Schlumberger

Company: **Lamont Doherty**

Well: **Expedition 336, Site U1383C**
Field: **North Pond**
Rig: **JOIDES Resolution** Country: **USA**

Rig: JOIDES Resolution
Field: North Pond
Location: Latitude: N 22* 48.1241'
Well: Expedition 336, Site U1383C
Company: Lamont Doherty

DSI − Sonic
P & S (Monopole)

LOCATION

Latitude: N 22* 48.1241'
Longitude: W 46* 3.1662'

Elev.: K.B. 11.00 m
G.L. −4425.20 m
D.F. 11.00 m

Permanent Datum: Mean Sea Level — Elev.: 0.00 m
Log Measured From: Drill Floor — 11.00 m above Perm. Datum
Drilling Measured From: Drill Floor

Ocean:	Max. Well Deviation	Longitude	Latitude
Atlantic	0 deg	W 46* 3.1662'	N 22* 48.1241'

		Run 1	Run 2	R
PVT DATA	Oil Density			
	Water Salinity			
	Gas Gravity			
	Bo			
	Bw			
	1/Bg			
	Bubble Point Pressure			
	Bubble Point Temperature			
	Solution GOR			
	Maximum Deviation	0 deg		
	CEMENTING DATA			
	Primary/Squeeze	Primary		
	Casing String No			
	Lead Cement Type			
	Volume			
	Density			
	Water Loss			
	Additives			
	Tail Cement Type			
	Volume			
	Density			
	Water Loss			
	Additives			
	Expected Cement Top			

Logging Date		3−Nov−2011					Logging Date
Run Number		2					Run Number
Depth Driller		332 m					Depth Driller
Schlumberger Depth		331.2 m					Schlumberger Depth
Bottom Log Interval		331.2 m					Bottom Log Interval
Top Log Interval		55 m					Top Log Interval
Casing Fluid Type		Seawater					Casing Fluid Type
Salinity							Salinity
Density		1.05 g/cm3					Density
Fluid Level							Fluid Level
BIT/CASING/TUBING STRING							BIT/CASING/TUBING STRING
Bit Size		9.875 in					Bit Size
From							From
To							To
Casing/Tubing Size		10.750 in					Casing/Tubing Size
Weight		43 lbm/ft					Weight
Grade							Grade
From							From
To							To
Maximum Recorded Temperatures		15 degC					Maximum Recorded Temperatures
Logger On Bottom	Time	3−Nov−2011	18:00				Logger On Bottom Time
Unit Number	Location	625003	Houston				Unit Number Location
Recorded By		C. Furman					Recorded By
Witnessed By		L. Anderson					Witnessed By

Run 3

Run 4

DISCLAIMER

THE USE OF AND RELIANCE UPON THIS RECORDED−DATA BY THE HEREIN NAMED COMPANY (AND ANY OF ITS AFFILIATES, PARTNERS, REPRESENTATIVES, AGENTS, CONSULTANTS AND EMPLOYEES) IS SUBJECT TO THE TERMS AND CONDITIONS AGREED UPON BETWEEN SCHLUMBERGER AND THE COMPANY, INCLUDING: (a) RESTRICTIONS ON USE OF THE RECORDED−DATA; (b) DISCLAIMERS AND WAIVERS OF WARRANTIES AND REPRESENTATIONS REGARDING COMPANY'S USE OF AND RELIANCE UPON THE RECORDED−DATA; AND (c) CUSTOMER'S FULL AND SOLE RESPONSIBILITY FOR ANY INFERENCE DRAWN OR DECISION MADE IN CONNECTION WITH THE USE OF THIS RECORDED−DATA.

OTHER SERVICES1

OS1: FMS
OS2: DEBIT
OS3: HLDS
OS4: HNGS

REMARKS: RUN NUMBER 1

Hole 1383C was drilled for the purpose of installing a CORK; logs run to determine packer positions.
Logs conducted to run experimental microbiology tool "DEBI−T" from JPL / USC.
Primary objective of this run was to collect structural data, especially caliper data to be used for CORK packer depth picks.
DSI was run with the following modes, as per client instructions:
SAM1: Lower Dipole in Standard Frequency, Even Array, Receiver processing
SAM2: Upper Dipole in Standard Frequency, Odd Array, Receiver processing
SAM3: Stoneley in Standard Frequency, Odd Array, Receiver processing
SAM4: P&S in Standard Frequency, Even Array, DDBHC (Depth−Derived Borehole Compensated) processing
FMS was run with calipers close and EMEX off during the down log, as per standard practice.
FMS calipers were opened after tagging TD during first up pass, but had to be closed and re−opened due to tool sticking.
TD was tagged at 331.2mbsf and the up log was started before opening the calipers on the second pass.
Calipers opened and EMEX applied at 330m during Pass #2. EMEX cut off at 66mbsf and calipers closed at 60mbsf during Pass #1.
Tool initially had difficulty re−entering pipe (head was catching on bit), so calipers were closed and EMEX switched off lower
during second up pass in order to facilitate re−entry; tool entered safely and without damage on second attempt.
Logs were depth matched to the second up pass from the first run, which was taken to be the reference pass for this job.

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

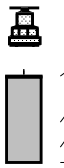
SURFACE EQUIPMENT

GSR−U 616008
WITM (EDTS)−A

DOWNHOLE EQUIPMENT

LEH−QT MP
LEH−QT 301
EDTC−B
EDTH−B 8528
EDTC−B 8529
EDTG−A/B

MDSB_EDTC
Mud Tempe
CTEM
Gamma Ray
EFTB DIAG
TelStatus
EDTCB Ele



34.57
33.50
32.93
32.59

35.46
34.57

RUN 2

HNGS−BA
HNGS−BA 194
HNSH−BA 205

Upper_1 31.89
Lower_2 31.67

32.59

HNGC−B
HNGH−A 115

HNGC Stat 29.55

30.09

AH−MCD
AH−MCD 2

29.02

DSST−B
SPAC−B 16
ECH−SD 16
SMDR−BD 8070
SSIJ−BA 8204
SMDX−AA 8147

26.73

PWF 11.19

AH−MCD
AH−MCD 1

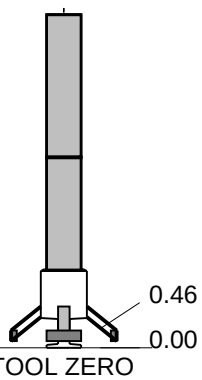
11.19

DTA−A
ECH−KE 8456

8.90

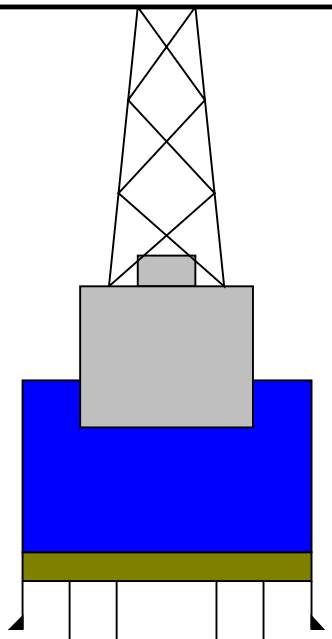
MEST−B
MEAH−B 726
MEAC−A 875
MEPH−A 702
GPIC−A 840
MEPC−AB 807
MEDS−B 770

7.68



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		−4421.5					
Derrick Floor Elevation		−4421.5					
Mean Sea Level		−4410.5					
				0.0			Sea Bed
				13.0	16.000		Casing Shoe
				55.0	5.500		Logging Bit
				60.0	10.750		Casing Shoe
				332.0	9.875		Total Depth − Driller

Schlumberger

Up Pass #2

MAXIS Field Log

Company: Lamont Doherty **Well: Expedition 336, Site U1383C**

Input DLIS Files

DEFAULT	FMS_DSI_NGS_034LUP	FN:33	PRODUCER	03−Nov−2011 21:58	4754.9 M	4414.3 M

Output DLIS Files

DEFAULT	FMS_DSI_NGS_058PUP	FN:54	PRODUCER	10−Nov−2011 18:38	331.5 M	−8.7 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	19C0−187

PIP SUMMARY

Time Mark Every 60 S

Peak Coherence / TA − P & S Shear (CHTS)
−1 (−−−−) 9

Delta−T Shear − P & S (DT4S)
440 (US/F) 40

Delta−T Shear / TA − P & S (DTTS)
440 (US/F) 40

Delta−T Shear / RA − P & S (DTRS)
440 (US/F) 40

Delta−T Comp − P & S (DT4P)
440 (US/F) 40

Delta−T Comp / TA − P & S (DTTP)
440 (US/F) 40

Delta−T Comp / RA − P & S (DTRP)
440 (US/F) 40

HNGS Spectroscopy Gamma Ray (HSGR)
0 (GAPI) 25

Peak Coherence / RA − P & S Shear (CHRS)
−1 (−−−−) 9

Min Amplitude Max

Rec.Array P&S Slow Proj. CVDL (SPR4)
40 (US/F) 240

Waveform Data Copy Indicator 4 − Monopole P&S (WCI4)
0 (−−−−) 10

Peak Coherence / TA − P & S Comp (CHTP)
0 (−−−−) 10

Delta−T Shear / RA − P & S (DTRS)
40 (US/F) 240

SAM4 Waveform Gain (WFG4)
0 (−−−−) 1000

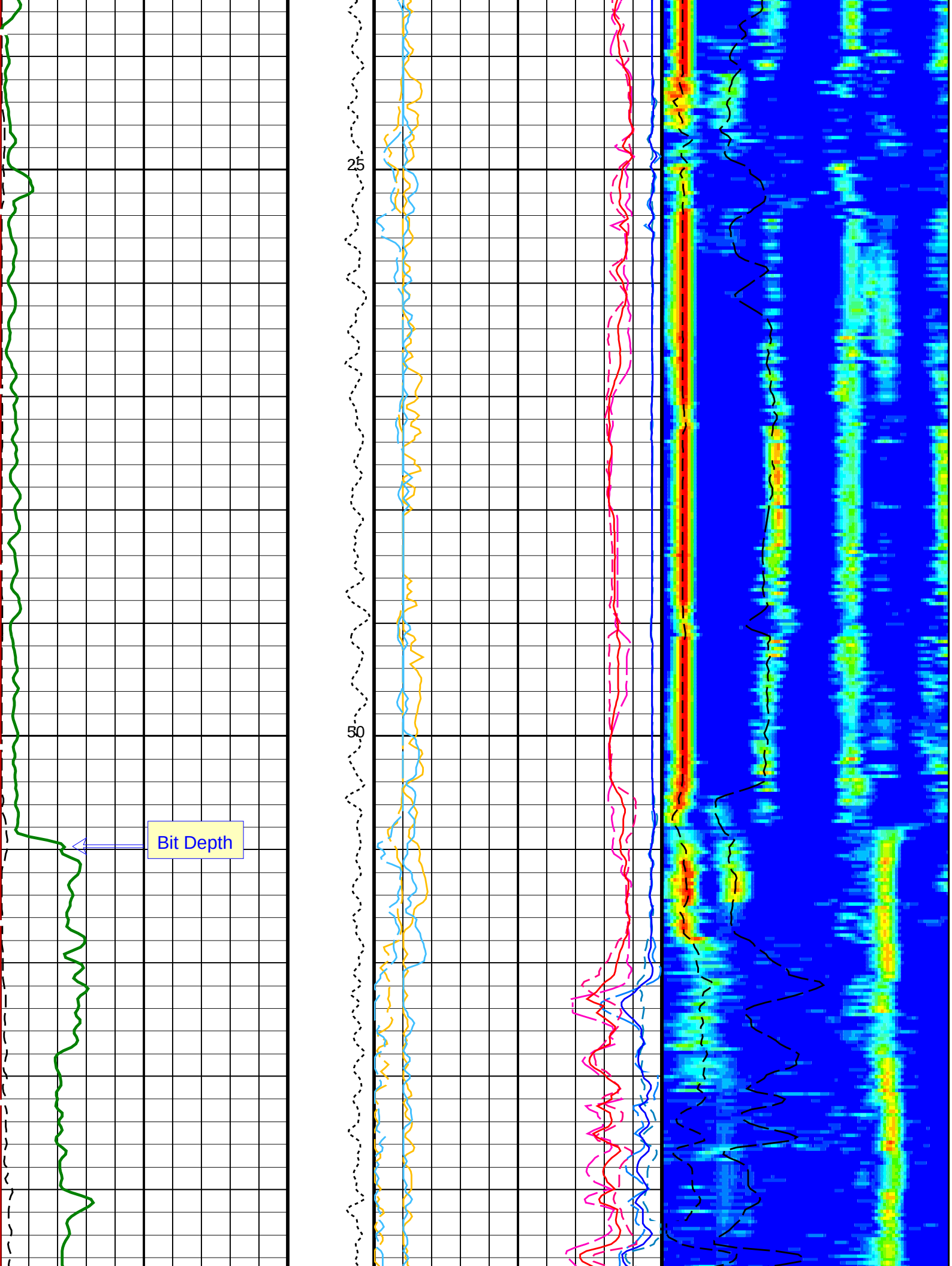
Tension (TENS) (LBF)
4000 6000

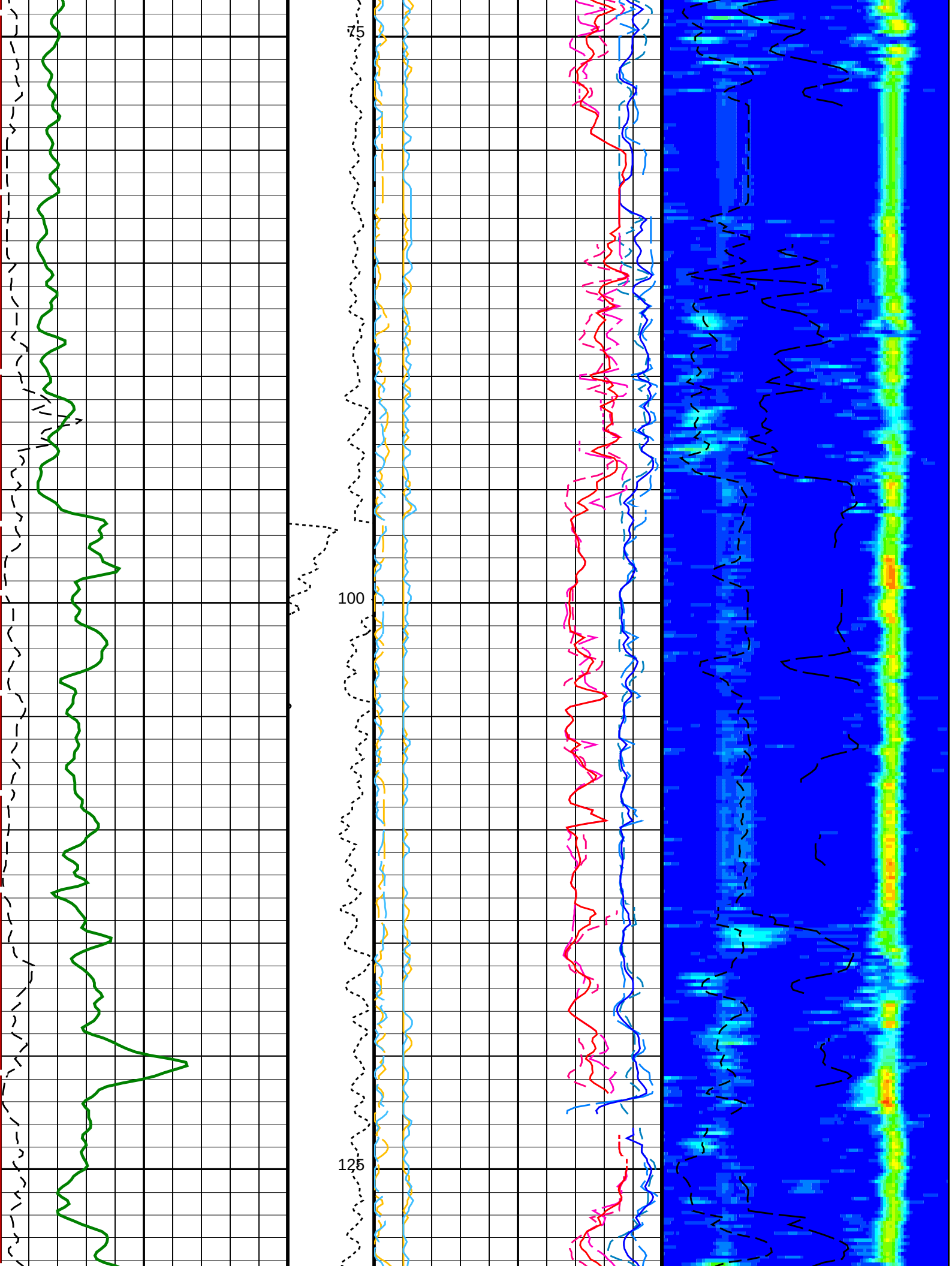
Peak Coherence / RA − P & S Comp (CHRP)
0 (−−−−) 10

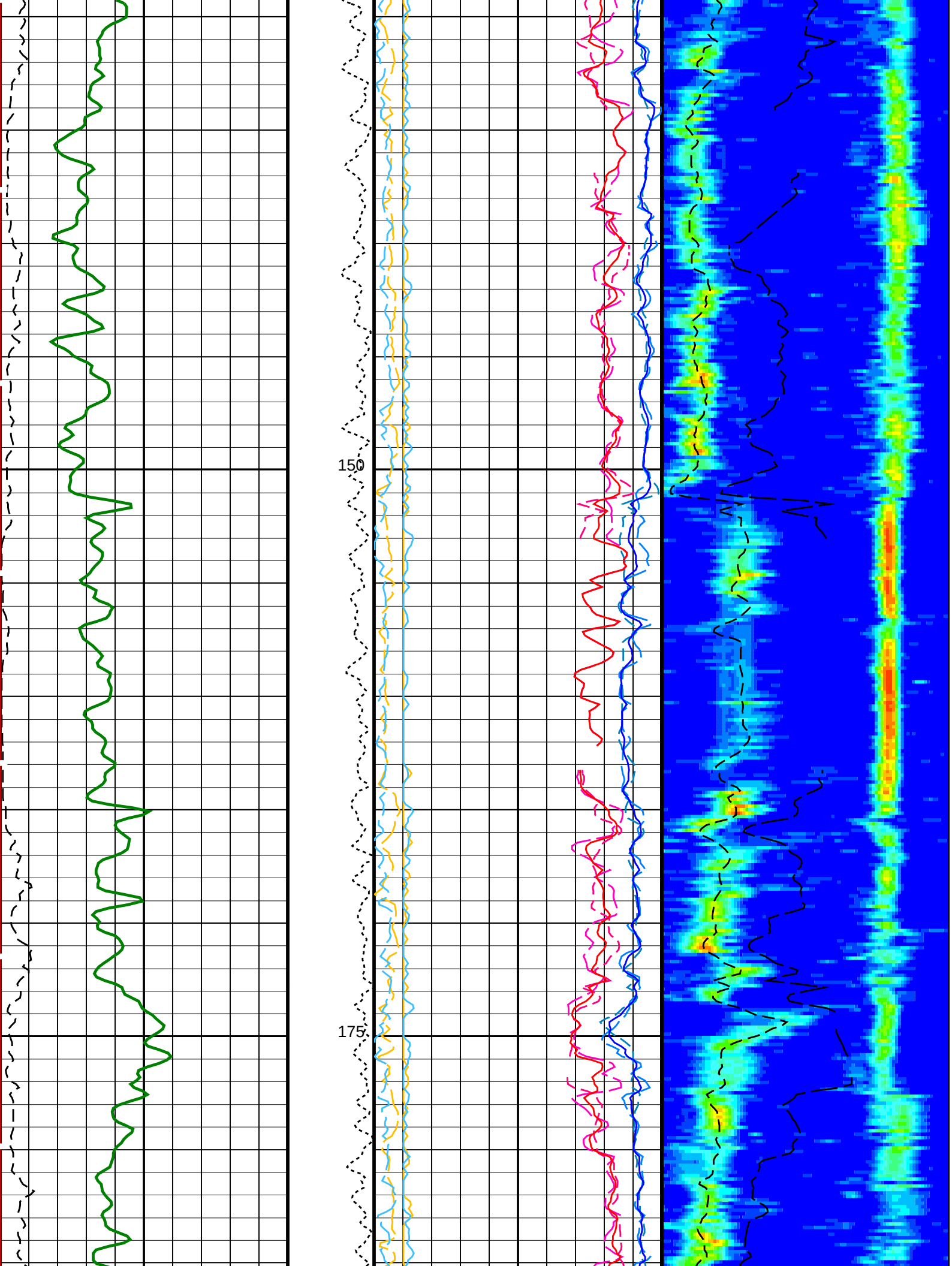
Delta−T Comp / RA − P & S (DTRP)
40 (US/F) 240

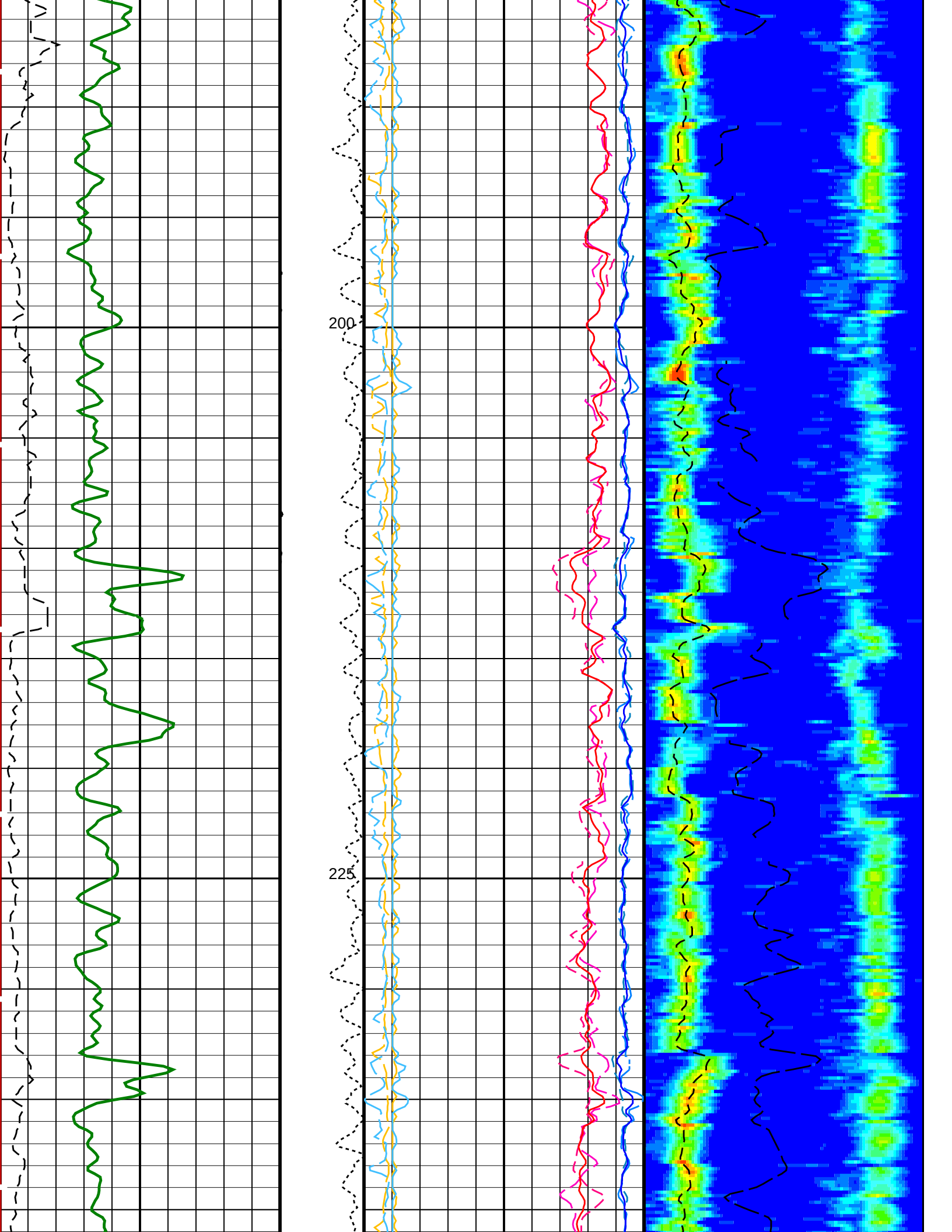
Sea Bed

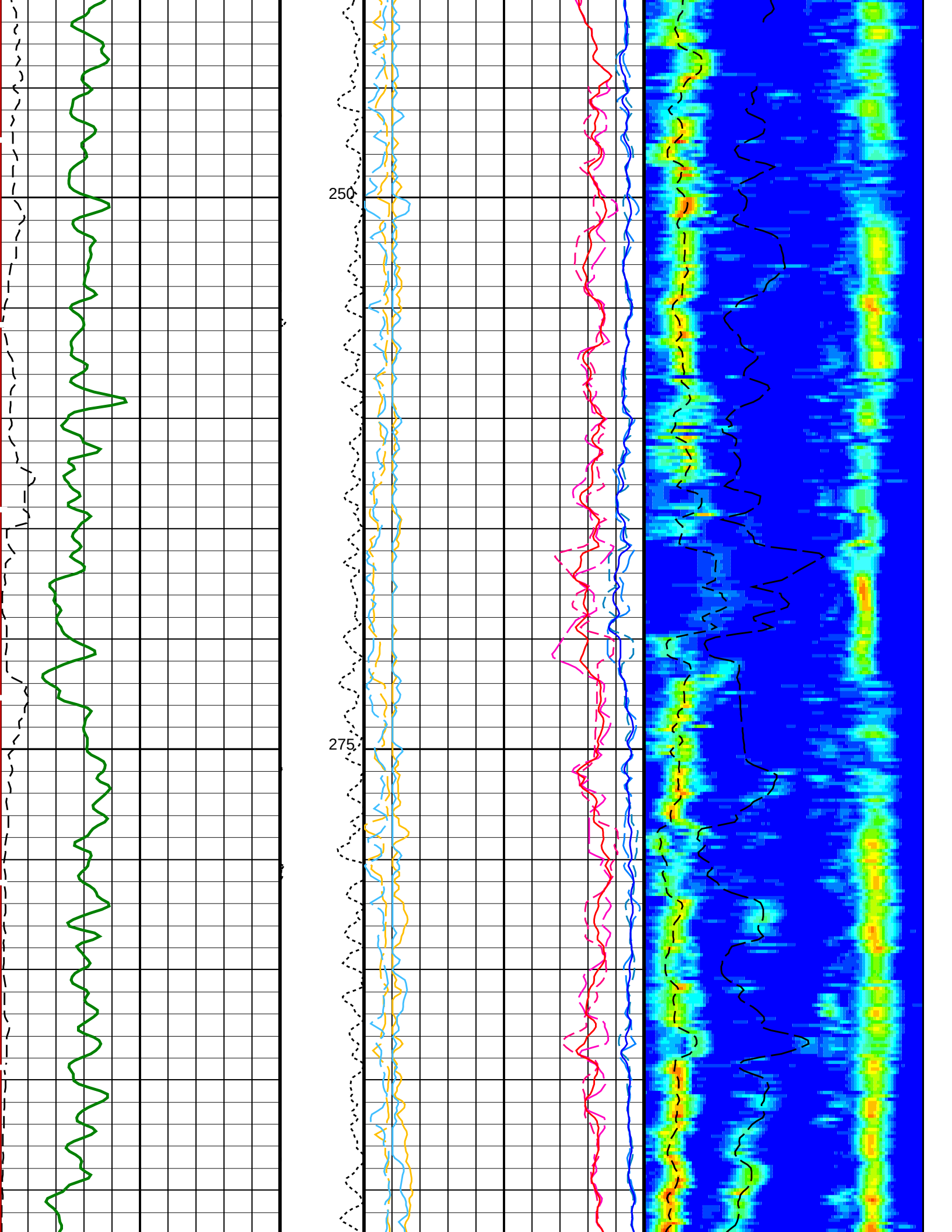
0

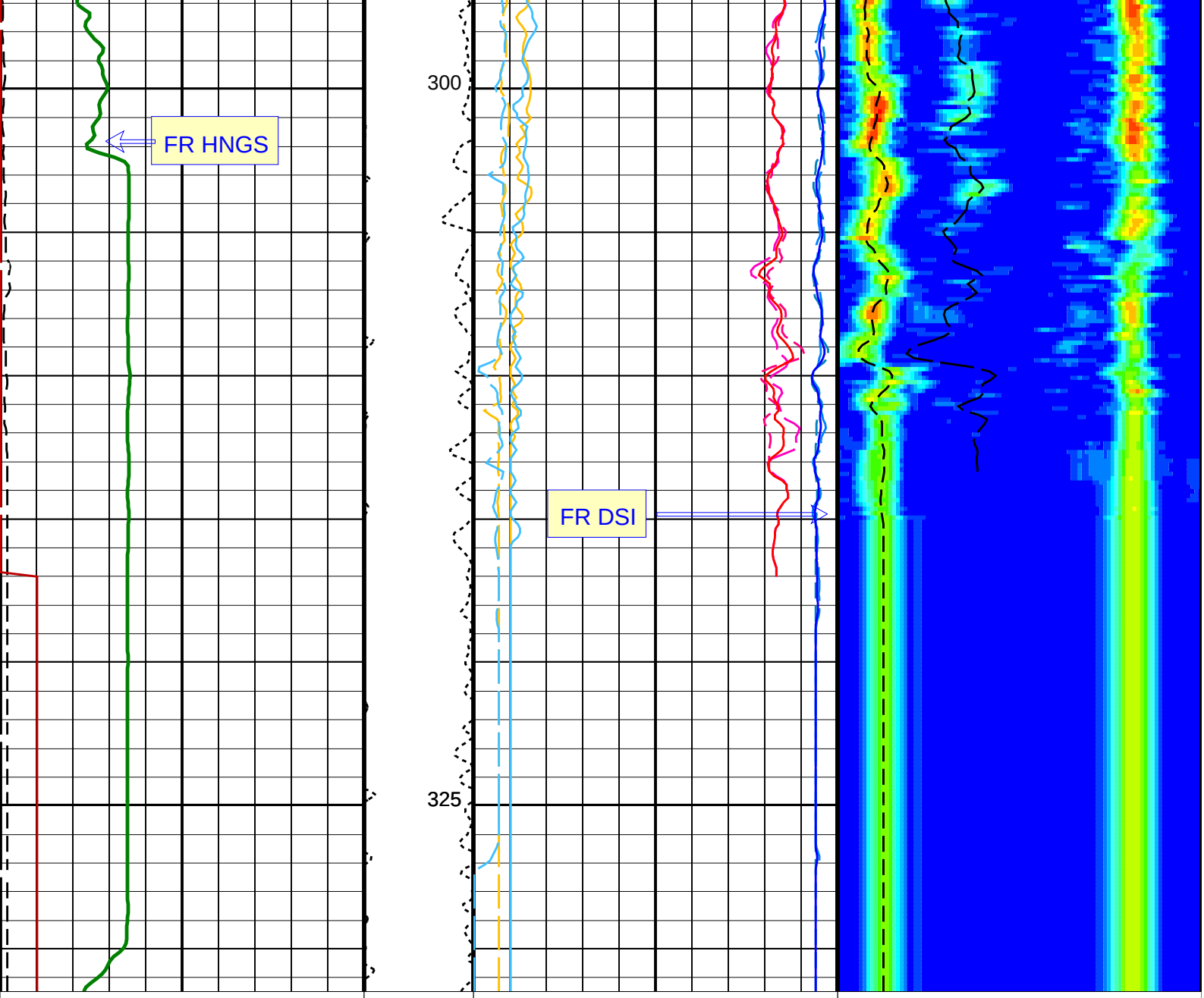

25
50
Bit Depth


75
100
125


150
175


200
225


250
275



SAM4 Waveform Gain (WFG4)
0 (----) 1000

Tension (TENS) (LBF)
4000
6000

Peak Coherence / RA – P & S Comp (CHRP)
0 (----) 10

Delta–T Comp / RA – P & S (DTRP)
40 (US/F) 240

Waveform Data Copy Indicator 4 – Monopole P&S (WCI4)
0 (----) 10

Peak Coherence / TA – P & S Comp (CHTP)
0 (----) 10

Delta–T Shear / RA – P & S (DTRS)
40 (US/F) 240

HNGS Spectroscopy Gamma Ray (HSGR)
0 (GAPI) 25

Peak Coherence / RA – P & S Shear (CHRS)
–1 (----) 9

Min Amplitude Max

Rec.Array P&S Slow Proj. CVDL (SPR4)
40 (US/F) 240

Delta–T Comp / RA – P & S (DTRP)
440 (US/F) 40

Delta–T Comp / TA – P & S (DTTP)
440 (US/F) 40

Delta–T Comp – P & S (DT4P)
440 (US/F) 40

Delta–T Shear / RA – P & S (DTRS)
440 (US/F) 40

Delta–T Shear / TA – P & S (DTTS)

440	(US/F)	40
Delta−T Shear − P & S (DT4S)		
440	(US/F)	40
Peak Coherence / TA − P & S Shear (CHTS)		
−1	(−−−−)	9

PIP SUMMARY

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
DDE4	Digitizing Delay 4	0	US
DDEX	Digitizing Delay X	0	US
DSI4	Digitizer Sample Interval 4	10	US
DSIX	Digitizer Sample Interval X	40	US
DTF	Delta−T Fluid	189	US/F
DWC4	Digitizer Word Count 4	512	
DWCX	Digitizer Word Count X	512	
FILG	Label Fill Gap Control − Monopole P&S	COMP_SHEAR	
GCSE	Generalized Caliper Selection	C1	
LFC	Label Formation Character − Monopole P&S	DYNAMIC	
MCS	Mean Casing Slowness	57	US/F
MTXG	Monopole Transmitter Geometry	186	IN
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
SAM4	DSST Sonic Acquisition Mode 4 − Monopole Mode for P&S	EVEN	
SAMX	DSST Sonic Acquisition Mode X − Both Dipoles or Monopole Mode for Expert	OFF	
SAS4	STC Sonic Array Status − Monopole P&S	255	
SBO4	STC Search Band Offset − Monopole P&S	500	US
SBR4	STC Baseline Removal − Monopole P&S	ON	
SBW4	STC Search Bandwidth − Monopole P&S	2000	US
SFC4	STC Formation Character − Monopole P&S	SELECTABLE	
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
SLL4	STC Slowness Lower Limit − Monopole P&S	40	US/F
SST4	STC Slowness Step − Monopole P&S	2	US/F
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
SUL4	STC Slowness Upper Limit − Monopole P&S	240	US/F
SWD4	STC Slowness Width − Monopole P&S	10	US/F
TBF4	STC Time for Baseline Fill − Monopole P&S	300	US
TLL4	STC Time Lower Limit − Monopole P&S	150	US
TST4	STC Time Step − Monopole P&S	50	US
TUL4	STC Time Upper Limit − Monopole P&S	3660	US
TWD4	STC Time Width − Monopole P&S	1000	US
TWI4	STC Integration Time Window − Monopole P&S	500	US
TWSX	Transmitter Waveform Select X	0	
WFM4	Waveform Mode 4	W1	
	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	−0.00680191	
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	1.07438	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	1.07443	
	EDTC−B: Enhanced DTS Cartridge		
BHS	Borehole Status	OPEN	
GCSE	Generalized Caliper Selection	C1	
	System and Miscellaneous		
BS	Bit Size	9.875	IN
DO	Depth Offset for Playback	−4423.0	M
PP	Playback Processing	RECOMPUTE	

Format: DSST_P_S_VDL_COLOR **Vertical Scale: 1:200** **Graphics File Created: 10−Nov−2011 18:38**

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	19C0−187

Input DLIS Files

DEFAULT	FMS_DSI_NGS_034LUP	FN:33	PRODUCER	03−Nov−2011 21:58	4754.9 M	4414.3 M

Output DLIS Files

DEFAULT	FMS_DSI_NGS_058PUP	FN:54	PRODUCER	10−Nov−2011 18:38		

Schlumberger

Up Pass #1

MAXIS Field Log

Company: Lamont Doherty **Well: Expedition 336, Site U1383C**

Input DLIS Files

DEFAULT	FMS_DSI_NGS_033LUP	FN:32	PRODUCER	03−Nov−2011 20:51	4757.2 M	4483.6 M

Output DLIS Files

DEFAULT	FMS_DSI_NGS_056PUP	FN:52	PRODUCER	10−Nov−2011 18:29	333.8 M	60.0 M

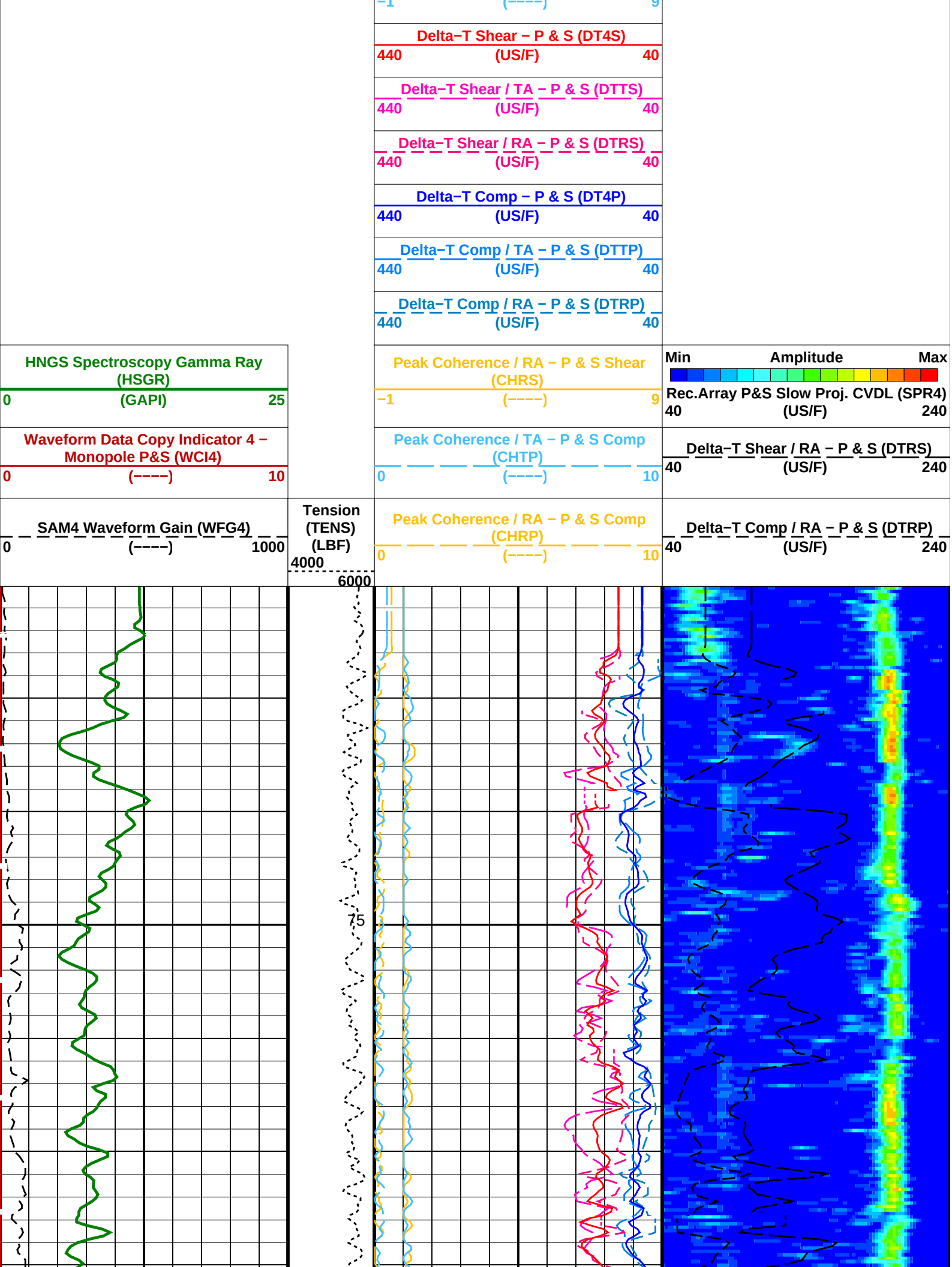
OP System Version: 19C0−187

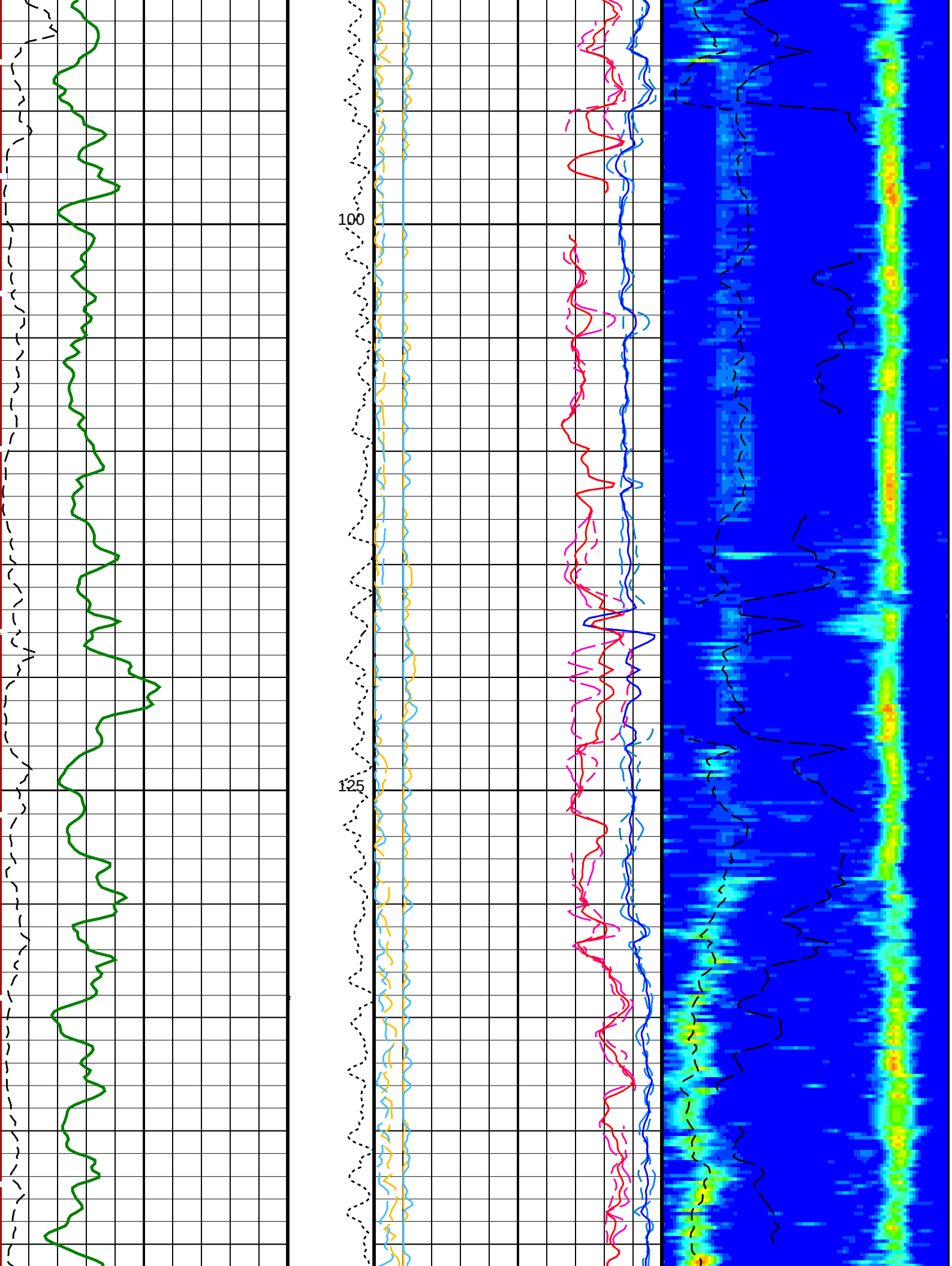
MEST−B	19C0−187	DTA−A	19C0−187
DSST−B	19C0−187	HNGC−B	19C0−187
HNGS−BA	19C0−187	EDTC−B	19C0−187

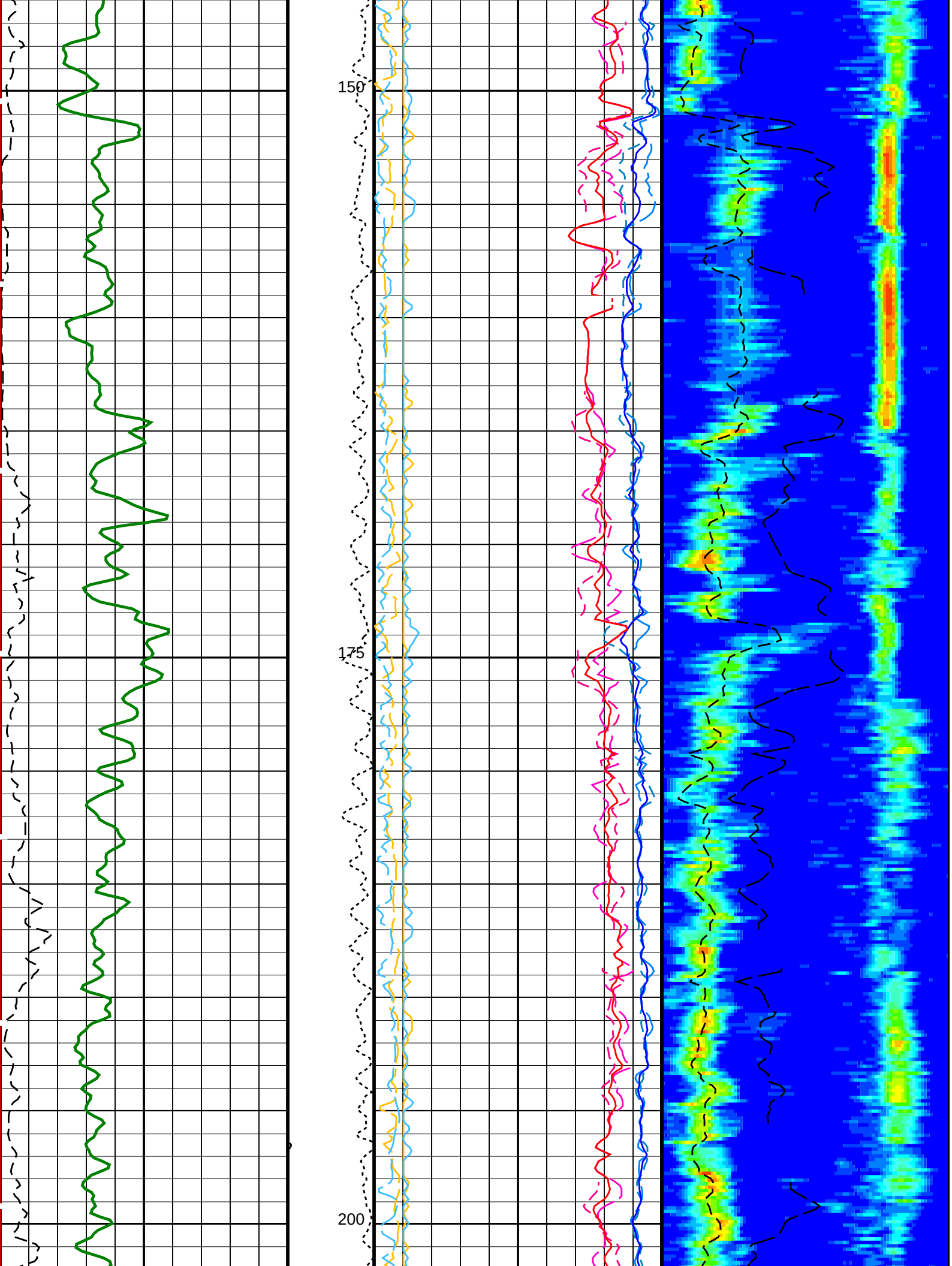
PIP SUMMARY

Time Mark Every 60 S

Peak Coherence / TA − P & S Shear (CHTS)


−1 (−−−−) 9
Delta−T Shear − P & S (DT4S)
440 (US/F) 40
Delta−T Shear / TA − P & S (DTTS)
440 (US/F) 40
Delta−T Shear / RA − P & S (DTRS)
440 (US/F) 40
Delta−T Comp − P & S (DT4P)
440 (US/F) 40
Delta−T Comp / TA − P & S (DTTP)
440 (US/F) 40
Delta−T Comp / RA − P & S (DTRP)
440 (US/F) 40
HNGS Spectroscopy Gamma Ray (HSGR)
0 (GAPI) 25
Peak Coherence / RA − P & S Shear (CHRS)
−1 (−−−−) 9
Min Amplitude Max
Rec.Array P&S Slow Proj. CVDL (SPR4)
40 (US/F) 240
Waveform Data Copy Indicator 4 − Monopole P&S (WCI4)
0 (−−−−) 10
Peak Coherence / TA − P & S Comp (CHTP)
0 (−−−−) 10
Delta−T Shear / RA − P & S (DTRS)
40 (US/F) 240
SAM4 Waveform Gain (WFG4)
0 (−−−−) 1000
Tension (TENS) (LBF)
4000
6000
Peak Coherence / RA − P & S Comp (CHRP)
0 (−−−−) 10
Delta−T Comp / RA − P & S (DTRP)
40 (US/F) 240
75


100
125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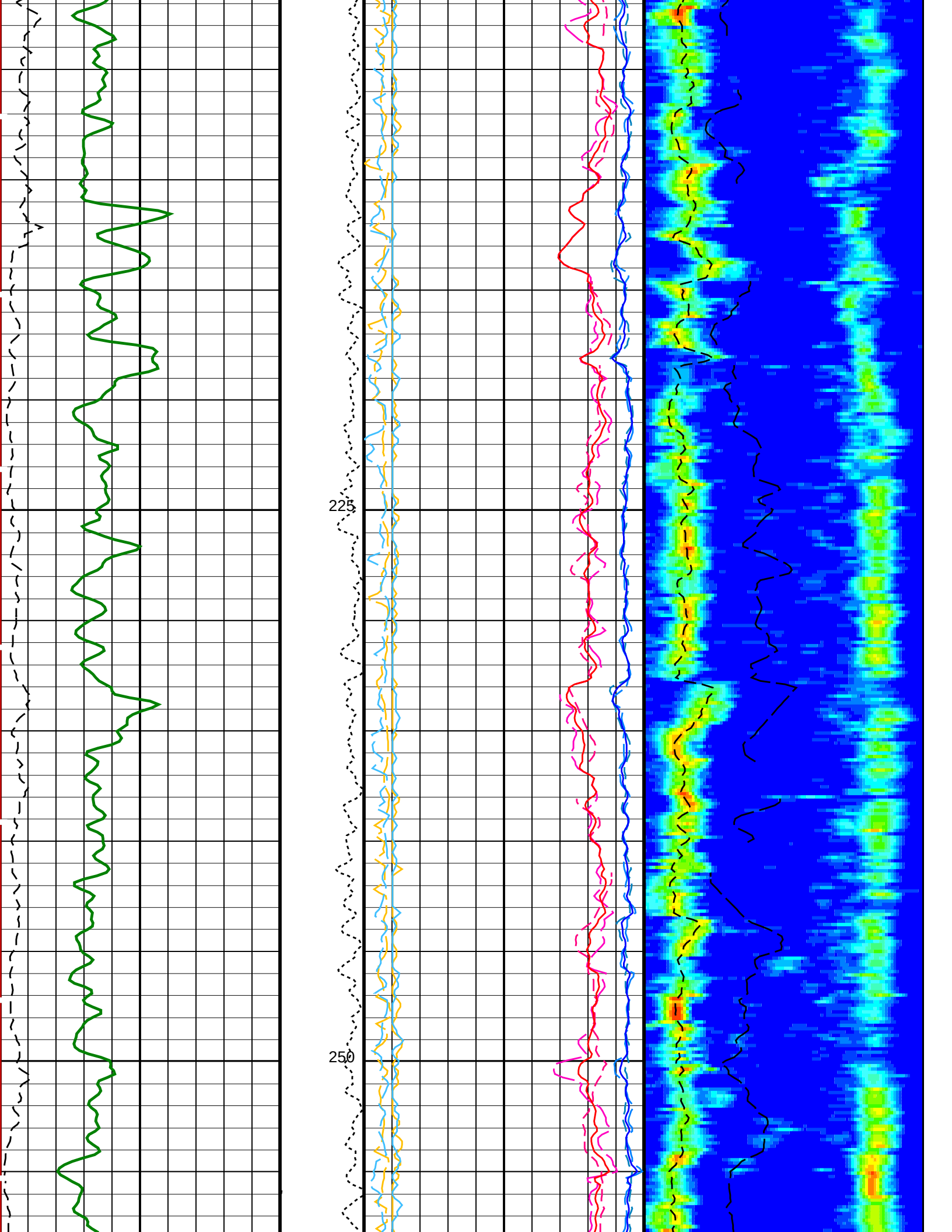
175
200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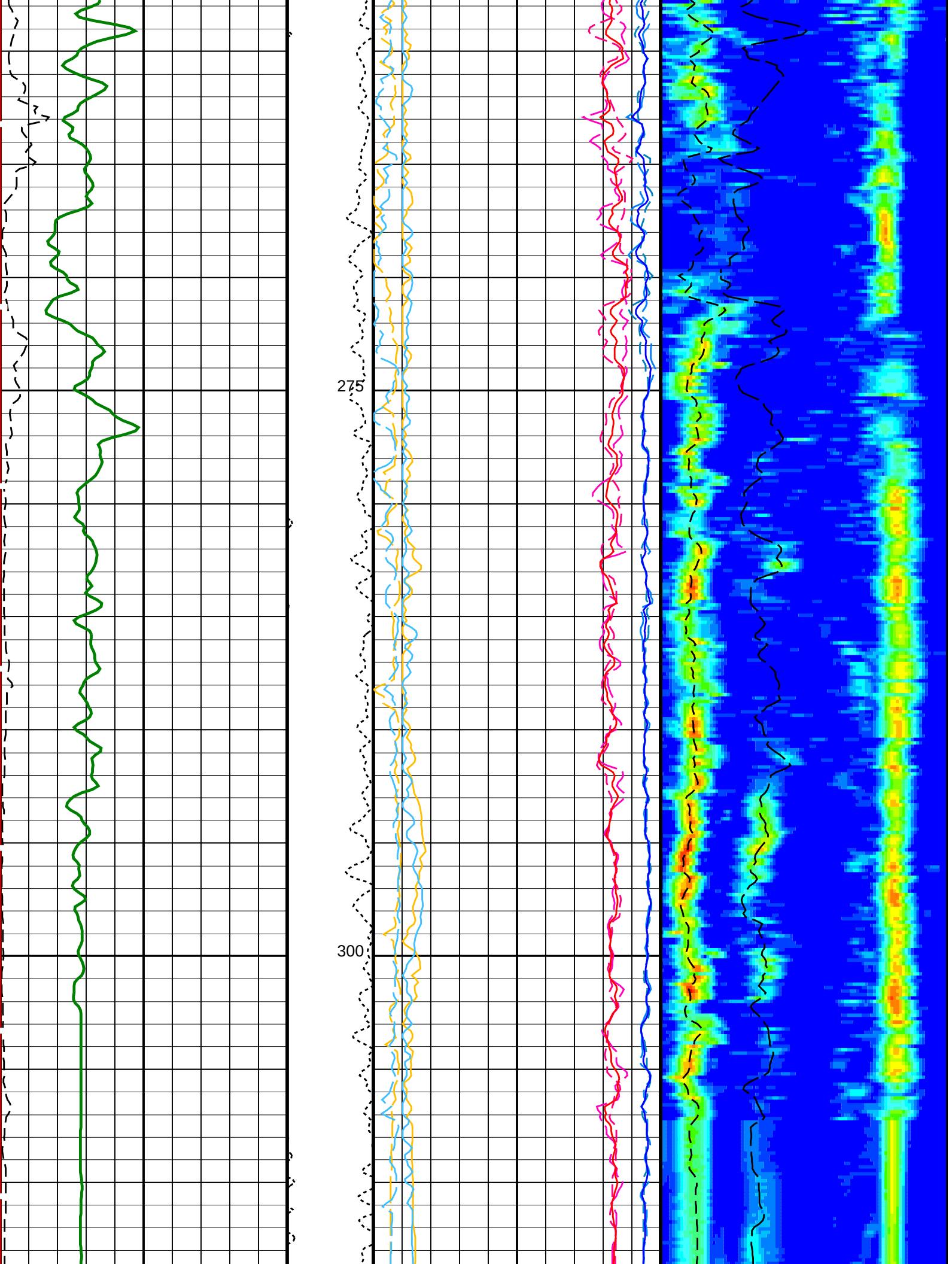
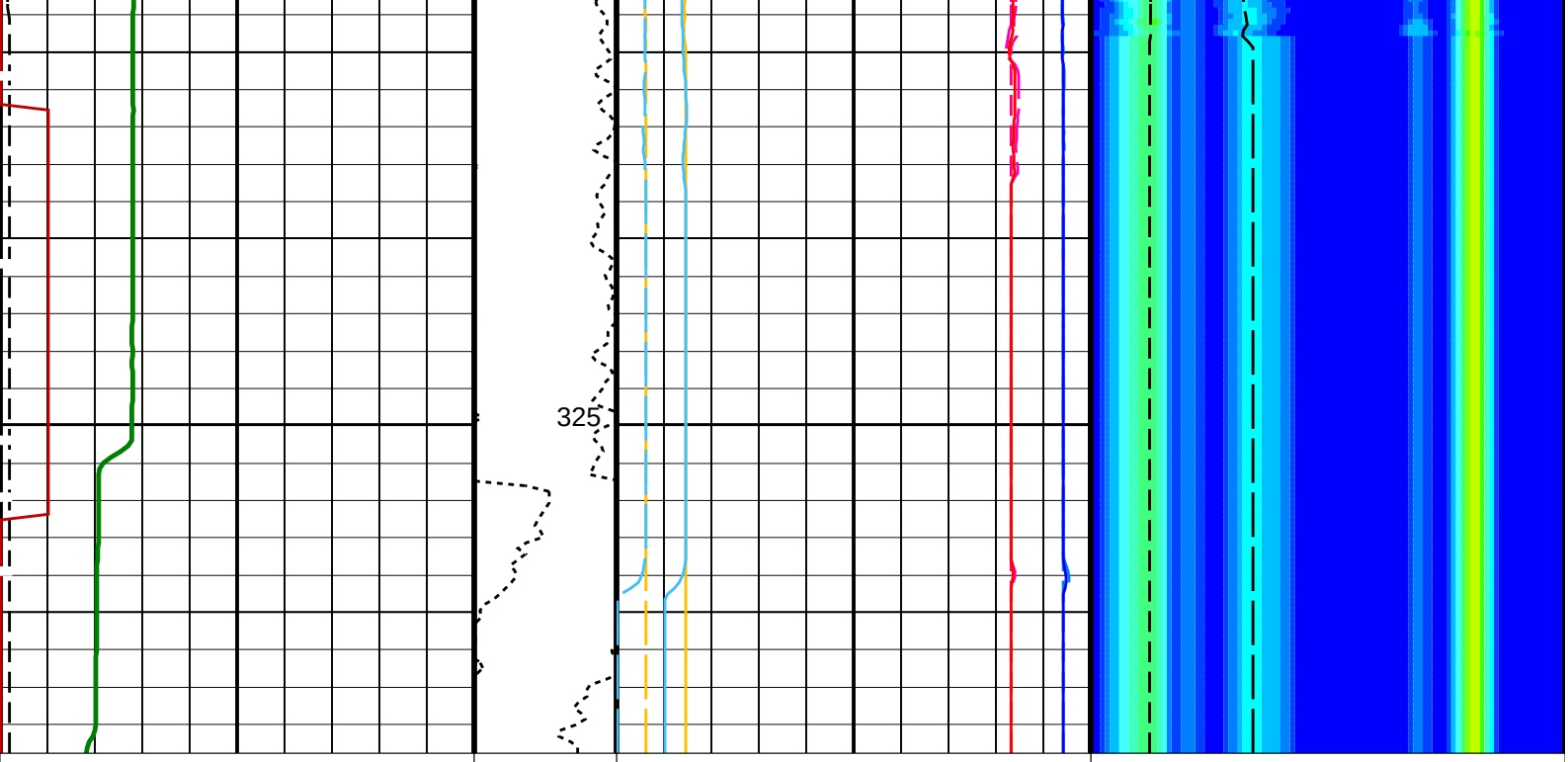
250


275
300



SAM4 Waveform Gain (WFG4)
0 (----) 1000

Tension (TENS) (LBF)
4000 6000

Peak Coherence / RA − P & S Comp (CHRP)
0 (----) 10

Delta−T Comp / RA − P & S (DTRP)
40 (US/F) 240

Waveform Data Copy Indicator 4 − Monopole P&S (WCI4)
0 (----) 10

Peak Coherence / TA − P & S Comp (CHTP)
0 (----) 10

Delta−T Shear / RA − P & S (DTRS)
40 (US/F) 240

HNGS Spectroscopy Gamma Ray (HSGR)
0 (GAPI) 25

Peak Coherence / RA − P & S Shear (CHRS)
−1 (----) 9

Min Amplitude Max

Rec.Array P&S Slow Proj. CVDL (SPR4)
40 (US/F) 240

Delta−T Comp / RA − P & S (DTRP)
440 (US/F) 40

Delta−T Comp / TA − P & S (DTTP)
440 (US/F) 40

Delta−T Comp − P & S (DT4P)
440 (US/F) 40

Delta−T Shear / RA − P & S (DTRS)
440 (US/F) 40

Delta−T Shear / TA − P & S (DTTS)
440 (US/F) 40

Delta−T Shear − P & S (DT4S)
440 (US/F) 40

Peak Coherence / TA − P & S Shear (CHTS)
−1 (----) 9

PIP SUMMARY

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
DDE4	Digitizing Delay 4	0	US
DDEX	Digitizing Delay X	0	US
DSI4	Digitizer Sample Interval 4	10	US
DSIX	Digitizer Sample Interval X	40	US
DTF	Delta−T Fluid	189	US/F
DWC4	Digitizer Word Count 4	512	
DWCX	Digitizer Word Count X	512	
FILG	Label Fill Gap Control − Monopole P&S	COMP_SHEAR	
GCSE	Generalized Caliper Selection	C1	
LFC	Label Formation Character − Monopole P&S	DYNAMIC	
MCS	Mean Casing Slowness	57	US/F
MTXG	Monopole Transmitter Geometry	186	IN
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
SAM4	DSST Sonic Acquisition Mode 4 − Monopole Mode for P&S	EVEN	
SAMX	DSST Sonic Acquisition Mode X − Both Dipoles or Monopole Mode for Expert	OFF	
SAS4	STC Sonic Array Status − Monopole P&S	255	
SBO4	STC Search Band Offset − Monopole P&S	500	US
SBR4	STC Baseline Removal − Monopole P&S	ON	
SBW4	STC Search Bandwidth − Monopole P&S	2000	US
SFC4	STC Formation Character − Monopole P&S	SELECTABLE	
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
SLL4	STC Slowness Lower Limit − Monopole P&S	40	US/F
SST4	STC Slowness Step − Monopole P&S	2	US/F
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
SUL4	STC Slowness Upper Limit − Monopole P&S	240	US/F
SWD4	STC Slowness Width − Monopole P&S	10	US/F
TBF4	STC Time for Baseline Fill − Monopole P&S	300	US
TLL4	STC Time Lower Limit − Monopole P&S	150	US
TST4	STC Time Step − Monopole P&S	50	US
TUL4	STC Time Upper Limit − Monopole P&S	3660	US
TWD4	STC Time Width − Monopole P&S	1000	US
TWI4	STC Integration Time Window − Monopole P&S	500	US
TWSX	Transmitter Waveform Select X	0	
WFM4	Waveform Mode 4	W1	
	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	−0.00676035	
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	1.07291	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	1.07443	
	EDTC−B: Enhanced DTS Cartridge		
BHS	Borehole Status	OPEN	
GCSE	Generalized Caliper Selection	C1	
	System and Miscellaneous		
BS	Bit Size	9.875	IN
DO	Depth Offset for Playback	−4423.5	M
PP	Playback Processing	RECOMPUTE	

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	19C0−187

Input DLIS Files

DEFAULT	FMS_DSI_NGS_033LUP	FN:32	PRODUCER	03−Nov−2011 20:51	4757.2 M	4483.6 M

Output DLIS Files

DEFAULT	FMS_DSI_NGS_056PUP	FN:52	PRODUCER	10−Nov−2011 18:29

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Down Log

MAXIS Field Log

Company: Lamont Doherty **Well: Expedition 336, Site U1383C**

Input DLIS Files

DEFAULT	Flip_FMS_DSI_NGS_042LUP	PRODUCER	10−Nov−2011 17:22	4757.0 M	4366.3 M

Output DLIS Files

DEFAULT	FMS_DSI_NGS_055PUP	FN:51	PRODUCER	10−Nov−2011 18:25	331.8 M	−59.0 M

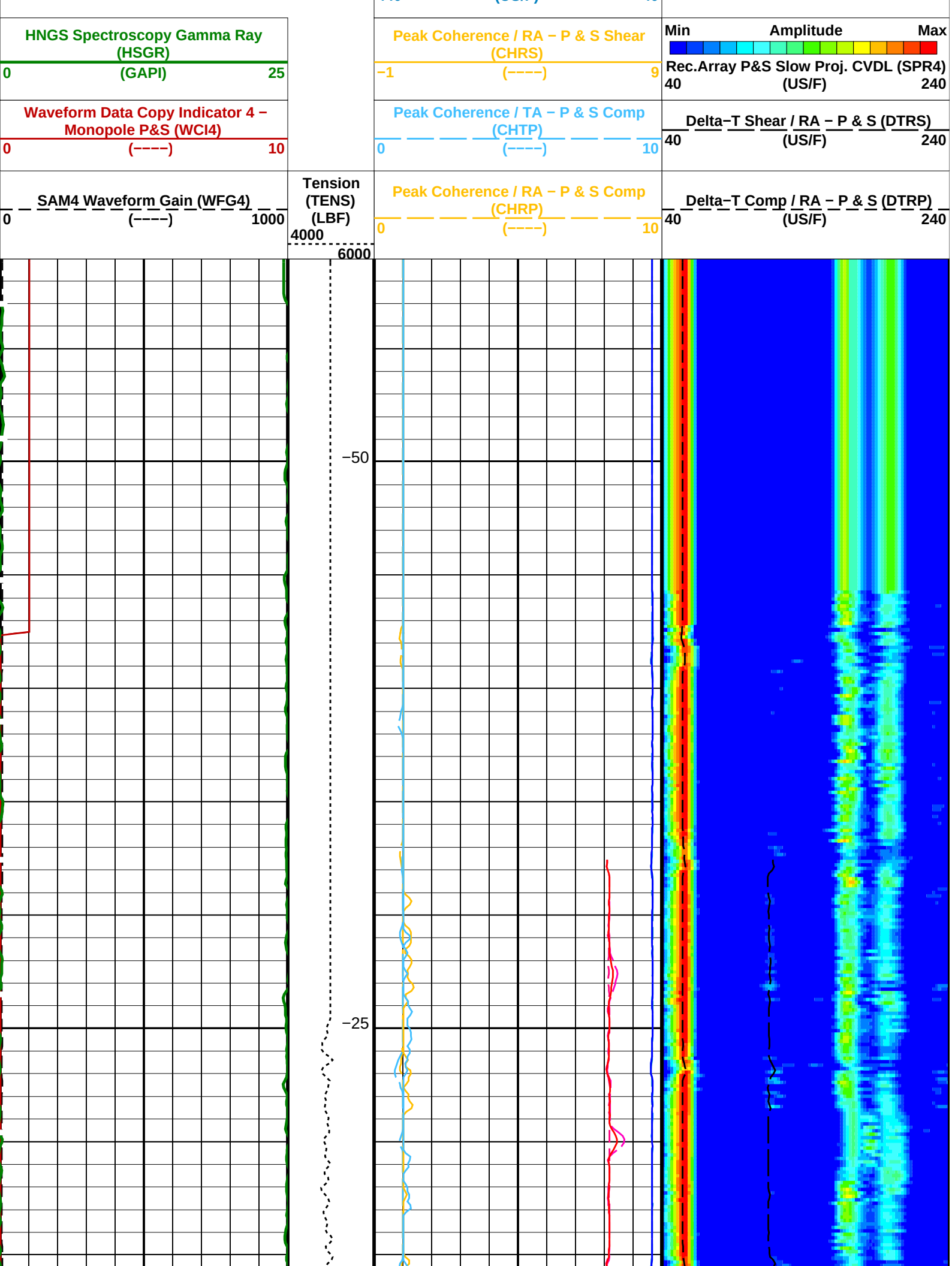
OP System Version: 19C0−187

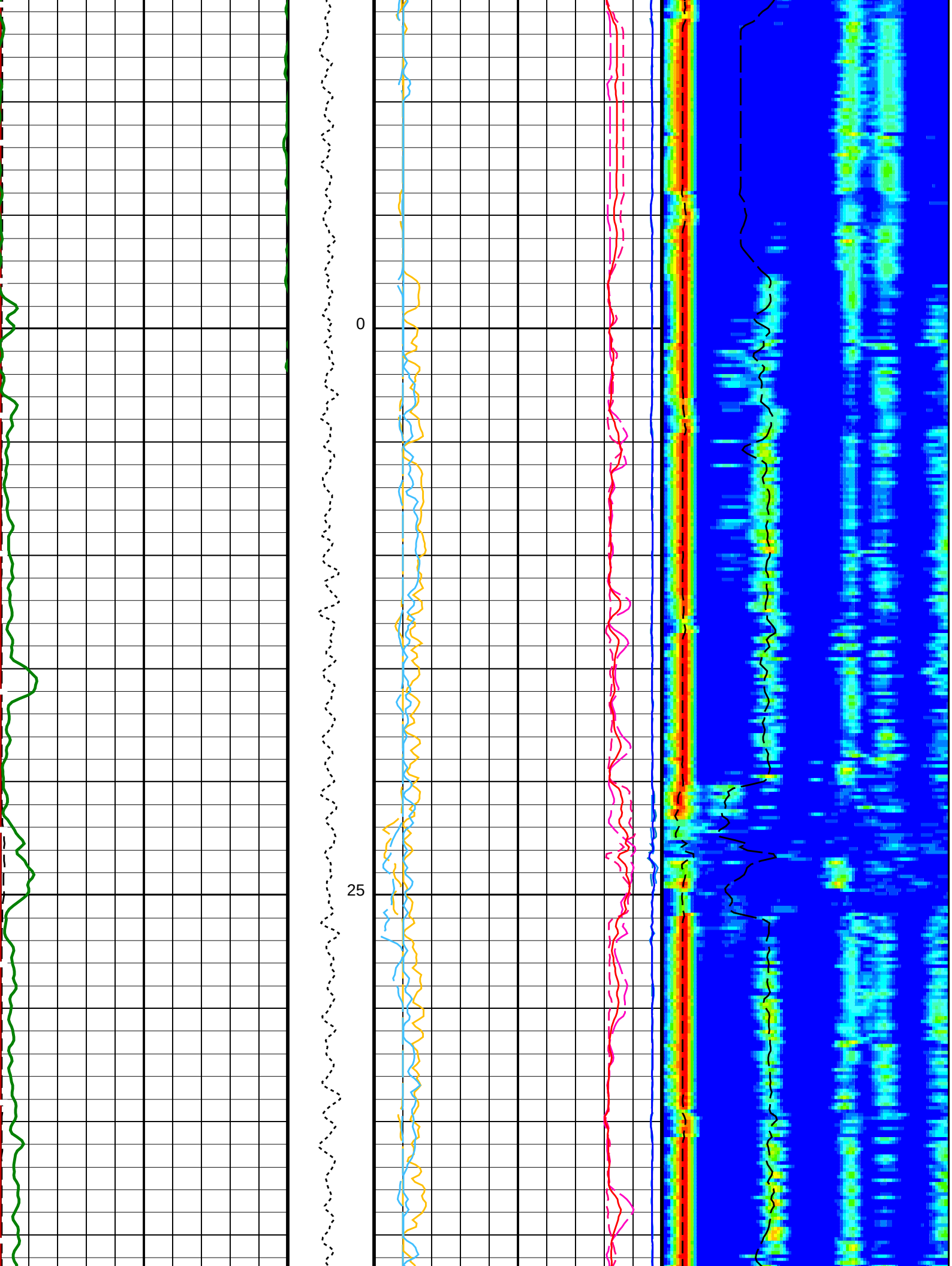
MEST−B	19C0−187	DTA−A	19C0−187
DSST−B	19C0−187	HNGC−B	19C0−187
HNGS−BA	19C0−187	EDTC−B	19C0−187

PIP SUMMARY

Time Mark Every 60 S

Peak Coherence / TA − P & S Shear (CHTS)		
−1	(−−−−)	9
Delta−T Shear − P & S (DT4S)		
440	(US/F)	40
Delta−T Shear / TA − P & S (DTTS)		
440	(US/F)	40
Delta−T Shear / RA − P & S (DTRS)		
440	(US/F)	40
Delta−T Comp − P & S (DT4P)		
440	(US/F)	40
Delta−T Comp / TA − P & S (DTTP)		
440	(US/F)	40
Delta−T Comp / RA − P & S (DTRP)		
440	(US/F)	40


HNGS Spectroscopy Gamma Ray (HSGR)
0 (GAPI) 25
Waveform Data Copy Indicator 4 − Monopole P&S (WCI4)
0 (−−−−) 10
SAM4 Waveform Gain (WFG4)
0 (−−−−) 1000
Tension (TENS) (LBF)
4000
6000
Peak Coherence / RA − P & S Shear (CHRS)
−1 (−−−−) 9
Peak Coherence / TA − P & S Comp (CHTP)
0 (−−−−) 10
Peak Coherence / RA − P & S Comp (CHRP)
0 (−−−−) 10
Min Amplitude Max
Rec.Array P&S Slow Proj. CVDL (SPR4)
40 (US/F) 240
Delta−T Shear / RA − P & S (DTRS)
40 (US/F) 240
Delta−T Comp / RA − P & S (DTRP)
40 (US/F) 240
−50
−25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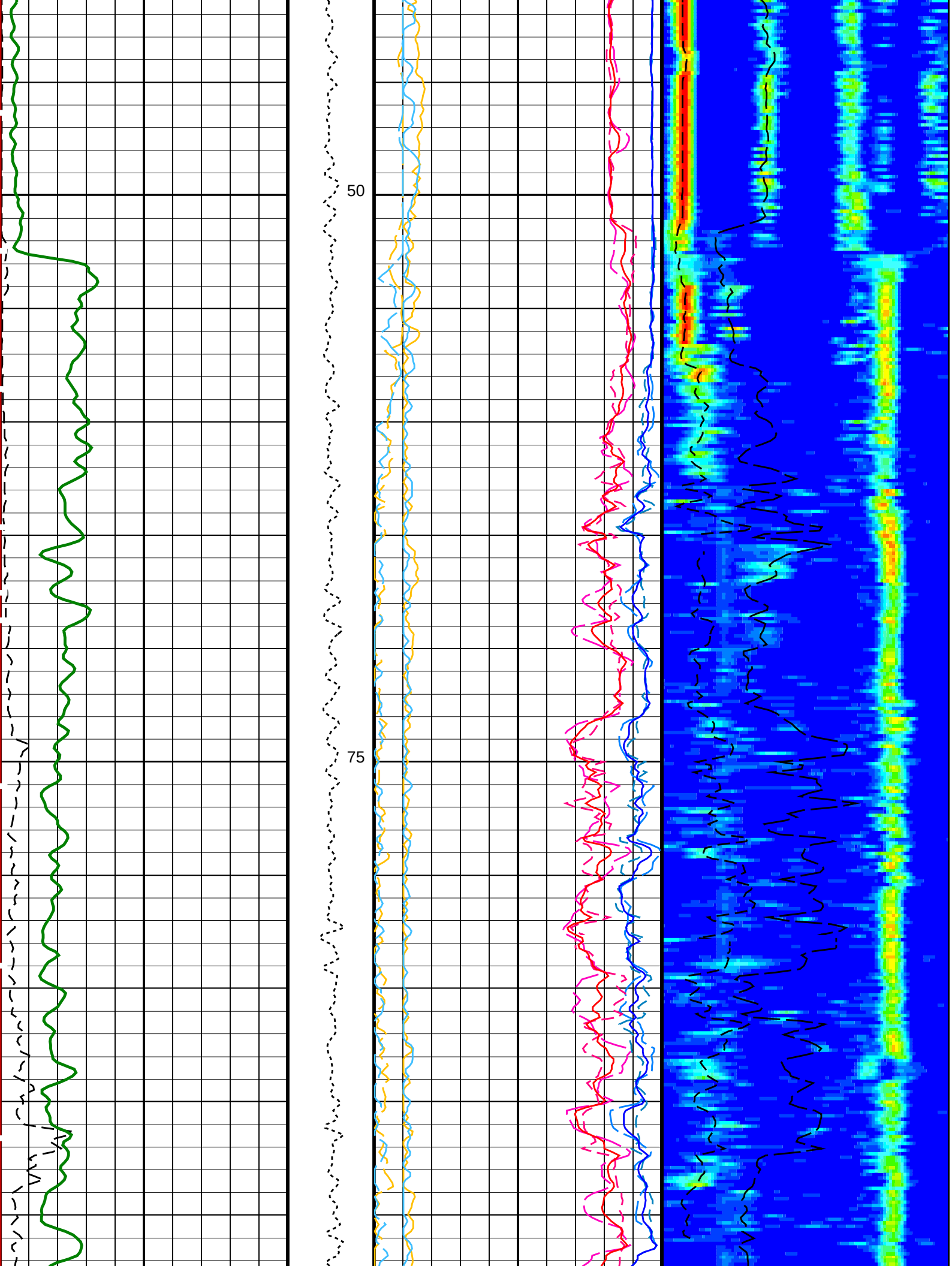
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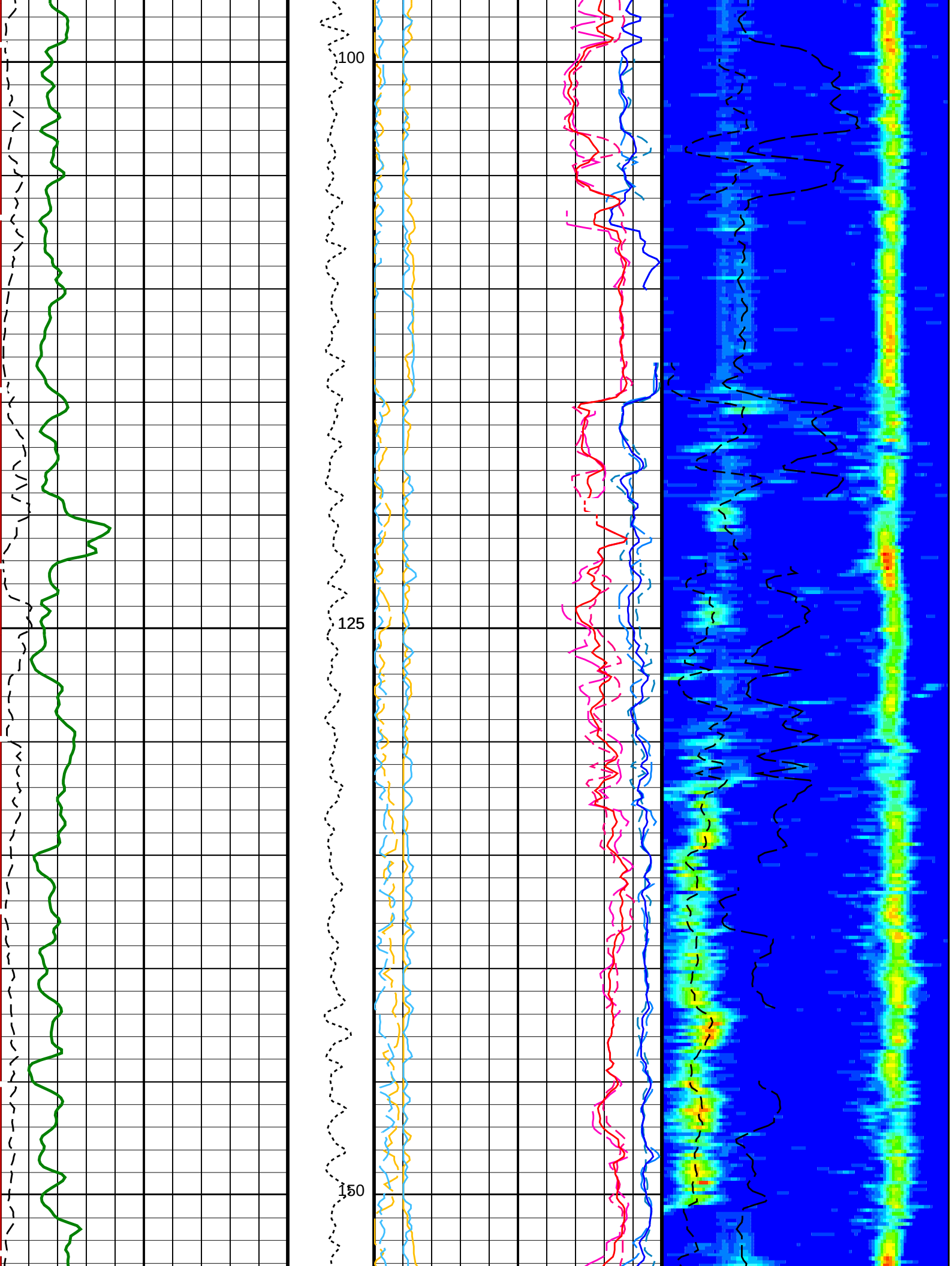
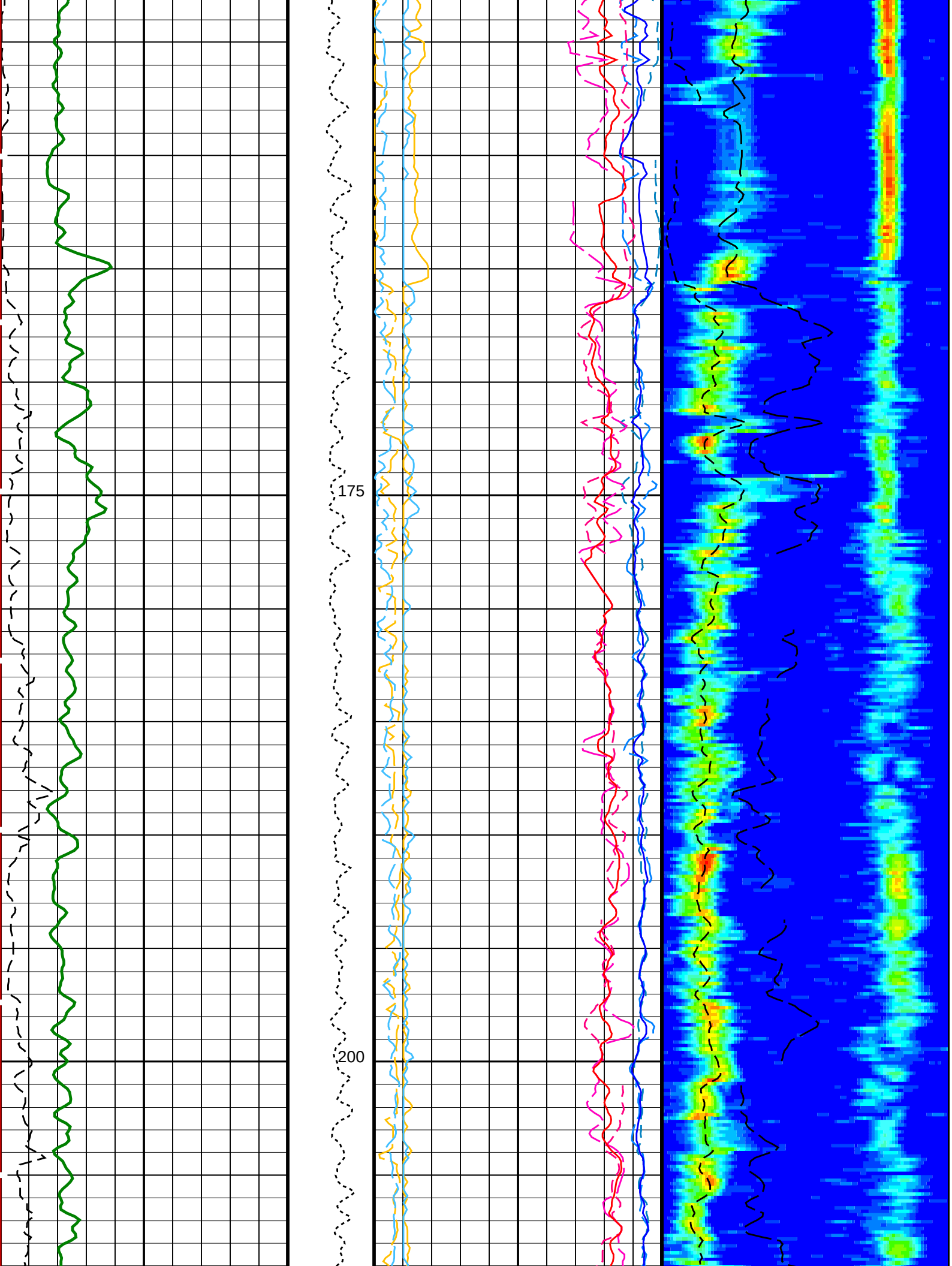

100
125
150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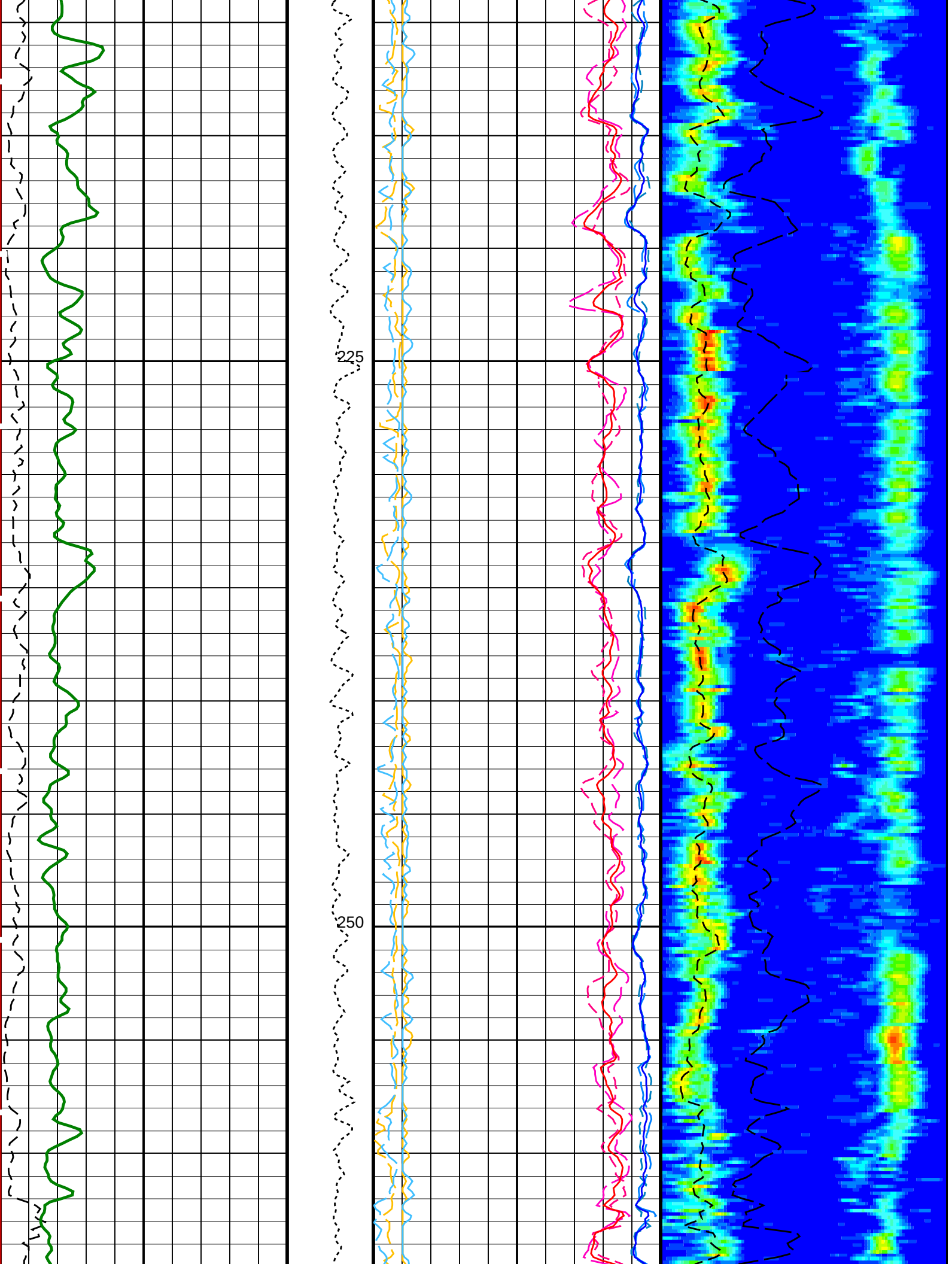
225
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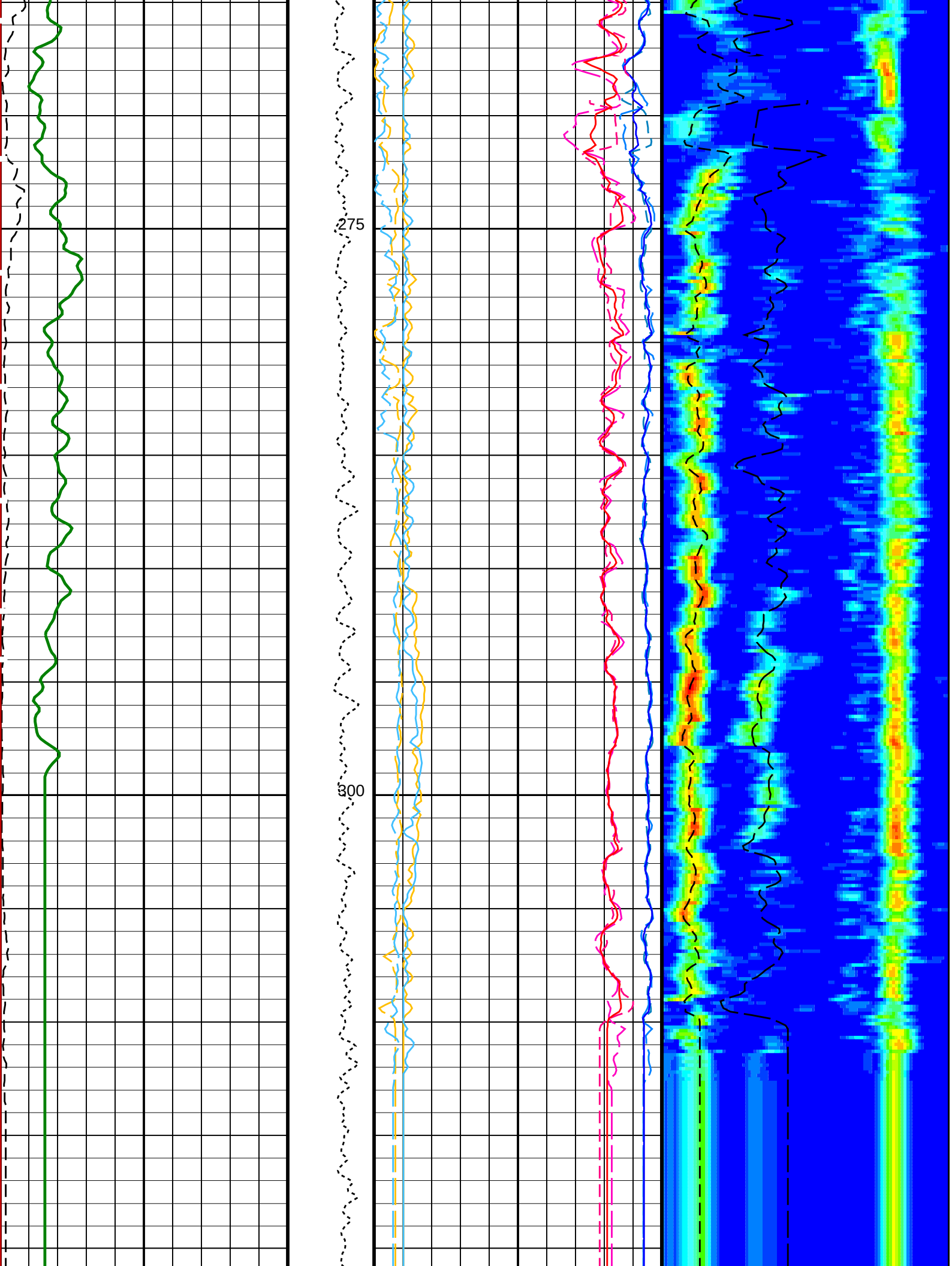
275
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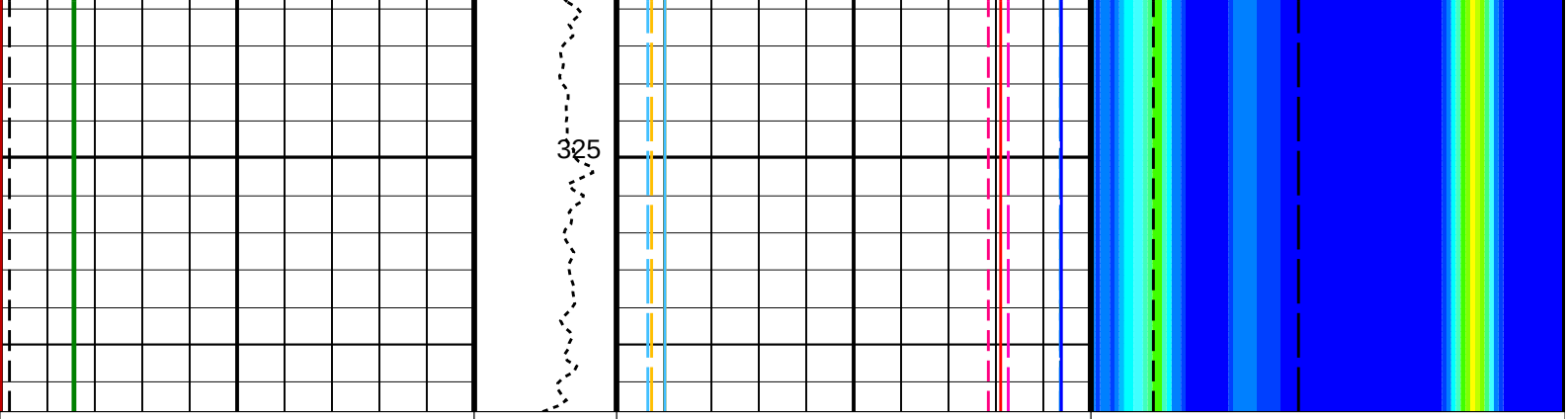

SAM4 Waveform Gain (WFG4)
0 (----) 1000

Tension (TENS) (LBF)
4000
6000

Peak Coherence / RA − P & S Comp (CHRP)
0 (----) 10

Delta−T Comp / RA − P & S (DTRP)
40 (US/F) 240

Waveform Data Copy Indicator 4 − Monopole P&S (WCI4)
0 (----) 10

Peak Coherence / TA − P & S Comp (CHTP)
0 (----) 10

Delta−T Shear / RA − P & S (DTRS)
40 (US/F) 240

HNGS Spectroscopy Gamma Ray (HSGR)
0 (GAPI) 25

Peak Coherence / RA − P & S Shear (CHRS)
−1 (----) 9

Min Amplitude Max

Rec.Array P&S Slow Proj. CVDL (SPR4)
40 (US/F) 240

Delta−T Comp / RA − P & S (DTRP)
440 (US/F) 40

Delta−T Comp / TA − P & S (DTTP)
440 (US/F) 40

Delta−T Comp − P & S (DT4P)
440 (US/F) 40

Delta−T Shear / RA − P & S (DTRS)
440 (US/F) 40

Delta−T Shear / TA − P & S (DTTS)
440 (US/F) 40

Delta−T Shear − P & S (DT4S)
440 (US/F) 40

Peak Coherence / TA − P & S Shear (CHTS)
−1 (----) 9

PIP SUMMARY

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
DDE4	Digitizing Delay 4	0	US
DDEX	Digitizing Delay X	0	US
DSI4	Digitizer Sample Interval 4	10	US
DSIX	Digitizer Sample Interval X	40	US
DTF	Delta−T Fluid	189	US/F
DWC4	Digitizer Word Count 4	512	
DWCX	Digitizer Word Count X	512	
FILG	Label Fill Gap Control − Monopole P&S	COMP_SHEAR	
GCSE	Generalized Caliper Selection	C1	
LFC	Label Formation Character − Monopole P&S	DYNAMIC	
MCS	Mean Casing Slowness	57	US/F
MTXG	Monopole Transmitter Geometry	186	IN

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
SAM4	DSST Sonic Acquisition Mode 4 − Monopole Mode for P&S	EVEN	
SAMX	DSST Sonic Acquisition Mode X − Both Dipoles or Monopole Mode for Expert	OFF	
SAS4	STC Sonic Array Status − Monopole P&S	255	
SBO4	STC Search Band Offset − Monopole P&S	500	US
SBR4	STC Baseline Removal − Monopole P&S	ON	
SBW4	STC Search Bandwidth − Monopole P&S	2000	US
SFC4	STC Formation Character − Monopole P&S	SELECTABLE	
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
SLL4	STC Slowness Lower Limit − Monopole P&S	40	US/F
SST4	STC Slowness Step − Monopole P&S	2	US/F
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
SUL4	STC Slowness Upper Limit − Monopole P&S	240	US/F
SWD4	STC Slowness Width − Monopole P&S	10	US/F
TBF4	STC Time for Baseline Fill − Monopole P&S	300	US
TLL4	STC Time Lower Limit − Monopole P&S	150	US
TST4	STC Time Step − Monopole P&S	50	US
TUL4	STC Time Upper Limit − Monopole P&S	3660	US
TWD4	STC Time Width − Monopole P&S	1000	US
TWI4	STC Integration Time Window − Monopole P&S	500	US
TWSX	Transmitter Waveform Select X	0	
WFM4	Waveform Mode 4	W1	
	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	−0.00676035	
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	1.07291	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	1.07443	
	EDTC−B: Enhanced DTS Cartridge		
BHS	Borehole Status	OPEN	
GCSE	Generalized Caliper Selection	C1	
	System and Miscellaneous		
BS	Bit Size	9.875	IN
DO	Depth Offset for Playback	−4425.3	M
PP	Playback Processing	NORMAL	

Format: DSST_P_S_VDL_COLOR **Vertical Scale: 1:200** **Graphics File Created: 10−Nov−2011 18:25**

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	19C0−187

Input DLIS Files

DEFAULT	Flip_FMS_DSI_NGS_042LUP	PRODUCER	10−Nov−2011 17:22	4757.0 M	4366.3 M

Output DLIS Files

DEFAULT **FMS_DSI_NGS_055PUP** **FN:51** **PRODUCER** **10−Nov−2011 18:25**

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Calibrations

MAXIS Field Log

Calibration and Check Summary

Measurement	Nominal	Master	Before	After	Change	Limit	Units
Micro Electrical Scanner − B (Slim) Wellsite Calibration − Caliper Calibration							
Before: 25−Oct−2011 2:04							
Caliper 1 Zero Measurement	12.00	N/A	12.06	N/A	N/A	N/A	IN
Caliper 2 Zero Measurement	12.00	N/A	12.10	N/A	N/A	N/A	IN
Caliper 1 Plus Measurement	15.19	N/A	15.24	N/A	N/A	N/A	IN
Caliper 2 Plus Measurement	15.19	N/A	15.39	N/A	N/A	N/A	IN
Micro Electrical Scanner − B (Slim) Wellsite Calibration − CROUZET ACCELEROMETER PROM HAS BEEN READ CORRECTLY							
Before: 3−Nov−2011 17:07							
TEMPERATURE REFERENCE :	N/A	N/A	20	N/A	N/A	N/A	DEGC
YEAR OF CALIBRATION :	N/A	N/A	99	N/A	N/A	N/A	
MONTH OF CALIBRATION :	N/A	N/A	3	N/A	N/A	N/A	
SERIAL NUMBER :	N/A	N/A	743	N/A	N/A	N/A	
Micro Electrical Scanner − B (Slim) Wellsite Calibration − CROUZET MAGNETOMETER PROM HAS BEEN READ CORRECTLY							
Before: 3−Nov−2011 17:07							
TEMPERATURE REFERENCE :	N/A	N/A	23	N/A	N/A	N/A	DEGC
YEAR OF CALIBRATION :	N/A	N/A	3	N/A	N/A	N/A	
MONTH OF CALIBRATION :	N/A	N/A	9	N/A	N/A	N/A	
SERIAL NUMBER :	N/A	N/A	507	N/A	N/A	N/A	
Hostile Natural Gamma Ray Sonde Wellsite Calibration − Detector 1 Check							
Master: 15−Sep−2011 14:01 Before: 3−Nov−2011 17:16 After: 3−Nov−2011 23:20							
Na 511 Peak Loc	40.00	39.54	39.70	39.69	−0.002346	1.000	
Na 511 Peak Res	15.50	16.51	15.16	15.04	−0.1195	2.000	%
High Voltage	1150	1190	1179	1177	−2.204	N/A	V
Na 1785 Peak Loc	142.6	141.9	142.6	142.0	−0.6493	7.000	
Na 1785 Peak Res	8.500	8.871	7.721	8.436	0.7150	2.000	%
Temperature	15.50	35.19	30.01	29.00	−1.011	N/A	DEGC
Na Count Rate	45.00	22.03	19.93	19.01	−0.9185	8.000	CPS
Hostile Natural Gamma Ray Sonde Wellsite Calibration − Detector 2 Check							
Master: 15−Sep−2011 14:01 Before: 3−Nov−2011 17:16 After: 3−Nov−2011 23:20							
Na 511 Peak Loc	40.00	39.52	39.46	39.62	0.1623	1.000	
Na 511 Peak Res	15.50	16.45	15.61	16.48	0.8699	2.000	%
High Voltage	1150	1121	1111	1110	−0.9961	N/A	V
Na 1785 Peak Loc	142.6	142.5	142.9	142.5	−0.3818	7.000	
Na 1785 Peak Res	8.500	8.764	7.834	8.489	0.6548	2.000	%
Temperature	15.50	35.72	31.24	30.68	−0.5593	N/A	DEGC
Na Count Rate	45.00	22.83	20.04	19.20	−0.8319	8.000	CPS
Hostile Natural Gamma Ray Sonde Wellsite Calibration − Ratio Of Detector 1 To Detector 2							
Master: 15−Sep−2011 14:01 Before: 3−Nov−2011 17:16 After: 3−Nov−2011 23:20							
Coincidence Count Rate Ratio	1.000	0.9670	0.9932	0.9903	−0.002906	0.05000	

Micro Electrical Scanner − B (Slim) / Equipment Identification

Primary Equipment:

MEST Sonde − B	MEDS − B	770
MEST Preamplifier Cartridge − AB	MEPC − AB	807
GPIT Cartridge − A	GPIC − A	840
MEST Acquisition Cartridge − A	MEAC − A	875
Auxiliary Equipment:		
MEST−B Preamplifier Cartridge Housing	MEPH − A	702
MEST Acquisition Cartridge Housing (Slim	MEAH − B	726

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		39.54
Before		39.70
After		39.69

37.50 (Minimum) 40.00 (Nominal) 43.50 (Maximum)

Phase	Na 511 Peak Res %	Value
Master		16.51
Before		15.16
After		15.04

12.00 (Minimum) 15.50 (Nominal) 19.00 (Maximum)

Phase	High Voltage V	Value
Master		1190
Before		1179
After		1177

900.0 (Minimum) 1150 (Nominal) 1600 (Maximum)

Phase	Na 1785 Peak Loc	Value
Master		141.9
Before		142.6
After		142.0

135.0 (Minimum) 142.6 (Nominal) 150.3 (Maximum)

Phase	Na 1785 Peak Res %	Value
Master		8.871
Before		7.721
After		8.436

7.000 (Minimum) 8.500 (Nominal) 11.00 (Maximum)

Phase	Temperature DEGC	Value
Master		35.19
Before		30.01
After		29.00

−28.89 (Minimum) 15.50 (Nominal) 60.00 (Maximum)

Phase	Na Count Rate CPS	Value
Master		22.03
Before		19.93
After		19.01

10.00 (Minimum) 45.00 (Nominal) 100.0 (Maximum)

Master: 15−Sep−2011 14:01 Before: 3−Nov−2011 17:16 After: 3−Nov−2011 23:20

Hostile Natural Gamma Ray Sonde Wellsite Calibration

Detector 2 Check

Phase	Na 511 Peak Loc	Value
Master		39.52
Before		39.46
After		39.62

37.50 (Minimum) 40.00 (Nominal) 43.50 (Maximum)

Phase	Na 511 Peak Res %	Value
Master		16.45
Before		15.61
After		16.48

12.00 (Minimum) 15.50 (Nominal) 19.00 (Maximum)

Phase	High Voltage V	Value
Master		1121
Before		1111
After		1110

900.0 (Minimum) 1150 (Nominal) 1600 (Maximum)

Phase	Na 1785 Peak Loc	Value
Master		142.5
Before		142.9
After		142.5

Phase	Na 1785 Peak Res %	Value
Master		8.764
Before		7.834
After		8.489

Phase	Temperature DEGC	Value
Master		35.72
Before		31.24
After		30.68

	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		22.83
Before		20.04
After		19.20
	10.00 (Minimum) 45.00 (Nominal) 100.0 (Maximum)	

Master: 15−Sep−2011 14:01 Before: 3−Nov−2011 17:16 After: 3−Nov−2011 23:20

Hostile Natural Gamma Ray Sonde Wellsite Calibration

Ratio Of Detector 1 To Detector 2

Phase	Coincidence Count Rate Ratio	Value
Master		0.9670
Before		0.9932
After		0.9903
	0.9500 (Minimum) 1.000 (Nominal) 1.050 (Maximum)	

Master: 15−Sep−2011 14:01
Before: 3−Nov−2011 17:16
After: 3−Nov−2011 23:20

Company: **Lamont Doherty**

Schlumberger

Well: **Expedition 336, Site U1383C**
Field: **North Pond**
Rig: **JOIDES Resolution**
Country: **USA**

DSI − Sonic
P & S (Monopole)