

<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>		
<p>OTHER SERVICES FOR RUN1</p> <p>Directional Drilling</p> <p>Directional Surveys</p>	<p>OTHER SERVICES FOR RUN2</p> <p>Directional Drilling</p> <p>Directional Surveys</p>	<p>OTHER SERVICES FOR RUN3</p> <p>Directional Drilling</p> <p>Directional Surveys</p>
<p>REMARKS: RUN NUMBER 1</p> <p>8-1/2 in. hole was drilled from 2331.7m to 2362.0m MD</p> <p>Depth is referenced to Driller's Depth</p> <p>Gamma Ray corrected for Tool Size, Bit Size and Mud Weight</p> <p>Mud type is KCI/PHPA/Glycol</p> <p>POOH for bit change</p>	<p>REMARKS: RUN NUMBER 2</p> <p>8-1/2 in. hole was drilled from 2362.0m to 2662.0m MD</p> <p>Depth is referenced to Driller's Depth</p> <p>Gamma Ray corrected for Tool Size, Bit Size and Mud Weight</p> <p>Mud type is KCI/PHPA/Glycol</p> <p>POOH for bit change</p>	<p>REMARKS: RUN NUMBER 3</p> <p>8-1/2 in. hole was drilled from 2662.0m to 3040.0m MD</p> <p>Depth is referenced to Driller's Depth</p> <p>Gamma Ray corrected for Tool Size, Bit Size and Mud Weight</p> <p>Mud type is KCI/PHPA/Glycol</p> <p>POOH for bit change</p>

EQUIPMENT DESCRIPTION

RUN1

RUN2

RUN3

DOWNHOLE E

DOWNHOLE E

DOWNHOLE E

6-3/4 in. Pow MDC: Z4( MEC: 61 MDI: 62( MGR: 29 DHS: 7.0	24.3	6-3/4 in. Pow MDC: Z4( MEC: 61 MDI: 62( MGR: 29 DHS: 7.0	24.3	6-3/4 in. Pow MDC: Z4( MEC: 61 MDI: 62( MGR: 29 DHS: 7.0	24.3
D&I GR	— 20.1 — 19.4	D&I GR	— 20.1 — 19.4	D&I GR	— 20.1 — 19.4
6-1/2 in. N S/N: L7	16.0	6-1/2 in. N S/N: L7	16.0	6-1/2 in. N S/N: L7	16.0
8-3/8 in. NM Rc S/N: GU7	14.4	8-3/8 in. NM Rc S/N: GU7	14.5	8-3/8 in. NM Rc S/N: GU7	14.5
6-1/2 in. N S/N: ANA5	12.3	6-1/2 in. N S/N: ANA5	12.4	6-1/2 in. N S/N: ANA5	12.4
6-11/16 in. F S/N: CMF	9.6	6-11/16 in. F S/N: CMF	9.6	6-11/16 in. F S/N: CMF	9.6
7 in. PowerPa A700G1 S/N: 7( 1.5 deg. Bent 8-3/8 in. Motr	9.1	7 in. PowerPa A700G1 S/N: 7( 1.15 deg. Bent 8-3/8 in. Motr	9.1	7 in. PowerPa A700G1 S/N: 7( 1.15 deg. Bent 8-3/8 in. Motr	9.1

## DISCLAIMER

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OTHER SERVICES FOR RUN4 Directional Drilling Directional Surveys	OTHER SERVICES FOR RUN5 Directional Drilling Directional Surveys	OTHER SERVICES FOR RUN
REMARKS: RUN NUMBER 4 8–1/2 in. hole was drilled from 3040.0m to 3393.0m  Depth is referenced to Driller's Depth  Gamma Ray corrected for Tool Size, Bit Size and Mud Weight  Mud type is KCL/PHPA/Glycol  POOH for bit change          Thank You for Choosing Schlumberger	REMARKS: RUN NUMBER 5 8–1/2 in. hole was drilled from 3393.0m to 3491.0m  Depth is referenced to Driller's Depth  Gamma Ray corrected for Tool Size, Bit size and Mud Weight  Mud type is KCL/PHPA/Glycol  Reduced data quality between 3375m to 3396m due to Downhole and Pump Noise  POOH due to reaching TD          Thank You for Choosing Schlumberger	REMARKS: RUN NUMBER

## EQUIPMENT DESCRIPTION

RUN4	RUN5	RUN
DOWNHOLE E	DOWNHOLE E	

6-3/4 in. Pov  
MDC: Z40  
MEC: 61  
MDI: 620  
MGR: 29  
DHS: 7.0

D&I  
GR — 20.1  
— 19.4



8-3/8 in. Roller  
S/N: GU1



6-1/2 in. N  
S/N: L1



6-1/2 in. N  
S/N: ANA5



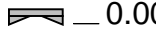
6-11/16 in. F  
S/N: CMF



7 in. PowerPac  
A700G1  
S/N: 70  
1.15 deg. Bent  
8-3/8 in. Motor



Smith Ins  
OD: 8-1  
GFI11 S/N: I



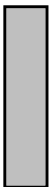
Maximum string dia  
All lengths in

24.36-3/4 in. Pov  
MDC: Z40  
MEC: 61  
MDI: 620  
MGR: 29  
DHS: 7.0

D&I  
GR — 18.9  
— 18.3



6-1/2 in. N  
S/N: ANA5



8-3/8 in. Roller  
S/N: GU2



6-1/2 in. N  
S/N: L1



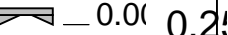
6-11/16 in. F  
S/N: CMF



6-3/4 in. Power  
AC675X  
S/N: 30  
0 deg. Bent  
8-3/8 in. Motor



Smith Ins  
OD: 8-1  
GFI11 S/N: I



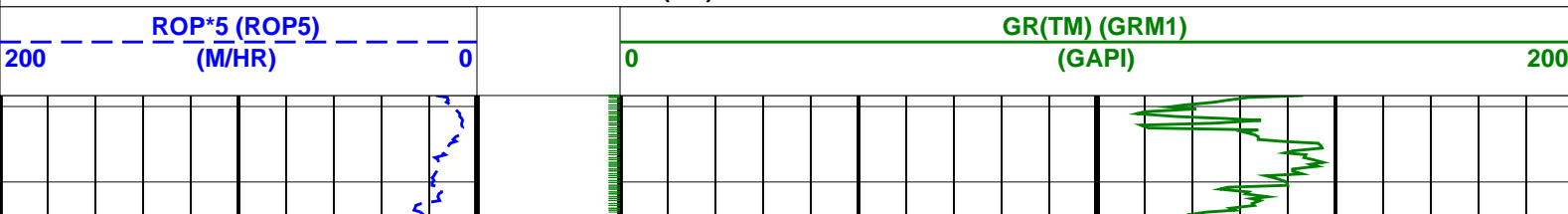
Maximum string dia  
All lengths in

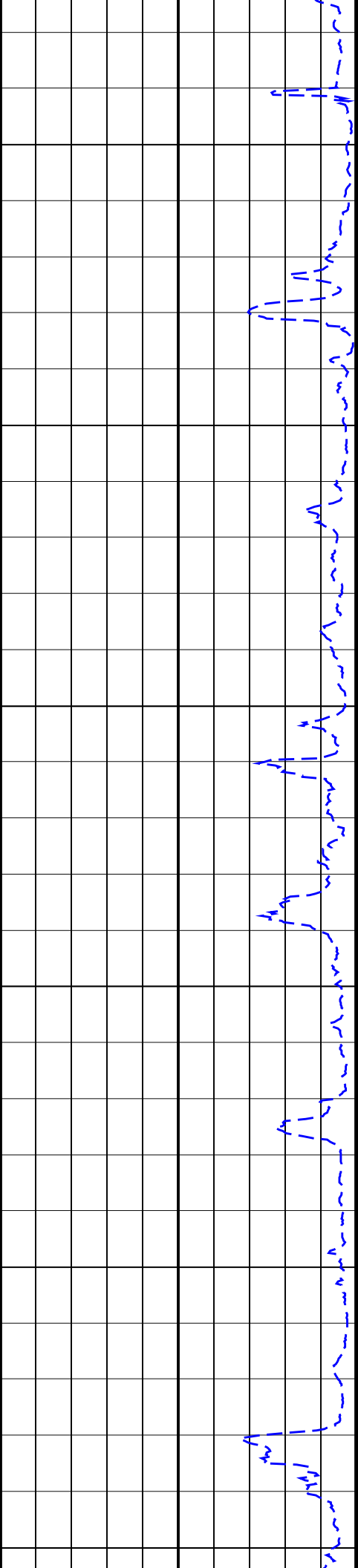
## Bit Run Summary

**MLA-A10AST RT 1:500 TVD**

## PIP SUMMARY

### GR(TM) PIP

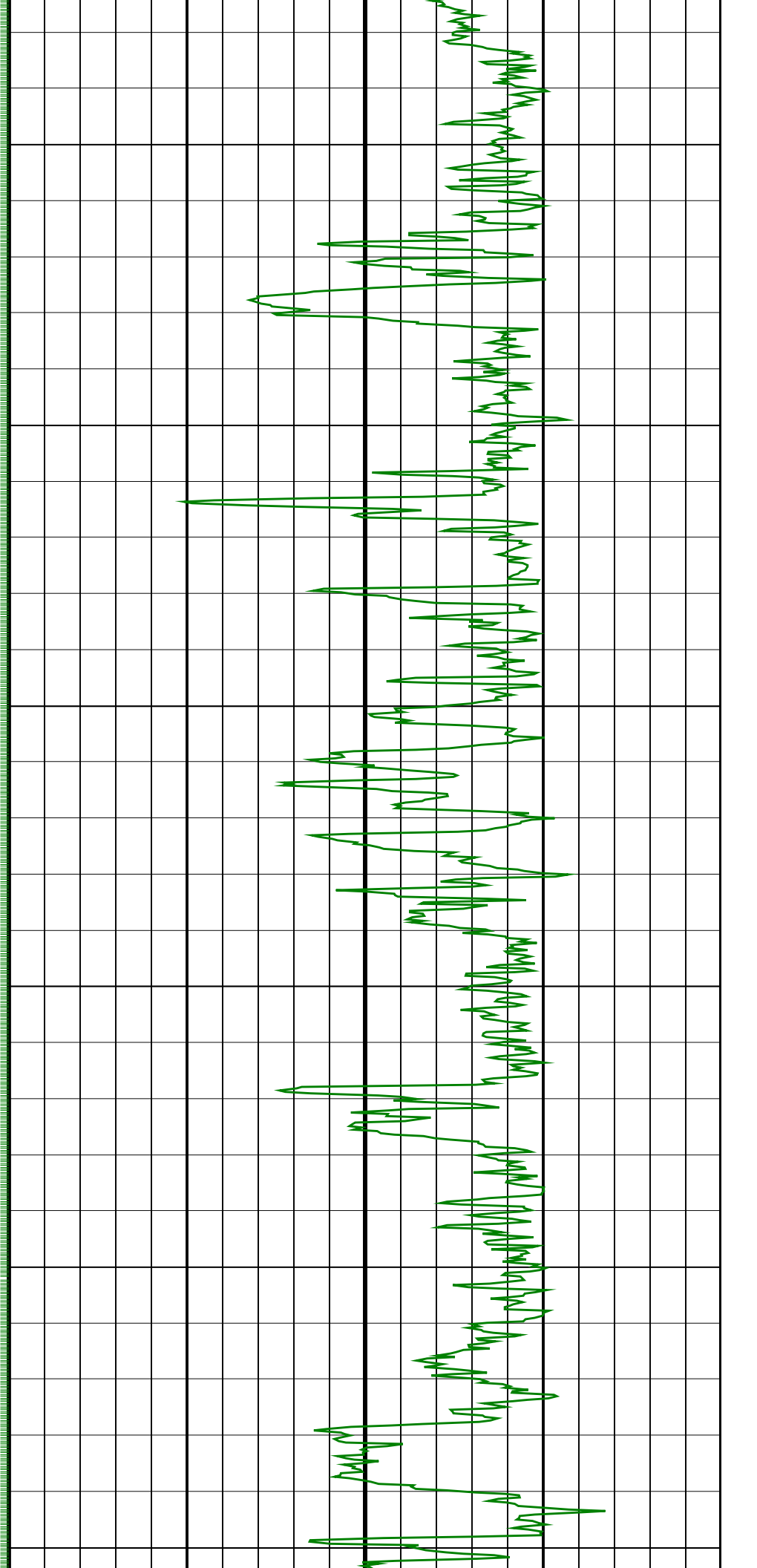


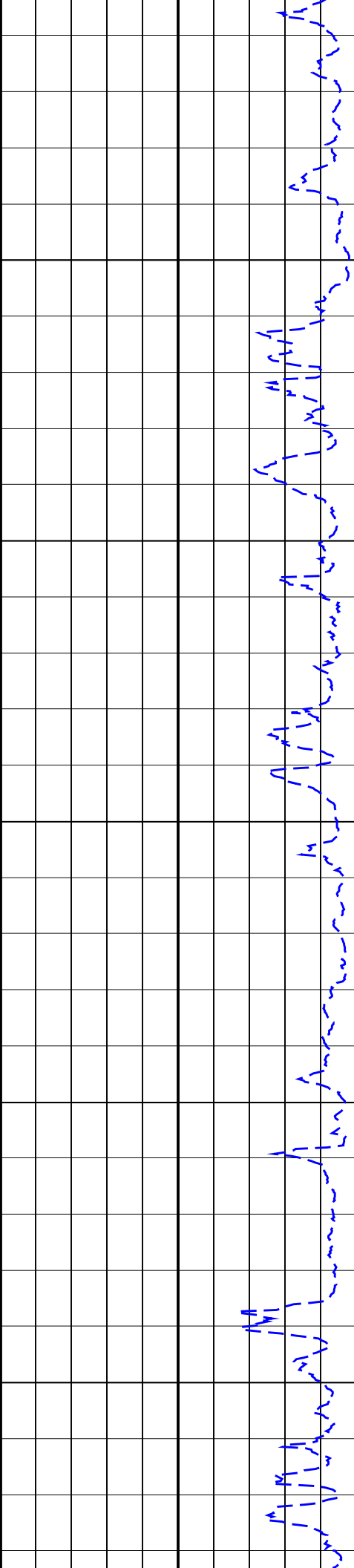


1900  
TVD

1950  
TVD

2000

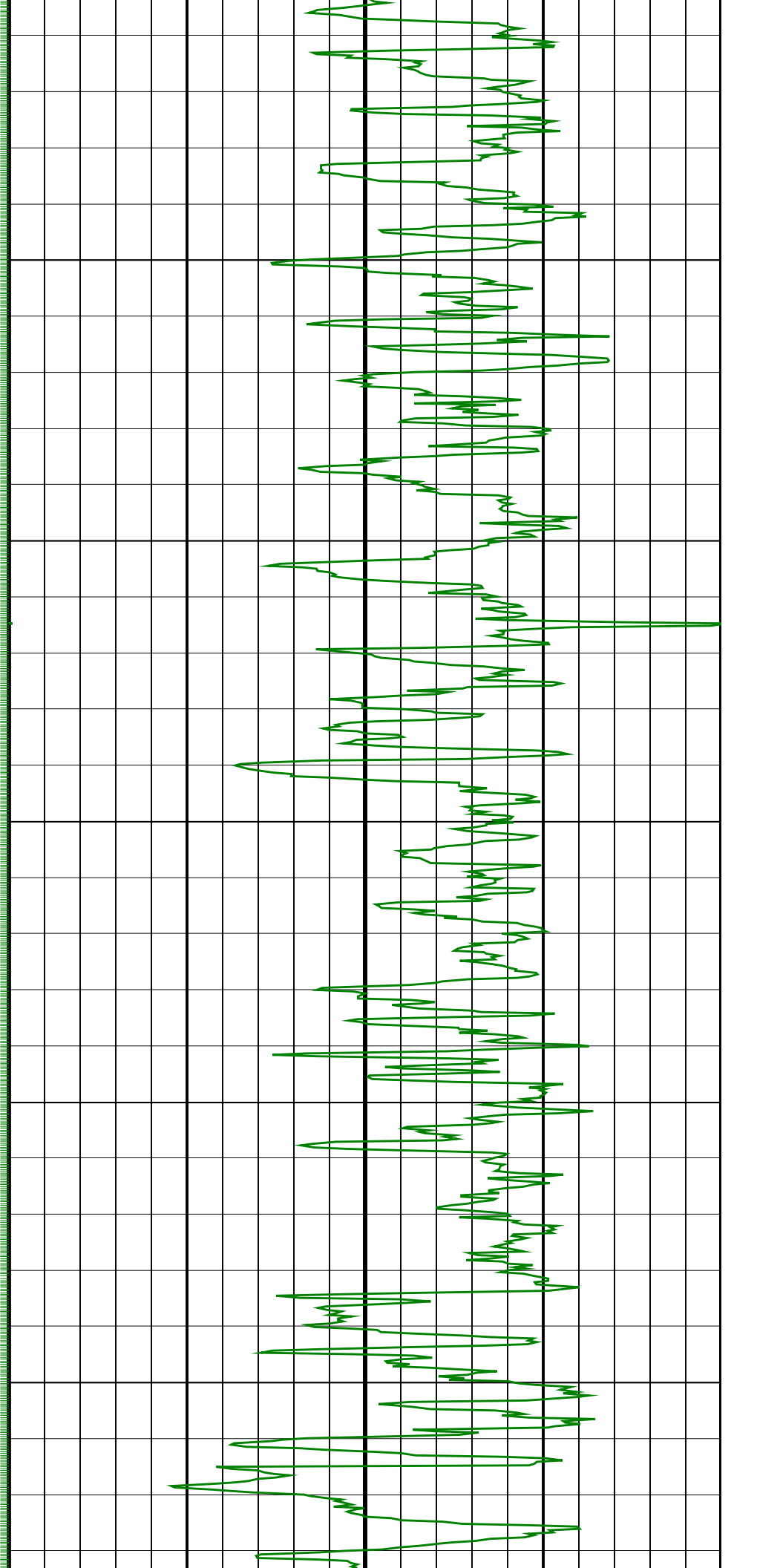


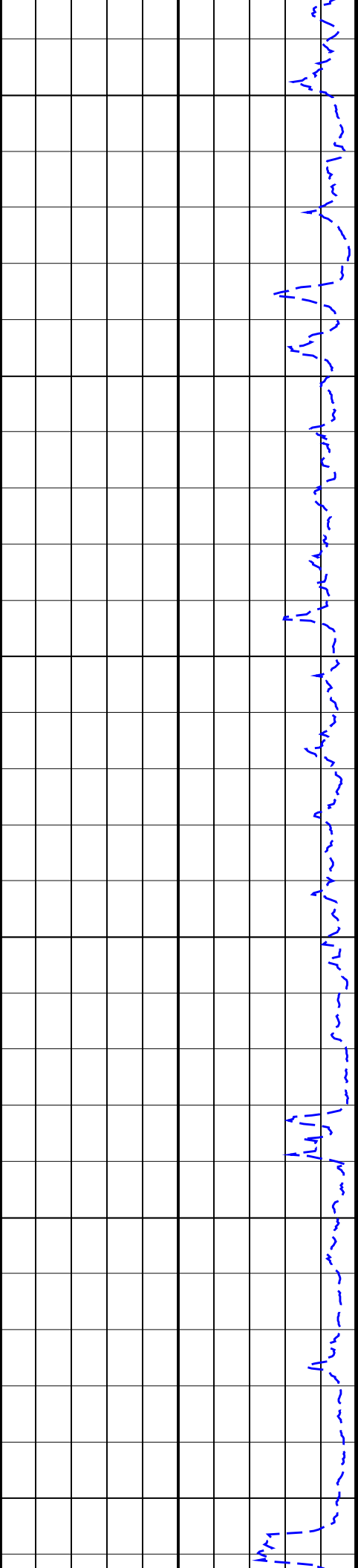


TVD

2050  
TVD

2100  
TVD

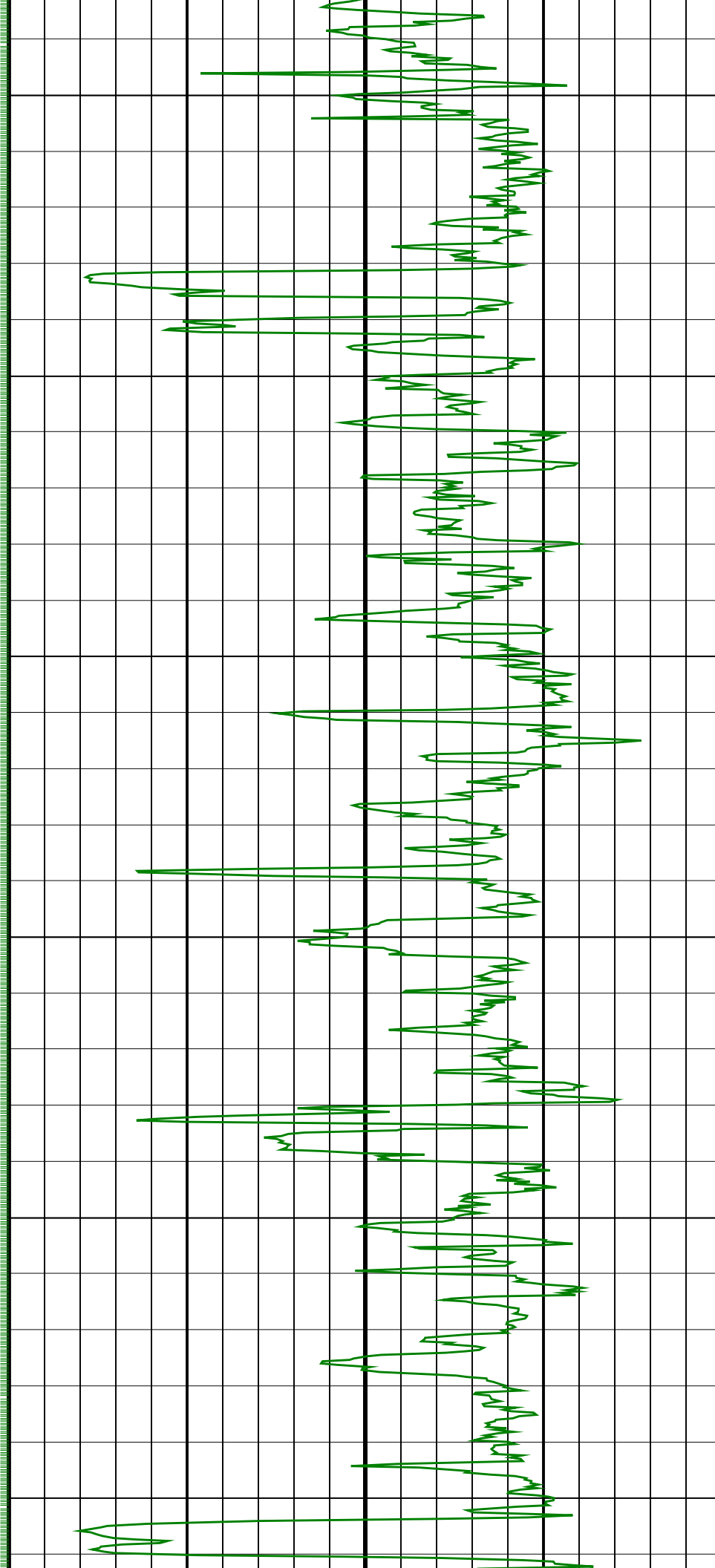




2150  
TVD

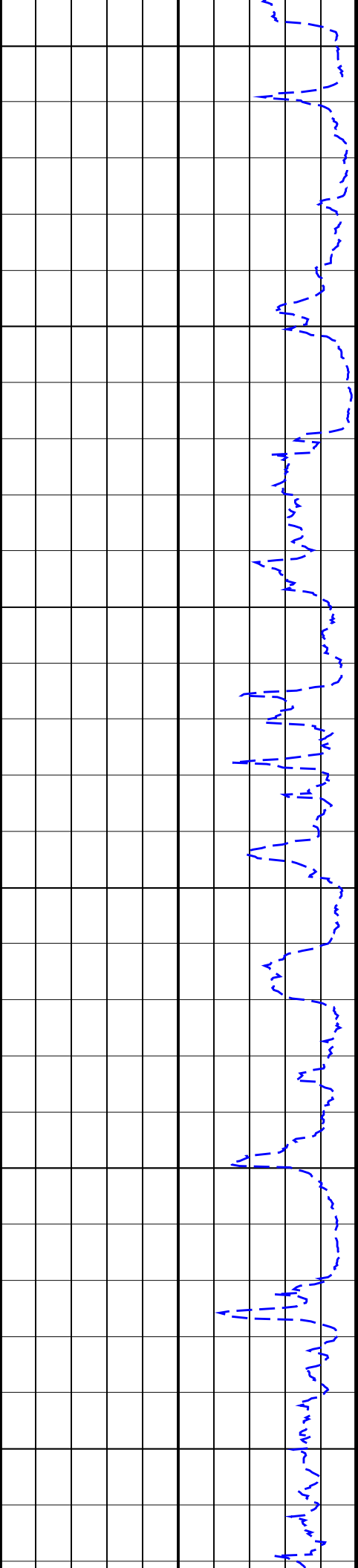
2200  
TVD

2250  
TVD





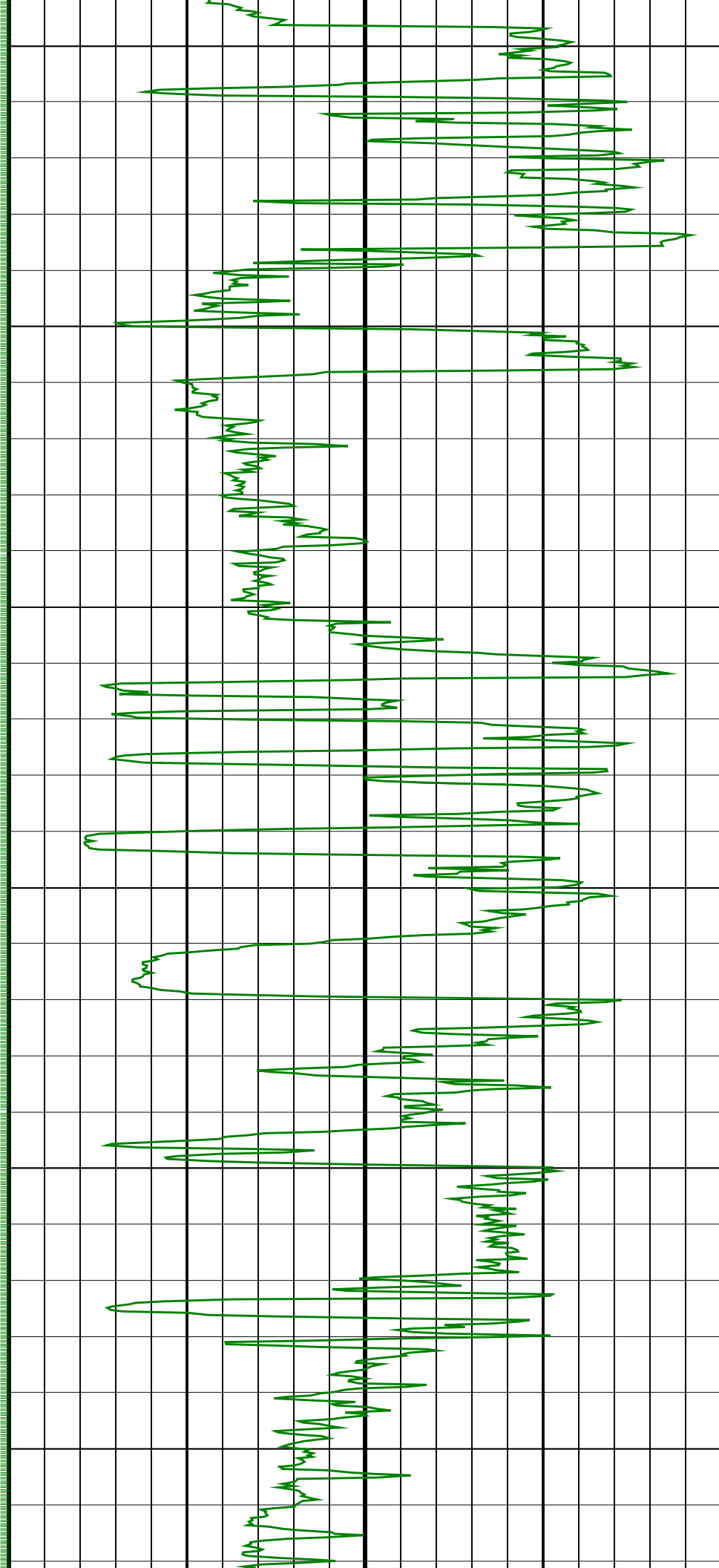


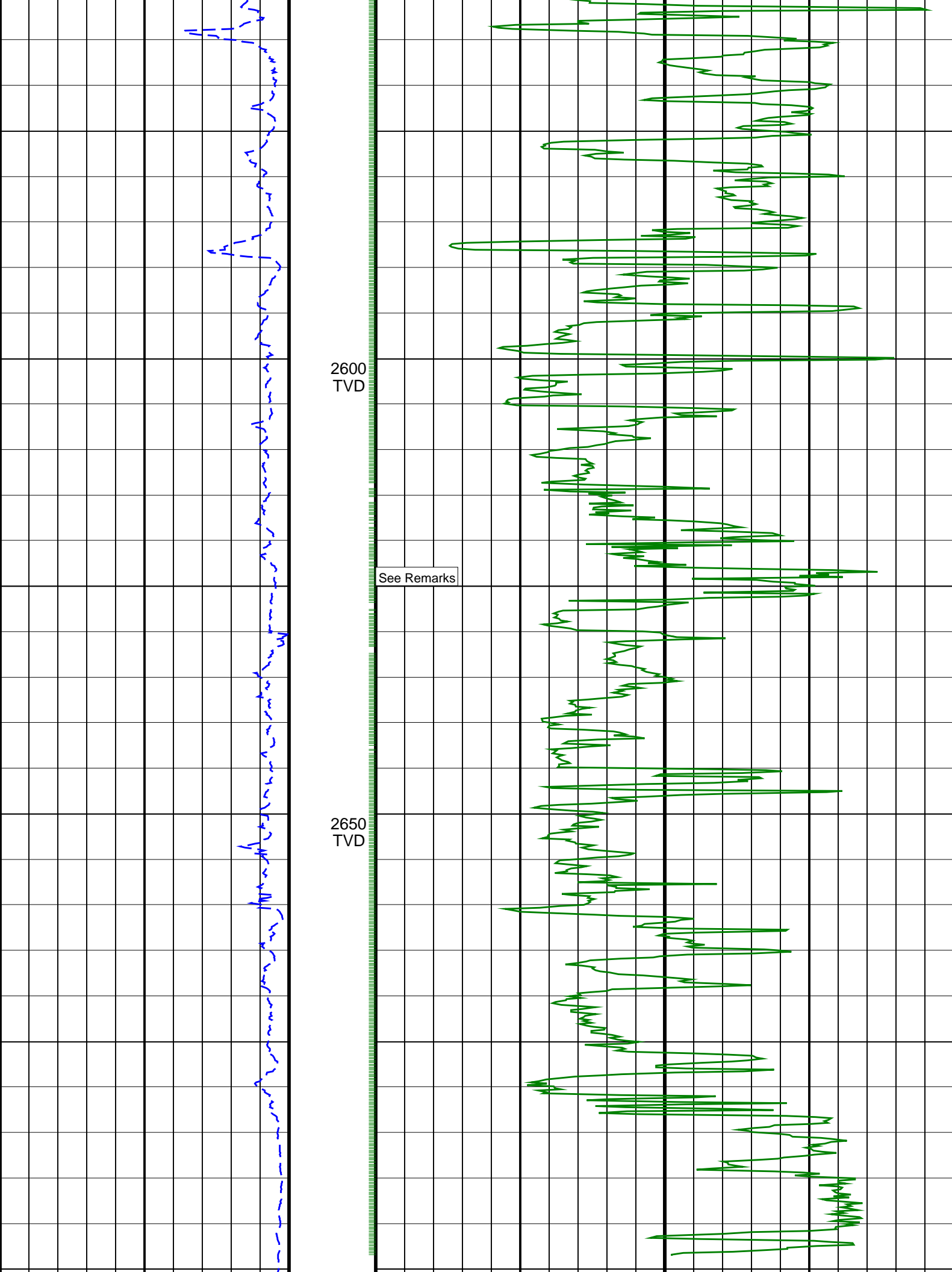


2450  
TVD

2500  
TVD

2550  
TVD





Survey report 14-Sep-2004 12:53:44 Page 1 of 3

Well.....: MLA-A10AST                      Spud date.....: 03-Sep-04  
API number.....:                      Last survey date.....: 14-Sep-04  
Engineer.....: J. Dolan, R. Borjas, L.Johnston    Total accepted surveys...: 42  
                                         MD of first survey.....: 2339.70 m  
RIG.....: ISDL 453                      MD of last survey.....: 3491.00 m  
STATE.....: Victoria

----- Survey calculation methods -----		----- Geomagnetic data -----	
Method for positions.....: Minimum curvature		Magnetic model.....: BGGM version 2003	
Method for DLS.....: Mason & Taylor		Magnetic date.....: 29-Aug-2004	
	Magnetic field strength..: 1199.58 HCNT		
----- Depth reference -----		Magnetic dec (+E/W-).....: 13.14 degrees	
Permanent datum.....: Mean Sea Level		Magnetic dip.....: -68.73 degrees	
Depth reference.....: Driller's Depth			
GL above permanent.....: -59.00 m		----- MWD survey Reference Criteria -----	
KB above permanent.....: 27.91 m		Reference G.....: 1000.03 mGal	
DF above permanent.....: 27.91 m		Reference H.....: 1199.58 HCNT	
	Reference Dip.....: -68.73 degrees		
----- Vertical section origin -----		Tolerance of G.....: (+/-) 2.50 mGal	
Latitude (+N/S-).....: 0.00 m		Tolerance of H.....: (+/-) 6.00 HCNT	
Departure (+E/W-).....: 0.00 m		Tolerance of Dip.....: (+/-) 0.45 degrees	

----- Platform reference point-----		----- Corrections-----	
Latitude (+N/S-).....:	-304.57 m	Magnetic dec (+E/W-).....:	13.14 degrees
Departure (+E/W-).....:	-304.57 m	Grid convergence (+E/W-)..:	-0.76 degrees
Total az corr (+E/W-).....:		13.90 degrees	
Azimuth from rotary table to target:		120.20 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)	Course azimuth (deg)	length (m)	TVD depth (m)	Vertical section (m)	Displ +N/S- (m)	Displ +E/W- (m)	Total displ (deg)	At Azim 100f	DLS (deg/ type)	Srvy tool	Corr
1	2339.70	42.24	122.92	0.00	1853.98	1285.32	-789.18	1027.85	1295.87	127.52	0.00	TIP	None
2	2370.23	45.12	126.14	30.53	1876.06	1306.33	-801.14	1045.21	1316.92	127.47	3.63	MWD	None
3	2398.02	44.56	126.06	27.79	1895.77	1325.83	-812.69	1061.04	1336.51	127.45	0.62	MWD	None
4	2426.51	43.32	124.70	28.49	1916.28	1345.51	-824.13	1077.15	1356.27	127.42	1.67	MWD	None
5	2454.92	43.29	123.12	28.41	1936.95	1364.96	-835.00	1093.32	1375.71	127.37	1.16	MWD	None
6	2483.86	43.60	121.48	28.94	1957.97	1384.84	-845.64	1110.15	1395.54	127.30	1.23	MWD	None
7	2512.25	44.18	121.58	28.39	1978.43	1404.52	-855.93	1126.92	1415.12	127.22	0.63	MWD	None
8	2540.84	44.92	121.38	28.59	1998.80	1424.57	-866.40	1144.03	1435.08	127.14	0.80	MWD	None
9	2569.37	43.81	120.98	28.53	2019.20	1444.52	-876.73	1161.09	1454.92	127.06	1.22	MWD	None
10	2598.21	43.61	120.70	28.84	2040.04	1464.44	-886.95	1178.20	1474.73	126.97	0.29	MWD	None
11	2627.02	43.24	121.07	28.81	2060.97	1484.25	-897.11	1195.20	1494.43	126.89	0.48	MWD	None
12	2655.51	43.25	122.24	28.49	2081.72	1503.76	-907.36	1211.81	1513.87	126.82	0.86	MWD	None
13	2684.17	44.65	124.22	28.66	2102.36	1523.62	-918.26	1228.45	1533.72	126.78	2.09	MWD	None
14	2712.97	42.72	125.62	28.80	2123.18	1543.44	-929.64	1244.76	1553.60	126.75	2.28	MWD	None
15	2741.46	43.19	125.14	28.49	2144.03	1562.78	-940.88	1260.59	1573.00	126.74	0.61	MWD	None
16	2770.13	43.95	124.26	28.67	2164.81	1582.48	-952.13	1276.83	1592.75	126.71	1.03	MWD	None
17	2798.78	43.58	123.35	28.65	2185.50	1602.25	-963.15	1293.30	1612.54	126.68	0.78	MWD	None
18	2827.53	43.12	122.43	28.75	2206.40	1621.97	-973.87	1309.87	1632.23	126.63	0.83	MWD	None
19	2856.49	43.44	122.18	28.65	2227.39	1641.89	-984.59	1328.89	1652.64	126.59	0.59	MWD	None

19	2856.18	44.61	122.49	28.65	2227.06	1641.80	-984.53	1326.62	1652.04	126.58	1.59	MWD	None
20	2884.87	45.10	122.55	28.69	2247.40	1662.02	-995.41	1343.69	1672.22	126.53	0.52	MWD	None
21	2908.51	44.95	122.76	23.64	2264.10	1678.73	-1004.43	1357.77	1688.91	126.49	0.27	MWD	None
22	2942.16	44.39	123.16	33.65	2288.04	1702.36	-1017.30	1377.61	1712.52	126.44	0.57	MWD	None
23	2971.42	43.63	123.67	29.26	2309.08	1722.66	-1028.49	1394.58	1732.82	126.41	0.87	MWD	None
24	3000.29	44.39	123.68	28.87	2329.84	1742.68	-1039.62	1411.28	1752.86	126.38	0.80	MWD	None
25	3028.64	44.11	124.48	28.35	2350.15	1762.41	-1050.70	1427.66	1772.62	126.35	0.67	MWD	None
26	3058.04	42.79	125.21	29.40	2371.49	1782.57	-1062.25	1444.25	1792.83	126.33	1.46	MWD	None
27	3085.69	42.75	124.69	27.65	2391.79	1801.28	-1073.01	1459.64	1811.60	126.32	0.39	MWD	None
28	3114.46	43.08	124.17	28.77	2412.86	1820.81	-1084.08	1475.80	1831.18	126.30	0.51	MWD	None
29	3143.15	43.27	124.07	28.69	2433.78	1840.40	-1095.09	1492.05	1850.80	126.28	0.21	MWD	None
30	3171.75	43.81	123.71	28.60	2454.52	1860.06	-1106.08	1508.41	1870.48	126.25	0.63	MWD	None

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SCHLUMBERGER Survey Report

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Seq	Measured	Incl	Azimuth	Course	TVD	Vertical	Displ	Displ	Total	At	DLS	Srvy	Tool
#	depth	angle	angle	length	depth	section	+N/S-	+E/W-	displ	Azim	(deg/	tool	Corr
-	(m)	(deg)	(deg)	(m)	(m)	(m)	(m)	(m)	(deg)	100f)	type	(deg)	
31	3200.60	44.41	123.68	28.85	2475.23	1880.10	-1117.22	1525.12	1890.54	126.22	0.63	MWD	None
32	3229.06	40.75	126.43	28.46	2496.19	1899.28	-1128.26	1540.88	1909.79	126.21	4.40	MWD	None
33	3257.94	39.00	127.27	28.88	2518.35	1917.67	-1139.36	1555.70	1928.30	126.22	1.93	MWD	None
34	3286.60	36.20	129.73	28.66	2541.05	1934.97	-1150.24	1569.39	1945.77	126.24	3.38	MWD	None
35	3315.17	34.57	131.07	28.57	2564.35	1951.26	-1160.96	1581.99	1962.27	126.27	1.93	MWD	None
36	3343.58	32.76	132.73	28.41	2587.99	1966.68	-1171.47	1593.71	1977.94	126.32	2.18	MWD	None
37	3371.90	32.44	133.37	28.32	2611.85	1981.55	-1181.88	1604.86	1993.10	126.37	0.51	MWD	None
38	3401.06	32.24	134.16	29.16	2636.49	1996.72	-1192.67	1616.13	2008.57	126.43	0.49	MWD	None
39	3427.39	31.81	135.26	26.33	2658.81	2010.23	-1202.49	1626.05	2022.38	126.48	0.84	MWD	None
40	3458.35	30.98	136.77	30.96	2685.24	2025.75	-1214.10	1637.25	2038.29	126.56	1.13	MWD	None
41	3470.52	30.00	137.67	12.17	2695.72	2031.65	-1218.63	1641.45	2044.36	126.59	2.71	MWD	None
42	3491.00	30.00	137.67	20.48	2713.46	2041.42	-1226.20	1648.34	2054.41	126.65	0.00	Projection to TD	

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

Well: **MLA-A10AST**  
Field: **Turrum**  
Rig: **ISDL 453**  
State: **Victoria**

**Schlumberger**

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

