

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

Well: BMA A9B

Field: **Bream A**

Rig: ISDL 453

State: **Victoria**

Rig:		ISDL 453	
Field:		Bream A	
Location:		Bass Strait	
Well:		BMA A9B	
Company:		ESSO Australia Pty. Ltd.	
<div>Gamma Ray Service 1:200 True Vertical Depth Real Time Log</div>			
Location			
Total depth:	2283.0 m	K.B.	Top Drive
Spud date:	26 Feb 2006	G.L.	-59.40 m
Runs:	1 To 2	D.F.	32.82 m
Permanent datum:	Mean Sea Level	Elev.:	0.0 m
Log measured from:	Drill Floor	32.82 m above Perm. datum	
Depth reference:	Driller's Depth		
Service Order no.	Y = 5738460.92 m	Longitude	Latitude
06ASQ0002	X = 567353.50 m	E147° 46' 20.685"	S38° 29' 58.800"

[illegible]

Bit Run Summary




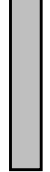


Run number		1	2							
Bit size	in	8.5	8.5							
Bit start depth	m	1756.0	1769.0							
Bit end depth	m	1769.0	2283.0							
Top interval logged	m	1736.4	1756.0							
Bottom interval logged	m	1749.4	2264.4							
Begin log: time		27-Feb-06	01-Mar-06							
Begin log: date		20:00	16:00							
End log: time		01-Mar-06	03-Mar-06							
End log: date		0:00	14:15							
Mud data										
Depth	m	1769.0	2283.0							
Type		KCl/PHPA/Gly.	KCl/PHPA/Gly.							
Mud weight	ppg	9.70	10.00							
Solids	%	4.6	7.1							
Chlorides	mg/L	45,000	43,000							
Rm		N/A	N/A							
Rmf		N/A	N/A							
Rmc		N/A	N/A							

Potassium	%	8.2	8.1								
Environmental data											
GR											
Mud weight	ppg	9.70	10.00								
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	T. Bassett							
Schlumberger D&M Personnel		B. Pattarakorn	C. Skiba	C. Soper	B. Manjenic						

<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 Survey	OTHER SERVICES FOR RUN2 Directional Drilling Directional Survey	OTHER SERVICES FOR RUN
REMARKS: RUN NUMBER 1 8-1/2 in. hole was drilled from 1756.0m to 1769.0m MD Depth is referenced to Driller's Depth Mud type is KCl/PHPA/Glycol. PowerPulse is used for orientation Whipstock. Tool failed from 23:15 on 27 Feb 06 to 14:00 on 28 Feb 06 due to high shock level while milling window Tool started working again at 14:00 on 28 Feb 06 till the end of Run1 POOH due to change BHA assembly	REMARKS: RUN NUMBER 2 8-1/2 in. hole was drilled from 1769.0m to 2283.0m MD Depth is referenced to Driller's Depth Mud type is KCl/PHPA/Glycol. Gamma Ray not corrected for Potassium Gamma Ray corrected for Tool Size, Bit Size and Mud Weight. POOH due to TD of BMA A9B	REMARKS: RUN NUMBER







EQUIPMENT DESCRIPTION		
RUN1	RUN2	RUN
DOWNHOLE EQUIPMENT	DOWNHOLE EQUIPMENT	

DOWNHOLE EQUIPMENT

6 3/4 in. PowerPulse MDC: Z411 MEC: 1533 MDI: 1565 MGR: 565 DHS: V8.0B96		24.59
	D&I GR	20.29 19.64
5" HWDP OD 6 3/8 in.		16.15
8-1/2 in. WaterMelon Mill S/N: TSV6764		6.71
4-7/8 in. Flex Jt. S/N: TSV6727		4.81
8-1/2 in. WaterMelon Mill S/N: TSV6766		2.07
BOT Window Mill S/N: TSP52105 OD: 8-1/2 in.		0.00
		0.35

Maximum string diameter 8.50 in.
All lengths in Meters

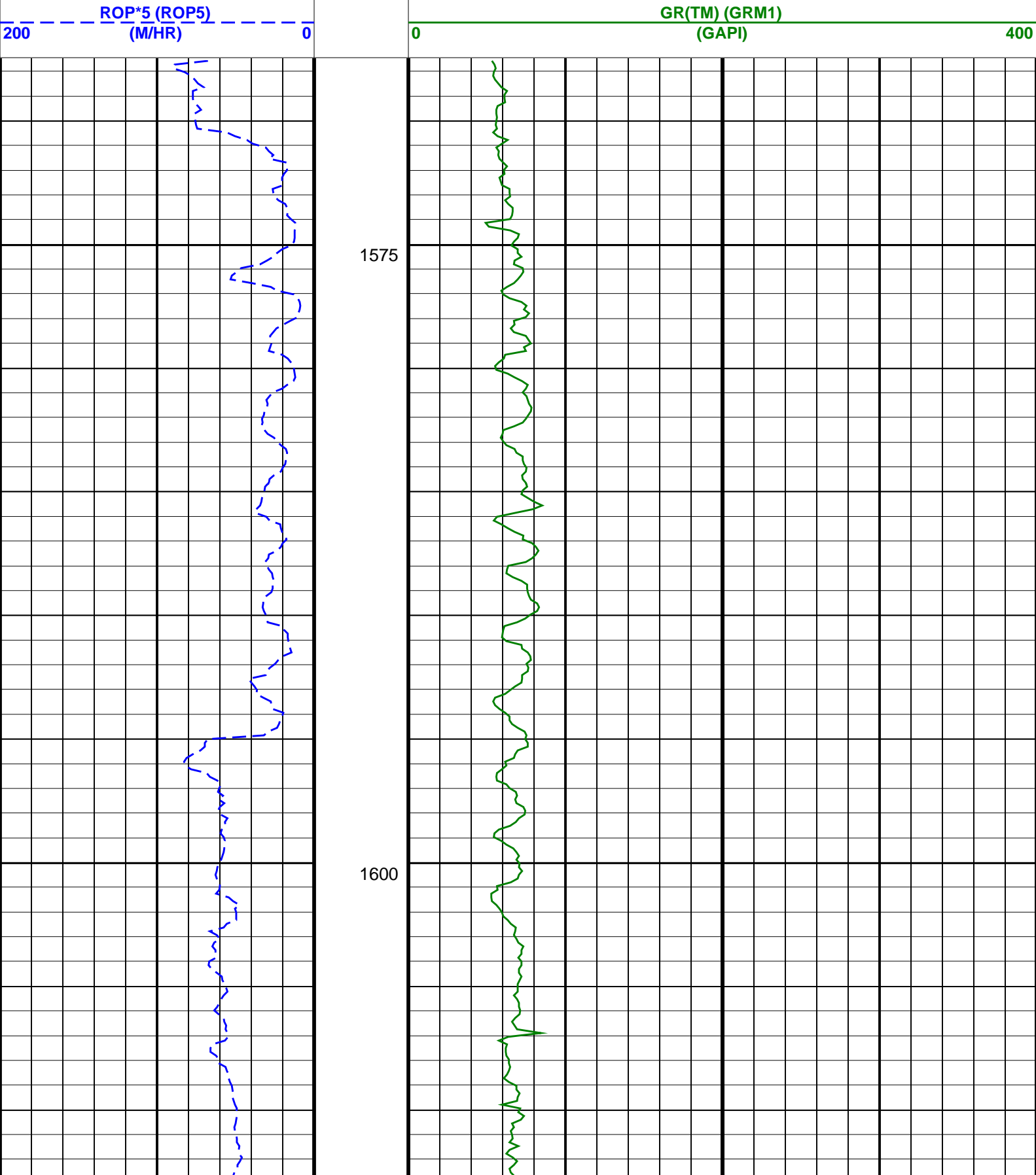
DOWNHOLE EQUIPMENT

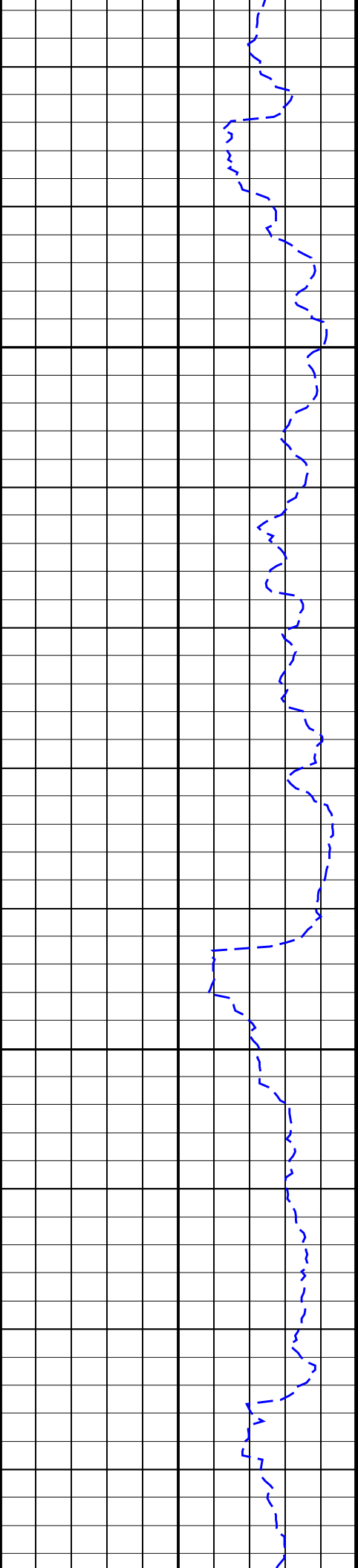
6 3/4 in. PowerPulse MDC: 401AB MEC: 1540 MDI : 1556 MGR: 146 DHS: V8.0B96		23.52
	D&I GR	19.21 18.56
6-5/8 in. NM Pony DC w/Float SN: 9612058		15.11
6-5/8 in. NM Pony DC SN: 97081023		12.68
8-3/8 in. NM Roller Reamer SN: GU2298		11.28
7 in. PowerPak* Motor A700GT 7:8 SN: N7310 1.5 deg. Bent Housing 8-3/8 in. Motor Sleeve		9.20
Smith PDC Bit S73PX S/N: JT6968A OD: 8-1/2 in.		0.00
		0.23

Maximum string diameter 8.50 in.
All lengths in Meters

BMA A9B RT 1:200 TVD

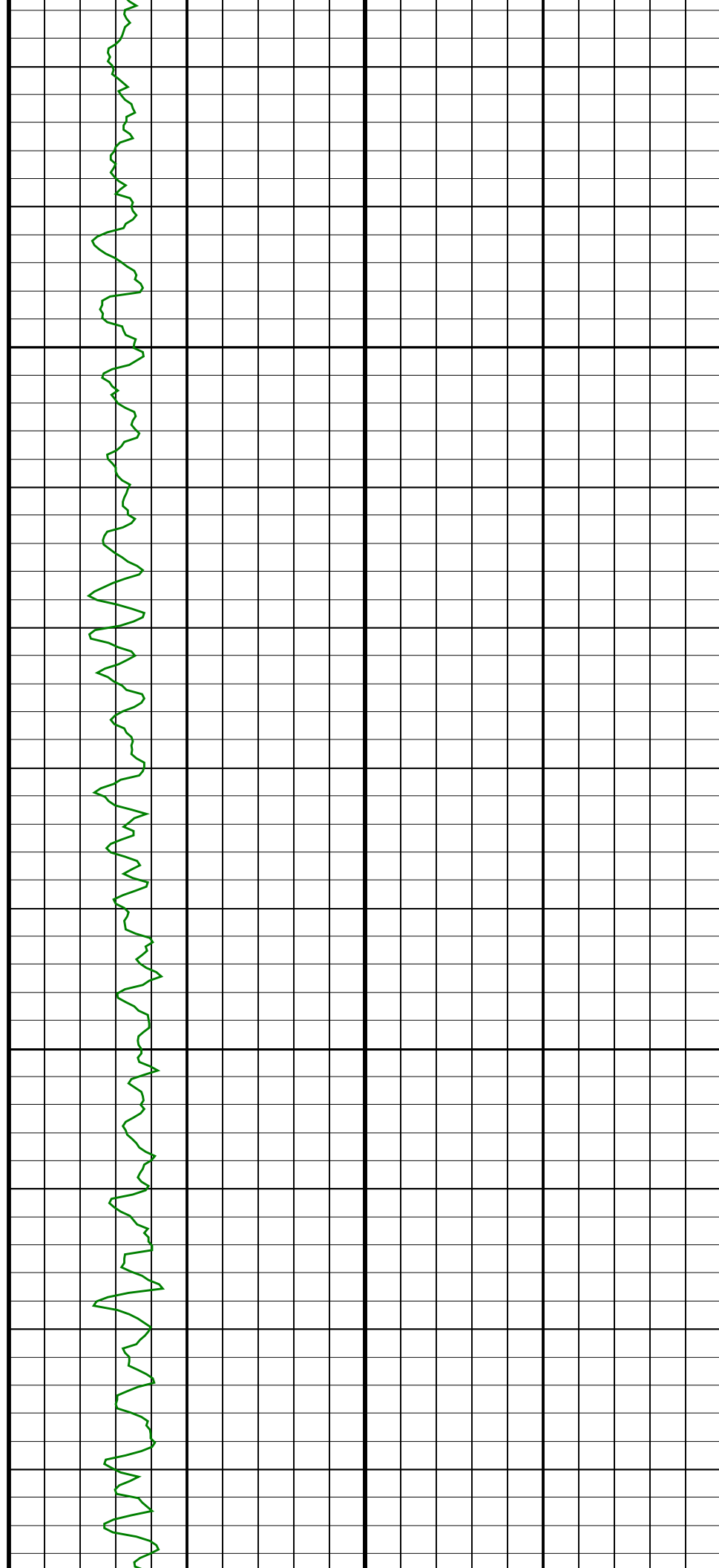
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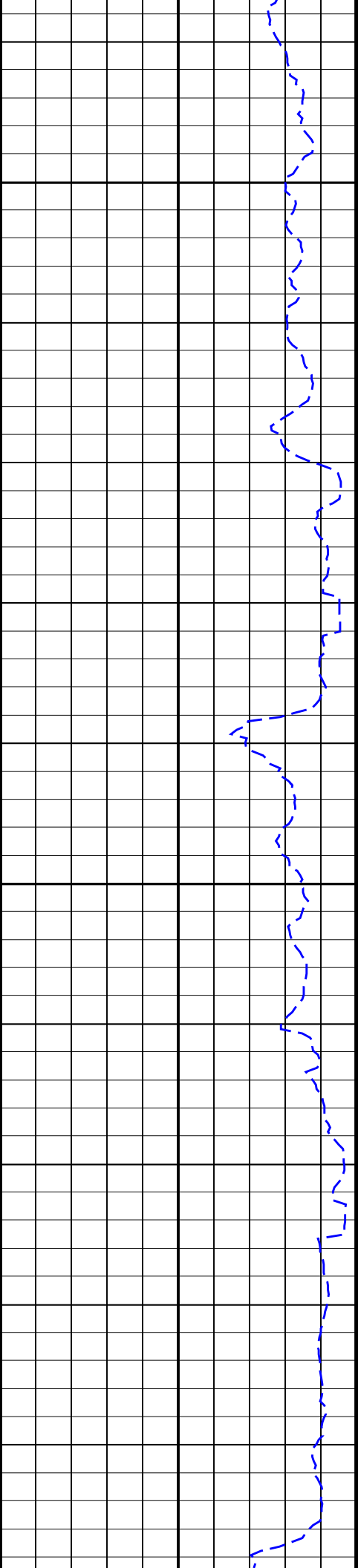




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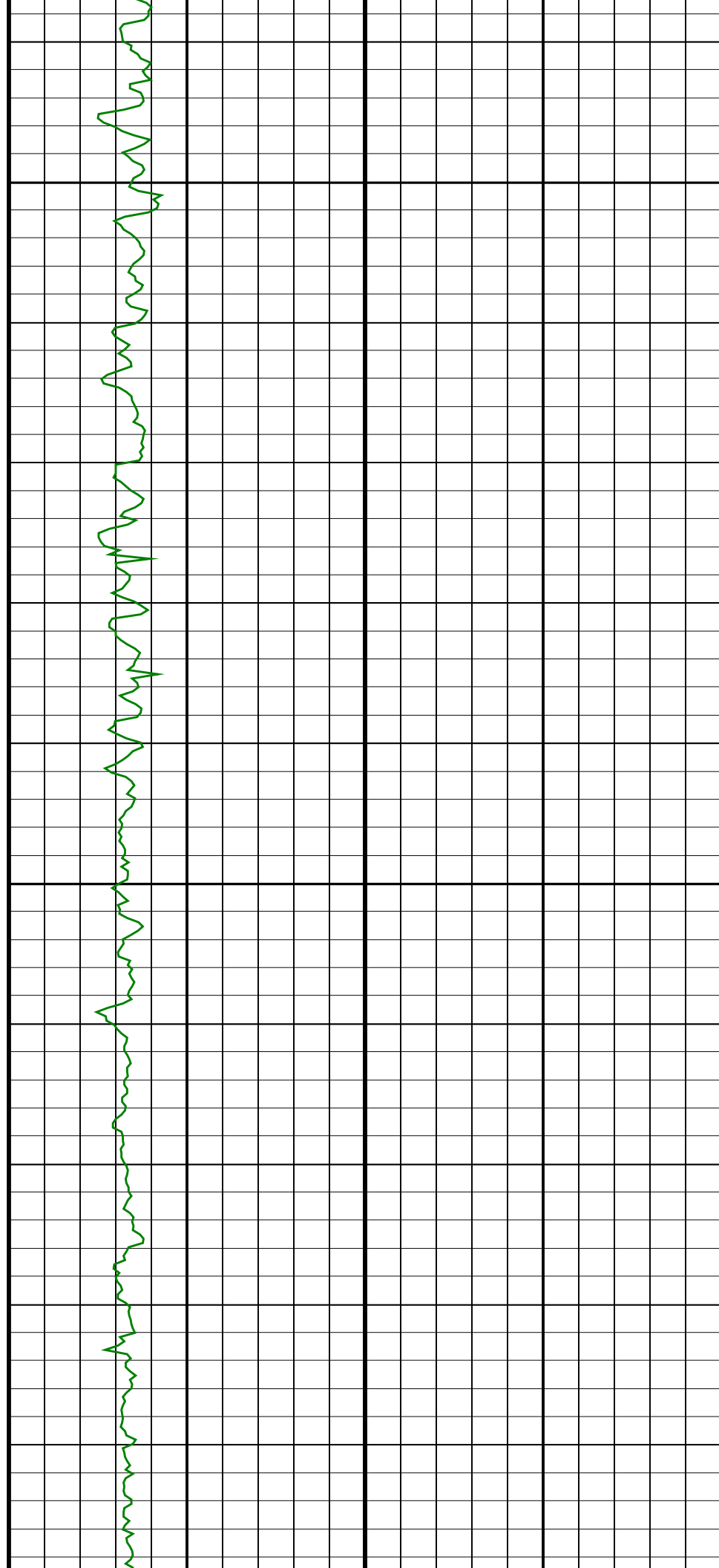
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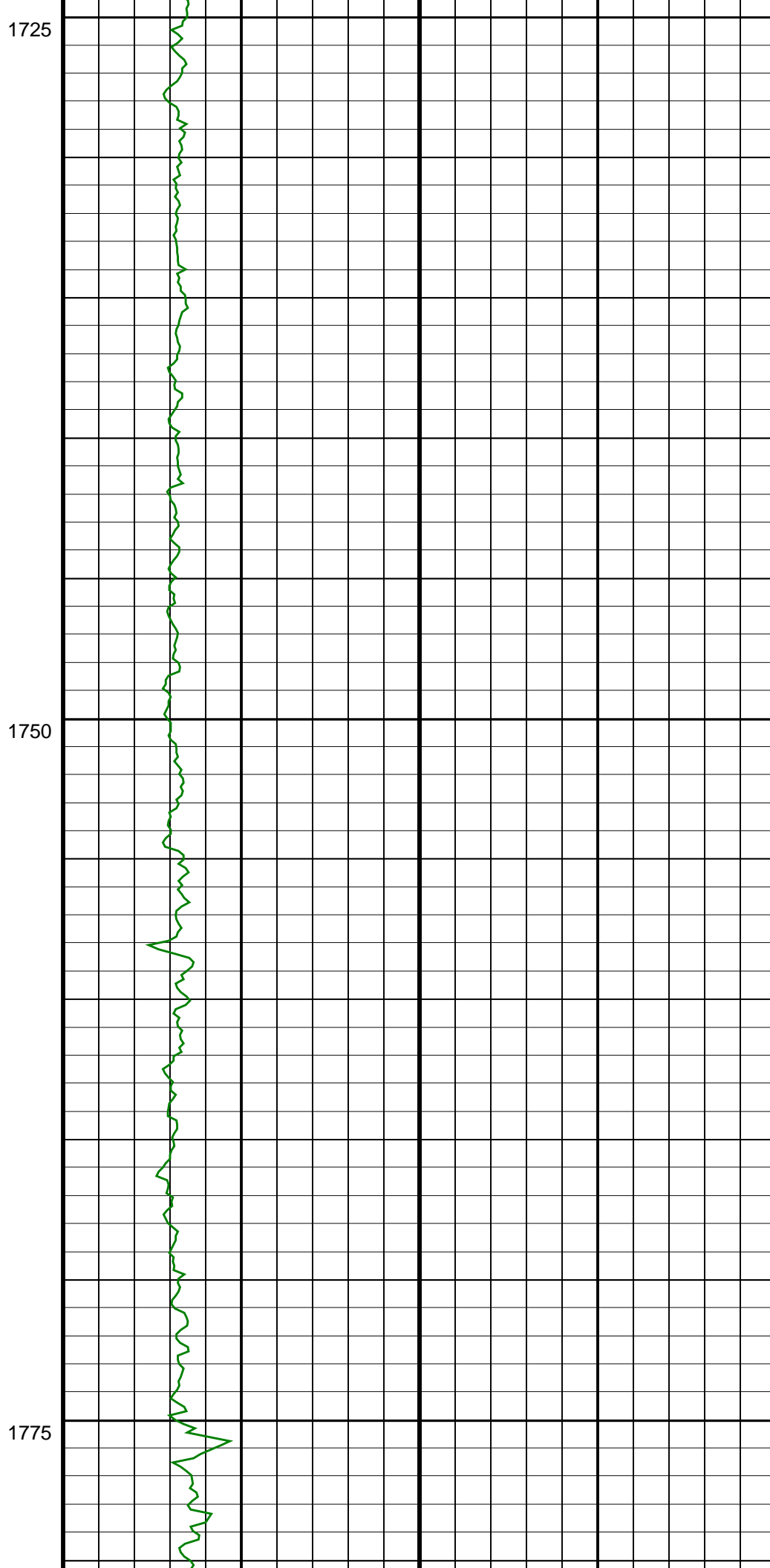
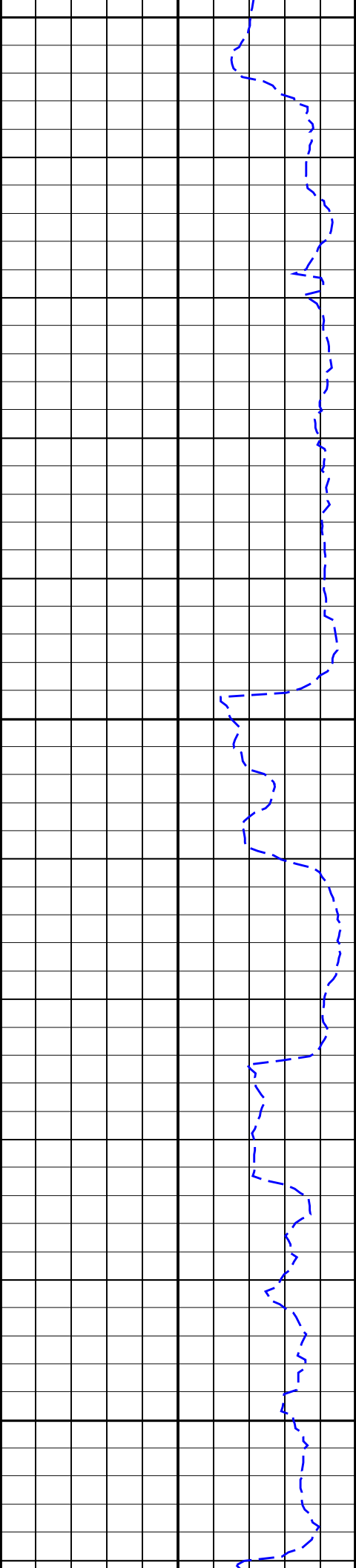


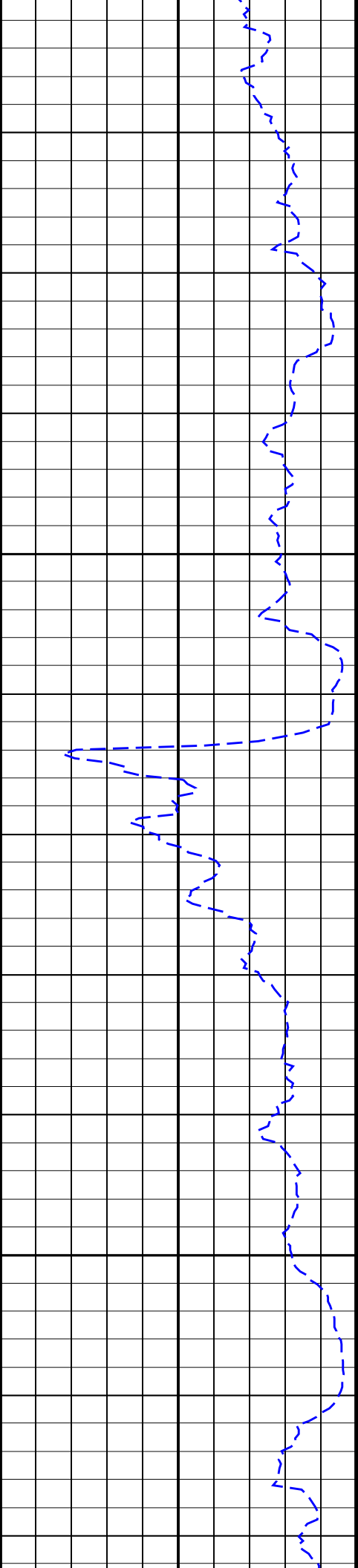


1675

1700

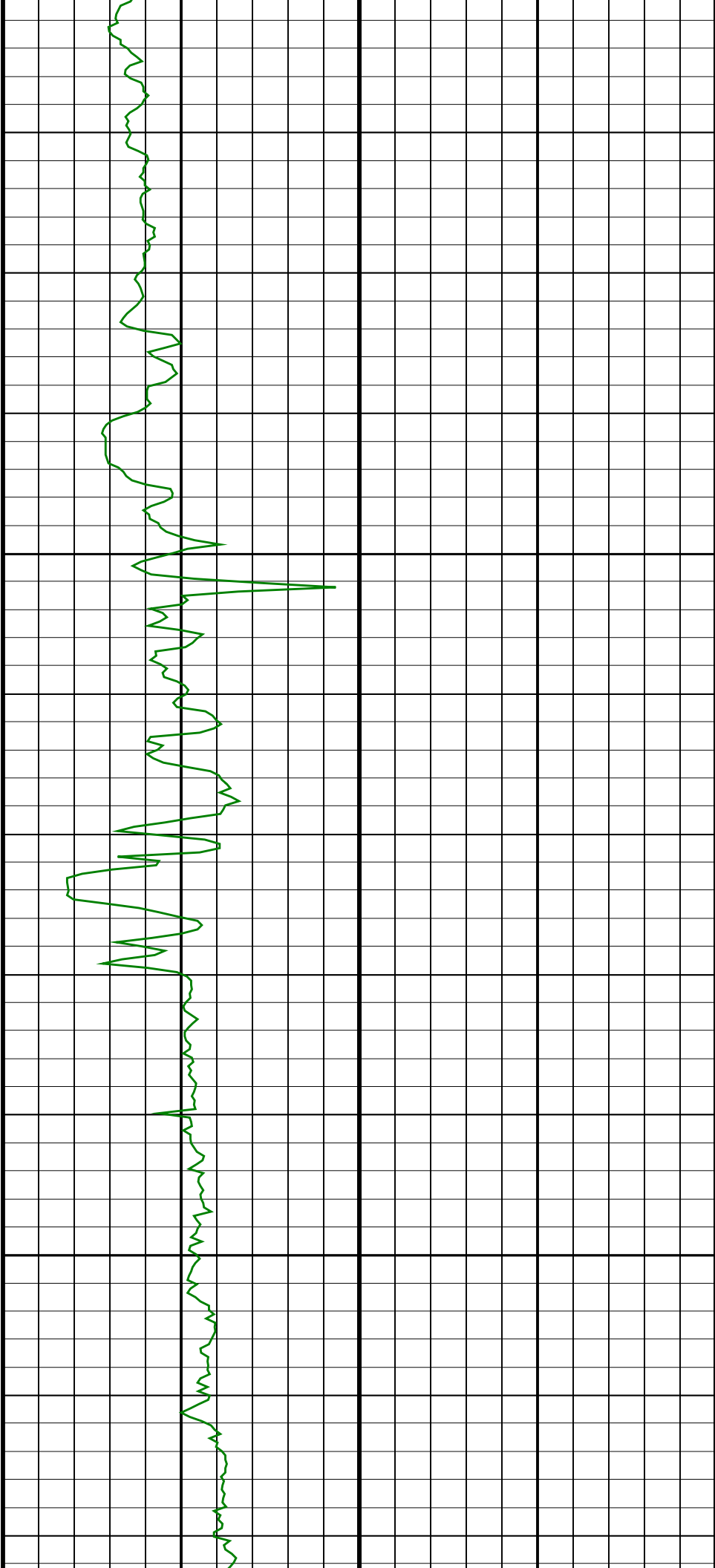


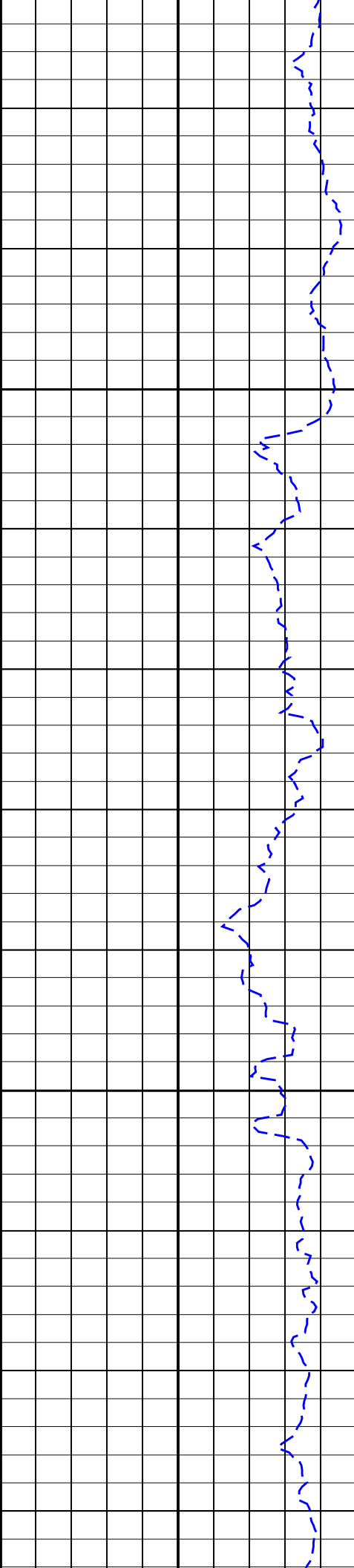




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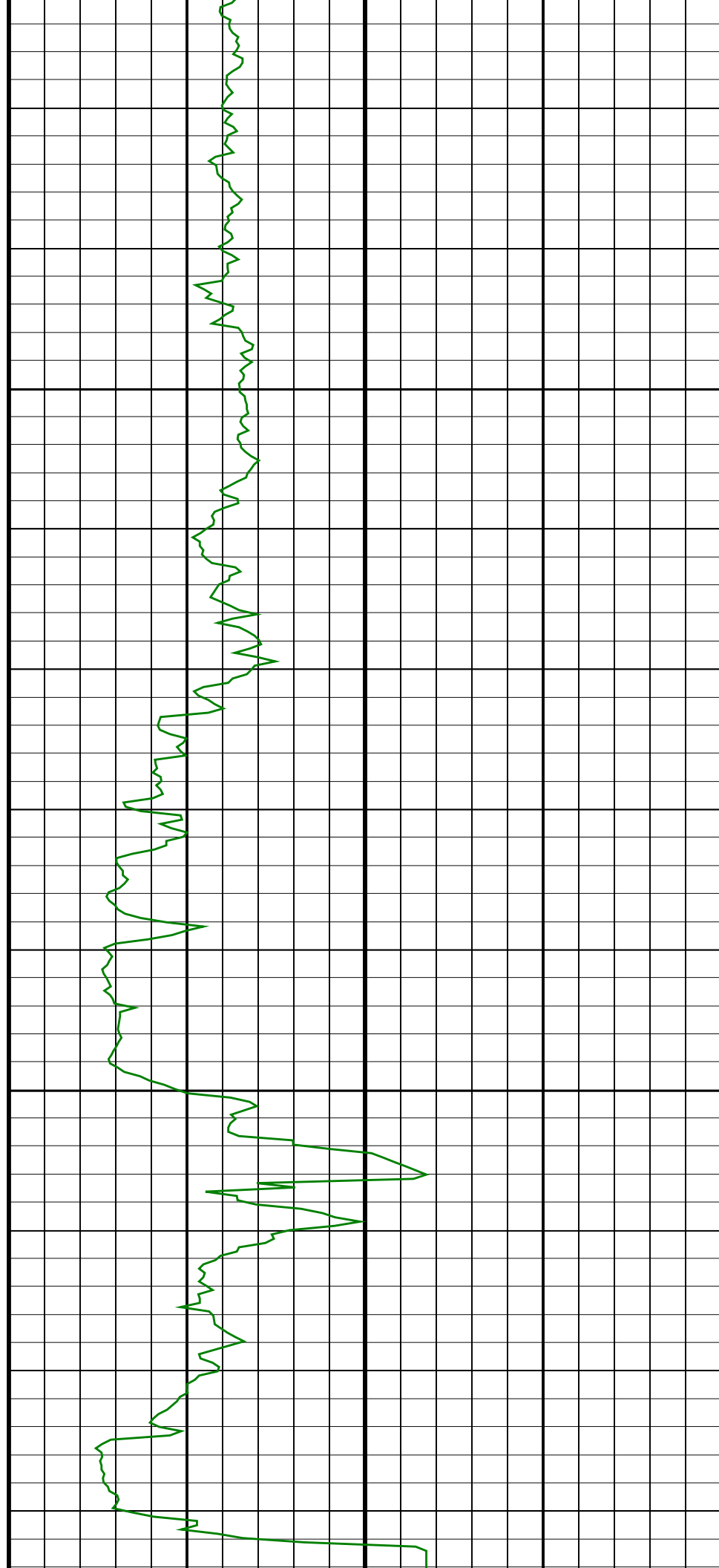
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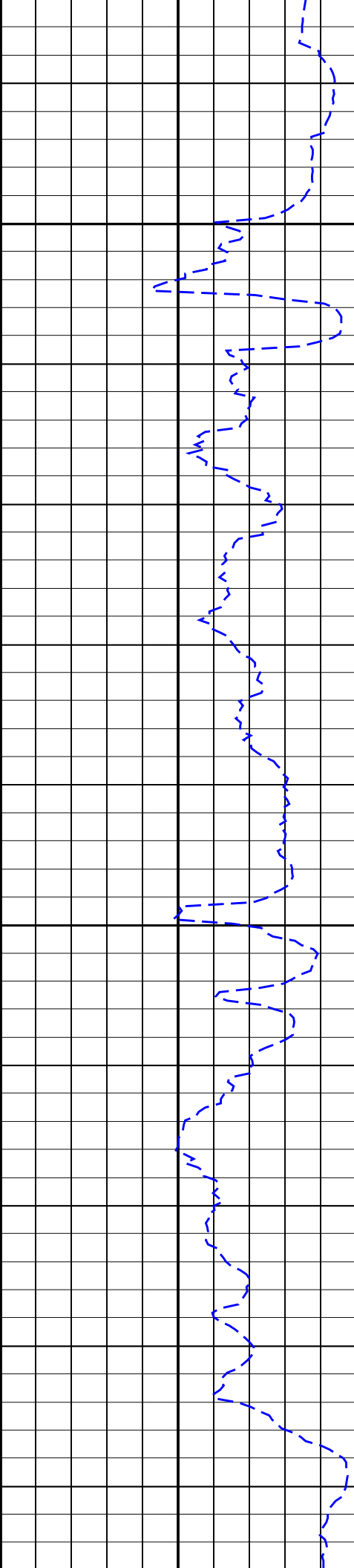




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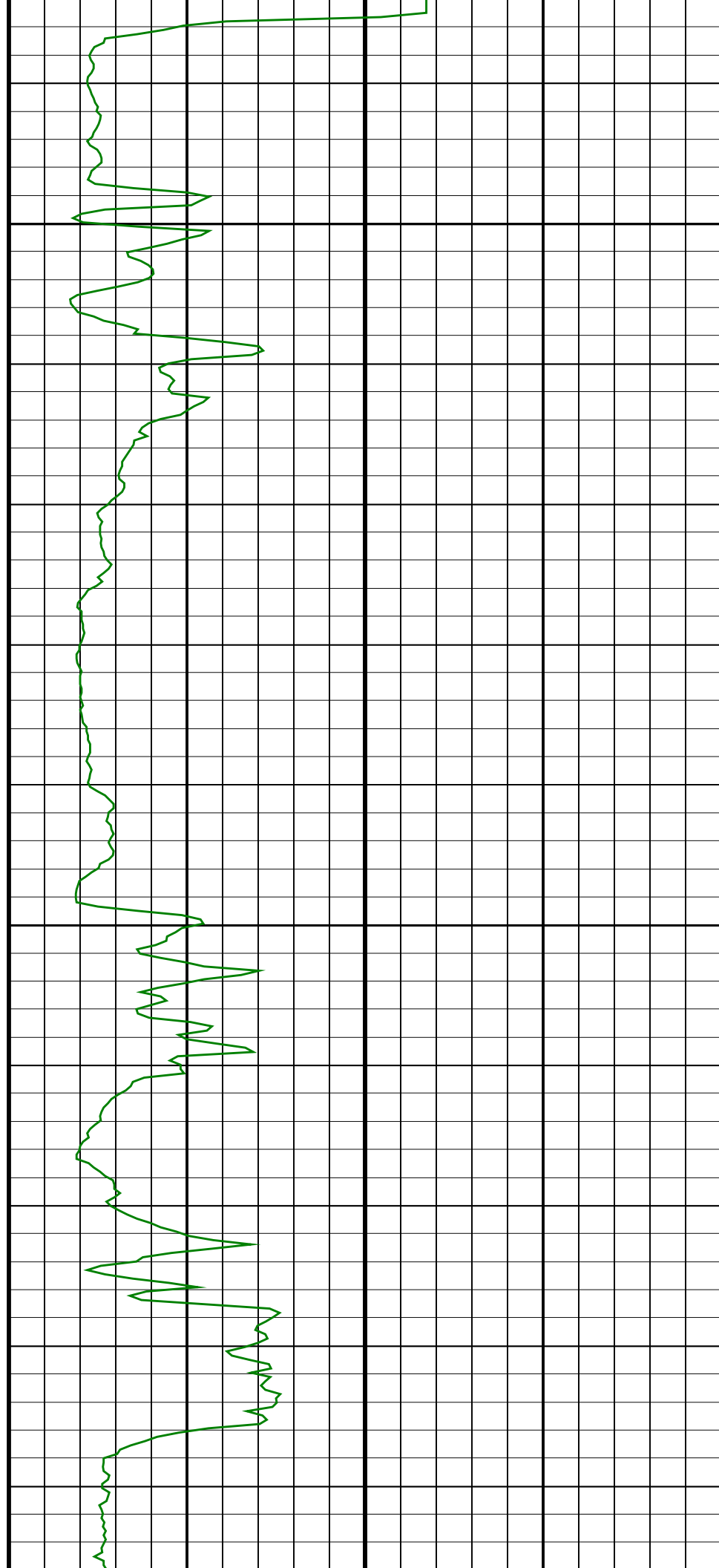
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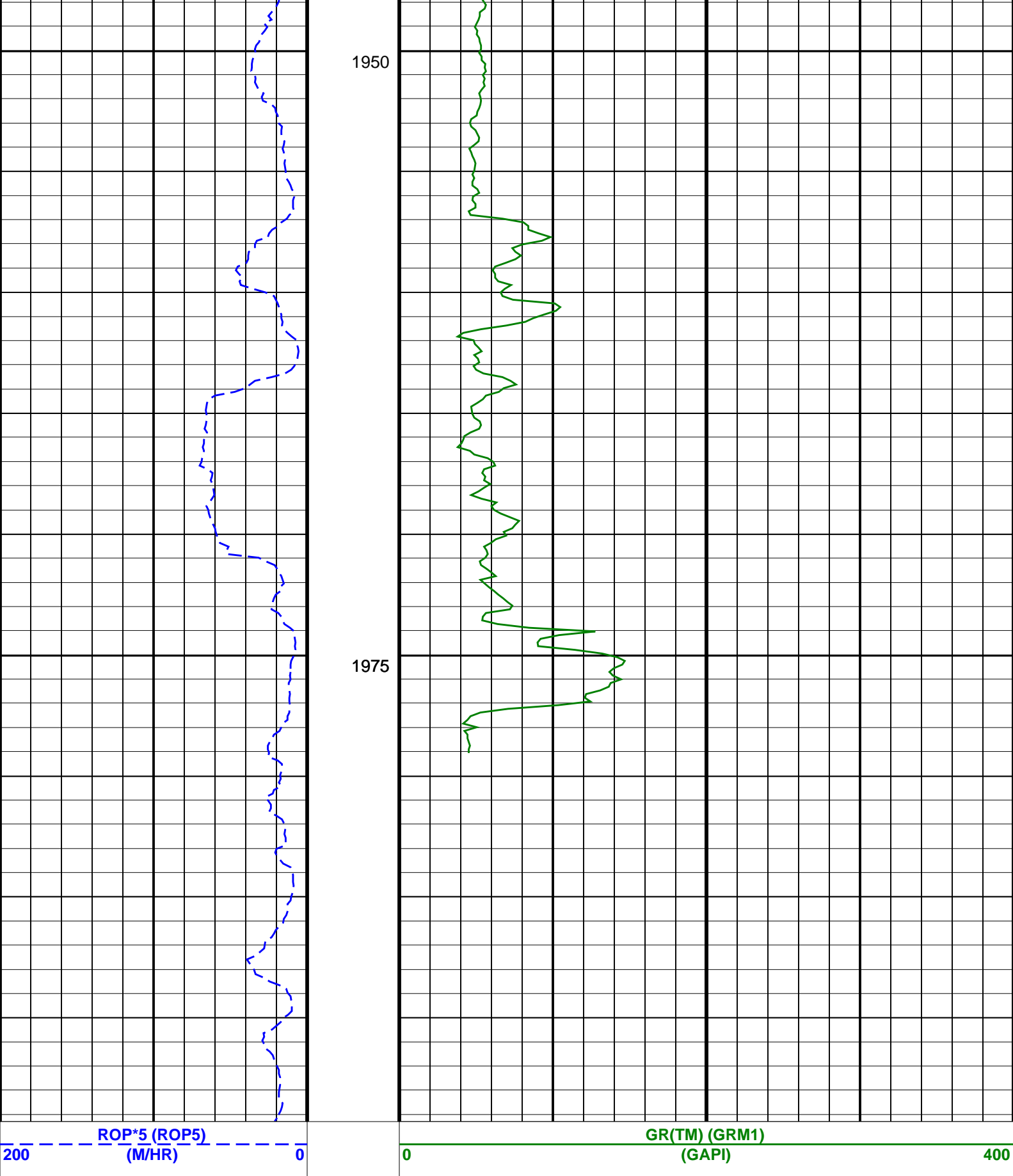




1900

1925





SCHLUMBERGER

Survey report

3-Mar-2006 17:21:45

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

Well.....: BMA A9B
API number.....:
Engineer.....: B. Pattarakorn/ C. Skiba

Spud date.....: 26-Feb-06
Last survey date.....: 03-Mar-06
Total accepted surveys....: 19

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

MD of first survey..... 1750.00 m
MD of last survey..... 2283.00 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.....: Top Drive
DF above permanent.....: 32.82 m

----- Vertical section origin-----
Latitude (+N/S-).....: 0.00 m
Departure (+E/W-).....: 0.00 m

Azimuth from Vsect Origin to target: 118.48 degrees

----- Geomagnetic data -----
Magnetic model.....: BGGM version 2005
Magnetic date.....: 27-Feb-2006
Magnetic field strength...: 1202.65 HCNT
Magnetic dec (+E/W-).....: 13.07 degrees
Magnetic dip.....: -69.03 degrees

----- MWD survey Reference Criteria -----
Reference G.....: 1000.05 mGal
Reference H.....: 1202.65 HCNT
Reference Dip.....: -69.03 degrees
Tolerance of G.....: (+/-) 2.50 mGal
Tolerance of H.....: (+/-) 6.00 HCNT
Tolerance of Dip.....: (+/-) 0.45 degrees

----- Corrections -----
Magnetic dec (+E/W-).....: 13.07 degrees
Grid convergence (+E/W-)..: -0.48 degrees
Total az corr (+E/W-).....: 13.55 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

3-Mar-2006 17:21:45

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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	1750.00	47.90	131.86	0.00	1563.40	499.77	-320.04	394.95	508.34	129.02	0.00	TIP	None
2	1802.08	41.64	118.76	52.08	1600.44	535.98	-341.32	424.60	544.78	128.79	6.51	MWD	None
3	1830.98	40.06	118.17	28.90	1622.30	554.88	-350.34	441.22	563.39	128.45	1.72	MWD	None
4	1859.93	35.88	113.15	28.95	1645.12	572.66	-358.07	457.24	580.76	128.07	5.47	MWD	None
5	1888.74	35.29	112.55	28.81	1668.55	589.34	-364.58	472.69	596.96	127.64	0.73	MWD	None
6	1917.12	35.15	108.55	28.38	1691.74	605.54	-370.33	488.01	612.61	127.19	2.48	MWD	None
7	1945.54	35.56	102.97	28.42	1714.92	621.57	-374.79	503.82	627.93	126.65	3.49	MWD	None
8	1974.64	35.32	94.19	29.10	1738.64	637.40	-377.30	520.47	642.84	125.94	5.33	MWD	None
9	2002.88	35.08	86.13	28.24	1761.73	651.70	-377.35	536.71	656.09	125.11	5.02	MWD	None
10	2032.39	34.45	85.45	29.51	1785.98	665.87	-376.12	553.50	669.19	124.20	0.76	MWD	None
11	2061.28	34.02	84.79	28.89	1809.86	679.44	-374.73	569.69	681.89	123.34	0.60	MWD	None
12	2090.26	33.53	82.66	28.98	1833.95	692.68	-372.98	585.70	694.38	122.49	1.35	MWD	None
13	2119.28	33.52	82.38	29.02	1858.14	705.65	-370.89	601.59	706.73	121.65	0.16	MWD	None
14	2148.28	33.68	81.84	29.00	1882.30	718.57	-368.69	617.49	719.18	120.84	0.36	MWD	None
15	2177.09	33.73	81.36	28.81	1906.26	731.36	-366.35	633.31	731.63	120.05	0.29	MWD	None
16	2205.90	33.69	80.36	28.81	1930.23	744.02	-363.81	649.09	744.10	119.27	0.59	MWD	None
17	2234.50	33.78	81.17	28.60	1954.01	756.59	-361.26	664.77	756.59	118.52	0.49	MWD	None
18	2263.78	33.72	79.83	29.28	1978.36	769.41	-358.58	680.81	769.47	117.78	0.78	MWD	None
19	2283.00	33.70	79.80	19.22	1994.35	777.74	-356.69	691.31	777.91	117.29	0.04	Proj.	to TD

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

Schlumberger

Well: **BMA A9B**

Field: **Bream A**

Rig: **ISDL 453**

State: **Victoria**

Gamma Ray Service

1:200 True Vertical Depth

Real Time Log

