

Reeves

DUAL LATEROLOG - GR DENSITY - 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 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 33.85 metres DF -93.00 metres GL	
Run Number	1						
Depth Driller	2626.97			metres			
Depth Logger	2628.90			metres			
First Reading	2627.30			metres			
Last Reading	1889.70			metres			
Casing Driller	597.60			metres			
Casing Logger	596.20			metres			
Bit Size	8.50			Inches			
Hole Fluid Type	KC/PHPA/GLY						
Density / Viscosity	9.50 lb/USg			68.00 sec/ct			
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 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

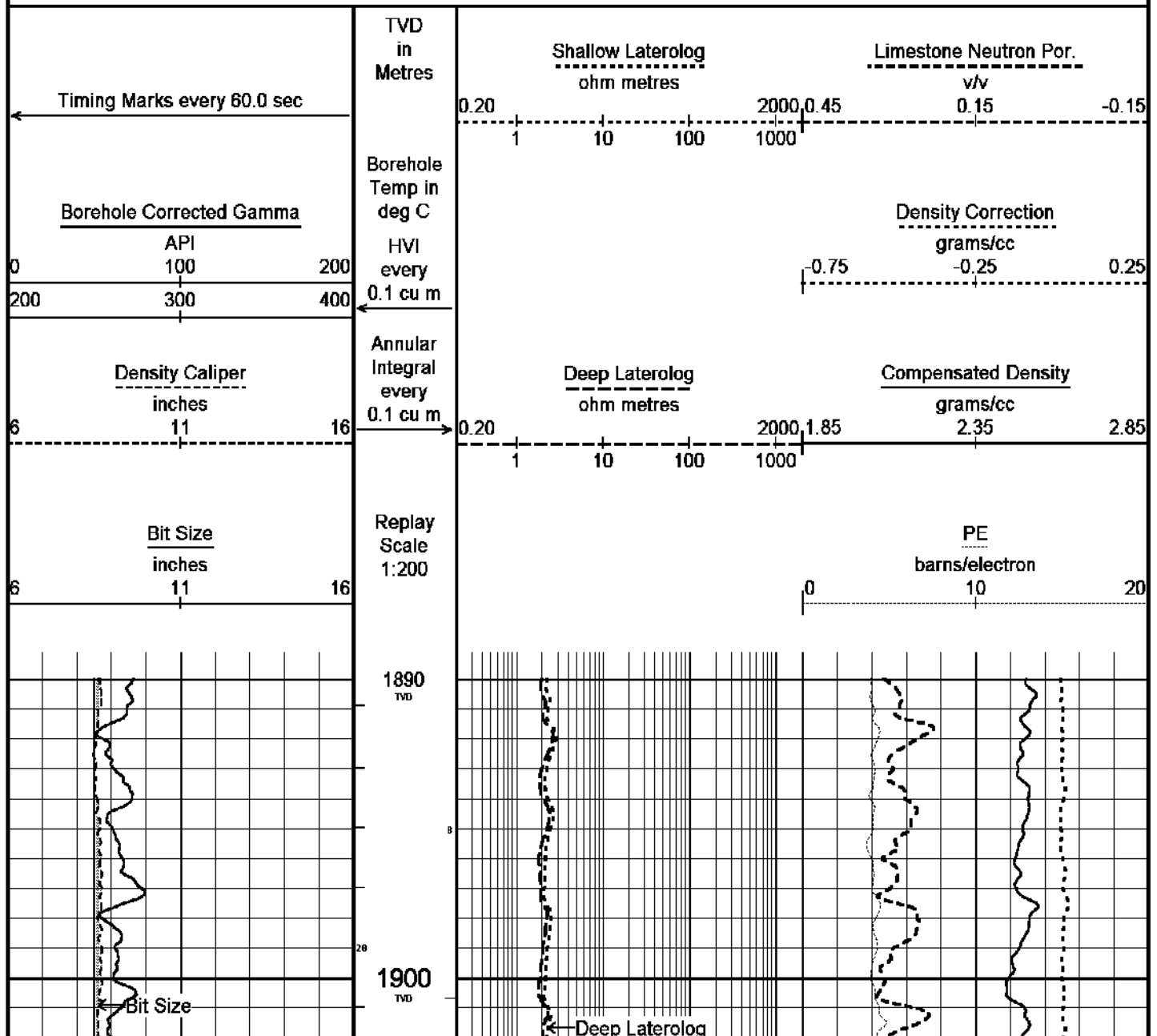
Depth Based Data - Maximum Sampling Increment 10.0cm

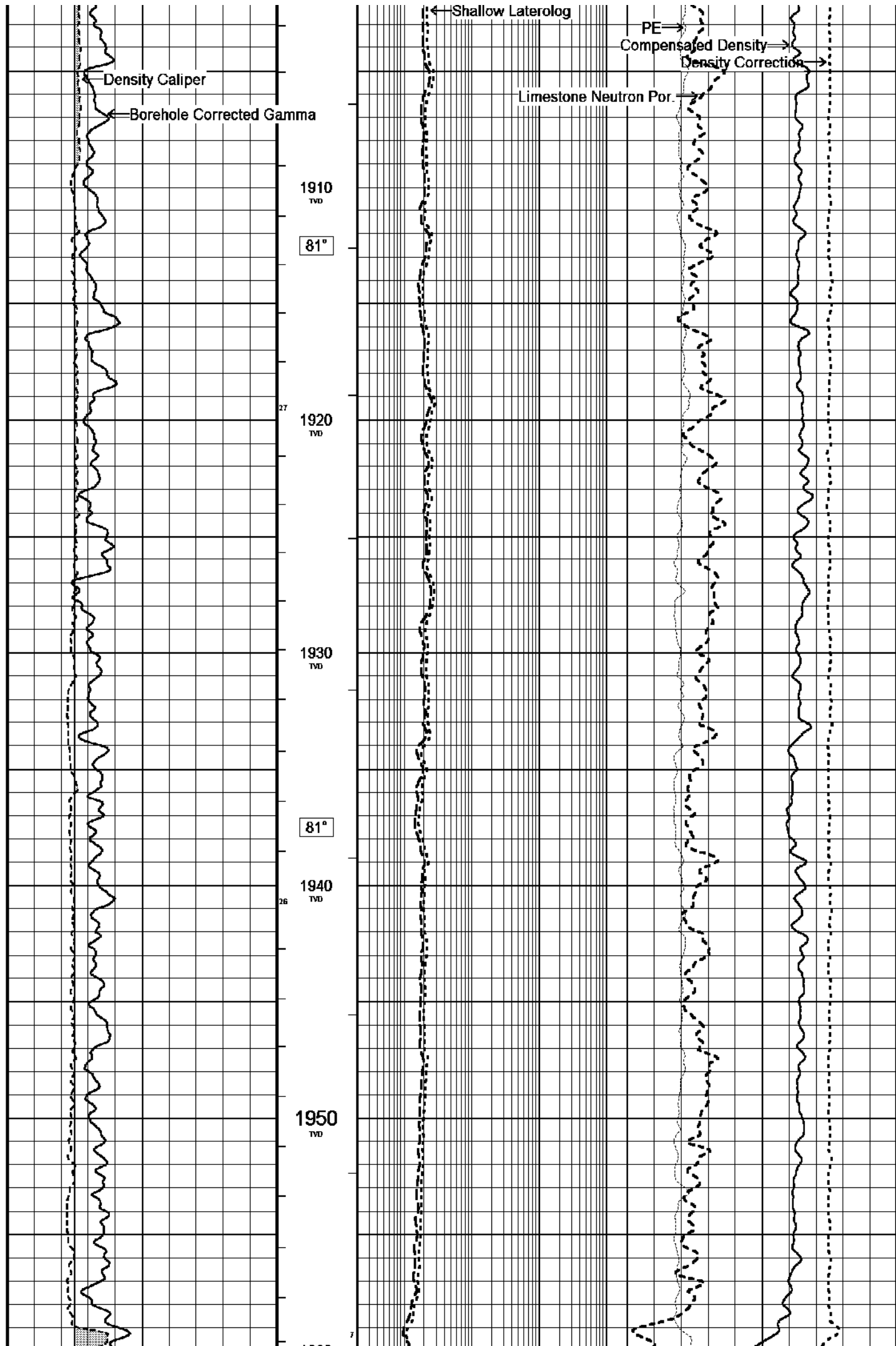
Plotted on 16-MAY-2003 12:25

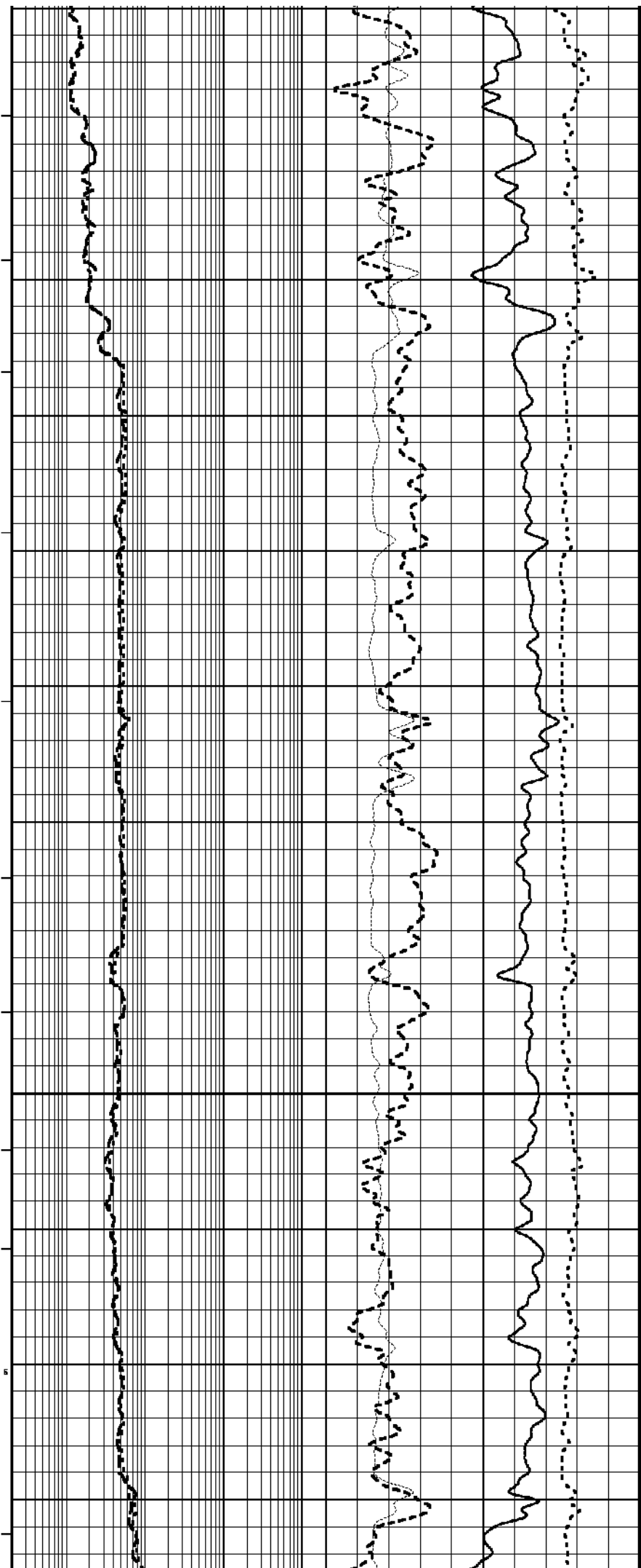
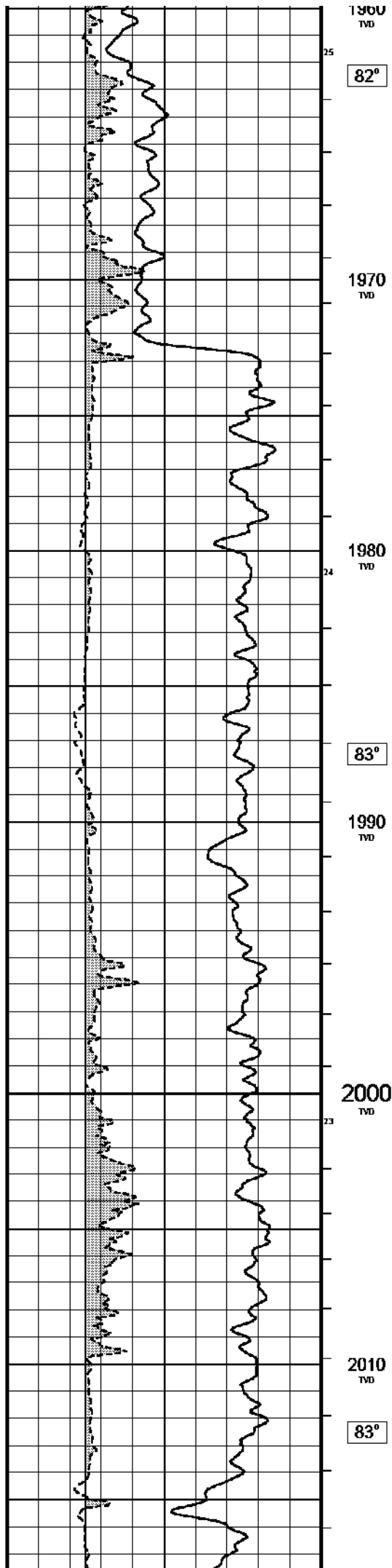
Filename: C:\FLA A24\FLA_A24A_Main_Log.dta

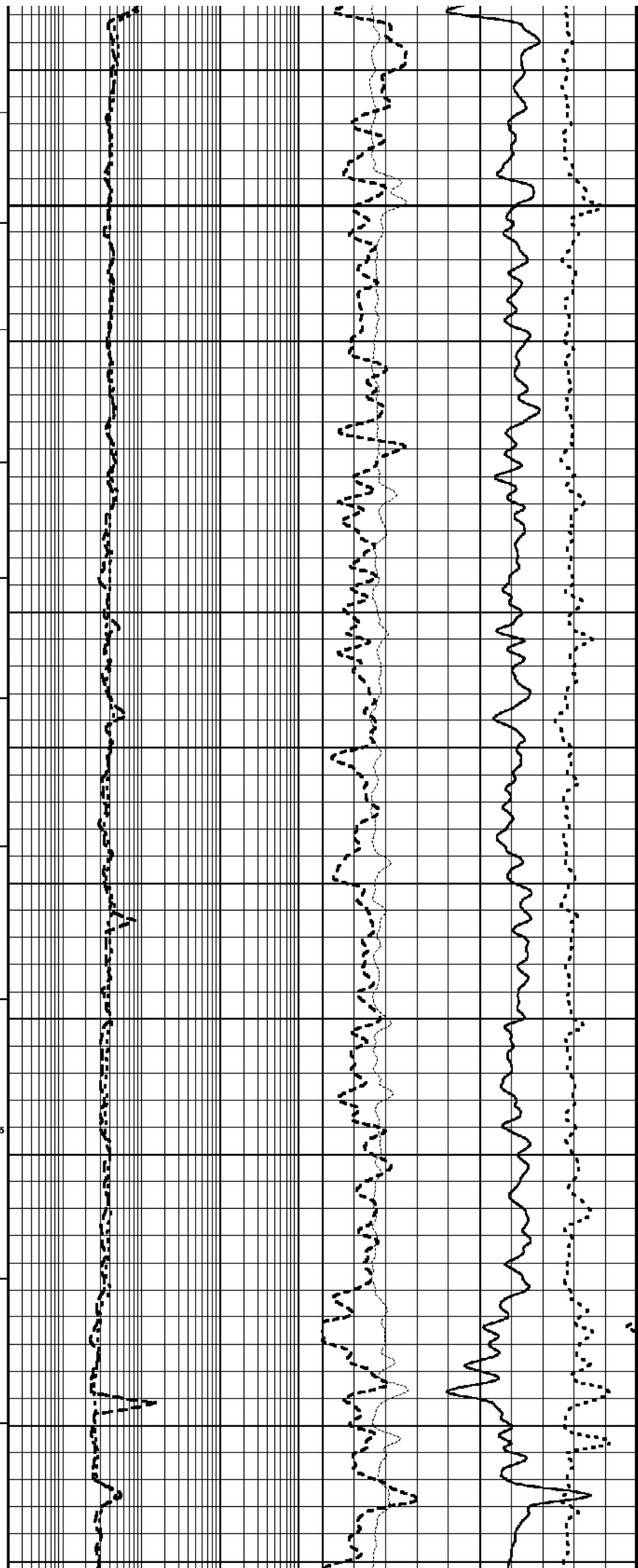
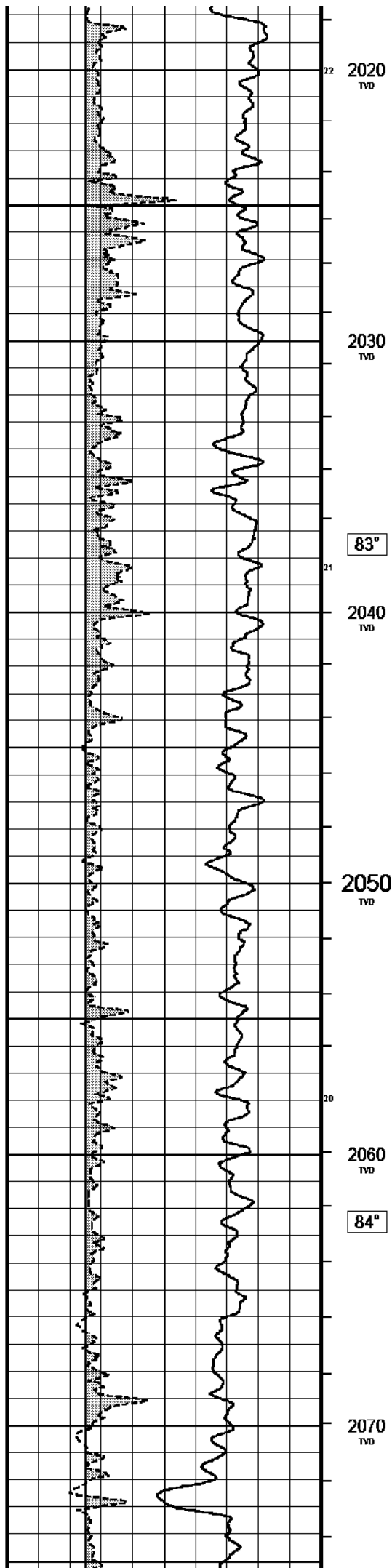
Recorded on 16-MAR-2003 13:38

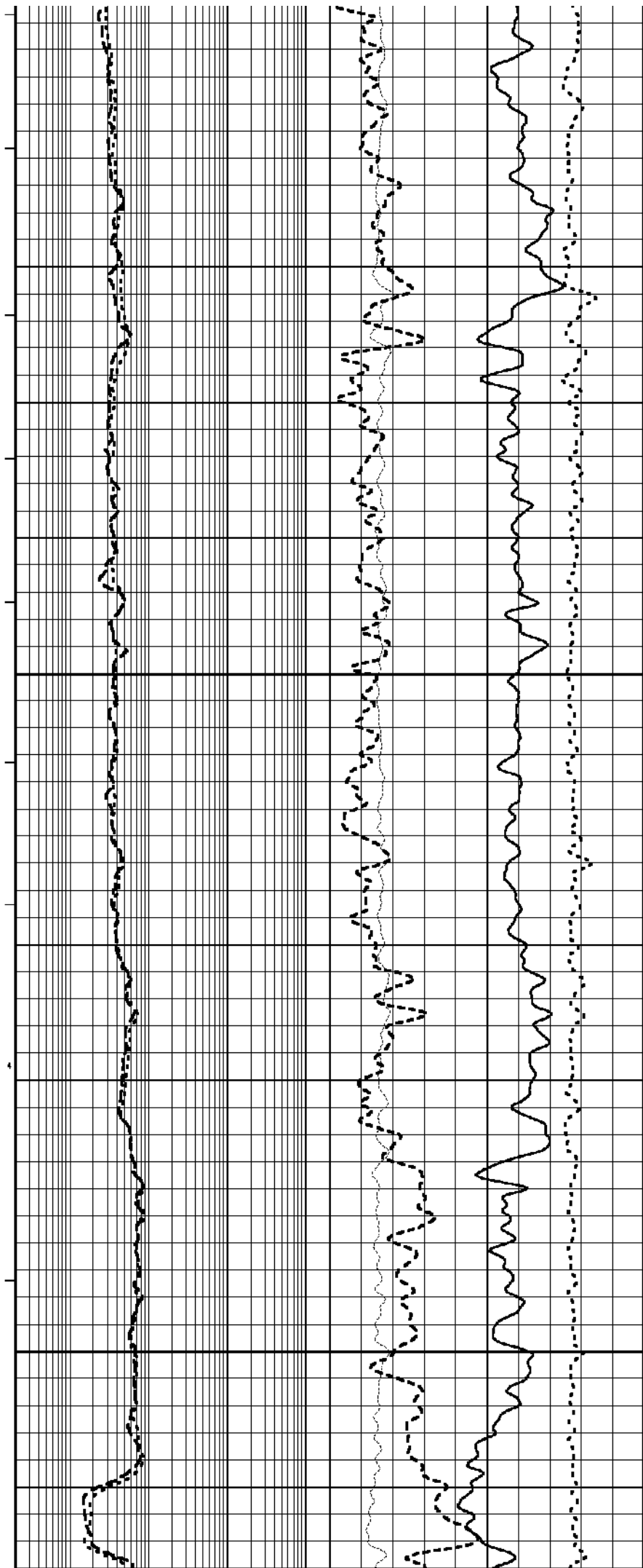
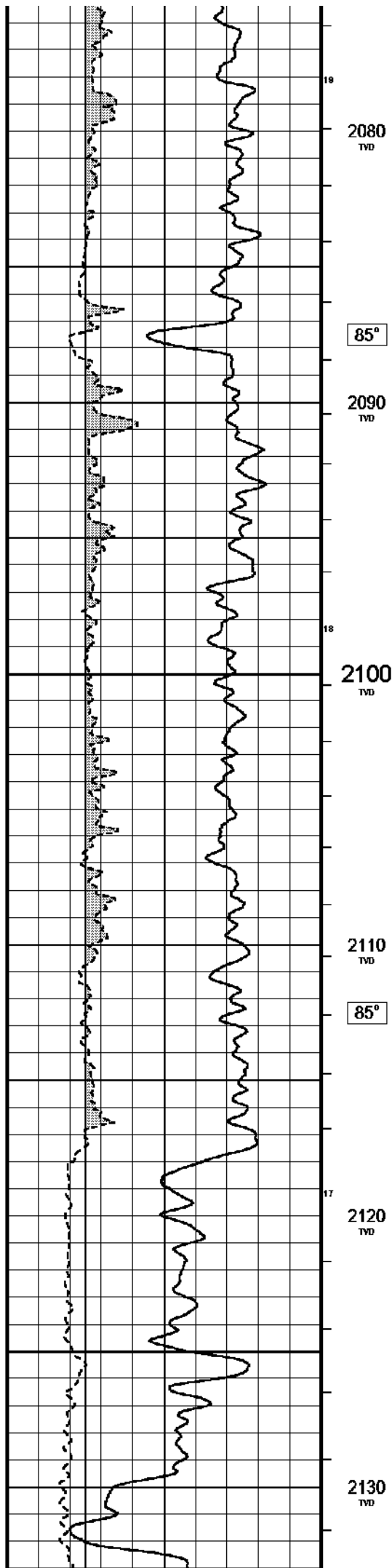
System Configuration Dates: Logged 23-OCT-2002: Processed 23-OCT-2002: Plotted 23-OCT-2002:

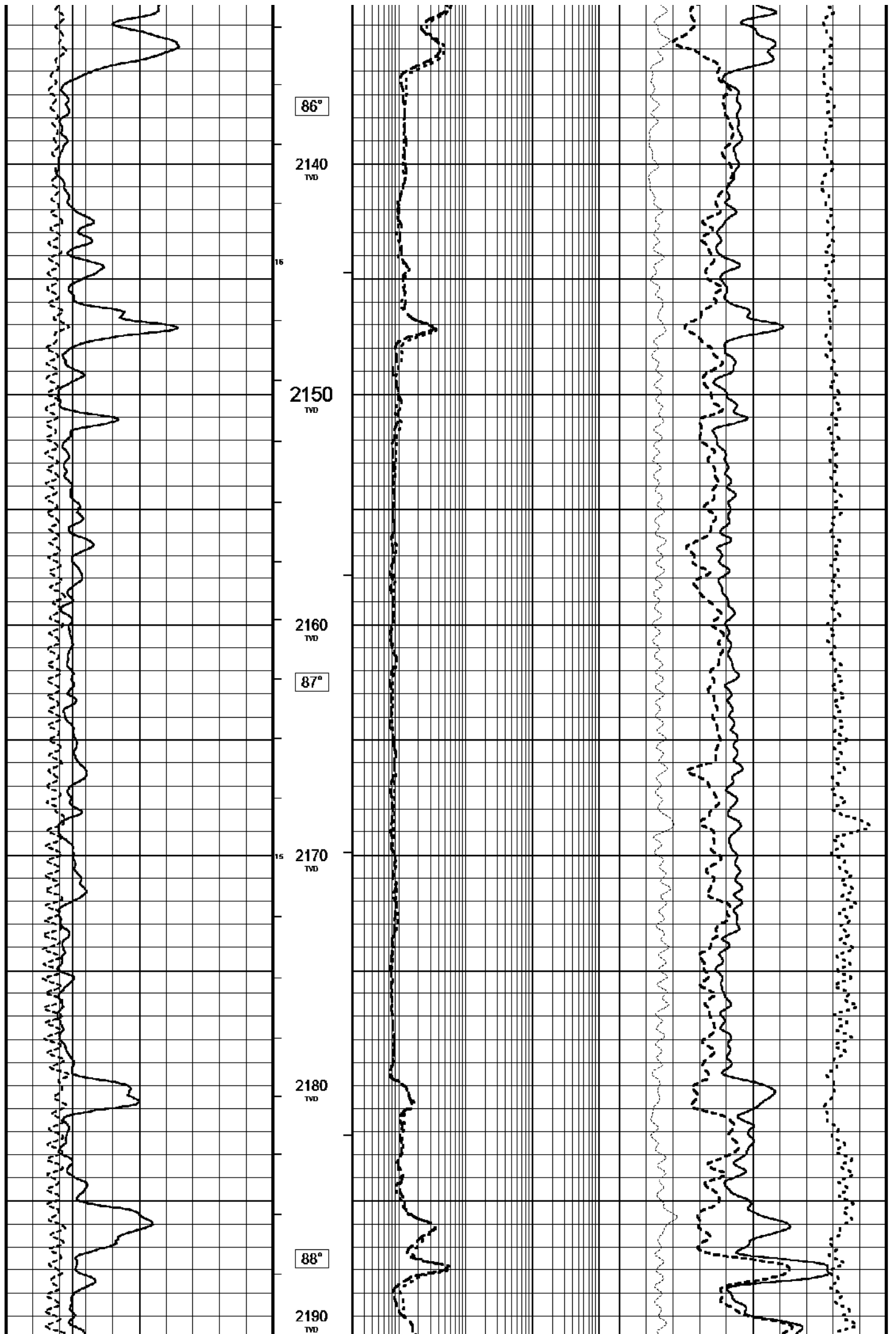


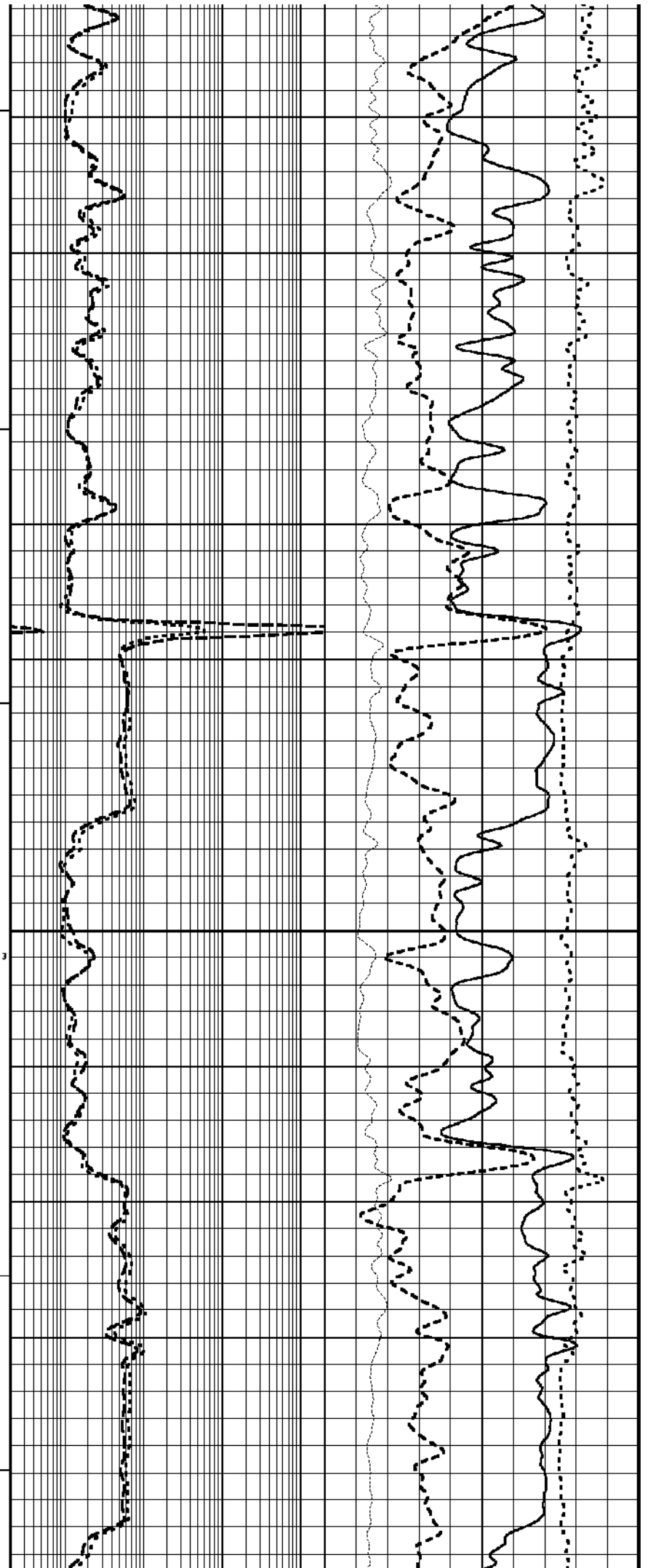
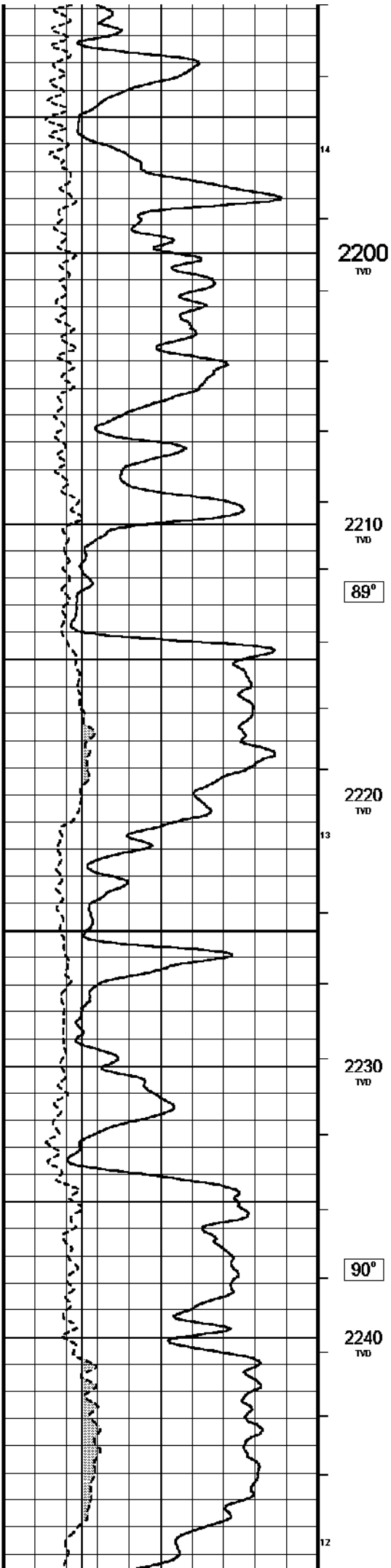


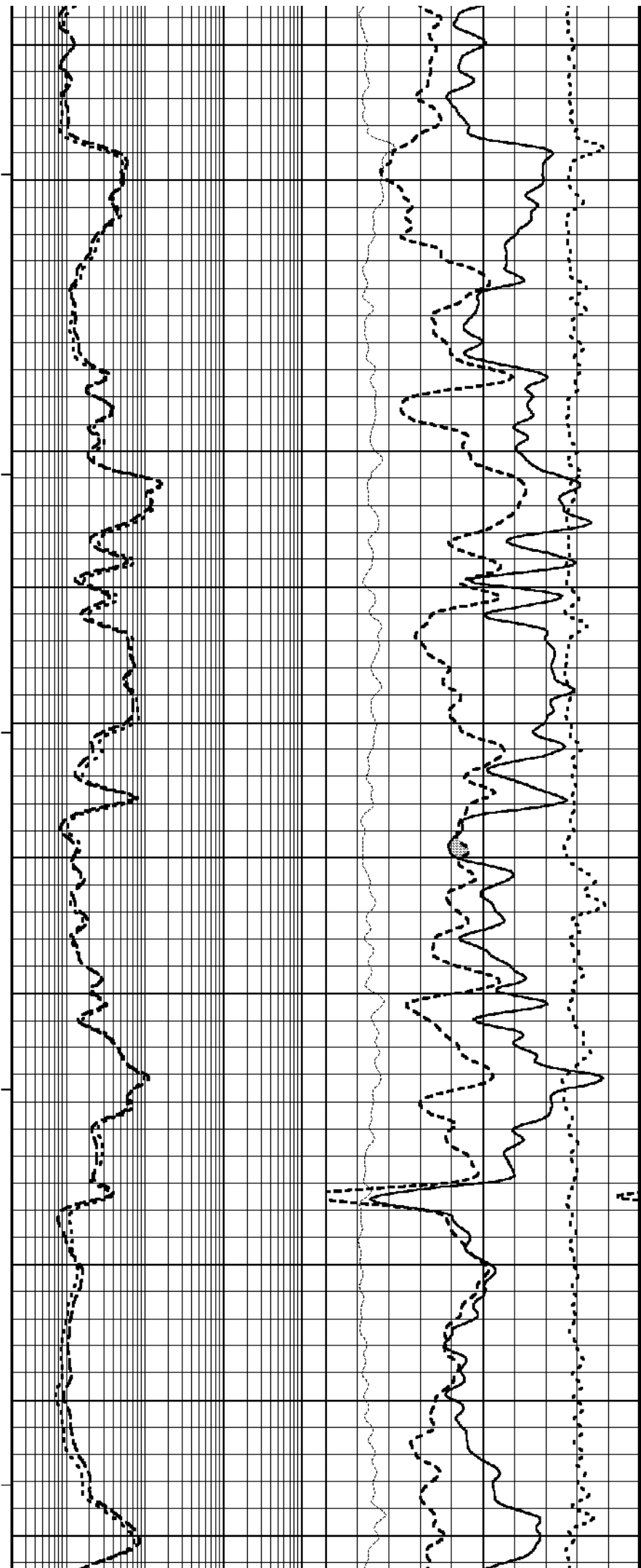
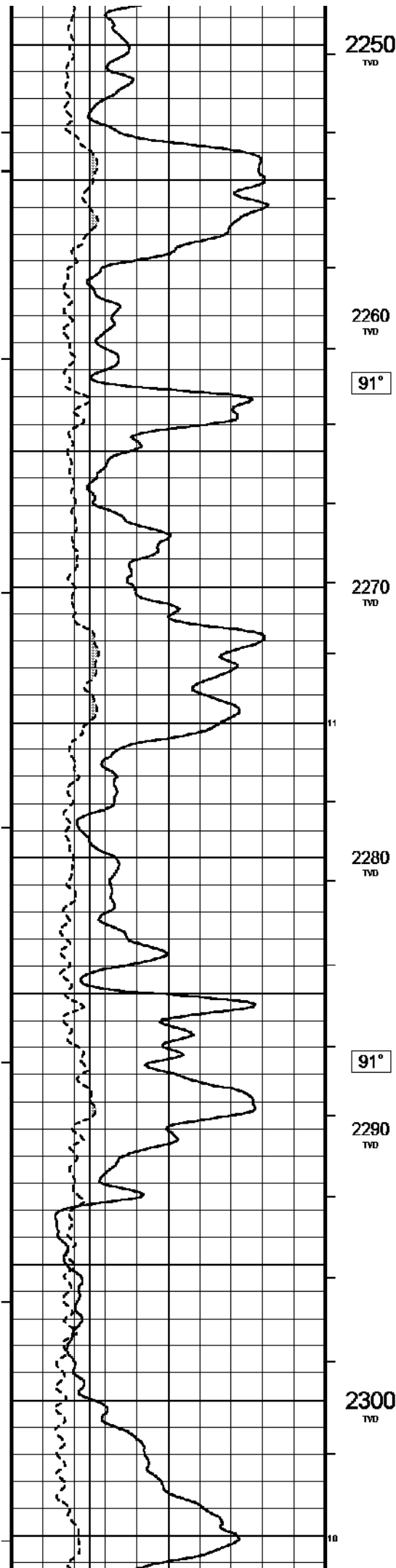


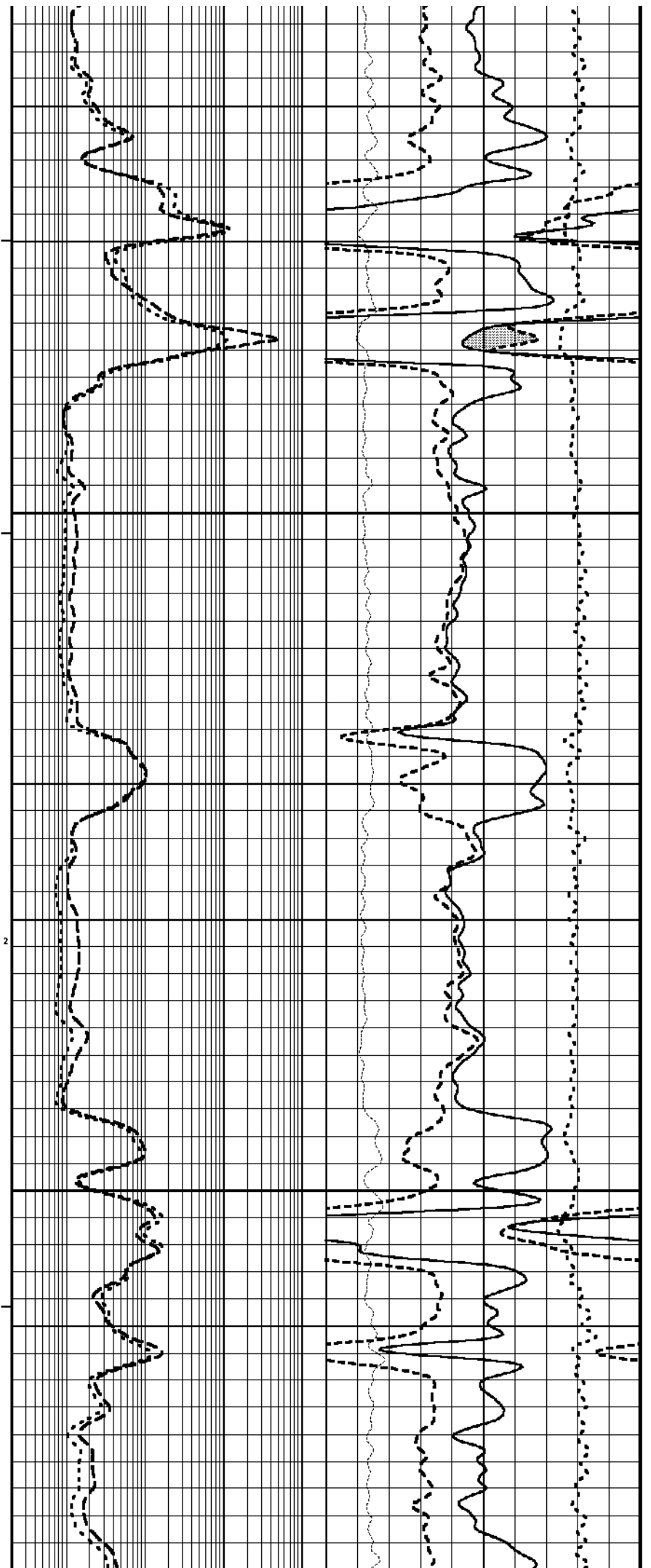
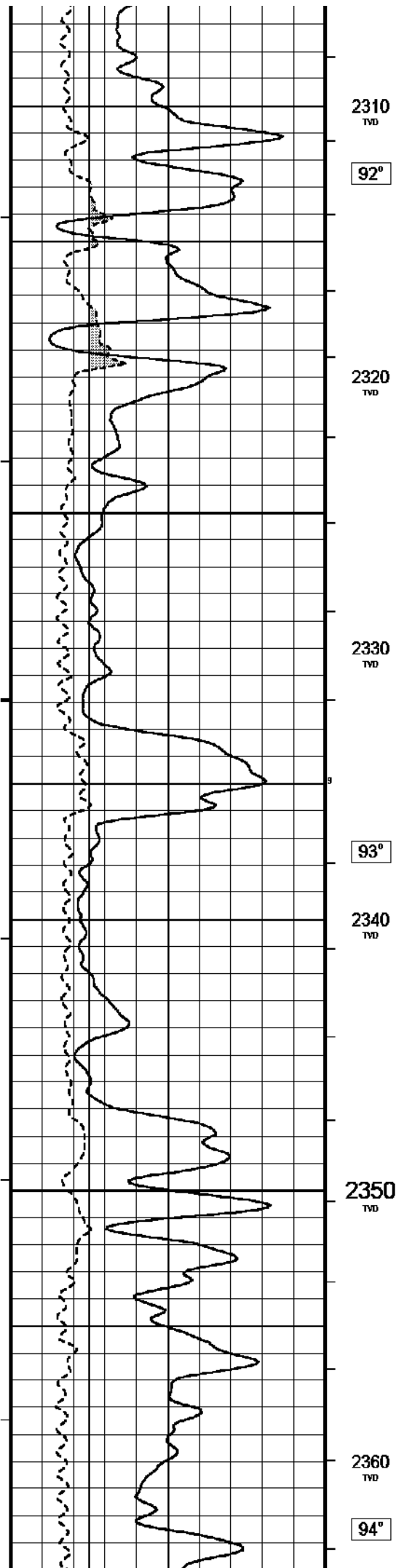


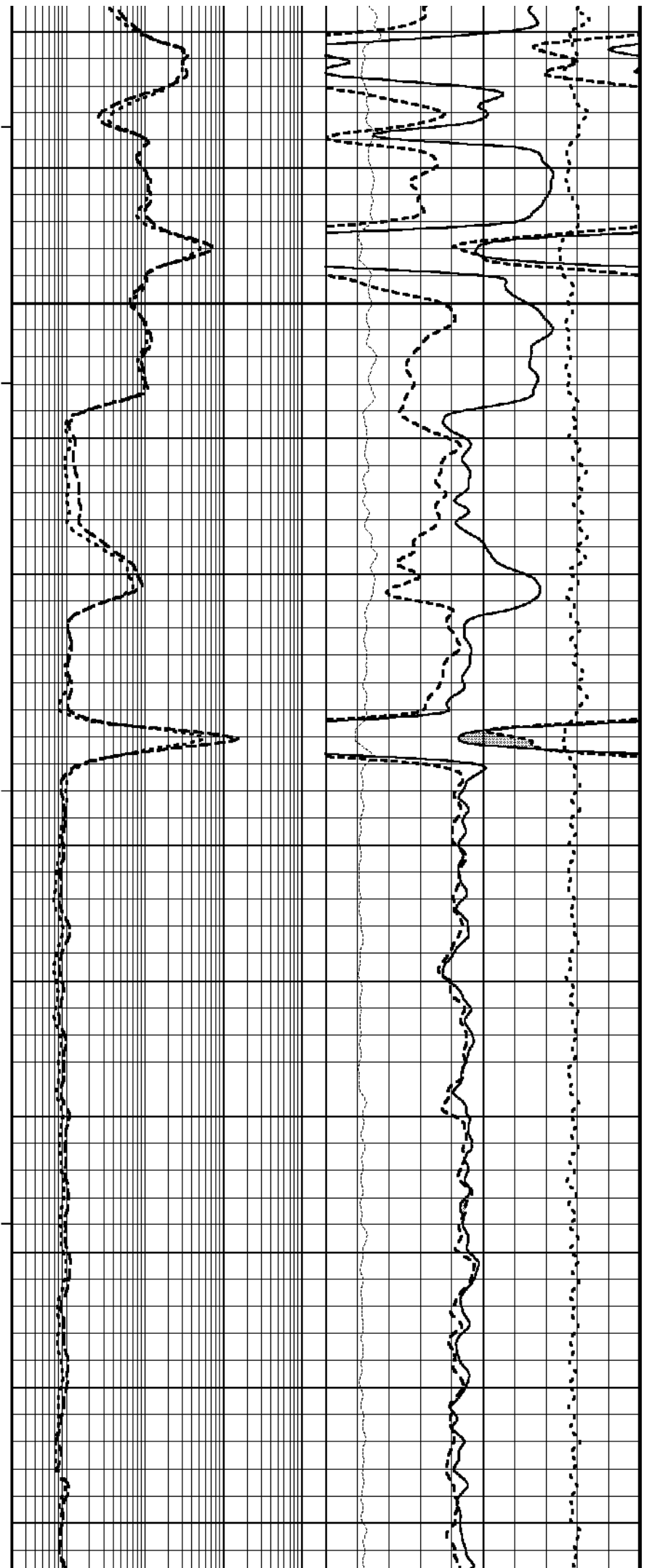
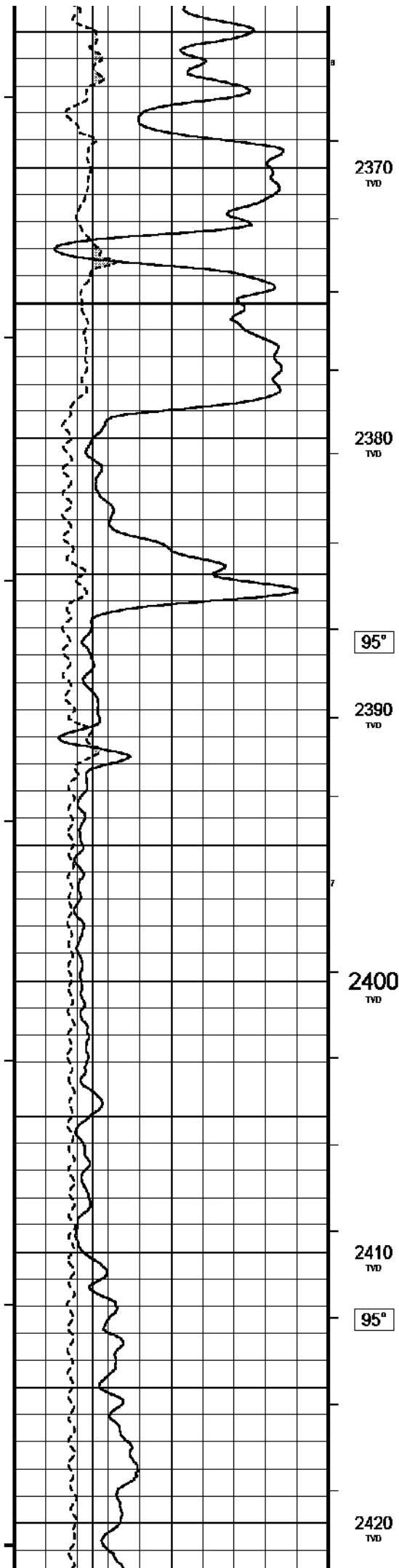


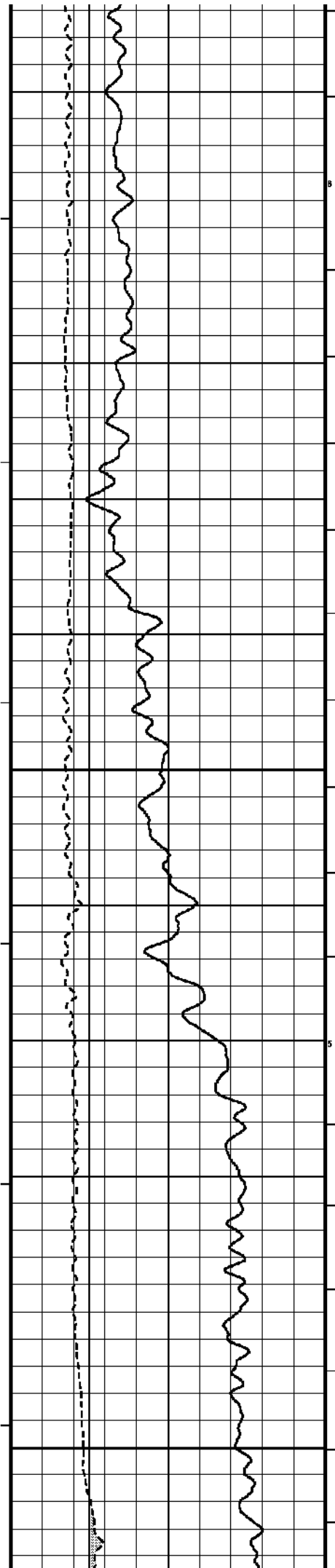












2430
TVD

96°

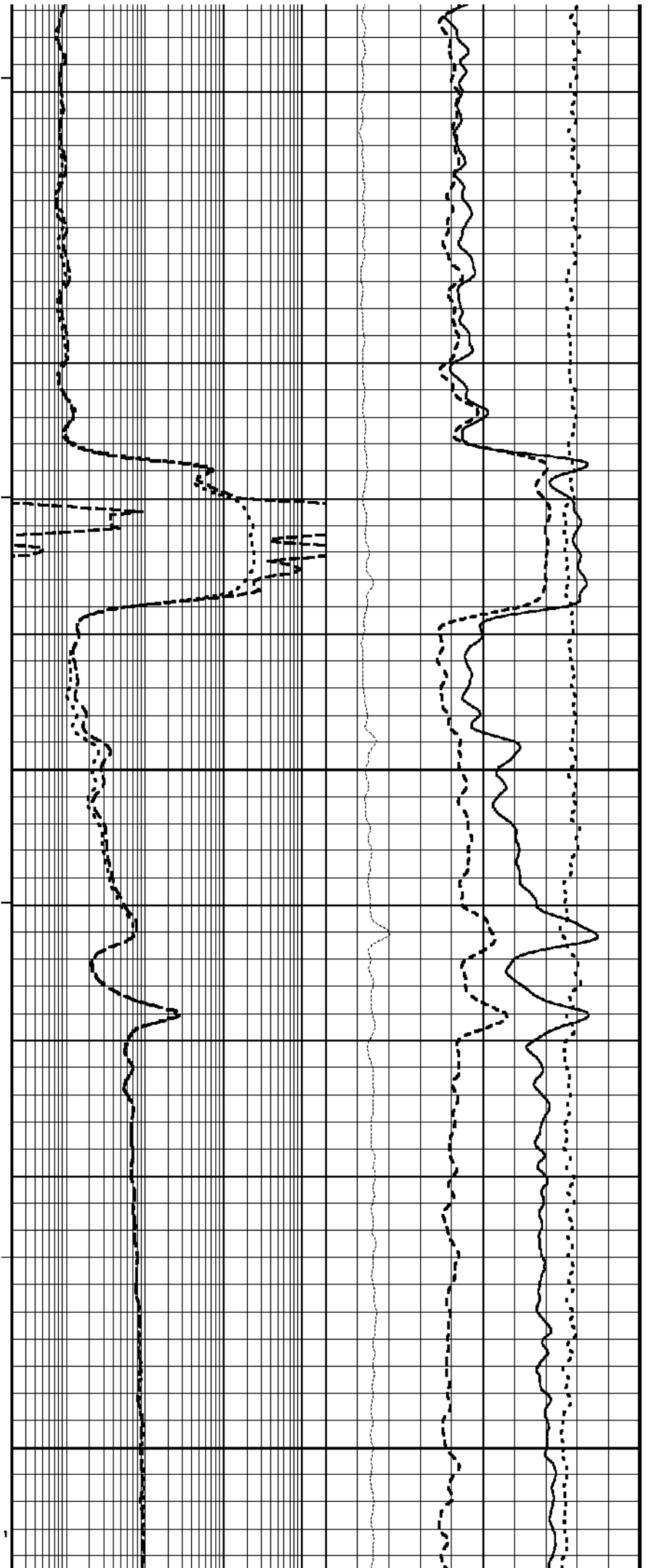
2440
TVD

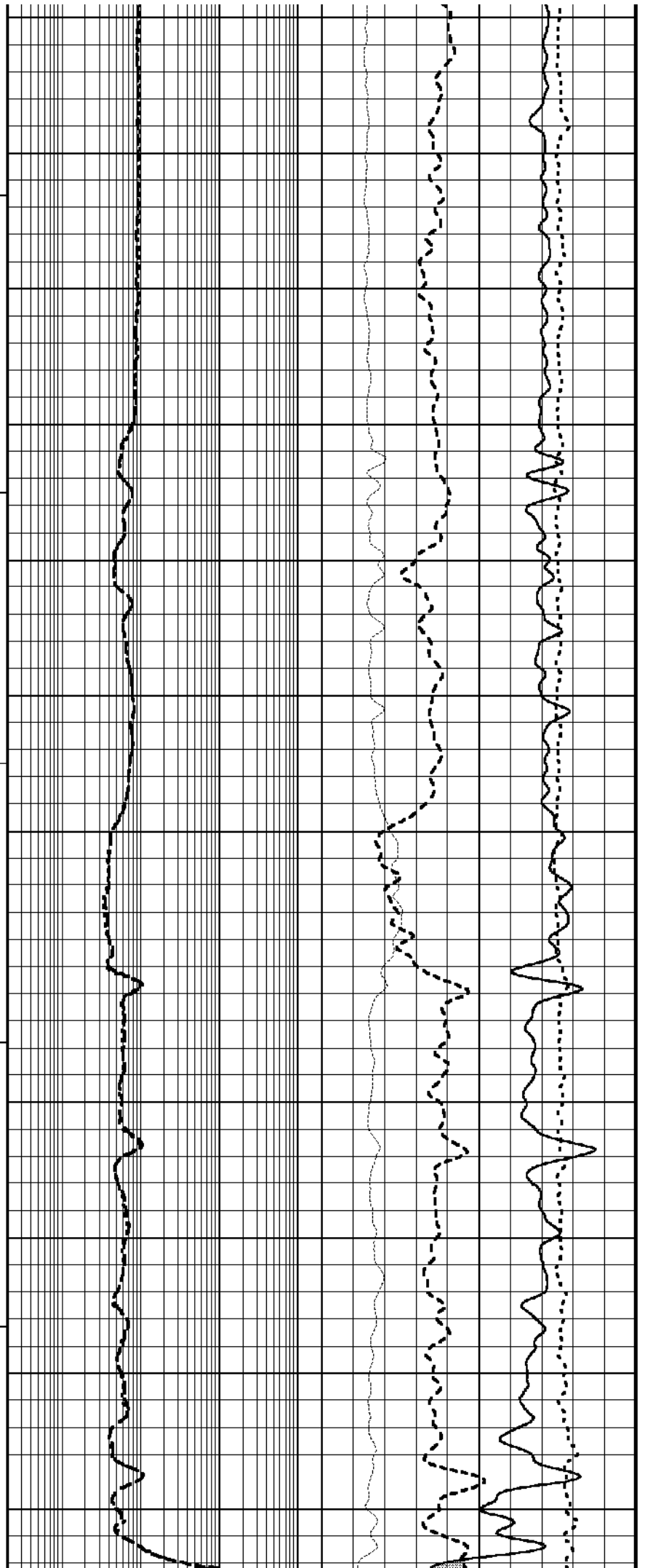
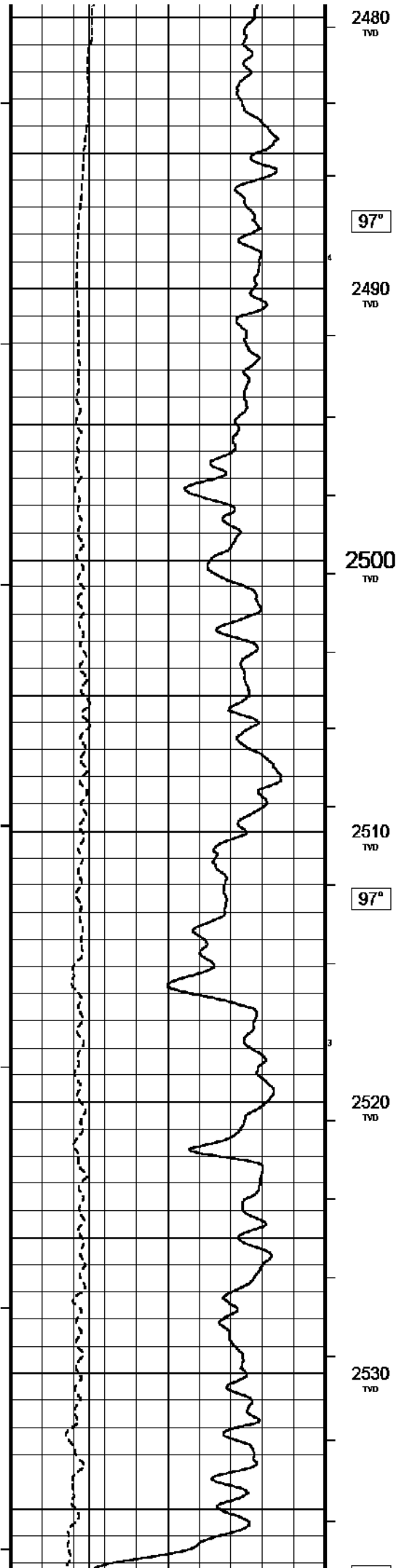
2450
TVD

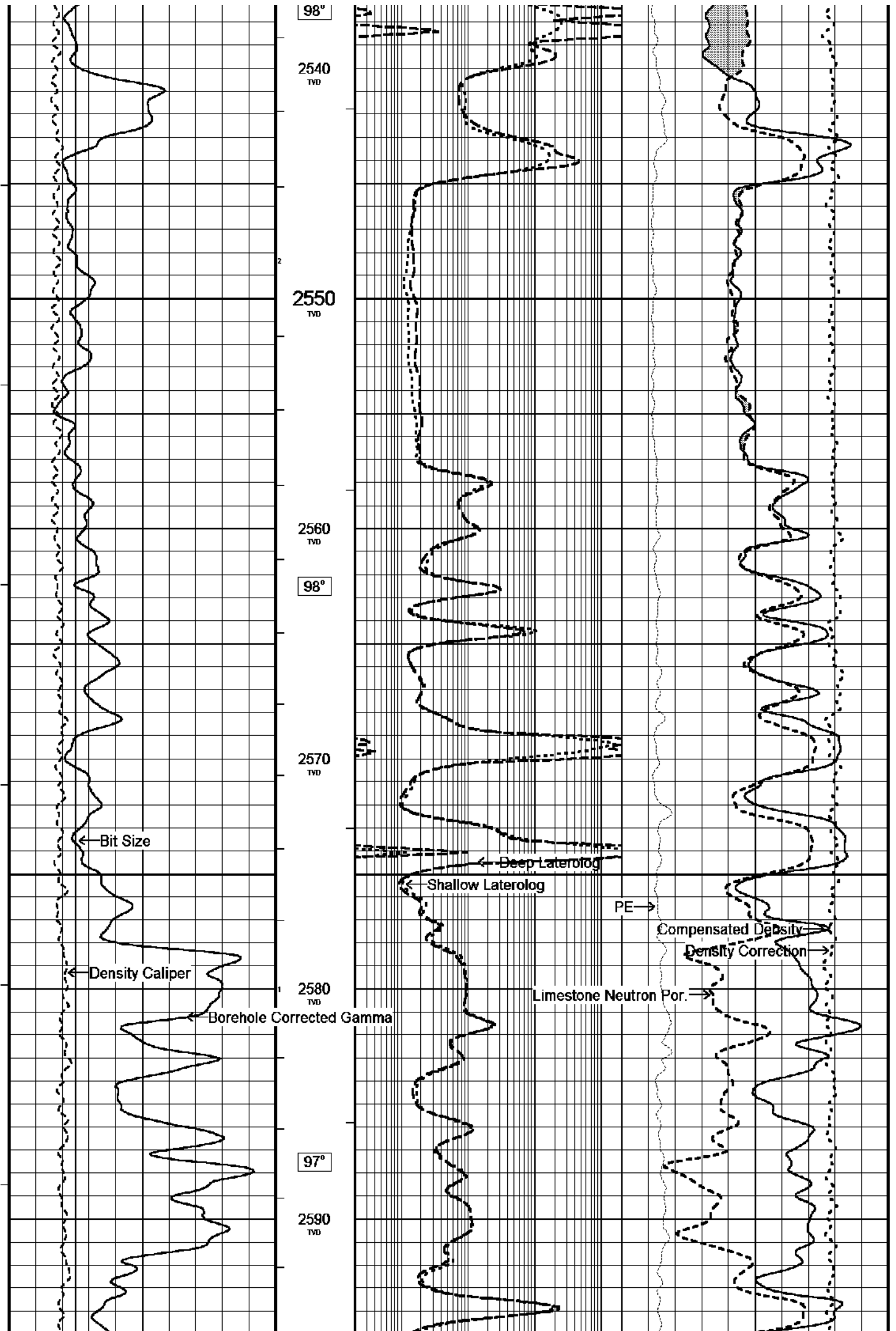
2460
TVD

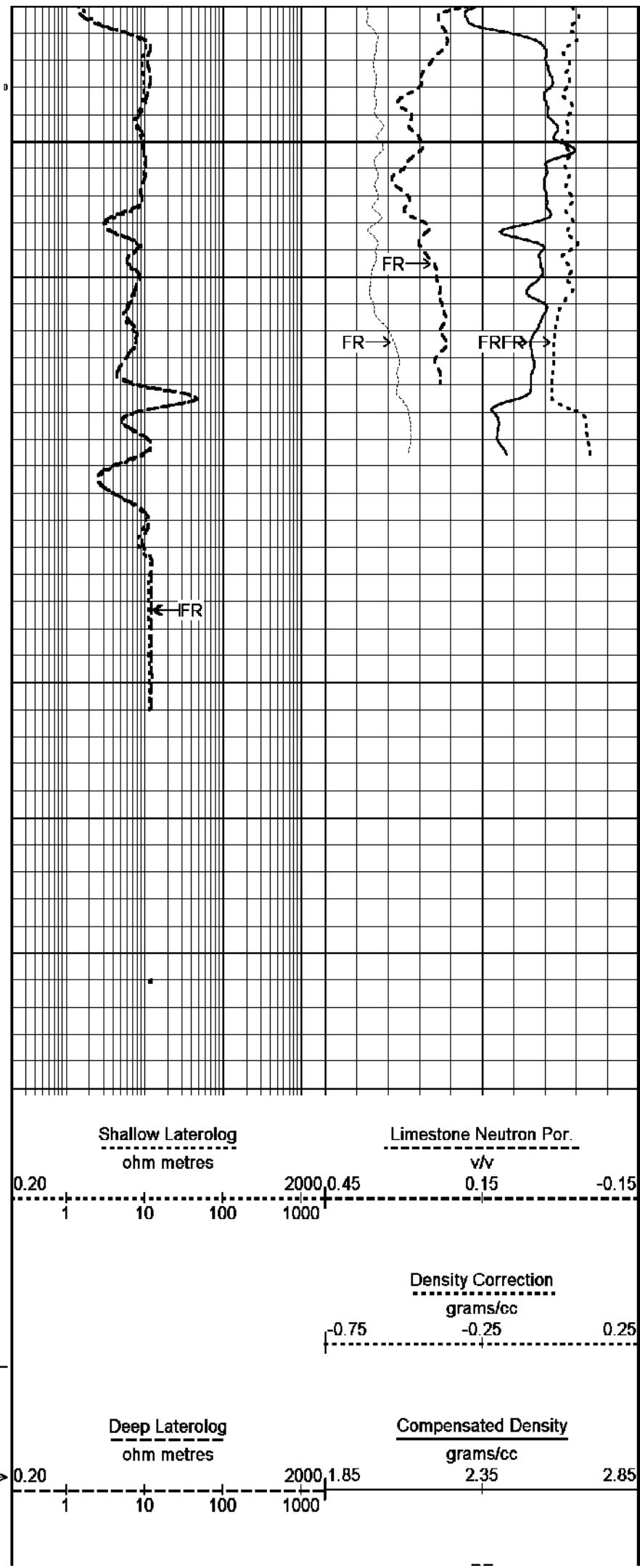
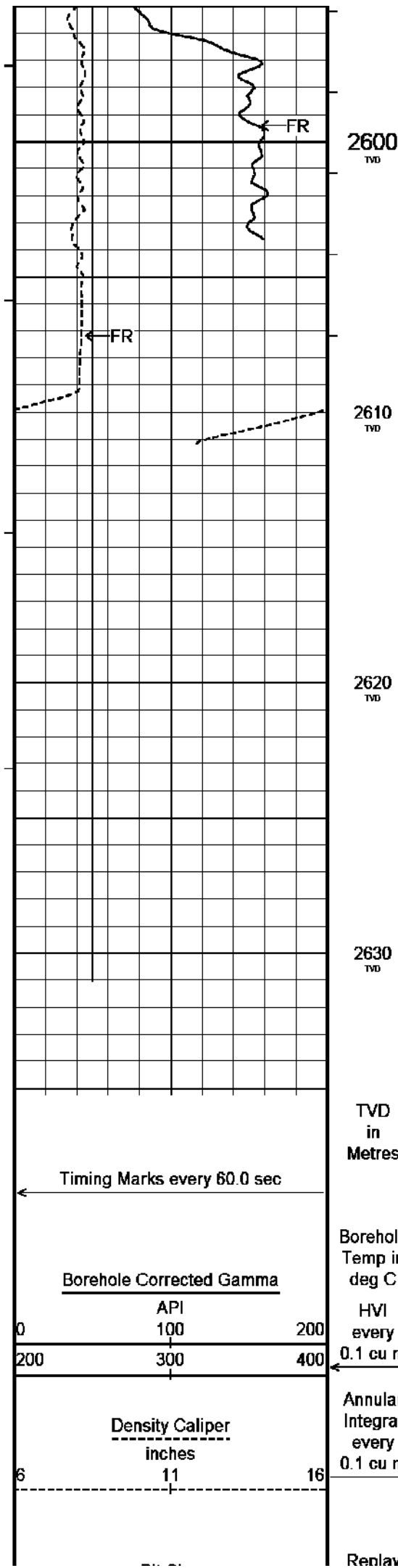
97°

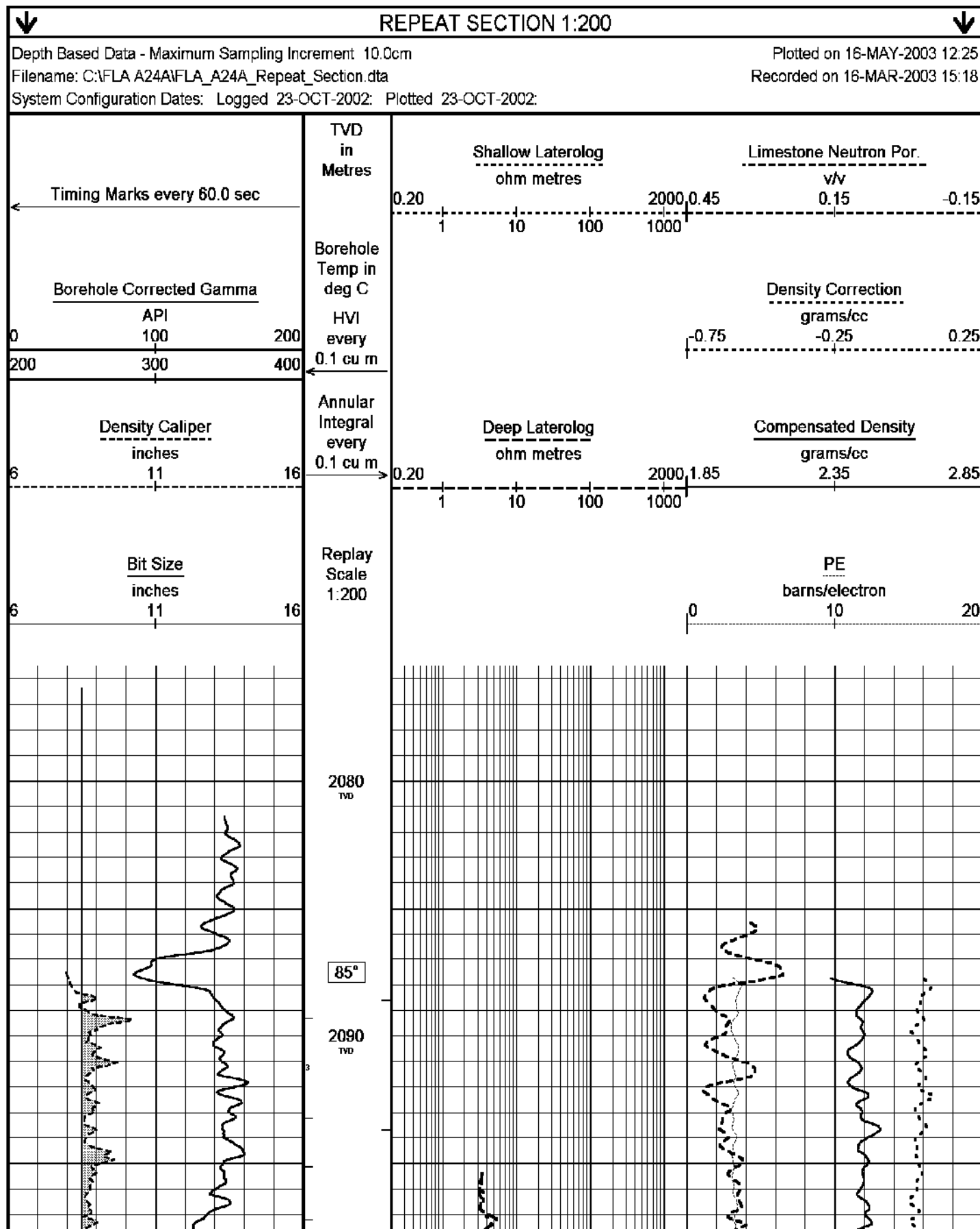
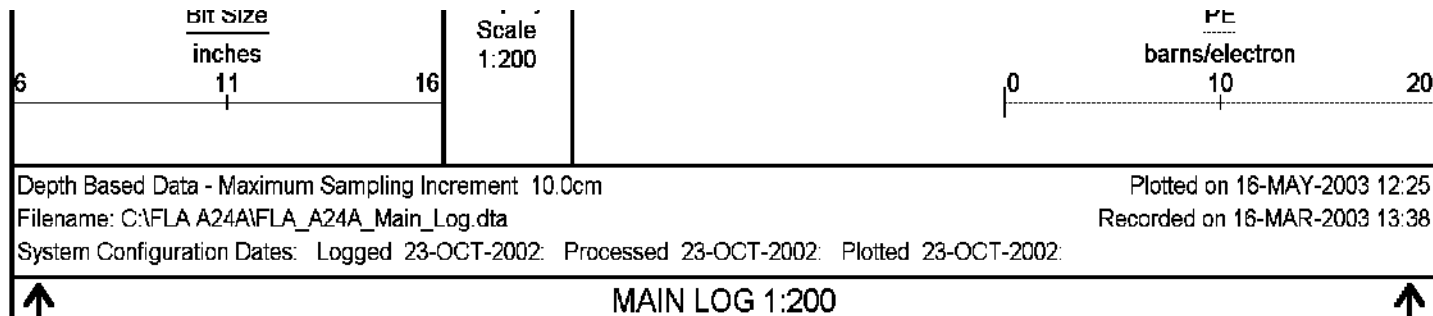
2470
TVD

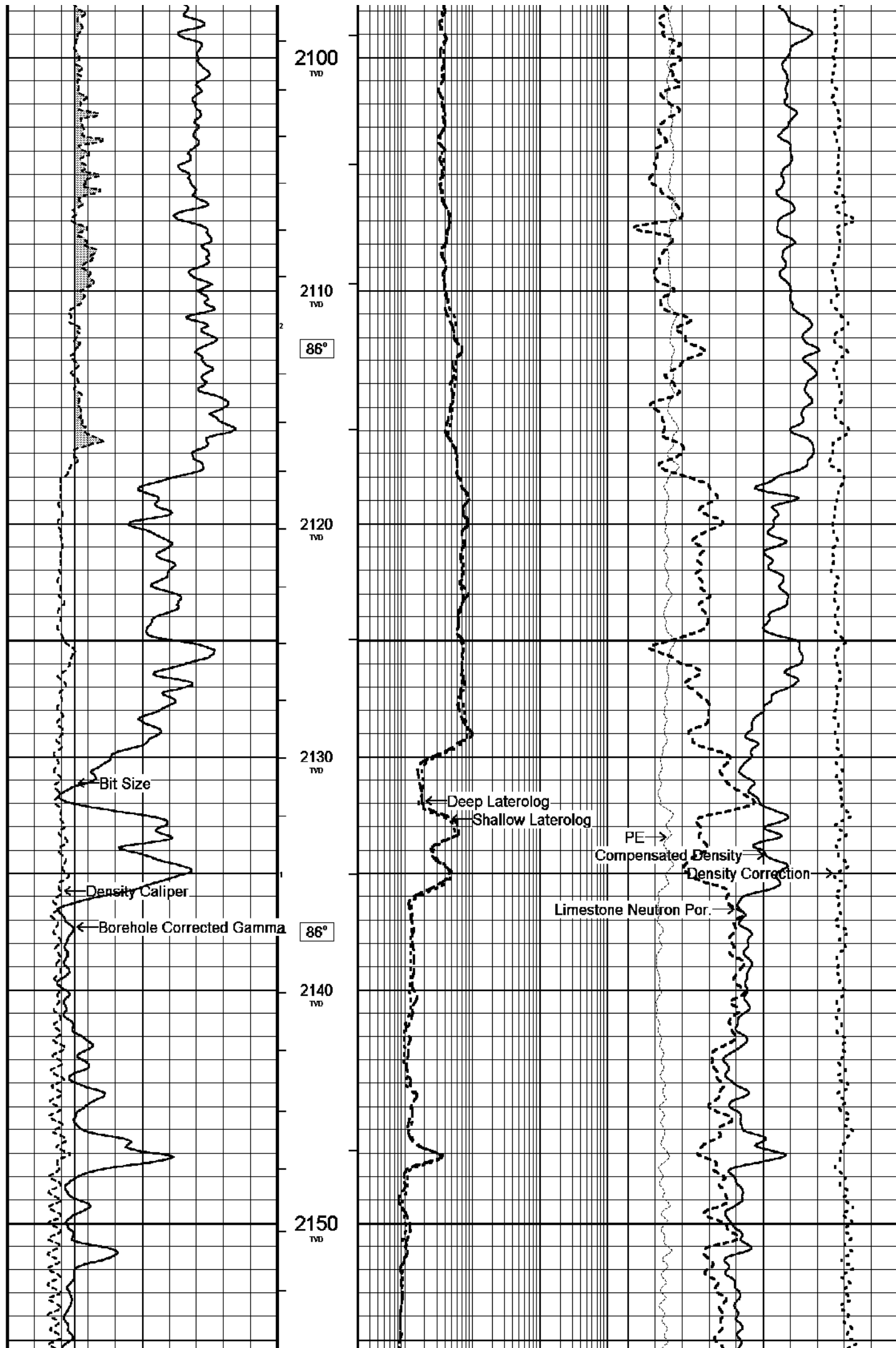


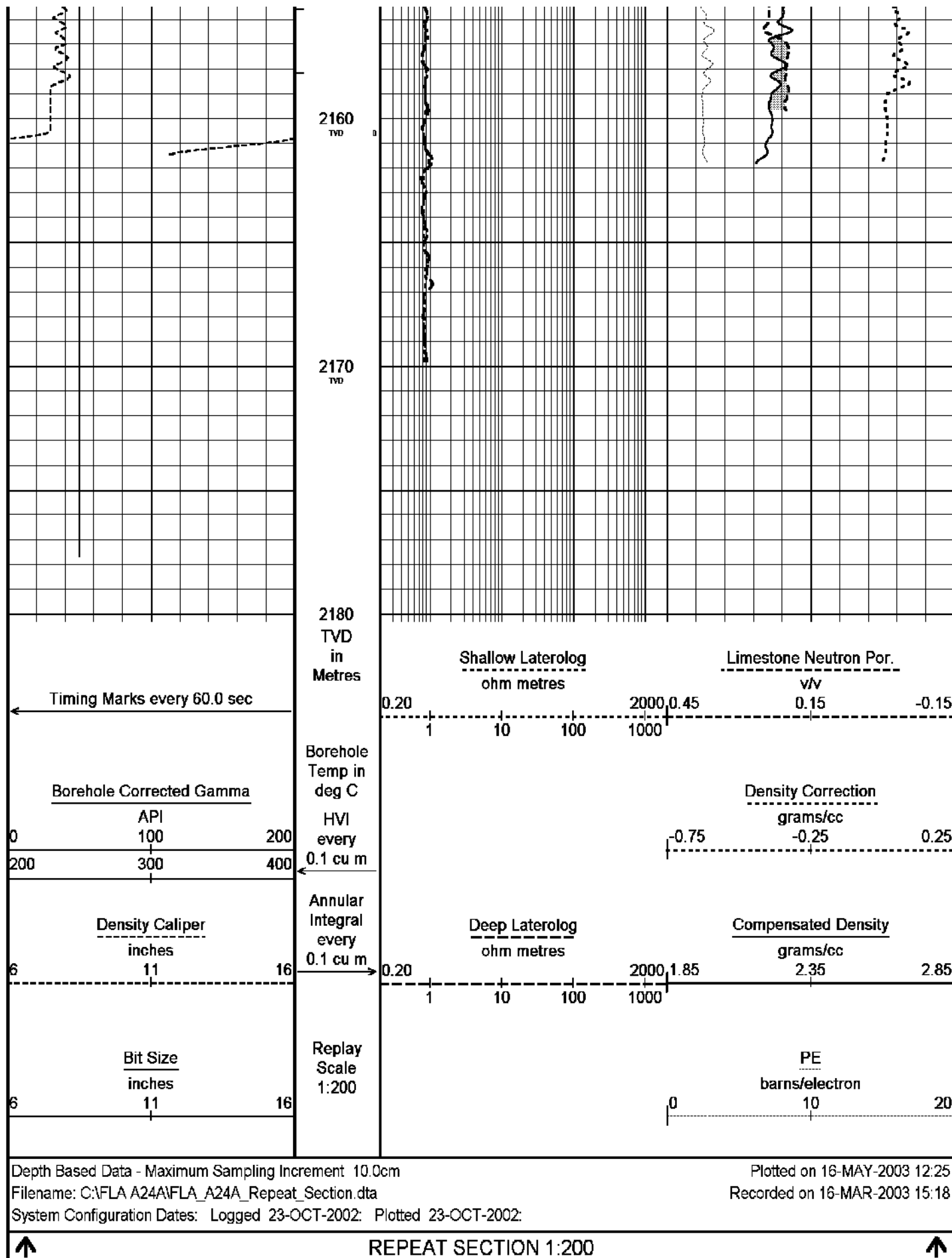












BEFORE SURVEY CALIBRATION

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	
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 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

Laterolog Calibration MLE 015			Base Calibration on 4-SEP-2002,14:40 Field Check on 14-MAR-2003,03:10	
Base Calibration				
		Measured		Calibrated (ohm-m)
Channel	Resistor 1	Resistor 2	Resistor 1	Resistor 2
Shallow	0.0	972.3	0.0	1327.3

Deep	0.0	972.9	0.0	852.7
Groningen	0.0	996.2	0.0	852.7

Channel	Base Check (ohm-m)	Field Check (ohm-m)
Shallow	49.1	49.1
Deep	31.5	31.5
Groningen	246.3	246.3

Laterolog Constants MLE 015

Squasher Start	40000	ohm-m
Shallow Laterolog K Factor	1.3273	
Deep Laterolog K Factor	0.8527	
Groningen Laterolog K Factor	0.8527	
Interference Rejection	50 Hz	
SP Connection	SP Bridle Electrode	
Groningen Connection	Groningen Electrode	

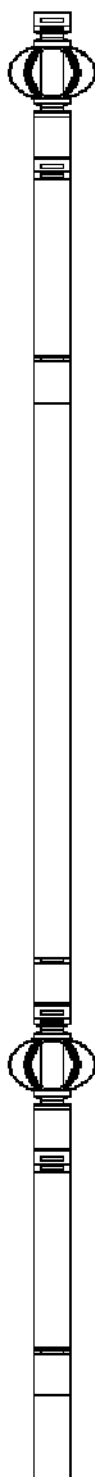
DOWNHOLE EQUIPMENT All measurements relative to tool zero.

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

- 20.20 m CLDC - Density Caliper
- 20.20 m HVOL - Hole Volume
- 20.20 m AVOL - Annular Volume
- 19.98 m DCOR - Density Correction
- 19.98 m DEN - Compensated Density
- 19.96 m PDPE - PE

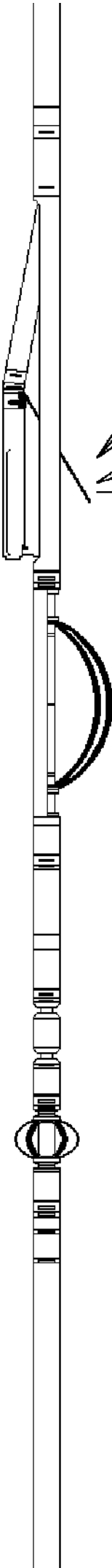
Compact Inline Bowspring A
MIS 25 Length: 1.74 m Weight: 33.07 lb

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

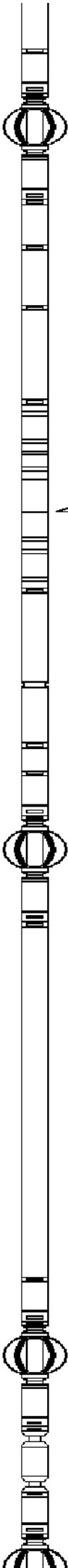
Compact Inline Standoff B
MIS 76 Length: 0.65 m Weight: 15.43 lb

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



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

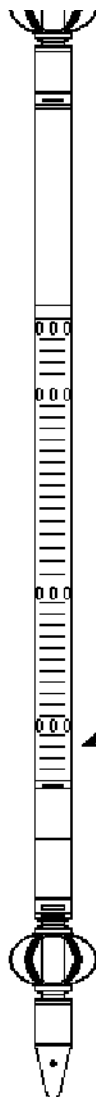
Compact Sonic
MSS 28 Length: 3.82 m Weight: 72.75 lb

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



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)

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



DUAL LATEROLOG - GR
DENSITY - NEUTRON
1:200 TVD