

Depth logged:	1006.0 m To 3060.3 m	Mag decl:	13.06 deg.	Other services:
Date logged:	01-Aug-05 To 10-Aug-05	Mag dip:	-69.04 deg.	Directional Drilling, D&I, APWD

Bit Run Summary

Bit Run Summary

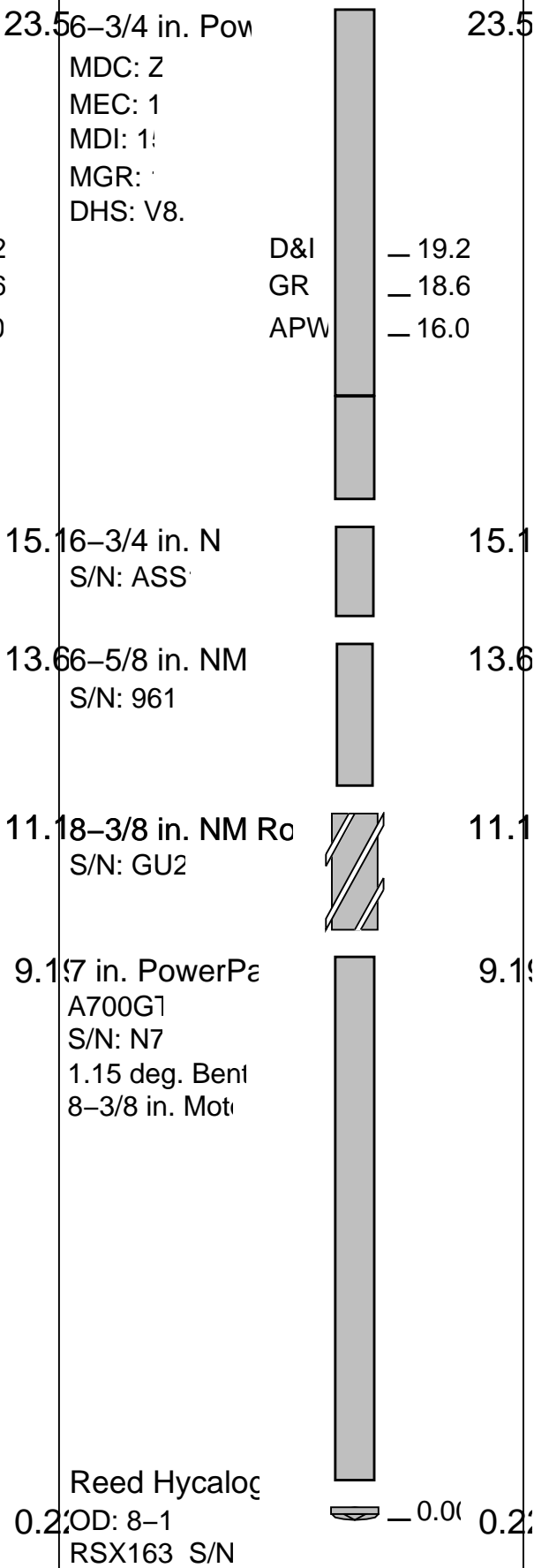
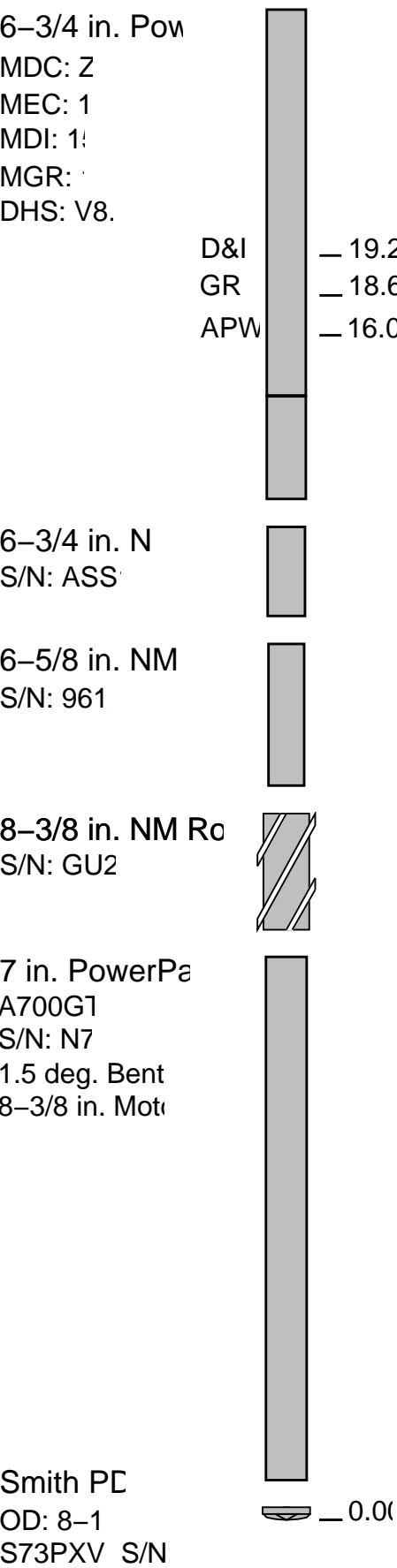
Potassium	%	1.2	1.2								
Environmental data											
GR											
Mud weight	ppg	10.05	10.05								
Bit size	in	8.5	8.5								
Resistivity											
Neutron porosity											
Hole Size		N/A	N/A								
Mud weight		N/A	N/A								
Temperature		N/A	N/A								
Mud salinity		N/A	N/A								
Formation salinity		N/A	N/A								
Recording rate 1	SEC	3.91	3.91								
Recording rate 2	SEC	N/A	N/A								
Filtering GR		3 pt.	3 pt.								
Filtering density		N/A	N/A								
Filtering Neutron		N/A	N/A								
Company representative		B. Steele	B. Davis	J. McKinnon							
Schlumberger D&M Personnel		R. Borjas	L. Johnston	R. Burns	C. Cocks	L. Muskett					

<p style="text-align: center;">DISCLAIMER</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>		
OTHER SERVICES FOR RUN1 Directional Drilling Directional Surveys Annular Pressure While Drilling	OTHER SERVICES FOR RUN2 Directional Drilling Directional Surveys Annular Pressure While Drilling	OTHER SERVICES FOR RUN
REMARKS: RUN NUMBER 1 Depth is referenced to driller's depth Gamma Ray corrected for Tool Size, Bit Size and Mud Weight Mud Type is KCl/PHPA/Glycol 8-1/2 in. hole was drilled from 1006.0 m to 2395.0 m MD Low Data Density from 1438.0 m to 1454.0 m due to high ROP of reamed section Acquisition Loss from 1451.0 m to 1454.0 m POOH to change bit	REMARKS: RUN NUMBER 2 Depth is referenced to driller's depth Gamma Ray corrected for Tool Size, Bit Size and Mud Weight Mud Type is KCl/PHPA/Glycol 8-1/2 in. hole was drilled from 2395.0 m to 3079.0 m MD POOH due to TD of BMA A14A	REMARKS: RUN NUMBER

EQUIPMENT DESCRIPTION		
RUN1	RUN2	RUN
DOWNHOLE F	DOWNHOLE F	

DOWNHOLE LOG

DOWNHOLE LOG



Maximum string dia
All lengths in

Maximum string dia
All lengths in

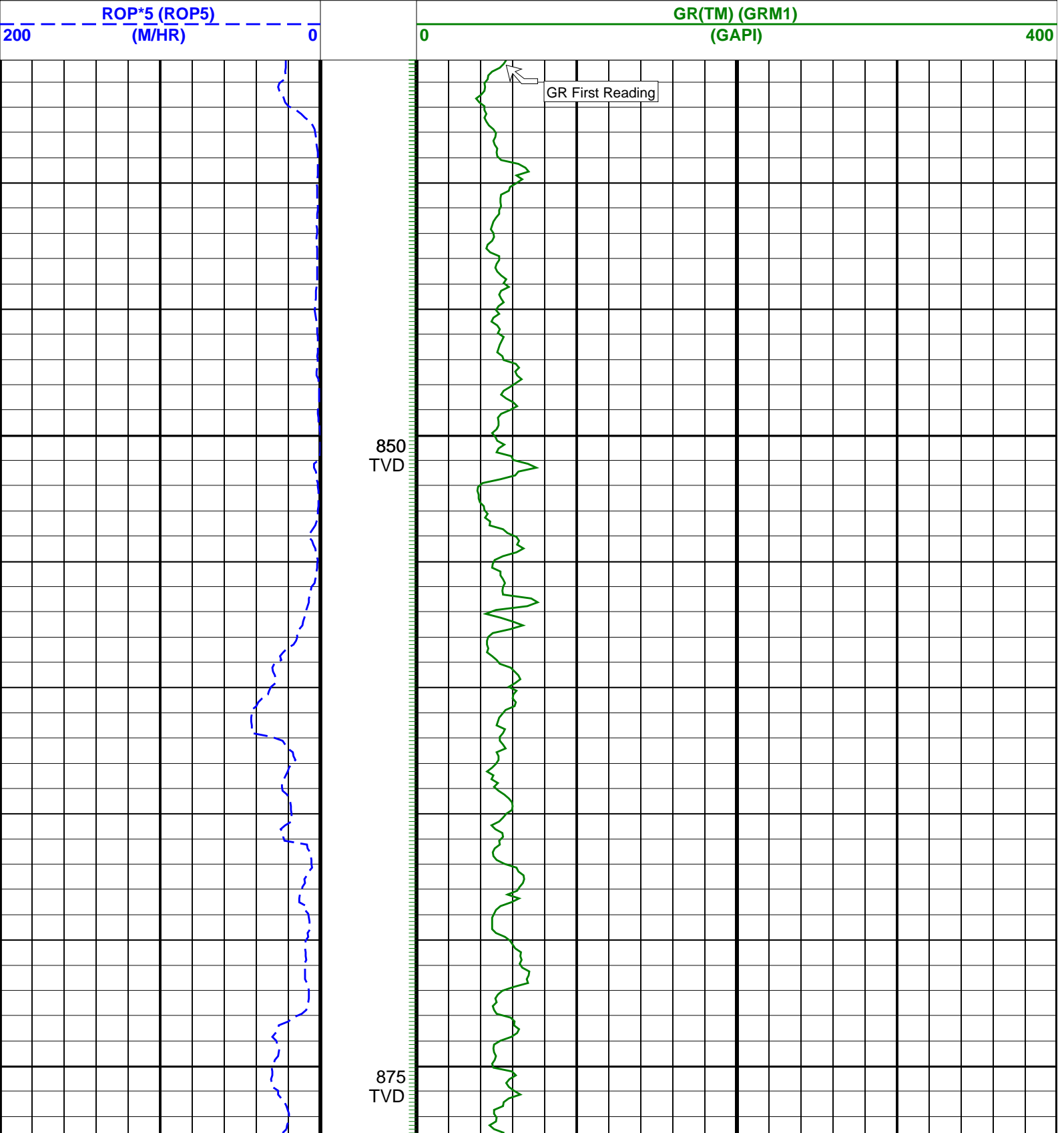
BMA A14A RT 1:200 TVD

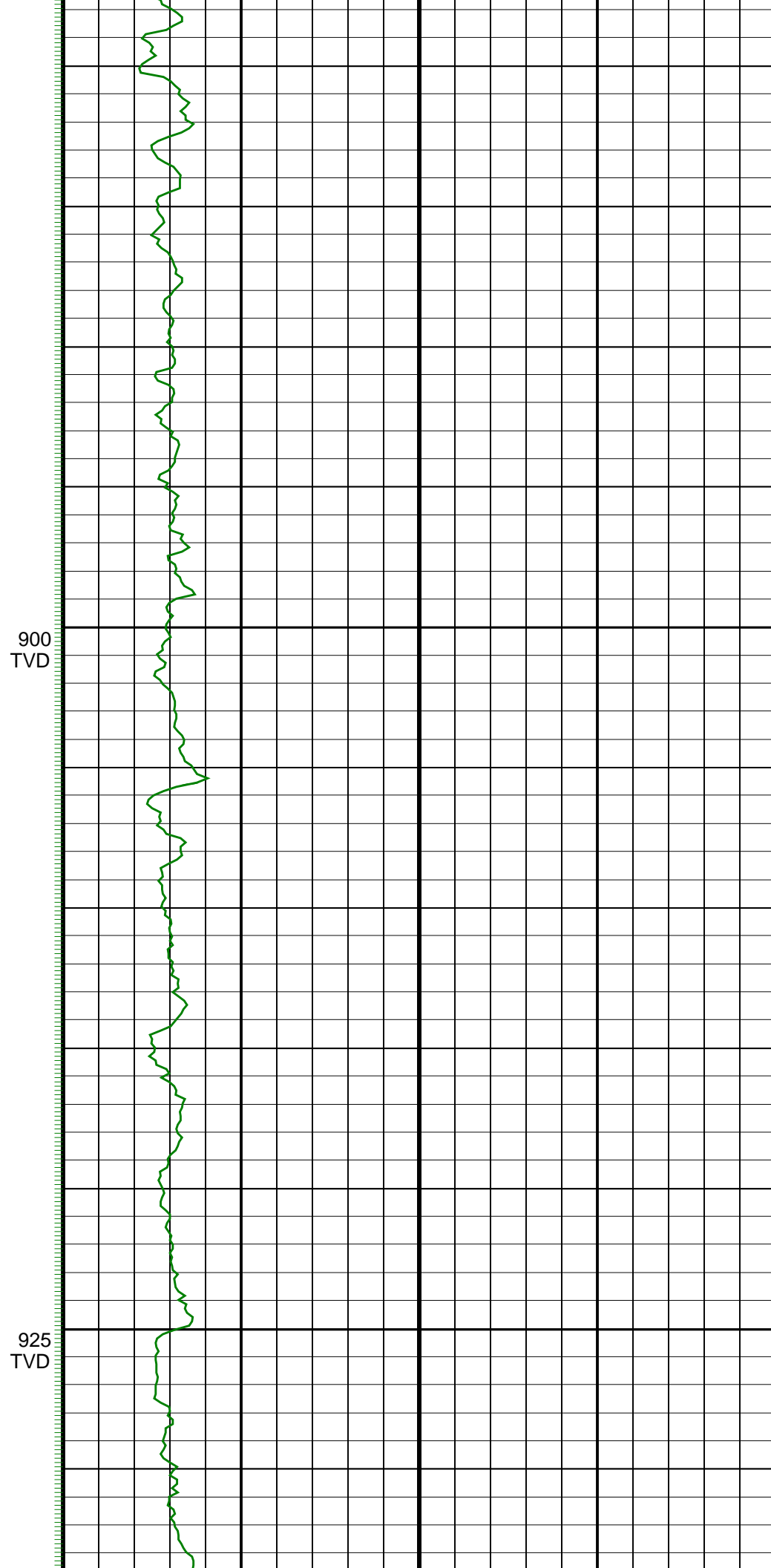
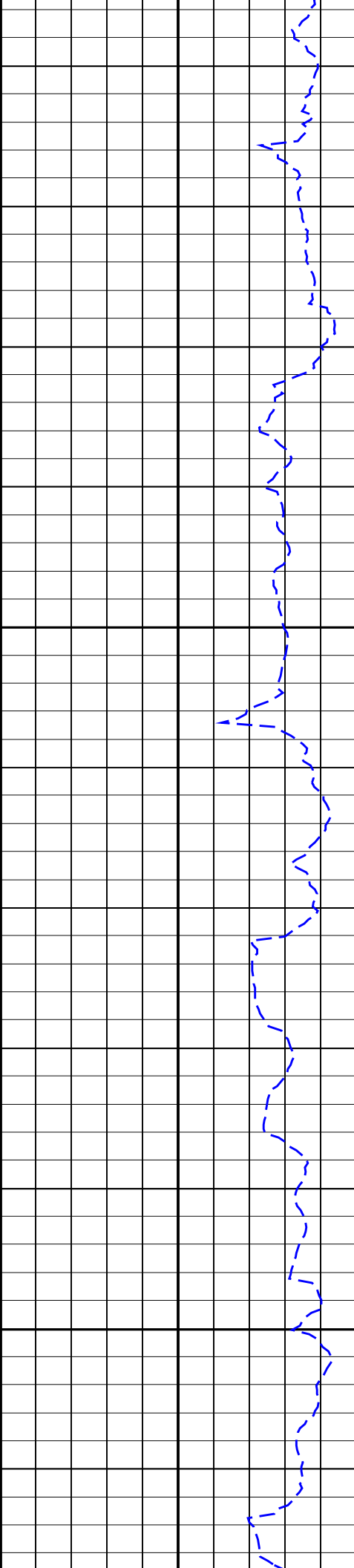
IDEAL Version: ID10_2C_01 <TVD> Vertical Scale: 1:200

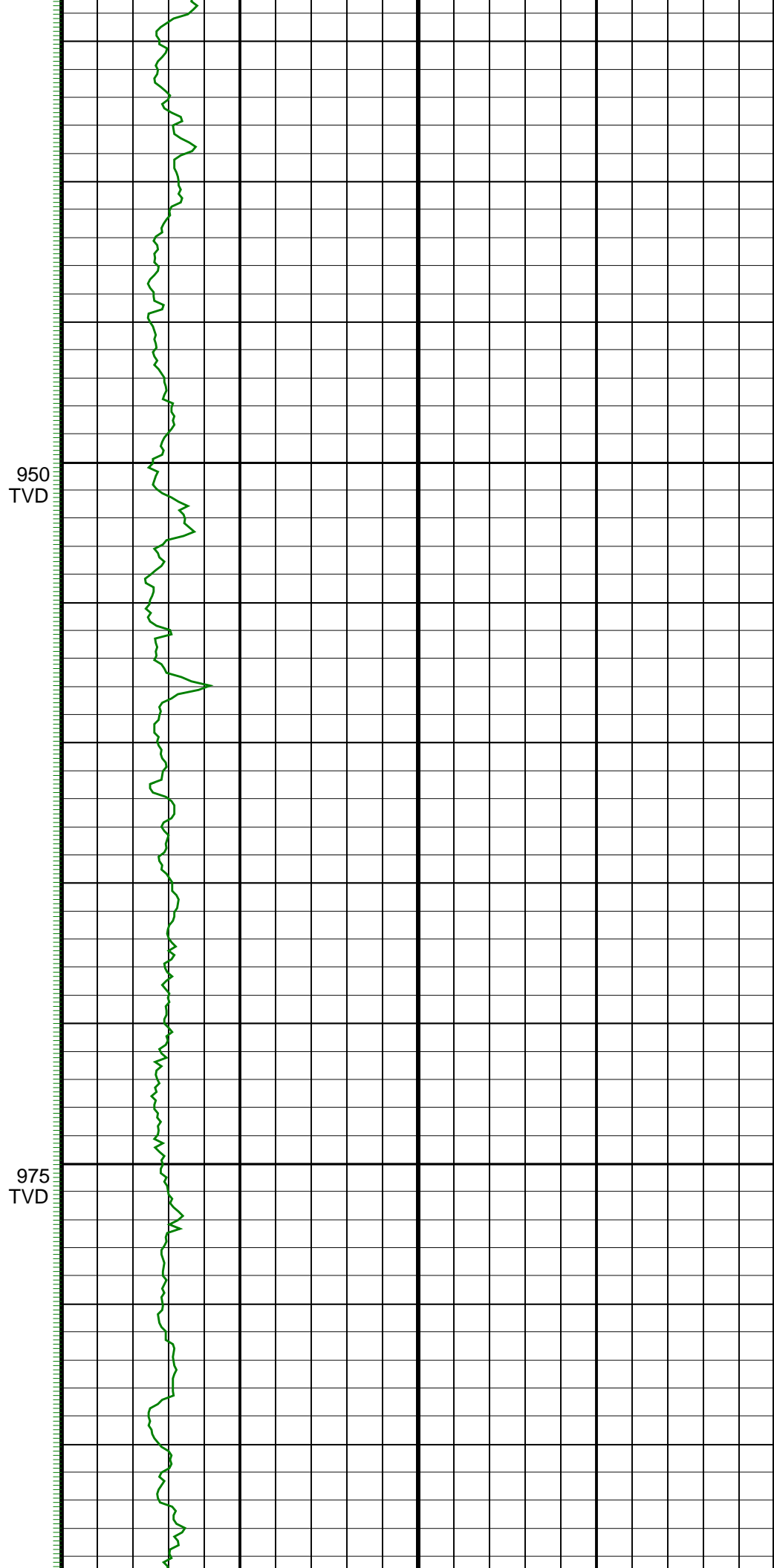
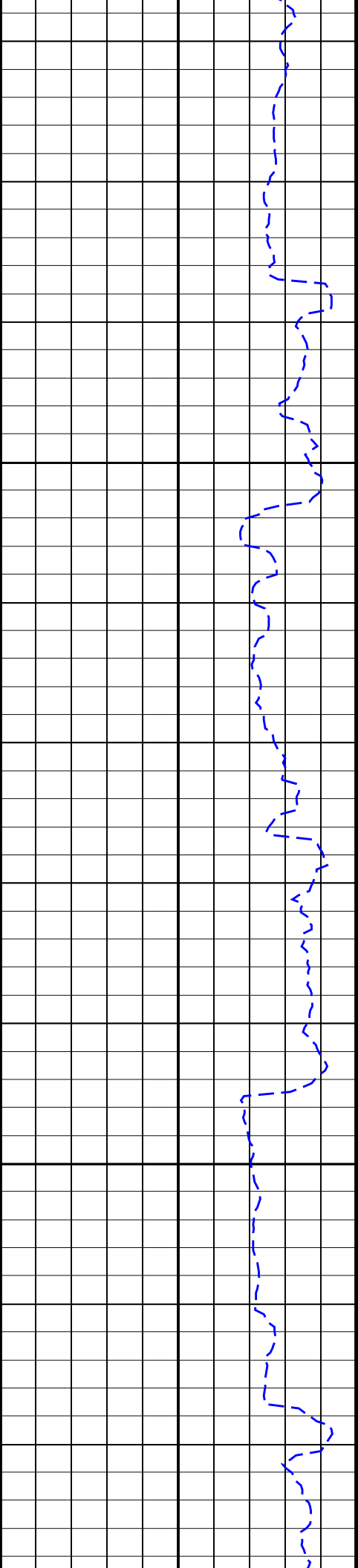
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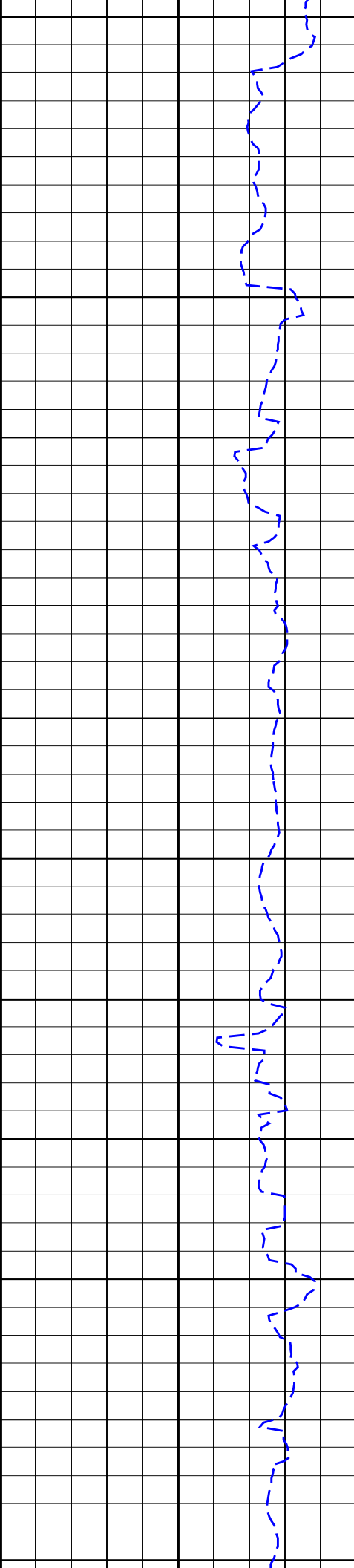
PIP SUMMARY

GR(TM) PIP



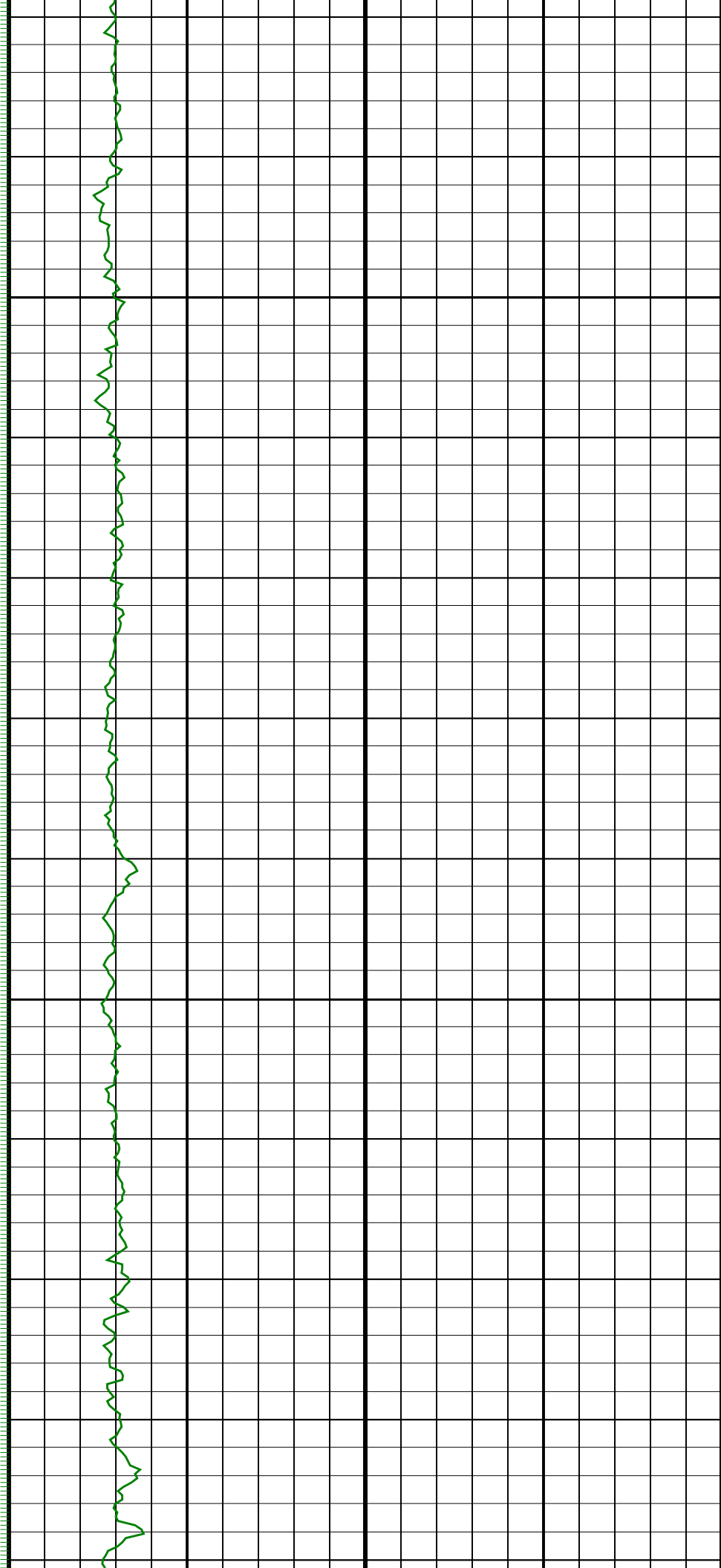


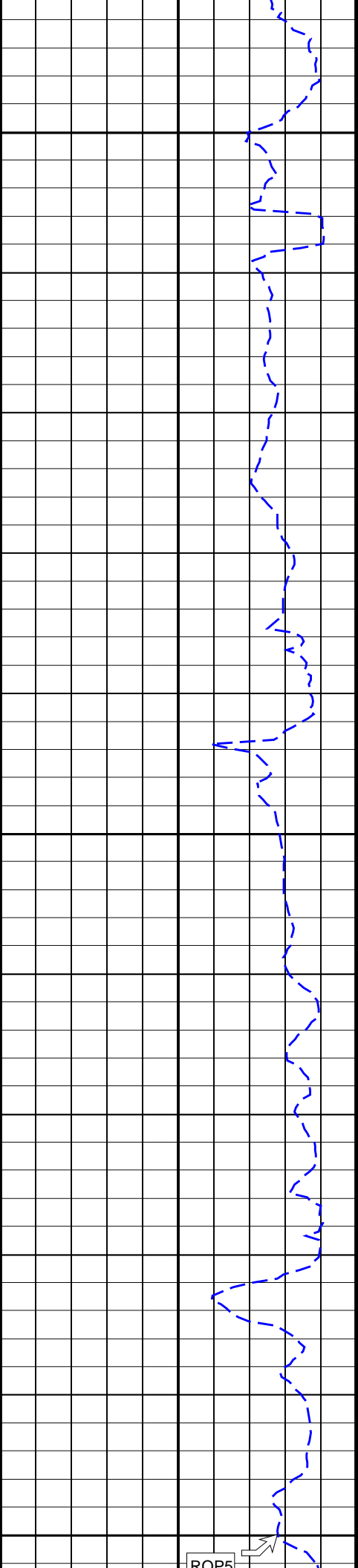




1000
TVD

1025
TVD

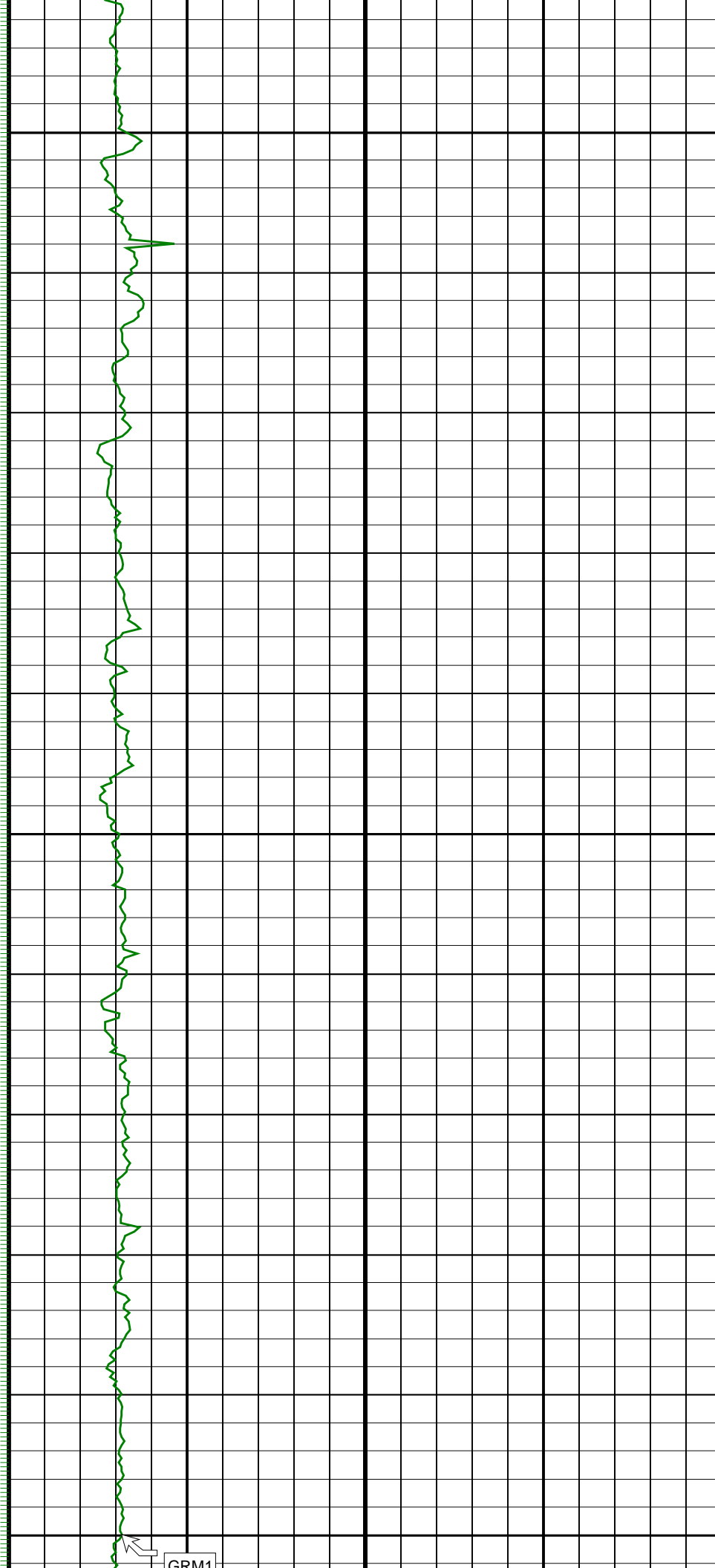




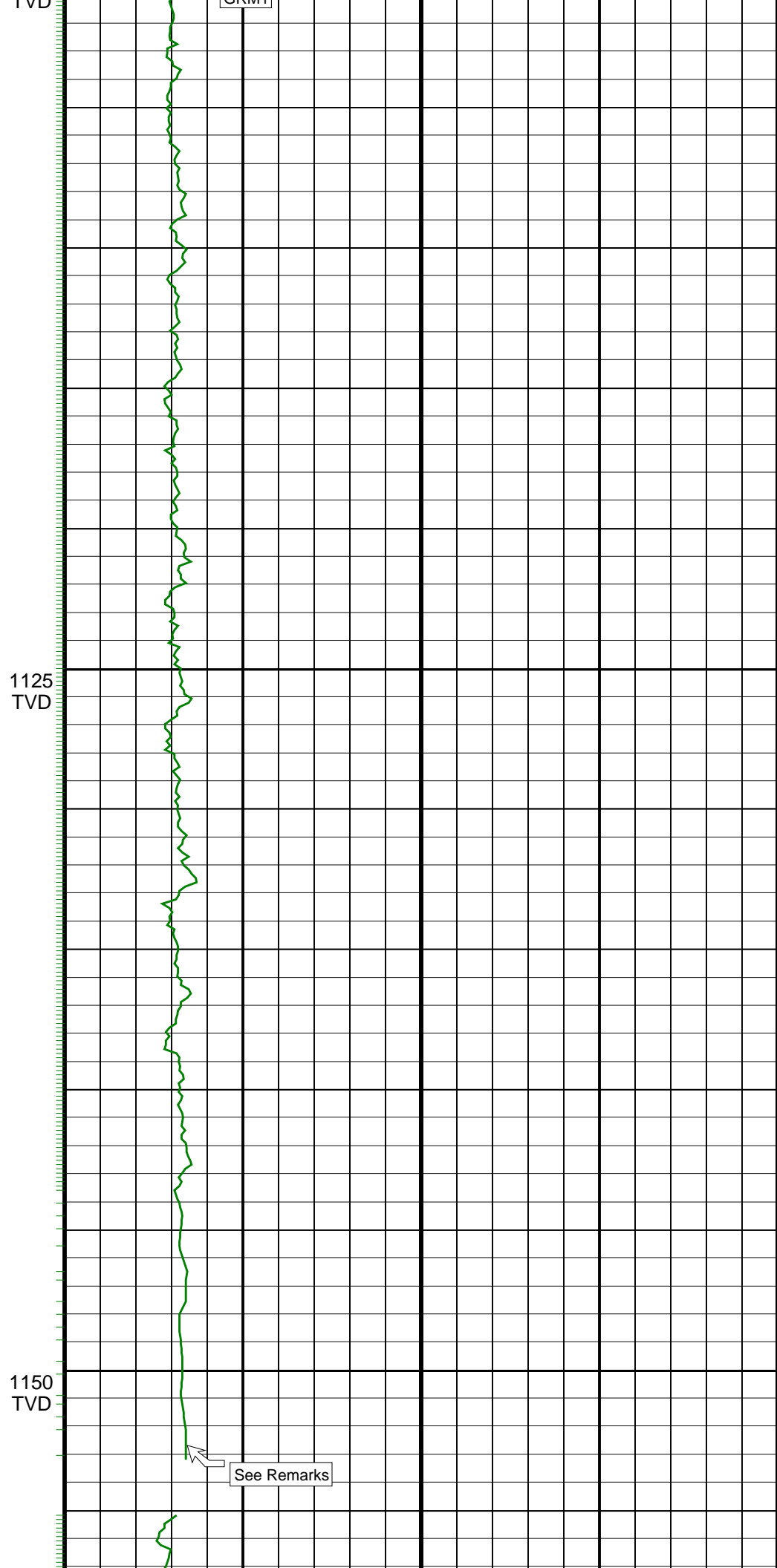
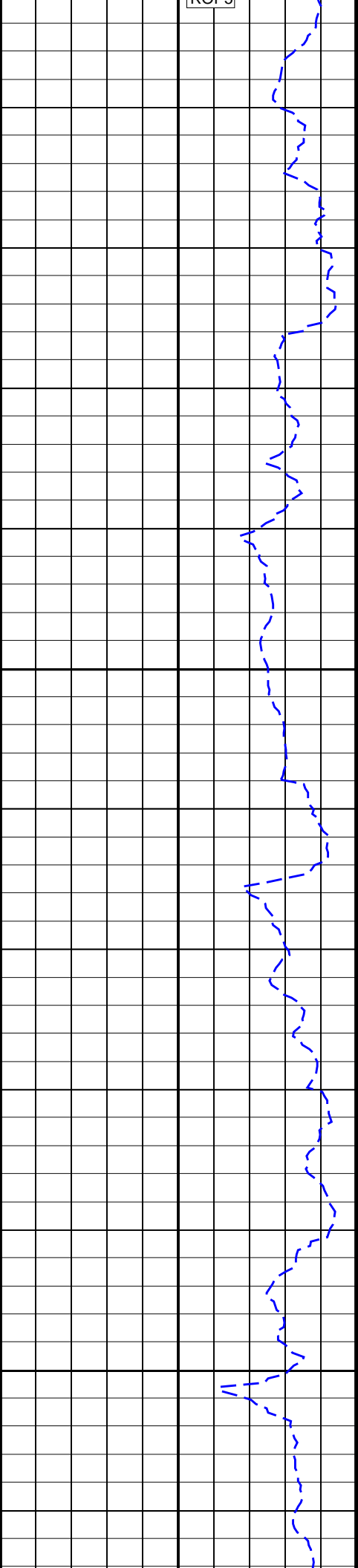
1050
TVD

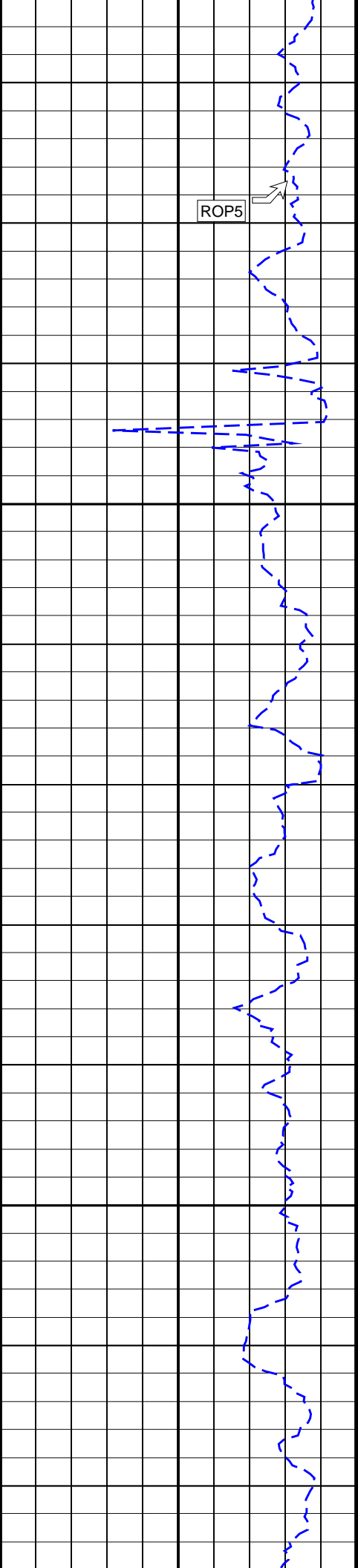
1075
TVD

1100
TVD



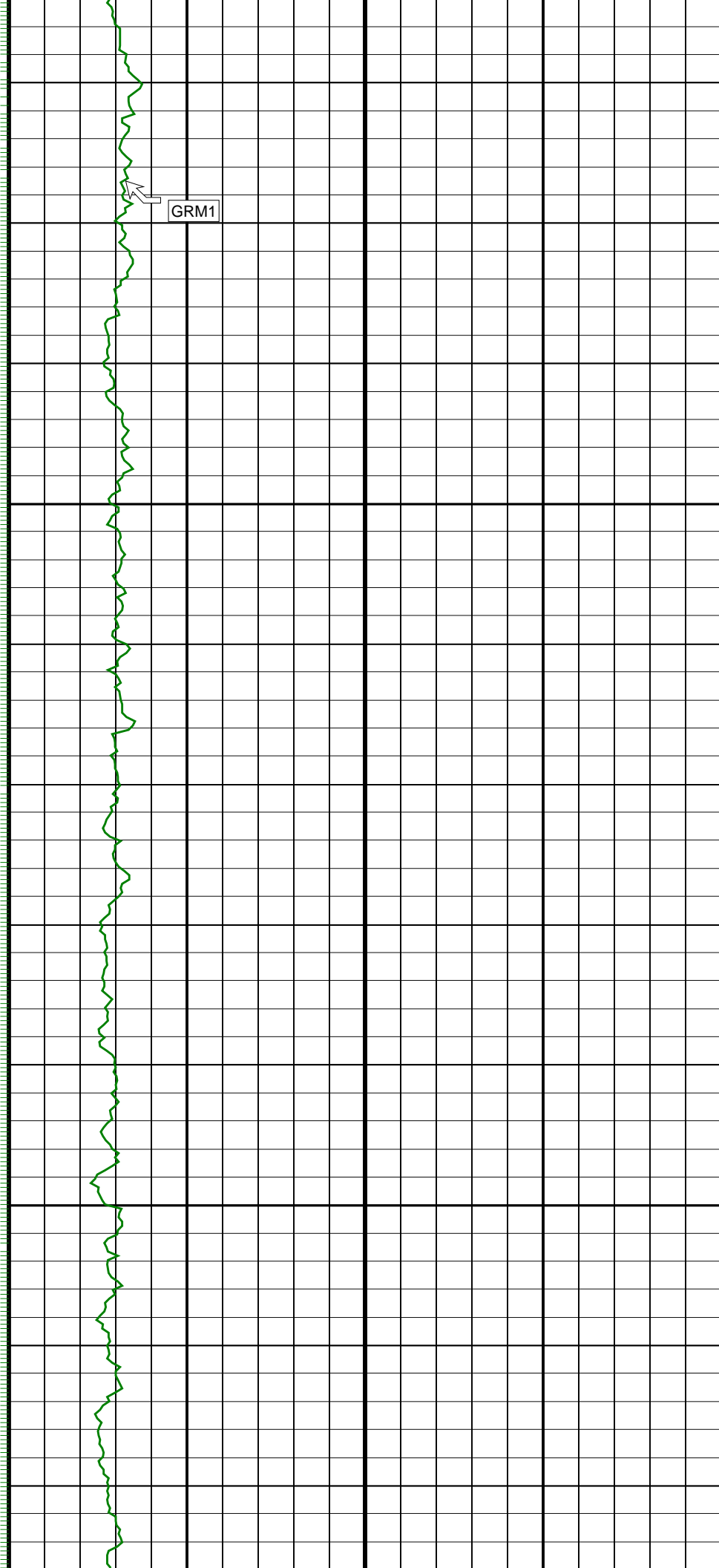
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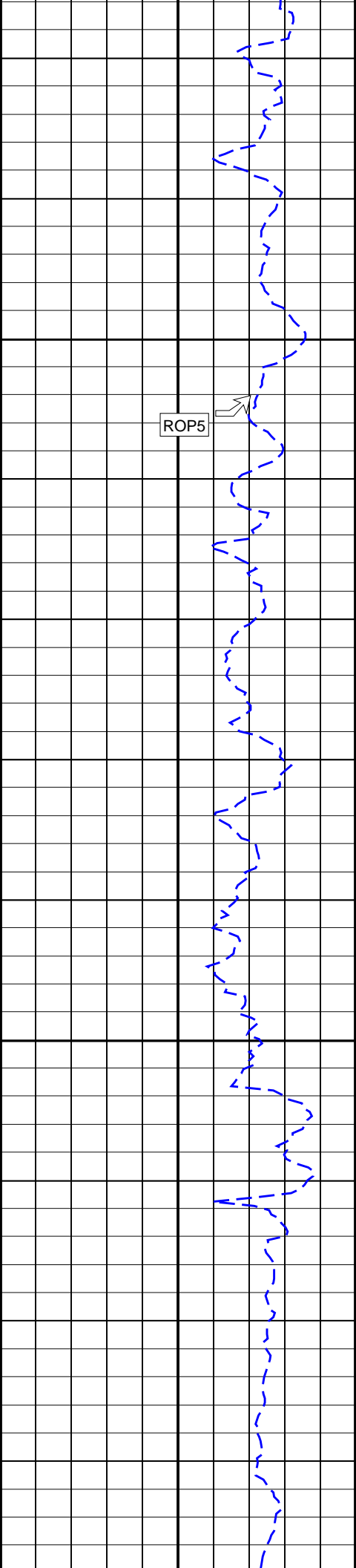




1175
TVD

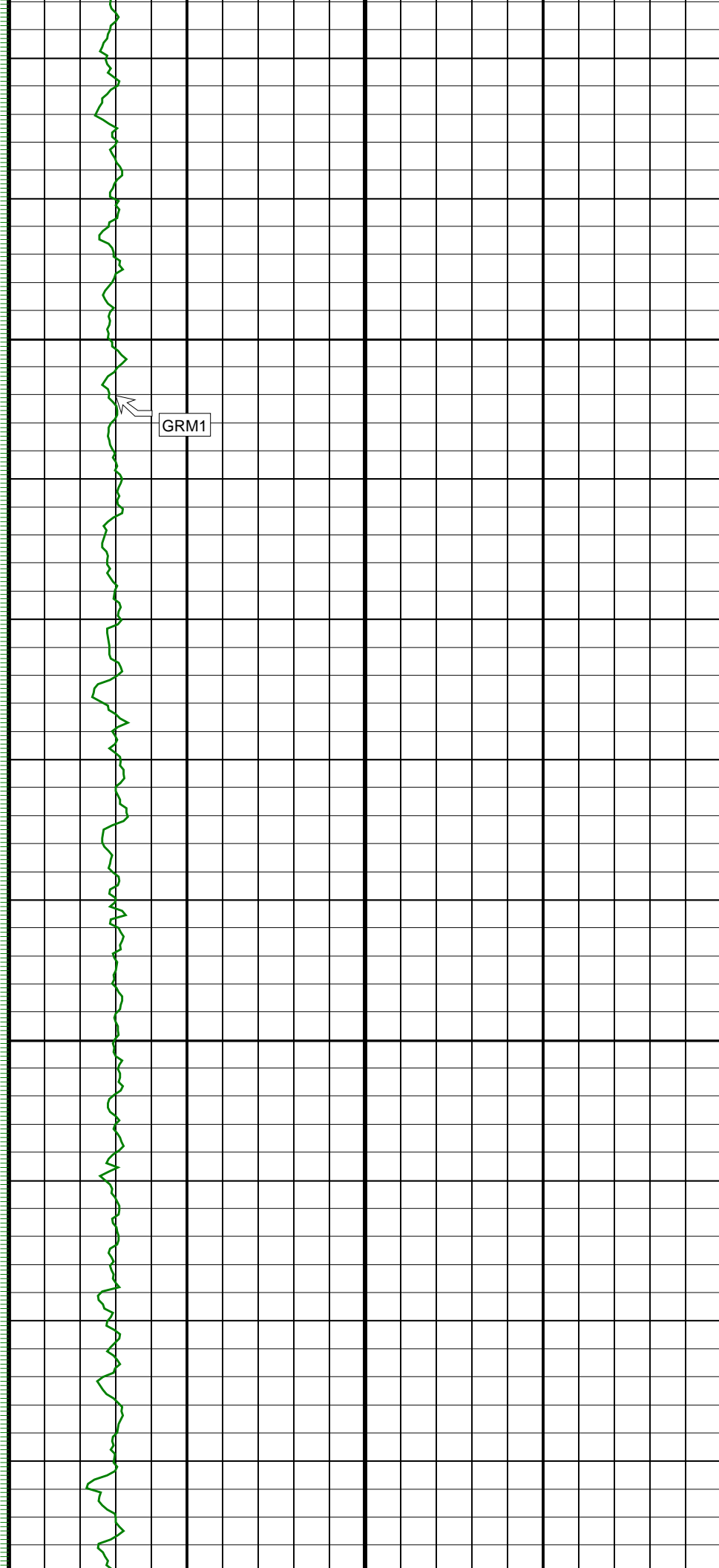
1200
TVD

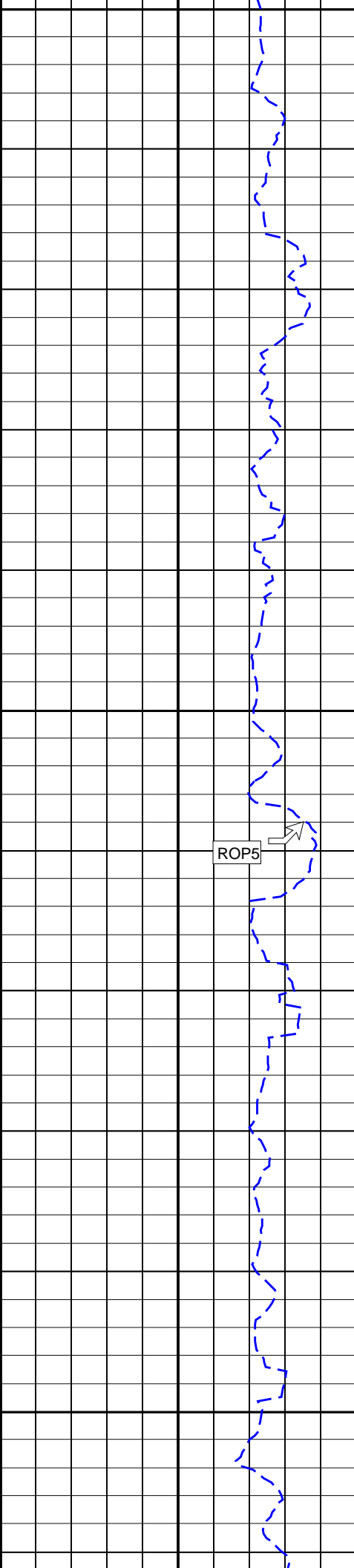




1225
TVD

1250
TVD



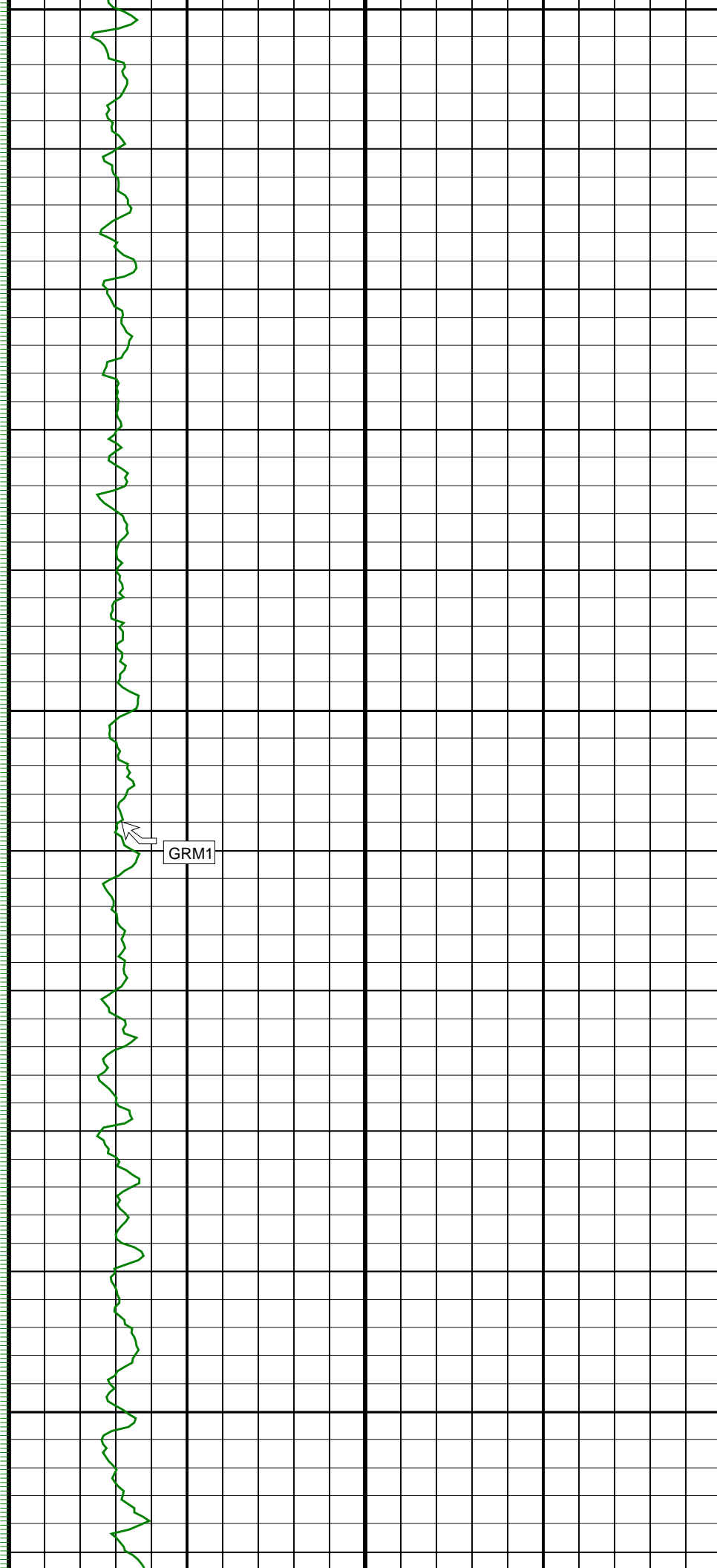


1325
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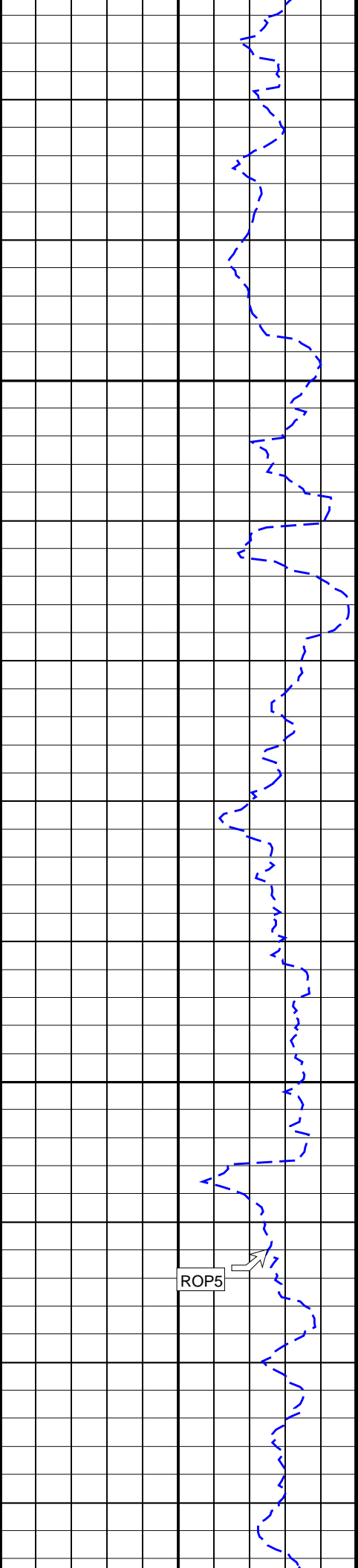
1350
TVD

1375
TVD

ROP5



GRM1



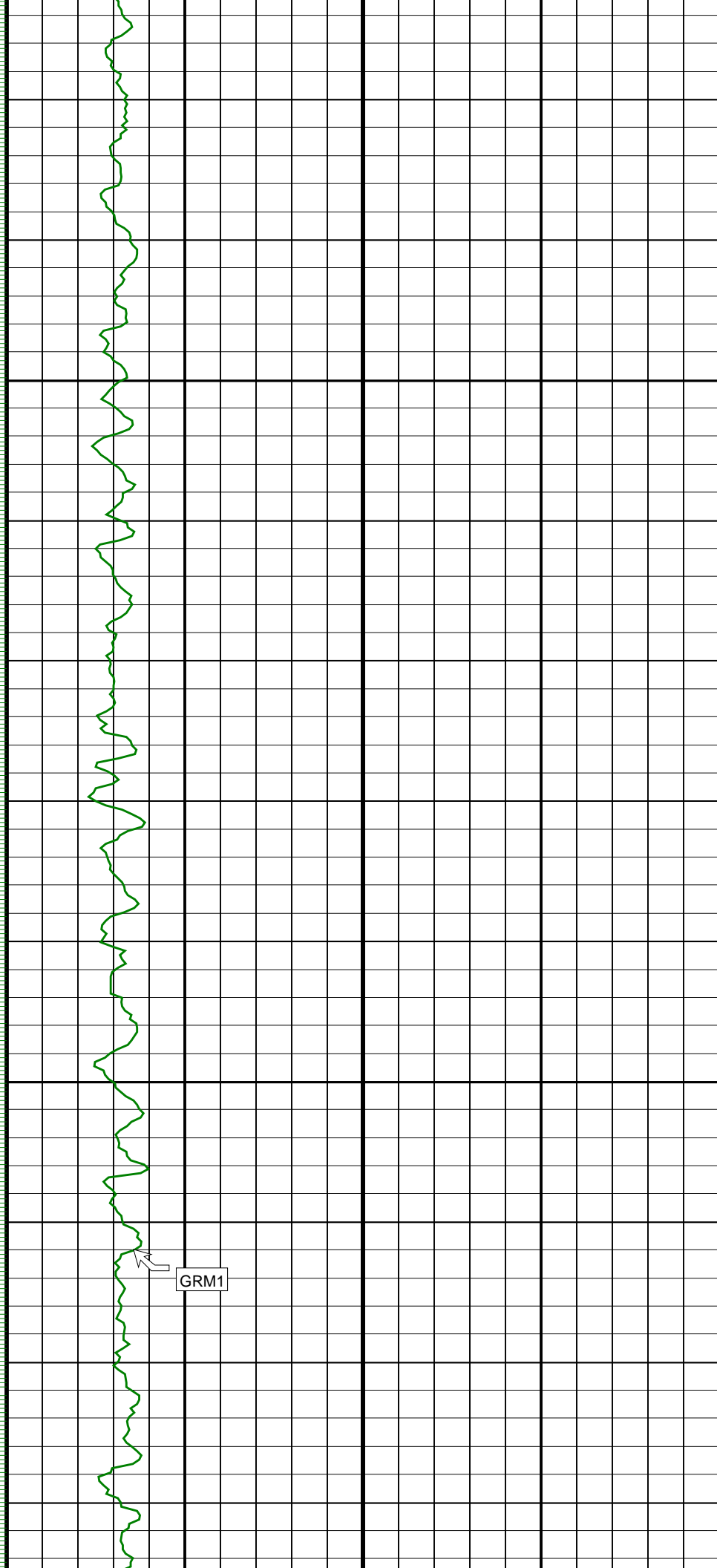
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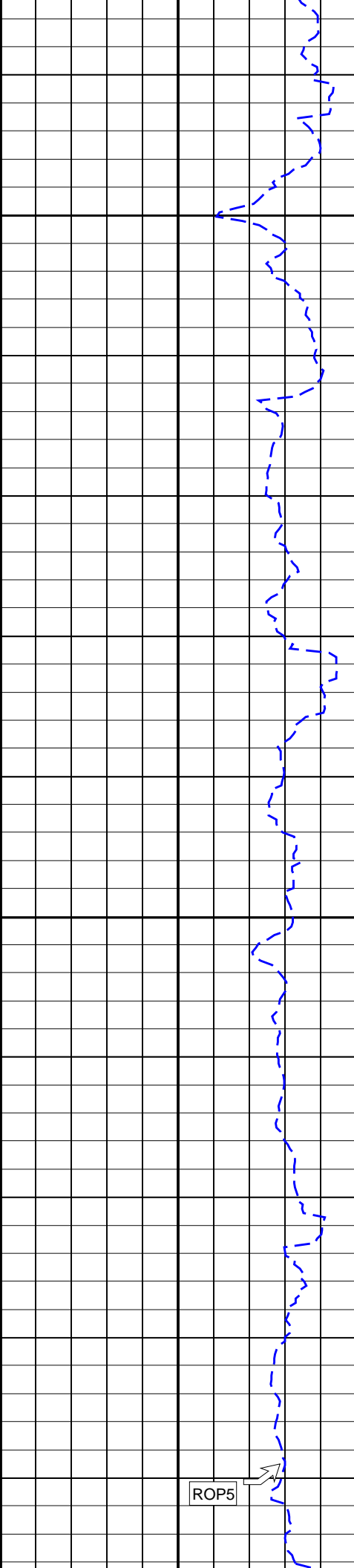
1475
TVD

ROP5



GRM1

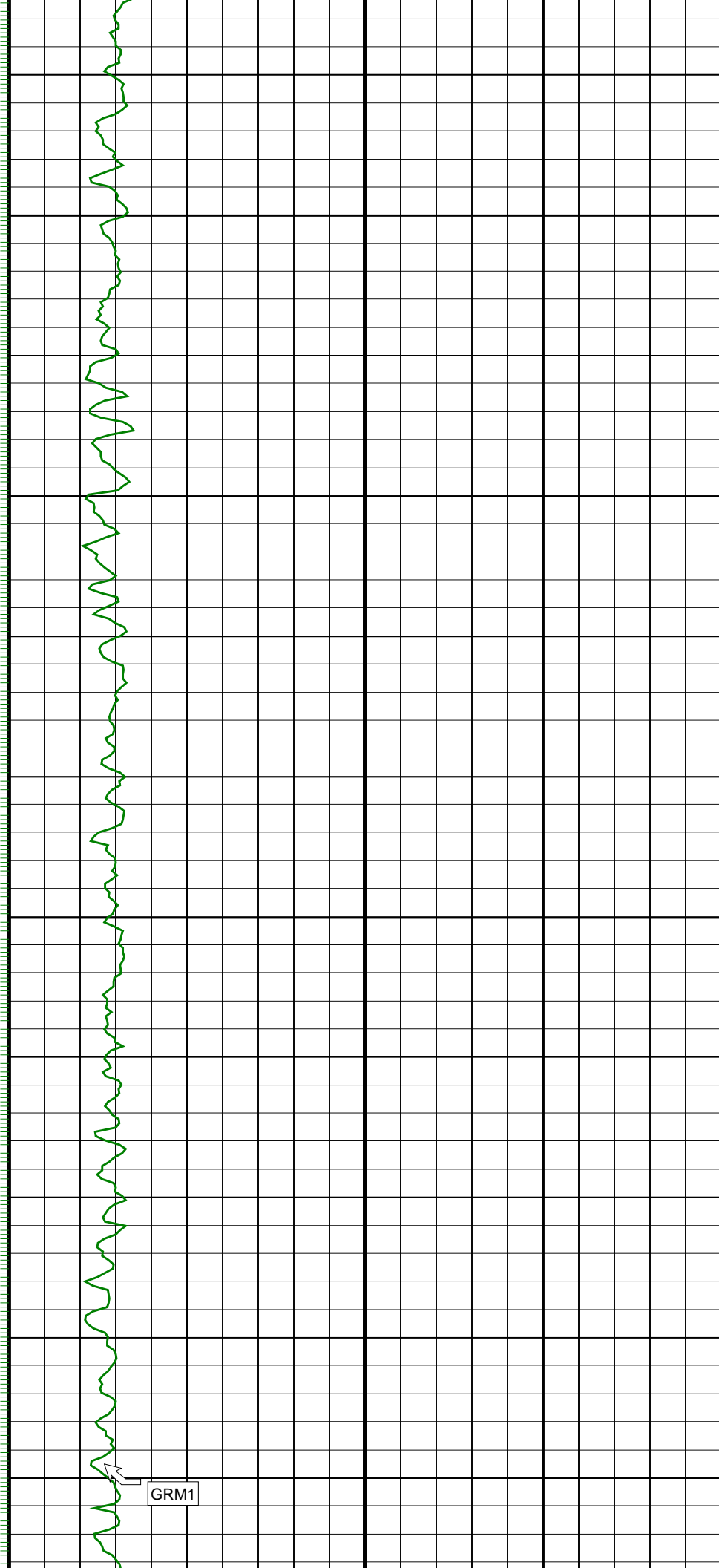




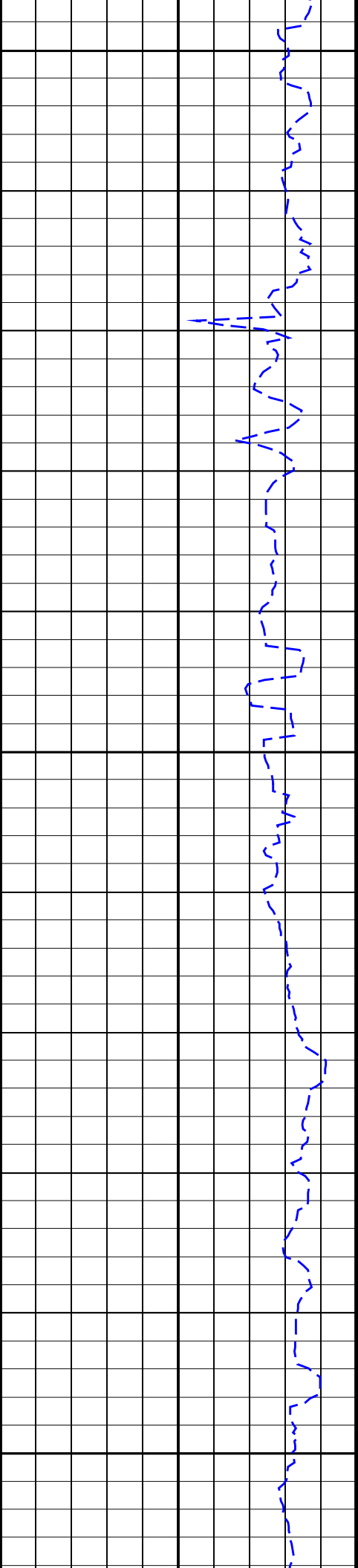
ROP5

1500
TVD

1525
TVD



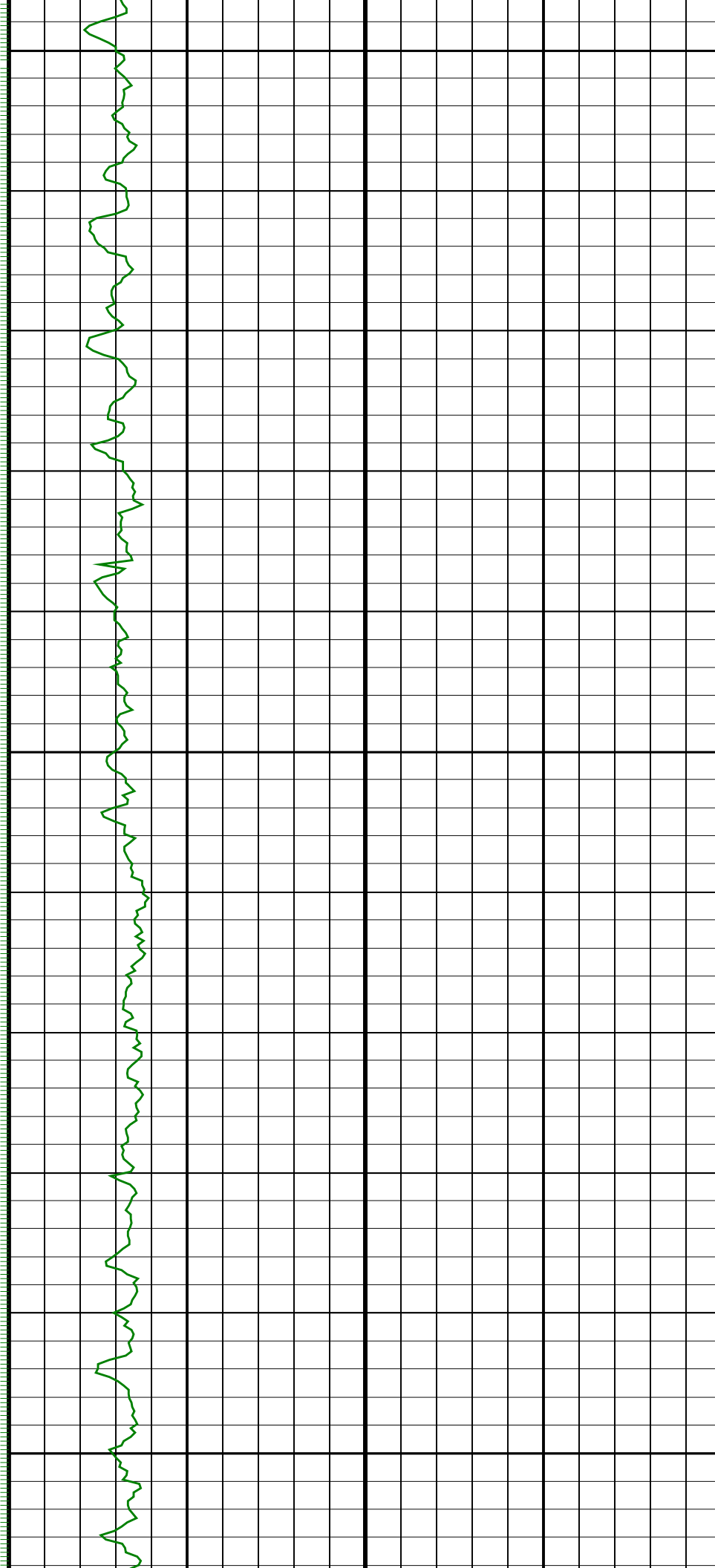
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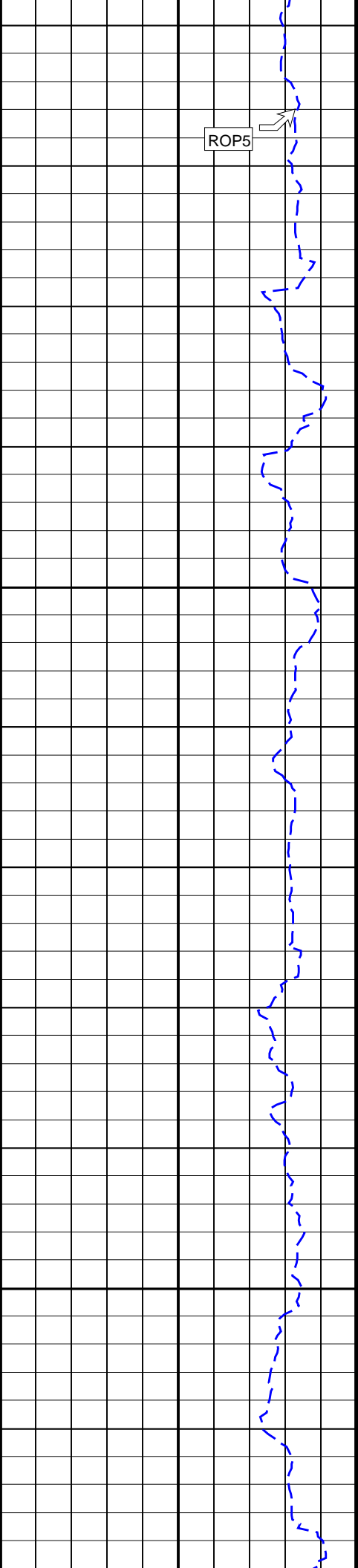


1550
TVD

1575
TVD

1600
TVD

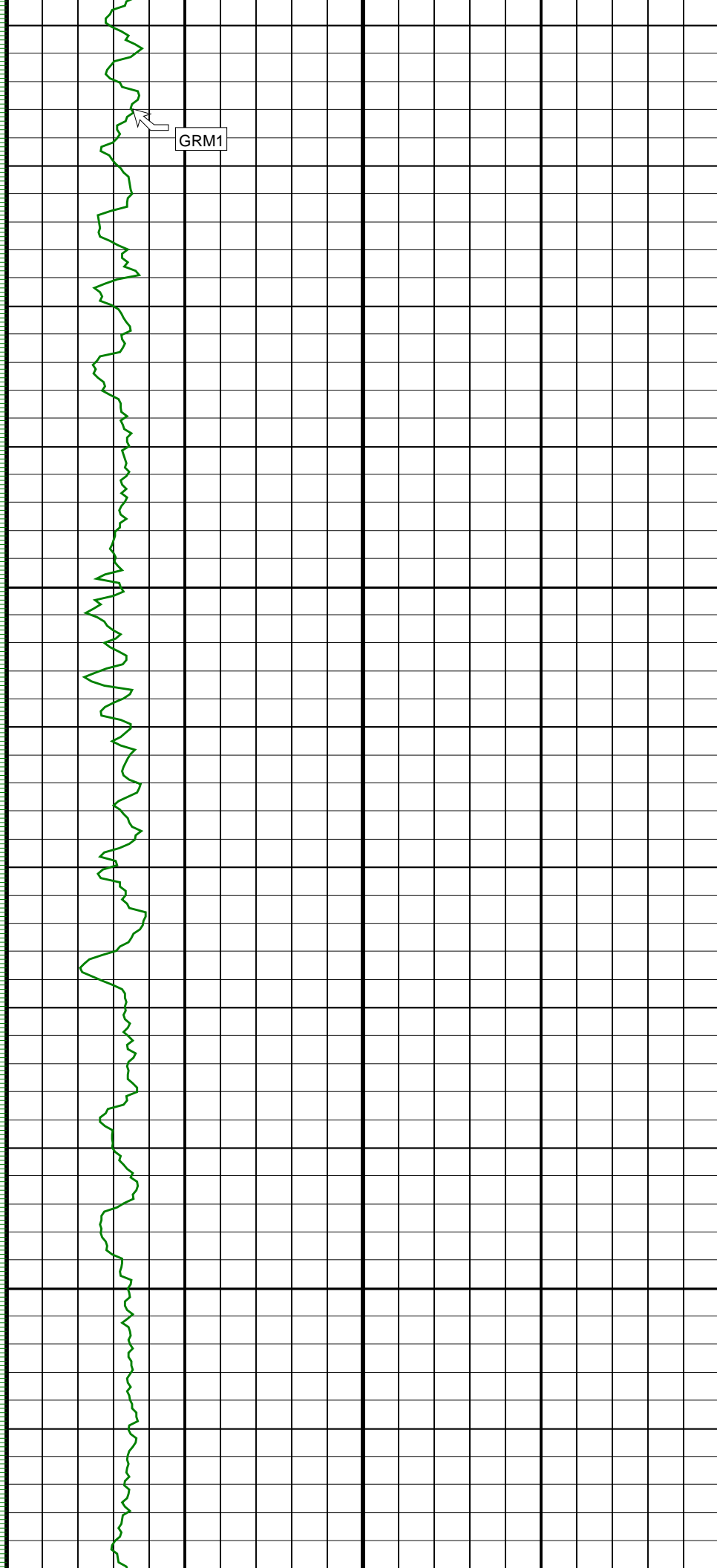




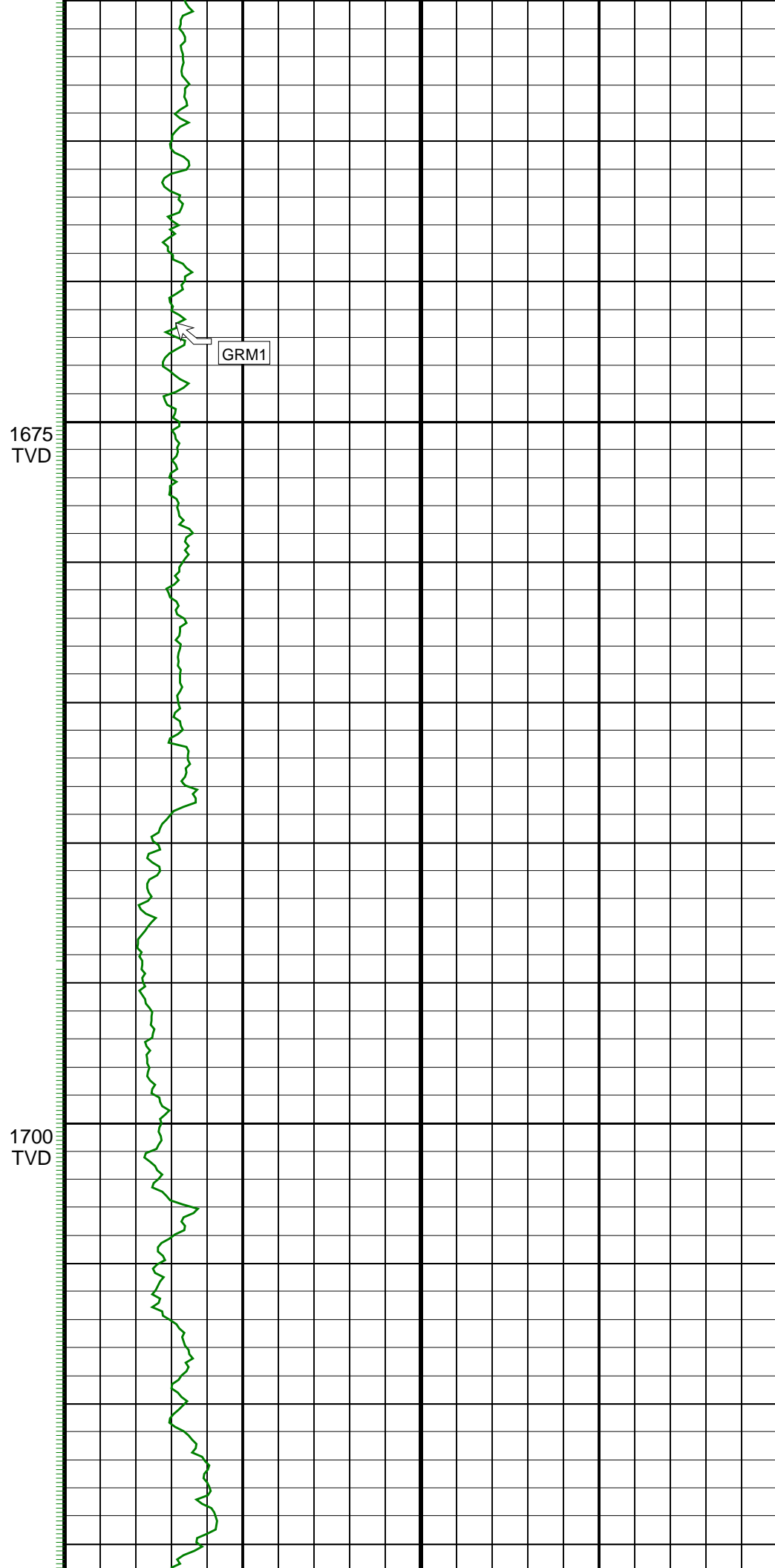
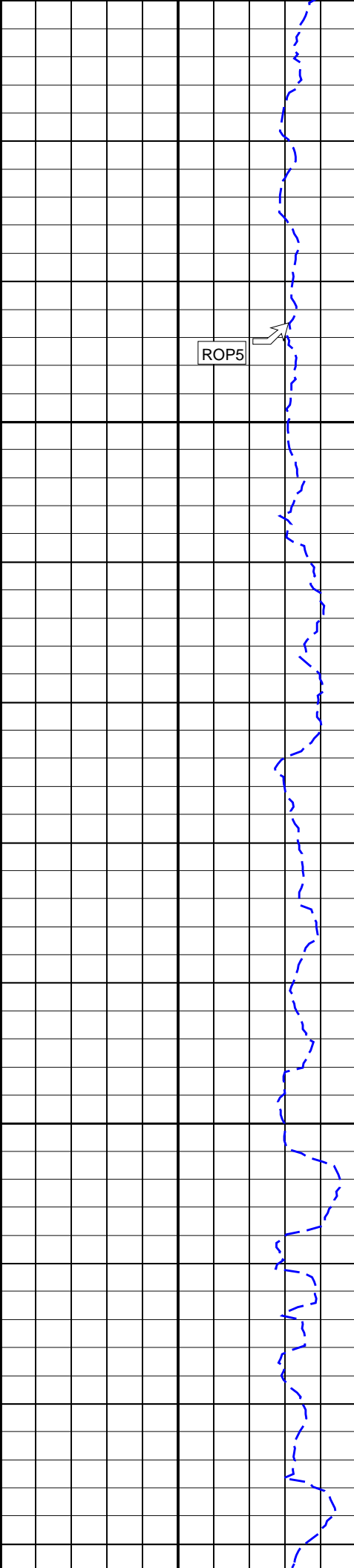
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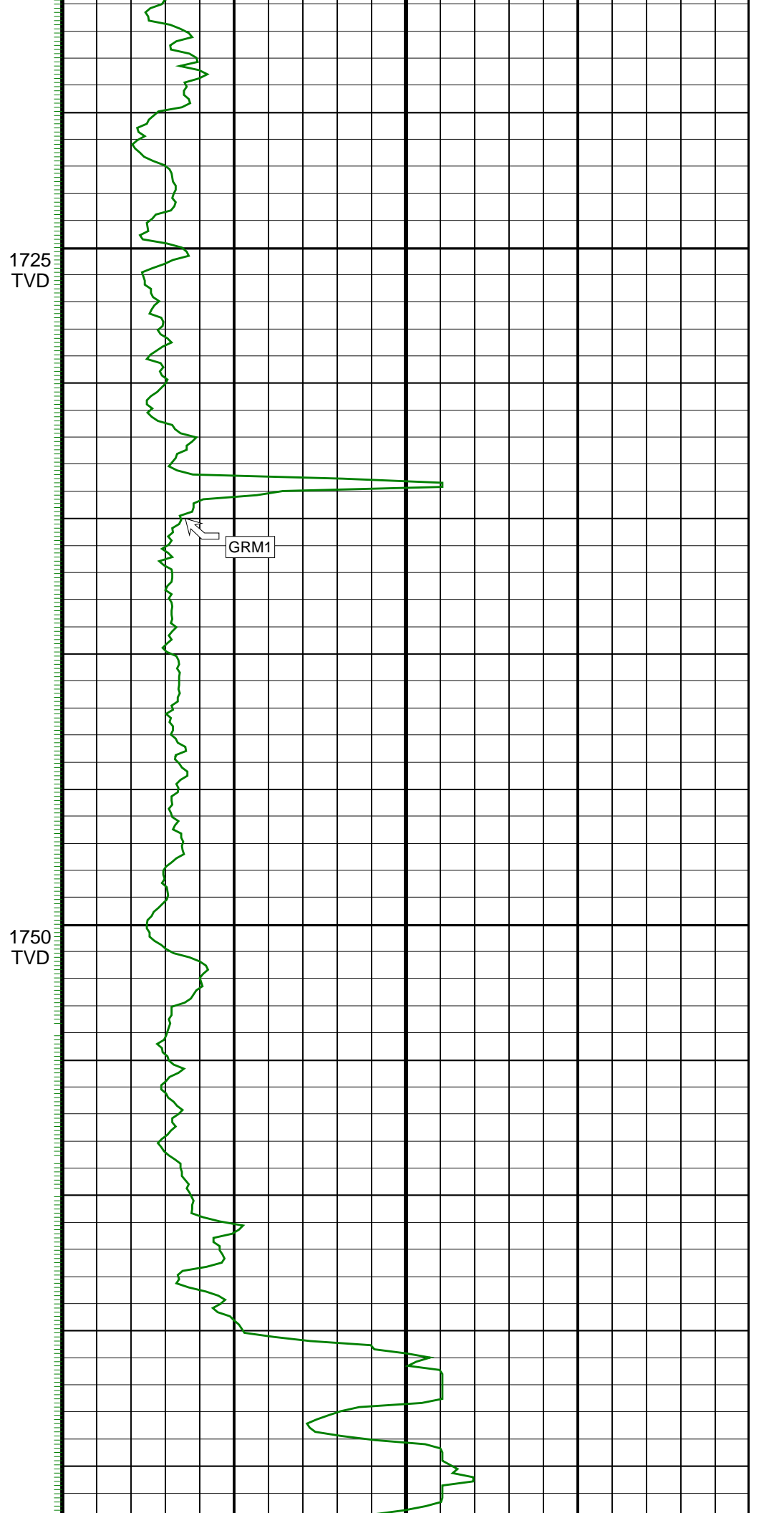
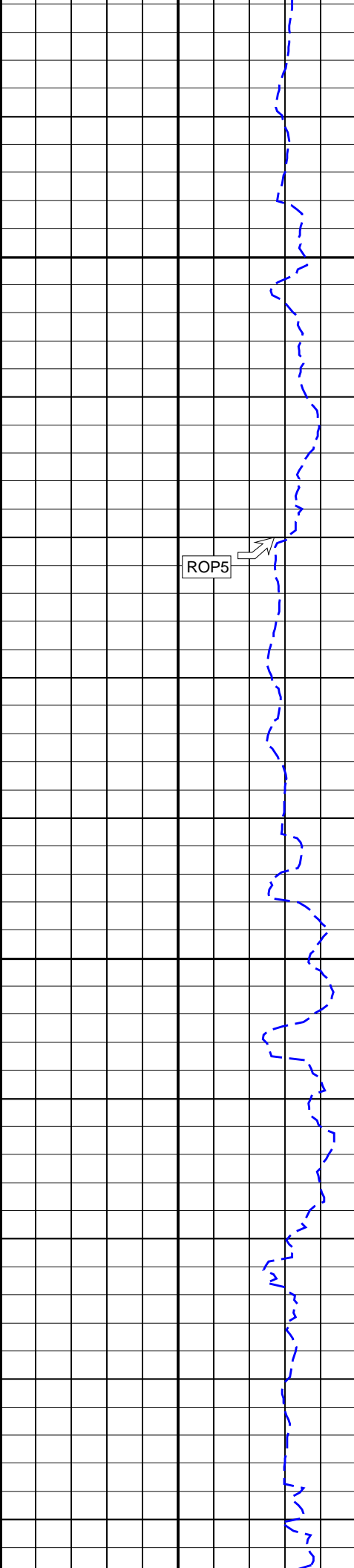
1625
TVD

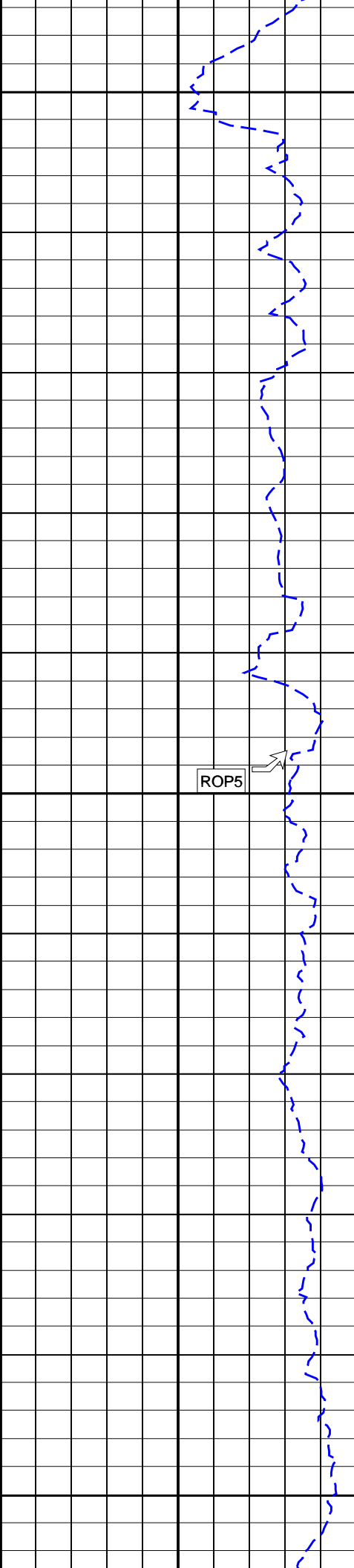
1650
TVD



GRM1



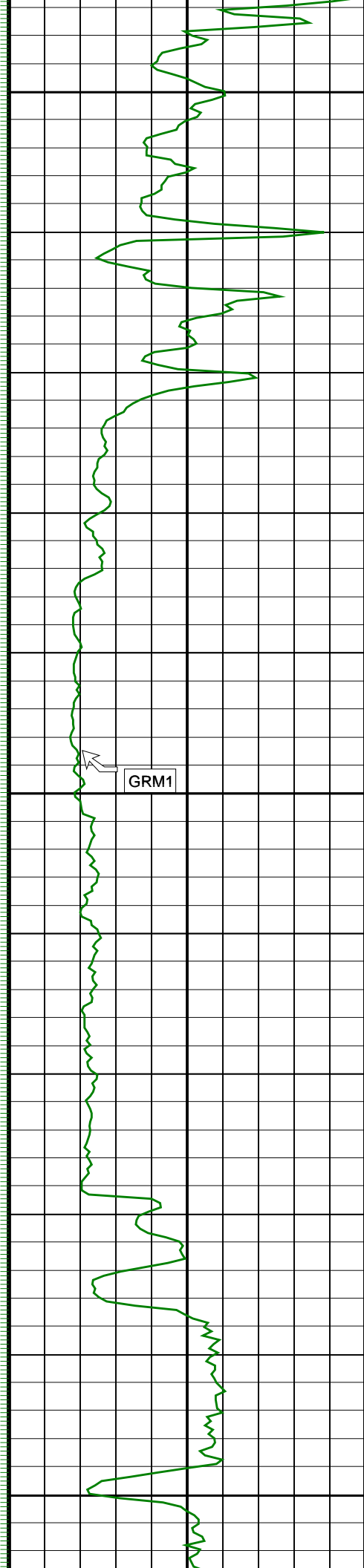


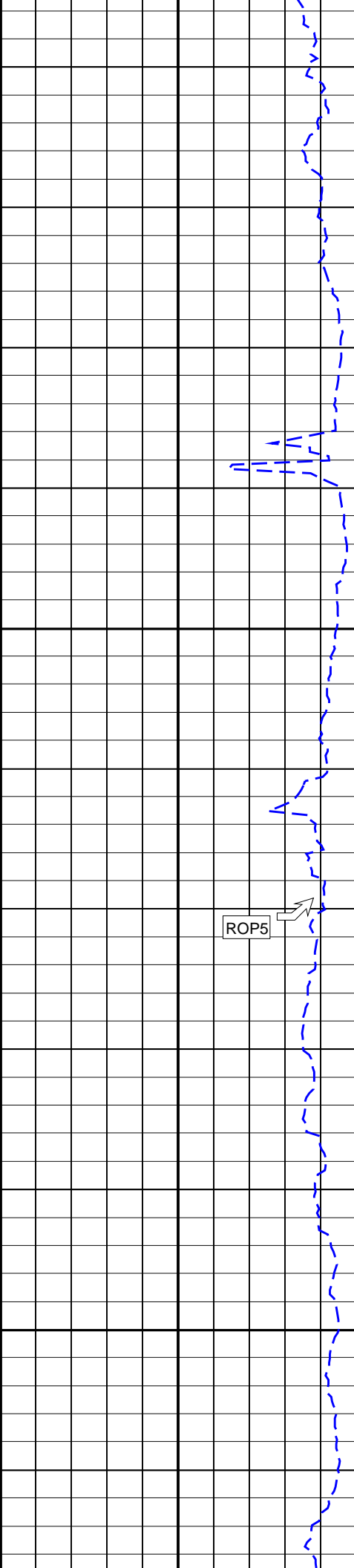


1775
TVD

1800
TVD

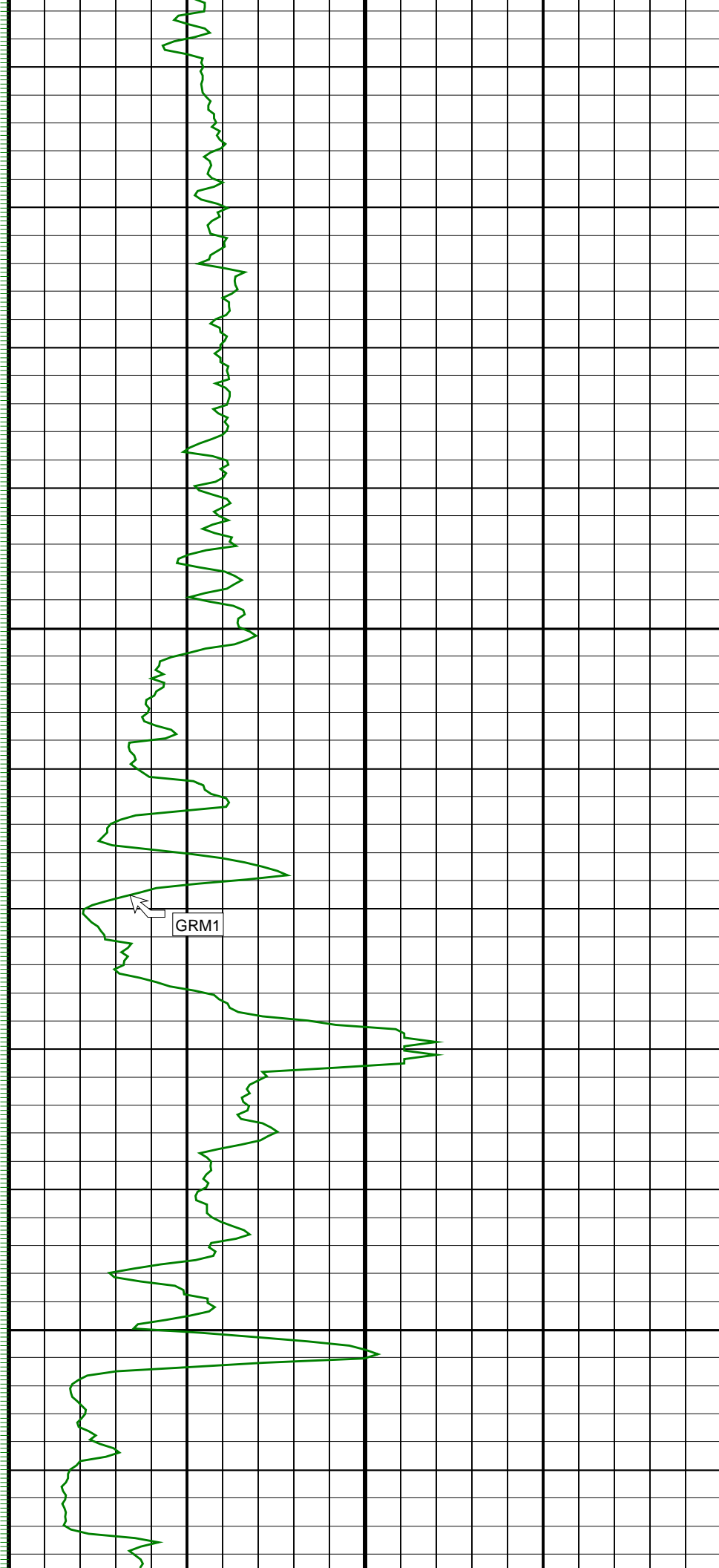
1825
TVD

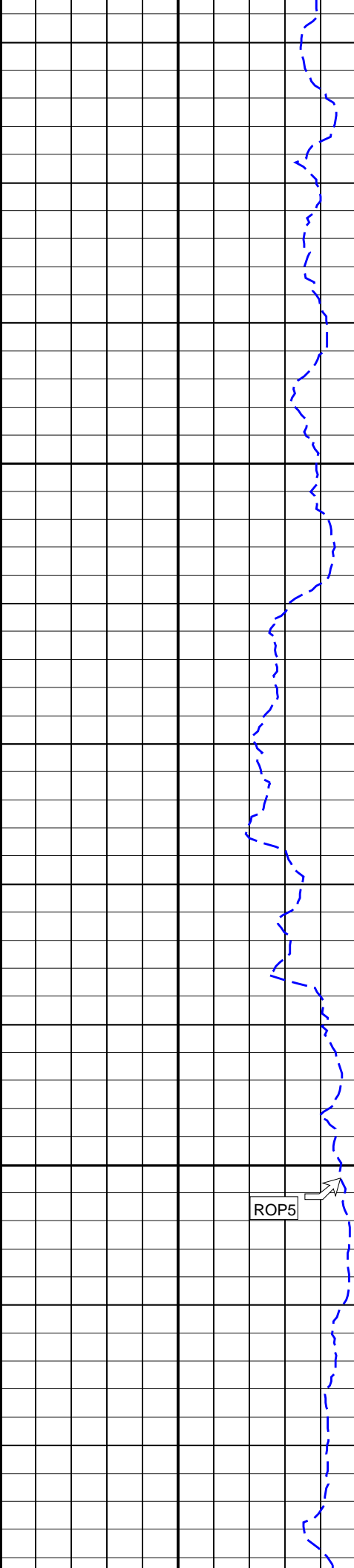




1850
TVD

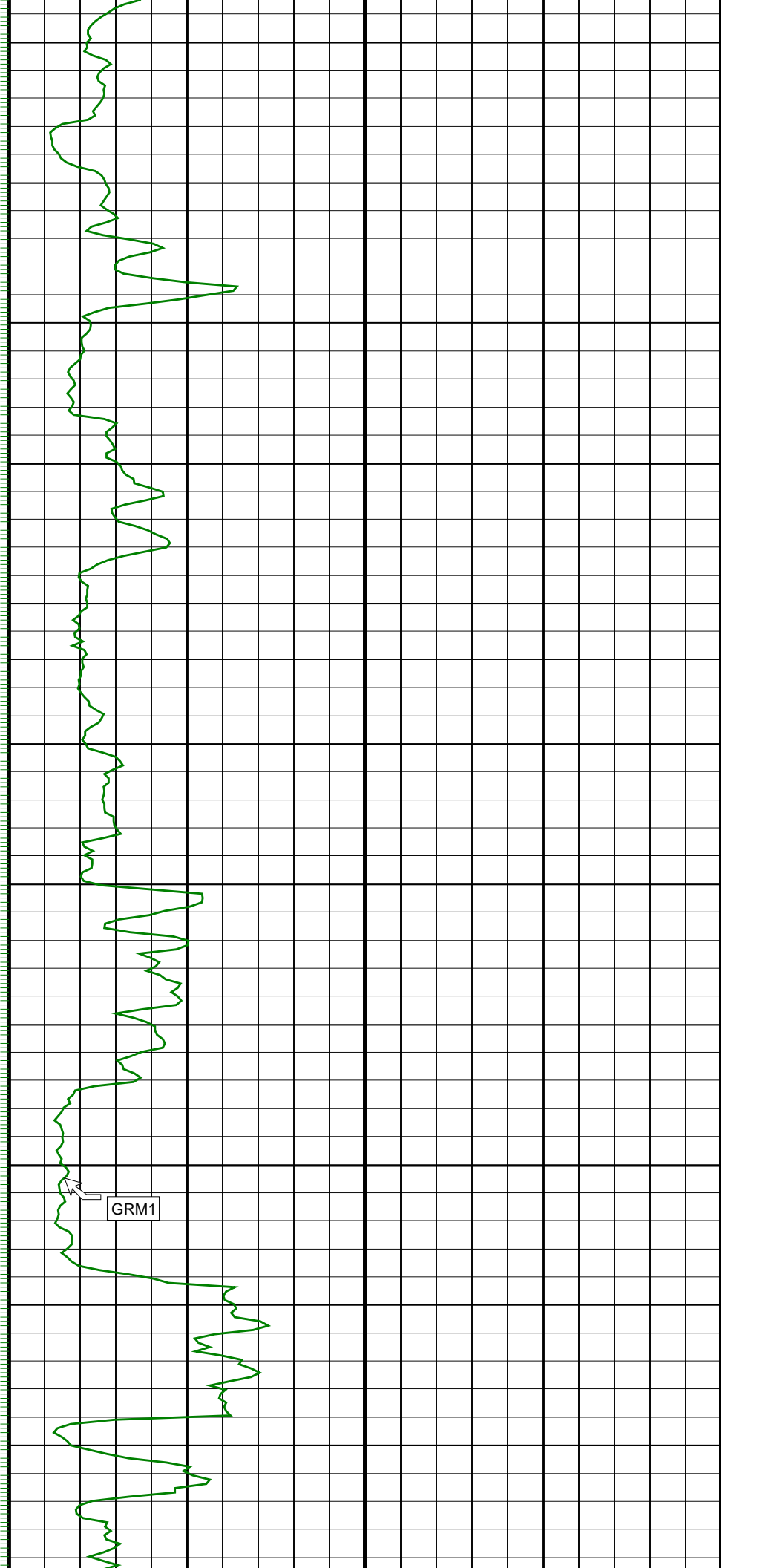
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TVD

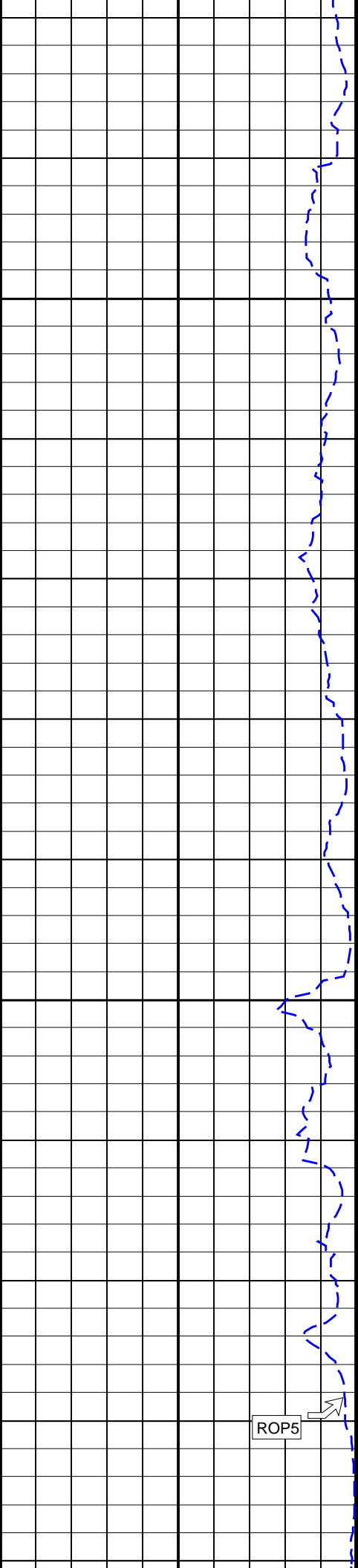




1900
TVD

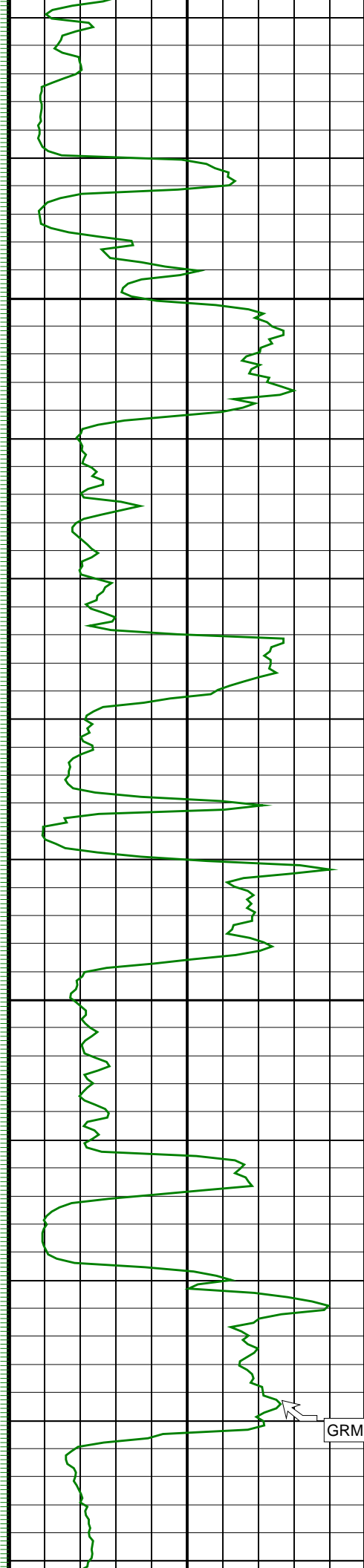
1925
TVD





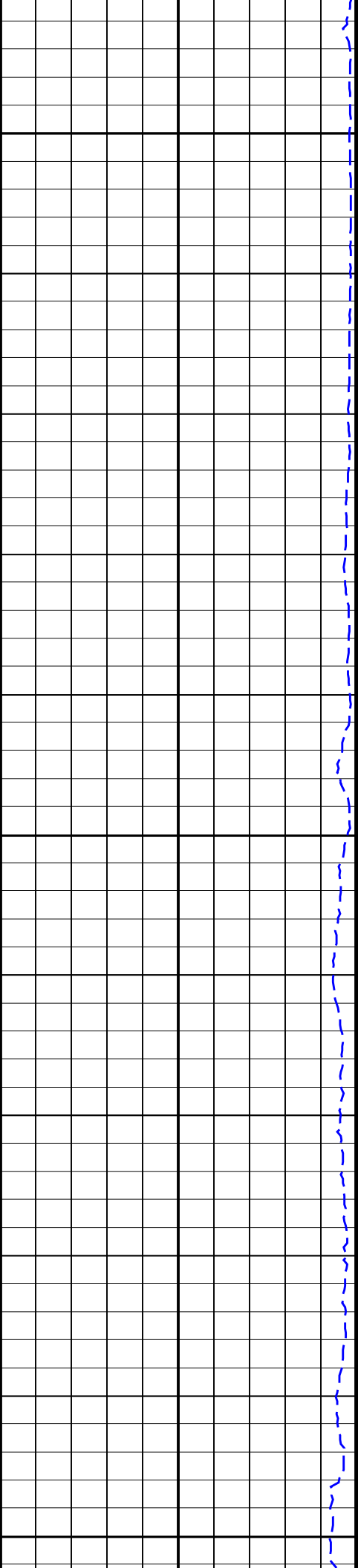
1950
TVD

1975
TVD



GRM1

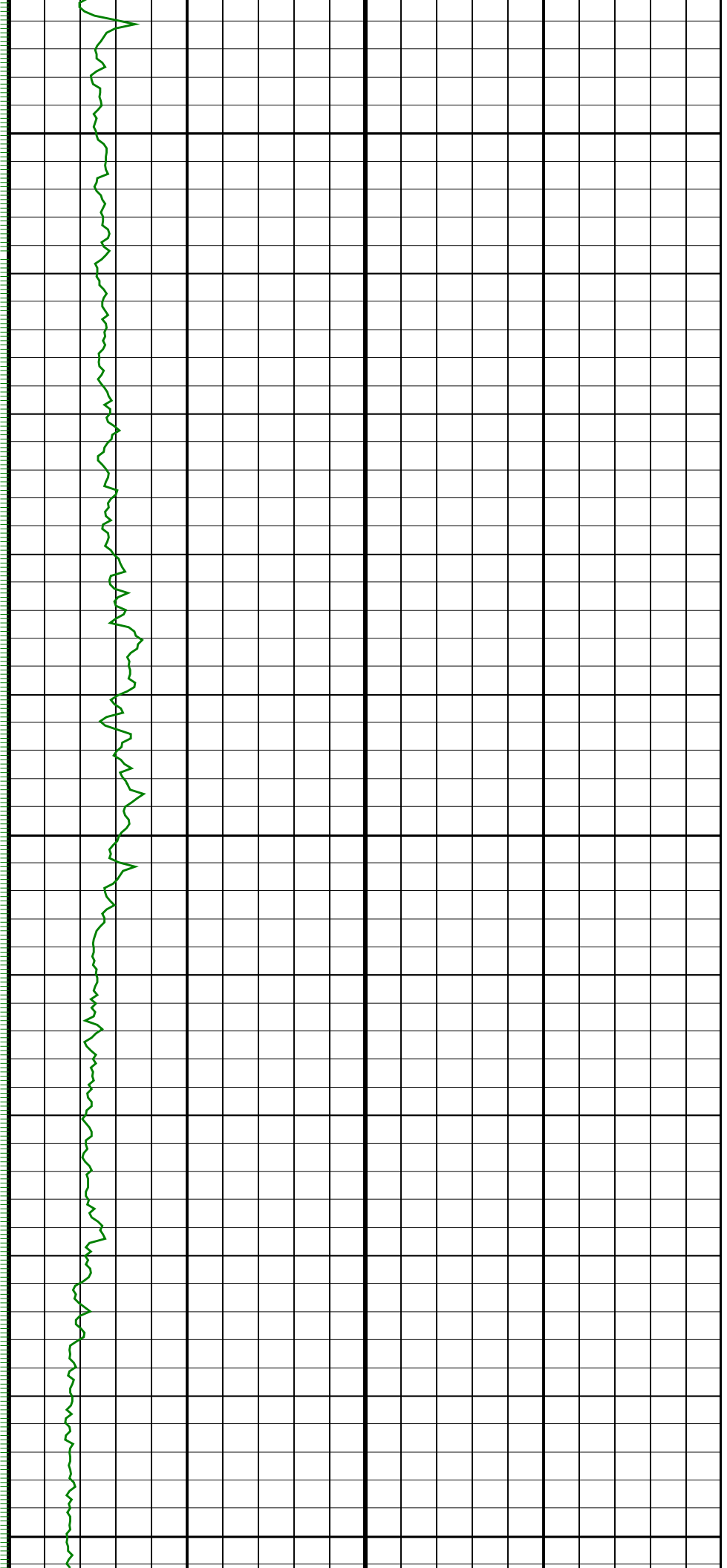
ROP5

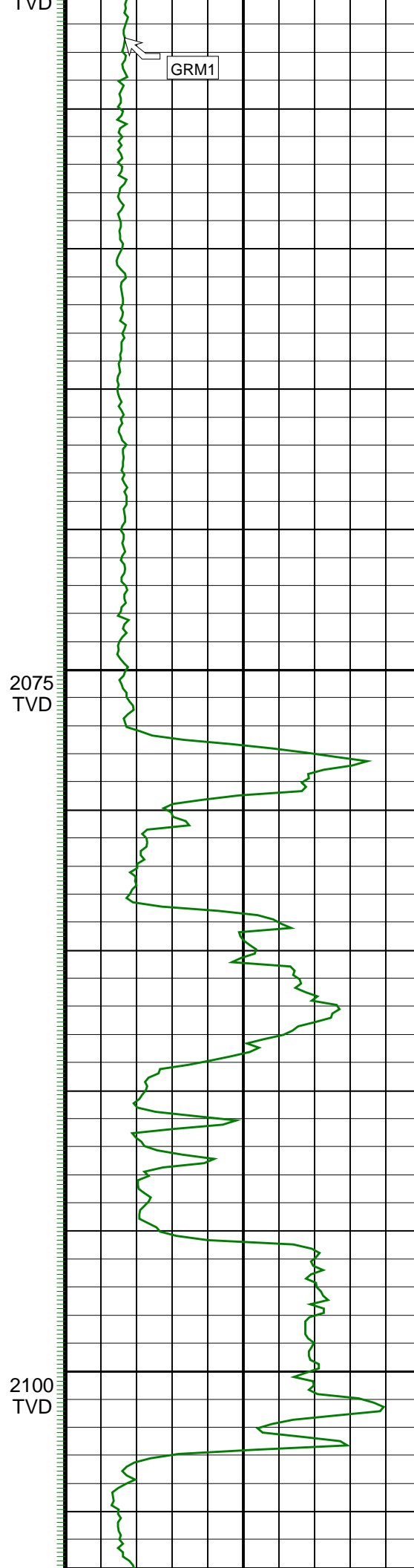
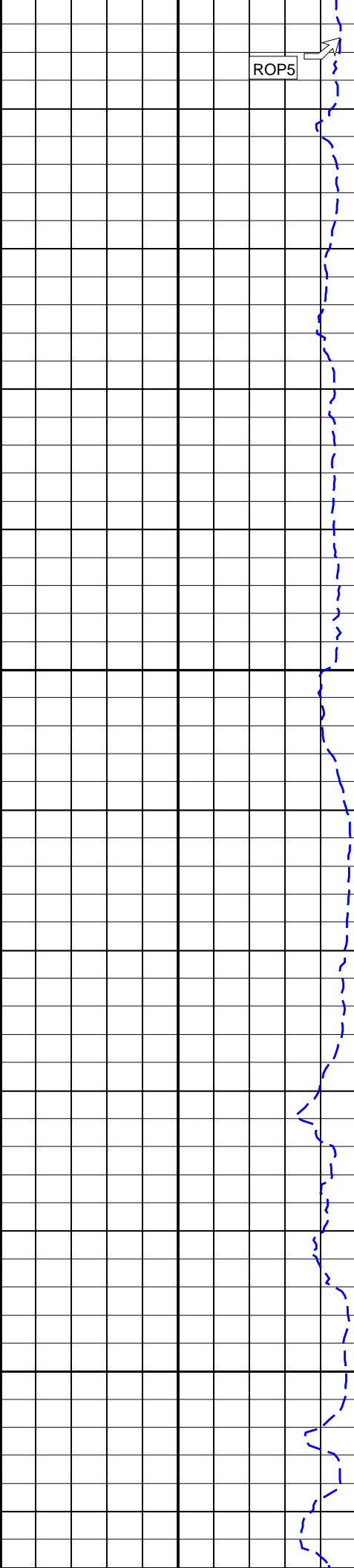


2000
TVD

2025
TVD

2050
TVD



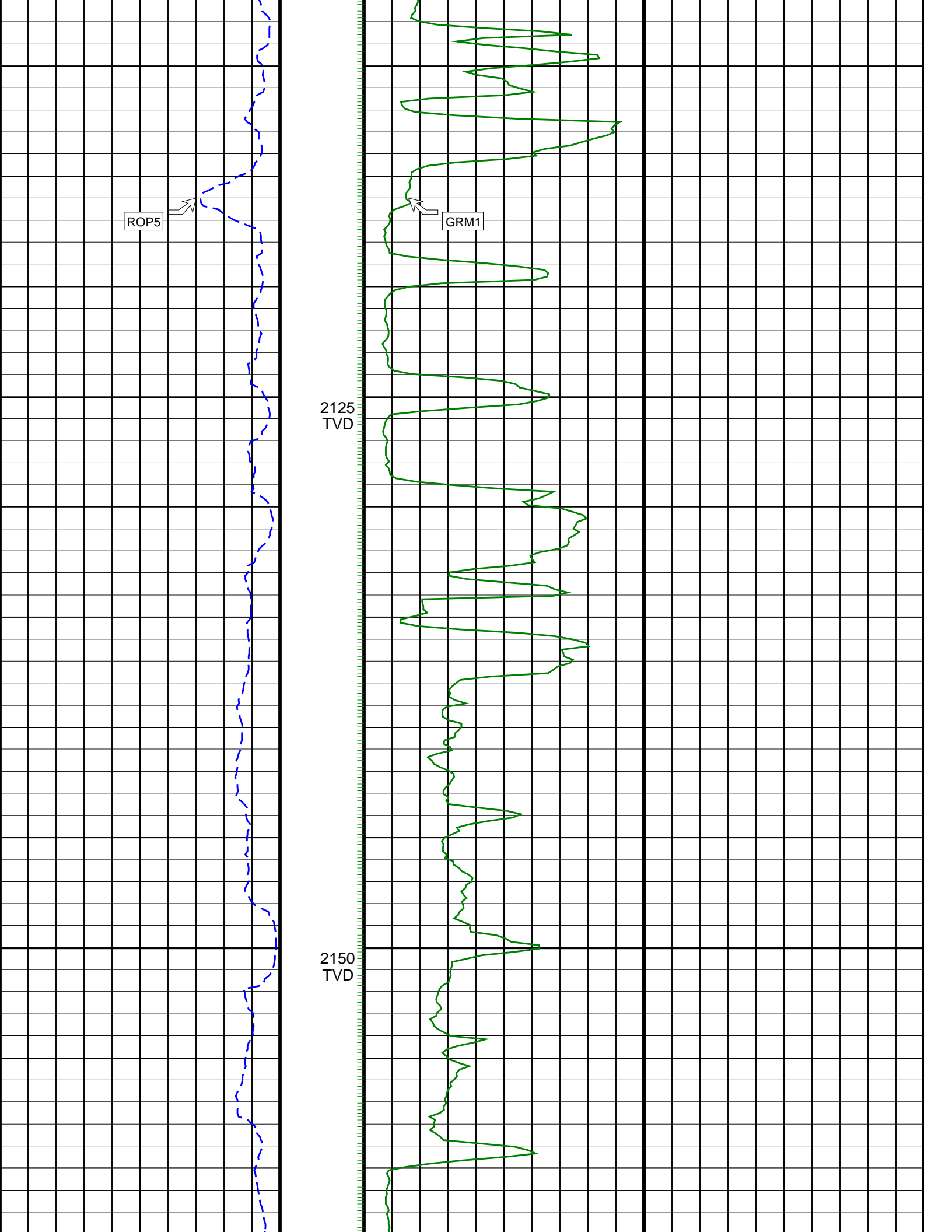


ROP5

GRM1

2125
TVD

2150
TVD



ROP5

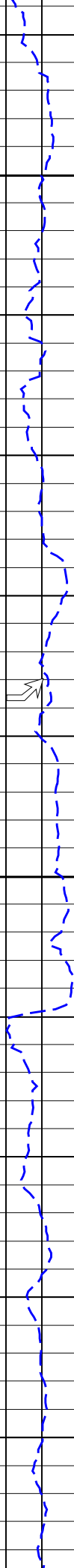


2175
TVD

GRM1

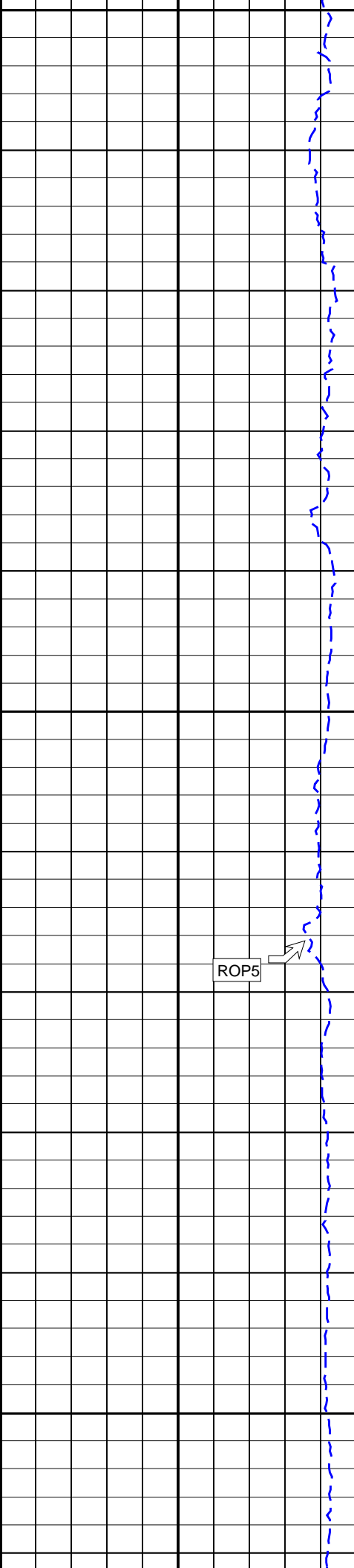


2200
TVD



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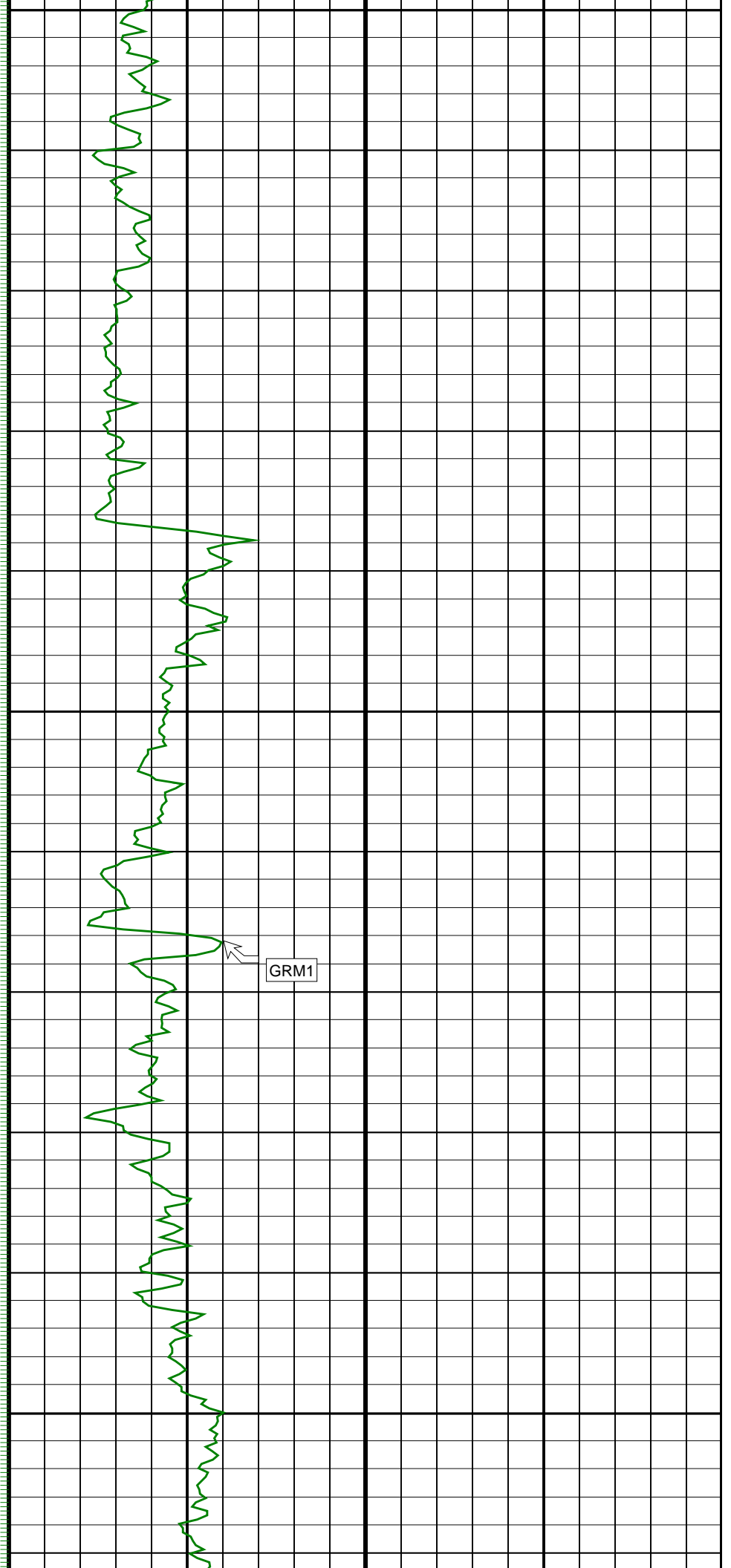
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2275
TVD

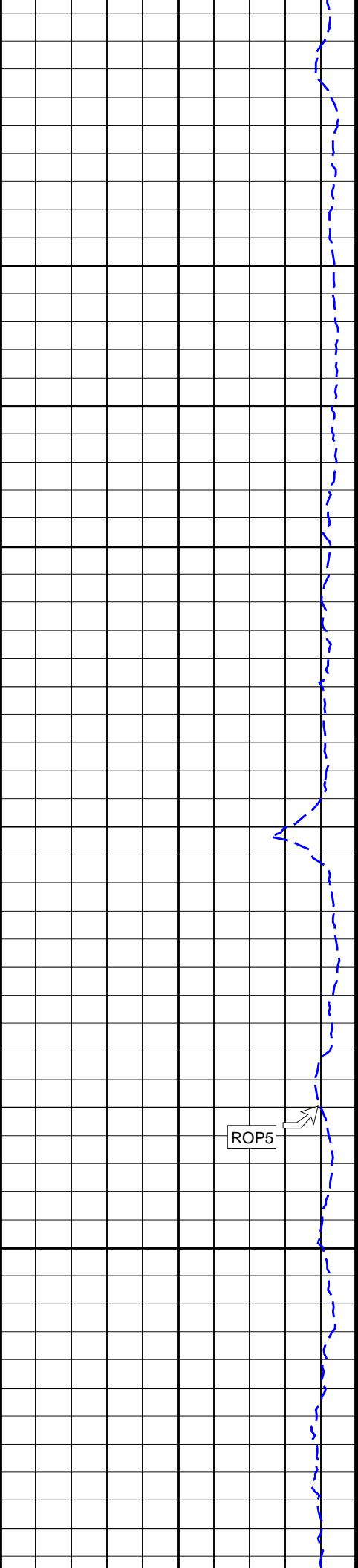
2300
TVD

2325
TVD



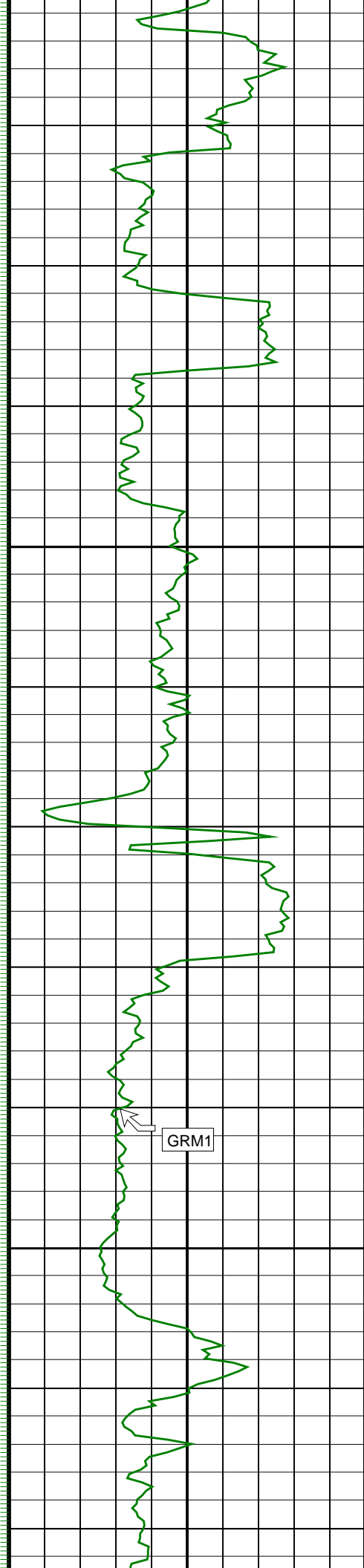
GRM1

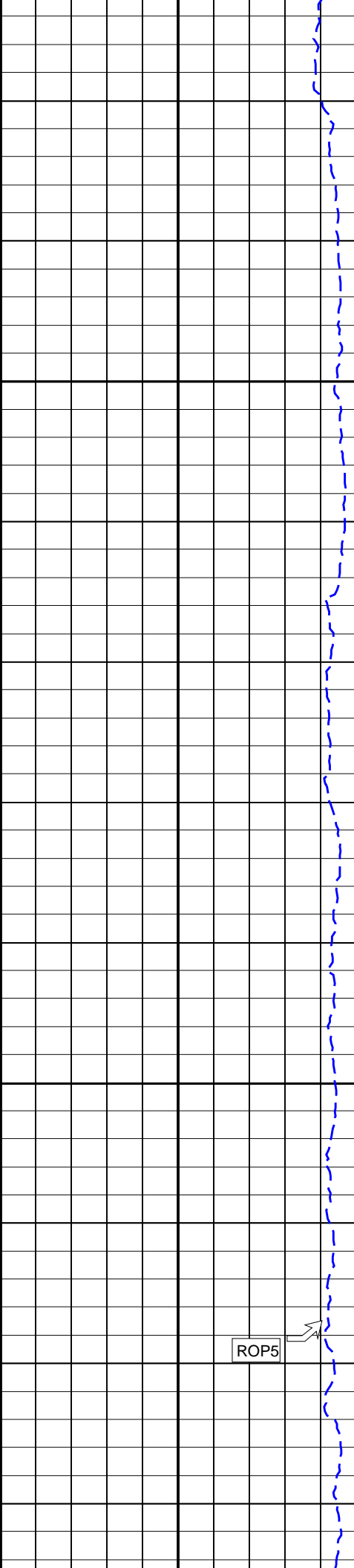
ROP5



2350
TVD

2375
TVD

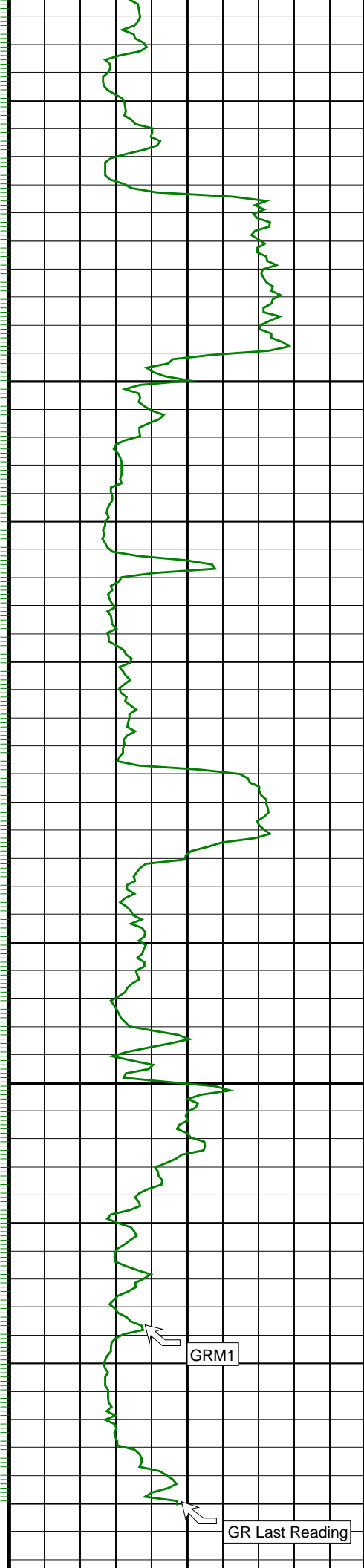




ROP5

2400
TVD

2425
TVD



GRM1

GR Last Reading

2450
TVD

ROP*5 (ROP5) (M/HR)	GR(TM) (GRM1) (GAPI)
200	400
0	0

PIP SUMMARY

GR(TM) PIP

SCHLUMBERGER

Survey report

16-Aug-2005 13:39:39

Page 1 of 4

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

Well.....: BMA A14A
API number.....:
Engineer.....: R. Borjas/L. Johnston

RIG.....: ISDL 453
STATE.....: Victoria

Spud date.....: 01-Aug-2005
Last survey date.....: 10-Aug-05
Total accepted surveys...: 73
MD of first survey.....: 1005.00 m
MD of last survey.....: 3079.00 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.....: 32.82 m
DF above permanent.....: 32.82 m

----- Vertical section origin-----
Latitude (+N/S-).....: -2.90 m
Departure (+E/W-).....: 8.31 m

Azimuth from Vsect Origin to target: 167.40 degrees

----- Geomagnetic data -----
Magnetic model.....: BGGM version 2005
Magnetic date.....: 01-Aug-2005
Magnetic field strength...: 1202.90 HCNT
Magnetic dec (+E/W-).....: 13.10 degrees
Magnetic dip.....: -69.02 degrees

----- MWD survey Reference Criteria -----
Reference G.....: 1000.05 mGal
Reference H.....: 1202.90 HCNT
Reference Dip.....: -69.02 degrees
Tolerance of G.....: (+/-) 2.50 mGal
Tolerance of H.....: (+/-) 6.00 HCNT
Tolerance of Dip.....: (+/-) 0.45 degrees

----- Corrections -----
Magnetic dec (+E/W-).....: 13.10 degrees
Grid convergence (+E/W-)..: -0.48 degrees
Total az corr (+E/W-).....: 13.58 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)2005 IDEAL ID10_2C_01]
SCHLUMBERGER Survey Report

16-Aug-2005 13:39:39

Page 2 of 4

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	1005.00	47.36	182.94	0.00	834.28	464.50	-478.31	10.80	478.43	178.71	0.00	TIP	None
2	1051.91	42.60	171.91	46.91	867.50	497.02	-511.33	12.15	511.47	178.64	5.93	MWD	None
3	1080.45	43.67	168.59	28.54	888.33	516.51	-530.55	15.46	530.78	178.33	2.68	MWD	None
4	1109.32	45.42	164.58	28.87	908.91	536.75	-550.24	20.17	550.61	177.90	3.50	MWD	None
5	1138.30	45.67	159.74	28.98	929.21	557.33	-569.92	26.50	570.54	177.34	3.64	MWD	None
6	1166.89	46.01	155.20	28.59	949.14	577.53	-588.85	34.36	589.86	176.66	3.49	MWD	None
7	1195.74	45.44	149.44	28.85	969.29	597.46	-607.13	43.94	608.72	175.86	4.40	MWD	None
8	1224.47	44.07	143.40	28.73	989.70	616.33	-623.98	55.11	626.41	174.95	4.74	MWD	None
9	1253.38	43.26	142.42	28.91	1010.61	634.49	-639.90	67.15	643.41	174.01	1.11	MWD	None
10	1282.15	42.52	142.33	28.77	1031.69	652.24	-655.41	79.10	660.16	173.12	0.79	MWD	None
11	1310.56	43.07	143.02	28.41	1052.54	669.77	-670.76	90.80	676.88	172.29	0.78	MWD	None
12	1339.29	44.26	142.42	28.73	1073.32	687.79	-686.54	102.82	694.20	171.48	1.34	MWD	None
13	1368.53	44.44	142.13	28.93	1094.25	707.22	-698.55	116.02	723.94	170.60	2.26	MWD	None

13	1368.51	44.14	142.11	29.22	1094.27	708.23	-702.65	115.29	712.04	170.68	0.26	MWD	None
14	1397.20	44.83	144.19	28.69	1114.74	724.56	-718.74	127.34	729.93	169.95	1.71	MWD	None
15	1425.97	44.98	144.23	28.77	1135.11	743.23	-735.21	139.22	748.28	169.28	0.16	MWD	None
16	1454.65	44.45	144.24	28.68	1155.49	761.78	-751.58	151.01	766.61	168.64	0.56	MWD	None
17	1483.50	44.91	144.10	28.85	1176.01	780.42	-768.03	162.89	785.11	168.03	0.50	MWD	None
18	1512.14	44.59	143.62	28.64	1196.35	798.91	-784.31	174.78	803.55	167.44	0.50	MWD	None
19	1540.94	45.07	143.26	28.80	1216.77	817.46	-800.62	186.87	822.14	166.86	0.57	MWD	None
20	1569.16	43.99	143.07	28.22	1236.89	835.51	-816.46	198.73	840.30	166.32	1.18	MWD	None
21	1598.09	44.78	143.33	28.93	1257.56	853.97	-832.67	210.86	858.95	165.79	0.85	MWD	None
22	1626.86	44.58	142.03	28.77	1278.02	872.34	-848.75	223.12	877.59	165.27	0.99	MWD	None
23	1655.64	45.17	140.98	28.78	1298.42	890.61	-864.65	235.76	896.21	164.75	1.00	MWD	None
24	1684.30	44.75	141.08	28.66	1318.70	908.75	-880.39	248.50	914.79	164.24	0.45	MWD	None
25	1713.06	45.26	141.14	28.76	1339.03	926.99	-896.22	261.26	933.53	163.75	0.54	MWD	None
26	1741.44	45.84	141.03	28.38	1358.90	945.15	-911.98	273.99	952.25	163.28	0.63	MWD	None
27	1769.98	45.13	141.10	28.54	1378.91	963.39	-927.81	286.78	971.12	162.82	0.76	MWD	None
28	1799.28	45.39	141.40	29.30	1399.54	982.07	-944.04	299.81	990.51	162.38	0.35	MWD	None
29	1828.01	45.40	141.48	28.73	1419.71	1000.46	-960.04	312.56	1009.64	161.97	0.06	MWD	None
30	1856.46	45.71	141.53	28.45	1439.63	1018.73	-975.94	325.20	1028.69	161.57	0.33	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	1885.59	45.01	141.31	29.13	1460.10	1037.36	-992.14	338.12	1048.17	161.18	0.75	MWD	None
32	1914.06	44.71	142.27	28.47	1480.28	1055.47	-1007.92	350.55	1067.14	160.82	0.79	MWD	None
33	1943.35	45.24	142.01	29.29	1501.00	1074.19	-1024.26	363.25	1086.77	160.47	0.58	MWD	None
34	1972.06	45.11	142.49	28.71	1521.24	1092.63	-1040.36	375.72	1106.13	160.14	0.39	MWD	None
35	2000.86	44.50	142.00	28.80	1541.68	1111.00	-1056.41	388.14	1125.46	159.83	0.74	MWD	None
36	2029.65	45.14	143.24	28.79	1562.10	1129.42	-1072.53	400.46	1144.86	159.53	1.15	MWD	None
37	2058.03	44.53	143.43	28.38	1582.22	1147.69	-1088.59	412.41	1164.09	159.25	0.67	MWD	None
38	2086.87	44.76	143.21	28.84	1602.74	1166.19	-1104.84	424.52	1183.59	158.98	0.29	MWD	None
39	2116.15	44.77	143.06	29.28	1623.53	1184.99	-1121.33	436.89	1203.44	158.71	0.11	MWD	None
40	2144.19	44.20	143.04	28.04	1643.53	1202.89	-1137.04	448.70	1222.37	158.46	0.62	MWD	None
41	2173.44	43.39	145.02	29.25	1664.65	1221.47	-1153.42	460.59	1241.98	158.23	1.66	MWD	None
42	2201.31	41.23	148.37	27.87	1685.26	1239.01	-1169.08	470.90	1260.36	158.06	3.41	MWD	None
43	2230.50	39.70	149.84	29.19	1707.47	1256.99	-1185.34	480.63	1279.07	157.93	1.88	MWD	None
44	2258.57	38.38	153.43	28.07	1729.27	1274.00	-1200.88	489.03	1296.64	157.84	2.84	MWD	None
45	2287.66	36.21	158.00	29.09	1752.42	1291.25	-1216.93	496.29	1314.24	157.81	3.68	MWD	None
46	2317.11	33.85	163.58	29.45	1776.54	1308.02	-1232.87	501.87	1331.11	157.85	4.12	MWD	None
47	2345.91	30.65	174.25	28.80	1800.91	1323.33	-1247.89	504.88	1346.15	157.97	6.90	MWD	None
48	2371.19	29.56	183.12	25.28	1822.79	1335.73	-1260.53	505.18	1357.99	158.16	5.52	MWD	None
49	2401.98	27.88	188.74	30.79	1849.80	1349.75	-1275.23	503.67	1371.10	158.45	3.15	MWD	None
50	2431.04	27.95	192.07	29.06	1875.48	1362.27	-1288.61	501.22	1382.66	158.75	1.64	MWD	None
51	2459.71	27.61	194.37	28.67	1900.84	1374.30	-1301.62	498.16	1393.69	159.06	1.20	MWD	None
52	2488.24	27.52	194.87	28.53	1926.14	1386.04	-1314.39	494.83	1404.45	159.37	0.27	MWD	None
53	2516.66	27.26	195.20	28.42	1951.37	1397.62	-1327.02	491.44	1415.09	159.68	0.32	MWD	None
54	2544.64	27.14	193.50	27.98	1976.26	1409.02	-1339.41	488.27	1425.63	159.97	0.86	MWD	None
55	2573.20	27.03	192.95	28.56	2001.68	1420.73	-1352.07	485.30	1436.52	160.26	0.29	MWD	None
56	2602.67	27.36	192.33	29.47	2027.90	1432.91	-1365.21	482.35	1447.91	160.54	0.45	MWD	None
57	2631.19	27.47	193.05	28.52	2053.21	1444.78	-1378.02	479.46	1459.05	160.82	0.37	MWD	None
58	2659.59	27.14	193.77	28.40	2078.45	1456.49	-1390.69	476.44	1470.04	161.09	0.50	MWD	None
59	2688.14	27.17	193.98	28.55	2103.85	1468.15	-1403.34	473.32	1481.01	161.36	0.11	MWD	None
60	2716.45	27.56	193.47	28.31	2128.99	1479.82	-1415.98	470.23	1492.02	161.63	0.49	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	2745.48	27.81	192.90	29.03	2154.70	1491.96	-1429.11	467.15	1503.53	161.90	0.38	MWD	None
62	2774.02	26.99	193.26	28.54	2180.04	1503.80	-1441.91	464.18	1514.78	162.16	0.89	MWD	None
63	2803.23	27.69	193.40	29.21	2205.99	1515.86	-1454.96	461.09	1526.28	162.42	0.73	MWD	None
64	2831.87	27.41	192.87	28.64	2231.38	1527.80	-1467.86	458.08	1537.68	162.67	0.40	MWD	None
65	2860.78	26.60	192.87	28.91	2257.14	1539.65	-1480.66	455.16	1549.04	162.91	0.85	MWD	None
66	2889.41	25.64	192.82	28.63	2282.84	1551.03	-1492.95	452.35	1559.97	163.14	1.02	MWD	None
67	2917.79	24.91	192.45	28.38	2308.51	1561.99	-1504.77	449.70	1570.53	163.36	0.80	MWD	None
68	2946.12	24.10	192.49	28.33	2334.28	1572.63	-1516.24	447.17	1580.81	163.57	0.87	MWD	None
69	2975.67	23.38	192.32	29.55	2361.33	1583.41	-1527.86	444.61	1591.24	163.77	0.75	MWD	None
70	3004.42	22.82	191.96	28.75	2387.78	1593.66	-1538.89	442.24	1601.17	163.97	0.61	MWD	None
71	3032.80	22.11	192.02	28.38	2414.00	1603.52	-1549.50	439.98	1610.75	164.15	0.76	MWD	None
72	3059.49	21.59	192.07	26.69	2438.78	1612.55	-1559.21	437.91	1619.54	164.31	0.59	MWD	None
73	3079.00	21.30	192.10	19.51	2456.94	1619.03	-1566.19	436.42	1625.86	164.43	0.45	Proj.	to TD

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Well: **BMA A14A**

Field: **Bream A**

Rig: **ISDL 453**

State: **Victoria**

Gamma Ray Service

1:200 True Vertical Depth

Real Time Log