

ENSCO 102

Trefoil

Rig:

Field:

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Run N
Depth
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Type f
Dens
Fluid
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DEPTH SUMMARY LISTING

Date Created: 2-DEC-2004 11:59:18

Depth System Equipment

Depth Measuring Device		Tension Device		Logging Cable	
Type:	IDW-B	Type:	CMTD-B/A	Type:	7-46ZV-XS
Serial Number:	1914	Serial Number:	2336	Serial Number:	74172
Calibration Date:	24-Mar-2004	Calibration Date:	28-Apr-2004	Length:	7324.04 M
Calibrator Serial Number:	9	Calibrator Serial Number:	1051	Conveyance Method: Wireline Rig Type: Offshore_Fixed	
Calibration Cable Type:	7-46V-XS	Calibration Gain:	0.87		
Wheel Correction 1:	-5	Calibration Offset:	115.00		
Wheel Correction 2:	-5				

Depth Control Parameters

Log Sequence:	Subsequent Log In the Well
Reference Log Name:	SP-HRLA-PEX-CMR-GR Nuclear Resistivity Pri
Reference Log Run Number:	Suite-1, Run1
Reference Log Date:	24-Nov-2004

Depth Control Remarks

1. Subsequent run in hole. Log correlated to Schlumberger SP-HRLA-PEX-CMR-GR log, dated 24-Nov-0
2. Primary depth reference IDW-E
3.
4.
5.
6.

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OTHER SERVICES1
OS1: SP-HRLA-PEX-CMR-G
OS2: VSI-GR
OS3: MDT-GR
OS4: MSCT-GR
OS5:

REMARKS: RUN NUMBER 1
Subsequent run in hole. Log correlated to Run 1, SP-HRLA-PEX-CMR-GR, 24 November 2004.
Toolstring run as per tool sketch, with FMI and DSI centralised using 4 CMEZs.
DSI was run in the following modes:
Downlog in casing from 280m - P&S in Low Frequency Mode.
Downlog in openhole from 2400 to 3450m - P&S, Upper and Lower Dipole (downlogs not presented in final print).
Uplong in openhole from 3527m to casing shoe - P&S, Upper and Lower Dipole.
The main pass was logged from 3527m to casing shoe; the repeat section was logged from 3485m to 3385m.
Uplong in casing from 2400m to 1710m - P&S, Upper and Lower Dipole all in Low Frequency Mode.
Compressional delta-T source (DTCO) and shear delta-T source (DTSM) from upper dipole.
Source for integrated transit time is DTCO (P&S); sonic porosity formula Raymer Hunt.

Slowness time coherence represents best estimate in real time; additional processing completed to improve delta-T labelling.
Dipole shera delta-T inconsistent at depths less than 1890m due to attenuation of formation signal behind casing.
Monopole shear delta-T not labelled at shallow casing depths because of poor formation signal strength.
Maximum hole deviation from Sperry Sun Survey.
Maximum recorded temperature was 133.3 degC from thermometers in logging head.
Mud data taken from Baroid Mud Report, 23-NOV-2004, from flowline sample taken at 20:00.
Additional mud data: PV/YP = 49degC/51lbs/100ft2, Gels = 3/4/7 lbs/100ft2, LGS/HGS = 5.0/0.9%.

SERVICE ORDER #: PROGRAM VERSION: 12C0-301 FLUID LEVEL: 0 m			RUN 1		

EQUIPMENT DESCRIPTION

RUN 1

SURFACE EQUIPMENT

GSR-U 2003
WITM (DTS)-A 964

DOWNHOLE EQUIPMENT

LEH-QT 1519		32.36
LEH-QT 1519		

Condition	Value
DTPC-A	31.47
ECH-KJ 64	
DTPC-A 64	

DTC-H 8457
ECH-KH
DTCH0-A
DTCH1-A

CTEM
TelStatus
ToolStatu

Error Code	Occurrences
DTC-H 8457	29.64
ECH-KH	28.40
DTCH0-A	27.76
DTCH1-A	27.76

DTA-A 8351		27.76
ECH-KE 8351		
DTA-A 8351		

HNGS-BA Upper_1 25.84 26.55
 Lower_2 25.63

HNGC-A HNGC Stat  23.51 24.05

DSST-B 22.98


SPAC-B 8056

ECH-SD 8038

SMDR-BD 8094

SSIJ-BA 8142

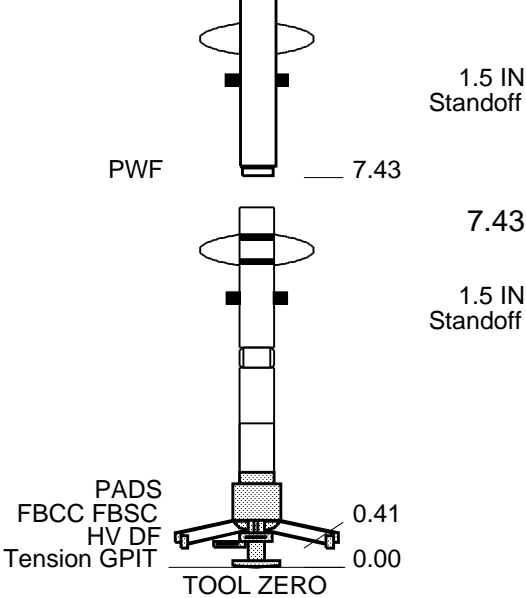
SMDX-AA 8063 1.5 IN



1.5 IN
Standoff

1.5 IN
Standoff

FBST-B
 ECH-MRA 4742
 FBCC-A 794
 AH-185 909
 FBST-A 855
 GPIC-AC 735
 FBSC-B 858
 FBSS-B 830



MAXIMUM STRING DIAMETER 6.63 IN
 MEASUREMENTS RELATIVE TO TOOL ZERO
 ALL LENGTHS IN METERS

Client: Origin Energy Resources Ltd.
 Well: Trefoil-1
 Field: Trefoil
 State: Tasmania
 Country: Australia

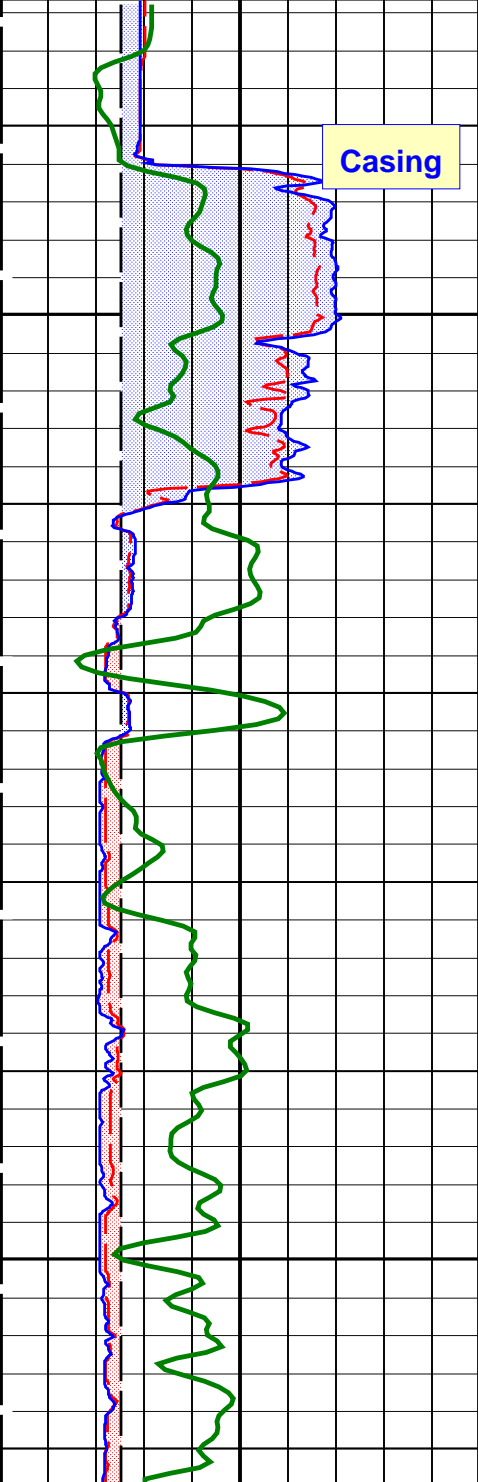
Rig Name: ENSCO 102
 Reference Datum: Mean Sea Level
 Elevation: 39.6 m

Drawing Date: 12/2/2004

Production String	(in)		(m)	Well Schematic	(m)		(in)	Casing String
	OD	ID	MD		MD	OD	ID	
					0.0	36.000		Borehole Segment
					0.0	30.000		Casing String, 310 lb/ft
					142.6	30.000		Casing Shoe
					142.6	26.000		Borehole Segment
					0.0	20.000		Casing String, 133 lb/ft
					214.6	20.000		Casing Shoe
					214.6	16.000		Borehole Segment
					0.0	13.375		Casing String, 54.5 lb/ft
					659.6	13.375		Casing Shoe
					659.6	12.250		Borehole Segment
					0.0	9.625		Casing String, 43.5 lb/ft

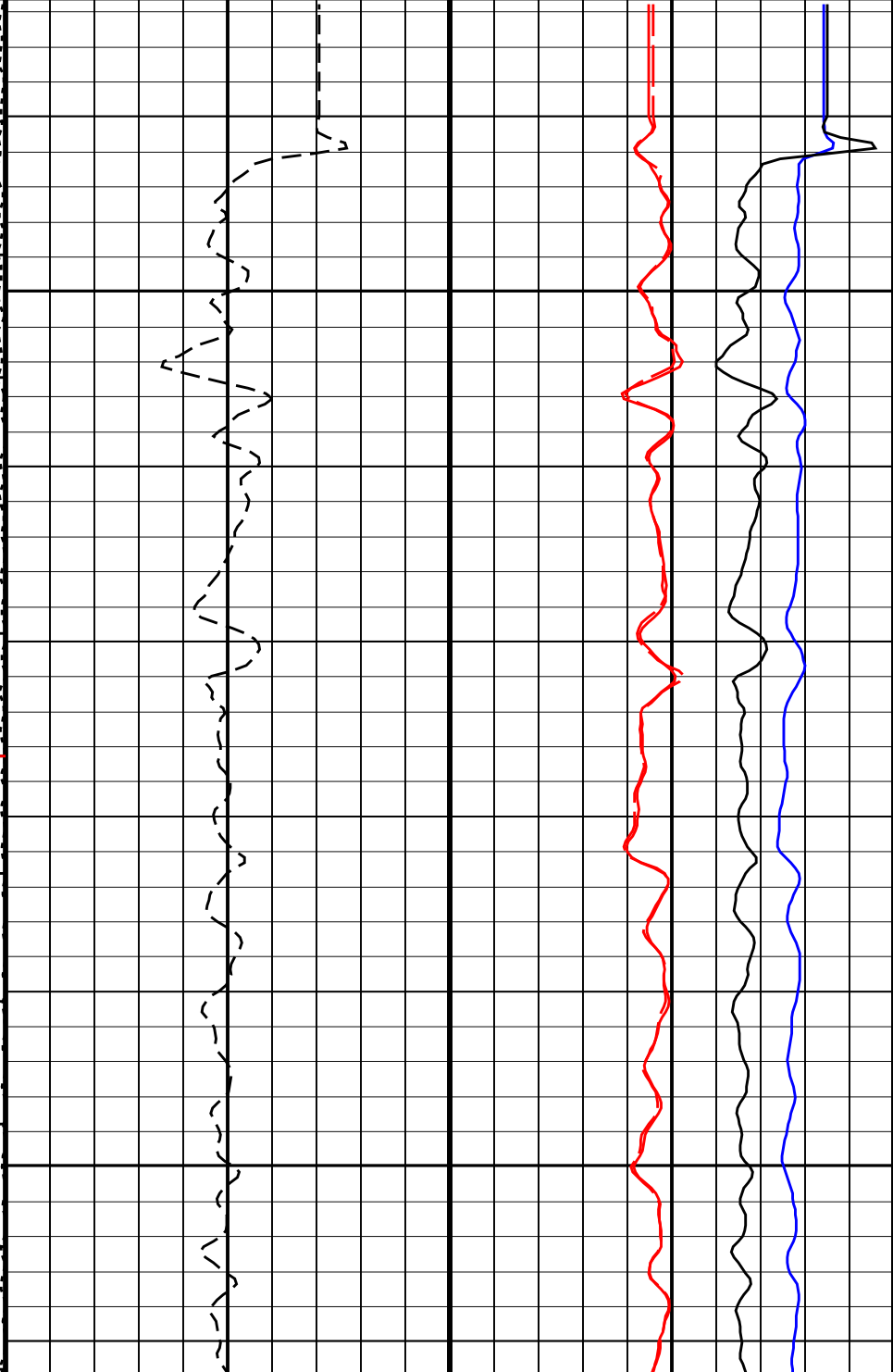
HNGS Spectroscopy Gamma Ray (HSGR)		
0	(GAPI)	200
Caliper 2 (C2)		
6	(IN)	16
Caliper 1 (C1)		
6	(IN)	16
Bit Size (BS)		
6	(IN)	16
Undergauge		

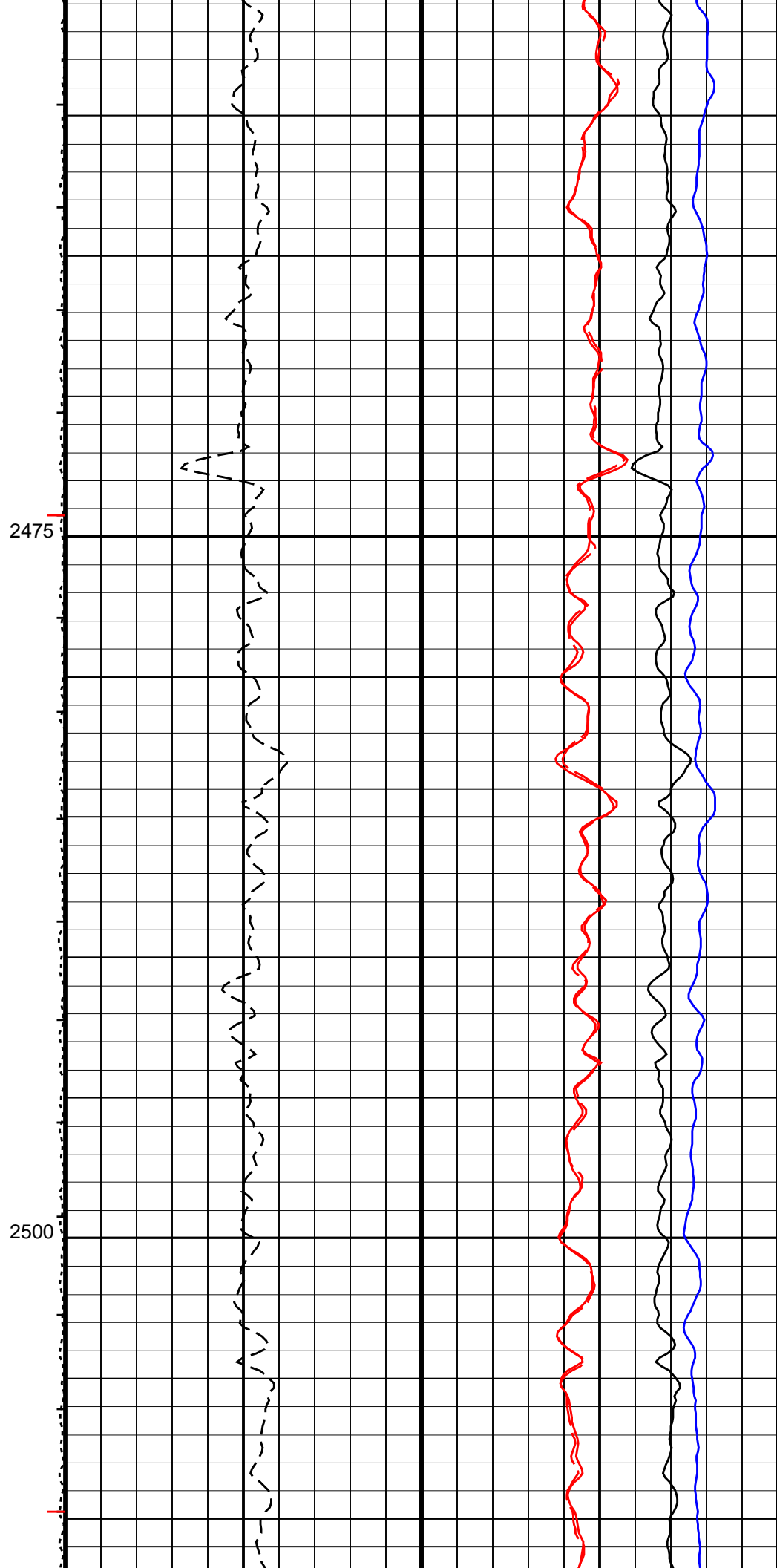
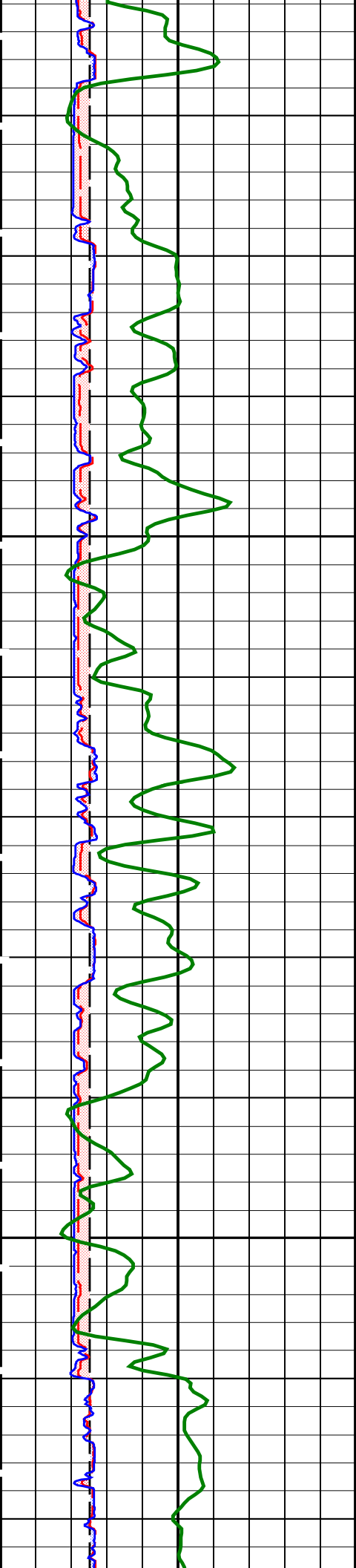
Washout		
Tension (TENS) (LBF)		
7000		4000

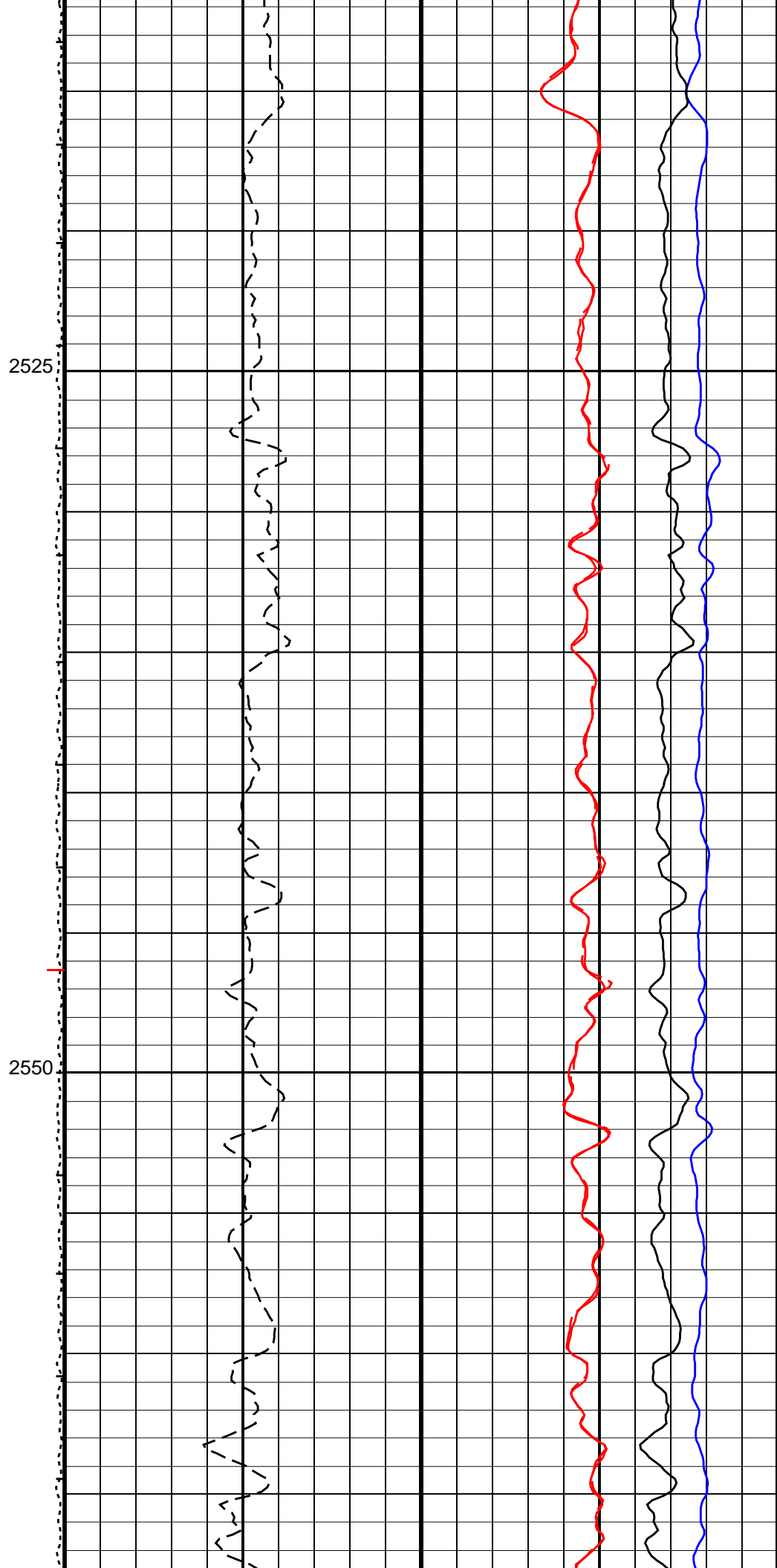
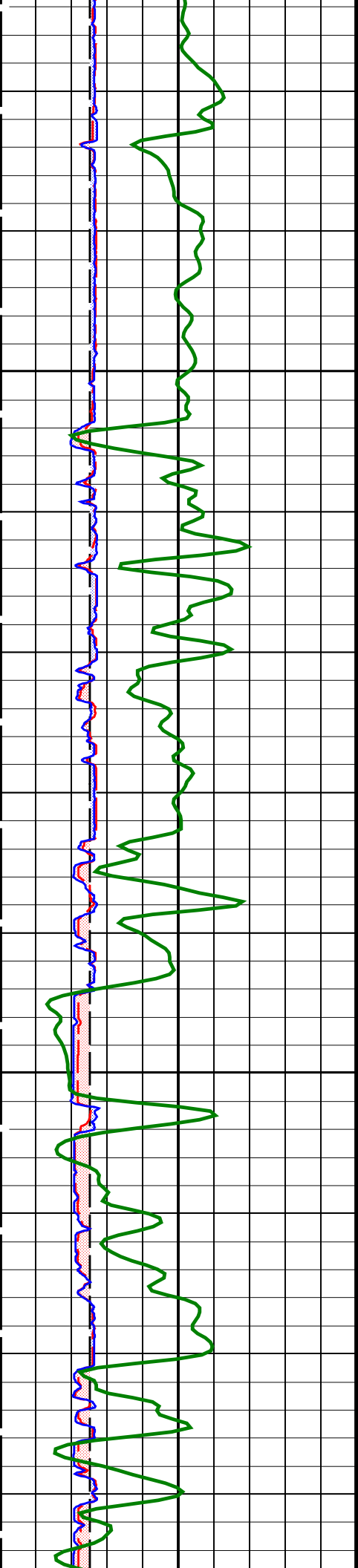


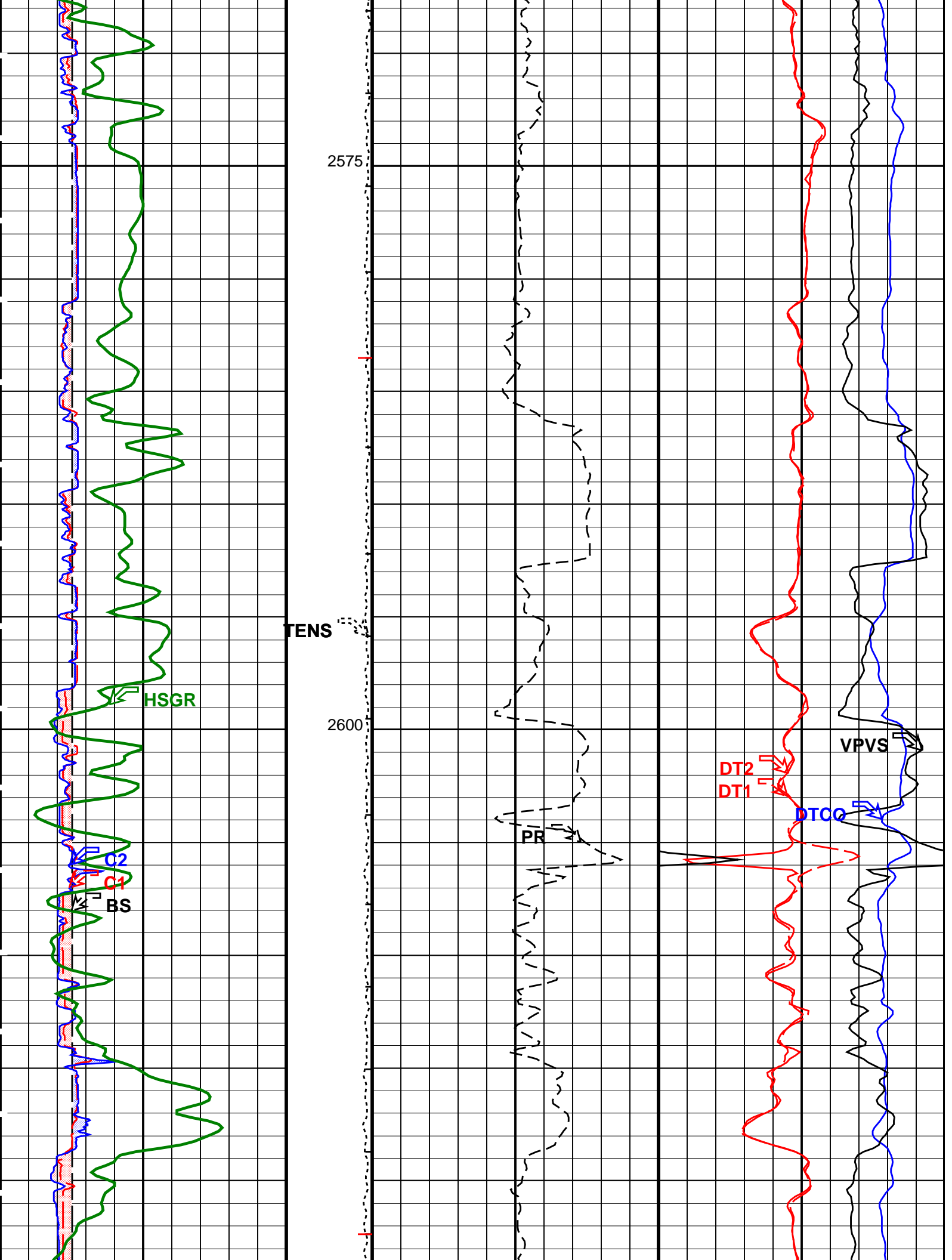
Delta-T Shear – Upper Dipole (DT2)		
440	(US/F)	40
Delta-T Shear – Lower Dipole (DT1)		
440	(US/F)	40
Delta-T Compressional (DTCO)		
440	(US/F)	40

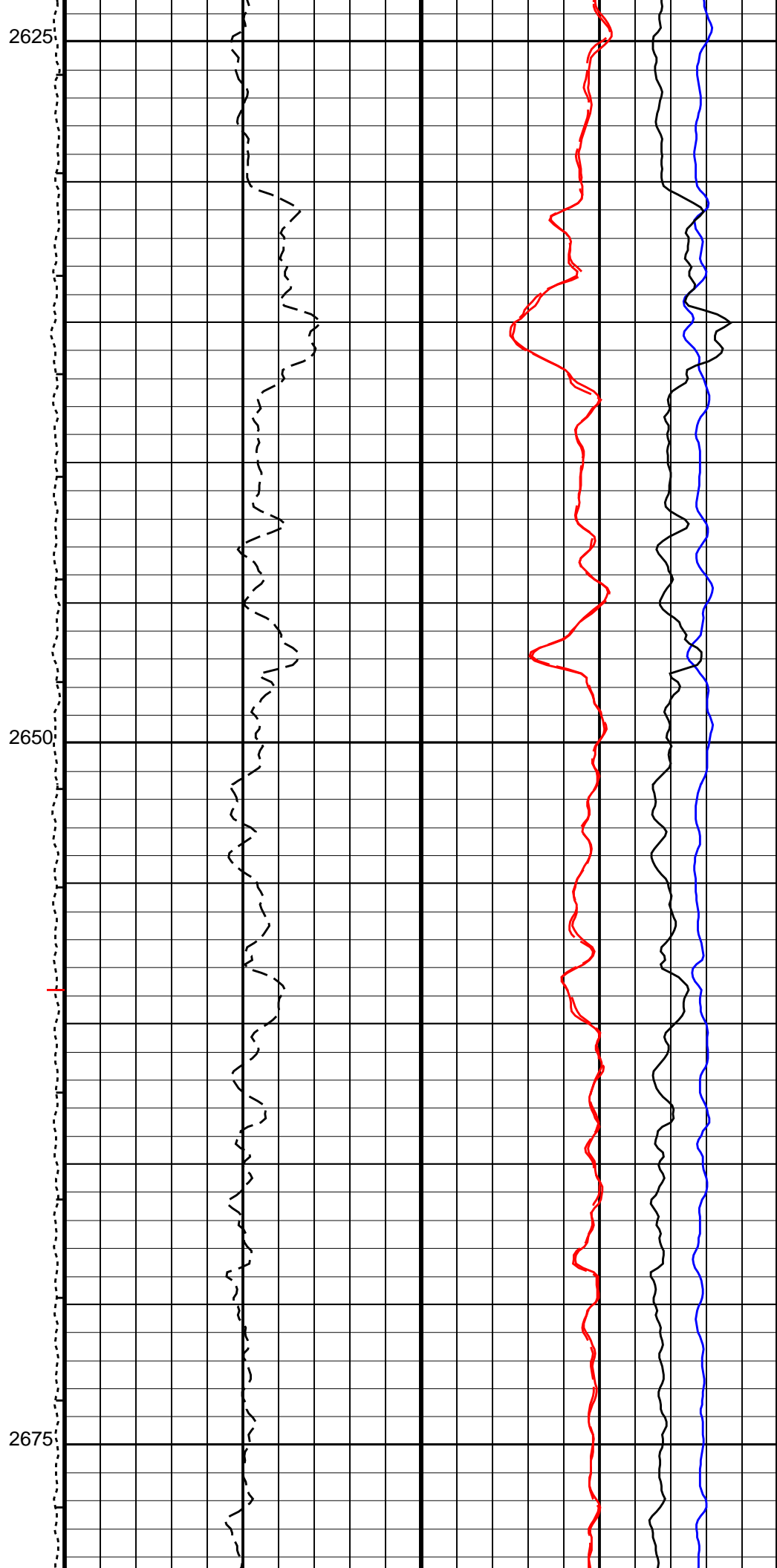
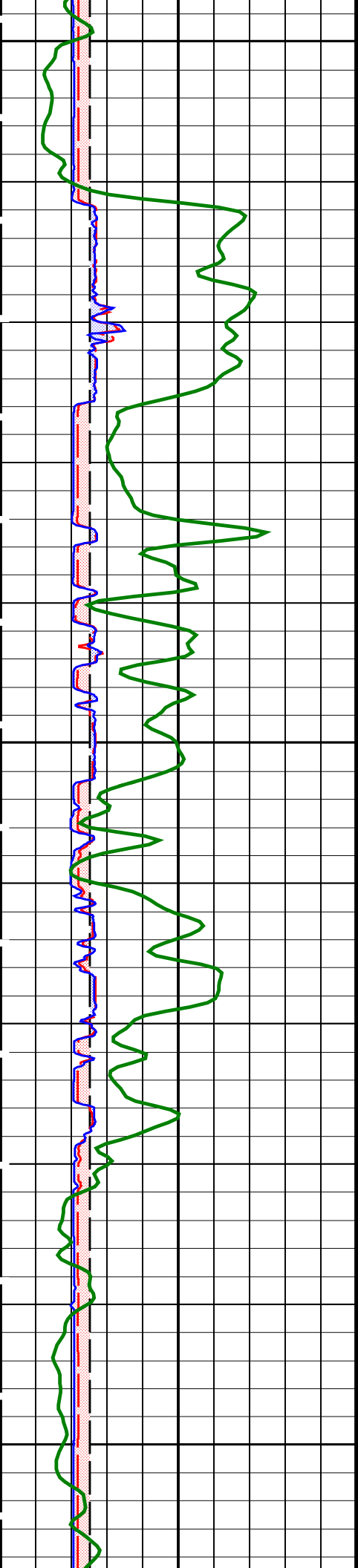
Poisson's Ratio (PR)		Sonic Vp / Vs Ratio (VPVS)	
0	(----	0.4	(----
0.5			2.4

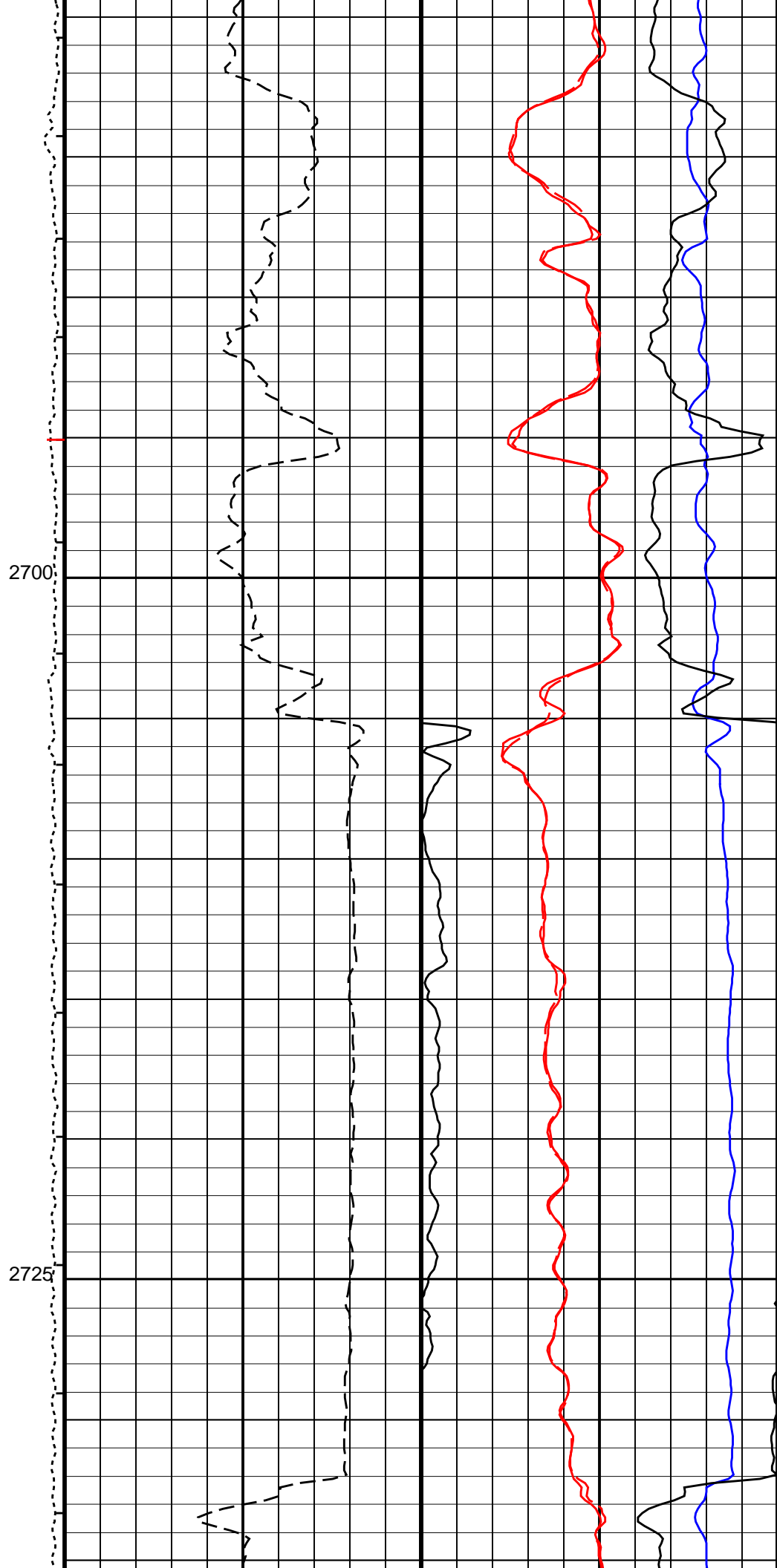
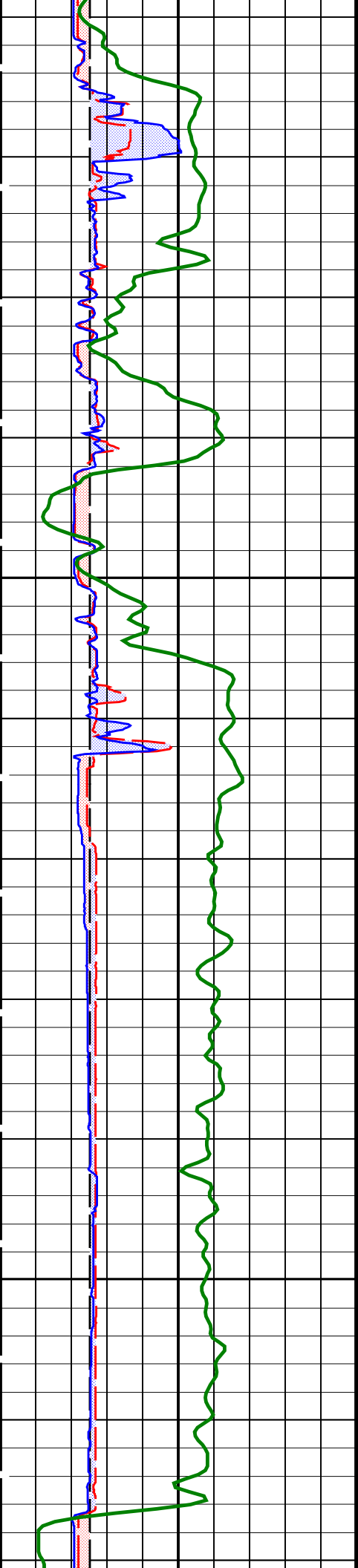


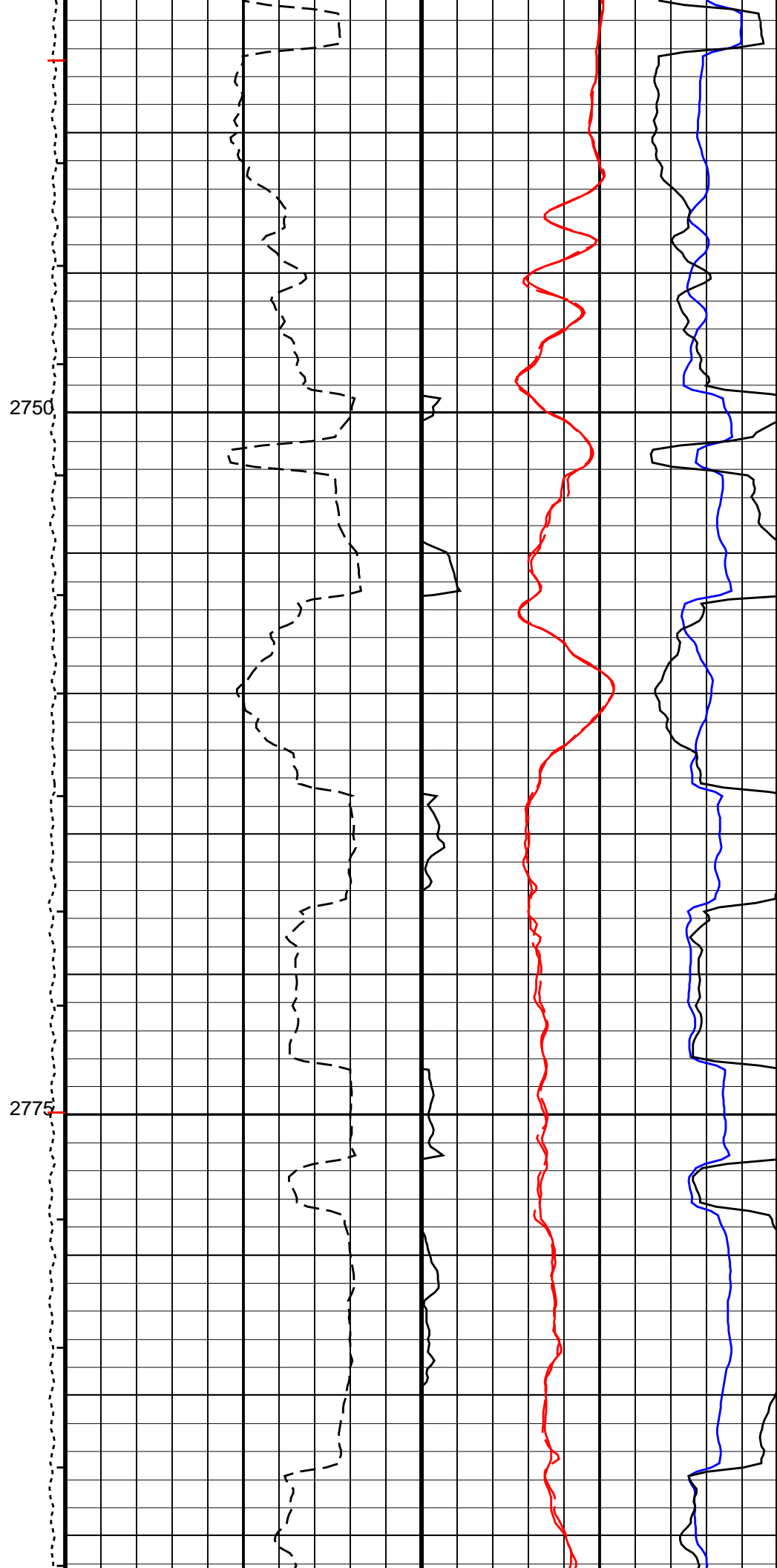
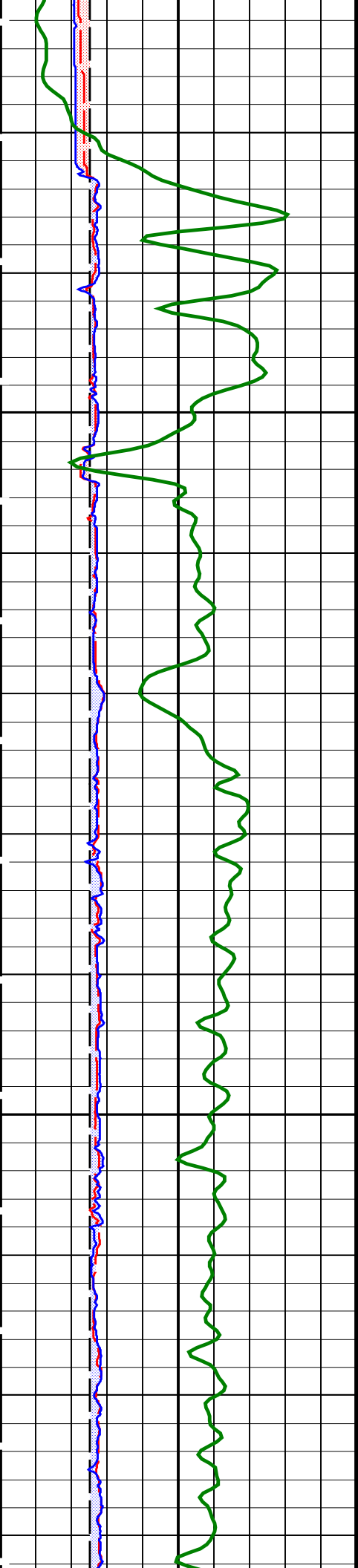


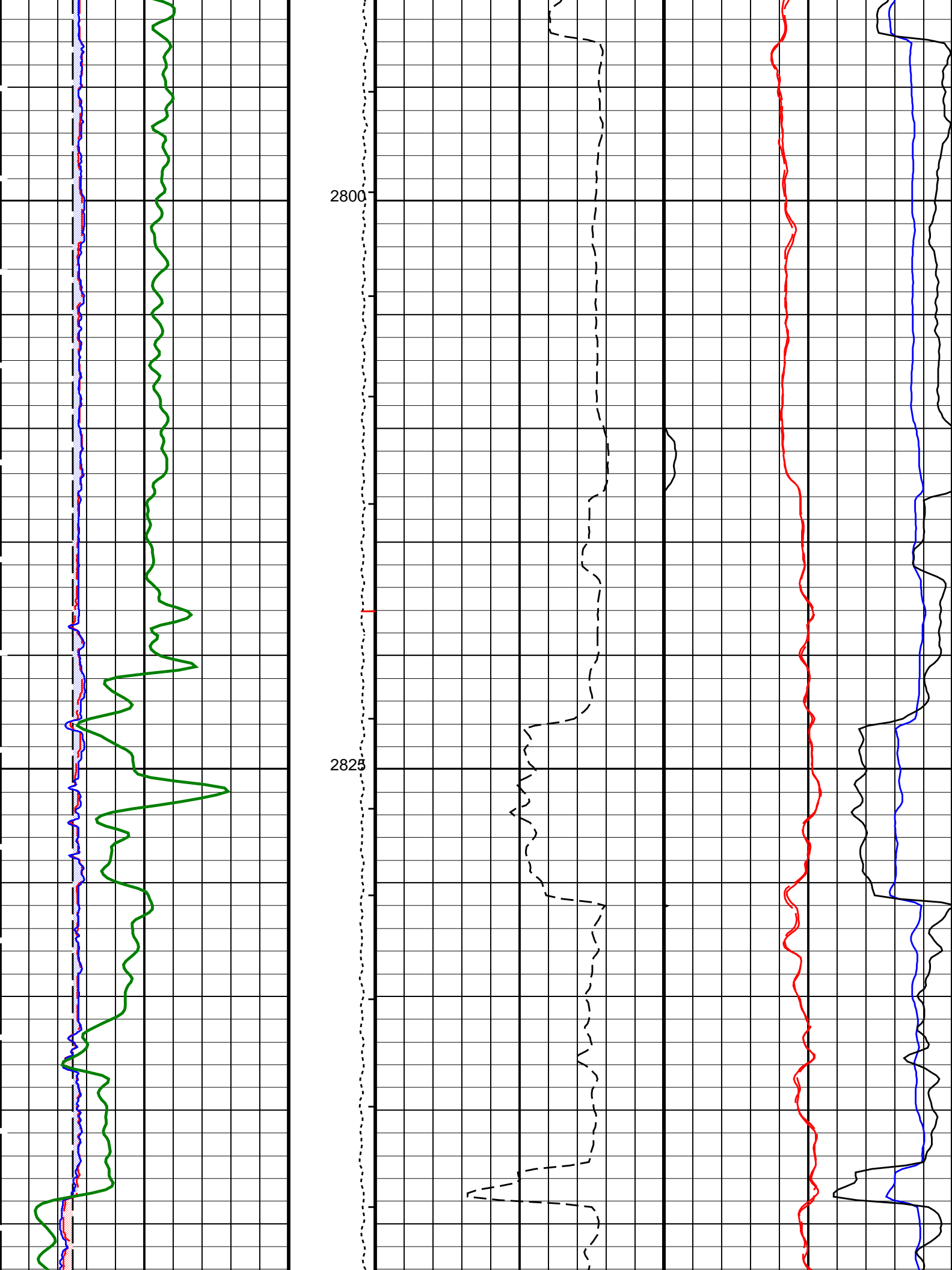


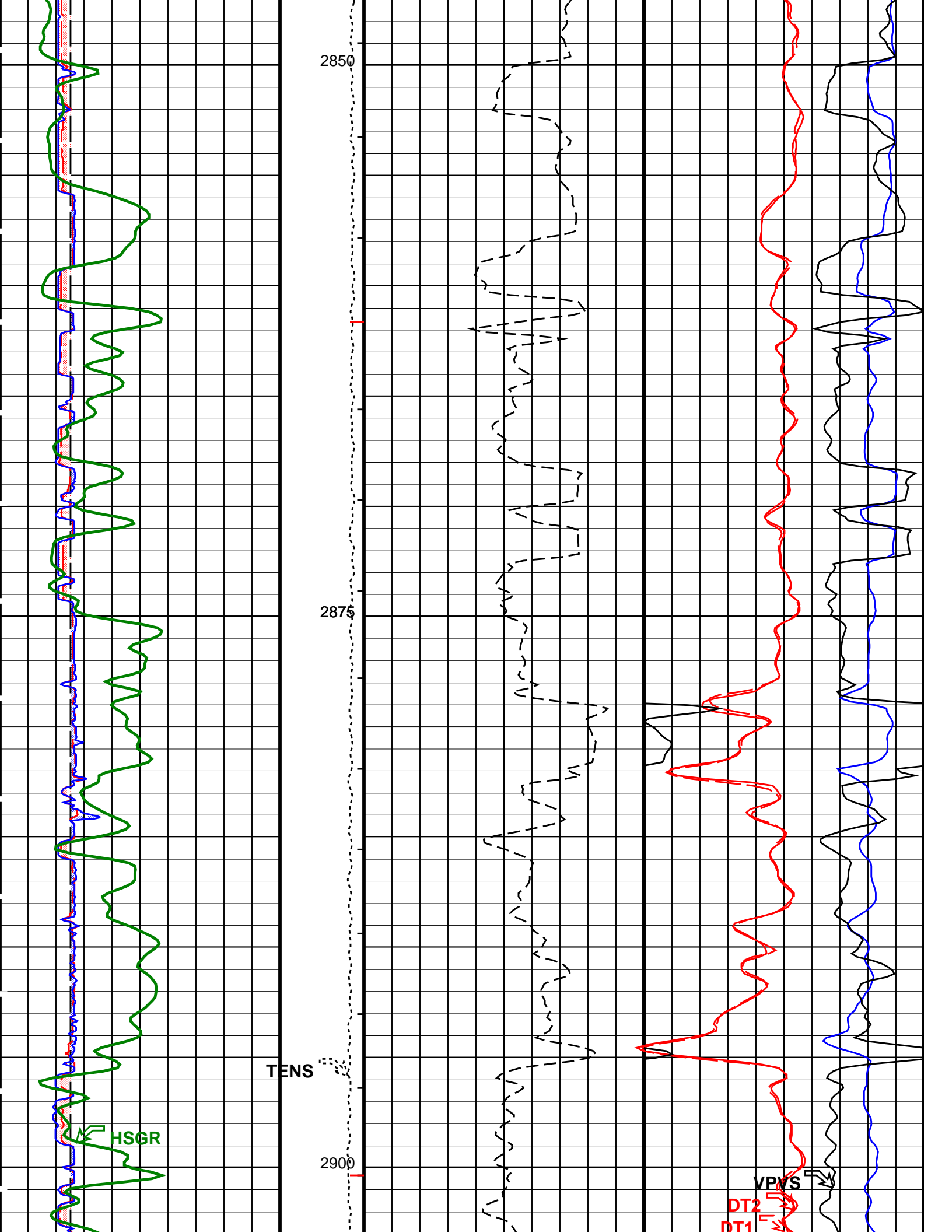


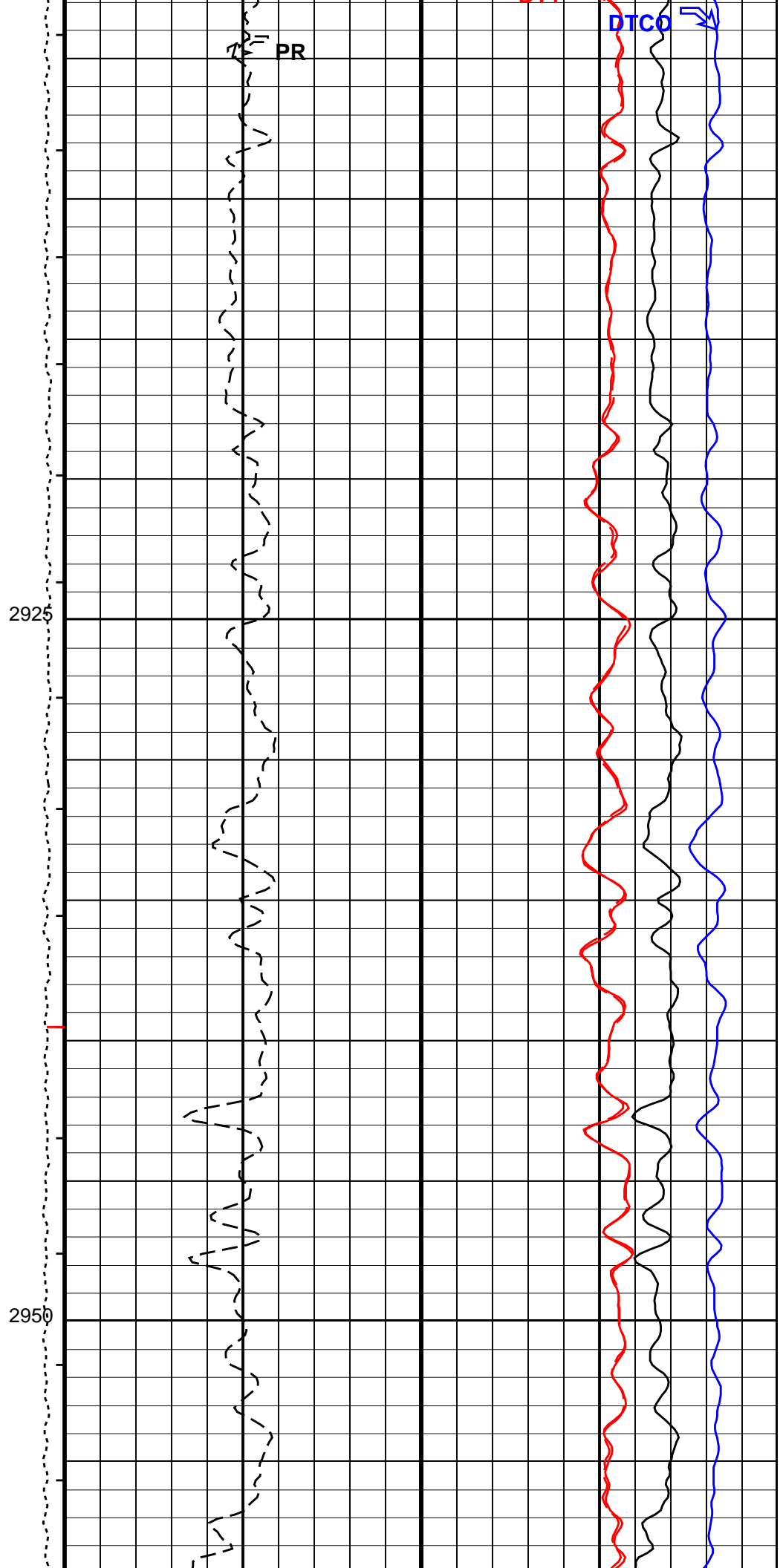
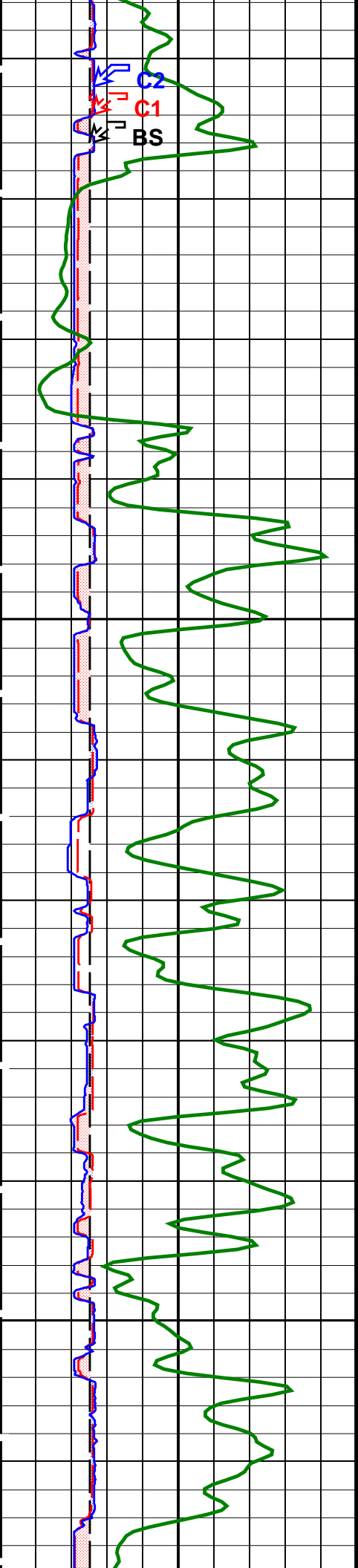


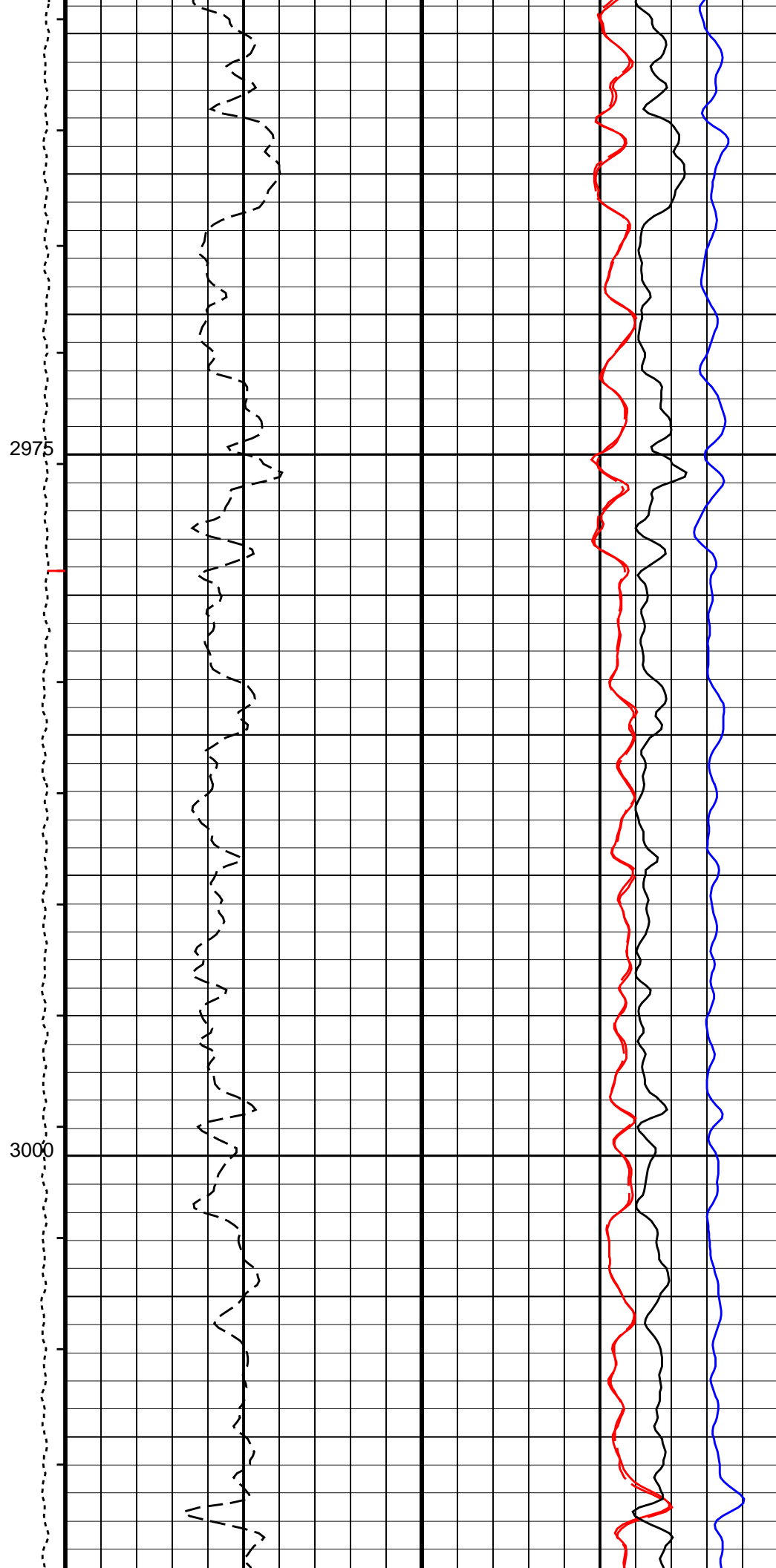
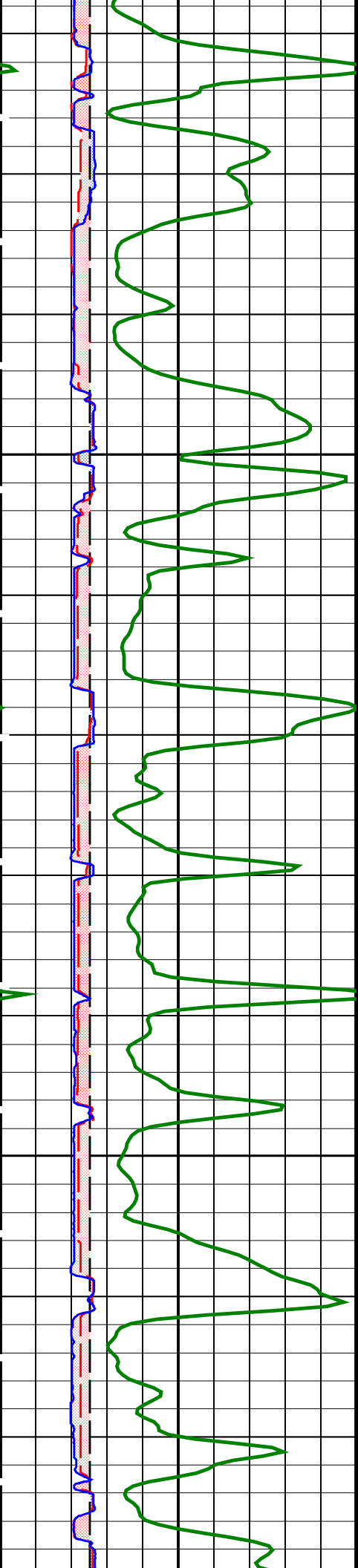


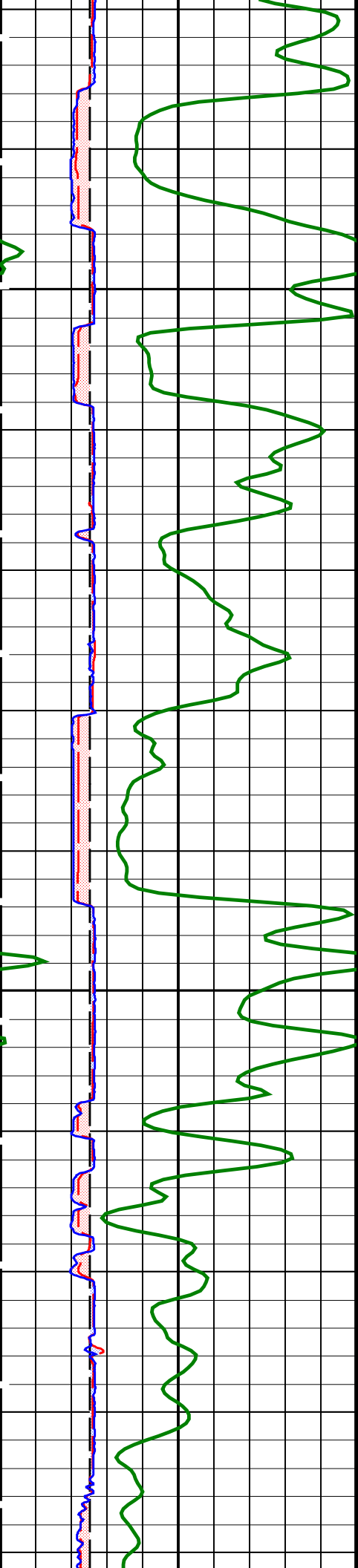






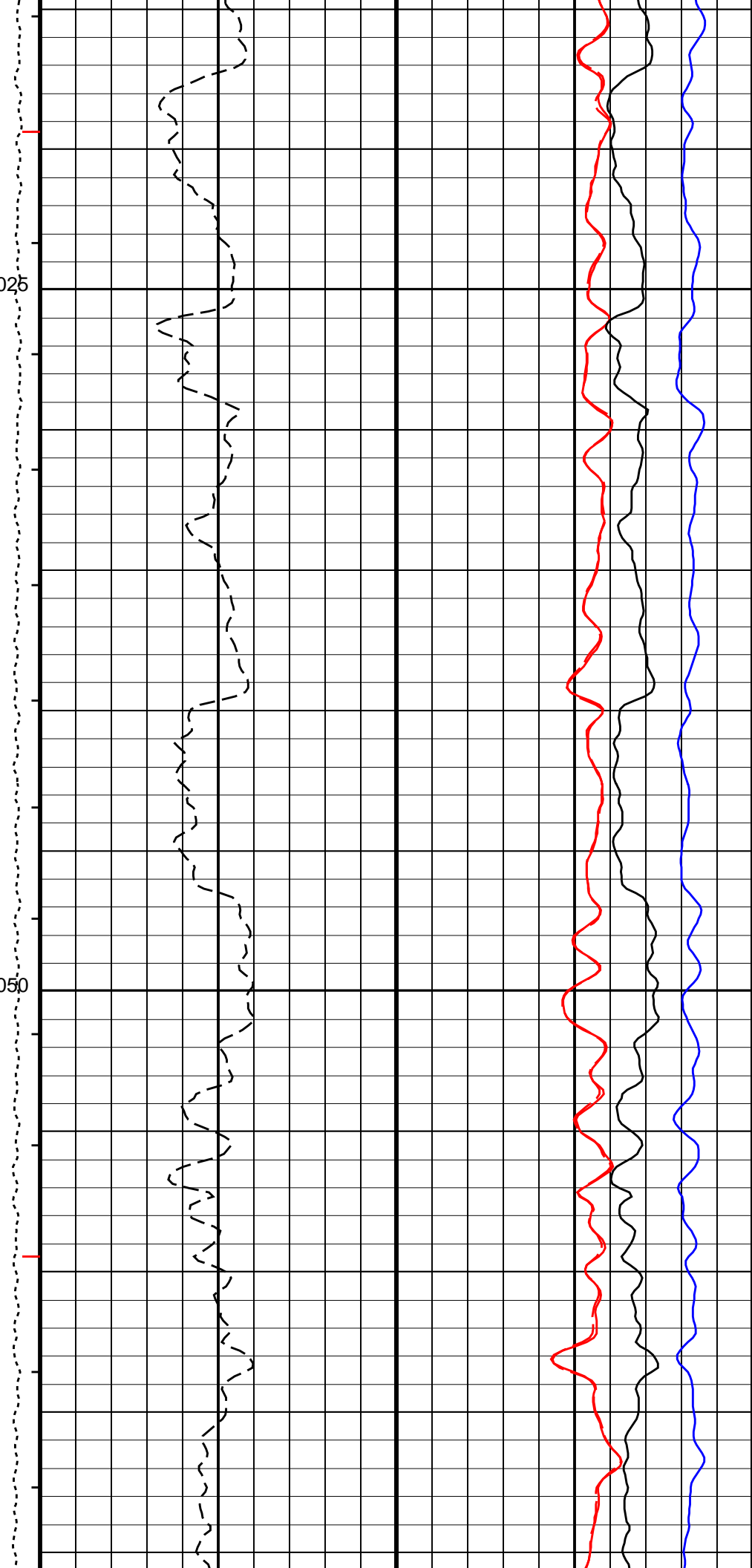


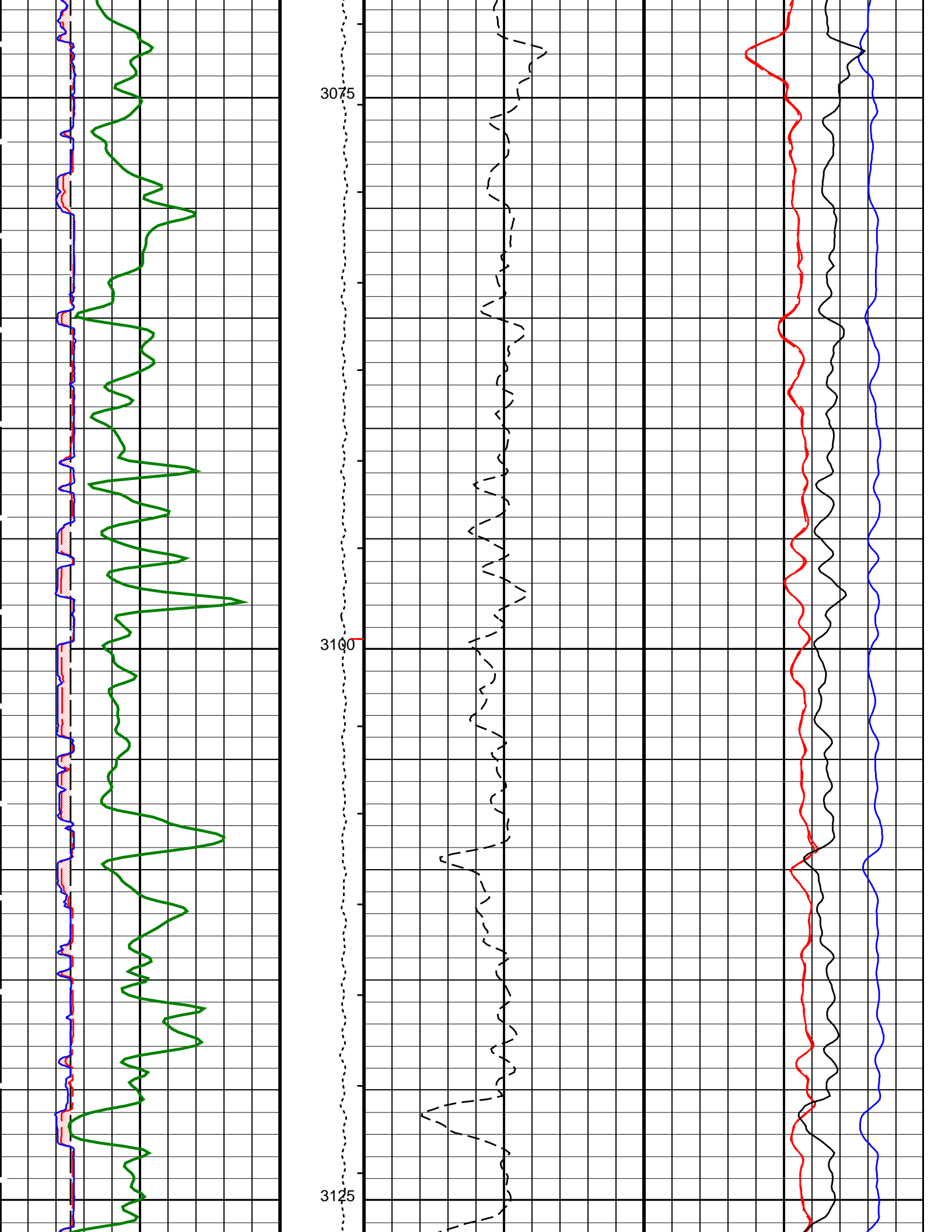


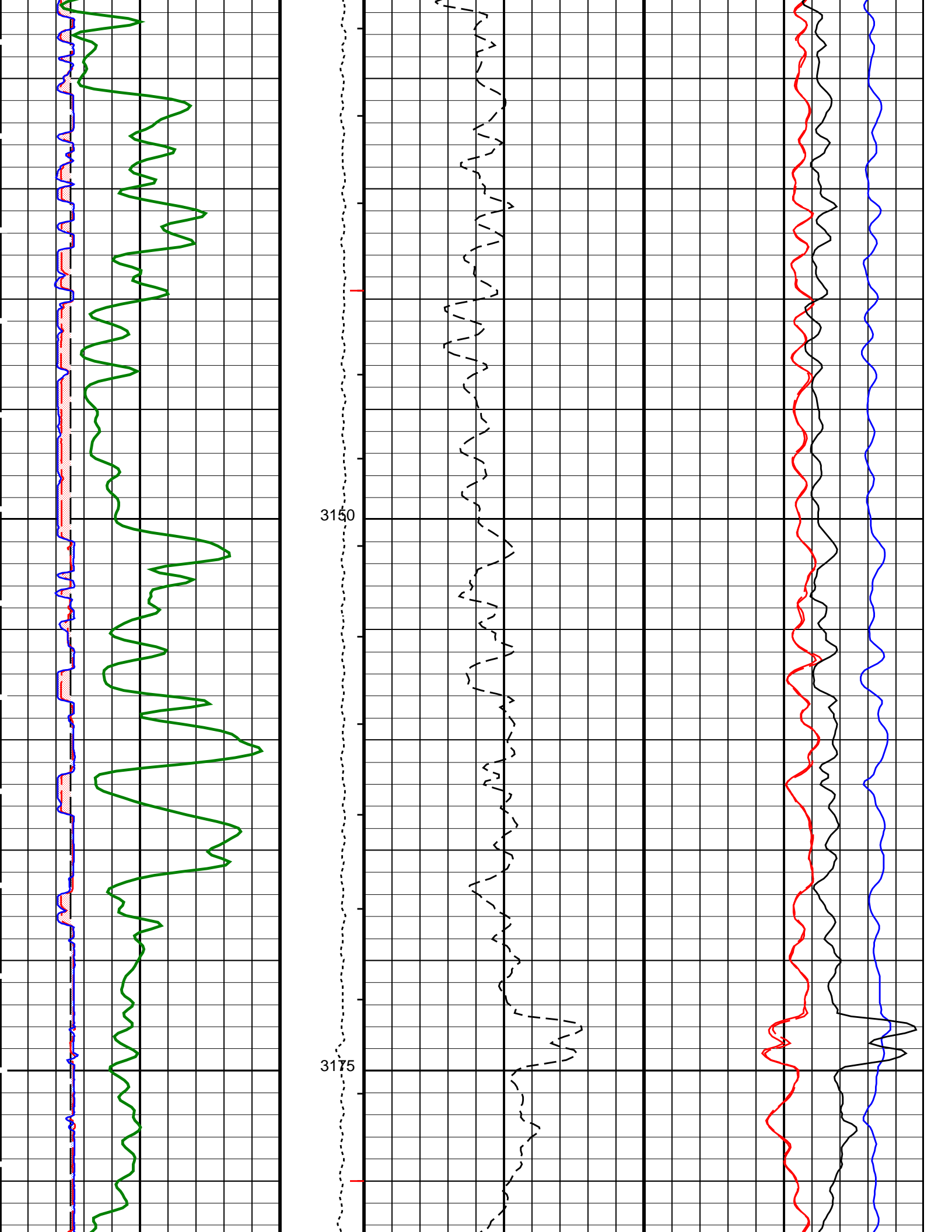


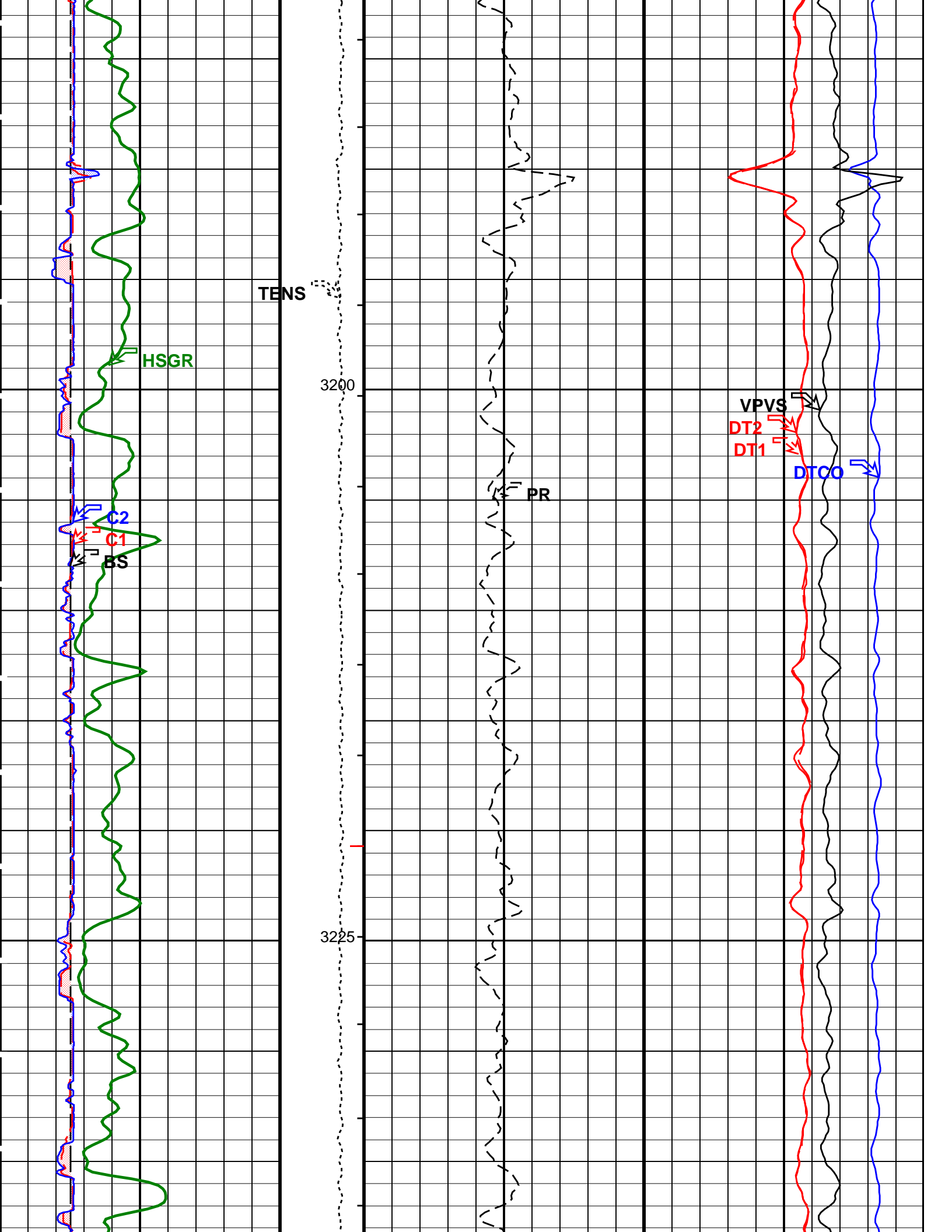
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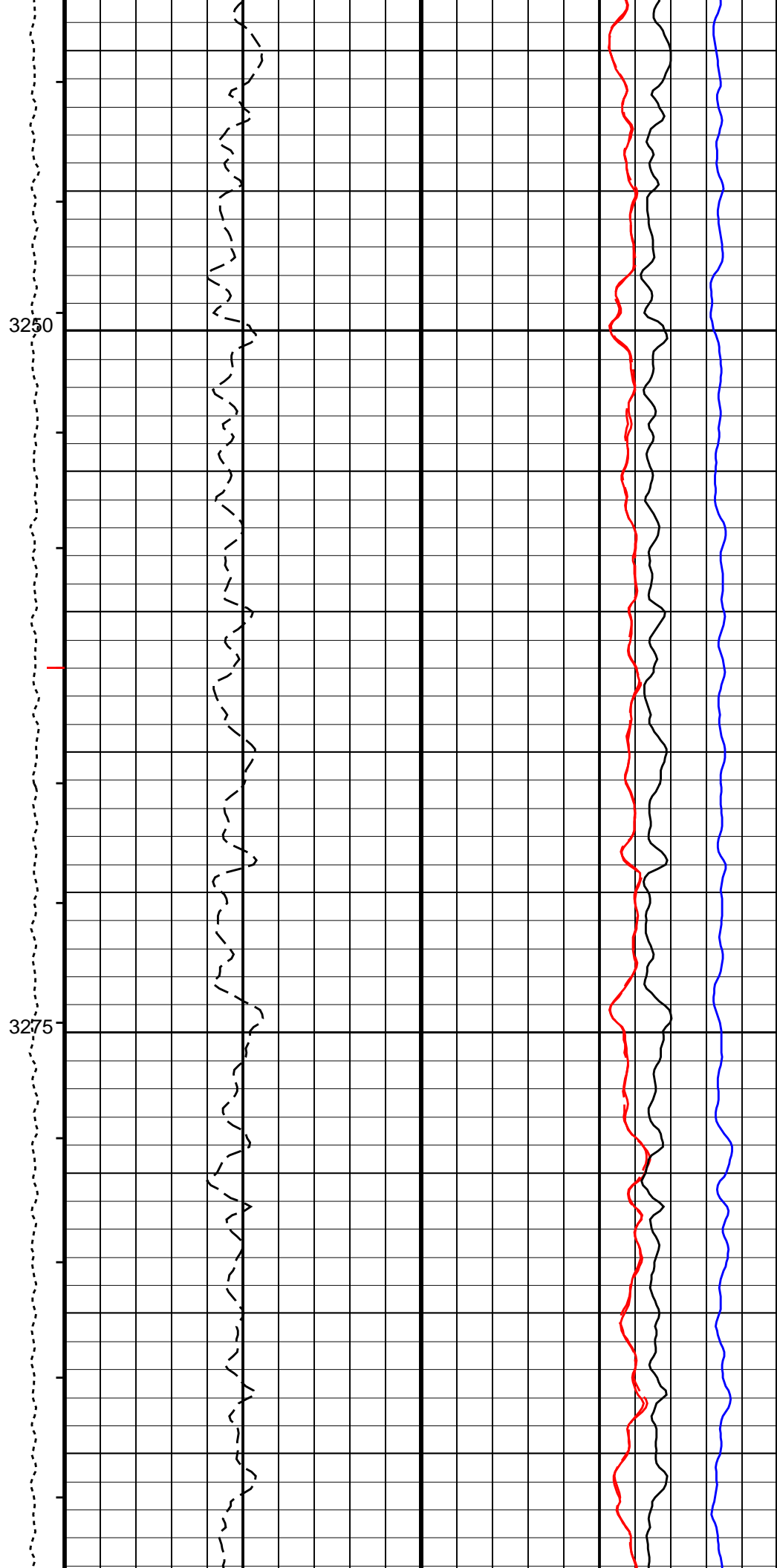
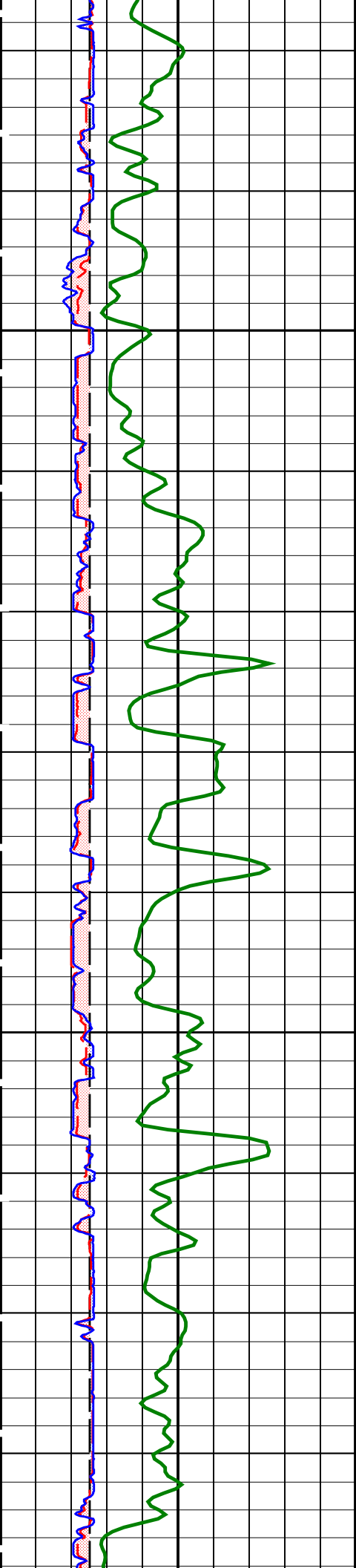
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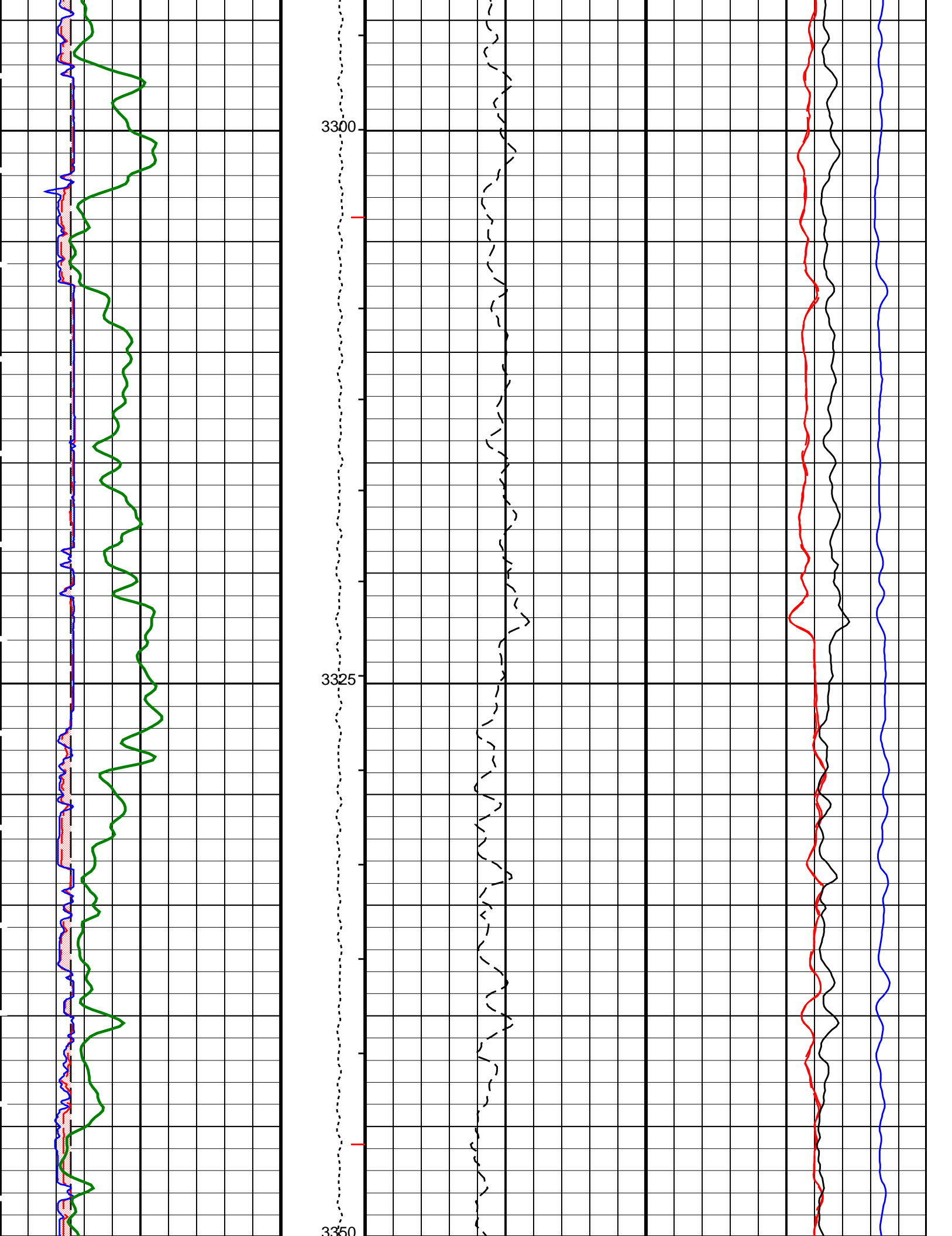


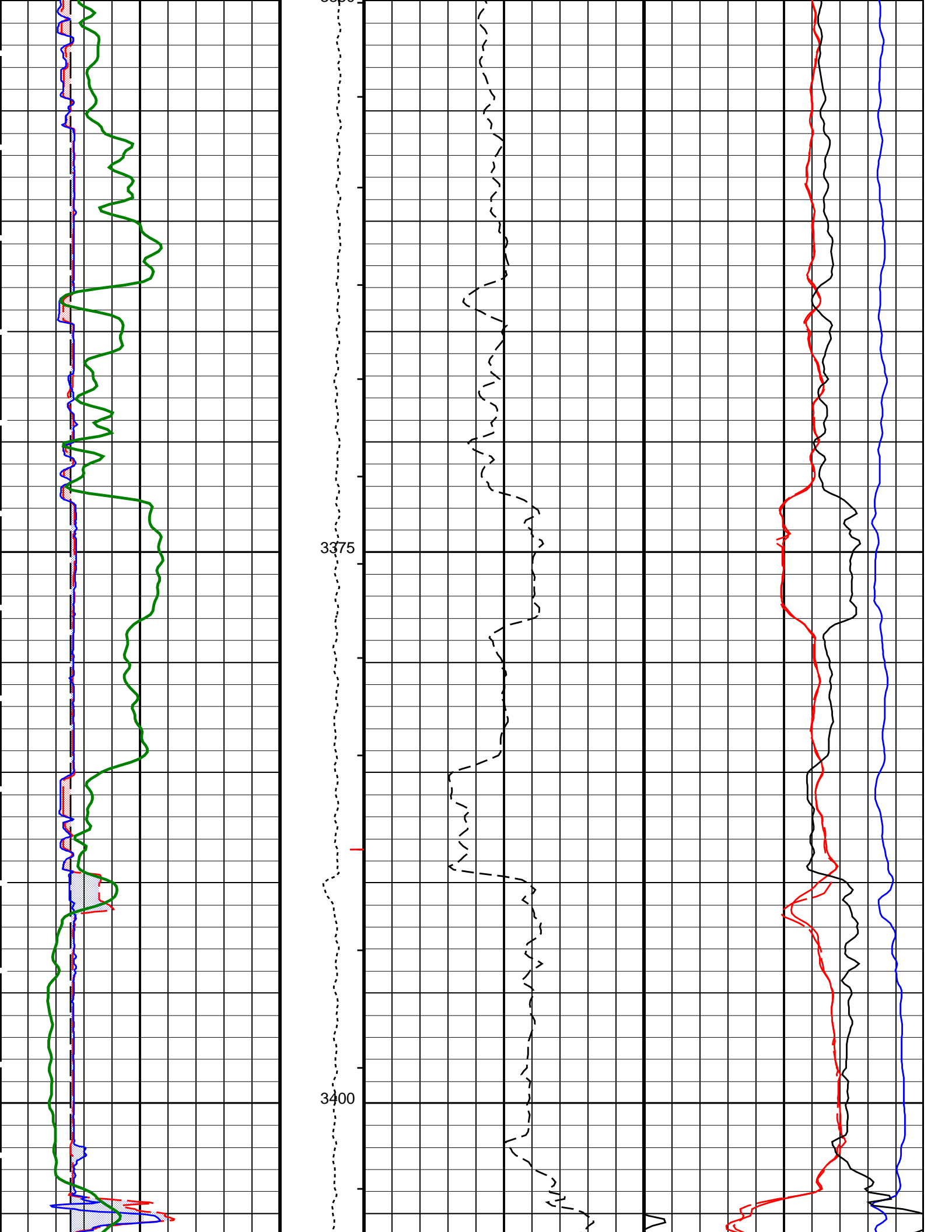


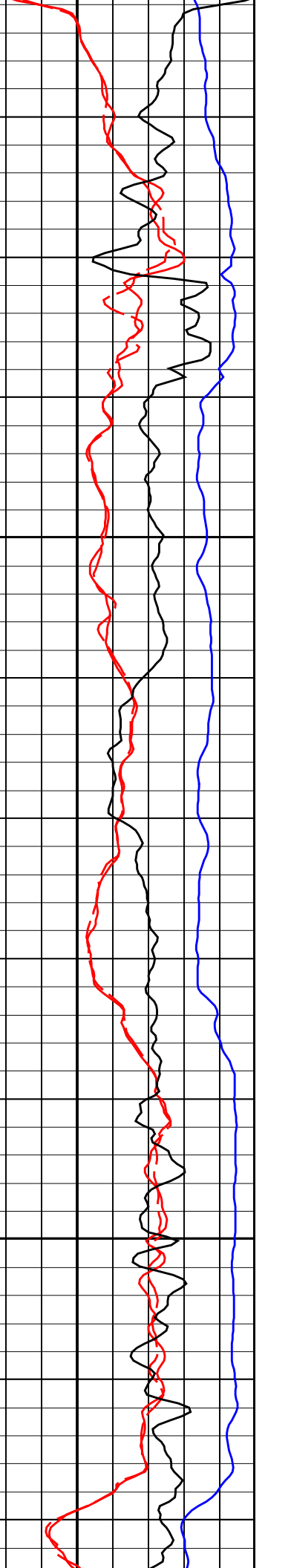
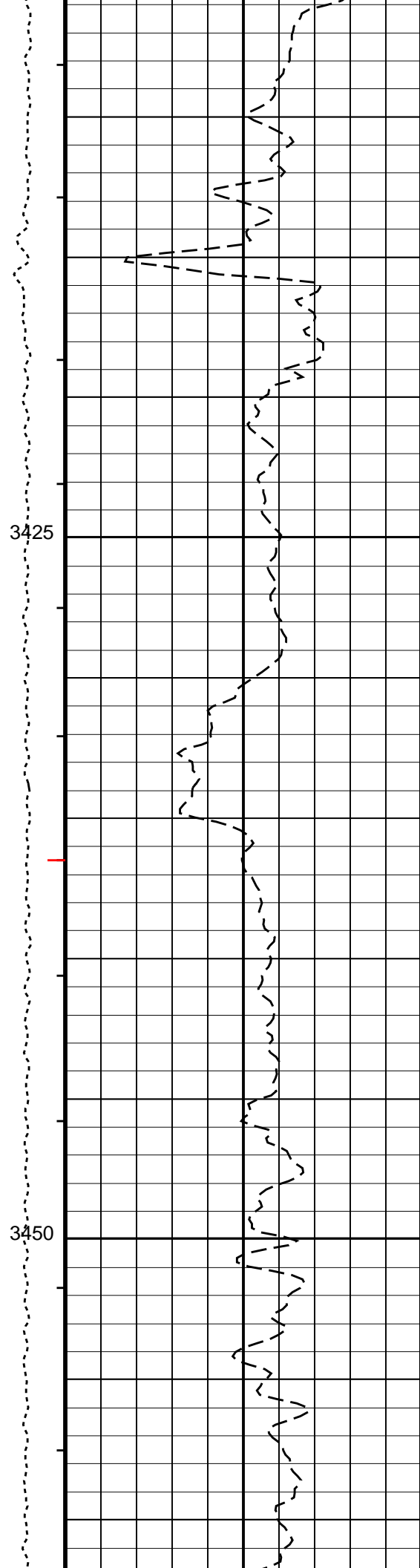
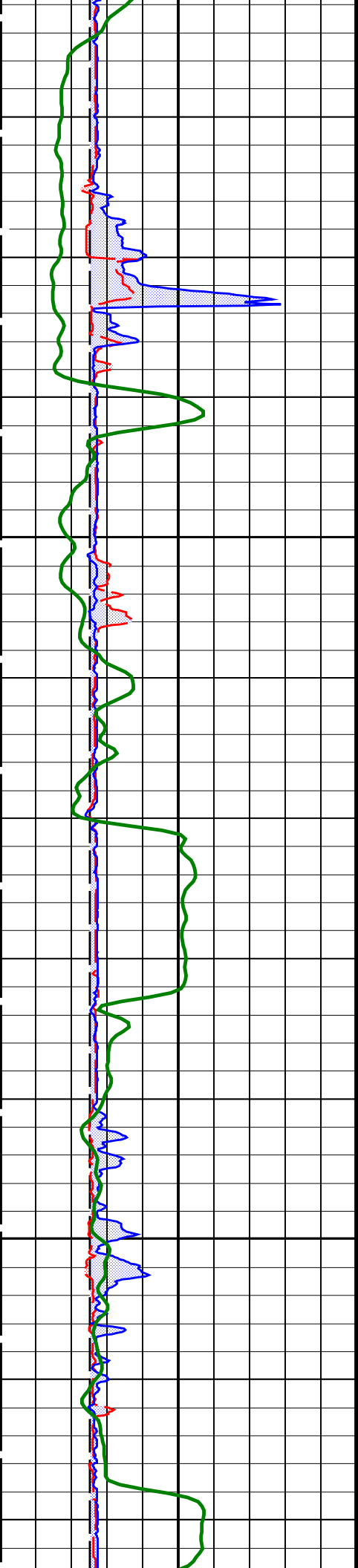


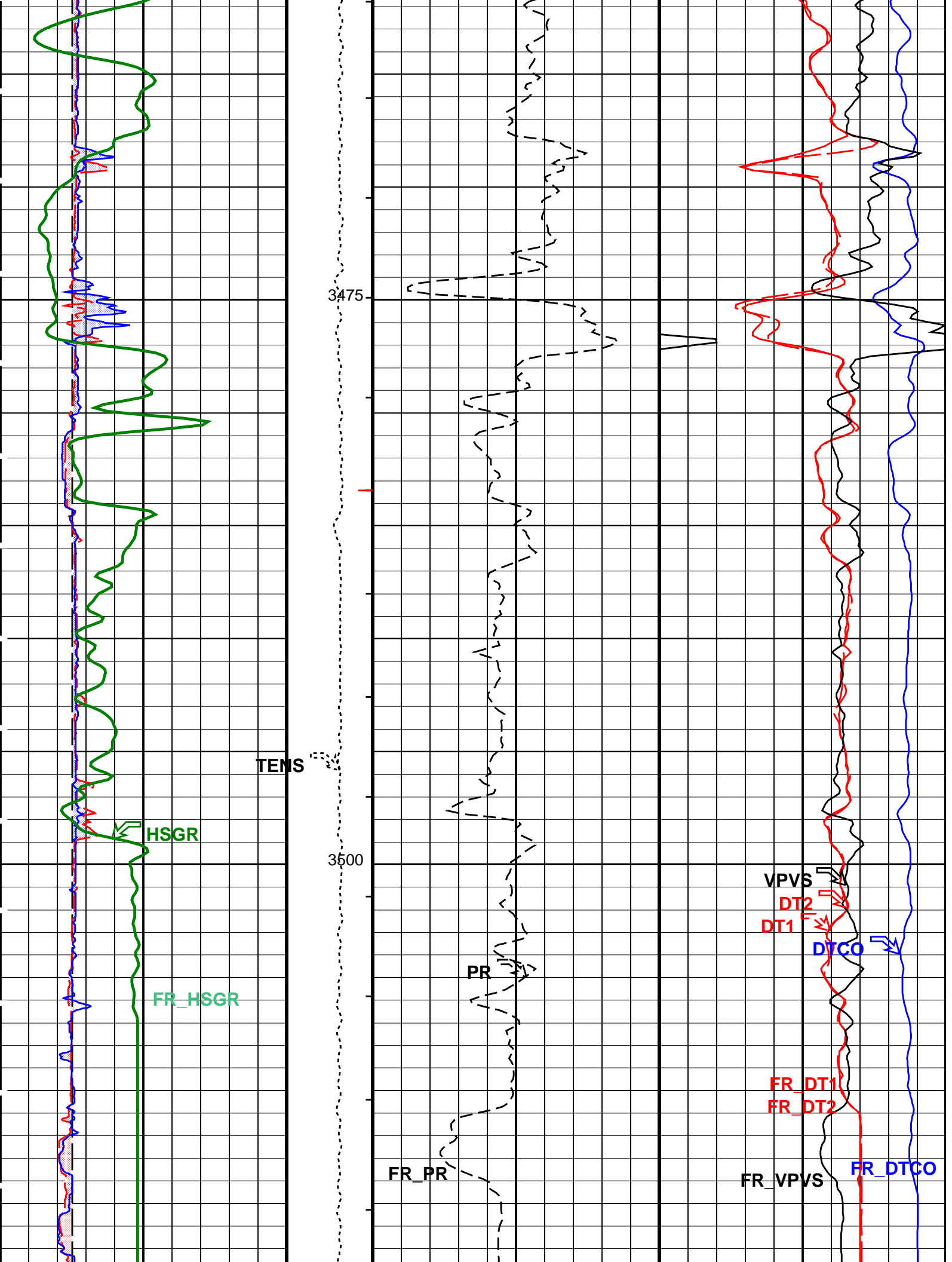


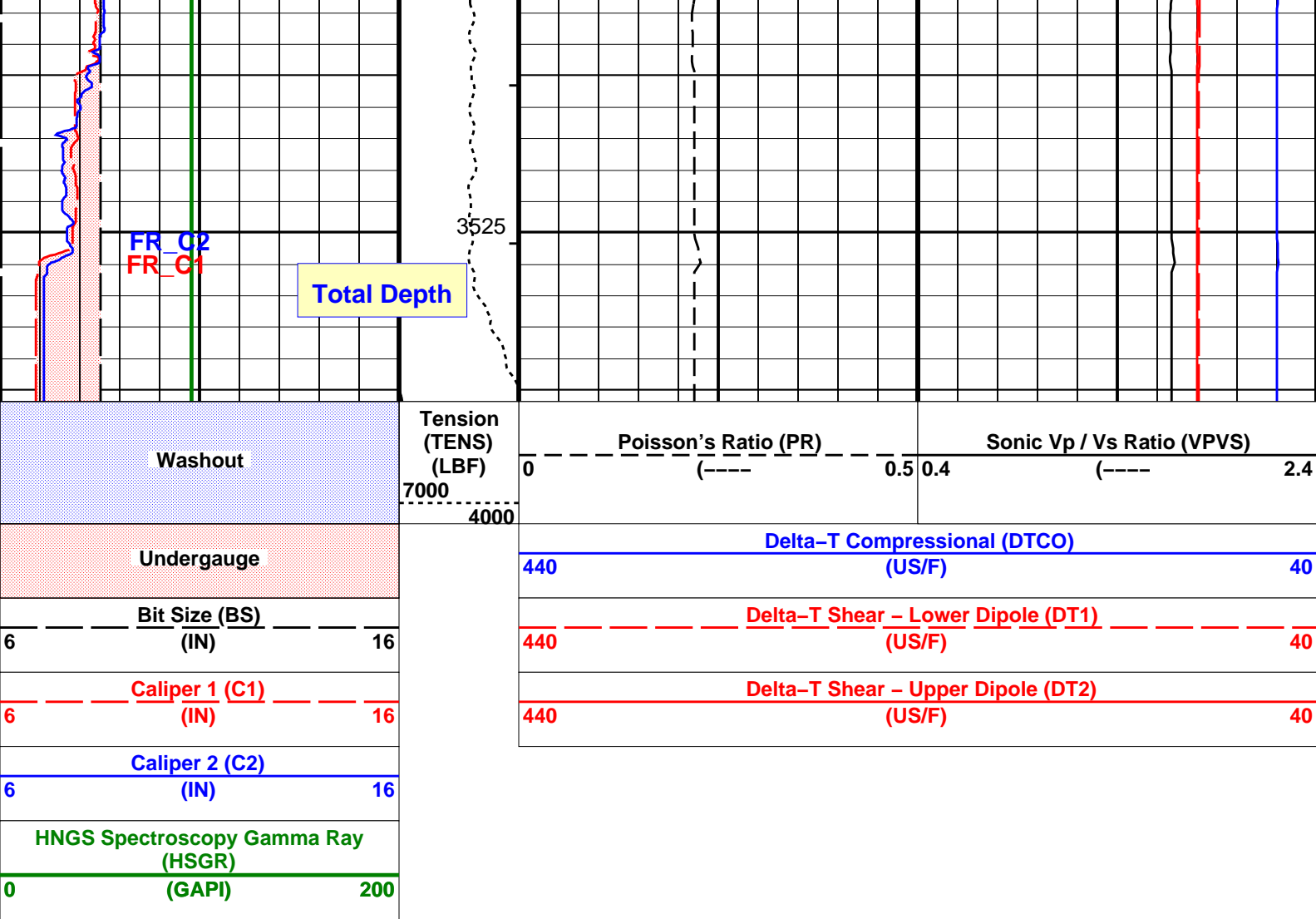












PIP SUMMARY

- └ Integrated Transit Time Minor Pip Every 1 MS
- └ Integrated Transit Time Major Pip Every 10 MS

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
FBST-B: Full-Bore Scanner - E		
ACPP	Accelerometer PROM Presence	PRESENT
AFMO	Accelerometer Filtering Mode	MOVING_AVERAGE
ART	Accelerometer Reference Temperature	20 DEGC
EGCO	FMI EMEX and GAIN Correction	NO
FBCD	Correct Dip Buttons Values by EMEX and Gain	OFF
FBEF	FMI EMEX filtering activation	OFF
FBMV	FMI EMEX maximum voltage calculation	OFF
FDBD	FMI Dead Buttons detection	AUTO
FDBP	FMI Dead Buttons Patching	OFF
FDFL	FMI DSP Filter Length	1
FIEQ	FMI Image Equalisation	ON
FIGA	FMI Image Gain	1
FIOF	FMI Image Offset	0
FLM	FMI Logging Mode	8PAD
FPESA	FMI Peak Signal Amplitude for Required Servo Level	ON
GLM	GPIT Logging Mode	DIPM
GMOD	Gain Mode	MANU
ICMO	Inclinometry Computation Mode	AUTOMATIC_SELECTION
MAPP	Magnetometer PROM Presence	PRESENT
MDEC	Magnetic Field Declination	12.4914 DEG
MRTE	Magneto Reference Temperature	31 DEGC
RBS	Resistivity Button Selection	AUTO
RBSI	Auto RBS Change Interval	10
SOFF	Standoff	-1 IN
TEMS	GPIT Temperature Sensor Used	BOTH
XGAI_FBST	Gain Value in Manual Mode	0_dB
XGMO	EMEX & Gain Modes	EmexManu_GainManu
XMOD	EMEX Voltage Regulation Mode	MANU

XVOL	EMEX Voltage	0	V
DSST-B: Dipole Shear Imager - B			
AGC1	Automatic Gain Control 1	ON	
AGC2	Automatic Gain Control 2	ON	
AGC3	Automatic Gain Control 3	ON	
AGC4	Automatic Gain Control 4	ON	
AGC5	Automatic Gain Control 5	ON	
AGCX	Automatic Gain Control X	ON	
BARS_MTR1	Length for Monopole Transmitter to Receiver 1	2.7432	M
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	100	DEGC
BILI	Bond Index Level for Zone Isolation	0.8	
CASF	Label Casing Function - Monopole P&S	50	
CDTS	C-Delta-T Shale	100	US/F
COLL	Label Slowness Lower Limit - Monopole P&S Compressional	40	US/F
COUL	Label Slowness Upper Limit - Monopole P&S Compressional	180	US/F
CSTR	Compressive Strength of Cement	0	KPAA
DDE1	Digitizing Delay 1	0	US
DDE2	Digitizing Delay 2	0	US
DDE3	Digitizing Delay 3	0	US
DDE4	Digitizing Delay 4	0	US
DDE5	Digitizing Delay 5	0	US
DDEX	Digitizing Delay X	0	US
DLCS	Label Compressional Source - Dipole Shear	USE	
DLHS	Label Hole Diameter Source for SOBS Channel	AUTO	
DSHL	Label Slowness Lower Limit - Dipole Shear	75	US/F
DSHU	Label Slowness Upper Limit - Dipole Shear	775	US/F
DSI1	Digitizer Sample Interval 1	40	US
DSI2	Digitizer Sample Interval 2	40	US
DSI3	Digitizer Sample Interval 3	40	US
DSI4	Digitizer Sample Interval 4	10	US
DSI5	Digitizer Sample Interval 5	10	US
DSIX	Digitizer Sample Interval X	40	US
DTCS	Compressional Delta-T Source for DTCO Channel	PS_COMP	
DTF	Delta-T Fluid	189	US/F
DTM	Delta-T Matrix	56	US/F
DTSS	Shear Delta-T Source for DTSM Channel	UPPER_DIPOLE	
DWC1	Digitizer Word Count 1	512	
DWC2	Digitizer Word Count 2	512	
DWC3	Digitizer Word Count 3	512	
DWC4	Digitizer Word Count 4	512	
DWC5	Digitizer Word Count 5	512	
DWCX	Digitizer Word Count X	480	
FCF	CBL Fluid Compensation Factor	1	
FDE1	Firing Delay 1	0	
FDE2	Firing Delay 2	0	
FDE3	Firing Delay 3	0	
FDE4	Firing Delay 4	0	
FDE5	Firing Delay 5	0	
FDEX	Firing Delay X	0	
FGM5	First Motion Gate Moveout 5	40	US/F
FGMX	First Motion Gate Moveout X	40	US/F
FILG	Label Fill Gap Control - Monopole P&S	COMP_SHEAR	
FMG5	First Motion Minimum Gate 5	500	US
FMGX	First Motion Minimum Gate X	500	US
FMLL	Slowness Lower Limit - FMD	40	US/F
FMRC	Restart Control - FMD	CONTINUE	
FMT5	First Motion Threshold 5	UP	
FMTX	First Motion Threshold X	NONE	
FMUL	Slowness Upper Limit - FMD	180	US/F
FNC5	First Motion Noise Counter Input 5	ALO	
FNCX	First Motion Noise Counter Input X	ALO	
FPM	Processing Mode - FMD	NONE	
FTD5	First Motion Threshold Direction 5	UP	
FTDX	First Motion Threshold Direction X	UP	
GAI1	Manual Gain 1	10	
GAI2	Manual Gain 2	10	
GAI3	Manual Gain 3	6	
GAI4	Manual Gain 4	16	
GAI5	Manual Gain 5	16	
GAIX	Manual Gain X	10	
GCSE	Generalized Caliper Selection	BS	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GDT1	Gain Delta-T 1	800	US/F
GDT2	Gain Delta-T 2	800	US/F
GDT3	Gain Delta-T 3	800	US/F
GDT4	Gain Delta-T 4	160	US/F
GDT5	Gain Delta-T 5	160	US/F
GDTX	Gain Delta-T X	800	US/F
GGRD	Geothermal Gradient	0.01	DF/F
GIN1	Gain Interval 1	15360	US
GIN2	Gain Interval 2	15360	US
GIN3	Gain Interval 3	15360	US
GIN4	Gain Interval 4	2560	US
GIN5	Gain Interval 5	1600	US

GINX	Gain Interval X	15360	US
GOBO	Good Bond	2	MV
GRSE	Generalized Mud Resistivity Selection	CHART_GEN 9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
HPF1	High Pass Filter 1	F80	
HPF2	High Pass Filter 2	F80	
HPF3	High Pass Filter 3	F80	
HPF4	High Pass Filter 4	F8K	
HPF5	High Pass Filter 5	F8K	
HPFX	High Pass Filter X	F80	
ITTS	Integrated Transit Time Source	DTCO	
LFC	Label Formation Character – Monopole P&S	DYNAMIC	
LPF1	Low Pass Filter 1	F5K	
LPF2	Low Pass Filter 2	F5K	
LPF3	Low Pass Filter 3	F5K	
LPF4	Low Pass Filter 4	F30K	
LPF5	Low Pass Filter 5	F30K	
LPFX	Low Pass Filter X	F5K	
LTXG	Lower Dipole Transmitter Geometry	156	IN
MAI5	Slowness Averaging Interval – FMD	42	IN
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
MCI	Minimum Cemented Interval for Isolation	4.51523	M
MCS	Mean Casing Slowness	57	US/F
MDS5	Multishot Delta–T Scatter – FMD	20	US
MSA	Minimum Sonic Amplitude	18.3087	MV
MTXG	Monopole Transmitter Geometry	186	IN
MUX1	Sum Difference Multiplexor Input 1	RR	
MUX2	Sum Difference Multiplexor Input 2	RR	
MUX3	Sum Difference Multiplexor Input 3	RR	
MUX4	Sum Difference Multiplexor Input 4	RR	
MUX5	Sum Difference Multiplexor Input 5	RR	
MUXX	Sum Difference Multiplexor Input X	RR	
NTI5	Number Threshold Items 5	0	
NTIX	Number Threshold Items X	0	
NWI1	Number Waveform Items 1	8	
NWI2	Number Waveform Items 2	8	
NWI3	Number Waveform Items 3	8	
NWI4	Number Waveform Items 4	8	
NWI5	Number Waveform Items 5	0	
NWIX	Number Waveform Items X	0	
NWS1	Number Waveforms Stacked 1	1	
NWS2	Number Waveforms Stacked 2	1	
NWS3	Number Waveforms Stacked 3	1	
NWS4	Number Waveforms Stacked 4	1	
NWS5	Number Waveforms Stacked 5	1	
NWSX	Number Waveforms Stacked X	1	
RATE	Firing Rate	R3	
RSMN	Label Shear/Compressional Minimum Ratio – Monopole P&S	1.4	
RSMX	Label Shear/Compressional Maximum Ratio – Monopole P&S	2.12	
RX1G	Receiver 1 Geometry	294	IN
RX2G	Receiver 2 Geometry	300	IN
RX3G	Receiver 3 Geometry	306	IN
RX4G	Receiver 4 Geometry	312	IN
RX5G	Receiver 5 Geometry	318	IN
RX6G	Receiver 6 Geometry	324	IN
RX7G	Receiver 7 Geometry	330	IN
RX8G	Receiver 8 Geometry	336	IN
SAM1	DSST Sonic Acquisition Mode 1 – Lower Dipole Mode	EVEN	
SAM2	DSST Sonic Acquisition Mode 2 – Upper Dipole Mode	ODD	
SAM3	DSST Sonic Acquisition Mode 3 – Low Frequency Monopole Mode for Stoneley	ODD	
SAM4	DSST Sonic Acquisition Mode 4 – High Frequency Monopole Mode for P&S	EVEN	
SAM5	DSST Sonic Acquisition Mode 5 – High Frequency Monopole Mode for FMD	OFF	
SAMX	DSST Sonic Acquisition Mode X – Both Dipoles or Monopole Mode for Expert	OFF	
SAS1	STC Sonic Array Status – Lower Dipole	255	
SAS2	STC Sonic Array Status – Upper Dipole	255	
SAS3	STC Sonic Array Status – Monopole Stoneley	255	
SAS4	STC Sonic Array Status – Monopole P&S	255	
SAS5	Sonic Array Status – FMD	255	
SBO1	STC Search Band Offset – Lower Dipole	3000	US
SBO2	STC Search Band Offset – Upper Dipole	3000	US
SBO3	STC Search Band Offset – Monopole Stoneley	2000	US
SBO4	STC Search Band Offset – Monopole P&S	500	US
SBR4	STC Baseline Removal – Monopole P&S	ON	
SBW1	STC Search Bandwidth – Lower Dipole	8000	US
SBW2	STC Search Bandwidth – Upper Dipole	8000	US
SBW3	STC Search Bandwidth – Monopole Stoneley	6000	US
SBW4	STC Search Bandwidth – Monopole P&S	2000	US
SFC1	STC Formation Character – Lower Dipole	SELECTABLE	
SFC2	STC Formation Character – Upper Dipole	SELECTABLE	
SFC3	STC Formation Character – Monopole Stoneley	SELECTABLE	
SFC4	STC Formation Character – Monopole P&S	SELECTABLE	

	STC Formation Character - Monopole P&S	SELECTABLE	
SFC4	STC Filter - Lower Dipole	B1-3K	
SFM1	STC Filter - Upper Dipole	B1-3K	
SFM2	STC Filter - Monopole Stoneley	B.5-1.5K	
SFM3	STC Filter - Monopole P&S	B3-20K	
SFM4	Label Slowness Lower Limit - Monopole P&S Shear	75	US/F
SHLL	Surface Hole Temperature	68	DEGF
SHT	Label Slowness Upper Limit - Monopole P&S Shear	180	US/F
SHUL	STC Slowness Lower Limit - Lower Dipole	40	US/F
SLL1	STC Slowness Lower Limit - Upper Dipole	40	US/F
SLL2	STC Slowness Lower Limit - Monopole Stoneley	180	US/F
SLL3	STC Slowness Lower Limit - Monopole P&S	40	US/F
SLL4	Sonic Porosity Formula	RAYMER_HUNT	
SPFS	Sonic Porosity Source	DTCO	
SPSO	STC Slowness Step - Lower Dipole	4	US/F
SST1	STC Slowness Step - Upper Dipole	4	US/F
SST2	STC Slowness Step - Monopole Stoneley	4	US/F
SST3	STC Slowness Step - Monopole P&S	2	US/F
SST4	STC Source Waveform - Lower Dipole	WF_SAM1	
SSW1	STC Source Waveform - Upper Dipole	WF_SAM2	
SSW2	STC Source Waveform - Monopole Stoneley	WF_SAM3	
SSW3	STC Source Waveform - Monopole P&S	WF_SAM4	
SSW4	Label Slowness Lower Limit - Monopole Stoneley	180	US/F
STLL	Label Slowness Upper Limit - Monopole Stoneley	780	US/F
STUL	STC Slowness Upper Limit - Lower Dipole	775	US/F
SUL1	STC Slowness Upper Limit - Upper Dipole	775	US/F
SUL2	STC Slowness Upper Limit - Monopole Stoneley	780	US/F
SUL3	STC Slowness Upper Limit - Monopole P&S	240	US/F
SUL4	STC Slowness Width - Lower Dipole	40	US/F
SWD1	STC Slowness Width - Upper Dipole	40	US/F
SWD2	STC Slowness Width - Monopole Stoneley	40	US/F
SWD3	STC Slowness Width - Monopole P&S	10	US/F
SWD4	Tool String Bottom to DSST Bottom	292.7	IN
TBDB	STC Time for Baseline Fill - Lower Dipole	0	US
TBFB	STC Time for Baseline Fill - Upper Dipole	0	US
TBF1	STC Time for Baseline Fill - Monopole Stoneley	0	US
TBF2	STC Time for Baseline Fill - Monopole P&S	300	US
TBF3	STC Time Lower Limit - Lower Dipole	600	US
TBF4	STC Time Lower Limit - Upper Dipole	600	US
TLL1	STC Time Lower Limit - Monopole Stoneley	620	US
TLL2	STC Time Lower Limit - Monopole P&S	150	US
TLL3	STC Time Step - Lower Dipole	200	US
TLL4	STC Time Step - Upper Dipole	200	US
TST1	STC Time Step - Monopole Stoneley	200	US
TST2	STC Time Step - Monopole P&S	50	US
TST3	Tool String Top to DSST Bottom	981.4	IN
TST4	STC Time Upper Limit - Lower Dipole	15912.5	US
TTDB	STC Time Upper Limit - Upper Dipole	15525	US
TUL1	STC Time Upper Limit - Monopole Stoneley	12020	US
TUL2	STC Time Upper Limit - Monopole P&S	3660	US
TUL3	Transmitter Waveform Amplitude 1	179	
TUL4	Transmitter Waveform Amplitude 2	179	
TWA1	Transmitter Waveform Amplitude 3	166	
TWA2	Transmitter Waveform Amplitude 4	150	
TWA3	Transmitter Waveform Amplitude 5	150	
TWA4	Transmitter Waveform Amplitude X	179	
TWA5	STC Time Width - Lower Dipole	2000	US
TWAX	STC Time Width - Upper Dipole	2000	US
TWD1	STC Time Width - Monopole Stoneley	2000	US
TWD2	STC Time Width - Monopole P&S	1000	US
TWD3	STC Integration Time Window - Lower Dipole	1600	US
TWD4	STC Integration Time Window - Upper Dipole	1600	US
TWI1	STC Integration Time Window - Monopole Stoneley	1600	US
TWI2	STC Integration Time Window - Monopole P&S	500	US
TWI3	Transmitter Waveform Sample Rate 1	5	US
TWI4	Transmitter Waveform Sample Rate 2	5	US
TWR1	Transmitter Waveform Sample Rate 3	5	US
TWR2	Transmitter Waveform Sample Rate 4	5	US
TWR3	Transmitter Waveform Sample Rate 5	5	US
TWR4	Transmitter Waveform Sample Rate X	5	US
TWR5	Transmitter Waveform Select 1	0	
TWRX	Transmitter Waveform Select 2	0	
TWS1	Transmitter Waveform Select 3	4	
TWS2	Transmitter Waveform Select 4	6	
TWS3	Transmitter Waveform Select 5	6	
TWS4	Transmitter Waveform Select X	0	
TWS5	Upper Dipole Transmitter Geometry	162	IN
TWSX	SAM1 Waveform Delta for Spectrum	0	US/F
UTXG	SAM2 Waveform Delta for Spectrum	0	US/F
WFDTSF1	SAM3 Waveform Delta for Spectrum	0	US/F
WFDTSF2	SAM4 Waveform Delta for Spectrum	0	US/F
WFDTSF3	SAMX Waveform Delta for Spectrum	0	US/F
WFDTSF4	SAM1 Waveform Lower Limit for Spectrum	0	US
WFDTSFX	SAM2 Waveform Lower Limit for Spectrum	0	US
WFLSP1	SAM3 Waveform Lower Limit for Spectrum	0	US
WFLSP2			
WFLSP3			

WFLLSP4	SAM4 Waveform Lower Limit for Spectrum	0	US
WFLSPX	SAMX Waveform Lower Limit for Spectrum	0	US
WFM1	Waveform Mode 1	W1	
WFM2	Waveform Mode 2	W1	
WFM3	Waveform Mode 3	W1	
WFM4	Waveform Mode 4	W1	
WFM5	Waveform Mode 5	W1	
WFMX	Waveform Mode X	W1	
WFULSP1	SAM1 Waveform Upper Limit for Spectrum	20000	US
WFULSP2	SAM2 Waveform Upper Limit for Spectrum	20000	US
WFULSP3	SAM3 Waveform Upper Limit for Spectrum	20000	US
WFULSP4	SAM4 Waveform Upper Limit for Spectrum	5000	US
WFULSPX	SAMX Waveform Upper Limit for Spectrum	20000	US
XMT1	Transmitter Select 1	DLO	
XMT2	Transmitter Select 2	DUP	
XMT3	Transmitter Select 3	MONO	
XMT4	Transmitter Select 4	MONO	
XMT5	Transmitter Select 5	MONO	
XMTX	Transmitter Select X	NONE	
HNGBS--BA: Hostile Natural Gamma Ray Sonde			
BAR1	HNGBS Detector 1 Barite Constant	1	
BAR2	HNGBS Detector 2 Barite Constant	1	
BHK	HNGBS Borehole Potassium Correction Concentration	0	
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	100	DEGC
CSD1	Inner Casing Outer Diameter	9.625	IN
CSD2	Outer Casing Outer Diameter	13.375	IN
CSW1	Inner Casing Weight	43.5	LB/F
CSW2	Outer Casing Weight	54.5	LB/F
DBCC	HNGBS Barite Constant Correction Flag	NONE	
GCSE	Generalized Caliper Selection	BS	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.01	DF/F
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
H1P	HNGBS Detector 1 Allow/Disallow In Processing	ALLOW	
H2P	HNGBS Detector 2 Allow/Disallow In Processing	ALLOW	
HABK	HNGBS Borehole Potassium Running Average	-0.00391936	
HALF	HNGBS Alpha Filter Length	60	IN
HCRB	HNGBS Apply Borehole Potassium Correction	NONE	
HMWM	Mud Weighting Material	NATU	
HNPE	HNGBS Processing Enable	YES	
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
S1BI	HNGBS Detector 1 Calibration Bismuth Count Rate	1.3	CPS
S2BI	HNGBS Detector 2 Calibration Bismuth Count Rate	1.3	CPS
SGRC	HNGBS Standard Gamma-Ray Correction Flag	YES	
SHT	Surface Hole Temperature	68	DEGF
TPOS	Tool Position	ECCE	
VBA1	HNGBS Detector 1 Variable Barite Factor Running Average	0.998909	
VBA2	HNGBS Detector 2 Variable Barite Factor Running Average	1.00683	
DIP: Dip Computation			
	DIP Tool	FBST	
CSBL	CSB DIP Number of Levels	2L	
DPAD	Disabled Pad	NONE	
ELRA	Electrical Radius	0.5	IN
INT	Correlation Interval	1.2192	M
SANG	Correlation Search Angle	35	DEG
SBUT	DIP Set of Buttons	MSD	
SDFA	Side-by-Side Distance Factor	0.9	IN
SPAN	DIP Spanning	1/4	
STDA	Structural DIP Azimuth	0	DEG
STDI	Structural DIP Angle	0	DEG
STEP	Correlation Step	0.6096	M
HOLEV: Integrated Hole/Cement Volume			
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	100	DEGC
FCD	Future Casing (Outer) Diameter	6.625	IN
GCSE	Generalized Caliper Selection	BS	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.01	DF/F
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
HVCS	Integrated Hole Volume Caliper Selection	C1/C2	
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
SHT	Surface Hole Temperature	68	DEGF
STI: Stuck Tool Indicator			
LBFR	Trigger for MAXIS First Reading Label	TDL	
STKT	STI Stuck Threshold	0.762	M
TDD	Total Depth - Driller	3545.10	M
TDL	Total Depth - Logger	3527.00	M
System and Miscellaneous			
ALTDPCCHAN	Name of alternate depth channel	SpeedCorrectedDepth	
BS	Bit Size	8.500	IN
BSAL	Borehole Salinity	26300.00	PPM
CSIZ	Current Casing Size	9.625	IN

CWEI	Current Casing Size	33.25	IN
DFD	Casing Weight	43.50	LB/F
DO	Drilling Fluid Density	9.40	LB/G
MST	Depth Offset for Playback	0.8	M
PBVSADP	Mud Sample Temperature	24.60	DEGC
PP	Use alternate depth channel for playback	NO	
RMFS	Playback Processing	RECOMPUTE	
RW	Resistivity of Mud Filtrate Sample	0.1738	OHMM
TD	Resistivity of Connate Water	1.0000	OHMM
TWS	Total Depth	3527	M
	Temperature of Connate Water Sample	37.78	DEGC


Format: DSI_BCR_200

Vertical Scale: 1:200

Graphics File Created: 04-Dec-2004 17:03

OP System Version: 12C0-301			
MCM			
FBST-B	12C0-301	DSST-B	12C0-301
HNGC-A	12C0-301	HNGS-BA	12C0-301
DTA-A	12C0-301	DTC-H	12C0-301
DTPC-A	12C0-301		

Input DLIS Files						
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Output DLIS Files						
DEFAULT	FMI_DSI_NGS_042PUP	FN:41	PRODUCER	04-Dec-2004 17:03		



DSI Image

(1:200)

MAXIS Field Log

Company: Origin Energy Resources Ltd.

Well: Trefoil-1

Input DLIS Files						
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Output DLIS Files						
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OP System Version: 12C0-301			
MCM			
FBST-B	12C0-301	DSST-B	12C0-301
HNGC-A	12C0-301	HNGS-BA	12C0-301
DTA-A	12C0-301	DTC-H	12C0-301
DTPC-A	12C0-301		

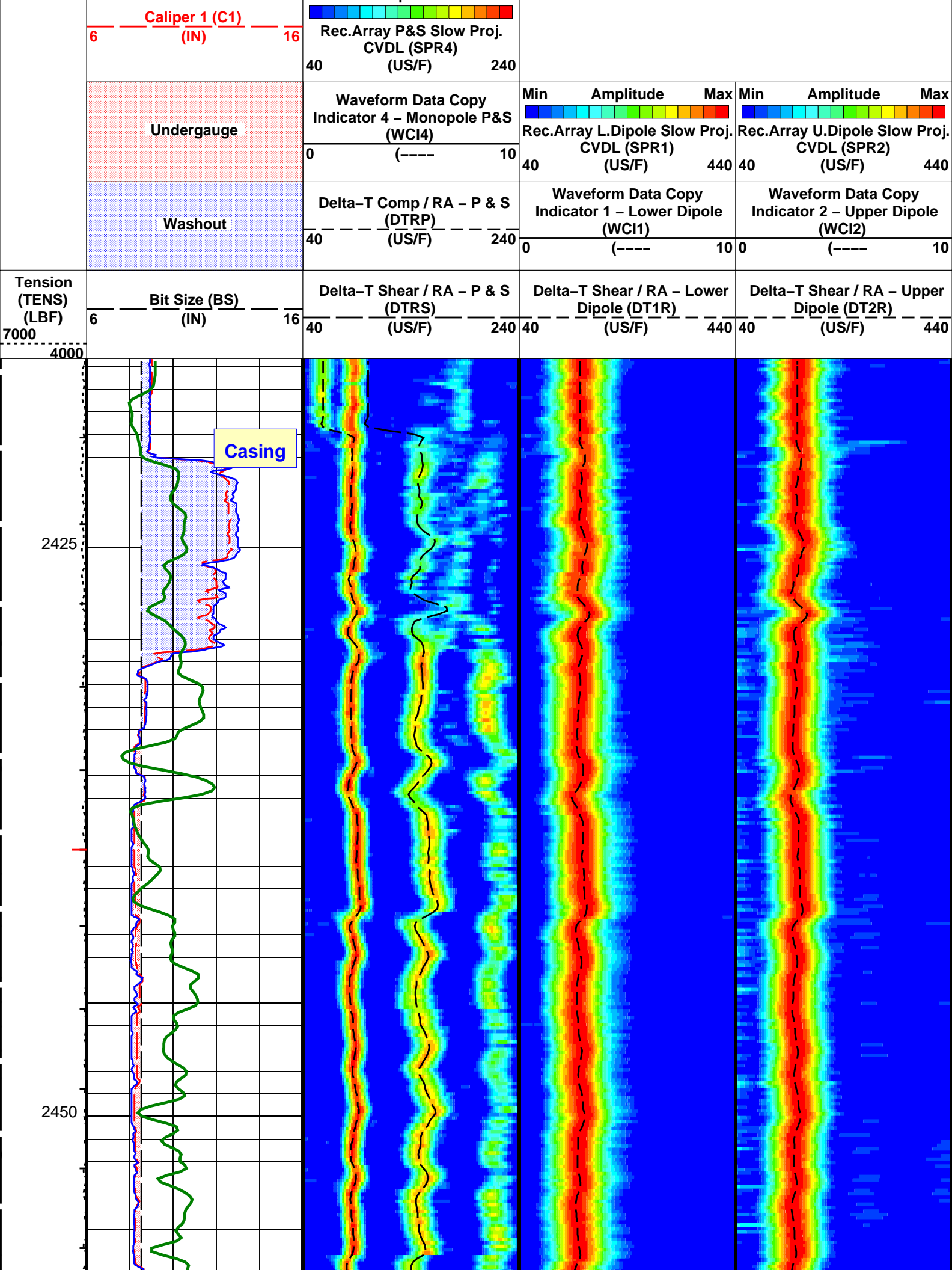
PIP SUMMARY

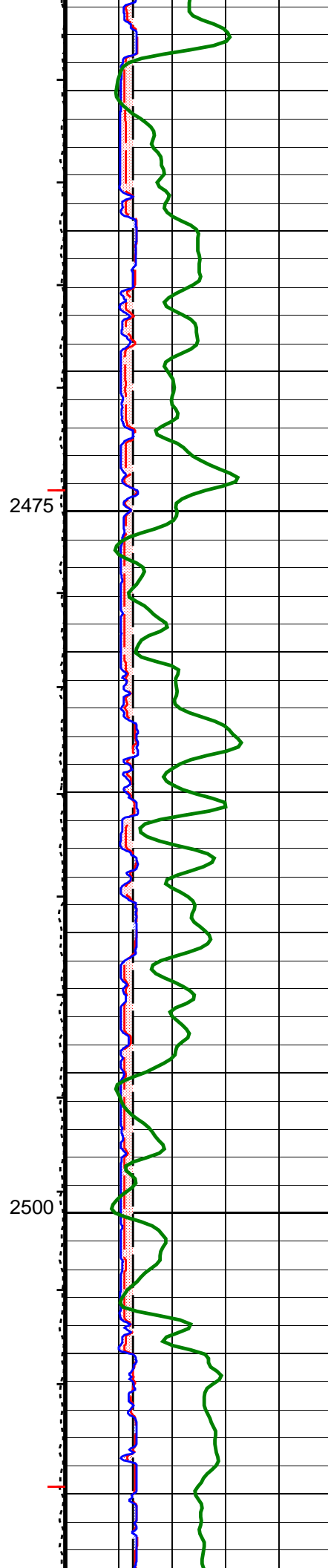
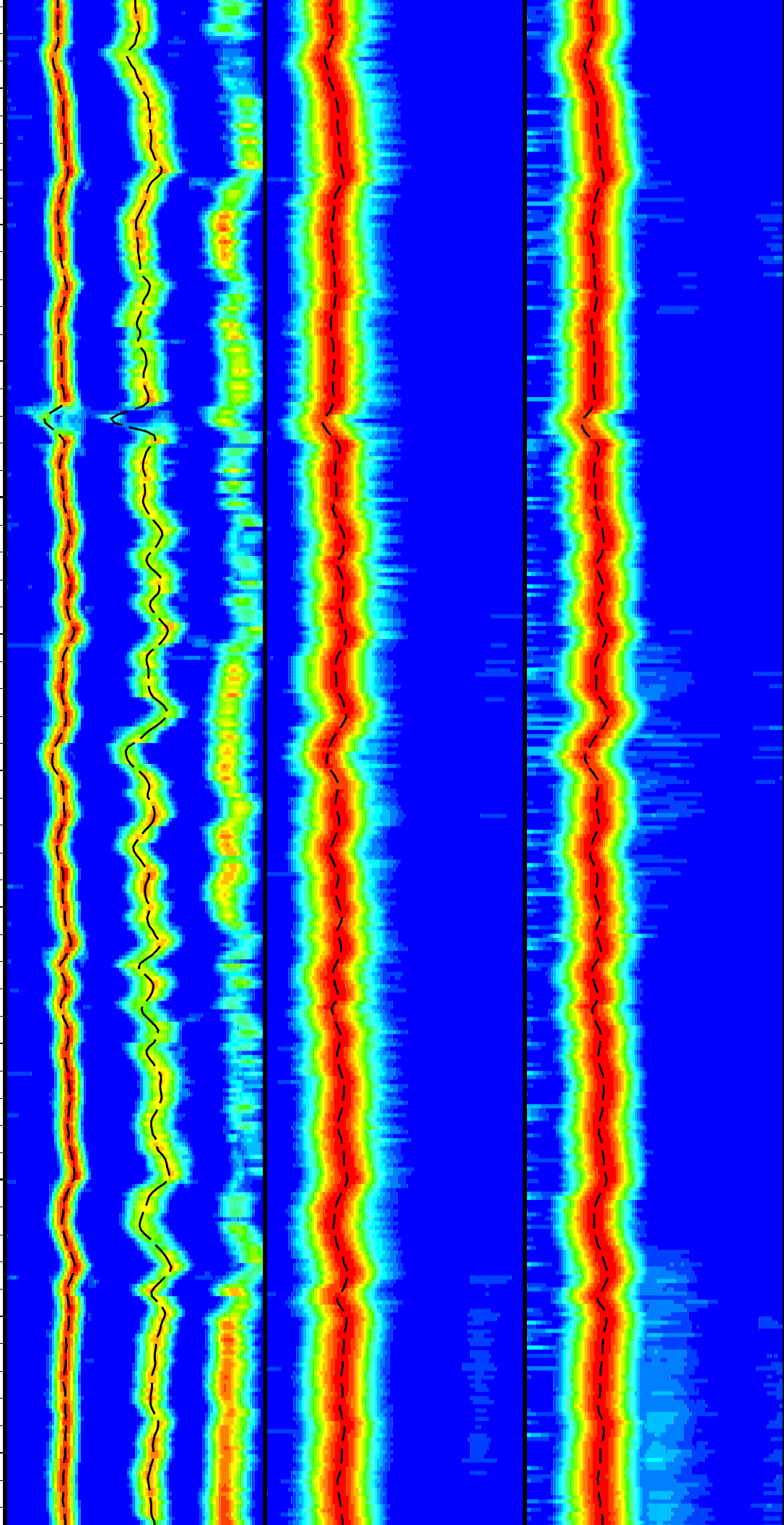
Integrated Transit Time Minor Pip Every 1 MS

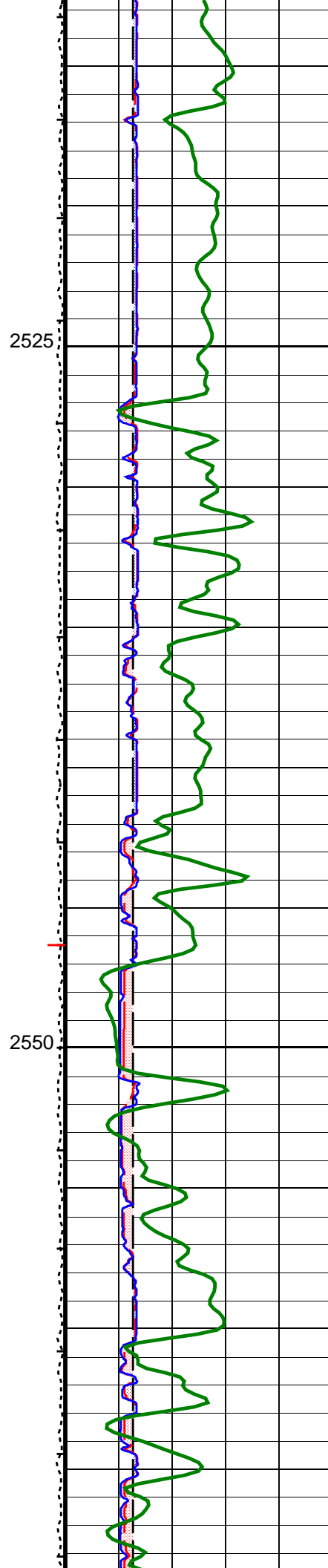
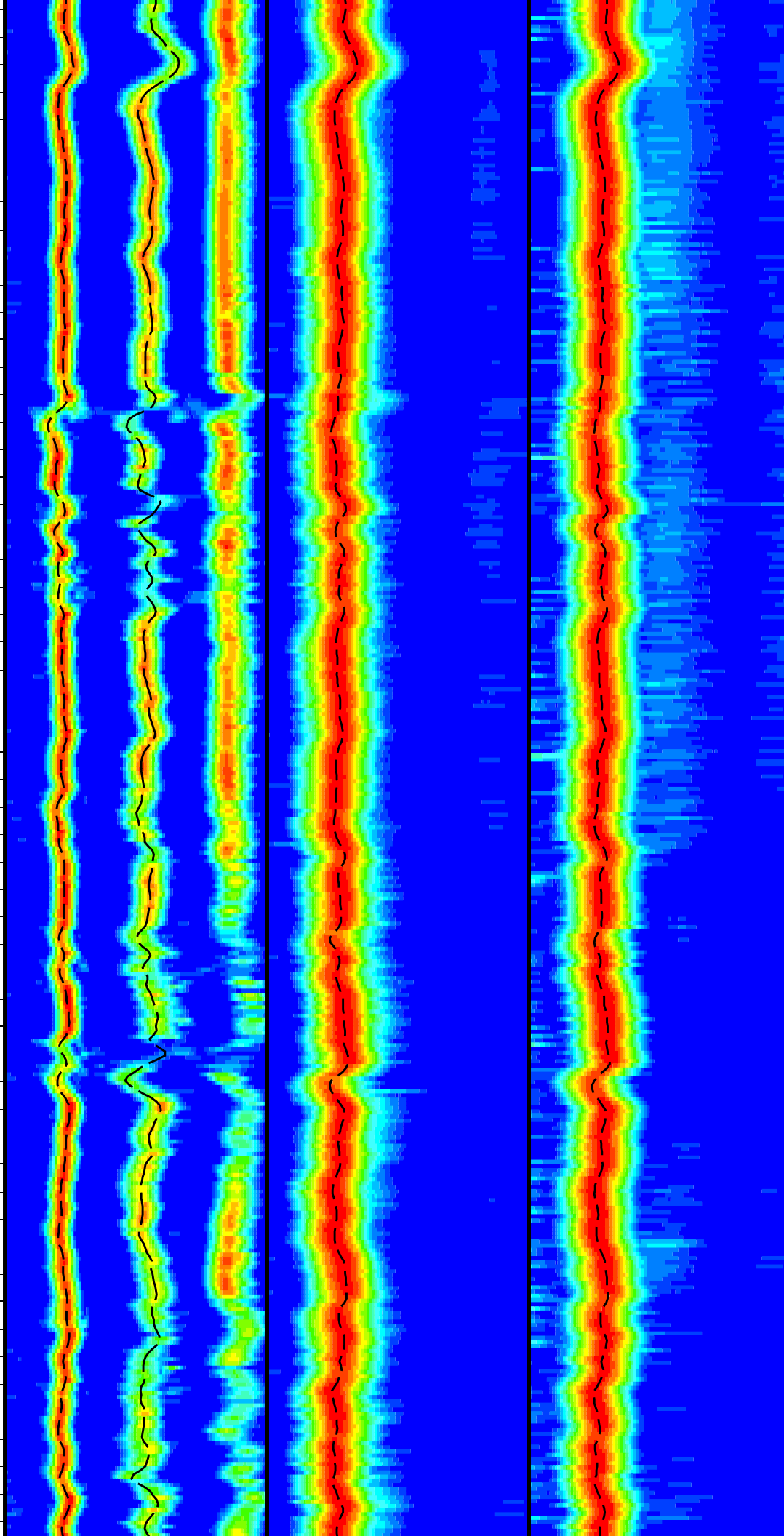
Integrated Transit Time Major Pip Every 10 MS

Time Mark Every 60 S

HNGS Spectroscopy Gamma Ray (HSGR)		
0	(GAPI)	200
Caliper 2 (C2)		
6	(IN)	16
Min	Amplitude	Max







2575

TENS

HSGR

WCI4

DTRP
DTRS

WCI1

WCI2

2600

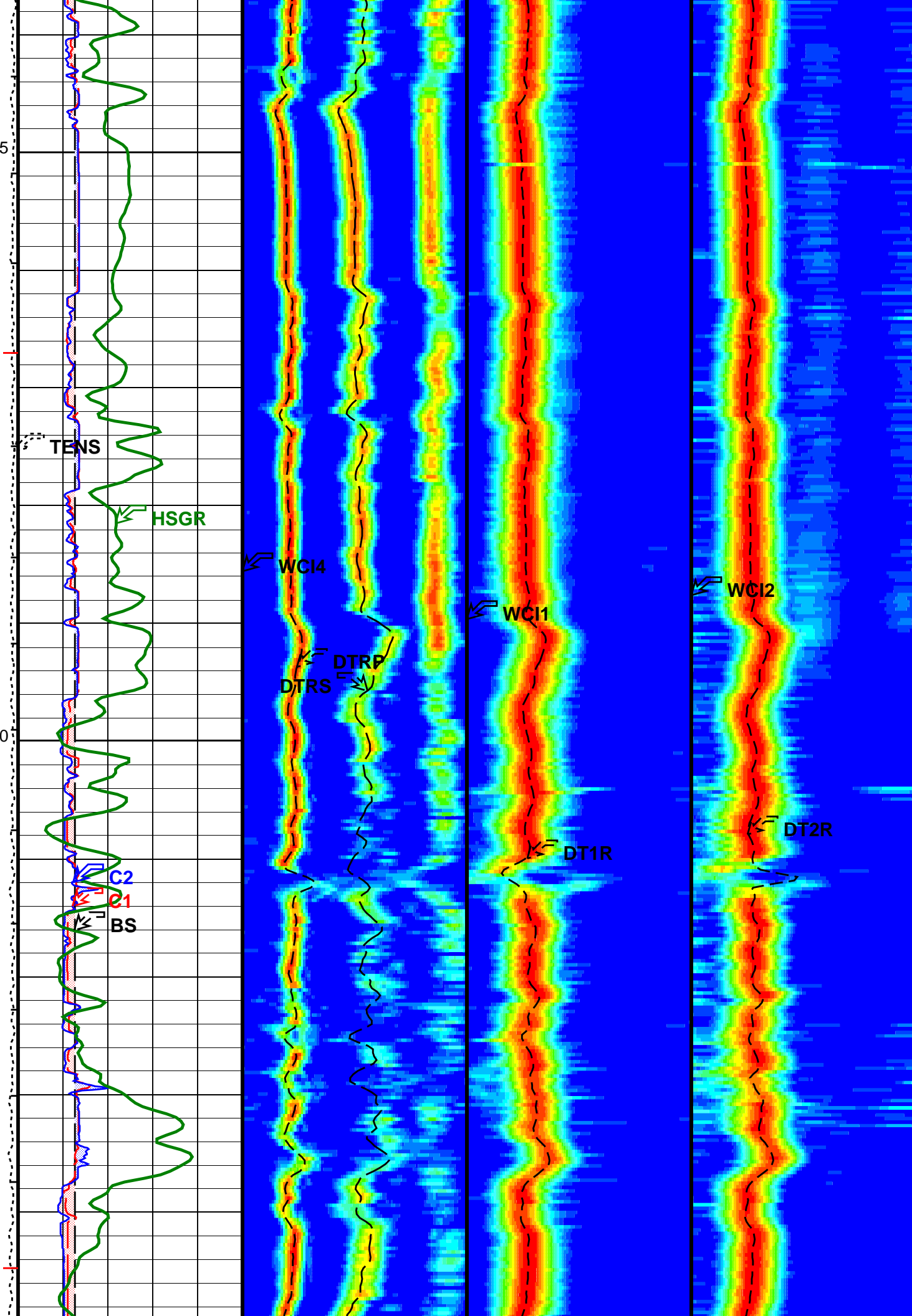
C2

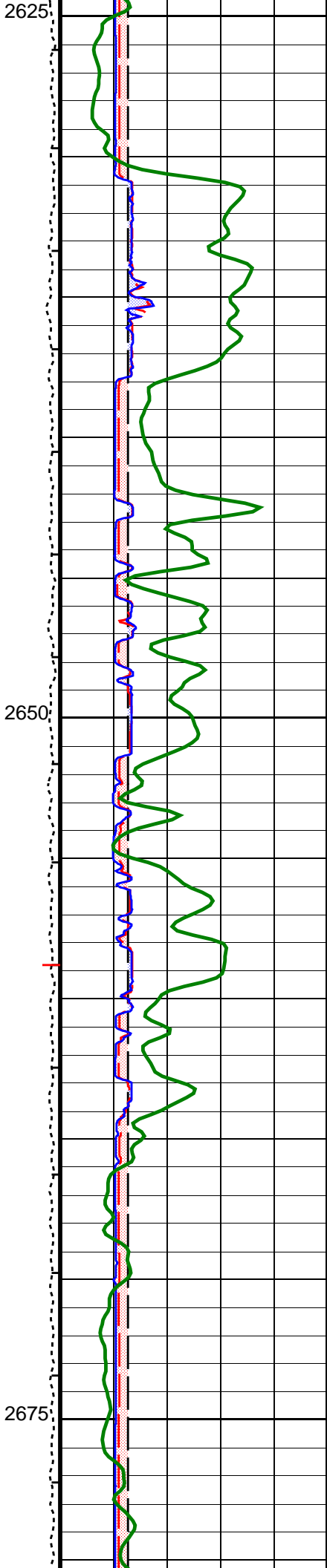
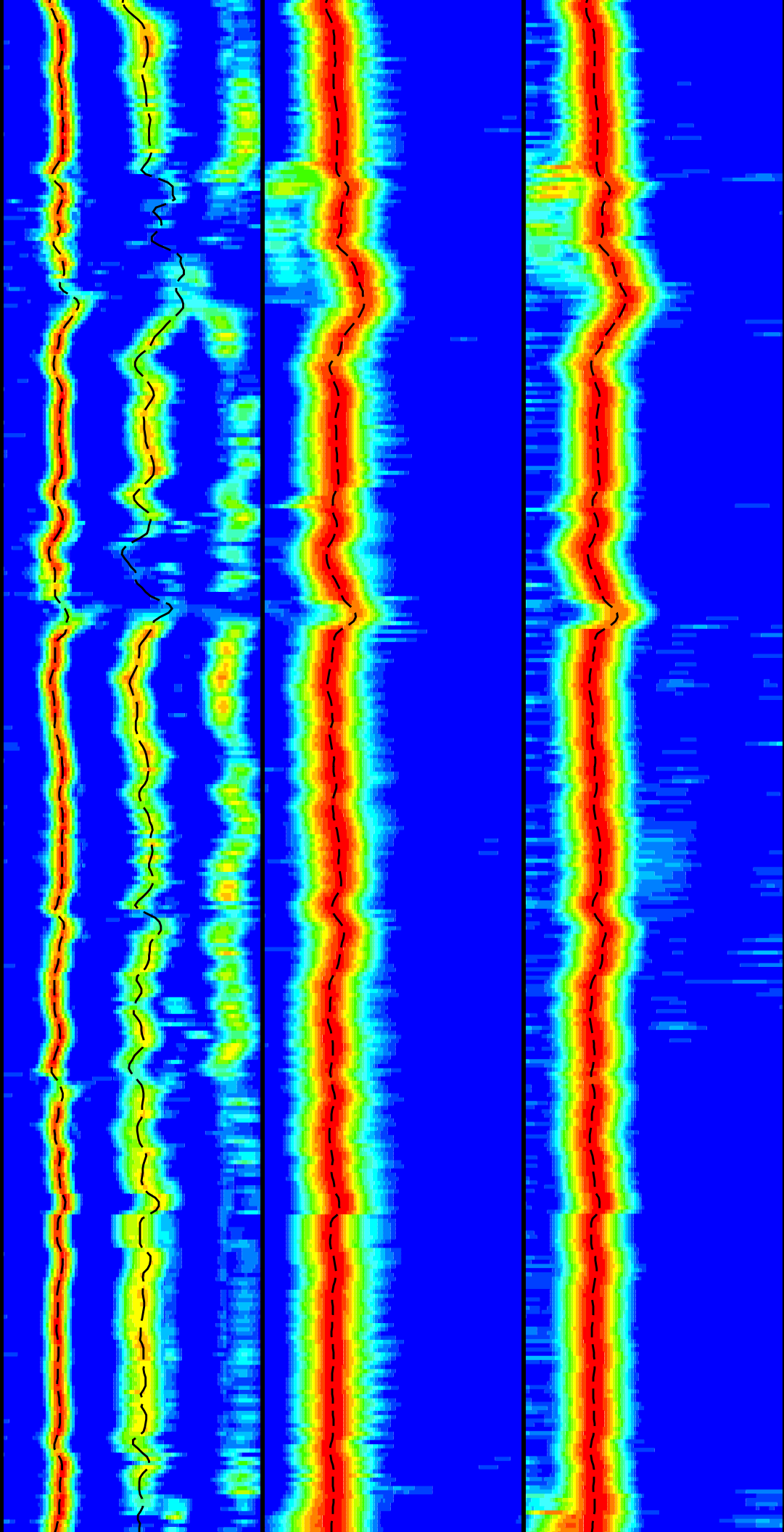
C1

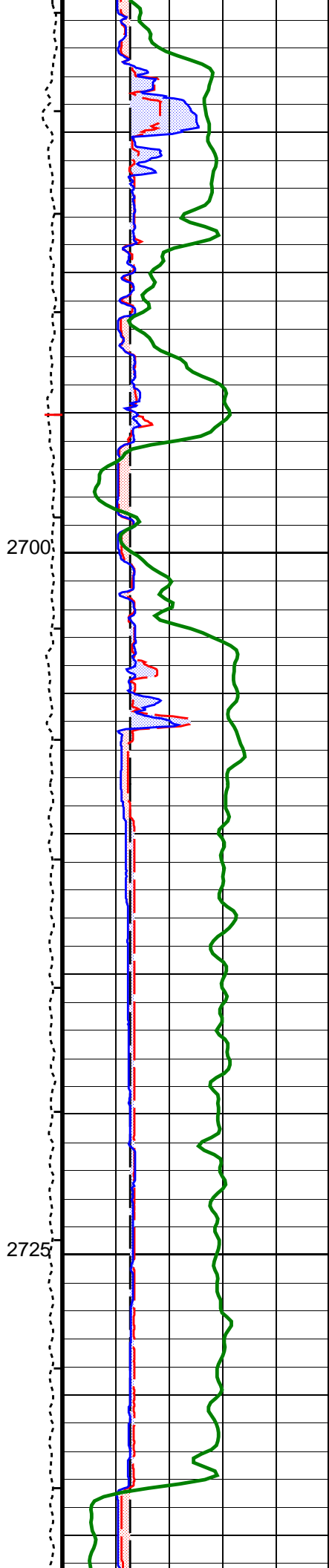
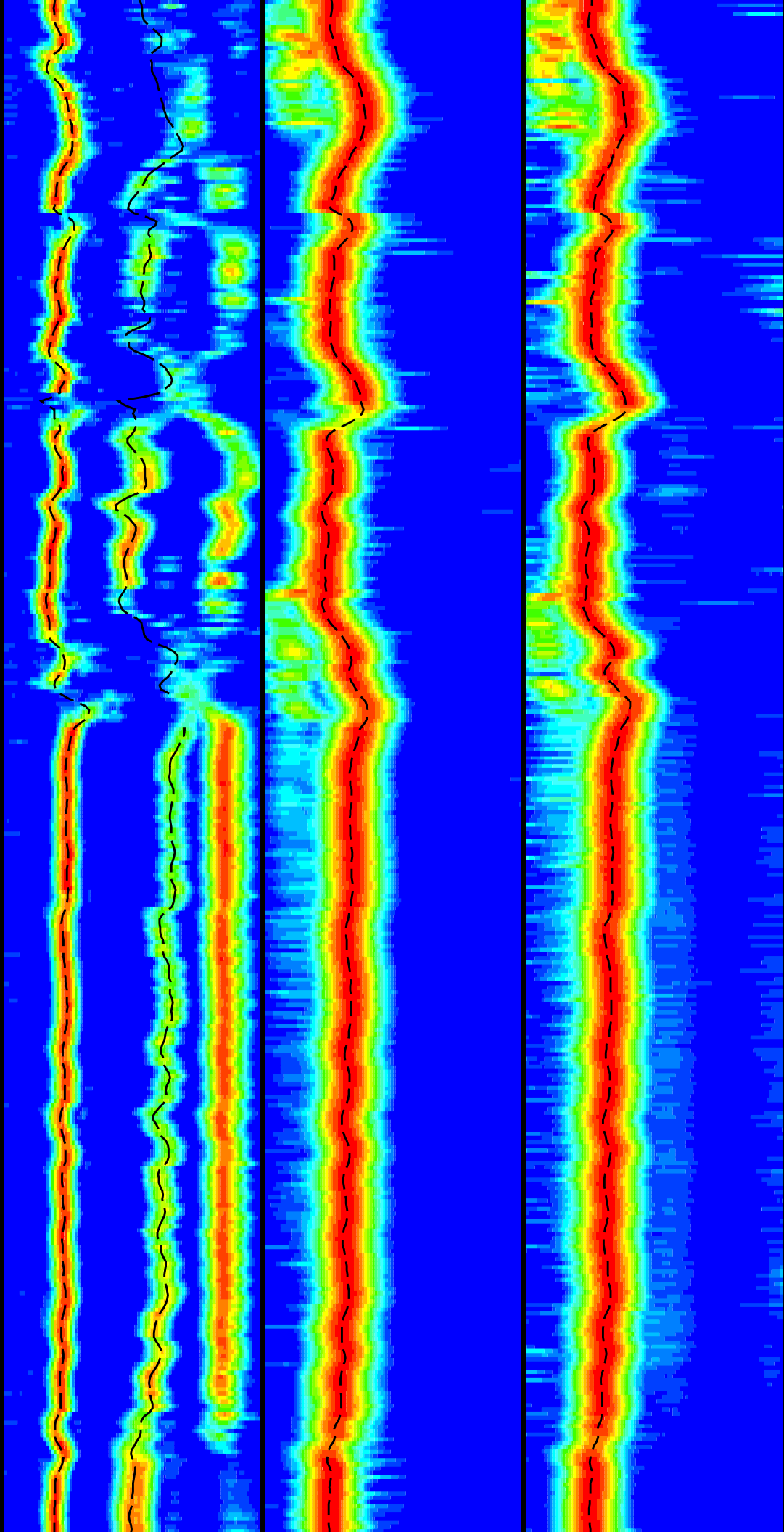
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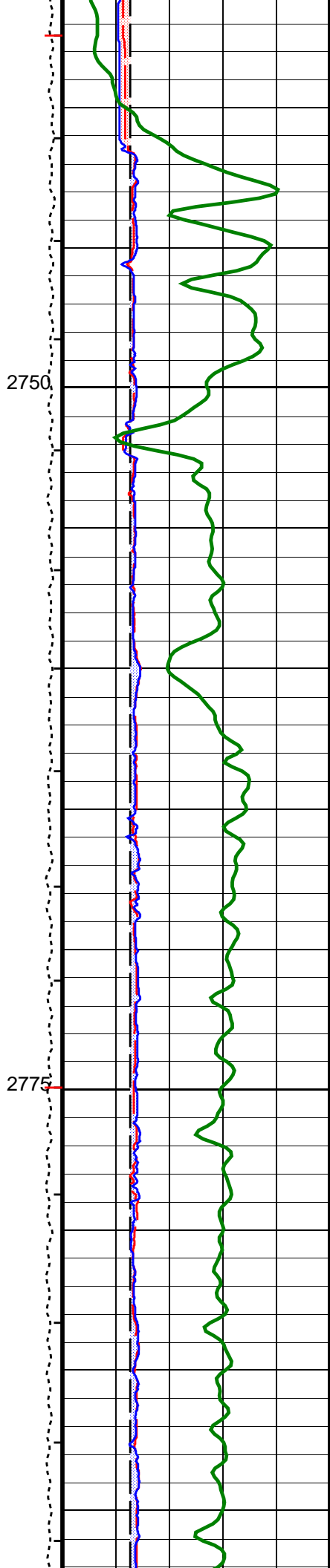
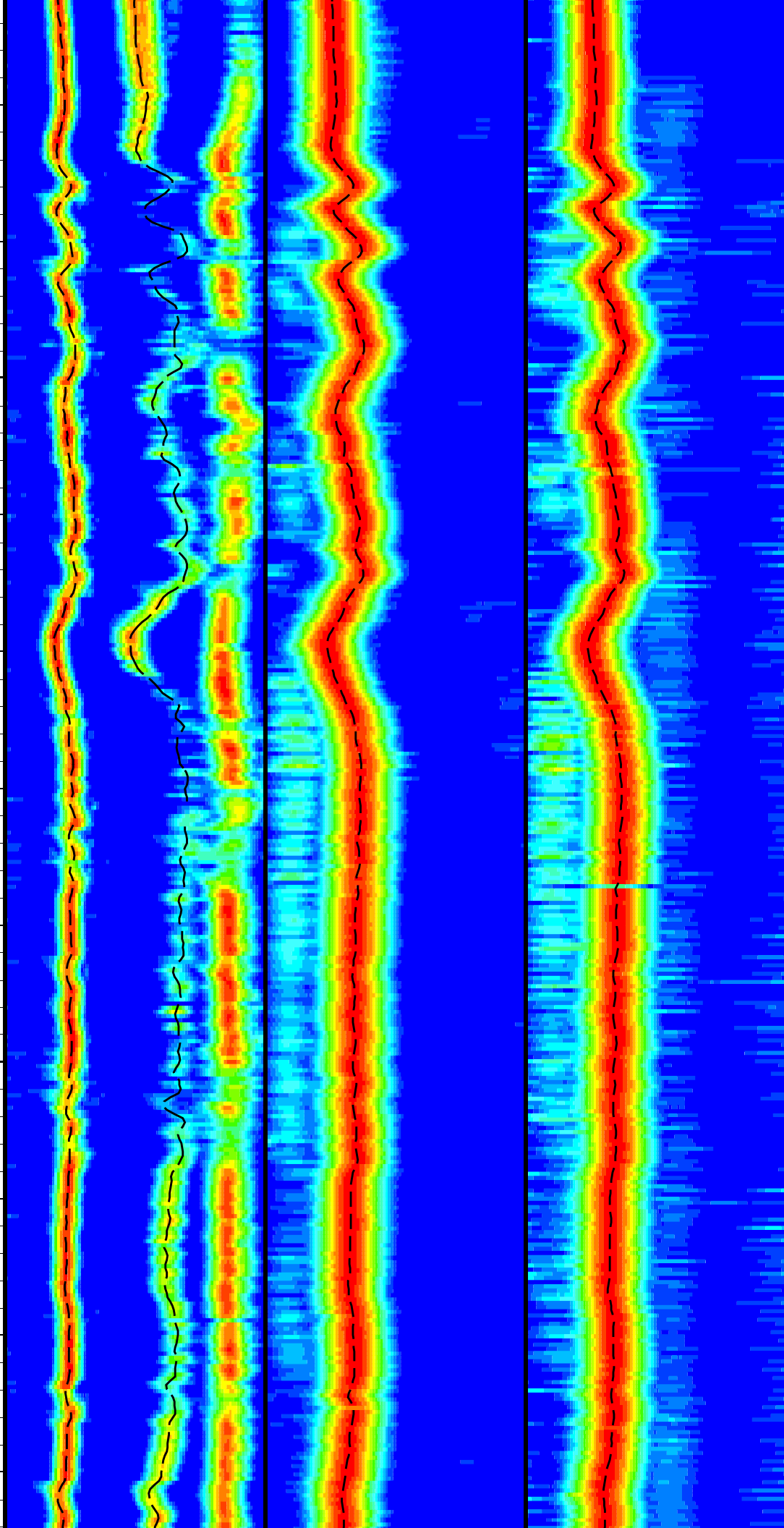
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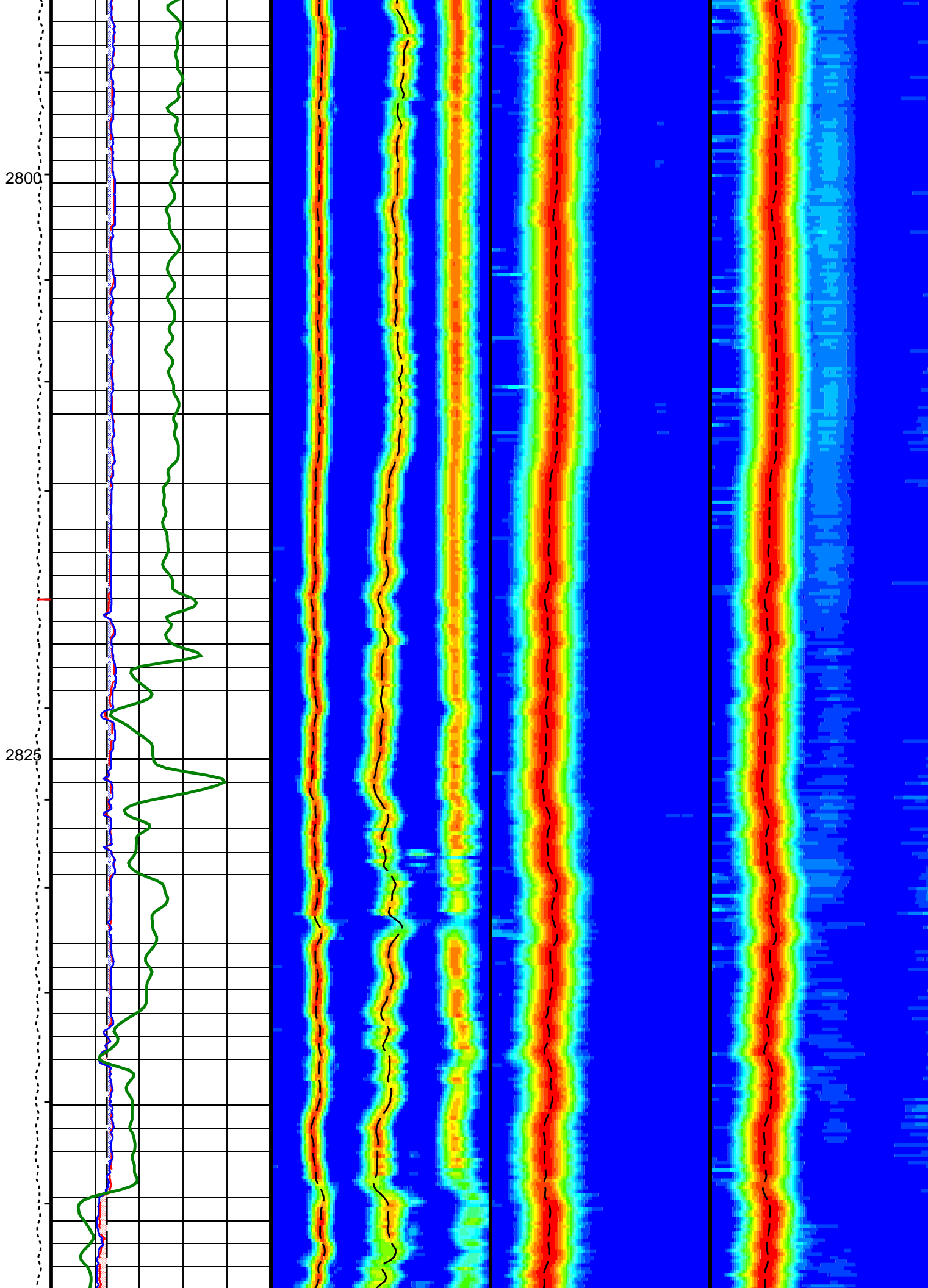
DT2R











2850

2875

2900

TENS

HSGR

WCI4

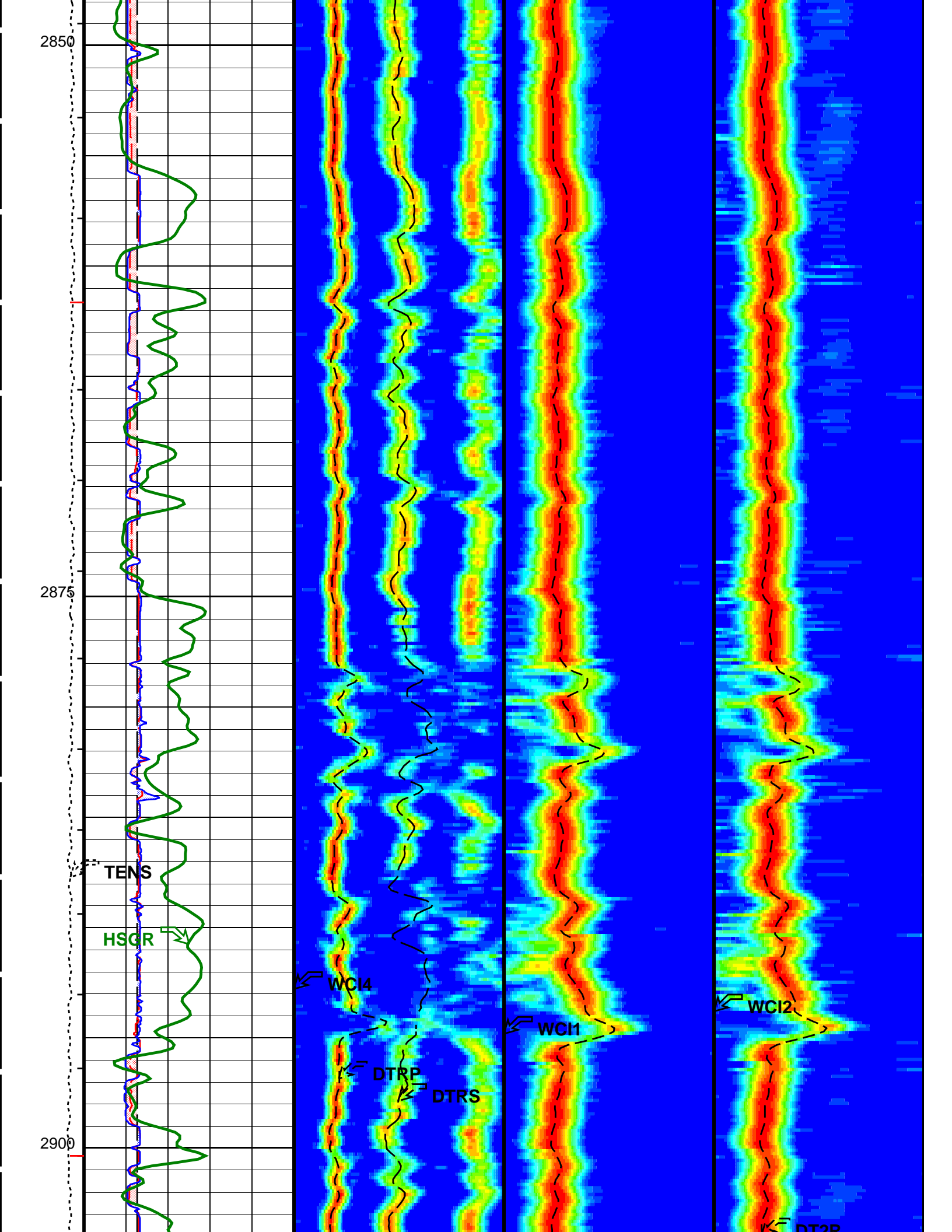
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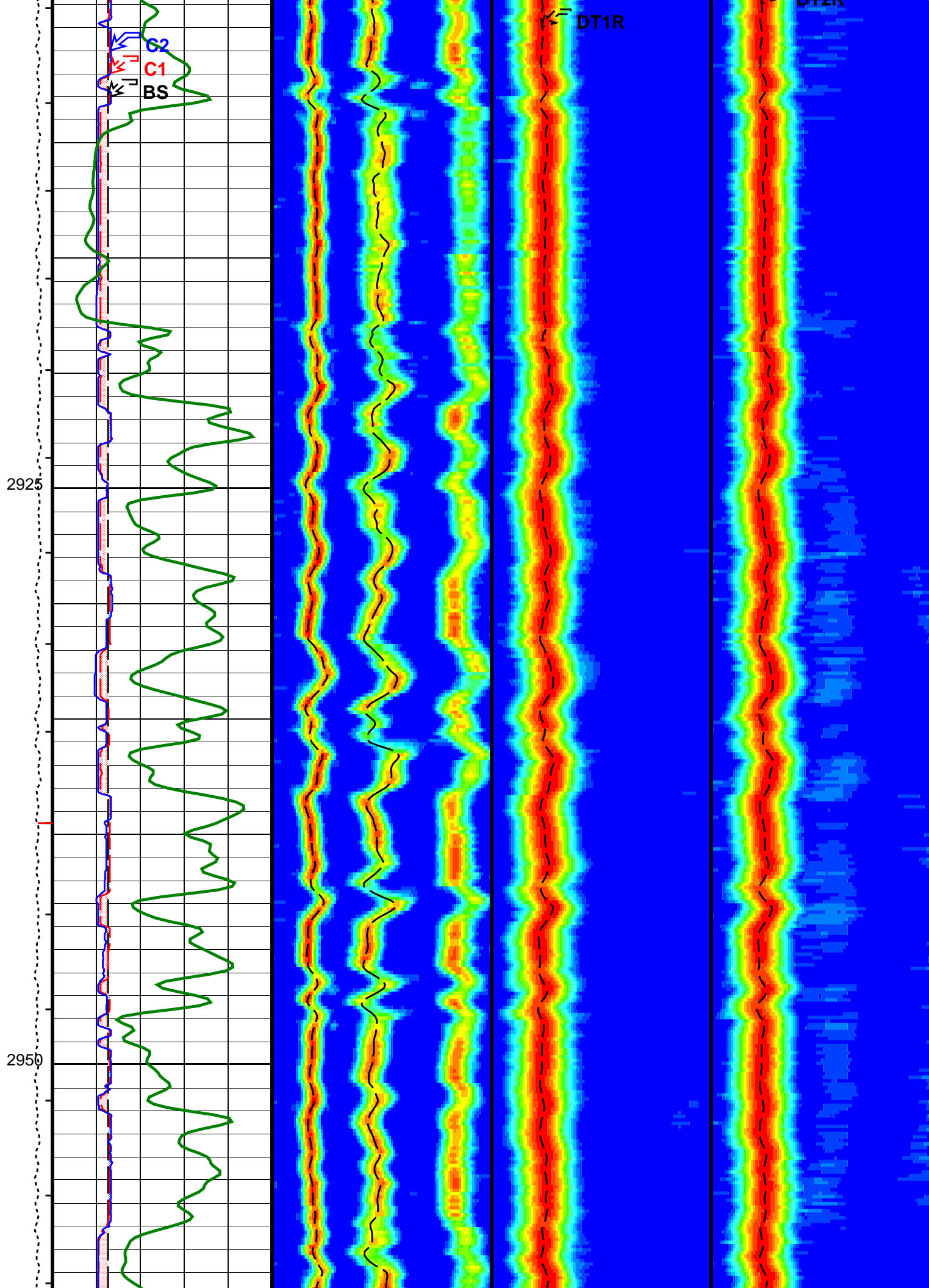
DTRS

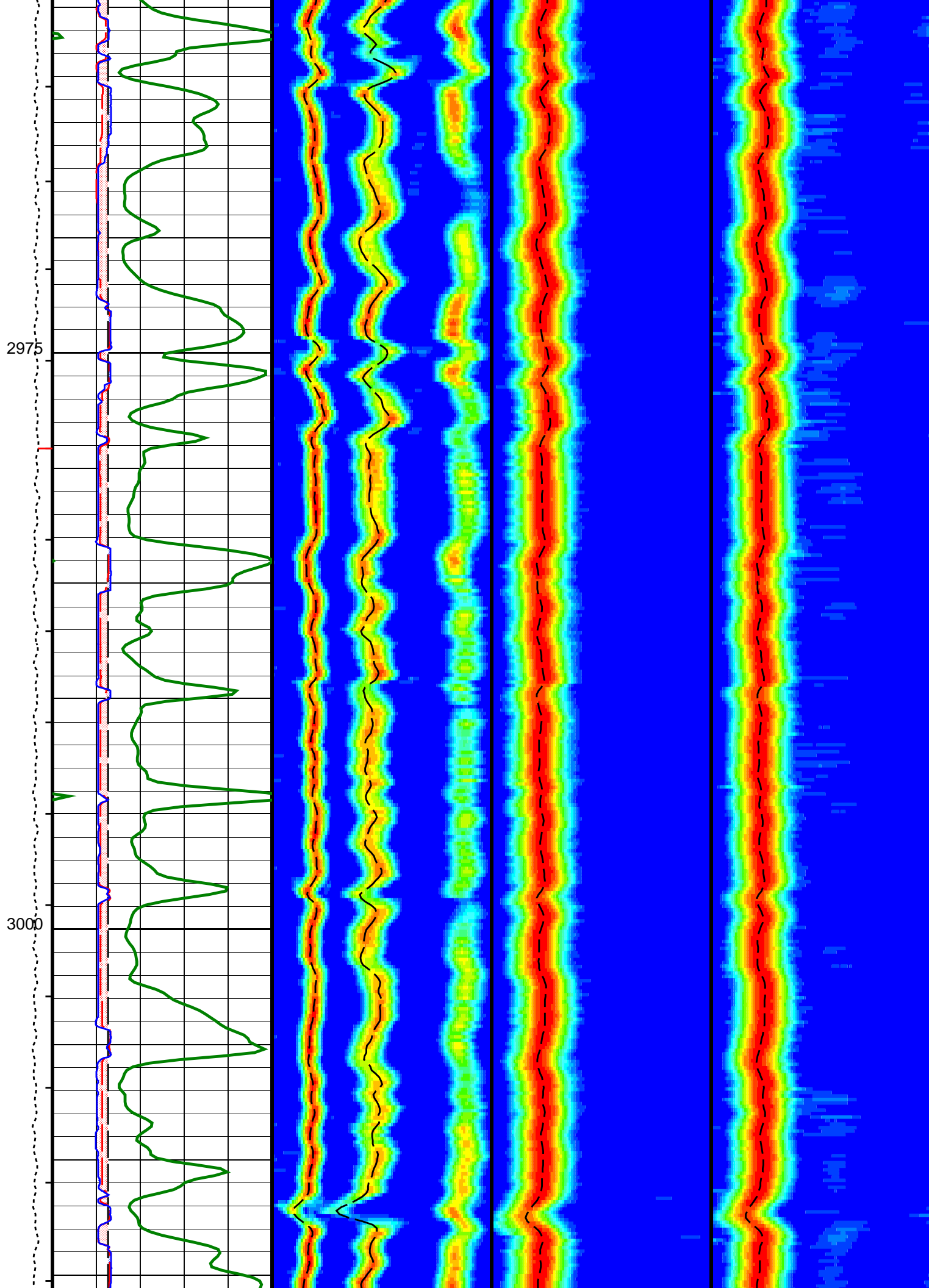
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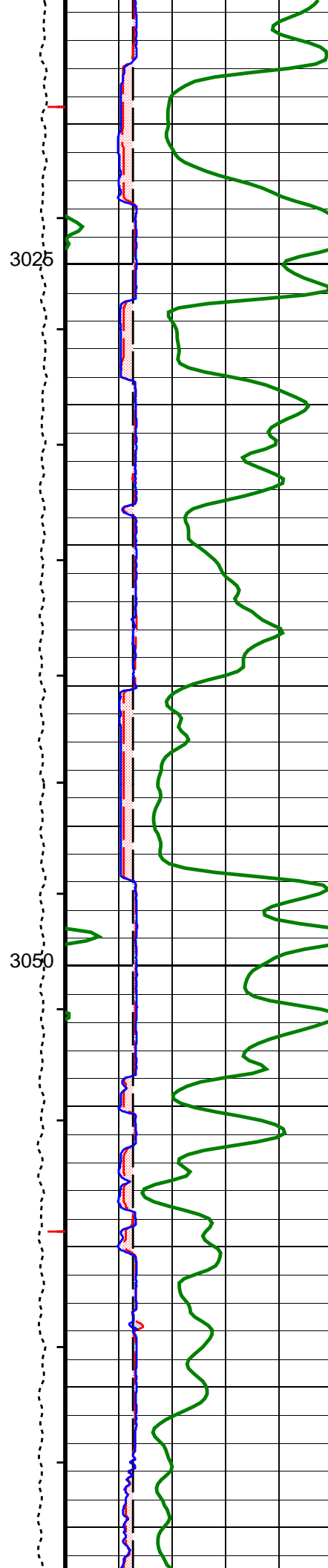
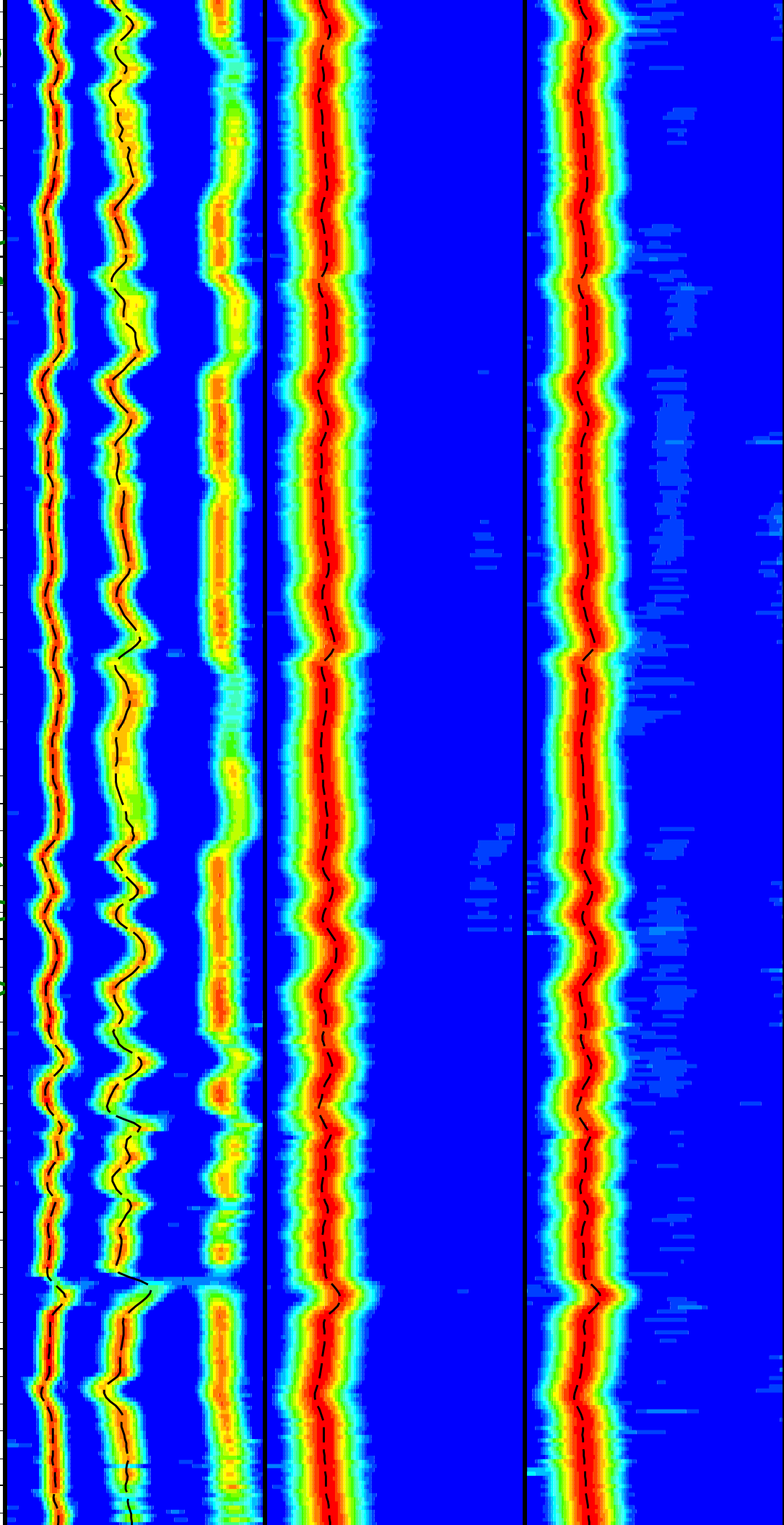
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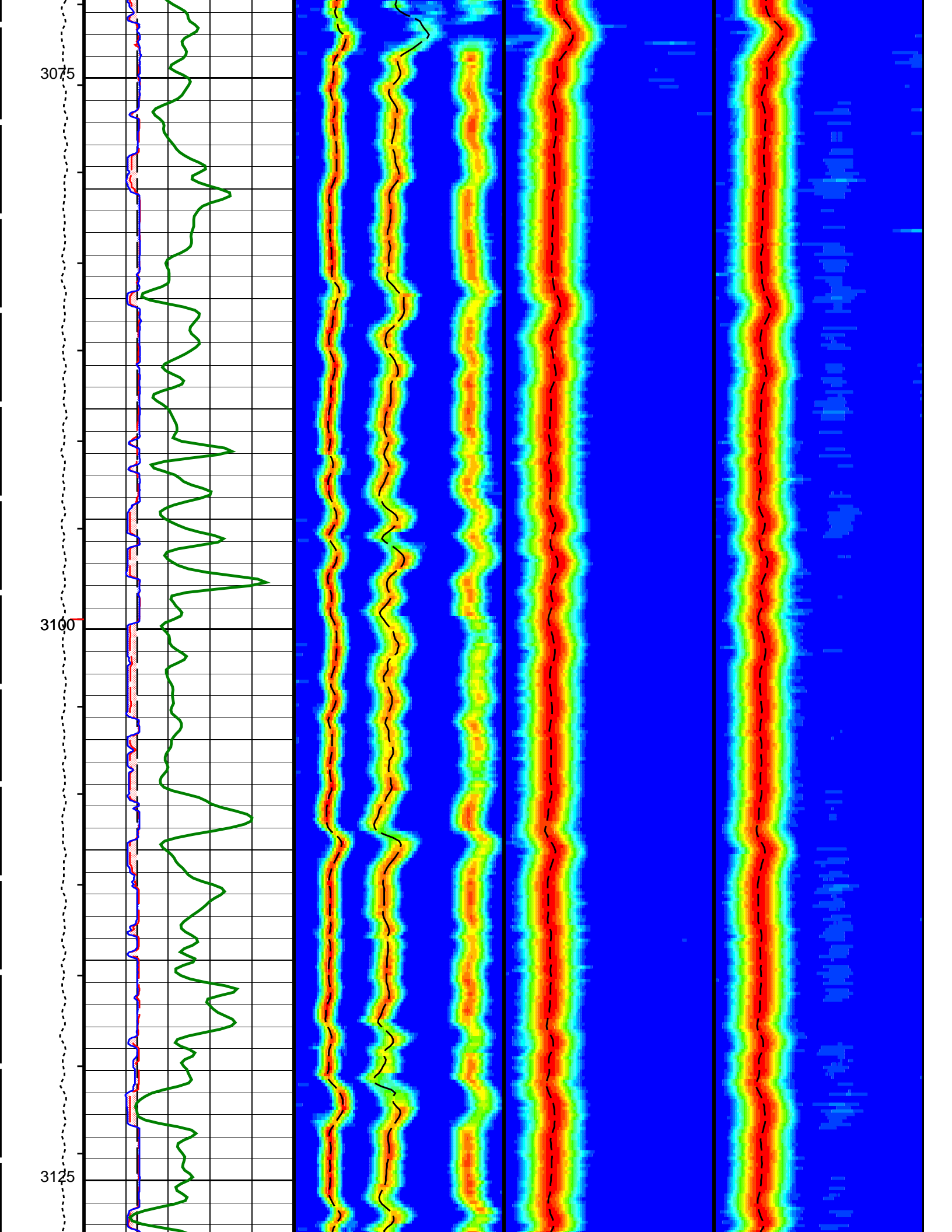
DT2P

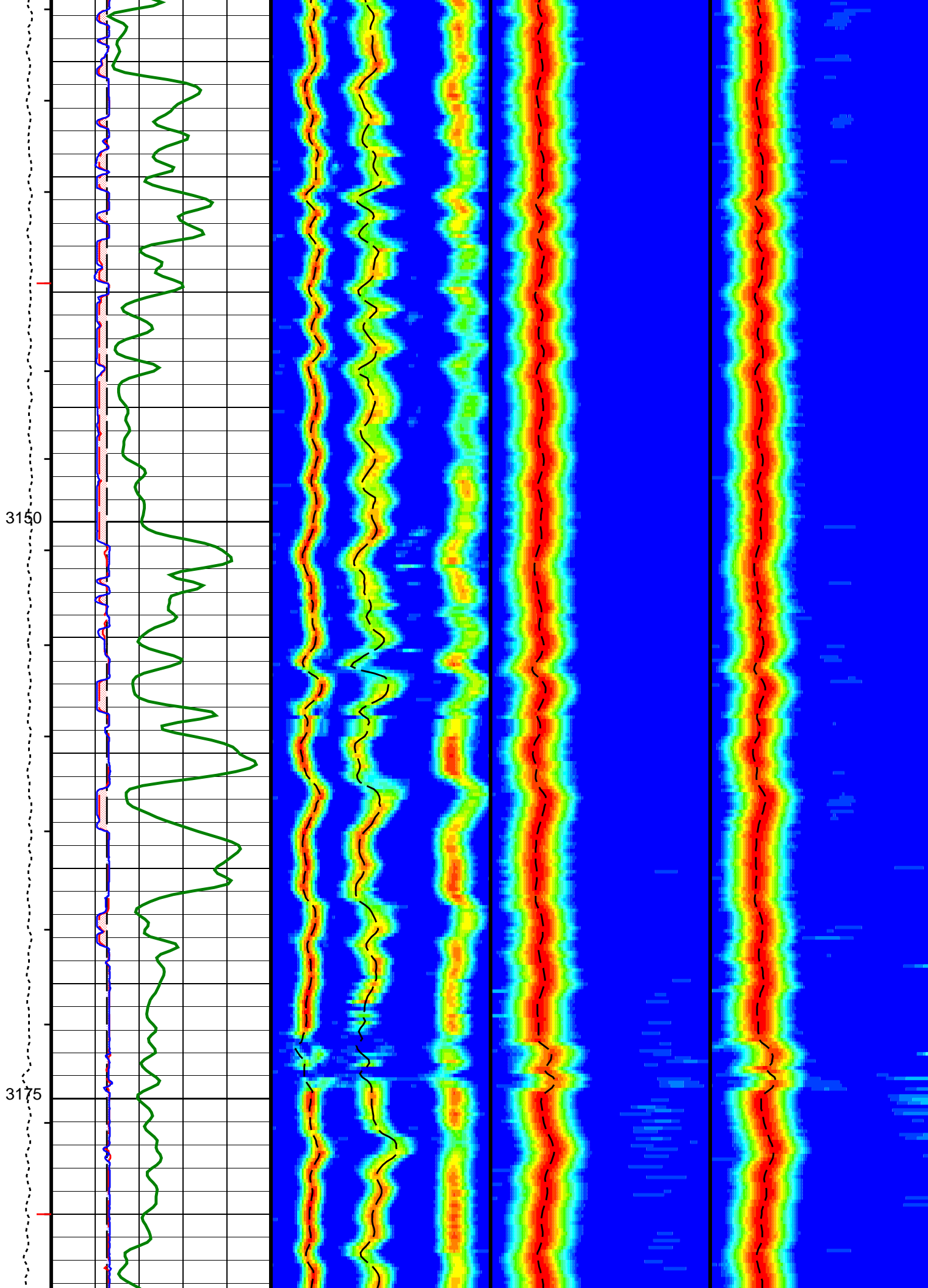


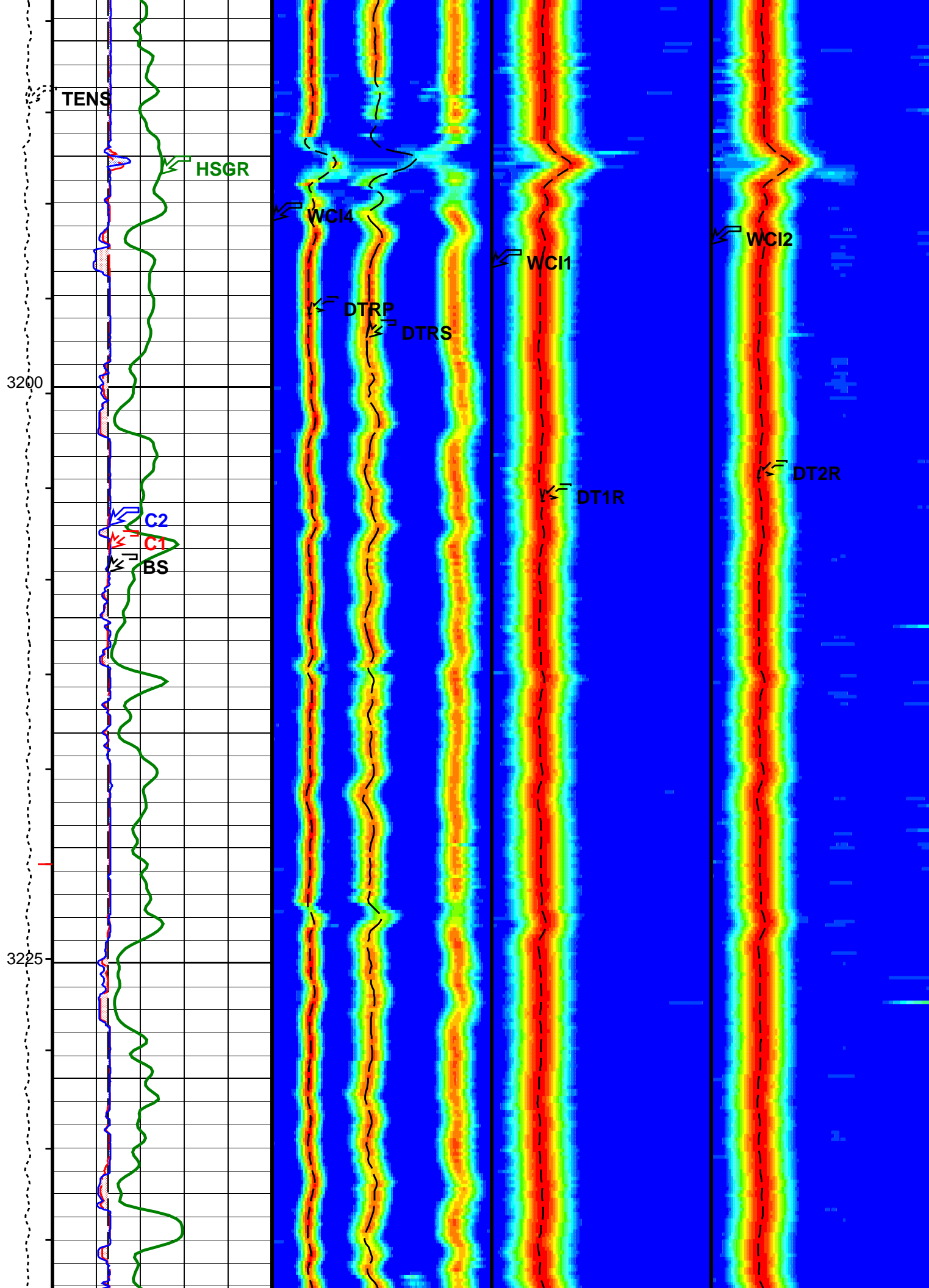


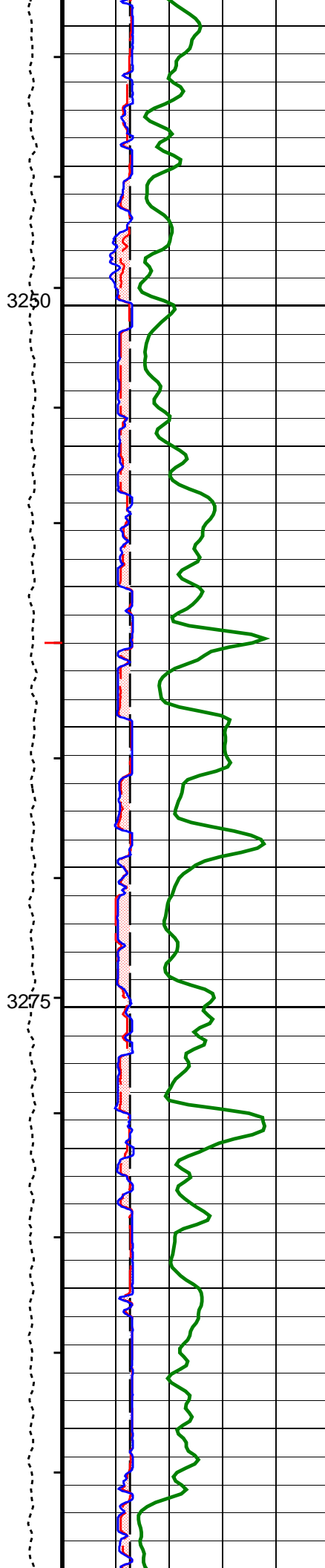
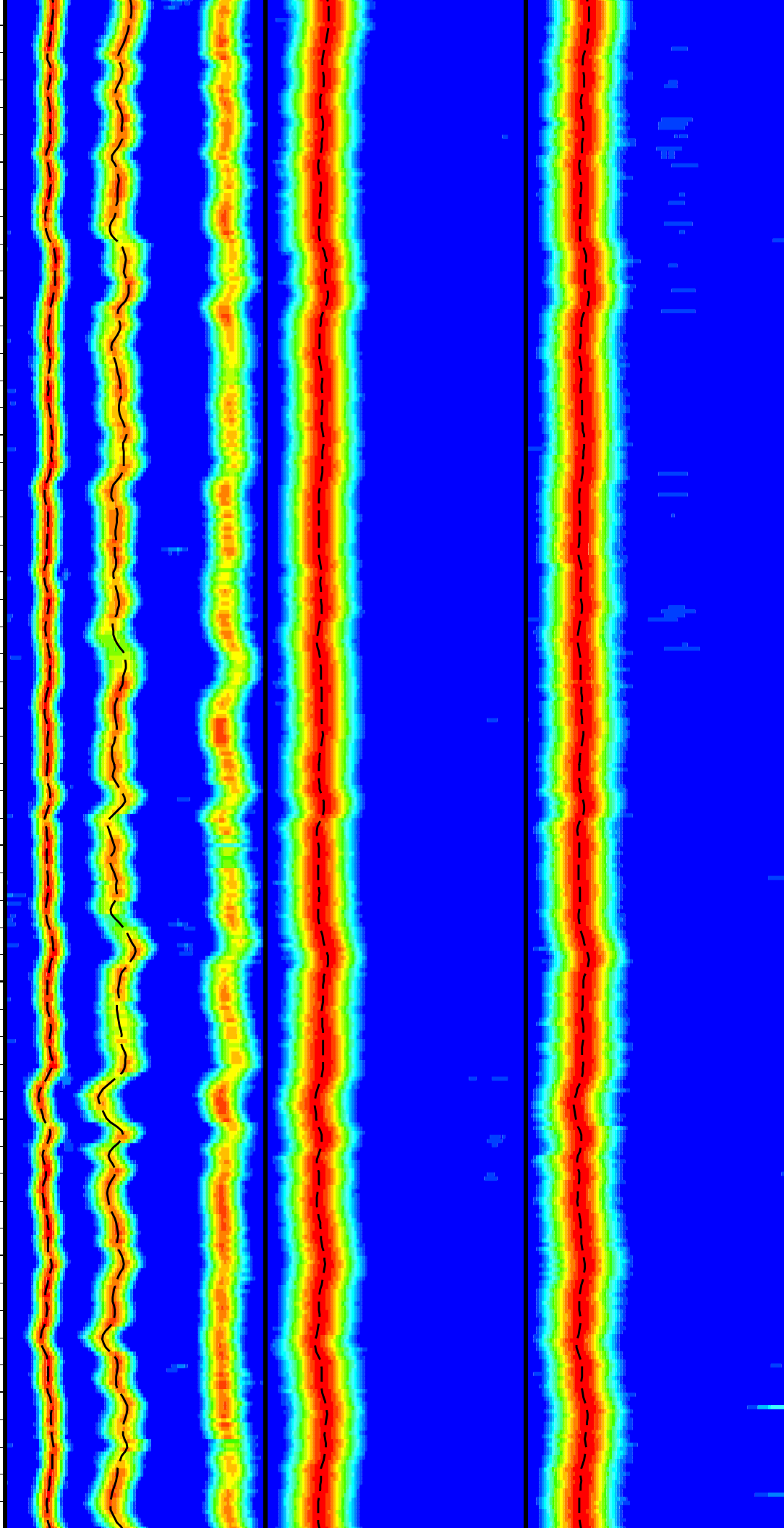


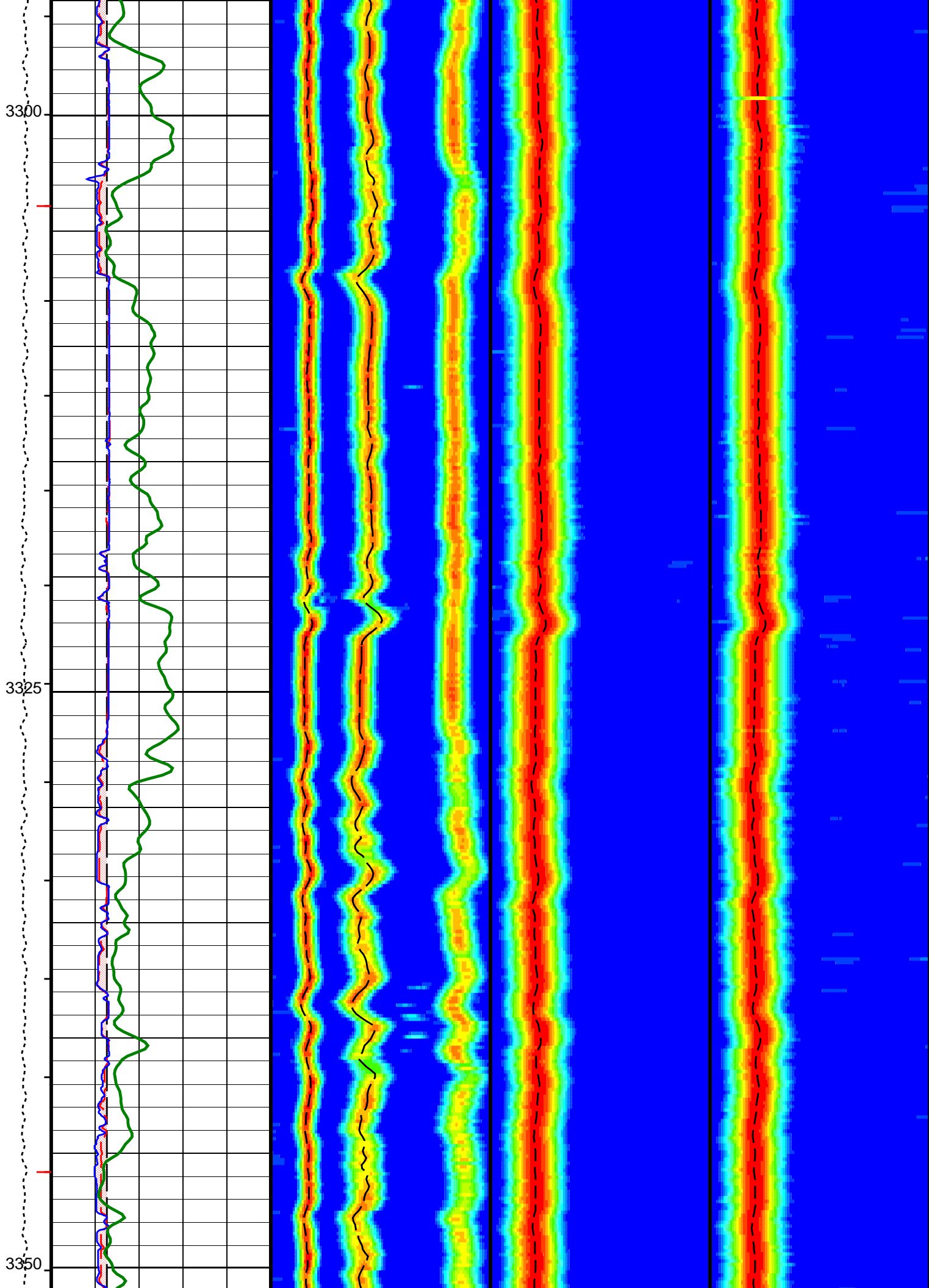


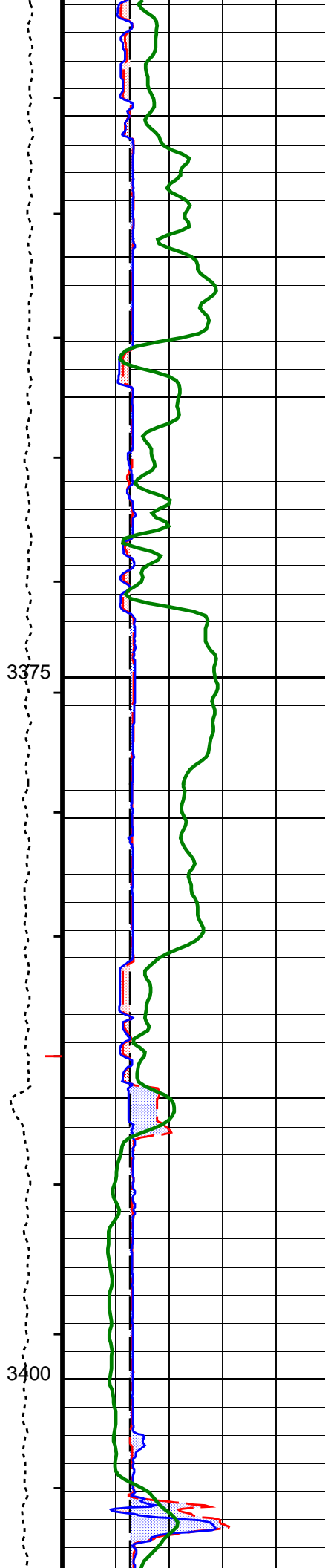
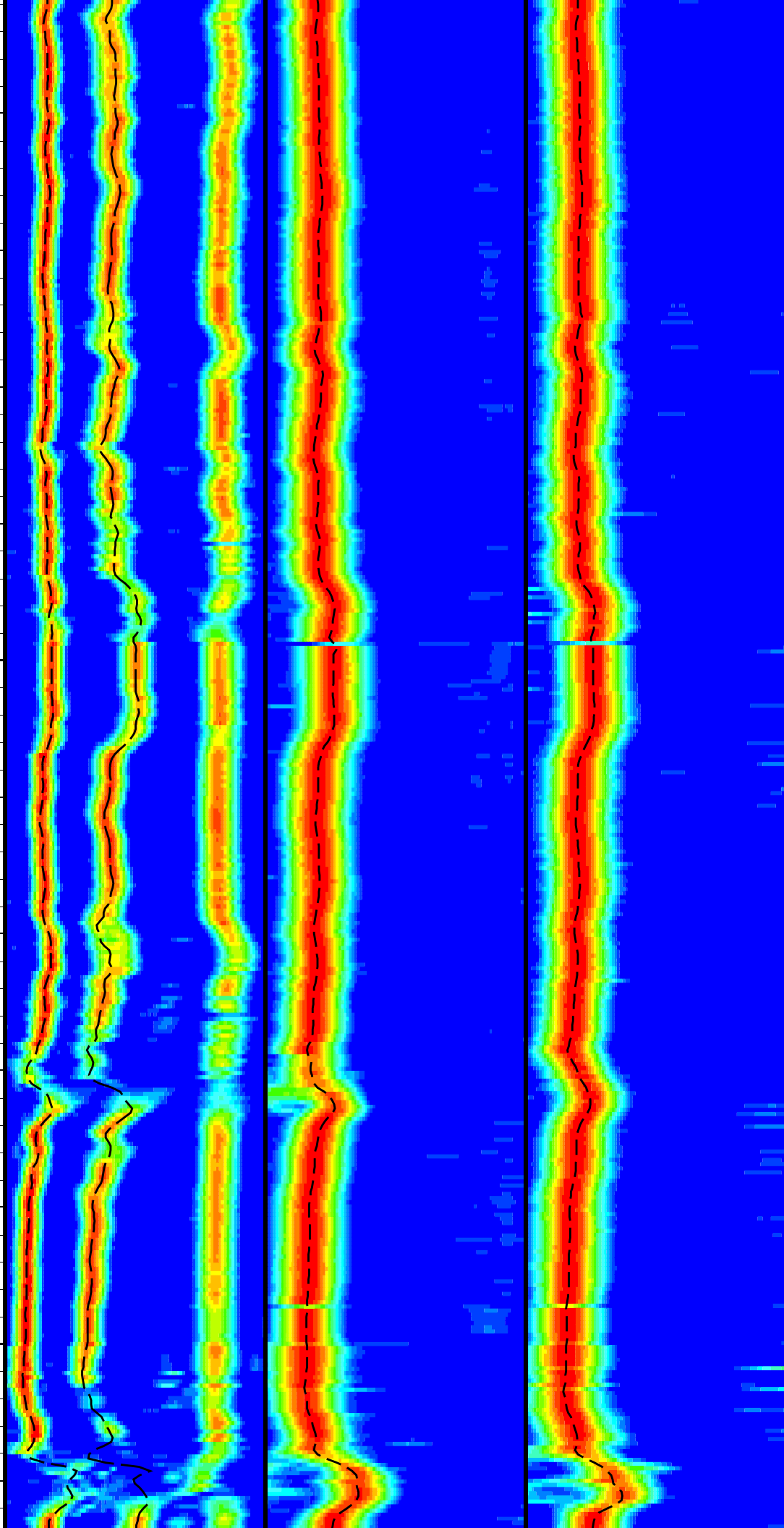


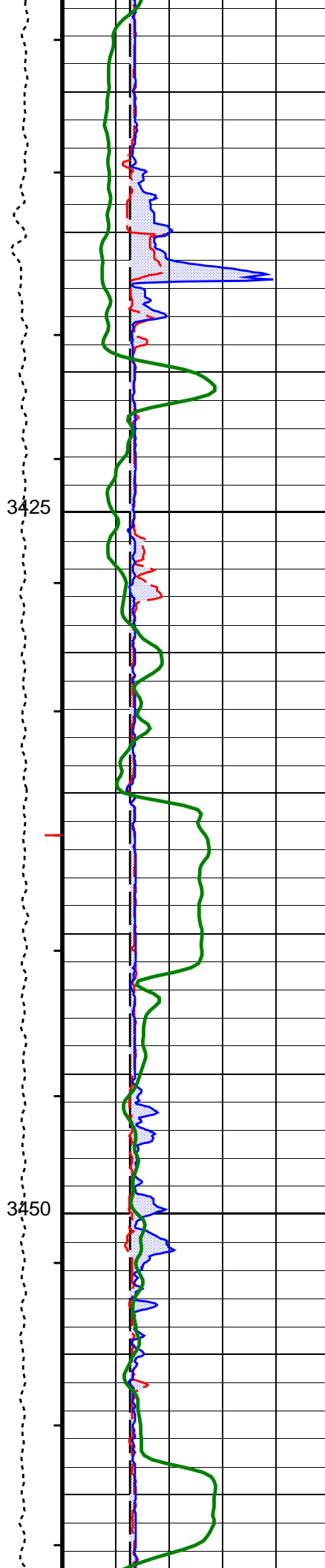
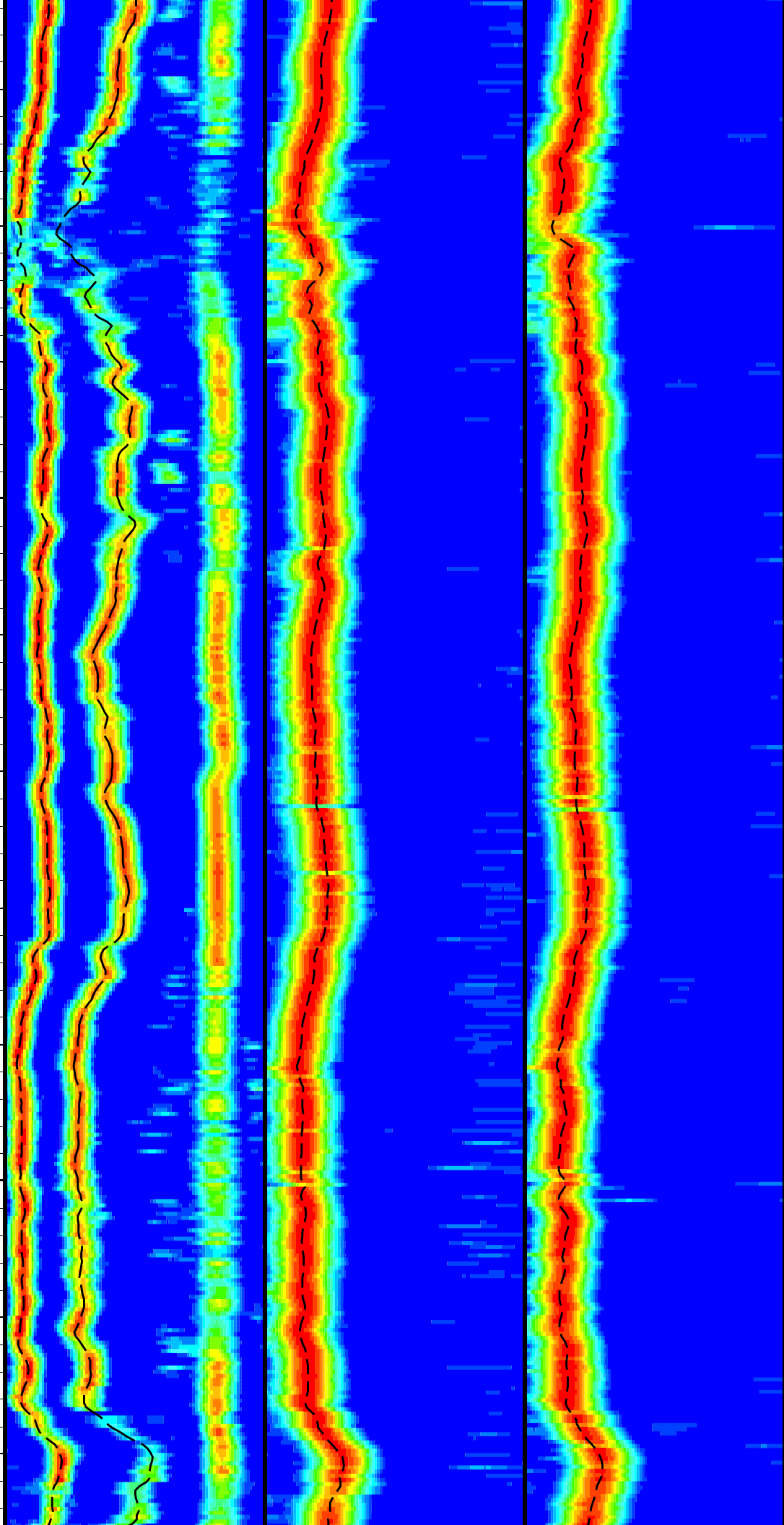


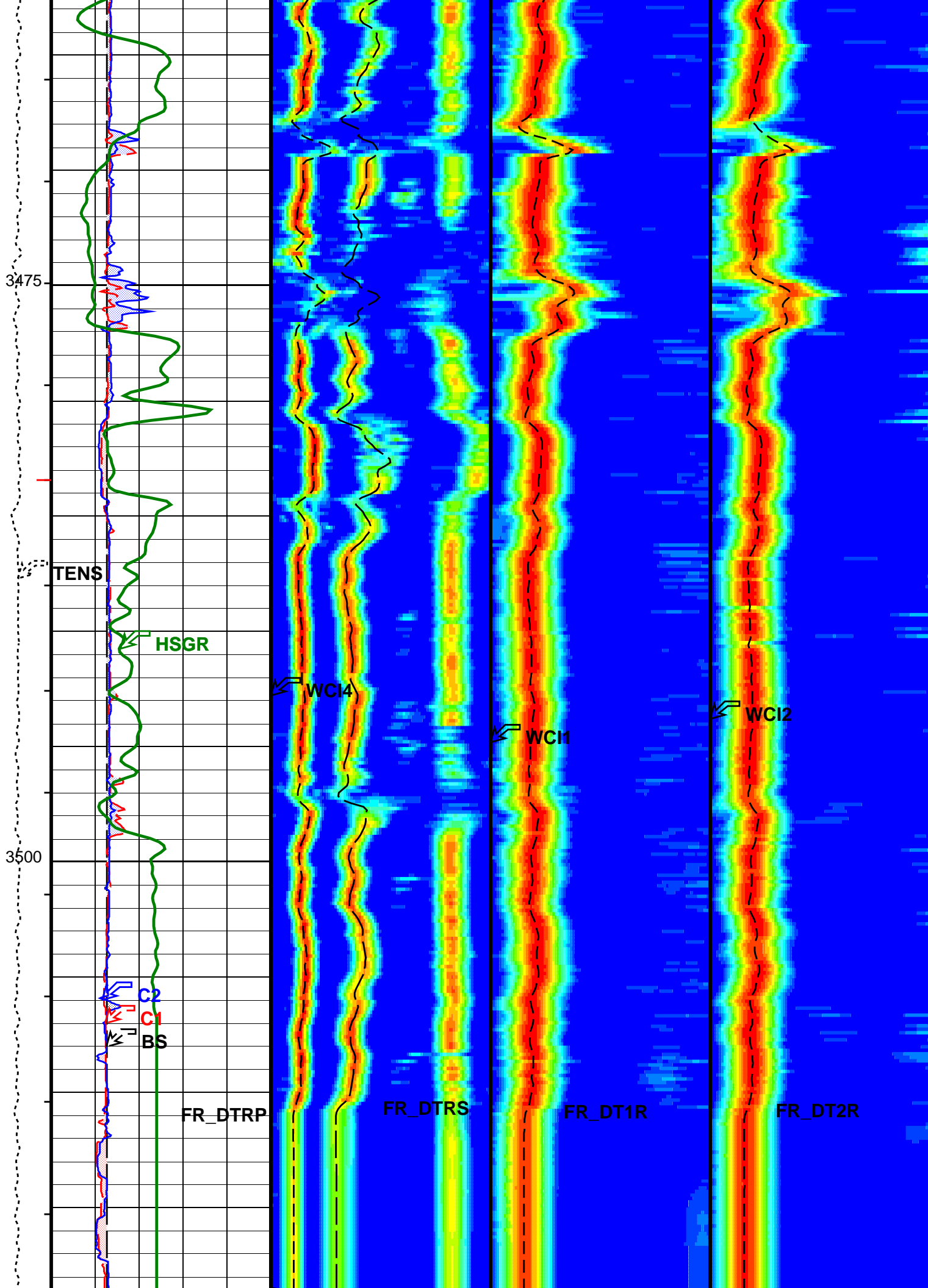


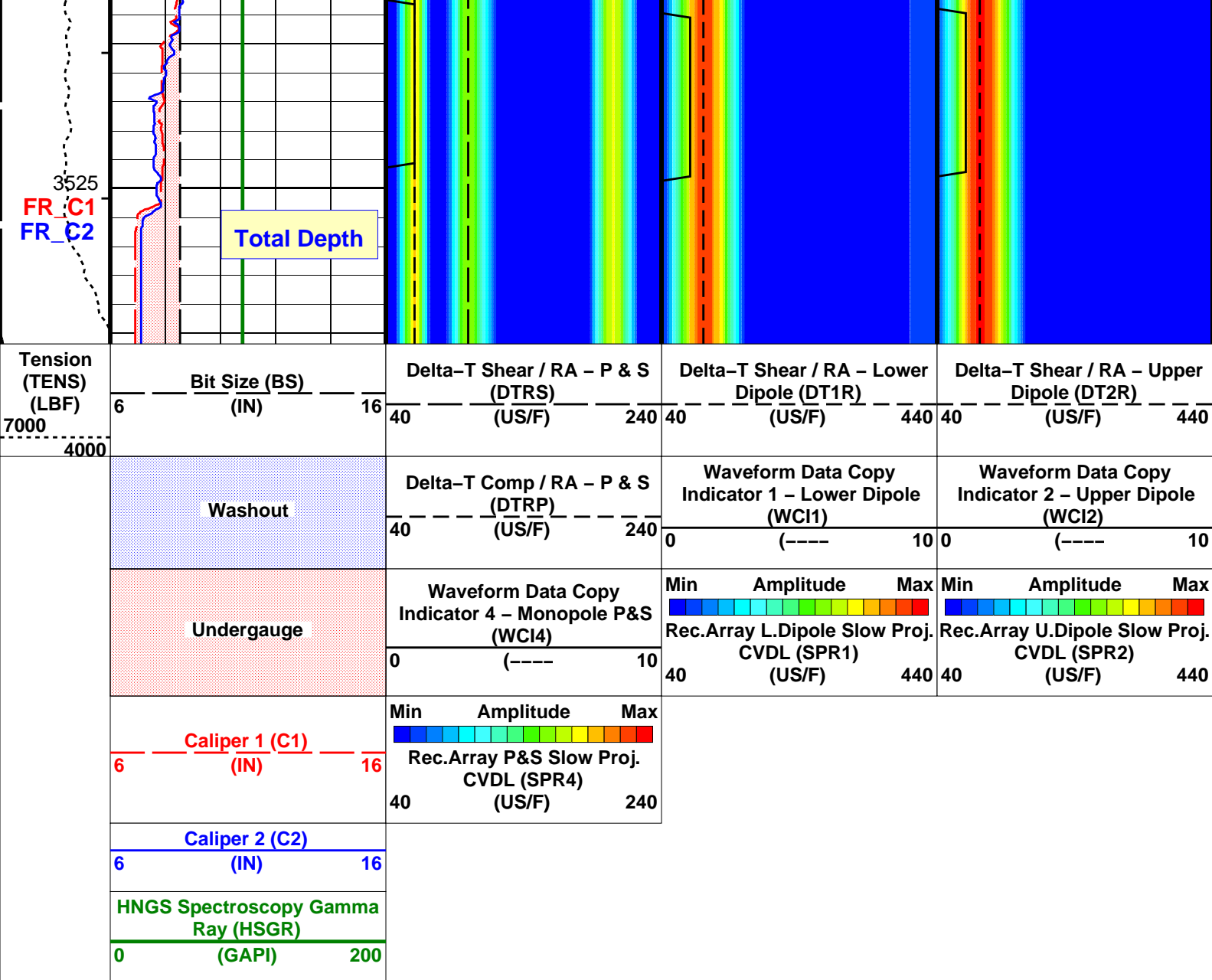












PIP SUMMARY

- Integrated Transit Time Minor Pip Every 1 MS
 - Integrated Transit Time Major Pip Every 10 MS

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value	
DSST-B: Dipole Shear Imager – B			
BHS	Borehole Status	OPEN	
CASF	Label Casing Function – Monopole P&S	50	
COLL	Label Slowness Lower Limit – Monopole P&S Compressional	40	US/F
COUL	Label Slowness Upper Limit – Monopole P&S Compressional	180	US/F
DDE1	Digitizing Delay 1	0	US
DDE2	Digitizing Delay 2	0	US
DDE4	Digitizing Delay 4	0	US
DDEX	Digitizing Delay X	0	US
DLCS	Label Compressional Source – Dipole Shear	USE	
DSHL	Label Slowness Lower Limit – Dipole Shear	75	US/F
DSHU	Label Slowness Upper Limit – Dipole Shear	775	US/F
DSI1	Digitizer Sample Interval 1	40	US
DSI2	Digitizer Sample Interval 2	40	US
DSI4	Digitizer Sample Interval 4	10	US
DSIX	Digitizer Sample Interval X	40	US
DTCS	Compressional Delta–T Source for DTCO Channel	PS_COMP	
DTF	Delta–T Fluid	189	US/F
DWC1	Digitizer Word Count 1	512	
DWC2	Digitizer Word Count 2	512	
DWC4	Digitizer Word Count 4	512	
DWCX	Digitizer Word Count X	480	

FILG	Label Fill Gap Control – Monopole P&S	COMP_SHEAR	
GCSE	Generalized Caliper Selection	BS	
ITTS	Integrated Transit Time Source	DTCO	
LFC	Label Formation Character – Monopole P&S	DYNAMIC	
LTXG	Lower Dipole Transmitter Geometry	156	IN
MCS	Mean Casing Slowness	57	US/F
MTXG	Monopole Transmitter Geometry	186	IN
NWI1	Number Waveform Items 1	8	
NWI2	Number Waveform Items 2	8	
NWI4	Number Waveform Items 4	8	
NWIX	Number Waveform Items X	0	
RSMN	Label Shear/Compressional Minimum Ratio – Monopole P&S	1.4	
RSMX	Label Shear/Compressional Maximum Ratio – Monopole P&S	2.12	
RX1G	Receiver 1 Geometry	294	IN
RX2G	Receiver 2 Geometry	300	IN
RX3G	Receiver 3 Geometry	306	IN
RX4G	Receiver 4 Geometry	312	IN
RX5G	Receiver 5 Geometry	318	IN
RX6G	Receiver 6 Geometry	324	IN
RX7G	Receiver 7 Geometry	330	IN
RX8G	Receiver 8 Geometry	336	IN
SAM1	DSST Sonic Acquisition Mode 1 – Lower Dipole Mode	EVEN	
SAM2	DSST Sonic Acquisition Mode 2 – Upper Dipole Mode	ODD	
SAM4	DSST Sonic Acquisition Mode 4 – High Frequency Monopole Mode for P&S	EVEN	
SAMX	DSST Sonic Acquisition Mode X – Both Dipoles or Monopole Mode for Expert	OFF	
SAS1	STC Sonic Array Status – Lower Dipole	255	
SAS2	STC Sonic Array Status – Upper Dipole	255	
SAS4	STC Sonic Array Status – Monopole P&S	255	
SBO1	STC Search Band Offset – Lower Dipole	3000	US
SBO2	STC Search Band Offset – Upper Dipole	3000	US
SBO4	STC Search Band Offset – Monopole P&S	500	US
SBR4	STC Baseline Removal – Monopole P&S	ON	
SBW1	STC Search Bandwidth – Lower Dipole	8000	US
SBW2	STC Search Bandwidth – Upper Dipole	8000	US
SBW4	STC Search Bandwidth – Monopole P&S	2000	US
SFC1	STC Formation Character – Lower Dipole	SELECTABLE	
SFC2	STC Formation Character – Upper Dipole	SELECTABLE	
SFC4	STC Formation Character – Monopole P&S	SELECTABLE	
SFM1	STC Filter – Lower Dipole	B1–3K	
SFM2	STC Filter – Upper Dipole	B1–3K	
SFM4	STC Filter – Monopole P&S	B3–20K	
SHLL	Label Slowness Lower Limit – Monopole P&S Shear	75	US/F
SHUL	Label Slowness Upper Limit – Monopole P&S Shear	180	US/F
SLL1	STC Slowness Lower Limit – Lower Dipole	40	US/F
SLL2	STC Slowness Lower Limit – Upper Dipole	40	US/F
SLL4	STC Slowness Lower Limit – Monopole P&S	40	US/F
SST1	STC Slowness Step – Lower Dipole	4	US/F
SST2	STC Slowness Step – Upper Dipole	4	US/F
SST4	STC Slowness Step – Monopole P&S	2	US/F
SSW1	STC Source Waveform – Lower Dipole	WF_SAM1	
SSW2	STC Source Waveform – Upper Dipole	WF_SAM2	
SSW4	STC Source Waveform – Monopole P&S	WF_SAM4	
STLL	Label Slowness Lower Limit – Monopole Stoneley	180	US/F
STUL	Label Slowness Upper Limit – Monopole Stoneley	780	US/F
SUL1	STC Slowness Upper Limit – Lower Dipole	775	US/F
SUL2	STC Slowness Upper Limit – Upper Dipole	775	US/F
SUL4	STC Slowness Upper Limit – Monopole P&S	240	US/F
SWD1	STC Slowness Width – Lower Dipole	40	US/F
SWD2	STC Slowness Width – Upper Dipole	40	US/F
SWD4	STC Slowness Width – Monopole P&S	10	US/F
TBF1	STC Time for Baseline Fill – Lower Dipole	0	US
TBF2	STC Time for Baseline Fill – Upper Dipole	0	US
TBF4	STC Time for Baseline Fill – Monopole P&S	300	US
TLL1	STC Time Lower Limit – Lower Dipole	600	US
TLL2	STC Time Lower Limit – Upper Dipole	600	US
TLL4	STC Time Lower Limit – Monopole P&S	150	US
TST1	STC Time Step – Lower Dipole	200	US
TST2	STC Time Step – Upper Dipole	200	US
TST4	STC Time Step – Monopole P&S	50	US
TUL1	STC Time Upper Limit – Lower Dipole	15912.5	US
TUL2	STC Time Upper Limit – Upper Dipole	15525	US
TUL4	STC Time Upper Limit – Monopole P&S	3660	US
TWD1	STC Time Width – Lower Dipole	2000	US
TWD2	STC Time Width – Upper Dipole	2000	US
TWD4	STC Time Width – Monopole P&S	1000	US
TWI1	STC Integration Time Window – Lower Dipole	1600	US
TWI2	STC Integration Time Window – Upper Dipole	1600	US
TWI4	STC Integration Time Window – Monopole P&S	500	US
TWSX	Transmitter Waveform Select X	0	
UTXG	Upper Dipole Transmitter Geometry	162	IN
WFM1	Waveform Mode 1	W1	
WFM2	Waveform Mode 2	W1	
WFM4	Waveform Mode 4	W1	

WFM	HNGS-BA: Hostile Natural Gamma Ray Sonde	HNGS Detector 1 Barite Constant	1	
BAR1		HNGS Detector 2 Barite Constant	1	
BAR2		HNGS Borehole Potassium Correction Concentration	0	
BHK		Borehole Status	OPEN	
BHS		Inner Casing Outer Diameter	9.625	IN
CSD1		Outer Casing Outer Diameter	13.375	IN
CSD2		Inner Casing Weight	43.5	LB/F
CSW1		Outer Casing Weight	54.5	LB/F
CSW2		HNGS Barite Constant Correction Flag	NONE	
DBCC		Generalized Caliper Selection	BS	
GCSE		HNGS Detector 1 Allow/Disallow In Processing	ALLOW	
H1P		HNGS Detector 2 Allow/Disallow In Processing	ALLOW	
H2P		HNGS Borehole Potassium Running Average	-0.00391936	
HABK		HNGS Alpha Filter Length	60	IN
HALF		HNGS Apply Borehole Potassium Correction	NONE	
HCRB		Mud Weighting Material	NATU	
HMWM		HNGS Processing Enable	YES	
HNPE		HNGS Detector 1 Calibration Bismuth Count Rate	1.3	CPS
S1BI		HNGS Detector 2 Calibration Bismuth Count Rate	1.3	CPS
S2BI		HNGS Standard Gamma-Ray Correction Flag	YES	
SGRC		Tool Position	ECCE	
TPOS		HNGS Detector 1 Variable Barite Factor Running Average	0.998909	
VBA1		HNGS Detector 2 Variable Barite Factor Running Average	1.00683	
VBA2		HOLEV: Integrated Hole/Cement Volume		
BHS		Borehole Status	OPEN	
GCSE		Generalized Caliper Selection	BS	
	System and Miscellaneous			
BS		Bit Size	8.500	IN
DFD		Drilling Fluid Density	9.40	LB/G
DO		Depth Offset for Playback	0.8	M
PP		Playback Processing	RECOMPUTE	

Format: DSI_BCR_IMAGE_200 Vertical Scale: 1:200 Graphics File Created: 04-Dec-2004 17:03

OP System Version: 12C0-301

MCM

FBST-B	12C0-301	DSST-B	12C0-301
HNGC-A	12C0-301	HNGS-BA	12C0-301
DTA-A	12C0-301	DTC-H	12C0-301
DTPC-A	12C0-301		

Input DLIS Files

DEFAULT	FMI_DSI_NGS_344LUP	FN:554	PRODUCER	02-Dec-2004 10:56	3529.6 M	2380.5 M
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Output DLIS Files

DEFAULT	FMI_DSI_NGS_042PUP	FN:41	PRODUCER	04-Dec-2004 17:03
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Schlumberger

**Repeat Analysis
(1:200)**

MAXIS Field Log

Company: Origin Energy Resources Ltd. Well: Trefoil-1

Input DLIS Files

DEFAULT	FMI_DSI_NGS_042PUP	FN:41	PRODUCER	04-Dec-2004 17:03	3530.3 M	2416.6 M
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Output DLIS Files

DEFAULT	FMI_DSI_NGS_050PUP	FN:49	PRODUCER	04-Dec-2004 17:38	3488.0 M	3376.6 M
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OP System Version: 12C0-301

MCM

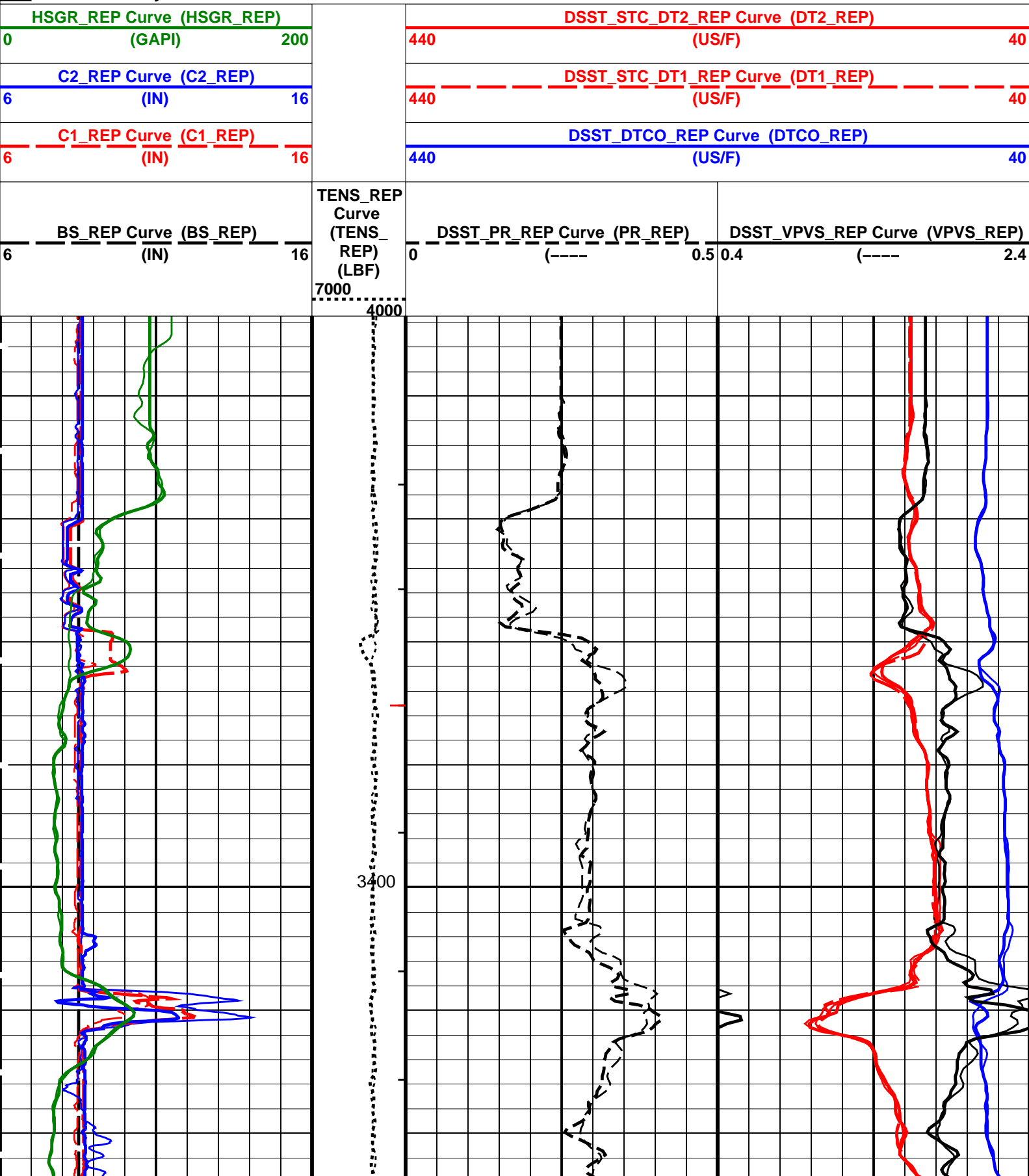
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 HNGC-A 12C0-301
 DTA-A 12C0-301
 DTPC-A 12C0-301

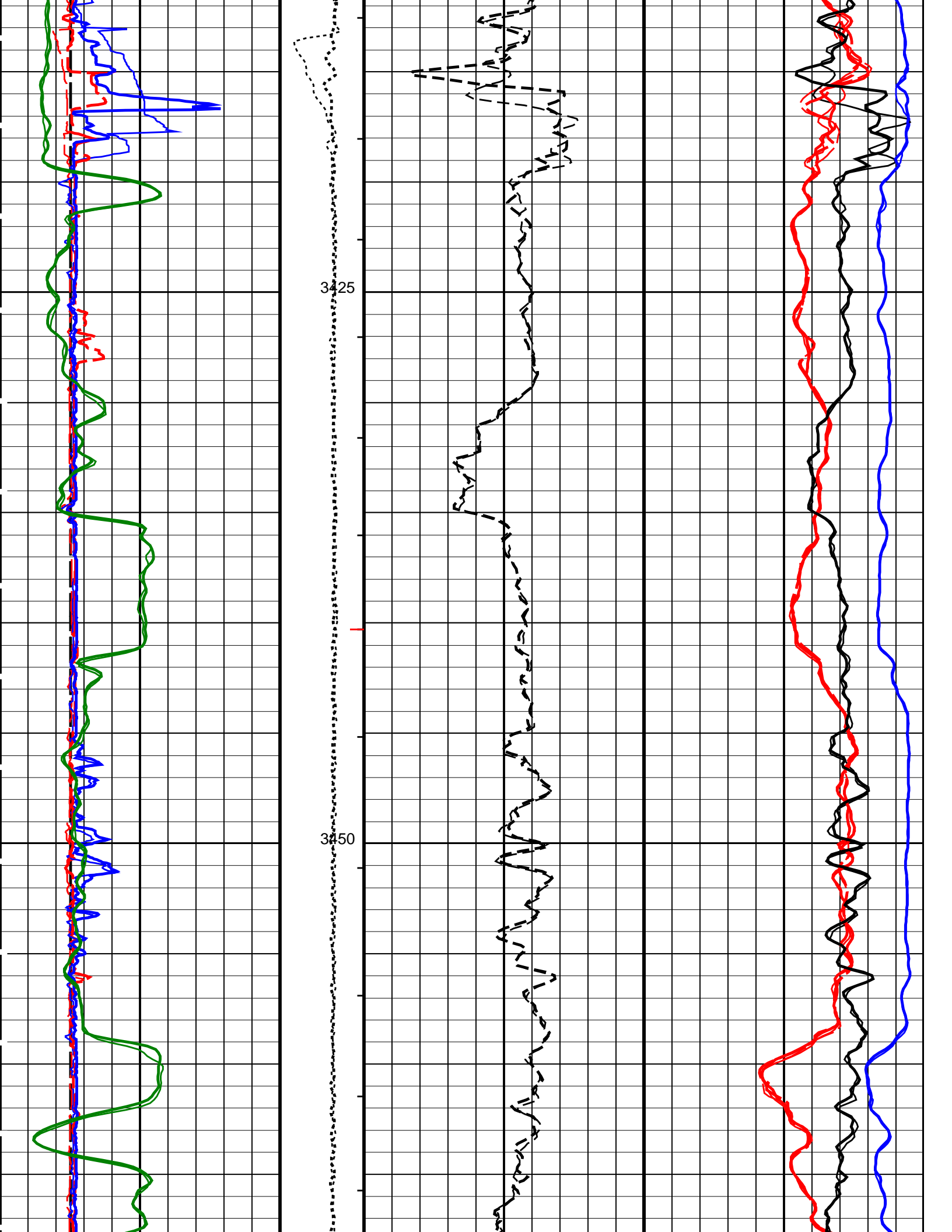
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 HNGS-BA 12C0-301
 DTC-H 12C0-301

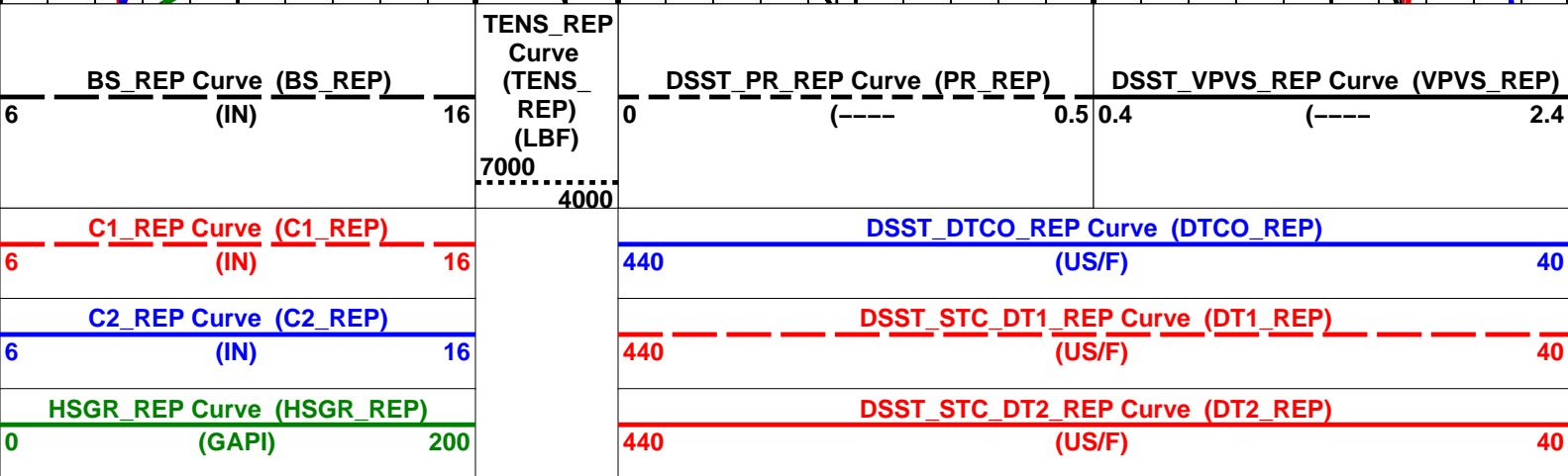
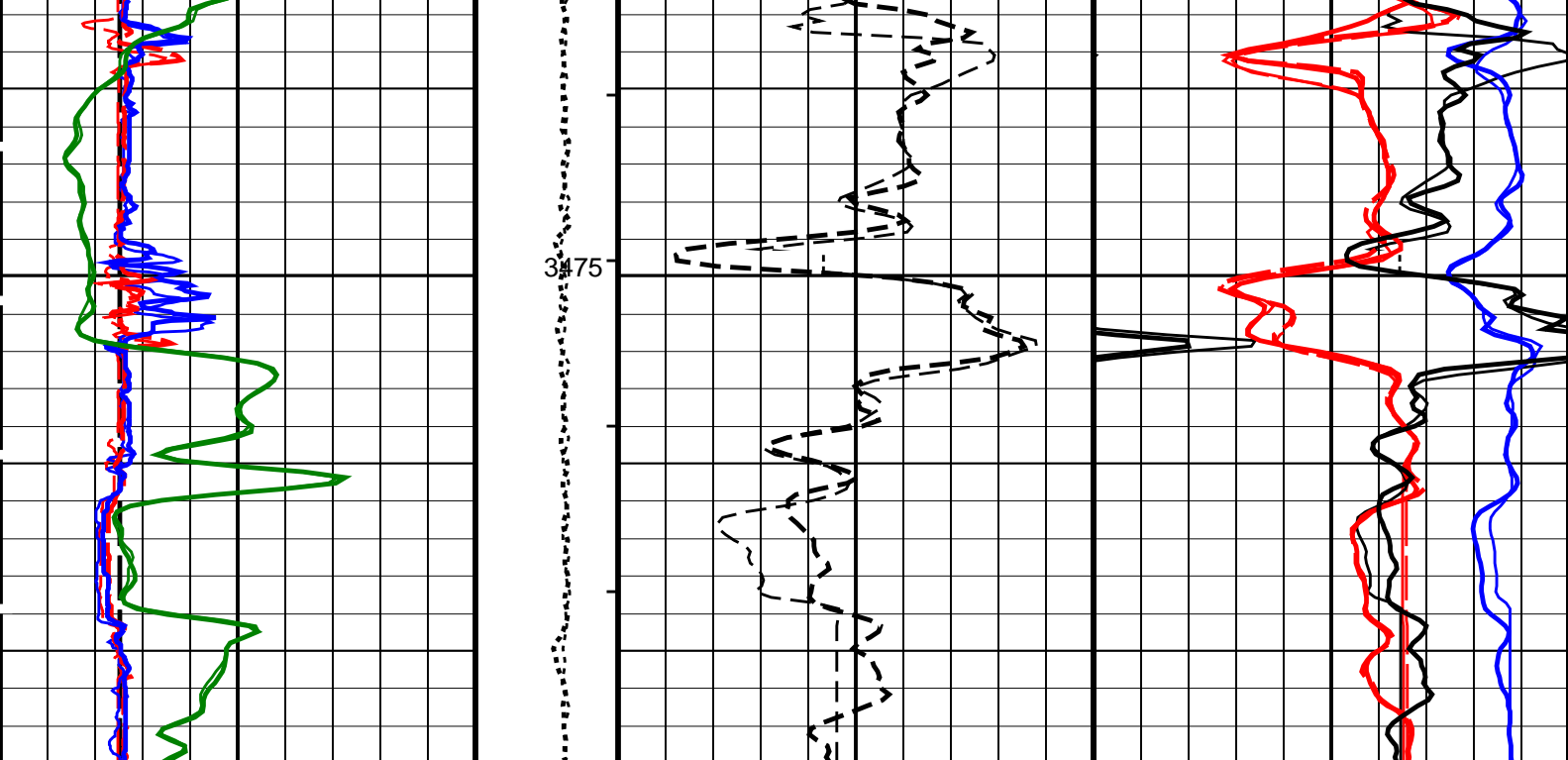
PIP SUMMARY

- ┆ Integrated Transit Time Minor Pip Every 1 MS
- ┆ Integrated Transit Time Major Pip Every 10 MS

Time Mark Every 60 S







PIP SUMMARY

- ┆ Integrated Transit Time Minor Pip Every 1 MS
- ┆ Integrated Transit Time Major Pip Every 10 MS

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
DSST-B: Dipole Shear Imager – B		
BHS	Borehole Status	OPEN
DTCS	Compressional Delta–T Source for DTCO Channel	PS_COMP
DTSS	Shear Delta–T Source for DTSM Channel	UPPER_DIPOLE
GCSE	Generalized Caliper Selection	BS
ITTS	Integrated Transit Time Source	DTCO
SAS1	STC Sonic Array Status – Lower Dipole	255
SAS2	STC Sonic Array Status – Upper Dipole	255
SFM1	STC Filter – Lower Dipole	B1–3K
SFM2	STC Filter – Upper Dipole	B1–3K
HNGS–BA: Hostile Natural Gamma Ray Sonde		
BAR1	HNGS Detector 1 Barite Constant	1
BAR2	HNGS Detector 2 Barite Constant	1
BHK	HNGS Borehole Potassium Correction Concentration	0
BHS	Borehole Status	OPEN
CSD1	Inner Casing Outer Diameter	9.625
CSD2	Outer Casing Outer Diameter	13.375
CSW1	Inner Casing Weight	43.5
CSW2	Outer Casing Weight	54.5
DBCC	HNGS Barite Constant Correction Flag	NONE
GCSE	Generalized Caliper Selection	BS
H1P	HNGS Detector 1 Allow/Disallow In Processing	ALLOW
H2P	HNGS Detector 2 Allow/Disallow In Processing	ALLOW
HARK	HNGS Borehole Potassium Running Average	0.00448694

HABK	HNGS Borehole Potassium Running Average	-0.00448884	60	IN
HALF	HNGS Alpha Filter Length		NONE	
HCRB	HNGS Apply Borehole Potassium Correction		NATU	
HMWM	Mud Weighting Material		YES	
HNPE	HNGS Processing Enable		1.3	CPS
S1BI	HNGS Detector 1 Calibration Bismuth Count Rate		1.3	CPS
S2BI	HNGS Detector 2 Calibration Bismuth Count Rate		YES	
SGRC	HNGS Standard Gamma-Ray Correction Flag		ECCE	
TPOS	Tool Position		0.998903	
VBA1	HNGS Detector 1 Variable Barite Factor Running Average		1.00638	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average			
HOLEV: Integrated Hole/Cement Volume				
BHS	Borehole Status		OPEN	
GCSE	Generalized Caliper Selection		BS	
System and Miscellaneous				
BS	Bit Size		8.500	IN
DFD	Drilling Fluid Density		9.40	LB/G
DO	Depth Offset for Playback		0.6	M
DORL	Depth Offset for Repeat Analysis		0.0	M
PP	Playback Processing		RECOMPUTE	
Format: DSI_BCR_200_REP Vertical Scale: 1:200 Graphics File Created: 04-Dec-2004 17:38				

OP System Version: 12C0-301

MCM

FBST-B	12C0-301	DSST-B	12C0-301
HNGC-A	12C0-301	HNGS-BA	12C0-301
DTA-A	12C0-301	DTC-H	12C0-301
DTPC-A	12C0-301		

Input DLIS Files

DEFAULT	FMI_DSI_NGS_042PUP	FN:41	PRODUCER	04-Dec-2004 17:03	3530.3 M	2416.6 M
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Output DLIS Files

DEFAULT	FMI_DSI_NGS_050PUP	FN:49	PRODUCER	04-Dec-2004 17:38		
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Schlumberger

Cased Hole Log (1:200)

MAXIS Field Log

Company: Origin Energy Resources Ltd. Well: Trefoil-1

Input DLIS Files

DEFAULT	FMI_DSI_NGS_345LUP	FN:556	PRODUCER	02-Dec-2004 10:57	2416.3 M	1699.0 M
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Output DLIS Files

DEFAULT	FMI_DSI_NGS_072PUP	FN:71	PRODUCER	04-Dec-2004 19:32	2416.3 M	1705.5 M
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OP System Version: 12C0-301

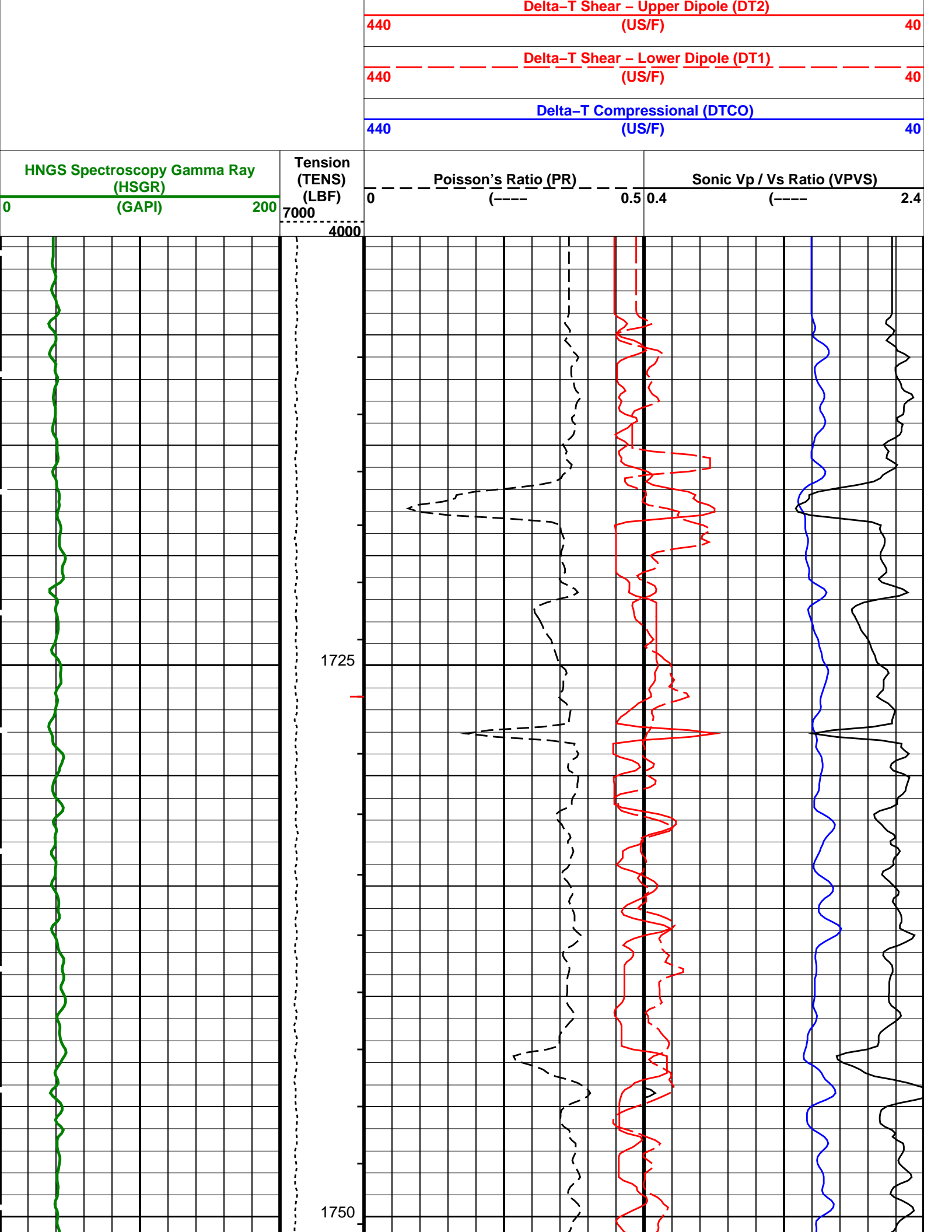
MCM

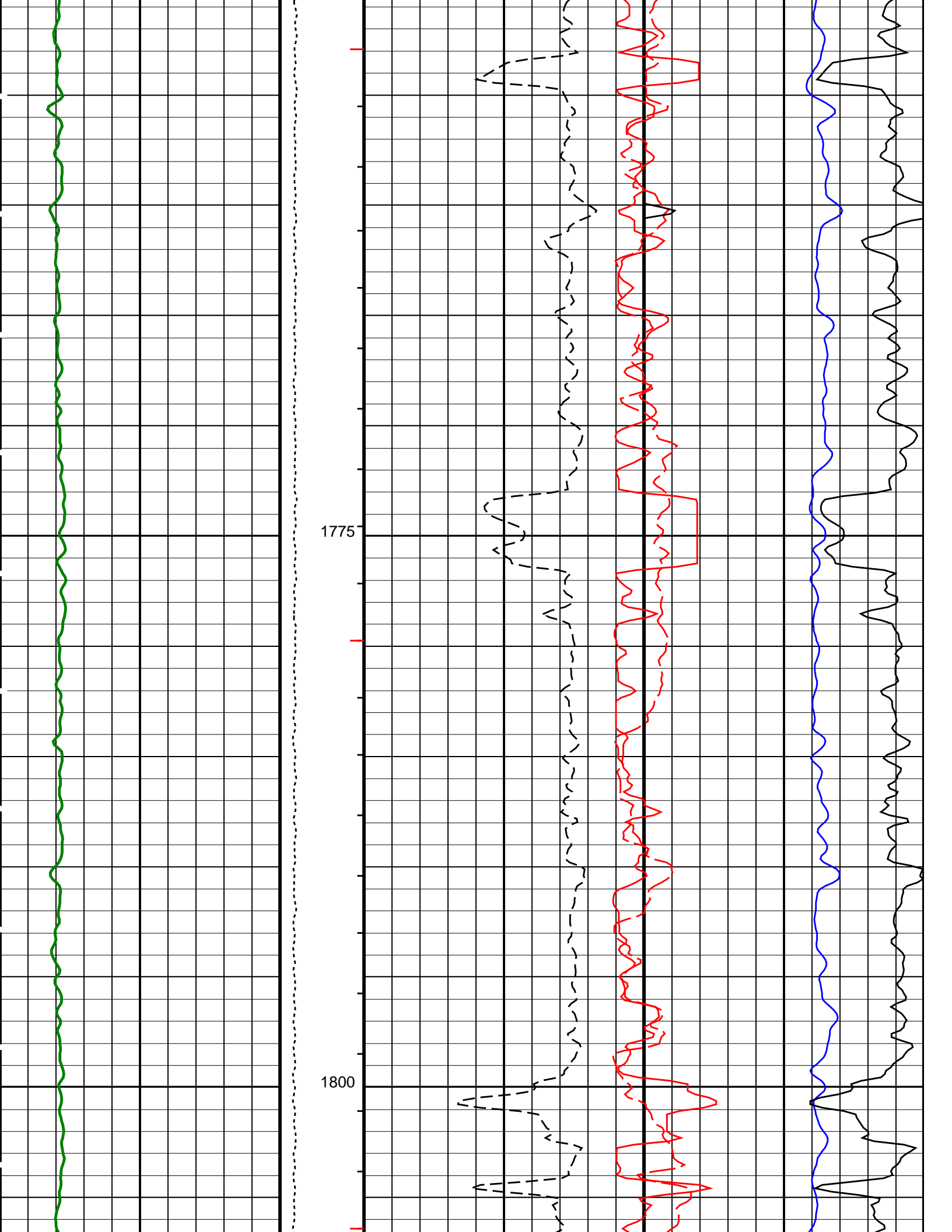
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HNGC-A	12C0-301	HNGS-BA	12C0-301
DTA-A	12C0-301	DTC-H	12C0-301
DTPC-A	12C0-301		

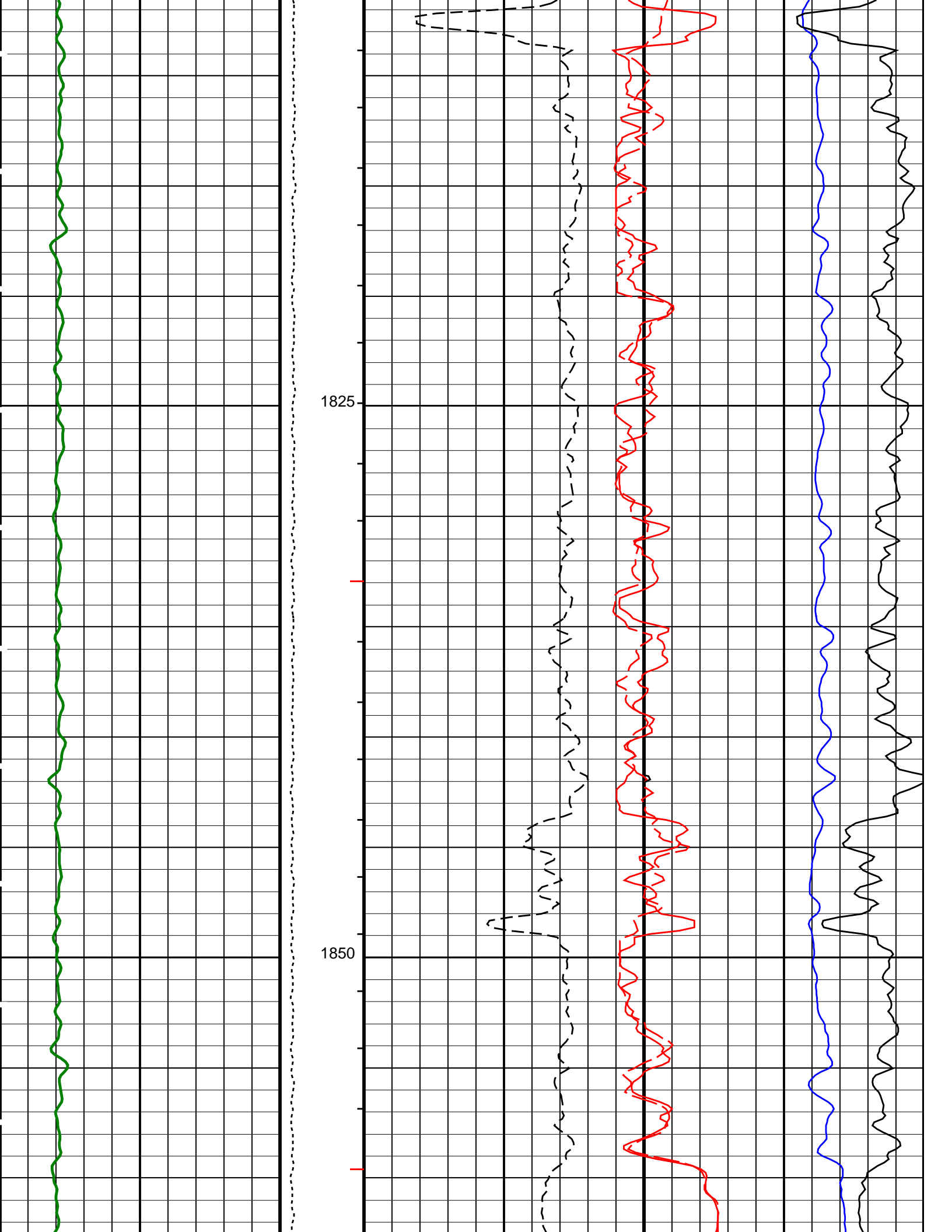
PIP SUMMARY

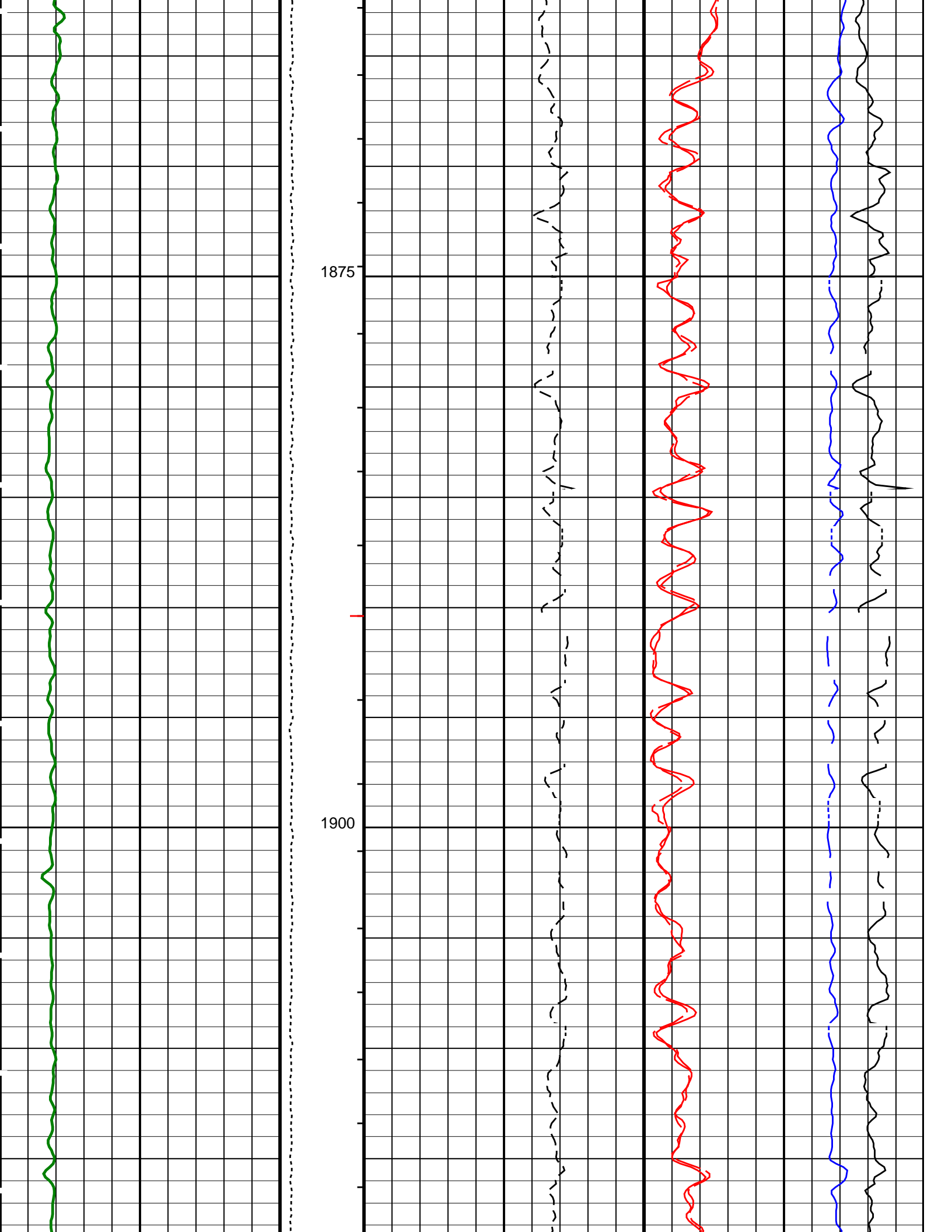
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- └ Integrated Transit Time Major Pip Every 10 MS

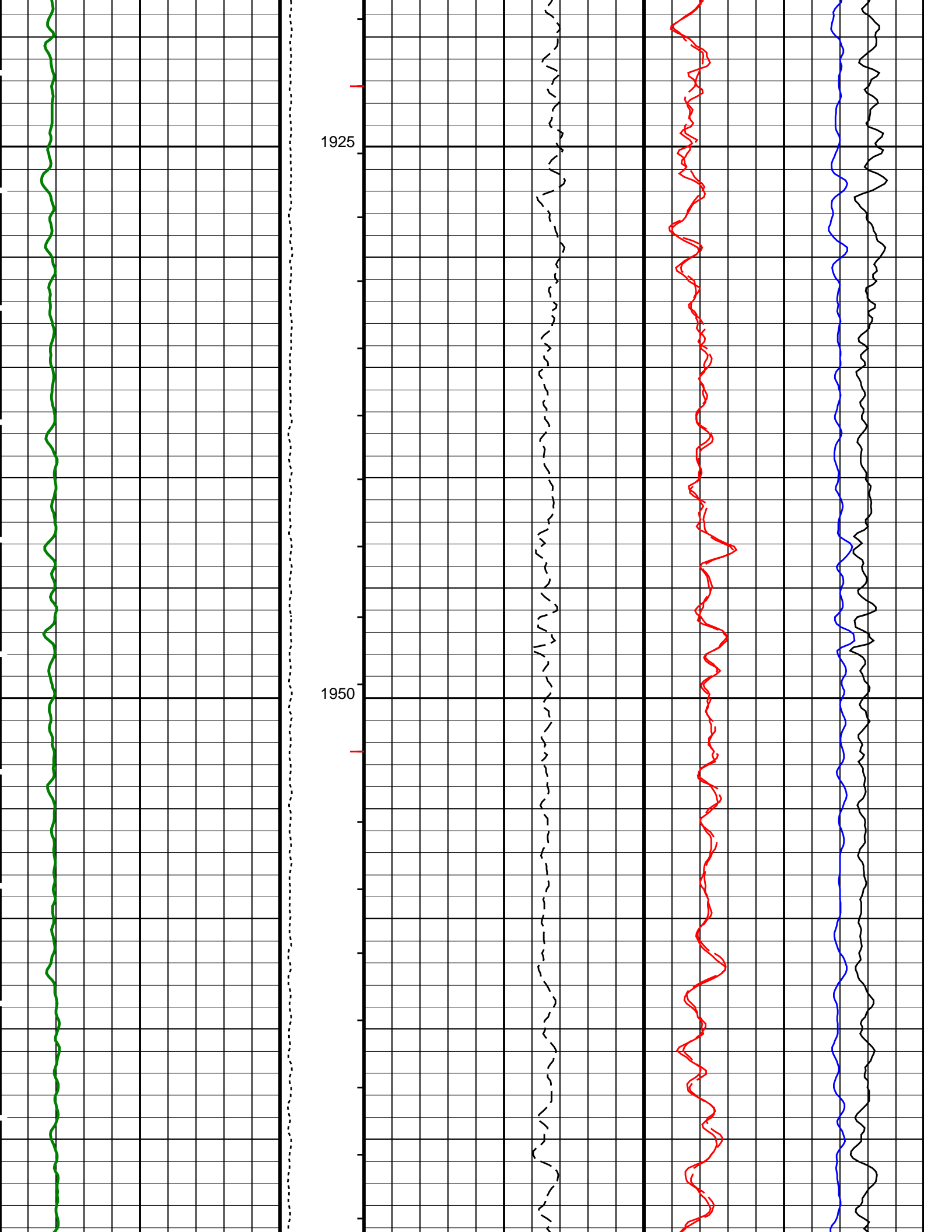
Time Mark Every 60 S

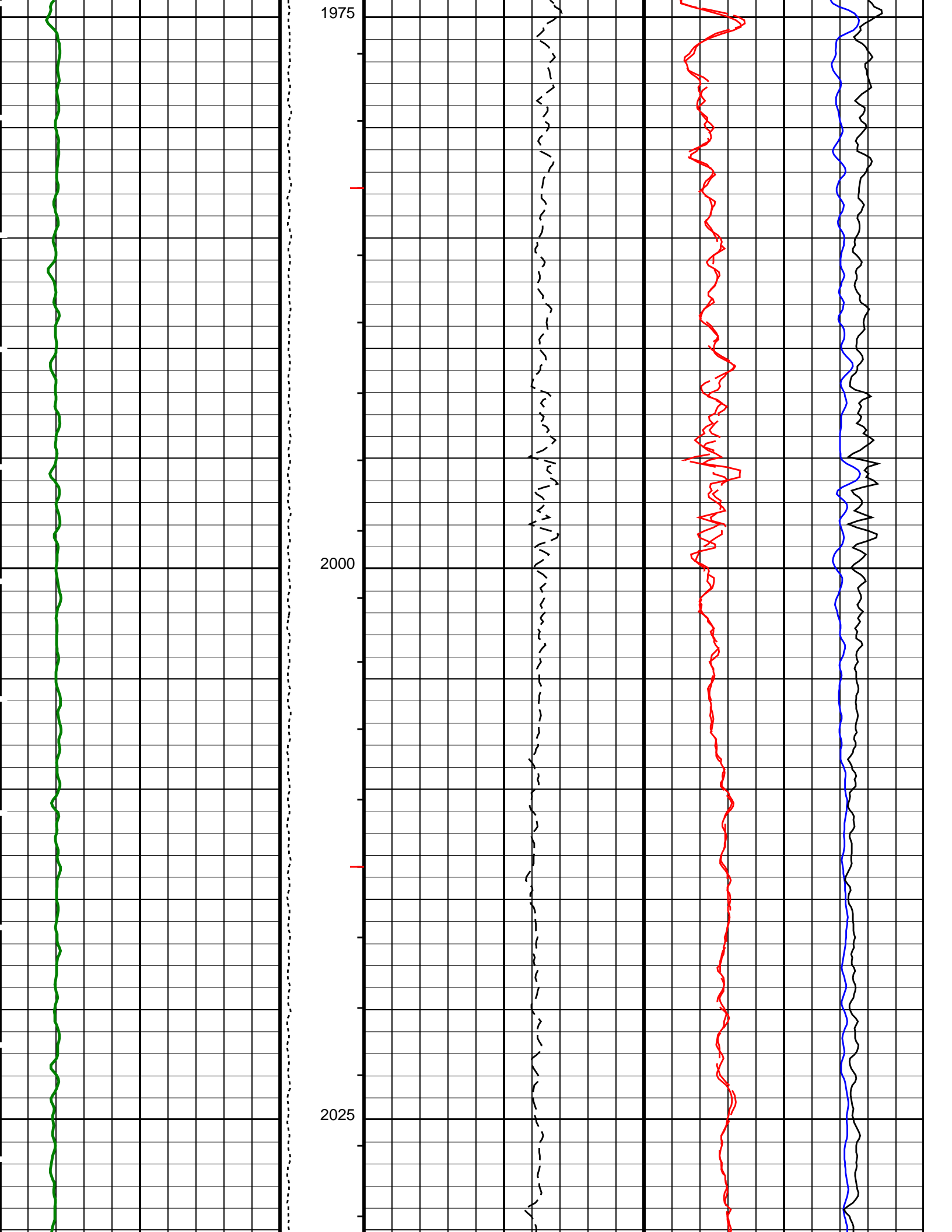


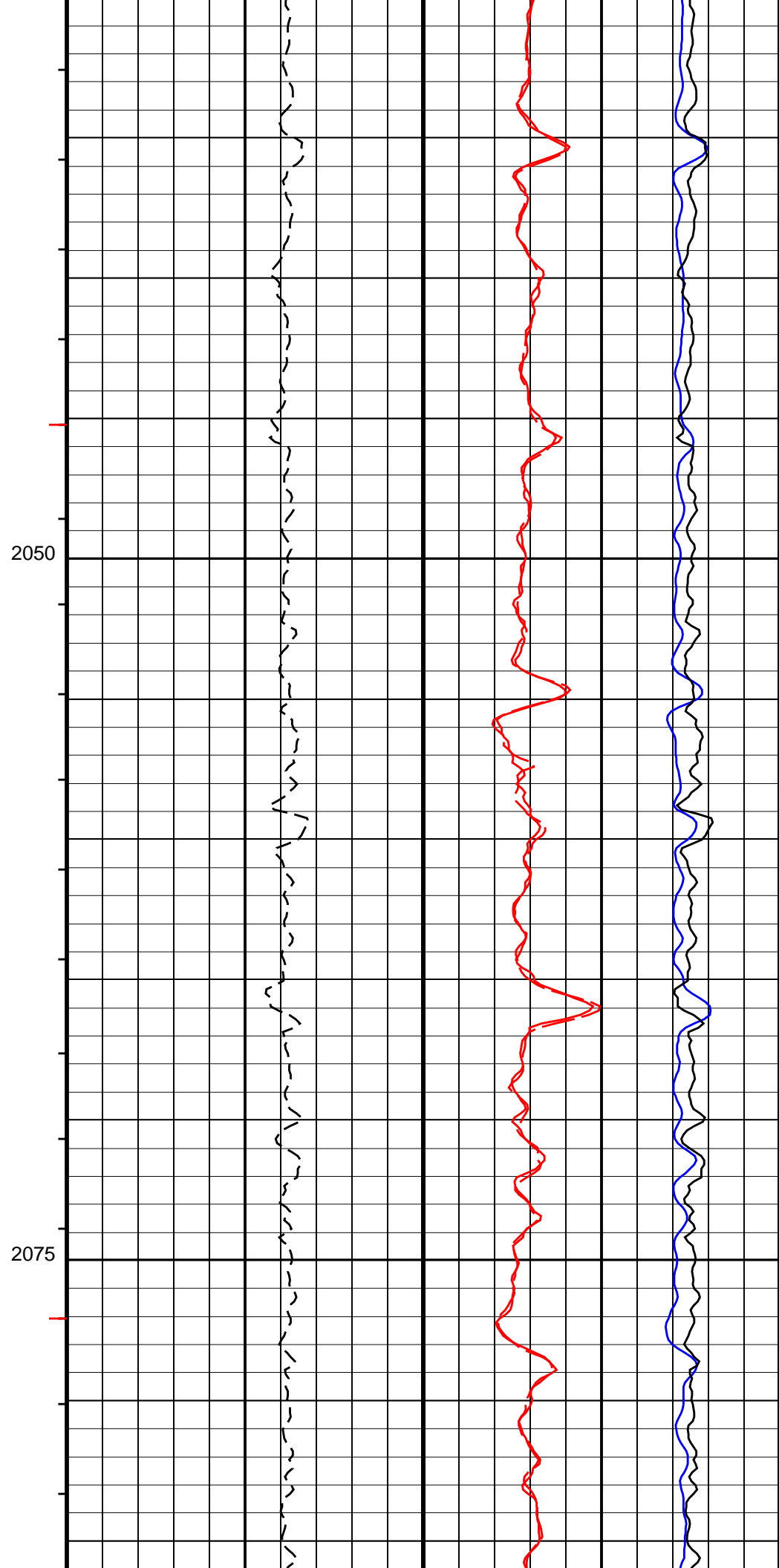
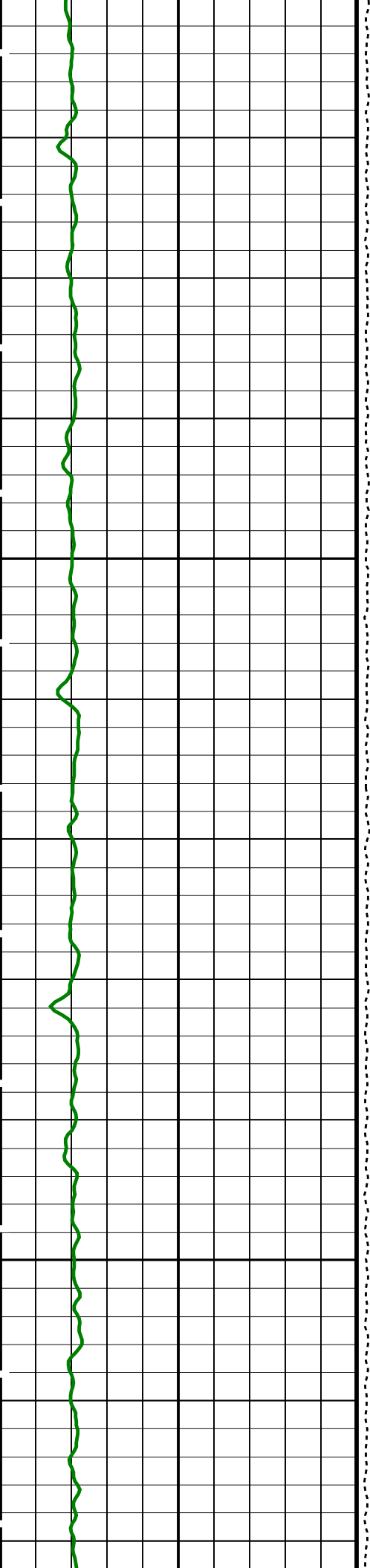


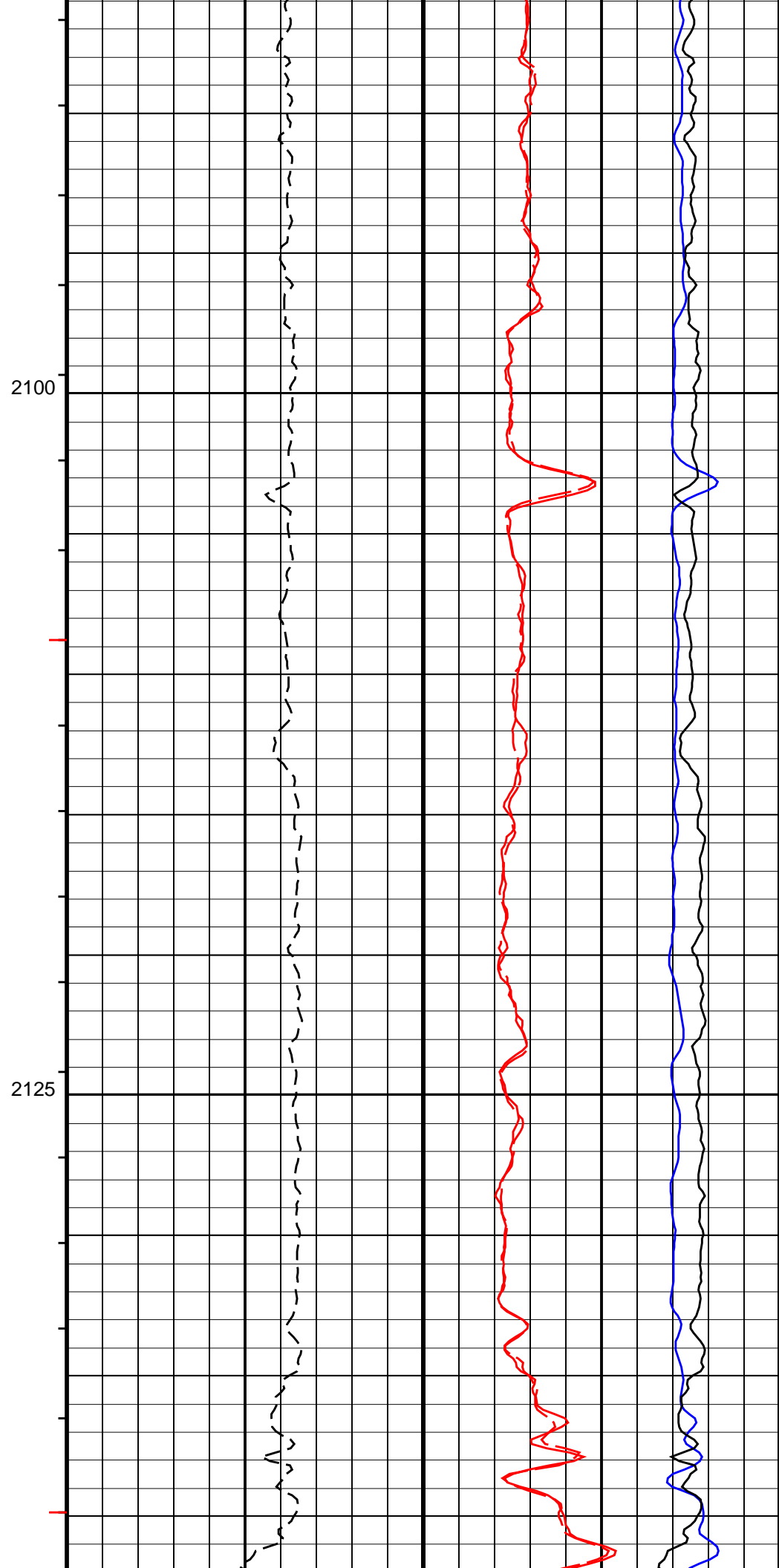
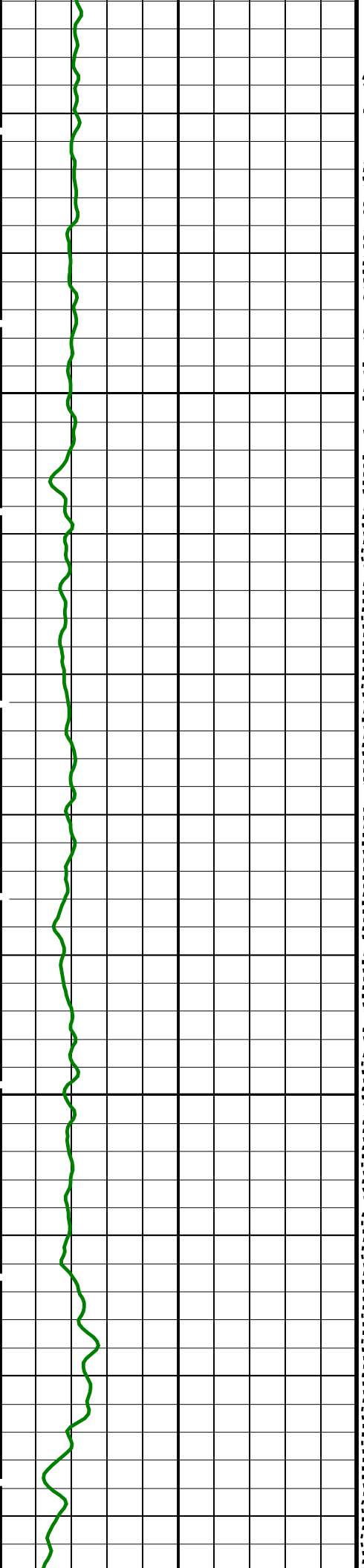


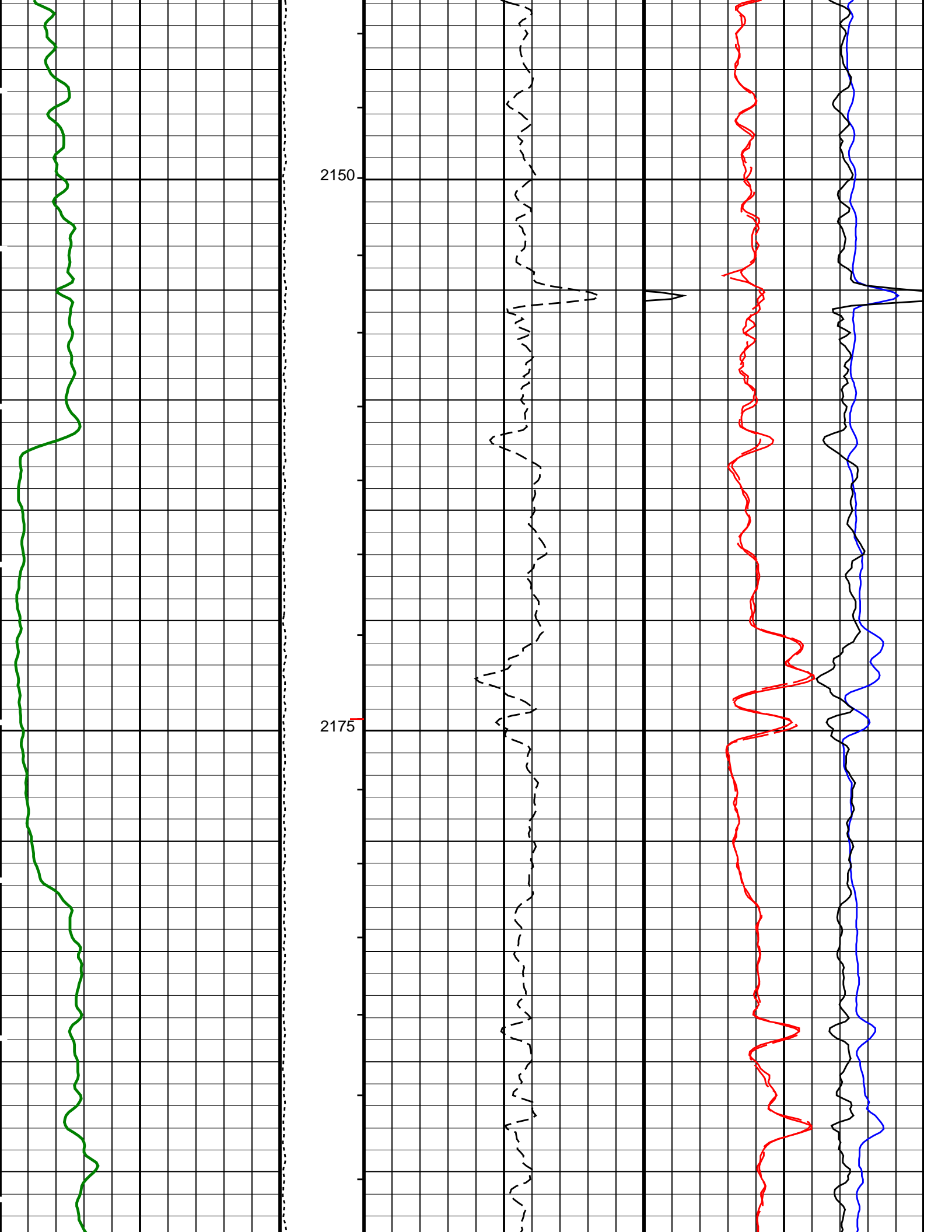


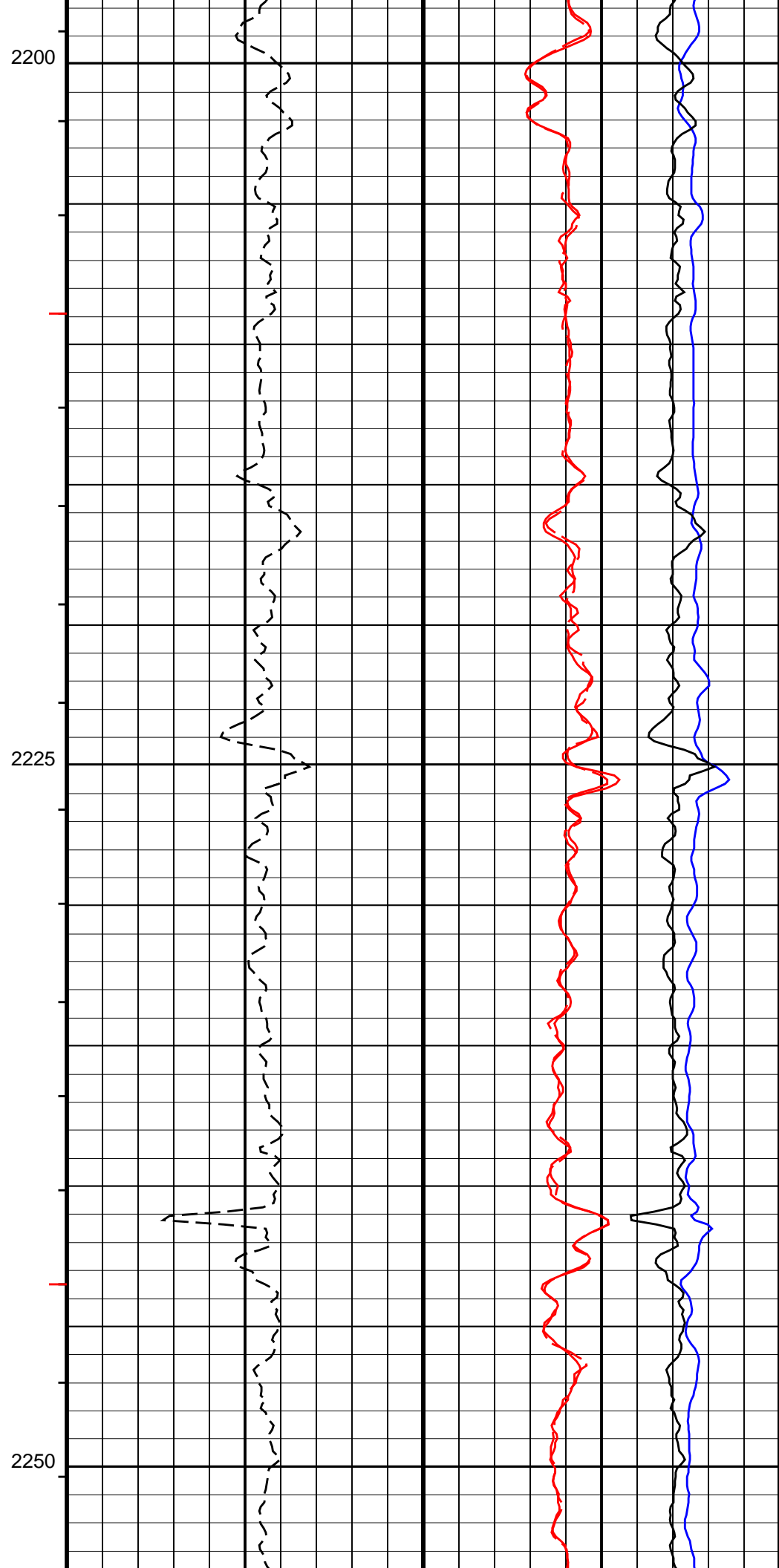
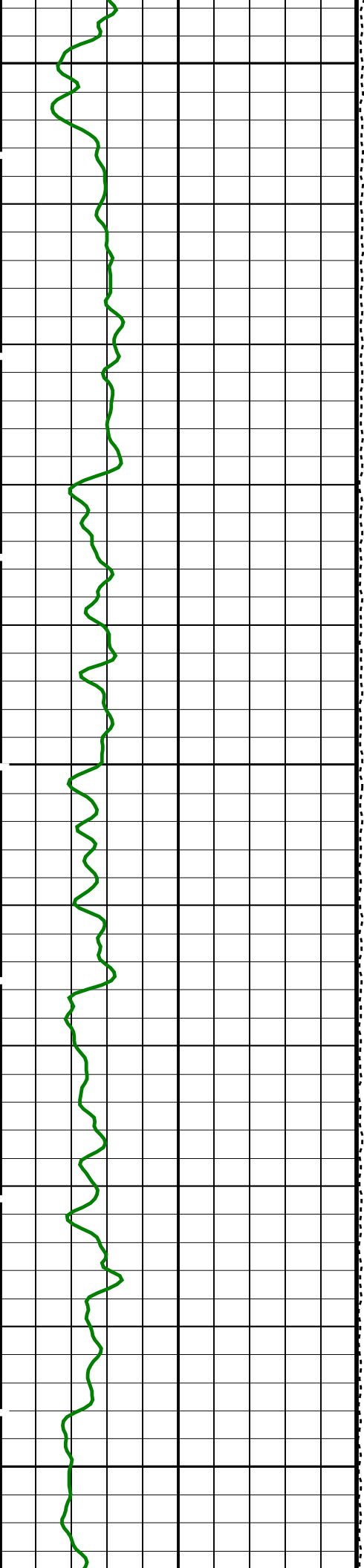


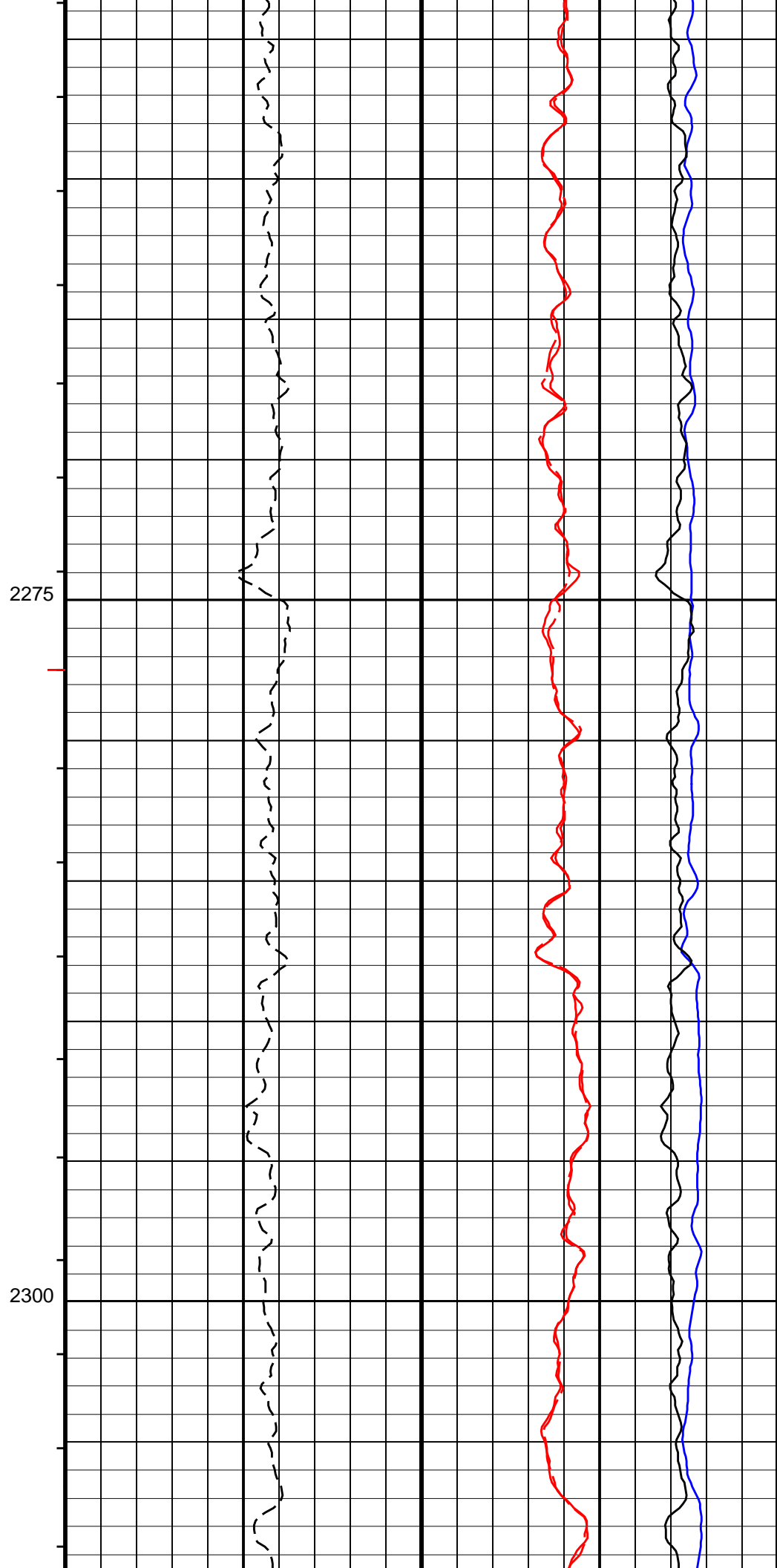
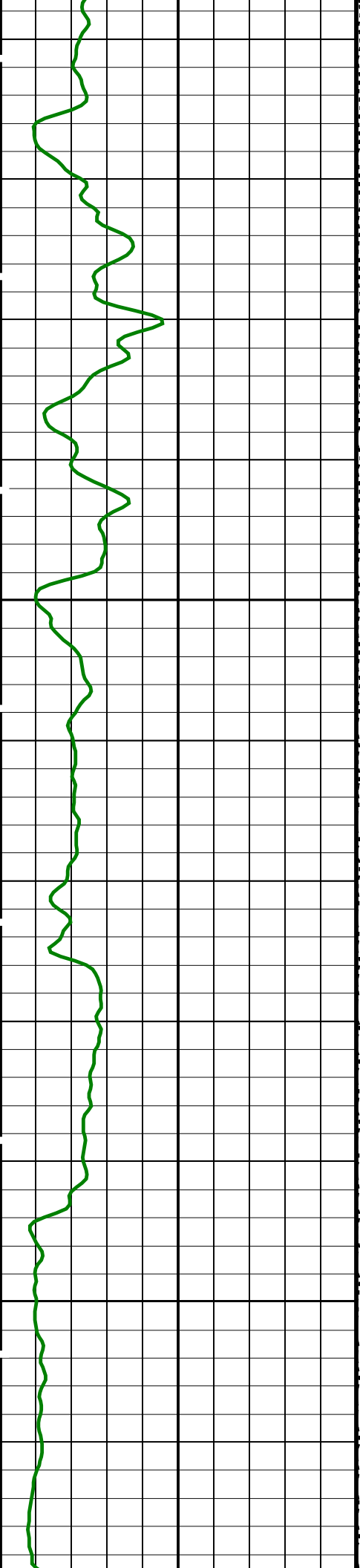


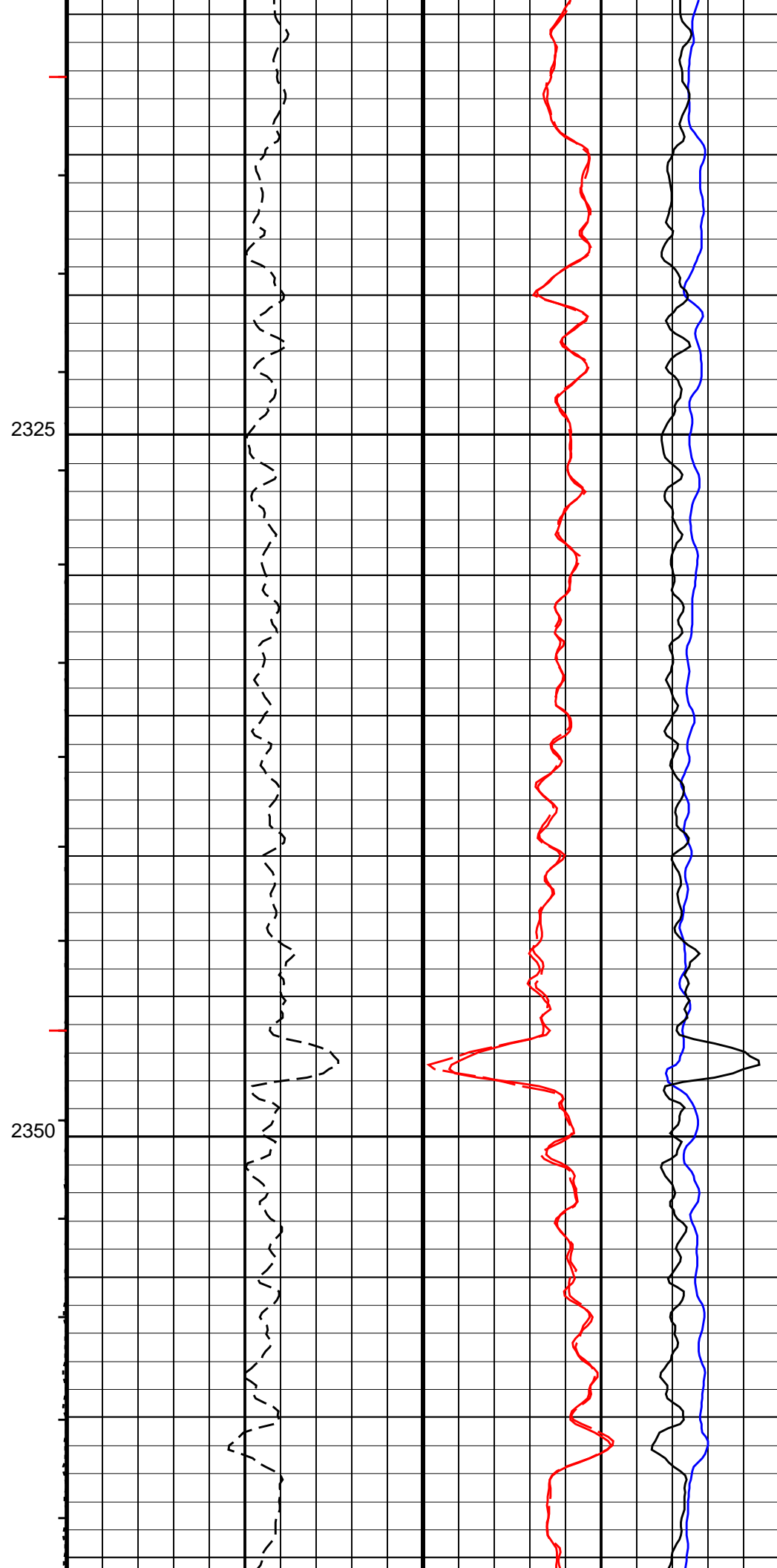
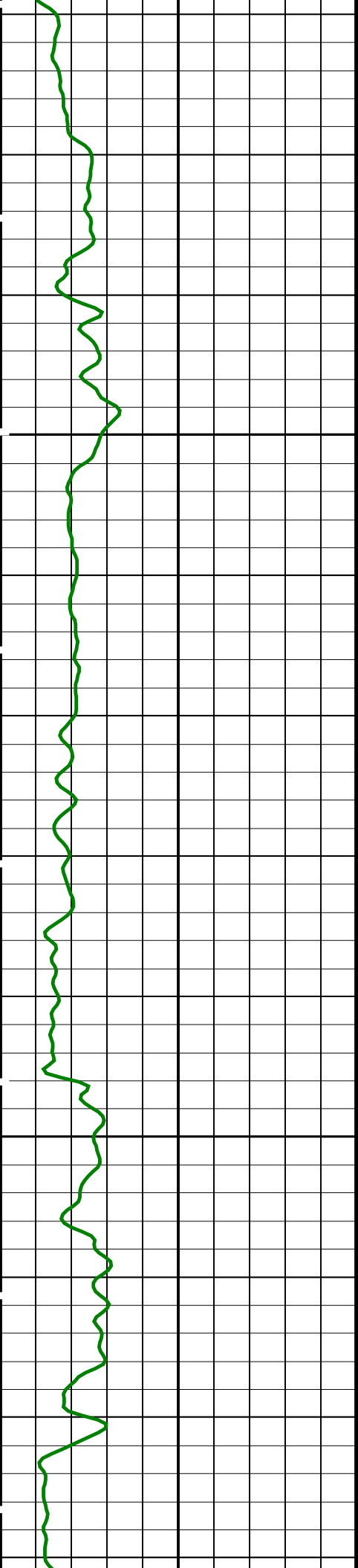


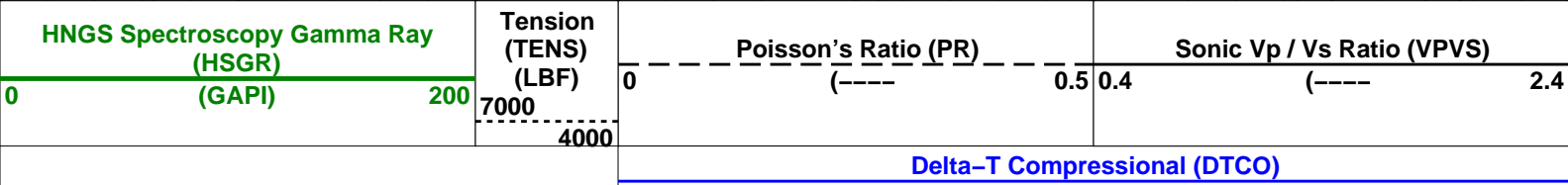
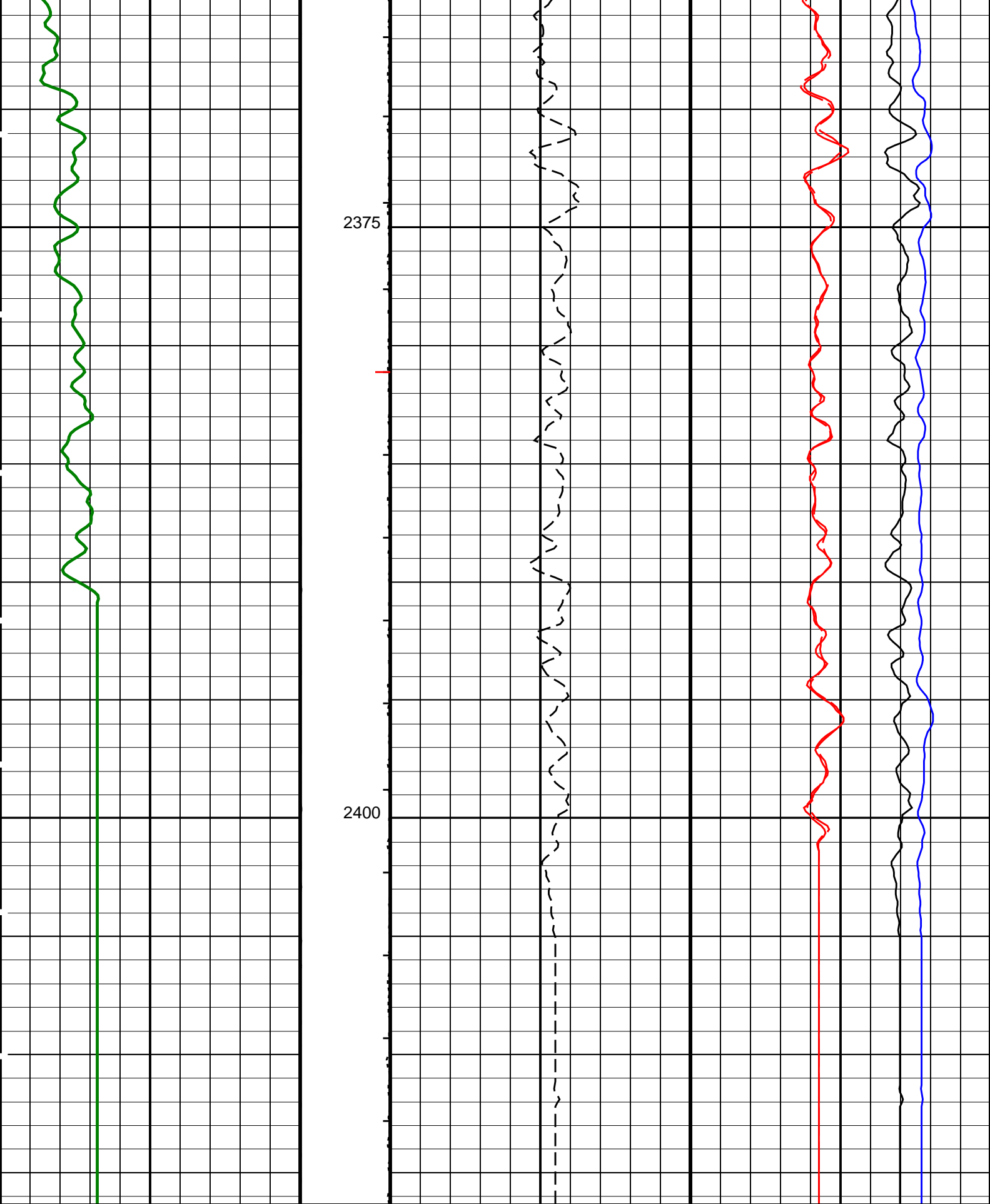












		440	(US/F)		40
		Delta-T Shear – Lower Dipole (DT1)			
440		(US/F)		40	
		Delta-T Shear – Upper Dipole (DT2)			
440		(US/F)		40	
PIP SUMMARY					
↓ Integrated Transit Time Minor Pip Every 1 MS					
→ Integrated Transit Time Major Pip Every 10 MS					
Time Mark Every 60 S					
Parameters					
DLIS Name		Description		Value	
DSST-B: Dipole Shear Imager – B					
BHS	Borehole Status		OPEN		
DTCS	Compressional Delta-T Source for DTCO Channel		PS_COMP		
DTSS	Shear Delta-T Source for DTSM Channel		UPPER_DIPOLE		
GCSE	Generalized Caliper Selection		BS		
ITTS	Integrated Transit Time Source		DTCO		
SAS1	STC Sonic Array Status – Lower Dipole		255		
SAS2	STC Sonic Array Status – Upper Dipole		255		
SFM1	STC Filter – Lower Dipole		B1-3K		
SFM2	STC Filter – Upper Dipole		B1-3K		
HNGS-BA: Hostile Natural Gamma Ray Sonde					
BAR1	HNGS Detector 1 Barite Constant		1		
BAR2	HNGS Detector 2 Barite Constant		1		
BHK	HNGS Borehole Potassium Correction Concentration		0		
BHS	Borehole Status		OPEN		
CSD1	Inner Casing Outer Diameter		9.625	IN	
CSD2	Outer Casing Outer Diameter		13.375	IN	
CSW1	Inner Casing Weight		43.5	LB/F	
CSW2	Outer Casing Weight		54.5	LB/F	
DBCC	HNGS Barite Constant Correction Flag		NONE		
GCSE	Generalized Caliper Selection		BS		
H1P	HNGS Detector 1 Allow/Disallow In Processing		ALLOW		
H2P	HNGS Detector 2 Allow/Disallow In Processing		ALLOW		
HABK	HNGS Borehole Potassium Running Average		-0.00364583		
HALF	HNGS Alpha Filter Length		60	IN	
HCRB	HNGS Apply Borehole Potassium Correction		NONE		
HMWM	Mud Weighting Material		NATU		
HNPE	HNGS Processing Enable		YES		
S1BI	HNGS Detector 1 Calibration Bismuth Count Rate		1.3	CPS	
S2BI	HNGS Detector 2 Calibration Bismuth Count Rate		1.3	CPS	
SGRC	HNGS Standard Gamma-Ray Correction Flag		YES		
TPOS	Tool Position		ECCE		
VBA1	HNGS Detector 1 Variable Barite Factor Running Average		0.956781		
VBA2	HNGS Detector 2 Variable Barite Factor Running Average		0.971473		
HOLEV: Integrated Hole/Cement Volume					
BHS	Borehole Status		OPEN		
GCSE	Generalized Caliper Selection		BS		
System and Miscellaneous					
BS	Bit Size		8.500	IN	
DFD	Drilling Fluid Density		9.40	LB/G	
DO	Depth Offset for Playback		0.0	M	
PP	Playback Processing		RECOMPUTE		
Format: DSI_BCR_200		Vertical Scale: 1:200		Graphics File Created: 04-Dec-2004 19:32	
OP System Version: 12C0-301					
MCM					
FBST-B	12C0-301	DSST-B	12C0-301		
HNGC-A	12C0-301	HNGS-BA	12C0-301		
DTA-A	12C0-301	DTC-H	12C0-301		
DTPC-A	12C0-301				
Input DLIS Files					
DEFAULT	FMI_DSI_NGS_345LUP	FN:556	PRODUCER	02-Dec-2004 10:57	2416.3 M 1699.0 M
Output DLIS Files					
DEFAULT	FMI_DSI_NGS_072PUP	FN:71	PRODUCER	04-Dec-2004 19:32	

Company: Origin Energy Resources Ltd.

Well: Trefoil-1

Input DLIS Files

DEFAULT	FMI_DSI_NGS_345LUP	FN:556	PRODUCER	02-Dec-2004 10:57	2416.3 M	1699.0 M
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Output DLIS Files

DEFAULT	FMI_DSI_NGS_072PUP	FN:71	PRODUCER	04-Dec-2004 19:32	2416.3 M	1705.5 M
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OP System Version: 12C0-301

MCM

FBST-B	12C0-301	DSST-B	12C0-301
HNGC-A	12C0-301	HNGS-BA	12C0-301
DTA-A	12C0-301	DTC-H	12C0-301
DTPC-A	12C0-301		

Changed Parameter Summary

DLIS Name	New Value	Previous Value	Depth & Time
COLL	75 US/F	75 US/F	2416.3 19:32:34
	60 US/F	75 US/F	2229.9 19:33:14
	57 US/F	60 US/F	2197.0 19:33:20
	60 US/F	57 US/F	2149.9 19:33:30
	75 US/F	60 US/F	2094.9 19:33:41
COUL	75 US/F	75 US/F	1864.9 19:34:34
	110 US/F	140 US/F	2416.3 19:32:34
	110 US/F	110 US/F	2229.9 19:33:14
	110 US/F	110 US/F	2197.0 19:33:20
	110 US/F	110 US/F	2149.9 19:33:30
DSHL	110 US/F	110 US/F	2094.9 19:33:41
	140 US/F	110 US/F	1864.9 19:34:34
	75 US/F	190 US/F	2416.3 19:32:35
	190 US/F	75 US/F	1864.9 19:34:34
	775 US/F	270 US/F	2416.3 19:32:35
DSHU	270 US/F	775 US/F	1864.9 19:34:34
	150 US/F	180 US/F	2416.3 19:32:34
	150 US/F	150 US/F	2229.9 19:33:14
	150 US/F	150 US/F	2197.0 19:33:20
	150 US/F	150 US/F	2149.9 19:33:30
SHLL	180 US/F	150 US/F	2094.9 19:33:41
	180 US/F	180 US/F	1864.9 19:34:34
	230 US/F	300 US/F	2416.3 19:32:34
	230 US/F	230 US/F	2229.9 19:33:14
	200 US/F	230 US/F	2197.0 19:33:20
SHUL	210 US/F	200 US/F	2149.9 19:33:30
	300 US/F	210 US/F	2094.9 19:33:41
	300 US/F	300 US/F	1864.9 19:34:34

PIP SUMMARY

└ Integrated Transit Time Minor Pip Every 1 MS

└ Integrated Transit Time Major Pip Every 10 MS

Time Mark Every 60 S

Min Amplitude Max



Rec.Array P&S Slow Proj.

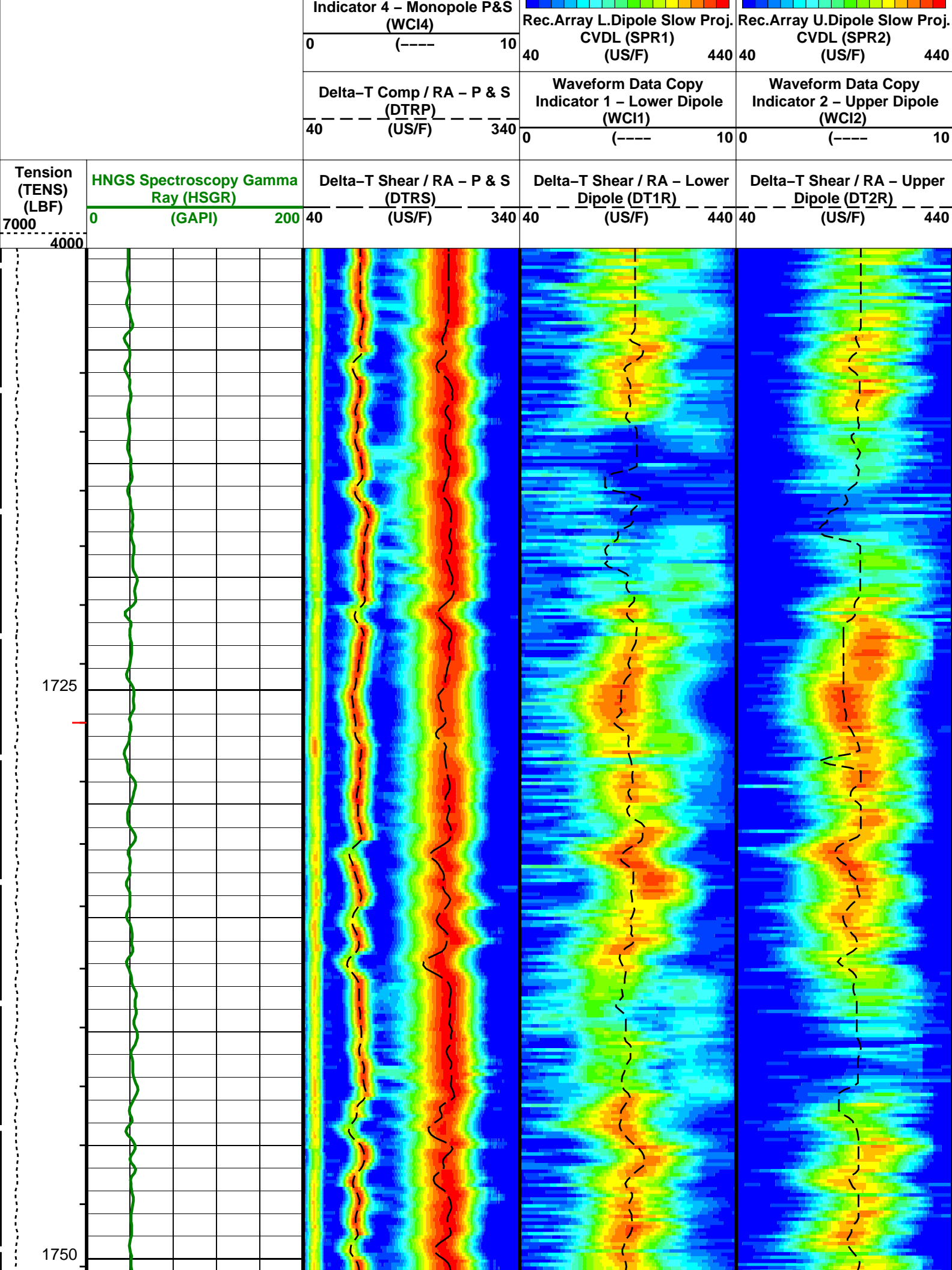
CVDL (SPR4)

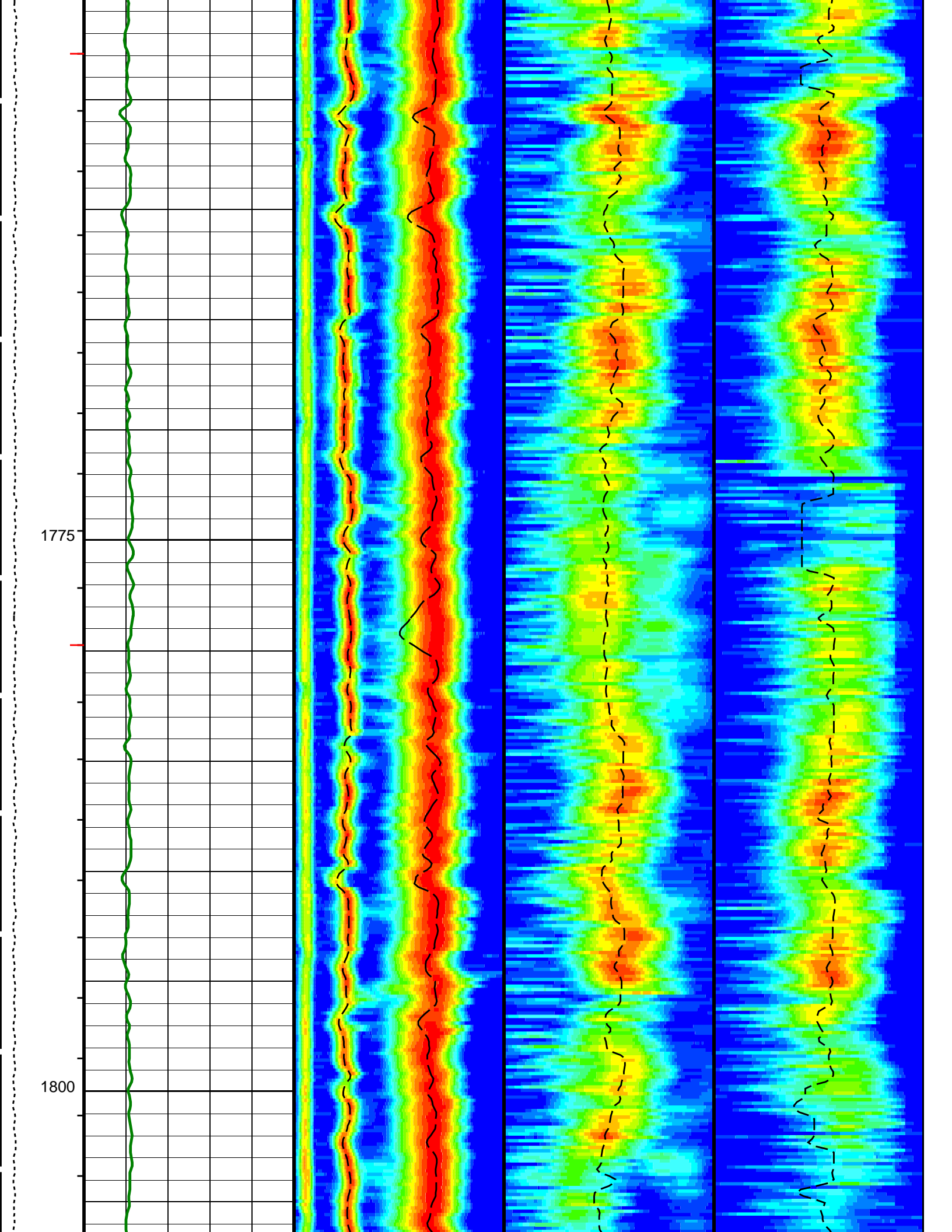
40 (US/F) 340

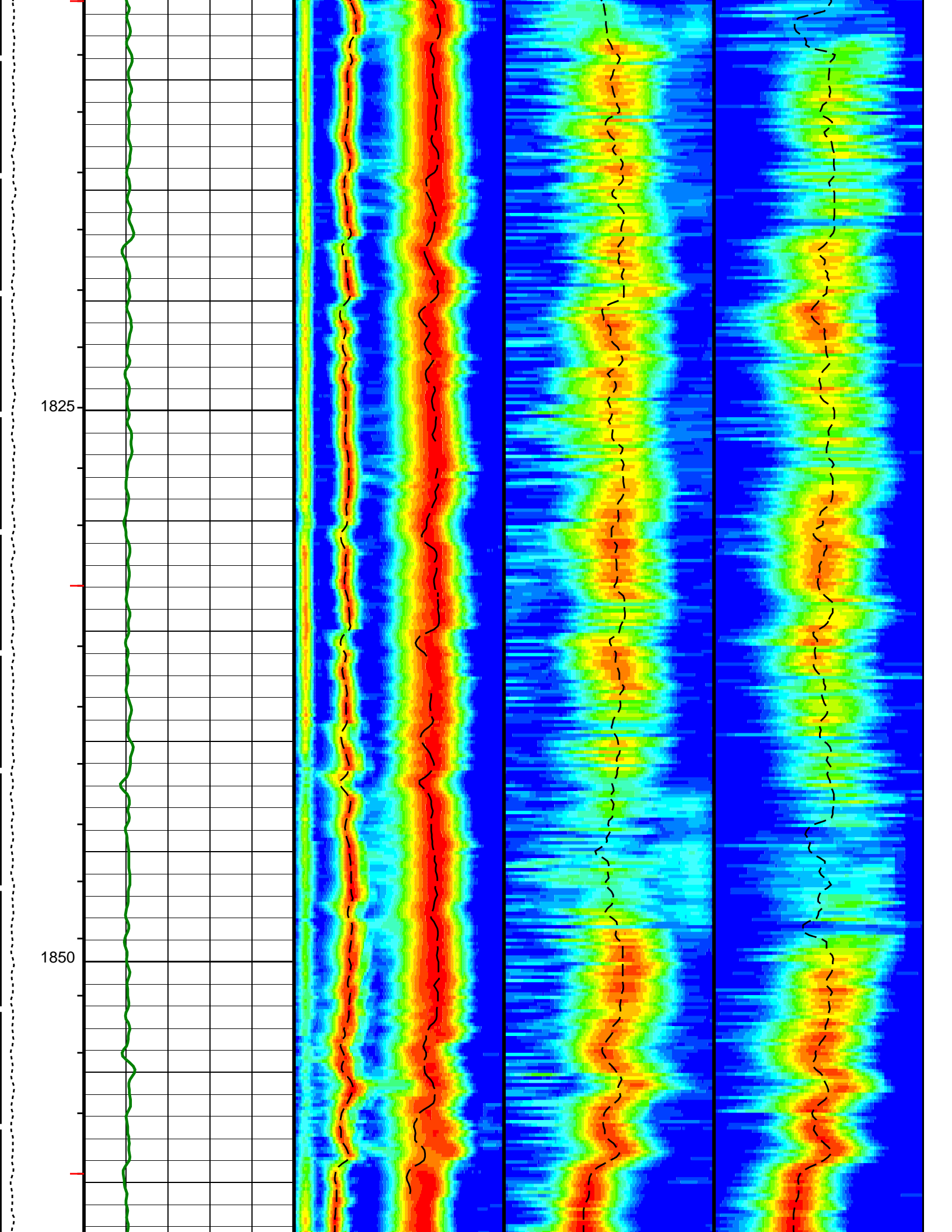
Waveform Data Copy

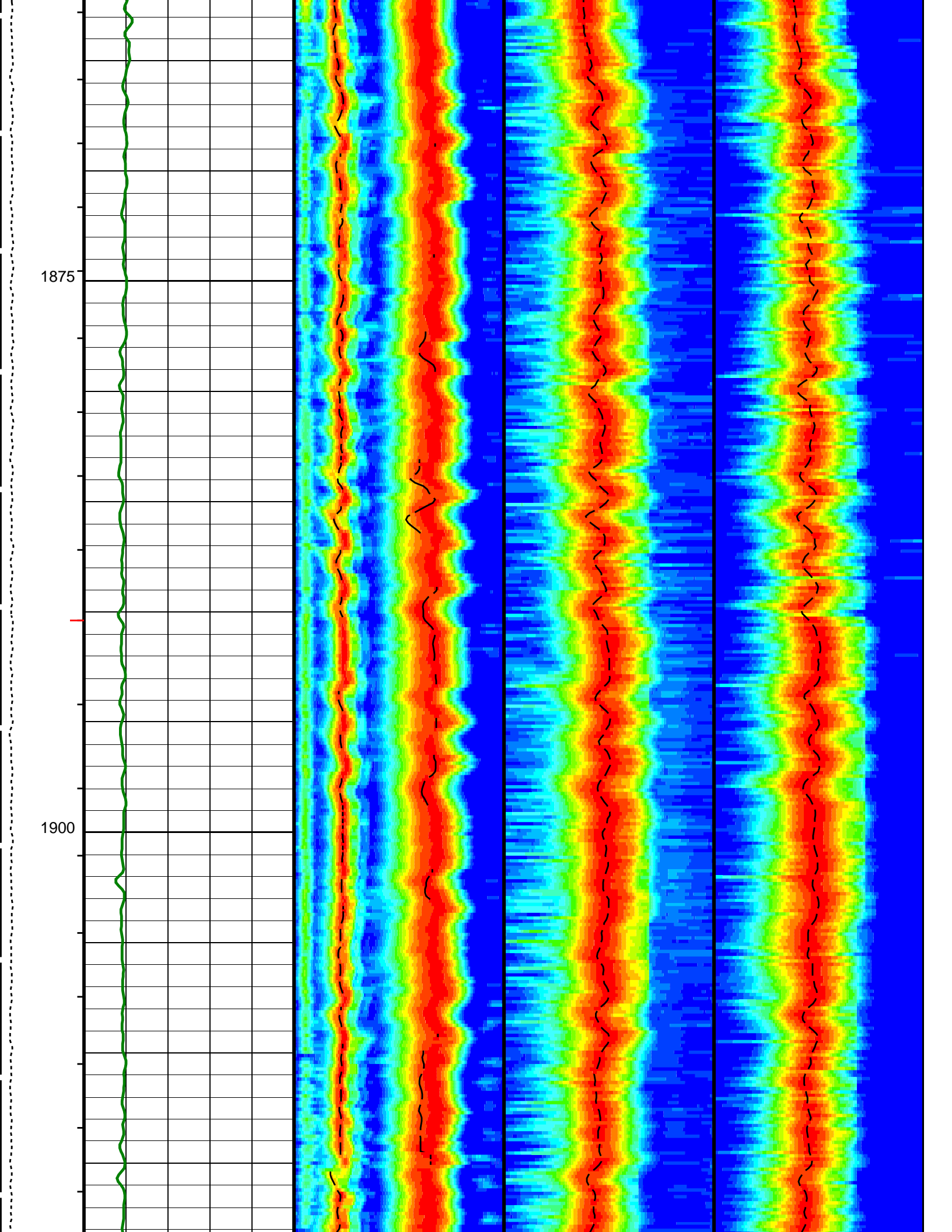
Min Amplitude Max

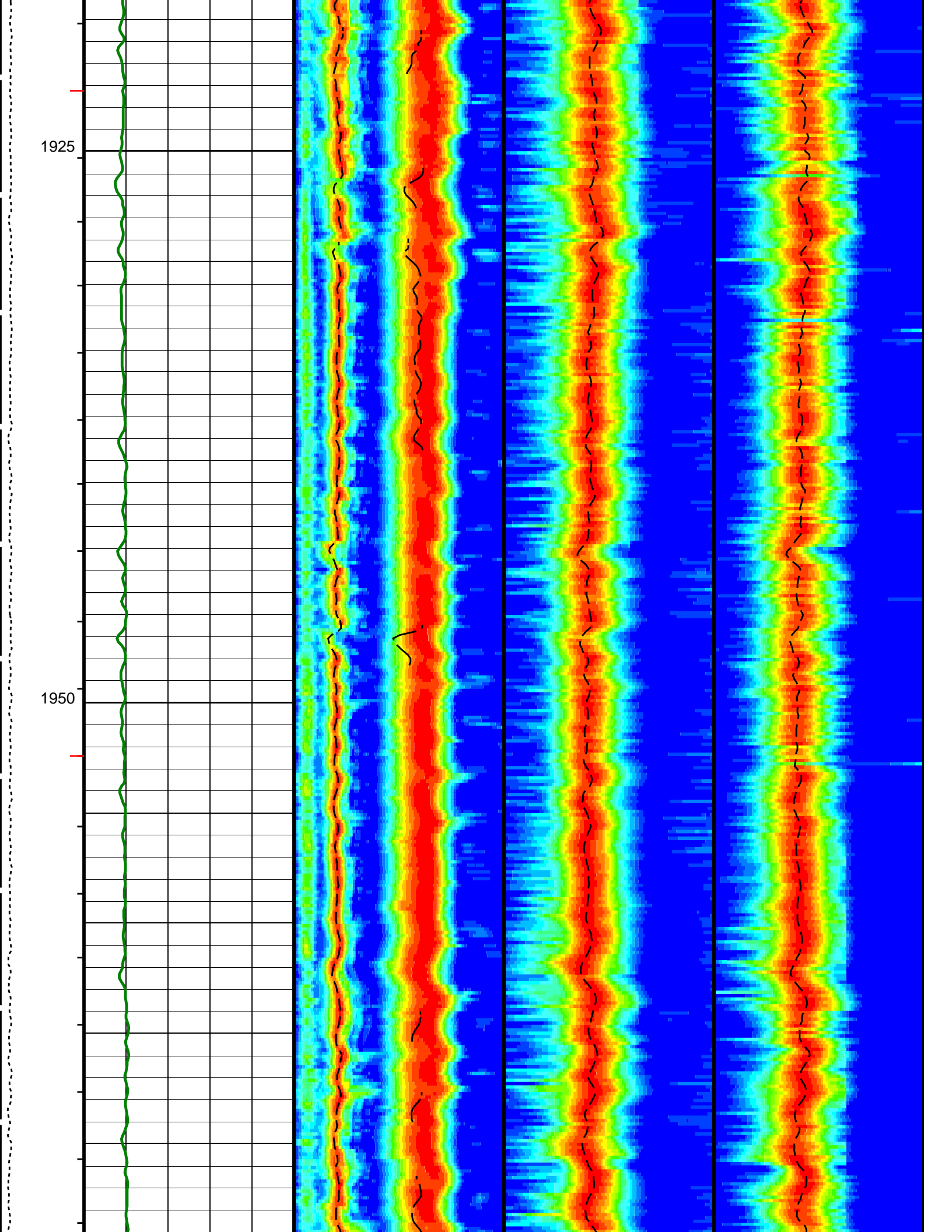
Min Amplitude Max

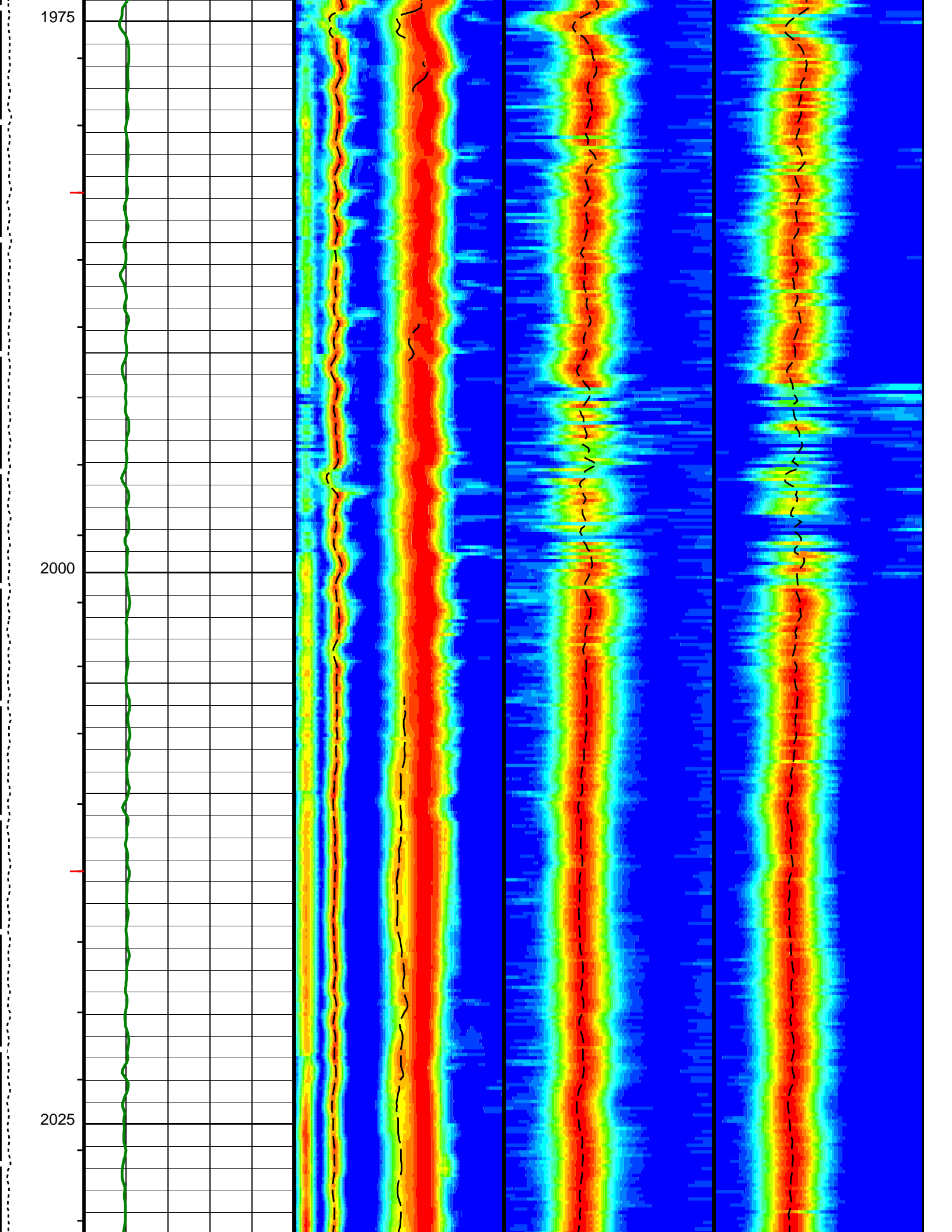


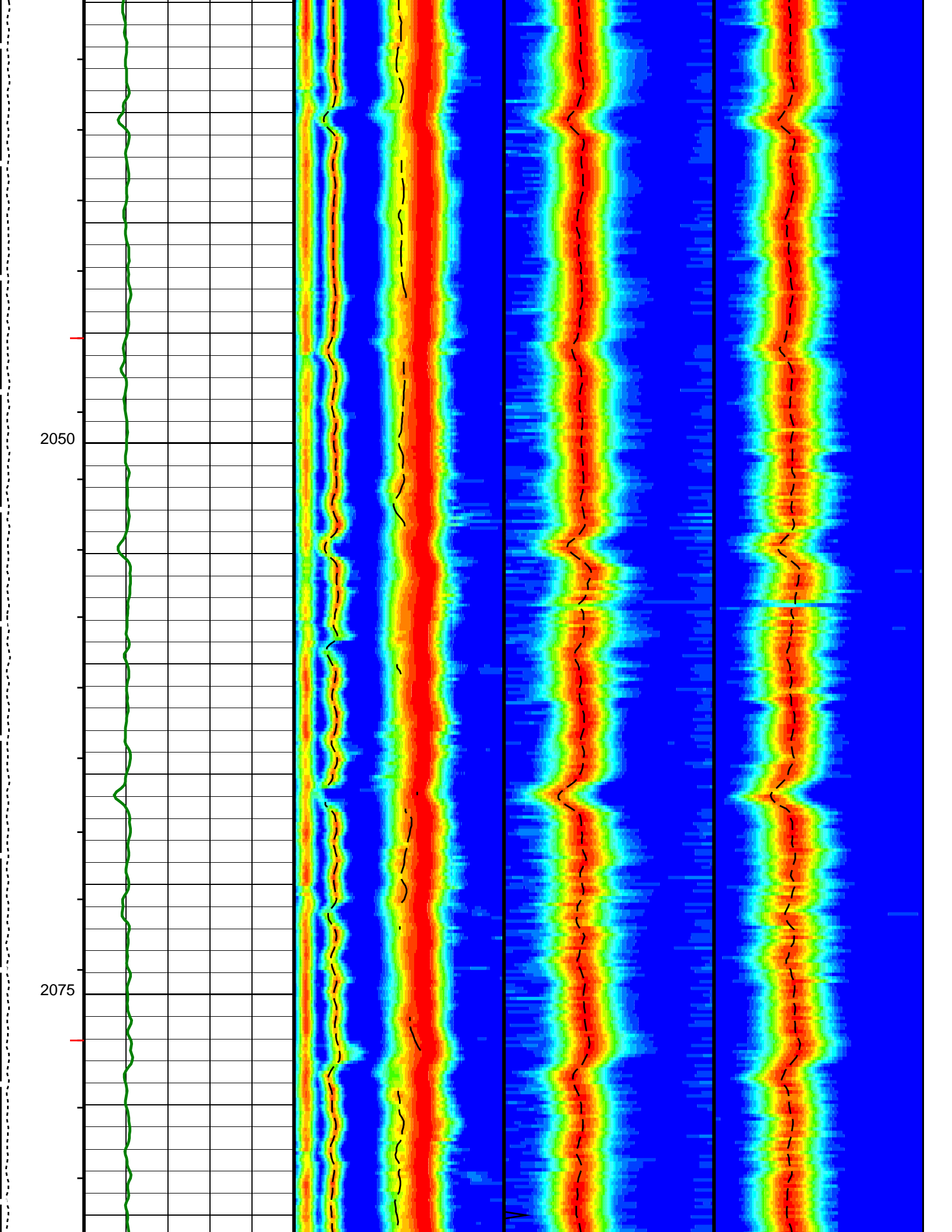


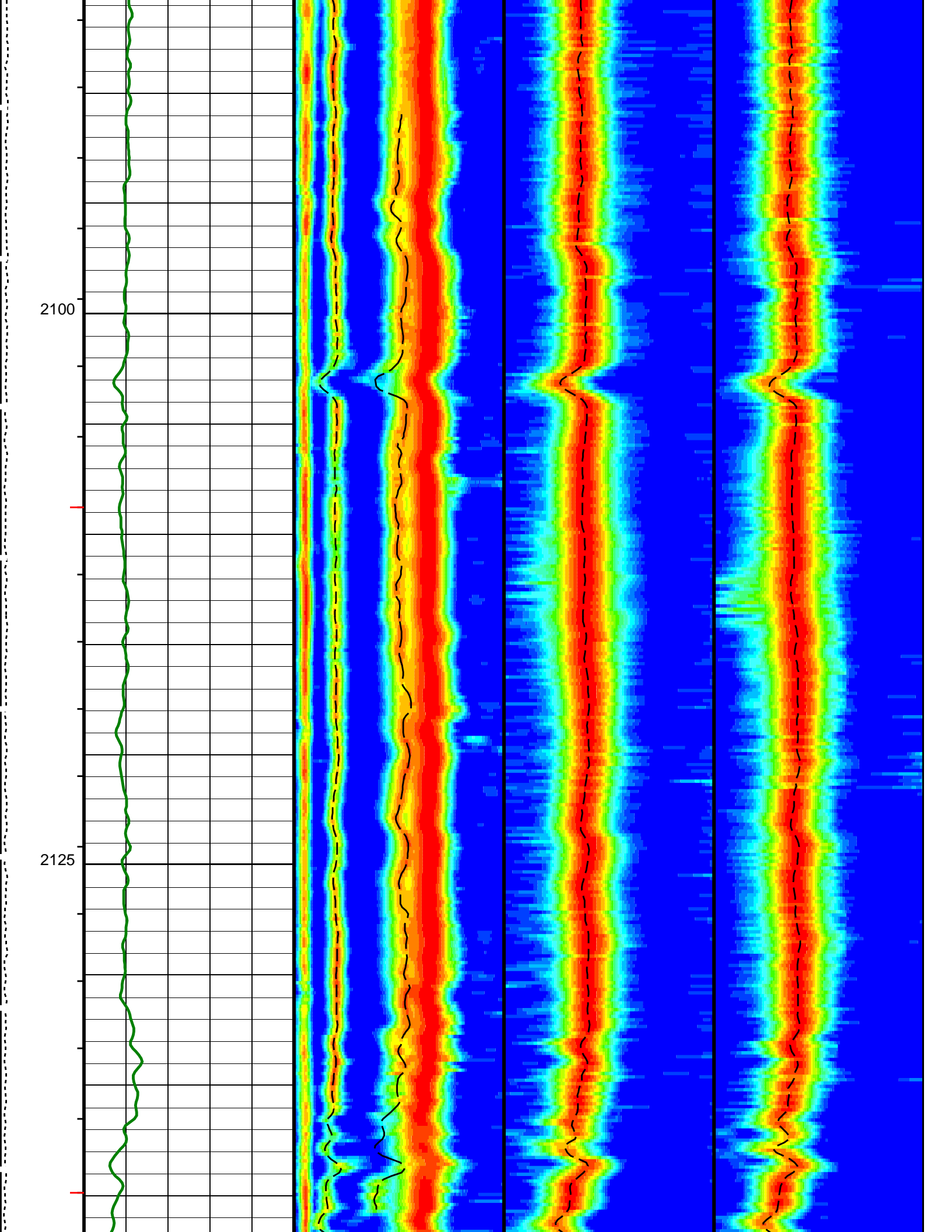


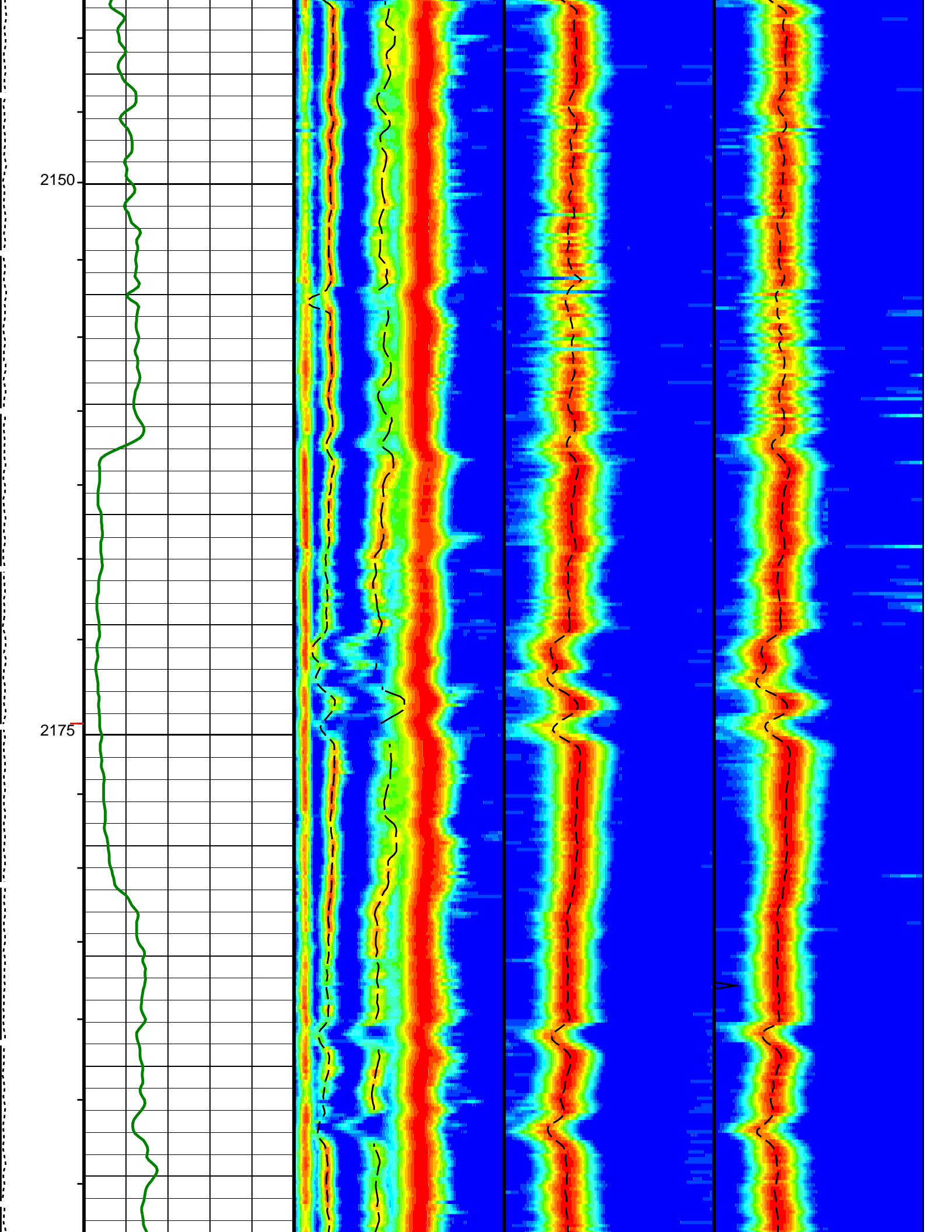


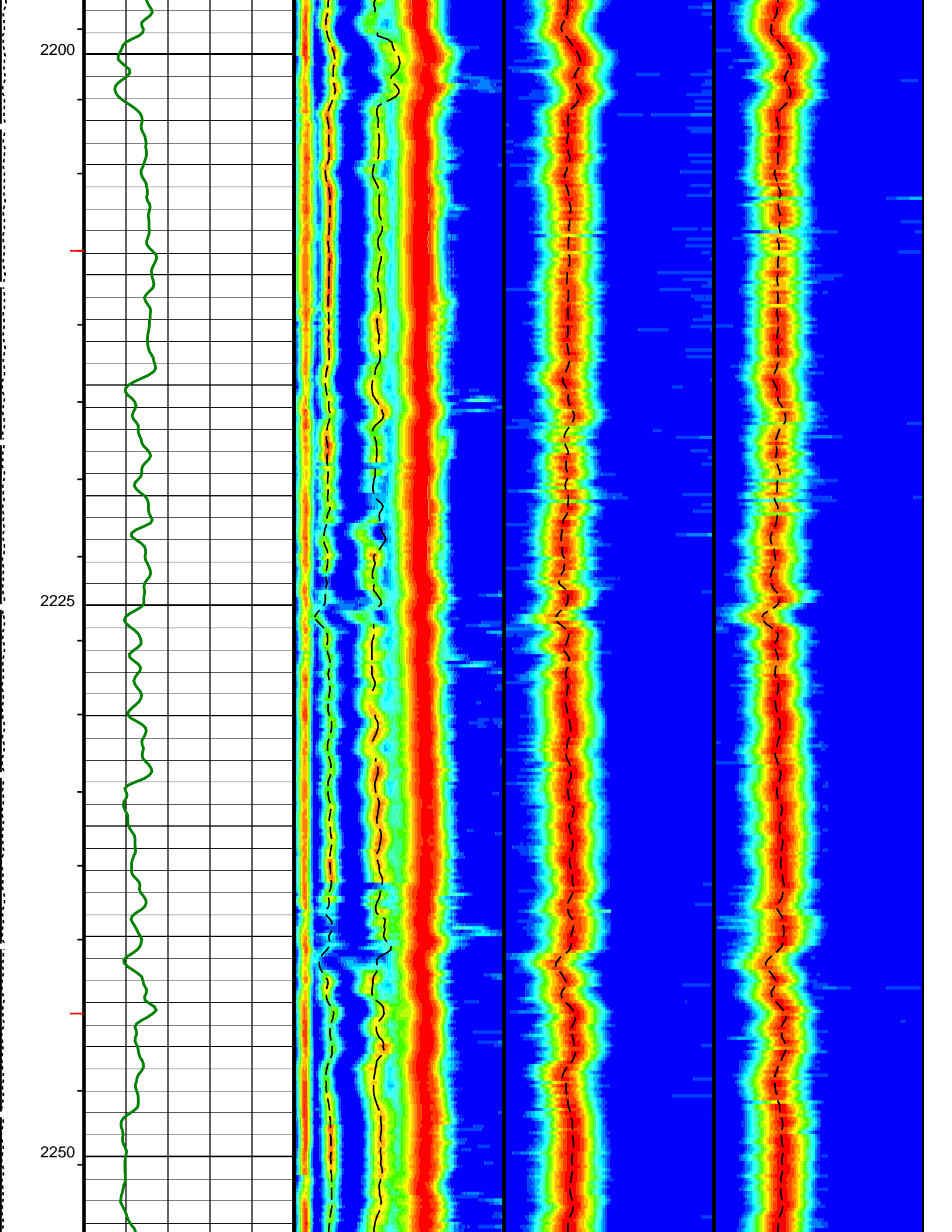


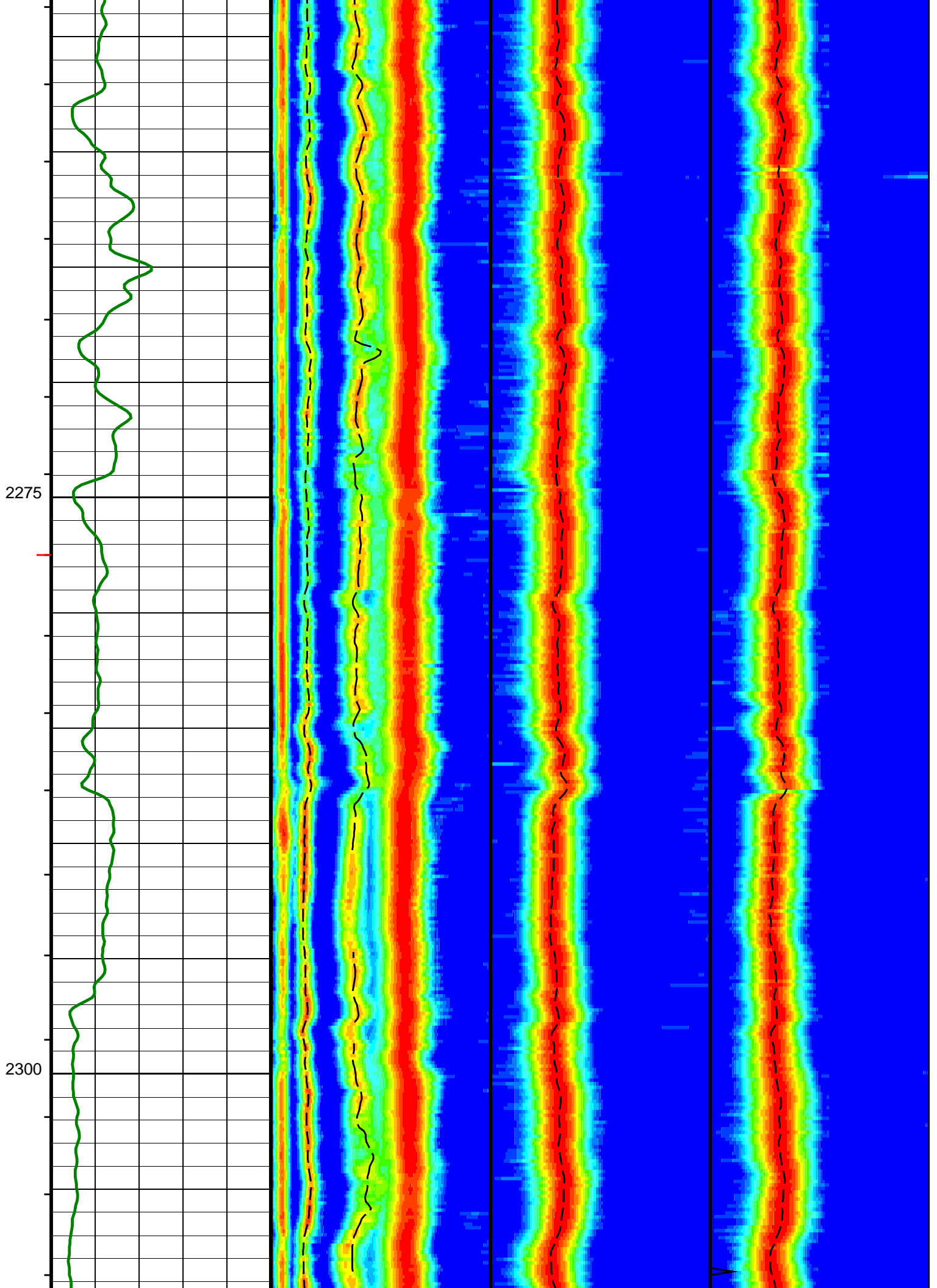


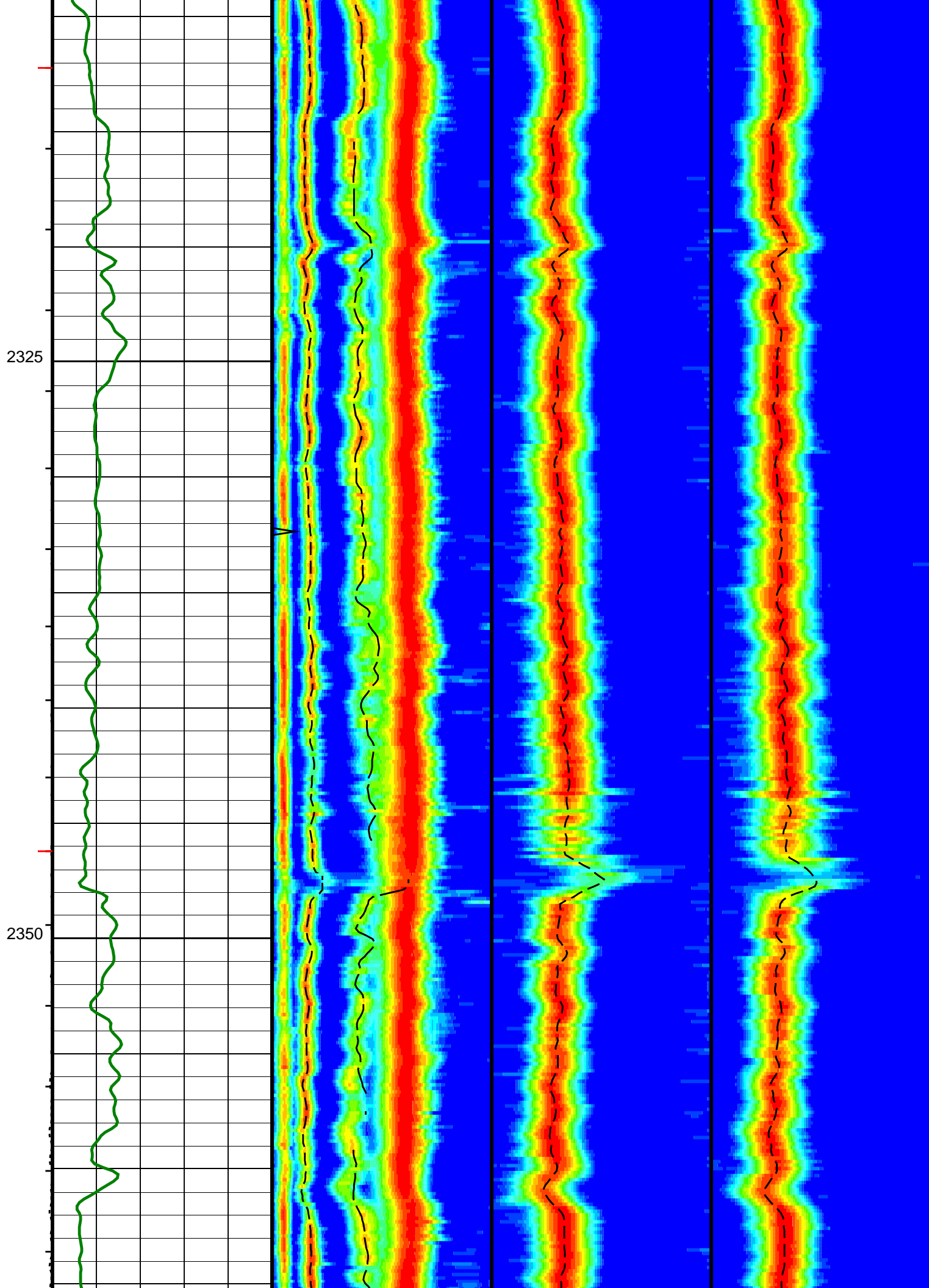


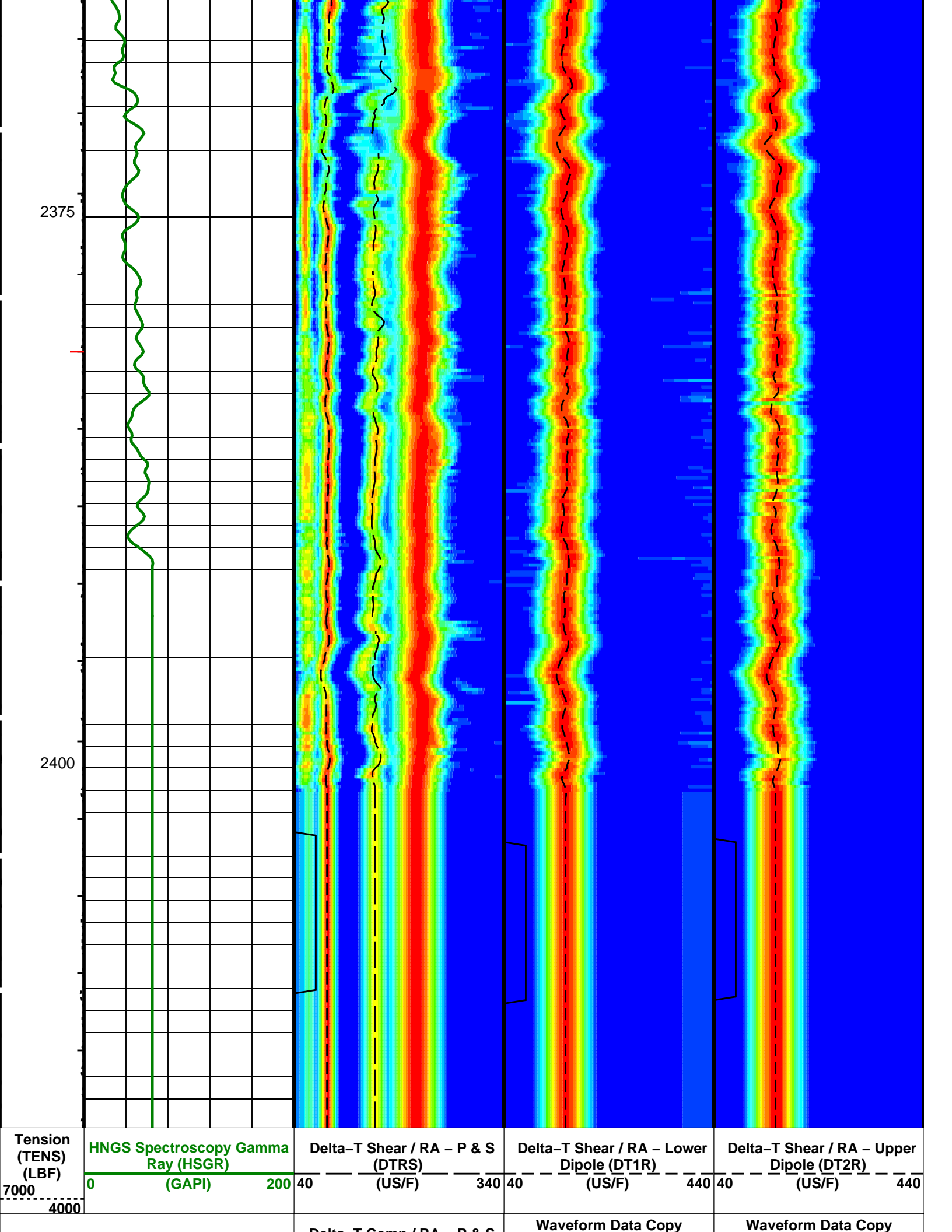












	Delta-T Comp / RA - P & S (DTRP) (US/F)	Indicator 1 - Lower Dipole (WCI1) (-----)	Indicator 2 - Upper Dipole (WCI2) (-----)
40	340	0	10
Waveform Data Copy Indicator 4 - Monopole P&S (WCI4)		Min Amplitude Max Rec.Array L.Dipole Slow Proj. CVDL (SPR1) (US/F)	Min Amplitude Max Rec.Array U.Dipole Slow Proj. CVDL (SPR2) (US/F)
0	10	40	440
Min Amplitude Max Rec.Array P&S Slow Proj. CVDL (SPR4) (US/F)			
40	340		

PIP SUMMARY			
<div> <div> <div></div> <div>Integrated Transit Time Minor Pip Every 1 MS</div> </div> <div> <div></div> <div>Integrated Transit Time Major Pip Every 10 MS</div> </div> <div> <div></div> <div>Time Mark Every 60 S</div> </div> </div>			

Parameters			
DLIS Name	Description	Value	
DSST-B: Dipole Shear Imager – B			
BHS	Borehole Status	OPEN	
CASF	Label Casing Function – Monopole P&S	50	
COLL	Label Slowness Lower Limit – Monopole P&S Compressional	75	US/F
COUL	Label Slowness Upper Limit – Monopole P&S Compressional	140	US/F
DDE1	Digitizing Delay 1	0	US
DDE2	Digitizing Delay 2	0	US
DDE4	Digitizing Delay 4	0	US
DDEX	Digitizing Delay X	0	US
DLCS	Label Compressional Source – Dipole Shear	USE	
DSHL	Label Slowness Lower Limit – Dipole Shear	190	US/F
DSHU	Label Slowness Upper Limit – Dipole Shear	270	US/F
DSI1	Digitizer Sample Interval 1	40	US
DSI2	Digitizer Sample Interval 2	40	US
DSI4	Digitizer Sample Interval 4	10	US
DSIX	Digitizer Sample Interval X	40	US
DTCS	Compressional Delta-T Source for DTCO Channel	PS_COMP	
DTF	Delta-T Fluid	189	US/F
DWC1	Digitizer Word Count 1	512	
DWC2	Digitizer Word Count 2	512	
DWC4	Digitizer Word Count 4	512	
DWCX	Digitizer Word Count X	480	
FILG	Label Fill Gap Control – Monopole P&S	COMP_SHEAR	
GCSE	Generalized Caliper Selection	BS	
ITTS	Integrated Transit Time Source	DTCO	
LFC	Label Formation Character – Monopole P&S	DYNAMIC	
LTXG	Lower Dipole Transmitter Geometry	156	IN
MCS	Mean Casing Slowness	57	US/F
MTXG	Monopole Transmitter Geometry	186	IN
NWI1	Number Waveform Items 1	8	
NWI2	Number Waveform Items 2	8	
NWI4	Number Waveform Items 4	8	
NWIX	Number Waveform Items X	0	
RSMN	Label Shear/Compressional Minimum Ratio – Monopole P&S	1.4	
RSMX	Label Shear/Compressional Maximum Ratio – Monopole P&S	2.12	
RX1G	Receiver 1 Geometry	294	IN
RX2G	Receiver 2 Geometry	300	IN
RX3G	Receiver 3 Geometry	306	IN
RX4G	Receiver 4 Geometry	312	IN
RX5G	Receiver 5 Geometry	318	IN
RX6G	Receiver 6 Geometry	324	IN
RX7G	Receiver 7 Geometry	330	IN
RX8G	Receiver 8 Geometry	336	IN
SAM1	DSST Sonic Acquisition Mode 1 – Lower Dipole Mode	EVEN	
SAM2	DSST Sonic Acquisition Mode 2 – Upper Dipole Mode	ODD	
SAM4	DSST Sonic Acquisition Mode 4 – High Frequency Monopole Mode for P&S	EVEN	
SAMX	DSST Sonic Acquisition Mode X – Both Dipoles or Monopole Mode for Expert	OFF	
SAS1	STC Sonic Array Status – Lower Dipole	255	
SAS2	STC Sonic Array Status – Upper Dipole	255	
SAS4	STC Sonic Array Status – Monopole P&S	255	
SBO1	STC Search Band Offset – Lower Dipole	3000	US
SBO2	STC Search Band Offset – Upper Dipole	3000	US
SBO4	STC Search Band Offset – Monopole P&S	500	US
SBR4	STC Baseline Removal – Monopole P&S	ON	

SBW1	STC Baseline Removal - Monopole P&S	8000	US
SBW2	STC Search Bandwidth - Upper Dipole	8000	US
SBW4	STC Search Bandwidth - Monopole P&S	2000	US
SFC1	STC Formation Character - Lower Dipole	SELECTABLE	
SFC2	STC Formation Character - Upper Dipole	SELECTABLE	
SFC4	STC Formation Character - Monopole P&S	SELECTABLE	
SFM1	STC Filter - Lower Dipole	B1-3K	
SFM2	STC Filter - Upper Dipole	B1-3K	
SFM4	STC Filter - Monopole P&S	B3-20K	
SHLL	Label Slowness Lower Limit - Monopole P&S Shear	180	US/F
SHUL	Label Slowness Upper Limit - Monopole P&S Shear	300	US/F
SLL1	STC Slowness Lower Limit - Lower Dipole	40	US/F
SLL2	STC Slowness Lower Limit - Upper Dipole	40	US/F
SLL4	STC Slowness Lower Limit - Monopole P&S	40	US/F
SST1	STC Slowness Step - Lower Dipole	4	US/F
SST2	STC Slowness Step - Upper Dipole	4	US/F
SST4	STC Slowness Step - Monopole P&S	2	US/F
SSW1	STC Source Waveform - Lower Dipole	WF_SAM1	
SSW2	STC Source Waveform - Upper Dipole	WF_SAM2	
SSW4	STC Source Waveform - Monopole P&S	WF_SAM4	
STLL	Label Slowness Lower Limit - Monopole Stoneley	180	US/F
STUL	Label Slowness Upper Limit - Monopole Stoneley	780	US/F
SUL1	STC Slowness Upper Limit - Lower Dipole	775	US/F
SUL2	STC Slowness Upper Limit - Upper Dipole	775	US/F
SUL4	STC Slowness Upper Limit - Monopole P&S	340	US/F
SWD1	STC Slowness Width - Lower Dipole	40	US/F
SWD2	STC Slowness Width - Upper Dipole	40	US/F
SWD4	STC Slowness Width - Monopole P&S	10	US/F
TBF1	STC Time for Baseline Fill - Lower Dipole	0	US
TBF2	STC Time for Baseline Fill - Upper Dipole	0	US
TBF4	STC Time for Baseline Fill - Monopole P&S	300	US
TLL1	STC Time Lower Limit - Lower Dipole	600	US
TLL2	STC Time Lower Limit - Upper Dipole	600	US
TLL4	STC Time Lower Limit - Monopole P&S	150	US
TST1	STC Time Step - Lower Dipole	200	US
TST2	STC Time Step - Upper Dipole	200	US
TST4	STC Time Step - Monopole P&S	50	US
TUL1	STC Time Upper Limit - Lower Dipole	15912.5	US
TUL2	STC Time Upper Limit - Upper Dipole	15525	US
TUL4	STC Time Upper Limit - Monopole P&S	4560	US
TWD1	STC Time Width - Lower Dipole	2000	US
TWD2	STC Time Width - Upper Dipole	2000	US
TWD4	STC Time Width - Monopole P&S	1000	US
TWI1	STC Integration Time Window - Lower Dipole	1600	US
TWI2	STC Integration Time Window - Upper Dipole	1600	US
TWI4	STC Integration Time Window - Monopole P&S	500	US
TWSX	Transmitter Waveform Select X	0	
UTXG	Upper Dipole Transmitter Geometry	162	IN
WFM1	Waveform Mode 1	W1	
WFM2	Waveform Mode 2	W1	
WFM4	Waveform Mode 4	W1	
HNGBS-BA: Hostile Natural Gamma Ray Sonde			
BAR1	HNGBS Detector 1 Barite Constant	1	
BAR2	HNGBS Detector 2 Barite Constant	1	
BHK	HNGBS Borehole Potassium Correction Concentration	0	
BHS	Borehole Status	OPEN	
CSD1	Inner Casing Outer Diameter	9.625	IN
CSD2	Outer Casing Outer Diameter	13.375	IN
CSW1	Inner Casing Weight	43.5	LB/F
CSW2	Outer Casing Weight	54.5	LB/F
DBCC	HNGBS Barite Constant Correction Flag	NONE	
GCSE	Generalized Caliper Selection	BS	
H1P	HNGBS Detector 1 Allow/Disallow In Processing	ALLOW	
H2P	HNGBS Detector 2 Allow/Disallow In Processing	ALLOW	
HABK	HNGBS Borehole Potassium Running Average	-0.00364583	
HALF	HNGBS Alpha Filter Length	60	IN
HCRB	HNGBS Apply Borehole Potassium Correction	NONE	
HMWM	Mud Weighting Material	NATU	
HNPE	HNGBS Processing Enable	YES	
S1BI	HNGBS Detector 1 Calibration Bismuth Count Rate	1.3	CPS
S2BI	HNGBS Detector 2 Calibration Bismuth Count Rate	1.3	CPS
SGRC	HNGBS Standard Gamma-Ray Correction Flag	YES	
TPOS	Tool Position	ECCE	
VBA1	HNGBS Detector 1 Variable Barite Factor Running Average	0.956781	
VBA2	HNGBS Detector 2 Variable Barite Factor Running Average	0.971473	
HOLEV: Integrated Hole/Cement Volume			
BHS	Borehole Status	OPEN	
GCSE	Generalized Caliper Selection	BS	
System and Miscellaneous			
BS	Bit Size	8.500	IN
DFD	Drilling Fluid Density	9.40	LB/G
DO	Depth Offset for Playback	0.0	M
PP	Playback Processing	RECOMPUTE	

OP System Version: 12C0-301

MCM

FBST-B	12C0-301	DSST-B	12C0-301
HNGC-A	12C0-301	HNGS-BA	12C0-301
DTA-A	12C0-301	DTC-H	12C0-301
DTPC-A	12C0-301		

Input DLIS Files

DEFAULT	FMI_DSI_NGS_345LUP	FN:556	PRODUCER	02-Dec-2004 10:57	2416.3 M	1699.0 M
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Output DLIS Files

DEFAULT	FMI_DSI_NGS_072PUP	FN:71	PRODUCER	04-Dec-2004 19:32
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Schlumberger

Calibrations

MAXIS Field Log

DSST Receiver Check – Matching Status

	R1	R2	R3	R4	R5	R6	R7	R8
EVEN Pair								
ODD Pair								
ODD/EVEN								

 = Good
  = Marginal
  = Bad

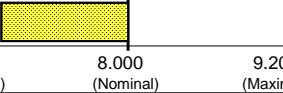
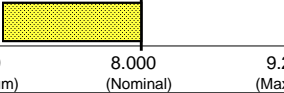
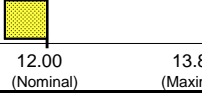

Calibration and Check Summary

Measurement	Nominal	Master	Before	After	Change	Limit	Units
Full-Bore Scanner – B Wellsite Calibration – Caliper Calibration							
Before: 21–Nov–2004 7:12							
Caliper 1 Small Jig	8.000	N/A	7.026	N/A	N/A	N/A	IN
Caliper 2 Small Jig	8.000	N/A	6.941	N/A	N/A	N/A	IN
Caliper 1 Large Jig	12.00	N/A	11.51	N/A	N/A	N/A	IN
Caliper 2 Large Jig	12.00	N/A	10.94	N/A	N/A	N/A	IN
Full-Bore Scanner – B Wellsite Calibration – CROUZET ACCELEROMETER PROM HAS BEEN READ CORRECTLY							
Before: 21–Nov–2004 5:10							
TEMPERATURE REFERENCE :	N/A	N/A	20	N/A	N/A	N/A	DEGC
YEAR OF CALIBRATION :	N/A	N/A	95	N/A	N/A	N/A	
MONTH OF CALIBRATION :	N/A	N/A	6	N/A	N/A	N/A	
SERIAL NUMBER :	N/A	N/A	292	N/A	N/A	N/A	
Full-Bore Scanner – B Wellsite Calibration – CROUZET MAGNETOMETER PROM HAS BEEN READ CORRECTLY							
Before: 21–Nov–2004 5:10							
TEMPERATURE REFERENCE :	N/A	N/A	31	N/A	N/A	N/A	DEGC
YEAR OF CALIBRATION :	N/A	N/A	92	N/A	N/A	N/A	
MONTH OF CALIBRATION :	N/A	N/A	12	N/A	N/A	N/A	
SERIAL NUMBER :	N/A	N/A	173	N/A	N/A	N/A	
Hostile Natural Gamma Ray Sonde Wellsite Calibration – Detector 1 Check							
Master: 20–Nov–2004 23:57 Before: 21–Nov–2004 7:15							
Na 511 Peak Loc	40.00	40.59	40.47	N/A	N/A	1.000	
Na 511 Peak Res	15.50	17.06	18.36	N/A	N/A	2.000	%
High Voltage	1150	1286	1288	N/A	N/A	N/A	V
Na 1785 Peak Loc	142.6	145.3	146.2	N/A	N/A	7.000	
Na 1785 Peak Res	8.500	10.48	9.773	N/A	N/A	2.000	%
Temperature	15.50	19.43	19.78	N/A	N/A	N/A	DEGC
Na Count Rate	45.00	21.72	21.01	N/A	N/A	8.000	CPS
Hostile Natural Gamma Ray Sonde Wellsite Calibration – Detector 2 Check							
Master: 20–Nov–2004 23:57 Before: 21–Nov–2004 7:15							
Na 511 Peak Loc	40.00	40.58	40.62	N/A	N/A	1.000	
Na 511 Peak Res	15.50	16.30	16.18	N/A	N/A	2.000	%
High Voltage	1150	1245	1247	N/A	N/A	N/A	V
Na 1785 Peak Loc	142.6	145.2	144.8	N/A	N/A	7.000	
Na 1785 Peak Res	8.500	9.098	8.969	N/A	N/A	2.000	%
Temperature	15.50	20.06	20.28	N/A	N/A	N/A	DEGC
Na Count Rate	45.00	21.82	21.06	N/A	N/A	8.000	CPS
Hostile Natural Gamma Ray Sonde Wellsite Calibration – Ratio Of Detector 1 To Detector 2							
Master: 20–Nov–2004 23:57 Before: 21–Nov–2004 7:15							
Coincidence Count Rate Ratio	1.000	0.9940	0.9959	N/A	N/A	0.05000	
Hostile Natural Gamma Ray Sonde Master Calibration – Detector 1 Calibration							
Master: 20–Nov–2004 23:57							
Na 511 Peak Set Point	40.00	42.00	--	--	--	--	
Th Peak Loc	209.6	208.8	--	--	--	--	
Th Peak Res	7.000	8.378	--	--	--	--	%
Background Count Rate	142.5	16.70	--	--	--	--	CPS
Gain Ratio	1.000	0.9789	--	--	--	--	
Hostile Natural Gamma Ray Sonde Master Calibration – Detector 2 Calibration							
Master: 20–Nov–2004 23:57							
Na 511 Peak Set Point	40.00	42.00	--	--	--	--	
Th Peak Loc	209.6	209.4	--	--	--	--	
Th Peak Res	7.000	7.666	--	--	--	--	%
Background Count Rate	142.5	15.85	--	--	--	--	CPS
Gain Ratio	1.000	0.9815	--	--	--	--	

Full-Bore Scanner – B / Equipment Identification

Primary Equipment:

FullBore Scanner Sonde	FBSS – B	830
FullBore Scanner Sonde Upper part	FBSh – A	855
FullBore Scanner Sonde Cartridge	FBSC – B	858
GPIT Cartridge – AC	GPIC – AC	735
Insulating Sub	AH – 185	909
FullBore Scanner Control Cartridge	FBCC – A	794

Full-Bore Scanner – B Wellsite Calibration					
Caliper Calibration					
Phase	Caliper 1 Small Jig IN	Value	Phase	Caliper 2 Small Jig IN	Value
Before		7.026	Before		6.941
	6.800 (Minimum) 8.000 (Nominal) 9.200 (Maximum)			6.800 (Minimum) 8.000 (Nominal) 9.200 (Maximum)	
Phase	Caliper 1 Large Jig IN	Value	Phase	Caliper 2 Large Jig IN	Value
Before		11.51	Before		10.94
	10.20 (Minimum) 12.00 (Nominal) 13.80 (Maximum)			10.20 (Minimum) 12.00 (Nominal) 13.80 (Maximum)	
Before: 21-Nov-2004 7:12					


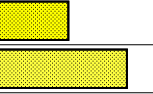
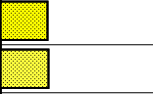
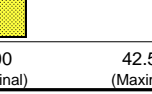
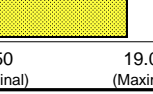

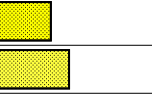
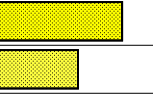




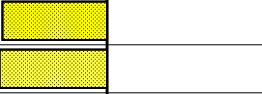
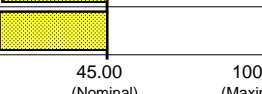
Hostile Natural Gamma Ray Cartridge – A / Equipment Identification

Primary Equipment: HNGC Cartridge	HNGC – A	10
Auxiliary Equipment: HNGC Housing	HNGH – A	3

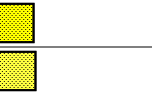
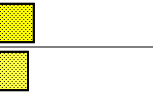
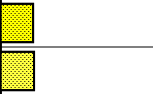
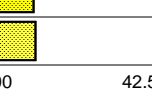

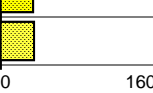
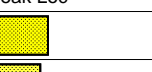
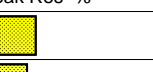
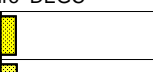
Hostile Natural Gamma Ray Sonde / Equipment Identification






Primary Equipment: HNGS Sonde	HNGS – BA	28
Auxiliary Equipment: HNGS Sonde Housing	HNSH – BA	28
Gamma Source Radioactive	GSR – U	2003



Hostile Natural Gamma Ray Sonde Wellsite Calibration






Detector 1 Check								
Phase	Na 511 Peak Loc	Value	Phase	Na 511 Peak Res %	Value	Phase	High Voltage V	Value
Master		40.59	Master		17.06	Master		1286
Before		40.47	Before		18.36	Before		1288
	37.50 (Minimum) 40.00 (Nominal) 42.50 (Maximum)			12.00 (Minimum) 15.50 (Nominal) 19.00 (Maximum)			900.0 (Minimum) 1150 (Nominal) 1600 (Maximum)	
Phase	Na 1785 Peak Loc	Value	Phase	Na 1785 Peak Res %	Value	Phase	Temperature DEGC	Value
Master		145.3	Master		10.48	Master		19.43
Before		146.2	Before		9.773	Before		19.78
	135.0 (Minimum) 142.6 (Nominal) 150.3 (Maximum)			7.000 (Minimum) 8.500 (Nominal) 11.00 (Maximum)			-28.89 (Minimum) 15.50 (Nominal) 60.00 (Maximum)	
Phase	Na Count Rate CPS	Value						
Master		21.72						
Before		21.01						
	10.00 (Minimum) 45.00 (Nominal) 100.0 (Maximum)							
Master: 20-Nov-2004 23:57			Before: 21-Nov-2004 7:15					




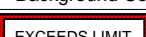

Hostile Natural Gamma Ray Sonde Wellsite Calibration

Detector 2 Check								
Phase	Na 511 Peak Loc	Value	Phase	Na 511 Peak Res %	Value	Phase	High Voltage V	Value
Master		40.58	Master		16.30	Master		1245
Before		40.62	Before		16.18	Before		1247
	37.50 (Minimum) 40.00 (Nominal) 42.50 (Maximum)			12.00 (Minimum) 15.50 (Nominal) 19.00 (Maximum)			900.0 (Minimum) 1150 (Nominal) 1600 (Maximum)	
Phase	Na 1785 Peak Loc	Value	Phase	Na 1785 Peak Res %	Value	Phase	Temperature DEGC	Value
Master		145.2	Master		9.098	Master		20.06

Before		144.8	Before		8.969	Before		20.28
135.0 (Minimum)	142.6 (Nominal)	150.3 (Maximum)	7.000 (Minimum)	8.500 (Nominal)	11.00 (Maximum)	-28.89 (Minimum)	15.50 (Nominal)	60.00 (Maximum)
Phase	Na Count Rate CPS	Value						
Master		21.82						
Before		21.06						
10.00 (Minimum)	45.00 (Nominal)	100.0 (Maximum)						
Master: 20–Nov–2004 23:57			Before: 21–Nov–2004 7:15					

Hostile Natural Gamma Ray Sonde Wellsite Calibration		
Ratio Of Detector 1 To Detector 2		
Phase	Coincidence Count Rate Ratio	Value
Master		0.9940
Before		0.9959
0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)
Master: 20–Nov–2004 23:57		
Before: 21–Nov–2004 7:15		

Hostile Natural Gamma Ray Sonde Master Calibration											
Detector 1 Calibration											
Phase	Na 511 Peak Set Point		Value	Phase	Th Peak Loc		Value	Phase	Th Peak Res %		Value
Master			42.00	Master			208.8	Master			8.378
	38.00 (Minimum)	40.00 (Nominal)	42.00 (Maximum)		201.0 (Minimum)	209.6 (Nominal)	218.3 (Maximum)		5.000 (Minimum)	7.000 (Nominal)	9.000 (Maximum)
Phase	Background Count Rate CPS		Value	Phase	Gain Ratio		Value				
Master			16.70	Master			0.9789				
	20.00 (Minimum)	142.5 (Nominal)	265.0 (Maximum)		0.9400 (Minimum)	1.000 (Nominal)	1.060 (Maximum)				
Master: 20–Nov–2004 23:57											

Hostile Natural Gamma Ray Sonde Master Calibration															
Detector 2 Calibration															
Phase	Na 511 Peak Set Point		Value	Phase	Th Peak Loc		Value	Phase	Th Peak Res %		Value				
Master			42.00	Master			209.4	Master			7.666				
38.00 (Minimum)			40.00 (Nominal)	201.0 (Minimum)			209.6 (Nominal)	5.000 (Minimum)			7.000 (Nominal)	9.000 (Maximum)			
Phase	Background Count Rate CPS		Value	Phase	Gain Ratio		Value								
Master			15.85	Master			0.9815								
20.00 (Minimum)			142.5 (Nominal)	0.9400 (Minimum)			1.000 (Nominal)						1.060 (Maximum)		
Master: 20–Nov–2004 23:57															

Company: **Origin Energy Resources Ltd.**

Schlumberger

Well: **Trefoil–1**

Field: **Trefoil**

Rig: **ENSCO 102**

Country: **Australia**

FMI–DSI–HNGS

Dipole Shear Sonic Imager

1:200 Scale