Reeves Compact

DUAL LATEROLOG - GR
DENSITY - NEUTRON
1:200 TVD

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 **FINAL PRINT**

LSD	SEC	TWP	RGE	Other Services
				COMPENSATED SONIC

API Number
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

Elevations:

KB		metres
DF	27.91	metres
GL	-59.00	metres

Date	5-MAY-2004		
Run Number	ONE		
Depth Driller	2676.90	metres	
Depth Logger	2672.90	metres	
First Reading	2672.50	metres	
Last Reading	1702.40	metres	
Casing Driller	633.50	metres	
Casing Logger			
Bit Size	8.50	inches	
Hole Fluid Type	KCL/GLY/PHPA		
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

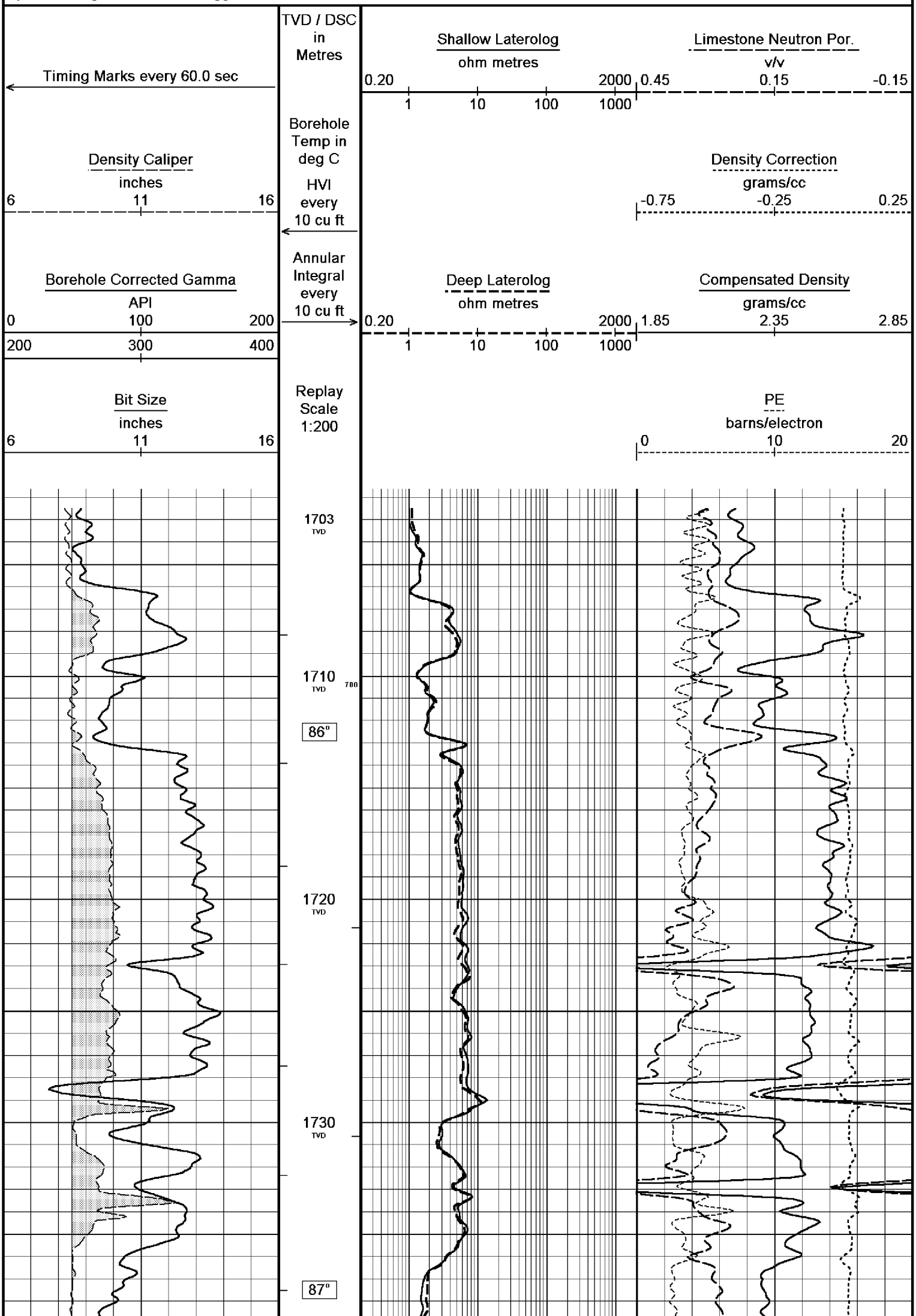
MAIN LOG 1:200

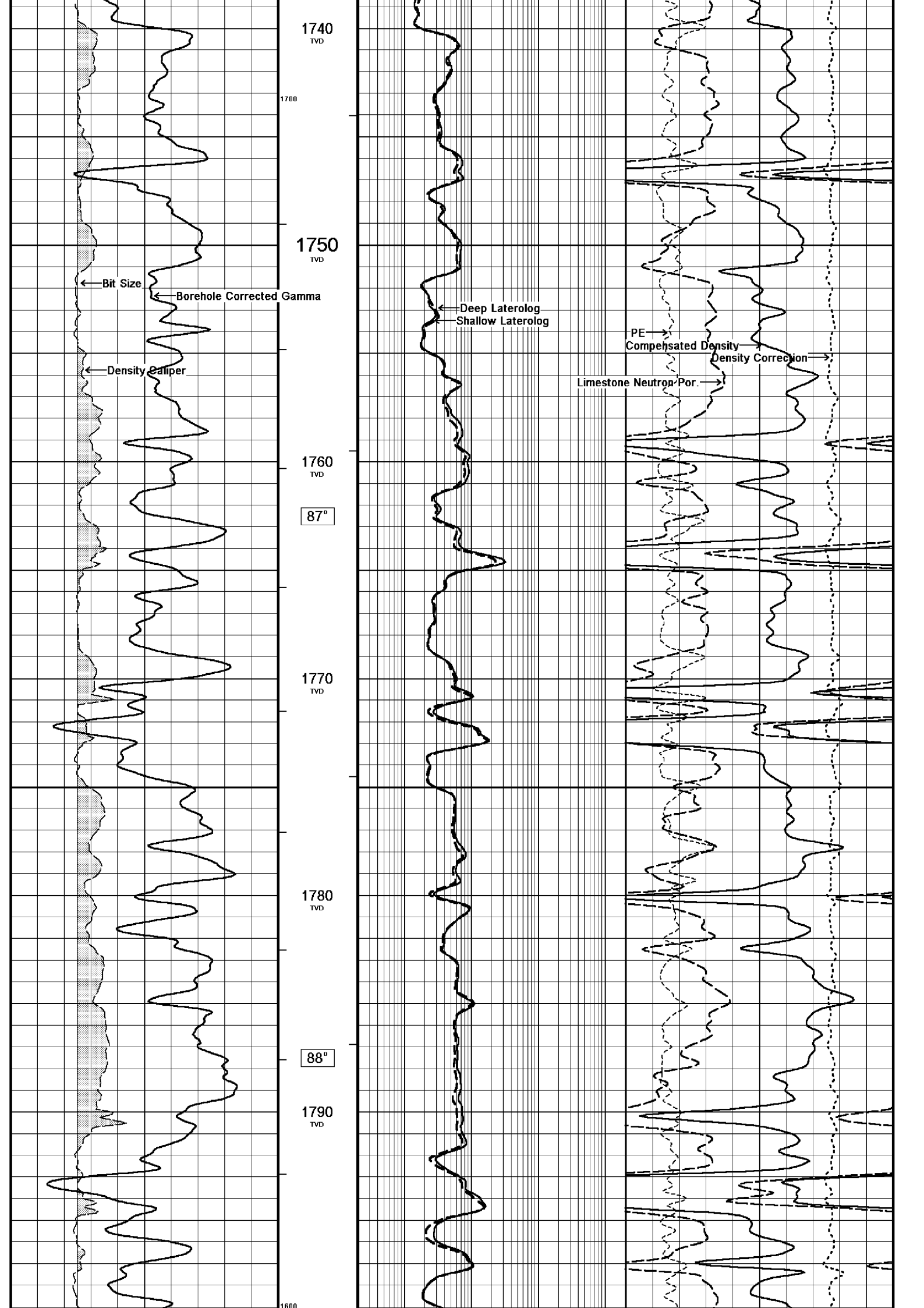
Depth Based Data - Maximum Sampling Increment 10.0cm

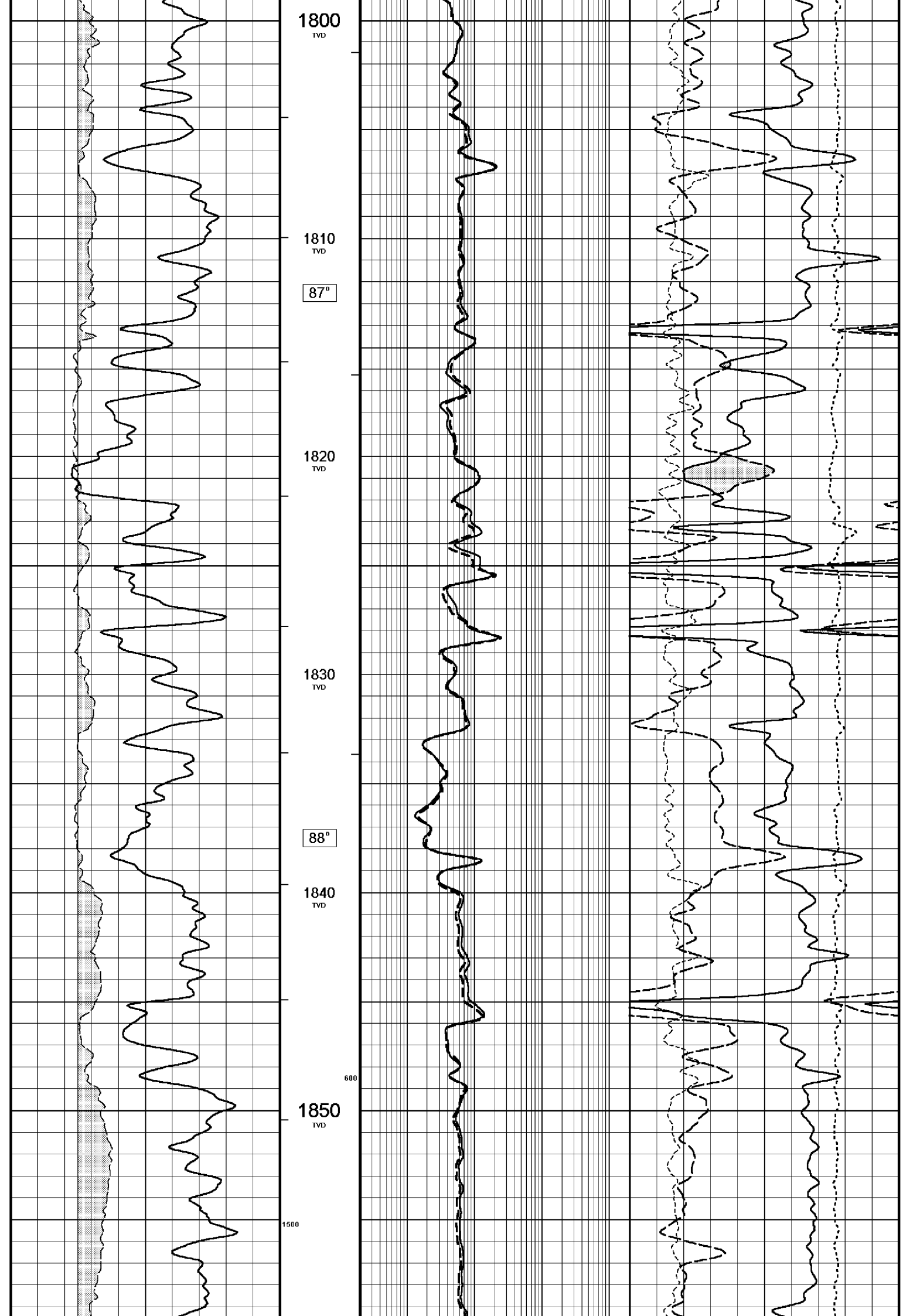
Plotted on 24-SEP-2004 12:51

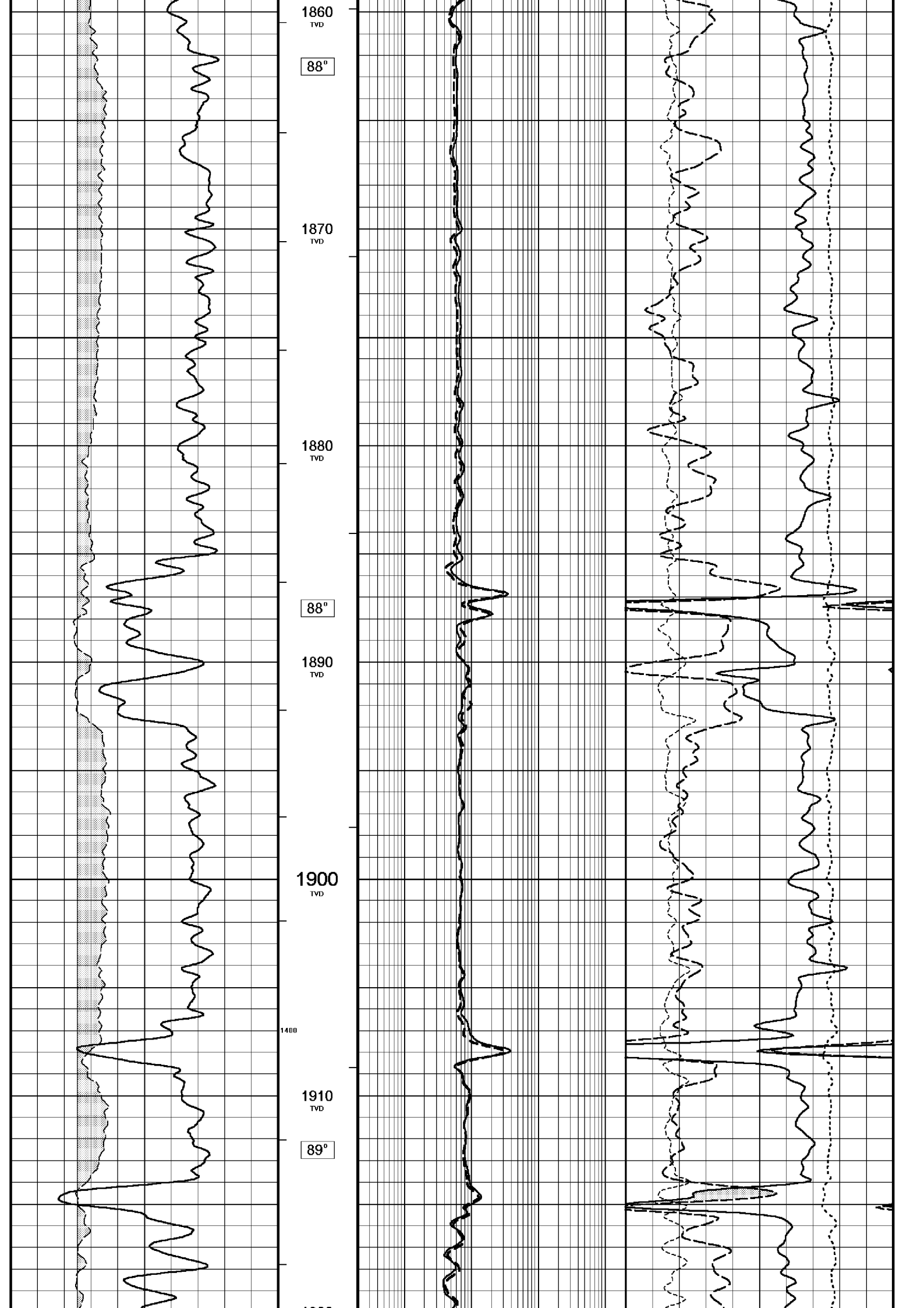
Filename: C:\Marlin\MLA A24a\Final Data Presentations\...\MLA A24A MAIN LOG TC.dta Recorded on 06-MAY-2004 16:05

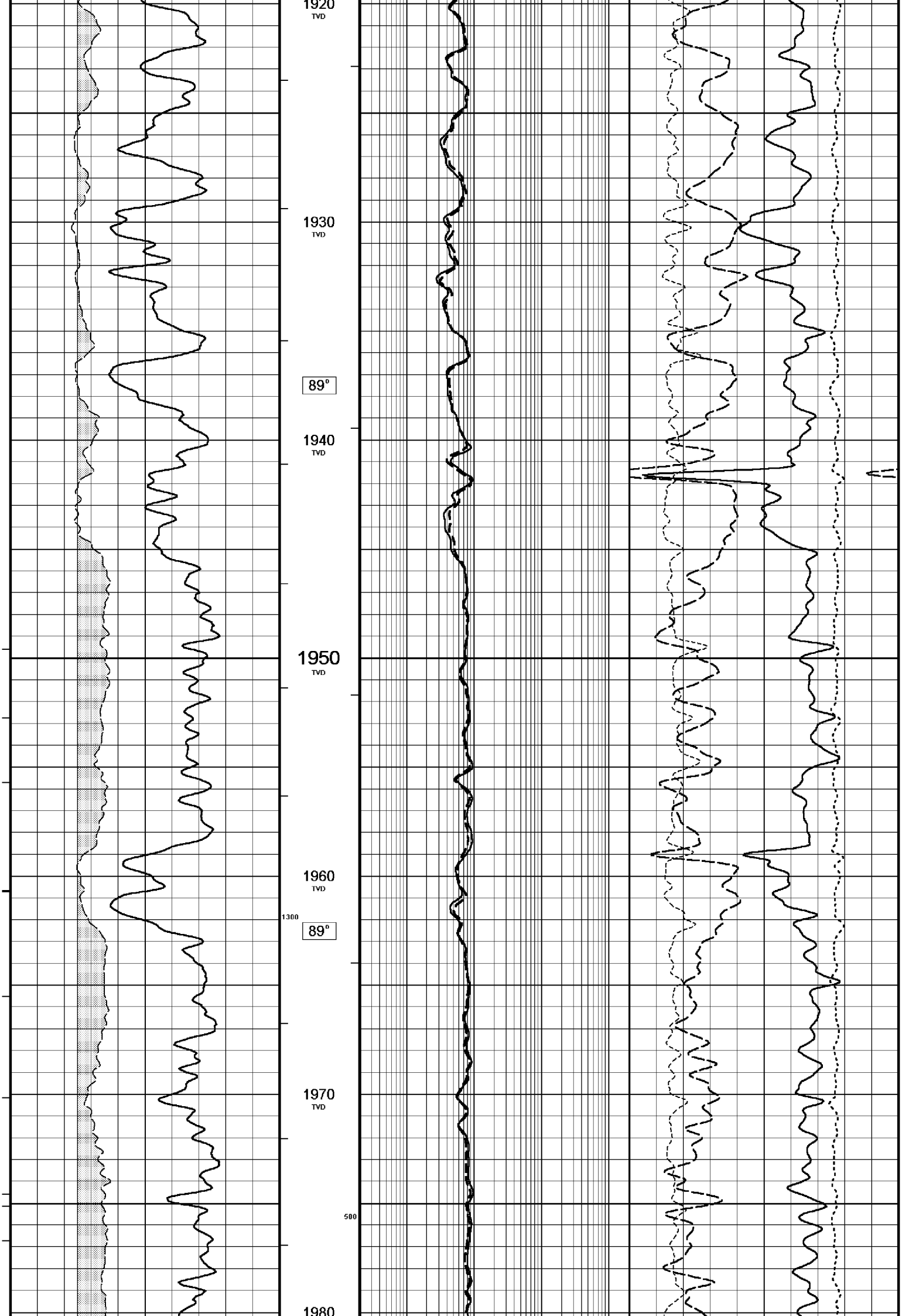
System Configuration Dates: Logged 09-SEP-2003: Processed 09-SEP-2003: Plotted 25-JUN-2003:

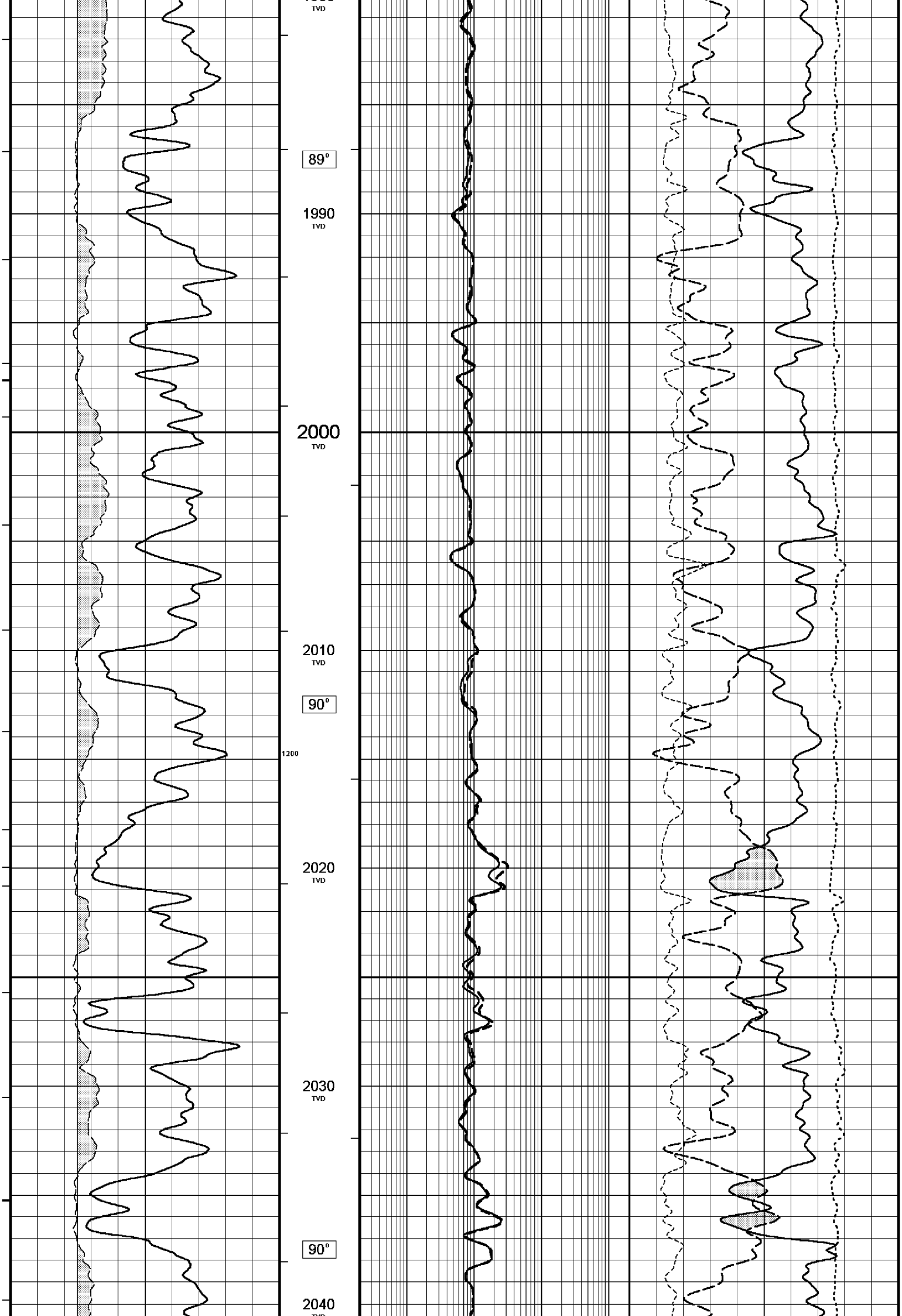


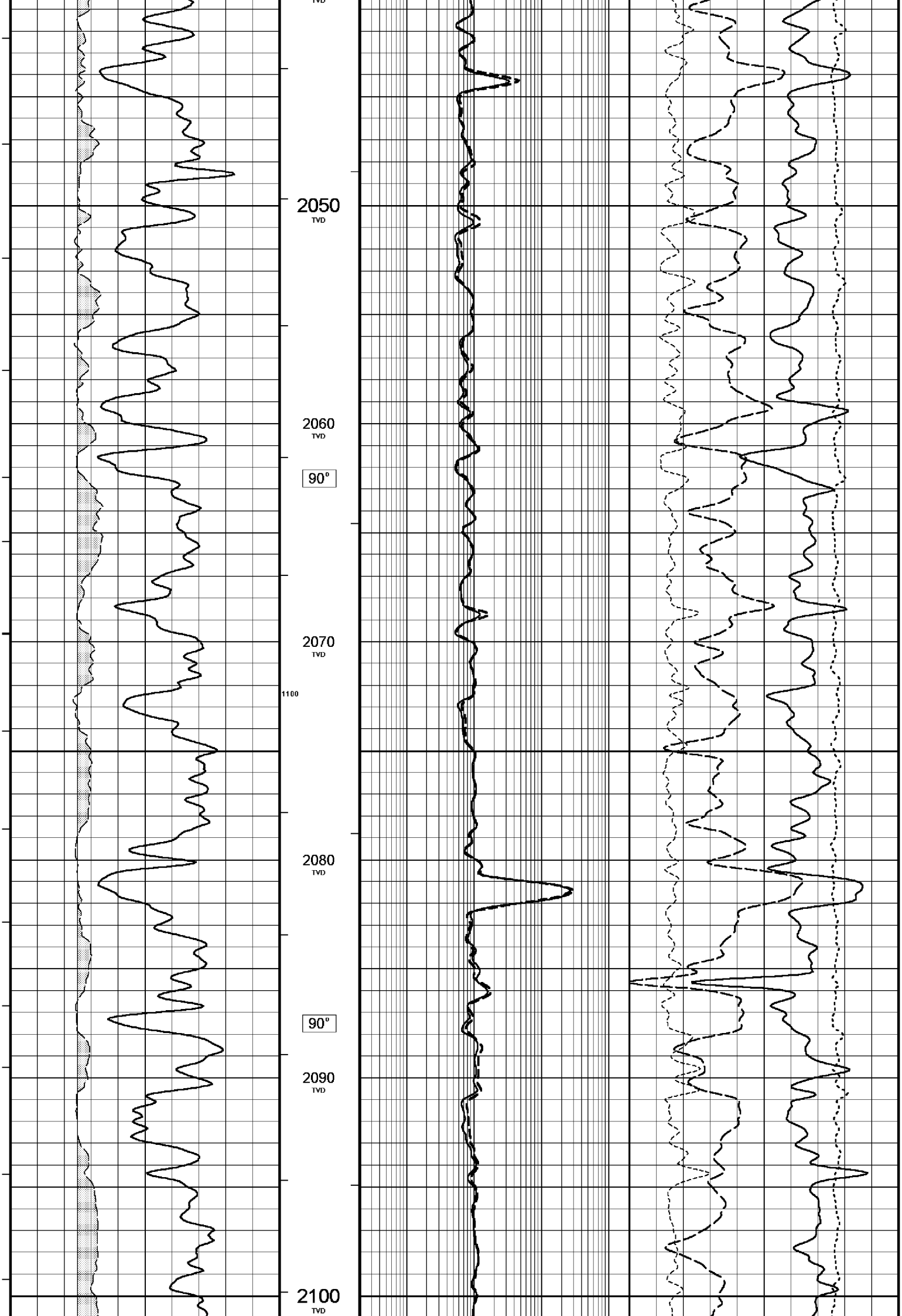

1740
TVD
1700
1750
TVD
Bit Size
Borehole Corrected Gamma
Deep Laterolog
Shallow Laterolog
PE
Compensated Density
Density Correction
Density Caliper
Limestone Neutron Por.
1760
TVD
87°
1770
TVD
1780
TVD
88°
1790
TVD
1600

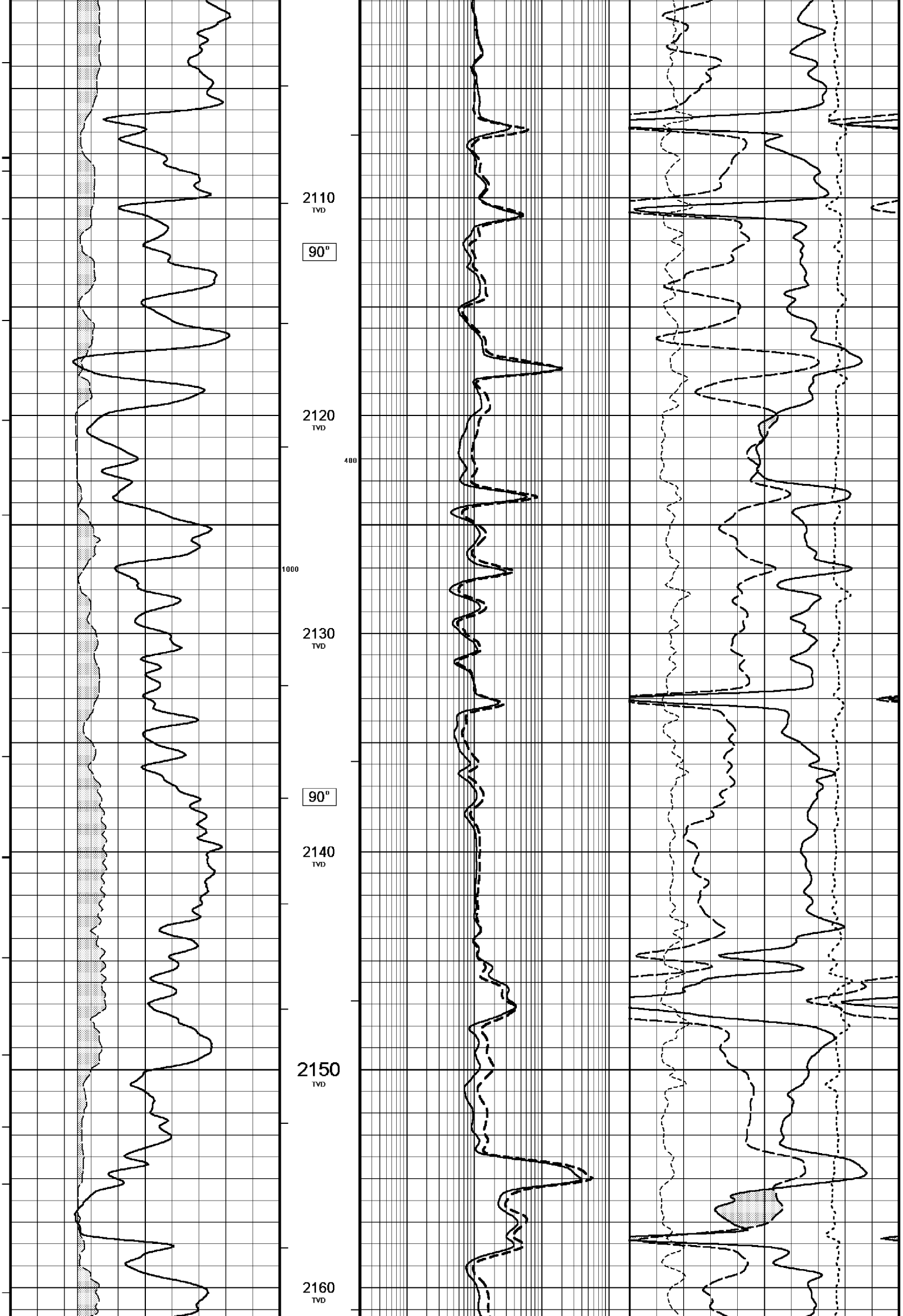

1800
TVD
1810
TVD
87°
1820
TVD
1830
TVD
88°
1840
TVD
600
1850
TVD
1500

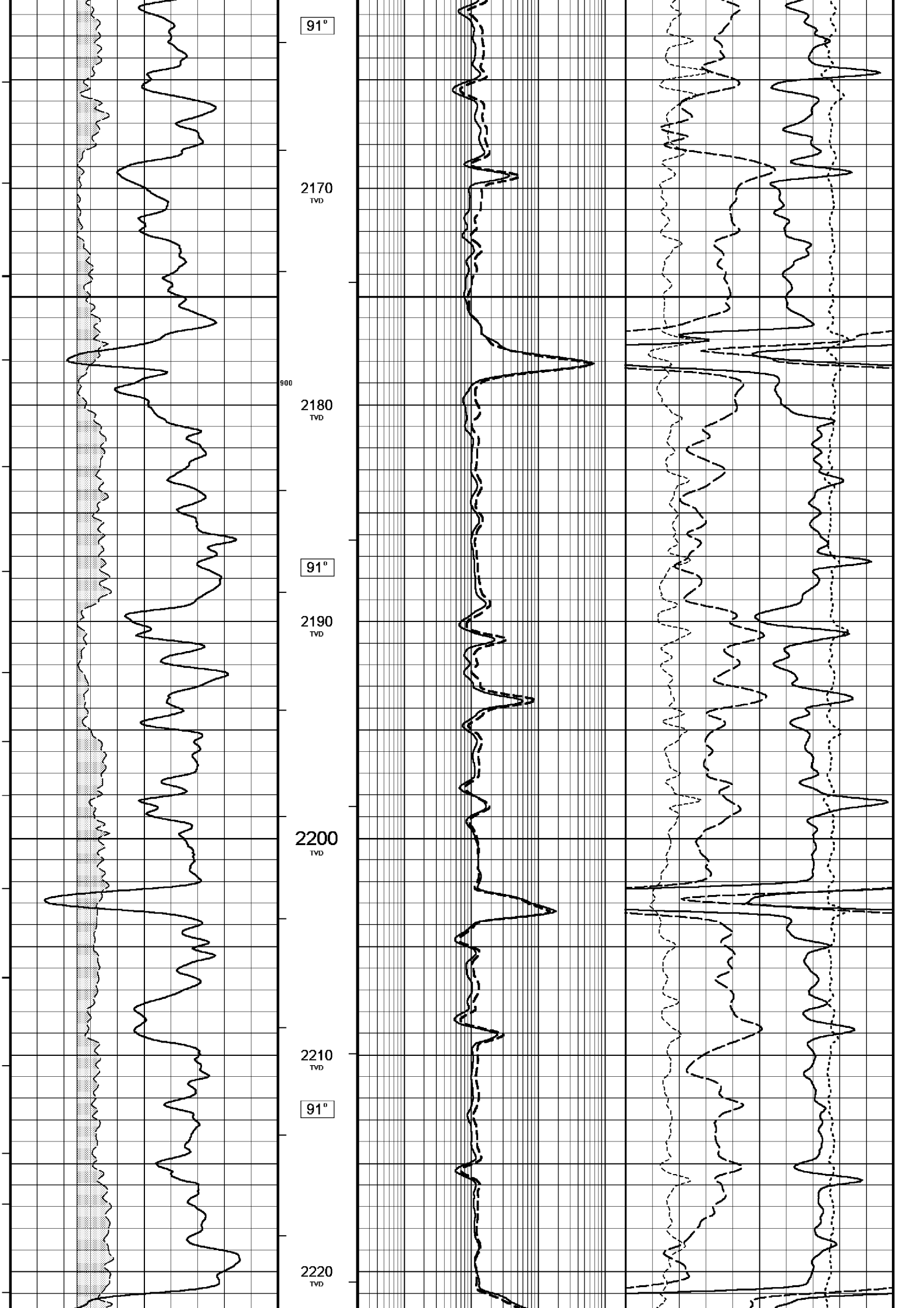

1860
TVD
88°
1870
TVD
1880
TVD
88°
1890
TVD
1900
TVD
1400
1910
TVD
89°

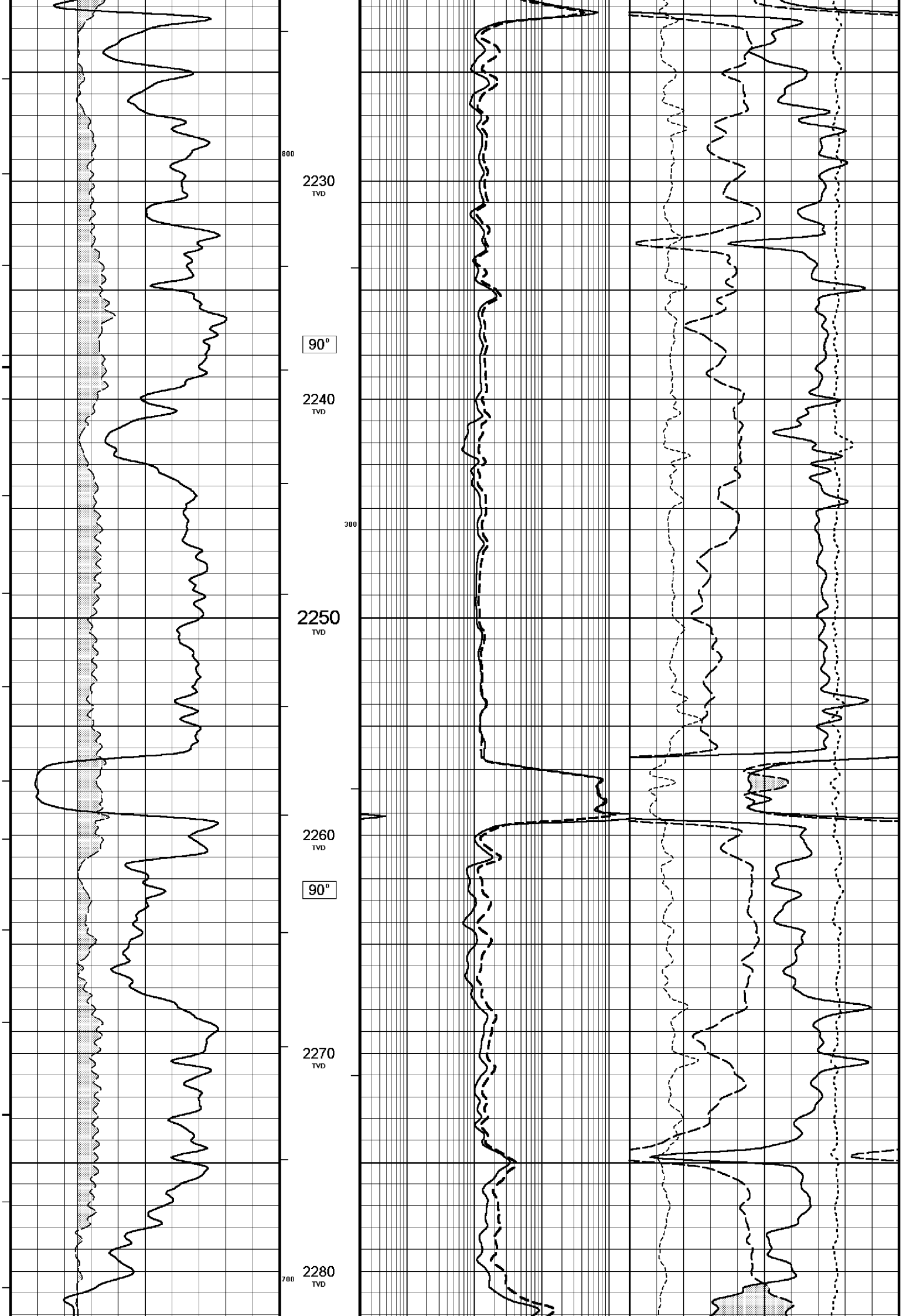

1920
TVD
1930
TVD
89°
1940
TVD
1950
TVD
1960
TVD
1300
89°
1970
TVD
500
1980

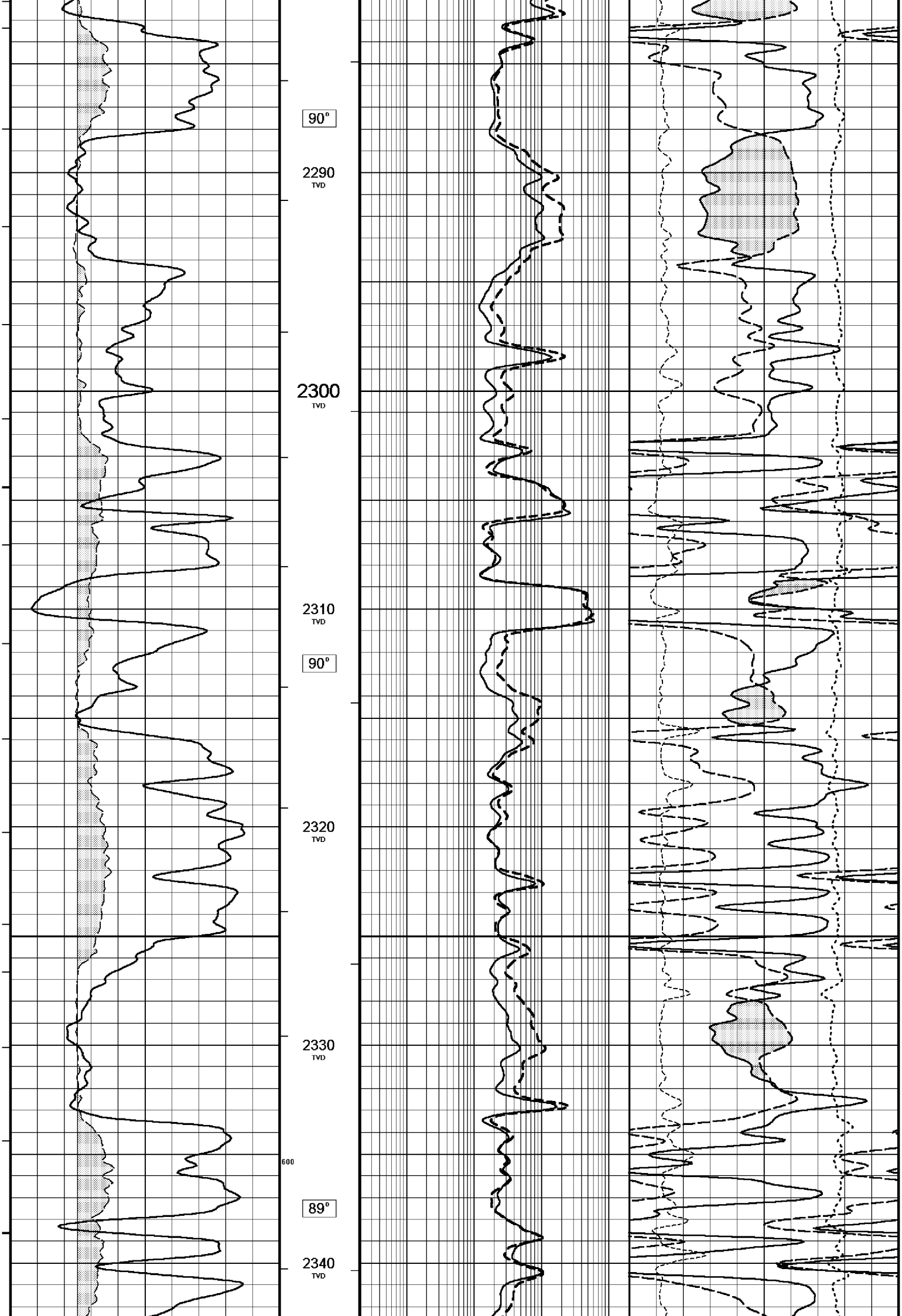

TVD
89°
1990
TVD
2000
TVD
2010
TVD
90°
1200
2020
TVD
2030
TVD
90°
2040

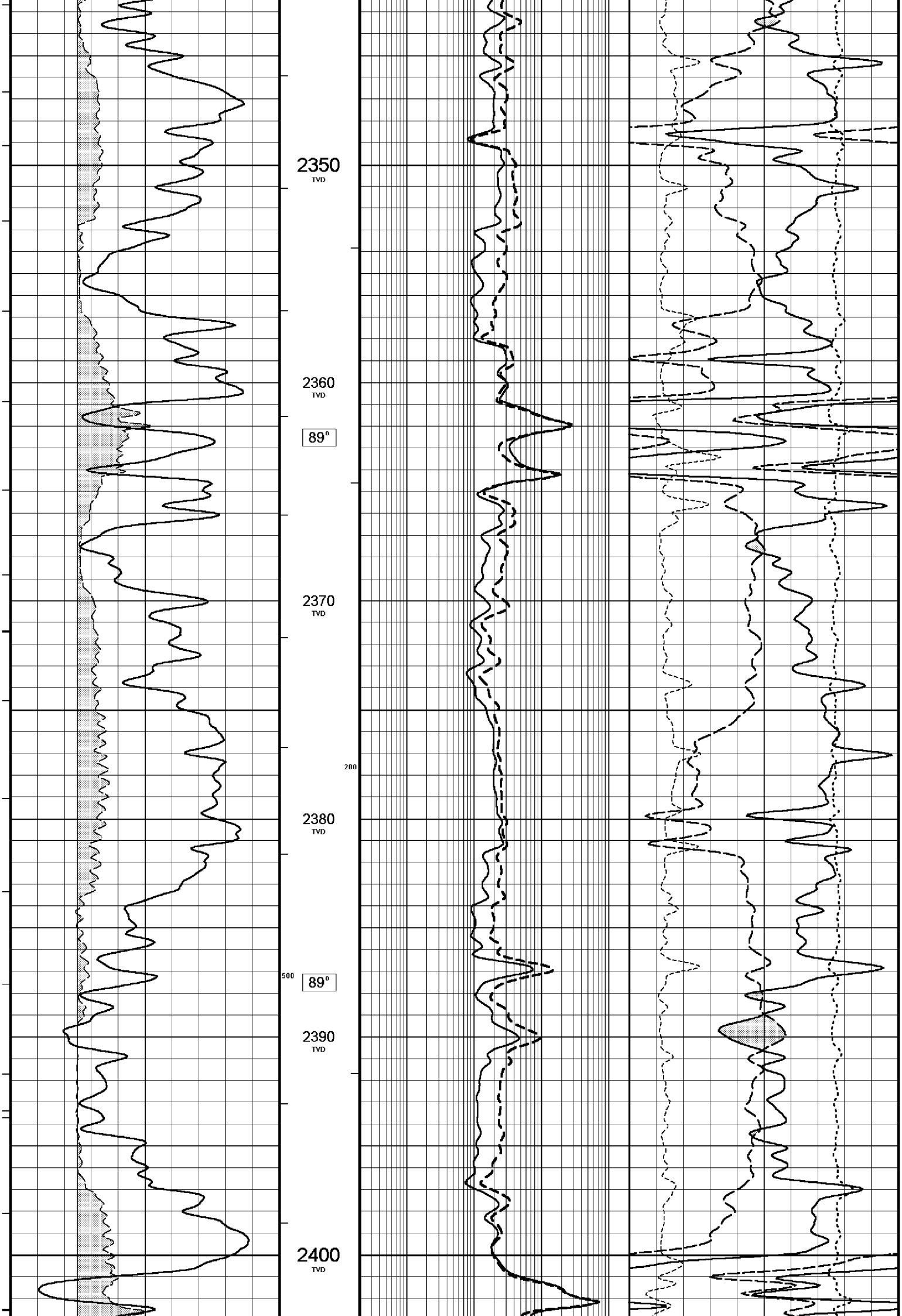

2050
TVD
2060
TVD
90°
2070
TVD
1100
2080
TVD
90°
2090
TVD
2100
TVD

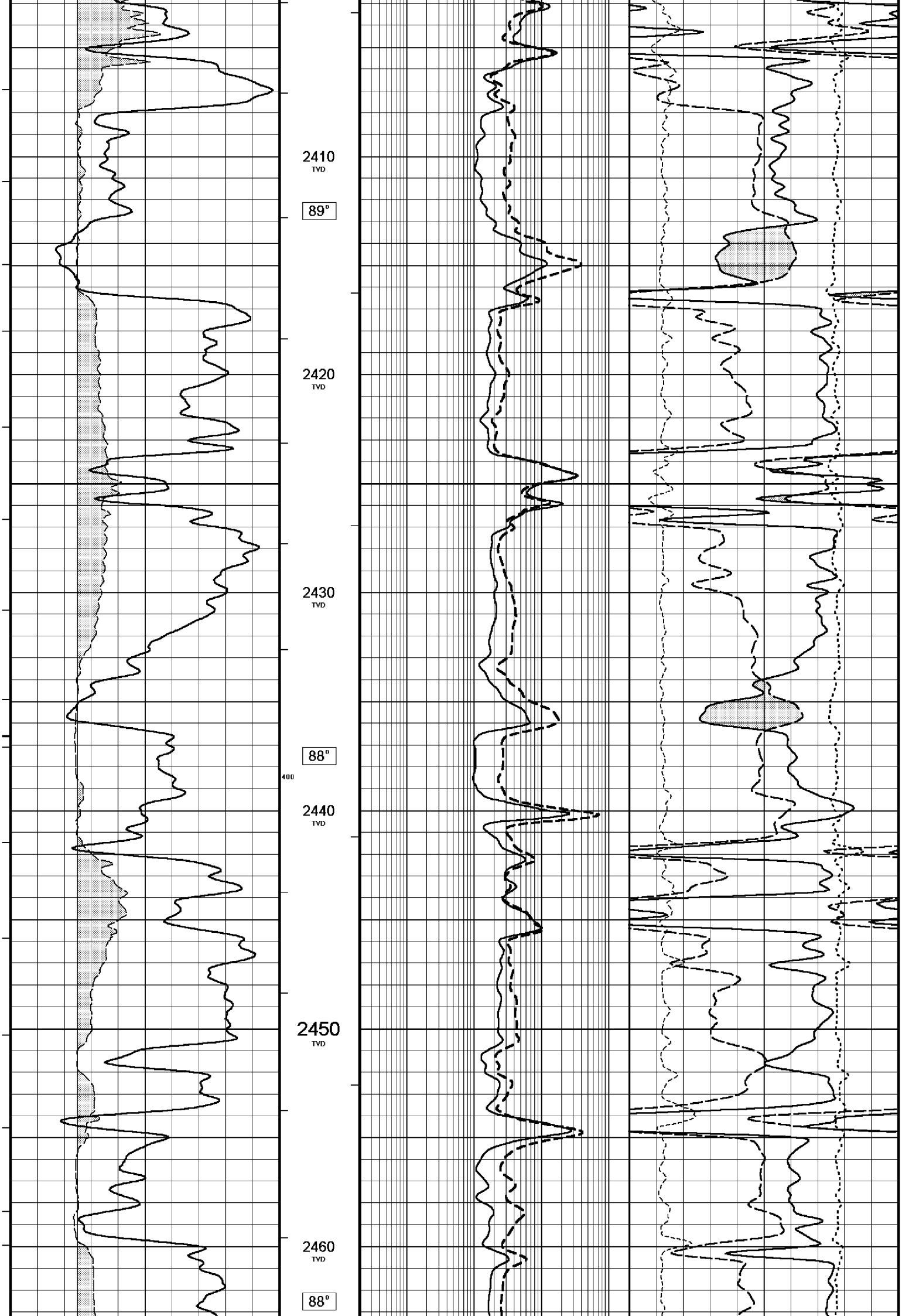

2110
TVD
90°
2120
TVD
400
1000
2130
TVD
90°
2140
TVD
2150
TVD
2160
TVD

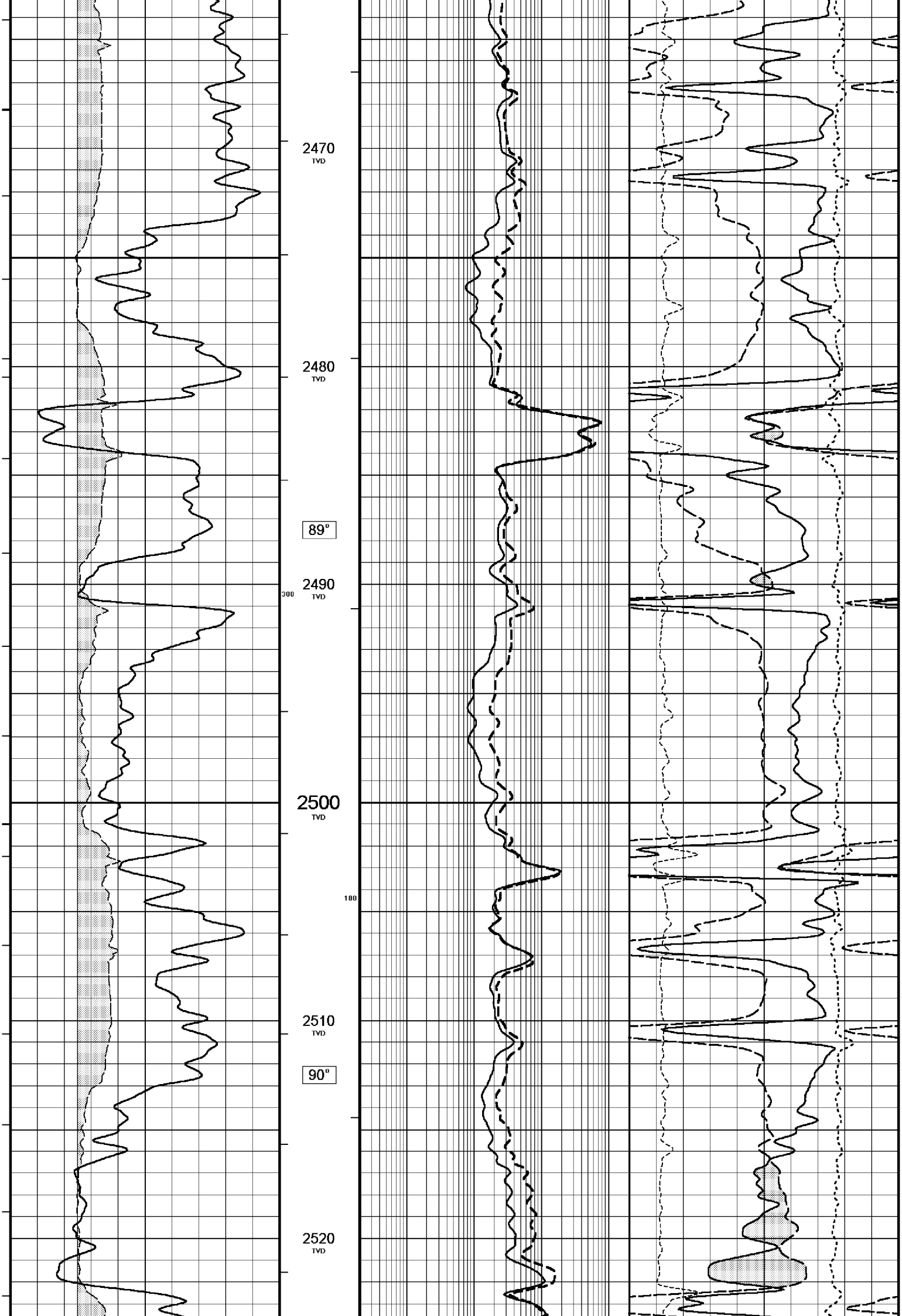

91°
2170
TVD
900
2180
TVD
91°
2190
TVD
2200
TVD
2210
TVD
91°
2220
TVD

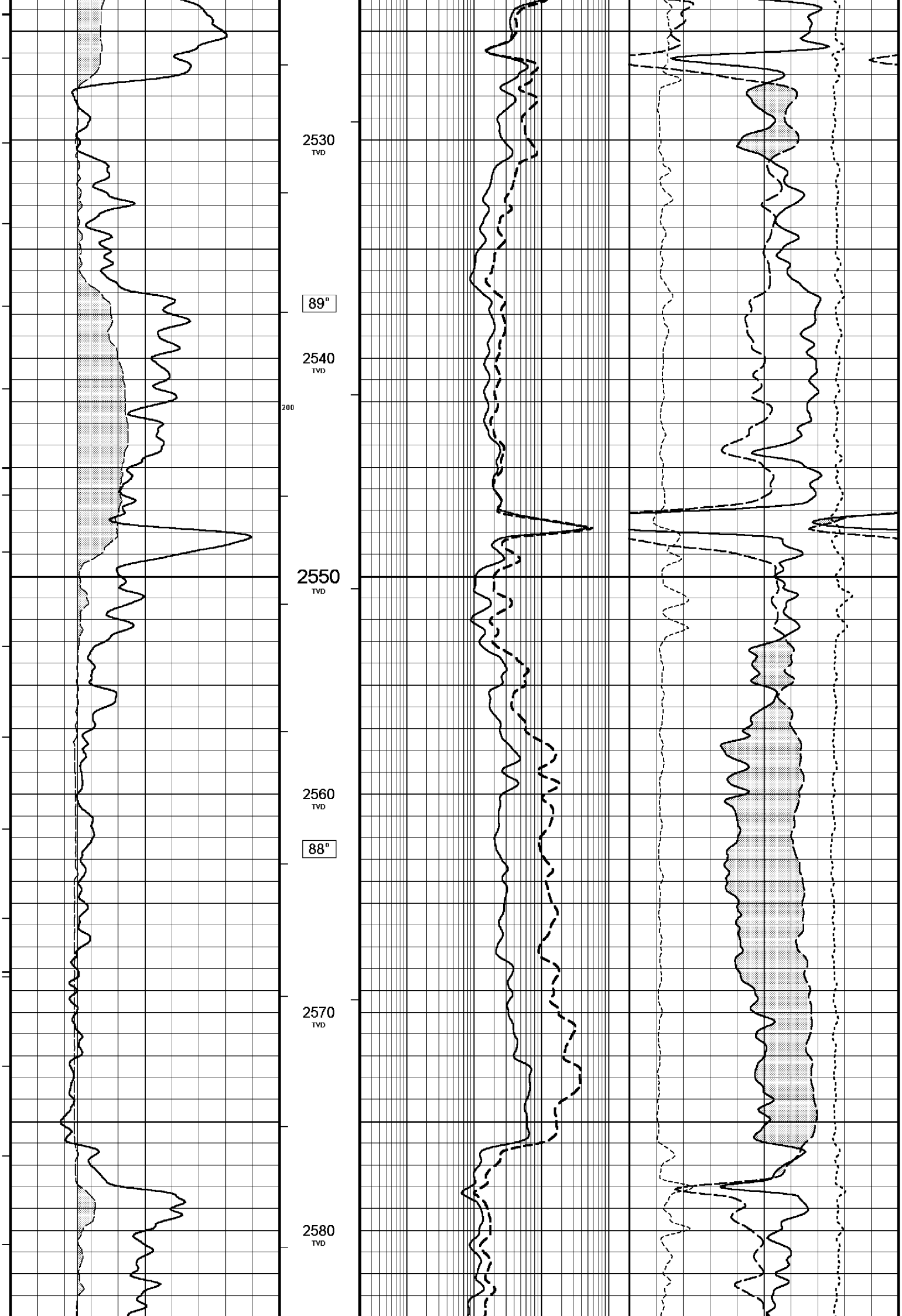

800
2230
TVD
90°
2240
TVD
300
2250
TVD
2260
TVD
90°
2270
TVD
700
2280
TVD

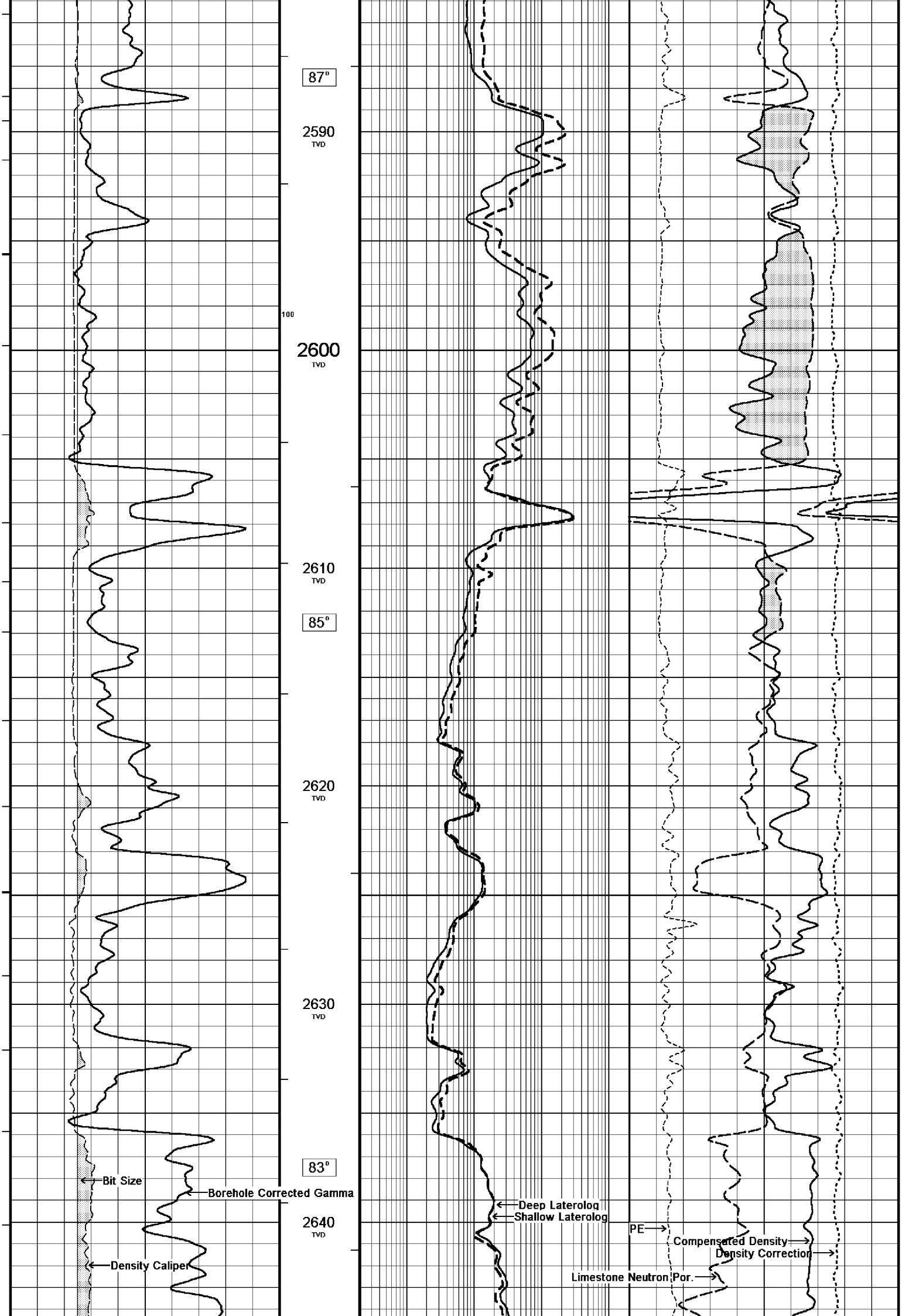

90°
2290
TVD
2300
TVD
2310
TVD
90°
2320
TVD
2330
TVD
600
89°
2340
TVD

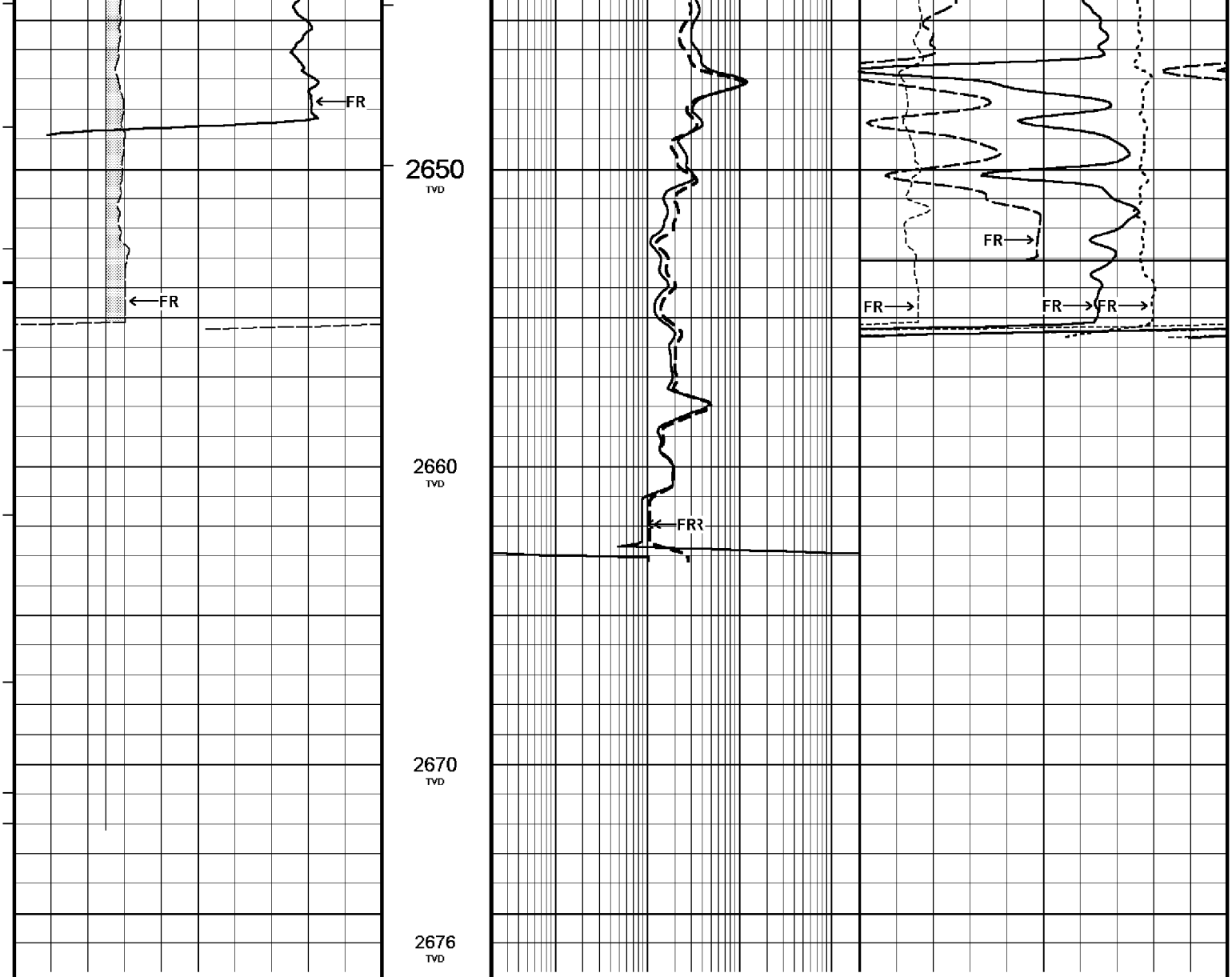

2350
TVD
2360
TVD
89°
2370
TVD
200
2380
TVD
500
89°
2390
TVD
2400
TVD


2410
TVD
89°
2420
TVD
2430
TVD
88°
400
2440
TVD
2450
TVD
2460
TVD
88°


2470
TVD
2480
TVD
89°
300
2490
TVD
2500
TVD
100
2510
TVD
90°
2520
TVD


2530
TVD
89°
2540
TVD
200
2550
TVD
2560
TVD
88°
2570
TVD
2580
TVD


87°
2590
TVD
100
2600
TVD
2610
TVD
85°
2620
TVD
2630
TVD
83°
2640
TVD
Bit Size
Borehole Corrected Gamma
Density Caliper
Deep Laterolog
Shallow Laterolog
PE
Compensated Density
Density Correction
Limestone Neutron Por.



TVD / DSC in Metres

Timing Marks every 60.0 sec

Shallow Laterolog
ohm metres
0.20 2000
1 10 100 1000

Limestone Neutron Por.
v/v
0.45 0.15 -0.15

Borehole Temp in deg C

Density Caliper
inches
6 11 16

HVI every 10 cu ft

Density Correction
grams/cc
-0.75 -0.25 0.25

Annular Integral every 10 cu ft

Borehole Corrected Gamma
API
0 100 200
200 300 400

Deep Laterolog
ohm metres
0.20 2000
1 10 100 1000

Compensated Density
grams/cc
1.85 2.35 2.85

Bit Size
inches
6 11 16

Replay Scale 1:200

PE
barns/electron
0 10 20

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 1:200

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)	
	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
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 Resistor 1	Measured Resistor 2	Calibrated (ohm-m) Resistor 1	Calibrated (ohm-m) 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

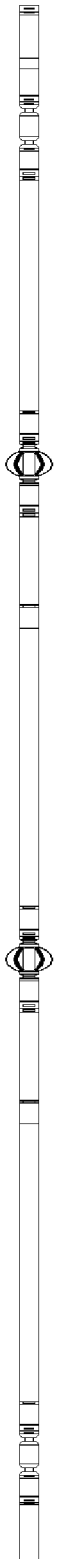
Channel	Base Check (ohm-m)	Field Check (ohm-m)
Shallow	49.0	49.0
Deep	28.0	28.0
Groningen	253.1	253.2

Laterolog Constants MLE 017

Squasher Start	40000	ohm-m
Shallow Laterolog K Factor	1.3210	
Deep Laterolog K Factor	0.7550	
Groningem 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 & 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

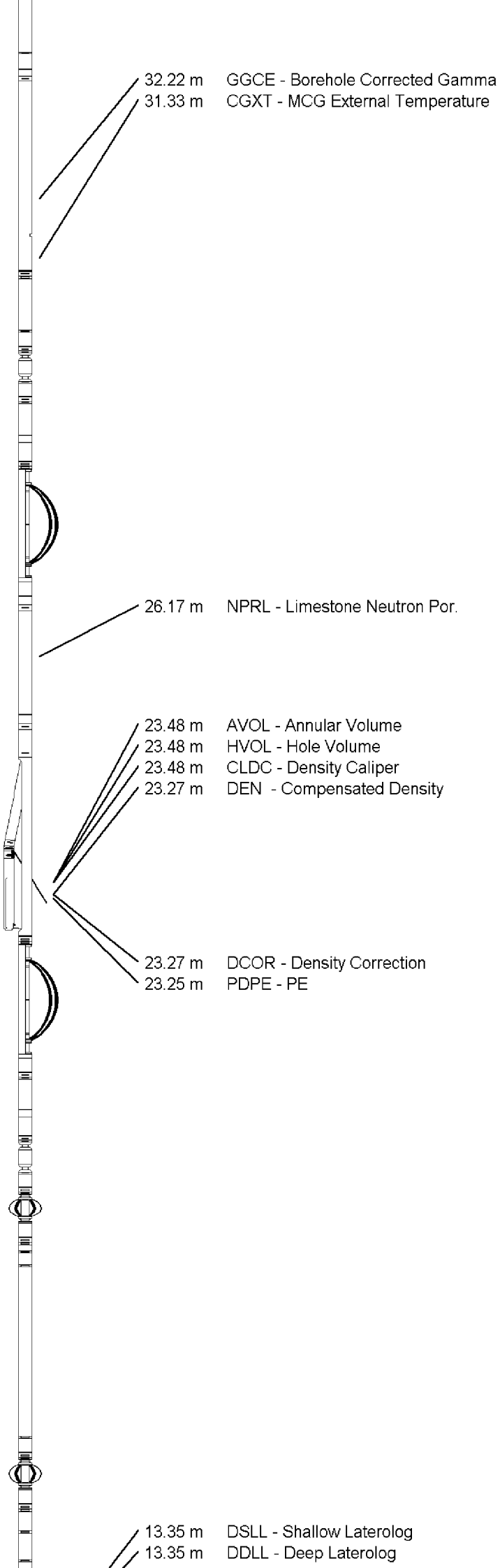
Compact Stiff Bridle Electrode Sub.
MBE 18 Length: 3.76 m Weight: 94.8 lb

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

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

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

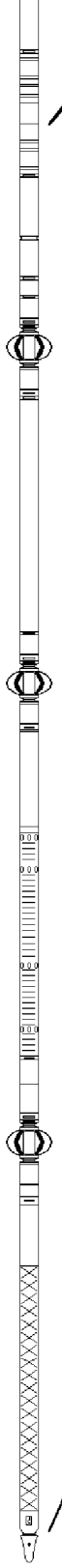
Compact Knuckle Joint
SKJ 44 Length: 0.66 m Weight: 24.3 lb

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	2672.50	metres
Elevation Drill Floor	27.91	metres	Depth Driller	2676.90	metres
Elevation Ground Level	-59.00	metres	Depth Logger	2672.90	metres

Reeves Compact

DUAL LATEROLOG - GR
DENSITY - NEUTRON
1:200 TVD