

Reeves

PHOTO DENSITY COMPENSATED NEUTRON 1:200 TVD

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
API Number DUAL LATEROLOG
Permit Number COMPENSATED SONIC

Permanent Datum MSL, Elevation 0 metres
Log Measured From RT@33.85 metres above Permanent Datum
Drilling Measured From RT

Elevations:
KB 33.85 metres
DF -93.00 metres
GL

Date	16-MAR-2003	
Run Number	1	
Depth Driller	2626.97	metres
Depth Logger	2628.90	metres
First Reading	2627.30	metres
Last Reading	1876.30	metres
Casing Driller	597.60	metres
Casing Logger	596.20	metres
Bit Size	8.50	Inches
Hole Fluid Type	KCl/PHPA/GLY	
Density / Viscosity	9.50 lb/USg	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	W. Arnold, C. Burton
Witnessed By	G. Smith	
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 1/2" STANDOFF

BARITE CONTENT 1.65%

AFTER SURVEY CALIBRATION

C:\FLA A24A\FLA_A24A_Sonde_Picture.dta

Gamma Check MCG 044

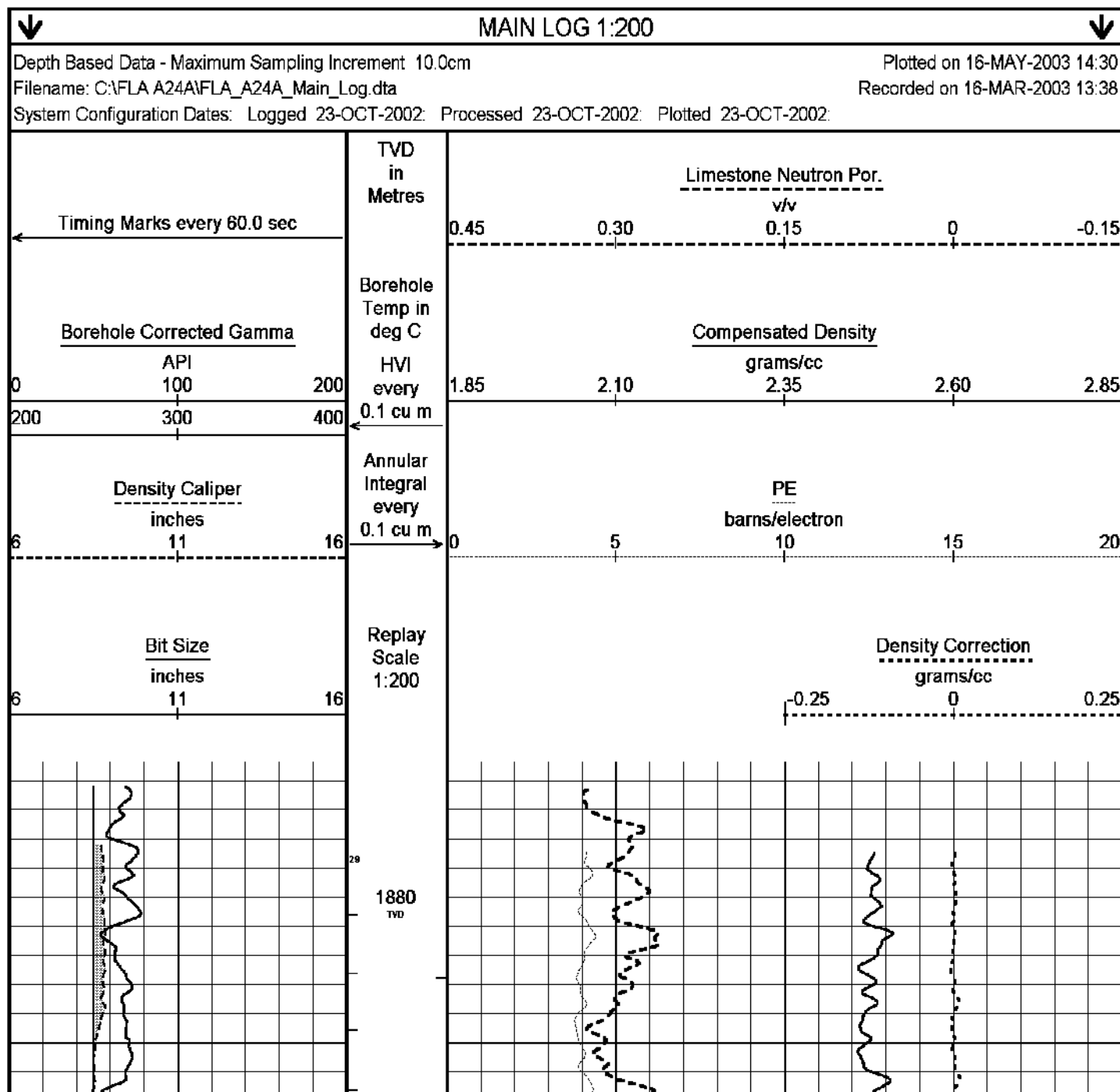
Field Calibration on 14-MAR-2003 09:40

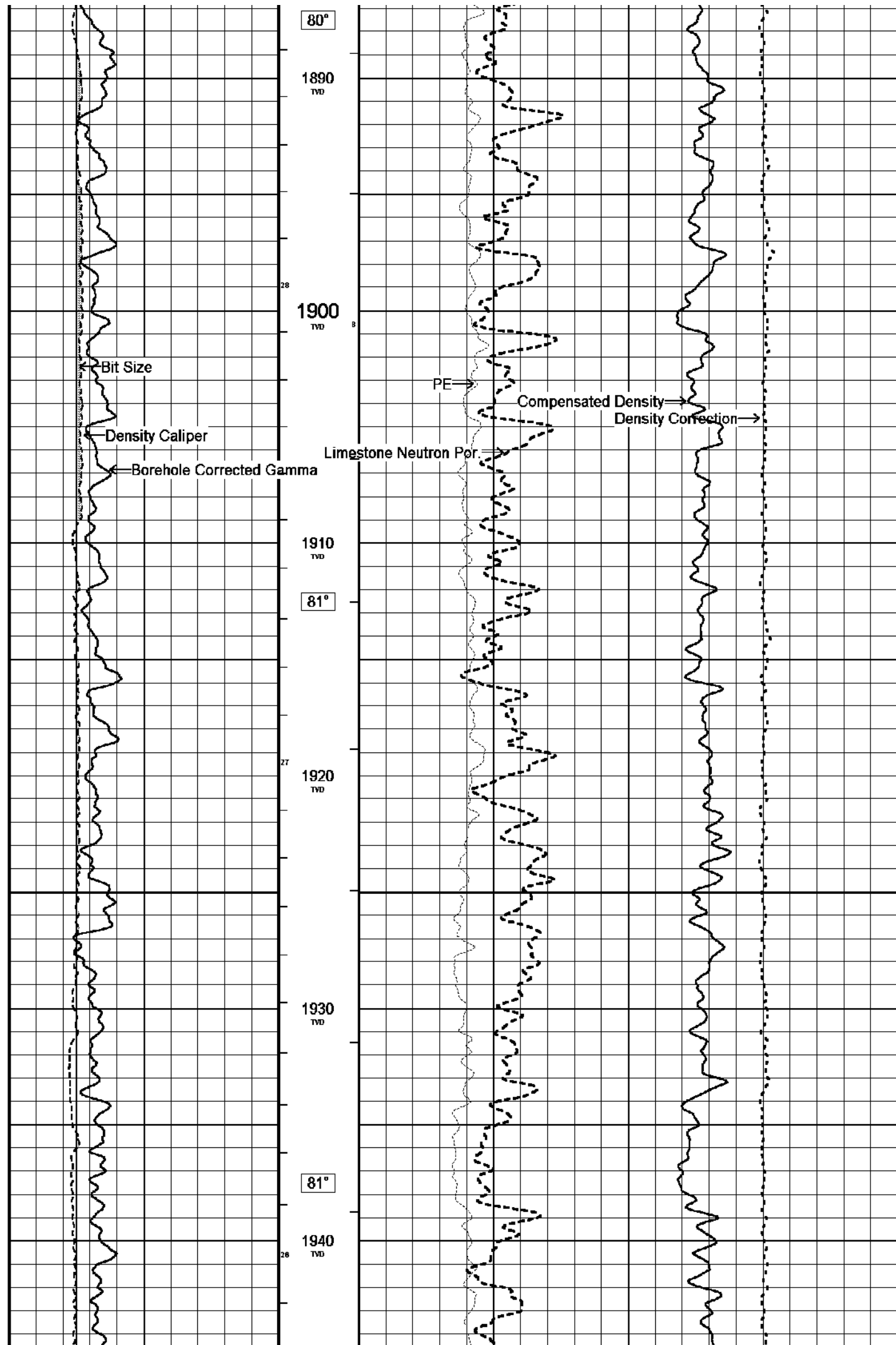
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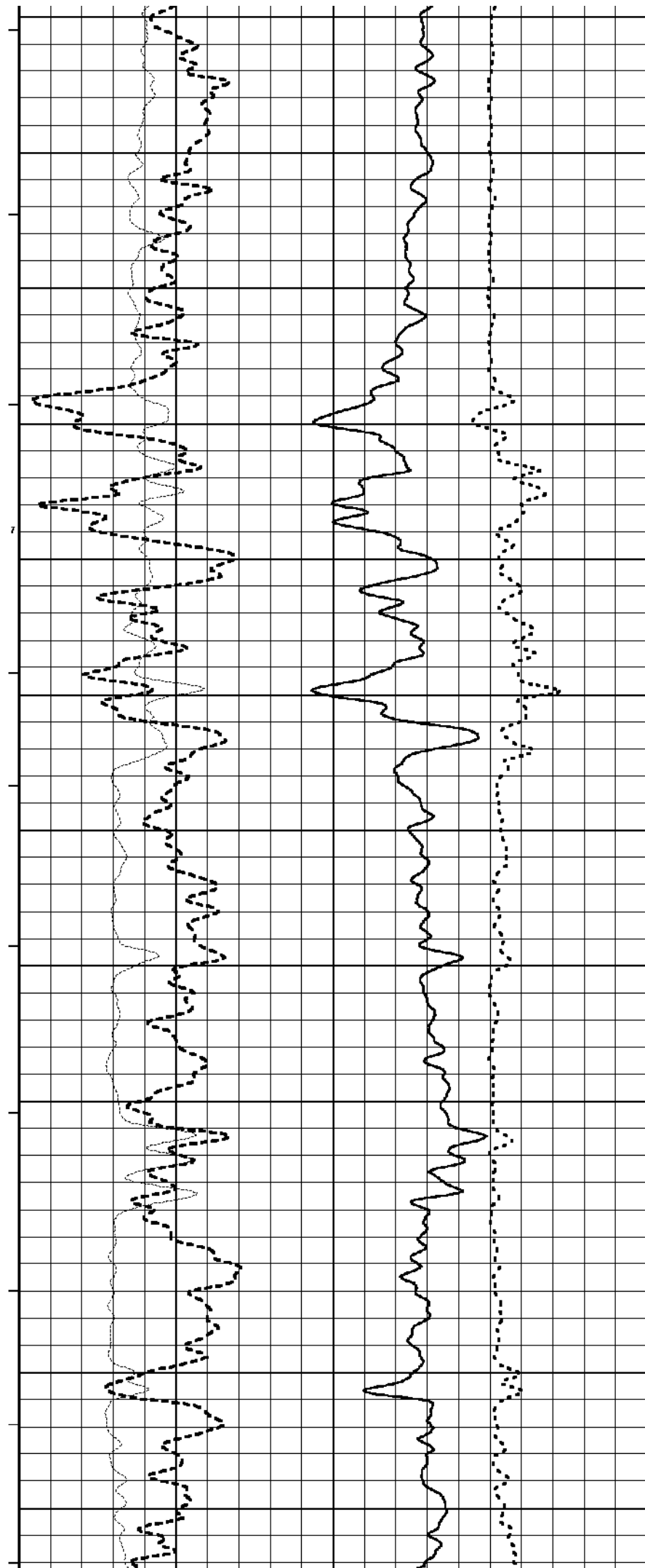
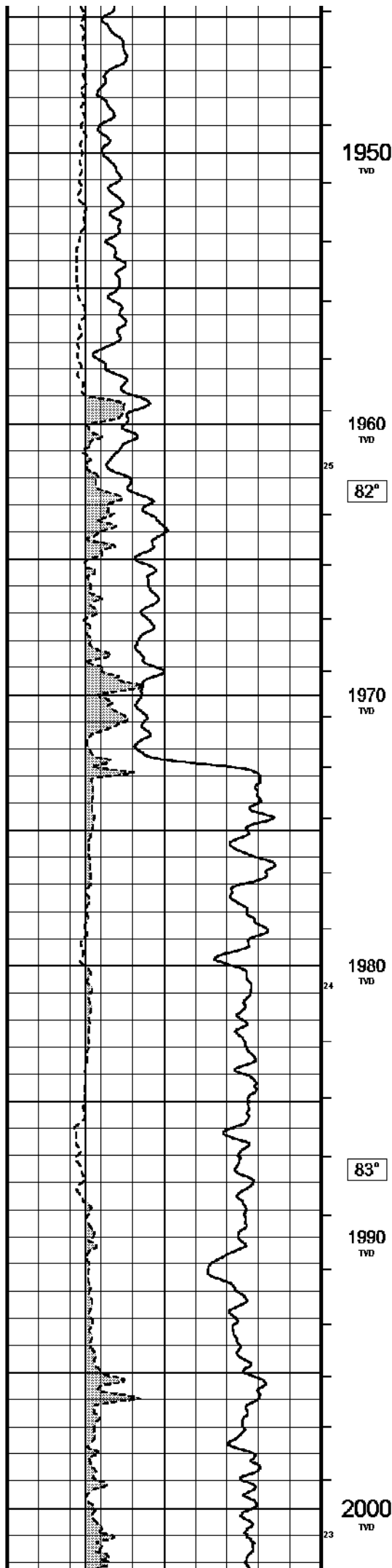
	Before (API)	After (API)
Background	10	13
Calibrator (Gross)	919	922

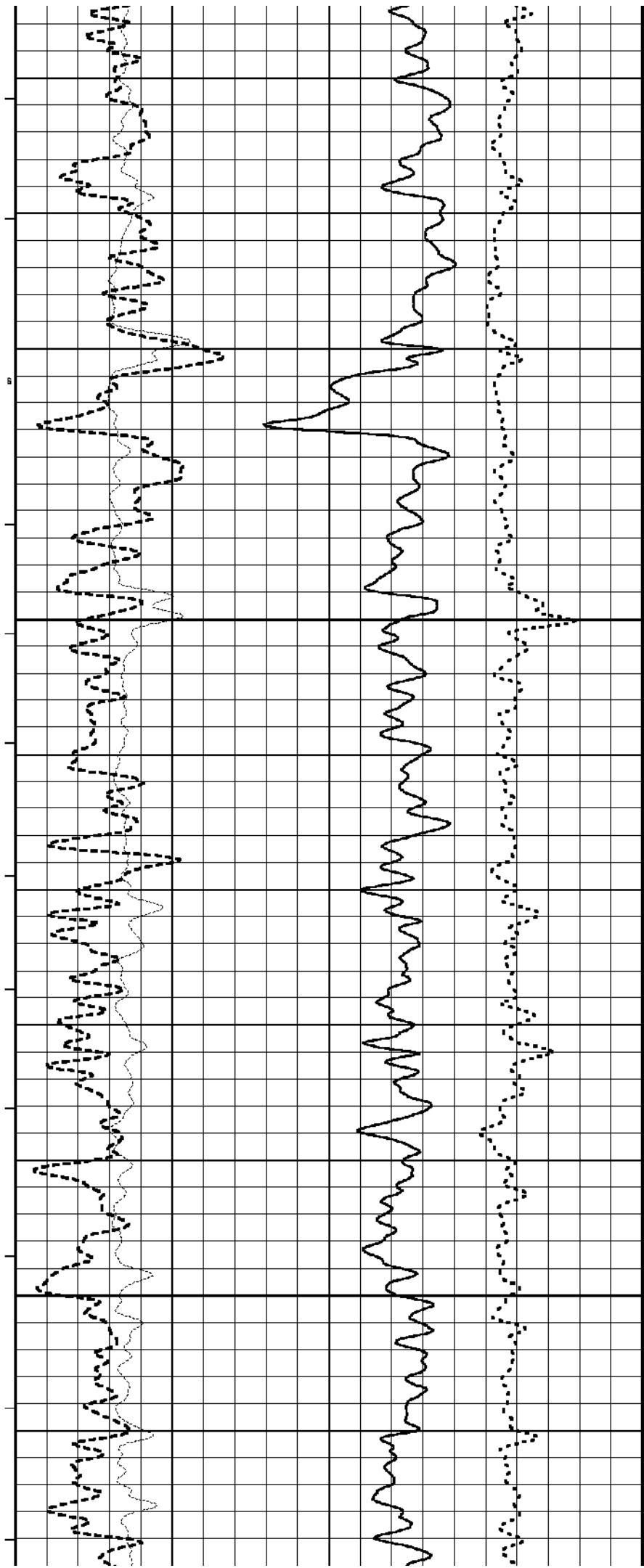
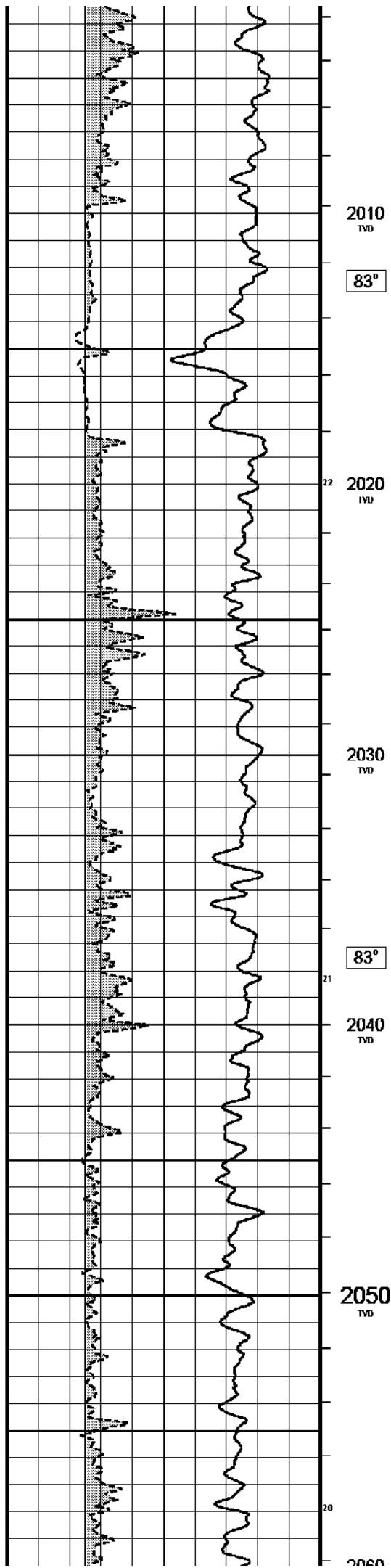
Calibrator (Net)		909	909	
Photo Density Check MPD 067		Before Survey Check on 14-MAR-2003 03:49 After Survey Check on 17-MAR-2003,00:13		
Density Check				
		Near	Far	
	Before	After	Before	After
	959.8	957.8	1151.7	1156.6
PE Check				
		Before	After	
WS		178.7	179.7	
WH		833.1	834.3	
Laterolog Check 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		

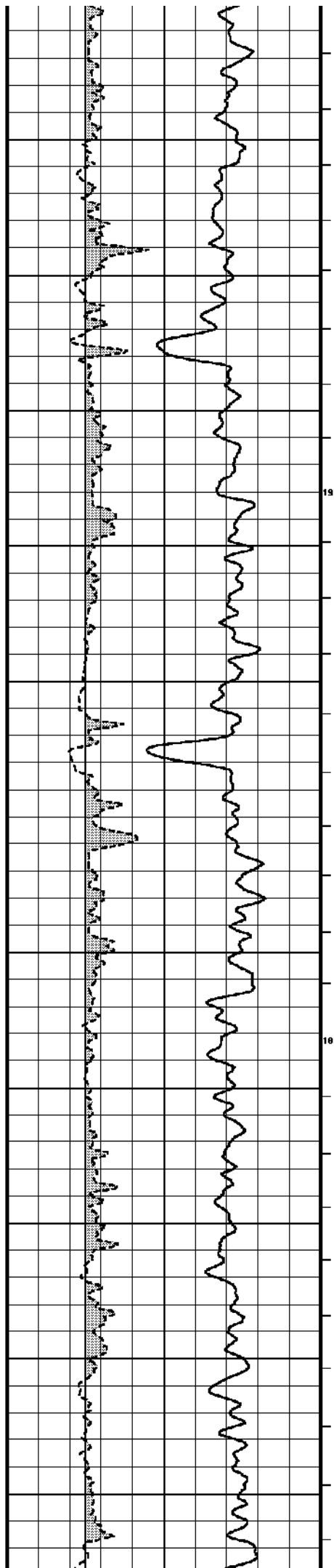
All interpretations are opinions based on inferences from electrical or other measurements and we cannot, and do not, guarantee the accuracy or correctness of any interpretations, and we shall not, except in the case of gross or wilful negligence on our part, be liable or responsible for any loss, costs,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











2060
TVD

84°

2070
TVD

19

2080
TVD

85°

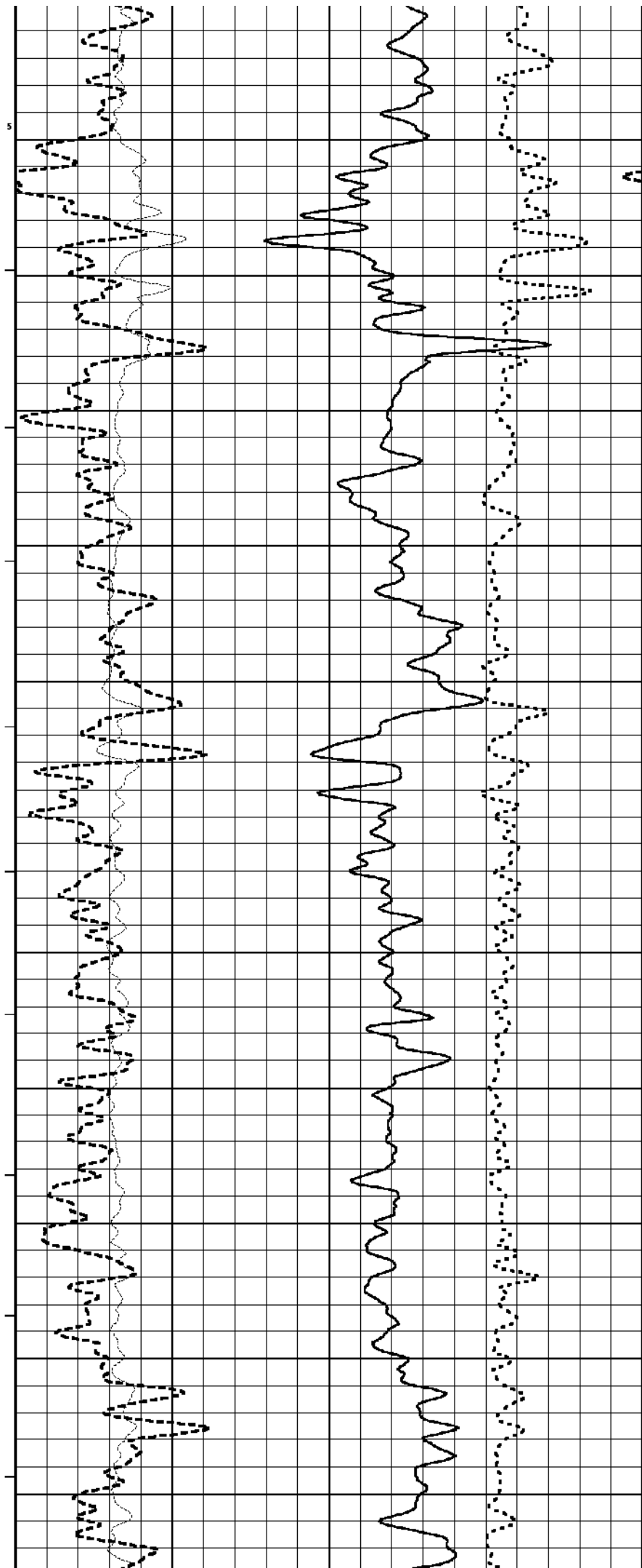
2090
TVD

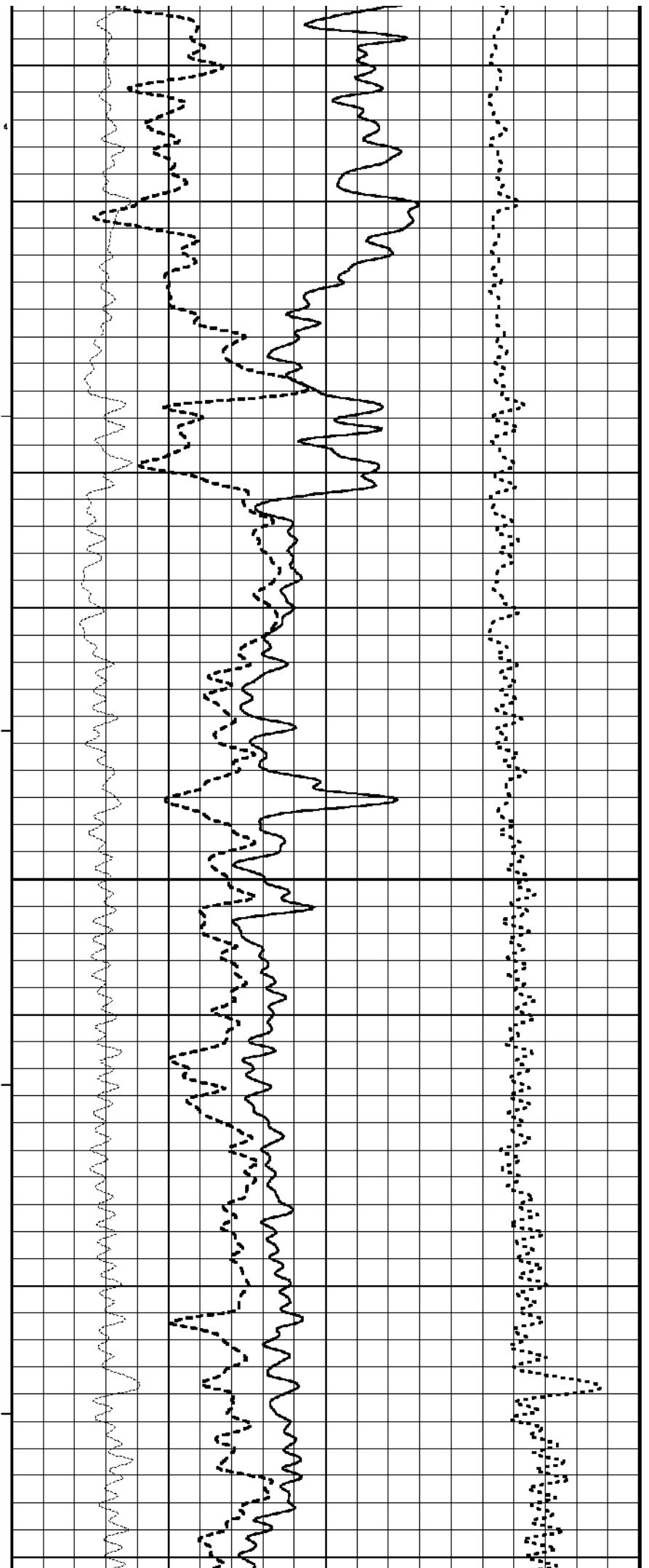
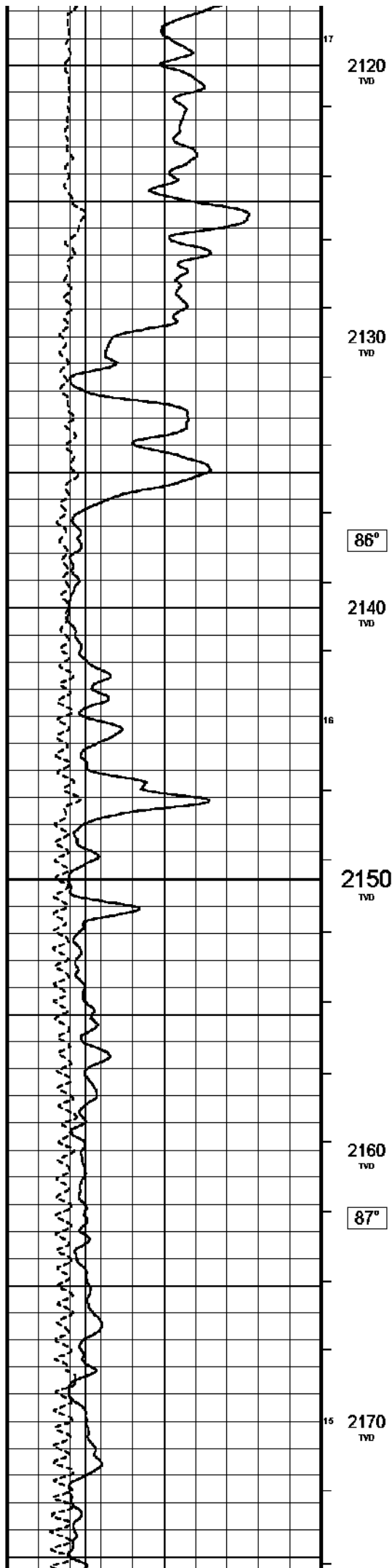
18

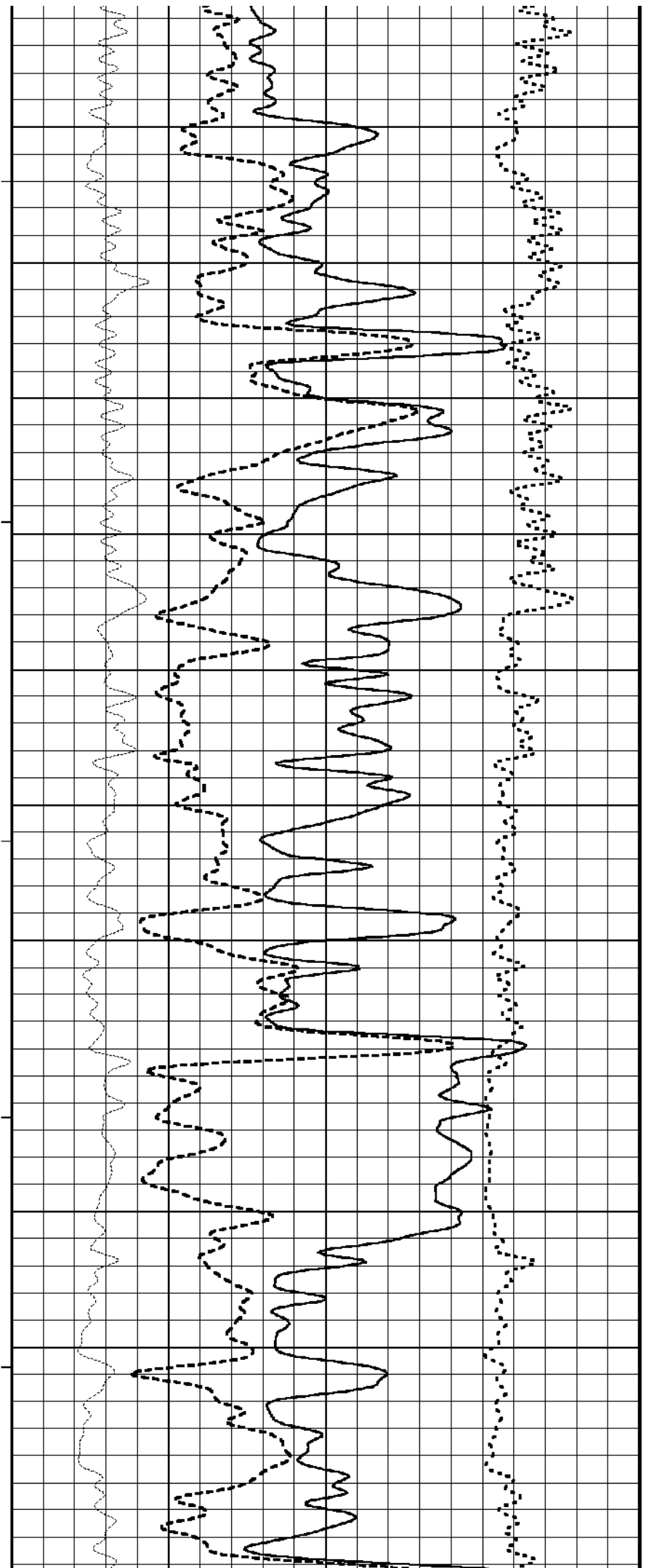
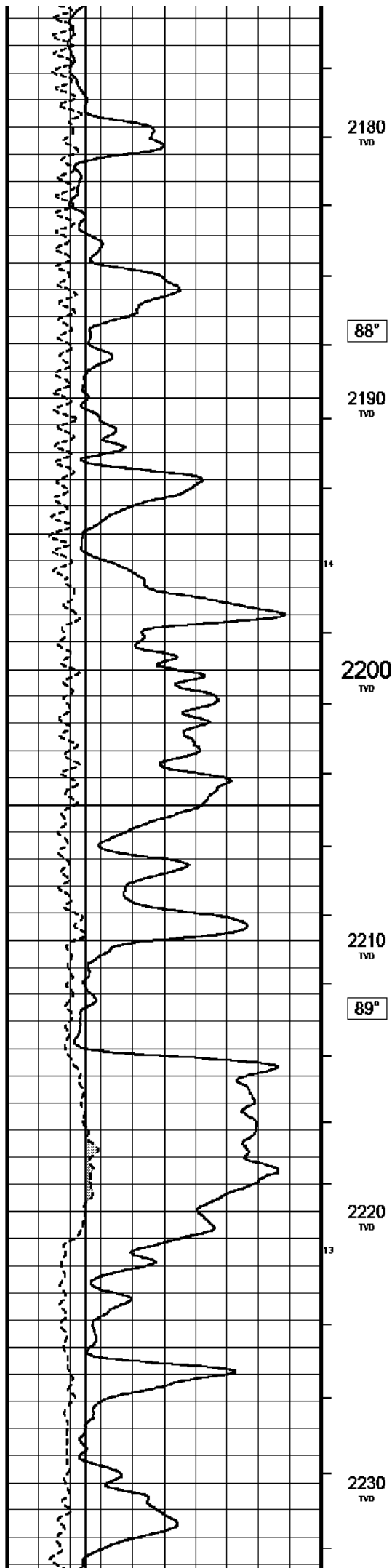
2100
TVD

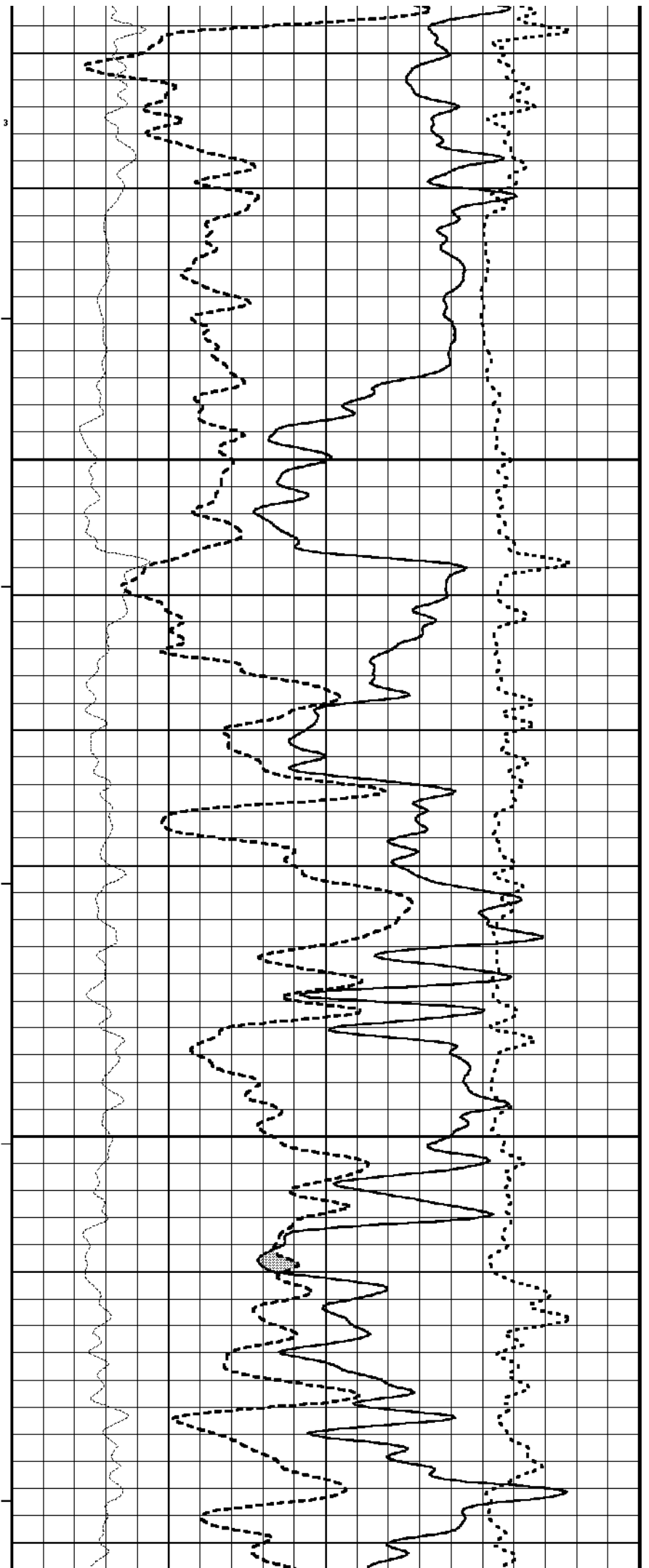
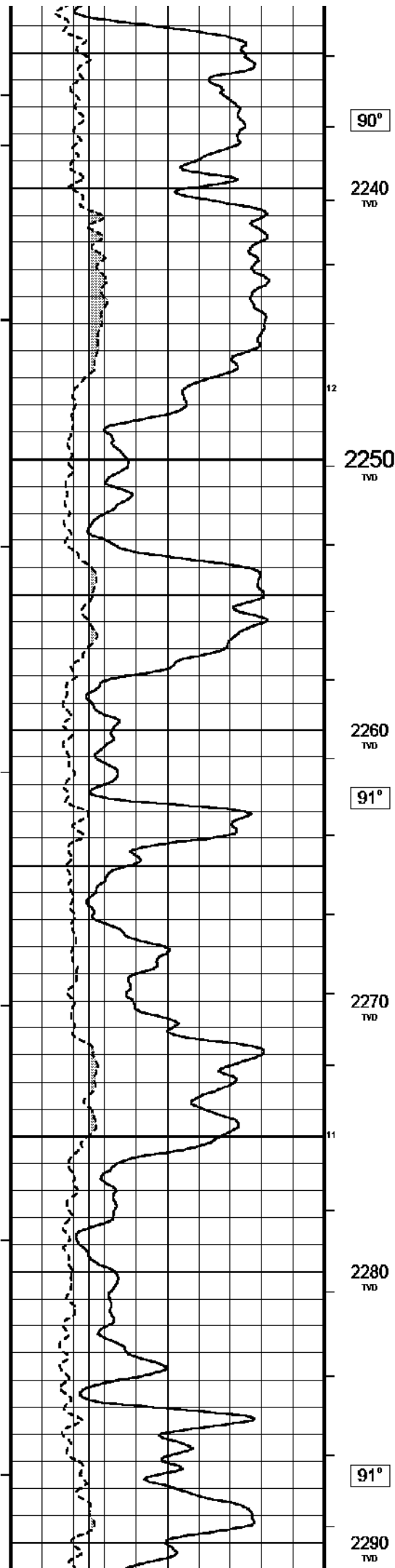
2110
TVD

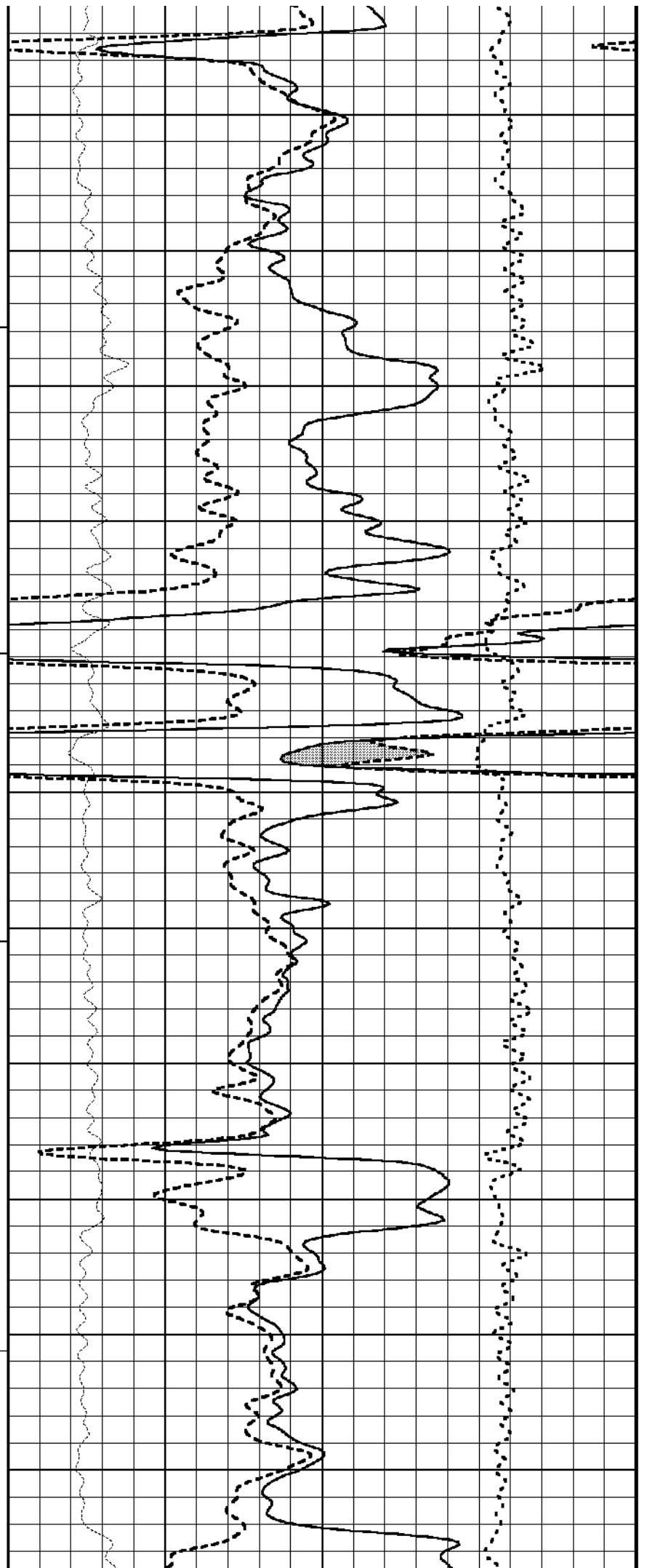
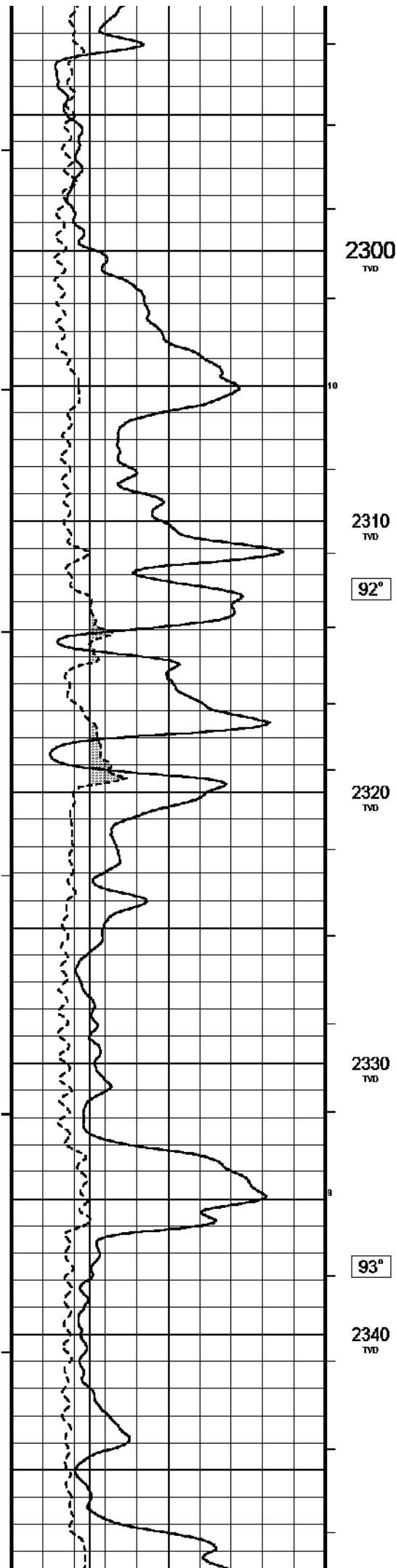
85°

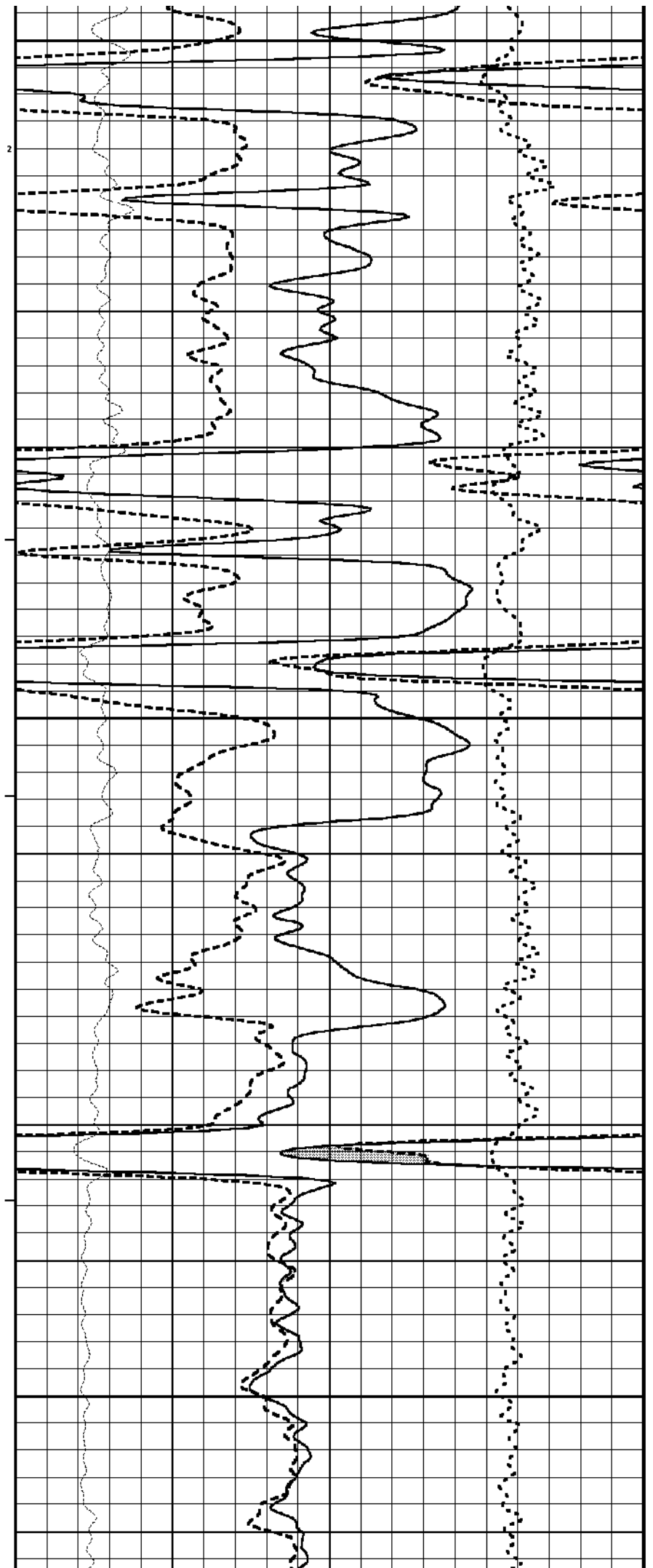
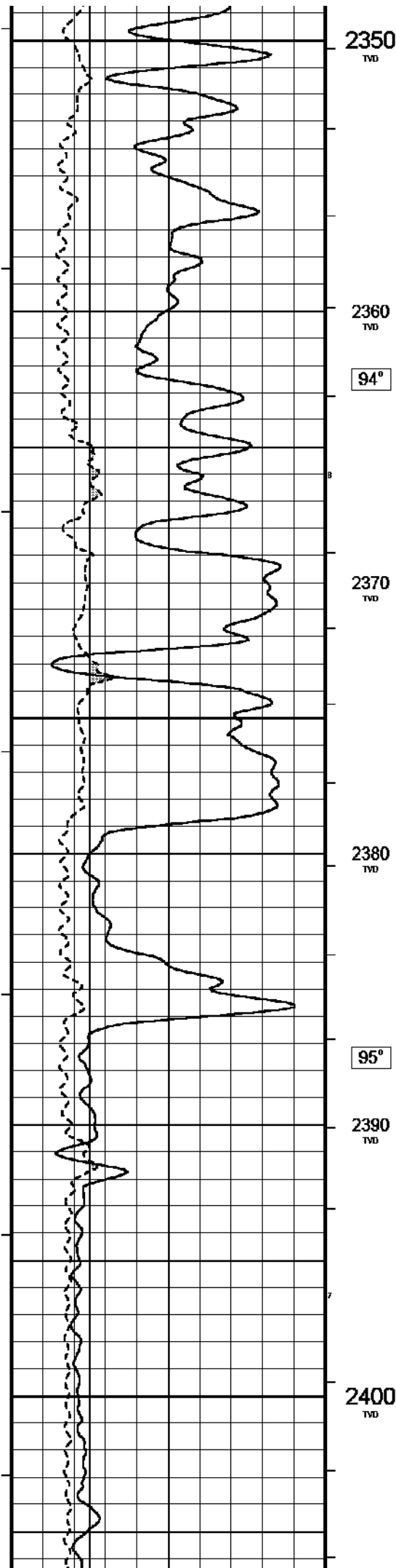


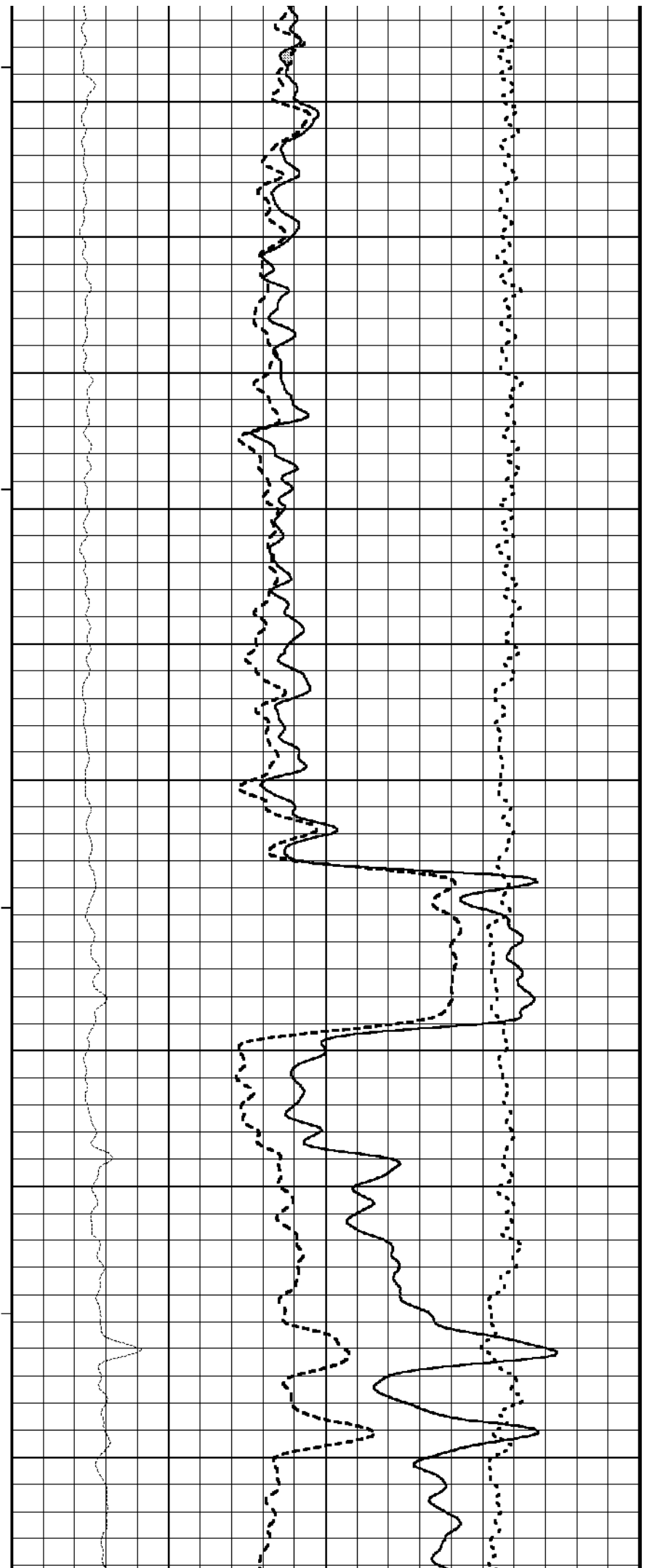
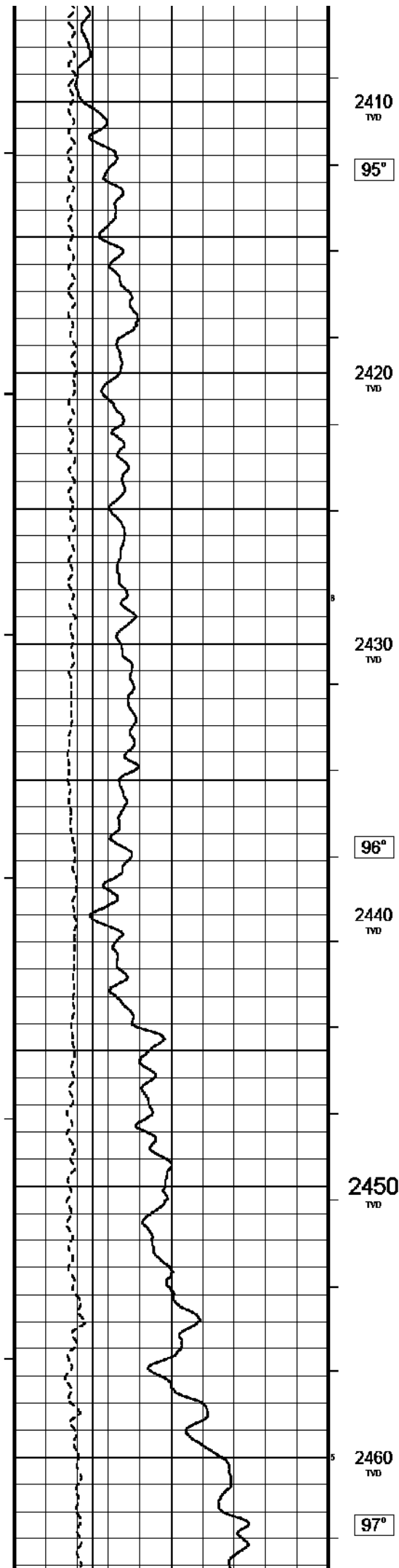


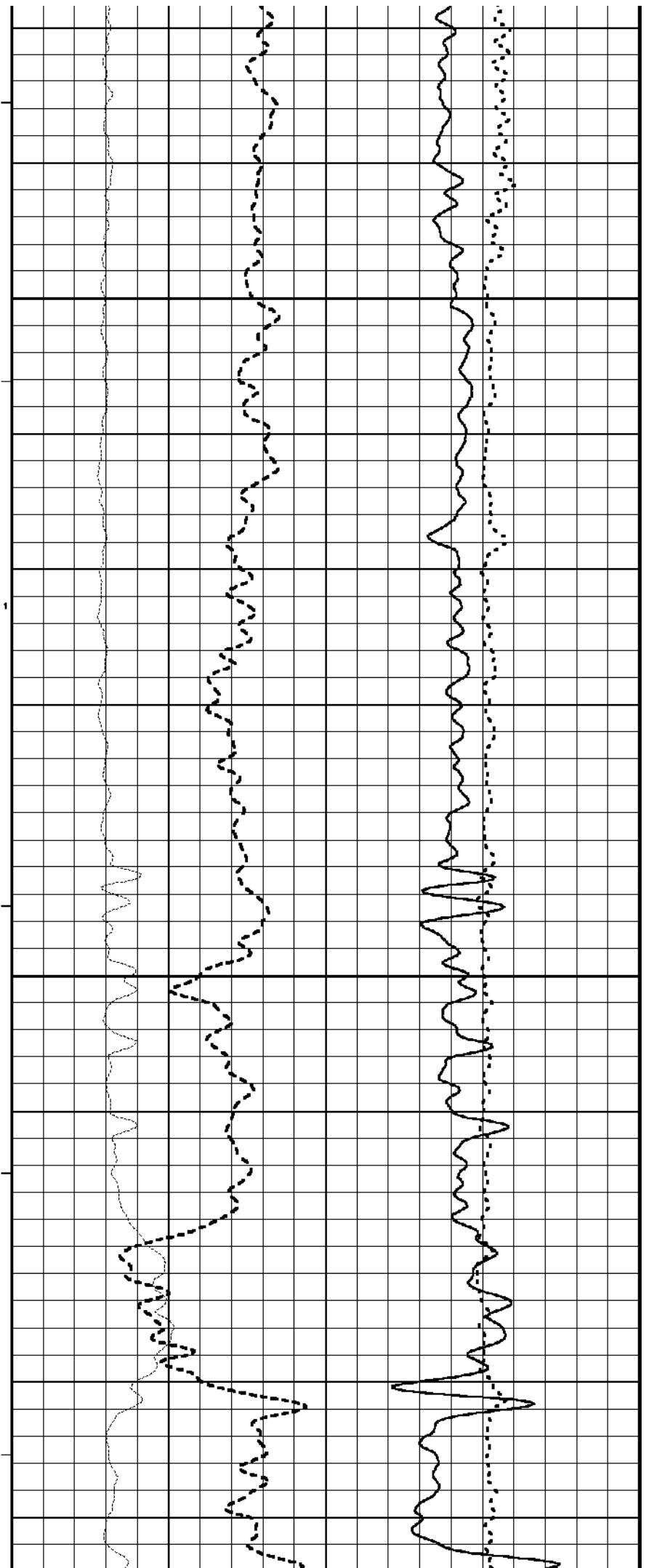
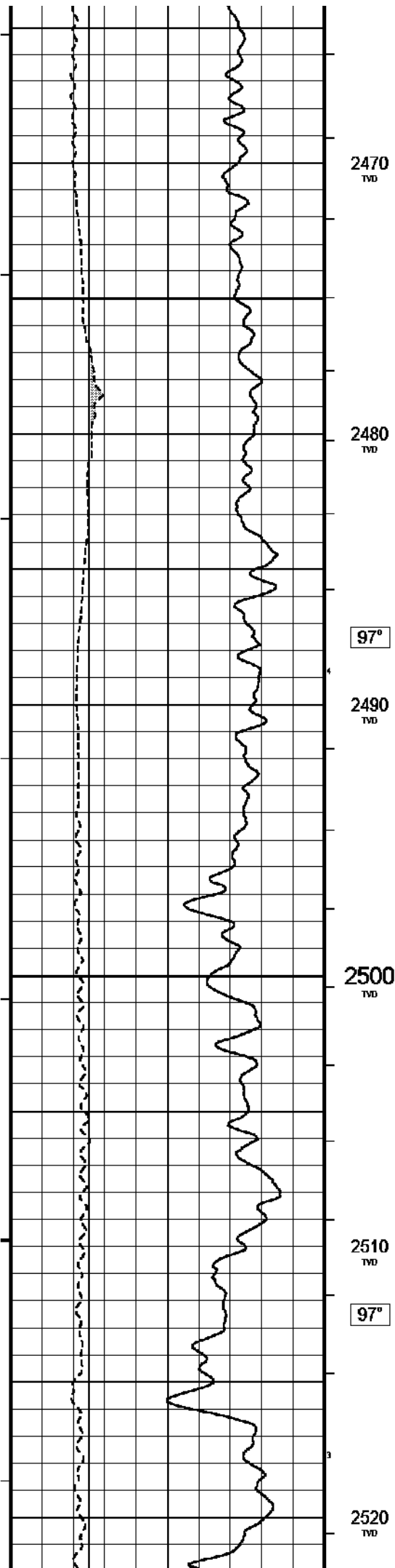


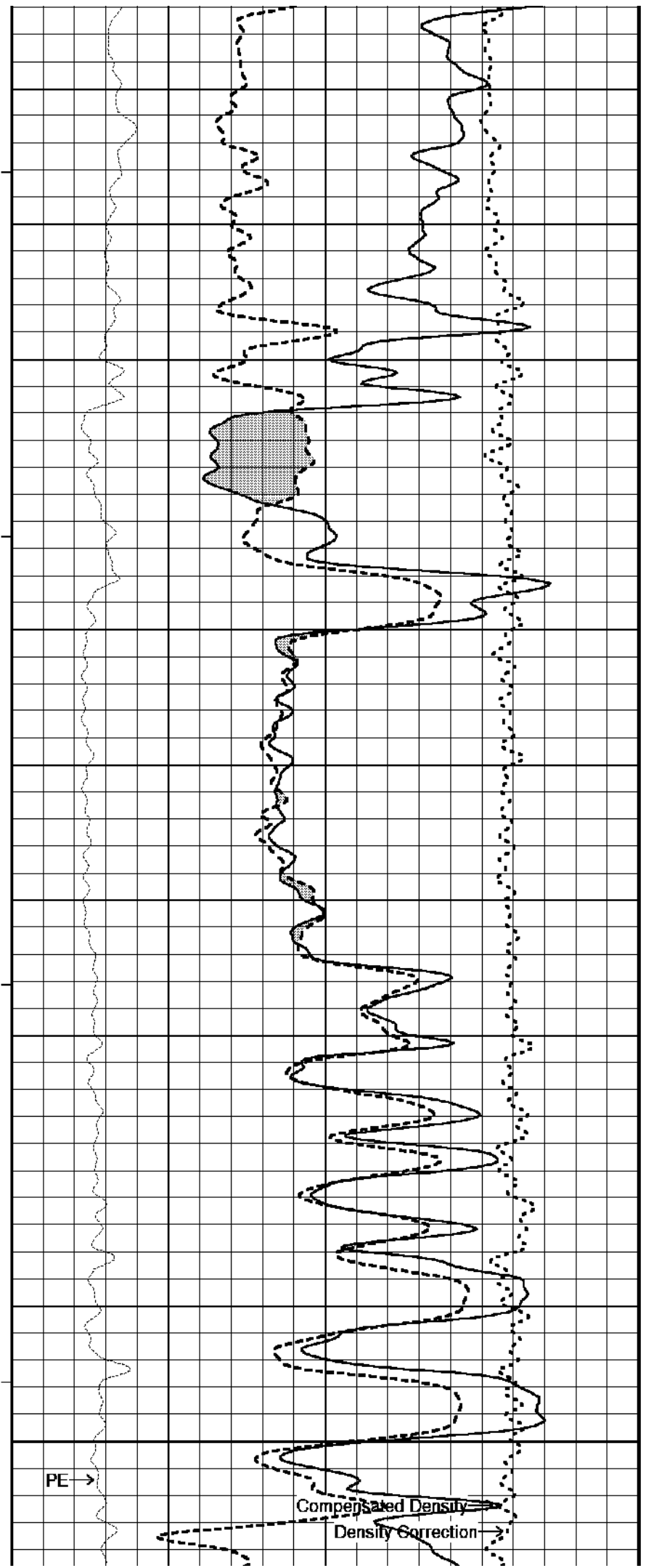
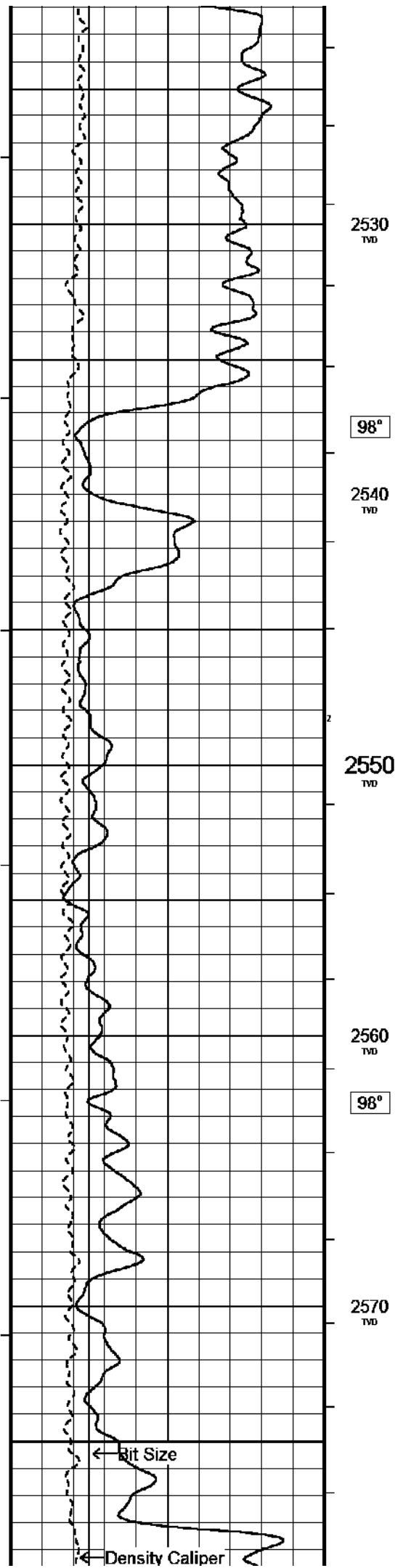


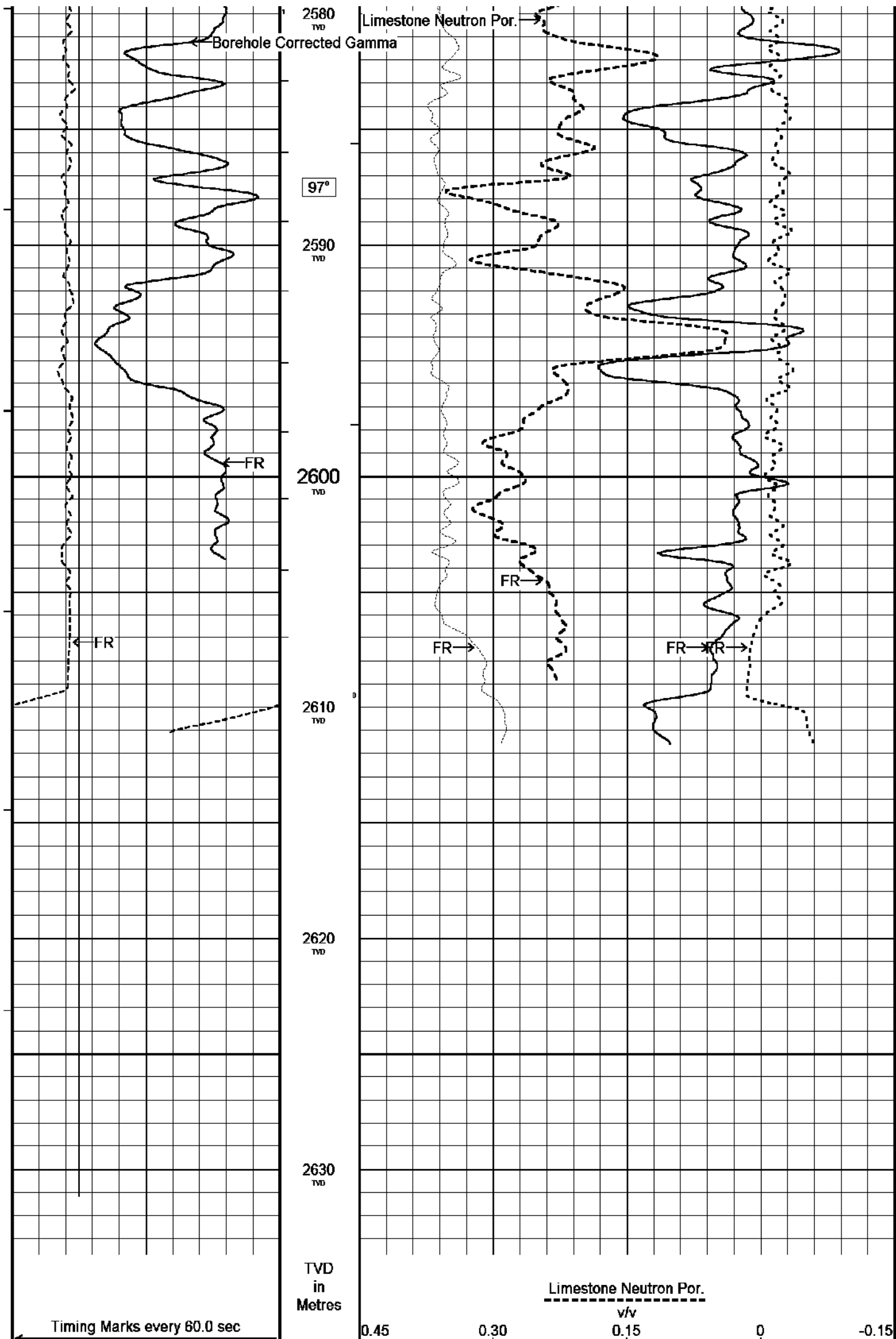


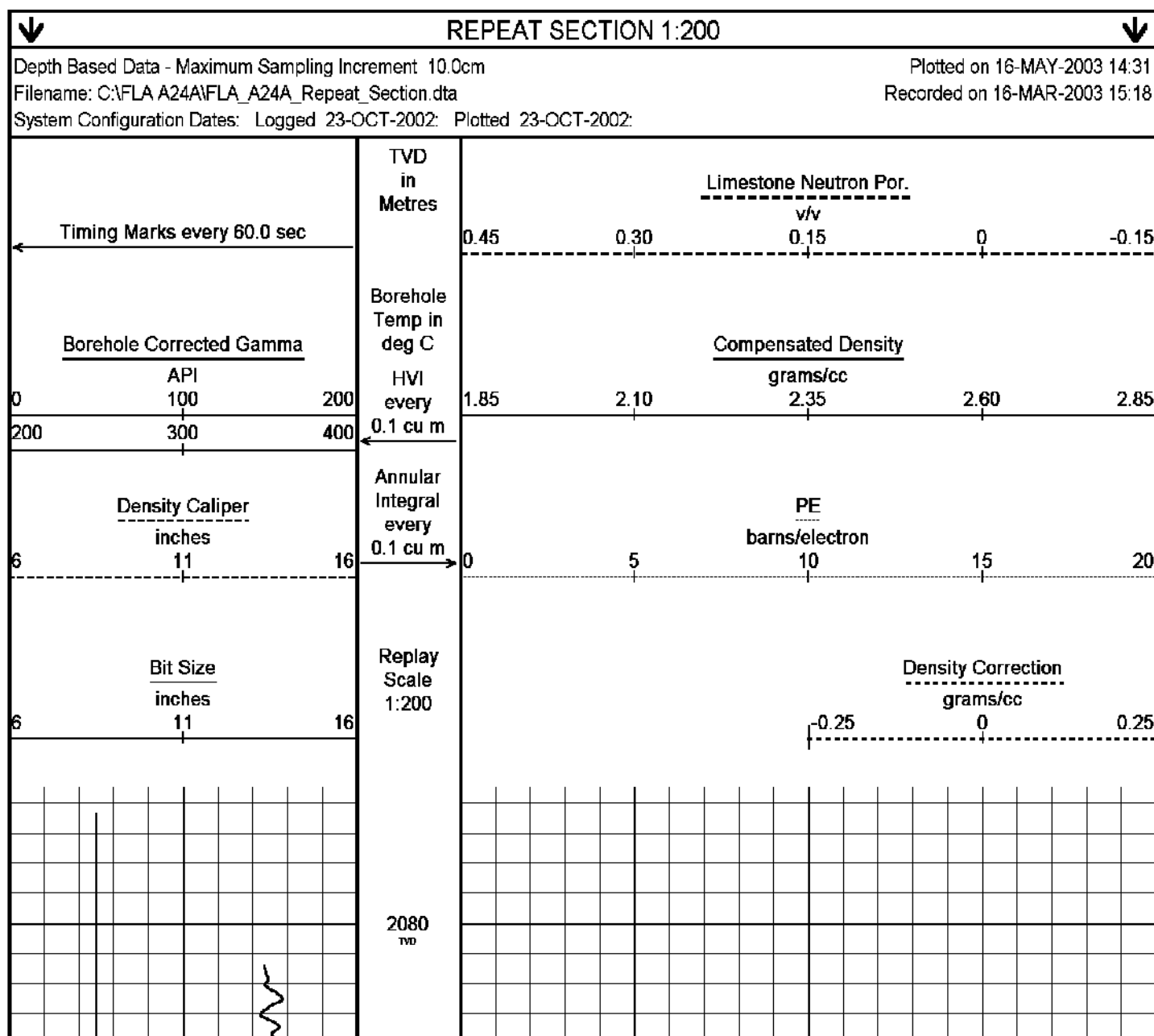
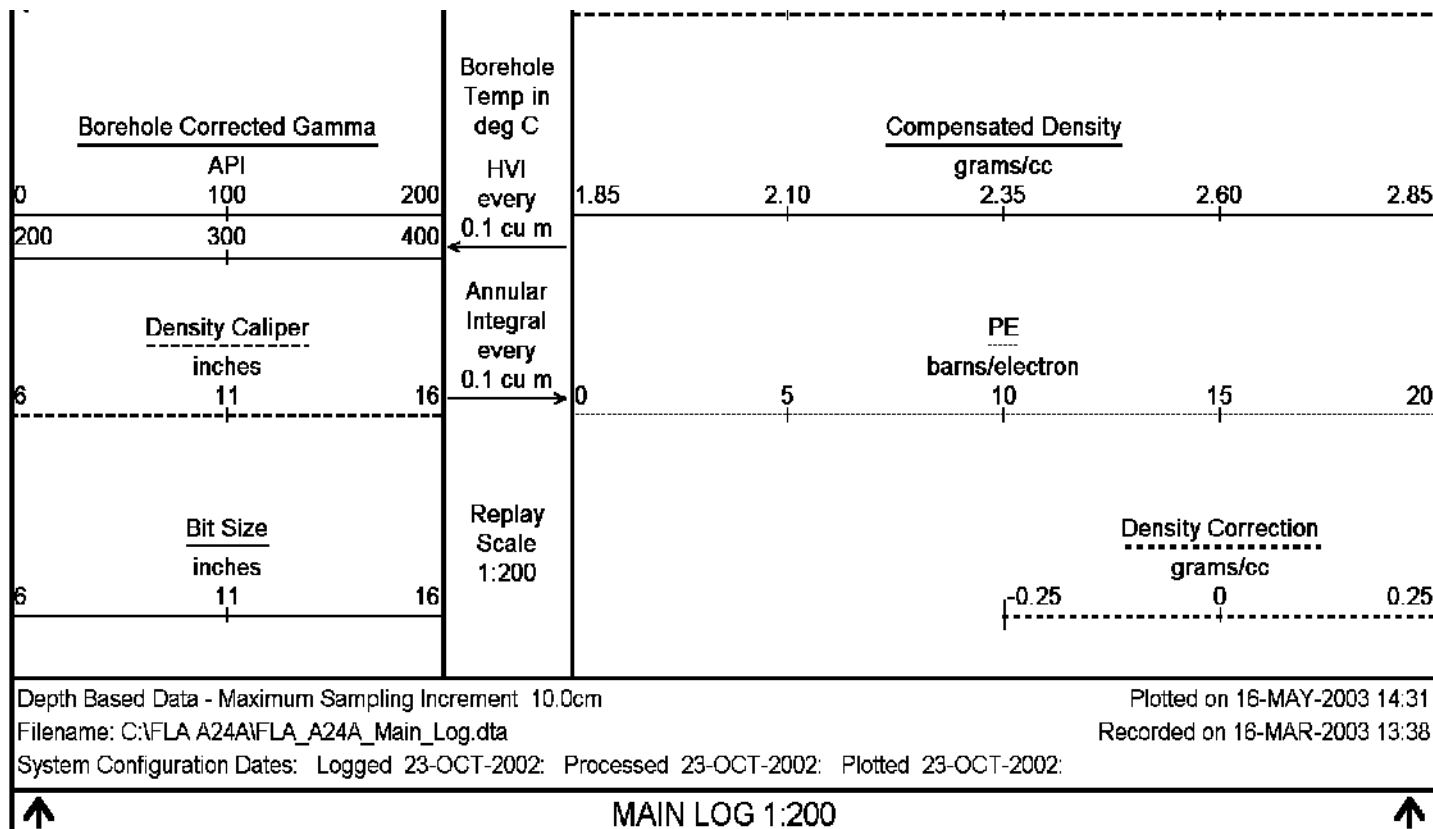


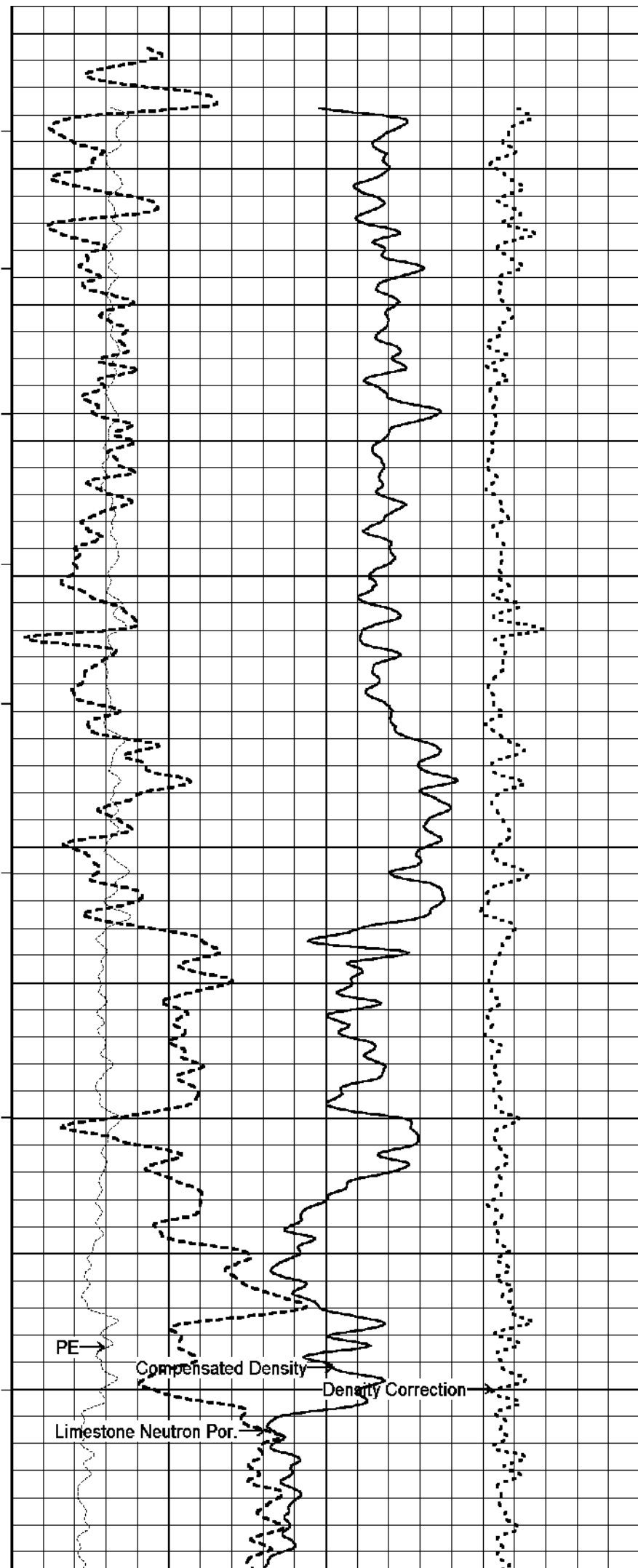
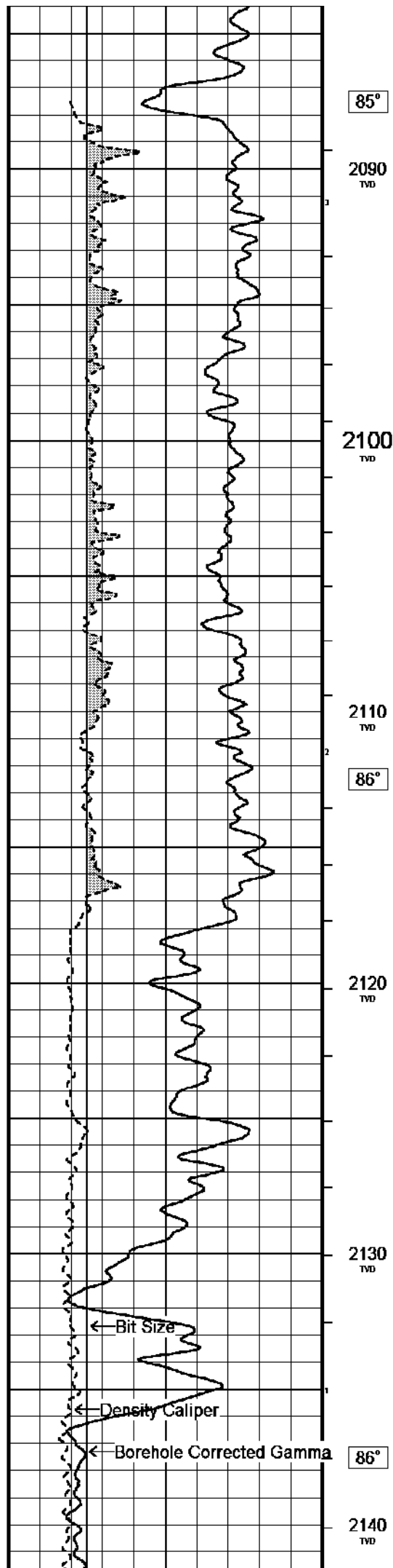


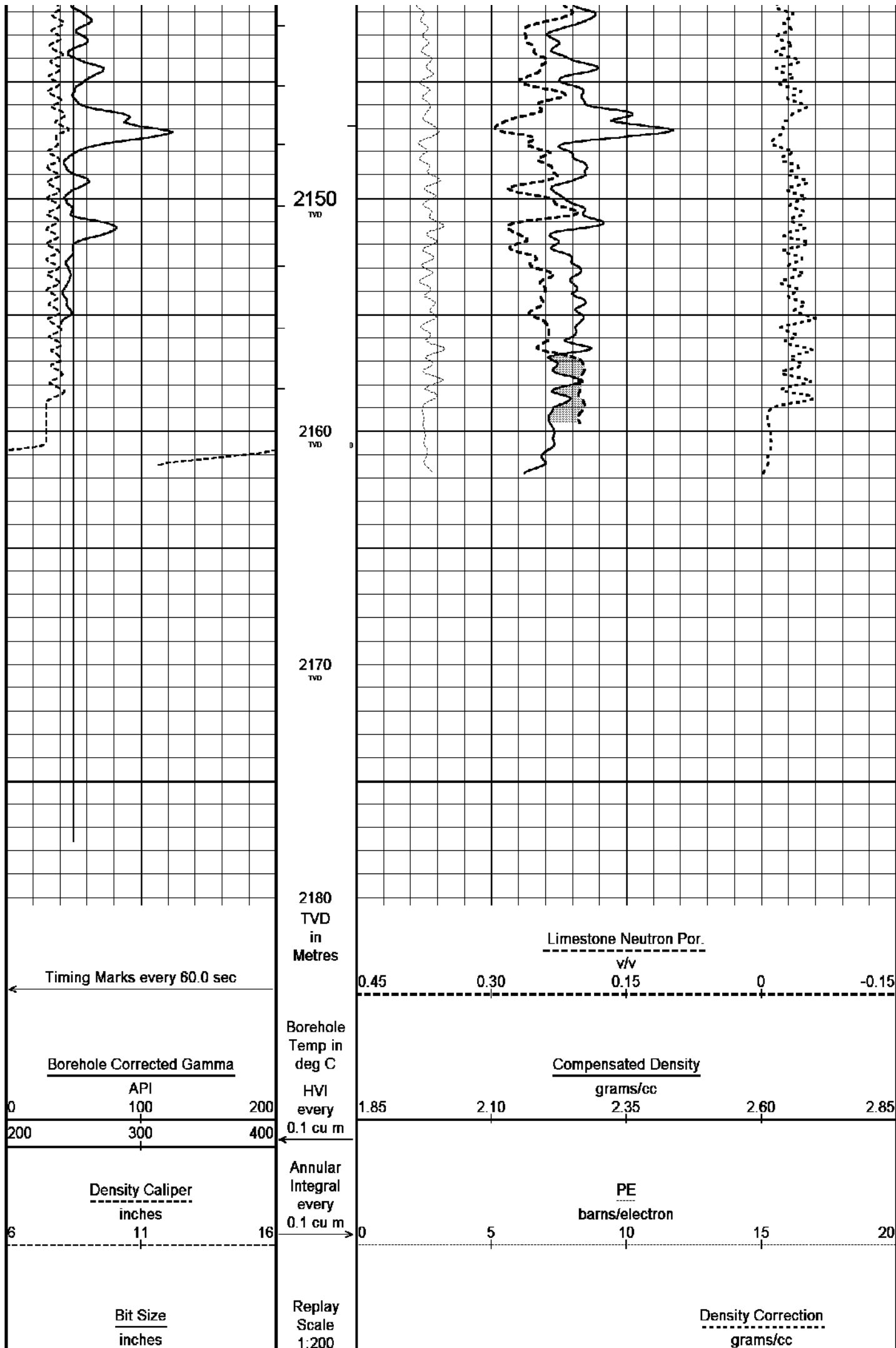












<div style="display: flex; justify-content: space-between; padding: 2px;"> 6 11 16 </div>		<div style="display: flex; justify-content: space-between; padding: 2px;"> -0.25 0 0.25 </div>
Depth Based Data - Maximum Sampling Increment: 10.0cm Filename: C:\FLA A24A\FLA_A24A_Repeat_Section.dta System Configuration Dates: Logged 23-OCT-2002: Plotted 23-OCT-2002:		Plotted on 16-MAY-2003 14:31 Recorded on 16-MAR-2003 15:18
↑	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
Ratio	2859	89	3714	110
	32.108		33.764	

Field Calibrator at Base

	Calibrated (cps)	
Ratio	1878	2704
	0.695	

Field Check

	Calibrated (cps)	
Ratio	1788	2640
	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	
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 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

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

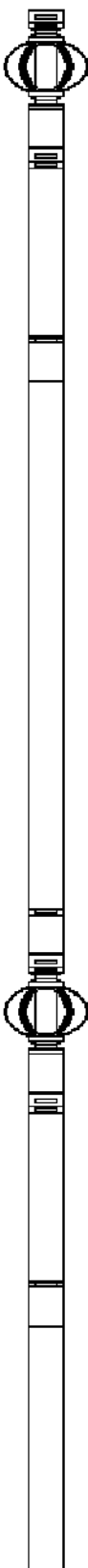
MIS 77 Length: 0.65 m

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

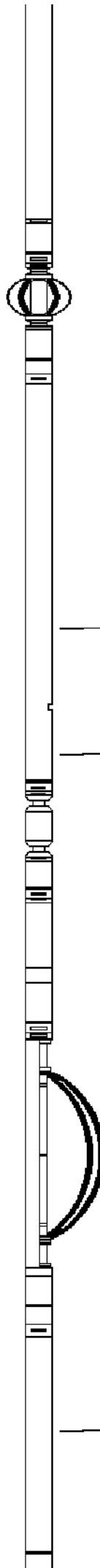
Compact Knuckle Joint
SKJ 46 Length: 0.66 m Weight: 24.25 lb

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

22.88 m NPRL - Limestone Neutron Por.



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

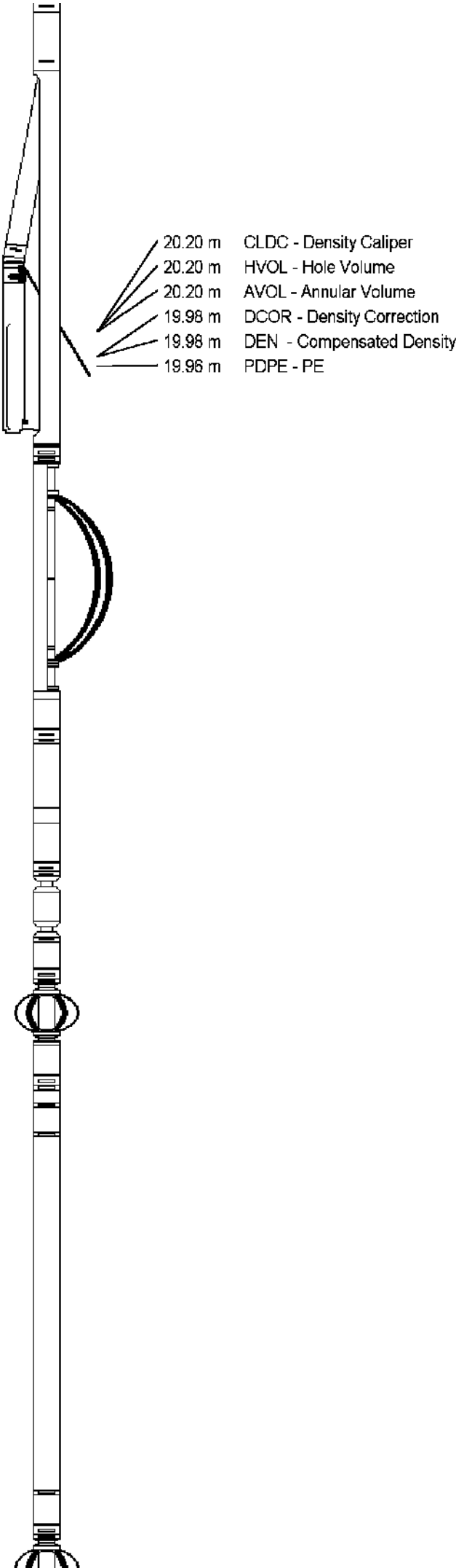
Compact Inline Bowspring A
MIS 25 Length: 1.74 m Weight: 33.07 lb

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 DSL - Shallow Laterolog
10.06 m DLL - Deep Laterolog

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

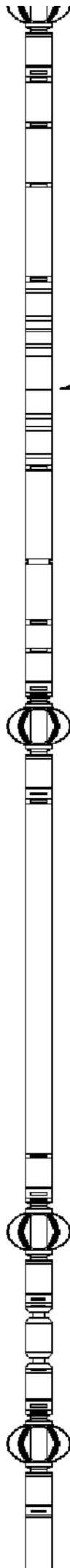
Compact Lower Guard Sub.
MLG 7 Length: 2.44 m Weight: 55.12 lb

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

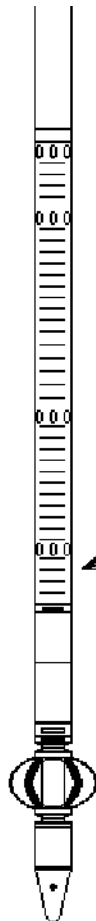
Compact Knuckle Joint
SKJ 48 Length: 0.66 m Weight: 24.25 lb

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

Compact Sonic
MCS 20 Length: 0.62 m Weight: 70.75 lb



MIS 20 Length: 3.62 m Weight: 72.75 lb



0.00 m TR21 - 3' Transit Time
0.00 m TR22 - 5' Transit Time
0.00 m DT35 - 3-5' Compensated Sonic
Tool Zero (1.58m from bottom)

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	2627.30	metres
Elevation Drill Floor 33.85	metres	Depth Driller	2626.97	metres
Elevation Ground Level -93.00	metres	Depth Logger	2628.90	metres



PHOTO DENSITY
COMPENSATED NEUTRON
1:200 TVD