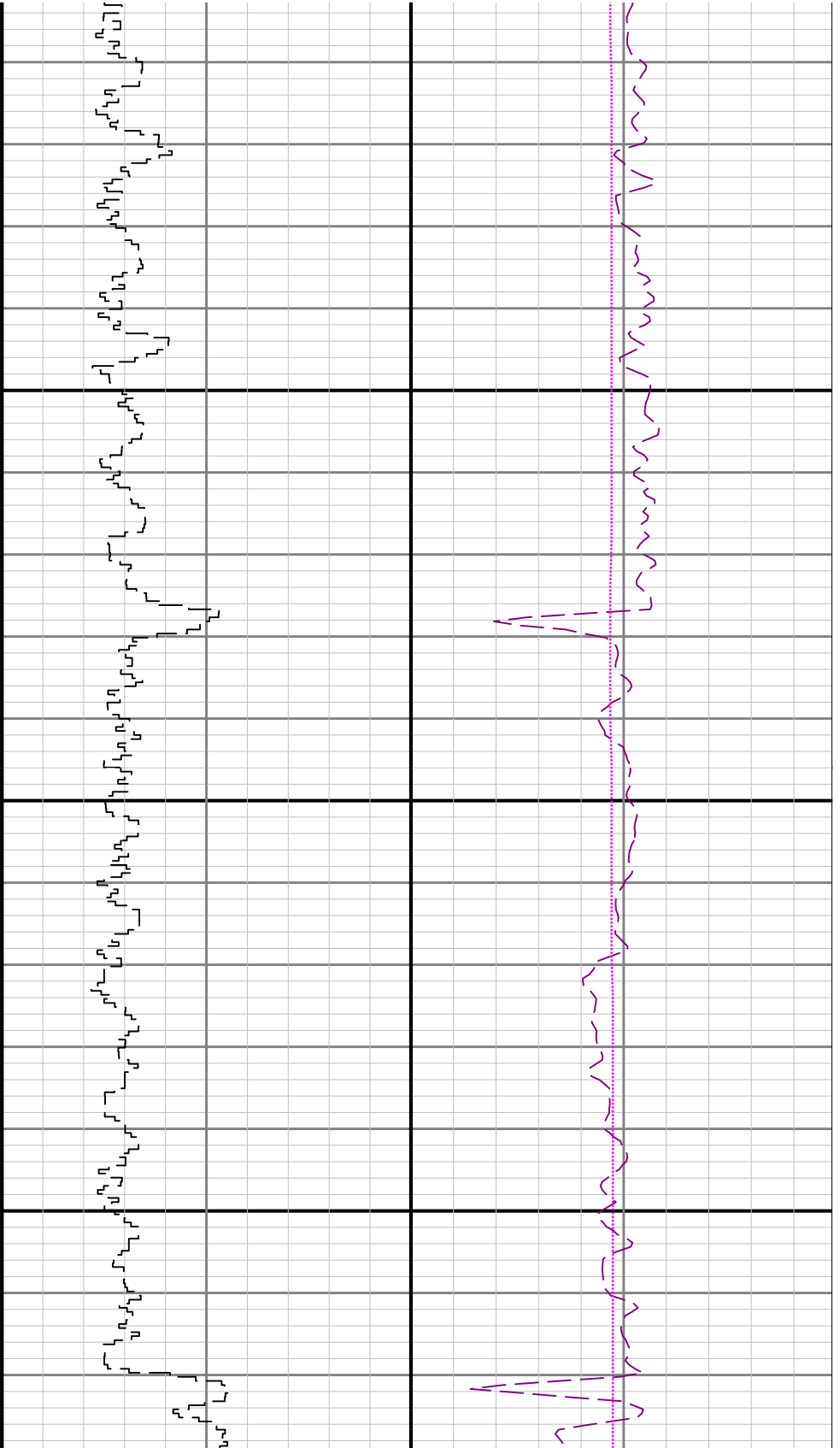


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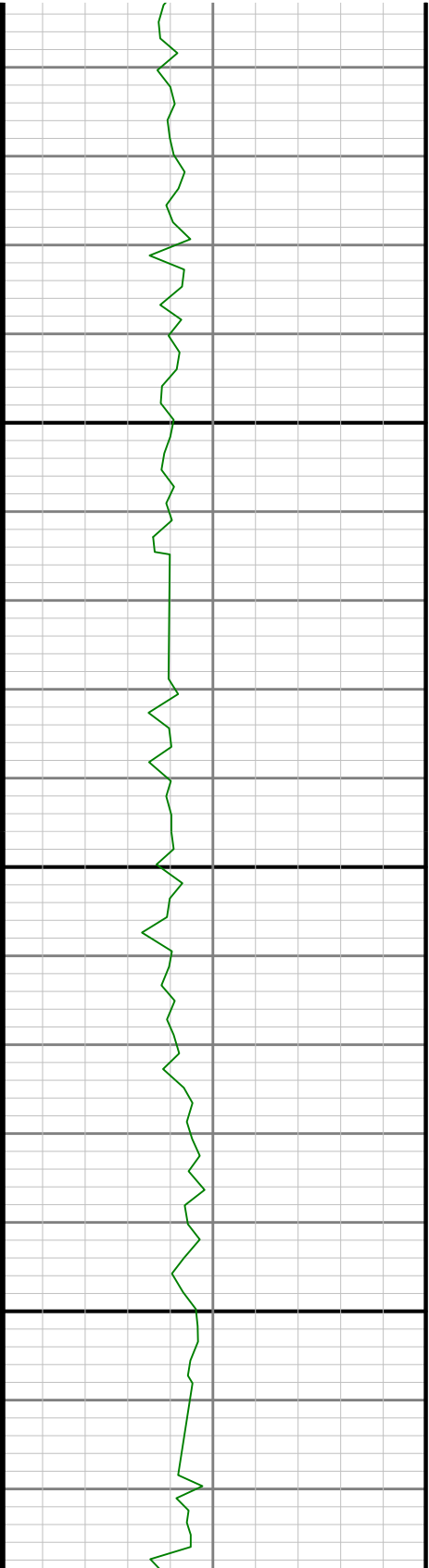


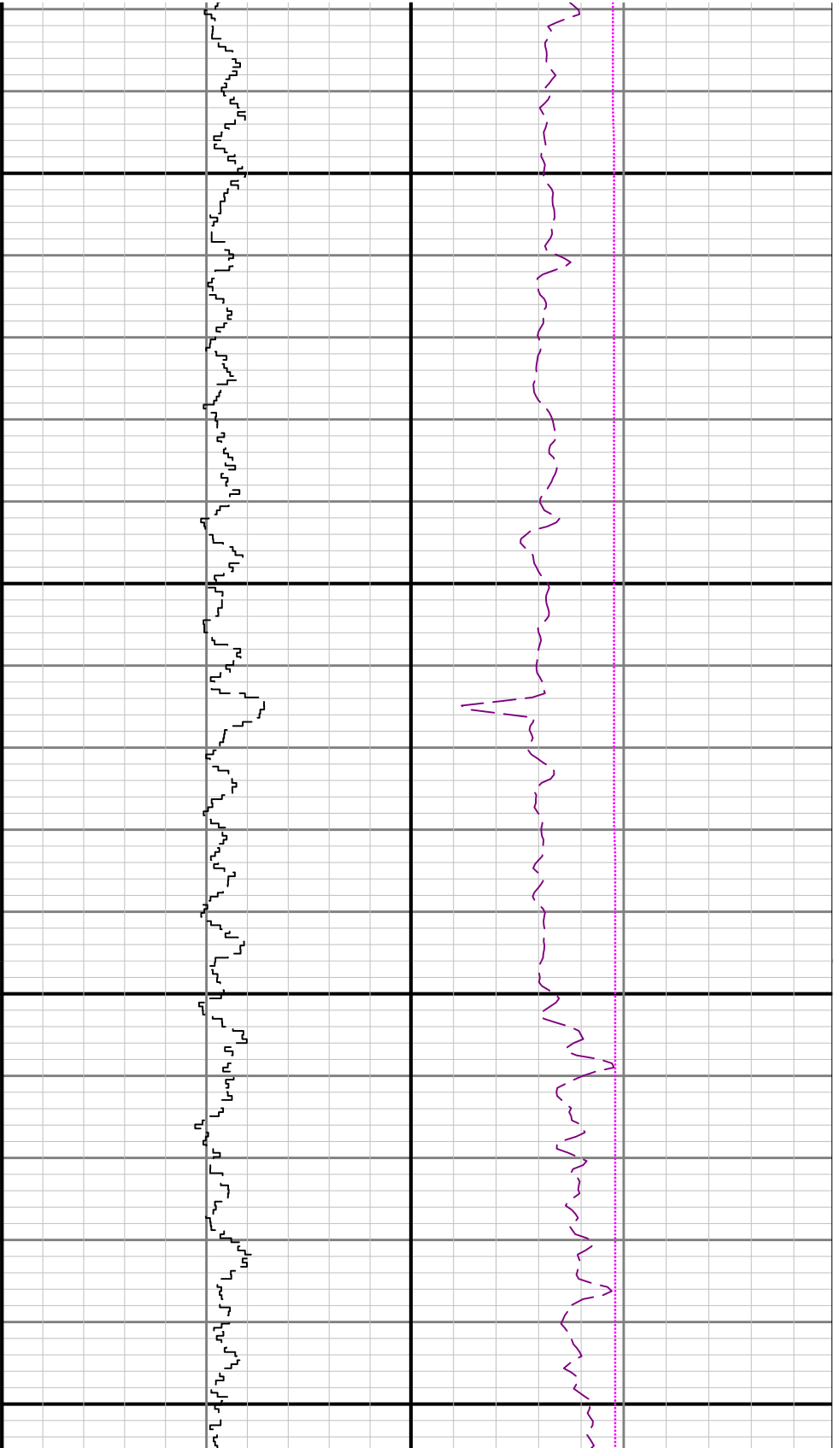




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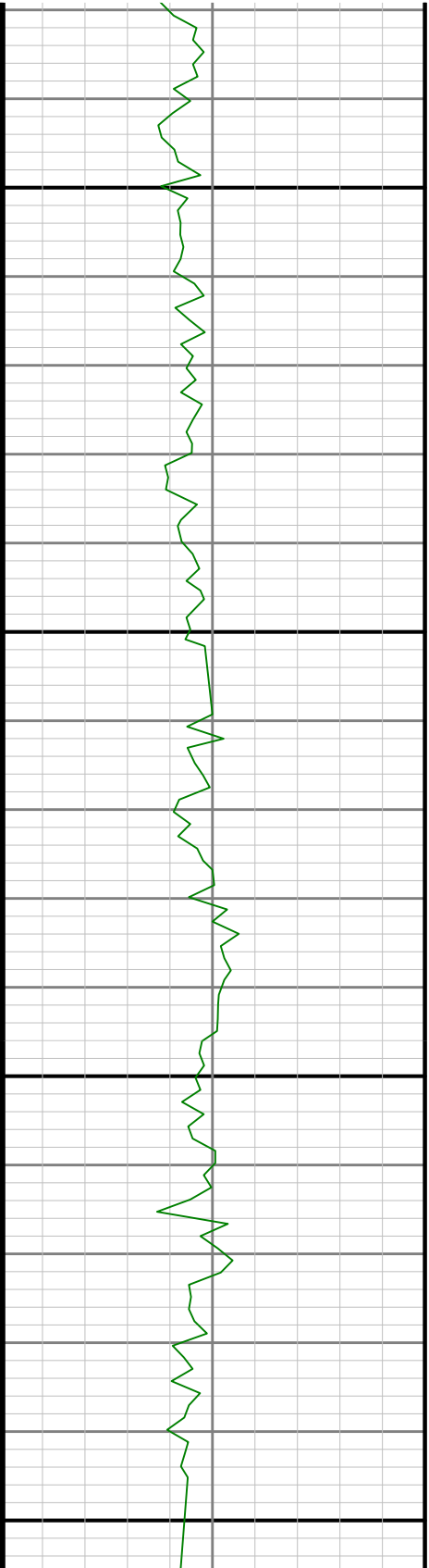
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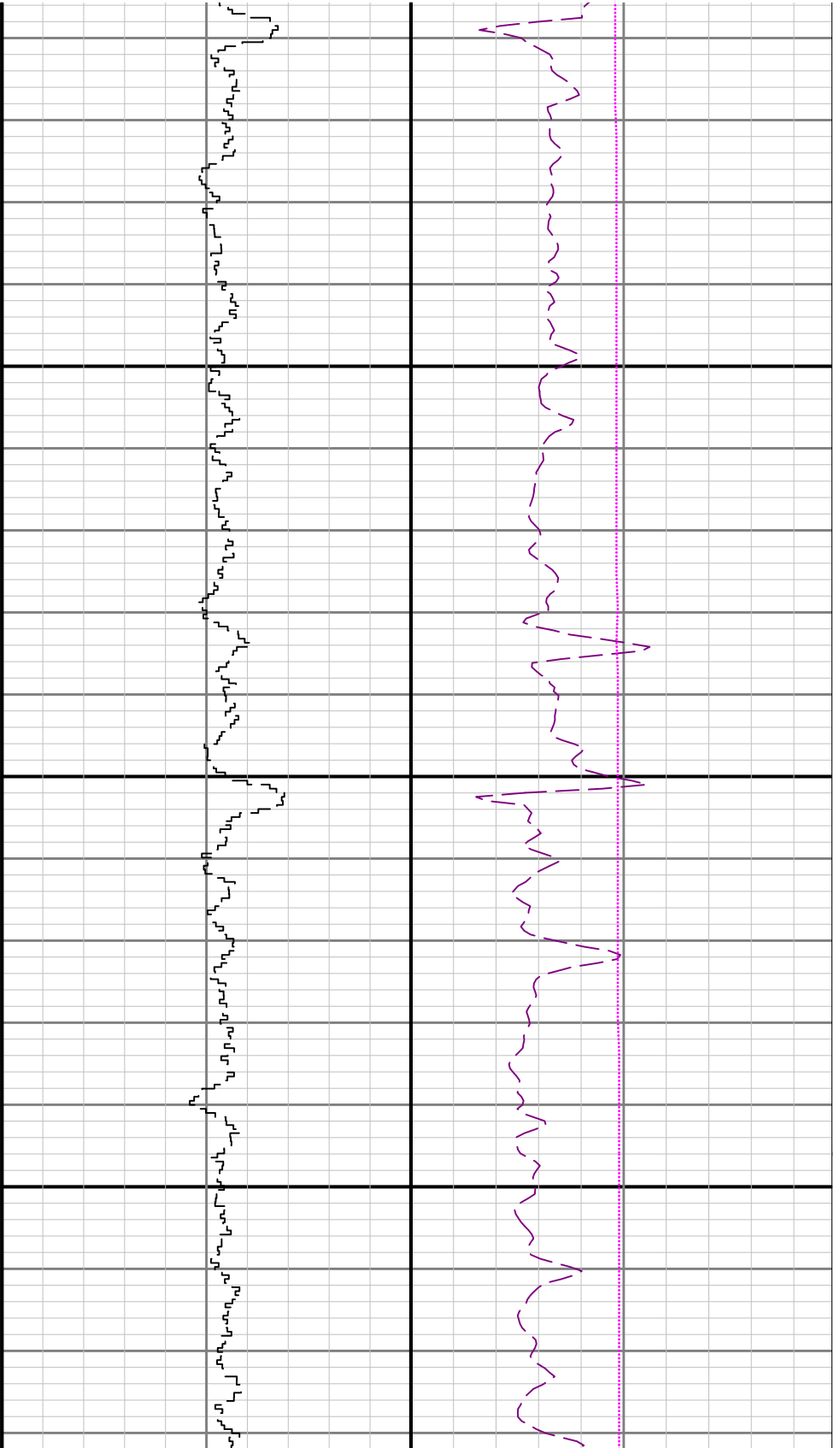




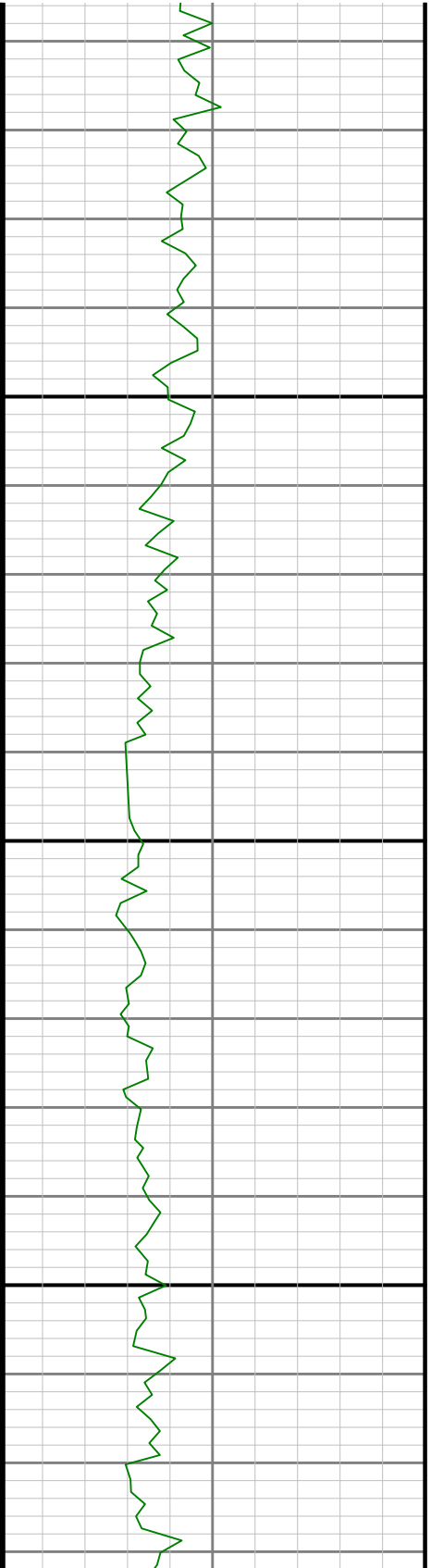
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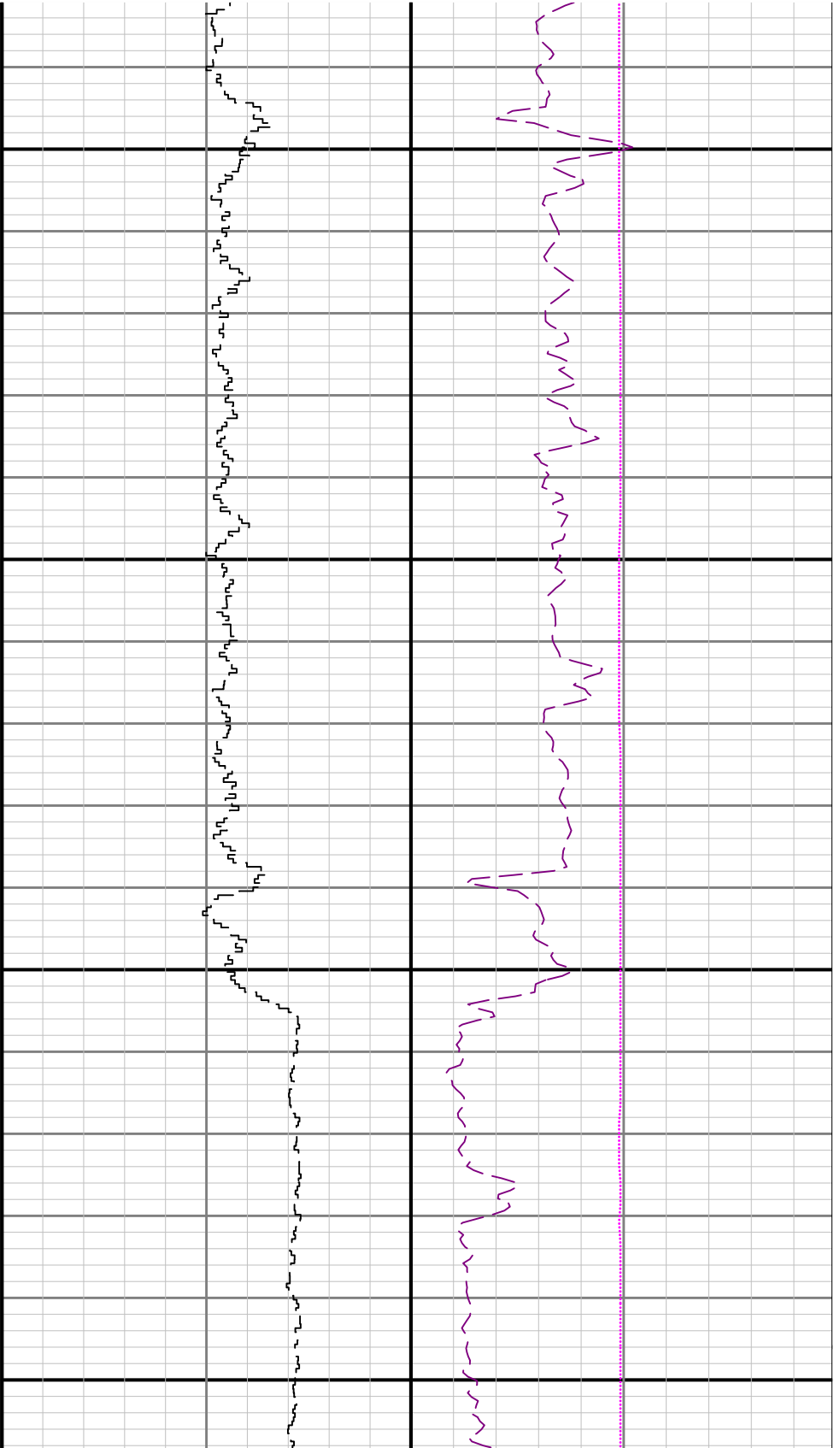
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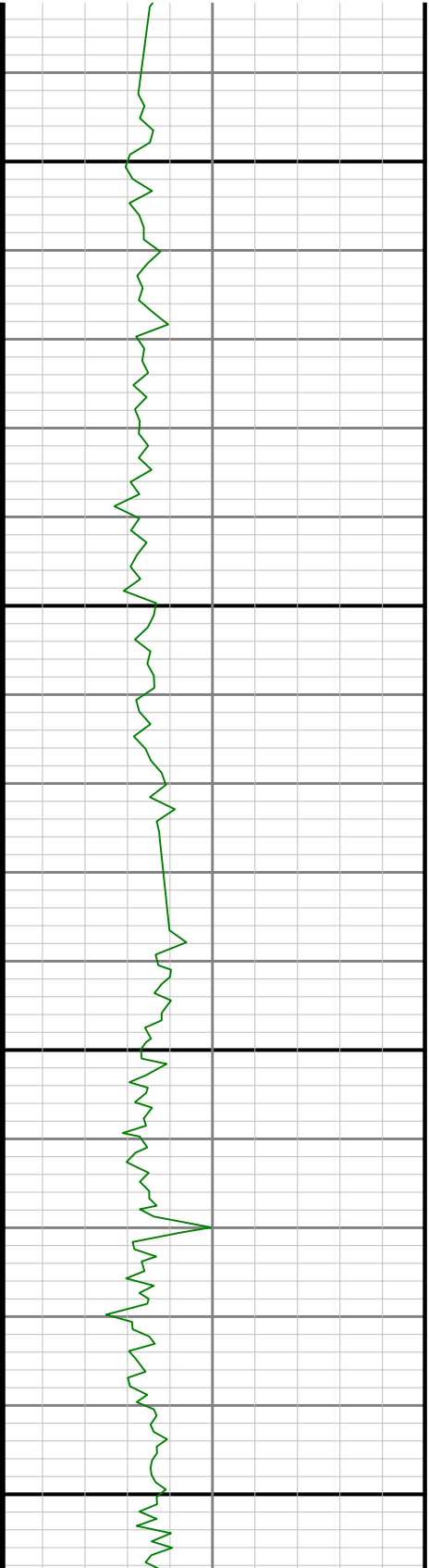
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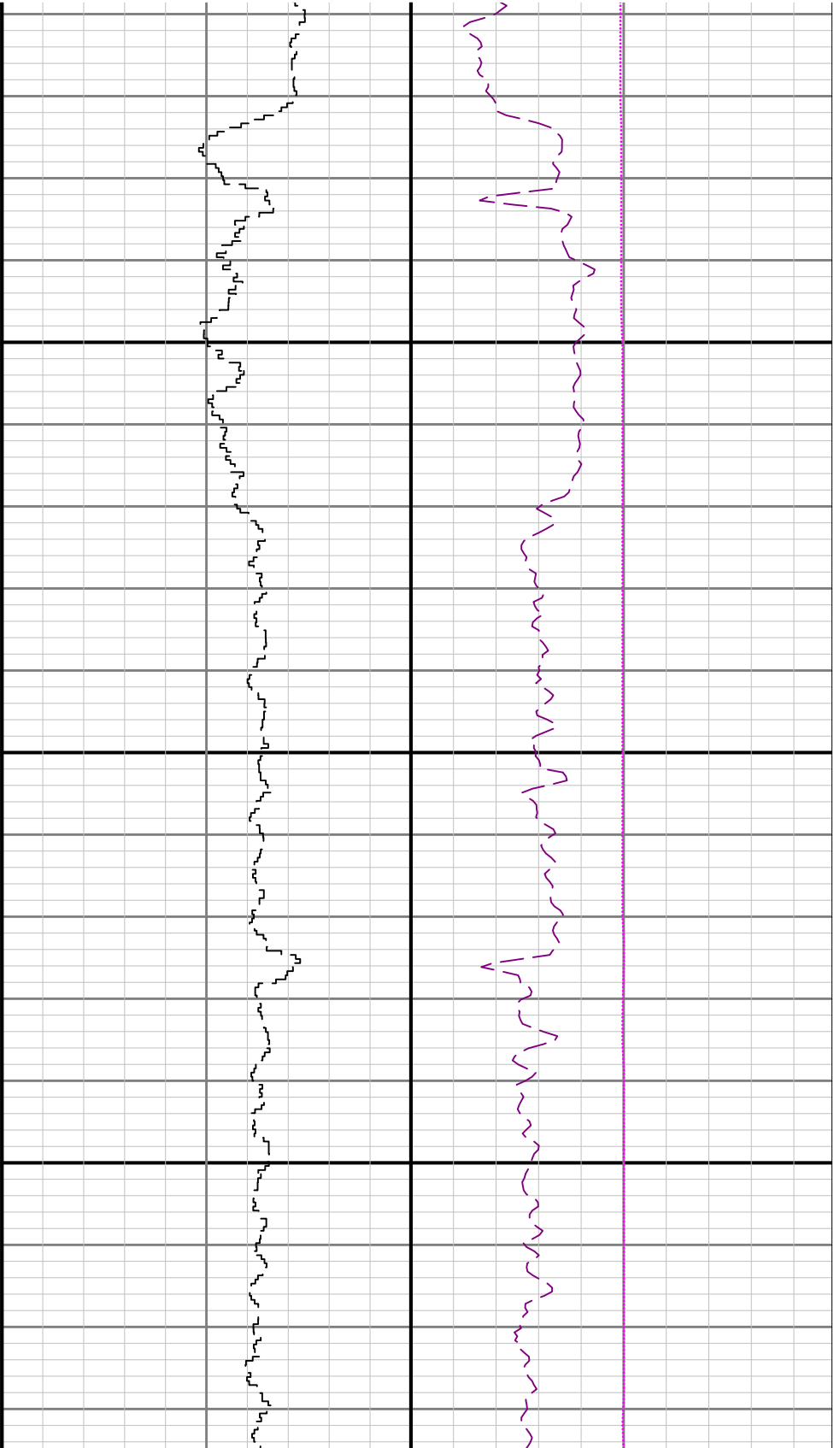




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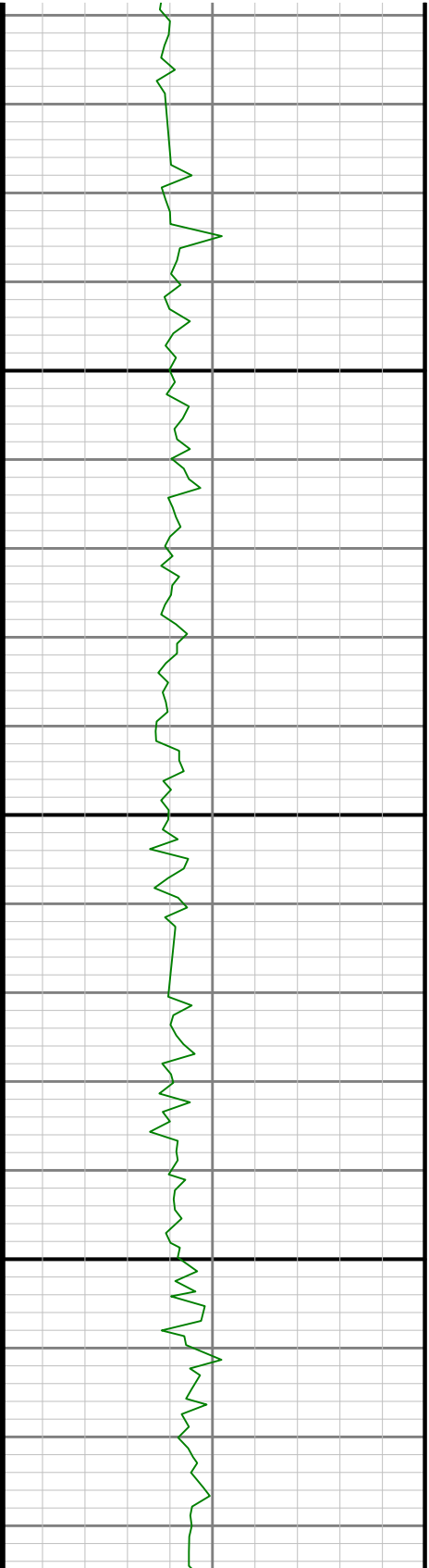
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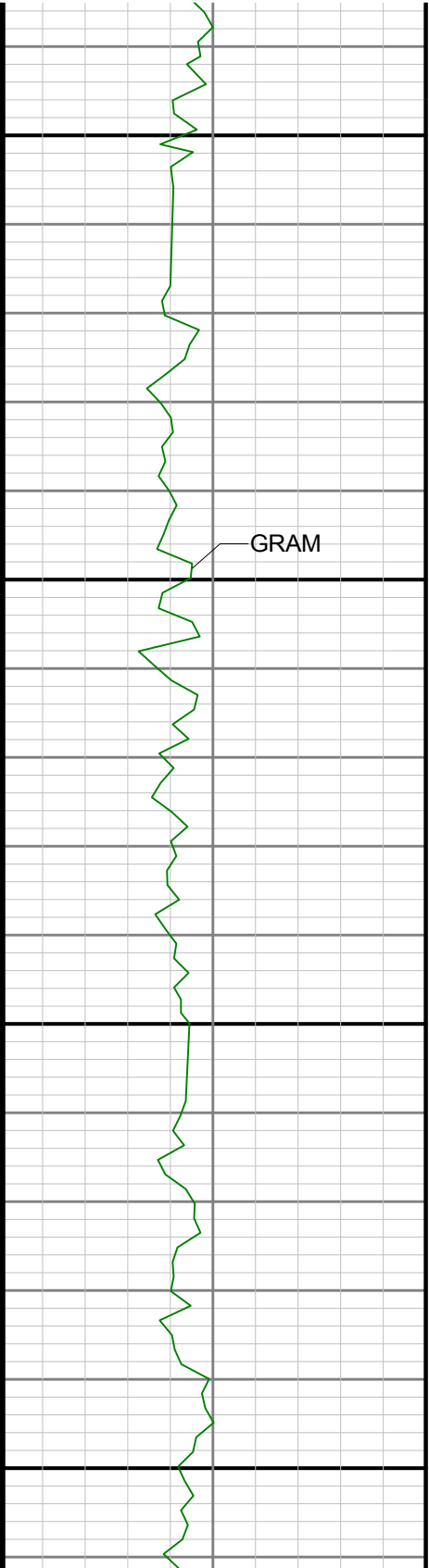




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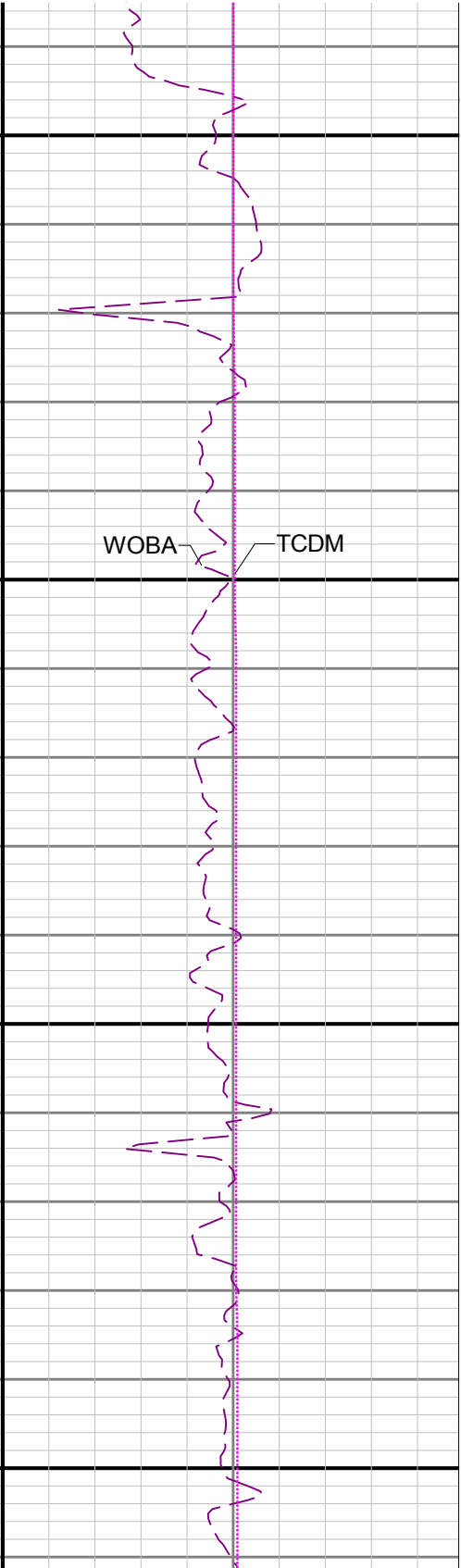
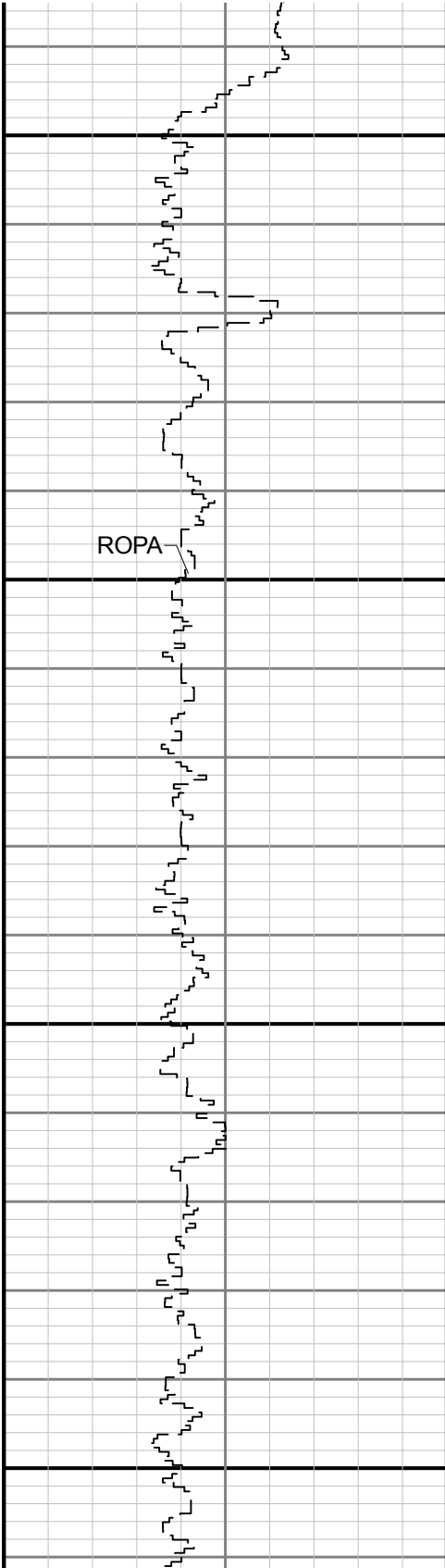
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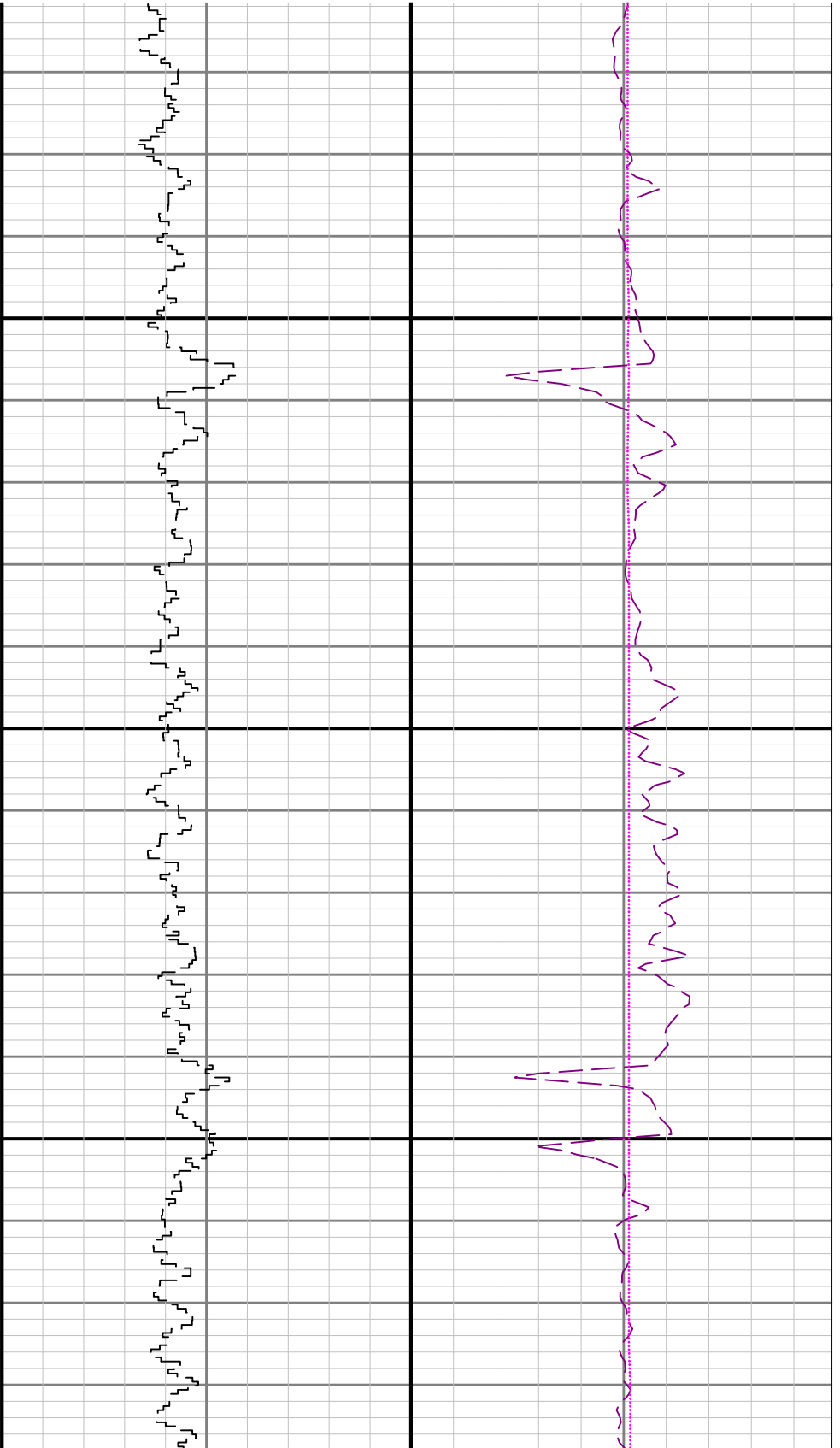




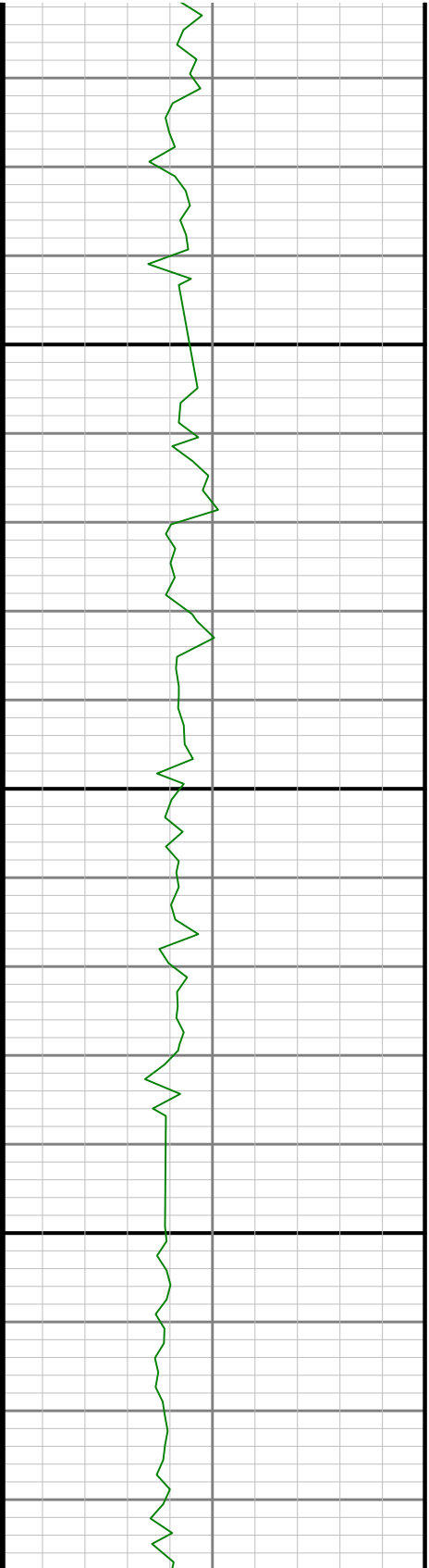
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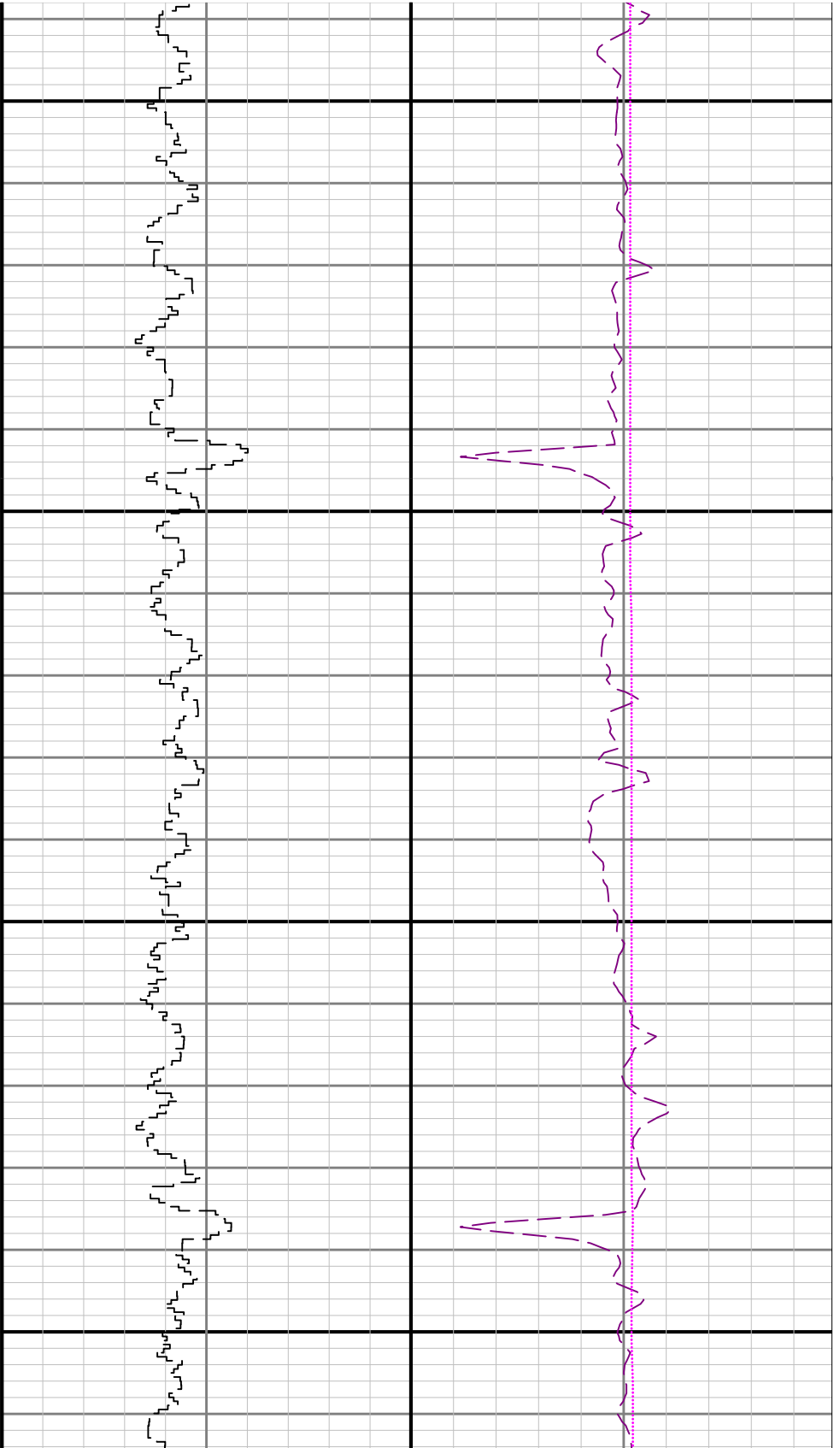
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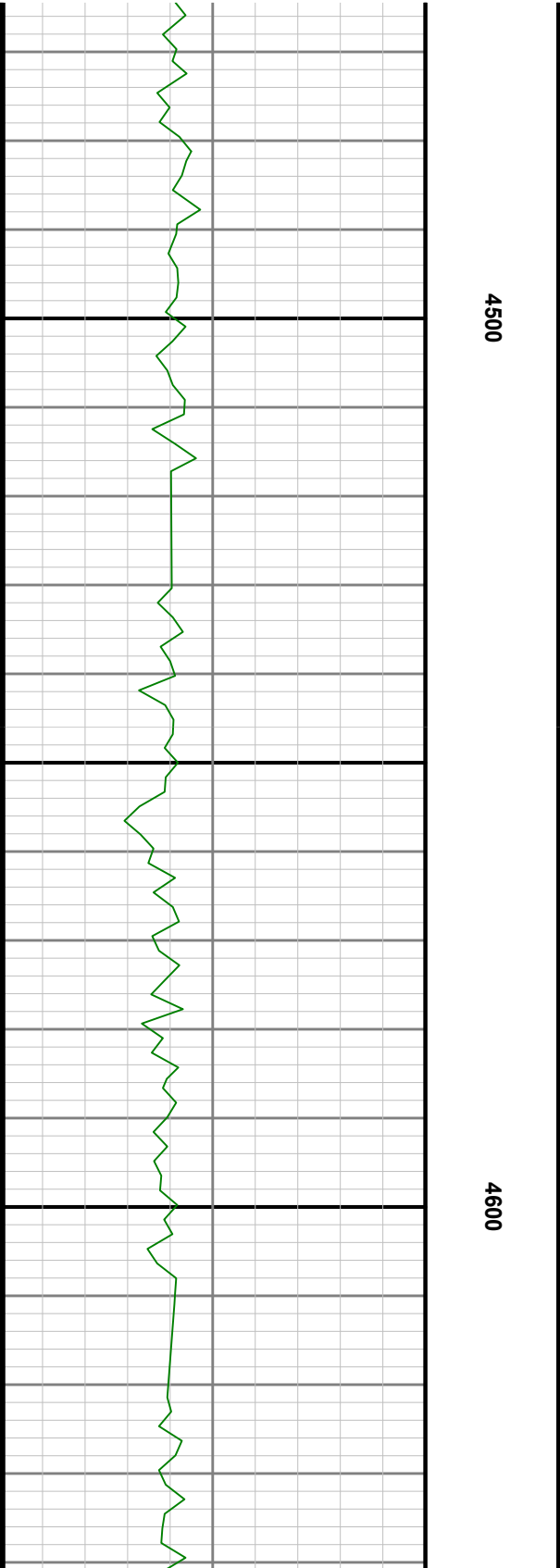
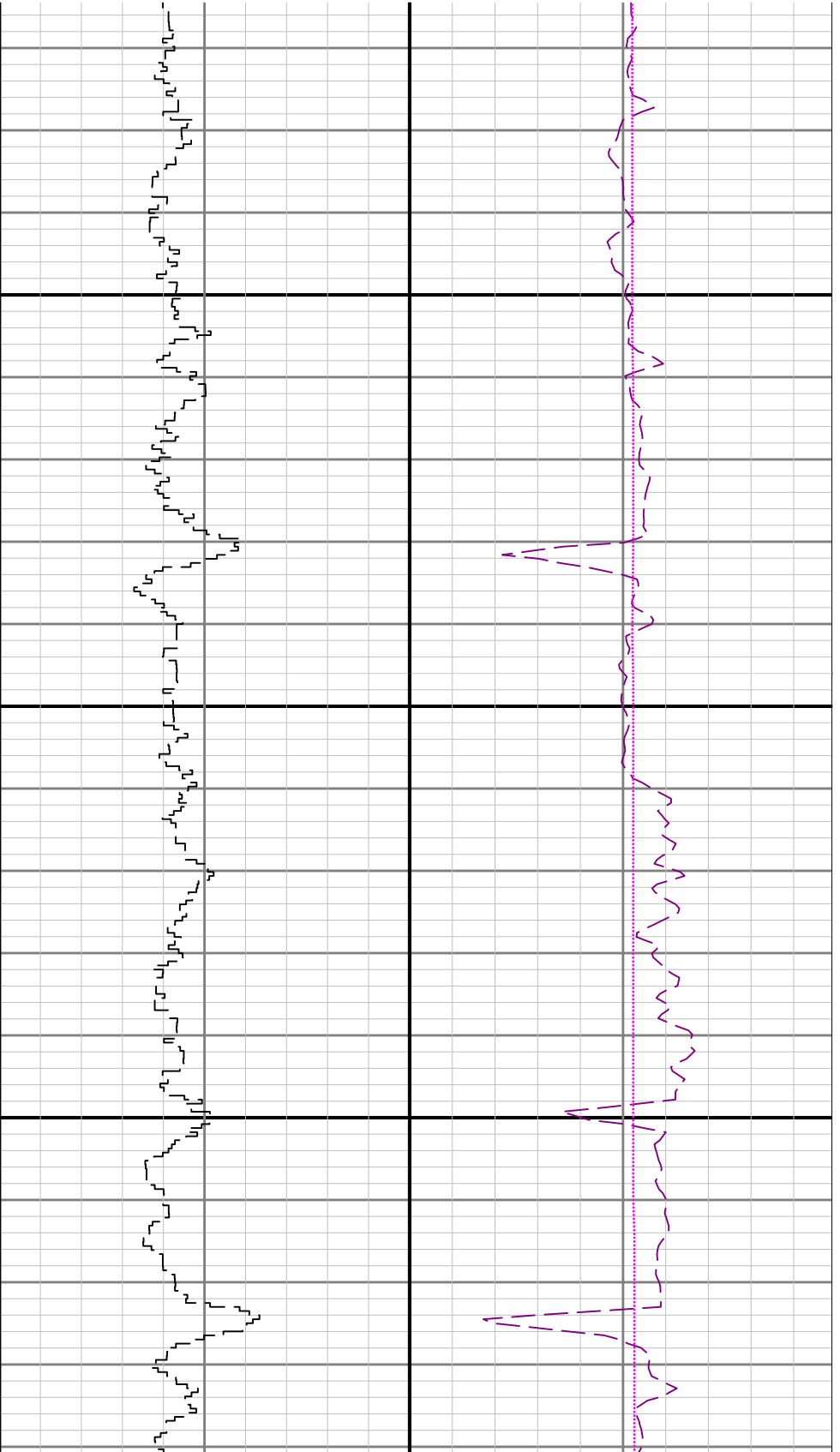


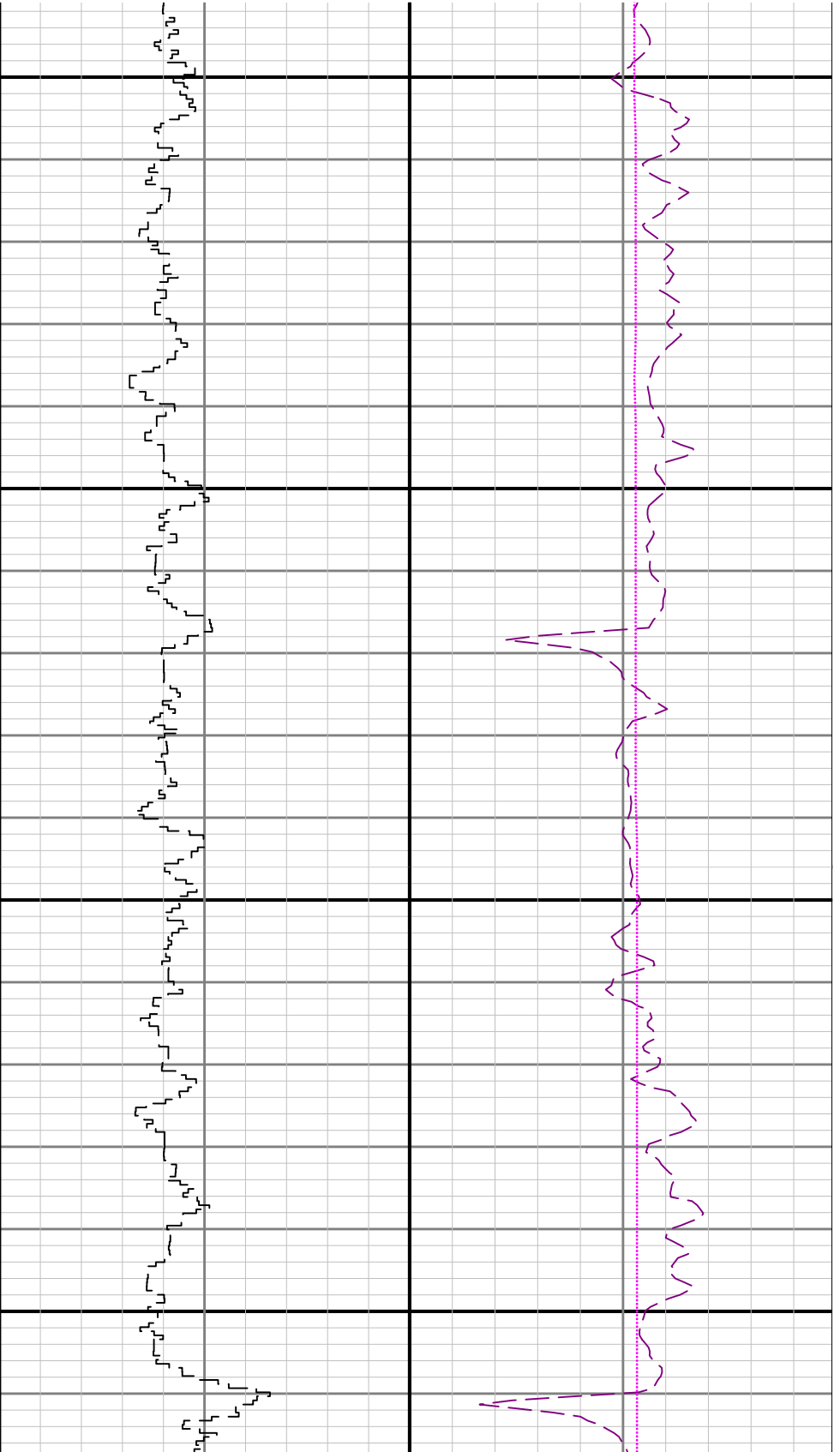


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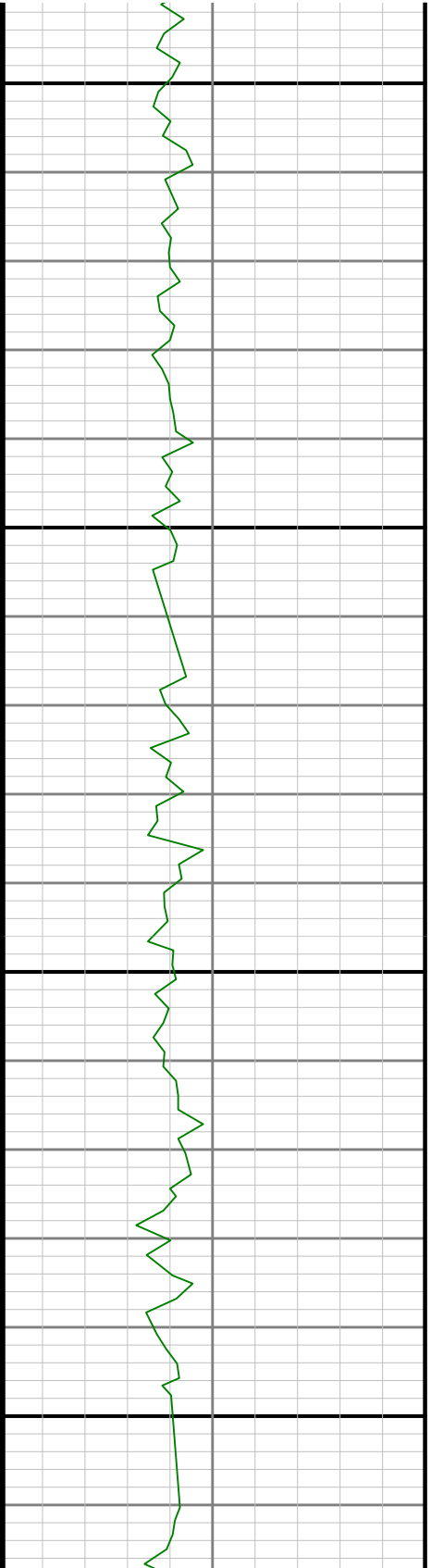


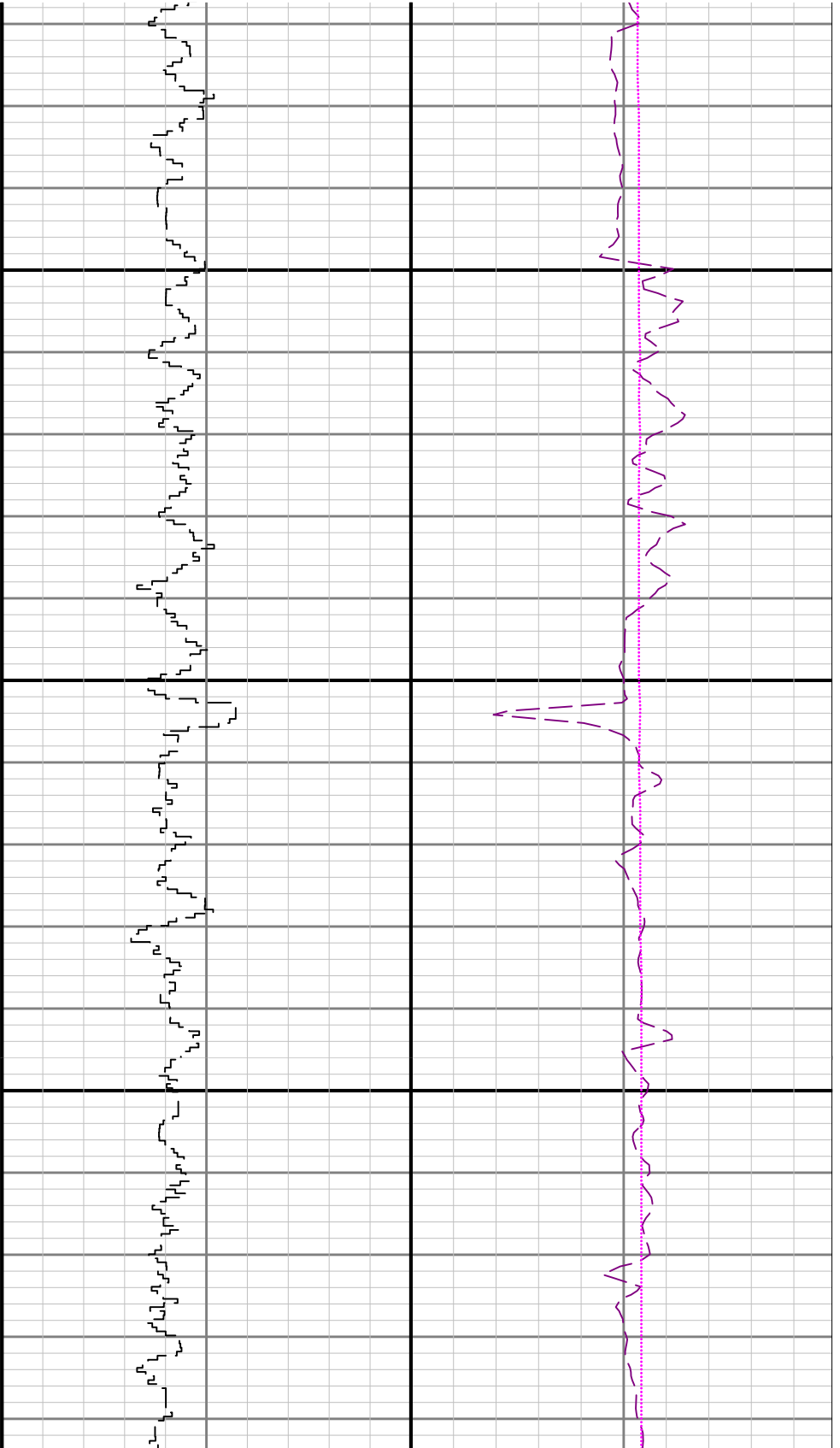




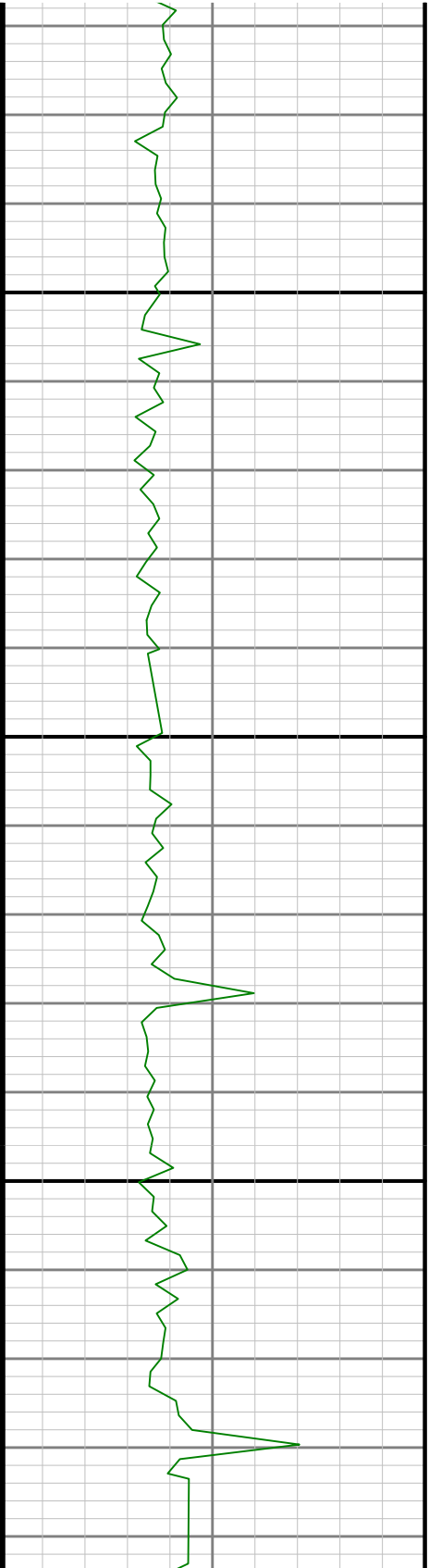
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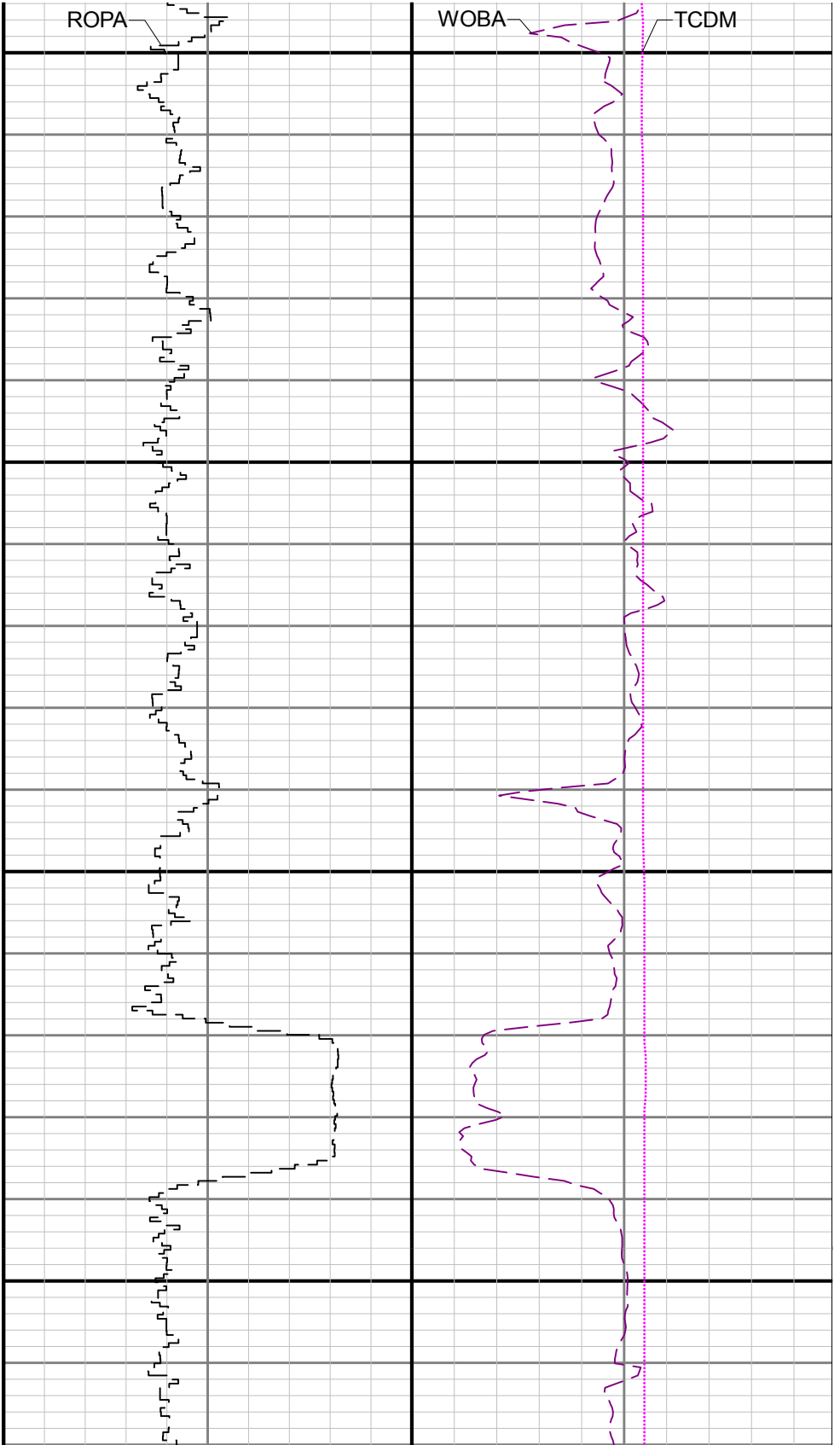
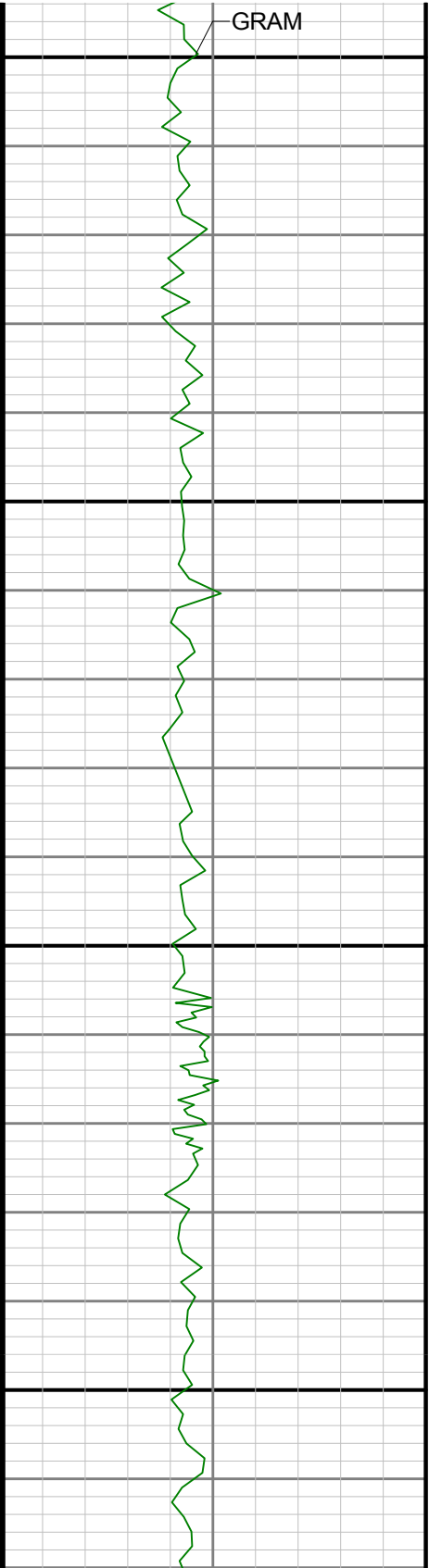
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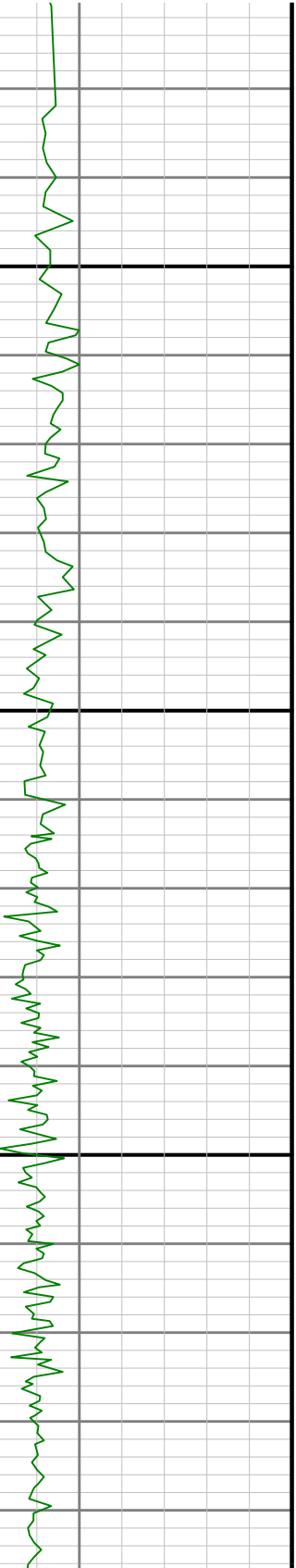


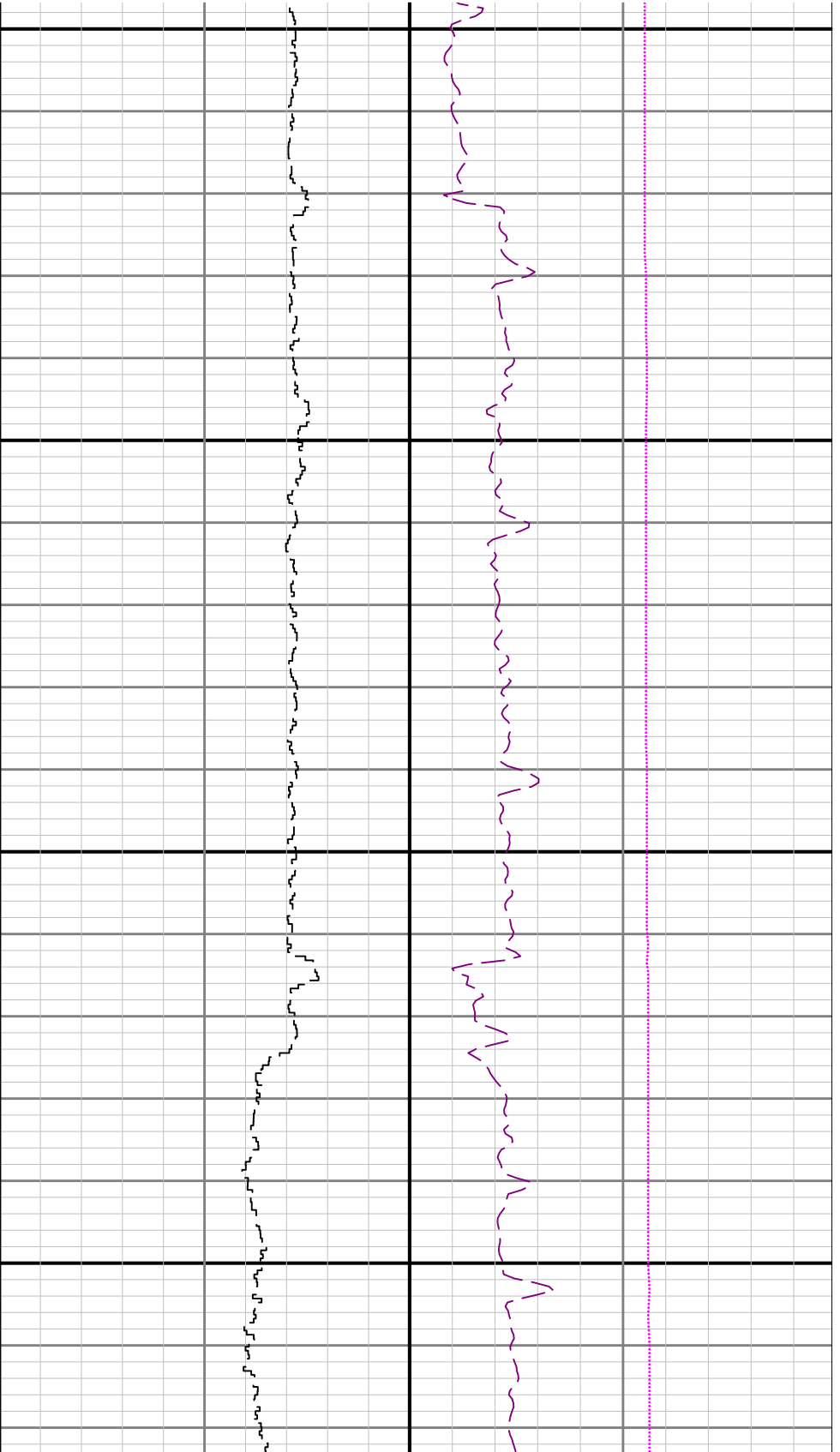




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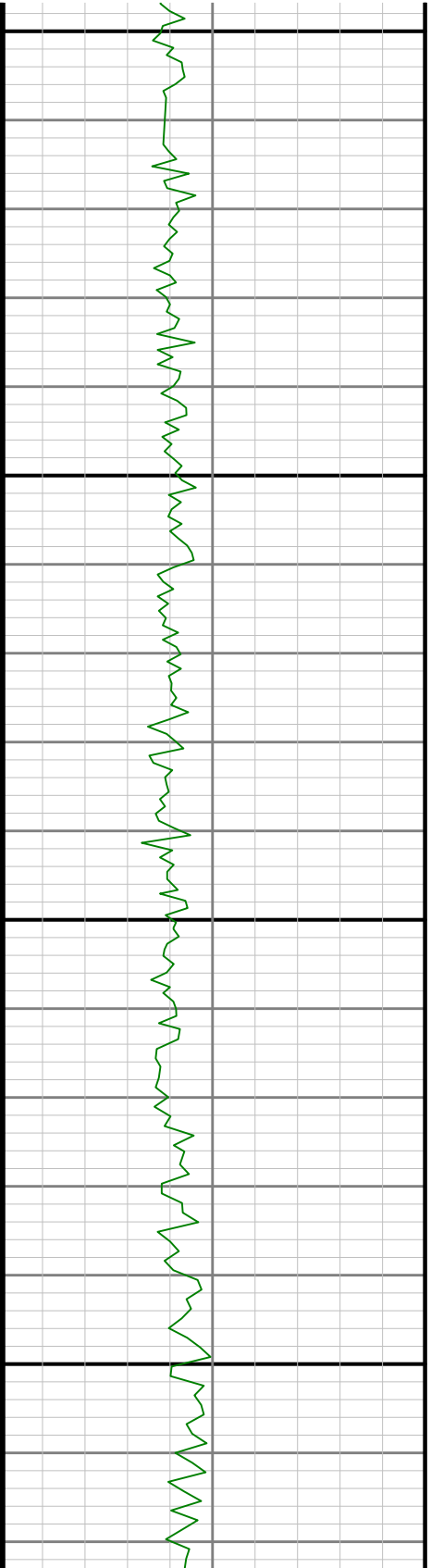
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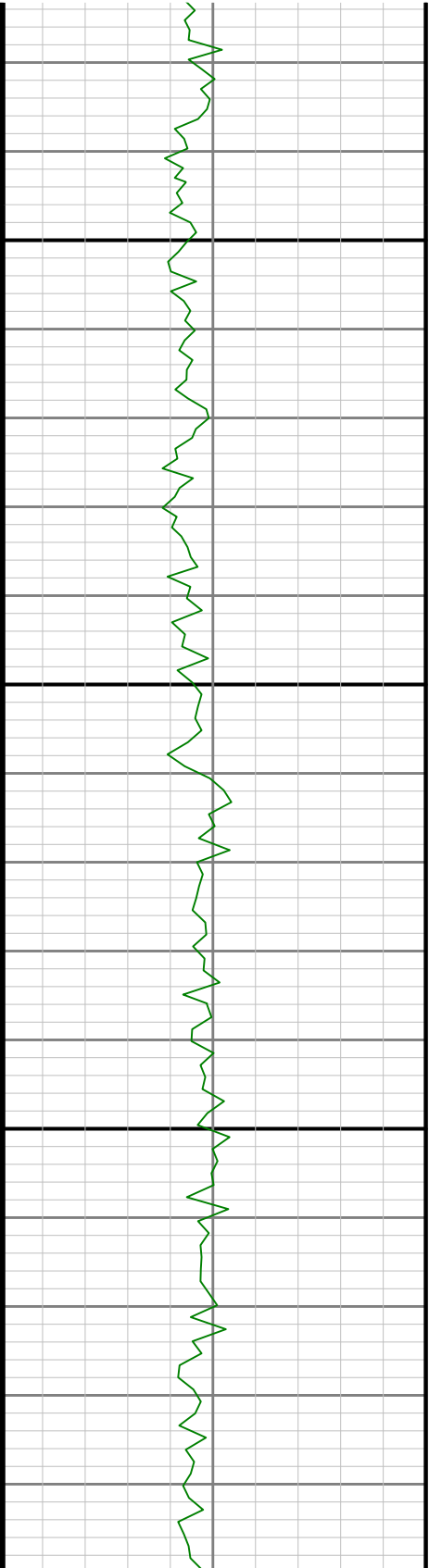




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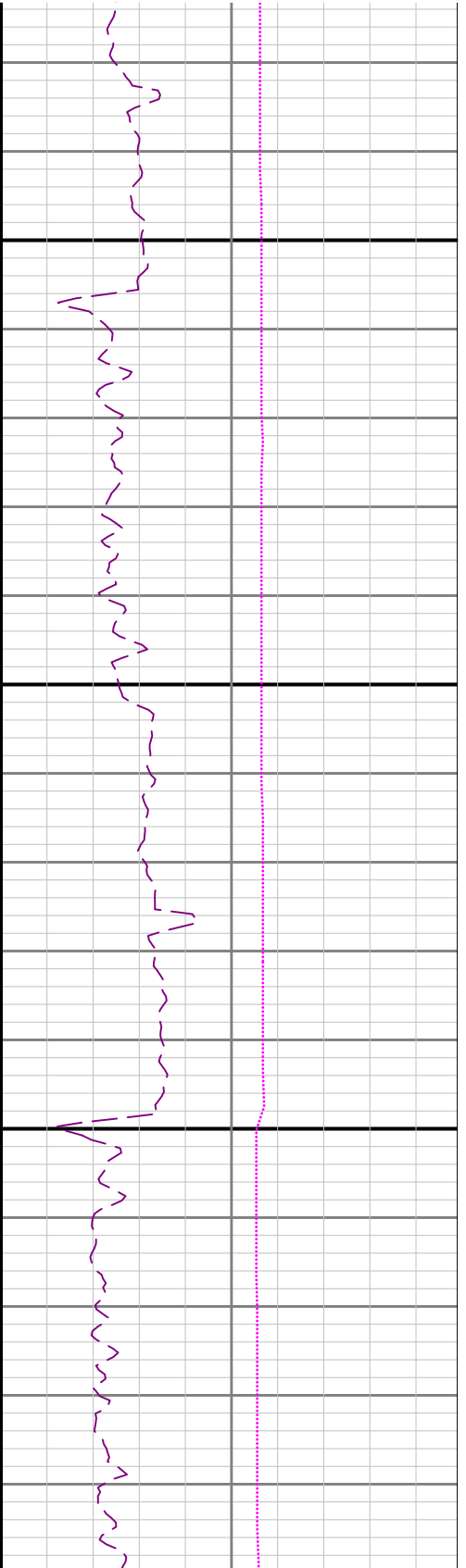
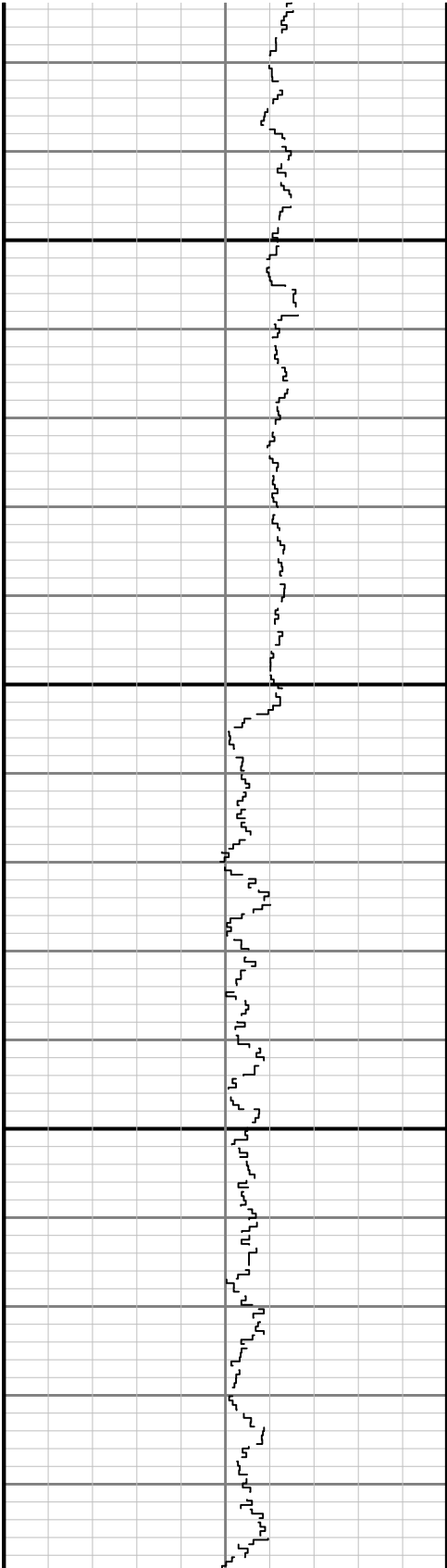
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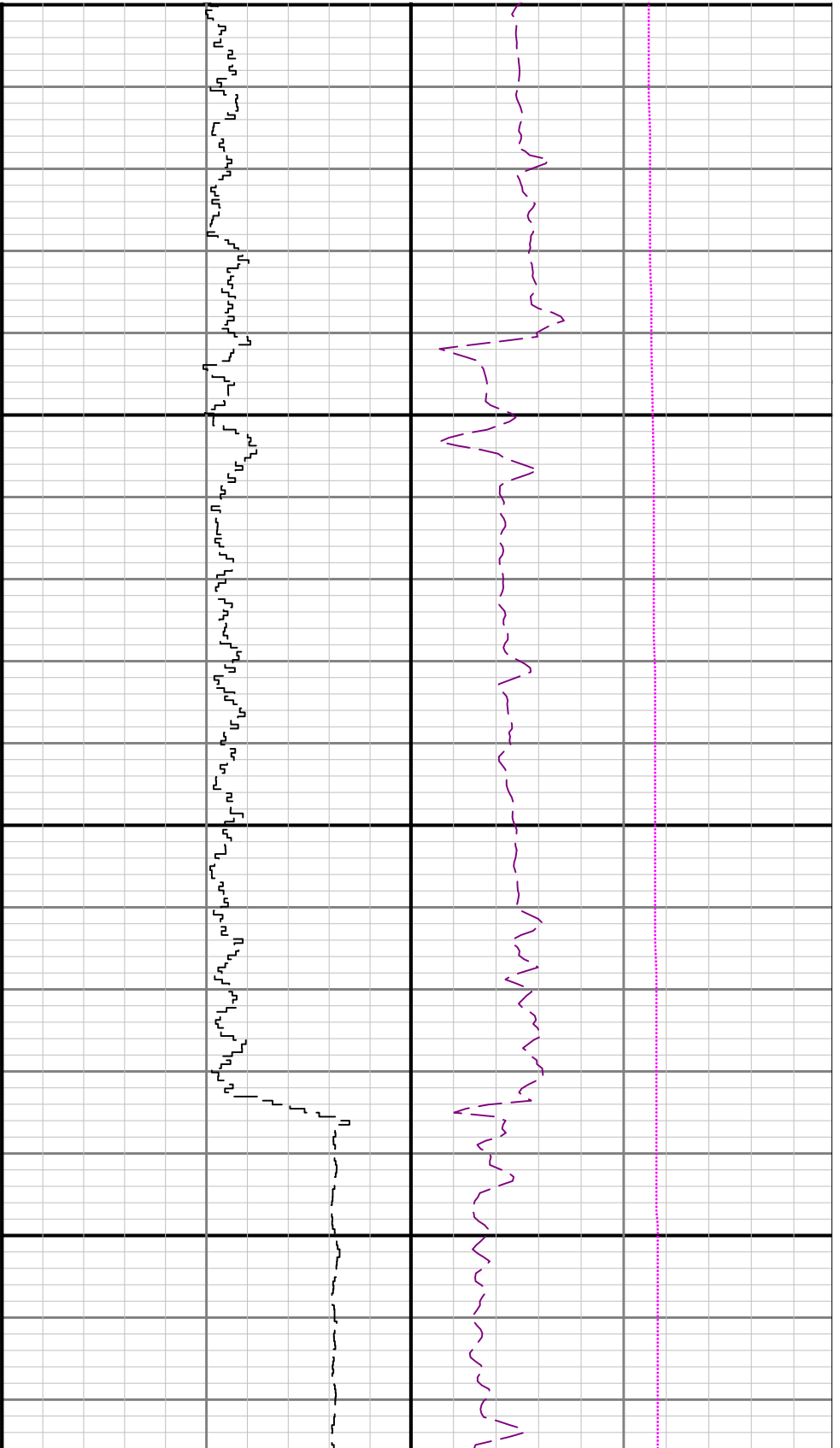




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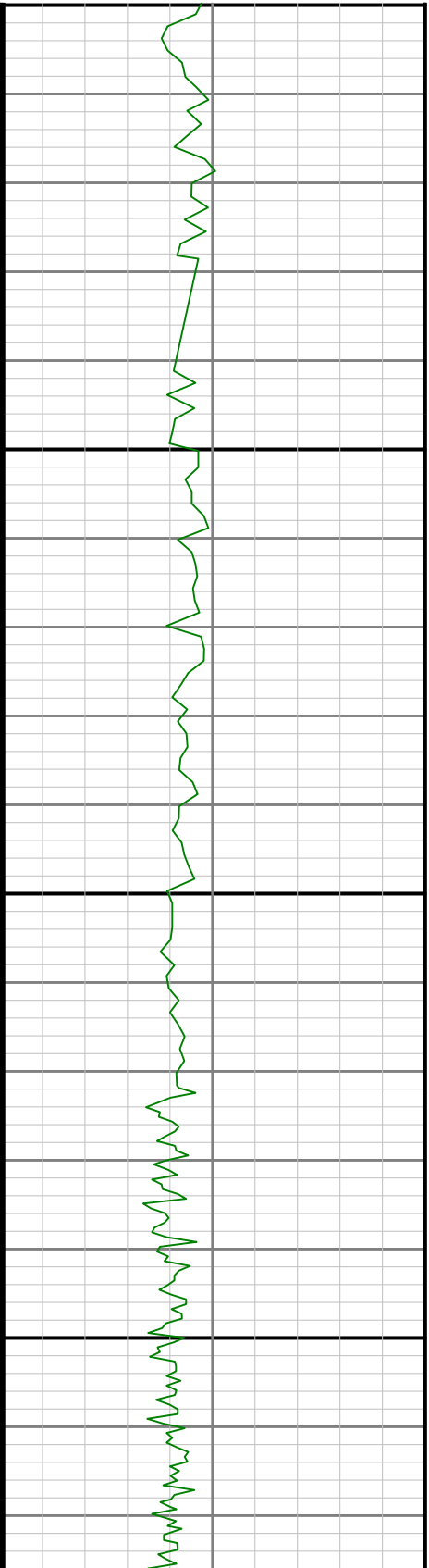
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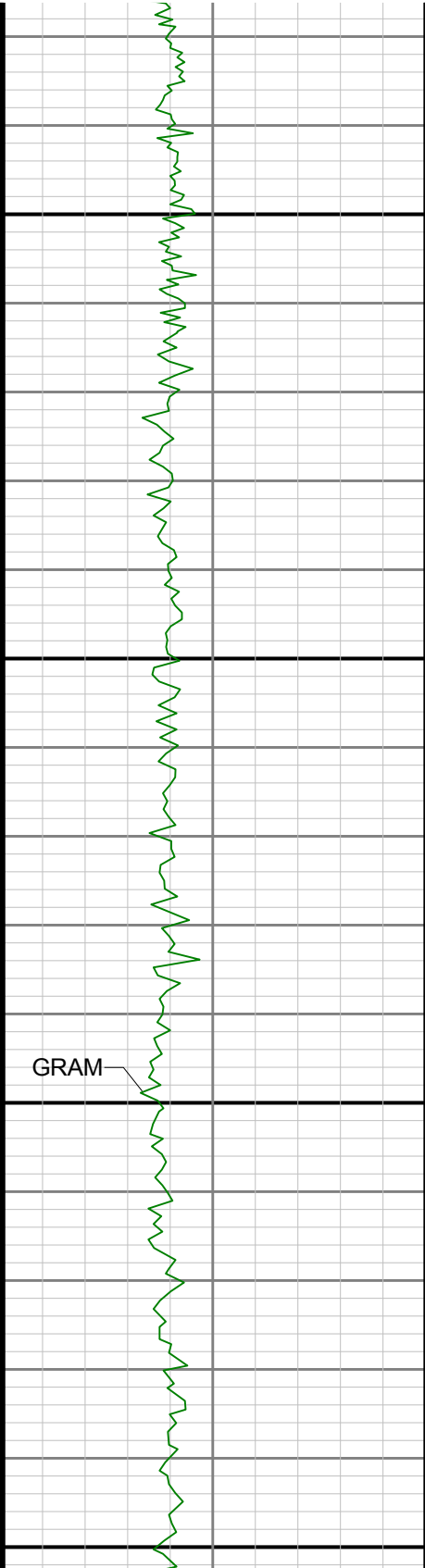




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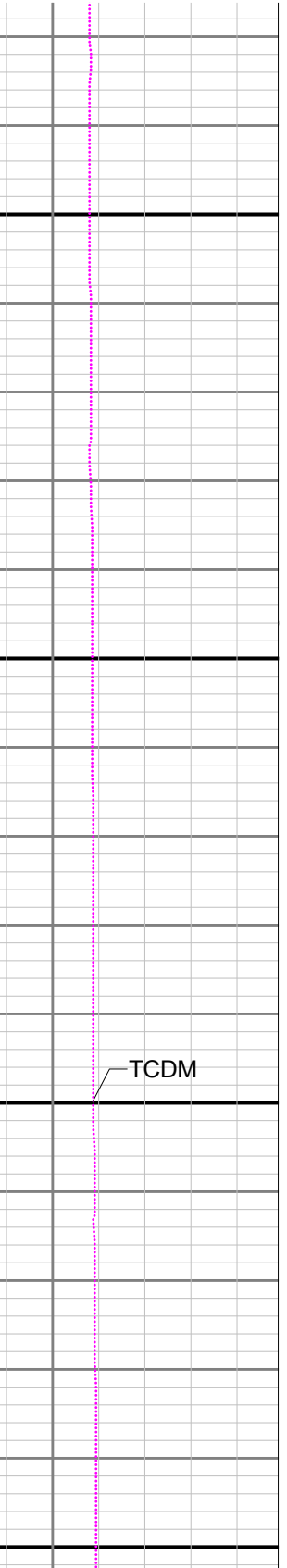
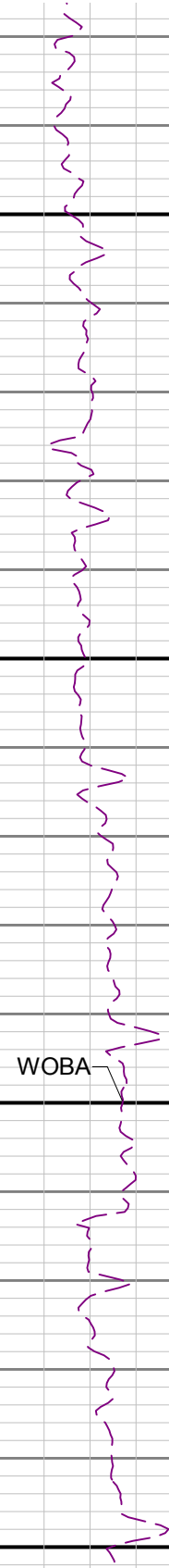
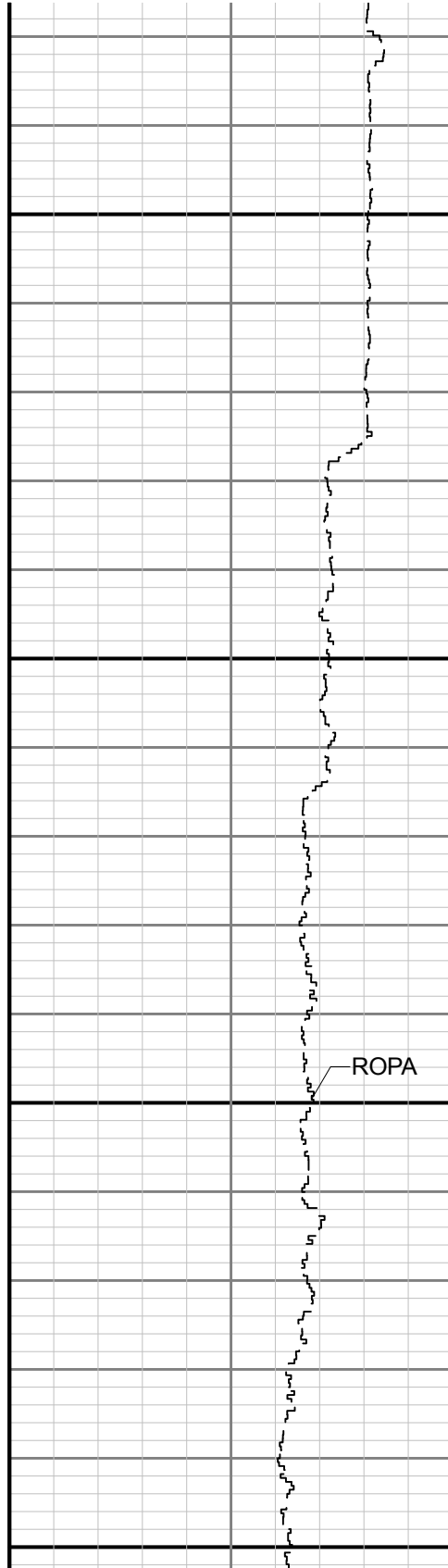
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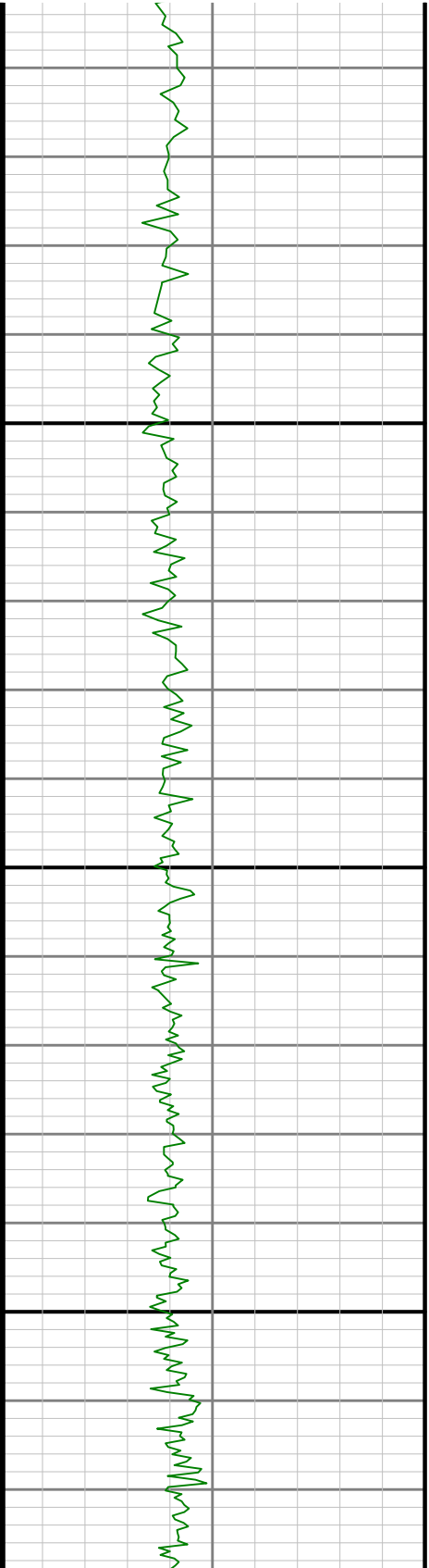
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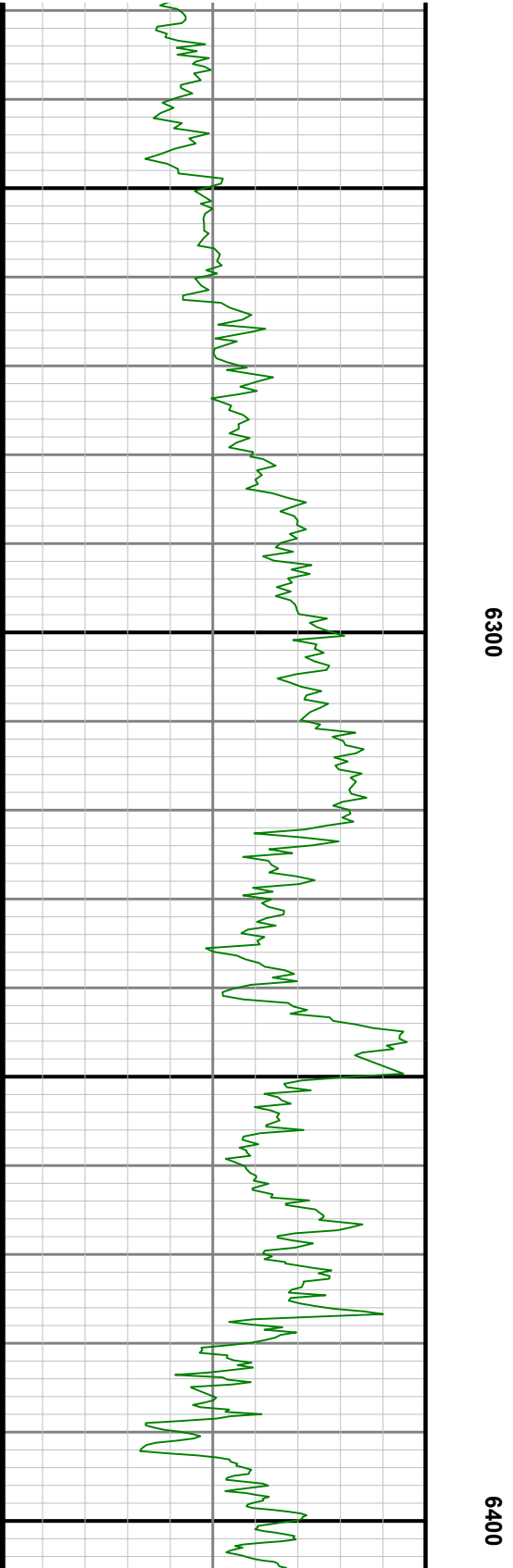
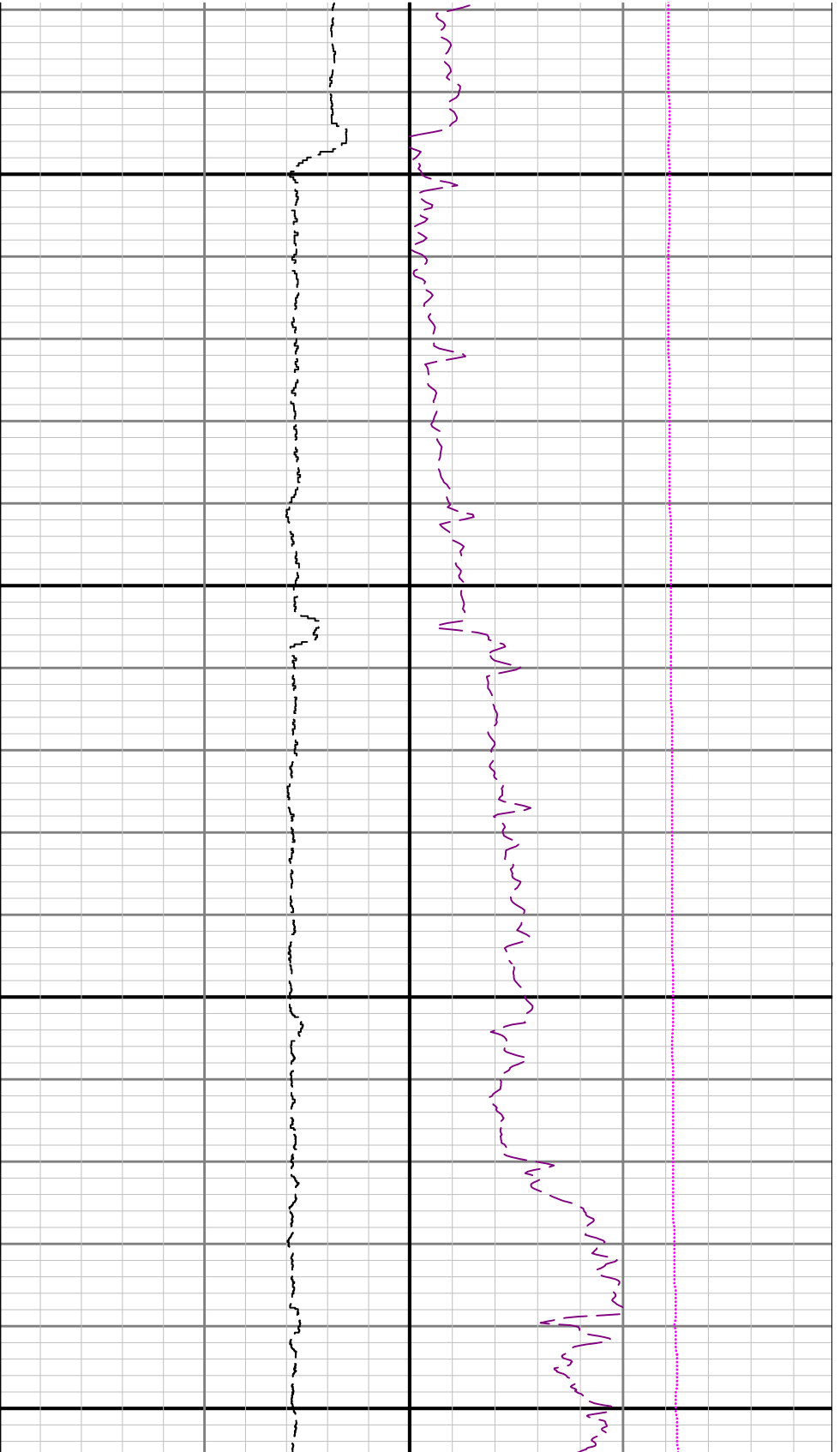


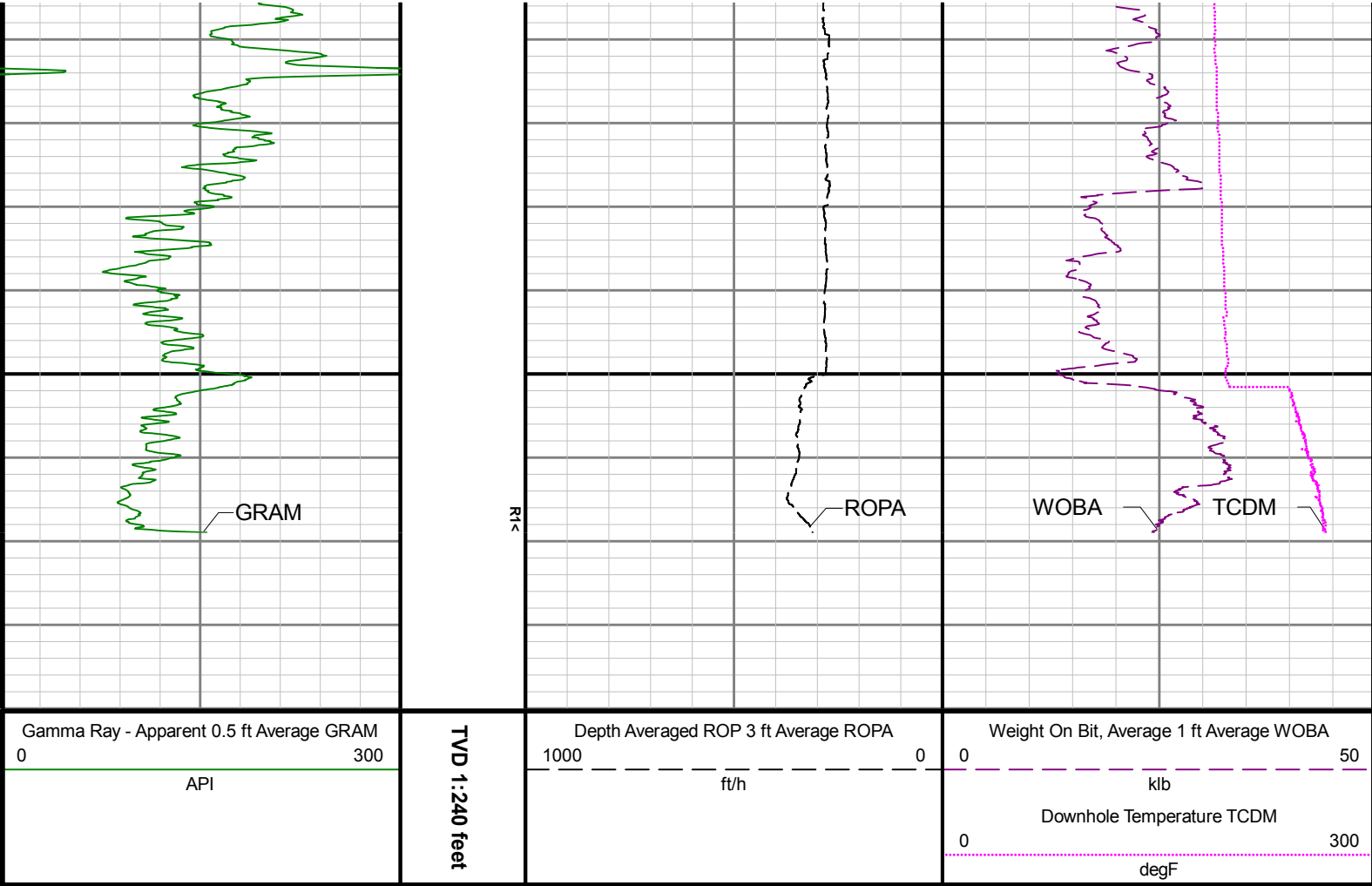


6100

6200







Directional Survey Summary

Latitude:	040° 24' 54.972" N	Longitude:	104° 20' 18.096" W
North Reference:	Grid	Drill Depth Zero:	Rig Floor
Vertical Datum is:	Ground Level	Vertical Datum to DDZ: (ft)	30.00
Vertical Section North: (m)	0.00	Vertical Section East: (m)	0.00
Vertical Section Azimuth: (deg)	272.12		
Grid Convergence: (deg)	-0.75	Magnetic Declination: (deg)	7.88
Total Correction: (deg)	7.13	TVD Calculation Method:	Minimum Curvature
Magnetic Correction:	Off	Local Magnetic Field: (nT)	52284
Local Magnetic Dip Angle: (deg)	67.14	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)	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	0.00	0.00	0.00	0.00	0.00
	81.00	0.33	248.88	N/A	-0.08	-0.22	81.00	0.21	81.00	0.41	0.41	-137.19
	178.00	0.54	261.61	N/A	-0.25	-0.93	178.00	0.92	97.00	0.24	0.22	13.12
	269.00	0.81	266.34	N/A	-0.36	-2.00	268.99	1.98	91.00	0.30	0.30	5.20
	364.00	0.91	277.59	N/A	-0.30	-3.41	363.98	3.40	95.00	0.21	0.11	11.84
	458.00	0.99	277.76	N/A	-0.09	-4.96	457.97	4.95	94.00	0.09	0.09	0.18
	553.00	0.55	290.77	N/A	0.18	-6.20	552.96	6.20	95.00	0.50	-0.46	13.69
	647.00	0.58	243.36	N/A	0.13	-7.05	646.95	7.05	94.00	0.48	0.03	-50.44
	742.00	0.38	229.26	N/A	-0.29	-7.71	741.95	7.70	95.00	0.24	-0.21	-14.84

	836.00	0.66	277.17	N/A	-0.43	-8.49	835.95	8.47	94.00	0.53	0.30	50.97
	931.00	0.72	312.17	N/A	0.04	-9.47	930.94	9.47	95.00	0.44	0.06	36.84
	1025.00	0.52	354.54	N/A	0.86	-9.95	1024.94	9.98	94.00	0.52	-0.21	45.07
	1120.00	0.62	324.68	N/A	1.71	-10.29	1119.93	10.35	95.00	0.33	0.11	-31.43
	1215.00	0.25	354.64	N/A	2.34	-10.61	1214.93	10.68	95.00	0.44	-0.39	31.54
	1309.00	0.17	0.47	N/A	2.68	-10.62	1308.93	10.72	94.00	0.09	-0.09	6.20
	1403.00	0.19	82.34	N/A	2.84	-10.47	1402.93	10.57	94.00	0.25	0.02	87.10
	1498.00	0.23	61.26	N/A	2.95	-10.14	1497.93	10.25	95.00	0.09	0.04	-22.19
	1593.00	0.23	11.29	N/A	3.23	-9.94	1592.93	10.05	95.00	0.20	0.00	-52.60
	1687.00	0.03	238.37	N/A	3.40	-9.92	1686.93	10.04	94.00	0.27	-0.21	-141.40
	1782.00	0.02	272.33	N/A	3.39	-9.96	1781.93	10.08	95.00	0.02	-0.01	35.75
	1876.00	0.46	229.20	N/A	3.15	-10.26	1875.92	10.37	94.00	0.47	0.47	-45.88
Tie-In	1931.00	0.87	226.29	N/A	2.71	-10.73	1930.92	10.83	55.00	0.75	0.75	-5.29
	1981.00	0.88	251.42	N/A	2.33	-11.37	1980.92	11.45	50.00	0.76	0.02	50.26
	2076.00	4.02	339.13	N/A	5.21	-13.25	2075.83	13.43	95.00	4.30	3.31	92.33
	2170.00	6.87	356.06	N/A	13.90	-14.81	2169.40	15.31	94.00	3.45	3.03	18.01
	2265.00	8.69	0.71	N/A	26.74	-15.11	2263.53	16.09	95.00	2.03	1.92	4.89
	2359.00	8.56	358.67	N/A	40.84	-15.19	2356.46	16.69	94.00	0.35	-0.14	-2.17
	2454.00	8.46	4.77	N/A	54.87	-14.77	2450.42	16.79	95.00	0.96	-0.11	6.42
	2548.00	8.56	6.20	N/A	68.72	-13.44	2543.39	15.97	94.00	0.25	0.11	1.52
	2643.00	8.60	3.60	N/A	82.83	-12.23	2637.32	15.29	95.00	0.41	0.04	-2.74
	2737.00	8.61	358.88	N/A	96.88	-11.93	2730.27	15.50	94.00	0.75	0.01	-5.02
	2832.00	8.76	351.77	N/A	111.15	-13.10	2824.18	17.20	95.00	1.14	0.16	-7.48
	2927.00	8.72	346.10	N/A	125.30	-15.87	2918.08	20.49	95.00	0.91	-0.04	-5.97
	3021.00	8.57	349.36	N/A	139.10	-18.87	3011.01	24.00	94.00	0.55	-0.16	3.47
	3116.00	8.77	347.63	N/A	153.13	-21.73	3104.92	27.38	95.00	0.35	0.21	-1.82
	3211.00	7.94	1.07	N/A	166.77	-23.16	3198.92	29.31	95.00	2.23	-0.87	14.15
	3305.00	7.52	9.51	N/A	179.33	-22.02	3292.07	28.64	94.00	1.29	-0.45	8.98
	3399.00	7.77	18.49	N/A	191.42	-18.99	3385.24	26.06	94.00	1.30	0.27	9.55
	3494.00	8.79	17.48	N/A	204.44	-14.77	3479.25	22.32	95.00	1.08	1.07	-1.06
	3589.00	9.07	353.90	N/A	218.81	-13.39	3573.13	21.47	95.00	3.84	0.29	-24.82
	3683.00	10.33	332.29	N/A	233.64	-18.09	3665.81	26.73	94.00	4.07	1.34	-22.99
	3778.00	8.87	317.87	N/A	246.62	-26.97	3759.50	36.07	95.00	2.95	-1.54	-15.18
	3872.00	8.58	329.45	N/A	258.03	-35.40	3852.41	44.92	94.00	1.89	-0.31	12.32
	3967.00	8.46	341.58	N/A	270.77	-41.21	3946.37	51.20	95.00	1.89	-0.13	12.77
	4061.00	8.61	346.86	N/A	284.18	-44.99	4039.33	55.47	94.00	0.85	0.16	5.62
	4156.00	8.51	354.71	N/A	298.10	-47.26	4133.28	58.25	95.00	1.23	-0.11	8.26
	4250.00	8.66	6.46	N/A	312.06	-47.10	4226.23	58.61	94.00	1.87	0.16	12.50
	4345.00	8.83	3.38	N/A	326.45	-45.87	4320.13	57.91	95.00	0.52	0.18	-3.24
	4439.00	8.86	0.29	N/A	340.89	-45.40	4413.01	57.98	94.00	0.51	0.03	-3.29
	4534.00	8.81	352.95	N/A	355.43	-46.26	4506.89	59.38	95.00	1.19	-0.05	-7.73
	4628.00	8.77	354.60	N/A	369.70	-47.82	4599.78	61.46	94.00	0.27	-0.04	1.76
	4723.00	8.71	2.58	N/A	384.10	-48.18	4693.68	62.35	95.00	1.28	-0.06	8.40
	4817.00	8.76	16.78	N/A	398.07	-45.79	4786.60	60.48	94.00	2.29	0.05	15.11
	4912.00	8.82	18.01	N/A	411.92	-41.45	4880.49	56.66	95.00	0.21	0.06	1.29
	5006.00	8.63	25.24	N/A	425.15	-36.21	4973.40	51.92	94.00	1.18	-0.20	7.69
	5101.00	7.74	37.45	N/A	436.68	-29.28	5067.44	45.42	95.00	2.05	-0.94	12.85
	5195.00	8.05	49.36	N/A	445.99	-20.44	5160.56	36.92	94.00	1.77	0.33	12.67
	5290.00	8.68	57.43	N/A	454.18	-9.35	5254.55	26.15	95.00	1.40	0.66	8.49
	5384.00	8.94	33.27	N/A	464.11	0.64	5347.47	16.53	94.00	3.92	0.28	-25.70
	5479.00	10.87	2.76	N/A	479.24	5.12	5441.12	12.61	95.00	5.80	2.03	-32.12
	5573.00	12.95	338.92	N/A	497.94	1.76	5533.14	16.66	94.00	5.63	2.21	-25.36
	5668.00	12.59	319.75	N/A	515.78	-8.77	5625.83	27.84	95.00	4.46	-0.38	-20.18
	5763.00	10.97	304.65	N/A	528.82	-22.90	5718.85	42.44	95.00	3.65	-1.71	-15.89
	5857.00	9.21	309.54	N/A	538.70	-36.06	5811.40	55.96	94.00	2.08	-1.87	5.20
	5952.00	16.42	305.98	N/A	551.44	-52.81	5903.97	73.17	95.00	7.63	7.59	-3.75
	6046.00	24.72	294.10	N/A	567.31	-81.56	5991.94	102.49	94.00	9.84	8.83	-12.64
	6140.00	29.40	290.81	N/A	583.54	-121.09	6075.63	142.60	94.00	5.23	4.98	-3.50
	6235.00	24.70	286.50	N/A	599.54	-168.02	6156.00	190.08	95.00	6.46	4.54	-1.04

		6233.00	34.79	286.50	N/A	599.34	-166.92	6156.09	190.96	95.00	6.16	5.97	-4.34
		6330.00	44.24	275.96	N/A	610.71	-228.07	6229.38	250.50	95.00	12.17	9.95	-11.09
		6424.00	53.15	274.13	N/A	616.84	-298.34	6291.37	320.95	94.00	9.59	9.48	-1.95
		6519.00	61.15	277.40	N/A	624.95	-377.65	6342.87	400.51	95.00	8.90	8.42	3.44
		6613.00	70.29	278.50	N/A	636.82	-462.42	6381.48	485.66	94.00	9.78	9.72	1.17
		6708.00	78.95	275.91	N/A	648.25	-553.20	6406.65	576.80	95.00	9.49	9.12	-2.73
		6802.00	86.46	272.55	N/A	655.10	-646.11	6418.59	669.90	94.00	8.74	7.99	-3.57
		6897.00	84.45	264.03	N/A	652.29	-740.67	6426.13	764.30	95.00	9.19	-2.12	-8.97
		6991.00	85.75	260.30	N/A	639.52	-833.44	6434.16	856.52	94.00	4.19	1.38	-3.97
		7086.00	85.63	264.89	N/A	627.31	-927.35	6441.30	949.92	95.00	4.82	-0.13	4.83
		7181.00	86.52	271.43	N/A	624.27	-1022.03	6447.81	1044.42	95.00	6.93	0.94	6.88
		7370.00	91.85	274.88	N/A	634.67	-1210.63	6450.50	1233.27	189.00	3.36	2.82	1.83
		7465.00	91.85	275.29	N/A	643.09	-1305.20	6447.43	1328.10	95.00	0.43	0.00	0.43
		7559.00	91.88	272.45	N/A	649.43	-1398.93	6444.37	1421.99	94.00	3.02	0.03	-3.02
		7654.00	93.17	266.67	N/A	648.70	-1493.79	6440.18	1516.77	95.00	6.23	1.36	-6.08
		7748.00	93.73	261.38	N/A	638.94	-1587.08	6434.52	1609.63	94.00	5.65	0.60	-5.63
		7843.00	89.69	260.64	N/A	624.11	-1680.85	6431.69	1702.78	95.00	4.32	-4.25	-0.78
		7937.00	89.66	265.19	N/A	612.51	-1774.10	6432.22	1795.55	94.00	4.84	-0.03	4.84
		8031.00	88.86	267.28	N/A	606.34	-1867.89	6433.44	1889.04	94.00	2.38	-0.85	2.22
		8126.00	88.98	267.65	N/A	602.14	-1962.78	6435.23	1983.71	95.00	0.41	0.13	0.39
		8220.00	88.92	267.43	N/A	598.11	-2056.68	6436.95	2077.39	94.00	0.24	-0.06	-0.23
		8315.00	89.02	267.32	N/A	593.76	-2151.56	6438.66	2172.05	95.00	0.16	0.11	-0.12
		8409.00	89.54	266.96	N/A	589.07	-2245.43	6439.84	2265.69	94.00	0.67	0.55	-0.38
		8504.00	89.72	267.00	N/A	584.06	-2340.30	6440.45	2360.31	95.00	0.19	0.19	0.04
		8598.00	89.69	265.70	N/A	578.08	-2434.11	6440.94	2453.83	94.00	1.38	-0.03	-1.38
		8693.00	89.66	264.73	N/A	570.15	-2528.77	6441.48	2548.13	95.00	1.02	-0.03	-1.02
		8787.00	89.54	265.24	N/A	561.94	-2622.41	6442.13	2641.40	94.00	0.56	-0.13	0.54
		8881.00	89.60	265.72	N/A	554.53	-2716.12	6442.84	2734.77	94.00	0.51	0.06	0.51
		8976.00	89.60	267.10	N/A	548.58	-2810.92	6443.50	2829.29	95.00	1.45	0.00	1.45
		9070.00	89.75	268.38	N/A	544.87	-2904.85	6444.03	2923.02	94.00	1.37	0.16	1.36
		9165.00	89.78	269.76	N/A	543.33	-2999.83	6444.42	3017.88	95.00	1.45	0.03	1.45
		9259.00	89.94	270.19	N/A	543.29	-3093.83	6444.65	3111.81	94.00	0.49	0.17	0.46
		9354.00	89.94	270.76	N/A	544.08	-3188.83	6444.75	3206.77	95.00	0.60	0.00	0.60
		9448.00	89.75	270.81	N/A	545.37	-3282.82	6445.01	3300.75	94.00	0.21	-0.20	0.05
		9543.00	89.88	269.64	N/A	545.74	-3377.82	6445.31	3395.69	95.00	1.24	0.14	-1.23
		9637.00	89.60	269.48	N/A	545.02	-3471.81	6445.74	3489.60	94.00	0.34	-0.30	-0.17
		9731.00	89.75	270.41	N/A	544.93	-3565.81	6446.27	3583.53	94.00	1.00	0.16	0.99
		9826.00	90.00	270.51	N/A	545.69	-3660.81	6446.48	3678.49	95.00	0.28	0.26	0.11
		9920.00	89.78	270.97	N/A	546.91	-3754.80	6446.66	3772.46	94.00	0.54	-0.23	0.49
		10015.00	89.85	269.99	N/A	547.70	-3849.79	6446.97	3867.42	95.00	1.03	0.07	-1.03
		10110.00	89.72	269.12	N/A	546.96	-3944.79	6447.32	3962.32	95.00	0.93	-0.14	-0.92
		10204.00	89.91	270.13	N/A	546.35	-4038.78	6447.63	4056.23	94.00	1.09	0.20	1.07
		10393.00	89.75	269.61	N/A	545.92	-4227.78	6448.19	4245.08	189.00	0.29	-0.08	-0.28
		10488.00	89.75	270.34	N/A	545.88	-4322.78	6448.60	4340.02	95.00	0.77	0.00	0.77
		10583.00	89.85	270.08	N/A	546.23	-4417.78	6448.93	4434.96	95.00	0.29	0.11	-0.27
		10677.00	89.69	270.76	N/A	546.91	-4511.78	6449.31	4528.92	94.00	0.74	-0.17	0.72
		10772.00	89.85	272.67	N/A	549.76	-4606.73	6449.69	4623.91	95.00	2.02	0.17	2.01
		10866.00	89.75	272.29	N/A	553.83	-4700.64	6450.02	4717.91	94.00	0.42	-0.11	-0.40
		10961.00	90.00	269.63	N/A	555.42	-4795.62	6450.23	4812.88	95.00	2.81	0.26	-2.80
		11055.00	89.91	266.63	N/A	552.35	-4889.56	6450.30	4906.64	94.00	3.19	-0.10	-3.19
		11150.00	89.82	266.50	N/A	546.66	-4984.39	6450.53	5001.20	95.00	0.17	-0.09	-0.14
		11244.00	89.82	266.17	N/A	540.65	-5078.19	6450.82	5094.72	94.00	0.35	0.00	-0.35
		11339.00	89.66	266.04	N/A	534.20	-5172.97	6451.25	5189.19	95.00	0.22	-0.17	-0.14
		11434.00	89.69	266.29	N/A	527.84	-5267.76	6451.79	5283.68	95.00	0.27	0.03	0.26
		11528.00	89.78	266.84	N/A	522.21	-5361.59	6452.23	5377.24	94.00	0.59	0.10	0.59
		11623.00	89.75	267.74	N/A	517.72	-5456.48	6452.62	5471.90	95.00	0.95	-0.03	0.95
		11717.00	89.72	266.54	N/A	513.03	-5550.36	6453.05	5565.54	94.00	1.28	-0.03	-1.28
		11811.00	89.75	263.25	N/A	504.67	-5643.97	6453.49	5658.78	94.00	3.50	0.03	-3.50
		11906.00	89.66	265.17	N/A	495.08	-5738.48	6453.98	5752.87	95.00	2.02	-0.09	2.02

	12001.00	89.78	265.77	N/A	487.58	-5833.18	6454.44	5847.23	95.00	0.64	0.13	0.63
	12095.00	89.82	268.39	N/A	482.79	-5927.05	6454.77	5940.86	94.00	2.79	0.04	2.79
	12190.00	89.69	268.51	N/A	480.22	-6022.02	6455.17	6035.66	95.00	0.19	-0.14	0.13
	12284.00	89.82	268.32	N/A	477.62	-6115.98	6455.58	6129.46	94.00	0.24	0.14	-0.20
	12379.00	89.78	269.62	N/A	475.91	-6210.96	6455.91	6224.32	95.00	1.37	-0.04	1.37
	12473.00	89.78	269.87	N/A	475.50	-6304.96	6456.27	6318.24	94.00	0.27	0.00	0.27
	12568.00	89.72	271.99	N/A	477.04	-6399.94	6456.68	6413.21	95.00	2.23	-0.06	2.23
	12662.00	89.78	270.92	N/A	479.42	-6493.91	6457.09	6507.20	94.00	1.14	0.06	-1.14
	12757.00	89.94	271.29	N/A	481.26	-6588.89	6457.33	6602.18	95.00	0.42	0.17	0.39
	12851.00	89.75	270.60	N/A	482.81	-6682.88	6457.58	6696.16	94.00	0.76	-0.20	-0.73
	12946.00	89.82	268.97	N/A	482.45	-6777.87	6457.94	6791.08	95.00	1.72	0.07	-1.72
	13041.00	89.78	269.78	N/A	481.41	-6872.87	6458.27	6885.97	95.00	0.85	-0.04	0.85
	13135.00	89.82	271.82	N/A	482.73	-6966.85	6458.60	6979.94	94.00	2.17	0.04	2.17
	13230.00	89.78	272.38	N/A	486.21	-7061.79	6458.93	7074.94	95.00	0.59	-0.04	0.59
	13324.00	89.91	271.79	N/A	489.63	-7155.72	6459.18	7168.94	94.00	0.64	0.14	-0.63
	13419.00	89.88	272.61	N/A	493.27	-7250.65	6459.36	7263.94	95.00	0.86	-0.03	0.86
	13513.00	89.75	271.11	N/A	496.32	-7344.60	6459.66	7357.93	94.00	1.60	-0.14	-1.60
	13608.00	89.78	269.49	N/A	496.82	-7439.59	6460.05	7452.88	95.00	1.71	0.03	-1.71
	13702.00	90.43	267.46	N/A	494.32	-7533.56	6459.88	7546.69	94.00	2.27	0.69	-2.16
	13797.00	89.69	264.43	N/A	487.60	-7628.31	6459.78	7641.12	95.00	3.28	-0.78	-3.19
	13891.00	89.75	264.49	N/A	478.53	-7721.87	6460.24	7734.28	94.00	0.09	0.06	0.06
	13986.00	89.66	265.58	N/A	470.31	-7816.51	6460.73	7828.55	95.00	1.15	-0.09	1.15
	14080.00	89.88	266.67	N/A	463.95	-7910.29	6461.10	7922.04	94.00	1.18	0.23	1.16
	14175.00	89.82	267.59	N/A	459.20	-8005.17	6461.35	8016.68	95.00	0.97	-0.06	0.97
	14269.00	89.82	267.61	N/A	455.26	-8099.09	6461.65	8110.38	94.00	0.02	0.00	0.02
	14364.00	89.82	268.01	N/A	451.63	-8194.02	6461.95	8205.12	95.00	0.42	0.00	0.42
	14458.00	89.78	270.28	N/A	450.23	-8288.00	6462.27	8298.98	94.00	2.42	-0.04	2.41
	14553.00	89.78	271.59	N/A	451.78	-8382.98	6462.64	8393.96	95.00	1.38	0.00	1.38
	14648.00	89.97	269.21	N/A	452.44	-8477.97	6462.85	8488.91	95.00	2.51	0.20	-2.51
	14742.00	89.85	267.42	N/A	449.68	-8571.93	6462.99	8582.70	94.00	1.91	-0.13	-1.90
	14837.00	89.85	266.62	N/A	444.74	-8666.80	6463.24	8677.32	95.00	0.84	0.00	-0.84
	14931.00	89.78	267.18	N/A	439.66	-8760.66	6463.55	8770.93	94.00	0.60	-0.07	0.60
	15026.00	89.82	267.38	N/A	435.15	-8855.55	6463.88	8865.59	95.00	0.21	0.04	0.21
	15120.00	89.72	267.55	N/A	430.99	-8949.46	6464.25	8959.28	94.00	0.21	-0.11	0.18
	15215.00	89.82	267.06	N/A	426.52	-9044.36	6464.64	9053.94	95.00	0.53	0.11	-0.52
	15309.00	89.82	267.70	N/A	422.23	-9138.26	6464.93	9147.62	94.00	0.68	0.00	0.68
	15404.00	89.72	267.71	N/A	418.42	-9233.18	6465.31	9242.34	95.00	0.11	-0.11	0.01
	15498.00	89.85	268.00	N/A	414.90	-9327.11	6465.67	9336.08	94.00	0.34	0.14	0.31
	15592.00	89.75	267.80	N/A	411.46	-9421.05	6465.99	9429.82	94.00	0.24	-0.11	-0.21
	15687.00	89.88	267.55	N/A	407.61	-9515.97	6466.30	9524.54	95.00	0.30	0.14	-0.26
	15781.00	89.78	267.70	N/A	403.71	-9609.89	6466.58	9618.25	94.00	0.19	-0.11	0.16
	15876.00	89.82	265.74	N/A	398.28	-9704.73	6466.91	9712.82	95.00	2.06	0.04	-2.06
	15970.00	89.94	264.64	N/A	390.39	-9798.40	6467.11	9806.13	94.00	1.18	0.13	-1.17
	16065.00	89.72	265.43	N/A	382.17	-9893.04	6467.39	9900.40	95.00	0.86	-0.23	0.83
	16159.00	89.82	265.93	N/A	375.09	-9986.77	6467.77	9993.81	94.00	0.54	0.11	0.53
	16254.00	89.72	266.10	N/A	368.49	-10081.54	6468.15	10088.27	95.00	0.21	-0.11	0.18
	16348.00	89.78	266.09	N/A	362.09	-10175.32	6468.56	10181.75	94.00	0.06	0.06	-0.01
	16443.00	89.69	267.86	N/A	357.07	-10270.18	6469.00	10276.36	95.00	1.87	-0.09	1.86
	16516.00	89.82	268.94	N/A	355.04	-10343.15	6469.31	10349.21	73.00	1.49	0.18	1.48
Projection	16540.00	89.82	268.94	N/A	354.59	-10367.15	6469.39	10373.17	24.00	0.00	0.00	0.00