



Potassium	%	8.6									
<b>Environmental data</b>											
<b>GR</b>											
Mud weight	ppg	10.05									
Bit size	in.	8.5									
<b>Resistivity</b>											
<b>Neutron porosity</b>											
Hole Size		N/A									
Mud weight		N/A									
Temperature		N/A									
Mud salinity		N/A									
Formation salinity		N/A									
Recording rate 1	SEC	3.83									
Recording rate 2	SEC	N/A									
Filtering GR		3 pt.									
Filtering density		N/A									
Filtering Neutron		N/A									
Company representative		G. Campbell	B. Davis	T. Bassett	B. Steel						
Schlumberger D&M Personnel		L. Johnston	B. Pattarakorn	C. Soper	L. Muskett	C. Skiba					

<p style="text-align: center;"><b>DISCLAIMER</b></p> <p>THE USE OF AND RELIANCE UPON THIS RECORDED-DATA BY THE HEREIN NAMED COMPANY (AND ANY OF ITS AFFILIATES, PARTNERS, REPRESENTATIVES, AGENTS, CONSULTANTS AND EMPLOYEES) IS SUBJECT TO THE TERMS AND CONDITIONS AGREED UPON BETWEEN SCHLUMBERGER AND THE COMPANY, INCLUDING: (a) RESTRICTIONS ON USE OF THE RECORDED-DATA; (b) DISCLAIMERS AND WAIVERS OF WARRANTIES AND REPRESENTATIONS REGARDING COMPANY'S USE OF AND RELIANCE UPON THE RECORDED-DATA; AND (c) CUSTOMER'S FULL AND SOLE RESPONSIBILITY FOR ANY INFERENCE DRAWN OR DECISION MADE IN CONNECTION WITH THE USE OF THIS RECORDED-DATA.</p>		
<b>OTHER SERVICES FOR RUN1</b> Directional Drilling Directional Surveys D&I	<b>OTHER SERVICES FOR RUN</b>	<b>OTHER SERVICES FOR RUN</b>
<b>REMARKS: RUN NUMBER 1</b> Depth is referenced to driller's depth  Gamma Ray corrected for Tool Size, Bit Size and Mud weight  Gamma Ray not corrected for Potassium  Mud type is KCl/PHPA/Glycol.  8-1/2 in. hole was drilled from 851.0m to 3256.0 m  POOH due to TD of BMA A6A	<b>REMARKS: RUN NUMBER</b>	<b>REMARKS: RUN NUMBER</b>

<b>EQUIPMENT DESCRIPTION</b>		
<b>RUN1</b>	<b>RUN</b>	<b>RUN</b>
<b>DOWNHOLE EQUIPMENT</b>		

DOWNHOLE EQUIPMENT

6-3/4 in. PowerPulse  
MDC: Z408  
MEC: 64  
MDI: 738  
MGR: 503  
DHS: V8.0B96

D&I 19.55  
GR 18.90

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

6-5/8 in. NM Roller Reamer  
S/N: GU2298

6-3/4 in. NM Pony  
S/N: ASS15700

7 in. PowerPak\* Motor  
A700GT 7:8  
S/N: N7311  
1.5 deg. Bent Housing  
8-3/8 in. Motor Sleeve

Smith PDC Bit  
OD: 8-1/2 in.  
S73PX S/N: JT0016R1

Maximum string diameter 8.50 in.  
All lengths in Meters

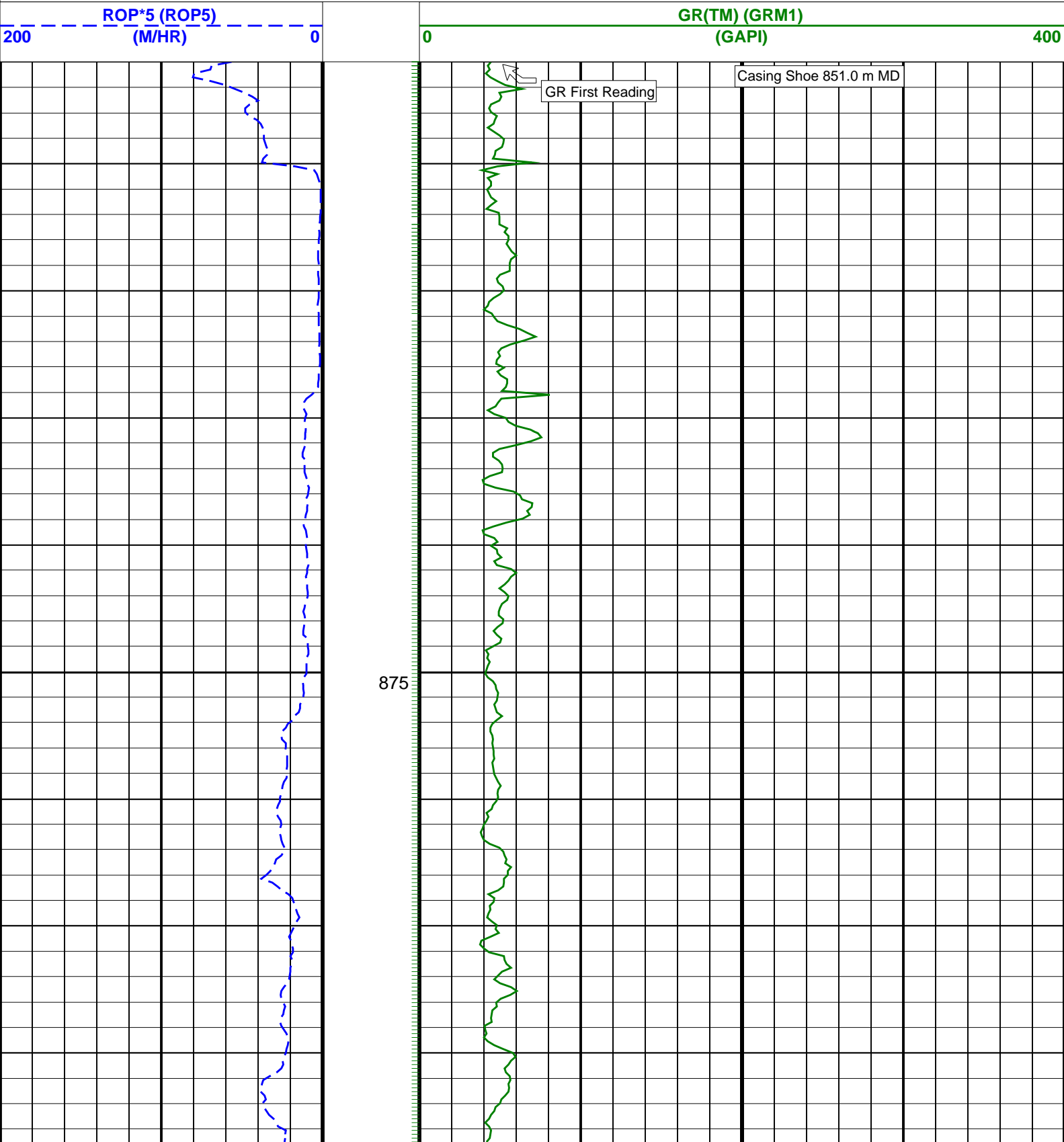
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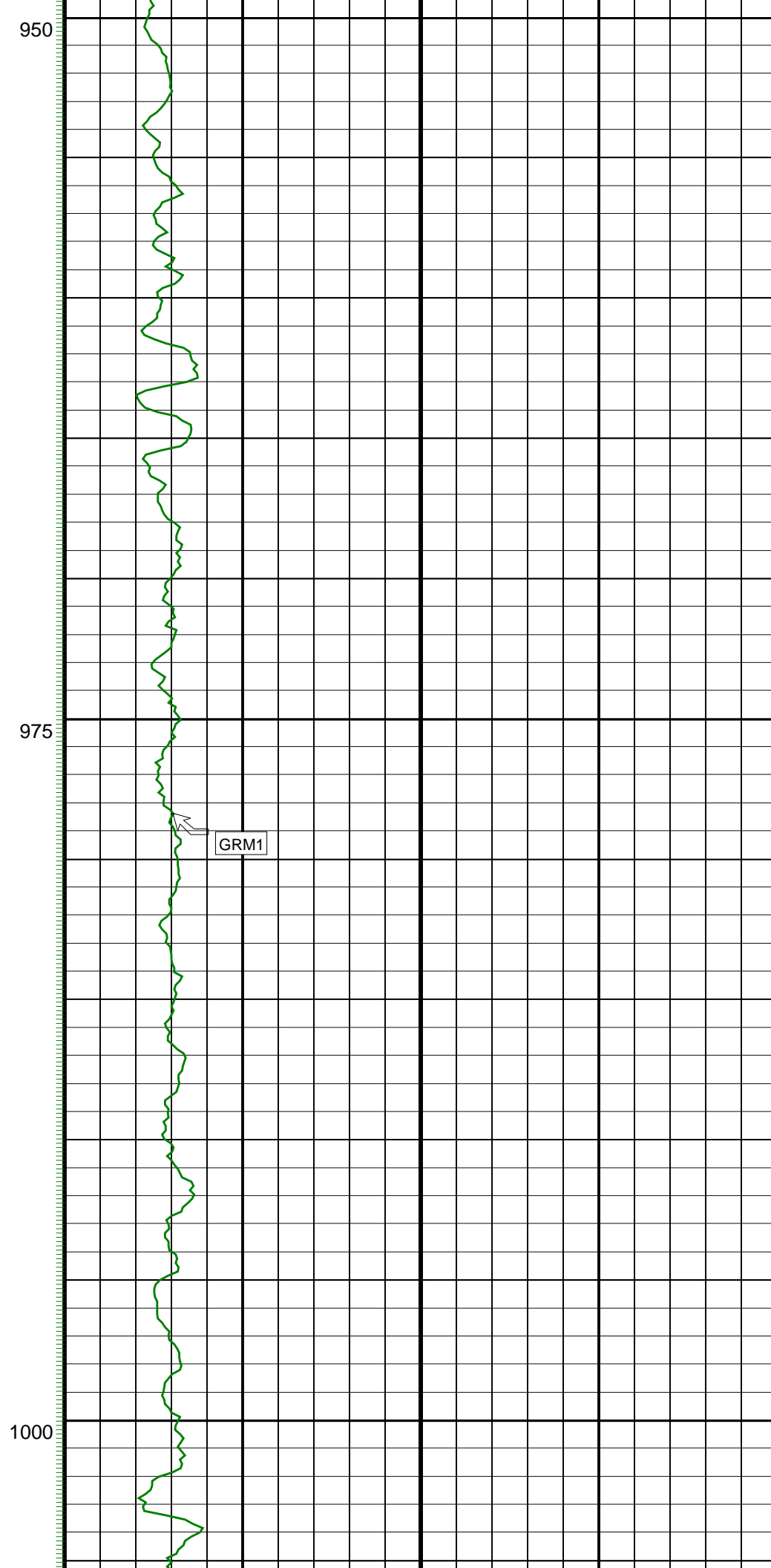
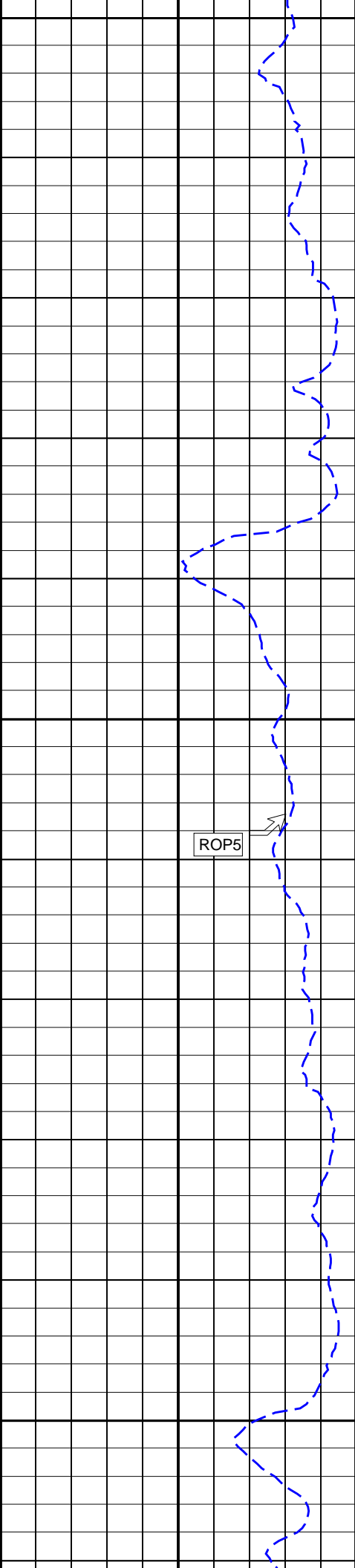
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PIP SUMMARY

GR(TM) PIP



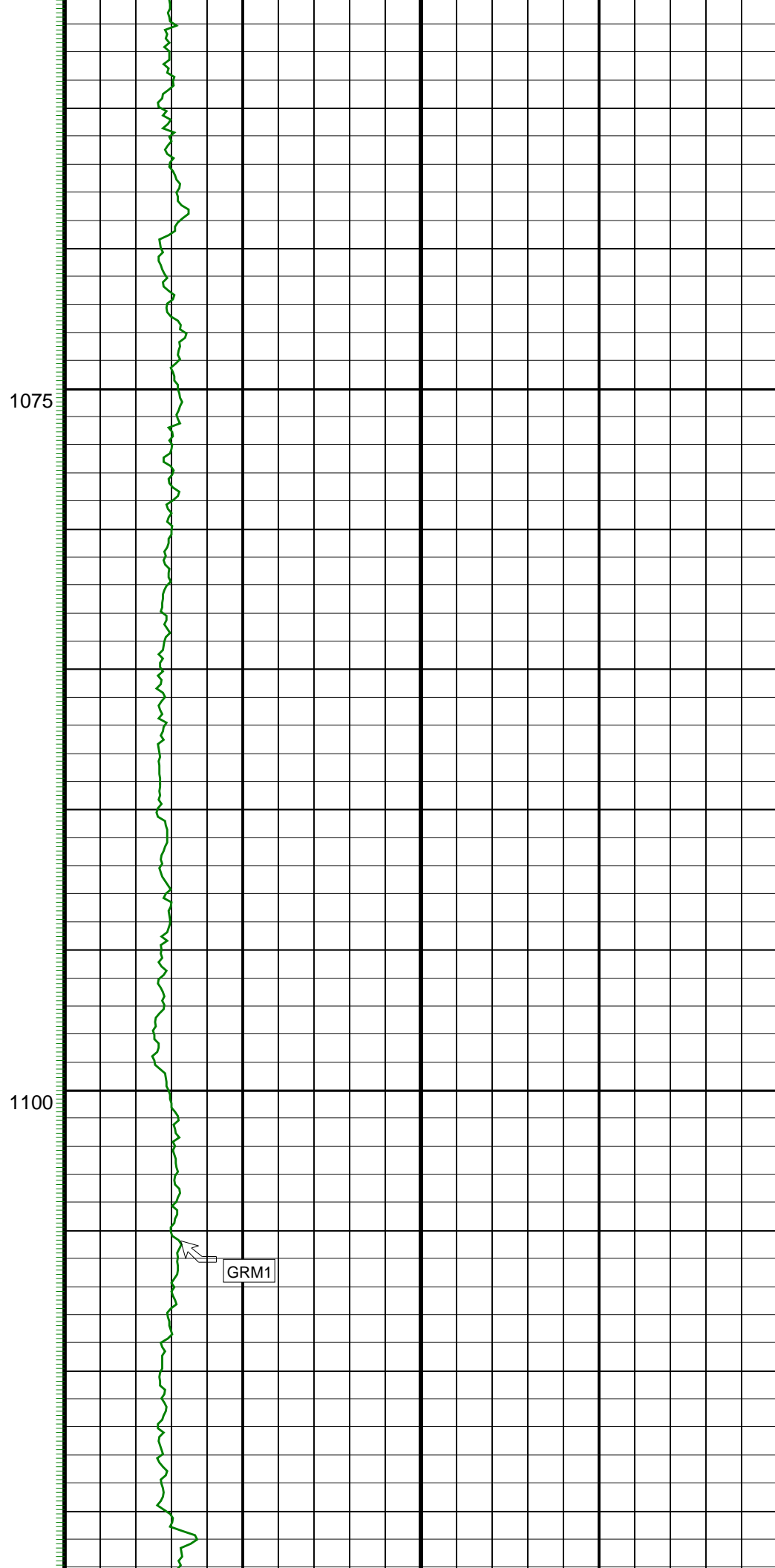
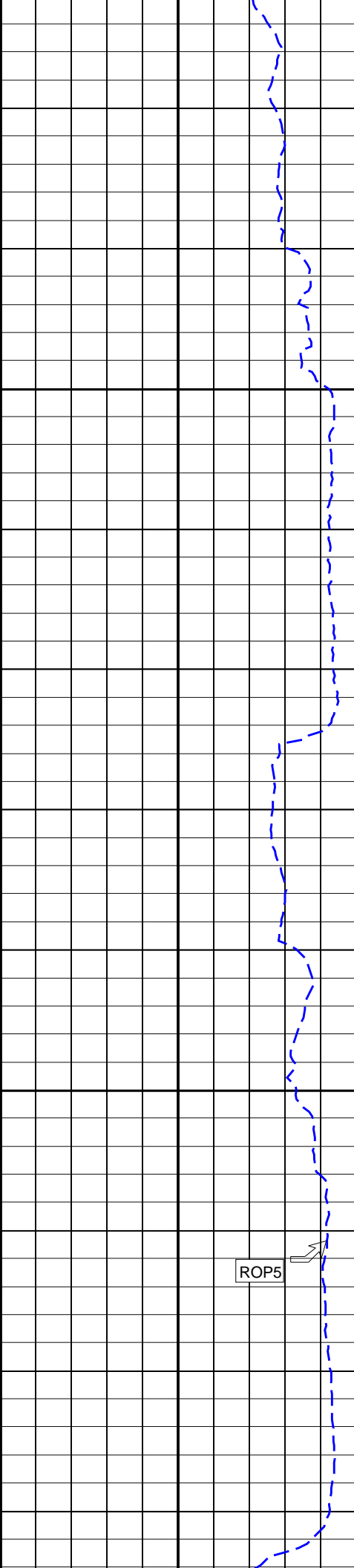




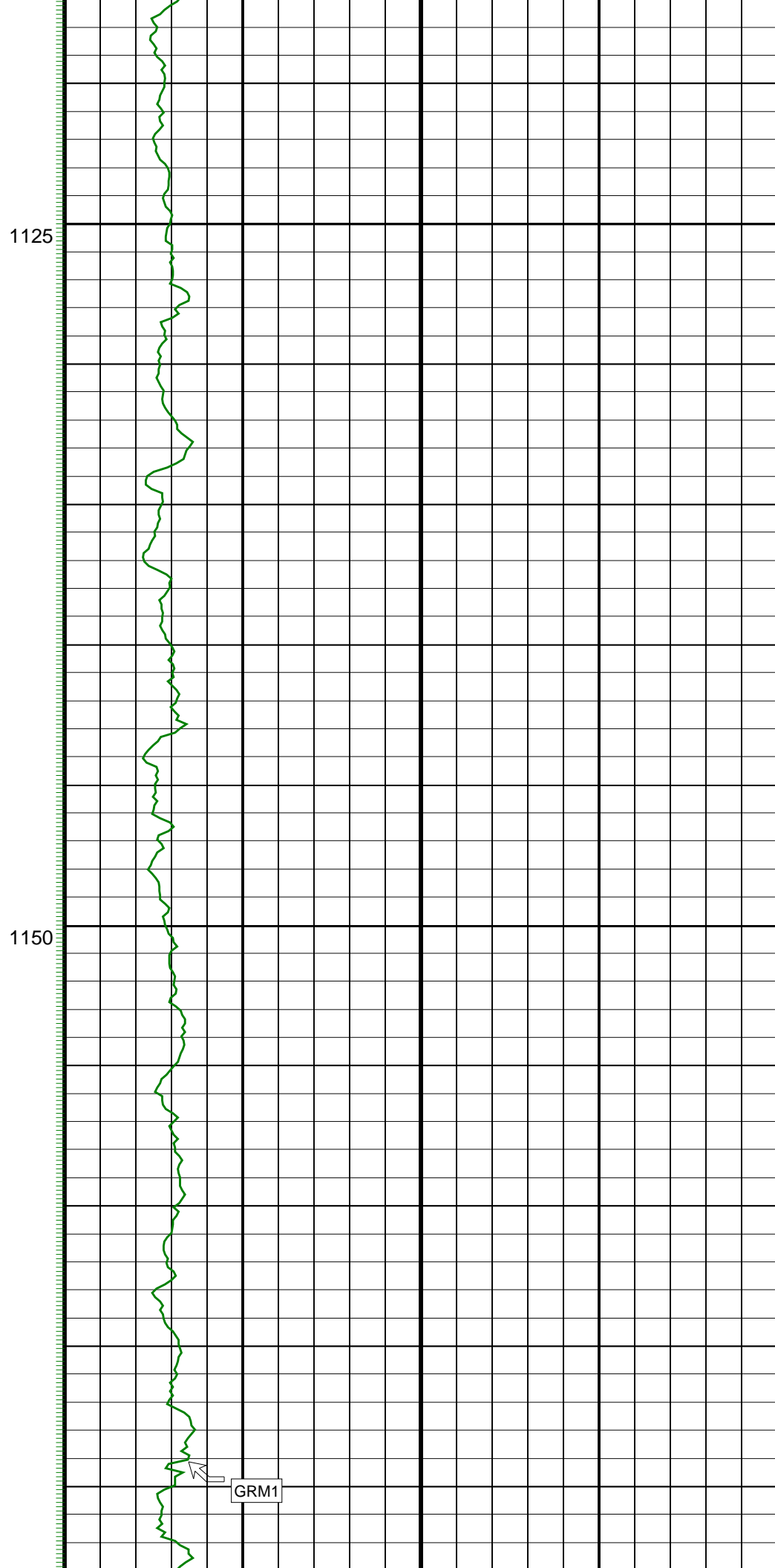
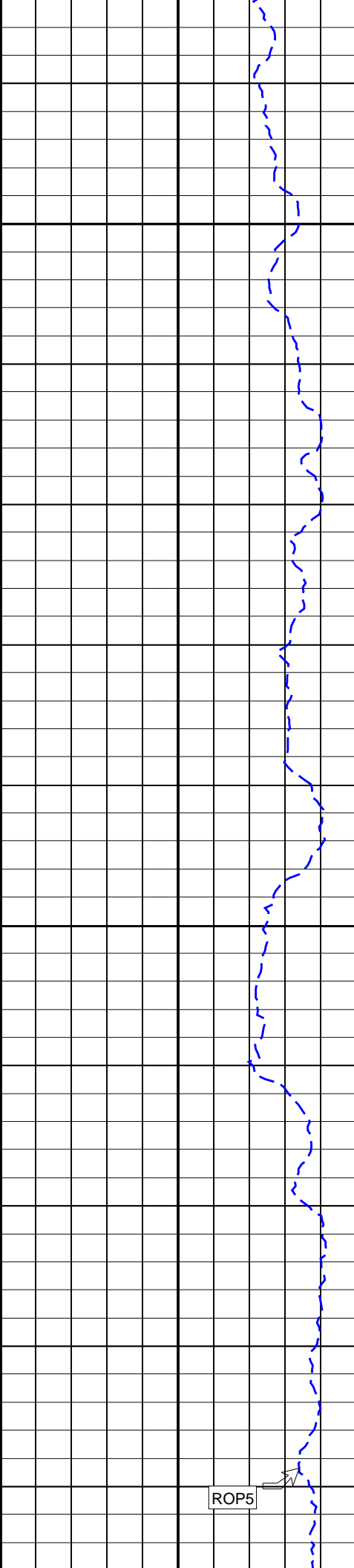


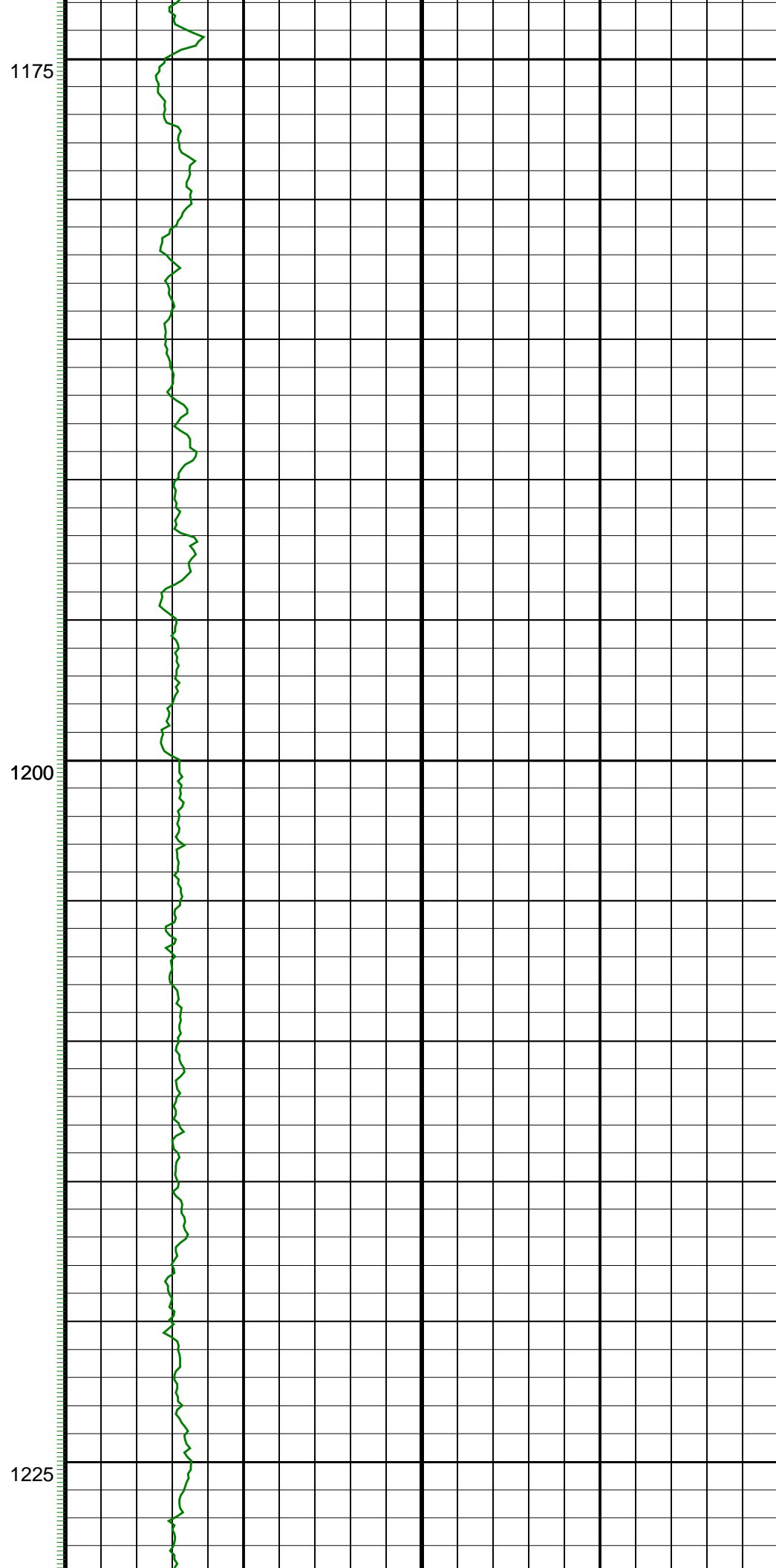
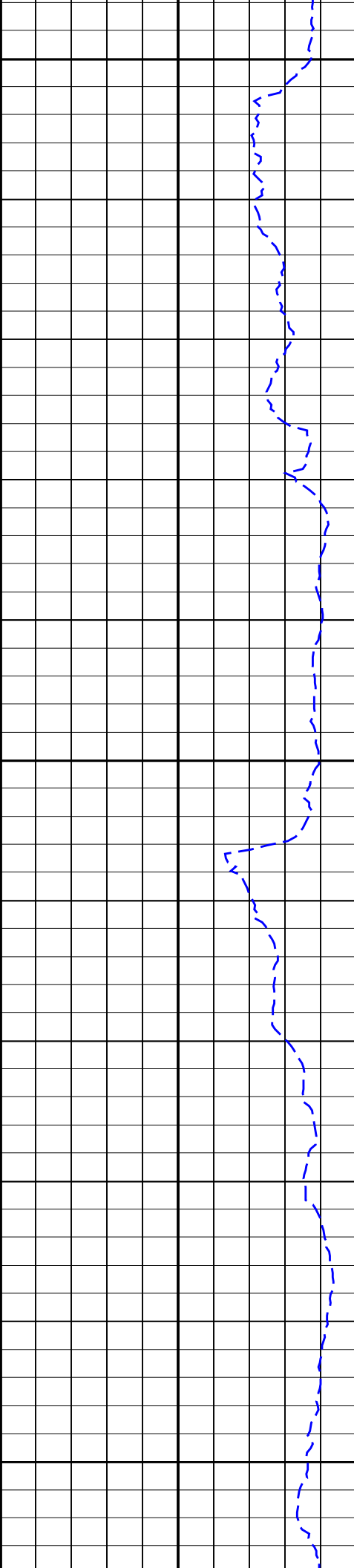
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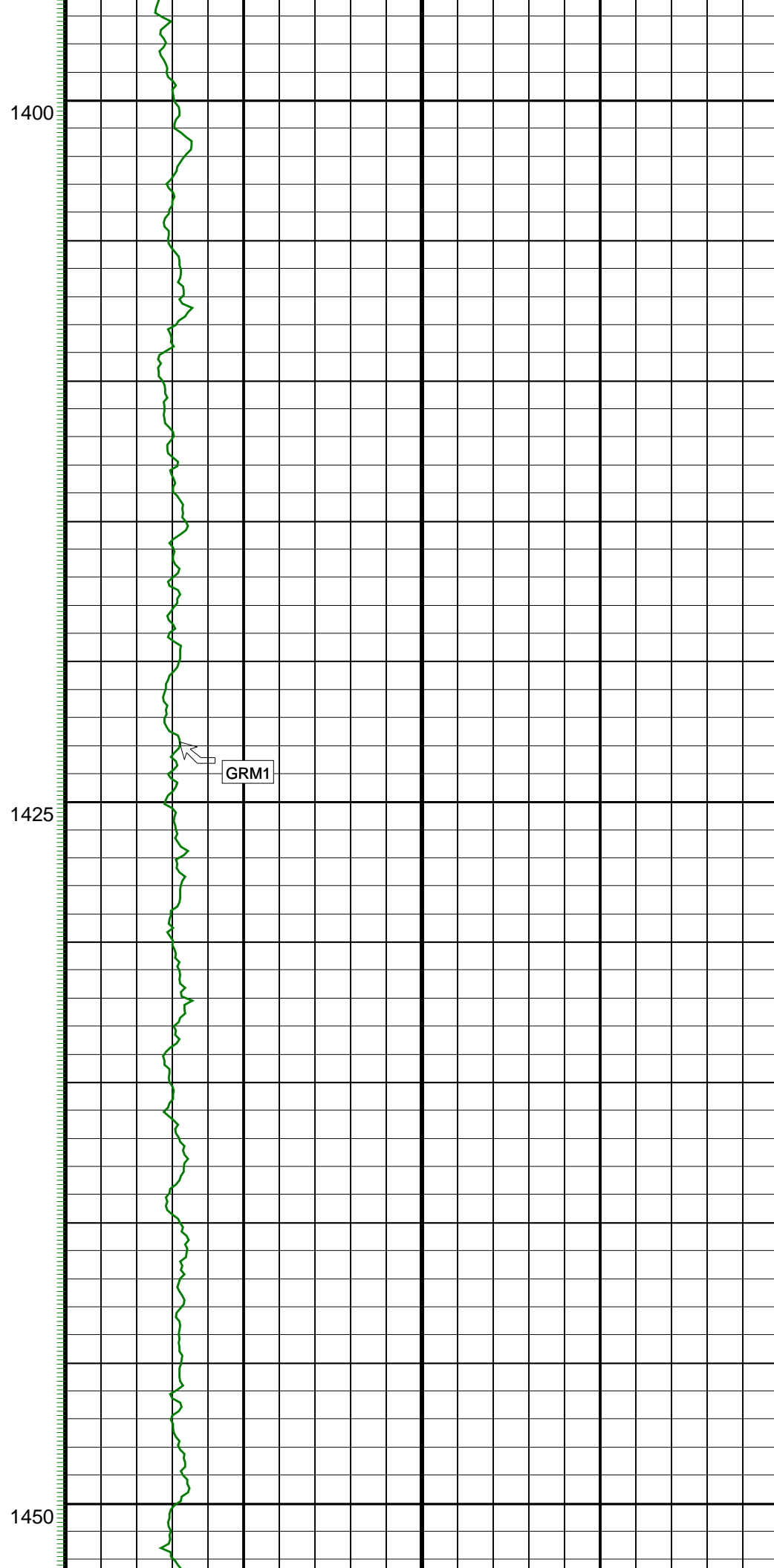
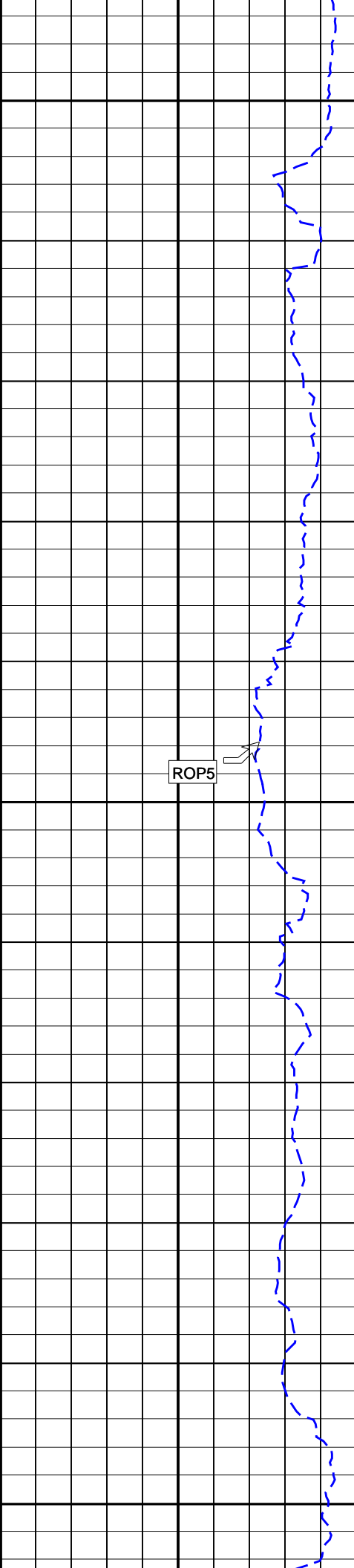


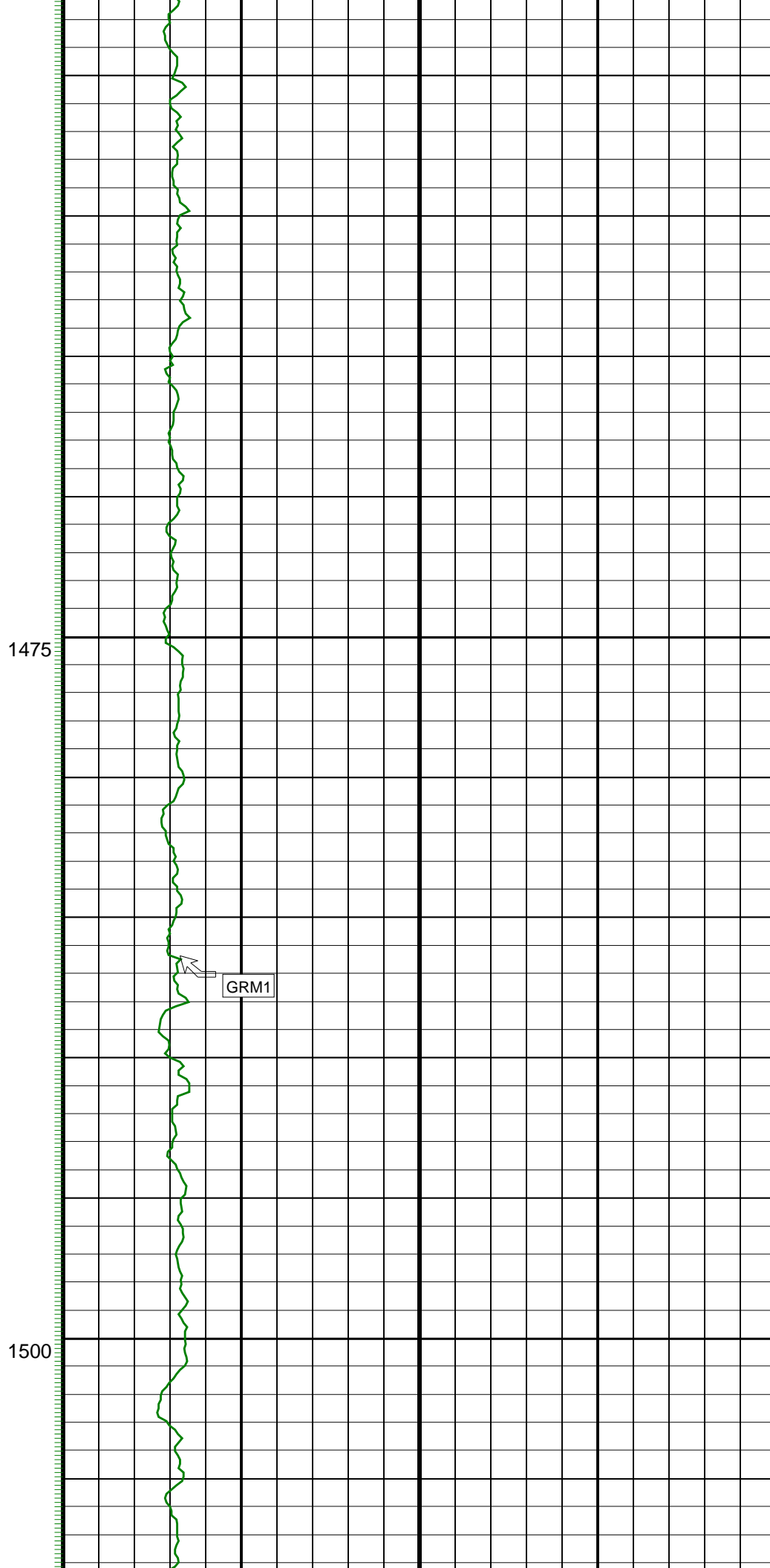
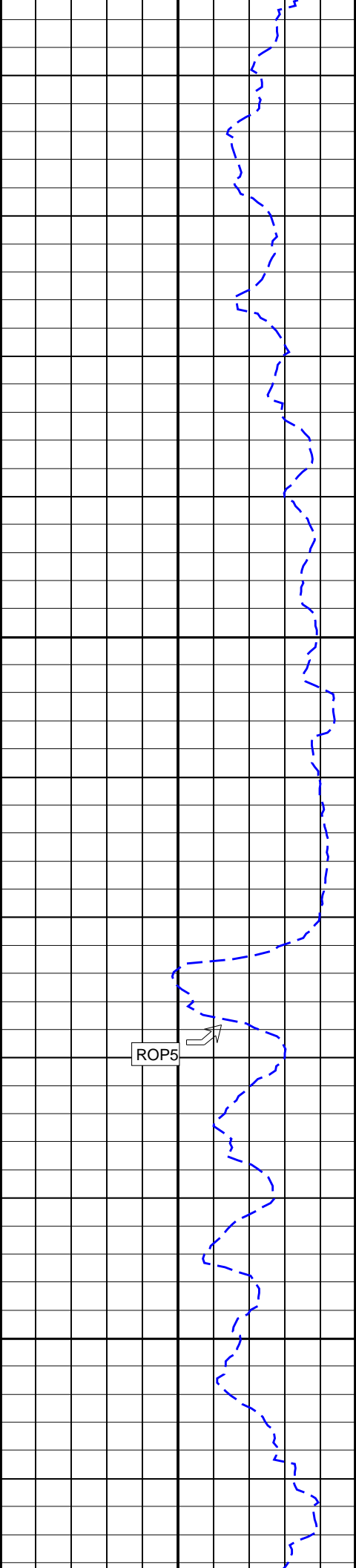








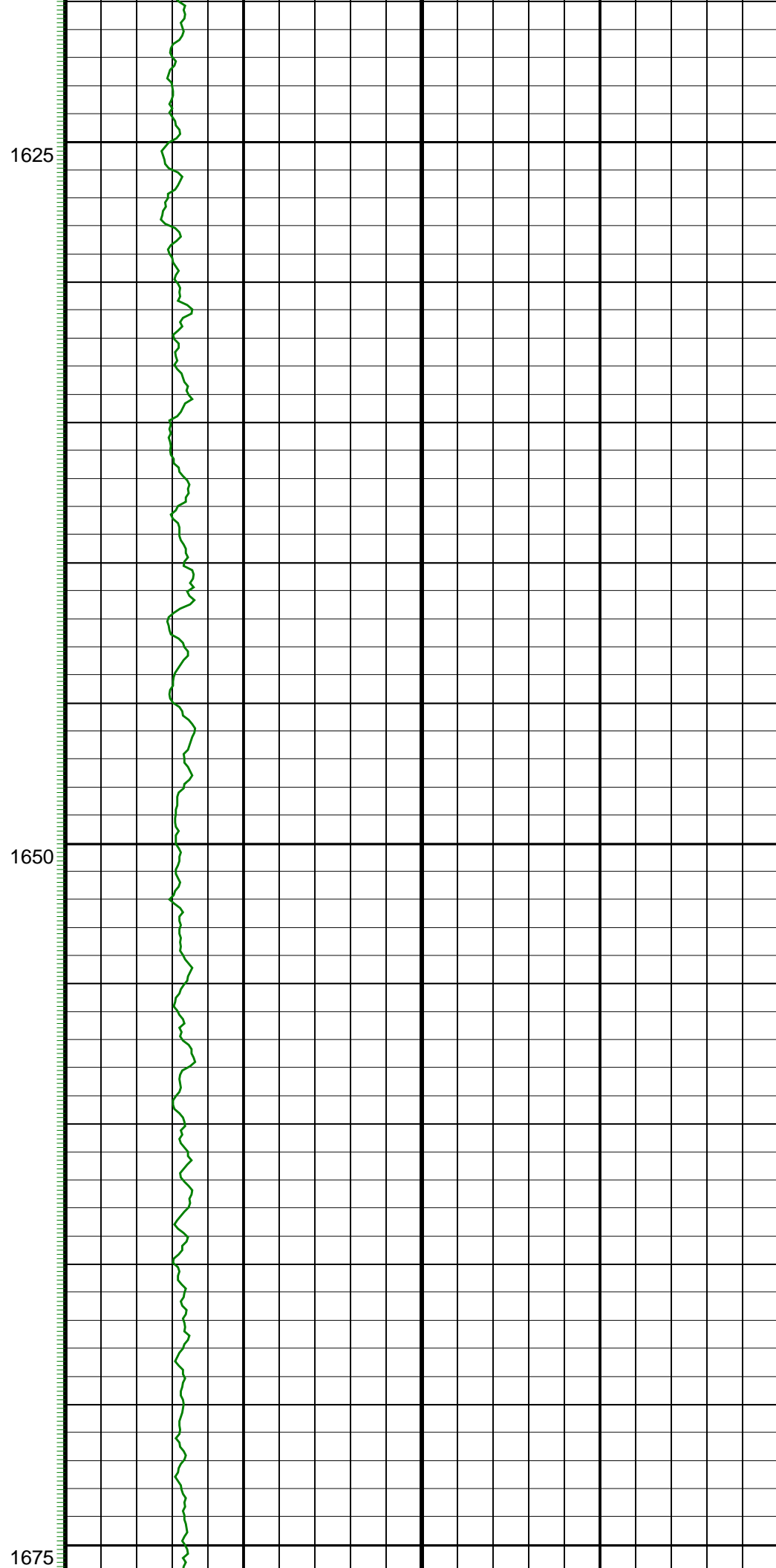
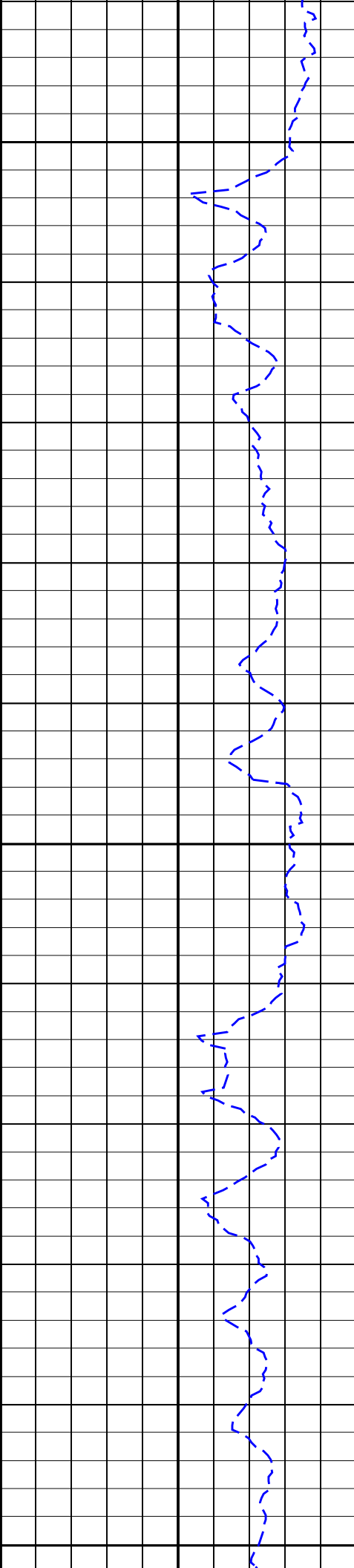


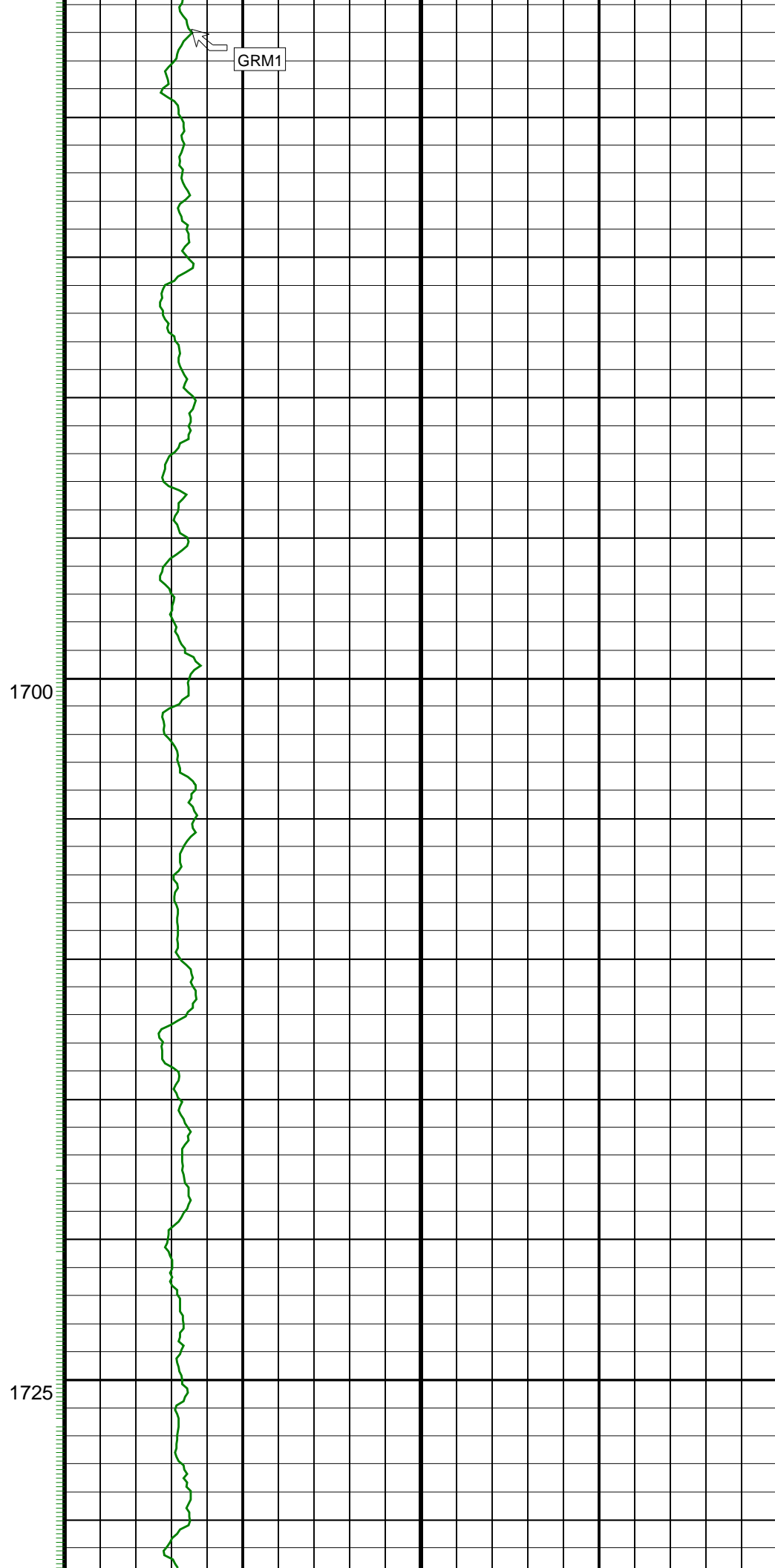
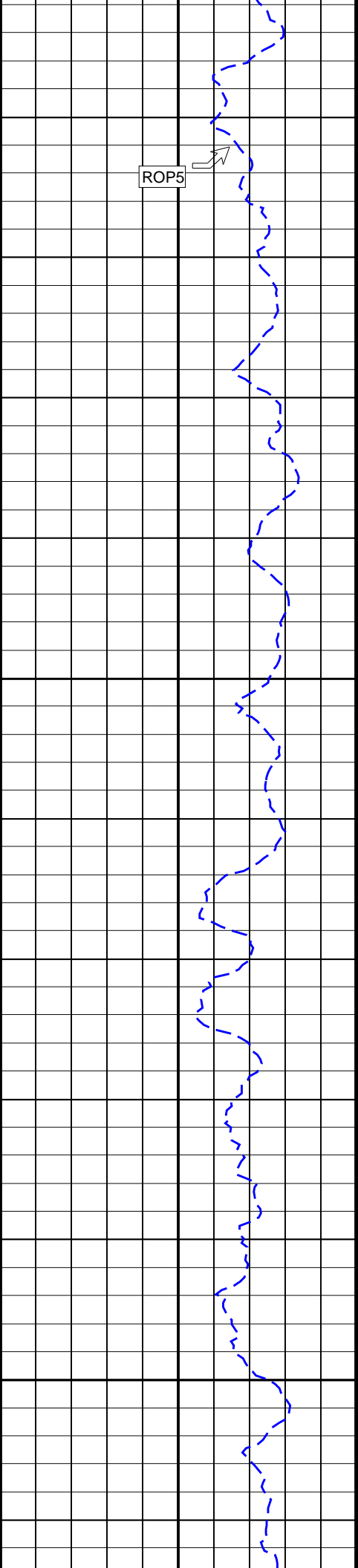




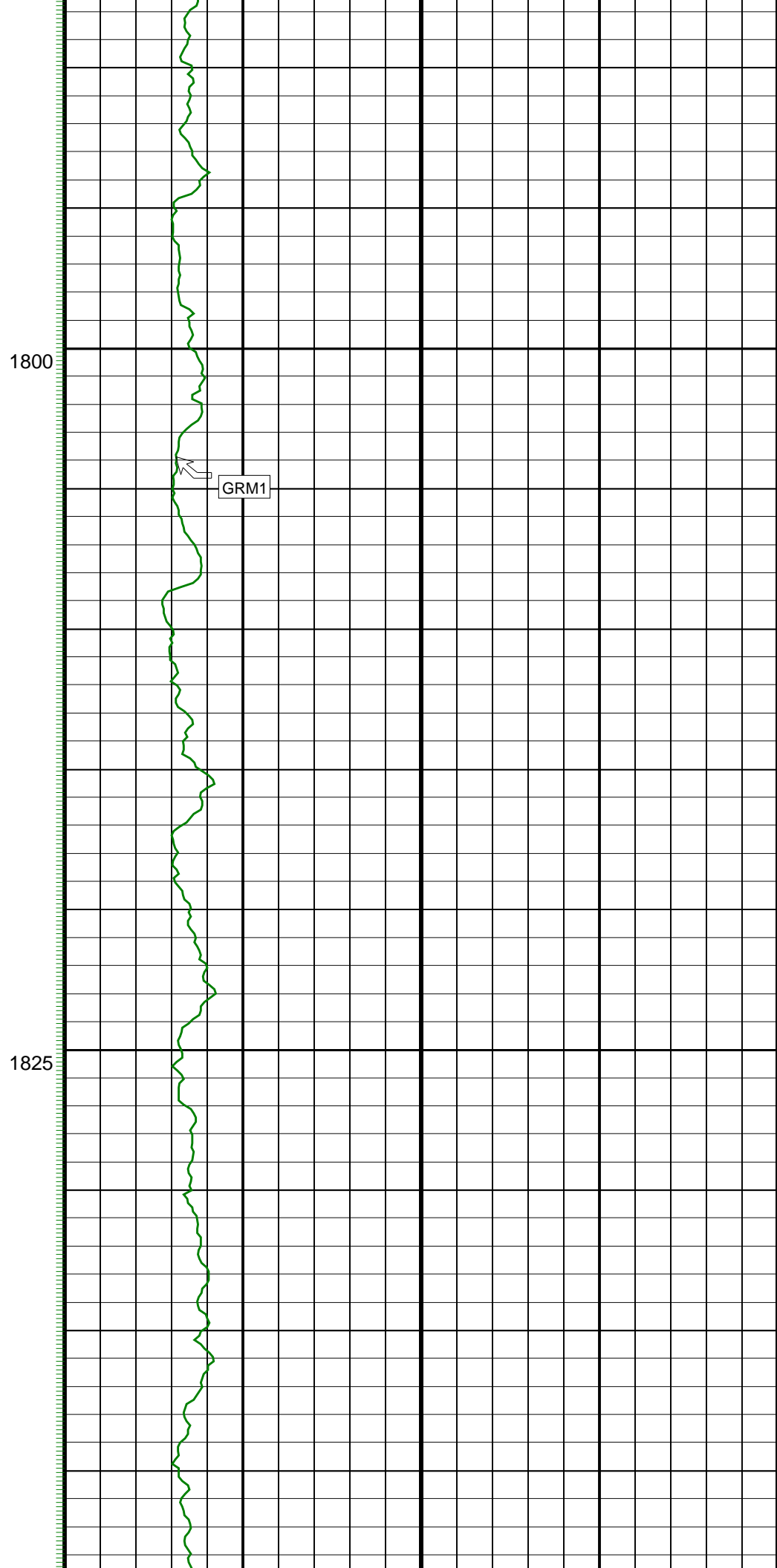
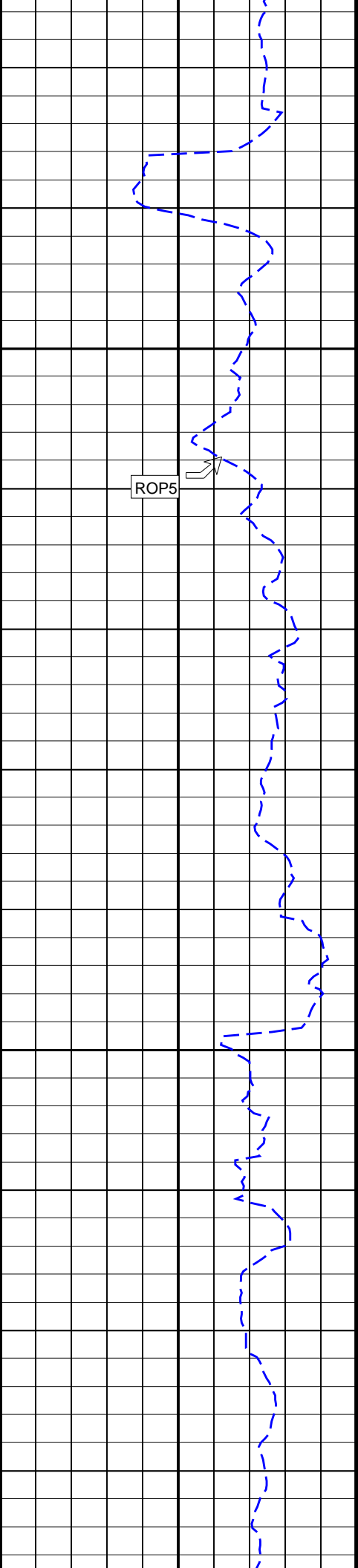


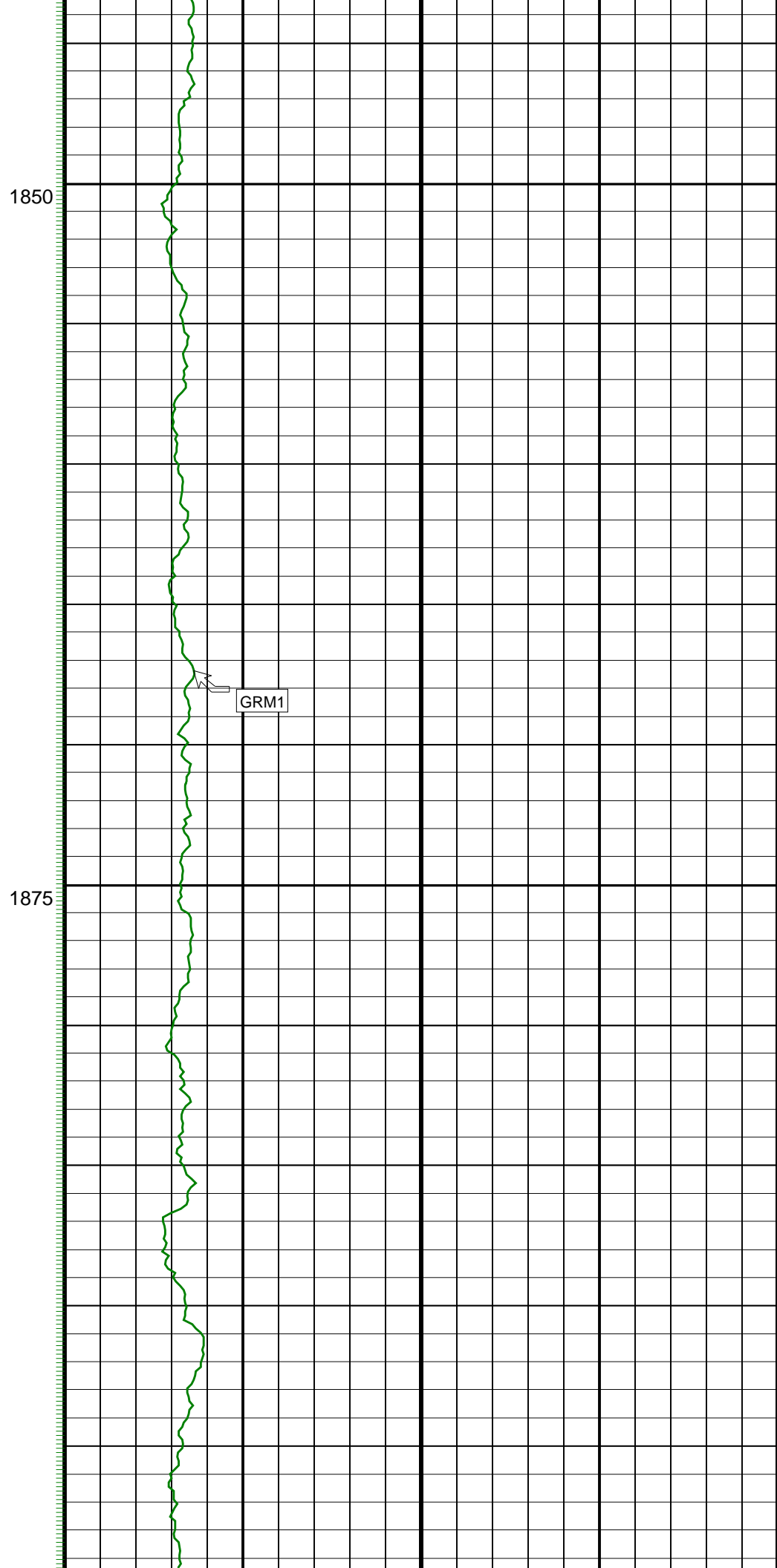
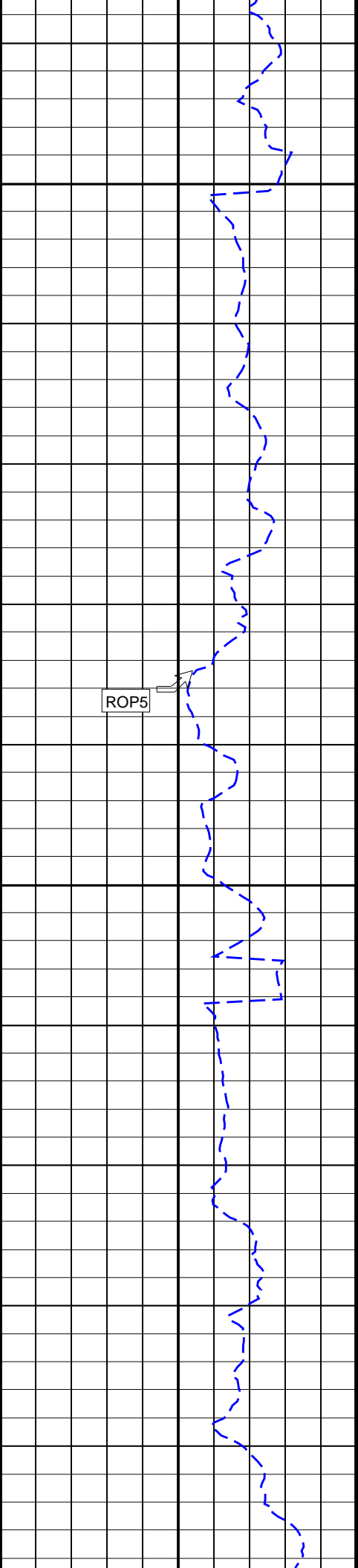




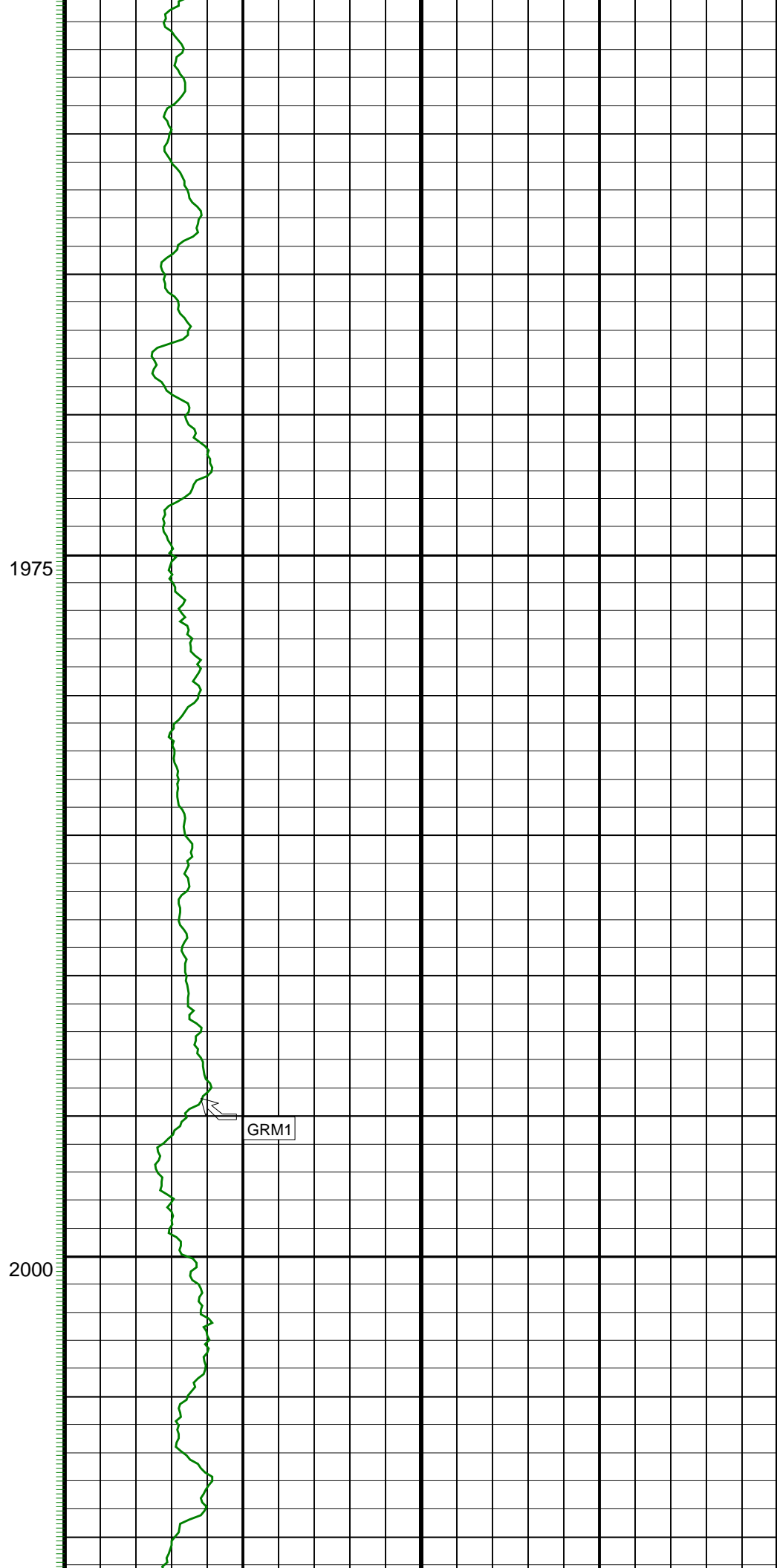
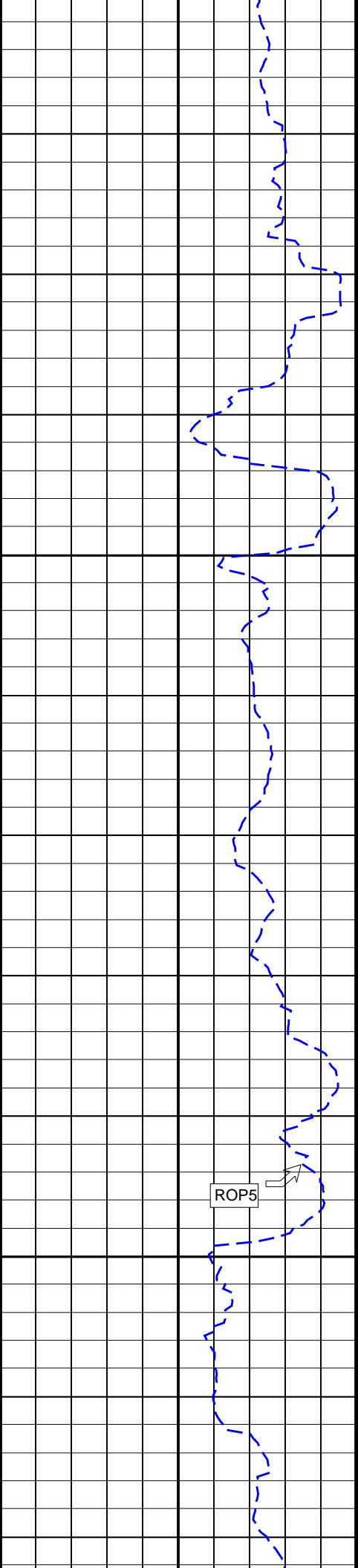




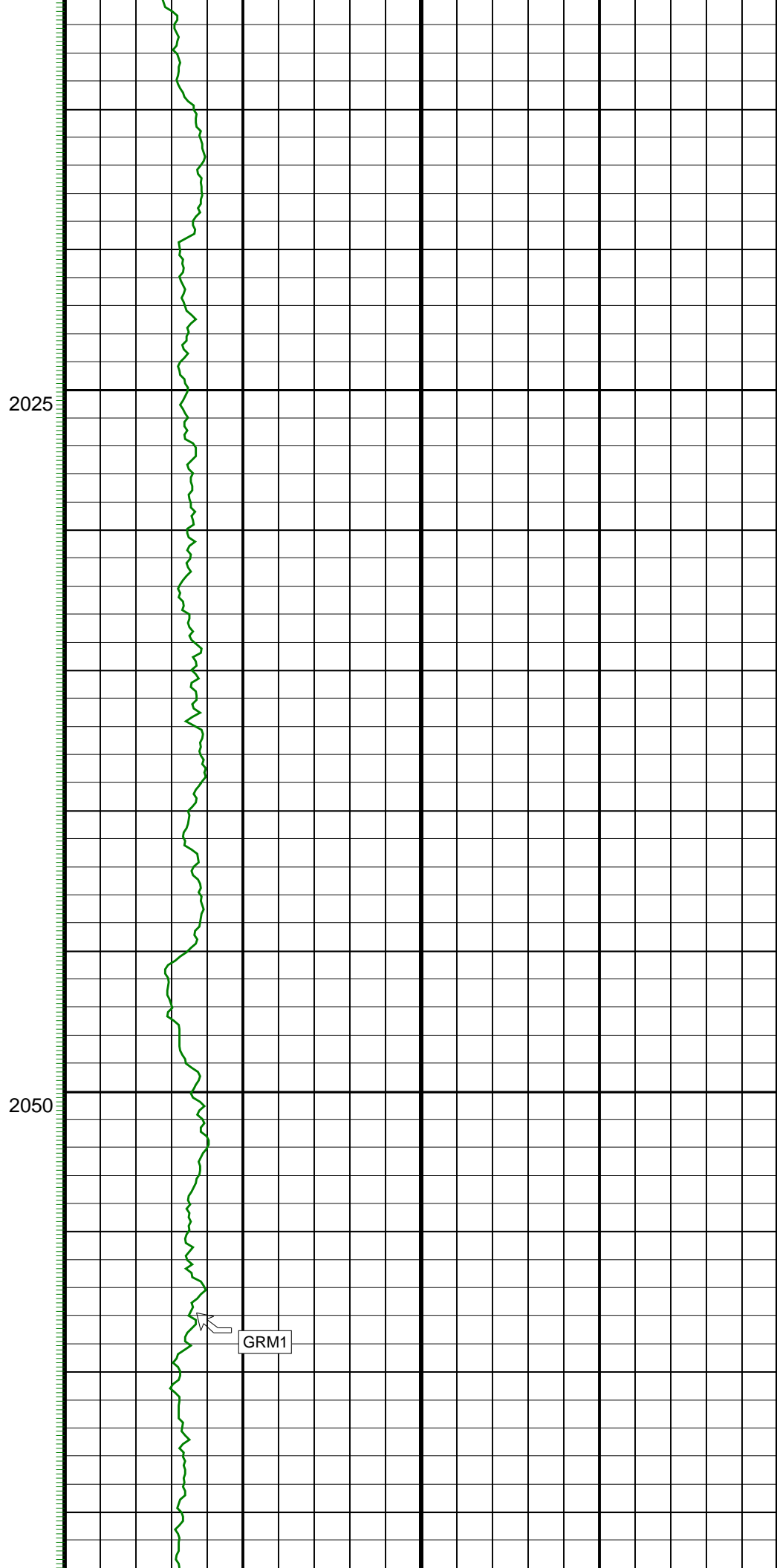
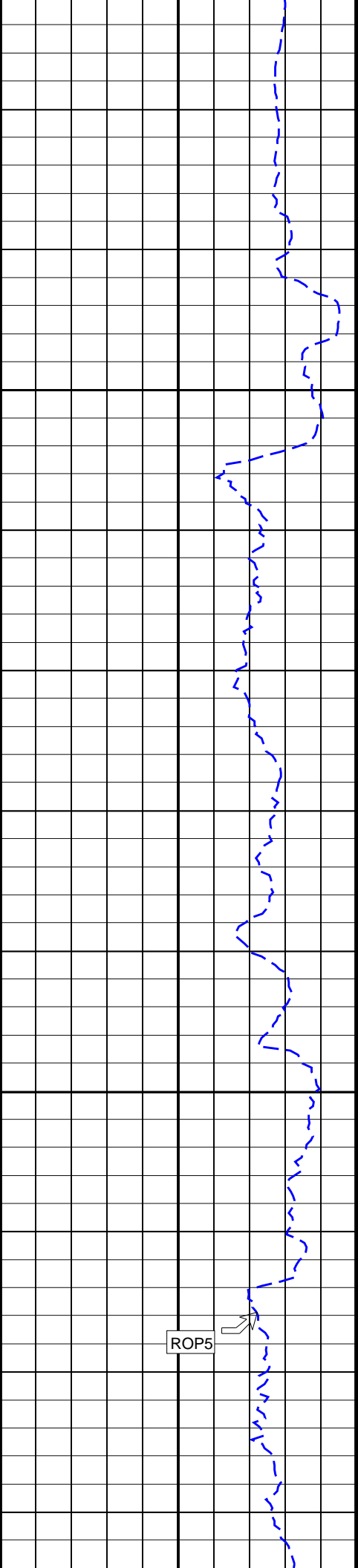


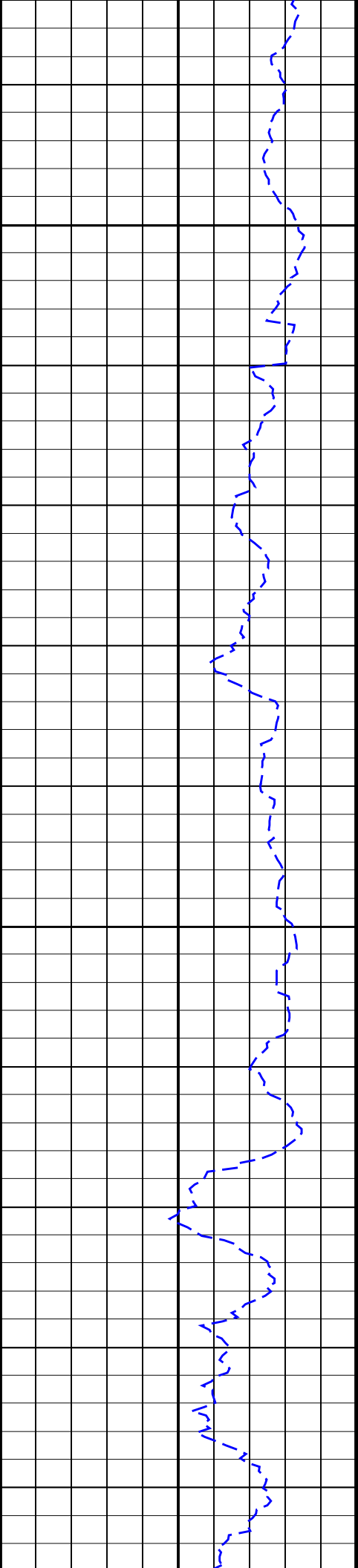






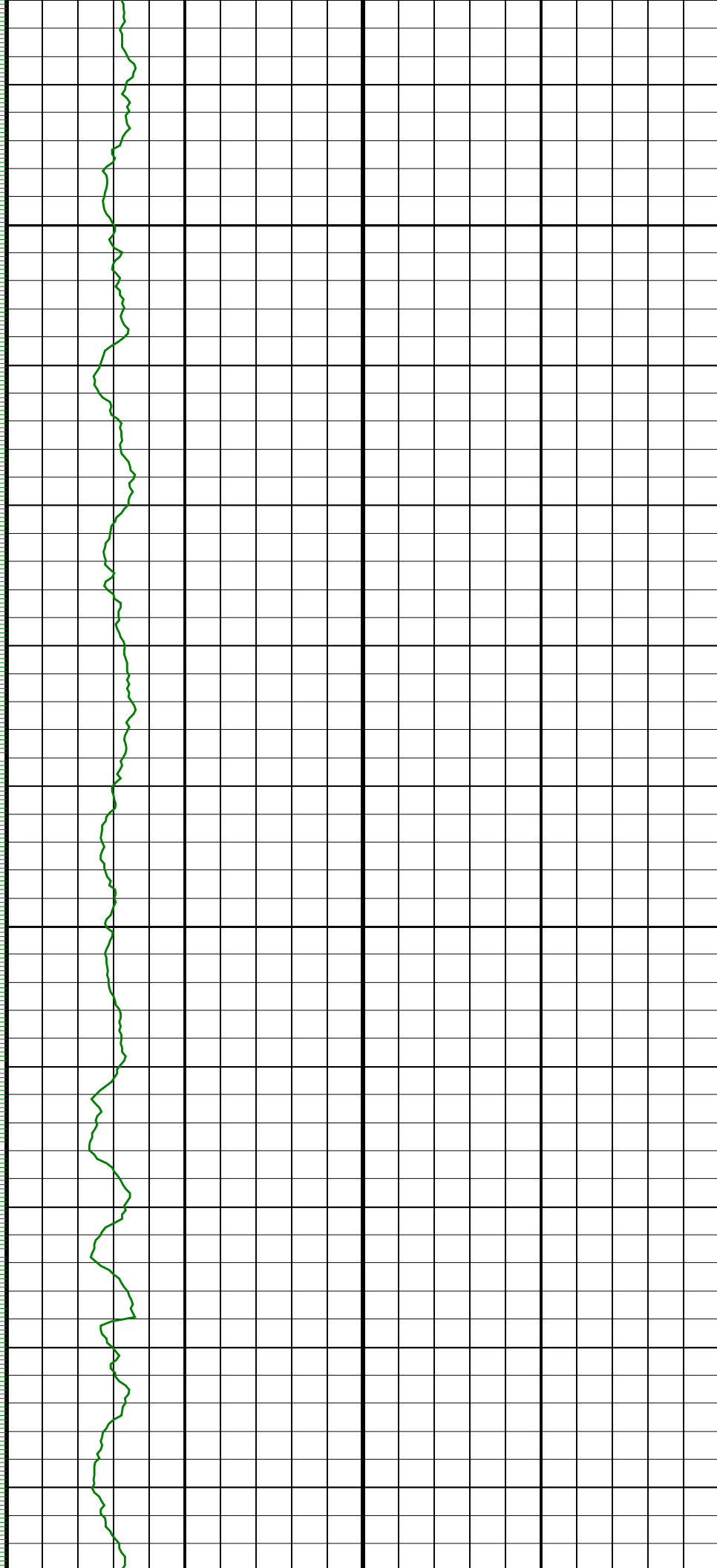






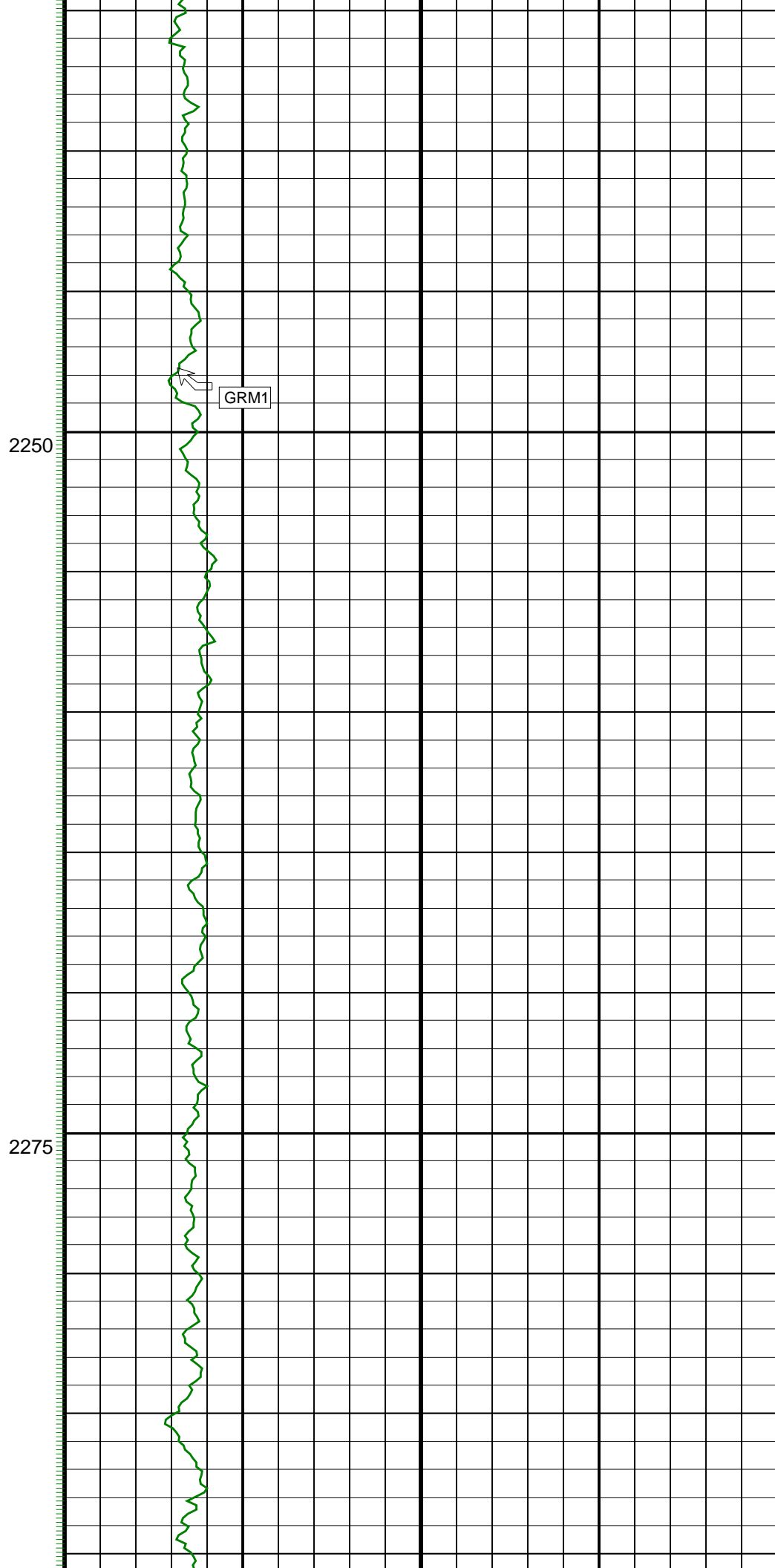
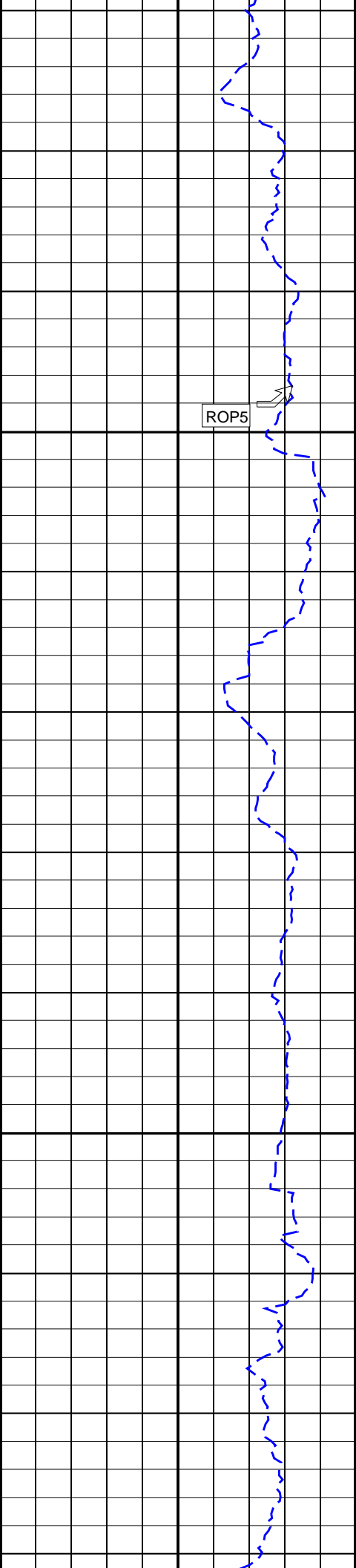
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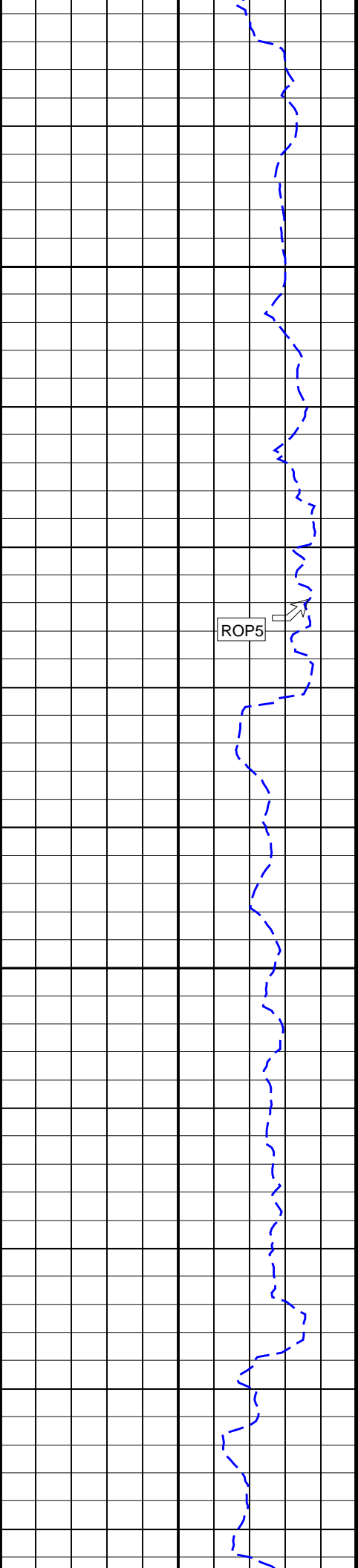
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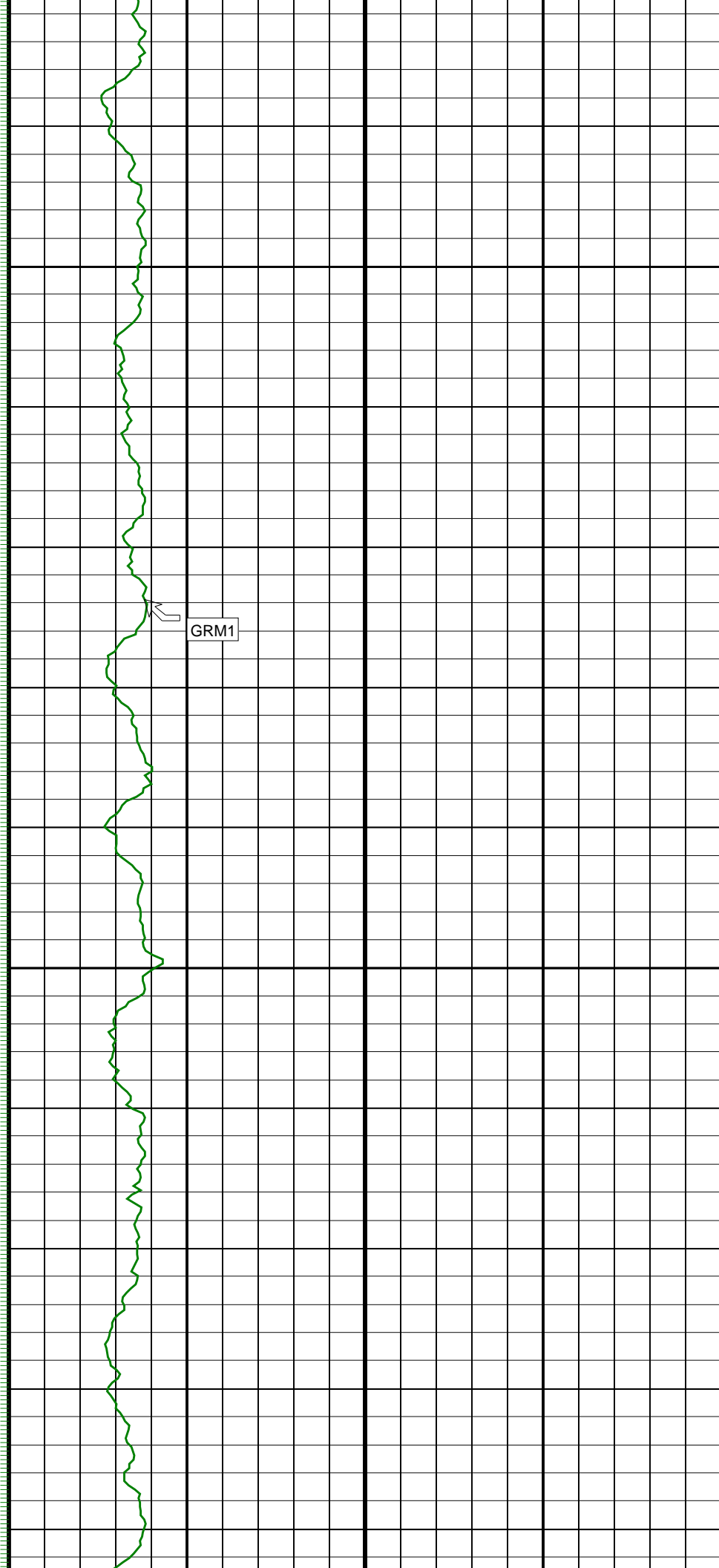


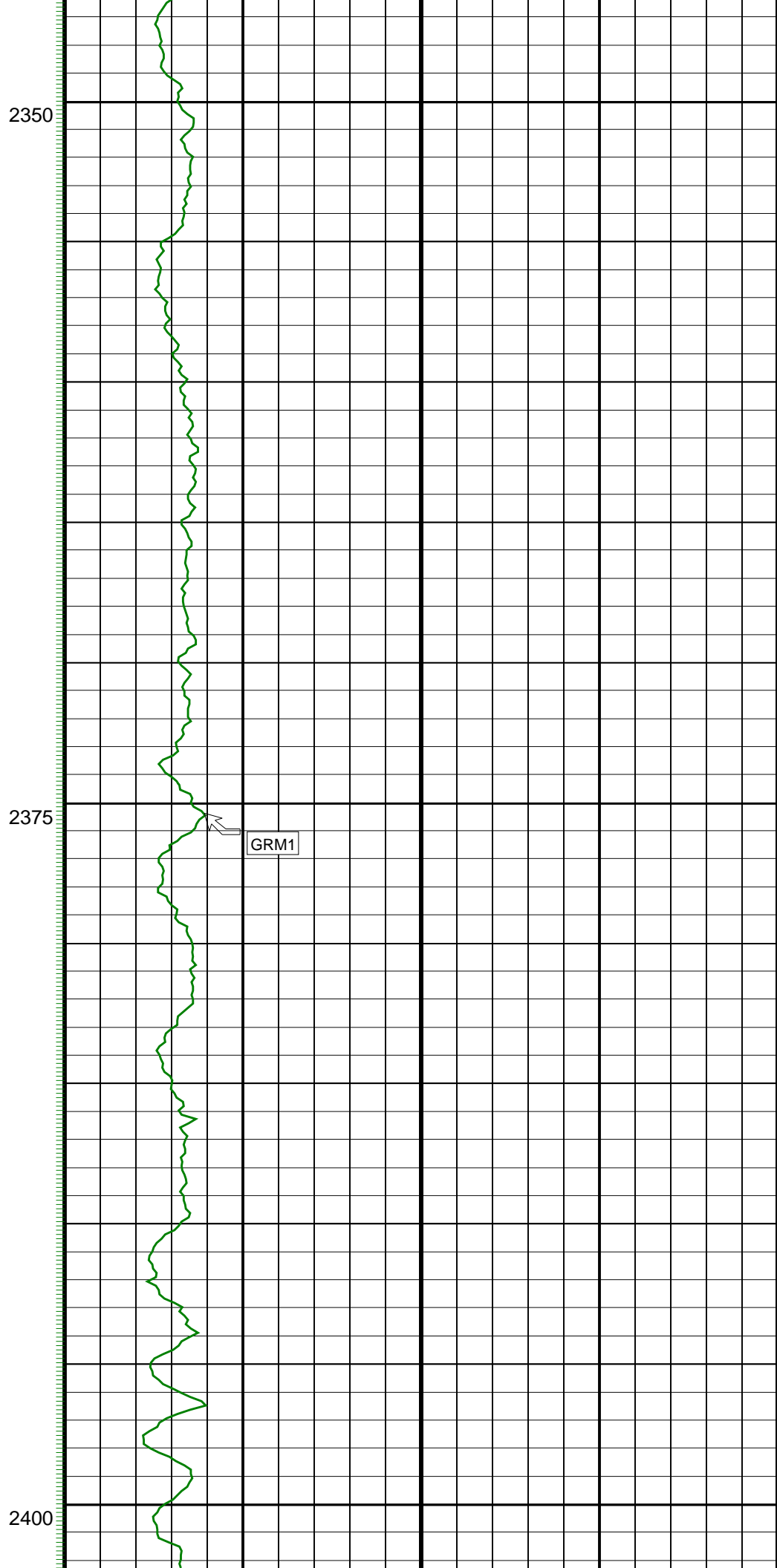
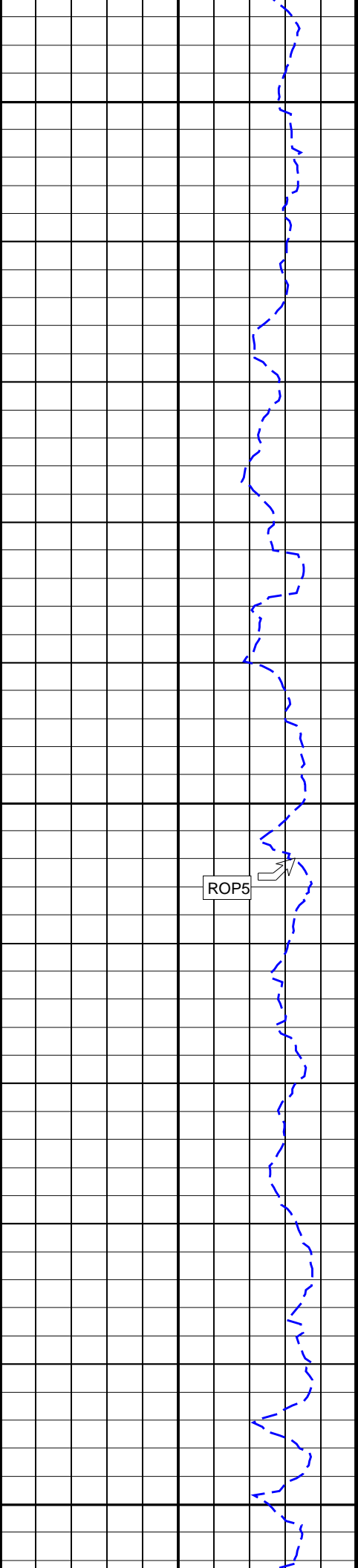


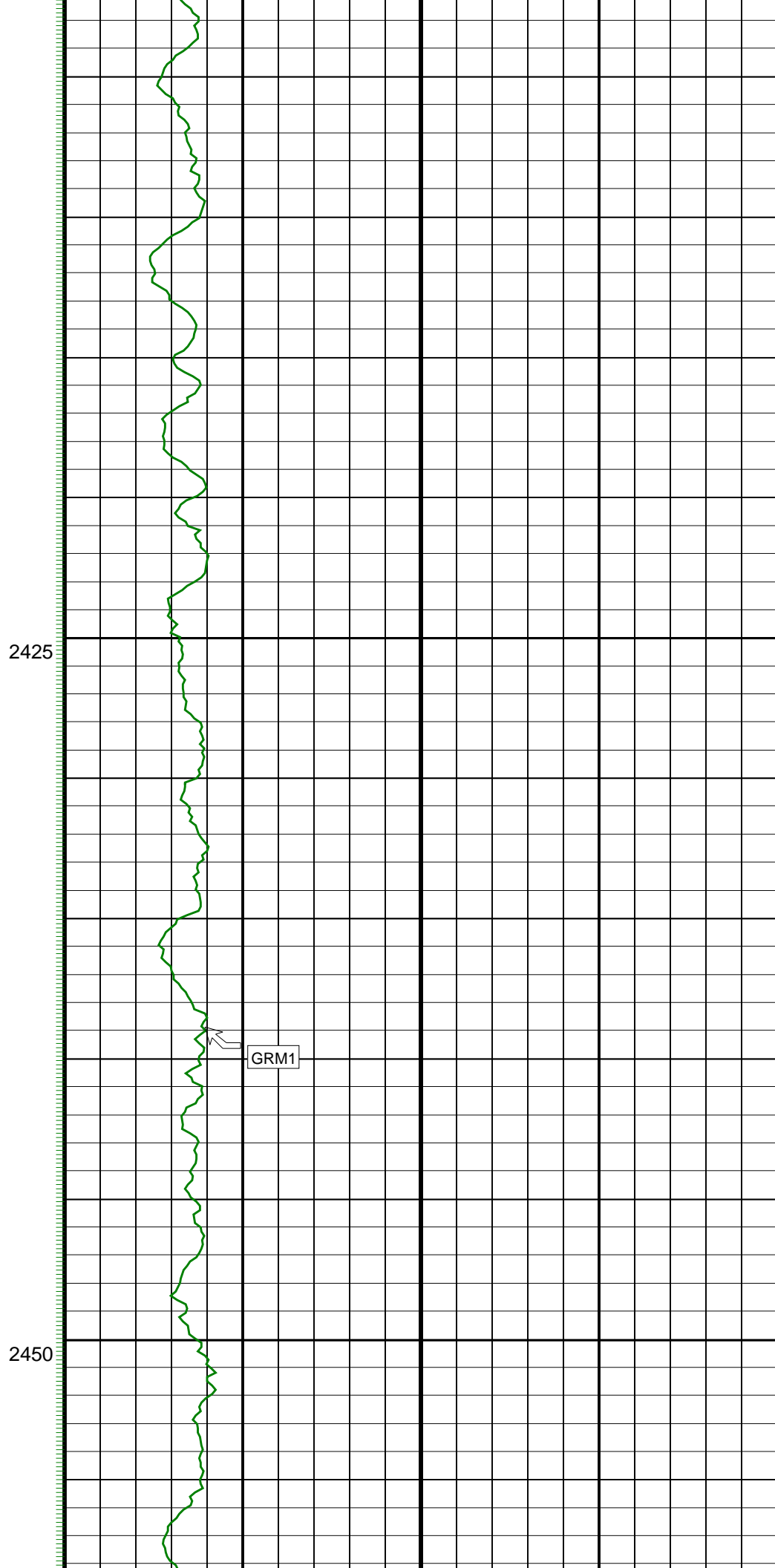
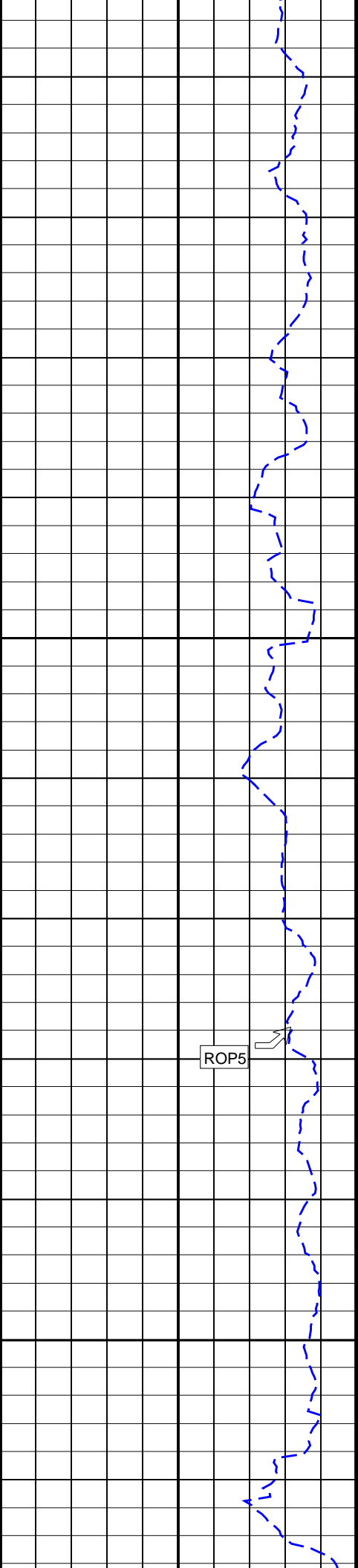


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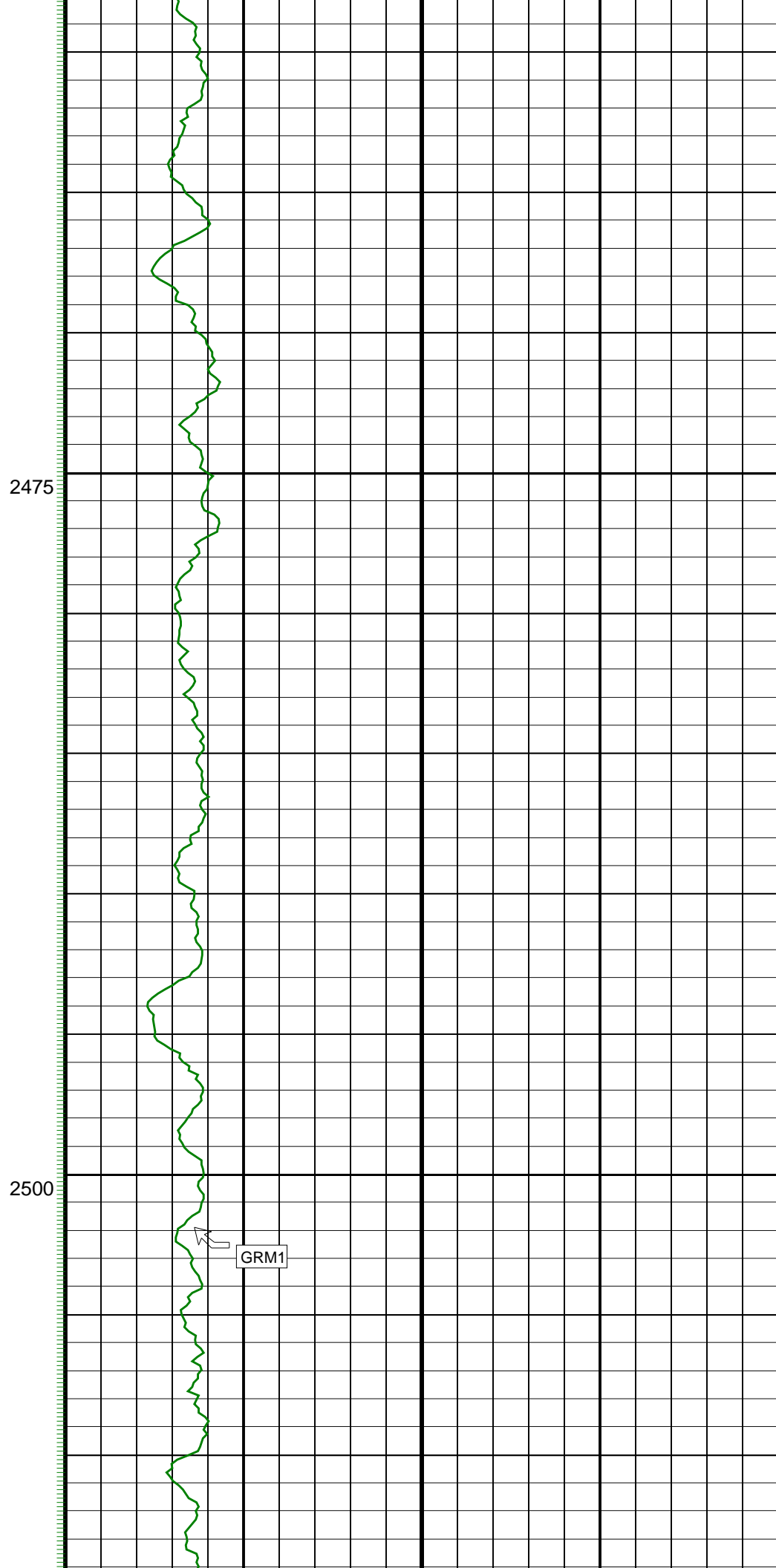
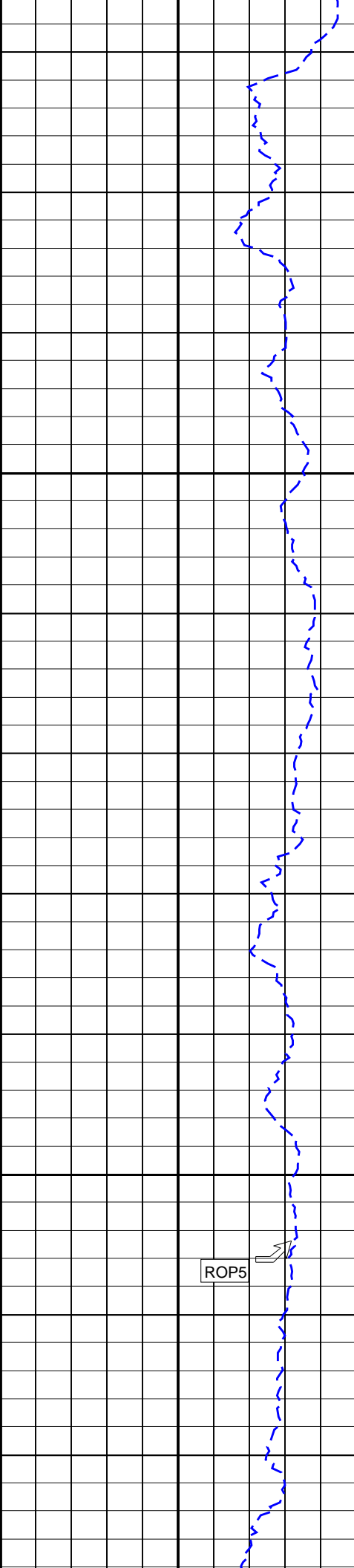
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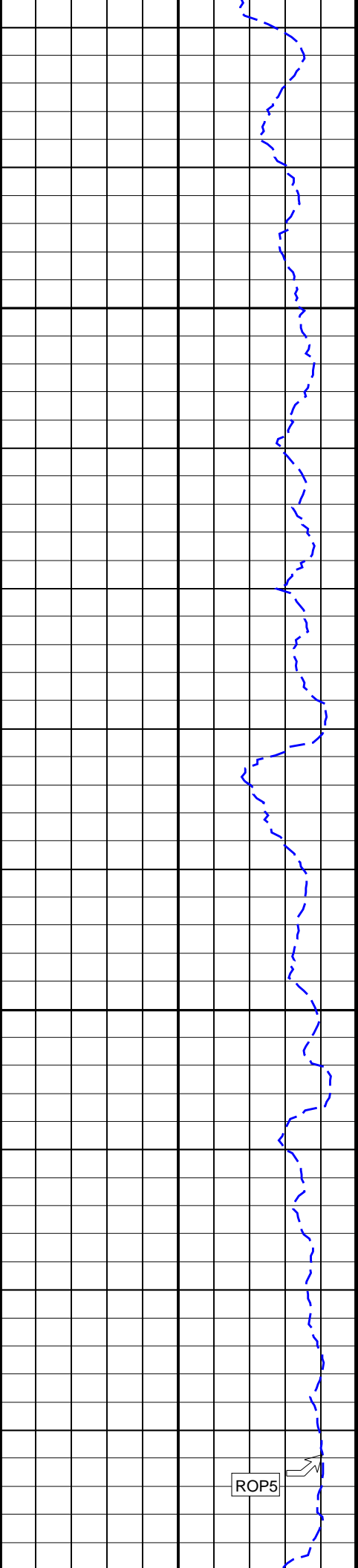






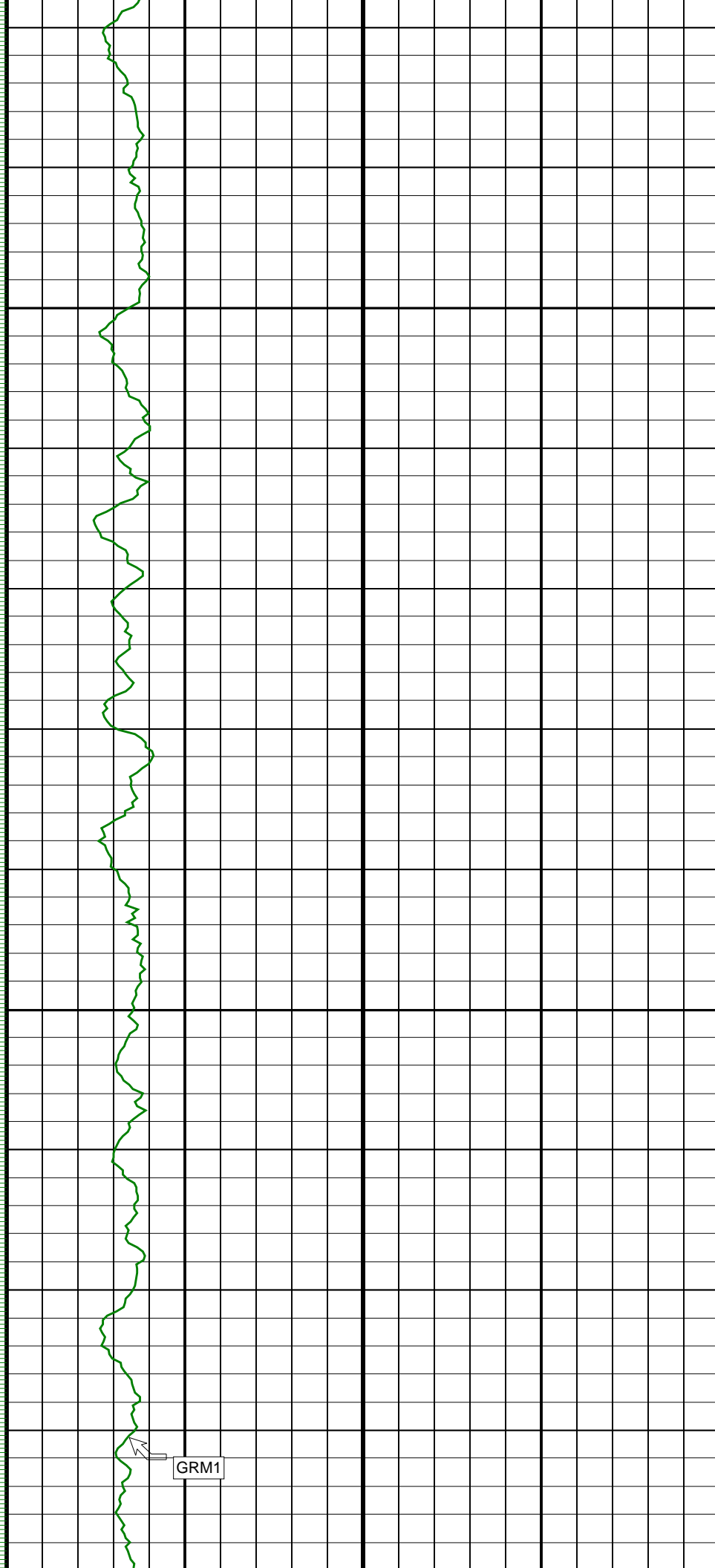






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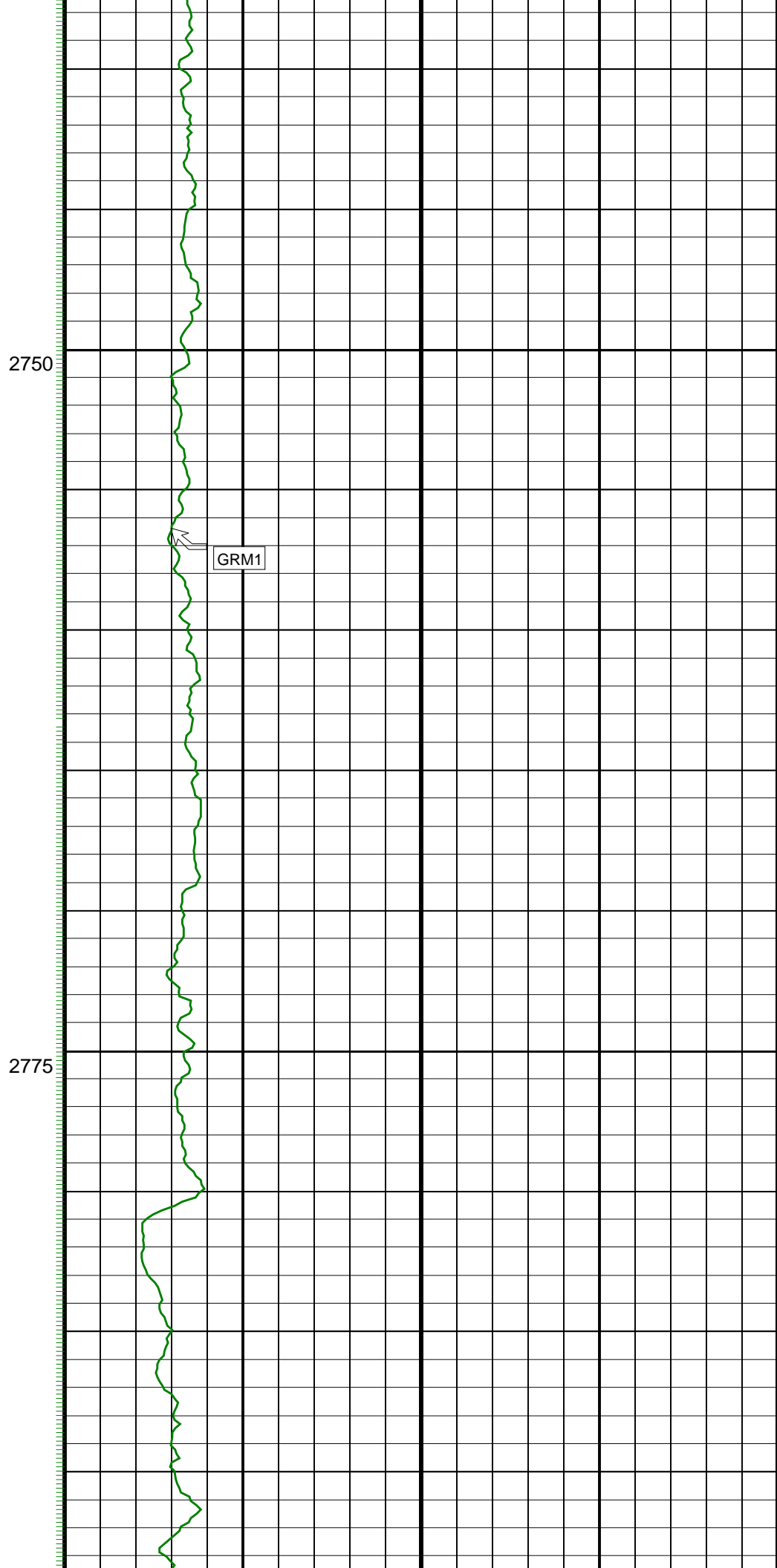
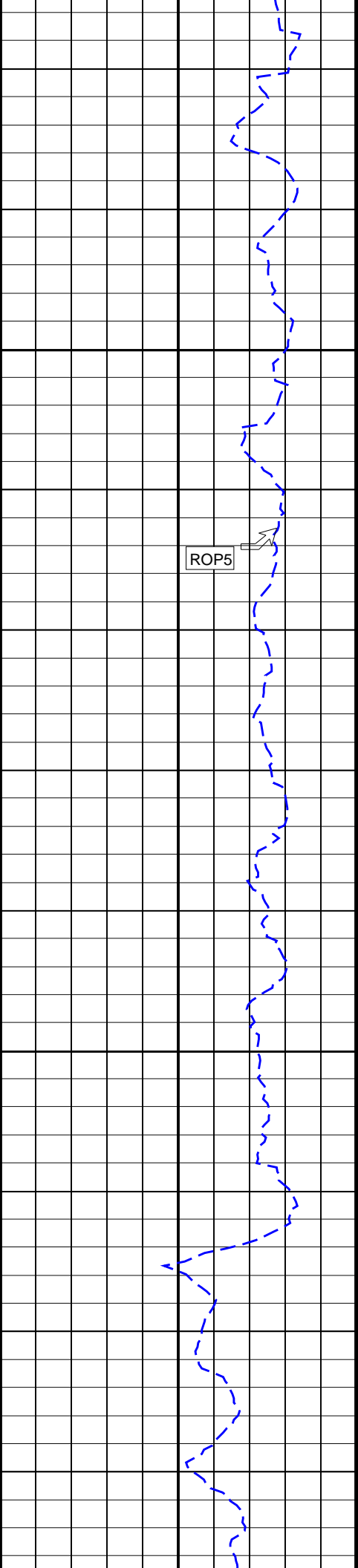




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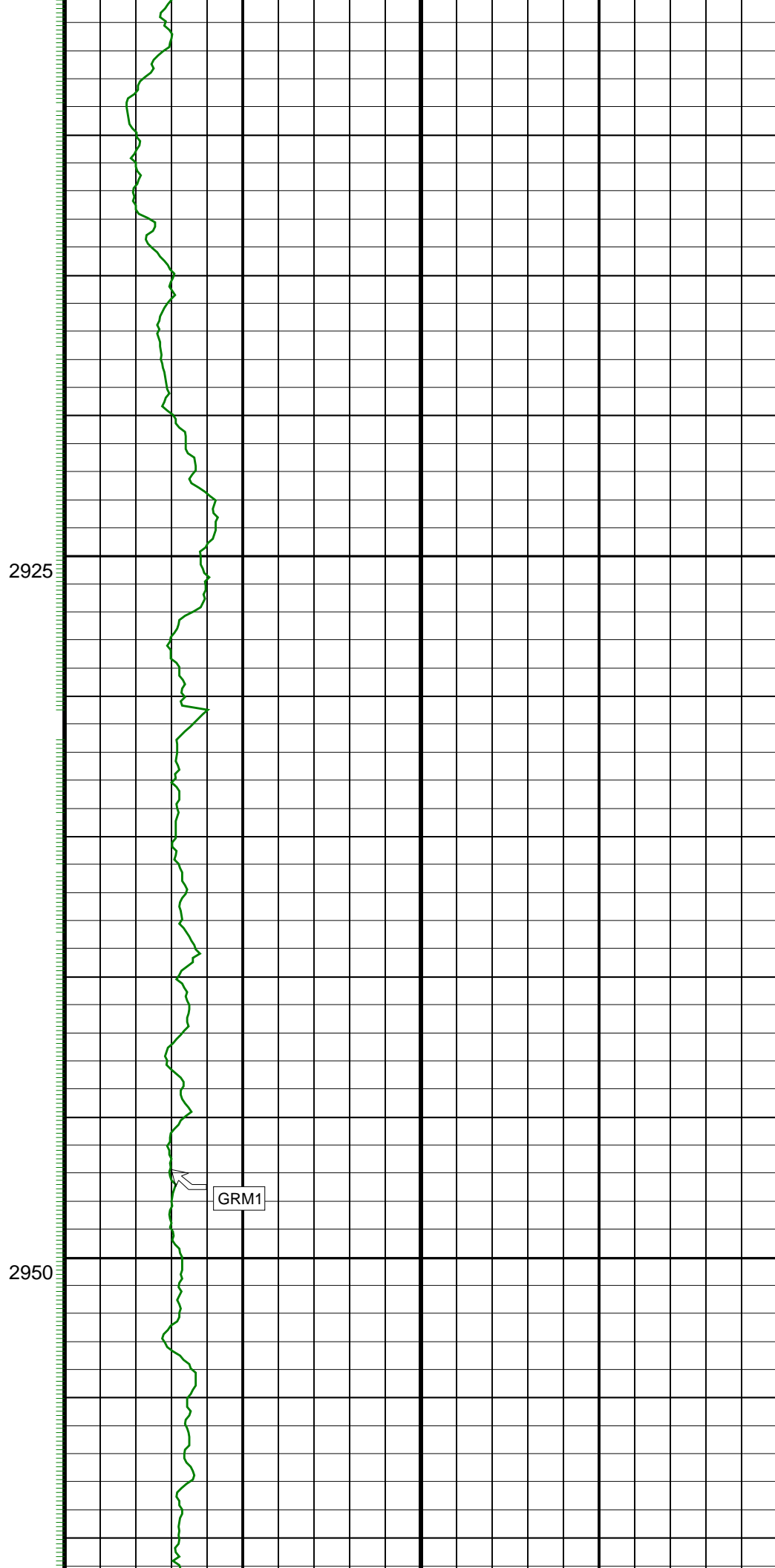
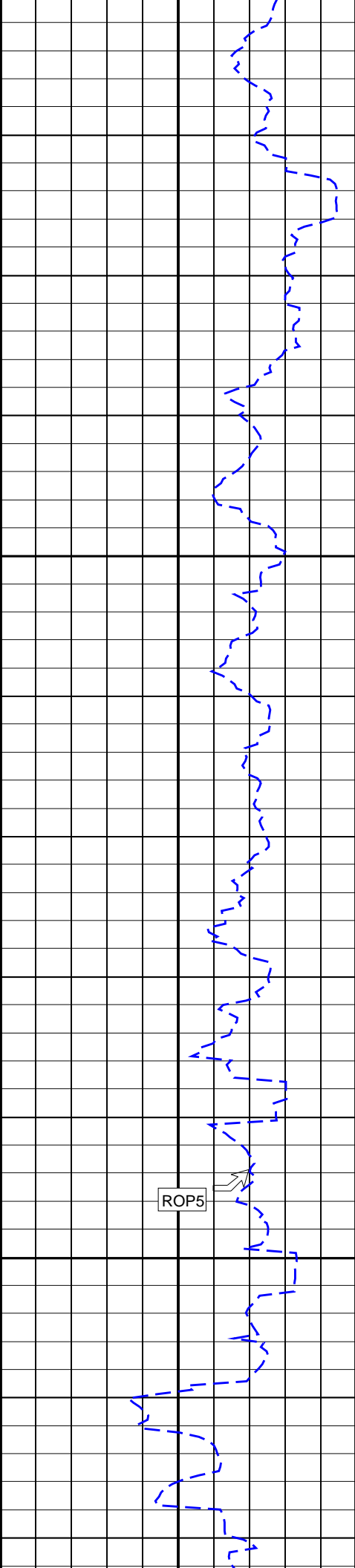




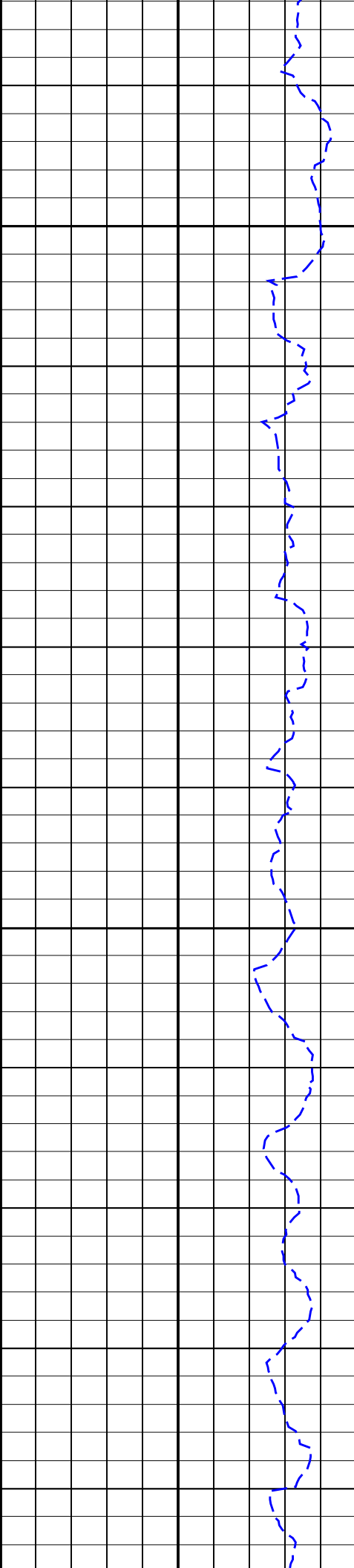






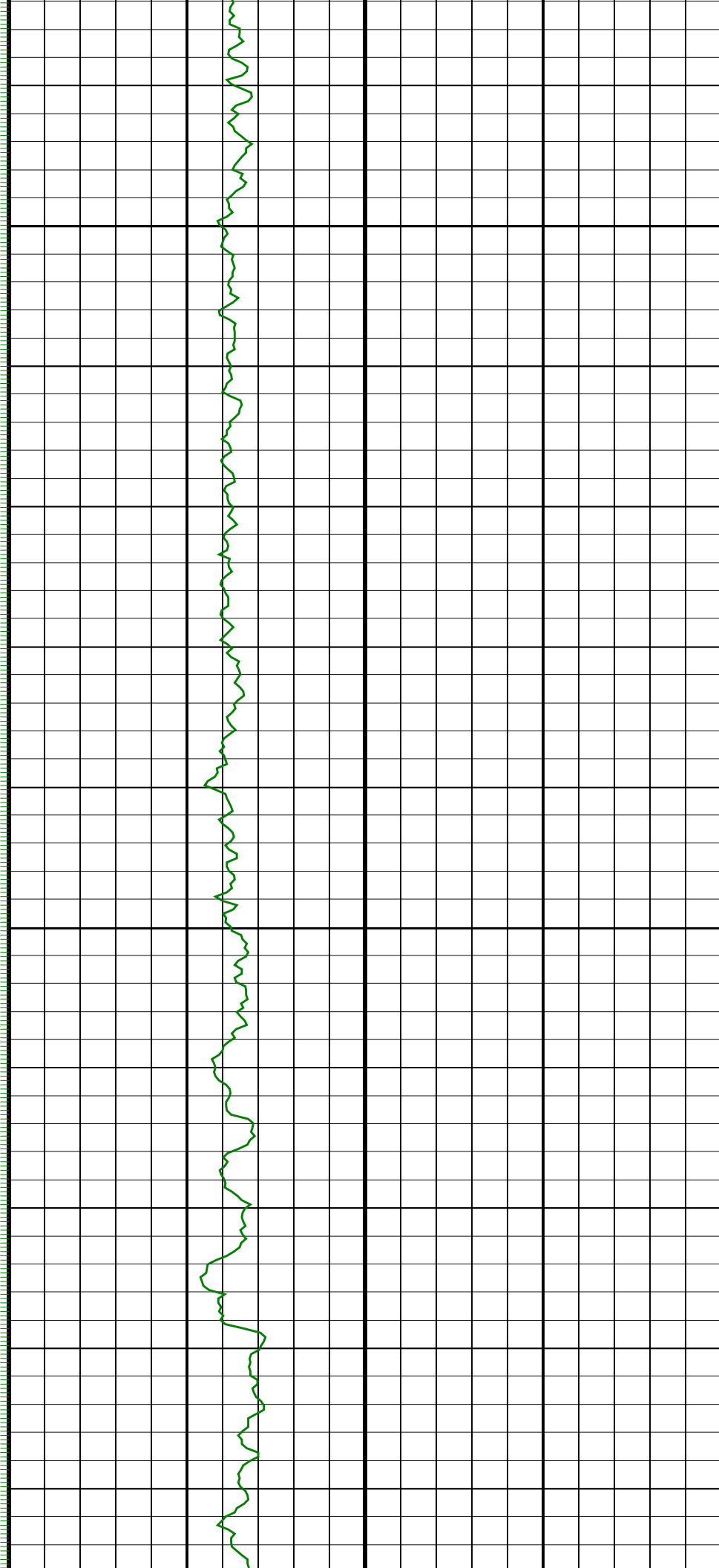




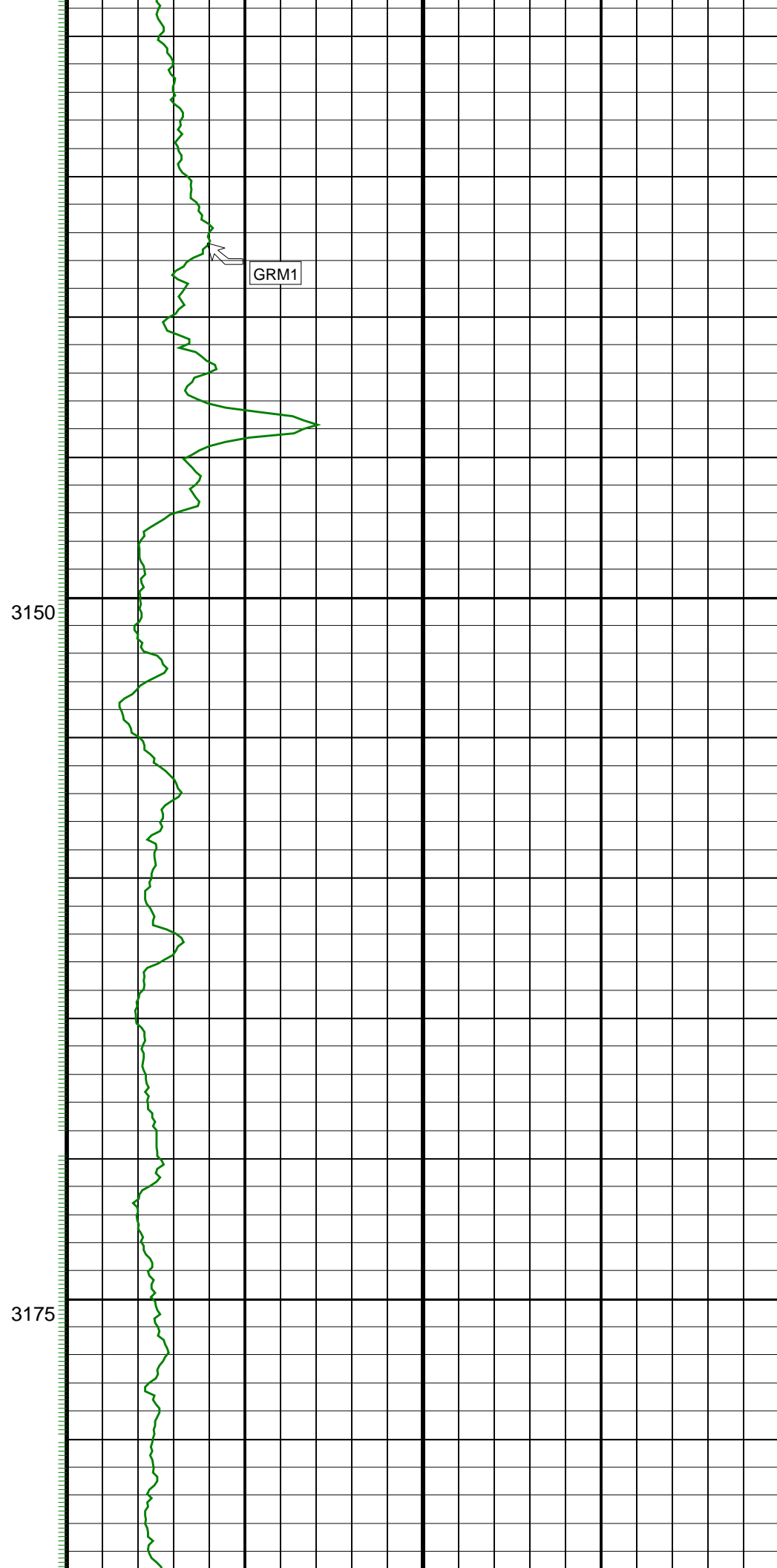
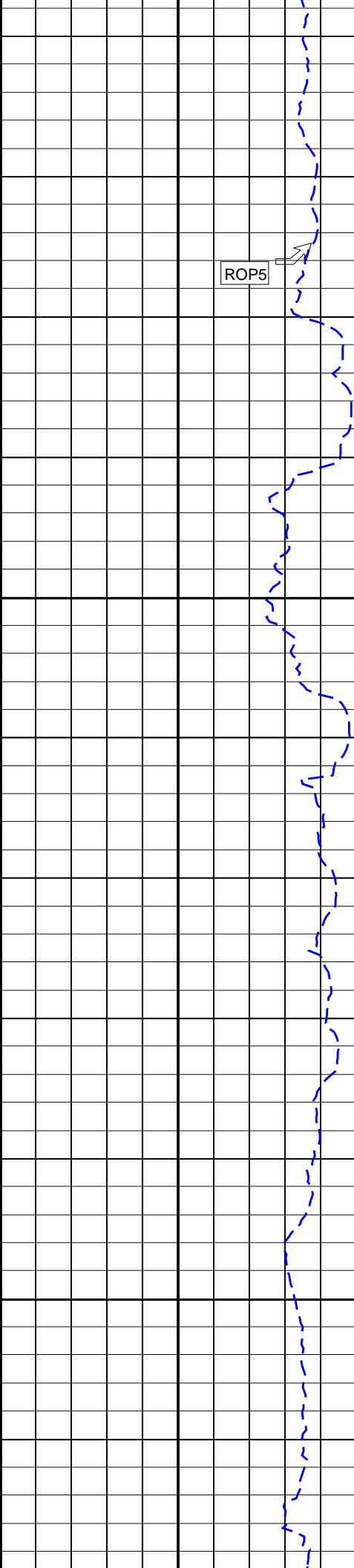


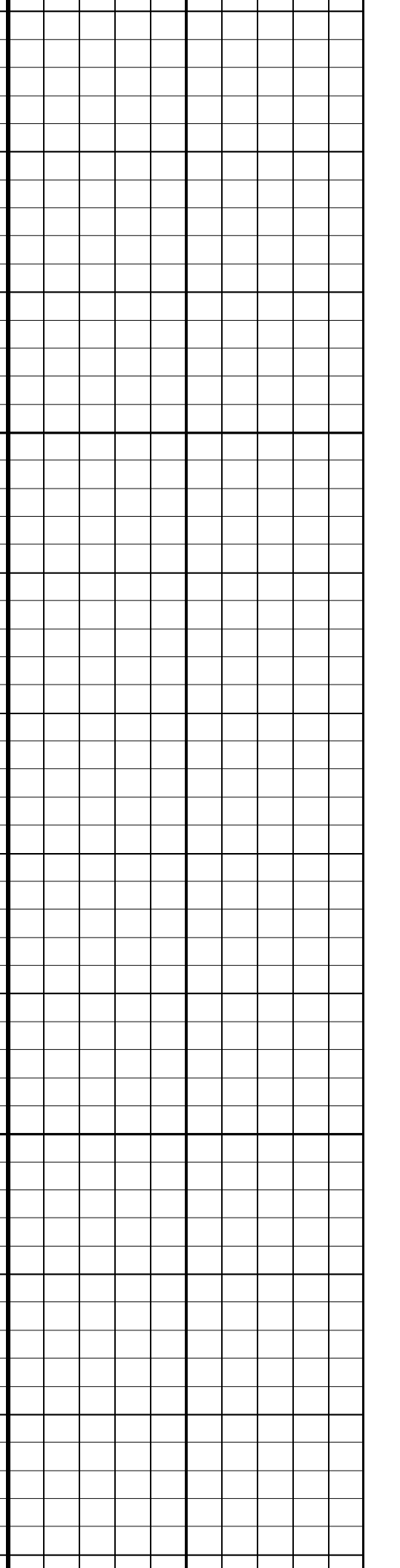
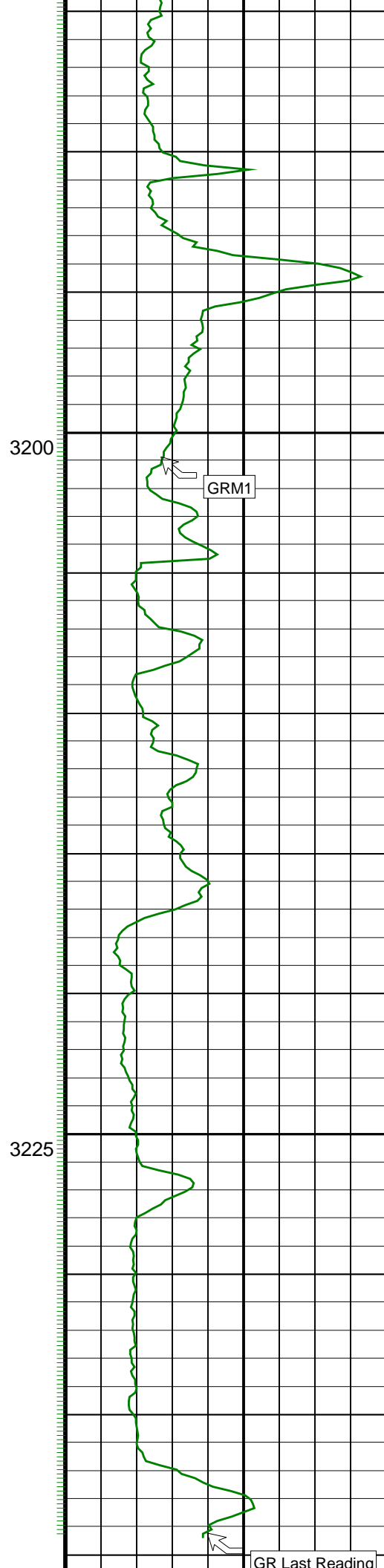
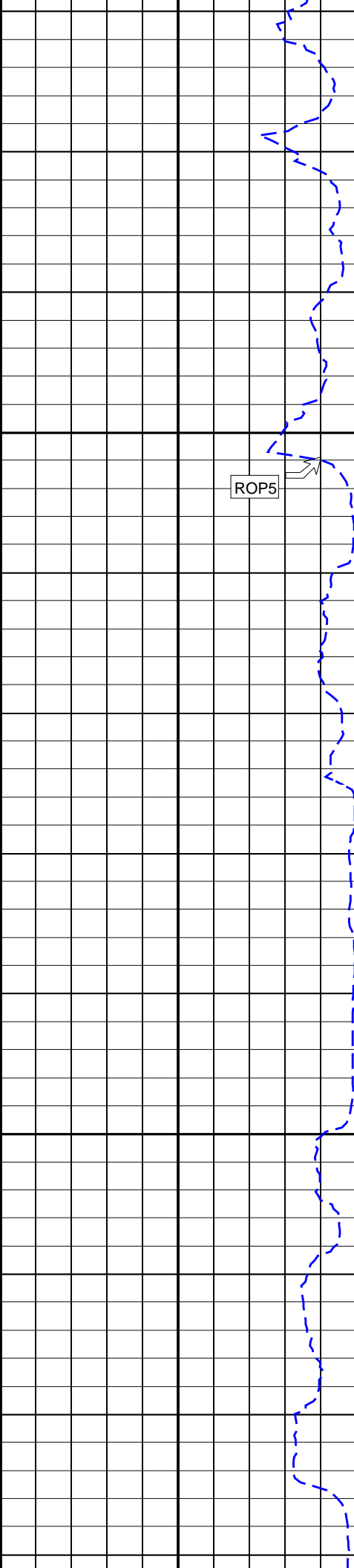
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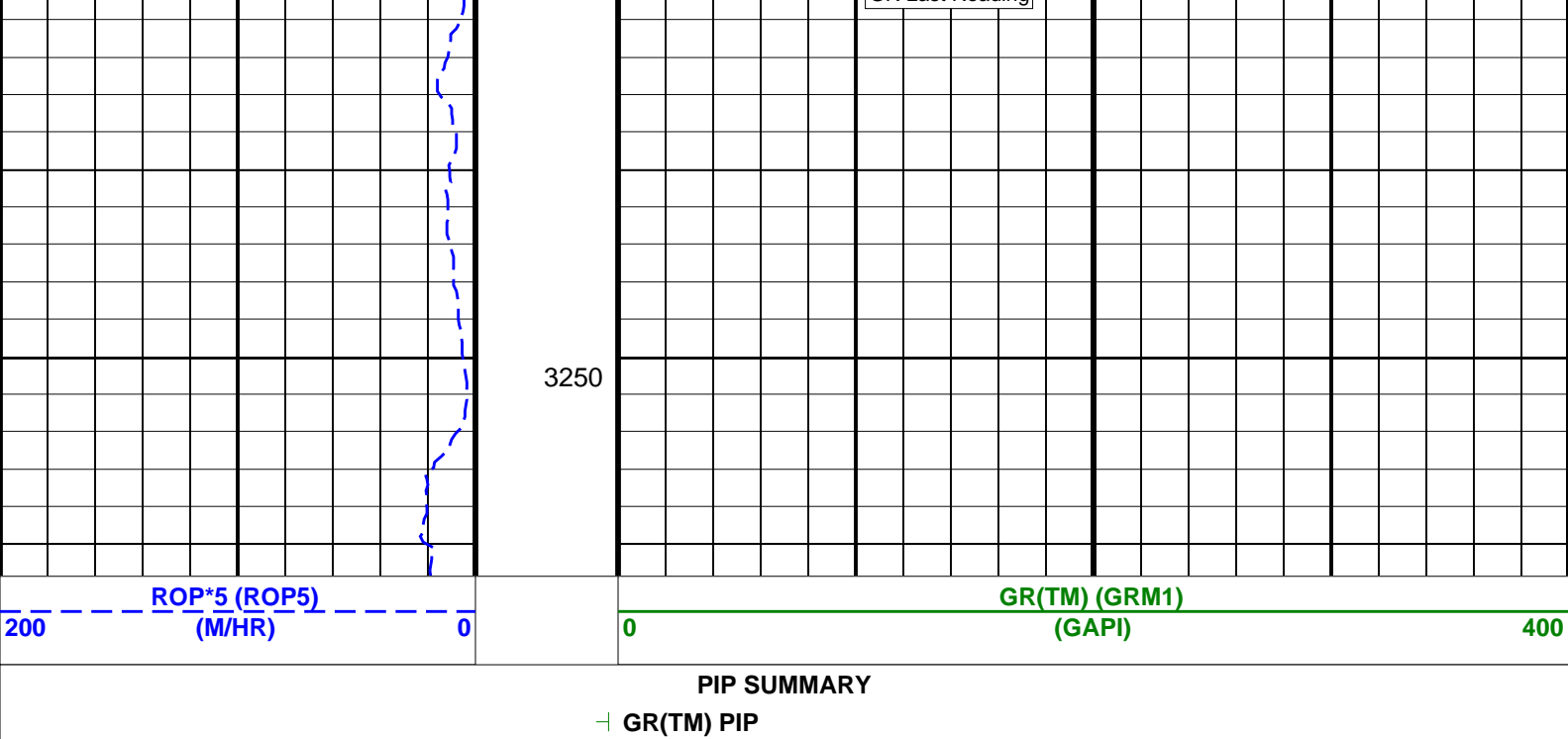
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SCHLUMBERGER

Survey report

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Client.....: ESSO Australia Pty. Ltd.  
Field.....: Bream A

Well.....: BMA A6A  
API number.....:  
Engineer.....: L. Johnston/ B. Pattarakorn

Rig.....: ISDL 453  
State.....: Victoria

Spud date.....: 1-Feb-06  
Last survey date.....: 12-Feb-06  
Total accepted surveys....: 86  
MD of first survey.....: 852.58 m  
MD of last survey.....: 3256.00 m

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

----- Depth reference -----  
Permanent datum.....: Mean Sea Level  
Depth reference.....: Driller's Depth  
GL above permanent.....: -59.40 m  
KB above permanent.....: Top Drive  
DF above permanent.....: 32.82 m

----- Vertical section origin-----  
Latitude (+N/S-).....: -0.97 m  
Departure (+E/W-).....: 10.62 m

----- Geomagnetic data -----  
Magnetic model.....: BGM version 2005  
Magnetic date.....: 31-Jan-2006  
Magnetic field strength...: 1202.69 HCNT  
Magnetic dec (+E/W-).....: 13.07 degrees  
Magnetic dip.....: -69.04 degrees

----- MWD survey Reference Criteria -----  
Reference G.....: 1000.05 mGal  
Reference H.....: 1202.69 HCNT  
Reference Dip.....: -69.04 degrees  
Tolerance of G.....: (+/-) 2.50 mGal  
Tolerance of H.....: (+/-) 6.00 HCNT  
Tolerance of Dip.....: (+/-) 0.45 degrees

----- Corrections -----  
Magnetic dec (+E/W-).....: 13.07 degrees  
Grid convergence (+E/W-)..: -0.48 degrees  
Total az corr (+E/W-).....: 13.55 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

Azimuth from Vsect Origin to target: 131.68 degrees

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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/100f)	Srvy tool type	Tool Corr (deg)
1	855.00	22.13	38.44	0.00	807.97	-28.29	199.01	150.79	249.69	37.15	0.00	TIP	None
2	881.48	18.78	55.18	26.48	832.80	-27.58	205.36	157.40	258.74	37.47	7.72	MWD	None
3	910.21	18.78	69.84	28.73	860.01	-24.31	209.59	165.54	267.08	38.30	4.99	MWD	None
4	938.83	20.33	77.43	28.62	886.99	-19.23	212.26	174.72	274.92	39.46	3.17	MWD	None
5	967.54	20.08	85.18	28.71	913.93	-12.93	213.76	184.50	282.37	40.80	2.85	MWD	None
6	996.45	20.83	93.13	28.91	941.03	-5.49	213.90	194.58	289.16	42.29	3.03	MWD	None
7	1025.13	23.00	97.88	28.68	967.64	3.16	212.85	205.22	295.67	43.95	2.98	MWD	None
8	1053.95	26.13	102.74	28.82	993.85	13.39	210.68	217.00	302.45	45.85	3.94	MWD	None
9	1082.41	28.28	109.02	28.46	1019.16	25.10	207.10	229.49	309.12	47.94	3.84	MWD	None
10	1111.11	30.81	115.02	28.70	1044.13	38.42	201.78	242.58	315.53	50.25	4.13	MWD	None
11	1139.28	34.11	120.35	28.17	1067.90	53.09	194.73	255.94	321.60	52.73	4.72	MWD	None
12	1168.44	38.85	125.48	29.16	1091.35	70.21	185.28	270.45	327.83	55.59	5.89	MWD	None

12	1197.36	43.23	127.94	28.92	1113.16	89.12	173.92	285.66	334.44	58.67	4.92	MWD	None
13	1226.15	47.11	129.25	28.79	1133.45	109.50	161.18	301.61	341.98	61.88	4.22	MWD	None
14	1254.76	50.44	130.82	28.61	1152.30	131.01	147.34	318.08	350.54	65.15	3.76	MWD	None
16	1283.33	53.02	132.06	28.57	1170.00	153.44	132.49	334.89	360.14	68.41	2.94	MWD	None
17	1311.72	55.20	133.75	28.39	1186.64	176.43	116.83	351.73	370.62	71.63	2.76	MWD	None
18	1340.66	57.84	135.42	28.94	1202.61	200.53	99.89	368.91	382.20	74.85	3.14	MWD	None
19	1368.90	60.92	137.54	28.24	1216.99	224.74	82.26	385.64	394.32	77.96	3.86	MWD	None
20	1397.94	64.27	139.51	29.04	1230.35	250.34	62.95	402.71	407.59	81.12	3.97	MWD	None
21	1426.45	64.06	140.07	28.51	1242.78	275.74	43.35	419.27	421.51	84.10	0.58	MWD	None
22	1455.43	64.16	140.75	28.98	1255.43	301.51	23.26	435.89	436.51	86.95	0.65	MWD	None
23	1484.13	65.48	142.60	28.70	1267.64	327.08	2.88	451.99	452.00	89.63	2.26	MWD	None
24	1511.98	67.02	143.27	27.85	1278.86	352.08	-17.46	467.35	467.68	92.14	1.81	MWD	None
25	1541.35	66.02	143.55	29.37	1290.56	378.46	-39.09	483.41	484.99	94.62	1.07	MWD	None
26	1570.07	66.51	143.32	28.72	1302.12	404.20	-60.20	499.07	502.69	96.88	0.57	MWD	None
27	1598.78	65.51	143.66	28.71	1313.79	429.87	-81.29	514.68	521.06	98.97	1.11	MWD	None
28	1627.50	66.46	143.22	28.72	1325.48	455.56	-102.36	530.30	540.09	100.92	1.09	MWD	None
29	1656.24	68.20	142.15	28.74	1336.56	481.59	-123.45	546.38	560.15	102.73	2.12	MWD	None
30	1685.21	67.65	141.97	28.97	1347.45	507.99	-144.62	562.89	581.17	104.41	0.60	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/ 100f)	Srvy tool type	Tool Corr (deg)
31	1713.71	66.62	142.15	28.50	1358.52	533.82	-165.33	579.03	602.17	105.94	1.12	MWD	None
32	1742.37	65.58	141.77	28.66	1370.13	559.61	-185.97	595.18	623.55	107.35	1.17	MWD	None
33	1771.02	66.71	141.83	28.65	1381.72	585.40	-206.56	611.38	645.33	108.67	1.20	MWD	None
34	1799.85	66.10	141.87	28.83	1393.26	611.40	-227.33	627.70	667.60	109.91	0.65	MWD	None
35	1828.44	66.44	140.68	28.59	1404.76	637.21	-247.75	644.08	690.08	111.04	1.22	MWD	None
36	1857.37	65.55	140.51	28.93	1416.53	663.32	-268.17	660.85	713.19	112.09	0.95	MWD	None
37	1885.96	64.70	140.40	28.59	1428.56	688.95	-288.17	677.37	736.12	113.05	0.91	MWD	None
38	1914.62	64.16	140.81	28.66	1440.93	714.49	-308.15	693.77	759.13	113.95	0.70	MWD	None
39	1943.46	63.94	141.25	28.84	1453.55	740.08	-328.31	710.08	782.31	114.81	0.48	MWD	None
40	1972.06	64.86	141.60	28.60	1465.91	765.50	-348.48	726.16	805.45	115.64	1.04	MWD	None
41	2000.68	65.73	142.18	28.62	1477.87	791.09	-368.93	742.21	828.85	116.43	1.08	MWD	None
42	2029.25	66.36	142.54	28.57	1489.47	816.74	-389.61	758.16	852.40	117.20	0.76	MWD	None
43	2058.02	67.04	142.41	28.77	1500.85	842.70	-410.57	774.25	876.37	117.94	0.73	MWD	None
44	2086.64	66.46	142.89	28.62	1512.15	868.52	-431.47	790.20	900.33	118.64	0.78	MWD	None
45	2115.53	65.55	142.90	28.89	1523.89	894.41	-452.52	806.13	924.45	119.31	0.96	MWD	None
46	2144.17	66.81	142.63	28.64	1535.46	920.12	-473.38	821.98	948.54	119.94	1.37	MWD	None
47	2172.93	66.02	142.94	28.76	1546.97	945.98	-494.37	837.92	972.89	120.54	0.89	MWD	None
48	2201.71	67.06	142.31	28.78	1558.43	971.90	-515.35	853.95	997.40	121.11	1.26	MWD	None
49	2230.49	66.02	142.54	28.78	1569.88	997.84	-536.27	870.05	1022.04	121.65	1.12	MWD	None
50	2259.36	67.28	142.77	28.87	1581.33	1023.86	-557.34	886.12	1046.83	122.17	1.35	MWD	None
51	2287.95	66.49	142.90	28.59	1592.55	1049.66	-578.30	902.01	1071.47	122.66	0.85	MWD	None
52	2317.02	67.71	142.78	29.07	1603.86	1075.93	-599.64	918.18	1096.64	123.15	1.28	MWD	None
53	2345.67	66.69	142.94	28.65	1614.96	1101.84	-620.69	934.13	1121.54	123.60	1.10	MWD	None
54	2374.43	65.89	142.90	28.76	1626.53	1127.67	-641.70	950.01	1146.42	124.04	0.85	MWD	None
55	2403.15	65.42	143.10	28.72	1638.37	1153.32	-662.60	965.75	1171.20	124.45	0.53	MWD	None
56	2432.09	64.65	142.95	28.94	1650.58	1179.05	-683.56	981.53	1196.10	124.85	0.82	MWD	None
57	2461.14	65.00	142.89	29.05	1662.94	1204.83	-704.53	997.39	1221.12	125.24	0.37	MWD	None
58	2489.80	66.75	142.15	28.66	1674.65	1230.52	-725.29	1013.30	1246.12	125.59	1.99	MWD	None
59	2518.74	65.94	142.01	28.94	1686.26	1256.59	-746.20	1029.59	1271.56	125.93	0.86	MWD	None
60	2547.55	65.46	142.02	28.81	1698.12	1282.42	-766.89	1045.75	1296.81	126.25	0.51	MWD	None

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SCHLUMBERGER Survey Report

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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/ 100f)	Srvy tool type	Tool Corr (deg)
61	2576.63	64.89	141.84	29.08	1710.33	1308.40	-787.67	1062.03	1322.24	126.56	0.62	MWD	None
62	2605.56	65.50	141.77	28.93	1722.47	1334.25	-808.31	1078.26	1347.60	126.86	0.65	MWD	None
63	2634.29	66.82	141.67	28.73	1734.08	1360.12	-828.94	1094.54	1373.01	127.14	1.40	MWD	None
64	2660.88	66.24	141.89	26.59	1744.67	1384.14	-848.10	1109.63	1396.62	127.39	0.70	MWD	None
65	2689.20	65.60	141.78	28.32	1756.22	1409.59	-868.43	1125.61	1421.68	127.65	0.70	MWD	None
66	2718.44	67.23	142.44	29.24	1767.92	1435.94	-889.57	1142.07	1447.64	127.92	1.81	MWD	None
67	2746.94	66.54	142.64	28.50	1779.11	1461.68	-910.38	1158.01	1473.02	128.17	0.76	MWD	None
68	2775.66	65.76	142.26	28.72	1790.72	1487.49	-931.21	1174.02	1498.49	128.42	0.91	MWD	None
69	2804.34	64.95	142.33	28.68	1802.68	1513.11	-951.83	1189.96	1523.81	128.66	0.86	MWD	None
70	2832.94	66.35	142.38	28.60	1814.47	1538.71	-972.46	1205.87	1549.13	128.88	1.49	MWD	None
71	2861.63	65.67	142.19	28.69	1826.14	1564.48	-993.20	1221.91	1574.64	129.11	0.75	MWD	None
72	2890.41	65.13	142.02	28.78	1838.12	1590.21	-1013.85	1237.98	1600.15	129.32	0.59	MWD	None
73	2918.90	66.35	141.65	28.49	1849.82	1615.78	-1034.27	1254.03	1625.52	129.51	1.35	MWD	None
74	2947.54	66.26	141.88	28.64	1861.33	1641.60	-1054.87	1270.26	1651.15	129.71	0.24	MWD	None
75	2975.95	66.04	141.64	28.41	1872.82	1667.18	-1075.28	1286.34	1676.57	129.89	0.33	MWD	None
76	3004.70	65.63	141.74	28.75	1884.59	1693.01	-1095.86	1302.61	1702.26	130.07	0.45	MWD	None
77	3033.57	65.06	141.16	28.87	1896.63	1718.87	-1116.38	1318.96	1727.99	130.24	0.82	MWD	None
78	3062.00	64.59	141.98	28.43	1908.73	1744.22	-1136.53	1334.95	1753.22	130.41	0.94	MWD	None
79	3090.72	64.37	141.76	28.72	1921.10	1769.73	-1156.92	1350.95	1778.63	130.58	0.31	MWD	None
80	3119.45	64.04	141.80	28.73	1933.60	1795.19	-1177.24	1366.96	1804.01	130.74	0.35	MWD	None
81	3148.18	64.00	141.66	28.73	1946.19	1820.62	-1197.52	1382.95	1829.37	130.89	0.14	MWD	None
82	3176.79	63.78	141.55	28.61	1958.78	1845.93	-1217.65	1398.91	1854.62	131.04	0.26	MWD	None
83	3205.75	63.12	141.38	28.96	1971.72	1871.46	-1237.92	1415.05	1880.11	131.18	0.71	MWD	None
84	3234.70	62.78	140.68	28.95	1984.89	1896.90	-1257.96	1431.26	1905.51	131.31	0.75	MWD	None
85	3256.00	62.55	140.21	21.30	1994.67	1915.60	-1272.55	1443.31	1924.20	131.40	0.68	Proj.	to TD



Company: **ESSO Australia Pty. Ltd.**

**Schlumberger**

Well: **BMA A6A**

Field: **Bream A**

Rig: **ISDL 453**

State: **Victoria**

**Gamma Ray Service**

**1:200 Measured Depth**

**Real Time Log**