



P-wave Slowness
S-wave Slowness
1:200 MD

COMPANY ESSO AUSTRALIA PTY LTD

WELL BREAM A20A

FIELD BREAM

PROVINCE/COUNTY BASS STRAIT

COUNTRY/STATE AUSTRALIA

LOCATION S 38 29 58.899 , E 147 46 20.056

N 5738458.020 m , E 567338.25 m

COMPACT
FINAL 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 19-Oct-2005

Run Number ONE

Depth Driller 2326.00 metres

Depth Logger 2323.10 metres

First Reading 2309.30 metres

Last Reading 1123.00 metres

Casing Driller 1123.00 metres

Casing Logger 1123.00 metres

Bit Size 8.50 inches

Hole Fluid Type KCL/GYL/POLY

Density / Viscosity 10.15 lb/USg 78.00 CP

PH / Fluid Loss 9.00 2.80

Sample Source FLOWLINE

Rm @ Measured Temp 0.116 @ 25.0 ohm-m

Rmf @ Measured Temp 0.107 @ 25.0 ohm-m

Rmc @ Measured Temp 0.211 @ 25.0 ohm-m

Source Rmf / Rmc PRESS PRESS

Rm @ BHT 0.058 @ 73.0 ohm-m

Time Since Circulation 23 Hours

Max Recorded Temp 77.90 deg C

Equipment Name 5" CWS/CML

Recorded By 1 SALE

Witnessed By G.McMANUS, B.MOSS

CIRC STOPPED TREVOR LOBO

04:30 18-OCT Last Line

BOREHOLE RECORD

Last Edited: 19-OCT-2005 14:34

Bit Size
inches
8.500

Depth From
metres
1123.00

Depth To
metres
2326.00

CASING RECORD

Type

Size
inches
10.750

Depth From
metres
0.00

Shoe Depth
metres
1123.00

Weight
pounds/ft
57.70

REMARKS

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

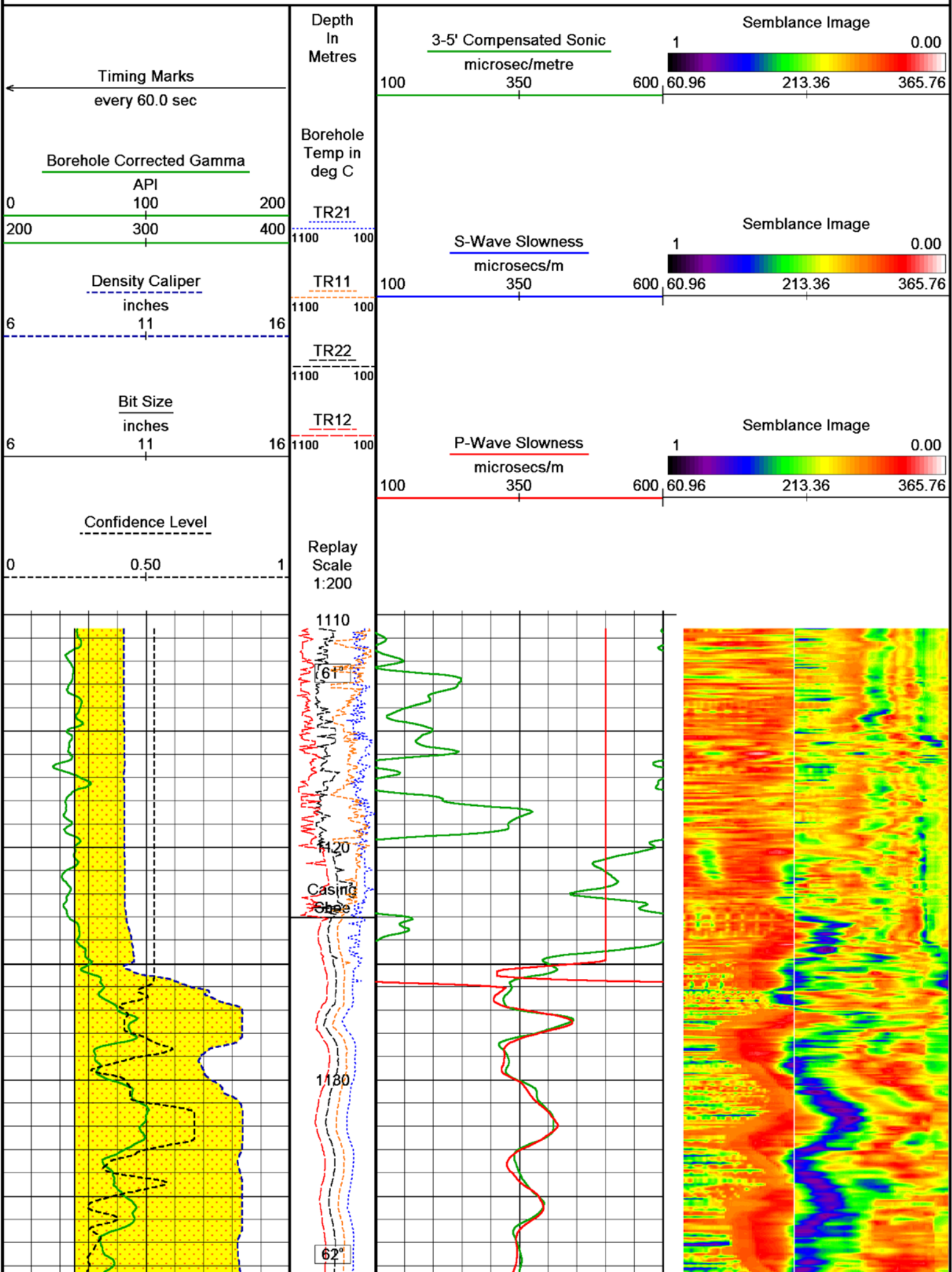
FIELD FINAL LOGS TO BE CORRELATED TO ANADRILL GAMMA LOG.

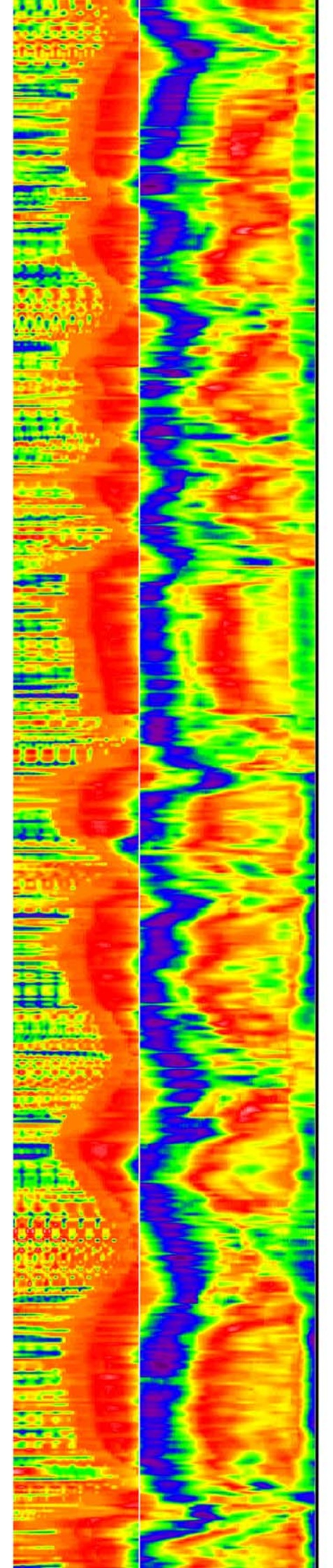
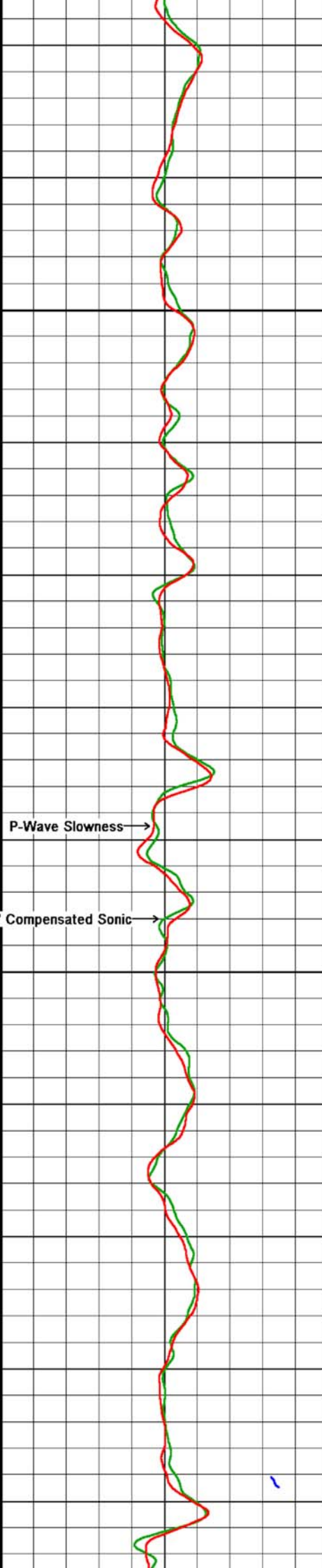
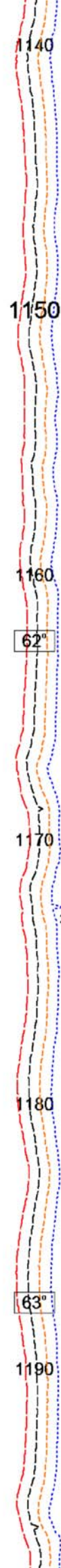
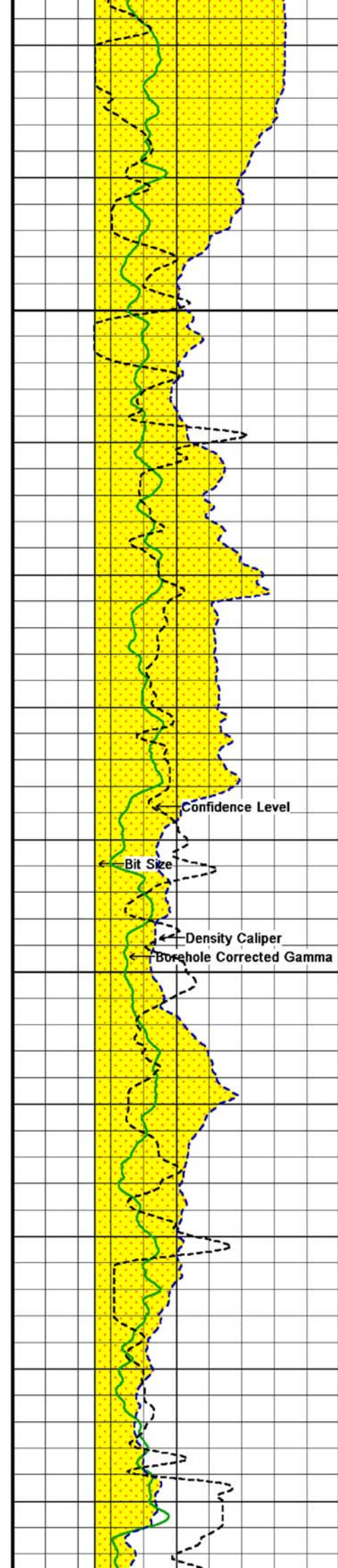
MAX. TEMPERATURE: 77.9 DEG C AT 2263.80 m MD
MAX. INCLINATION: 50.12 DEG AT 1123.20 m MD
MAX. DOGLEG SERVERITY: 11.64 DEG/30m AT 1130.05 m MD
DEPLOYMENT ANGLE: 6.5 DEG

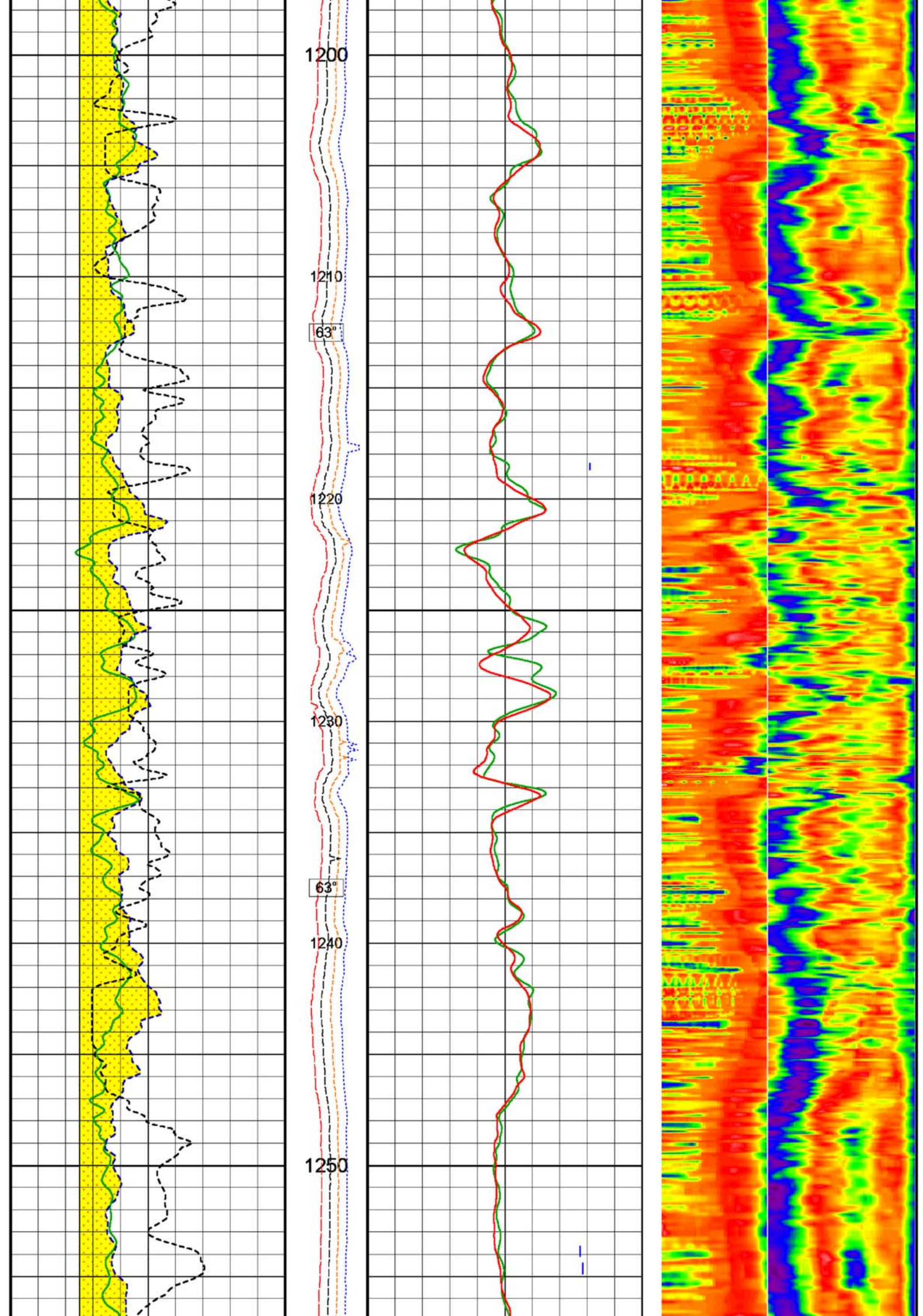
P-Wave Slowness derived from First Break arrival on the waveforms.
S-Wave Slowness derived from P-Wave Guided Semblance Map.
Confidence Level cut-off of 0.8 used.

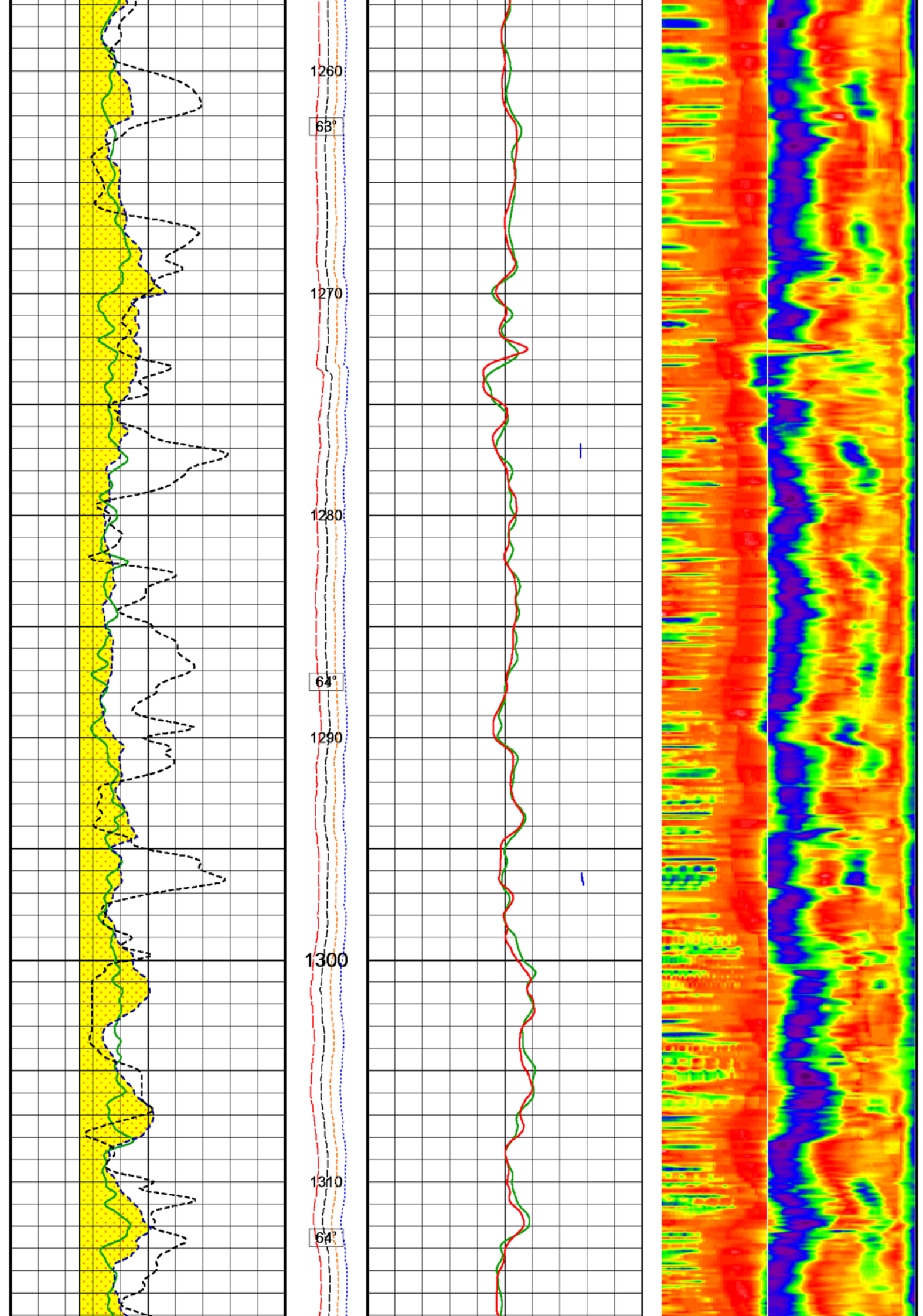
Left hand Semblance Image scale value = 60.96 (equivalent to true 100 microsecs/metre).
Right hand Semblance Image scale value = 365.76 (equivalent to true 600 microsecs/metre).

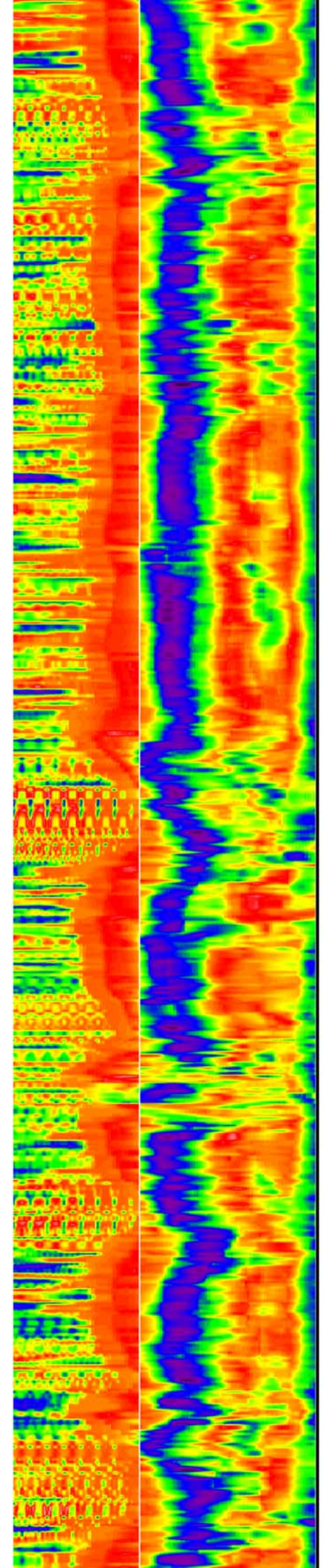
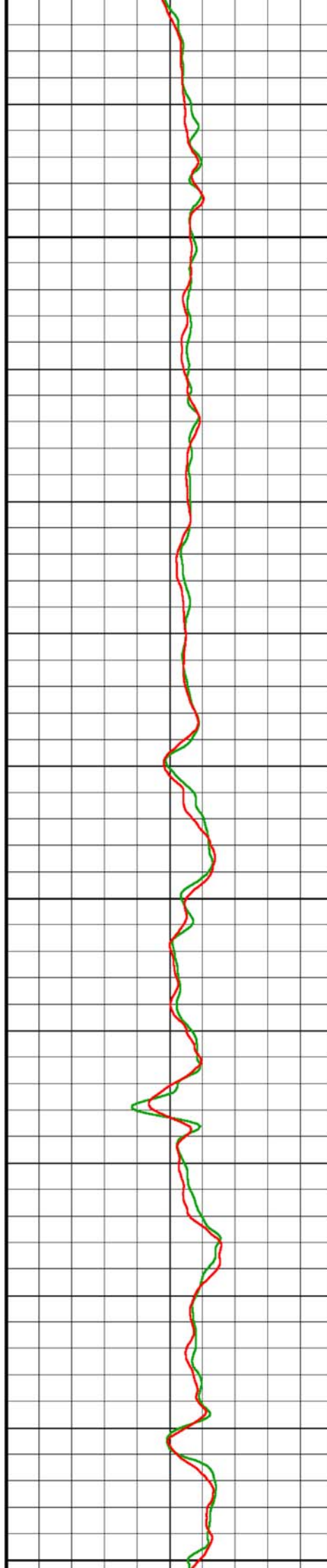
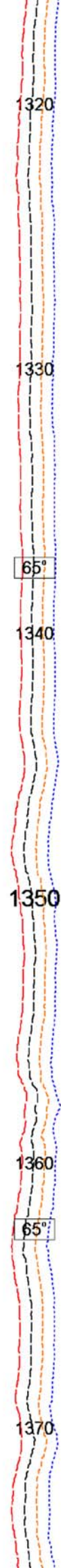
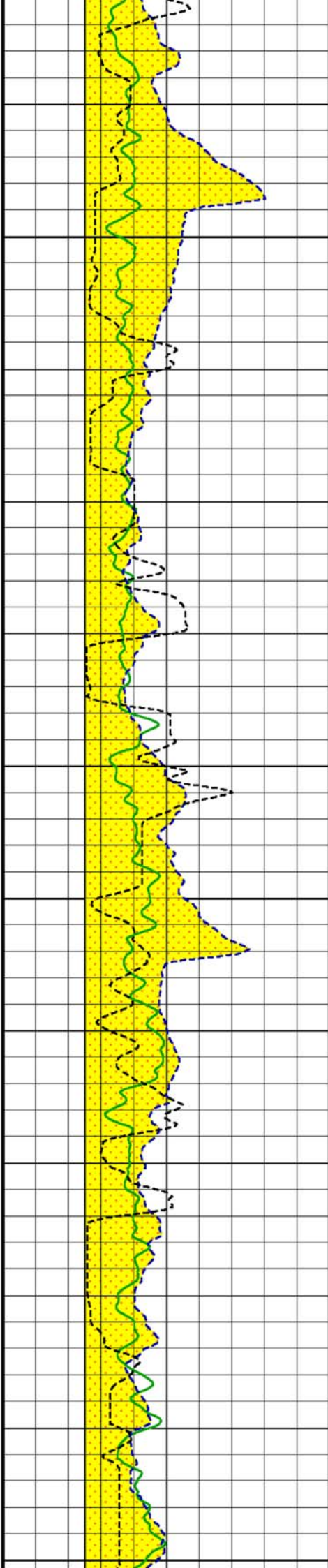
All interpretations are opinions based on inferences from electrical or other measurements and we cannot, and do not, guarantee the accuracy or correctness of any interpretations, and we shall not, except in the case of gross or wilful negligence on our part, be liable or responsible for any loss, costs,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

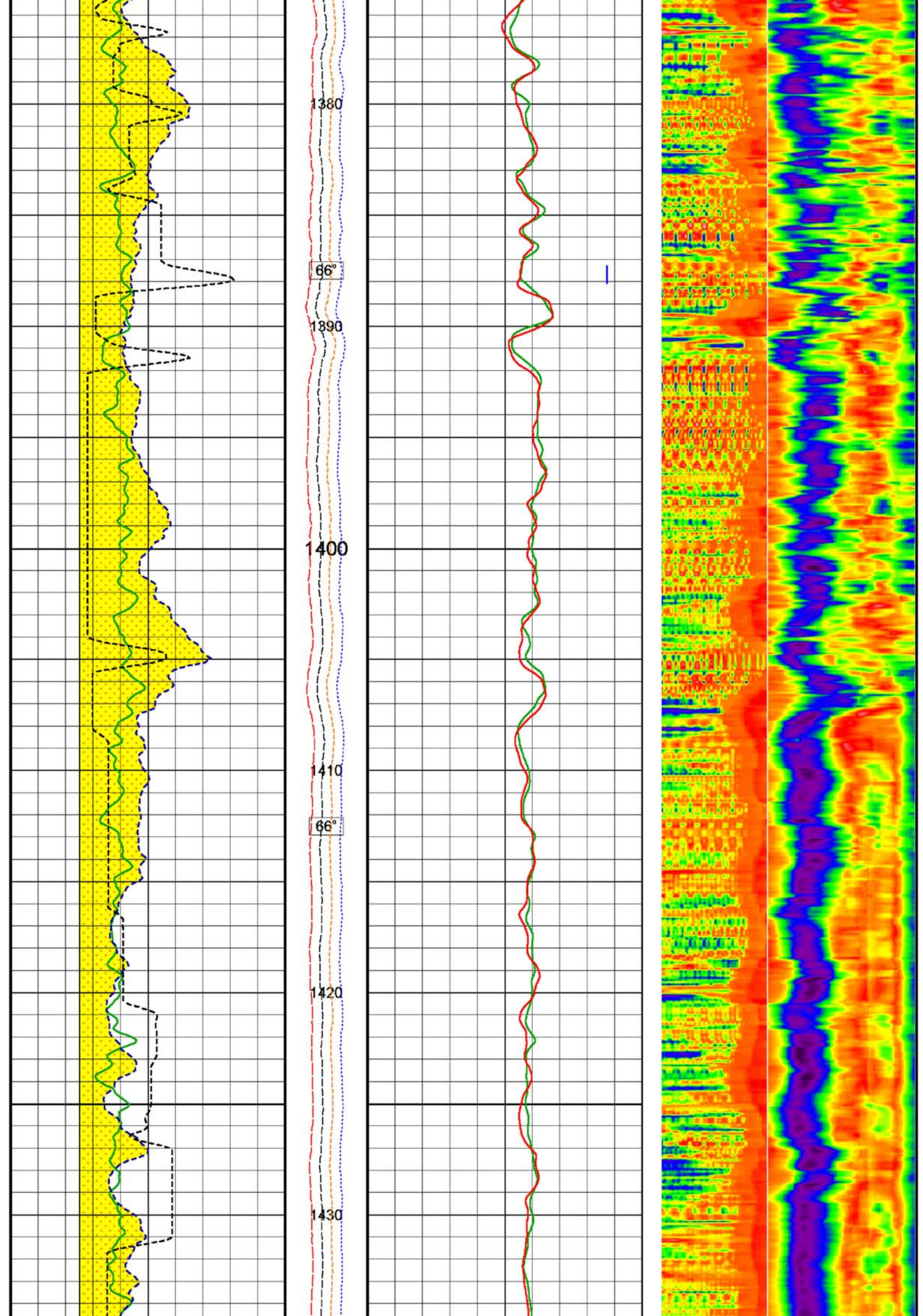


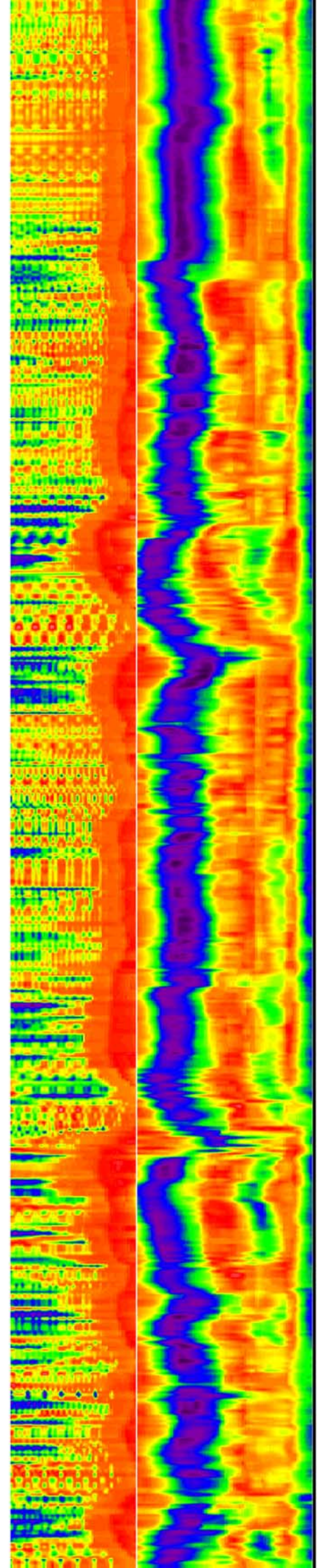
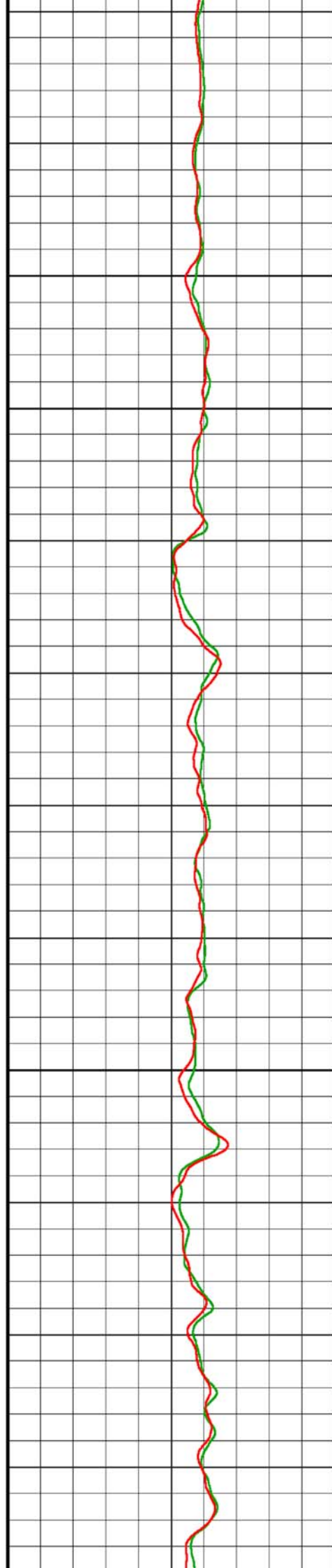
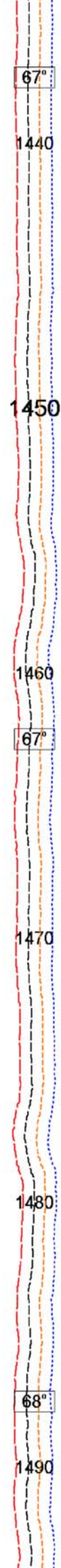
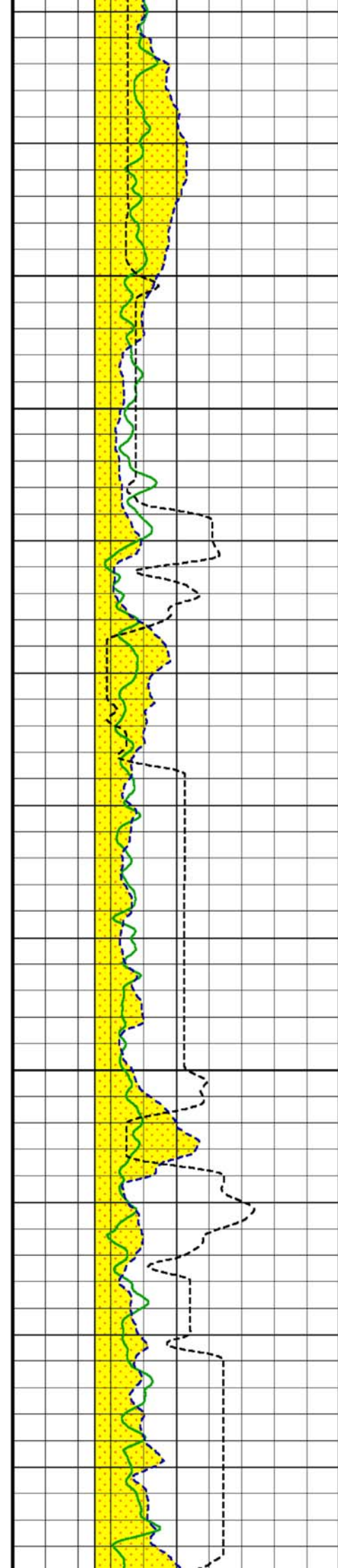


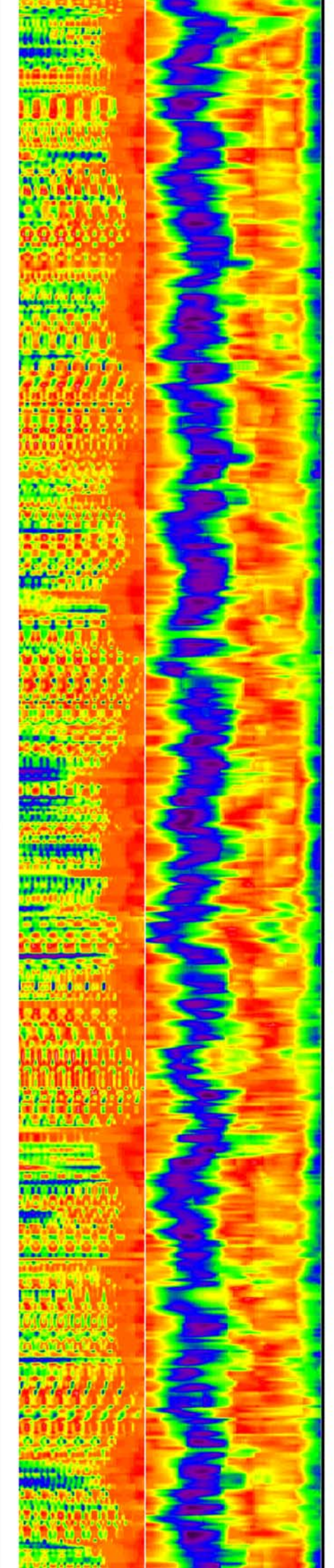
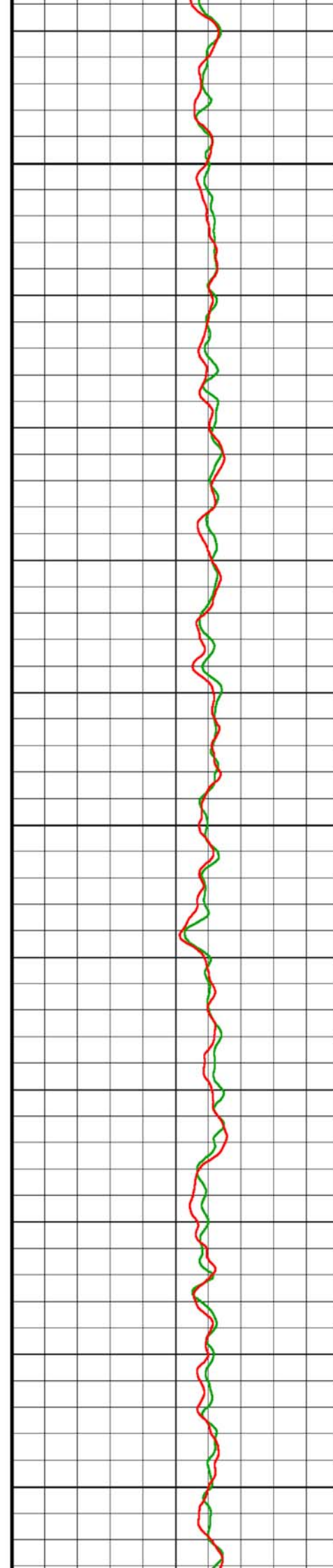
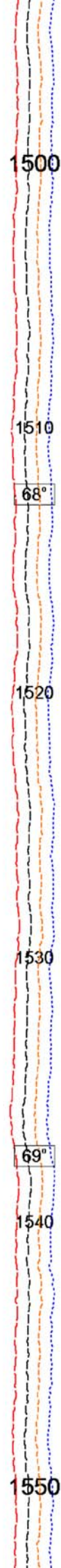
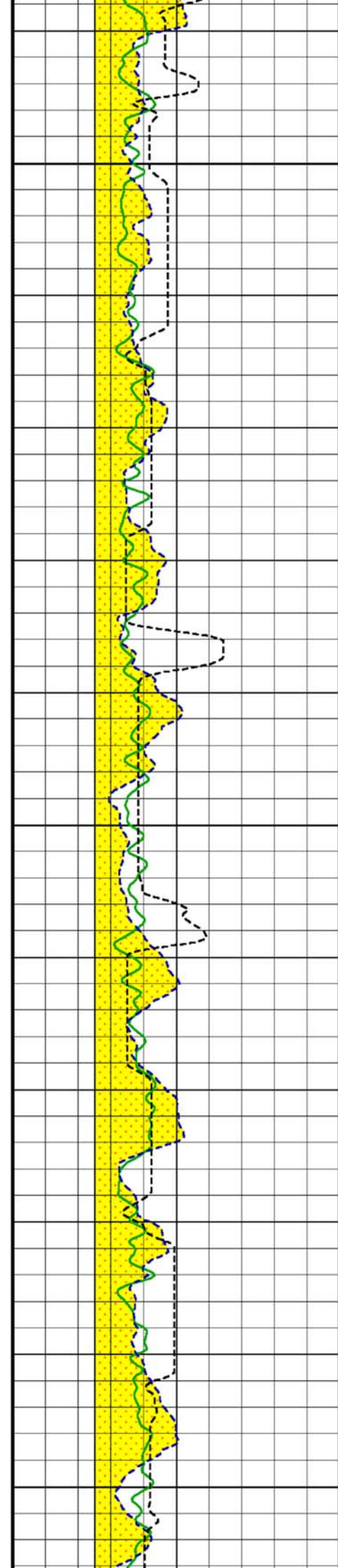


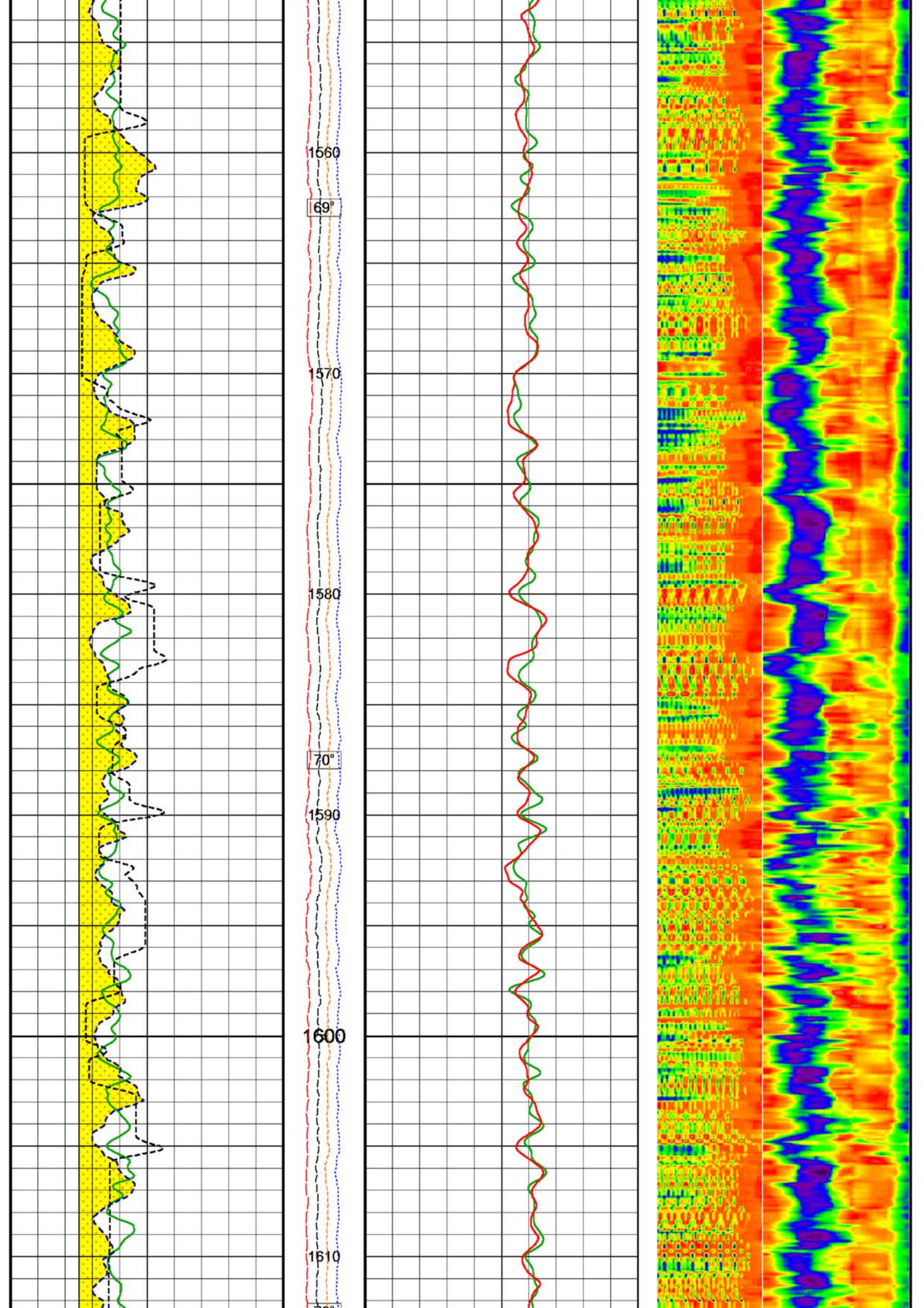


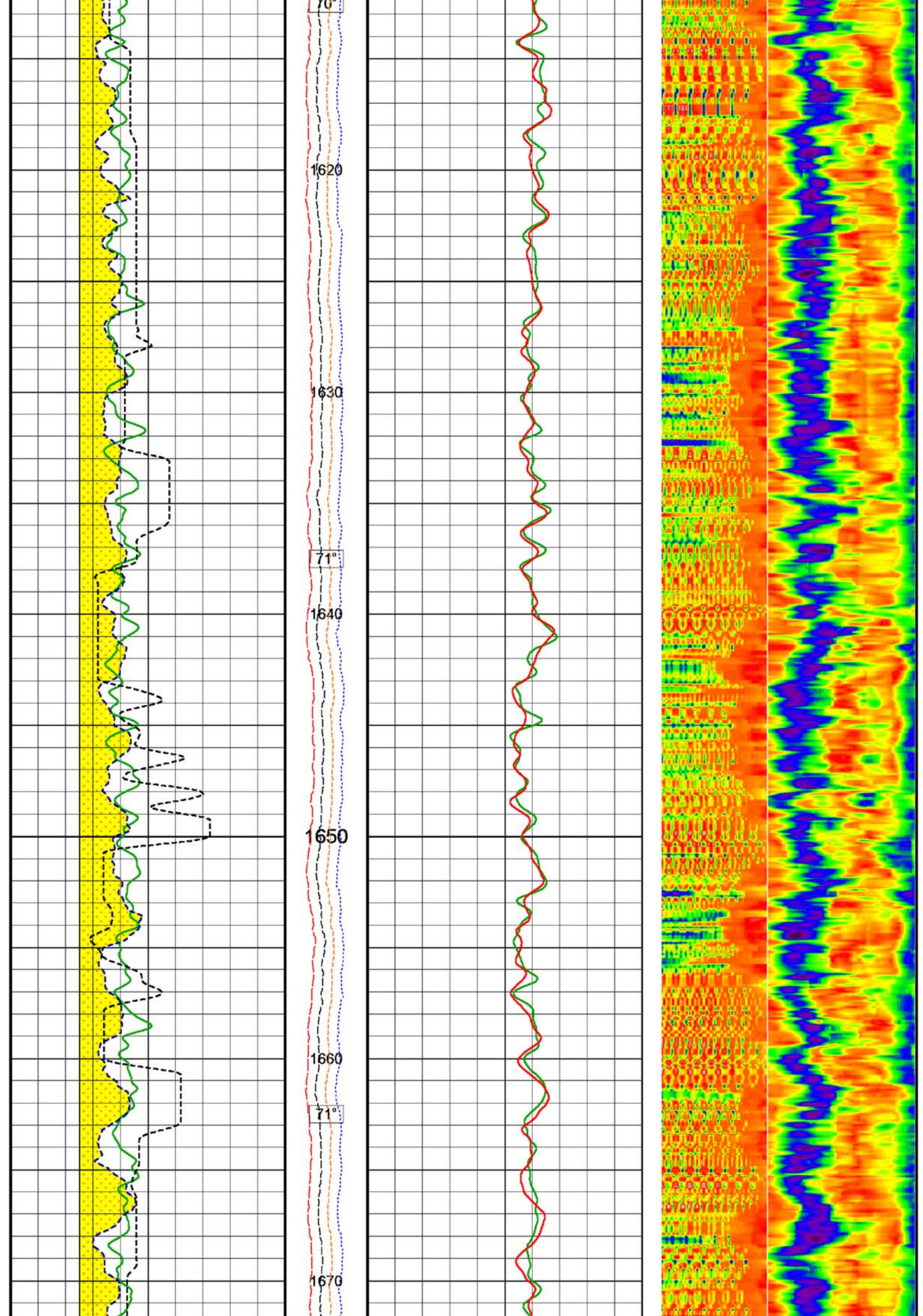


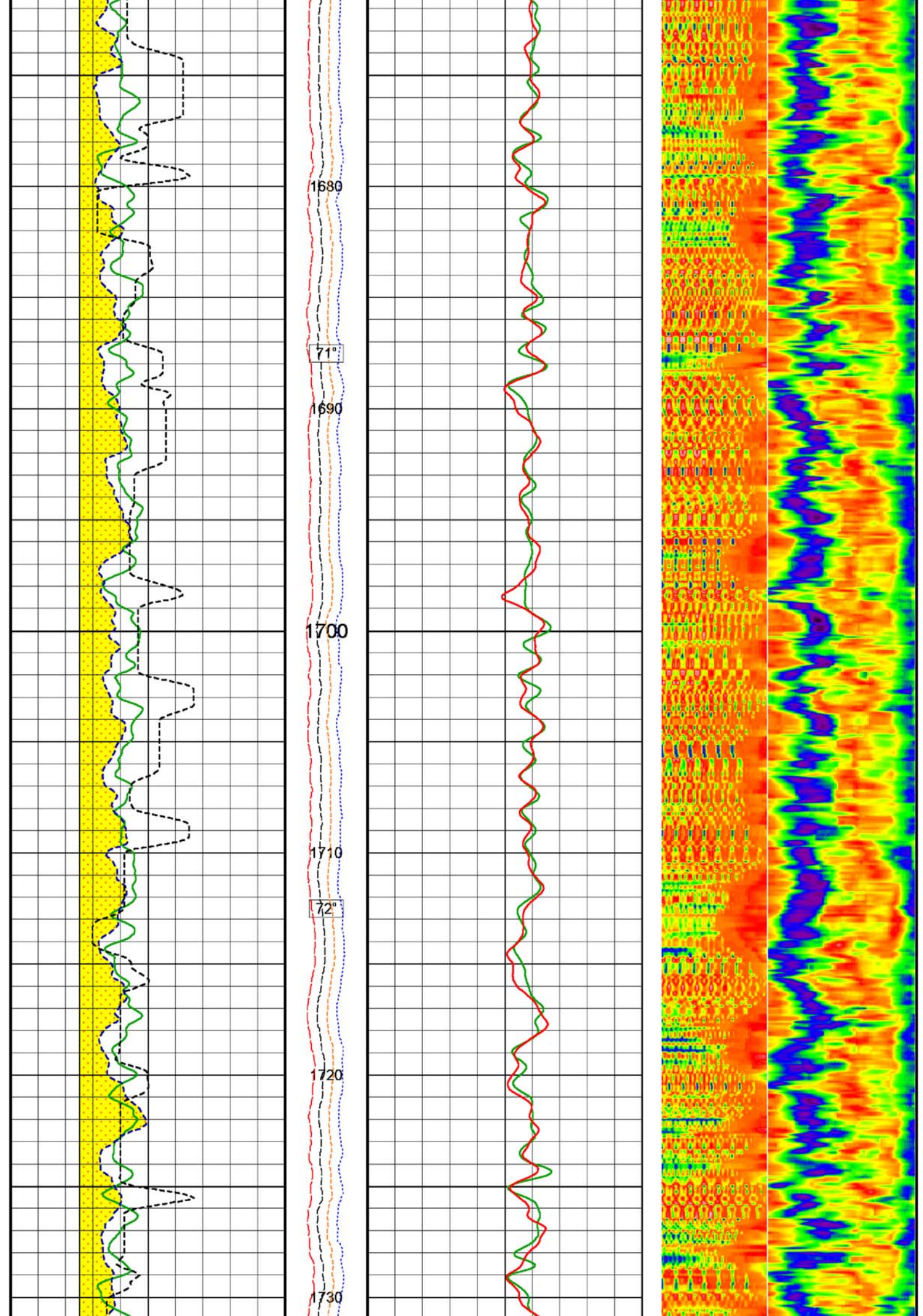


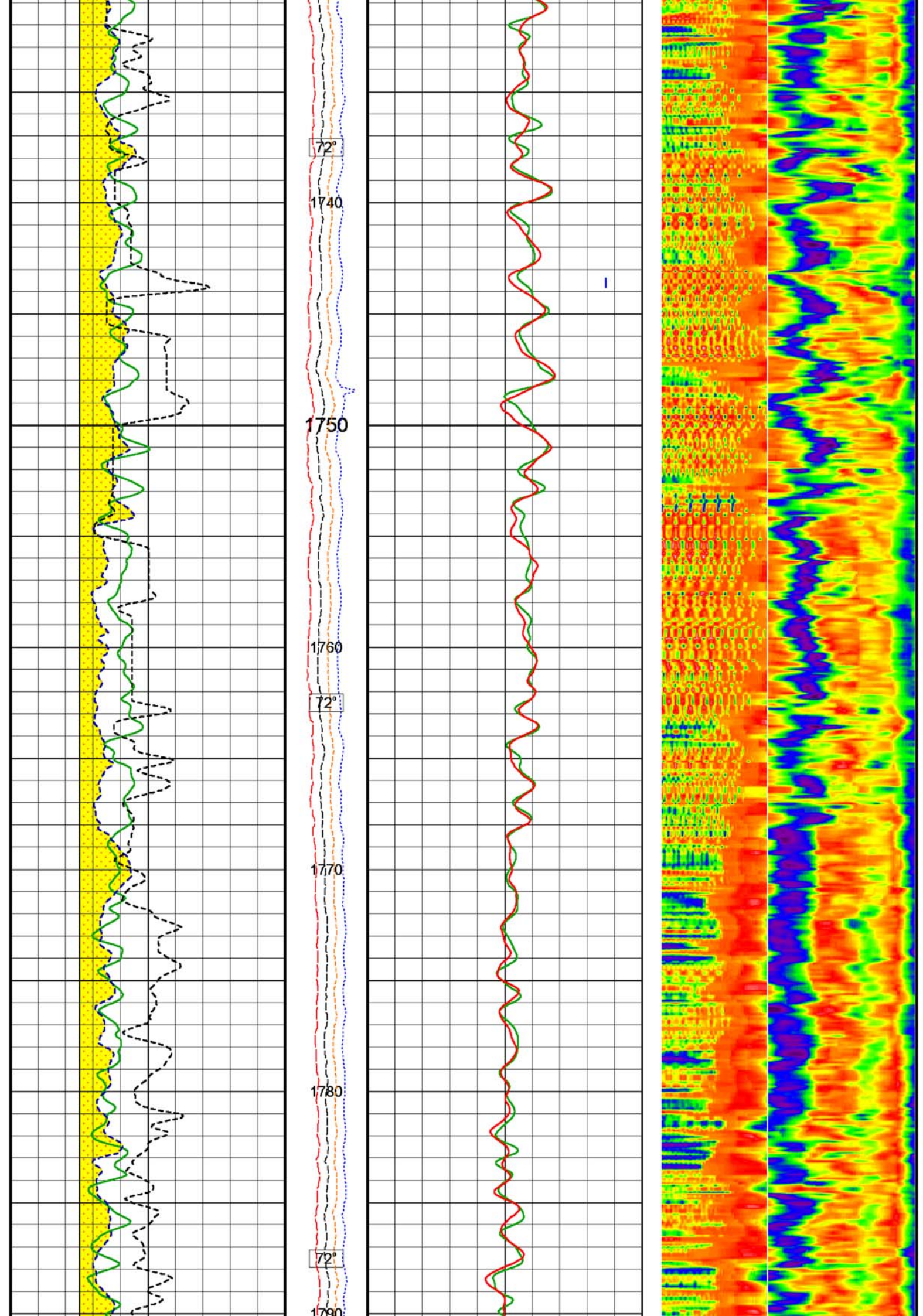


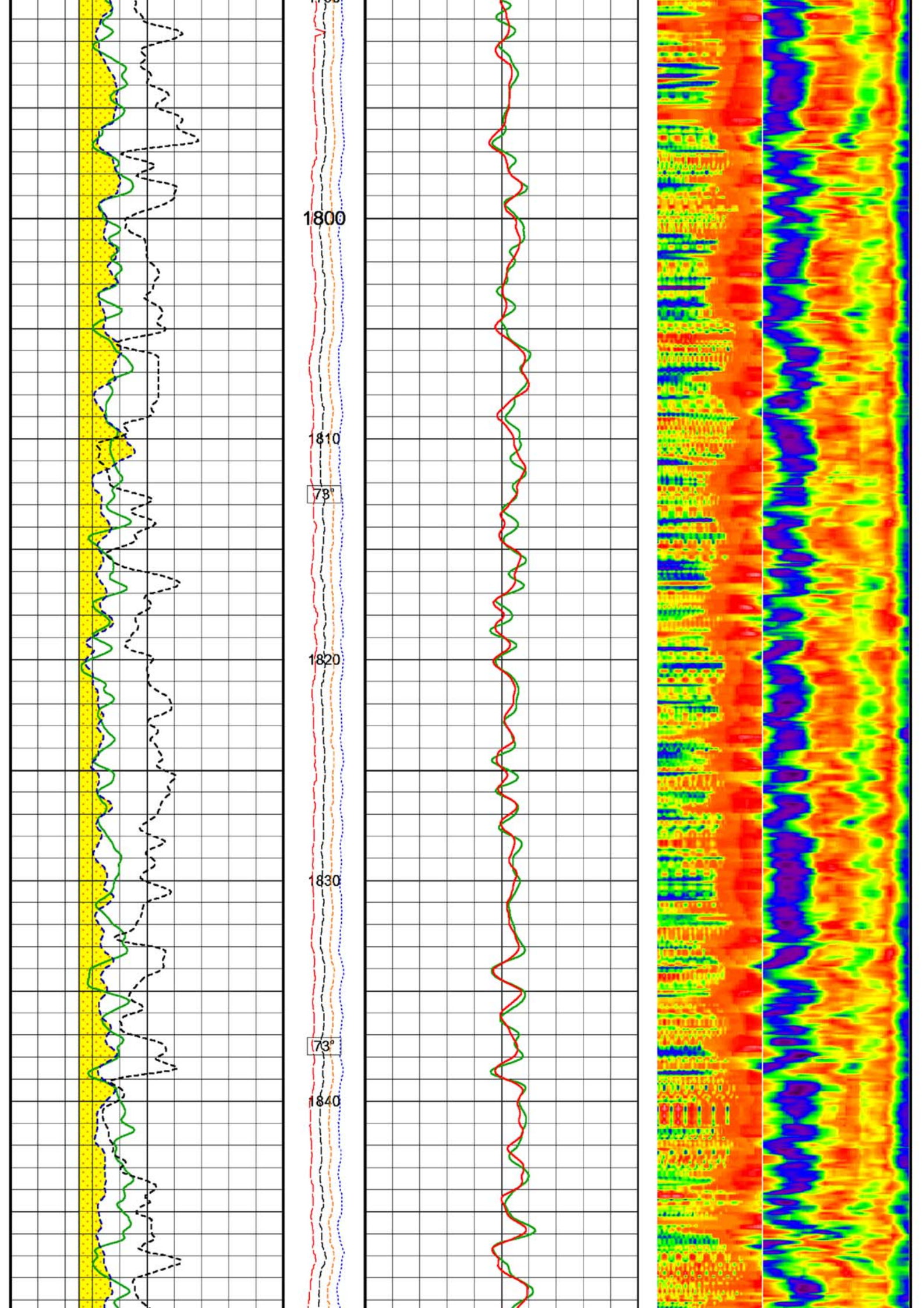


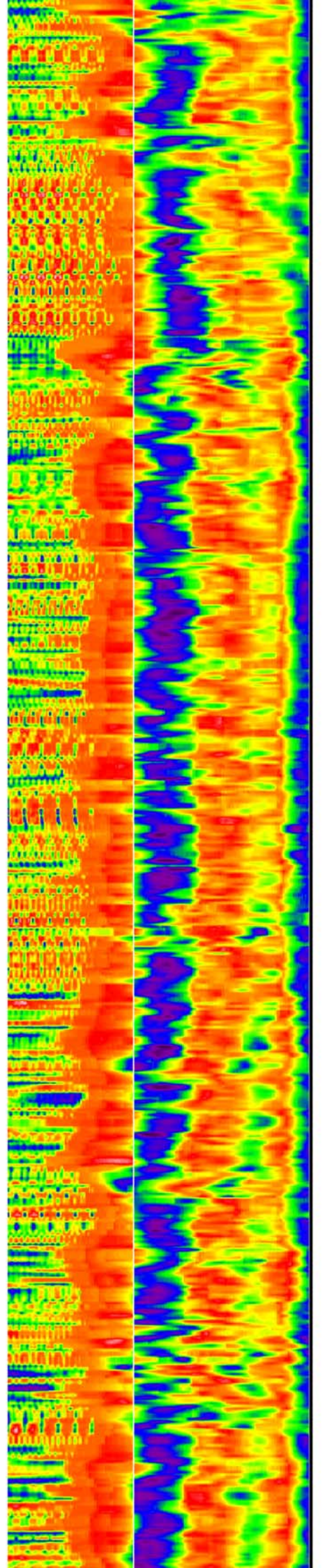
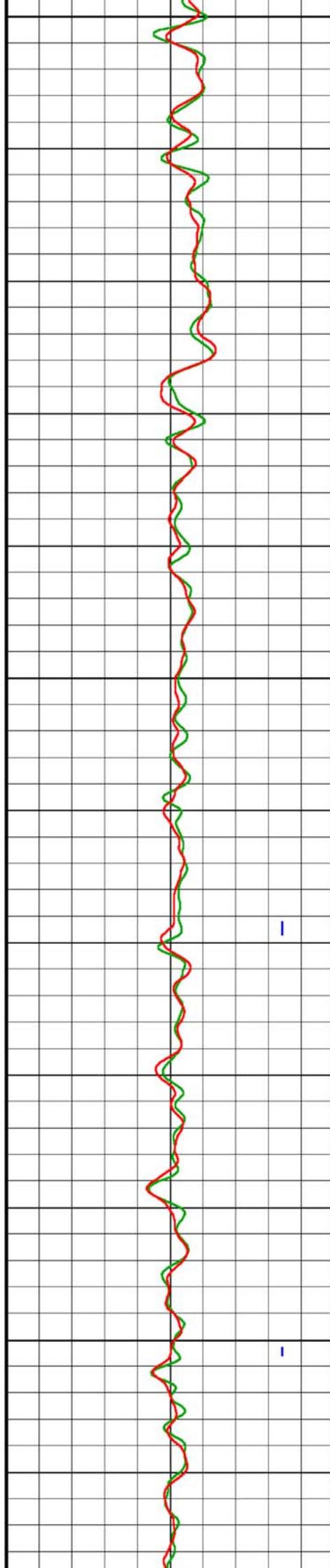
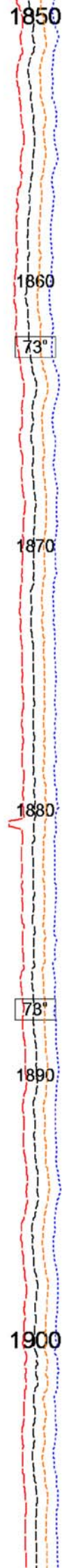
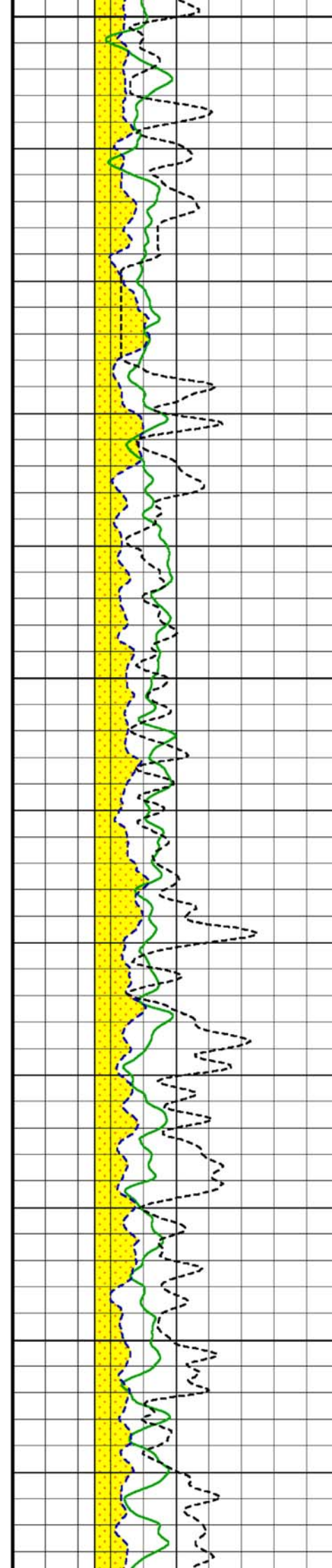


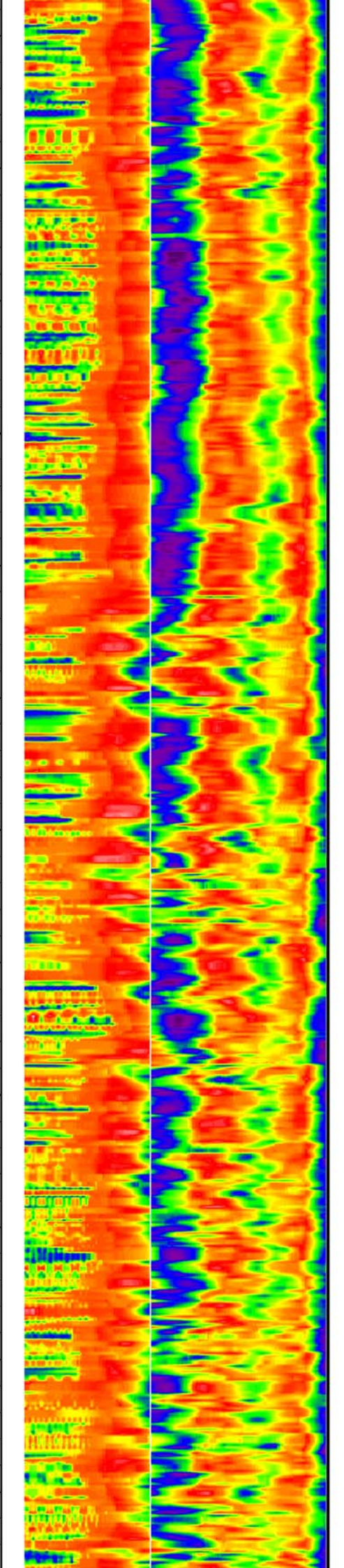
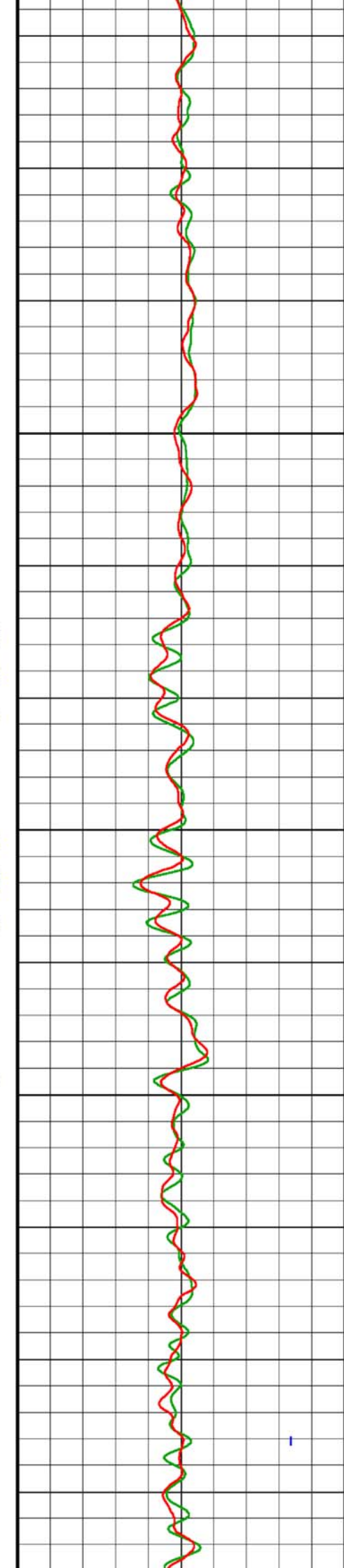
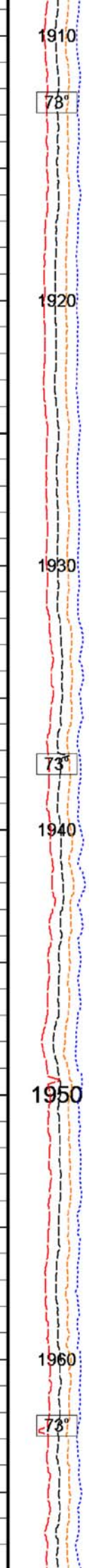
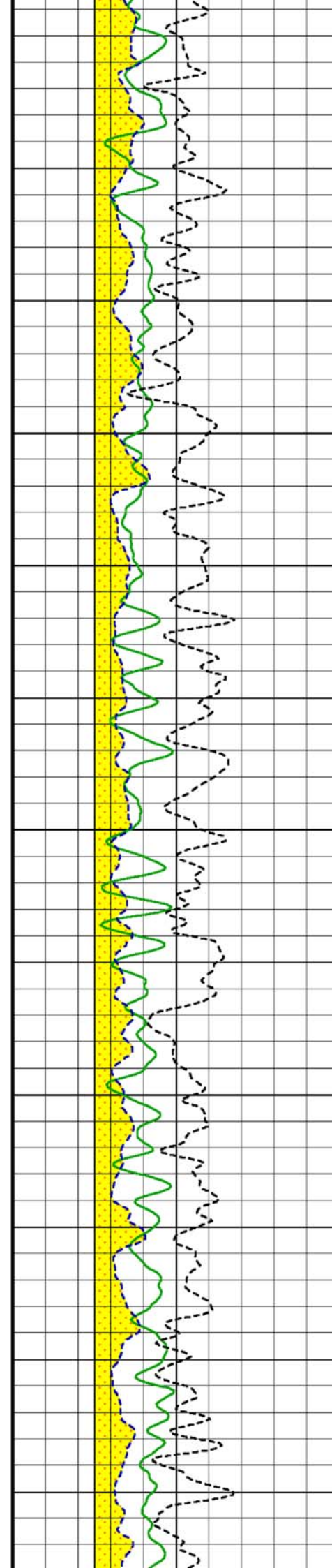


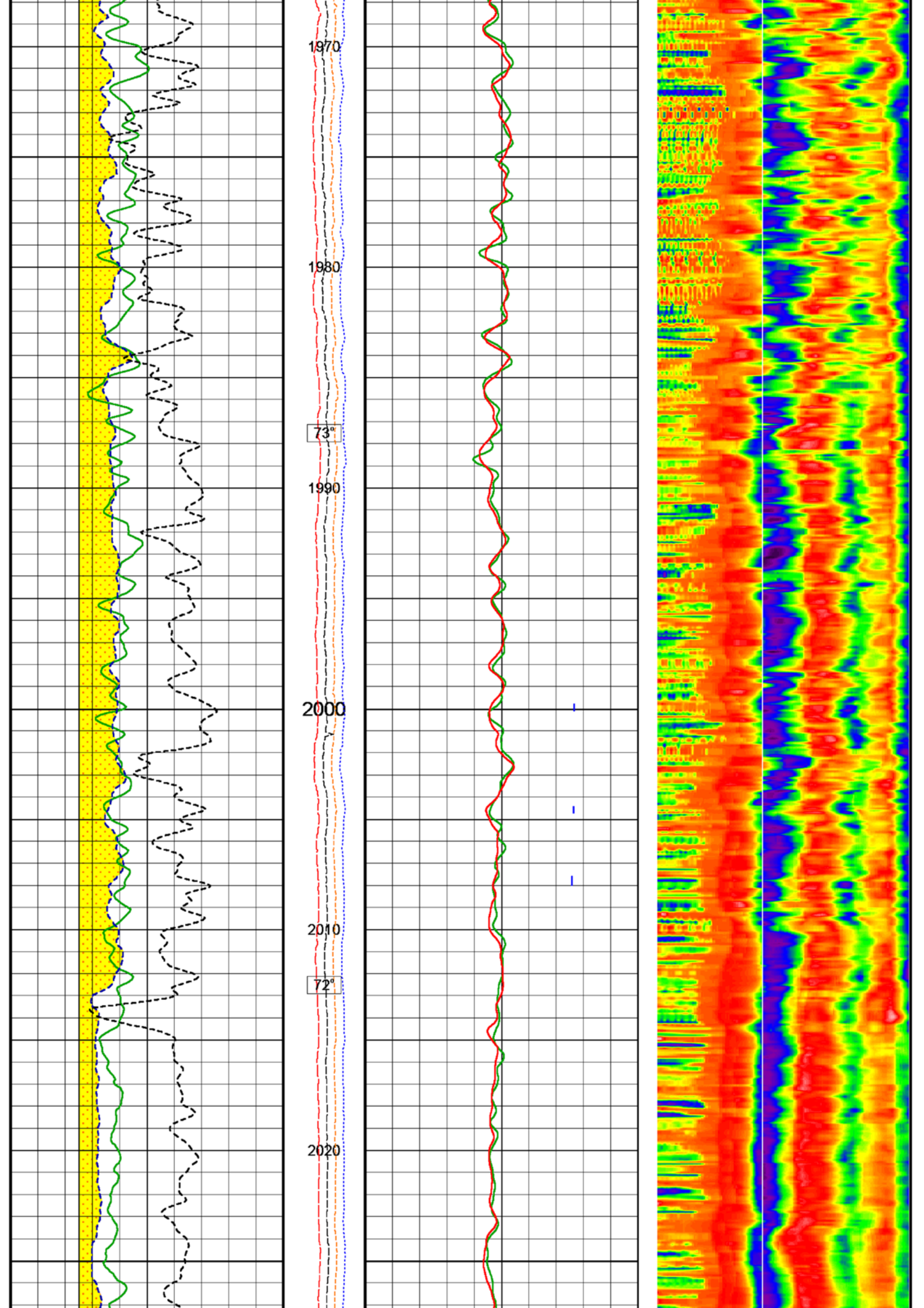


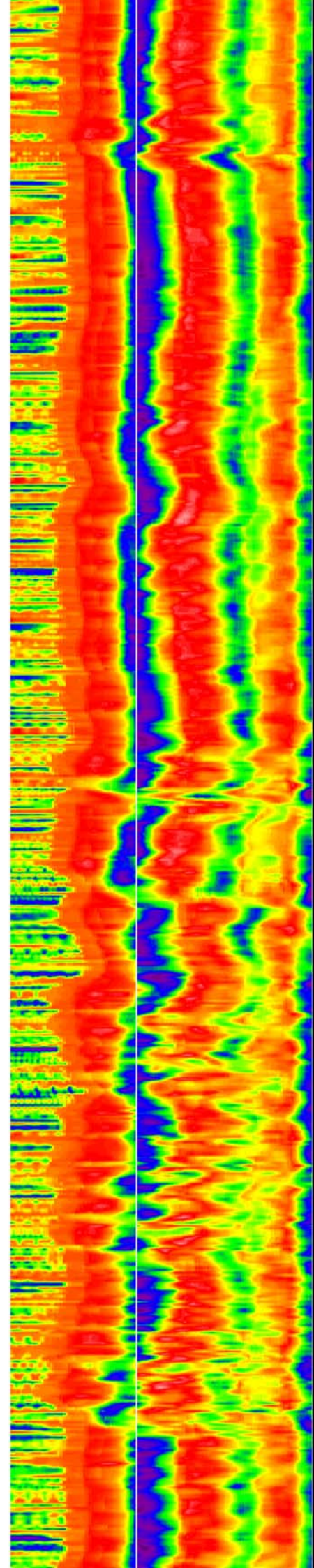
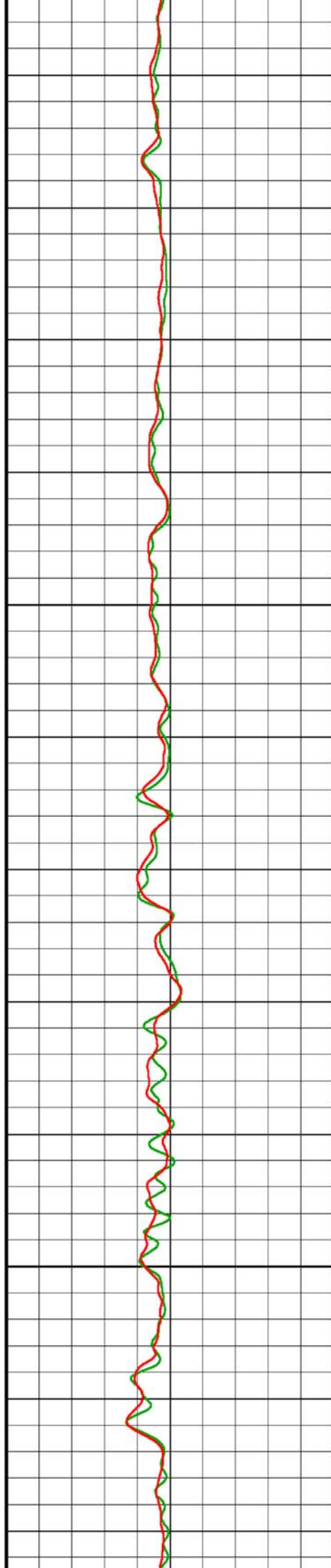
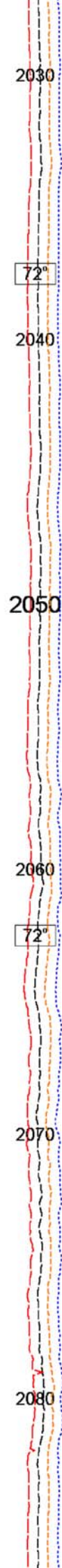
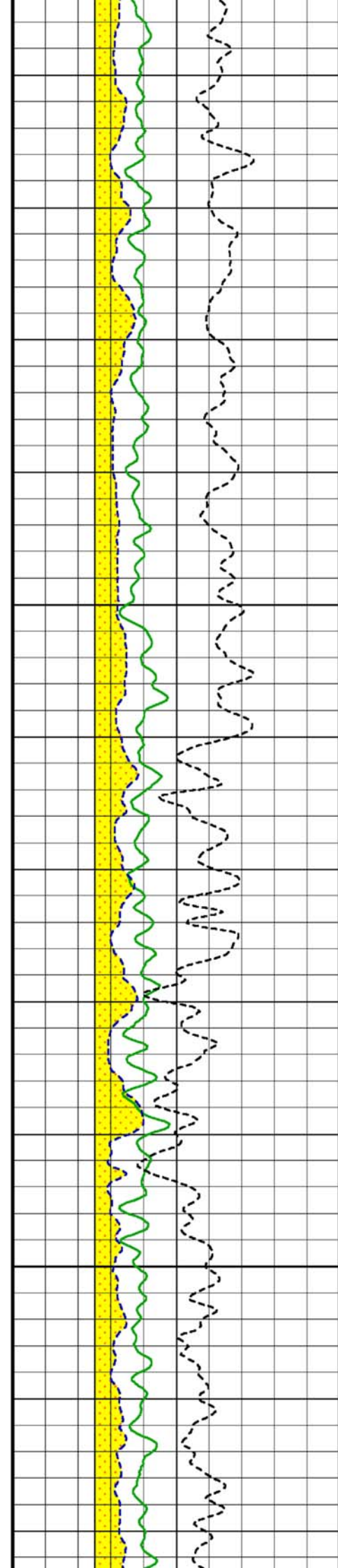


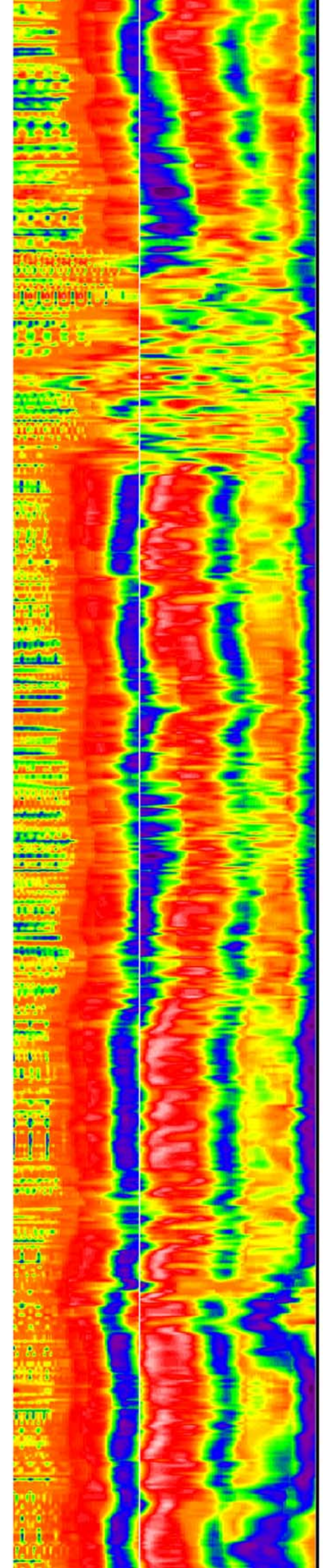
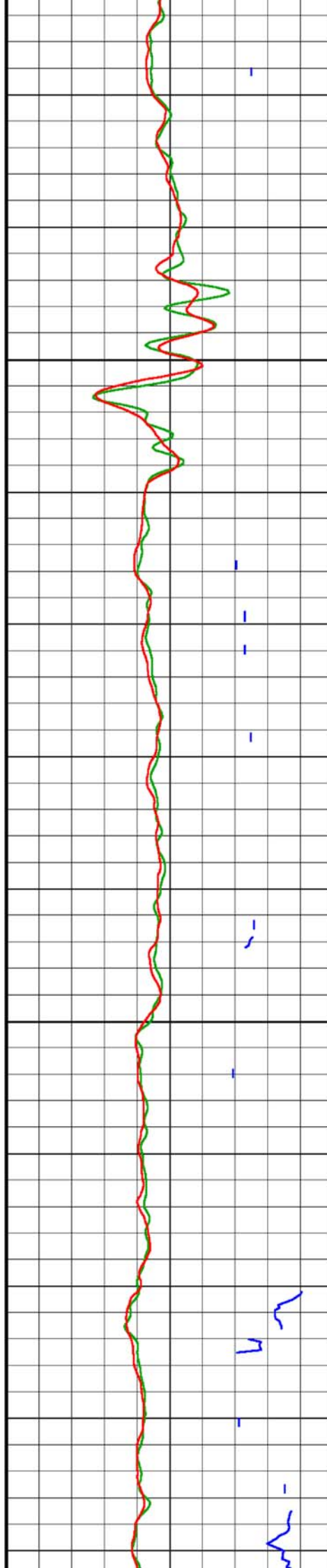
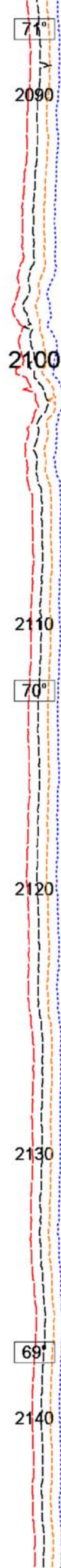
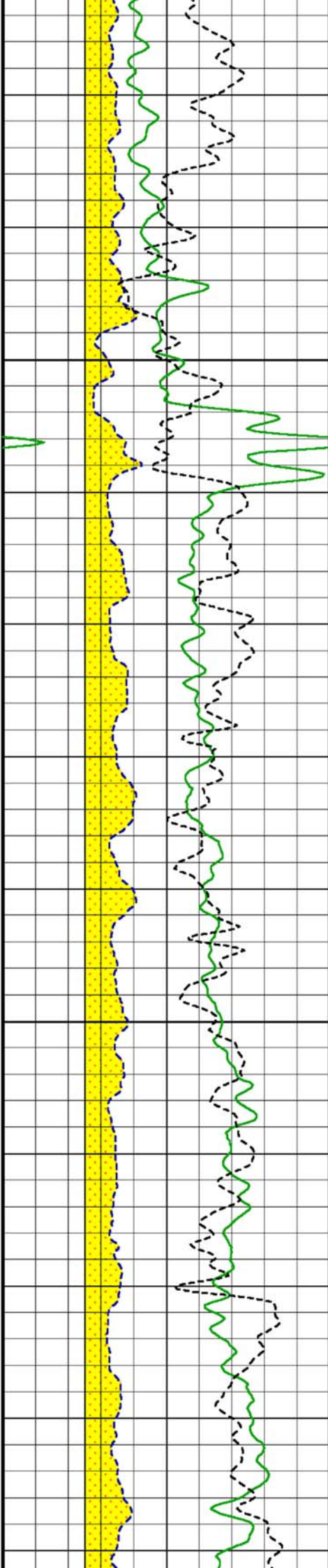


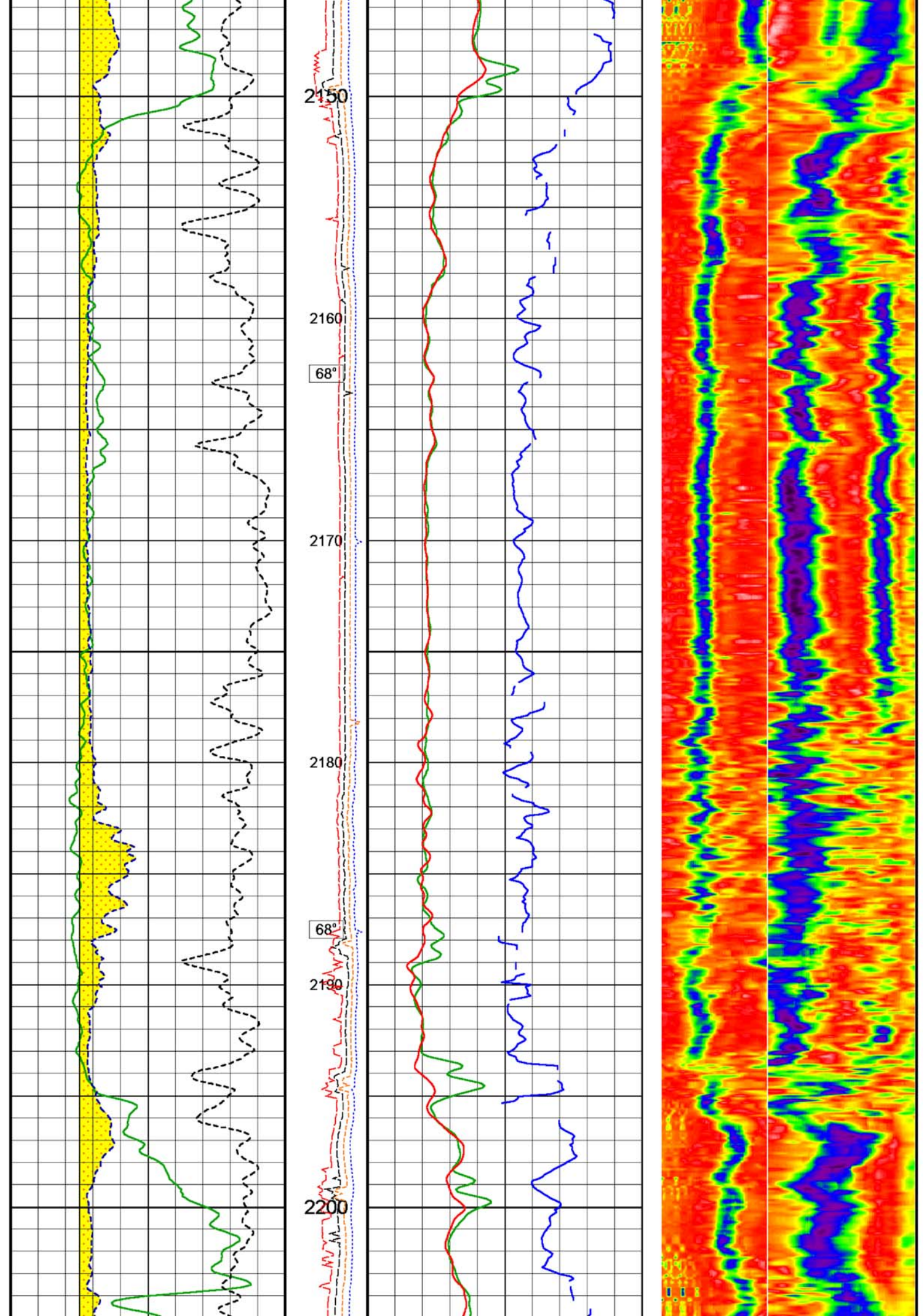


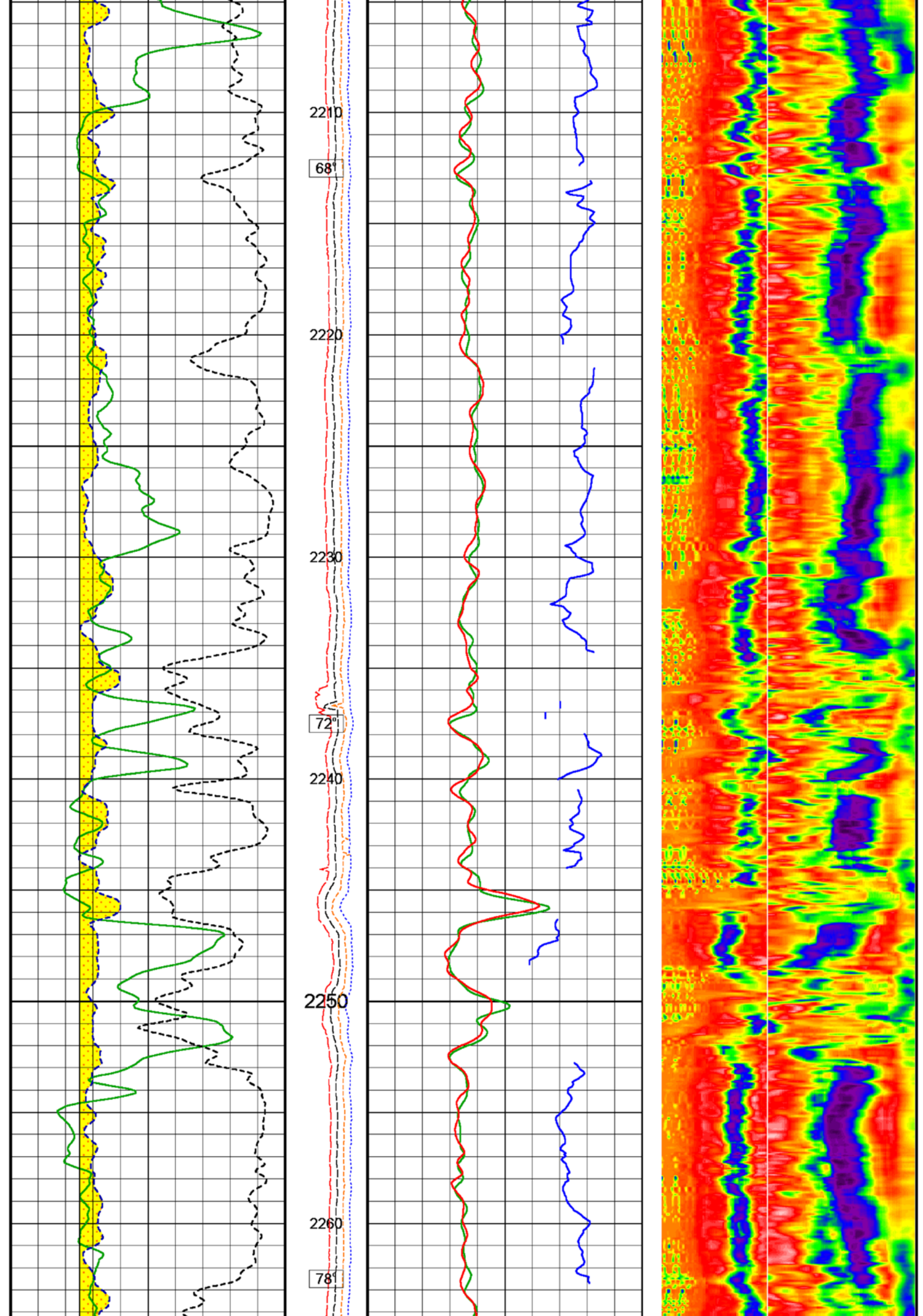


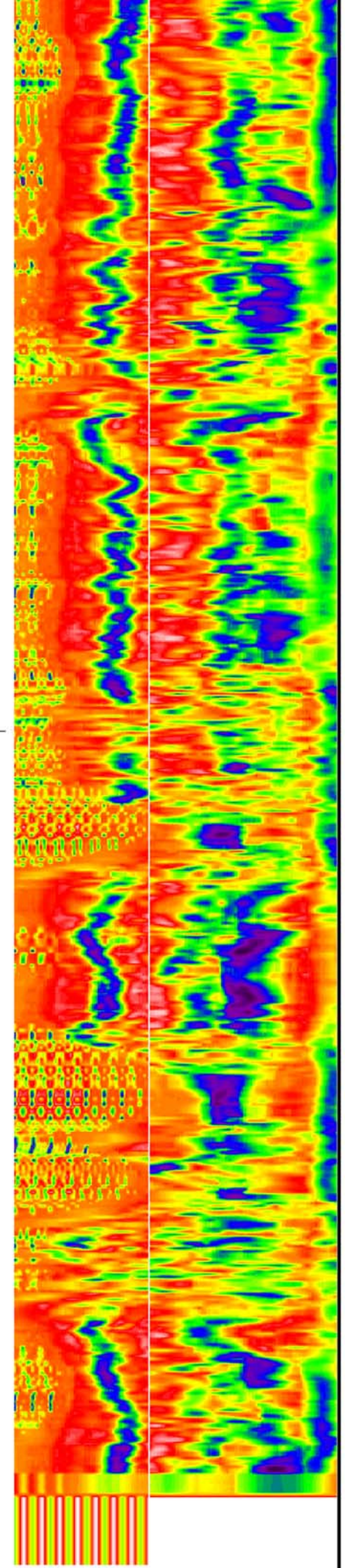
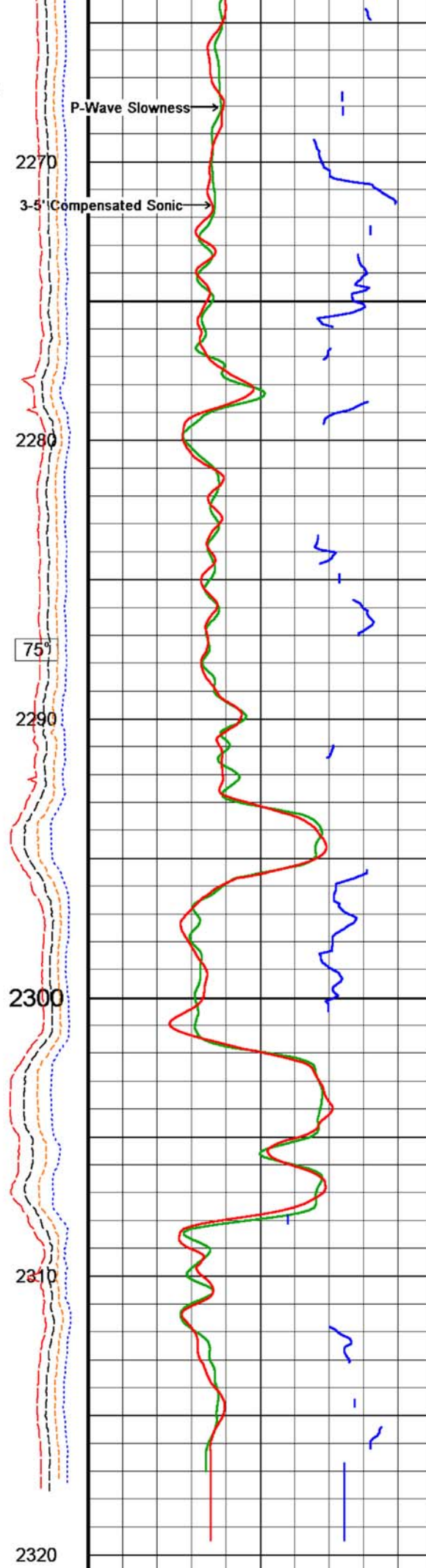
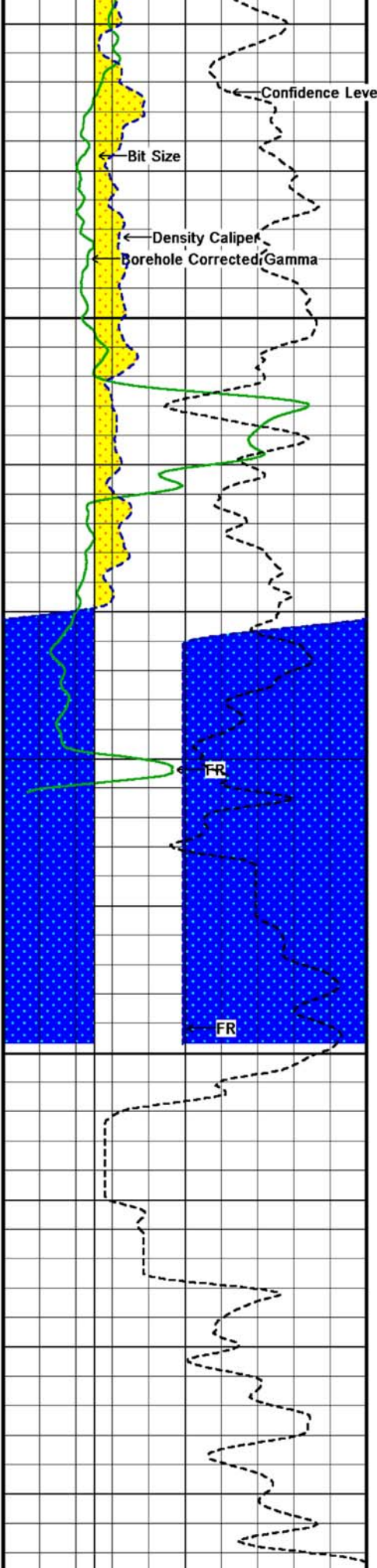




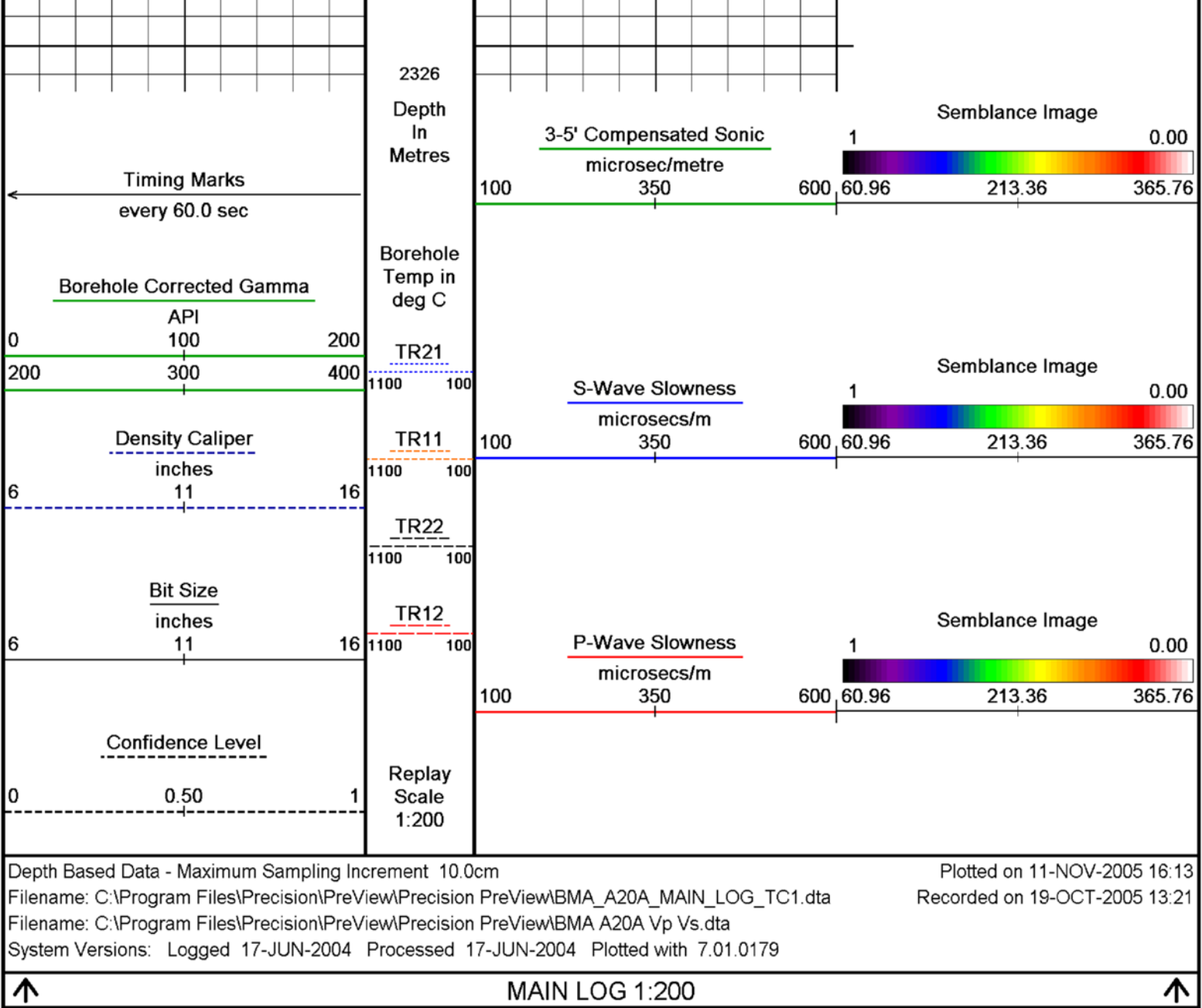








2320



BEFORE SURVEY CALIBRATION		
C:\Program Files\Precision\PreView\Precision PreView\BMA A20A Vp Vs.dta		
General Constants All 000		Last Edited on 19-OCT-2005,13:50
General Parameters		
Mud Resistivity	0.116	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	Density Caliper	
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 15-OCT-2005,21:40
	Measured	Calibrated(Deg C)
Lower	0.00	0.00
Upper	100.00	100.00

Pre-filter Length 11

Gamma Calibration MCG 142

Field Calibration on 15-OCT-2005 21:45

	Measured	Calibrated (API)
Background	17	11
Calibrator (Gross)	1371	920
Calibrator (Net)	1354	909

Gamma Constants MCG 142

Last Edited on 19-OCT-2005,13:50

Gamma Calibrator Number	060	
Mud Density	1.22	gm/cc
Caliper Source for Processing	Density Caliper	
Tool Position	Eccentred	
Concentration of KCl	0.00	kppm

Caliper Calibration MPD 083

Base Calibration on 11-OCT-2005 10:53

Field Calibration on 15-OCT-2005 22:54

Base Calibration

Reading No	Measured	Calibrator Size (in)
1	13440	4.01
2	21712	5.99
3	30187	7.98
4	38575	9.94
5	47854	12.01
6	N/A	N/A

Field Calibration

Measured Caliper (in)	Actual Caliper (in)
7.96	7.98

Sonic Constants MSS 066

Last Edited on 19-OCT-2005,13:51

Maximum Boundary Contrast	328.08	micro-sec/m
Fluid Transit Time	620.08	micro-sec/m
Limestone Transit Time	155.84	micro-sec/m
Sandstone Transit Time	182.09	micro-sec/m
Dolomite Transit Time	142.72	micro-sec/m
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	328.08	micro-sec/m
Sonic 2 Despiker	620.08	micro-sec/m

DOWNHOLE EQUIPMENT

C:\Program Files\Precision\PreView\Precision PreView\BMA A20A Vp Vs.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

Extended Battery Sub.

MBS 99 Length: 4.47 m Weight: 90.4 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 139 Length: 0.65 m Weight: 15.4 lb

Third Bridle - MBE 21

MLK 111 Length: 3.76 m Weight: 94.8 lb

Compact Inline Standoff B

MIS 72 Length: 0.65 m Weight: 15.4 lb

Compact Gamma

MCG 142 Length: 2.65 m Weight: 63.9 lb



32.22 m

31.33 m

GGCE - Borehole Corrected Gamma

CGXT - MCG External Temperature

Compact Memory Sub A.C
MMS 38 Length: 0.95 m Weight: 22.0 lb

Compact Knuckle Joint
SKJ 46 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 95 Length: 1.74 m Weight: 33.1 lb

Compact Swivel Head Adaptor F
SHA 63 Length: 0.83 m Weight: 26.5 lb

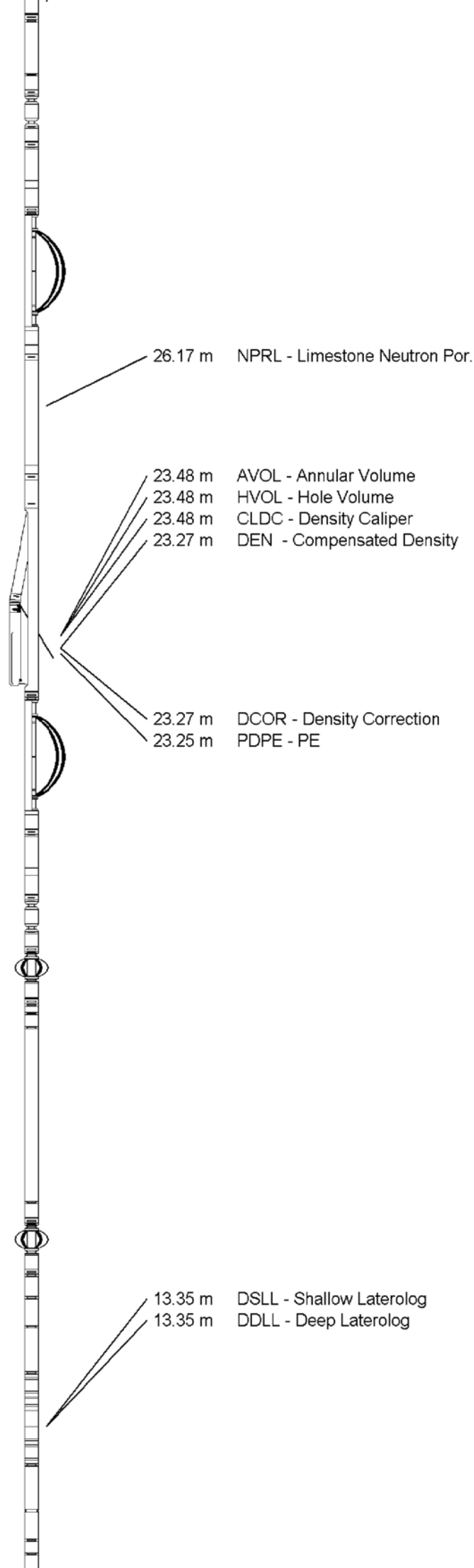
Compact Knuckle Joint
SKJ 101 Length: 0.66 m Weight: 24.3 lb

Compact Inline Standoff B
MIS 129 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 101 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 133 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 31 Length: 0.65 m Weight: 15.4 lb

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

MAI Inline Centraliser
HFS 4 Length: 0.40 m Weight: 4.4 lb

Total Length: 54.08 m Weight: 1300.7 lb



Tool Zero (0.44m from bottom)

All measurements relative to tool zero.

COMPANY	ESSO AUSTRALIA PTY LTD
WELL	BREAM A20A
FIELD	BREAM
PROVINCE/COUNTY	BASS STRAIT
COUNTRY/STATE	AUSTRALIA

Elevation Kelly Bushing	metres	First Reading	2309.30	metres	
Elevation Drill Floor	32.82	metres	Depth Driller	2326.00	metres
Elevation Ground Level	-59.40	metres	Depth Logger	2323.10	metres



P-wave Slowness

S-wave Slowness

1:200 MD