



















Bit Run Summary

EQUIPMENT DESCRIPTION		
RUN1	RUN2	RUN3
DOWNHOLE EQUIPMENT	DOWNHOLE EQUIPMENT	DOWNHOLE EQUIPMENT

DOWNHOLE EQUIPMENT			DOWNHOLE EQUIPMENT			DOWNHOLE EQUIPMENT		
6-3/4 in. PowerPulse* MDC: V875 MEC: 064 MDI: 738 MGR: AA 503 DHS: V80C02 OD 6.89		23.42	6-3/4 in. PowerPulse* MDC: V875 MEC: 064 MDI: 738 MGR: AA 503 DHS: V80C02 OD 6.89		23.46	6-3/4 in. PowerPulse* MDC: V875 MEC: 064 MDI: 738 MGR: AA 503 DHS: V80C02 OD 6.89		23.52
	D&I — 19.07			D&I — 19.11			D&I — 19.17	
	GR — 18.42			GR — 18.46			GR — 18.52	
6-5/8 in. NM Pony S/N: 97081023		14.93	6-5/8 in. NM Pony S/N: 97081023		14.97	6-5/8 in. NM Pony S/N: 97081023		15.03
6-5/8 in. NM Roller Reamer S/N: GU2317R		13.69	6-5/8 in. NM Roller Reamer S/N: GU2317R		13.73	6-5/8 in. NM Roller Reamer S/N: GU2317R		13.79
6-5/8 in. NM Pony wFloat S/N: ANA98-007		11.70	6-5/8 in. NM Pony wFloat S/N: ANA98-007		11.74	6-5/8 in. NM Pony wFloat S/N: ANA98-007		11.80
7 in. PowerPak* Motor A700GT 7:8 S/N: N7310 1.5 deg. Bent Housing		9.09	7 in. PowerPak* Motor A700GT 7:8 S/N: N7310 1.5 deg. Bent Housing		9.13	7 in. PowerPak* Motor A700GT 7:8 S/N: N7311 0 deg. Bent Housing		9.19
		0.00			0.00			0.00
Smith PDC Bit OD: 8-1/2 in. S73PX S/N: JT6967		0.22	Smith TCI Bit OD: 8-1/2 in. GF11YODV S/N: MR5166		0.26	Smith PDC Bit OD: 8-1/2 in, S73PX S/N: JT6968A		0.22
Maximum string diameter 8.50 in.			Maximum string diameter 8.50 in.			Maximum string diameter 8.50 in.		
All lengths in Meters			All lengths in Meters			All lengths in Meters		

DISCLAIMER

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OTHER SERVICES FOR RUN4 Directional Drilling Directional surveys D&I	OTHER SERVICES FOR RUN	OTHER SERVICES FOR RUN
REMARKS: RUN NUMBER 4 Depth is referenced to Driller's Depth. All data presented is from Real-Time Transmission. Environmental Correction:-- Gamma Ray was corrected for Mud weight, Tool size and Bit size. Gamma Ray is not corrected for Potassium. 8.5 in. hole was reamed up from 2946.0 m to 2890.0m MD. Gamma Ray data is spliced from 2890.0m to last reading at 2929.0m	REMARKS: RUN NUMBER	REMARKS: RUN NUMBER

EQUIPMENT DESCRIPTION

RUN4	RUN	RUN
<div>DOWNHOLE EQUIPMENT</div> <div><div>6-3/4 in. PowerPulse*23.54</div><div>MDC: FA28</div><div>MEC: 1542</div><div>MDI: 1559</div><div>MGR: 295</div><div>DHS: V80B96</div><div>OD 6.89</div><div><div>D&I19.17</div><div>GR18.52</div></div></div>		

6-5/8 in. NM Pony
S/N: 97081023

15.03

6-5/8 in. NM Roller Reamer
S/N: GU2317R

13.79

6-5/8 in. NM Pony wFloat
S/N: ANA98-007

11.80

7 in. PowerPak* Motor
A700GT 7:8
S/N: N7311
0 deg. Bent Housing

9.19

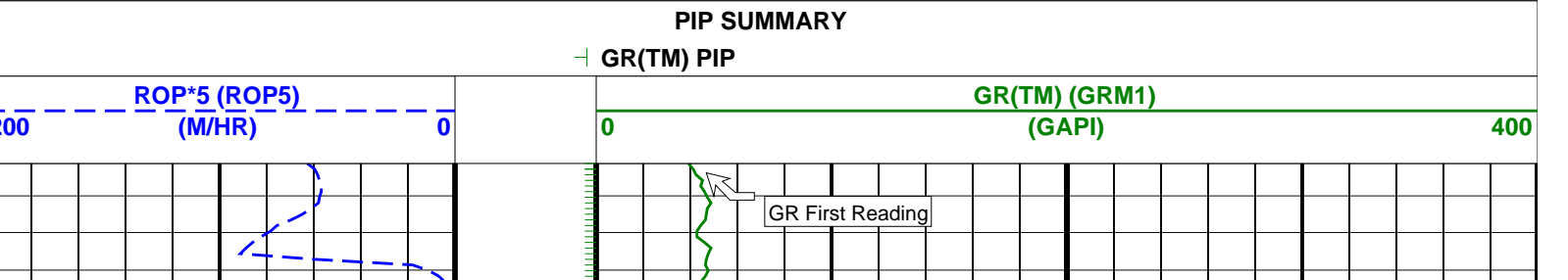
Smith PDC Bit
OD: 8-1/2 in,
S73PX S/N: JT6968A

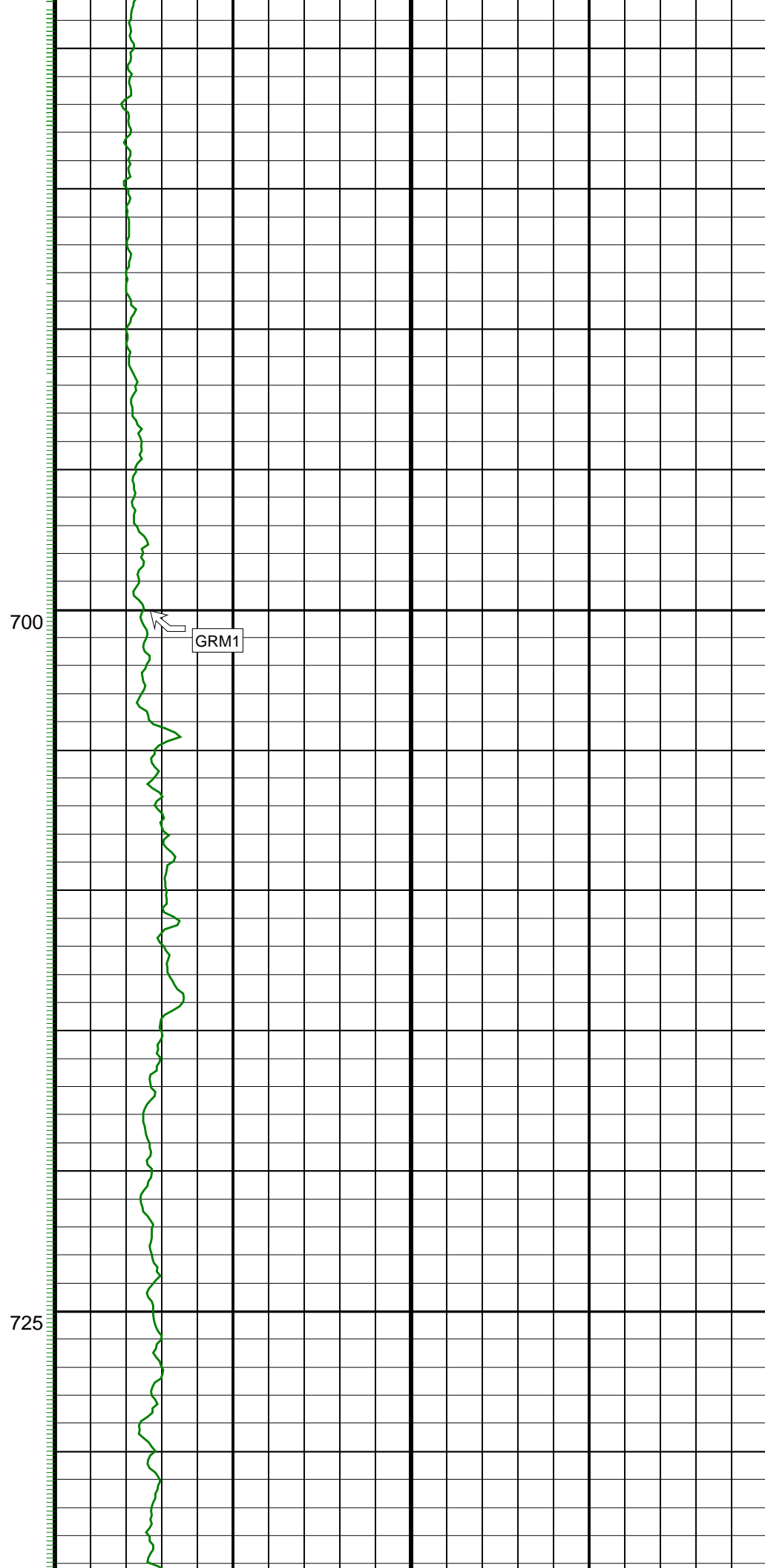
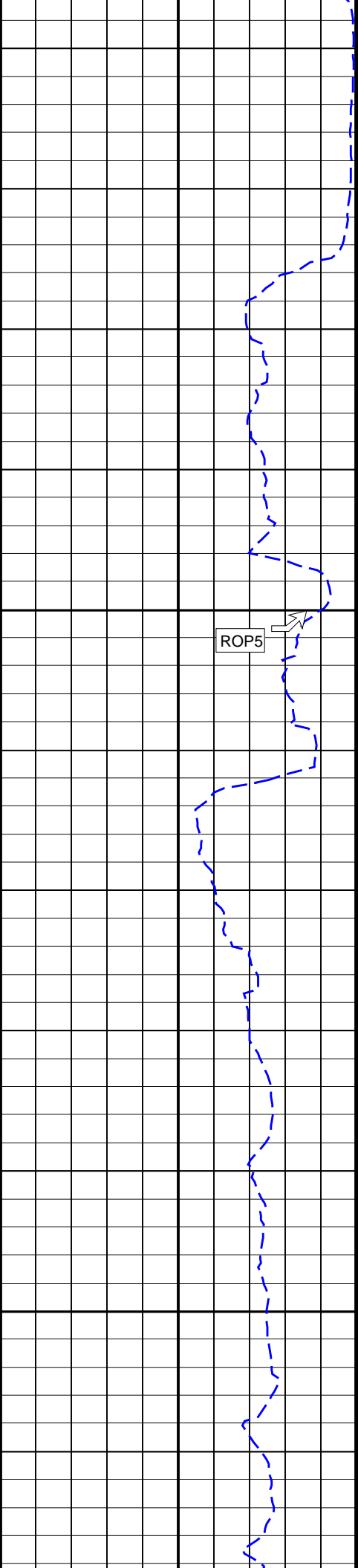
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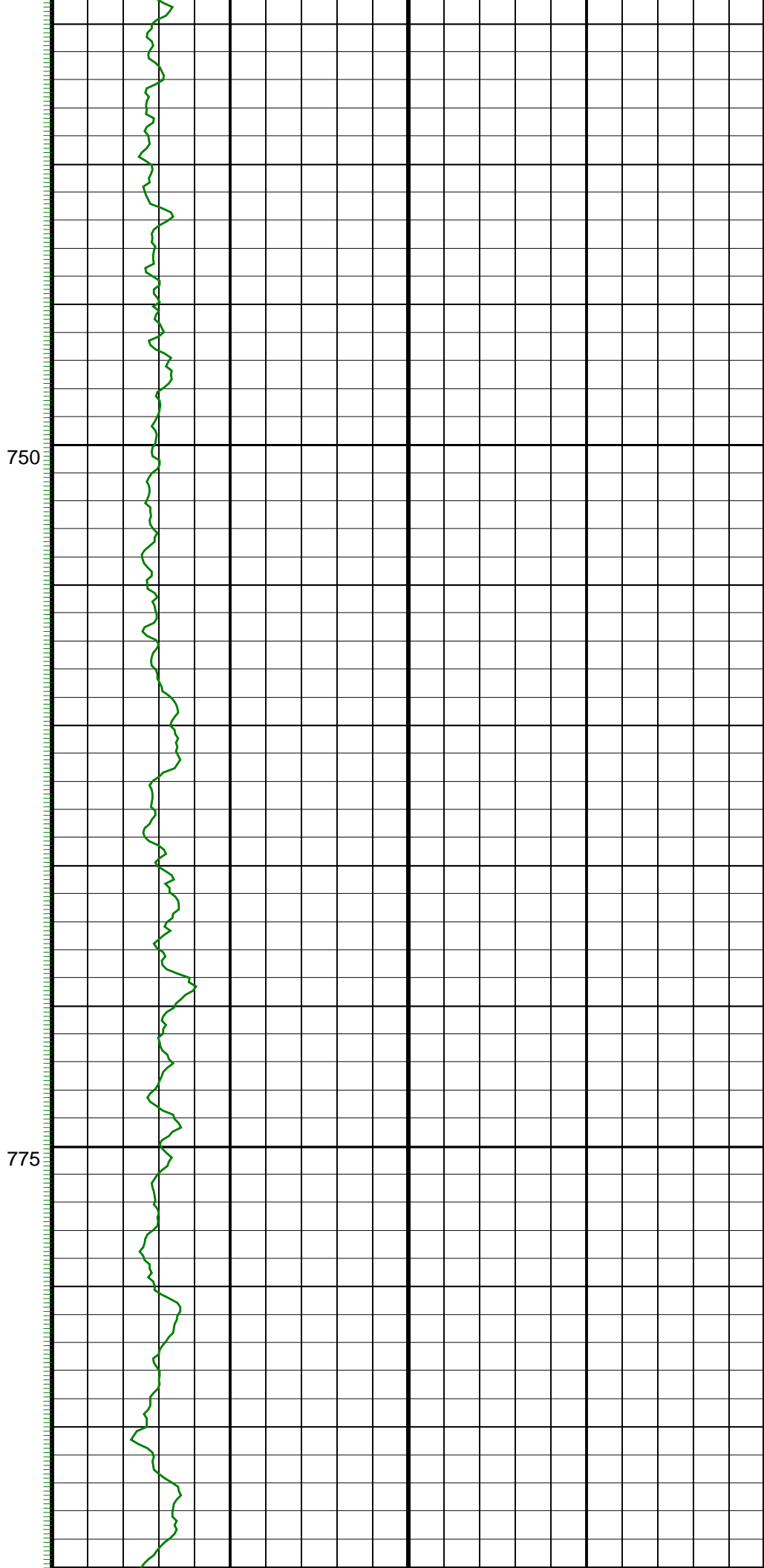
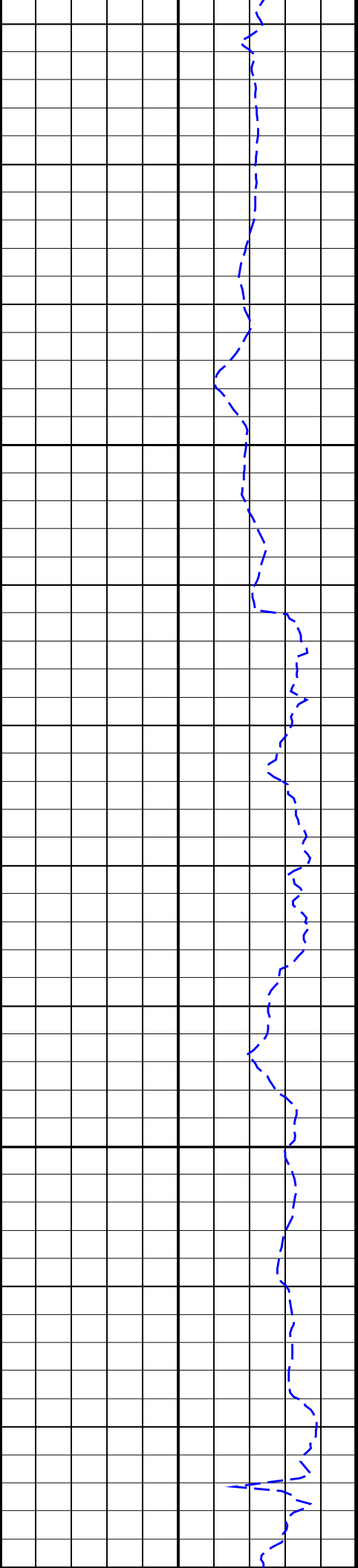
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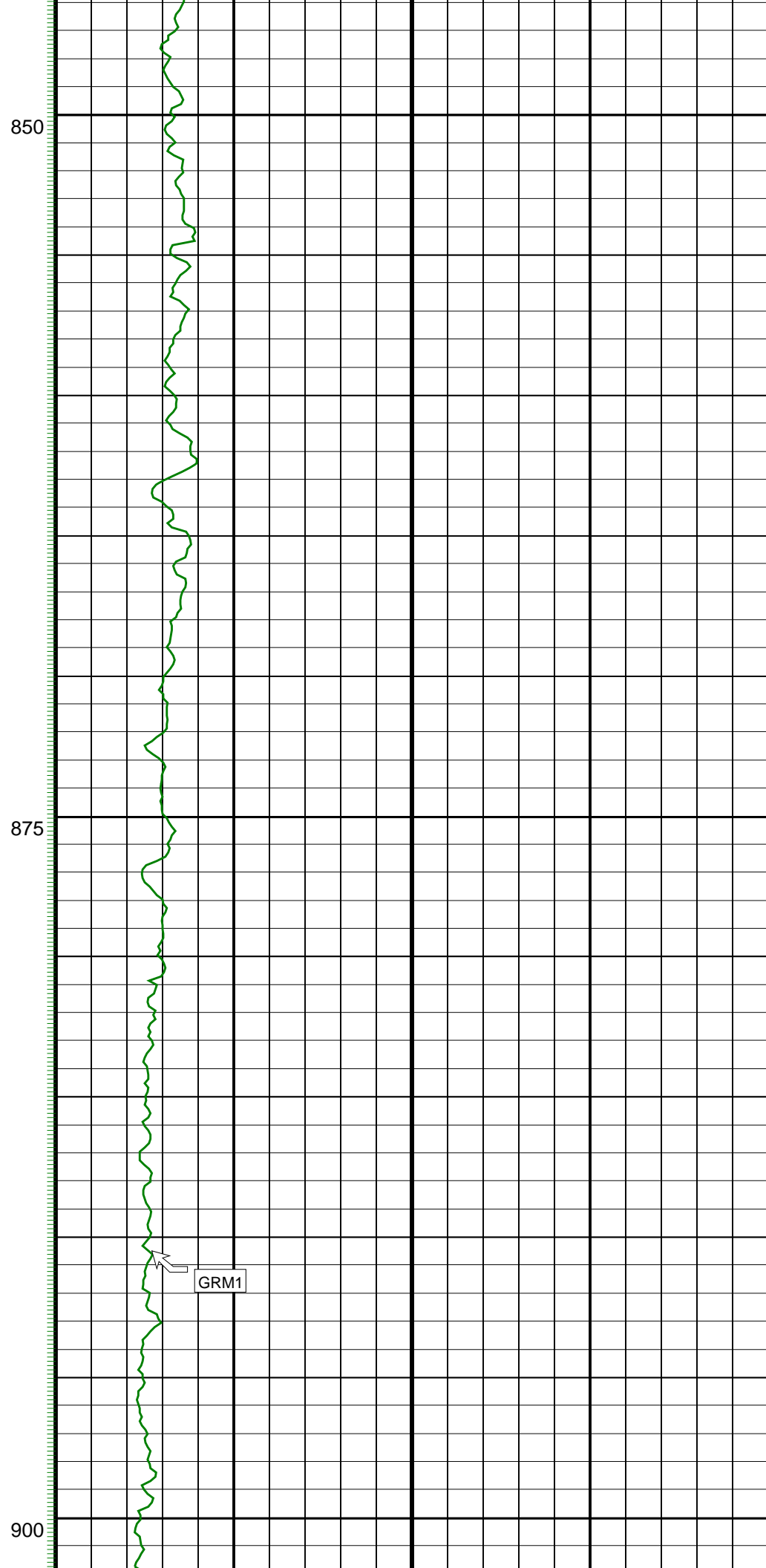
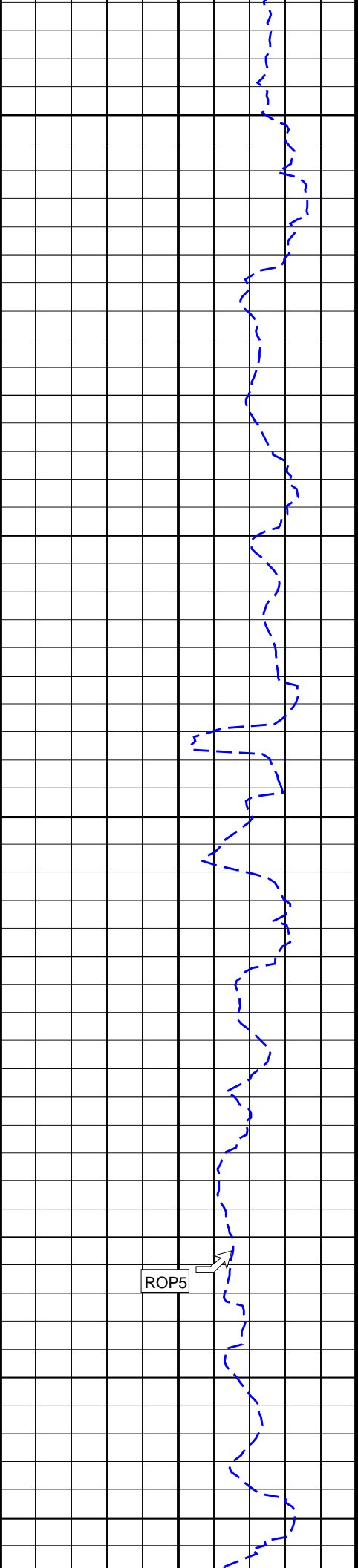
Maximum string diameter 8.50 in.
All lengths in Meters

WKF W20A RT 1:200 MD





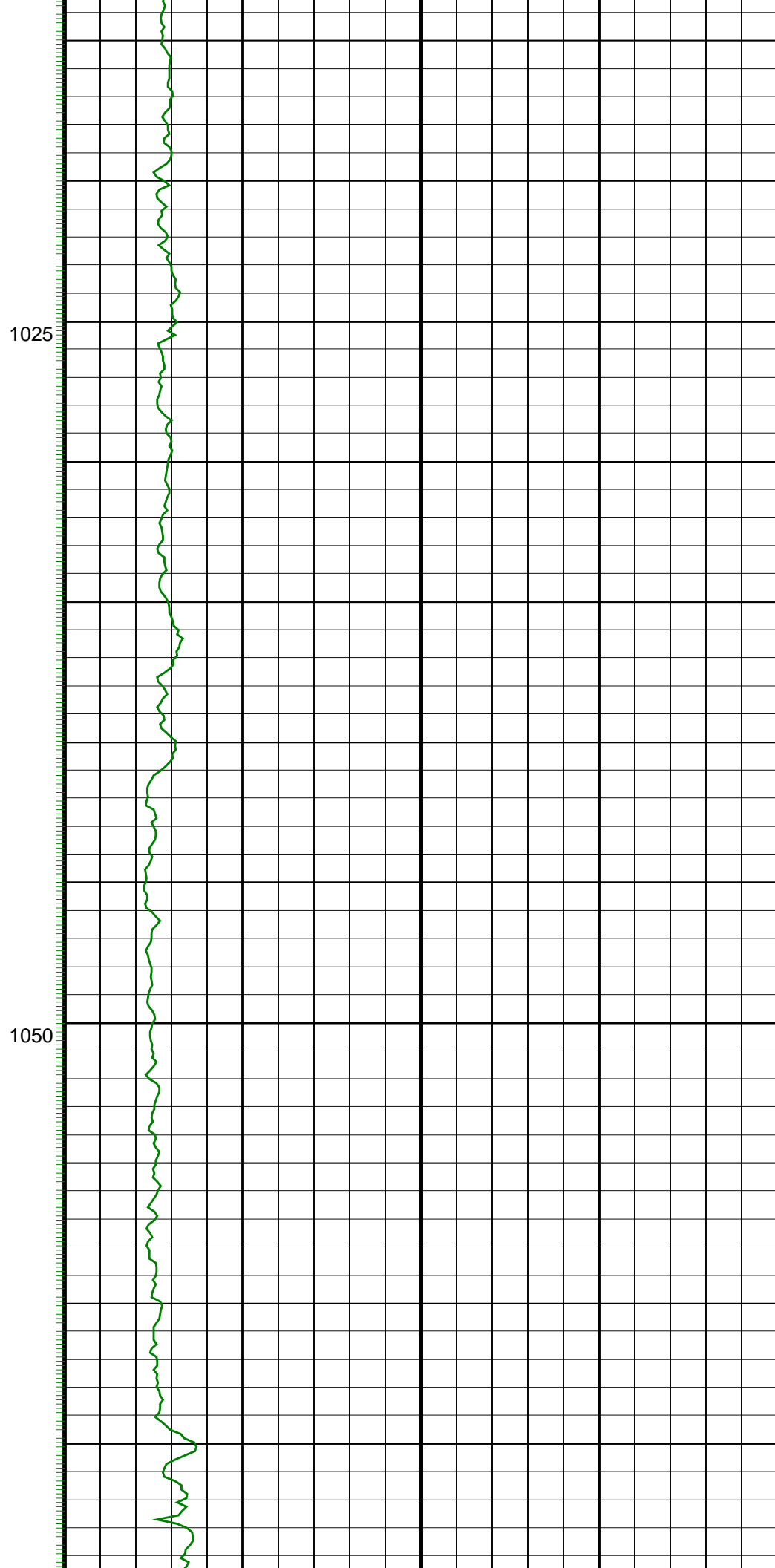
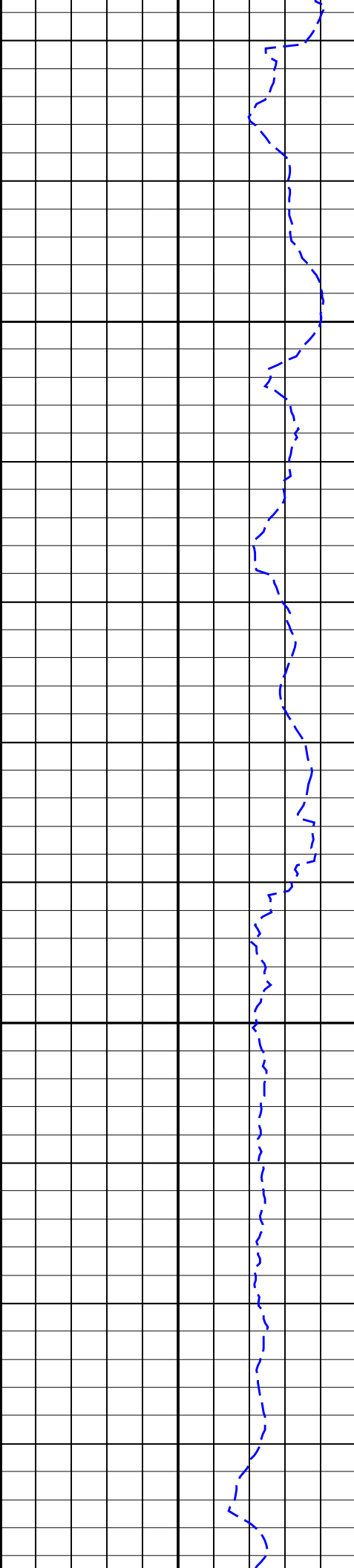


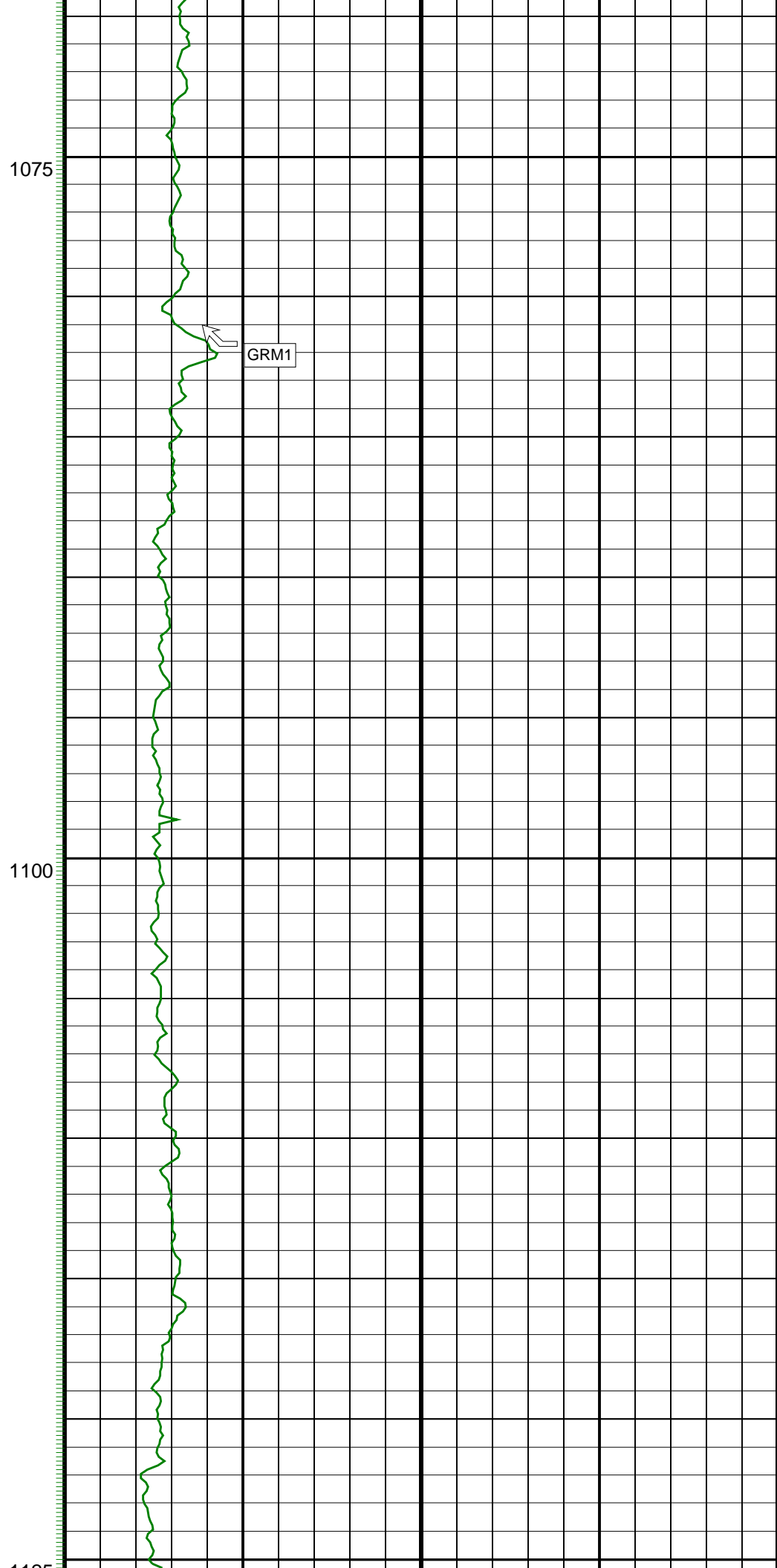
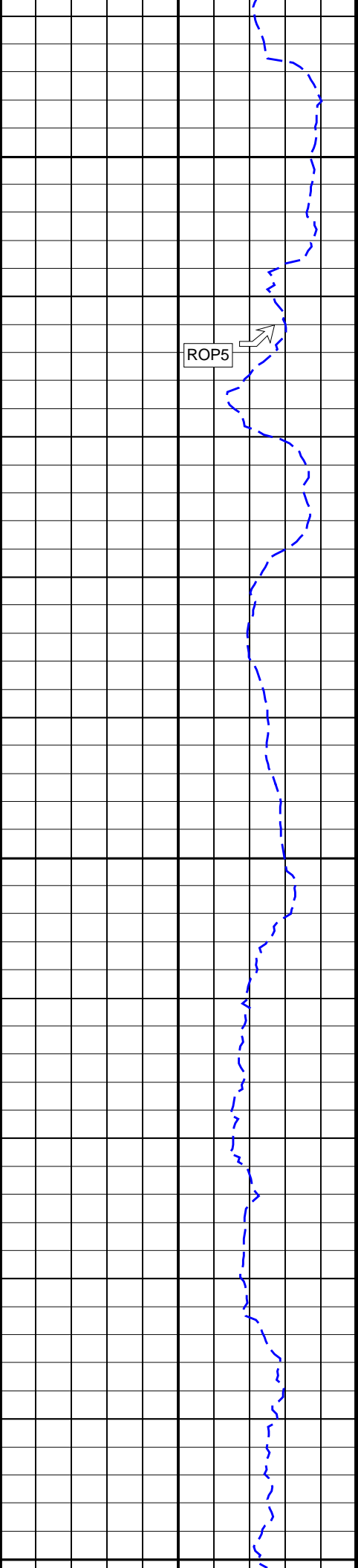


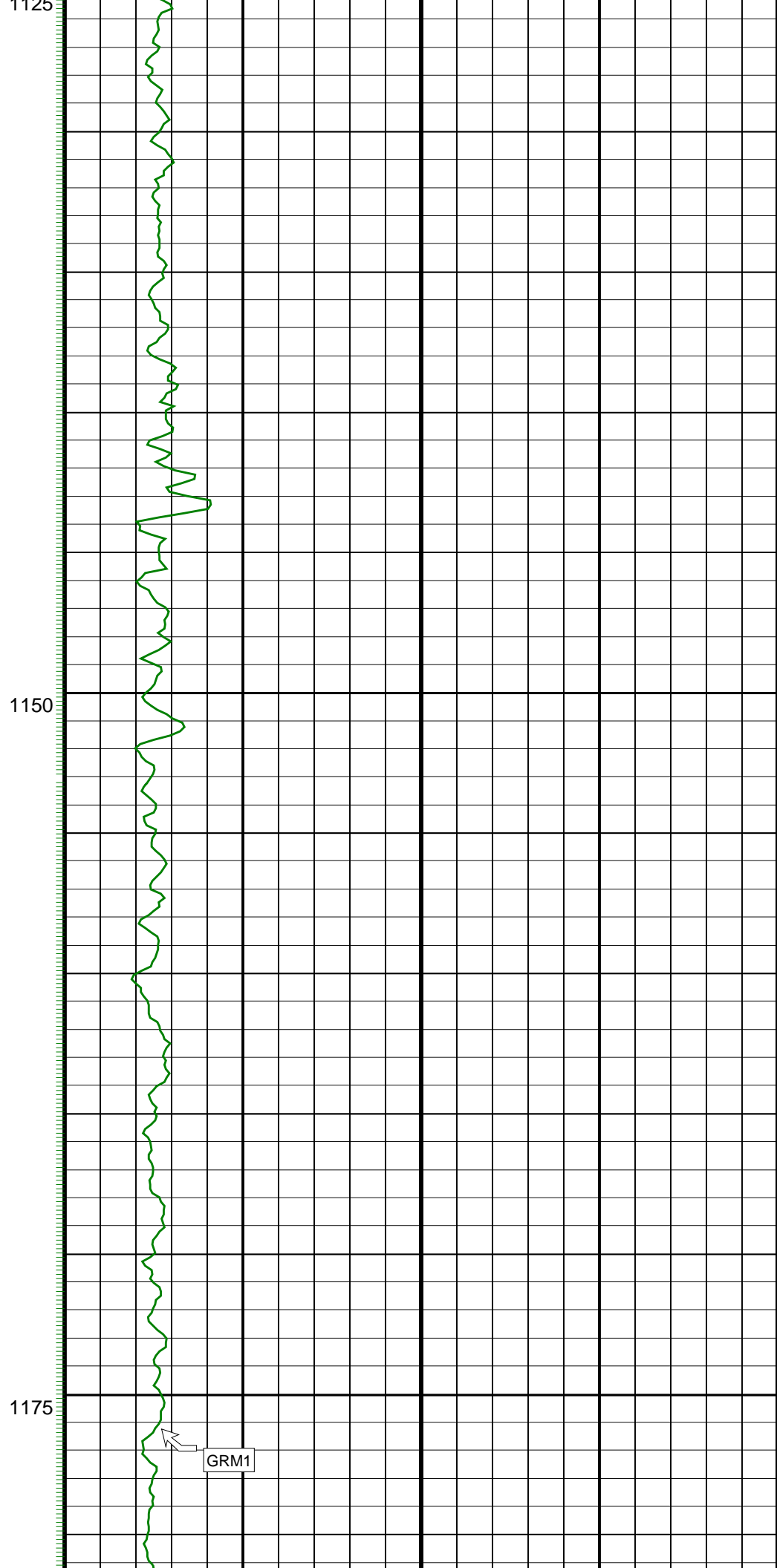
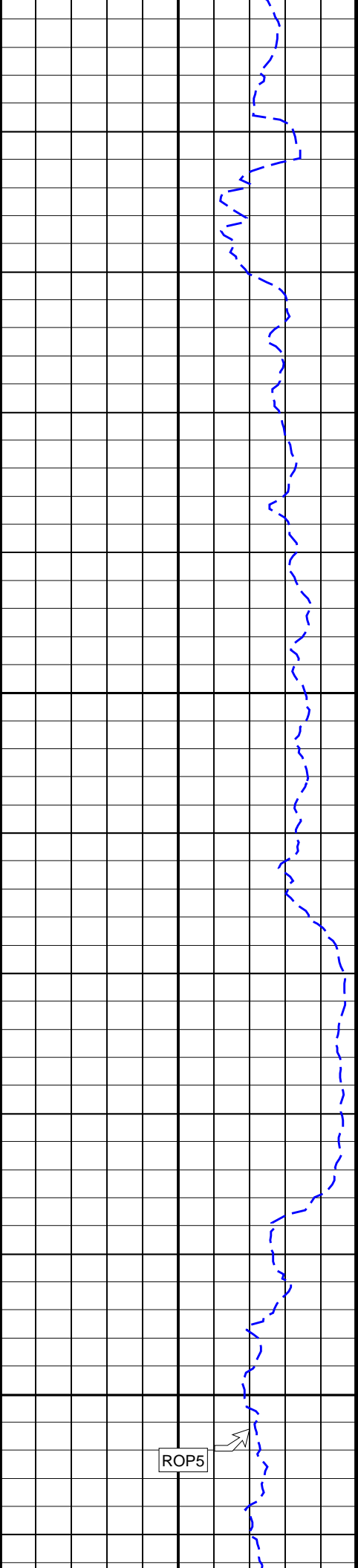
GRM1

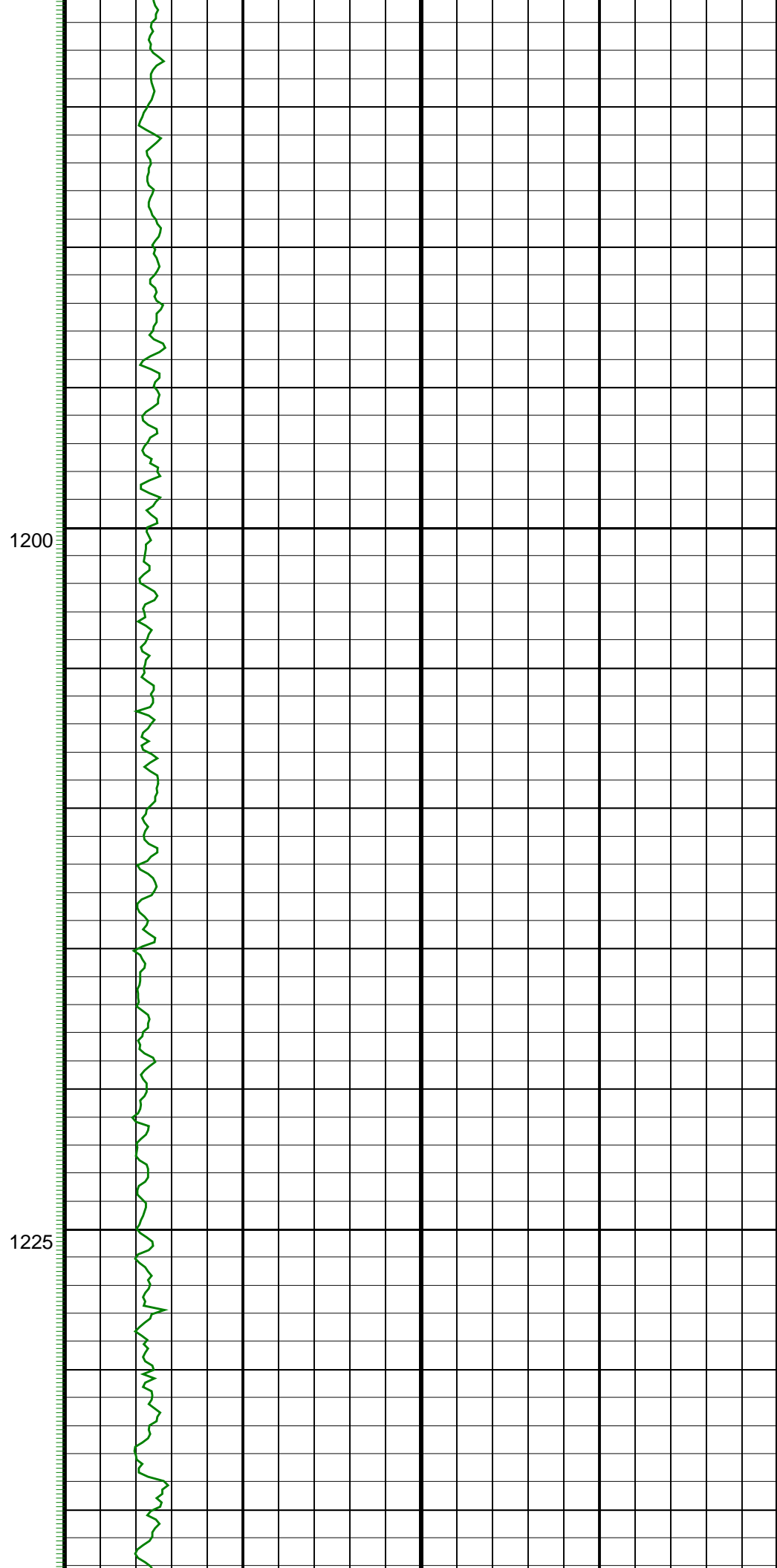
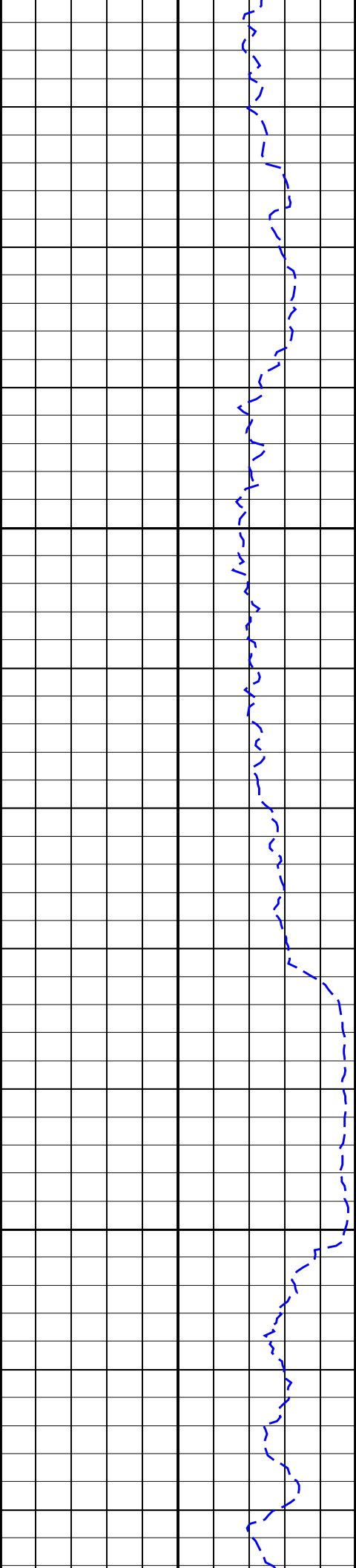
A line graph on a grid. The x-axis is labeled 'Time' and the y-axis is labeled 'Power'. A green line represents the power consumption over time. The line shows a series of small fluctuations, with a prominent sharp peak labeled 'GRM1' pointing to it. The peak occurs at approximately 1/3 of the way across the x-axis and reaches a height of about 1/3 of the way up the y-axis. The grid consists of 10 major divisions on the x-axis and 10 major divisions on the y-axis, with each major division further subdivided into 5 smaller units.

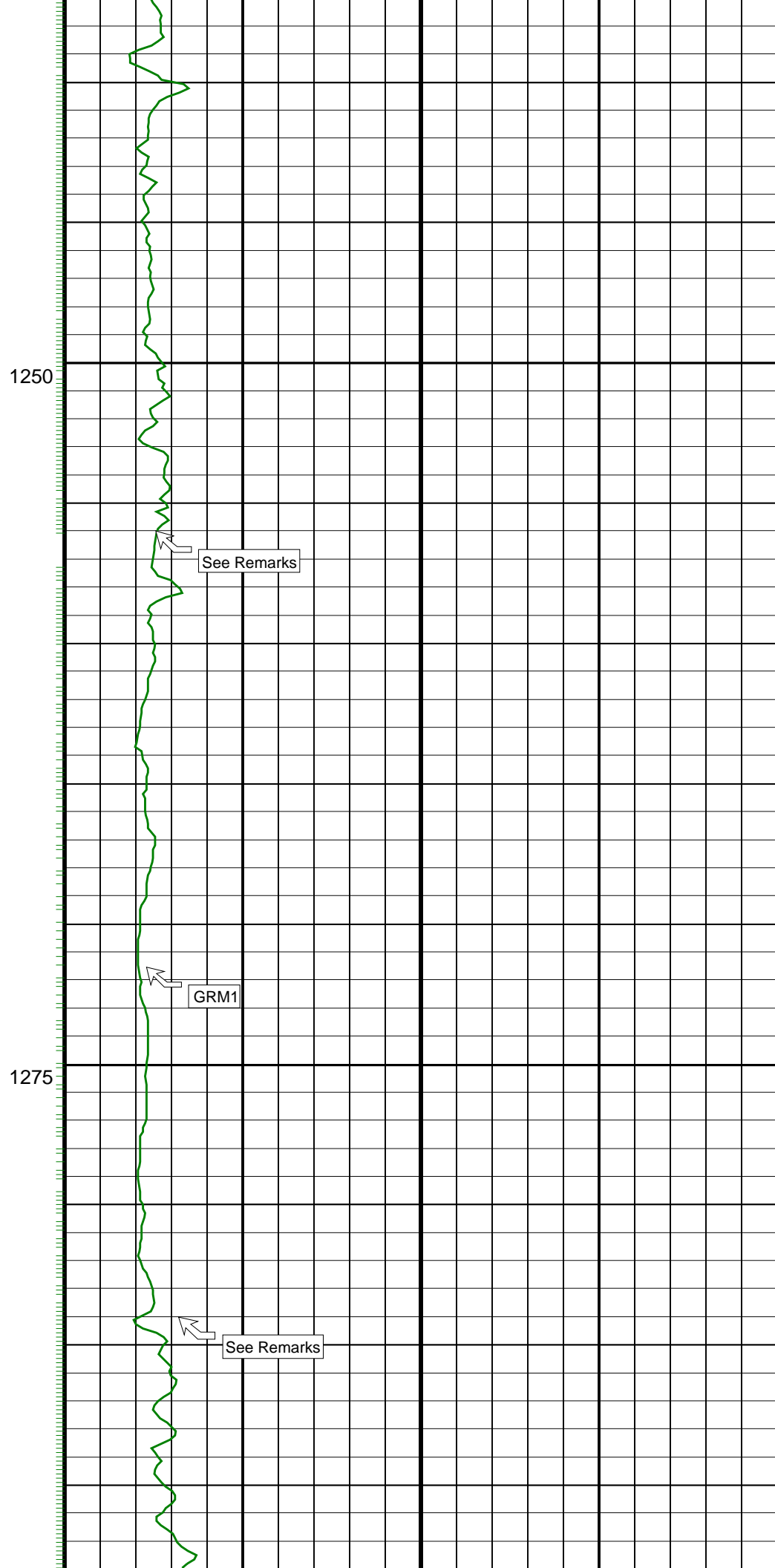
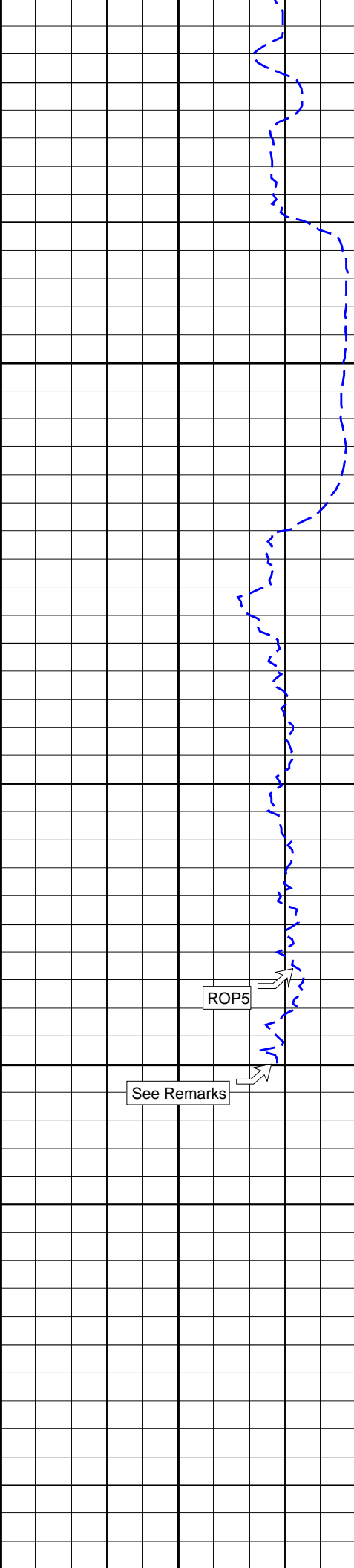
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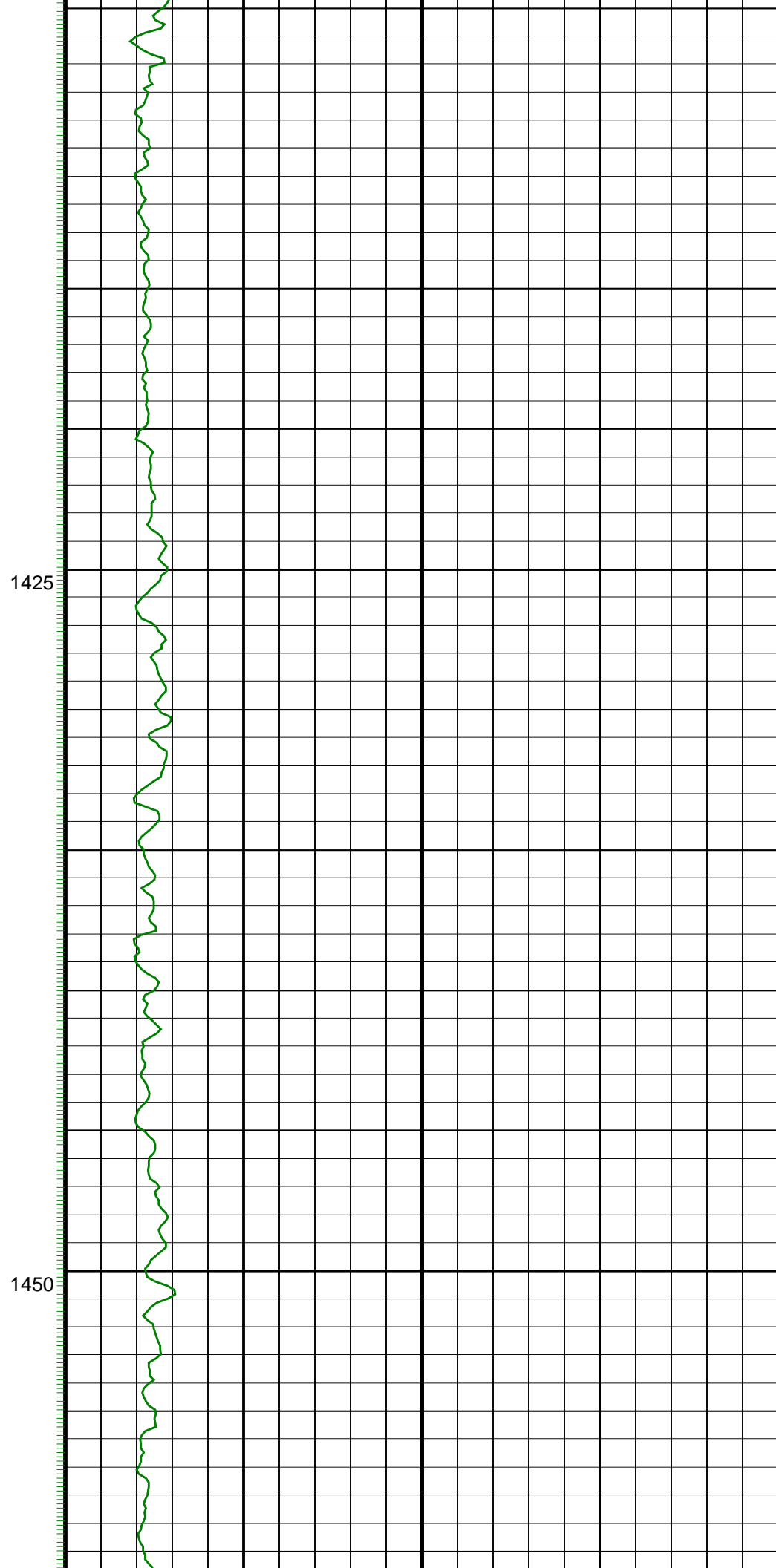
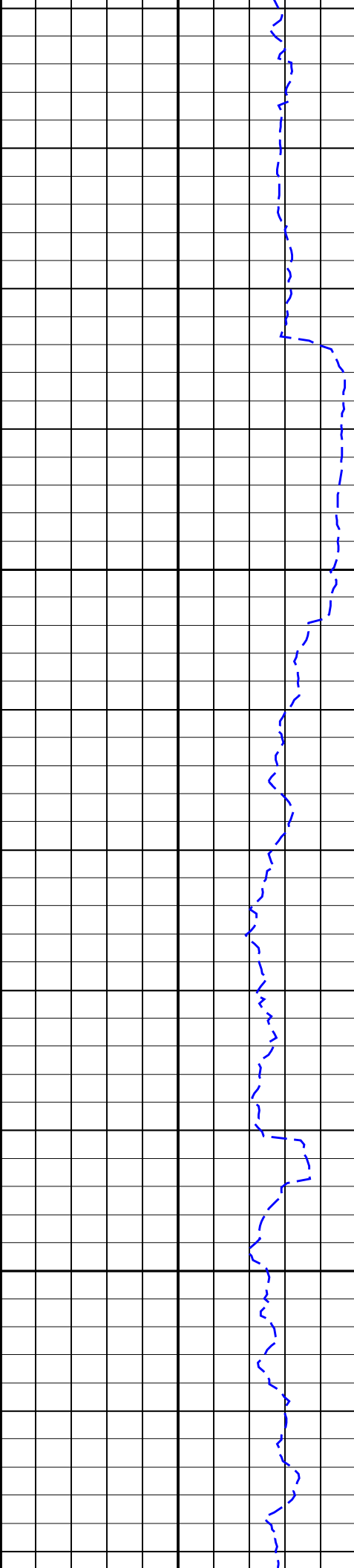


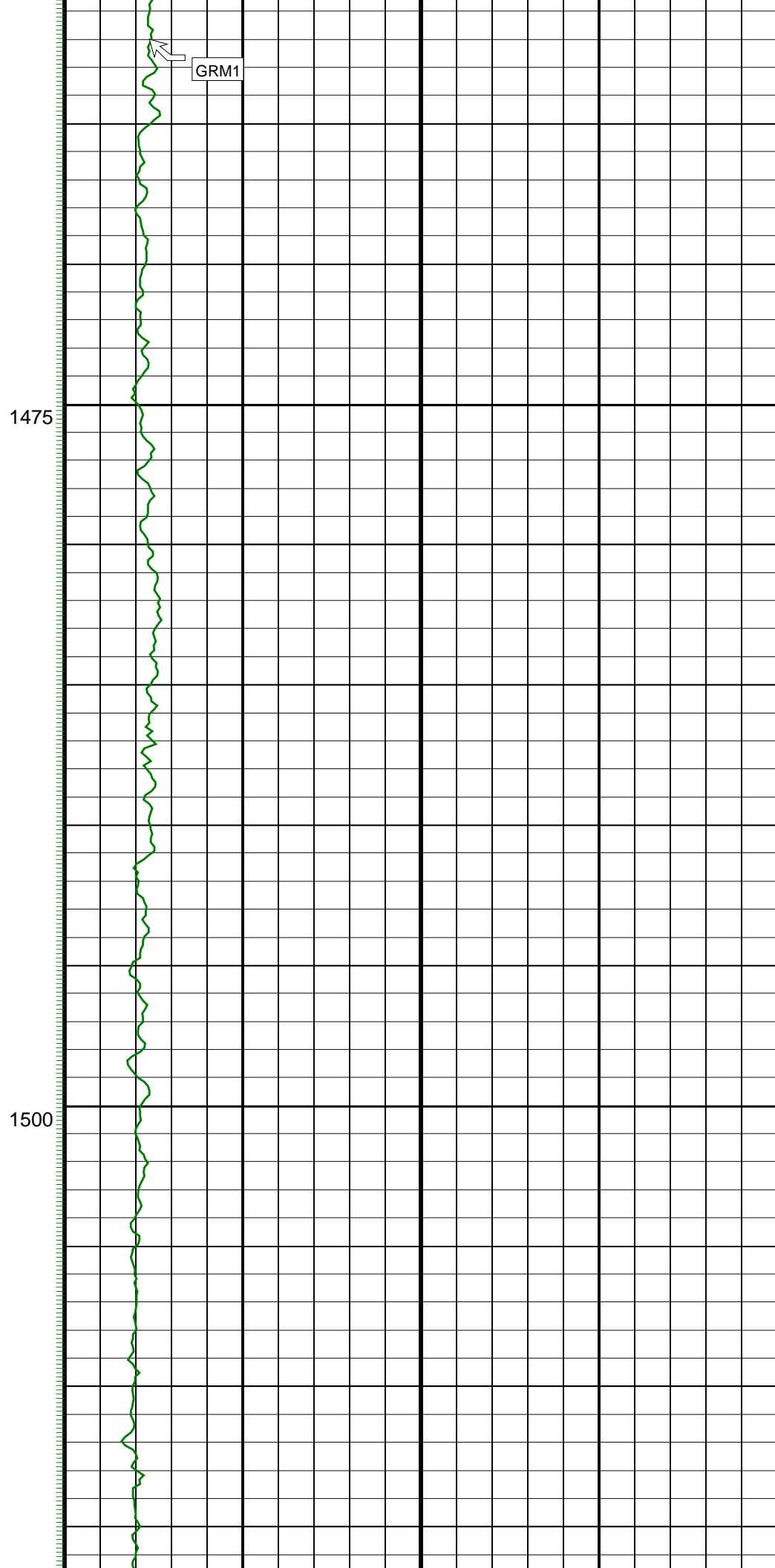
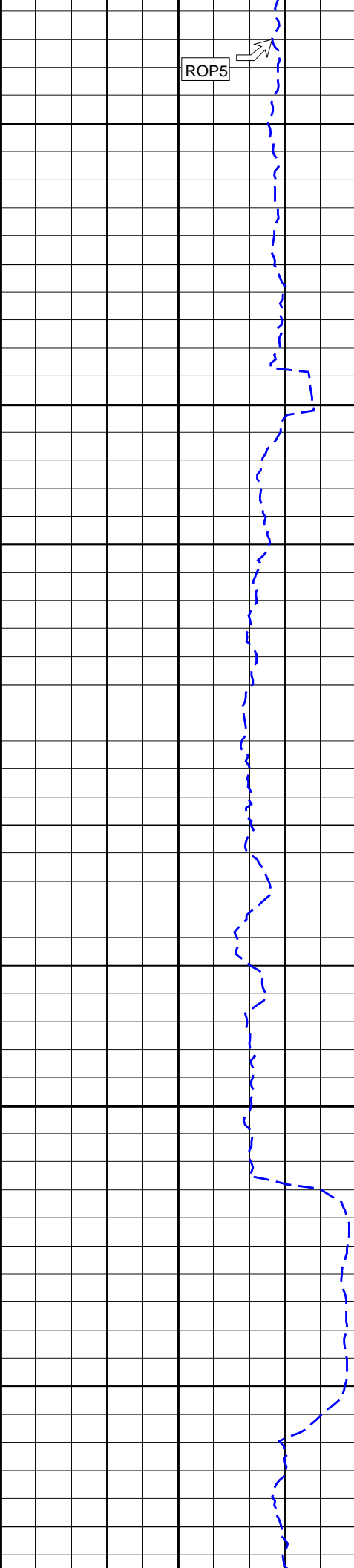


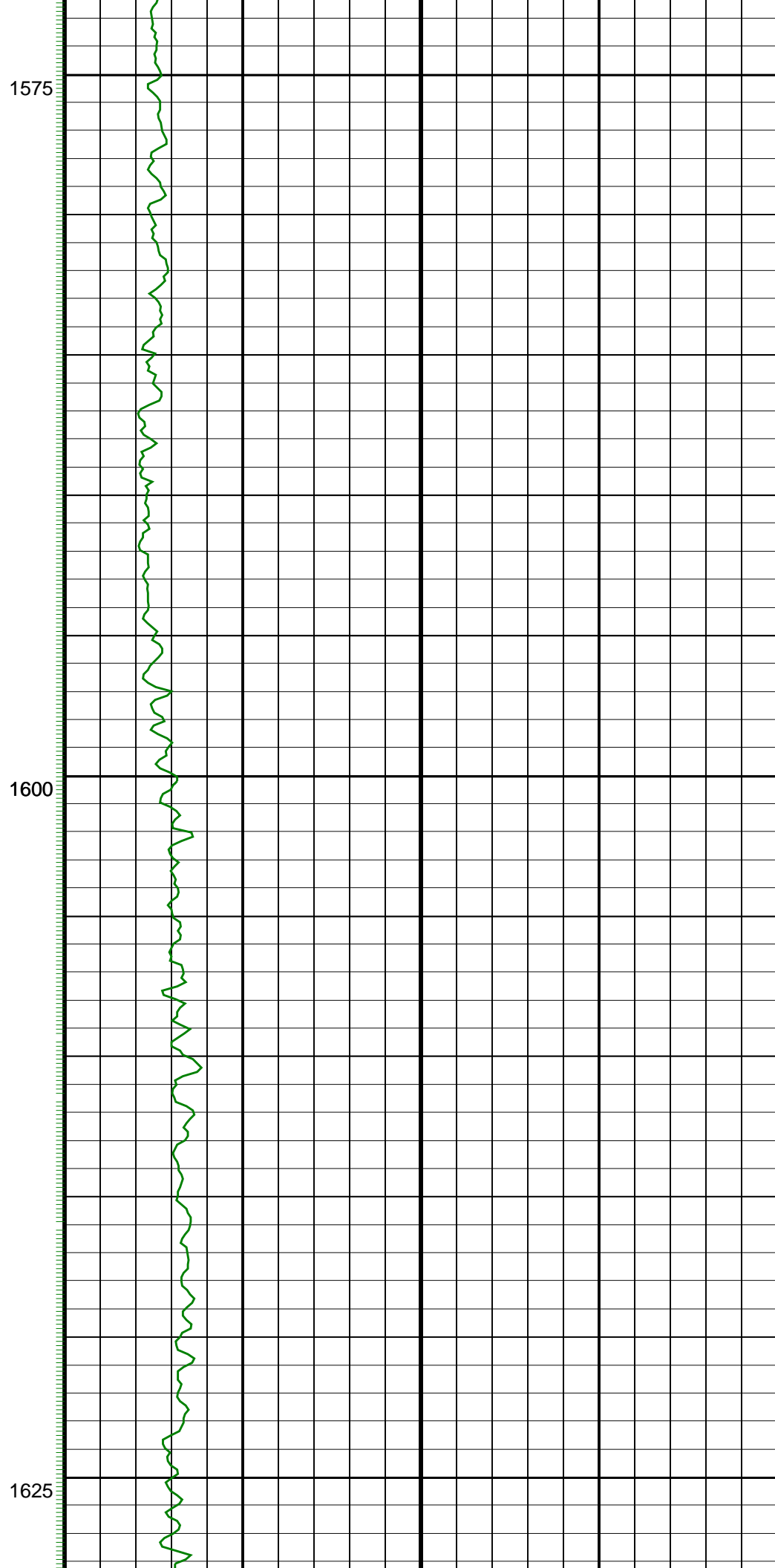
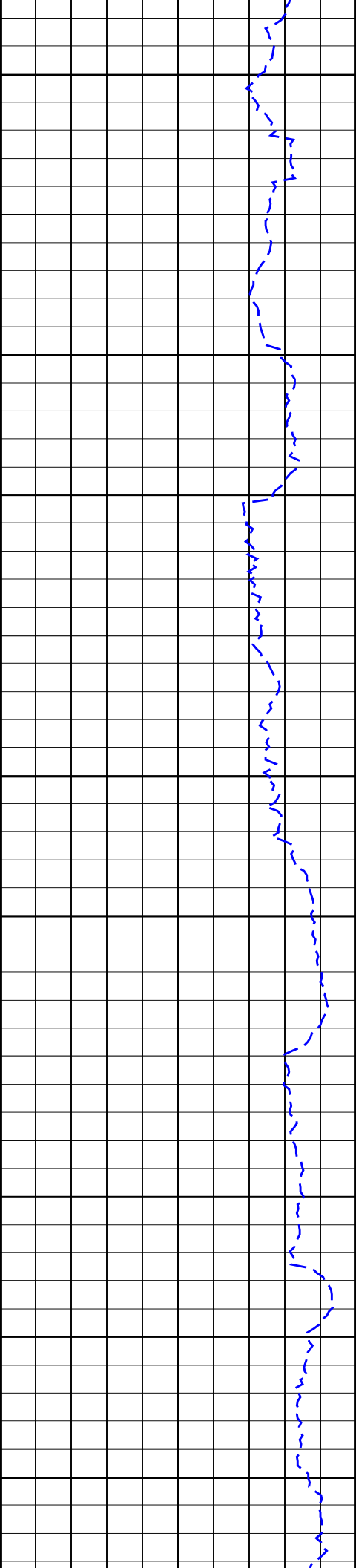


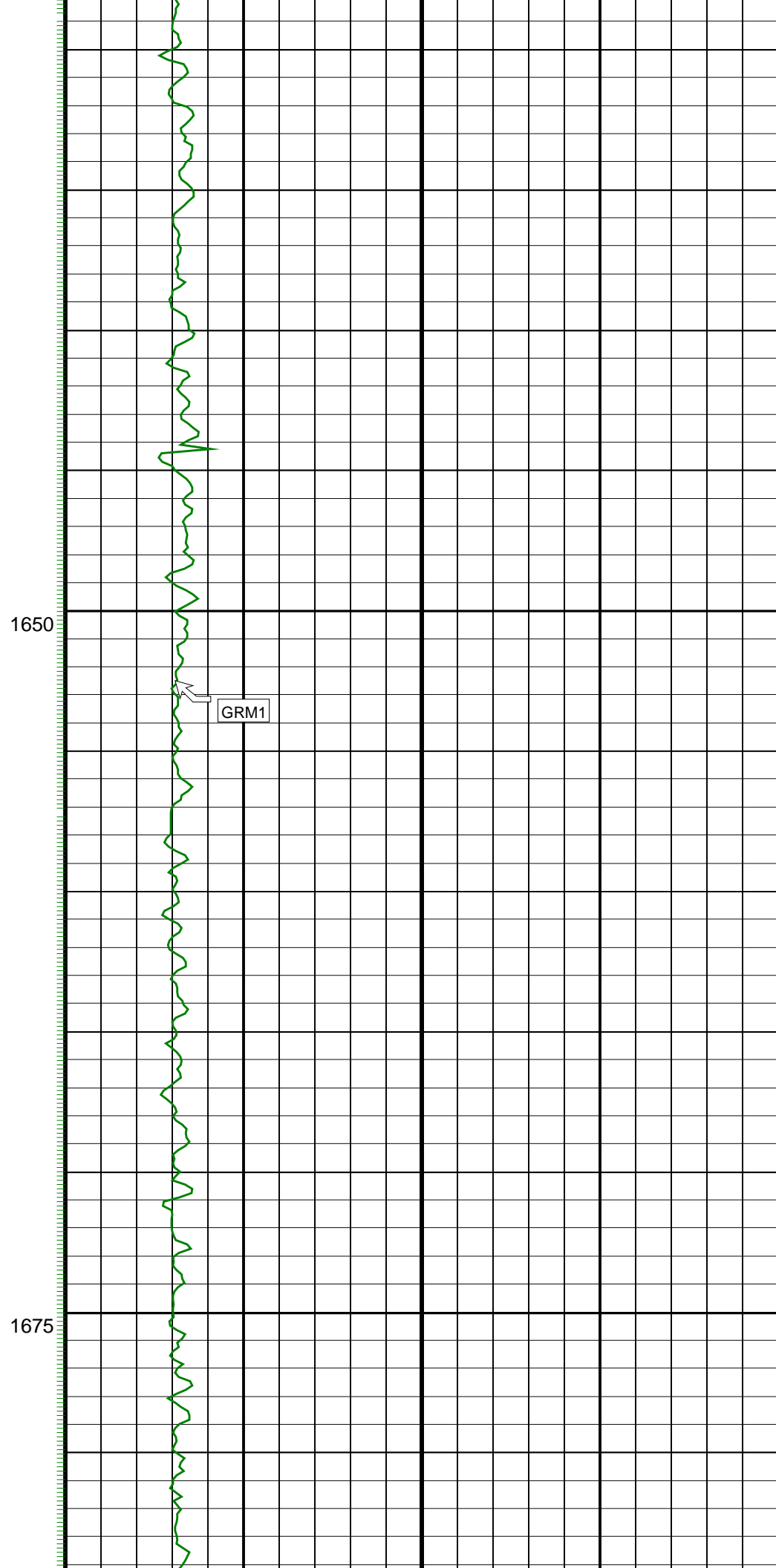
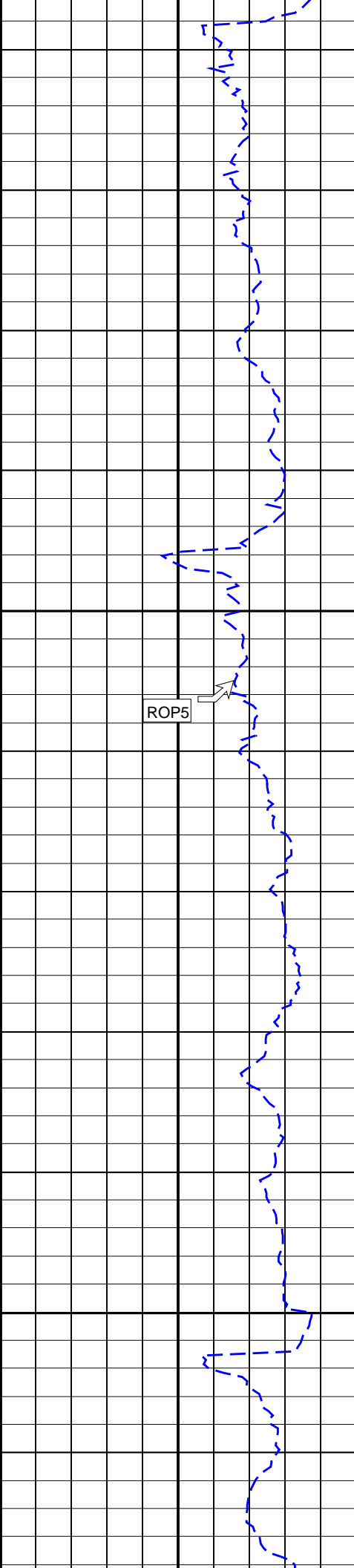


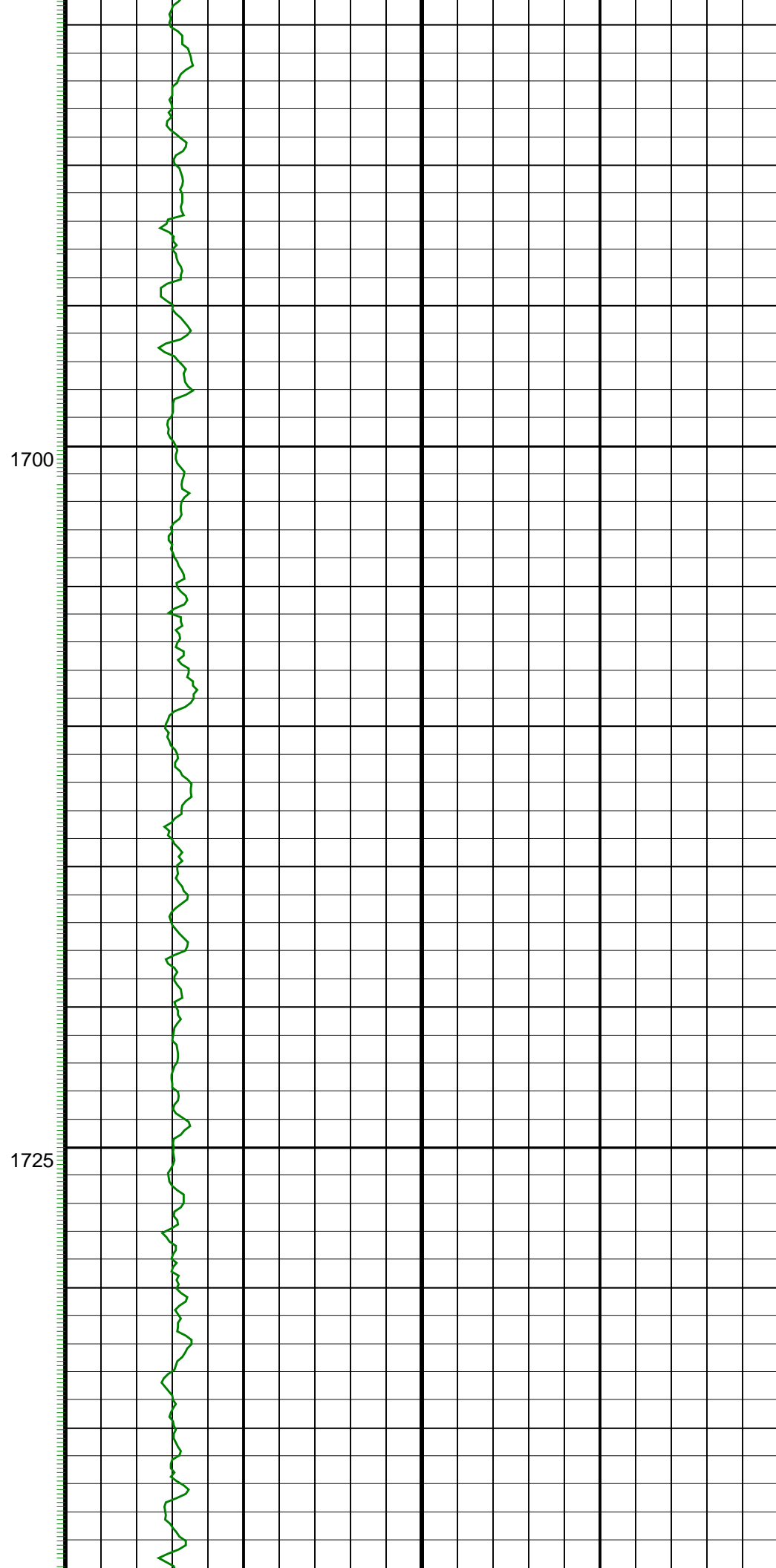
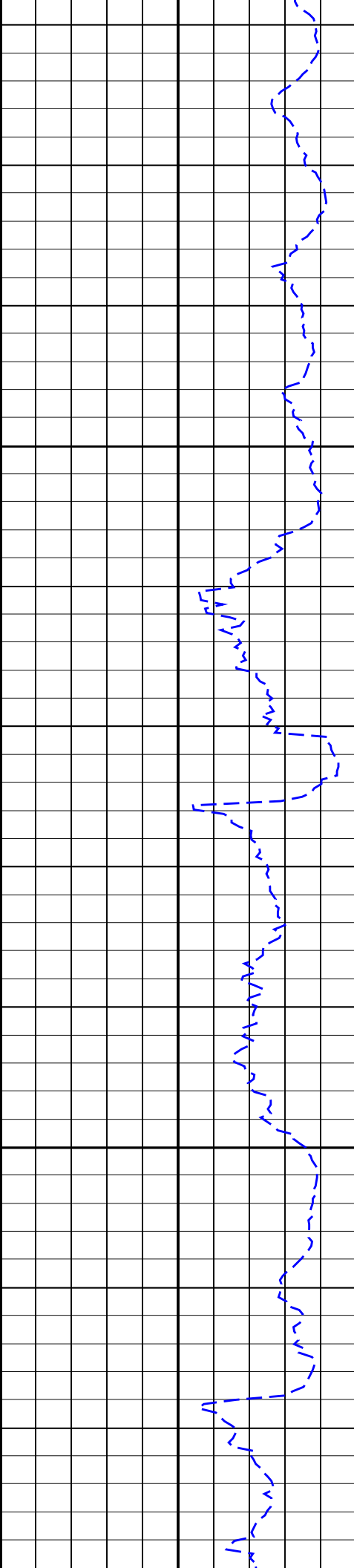
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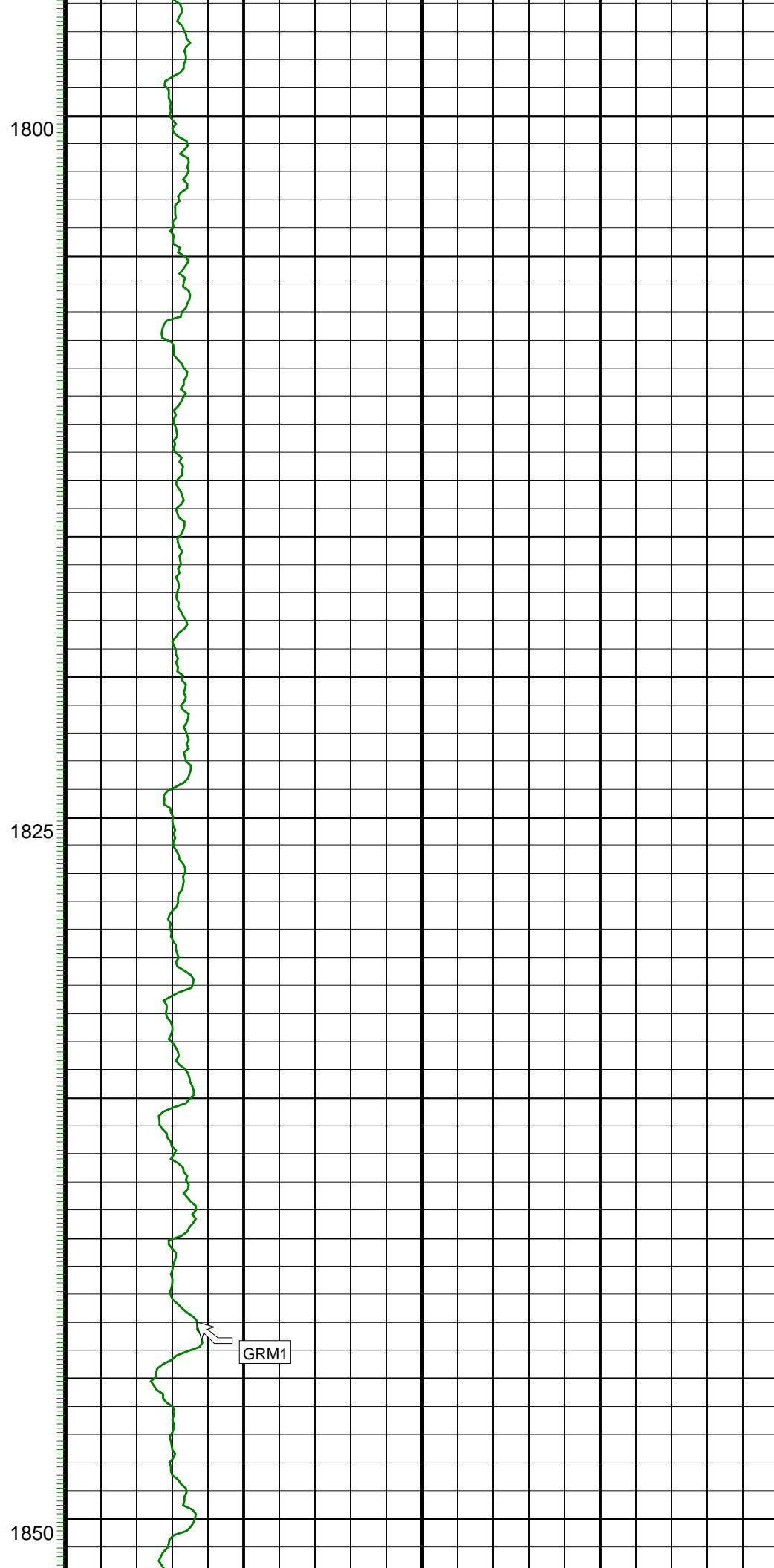
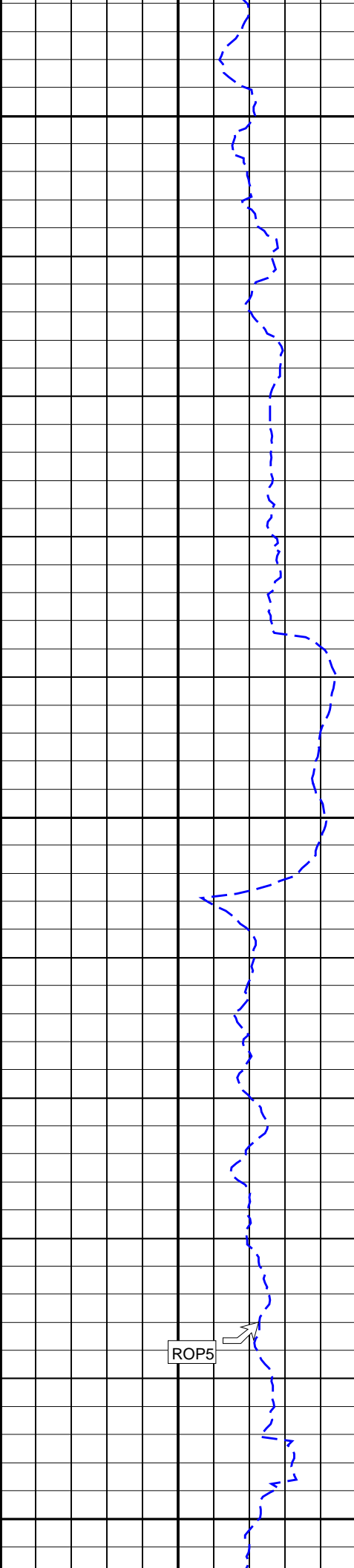


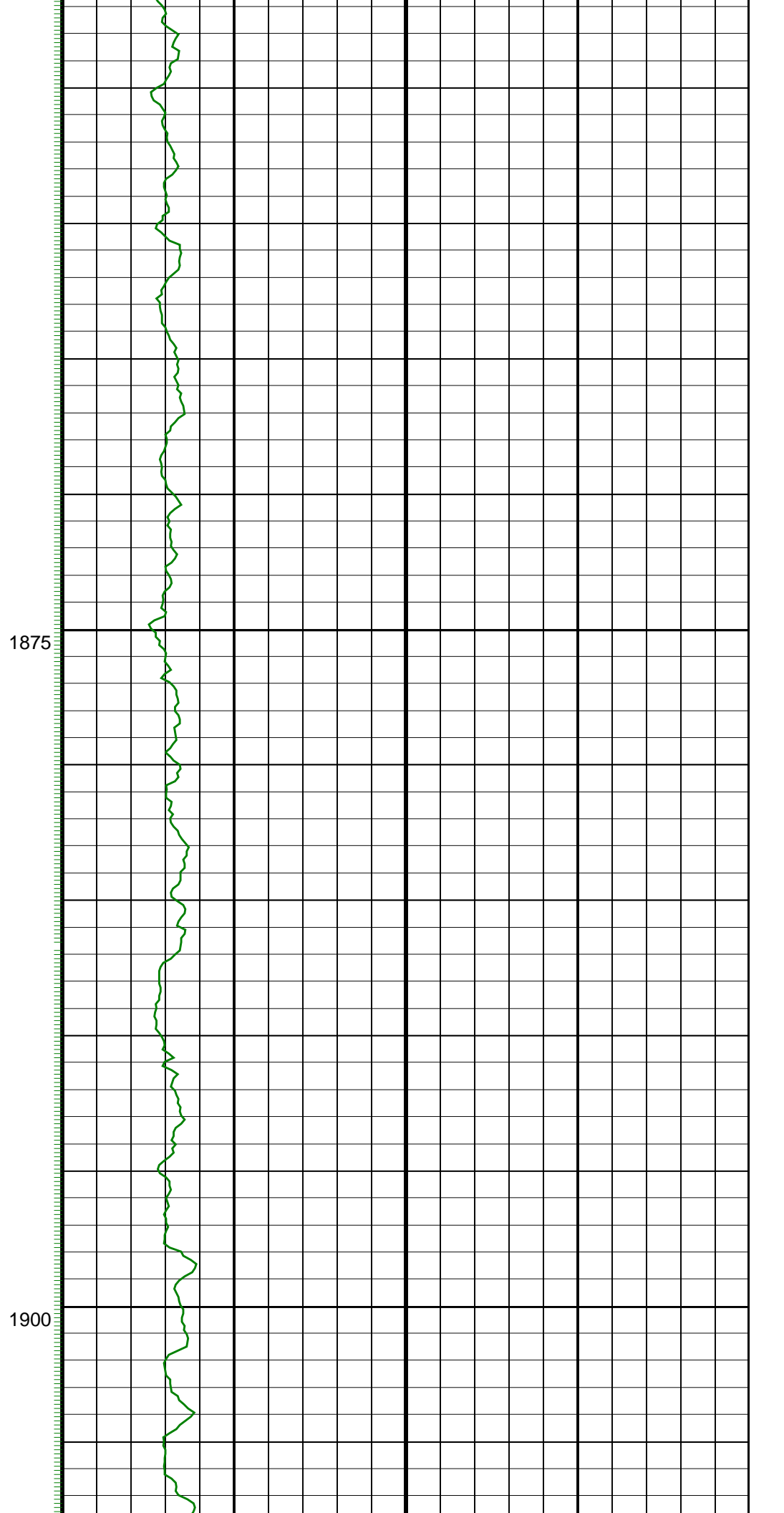
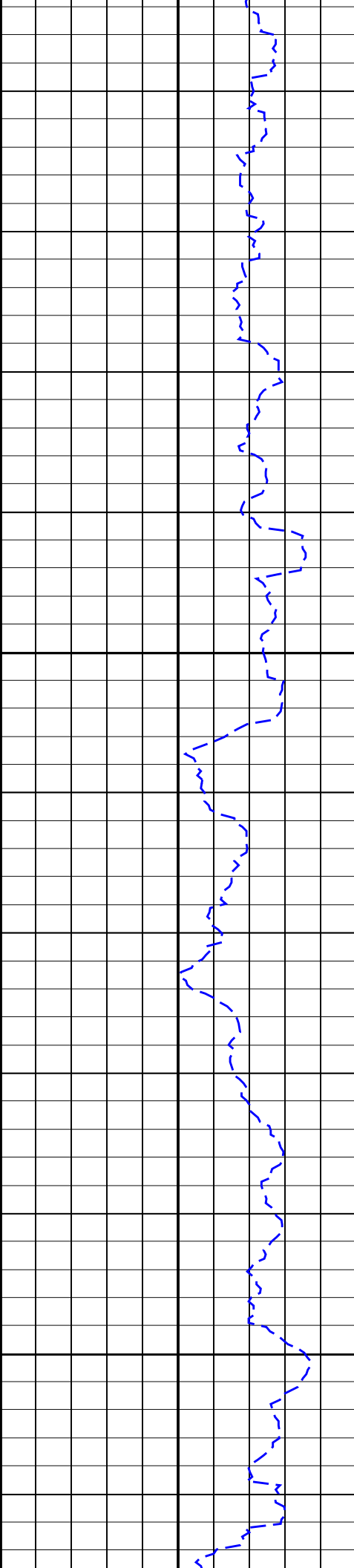


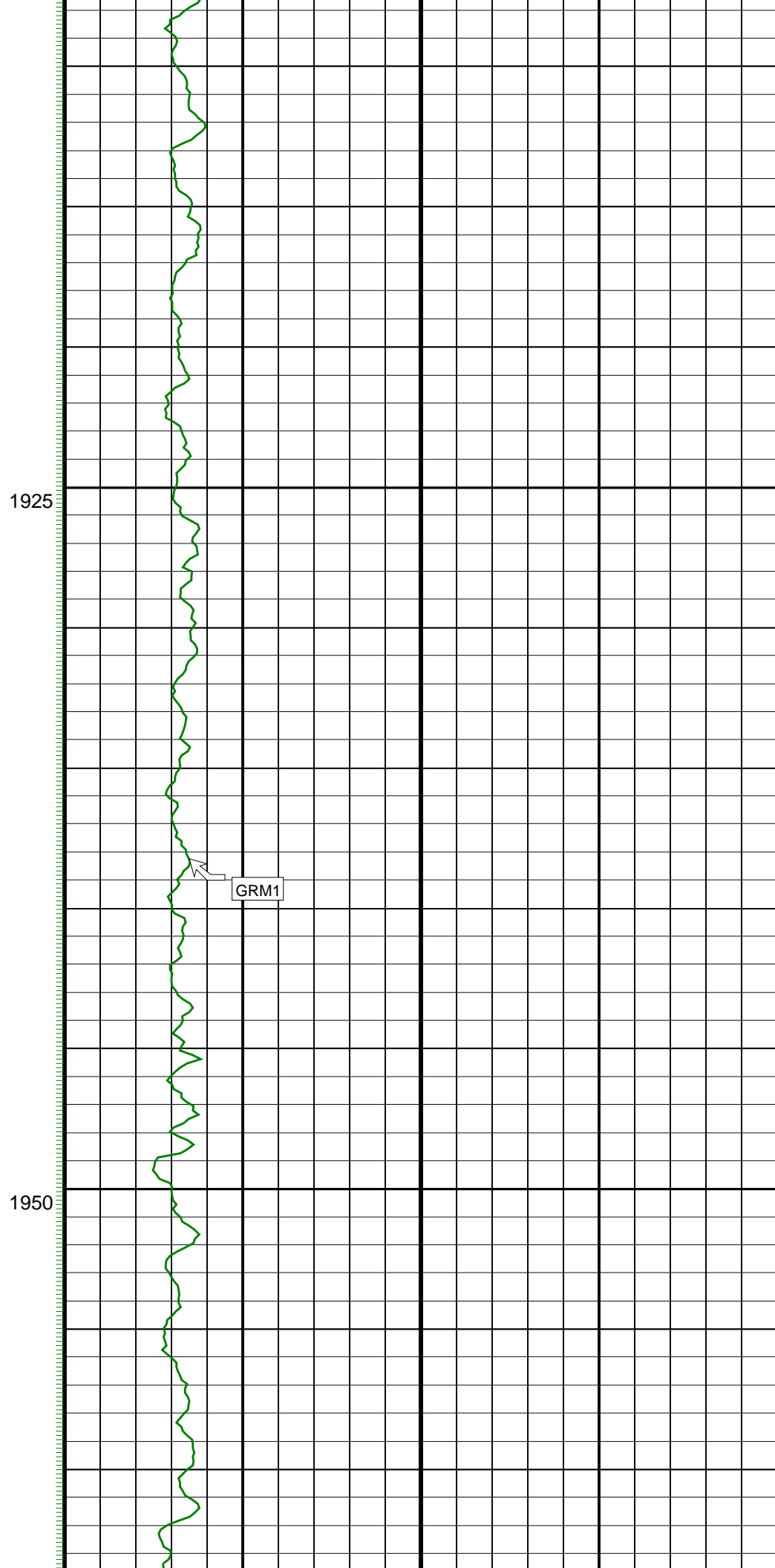
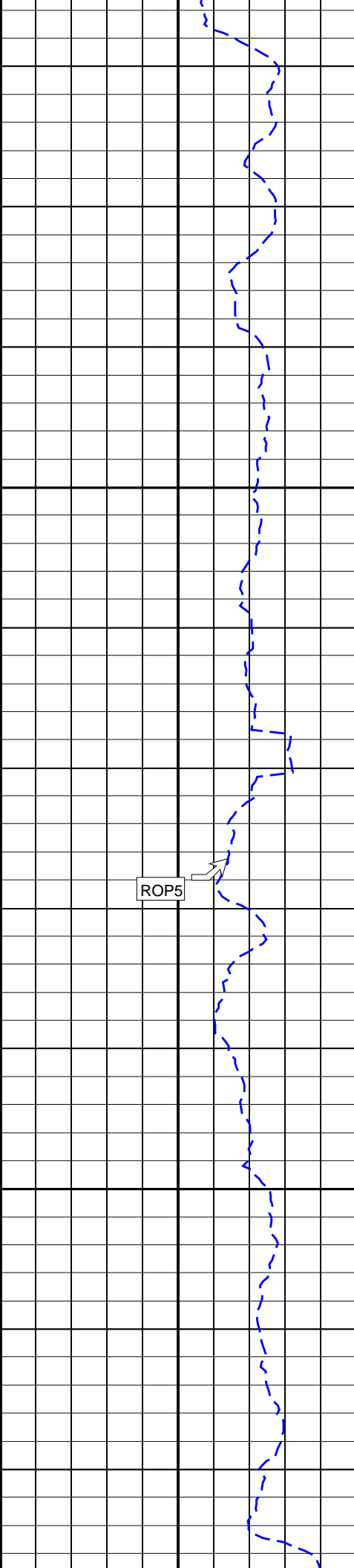


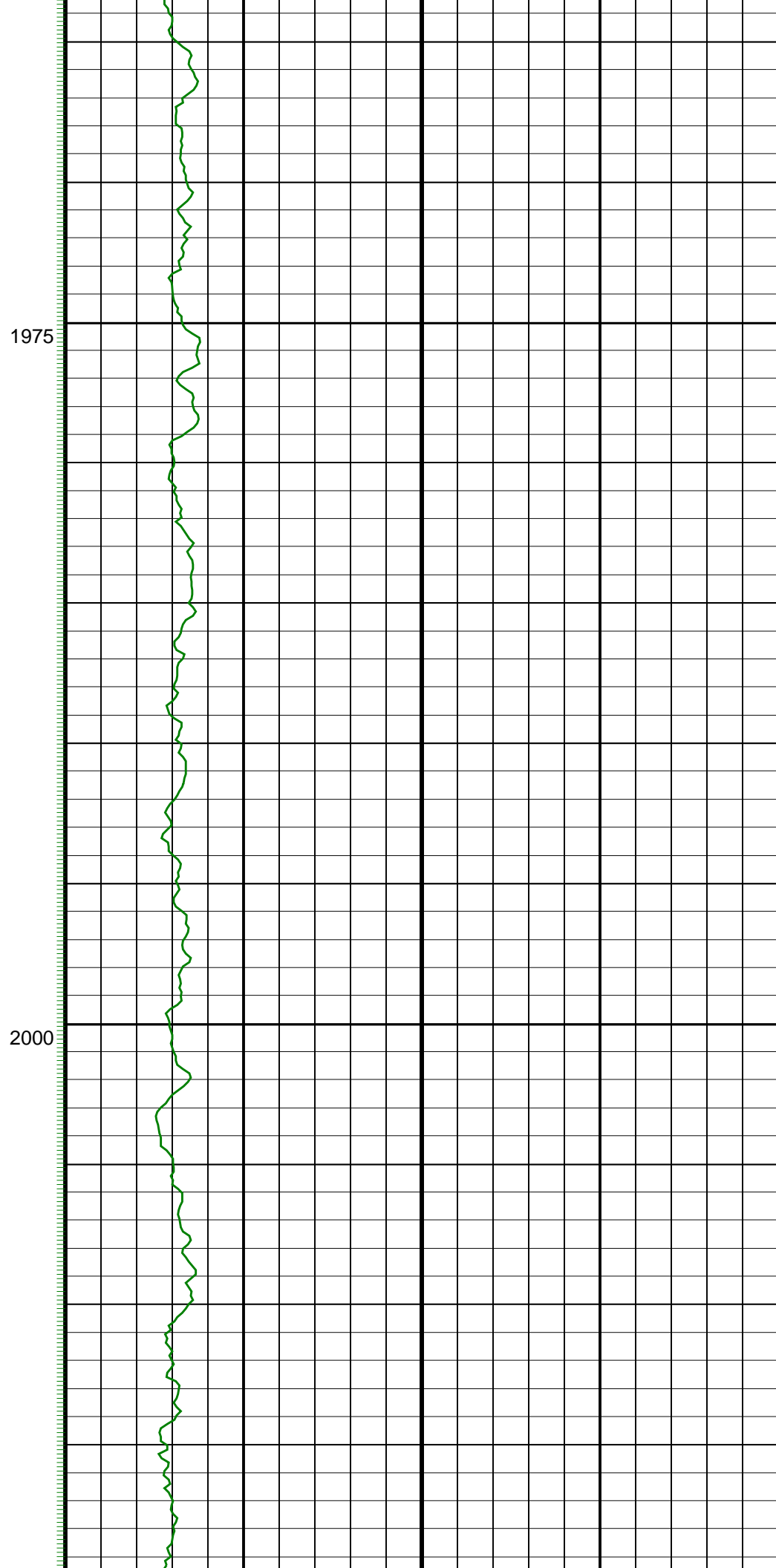
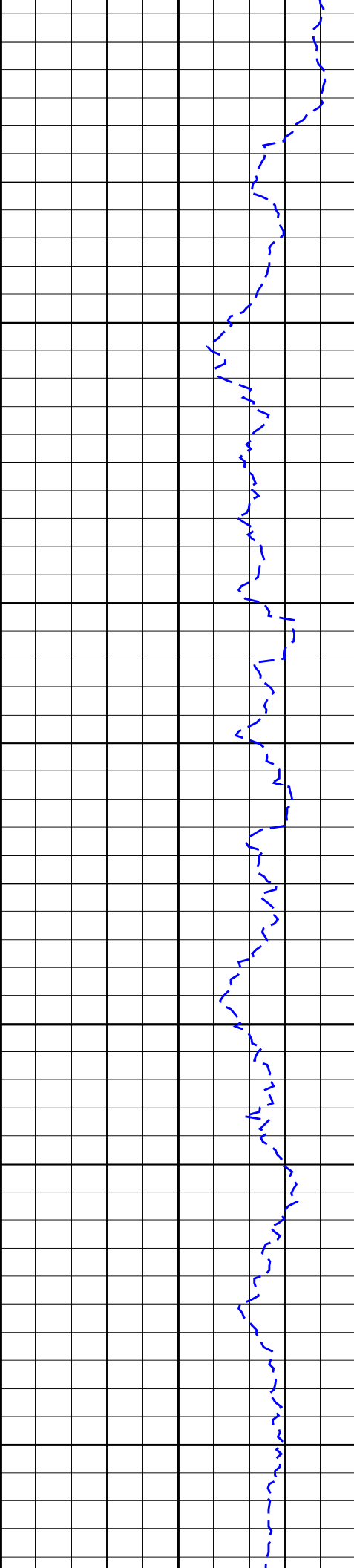


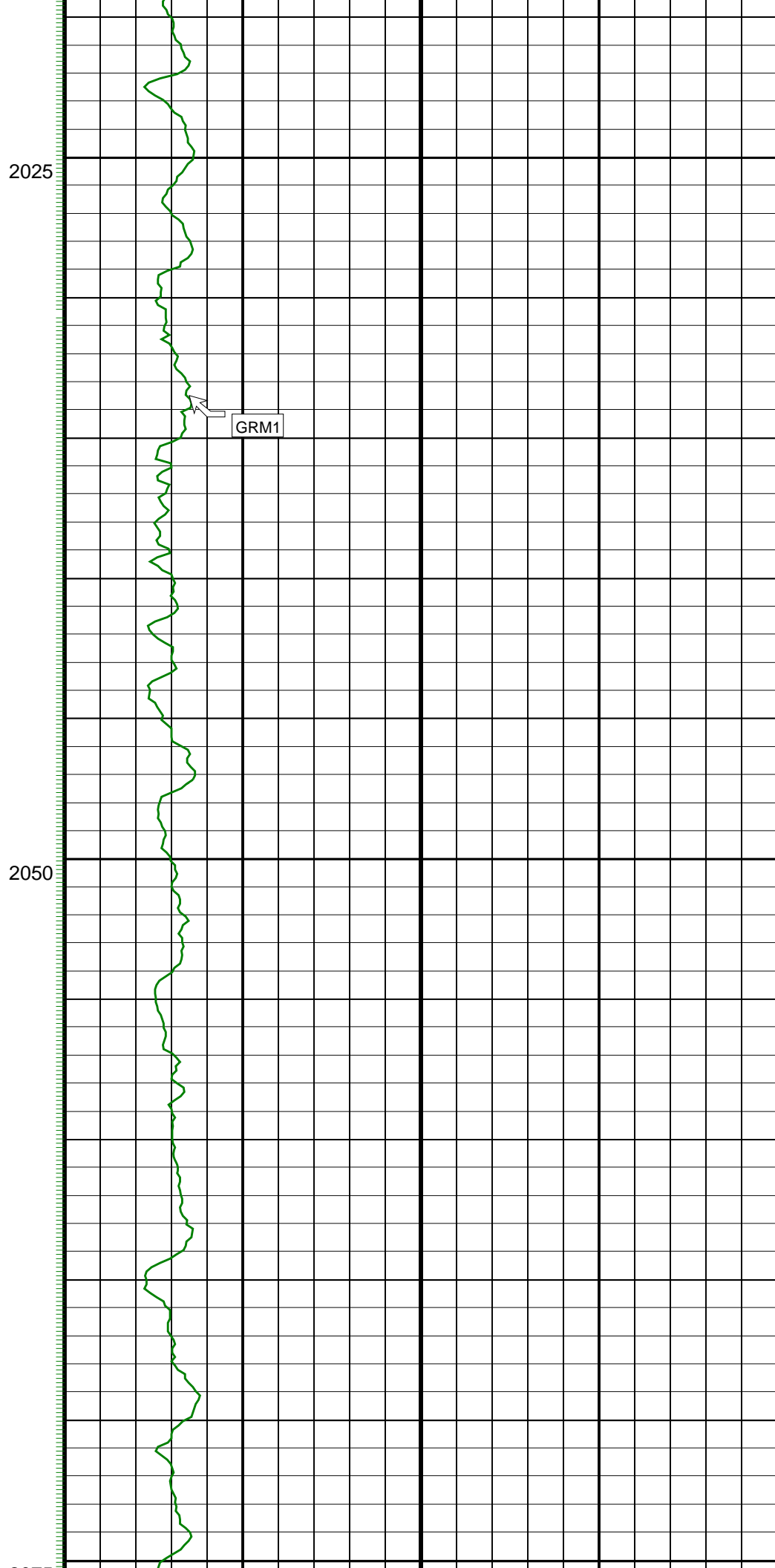
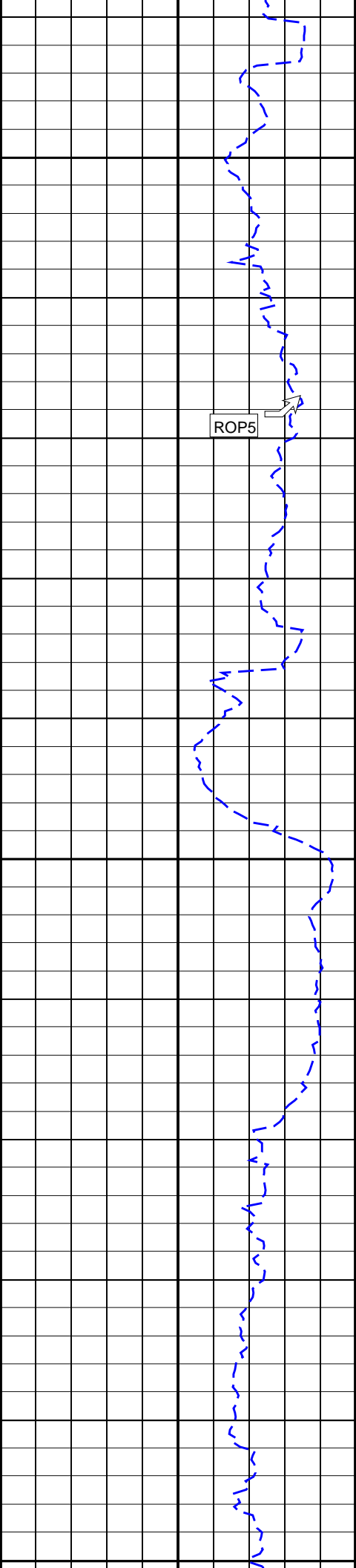


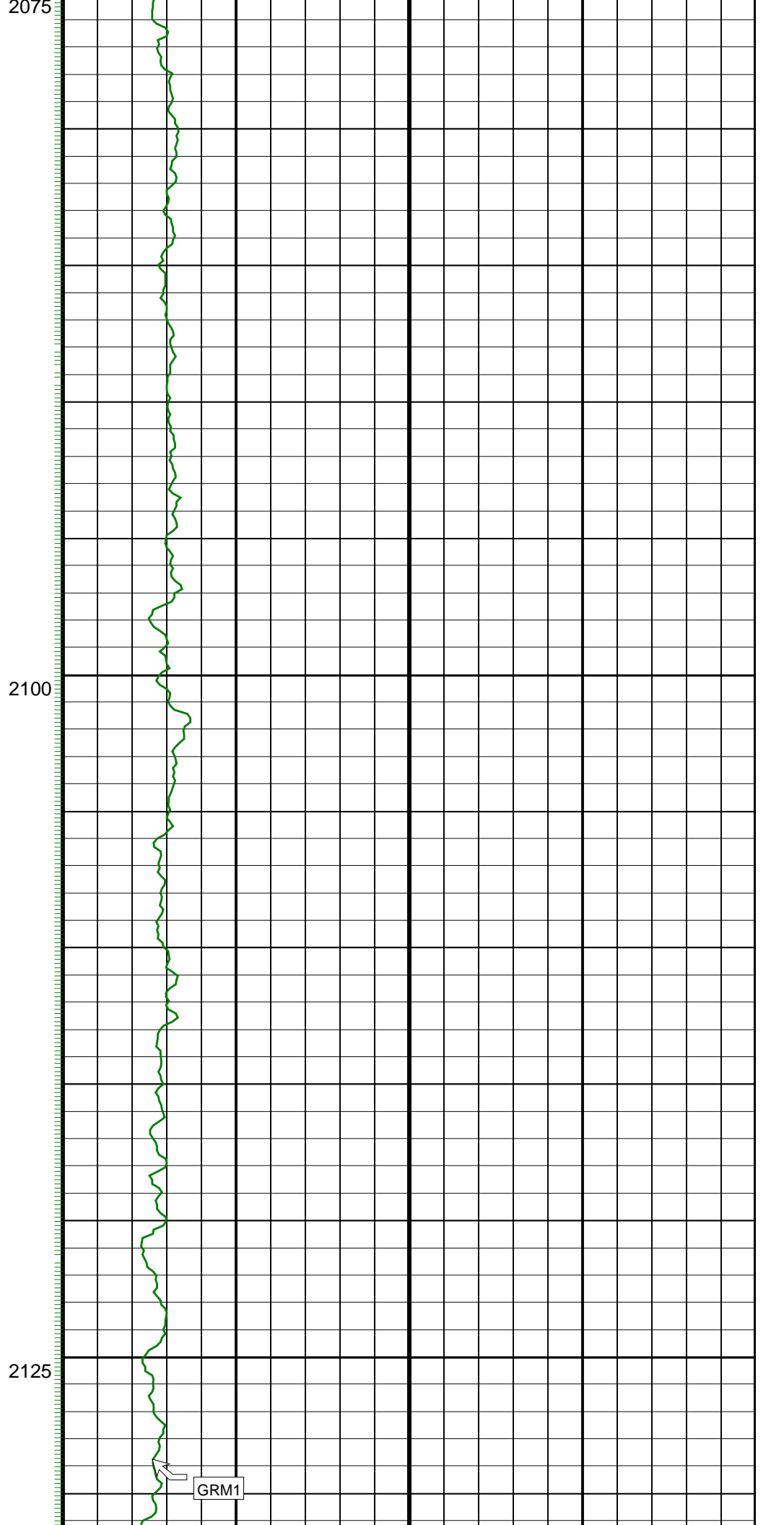
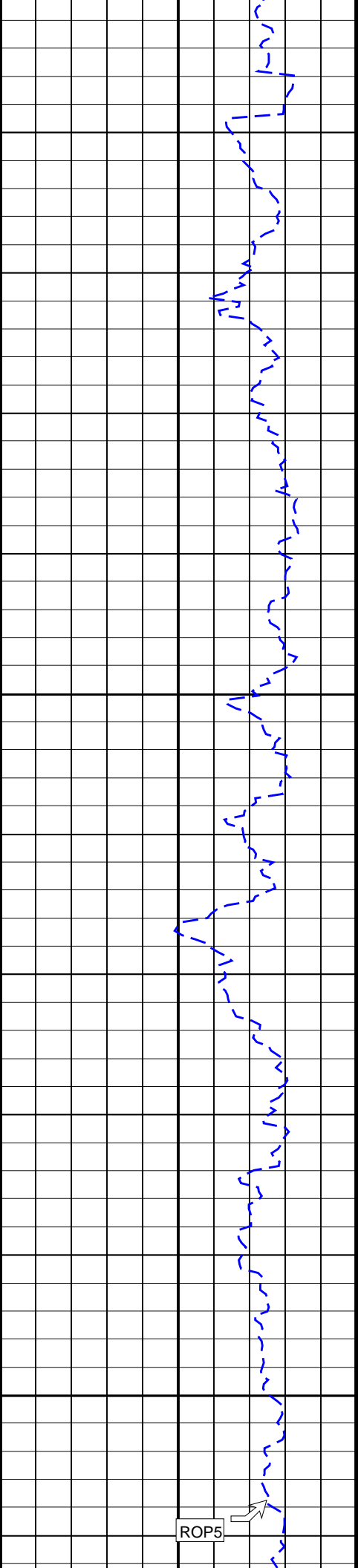


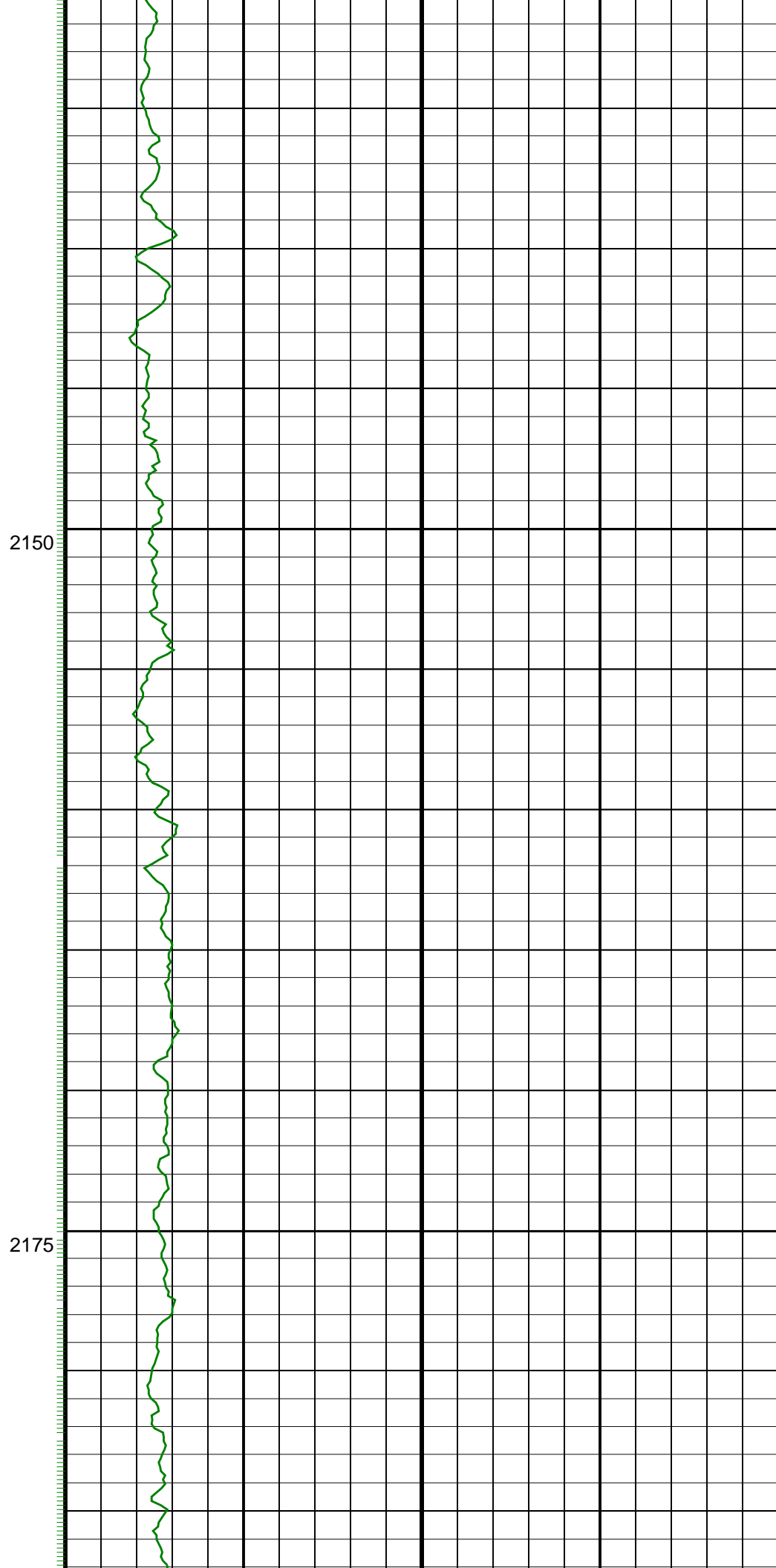
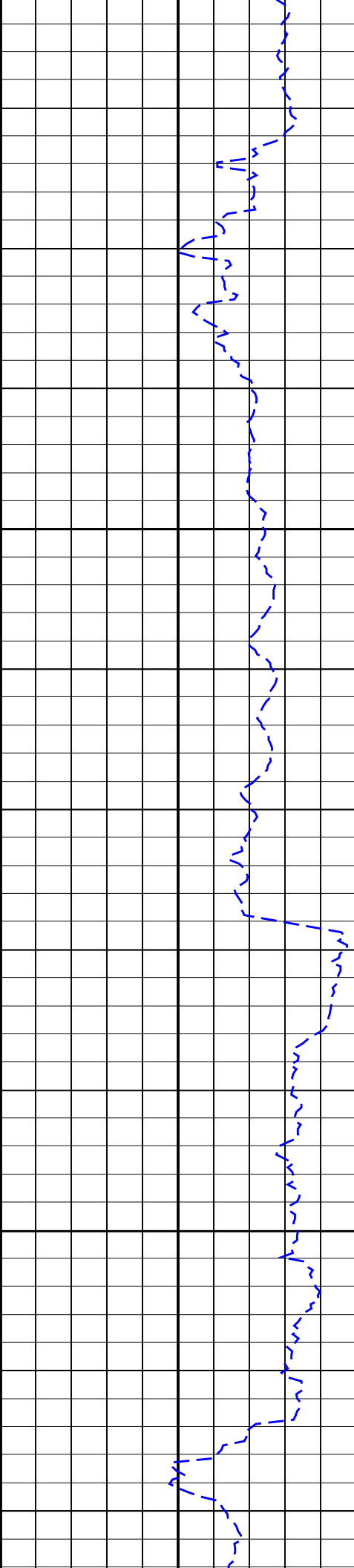


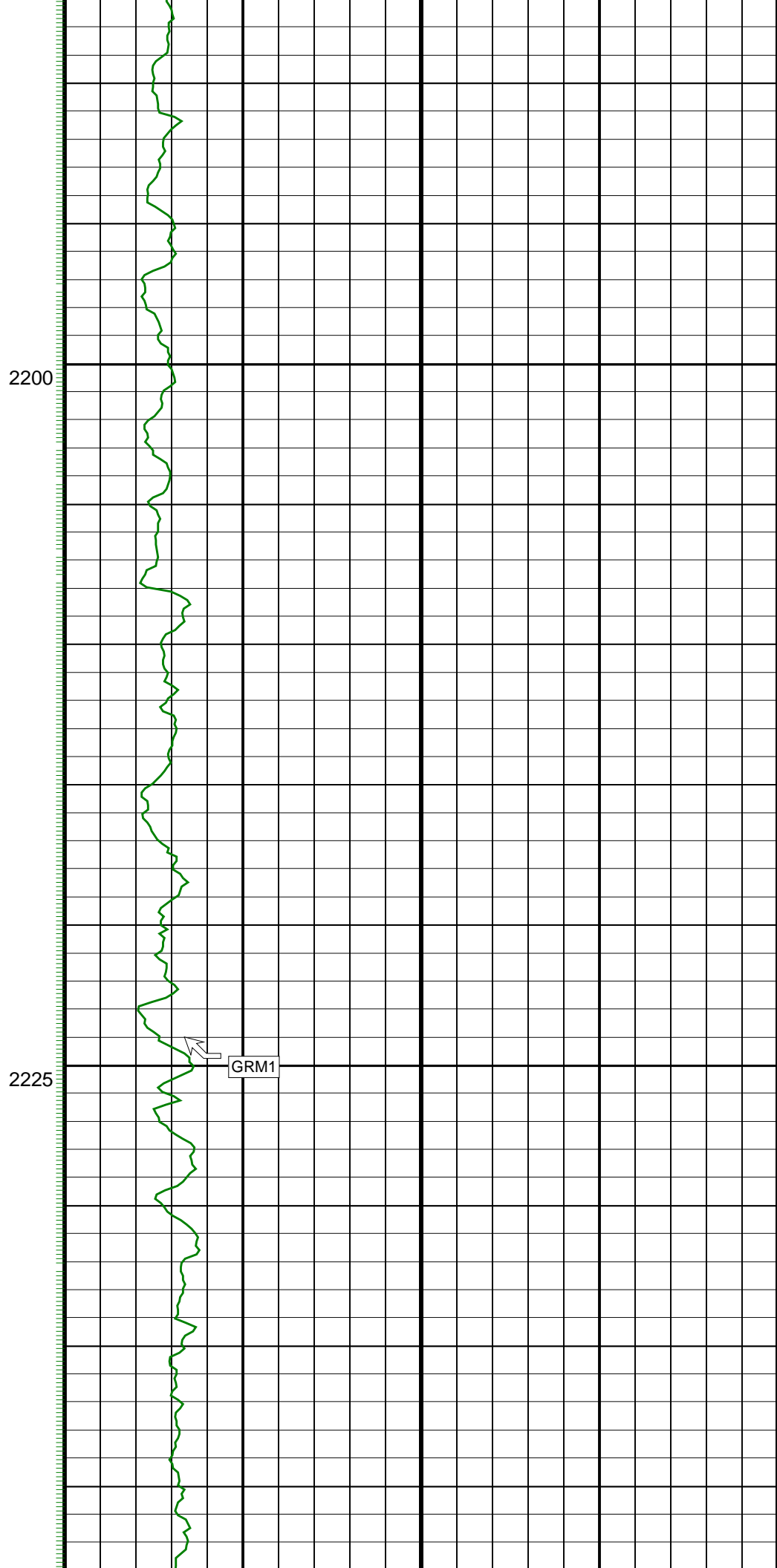
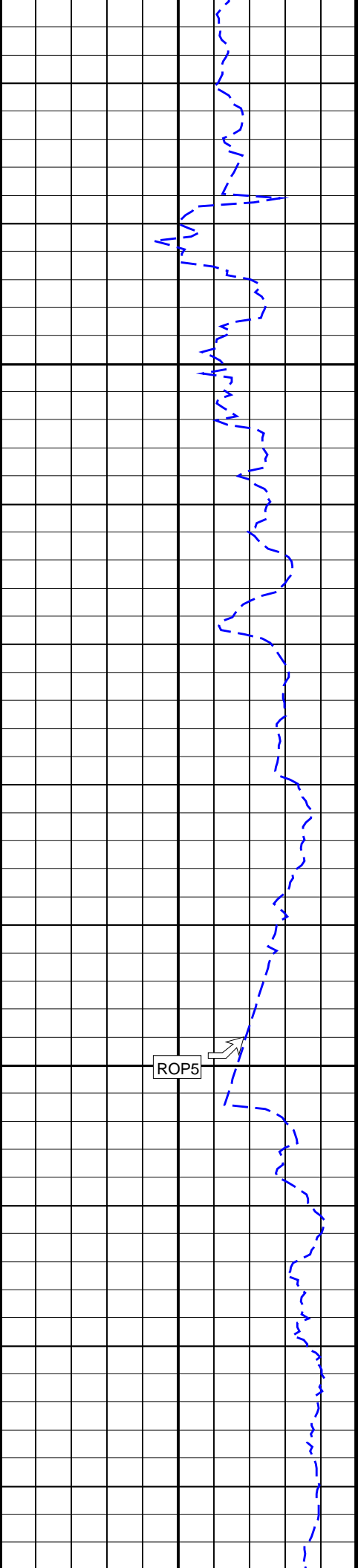


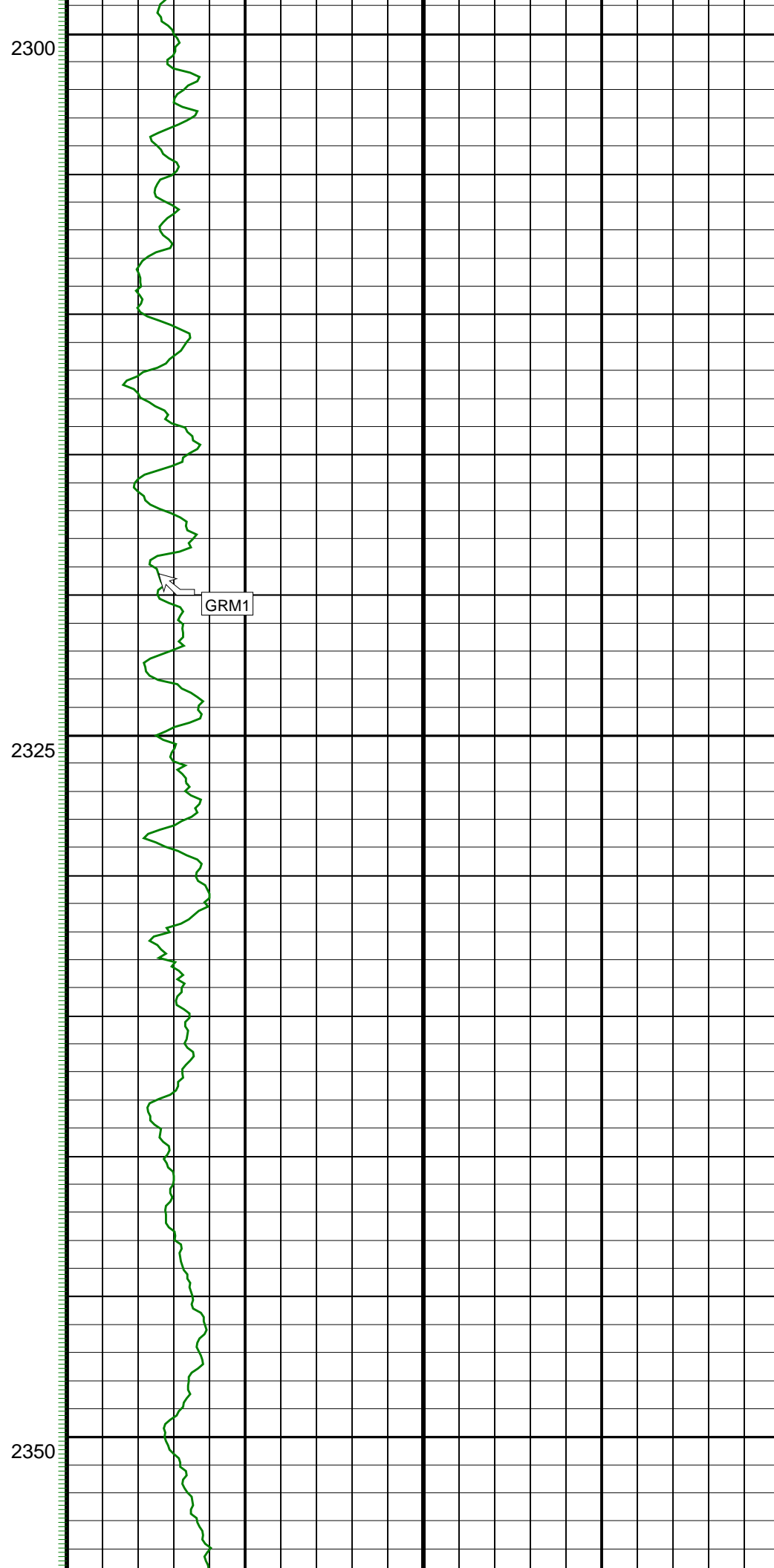
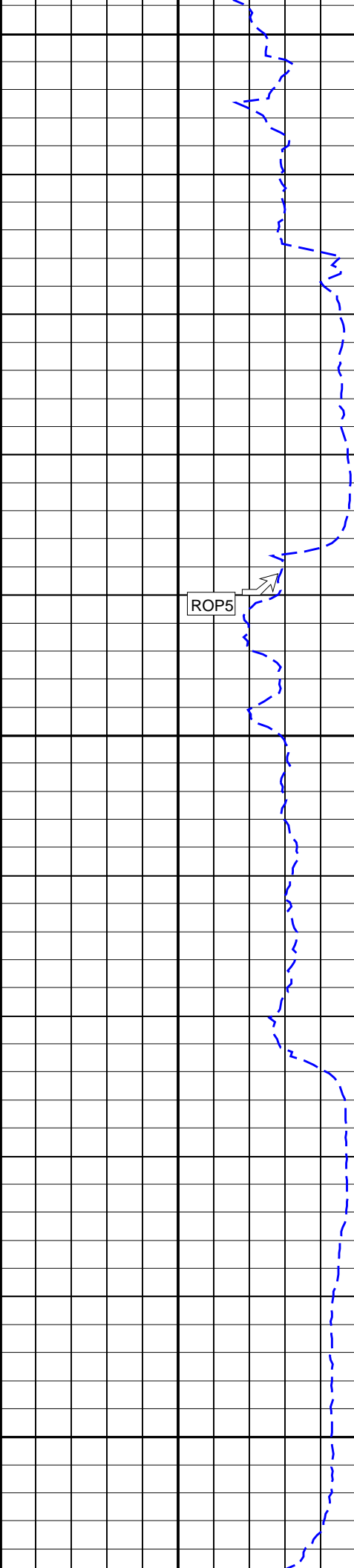


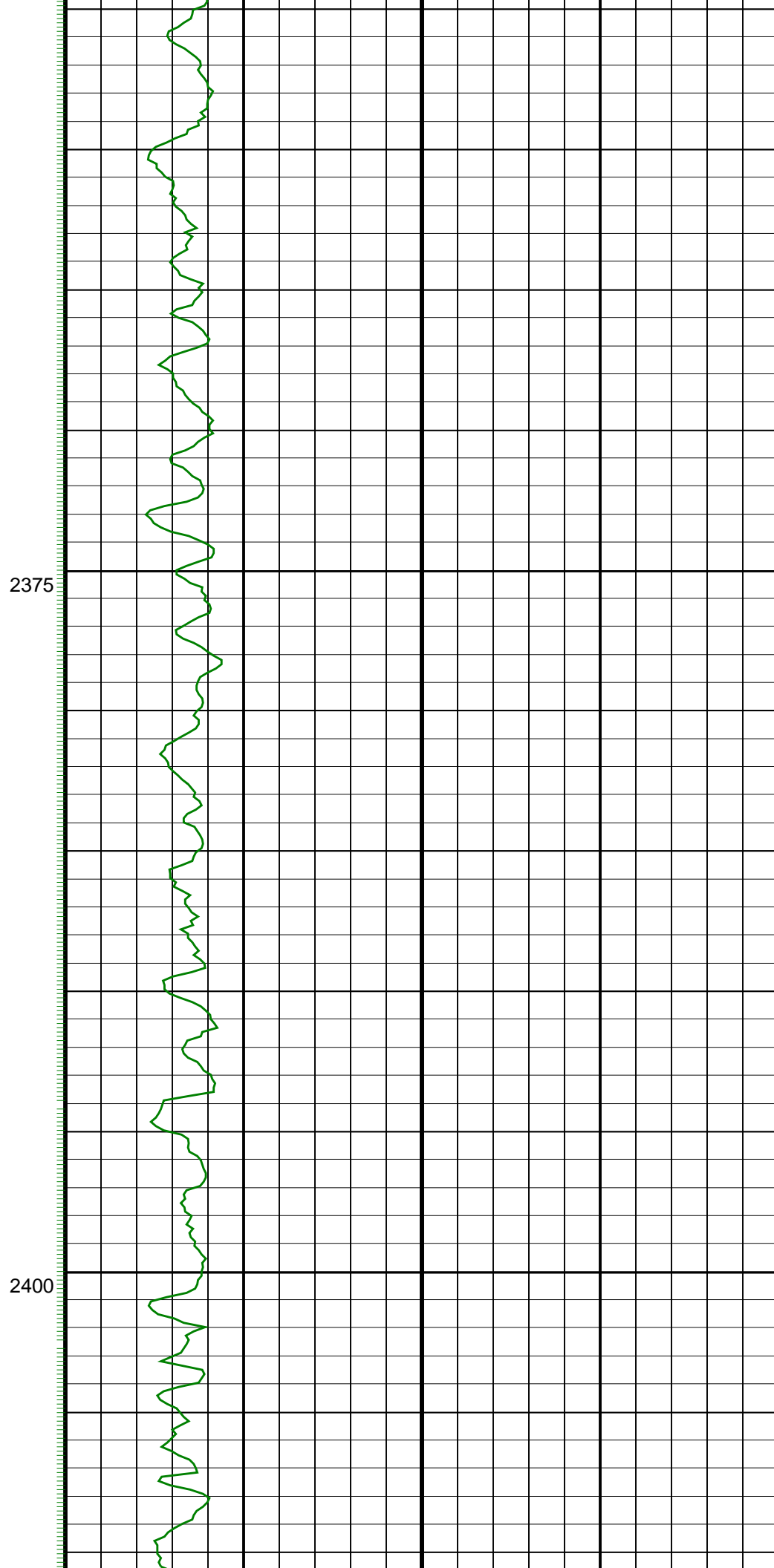
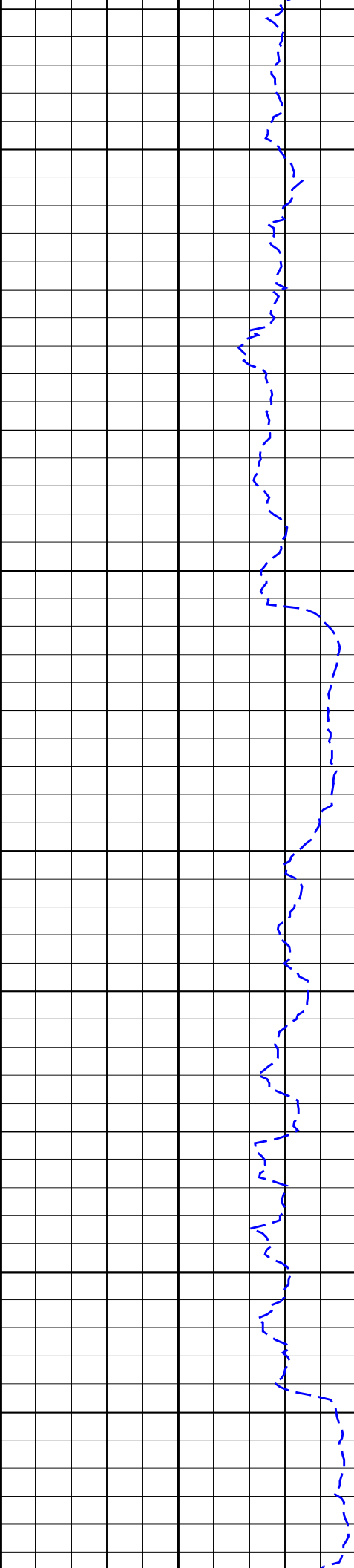


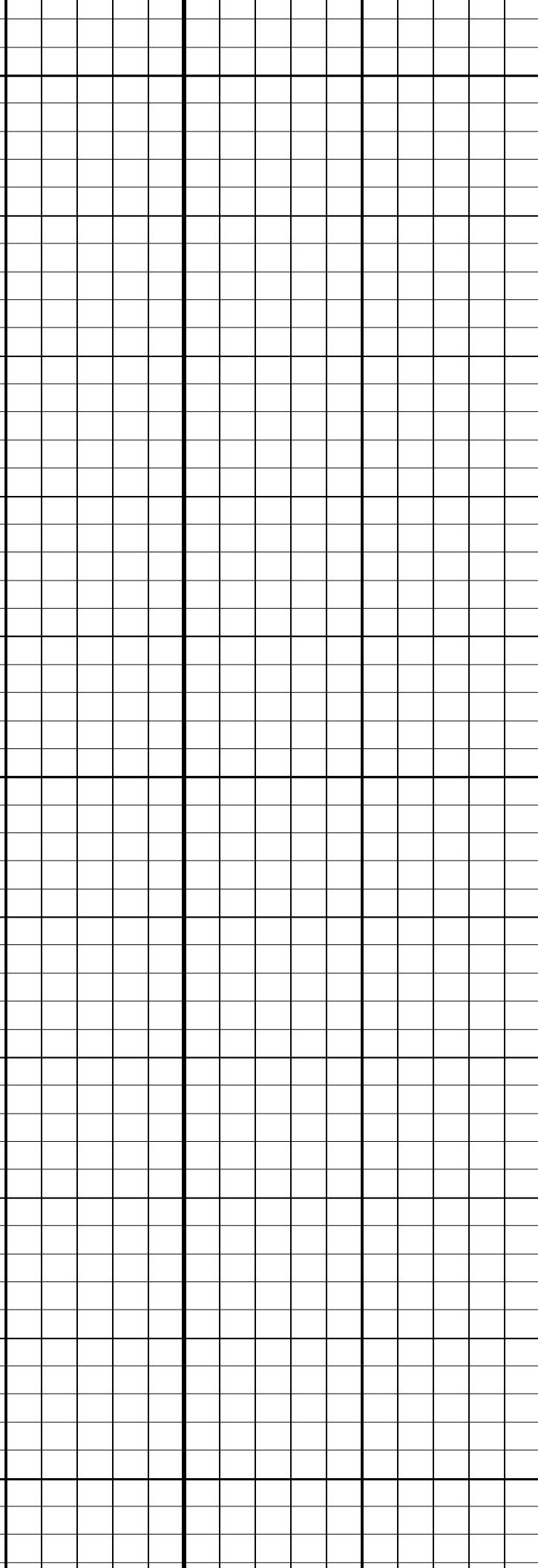
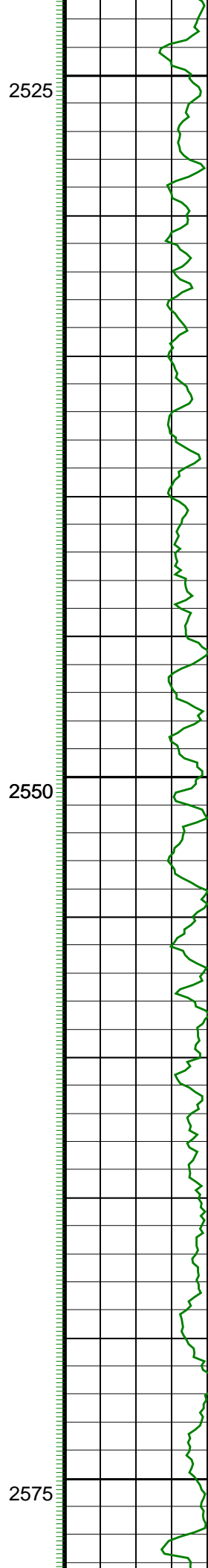
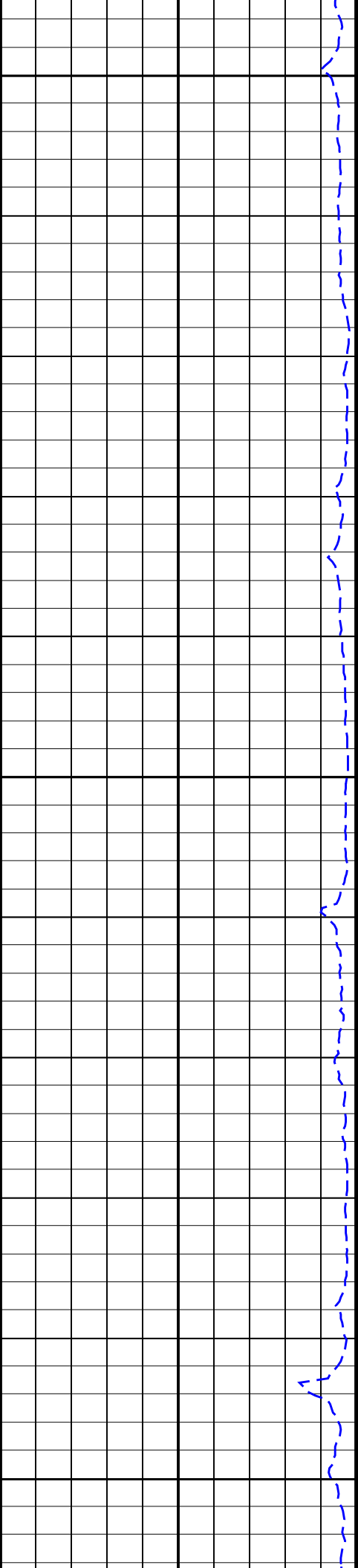


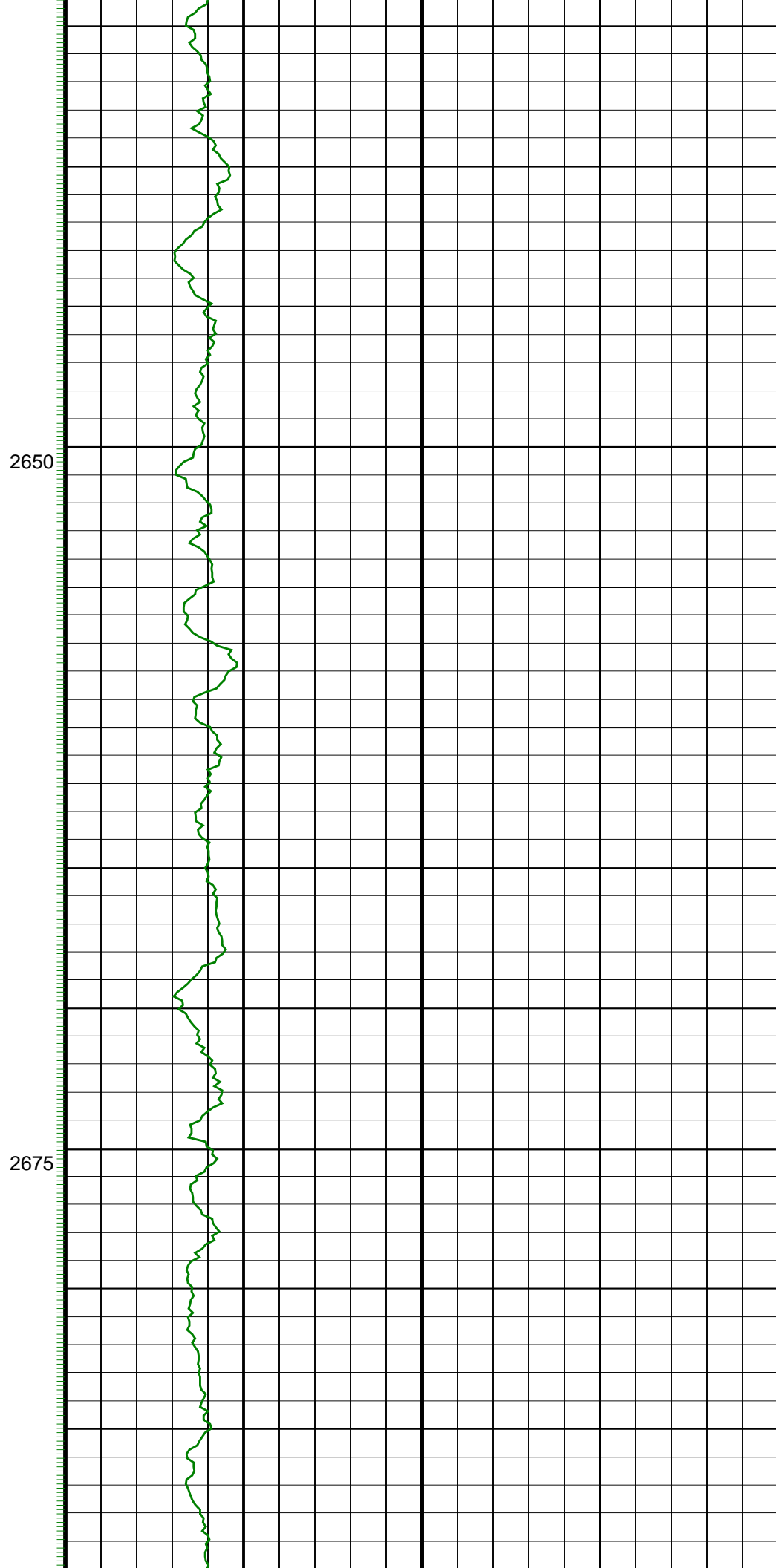
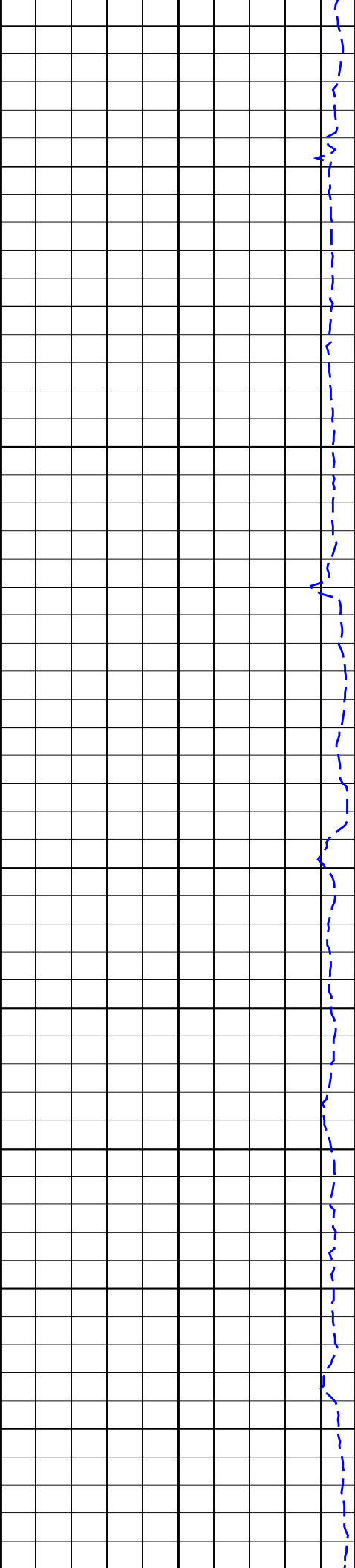


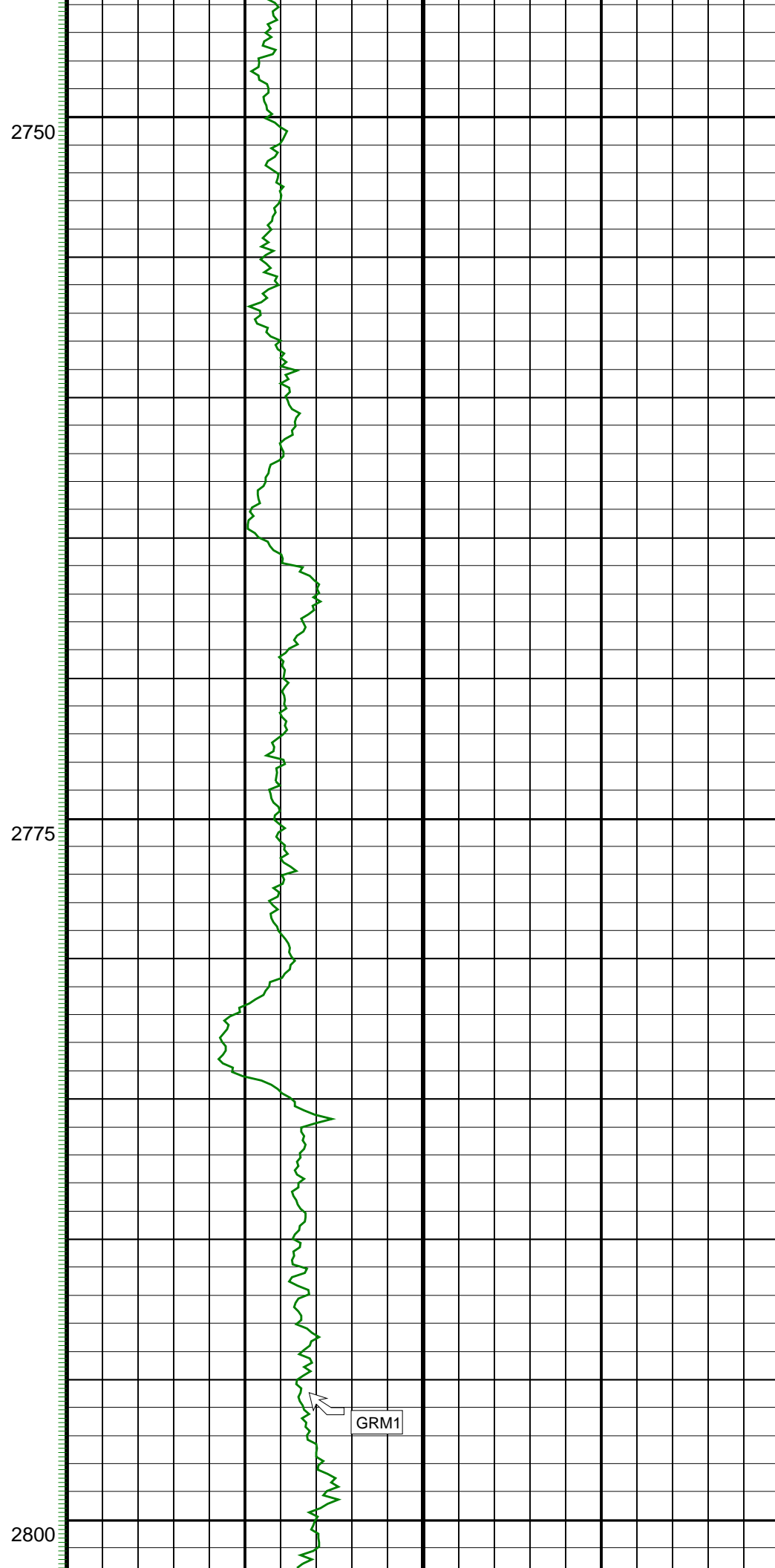
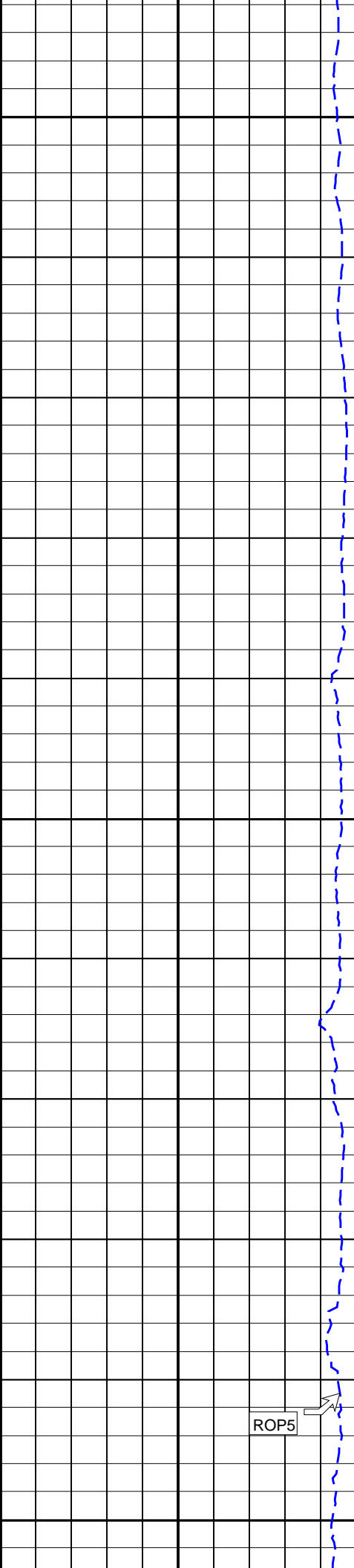


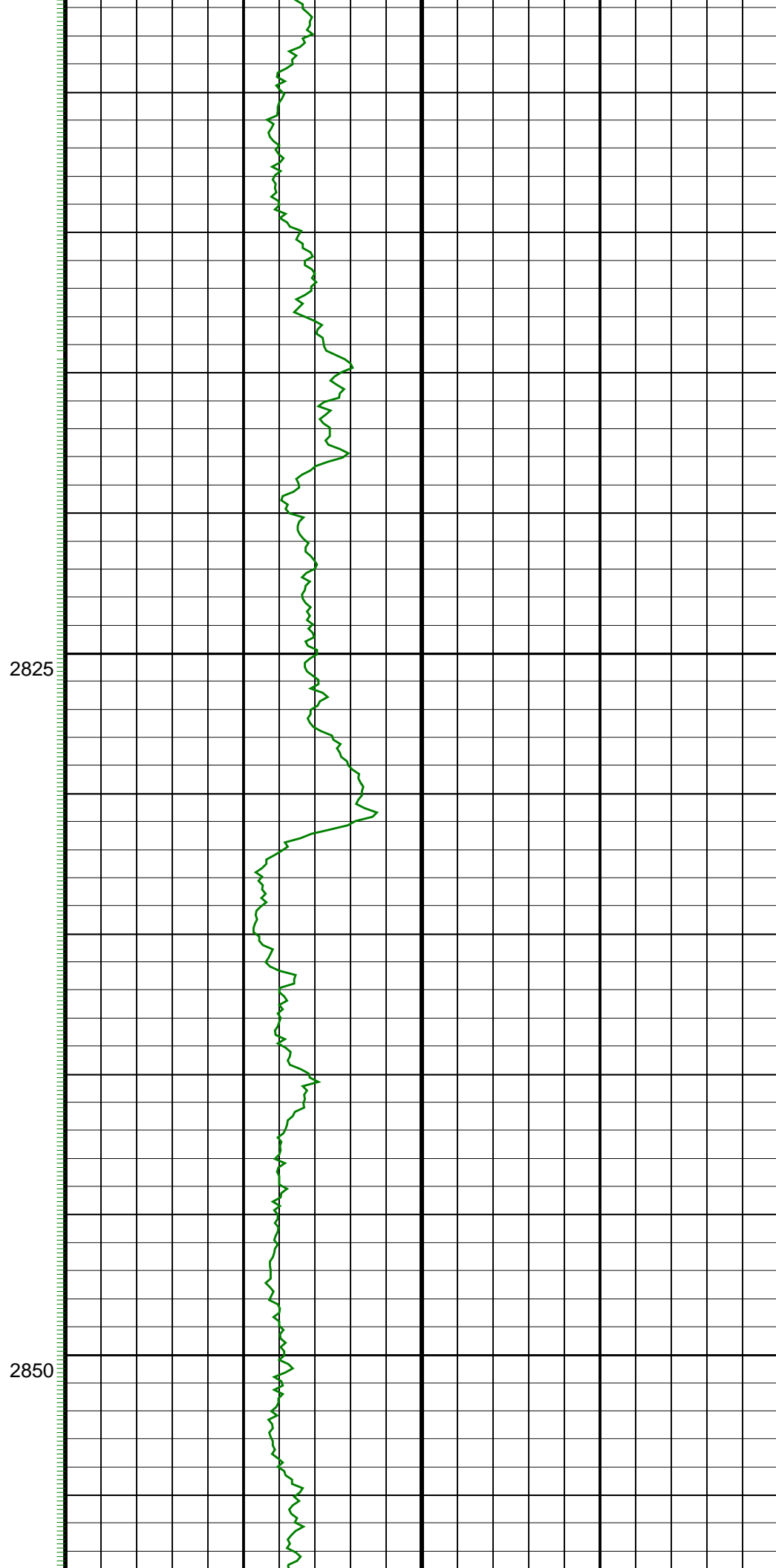
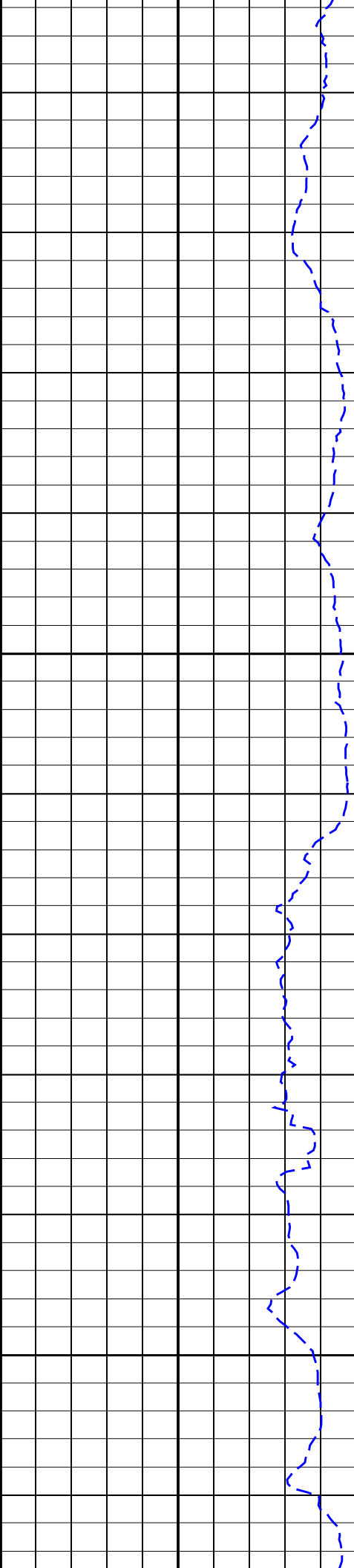


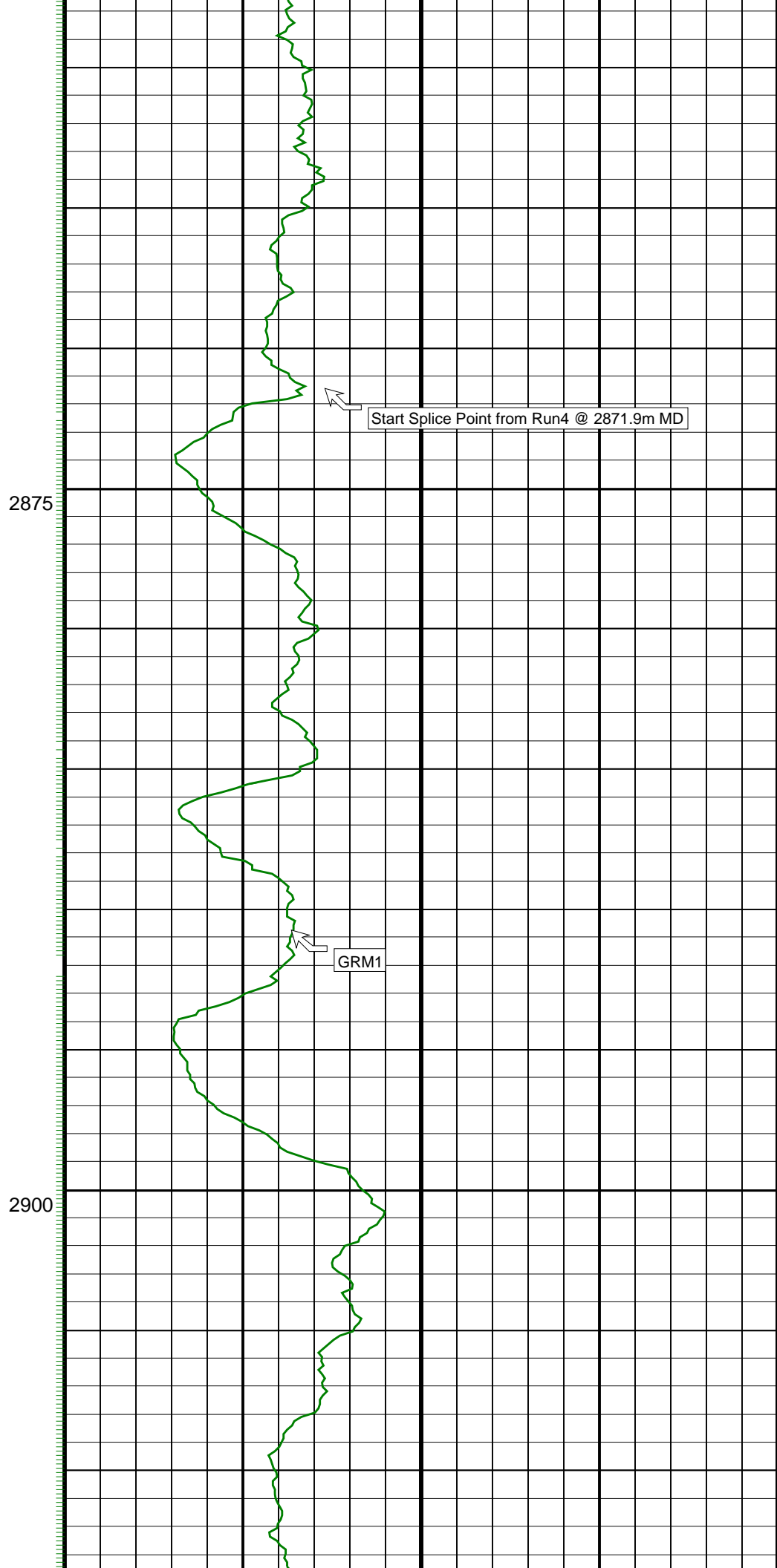
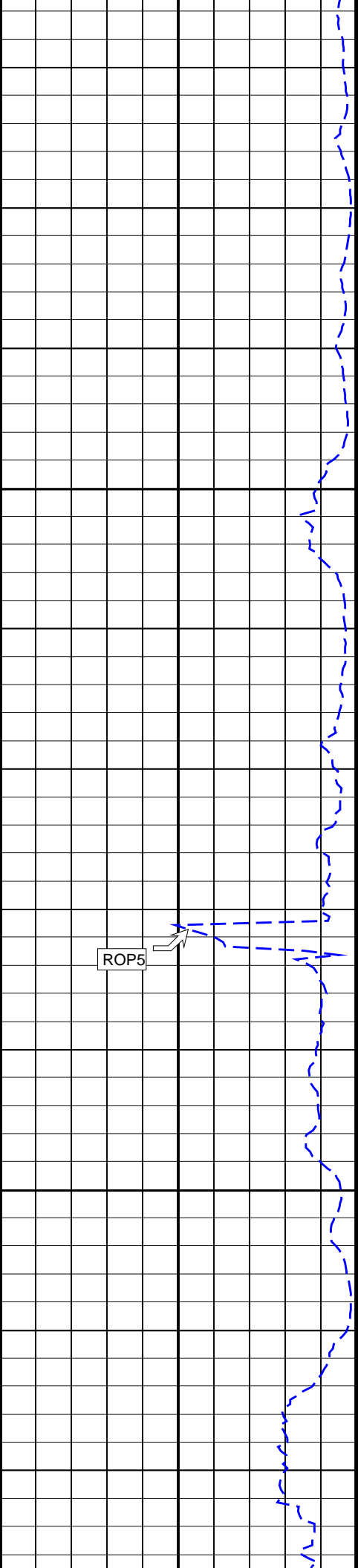


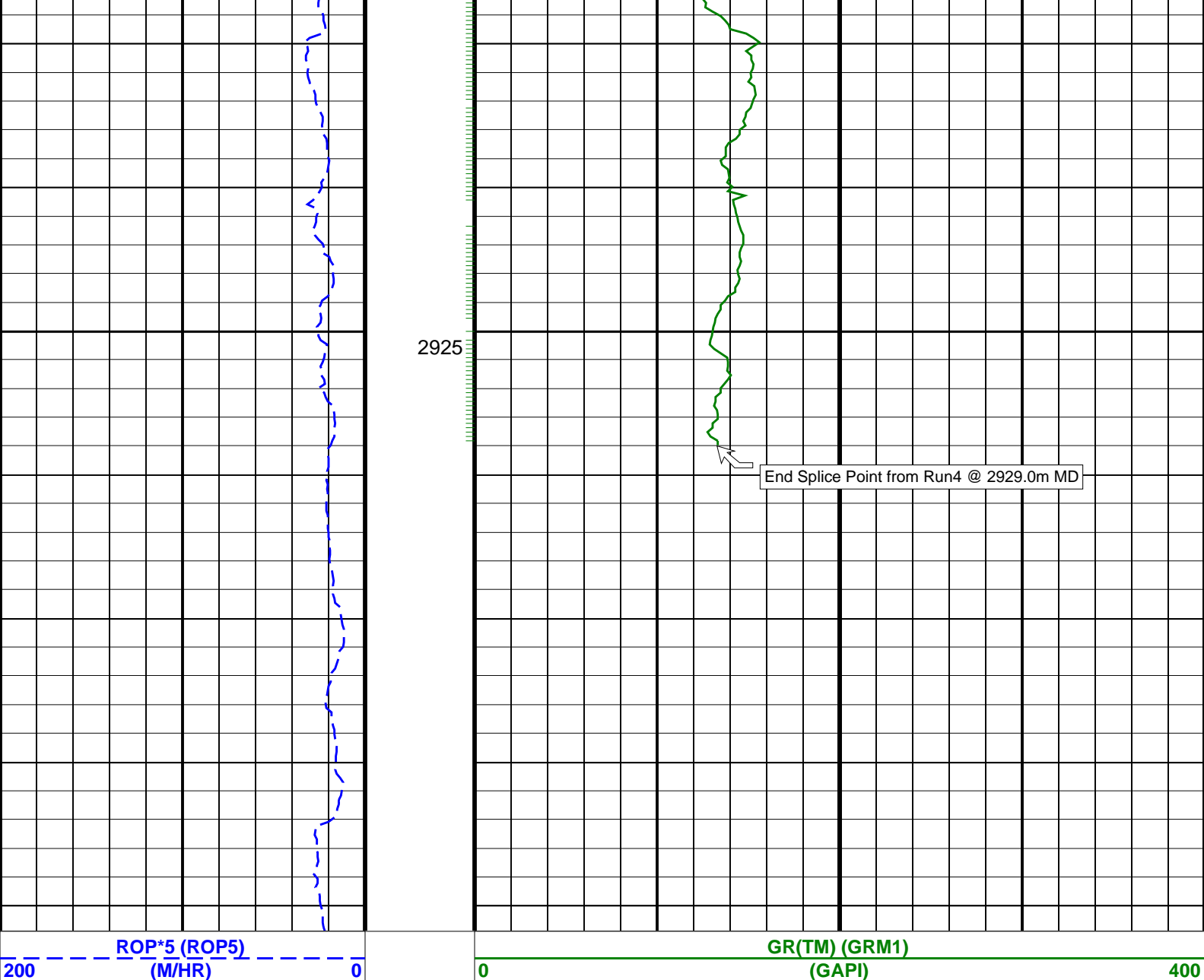












PIP SUMMARY
+ GR(TM) PIP

SCHLUMBERGER
Survey report 25-May-2006 12:53:48 Page 1 of 4

Client..... ESSO Australia Pty. Ltd.
Field..... West Kingfish

Well..... WKF W20A
Service Order number..... 06ASQ0005
Engineer..... B. Pattarakorn/ C. Skiba

Rig:..... ISDL 453
STATE:..... Victoria

Spud date..... 12 May 06
Last survey date..... 25-May-06
Total accepted surveys... 81
MD of first survey..... 674.53 m
MD of last survey..... 2946.00 m

----- Survey calculation methods-----
Method for positions..... Minimum curvature
Method for DLS..... Mason & Taylor

----- Geomagnetic data -----
Magnetic model..... BGM version 2005
Magnetic date..... 11-May-2006
Magnetic field strength... 1202.51 HCNT
Magnetic dec (+E/W-)..... 13.25 degrees
Magnetic dip..... -69.06 degrees

----- Depth reference -----
Permanent datum..... Mean Sea Level
Depth reference..... Driller's Depth
GL above permanent..... -76.13 m
KB above permanent..... 0.00 m
DF above permanent..... 33.43 m

----- MWD survey Reference Criteria -----
Reference G..... 1000.06 mGal
Reference H..... 1202.51 HCNT
Reference Dip..... -69.06 degrees
Tolerance of G..... (+/-) 2.50 mGal
Tolerance of H..... (+/-) 6.00 HCNT
Tolerance of Dip..... (+/-) 0.45 degrees

----- Vertical section origin-----
Latitude (+N/S-)..... -4.35 m
Departure (+E/W-)..... 1.93 m

----- Platform reference point-----
Latitude (+N/S-)..... 5727806.50 m
Departure (+E/W-)..... 596265.00 m

----- Corrections -----
Magnetic dec (+E/W-)..... 13.25 degrees
Grid convergence (+E/W-).. -0.69 degrees

Azimuth from Vsect Origin to target: 245.69 degrees

Total az corr (+E/W-)....: 13.94 degrees
(Total az corr = magnetic dec - grid conv)
Survey Correction Type:
I=Sag Corrected Inclination
M=Schlumberger Magnetic Correction
S=Shell Magnetic Correction
F=Failed Axis Correction
R=Magnetic Resonance Tool Correction
D=Dmag Magnetic Correction

[[c)2006 IDEAL ID11_OC_01]
SCHLUMBERGER Survey Report

25-May-2006 12:53:48

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Seq # -	Measured depth (m)	Incl angle (deg)	Azimuth angle (deg)	Course length (m)	TVD depth (m)	Vertical section (m)	Displ +N/S- (m)	Displ +E/W- (m)	Total displ (m)	At Azim (deg)	DLS (deg/ 10m)	Srvy tool type	Tool Corr (deg)
1	674.53	46.50	253.23	0.00	622.76	189.41	-54.07	-183.45	191.25	253.58	0.00	TIP	None
2	706.79	50.72	241.60	32.26	644.13	213.52	-63.41	-205.69	215.24	252.87	3.00	MWD	None
3	735.63	50.08	239.53	28.84	662.51	235.65	-74.32	-225.04	237.00	251.72	0.60	MWD	None
4	763.06	46.38	238.21	27.43	680.78	255.96	-84.89	-242.55	256.98	250.71	1.40	MWD	None
5	792.99	42.30	236.90	29.93	702.18	276.67	-96.10	-260.21	277.39	249.73	1.40	MWD	None
6	823.14	38.13	237.55	30.15	725.20	295.91	-106.64	-276.57	296.42	248.91	1.39	MWD	None
7	850.62	34.44	237.39	27.48	747.35	312.01	-115.39	-290.28	312.37	248.32	1.34	MWD	None
8	878.86	33.78	237.13	28.24	770.73	327.67	-123.95	-303.60	327.93	247.79	0.24	MWD	None
9	907.36	33.51	236.86	28.50	794.46	343.28	-132.55	-316.84	343.45	247.30	0.11	MWD	None
10	936.95	32.59	238.86	29.59	819.26	359.27	-141.14	-330.50	359.38	246.88	0.48	MWD	None
11	964.80	32.38	238.93	27.85	842.75	374.12	-148.87	-343.31	374.19	246.56	0.08	MWD	None
12	993.42	31.99	238.25	28.62	866.97	389.25	-156.81	-356.32	389.30	246.25	0.19	MWD	None
13	1022.94	31.42	238.40	29.52	892.09	404.63	-164.96	-369.52	404.67	245.94	0.19	MWD	None
14	1051.55	30.85	238.27	28.61	916.58	419.30	-172.72	-382.11	419.34	245.68	0.20	MWD	None
15	1080.53	31.49	240.83	28.98	941.37	434.21	-180.32	-395.04	434.25	245.47	0.51	MWD	None
16	1109.94	31.23	240.18	29.41	966.49	449.46	-187.86	-408.36	449.50	245.30	0.15	MWD	None
17	1137.96	31.08	240.62	28.02	990.47	463.89	-195.02	-420.97	463.94	245.14	0.10	MWD	None
18	1166.87	29.62	246.25	28.91	1015.42	478.47	-201.56	-434.01	478.53	245.09	1.11	MWD	None
19	1195.61	27.77	247.96	28.74	1040.63	492.27	-206.93	-446.72	492.32	245.15	0.70	MWD	None
20	1224.36	28.76	248.27	28.75	1065.95	505.87	-212.00	-459.35	505.92	245.23	0.35	MWD	None
21	1252.66	30.06	245.24	28.30	1090.60	519.76	-217.49	-472.12	519.80	245.27	0.70	MWD	None
22	1281.95	29.22	244.60	29.29	1116.06	534.24	-223.63	-485.24	534.29	245.26	0.31	MWD	None
23	1309.53	27.80	244.86	27.58	1140.29	547.40	-229.25	-497.14	547.45	245.24	0.52	MWD	None
24	1338.89	29.19	244.81	29.36	1166.10	561.41	-235.21	-509.82	561.46	245.23	0.47	MWD	None
25	1368.17	30.13	244.69	29.28	1191.54	575.90	-241.39	-522.92	575.95	245.22	0.32	MWD	None
26	1396.84	28.90	244.52	28.67	1216.49	590.02	-247.45	-535.68	590.07	245.21	0.43	MWD	None
27	1425.16	30.13	245.91	28.32	1241.13	603.97	-253.29	-548.35	604.02	245.21	0.50	MWD	None
28	1453.53	28.98	245.99	28.37	1265.81	617.96	-258.99	-561.13	618.01	245.22	0.41	MWD	None
29	1482.63	27.29	246.23	29.10	1291.47	631.68	-264.55	-573.67	631.73	245.24	0.58	MWD	None
30	1511.25	28.23	245.43	28.62	1316.80	645.01	-270.01	-585.83	645.06	245.25	0.35	MWD	None

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Seq # -	Measured depth (m)	Incl angle (deg)	Azimuth angle (deg)	Course length (m)	TVD depth (m)	Vertical section (m)	Displ +N/S- (m)	Displ +E/W- (m)	Total displ (m)	At Azim (deg)	DLS (deg/ 10m)	Srvy tool type	Tool Corr (deg)
31	1539.77	27.46	245.23	28.52	1342.02	658.33	-275.57	-597.94	658.38	245.26	0.27	MWD	None
32	1568.45	28.58	244.22	28.68	1367.33	671.80	-281.33	-610.12	671.86	245.25	0.42	MWD	None
33	1597.09	27.80	243.57	28.64	1392.58	685.33	-287.28	-622.27	685.38	245.22	0.29	MWD	None
34	1625.48	30.45	244.68	28.39	1417.38	699.14	-293.30	-634.70	699.20	245.20	0.95	MWD	None
35	1654.41	30.47	244.59	28.93	1442.31	713.80	-299.58	-647.95	713.86	245.19	0.02	MWD	None
36	1682.43	30.24	244.31	28.02	1466.49	727.96	-305.69	-660.73	728.02	245.17	0.10	MWD	None
37	1711.73	29.39	244.52	29.30	1491.91	742.52	-311.98	-673.87	742.59	245.16	0.29	MWD	None
38	1740.32	28.62	245.05	28.59	1516.92	756.38	-317.89	-686.41	756.45	245.15	0.28	MWD	None
39	1769.67	28.24	245.59	29.35	1542.73	770.36	-323.72	-699.11	770.42	245.15	0.16	MWD	None
40	1798.67	27.48	245.37	29.00	1568.37	783.91	-329.35	-711.44	783.97	245.16	0.26	MWD	None
41	1827.64	29.57	244.90	28.97	1593.82	797.74	-335.17	-723.99	797.81	245.16	0.73	MWD	None
42	1855.91	29.01	245.48	28.27	1618.47	811.57	-340.97	-736.54	811.64	245.16	0.22	MWD	None
43	1884.87	28.52	245.00	28.96	1643.86	825.51	-346.81	-749.20	825.57	245.16	0.19	MWD	None
44	1913.53	27.59	244.89	28.66	1669.15	838.98	-352.52	-761.41	839.05	245.16	0.32	MWD	None
45	1942.40	26.83	244.54	28.87	1694.83	852.18	-358.15	-773.34	852.25	245.15	0.27	MWD	None
46	1971.75	27.82	244.37	29.35	1720.90	865.65	-363.96	-785.50	865.72	245.14	0.34	MWD	None
47	2000.10	27.44	244.07	28.35	1746.02	878.79	-369.68	-797.34	878.87	245.13	0.14	MWD	None
48	2028.99	26.94	244.59	28.89	1771.72	891.99	-375.40	-809.23	892.07	245.11	0.19	MWD	None
49	2057.82	29.28	244.92	28.83	1797.14	905.57	-381.19	-821.52	905.65	245.11	0.81	MWD	None
50	2086.13	28.98	244.47	28.31	1821.87	919.35	-387.08	-833.98	919.43	245.10	0.13	MWD	None
51	2114.27	28.28	244.27	28.14	1846.57	932.83	-392.92	-846.14	932.91	245.09	0.25	MWD	None
52	2143.80	27.40	244.34	29.53	1872.68	946.62	-398.89	-858.56	946.70	245.08	0.30	MWD	None
53	2171.65	28.15	244.42	27.85	1897.32	959.59	-404.51	-870.26	959.68	245.07	0.27	MWD	None
54	2201.22	28.95	246.24	29.57	1923.30	973.72	-410.40	-883.11	973.81	245.07	0.40	MWD	None
55	2230.09	28.34	245.38	28.87	1948.64	987.56	-416.07	-895.73	987.65	245.08	0.26	MWD	None
56	2258.89	27.57	245.72	28.80	1974.08	1001.06	-421.66	-908.02	1001.15	245.09	0.27	MWD	None
57	2287.33	30.20	247.14	28.44	1998.98	1014.80	-427.15	-920.61	1014.88	245.11	0.96	MWD	None
58	2316.69	31.70	246.61	29.36	2024.15	1029.89	-433.08	-934.50	1029.97	245.14	0.52	MWD	None
59	2345.46	34.08	245.32	28.77	2048.31	1045.51	-439.45	-948.76	1045.59	245.15	0.86	MWD	None
60	2373.81	35.28	245.70	28.35	2071.62	1061.64	-446.13	-963.44	1061.72	245.15	0.43	MWD	None

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Seq # -	Measured depth (m)	Incl angle (deg)	Azimuth angle (deg)	Course length (m)	TVD depth (m)	Vertical section (m)	Displ +N/S- (m)	Displ +E/W- (m)	Total displ (m)	At Azim (deg)	DLS (deg/ 10m)	Srvy tool type	Tool Corr (deg)
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Seq # -	Measured depth (m)	Incl angle (deg)	Azimuth angle (deg)	Course length (m)	TVD depth (m)	Vertical section (m)	Displ +N/S- (m)	Displ +E/W- (m)	Total displ (m)	At Azim (deg)	DLS (deg/ 10m)	Srvy tool type	Tool Corr (deg)
61	2402.35	37.26	246.37	28.54	2094.63	1078.53	-452.99	-978.87	1078.60	245.17	0.71	MWD	None
62	2431.27	40.90	245.77	28.92	2117.08	1096.75	-460.38	-995.53	1096.83	245.18	1.27	MWD	None
63	2459.03	42.82	245.76	27.76	2137.75	1115.28	-467.99	-1012.42	1115.35	245.19	0.69	MWD	None
64	2488.00	45.39	245.34	28.97	2158.55	1135.44	-476.33	-1030.77	1135.51	245.20	0.89	MWD	None
65	2517.61	49.71	246.31	29.61	2178.53	1157.28	-485.27	-1050.70	1157.35	245.21	1.48	MWD	None
66	2546.73	55.95	247.91	29.12	2196.12	1180.47	-494.28	-1072.07	1180.53	245.25	2.19	MWD	None
67	2575.77	60.70	246.52	29.04	2211.37	1205.16	-503.86	-1094.85	1205.22	245.29	1.69	MWD	None
68	2604.45	64.45	246.50	28.68	2224.57	1230.61	-514.00	-1118.19	1230.67	245.31	1.31	MWD	None
69	2633.12	67.90	248.28	28.67	2236.15	1256.82	-524.08	-1142.40	1256.88	245.36	1.33	MWD	None
70	2661.54	70.43	248.39	28.42	2246.26	1283.35	-533.88	-1167.08	1283.40	245.42	0.89	MWD	None
71	2690.06	72.05	247.45	28.52	2255.43	1310.34	-544.03	-1192.11	1310.38	245.47	0.65	MWD	None
72	2719.33	74.27	244.91	29.27	2263.91	1338.35	-555.35	-1217.73	1338.39	245.48	1.12	MWD	None
73	2747.50	74.93	244.96	28.17	2271.39	1365.50	-566.85	-1242.33	1365.54	245.47	0.23	MWD	None
74	2776.37	75.40	244.92	28.87	2278.79	1393.41	-578.68	-1267.61	1393.45	245.46	0.16	MWD	None
75	2805.15	75.49	245.23	28.78	2286.02	1421.26	-590.42	-1292.87	1421.31	245.46	0.11	MWD	None
76	2833.96	75.62	245.27	28.81	2293.20	1449.16	-602.10	-1318.21	1449.21	245.45	0.05	MWD	None
77	2862.67	75.70	245.06	28.71	2300.32	1476.97	-613.78	-1343.45	1477.02	245.45	0.08	MWD	None
78	2889.43	76.06	246.10	26.76	2306.84	1502.93	-624.51	-1367.08	1502.97	245.45	0.40	MWD	None
79	2919.19	77.19	245.82	29.76	2313.73	1531.88	-636.30	-1393.52	1531.92	245.46	0.39	MWD	None
80	2926.49	77.73	245.56	7.30	2315.31	1539.00	-639.23	-1400.02	1539.05	245.46	0.82	MWD	None
81	2946.00	78.20	245.25	19.51	2319.38	1558.08	-647.18	-1417.37	1558.13	245.46	0.29	Proj.	to TD

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Company:
ESSO Australia Pty. Ltd.



Well: **WKF W20A**
Field: **West Kingfish**
Rig: **ISDL 453**
State: **Victoria**

Gamma Ray Service
1:200 Measured Depth
Real Time Log