



COMPENSATED SONIC

1:200 MD

Compact

ESSO AUSTRALIA PTY LTD

BREAM A9B

BREAM

BASS STRAIT

AUSTRALIA

38DEG 29' 58.800"S 147DEG 46' 20.685"E

5738460.920 N 567353.500 E

FIELD PRINT

LSD SEC TWP RGE

Other Services
COMPENSATED SONIC

API Number
Permit Number

Permanent Datum MSL , Elevation 0.0 metres

Log Measured From RT @ 32.82 M above Permanent Datum

Drilling Measured From RT

Elevations:
KB 32.82 metres
DF 32.82 metres
GL -59.40 metres

Date 05-MAR-2006

Run Number ONE metres

Depth Driller 2283.00 metres

Depth Logger 2280.00 metres

First Reading 2273.00 metres

Last Reading 1756.00 metres

Casing Driller 1756.00 metres

Casing Logger 1756.00 metres

Bit Size 8.50 inches

Hole Fluid Type KCL/GYL/POLY

Density / Viscosity 10.00 lb/USg 75.00 CP

PH / Fluid Loss 8.90 2.80

Sample Source FLOWLINE

Rm @ Measured Temp 0.095 @ 25.0 ohm-m

Rmf @ Measured Temp 0.072 @ 25.0 ohm-m

Rmc @ Measured Temp 0.099 @ 25.0 ohm-m

Source Rmf / Rmc PRESS PRESS

Rm @ BHT 0.043 @ 82.4 ohm-m

Time Since Circulation 0.5 HRS

Max Recorded Temp 82.40 deg C

Equipment Name 5" CWS/CML

Equipment / Base 1 SALE

Recorded By R. TENCH, B. MOSS

Witnessed By TREVOR LOBO

CIRC STOPPED 22:00 4/03

BOREHOLE RECORD

Bit Size inches	Depth From metres	Depth To metres
8.500	1756.00	2283.00

CASING RECORD

Type	Size inches	Depth From metres	Shoe Depth metres	Weight pounds/ft
K-55	13.375	0.00	797.00	54.50
K-55	9.625	797.00	1756.00	47.00

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.

MAX. TEMPERATURE: 82.4 DEG C AT 2226.5 m MD

MAX. INCLINATION: 47.9 DEG AT 1750 m MD

MAX. DOGLEG SERVERITY: 6.15 DEG/30m AT 1802.19 m MD

DEPLOYMENT ANGLE: 33.7 DEG

HVOL: 850 FT^3

AVOL: 415 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.

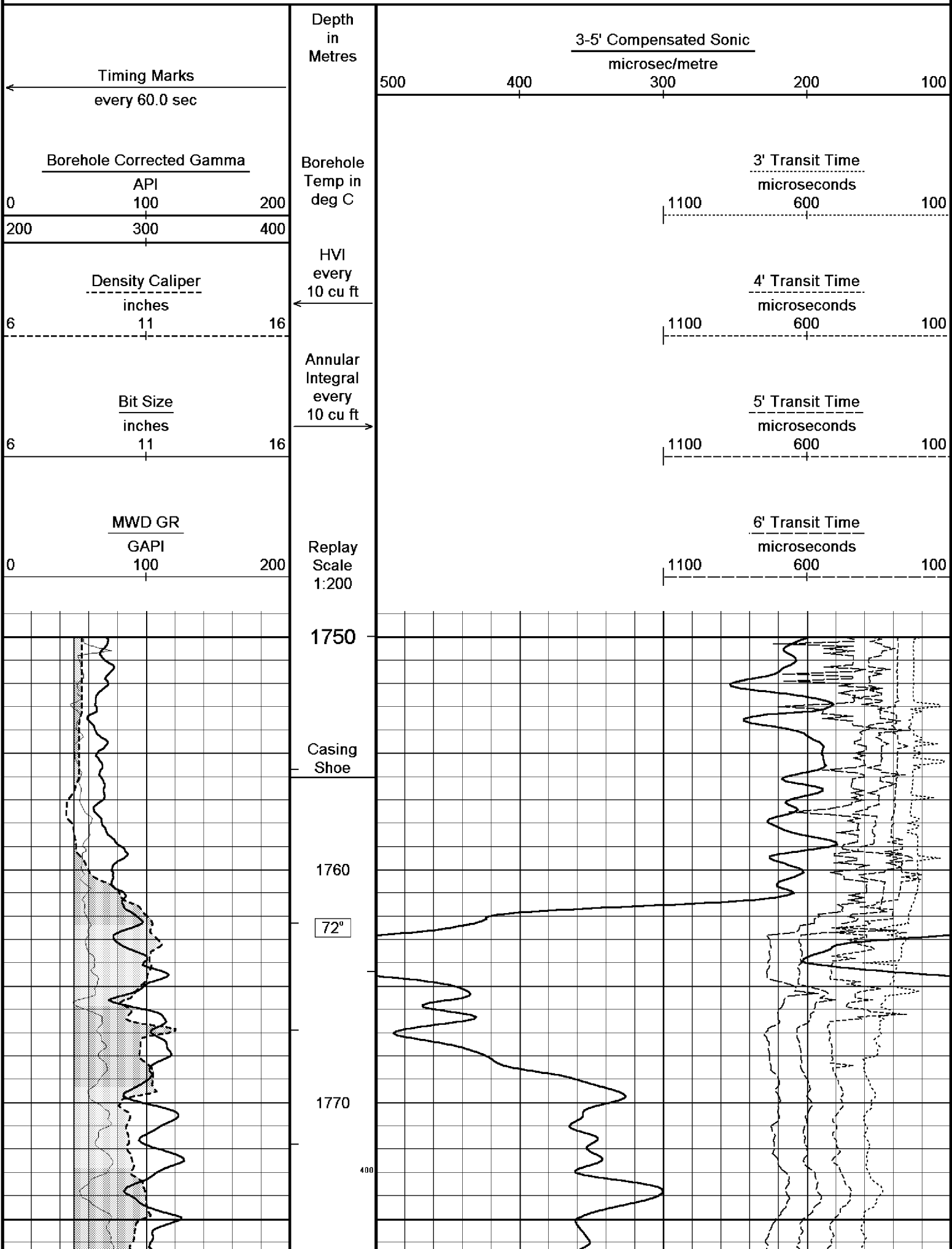
Depth Based Data - Maximum Sampling Increment 10.0cm

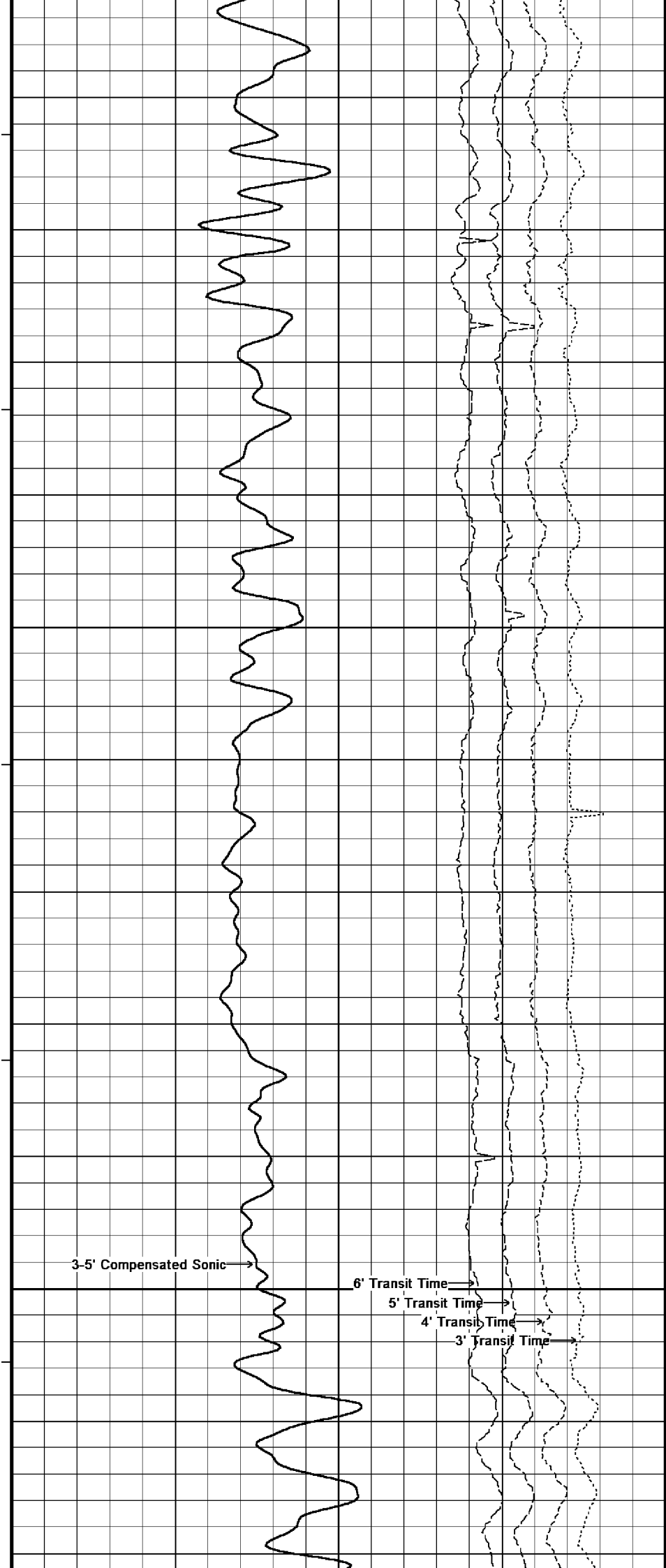
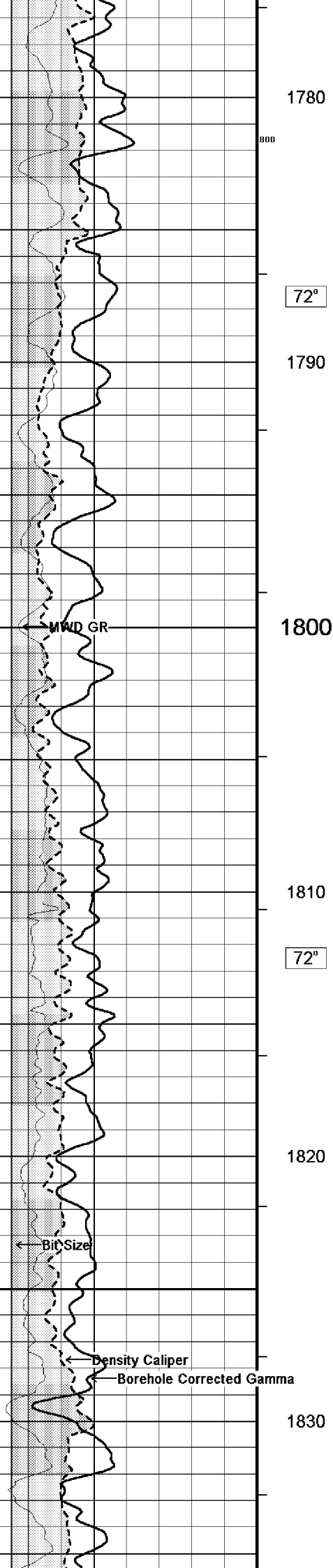
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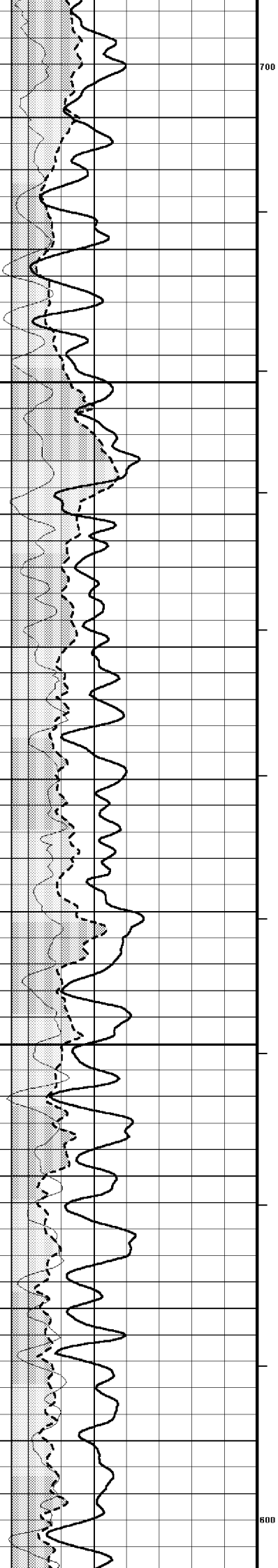
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Filename: C:\logs\BMA_A9B\DEPTH DATA\BMAA9B_MWD_GR.dta

System Configuration Dates: Logged 17-JUN-2004: Processed 17-JUN-2004: Plotted 17-JUN-2004:







72°

1840

1850

1860

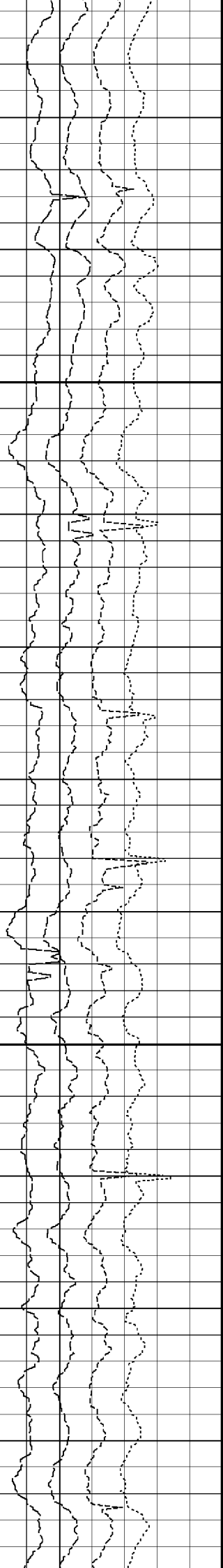
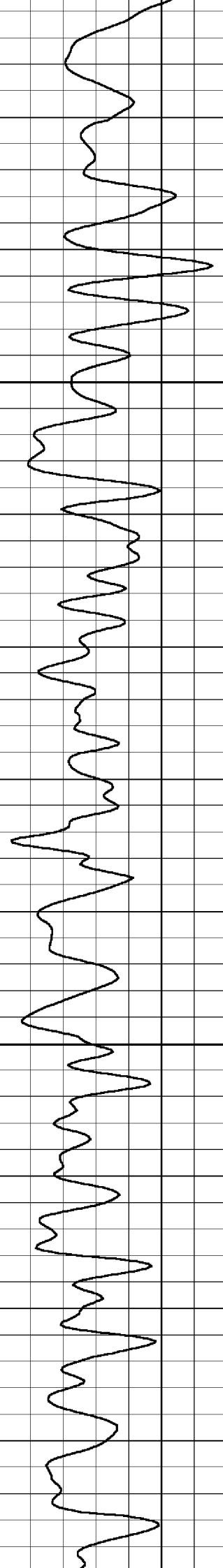
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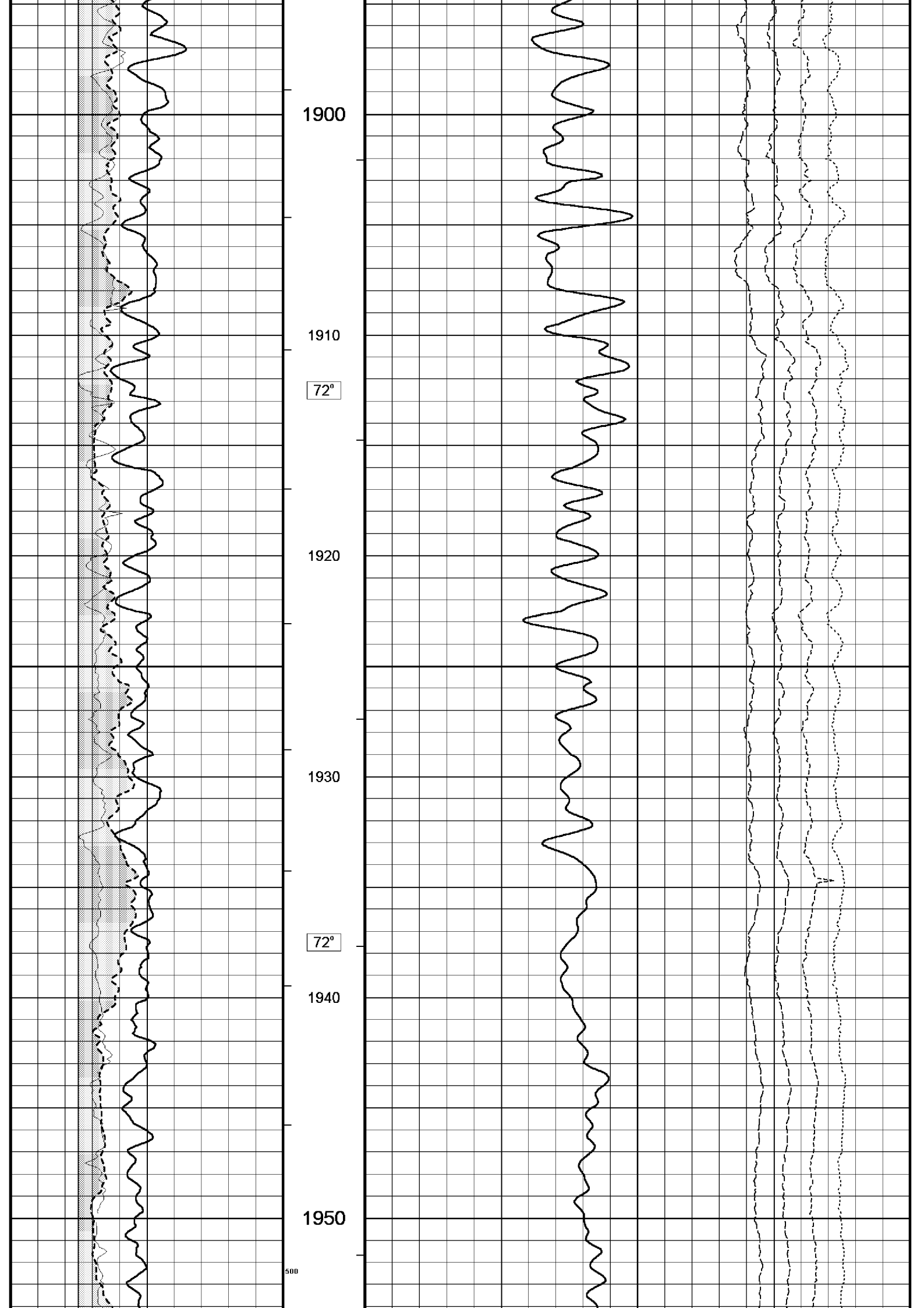
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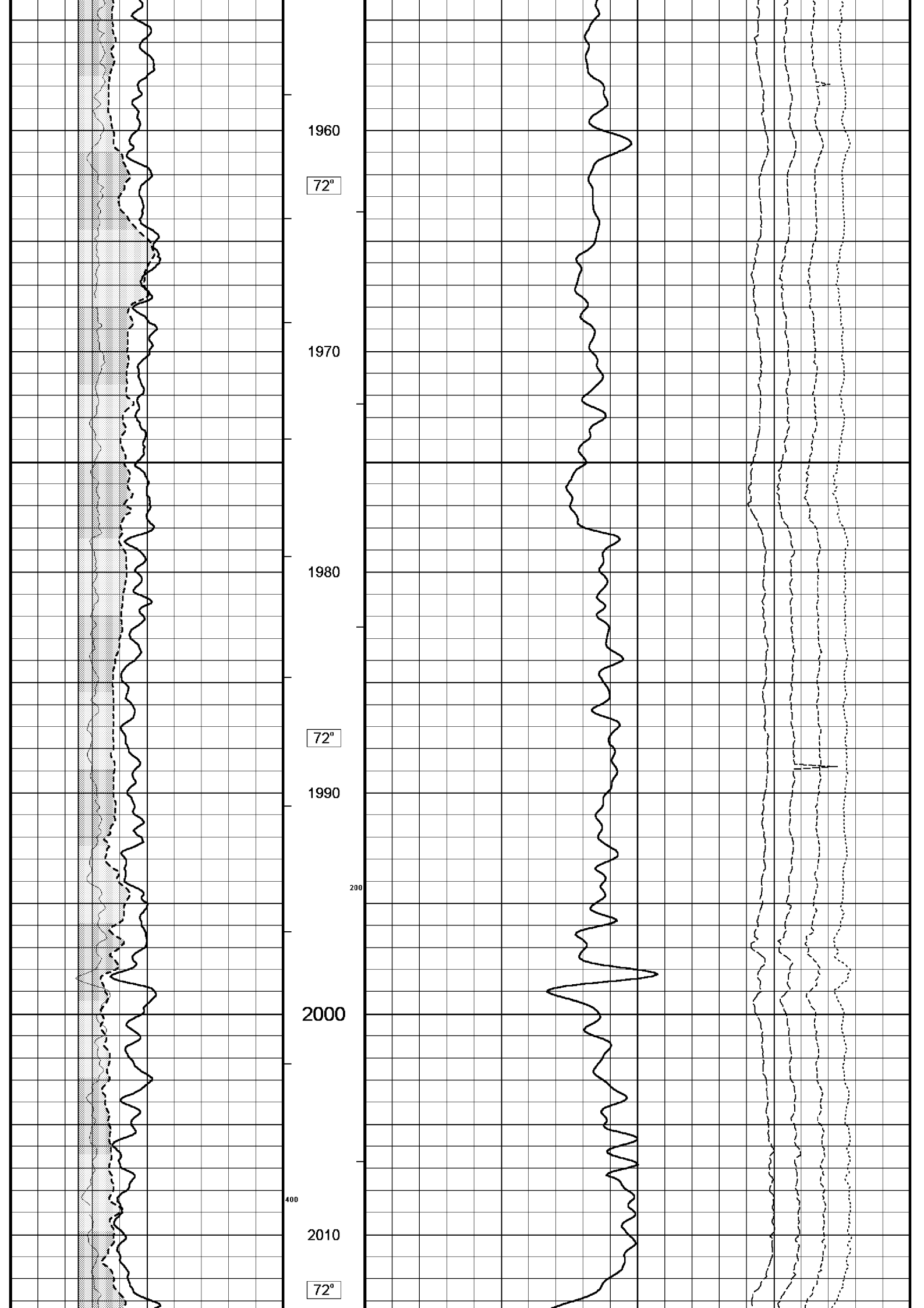
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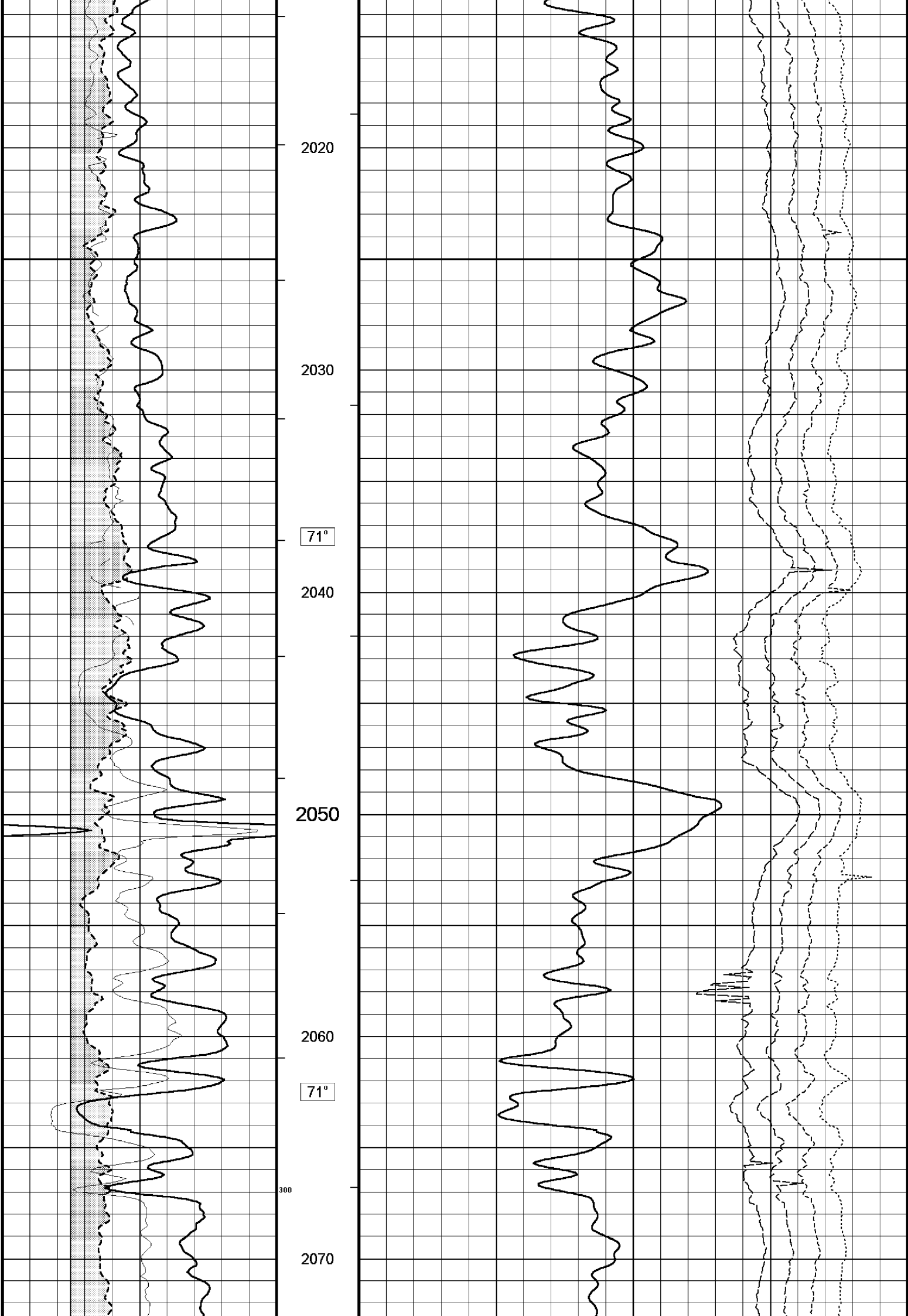
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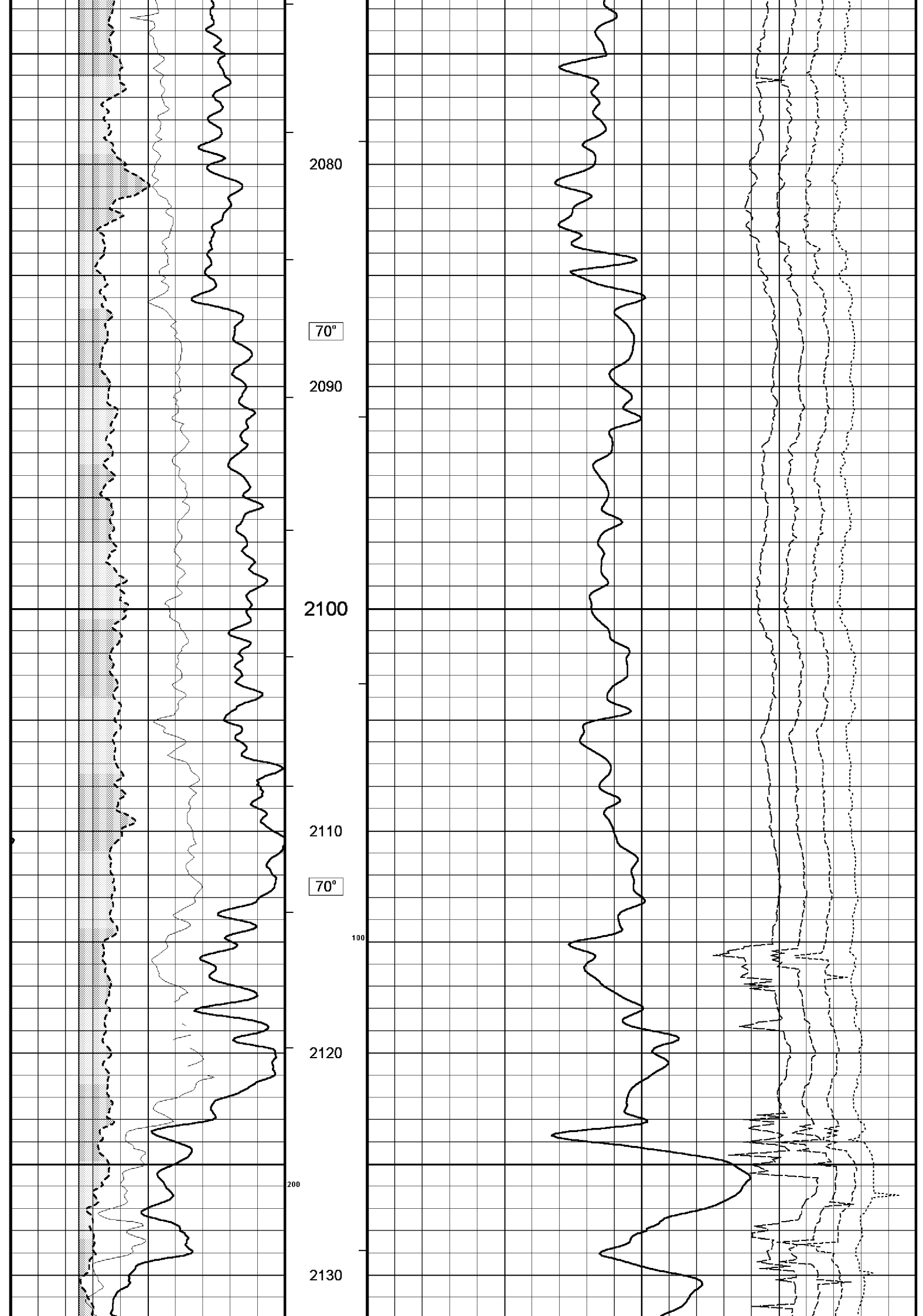
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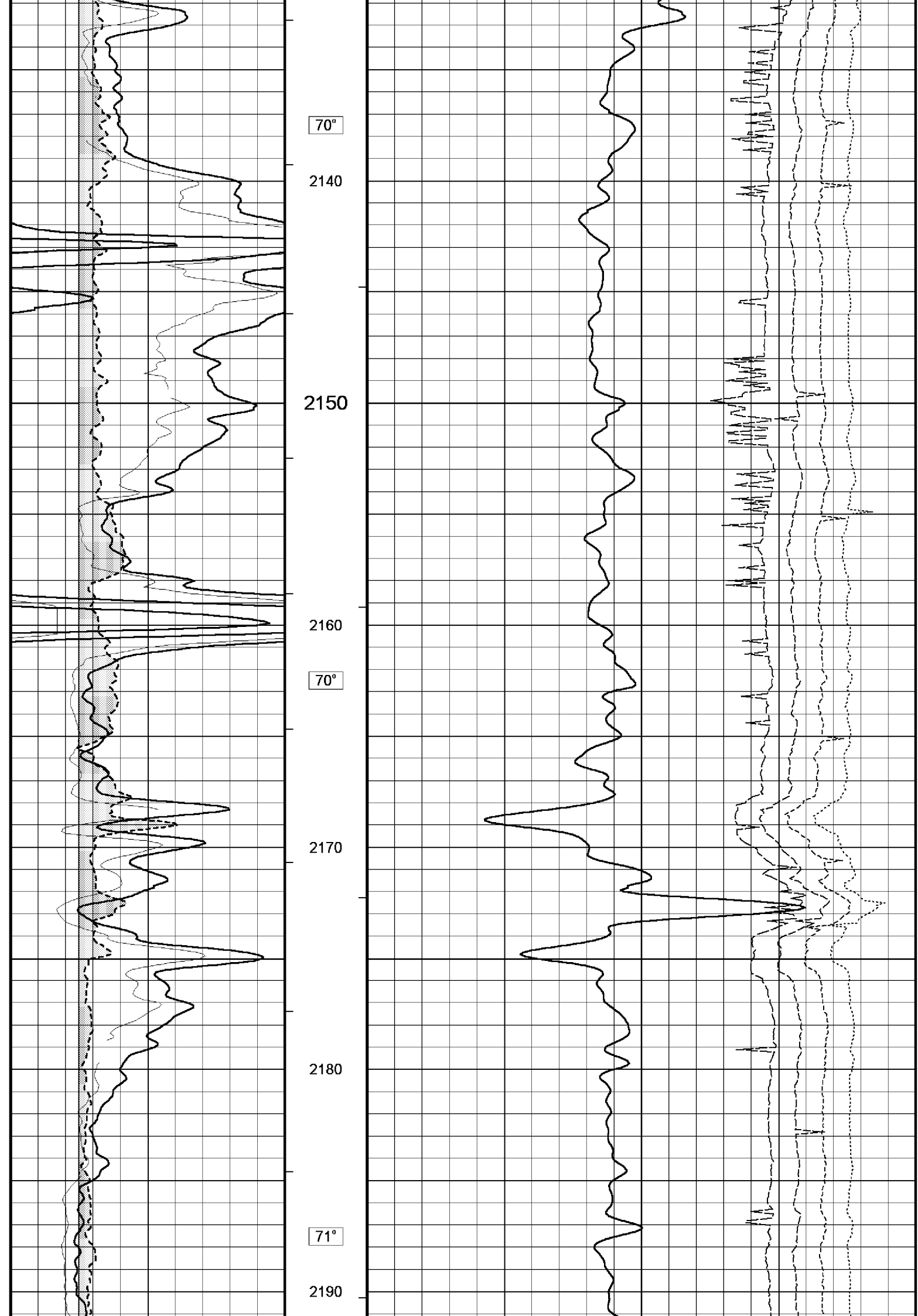


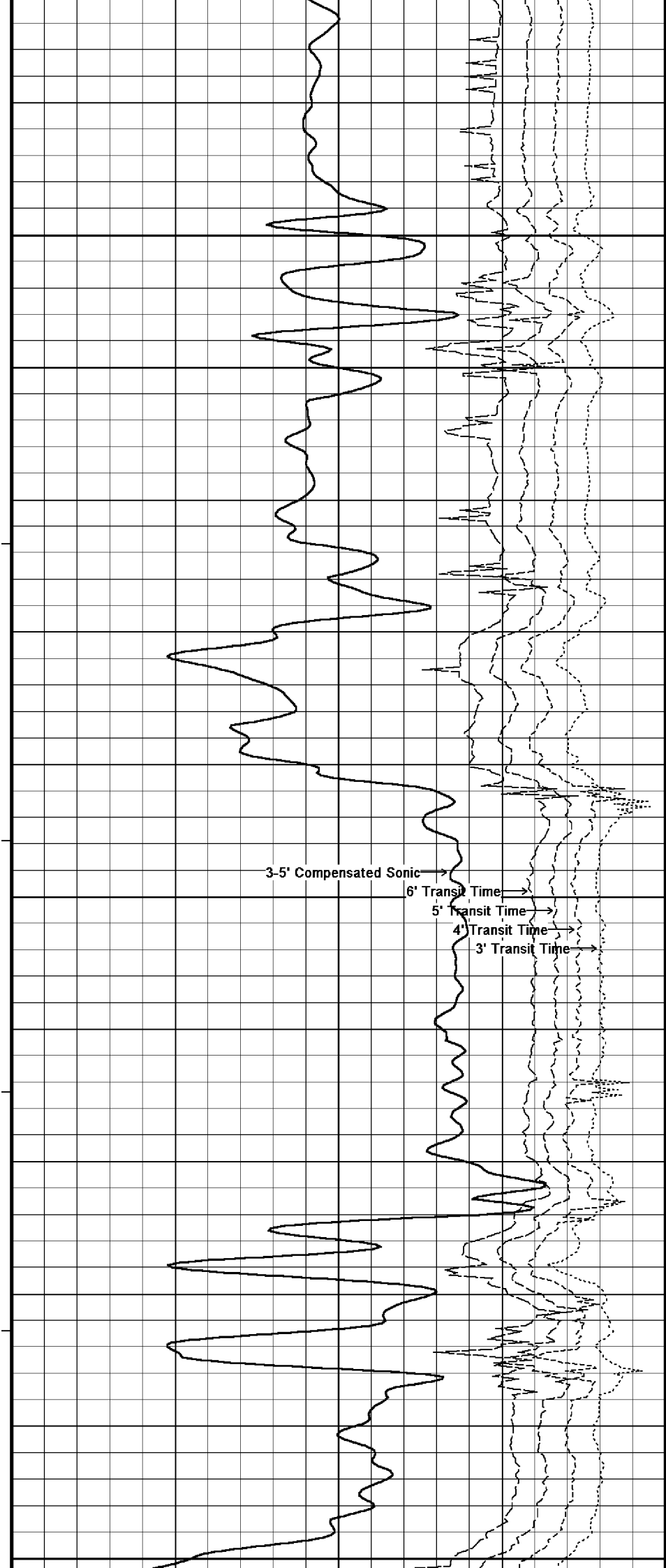
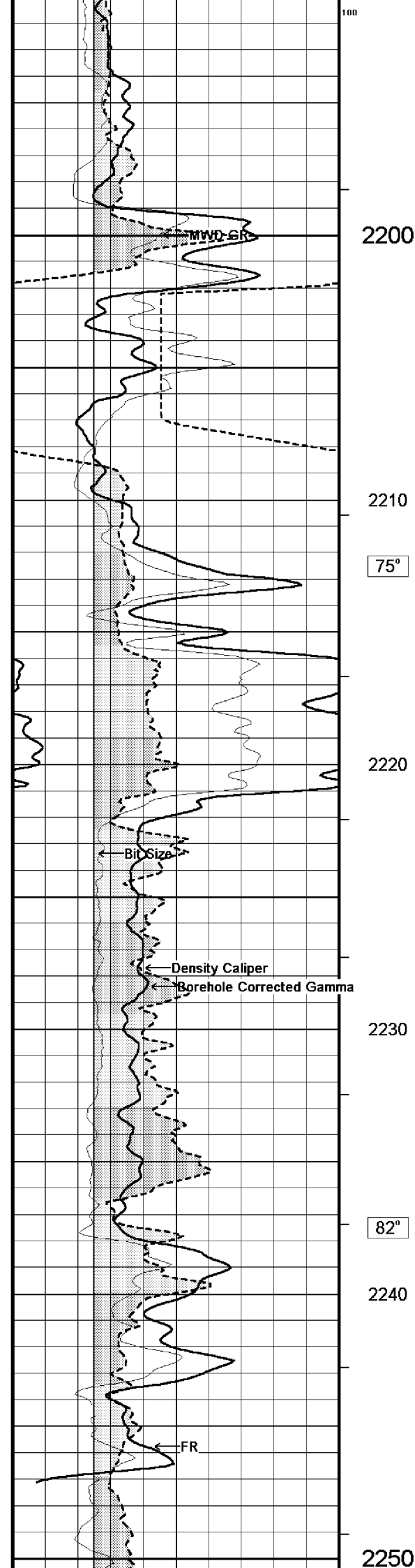


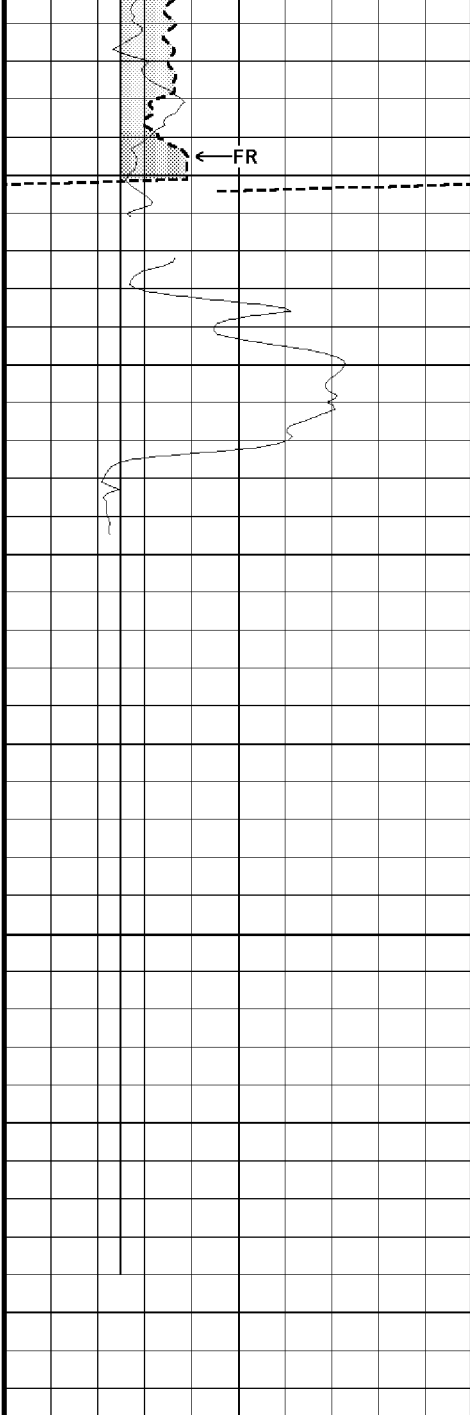












← Timing Marks
every 60.0 sec

Borehole Corrected Gamma
API
0 100 200
200 300 400

Density Caliper
inches
6 11 16

Bit Size
inches
6 11 16

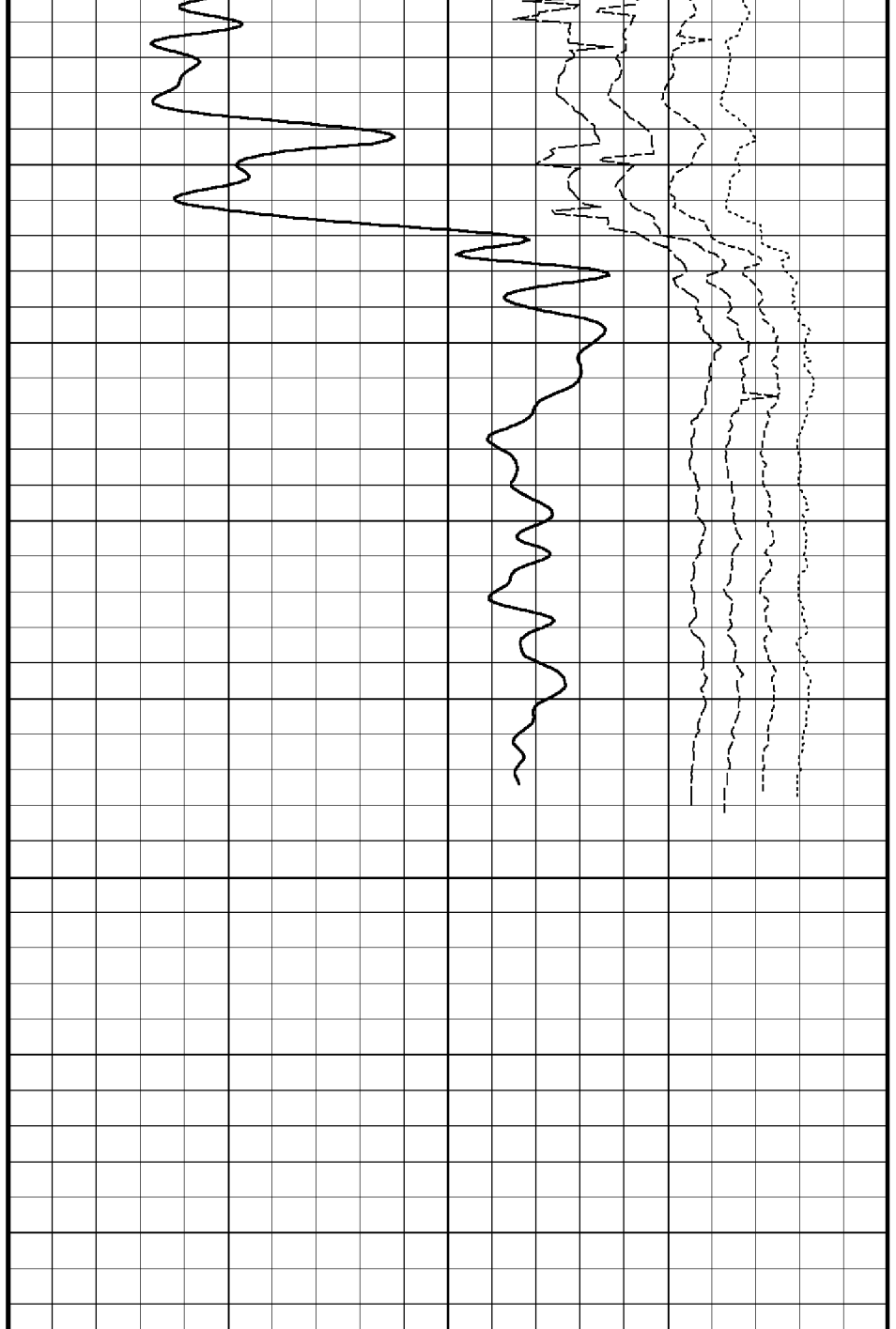
2260

2270

2280

2287

Depth
in
Metres



3-5' Compensated Sonic
microsec/metre
500 400 300 200 100

3' Transit Time
microseconds
1100 600 100

4' Transit Time
microseconds
1100 600 100

5' Transit Time
microseconds
1100 600 100

Borehole
Temp in
deg C

HVI
every
10 cu ft
←

Annular
Integral
every
10 cu ft
→

MWD GR

GAPI

100

200

Replay

Scale

1:200

6' Transit Time

microseconds

1100

600

100

Depth Based Data - Maximum Sampling Increment 10.0cm

Plotted on 05-MAR-2006 12:21

Filename: C:\logs\BMA_A9B\Field_Data\DSC3.dta

Filename: C:\logs\BMA_A9B\DEPTH DATA\BMAA9B_MWD_GR.dta

System Configuration Dates: Logged 17-JUN-2004: Processed 17-JUN-2004: Plotted 17-JUN-2004:



MAIN LOG 1:200



BEFORE SURVEY CALIBRATION

C:\logs\BMA_A9B\Field_Data\DSC3.dta

General Constants All 000

General Parameters

Mud Resistivity	0.108	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 3-MAR-2006,18:44

	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 3-MAR-2006 18:49

	Measured	Calibrated (API)
Background	9	6
Calibrator (Gross)	1351	915
Calibrator (Net)	1342	909

Gamma Constants MCG 142

Gamma Calibrator Number	060	
Mud Density	1.20	gm/cc
Caliper Source for Processing	Density Caliper	
Tool Position	Centred	
Concentration of KCl	0.00	kppm

Caliper Calibration MPD 083

Base Calibration on 26-FEB-2006 16:04

Field Calibration on 3-MAR-2006 19:00

Base Calibration

Reading No	Measured	Calibrator Size (in)
1	14260	4.01
2	22438	5.99
3	30914	7.98
4	39296	9.94
5	48592	12.01
6	N/A	N/A

Field Calibration

Measured Caliper (in)

Actual Caliper (in)

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_A9B\Field_Data\DSC3.dta

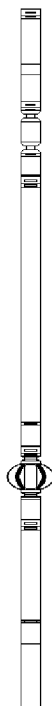
Compact Swivel Head Adaptor F
SHA 71 Length: 0.83 m Weight: 26.5 lb

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 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

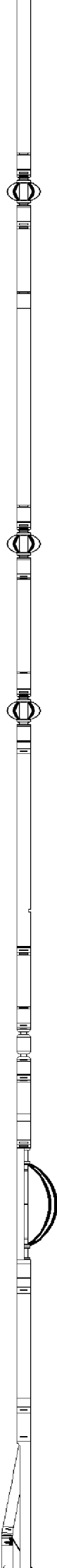
Compact Knuckle Joint
SKJ 45 Length: 0.66 m Weight: 24.3 lb

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

Compact Inline Bowspring A
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

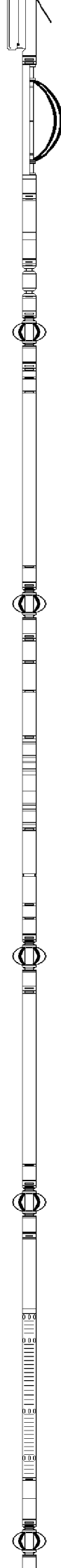
Compact Inline Standoff B
MIS 127 Length: 0.65 m Weight: 15.4 lb

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



Tool Zero (0.44m from bottom)

All measurements relative to tool zero.

COMPANY	ESSO AUSTRALIA PTY LTD
WELL	BREAM A9B
FIELD	BREAM
PROVINCE/COUNTY	BASS STRAIT
COUNTRY/STATE	AUSTRALIA

Elevation Kelly Bushing		metres	First Reading	2273.00	metres
Elevation Drill Floor	32.82	metres	Depth Driller	2283.00	metres
Elevation Ground Level	50.40	metres	Depth Logger	2280.00	metres



COMPENSATED SONIC
1:200 MD

Compact