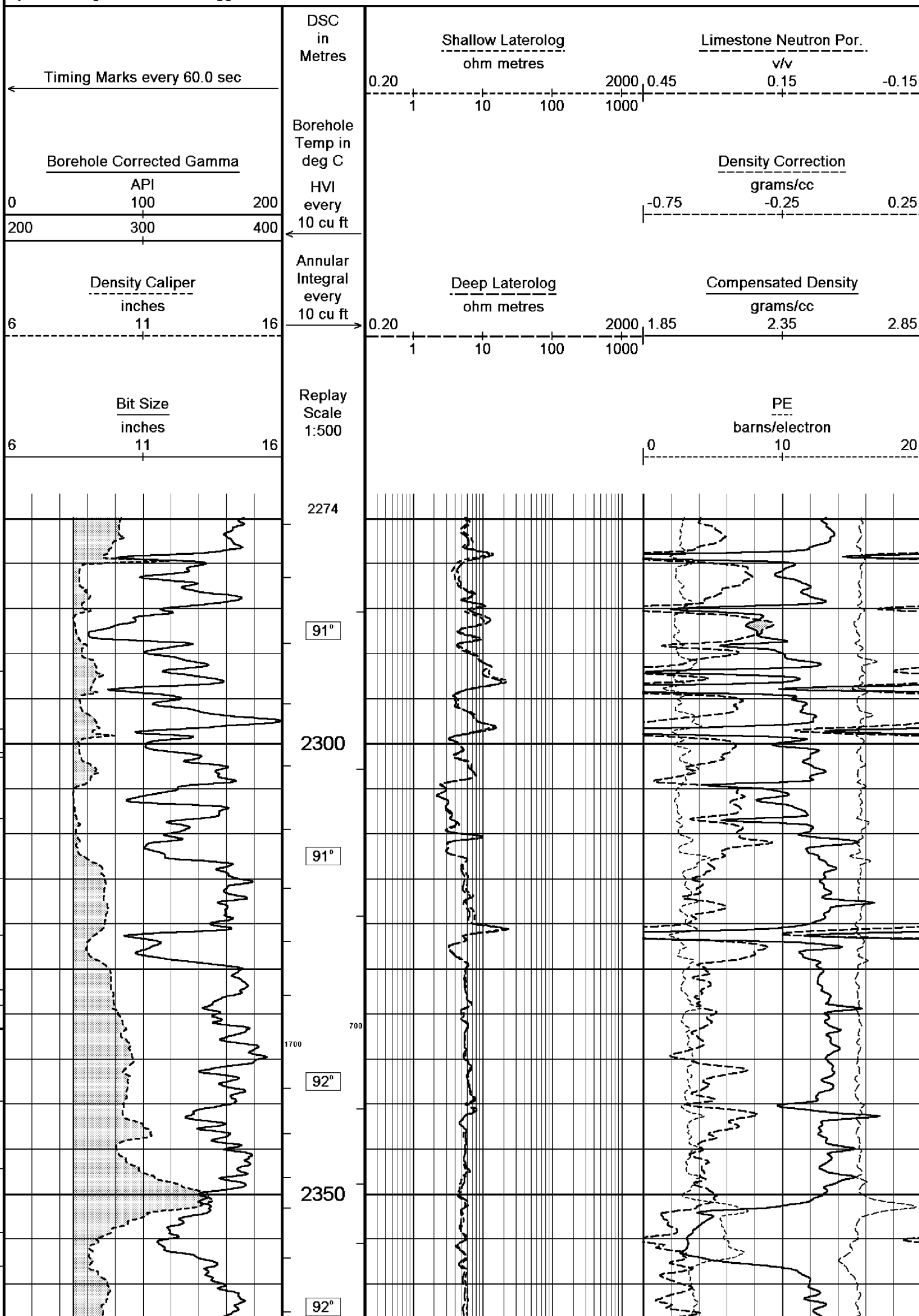
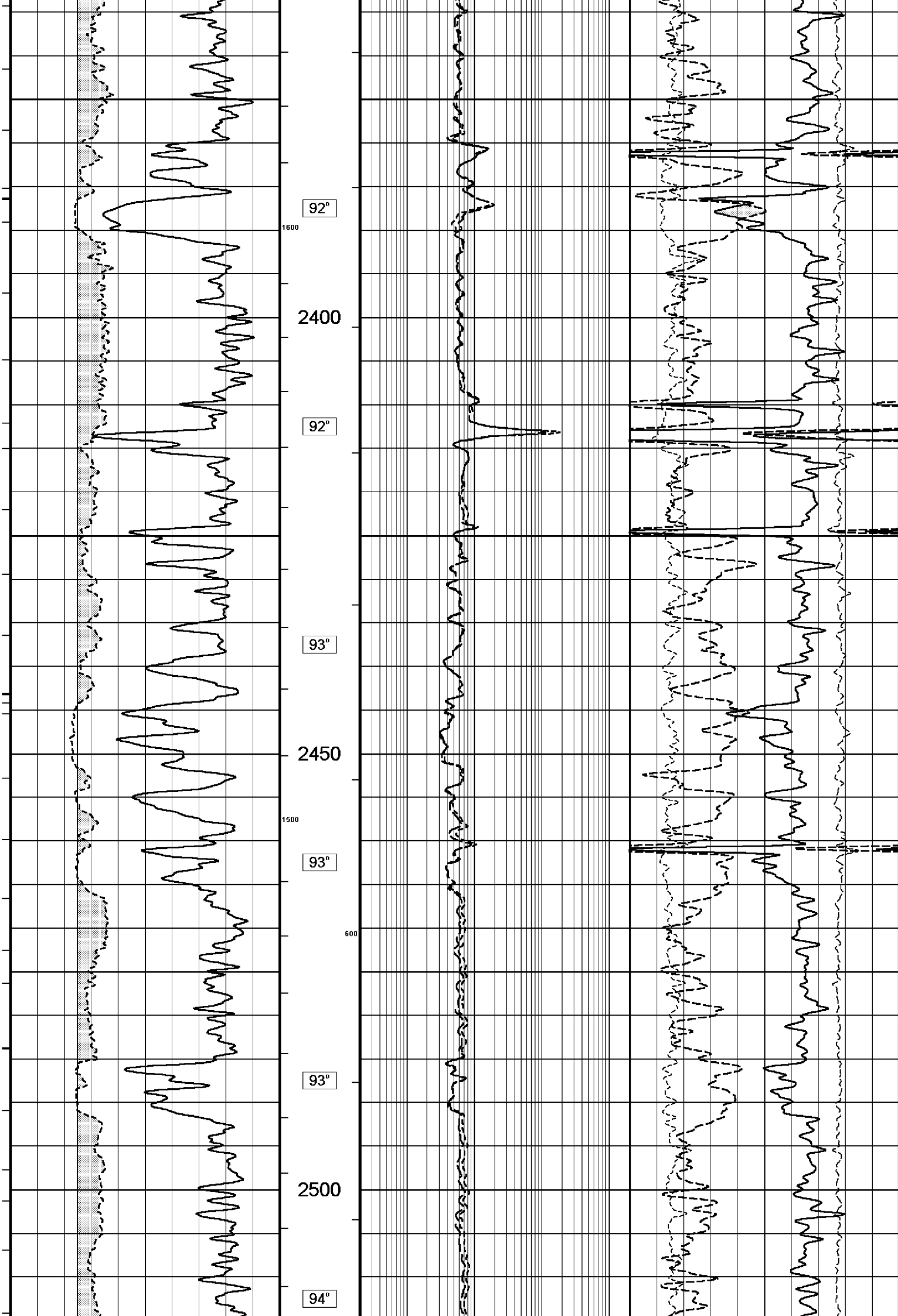


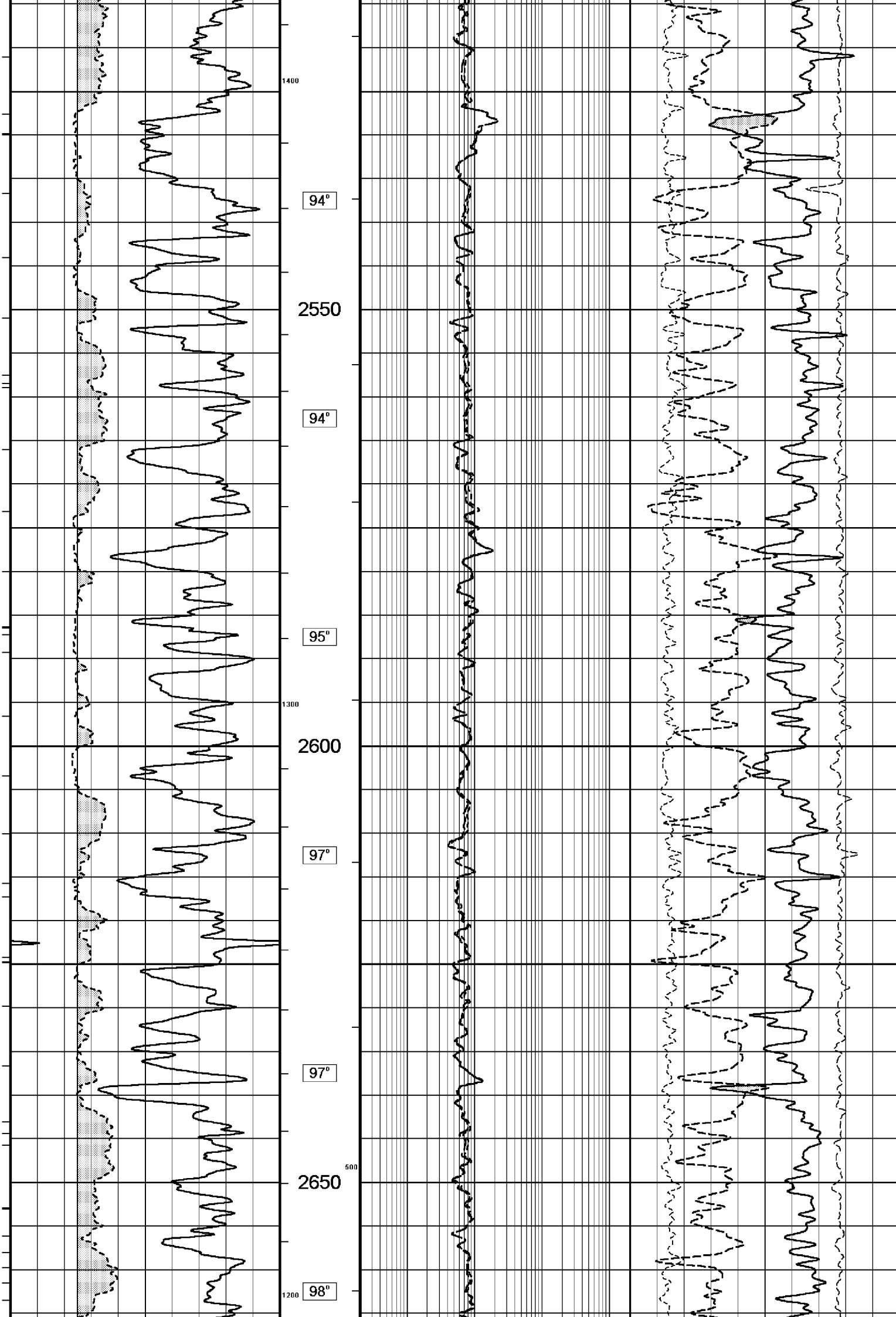
<div>Reeves</div> <div>Compact</div>			DUAL LATEROLOG - GR		
			DENSITY - NEUTRON		
			1:500 MD		
COMPANY			Esso Australia Pty Ltd		
WELL			Marlin A10a ST		
FIELD			Turrum		
PROVINCE/COUNTRY			Bass Strait		
COUNTRY/STATE			Australia		
LOCATION			38 13 49.320E , 148 13 15.712S		
			N 5767920.060 m , E 606868.950 m		
			[FINAL PRINT]		
LSD	SEC	TWP	RGE	Other Services	
				COMPENSATED SONIC	
API Number			Permit Number VIC L3/L4		
Permanent Datum M.S.L.			, Elevation 0.00 metres		
Log Measured From R.T.			@ 27.91m above Permanent Datum		
Drilling Measured From R.T.					
Date	15-SEP-2004				Elevations: KB DF GL 27.91 -59.00 metres metres metres
Run Number	One				
Depth Driller	3491.00		metres		
Depth Logger	3484.50		metres		
First Reading	3479.45		metres		
Last Reading	2275.00		metres		
Casing Driller	642.00		metres		
Casing Logger					
Bit Size	8.50		inches		
Hole Fluid Type	KC/PPH/PA/GLY				
Density / Viscosity	9.90 lb/USg		77.00 CP		
PH / Fluid Loss	9.10		2.80 ml/30Min		
Sample Source	Flow Line				
Rm @ Measured Temp	0.135 @ 25.0		ohm-m		
Rmf @ Measured Temp	0.098 @ 25.0		ohm-m		
Rmc @ Measured Temp	0.168 @ 25.0		ohm-m		
Source Rmf / Rmc	Press		Press		
Rm @ BHT	0.047 @ 114.0		ohm-m		
Time Since Circulation	23.5 Hrs				
Max Recorded Temp	114.00		deg C		
Equipment Name	CWS/CML				
Equipment / Base	1		Sale		
Recorded By	G. McManus, R. Tench				
Witnessed By	C. MENHENITT				
Circ. Stopped	2200 14-Sep				

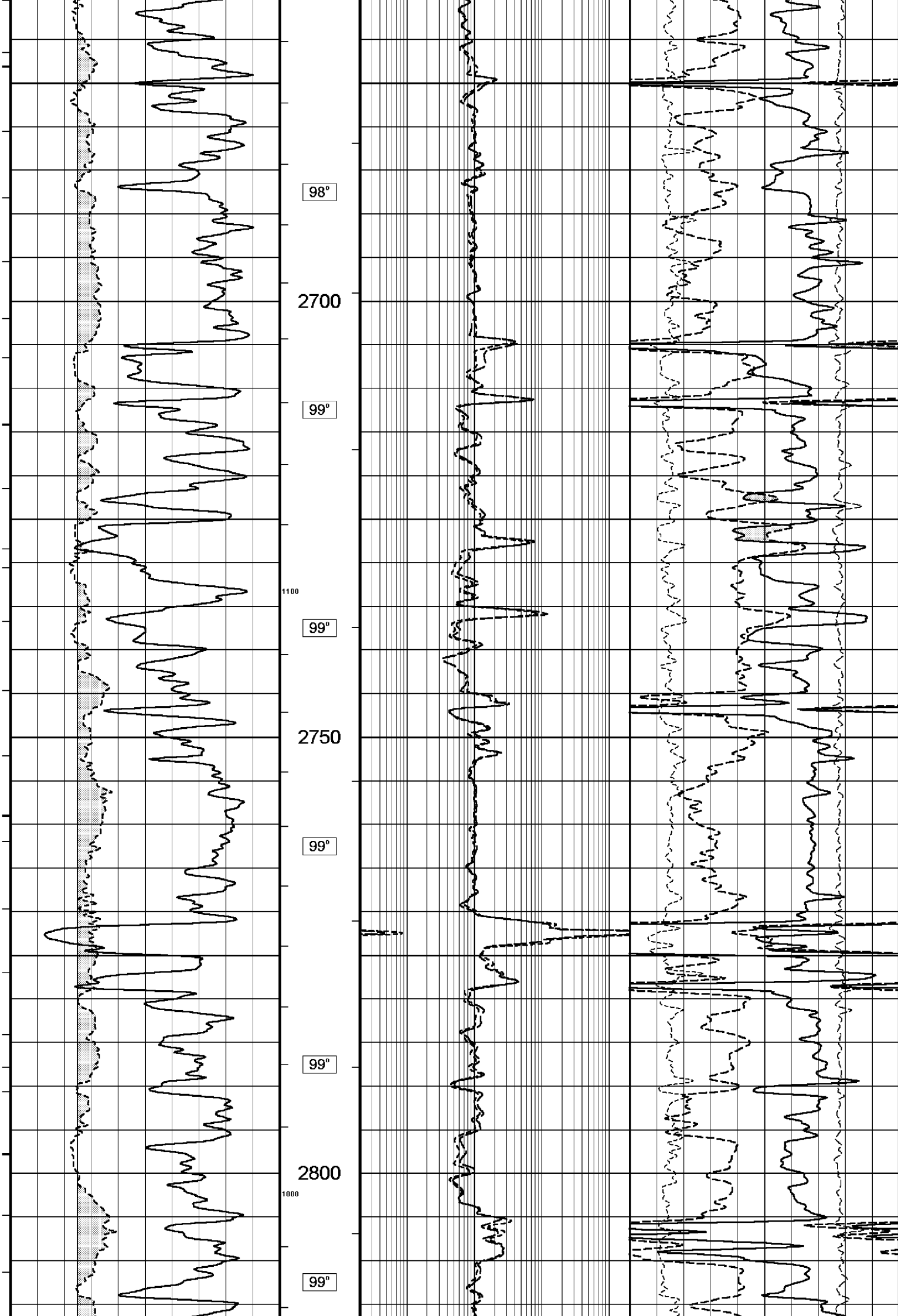
BOREHOLE RECORD				
Bit Size inches	Depth From metres		Depth To metres	
8.500	642.000		3491.000	
CASING RECORD				
Type	Size inches	Depth From metres	Shoe Depth metres	Weight pounds/ft
J-55	13.375	0.000	642.000	54.40
REMARKS				
Drilling Rig: Nabors 453				
Crew: G McManus; R Tench; B Goodwin; M Susa				
Open hole well logged using Reeves COMPACT logging tools and 5" Shuttle conveyed Memory logging techniques.				
Logs depth corrected and quality controlled with Anadrill gamma log.				
Caliper reading inside casing: 12.688 In.				
Inside diameter of casing: 12.615 In.				
Max Inclination: 45.1 deg at 2884.87mMDRT				
Max Dogleg Severity: 4.32 deg at 3229.06mMDRT				
Max Temperature: 114.0 deg C at 3429.90mMDRT				
Hole Volume to Last Read: 1790 ft^3				
Annular Volume to Last Read: 735 ft^3				

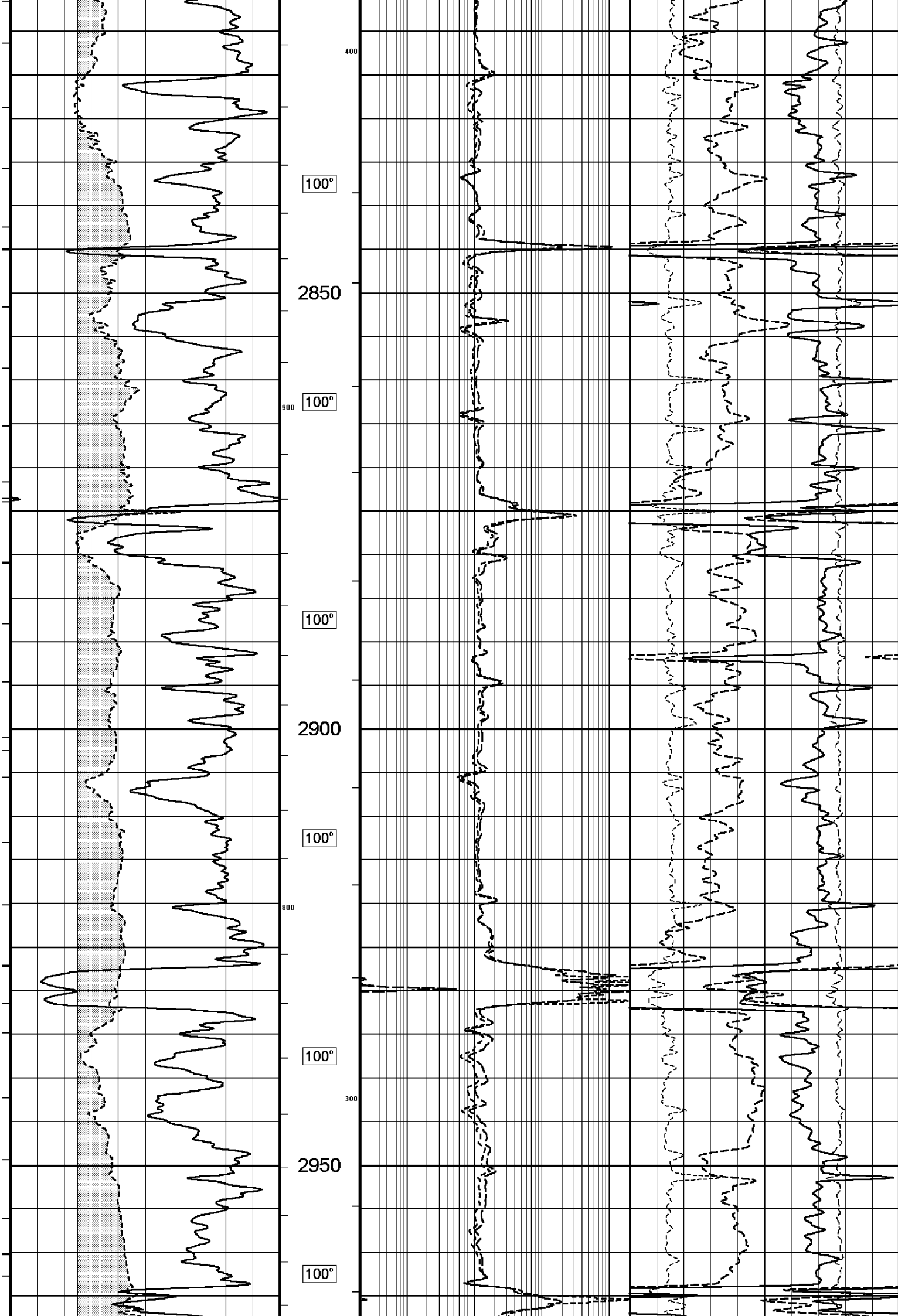
All interpretations are opinions based on inferences from electrical or other measurements and we cannot, and do not, guarantee the accuracy or correctness of any interpretations, and we shall not, except in the case of gross or wilful negligence on our part, be liable or responsible for any loss, costs, damages or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to our general terms and conditions in our price schedule.

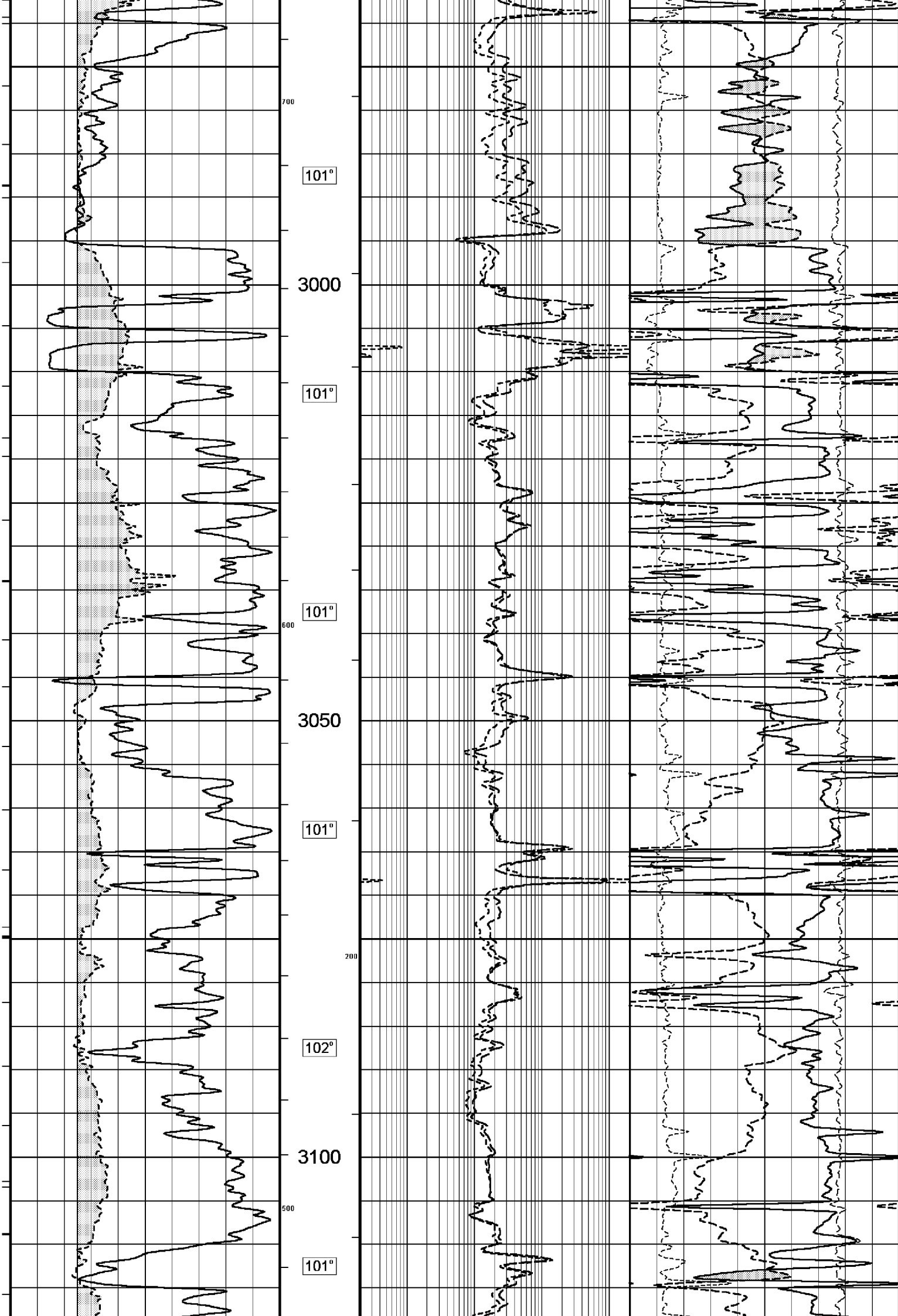


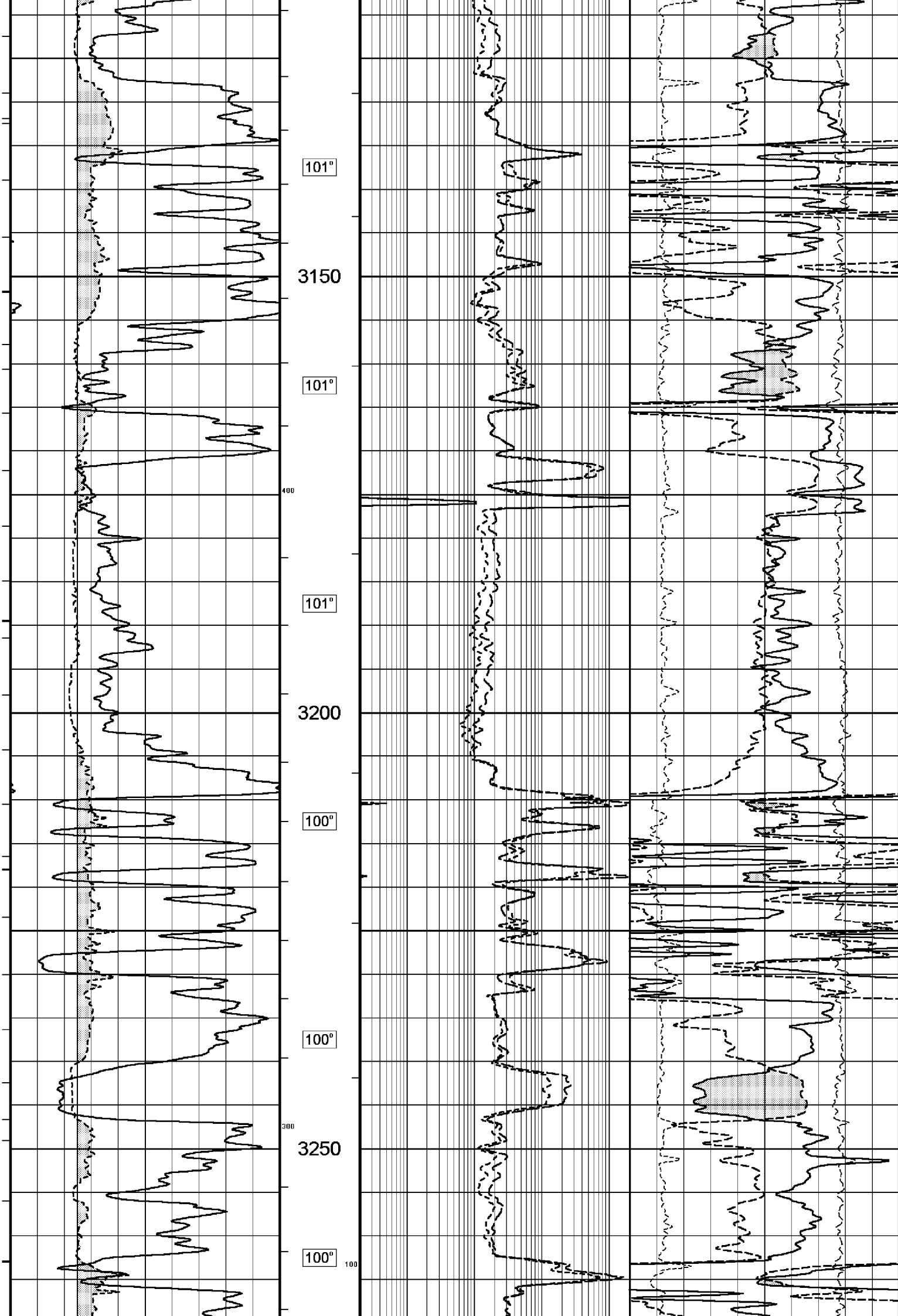




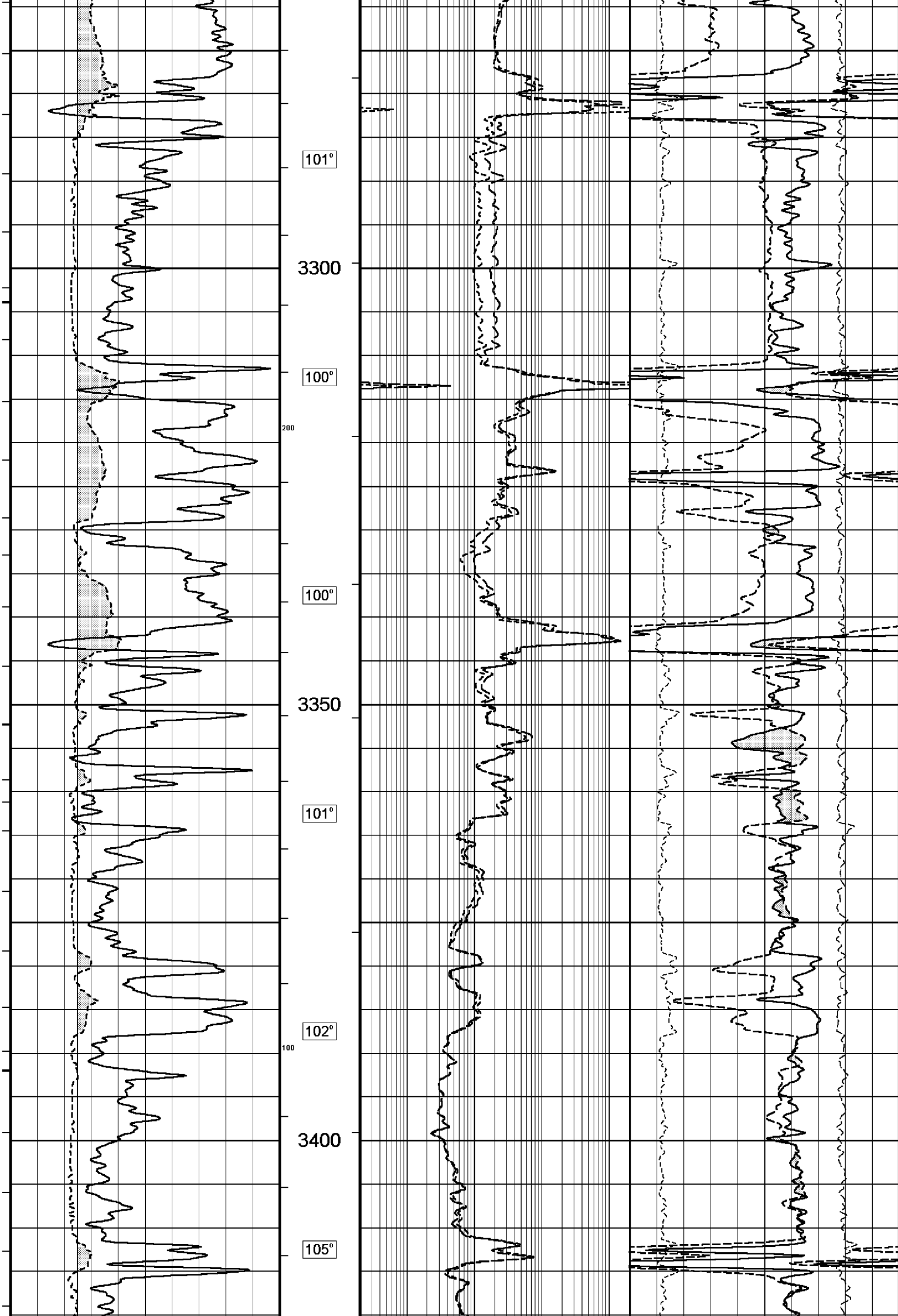


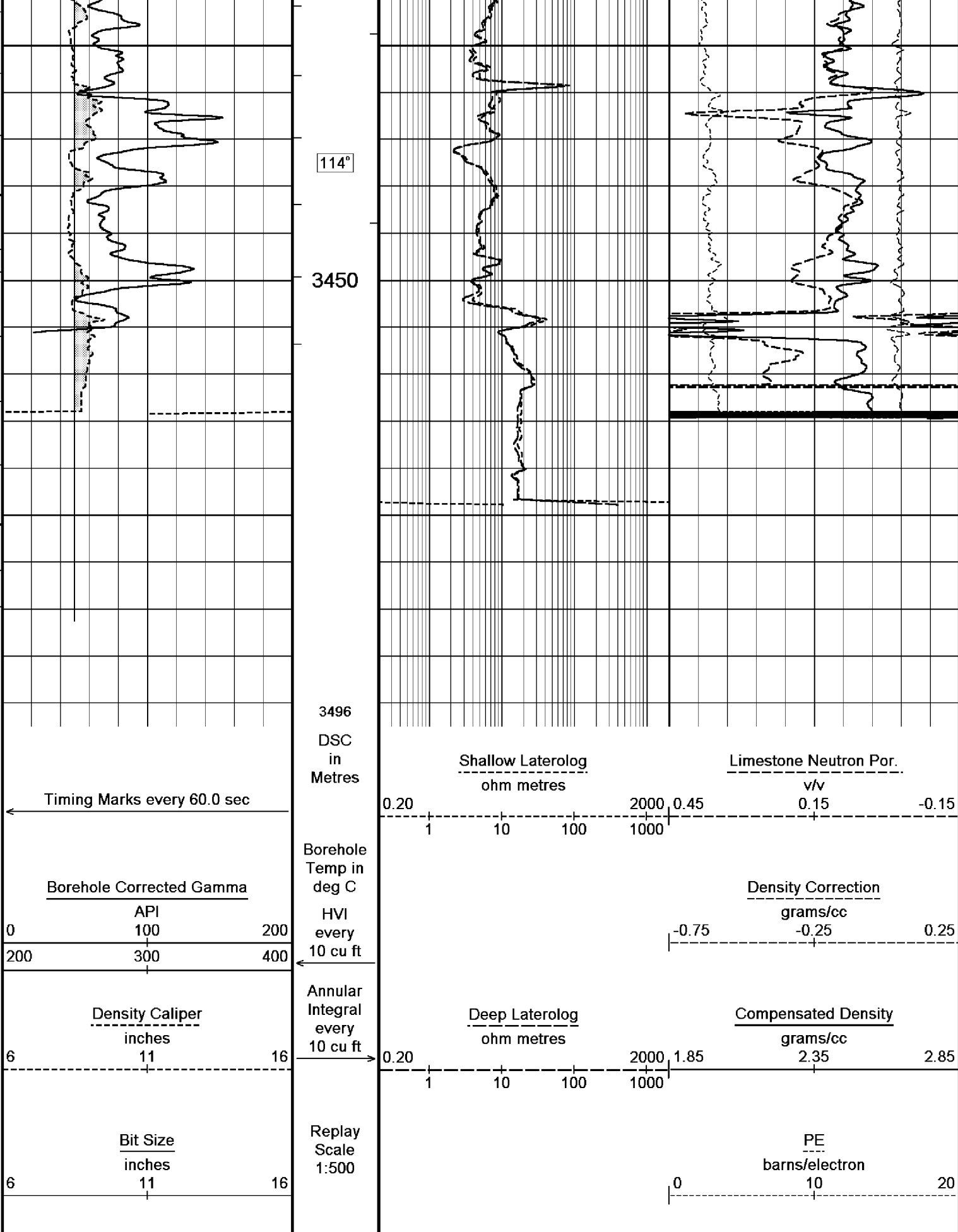












Depth Based Data - Maximum Sampling Increment 10.0cm  
Filename: C:\MLA A10AST\FINALS\MLA\_A10AST\_Main\_Log\_TC.dta  
System Configuration Dates: Logged 09-SEP-2003: Processed 09-SEP-2003: Plotted 25-JUN-2003:

Plotted on 03-NOV-2004 11:55  
Recorded on 16-SEP-2004 08:56

MAIN LOG 1:500

BEFORE SURVEY CALIBRATION  
C:\MLA A10AST\FINALS\BLACK AND WHITE PRESENTATIONS\MLA\_A10AST\_Main\_Log\_TC.dta

General Constants All 000			
General Parameters			
Mud Resistivity	0.135	ohm-metres	
Mud Resistivity Temperature	25.000	degrees C	
Water Level	0.000	metres	
Density/Neutron Processing	Wet Hole		
Hole/Annular Volume and Differential Caliper Parameters			
HVOL Caliper 1	Density Caliper		
HVOL Caliper 2	Density Caliper		
Annular Volume Diameter	7.000	inches	
Caliper for Differential Caliper	Density Caliper		
Rwa Parameters			
Porosity used	Base Density Porosity		
Resistivity used	Deep Induction		
RWA Constant A	0.610		
RWA Constant M	2.150		

High Resolution Temperature Calibration MCG 043			Field Calibration on 10-FEB-2004,09:37
	Measured	Calibrated(Deg C)	
Lower	0.00	0.00	
Upper	100.00	100.00	

High Resolution Temperature Constants MCG 043	
Pre-filter Length	11

Gamma Calibration MCG 043			Field Calibration on 13-SEP-2004 17:13
	Measured	Calibrated (API)	
Background	7	4	
Calibrator (Gross)	1404	913	
Calibrator (Net)	1397	909	

Gamma Constants MCG 043			
Gamma Calibrator Number	60		
Mud Density	1.18	gm/cc	
Caliper Source for Processing	Density Caliper		
Tool Position	Eccentred		
Concentration of KCl	0.00	kppm	

Neutron Calibration MDN 085				Base Calibration on 1-SEP-2004 13:09	
				Field Check on 13-SEP-2004 18:47	
Base Calibration					
		Measured		Calibrated (cps)	
	Near	Far	Near	Far	
	3144	98	3714	110	
Ratio	32.224		33.764		
Field Calibrator at Base					
			Calibrated (cps)		
			1597	2306	
Ratio			0.692		
Field Check					
			Calibrated (cps)		
			1571	2298	
Ratio			0.684		

Neutron Constants MDN 085			
Neutron Source Id	NSN-E-739		
Neutron Jig Number	NEC-C-052		
Epithermal Neutron	No		
Caliper Source for Processing	Density Caliper		
Stand-off	0.00	inches	
Mud Density	1.18	gm/cc	
Limestone Sigma	7.10	cu	
Sandstone Sigma	4.26	cu	
Dolomite Sigma	4.70	cu	
Formation Pressure Source	None		
Formation Pressure	N/A	kpsi	
Temperature Source	MCG External Temperature		
Temperature	20.00	degrees C	
Mud Salinity	48.30	kppm	
Formation Fluid Salinity Source	None		

Formation Fluid Salinity	N/A	kppm
Barite Mud Correction	Not Applied	
Caliper Calibration MPD 083		Base Calibration on 1-SEP-2004 10:37 Field Calibration on 13-SEP-2004 18:41
Base Calibration		
Reading No	Measured	Calibrator Size (in)
1	13072	4.01
2	21358	5.99
3	29792	7.98
4	38288	9.94
5	47695	12.01
6	N/A	N/A
Field Calibration		
	Measured Caliper (in)	Actual Caliper (in)
	7.95	7.98

Photo Density Calibration MPD 083				Base Calibration on 1-SEP-2004 10:28	
				Field Check on 13-SEP-2004 18:40	
Density Calibration					
Base Calibration		Measured		Calibrated (sdu)	
		Near	Far	Near	Far
	Reference 1	54422	18790	53111	19310
	Reference 2	25713	2533	24951	2530
Field Check at Base					
		981.2	1133.8		
Field Check					
		980.1	1130.8		
PE Calibration					
Base Calibration		Measured		Calibrated	
	WS	WH	Ratio	Ratio	
	Background	186	847		
	Reference 1	16823	54230	0.312	0.320
	Reference 2	6734	25569	0.265	0.273
Field Check at Base					
		185.5	846.9		
Field Check					
		186.9	844.2		

Density Constants MPD 083		
Density Source Id	242	
Nylon Calibrator Number	DNC-D-536	
Aluminium/Fe Calibrator Number	DAC-D-536	
Density Shoe Profile	4 inch	
Caliper Source for Processing	Density Caliper	
PE Correction to Density	Not Applied	
Mud Density	1.18	gm/cc
Mud Density Z/A Correction	1.11	
Mud Filtrate Density	1.00	gm/cc
Dry Hole Mud Filtrate Density	1.00	gm/cc
DNCT	0.00	gm/cc
CRCT	0.00	gm/cc
Matrix Density (gm/cc)	Depth (m)	
2.71	0.00	
0.00	0.00	
0.00	0.00	
0.00	0.00	
0.00	0.00	
0.00	0.00	
0.00	0.00	
0.00	0.00	

Laterolog Calibration MLE 017				Base Calibration on 2-SEP-2004,17:05	
				Field Check on 13-SEP-2004,17:07	
Base Calibration					
		Measured		Calibrated (ohm-m)	
Channel	Resistor 1	Resistor 2	Resistor 1	Resistor 2	
Shallow	9.7	969.2	13.2	1321.0	
Deep	9.7	933.4	7.5	755.0	
Groningen	9.7	933.7	8.5	854.0	

Channel	Base Check (ohm-m)	Field Check (ohm-m)
Shallow	49.0	49.0
Deep	28.8	28.8
Groningen	262.9	262.9

Laterolog Constants MLE 017		
Squasher Start	40000	ohm-m
Shallow Laterolog K Factor	1.3210	
Deep Laterolog K Factor	0.7550	
Groningen Laterolog K Factor	0.8540	
Interference Rejection	50 Hz	
SP Connection	SP Bridle Electrode	
Groningen Connection	Groningen Electrode	

DOWNHOLE EQUIPMENT

C:\MLA A10AST\FINALS\BLACK AND WHITE PRESENTATIONS\MLA\_A10AST\_Main\_Log\_TC.dta

Compact Swivel Head Adaptor SHA 64    Length: 0.83 m    Weight: 26.5 lb	
Compact Knuckle Joint SKJ 111    Length: 0.66 m    Weight: 24.3 lb	
Compact Battery Sub. MBS 99    Length: 4.34 m    Weight: 88.2 lb	
Compact Inline Standoff B MIS 144    Length: 0.65 m    Weight: 15.4 lb	
Compact Stiff Bridle Electrode Sub. MBE 18    Length: 3.76 m    Weight: 94.8 lb	
Compact Inline Standoff B MIS 142    Length: 0.65 m    Weight: 15.4 lb	
Compact Stiff Bridle Electrode Sub. MBE 19    Length: 3.76 m    Weight: 94.8 lb	
Compact Inline Standoff B MIS 141    Length: 0.65 m    Weight: 15.4 lb	
Thrid Bridle MBE 20 MLK 111    Length: 3.76 m    Weight: 94.8 lb	

Compact Inline Standoff B  
MIS 140 Length: 0.65 m Weight: 15.4 lb

Compact Knuckle Joint  
SKJ 110 Length: 0.66 m Weight: 24.3 lb

Compact Gamma  
MCG 43 Length: 2.65 m Weight: 63.9 lb

Compact Memory Sub.  
MMS 24 Length: 0.95 m Weight: 22.0 lb

Compact Knuckle Joint  
SKJ 100 Length: 0.66 m Weight: 24.3 lb

Compact Swivel Head Adaptor  
SHA 71 Length: 0.83 m Weight: 26.5 lb

Compact Inline Bowspring A  
MIS 94 Length: 1.74 m Weight: 33.1 lb

Compact Neutron  
MDN 85 Length: 1.53 m Weight: 50.7 lb

Compact Density/Caliper  
MPD 83 Length: 2.92 m Weight: 90.4 lb

Compact Inline Bowspring A  
MIS 24 Length: 1.74 m Weight: 33.1 lb

Compact Knuckle Joint  
SKJ 102 Length: 0.66 m Weight: 24.3 lb

Compact Inline Standoff B  
MIS 139 Length: 0.65 m Weight: 15.4 lb

Compact Upper Guard Sub.  
MUG 5 Length: 2.74 m Weight: 68.3 lb

Compact Inline Standoff B  
MIS 136 Length: 0.65 m Weight: 15.4 lb

Compact Laterolog Electrode Sub.  
MLE 17 Length: 3.76 m Weight: 92.6 lb



31.38 m GGCE - Borehole Corrected Gamma  
30.50 m CGXT - MCG External Temperature

25.33 m NPRL - Limestone Neutron Por.

22.65 m AVOL - Annular Volume  
22.65 m HVOL - Hole Volume  
22.65 m CLDC - Density Caliper  
22.44 m DEN - Compensated Density

22.44 m DCOR - Density Correction  
22.42 m PDPE - PE

13.35 m DSLL - Shallow Laterolog  
13.35 m DDLL - Deep Laterolog

Compact Inline Standoff B  
MIS 133 Length: 0.65 m Weight: 15.4 lb

Compact Lower Guard Sub.  
MLG 7 Length: 2.44 m Weight: 55.1 lb

Compact Inline Standoff B  
MIS 130 Length: 0.65 m Weight: 15.4 lb

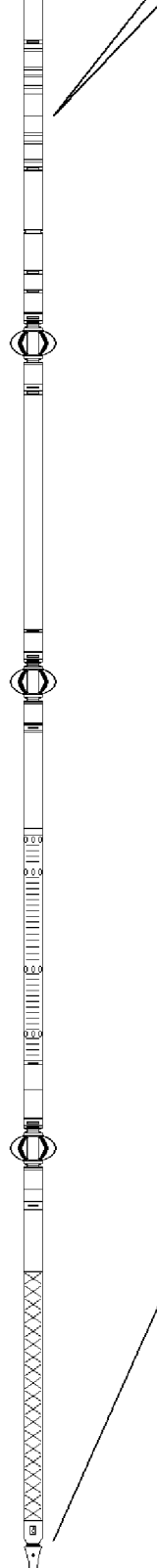
Compact Sonic  
MSS 47 Length: 3.82 m Weight: 72.8 lb

Compact Inline Standoff B  
MIS 132 Length: 0.65 m Weight: 15.4 lb

Compact Induction  
MAI 39 Length: 3.29 m Weight: 48.5 lb

Pressure Bung + Hole Finder  
HFS 3 Length: 0.40 m Weight: 6.6 lb

Total Length: 53.77 m Weight: 1298.5 lb



Tool Zero (0.44m from bottom)

All measurements relative to tool zero.

COMPANY	Esso Australia Pty Ltd
WELL	Marlin A10a ST
FIELD	Turrum
PROVINCE/COUNTY	Bass Strait
COUNTRY/STATE	Australia

Elevation Kelly Bushing	metres	First Reading	3479.45	metres
Elevation Drill Floor 27.91	metres	Depth Driller	3491.00	metres
Elevation Ground Level -59.00	metres	Depth Logger	3484.50	metres

DUAL LATEROLOG - GR  
DENSITY - NEUTRON  
1:500 MD

**Reeves**  
**Compact**

