

Reeves

PHOTO DENSITY COMPENSATED NEUTRON 1:500 TVD

COMPANY				ESSO AUSTRALIA PTY. LTD.			
WELL				FLOUNDER A12a			
FIELD				GIPPSLAND BASIN			
PROVINCE/COUNTY				BASS STRAIT			
COUNTRY/STATE				AUSTRALIA			
LOCATION				5758709.11 m N, 625849.47 m E 38°18'39.173" S, 148°26'21.833" E			
LSD	SEC	TWP	RGE	Other Services COMPENSATED SONIC DUAL LATEROLOG			
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				12-APR-2003			
Run Number				1			
Depth Driller				2636.40 metres			
Depth Logger				2637.40 metres			
First Reading				2636.90 metres			
Last Reading				1084.00 metres			
Casing Driller				754.70 metres			
Casing Logger				754.50 metres			
Bit Size				8.50 inches			
Hole Fluid Type				KC/PHPA/GLY			
Density / Viscosity				9.90 lb/USg 68.00 sec/cst			
PH / Fluid Loss				9.40 2.50 ml/30Min			
Sample Source				FLOWLINE			
Rm @ Measured Temp				0.124 @ 25.0 ohm-m			
Rmf @ Measured Temp				0.113 @ 25.0 ohm-m			
Rmc @ Measured Temp				0.179 @ 25.0 ohm-m			
Source Rmf / Rmc				PRESS PRESS			
Rm @ BHT				0.048 @100.0 ohm-m			
Time Since Circulation				17:45 HRS			
Max Recorded Temp				100.00 deg C			
Equipment Name				COMPACT			
Equipment / Base				1			
Recorded By				M.Barnes, R.Tench			
Witnessed By				E.Espiritu			
Circ. Stopped				08:00 11-APR			
				G.McManus			

BOREHOLE RECORD

Bit Size inches	Depth From metres	Depth To metres
8.500	0.00	2920.00

CASING RECORD

Type	Size inches	Depth From metres	Shoe Depth metres	Weight pounds/ft
K-55	10.750	0.00	856.25	40.50

REMARKS

DRILLING RIG: NABORS (ISDL) 453.

TOP OF WINDOW: 856.25m

TOP OF WHIPSTOCK: 856.75m

BTTM OF WINDOW: 863.25m

REEVES COMPACT WIRELINE TOOLS RUN ON SCHLUMBERGER UNIT.

MPD CALIPER AND MMR CALIPER ARE INDEPENDENT OF EACH OTHER, DUE TO SWIVALS ABOVE AND BELOW DENSITY/NEUTRON SECTION.

SPIKES IN DEEP LATEROLOG @ 2094m MD AND 2113m MD ARE INVALID.

HTHP: 11.2 ml/30 min @ Deg 121 deg C.

MAX DEVIATION: 53.8 DEGREES AT 2137.0 m.

DOGLEG AT 892 M, WITH DLS > 6.0 DEGREES/30 m.

REEVES CREW: M.BARNES, R.TENCH, G.MCMANUS.

SCHLUMBERGER CREW: B.GLOVER, B.TAYLOR, J.LIGHT, R.DEGROOT.

AFTER SURVEY CALIBRATION

C:\Fla a12a\MAIN LOG A DSC.dta

Gamma Check MCG 076

Field Calibration on 7-APR-2003,14:34
After Survey Check on 12-APR-2003,07:31

	Before (API)	After (API)
Background	10	6
Calibrator (Gross)	919	915
Calibrator (Net)	909	909

Neutron Check MDN 069

Before Survey Check on 7-APR-2003 14:52
After Survey Check on 12-APR-2003,07:35

Near (cps)		Far (cps)	
Before	After	Before	After
1846	1818	2708	2648
Ratio			
Before		After	
0.682		0.687	

Photo Density Check MPD 067

Before Survey Check on 7-APR-2003 14:40
After Survey Check on 12-APR-2003,07:40

Density Check

Near		Far	
Before	After	Before	After
957.7	954.7	1152.3	1153.1

PE Check

	Before	After
WS	180.1	179.6
WH	831.6	828.5

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 B 1:500



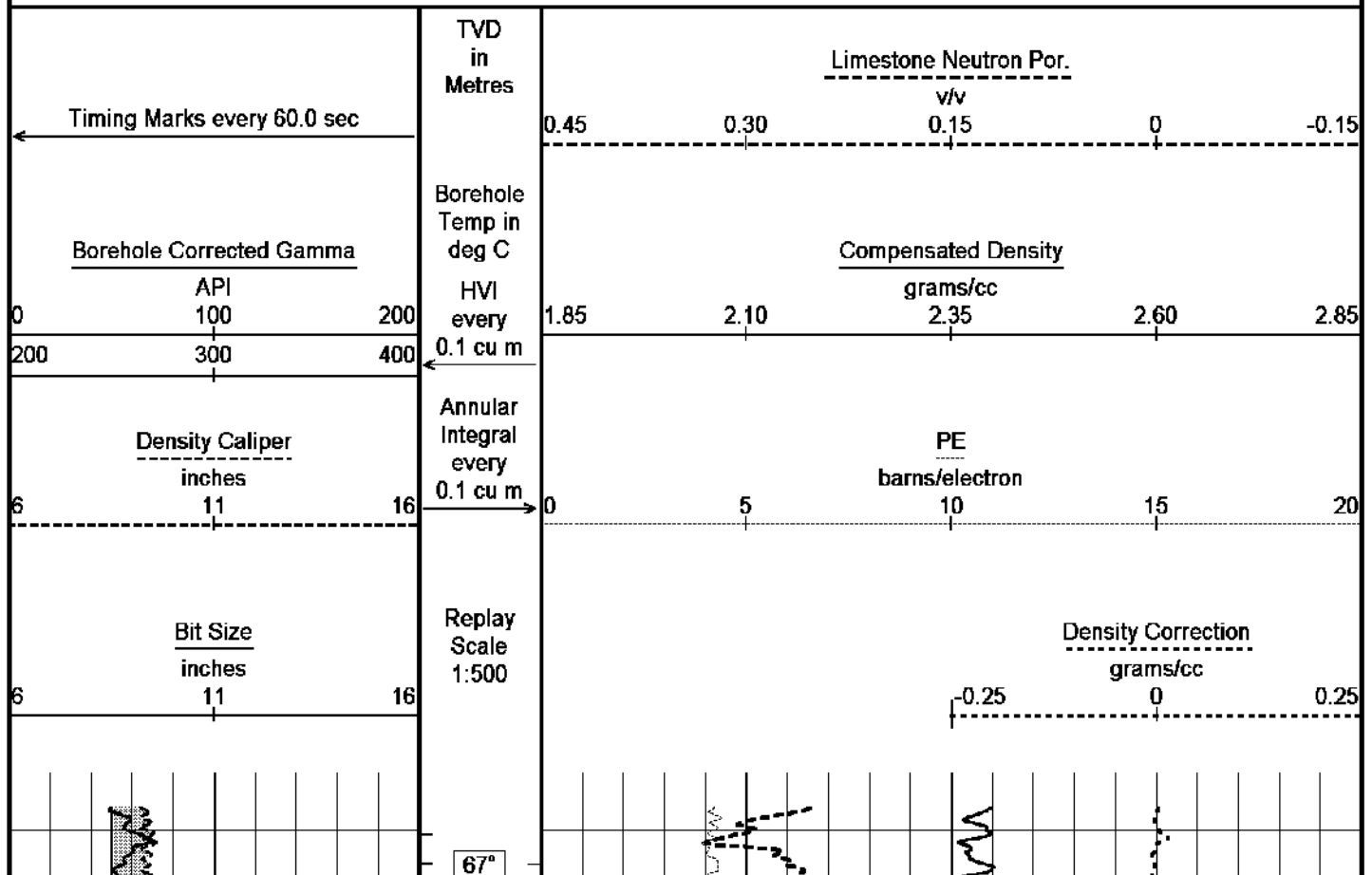
Depth Based Data - Maximum Sampling Increment 10.0cm

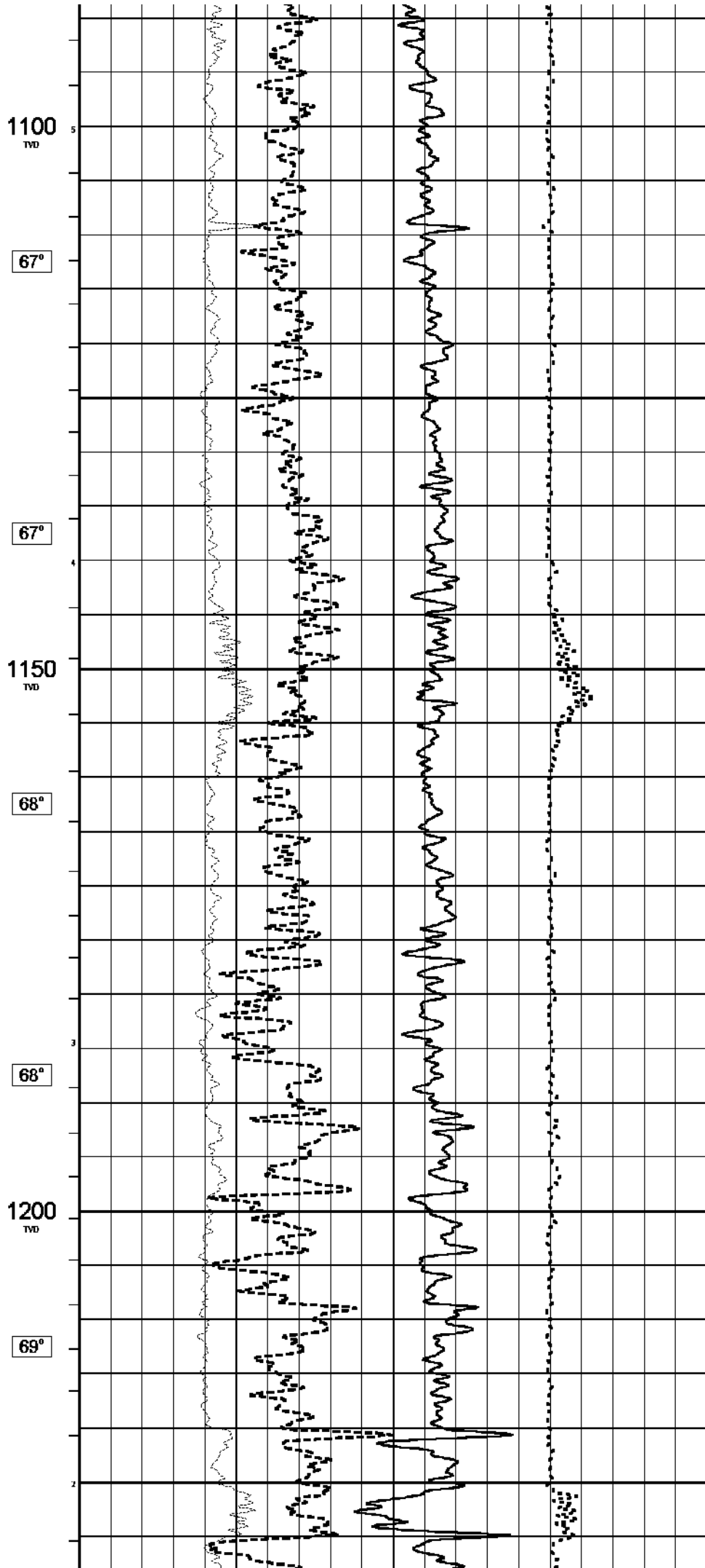
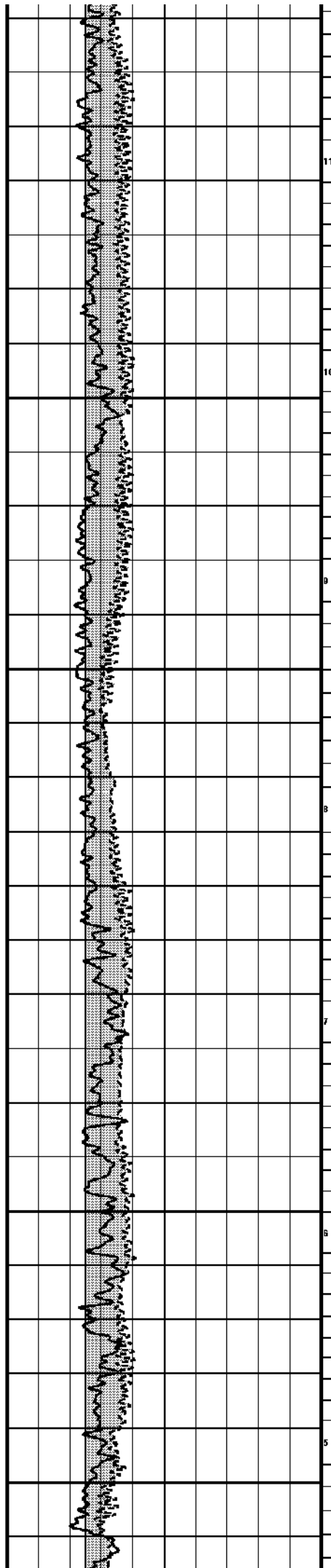
Plotted on 24-MAY-2003 16:33

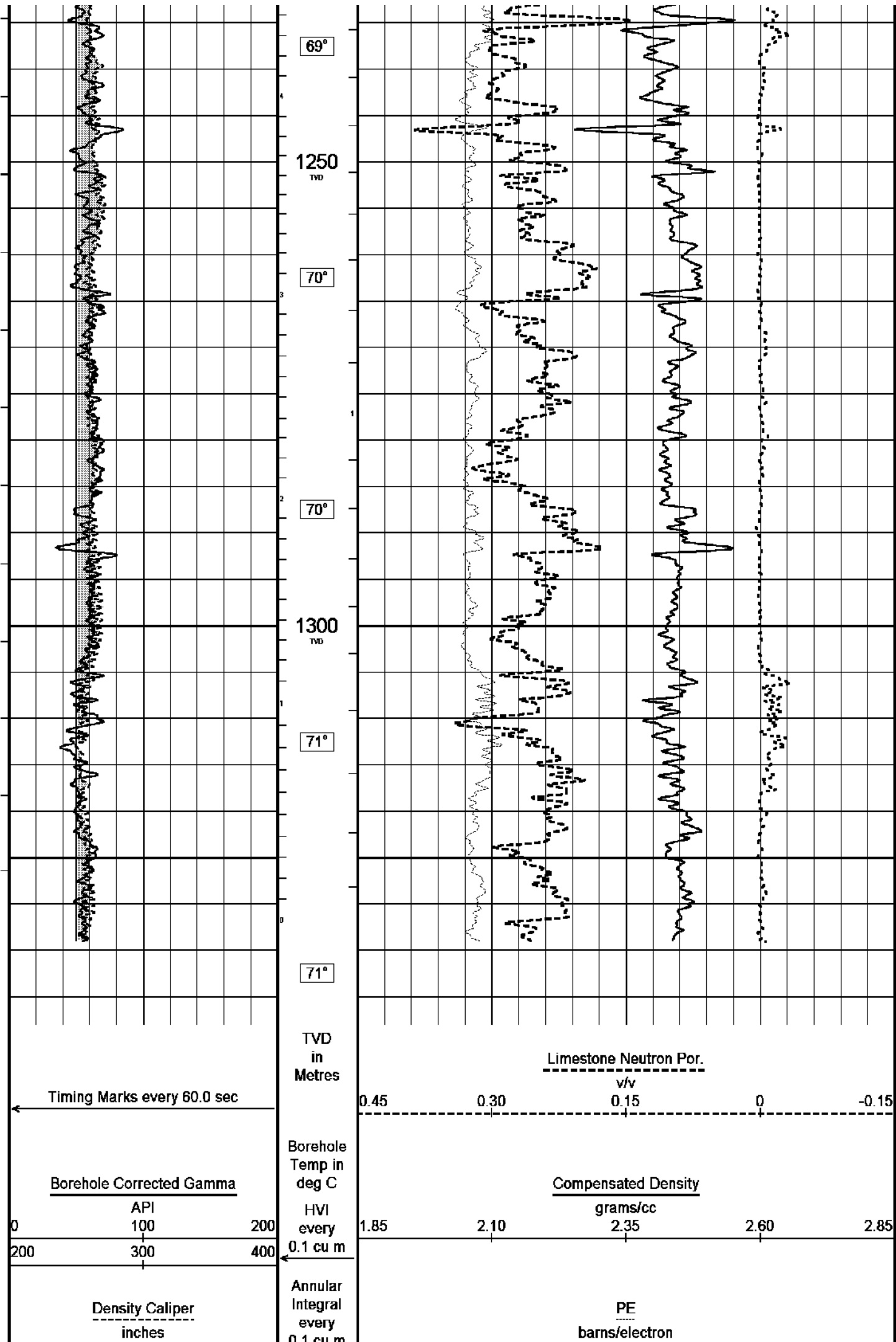
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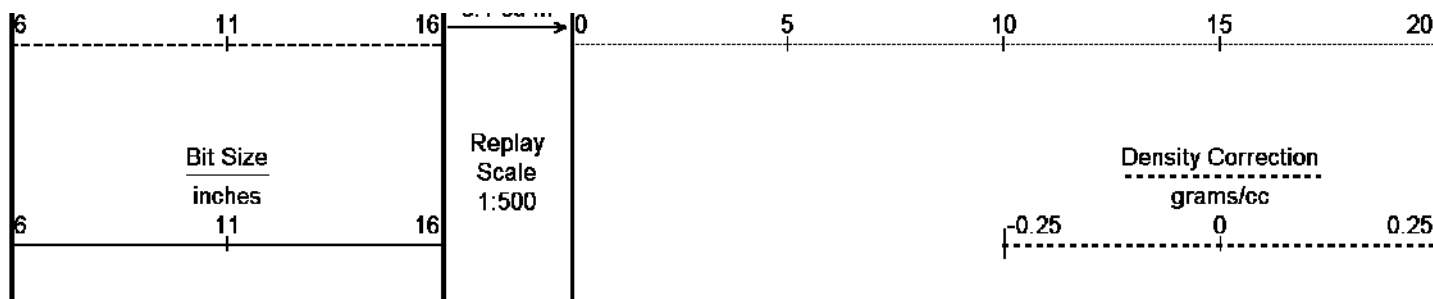
Recorded on 12-APR-2003 04:49

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







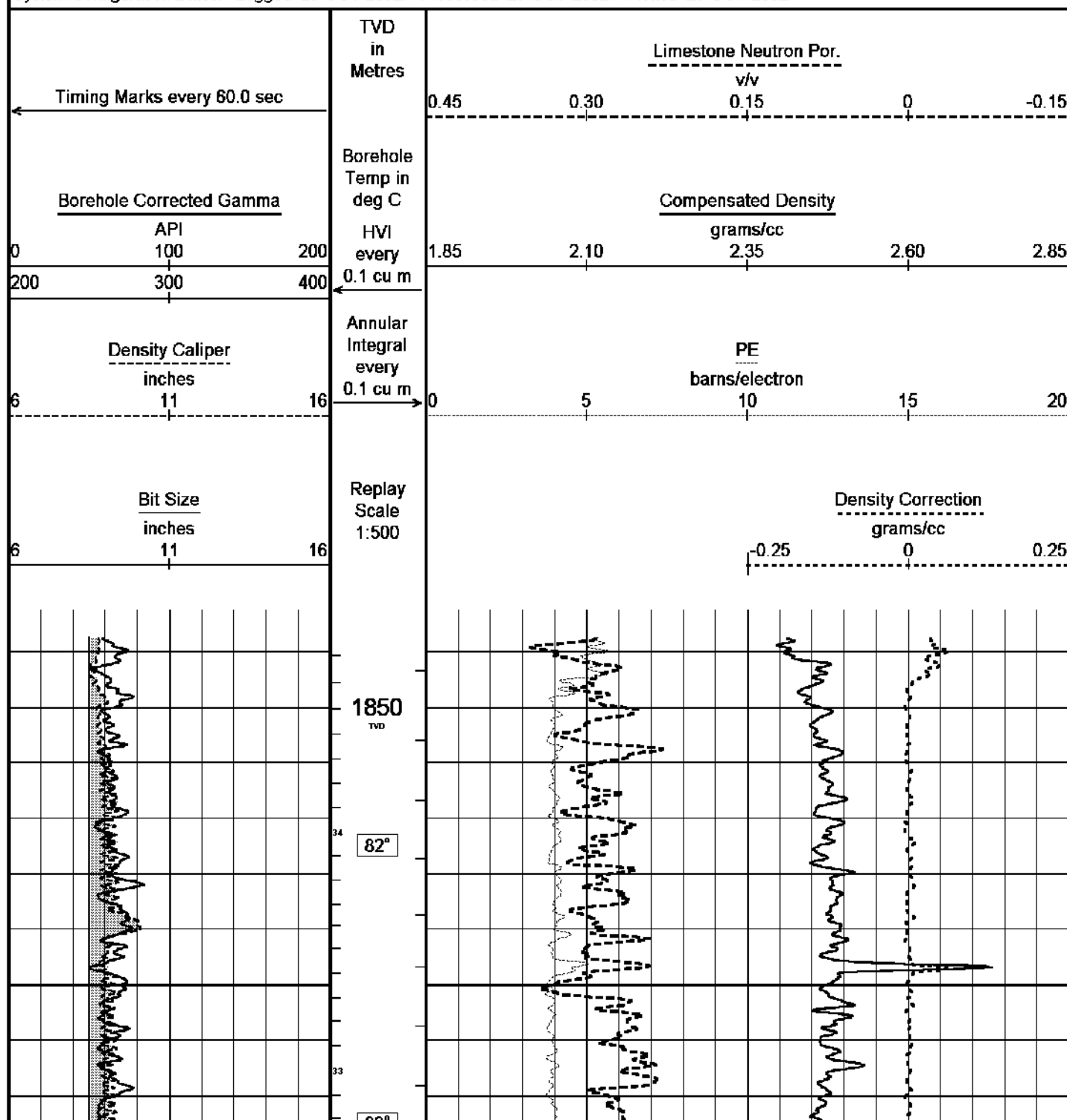


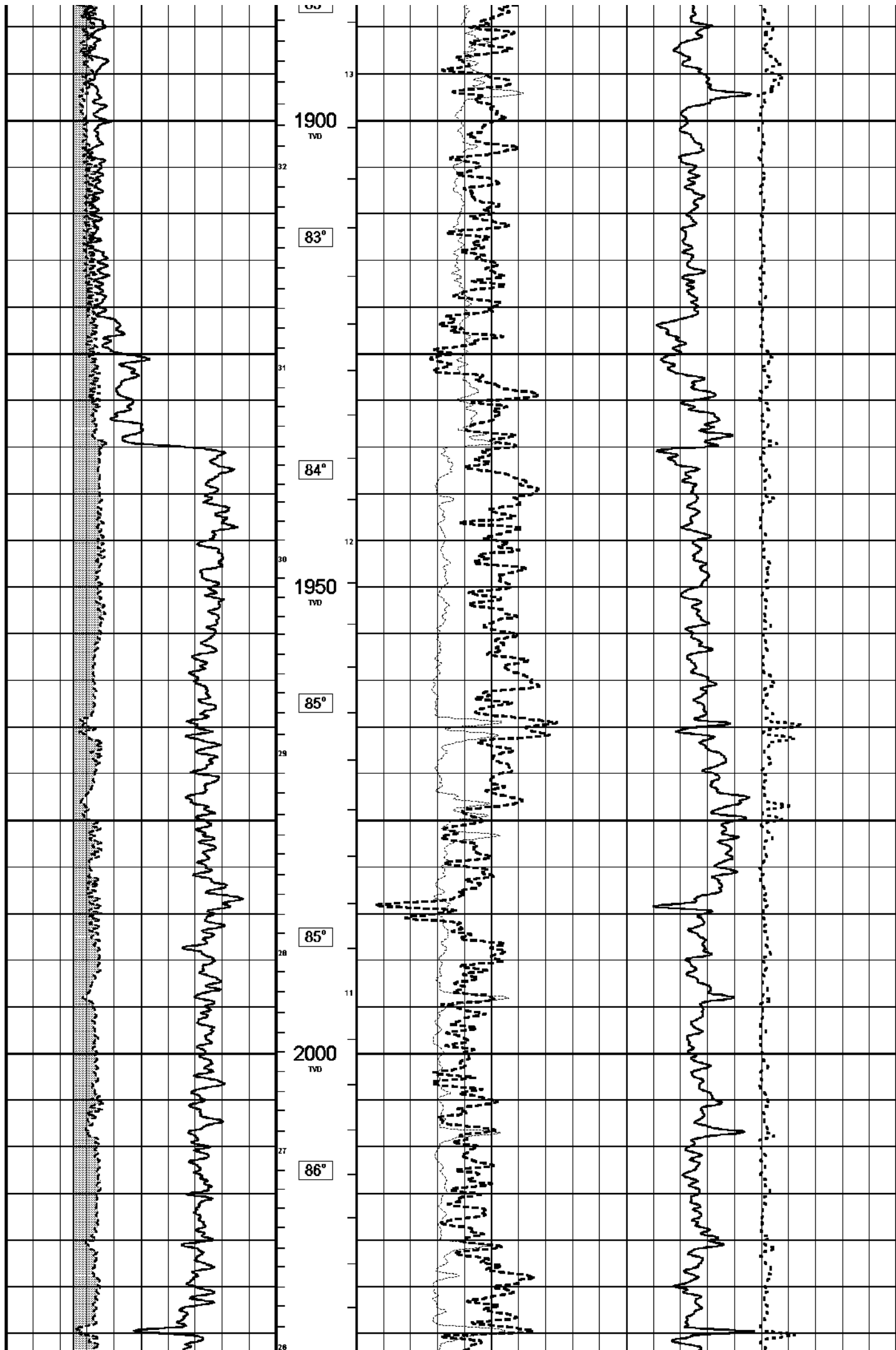
Depth Based Data - Maximum Sampling Increment 10.0cm Plotted on 24-MAY-2003 16:33
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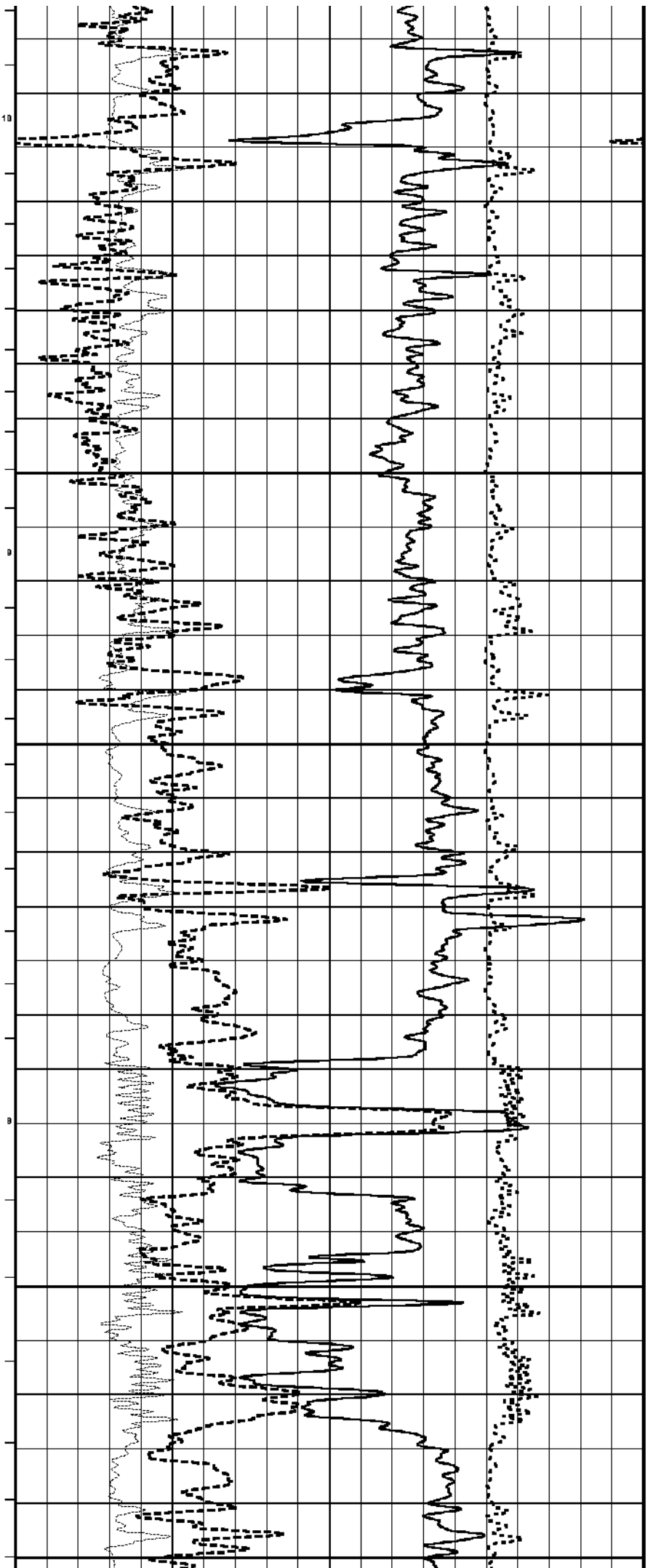
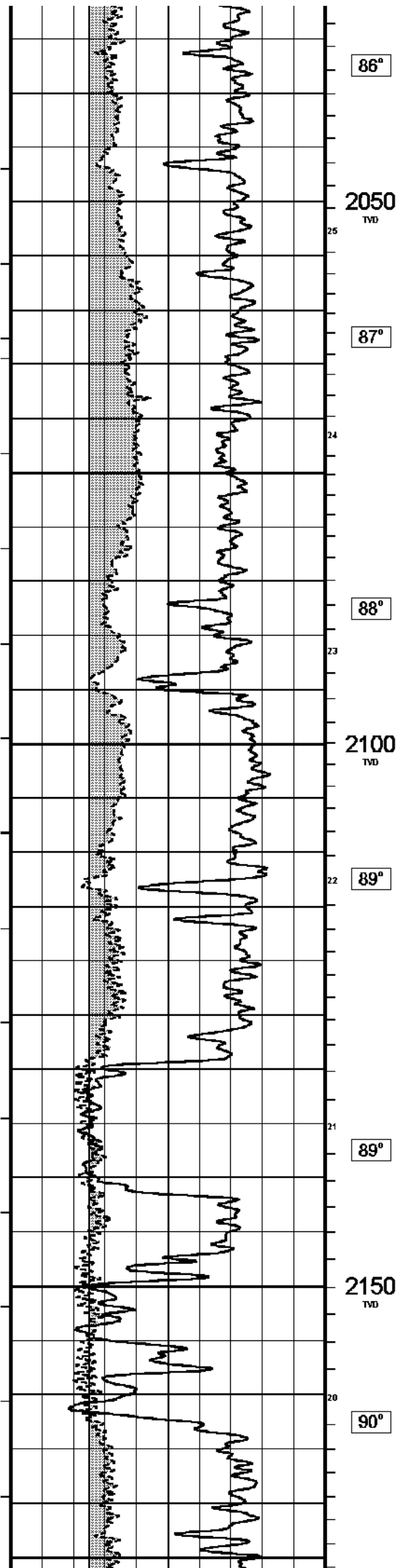
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MAIN LOG B 1:500
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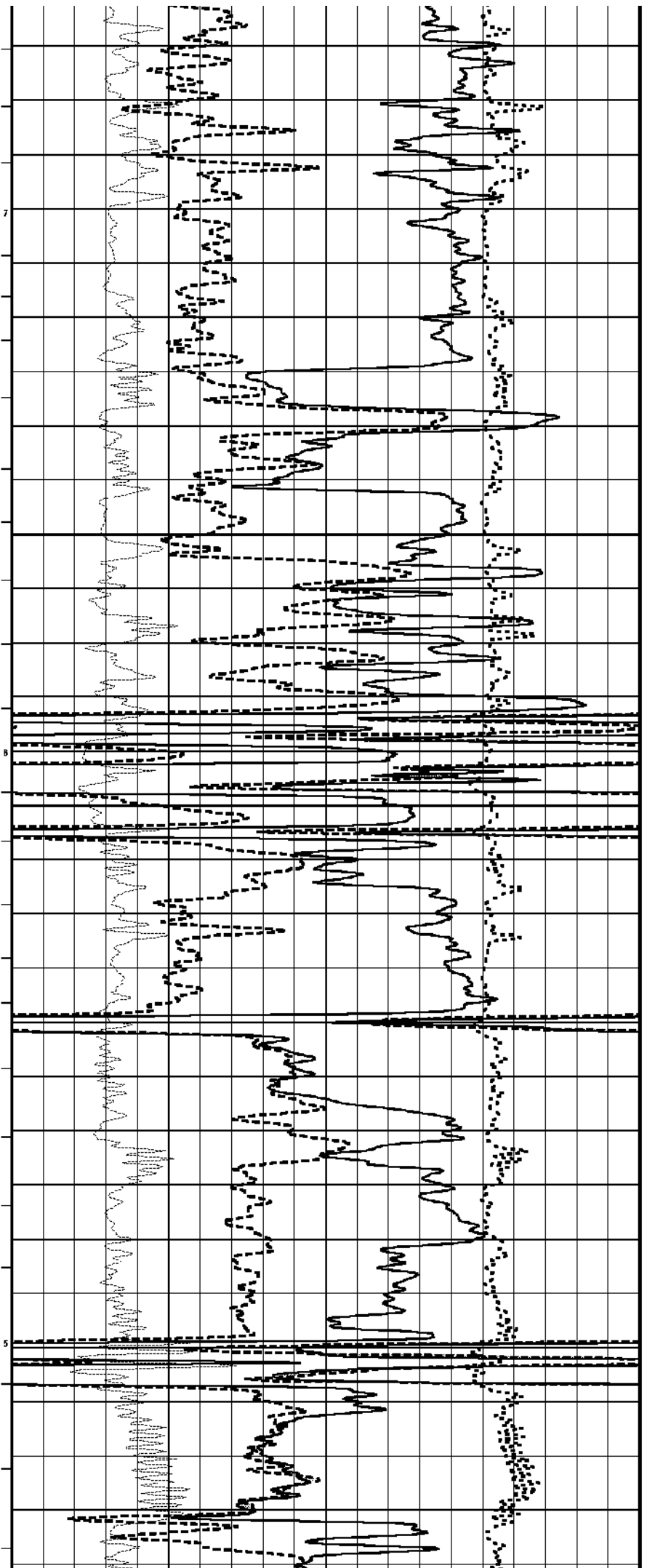
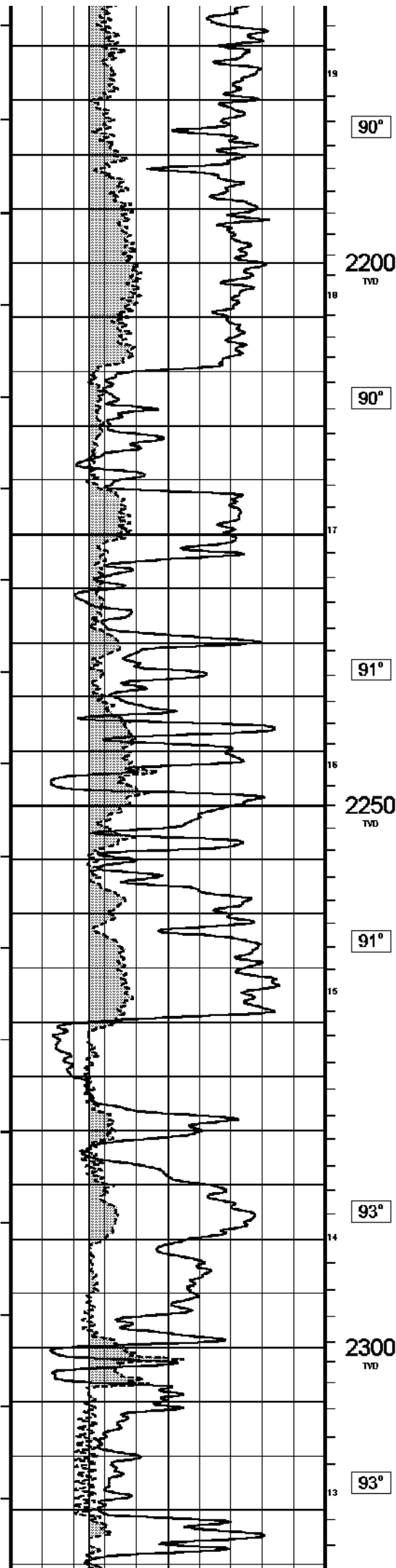
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MAIN LOG A 1:500
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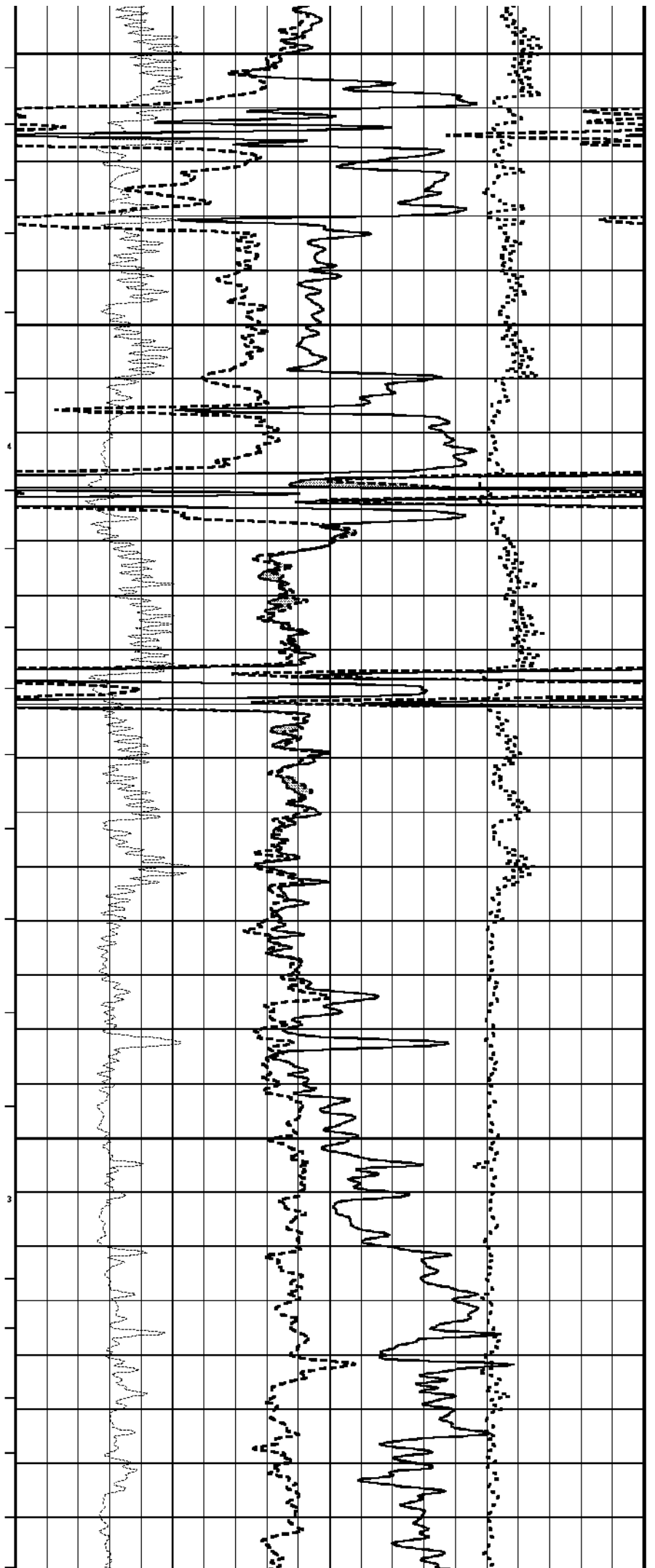
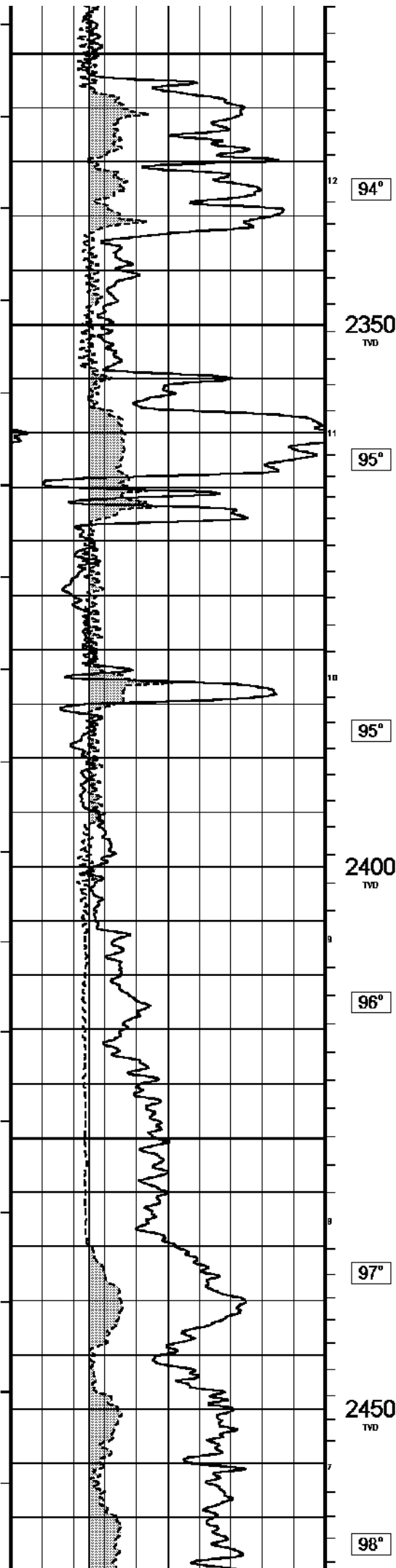
Depth Based Data - Maximum Sampling Increment 10.0cm Plotted on 24-MAY-2003 16:33
 Filename: C:\Fla a12a\MAIN LOG A DSC.dta Recorded on 12-APR-2003 01:43
 System Configuration Dates: Logged 23-OCT-2002: Processed 23-OCT-2002: Plotted 23-OCT-2002:

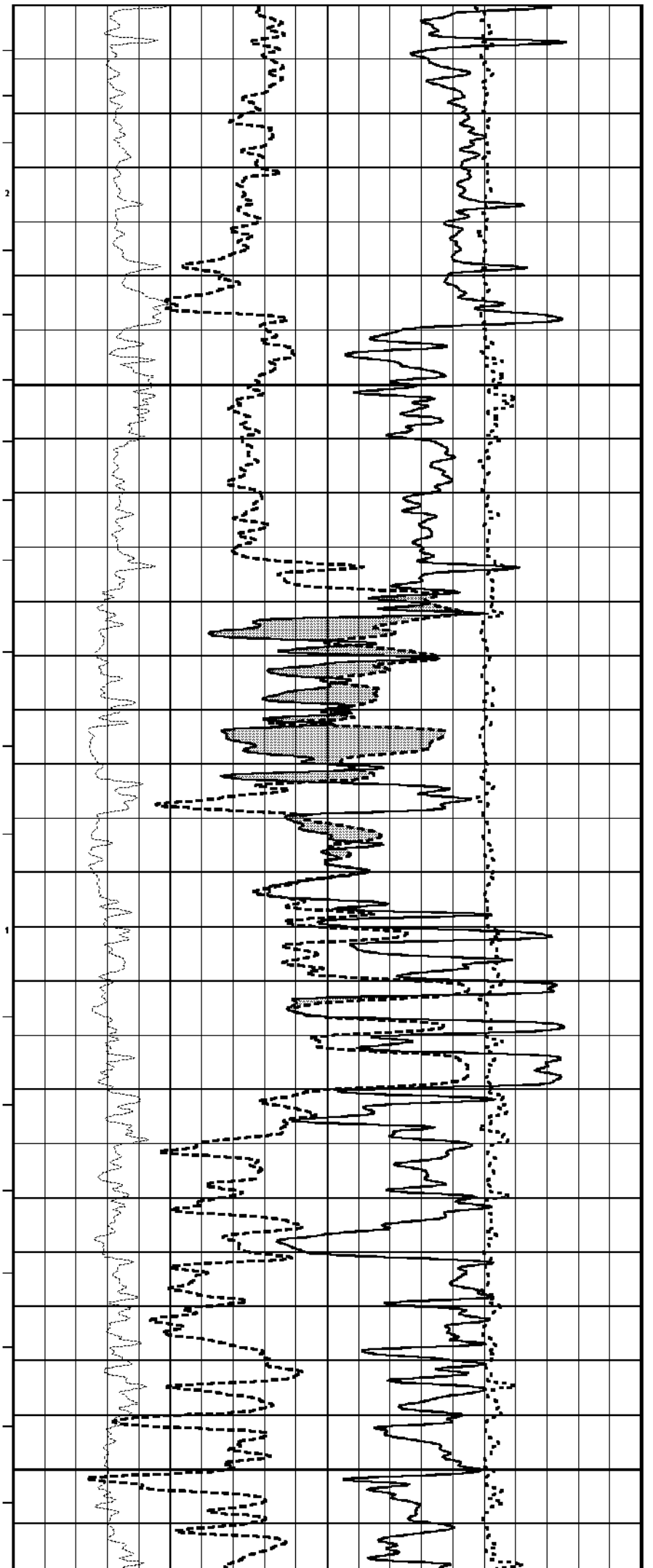
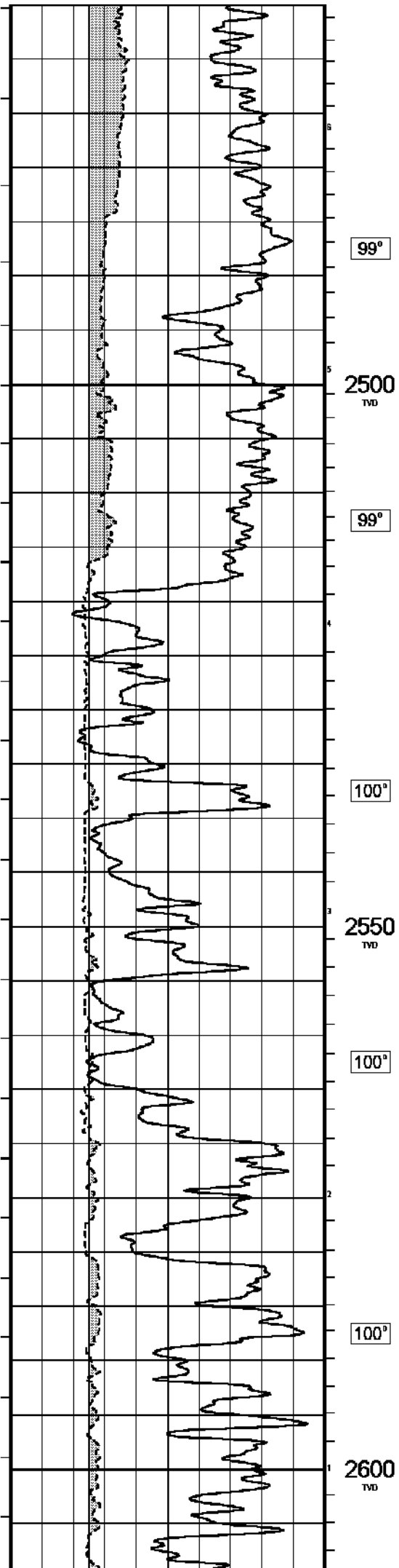


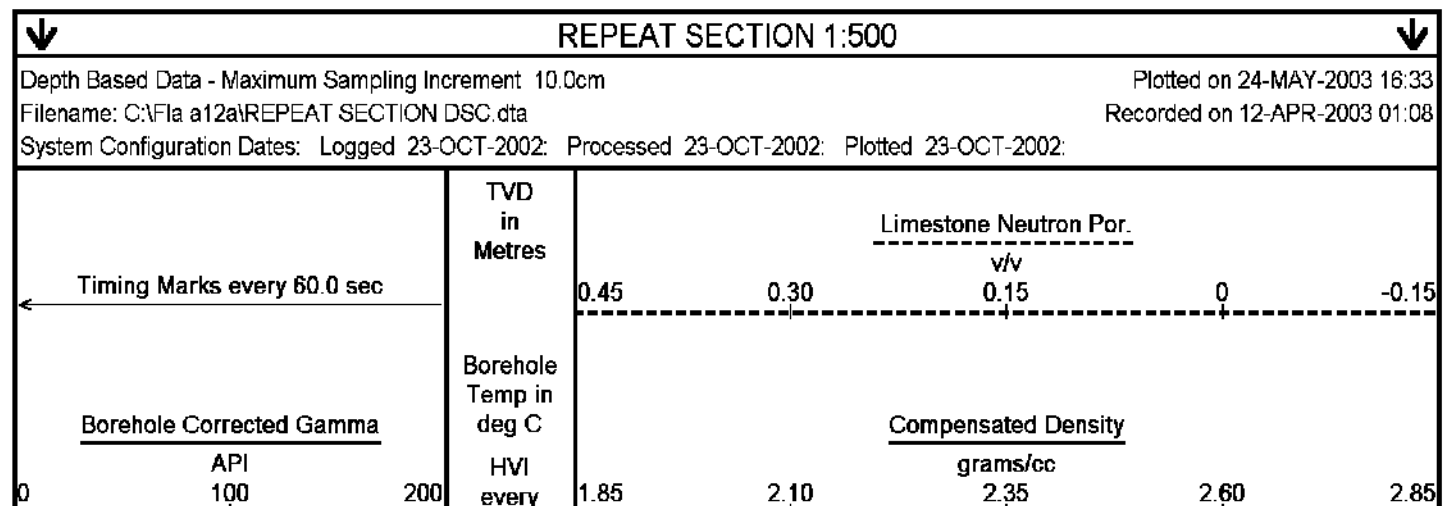
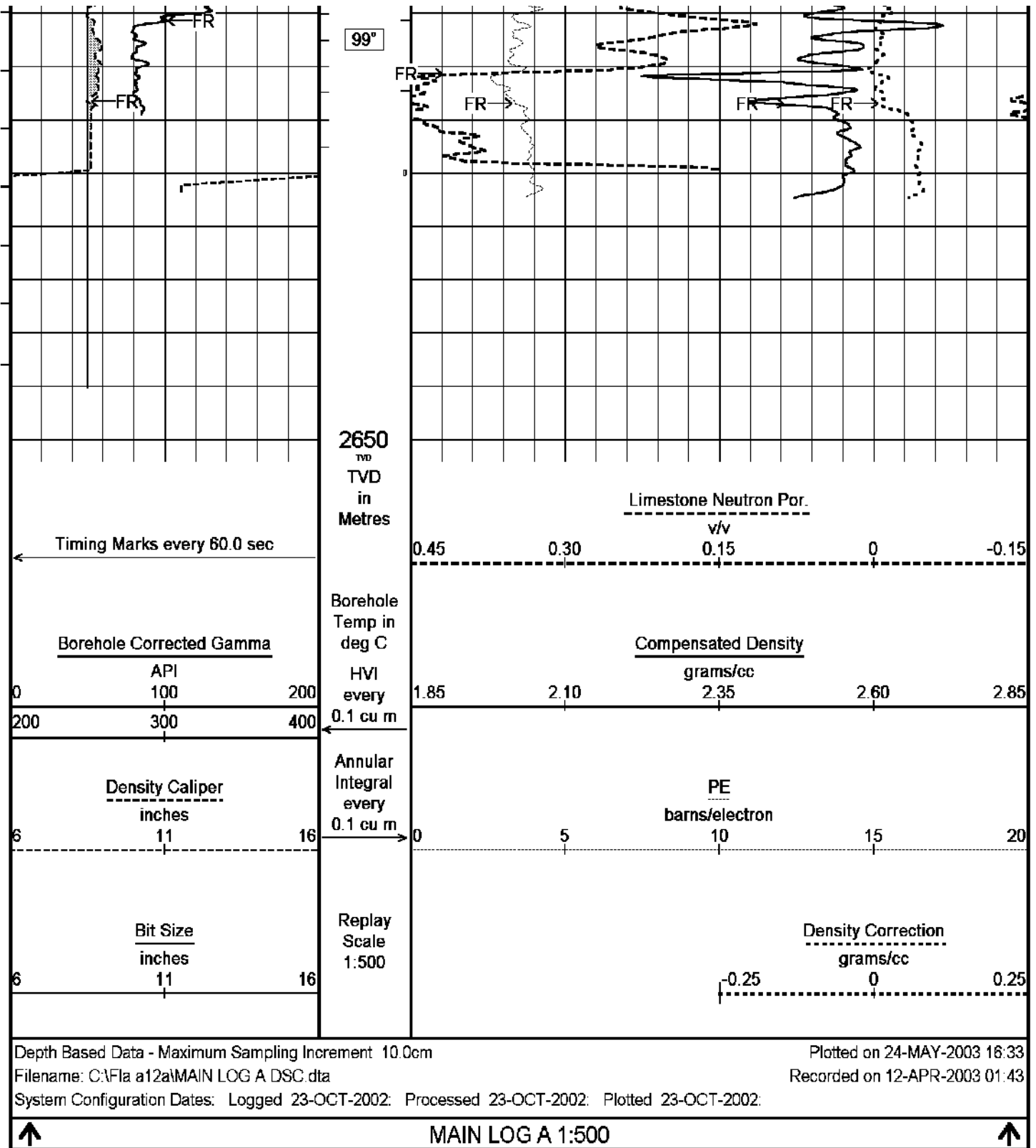


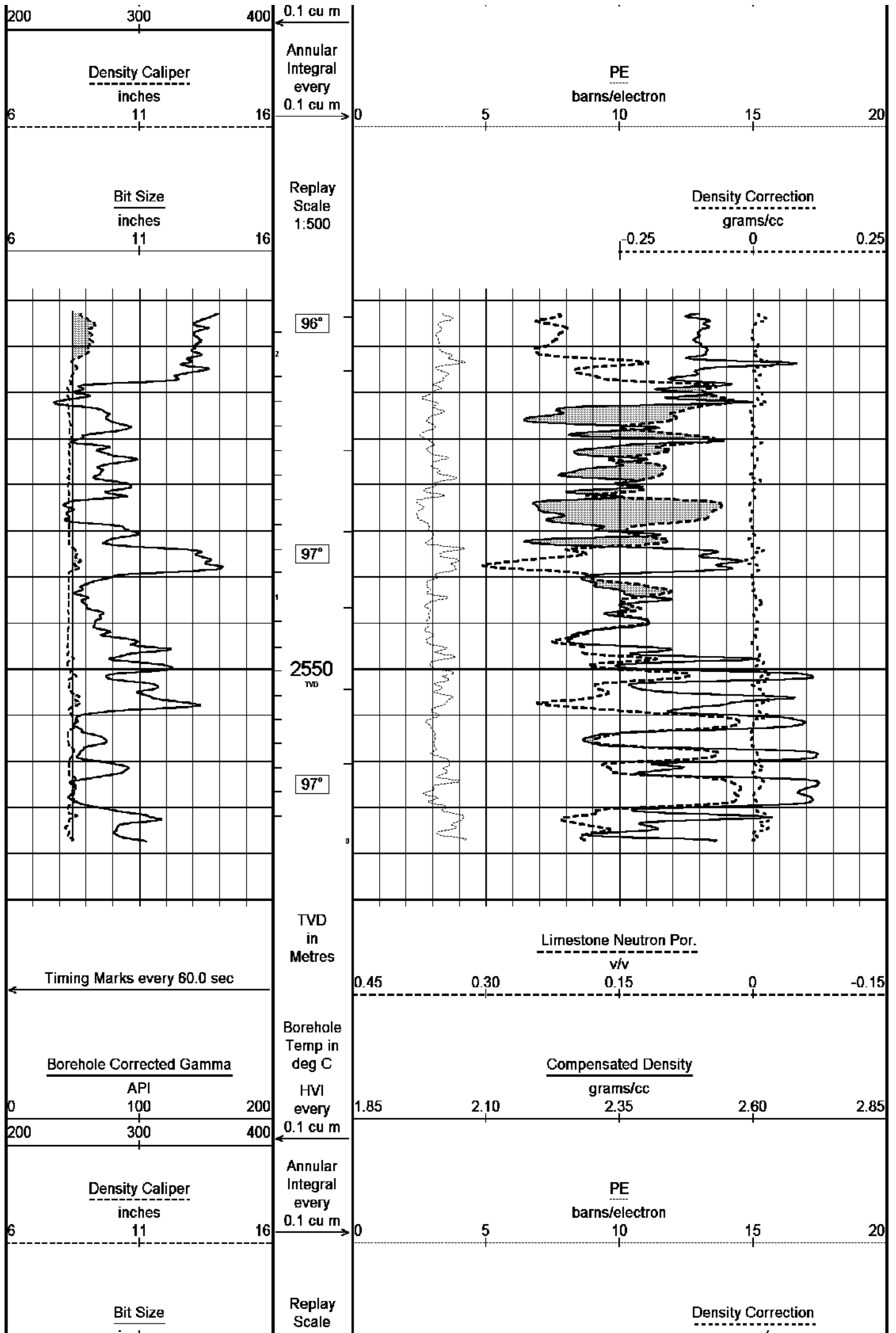












inches 6 11 16	1:500	grams/cc -0.25 0 0.25
Depth Based Data - Maximum Sampling Increment: 10.0cm Plotted on 24-MAY-2003 16:33 Filename: C:\Fla a12a\REPEAT SECTION DSC.dta Recorded on 12-APR-2003 01:08 System Configuration Dates: Logged 23-OCT-2002: Processed 23-OCT-2002: Plotted 23-OCT-2002:		
↑	REPEAT SECTION 1:500	↑

BEFORE SURVEY CALIBRATION

C:\Fla a12a\MAIN LOG A DSC.dta

General Constants All 000

General Parameters

Mud Resistivity	0.05	ohm-metres
Mud Resistivity Temperature	100.00	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	Density Caliper	
Annular Volume Diameter	7.00	inches
Caliper for Differential Caliper	Density Caliper	

Rwa Parameters

Porosity used	Limestone Sonic Porosity
Resistivity used	Deep Laterolog
RWA Constant A	0.61
RWA Constant M	2.15

Gamma Calibration MCG 076

Field Calibration on 7-APR-2003,14:34

	Measured	Calibrated (API)
Background	16	10
Calibrator (Gross)	1432	919
Calibrator (Net)	1416	909

Gamma Constants MCG 076

Gamma Calibrator Number	60	
Mud Density	1.19	gm/cc
Caliper Source for Processing	Density Caliper	
Tool Position	Eccentred	
Concentration of KCl	0.00	kppm

High Resolution Temperature Calibration MCG 076

Field Calibration on 19-FEB-2003,09:40

	Measured	Calibrated(Deg C)
Lower	0.00	0.00
Upper	100.00	100.00

High Resolution Temperature Constants MCG 076

Pre-filter Length	11
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Neutron Calibration MDN 069

Base Calibration on 17-JAN-2003 16:36

Field Check on 7-APR-2003 14:52

Base Calibration

	Measured		Calibrated (cps)	
	Near	Far	Near	Far
Ratio	2851	89	3714	110
	31.978		33.764	

Field Calibrator at Base

	Calibrated (cps)	
Ratio	1871	2717
	0.689	

Field Check

	Calibrated (cps)	
Ratio	1846	2708
	0.682	

Neutron Constants MPD 067

Neutron Source Id	724	
Neutron Jig Number	52	
Epithermal Neutron	No	
Caliper Source for Processing	Density Caliper	
Stand-off	0.00	inches
Mud Density	1.19	gm/cc
Limestone Sigma	7.10	cu
Sandstone Sigma	4.26	cu
Dolomite Sigma	4.70	cu
Formation Pressure Source	Constant Value	
Formation Pressure	0.00	kpsi
Temperature Source	MCG External Temperature	
Temperature	N/A	degrees C
Mud Salinity	53.00	kppm
Formation Fluid Salinity Source	None	
Formation Fluid Salinity	N/A	kppm
Barite Mud Correction	Not Applied	

Caliper Calibration MPD 067

Base Calibration on 12-APR-2003,03:34

Field Calibration on

Base Calibration		
Reading No	Measured	Calibrator Size (in)
1	14809	4.61
2	24384	6.59
3	34304	8.58
4	44327	10.54
5	55504	12.61
6	N/A	N/A
Field Calibration		
	0	0
	0.00	0.00

Photo Density Calibration MPD 067

Base Calibration on 19-JAN-2003 12:40

Field Check on 7-APR-2003 14:40

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				
	957.7	1152.3		
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				
	180.1	831.6		

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	1.19	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	

DOWNHOLE EQUIPMENT

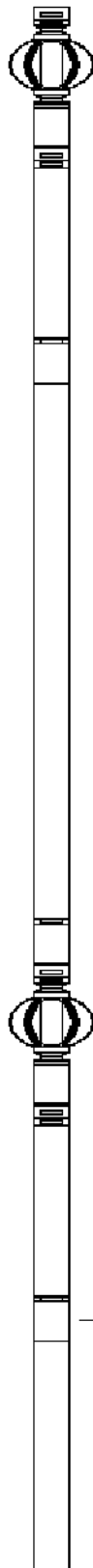
All measurements relative to tool zero.

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



31.84 m SPDL - Spontaneous Potential

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

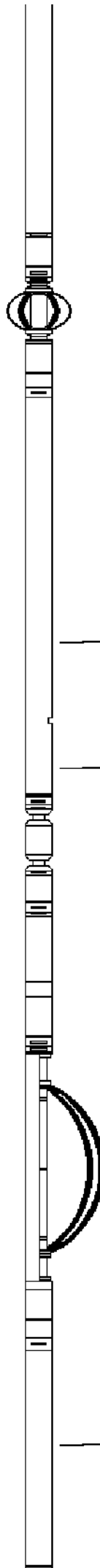
Compact Gamma
MCG 76 Length: 2.65 m Weight: 63.93 lb

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



26.85 m GGCE - Borehole Corrected Gamma

25.96 m CGXT - MCG External Temperature

21.75 m NPRL - Limestone Neutron Por.

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

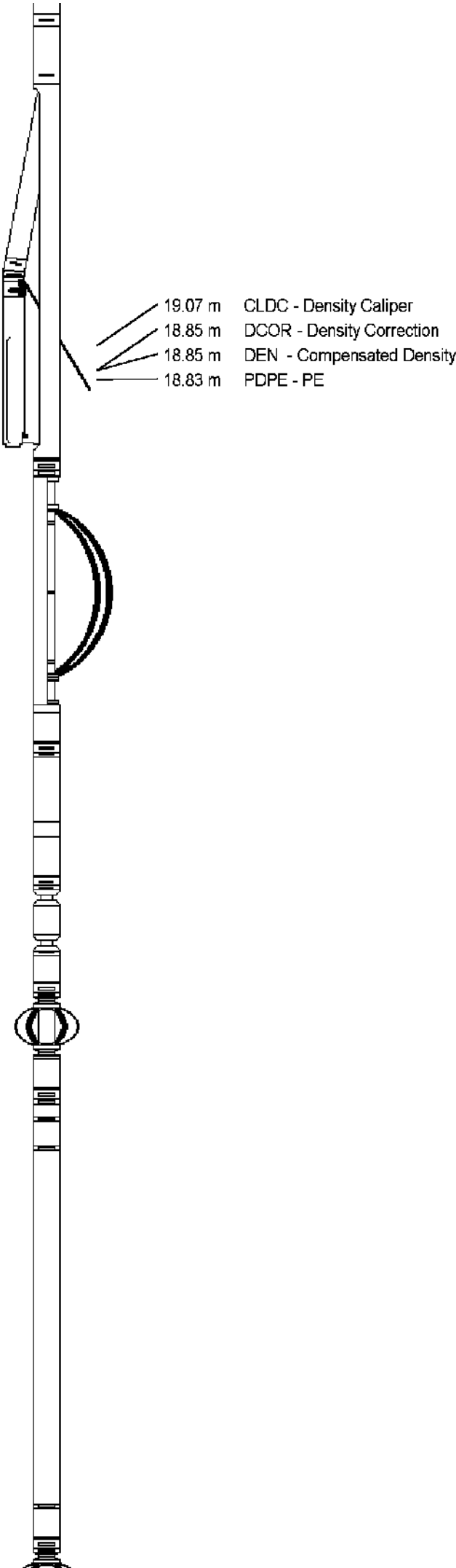
Compact Inline Bowspring A
MIS 25 Length: 1.74 m Weight: 33.07 lb

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

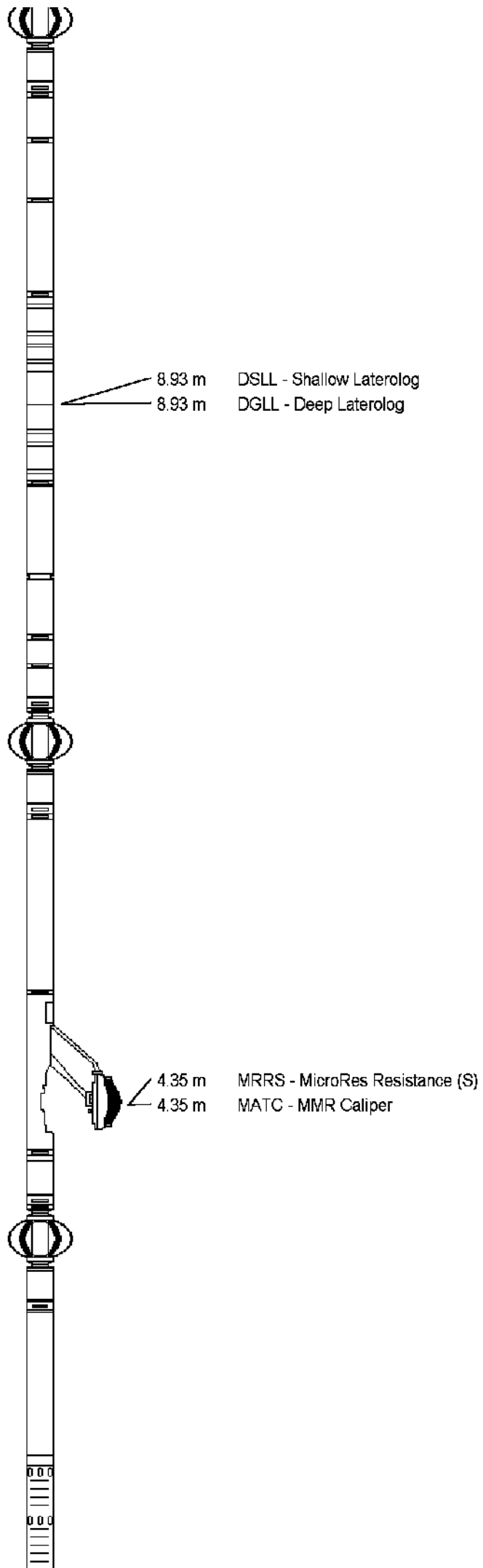
Compact Laterolog Electrode Sub.
MLE 15 Length: 3.76 m Weight: 92.59 lb

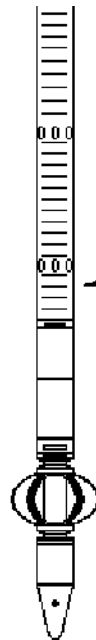
Compact Inline Standoff B
MIS 76 Length: 0.65 m Weight: 15.43 lb

Compact Micro-Resistivity
MMR 5 Length: 2.62 m Weight: 81.57 lb

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

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





0.00 m DT35 - 3-5' Compensated Sonic
Tool Zero (1.62m from bottom)

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

Pressure Bung + Hole Finder
HFS 3 Length: 0.28 m Weight: 6.61 lb

Total Length: 39.51 m

Total Weight: 1007.51 lb

COMPANY	ESSO AUSTRALIA PTY. LTD.
WELL	FLOUNDER A12a
FIELD	GIPPSLAND BASIN
PROVINCE/COUNTY	BASS STRAIT
COUNTRY/STATE	AUSTRALIA

Elevation Kelly Bushing		metres	First Reading	2636.90	metres
Elevation Drill Floor	33.85	metres	Depth Driller	2636.40	metres
Elevation Ground Level	-93.00	metres	Depth Logger	2637.40	metres

Reeves

PHOTO DENSITY
COMPENSATED NEUTRON
1:500 TVD