Reeves

PHOTO DENSITY
COMPENSATED NEUTRON
1:500 MD

COMPANY	ESSO AUSTRALIA PTY. LTD.
WELL	FLOUNDER A-17a
FIELD	GIPPSLAND BASIN
PROVINCE/COUNTY	BASS STRAIT
COUNTRY/STATE	AUSTRALIA
LOCATION	5758711.37 m N, 625853.66 m E
	38°18'39.158" S, 148°26'22.270" E

LSD	SEC	TWP	RGE	Other Services
				DUAL LATEROLOG
API Number				COMPENSATED SONIC
Permit Number				

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

Elevations:

KB		metres
DF	33.85	metres
GL	-93.00	metres

Date	17-Aug-2003		
Run Number	2		
Depth Driller	3660.00	metres	
Depth Logger	3646.00	metres	
First Reading	3639.70	metres	
Last Reading	2892.30	metres	
Casing Driller	2904.00	metres	
Casing Logger	2892.30	metres	
Bit Size	6.00	inches	
Hole Fluid Type	KCl/PHPA/GLY		
Density / Viscosity	9.20 lb/USg	70.00 sec/qt	
PH / Fluid Loss	9.30	3.10 ml/30Min	
Sample Source	FLOWLINE		
Rm @ Measured Temp	0.101 @ 25.0	ohm-m	
Rmf @ Measured Temp	0.083 @ 25.0	ohm-m	
Rmc @ Measured Temp	0.146 @ 25.0	ohm-m	
Source Rmf / Rmc	PRESS	PRESS	
Rm @ BHT	0.036 @111.0	ohm-m	
Time Since Circulation	30 HRS		
Max Recorded Temp	111.00	deg C	
Equipment Name	COMPACT		
Equipment / Base	1	SALE	
Recorded By	G. McManus, R. Tench		S. Mooney, B. Arnold
Witnessed By	E.Espiritu		
Circ.Stopped	23:15 15-AUG		

BOREHOLE RECORD

Bit Size inches	Depth From metres	Depth To metres
8.500	1500.00	2800.00
6.000	2800.00	3660.00

CASING RECORD

Type	Size inches	Depth From metres	Shoe Depth metres	Weight pounds/ft
K55 BTC	10.750	0.00	1256.00	40.50
	7.625	1256.00	2896.00	27.00

REMARKS

DRILLING RIG: NABORS (ISDL) 453.

REEVES COMPACT TOOLS RAN WITH 3½" WELL SHUTTLE.

MAX DEVIATION: 43.3° @ 3283 m.

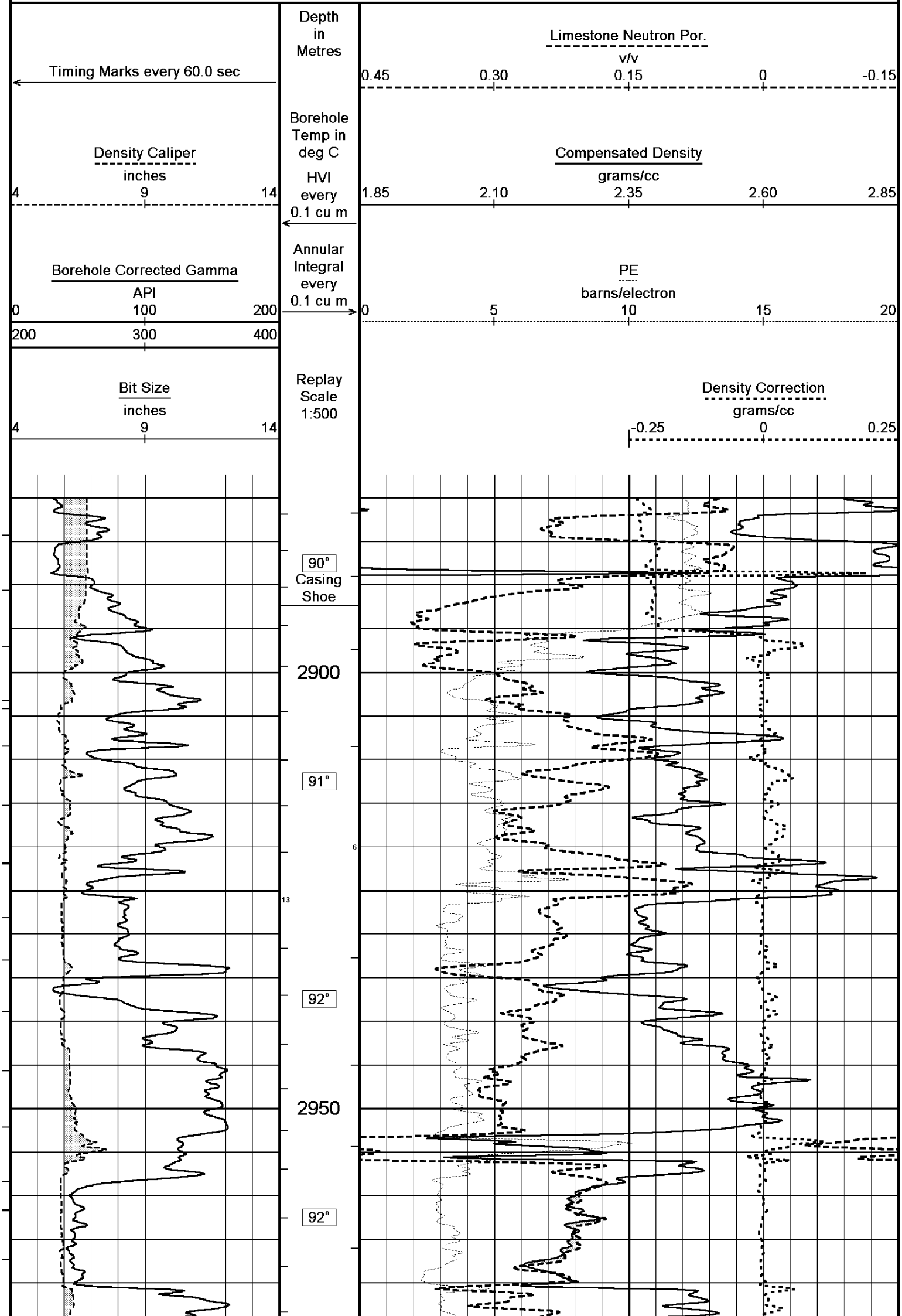
GRONINGEN LATEROLOG PRESENTED WITH ORIGINAL LOGGING CONSTANT.
ENHANCED MODEL PROCESSING USED FOR INDUCTION DATA (NOT PRESENTED).

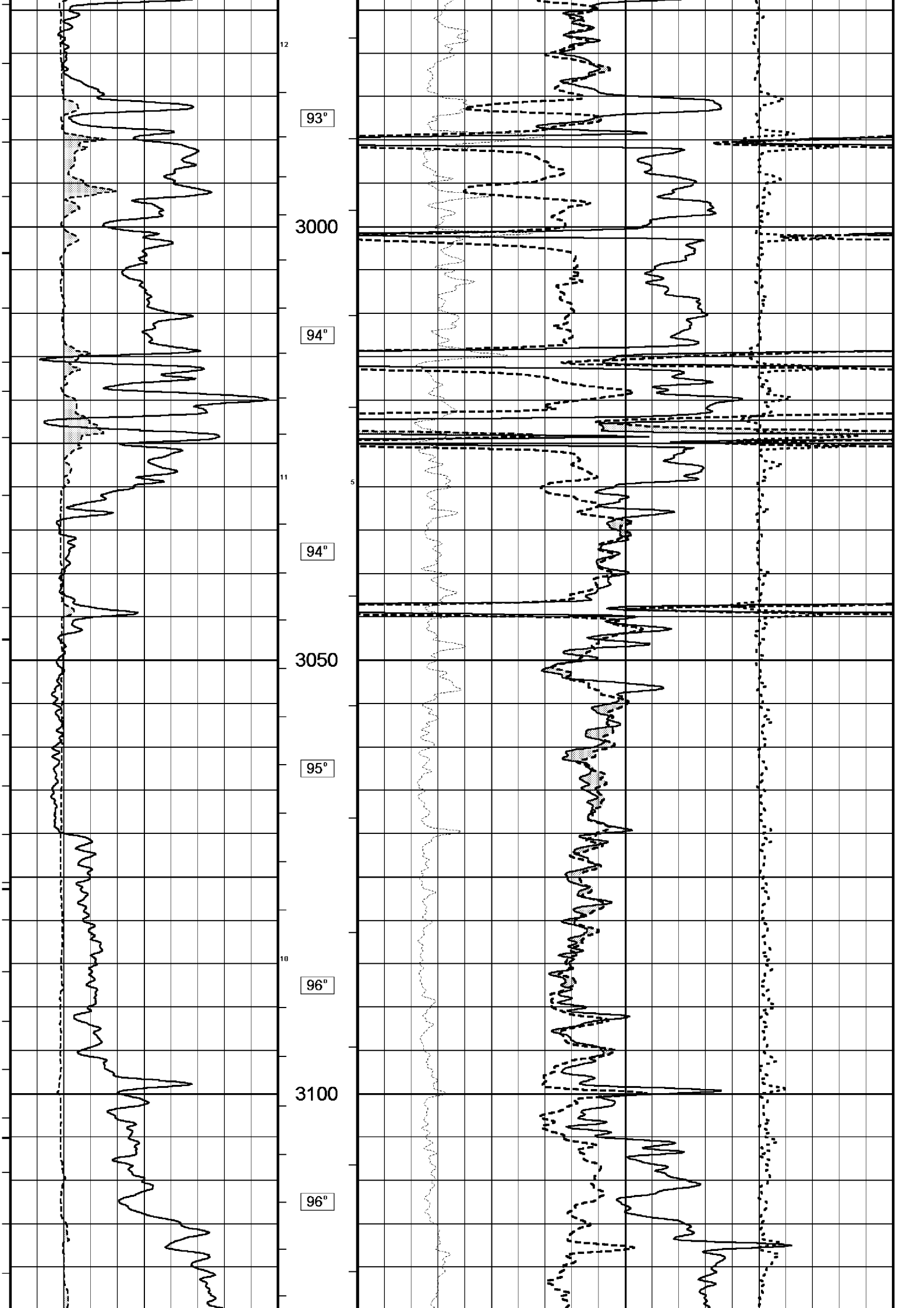
REEVES CREW: R.TENCH, G.MCMANUS, S.MOONEY AND BILL ARNOLD

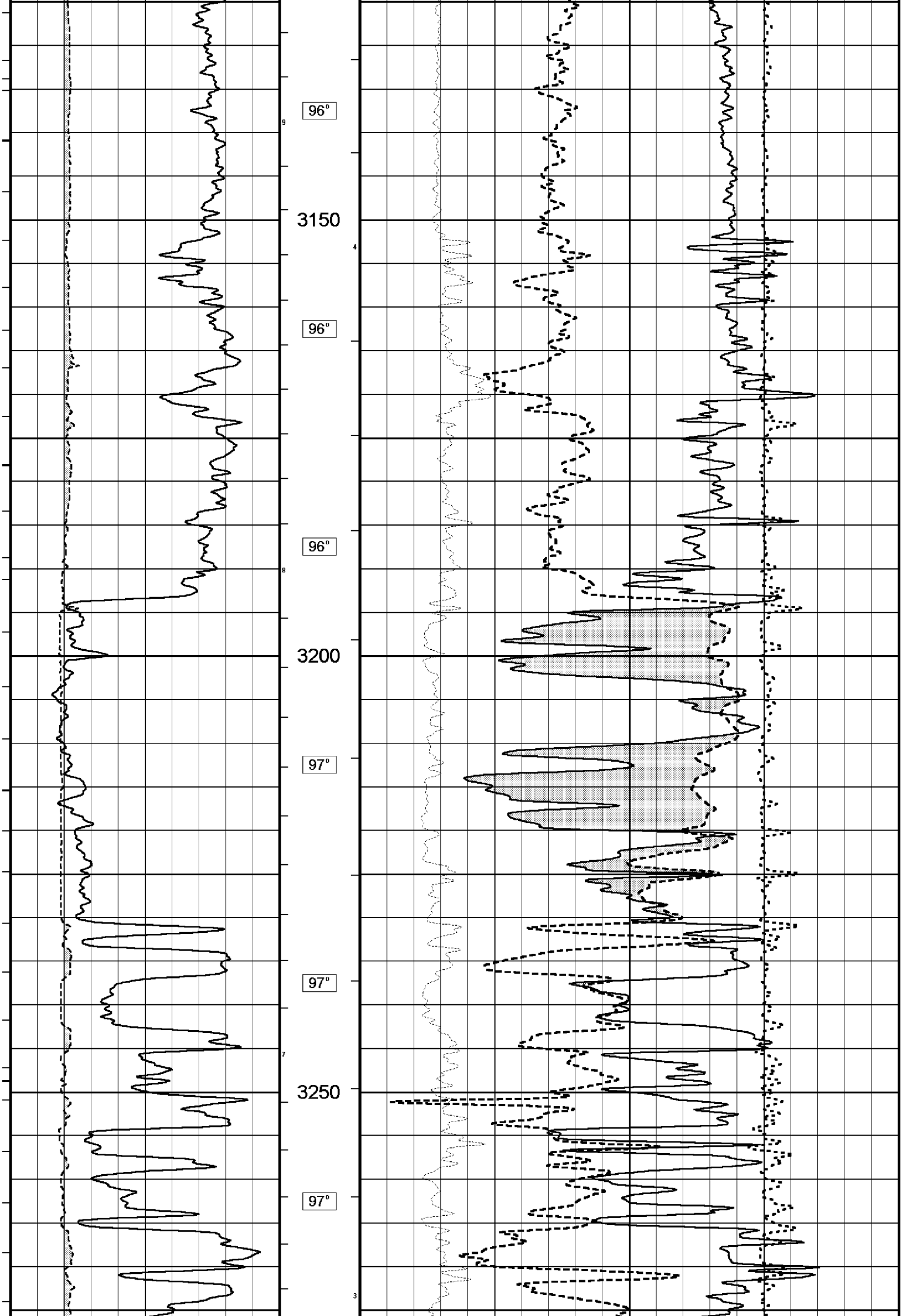
MAIN LOG 1:500

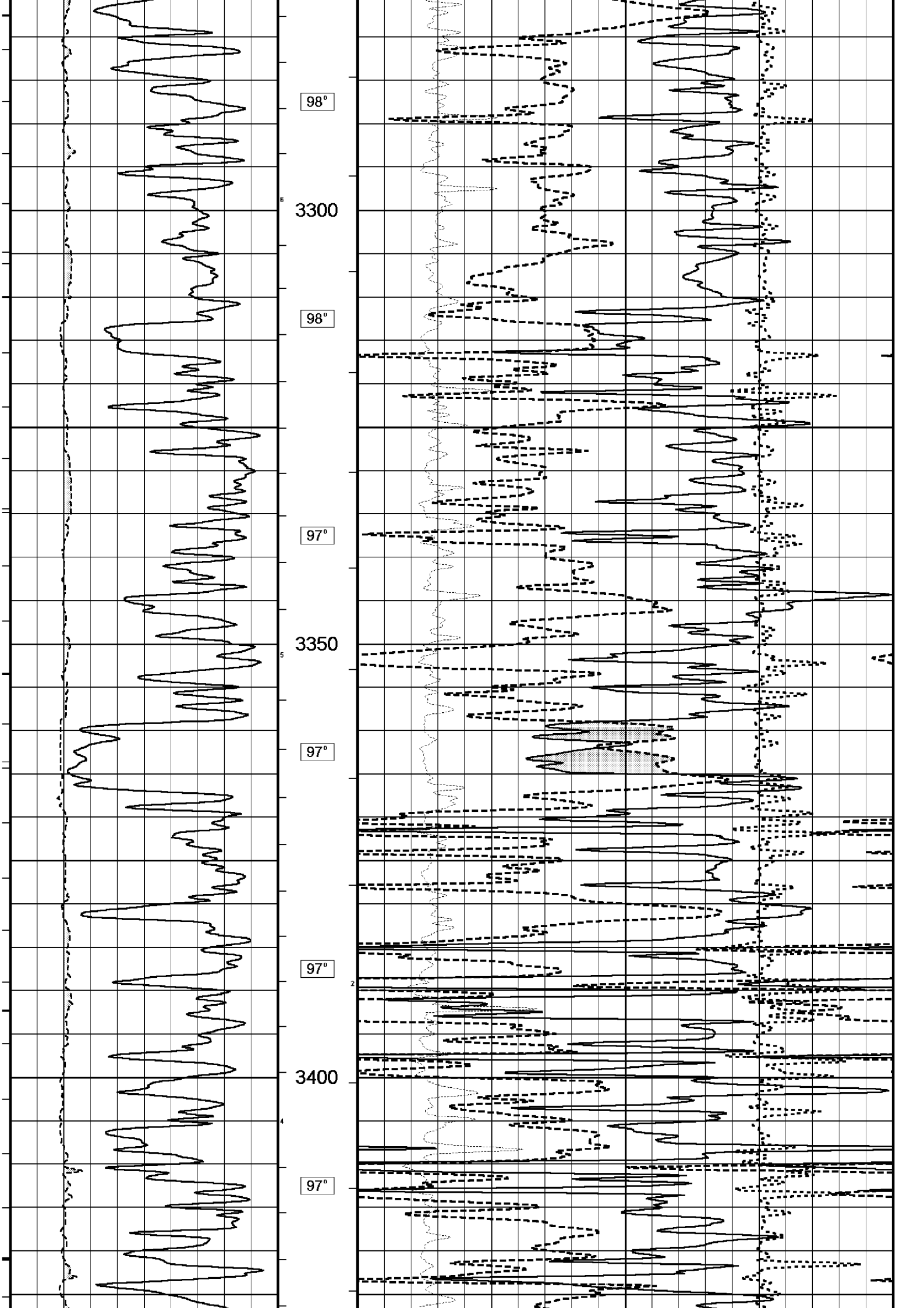
Depth Based Data - Maximum Sampling Increment 10.0cm
Filename: C:\Fla_a17a\B & W Finals\Fla_A17a_Main_log_MPD.dta
System Configuration Dates: Logged 23-OCT-2002: Processed 23-OCT-2002: Plotted 23-OCT-2002:

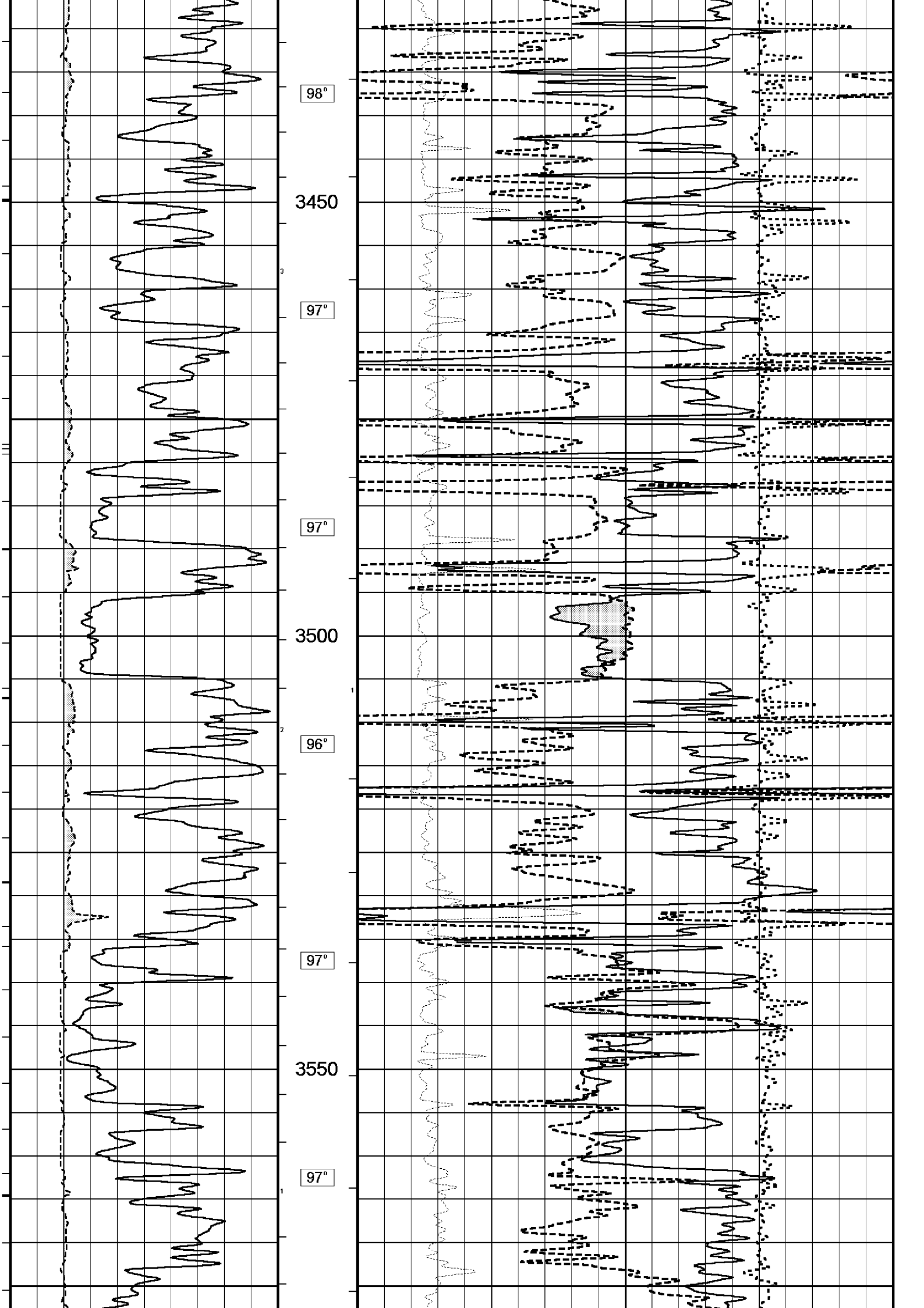
Plotted on 23-OCT-2003 11:04
Recorded on 17-AUG-2003 18:09

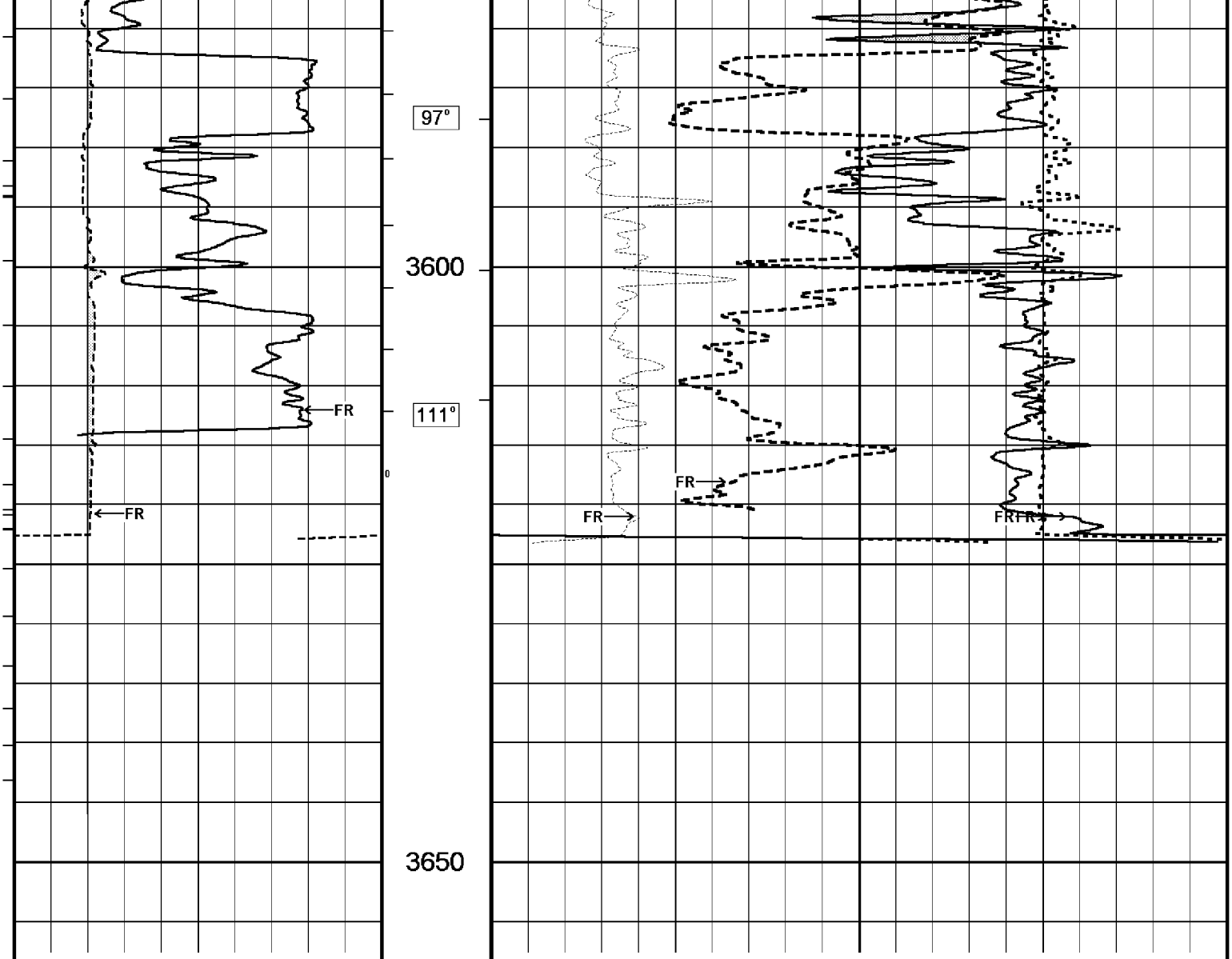

Timing Marks every 60.0 sec
Density Caliper
inches
4
9
14
Borehole Corrected Gamma
API
0
100
200
200
300
400
Bit Size
inches
4
9
14
Depth in Metres
Borehole Temp in deg C
HVI every 0.1 cu m
Annular Integral every 0.1 cu m
Replay Scale 1:500
Limestone Neutron Por.
v/v
0.45
0.30
0.15
0
-0.15
Compensated Density
grams/cc
1.85
2.10
2.35
2.60
2.85
PE
barns/electron
0
5
10
15
20
Density Correction
grams/cc
-0.25
0
0.25
90°
Casing Shoe
2900
91°
92°
2950
92°


12
93°
3000
94°
11
5
94°
3050
95°
10
96°
3100
96°


96°
3150
96°
96°
3200
97°
97°
3250
97°


98°
3300
98°
97°
3350
97°
97°
3400
97°


98°
3450
97°
97°
3500
96°
97°
3550
97°



Depth in Metres

Timing Marks every 60.0 sec

Limestone Neutron Por.
v/v
0.45 0.30 0.15 0 -0.15

Borehole Temp in deg C

Density Caliper
inches
4 9 14

HVI every 0.1 cu m

Compensated Density
grams/cc
1.85 2.10 2.35 2.60 2.85

Annular Integral every 0.1 cu m

Borehole Corrected Gamma
API
0 100 200
200 300 400

PE
barns/electron
0 5 10 15 20

Replay Scale 1:500

Bit Size
inches
4 9 14

Density Correction
grams/cc
-0.25 0 0.25

Depth Based Data - Maximum Sampling Increment 10.0cm
Plotted on 23-OCT-2003 11:04
Filename: C:\Fla_a17a\B & W Finals\Fla_A17a_Main_log_MPD.dta
Recorded on 17-AUG-2003 18:09
System Configuration Dates: Logged 23-OCT-2002: Processed 23-OCT-2002: Plotted 23-OCT-2002:

MAIN LOG 1:500

BEFORE SURVEY CALIBRATION

General Constants All 000

General Parameters		
Mud Resistivity	0.10	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	Density Caliper	
Annular Volume Diameter	4.50	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	

High Resolution Temperature Calibration MCG 043

Field Calibration on 9-AUG-2002,07:03

	Measured	Calibrated(Deg C)
Lower	20.50	20.00
Upper	51.00	50.00

High Resolution Temperature Constants MCG 043

Pre-filter Length	11

Gamma Calibration MCG 043

Field Calibration on 15-AUG-2003 19:05

	Measured	Calibrated (API)
Background	16	11
Calibrator (Gross)	1419	920
Calibrator (Net)	1403	909

Gamma Constants MCG 043

Gamma Calibrator Number	60	
Mud Density	1.15	gm/cc
Caliper Source for Processing	Density Caliper	
Tool Position	Eccentred	
Concentration of KCl	0.00	kppm

Neutron Calibration MDN 042

Base Calibration on 2-AUG-2003 10:04
Field Check on 15-AUG-2003 20:39

Base Calibration

	Measured		Calibrated (cps)	
	Near	Far	Near	Far
	3104	98	3714	110
Ratio	31.769		33.764	

Field Calibrator at Base

	Calibrated (cps)	
	1679	2371
Ratio	0.708	

Field Check

	Calibrated (cps)	
	1692	2398
Ratio	0.706	

Neutron Constants MDN 042

Neutron Source Id	NSN-E-739	
Neutron Jig Number	NE-C-052	
Epithermal Neutron	No	
Caliper Source for Processing	Density Caliper	
Stand-off	0.00	inches
Mud Density	1.15	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	42.30	kppm

Formation Fluid Salinity Source	None	
Formation Fluid Salinity	N/A	kppm
Barite Mud Correction	Not Applied	

Caliper Calibration MPD 066

Base Calibration on 22-OCT-2003,14:18
Field Calibration on 22-OCT-2003,14:18

Base Calibration

Reading No	Measured	Calibrator Size (in)
1	12128	4.58
2	20304	6.56
3	28752	8.56
4	37248	10.52
5	46672	12.58
6	N/A	N/A

Field Calibration

Measured Caliper (in)	Actual Caliper (in)
6.00	6.00

Photo Density Calibration MPD 066

Base Calibration on 2-AUG-2003 14:56
Field Check on 15-AUG-2003 20:32

Density Calibration

Base Calibration	Measured		Calibrated (sdu)	
	Near	Far	Near	Far
Reference 1	53064	18614	53282	19349
Reference 2	24973	2526	25298	2555

Field Check at Base

980.9	1146.2	

Field Check

969.2	1145.5	

PE Calibration

Base Calibration	Measured			Calibrated
	WS	WH	Ratio	Ratio
Background	188	856		
Reference 1	16447	52883	0.313	0.318
Reference 2	6593	24840	0.267	0.273

Field Check at Base

187.7	855.8	

Field Check

188.0	845.9	

Density Constants MPD 066

Density Source Id	242	
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	1.15	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	

DOWNHOLE EQUIPMENT

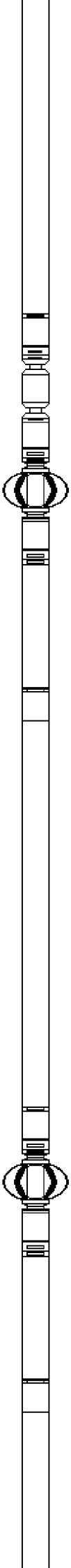
All measurements relative to tool zero.

Compact Battery Sub.
MBS 99 Length: 4.34 m Weight: 44.09 lb

Compact Knuckle Joint
SKJ 110 Length: 0.66 m Weight: 24.25 lb

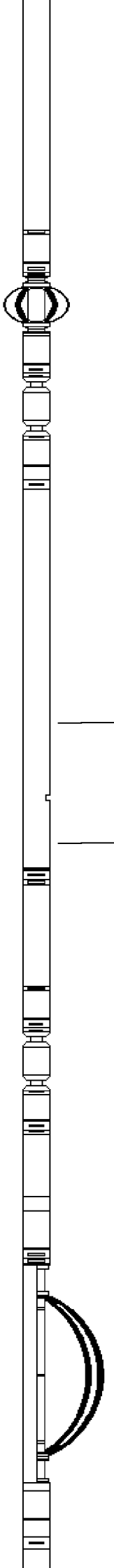
Compact Inline Standoff B
MIS 135 Length: 0.65 m Weight: 15.43 lb

Compact Stiff Bridle Electrode Sub.
MBE 18 Length: 3.76 m Weight: 94.80 lb



Compact Inline Standoff B
MIS 136 Length: 0.65 m Weight: 15.43 lb

Compact Stiff Bridle Electrode Sub.
MBE 17 Length: 3.76 m Weight: 94.80 lb



Compact Inline Standoff B
MIS 132 Length: 0.65 m Weight: 15.43 lb

Compact Knuckle Joint
SKJ 102 Length: 0.66 m Weight: 24.25 lb

Compact Gamma
MCG 43 Length: 2.65 m Weight: 63.93 lb

32.22 m GRGC - Gamma Ray

31.33 m CGXT - MCG External Temperature

Compact Memory Sub.
MMS 24 Length: 0.95 m Weight: 22.05 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 42 Length: 1.53 m Weight: 50.71 lb

26.17 m NPRL - Limestone Neutron Por.

Compact Density/Caliper
MPD 66 Length: 2.92 m Weight: 90.39 lb

23.48 m HVOL - Hole Volume
23.48 m AVOL - Annular Volume
23.27 m DCOR - Density Correction
23.27 m DEN - Compensated Density
23.25 m PDPE - PE

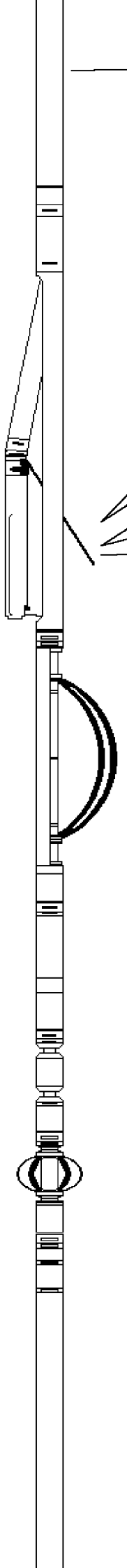
Compact Inline Bowspring A
MIS 25 Length: 1.74 m Weight: 33.07 lb

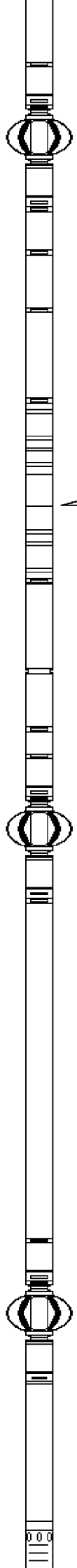
Compact Swivel Head Adaptor
SHA 28 Length: 0.83 m Weight: 26.46 lb

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

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

Compact Upper Guard Sub.
MUG 16 Length: 2.74 m Weight: 68.34 lb





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

Compact Laterolog Electrode Sub.
MLE 5 Length: 3.76 m Weight: 92.59 lb

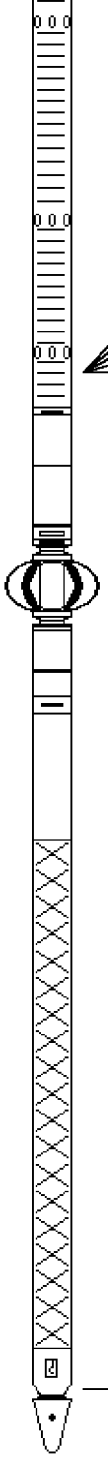
13.35 m DSLL - Shallow Laterolog
13.35 m DDLL - Deep Laterolog

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

Compact Lower Guard Sub.
MLG 9 Length: 2.44 m Weight: 55.12 lb

Compact Inline Standoff B
MIS 130 Length: 0.65 m Weight: 15.43 lb

Compact Sonic
MSS 47 Length: 3.82 m Weight: 72.75 lb



4.60 m	TR21 - 3' Transit Time	
4.60 m	TR11 - 4' Transit Time	
4.60 m	TR22 - 5' Transit Time	
4.60 m	TR12 - 6' Transit Time	
4.60 m	DT35 - 3-5' Compensated Sonic	

Compact Inline Standoff B
MIS 128 Length: 0.65 m Weight: 15.43 lb

Compact Induction
MAI 39 Length: 3.29 m Weight: 48.50 lb

Tool Zero (0.32m from bottom)

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

Total Length: 49.23 m Total Weight: 1144.20 lb

COMPANY	ESSO AUSTRALIA PTY. LTD.
WELL	FLOUNDER A-17a
FIELD	GIPPSLAND BASIN
PROVINCE/COUNTY	BASS STRAIT
COUNTRY/STATE	AUSTRALIA

Elevation Kelly Bushing		metres	First Reading	3639.70	metres
Elevation Drill Floor	33.85	metres	Depth Driller	3660.00	metres
Elevation Ground Level	-93.00	metres	Depth Logger	3646.00	metres

Reeves

PHOTO DENSITY
COMPENSATED NEUTRON
1:500 MD