



PRECISION
ENERGY SERVICES

COMPENSATED SONIC

Compact

1:500 MD

COMPANY				ESSO AUSTRALIA PTY LTD			
WELL				BREAM A19A			
FIELD				BREAM			
PROVINCE/COUNTRY				BASS STRAIT			
COUNTRY/STATE				AUSTRALIA			
LOCATION				S 38 29 58.893, E 147 46 19.968			
				N 5738458.220 m, E 567336.120 m			
				FIELD PRINT			
LSD	SEC	TWP	RGE	Other Services			
				DUAL LATEROLOG			
API Number				PHOTO DENSITY			
Permit Number				COMPENSATED NEUTRON			
Permanent Datum MSL				, Elevation 0.0 metres			
Log Measured From RT @ 32.82 M				above Permanent Datum			
Drilling Measured From RT							
Date	30-Nov-2005						
Run Number	ONE						
Depth Driller	2804.00			metres			
Depth Logger	2801.00			metres			
First Reading	2787.60			metres			
Last Reading	1434.00			metres			
Casing Driller	1434.00			metres			
Casing Logger	1434.00			metres			
Bit Size	8.50			inches			
Hole Fluid Type	KCL/GYL/POLY						
Density / Viscosity	10.15 lb/USg			62.00 CP			
PH / Fluid Loss	9.00			2.60			
Sample Source	FLOWLINE						
Rm @ Measured Temp	0.228 @ 25.0			ohm-m			
Rmf @ Measured Temp	0.091 @ 25.0			ohm-m			
Rmc @ Measured Temp	0.359 @ 25.0			ohm-m			
Source Rmf / Rmc	PRESS			PRESS			
Rm @ BHT	0.119 @ 67.5			ohm-m			
Time Since Circulation	27.5 HOURS						
Max Recorded Temp	70.60			deg C			
Equipment Name	5" CWS/CML						
Equipment / Base	1			SALE			
Recorded By	R. TENCH, B. MOSS						
Witnessed By	TREVOR LOBO						
CIRC STOPPED	00:15 29/NOV						

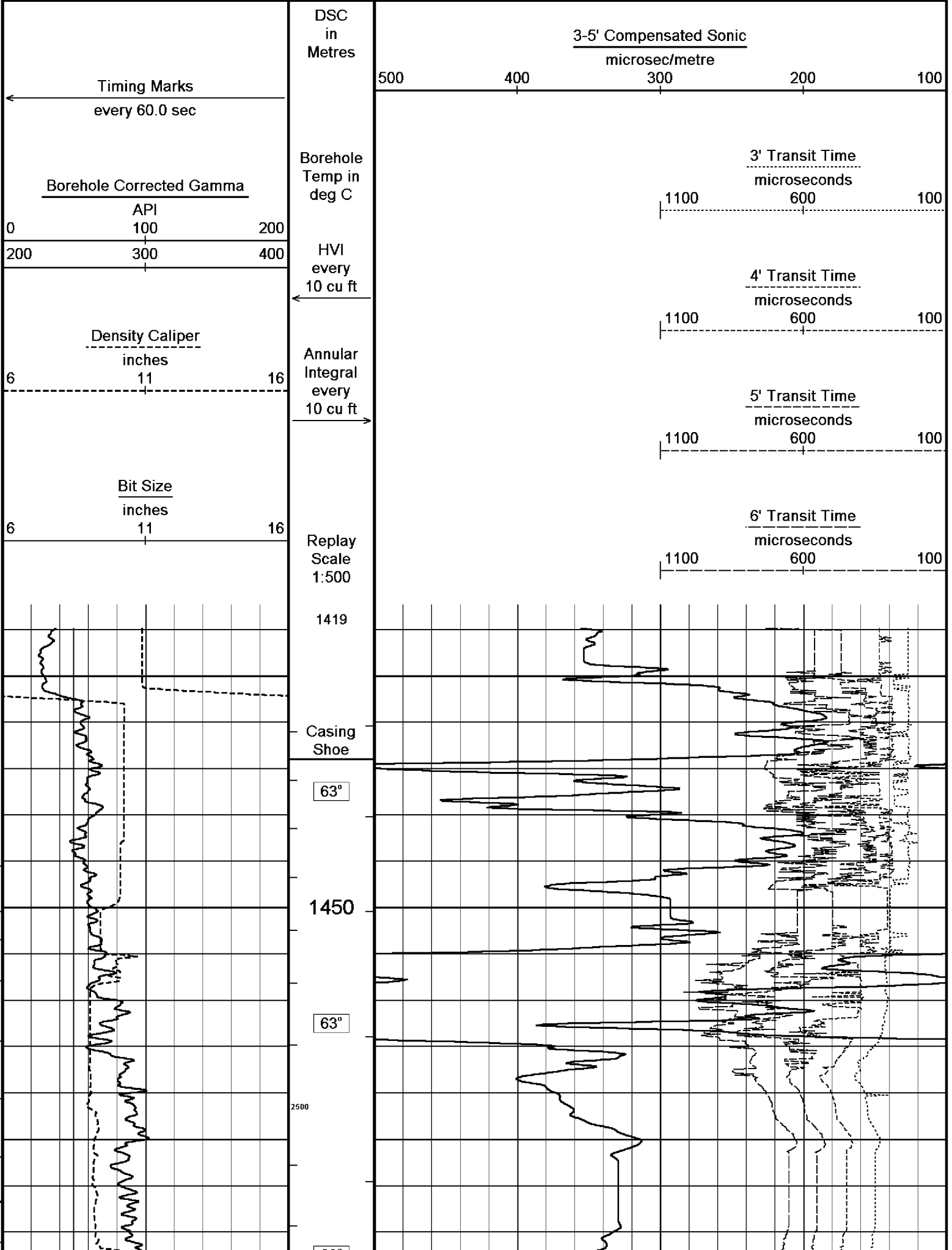
BOREHOLE RECORD				
Bit Size inches		Depth From metres		Depth To metres
8.500		1434.00		2804.00
CASING RECORD				
Type	Size inches	Depth From metres	Shoe Depth metres	Weight pounds/ft
K-55	10.750	0.00	1434.00	40.50

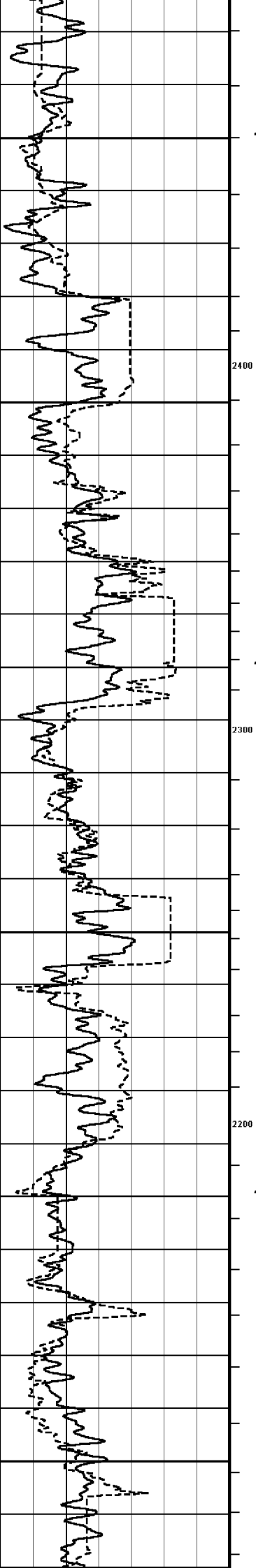
REMARKS
RIG: NABORS 453
5" SHUTTLE/MEMORY COMPACT OPERATION. CREW: R TENCH , B MOSS , B GOODWIN, M KOLCZE.
FIELD FINAL LOGS TO BE CORRELATED TO ANADRILL GAMMA LOG. FIELD FINALS REQUIRE CORRECTION TO TIME DEPTH CORRELATION ABOVE 1800mMD.
BRIDGED OF AT 2786mMD ON TRIP IN, REQUIRED 60RPM AND 10BBL/MIN TO ALLOW PIPE TO BE WASHED TO TD.
MAX. TEMPERATURE: 70.6 DEG C AT 2379m MD MAX. INCLINATION: 60.56 DEG AT 1478.37m MD MAX. DOGLEG SERVERITY: 6.78DEG/30m AT 1478.37m MD DEPLOYMENT ANGLE: 32.90DEG
HVOL: 2524 FT^3 AVOL: 1346 FT^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.

Depth Based Data - Maximum Sampling Increment 10.0cm
Filename: C:\logs\BMA_A19A\FIELD DATA\BMA_A19A_MSS.dta
System Configuration Dates: Logged 17-JUN-2004: Processed 17-JUN-2004: Plotted 17-JUN-2004:

Plotted on 30-NOV-2005 21:46
Recorded on 30-NOV-2005 14:16





63°

1500

63°

1300

2400

64°

1550

2300

64°

1200

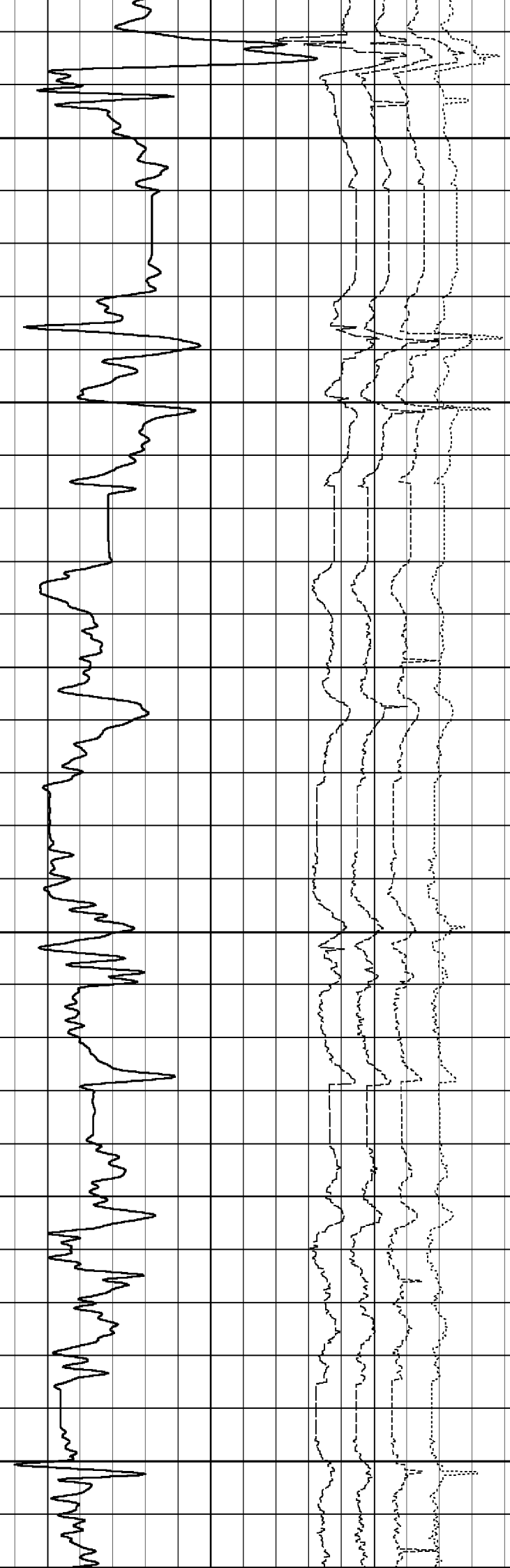
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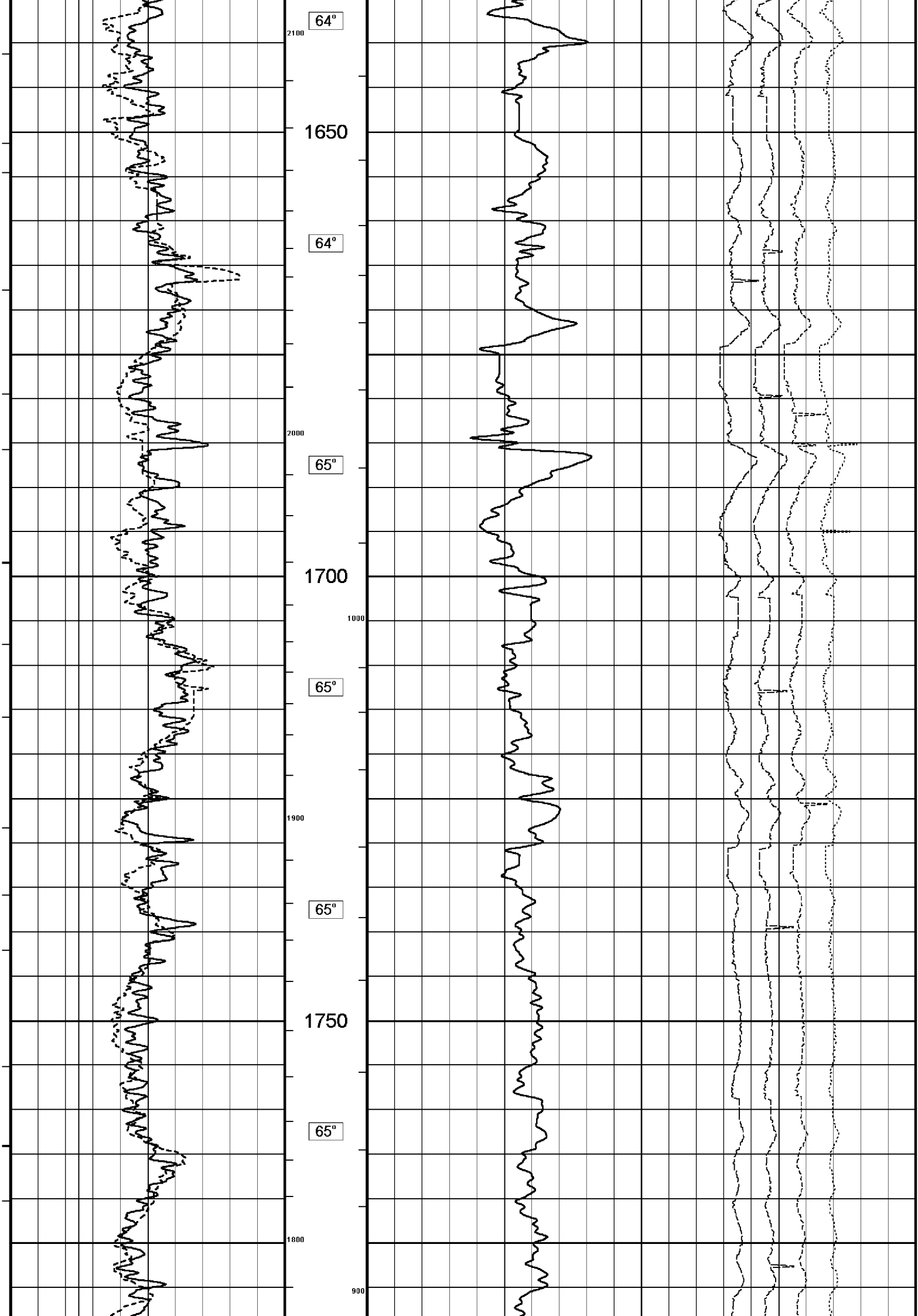
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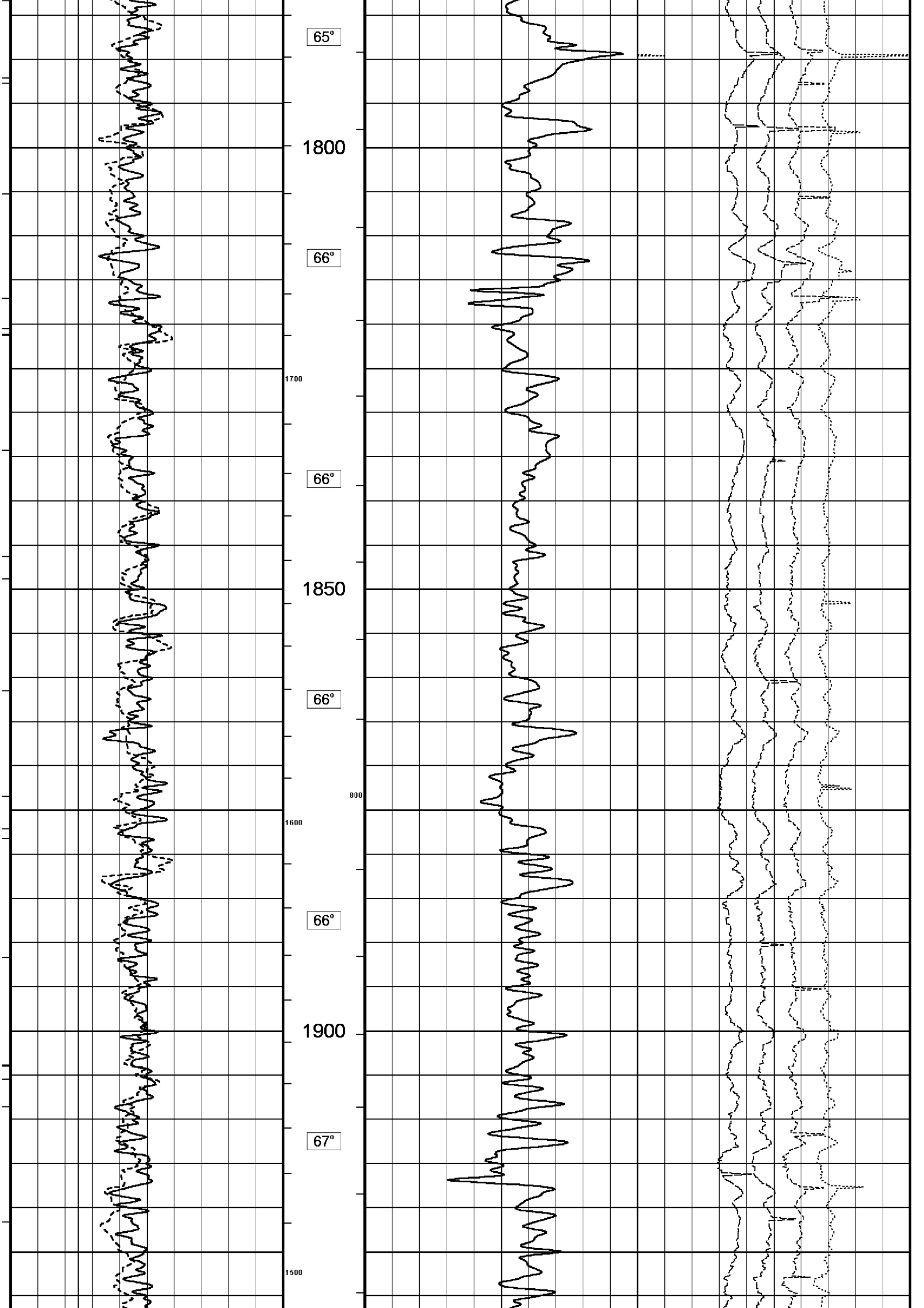
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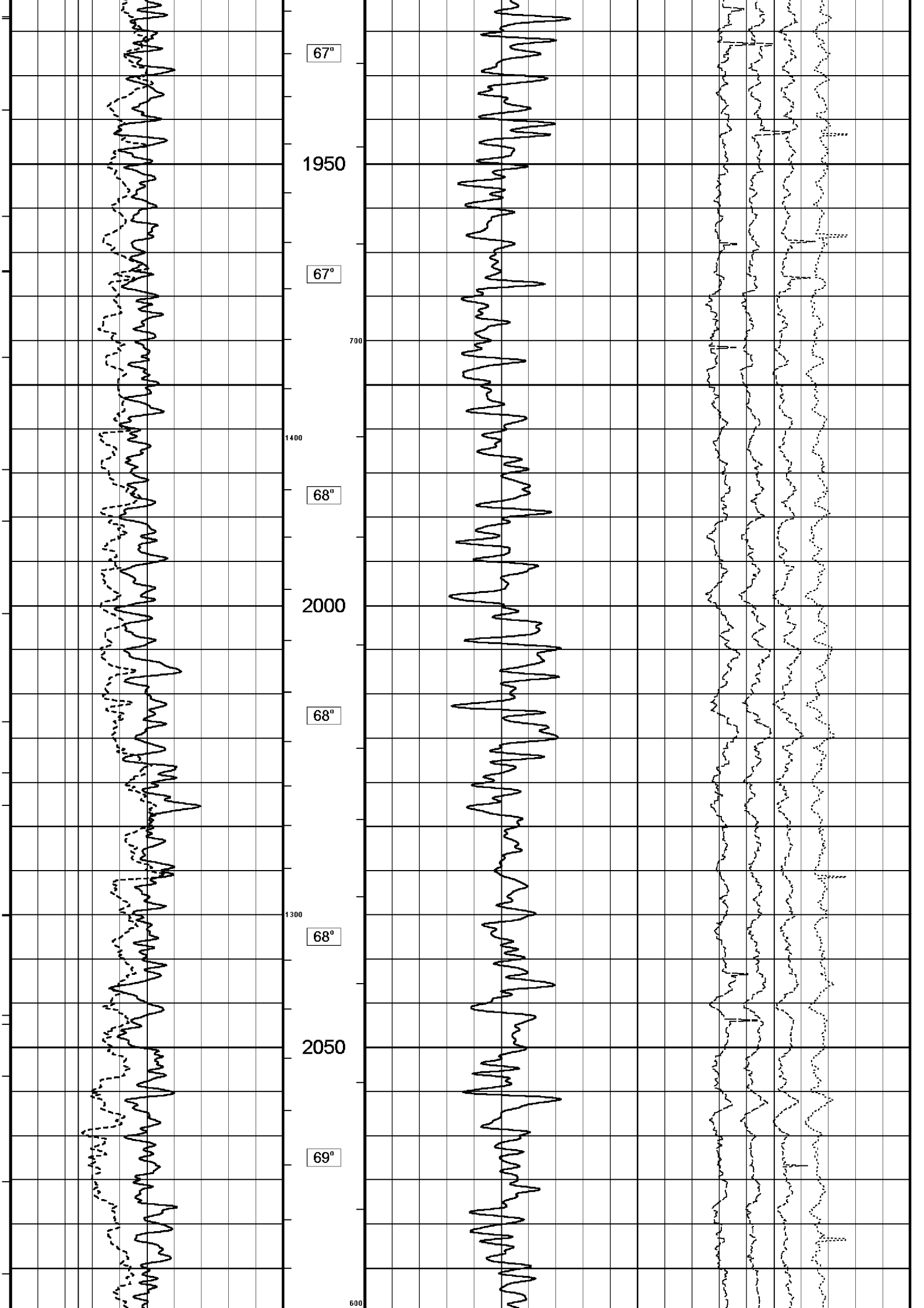
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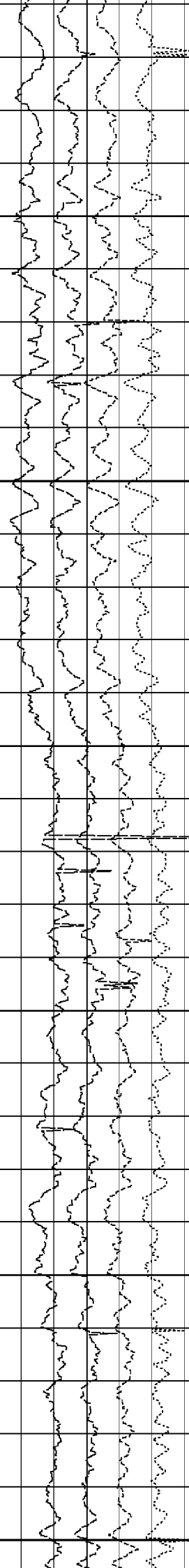
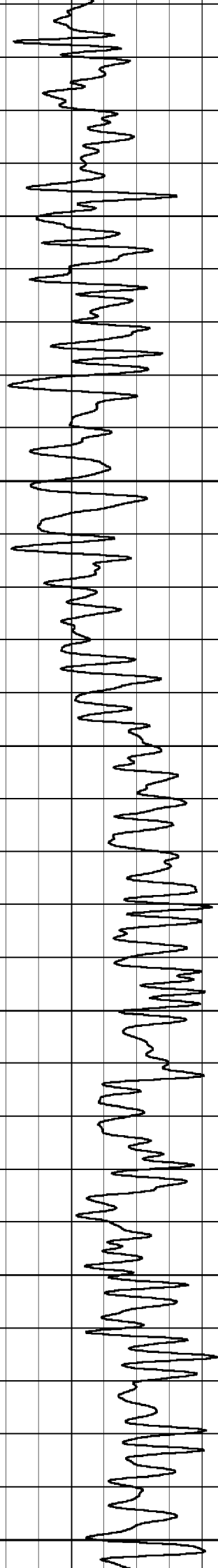
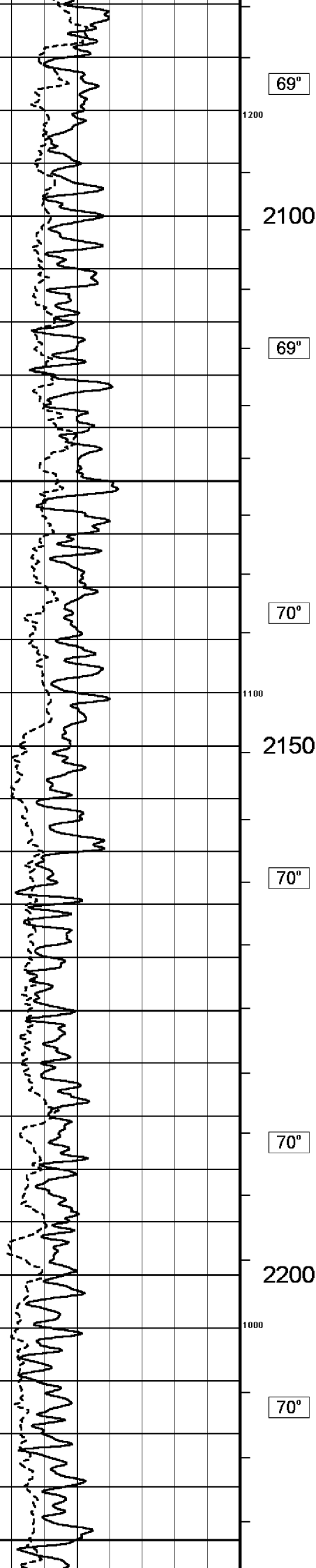
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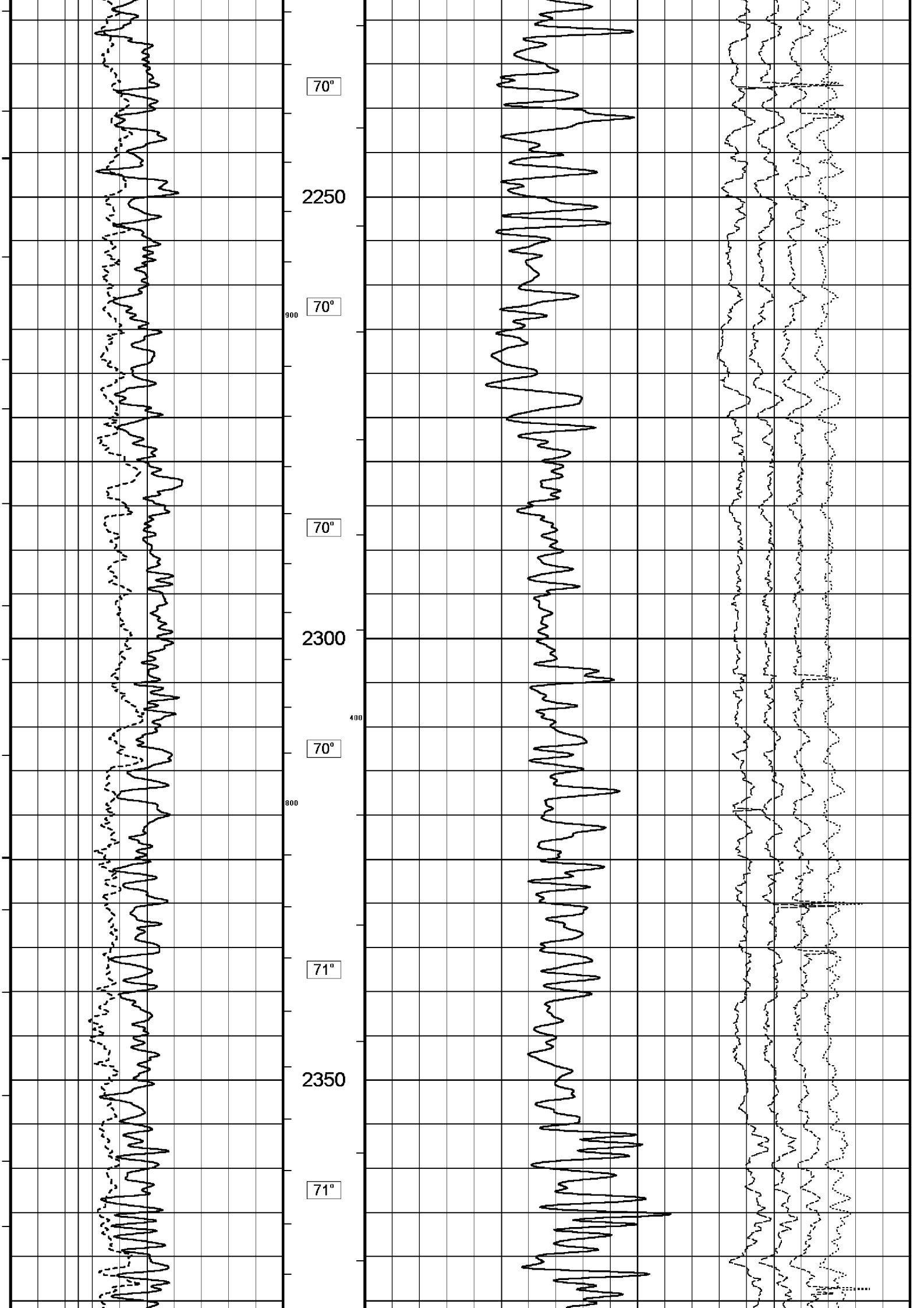


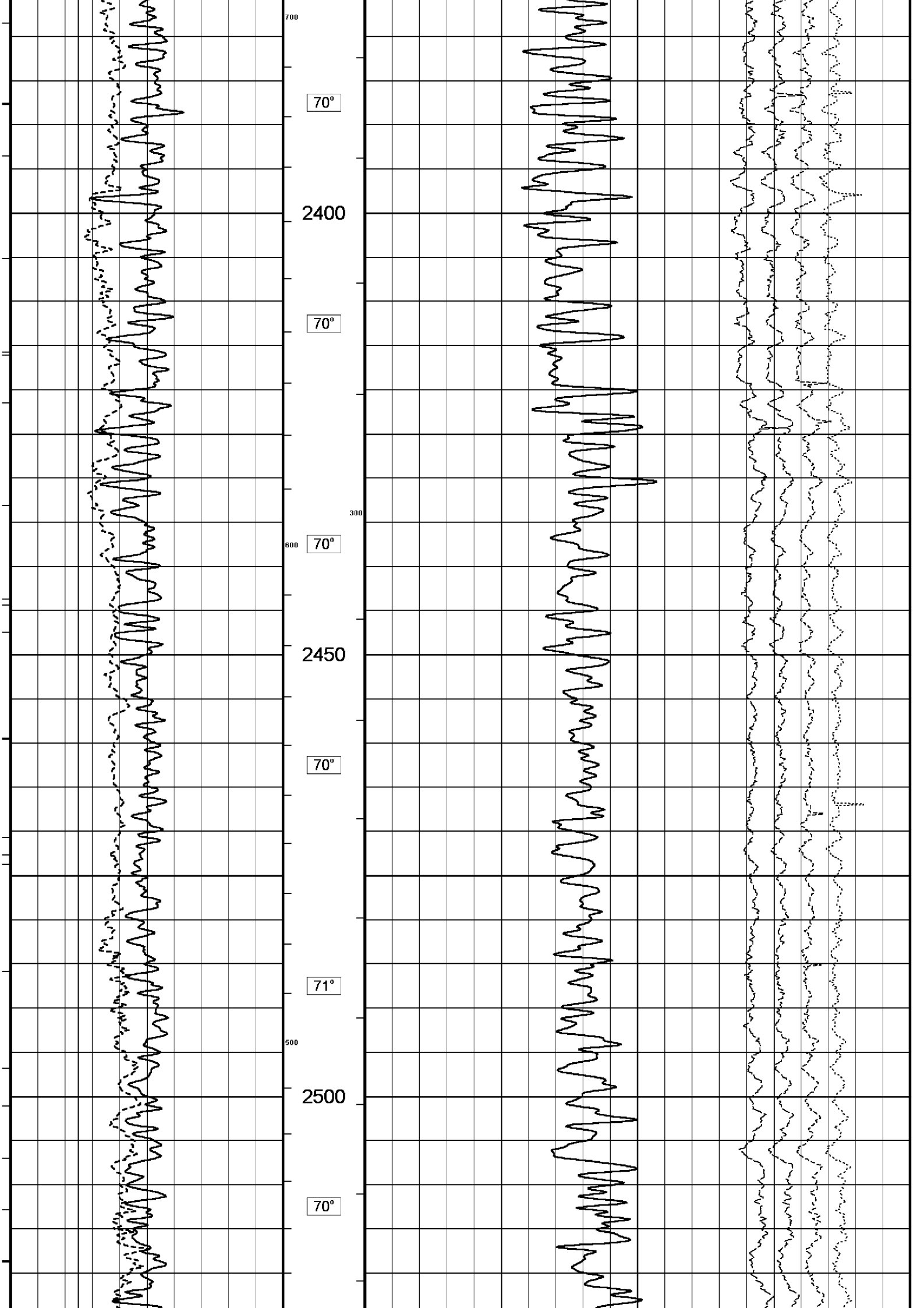


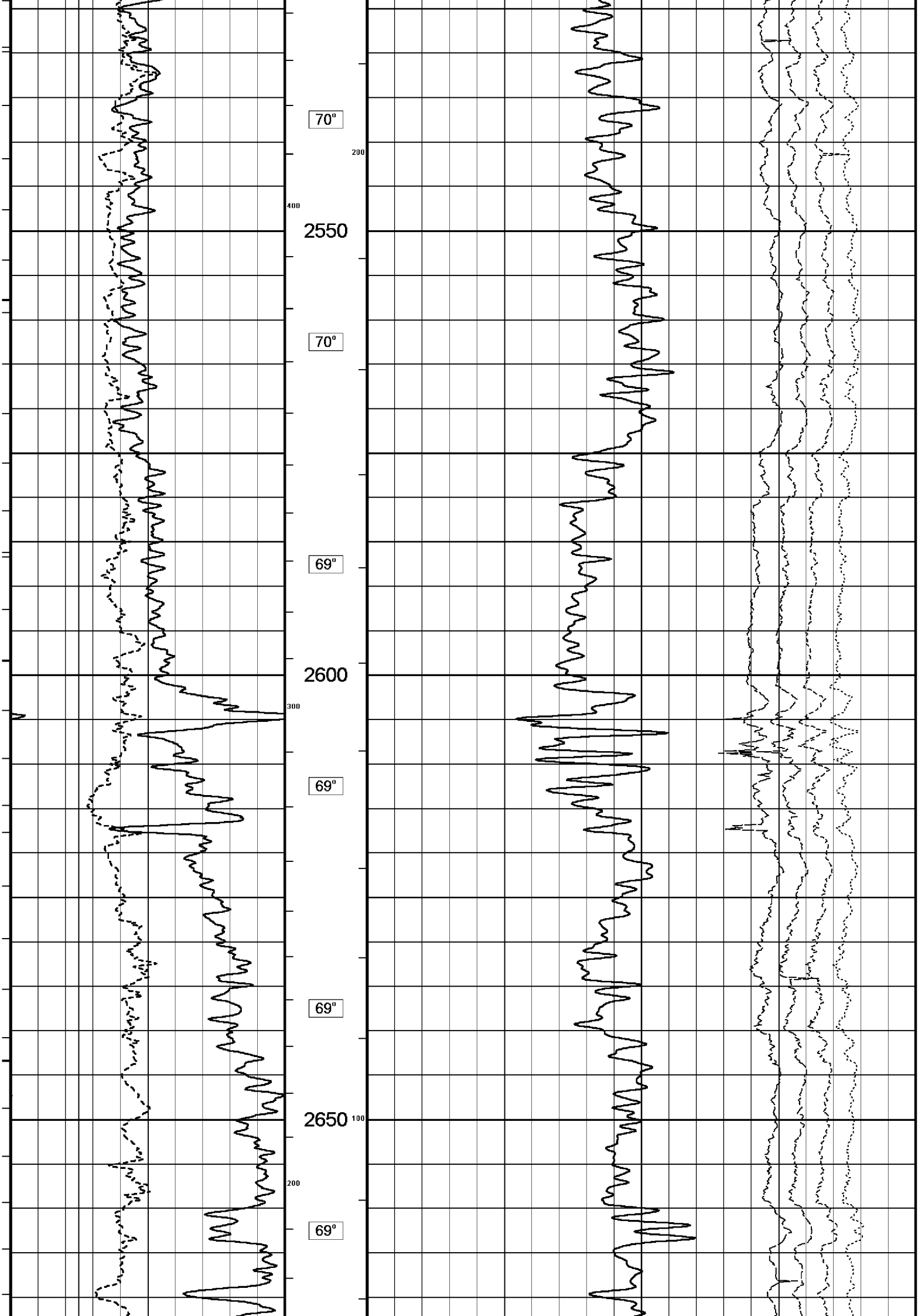


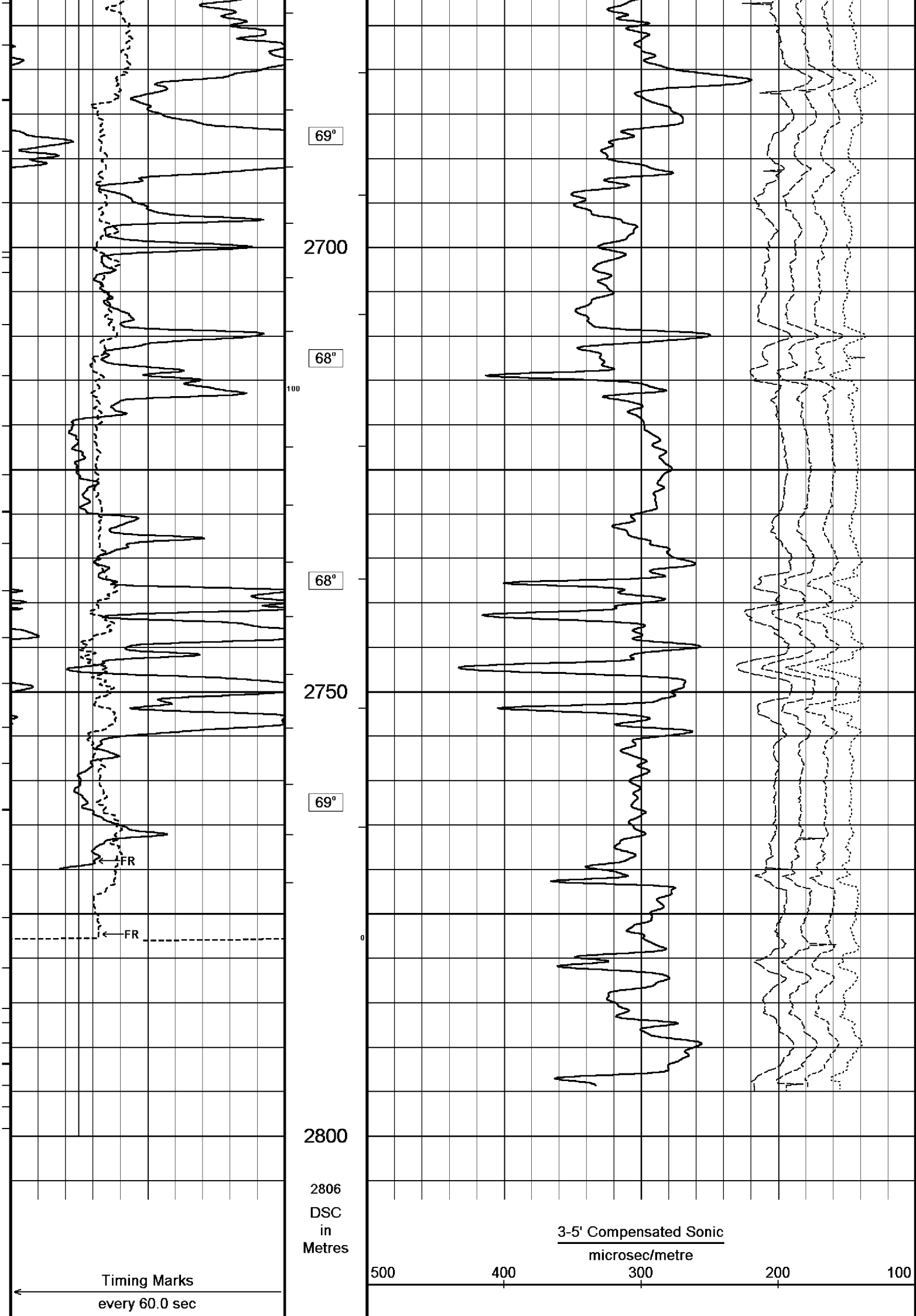


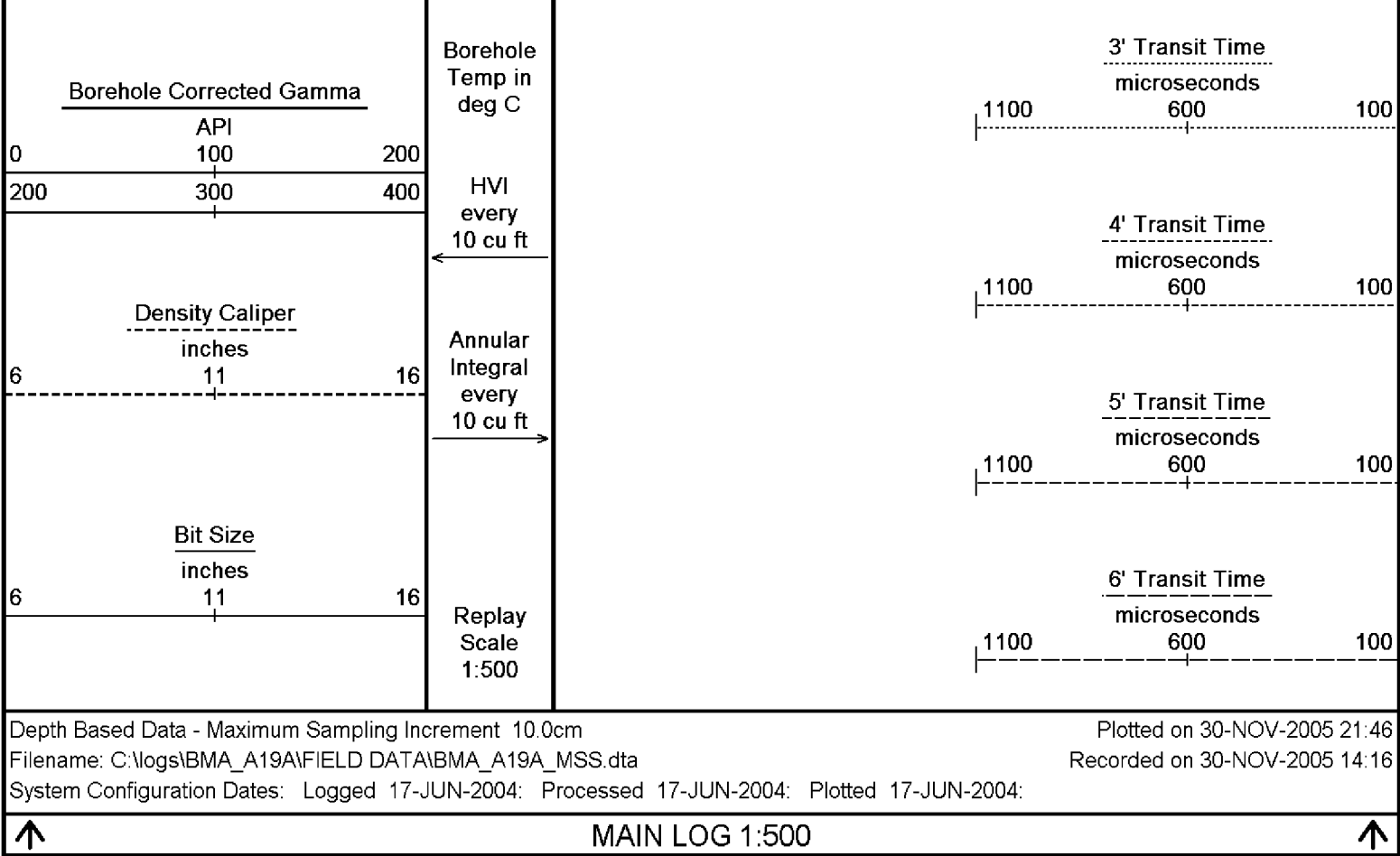












BEFORE SURVEY CALIBRATION			
C:\logs\BMA_A19A\FIELD DATA\BMA_A19A_TIME_LOG14.dta			
General Constants All 000			
General Parameters			
Mud Resistivity	0.113	ohm-metres	
Mud Resistivity Temperature	25.000	degrees C	
Water Level	0.000	metres	
Density/Neutron Processing	Wet Hole		
Hole/Annular Volume and Differential Caliper Parameters			
HVOL Caliper 1	Density Caliper		
HVOL Caliper 2	Density Caliper		
Annular Volume Diameter	7.000	inches	
Caliper for Differential Caliper	None		
Rwa Parameters			
Porosity used	Limestone Sonic Porosity		
Resistivity used	Deep Induction		
RWA Constant A	0.610		
RWA Constant M	2.150		
High Resolution Temperature Calibration MCG 142			
			Field Calibration on 7-NOV-2005,03:12
	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 7-NOV-2005 03:17
	Measured	Calibrated (API)	
Background	21	14	
Calibrator (Gross)	1367	923	
Calibrator (Net)	1346	909	
Gamma Constants MCG 142			

Gamma Calibrator Number	060	
Mud Density	1.21	gm/cc
Caliper Source for Processing	Density Caliper	
Tool Position	Centred	
Concentration of KCl	0.00	kppm

Caliper Calibration MPD 083

Base Calibration on 28-OCT-2005 18:13
Field Calibration on 7-NOV-2005 03:20

Base Calibration

Reading No	Measured	Calibrator Size (in)
1	13616	4.01
2	21847	5.99
3	30336	7.98
4	38762	9.94
5	47872	12.01
6	N/A	N/A

Field Calibration

Measured Caliper (in)	Actual Caliper (in)
7.94	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\BMA_A19A\FIELD DATA\BMA_A19A_TIME_LOG14.dta

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

Compact Knuckle Joint
SHA 100 Length: 0.66 m Weight: 24.2 lb



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 73 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 138 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 136 Length: 0.65 m Weight: 15.4 lb

MBE21 - THIRD BRIDLE
MLK 111 Length: 3.76 m Weight: 30.9 lb

Compact Inline Standoff B
MIS 133 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 Knuckle Joint
SKJ 45 Length: 0.66 m Weight: 24.3 lb

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

Compact Inline Bowspring A



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

MIS 94 Length: 1.74 m Weight: 33.1 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 Inline Bowspring A
MIS 24 Length: 1.74 m Weight: 33.1 lb

Compact Swivel Head Adaptor
SHA 28 Length: 0.83 m Weight: 26.5 lb

Compact Knuckle Joint
SKJ 110 Length: 0.66 m Weight: 24.3 lb

Compact Inline Standoff B
MIS 72 Length: 0.65 m Weight: 15.4 lb

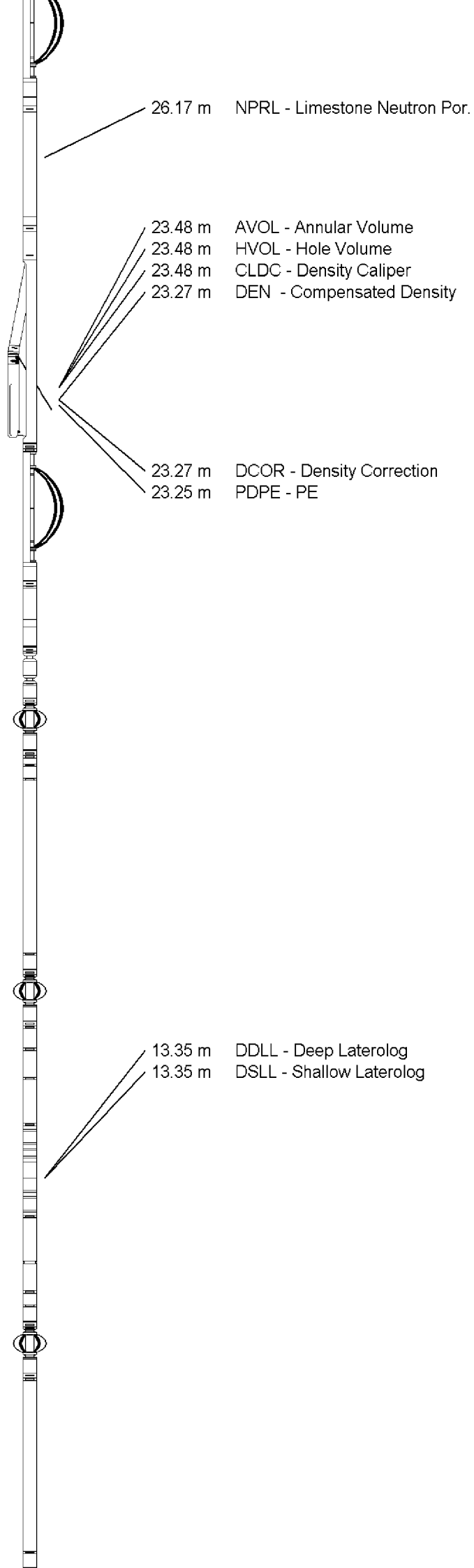
Compact Upper Guard Sub.
MUG 30 Length: 2.74 m Weight: 68.3 lb

Compact Inline Standoff B
MIS 141 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 127 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 129 Length: 0.65 m Weight: 15.4 lb

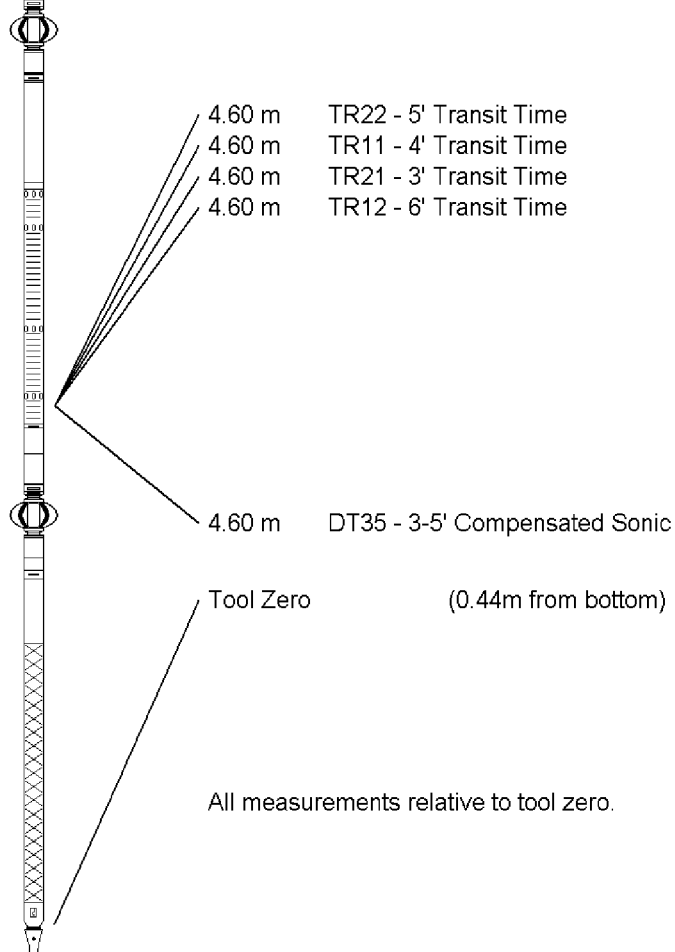
Compact Sonic
MSS 66 Length: 3.82 m Weight: 72.8 lb

Compact Inline Standoff B
MIS 126 Length: 0.65 m Weight: 15.4 lb

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

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

Total Length: 54.01 m Weight: 1201.5 lb



COMPANY	ESSO AUSTRALIA PTY LTD
WELL	BREAM A19A
FIELD	BREAM
PROVINCE/COUNTY	BASS STRAIT
COUNTRY/STATE	AUSTRALIA

Elevation Kelly Bushing	metres	First Reading	2787.60	metres	
Elevation Drill Floor	32.82	metres	Depth Driller	2804.00	metres
Elevation Ground Level	-59.40	metres	Depth Logger	2801.00	metres



COMPENSATED SONIC
1:500 MD