Schlumberger

Company: **Lamont Doherty**

Well: **KKGH01 Site 1 Hole A**
Field: **Kerala Konkan Basin**
Rig: **Joides Resolution** Ocean: **Arabian Sea**

Rig: Joides Resolution
Field: Kerala Konkan Basin
Location: Rig– Joides Resolution
Well: KKGH01 Site 1 Hole A
Company: Lamont Doherty

Dipole Shear Sonic Imager

LOCATION

		Elev.: K.B.	11.3 m
		G.L.	–2674.2 m
		D.F.	11 m
Permanent Datum:	Mean Sea Level	Elev.:	0 m
Log Measured From:	Rig Floor	11.0 m	above Perm. Datum
Drilling Measured From:	Rig Floor		

API Serial No.	Max. Hole Devi.	Longitude	Latitude
		70* 54.192 E	15* 18.366 N

Logging Date			9–May–2006						Logging Date
Run Number			One						Run Number
Depth Driller			2964.2 m						Depth Driller
Schlumberger Depth			2958 m						Schlumberger Depth
Bottom Log Interval			2957 m						Bottom Log Interval
Top Log Interval			2735 m						Top Log Interval
Casing Driller Size @ Depth			0.000 in @ 2758 m			@			Casing Driller Size @ Depth
Casing Schlumberger			2735 m						Casing Schlumberger
Bit Size			9.875 in						Bit Size
Type Fluid In Hole			SepioLite/Barite						Type Fluid In Hole
MUD	Density	Viscosity	1.26 g/cm3						MUD Density / Viscosity
MUD	Fluid Loss	PH	0 cm3						MUD Fluid Loss / PH
MUD	Source Of Sample		Pit						MUD Source Of Sample
RM @ Measured Temperature			0.177 ohm.m @ 23 degC			@			RM @ Measured Temperature
RMF @ Measured Temperature			0.000 ohm.m @			@			RMF @ Measured Temperature
RMC @ Measured Temperature			0.000 ohm.m @			@			RMC @ Measured Temperature
Source RMF	RMC								Source RMF / RMC
RM @ MRT	RMF @ MRT		0.281 @ 7	@ 7		@		@	RM @ MRT / RMF @ MRT
Maximum Recorded Temperatures			7 degC						Maximum Recorded Temperatures
Circulation Stopped		Time	8–May–2006	16:00					Circulation Stopped / Time
Logger On Bottom		Time	9–May–2006	see log					Logger On Bottom / Time
Unit Number	Location		2082	Webster, TX					Unit Number / Location
Recorded By			Steve Kittredge						Recorded By
Witnessed By			S. Mrozewski A. Cook						Witnessed By

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	OTHER SERVICES2
OS1: VSI	OS1:
OS2: DITE/EMS/	OS2:
OS3: HLDS/APS/HNGS	OS3:
OS4:	OS4:
OS5:	OS5:

REMARKS: RUN NUMBER 1	REMARKS: RUN NUMBER 2
All parameters and presentations as per IODP standards	
Tool ran as per tool sketch below.	
Pass #1 stopped before entering pipe.	
10.5 ppg mud with Barite used to fill the hole.	
Go–Devil run on bottom of tool.	
Upper Dipole Low frequency, Lower Dipole	
P&S and Stonely modes run on both passes.	

RUN 1		RUN 2	
SERVICE ORDER #:		SERVICE ORDER #:	
PROGRAM VERSION:	12C0–301	PROGRAM VERSION:	
FLUID LEVEL:		FLUID LEVEL:	

LOGGED INTERVAL	START	STOP	LOGGED INTERVAL	START	STOP

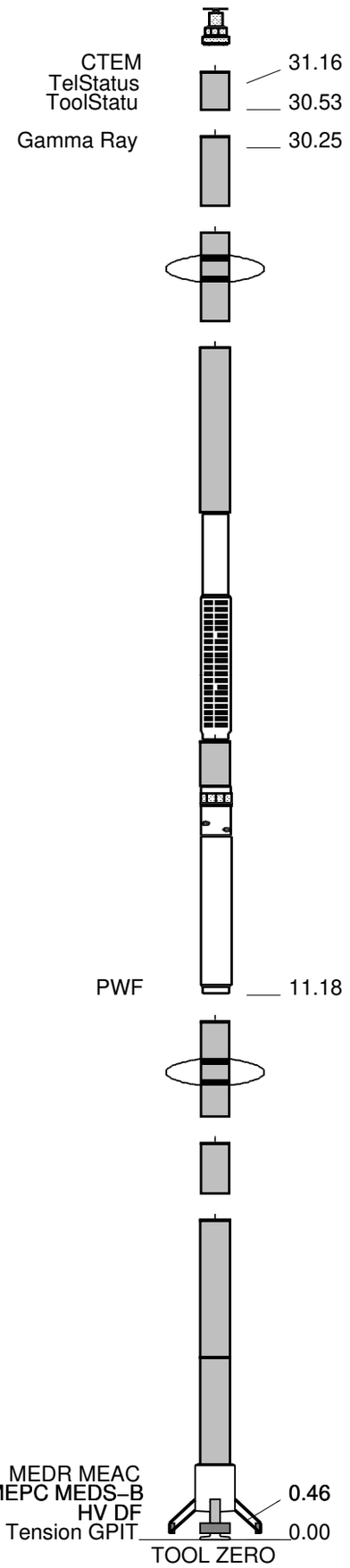
EQUIPMENT DESCRIPTION

RUN 1 RUN 2

SURFACE EQUIPMENT

GSR–U/Y 166
WITM (DTS)–A

DOWNHOLE EQUIPMENT

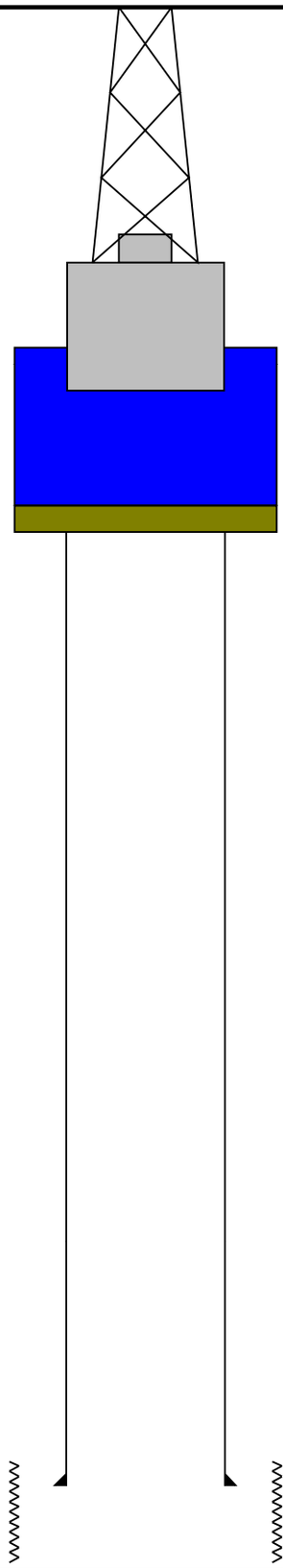


LEH–QT LEH–QT	32.33
DTC–H ECH–KC	31.44
SGT–N SGH–K 2443 SGC–TB 9582 SGD–TAA	30.53
AH–MCD AH–MCD	28.85
DSST–B SPAC–B 8128 ECH–SD 8128 SMDR–BD 8076 SSIJ–BA 8127 SMDX–AA 8148	26.73
AH–MCD AH–MCD	11.18
DTA–A ECH–KE DTA–A 8231	8.90
MEST–B MEAH–B 701 MEAC–A 804 MEPH–A 702 GPIC–A 840 MEPC–AB 807 MEDS–B 771	7.68

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

Production String	(in) OD	(in) ID	(m) MD
Kelly Bushing Elevation			11.3
Derrick Floor Elevation			11.0
Mean Sea Level			0.0

Well Schematic



(m) MD	(in) OD	(in) ID	Casing String
0.0	6.000		Casing String
2672.2	9.875		Borehole Segment
2742.4	6.000		Casing Shoe
2964.2	9.875		Borehole Segment Bottom

Schlumberger

Pass #1

MAXIS Field Log

Input DLIS Files

DEFAULT	FMS_DSI_037PUP	FN:33	PRODUCER	10–May–2006 14:14	2960.8 M	2773.1 M

Output DLIS Files

DEFAULT	FMS_DSI_041PUP	FN:37	PRODUCER	11–May–2006 13:10	2960.8 M	2773.5 M

OP System Version: 12C0–301

MCM

MEST–B	12C0–301	DTA–A	12C0–301
DSST–B	12C0–301	SGT–N	12C0–301
DTC–H	12C0–301		

PIP SUMMARY

Time Mark Every 60 S

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

Peak Coherence / RA – Upper Dipole (CHR2)
0 (----) 10

Peak Coherence / RA – Lower Dipole (CHR1)
0 (----) 10

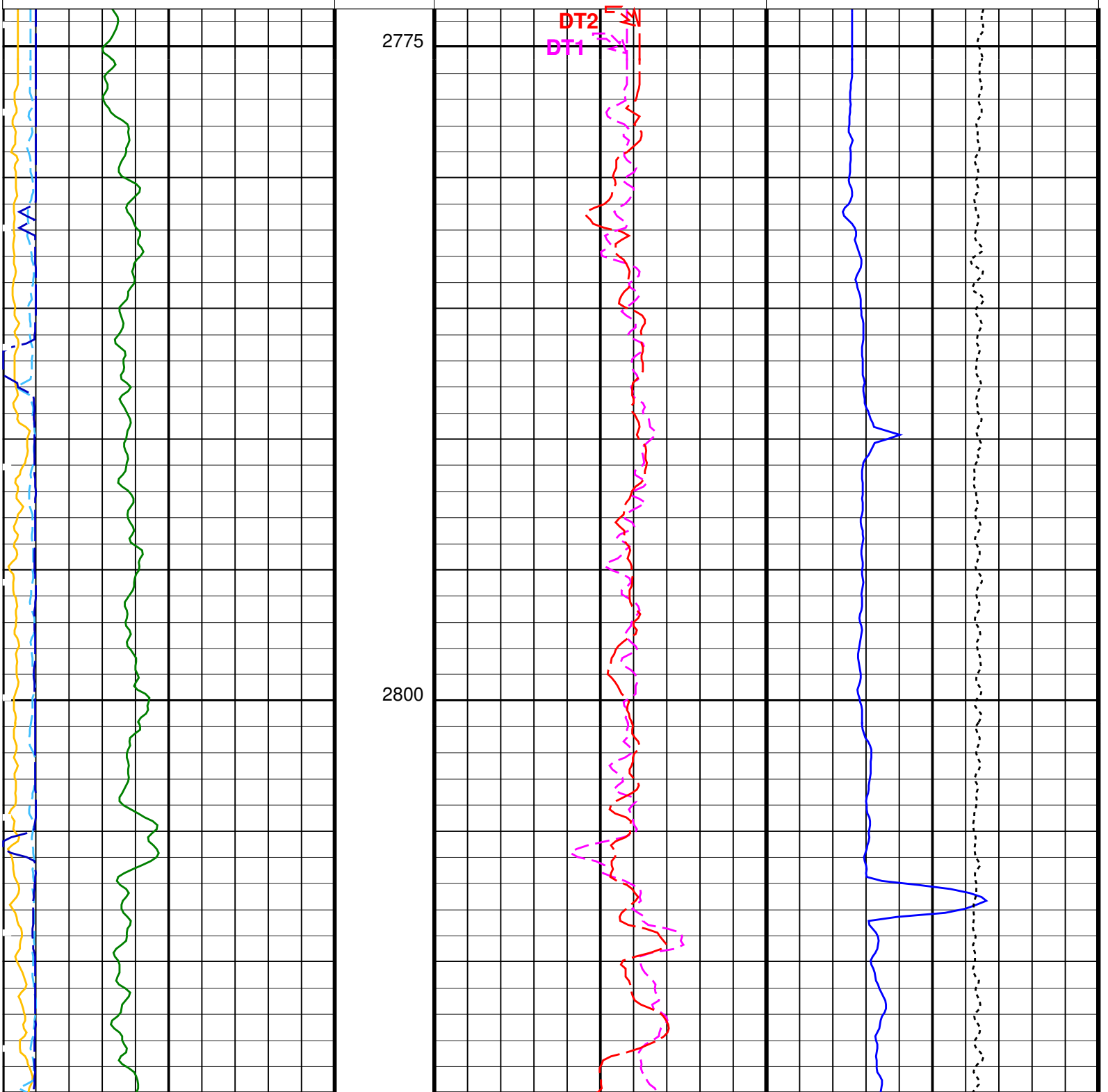
Gamma Ray (GR)
0 (GAPI) 100

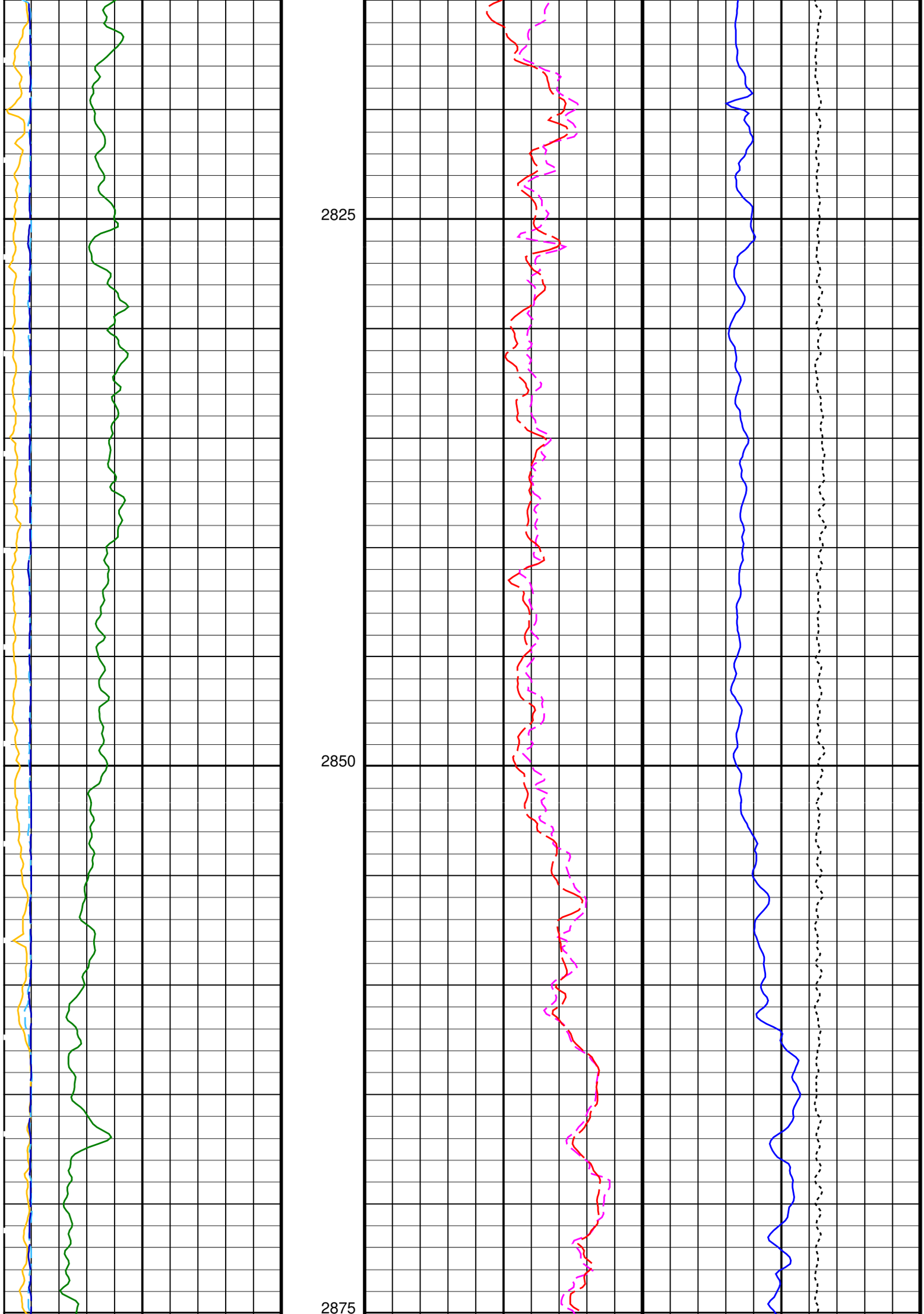
Delta–T Shear – Upper Dipole (DT2)
1600 (US/F) 300

Delta–T Shear – Lower Dipole (DT1)
1600 (US/F) 300

Tension (TENS)
10000 (LBF) 0

Delta–T Comp – P & S (DT4P)
220 (US/F) 120

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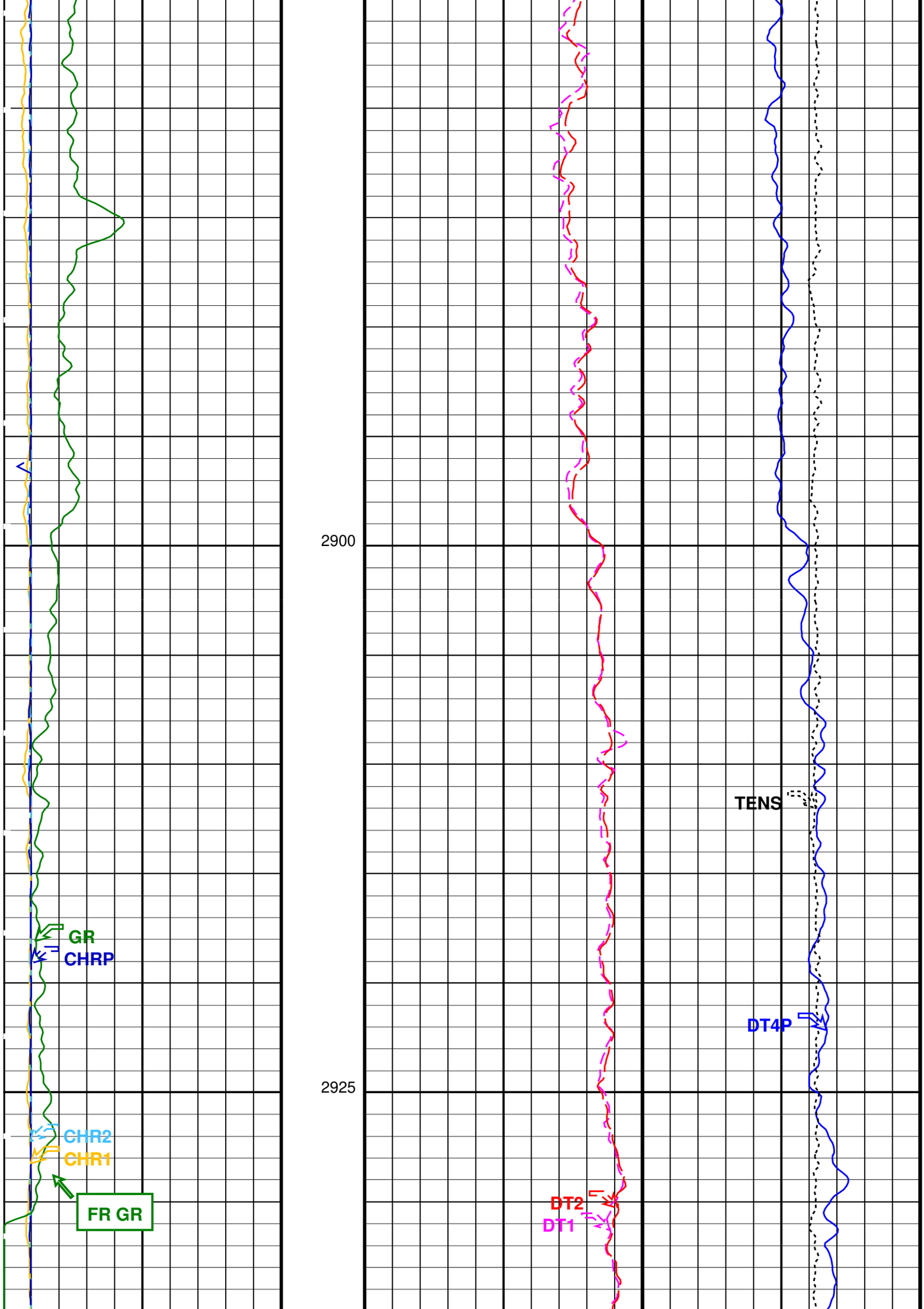
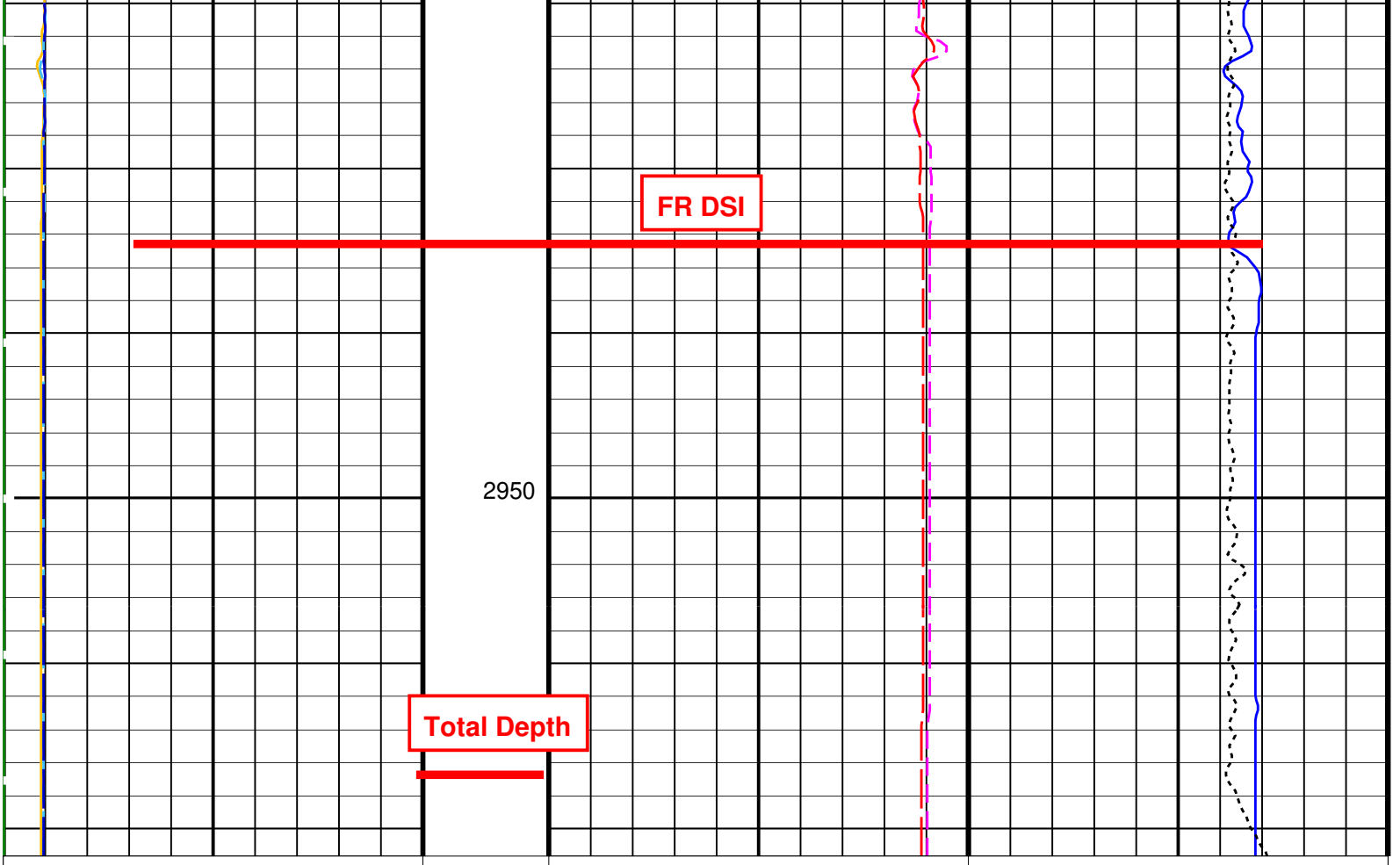

2900
2925
GR
CHRP
CHR2
CHR1
FR GR
DT2
DT1
TENS
DT4P



Gamma Ray (GR)	Delta–T Shear – Lower Dipole (DT1)	Delta–T Comp – P & S (DT4P)
0 (GAPI) 100	1600 (US/F) 300	220 (US/F) 120
Peak Coherence / RA – Lower Dipole (CHR1)	Delta–T Shear – Upper Dipole (DT2)	Tension (TENS)
0 (----) 10	1600 (US/F) 300	10000 (LBF) 0
Peak Coherence / RA – Upper Dipole (CHR2)		
0 (----) 10		
Peak Coherence / RA – P & S Comp (CHRP)		
0 (----) 10		

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	185	US/F
DLCS	Label Compressional Source – Dipole Shear	USE	
DSHL	Label Slowness Lower Limit – Dipole Shear	220	US/F
DSHU	Label Slowness Upper Limit – Dipole Shear	1600	US/F
DTCS	Compressional Delta–T Source for DTCO Channel	PS_COMP	
DTF	Delta–T Fluid	189	US/F
FILG	Label Fill Gap Control – Monopole P&S	COMP_SHEAR	
LFC	Label Formation Character – Monopole P&S	COMP_FIRST	
LTXG	Lower Dipole Transmitter Geometry	156	IN
MCS	Mean Casing Slowness	57	US/F
MTXG	Monopole Transmitter Geometry	186	IN
NWI1	Number Waveform Items 1	8	
NWI2	Number Waveform Items 2	8	

NWI4	Number Waveform Items 4	8	
NWIX	Number Waveform Items X	0	
RSMN	Label Shear/Compressional Minimum Ratio – Monopole P&S	1.4	
RSMX	Label Shear/Compressional Maximum Ratio – Monopole P&S	2.12	
RX1G	Receiver 1 Geometry	294	IN
RX2G	Receiver 2 Geometry	300	IN
RX3G	Receiver 3 Geometry	306	IN
RX4G	Receiver 4 Geometry	312	IN
RX5G	Receiver 5 Geometry	318	IN
RX6G	Receiver 6 Geometry	324	IN
RX7G	Receiver 7 Geometry	330	IN
RX8G	Receiver 8 Geometry	336	IN
SAS1	STC Sonic Array Status – Lower Dipole	255	
SAS2	STC Sonic Array Status – Upper Dipole	255	
SAS4	STC Sonic Array Status – Monopole P&S	255	
SFM1	STC Filter – Lower Dipole	B1–3K	
SFM2	STC Filter – Upper Dipole	B.3–1.5K	
SHLL	Label Slowness Lower Limit – Monopole P&S Shear	75	US/F
SHUL	Label Slowness Upper Limit – Monopole P&S Shear	240	US/F
SSW1	STC Source Waveform – Lower Dipole	WF_SAM1	
SSW2	STC Source Waveform – Upper Dipole	WF_SAM2	
SSW4	STC Source Waveform – Monopole P&S	WF_SAM4	
STLL	Label Slowness Lower Limit – Monopole Stoneley	220	US/F
STUL	Label Slowness Upper Limit – Monopole Stoneley	1000	US/F
TWI1	STC Integration Time Window – Lower Dipole	1600	US
TWI2	STC Integration Time Window – Upper Dipole	1600	US
TWI4	STC Integration Time Window – Monopole P&S	500	US
UTXG	Upper Dipole Transmitter Geometry	162	IN
SGT–N: Scintillation Gamma–Ray – N			
BHS	Borehole Status	OPEN	
System and Miscellaneous			
DO	Depth Offset for Playback	0.0	M
PP	Playback Processing	NORMAL	

Format: DSI_Field_Print Vertical Scale: 1:200 Graphics File Created: 11–May–2006 13:10

OP System Version: 12C0–301

MCM

MEST–B	12C0–301	DTA–A	12C0–301
DSST–B	12C0–301	SGT–N	12C0–301
DTC–H	12C0–301		

Input DLIS Files

DEFAULT	FMS_DSI_037PUP	FN:33	PRODUCER	10–May–2006 14:14	2960.8 M	2773.1 M

Output DLIS Files

DEFAULT	FMS_DSI_041PUP	FN:37	PRODUCER	11–May–2006 13:10

Input DLIS Files

DEFAULT	FMS_DSI_037PUP	FN:33	PRODUCER	10–May–2006 14:14	2960.8 M	2773.1 M

Output DLIS Files

DEFAULT	FMS_DSI_041PUP	FN:37	PRODUCER	11–May–2006 13:10	2960.8 M	2773.5 M

OP System Version: 12C0–301

MCM

MEST–B	12C0–301	DTA–A	12C0–301
DSST–B	12C0–301	SGT–N	12C0–301
DTC–H	12C0–301		

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

Tension (TENS)

10000 (LBF) 0

Gamma Ray (GR)

0 (GAPI) 100

Min Amplitude Max

Rec.Array P&S Slow Proj. CVDL (SPR4)

40 (US/F) 440

Delta–T Shear / RA – P & S (DTRS)

40 (US/F) 440

Delta–T Comp / RA – P & S (DTRP)

40 (US/F) 440

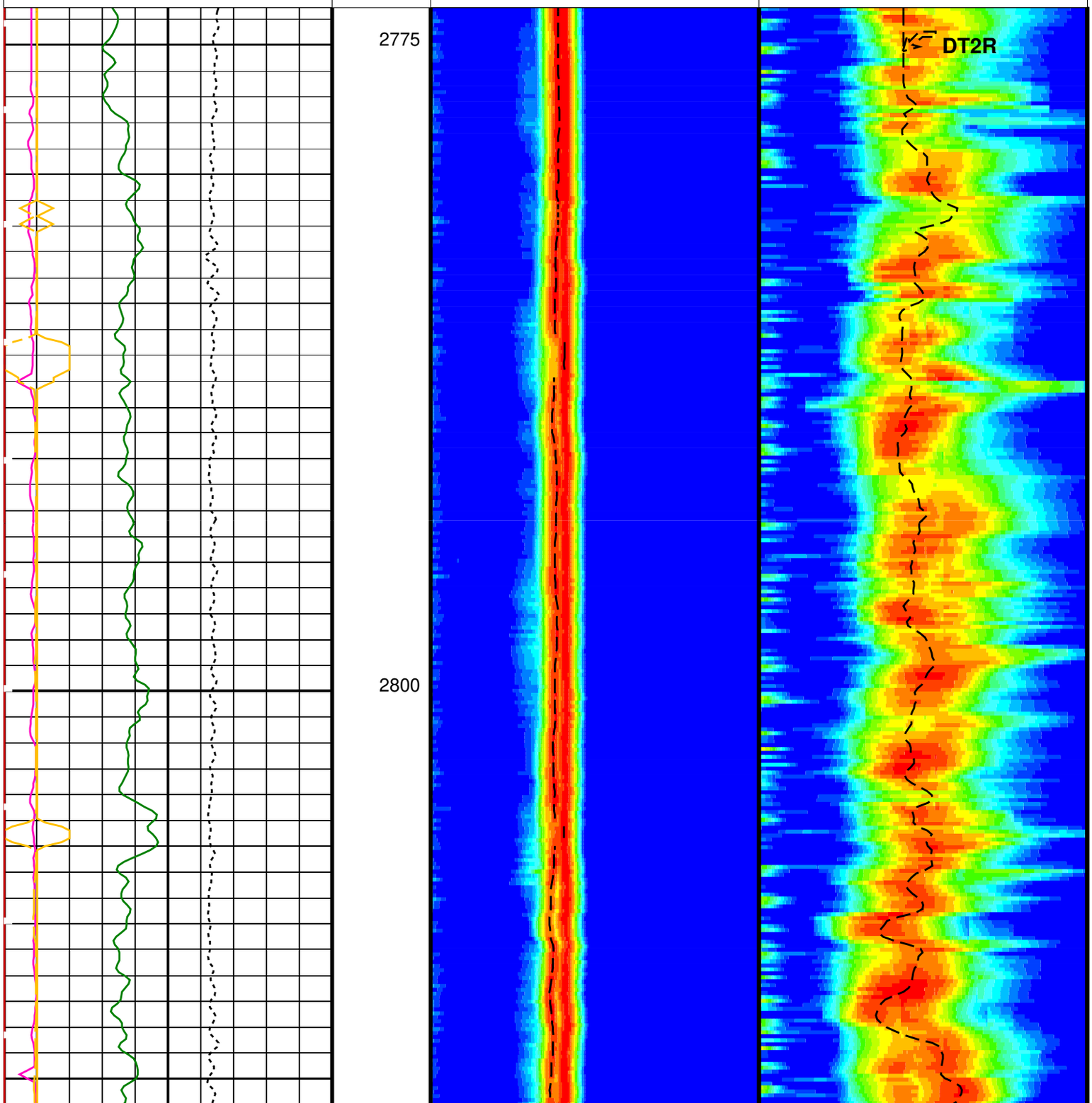
Min Amplitude Max

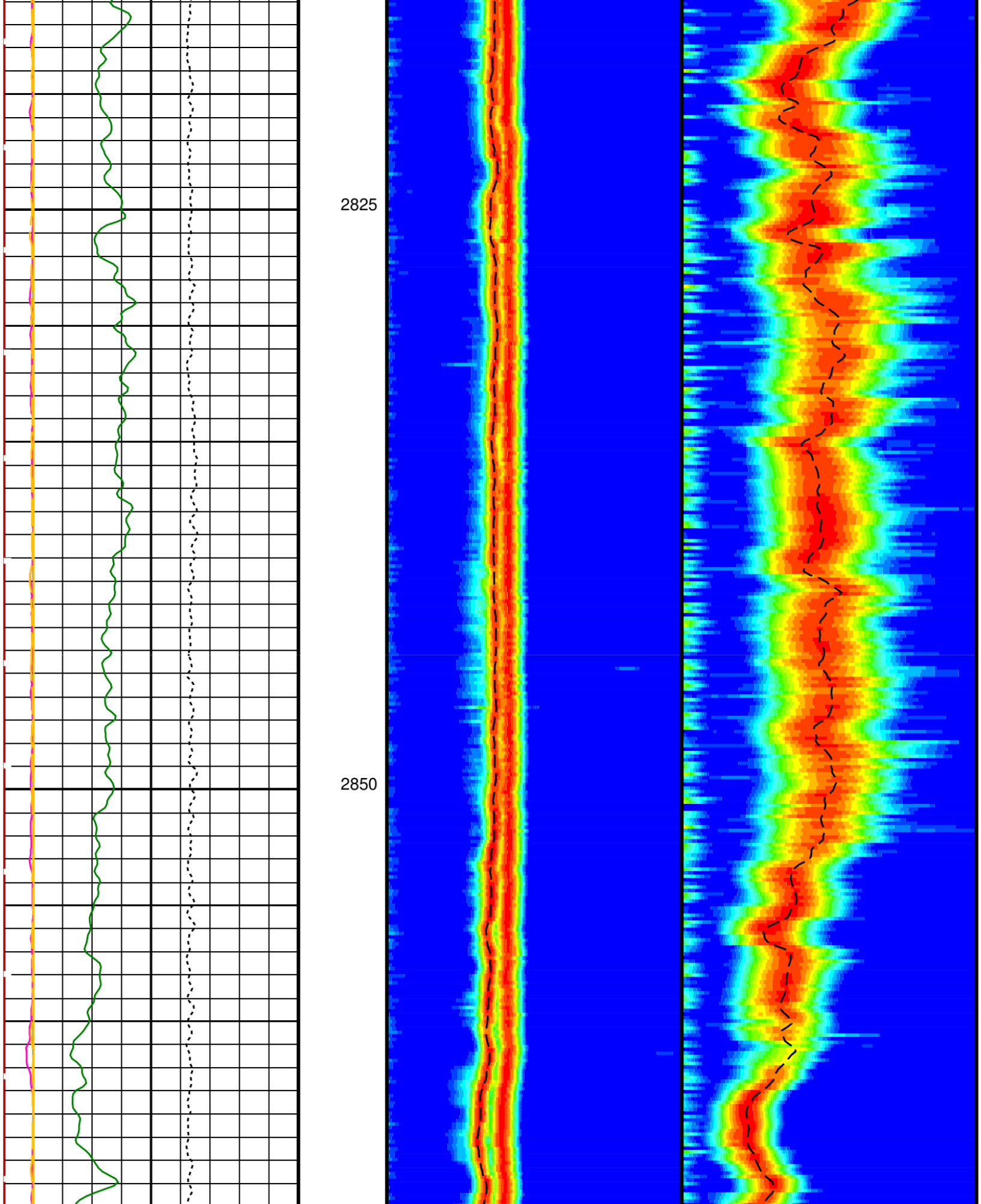
Rec.Array U.Dipole Slow Proj. CVDL (SPR2)

220 (US/F) 1600

Delta–T Shear / RA – Upper Dipole (DT2R)

220 (US/F) 1600

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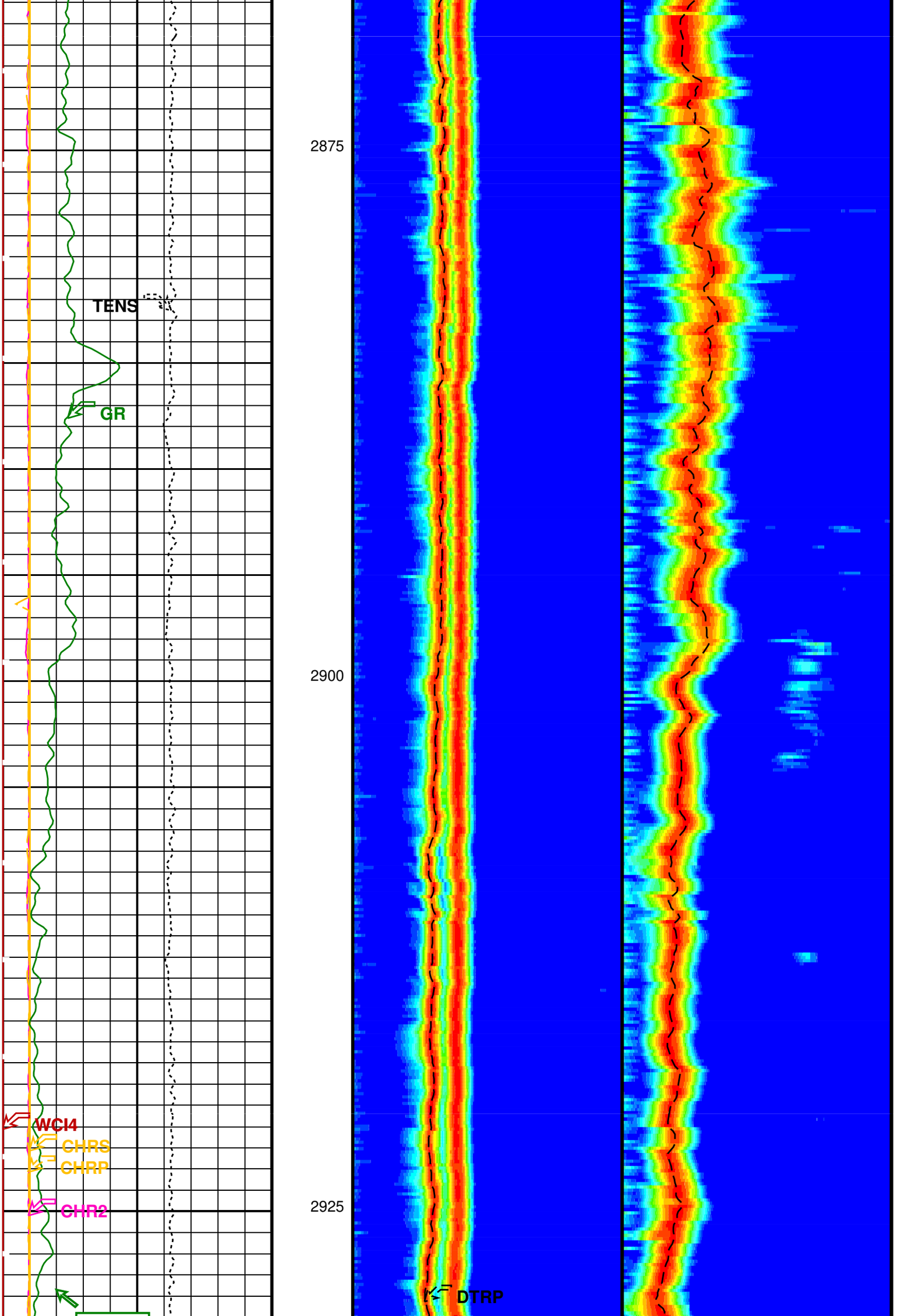
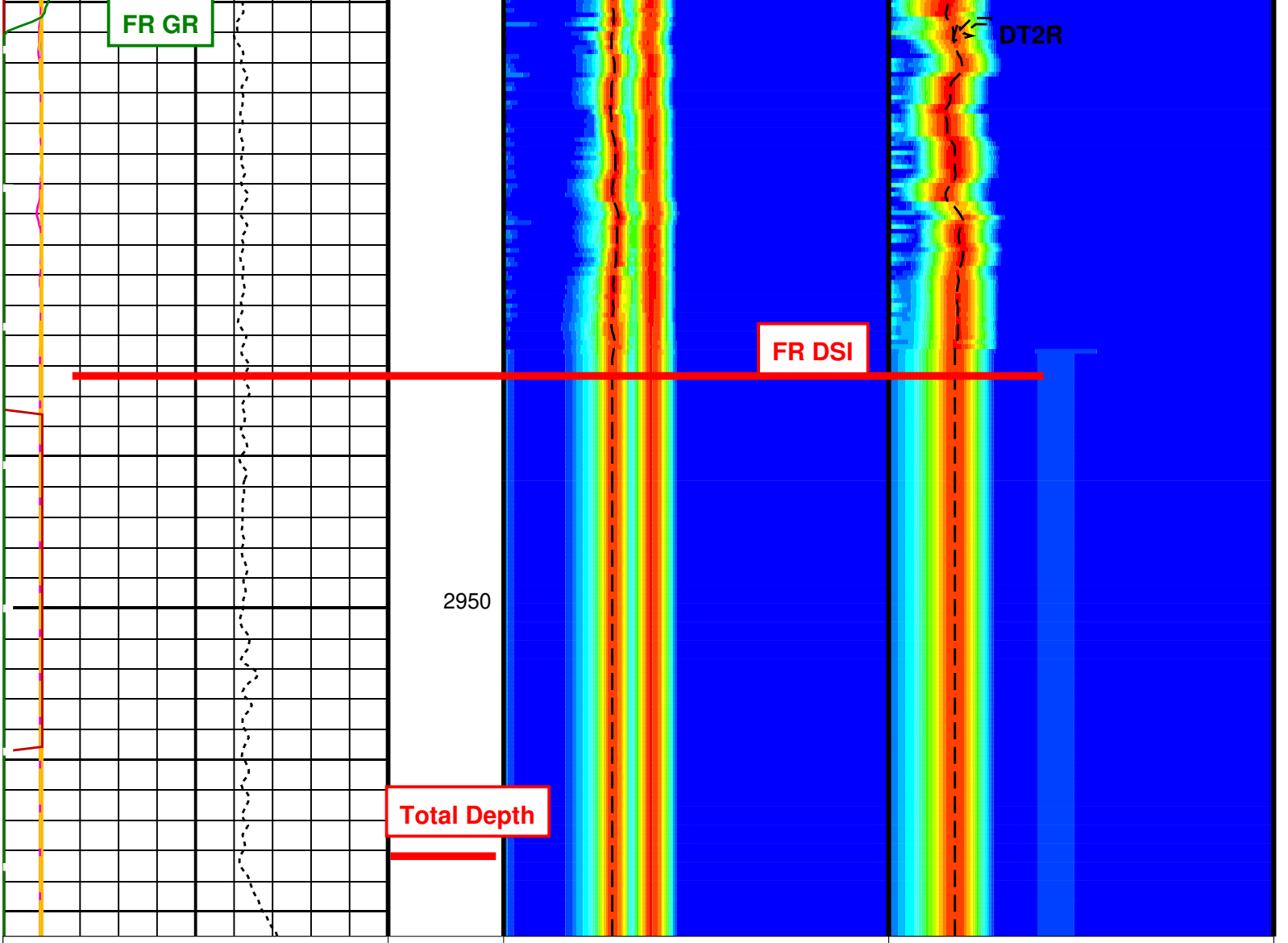

2875
2900
2925
TENS
GR
WCI4
CHRS
CHRP
CHR2
DTRP



Gamma Ray (GR) 0 (GAPI) 100	Delta–T Comp / RA – P & S (DTRP) 40 (US/F) 440	Delta–T Shear / RA – Upper Dipole (DT2R) 220 (US/F) 1600
Tension (TENS) 10000 (LBF) 0	Delta–T Shear / RA – P & S (DTRS) 40 (US/F) 440	Min Amplitude Max Rec.Array U.Dipole Slow Proj. CVDL (SPR2) 220 (US/F) 1600
Peak Coherence / RA – Upper Dipole (CHR2) 0 (----) 10	Min Amplitude Max Rec.Array P&S Slow Proj. CVDL (SPR4) 40 (US/F) 440	
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	
	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	185	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	220	US/F
DSHU	Label Slowness Upper Limit – Dipole Shear	1600	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	189	US/F
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	COMP_FIRST	
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	LFD_ODD	
SAM4	DSST Sonic Acquisition Mode 4 – High Frequency Monopole Mode for P&S	MFD_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	B.3–1.5K	
SFM4	STC Filter – Monopole P&S	B3–12K	
SHLL	Label Slowness Lower Limit – Monopole P&S Shear	75	US/F
SHUL	Label Slowness Upper Limit – Monopole P&S Shear	240	US/F
SLL2	STC Slowness Lower Limit – Upper Dipole	220	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	220	US/F
STUL	Label Slowness Upper Limit – Monopole Stoneley	1000	US/F
SUL2	STC Slowness Upper Limit – Upper Dipole	1600	US/F
SUL4	STC Slowness Upper Limit – Monopole P&S	440	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	1420	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	20440	US
TUL4	STC Time Upper Limit – Monopole P&S	5110	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	
	SGT–N: Scintillation Gamma–Ray – N		
BHS	Borehole Status	OPEN	
	System and Miscellaneous		
DO	Depth Offset for Playback	0.0	M
PP	Playback Processing	NORMAL	

OP System Version: 12C0–301
MCM

MEST–B	12C0–301	DTA–A	12C0–301
DSST–B	12C0–301	SGT–N	12C0–301
DTC–H	12C0–301		

Input DLIS Files

DEFAULT	FMS_DSI_037PUP	FN:33	PRODUCER	10–May–2006 14:14	2960.8 M	2773.1 M

Output DLIS Files

DEFAULT	FMS_DSI_041PUP	FN:37	PRODUCER	11–May–2006 13:10

Input DLIS Files

DEFAULT	FMS_DSI_037PUP	FN:33	PRODUCER	10–May–2006 14:14	2960.8 M	2773.1 M

Output DLIS Files

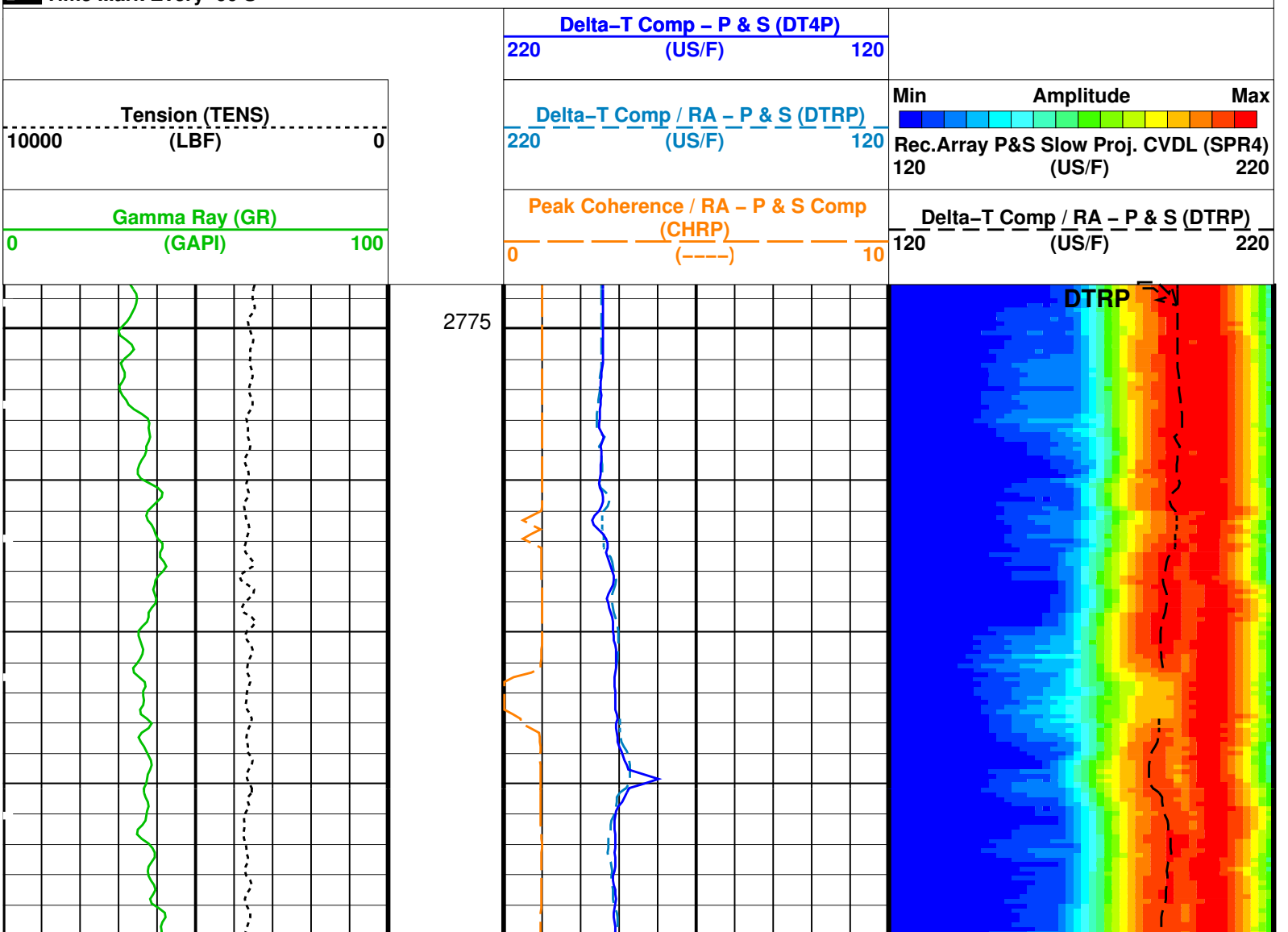
DEFAULT	FMS_DSI_041PUP	FN:37	PRODUCER	11–May–2006 13:10	2960.8 M	2773.5 M

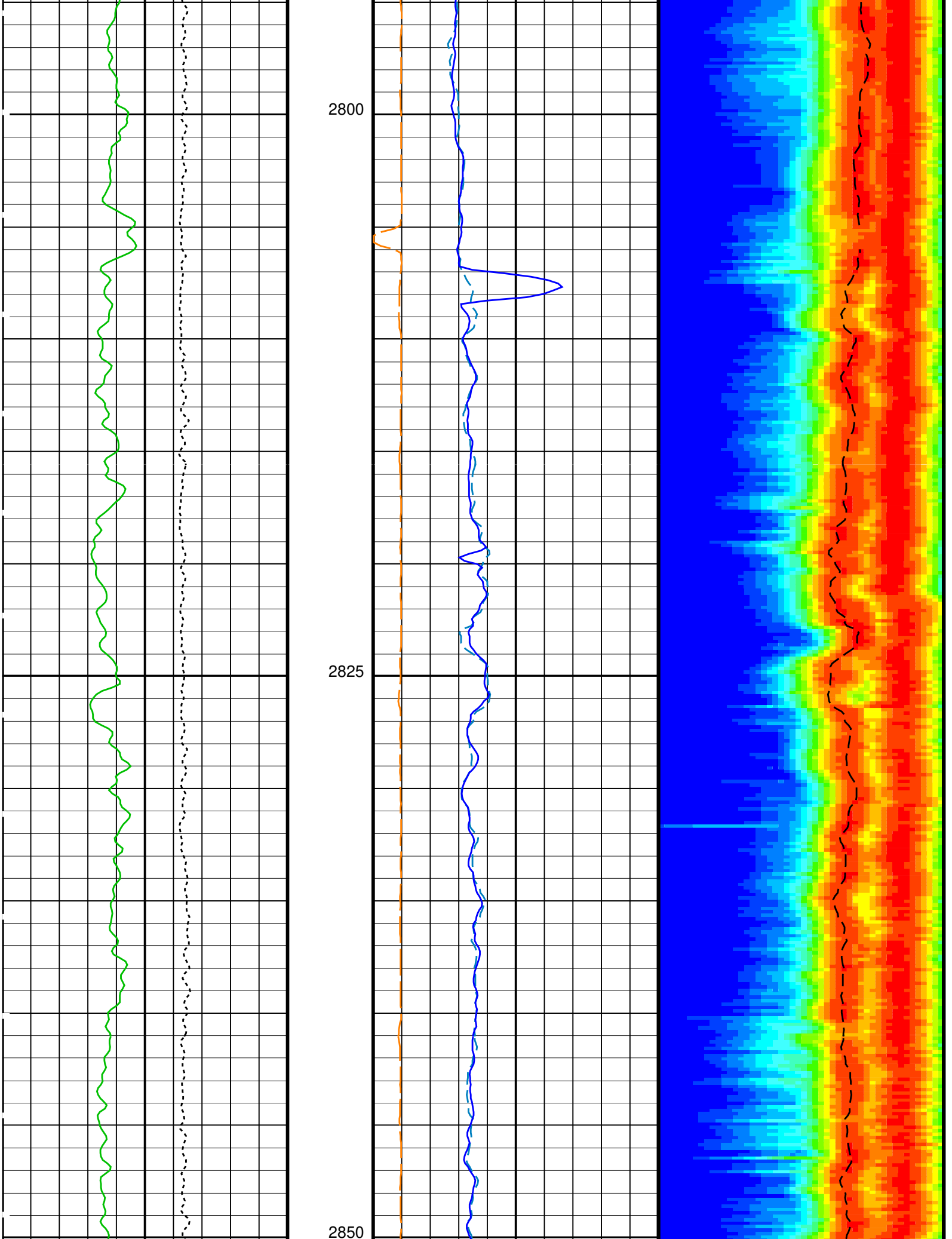
OP System Version: 12C0–301
MCM

MEST–B	12C0–301	DTA–A	12C0–301
DSST–B	12C0–301	SGT–N	12C0–301
DTC–H	12C0–301		

PIP SUMMARY

Time Mark Every 60 S

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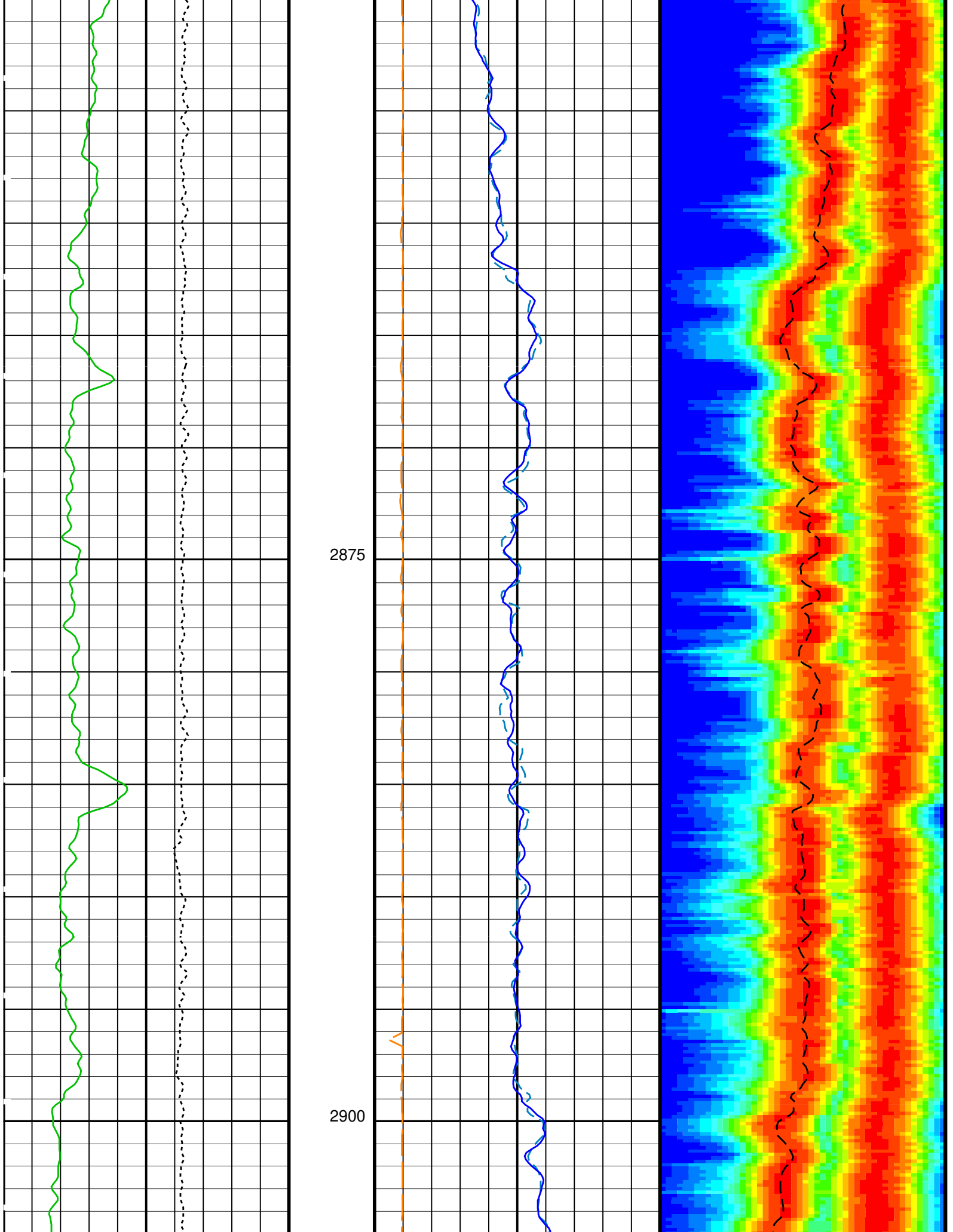
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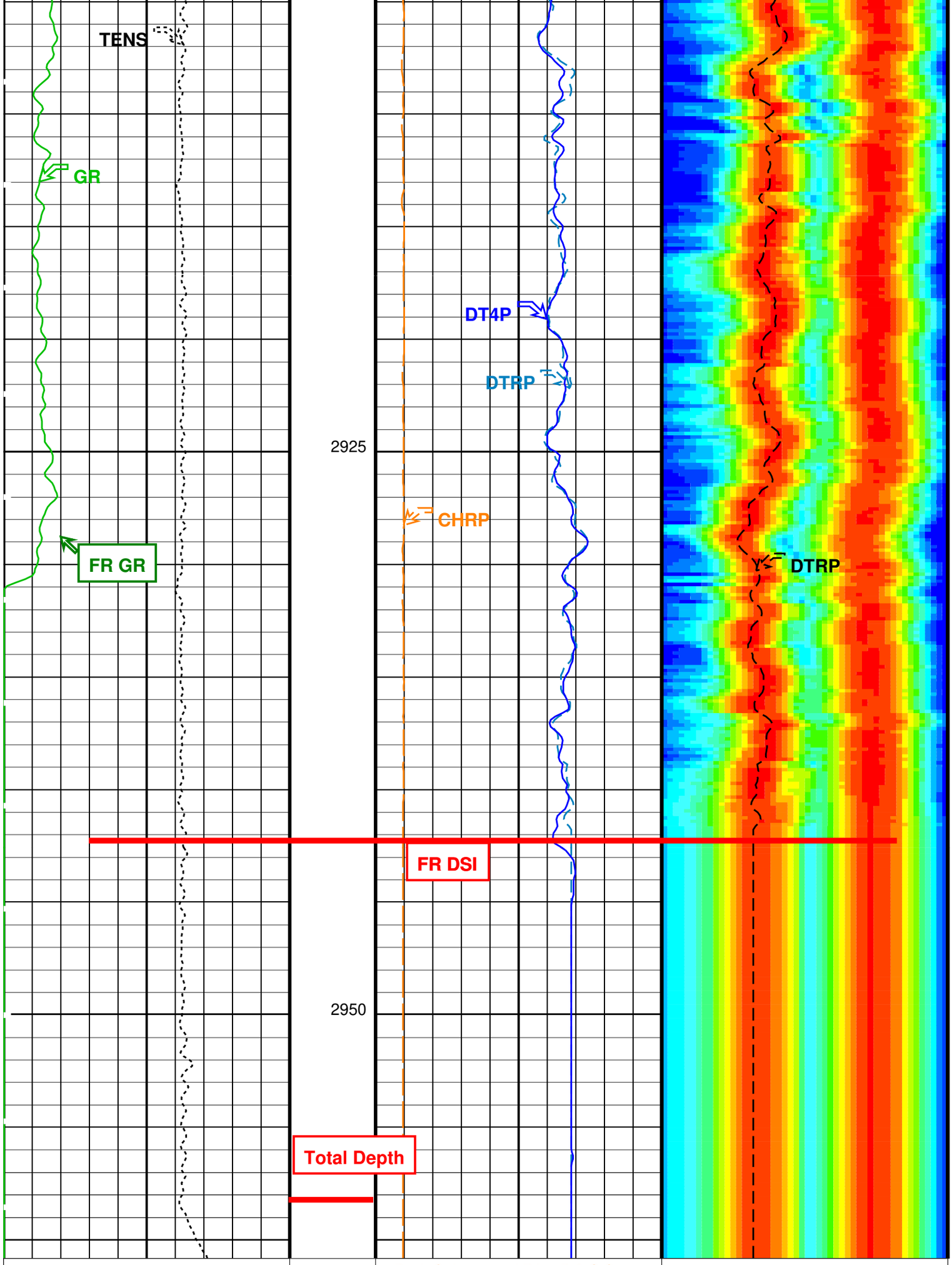
2900


TENS
GR
FR GR
DT4P
DTRP
CHRP
2925
2950
FR DSI
Total Depth
DTRP
Gamma Ray (GR)
0 (GAPI) 100
Tension (TENS)
10000 (LBF) 0
Peak Coherence / RA – P & S Comp (CHRP)
0 (----) 10
Delta–T Comp / RA – P & S (DTRP)
220 (US/F) 120
Delta–T Comp / RA – P & S (DTRP)
120 (US/F) 220
Min Amplitude Max
Rec.Array P&S Slow Proj. CVDL (SPR4)
120 (US/F) 220

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	185	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	
LFC	Label Formation Character – Monopole P&S	COMP_FIRST	
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 – High Frequency Monopole Mode for P&S	MFD_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	B3–12K	
SHLL	Label Slowness Lower Limit – Monopole P&S Shear	75	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	220	US/F
STUL	Label Slowness Upper Limit – Monopole Stoneley	1000	US/F
SUL4	STC Slowness Upper Limit – Monopole P&S	440	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	5110	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	
SGT–N: Scintillation Gamma–Ray – N			
BHS	Borehole Status	OPEN	
System and Miscellaneous			
DO	Depth Offset for Playback	0.0	M
PP	Playback Processing	NORMAL	

Format: DSST_P_S_VDL_COLOR Vertical Scale: 1:200 Graphics File Created: 11–May–2006 13:10

OP System Version: 12C0–301

MCM

MEST–B	12C0–301	DTA–A	12C0–301
DSST–B	12C0–301	SGT–N	12C0–301
DTC–H	12C0–301		

Input DLIS Files

DEFAULT	FMS_DSI_037PUP	FN:33	PRODUCER	10–May–2006 14:14	2960.8 M	2773.1 M

Output DLIS Files

DEFAULT	FMS_DSI_041PUP	FN:37	PRODUCER	11–May–2006 13:10

Schlumberger

Pass #2

MAXIS Field Log

Input DLIS Files

DEFAULT	FMS_DSI_031LUP	FN:30	PRODUCER	09–May–2006 08:10	2961.4 M	2726.6 M

Output DLIS Files

DEFAULT	FMS_DSI_042PUP	FN:38	PRODUCER	11–May–2006 13:11	2961.4 M	2727.0 M

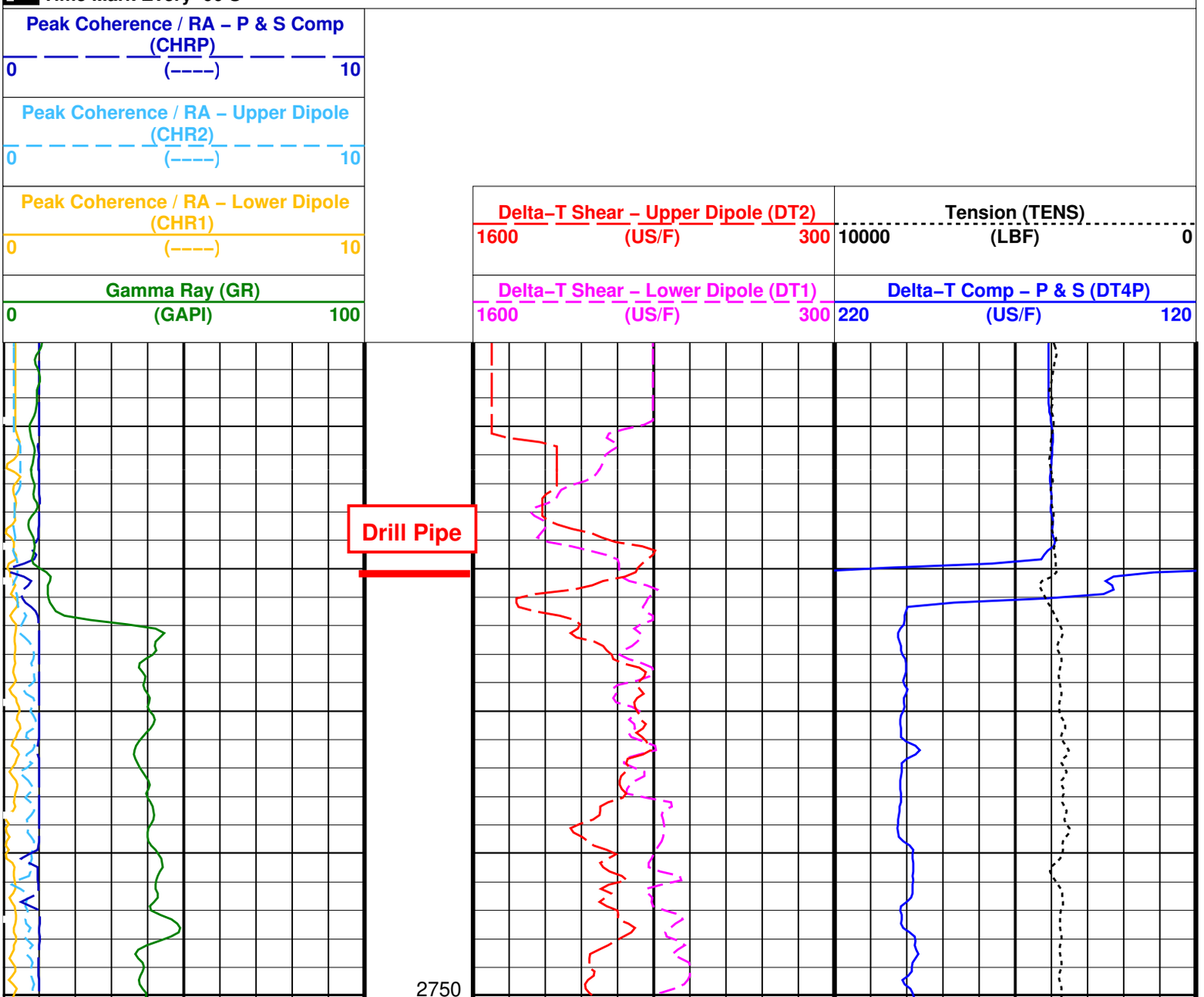
OP System Version: 12C0–301

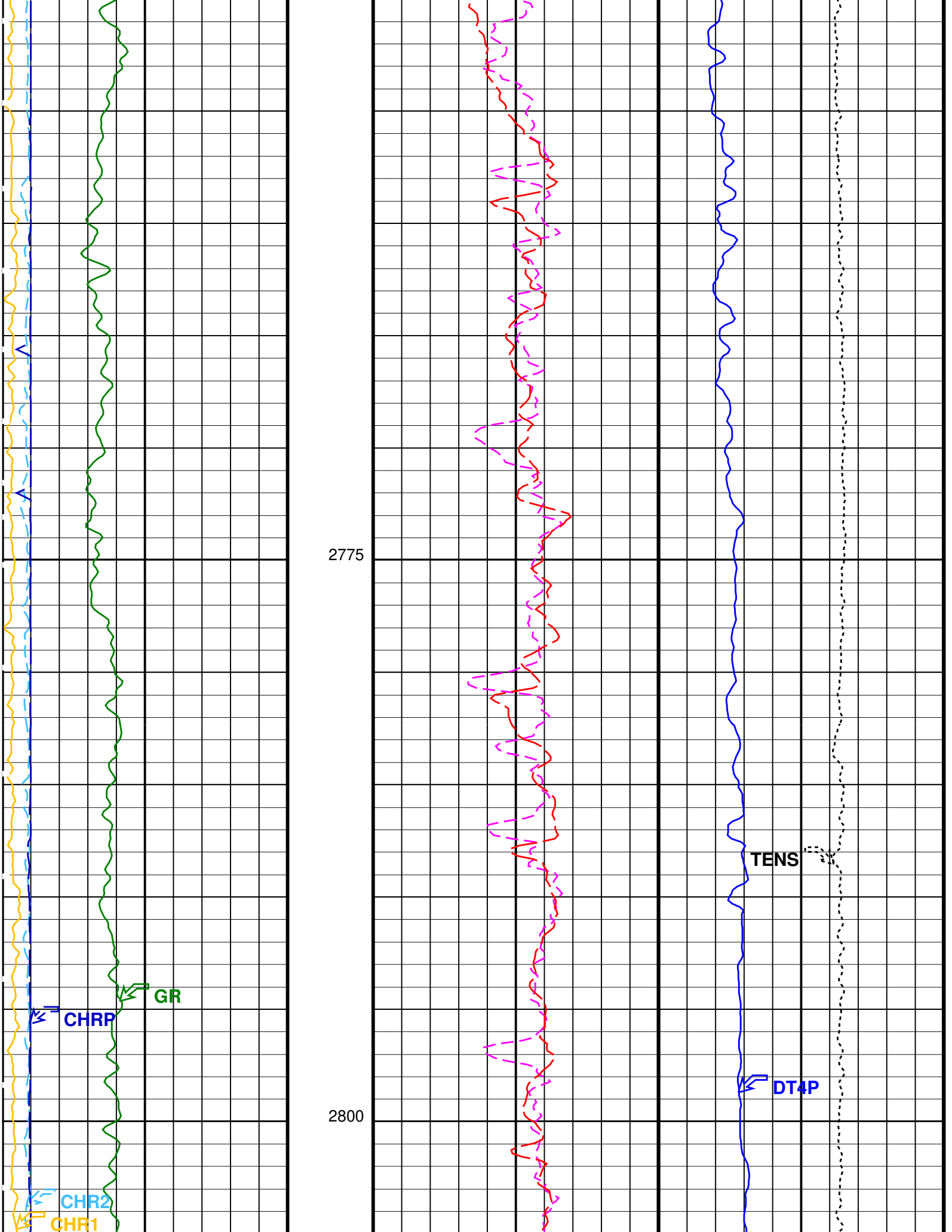
MCM

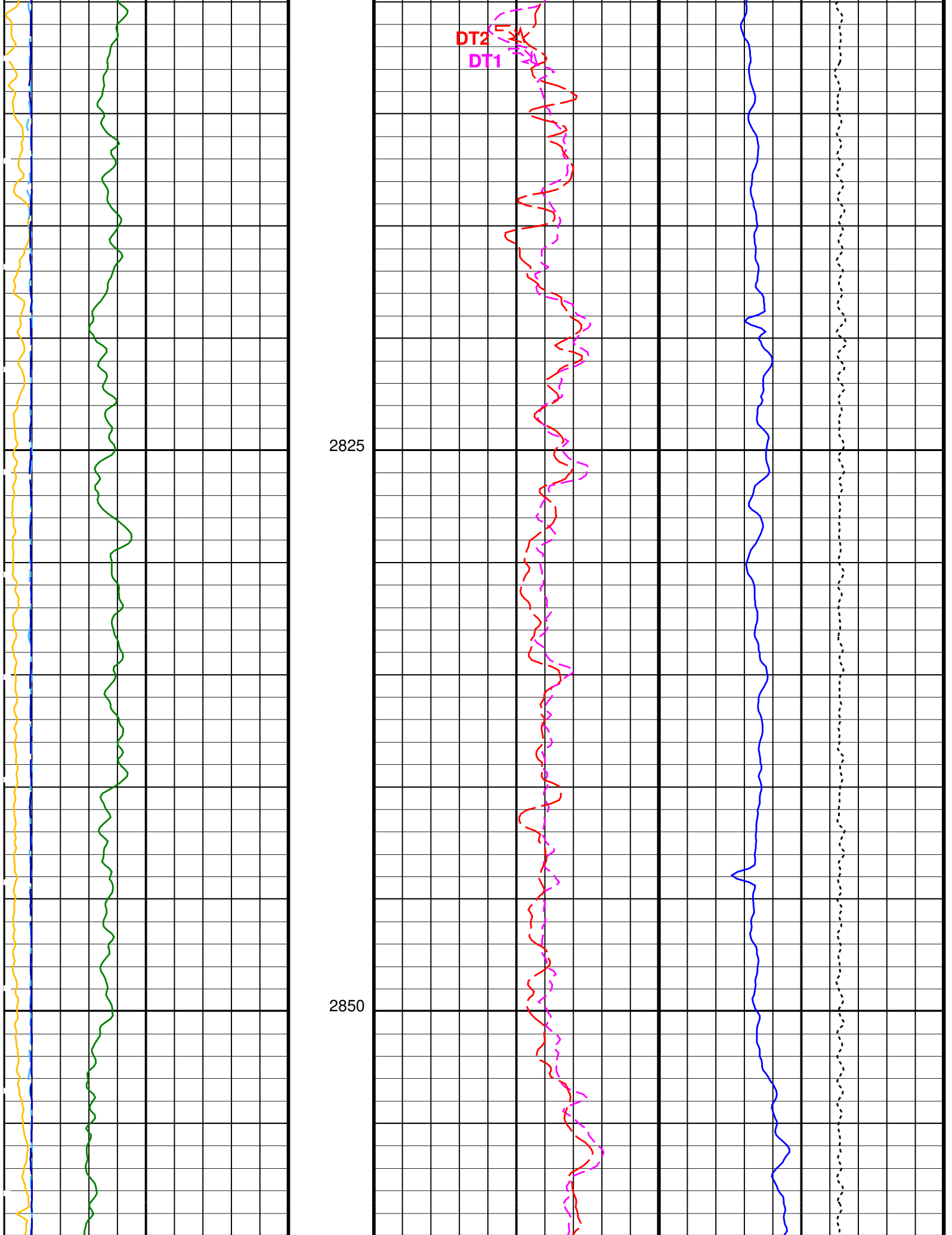
MEST–B	12C0–301	DTA–A	12C0–301
DSST–B	12C0–301	SGT–N	12C0–301
DTC–H	12C0–301		

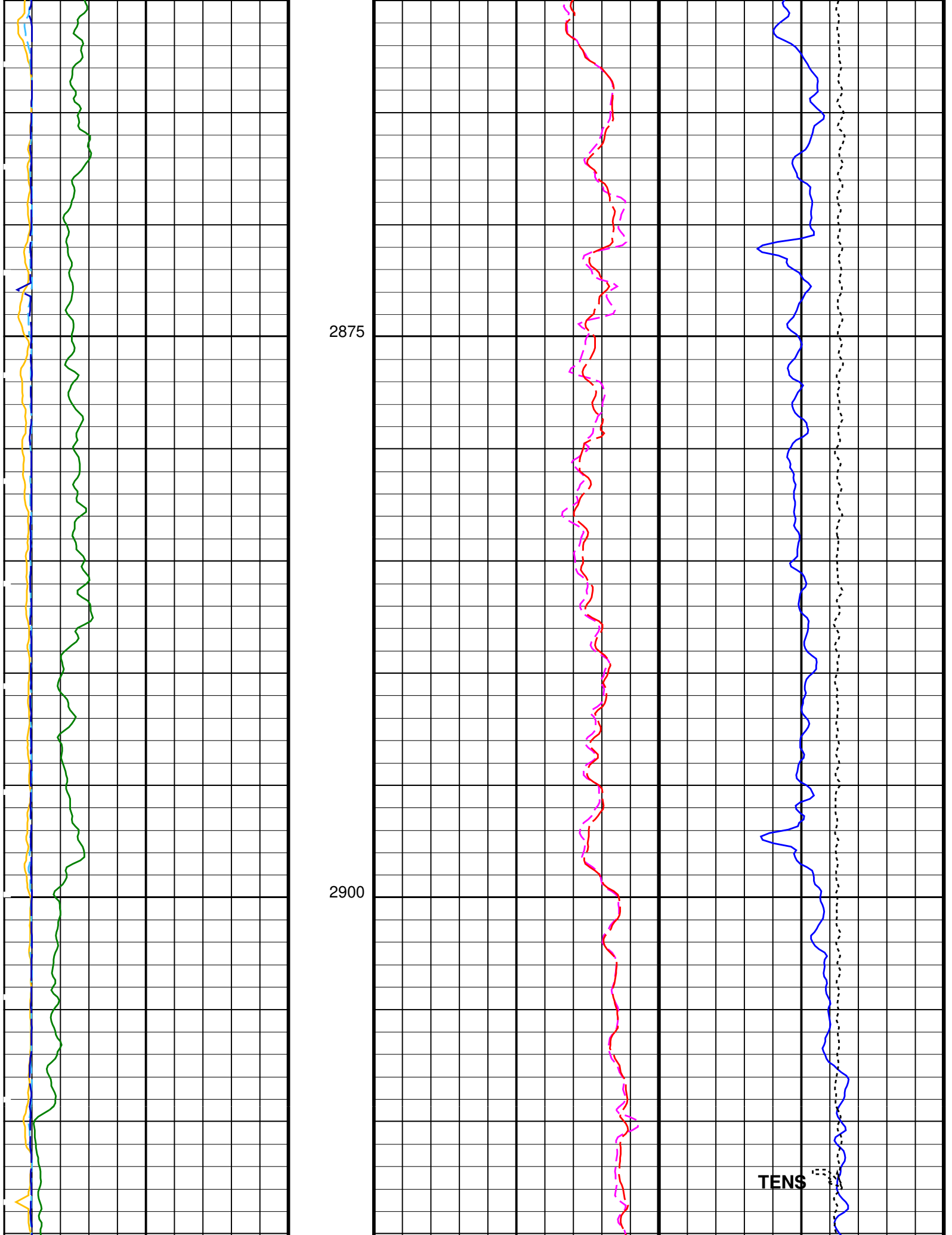
PIP SUMMARY

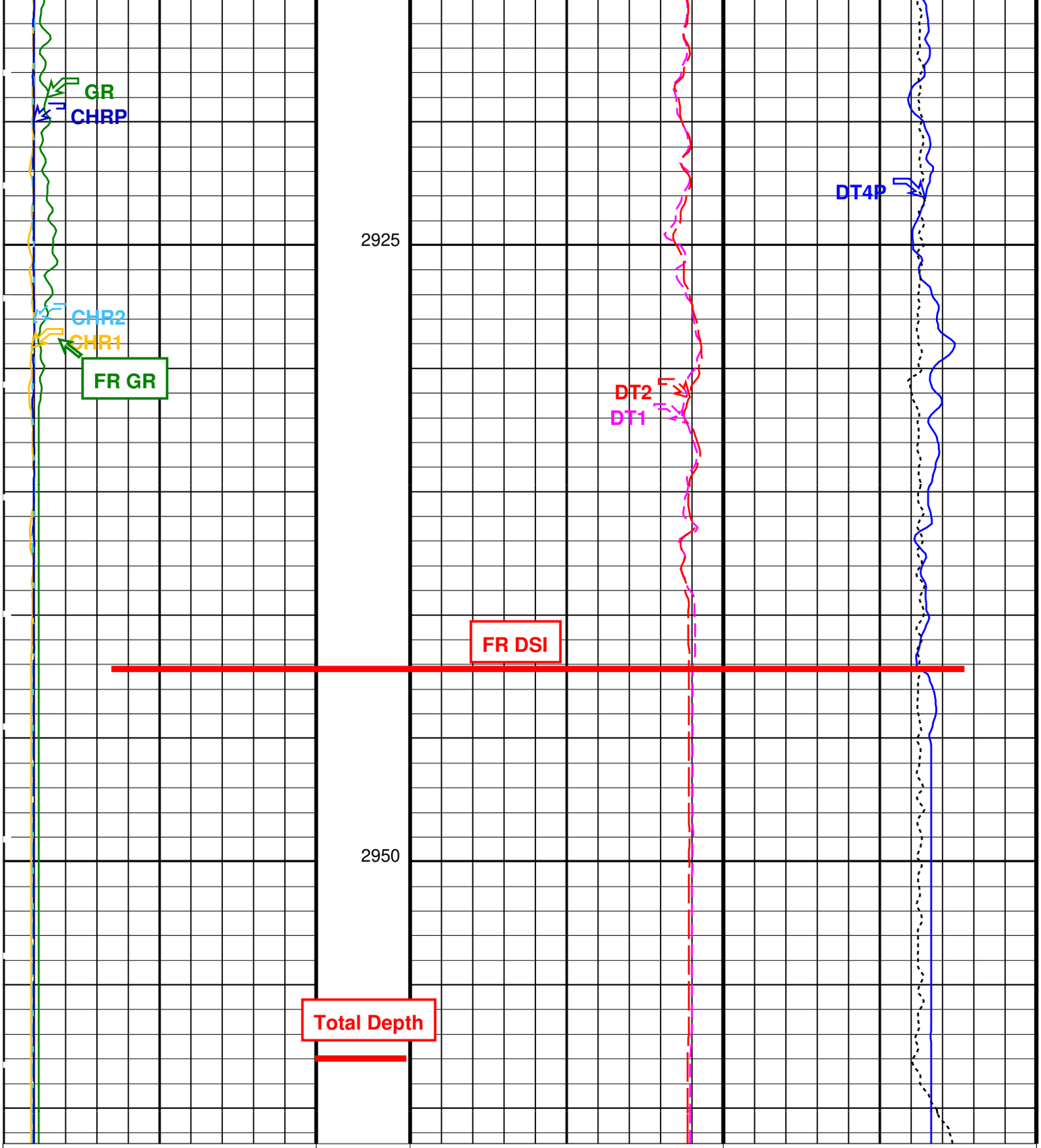
Time Mark Every 60 S




2775
2800
GR
CHRP
CHR2
CHR1
TENS
DT4P


DT2
DT1
2825
2850


2875
2900
TENS



Gamma Ray (GR)	Delta–T Shear – Lower Dipole (DT1)	Delta–T Comp – P & S (DT4P)
0 (GAPI) 100	1600 (US/F) 300	220 (US/F) 120
Peak Coherence / RA – Lower Dipole (CHR1)	Delta–T Shear – Upper Dipole (DT2)	Tension (TENS)
0 (----) 10	1600 (US/F) 300	10000 (LBF) 0
Peak Coherence / RA – Upper Dipole (CHR2)		
0 (----) 10		
Peak Coherence / RA – P & S Comp (CHRP)		
0 (----) 10		

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	185	US/F
DLCS	Label Compressional Source − Dipole Shear	USE	
DSHL	Label Slowness Lower Limit − Dipole Shear	220	US/F
DSHU	Label Slowness Upper Limit − Dipole Shear	1600	US/F
DTCS	Compressional Delta−T Source for DTCO Channel	PS_COMP	
DTF	Delta−T Fluid	189	US/F
FILG	Label Fill Gap Control − Monopole P&S	COMP_SHEAR	
LFC	Label Formation Character − Monopole P&S	COMP_FIRST	
LTXG	Lower Dipole Transmitter Geometry	156	IN
MCS	Mean Casing Slowness	57	US/F
MTXG	Monopole Transmitter Geometry	186	IN
NWI1	Number Waveform Items 1	8	
NWI2	Number Waveform Items 2	8	
NWI4	Number Waveform Items 4	8	
NWIX	Number Waveform Items X	0	
RSMN	Label Shear/Compressional Minimum Ratio − Monopole P&S	1.4	
RSMX	Label Shear/Compressional Maximum Ratio − Monopole P&S	2.12	
RX1G	Receiver 1 Geometry	294	IN
RX2G	Receiver 2 Geometry	300	IN
RX3G	Receiver 3 Geometry	306	IN
RX4G	Receiver 4 Geometry	312	IN
RX5G	Receiver 5 Geometry	318	IN
RX6G	Receiver 6 Geometry	324	IN
RX7G	Receiver 7 Geometry	330	IN
RX8G	Receiver 8 Geometry	336	IN
SAS1	STC Sonic Array Status − Lower Dipole	255	
SAS2	STC Sonic Array Status − Upper Dipole	255	
SAS4	STC Sonic Array Status − Monopole P&S	255	
SFM1	STC Filter − Lower Dipole	B1−3K	
SFM2	STC Filter − Upper Dipole	B.3−1.5K	
SHLL	Label Slowness Lower Limit − Monopole P&S Shear	75	US/F
SHUL	Label Slowness Upper Limit − Monopole P&S Shear	240	US/F
SSW1	STC Source Waveform − Lower Dipole	WF_SAM1	
SSW2	STC Source Waveform − Upper Dipole	WF_SAM2	
SSW4	STC Source Waveform − Monopole P&S	WF_SAM4	
STLL	Label Slowness Lower Limit − Monopole Stoneley	220	US/F
STUL	Label Slowness Upper Limit − Monopole Stoneley	1000	US/F
TWI1	STC Integration Time Window − Lower Dipole	1600	US
TWI2	STC Integration Time Window − Upper Dipole	1600	US
TWI4	STC Integration Time Window − Monopole P&S	500	US
UTXG	Upper Dipole Transmitter Geometry	162	IN
SGT−N: Scintillation Gamma−Ray − N			
BHS	Borehole Status	OPEN	
System and Miscellaneous			
DO	Depth Offset for Playback	0.0	M
PP	Playback Processing	NORMAL	

Format: DSI_Field_Print Vertical Scale: 1:200 Graphics File Created: 11−May−2006 13:11

OP System Version: 12C0−301

MCM

MEST−B	12C0−301	DTA−A	12C0−301
DSST−B	12C0−301	SGT−N	12C0−301
DTC−H	12C0−301		

Input DLIS Files

DEFAULT	FMS_DSI_031LUP	FN:30	PRODUCER	09−May−2006 08:10	2961.4 M	2726.6 M

Output DLIS Files

DEFAULT	FMS_DSI_042PUP	FN:38	PRODUCER	11−May−2006 13:11

Input DLIS Files

DEFAULT	FMS_DSI_031LUP	FN:30	PRODUCER	09–May–2006 08:10	2961.4 M	2726.6 M

Output DLIS Files

DEFAULT	FMS_DSI_042PUP	FN:38	PRODUCER	11–May–2006 13:11	2961.4 M	2727.0 M

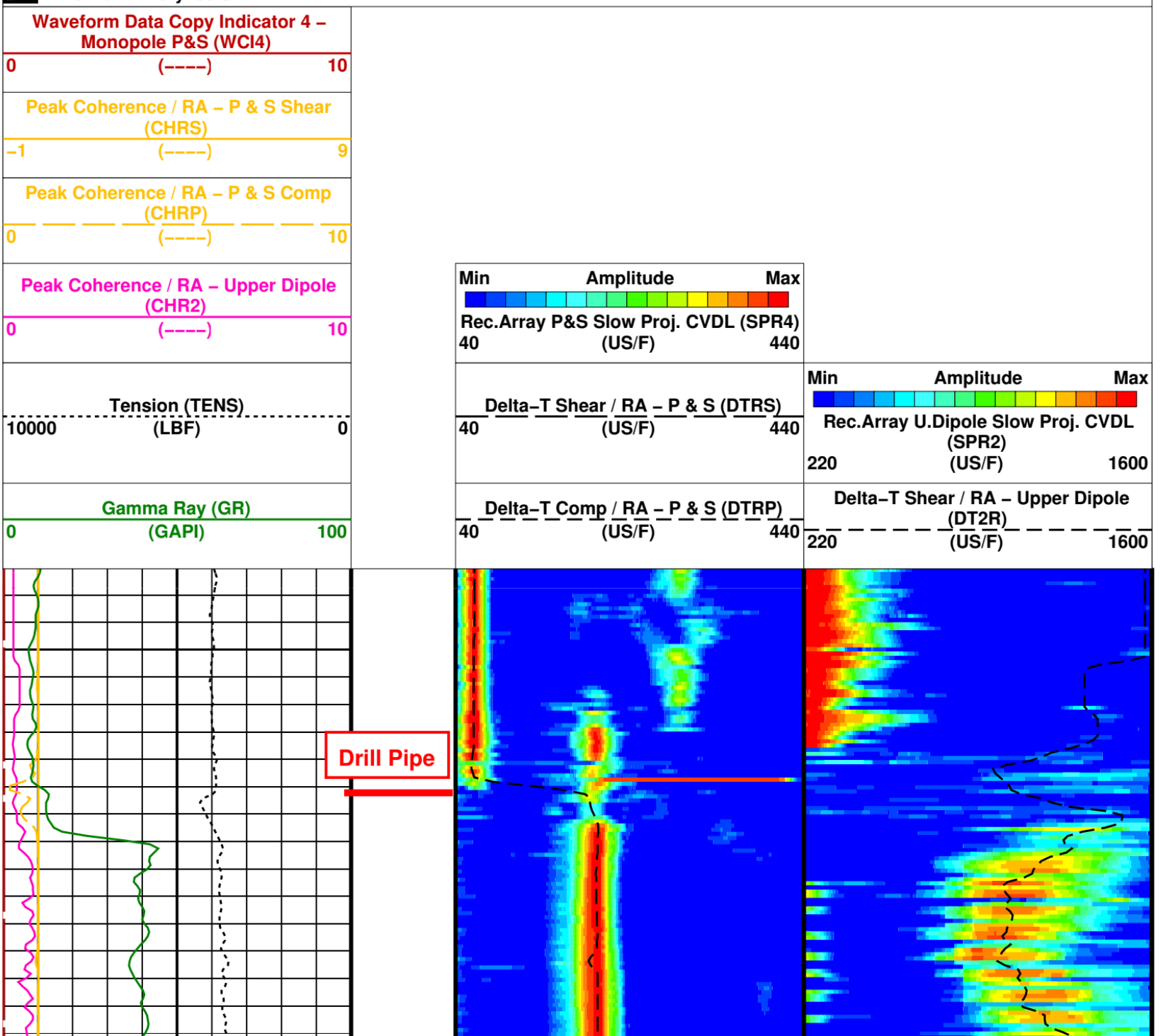
OP System Version: 12C0–301

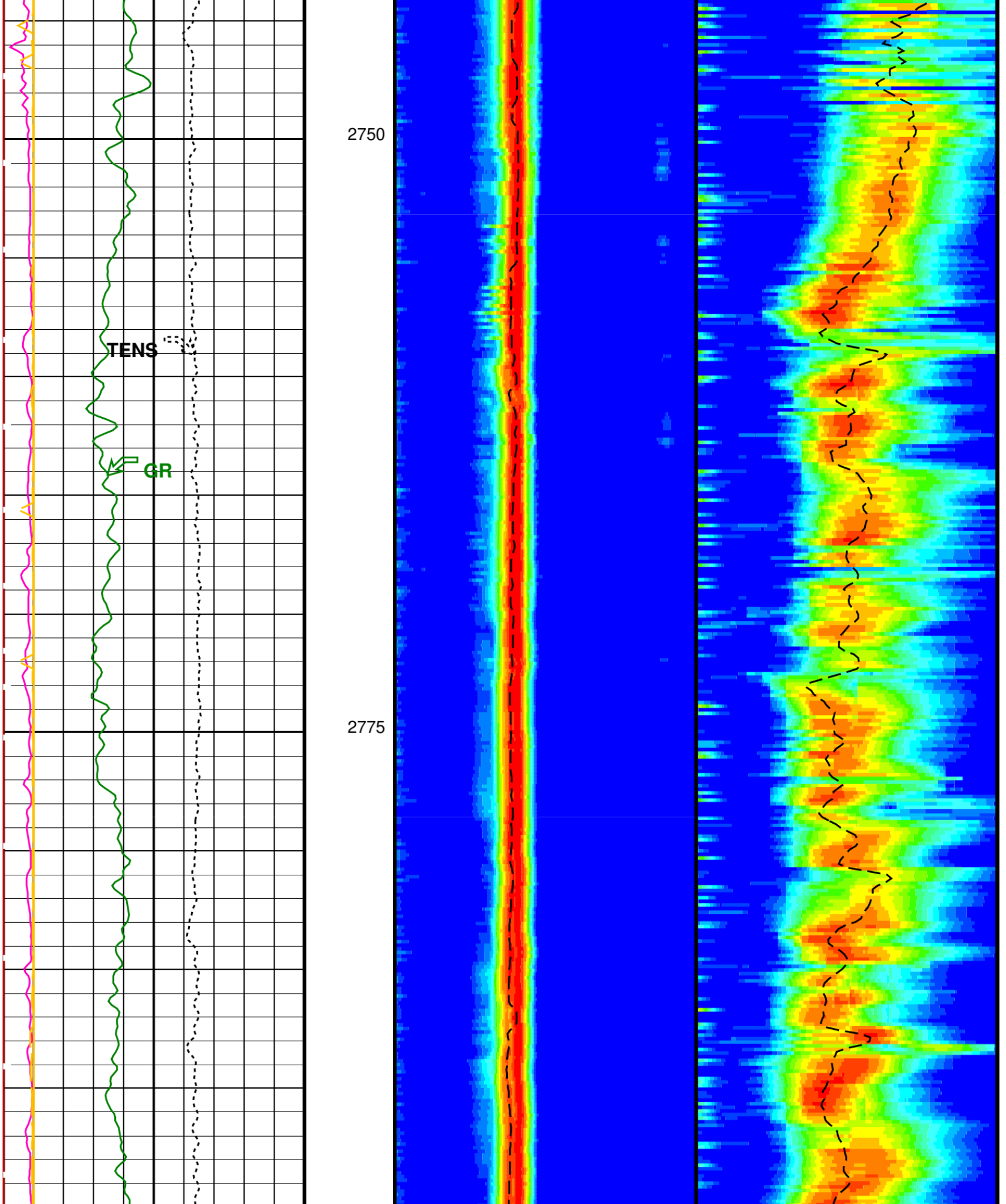
MCM

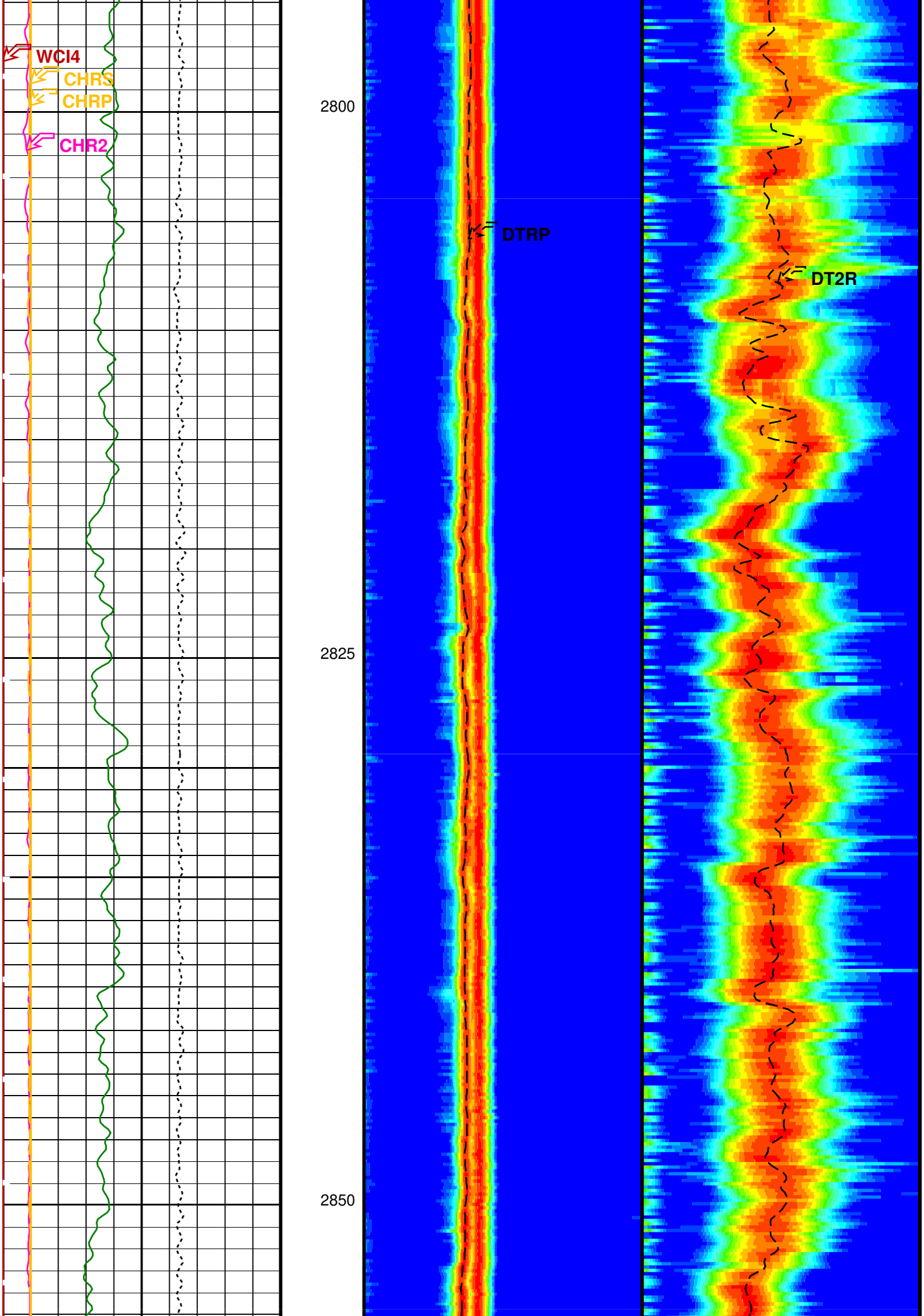
MEST–B	12C0–301	DTA–A	12C0–301
DSST–B	12C0–301	SGT–N	12C0–301
DTC–H	12C0–301		

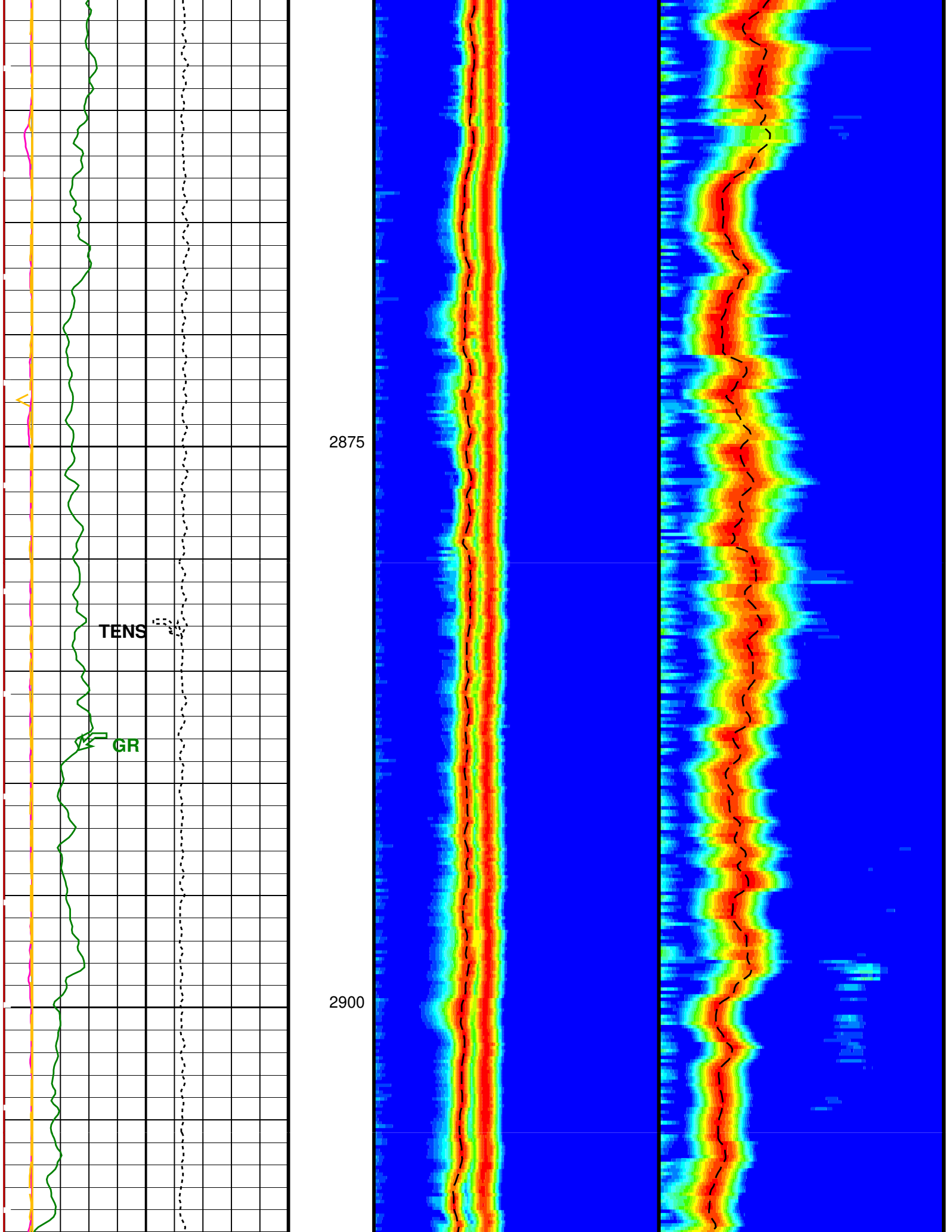
PIP SUMMARY

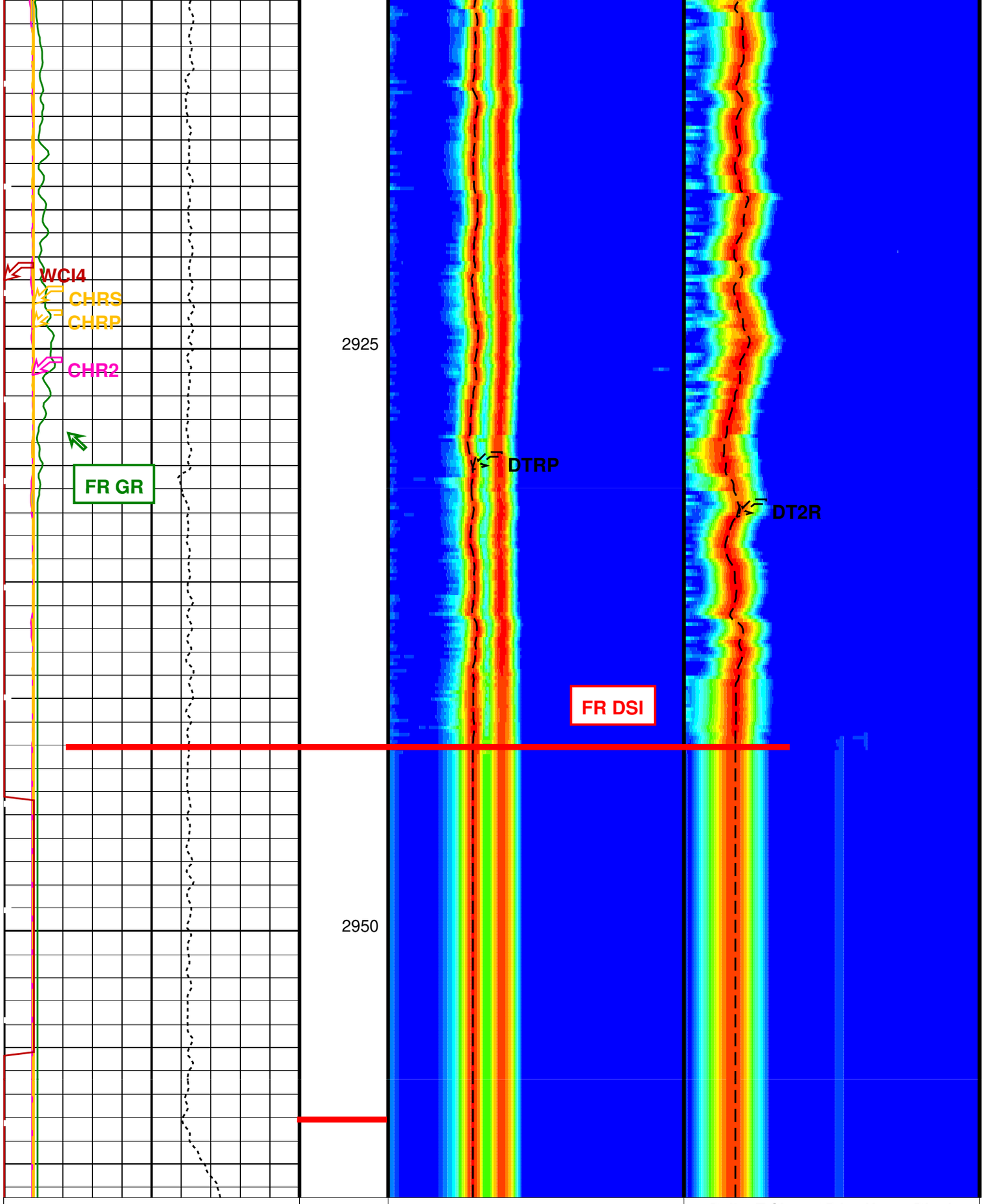
Time Mark Every 60 S




TENS
GR
2750
2775


WCI4
CHRS
CHRP
CHR2
2800
2825
2850
DTRP
DT2R


TENS
GR
2875
2900



Gamma Ray (GR)
0 (GAPI) 100

Tension (TENS)
10000 (LBF) 0

Peak Coherence / RA – Upper Dipole (CHR2)
0 (----) 10

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

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

Min Amplitude Max
Rec.Array P&S Slow Proj. CVDL (SPR4)
40 (US/F) 440

Delta–T Shear / RA – Upper Dipole (DT2R)
220 (US/F) 1600

Min Amplitude Max
Rec.Array U.Dipole Slow Proj. CVDL (SPR2)
220 (US/F) 1600

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	
	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	185	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	220	US/F
DSHU	Label Slowness Upper Limit – Dipole Shear	1600	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	189	US/F
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	COMP_FIRST	
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	LFD_ODD	
SAM4	DSST Sonic Acquisition Mode 4 – High Frequency Monopole Mode for P&S	MFD_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	B.3–1.5K	
SFM4	STC Filter – Monopole P&S	B3–12K	
SHLL	Label Slowness Lower Limit – Monopole P&S Shear	75	US/F
SHUL	Label Slowness Upper Limit – Monopole P&S Shear	240	US/F
SLL2	STC Slowness Lower Limit – Upper Dipole	220	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	220	US/F
STUL	Label Slowness Upper Limit – Monopole Stoneley	1000	US/F
SUL2	STC Slowness Upper Limit – Upper Dipole	1600	US/F
SUL4	STC Slowness Upper Limit – Monopole P&S	440	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	1420	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	20440	US
TUL4	STC Time Upper Limit – Monopole P&S	5110	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	
	SGT–N: Scintillation Gamma–Ray – N		
BHS	Borehole Status	OPEN	
	System and Miscellaneous		
DO	Depth Offset for Playback	0.0	M
PP	Playback Processing	NORMAL	

Format: DSST_P_S_UPPER_VDL_COLOR Vertical Scale: 1:200 Graphics File Created: 11–May–2006 13:11

OP System Version: 12C0–301

MCM

MEST–B	12C0–301	DTA–A	12C0–301
DSST–B	12C0–301	SGT–N	12C0–301
DTC–H	12C0–301		

Input DLIS Files

DEFAULT	FMS_DSI_031LUP	FN:30	PRODUCER	09–May–2006 08:10	2961.4 M	2726.6 M

Output DLIS Files

DEFAULT	FMS_DSI_042PUP	FN:38	PRODUCER	11–May–2006 13:11

Input DLIS Files

DEFAULT	FMS_DSI_031LUP	FN:30	PRODUCER	09–May–2006 08:10	2961.4 M	2726.6 M

Output DLIS Files

DEFAULT	FMS_DSI_042PUP	FN:38	PRODUCER	11–May–2006 13:11	2961.4 M	2727.0 M

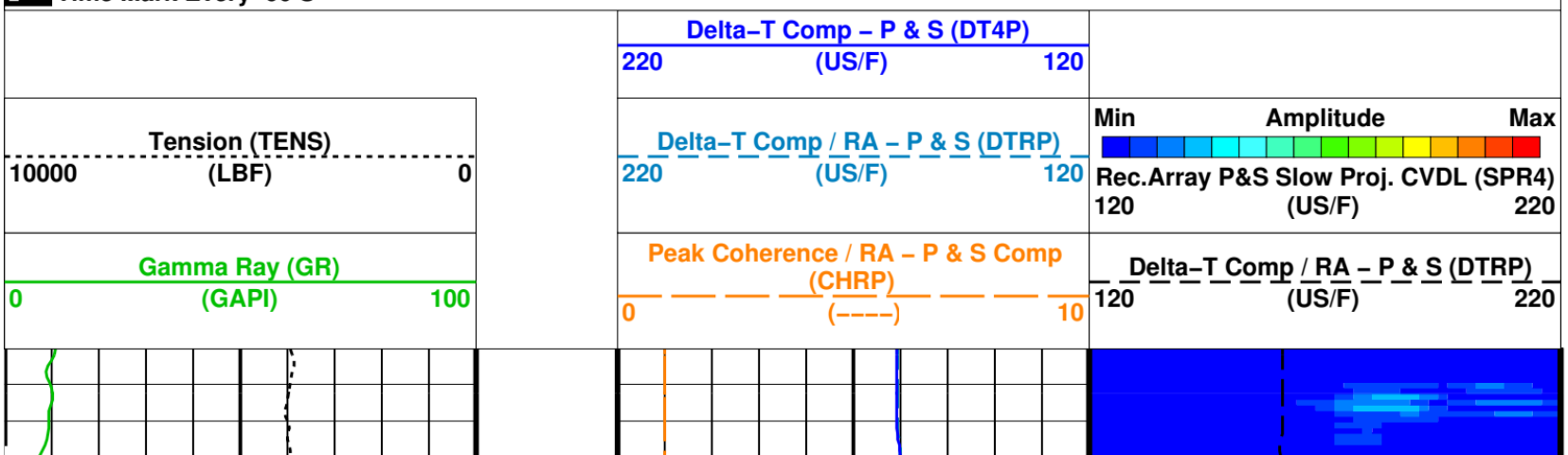
OP System Version: 12C0–301

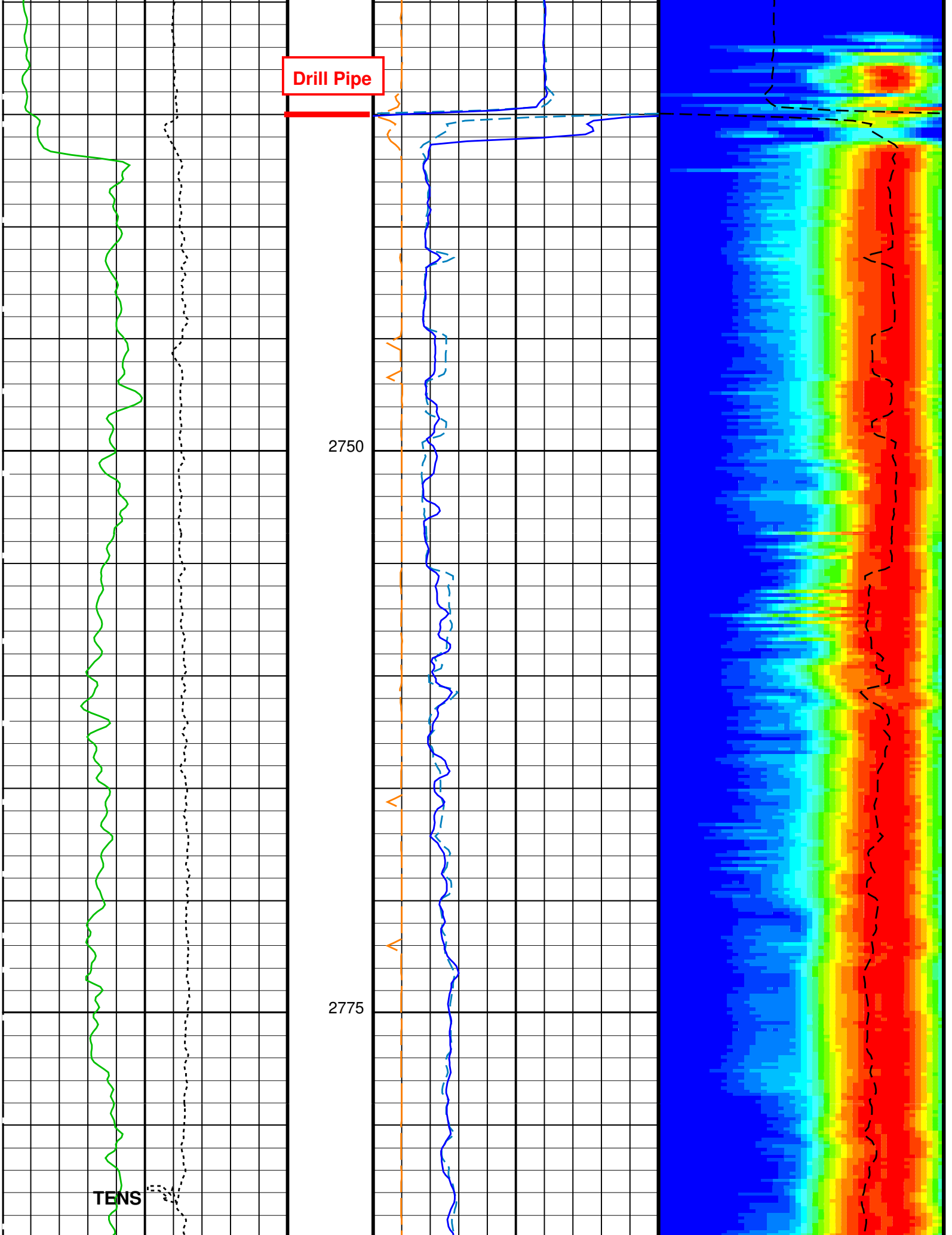
MCM

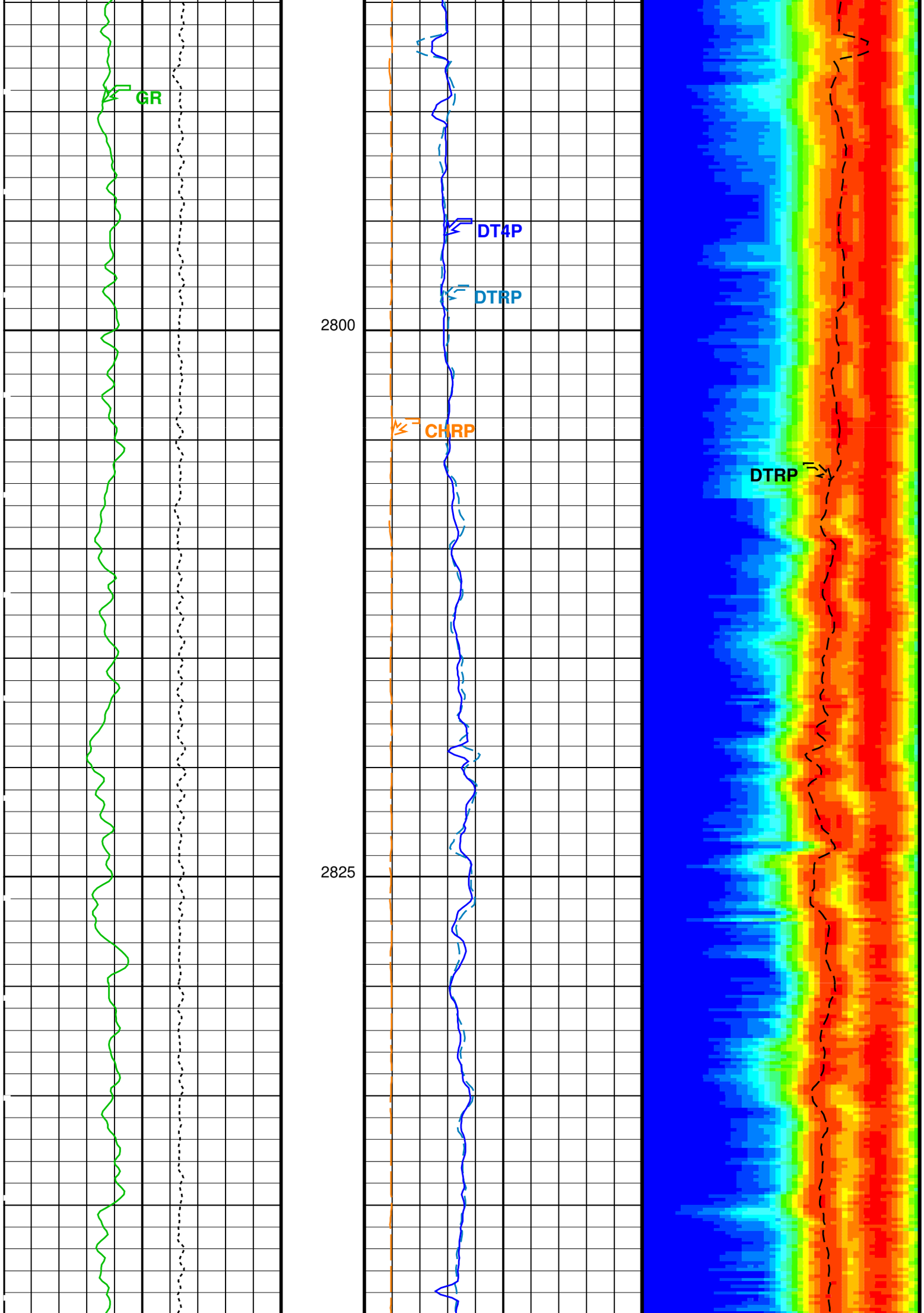
MEST–B	12C0–301	DTA–A	12C0–301
DSST–B	12C0–301	SGT–N	12C0–301
DTC–H	12C0–301		

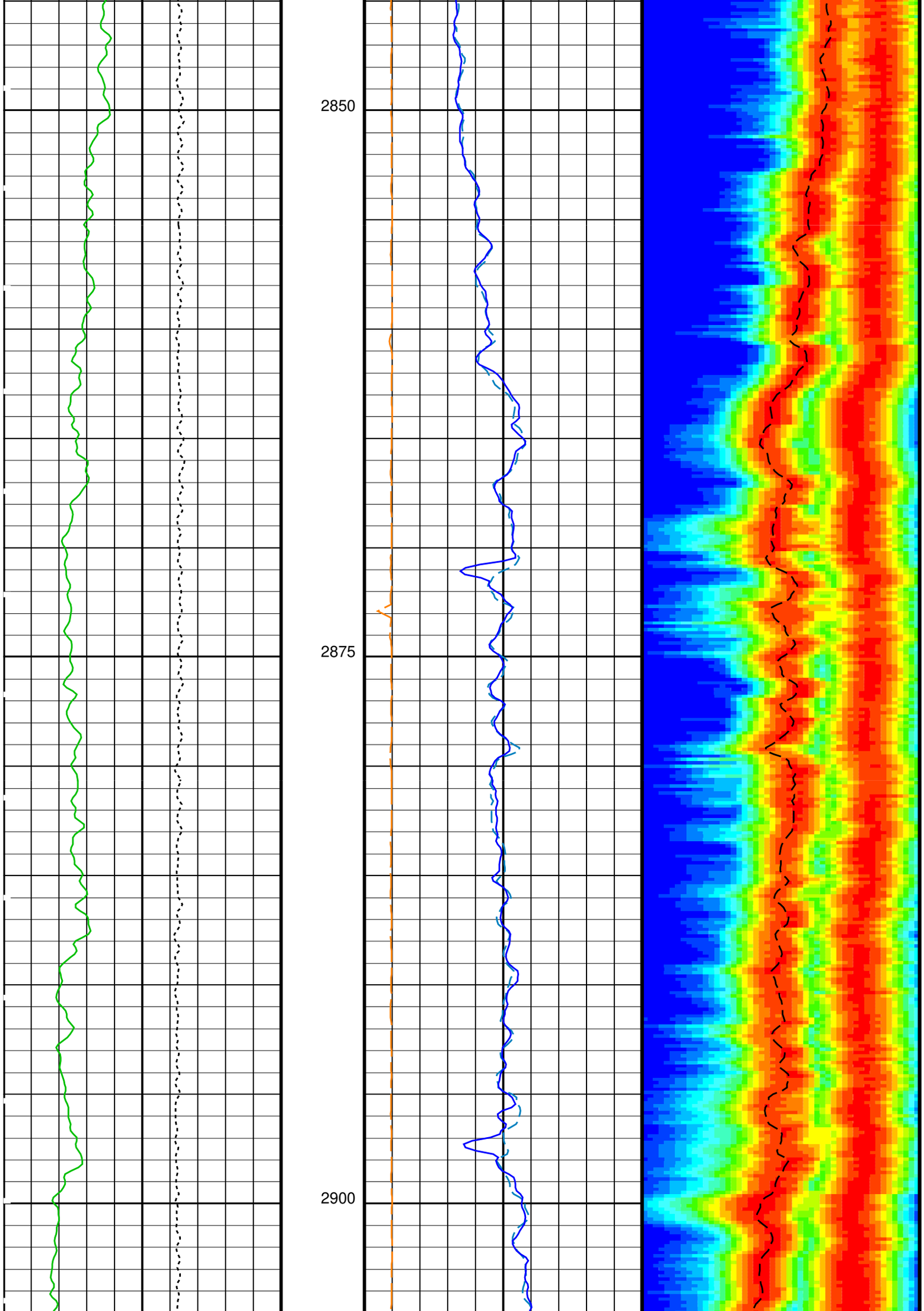
PIP SUMMARY

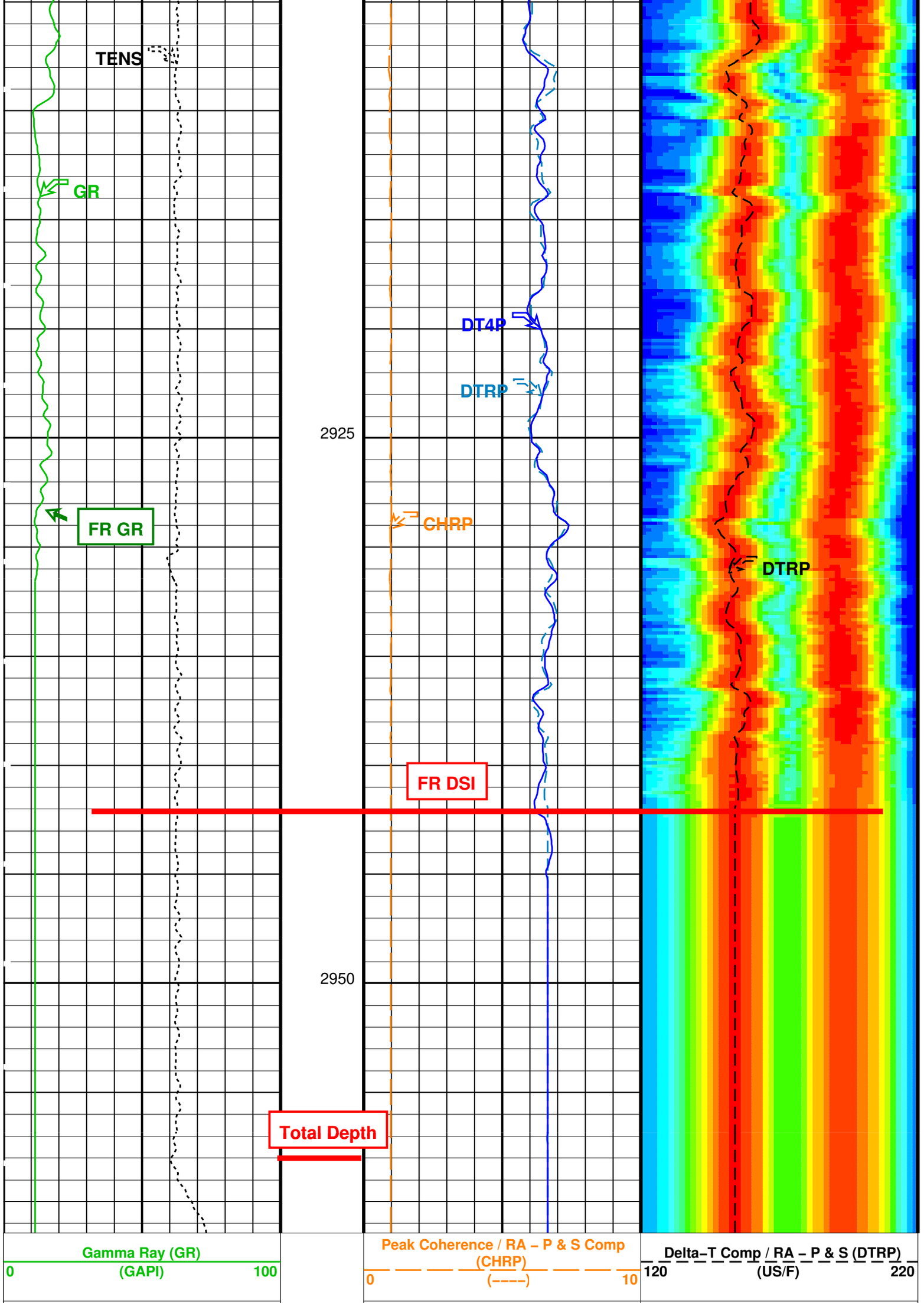
Time Mark Every 60 S




Drill Pipe
2750
2775
TENS


GR
DT4P
DTRP
2800
CHRP
DTRP
2825


2850
2875
2900


TENS
GR
FR GR
DT4P
DTRP
2925
CHRP
DTRP
FR DSI
2950
Total Depth
Gamma Ray (GR)
0
(GAPI)
100
Peak Coherence / RA – P & S Comp
(CHRP)
0
(----)
10
Delta–T Comp / RA – P & S (DTRP)
120
(US/F)
220

Tension (TENS)	Delta–T Comp / RA – P & S (DTRP)	Min Amplitude Max
10000 (LBF) 0	220 (US/F) 120	Rec.Array P&S Slow Proj. CVDL (SPR4) 120 (US/F) 220
	Delta–T Comp – P & S (DT4P) 220 (US/F) 120	

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	185	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	
LFC	Label Formation Character – Monopole P&S	COMP_FIRST	
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 – High Frequency Monopole Mode for P&S	MFD_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	B3–12K	
SHLL	Label Slowness Lower Limit – Monopole P&S Shear	75	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	220	US/F
STUL	Label Slowness Upper Limit – Monopole Stoneley	1000	US/F
SUL4	STC Slowness Upper Limit – Monopole P&S	440	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	5110	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	
	SGT–N: Scintillation Gamma–Ray – N		
BHS	Borehole Status	OPEN	
	System and Miscellaneous		
DO	Depth Offset for Playback	0.0	M
PP	Playback Processing	NORMAL	

Format: DSST_P_S_VDL_COLOR Vertical Scale: 1:200 Graphics File Created: 11–May–2006 13:11

OP System Version: 12C0–301

MCM

MEST–B	12C0–301	DTA–A	12C0–301
DSST–B	12C0–301	SGT–N	12C0–301
DTC–H	12C0–301		

Input DLIS Files

DEFAULT	FMS_DSI_031LUP	FN:30	PRODUCER	09–May–2006 08:10	2961.4 M	2726.6 M

Output DLIS Files

DEFAULT	FMS_DSI_042PUP	FN:38	PRODUCER	11–May–2006 13:11

Schlumberger

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: 2–May–2006 6:23							
Caliper 1 Zero Measurement	8.000	N/A	8.624	N/A	N/A	N/A	IN
Caliper 2 Zero Measurement	8.000	N/A	8.631	N/A	N/A	N/A	IN
Caliper 1 Plus Measurement	12.00	N/A	12.54	N/A	N/A	N/A	IN
Caliper 2 Plus Measurement	12.00	N/A	12.72	N/A	N/A	N/A	IN
Micro Electrical Scanner – B (Slim) Wellsite Calibration – CROUZET ACCELEROMETER PROM HAS BEEN READ CORRECTLY							
Before: 2–May–2006 6:17							
TEMPERATURE REFERENCE :	N/A	N/A	20	N/A	N/A	N/A	DEGC
YEAR OF CALIBRATION :	N/A	N/A	92	N/A	N/A	N/A	
MONTH OF CALIBRATION :	N/A	N/A	10	N/A	N/A	N/A	
SERIAL NUMBER :	N/A	N/A	448	N/A	N/A	N/A	
Micro Electrical Scanner – B (Slim) Wellsite Calibration – CROUZET MAGNETOMETER PROM HAS BEEN READ CORRECTLY							
Before: 2–May–2006 6:17							
TEMPERATURE REFERENCE :	N/A	N/A	19	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	12	N/A	N/A	N/A	
SERIAL NUMBER :	N/A	N/A	428	N/A	N/A	N/A	
Scintillation Gamma–Ray – N Wellsite Calibration – Detector Calibration							
Before: 2–May–2006 22:12							
Gamma Ray (Jig – Bkg)	165.3	N/A	165.3	N/A	N/A	15.03	GAPI
Gamma Ray (Calibrated)	165.0	N/A	165.0	N/A	N/A	15.00	GAPI

Micro Electrical Scanner – B (Slim) / Equipment Identification

Primary Equipment:		
MEST Sonde – B	MEDS – B	771
MEST Preamplifier Cartridge – AB	MEPC – AB	807
GPIT Cartridge – A	GPIC – A	840
MEST Acquisition Cartridge – A	MEAC – A	804
Auxiliary Equipment:		
MEST–B Preamplifier Cartridge Housing	MEPH – A	702
MEST Acquisition Cartridge Housing (Slim	MEAH – B	701

Scintillation Gamma–Ray – N / Equipment Identification

Primary Equipment:		
Scintillation Gamma Cartridge	SGC – TB	9582
Scintillation Gamma Detector	SGD – TAA	
Auxiliary Equipment:		
Scintillation Gamma Housing	SGH – K	2443
Gamma Source Radioactive	GSR – U/Y	166

Scintillation Gamma–Ray – N Wellsite Calibration

Detector Calibration

Phase	Gamma Ray Background GAPI	Value	Phase	Gamma Ray (Jig – Bkg) GAPI	Value	Phase	Gamma Ray (Calibrated) GAPI	Value
Before		6.390	Before		165.3	Before		165.0
0 (Minimum)	30.00 (Nominal) / 120.0 (Maximum)		150.3 (Minimum)	165.3 (Nominal) / 180.3 (Maximum)		150.0 (Minimum)	165.0 (Nominal) / 180.0 (Maximum)	

Before: 2–May–2006 22:12

Company: **Lamont Doherty**

Schlumberger

Well: **KKGH01 Site 1 Hole A**
Field: **Kerala Konkan Basin**
Rig: **Joides Resolution**
Ocean: **Arabian Sea**

Dipole ShearSonic Imager