

Reeves

Compact

DUAL LATEROLOG - GR
DENSITY - NEUTRON

1:200 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		
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		

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

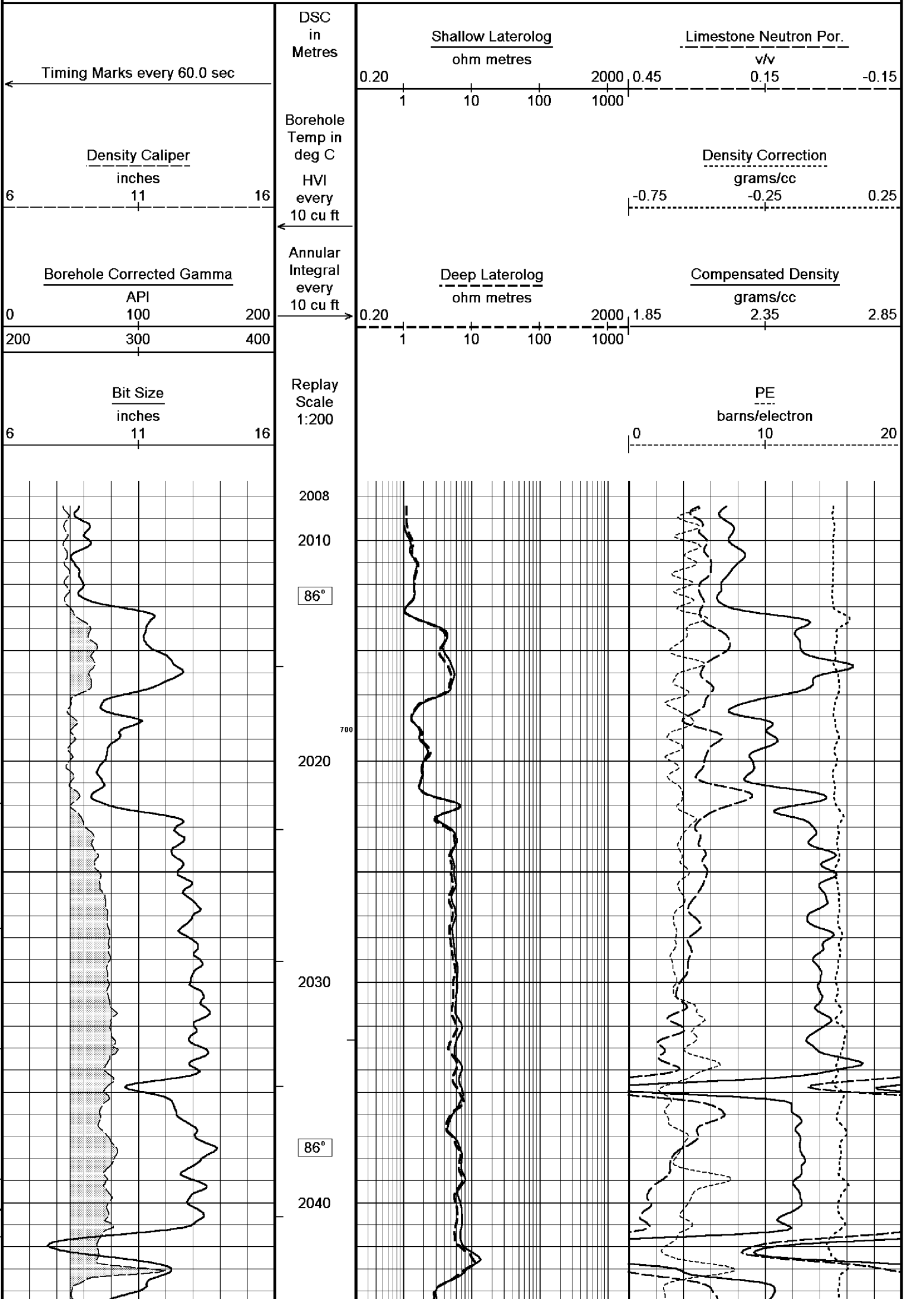
MAXIMUM TEMPERATURE: 90.6°C @ 2654.30 mMD

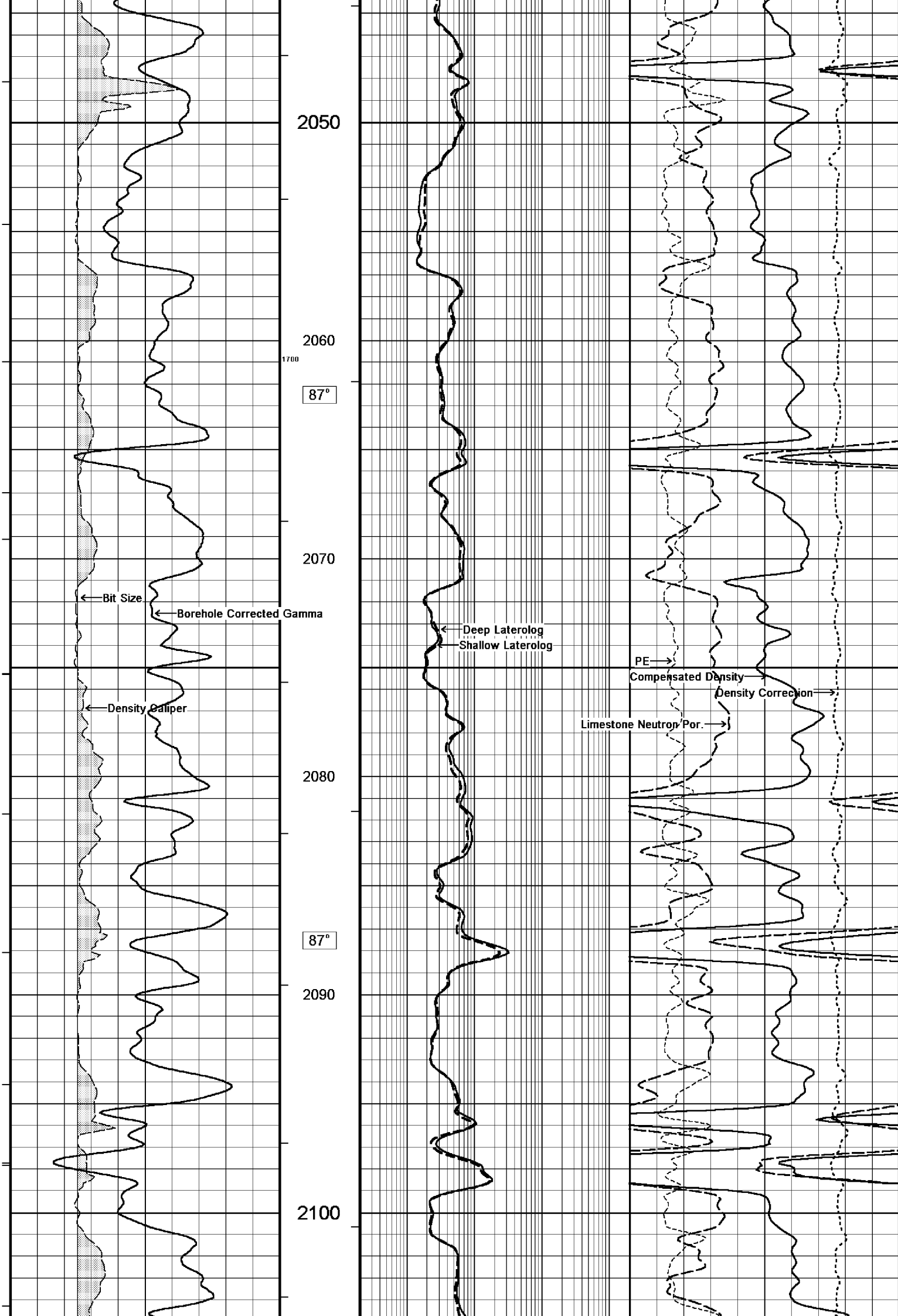
All interpretations are opinions based on inferences from electrical or other measurements and we cannot, and do not, guarantee the accuracy or correctness of any interpretations, and we shall not, except in the case of gross or wilful negligence on our part, be liable or responsible for any loss, costs,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

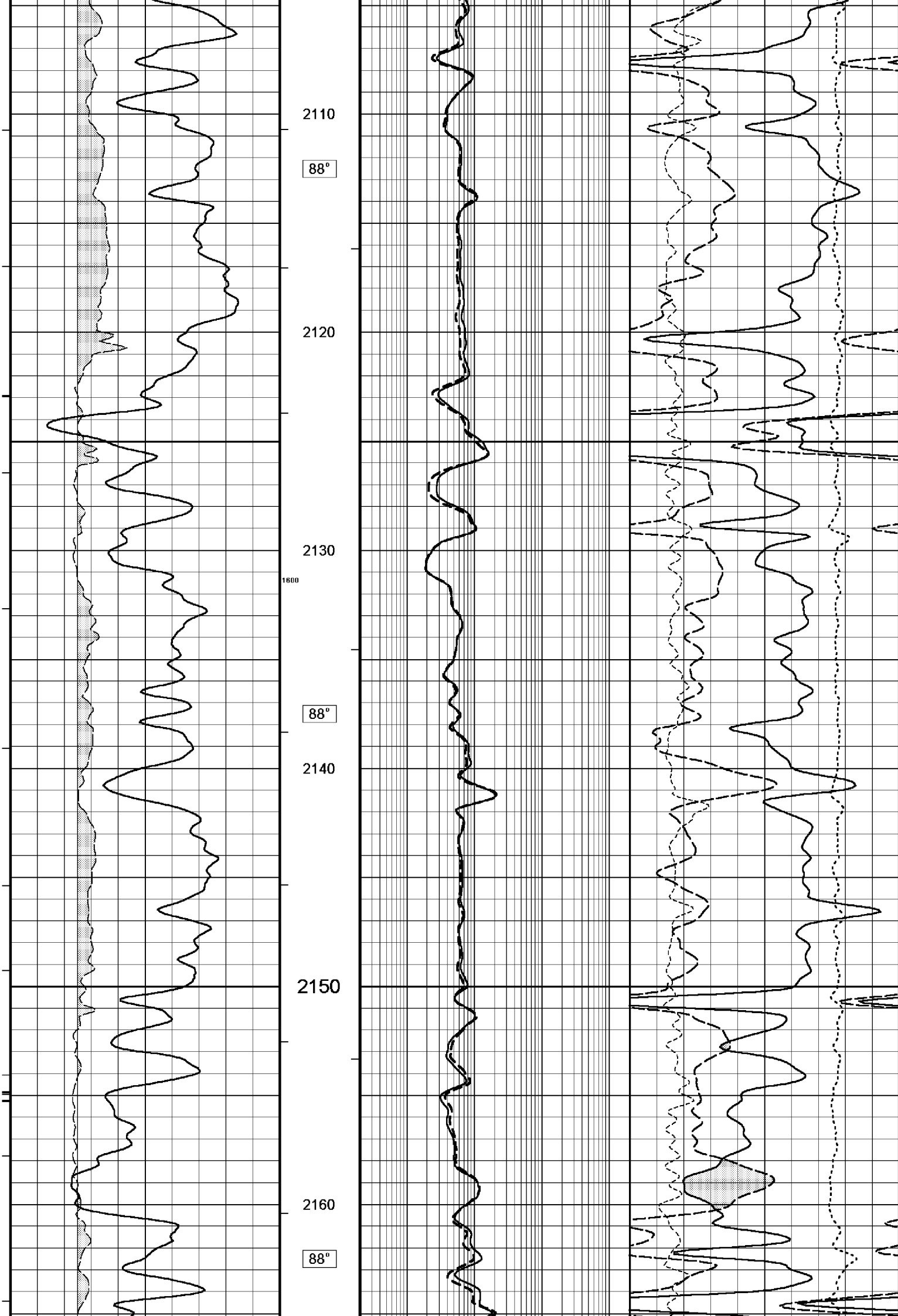
MAIN LOG 1:200

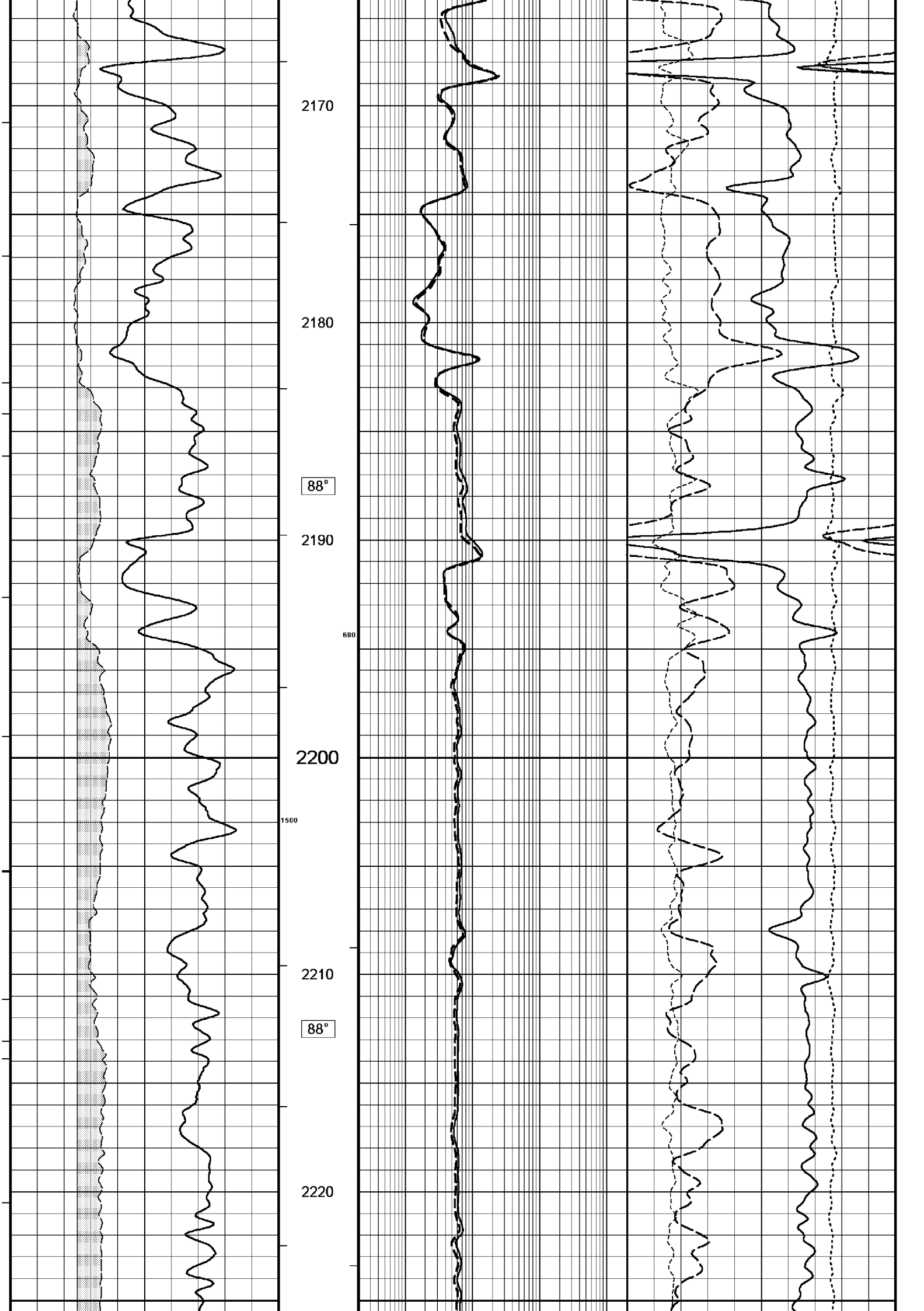
Depth Based Data - Maximum Sampling Increment 10.0cm

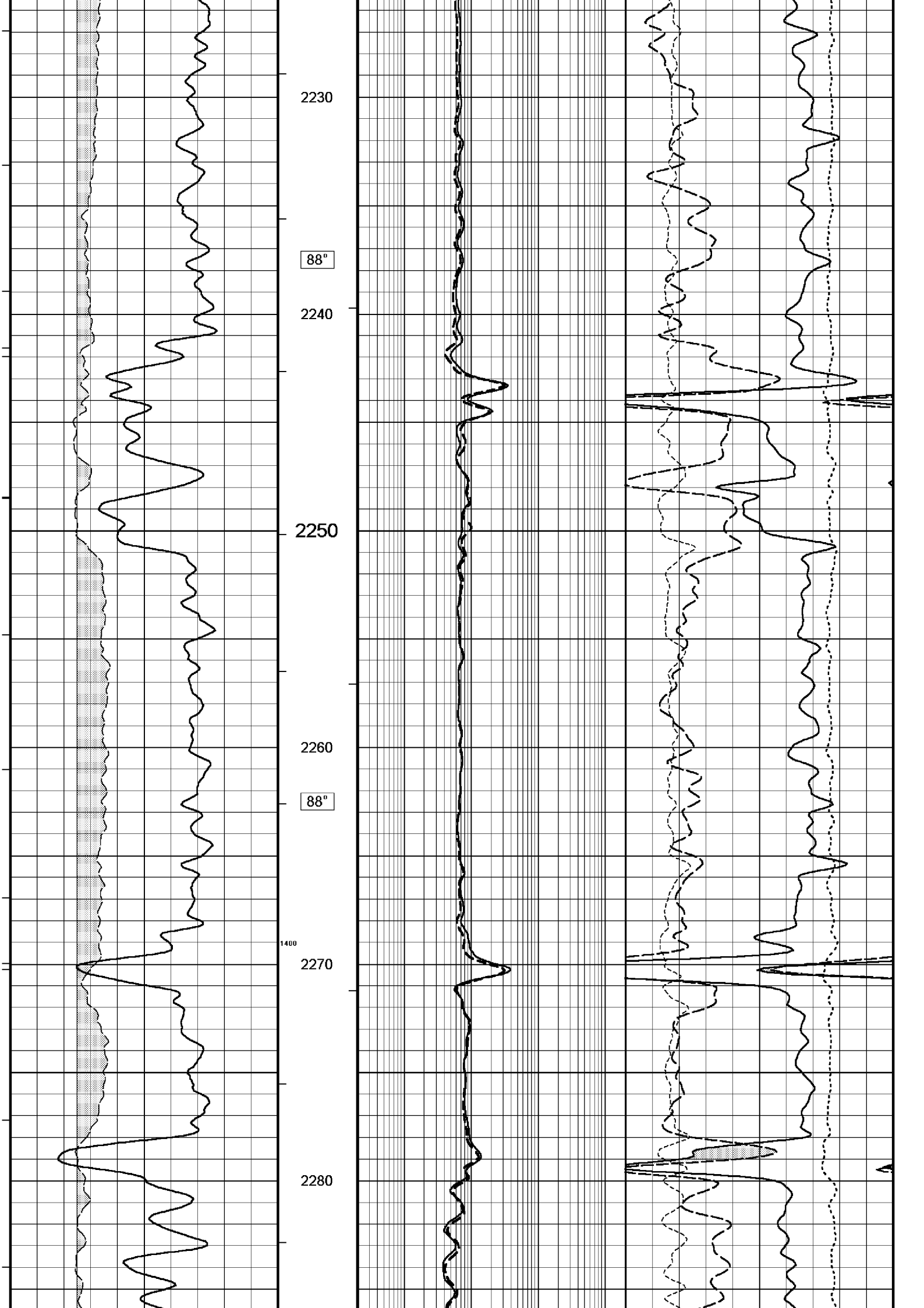
Plotted on 24-SEP-2004 12:51

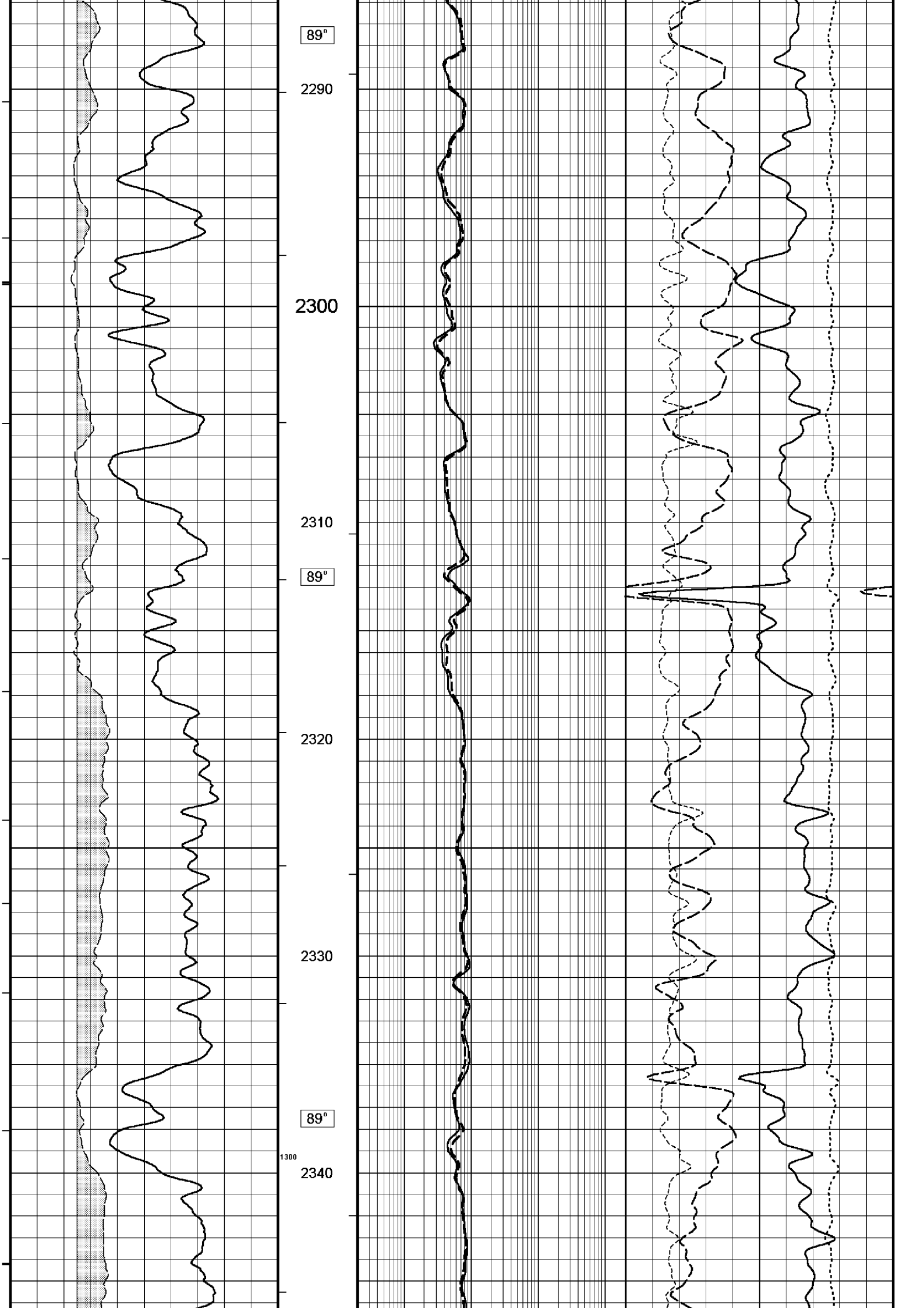


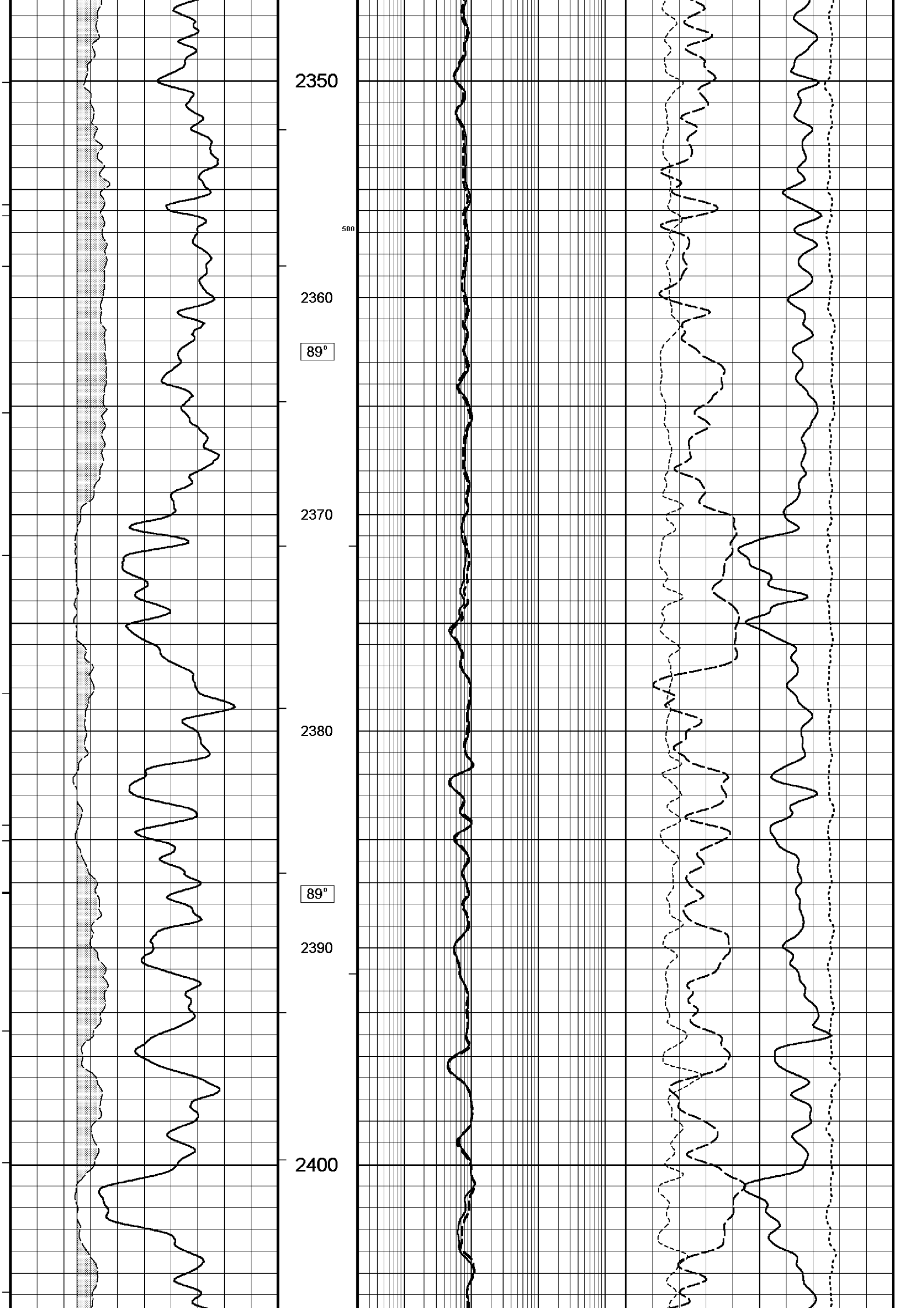


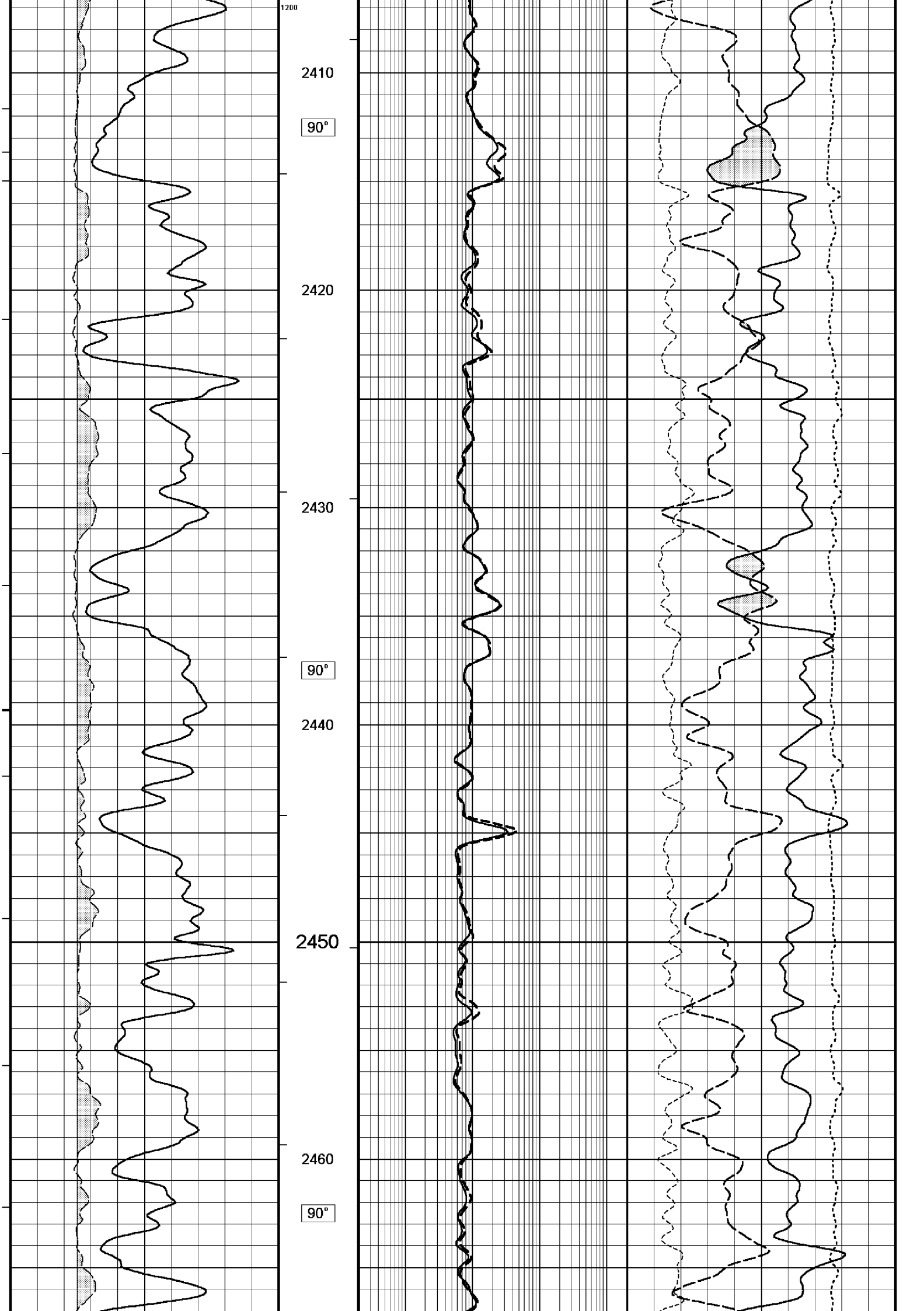


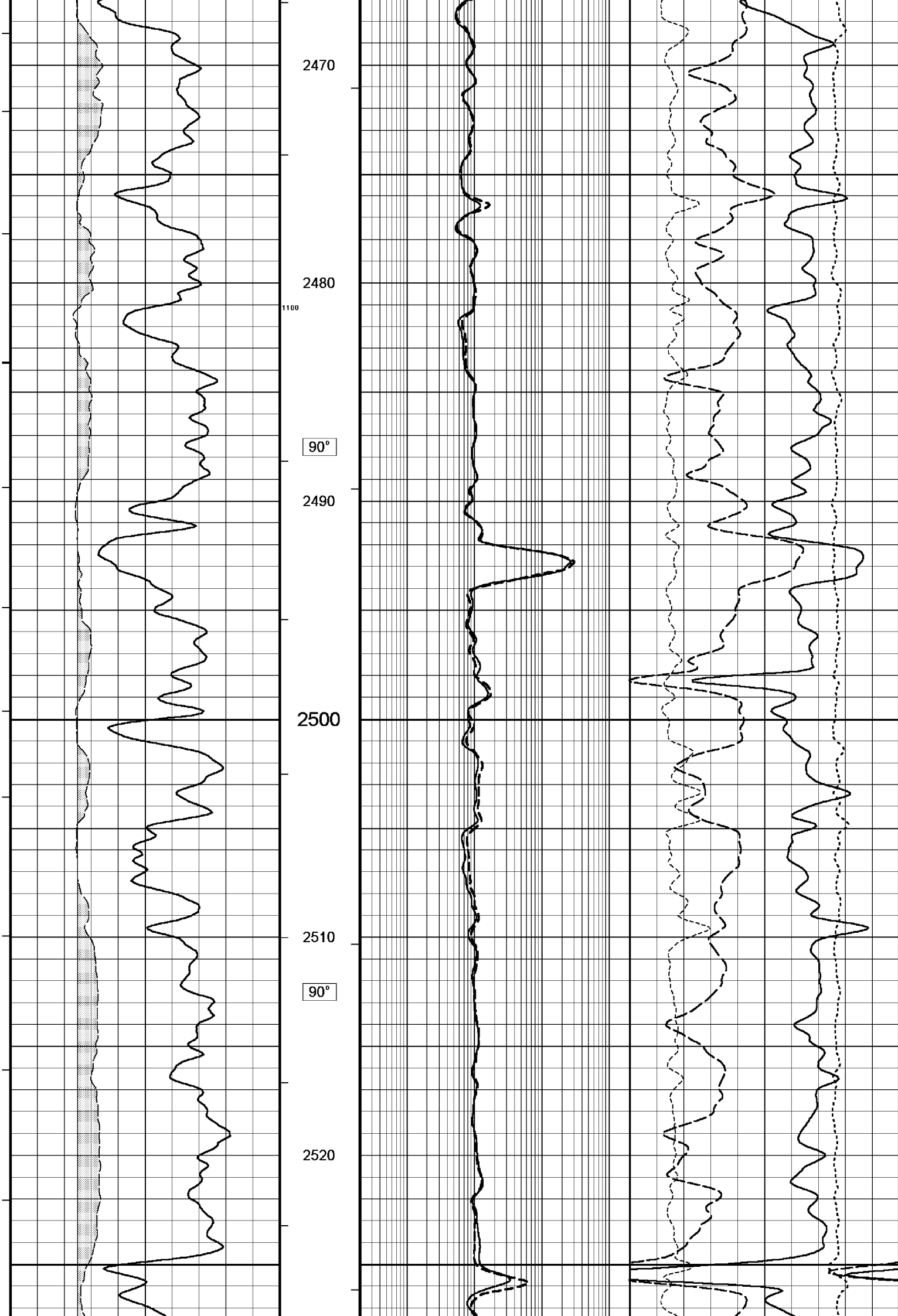


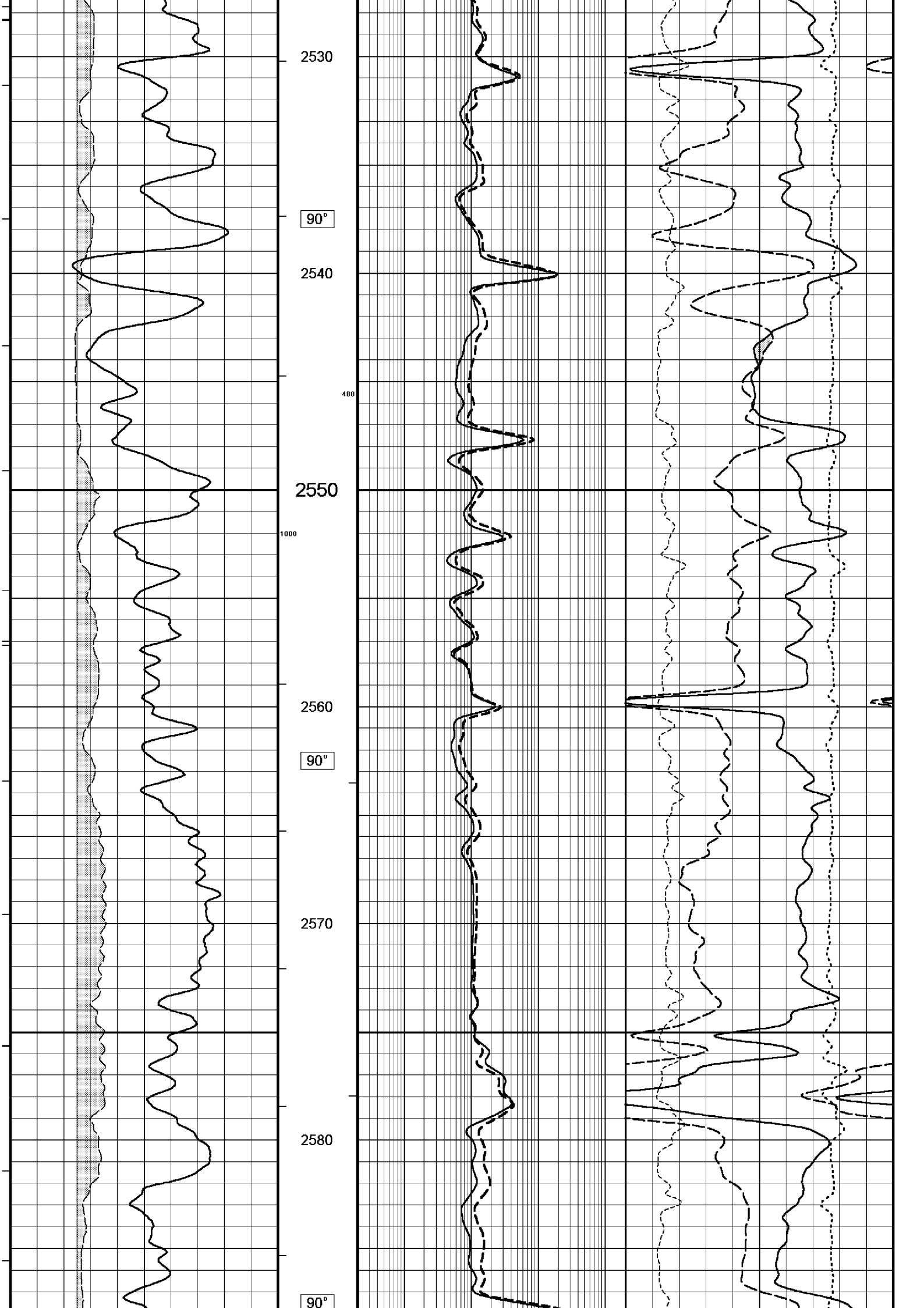


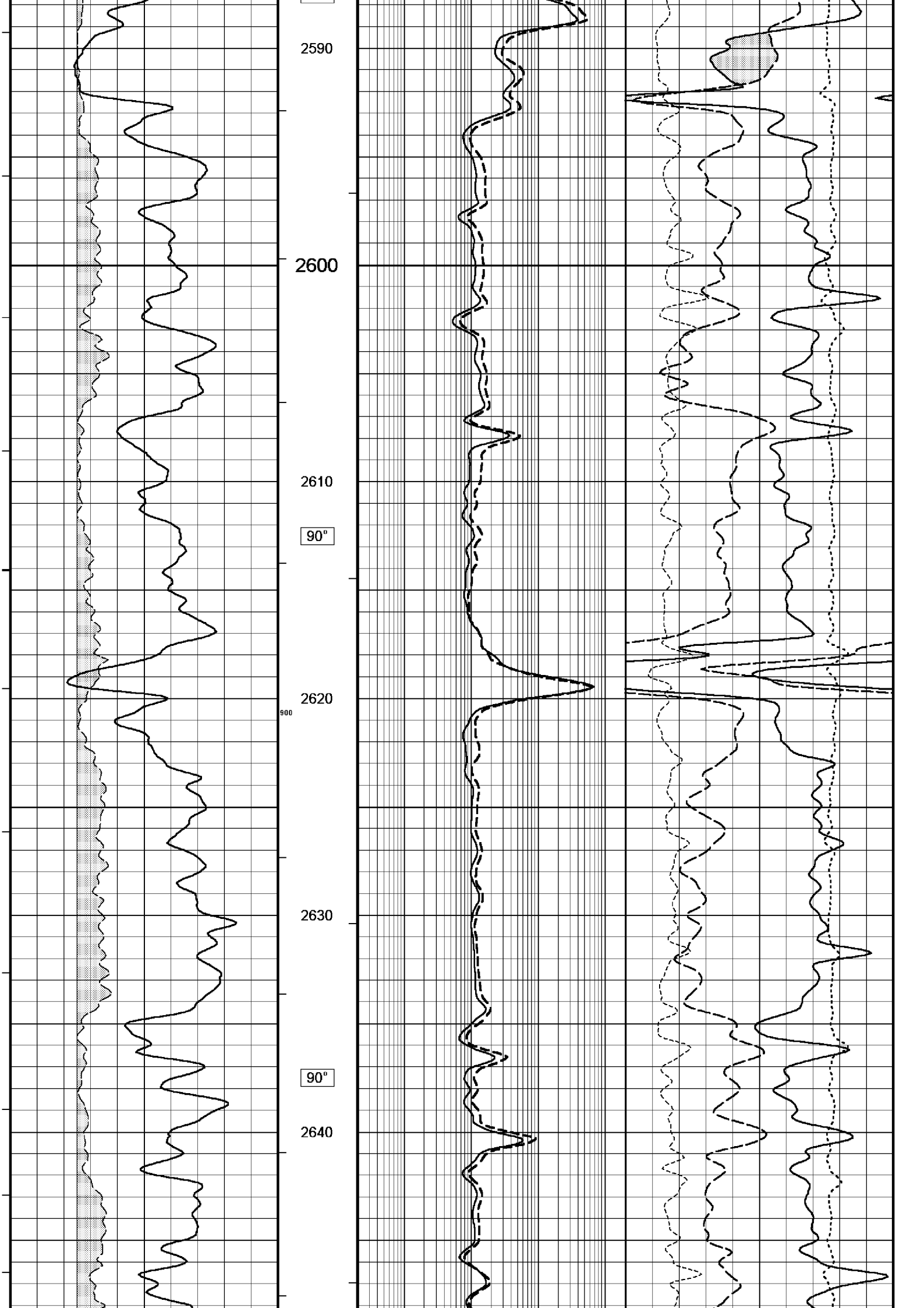


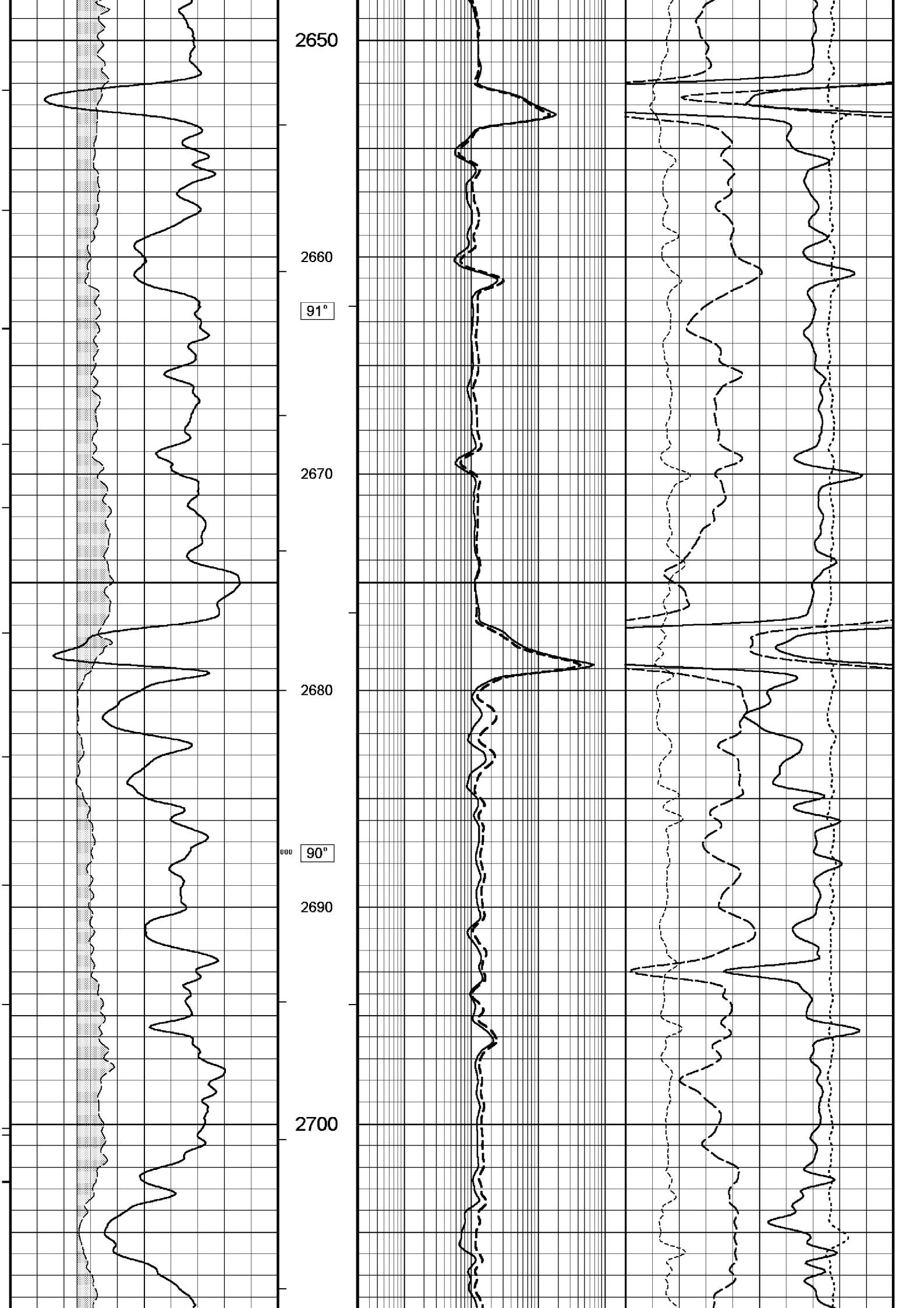


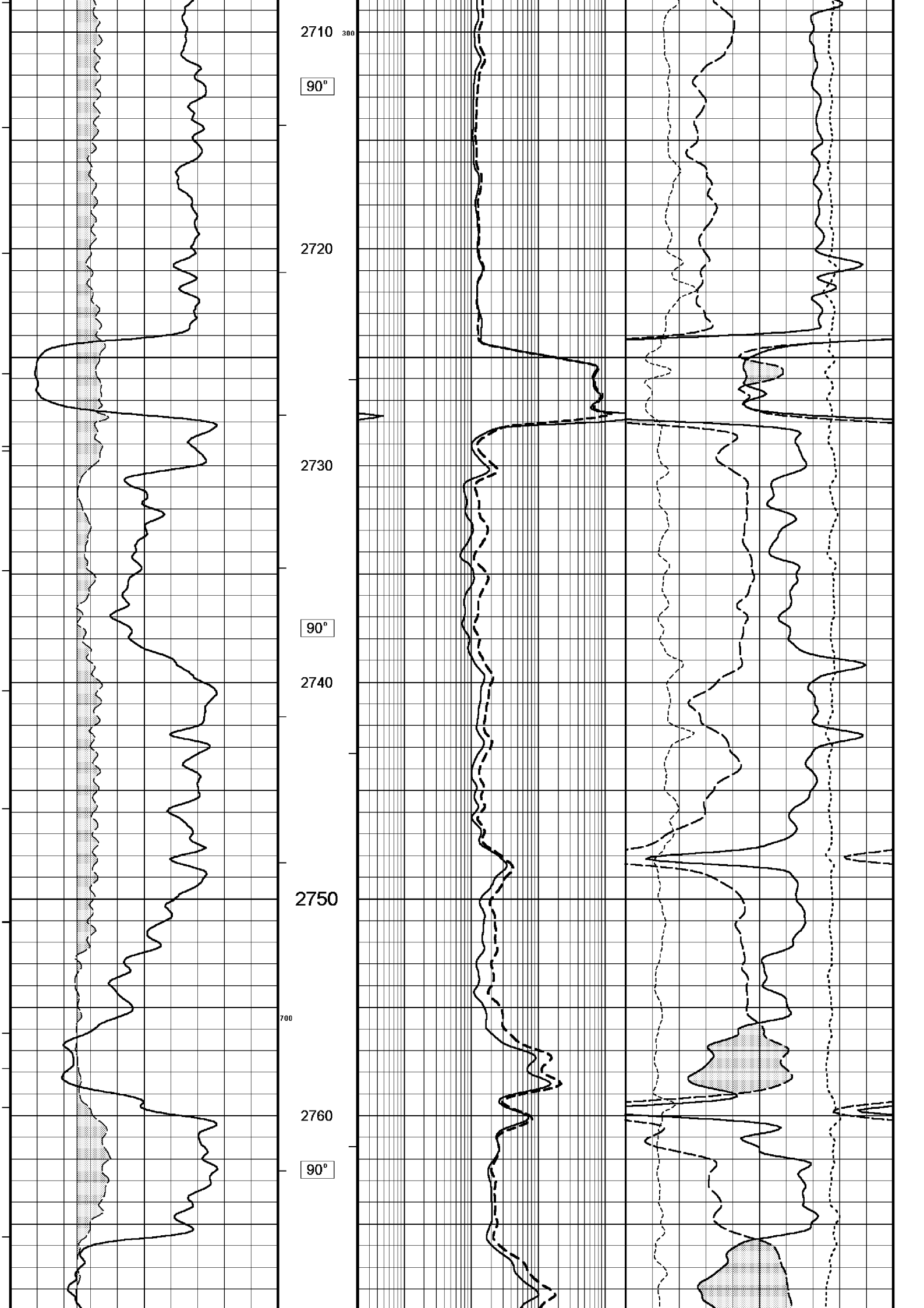


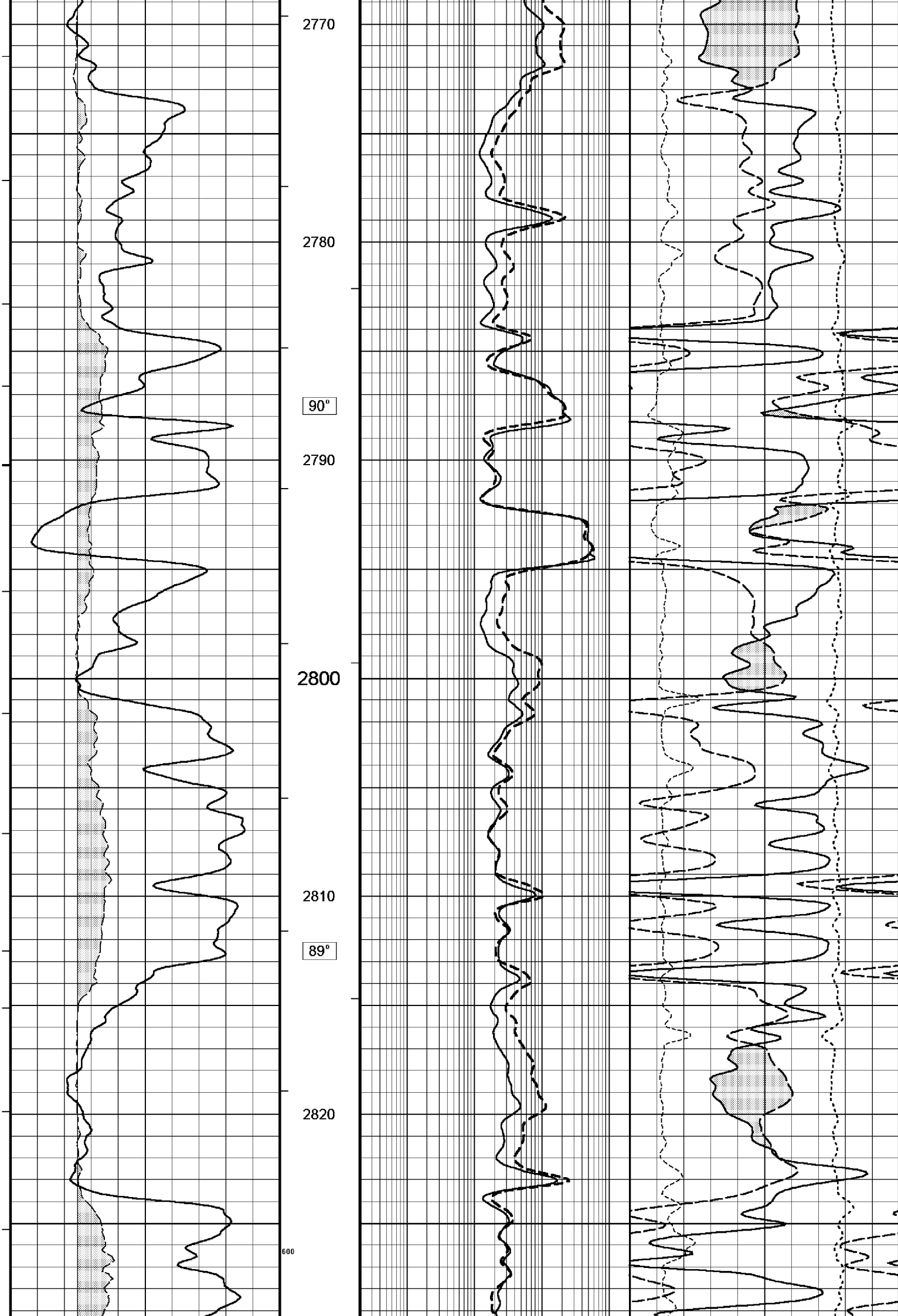


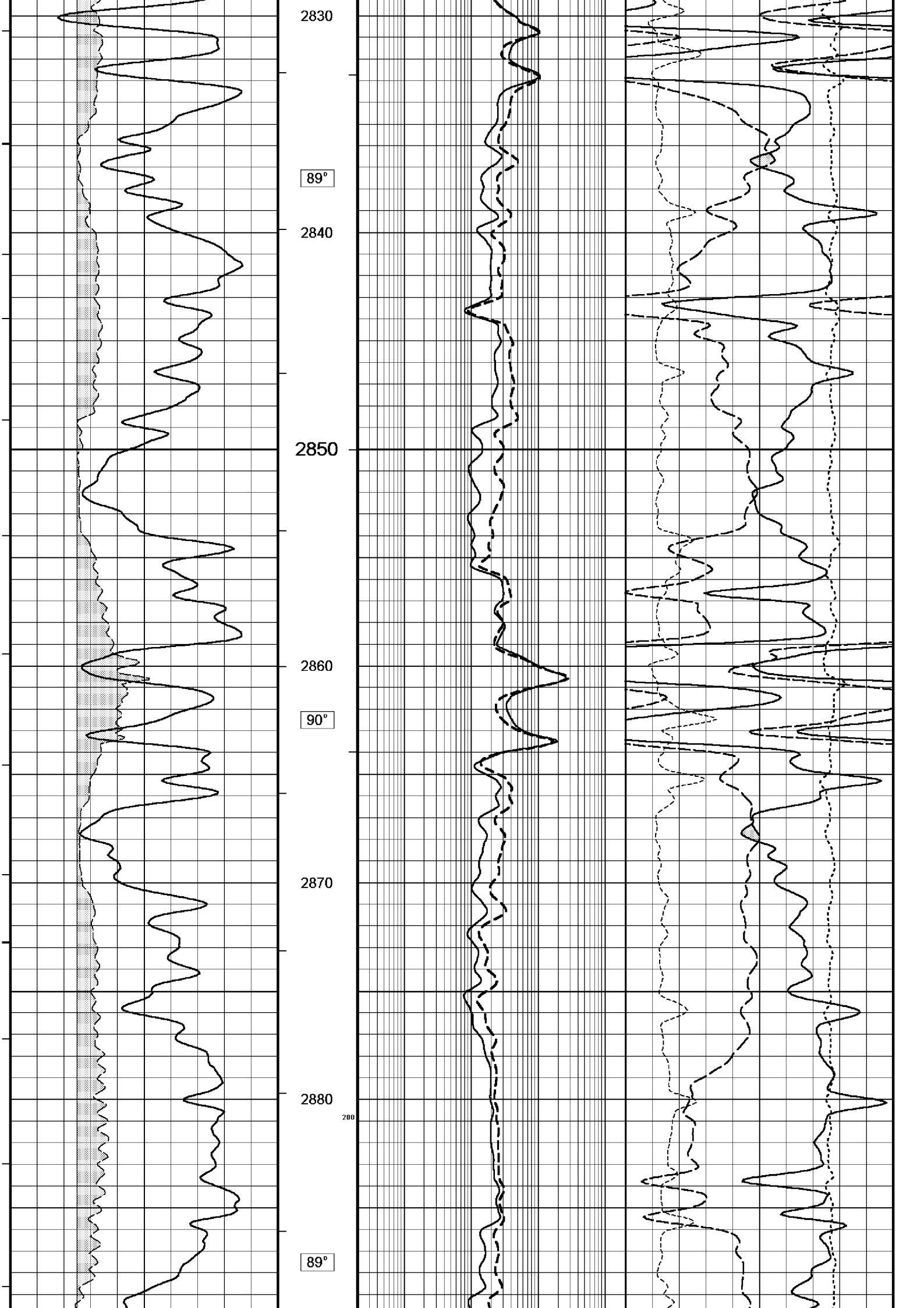


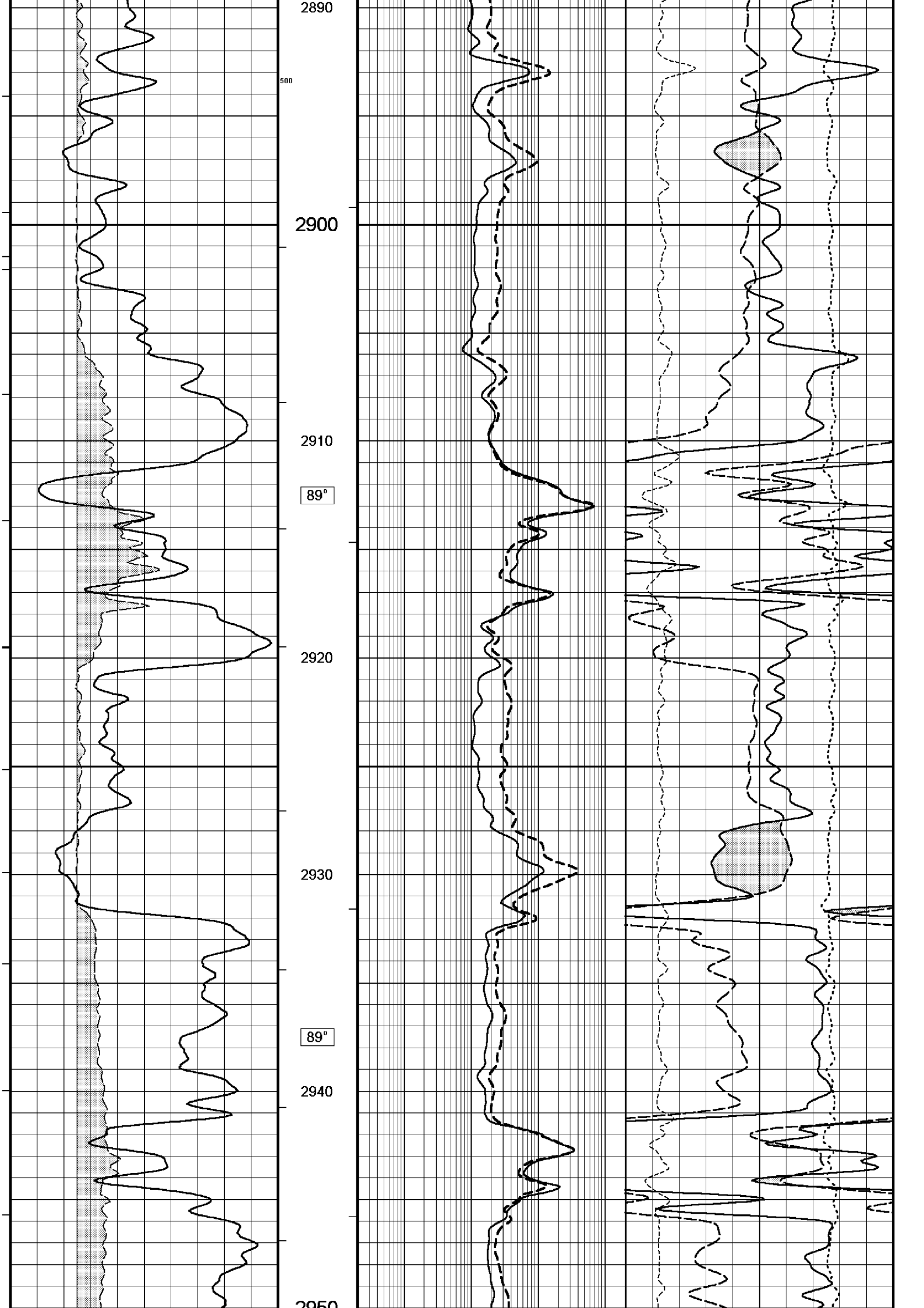


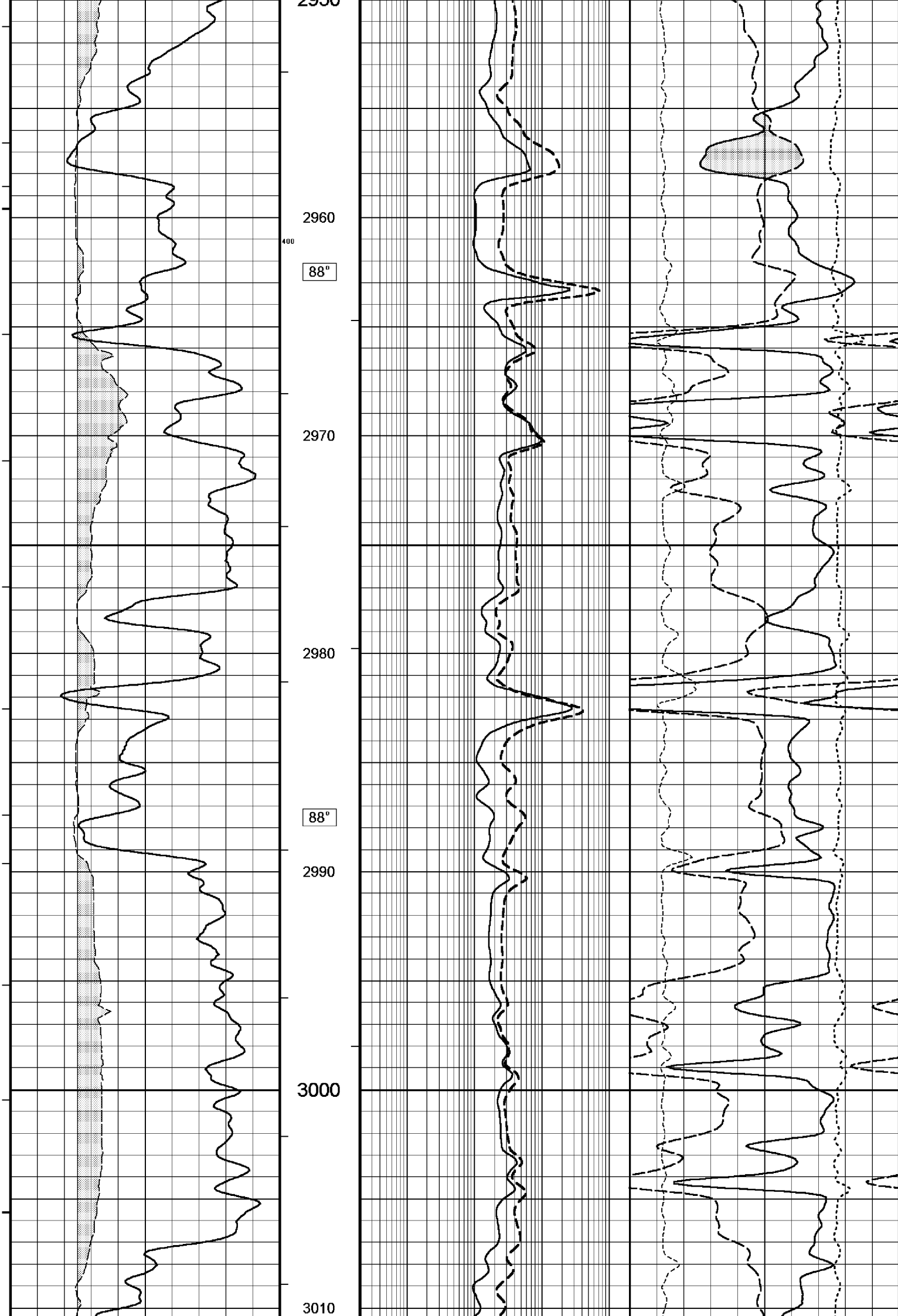


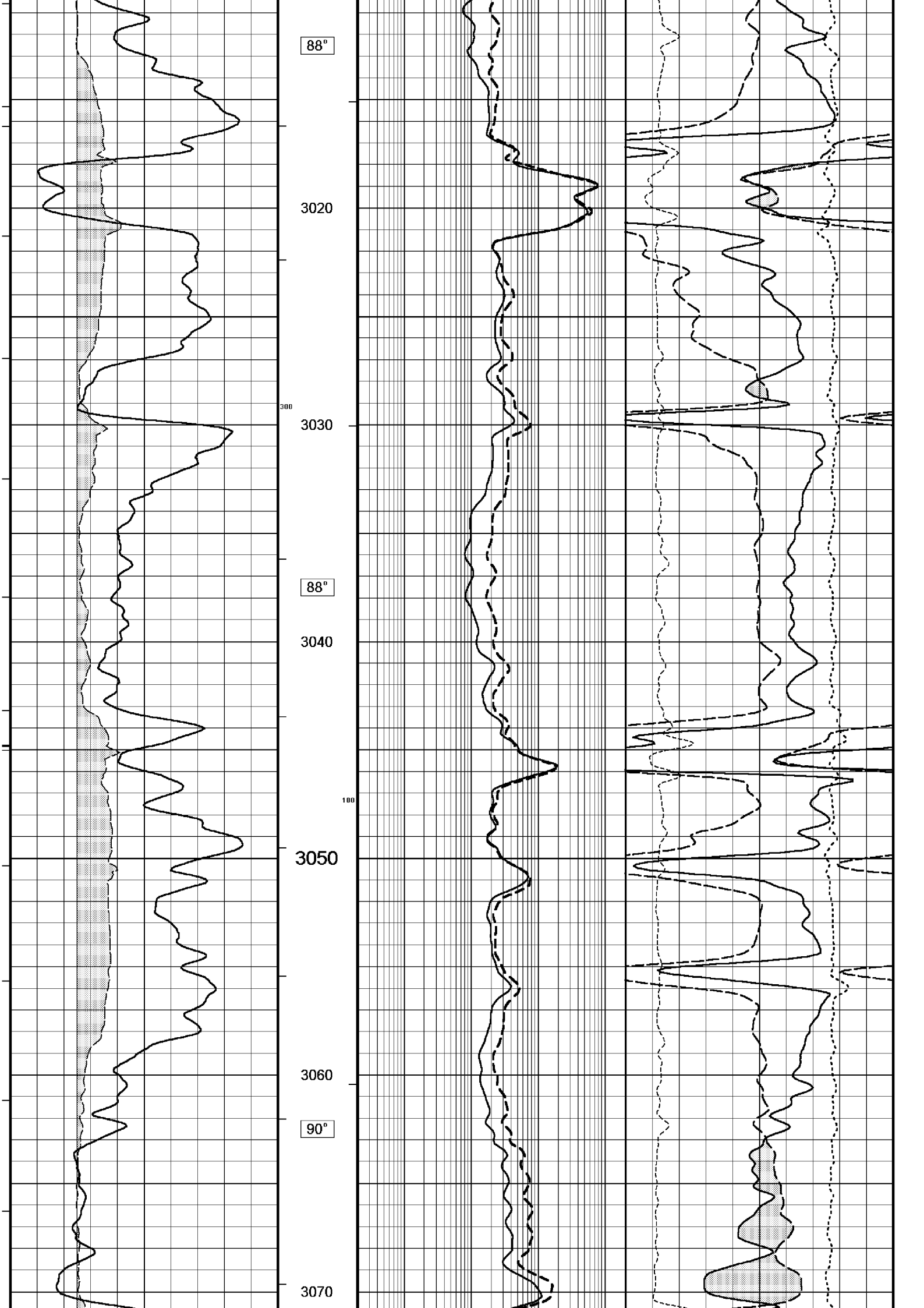


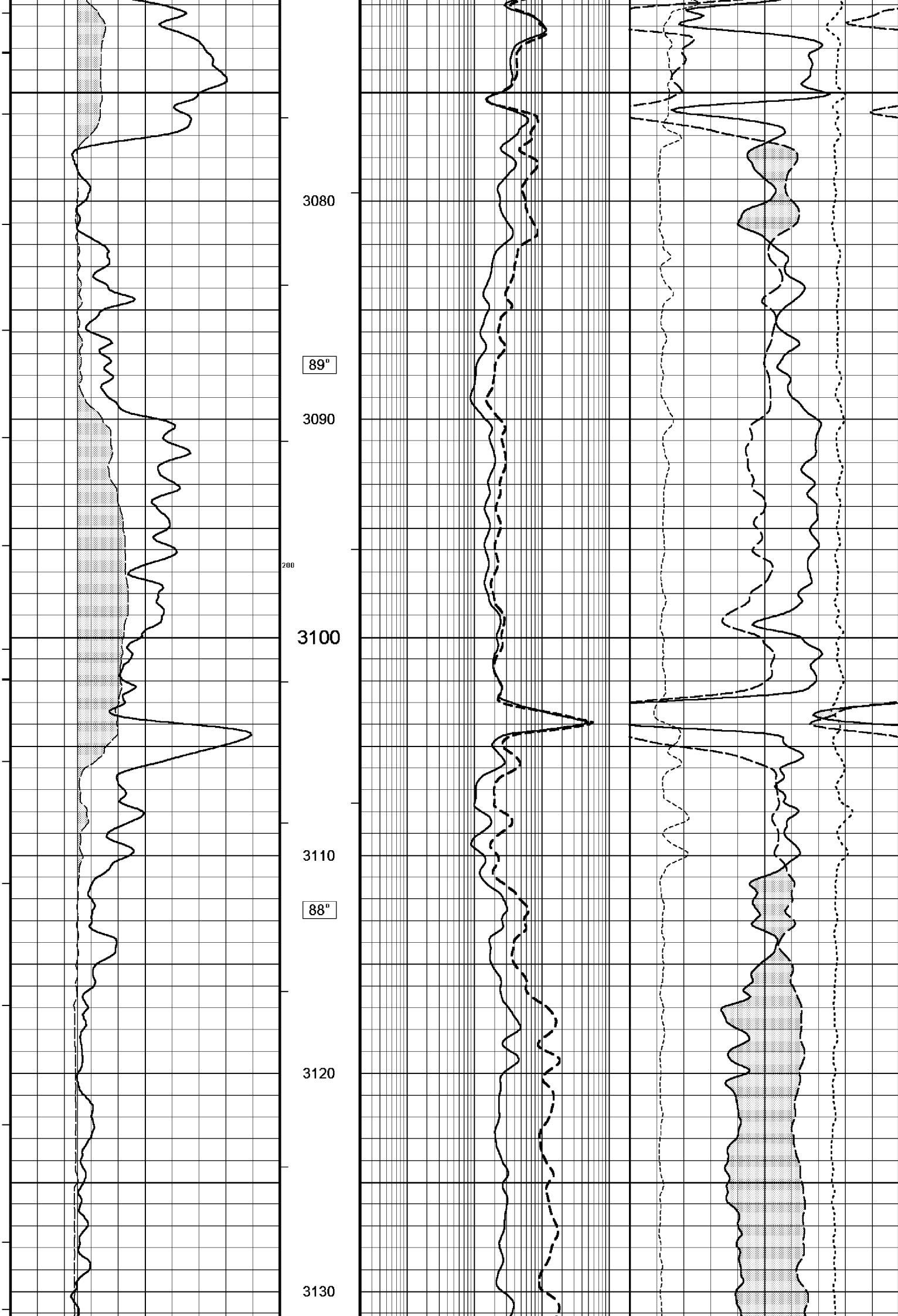


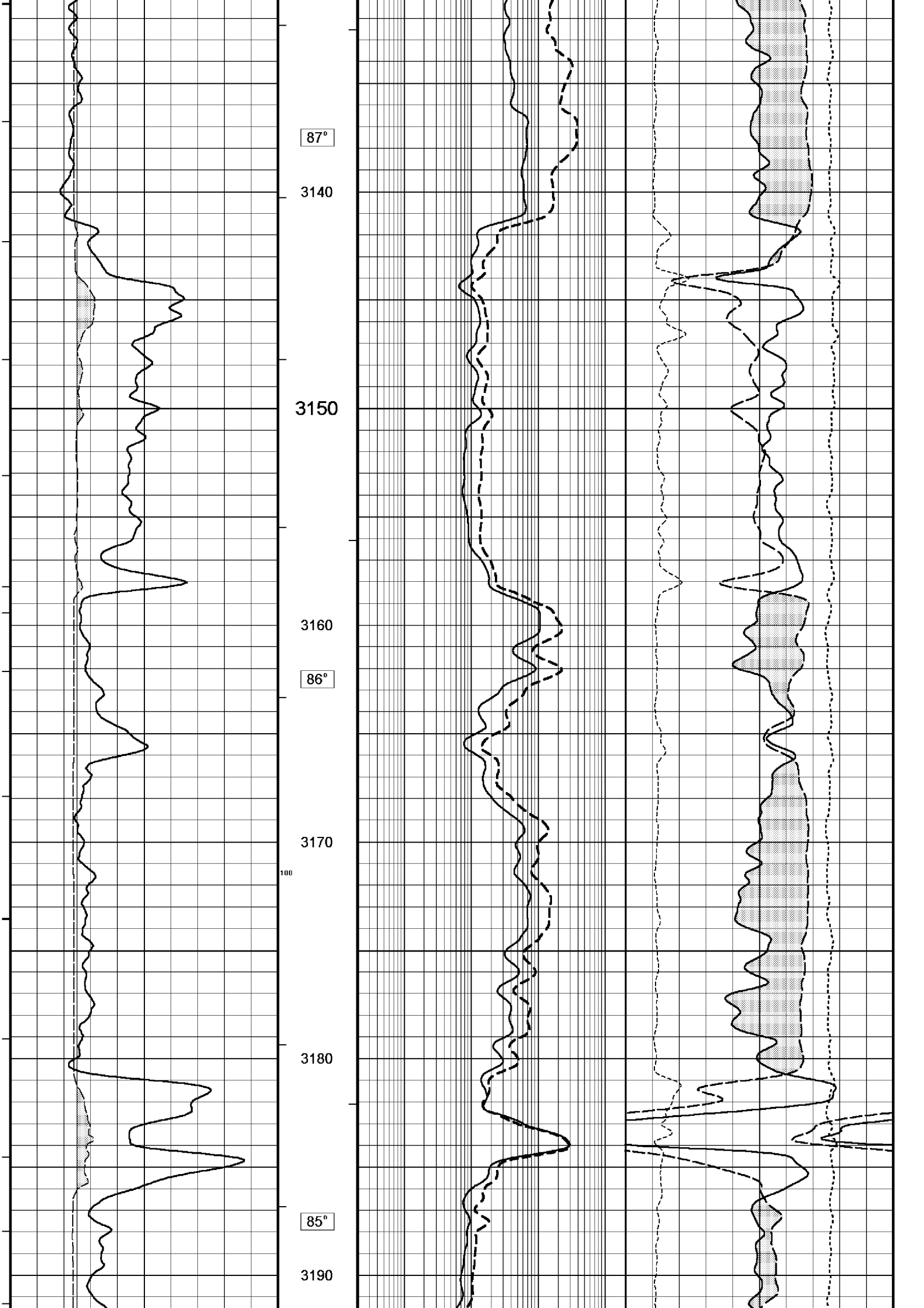


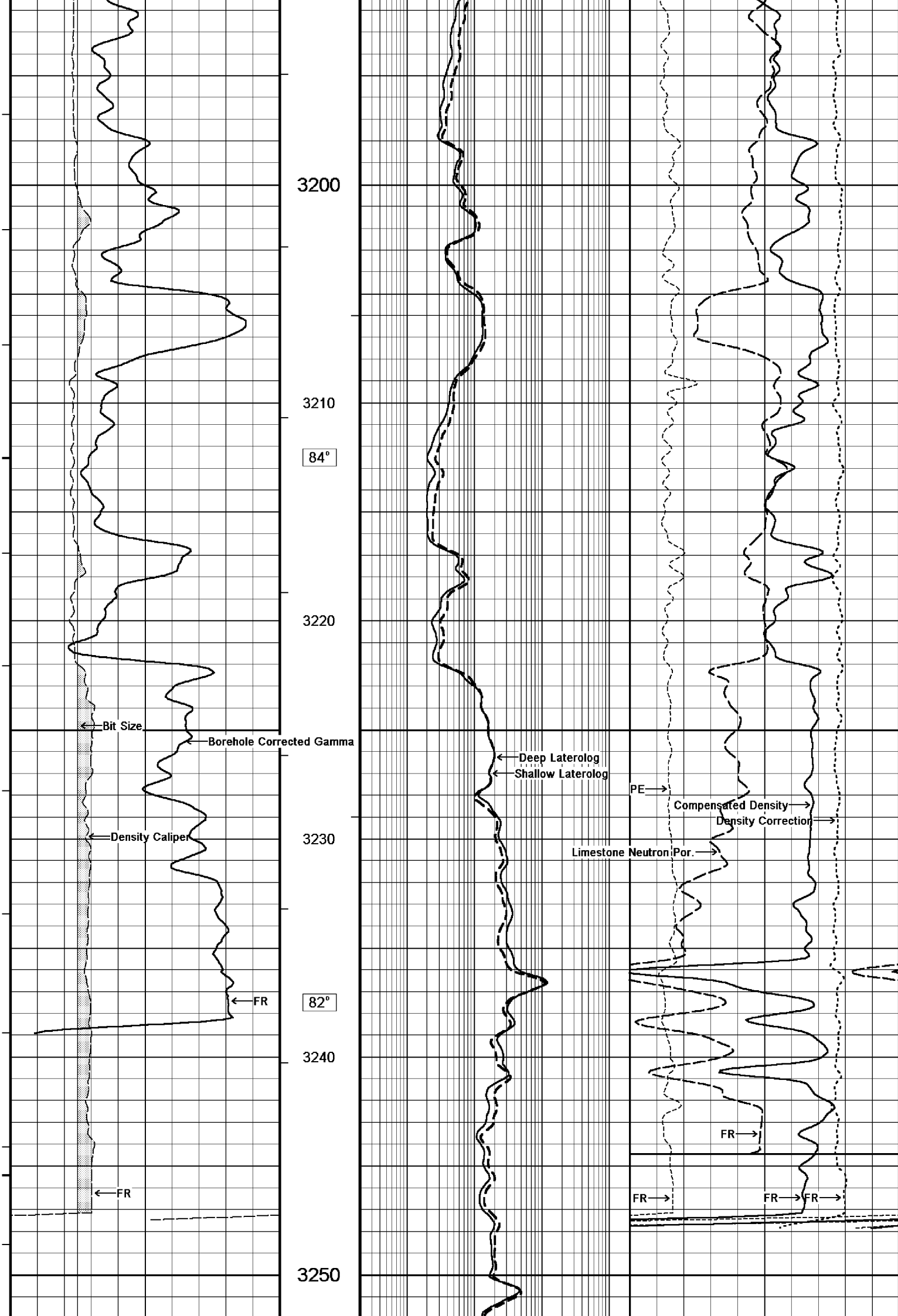


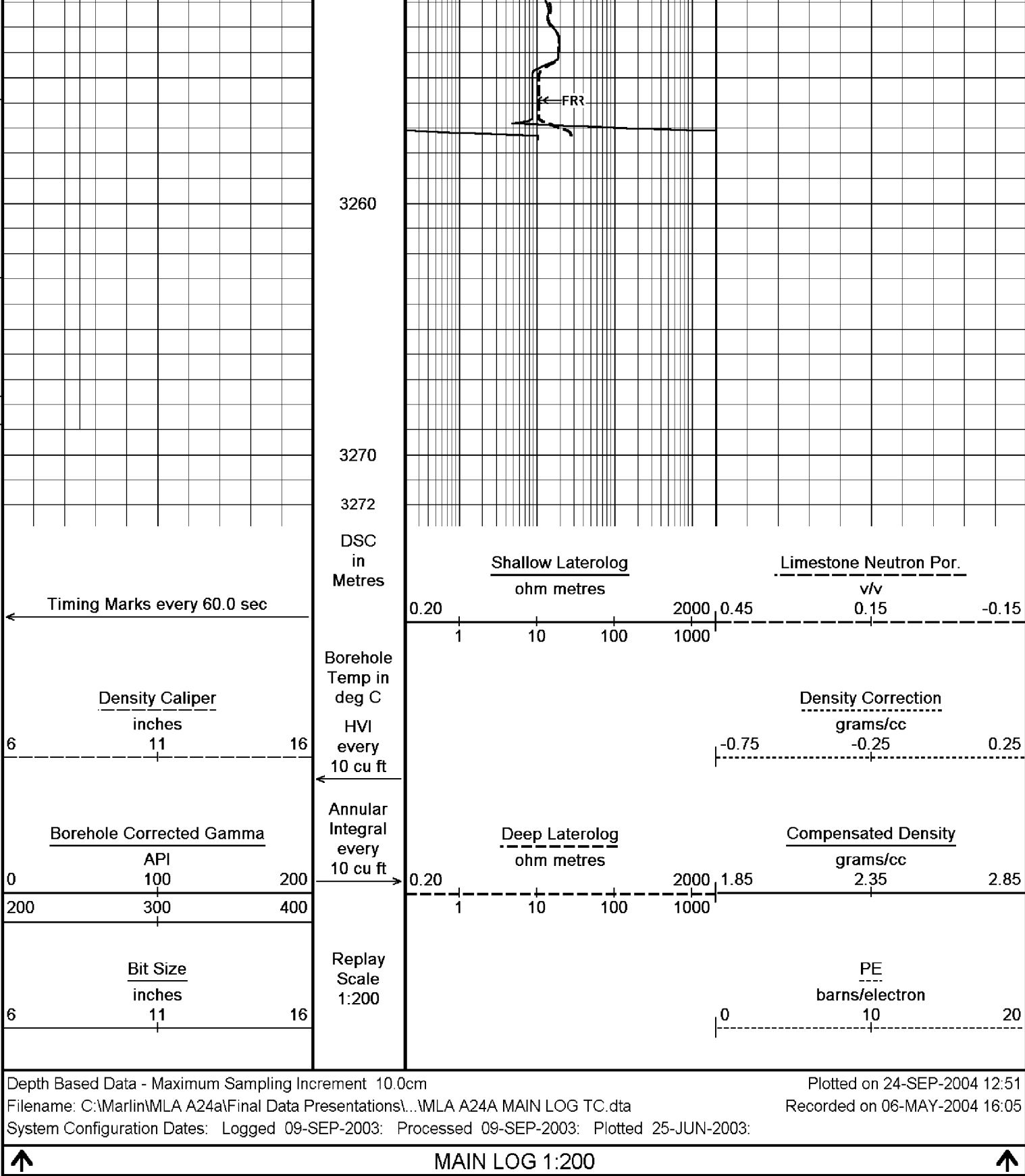












BEFORE SURVEY CALIBRATION
C:\Marlin\MLA A24a\Final Data Presentations\Black & White Prints\MLA A24A MAIN LOG TC.dta

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			
	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			
	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)	
		1647 2404	
Ratio		0.685	
Field Check		Calibrated (cps)	
		1635 2387	
Ratio		0.685	
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	1.19	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	42.00	kppm	
Formation Fluid Salinity Source	None		
Formation Fluid Salinity	N/A	kppm	
Barite Mud Correction	Not Applied		
Photo Density Calibration MPD 083		Base Calibration on 20-APR-2004 12:19 Field Check on 3-MAY-2004 10:28	
Density Calibration			
Base Calibration			
	Measured	Calibrated (sdu)	
	Near Far	Near Far	
Reference 1	54734 19093	53111 19310	
Reference 2	25855 2558	24951 2530	
Field Check at Base			
	991.1 1147.4		

Field Check		992.2	1143.0	
PE Calibration				
Base Calibration		Measured		Calibrated
	WS	WH	Ratio	Ratio
Background	186	857		
Reference 1	17122	54541	0.315	0.320
Reference 2	6855	25709	0.268	0.273
Field Check at Base				
	186.1	857.3		
Field Check				
	184.8	857.7		

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	1.19 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

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					
		Measured		Calibrated (ohm-m)	
Channel	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

DOWNHOLE EQUIPMENT

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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

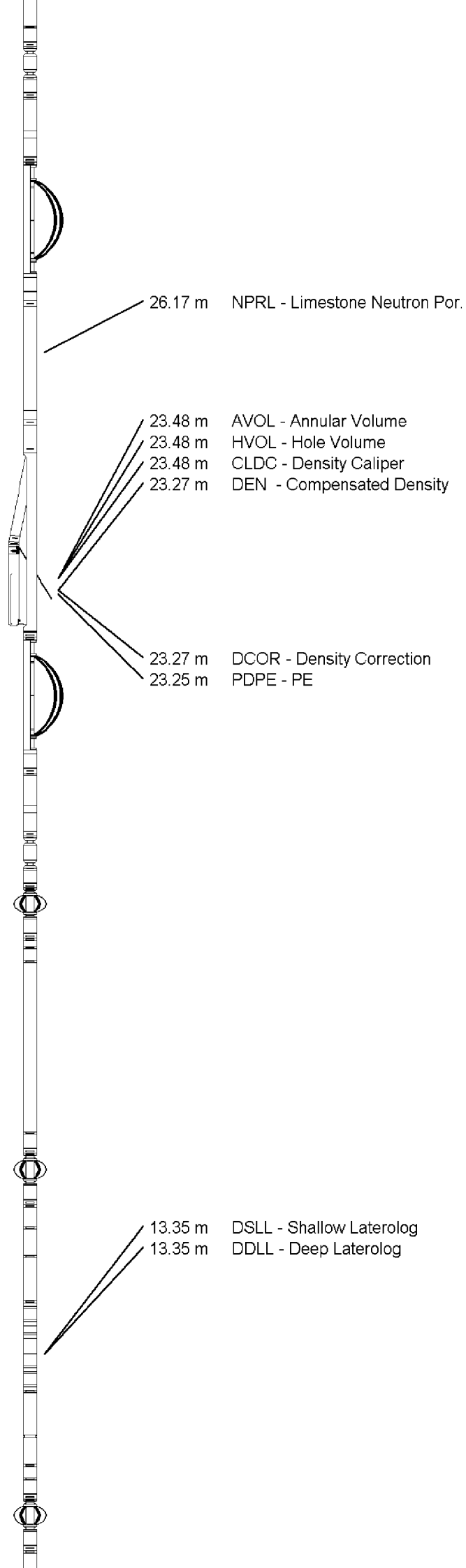
Compact Gamma
MCG 98 Length: 2.65 m Weight: 63.9 lb

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



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

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
Compact Density/Caliper MPD 83	Length: 2.92 m	Weight: 90.4 lb
Compact Inline Bowspring A MIS 94	Length: 1.74 m	Weight: 33.1 lb
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



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

Reeves
Compact

DUAL LATEROLOG - GR
DENSITY - NEUTRON
1:200 MD