



**PRECISION**

**COMPENSATED SONIC**

**Compact**

**1:200 MD**

COMPANY

ESSO AUSTRALIA PTY.LTD

WELL

WKF W6A

FIELD

KINGFISH GDA94

PROVINCE/COUNTY

BASS STRAIT, VICTORIA

COUNTRY/STATE

AUSTRALIA

LOCATION

S 38 35 34.706, E 148 6 19.764

N 5727810.570 m, E 596273.687 m

**FIELD PRINT**

LSD SEC TWP RGE

Other Services

API Number

COMPENSATED NEUTRON

Permit Number

PHOTO DENSITY  
DUAL LATEROLOG

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 3469.40 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/PPHA

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

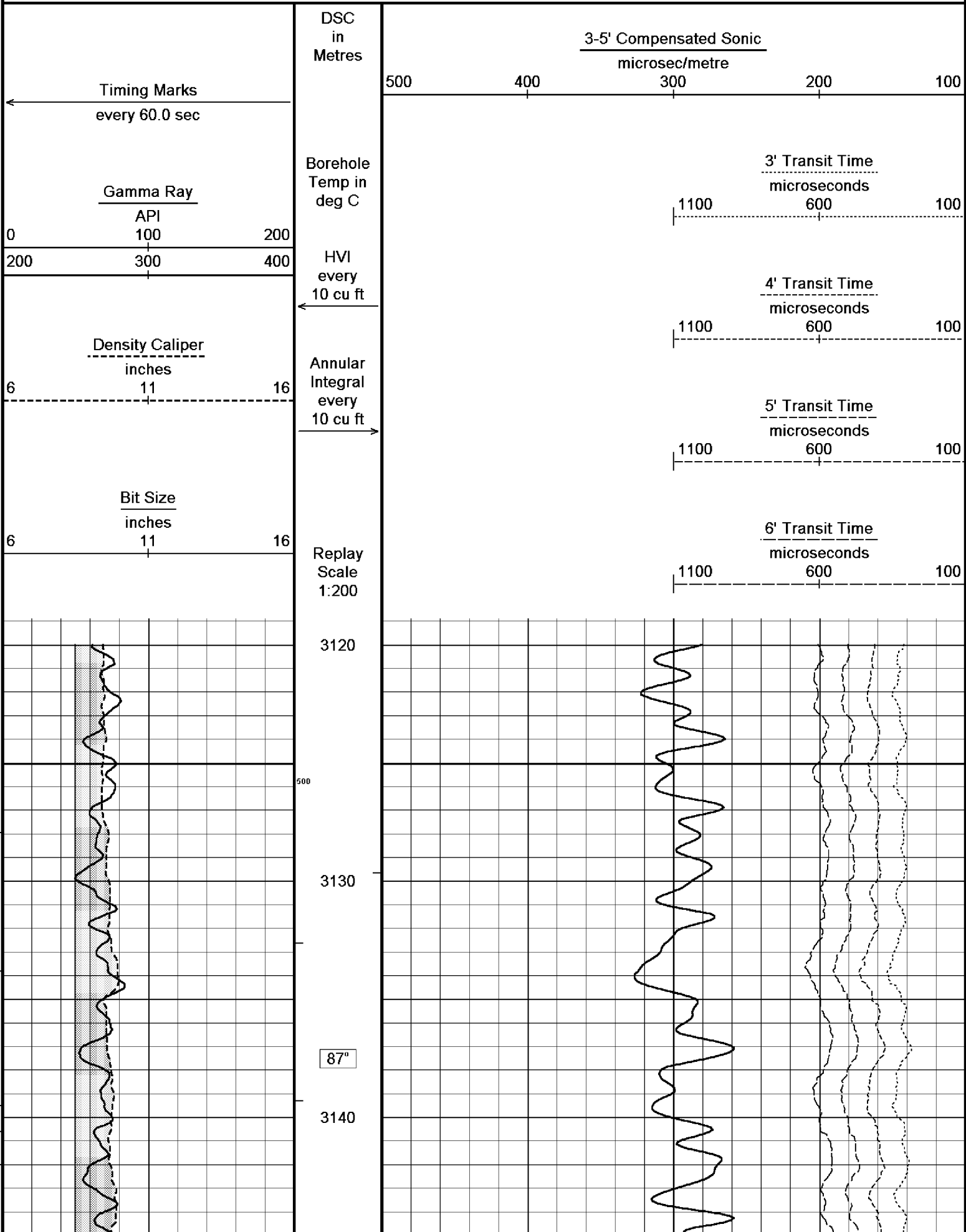
LOGGING SPEED 6M/MIN FROM TD TO 3112 M MD  
LOGGING SPEED 12 M/MIN FROM 3112 TO 1244 M MD  
LOGGING SPEED 6 M/MIN FROM 1244 TO 1015 M MD  
LOGGING SPEED 12 M/MIN FROM 1015 TO 671 M MD

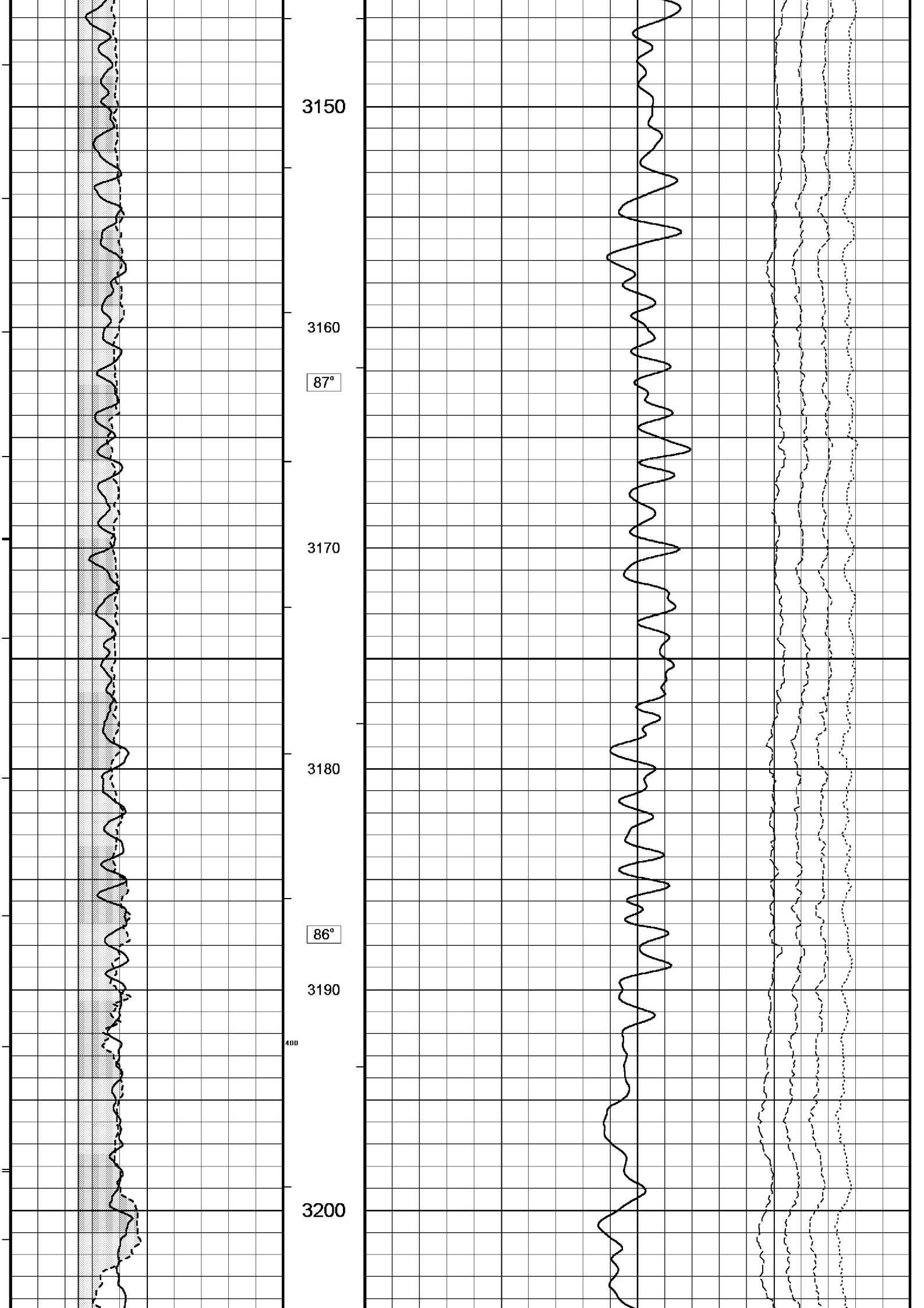
All interpretations are opinions based on inferences from electrical or other measurements and we cannot, and do not, guarantee the accuracy or correctness of any interpretations, and we shall not, except in the case of gross or wilful negligence on our part, be liable or responsible for

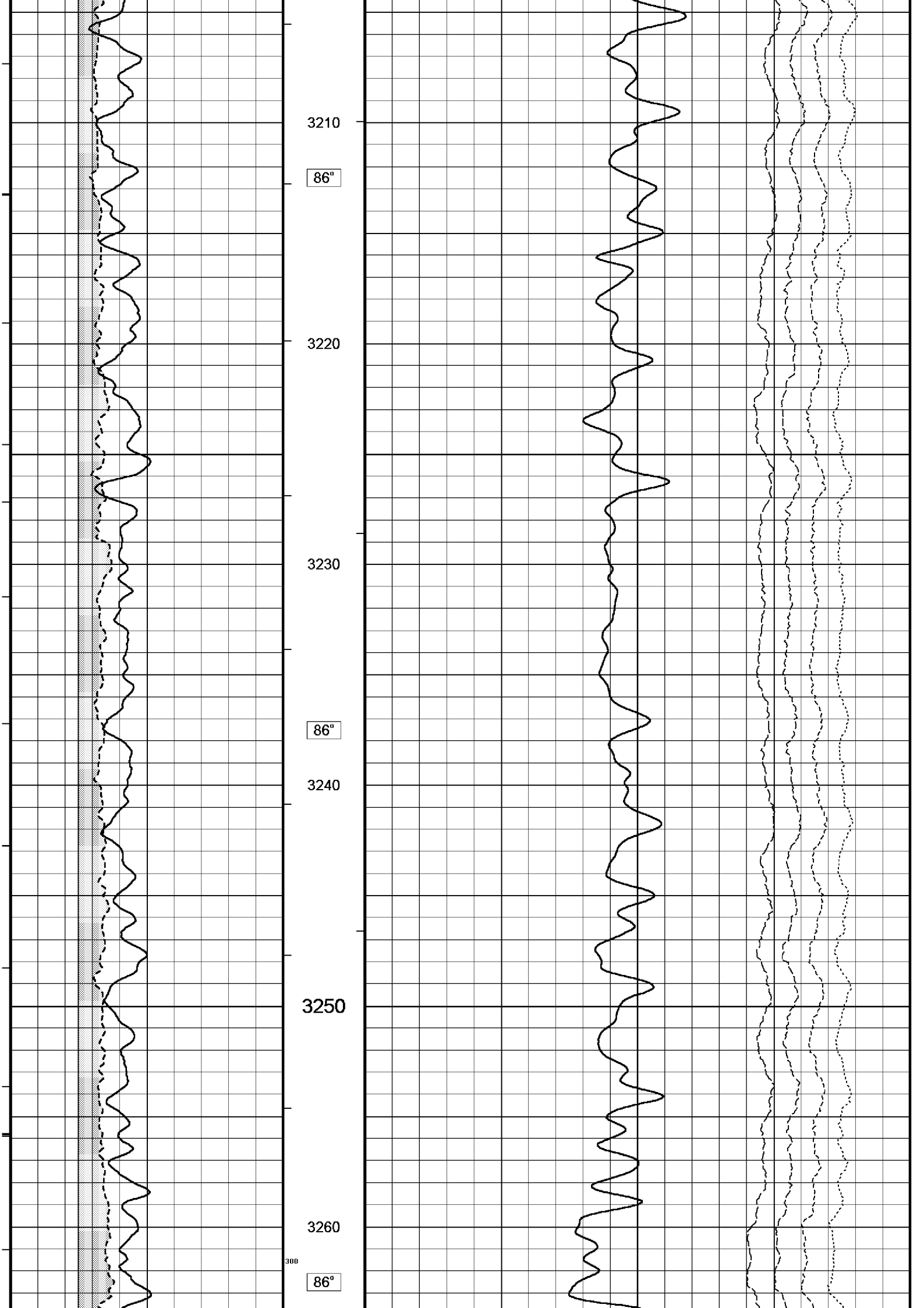
of correctness of any loss, costs, damages or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to our general terms and conditions in our price schedule.

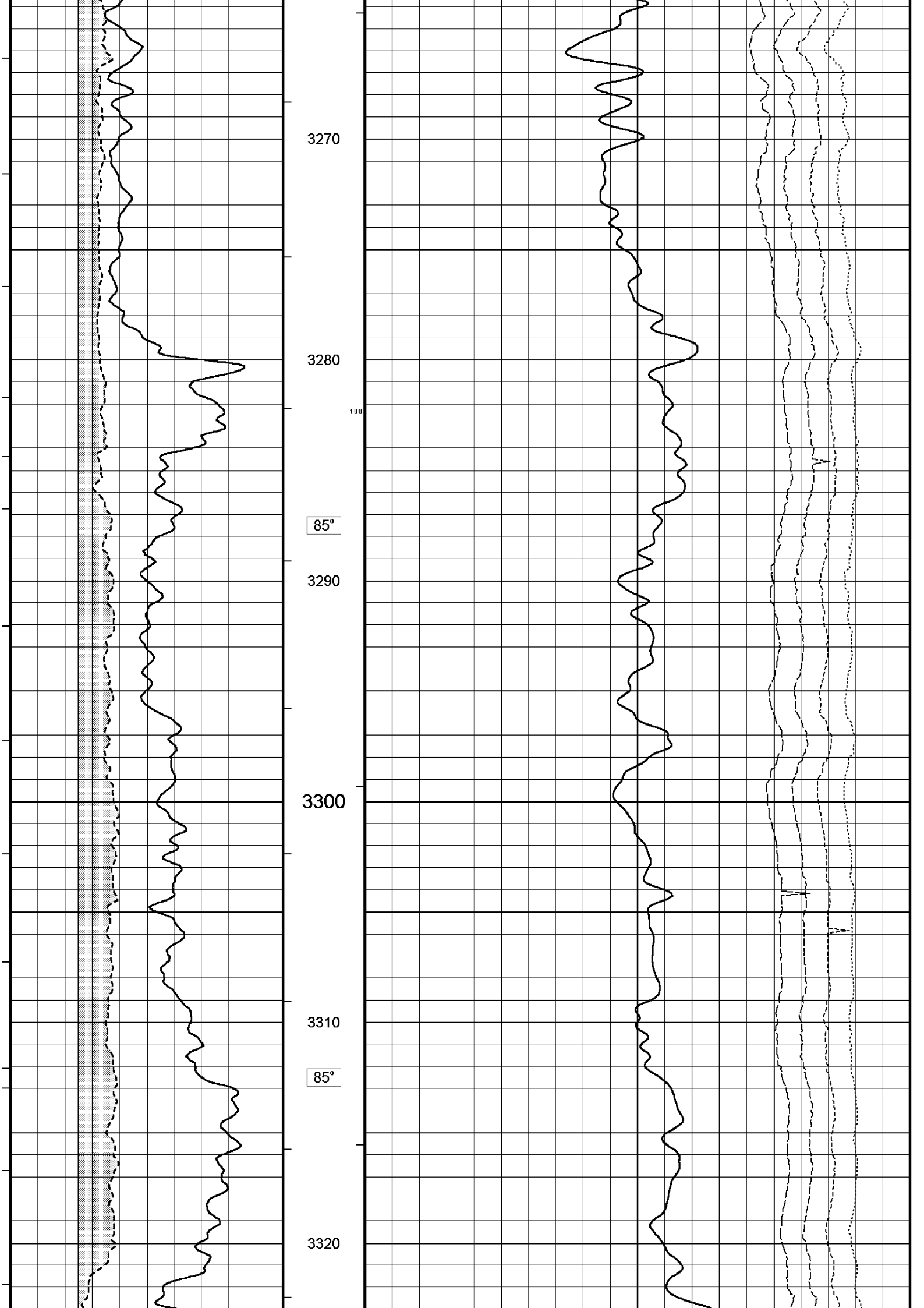
**MAIN LOG 1:200**

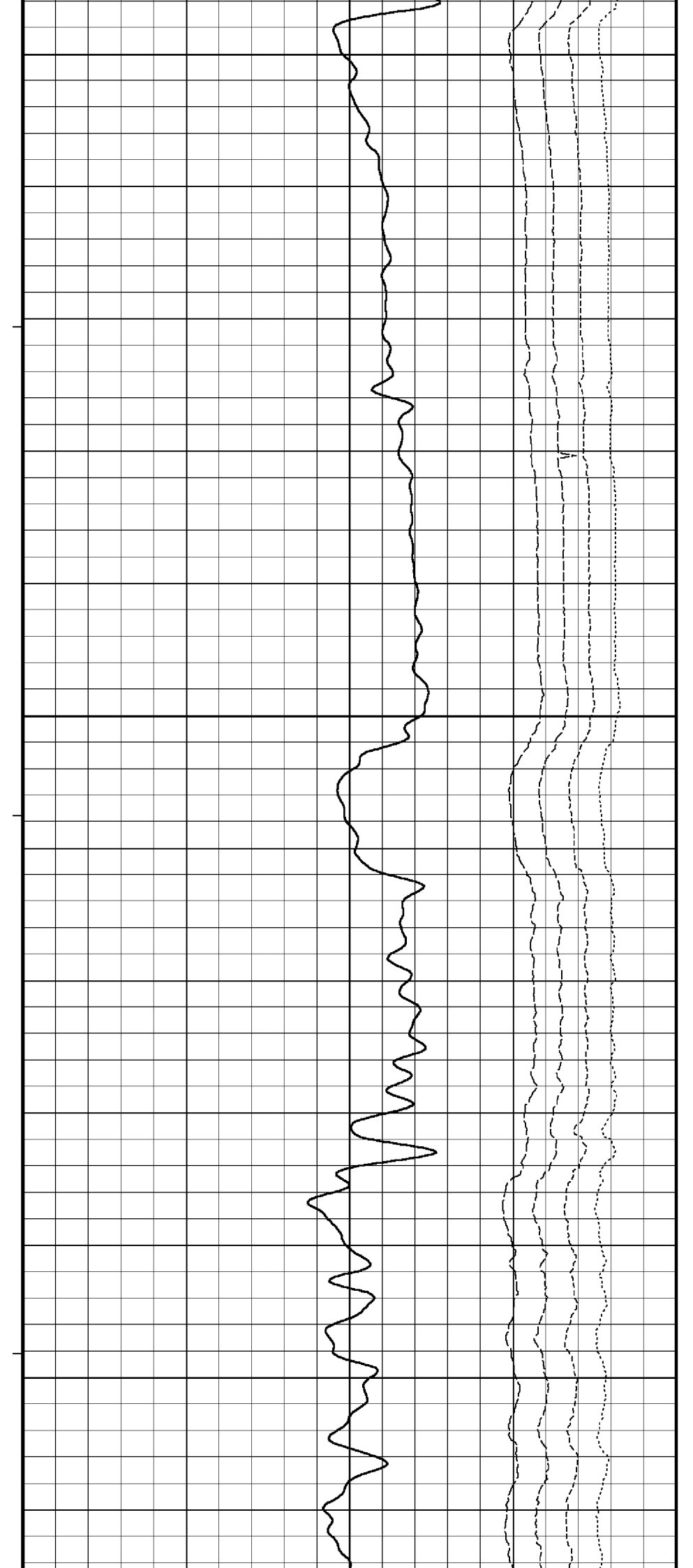
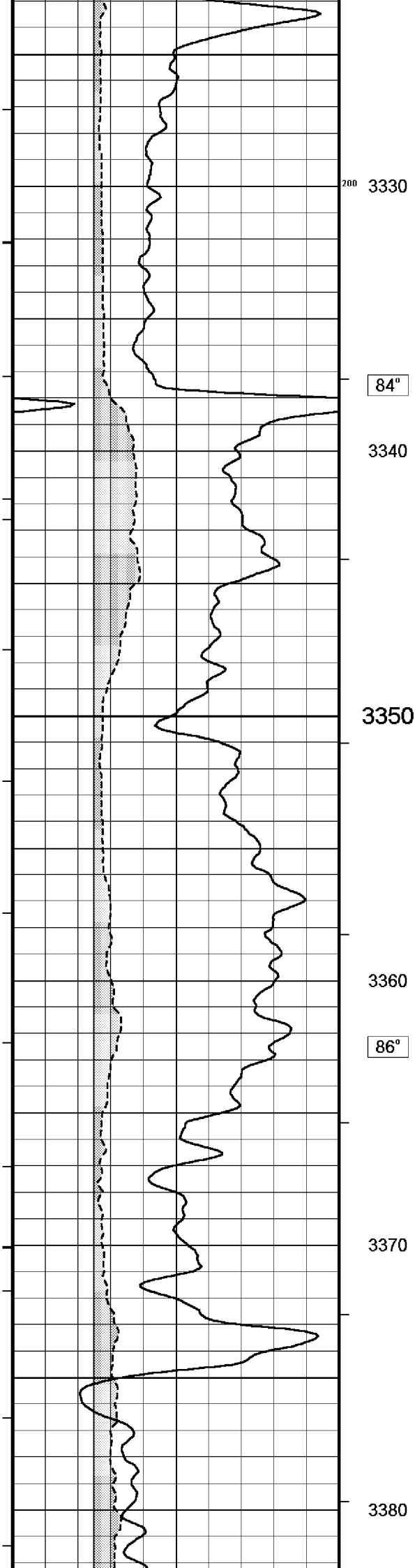
Depth Based Data - Maximum Sampling Increment 10.0cm Plotted on 20-SEP-2006 02:16  
 Filename: C:\logs\WKF\_W6A\FIELD\_DATA\WKF\_W6A\_MAIN\_LOG3.dta Recorded on 19-SEP-2006 22:44  
 System Configuration Dates: Logged 17-JUN-2004: Processed 17-JUN-2004: Plotted 17-JUN-2004:

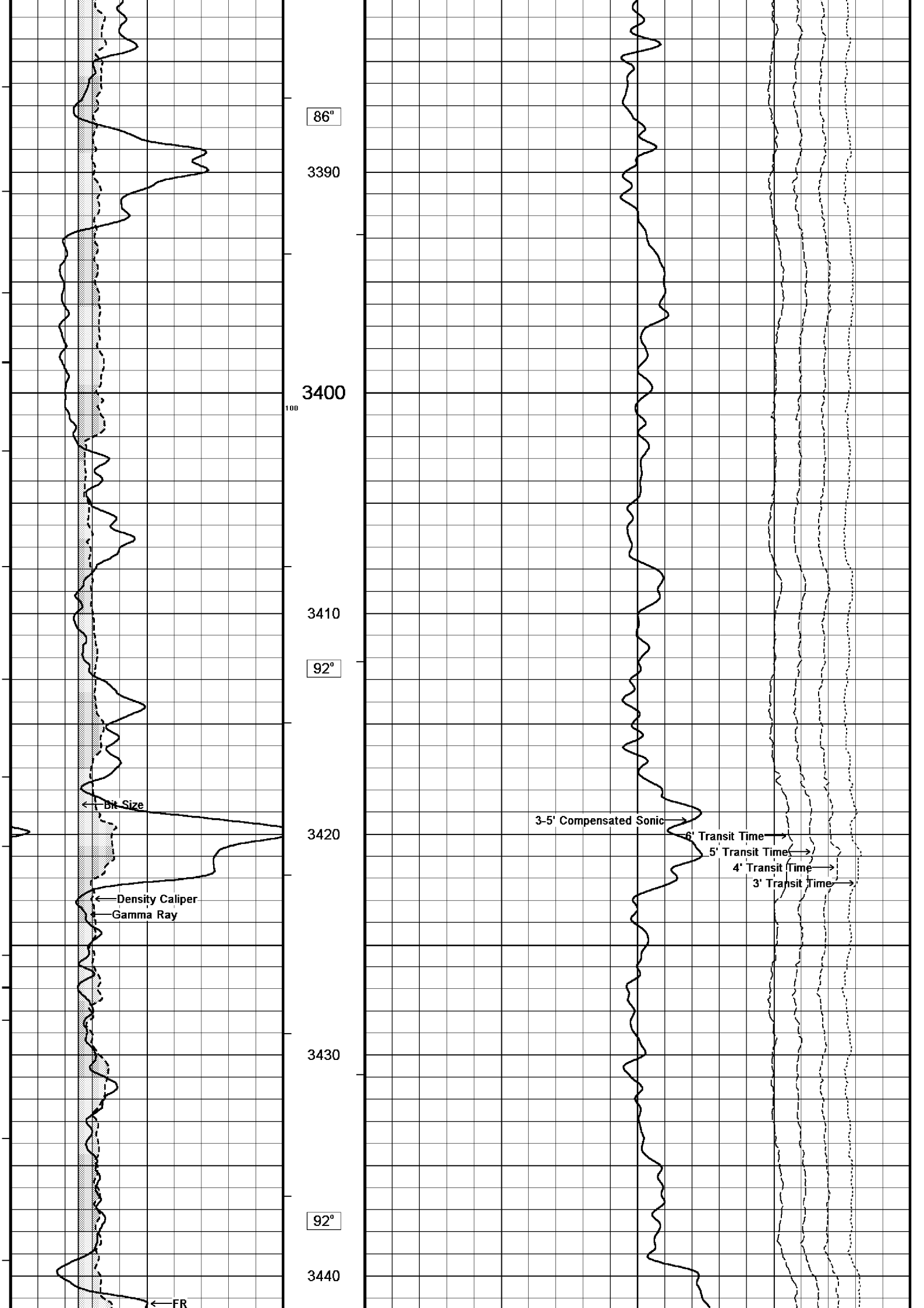


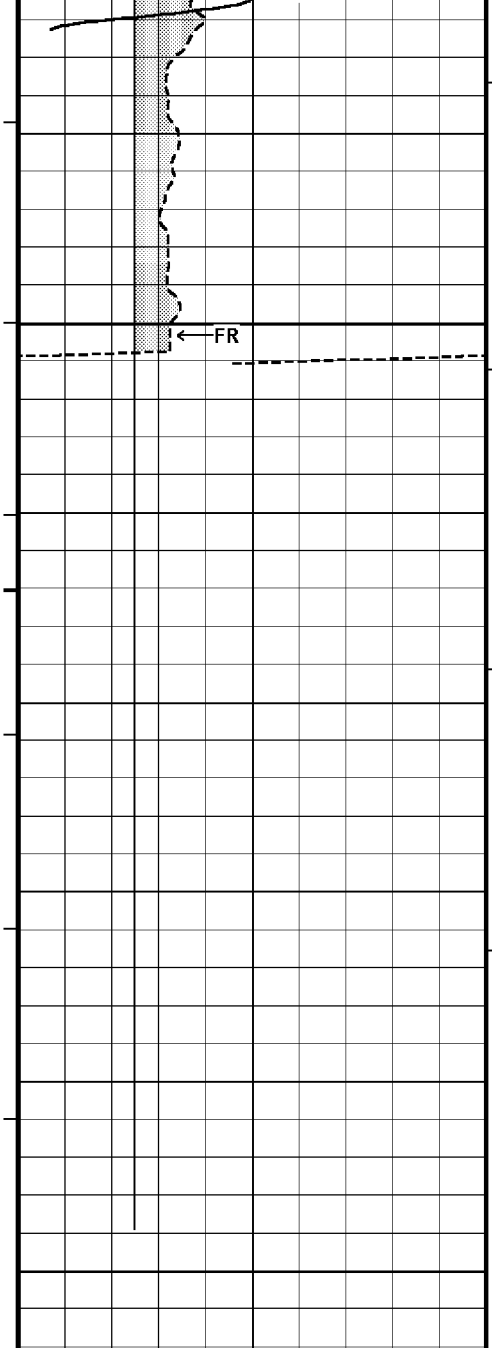












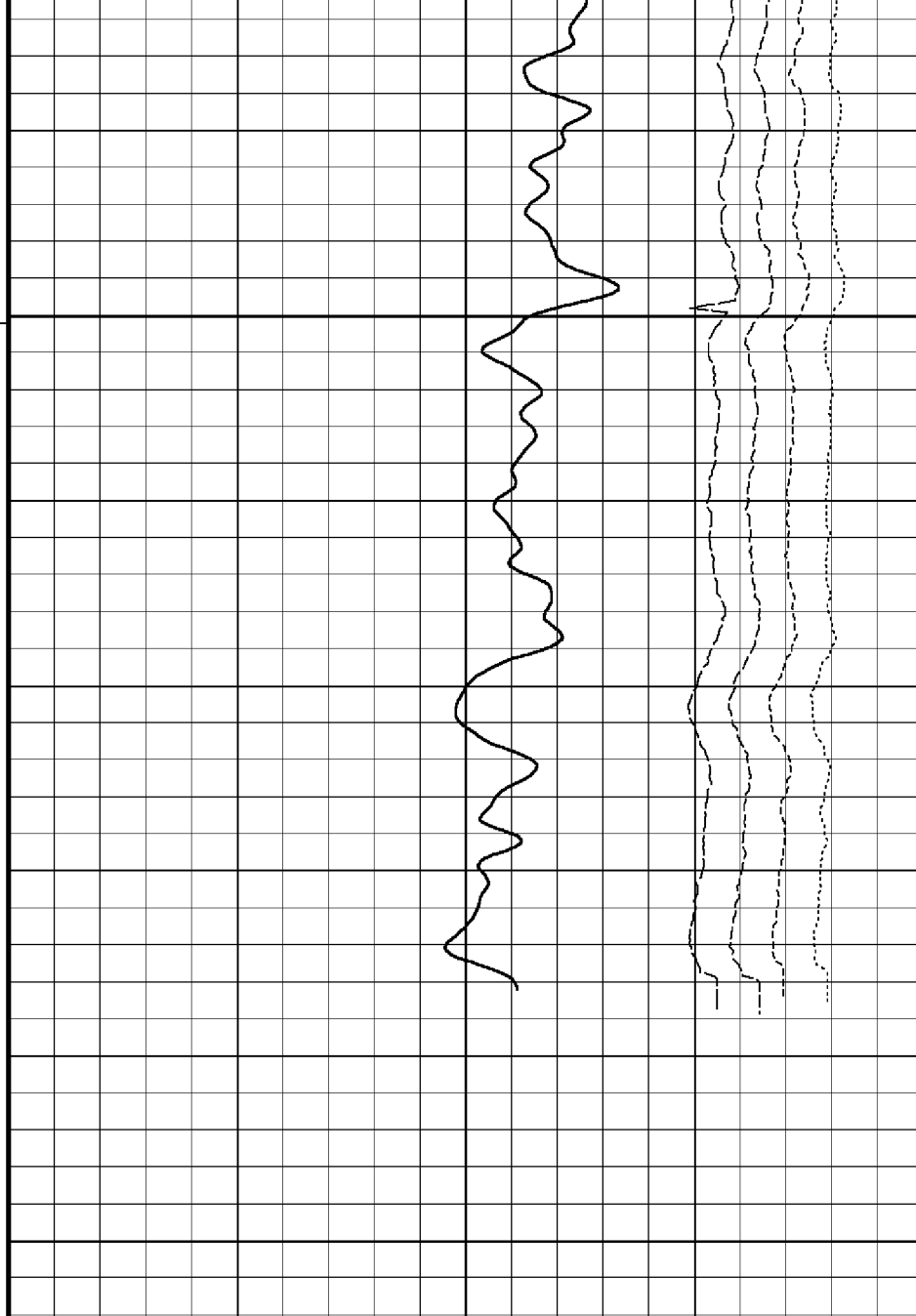
3450

3460

3470

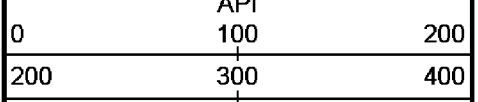
3476

DSC  
in  
Metres



Timing Marks  
every 60.0 sec

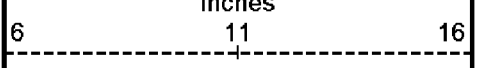
Gamma Ray  
API



Borehole  
Temp in  
deg C

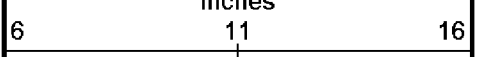
HVI  
every  
10 cu ft

Density Caliper  
inches



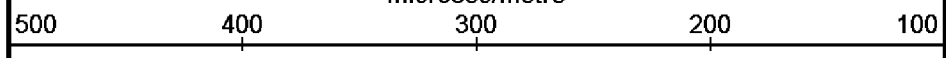
Annular  
Integral  
every  
10 cu ft

Bit Size  
inches

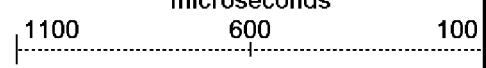


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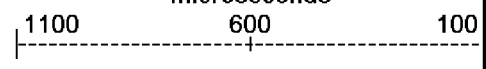
3-5' Compensated Sonic  
microsec/metre



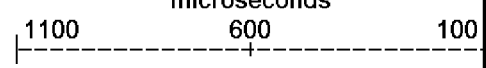
3' Transit Time  
microseconds



4' Transit Time  
microseconds



5' Transit Time  
microseconds



6' Transit Time  
microseconds



Depth Based Data - Maximum Sampling Increment 10.0cm  
 Plotted on 20-SEP-2006 02:16  
 Filename: C:\logs\WKF\_W6A\FIELD\_DATA\WKF\_W6A\_MAIN\_LOG3.dta  
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 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

**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

**Caliper Calibration MPD 083**

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

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

**Sonic Constants MSS 066**

Maximum Boundary Contrast 100.00 micro-sec/ft

Fluid Transit Time	189.00	micro-sec/ft
Limestone Transit Time	47.50	micro-sec/ft
Sandstone Transit Time	55.50	micro-sec/ft
Dolomite Transit Time	43.50	micro-sec/ft
Sonic used for Porosities	3-5' Compensated Sonic	
Correction for Sonde Skew	Applied	
Cycle Stretch Algorithm	Applied	
MN3FT	N/A	micro-sec
MX3FT	N/A	micro-sec

**Fixed Gate Parameters**

Start Time (micro-sec)	End Time (micro-sec)	Discriminator (mV)	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A

**Down Hole Fixed Gate Parameters**

Gate Start	N/A	micro-sec
Gate Width	N/A	micro-sec
Initial Discriminator Level	0.0000	mVolts

**Full Waveform Parameters**

Use 3' Waveform to derive TR	No	
Use 4' Waveform to derive TR	No	
Use 5' Waveform to derive TR	No	
Use 6' Waveform to derive TR	No	
3' Waveform Discriminator Level	0.45	mV
4' Waveform Discriminator Level	0.45	mV
5' Waveform Discriminator Level	0.35	mV
6' Waveform Discriminator Level	0.35	mV
3' Waveform Filter	None	
4' Waveform Filter	None	
5' Waveform Filter	None	
6' Waveform Filter	None	
Semblance Level	0.50	
Semblance Window Width	120.00	micro-sec
Sonic 1 Despiker	100.00	micro-sec/ft
Sonic 2 Despiker	100.00	micro-sec/ft

**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

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

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

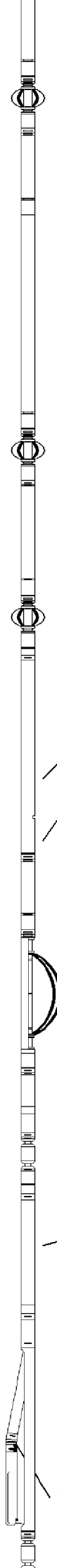
26.17 m NPRL - Limestone Neutron Por.

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

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

Compact Knuckle Joint  
SKJ 146 Length: 0.66 m Weight: 24.3 lb

23.27 m DCOR - Density Correction



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 139 Length: 0.65 m Weight: 15.4 lb

Compact Laterolog Electrode Sub.  
MLE 31 Length: 3.76 m Weight: 92.6 lb

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

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

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

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

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

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

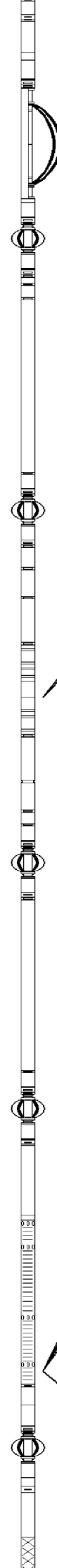
23.25 m PDPE - PE

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

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

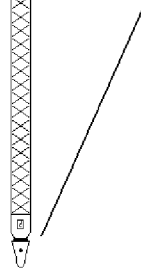
4.60 m DT35 - 3-5' Compensated Sonic

Tool Zero (0.44m from bottom)



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

Total Length: 54.01 m Weight: 1265.5 lb



All measurements relative to tool zero.

**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	3469.40	metres
Elevation Drill Floor	33.43	metres	Depth Driller	3477.00	metres
Elevation Ground Level	-76.13	metres	Depth Logger	3477.00	metres



**COMPENSATED SONIC**  
 1:200 MD