

# Reeves

## Compact

DUAL LATEROLOG - GR  
DENSITY - NEUTRON

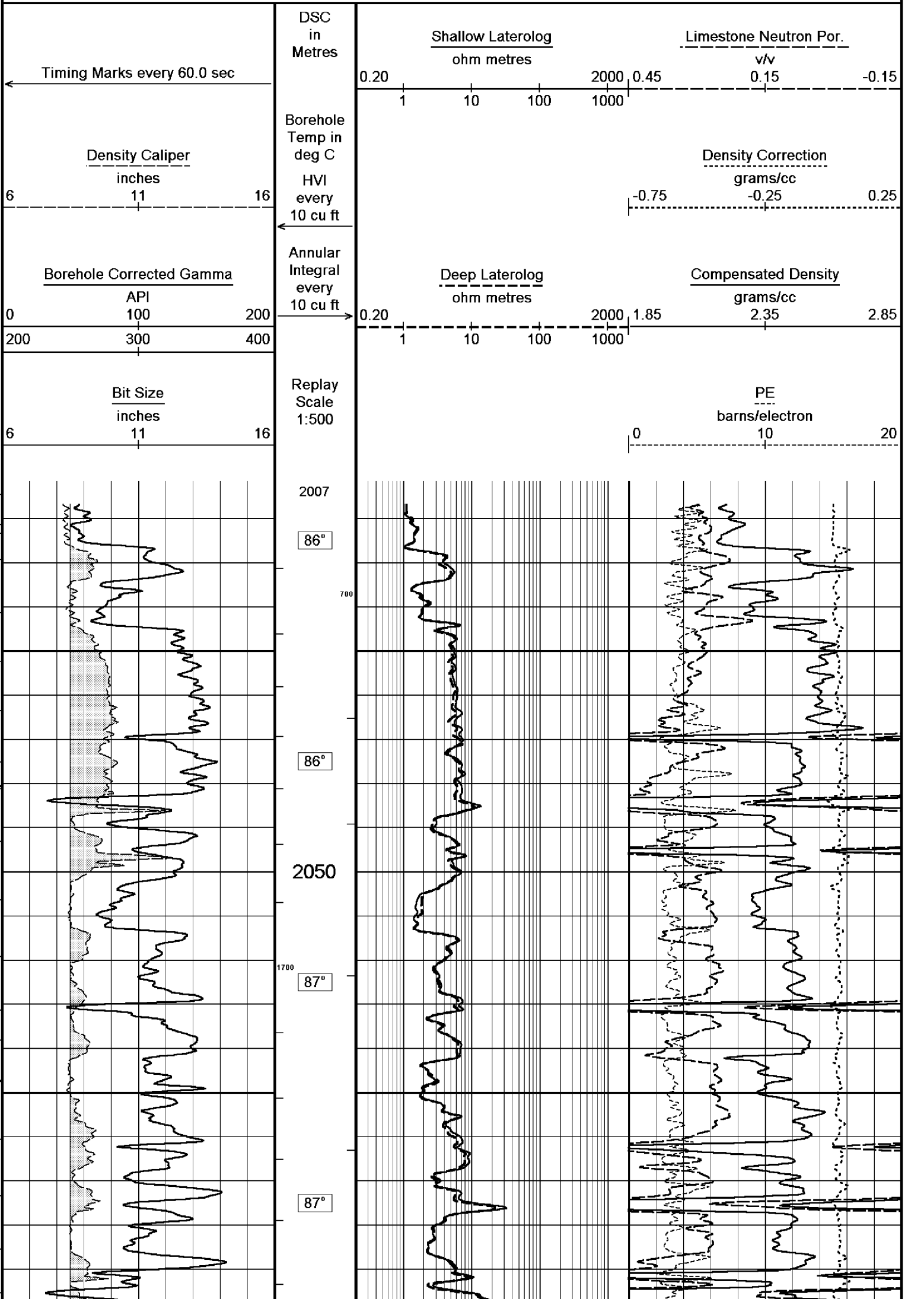
1:500 MD

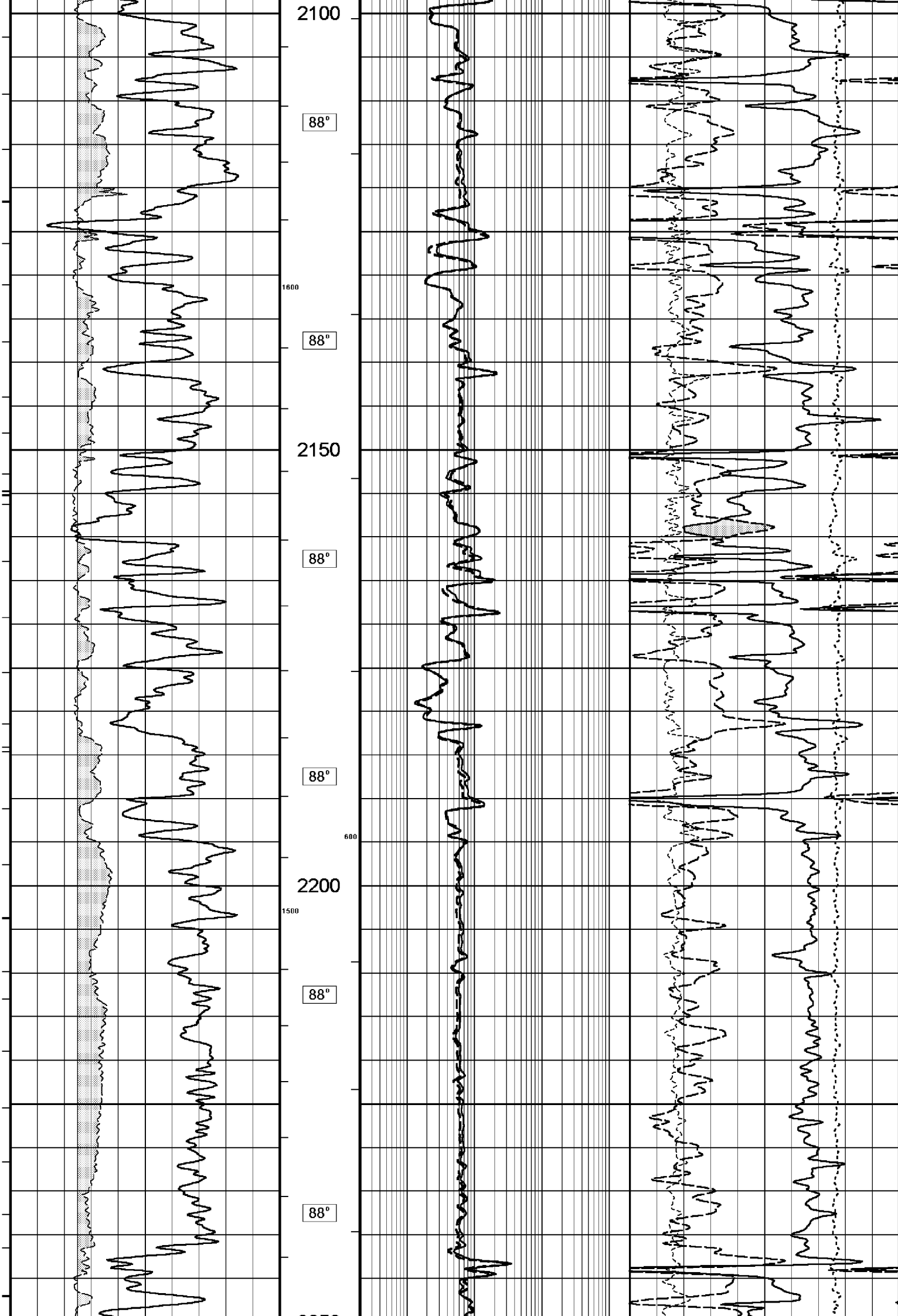
COMPANY	ESSO AUSTRALIA PTY. LTD.		
WELL	MARLIN A24A		
FIELD	TURRUM		
PROVINCE/COUNTY	BASS STRAIT		
COUNTRY/STATE	AUSTRALIA		
LOCATION	38Deg13'49.203"S, 148Deg13'15.554"E N 5767923.720 m, E 606865.170 m		
LSD	SEC	TWP	RGE
API Number	Other Services		
Permit Number	VIC/L11 COMPENSATED SONIC		
Permanent Datum MSL	, Elevation 0.0 metres		
Log Measured From RT@27.91 m	above Permanent Datum		
Drilling Measured From RT			
Date	5-MAY-2004		
Run Number	ONE		
Depth Driller	3275.00	metres	
Depth Logger	3270.50	metres	
First Reading	3270.12	metres	
Last Reading	2008.50	metres	
Casing Driller	653.00	metres	
Casing Logger			
Bit Size	8.50	inches	
Hole Fluid Type	KCL/GLY/PPHA		
Density / Viscosity	10.15 lb/USg	30.00 CP	
PH / Fluid Loss	8.90	3.00 ml/30Min	
Sample Source	PRESS		
Rm @ Measured Temp	0.137 @ 25.0	ohm-m	
Rmf @ Measured Temp	0.098 @ 25.0	ohm-m	
Rmc @ Measured Temp	0.236 @ 25.0	ohm-m	
Source Rmf / Rmc	FLOW	FLOW	
Rm @ BHT	0.066 @ 75.0	ohm-m	
Time Since Circulation	36 HRS		
Max Recorded Temp	90.60	deg C	
Equipment Name	CWS/CML		
Equipment / Base	1	SALE	
Recorded By	G. MCMANUS, N. PATMAN		
Witnessed By	C. MENHENNIT, L. CULLEN		
Circ. Stopped	1400 4-MAY		

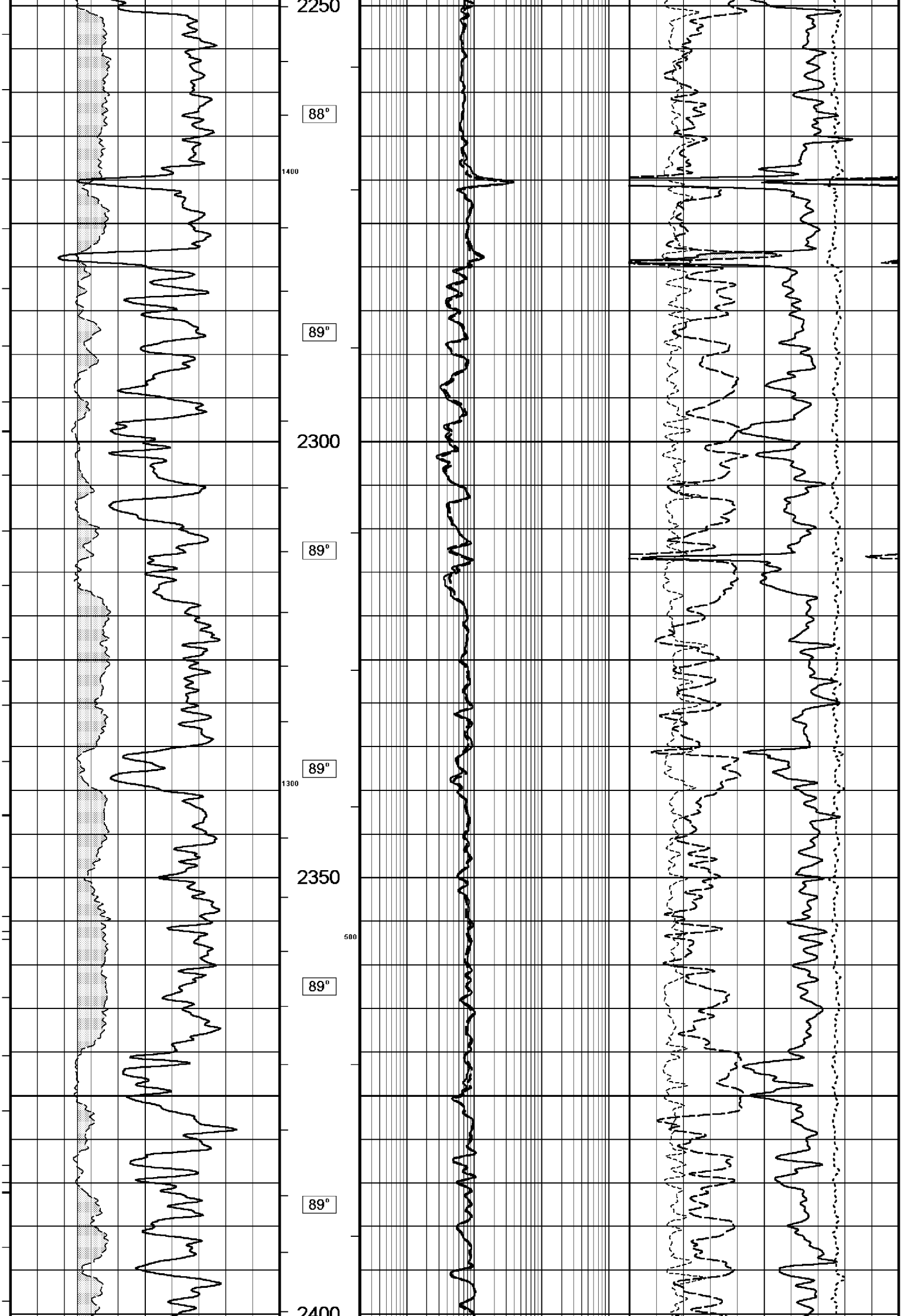
**FINAL PRINT**

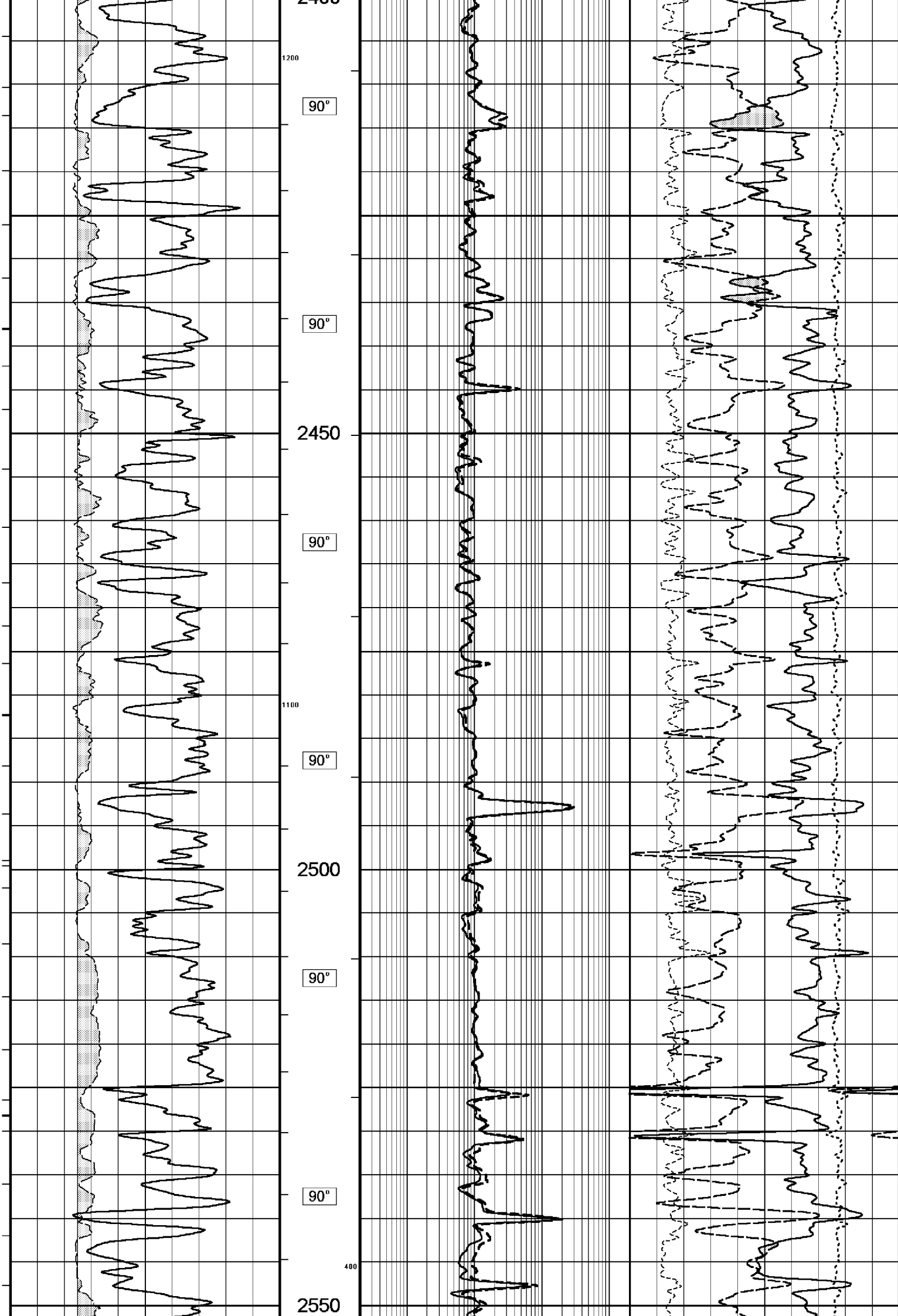
BOREHOLE RECORD				
Bit Size inches		Depth From metres		Depth To metres
8.500		653.000		3275.000
CASING RECORD				
Type	Size inches	Depth From metres	Shoe Depth metres	Weight pounds/ft
SURFACE	13.375	0.000	653.000	0.00
L80	9.625	0.000	653.000	47.00
REMARKS				
***Miss Run - No data collected above 2008.5 m MD Due To Battery Failure***				
Rig Nabors 453				
5" SHUTTLE - MEMORY LOGGING				
5-MAY-04				
Crew: G McManus, N Patman, M Susa, B Goodwin				
Logs depth corrected -1.1m to correlate with Anadrill gamma log.				
AVERAGE INCLINATION: 38° FROM WINDOW TO TD				
MAXIMUM INCLINATION: 42.38° @ 3162.70 mMD				
MAXIMUM DOGLEG SERVERITY: 5.53°/30m @ 780.54				
MAXIMUM TEMPERATURE: 90.6°C @ 2654.30 mMD				

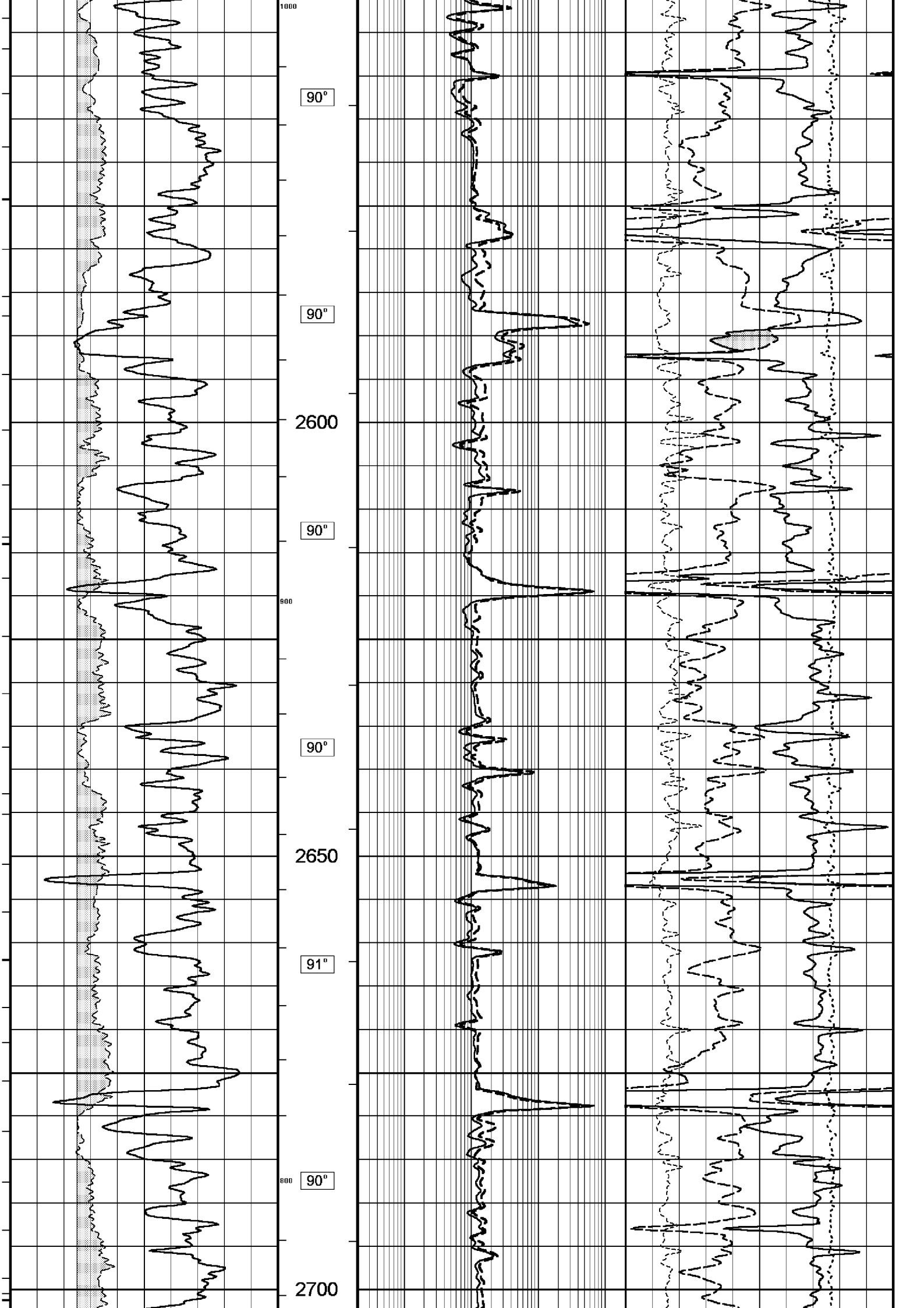
All interpretations are opinions based on inferences from electrical or other measurements and we cannot, and do not, guarantee the accuracy or correctness of any interpretations, and we shall not, except in the case of gross or wilful negligence on our part, be liable or responsible for any loss, costs, 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.

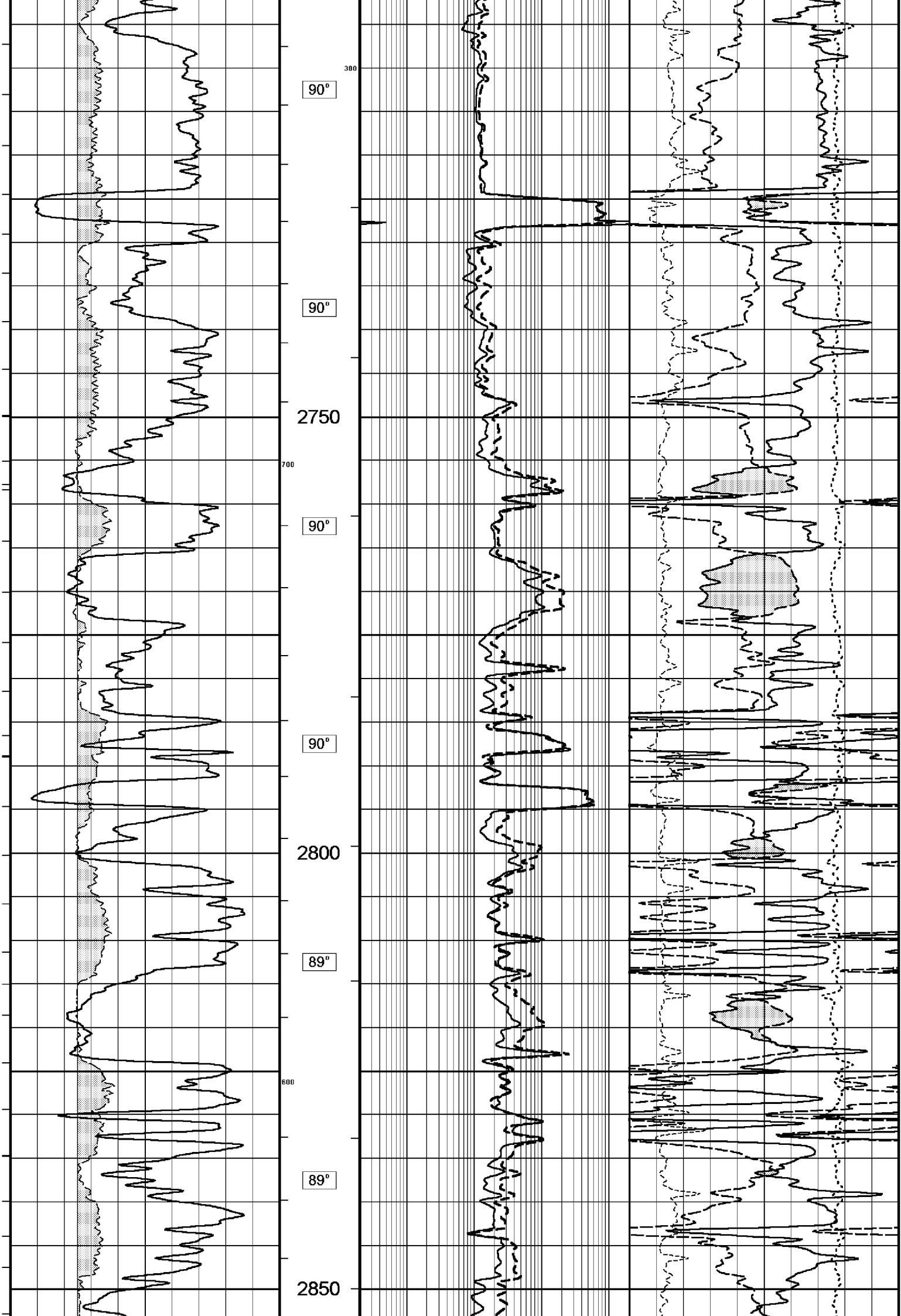


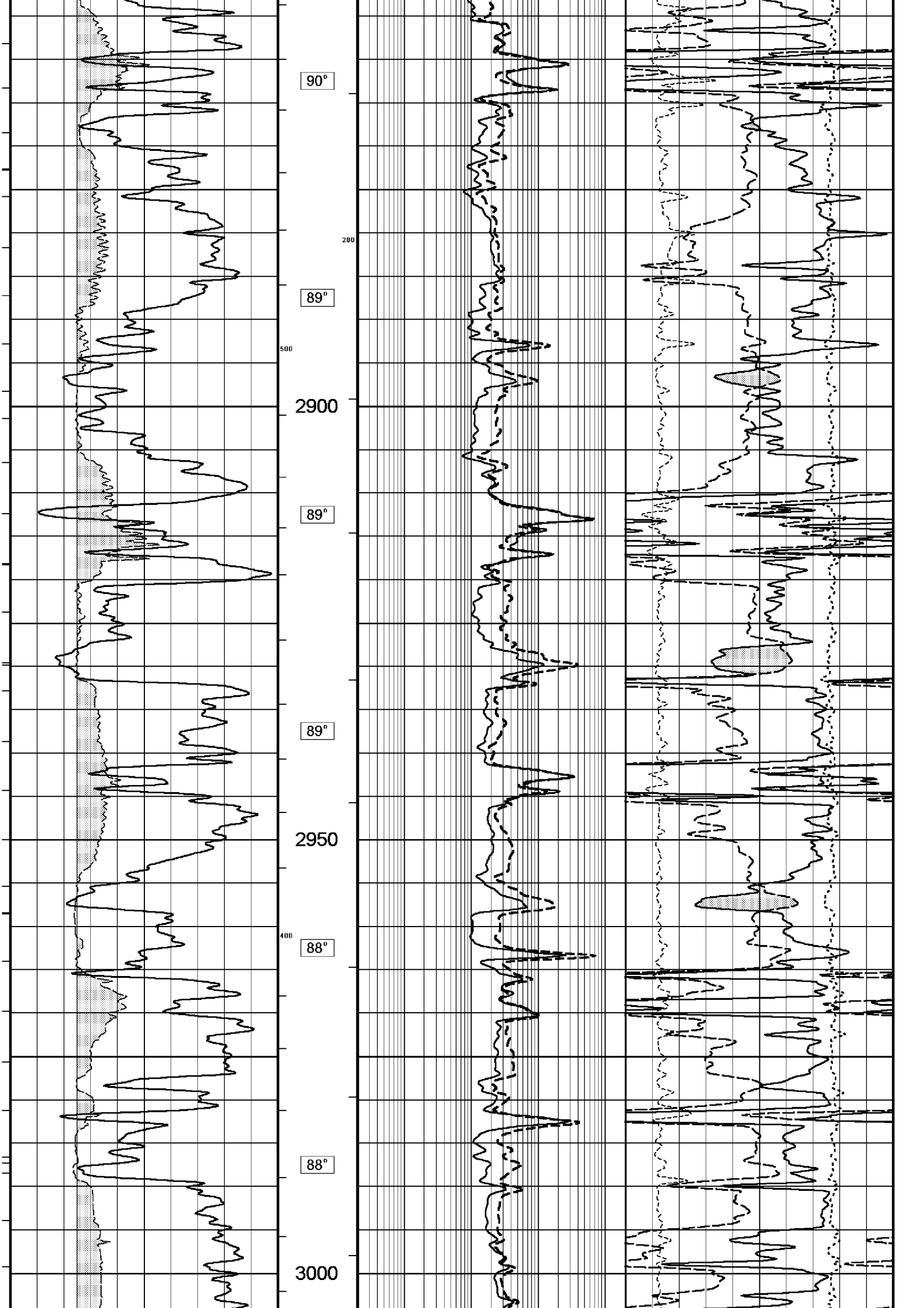




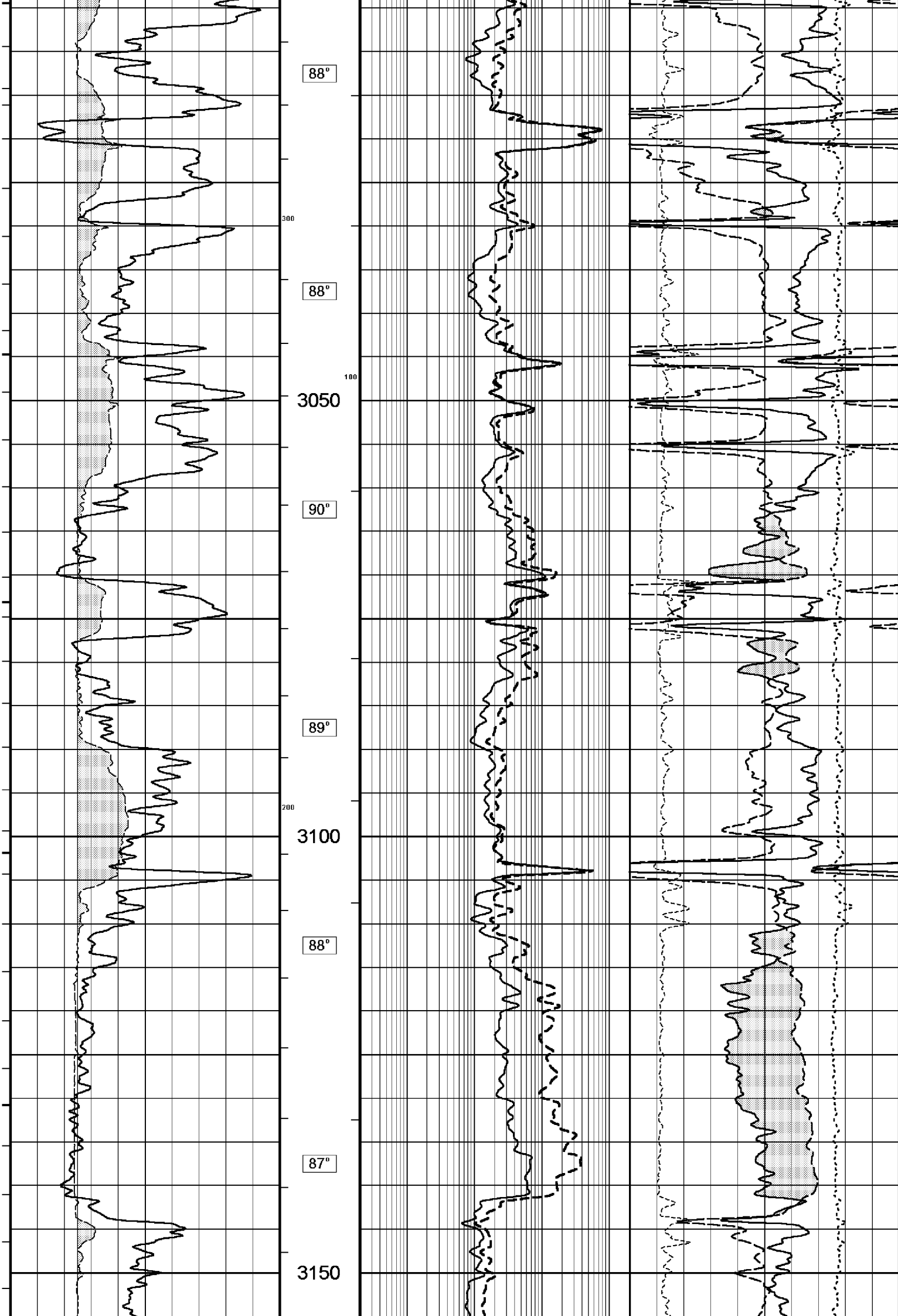


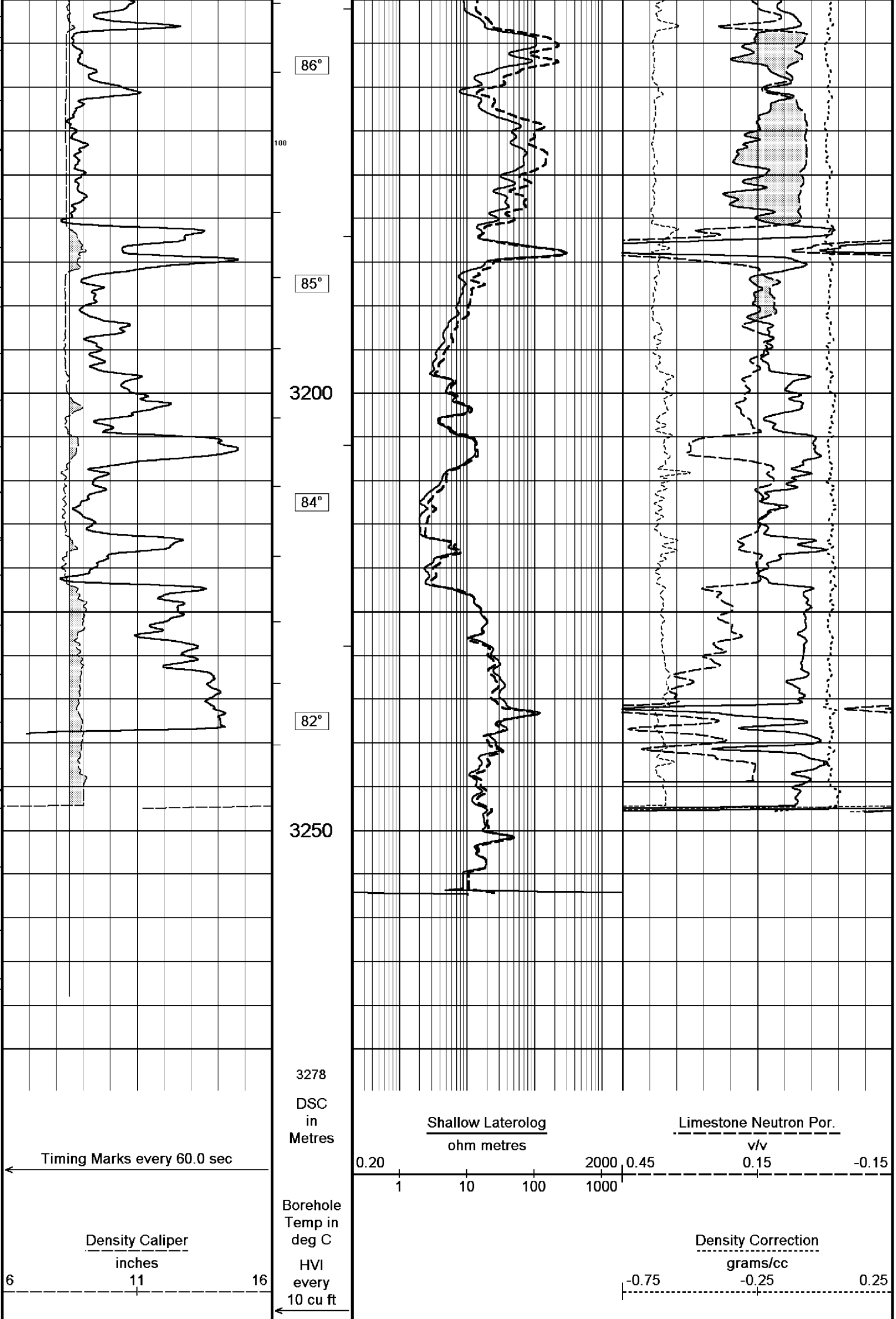


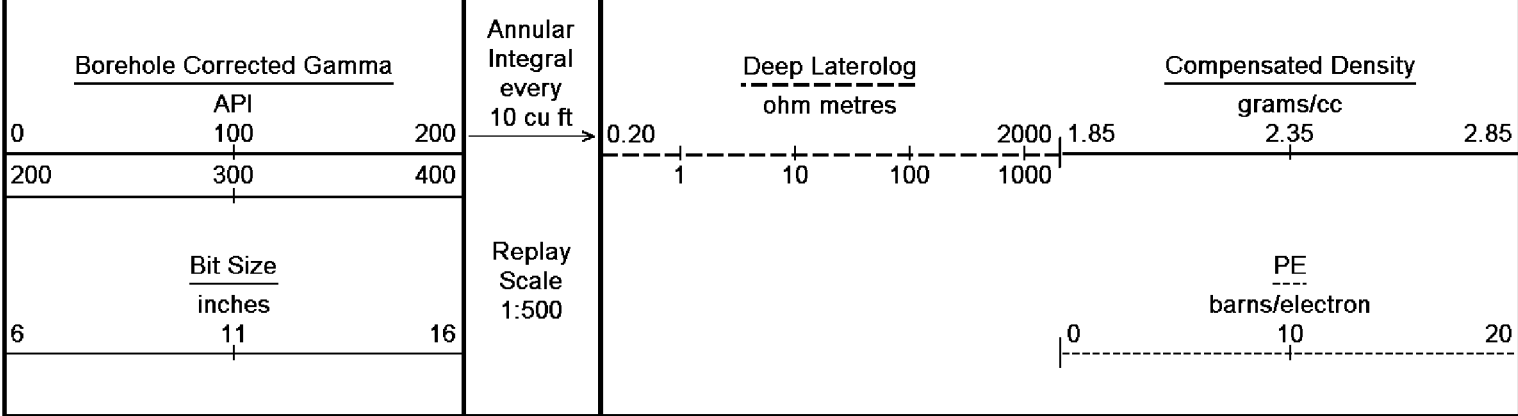












Depth Based Data - Maximum Sampling Increment 10.0cm

Plotted on 24-SEP-2004 12:51

Filename: C:\Marlin\MLA A24a\Final Data Presentations\...MLA A24A MAIN LOG TC.dta

Recorded on 06-MAY-2004 16:05

System Configuration Dates: Logged 09-SEP-2003: Processed 09-SEP-2003: Plotted 25-JUN-2003:

MAIN LOG 1:500

BEFORE SURVEY CALIBRATION

C:\Marlin\MLA A24a\Final Data Presentations\Black & White Prints\MLA A24A MAIN LOG TC.dta

General Constants All 000			
General Parameters			
Mud Resistivity	0.119	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		

Gamma Calibration MCG 098			Field Calibration on 3-MAY-2004 11:25
	Measured	Calibrated (API)	
Background	8	5	
Calibrator (Gross)	1371	914	
Calibrator (Net)	1363	909	

Gamma Constants MCG 098			
Gamma Calibrator Number	60		
Mud Density	1.00	gm/cc	
Caliper Source for Processing	Bit Size		
Tool Position	Eccentred		
Concentration of KCl	0.00	kppm	

High Resolution Temperature Calibration MCG 098			Field Calibration on 3-MAY-2004,11:21
	Measured	Calibrated(Deg C)	
Lower	0.00	0.00	
Upper	100.00	100.00	

High Resolution Temperature Constants MCG 098	
Pre-filter Length	11

Neutron Calibration MDN 085				Base Calibration on 20-APR-2004 10:18	
				Field Check on 3-MAY-2004 10:35	
Base Calibration					
		Measured		Calibrated (cps)	
	Near	Far		Near	Far
	3167	98		3714	110
Ratio	32.172			33.764	
Field Calibrator at Base				Calibrated (cps)	

Field Calibrator at Base	
	Calibrated (cps) 1647      2404
Ratio	0.685

Field Check	
	Calibrated (cps) 1635      2387
Ratio	0.685

0.00

0.00

## Caliper Calibration MPD 083

Base Calibration on 20-APR-2004 12:25

Field Calibration on 3-MAY-2004 10:29

## Base Calibration

Reading No	Measured	Calibrator Size (in)
1	13792	4.01
2	23424	5.99
3	33363	7.98
4	43344	9.94
5	54608	12.01
6	N/A	N/A

## Field Calibration

Measured Caliper (in)	Actual Caliper (in)
7.96	7.98

## Laterolog Calibration MLE 017

Base Calibration on 16-APR-2004 15:30

Field Check on 3-MAY-2004,11:45

## Base Calibration

Channel	Measured		Calibrated (ohm-m)	
	Resistor 1	Resistor 2	Resistor 1	Resistor 2
Shallow	9.7	969.1	13.2	1321.0
Deep	9.7	969.2	7.5	755.0
Groningen	9.7	970.5	8.5	854.0

Channel	Base Check (ohm-m)	Field Check (ohm-m)
Shallow	49.0	49.0
Deep	28.0	28.0
Groningen	253.1	253.2

## 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:\Marlin\MLA A24a\Final Data Presentations\Black &amp; White Prints\MLA A24A MAIN LOG TC.dta

Compact Swivel Head Adaptor

SHA 63 Length: 0.83 m Weight: 26.5 lb

Compact Knuckle Joint

SKJ 49 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 141 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 127 Length: 0.65 m Weight: 15.4 lb

Compact Stiff Bridle Electrode Sub.  
MBE 19 Length: 3.76 m Weight: 94.8 lb

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

Thrid Bridle MBE 20  
MLK 111 Length: 3.76 m Weight: 94.8 lb

Compact Gamma  
MCG 98 Length: 2.65 m Weight: 63.9 lb

32.22 m GGCE - Borehole Corrected Gamma  
31.33 m CGXT - MCG External Temperature

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

Compact Knuckle Joint  
SKJ 48 Length: 0.66 m Weight: 24.3 lb

Compact Swivel Head Adaptor  
SHA 28 Length: 0.83 m Weight: 26.5 lb

Compact Inline Bowspring A  
MIS 95 Length: 1.74 m Weight: 33.1 lb

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

26.17 m NPRL - Limestone Neutron Por.

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

23.48 m AVOL - Annular Volume  
23.48 m HVOL - Hole Volume  
23.48 m CLDC - Density Caliper  
23.27 m DEN - Compensated Density

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

23.27 m DCOR - Density Correction  
23.25 m PDPE - PE

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

Compact Knuckle Joint  
SKJ 44    Length: 0.66 m    Weight: 24.3 lb

Compact Inline Standoff B  
MIS 128    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 135    Length: 0.65 m    Weight: 15.4 lb

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

Compact Inline Standoff B  
MIS 31    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 140    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 73    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: 0.28 m    Weight: 6.6 lb

Total    Length: 53.18 m    Weight: 1294.1 lb



13.35 m    DSL - Shallow Laterolog  
13.35 m    DDL - Deep Laterolog

Tool Zero    (0.32m from bottom)

All measurements relative to tool zero.

COMPANY	ESSO AUSTRALIA PTY. LTD.
WELL	MARLIN A24A
FIELD	TURRUM
PROVINCE/COUNTY	BASS STRAIT
COUNTRY/STATE	AUSTRALIA

Elevation Kelly Bushing		metres	First Reading	3270.12	metres
Elevation Drill Floor	27.91	metres	Depth Driller	3275.00	metres
Elevation Ground Level	-59.00	metres	Depth Logger	3270.50	metres

<div><div>Reeves</div><div>Compact</div></div>	DUAL LATEROLOG - GR DENSITY - NEUTRON 1:500 MD
--	--