



PRECISION

Compact

**DUAL LATEROLOG - GR
DENSITY - NEUTRON
1:200 MD**

COMPANY **ESSO AUSTRALIA PTY.LTD**

WELL **WKF W6A
KINGFISH GDA94**

FIELD **BASS STRAIT, VICTORIA
AUSTRALIA**

PROVINCE/COUNTRY **S 38 35 34.706, E 148 6 19.764**

COUNTRY/STATE **N 5727810.570 m, E 596273.687 m**

FIELD PRINT

LOCATION **Other Services
COMPENSATED SONIC**

LSD SEC TWP RGE

Permit Number Permanent Datum MSL , Elevation 0.0 metres
Log Measured From DF @ 33.43m above Permanent Datum
Drilling Measured From DF

Elevations:
KB 33.43 metres
DF 33.43 metres
GL -76.13 metres

Date 19-SEP-2006

Run Number ONE

Depth Driller 3477.00 metres

Depth Logger 3477.00 metres

First Reading 3461.00 metres

Last Reading 695.00 metres

Casing Driller 695.00 metres

Casing Logger 695.00 metres

Bit Size 8.50 inches

Hole Fluid Type KCL/PHPA

Density / Viscosity 1.17 g/cc 27.00 CP

PH / Fluid Loss 9.50 2.40 ml/30Min

Sample Source FLOWLINE

Rm @ Measured Temp 0.125 @ 25.0 ohm-m

Rmf @ Measured Temp 0.096 @ 25.0 ohm-m

Rmc @ Measured Temp 0.102 @ 25.0 ohm-m

Source Rmf / Rmc MEAS MEAS

Rm @ BHT 0.053 @ 90.3 ohm-m

Time Since Circulation 39.75 HOUR

Max Recorded Temp 94.60 deg C

Equipment Name CML

Equipment / Base 1 SALE

Recorded By B J R MOSS, J BLESSING

Witnessed By D VAN DER AA

LAST CIRC. 17:15 17/9

Last Line

BOREHOLE RECORD

Bit Size inches	Depth From metres	Depth To metres
8.500	695.00	3477.00

CASING RECORD

Type	Size inches	Depth From metres	Shoe Depth metres	Weight pounds/ft
K-55	10.750	0.00	695.00	40.50

REMARKS

RIG: NABORS 453

5" SHUTTLE/MEMORY COMPACT OPERATION.
CREW: B MOSS , J.BLESSING, M KOLCZE, B GOODWIN.

FIELD FINAL LOGS TO BE CORRELATED TO ANADRILL GAMMA LOG.

MAX. TEMPERATURE: 94.6 DEG C AT 3425.1 m MD
MAX. INCLINATION: 54.32 DEG AT 3094.17 m MD
MAX. DOGLEG SEVERITY: 4.56 DEG/30m AT 738.24 m MD
DEPLOYMENT ANGLE: 53.5 DEG

HVOL: FT^3
AVOL: FT^3

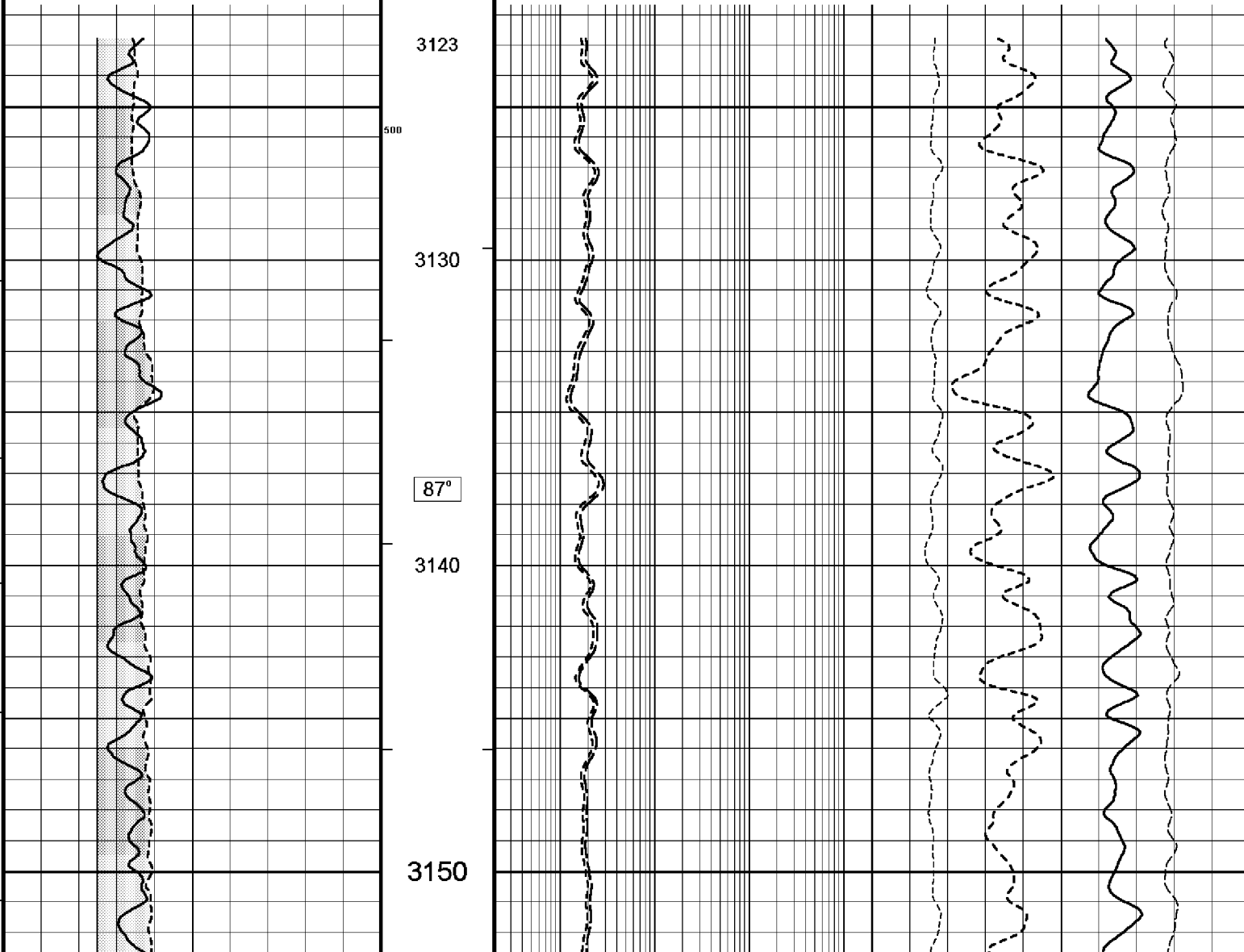
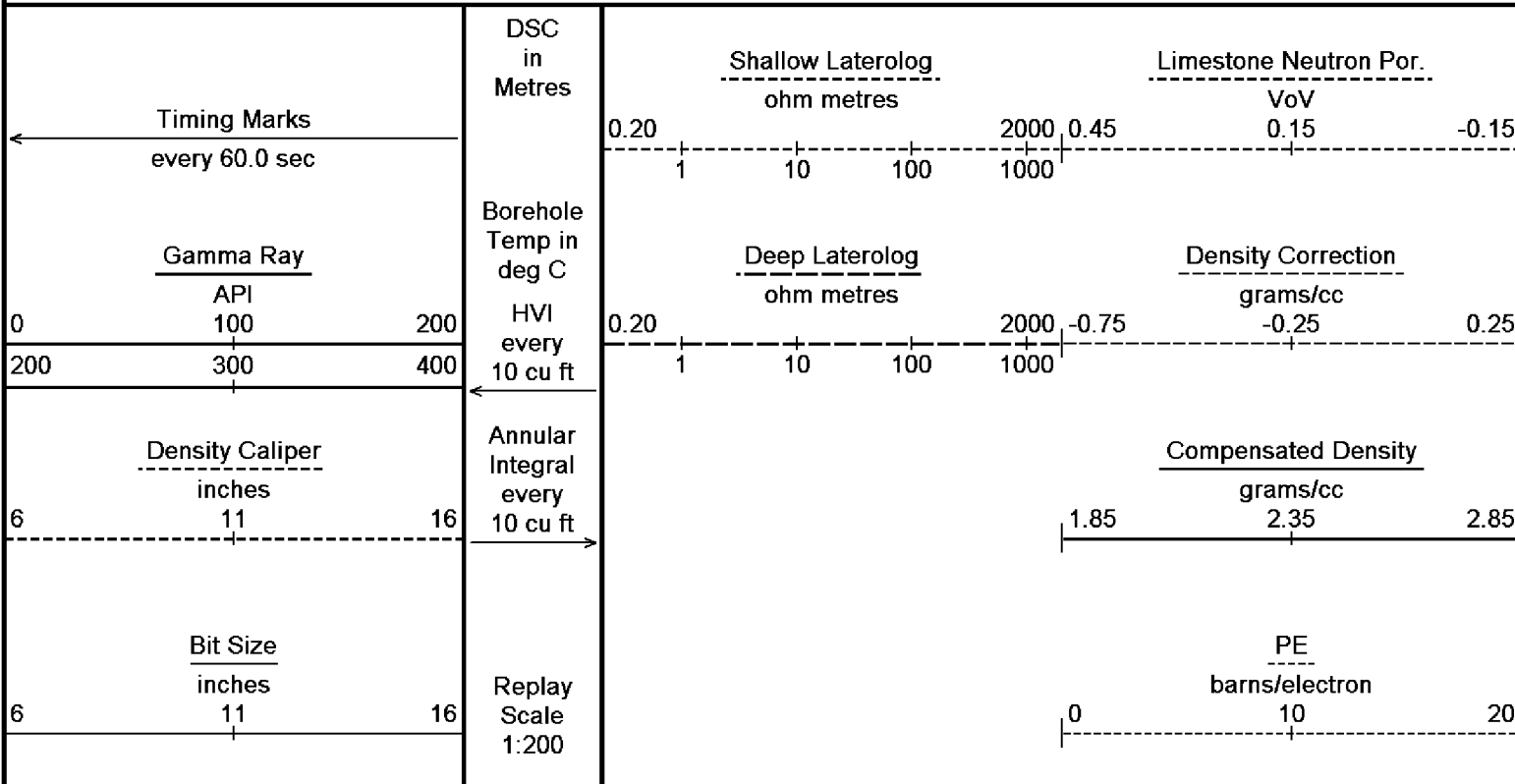
LOGGING SPEED 6M/MIN FROM TD TO 3112 M MD
LOGGING SPEED 12 M/MIN FROM 3112 TO 1244 M MD
LOGGING SPEED 6 M/MIN FROM 1244 TO 1015 M MD
LOGGING SPEED 12 M/MIN FROM 1015 TO 671 M MD

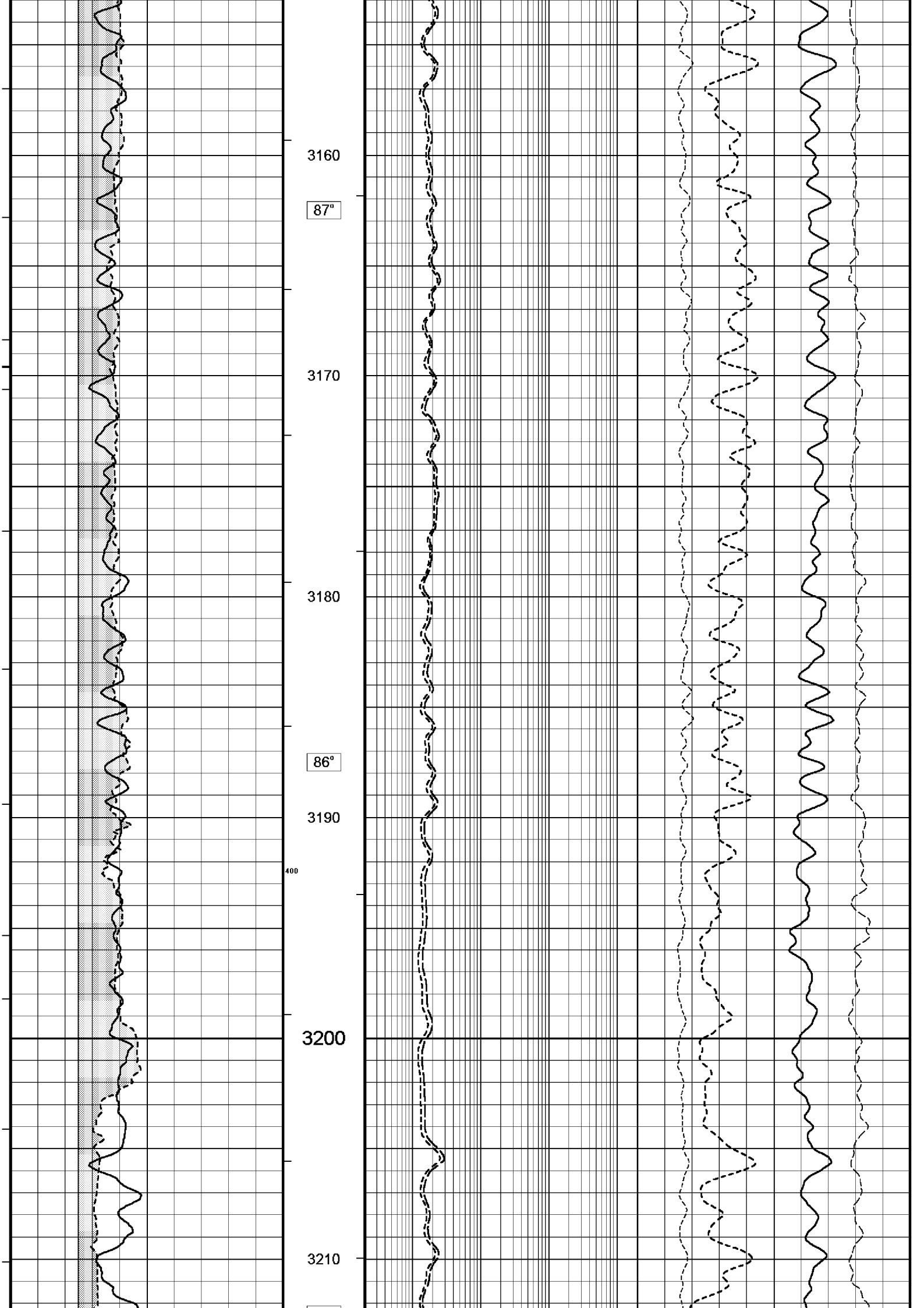
All interpretations are opinions based on inferences from electrical or other measurements and we cannot, and do not, guarantee the accuracy or correctness of any interpretations, and we shall not, except in the case of gross or wilful negligence on our part, be liable or responsible for

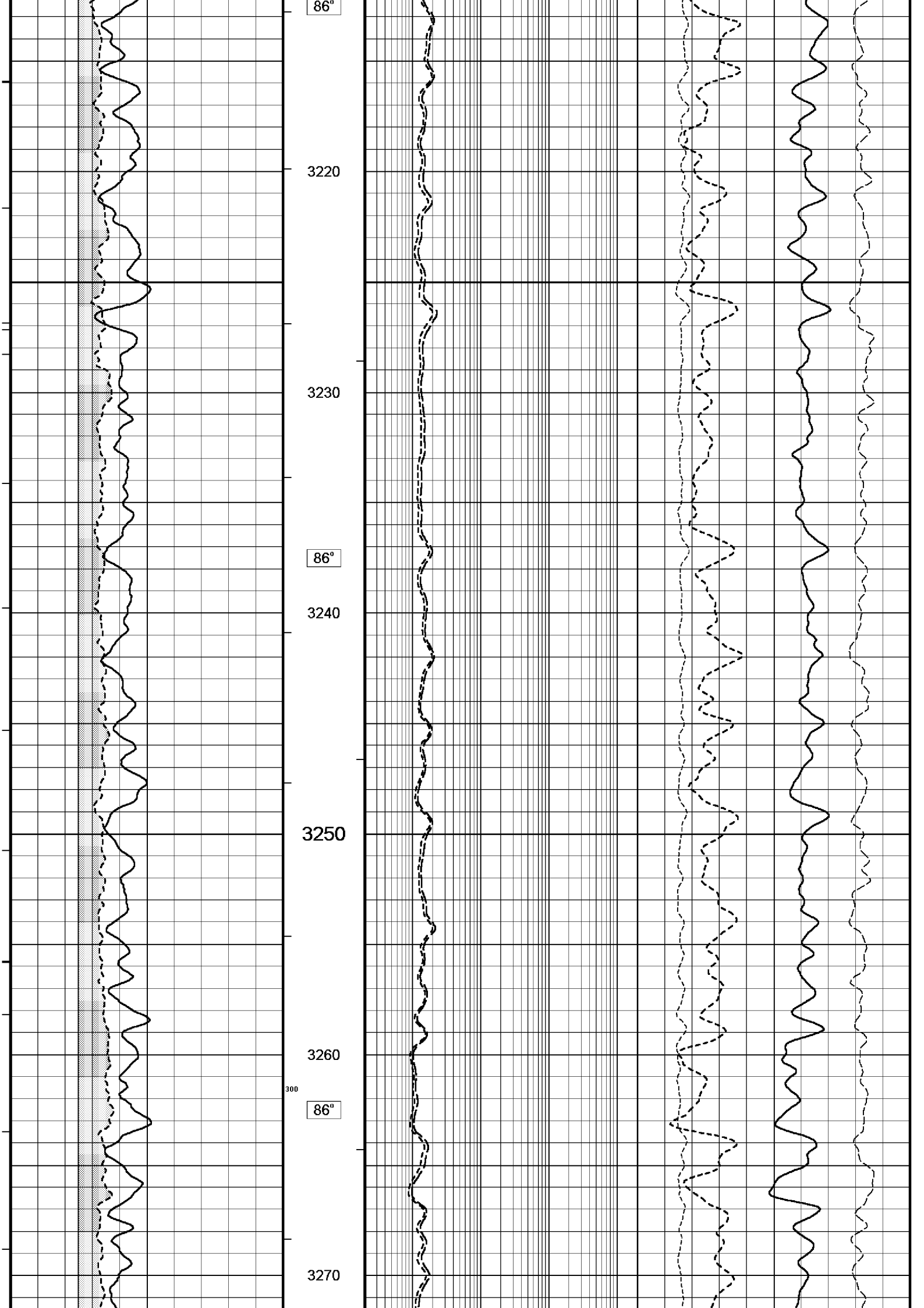
of correctness of these interpretations, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to our general terms and conditions in our price schedule.

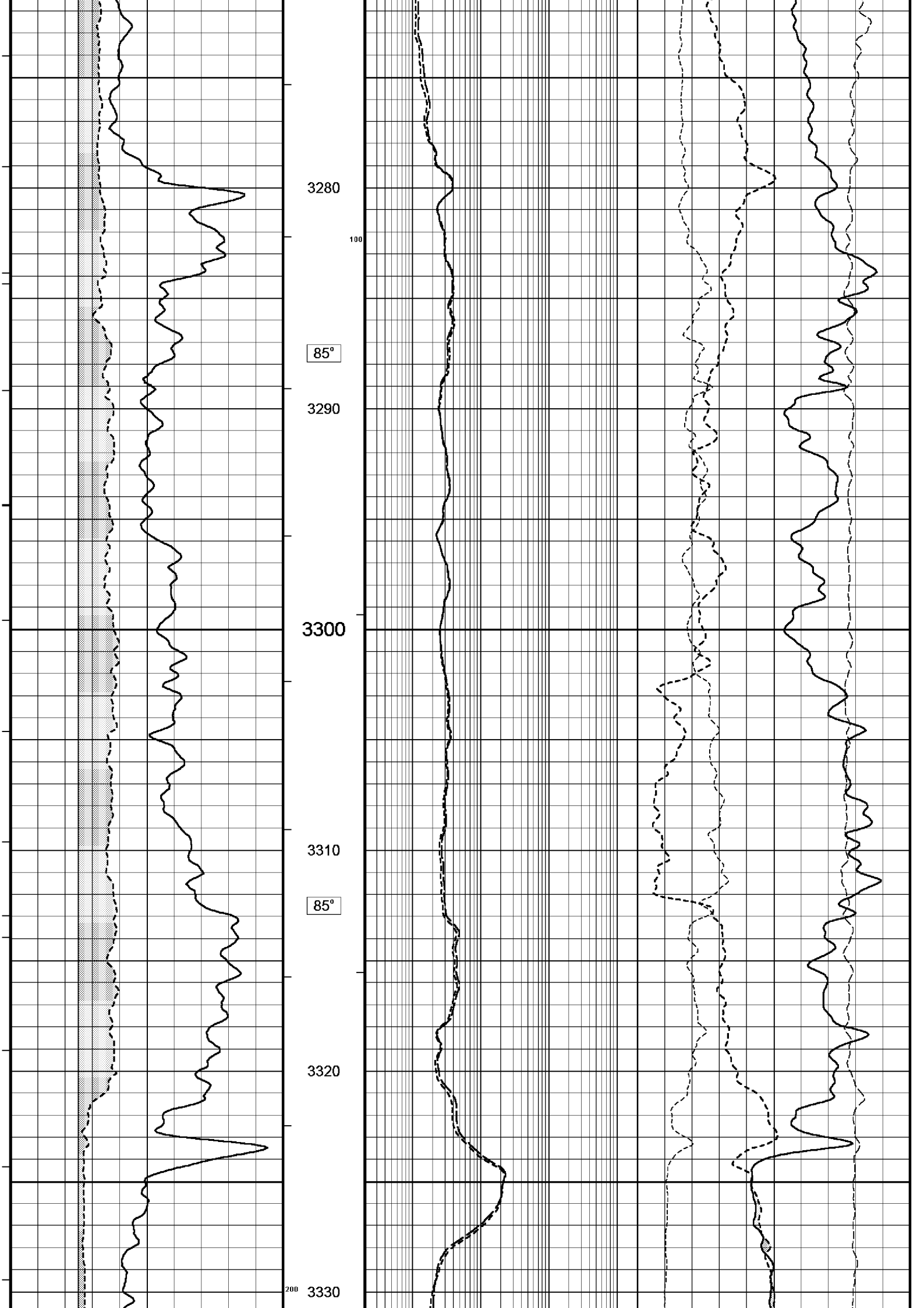
MAIN LOG 1:200

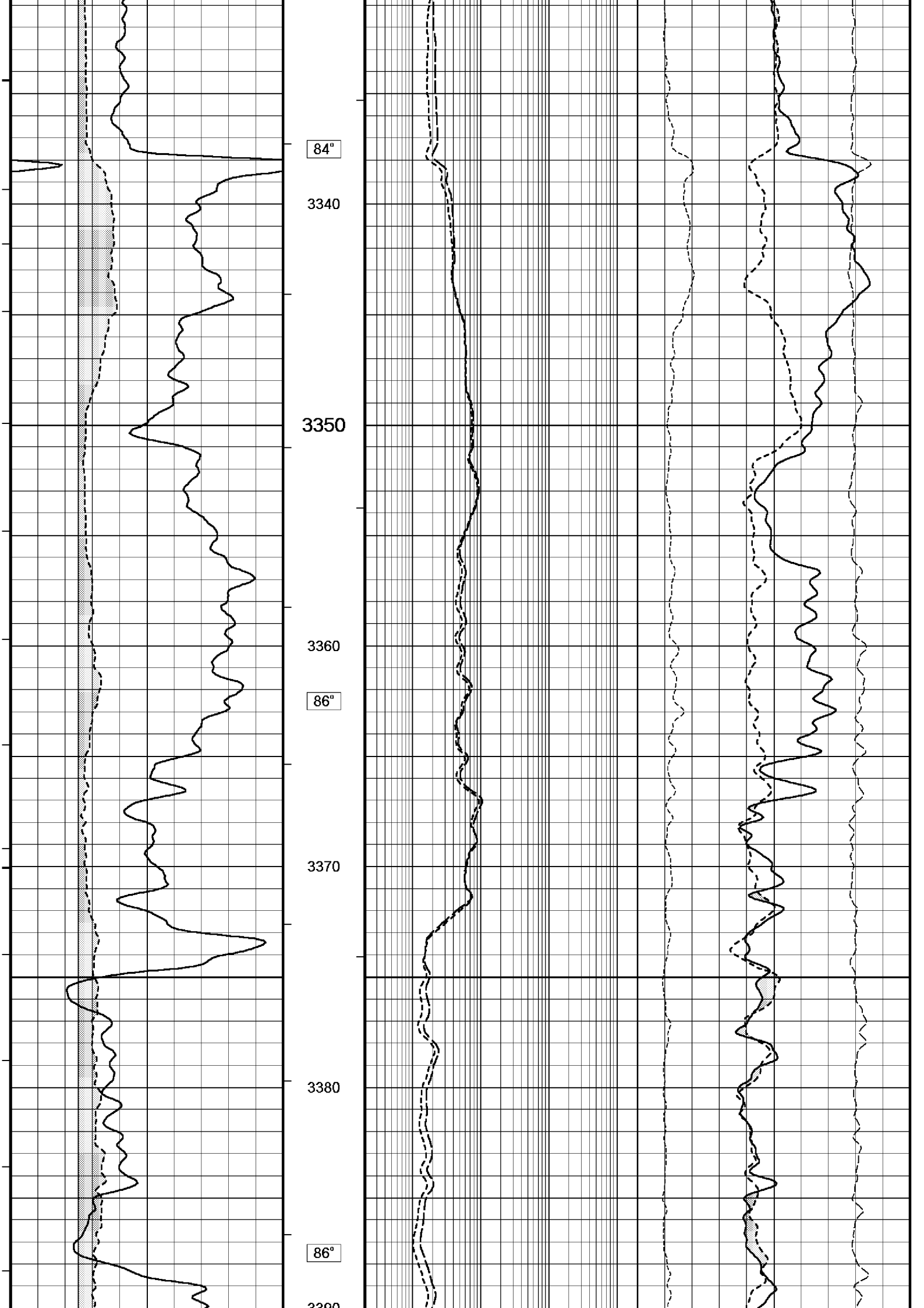
Depth Based Data - Maximum Sampling Increment 10.0cm Plotted on 20-SEP-2006 02:07
 Filename: C:\logs\WKF_W6A\FIELD_DATA\WKF_W6A_MAIN_LOG3.dta Recorded on 19-SEP-2006 22:44
 System Configuration Dates: Logged 17-JUN-2004: Processed 17-JUN-2004: Plotted 17-JUN-2004:

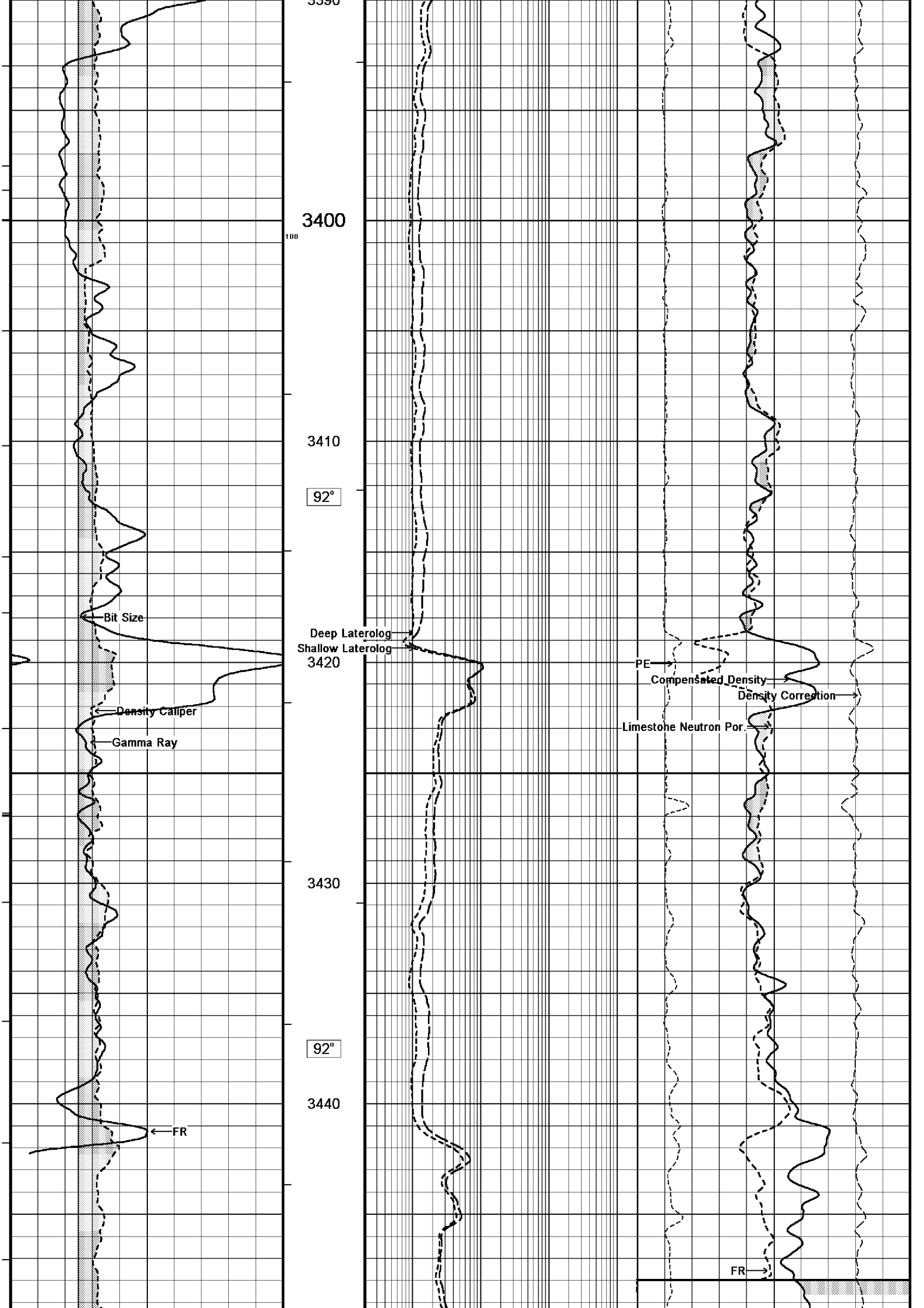


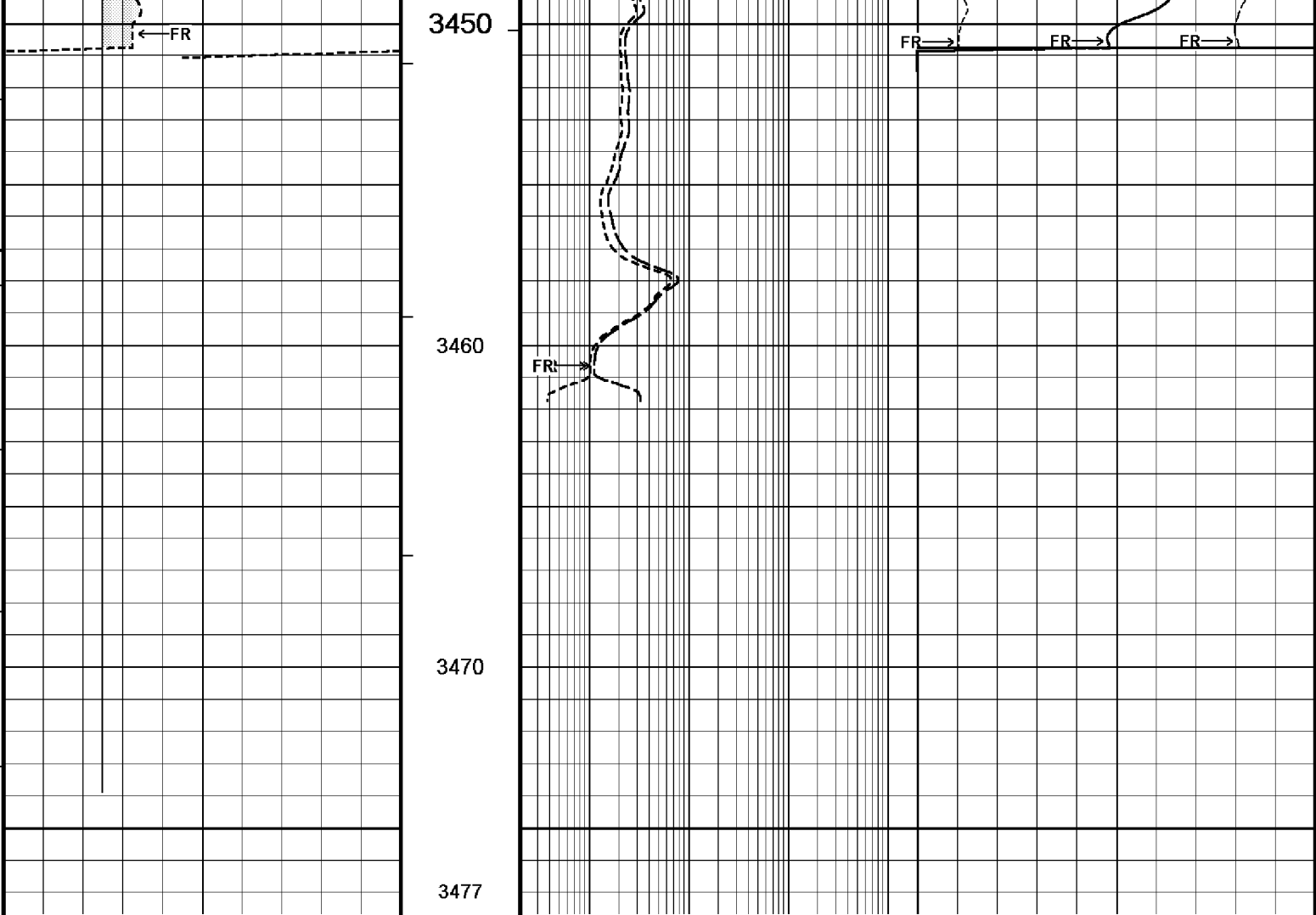












Timing Marks
every 60.0 sec

Gamma Ray
API
0 100 200
200 300 400

Density Caliper
inches
6 11 16

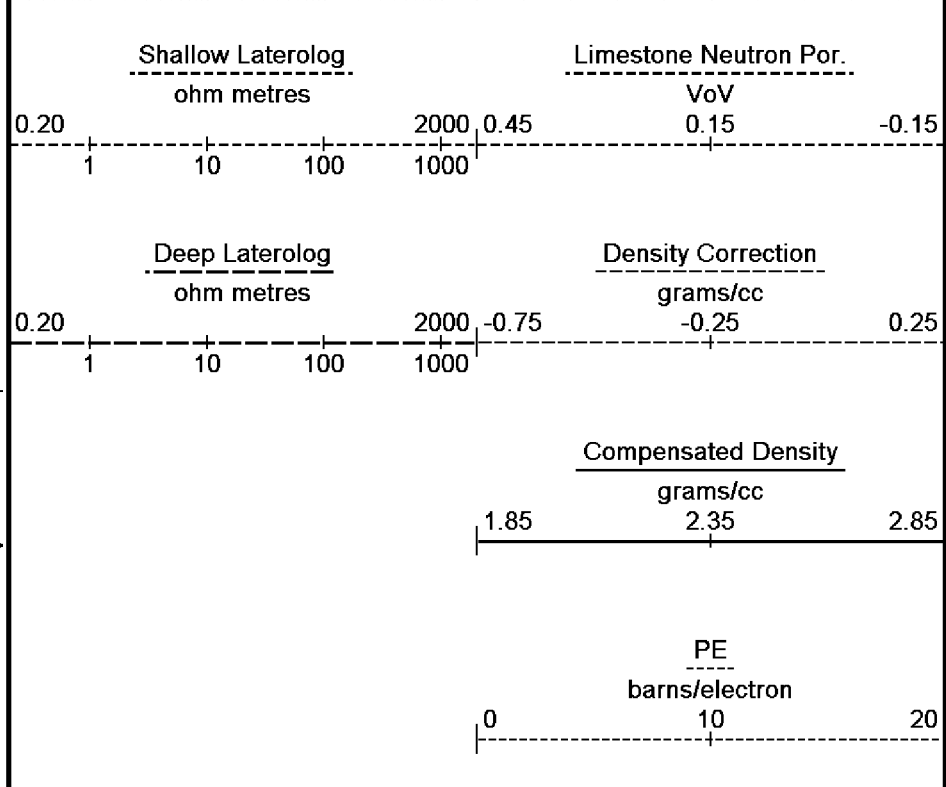
Bit Size
inches
6 11 16

DSC
in Metres

Borehole
Temp in deg C
HVI
every
10 cu ft

Annular
Integral
every
10 cu ft

Replay
Scale
1:200



Depth Based Data - Maximum Sampling Increment 10.0cm
 Plotted on 20-SEP-2006 02:07
 Filename: C:\logs\WKF_W6A\FIELD_DATA\WKF_W6A_MAIN_LOG3.dta
 Recorded on 19-SEP-2006 22:44
 System Configuration Dates: Logged 17-JUN-2004: Processed 17-JUN-2004: Plotted 17-JUN-2004:

↑ MAIN LOG 1:200 ↑

BEFORE SURVEY CALIBRATION
 C:\logs\WKF_W6A\FIELD_DATA\WKF_W6A_MAIN_LOG3.dta

General Constants All 000

General Parameters		
Mud Resistivity	0.122	ohm-metres
Mud Resistivity Temperature	25.000	degrees C
Water Level	0.000	metres
Density/Neutron Processing	Wet Hole	

Hole/Annular Volume and Differential Caliper Parameters		
HVOL Caliper 1	Density Caliper	
HVOL Caliper 2	Bit Size	
Annular Volume Diameter	7.000	inches
Caliper for Differential Caliper	None	

Rwa Parameters		
Porosity used	Base Density Porosity	
Resistivity used	Deep Laterolog	
RWA Constant A	0.610	
RWA Constant M	2.150	

High Resolution Temperature Calibration MCG 142

Field Calibration on 17-SEP-2006,09:45

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

High Resolution Temperature Constants MCG 142

Pre-filter Length	11
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Gamma Calibration MCG 142

Field Calibration on 17-SEP-2006 02:40

	Measured	Calibrated (API)
Background	14	9
Calibrator (Gross)	1359	918
Calibrator (Net)	1345	909

Gamma Constants MCG 142

Gamma Calibrator Number	060	
Mud Density	1.00	gm/cc
Caliper Source for Processing	Density Caliper	
Tool Position	Eccentred	
Concentration of KCl	0.00	kppm

Neutron Calibration MDN 085

Base Calibration on 31-AUG-2006 15:06

Field Check on 17-SEP-2006 02:51

Base Calibration					
		Measured		Calibrated (cps)	
	Near	Far	Near	Far	
	3173	98	3714	110	
Ratio	32.537		33.764		
Field Calibrator at Base					
			Calibrated (cps)		
			1939	2837	
Ratio			0.683		
Field Check					
			Calibrated (cps)		
			1627	2354	
Ratio			0.691		

Neutron Constants MDN 085

Neutron Source Id	NSN-E-739	
Neutron Jig Number	NEC-E-052	
Epithermal Neutron	No	
Caliper Source for Processing	Density Caliper	
Stand-off	0.00	inches
Mud Density	1.00	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	N/A	degrees C
Mud Salinity	0.00	kppm
Formation Fluid Salinity Source	None	

Formation Fluid Salinity
Barite Mud Correction

N/A
Not Applied

kppm

Caliper Calibration MPD 083

Base Calibration on 3-SEP-2006 16:00
Field Calibration on 17-SEP-2006 02:53

Base Calibration

Reading No	Measured	Calibrator Size (in)
1	14704	4.01
2	22880	5.99
3	31311	7.98
4	39757	9.94
5	49111	12.01
6	N/A	N/A

Field Calibration

Measured Caliper (in)	Actual Caliper (in)
7.93	7.98

Photo Density Calibration MPD 083

Base Calibration on 3-SEP-2006 15:48
Field Check on 17-SEP-2006 02:46

Density Calibration

Base Calibration	Measured		Calibrated (sdu)	
	Near	Far	Near	Far
Reference 1	53741	17856	53111	19310
Reference 2	25062	2460	24951	2530

Field Check at Base

930.7 1084.8

Field Check

931.1 1079.7

PE Calibration

Base Calibration	WS	Measured		Calibrated Ratio
		WH	Ratio	
Background	176	796		
Reference 1	17290	53546	0.324	0.320
Reference 2	6796	24917	0.274	0.273

Field Check at Base

176.3 796.3

Field Check

174.3 795.8

Density Constants MPD 083

Density Source Id	NSDL 242	
Nylon Calibrator Number	DNC-D-536	
Aluminium/Fe Calibrator Number	DAC-D-536	
Density Shoe Profile	4 inch	
Caliper Source for Processing	Density Caliper	
PE Correction to Density	Not Applied	
Mud Density	1.00	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

Laterolog Calibration MLE 031

Base Calibration on 31-AUG-2006 10:33
Field Check on 17-SEP-2006,09:46

Base Calibration

Channel	Measured		Calibrated (ohm-m)	
	Resistor 1	Resistor 2	Resistor 1	Resistor 2
Shallow	9.8	977.5	13.2	1321.0
Deep	9.8	977.6	7.5	755.0

Groningen 9.8 977.7 8.5 854.0

Channel	Base Check (ohm-m)	Field Check (ohm-m)
Shallow	48.6	48.6
Deep	27.8	27.7
Groningen	251.3	251.3

Laterolog Constants MLE 031

Squasher Start	40000	ohm-m
Shallow Laterolog K Factor	1.3210	
Deep Laterolog K Factor	0.7550	
Groningen Laterolog K Factor	0.8540	
Interference Rejection	50 Hz	
SP Connection	SP Bridle Electrode	
Groningen Connection	None	

DOWNHOLE EQUIPMENT

C:\logs\WKF_W6A\FIELD_DATA\WKF_W6A_MAIN_LOG3.dta

Compact Swivel Head Adaptor F
SHA 71 Length: 0.83 m Weight: 26.5 lb

Compact Knuckle Joint
SKJ 100 Length: 0.66 m Weight: 24.3 lb

Compact Battery Sub.
MBS 99 Length: 4.41 m Weight: 44.1 lb

Compact Inline Standoff B
MIS 31 Length: 0.65 m Weight: 15.4 lb

Compact Stiff Bridle Electrode Sub.
MBE 18 Length: 3.76 m Weight: 94.8 lb

Compact Inline Standoff B
MIS 141 Length: 0.65 m Weight: 15.4 lb

Compact Stiff Bridle Electrode Sub.
MBE 19 Length: 3.76 m Weight: 94.8 lb

Compact Inline Standoff B
MIS 129 Length: 0.65 m Weight: 15.4 lb

MBE 21 3rd bridle



MLK 111 Length: 3.76 m Weight: 94.8 lb

Compact Inline Standoff B
MIS 135 Length: 0.65 m Weight: 15.4 lb

Compact Gamma
MCG 142 Length: 2.65 m Weight: 63.9 lb

Compact Memory Sub A.C
MMS 38 Length: 0.95 m Weight: 30.9 lb

Compact Inline Bowspring A
MIS 95 Length: 1.74 m Weight: 33.1 lb

Compact Swivel Head Adaptor F
SHA 64 Length: 0.83 m Weight: 26.5 lb

Compact Knuckle Joint
SKJ 101 Length: 0.66 m Weight: 24.3 lb

Compact Neutron
MDN 85 Length: 1.53 m Weight: 50.7 lb

Compact Density/Caliper
MPD 83 Length: 2.92 m Weight: 90.4 lb

Compact Knuckle Joint
SKJ 46 Length: 0.66 m Weight: 24.3 lb

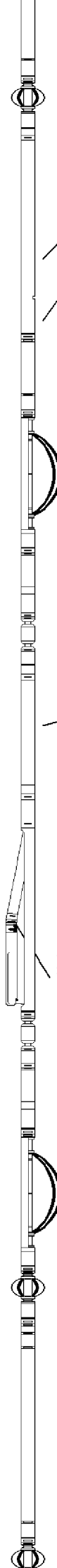
Compact Swivel Head Adaptor F
SHA 73 Length: 0.83 m Weight: 26.5 lb

Compact Inline Bowspring A
MIS 24 Length: 1.74 m Weight: 33.1 lb

Compact Inline Standoff B
MIS 132 Length: 0.65 m Weight: 15.4 lb

Compact Upper Guard Sub.
MUG 30 Length: 2.74 m Weight: 68.3 lb

Compact Inline Standoff B
MIS 130 Length: 0.65 m Weight: 15.4 lb



32.22 m GGCE - Borehole Corrected Gamma
31.33 m CGXT - MCG External Temperature

26.17 m NPRL - Limestone Neutron Por.

23.48 m AVOL - Annular Volume
23.48 m HVOL - Hole Volume
23.48 m CLDC - Density Caliper
23.27 m DEN - Compensated Density

23.27 m DCOR - Density Correction
23.25 m PDPE - PE

MIS 139 Length: 0.65 m Weight: 15.4 lb
 Compact Laterolog Electrode Sub.
 MLE 31 Length: 3.76 m Weight: 92.6 lb

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

MIS 138 Length: 0.65 m Weight: 15.4 lb
 Compact Inline Standoff B

MLG 7 Length: 2.44 m Weight: 55.1 lb
 Compact Lower Guard Sub.

MIS 73 Length: 0.65 m Weight: 15.4 lb
 Compact Inline Standoff B

MSS 66 Length: 3.82 m Weight: 72.8 lb
 Compact Sonic

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

MIS 127 Length: 0.65 m Weight: 15.4 lb
 Compact Inline Standoff B

4.60 m DT35 - 3-5' Compensated Sonic

MAI 39 Length: 3.29 m Weight: 48.5 lb
 Compact Induction

Tool Zero (0.44m from bottom)

HFS 4 Length: 0.40 m Weight: 6.6 lb
 Pressure Bung + Hole Finder

All measurements relative to tool zero.

Total Length: 54.01 m Weight: 1265.5 lb



COMPANY ESSO AUSTRALIA PTY.LTD
WELL WKF W6A
FIELD KINGFISH GDA94
PROVINCE/COUNTY BASS STRAIT, VICTORIA
COUNTRY/STATE AUSTRALIA

Elevation Kelly Bushing		metres	First Reading	3461.00	metres
Elevation Drill Floor	33.43	metres	Depth Driller	3477.00	metres
Elevation Ground Level	-76.13	metres	Depth Logger	3477.00	metres



DUAL LATEROLOG - GR
DENSITY - NEUTRON
1:200 MD