



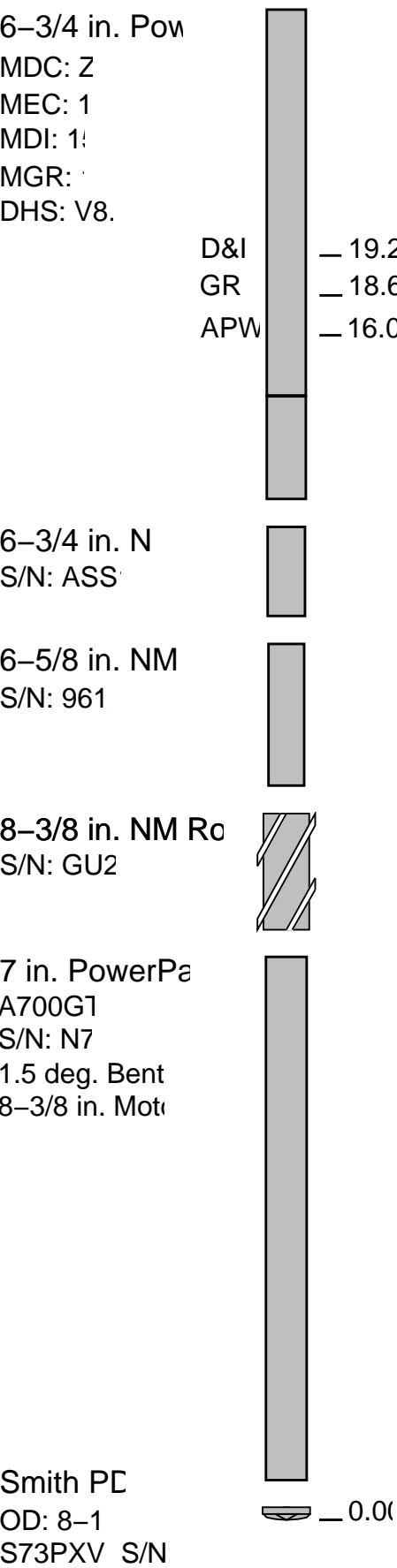
Potassium	%	1.2	1.2								
<b>Environmental data</b>											
<b>GR</b>											
Mud weight	ppg	10.05	10.05								
Bit size	in	8.5	8.5								
<b>Resistivity</b>											
<b>Neutron porosity</b>											
Hole Size		N/A	N/A								
Mud weight		N/A	N/A								
Temperature		N/A	N/A								
Mud 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;"><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 Annular Pressure While Drilling	<b>OTHER SERVICES FOR RUN2</b> Directional Drilling Directional Surveys Annular Pressure While Drilling	<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  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	<b>REMARKS: RUN NUMBER 2</b> 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	<b>REMARKS: RUN NUMBER</b>

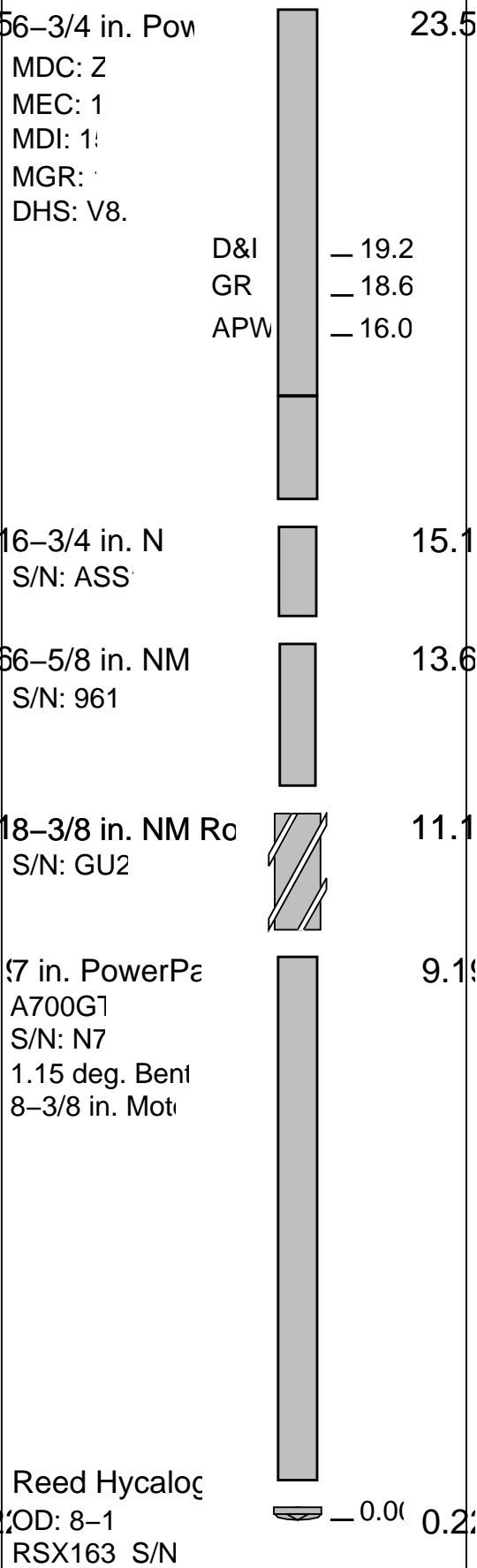
<b>EQUIPMENT DESCRIPTION</b>		
RUN1	RUN2	RUN
DOWNHOLE F	DOWNHOLE F	

DOWNHOLE LOG

DOWNHOLE LOG



Maximum string dia  
All lengths in



Maximum string dia  
All lengths in

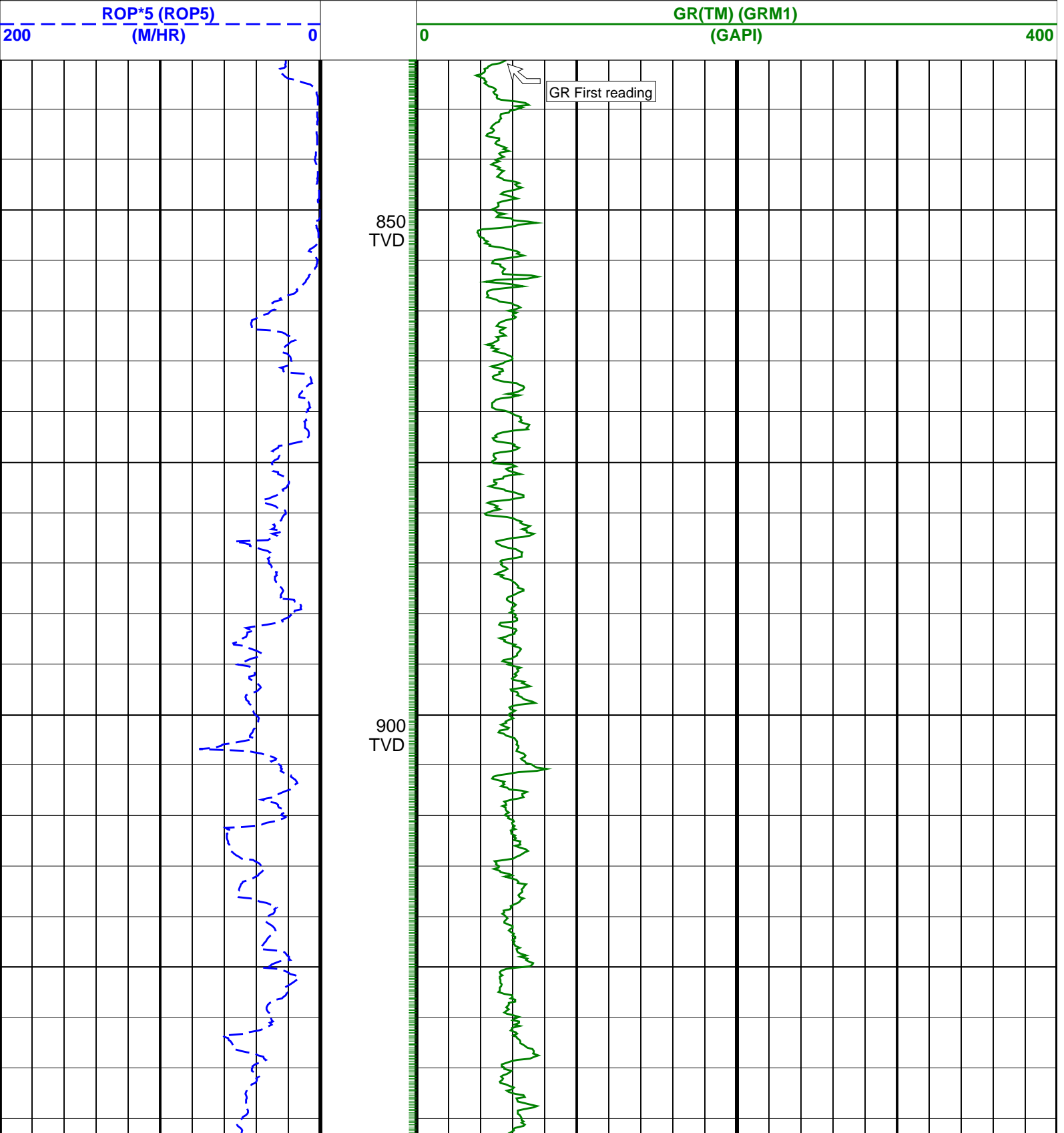
# BMA A14A RT 1:500 TVD

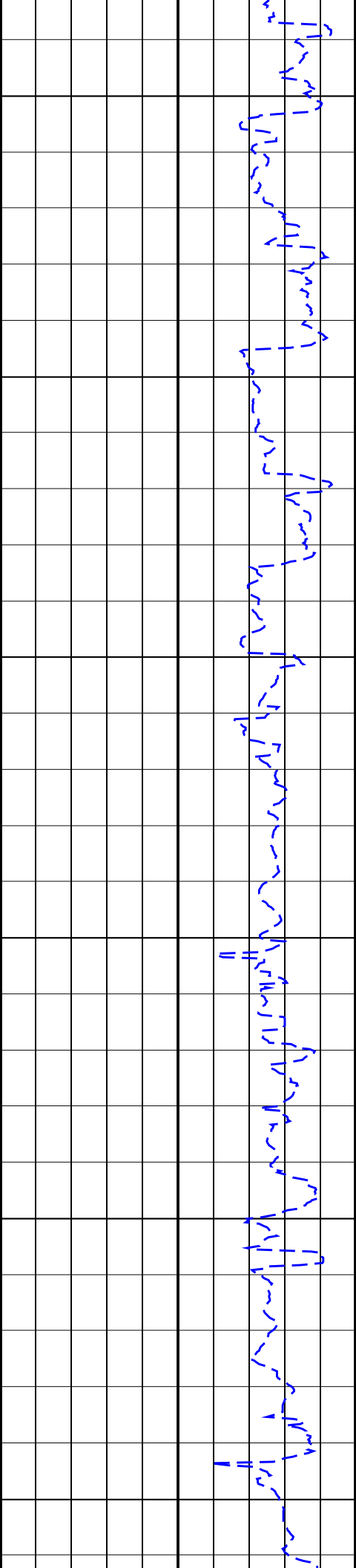
IDEAL Version: ID10\_2C\_01 <TVD> Vertical Scale: 1:500

Graphics File Created: 17-Aug-2005 14:47

## PIP SUMMARY

GR(TM) PIP

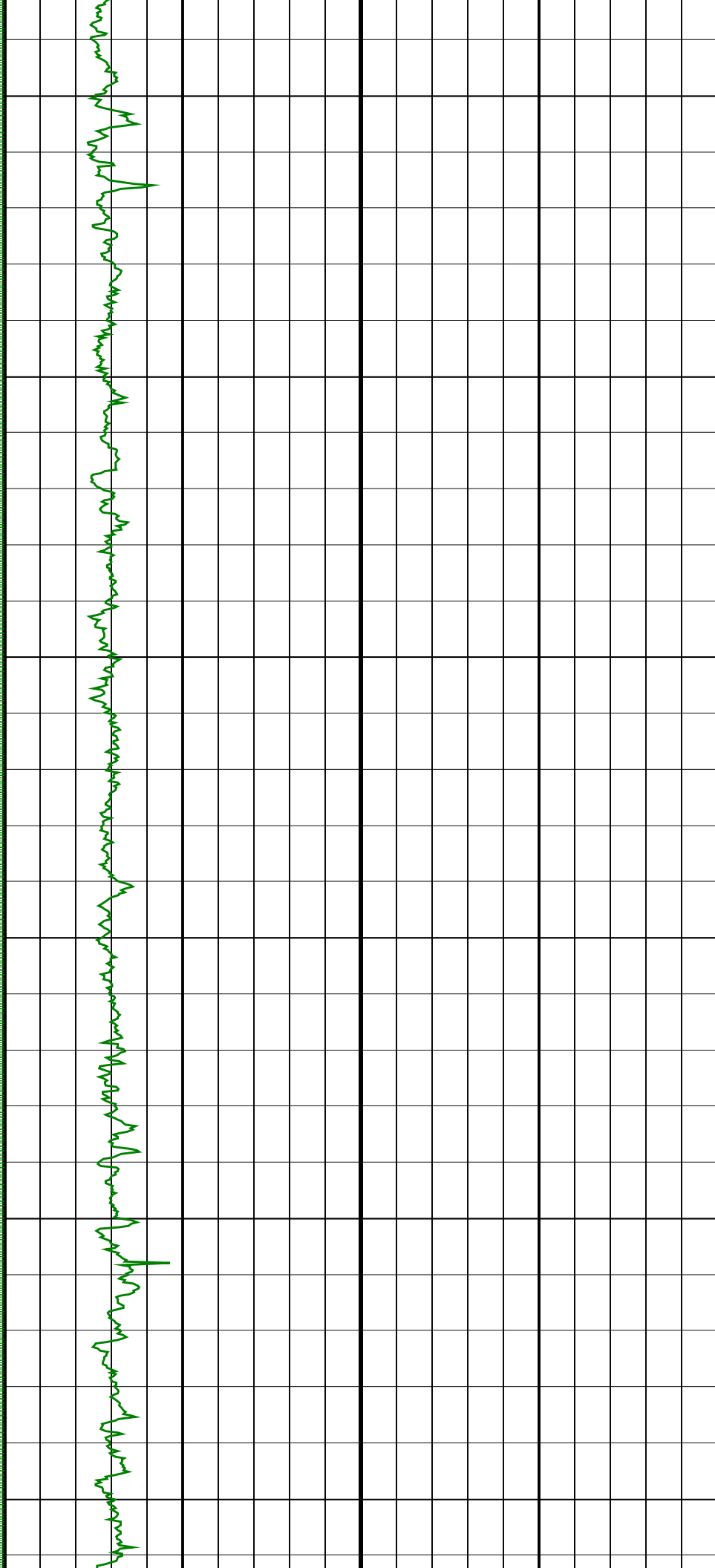


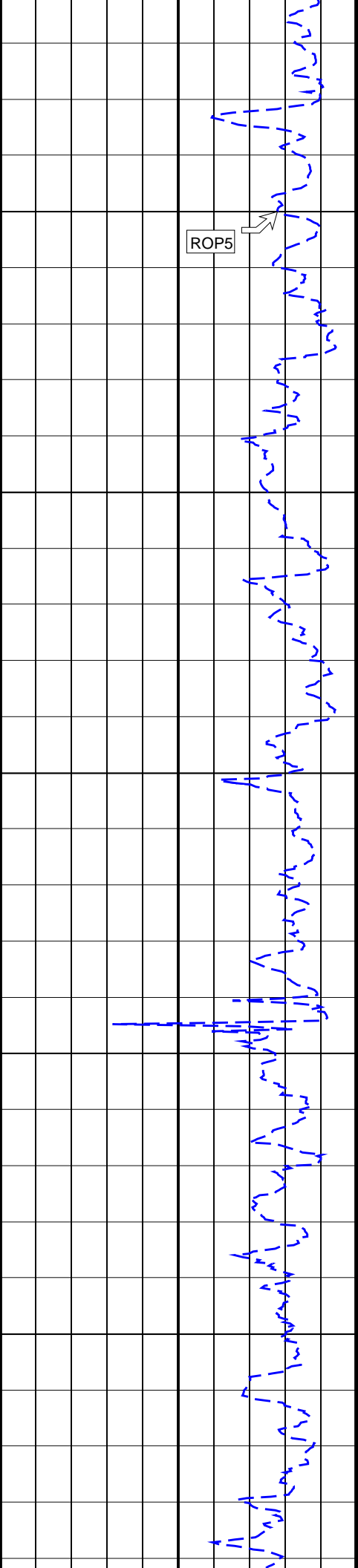


950  
TVD

1000  
TVD

1050  
TVD





1100  
TVD

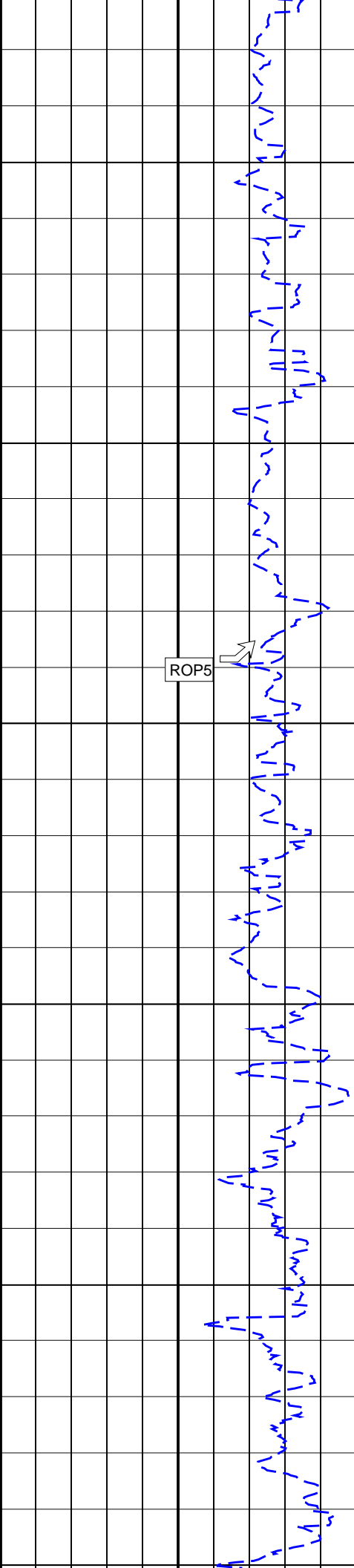
GRM1

1150  
TVD

See Remarks

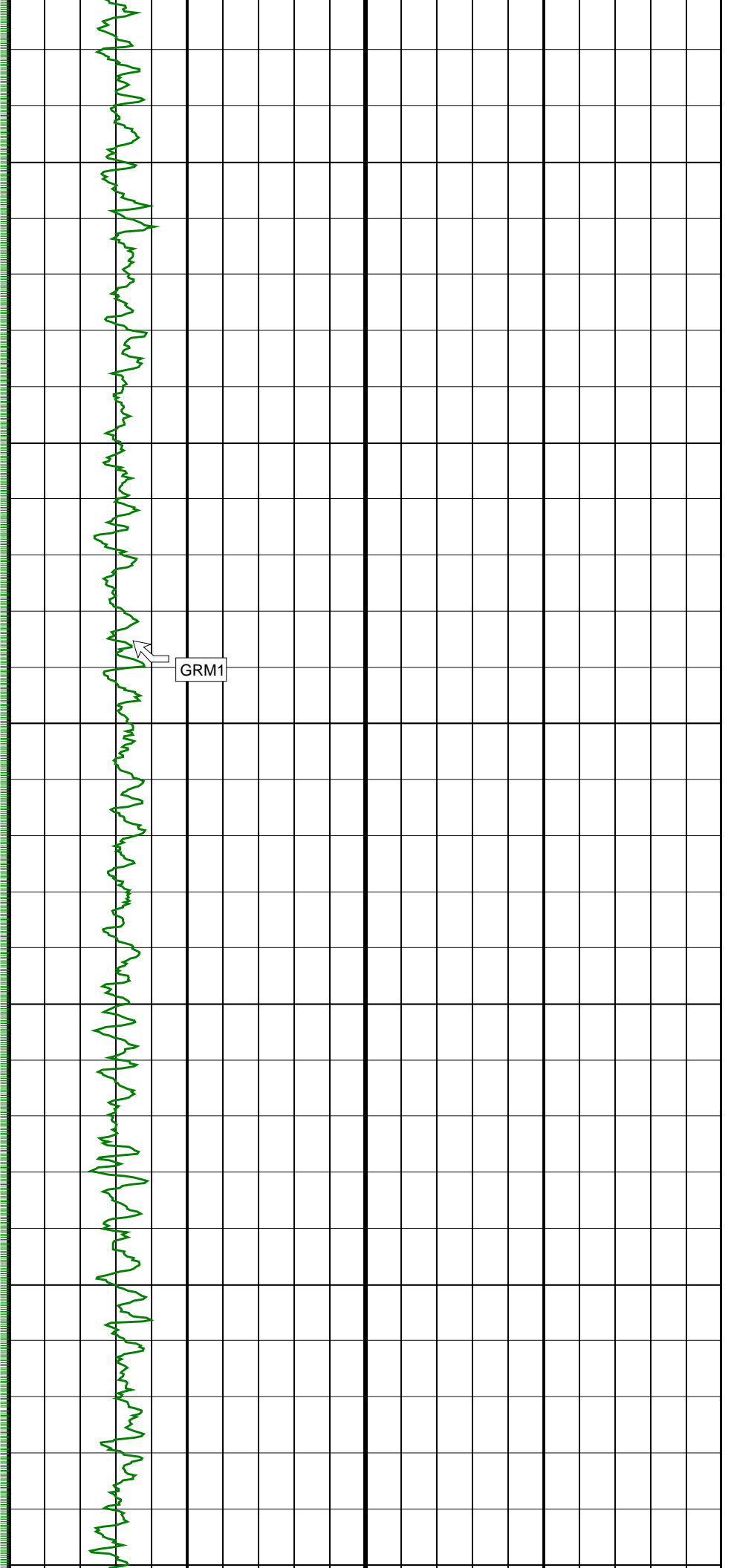
1200  
TVD



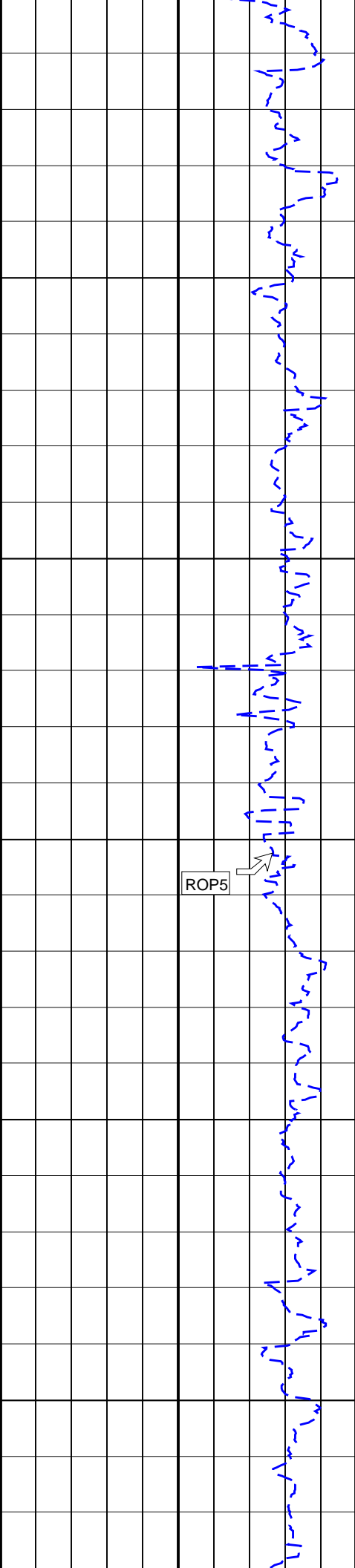


1400  
TVD

1450  
TVD



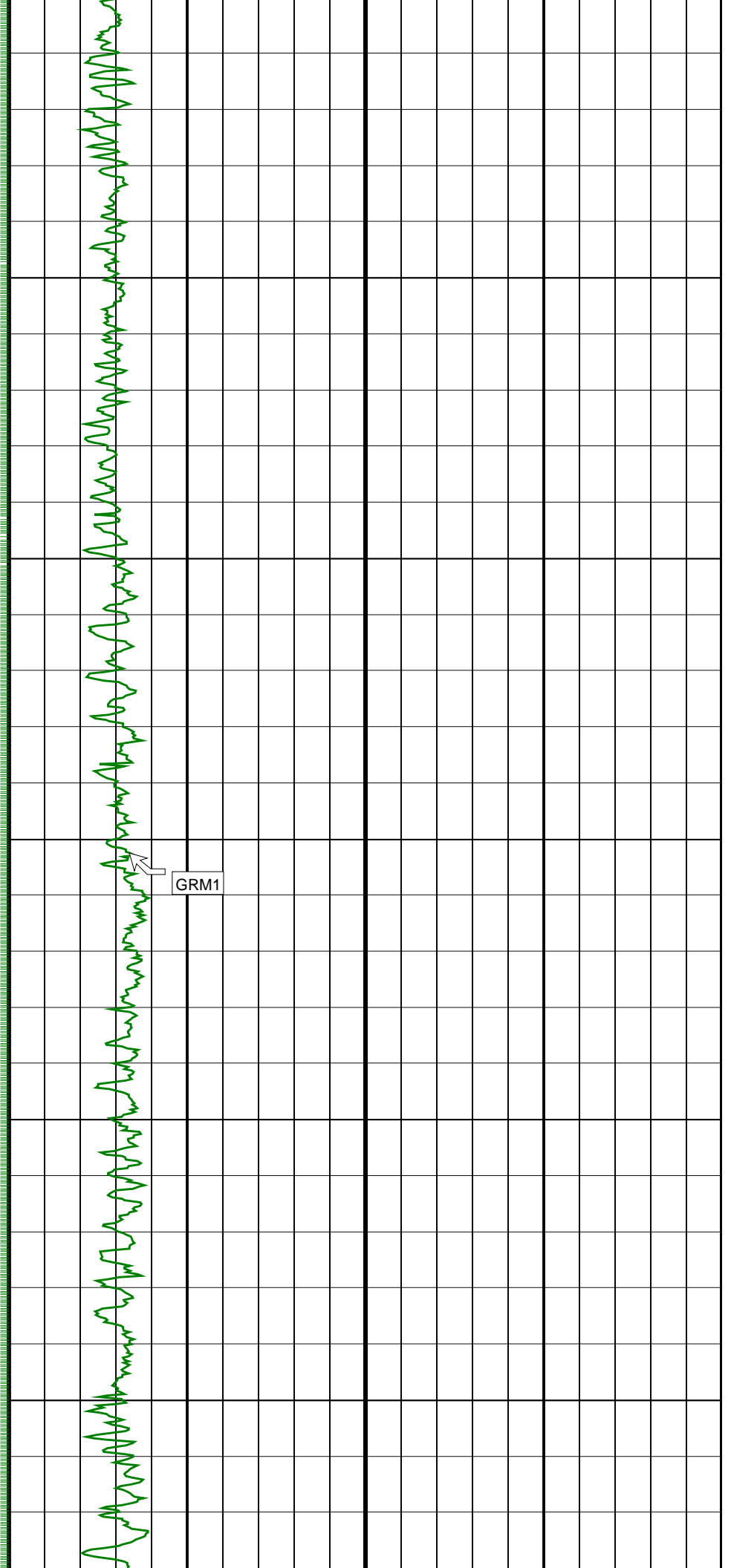


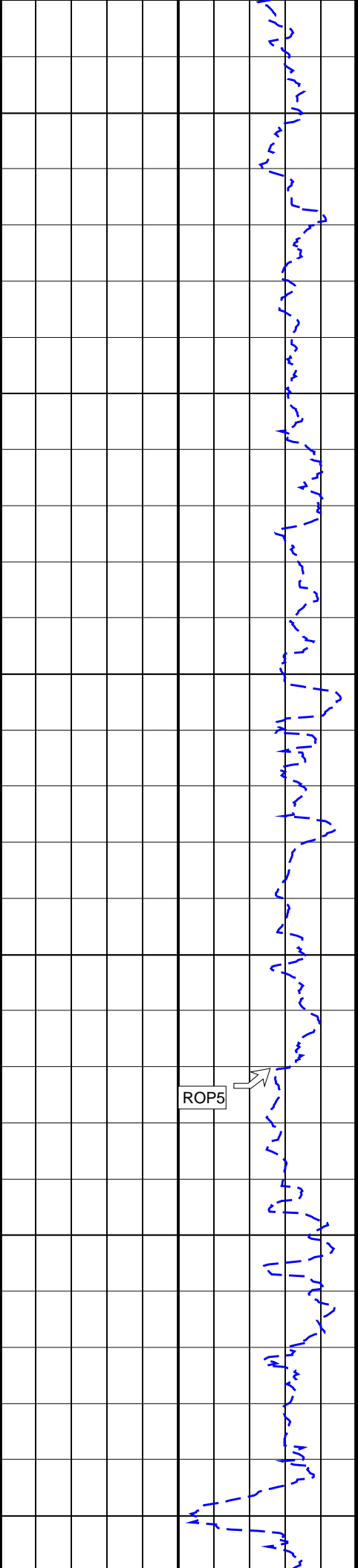


1500  
TVD

1550  
TVD

1600  
TVD

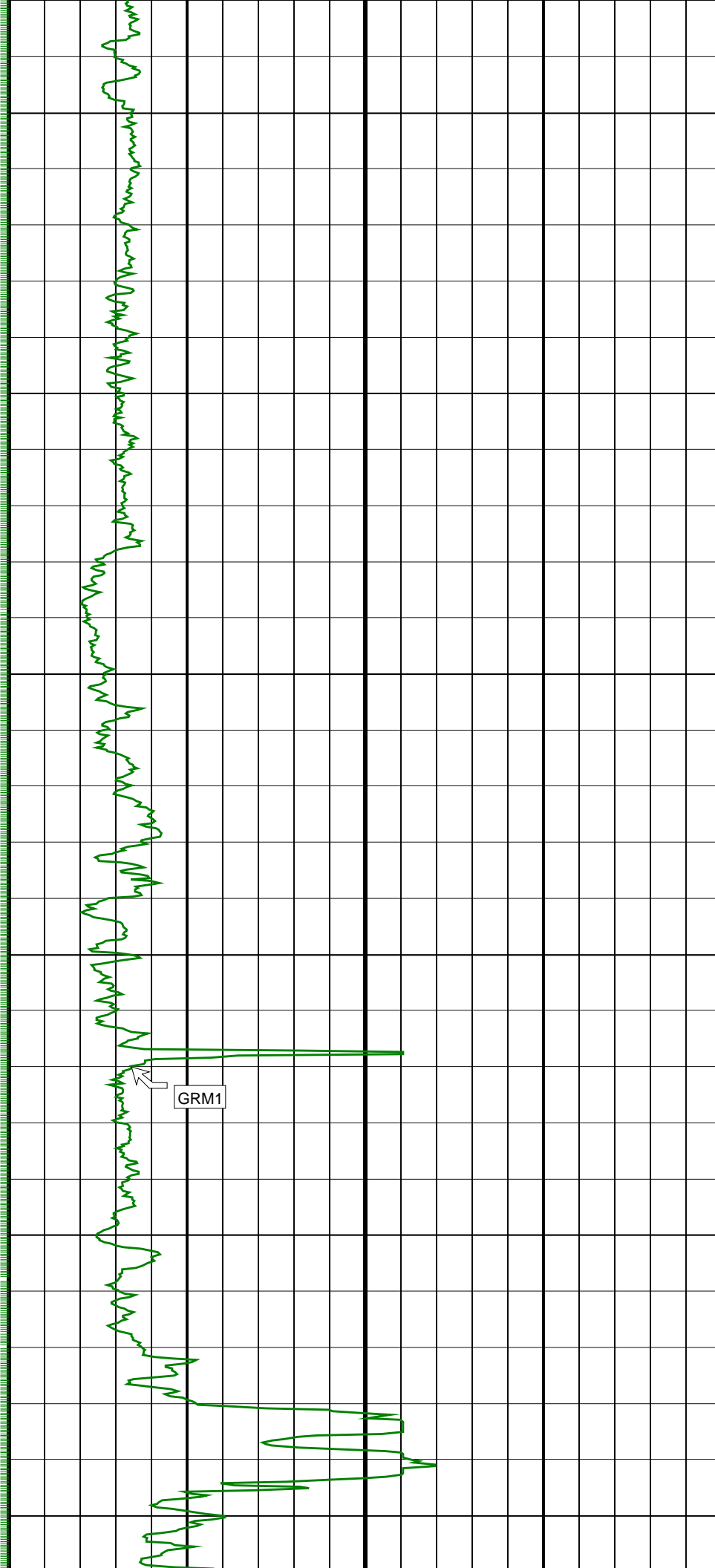


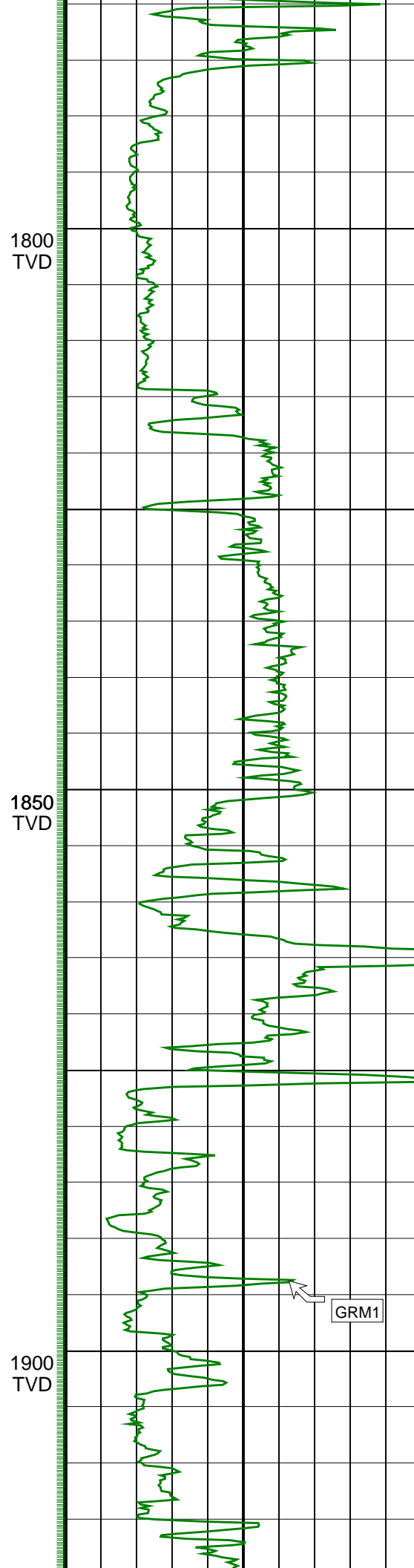
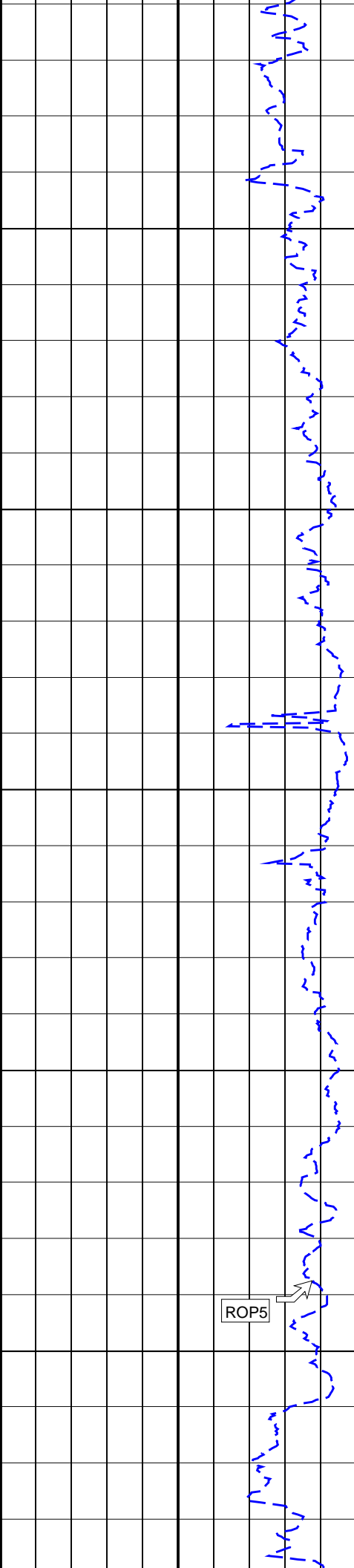


1650  
TVD

1700  
TVD

1750  
TVD

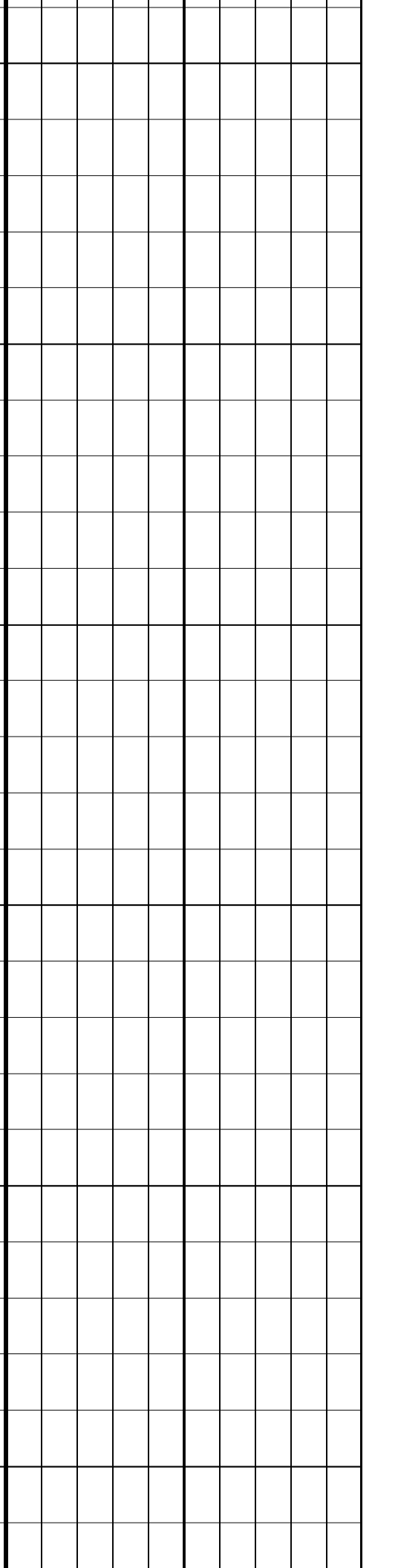
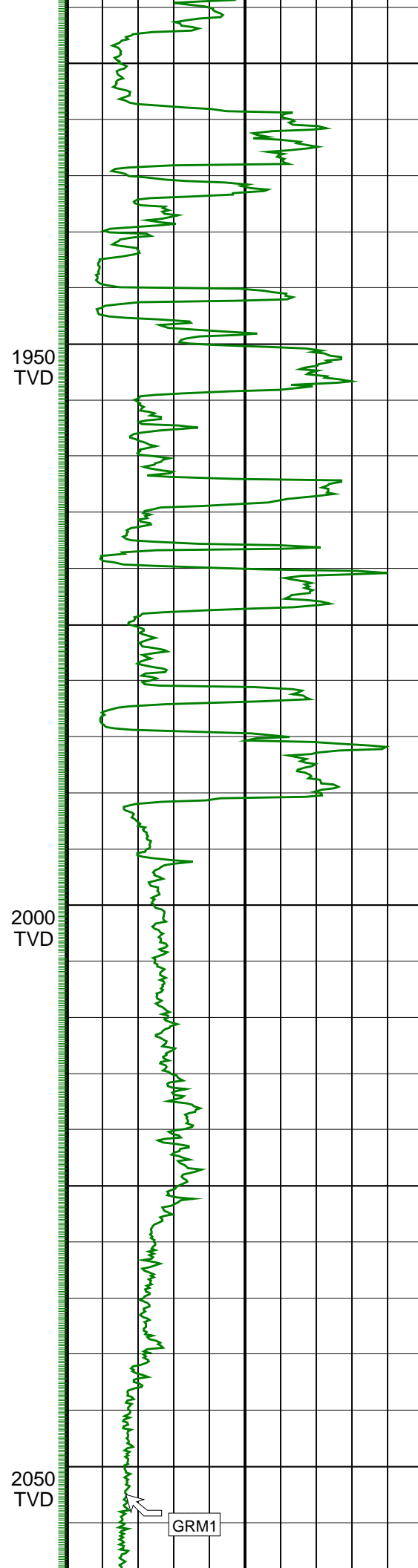
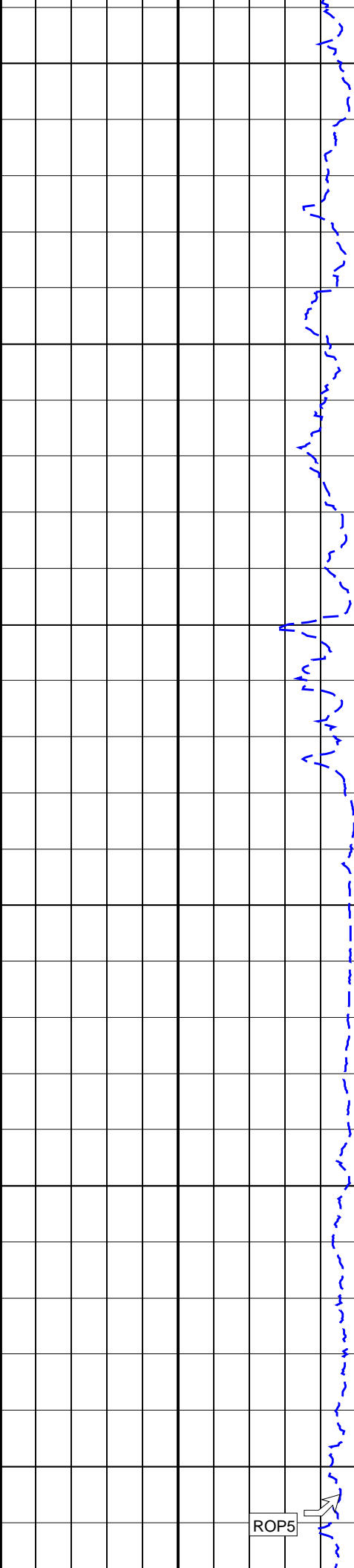


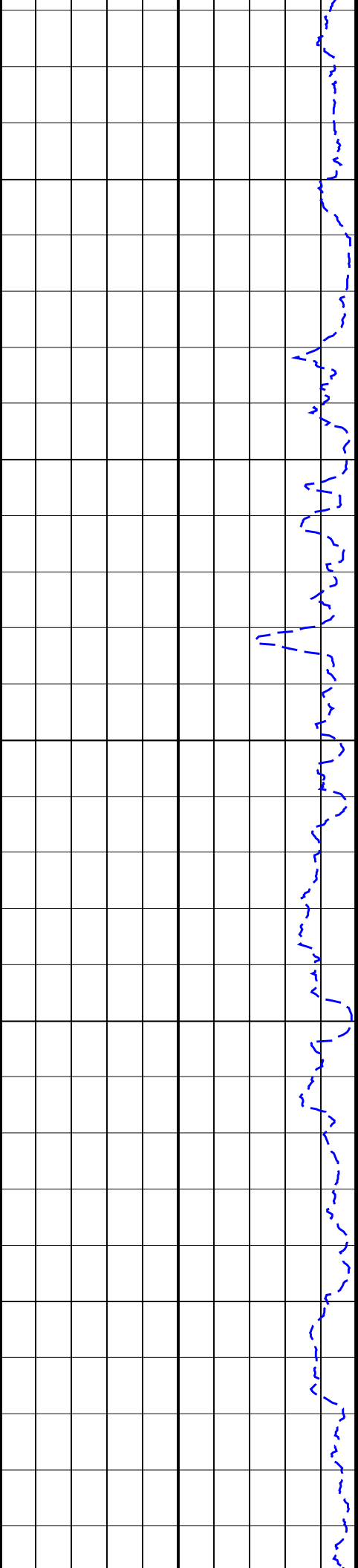


1800  
TVD

1850  
TVD

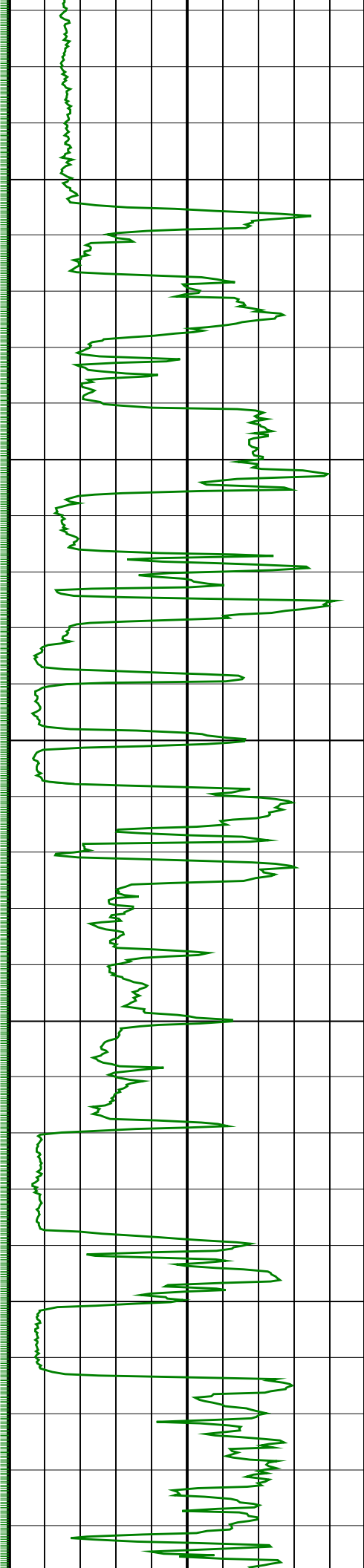
1900  
TVD

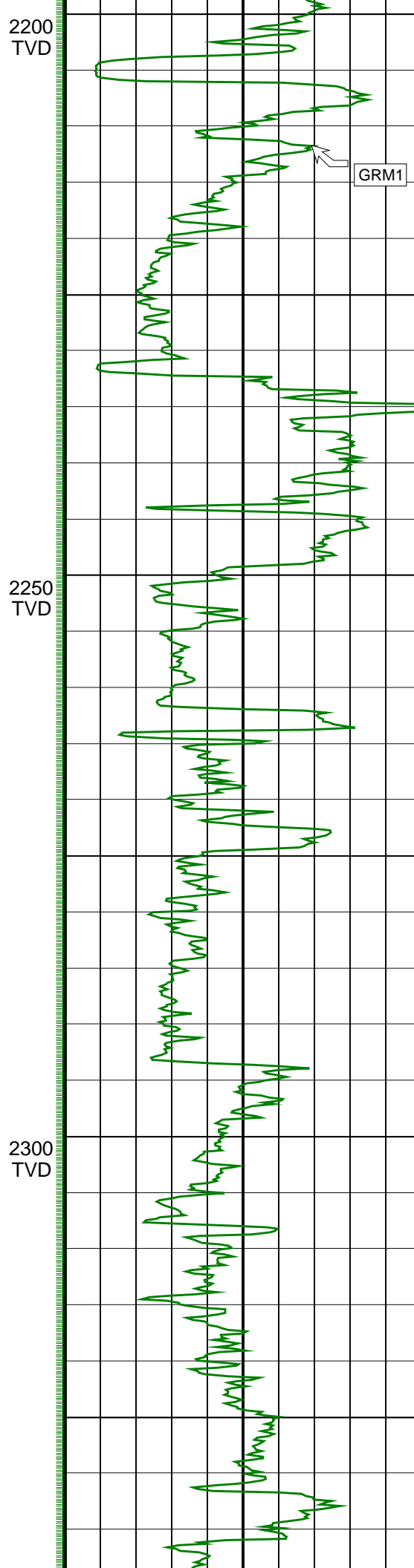
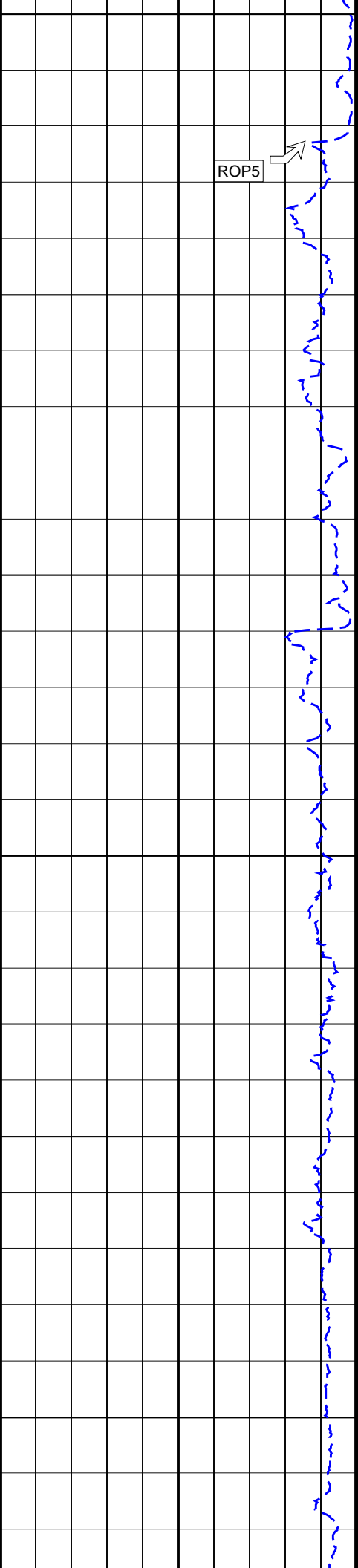


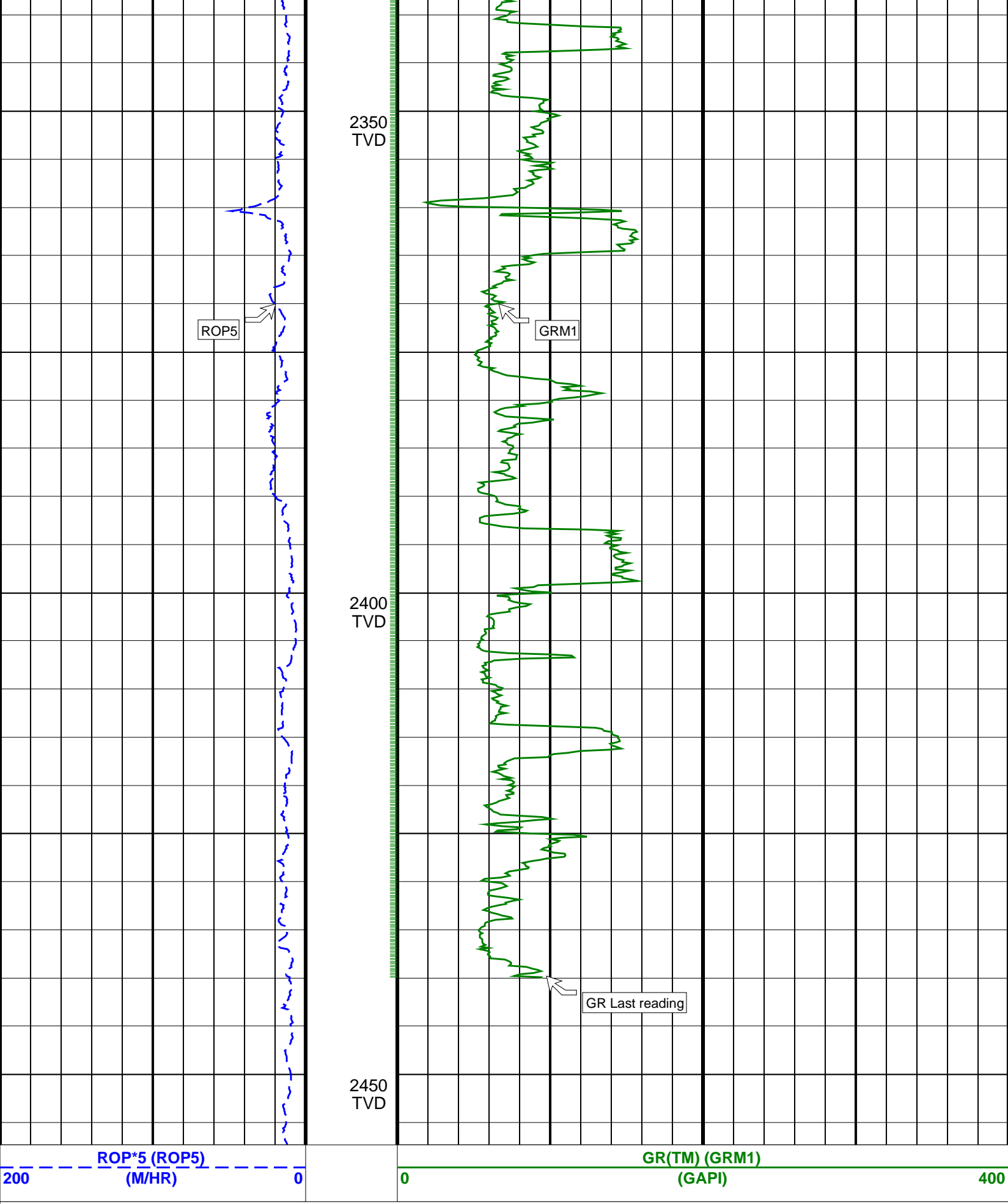


2100  
TVD

2150  
TVD







PIP SUMMARY

GR(TM) PIP

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

----- 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

Azimuth from Vsect Origin to target: 167.40 degrees

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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	1368.51	44.14	142.11	29.22	1094.27	706.23	-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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SCHLUMBERGER Survey Report

16-Aug-2005 13:39:39

Page 3 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)
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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SCHLUMBERGER Survey Report

16-Aug-2005 13:39:39

Page 4 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)
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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Company:
ESSO Australia Pty. Ltd.

Well:
BMA A14A

Field:
Bream A

Rig:
ISDL 453

State:
Victoria

Gamma Ray Service  
1:500 True Vertical Depth  
Real Time Log

Schlumberger

