



Potassium	%	4.2									
<b>Environmental data</b>											
<b>GR</b>											
Mud weight	ppg	9.65									
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		B. Steel	C. Stead								
Schlumberger D&M Personnel		R. Borjas	L. Johnston	C. Soper	L. Muskett						

<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 666.0 m to 2687.0 m.  POOH due to TD of WKF W19A.	<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: FA28  
MEC: 1542  
MDI: 1559  
MGR: 295  
DHS: V8.0B96

D&I 19.17  
GR 18.52

6-5/8 in. NM Pony  
S/N: 970810

6-5/8 in. NM Roller Reamer  
S/N: GU2317

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

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: JW0241

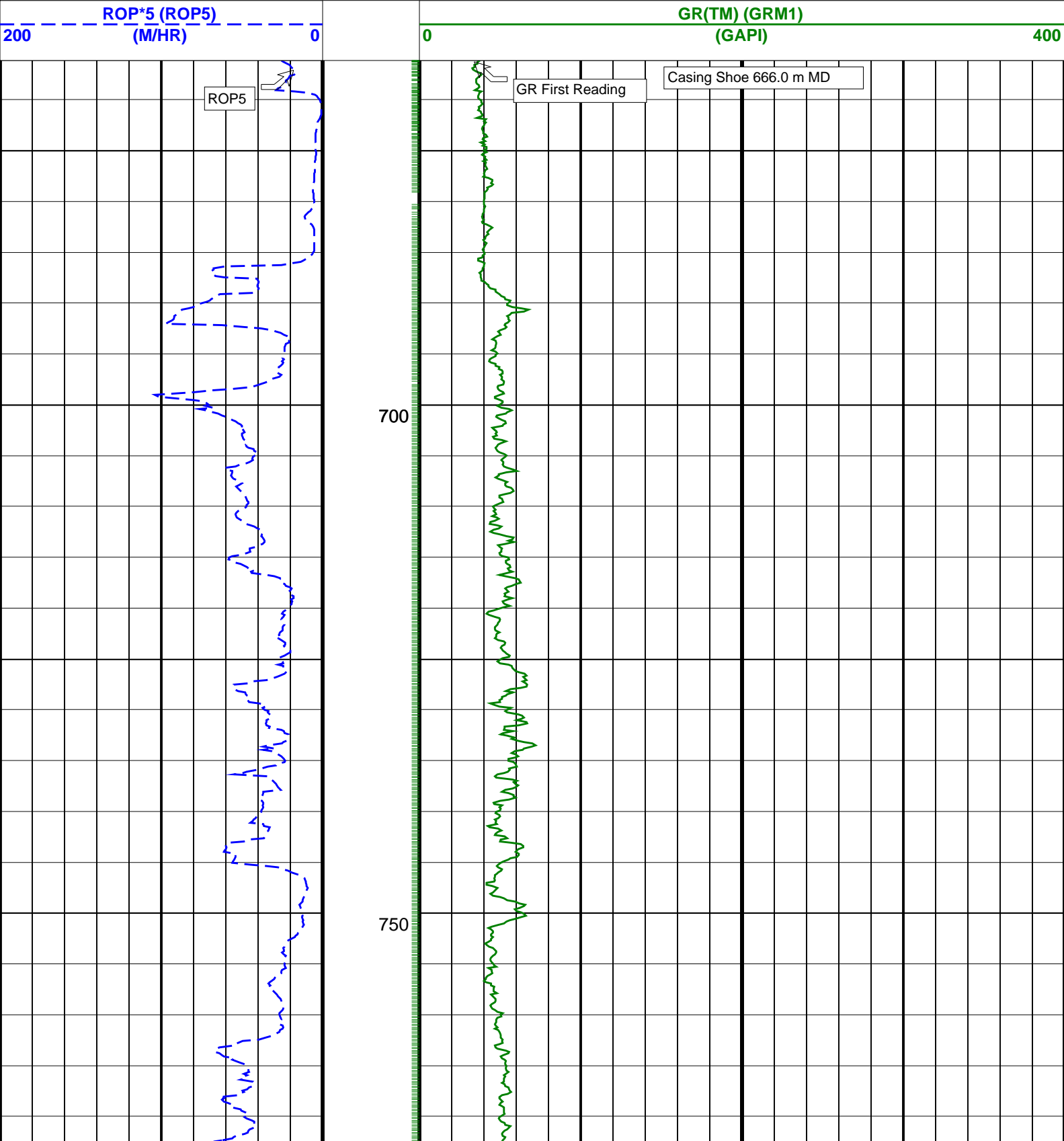
Maximum string diameter 8.50 in.  
All lengths in Meters

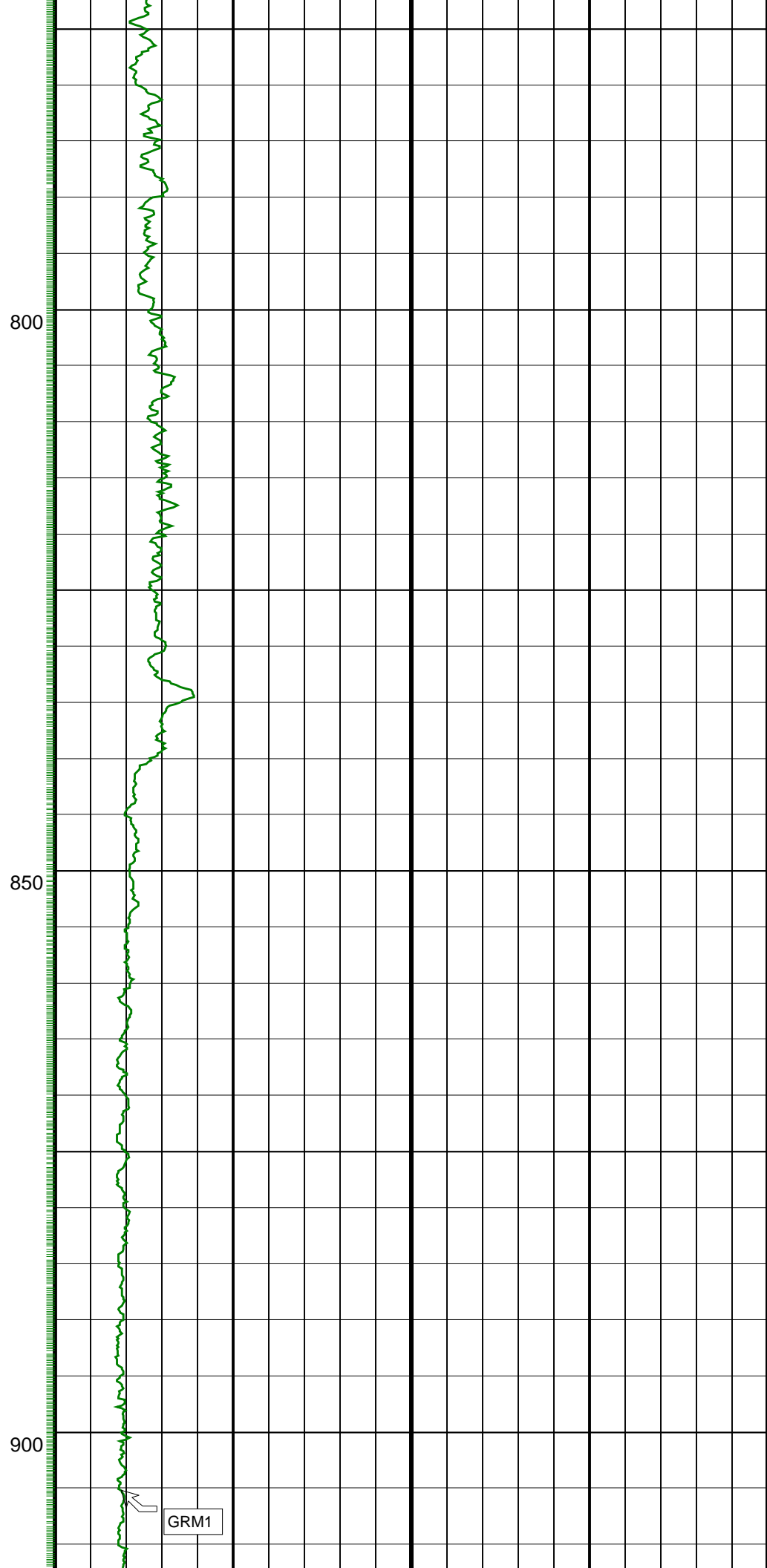
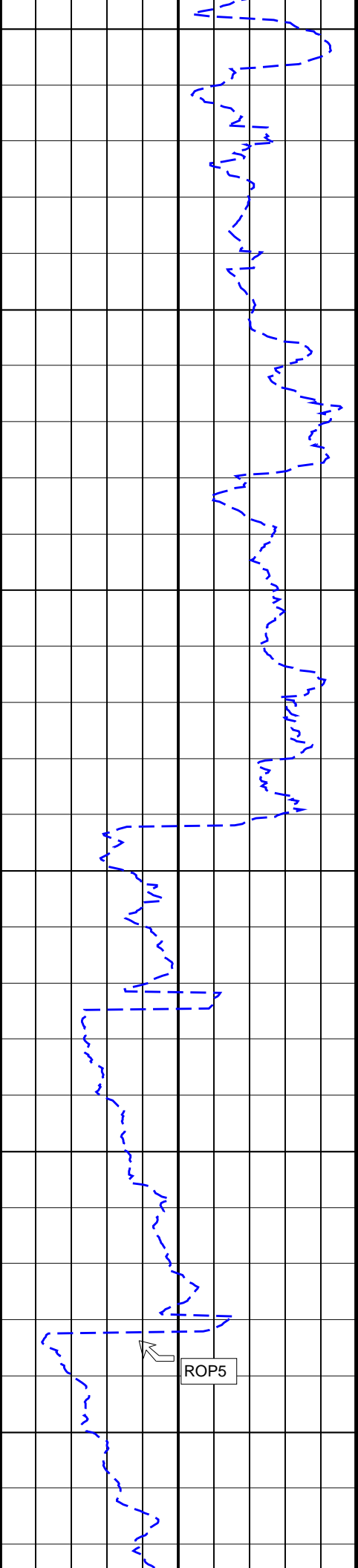
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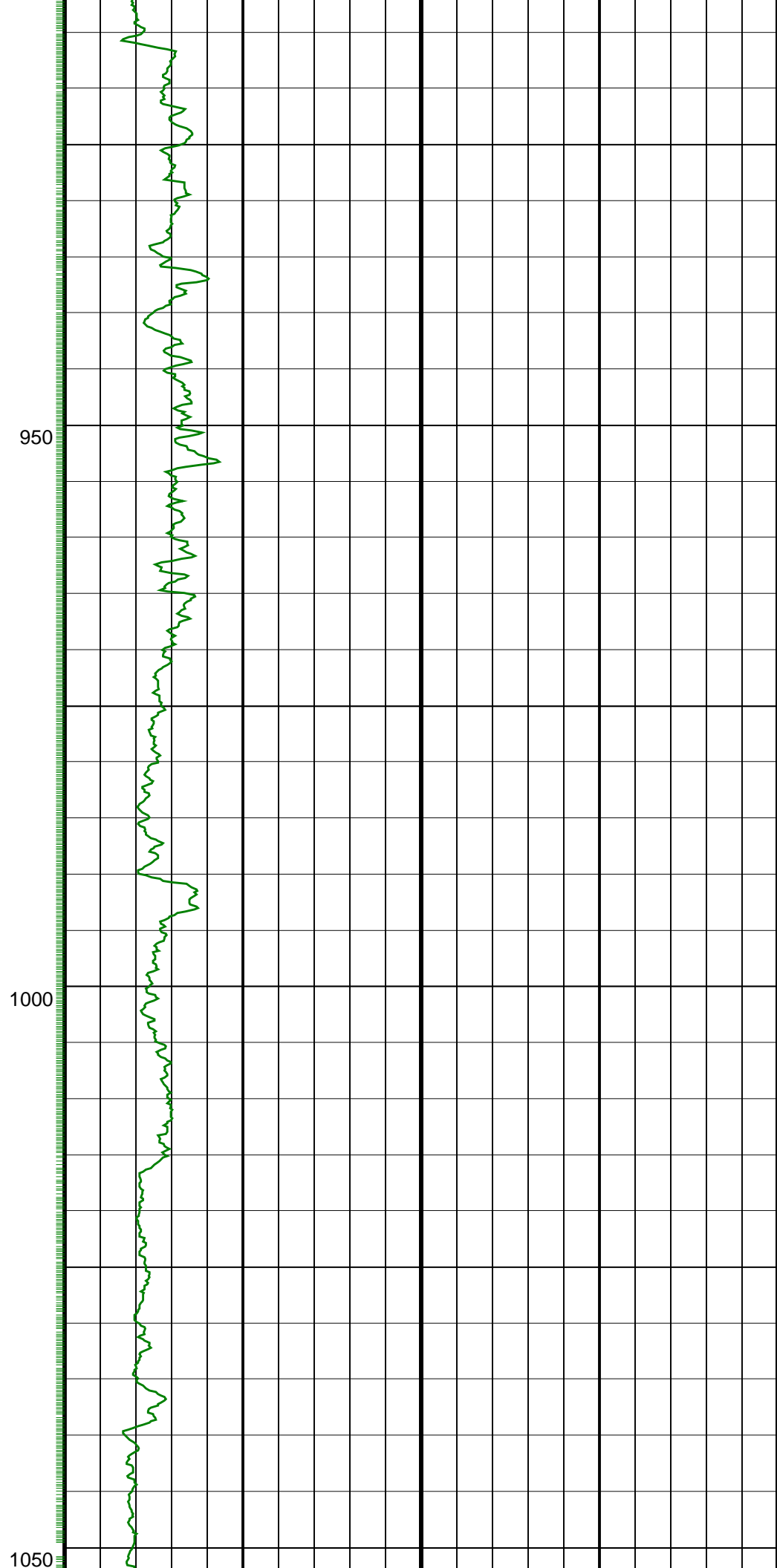
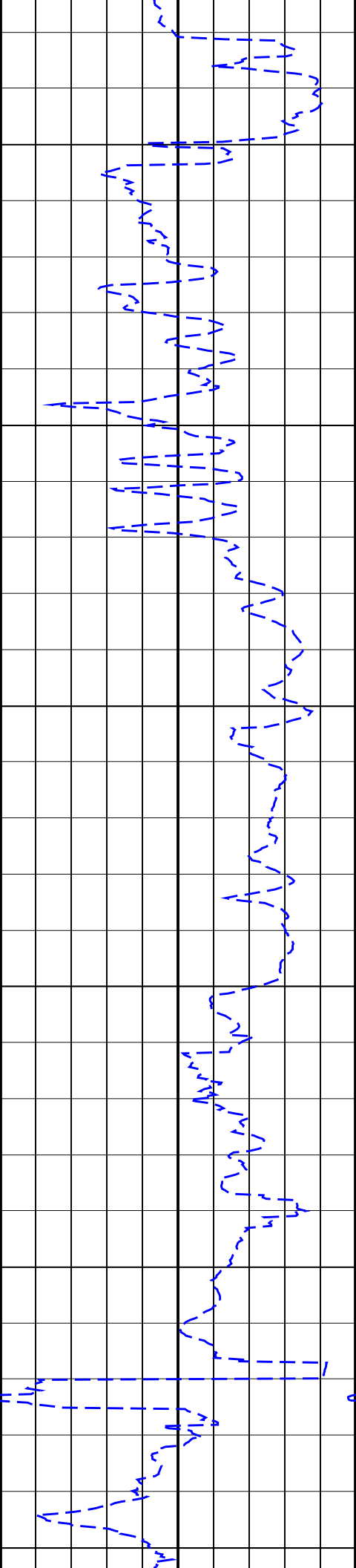
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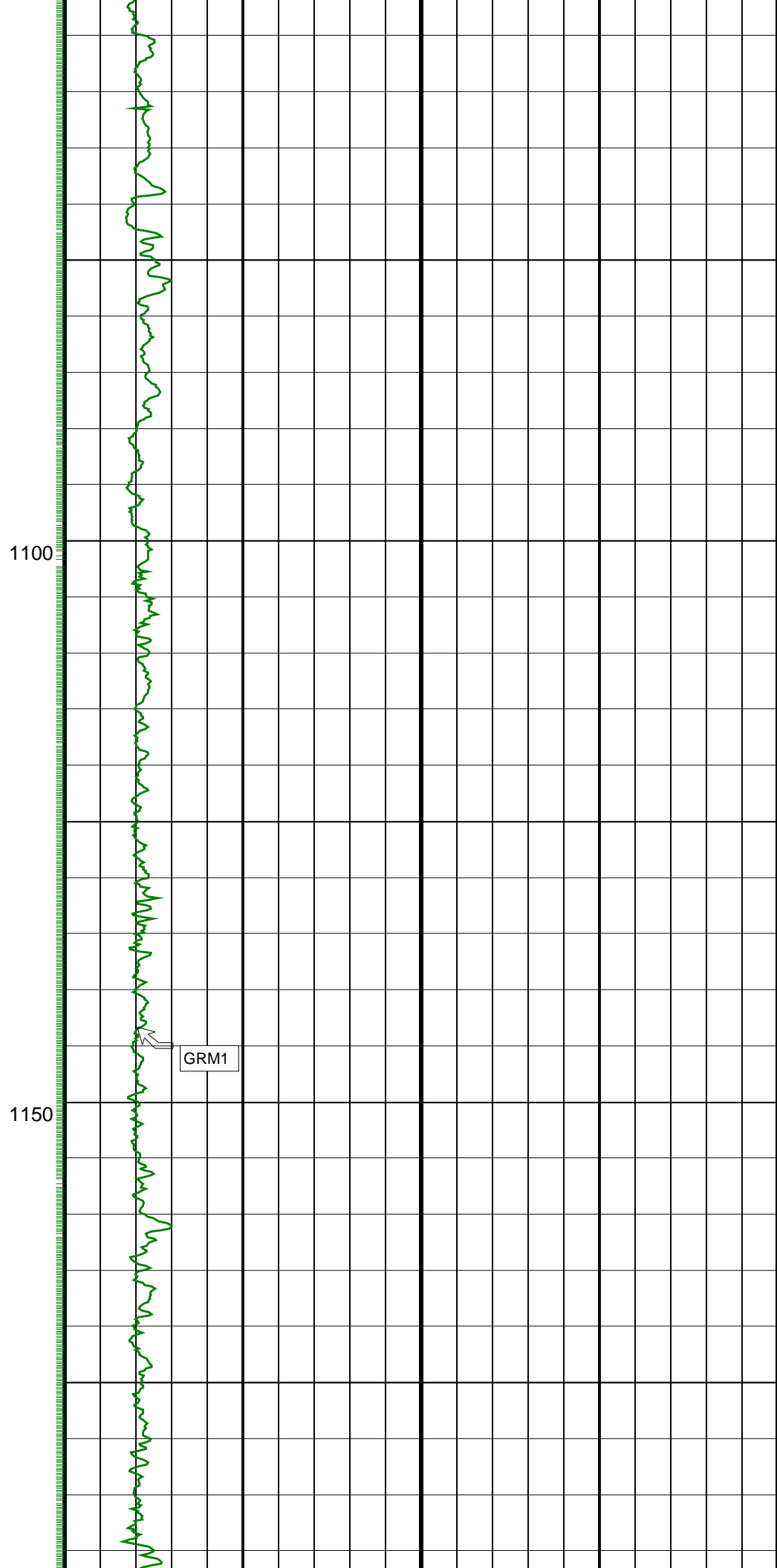
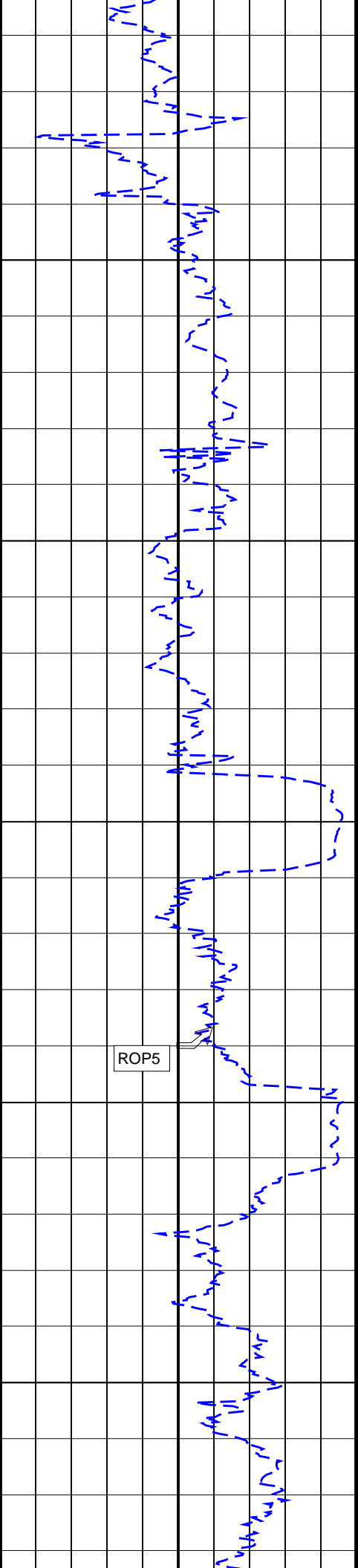
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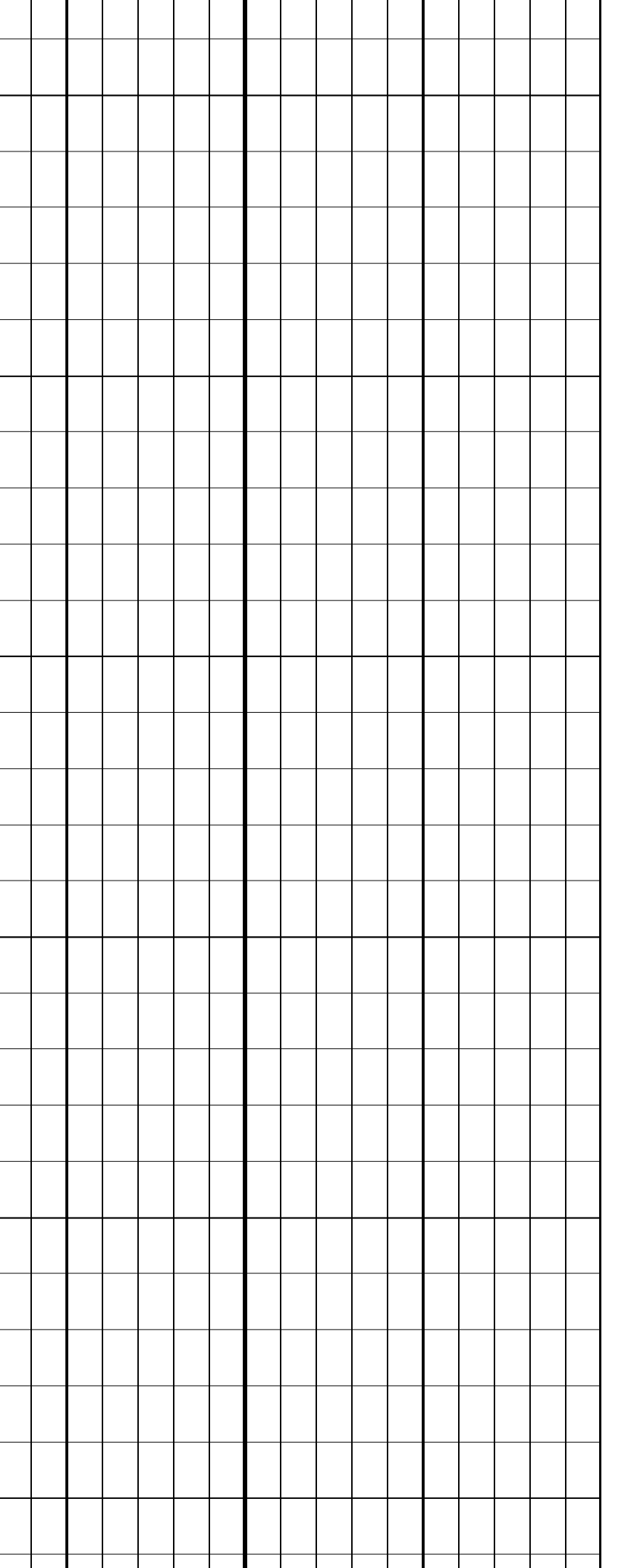
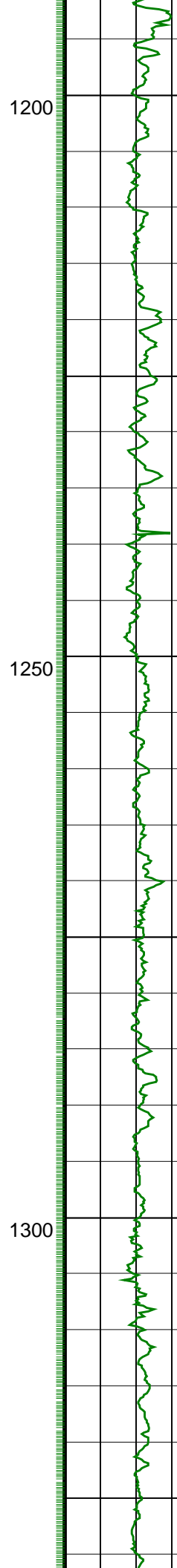
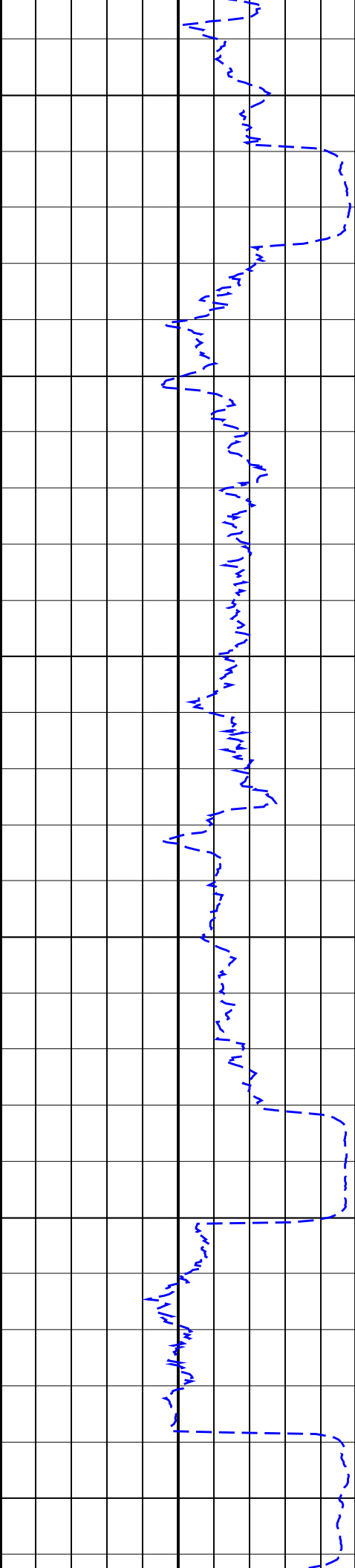
GR(TM) PIP



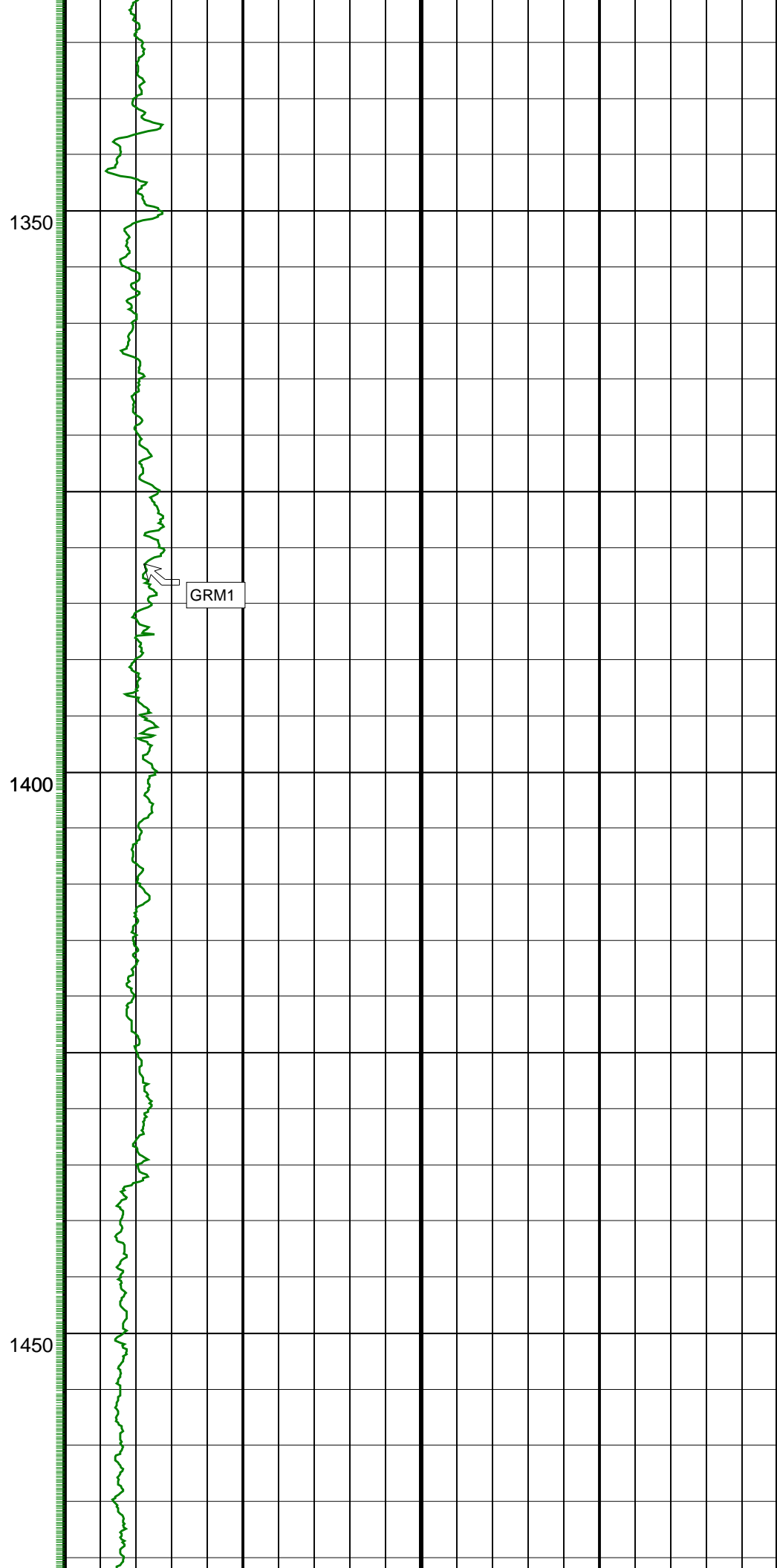
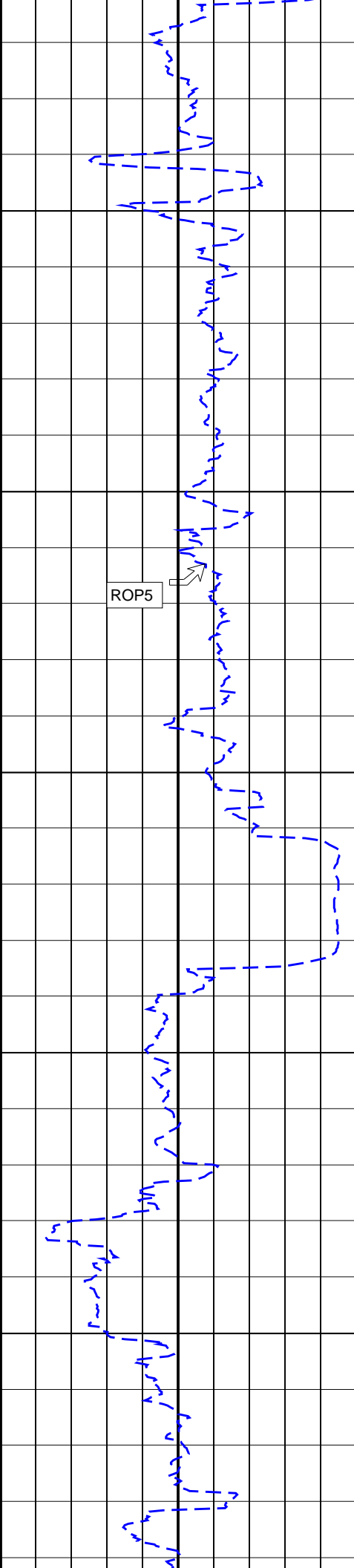


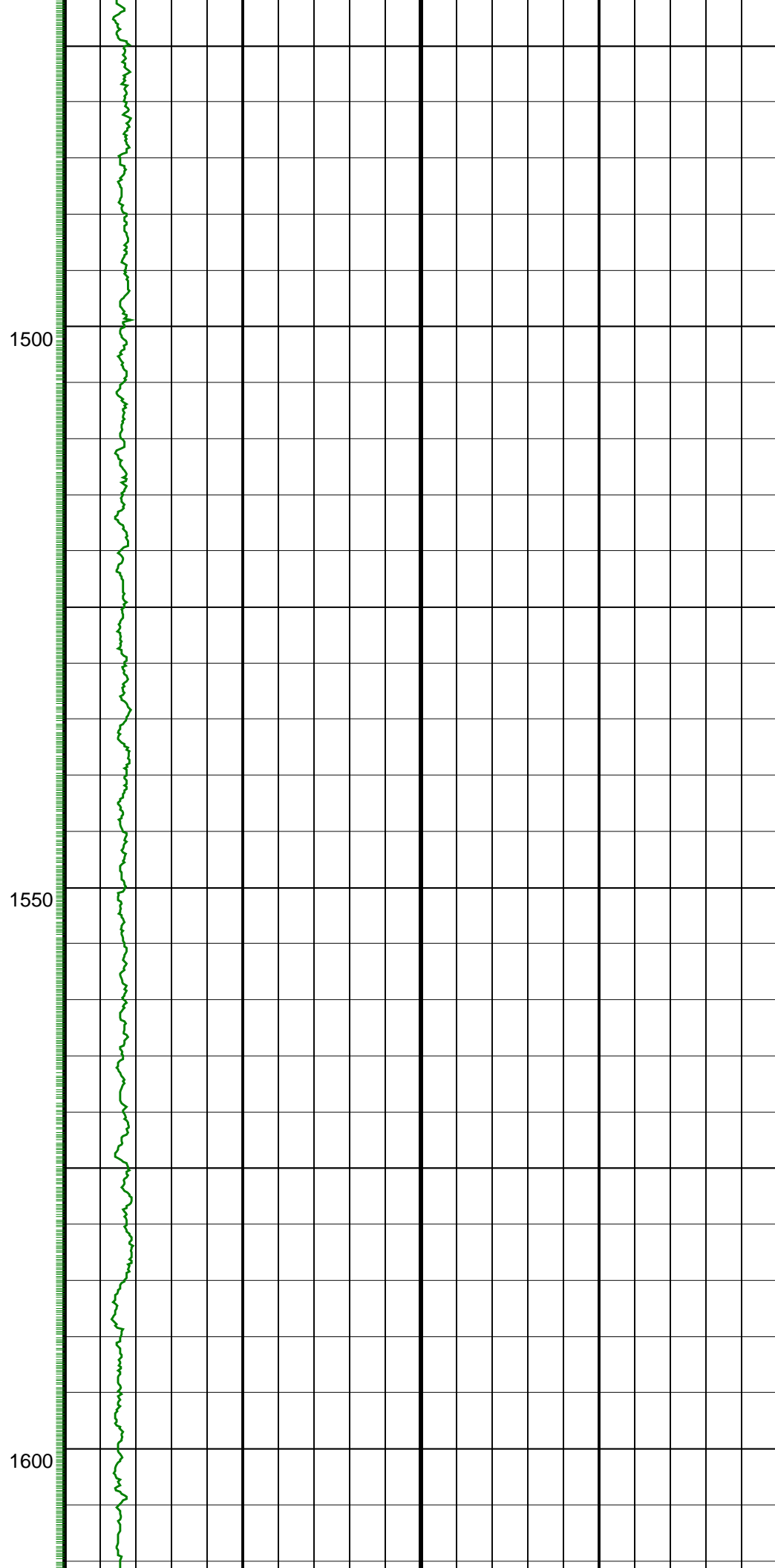
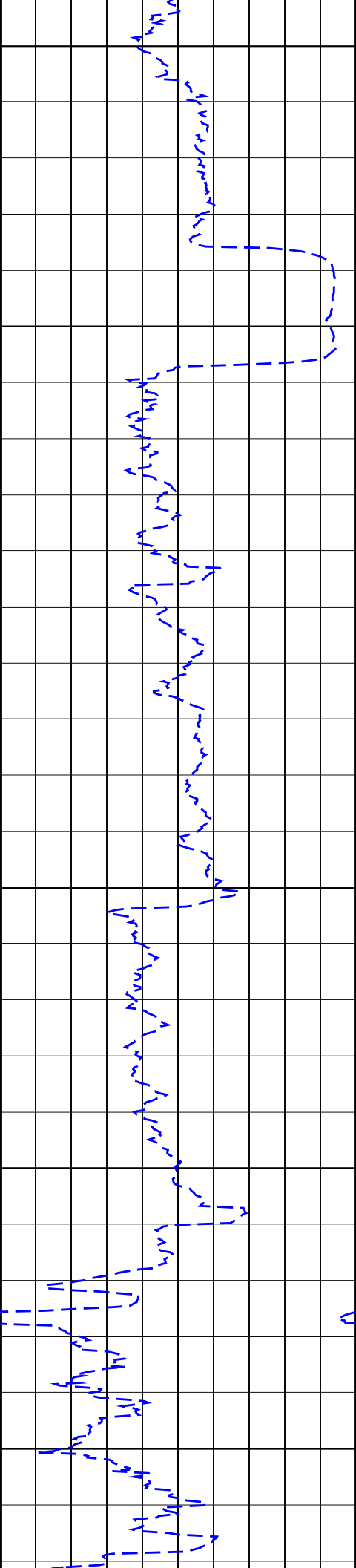


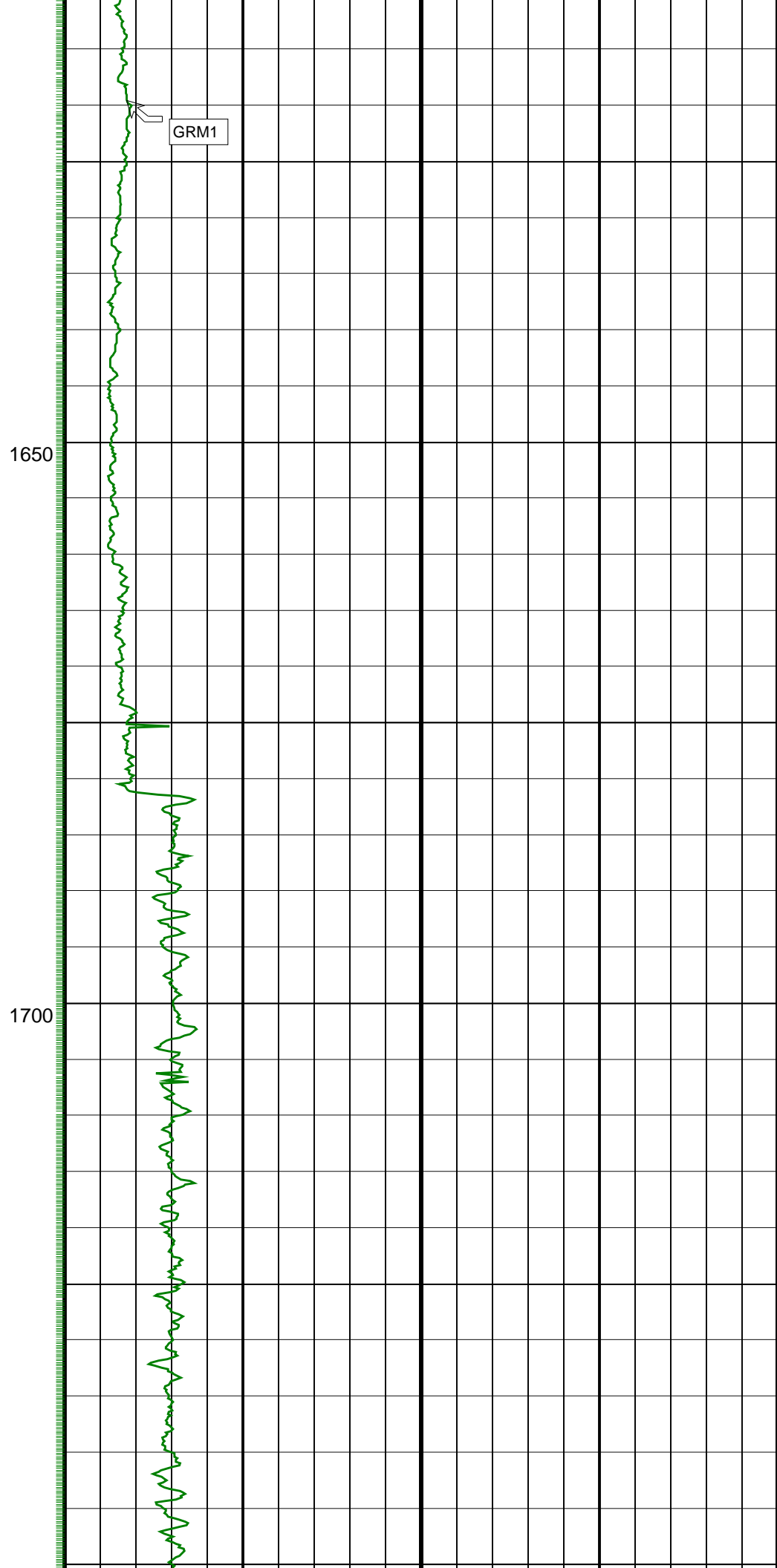
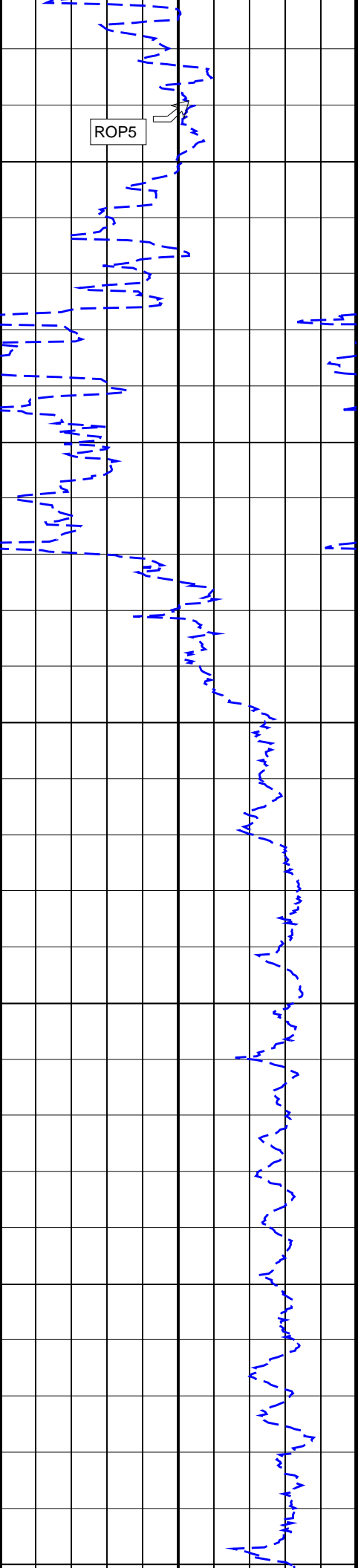


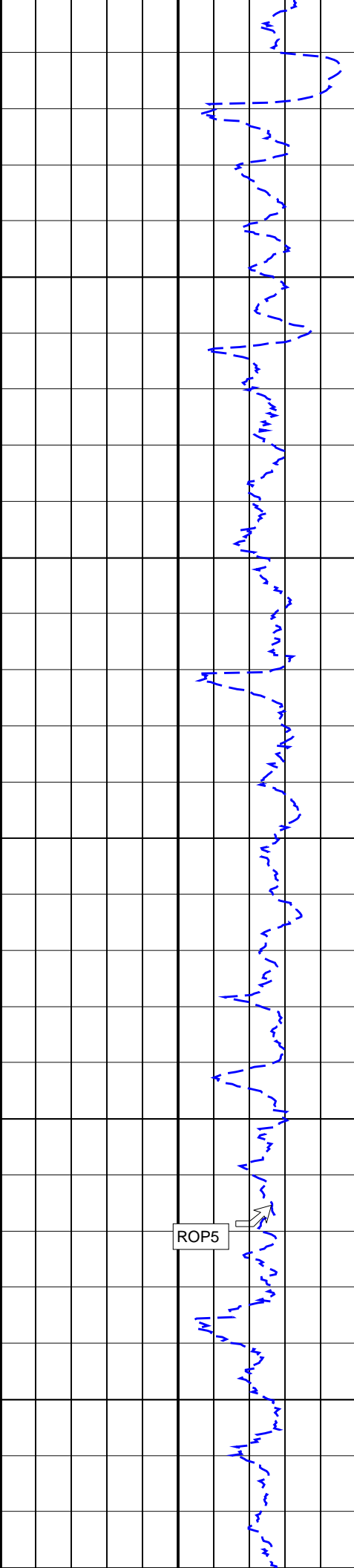








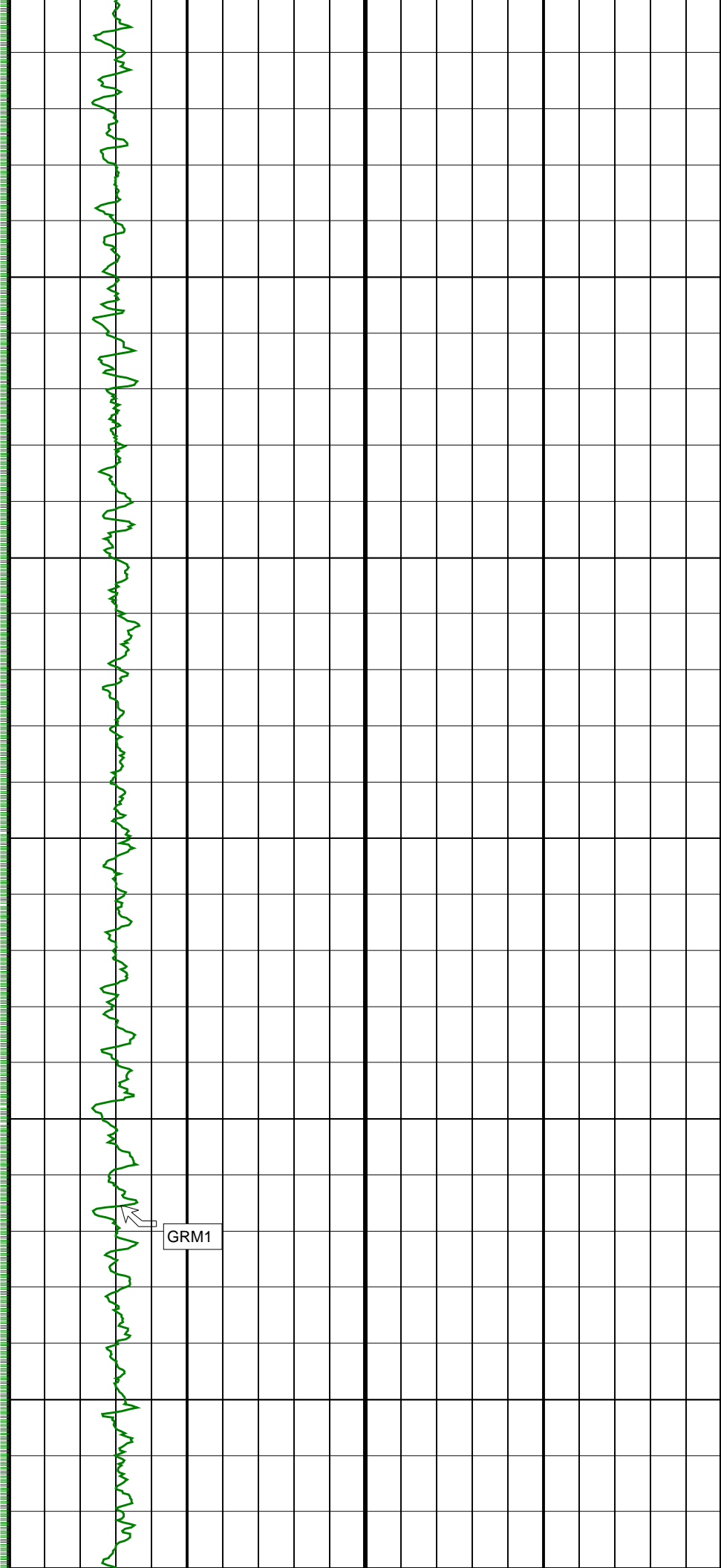


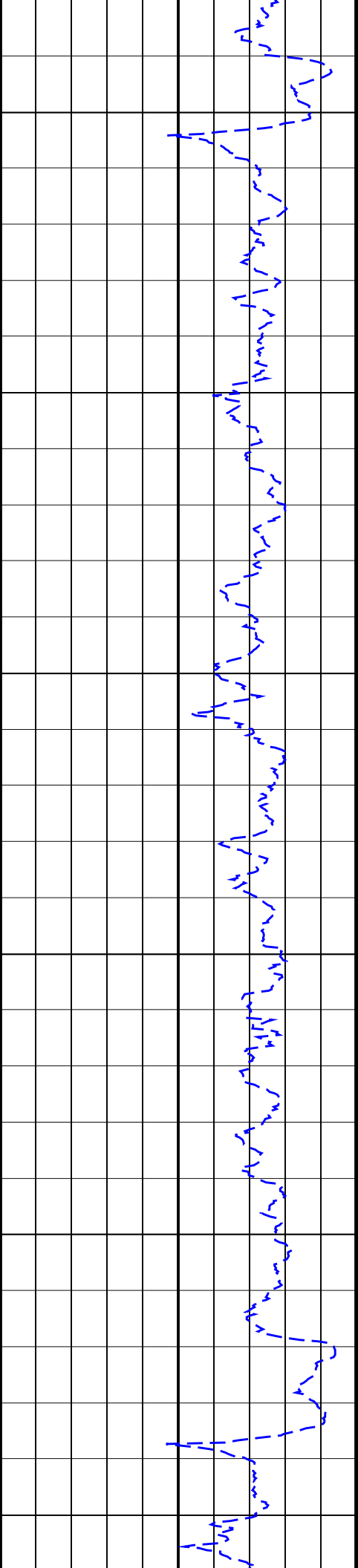


1750

1800

1850

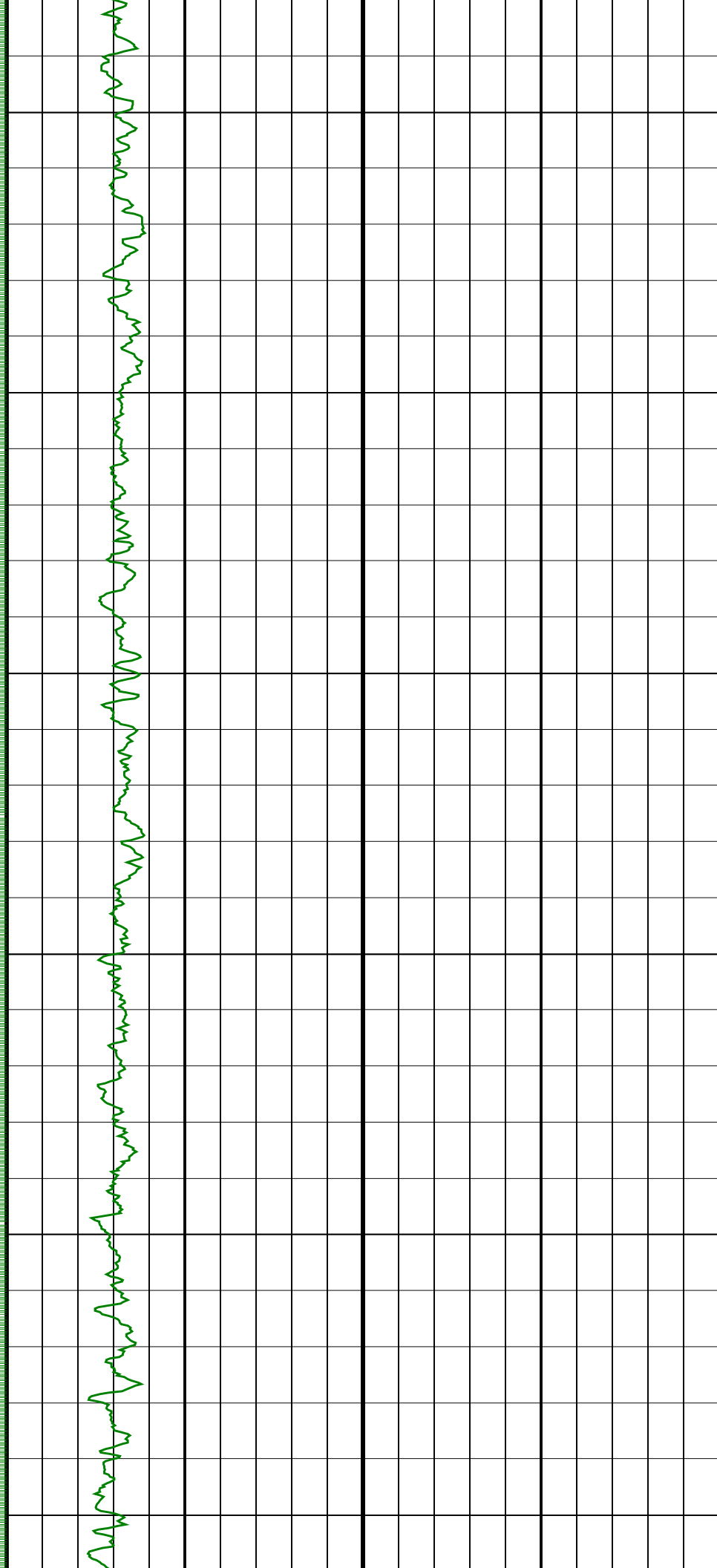


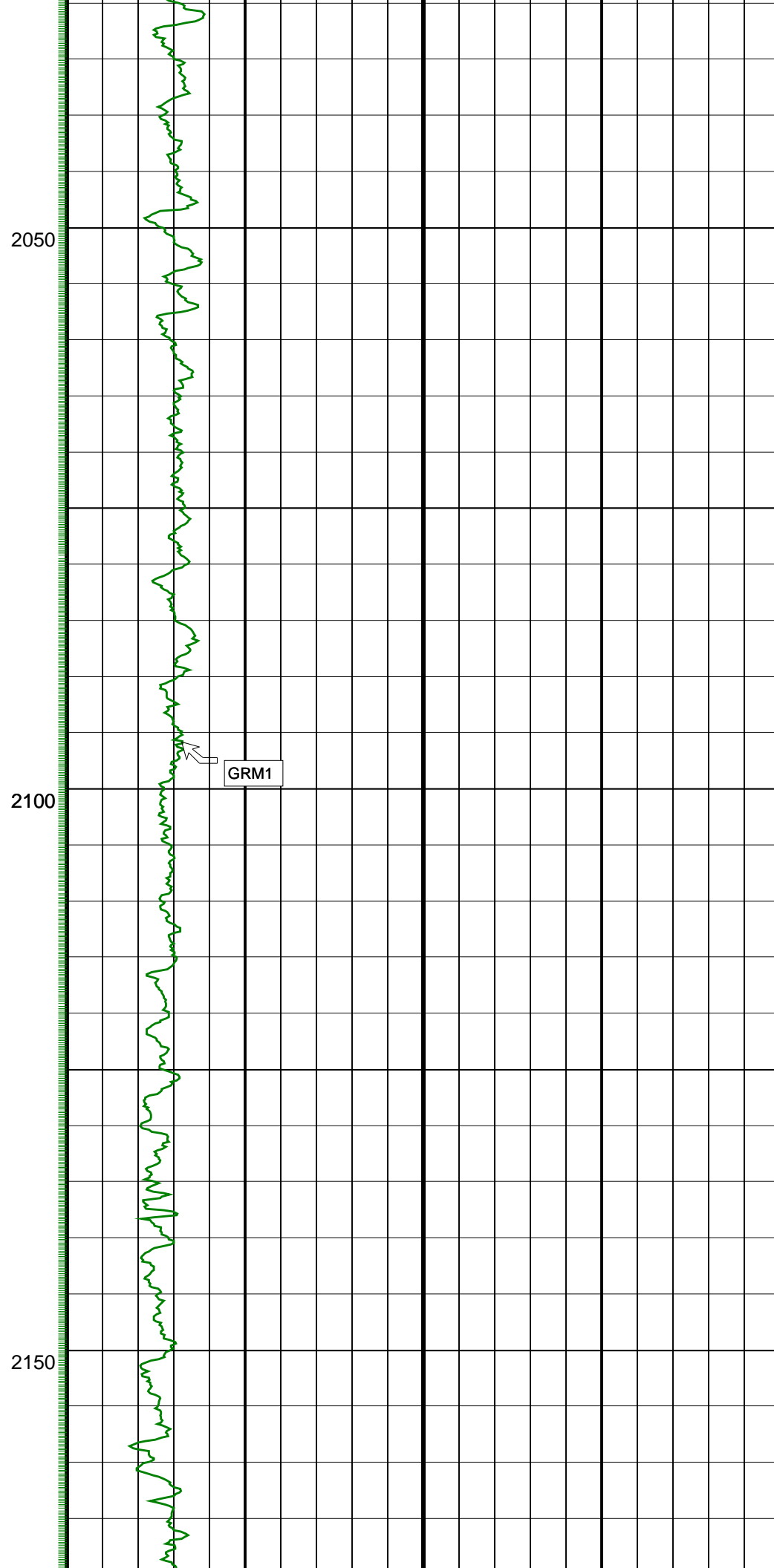
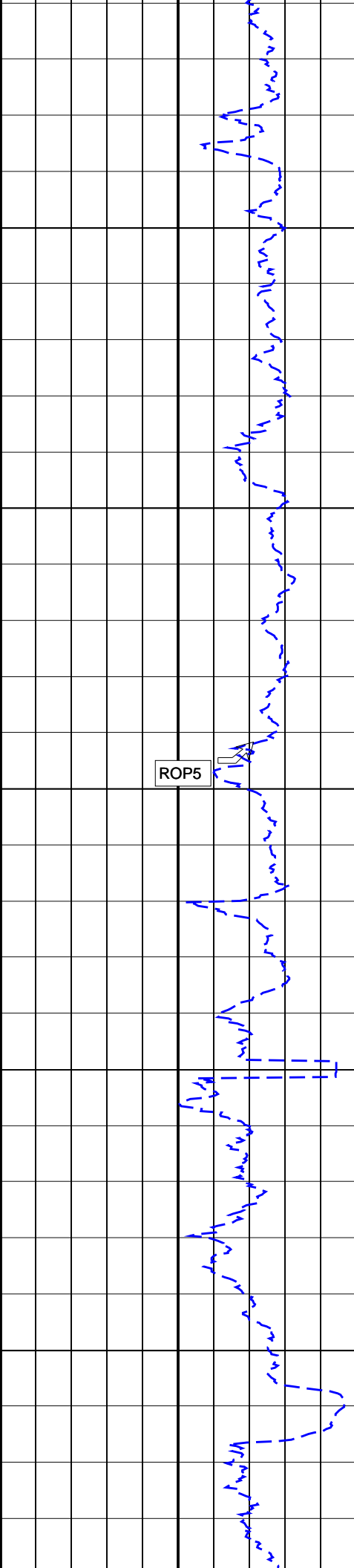


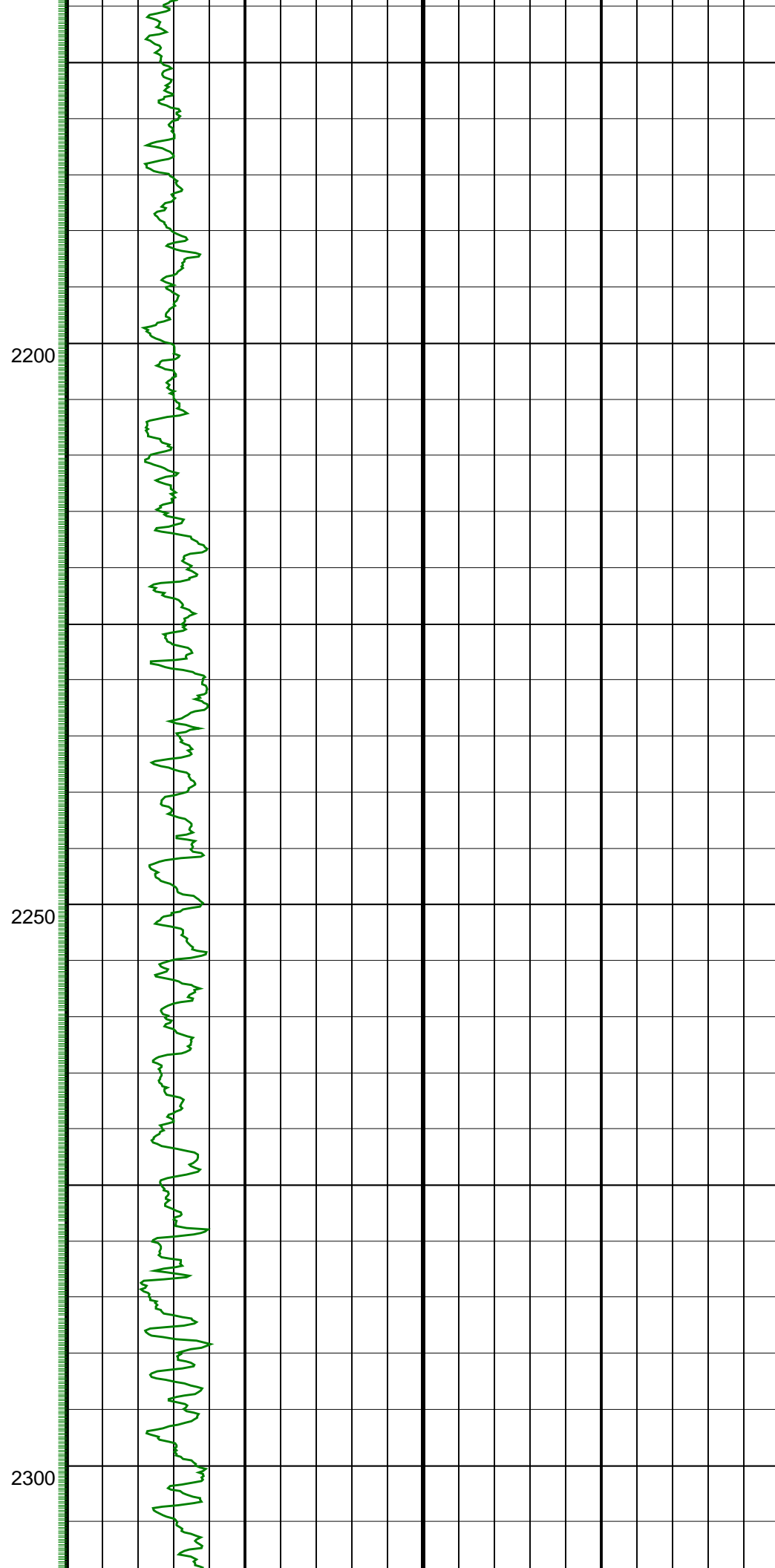
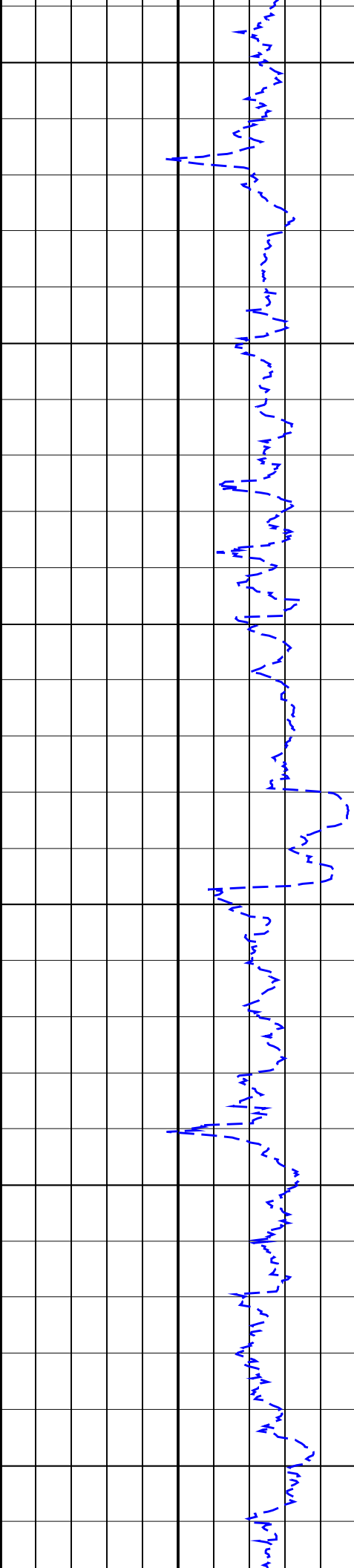
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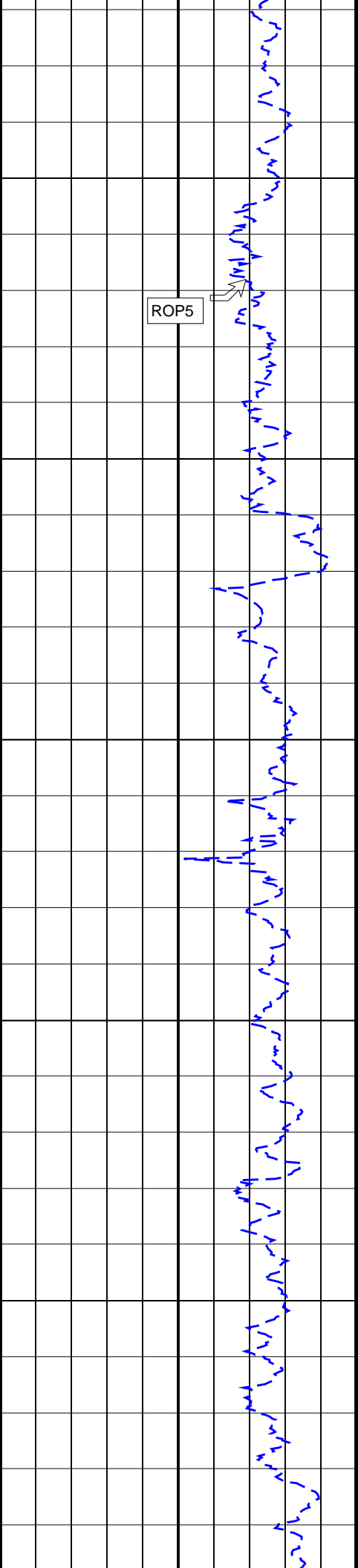
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2000



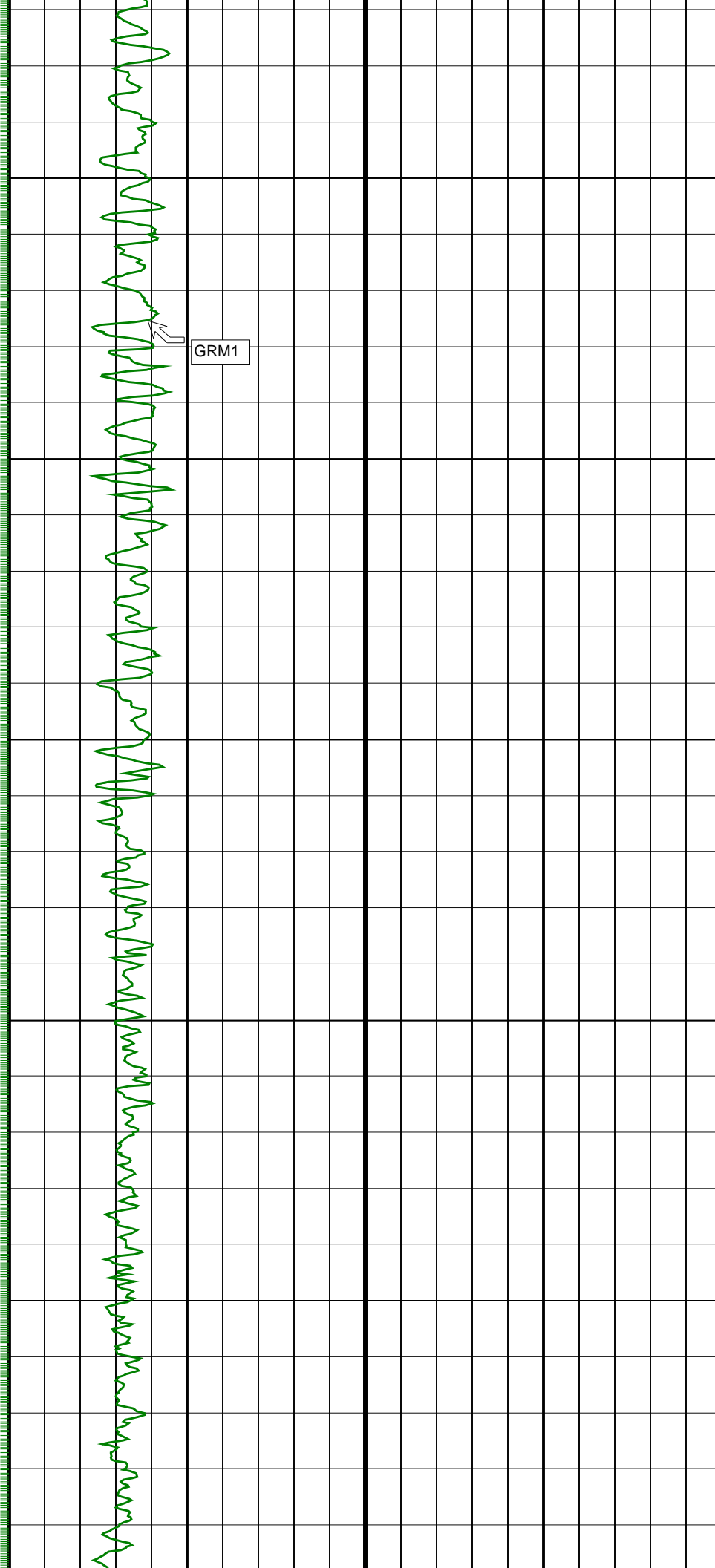




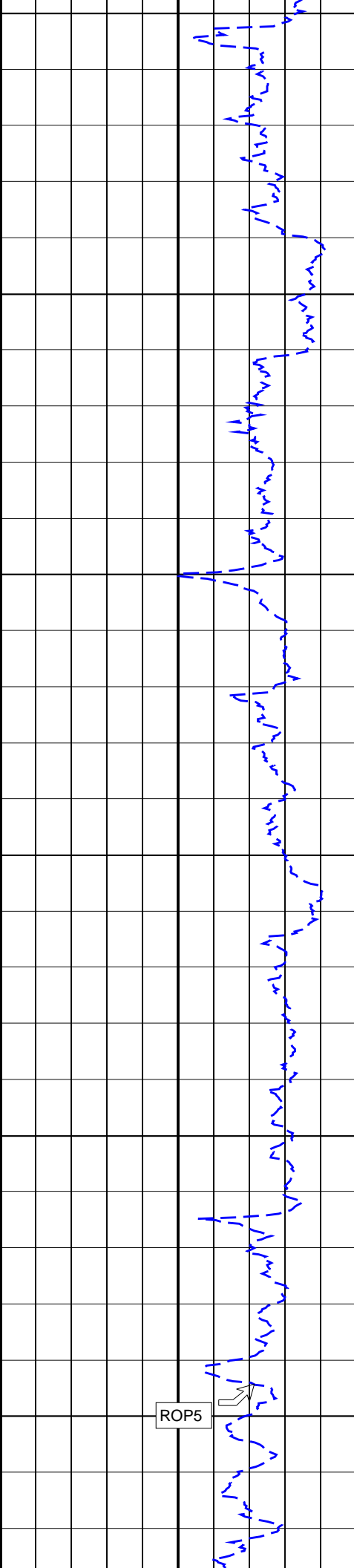


2350

2400



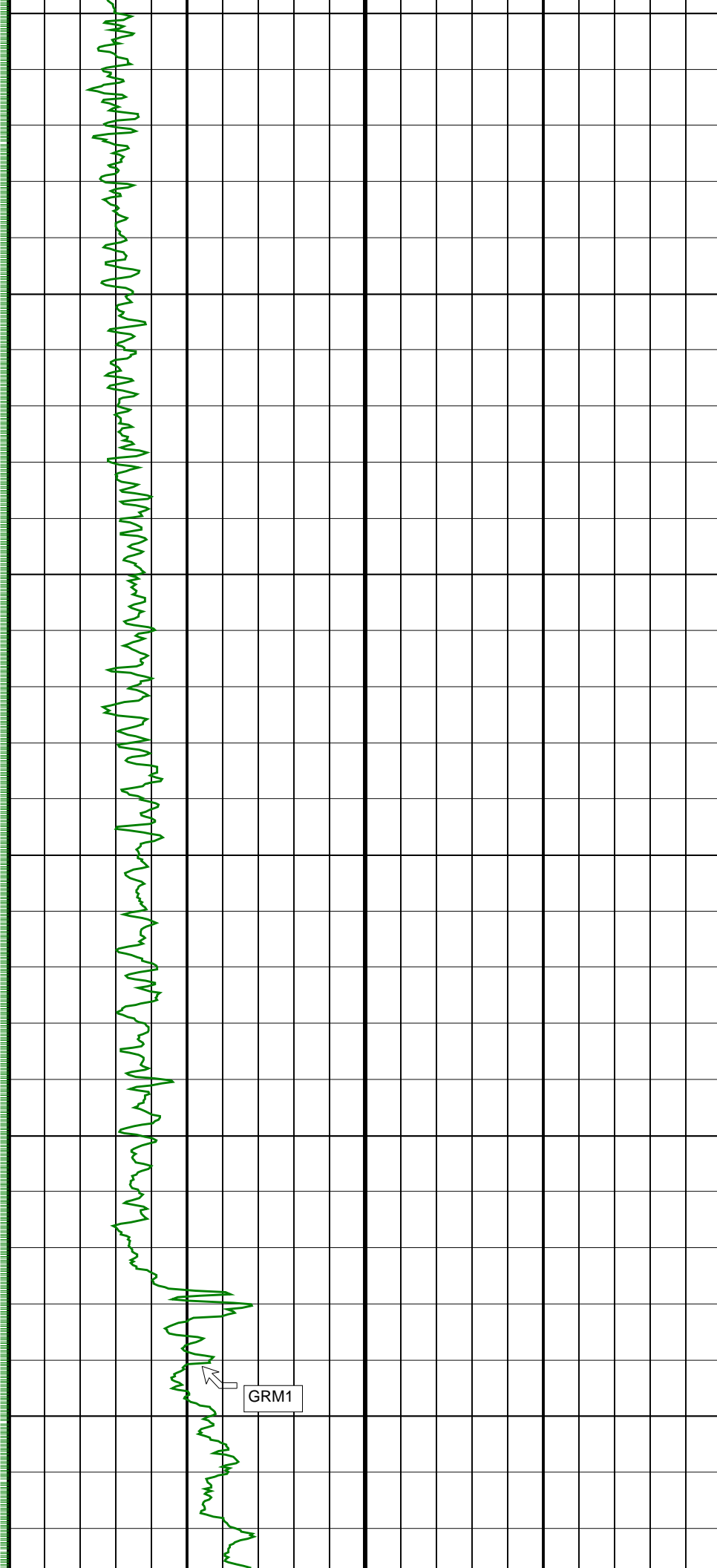


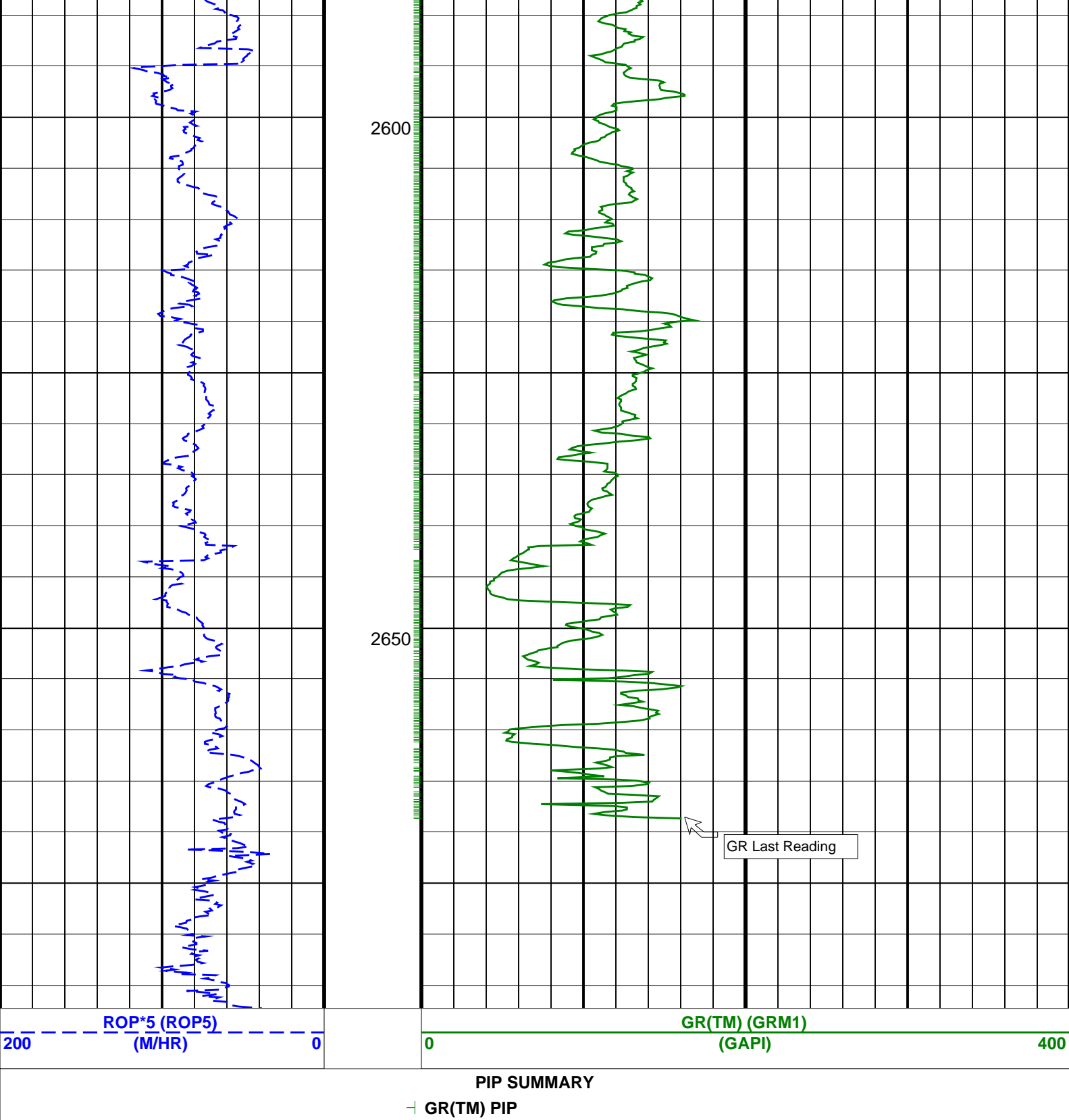


2450

2500

2550





SCHLUMBERGER

Survey report

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Client..... ESSO Australia Pty. Ltd.  
Field..... King Fish

Well..... WKF W19A  
API number..... N/A  
Engineer..... R. Borjas/L. Johnston

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

Spud date..... 02-June-2006  
Last survey date..... 07-June-2006  
Total accepted surveys... 72  
MD of first survey..... 665.00 m  
MD of last survey..... 2687.00 m

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

----- Geomagnetic data -----  
Magnetic model..... BGGM version 2005  
Magnetic date..... 01-Jun-2006  
Magnetic field strength... 1202.45 HCNT

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

----- Vertical section origin-----  
Latitude (+N/S-).....: -4.26 m  
Departure (+E/W-).....: -0.20 m

Azimuth from Vsect Origin to target: 331.73 degrees

Magnetic dec (+E/W-).....: 13.25 degrees  
Magnetic dip.....: -69.06 degrees

----- MWD survey Reference Criteria -----  
Reference G.....: 1000.06 mGal  
Reference H.....: 1202.45 HCNT  
Reference Dip.....: -69.06 degrees  
Tolerance of G.....: (+/-) 2.50 mGal  
Tolerance of H.....: (+/-) 6.00 HCNT  
Tolerance of Dip.....: (+/-) 0.45 degrees

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

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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	665.00	37.00	301.42	0.00	628.03	131.66	80.81	-120.00	144.67	303.96	0.00	TIP	None
2	696.25	34.26	311.48	31.25	653.45	148.05	91.55	-134.63	162.81	304.22	6.30	MWD	None
3	725.07	32.95	314.68	28.82	677.45	163.16	102.44	-146.28	178.58	305.00	2.33	MWD	None
4	753.43	31.38	320.69	28.36	701.47	177.78	113.57	-156.45	193.33	305.98	3.83	MWD	None
5	782.04	31.05	324.79	28.61	725.94	192.42	125.37	-165.42	207.56	307.16	2.29	MWD	None
6	811.84	30.43	329.43	29.80	751.55	207.59	138.15	-173.69	221.93	308.50	2.51	MWD	None
7	840.37	31.29	335.54	28.53	776.05	222.21	151.11	-180.44	235.36	309.95	3.47	MWD	None
8	869.04	31.73	335.72	28.67	800.49	237.16	164.76	-186.62	248.94	311.44	0.48	MWD	None
9	897.64	31.83	335.34	28.60	824.81	252.19	178.47	-192.86	262.77	312.78	0.24	MWD	None
10	926.33	31.92	338.22	28.69	849.17	267.27	192.39	-198.83	276.67	314.06	1.62	MWD	None
11	955.16	31.41	337.72	28.83	873.71	282.32	206.42	-204.51	290.57	315.27	0.61	MWD	None
12	984.25	30.93	337.85	29.09	898.60	297.29	220.36	-210.20	304.54	316.35	0.51	MWD	None
13	1014.37	30.61	337.91	30.12	924.48	312.61	234.64	-216.00	318.92	317.37	0.33	MWD	None
14	1042.10	30.13	337.67	27.73	948.40	326.55	247.61	-221.30	332.10	318.21	0.54	MWD	None
15	1070.66	29.82	338.14	28.56	973.14	340.74	260.84	-226.67	345.56	319.01	0.42	MWD	None
16	1098.58	29.11	338.49	27.92	997.45	354.38	273.60	-231.74	358.55	319.73	0.80	MWD	None
17	1127.56	30.32	336.99	28.98	1022.62	368.67	286.89	-237.19	372.24	320.42	1.49	MWD	None
18	1155.25	31.80	337.52	27.69	1046.34	382.89	300.06	-242.71	385.94	321.03	1.66	MWD	None
19	1183.77	30.81	338.52	28.52	1070.71	397.62	313.80	-248.26	400.13	321.65	1.19	MWD	None
20	1213.10	31.87	336.99	29.33	1095.76	412.78	327.92	-254.04	414.81	322.24	1.38	MWD	None
21	1241.19	30.27	336.91	28.09	1119.82	427.22	341.26	-259.71	428.85	322.73	1.74	MWD	None
22	1269.70	28.66	337.47	28.51	1144.64	441.18	354.19	-265.15	442.44	323.18	1.75	MWD	None
23	1298.43	29.93	336.71	28.73	1169.70	455.18	367.13	-270.62	456.10	323.61	1.40	MWD	None
24	1327.67	31.49	335.26	29.24	1194.83	470.07	380.77	-276.70	470.69	323.99	1.80	MWD	None
25	1356.54	31.48	335.54	28.87	1219.45	485.11	394.48	-282.98	485.48	324.35	0.15	MWD	None
26	1385.65	29.88	335.83	29.11	1244.49	499.93	408.02	-289.10	500.05	324.68	1.68	MWD	None
27	1414.88	31.19	335.74	29.23	1269.67	514.74	421.56	-295.19	514.63	325.00	1.37	MWD	None
28	1443.65	30.51	336.02	28.77	1294.36	529.46	435.02	-301.22	529.13	325.30	0.74	MWD	None
29	1472.27	29.96	336.80	28.62	1319.09	543.82	448.23	-306.99	543.28	325.59	0.72	MWD	None
30	1501.10	32.22	336.28	28.83	1343.78	558.66	461.89	-312.91	557.90	325.88	2.41	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	1529.54	32.23	335.86	28.44	1367.84	573.78	475.75	-319.07	572.83	326.15	0.24	MWD	None
32	1558.53	31.64	336.07	28.99	1392.44	589.07	489.75	-325.31	587.95	326.41	0.63	MWD	None
33	1587.52	31.83	336.73	28.99	1417.10	604.27	503.73	-331.42	602.97	326.66	0.42	MWD	None
34	1615.73	31.83	337.19	28.21	1441.06	619.08	517.42	-337.24	617.62	326.90	0.26	MWD	None
35	1644.76	32.08	338.06	29.03	1465.69	634.37	531.62	-343.09	632.72	327.16	0.55	MWD	None
36	1673.14	31.88	339.21	28.38	1489.77	649.29	545.62	-348.56	647.45	327.43	0.69	MWD	None
37	1701.73	31.44	339.05	28.59	1514.10	664.17	559.64	-353.91	662.16	327.69	0.48	MWD	None
38	1730.20	31.11	338.98	28.47	1538.44	678.83	573.44	-359.20	676.65	327.94	0.36	MWD	None
39	1758.66	30.49	337.00	28.46	1562.88	693.31	586.95	-364.66	691.01	328.15	1.27	MWD	None
40	1787.69	30.02	336.33	29.03	1587.96	707.89	600.38	-370.45	705.47	328.32	0.61	MWD	None
41	1816.72	29.37	335.96	29.03	1613.18	722.22	613.53	-376.27	719.72	328.48	0.71	MWD	None
42	1845.90	29.25	336.20	29.18	1638.62	736.47	626.59	-382.06	733.89	328.63	0.18	MWD	None
43	1874.19	28.85	336.22	28.29	1663.35	750.16	639.16	-387.60	747.50	328.77	0.43	MWD	None
44	1903.12	29.77	335.79	28.93	1688.58	764.28	652.10	-393.36	761.56	328.90	0.99	MWD	None
45	1931.93	29.68	335.20	28.81	1713.60	778.54	665.10	-399.29	775.75	329.02	0.32	MWD	None
46	1960.48	29.43	335.29	28.55	1738.43	792.60	677.89	-405.18	789.75	329.13	0.27	MWD	None
47	1989.17	28.81	334.87	28.69	1763.49	806.53	690.55	-411.07	803.64	329.24	0.69	MWD	None
48	2017.99	30.49	337.15	28.82	1788.54	820.75	703.57	-416.85	817.79	329.35	2.14	MWD	None
49	2046.82	30.07	336.92	28.83	1813.44	835.22	716.96	-422.53	832.20	329.49	0.46	MWD	None
50	2075.33	29.46	336.75	28.51	1838.19	849.32	729.97	-428.09	846.24	329.61	0.66	MWD	None
51	2104.19	29.00	336.63	28.86	1863.37	863.36	742.91	-433.67	860.23	329.73	0.49	MWD	None
52	2133.13	28.90	336.40	28.94	1888.69	877.32	755.76	-439.25	874.14	329.83	0.16	MWD	None
53	2161.45	29.11	335.76	28.32	1913.46	891.01	768.31	-444.82	887.79	329.93	0.40	MWD	None
54	2190.26	28.86	336.28	28.81	1938.66	904.93	781.07	-450.49	901.67	330.03	0.38	MWD	None
55	2218.87	28.30	336.43	28.61	1963.79	918.57	793.61	-455.98	915.28	330.12	0.60	MWD	None

56	2247.88	29.72	336.82	29.01	1989.16	932.59	806.52	-461.56	929.26	330.22	1.51	MWD	None
57	2276.89	29.26	336.78	29.01	2014.41	946.82	819.65	-467.19	943.45	330.32	0.48	MWD	None
58	2305.72	29.94	335.41	28.83	2039.48	961.01	832.66	-472.96	957.61	330.40	1.01	MWD	None
59	2334.03	29.47	335.36	28.31	2064.07	975.01	845.42	-478.80	971.59	330.47	0.51	MWD	None
60	2363.71	30.57	335.88	29.68	2089.76	989.83	858.94	-484.93	986.38	330.55	1.16	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)
61	2392.30	30.07	336.47	28.59	2114.44	1004.22	872.15	-490.76	1000.74	330.63	0.62	MWD	None
62	2420.84	29.26	335.66	28.54	2139.24	1018.30	885.06	-496.49	1014.81	330.71	0.97	MWD	None
63	2449.59	30.55	337.13	28.75	2164.17	1032.59	898.19	-502.23	1029.07	330.79	1.57	MWD	None
64	2478.26	30.12	337.06	28.67	2188.91	1047.00	911.53	-507.86	1043.46	330.88	0.46	MWD	None
65	2507.09	29.10	337.16	28.83	2213.97	1061.19	924.65	-513.41	1057.62	330.96	1.08	MWD	None
66	2536.11	28.29	338.04	29.02	2239.43	1075.05	937.53	-518.72	1071.46	331.05	0.96	MWD	None
67	2564.78	27.16	338.44	28.67	2264.81	1088.30	949.92	-523.66	1084.70	331.13	1.22	MWD	None
68	2593.34	27.21	338.26	28.56	2290.21	1101.26	962.05	-528.48	1097.65	331.22	0.10	MWD	None
69	2621.58	27.41	337.56	28.24	2315.31	1114.14	974.05	-533.35	1110.51	331.30	0.41	MWD	None
70	2650.13	27.81	336.15	28.55	2340.60	1127.32	986.22	-538.55	1123.68	331.36	0.82	MWD	None
71	2667.00	26.98	335.29	16.87	2355.58	1135.06	993.30	-541.74	1131.42	331.39	1.66	MWD	None
72	2687.00	26.98	335.29	20.00	2373.41	1144.12	1001.54	-545.53	1140.48	331.42	0.00	Proj.	to TD

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

**Schlumberger**

Well: **WKF W19A**

Field: **West Kingfish**

Rig: **ISDL 453**

State: **Victoria**

**Gamma Ray Service  
1:500 Measured Depth  
Real Time Log**