

Bit Run Summary

Type		KCl/PHPA/Glycol	KCl/PHPA/Glycol	KCl/PHPA/Glycol	KCl/PHPA/Glycol	KCl/PHPA/Glycol					
Mud weight	ppg	9.55	9.4	9.55	9.55	9.45					
Solids	%wt	4.7	4.3	5.6	5.3	5.2					
Chlorides	mg/L	47,500	46,000	43,000	46,500	42,500					
Rm											
Rmf											
Rmc											
Potassium											
Environmental data											
GR											
Mud weight	ppg	9.55	9.4	9.55	9.55	9.45					
Bit size	in	8.5	8.5	8.5	8.5	8.5					
Resistivity											
Neutron porosity											
Hole Size											
Mud weight											
Temperature											
Mud salinity											
Formation salinity											
Recording rate 1	SEC										
Recording rate 2	SEC										
Filtering GR		3pt	3pt	3pt	3pt	3pt					
Filtering density											
Filtering Neutron											
Company representative		G.Campbell	B.Steel								
Anadrill personnel		J.Dolan	O.Radicevic	C.Soper	B.Manjenic	D.Hastie					

DISCLAIMER

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OTHER SERVICES FOR RUN1	OTHER SERVICES FOR RUN2	OTHER SERVICES FOR RUN3
Gamma Ray Directional Drilling Directional Surveys	Gamma Ray Directional Drilling Directional Surveys	Gamma Ray Directional Drilling Directional Surveys
REMARKS: RUN NUMBER 1 8-1/2 in. hole was drilled from 1362.6m to 2243.0m. Depth is referenced to the Driller's Depth. Gamma Ray is corrected for Tool Size, Bit Size, and Mud Weight. Mud type is KCl/PHPA/Glycol. Gamma Ray logged behind casing to 1351m. POOH due to bit change.	REMARKS: RUN NUMBER 2 8-1/2 in. hole was drilled from 2243.0m to 2391.0m. Depth is referenced to the Driller's Depth. Gamma Ray is corrected for Tool Size, Bit Size, and Mud Weight. Mud type is KCl/PHPA/Glycol. POOH due to bit change.	REMARKS: RUN NUMBER 3 8-1/2 in. hole was drilled from 2391.0m to 2637.0m. Depth is referenced to the Driller's Depth. Gamma Ray is corrected for Tool Size, Bit Size, and Mud Weight. Mud type is KCl/PHPA/Glycol. POOH due to bit change.

EQUIPMENT DESCRIPTION

RUN1
















RUN2

RUN3

DOWNHOLE EQ





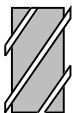
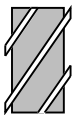




DOWNHOLE E

DOWNHOLE EQ

<div>6-3/4 in. Pow</div> <div>MDC: Z40 MEC: 10 MDI: 108 MGR: 14 DH Software:</div> <div>D&I GR</div> <div>18.6 — 18.0</div> <div></div>	<div>22.96-3/4 in. Pow</div> <div>MDC: Z40 MEC: 10 MDI: 108 MGR: 14 DH Software:</div> <div>D&I GR</div> <div>18.7 — 18.0</div> <div></div>	<div>23.06-3/4 in. Pow</div> <div>MDC: Z40 MEC: 10 MDI: 108 MGR: 14 DH Software:</div> <div>D&I GR</div> <div>18.7 — 18.0</div> <div></div>
<div>6-1/2 in. P</div> <div>S/N: GS9</div> <div></div>	<div>14.56-3/4 in. P</div> <div>S/N: GS9</div> <div></div>	<div>14.56-3/4 in. P</div> <div>S/N: GS9</div> <div></div>
<div>6-1/8 in. NM</div> <div>S/N: DOTS Stab OD: 8</div> <div></div>	<div>11.86-3/4 in. NM</div> <div>S/N: DOTS Stab OD: 8</div> <div></div>	<div>11.96-3/4 in. NM</div> <div>S/N: DOTS Stab OD: 8</div> <div></div>
<div>6-1/2 in. P</div> <div>S/N: ANA 9</div> <div></div>	<div>10.66-3/4 in. P</div> <div>S/N: ANA 9</div> <div></div>	<div>10.66-3/4 in. P</div> <div>S/N: ANA 9</div> <div></div>
<div>6-3/4 in. Power</div> <div>A675XP S/N: 02 1.15 deg. 8-3/8 in. Moto</div> <div></div>	<div>7.96-3/4 in. Power</div> <div>A675XP S/N: 02 1.15 deg. 8-3/8 in. Moto</div> <div></div>	<div>7.96-3/4 in. Power</div> <div>A675XP S/N: 02 1.15 deg. 8-3/8 in. Moto</div> <div></div>

DOWNHOLE EQ

DOWNHOLE E

6-3/4 in. Pow MDC: 06 MEC: 61 MDI: 62 MGR: 29 DH software:		23.06-3/4 in. Pow MDC: 06 MEC: 61 MDI: 62 MGR: 29 DH software:		23.0
D&I GR	18.7 — 18.1	D&I GR	18.7 — 18.1	
6-1/2 in. P S/N:GS9		14.86-1/2 in. P S/N:GS9		14.8
6-1/8 in. NM S/N: DOTS Stab OD: 8		12.26-1/8 in. NM S/N: DOTS Stab OD: 8		12.2
6-1/2 in. P S/N: ANA9		10.66-1/2 in. P S/N: ANA9		10.6
6-3/4 in. Power A675XP S/N: 02 1.15 deg. 8-3/8 in. Moto		7.936-3/4 in. Power A675XP S/N: 02 1.15 deg. 8-3/8 in. Moto		7.93

Smith Inse

8-1/2 in

FG20 S/N: M

Maximum string diam
All lengths in



0.00

0.25

Smith Inse

8-1/2 in

GFi30 S/N: M

Maximum string diam
All lengths in



0.00

0.25

FLA-A2a RT 1:500TVD

IDEAL Version: ID8_OC_07 <TVD> Vertical Scale: 1:500

Graphics File Created: 15-Sep-2003 15:05

ROP*5 (ROP5)
(M/HR)

200

0

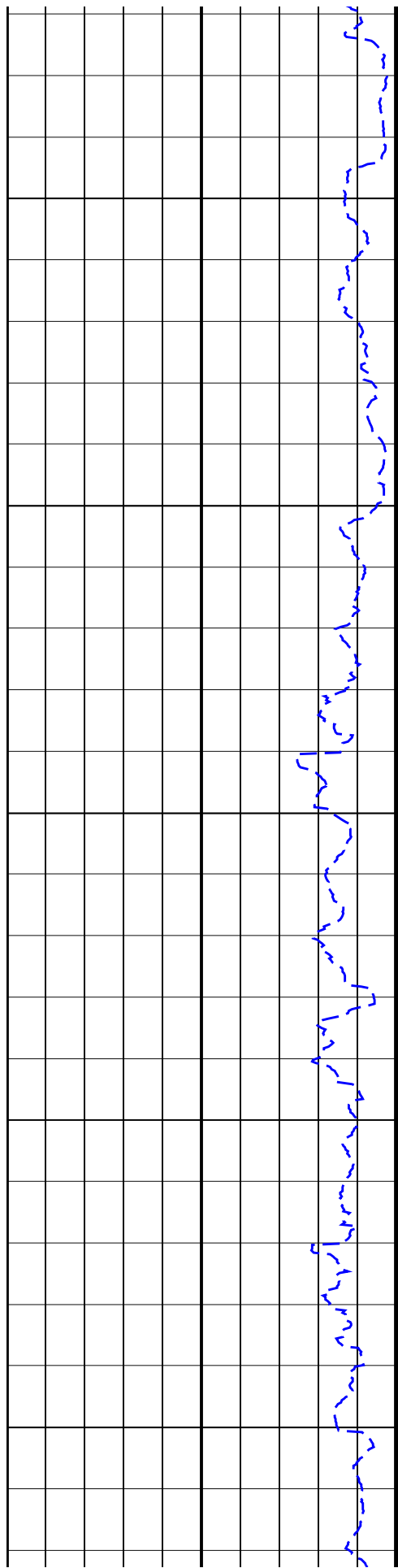
GR(TM) (GRM1)
(GAPI)

0

400

1350
TVD

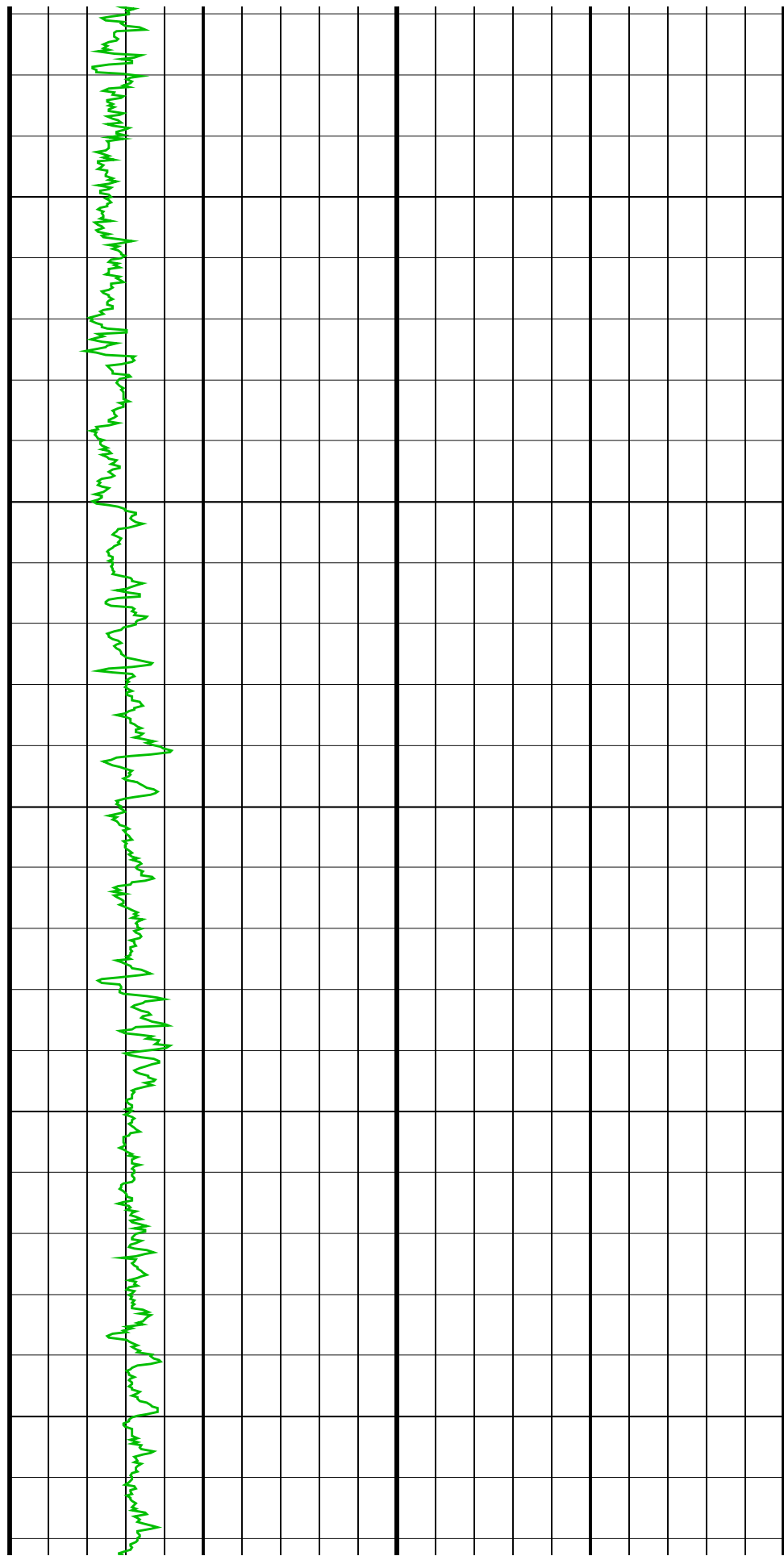
GR Logged behind casing to 1350m.
9-5/8 in. Casing shoe at 1350m

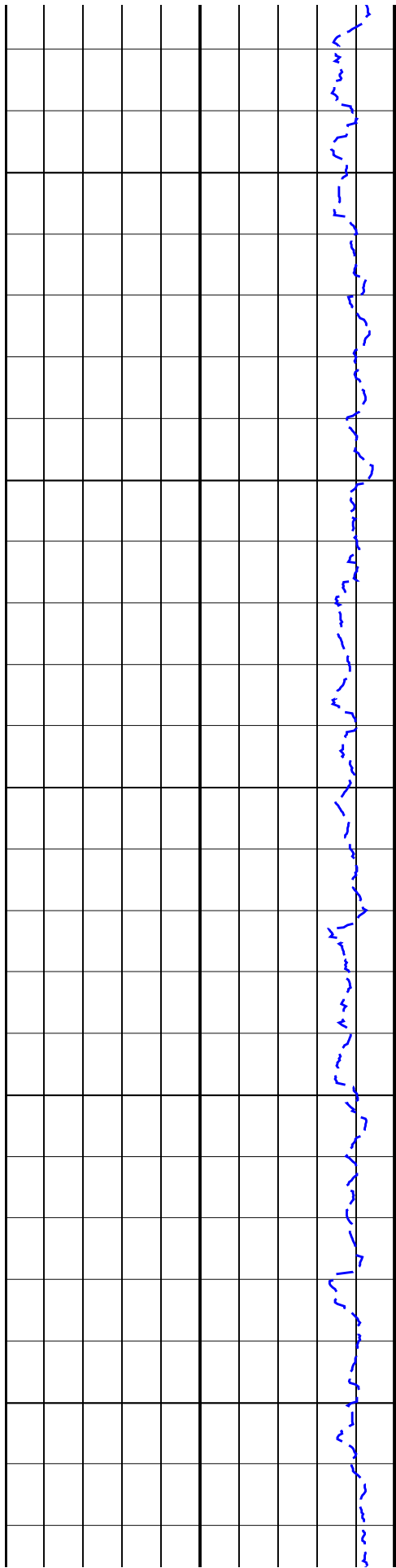


1400
TVD

1450
TVD

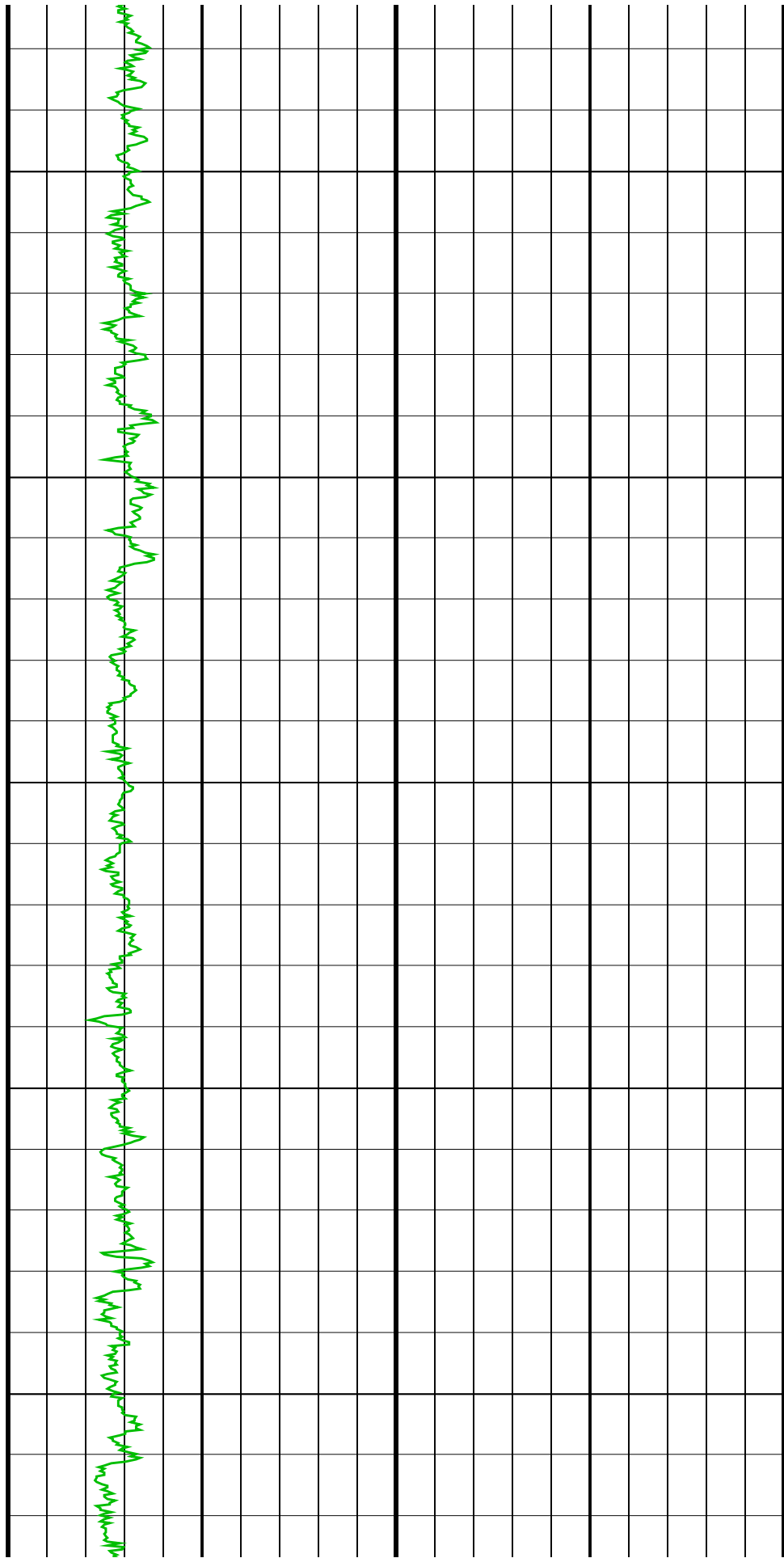
1500
TVD

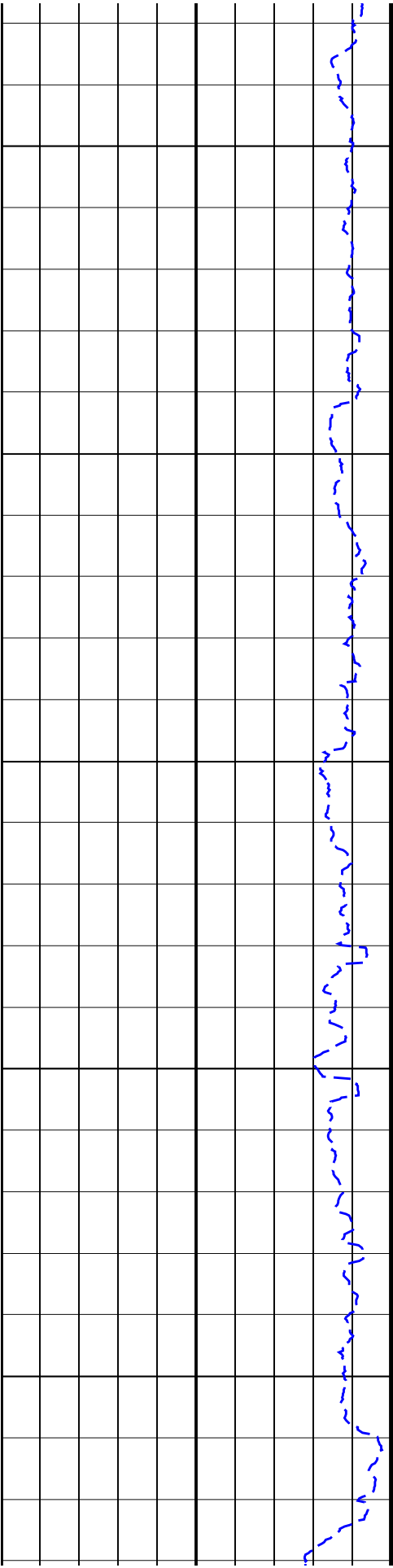




1550
TVD

1600
TVD

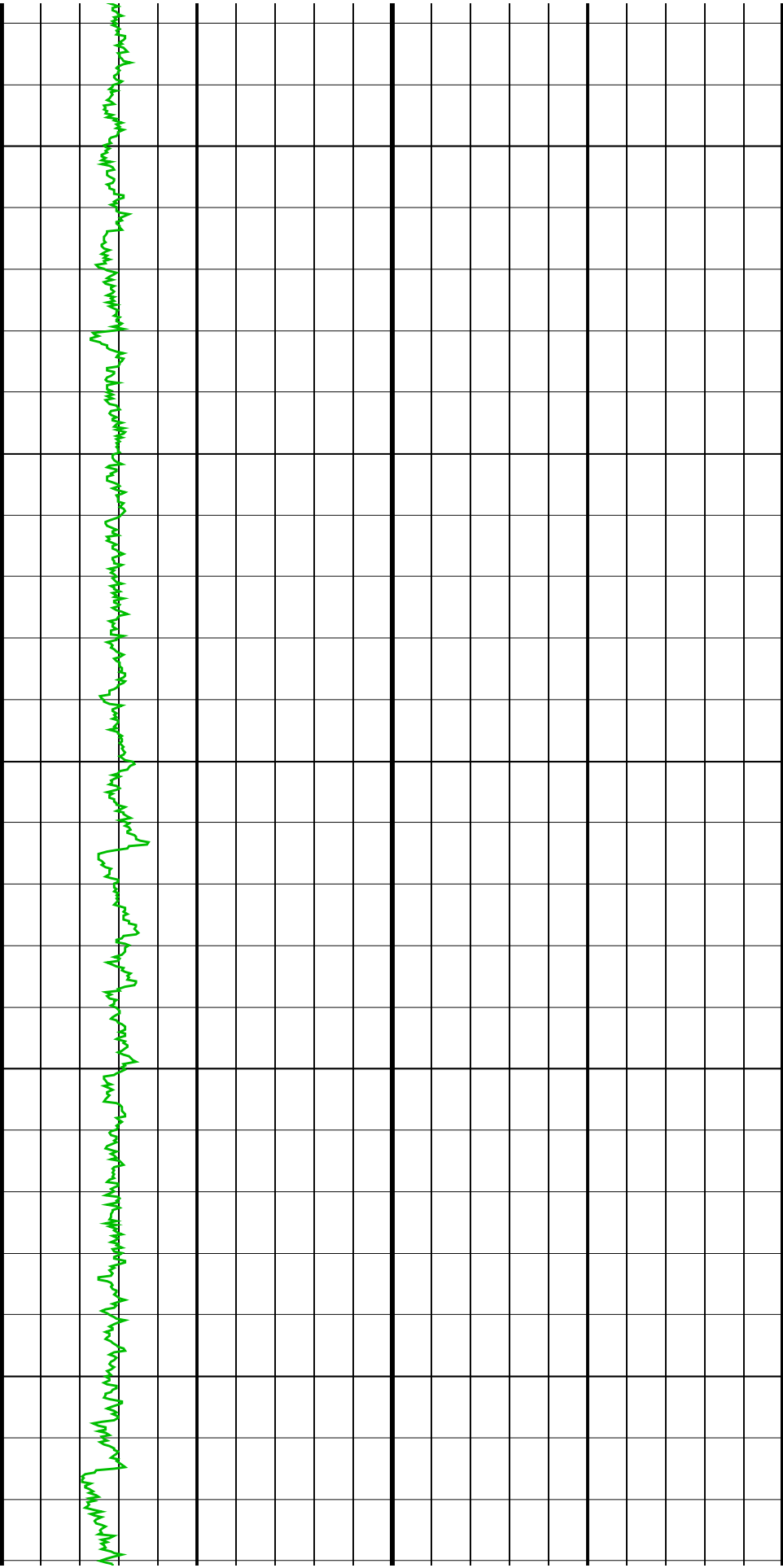


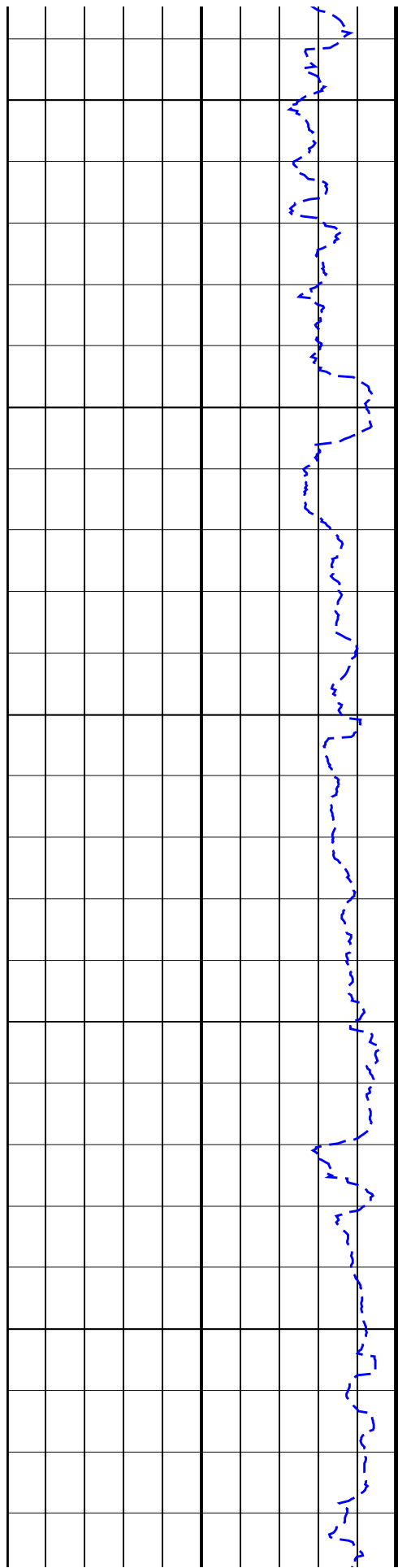


1650
TVD

1700
TVD

1750
TVD

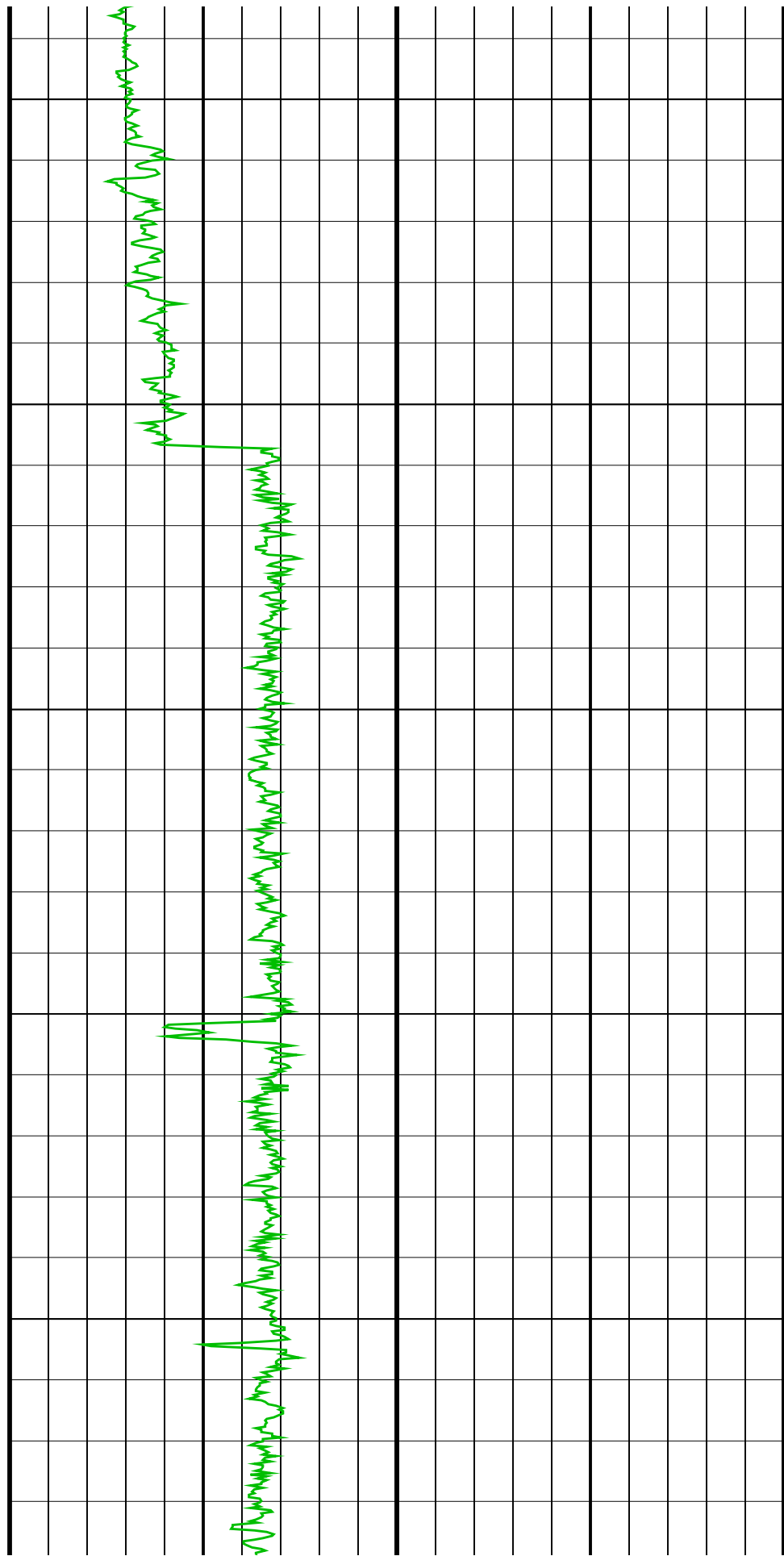


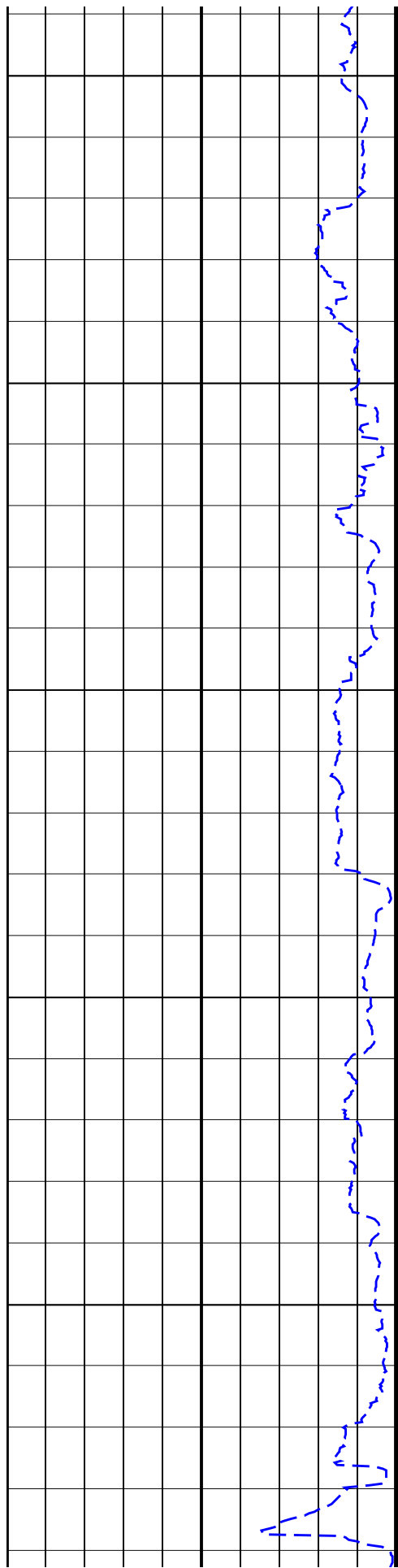


1900
TVD

1950
TVD

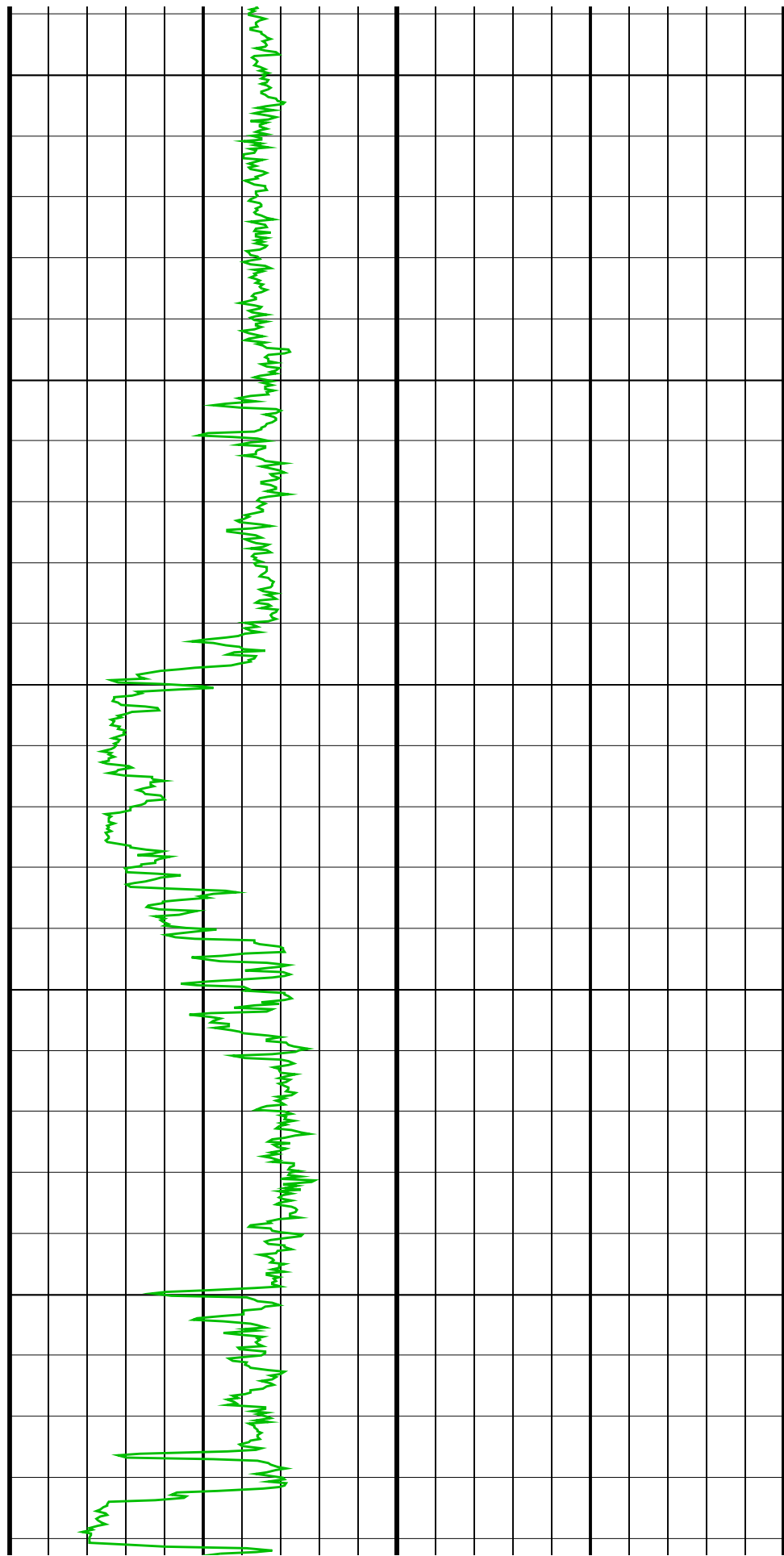
2000
TVD

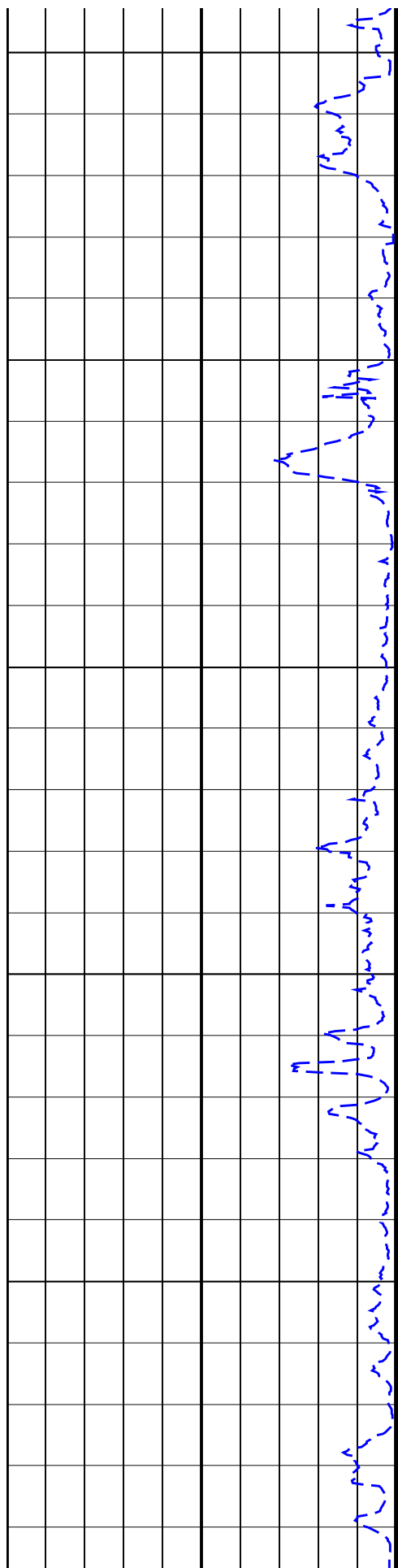


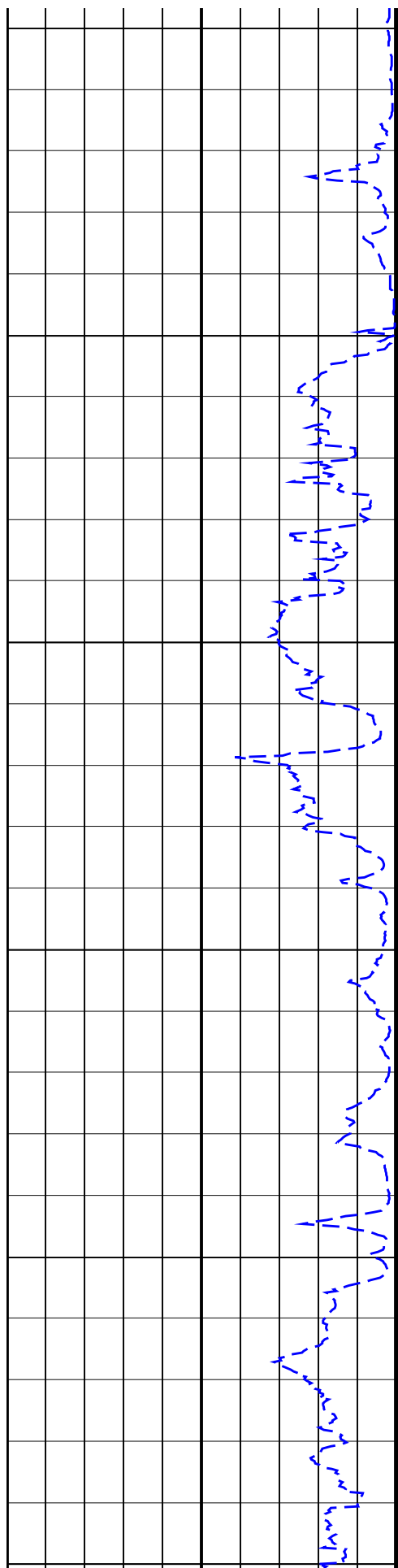


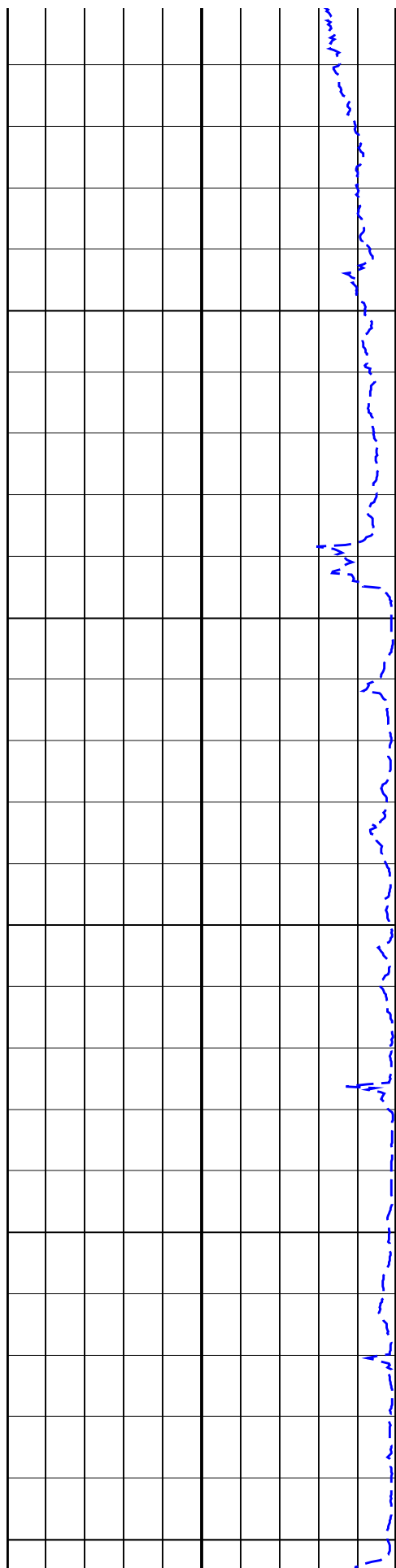
2050
TVD

2100
TVD

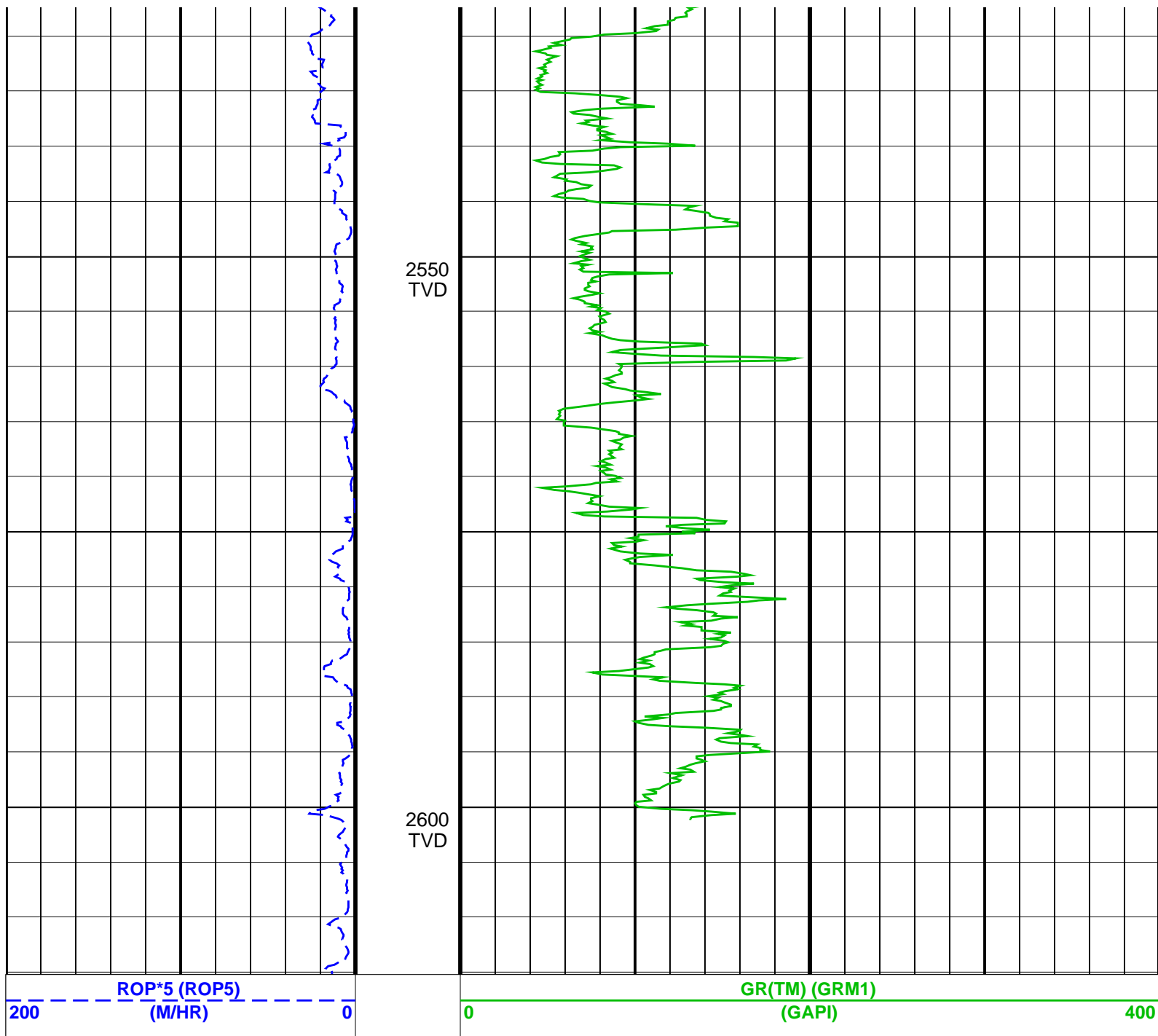








See Remarks for Run 4



SCHLUMBERGER

Survey report 15-Sep-2003 11:02:46 Page 1 of 3

Client.....: ESSO Australia
Field.....: FLA GDA 94

Well.....: FLA-A2a Spud date.....: 03-Sep-03
API number.....: Last survey date.....: 15-Sep-03
Engineer.....: J.Dolan/O.Radicevic/D.Hastie Total accepted surveys...: 54
MD of first survey.....: 1350.00 m
RIG.....: ISDL 453 MD of last survey.....: 2803.00 m
STATE.....: VICTORIA

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

----- Geomagnetic data -----
Magnetic model.....: BGGM version 2002
Magnetic date.....: 02-Sep-2003

Magnetic field strength...: 1200.85 HCNT
 ----- Depth reference -----
 Permanent datum.....: Mean Sea Level
 Depth reference.....: Driller's Pipe Tally
 GL above permanent.....: -93.00 m
 KB above permanent.....: -15240.00 m
 DF above permanent.....: 33.85 m
 Magnetic dec (+E/W-).....: 13.22 degrees
 Magnetic dip.....: -68.76 degrees
 ----- MWD survey Reference Criteria -----
 Reference G.....: 1000.03 mGal
 Reference H.....: 1200.85 HCNT
 Reference Dip.....: -68.76 degrees
 Tolerance of G.....: (+/-) 2.50 mGal
 Tolerance of H.....: (+/-) 6.00 HCNT
 Tolerance of Dip.....: (+/-) 0.45 degrees

----- Corrections -----
 Magnetic dec (+E/W-).....: 13.22 degrees
 Grid convergence (+E/W-).....: -0.89 degrees
 Total az corr (+E/W-).....: 14.11 degrees
 Azimuth from rotary table to target: 297.15 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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 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)	Displ Total (m)	At Azim (deg)	DLS (deg/10m)	Srvy tool	Tool Corr
1	1350.00	16.46	221.99	0.00	1307.62	62.86	-215.88	-179.26	280.60	219.71	1.57	TIP	None
2	1374.40	13.55	232.15	24.40	1331.19	64.95	-220.20	-183.83	286.85	219.86	4.81	GYR	None
3	1411.73	9.13	256.70	37.33	1367.80	69.06	-223.57	-190.17	293.51	220.38	5.19	MWD	None
4	1440.12	8.96	275.09	28.39	1395.85	72.82	-223.90	-194.57	296.62	220.99	3.05	MWD	None
5	1469.06	9.09	292.17	28.94	1424.43	77.19	-222.83	-198.93	298.71	221.76	2.77	MWD	None
6	1497.91	8.97	296.87	28.85	1452.92	81.71	-220.95	-203.05	300.08	222.58	0.78	MWD	None
7	1526.50	10.31	309.60	28.59	1481.11	86.44	-218.32	-207.01	300.86	223.48	2.63	MWD	None
8	1555.14	11.41	326.61	28.64	1509.25	91.41	-214.32	-210.54	300.43	224.49	3.53	MWD	None
9	1584.00	11.80	331.76	28.86	1537.52	96.32	-209.33	-213.51	299.01	225.57	1.15	MWD	None
10	1612.87	11.87	331.37	28.87	1565.77	101.21	-204.13	-216.33	297.43	226.66	0.11	MWD	None
11	1641.74	11.93	331.51	28.87	1594.02	106.12	-198.90	-219.18	295.97	227.78	0.07	MWD	None
12	1670.80	11.79	331.23	29.06	1622.46	111.06	-193.66	-222.04	294.62	228.91	0.16	MWD	None
13	1699.15	11.74	330.47	28.35	1650.22	115.87	-188.61	-224.85	293.48	230.01	0.17	MWD	None
14	1728.09	11.53	329.93	28.94	1678.56	120.76	-183.54	-227.75	292.51	231.14	0.25	MWD	None
15	1757.04	11.41	329.44	28.95	1706.94	125.62	-178.57	-230.66	291.71	232.25	0.16	MWD	None
16	1785.60	11.25	327.87	28.56	1734.94	130.40	-173.78	-233.58	291.13	233.35	0.36	MWD	None
17	1814.31	11.16	332.62	28.71	1763.10	135.07	-168.94	-236.34	290.52	234.44	0.97	MWD	None
18	1843.05	11.19	331.76	28.74	1791.30	139.63	-164.02	-238.94	289.82	235.53	0.18	MWD	None
19	1871.62	11.06	331.55	28.57	1819.33	144.17	-159.16	-241.56	289.28	236.62	0.14	MWD	None
20	1900.06	10.82	332.11	28.44	1847.25	148.61	-154.41	-244.11	288.84	237.69	0.28	MWD	None
21	1928.69	11.77	330.34	28.63	1875.33	153.26	-149.49	-246.81	288.55	238.80	1.06	MWD	None
22	1957.49	11.60	329.37	28.80	1903.53	158.17	-144.45	-249.74	288.51	239.95	0.27	MWD	None
23	1986.11	12.40	330.46	28.62	1931.53	163.17	-139.30	-252.72	288.57	241.14	0.87	MWD	None
24	2015.06	12.13	330.42	28.95	1959.82	168.31	-133.95	-255.75	288.71	242.36	0.28	MWD	None
25	2043.78	13.10	330.59	28.72	1987.84	173.55	-128.49	-258.84	288.98	243.60	1.01	MWD	None
26	2072.44	14.31	331.30	28.66	2015.68	179.19	-122.56	-262.14	289.37	244.94	1.28	MWD	None
27	2101.06	14.00	330.94	28.62	2043.44	184.99	-116.43	-265.52	289.92	246.32	0.34	MWD	None
28	2129.96	15.19	332.71	28.90	2071.40	190.98	-110.00	-268.95	290.58	247.75	1.32	MWD	None
29	2159.25	18.21	334.37	29.29	2099.46	197.75	-102.47	-272.69	291.31	249.41	3.13	MWD	None
30	2187.25	21.60	334.98	28.00	2125.78	205.30	-93.85	-276.77	292.24	251.27	3.64	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)	Displ Total (m)	At Azim (deg)	DLS (deg/10m)	Srvy tool	Tool Corr
31	2215.89	24.11	332.81	28.64	2152.17	214.22	-83.87	-281.67	293.89	253.42	2.77	MWD	None
32	2244.50	26.55	331.20	28.61	2178.03	224.27	-73.06	-287.42	296.56	255.74	2.66	MWD	None
33	2272.84	28.75	329.07	28.34	2203.13	235.30	-61.67	-293.98	300.37	258.15	2.55	MWD	None
34	2301.31	32.66	329.75	28.47	2227.60	247.59	-49.15	-301.37	305.35	260.74	4.14	MWD	None
35	2329.86	36.22	329.93	28.55	2251.15	261.18	-35.19	-309.48	311.47	263.51	3.74	MWD	None

36	2359.02	38.38	330.45	29.16	2274.34	275.99	-19.86	-318.26	318.88	266.43	2.25	MWD	None
37	2371.48	38.87	333.19	12.46	2284.07	282.50	-13.10	-322.11	322.19	267.69	1.24	MWD	None
38	2388.13	38.50	329.86	16.65	2297.07	291.24	-4.09	-327.31	326.91	269.32	0.76	MWD	None
39	2416.83	42.45	331.83	28.70	2318.90	306.73	12.18	-336.37	336.18	272.12	4.34	MWD	None
40	2445.44	43.87	331.98	28.61	2339.77	322.78	29.47	-345.55	346.44	274.91	1.52	MWD	None
41	2474.07	38.51	335.08	28.63	2361.31	337.94	46.34	-353.93	356.64	277.50	5.95	MWD	None
42	2502.61	38.45	335.48	28.54	2383.65	351.91	62.48	-361.36	366.41	279.85	0.27	MWD	None
43	2531.19	39.29	335.30	28.58	2405.90	365.99	78.78	-368.82	376.85	282.10	0.89	MWD	None
44	2559.97	39.87	335.27	28.78	2428.08	380.42	95.44	-376.49	388.12	284.26	0.60	MWD	None
45	2589.01	38.93	335.13	29.04	2450.52	394.93	112.17	-384.22	399.99	286.31	0.98	MWD	None
46	2616.01	39.31	334.73	27.00	2471.47	408.40	127.60	-391.44	411.45	288.09	0.51	MWD	None
47	2643.54	39.80	334.52	27.53	2492.70	422.31	143.44	-398.95	423.70	289.81	0.51	MWD	None
48	2675.58	40.05	334.10	32.04	2517.27	438.70	161.97	-407.87	438.61	291.70	0.34	MWD	None
49	2704.02	40.51	333.56	28.44	2538.97	453.44	178.47	-415.98	452.41	293.26	0.61	MWD	None
50	2726.90	40.71	333.58	22.88	2556.33	465.43	191.81	-422.61	463.87	294.45	0.26	MWD	None
51	2733.21	40.62	333.55	6.31	2561.12	468.74	195.49	-424.44	467.06	294.77	0.44	MWD	None
52	2761.16	39.98	333.49	27.95	2582.44	483.29	211.67	-424.44	481.30	296.12	0.69	MWD	None
53	2783.99	38.26	333.88	22.83	2600.15	494.87	224.58	-438.88	492.79	297.14	2.28	MWD	None
54	2803.00	37.00	334.20	19.01	2615.20	504.15	235.02	-443.97	502.12	297.93	2.01	Projection to TD	

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Company: **EESO Australia Pty. Ltd.**

Schlumberger

Well: **FLA-A2a**

Field: **Flounder GDA 94**

Rig: **ISDL 453**

State: **VICTORIA**

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