Schlumberger

Company: **Lamont Doherty Earth Observatory**

Well: **Expedition 351, Site U1438F**
Field: **IBM Arc Origins**
Rig: **JOIDES Resolution** Ocean: **Pacific**

Rig: JOIDES Resolution
Field: IBM Arc Origins
Location: Latitude: N 27.3836116*
Well: Expedition 351, Site U1438F
Company: Lamont Doherty Earth Observatory

Formation Micro Scanner (FMS)
Dipole Shear Sonic Imager (DSI)
Gamma Ray, Dual Axis Caliper

LOCATION

Latitude: N 27.3836116*
Longitude: E 134.3181633*

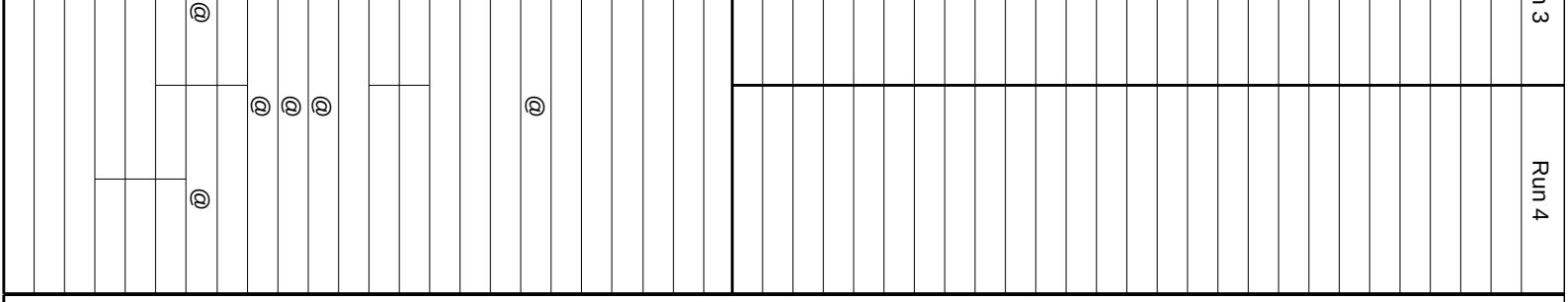
Elev.: K.B. −4711.00 m
G.L. 0.00 m
D.F. −4711.00 m

Permanent Datum: Sea Floor Elev.: 0.00 m
Log Measured From: Sea Floor 0.00 m above Perm. Datum
Drilling Measured From: Sea Floor

API Serial No.	N 27.3836116	E 134.3181633	

	Run 1	Run 2	Run
Logging Date	26−Jul−2014		
Run Number	1		
Depth Driller	700 m		
Schlumberger Depth	608 m		
Bottom Log Interval	608 m		
Top Log Interval	0 m		
Casing Driller Size @ Depth	5.500 in @ 94.67 m	@	
Casing Schlumberger	92 m		
Bit Size	9.875 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	@ 23 / @ 23	@ / @	
Maximum Recorded Temperatures	23 degC		
Circulation Stopped / Time	25−Jul−2014 14:00		
Logger On Bottom / Time	26−Jul−2014 16:28		
Unit Number / Location	627314 Houston		
Recorded By	K. Swain		
Witnessed By	L. Drab		

	Run 1	Run 2	Run
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	OTHER SERVICES2
OS1: HRLA/HLDS/APS/HNGS	OS1:
OS2:	OS2:
OS3: MSS	OS3:
OS4:	OS4:
OS5:	OS5:

REMARKS: RUN NUMBER 1	REMARKS: RUN NUMBER 2
Hole drilled with RCB rotary cone bit and bottom hole assembly (BHA). 9 7/8 " BS	
Dedicated hole only for logging, no core taken.	
Drill pipe set at 95 mbsf and wireline operation made inside of drillpipe into	
open hole below this depth.	
FMS and DSI run only with EDTC GR to reduce outer diameter of tools	
as previous tool runs had difficulty at 16m below drill pipe.	
FMS/DSI string kept above TD due to mushy fill, causing calipers to open slow.	
Fluid type was sea water, as used to drill, so no barite corrections were required.	
one pass of FMS/DSI due to time restraints and difficulty with winch.	
All logs presented in measured depth below sea floor (MDBSF).	
Maximum observed temperature on the HRLA temperature was 22.6 degC.	
Original log data acquired with drill floor as the reference but later	
played back to sea floor depth as the primary depth reference.	
563−562 mbsf FMS calipers closed to drop down and fix cable wrap.	
AHC stroked up before logging drill pipe,causes anomoly in GR before pipe.	
SAM1,2,3,4 modes acquired...SAM4 = Compressional	
SAM 2 provides best Shear below 164mbsf, use SAM1 above this depth.	

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

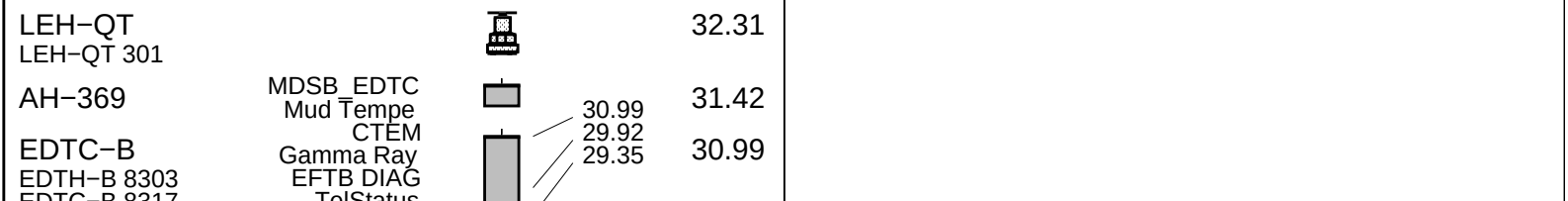
EQUIPMENT DESCRIPTION

RUN 1 RUN 2

SURFACE EQUIPMENT

WITM (EDTS)−A 1

DOWNHOLE EQUIPMENT



EDTC−B 8317
EDTG−A/B 8305

TelStatus
EDTCB Ele — 29.01

AH−MCD2 — 29.01
AH−MCD2 82

DSST−B — 26.73
SPAC−B 8128
ECH−SD 8127
SMDR−BD 8227
SSIJ−BA 8204
SMDX−AA 8194

PWF — 11.18

AH−MCD1 — 11.18
AH−MCD1 1663

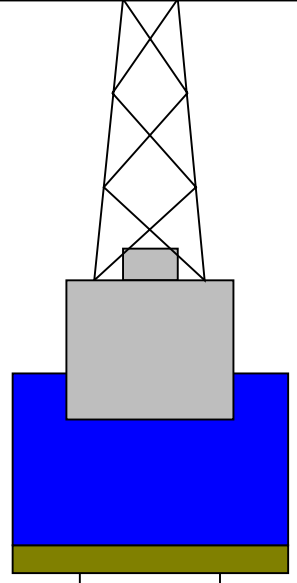
DTA−A — 8.90
ECH−KE 8456
DTA−A 8453

MEST−B — 7.68
MEAH−B 701
MEAC−A 804
MEPH−A 701
GPIC−AC 719
MEPC−AB 806
MEDS−B 770

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

MAXIMUM STRING DIAMETER 3.75 IN
MEASUREMENTS RELATIVE TO TOOL ZERO
ALL LENGTHS IN METERS

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



Kelly Bushing Elevation	−4711			
Derrick Floor Elevation	−4711			
Mean Sea Level	−4700			
				4.1
		Sea Floor	0	4.1
		Drill Pipe	94.67	
		Open Hole		9.875
		Total Depth	700	

Company: Lamont Doherty Earth Observatory | Well: Expedition 351, Site U1438F

Input DLIS Files

DEFAULT	FMS_DSI_058PUP	FN:80	PRODUCER	27−Jul−2014 03:51	5405.5 M	4757.9 M

Output DLIS Files

DEFAULT	FMS_DSI_064PUP	FN:86	PRODUCER	27−Jul−2014 06:11	694.5 M	46.9 M

OP System Version: 19C0−187

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

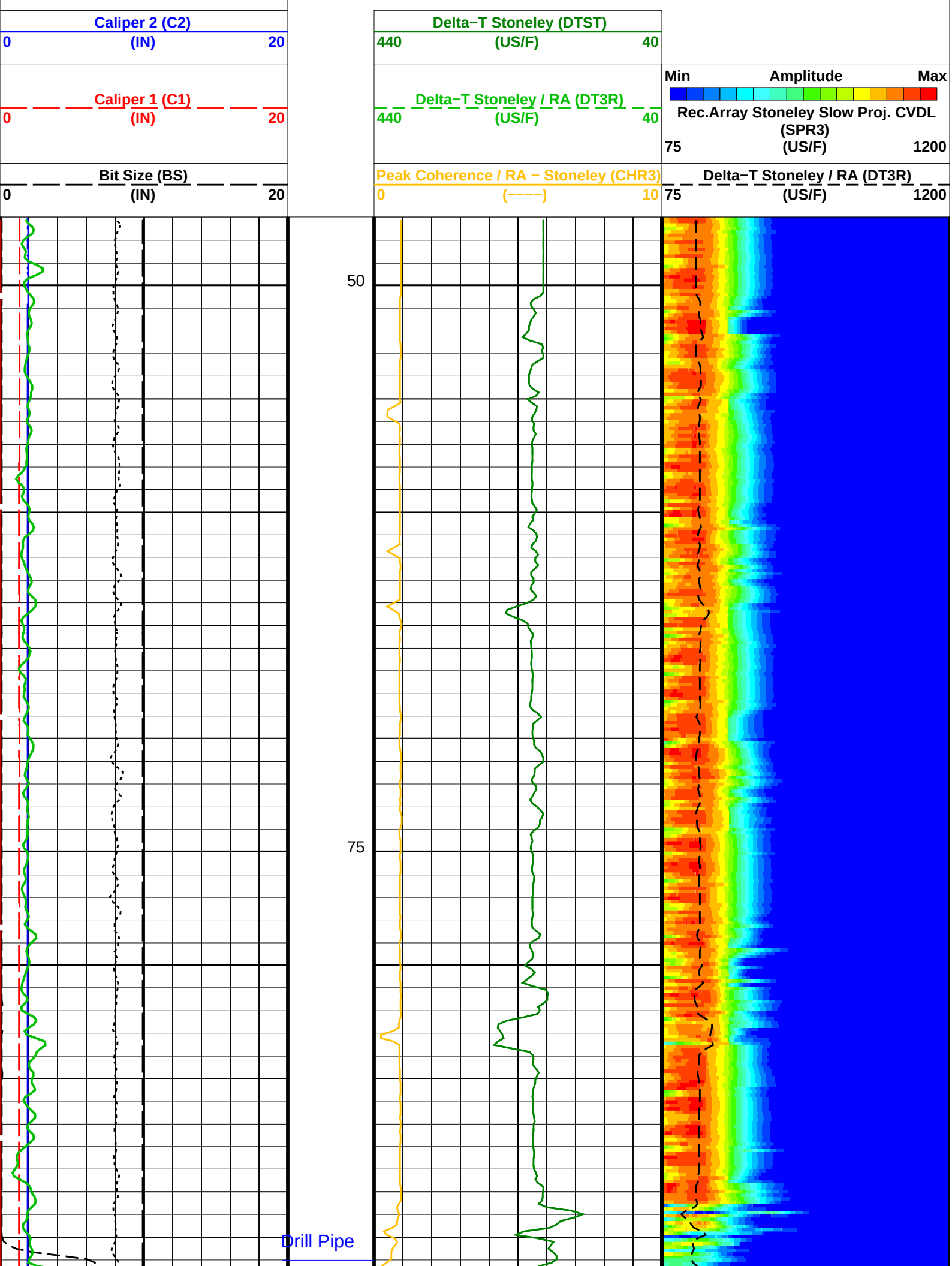
PIP SUMMARY

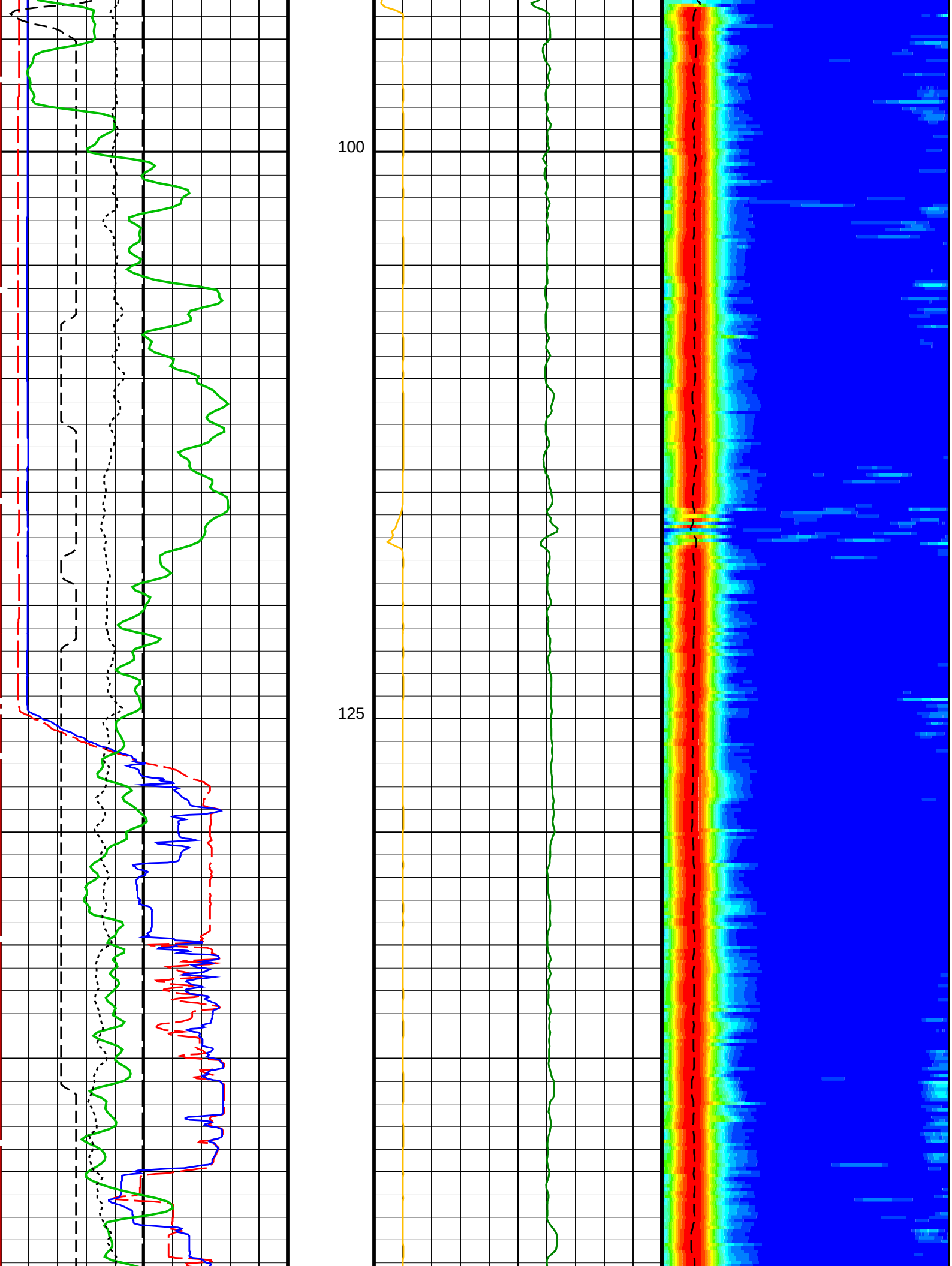
Time Mark Every 60 S

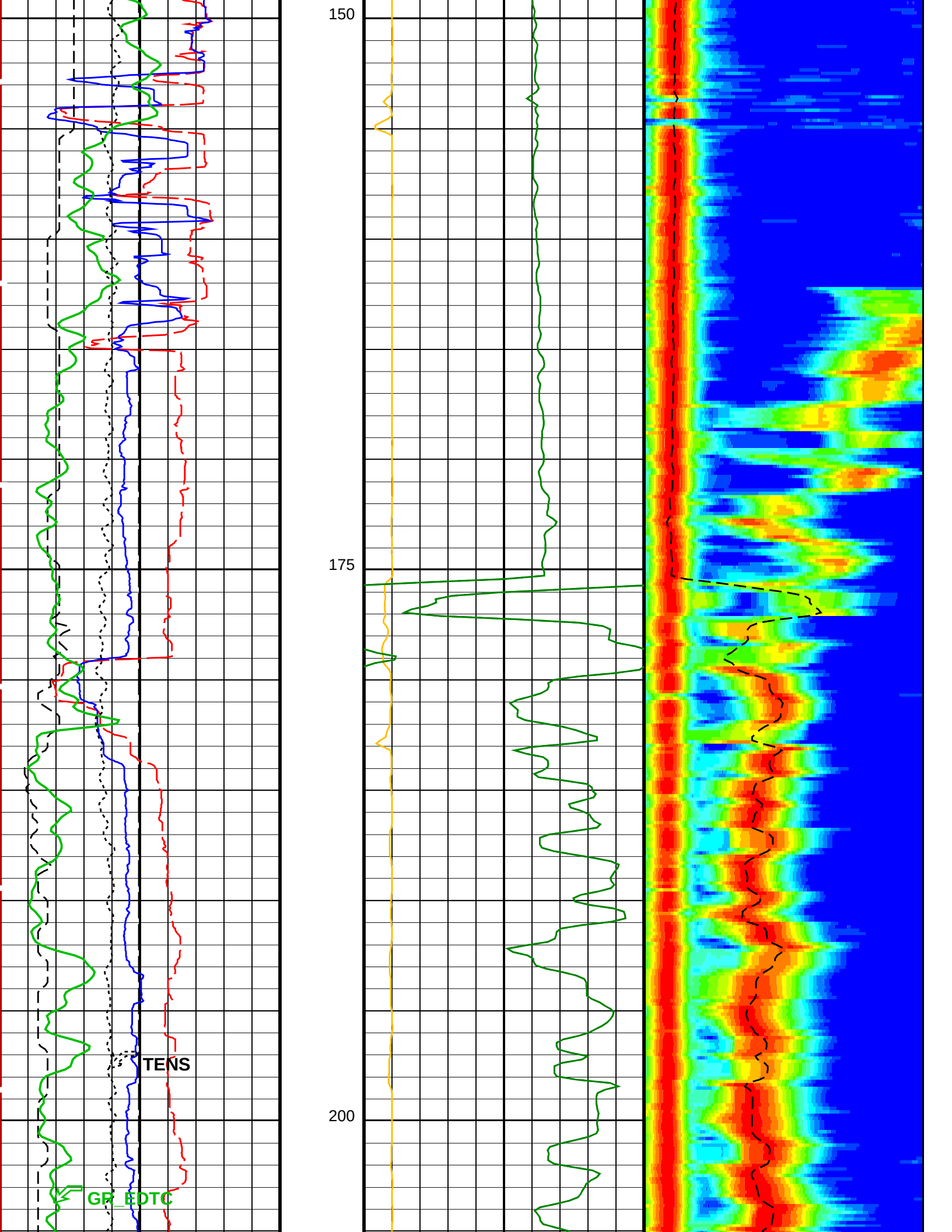
Waveform Data Copy Indicator 3 − Monopole Stoneley (WCI3)		
0	(−−−−)	10
Gamma Ray (GR_EDTC)		
0	(GAPI)	100
Tension (TENS)		
10000	(LBF)	0
SAM3 Waveform Gain (WFG3)		
0	(−−−−)	1000

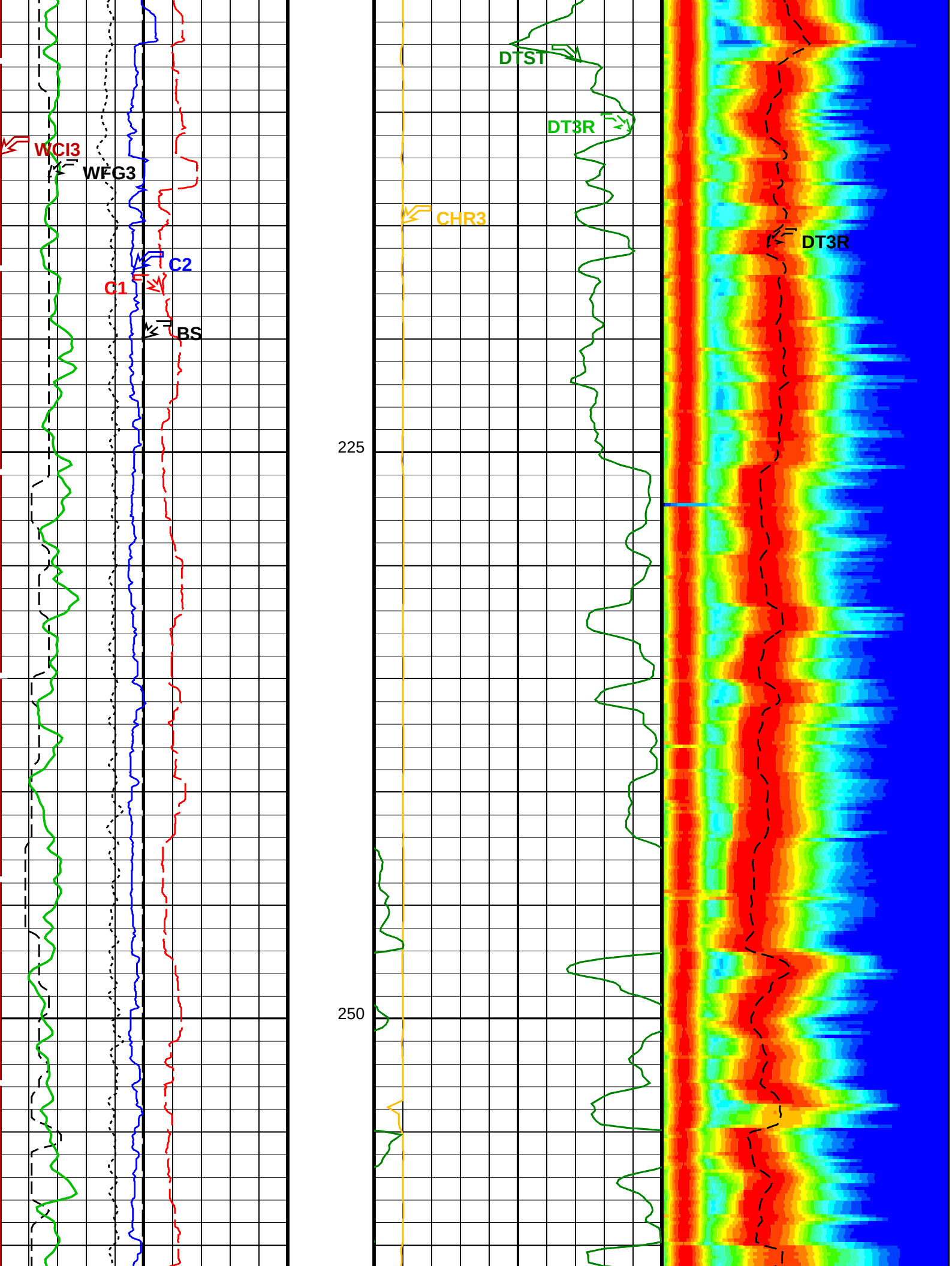
Sea Floor Depth Reference

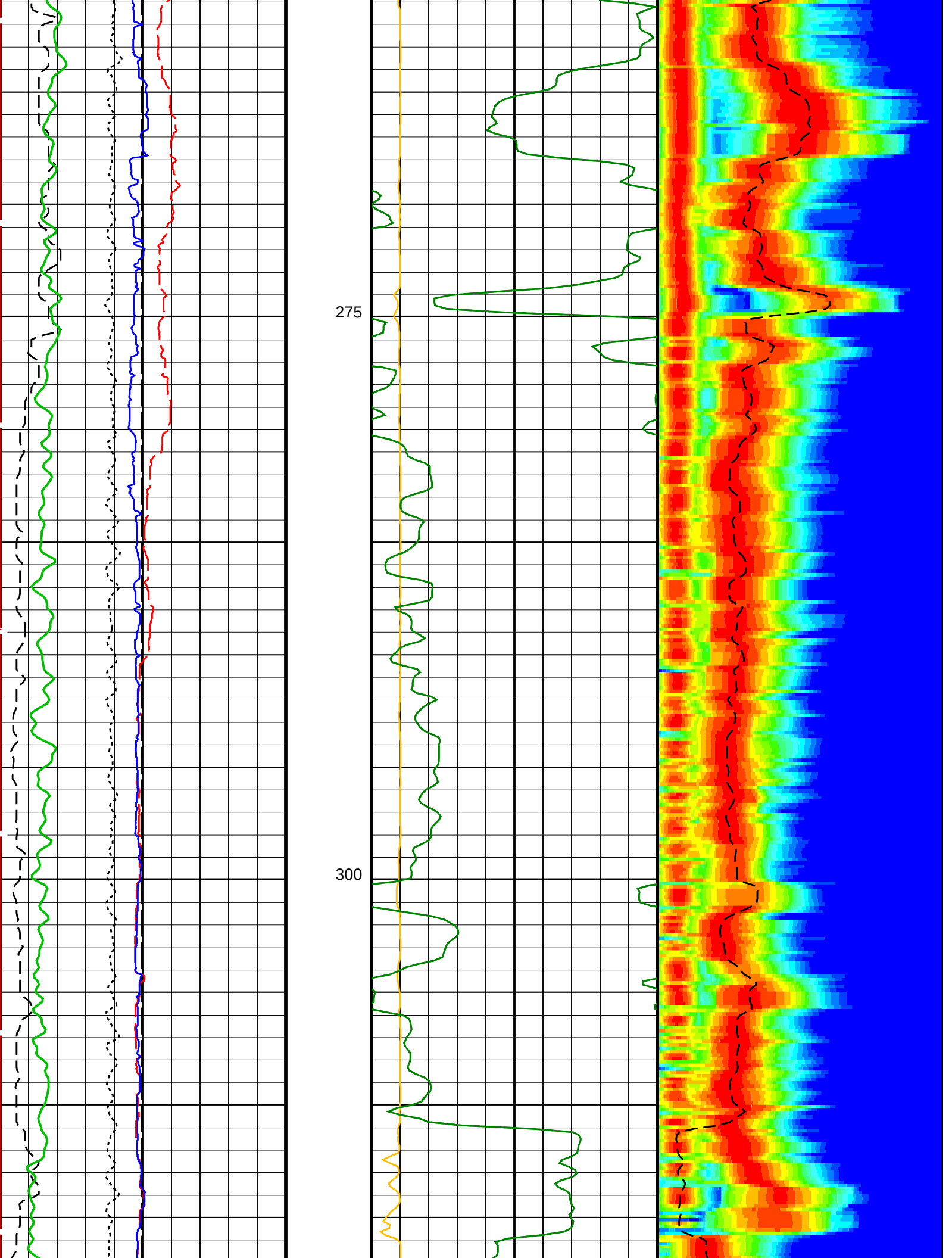
Main Uplog

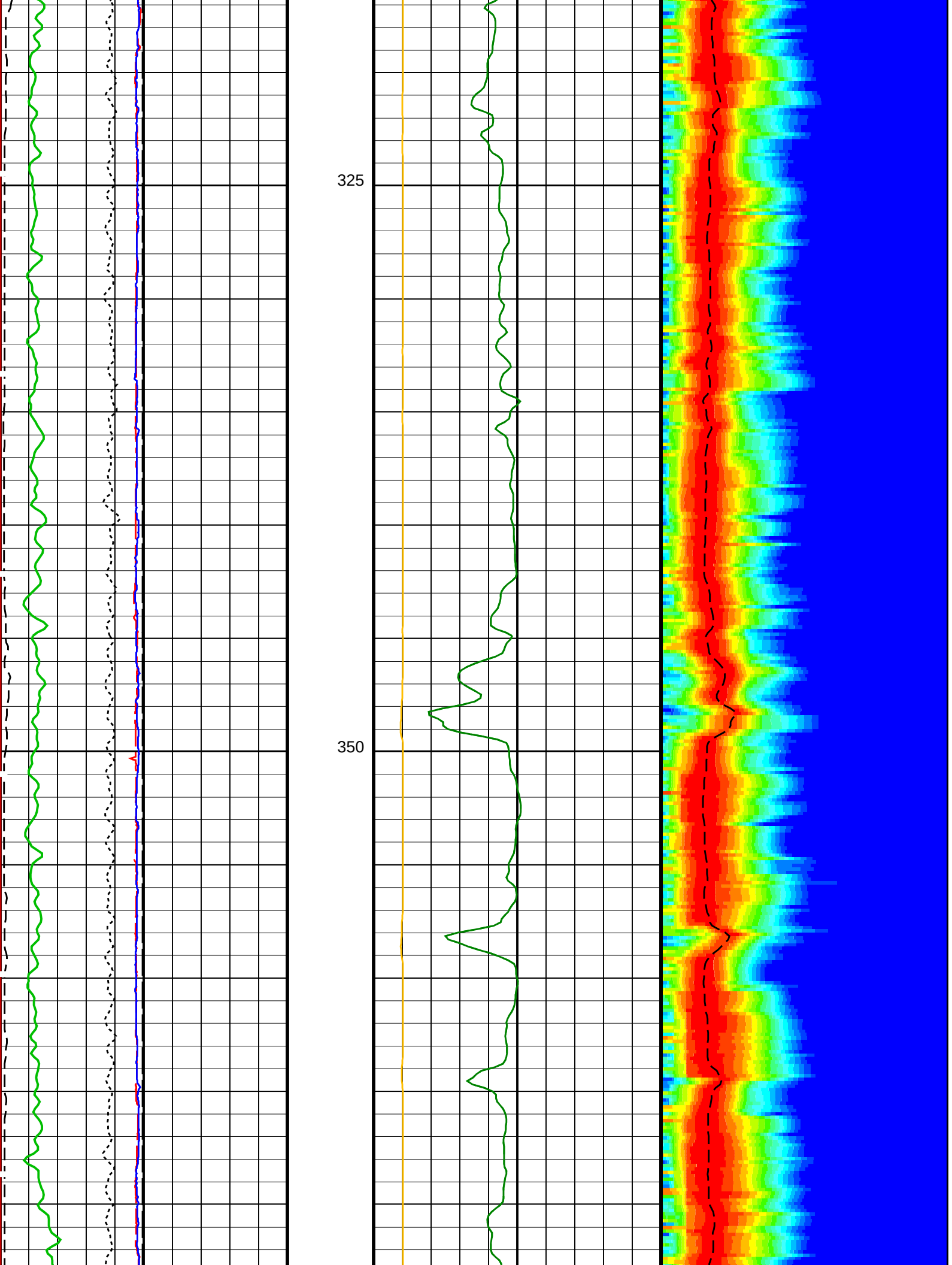

Caliper 2 (C2)
0
(IN)
20
Caliper 1 (C1)
0
(IN)
20
Bit Size (BS)
0
(IN)
20
Delta−T Stoneley (DTST)
440
(US/F)
40
Delta−T Stoneley / RA (DT3R)
440
(US/F)
40
Peak Coherence / RA − Stoneley (CHR3)
0
(−−−−)
10
Min
Amplitude
Max
Rec.Array Stoneley Slow Proj. CVDL (SPR3)
75
(US/F)
1200
Delta−T Stoneley / RA (DT3R)
75
(US/F)
1200
50
75
Drill Pipe

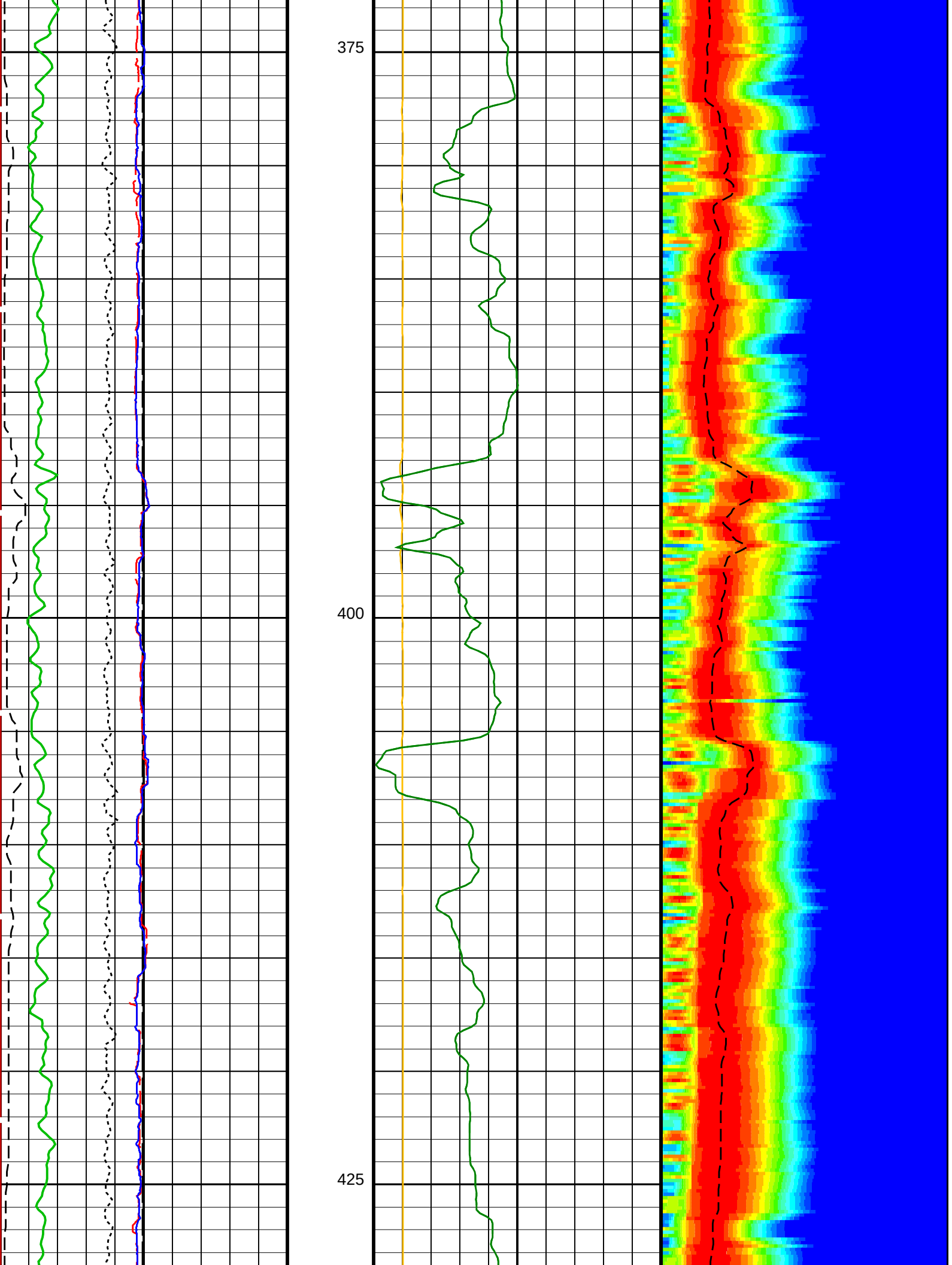

100
125

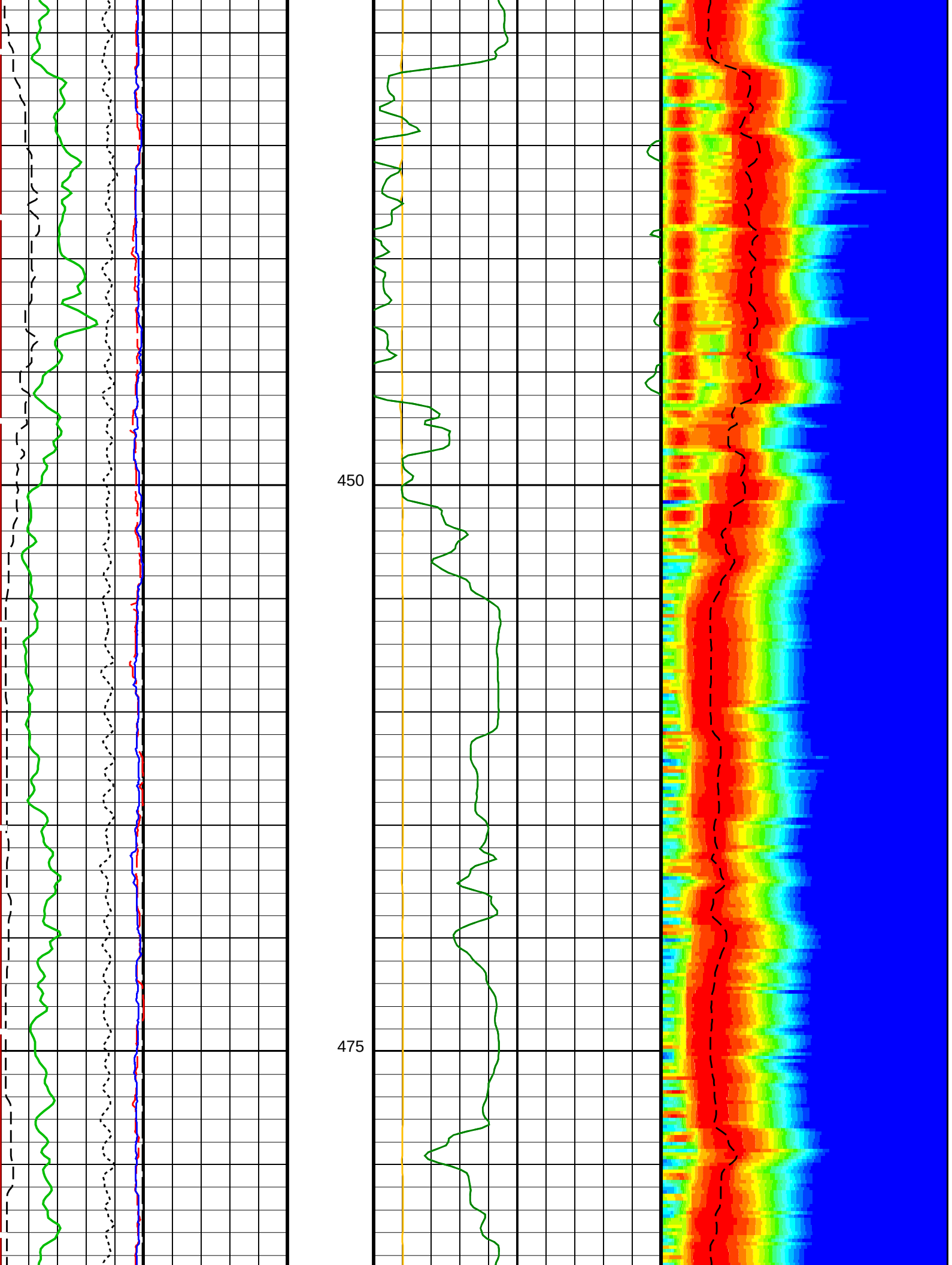

150
175
200
TENS
GR_EDTC

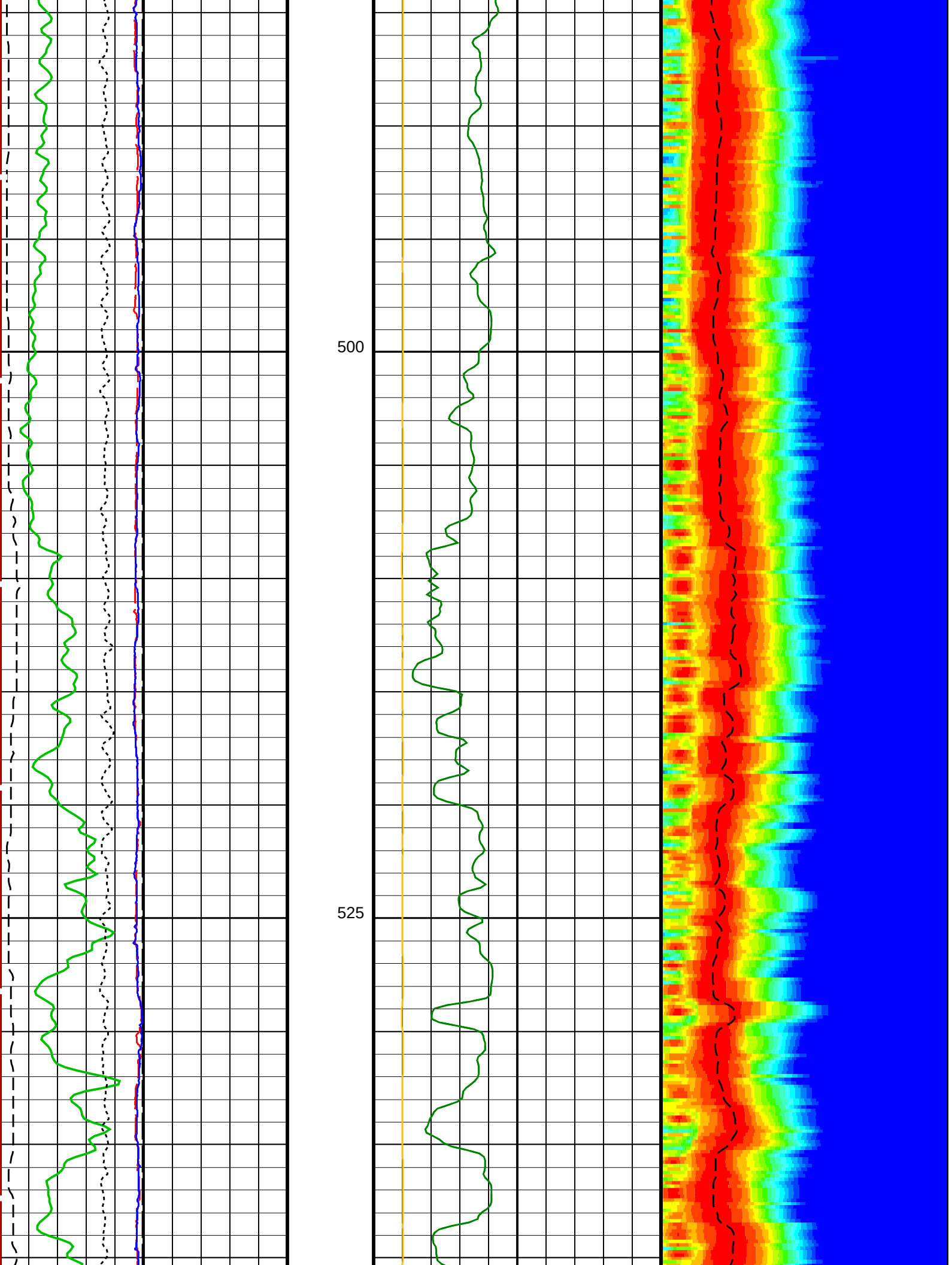

WCI3
WFG3
C2
C1
BS
DTST
DT3R
CHR3
DT3R
225
250

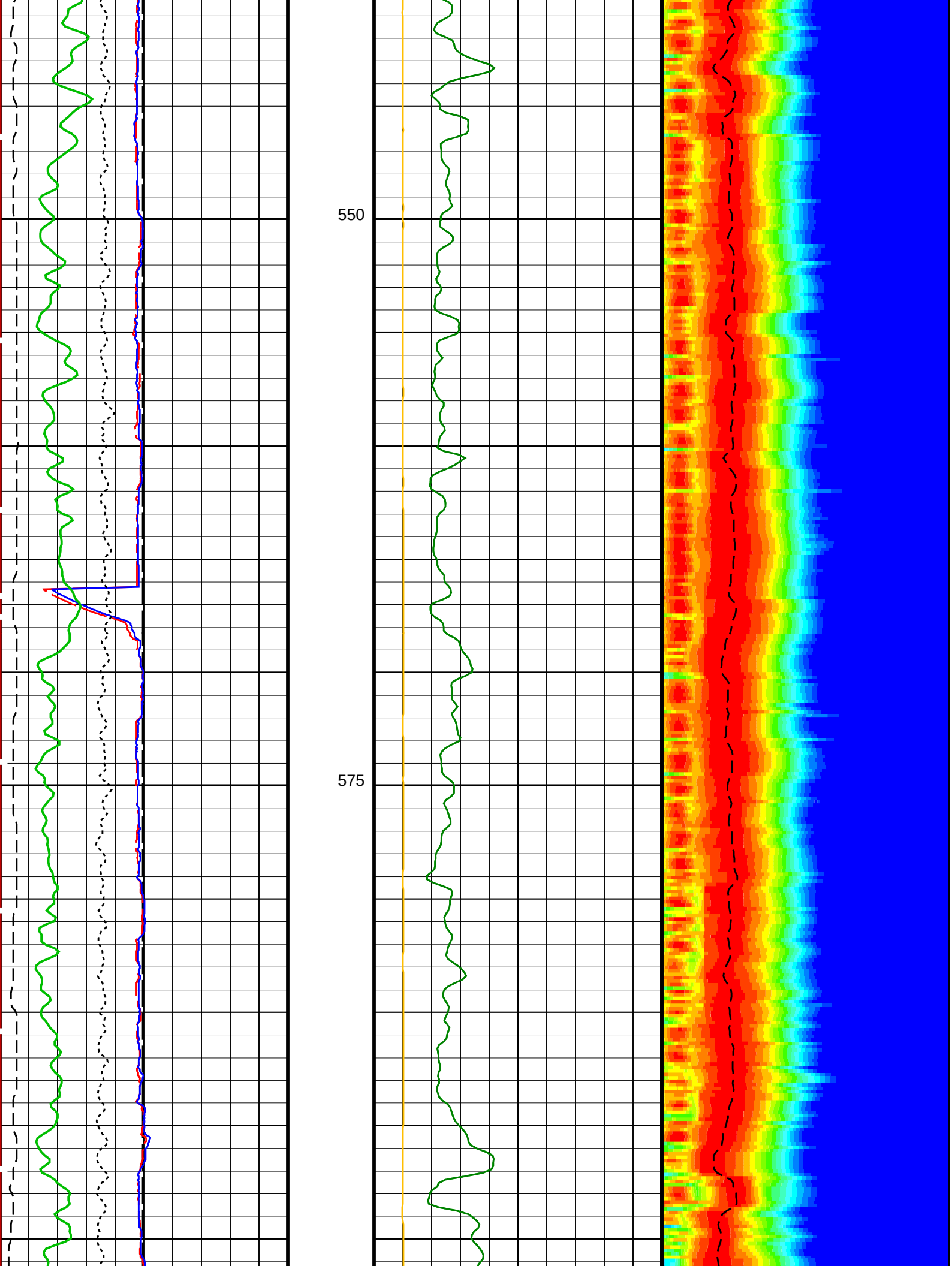

275
300

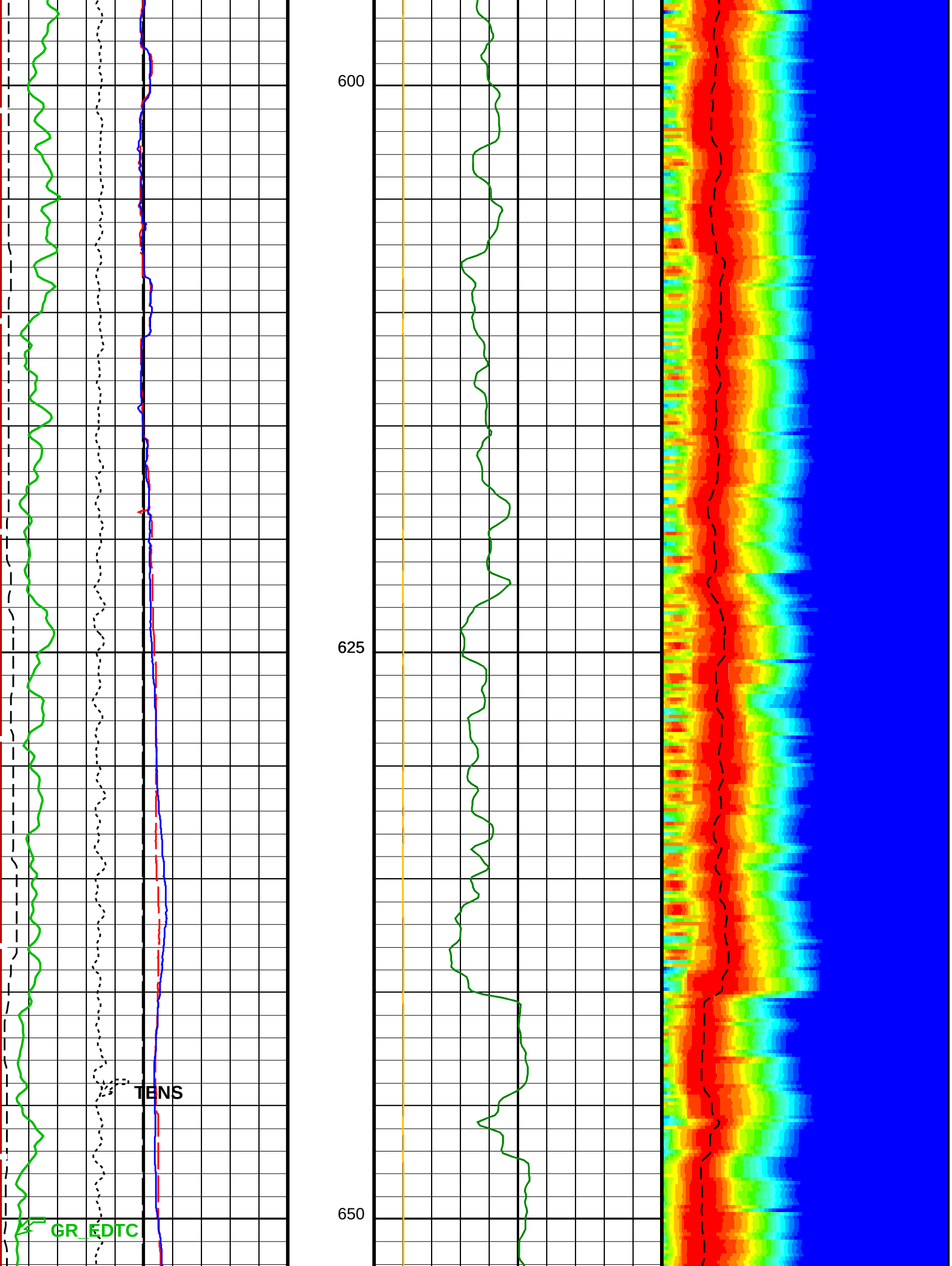

325
350

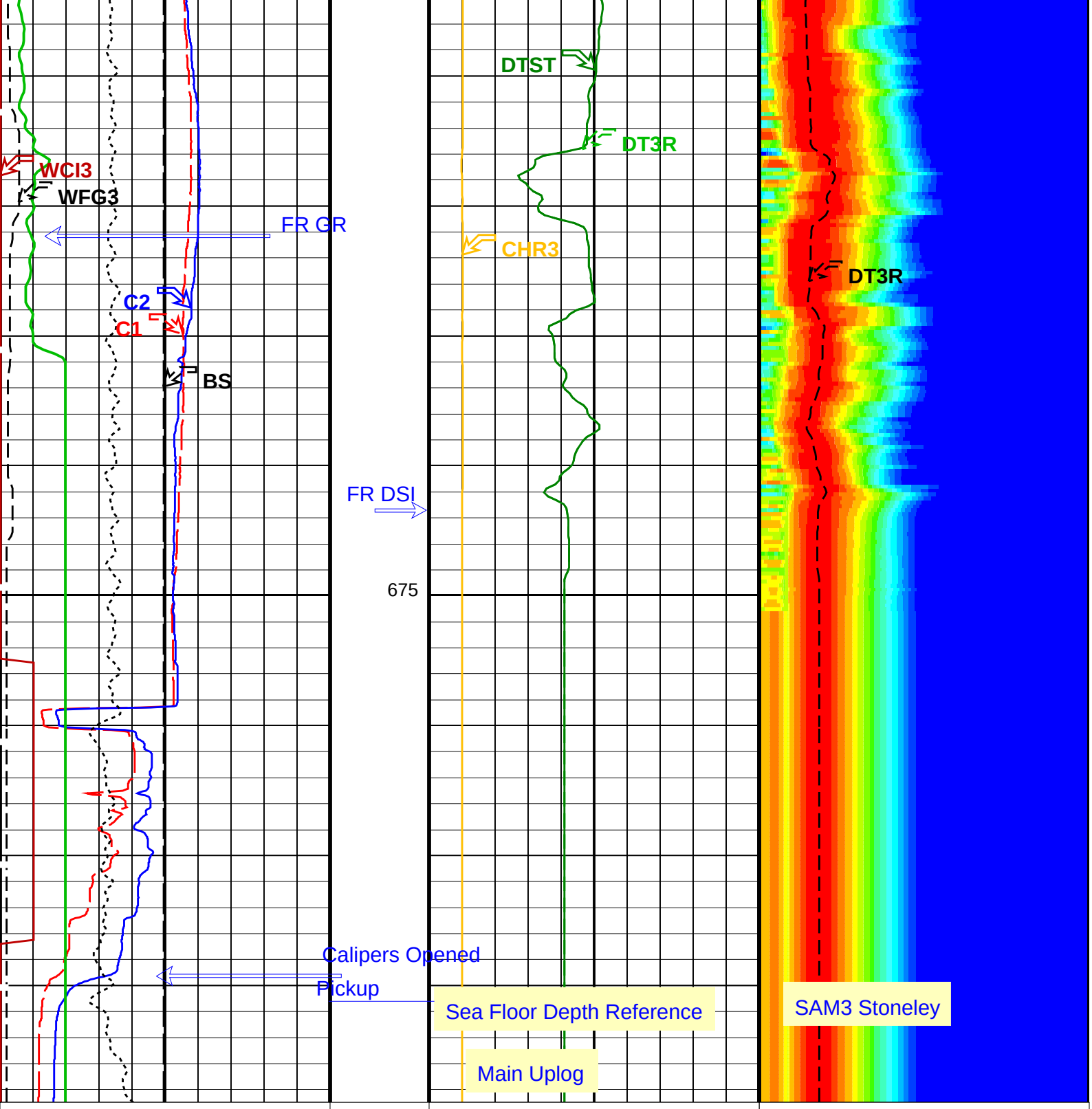

375
400
425


450
475


500
525


550
575


600
625
650
TENS
GR_EDTC



Bit Size (BS) 0 (IN) 20	Peak Coherence / RA − Stoneley (CHR3) 0 (−−−−) 10	Delta−T Stoneley / RA (DT3R) 75 (US/F) 1200
Caliper 1 (C1) 0 (IN) 20	Delta−T Stoneley / RA (DT3R) 440 (US/F) 40	Min Amplitude Max Rec.Array Stoneley Slow Proj. CVDL (SPR3) 75 (US/F) 1200
Caliper 2 (C2) 0 (IN) 20	Delta−T Stoneley (DTST) 440 (US/F) 40	
SAM3 Waveform Gain (WFG3) 0 (−−−−) 1000		
Tension (TENS) 10000 (LBF) 0		

Gamma Ray (GR_EDTC)		
0	(GAPI)	100

Waveform Data Copy Indicator 3 − Monopole Stoneley (WCI3)		
0	(−−−−)	10

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value	
	DSST−B: Dipole Shear Imager − B		
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	
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	ODD	
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	75	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	75	US/F
STUL	Label Slowness Upper Limit − Monopole Stoneley	1200	US/F
SUL3	STC Slowness Upper Limit − Monopole Stoneley	1200	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	600	US
TST3	STC Time Step − Monopole Stoneley	200	US
TUL3	STC Time Upper Limit − Monopole Stoneley	15800	US
TWD3	STC Time Width − Monopole Stoneley	2000	US
TWI3	STC Integration Time Window − Monopole Stoneley	1600	US
TWSX	Transmitter Waveform Select X	0	
WFM3	Waveform Mode 3	W1	
	DIR: Directional Survey Computation		
SPVD	TVD of Starting Point	0	M
TIMD	Along−hole depth of Tie−in Point	0	M
TIVD	TVD of Tie−in Point	0	M
	System and Miscellaneous		
BS	Bit Size	9.875	IN
DO	Depth Offset for Playback	−4711.0	M
PP	Playback Processing	RECOMPUTE	

Format: DSST_STONELEY_VDL_COLOR Vertical Scale: 1:200 Graphics File Created: 27−Jul−2014 06:11

OP System Version: 19C0−187

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

Input DLIS Files

DEFAULT	FMS_DSI_058PUP	FN:80	PRODUCER	27−Jul−2014 03:51	5405.5 M	4757.9 M

Output DLIS Files

DEFAULT	FMS_DSI_064PUP	FN:86	PRODUCER	27−Jul−2014 06:11	

Company: Lamont Doherty Earth Observatory — Well: Expedition 351, Site U1438F

Input DLIS Files

DEFAULT	FMS_DSI_058PUP	FN:80	PRODUCER	27−Jul−2014 03:51	5405.5 M	4757.9 M

Output DLIS Files

DEFAULT	FMS_DSI_060PUP	FN:82	PRODUCER	27−Jul−2014 05:31	694.5 M	46.9 M

OP System Version: 19C0−187

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

Changed Parameter Summary

DLIS Name	New Value	Previous Value	Depth & Time
COLL	120 US/F	87 US/F	159.4 05:33:44

PIP SUMMARY

Time Mark Every 60 S

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

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

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

Peak Coherence / RA − Lower Dipole (CHR1)
0 (−−−−) 10

Sonic Velocity (SVEL)
1000 (M/S) 6000

Gamma Ray (GR_EDTC)
0 (GAPI) 100

Poisson's Ratio (PR)
0 (−−−−) 0.5

Sonde Deviation (SDEVM)
0 (DEG) 10

Poisson's Ratio (PR)
0 (−−−−) 0.5

Caliper 2 (C2)
0 (IN) 20

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

Caliper 1 (C1)
0 (IN) 20

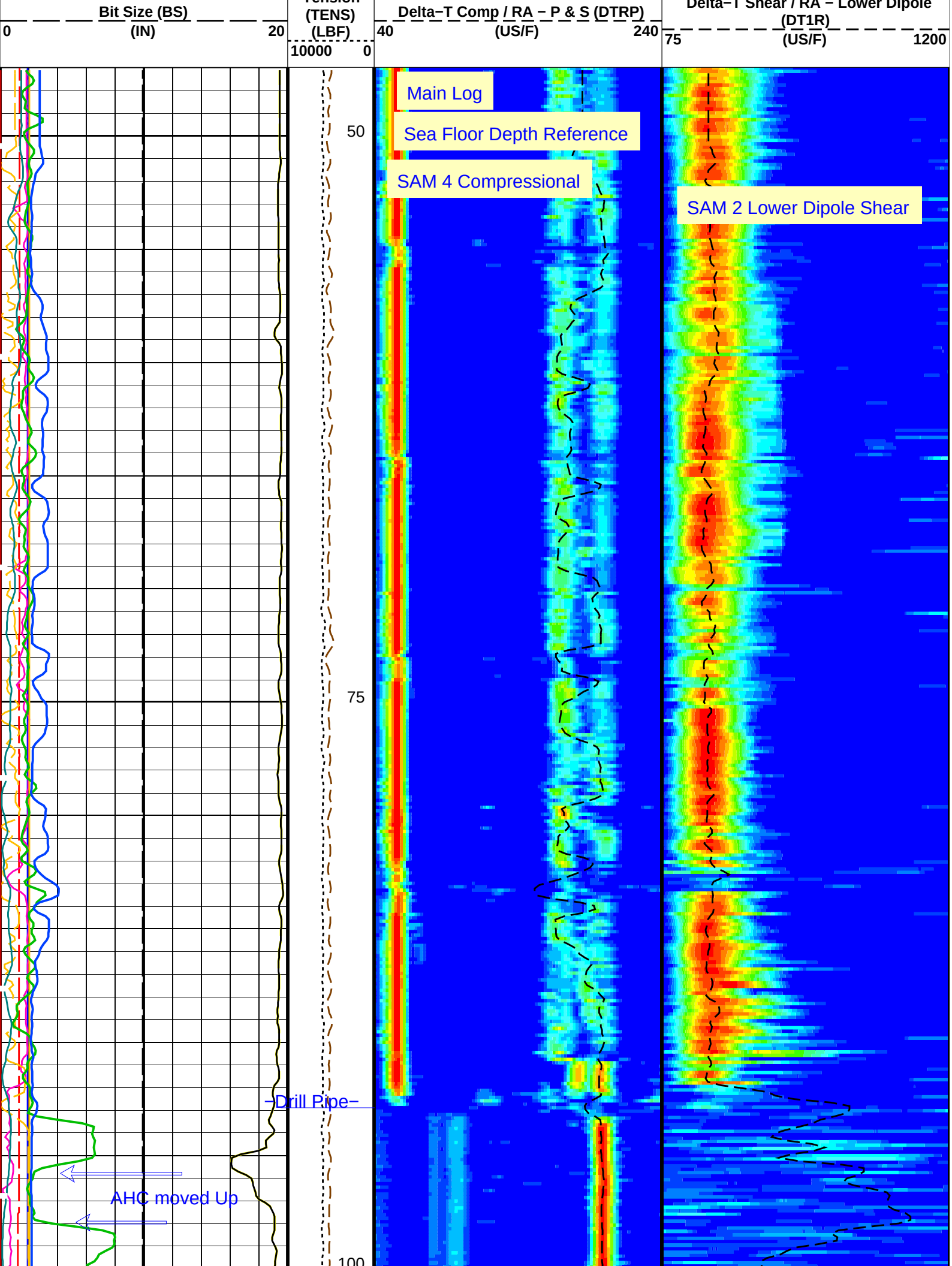
Calibrated Downhole Force (CDF) (LBF)
3000 0

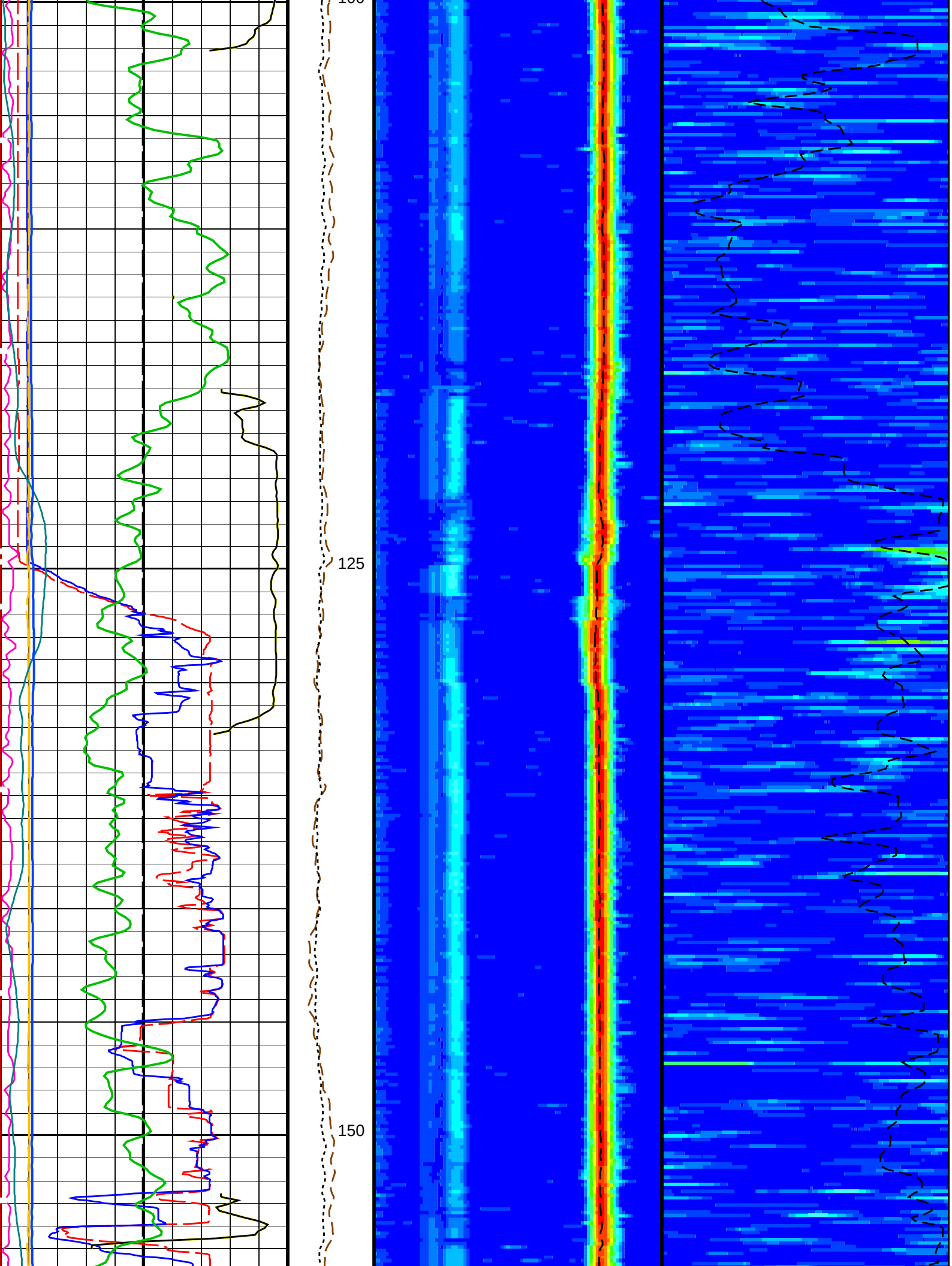
Delta−T Shear / RA − P & S (DTRS)
40 (US/F) 240

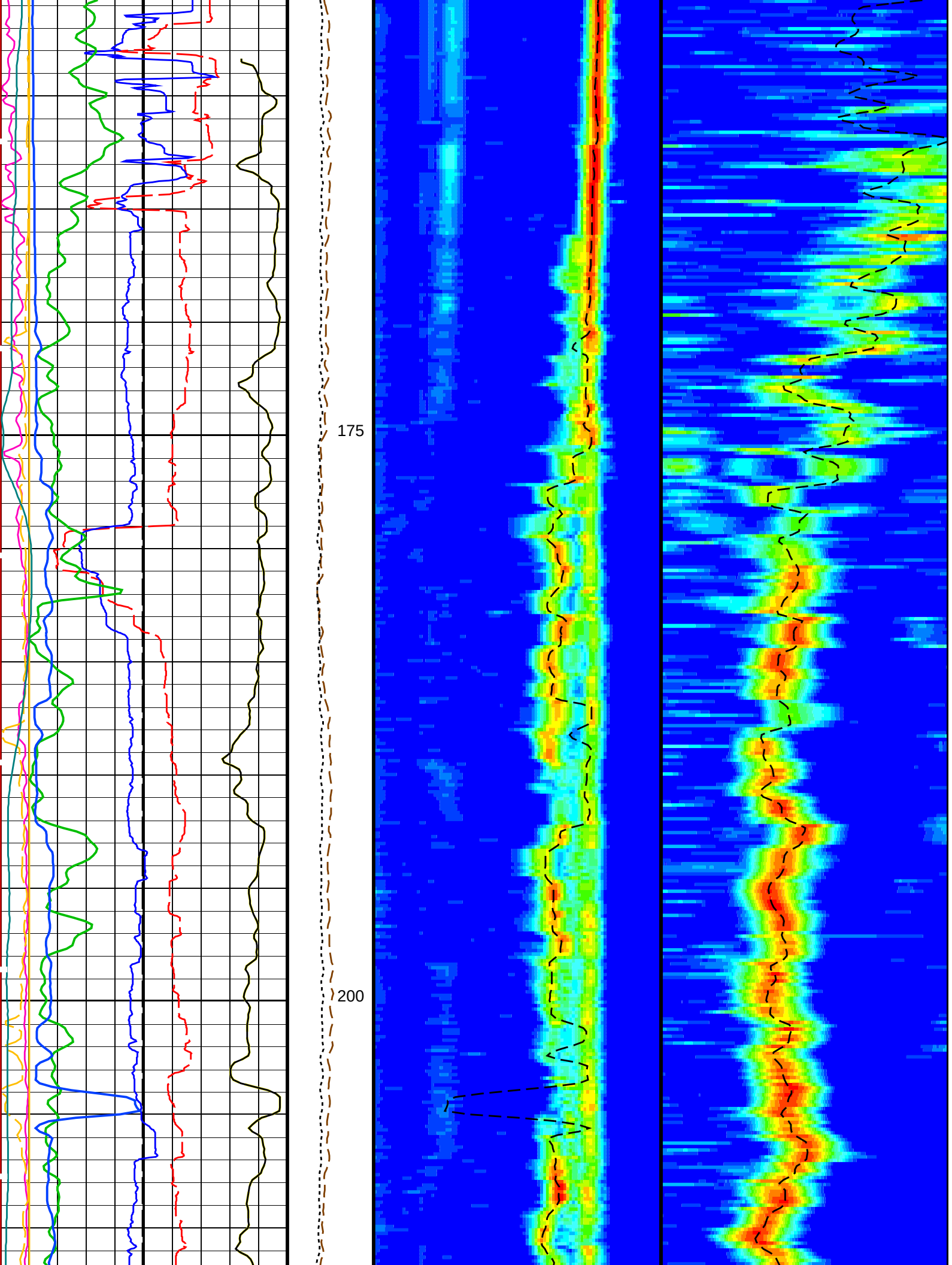
Min Amplitude Max
Rec.Array L.Dipole Slow Proj. CVDL (SPR1)
75 (US/F) 1200

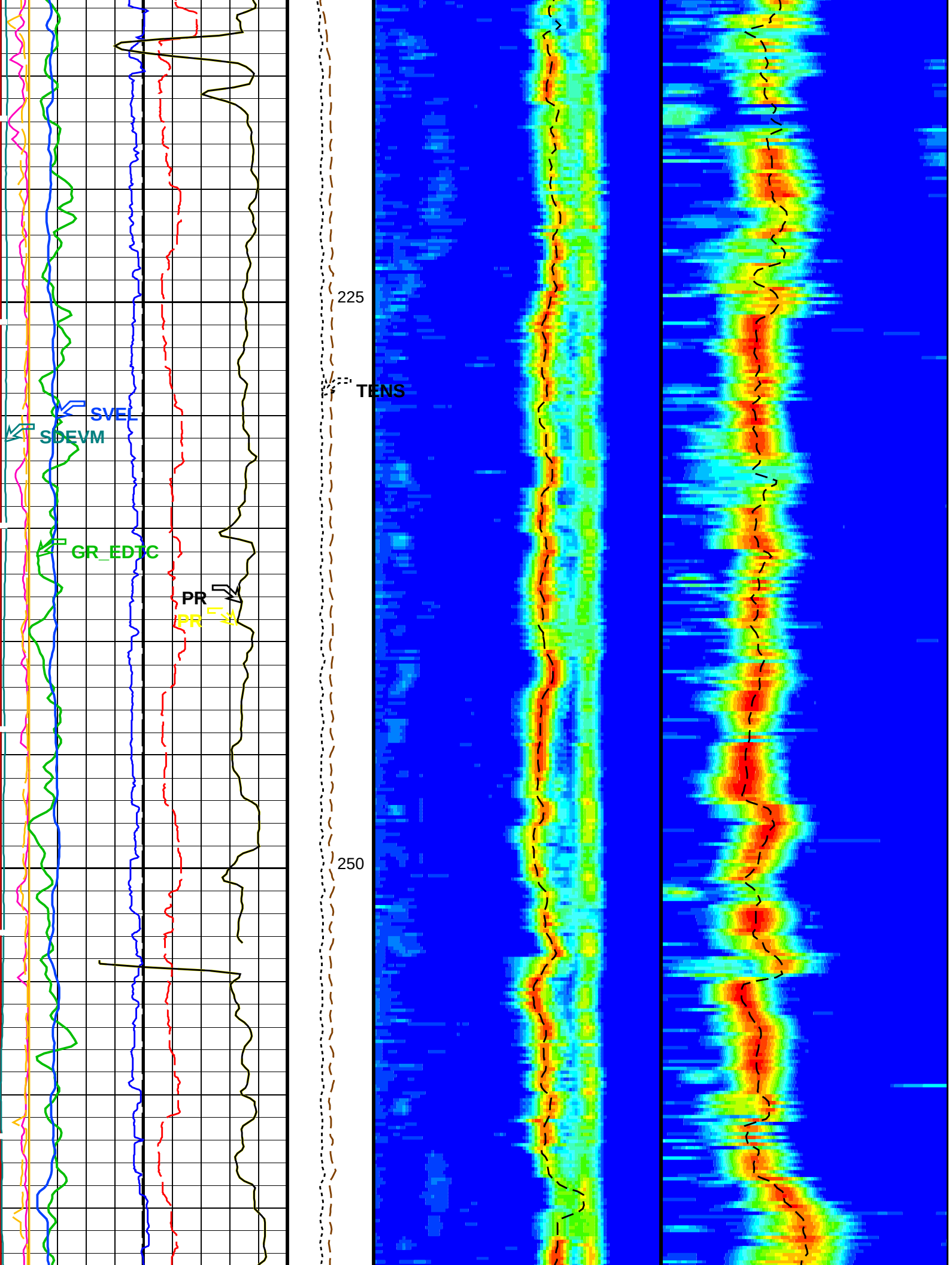
Tension

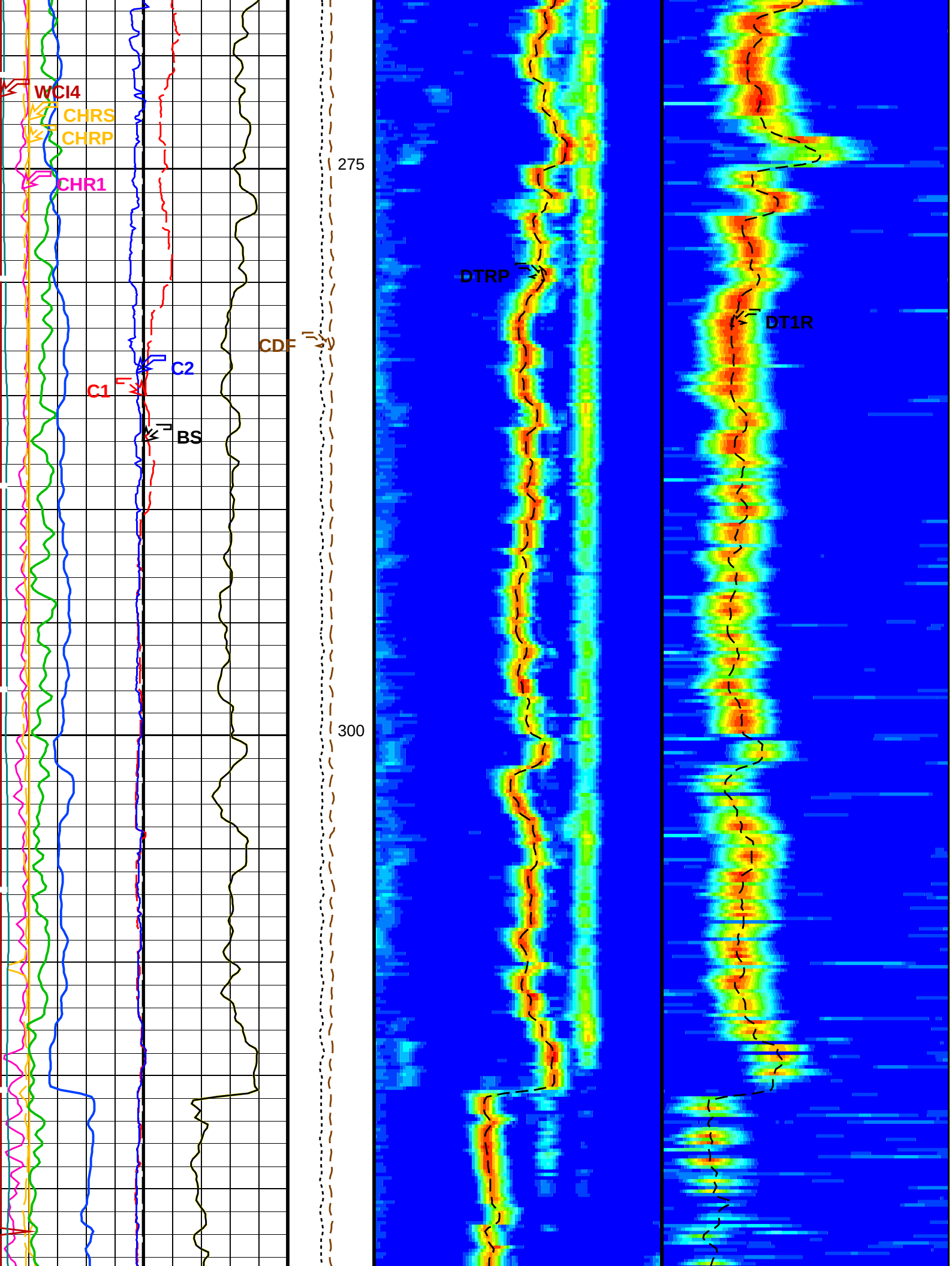
Delta−T Shear / RA − Lower Dipole

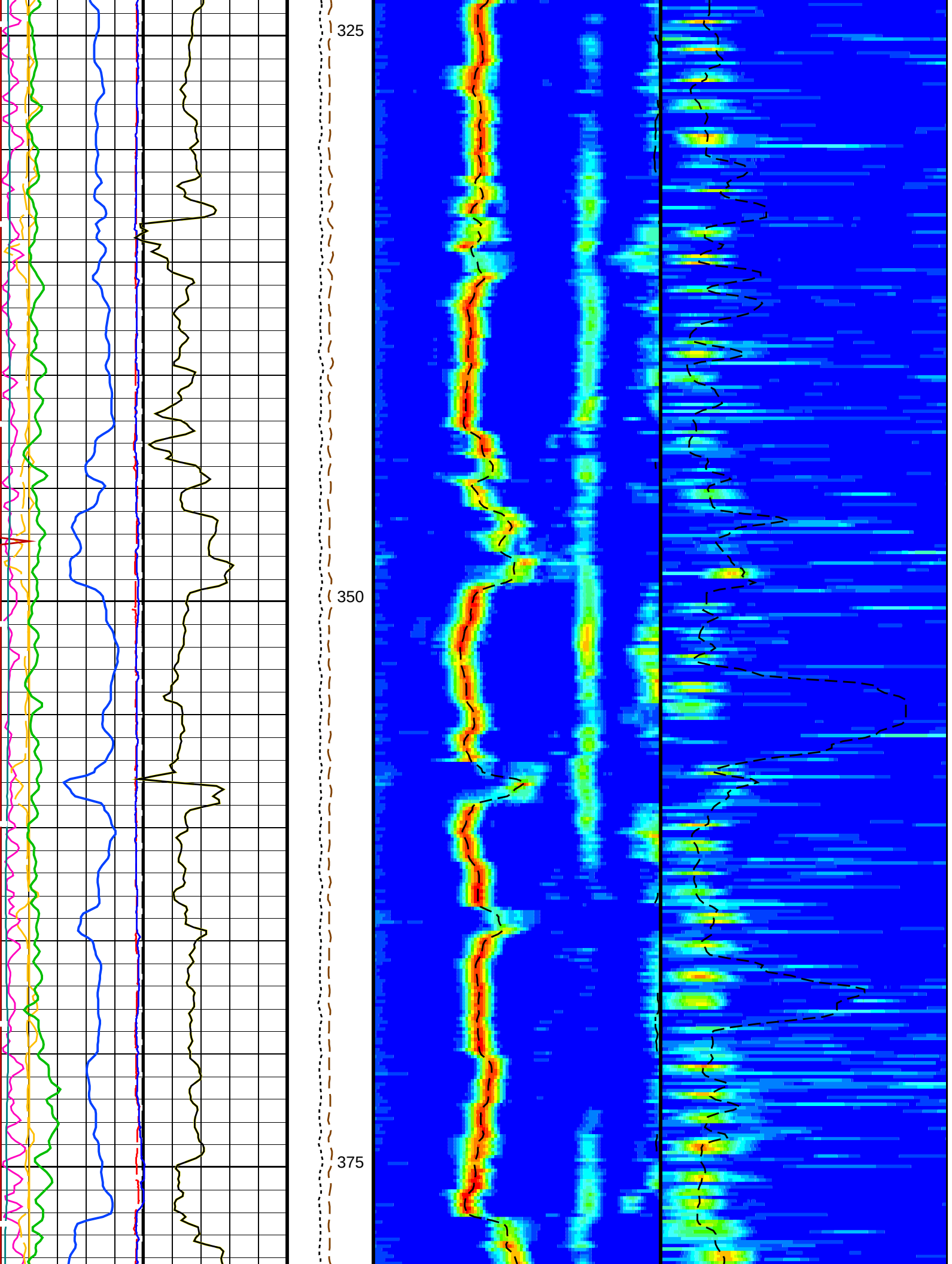

Bit Size (BS)
0
(IN)
20
Tension (TENS)
(LBF)
10000
0
Delta−T Comp / RA − P & S (DTRP)
40
(US/F)
240
Delta−T Shear / RA − Lower Dipole (DT1R)
75
(US/F)
1200
Main Log
Sea Floor Depth Reference
SAM 4 Compressional
SAM 2 Lower Dipole Shear
50
75
100
−Drill Pipe−
AHC moved Up

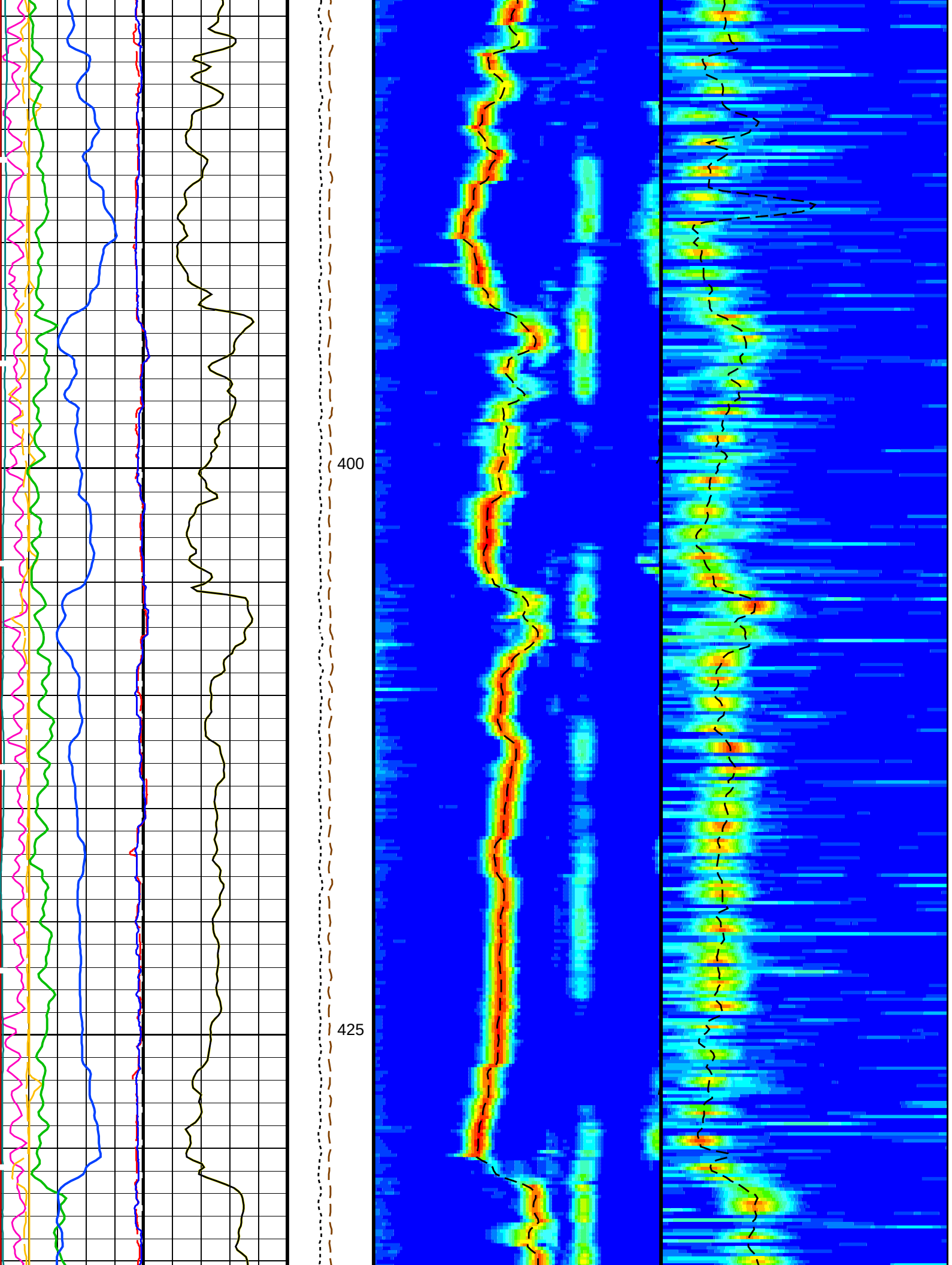

100
125
150

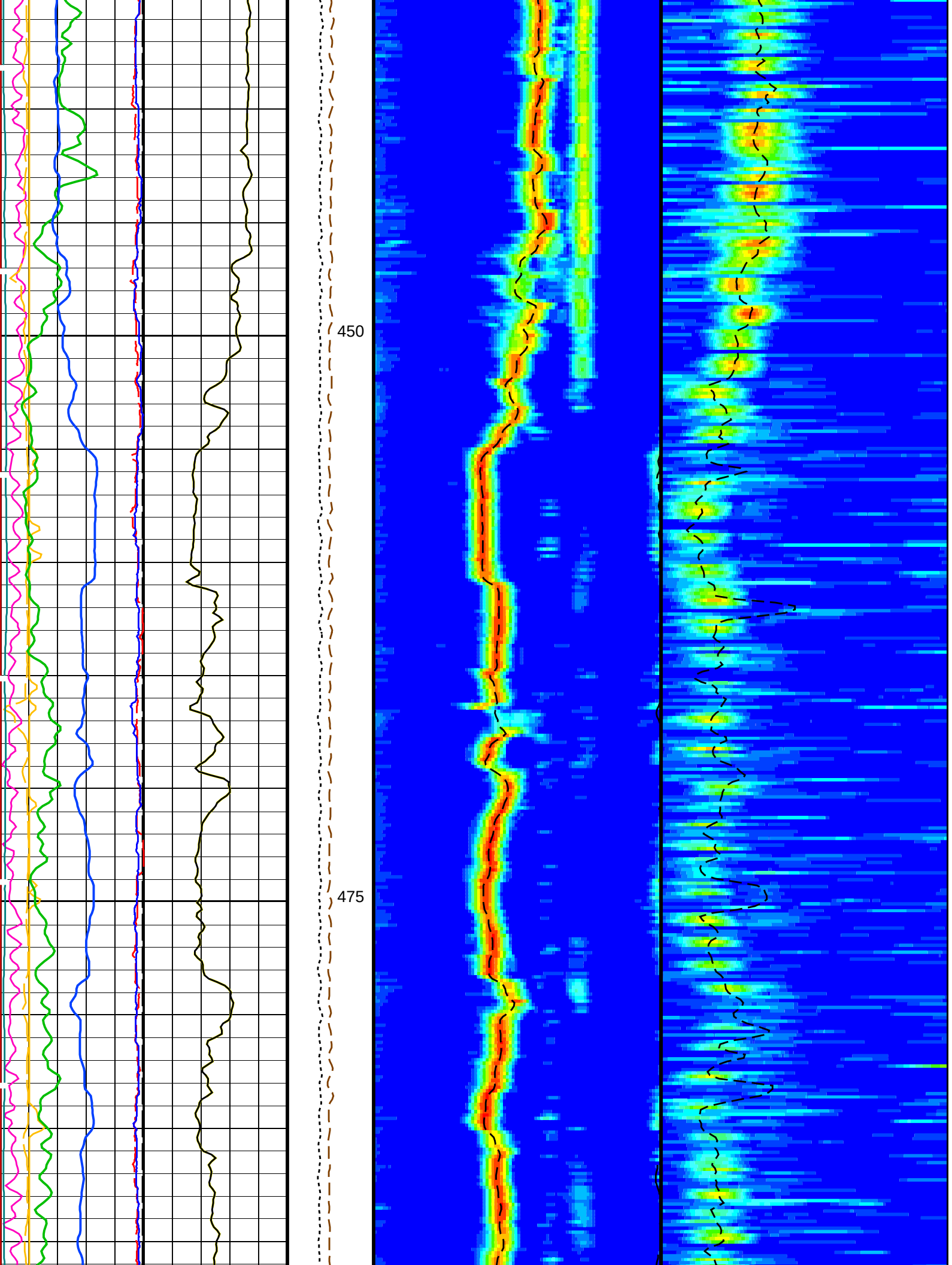

175
200

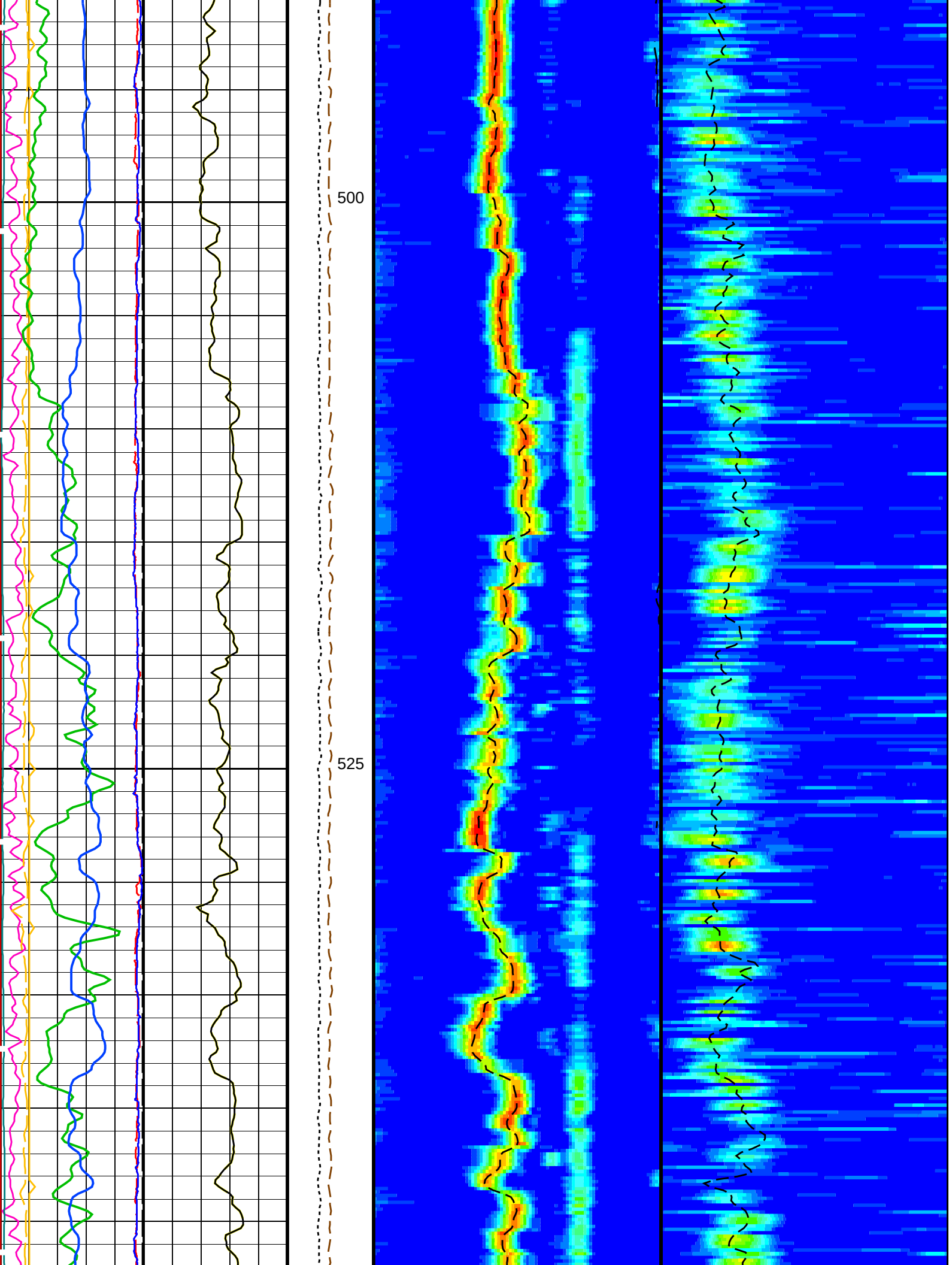

225
TENS
SVEL
SDEVM
GR_EDTC
PR
PR
250

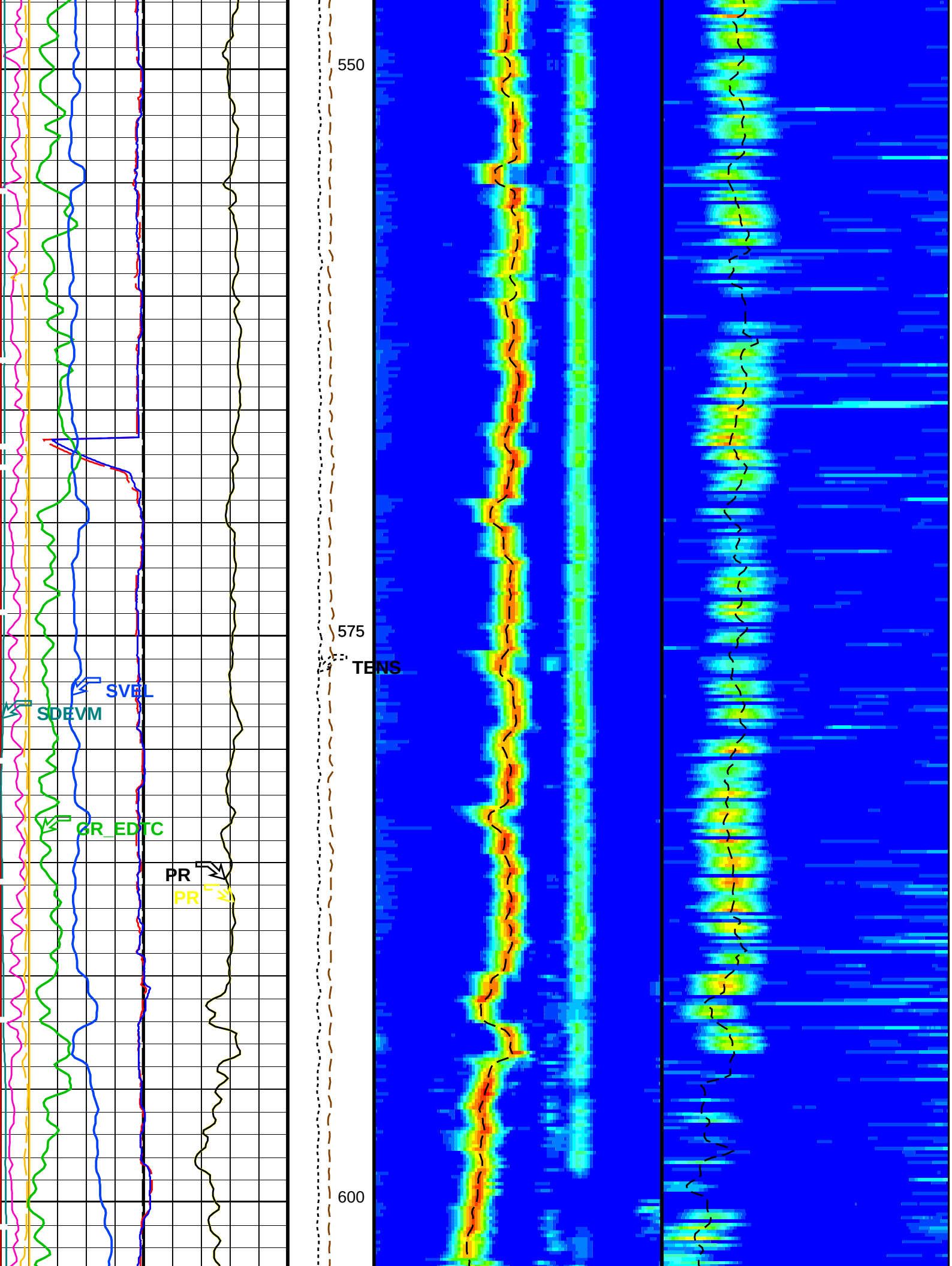

WCI4
CHRS
CHRP
CHR1
C2
C1
BS
CDF
275
300
DTRP
DT1R

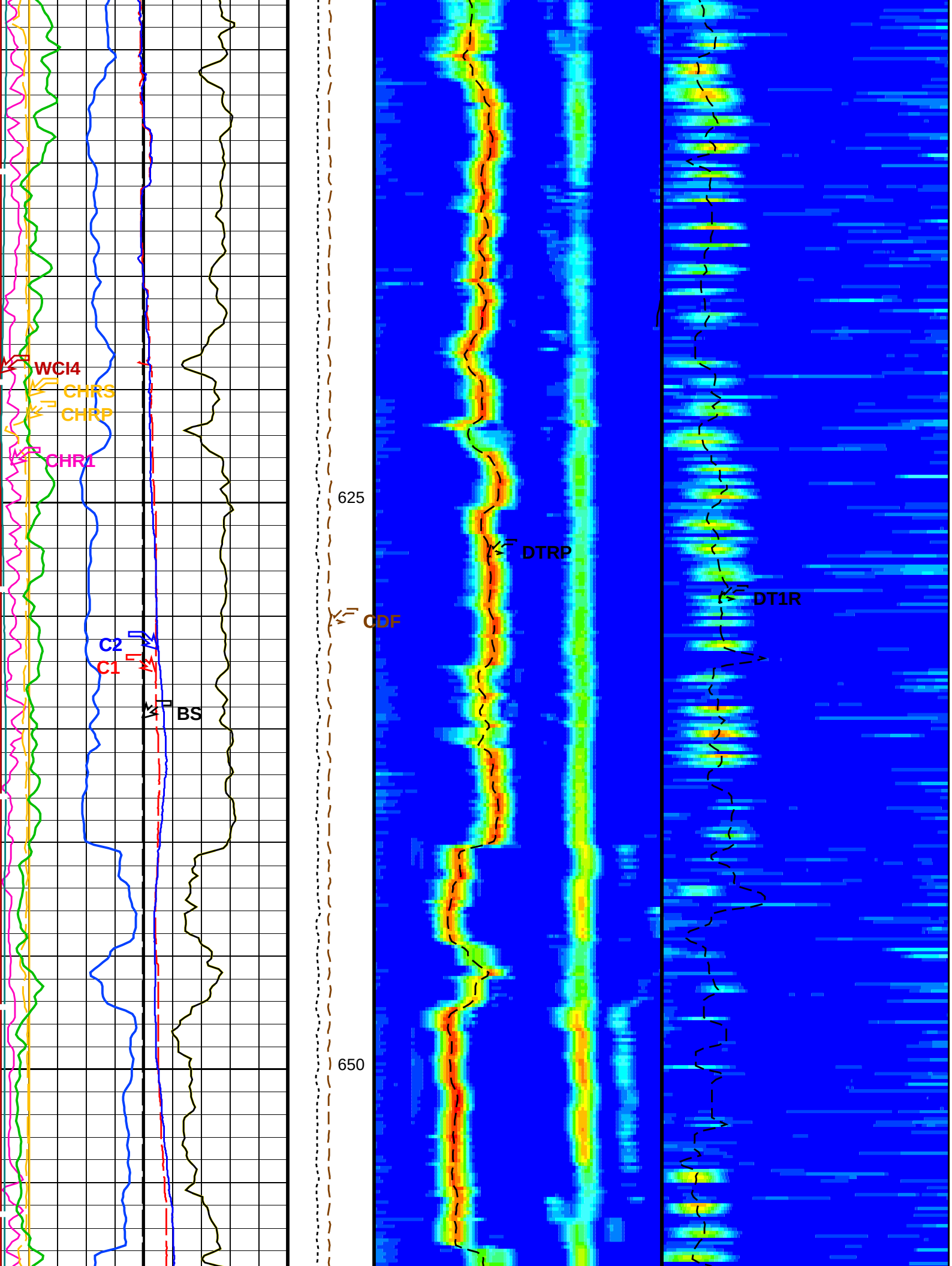

325
350
375

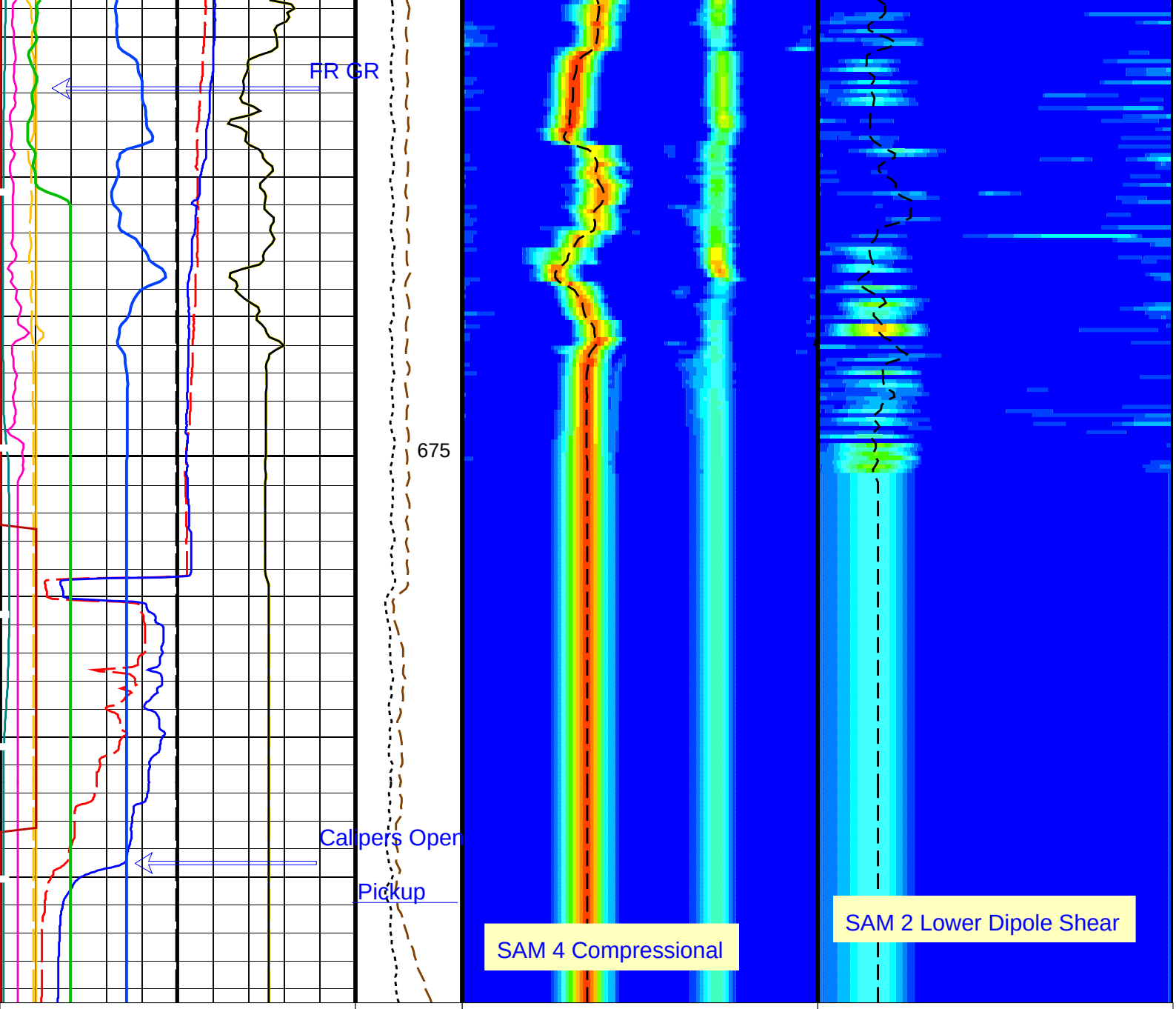

400
425


450
475


500
525


550
575
600
TENS
SVEL
SDEVM
GR_EDTC
PR
PR


WCI4
CHRS
CHRP
CHR1
C2
C1
BS
625
CDF
650
DTRP
DT1R



Bit Size (BS) (IN) 0 – 20	Tension (TENS) (LBF) 10000 – 0	Delta−T Comp / RA − P & S (DTRP) (US/F) 40 – 240	Delta−T Shear / RA − Lower Dipole (DT1R) (US/F) 75 – 1200
Caliper 1 (C1) (IN) 0 – 20	Calibrated Downhole Force (CDF) (LBF) 3000 – 0	Delta−T Shear / RA − P & S (DTRS) (US/F) 40 – 240	Min Amplitude Max; Rec.Array L.Dipole Slow Proj. CVDL (SPR1) (US/F) 75 – 1200
Caliper 2 (C2) (IN) 0 – 20		Min Amplitude Max; Rec.Array P&S Slow Proj. CVDL (SPR4) (US/F) 40 – 240	
Poisson's Ratio (PR) (−−−−) 0 – 0.5			
Sonde Deviation (SDEVM) (DEG) 0 – 10			
Poisson's Ratio (PR) (−−−−) 0 – 0.5			
Gamma Ray (GR, EDTC)			

Main Log

Sea Floor Depth Reference

Gamma Ray (GR_EDTC)

0	(GAPI)	100

Sonic Velocity (SVEL)

1000	(M/S)	6000

Peak Coherence / RA − Lower Dipole (CHR1)

0	(−−−−)	10

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

0	(−−−−)	10

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

−1	(−−−−)	9

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

0	(−−−−)	10

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value	
	MEST−B: Micro Electrical Scanner − B (Slim)		
AFMO	Accelerometer Filtering Mode	MOVING_AVERAGE	
ICMO	Inclinometry Computation Mode	AUTOMATIC_SELECTION	
MDEC	Magnetic Field Declination	−5.1425	DEG
	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	87	US/F
COUL	Label Slowness Upper Limit − Monopole P&S Compressional	210	US/F
DDE1	Digitizing Delay 1	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	1200	US/F
DSI1	Digitizer Sample Interval 1	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	195	US/F
DTSS	Shear Delta−T Source for DTSM Channel	UPPER_DIPOLE	
DWC1	Digitizer Word Count 1	512	
DWC4	Digitizer Word Count 4	512	
DWCX	Digitizer Word Count X	512	
FILG	Label Fill Gap Control − Monopole P&S	COMP_SHEAR	
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	
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	LFD_EVEN	
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	
SAS1	STC Sonic Array Status − Lower Dipole	255	
SAS4	STC Sonic Array Status − Monopole P&S	255	
SBO1	STC Search Band Offset − Lower Dipole	3000	US
SBO4	STC Search Band Offset − Monopole P&S	500	US
SBR4	STC Baseline Removal − Monopole P&S	ON	

SBR4	STC Baseline Removal − Monopole P&S	ON	
SBW1	STC Search Bandwidth − Lower Dipole	8000	US
SBW4	STC Search Bandwidth − Monopole P&S	2000	US
SFC1	STC Formation Character − Lower Dipole	SELECTABLE	
SFC4	STC Formation Character − Monopole P&S	SELECTABLE	
SFM1	STC Filter − Lower Dipole	B.3−1.5K	
SFM4	STC Filter − Monopole P&S	B3−20K	
SHLL	Label Slowness Lower Limit − Monopole P&S Shear	235	US/F
SHUL	Label Slowness Upper Limit − Monopole P&S Shear	240	US/F
SLL1	STC Slowness Lower Limit − Lower Dipole	75	US/F
SLL4	STC Slowness Lower Limit − Monopole P&S	40	US/F
SST1	STC Slowness Step − Lower Dipole	4	US/F
SST4	STC Slowness Step − Monopole P&S	2	US/F
SSW1	STC Source Waveform − Lower Dipole	WF_SAM1	
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	1200	US/F
SUL4	STC Slowness Upper Limit − Monopole P&S	240	US/F
SWD1	STC Slowness Width − Lower Dipole	40	US/F
SWD4	STC Slowness Width − Monopole P&S	10	US/F
TBF1	STC Time for Baseline Fill − Lower Dipole	0	US
TBF4	STC Time for Baseline Fill − Monopole P&S	300	US
TLL1	STC Time Lower Limit − Lower Dipole	600	US
TLL4	STC Time Lower Limit − Monopole P&S	150	US
TST1	STC Time Step − Lower Dipole	200	US
TST4	STC Time Step − Monopole P&S	50	US
TUL1	STC Time Upper Limit − Lower Dipole	20440	US
TUL4	STC Time Upper Limit − Monopole P&S	3660	US
TWD1	STC Time Width − Lower Dipole	2000	US
TWD4	STC Time Width − Monopole P&S	1000	US
TWI1	STC Integration Time Window − Lower Dipole	1600	US
TWI4	STC Integration Time Window − Monopole P&S	500	US
TWSX	Transmitter Waveform Select X	0	
WFM4	Waveform Mode 4	W1	
	EDTC−B: Enhanced DTS Cartridge		
BHS	Borehole Status	OPEN	
	DIR: Directional Survey Computation		
SPVD	TVD of Starting Point	0	M
TIMD	Along−hole depth of Tie−in Point	0	M
TIVD	TVD of Tie−in Point	0	M
	System and Miscellaneous		
BS	Bit Size	9.875	IN
DO	Depth Offset for Playback	−4711.0	M
PP	Playback Processing	RECOMPUTE	

Format: DSST_P_S_LOWER_VDL_COLOR Vertical Scale: 1:200 Graphics File Created: 27−Jul−2014 05:31

OP System Version: 19C0−187

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

Input DLIS Files

DEFAULT	FMS_DSI_058PUP	FN:80	PRODUCER	27−Jul−2014 03:51	5405.5 M	4757.9 M

Output DLIS Files

DEFAULT	FMS_DSI_060PUP	FN:82	PRODUCER	27−Jul−2014 05:31		

Company: Lamont Doherty Earth Observatory Well: Expedition 351, Site U1438F

Input DLIS Files

DEFAULT	FMS_DSI_058PUP	FN:80	PRODUCER	27−Jul−2014 03:51	5405.5 M	4757.9 M

Output DLIS Files

DEFAULT	FMS_DSI_060PUP	FN:82	PRODUCER	27−Jul−2014 05:31	694.5 M	46.9 M

OP System Version: 19C0−187

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

Changed Parameter Summary

DLIS Name	New Value	Previous Value	Depth & Time
COLL	120 US/F	87 US/F	159.4 05:33:44

PIP SUMMARY

Time Mark Every 60 S

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

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

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

Peak Coherence / RA − Upper Dipole (CHR2)
0 (−−−−) 10

Gamma Ray (GR_EDTC)
0 (GAPI) 100

Poisson's Ratio (PR)
0 (−−−−) 0.5

Sonic Velocity (SVEL)
1000 (M/S) 6000

Sonde Deviation (SDEVM)
0 (DEG) 10

Poisson's Ratio (PR)
0 (−−−−) 0.5

Caliper 1 (C1)
0 (IN) 20

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

Caliper 2 (C2)
0 (IN) 20

Calibrated Downhole Force (CDF) (LBF)
3000 0

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

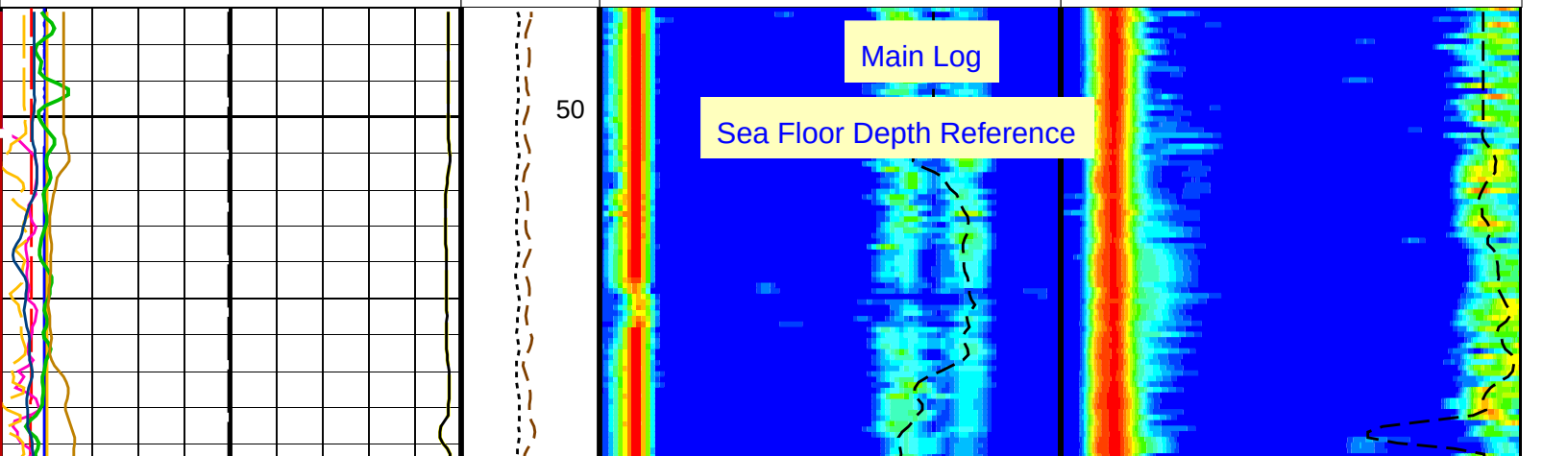
Min Amplitude Max
Rec.Array U.Dipole Slow Proj. CVDL (SPR2)
75 (US/F) 1200

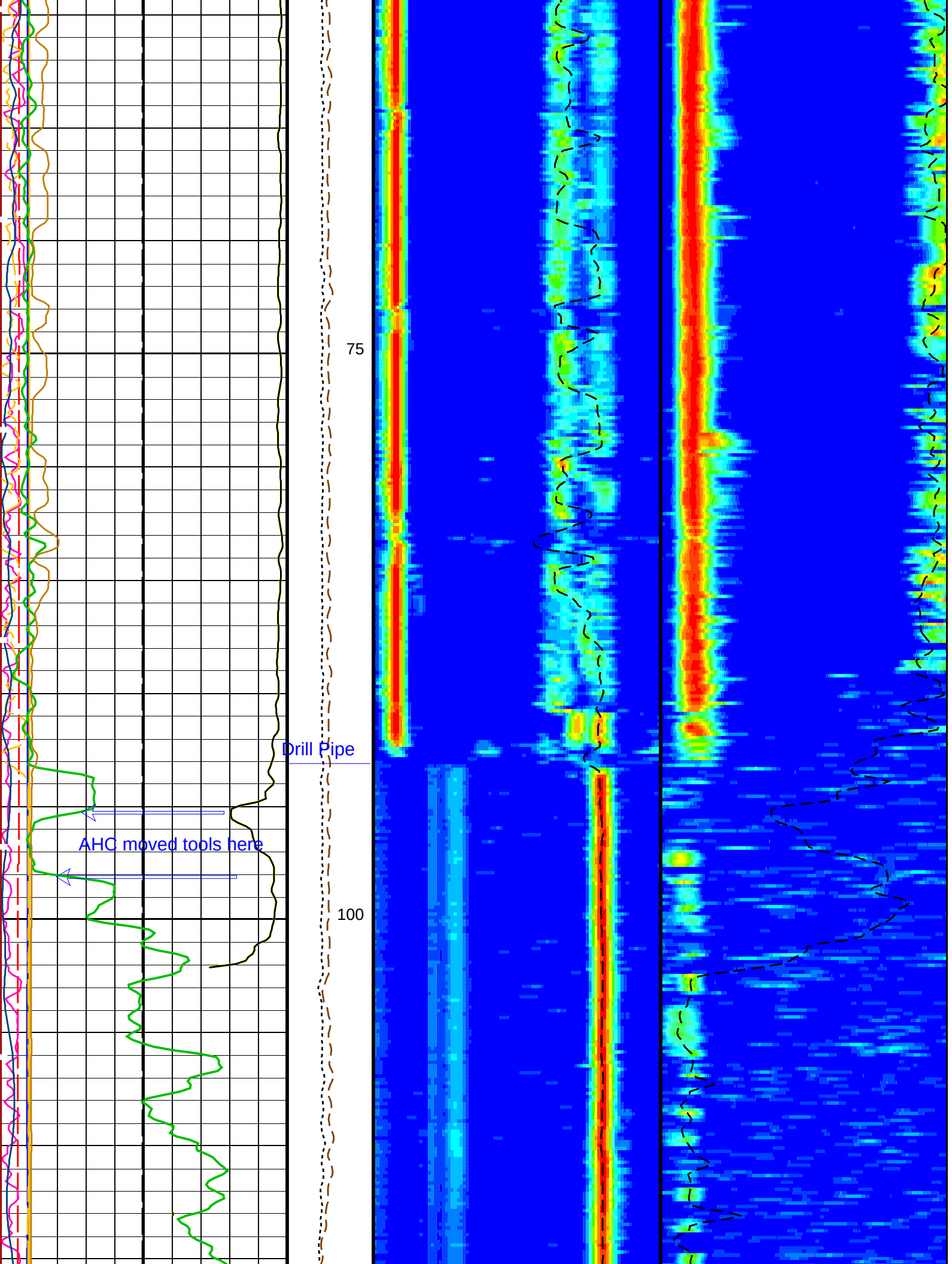
Bit Size (BS)
0 (IN) 20

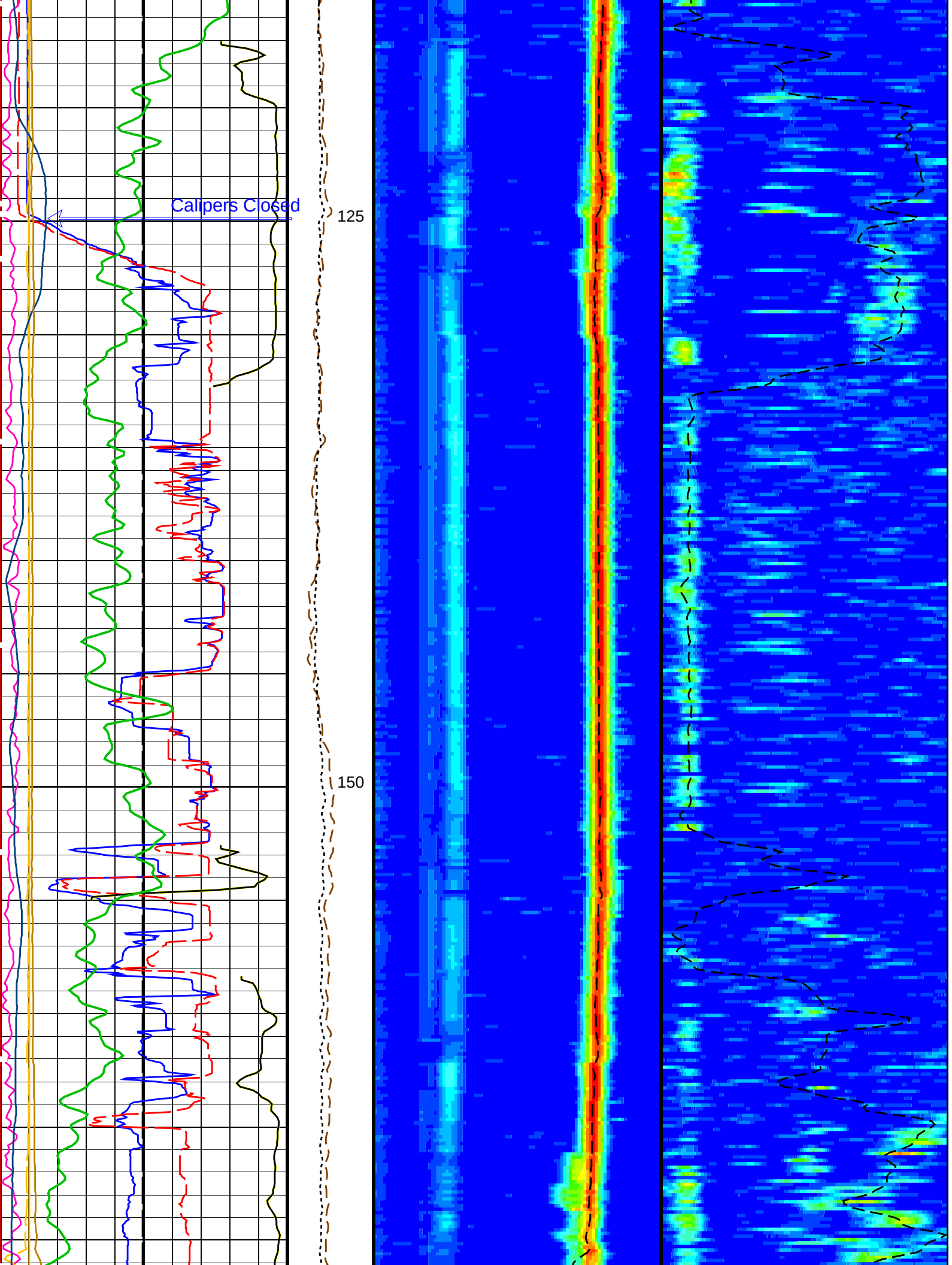
Tension (TENS) (LBF)
10000 0

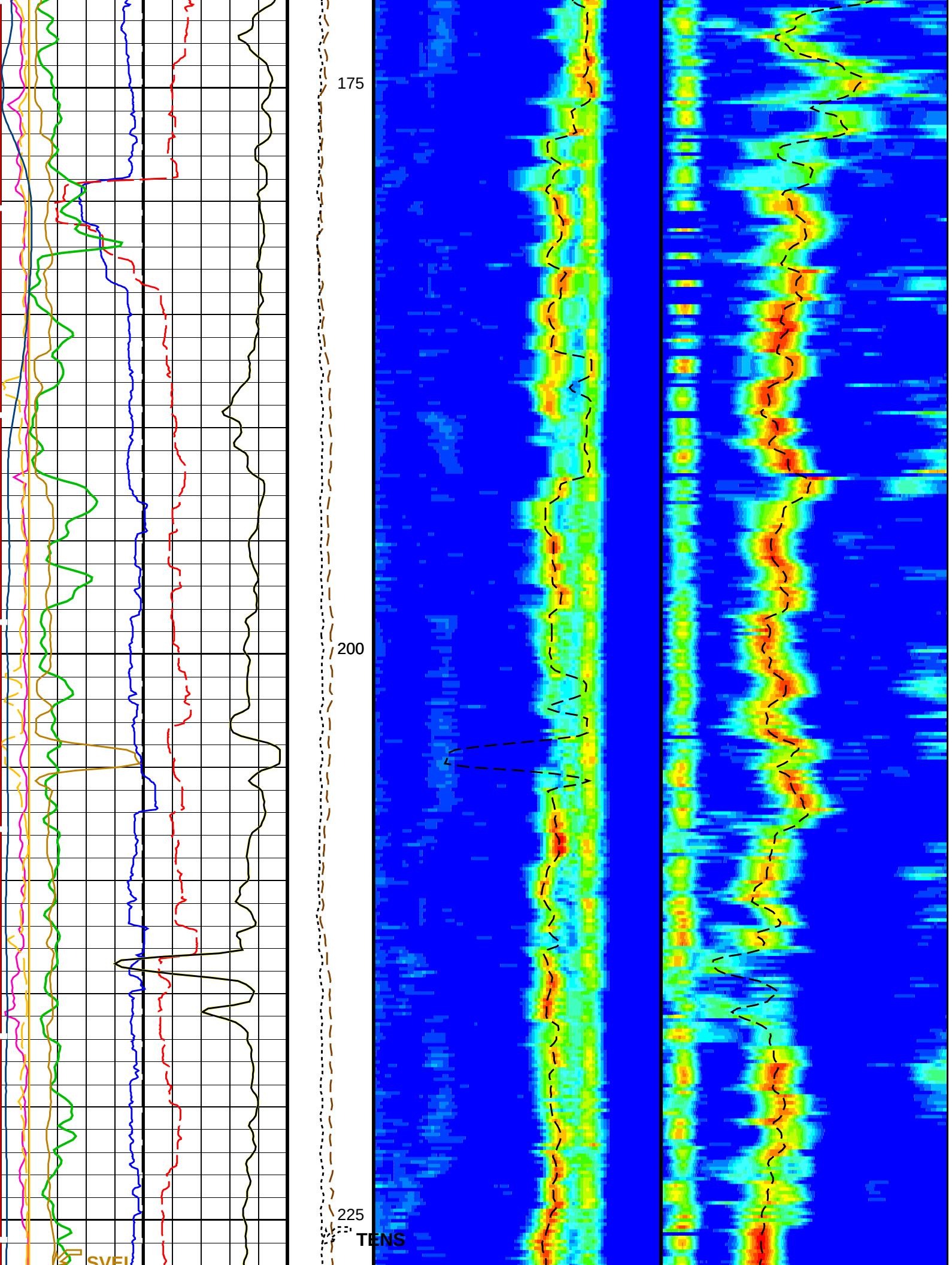
Delta−T Comp / RA − P & S (DTRP)
40 (US/F) 240

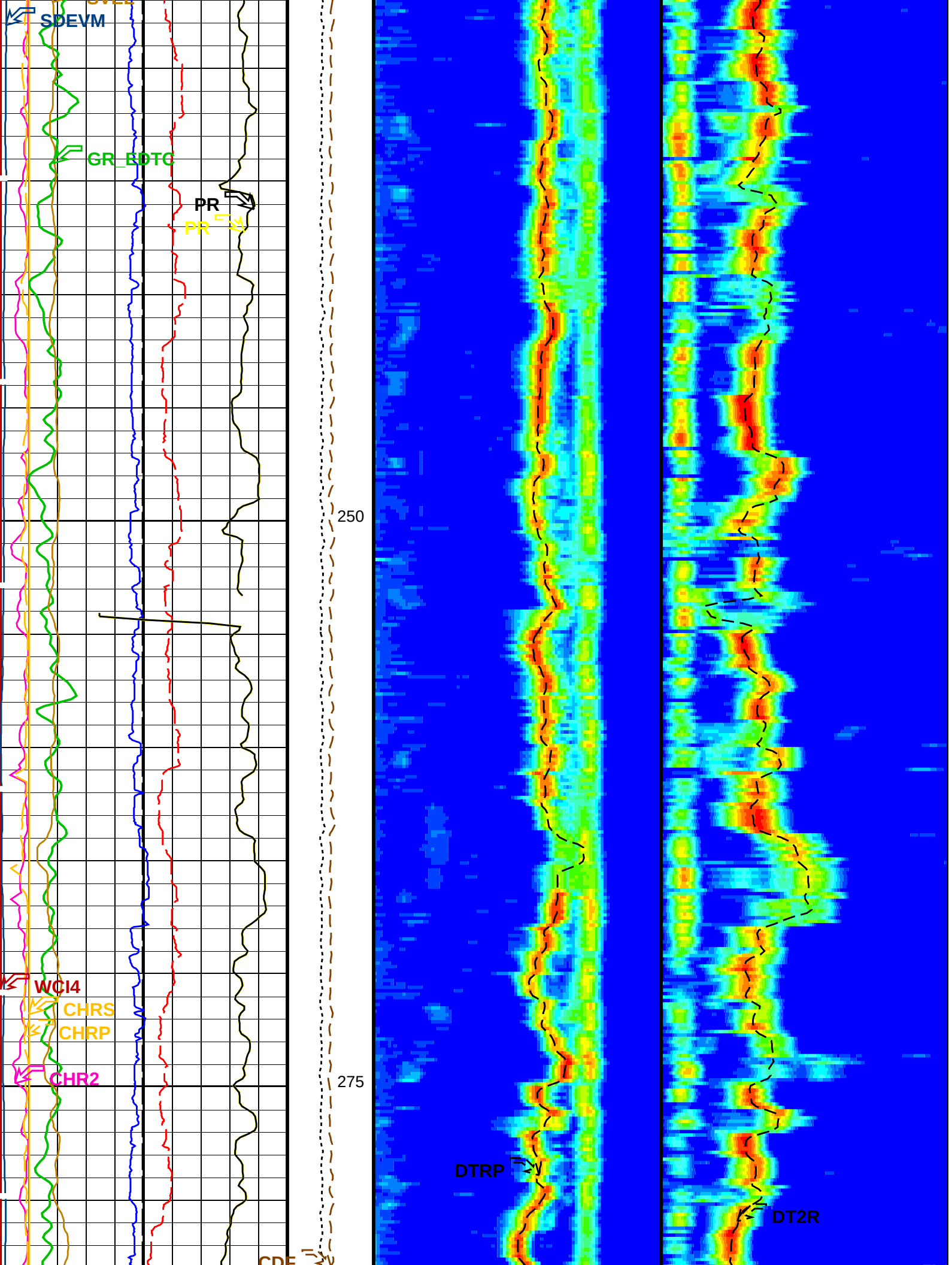
Delta−T Shear / RA − Upper Dipole (DT2R)
75 (US/F) 1200

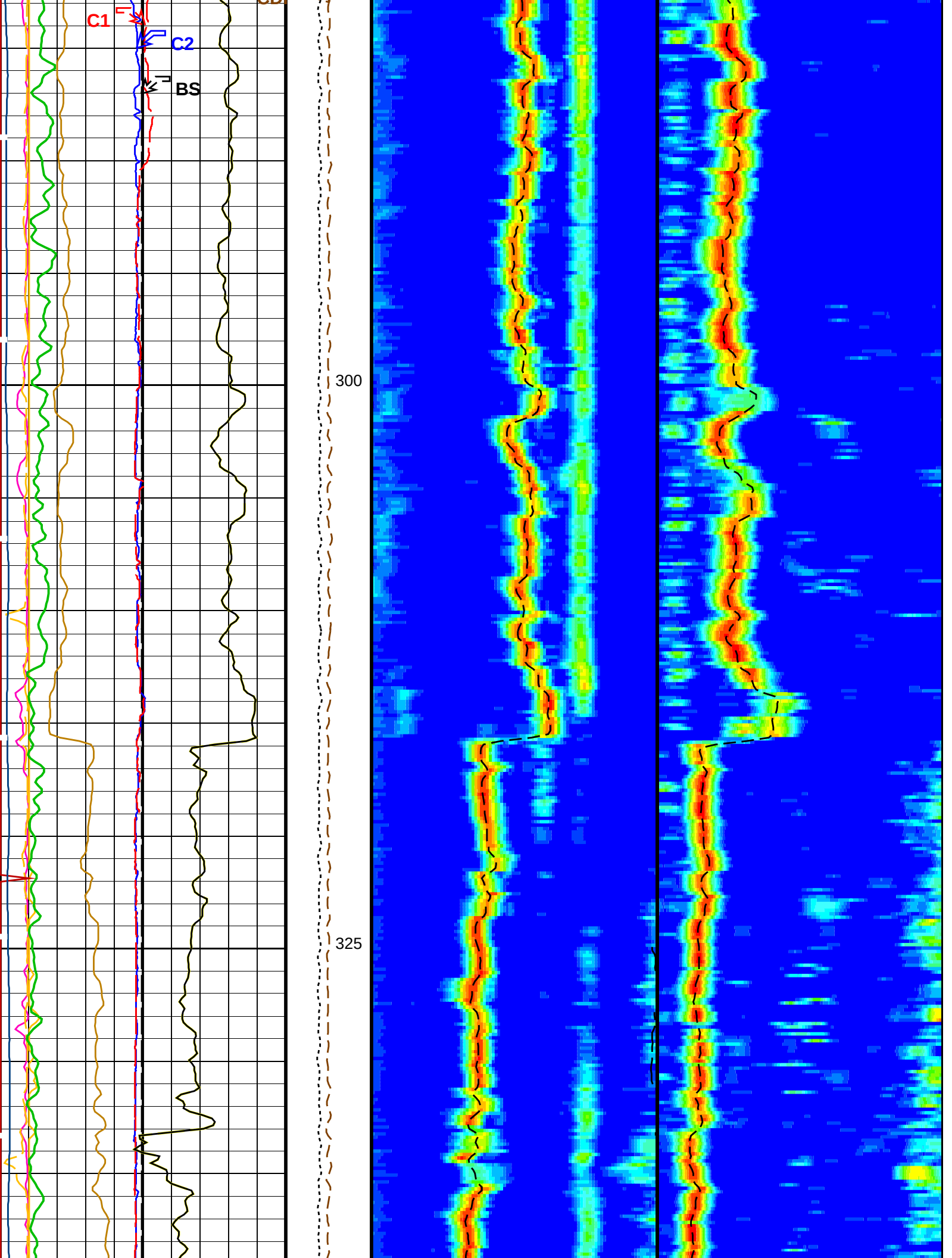


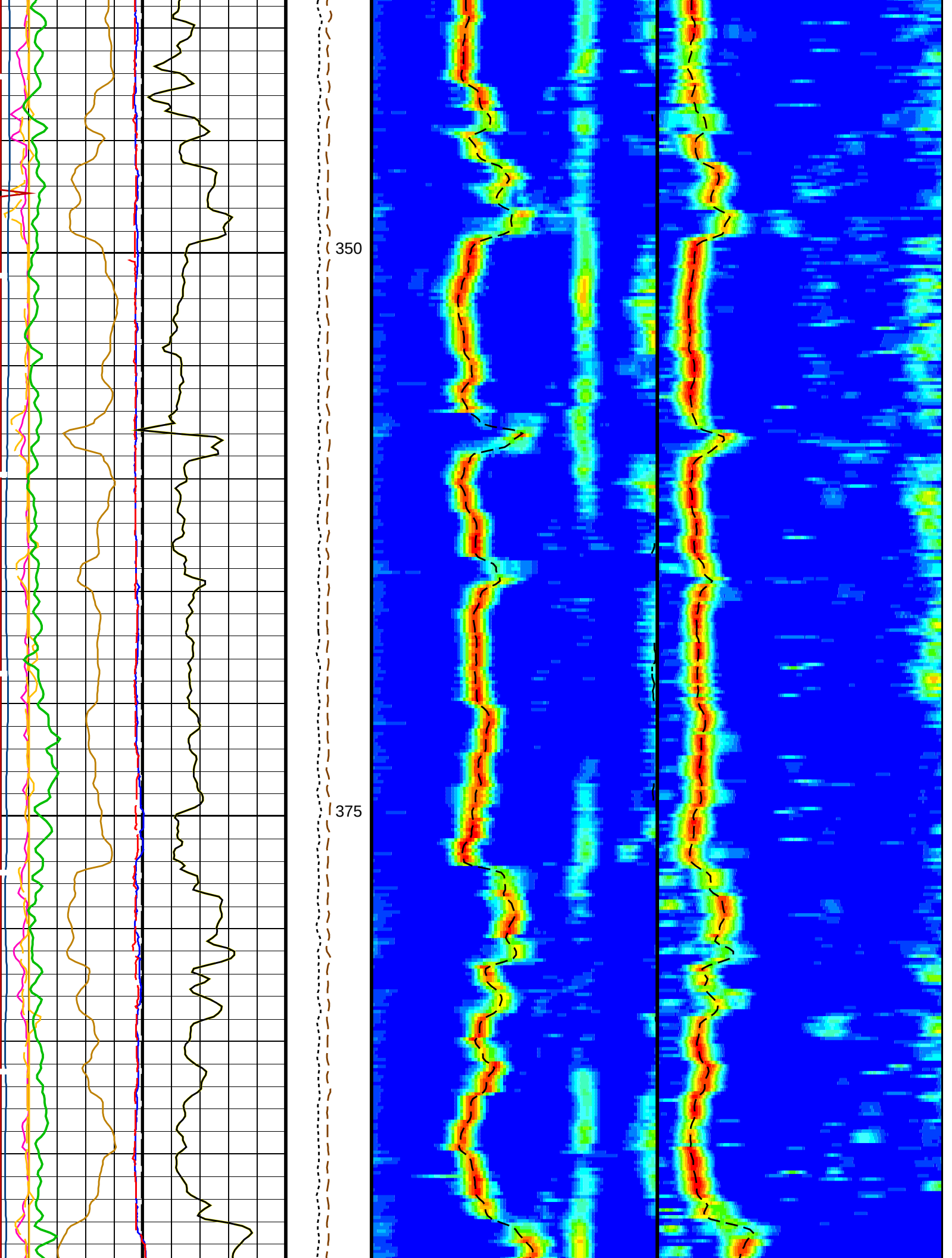

75
Drill Pipe
AHC moved tools here
100

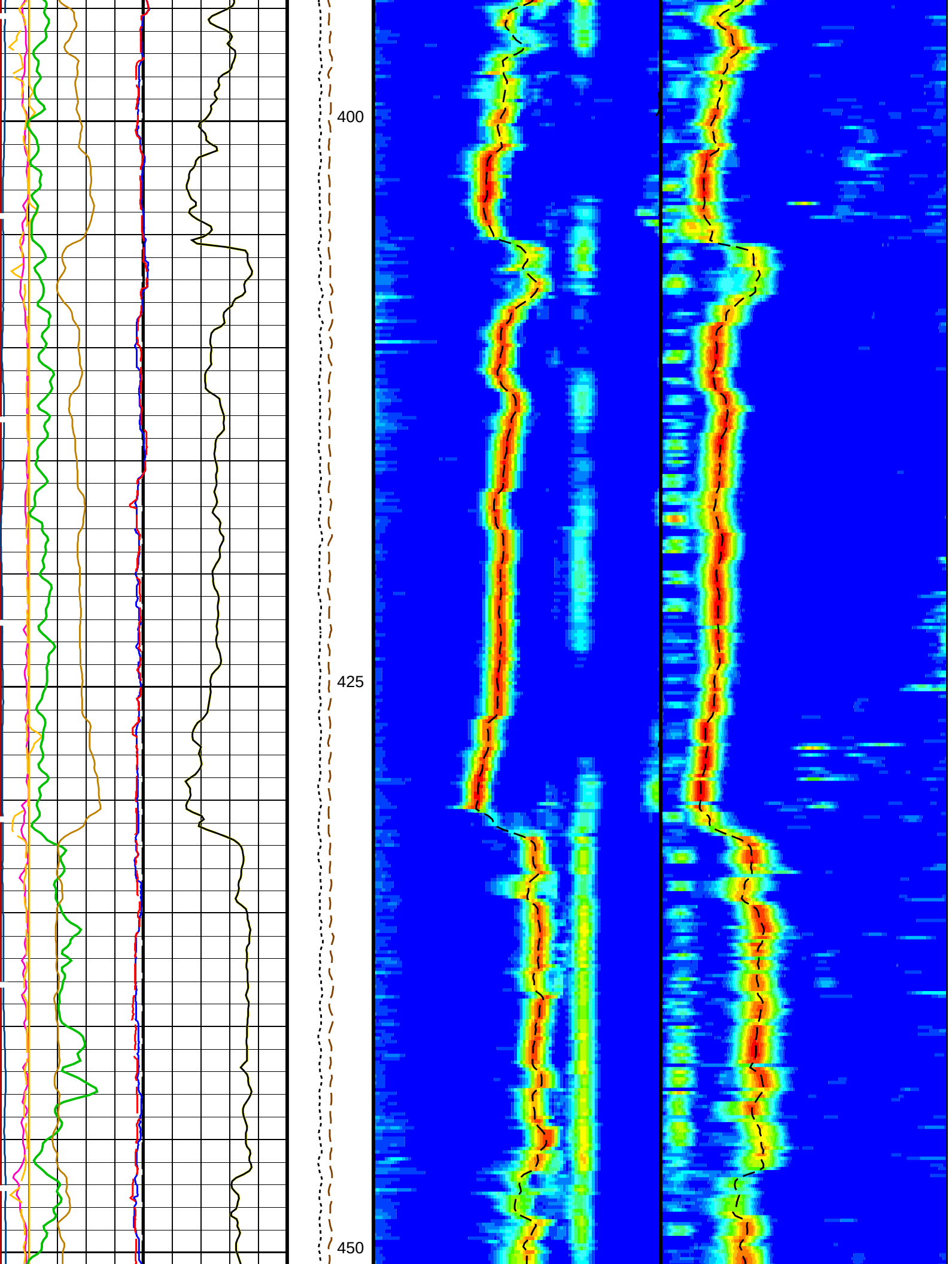

Calipers Closed
125
150

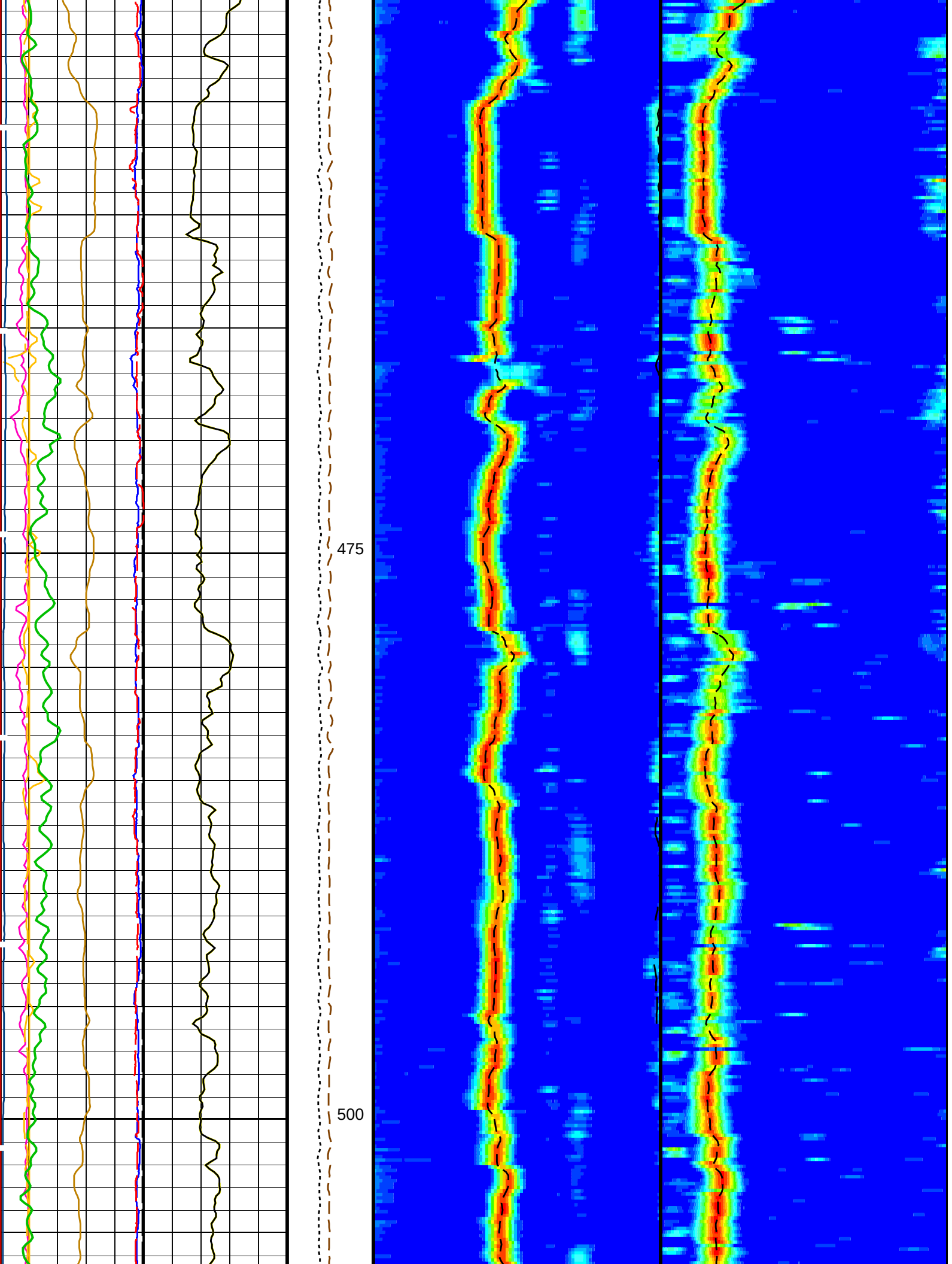

175
200
225
TENS

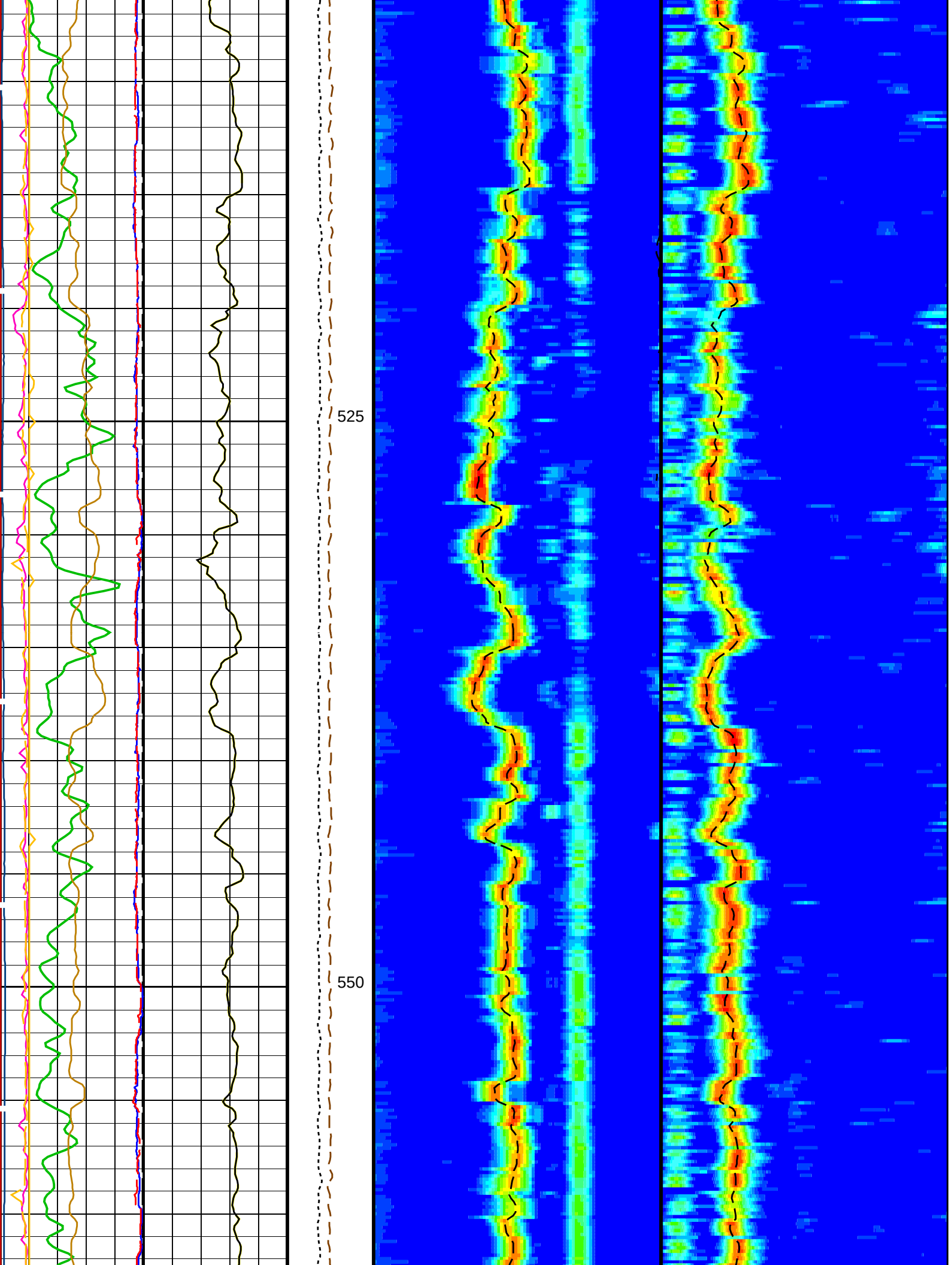

SDEVM
GR_EDTC
PR
PR
250
WCI4
CHRS
CHRP
CHR2
275
DTRP
DT2R
CDF

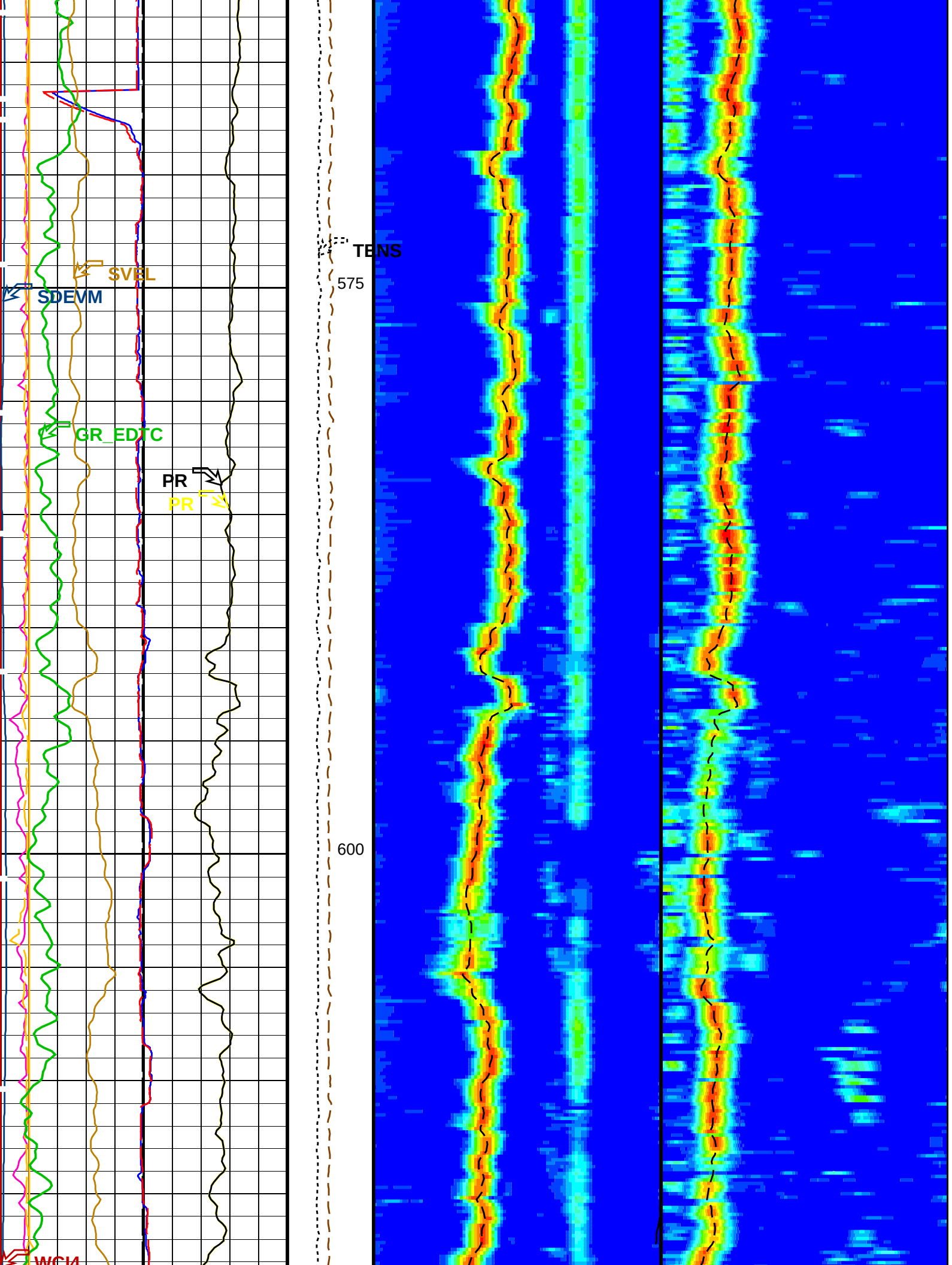

C1
C2
BS
300
325

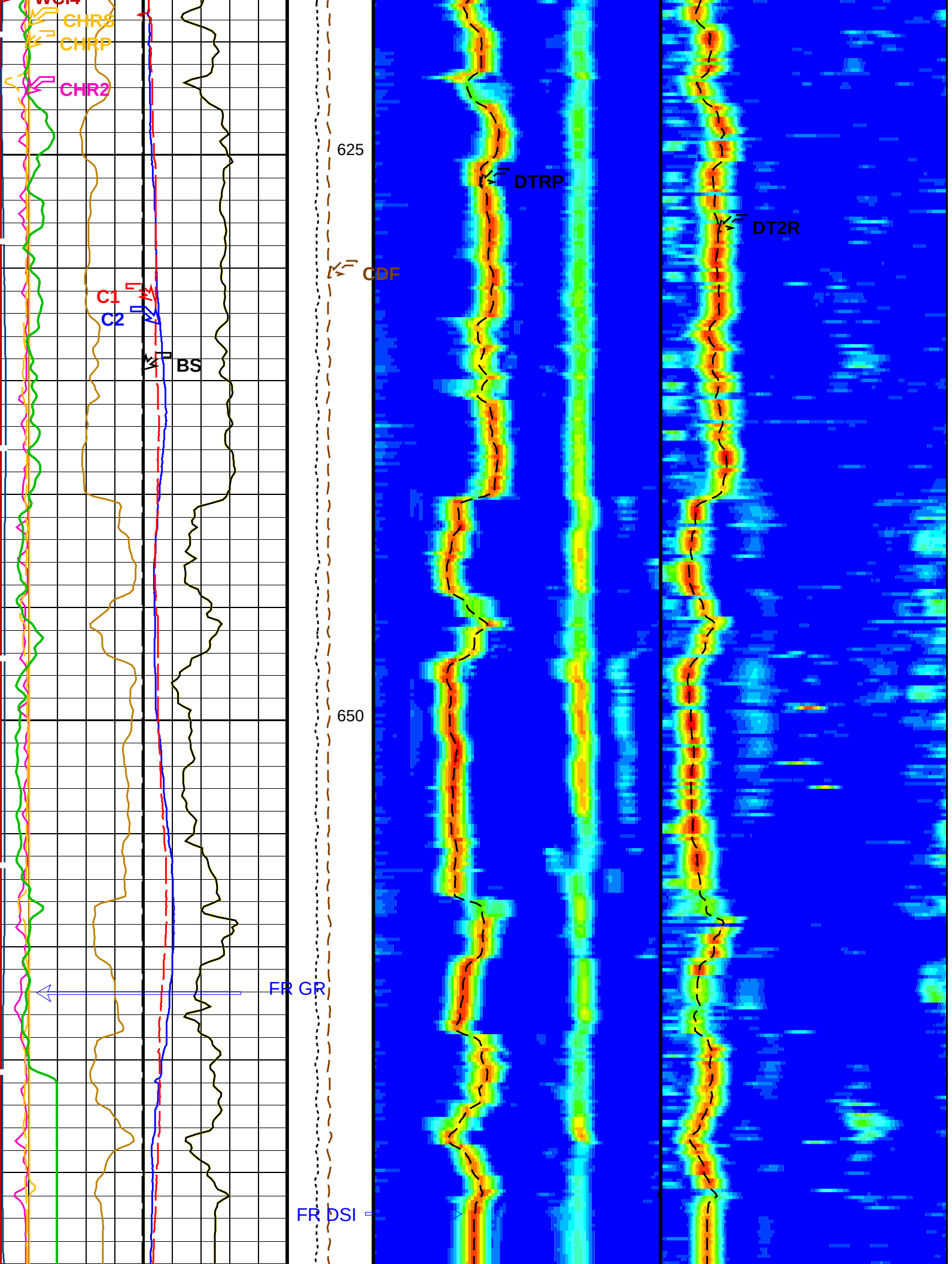

350
375

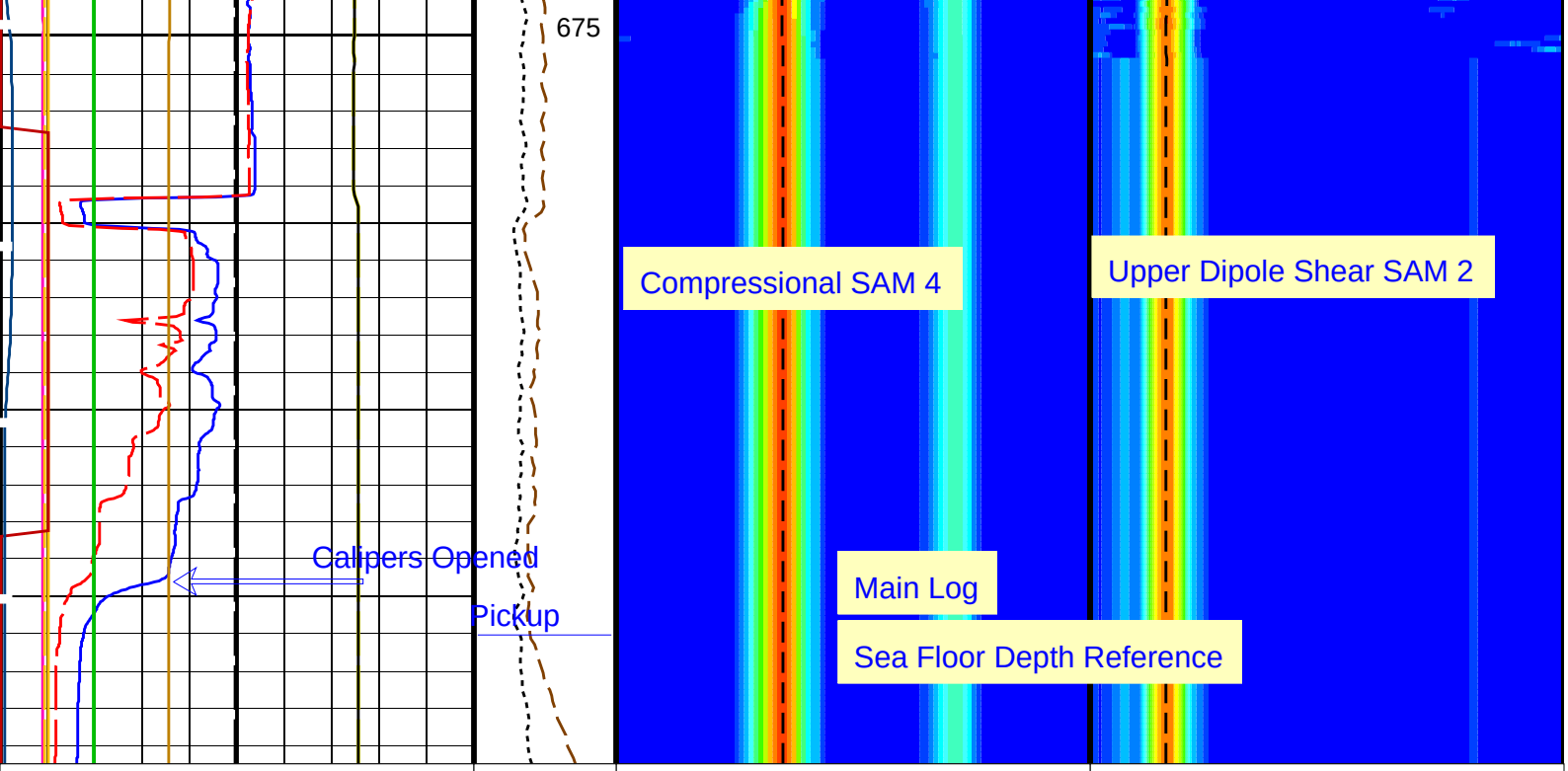

400
425
450


475
500


525
550


TENS
SVEL
SDEVM
575
GR_EDTC
PR
PR
600


WCI4
CHRS
CHRP
CHR2
C1
C2
BS
625
650
CDF
DTRP
DT2R
FR GR
FR DSI



Bit Size (BS) 0 (IN) 20	Tension (TENS) (LBF) 10000 0	Delta−T Comp / RA − P & S (DTRP) 40 (US/F) 240
Caliper 2 (C2) 0 (IN) 20	Calibrated Downhole Force (CDF) (LBF) 3000 0	Delta−T Shear / RA − P & S (DTRS) 40 (US/F) 240
Caliper 1 (C1) 0 (IN) 20		Min Amplitude Max Rec.Array P&S Slow Proj. CVDL (SPR4) 40 (US/F) 240

Poisson's Ratio (PR) 0 (−−−−) 0.5
Sonde Deviation (SDEVM) 0 (DEG) 10
Sonic Velocity (SVEL) 1000 (M/S) 6000
Poisson's Ratio (PR) 0 (−−−−) 0.5
Gamma Ray (GR_EDTC) 0 (GAPI) 100
Peak Coherence / RA − Upper Dipole (CHR2) 0 (−−−−) 10
Peak Coherence / RA − P & S Comp (CHRP) 0 (−−−−) 10
Peak Coherence / RA − P & S Shear (CHRS) −1 (−−−−) 9
Waveform Data Copy Indicator 4 − Monopole P&S (WCI4)

Delta−T Shear / RA − Upper Dipole (DT2R) 75 (US/F) 1200
Min Amplitude Max Rec.Array U.Dipole Slow Proj. CVDL (SPR2) 75 (US/F) 1200

0 (----) 10

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value	
	MEST−B: Micro Electrical Scanner − B (Slim)		
AFMO	Accelerometer Filtering Mode	MOVING_AVERAGE	
ICMO	Inclinometry Computation Mode	AUTOMATIC_SELECTION	
MDEC	Magnetic Field Declination	−5.1425	DEG
	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	87	US/F
COUL	Label Slowness Upper Limit − Monopole P&S Compressional	210	US/F
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	1200	US/F
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	195	US/F
DTSS	Shear Delta−T Source for DTSM Channel	UPPER_DIPOLE	
DWC2	Digitizer Word Count 2	512	
DWC4	Digitizer Word Count 4	512	
DWCX	Digitizer Word Count X	512	
FILG	Label Fill Gap Control − Monopole P&S	COMP_SHEAR	
LFC	Label Formation Character − Monopole P&S	DYNAMIC	
MCS	Mean Casing Slowness	57	US/F
MTXG	Monopole Transmitter Geometry	186	IN
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
SAM2	DSST Sonic Acquisition Mode 2 − Upper Dipole Mode	ODD	
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	
SAS2	STC Sonic Array Status − Upper Dipole	255	
SAS4	STC Sonic Array Status − Monopole P&S	255	
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	
SBW2	STC Search Bandwidth − Upper Dipole	8000	US
SBW4	STC Search Bandwidth − Monopole P&S	2000	US
SFC2	STC Formation Character − Upper Dipole	SELECTABLE	
SFC4	STC Formation Character − Monopole P&S	SELECTABLE	
SFM2	STC Filter − Upper Dipole	B1−3K	
SFM4	STC Filter − Monopole P&S	B3−20K	
SHLL	Label Slowness Lower Limit − Monopole P&S Shear	235	US/F
SHUL	Label Slowness Upper Limit − Monopole P&S Shear	240	US/F
SLL2	STC Slowness Lower Limit − Upper Dipole	75	US/F
SLL4	STC Slowness Lower Limit − Monopole P&S	40	US/F
SST2	STC Slowness Step − Upper Dipole	4	US/F
SST4	STC Slowness Step − Monopole P&S	2	US/F
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
SUL2	STC Slowness Upper Limit − Upper Dipole	1200	US/F
SUL4	STC Slowness Upper Limit − Monopole P&S	240	US/F
SWD2	STC Slowness Width − Upper Dipole	40	US/F
SWD4	STC Slowness Width − Monopole P&S	10	US/F
TBF2	STC Time for Baseline Fill − Upper Dipole	0	US
TBF4	STC Time for Baseline Fill − Monopole P&S	300	US
TLL2	STC Time Lower Limit − Upper Dipole	600	US
TLL4	STC Time Lower Limit − Monopole P&S	150	US

TST2	STC Time Step − Upper Dipole	200	US
TST4	STC Time Step − Monopole P&S	50	US
TUL2	STC Time Upper Limit − Upper Dipole	20200	US
TUL4	STC Time Upper Limit − Monopole P&S	3660	US
TWD2	STC Time Width − Upper Dipole	2000	US
TWD4	STC Time Width − Monopole P&S	1000	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
WFM4	Waveform Mode 4	W1	
	EDTC−B: Enhanced DTS Cartridge		
BHS	Borehole Status	OPEN	
	DIR: Directional Survey Computation		
SPVD	TVD of Starting Point	0	M
TIMD	Along−hole depth of Tie−in Point	0	M
TIVD	TVD of Tie−in Point	0	M
	System and Miscellaneous		
BS	Bit Size	9.875	IN
DO	Depth Offset for Playback	−4711.0	M
PP	Playback Processing	RECOMPUTE	

Format: DSST_P_S_UPPER_VDL_COLOR Vertical Scale: 1:200 Graphics File Created: 27−Jul−2014 05:31

OP System Version: 19C0−187

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

Input DLIS Files

DEFAULT	FMS_DSI_058PUP	FN:80	PRODUCER	27−Jul−2014 03:51	5405.5 M	4757.9 M

Output DLIS Files

DEFAULT	FMS_DSI_060PUP	FN:82	PRODUCER	27−Jul−2014 05:31		

Company: Lamont Doherty Earth Observatory Well: Expedition 351, Site U1438F

Input DLIS Files

DEFAULT	Flip_FMS_DSI_047PUP		PRODUCER	27−Jul−2014 03:00	5401.4 M	4629.1 M

Output DLIS Files

DEFAULT	FMS_DSI_053PUP	FN:75	PRODUCER	27−Jul−2014 03:16	690.4 M	−81.8 M

OP System Version: 19C0−187

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

PIP SUMMARY

Time Mark Every 60 S

Waveform Data Copy Indicator 4 − Monopole P&S (WCI4)		
0	(−−−−)	10
Peak Coherence / RA − P & S Shear (CHRS)		
−1	(−−−−)	9
Peak Coherence / RA − P & S Comp (CHRP)		
0	(−−−−)	10
Gamma Ray (GR_EDTC)		
0	(GAPI)	100
Poisson's Ratio (PR)		

0 (----) 0.5

Sonic Velocity (SVEL)
1000 (M/S) 6000

Sonde Deviation (SDEVM)
0 (DEG) 10

Poisson's Ratio (PR)
0 (----) 0.5

Caliper 1 (C1)
0 (IN) 20

Caliper 2 (C2)
0 (IN) 20

Bit Size (BS)
0 (IN) 20

Sea Floor Depth Reference

Flipped Downlog

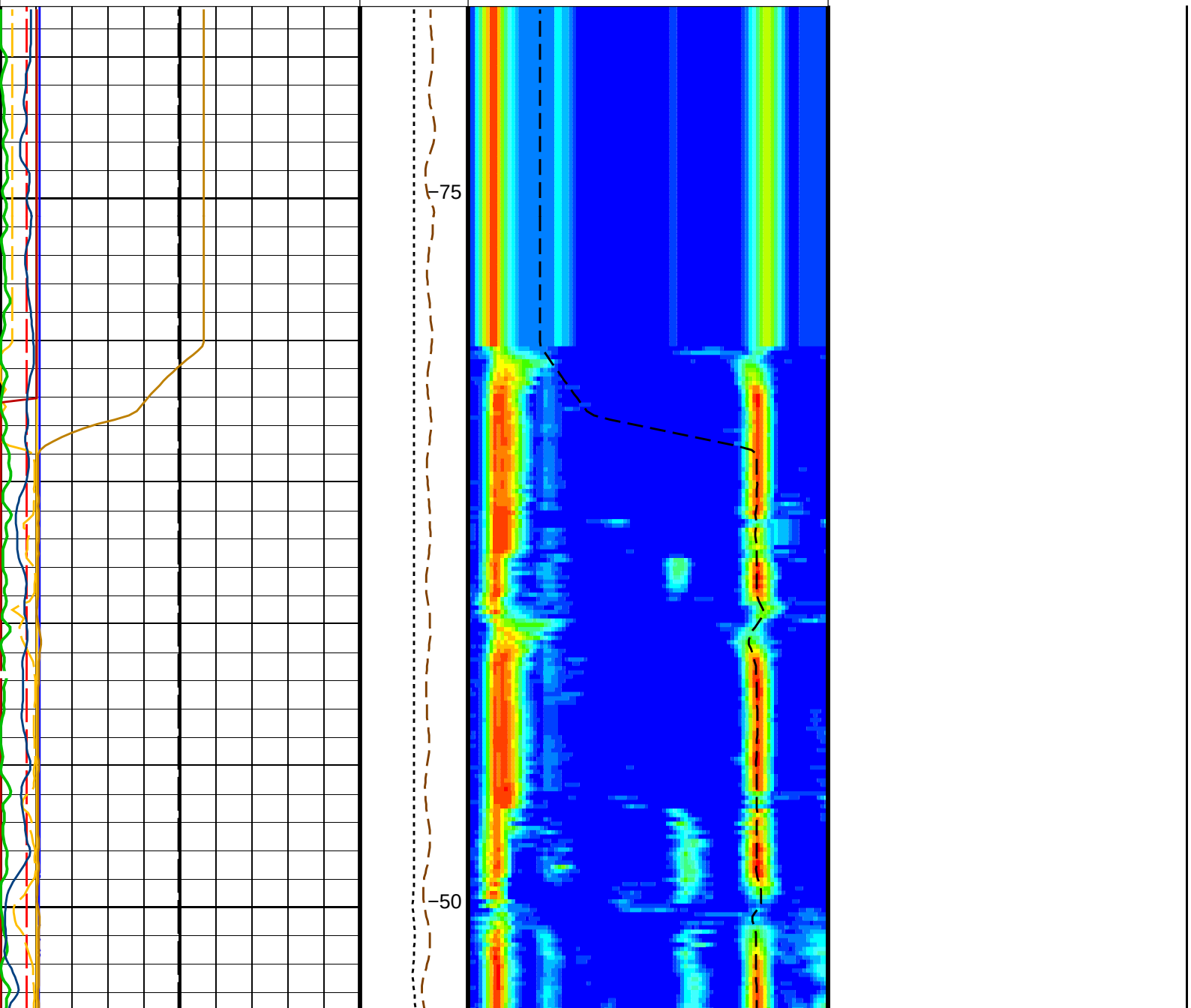
Min Amplitude Max
Rec.Array P&S Slow Proj. CVDL (SPR4)
40 (US/F) 240

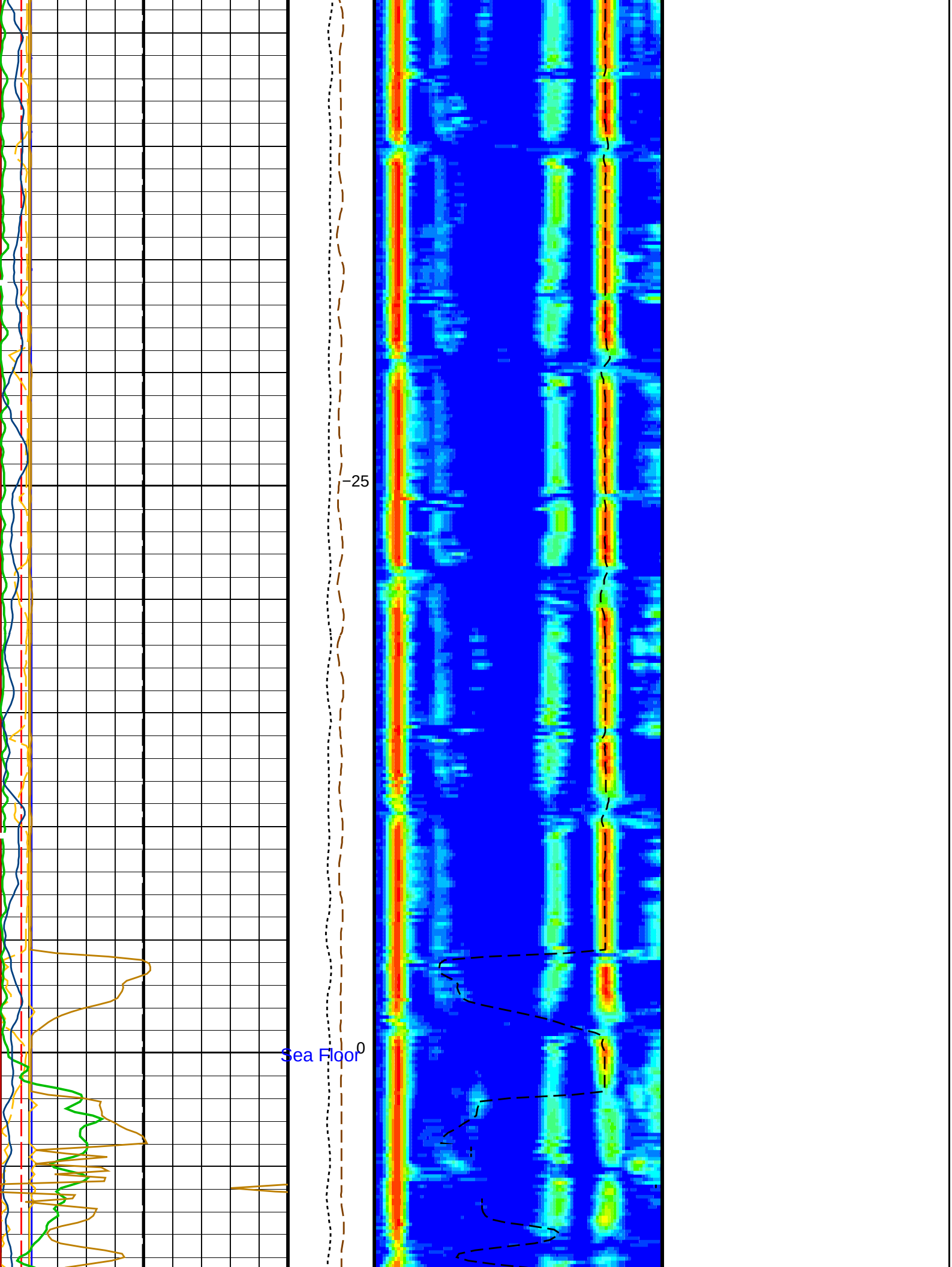
Calibrated Downhole Force (CDF) (LBF)
3000 0

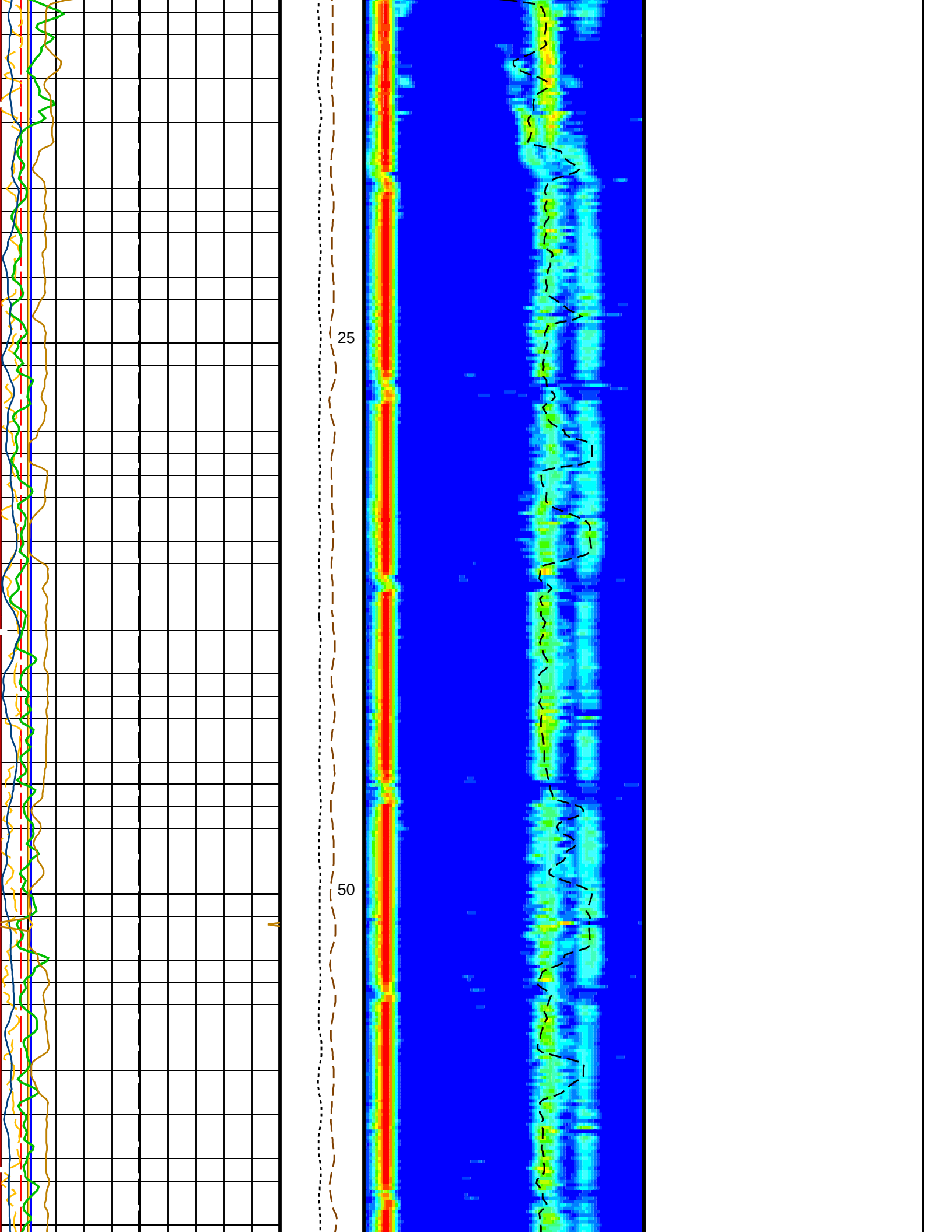
Tension (TENS) (LBF)
10000 0

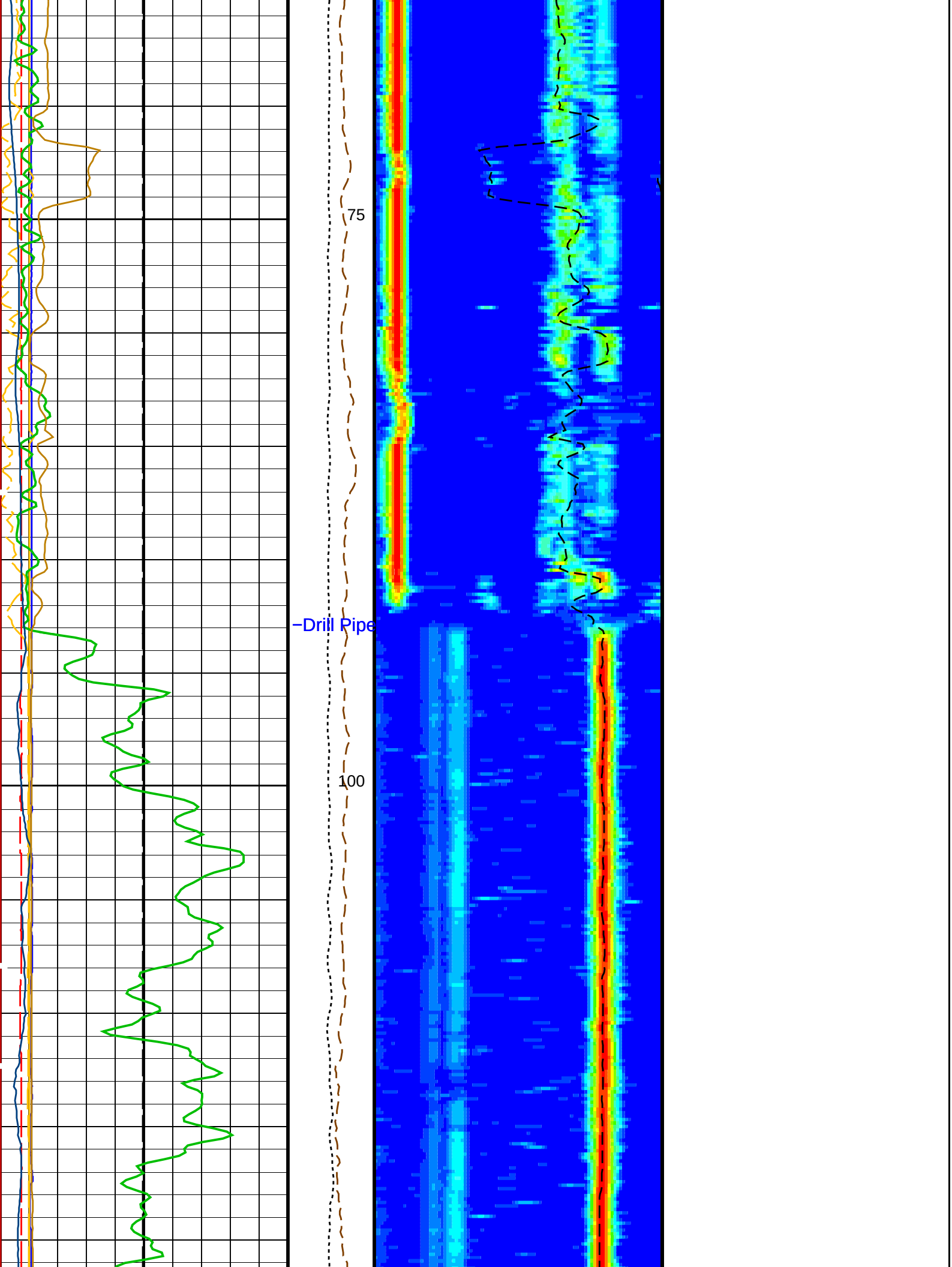
Delta-T Shear / RA - P & S (DTRS)
40 (US/F) 240

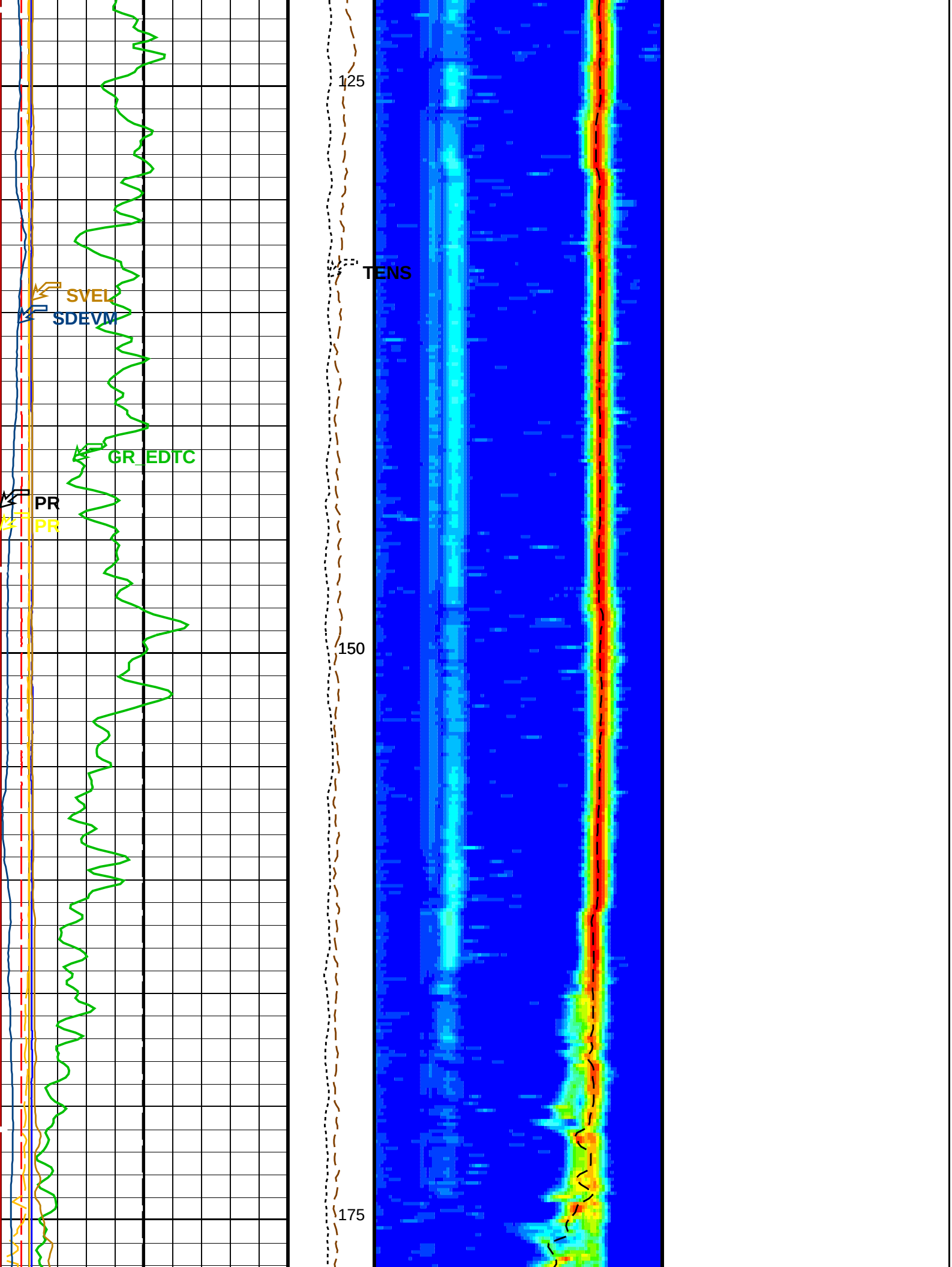
Delta-T Comp / RA - P & S (DTRP)
40 (US/F) 240

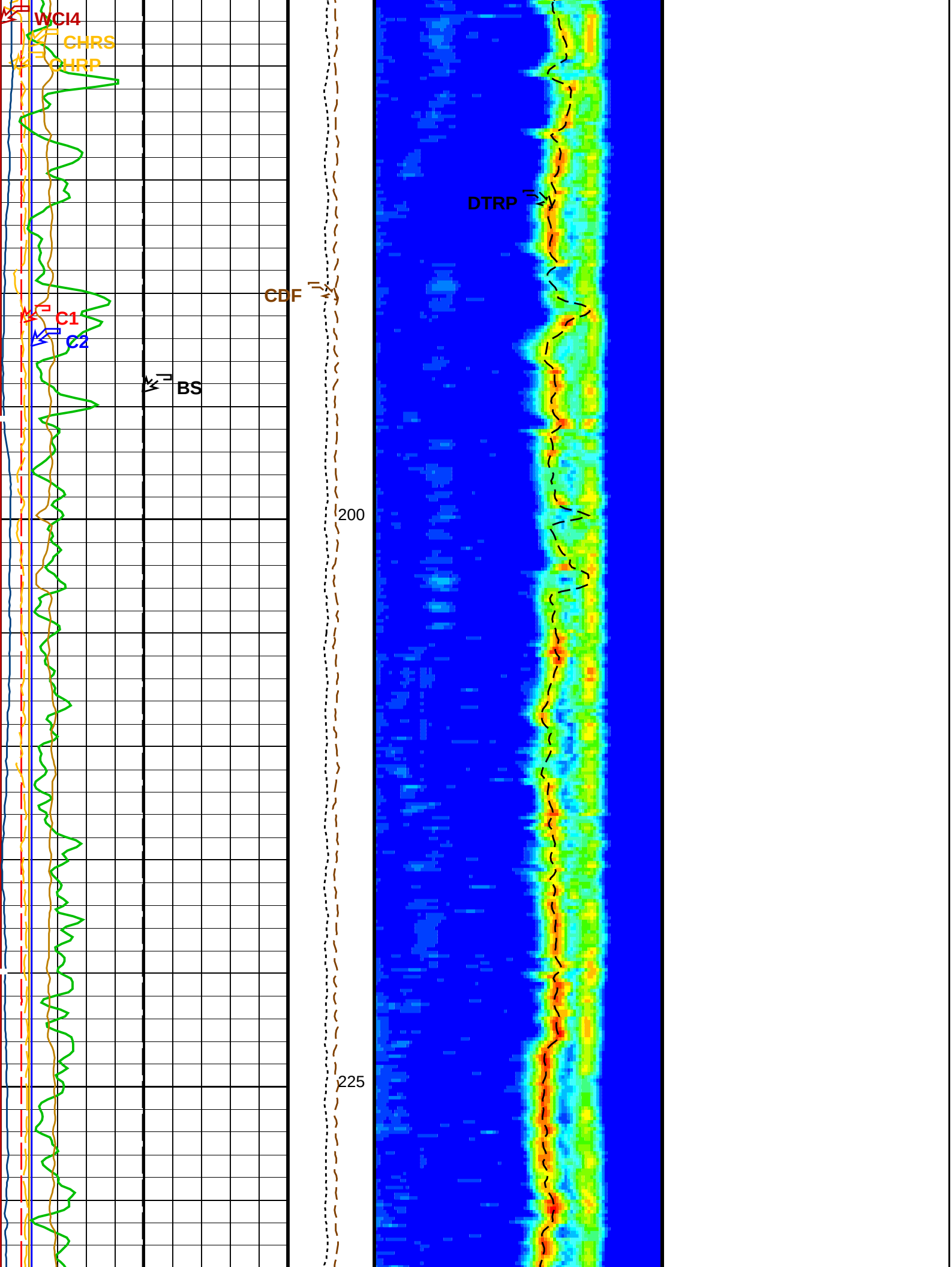


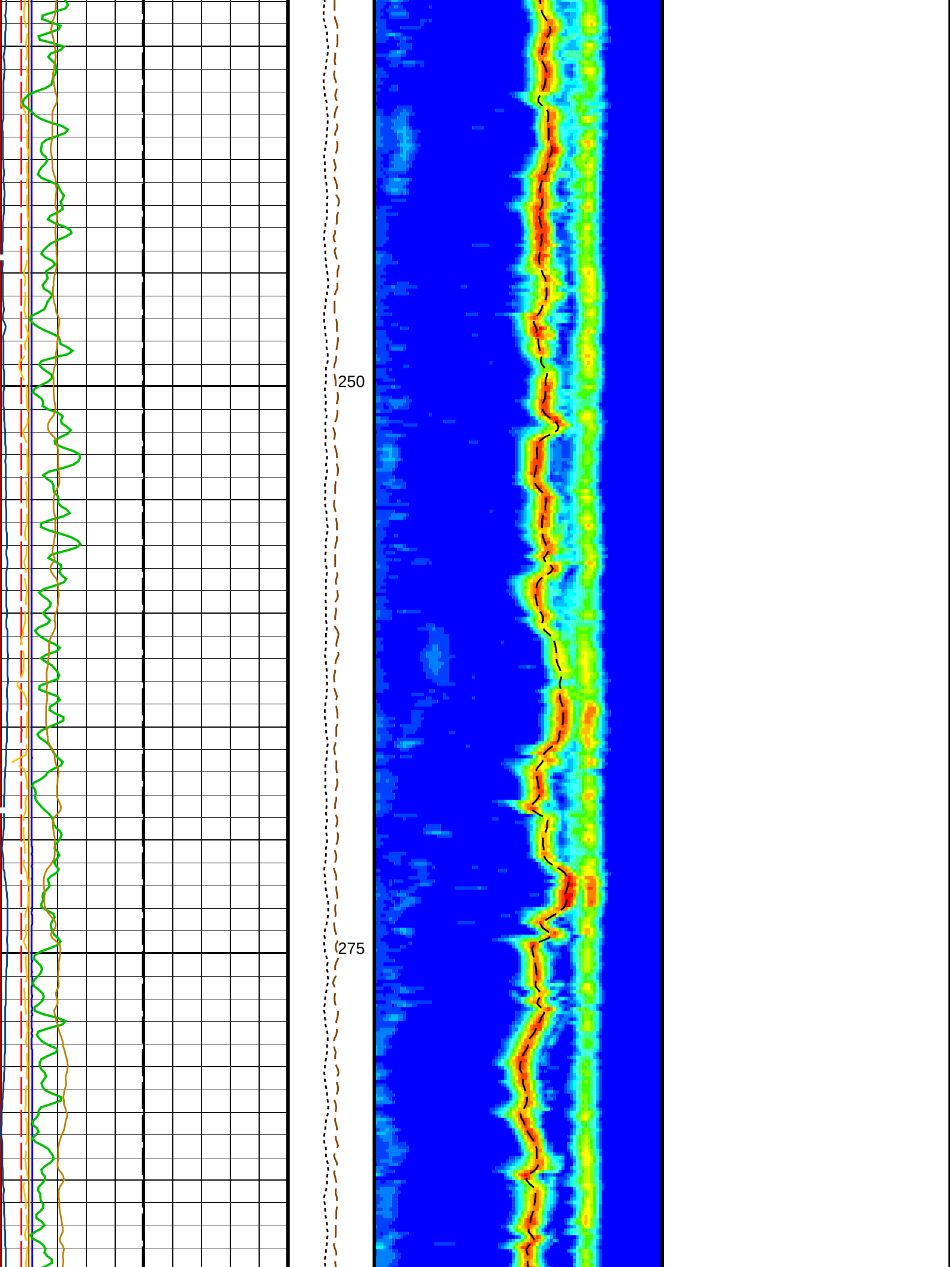

−25
Sea Floor
0

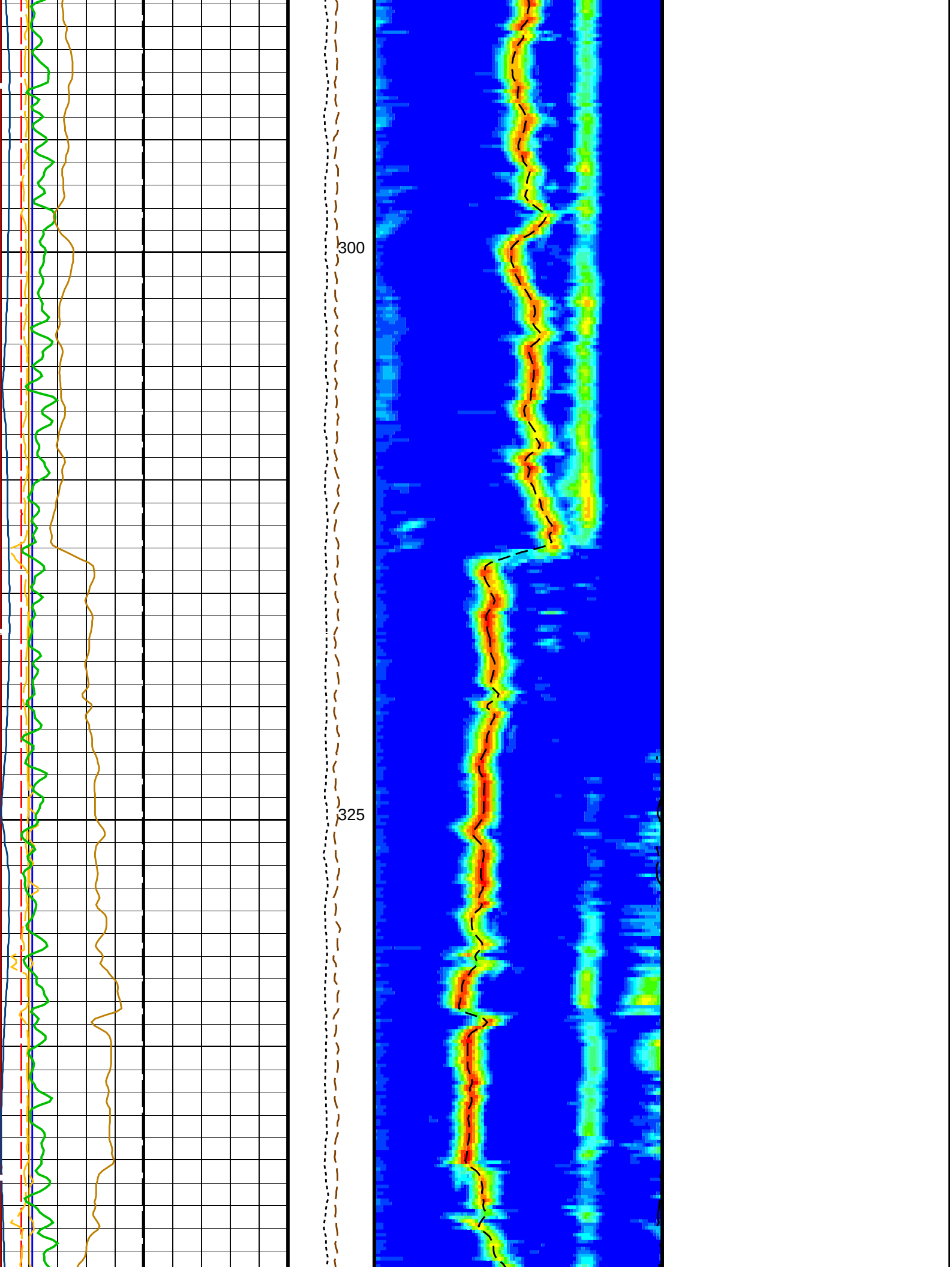

25
50

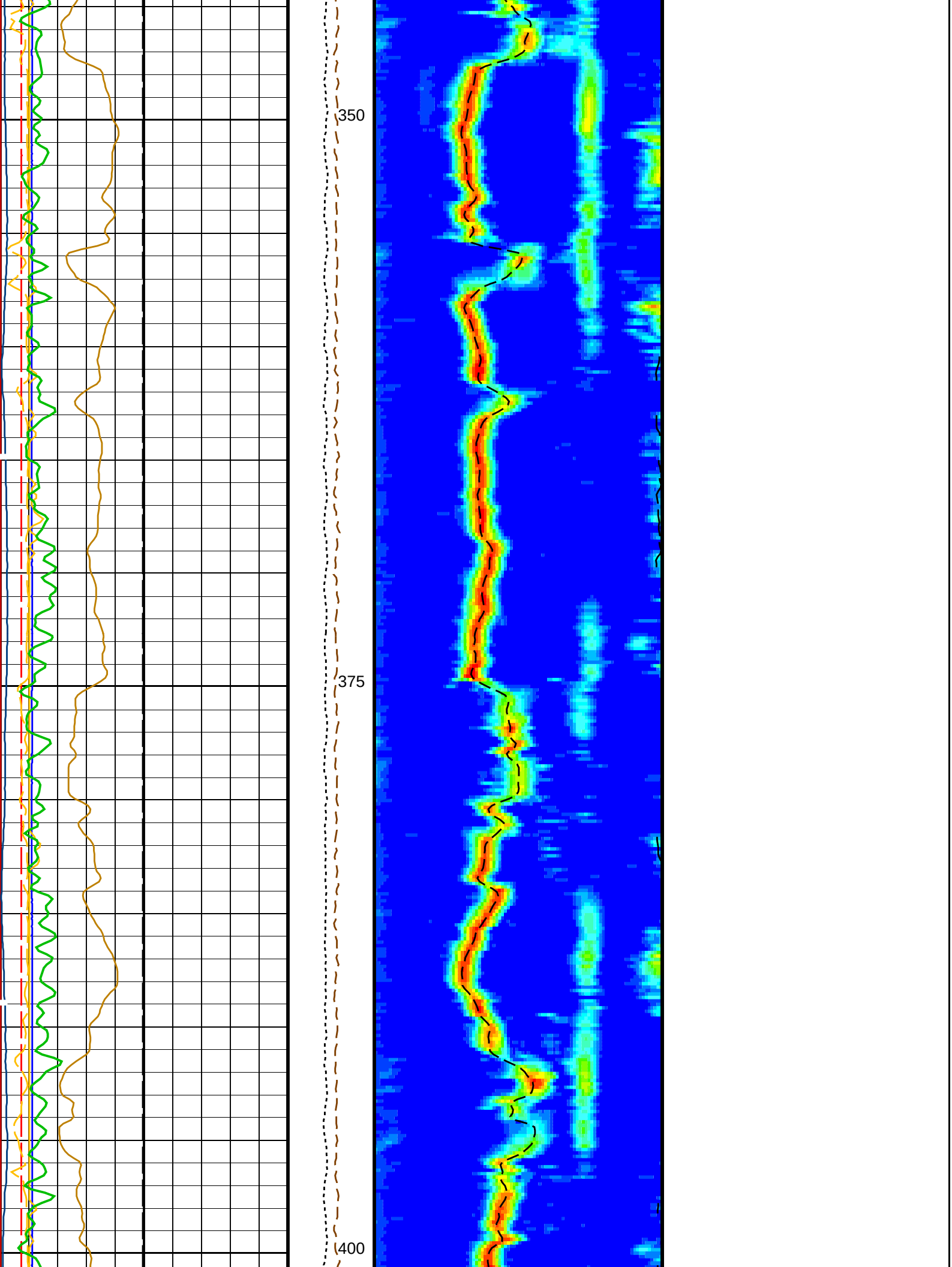

75
Drill Pipe
100

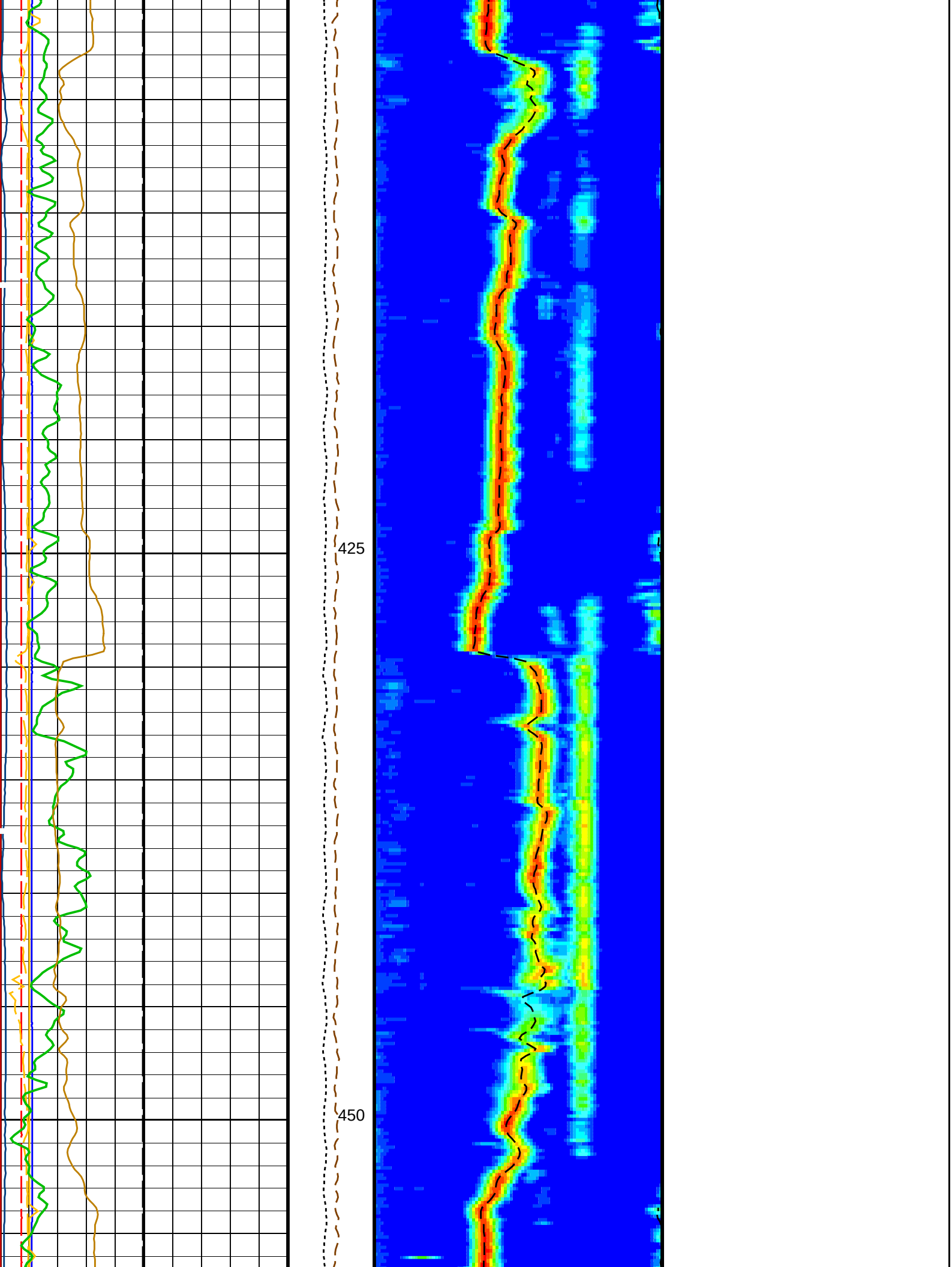

125
TENS
SVEL
SDEVM
GR_EDTC
PR
PR
150
175

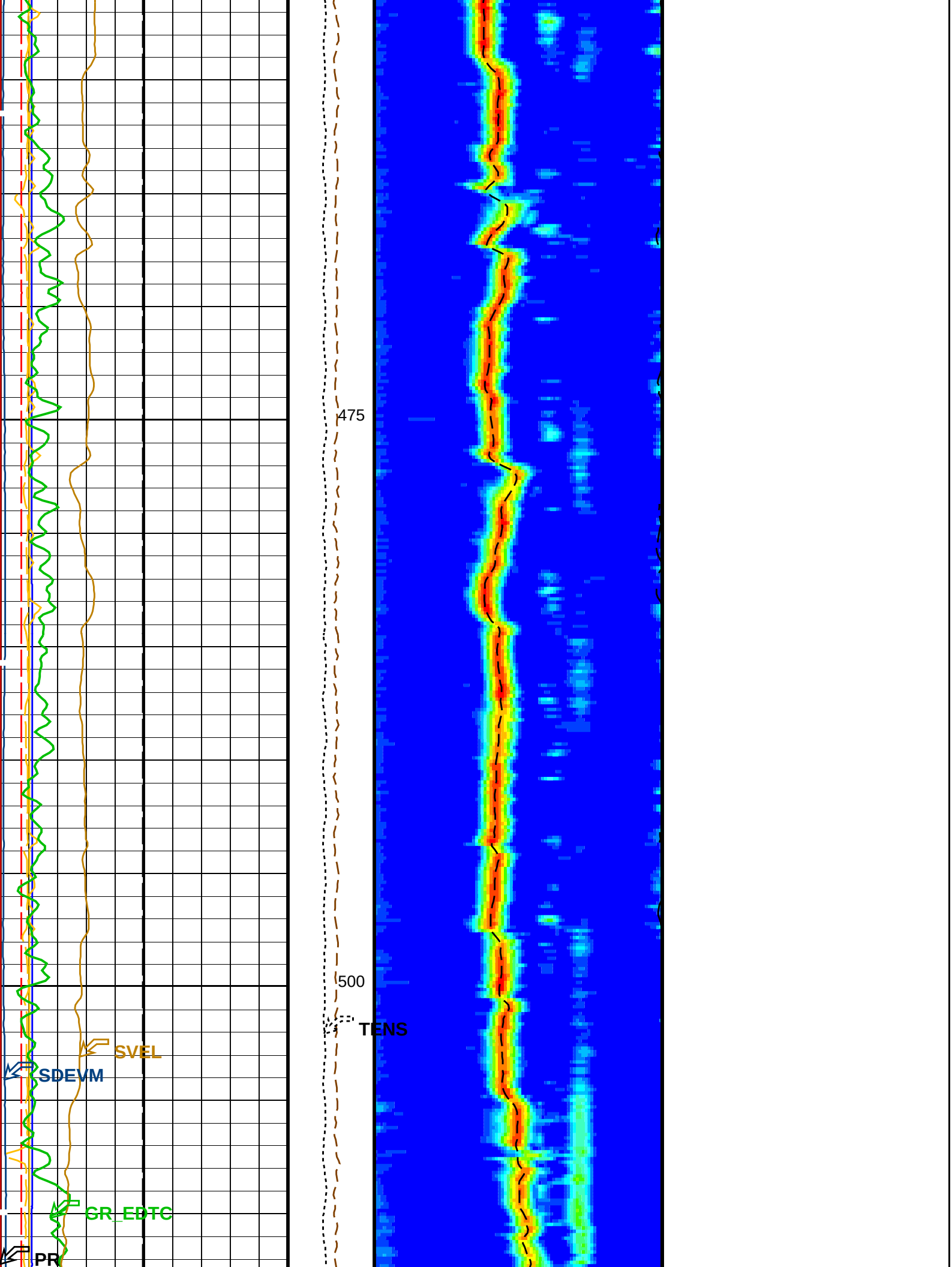

WCI4
CHRS
CHRP
C1
C2
BS
CDF
DTRP
200
225

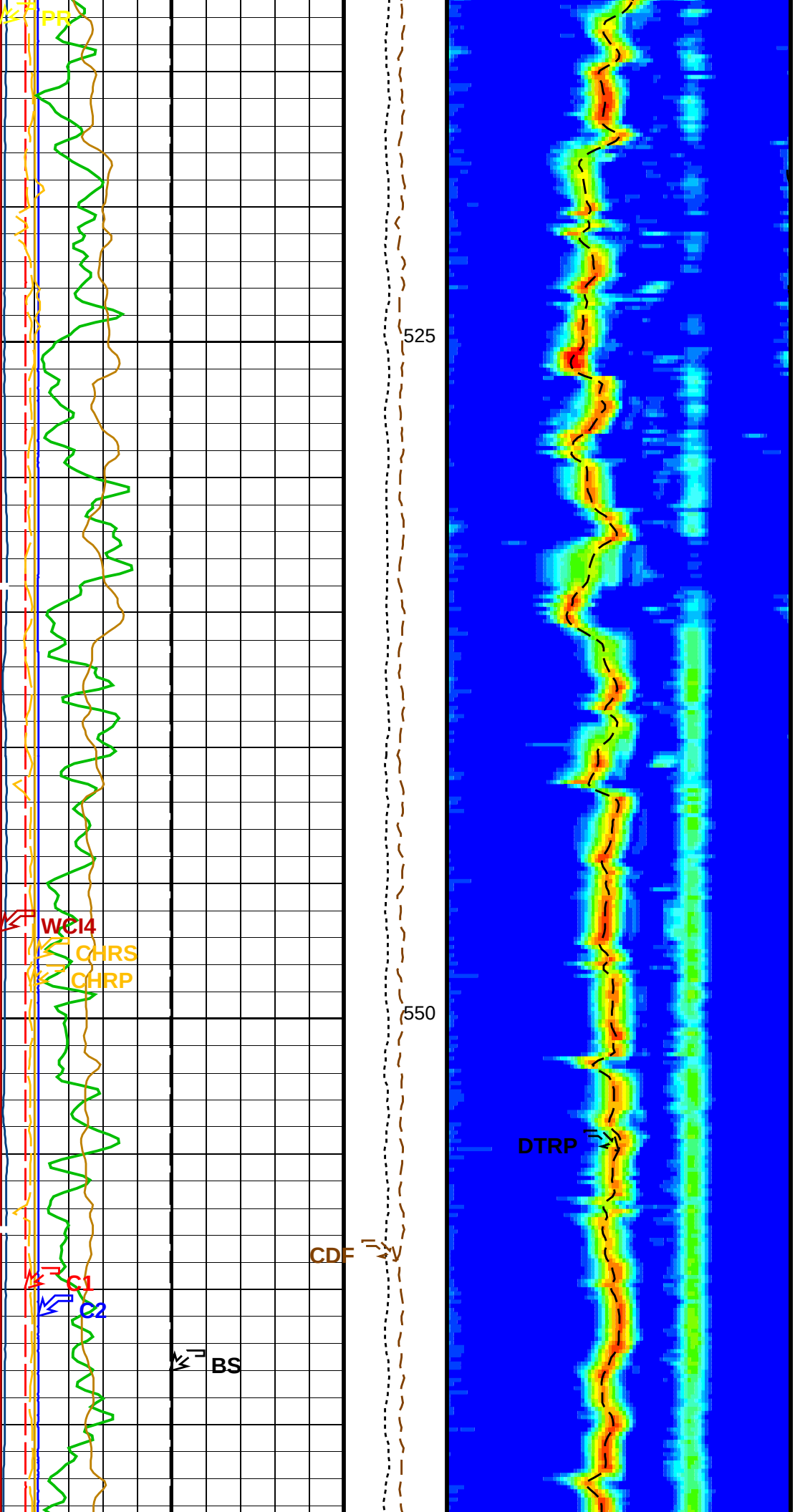

250
275

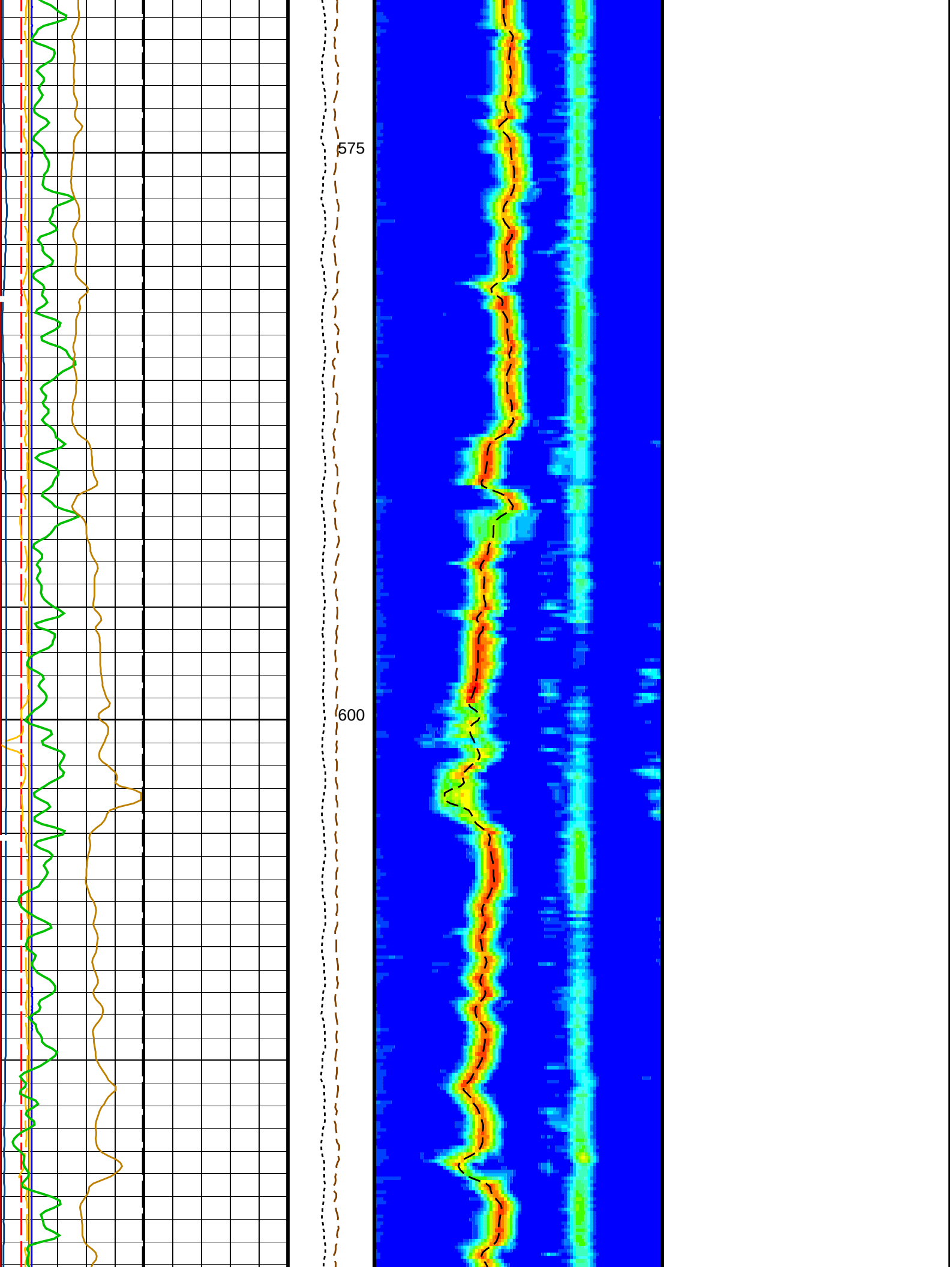

300
325

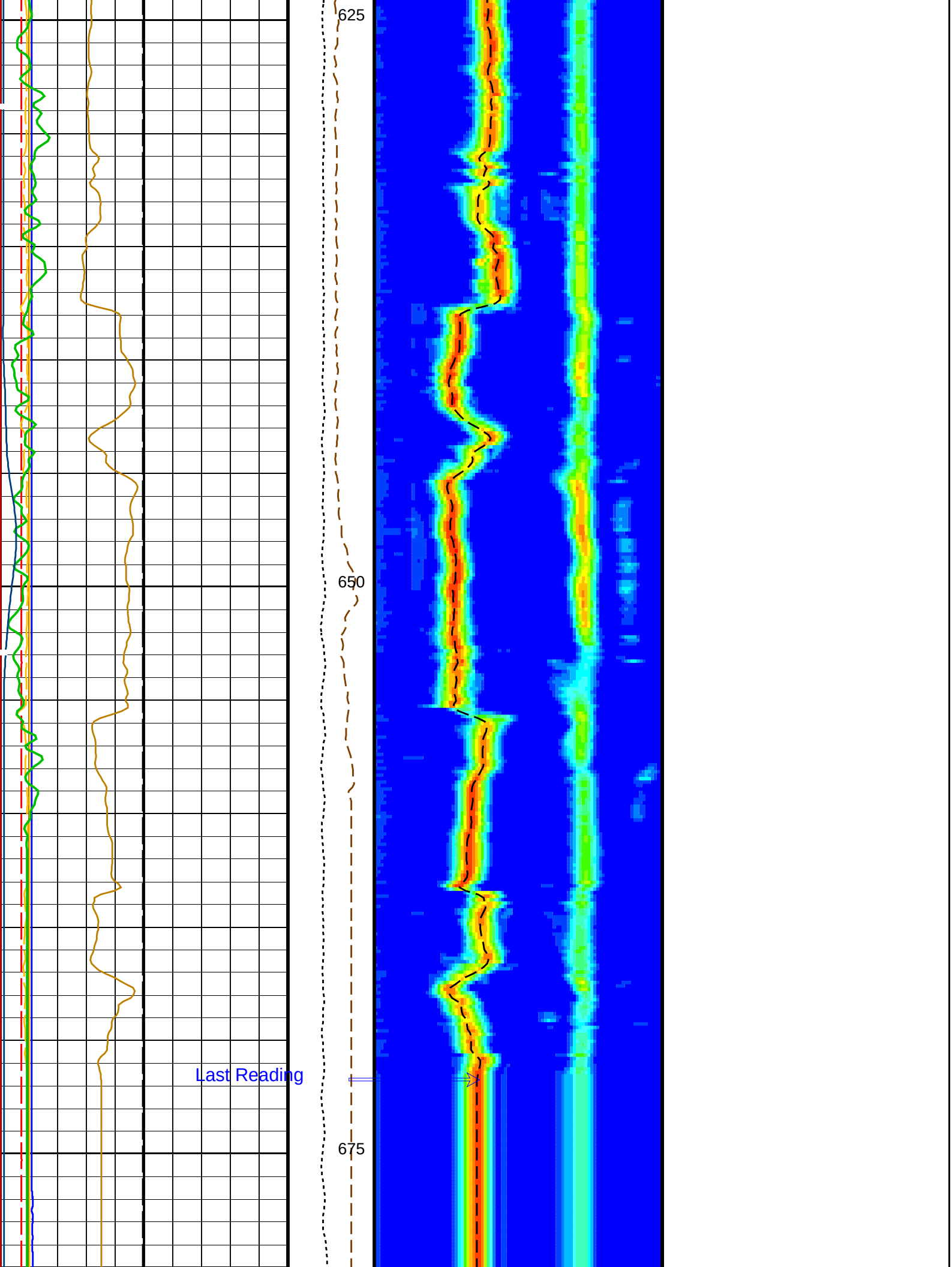

350
375
400

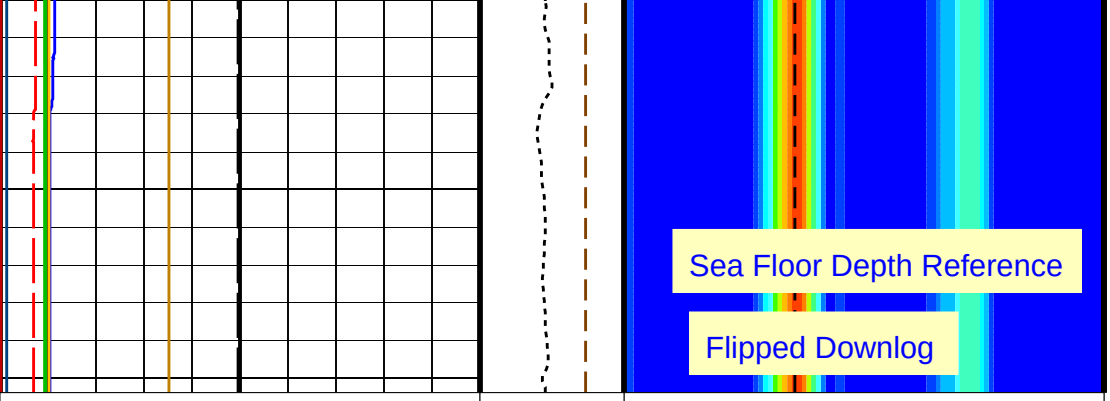

425
450


475
500
TENS
SVEL
SDEVM
GR_EDTC
PR


PR
525
WCI4
CHRS
CHRP
550
DTRP
CDF
C1
C2
BS


575
600


625
650
Last Reading
675



Bit Size (BS)	Tension (TENS)	Delta−T Comp / RA − P & S (DTRP)
0 (IN) 20	(LBF) 10000 0	40 (US/F) 240
Caliper 2 (C2)	**Calibrated Downhole Force (CDF)**	**Delta−T Shear / RA − P & S (DTRS)**
0 (IN) 20	(LBF) 3000 0	40 (US/F) 240
Caliper 1 (C1)		Min Amplitude Max
0 (IN) 20		Rec.Array P&S Slow Proj. CVDL (SPR4)
		40 (US/F) 240
Poisson's Ratio (PR)		
0 (−−−−) 0.5		
Sonde Deviation (SDEVM)		
0 (DEG) 10		
Sonic Velocity (SVEL)		
1000 (M/S) 6000		
Poisson's Ratio (PR)		
0 (−−−−) 0.5		
Gamma Ray (GR_EDTC)		
0 (GAPI) 100		
Peak Coherence / RA − P & S Comp (CHRP)		
0 (−−−−) 10		
Peak Coherence / RA − P & S Shear (CHRS)		
−1 (−−−−) 9		
Waveform Data Copy Indicator 4 − Monopole P&S (WCI4)		
0 (−−−−) 10		

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value	
	MEST−B: Micro Electrical Scanner − B (Slim)		
AFMO	Accelerometer Filtering Mode	MOVING_AVERAGE	
ICMO	Inclinometry Computation Mode	AUTOMATIC_SELECTION	
MDEC	Magnetic Field Declination	−5.1425	DEG
	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	87	US/F
COUL	Label Slowness Upper Limit − Monopole P&S Compressional	205	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
DTCS	Compressional Delta−T Source for DTCO Channel	PS_COMP	
DTF	Delta−T Fluid	195	US/F
DTSS	Shear Delta−T Source for DTSM Channel	UPPER_DIPOLE	
DWC4	Digitizer Word Count 4	512	
DWCX	Digitizer Word Count X	512	
FILG	Label Fill Gap Control − Monopole P&S	COMP_SHEAR	
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	235	US/F
SHUL	Label Slowness Upper Limit − Monopole P&S Shear	240	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	
EDTC−B: Enhanced DTS Cartridge			
BHS	Borehole Status	OPEN	
DIR: Directional Survey Computation			
SPVD	TVD of Starting Point	0	M
TIMD	Along−hole depth of Tie−in Point	0	M
TIVD	TVD of Tie−in Point	0	M
System and Miscellaneous			
BS	Bit Size	9.875	IN
DO	Depth Offset for Playback	−4711.0	M
PP	Playback Processing	NORMAL	

Format: DSST_P_S_UPPER_VDL_COLOR Vertical Scale: 1:200 Graphics File Created: 27−Jul−2014 03:16

OP System Version: 19C0−187

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

Input DLIS Files

DEFAULT	Flip_FMS_DSI_047PUP	PRODUCER	27−Jul−2014 03:00	5401.4 M	4629.1 M

Output DLIS Files

DEFAULT	FMS_DSI_053PUP	FN:75	PRODUCER	27−Jul−2014 03:16

Input DLIS Files

DEFAULT	FMS_DSI_058PUP	FN:80	PRODUCER	27−Jul−2014 03:51	5405.5 M	4757.9 M

Output DLIS Files

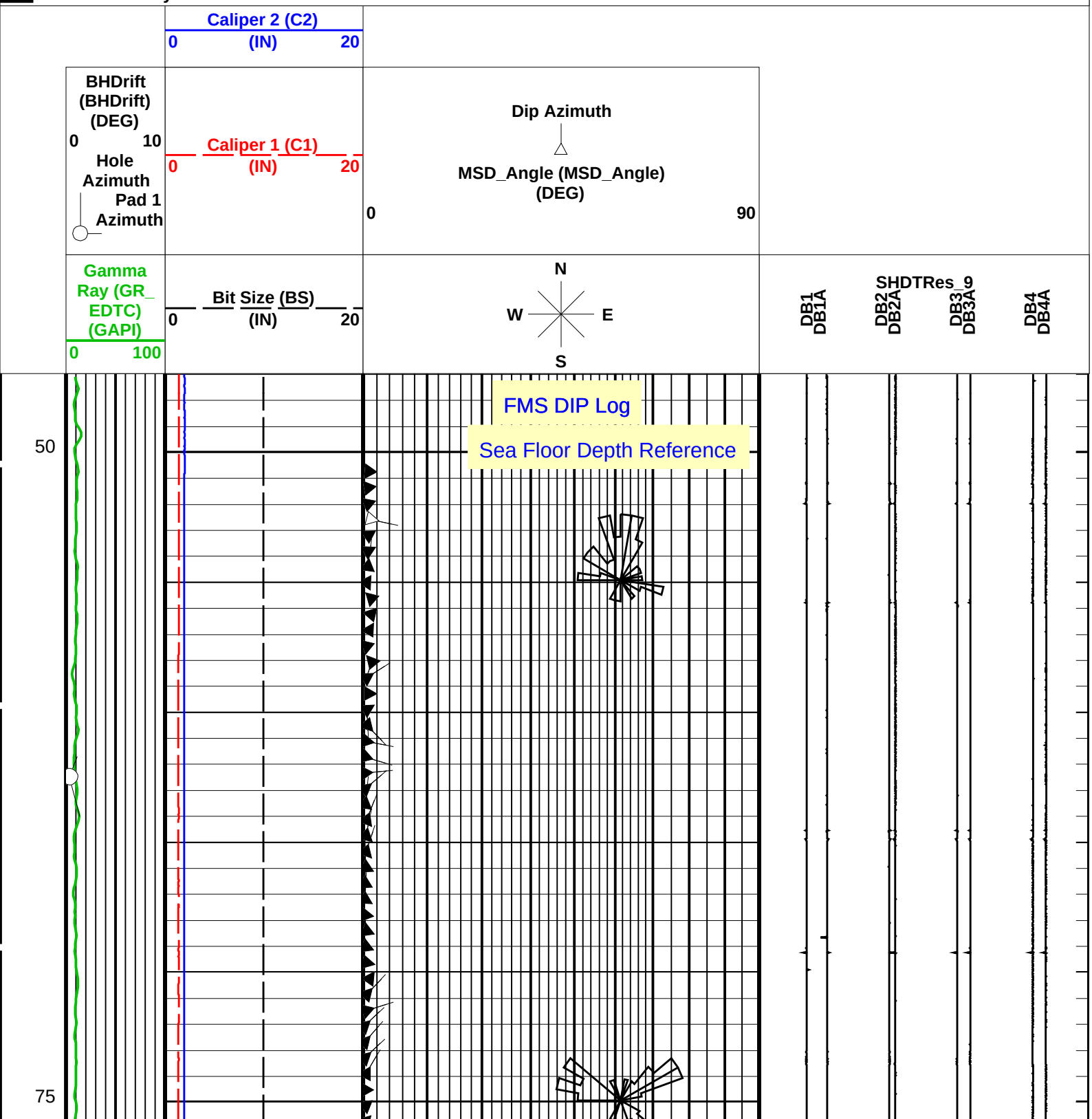
DEFAULT	FMS_DSI_060PUP	FN:82	PRODUCER	27−Jul−2014 05:31	694.5 M	46.9 M

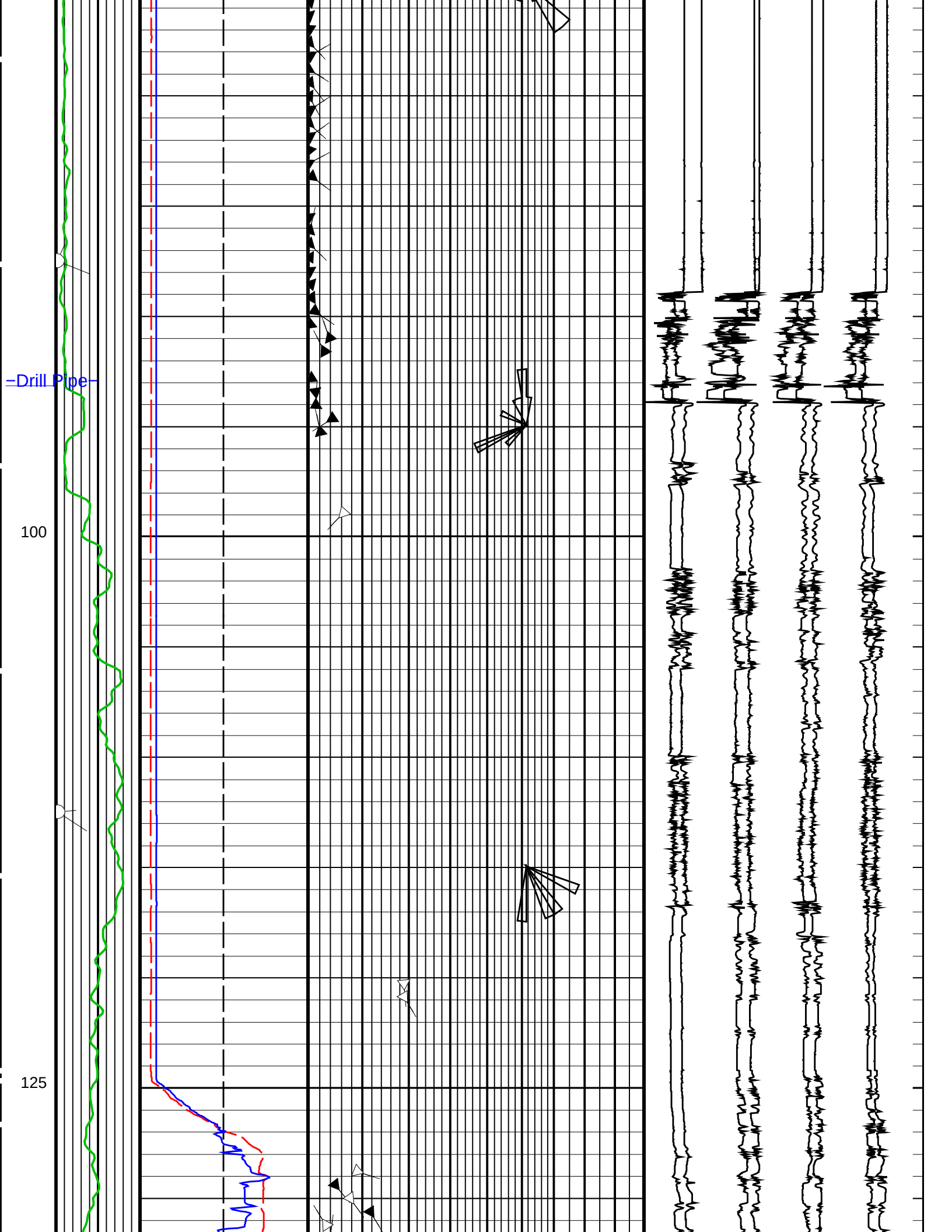
OP System Version: 19C0−187

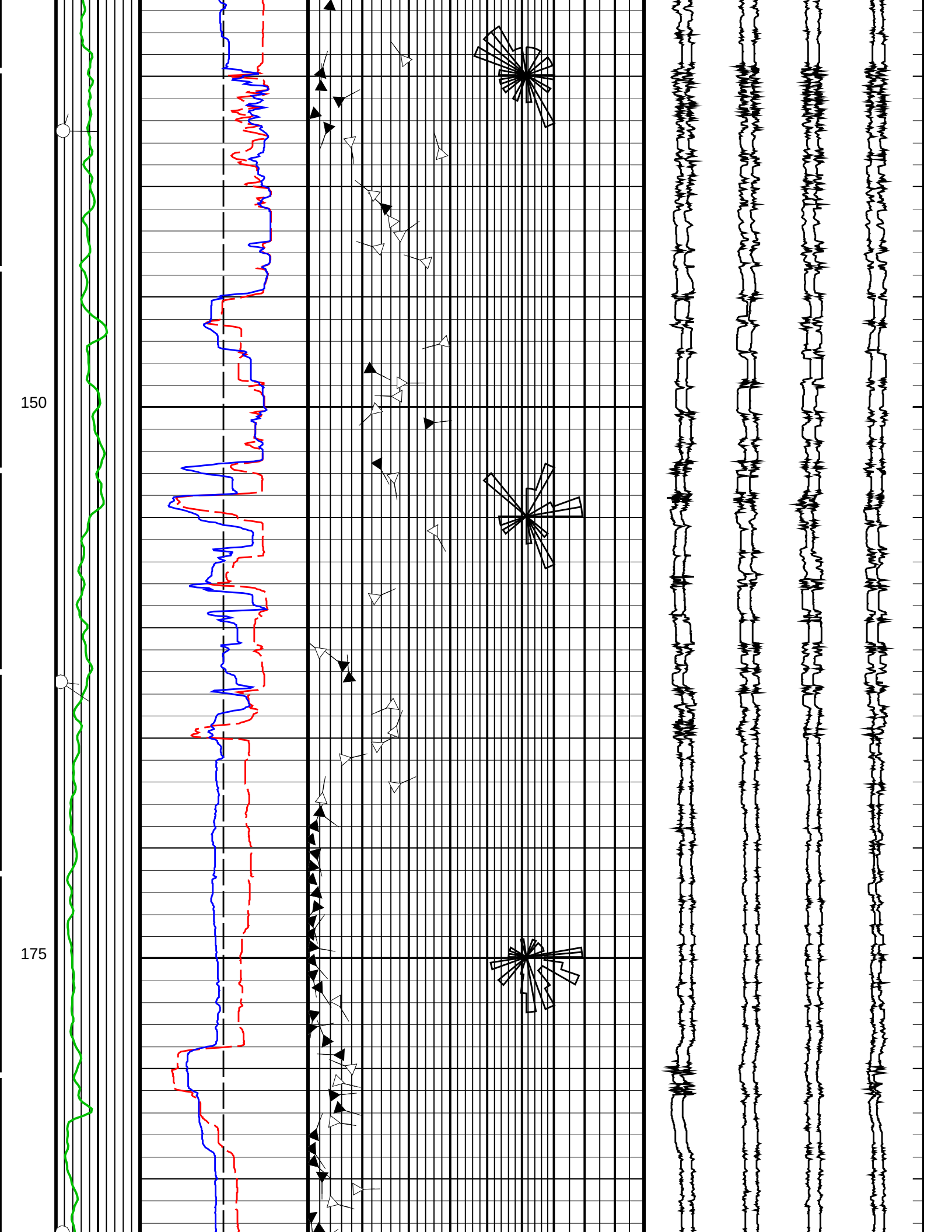
MEST−B	19C0−187	DTA−A	19C0−187
DSST−B	19C0−187	EDTC−B	SKK−5169−EDTCB

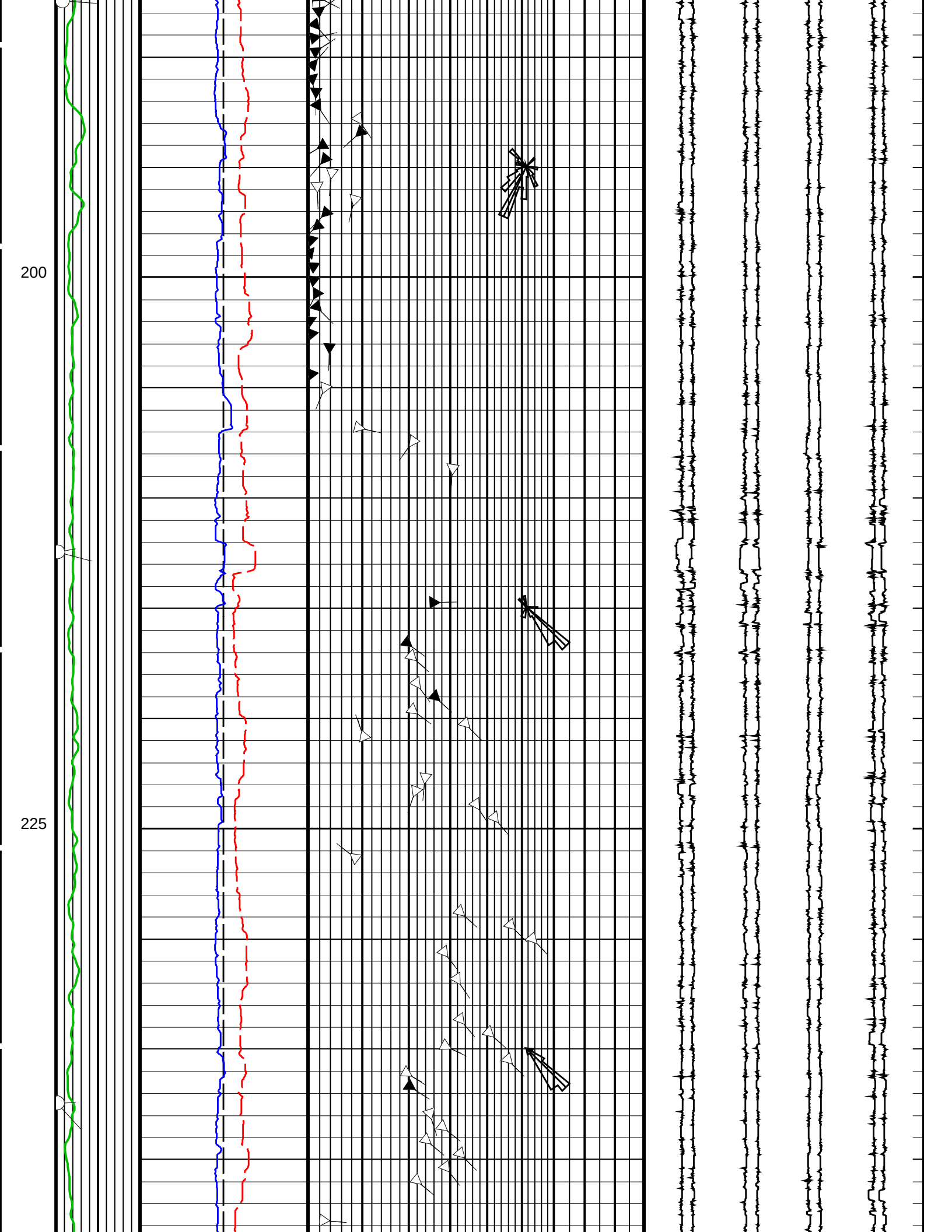
PIP SUMMARY

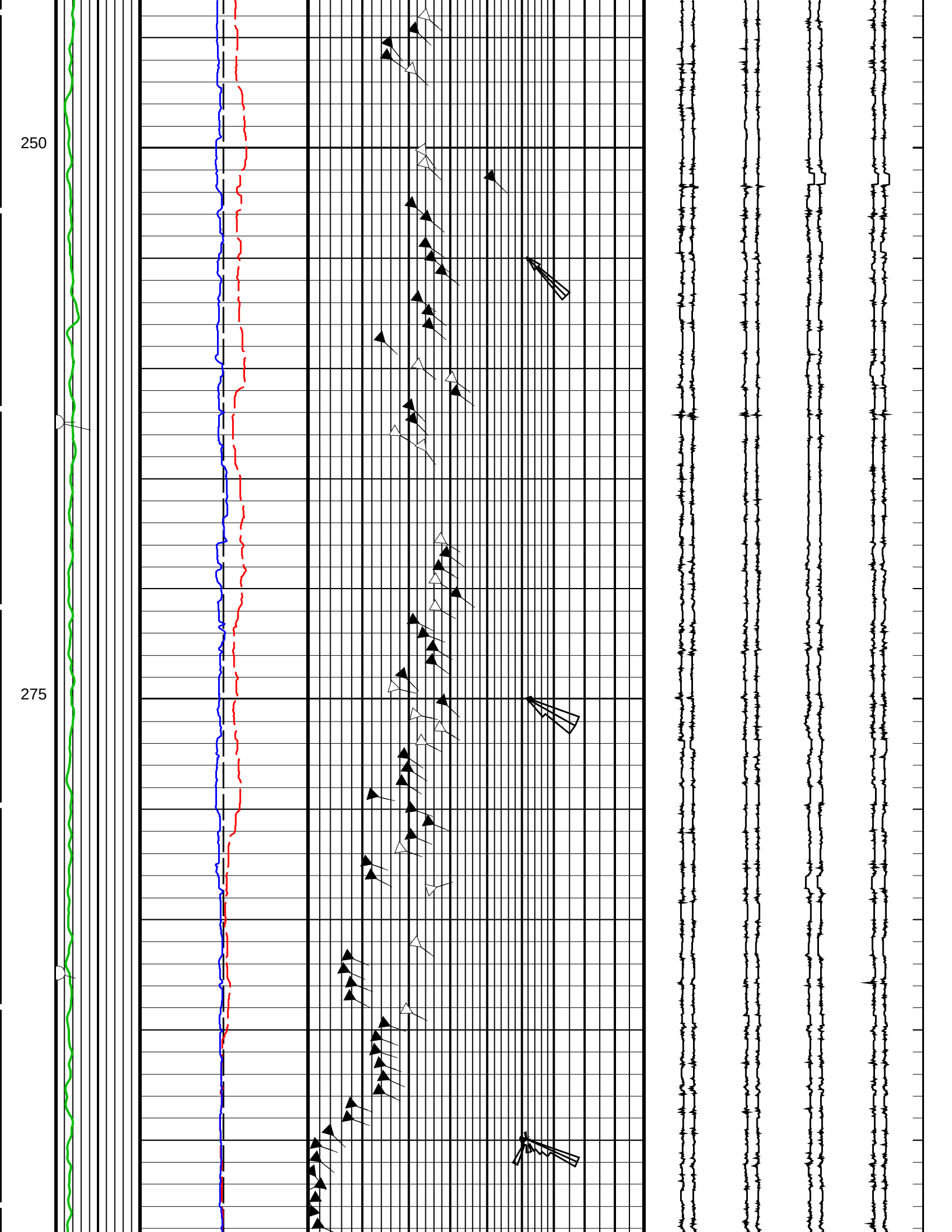
Time Mark Every 60 S

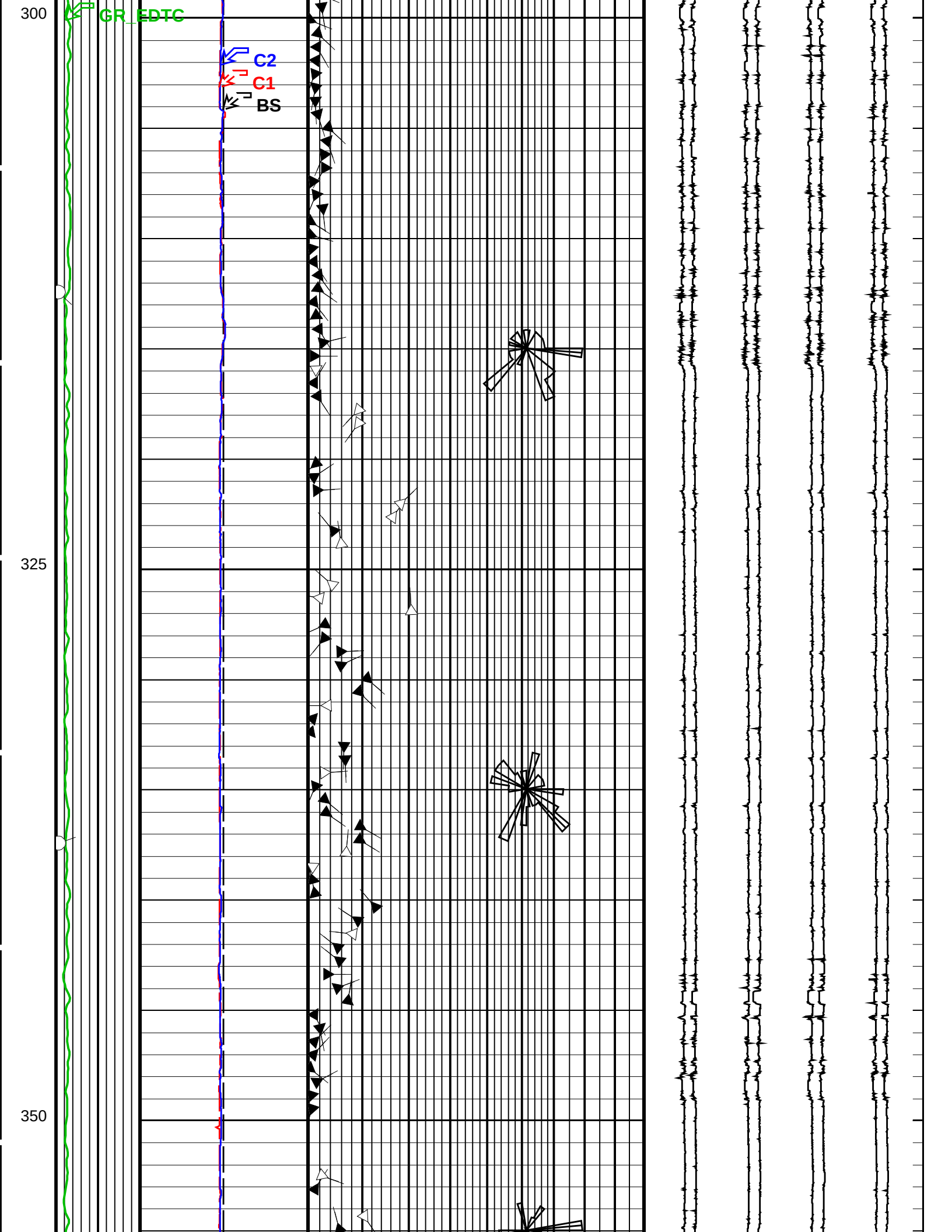


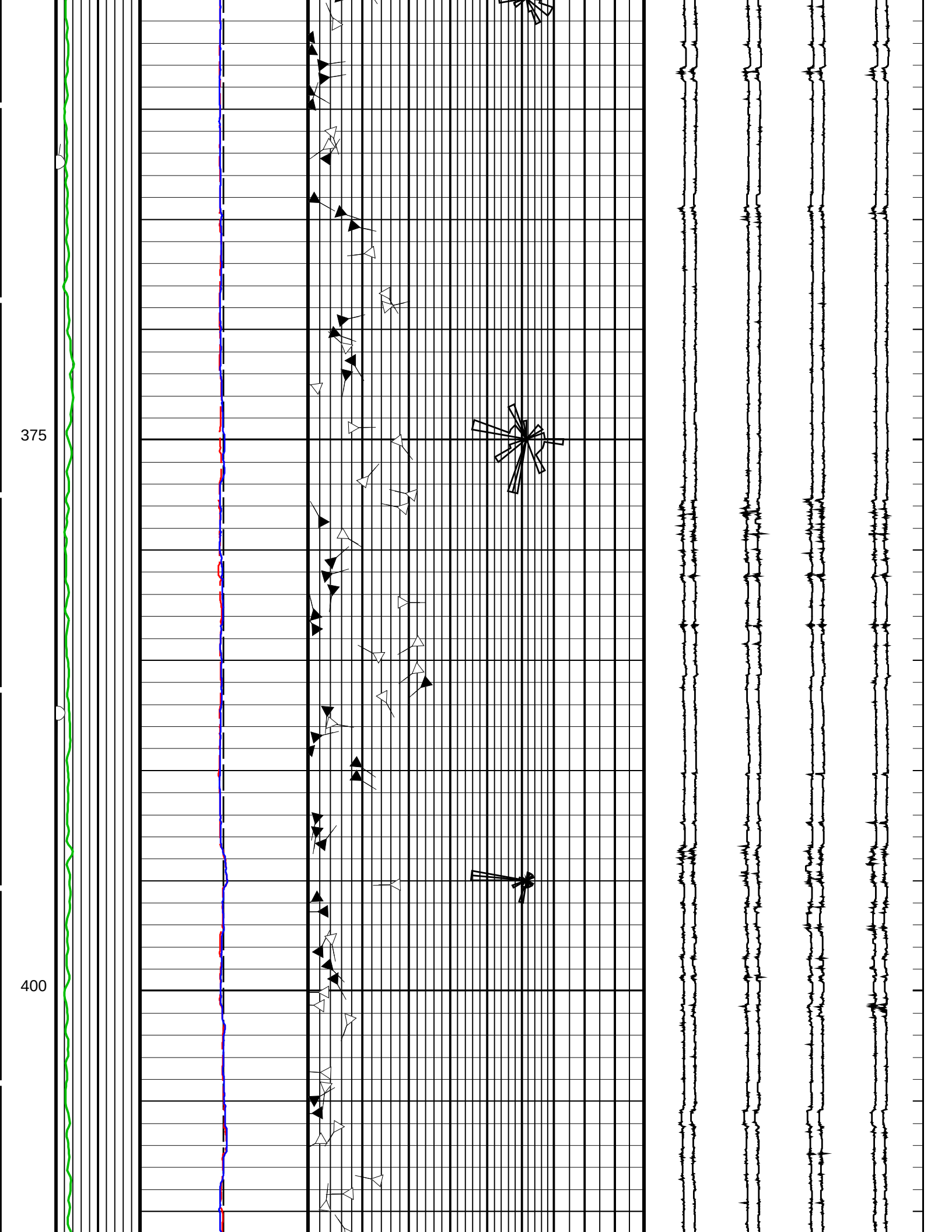

Drill Pipe
100
125

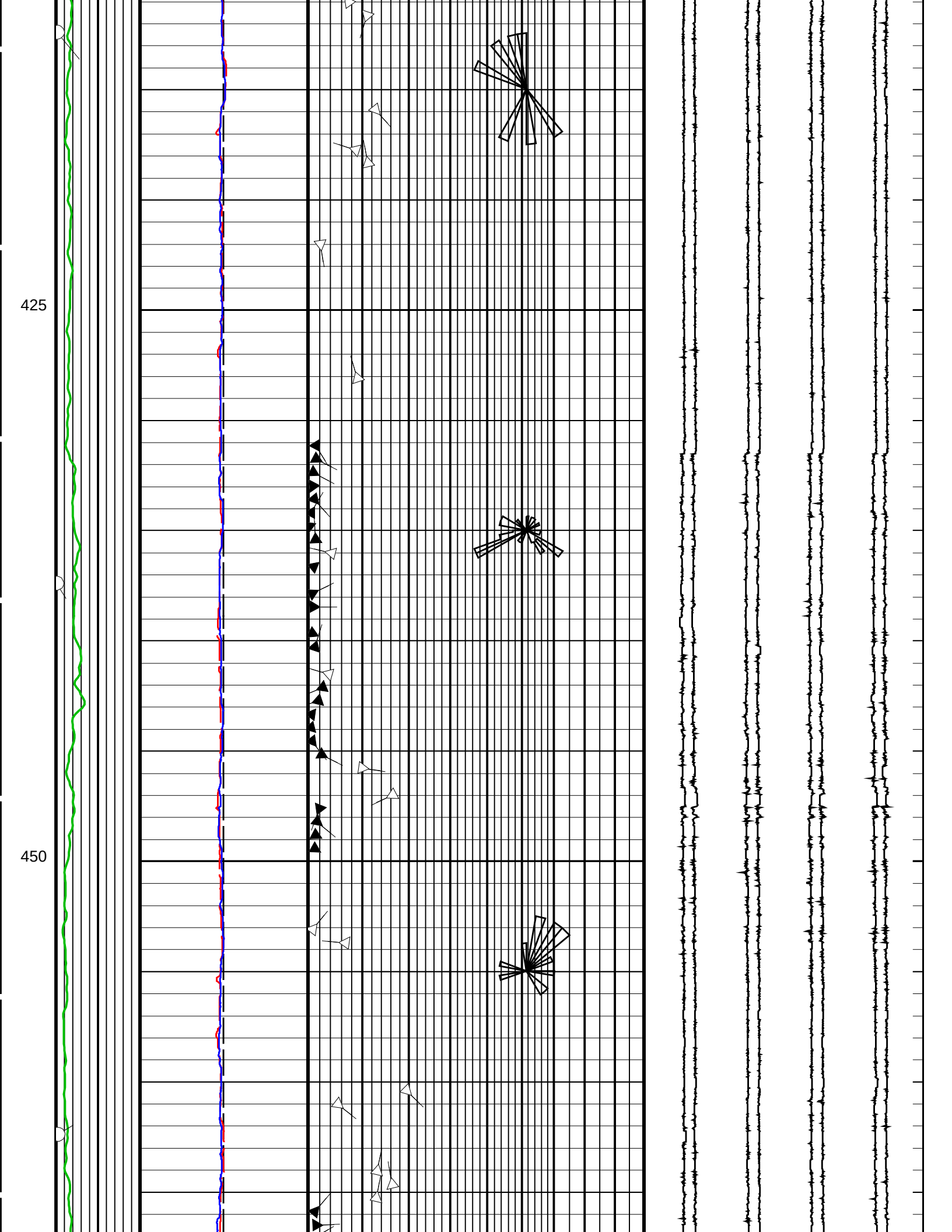

150
175

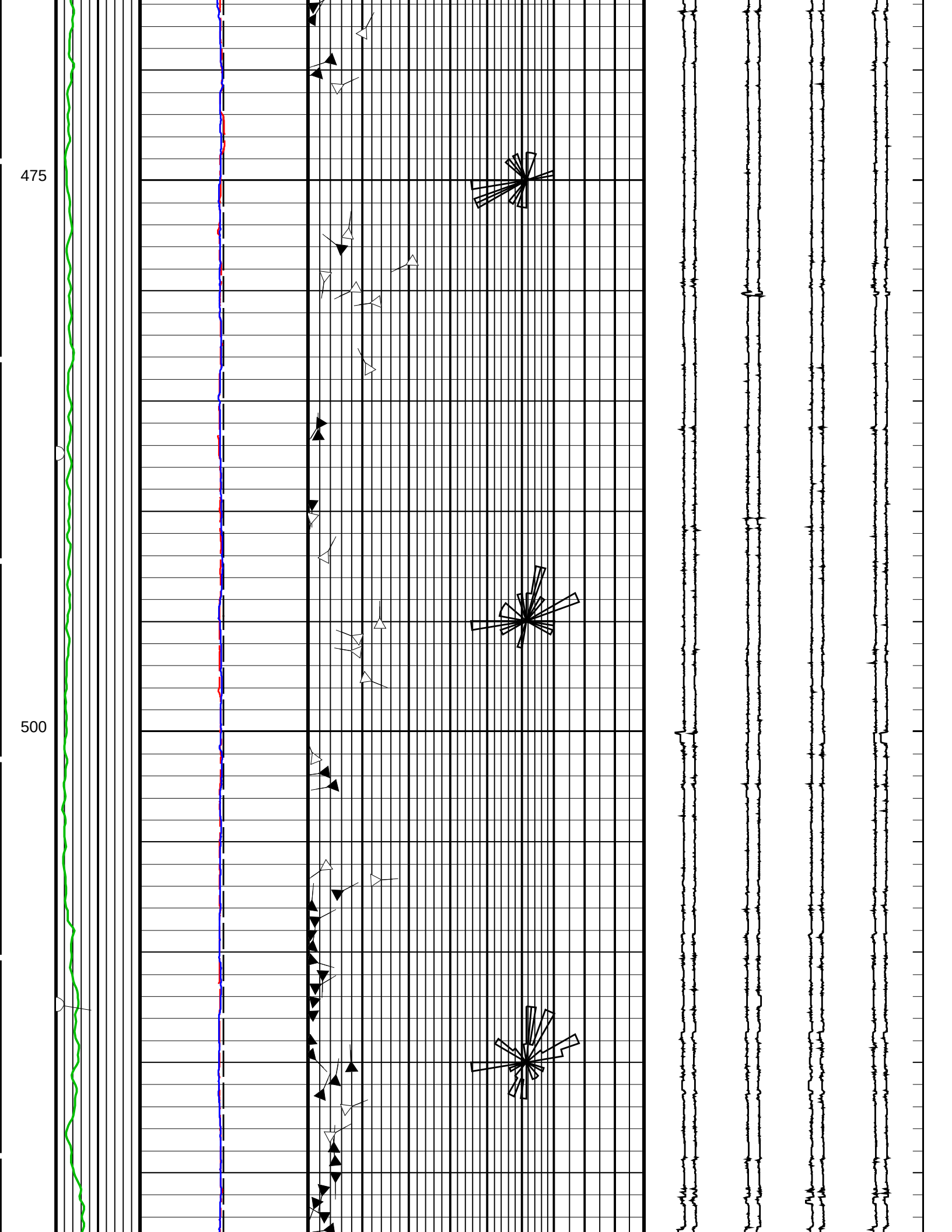

200
225

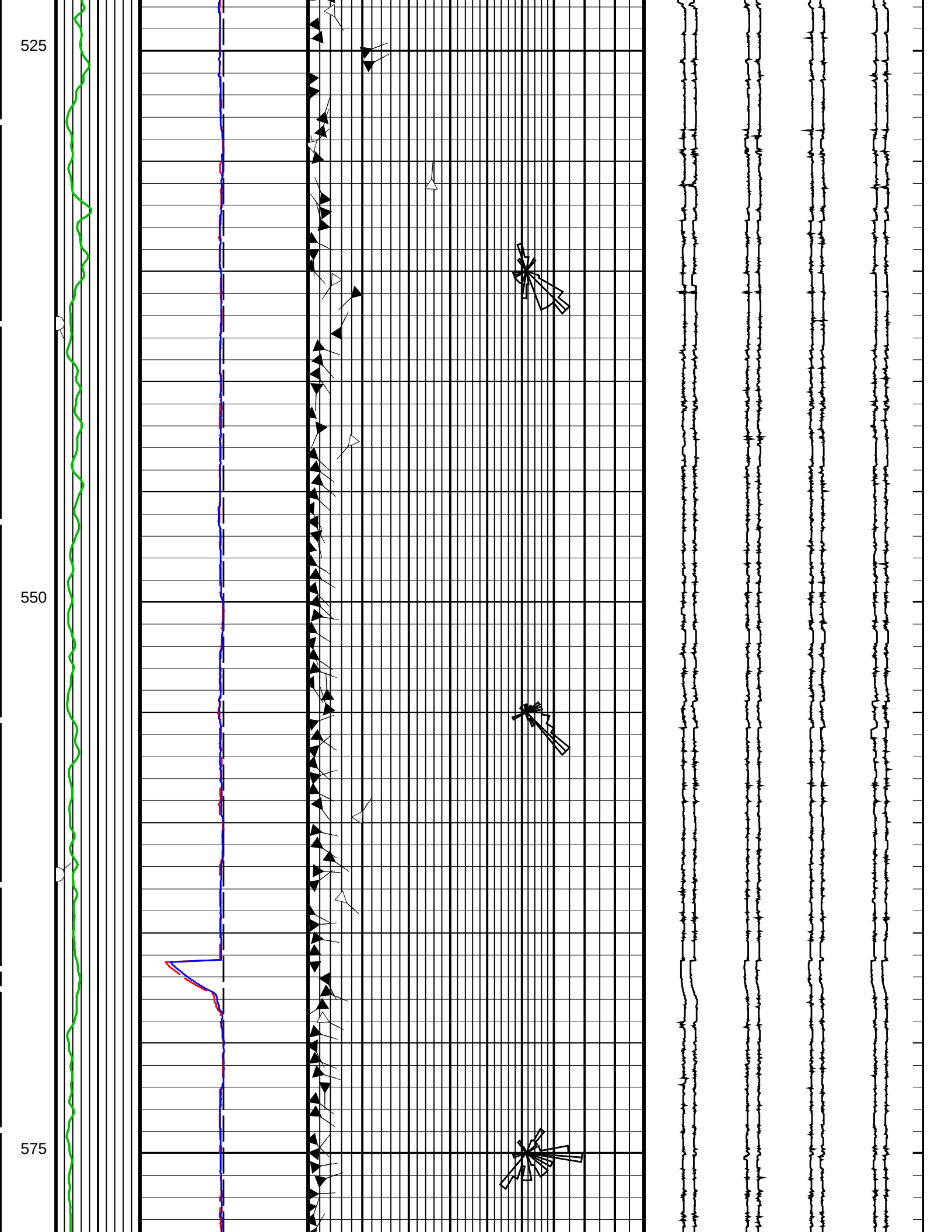

250
275

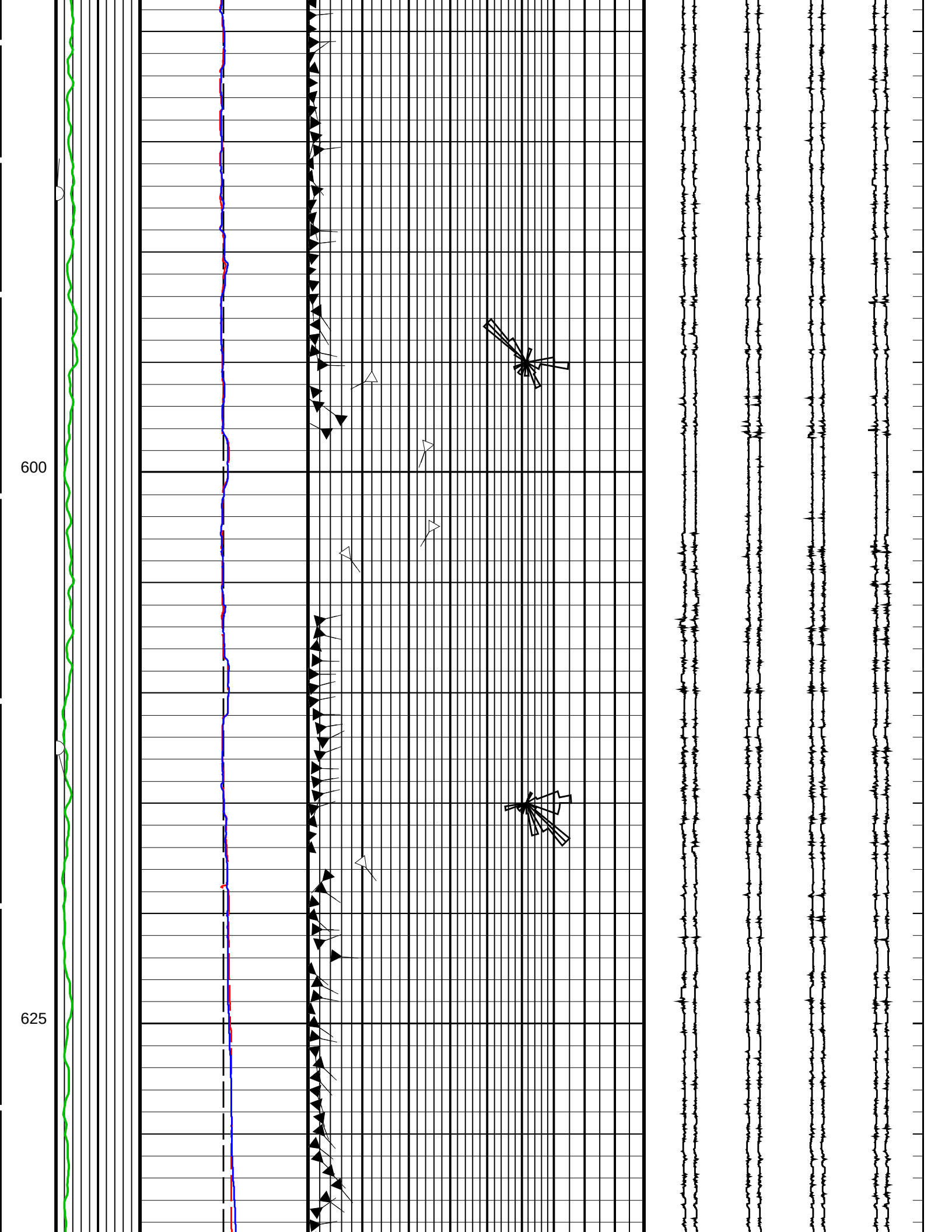

300
325
350
GR_EDTC
C2
C1
BS

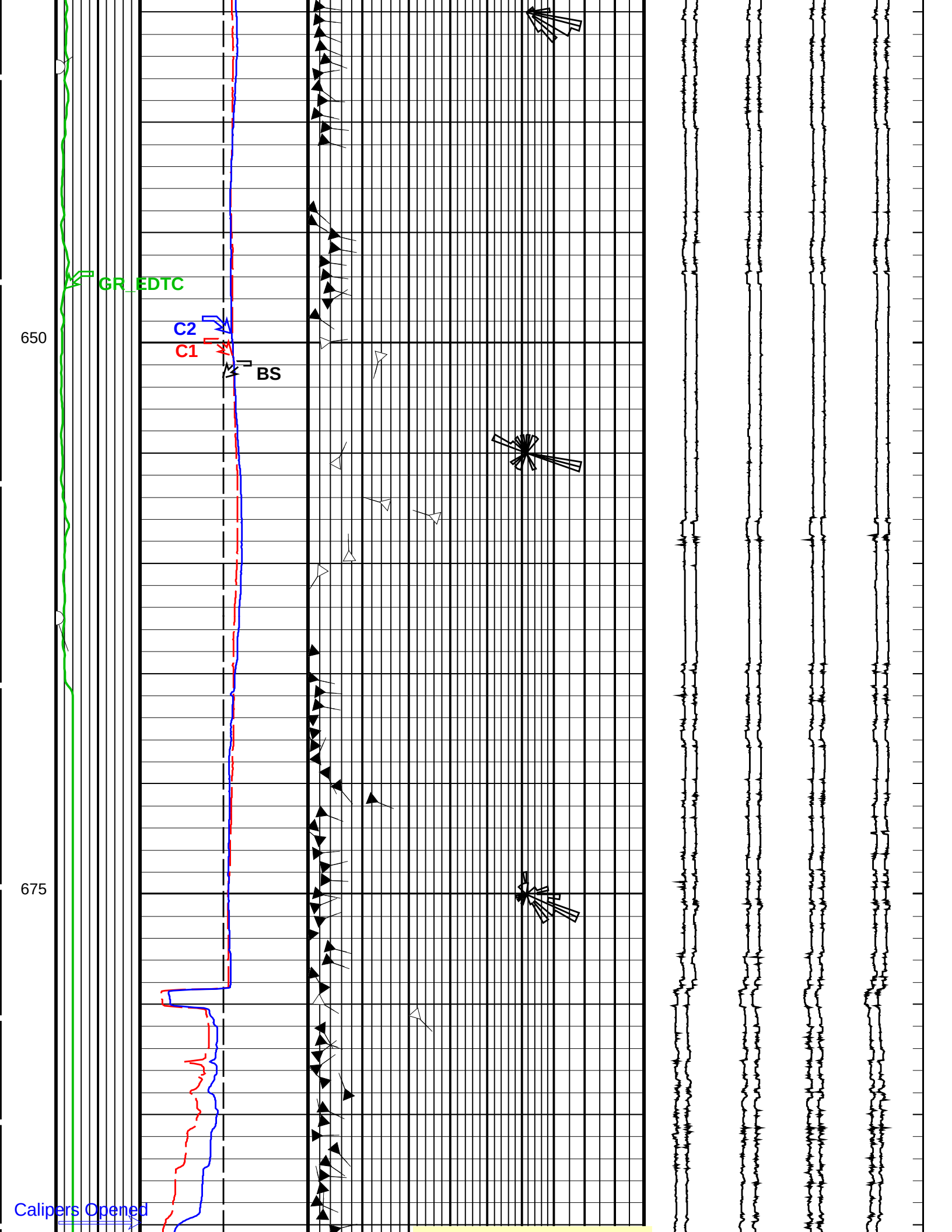

375
400

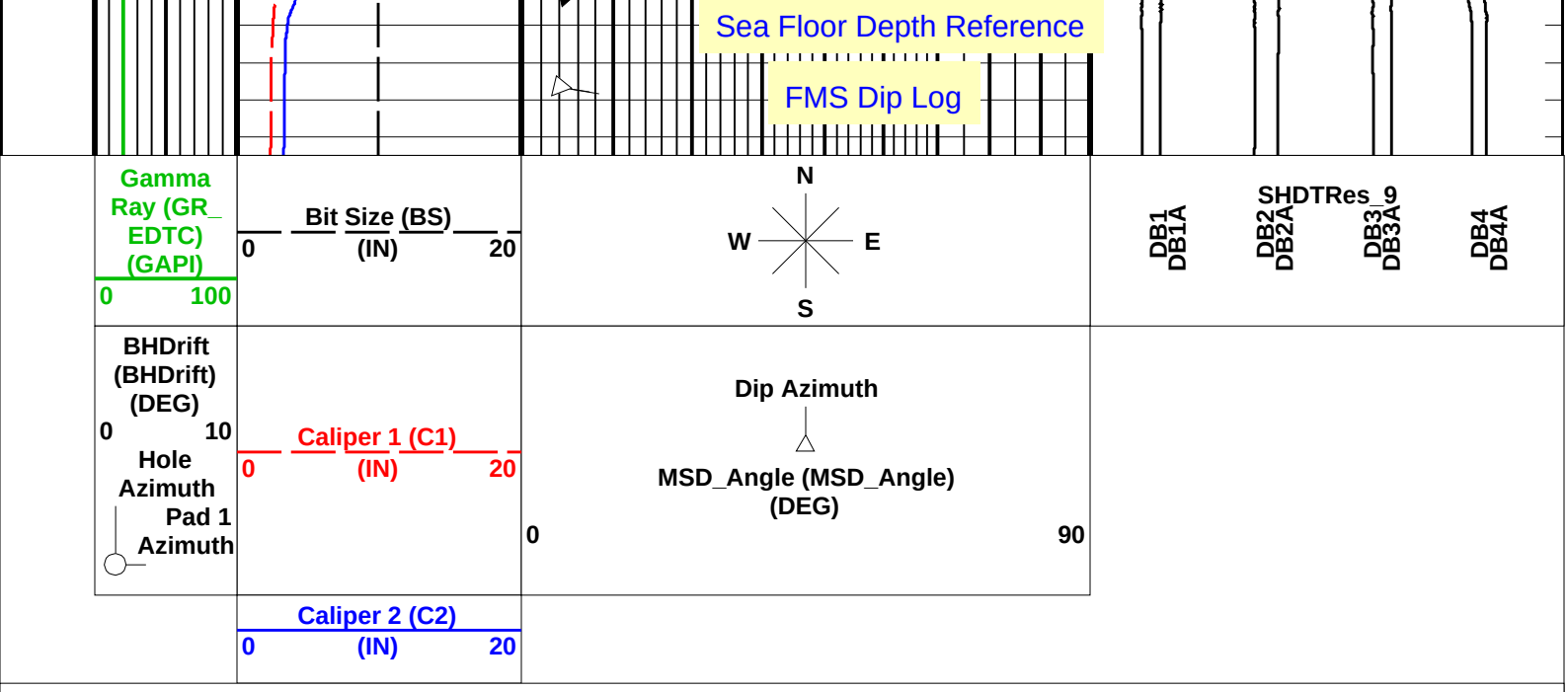

425
450


475
500


525
550
575


600
625


GR_EDTC
C2
C1
BS
650
675
Calipers Opened



PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value	
	MEST−B: Micro Electrical Scanner − B (Slim)		
AFMO	Accelerometer Filtering Mode	MOVING_AVERAGE	
ICMO	Inclinometry Computation Mode	AUTOMATIC_SELECTION	
MDEC	Magnetic Field Declination	−5.1425	DEG
XGAI	Gain	GAIN_2	
XOFF	Offset	OFFSET_0	
	DIP: Dip Computation		
	DIP Tool	SHDT	
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
	DIR: Directional Survey Computation		
SPVD	TVD of Starting Point	0	M
TIMD	Along−hole depth of Tie−in Point	0	M
TIVD	TVD of Tie−in Point	0	M
	System and Miscellaneous		
BS	Bit Size	9.875	IN
DO	Depth Offset for Playback	−4711.0	M
PP	Playback Processing	RECOMPUTE	

Format: Dip Vertical Scale: 1:200 Graphics File Created: 27−Jul−2014 05:31

OP System Version: 19C0−187

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

Input DLIS Files

DEFAULT	FMS_DSI_058PUP	FN:80	PRODUCER	27−Jul−2014 03:51	5405.5 M	4757.9 M

Output DLIS Files

DEFAULT	FMS_DSI_060PUP	FN:82	PRODUCER	27−Jul−2014 05:31

Input DLIS Files

DEFAULT	FMS_DSI_058PUP	FN:80	PRODUCER	27−Jul−2014 03:51	5405.5 M	4757.9 M

Output DLIS Files

DEFAULT	FMS_DSI_060PUP	FN:82	PRODUCER	27−Jul−2014 05:31	694.5 M	46.9 M

OP System Version: 19C0−187

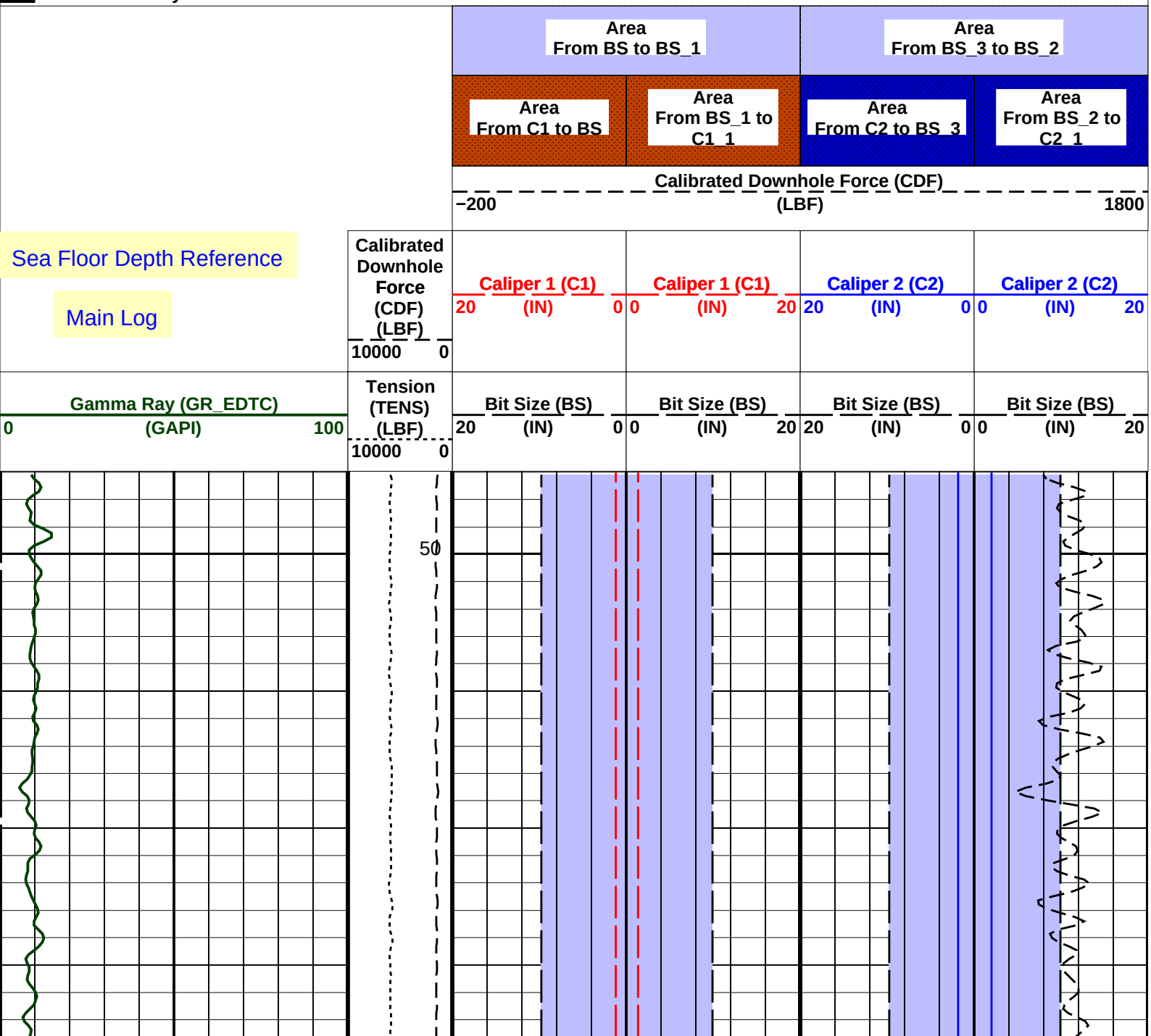
MEST−B	19C0−187	DTA−A	19C0−187
DSST−B	19C0−187	EDTC−B	SKK−5169−EDTCB

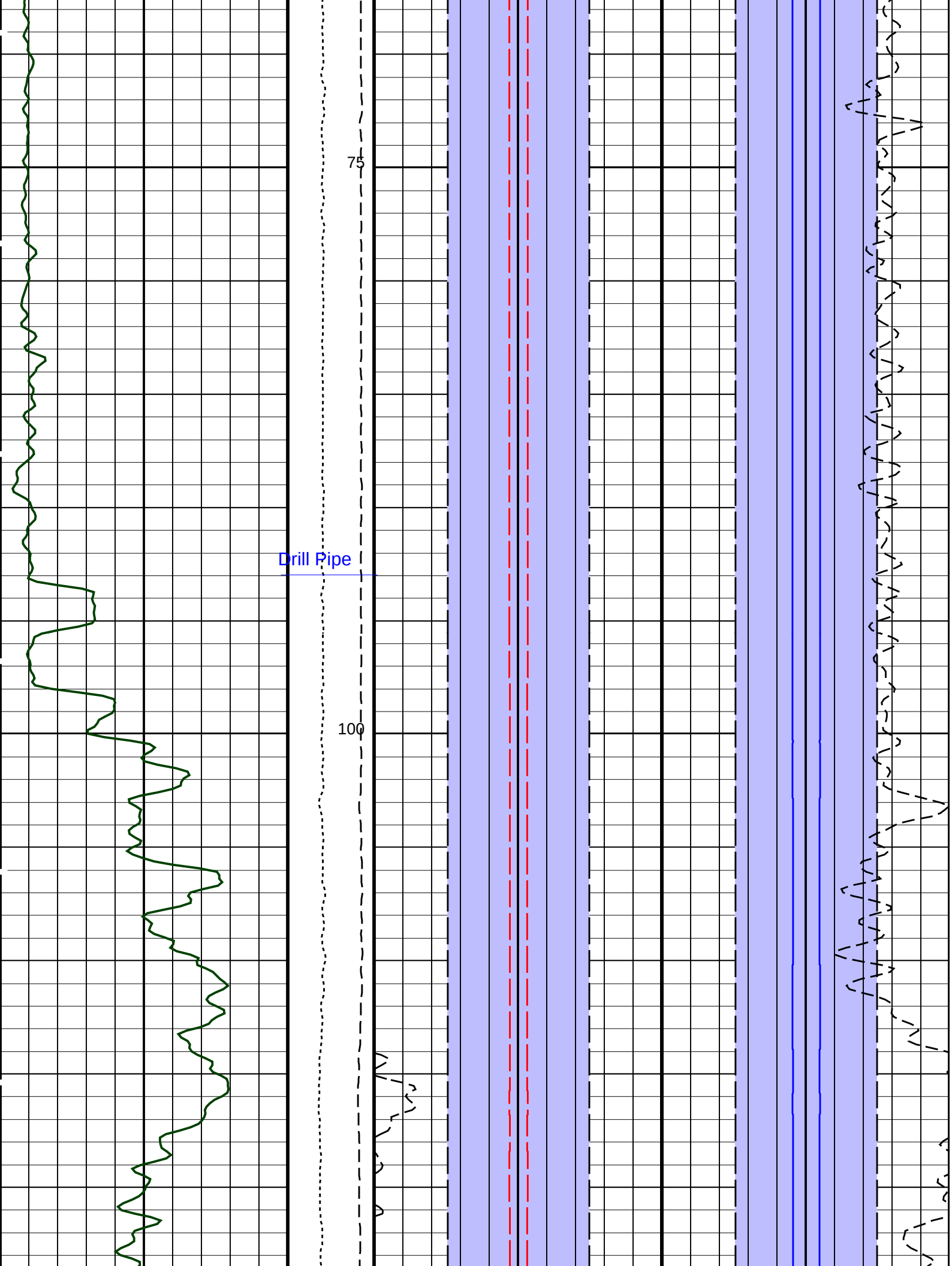
Changed Parameter Summary

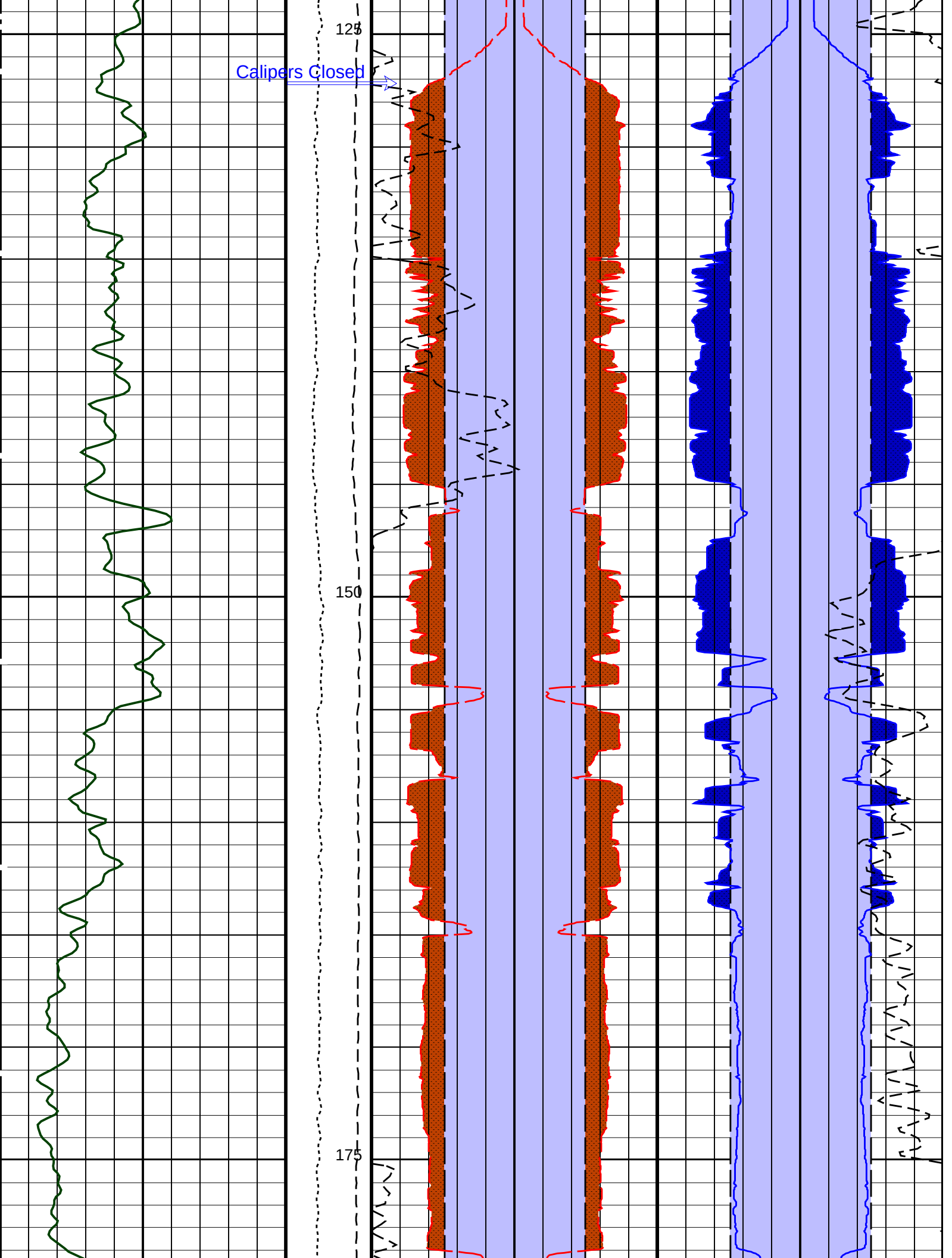
DLIS Name	New Value	Previous Value	Depth & Time
COLL	120 US/F	87 US/F	159.4 05:33:44

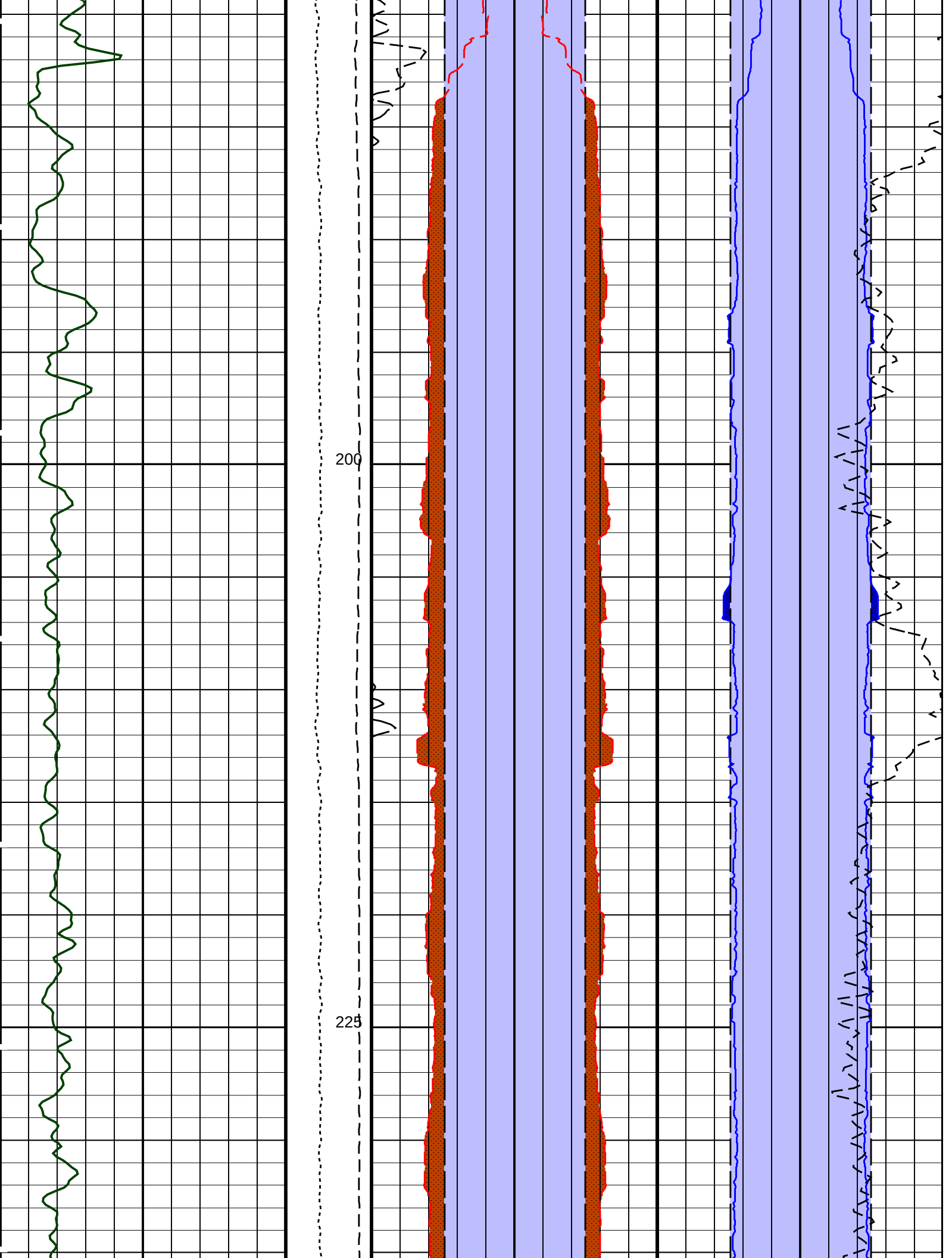
PIP SUMMARY

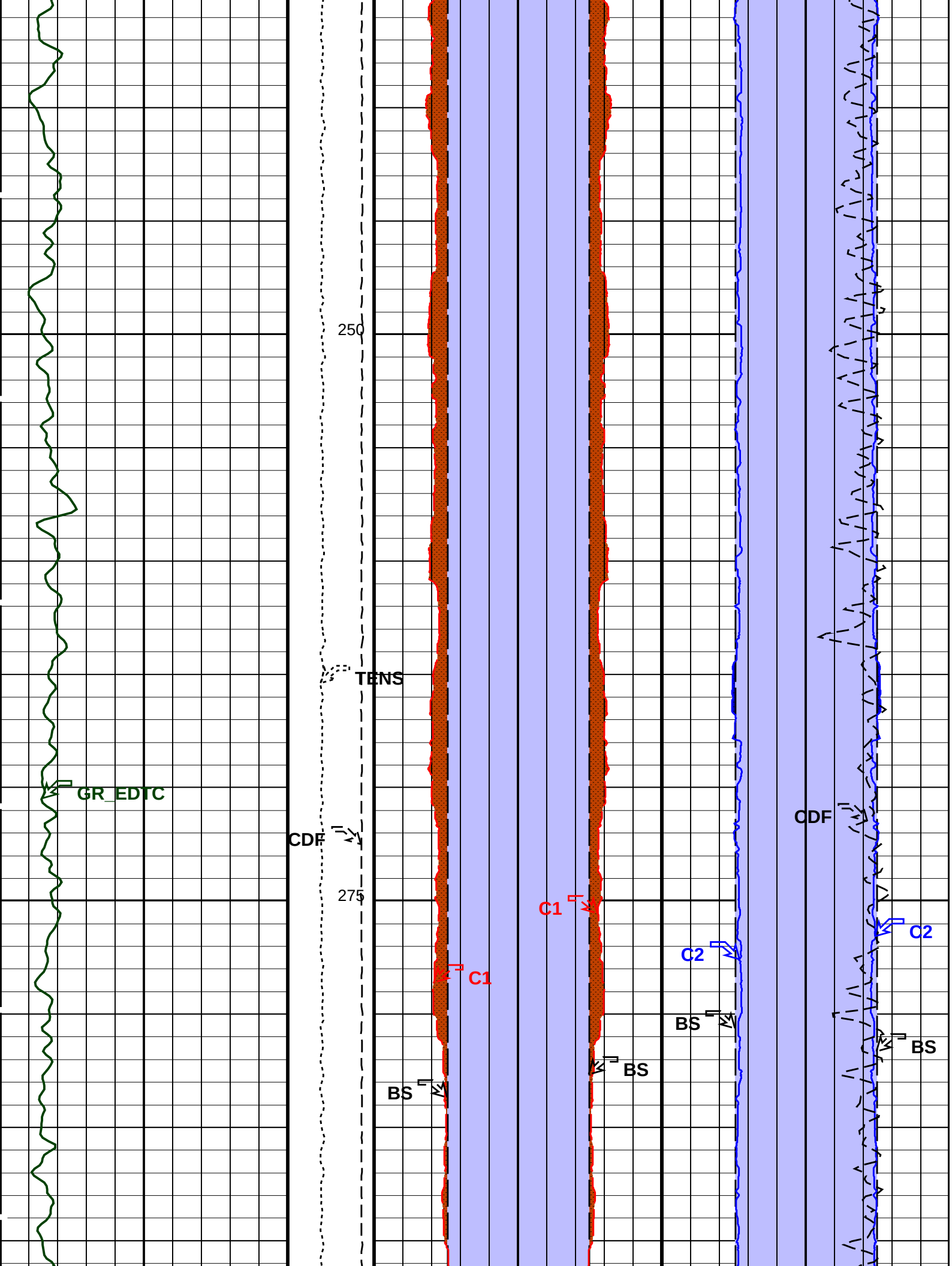
Time Mark Every 60 S

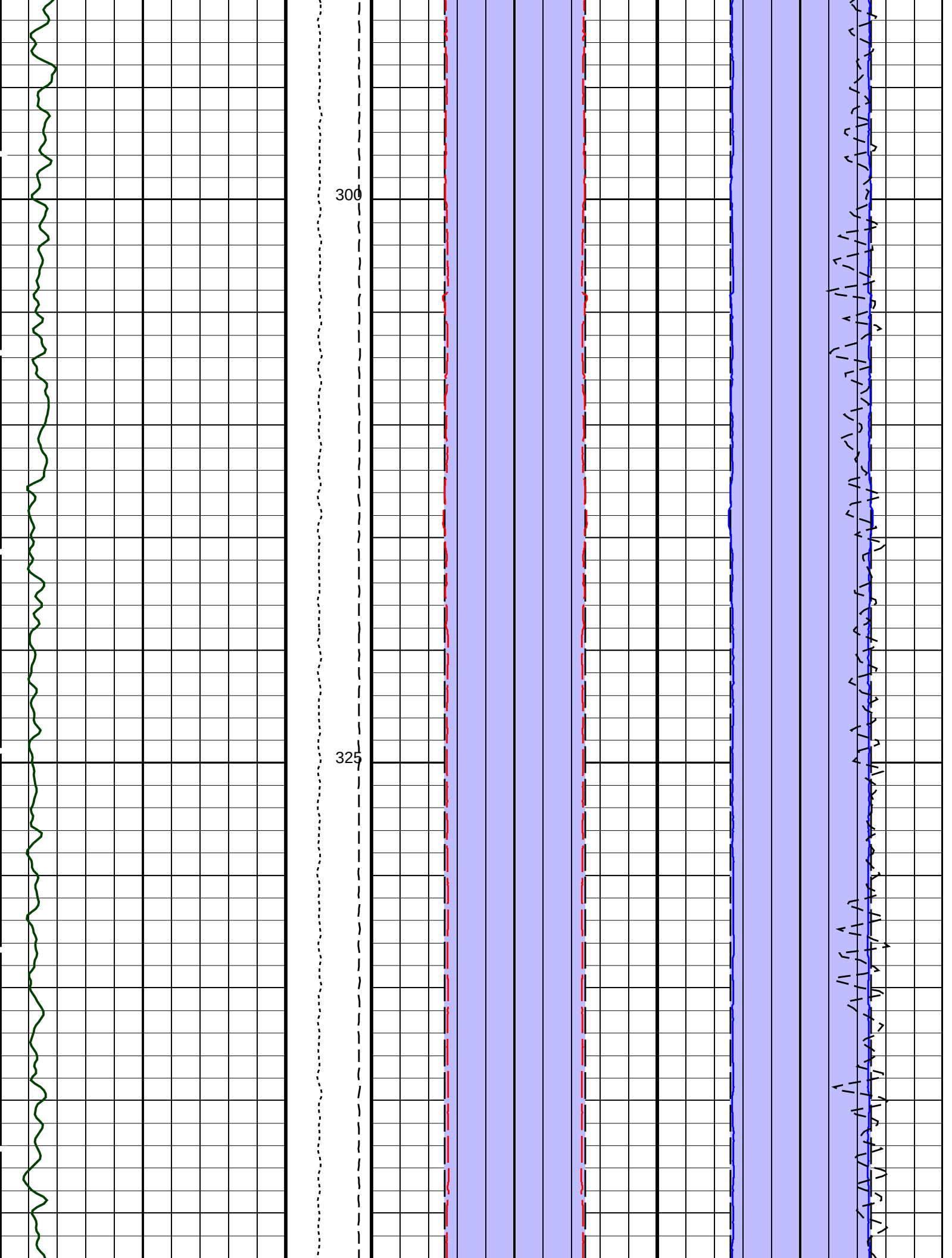


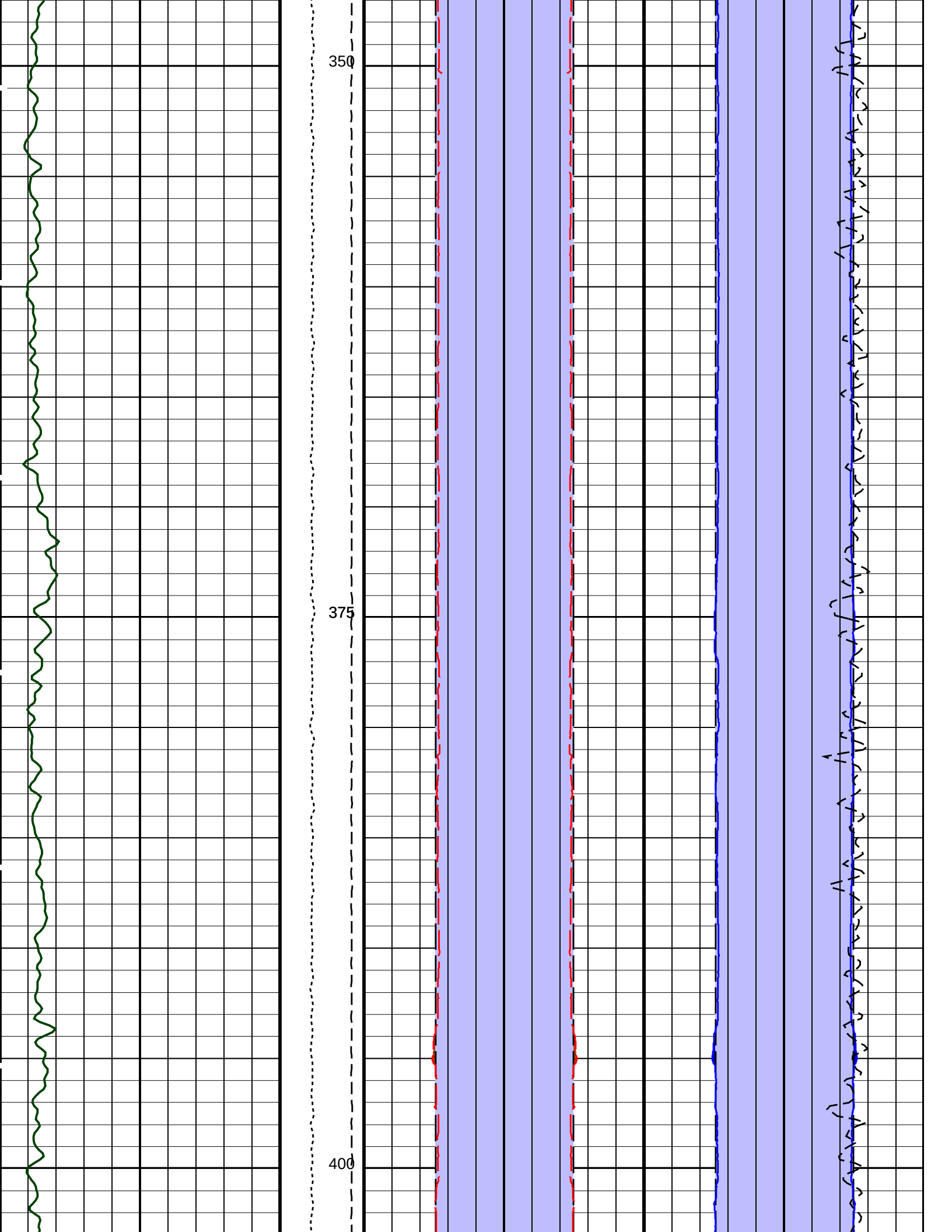

75
Drill Pipe
100

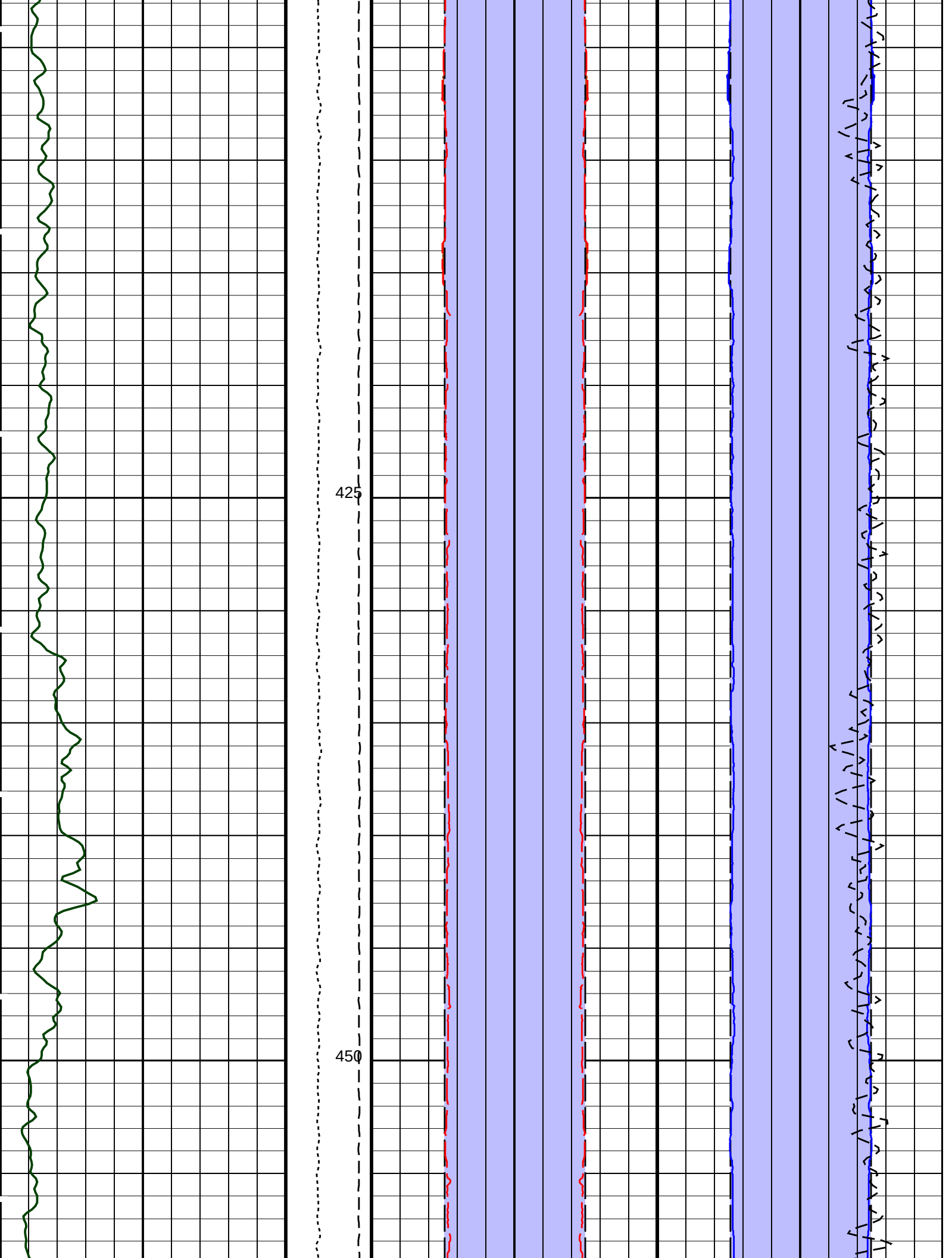

125
Calipers Closed
150
175

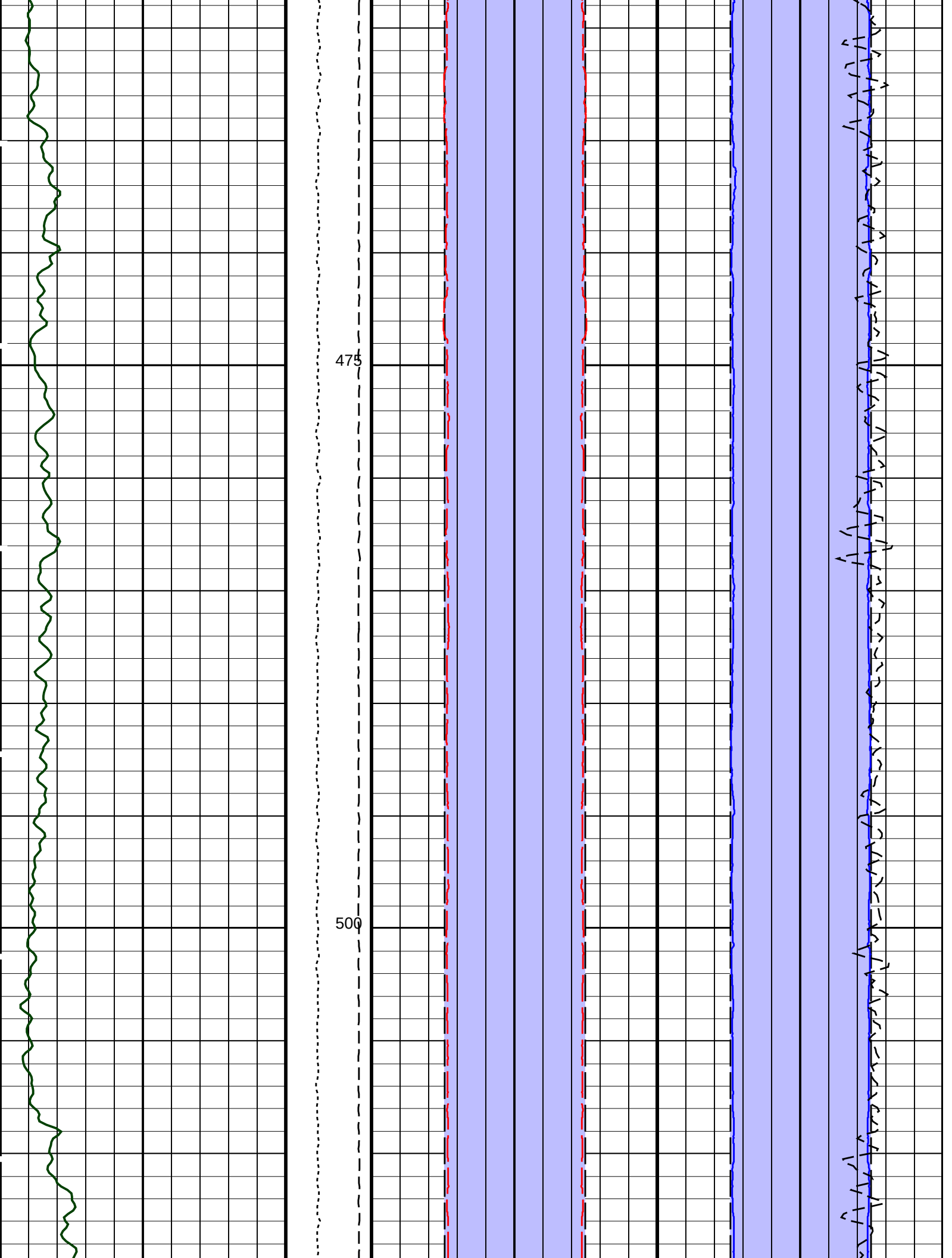

200
225

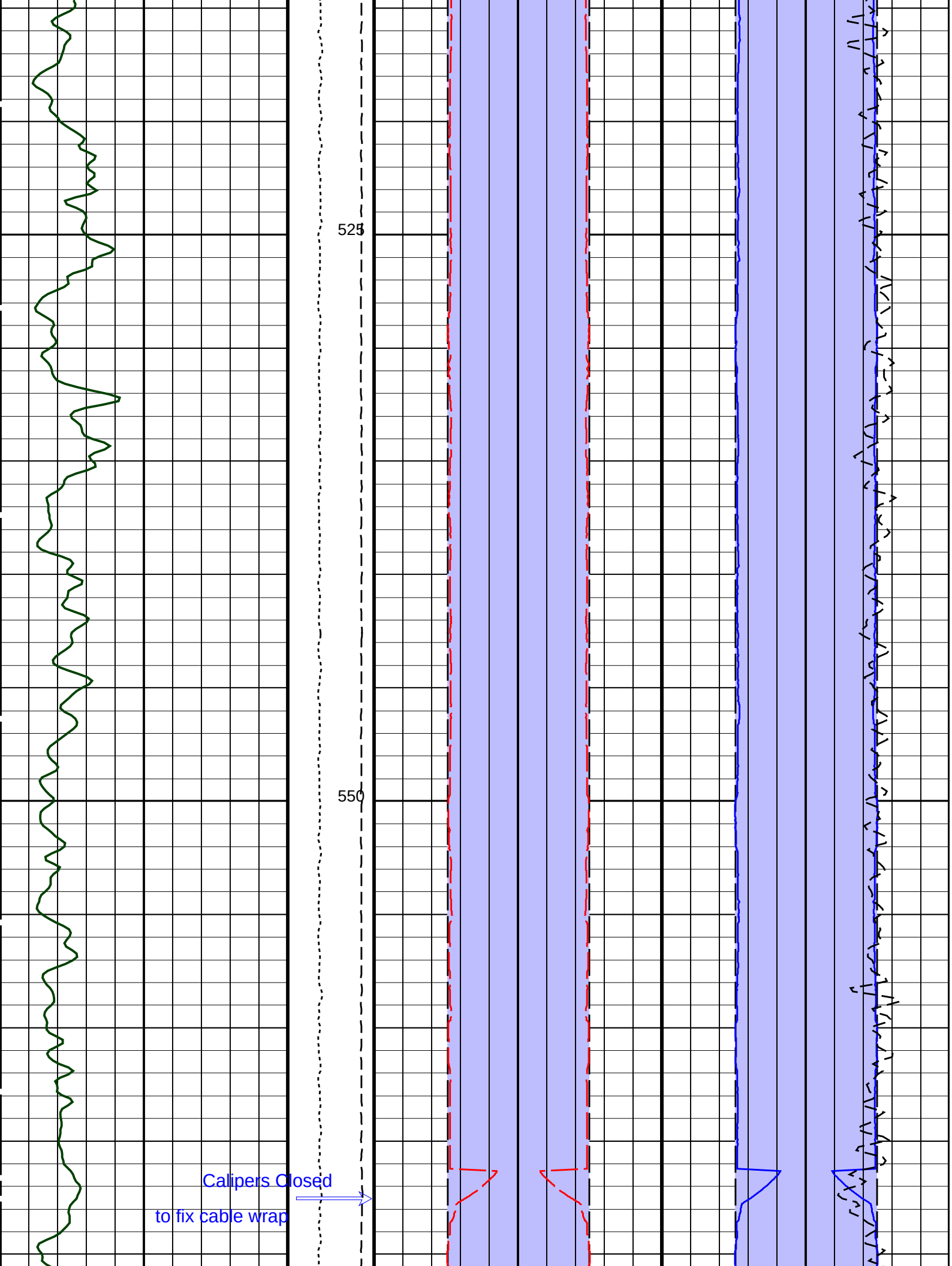

250
TENS
GR_EDTC
CDF
275
C1
C1
C2
C2
BS
BS
BS
CDF
BS

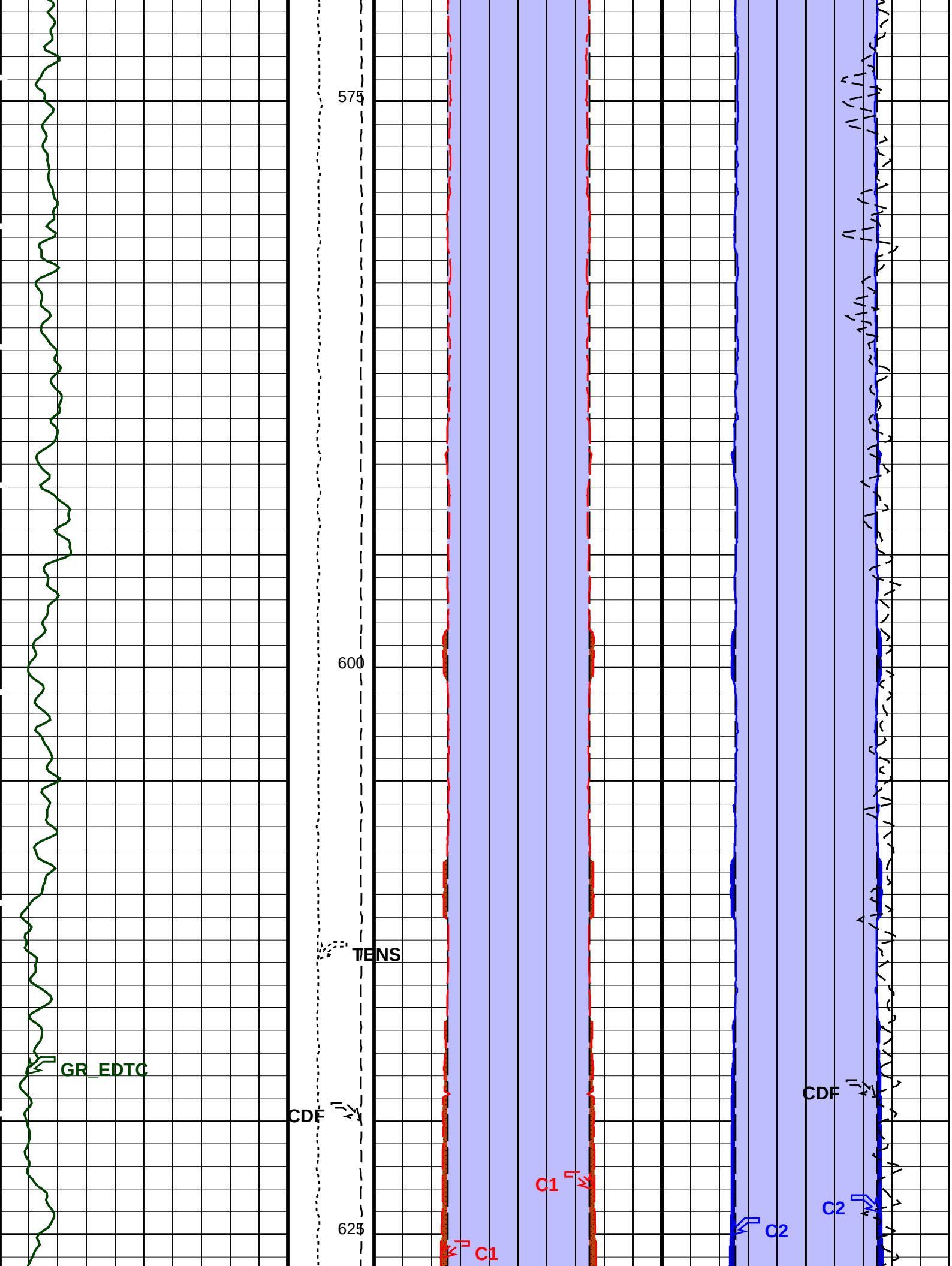

300
325

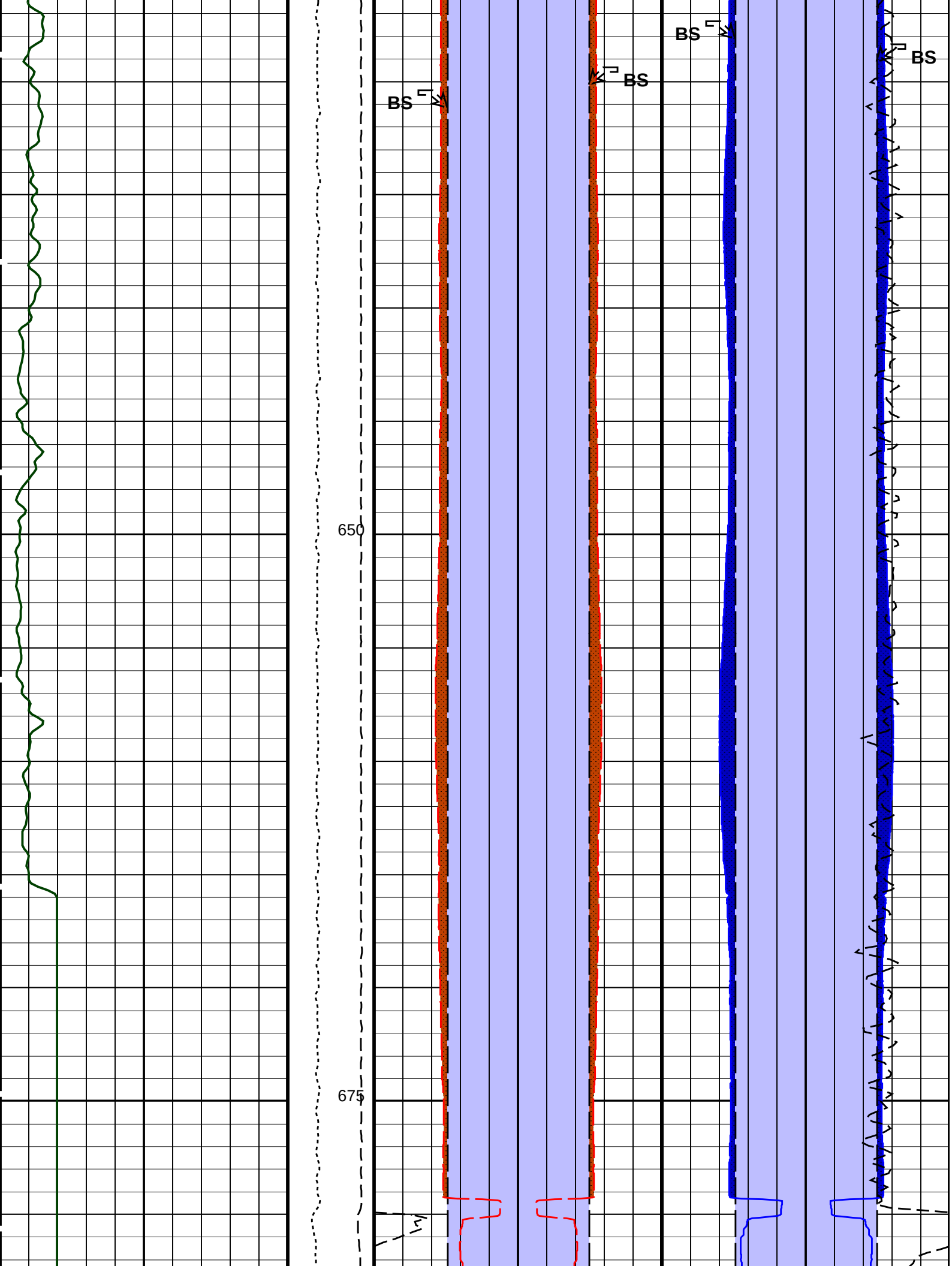

350
375
400

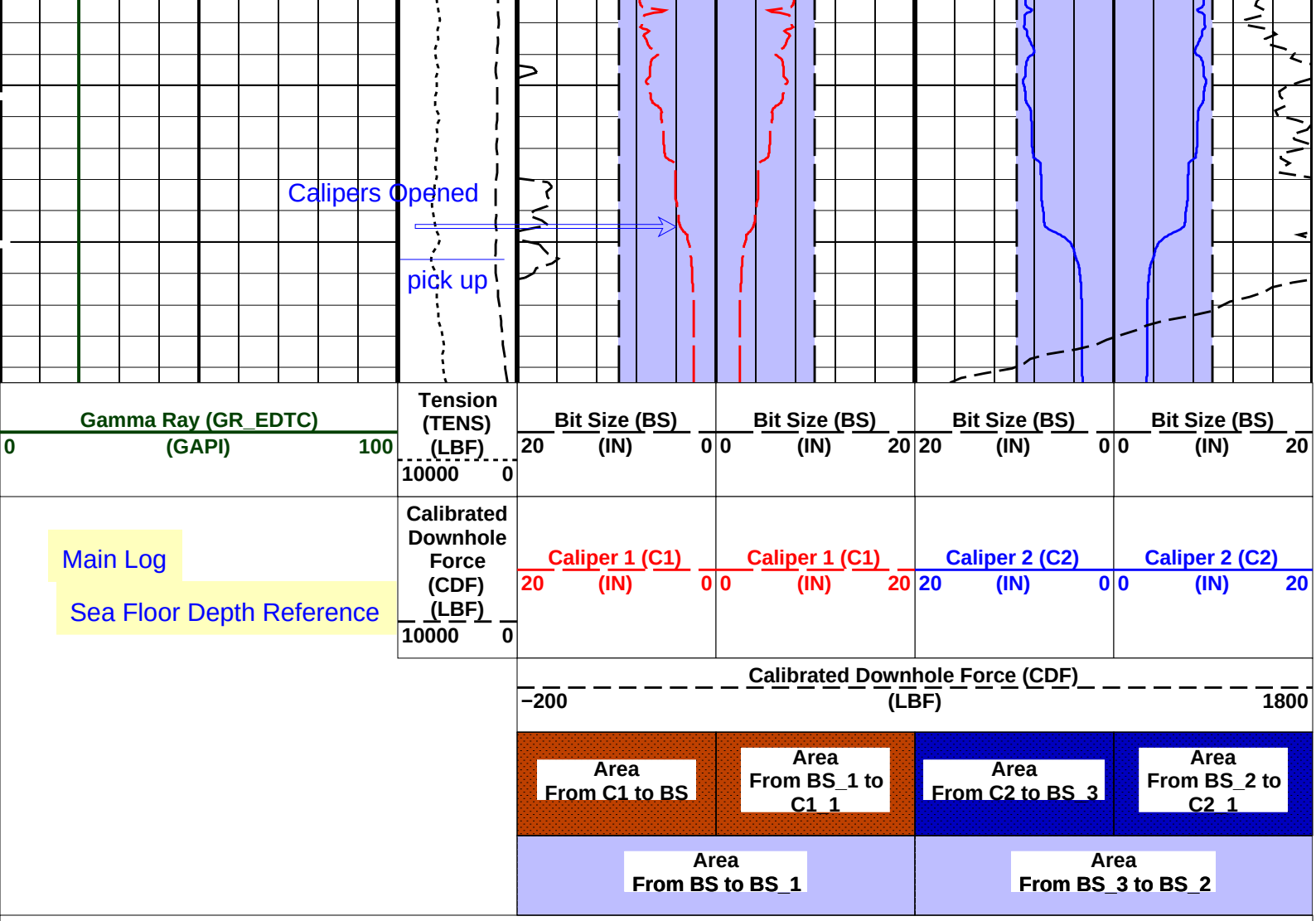

425
450


475
500


525
550
Calipers Closed
to fix cable wrap


575
600
625
TENS
GR_EDTC
CDF
C1
C2
CDF
C1
C2


BS
BS
BS
BS
650
675



Parameters

DLIS Name	Description	Value	
	MEST−B: Micro Electrical Scanner − B (Slim)		
ACPP	Accelerometer PROM Presence	PRESENT	
AFMO	Accelerometer Filtering Mode	MOVING_AVERAGE	
ART	Accelerometer Reference Temperature	20	DEGC
GLM	GPIT Logging Mode	DIPM	
ICMO	Inclinometry Computation Mode	AUTOMATIC_SELECTION	
MAPP	Magnetometer PROM Presence	PRESENT	
MDEC	Magnetic Field Declination	−5.1425	DEG
MLM	MEST Logging Mode	SCAN1800	
MRTE	Magneto Reference Temperature	23	DEGC
PTYP	Pad Type − High Resolution or Medium Extended Coverage	HR_SLIM_0_12_IN	
RBS	Resistivity Button Selection	AUTO	
TEMS	GPIT Temperature Sensor Used	BOTH	
U−GPOF	Playback OLD VERSION GPIT FILE (BEFORE OP14 + SRPC−3098−FEB_2006_C) ?	NO	
XGAI	Gain	GAIN_2	
XMOD	Emex Mode	MANUAL	
XOFF	Offset	OFFSET_0	
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)	30	DEGC
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	87	US/F
COUL	Label Slowness Upper Limit − Monopole P&S Compressional	210	US/F
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	1200	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	195	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	512	
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	C1	
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	0.018227	DC/M
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
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	
ISSBAR	Barite Mud Switch	NOBARITE	
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	
MCS	Mean Casing Slowness	57	US/F
MDS5	Multishot Delta−T Scatter − FMD	20	US
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	R7	
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	LFD_EVEN	
SAM2	DSST Sonic Acquisition Mode 2 − Upper Dipole Mode	ODD	
SAM3	DSST Sonic Acquisition Mode 3 − Monopole Mode for Stoneley	ODD	
SAM4	DSST Sonic Acquisition Mode 4 − Monopole Mode for P&S	EVEN	
SAM5	DSST Sonic Acquisition Mode 5 − 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	
SFM1	STC Filter − Lower Dipole	B.3−1.5K	
SFM2	STC Filter − Upper Dipole	B1−3K	
SFM3	STC Filter − Monopole Stoneley	B.5−1.5K	
SFM4	STC Filter − Monopole P&S	B3−20K	
SHLL	Label Slowness Lower Limit − Monopole P&S Shear	235	US/F
SHT	Surface Hole Temperature	35	DEGC
SHUL	Label Slowness Upper Limit − Monopole P&S Shear	240	US/F
SLL1	STC Slowness Lower Limit − Lower Dipole	75	US/F
SLL2	STC Slowness Lower Limit − Upper Dipole	75	US/F
SLL3	STC Slowness Lower Limit − Monopole Stoneley	180	US/F
SLL4	STC Slowness Lower Limit − Monopole P&S	40	US/F
SPFS	Sonic Porosity Formula	RAYMER_HUNT	
SPSO	Sonic Porosity Source	DTCO	
SST1	STC Slowness Step − Lower Dipole	4	US/F
SST2	STC Slowness Step − Upper Dipole	4	US/F
SST3	STC Slowness Step − Monopole Stoneley	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	
SSW3	STC Source Waveform − Monopole Stoneley	WF_SAM3	

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	1200	US/F
SUL2	STC Slowness Upper Limit − Upper Dipole	1200	US/F
SUL3	STC Slowness Upper Limit − Monopole Stoneley	780	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
SWD3	STC Slowness Width − Monopole Stoneley	40	US/F
SWD4	STC Slowness Width − Monopole P&S	10	US/F
TBDB	Tool String Bottom to DSST Bottom	440.25	IN
TBF1	STC Time for Baseline Fill − Lower Dipole	0	US
TBF2	STC Time for Baseline Fill − Upper Dipole	0	US
TBF3	STC Time for Baseline Fill − Monopole Stoneley	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
TLL3	STC Time Lower Limit − Monopole Stoneley	620	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
TST3	STC Time Step − Monopole Stoneley	200	US
TST4	STC Time Step − Monopole P&S	50	US
TTDB	Tool String Top to DSST Bottom	831.86	IN
TUL1	STC Time Upper Limit − Lower Dipole	20440	US
TUL2	STC Time Upper Limit − Upper Dipole	20200	US
TUL3	STC Time Upper Limit − Monopole Stoneley	12020	US
TUL4	STC Time Upper Limit − Monopole P&S	3660	US
TWA1	Transmitter Waveform Amplitude 1	179	
TWA2	Transmitter Waveform Amplitude 2	179	
TWA3	Transmitter Waveform Amplitude 3	166	
TWA4	Transmitter Waveform Amplitude 4	150	
TWA5	Transmitter Waveform Amplitude 5	150	
TWAX	Transmitter Waveform Amplitude X	179	
TWD1	STC Time Width − Lower Dipole	2000	US
TWD2	STC Time Width − Upper Dipole	2000	US
TWD3	STC Time Width − Monopole Stoneley	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
TWI3	STC Integration Time Window − Monopole Stoneley	1600	US
TWI4	STC Integration Time Window − Monopole P&S	500	US
TWR1	Transmitter Waveform Sample Rate 1	20	US
TWR2	Transmitter Waveform Sample Rate 2	5	US
TWR3	Transmitter Waveform Sample Rate 3	5	US
TWR4	Transmitter Waveform Sample Rate 4	5	US
TWR5	Transmitter Waveform Sample Rate 5	5	US
TWRX	Transmitter Waveform Sample Rate X	5	US
TWS1	Transmitter Waveform Select 1	2	
TWS2	Transmitter Waveform Select 2	0	
TWS3	Transmitter Waveform Select 3	4	
TWS4	Transmitter Waveform Select 4	6	
TWS5	Transmitter Waveform Select 5	6	
TWSX	Transmitter Waveform Select X	0	
UTXG	Upper Dipole Transmitter Geometry	162	IN
WFDTSP1	SAM1 Waveform Delta for Spectrum	0	US/F
WFDTSP2	SAM2 Waveform Delta for Spectrum	0	US/F
WFDTSP3	SAM3 Waveform Delta for Spectrum	0	US/F
WFDTSP4	SAM4 Waveform Delta for Spectrum	0	US/F
WFDTSPX	SAMX Waveform Delta for Spectrum	0	US/F
WFLLSP1	SAM1 Waveform Lower Limit for Spectrum	0	US
WFLLSP2	SAM2 Waveform Lower Limit for Spectrum	0	US
WFLLSP3	SAM3 Waveform Lower Limit for Spectrum	0	US
WFLLSP4	SAM4 Waveform Lower Limit for Spectrum	0	US
WFLLSPX	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	DUP	

EDTC−B: Enhanced DTS Cartridge

RHFL	Borehole Fluid Type	WATER	

BHFL	Borehole Fluid Type	WATER	
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	30	DEGC
BSCO	Borehole Salinity Correction Option	NO	
CCCO	Casing & Cement Thickness Correction Option	NO	
DPPM	Density Porosity Processing Mode	HIRS	
FSAL	Formation Salinity	−50000	PPM
FSCO	Formation Salinity Correction Option	NO	
GCSE	Generalized Caliper Selection	C1	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
HSCO	Hole Size Correction Option	YES	
ISSBAR	Barite Mud Switch	NOBARITE	
ISSBAR_EDTC	Nuclear Mud Type	NOBARITE	
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
MCCO	Mud Cake Correction Option	NO	
MCOR	Mud Correction	NATU	
MWCO	Mud Weight Correction Option	NO	
PTCO	Pressure/Temperature Correction Option	NO	
SDAT	Standoff Data Source	SOCN	
SHT	Surface Hole Temperature	35	DEGC
SOCN	Standoff Distance	0.5	IN
SOCO	Standoff Correction Option	NO	
TPOS_EDTC	EDTC Tool Centered/Eccentered	Centered	
U−ETELM_EDTS	Telemetry Mode for eWAFE	Standard_EDTS	
U−TELM_EDTS	Telemetry Mode for WAFE	Standard_EDTS	
DIP: Dip Computation			
	DIP Tool	SHDT	
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
DIR: Directional Survey Computation			
SPED	East Departure of Starting Point	0	M
SPND	North Departure of Starting Point	0	M
SPVD	TVD of Starting Point	0	M
TAZI	Vertical Section Azimuth	0	DEG
TIED	East Departure of Tie−in Point	0	M
TIMD	Along−hole depth of Tie−in Point	0	M
TIND	North Departure of Tie−in Point	0	M
TIVD	TVD of Tie−in Point	0	M
System and Miscellaneous			
ALTDPCHAN	Name of alternate depth channel	SpeedCorrectedDepth	
BS	Bit Size	9.875	IN
BSAL	Borehole Salinity	−50000.00	PPM
CSIZ	Current Casing Size	5.500	IN
CWEI	Casing Weight	168.00	LB/F
DFD	Drilling Fluid Density	1.03	G/C3
DO	Depth Offset for Playback	−4711.0	M
FLEV	Fluid Level	−50000.00	M
MST	Mud Sample Temperature	−50000.00	DEGC
PBVSADP	Use alternate depth channel for playback	NO	
PP	Playback Processing	RECOMPUTE	
RMFS	Resistivity of Mud Filtrate Sample	−50000.0000	OHMM
RW	Resistivity of Connate Water	1.0000	OHMM
TD	Total Depth	5411	M
TDD	Total Depth − Driller	5411.00	M
TDL	Total Depth − Logger	5411.00	M
TWS	Temperature of Connate Water Sample	37.78	DEGC

Format: BHP **Vertical Scale: 1:200** **Graphics File Created: 27−Jul−2014 05:31**

OP System Version: 19C0−187

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

Input DLIS Files

DEFAULT	FMS_DSI_058PUP	FN:80	PRODUCER	27−Jul−2014 03:51	5405.5 M	4757.9 M

Output DLIS Files

Calibration and Check Summary

Measurement	Nominal	Master	Before	After	Change	Limit	Units
Micro Electrical Scanner − B (Slim) Wellsite Calibration − Caliper Calibration							
Before: 16−Jul−2014 23:53							
Caliper 1 Zero Measurement	11.90	N/A	12.10	N/A	N/A	N/A	IN
Caliper 2 Zero Measurement	11.90	N/A	12.13	N/A	N/A	N/A	IN
Caliper 1 Plus Measurement	15.19	N/A	15.17	N/A	N/A	N/A	IN
Caliper 2 Plus Measurement	15.19	N/A	15.40	N/A	N/A	N/A	IN
Micro Electrical Scanner − B (Slim) Wellsite Calibration − CROUZET ACCELEROMETER PROM HAS BEEN READ CORRECTLY							
Before: 26−Jul−2014 5:53							
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: 26−Jul−2014 5:53							
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	
Enhanced DTS Cartridge Wellsite Calibration − EDTC Accelerometer Calibration							
Before: 26−Jul−2014 5:53							
EDTC Z−Axis Acceleration	9.810	N/A	9.741	N/A	N/A	N/A	M/S2
Enhanced DTS Cartridge Wellsite Calibration − Detector Calibration							
Before: 15−Jul−2014 8:25 After: 15−Jul−2014 8:38							
Gamma Ray (Jig − Bkg)	154.0	N/A	154.0	158.6	4.600	14.00	GAPI
Gamma Ray (Calibrated)	164.0	N/A	164.0	168.9	4.899	15.00	GAPI

Micro Electrical Scanner − B (Slim) / Equipment Identification

Primary Equipment:		
MEST Sonde − B	MEDS − B	770
MEST Preamplifier Cartridge − AB	MEPC − AB	806
GPIT Cartridge − AC	GPIC − AC	719
MEST Acquisition Cartridge − A	MEAC − A	804
Auxiliary Equipment:		
MEST−B Preamplifier Cartridge Housing	MEPH − A	701
MEST Acquisition Cartridge Housing (Slim	MEAH − B	701

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		9.741

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

Before: 26−Jul−2014 5:53

Enhanced DTS Cartridge Wellsite Calibration

Enhanced DTS Cartridge Wellsite Calibration

Detector Calibration

Phase	Gamma Ray Background GAPI	Value
Before		6.019
After		5.723
	0 (Minimum) 30.00 (Nominal) 120.0 (Maximum)	

Phase	Gamma Ray (Jig − Bkg) GAPI	Value
Before		154.0
After		158.6
	140.0 (Minimum) 154.0 (Nominal) 168.0 (Maximum)	

Phase	Gamma Ray (Calibrated) GAPI	Value
Before		164.0
After		168.9
	149.0 (Minimum) 164.0 (Nominal) 179.0 (Maximum)	

Before: 15−Jul−2014 8:25 After: 15−Jul−2014 8:38

Company: **Lamont Doherty Earth Observatory**

Schlumberger

Well: **Expedition 351, Site U1438F**
Field: **IBM Arc Origins**
Rig: **JOIDES Resolution**
Ocean: **Pacific**

Formation Micro Scanner (FMS)
Dipole Shear Sonic Imager (DSI)
Gamma Ray, Dual Axis Caliper