

Reeves

PHOTO DENSITY 1:200 MD

COMPANY				ESSO AUSTRALIA PTY LTD			
WELL				FLOUNDER A24A			
FIELD				GIPPSLAND BASIN			
PROVINCE/COUNTY				BASS STRAIT			
COUNTRY/STATE				AUSTRALIA			
LOCATION				5758709.11 m N, 625849.47 m E 38°18'39.233" S, 148°26'22.099" E			
LSD	SEC	TWP	RGE	Other Services DUAL LATEROLOG COMPENSATED SONIC			
API Number							
Permit Number							
Permanent Datum MSL				, Elevation 0 metres			
Log Measured From RT@33.85 metres above Permanent Datum							
Drilling Measured From RT							
Date	16-MAR-2003					Elevations: KB DF	metres metres metres
Run Number	1					GL	-93.00
Depth Driller	3193.00						
Depth Logger	3195.00						
First Reading	3193.40						
Last Reading	2342.60						
Casing Driller	662.60						
Casing Logger	660.20						
Bit Size	8.50					Inches	
Hole Fluid Type	KC/PPH/AGLY						
Density / Viscosity	9.50 g/cc					68.00 sec/qt	
PH / Fluid Loss	9.00					2.50 ml/30Min	
Sample Source	FLOWLINE						
Rm @ Measured Temp	0.119 @ 25.0					ohm-m	
Rmf @ Measured Temp	0.089 @ 25.0					ohm-m	
Rmc @ Measured Temp	0.119 @ 25.0					ohm-m	
Source Rmf / Rmc	PRESS					PRESS	
Rm @ BHT	0.048 @ 96.0					ohm-m	
Time Since Circulation	15hr 40min						
Max Recorded Temp	98.00					deg C	
Equipment Name	CWS/CIS						
Equipment / Base	1						
Recorded By	G. McManus, D. Woodward						
Witnessed By	G. Smith					W. Arnold, C. Burton	
Circ. Stopped	22:10 15-MAR						

BOREHOLE RECORD				
Bit Size inches		Depth From metres		Depth To metres
8.510		662.60		3193.00
CASING RECORD				
Type	Size inches	Depth From metres	Shoe Depth metres	Weight pounds/ft
Conduct.	20.000	0.00	202.65	133.00
Surface	10.750	202.65	662.60	54.50
REMARKS				
DRILLING RIG: NABORS (ISDL) 453.				
COMPACT WIRELINE TOOLS LOGGED CONVENTIONALLY VIA SCHLUMBERGER WIRELINE UNIT.				
DUAL NEUTRON / PHOTO DENSITY ECCENTRALISED				
COMPENSATED SONIC / LATEROLOG FITTED WITH ½" STANDOFF				
BARITE CONTENT 1.65%				

AFTER SURVEY CALIBRATION			
C:\FLA A24A\FLA_A24A_Sonde_Picture.dta			
Gamma Check MCG 044		Field Calibration on 14-MAR-2003 09:40 After Survey Check on 17-MAR-2003 00:08	
	Before (API)	After (API)	
Background	10	13	
Calibrator (Gross)	919	922	
Calibrator (Net)	909	909	
Photo Density Check MPD 067		Before Survey Check on 14-MAR-2003 03:49	

Density Check

	Near		Far	
	Before	After	Before	After
	959.8	957.8	1151.7	1156.6

PE Check

	Before	After
WS	178.7	179.7
WH	833.1	834.3

Laterolog Check MLE 015

Before Survey Check on 14-MAR-2003,03:10

After Survey Check on 17-MAR-2003,00:56

Channel	Before Survey (ohm-m)	After Survey (ohm-m)
Shallow	49.1	49.1
Deep	31.5	31.5
Groningen	246.3	246.3

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.

MAIN LOG 1:200

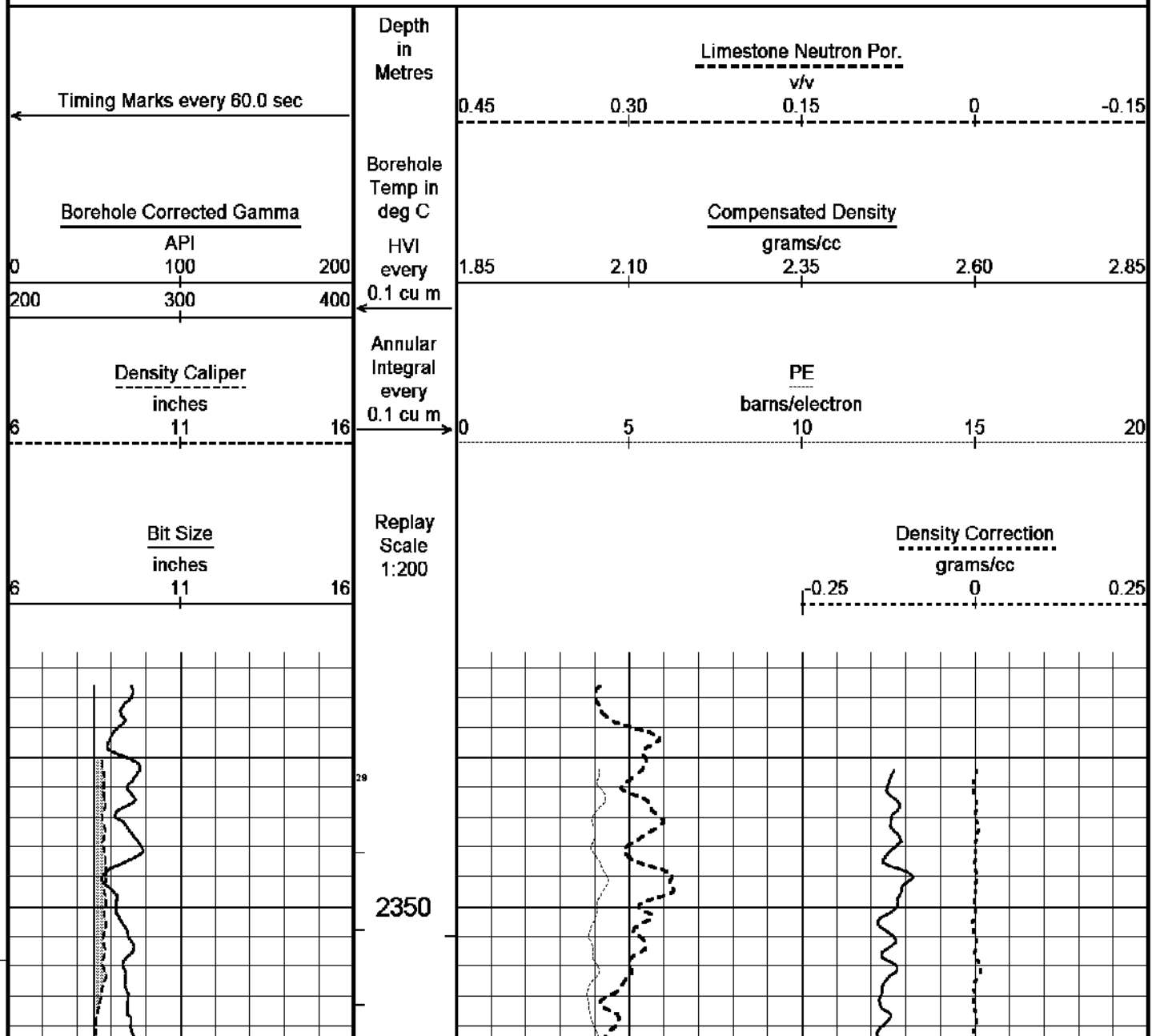
Depth Based Data - Maximum Sampling Increment: 10.0cm

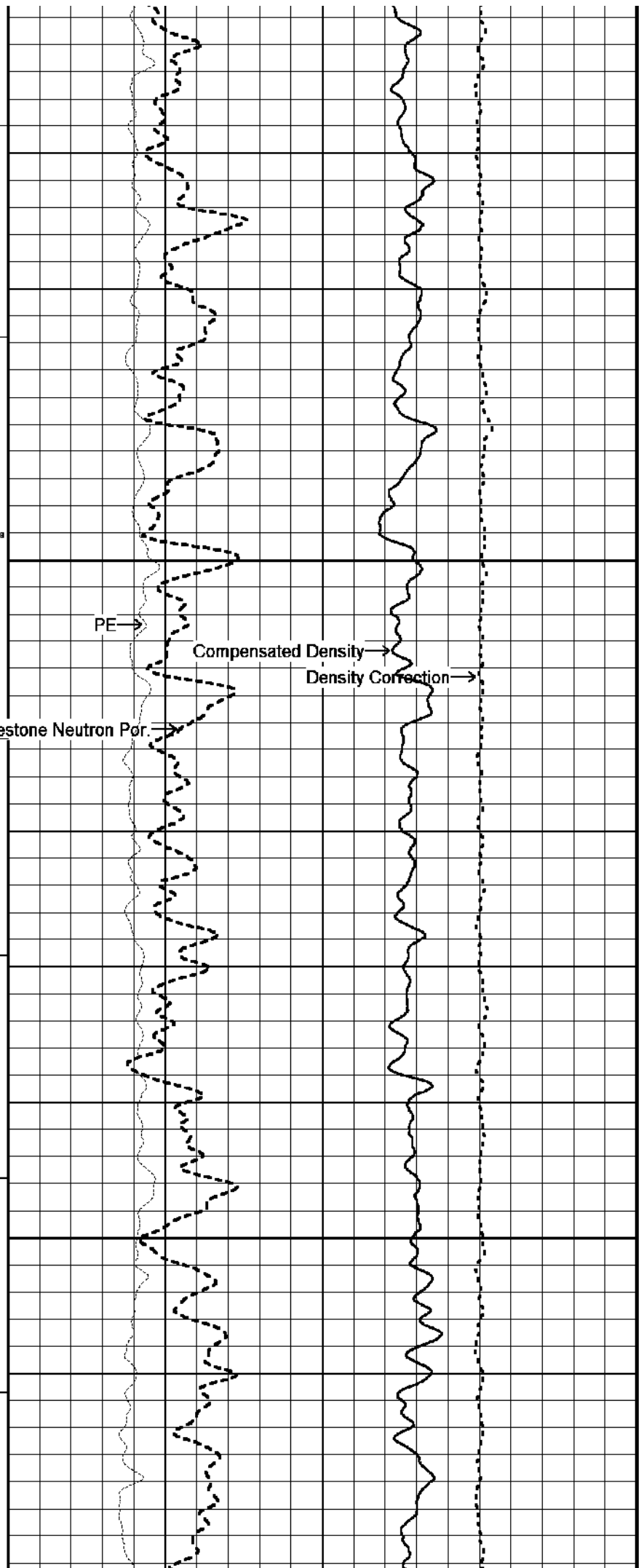
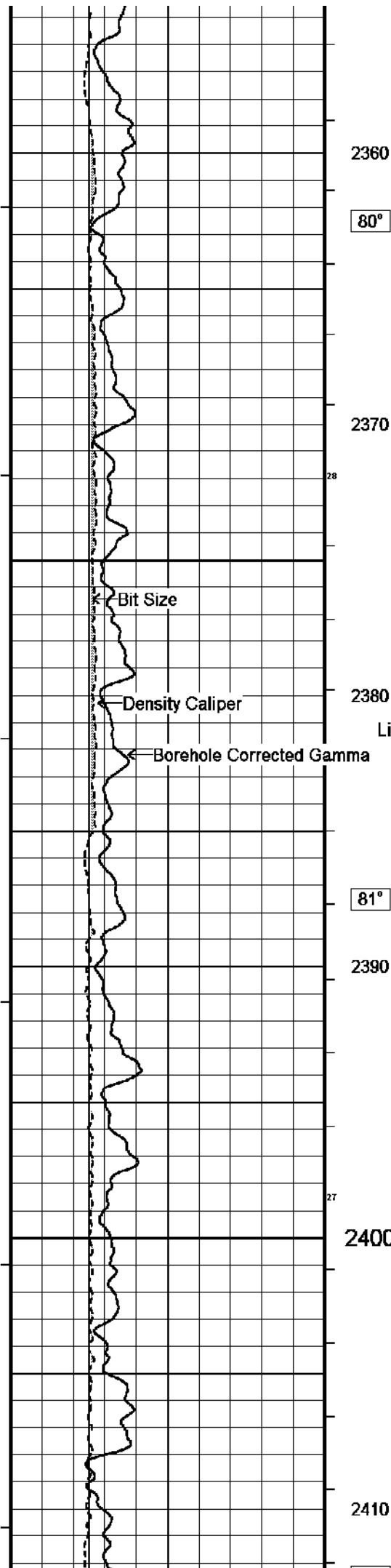
Plotted on 16-MAY-2003 13:51

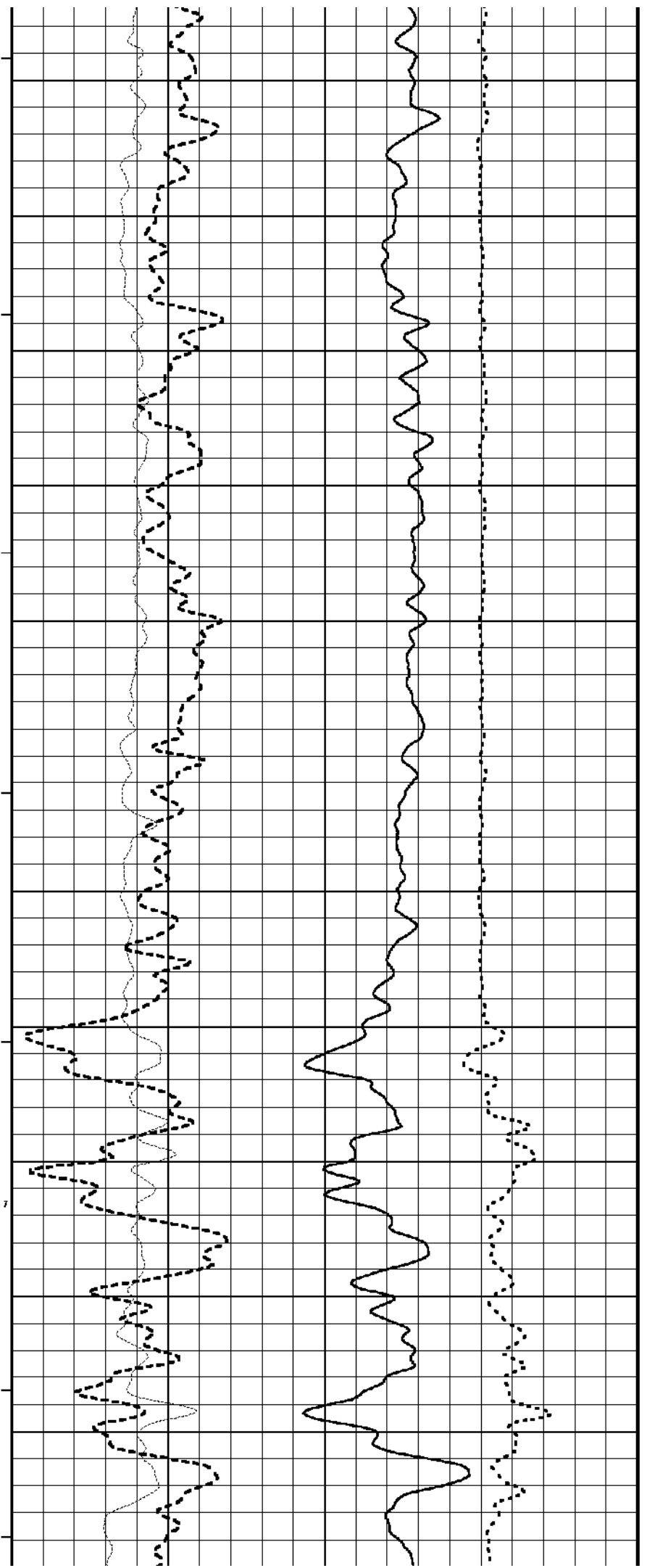
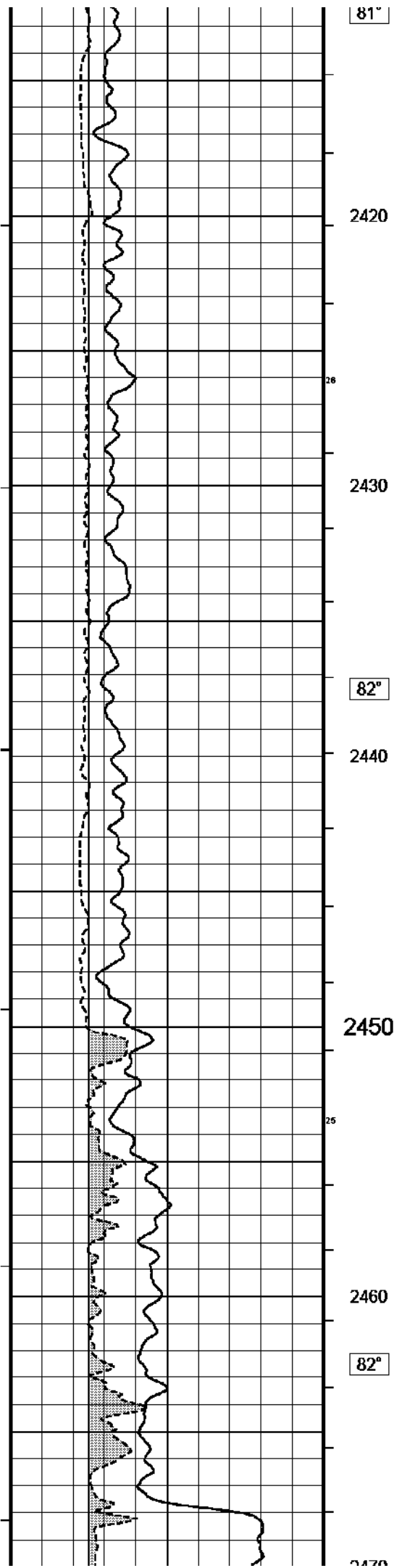
Filename: C:\FLA A24\FLA_A24A_Main_Log.dta

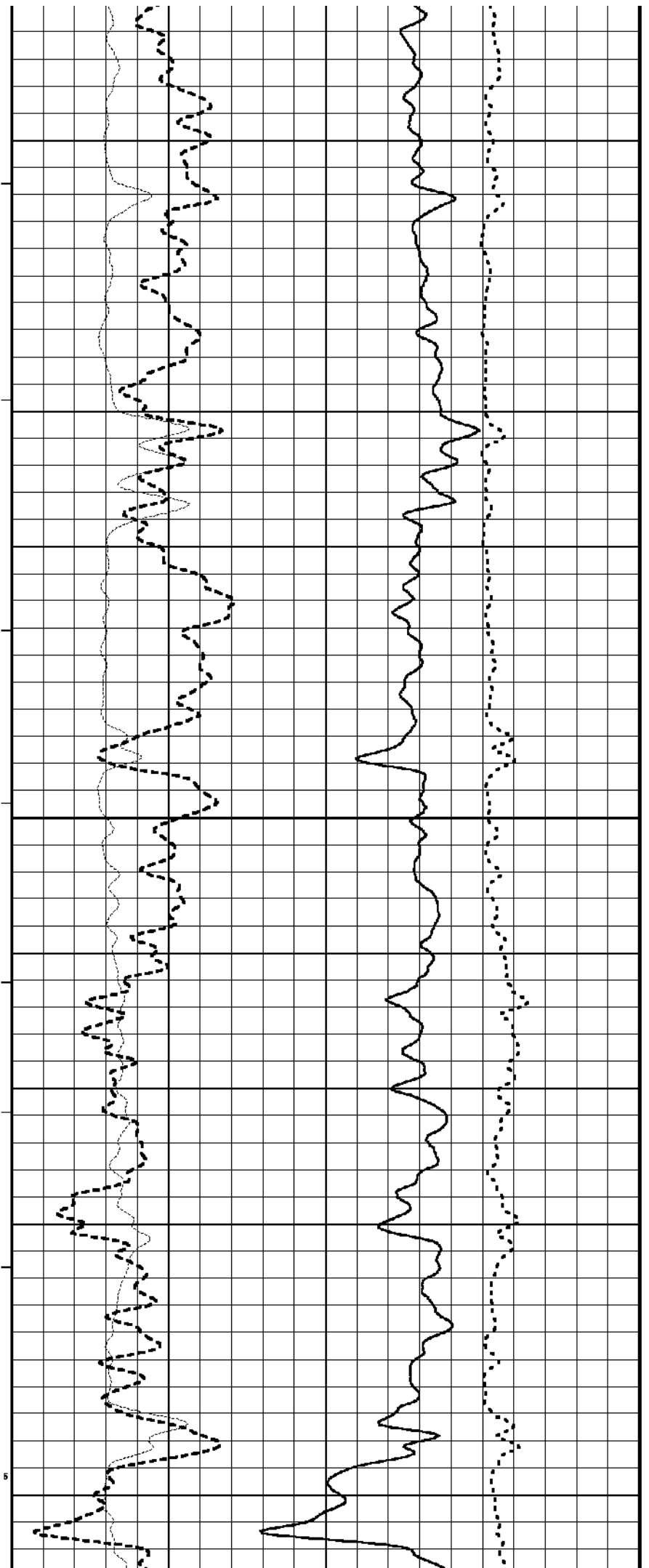
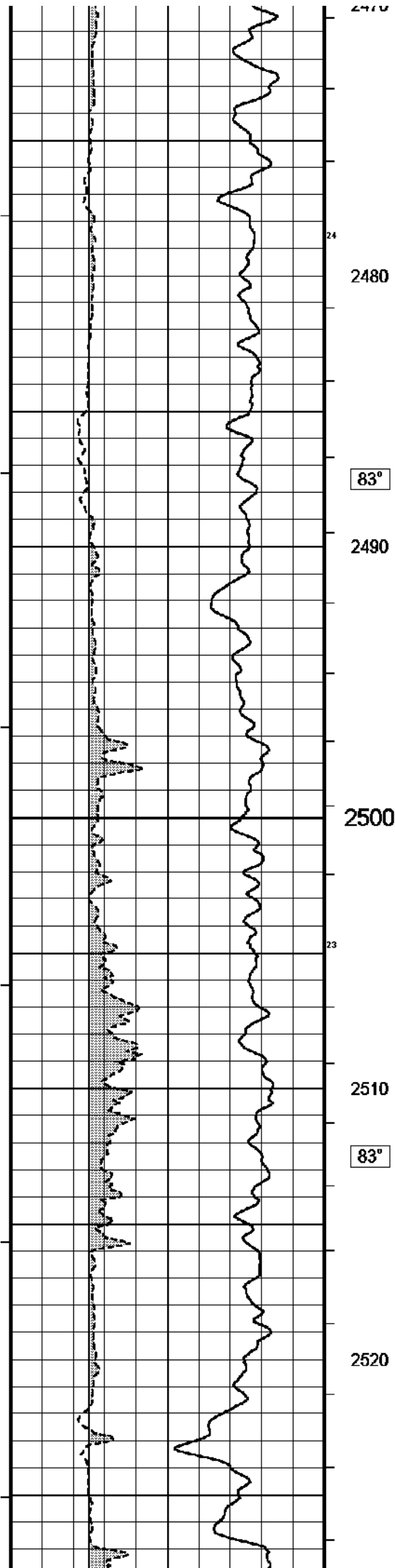
Recorded on 16-MAR-2003 13:38

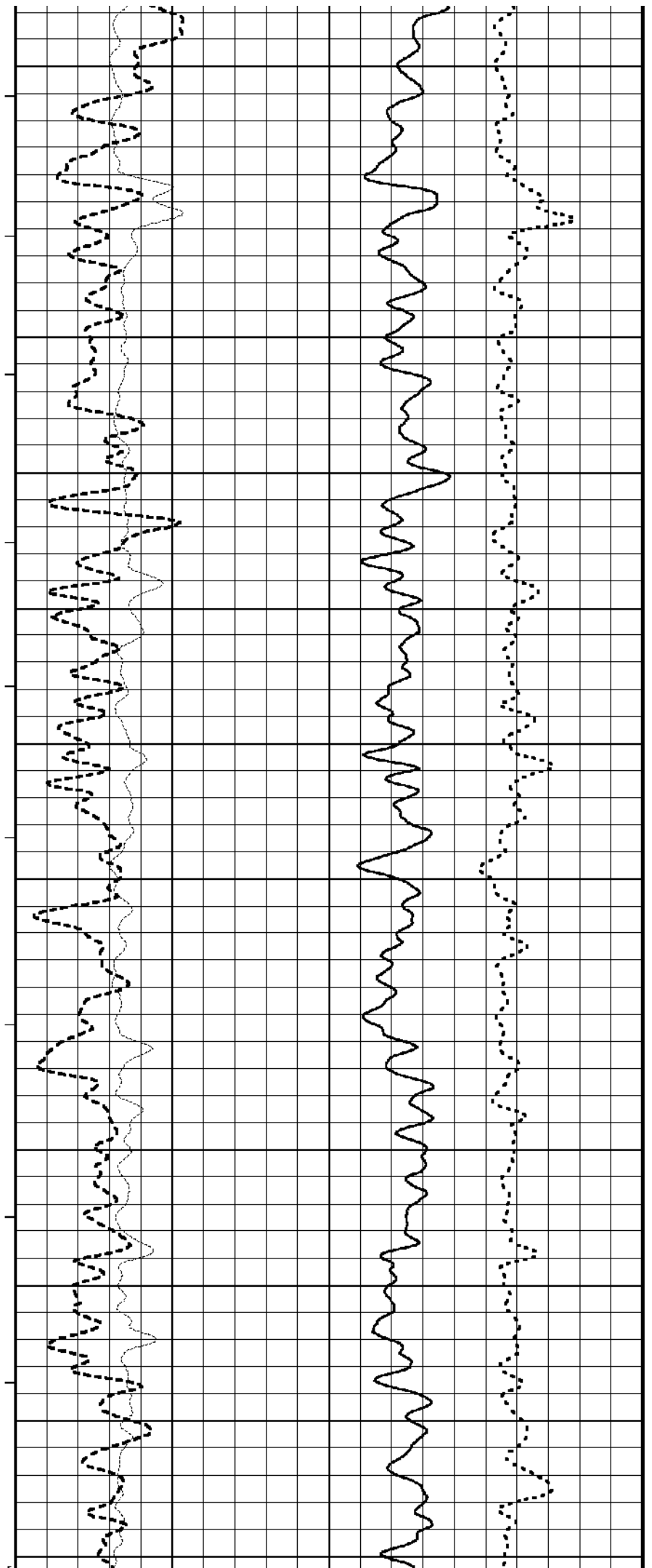
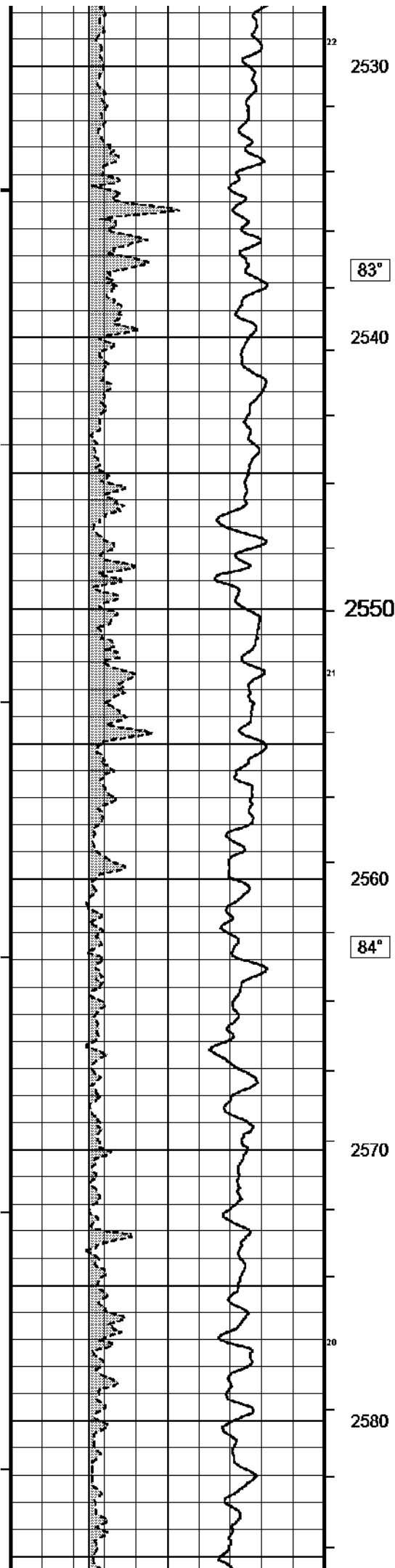
System Configuration Dates: Logged 23-OCT-2002: Processed 23-OCT-2002: Plotted 23-OCT-2002:

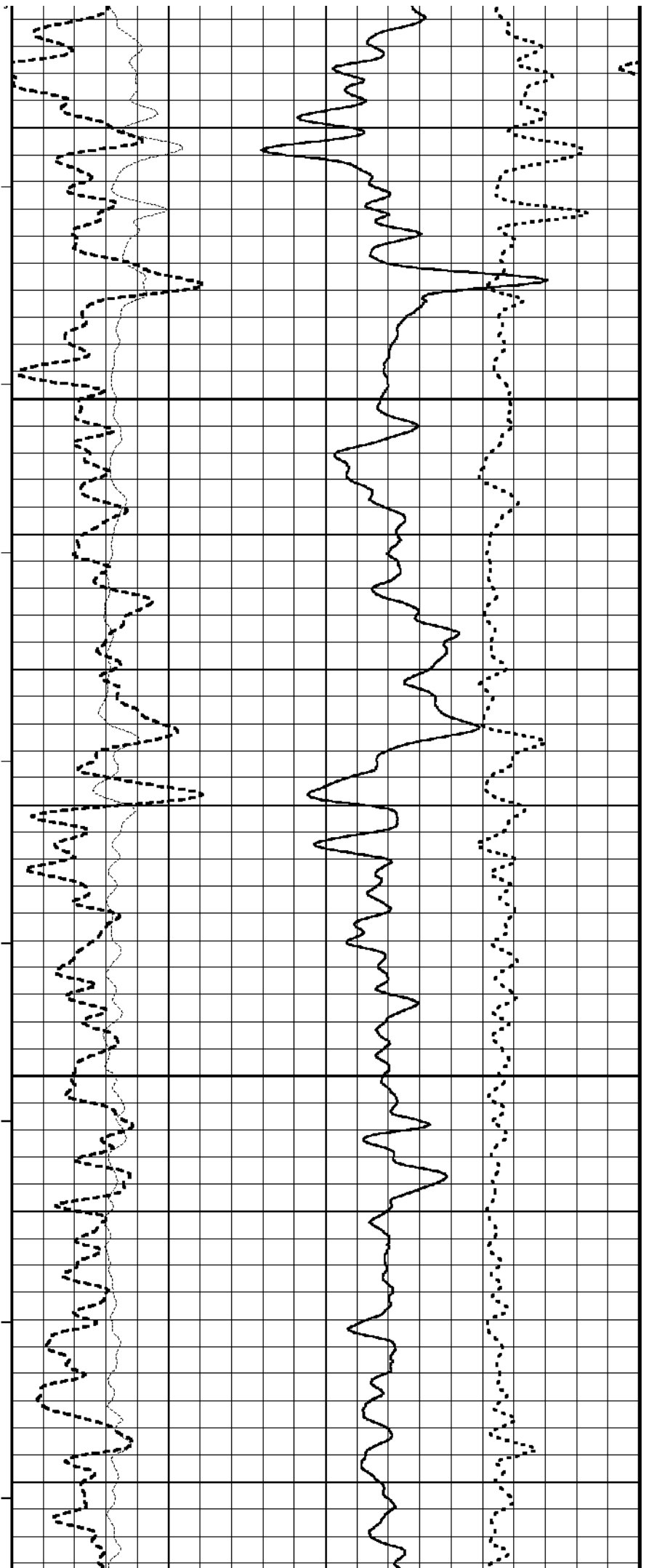
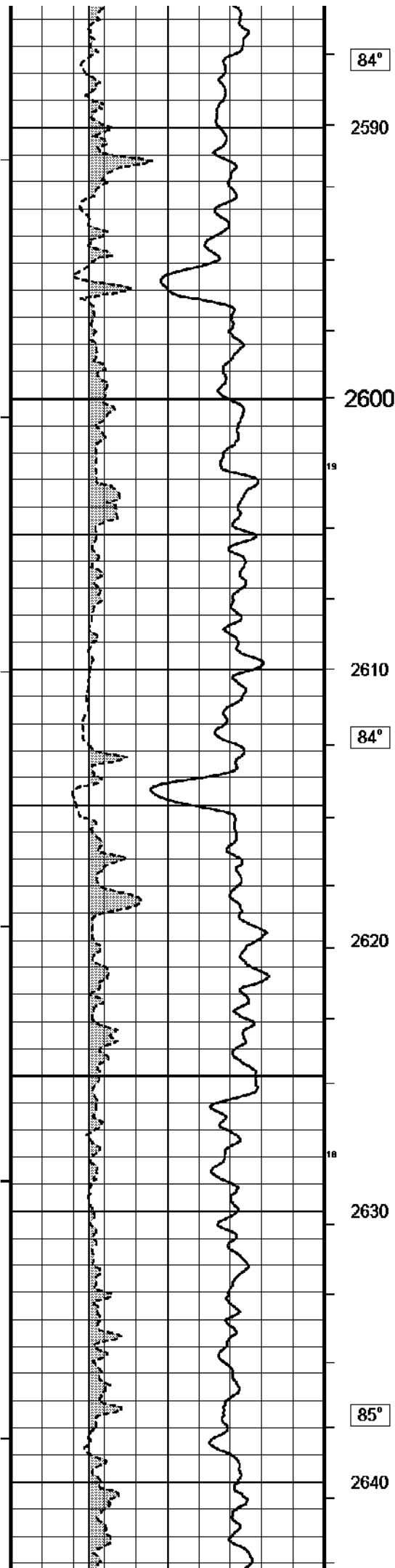


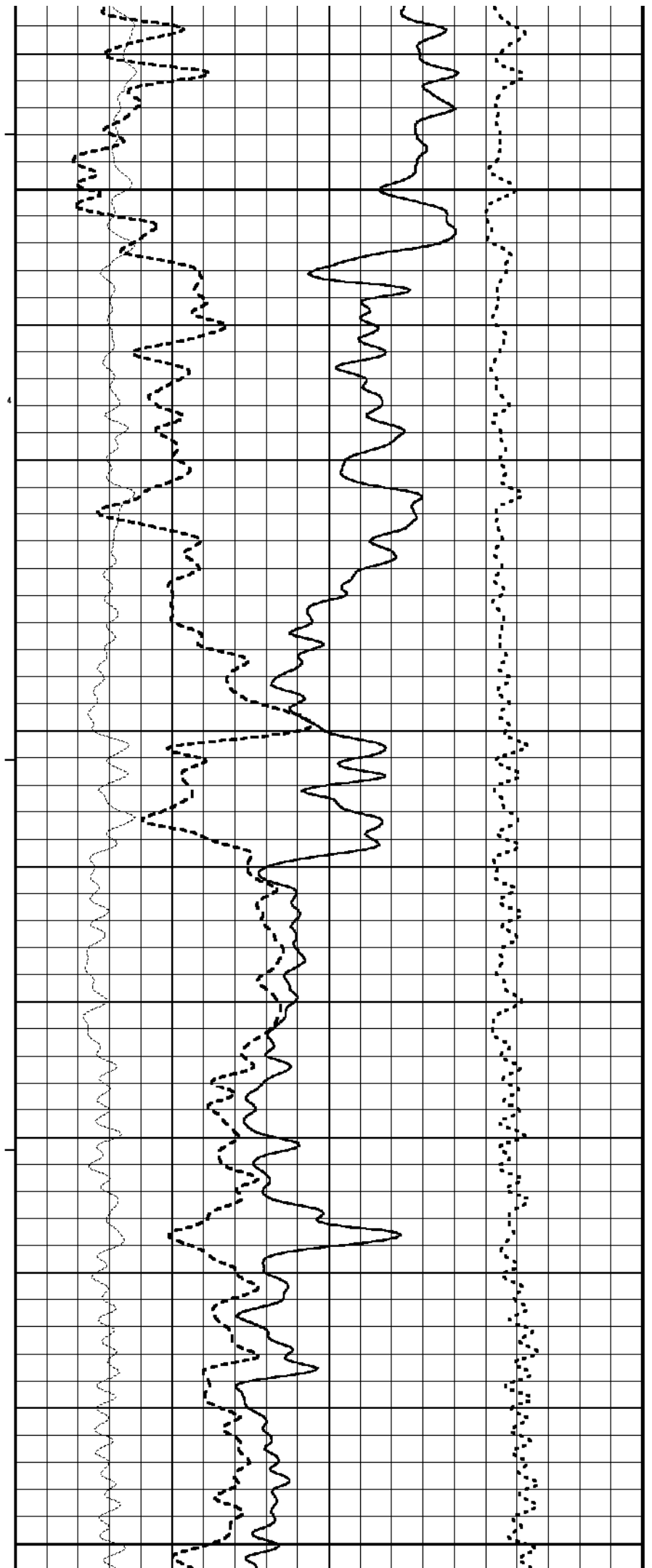
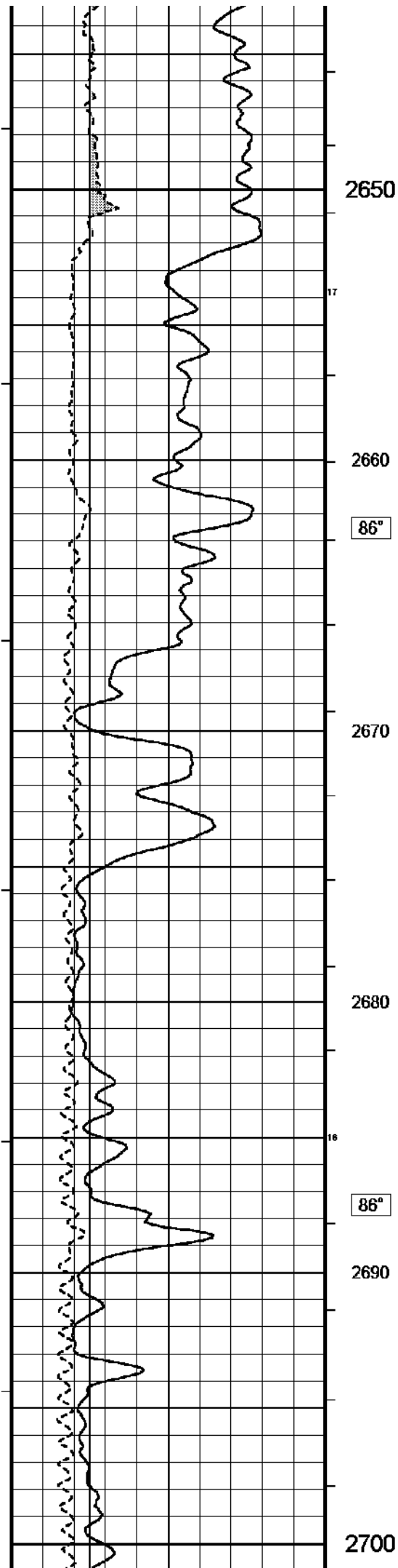


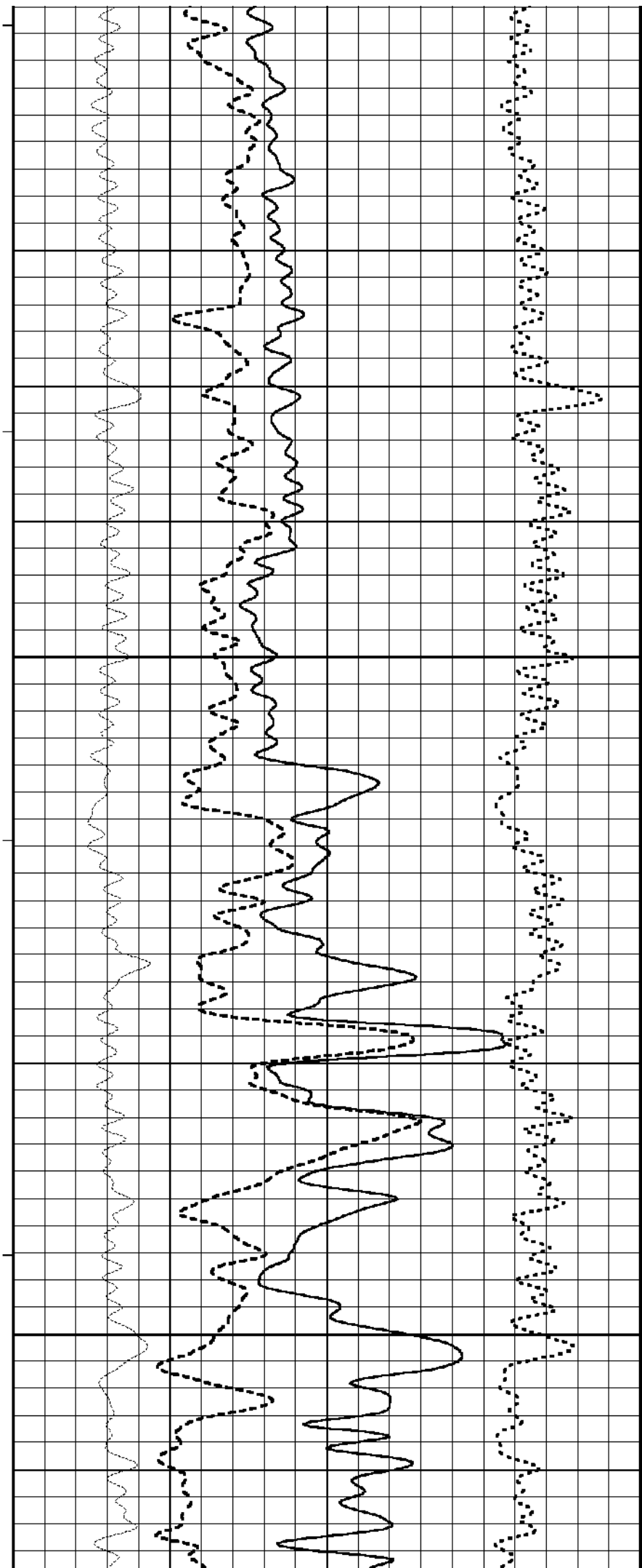
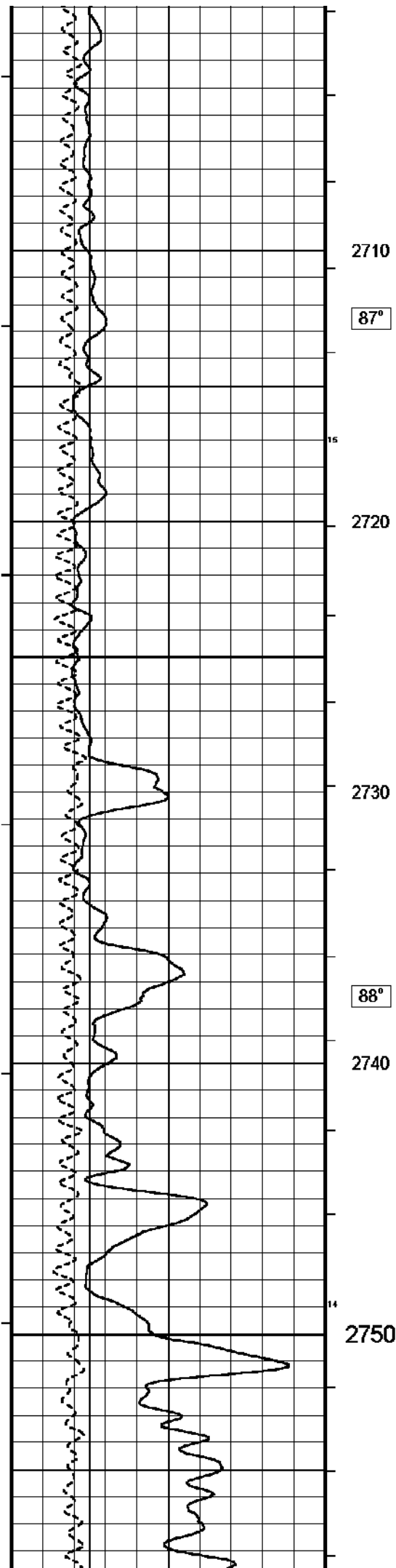


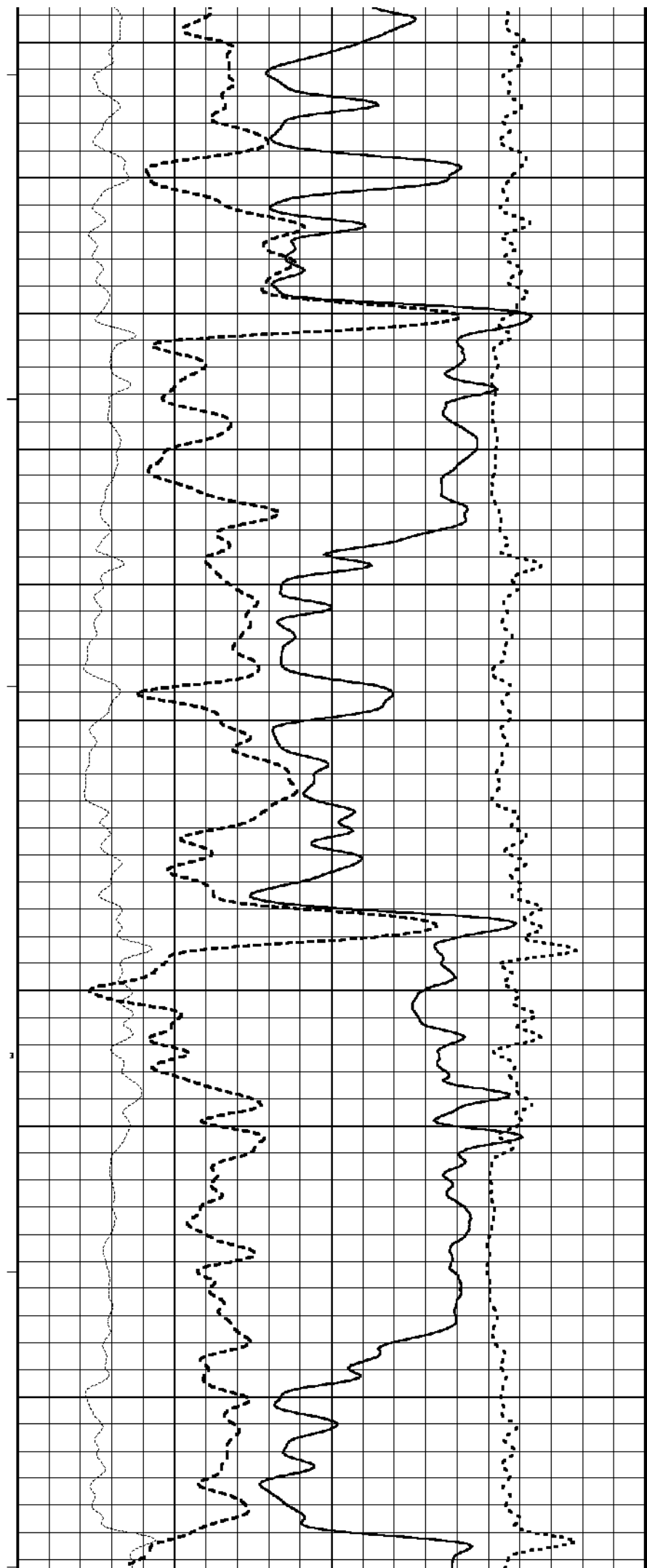
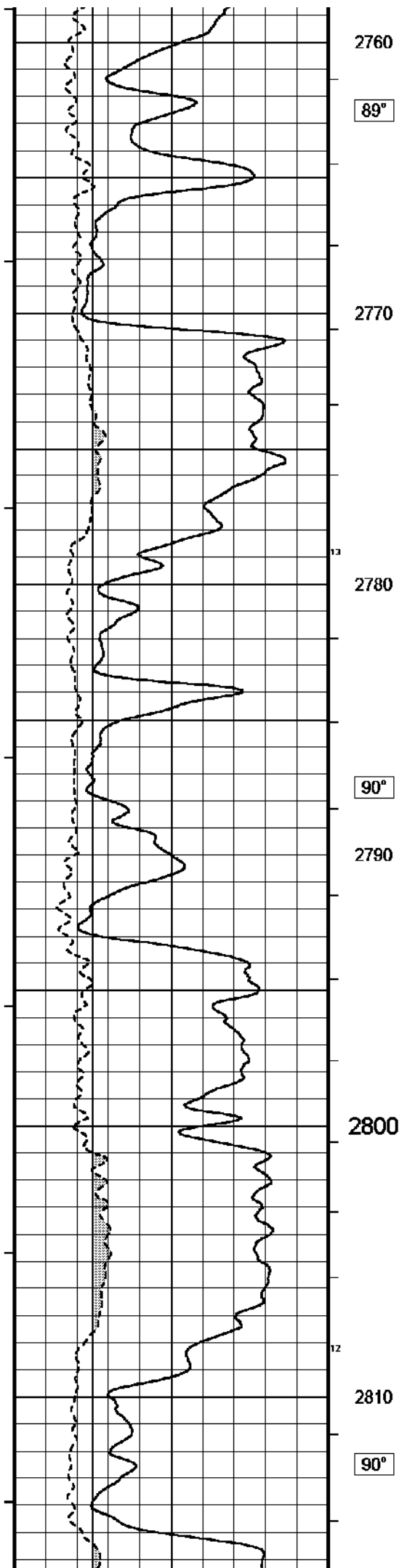


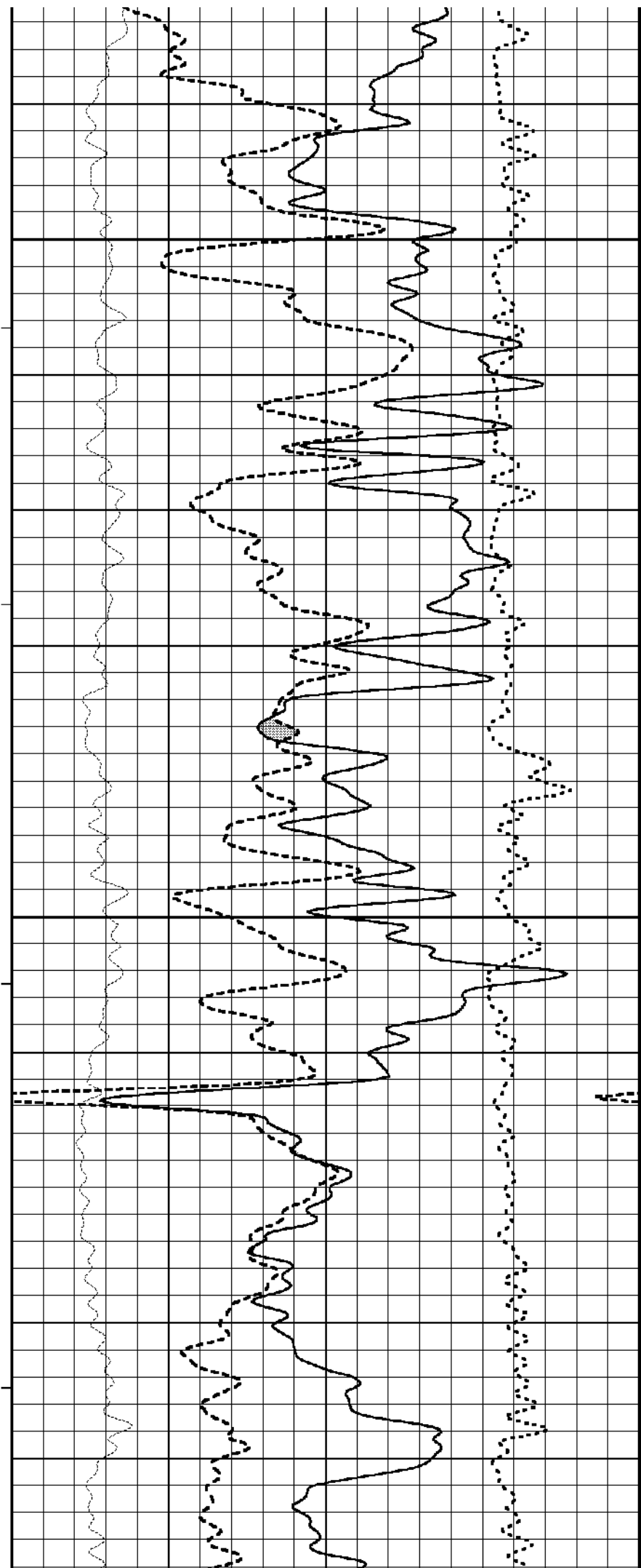
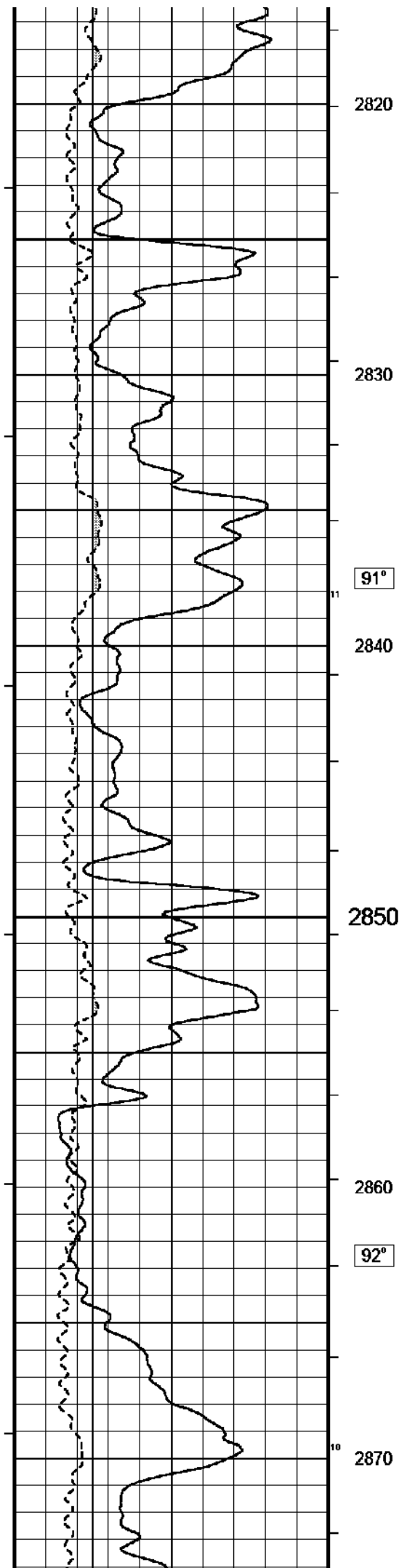


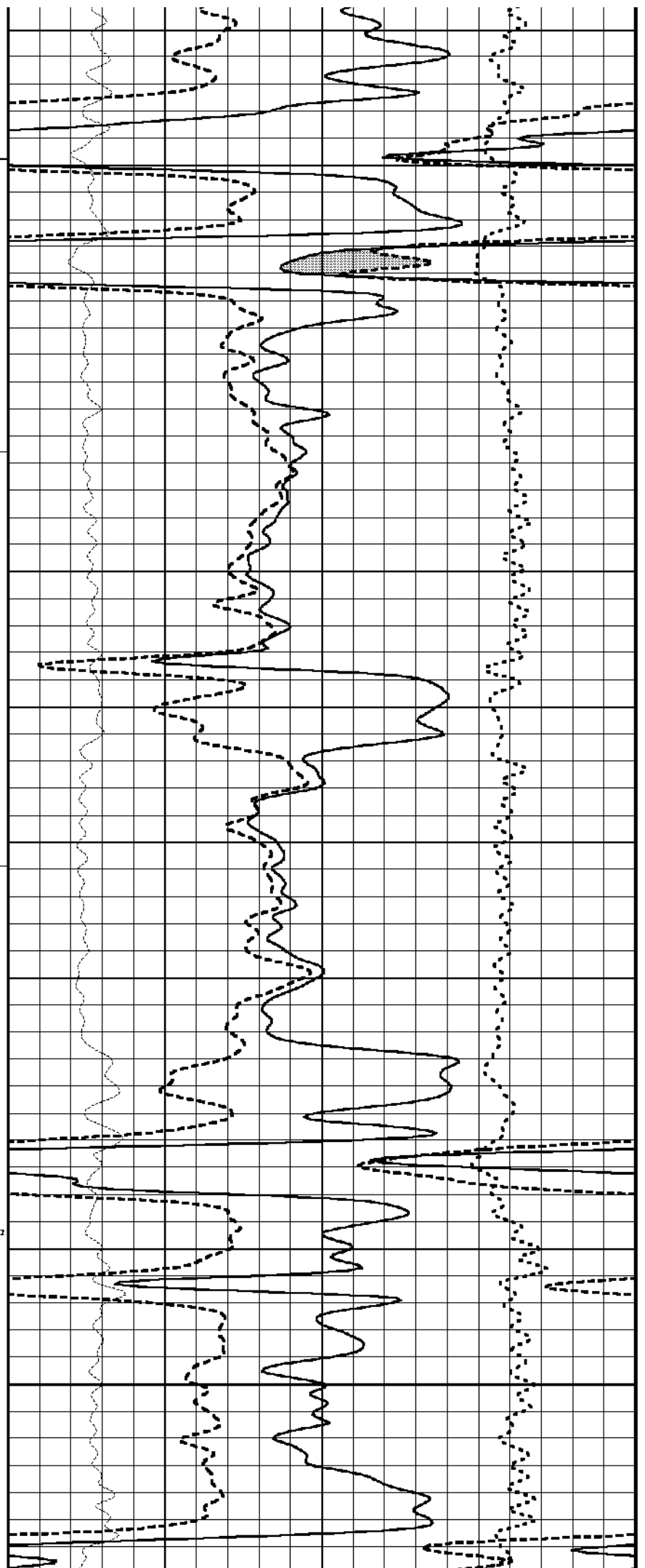
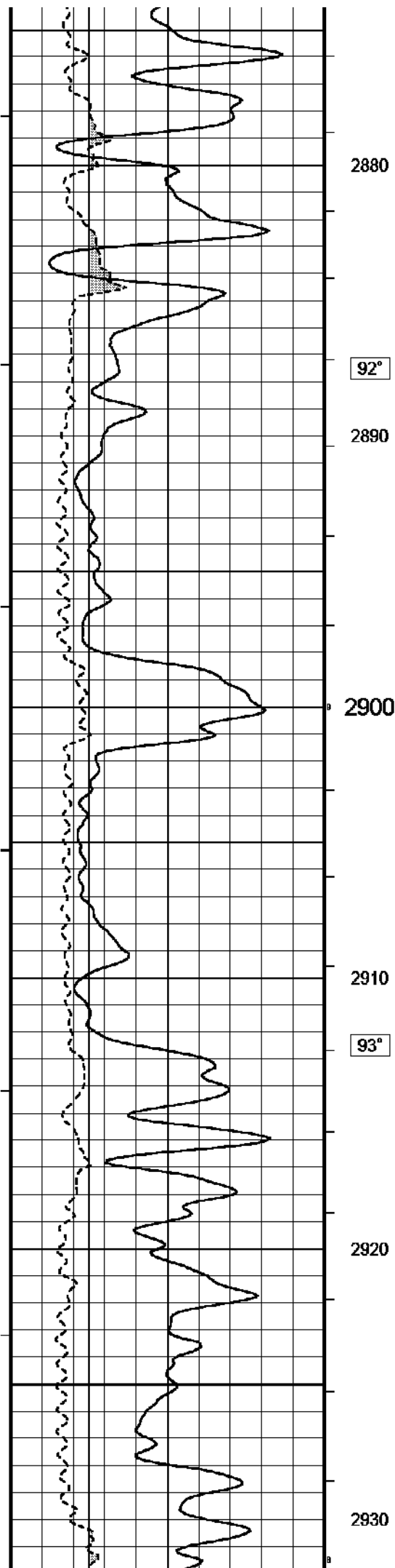


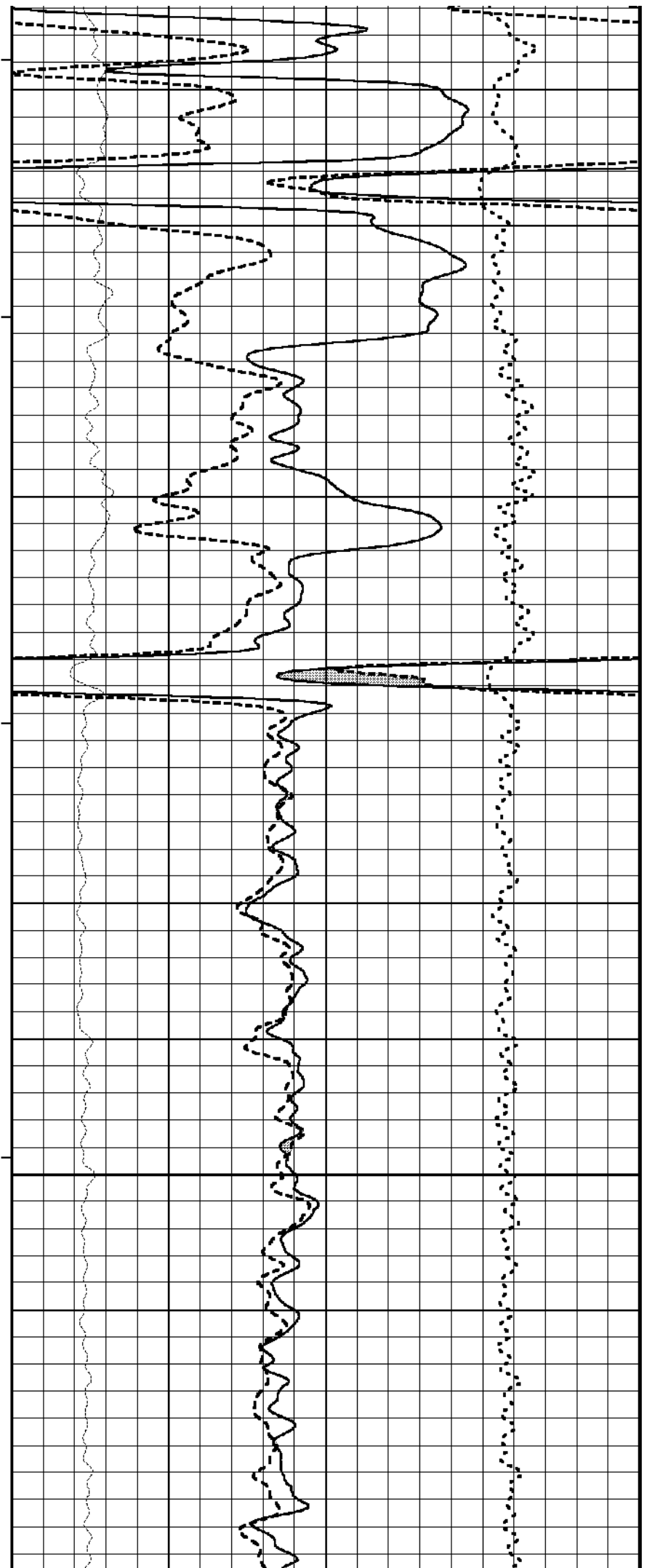
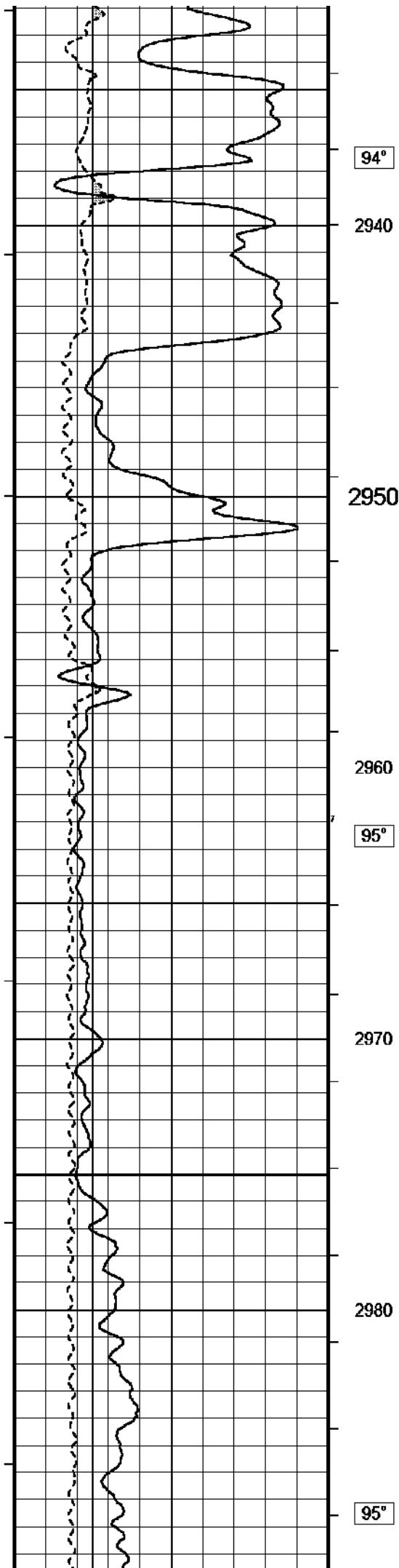


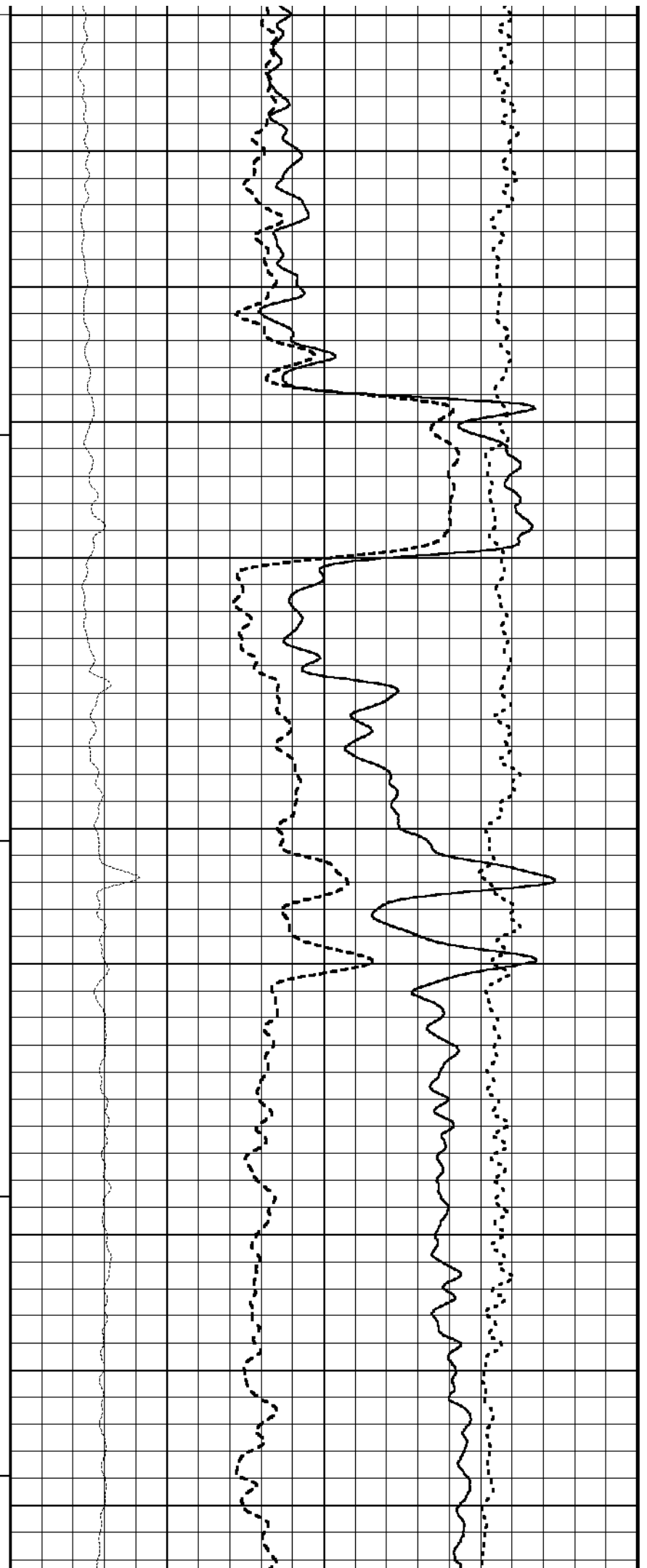
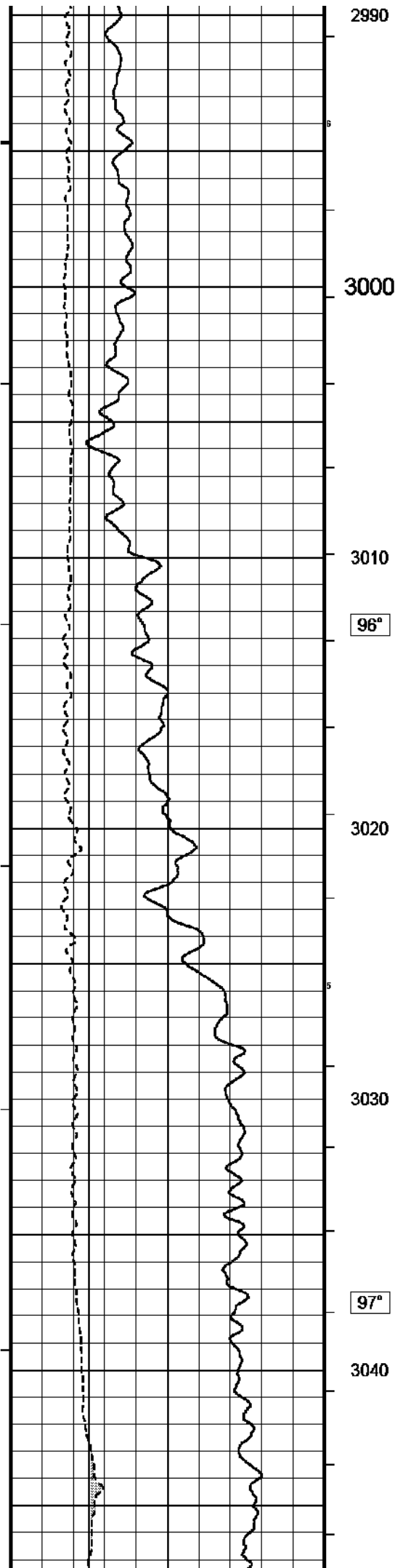


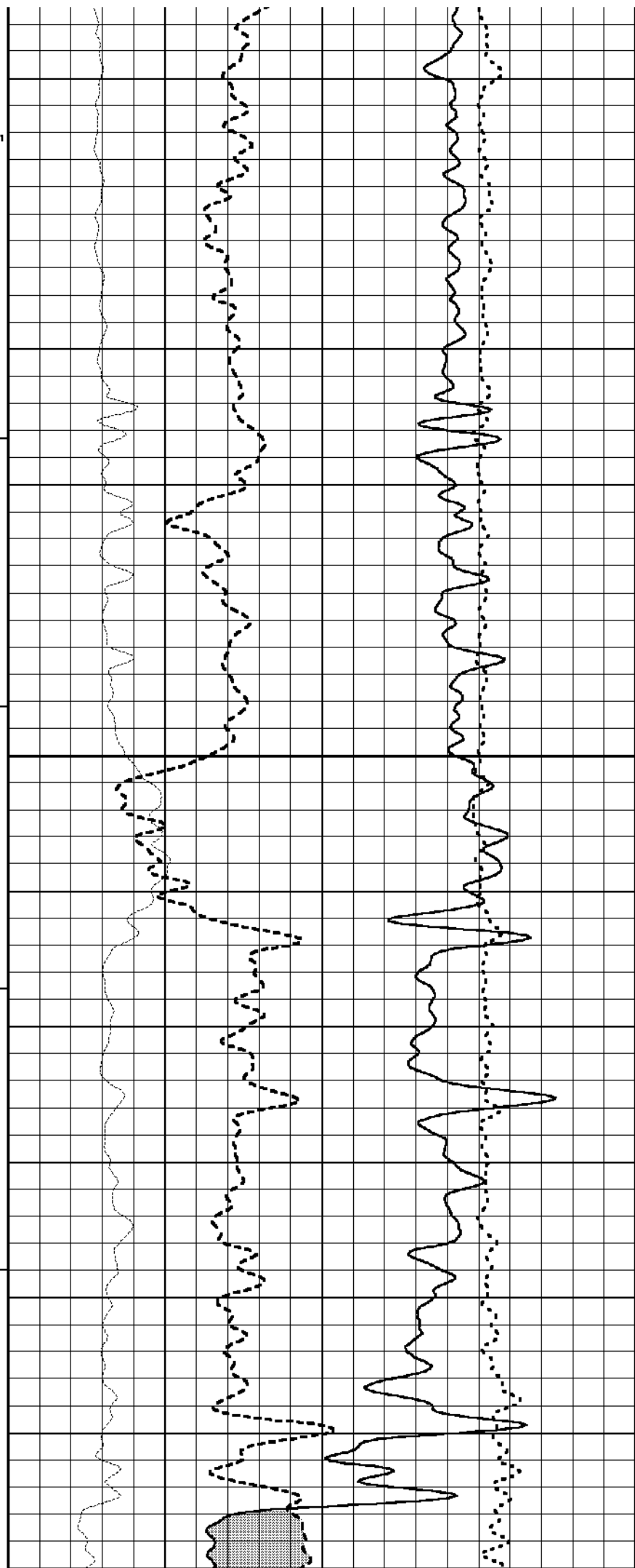
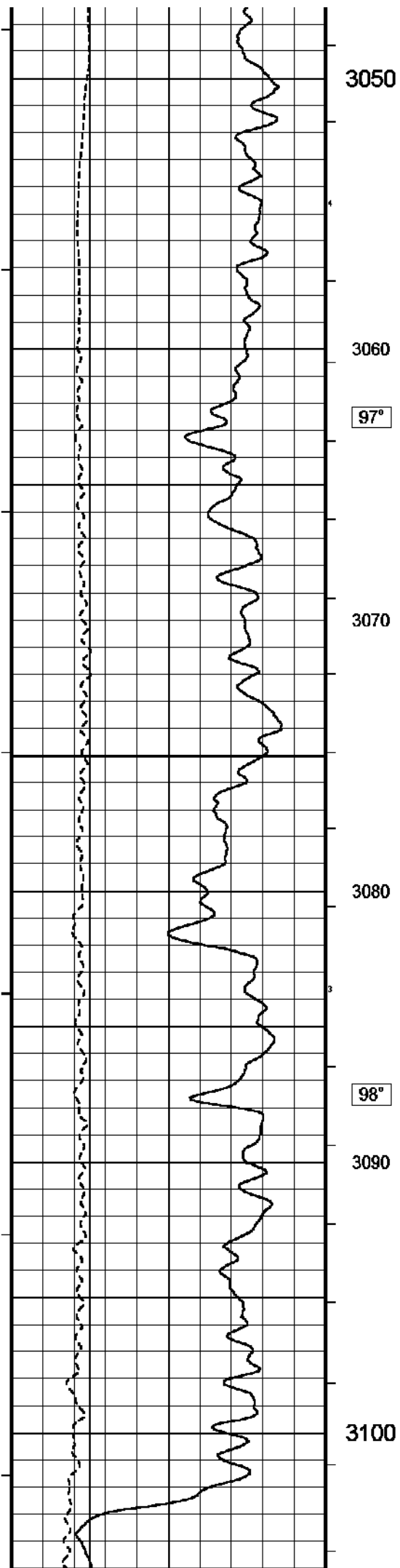


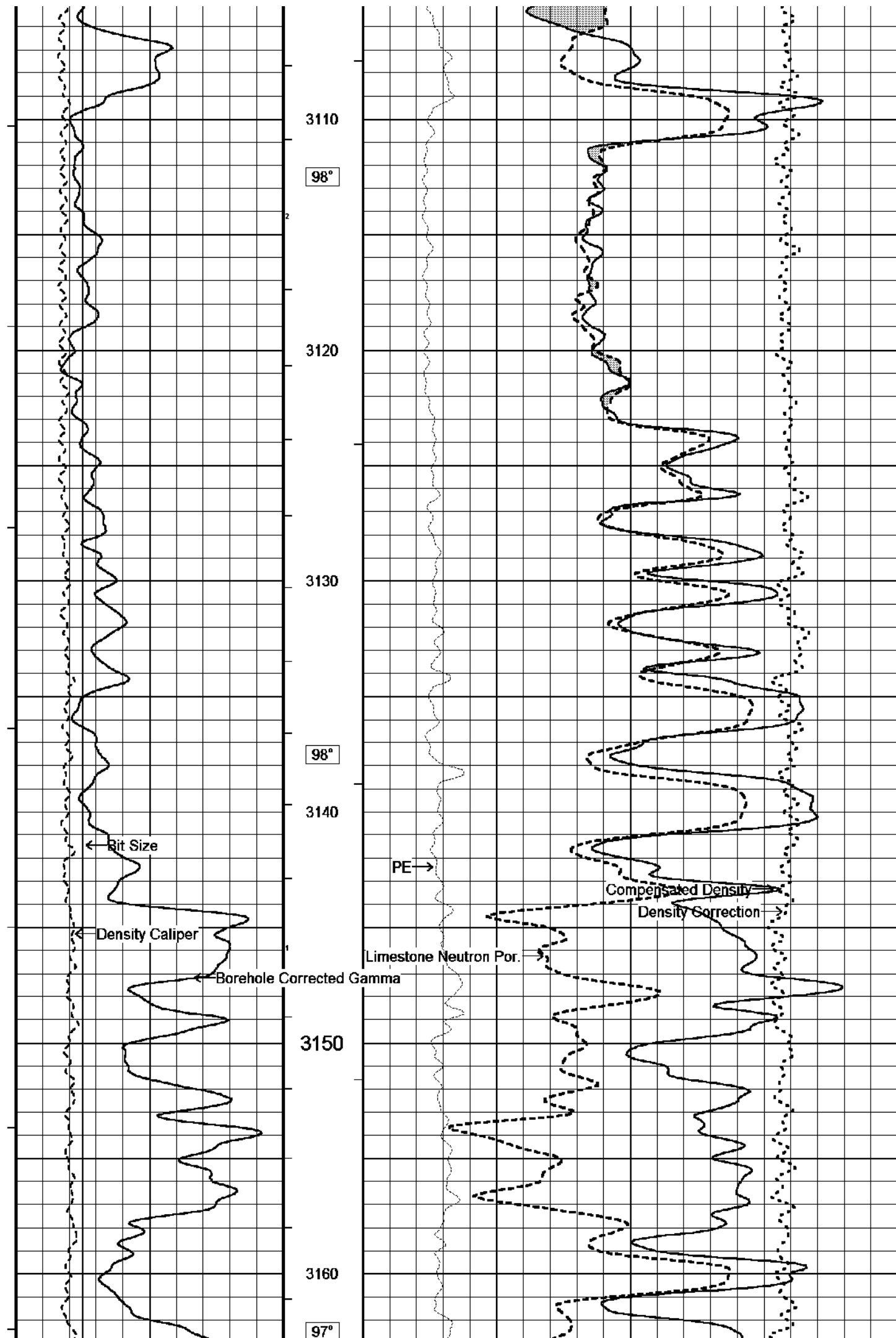


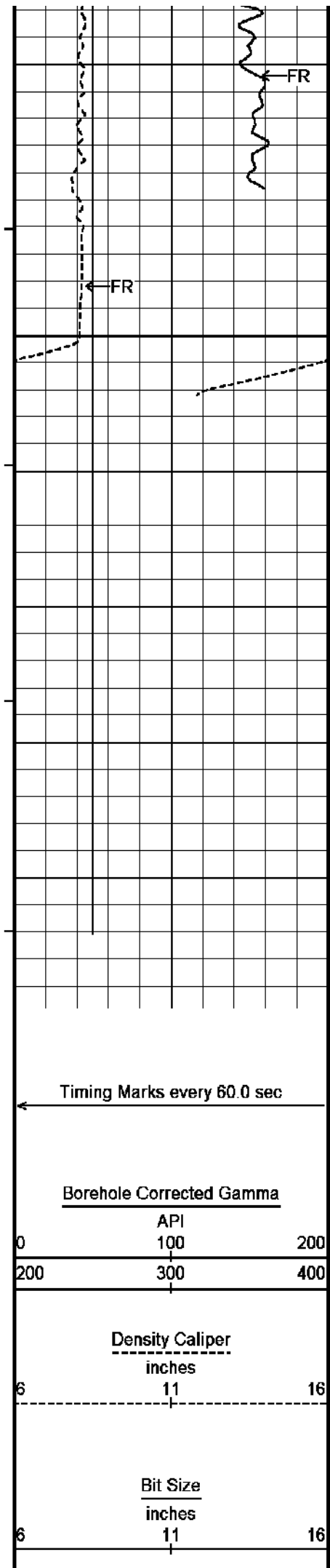












3170

3180

3190

3200

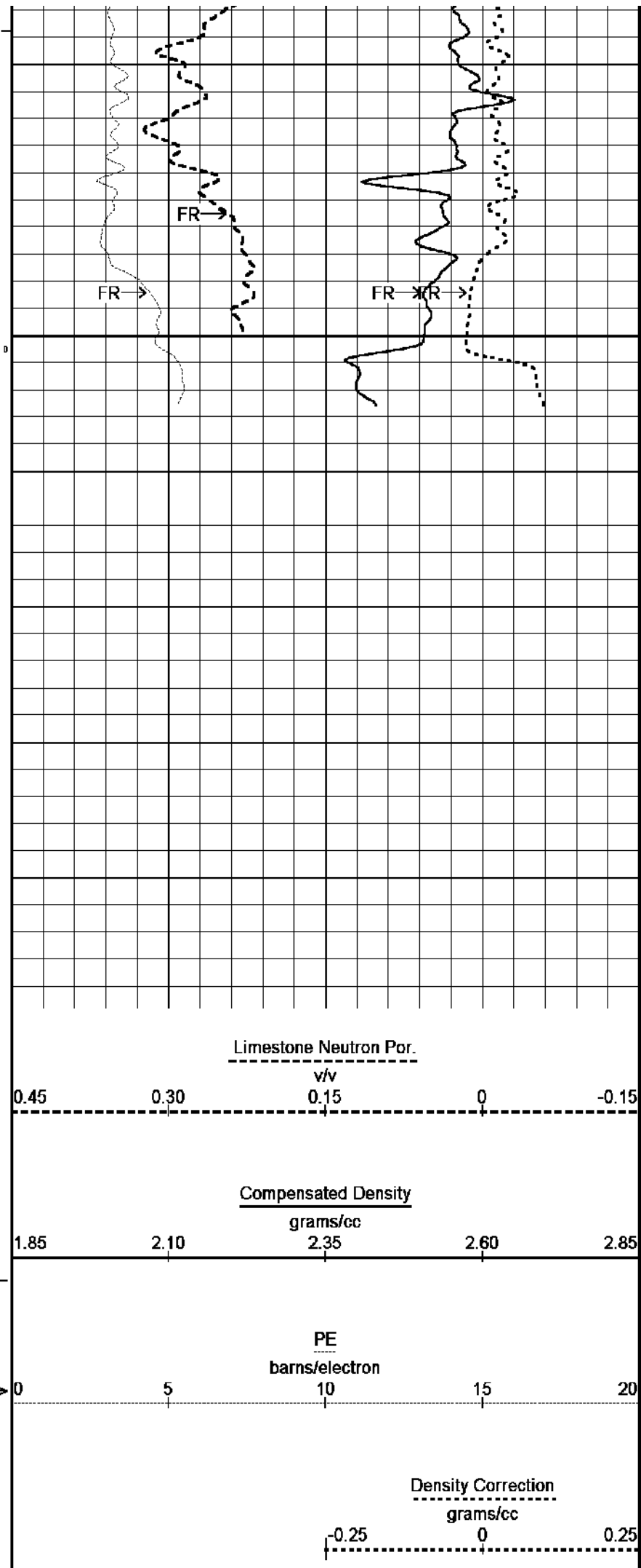
Depth in Metres

Borehole Temp in deg C

HVI every 0.1 cu m

Annular Integral every 0.1 cu m

Replay Scale 1:200



Depth Based Data - Maximum Sampling Increment 10.0cm

Plotted on 16-MAY-2003 13:51

Filename: C:\FLA A24\FLA_A24A_Main_Log.dta

Recorded on 16-MAR-2003 13:38

System Configuration Dates: Logged 23-OCT-2002: Processed 23-OCT-2002: Plotted 23-OCT-2002:

MAIN LOG 1:200

REPEAT SECTION 1:200

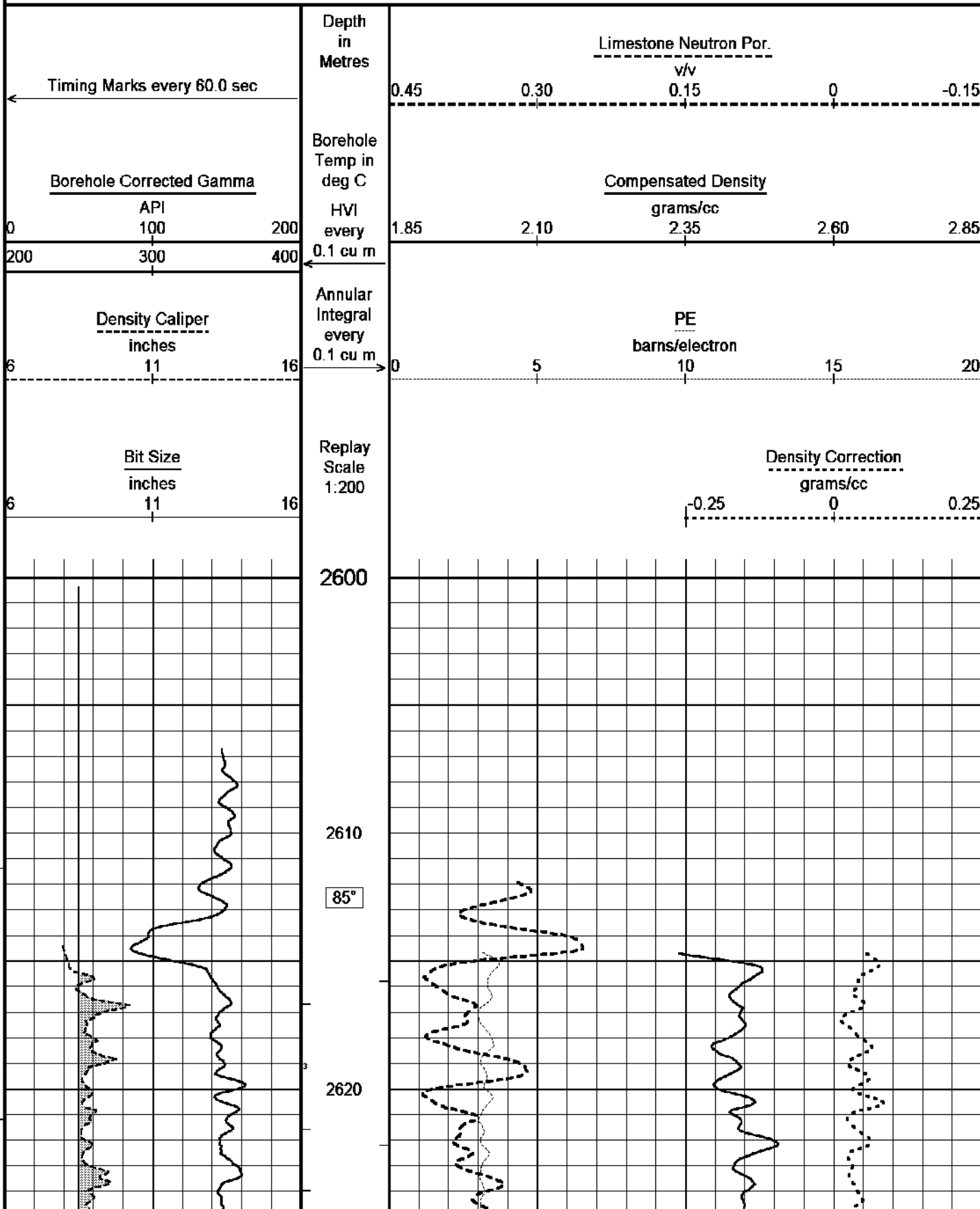
Depth Based Data - Maximum Sampling Increment 10.0cm

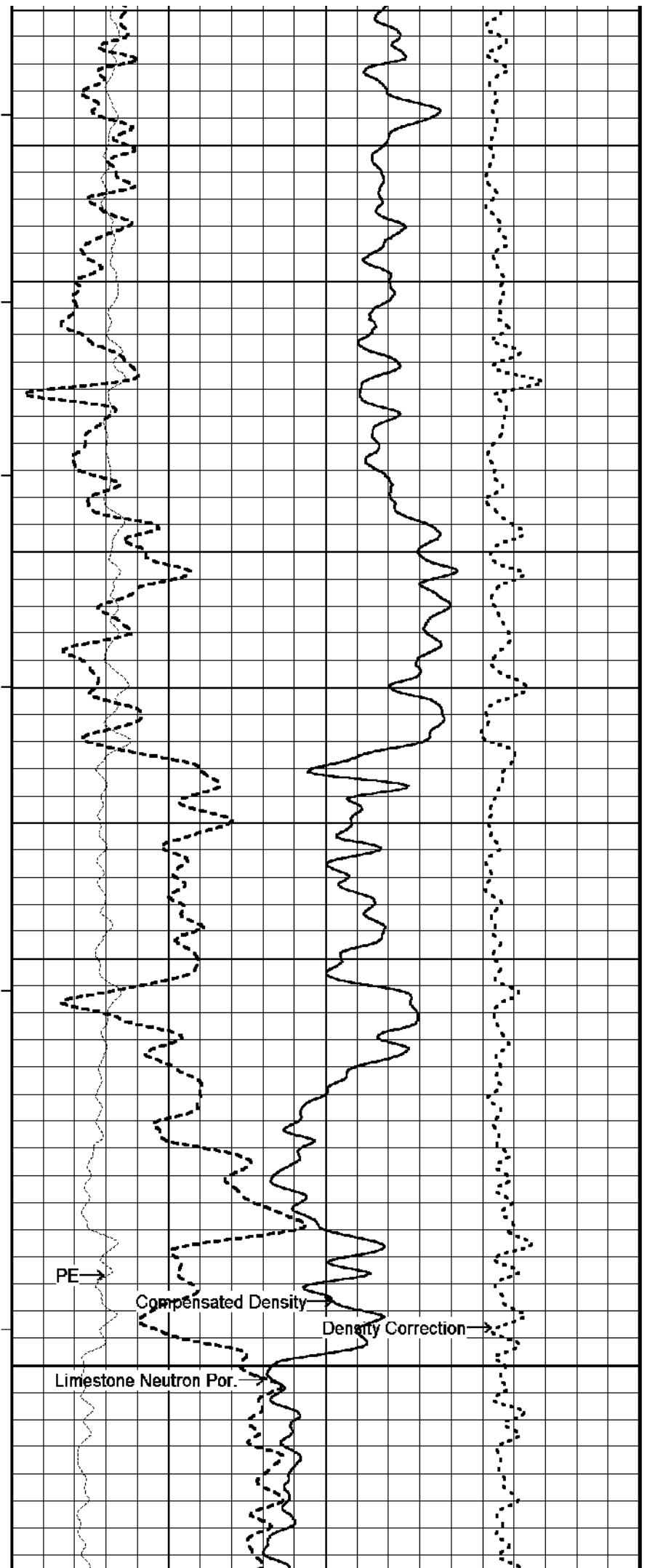
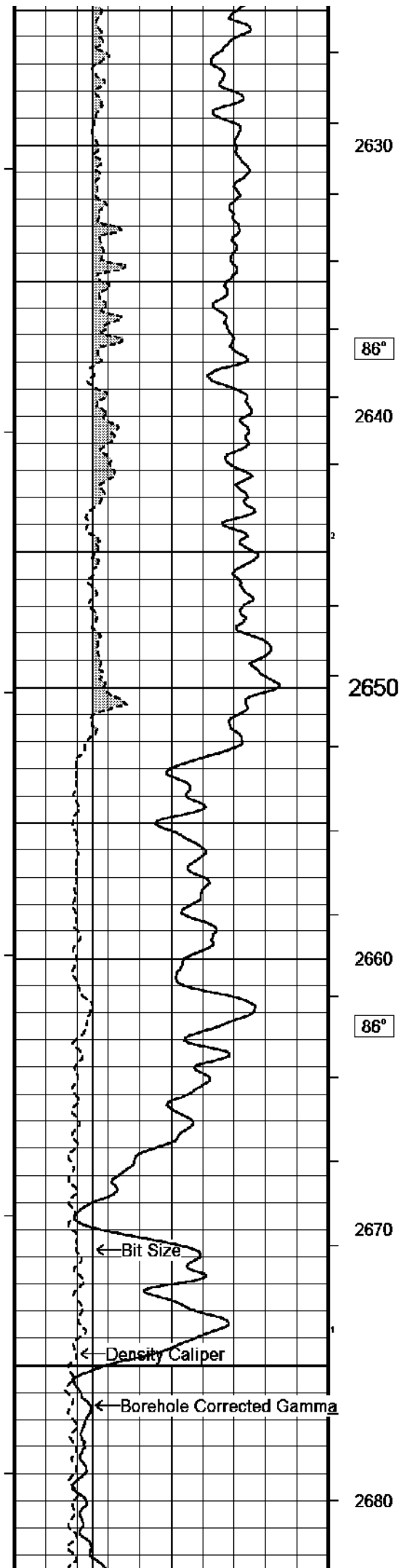
Plotted on 16-MAY-2003 13:51

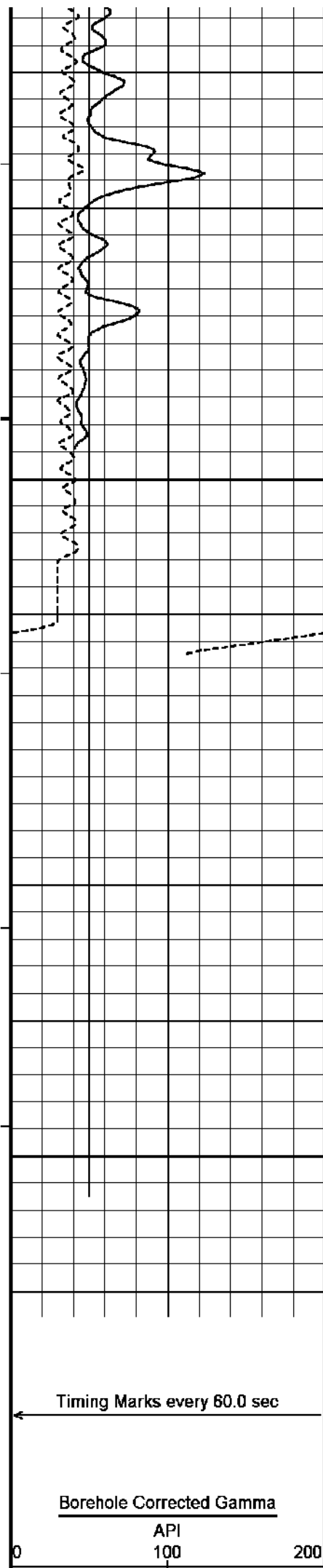
Filename: C:\FLA A24\FLA_A24A_Repeat_Section.dta

Recorded on 16-MAR-2003 15:18

System Configuration Dates: Logged 23-OCT-2002: Plotted 23-OCT-2002:







85°

2690

2700

2710

2720

2730

Depth
in
Metres

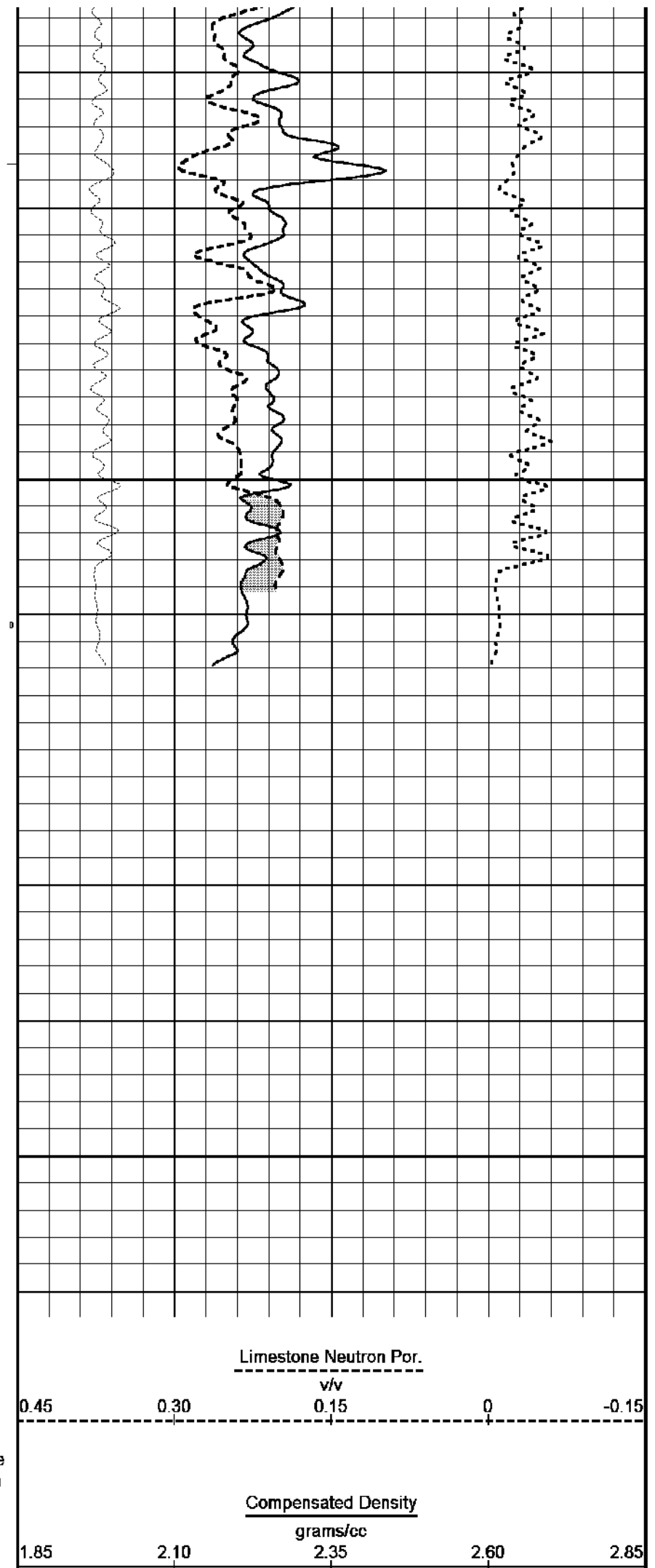
Borehole
Temp in
deg C
HVI
every

Borehole Corrected Gamma

API
100

0

200



Limestone Neutron Por.

v/v

0.45

0.30

0.15

0

-0.15

Compensated Density

grams/cc

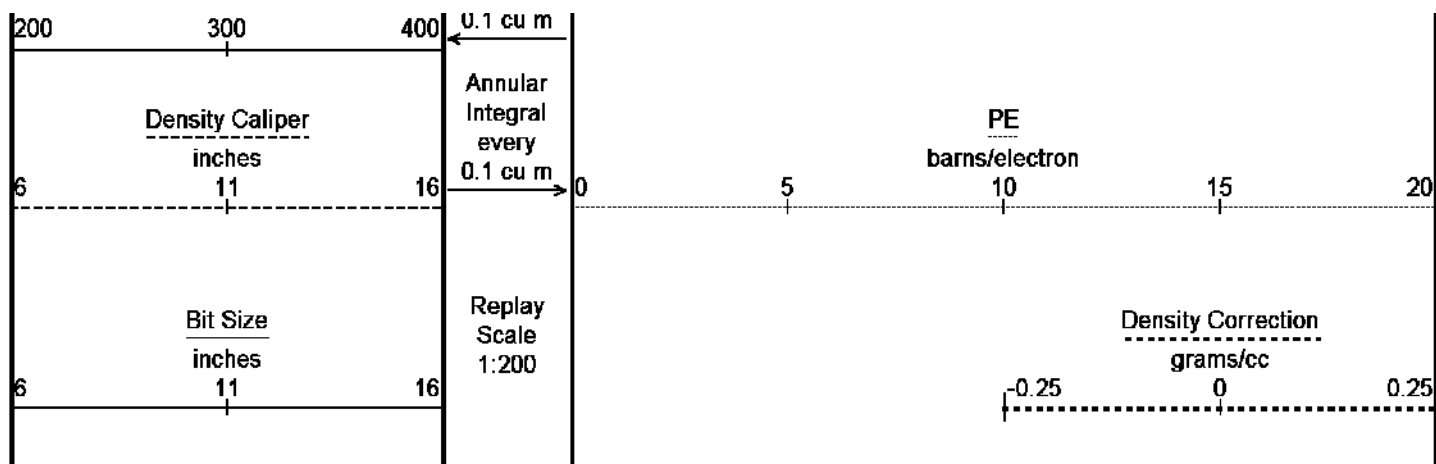
1.85

2.10

2.35

2.60

2.85



Depth Based Data - Maximum Sampling Increment: 10.0cm

Plotted on 16-MAY-2003 13:51

Filename: C:\FLA A24A\FLA_A24A_Repeat_Section.dta

Recorded on 16-MAR-2003 15:18

System Configuration Dates: Logged 23-OCT-2002: Plotted 23-OCT-2002:



REPEAT SECTION 1:200



BEFORE SURVEY CALIBRATION

C:\FLA A24A\FLA_A24A_Main_Log.dta

General Constants All 000

General Parameters

Mud Resistivity	0.12	ohm-metres
Mud Resistivity Temperature	25.00	degrees C
Water Level	0.00	metres
Density/Neutron Processing	Wet Hole	

Hole/Annular Volume and Differential Caliper Parameters

HVOL Caliper 1	Density Caliper	
HVOL Caliper 2	None	
Annular Volume Diameter	7.00	inches
Caliper for Differential Caliper	Density Caliper	

Rwa Parameters

Porosity used	Base Density Porosity
Resistivity used	Deep Laterolog
RWA Constant A	0.61
RWA Constant M	2.15

Gamma Calibration MCG 044

Field Calibration on 14-MAR-2003 09:40

	Measured	Calibrated (API)
Background	16	10
Calibrator (Gross)	1435	919
Calibrator (Net)	1419	909

Gamma Constants MCG 044

Gamma Calibrator Number	060	
Mud Density	1.14	gm/cc
Caliper Source for Processing	Density Caliper	
Tool Position	Eccentred	
Concentration of KCl	0.00	kppm

High Resolution Temperature Calibration MCG 044

Field Calibration on 4-SEP-2002,14:58

	Measured	Calibrated(Deg C)
Lower	1.00	1.00
Upper	150.00	150.00

High Resolution Temperature Constants MCG 044

Pre-filter Length	11
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Neutron Calibration MDN 068

Base Calibration on 17-JAN-2003 15:32

Field Check on 14-MAR-2003 04:20

Base Calibration

..	Measured	..	Calibrated (cps)
----	----------	----	------------------

	near	far	near	far
	2859	89	3714	110
Ratio	32.108		33.764	
Field Calibrator at Base	Calibrated (cps)			
	1878		2704	
Ratio	0.695			
Field Check	Calibrated (cps)			
	1788		2640	
Ratio	0.677			

Neutron Constants MDN 068

Neutron Source Id	724	
Neutron Jig Number	52	
Epithermal Neutron	No	
Caliper Source for Processing	Density Caliper	
Stand-off	0.00	inches
Mud Density	1.14	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	56.00	kppm
Formation Fluid Salinity Source	None	
Formation Fluid Salinity	N/A	kppm
Barite Mud Correction	Not Applied	

Caliper Calibration MPD 067

Base Calibration on 19-FEB-2003,13:48
Field Calibration on 14-MAR-2003 03:53

Base Calibration		
Reading No	Measured	Calibrator Size (in)
1	14847	4.01
2	24400	5.99
3	34321	7.98
4	44338	9.94
5	55648	12.01
6	N/A	N/A

Field Calibration		
	Measured Caliper (in)	Actual Caliper (in)
	7.98	7.98

Photo Density Calibration MPD 067

Base Calibration on 19-JAN-2003 12:40
Field Check on 14-MAR-2003 03:49

Density Calibration				
Base Calibration		Measured	Calibrated (sdu)	
	Near	Far	Near	Far
Reference 1	58595	20350	53282	19349
Reference 2	27401	2638	25298	2555

Field Check at Base		
	960.1	1164.2

Field Check		
	959.8	1151.7

PE Calibration				
Base Calibration		Measured	Calibrated	
	WS	WH	Ratio	Ratio
Background	180	835		
Reference 1	18645	58403	0.321	0.318
Reference 2	7313	27257	0.270	0.273

Field Check at Base		
	179.8	835.5

Field Check		
	178.7	833.1

Density Constants MPD 067

Density Constants WPD 007

Density Source Id	226	
Nylon Calibrator Number	517	
Aluminium/Fe Calibrator Number	517	
Density Shoe Profile	4 inch	
Caliper Source for Processing	Density Caliper	
PE Correction to Density	Not Applied	
Mud Density	1.14	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	0.00

DOWNHOLE EQUIPMENT

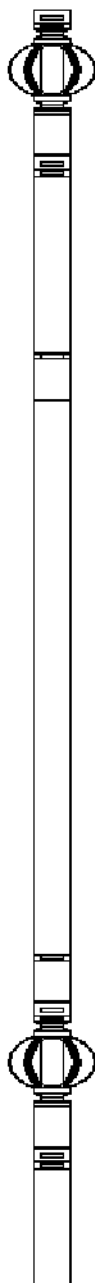
All measurements relative to tool zero.

Compact Inline Standoff B
MIS 52 Length: 0.65 m Weight: 15.43 lb

Compact Stiff Bridle Electrode Sub.
MBE 9 Length: 3.76 m Weight: 94.80 lb

Compact Inline Standoff B
MIS 77 Length: 0.65 m Weight: 15.43 lb

Compact Stiff Bridle Electrode Sub.
MBE 5 Length: 3.76 m Weight: 94.80 lb



Compact Inline Standoff B
MIS 31 Length: 0.65 m Weight: 15.43 lb

Compact Gamma
MCG 44 Length: 2.65 m Weight: 63.93 lb

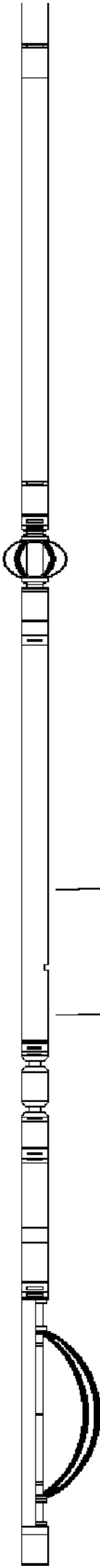
27.98 m GRGC - Gamma Ray

27.09 m CGXT - MCG External Temperature

Compact Knuckle Joint
SKJ 46 Length: 0.66 m Weight: 24.25 lb

Compact Swivel Head Adaptor
SHA 27 Length: 0.83 m Weight: 26.46 lb

Compact Inline Bowspring A
MIS 24 Length: 1.74 m Weight: 33.07 lb



Compact Neutron
MDN 69 Length: 1.53 m Weight: 50.71 lb

Compact Density/Caliper
MPD 67 Length: 2.92 m Weight: 90.39 lb

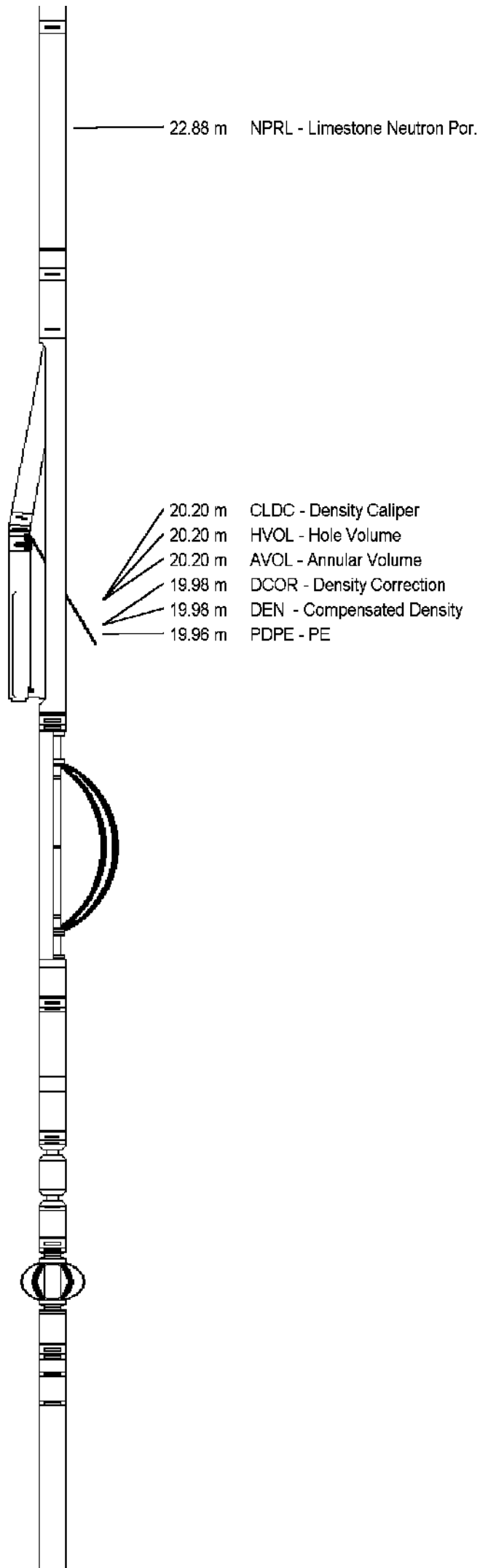
Compact Inline Bowspring A
MIS 25 Length: 1.74 m Weight: 33.07 lb

Compact Swivel Head Adaptor
SHA 28 Length: 0.83 m Weight: 26.46 lb

Compact Knuckle Joint
SKJ 45 Length: 0.66 m Weight: 24.25 lb

Compact Inline Standoff B
MIS 53 Length: 0.65 m Weight: 15.43 lb

Compact Upper Guard Sub.
MUG 17 Length: 2.74 m Weight: 68.34 lb



Compact Inline Standoff B
MIS 49 Length: 0.65 m Weight: 15.43 lb

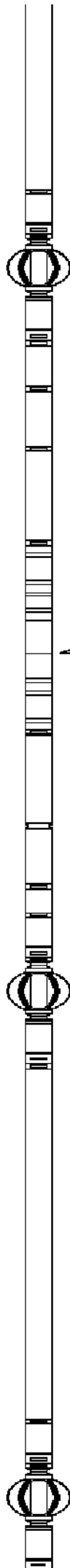
Compact Laterolog Electrode Sub.
MLE 15 Length: 3.76 m Weight: 92.59 lb

10.06 m DSLL - Shallow Laterolog
10.06 m DDLL - Deep Laterolog

Compact Inline Standoff B
MIS 76 Length: 0.65 m Weight: 15.43 lb

Compact Lower Guard Sub.
MLG 7 Length: 2.44 m Weight: 55.12 lb

Compact Inline Standoff B
MIS 73 Length: 0.65 m Weight: 15.43 lb



Compact Knuckle Joint
SKJ 48 Length: 0.66 m Weight: 24.25 lb

Compact Inline Standoff B
MIS 75 Length: 0.65 m Weight: 15.43 lb

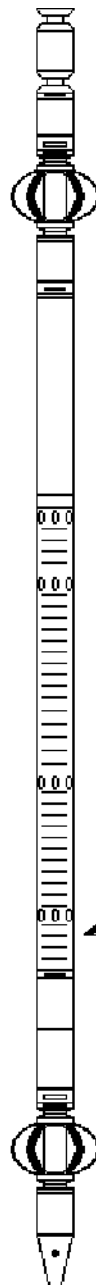
Compact Sonic
MSS 28 Length: 3.82 m Weight: 72.75 lb

Compact Inline Standoff B
MIS 30 Length: 0.65 m Weight: 15.43 lb

Compact Hole Finder
HFS 1 Length: 0.24 m Weight: 2.20 lb

Total Length: 40.60 m

Total Weight: 1016.33 lb



COMPANY	ESSO AUSTRALIA PTY LTD
WELL	FLOUNDER A24A
FIELD	GIPPSLAND BASIN
PROVINCE/COUNTY	BASS STRAIT
COUNTRY/STATE	AUSTRALIA

Elevation Kelly Bushing	metres	First Reading	3193.40	metres
Elevation Drill Floor	33.85 metres	Depth Driller	3193.00	metres
Elevation Ground Level	-93.00 metres	Depth Logger	3195.00	metres

Reeves

PHOTO DENSITY
1:200 MD

