Schlumberger

Company: **Lamont Doherty Earth Observatory**

Well: **Expedition 346, Site U1425B**
Field: **Asian Monsoon**
Rig: **JOIDES Resolution** Country: **USA**

Rig: JOIDES Resolution
Field: Asian Monsoon
Location: Latitude: N 39* 29.4476'
Well: Expedition 346, Site U1425B
Company: Lamont Doherty Earth Observatory

DSI
Stoneley

LOCATION

Latitude: N 39* 29.4476'
Longitude: W 134* 26.5502'

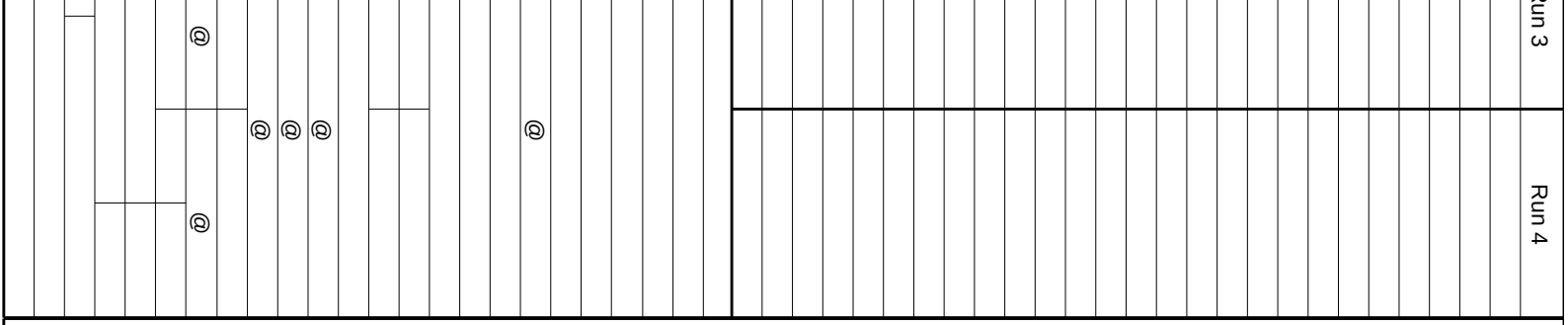
Elev.: K.B. −1919.10 m
G.L. 0.00 m
D.F. −1919.10 m

Permanent Datum: Sea Floor — Elev.: 0.00 m
Log Measured From: Drill Floor — −1919.10 m above Perm. Datum
Drilling Measured From: Drill Floor

Ocean: Pacific	Max. Well Deviation 0 deg	Longitude W 134.4425*	Latitude N 39.4908

	Run 1	Run 2	Run 3
Logging Date	30−Aug−2013		
Run Number	2		
Depth Driller	407.3 m		
Schlumberger Depth	398.6 m		
Bottom Log Interval	377.2 m		
Top Log Interval	83 m		
Casing Driller Size @ Depth	5.500 in @ 81.9 m	@	@
Casing Schlumberger	83 m		
Bit Size	11.750 in		
Type Fluid In Hole	Seawater		
MUD Density / Viscosity	1.03 g/cm3		
MUD Fluid Loss / PH			
MUD Source Of Sample	N/A		
RM @ Measured Temperature	@	@	@
RMF @ Measured Temperature	@	@	@
RMC @ Measured Temperature	@	@	@
Source RMF / RMC	N/A / N/A		
RM @ MRT / RMF @ MRT	@ 15 / @ 15	@ / @	@ / @
Maximum Recorded Temperatures	15 degC		
Circulation Stopped / Time	30−Aug−2013 / 9:00		
Logger On Bottom / Time	30−Aug−2013 / 23:00		
Unit Number / Location	625003 / Houston		
Recorded By	C. Furman		
Witnessed By	J. Lofi		

	Run 1	Run 2	Run 3
Logging Date			
Run Number			
Depth Driller			
Schlumberger Depth			
Bottom Log Interval			
Top Log Interval			
Casing Driller Size @ Depth	@		
Casing Schlumberger			
Bit Size			
Type Fluid In Hole			
MUD Density / Viscosity			
MUD Fluid Loss / PH			
MUD Source Of Sample			
RM @ Measured Temperature	@		
RMF @ Measured Temperature	@		
RMC @ Measured Temperature	@		
Source RMF / RMC			
RM @ MRT / RMF @ MRT	@	@	
Maximum Recorded Temperatures			
Circulation Stopped / Time			
Logger On Bottom / Time			
Unit Number / Location			
Recorded By			
Witnessed By			



DISCLAIMER

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OTHER SERVICES1

OS1: HNGS
OS2: HRLA
OS3: MSS
OS4: HLDS
OS5: FMS

REMARKS: RUN NUMBER 1

Hole drilled and cored using APC/XCB coring system.
Modified MCD devices run above and below HRLA for centralization.
HLDS and MSS eccentralized by caliper and bowspring with knuckled to decouple from HRLA.
LFV Actuator (Go−Devil) run attached to bottom of MSS for LFV locking open / closed.
Logs recorded from drill floor (1919.1m above permanent datum) then shifted to zero at sea floor.
Active Heave Compensator (AHC) switched off at 120mbsf to facilitate pipe entry.
Caliper closed at 99mbsf to facilitate pipe entry.
Run 1 Main pass used as depth reference for logging job; all other runs/passes correlated to that main pass.
AHC not used for downlog, but engaged prior to opening calipers for repeat section and used for both up passes.
Unable to descend below 398.6mbsf on this run; logs recorded from that depth.
DSI P&S in standard frequency, Upper Dipole in standard frequency, and Stoneley in standard frequency for all passes.
DSI Lower Dipole in Low−Frequency Dipole (LFD) mode for downlog, but standard frequency for both up passes.

RUN 1

SERVICE ORDER #:
PROGRAM VERSION: 19C0−187
FLUID LEVEL:

LOGGED INTERVAL	START	STOP

RUN 2

SERVICE ORDER #:
PROGRAM VERSION:
FLUID LEVEL:

LOGGED INTERVAL	START	STOP

EQUIPMENT DESCRIPTION

RUN 1 RUN 2

SURFACE EQUIPMENT

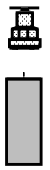
GSR−U 616008
WITM (EDTS)−A

DOWNHOLE EQUIPMENT

LEH−MT 101
LEH−MT 101 101

EDTC−B
EDTH−B 8303
EDTC−B 8317
EDTG−A/B 8305

MDSB_EDTC
Mud Tempe
CTEM
Gamma Ray
EFTB DIAG
TelStatus
EDTCB Ele



35.51
34.55
33.49
32.92
34.55
32.57

HNGS−BA
HNGS−BA 194
HNSH−BA 205

Upper_1 31.87
Lower_2 31.66

32.57

HNGC−B
HNGH−A 115

HNGC Stat 29.54

30.07

AH−MCD1
AH−MCD1 1

29.01

DSST−B
SPAC−B 16
ECH−SD 16
SMDR−BD 8232
SSIJ−BA 8192
SMDX−AA 8194

26.73

PWF 11.18

AH−MCD
AH−MCD 82

11.18

DTA−A
ECH−KE 8451

8.90

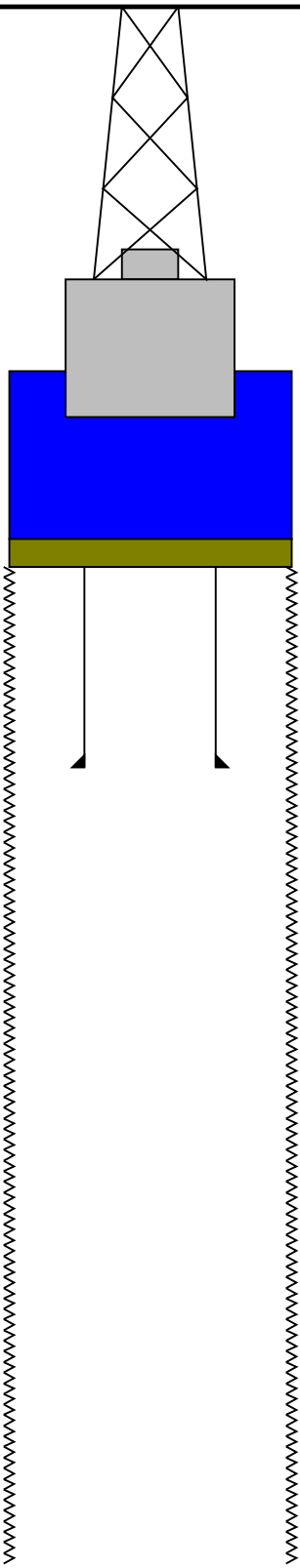
MEST−B
MEAH−B 769
MEAC−A 875
MEPH−A 702
GPIC−AC 840
MEPC−AB 807
MEDS−B 724

7.68

MEDR MEAC
MEPC MEDS−B 0.46
HV DF ACCZ
Tension GPIT 0.00
TOOL ZERO

MAXIMUM STRING DIAMETER 4.50 IN
MEASUREMENTS RELATIVE TO TOOL ZERO
ALL LENGTHS IN METERS

Production String	(in) OD	ID	(m) MD	Well Schematic	(m) MD	(in) OD	ID	Casing String

	OD	ID	MD		MD	OD	ID	
Kelly Bushing Elevation			−1919.1					
Derrick Floor Elevation			−1919.1					
Mean Sea Level			−1908.1					
					0.0			Sea Bed
					81.9	5.500	4.000	Bit
					407.3	11.750		Total Depth − Driller

Schlumberger

Downlog
1:200 Scale

MAXIS Field Log

Company: Lamont Doherty Earth Observatory **Well: Expedition 346, Site U1430B**

Input DLIS Files

	FMS_DSI_NGS_034PUP	FN:34		31−Aug−2013 13:33	399.0 M	−37.3 M

Output DLIS Files

DEFAULT	FMS_DSI_NGS_046PUP	FN:51	PRODUCER	20−Sep−2013 13:53	399.3 M	−37.3 M
CLIENT	FMS_DSI_NGS_046PUC	FN:52	CUSTOMER	20−Sep−2013 13:53	399.3 M	−37.3 M

OP System Version: 19C0−187

MEST−B	19C0−187	DTA−A	19C0−187
DSST−B	19C0−187	HNGC−B	19C0−187
HNGS−BA	19C0−187	EDTC−B	SKK−5169−EDTCB

PIP SUMMARY

Time Mark Every 60 S

HNGS Spectroscopy Gamma Ray (HSGR)
0 (GAPI) 100

Caliper 2 (C2)
0 (IN) 20

Caliper 1 (C1)
0 (IN) 20

Bit Size (BS)
0 (IN) 20

Tension (TENS)
0 (LBF) 5000

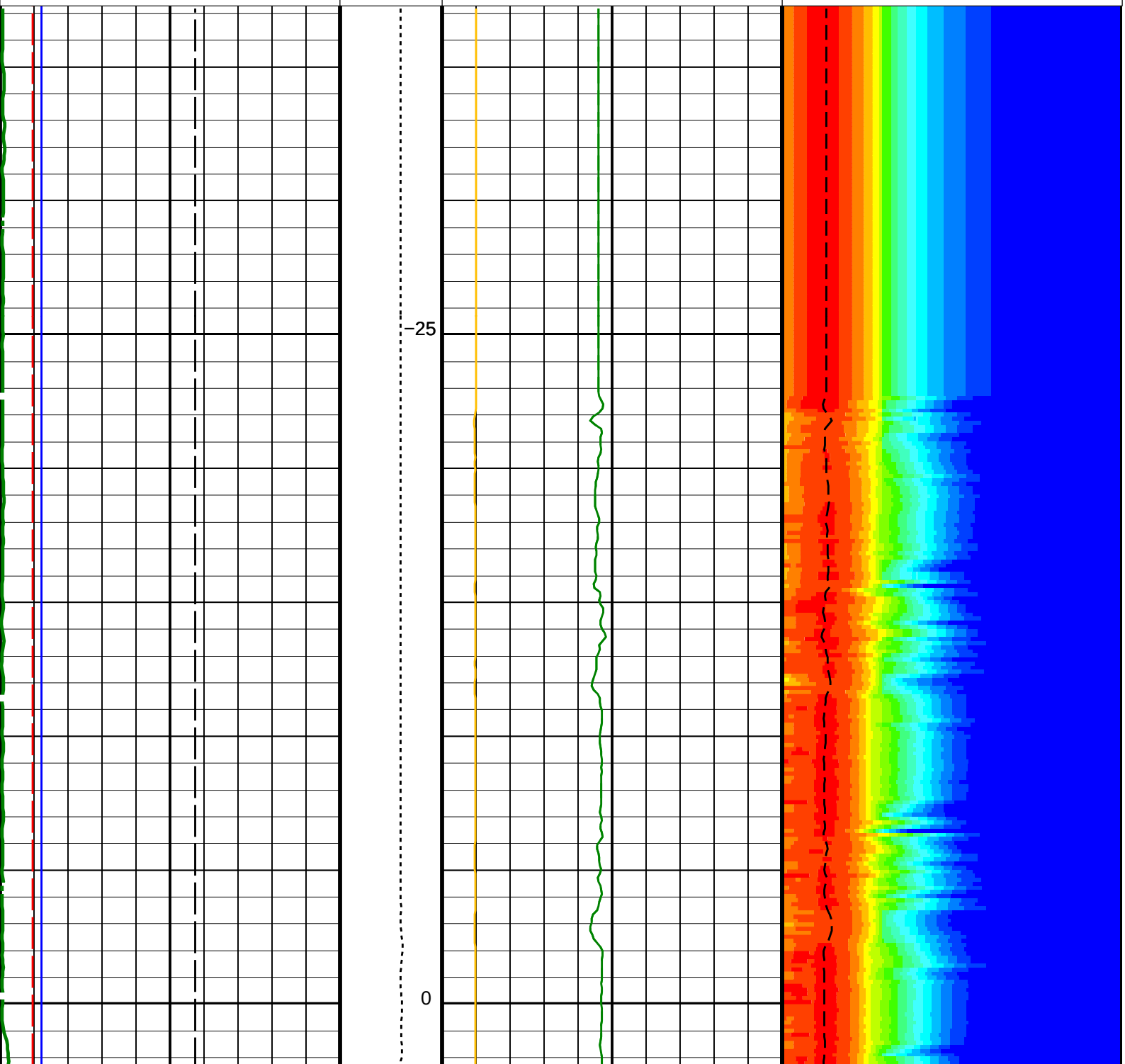
Delta−T Stoneley (DTST)
440 (US/F) 40

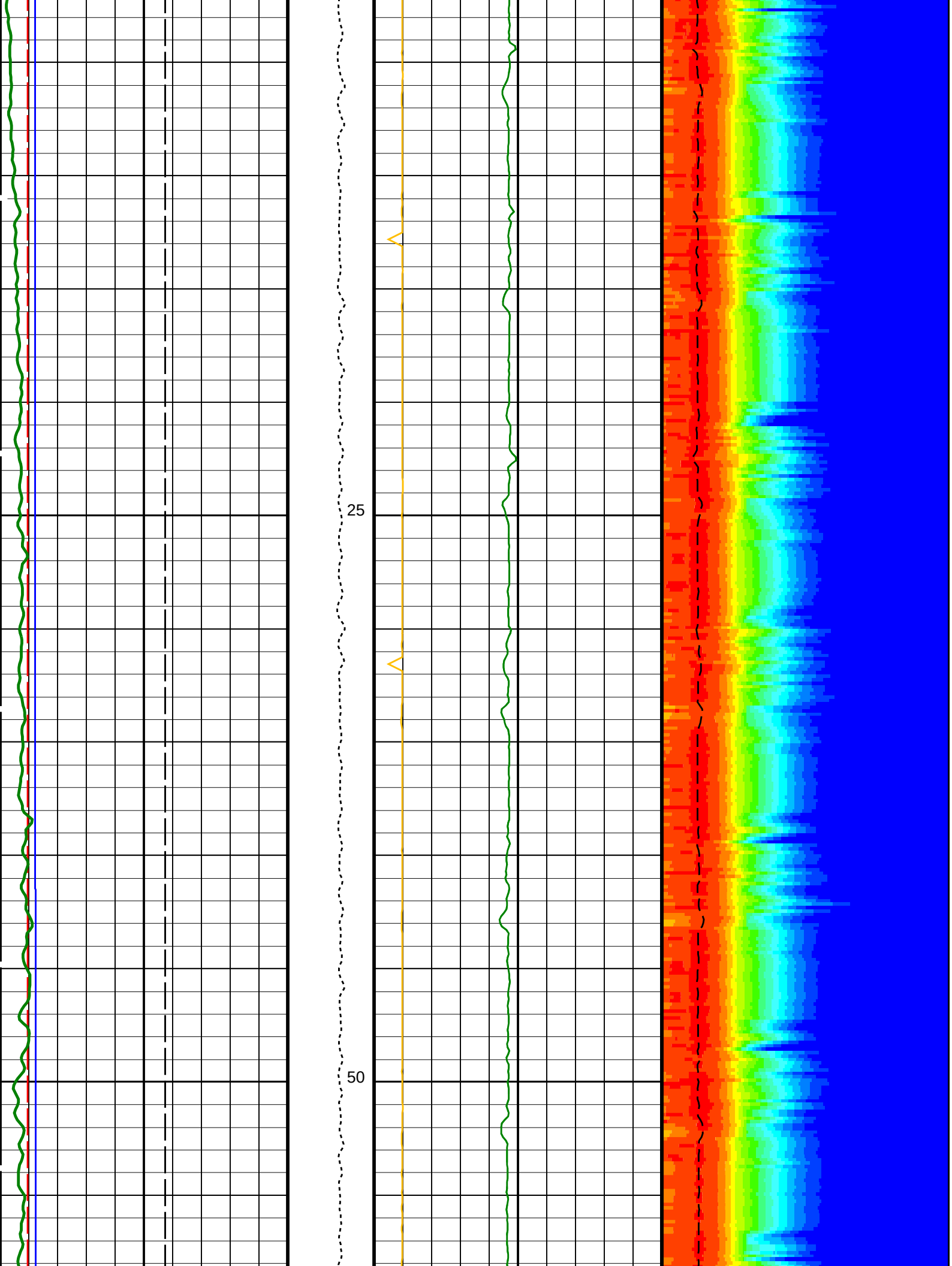
Delta−T Stoneley / RA (DT3R)
440 (US/F) 40

Peak Coherence / RA − Stoneley (CHR3)
0 (−−−−) 10

Min Amplitude Max
Rec.Array Stoneley Slow Proj. CVDL (SPR3)
180 (US/F) 780

Delta−T Stoneley / RA (DT3R)
180 (US/F) 780

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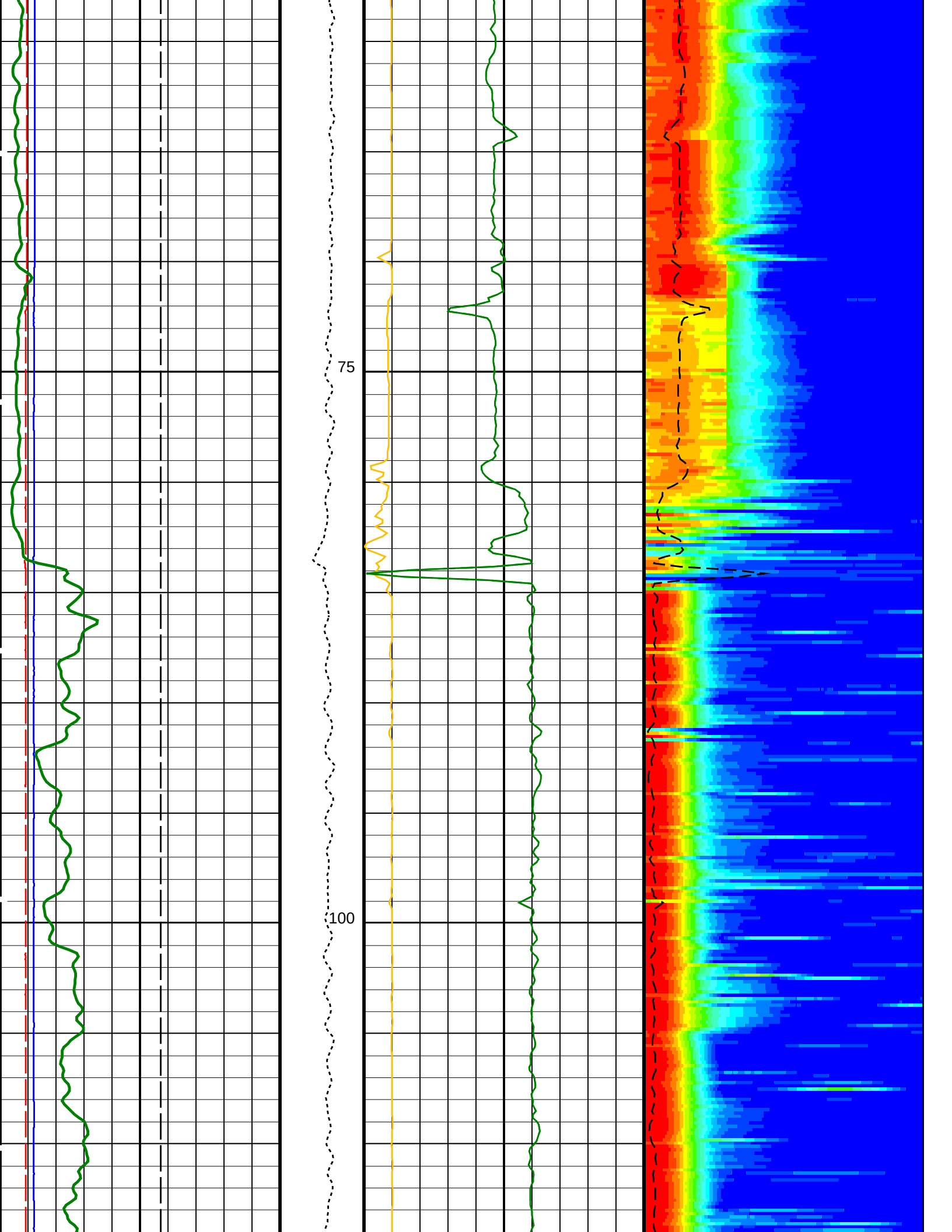
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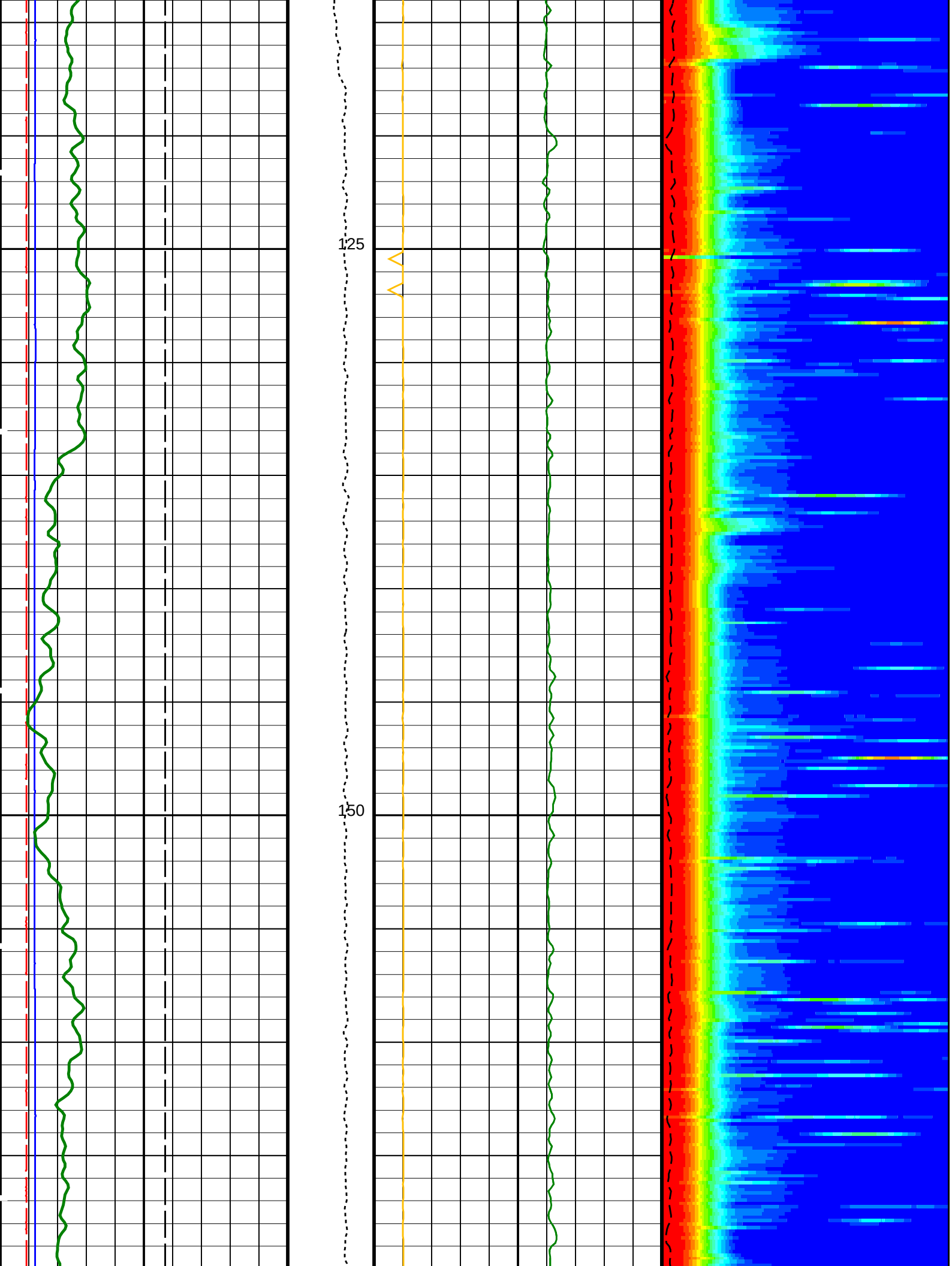
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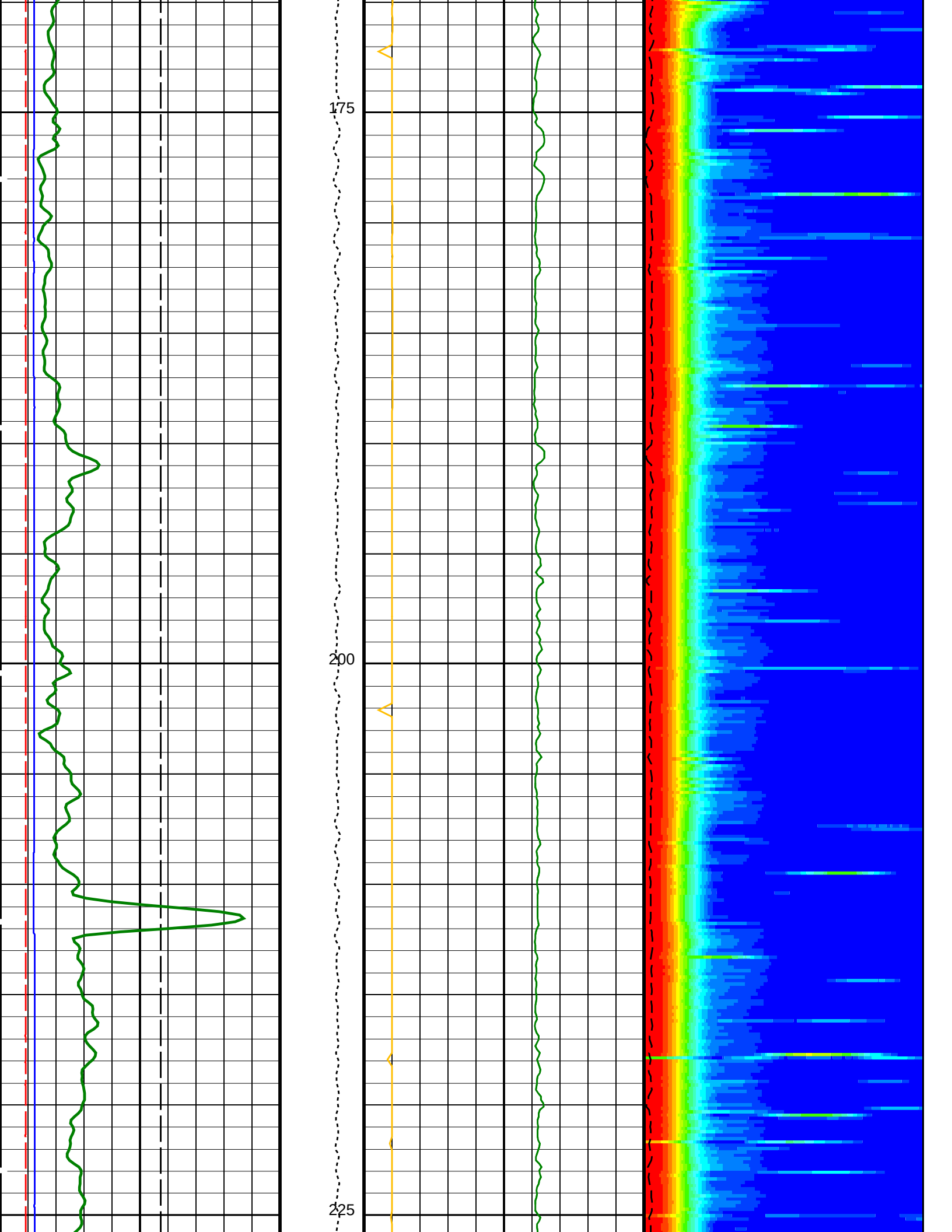
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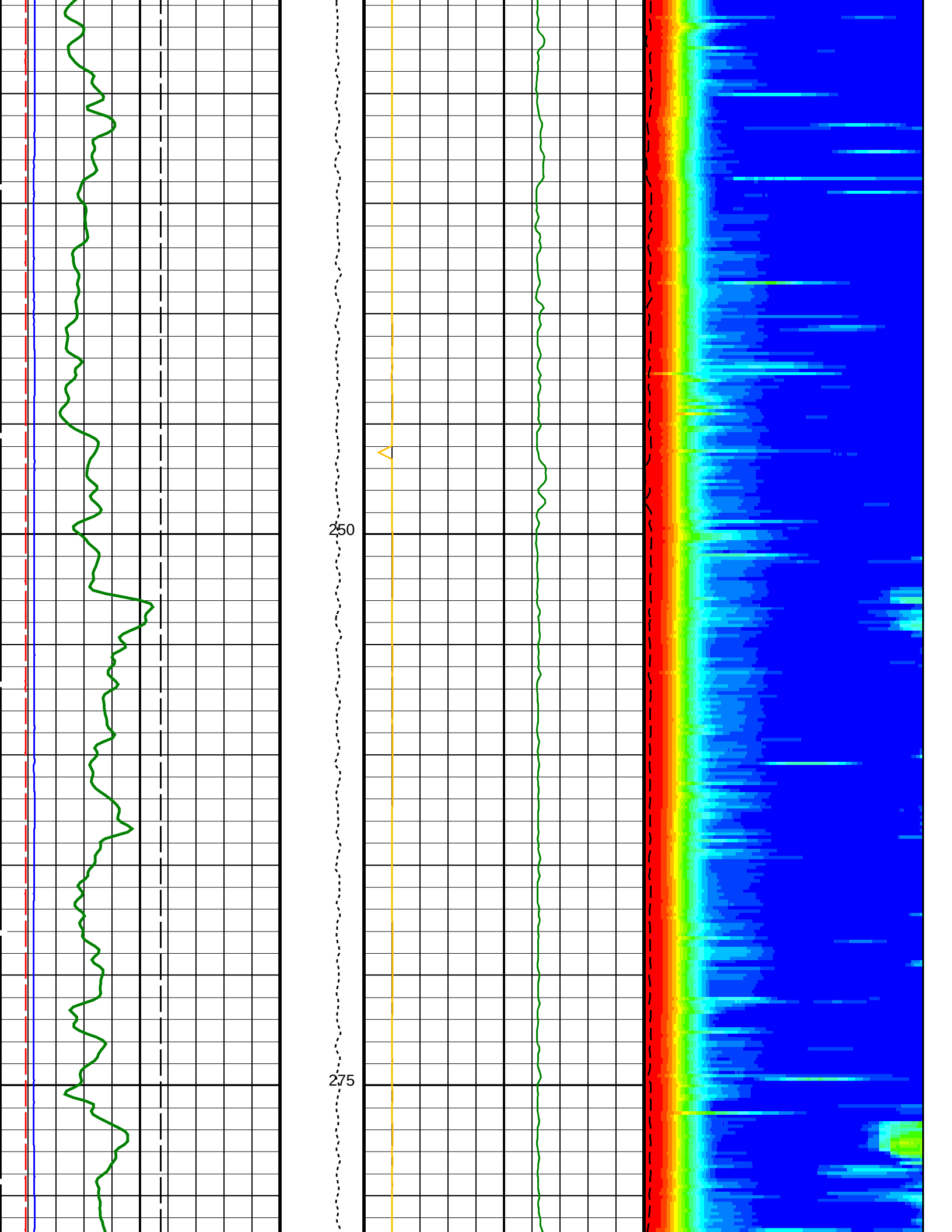
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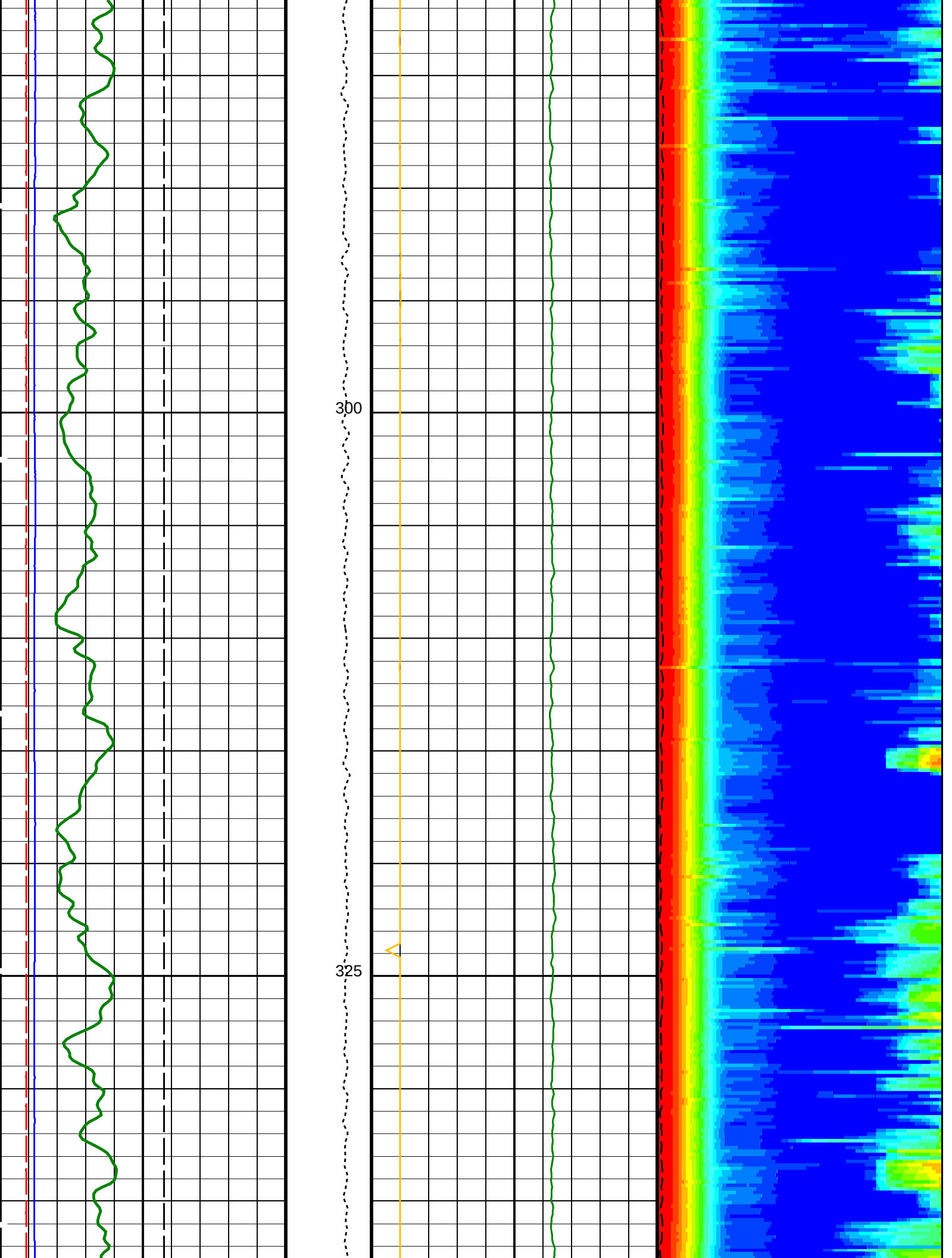
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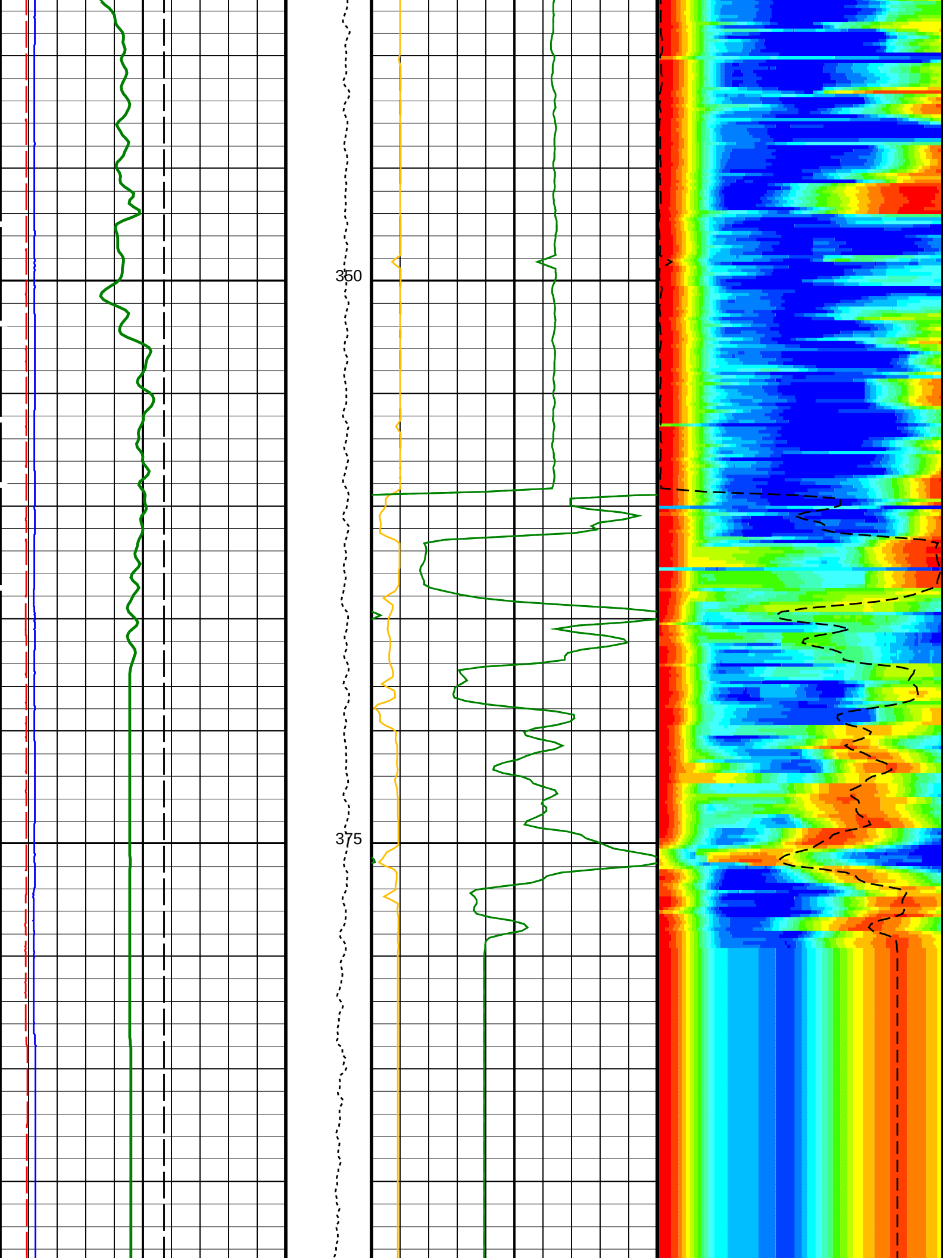
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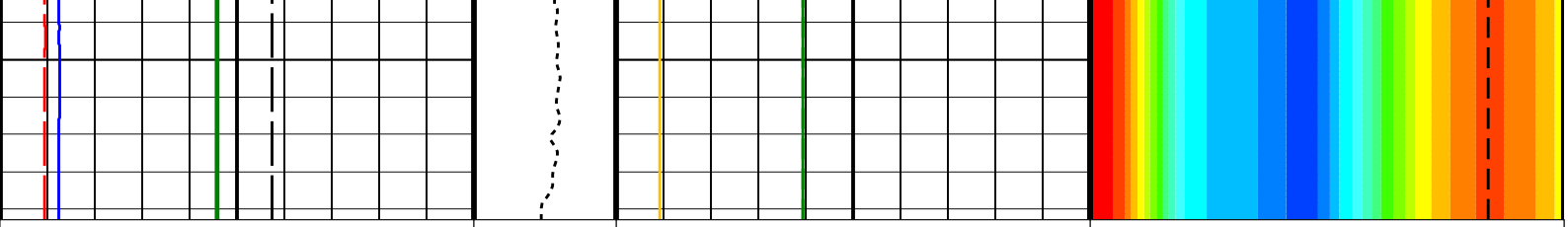


Bit Size (BS)	Tension (TENS)	Peak Coherence / RA − Stoneley (CHR3)	Delta−T Stoneley / RA (DT3R)
0 (IN) 20	0 (LBF) 5000	0 (−−−−) 10	180 (US/F) 780

Caliper 1 (C1)	Delta−T Stoneley / RA (DT3R)	Min Amplitude Max
0 (IN) 20	440 (US/F) 40	Rec.Array Stoneley Slow Proj. CVDL (SPR3) 180 (US/F) 780

Caliper 2 (C2)	Delta−T Stoneley (DTST)
0 (IN) 20	440 (US/F) 40

HNGS Spectroscopy Gamma Ray (HSGR)
0 (GAPI) 100

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value	
	DSST−B: Dipole Shear Imager − B		
BHS	Borehole Status	OPEN	
DDE3	Digitizing Delay 3	0	US
DDEX	Digitizing Delay X	0	US
DSI3	Digitizer Sample Interval 3	40	US
DSIX	Digitizer Sample Interval X	40	US
DTCS	Compressional Delta−T Source for DTCO Channel	PS_COMP	
DWC3	Digitizer Word Count 3	512	
DWCX	Digitizer Word Count X	512	
GCSE	Generalized Caliper Selection	C1	
MTXG	Monopole Transmitter Geometry	186	IN
NWI3	Number Waveform Items 3	8	
NWIX	Number Waveform Items X	0	
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
SAM3	DSST Sonic Acquisition Mode 3 − Monopole Mode for Stoneley	EVEN	
SAMX	DSST Sonic Acquisition Mode X − Both Dipoles or Monopole Mode for Expert	OFF	
SAS3	STC Sonic Array Status − Monopole Stoneley	255	
SBO3	STC Search Band Offset − Monopole Stoneley	2000	US
SBW3	STC Search Bandwidth − Monopole Stoneley	6000	US
SFC3	STC Formation Character − Monopole Stoneley	SELECTABLE	
SFM3	STC Filter − Monopole Stoneley	B.5−1.5K	
SLL3	STC Slowness Lower Limit − Monopole Stoneley	180	US/F
SST3	STC Slowness Step − Monopole Stoneley	4	US/F
SSW3	STC Source Waveform − Monopole Stoneley	WF_SAM3	
STLL	Label Slowness Lower Limit − Monopole Stoneley	180	US/F
STUL	Label Slowness Upper Limit − Monopole Stoneley	780	US/F
SUL3	STC Slowness Upper Limit − Monopole Stoneley	780	US/F
SWD3	STC Slowness Width − Monopole Stoneley	40	US/F
TBF3	STC Time for Baseline Fill − Monopole Stoneley	0	US
TLL3	STC Time Lower Limit − Monopole Stoneley	620	US
TST3	STC Time Step − Monopole Stoneley	200	US
TUL3	STC Time Upper Limit − Monopole Stoneley	12020	US
TWD3	STC Time Width − Monopole Stoneley	2000	US
TWI3	STC Integration Time Window − Monopole Stoneley	1600	US
TWSX	Transmitter Waveform Select X	0	
	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	0	IN
CSD2	Outer Casing Outer Diameter	0	IN
CSW1	Inner Casing Weight	0	LB/F
CSW2	Outer Casing Weight	0	LB/F
DBCC	HNGS Barite Constant Correction Flag	NONE	
GCSE	Generalized Caliper Selection	C1	
H1P	HNGS Detector 1 Allow/Disallow In Processing	ALLOW	
H2P	HNGS Detector 2 Allow/Disallow In Processing	ALLOW	
HABK	HNGS Borehole Potassium Running Average	−0.0214685	
HALF	HNGS Alpha Filter Length	60	IN
HCRB	HNGS Apply Borehole Potassium Correction	NONE	
HMWM	Mud Weighting Material	BARI	
HNPE	HNGS Processing Enable	YES	
S1BI	HNGS Detector 1 Calibration Bismuth Count Rate	−999.25	CPS
S2BI	HNGS Detector 2 Calibration Bismuth Count Rate	−999.25	CPS
SGRC	HNGS Standard Gamma−Ray Correction Flag	YES	
TPOS	Tool Position	ECCE	
VBA1	HNGS Detector 1 Variable Barite Factor Running Average	0.973109	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	0.963734	
	EDTC−B: Enhanced DTS Cartridge		
BHS	Borehole Status	OPEN	
GCSE	Generalized Caliper Selection	C1	
	System and Miscellaneous		
BS	Bit Size	11.438	IN
DFD	Drilling Fluid Density	1.26	G/C3
DO	Depth Offset for Playback	0.0	M
PP	Playback Processing	RECOMPUTE	

Format: DSST_STONELEY_VDL_COLOR Vertical Scale: 1:200 Graphics File Created: 20−Sep−2013 13:53

OP System Version: 19C0−187

MEST−B	19C0−187	DTA−A	19C0−187
DSST−B	19C0−187	HNGC−B	19C0−187
HNGS−BA	19C0−187	EDTC−B	SKK−5169−EDTCB

Input DLIS Files

FMS_DSI_NGS_034PUP	FN:34	31−Aug−2013 13:33	399.0 M		−37.3 M

Output DLIS Files

DEFAULT	FMS_DSI_NGS_046PUP	FN:51	PRODUCER	20−Sep−2013 13:53	
CLIENT	FMS_DSI_NGS_046PUC	FN:52	CUSTOMER	20−Sep−2013 13:53	

Schlumberger

First Pass
1:200 Scale

MAXIS Field Log

Company: Lamont Doherty Earth Observatory Well: Expedition 346, Site U1430B

Input DLIS Files

DEFAULT	FMS_DSI_NGS_035PUP	FN:36	PRODUCER	31−Aug−2013 13:39	397.8 M	90.1 M

Output DLIS Files

DEFAULT	FMS_DSI_NGS_047PUP	FN:53	PRODUCER	20−Sep−2013 13:54	397.8 M	90.1 M
CLIENT	FMS_DSI_NGS_047PUC	FN:54	CUSTOMER	20−Sep−2013 13:54	397.8 M	90.1 M

OP System Version: 19C0−187

MEST−B	19C0−187	DTA−A	19C0−187
DSST−B	19C0−187	HNGC−B	19C0−187
HNGS−BA	19C0−187	EDTC−B	SKK−5169−EDTCB

PIP SUMMARY

Time Mark Every 60 S

HNGS Spectroscopy Gamma Ray (HSGR)
0 (GAPI) 100

Caliper 2 (C2)
0 (IN) 20

Caliper 1 (C1)
0 (IN) 20

Bit Size (BS)
0 (IN) 20

Tension (TENS)
0 (LBF) 5000

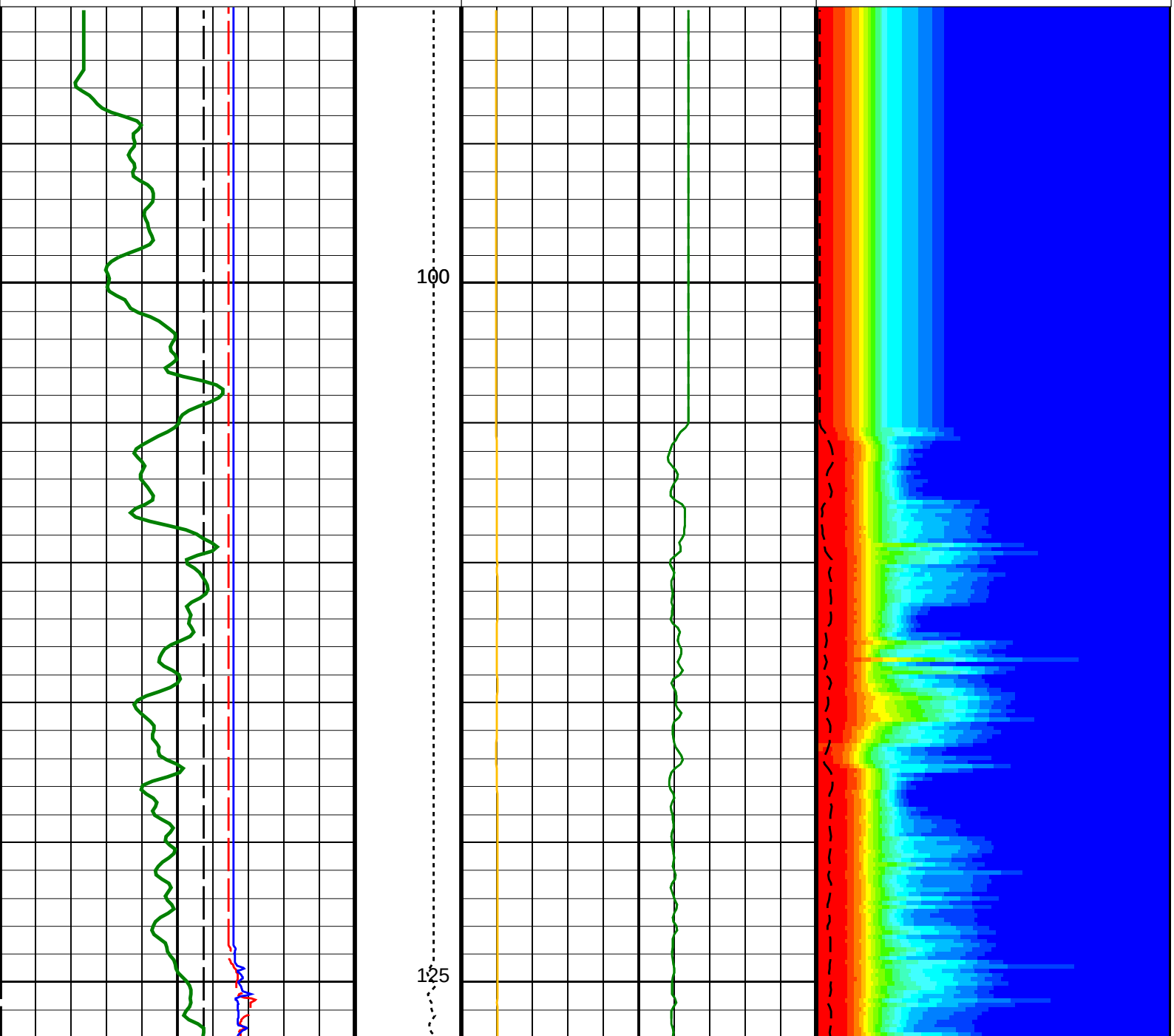
Delta−T Stoneley (DTST)
440 (US/F) 40

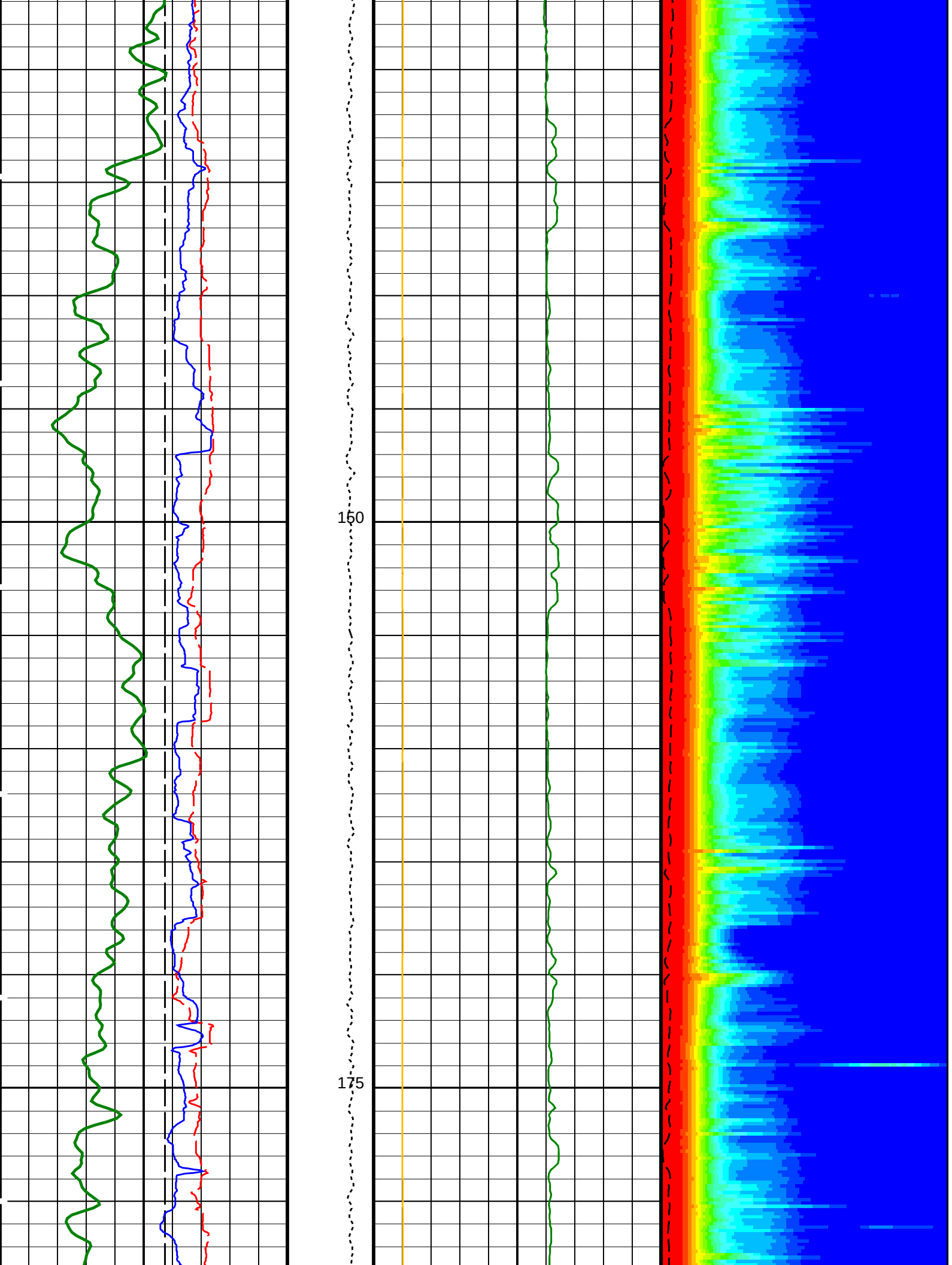
Delta−T Stoneley / RA (DT3R)
440 (US/F) 40

Peak Coherence / RA − Stoneley (CHR3)
0 (−−−−) 10

Min Amplitude Max
Rec.Array Stoneley Slow Proj. CVDL (SPR3)
180 (US/F) 780

Delta−T Stoneley / RA (DT3R)
180 (US/F) 780

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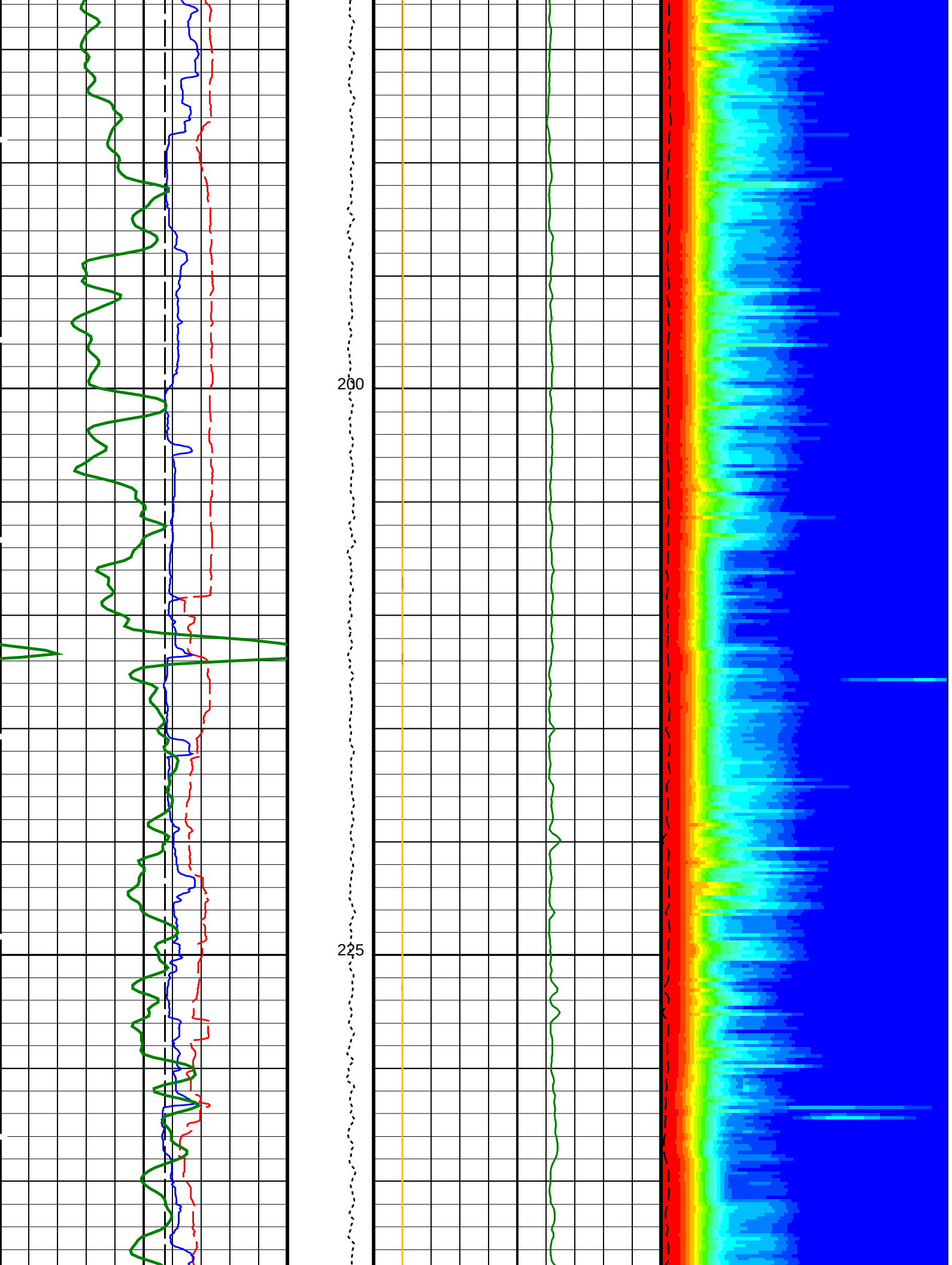
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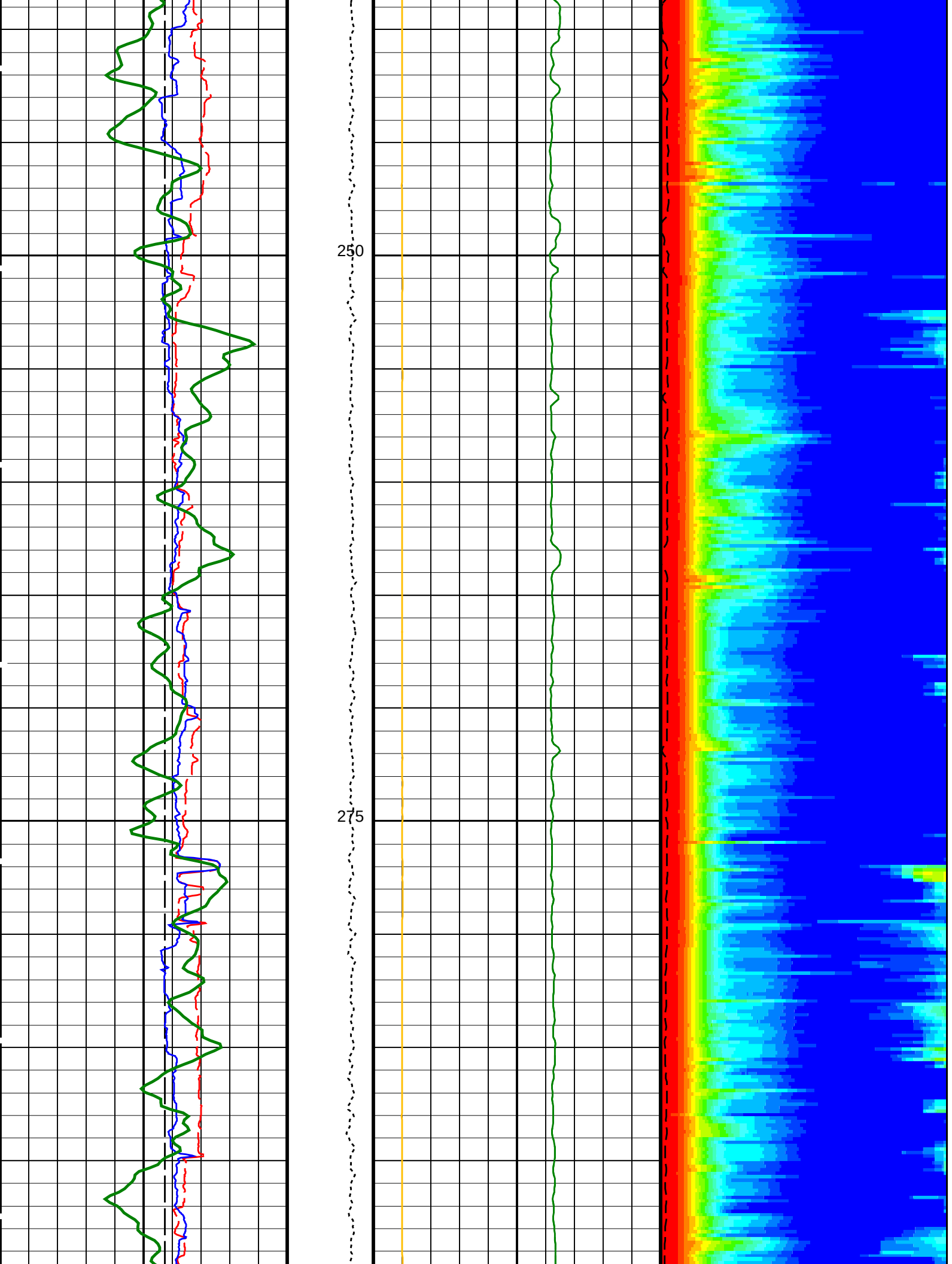
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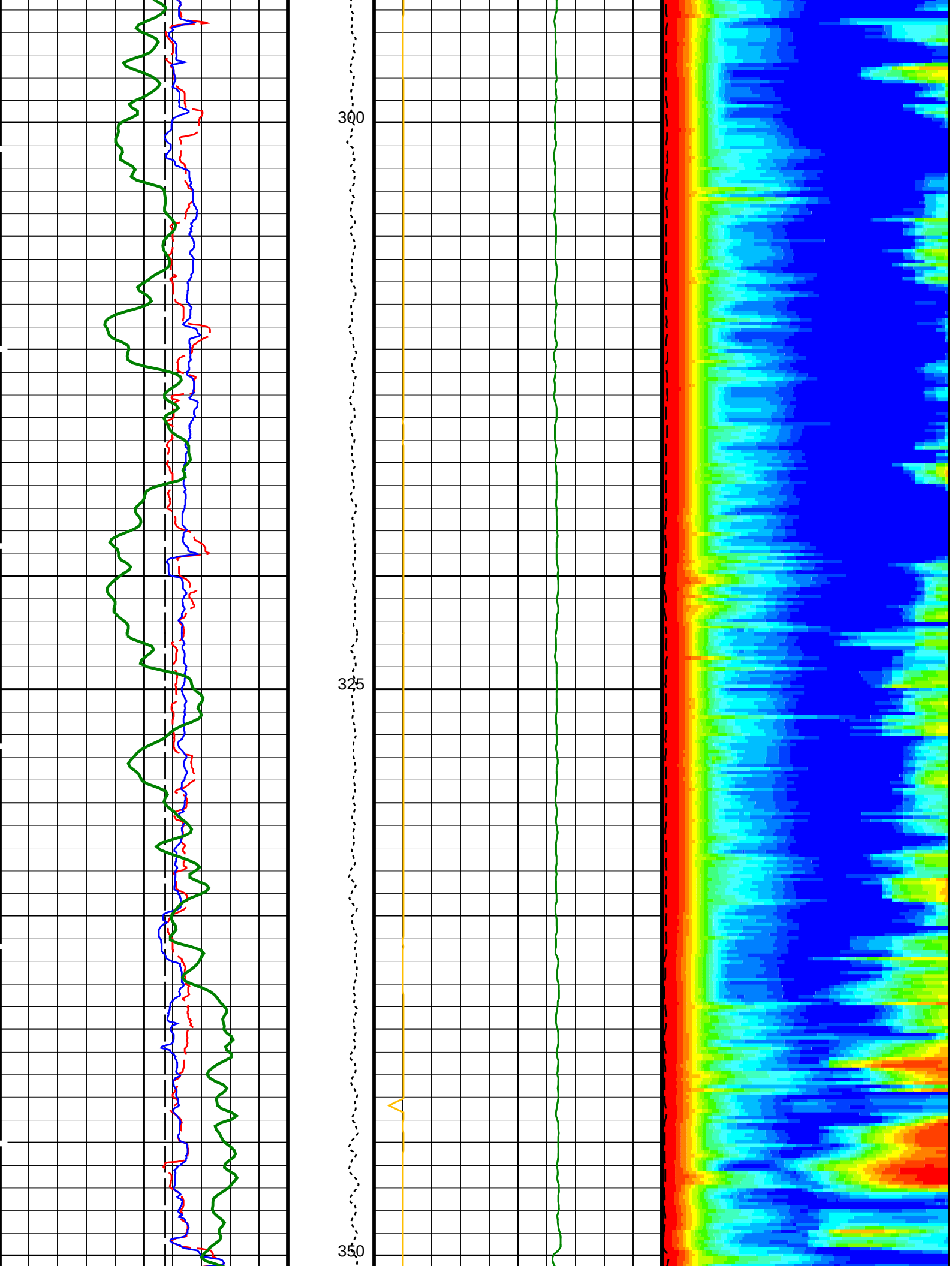
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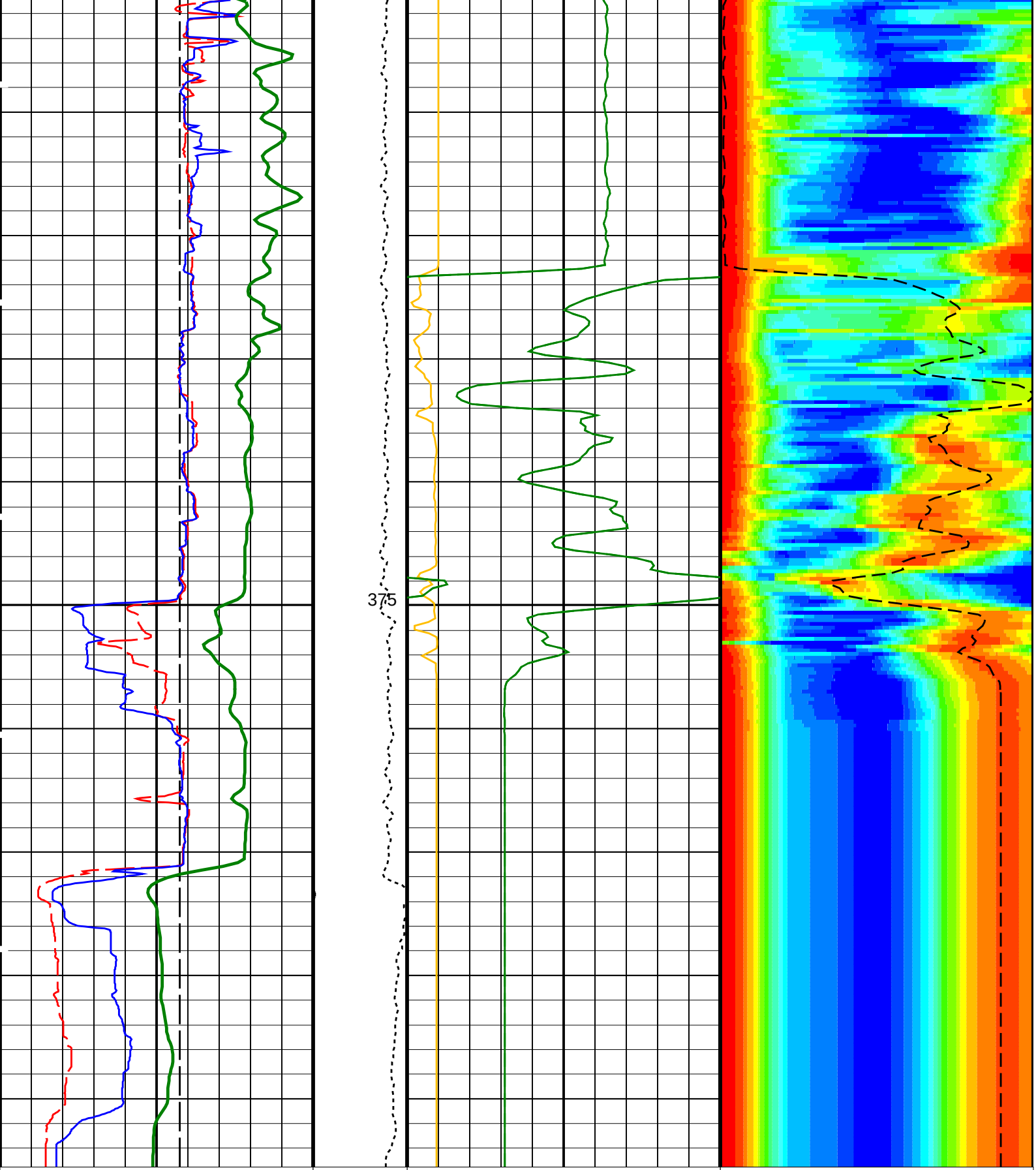


Bit Size (BS)	Tension (TENS)	Peak Coherence / RA − Stoneley (CHR3)	Delta−T Stoneley / RA (DT3R)
0 (IN) 20	(LBF) 0 5000	0 (−−−−) 10	180 (US/F) 780
Caliper 1 (C1)		Delta−T Stoneley / RA (DT3R)	Min Amplitude Max
0 (IN) 20		440 (US/F) 40	Rec.Array Stoneley Slow Proj. CVDL (SPR3)
Caliper 2 (C2)		Delta−T Stoneley (DTST)	180 (US/F) 780

Caliper 2 (C2)		
0	(IN)	20

HNGS Spectroscopy Gamma Ray (HSGR)		
0	(GAPI)	100

Delta−T Stoneley (DTST)		
440	(US/F)	40

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value	
	DSST−B: Dipole Shear Imager − B		
BHS	Borehole Status	OPEN	
DDE3	Digitizing Delay 3	0	US
DDEX	Digitizing Delay X	0	US
DSI3	Digitizer Sample Interval 3	40	US
DSIX	Digitizer Sample Interval X	40	US
DTCS	Compressional Delta−T Source for DTCO Channel	PS_COMP	
DWC3	Digitizer Word Count 3	512	
DWCX	Digitizer Word Count X	512	
GCSE	Generalized Caliper Selection	C1	
MTXG	Monopole Transmitter Geometry	186	IN
NWI3	Number Waveform Items 3	8	
NWIX	Number Waveform Items X	0	
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
SAM3	DSST Sonic Acquisition Mode 3 − Monopole Mode for Stoneley	EVEN	
SAMX	DSST Sonic Acquisition Mode X − Both Dipoles or Monopole Mode for Expert	OFF	
SAS3	STC Sonic Array Status − Monopole Stoneley	255	
SBO3	STC Search Band Offset − Monopole Stoneley	2000	US
SBW3	STC Search Bandwidth − Monopole Stoneley	6000	US
SFC3	STC Formation Character − Monopole Stoneley	SELECTABLE	
SFM3	STC Filter − Monopole Stoneley	B.5−1.5K	
SLL3	STC Slowness Lower Limit − Monopole Stoneley	180	US/F
SST3	STC Slowness Step − Monopole Stoneley	4	US/F
SSW3	STC Source Waveform − Monopole Stoneley	WF_SAM3	
STLL	Label Slowness Lower Limit − Monopole Stoneley	180	US/F
STUL	Label Slowness Upper Limit − Monopole Stoneley	780	US/F
SUL3	STC Slowness Upper Limit − Monopole Stoneley	780	US/F
SWD3	STC Slowness Width − Monopole Stoneley	40	US/F
TBF3	STC Time for Baseline Fill − Monopole Stoneley	0	US
TLL3	STC Time Lower Limit − Monopole Stoneley	620	US
TST3	STC Time Step − Monopole Stoneley	200	US
TUL3	STC Time Upper Limit − Monopole Stoneley	12020	US
TWD3	STC Time Width − Monopole Stoneley	2000	US
TWI3	STC Integration Time Window − Monopole Stoneley	1600	US
TWSX	Transmitter Waveform Select X	0	
	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	0	IN
CSD2	Outer Casing Outer Diameter	0	IN
CSW1	Inner Casing Weight	0	LB/F
CSW2	Outer Casing Weight	0	LB/F
DBCC	HNGS Barite Constant Correction Flag	NONE	
GCSE	Generalized Caliper Selection	C1	
H1P	HNGS Detector 1 Allow/Disallow In Processing	ALLOW	
H2P	HNGS Detector 2 Allow/Disallow In Processing	ALLOW	
HABK	HNGS Borehole Potassium Running Average	−0.0277771	
HALF	HNGS Alpha Filter Length	60	IN
HCRB	HNGS Apply Borehole Potassium Correction	NONE	
HMWM	Mud Weighting Material	BARI	
HNPE	HNGS Processing Enable	YES	
S1BI	HNGS Detector 1 Calibration Bismuth Count Rate	−999.25	CPS
S2BI	HNGS Detector 2 Calibration Bismuth Count Rate	−999.25	CPS
SGRC	HNGS Standard Gamma−Ray Correction Flag	YES	
TPOS	Tool Position	ECCE	
VBA1	HNGS Detector 1 Variable Barite Factor Running Average	1.00642	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	0.994636	
	EDTC−B: Enhanced DTS Cartridge		
BHS	Borehole Status	OPEN	

BHS	Borehole Status	OPEN	
GCSE	Generalized Caliper Selection	C1	
	System and Miscellaneous		
BS	Bit Size	11.438	IN
DFD	Drilling Fluid Density	1.26	G/C3
DO	Depth Offset for Playback	0.0	M
PP	Playback Processing	RECOMPUTE	

Format: DSST_STONELEY_VDL_COLOR Vertical Scale: 1:200 Graphics File Created: 20−Sep−2013 13:54

OP System Version: 19C0−187

MEST−B	19C0−187	DTA−A	19C0−187
DSST−B	19C0−187	HNGC−B	19C0−187
HNGS−BA	19C0−187	EDTC−B	SKK−5169−EDTCB

Input DLIS Files

DEFAULT	FMS_DSI_NGS_035PUP	FN:36	PRODUCER	31−Aug−2013 13:39	397.8 M	90.1 M

Output DLIS Files

DEFAULT	FMS_DSI_NGS_047PUP	FN:53	PRODUCER	20−Sep−2013 13:54		
CLIENT	FMS_DSI_NGS_047PUC	FN:54	CUSTOMER	20−Sep−2013 13:54		

Schlumberger

Main Pass
1:200 Scale

MAXIS Field Log

Company: Lamont Doherty Earth Observatory Well: Expedition 346, Site U1430B

Input DLIS Files

DEFAULT	FMS_DSI_NGS_037PUP	FN:40	PRODUCER	31−Aug−2013 13:47	397.8 M	−10.1 M

Output DLIS Files

DEFAULT	FMS_DSI_NGS_048PUP	FN:55	PRODUCER	20−Sep−2013 13:55	397.8 M	−10.1 M
CLIENT	FMS_DSI_NGS_048PUC	FN:56	CUSTOMER	20−Sep−2013 13:55	397.8 M	−10.1 M

OP System Version: 19C0−187

MEST−B	19C0−187	DTA−A	19C0−187
DSST−B	19C0−187	HNGC−B	19C0−187
HNGS−BA	19C0−187	EDTC−B	SKK−5169−EDTCB

PIP SUMMARY

Time Mark Every 60 S

HNGS Spectroscopy Gamma Ray (HSGR)
0 (GAPI) 100

Caliper 2 (C2)
0 (IN) 20

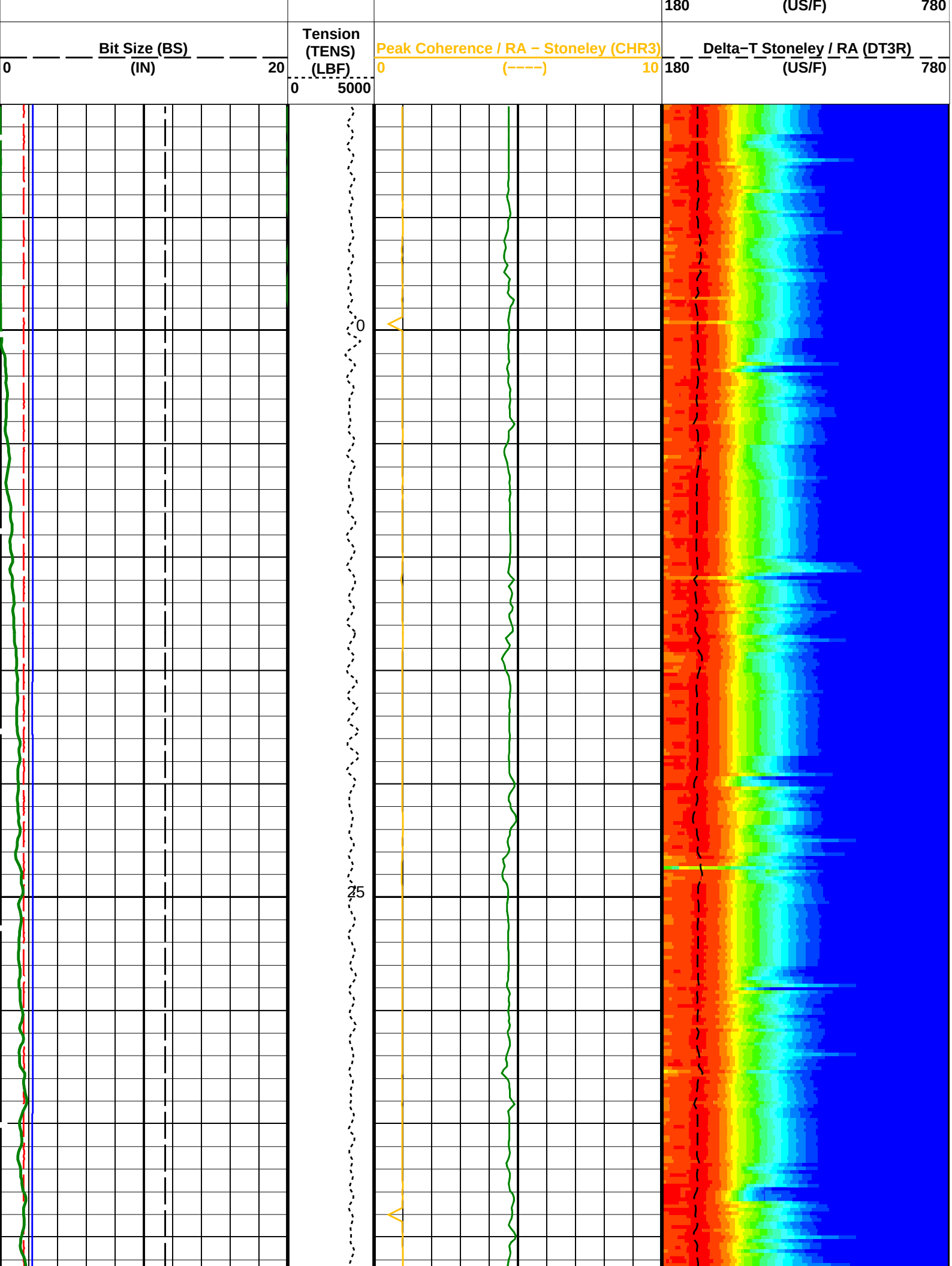
Caliper 1 (C1)
0 (IN) 20

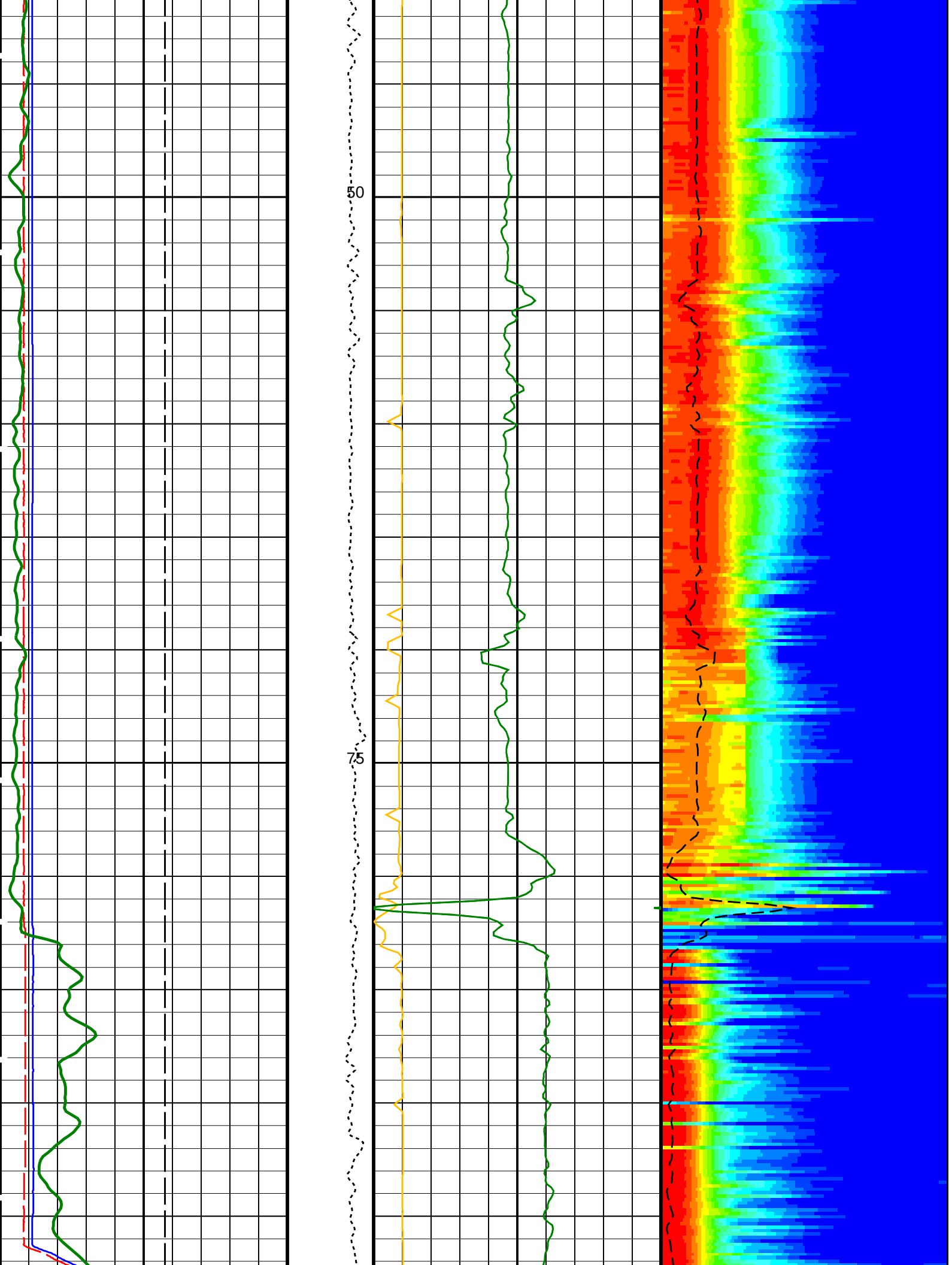
Delta−T Stoneley (DTST)
440 (US/F) 40

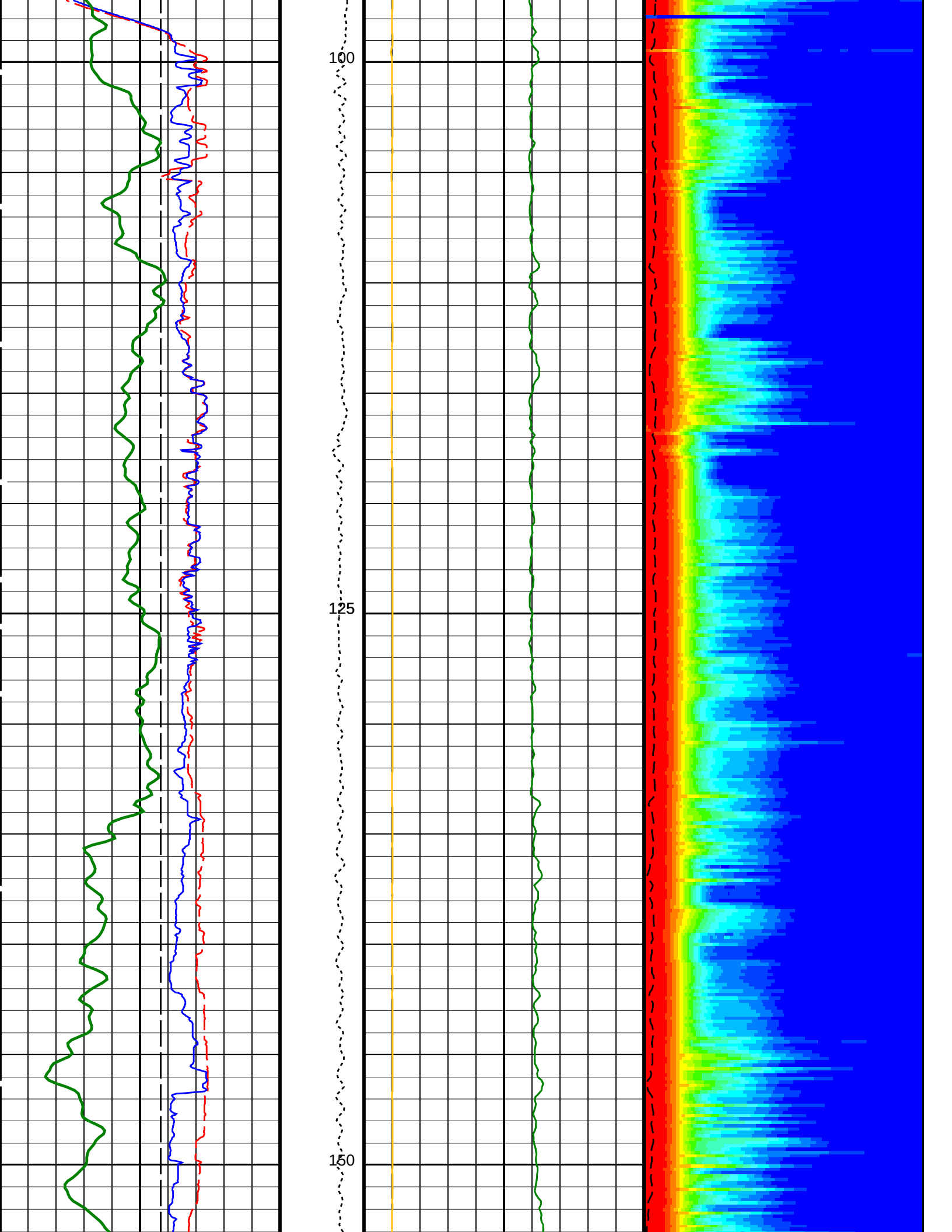
Delta−T Stoneley / RA (DT3R)
440 (US/F) 40

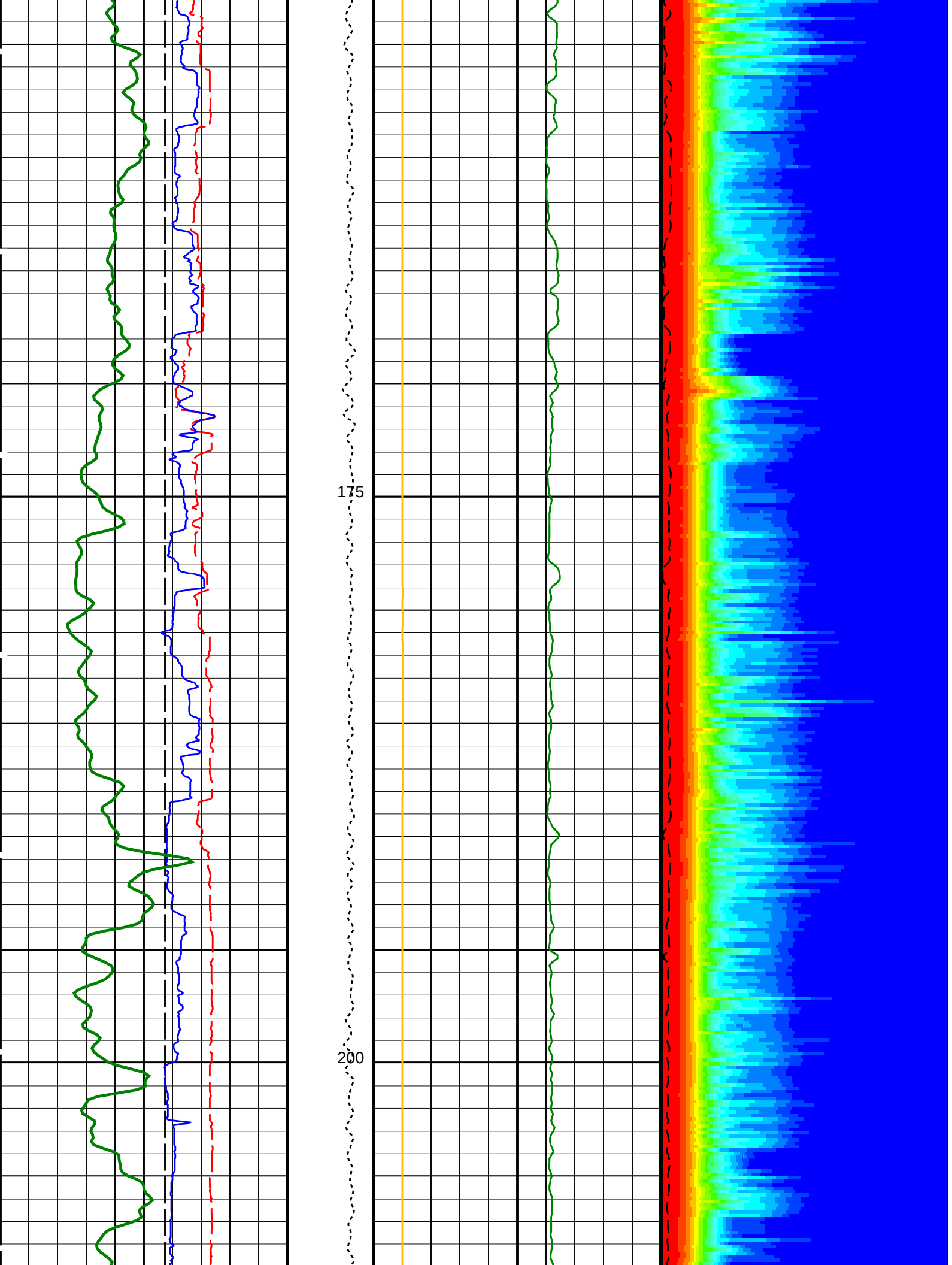
Min Amplitude Max

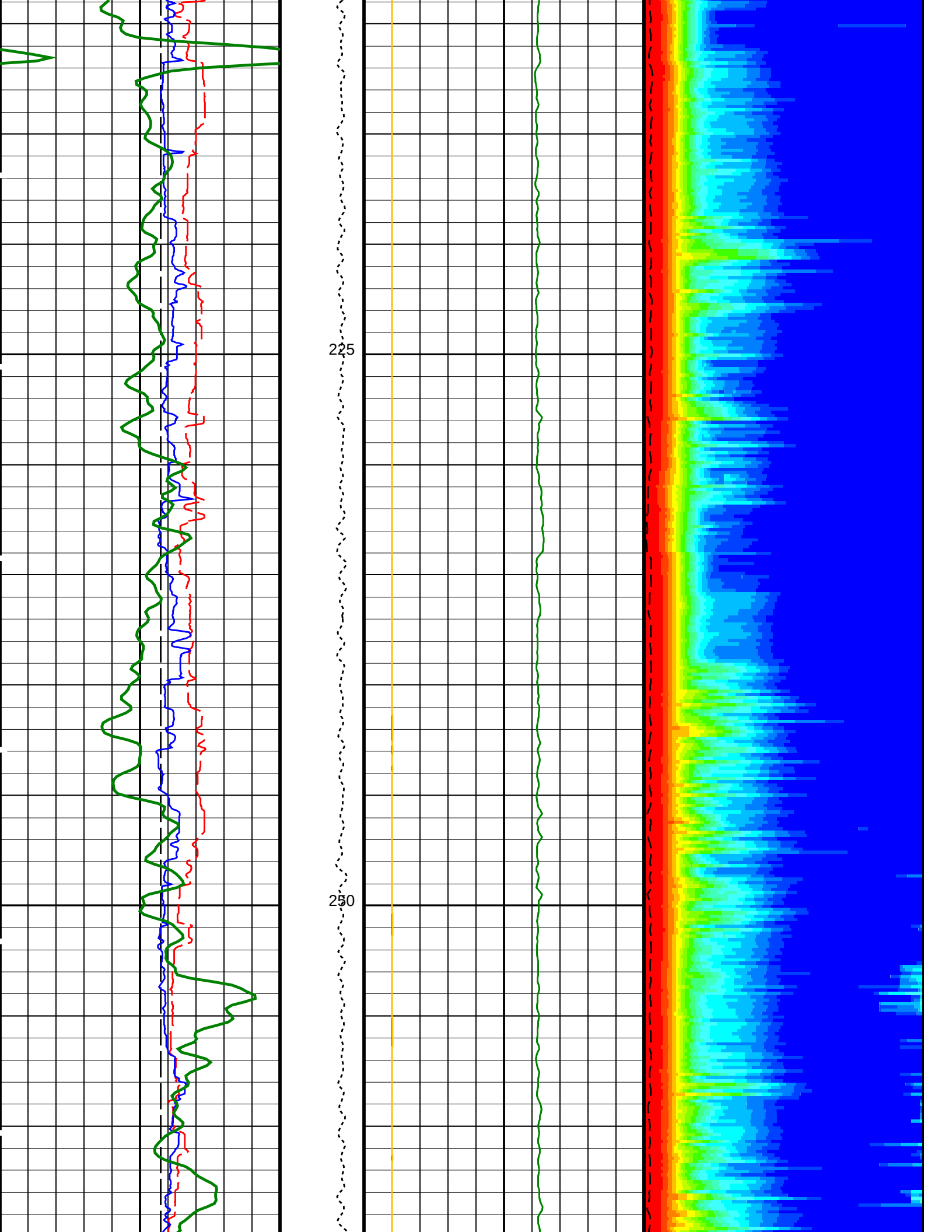
Rec.Array Stoneley Slow Proj. CVDL (SPR3)

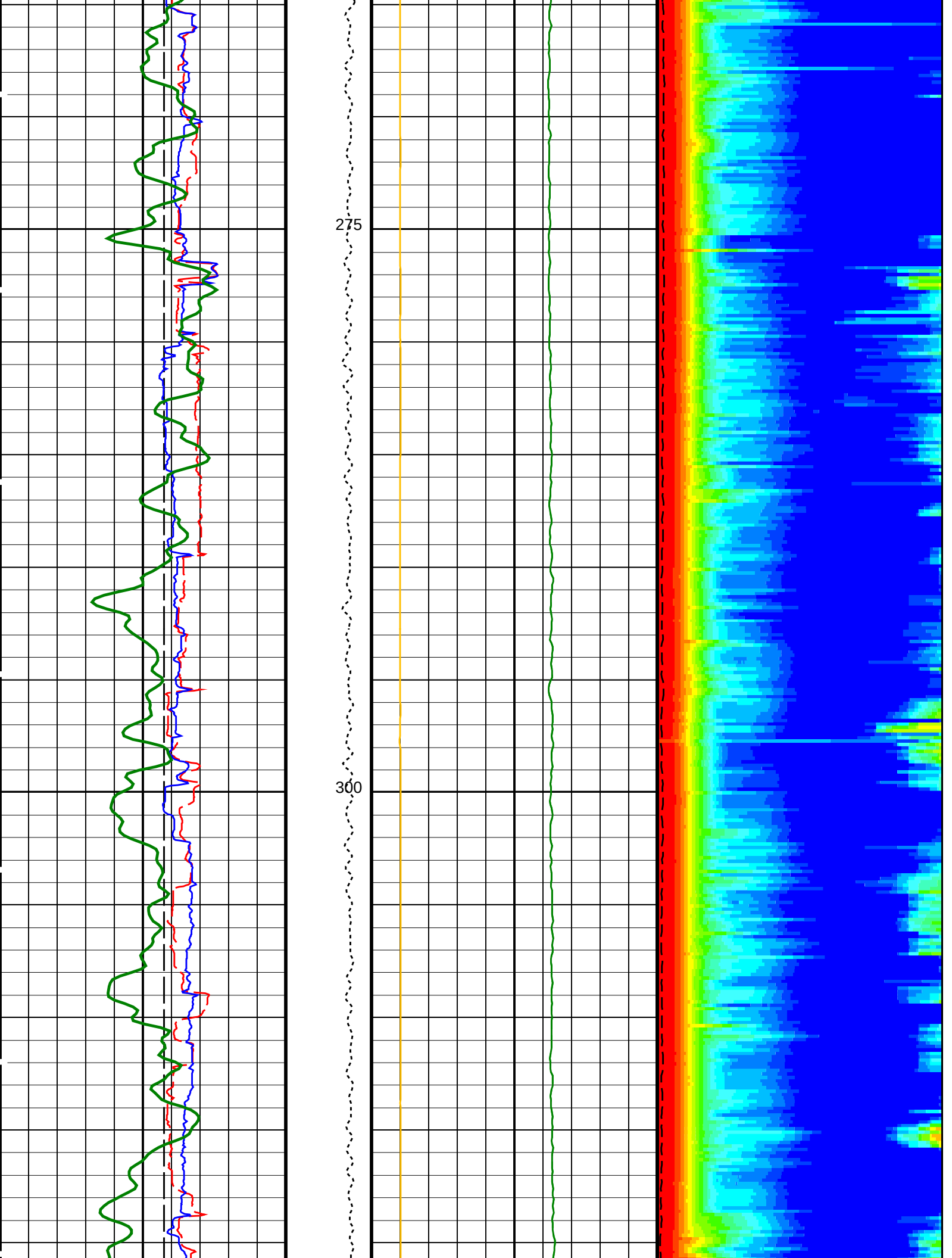

180
(US/F)
780
Bit Size (BS)
0
(IN)
20
Tension
(TENS)
(LBF)
0
5000
Peak Coherence / RA − Stoneley (CHR3)
0
(−−−−)
10
Delta−T Stoneley / RA (DT3R)
180
(US/F)
780
0
25

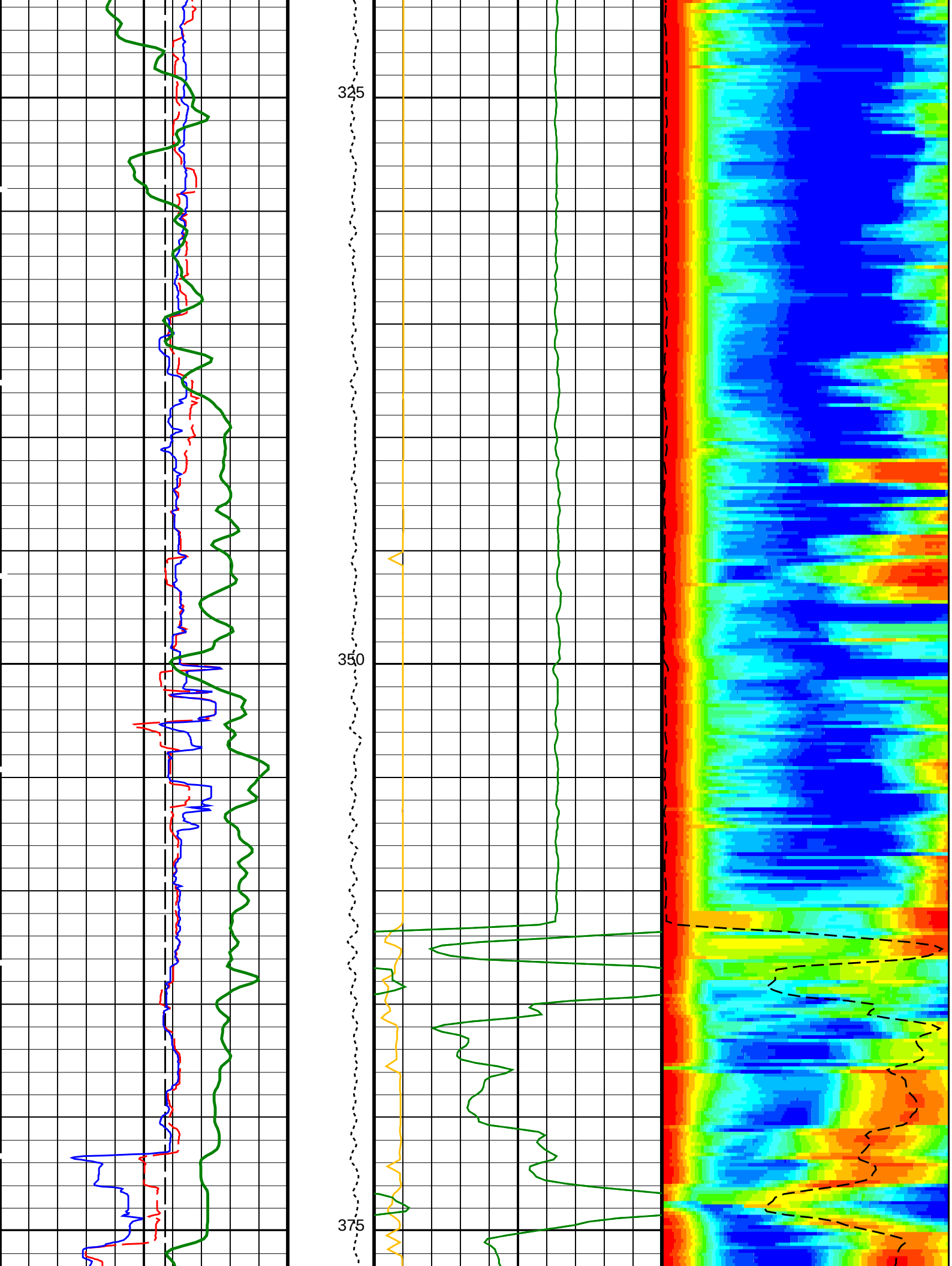

50
75

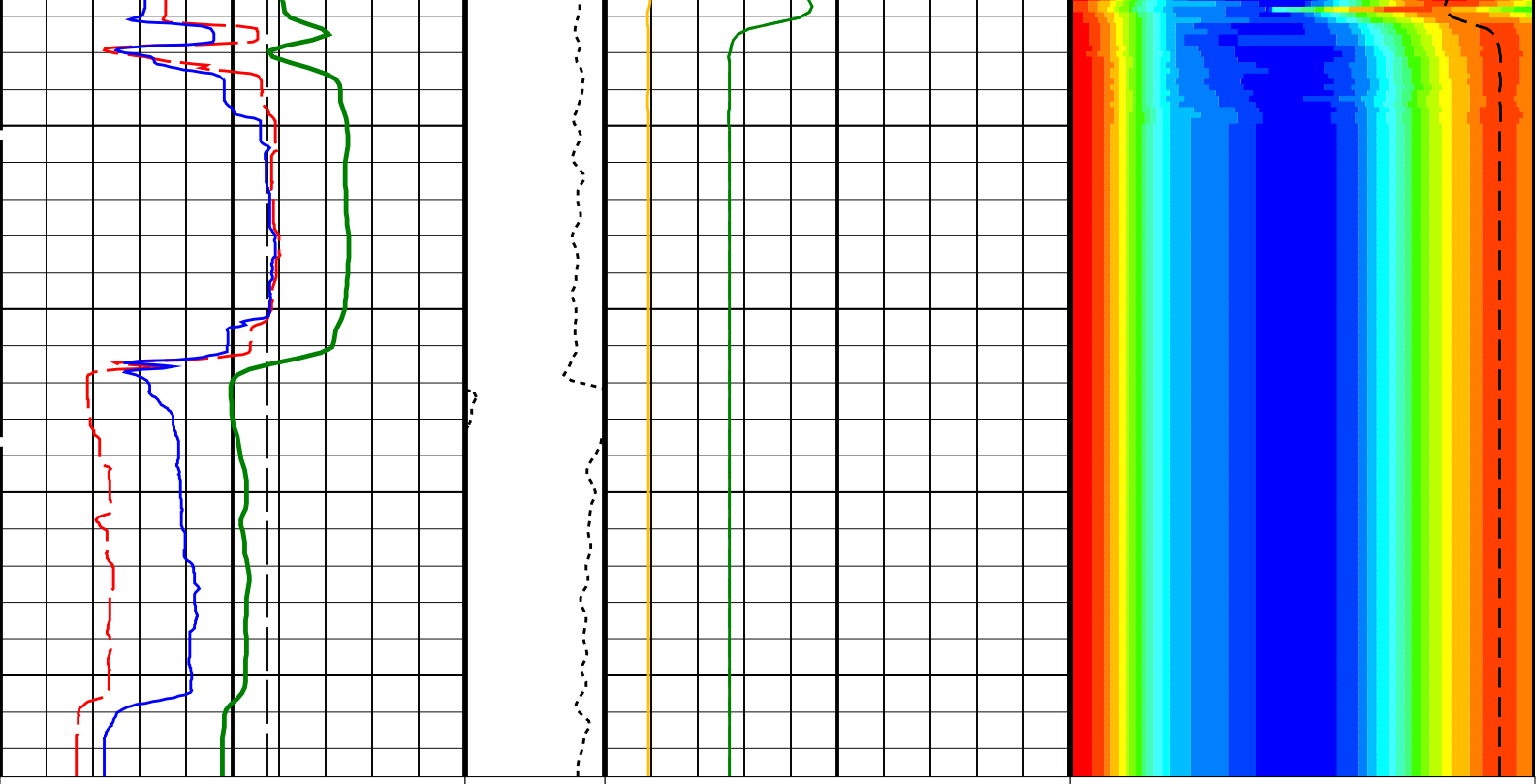

100
125
150


175
200


225
250


275
300


325
350
375



Bit Size (BS)	Tension (TENS)	Peak Coherence / RA − Stoneley (CHR3)	Delta−T Stoneley / RA (DT3R)
0 (IN) 20	0 (LBF) 5000	0 (−−−−) 10	180 (US/F) 780

Caliper 1 (C1)	Delta−T Stoneley / RA (DT3R)	Min Amplitude Max
0 (IN) 20	440 (US/F) 40	Rec.Array Stoneley Slow Proj. CVDL (SPR3) 180 (US/F) 780

Caliper 2 (C2)	Delta−T Stoneley (DTST)
0 (IN) 20	440 (US/F) 40

HNGS Spectroscopy Gamma Ray (HSGR)
0 (GAPI) 100

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value	
	DSST−B: Dipole Shear Imager − B		
BHS	Borehole Status	OPEN	
DDE3	Digitizing Delay 3	0	US
DDEX	Digitizing Delay X	0	US
DSI3	Digitizer Sample Interval 3	40	US
DSIX	Digitizer Sample Interval X	40	US
DTCS	Compressional Delta−T Source for DTCO Channel	PS_COMP	
DWC3	Digitizer Word Count 3	512	
DWCX	Digitizer Word Count X	512	
GCSE	Generalized Caliper Selection	C1	
MTXG	Monopole Transmitter Geometry	186	IN
NWI3	Number Waveform Items 3	8	
NWIX	Number Waveform Items X	0	
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
SAM3	DSST Sonic Acquisition Mode 3 − Monopole Mode for Stoneley	EVEN	
SAMX	DSST Sonic Acquisition Mode X − Both Dipoles or Monopole Mode for Expert		

		OFF	
SAS3	STC Sonic Array Status − Monopole Stoneley	255	
SBO3	STC Search Band Offset − Monopole Stoneley	2000	US
SBW3	STC Search Bandwidth − Monopole Stoneley	6000	US
SFC3	STC Formation Character − Monopole Stoneley	SELECTABLE	
SFM3	STC Filter − Monopole Stoneley	B.5−1.5K	
SLL3	STC Slowness Lower Limit − Monopole Stoneley	180	US/F
SST3	STC Slowness Step − Monopole Stoneley	4	US/F
SSW3	STC Source Waveform − Monopole Stoneley	WF_SAM3	
STLL	Label Slowness Lower Limit − Monopole Stoneley	180	US/F
STUL	Label Slowness Upper Limit − Monopole Stoneley	780	US/F
SUL3	STC Slowness Upper Limit − Monopole Stoneley	780	US/F
SWD3	STC Slowness Width − Monopole Stoneley	40	US/F
TBF3	STC Time for Baseline Fill − Monopole Stoneley	0	US
TLL3	STC Time Lower Limit − Monopole Stoneley	620	US
TST3	STC Time Step − Monopole Stoneley	200	US
TUL3	STC Time Upper Limit − Monopole Stoneley	12020	US
TWD3	STC Time Width − Monopole Stoneley	2000	US
TWI3	STC Integration Time Window − Monopole Stoneley	1600	US
TWSX	Transmitter Waveform Select X	0	
	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	0	IN
CSD2	Outer Casing Outer Diameter	0	IN
CSW1	Inner Casing Weight	0	LB/F
CSW2	Outer Casing Weight	0	LB/F
DBCC	HNGS Barite Constant Correction Flag	NONE	
GCSE	Generalized Caliper Selection	C1	
H1P	HNGS Detector 1 Allow/Disallow In Processing	ALLOW	
H2P	HNGS Detector 2 Allow/Disallow In Processing	ALLOW	
HABK	HNGS Borehole Potassium Running Average	−0.00407081	
HALF	HNGS Alpha Filter Length	60	IN
HCRB	HNGS Apply Borehole Potassium Correction	NONE	
HMWM	Mud Weighting Material	BARI	
HNPE	HNGS Processing Enable	YES	
S1BI	HNGS Detector 1 Calibration Bismuth Count Rate	−999.25	CPS
S2BI	HNGS Detector 2 Calibration Bismuth Count Rate	−999.25	CPS
SGRC	HNGS Standard Gamma−Ray Correction Flag	YES	
TPOS	Tool Position	ECCE	
VBA1	HNGS Detector 1 Variable Barite Factor Running Average	1.02293	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	1.02458	
	EDTC−B: Enhanced DTS Cartridge		
BHS	Borehole Status	OPEN	
GCSE	Generalized Caliper Selection	C1	
	System and Miscellaneous		
BS	Bit Size	11.438	IN
DFD	Drilling Fluid Density	1.26	G/C3
DO	Depth Offset for Playback	0.0	M
PP	Playback Processing	RECOMPUTE	

Format: DSST_STONELEY_VDL_COLOR Vertical Scale: 1:200 Graphics File Created: 20−Sep−2013 13:55

OP System Version: 19C0−187

MEST−B	19C0−187	DTA−A	19C0−187
DSST−B	19C0−187	HNGC−B	19C0−187
HNGS−BA	19C0−187	EDTC−B	SKK−5169−EDTCB

Input DLIS Files

DEFAULT	FMS_DSI_NGS_037PUP	FN:40	PRODUCER	31−Aug−2013 13:47	397.8 M	−10.1 M

Output DLIS Files

DEFAULT	FMS_DSI_NGS_048PUP	FN:55	PRODUCER	20−Sep−2013 13:55
CLIENT	FMS_DSI_NGS_048PUC	FN:56	CUSTOMER	20−Sep−2013 13:55

Schlumberger

Calibrations

Calibration and Check Summary

Measurement	Nominal	Master	Before	After	Change	Limit	Units
Hostile Natural Gamma Ray Sonde Wellsite Calibration − Detector 1 Check							
Master: 29−Jul−2013 20:46 Before: 30−Aug−2013 3:43 After: 30−Aug−2013 9:52							
Na 511 Peak Loc	40.00	39.74	39.66	39.66	−0.001842	1.000	
Na 511 Peak Res	15.50	15.31	14.99	15.59	0.6071	2.000	%
High Voltage	1150	1168	1175	1177	1.875	N/A	V
Na 1785 Peak Loc	142.6	142.6	141.1	143.1	1.995	7.000	
Na 1785 Peak Res	8.500	9.002	8.739	8.350	−0.3891	2.000	%
Temperature	15.50	21.46	30.66	29.21	−1.452	N/A	DEGC
Na Count Rate	45.00	15.10	12.22	12.96	0.7358	8.000	CPS
Hostile Natural Gamma Ray Sonde Wellsite Calibration − Detector 2 Check							
Master: 29−Jul−2013 20:46 Before: 30−Aug−2013 3:43 After: 30−Aug−2013 9:52							
Na 511 Peak Loc	40.00	39.58	39.50	39.79	0.2864	1.000	
Na 511 Peak Res	15.50	16.04	16.51	15.30	−1.204	2.000	%
High Voltage	1150	1093	1109	1110	1.251	N/A	V
Na 1785 Peak Loc	142.6	141.7	143.1	142.4	−0.7710	7.000	
Na 1785 Peak Res	8.500	9.499	8.731	9.377	0.6464	2.000	%
Temperature	15.50	21.65	30.81	30.84	0.03577	N/A	DEGC
Na Count Rate	45.00	14.93	12.29	12.87	0.5788	8.000	CPS
Hostile Natural Gamma Ray Sonde Wellsite Calibration − Ratio Of Detector 1 To Detector 2							
Master: 29−Jul−2013 20:46 Before: 30−Aug−2013 3:43 After: 30−Aug−2013 9:52							
Coincidence Count Rate Ratio	1.000	1.015	0.9928	1.007	0.01398	0.05000	
Enhanced DTS Cartridge Wellsite Calibration − EDTC Accelerometer Calibration							
Before: 30−Aug−2013 3:44							
EDTC Z−Axis Acceleration	9.810	N/A	9.794	N/A	N/A	N/A	M/S2
Enhanced DTS Cartridge Wellsite Calibration − Detector Calibration							
Before: 30−Aug−2013 3:38							
Gamma Ray (Jig − Bkg)	204.1	N/A	204.1	N/A	N/A	18.55	GAPI
Gamma Ray (Calibrated)	165.0	N/A	165.0	N/A	N/A	15.00	GAPI

Litho−Density Spectroscopy Cartridge − B / Equipment Identification

Primary Equipment:		
LDSC Cartridge	LDSC − B	326
Auxiliary Equipment:		
LDSC Housing	LDSH − A	303

Hostile Natural Gamma Ray Cartridge − B / Equipment Identification

Primary Equipment:		
HNGC Cartridge	HNGC − B	300
Auxiliary Equipment:		
HNGC Housing	HNGH − A	115

Hostile Natural Gamma Ray Sonde / Equipment Identification

Primary Equipment:		
HNGS Sonde	HNGS − BA	194
Auxiliary Equipment:		
HNGS Sonde Housing	HNSH − BA	205
Gamma Source Radioactive	GSR − U	616008

Hostile Natural Gamma Ray Sonde Wellsite Calibration

Detector 1 Check

Phase	Na 511 Peak Loc	Value
Master		39.74
Before		39.66
After		39.66
37.50 (Minimum)	40.00 (Nominal)	43.50 (Maximum)

Phase	Na 511 Peak Res %	Value
Master		15.31
Before		14.99
After		15.59
12.00 (Minimum)	15.50 (Nominal)	19.00 (Maximum)

Phase	High Voltage V	Value
Master		1168
Before		1175
After		1177
900.0 (Minimum)	1150 (Nominal)	1600 (Maximum)

Phase	Na 1785 Peak Loc	Value
Master		142.6
Before		141.1
After		143.1
135.0 (Minimum)	142.6 (Nominal)	150.3 (Maximum)

Phase	Na 1785 Peak Res %	Value
Master		9.002
Before		8.739
After		8.350
7.000 (Minimum)	8.500 (Nominal)	11.00 (Maximum)

Phase	Temperature DEGC	Value
Master		21.46
Before		30.66
After		29.21
−28.89 (Minimum)	15.50 (Nominal)	60.00 (Maximum)

Phase	Na Count Rate CPS	Value
Master		15.10
Before		12.22
After		12.96
10.00 (Minimum)	45.00 (Nominal)	100.0 (Maximum)

Master: 29−Jul−2013 20:46 Before: 30−Aug−2013 3:43 After: 30−Aug−2013 9:52

Hostile Natural Gamma Ray Sonde Wellsite Calibration

Detector 2 Check

Phase	Na 511 Peak Loc	Value
Master		39.58
Before		39.50
After		**39.79**
37.50 (Minimum)	40.00 (Nominal)	43.50 (Maximum)

Phase	Na 511 Peak Res %	Value
Master		16.04
Before		16.51
After		**15.30**
12.00 (Minimum)	15.50 (Nominal)	19.00 (Maximum)

Phase	High Voltage V	Value
Master		1093
Before		1109
After		**1110**
900.0 (Minimum)	1150 (Nominal)	1600 (Maximum)

Phase	Na 1785 Peak Loc	Value
Master		141.7
Before		143.1
After		142.4
135.0 (Minimum)	142.6 (Nominal)	150.3 (Maximum)

Phase	Na 1785 Peak Res %	Value
Master		9.499
Before		8.731
After		9.377
7.000 (Minimum)	8.500 (Nominal)	11.00 (Maximum)

Phase	Temperature DEGC	Value
Master		21.65
Before		30.81
After		30.84
−28.89 (Minimum)	15.50 (Nominal)	60.00 (Maximum)

Phase	Na Count Rate CPS	Value
Master		14.93
Before		12.29
After		12.87
10.00 (Minimum)	45.00 (Nominal)	100.0 (Maximum)

Master: 29−Jul−2013 20:46 Before: 30−Aug−2013 3:43 After: 30−Aug−2013 9:52

Hostile Natural Gamma Ray Sonde Wellsite Calibration

Ratio Of Detector 1 To Detector 2

Phase	Coincidence Count Rate Ratio	Value
Master		1.015
Before		0.9928
After		1.007
0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)

Master: 29−Jul−2013 20:46
Before: 30−Aug−2013 3:43
After: 30−Aug−2013 9:52

Enhanced DTS Cartridge / Equipment Identification

Primary Equipment:		
EDTC Gamma Ray Detector	EDTG − A/B	8305
Enhanced DTS Cartridge	EDTC − B	8317
Auxiliary Equipment:		
EDTC Housing	EDTH − B	8303

Enhanced DTS Cartridge Wellsite Calibration

EDTC Accelerometer Calibration

Phase	EDTC Z−Axis Acceleration M/S2	Value
Before		9.794

9.610 (Minimum) 9.810 (Nominal) 10.01 (Maximum)

Before: 30−Aug−2013 3:44

Enhanced DTS Cartridge Wellsite Calibration

Detector Calibration

Phase	Gamma Ray Background GAPI	Value	Phase	Gamma Ray (Jig − Bkg) GAPI	Value	Phase	Gamma Ray (Calibrated) GAPI	Value
Before		1.864	Before		204.1	Before		165.0

0 (Minimum) 30.00 (Nominal) 120.0 (Maximum)

185.5 (Minimum) 204.1 (Nominal) 222.7 (Maximum)

150.0 (Minimum) 165.0 (Nominal) 180.0 (Maximum)

Before: 30−Aug−2013 3:38

Company: **Lamont Doherty Earth Observatory**

Schlumberger

Well: **Expedition 346, Site U1425B**
Field: **Asian Monsoon**
Rig: **JOIDES Resolution**
Country: **USA**

DSI
Stoneley