

Rig: ISDL 453			
Field: West KingFish			
Location: Bass Strait			
Well: WKF W6A			
Company: ESSO Australia Pty. Ltd.			
<div>Gamma Ray Service</div> <div>1:500 True Vertical Depth</div> <div>Real Time Log</div>			
Location			
Total depth:	3477.0 m	K.B. Top Drive	
Spud date:	7 Sep 2006	G.L. -76.13 m	
Runs:	1 To 2	D.F. 33.43 m	
Permanent datum:	Mean Sea Level	Elev.: 0.00 m	
Log measured from:	Drill Floor	33.43 m above Perm. datum	
Depth reference:	Driller's Depth		
Y = 5727810.570 X = 596273.687	Longitude	Latitude	
	E148°6'19.764"	S38°35'34.706"	

Bit Run Summary

Run number		1	2							
Bit size	in.	8.5	8.5							
Bit start depth	m	695.0	2768.0							
Bit end depth	m	2768.0	3477.0							
Top interval logged	m	695.0	2747.7							
Bottom interval logged	m	2747.7	3457.3							
Begin log: time		00:09	20:38							
Begin log: date		07-Sep-06	14-Sep-06							
End log: time		05:58	12:10							
End log: date		12-Sep-06	17-Sep-06							
Mud data										
Depth	m	2768.0	3477.0							
Type		KCl/PHPA/Gly	KCl/PHPA/Gly							
Mud weight	ppg	9.2	9.9							
Solids	%	3.0	8.2							
Chlorides	mg/L	42,000	41,000							
Rm		N/A	N/A							
Rmf		N/A	N/A							
Rmc		N/A	N/A							

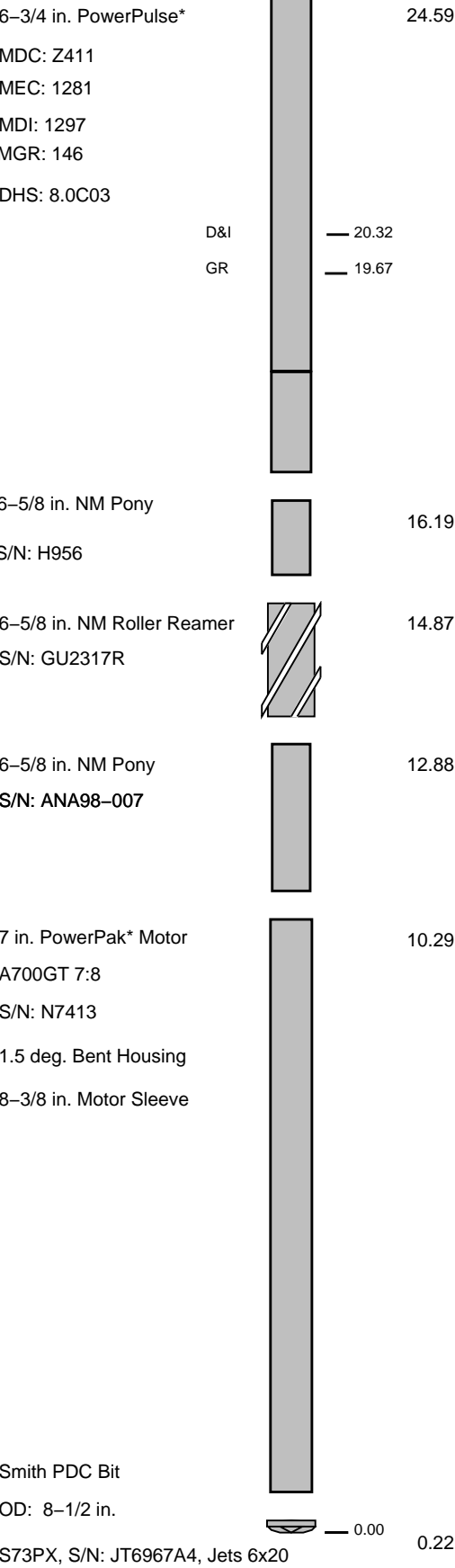
Potassium	%	1.2	1.2							
Environmental data										
GR										
Mud weight		9.2	9.9							
Bit size	in.	8.5	8.5							
Resistivity										
Neutron porosity										
Hole Size		N/A	N/A							
Mud weight		N/A	N/A							
Temperature		N/A	N/A							
Mud salinity		N/A	N/A							
Formation salinity		N/A	N/A							
Recording rate 1	SEC	3.83	3.83							
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		G. Campbell	B. Davis	D. Bareswell	J. Bennett					
Schlumberger D&M Personnel		R. Borjas	B. Pattarakorn	C. Cocks	O. Radicevic					

<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 D&I	OTHER SERVICES FOR RUN2 Directional Drilling Directional Surveys D&I	OTHER SERVICES FOR RUN
REMARKS: RUN NUMBER 1 Depth is referenced to Driller's Depth. Gamma Ray not correct for Potassium. Gamma Ray corrected for Tool Size, Hole Size and Mud Weight. Mud type is KCl/PHPA/Glycol. 8-1/2 in. hole was drilled from 695.0m to 2768.0 m. Gap of data at 698m-703m, 705m-707m, 1688m-1690m and 247m -2480m MD, due to Downhole noise affecting the MWD signal. POOH to change drillpipe	REMARKS: RUN NUMBER 2 Depth is referenced to Driller's Depth. Gamma Ray not correct for Potassium. Gamma Ray corrected for Tool Size, Hole Size and Mud Weight. Mud type is KCl/PHPA/Glycol. 8-1/2 in. hole was drilled from 2768.0m to 3477.0 m. Erratic data from 3370m MD due to downhole noise. POOH due to TD of WKF W6A	REMARKS: RUN NUMBER

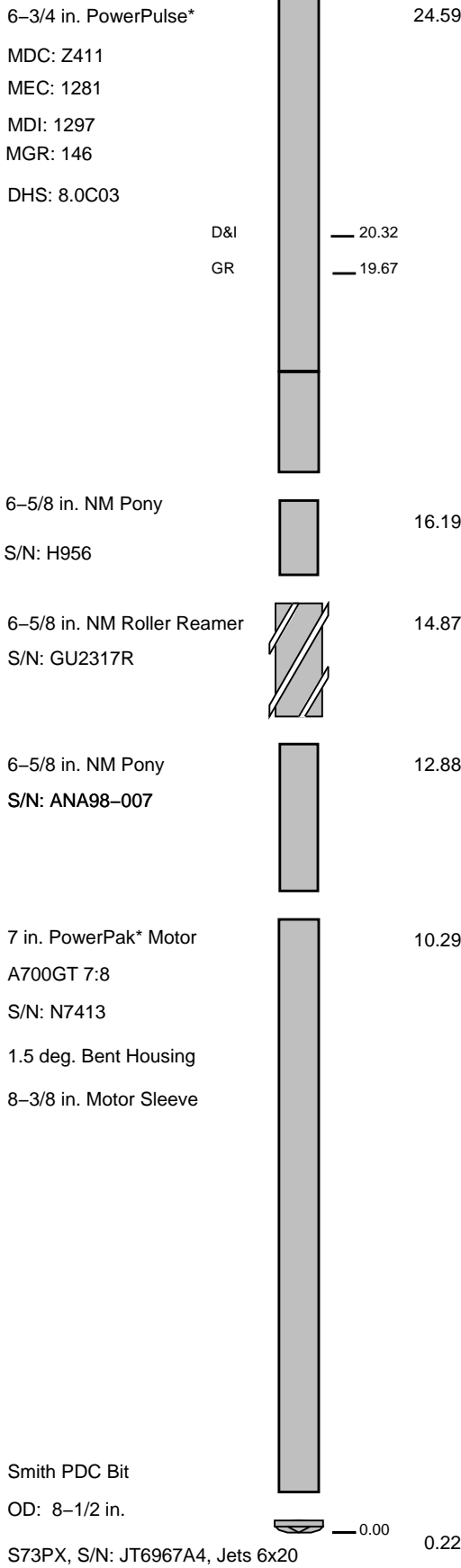
EQUIPMENT DESCRIPTION		
RUN1	RUN2	RUN
DOWNHOLE EQUIPMENT	DOWNHOLE EQUIPMENT	

DOWNHOLE EQUIPMENT

DOWNHOLE EQUIPMENT



Maximum string diameter 8.50 in.
All lengths in Meters



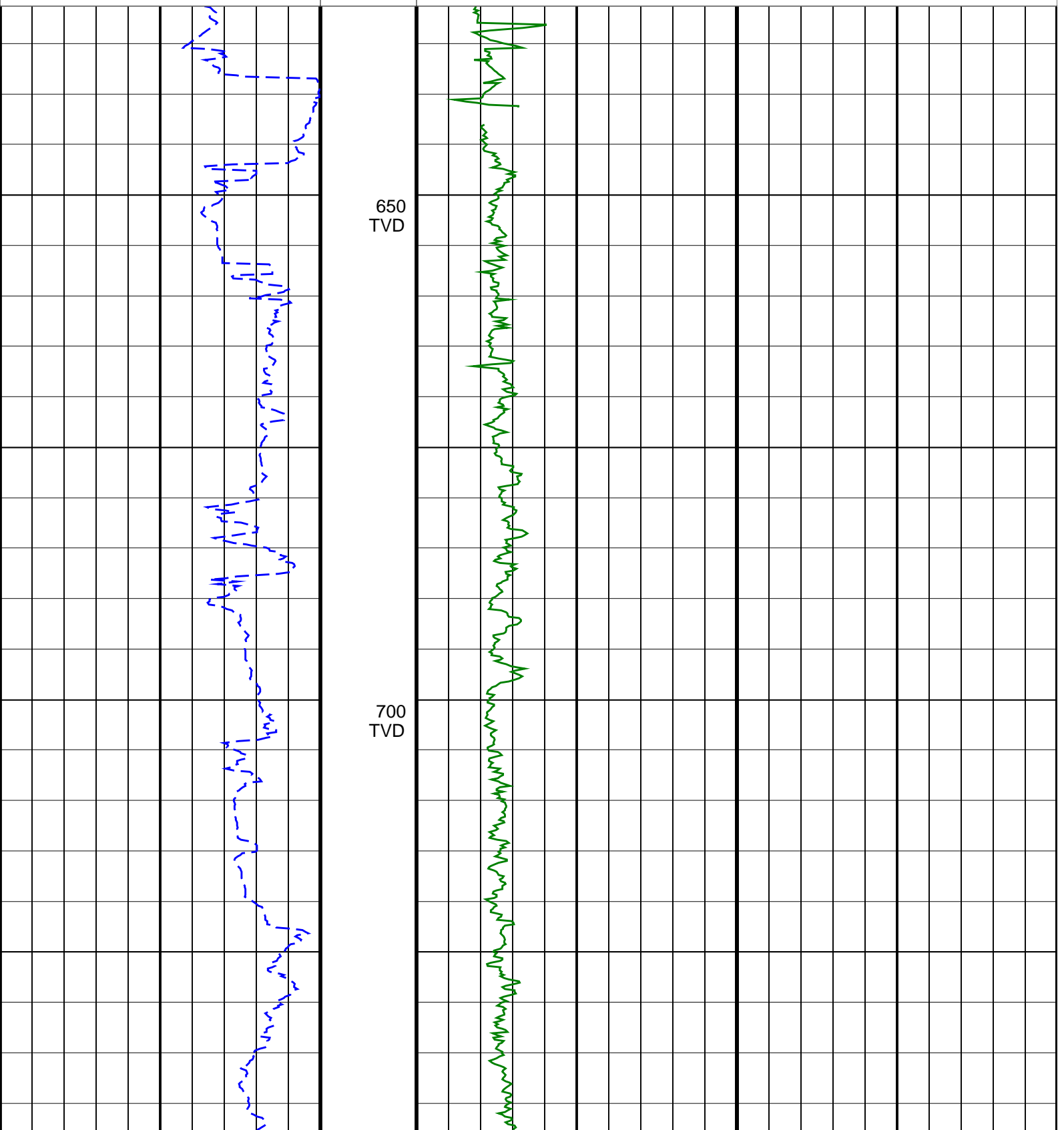
Maximum string diameter 8.50 in.
All lengths in Meters

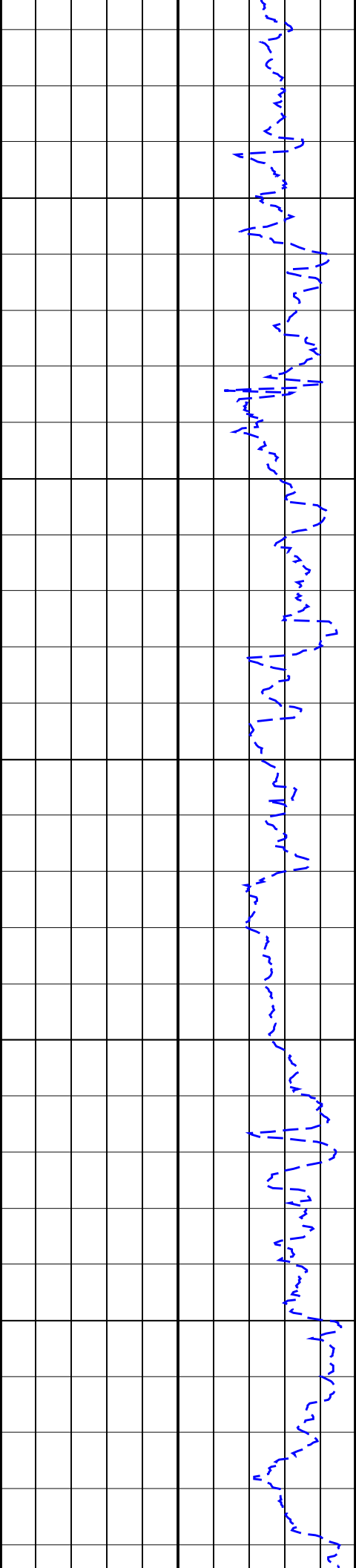
WKF W06A RT 1:500TVD

IDEAL Version: ID11_OC_01 <TVD> Vertical Scale: 1:500

Graphics File Created: 23-Sep-2006 13:00

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

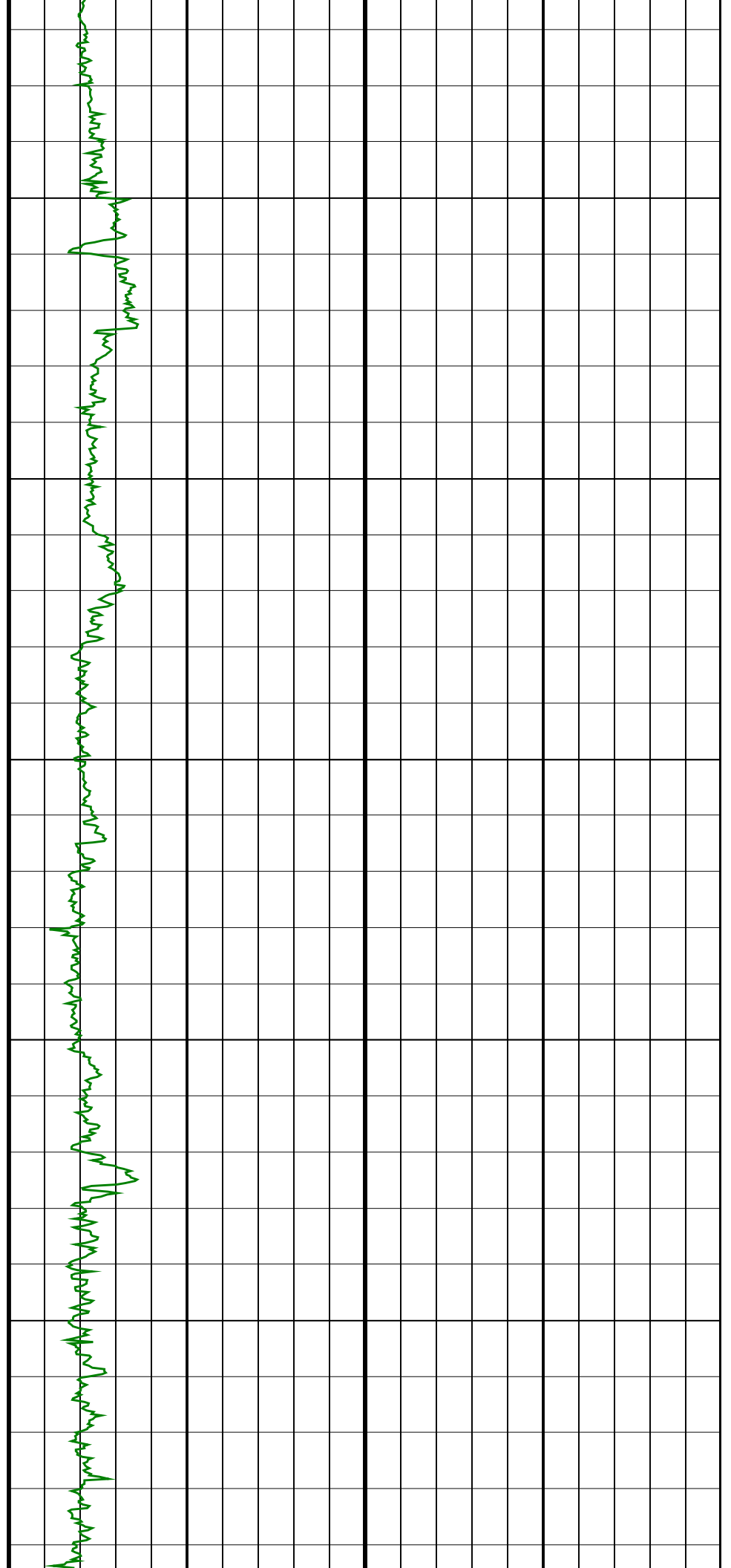


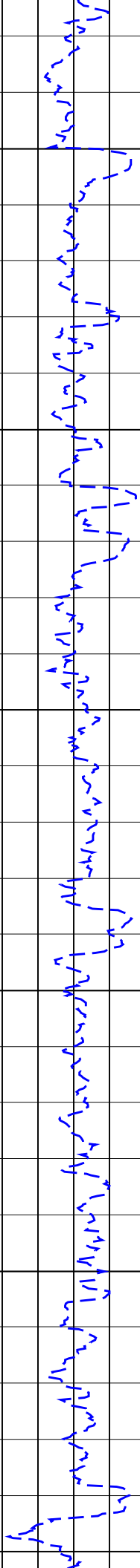


900
TVD

950
TVD

1000
TVD

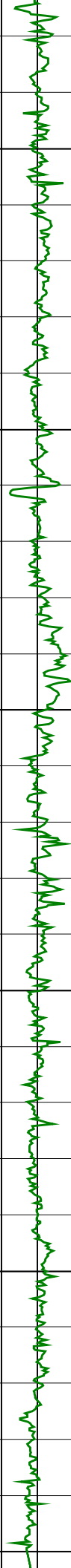


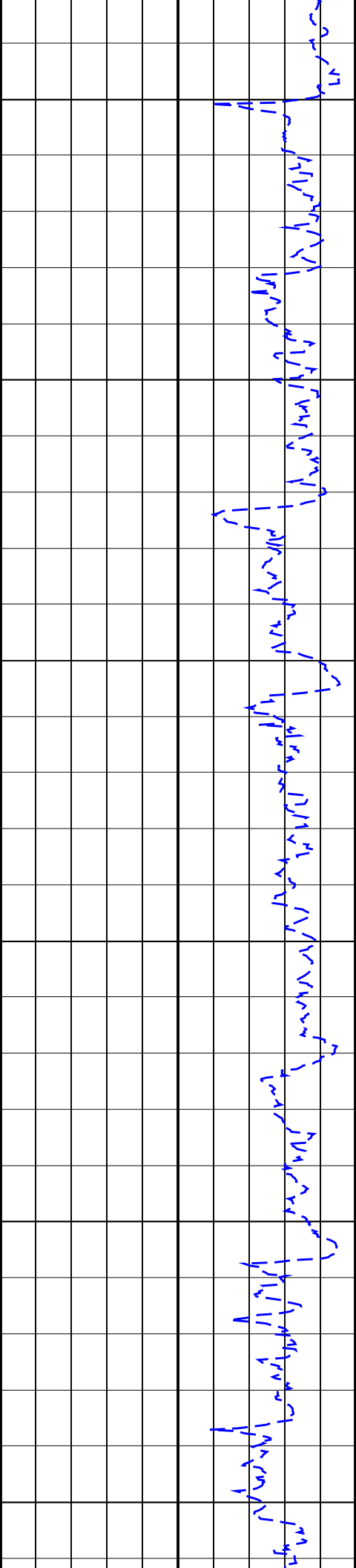


1200
TVD

1250
TVD

1300

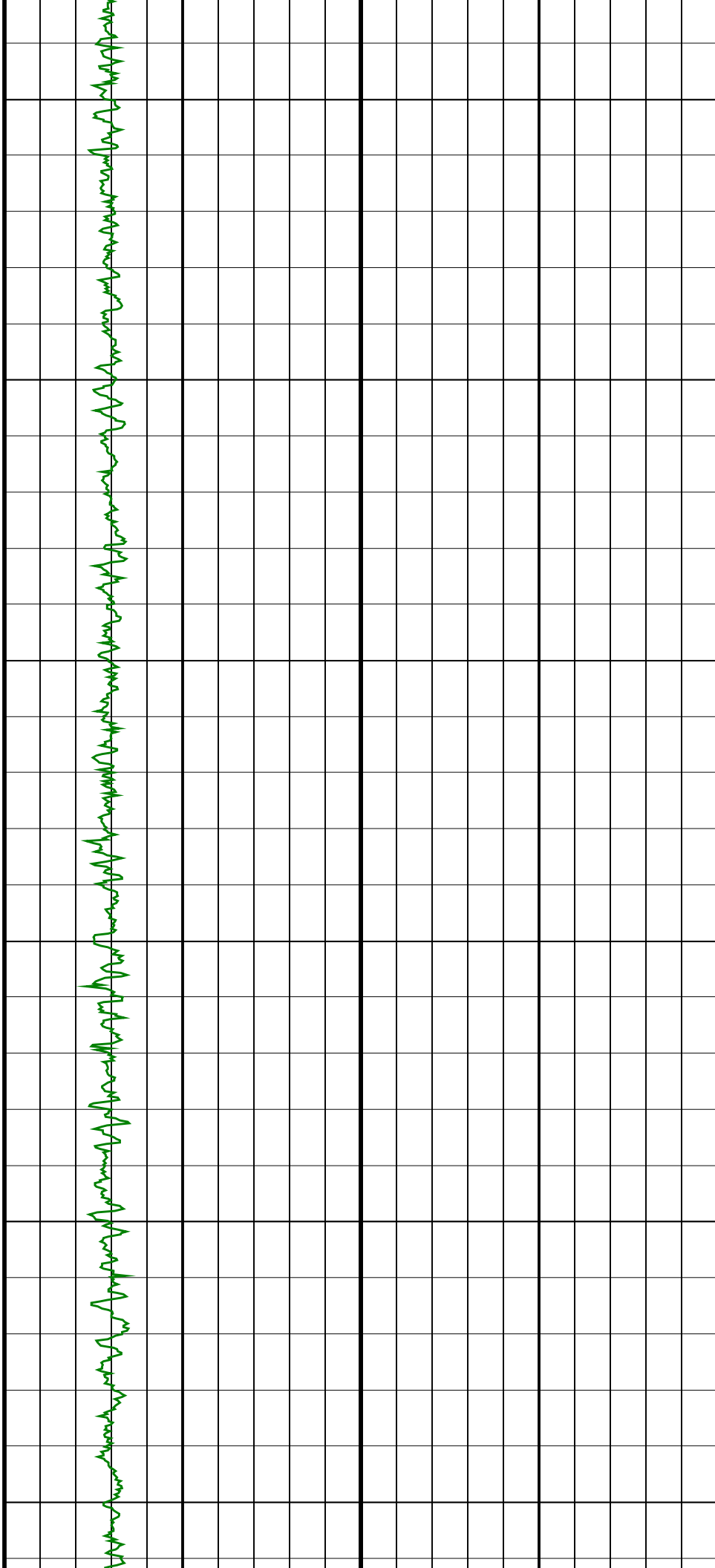


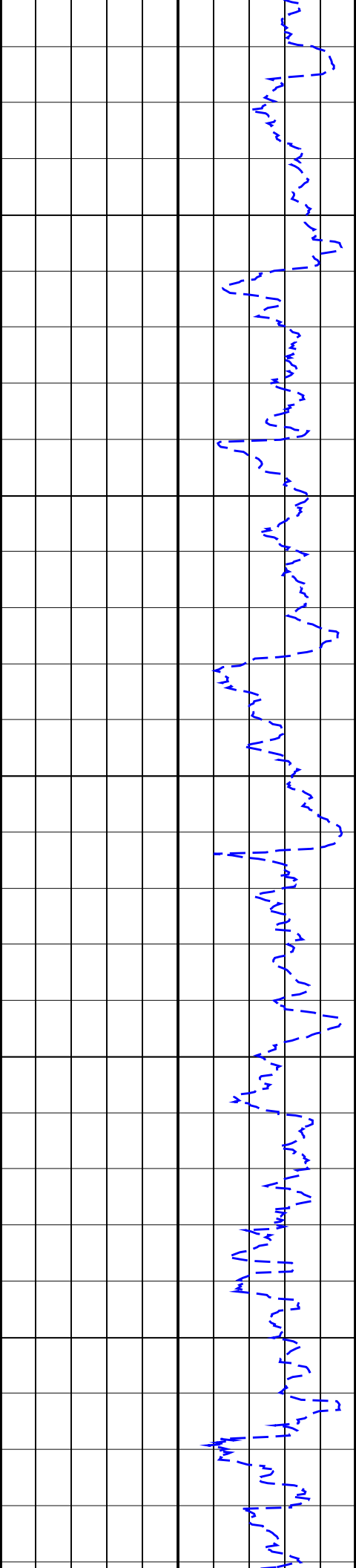


1450
TVD

1500
TVD

1550
TVD

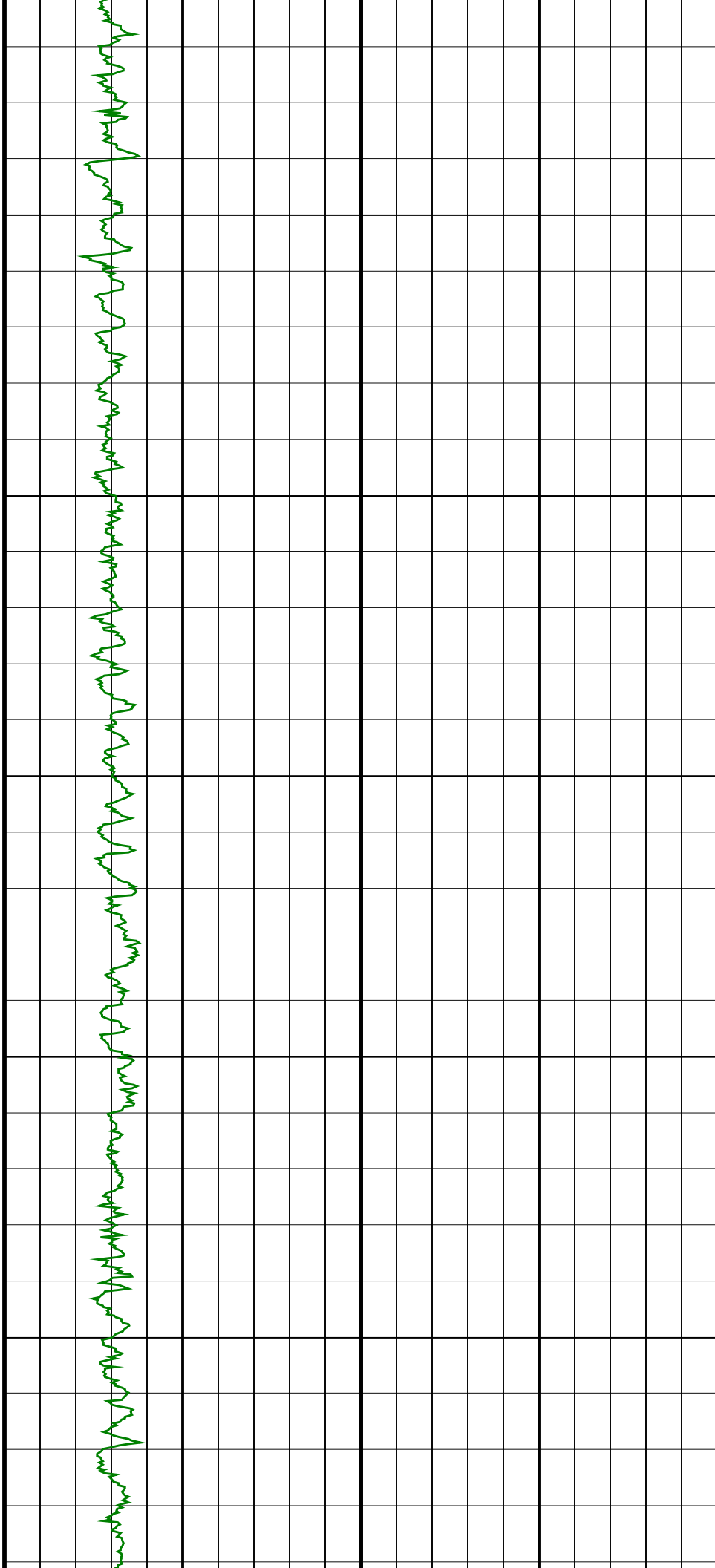


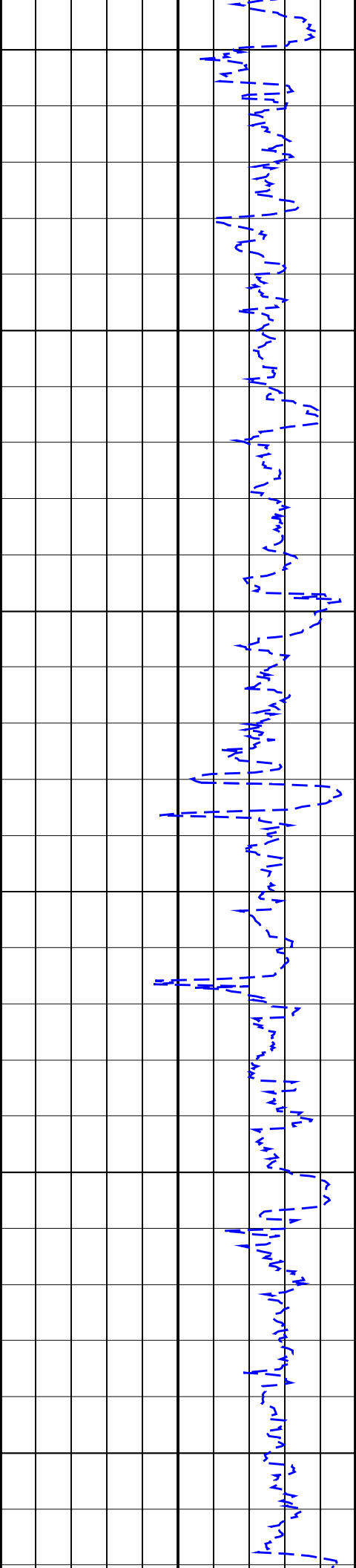


1600
TVD

1650
TVD

1700
TVD

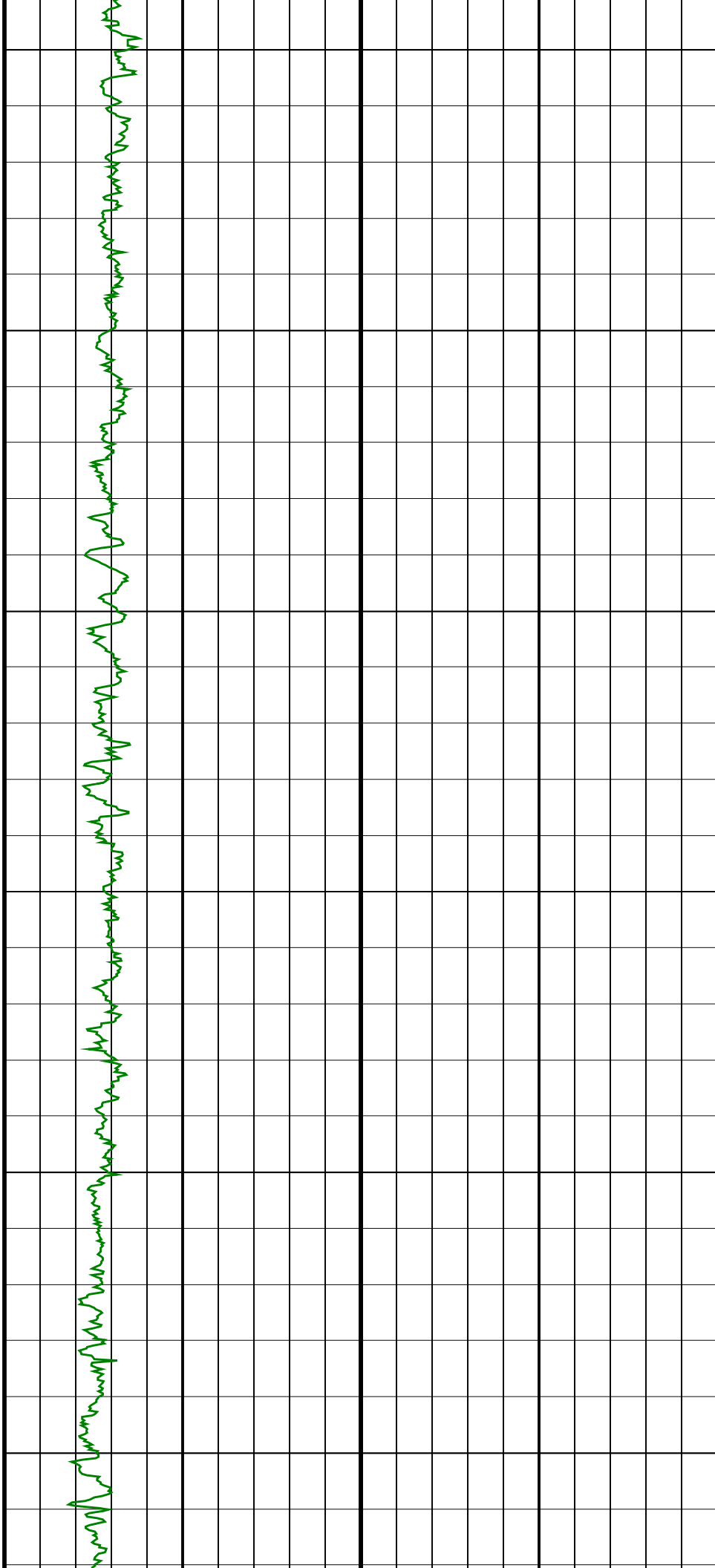


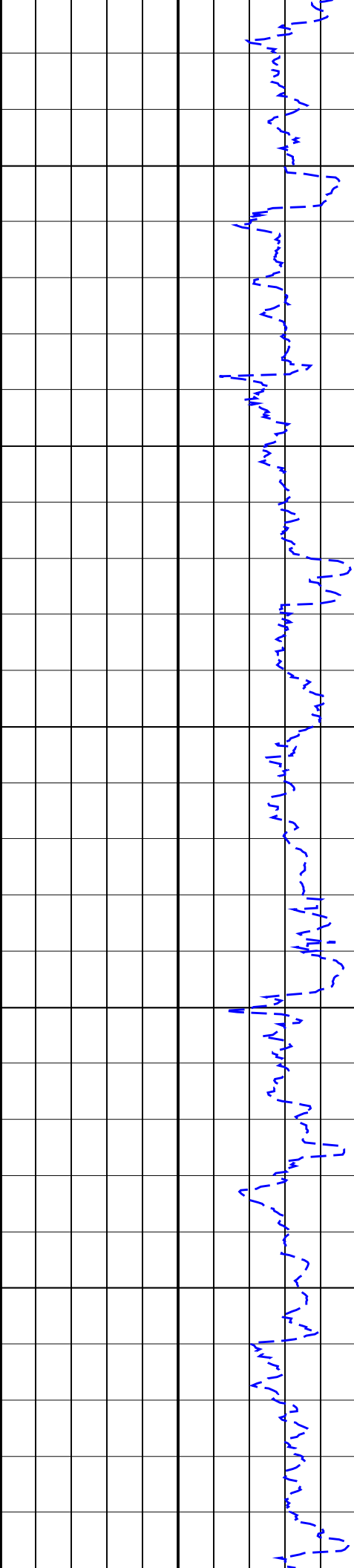


1750
TVD

1800
TVD

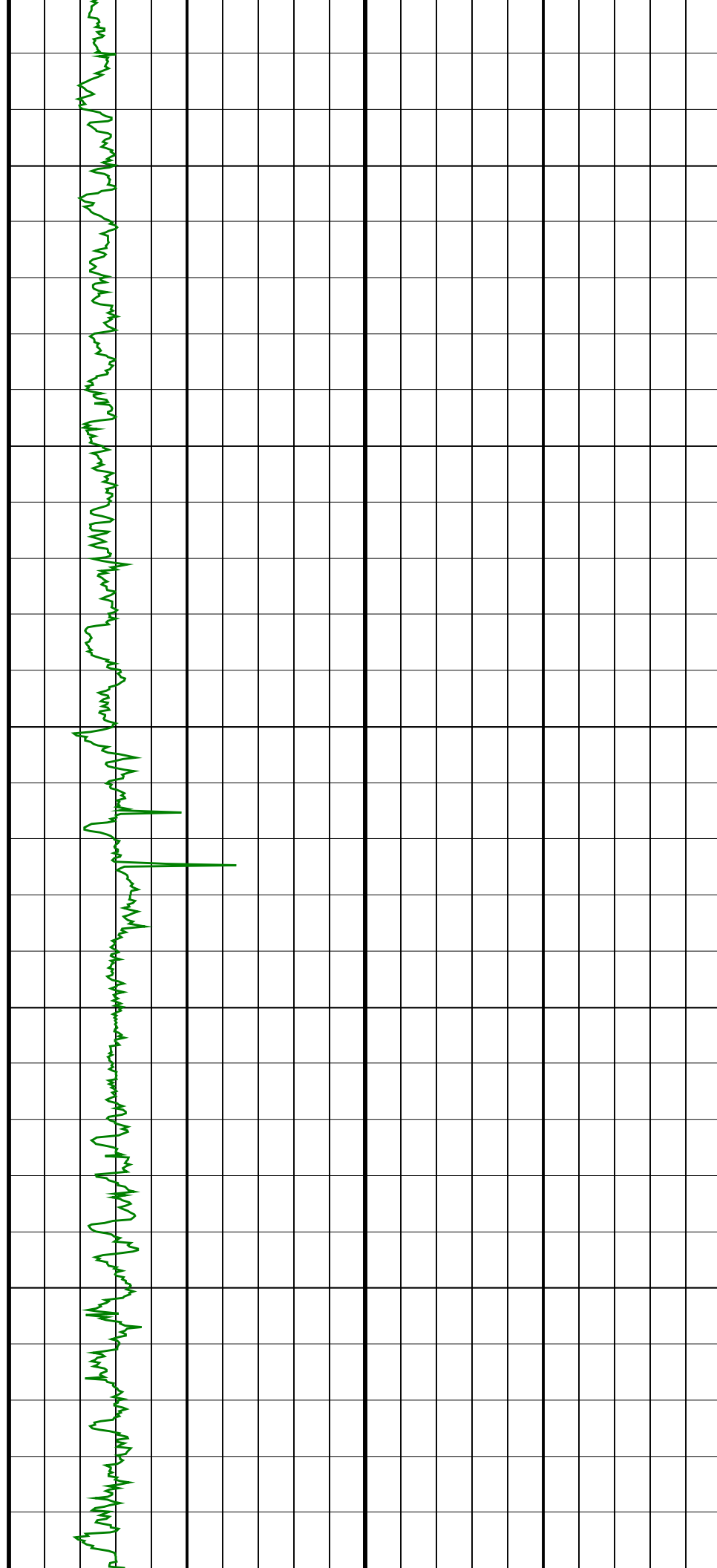
1850
TVD

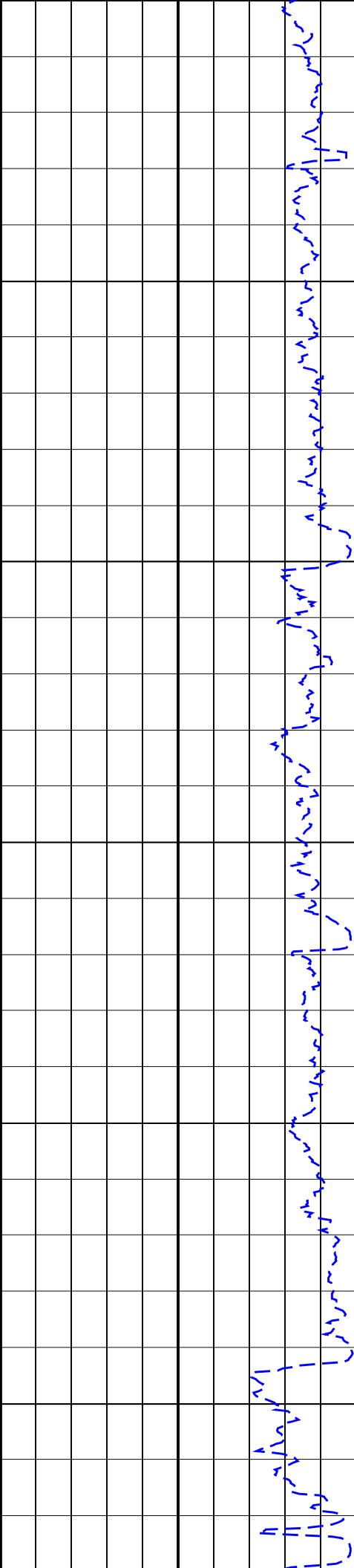




1900
TVD

1950
TVD

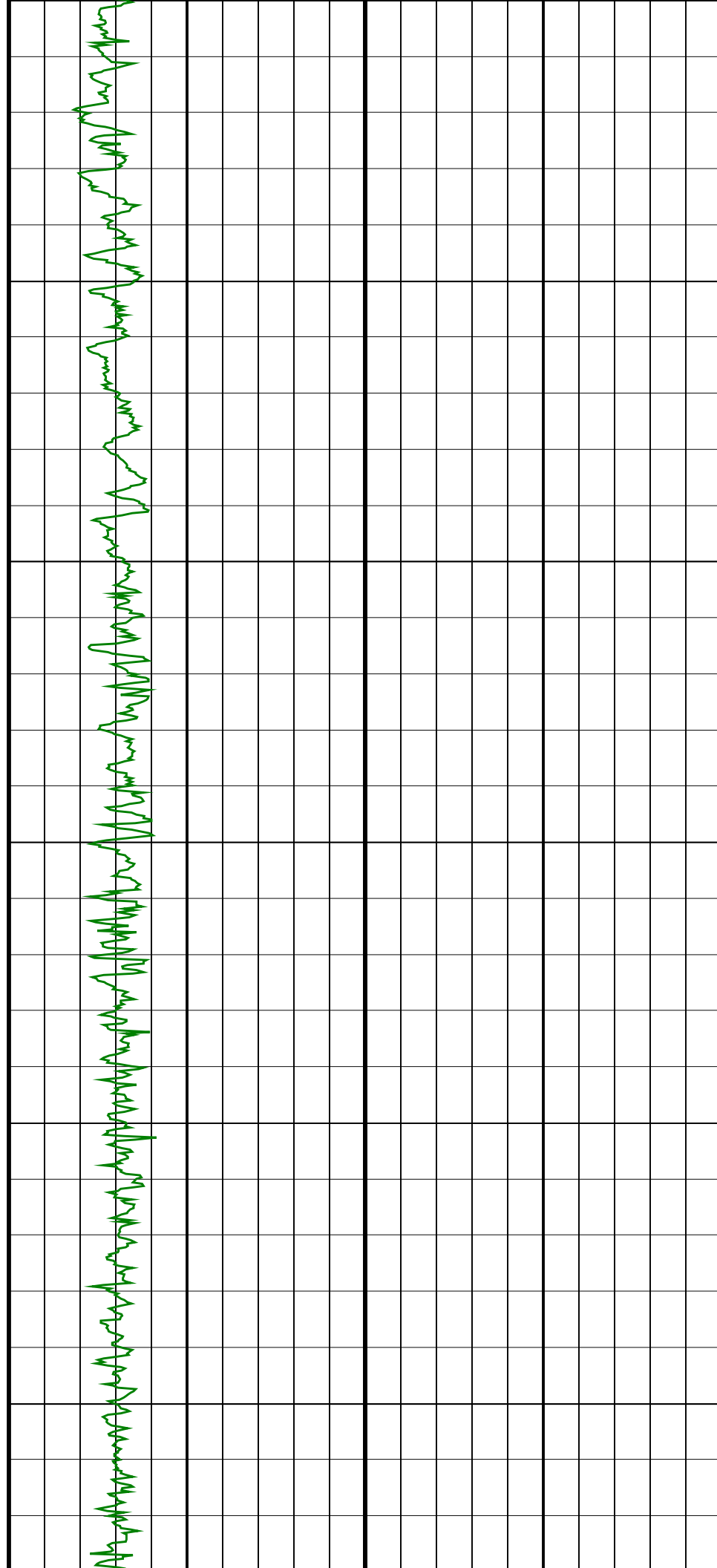


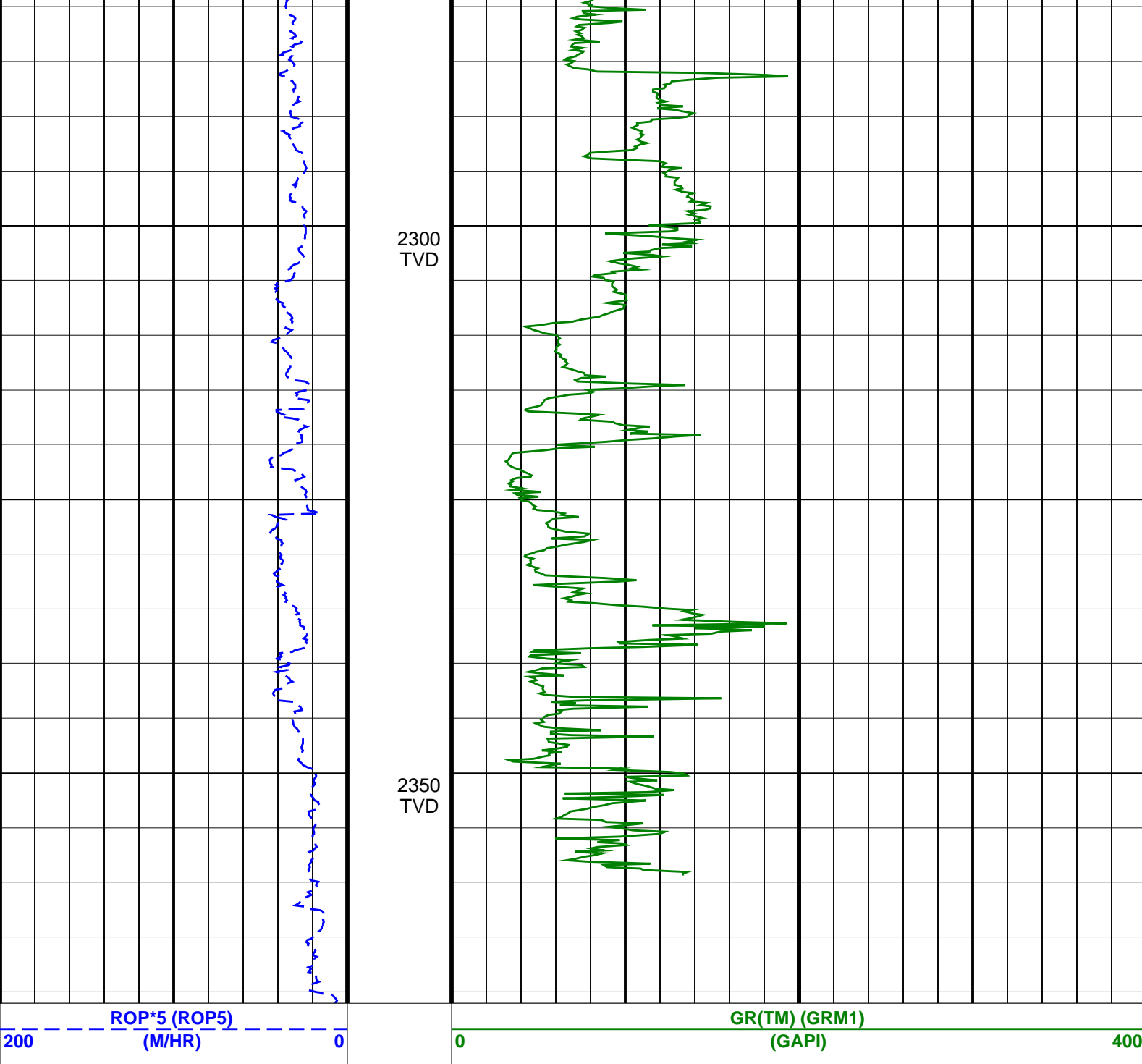


2000
TVD

2050
TVD

2100
TVD





SCHLUMBERGER

Survey report

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Client..... ESSO Australia
Field..... West Kingfish

Well..... WKF W6A
API number..... N/A
Engineer..... R. Borjas/ B. Pattarakorn

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

Spud date..... 07-Sep-2006
Last survey date..... 17-Sep-06
Total accepted surveys... 99
MD of first survey..... 690.00 m
MD of last survey..... 3477.00 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..... -77.00 m
KB above permanent..... 33.40 m
DF above permanent..... 33.40 m

----- Vertical section origin-----
Latitude (+N/S-)..... -0.48 m
Departure (+E/W-)..... 10.65 m

----- Geomagnetic data -----
Magnetic model..... BGGM version 2005
Magnetic date..... 05-Sep-2006
Magnetic field strength... 1202.32 HCNT
Magnetic dec (+E/W-)..... 13.25 degrees
Magnetic dip..... -69.06 degrees

----- MWD survey Reference Criteria -----
Reference G..... 1000.06 mGal
Reference H..... 1202.32 HCNT
Reference Dip..... -69.06 degrees
Tolerance of G..... (+/-) 2.50 mGal
Tolerance of H..... (+/-) 6.00 HCNT
Tolerance of Dip..... (+/-) 0.45 degrees

Separate (+E/W-)
Azimuth from Vsect Origin to target: 265.94 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	690.00	45.86	286.40	0.00	631.13	180.38	80.03	-175.90	193.25	294.46	0.00	TIP	None
2	709.33	45.71	283.20	19.33	644.61	193.49	83.57	-189.29	206.92	293.82	3.62	MWD	None
3	738.24	43.99	277.46	28.91	665.12	213.22	87.24	-209.33	226.78	292.62	4.64	MWD	None
4	766.50	43.12	273.65	28.26	685.60	232.41	89.13	-228.70	245.46	291.29	2.98	MWD	None
5	795.10	42.25	273.35	28.60	706.62	251.63	90.31	-248.06	263.98	290.01	0.95	MWD	None
6	823.65	41.28	269.78	28.55	727.92	270.55	90.83	-267.06	282.08	288.78	2.74	MWD	None
7	852.55	40.91	267.75	28.90	749.70	289.52	90.43	-286.05	300.00	287.54	1.46	MWD	None
8	881.21	40.24	267.07	28.66	771.47	308.15	89.59	-304.67	317.57	286.39	0.85	MWD	None
9	909.84	40.51	267.27	28.63	793.28	326.69	88.67	-323.19	335.14	285.34	0.32	MWD	None
10	938.68	41.99	266.95	28.84	814.96	345.71	87.71	-342.18	353.25	284.38	1.58	MWD	None
11	967.42	41.91	266.94	28.74	836.34	364.91	86.69	-361.37	371.62	283.49	0.09	MWD	None
12	996.03	41.55	267.19	28.61	857.69	383.95	85.71	-380.39	389.92	282.70	0.42	MWD	None
13	1024.68	42.13	267.43	28.65	879.03	403.06	84.81	-399.48	408.38	281.99	0.64	MWD	None
14	1053.07	41.86	267.04	28.39	900.13	422.05	83.90	-418.45	426.78	281.34	0.40	MWD	None
15	1082.11	41.04	267.01	29.04	921.90	441.27	82.90	-437.65	445.43	280.73	0.86	MWD	None
16	1110.24	42.41	265.86	28.13	942.89	459.99	81.73	-456.33	463.59	280.15	1.70	MWD	None
17	1139.08	42.37	265.61	28.84	964.19	479.43	80.29	-475.72	482.45	279.58	0.18	MWD	None
18	1167.71	44.96	265.60	28.63	984.90	499.20	78.77	-495.43	501.65	279.03	2.76	MWD	None
19	1196.36	47.43	264.84	28.65	1004.73	519.87	77.05	-516.03	521.75	278.49	2.69	MWD	None
20	1225.27	50.24	262.40	28.91	1023.76	541.61	74.62	-537.65	542.81	277.90	3.54	MWD	None
21	1254.31	52.65	262.37	29.04	1041.86	564.28	71.61	-560.16	564.72	277.29	2.53	MWD	None
22	1283.07	53.53	261.94	28.76	1059.13	587.22	68.47	-582.94	586.95	276.70	1.00	MWD	None
23	1311.71	53.01	261.83	28.64	1076.26	610.12	65.23	-605.67	609.17	276.15	0.56	MWD	None
24	1340.41	53.44	262.45	28.70	1093.44	633.06	62.09	-628.44	631.50	275.64	0.70	MWD	None
25	1369.31	52.88	262.58	28.90	1110.77	656.14	59.07	-651.37	654.04	275.18	0.60	MWD	None
26	1398.19	53.32	262.64	28.88	1128.11	679.20	56.10	-674.27	676.60	274.76	0.47	MWD	None
27	1426.95	53.72	261.79	28.76	1145.21	702.27	52.97	-697.18	699.19	274.34	0.84	MWD	None
28	1455.72	53.27	261.54	28.77	1162.33	725.34	49.62	-720.07	721.77	273.94	0.52	MWD	None
29	1484.35	54.06	261.12	28.63	1179.29	748.32	46.14	-742.87	744.30	273.55	0.91	MWD	None
30	1513.16	53.59	260.70	28.81	1196.29	771.49	42.47	-765.83	767.01	273.17	0.61	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	1541.86	53.98	261.26	28.70	1213.25	794.56	38.84	-788.70	789.65	272.82	0.63	MWD	None
32	1570.30	53.53	260.76	28.44	1230.07	817.41	35.25	-811.35	812.12	272.49	0.65	MWD	None
33	1599.05	53.88	262.49	28.75	1247.08	840.51	31.88	-834.28	834.89	272.19	1.52	MWD	None
34	1627.43	53.47	262.47	28.38	1263.90	863.34	28.88	-856.94	857.43	271.93	0.44	MWD	None
35	1656.18	52.81	262.34	28.75	1281.14	886.30	25.84	-879.75	880.12	271.68	0.71	MWD	None
36	1685.11	53.85	262.93	28.93	1298.42	909.46	22.87	-902.76	903.05	271.45	1.20	MWD	None
37	1713.71	53.65	263.19	28.60	1315.33	932.50	20.08	-925.65	925.87	271.24	0.31	MWD	None
38	1742.69	53.28	263.21	28.98	1332.58	955.76	17.33	-948.77	948.93	271.05	0.39	MWD	None
39	1771.13	54.15	263.26	28.44	1349.41	978.66	14.63	-971.54	971.65	270.86	0.93	MWD	None
40	1800.06	53.99	263.13	28.93	1366.39	1002.05	11.85	-994.80	994.87	270.68	0.20	MWD	None
41	1828.94	53.63	262.43	28.88	1383.44	1025.33	8.92	-1017.92	1017.96	270.50	0.71	MWD	None
42	1857.75	53.88	262.42	28.81	1400.48	1048.52	5.86	-1040.96	1040.97	270.32	0.26	MWD	None
43	1886.75	53.18	262.52	29.00	1417.71	1071.80	2.80	-1064.08	1064.08	270.15	0.74	MWD	None
44	1915.07	53.60	262.27	28.32	1434.60	1094.48	-0.21	-1086.61	1086.61	269.99	0.50	MWD	None
45	1944.54	53.61	262.66	29.47	1452.09	1118.16	-3.32	-1110.12	1110.13	269.83	0.32	MWD	None
46	1973.18	52.93	262.51	28.64	1469.22	1141.08	-6.28	-1132.89	1132.90	269.68	0.73	MWD	None
47	2001.77	52.96	264.12	28.59	1486.44	1163.87	-8.94	-1155.55	1155.58	269.56	1.37	MWD	None
48	2030.97	53.86	263.51	29.20	1503.85	1187.30	-11.46	-1178.85	1178.91	269.44	1.07	MWD	None
49	2059.35	53.09	263.20	28.38	1520.74	1210.08	-14.10	-1201.51	1201.59	269.33	0.87	MWD	None
50	2087.64	53.38	263.07	28.29	1537.67	1232.72	-16.81	-1224.01	1224.12	269.21	0.33	MWD	None
51	2116.53	53.75	262.65	28.89	1554.83	1255.93	-19.70	-1247.07	1247.23	269.10	0.53	MWD	None
52	2145.71	53.13	262.89	29.18	1572.21	1279.33	-22.65	-1270.32	1270.52	268.98	0.68	MWD	None
53	2174.44	53.32	263.02	28.73	1589.41	1302.31	-25.47	-1293.16	1293.41	268.87	0.23	MWD	None
54	2203.17	53.65	262.30	28.73	1606.51	1325.36	-28.42	-1316.06	1316.37	268.76	0.71	MWD	None
55	2231.77	52.82	261.92	28.60	1623.63	1348.22	-31.57	-1338.76	1339.13	268.65	0.94	MWD	None
56	2260.74	53.08	261.38	28.97	1641.08	1371.28	-34.92	-1361.63	1362.08	268.53	0.53	MWD	None
57	2289.24	53.40	260.97	28.50	1658.14	1394.03	-38.43	-1384.19	1384.73	268.41	0.49	MWD	None
58	2317.55	53.91	260.96	28.31	1674.91	1416.75	-42.01	-1406.71	1407.34	268.29	0.55	MWD	None
59	2346.50	52.97	260.82	28.95	1692.16	1439.91	-45.69	-1429.67	1430.40	268.17	1.00	MWD	None
60	2374.77	53.67	262.16	28.27	1709.05	1462.51	-49.04	-1452.10	1452.92	268.07	1.38	MWD	None

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	2403.76	53.94	263.26	28.99	1726.17	1485.87	-52.01	-1475.30	1476.22	267.98	0.98	MWD	None
62	2432.54	53.14	262.81	28.78	1743.27	1508.99	-54.82	-1498.28	1499.28	267.90	0.93	MWD	None
63	2461.11	52.81	262.65	28.57	1760.47	1531.76	-57.70	-1520.90	1522.00	267.83	0.38	MWD	None
64	2489.92	53.49	263.17	28.81	1777.75	1554.78	-60.55	-1543.78	1544.97	267.75	0.84	MWD	None
65	2517.99	53.46	263.01	28.07	1794.46	1577.31	-63.26	-1566.17	1567.45	267.69	0.14	MWD	None
66	2546.97	52.75	262.81	28.98	1811.86	1600.46	-66.12	-1589.17	1590.55	267.62	0.77	MWD	None
67	2575.68	53.70	262.57	28.71	1829.04	1623.42	-69.05	-1611.98	1613.46	267.55	1.03	MWD	None
68	2604.19	52.78	262.57	28.51	1846.11	1646.22	-72.00	-1634.63	1636.22	267.48	0.98	MWD	None
69	2632.63	53.53	262.51	28.44	1863.16	1668.94	-74.96	-1657.20	1658.89	267.41	0.81	MWD	None
70	2661.88	54.17	262.17	29.25	1880.41	1692.51	-78.11	-1680.61	1682.42	267.34	0.73	MWD	None
71	2690.32	53.40	261.96	28.44	1897.22	1715.40	-81.27	-1703.33	1705.27	267.27	0.84	MWD	None
72	2719.04	53.76	262.04	28.72	1914.27	1738.46	-84.49	-1726.22	1728.28	267.20	0.39	MWD	None
73	2746.92	53.08	261.78	27.88	1930.88	1760.79	-87.64	-1748.38	1750.58	267.13	0.78	MWD	None
74	2778.51	53.97	261.32	31.59	1949.66	1786.12	-91.37	-1773.51	1775.86	267.05	0.93	MWD	None
75	2807.18	54.24	261.80	28.67	1966.47	1809.27	-94.78	-1796.48	1798.98	266.98	0.50	MWD	None
76	2835.60	53.62	261.31	28.42	1983.20	1832.18	-98.16	-1819.20	1821.85	266.91	0.79	MWD	None
77	2864.27	53.49	262.06	28.67	2000.24	1855.18	-101.49	-1842.02	1844.82	266.85	0.66	MWD	None
78	2893.11	54.05	262.02	28.84	2017.28	1878.39	-104.71	-1865.06	1868.00	266.79	0.59	MWD	None
79	2922.03	53.61	261.68	28.92	2034.35	1901.67	-108.02	-1888.17	1891.26	266.73	0.55	MWD	None
80	2950.86	53.68	261.99	28.83	2051.44	1924.83	-111.32	-1911.16	1914.40	266.67	0.27	MWD	None
81	2978.82	53.21	262.06	27.96	2068.09	1947.24	-114.44	-1933.40	1936.78	266.61	0.52	MWD	None
82	3007.83	52.97	262.77	29.01	2085.51	1970.39	-117.50	-1956.39	1959.92	266.56	0.65	MWD	None
83	3035.59	52.66	262.33	27.76	2102.29	1992.47	-120.37	-1978.32	1981.98	266.52	0.51	MWD	None
84	3064.95	53.36	262.68	29.36	2119.96	2015.88	-123.42	-2001.57	2005.37	266.47	0.78	MWD	None
85	3094.17	54.32	262.81	29.22	2137.20	2039.43	-126.40	-2024.97	2028.92	266.43	1.01	MWD	None
86	3123.14	54.15	262.62	28.97	2154.13	2062.90	-129.38	-2048.29	2052.37	266.39	0.24	MWD	None
87	3152.01	53.63	262.32	28.87	2171.14	2086.18	-132.44	-2071.41	2075.64	266.34	0.61	MWD	None
88	3179.78	53.10	262.07	27.77	2187.71	2108.42	-135.47	-2093.49	2097.87	266.30	0.62	MWD	None
89	3208.82	52.19	261.96	29.04	2205.33	2131.45	-138.67	-2116.35	2120.89	266.25	0.96	MWD	None
90	3237.72	51.83	261.90	28.90	2223.12	2154.17	-141.87	-2138.90	2143.60	266.21	0.38	MWD	None

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)
91	3266.31	51.33	262.10	28.59	2240.89	2176.52	-144.99	-2161.08	2165.94	266.16	0.56	MWD	None
92	3295.03	50.77	261.90	28.72	2258.94	2198.80	-148.10	-2183.20	2188.22	266.12	0.62	MWD	None
93	3323.76	50.89	261.78	28.73	2277.09	2221.01	-151.26	-2205.25	2210.43	266.08	0.16	MWD	None
94	3352.54	51.40	261.23	28.78	2295.15	2243.36	-154.57	-2227.42	2232.77	266.03	0.71	MWD	None
95	3381.41	51.71	261.06	28.87	2313.10	2265.89	-158.05	-2249.76	2255.30	265.98	0.36	MWD	None
96	3409.74	52.40	260.55	28.33	2330.52	2288.14	-161.62	-2271.81	2277.55	265.93	0.86	MWD	None
97	3438.82	52.74	260.11	29.08	2348.19	2311.12	-165.50	-2294.58	2300.54	265.87	0.51	MWD	None
98	3455.28	53.13	259.96	16.46	2358.11	2324.19	-167.77	-2307.51	2313.60	265.84	0.76	MWD	None
99	3477.00	53.50	259.80	21.72	2371.09	2341.51	-170.83	-2324.66	2330.93	265.80	0.55	Proj.	to TD

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

Well: **WKF W6A**
Field: **West KingFish**
Rig: **ISDL 453**
State: **Victoria**

Schlumberger

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

