

DISCLAIMER

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OTHER SERVICES1 OS1: DITE/APS/HLDT/HNGS OS2: MEST OS3: OS4: OS5:	OTHER SERVICES2 OS1: OS2: OS3: OS4: OS5:
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REMARKS: RUN NUMBER 1 Hole cored with APC, XCB Log presented in meters below rig floor. Lamont Temperature tool (TAP) was run on Triple Combo. Wireline Heave Compensator (WHC) was used on all descents. Sepiolite mud was used to displace the hole during the wiper trip. Drillers TD 5375 mbrf, Driller pipe depth: 5178 mbrf, Sea Floor: 5097 mbrf. Drill Pipe Schlumberger 5179 mbrf. Sea Floor Schlumberger 5099 mbrf.	REMARKS: RUN NUMBER 2
First Pass: Sam 4 Compressional, Sam 3 Stoneley, Sam 2 Upper Dipole high freq. 2nd Pass: Sam 4 Compressional, Sam 2 Upper Dipole low freq., Sam 1 lower dipole high frequency. Dipole Sonic data needs further processing on Geoframe for improvement of Data.	

RUN 1			RUN 2		
SERVICE ORDER #:			SERVICE ORDER #:		
PROGRAM VERSION:		10C0-306	PROGRAM VERSION:		
FLUID LEVEL:			FLUID LEVEL:		
LOGGED INTERVAL	START	STOP	LOGGED INTERVAL	START	STOP

EQUIPMENT DESCRIPTION

RUN 1	RUN 2
SURFACE EQUIPMENT	
GSR-U WITM (DTS)-A 2	

DOWNHOLE EQUIPMENT	
LEH-QT LEH-QT 1726	33.28
DTC-H ECH-KC 9343	32.39
AH-MCD-Top AH-MCD-Top	31.47

CTEM 32.11
TelStatus 31.47
ToolStatu 31.47

Input DLIS Files

DEFAULT	FMS_NGS_DSI_019LUP	FN:29	PRODUCER	16-Mar-2002 18:33	5382.5 M	5164.7 M
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Output DLIS Files

DEFAULT	FMS_NGS_DSI_028PUP	FN:43	PRODUCER	18-Mar-2002 15:20	5382.5 M	5165.1 M
DOH	FMS_NGS_DSI_028PUP	FN:44	PRODUCER	18-Mar-2002 15:20	5382.5 M	5165.1 M

OP System Version: 10C0-306

MCM

MEST-B	10C0-306	NGT-C	10C0-306
DTA-A	10C0-306	DSST-B	10C0-306
DTC-H	10C0-306		

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
Spectroscopy Gamma Ray (SGR)		
0	(GAPI)	100

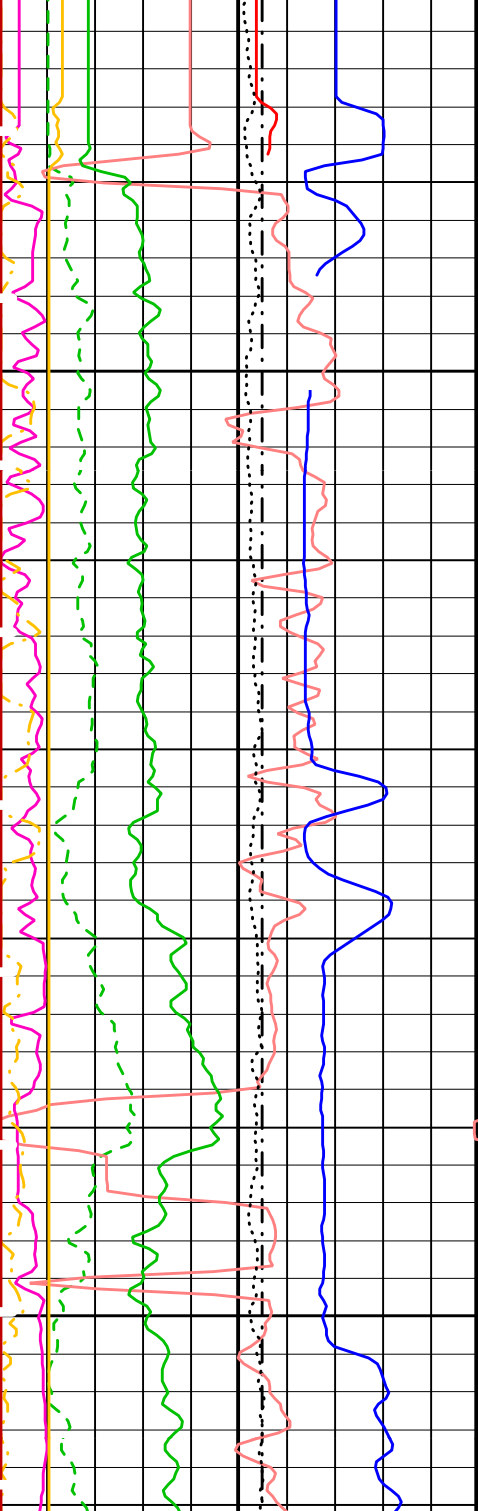
Delta-T Shear - P & S (DT4S)	(US/F)	40
Delta-T Comp - P & S (DT4P)	(US/F)	40
Delta-T Shear - Upper Dipole (DT2)	(US/F)	40
Computed Gamma Ray (CGR)	(GAPI)	100
Bit Size (BS)	(IN)	16

Compressional Monopole, Pass #2

Upper Dipole, Low Frequency, Pass #2

Min	Amplitude	Max
40	Rec.Array P&S Slow Proj. CVDL (SPR4)	240
40	Delta-T Shear / RA - P & S (DTRS)	240
40	Delta-T Comp / RA - P & S (DTRP)	240

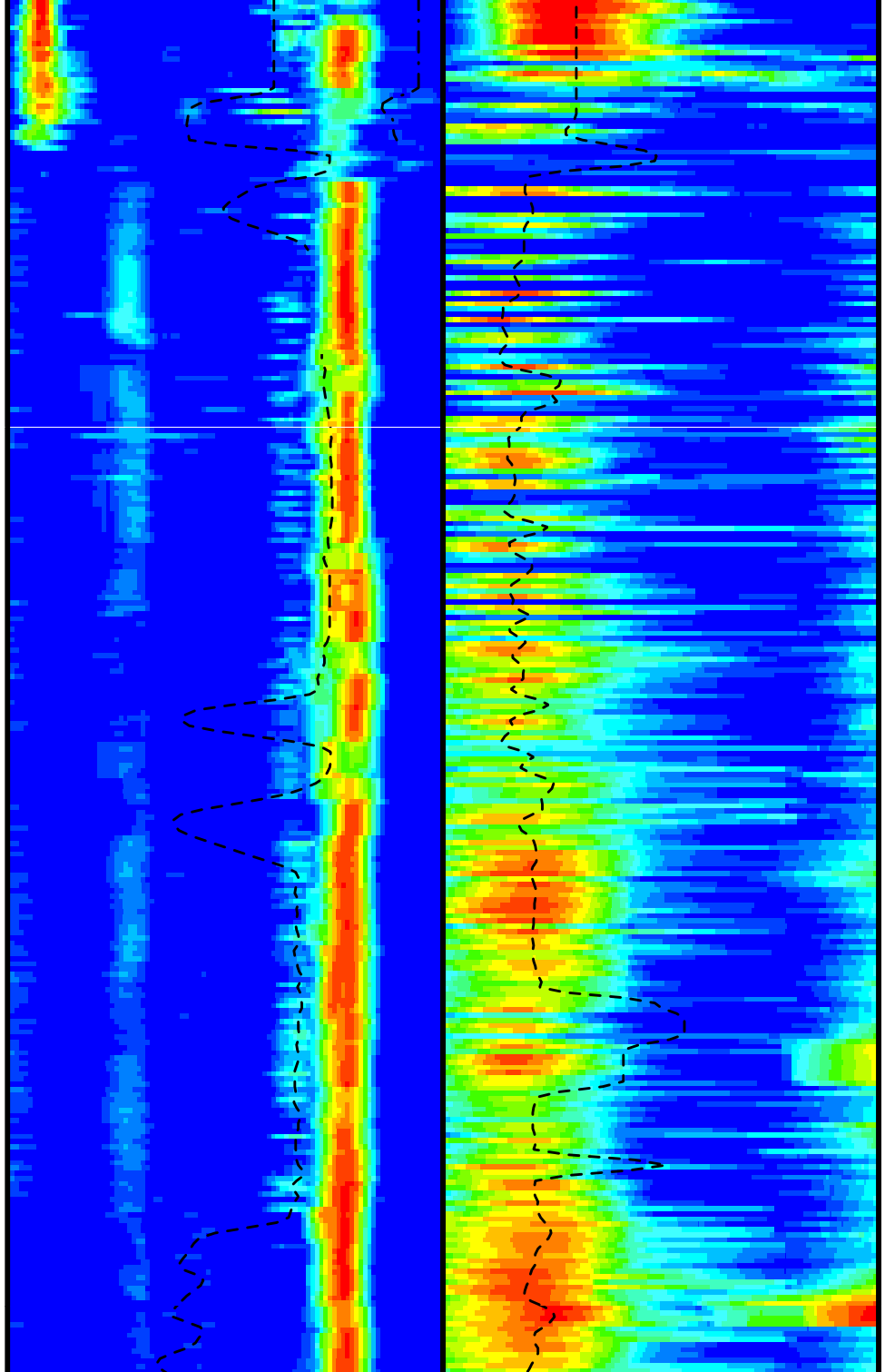
Min	Amplitude	Max
75	Rec.Array U.Dipole Slow Proj. CVDL (SPR2)	775
75	Delta-T Shear / RA - Upper Dipole (DT2R)	775

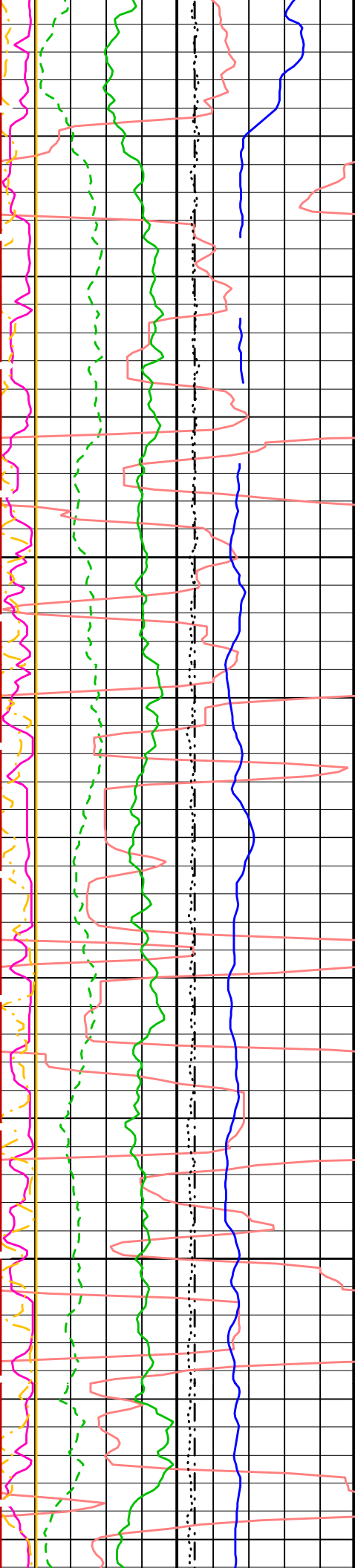


-Drill Pipe-

5175

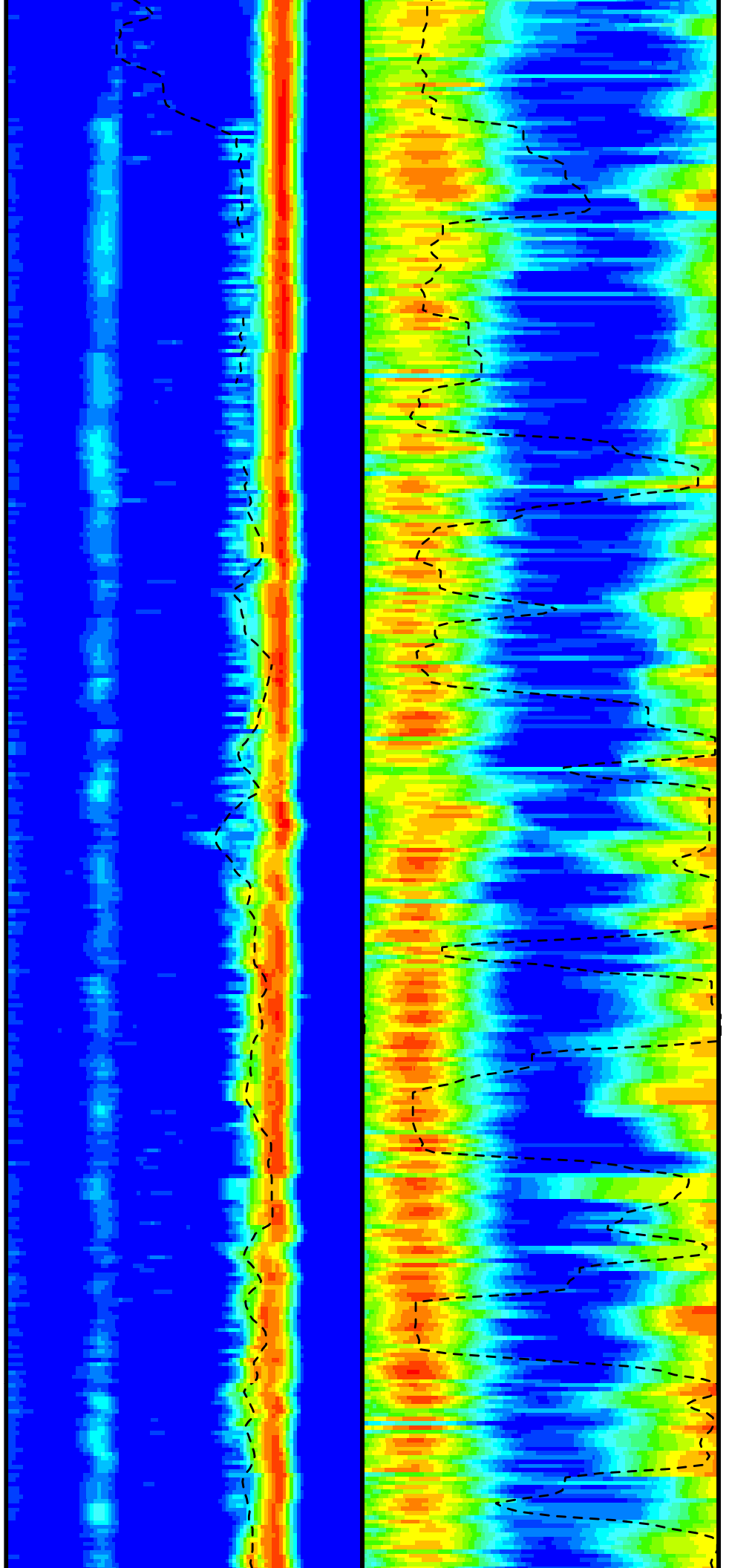
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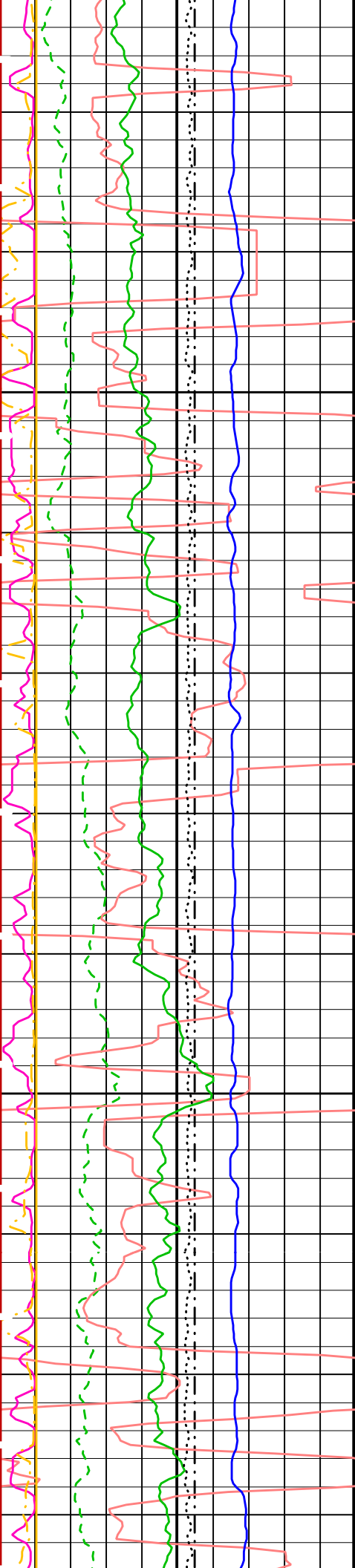




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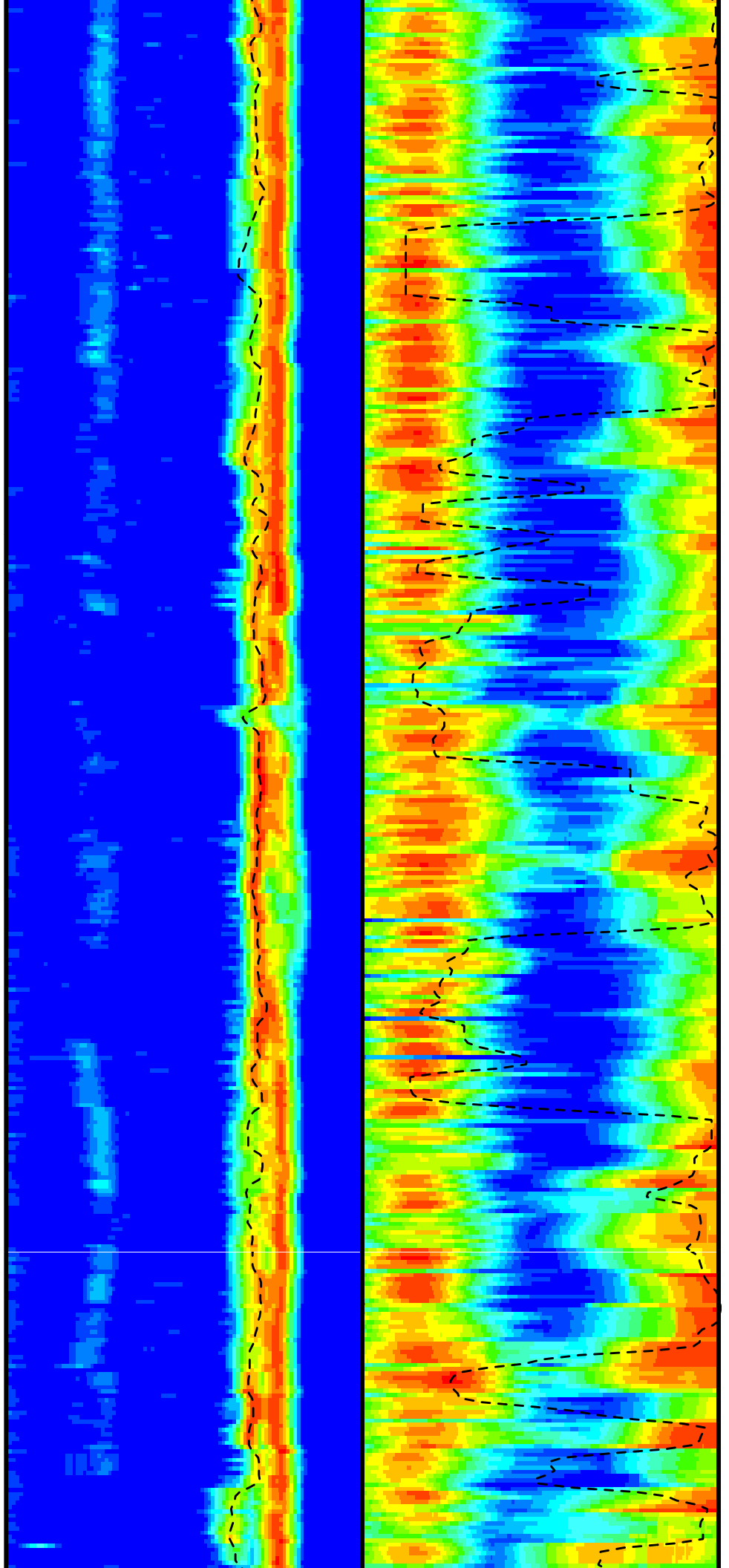
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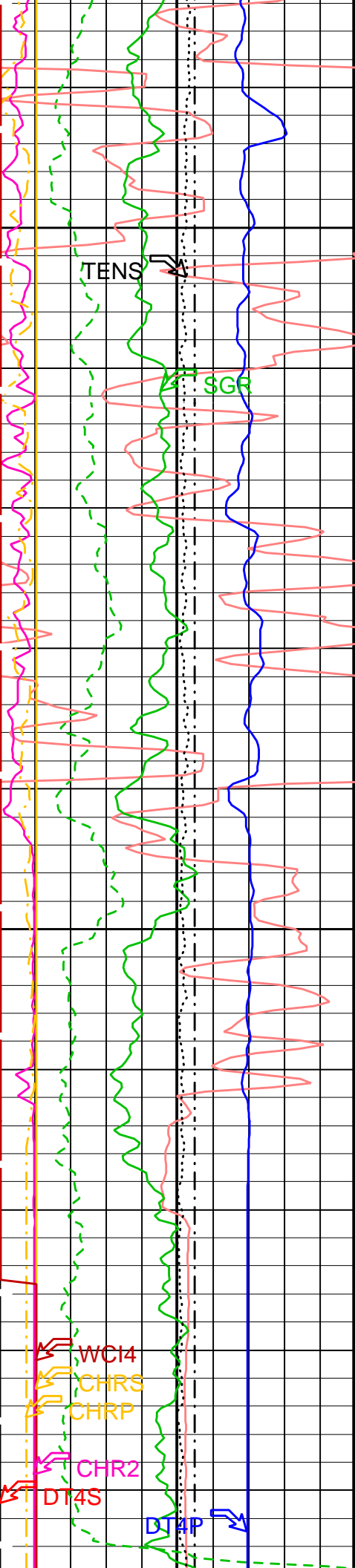




5275

5300





5325

TENS

SGR

5350

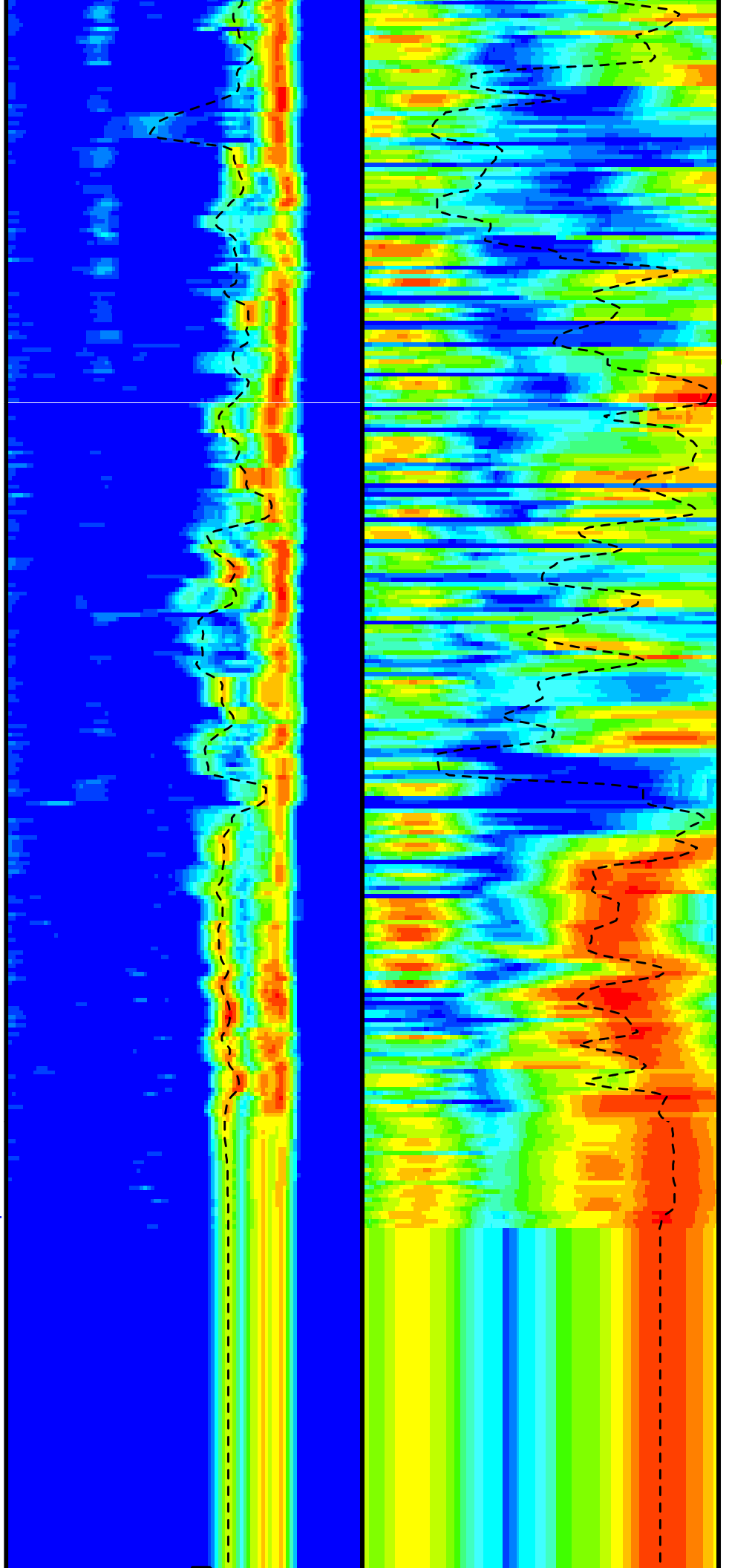
FR DSI-

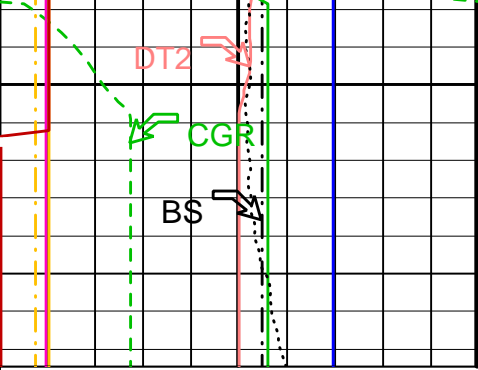
WCI4
CHRS
CHRP

CHR2
DT4S

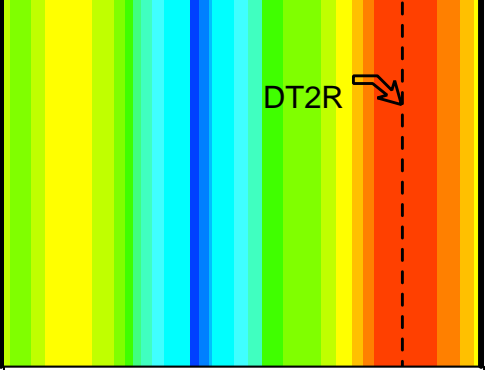
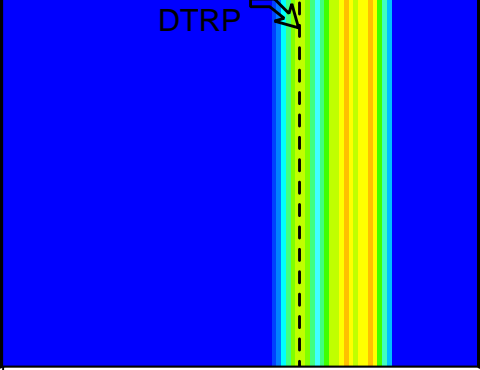
DTAP

-FR NGT





5375
-TD-



Bit Size (BS)
(IN) 6 16

Computed Gamma Ray (CGR)
(GAPI) 0 100

Delta-T Shear - Upper Dipole (DT2)
(US/F) 440 40

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

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

Spectroscopy Gamma Ray (SGR)
(GAPI) 0 100

Tension (TENS)
(LBF) 10000 0

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) 0 10

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

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

Min Amplitude Max
Rec.Array U.Dipole Slow Proj. CVDL
(SPR2) (US/F) 75 775

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

Upper Dipole, Low Frequency, Pass #2

Compressional Monopole, Pass #2

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
NGT-C:	Natural Gamma Spectroscopy - C	
CBAR	Constant Barite	1
CGMI	Spectro Computed Gamma Ray Minimum	0 GAPI
CGSH	Spectro Computed Gamma Ray Shale	100 GAPI
KMIN	Potassium Minimum	0
KSHA	Potassium Shale	0.02
NFO	NGT Filtering Option	KALMAN
PMUD	Potassium Mud	0 %
SGMI	Spectro Gamma Ray Minimum	0 GAPI
SGSH	Spectro Gamma Ray Shale	100 GAPI
TMIN	Thorium Minimum	0 PPM

TSHA	Thorium Shale	12	PPM
UMIN	Uranium Minimum	0	PPM
USHA	Uranium Shale	3	PPM
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	100	US/F
COUL	Label Slowness Upper Limit - Monopole P&S Compressional	188	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	775	US/F
DSI2	Digitizer Sample Interval 2	40	US
DSI4	Digitizer Sample Interval 4	10	US
DSIX	Digitizer Sample Interval X	10	US
DTCS	Compressional Delta-T Source for DTCS 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	
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	
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	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	B3-20K	
SHLL	Label Slowness Lower Limit - Monopole P&S Shear	200	US/F
SHUL	Label Slowness Upper Limit - Monopole P&S Shear	240	US/F
SSL2	STC Slowness Lower Limit - Upper Dipole	75	US/F
SSL4	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	775	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	15525	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	
System and Miscellaneous			
BS	Bit Size	11 438	IN

OP System Version: 10C0-306

MCM

MEST-B	10C0-306	NGT-C	10C0-306
DTA-A	10C0-306	DSST-B	10C0-306
DTC-H	10C0-306		

Input DLIS Files

DEFAULT	FMS_NGS_DSI_019LUP	FN:29	PRODUCER	16-Mar-2002 18:33	5382.5 M	5164.7 M
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Output DLIS Files

DEFAULT	FMS_NGS_DSI_028PUP	FN:43	PRODUCER	18-Mar-2002 15:20		
DOH	FMS_NGS_DSI_028PUP	FN:44	PRODUCER	18-Mar-2002 15:20		

Input DLIS Files

DEFAULT	FMS_NGS_DSI_019LUP	FN:29	PRODUCER	16-Mar-2002 18:33	5382.5 M	5164.7 M
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Output DLIS Files

DEFAULT	FMS_NGS_DSI_028PUP	FN:43	PRODUCER	18-Mar-2002 15:20	5382.5 M	5165.1 M
DOH	FMS_NGS_DSI_028PUP	FN:44	PRODUCER	18-Mar-2002 15:20	5382.5 M	5165.1 M

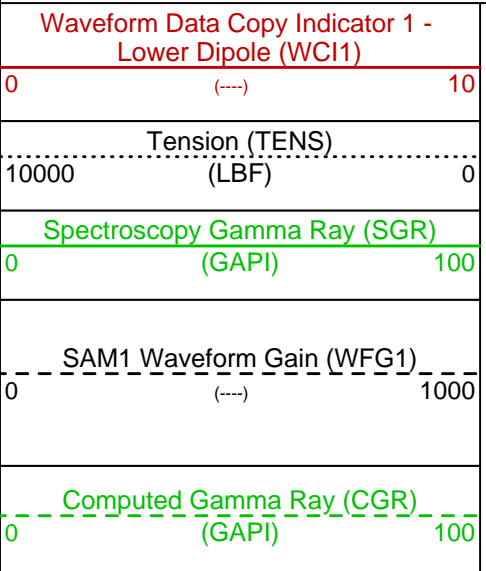
OP System Version: 10C0-306

MCM

MEST-B	10C0-306	NGT-C	10C0-306
DTA-A	10C0-306	DSST-B	10C0-306
DTC-H	10C0-306		

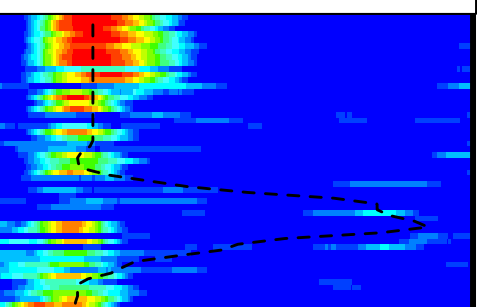
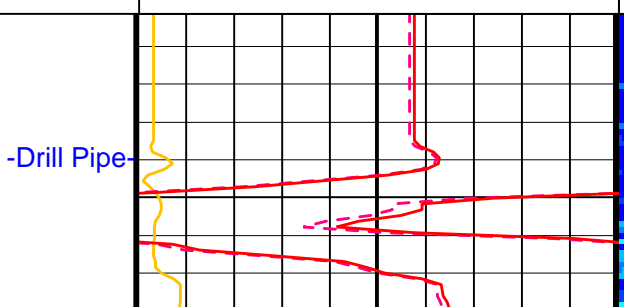
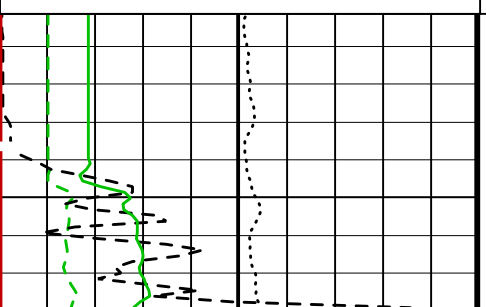
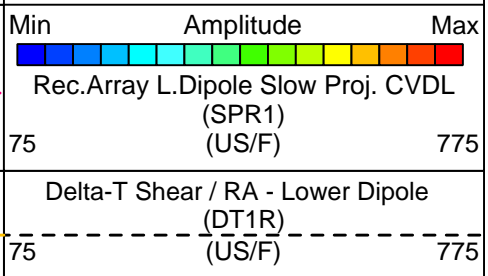
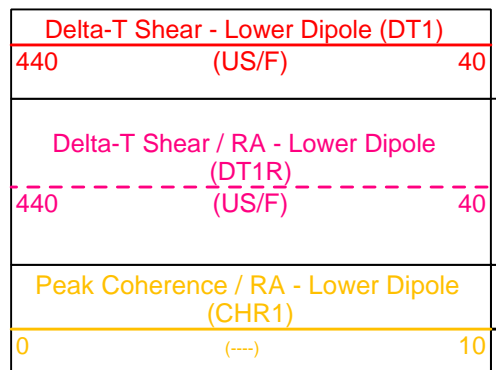
PIP SUMMARY

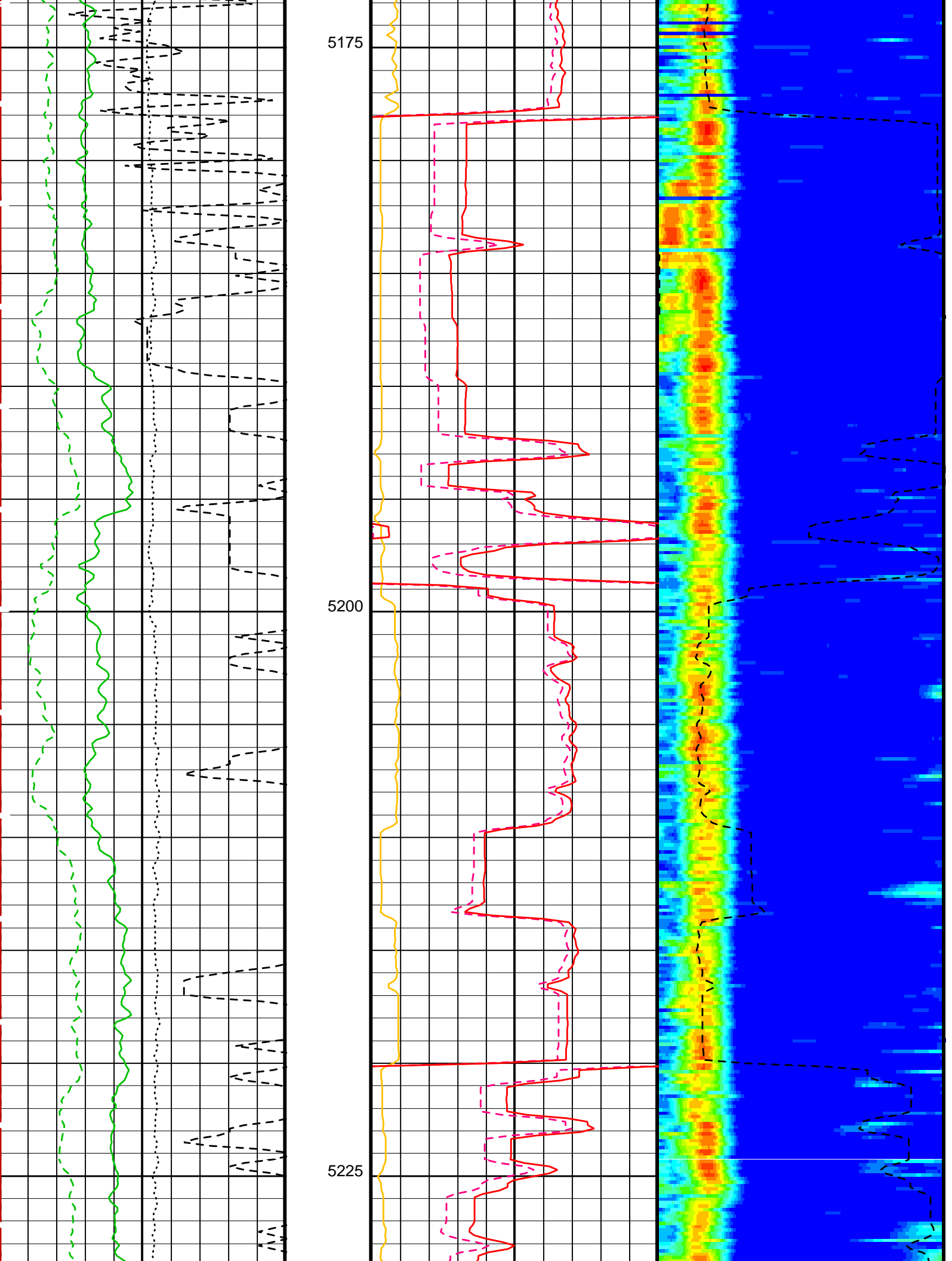
Time Mark Every 60 S

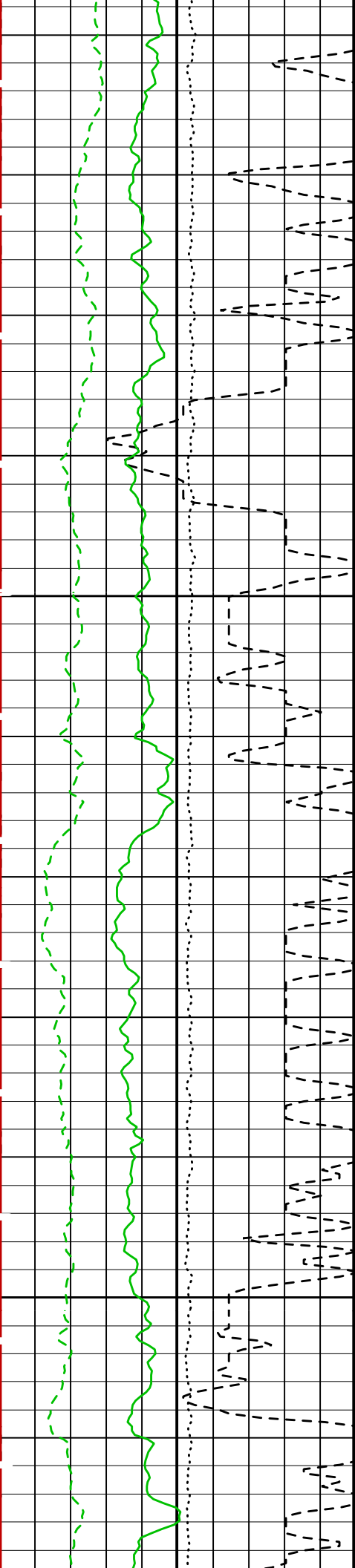


Lower Dipole Shear-High Frequency

Pass #2

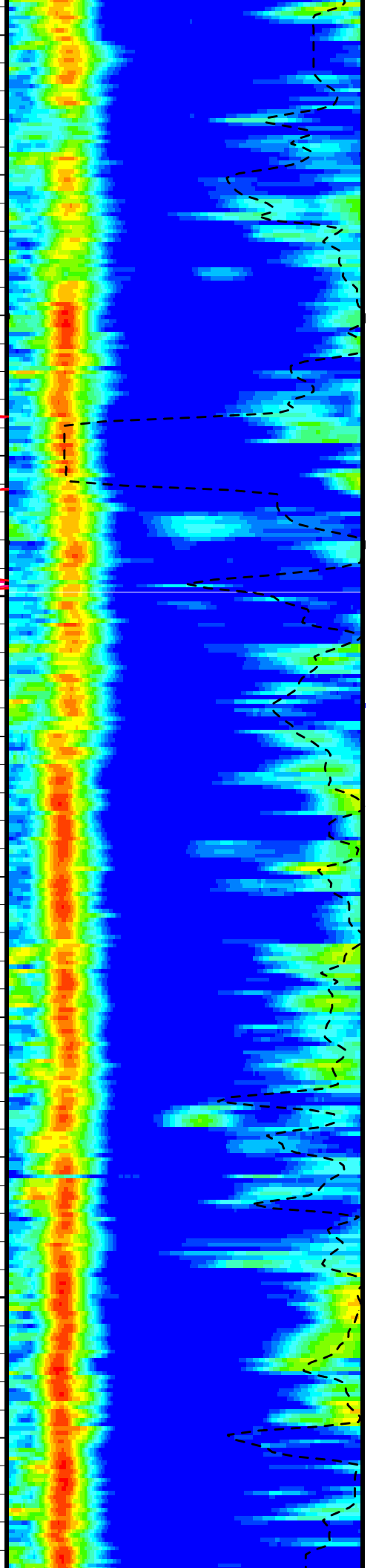


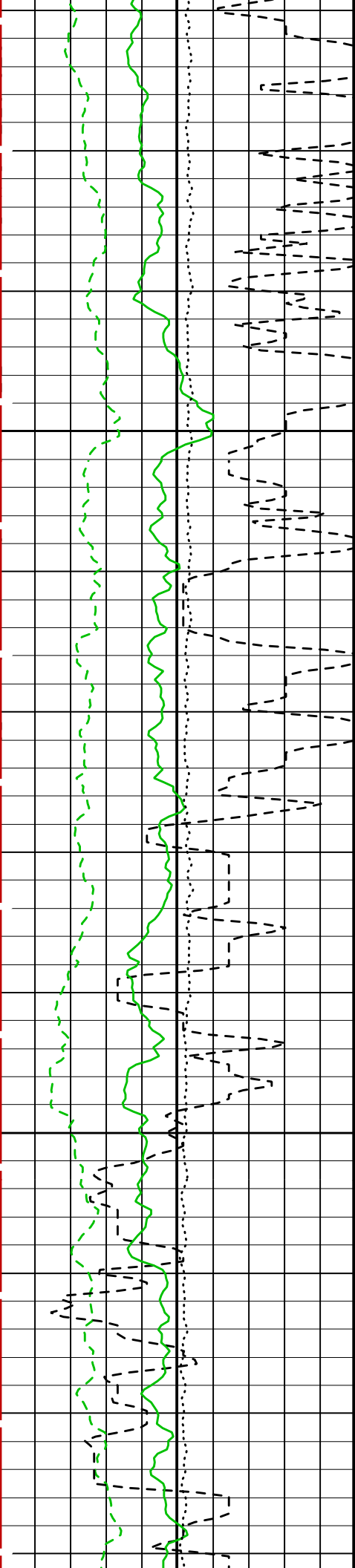




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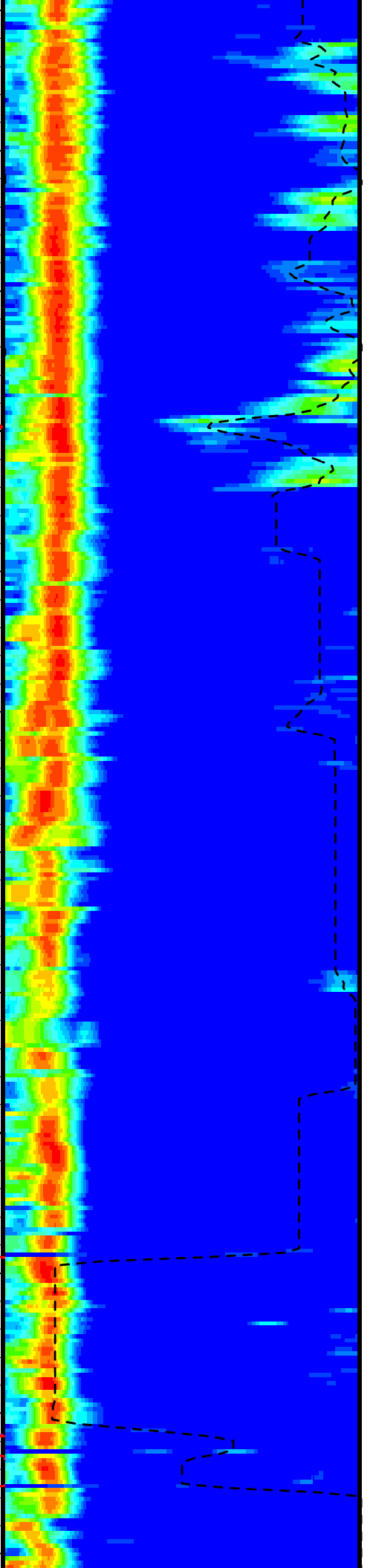
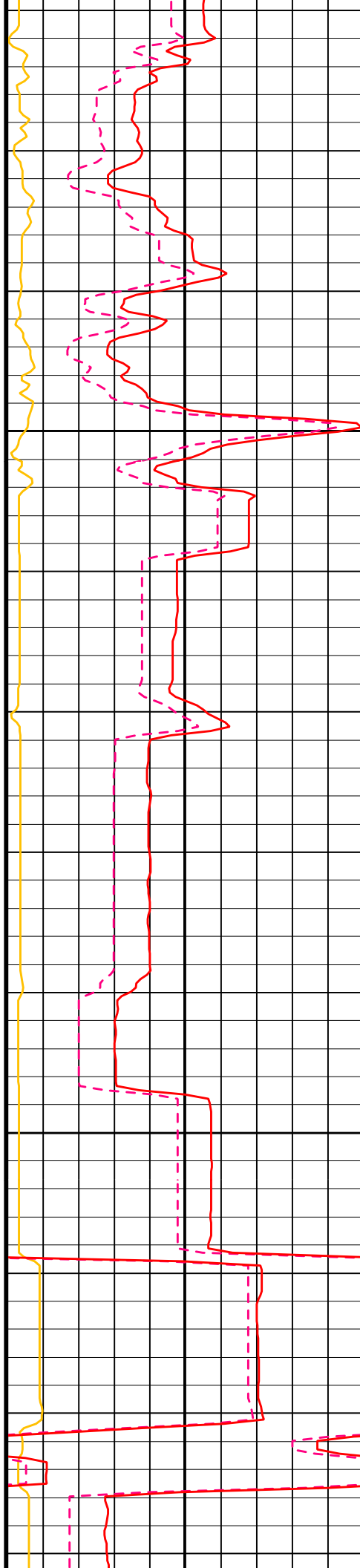
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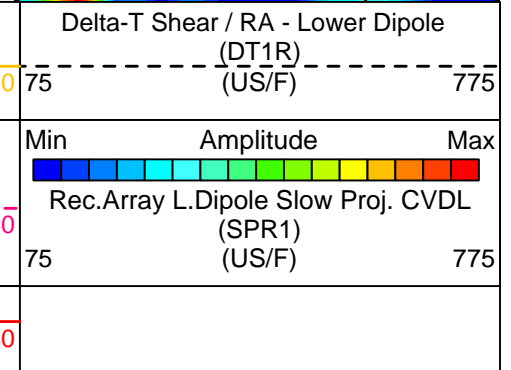
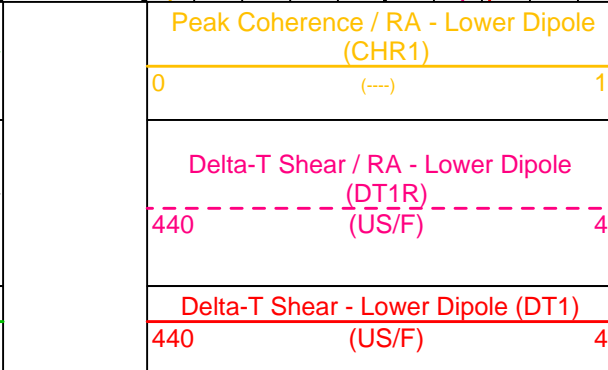
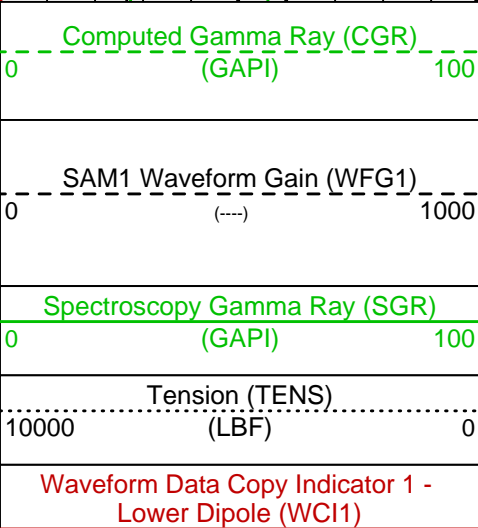
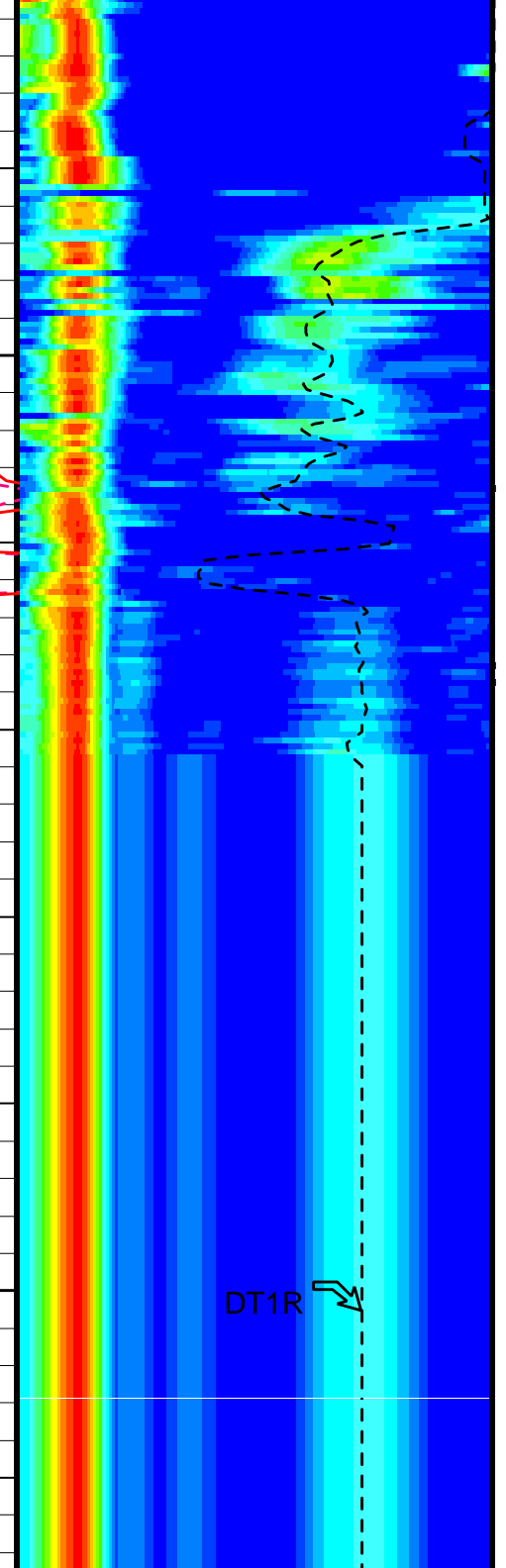
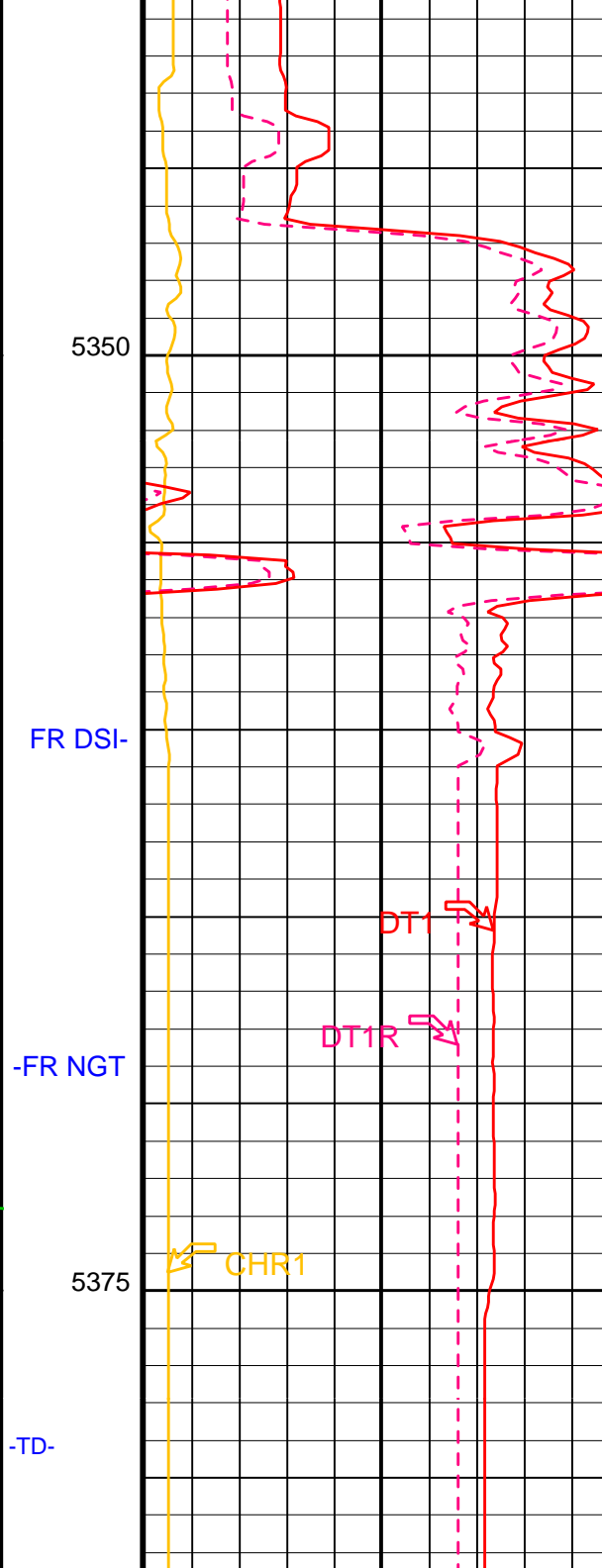
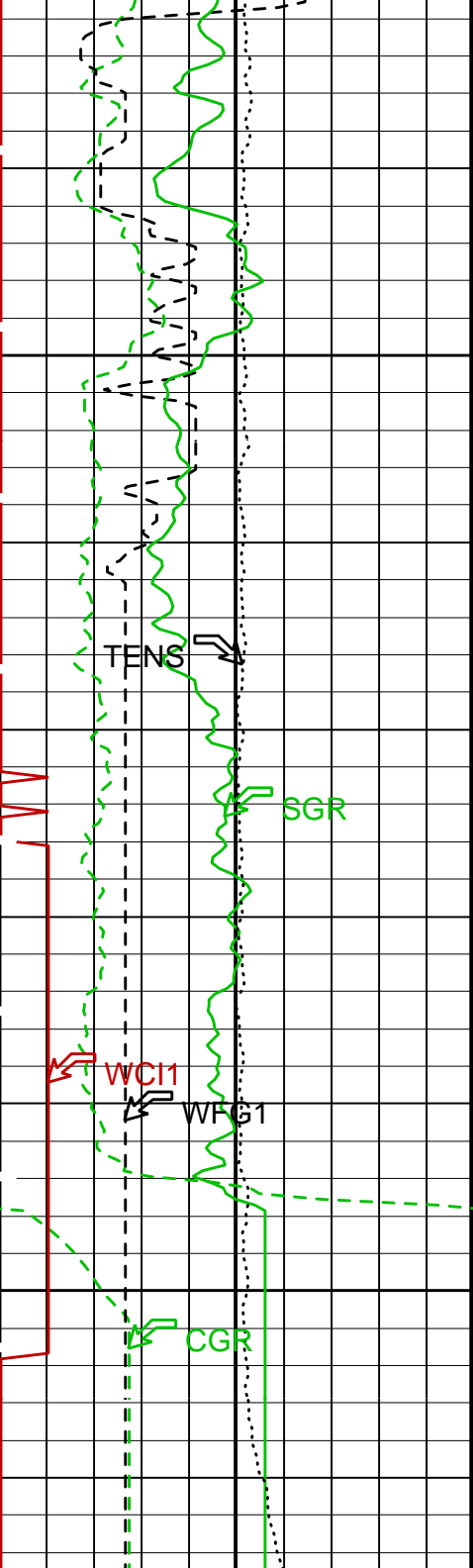




5300

5325





Lower Dipole Shear-High Frequency

Pass #2

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value	
NGT-C: Natural Gamma Spectroscopy - C			
CBAR	Constant Barite	1	
CGMI	Spectro Computed Gamma Ray Minimum	0	GAPI
CGSH	Spectro Computed Gamma Ray Shale	100	GAPI
KMIN	Potassium Minimum	0	
KSHA	Potassium Shale	0.02	
NFO	NGT Filtering Option	KALMAN	
PMUD	Potassium Mud	0	%
SGMI	Spectro Gamma Ray Minimum	0	GAPI
SGSH	Spectro Gamma Ray Shale	100	GAPI
TMIN	Thorium Minimum	0	PPM
TSHA	Thorium Shale	12	PPM
UMIN	Uranium Minimum	0	PPM
USHA	Uranium Shale	3	PPM
DSST-B: Dipole Shear Imager - B			
DDE1	Digitizing Delay 1	0	US
DDEX	Digitizing Delay X	0	US
DLCS	Label Compressional Source - Dipole Shear	USE	
DSHL	Label Slowness Lower Limit - Dipole Shear	75	US/F
DSHU	Label Slowness Upper Limit - Dipole Shear	775	US/F
DSI1	Digitizer Sample Interval 1	40	US
DSIX	Digitizer Sample Interval X	10	US
DTCS	Compressional Delta-T Source for DTCO Channel	PS_COMP	
DWC1	Digitizer Word Count 1	512	
DWCX	Digitizer Word Count X	512	
LTXG	Lower Dipole Transmitter Geometry	156	IN
NW11	Number Waveform Items 1	8	
RX1G	Receiver 1 Geometry	294	IN
RX2G	Receiver 2 Geometry	300	IN
RX3G	Receiver 3 Geometry	306	IN
RX4G	Receiver 4 Geometry	312	IN
RX5G	Receiver 5 Geometry	318	IN
RX6G	Receiver 6 Geometry	324	IN
RX7G	Receiver 7 Geometry	330	IN
RX8G	Receiver 8 Geometry	336	IN
SAM1	DSST Sonic Acquisition Mode 1 - Lower Dipole Mode	EVEN	
SAMX	DSST Sonic Acquisition Mode X - Both Dipoles or Monopole Mode for Expert	OFF	
SAS1	STC Sonic Array Status - Lower Dipole	255	
SBO1	STC Search Band Offset - Lower Dipole	3000	US
SBW1	STC Search Bandwidth - Lower Dipole	8000	US
SFC1	STC Formation Character - Lower Dipole	SELECTABLE	
SFM1	STC Filter - Lower Dipole	B1-3K	
SLL1	STC Slowness Lower Limit - Lower Dipole	75	US/F
SST1	STC Slowness Step - Lower Dipole	4	US/F
SSW1	STC Source Waveform - Lower Dipole	WF_SAM1	
SUL1	STC Slowness Upper Limit - Lower Dipole	775	US/F
SWD1	STC Slowness Width - Lower Dipole	40	US/F
TBF1	STC Time for Baseline Fill - Lower Dipole	0	US
TLL1	STC Time Lower Limit - Lower Dipole	600	US
TST1	STC Time Step - Lower Dipole	200	US
TUL1	STC Time Upper Limit - Lower Dipole	15912.5	US
TWD1	STC Time Width - Lower Dipole	2000	US
TWI1	STC Integration Time Window - Lower Dipole	1600	US
TWSX	Transmitter Waveform Select X	0	
WFM1	Waveform Mode 1	W1	
System and Miscellaneous			
BS	Bit Size	11.438	IN
DFD	Drilling Fluid Density	8.93	LB/G
DO	Depth Offset for Playback	0.0	M
PP	Playback Processing	RECOMPUTE	

Format: DSST_LOWER_DIPOLE_VDL_COLOR Vertical Scale: 1:200 Graphics File Created: 18-Mar-2002 15:20

OP System Version: 10C0-306
MCM

MEST-B	10C0-306	NGT-C	10C0-306
DTA-A	10C0-306	DSST-B	10C0-306
DTC-H	10C0-306		

Input DLIS Files

Output DLIS Files

DEFAULT	FMS_NGS_DSI_028PUP	FN:43	PRODUCER	18-Mar-2002 15:20		
DOH	FMS_NGS_DSI_028PUP	FN:44	PRODUCER	18-Mar-2002 15:20		

Input DLIS Files

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Output DLIS Files

DEFAULT	FMS_NGS_DSI_028PUP	FN:43	PRODUCER	18-Mar-2002 15:20	5382.5 M	5165.1 M
DOH	FMS_NGS_DSI_028PUP	FN:44	PRODUCER	18-Mar-2002 15:20	5382.5 M	5165.1 M

OP System Version: 10C0-306

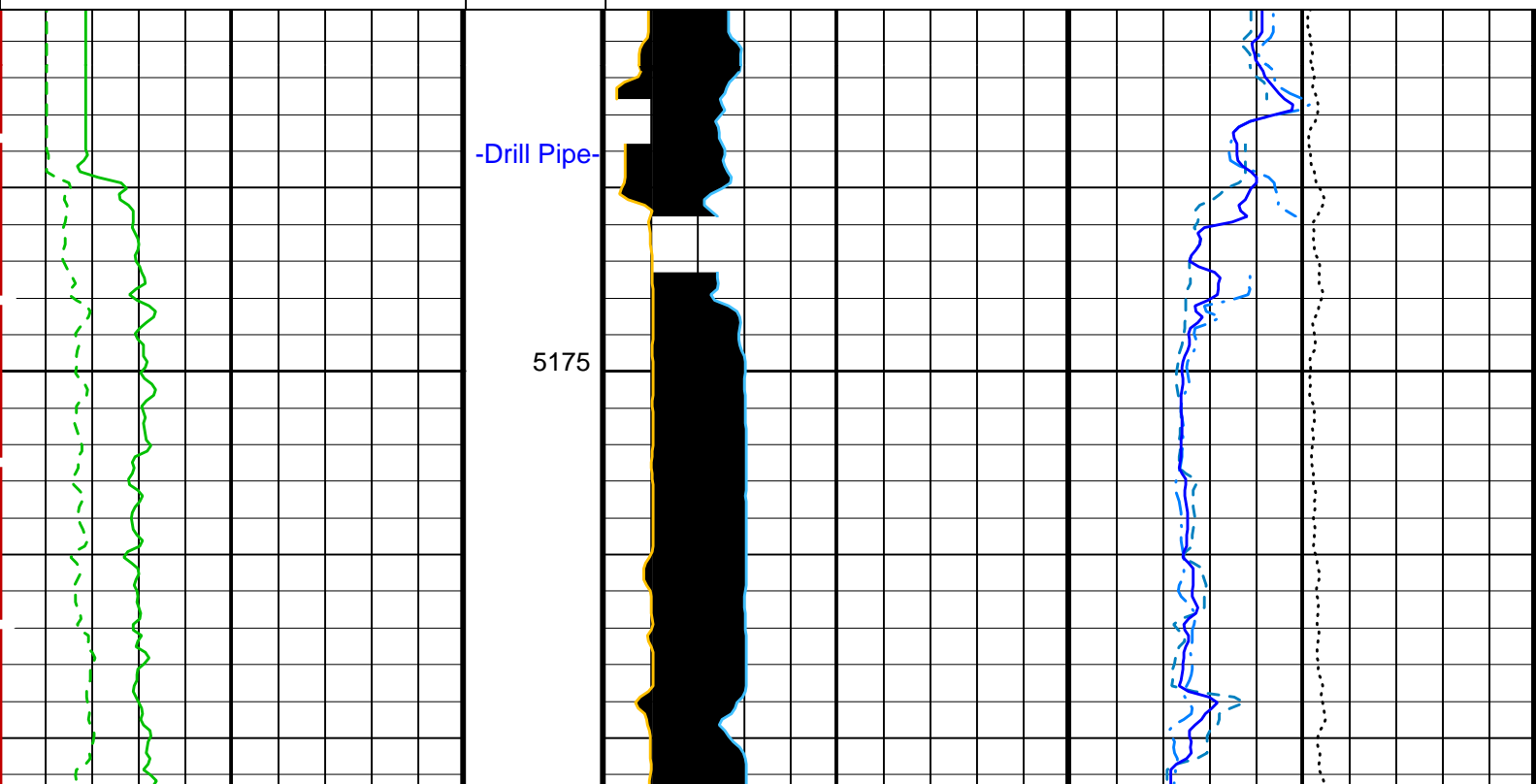
MCM

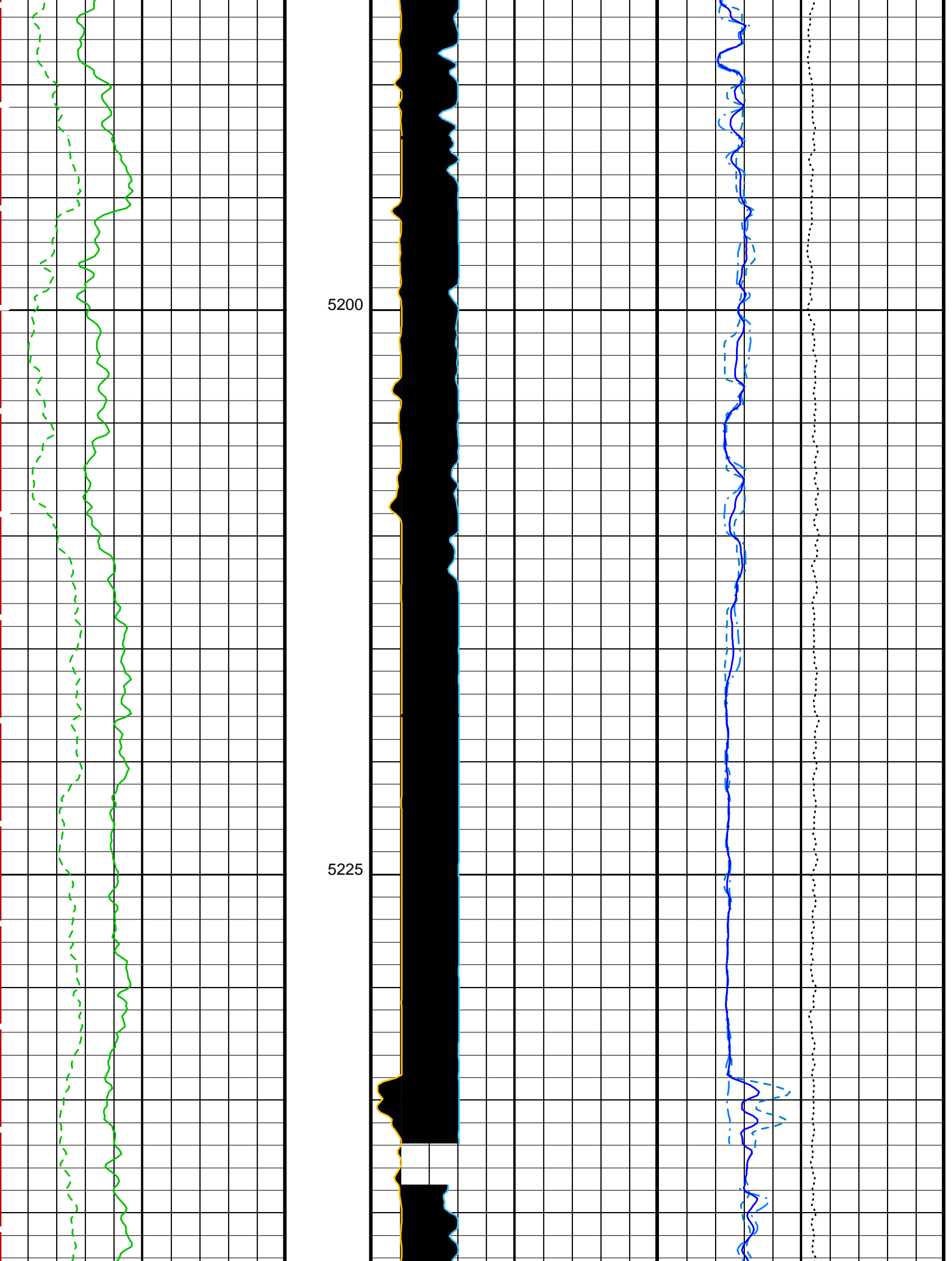
MEST-B	10C0-306	NGT-C	10C0-306
DTA-A	10C0-306	DSST-B	10C0-306
DTC-H	10C0-306		

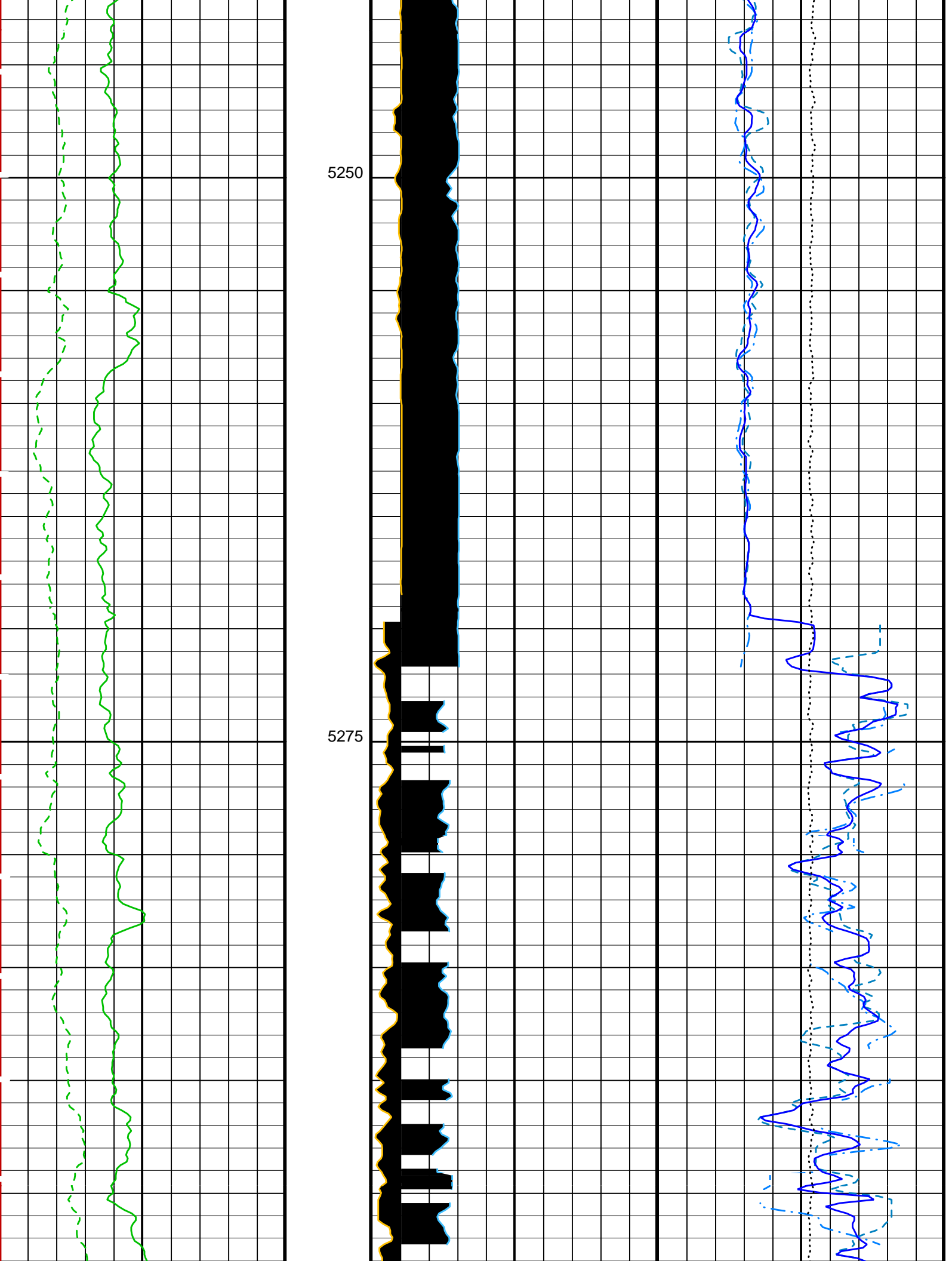
PIP SUMMARY

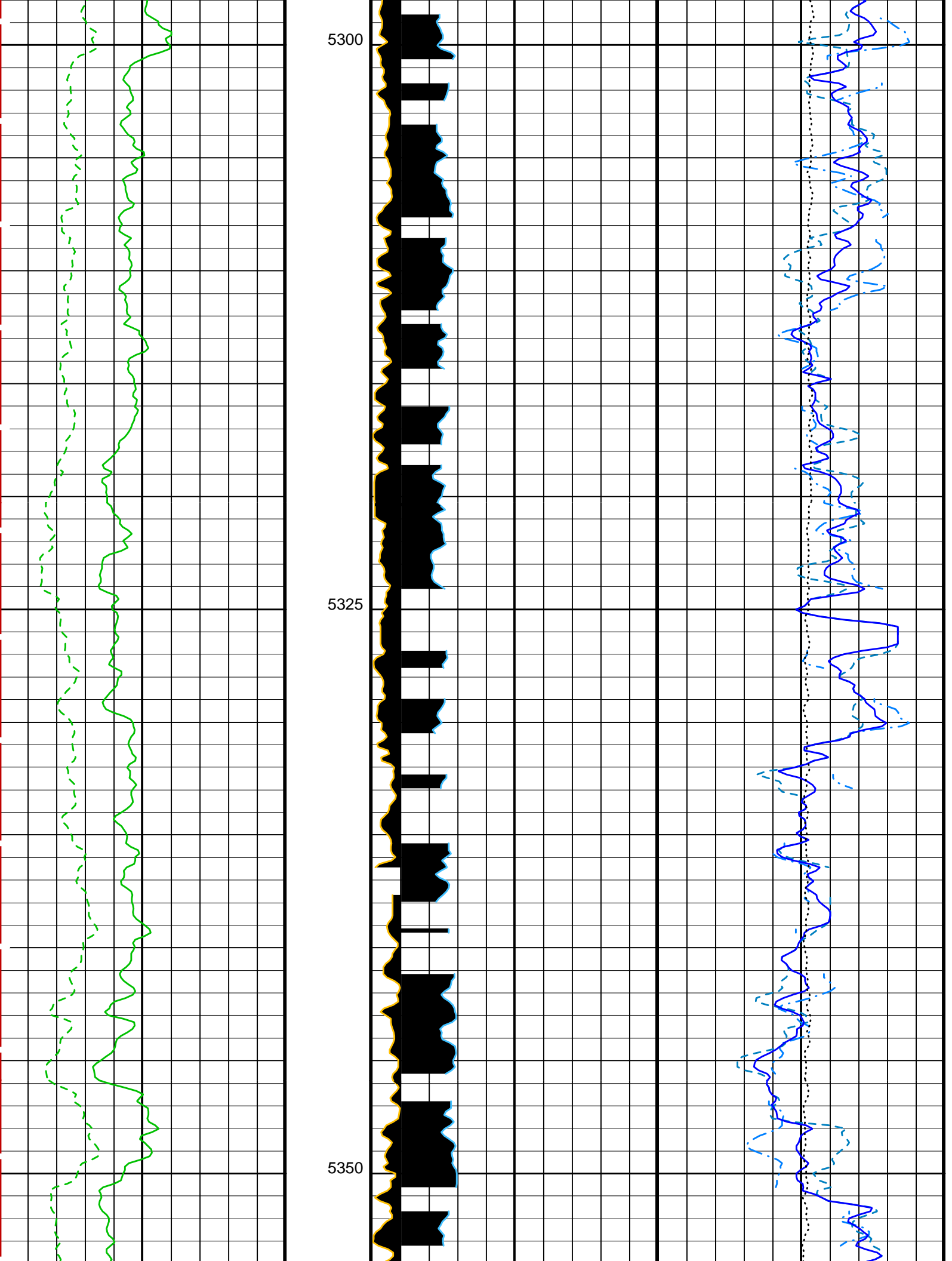
Time Mark Every 60 S

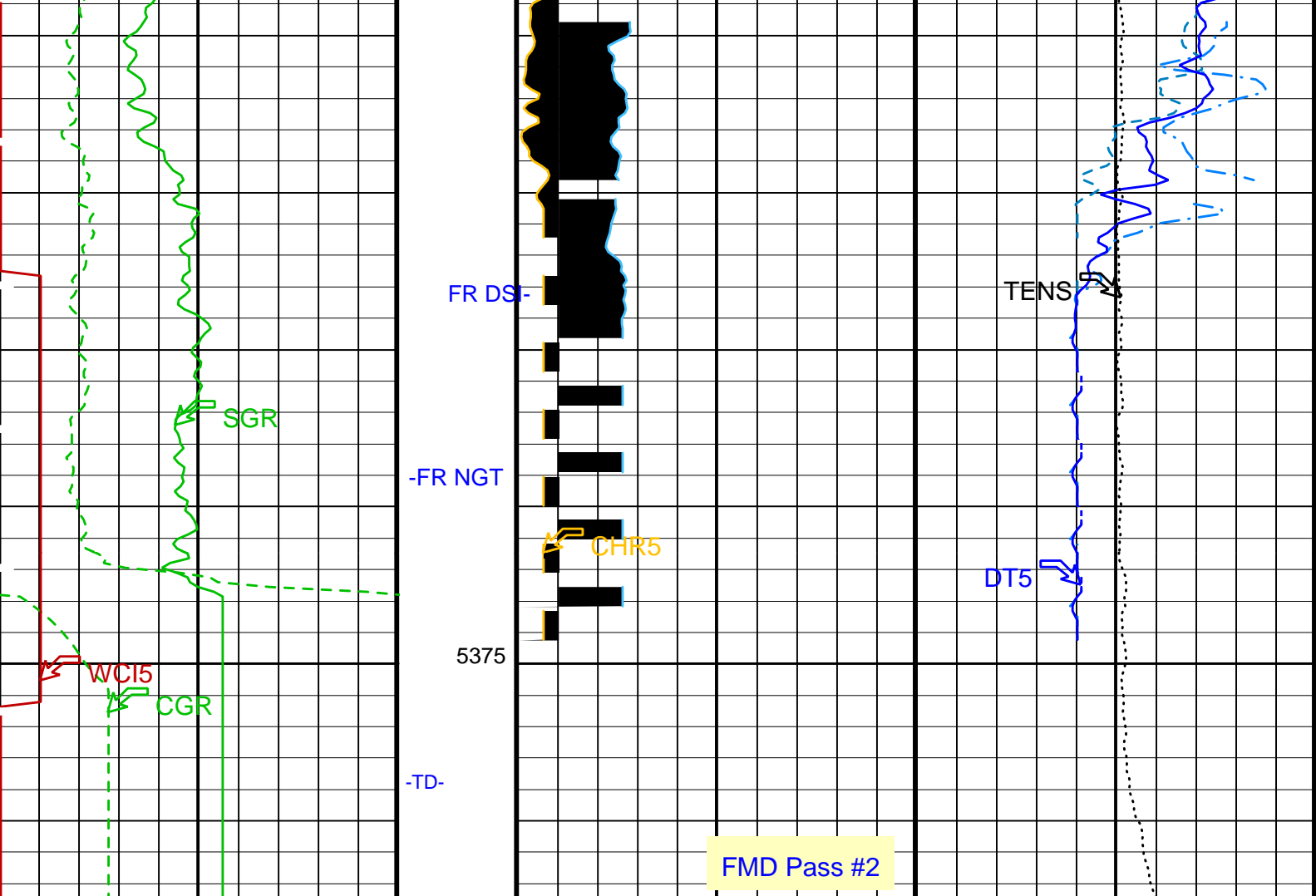
	Coherence /TA FMD (CHT5)	-2	(---)	8	FMD Pass #2
Waveform Data Copy Indicator 5 - FMD (WC15)	Coherence /RA FMD (CHR5)	0	(---)	10	Tension (TENS) (LBF)
0	(---)	10	10000		
Spectroscopy Gamma Ray (SGR)	Delta-T Comp - FMD (DT5)	440	(US/F)		
0	(GAPI)	100	40		
Computed Gamma Ray (CGR)	Delta-T Comp / TA - FMD (DT5T)	440	(US/F)		
0	(GAPI)	100	40		
	Delta-T Comp / RA - FMD (DT5R)	440	(US/F)		
	(US/F)	40	40		











Computed Gamma Ray (CGR) (GAPI)	0	100	Delta-T Comp / RA - FMD (DT5R) (US/F)	440	40
Spectroscopy Gamma Ray (SGR) (GAPI)	0	100	Delta-T Comp / TA - FMD (DT5T) (US/F)	440	40
Waveform Data Copy Indicator 5 - FMD (WC15)	0	10	Delta-T Comp - FMD (DT5) (US/F)	440	40
			Coherence / RA FMD (CHR5)	0	10
			Coherence / TA FMD (CHT5)	-2	8
			Tension (TENS) (LBF)	10000	0

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
	NGT-C: Natural Gamma Spectroscopy - C	
CBAR	Constant Barite	1
CGMI	Spectro Computed Gamma Ray Minimum	0 GAPI
CGSH	Spectro Computed Gamma Ray Shale	100 GAPI
KMIN	Potassium Minimum	0
KSHA	Potassium Shale	0.02
NFO	NGT Filtering Option	KALMAN
PMUD	Potassium Mud	0 %
SGMI	Spectro Gamma Ray Minimum	0 GAPI
SGSH	Spectro Gamma Ray Shale	100 GAPI
TMIN	Thorium Minimum	0 PPM
TSHA	Thorium Shale	12 PPM
UMIN	Uranium Minimum	0 PPM
USHA	Uranium Shale	3 PPM

USHA	DSST-B: Dipole Shear Imager - B	Granular State	3	PPM
FMLL		Slowness Lower Limit - FMD	100	US/F
FMRC		Restart Control - FMD	CONTINUE	
FMUL		Slowness Upper Limit - FMD	189	US/F
MTXG		Monopole Transmitter Geometry	186	IN
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
SAS5		Sonic Array Status - FMD	255	
WFM5		Waveform Mode 5	W1	
System and Miscellaneous				
BS		Bit Size	11.438	IN
DFD		Drilling Fluid Density	8.93	LB/G
DO		Depth Offset for Playback	0.0	M
PP		Playback Processing	RECOMPUTE	

Format: DSST_FMD Vertical Scale: 1:200 Graphics File Created: 18-Mar-2002 15:20

OP System Version: 10C0-306			
MCM			
MEST-B	10C0-306	NGT-C	10C0-306
DTA-A	10C0-306	DSST-B	10C0-306
DTC-H	10C0-306		

Input DLIS Files						
DEFAULT	FMS_NGS_DSI_019LUP	FN:29	PRODUCER	16-Mar-2002 18:33	5382.5 M	5164.7 M
Output DLIS Files						
DEFAULT	FMS_NGS_DSI_028PUP	FN:43	PRODUCER	18-Mar-2002 15:20		
DOH	FMS_NGS_DSI_028PUP	FN:44	PRODUCER	18-Mar-2002 15:20		

Input DLIS Files						
DEFAULT	FMS_NGS_DSI_018LUP	FN:27	PRODUCER	16-Mar-2002 17:38	5381.5 M	5168.8 M
Output DLIS Files						
DEFAULT	FMS_NGS_DSI_026PUP	FN:39	PRODUCER	17-Mar-2002 16:18	5381.5 M	5169.3 M
FMS	FMS_NGS_DSI_026PUP	FN:40	PRODUCER	17-Mar-2002 16:18	5381.5 M	5169.3 M

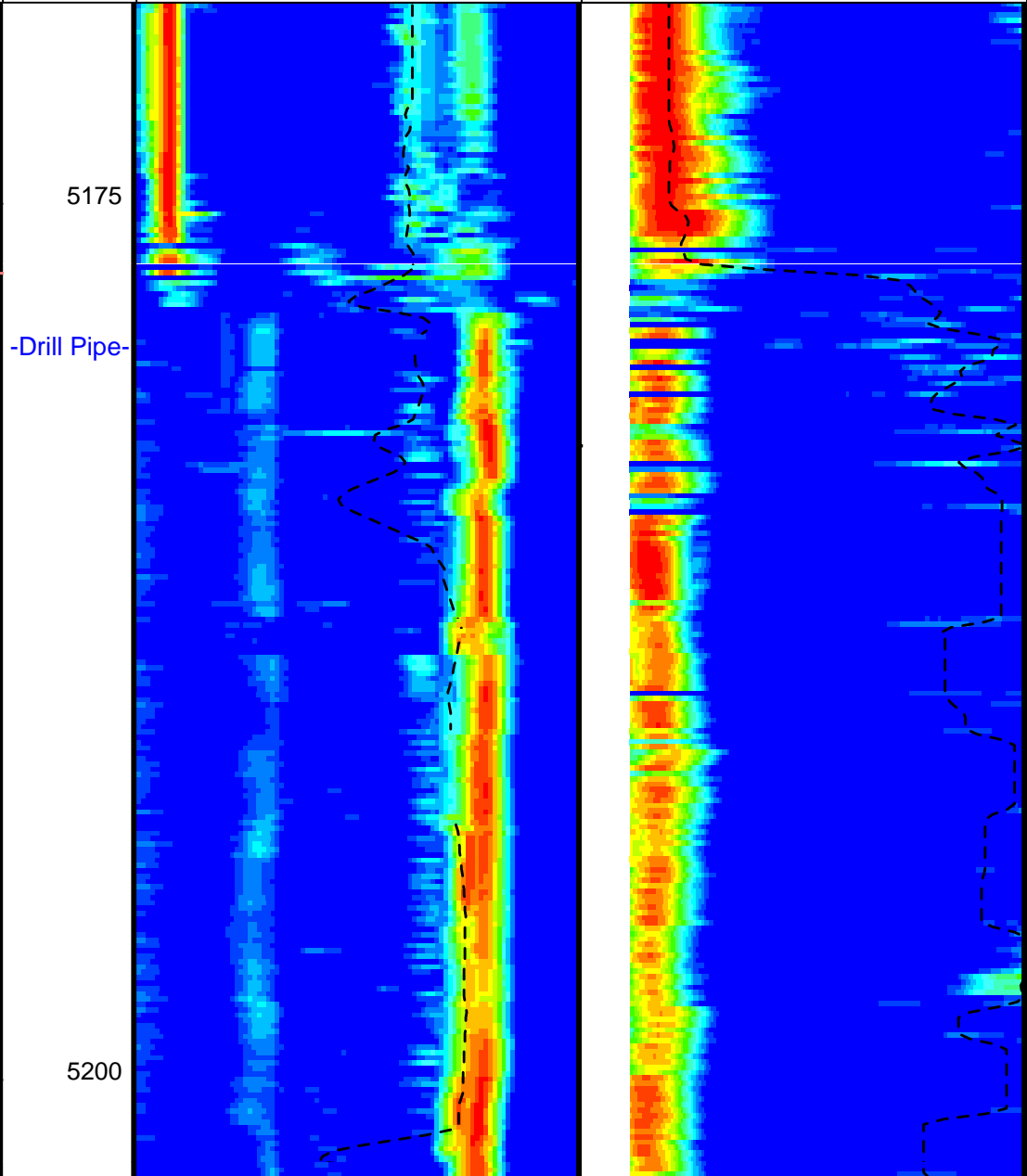
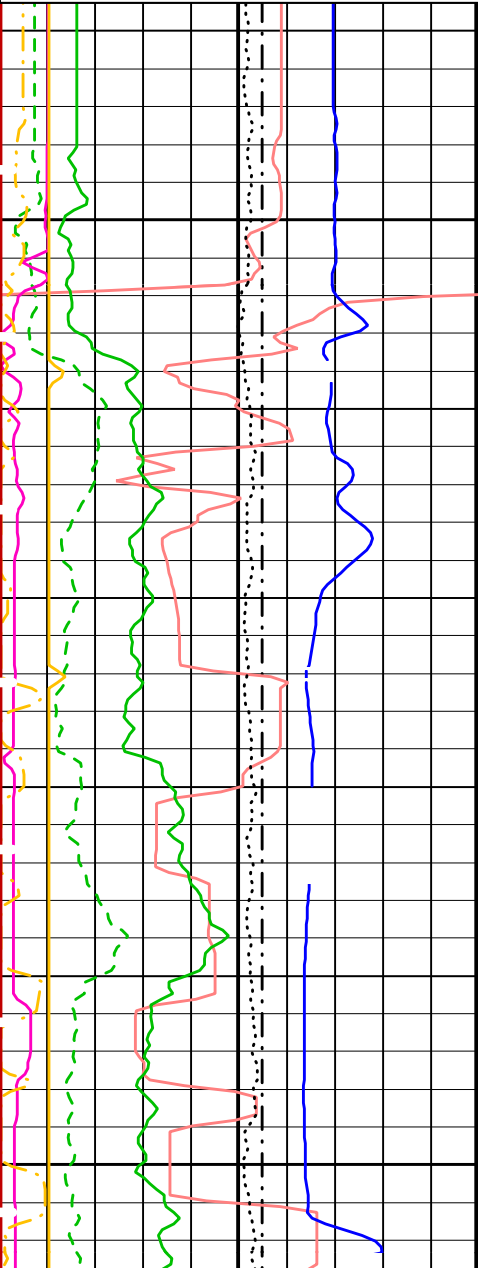
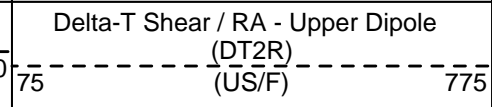
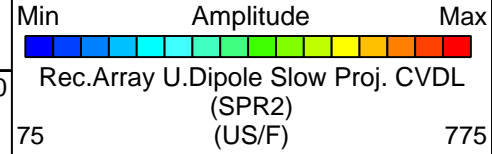
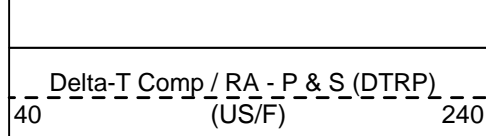
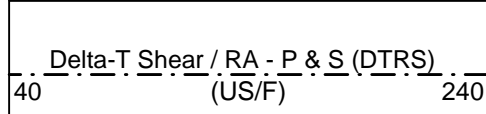
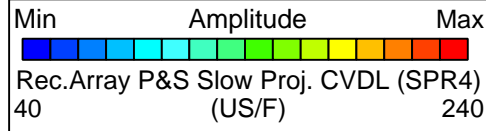
OP System Version: 10C0-306			
MCM			
MEST-B	10C0-306	NGT-C	10C0-306
DTA-A	10C0-306	DSST-B	10C0-306
DTC-H	10C0-306		

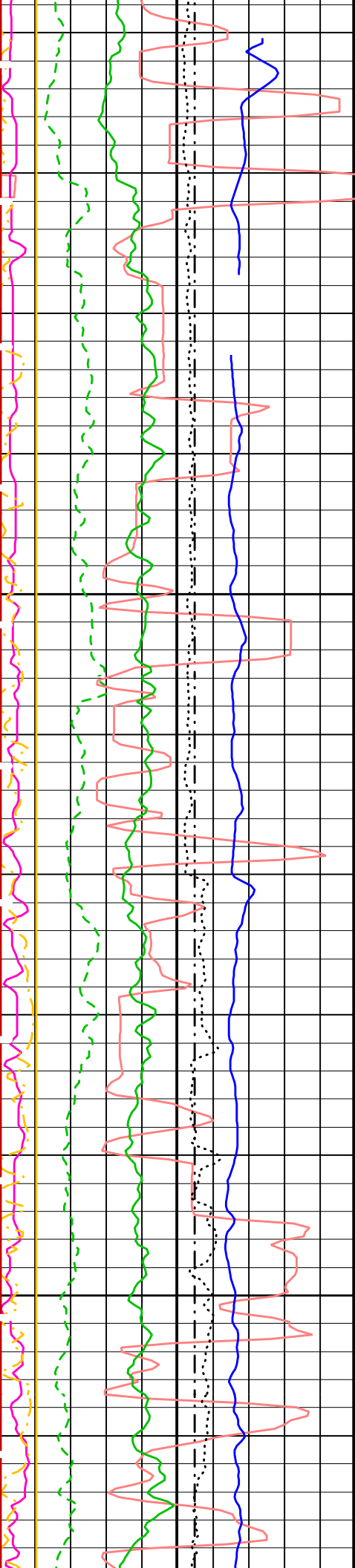
PIP SUMMARY

▶ Time Mark Every 60 S		
Waveform Data Copy Indicator 4 - Monopole P&S (WC14)		
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) (LBF)	10000	0
Spectroscopy Gamma Ray (SGR) (GAPI)	0	100
Delta-T Shear - P & S (DT4S) (US/F)	440	40
Delta-T Comp - P & S (DT4P) (US/F)	440	40
Delta-T Shear - Upper Dipole (DT2) (US/F)	440	40
Computed Gamma Ray (CGR) (GAPI)	0	100
Bit Size (BS) (IN)	6	16

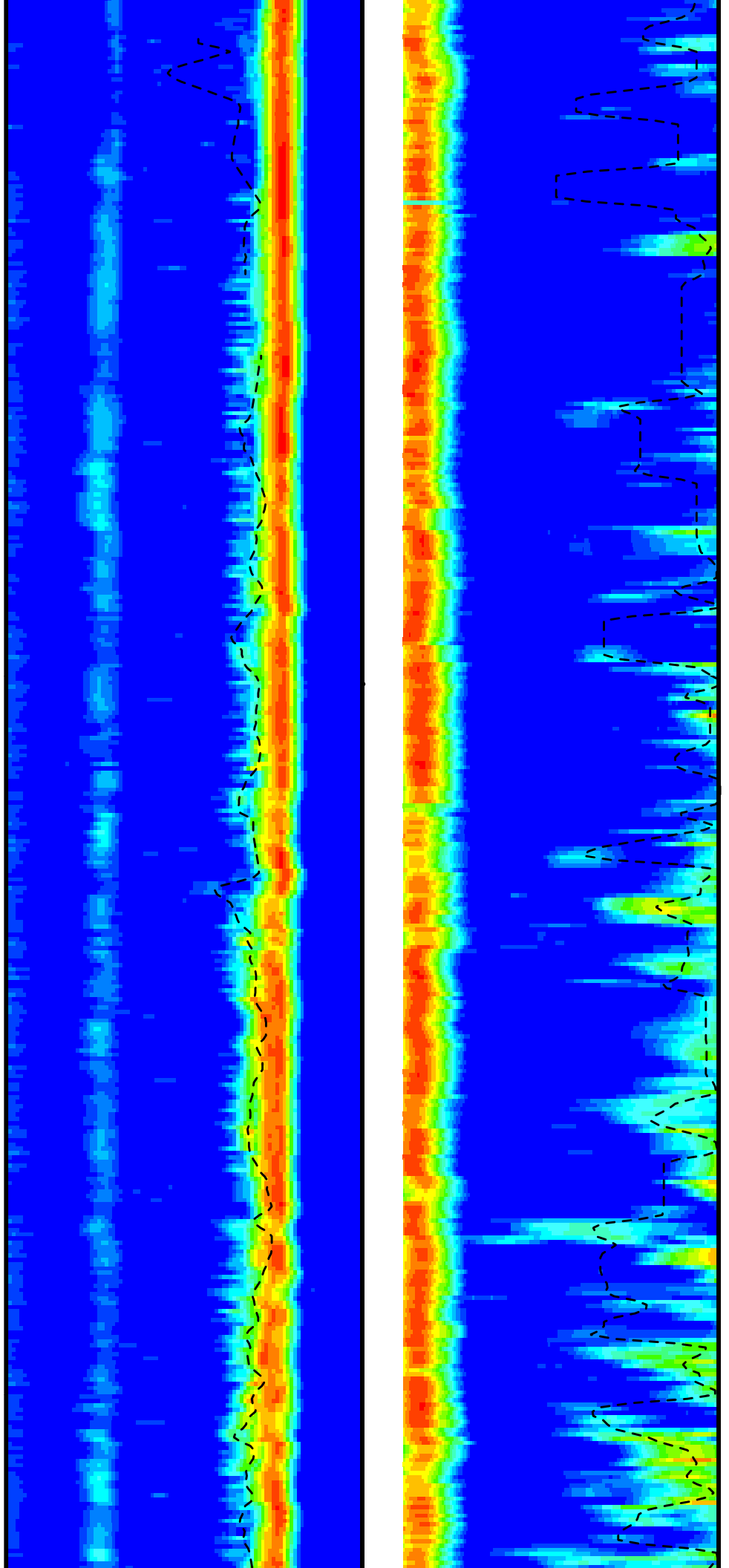
Compressional Monopole

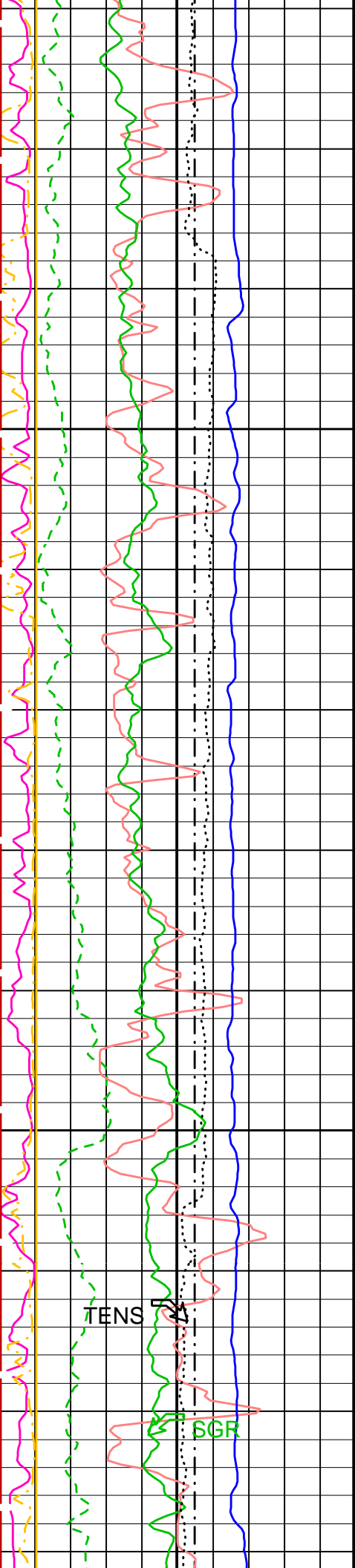




5225

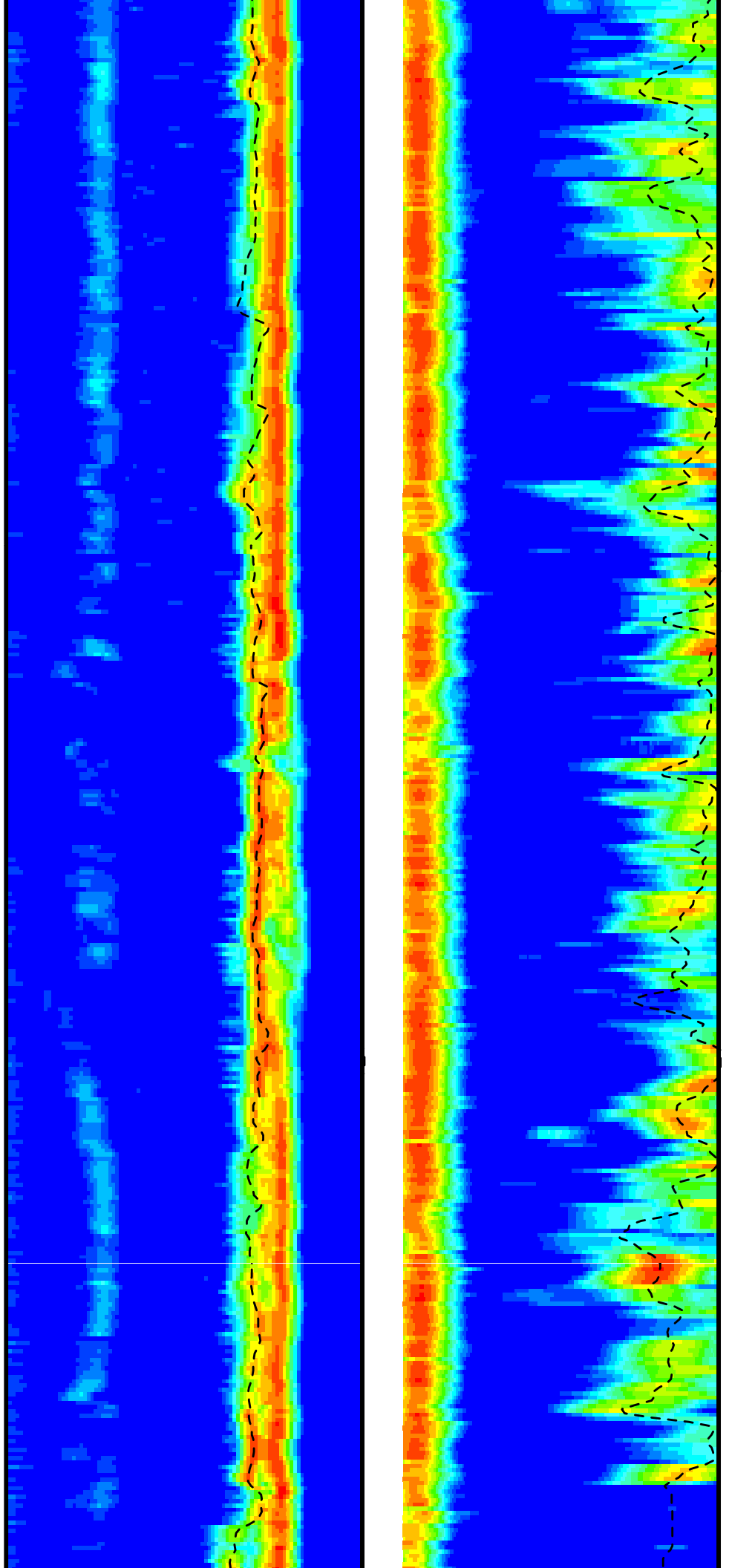
5250





5275

5300



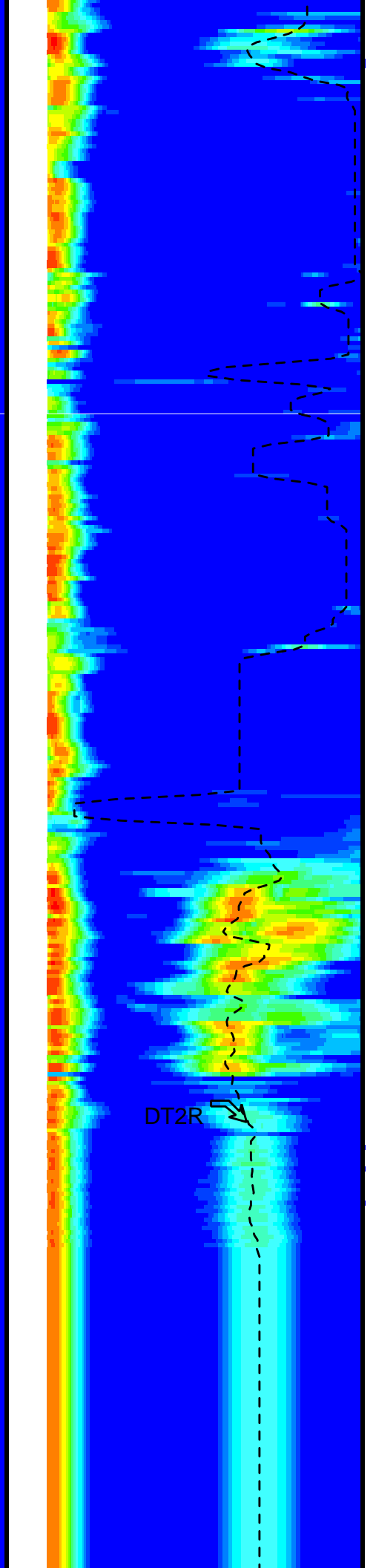
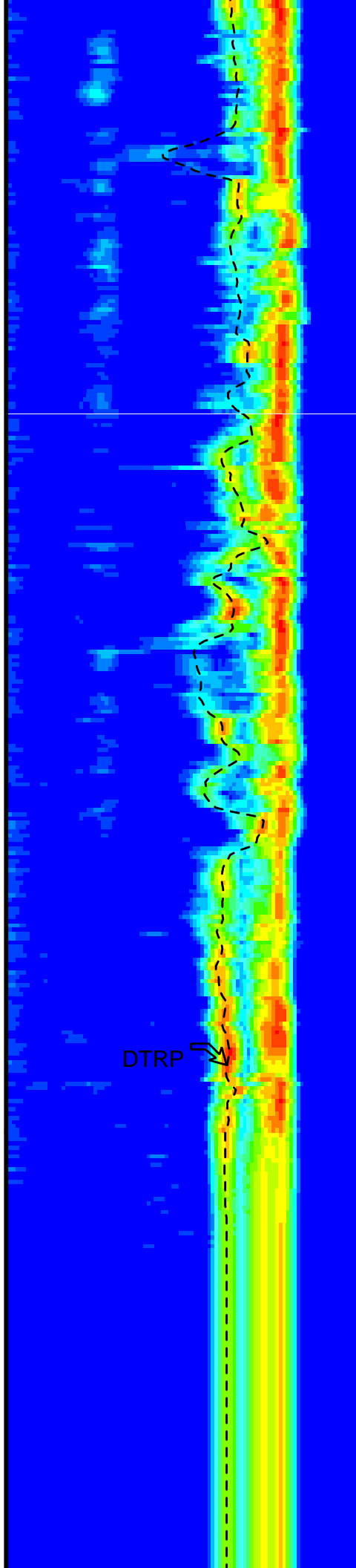


5325

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FR DSI-

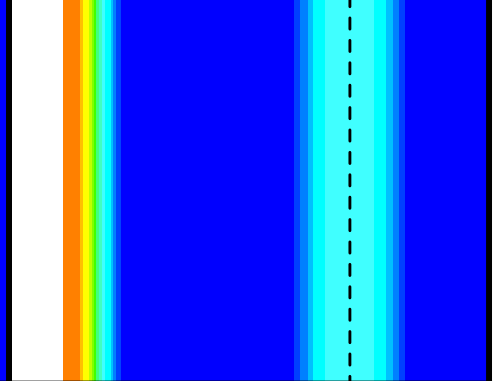
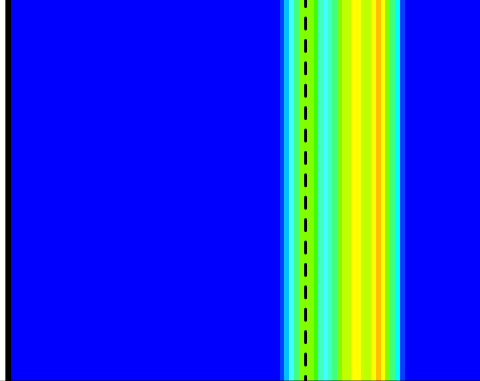
-FR NGT





5375

-TD-



Bit Size (BS)
(IN) 6 16

Computed Gamma Ray (CGR)
(GAPI) 0 100

Delta-T Shear - Upper Dipole (DT2)
(US/F) 440 40

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

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

Spectroscopy Gamma Ray (SGR)
(GAPI) 0 100

Tension (TENS)
(LBF) 10000 0

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) 0 10

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

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

Min Amplitude Max
Rec.Array U.Dipole Slow Proj. CVDL
(SPR2) 75 775
(US/F)

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

Upper Dipole Shear-High Frequency Pass #1

Compressional Monopole

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
NGT-C:	Natural Gamma Spectroscopy - C	
CBAR	Constant Barite	1
CGMI	Spectro Computed Gamma Ray Minimum	0 GAPI
CGSH	Spectro Computed Gamma Ray Shale	100 GAPI
KMIN	Potassium Minimum	0
KSHA	Potassium Shale	0.02
NFO	NGT Filtering Option	KALMAN
PMUD	Potassium Mud	0 %
SGMI	Spectro Gamma Ray Minimum	0 GAPI
SGSH	Spectro Gamma Ray Shale	100 GAPI
TMIN	Thorium Minimum	0 PPM

TMIN	Thorium Minimum	0	PPM
TSHA	Thorium Shale	12	PPM
UMIN	Uranium Minimum	0	PPM
USHA	Uranium Shale	3	PPM
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	120	US/F
COUL	Label Slowness Upper Limit - Monopole P&S Compressional	188	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	200	US/F
DSHU	Label Slowness Upper Limit - Dipole Shear	775	US/F
DSI2	Digitizer Sample Interval 2	40	US
DSI4	Digitizer Sample Interval 4	10	US
DSIX	Digitizer Sample Interval X	10	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	
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	
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 - High Frequency 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	SLOW	
SFC4	STC Formation Character - Monopole P&S	SLOW	
SFM2	STC Filter - Upper Dipole	B1-3K	
SFM4	STC Filter - Monopole P&S	B3-20K	
SHLL	Label Slowness Lower Limit - Monopole P&S Shear	200	US/F
SHUL	Label Slowness Upper Limit - Monopole P&S Shear	240	US/F
SLL2	STC Slowness Lower Limit - Upper Dipole	150	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	775	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	650	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	15525	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	

System and Miscellaneous

BS Bit Size
 DFD Drilling Fluid Density
 DO Depth Offset for Playback
 PP Playback Processing

11.438 IN
 8.93 LB/G
 0.0 M
 RECOMPUTE

Format: DSST_P_S_UPPER_VDL_COLOR Vertical Scale: 1:200 Graphics File Created: 17-Mar-2002 16:18

OP System Version: 10C0-306
 MCM

MEST-B	10C0-306	NGT-C	10C0-306
DTA-A	10C0-306	DSST-B	10C0-306
DTC-H	10C0-306		

Input DLIS Files

DEFAULT	FMS_NGS_DSI_018LUP	FN:27	PRODUCER	16-Mar-2002 17:38	5381.5 M	5168.8 M
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Output DLIS Files

DEFAULT	FMS_NGS_DSI_026PUP	FN:39	PRODUCER	17-Mar-2002 16:18
FMS	FMS_NGS_DSI_026PUP	FN:40	PRODUCER	17-Mar-2002 16:18

Input DLIS Files

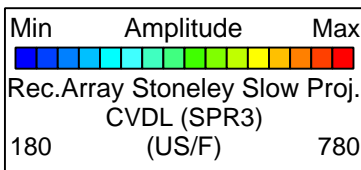
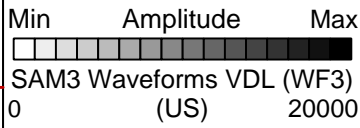
DEFAULT	FMS_NGS_DSI_018LUP	FN:27	PRODUCER	16-Mar-2002 17:38	5381.5 M	5168.8 M
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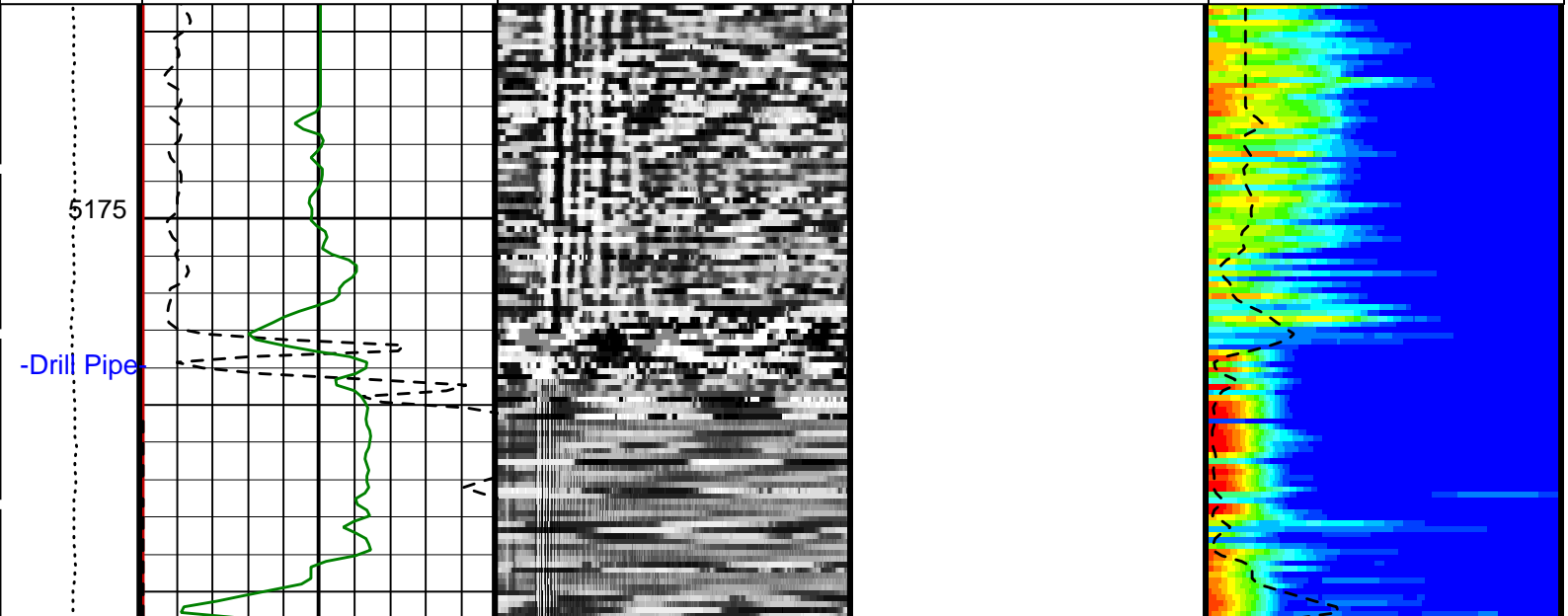
OP System Version: 10C0-306
 MCM

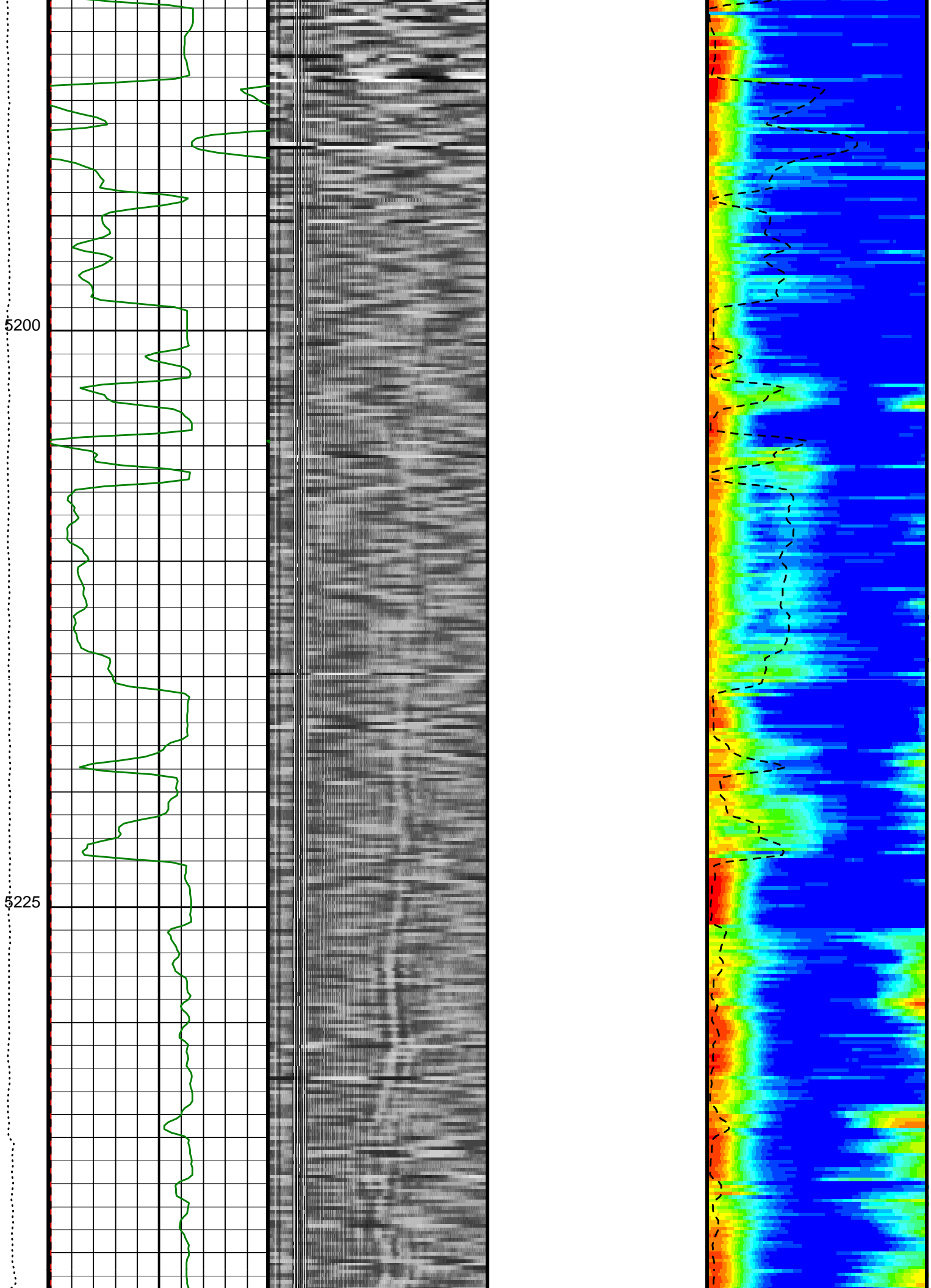
MEST-B	10C0-306	NGT-C	10C0-306
DTA-A	10C0-306	DSST-B	10C0-306
DTC-H	10C0-306		

PIP SUMMARY

Time Mark Every 60 S

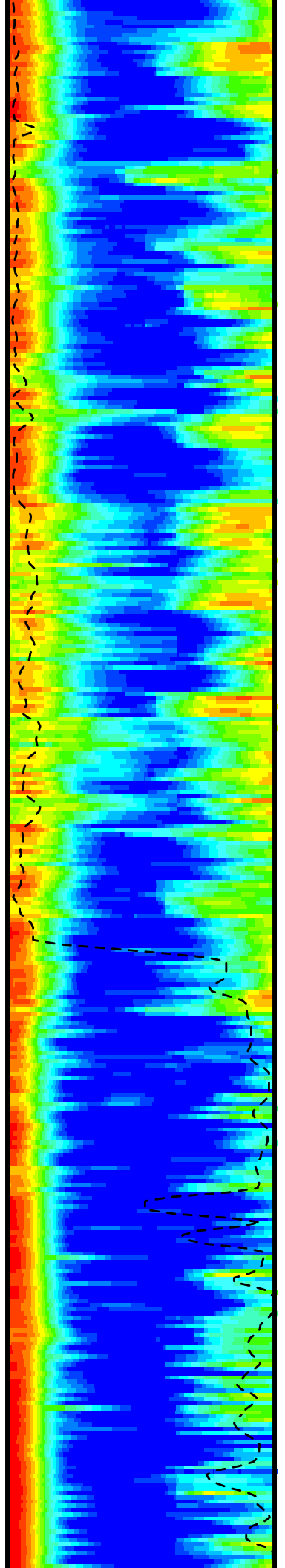
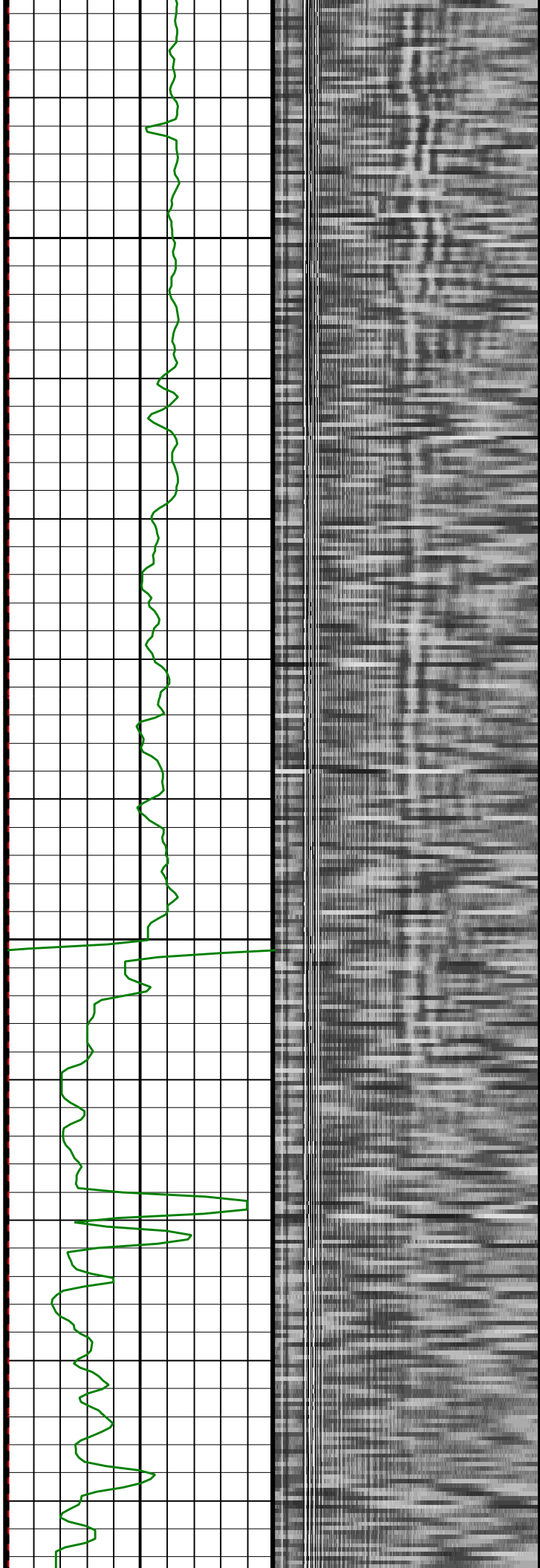
	<p style="color: green;">Delta-T Stoneley (DTST)</p> <p>440 (US/F) 40</p>	<div style="background-color: yellow; padding: 5px; display: inline-block;">Stoneley Pass #1</div>	
	<p style="color: red;">SAM3 Waveform Gain (WFG3)</p> <p>0 (----) 1000</p>		<p>Min Amplitude Max</p>  <p>Rec.Array Stoneley Slow Proj. CVDL (SPR3)</p> <p>180 (US/F) 780</p>
<p>Tension (TENS) (LBF)</p> <p>10000 0</p>	<p style="color: red;">Waveform Data Copy Indicator 3 - Monopole Stoneley (WCI3)</p> <p>0 (----) 10</p>	<p>Min Amplitude Max</p>  <p>SAM3 Waveforms VDL (WF3)</p> <p>0 (US) 20000</p>	<p>Delta-T Stoneley / RA (DT3R)</p> <p>180 (US/F) 780</p>





5250

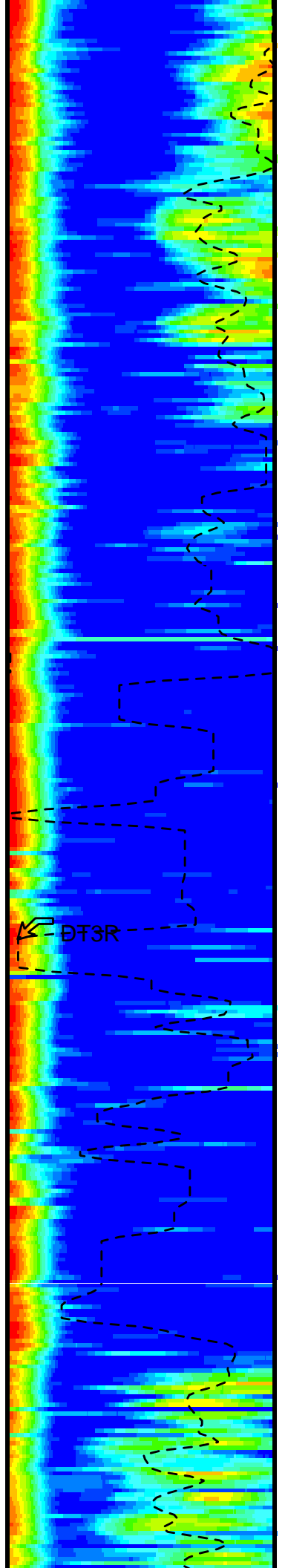
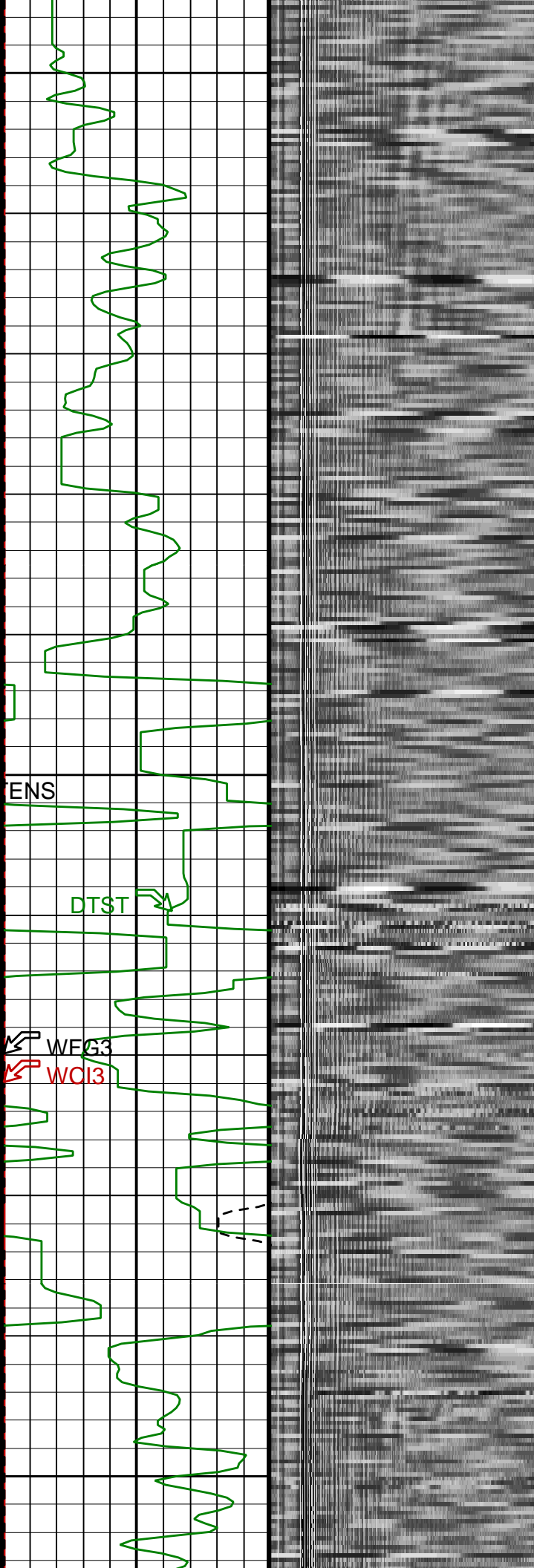
5275

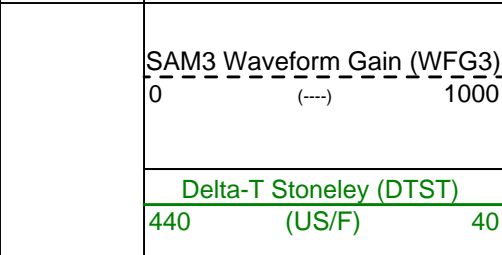
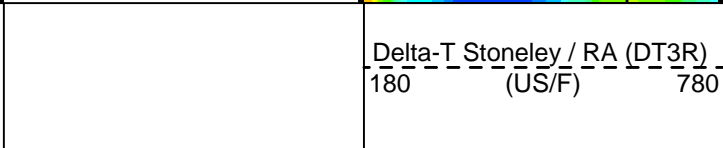
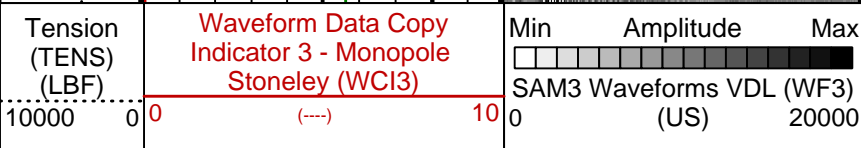
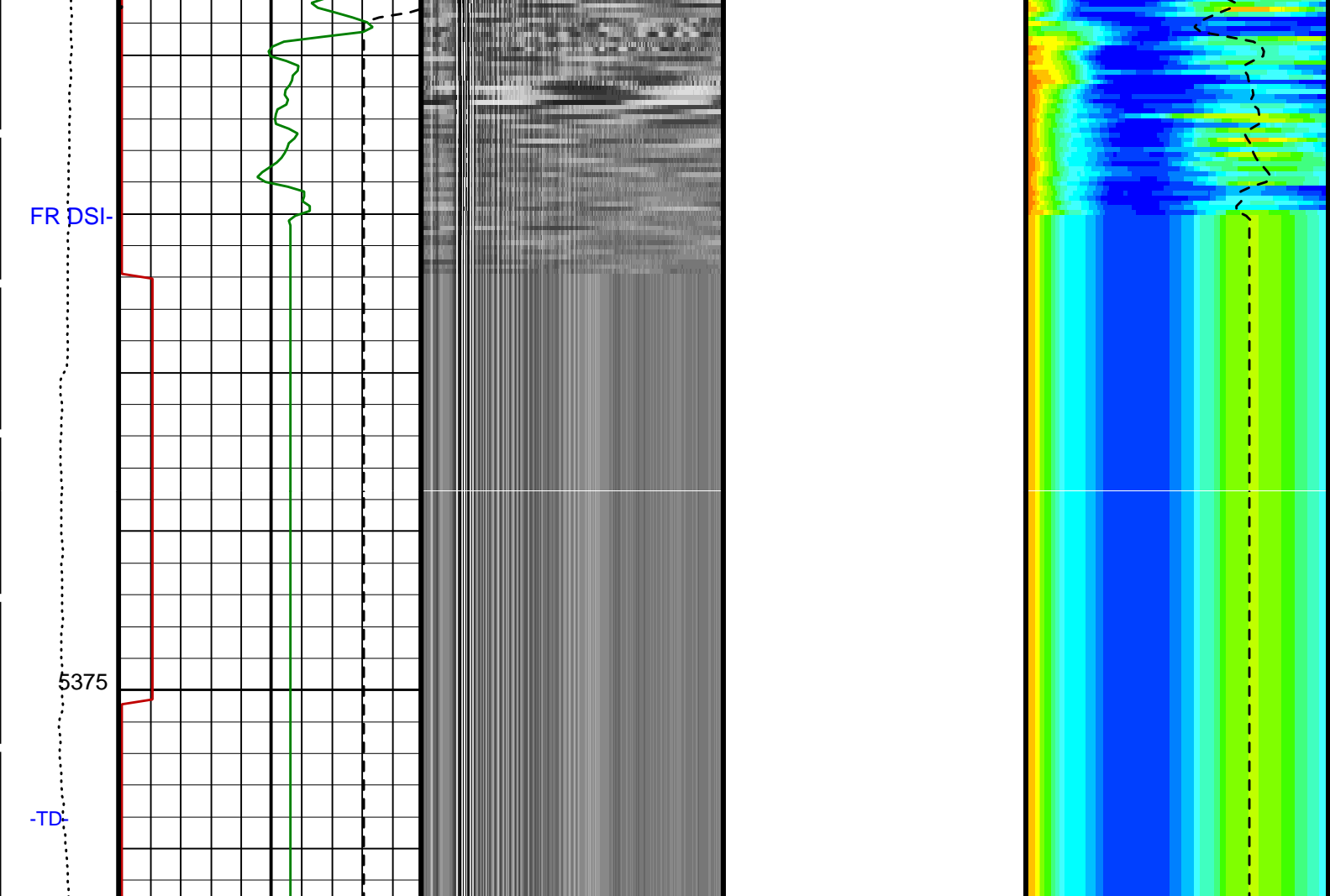


5300

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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	10 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
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 - Low Frequency 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	180	US/F
SST3	STC Slowness Step - Monopole Stoneley	4	US/F
STLL	Label Slowness Lower Limit - Monopole Stoneley	180	US/F
STUL	Label Slowness Upper Limit - Monopole Stoneley	780	US/F
SUL3	STC Slowness Upper Limit - Monopole Stoneley	780	US/F
SWD3	STC Slowness Width - Monopole Stoneley	40	US/F
TBF3	STC Time for Baseline Fill - Monopole Stoneley	0	US
TLL3	STC Time Lower Limit - Monopole Stoneley	620	US
TST3	STC Time Step - Monopole Stoneley	200	US
TUL3	STC Time Upper Limit - Monopole Stoneley	12020	US
TWD3	STC Time Width - Monopole Stoneley	2000	US
TWI3	STC Integration Time Window - Monopole Stoneley	1600	US
TWSX	Transmitter Waveform Select X	0	
WFM3	Waveform Mode 3	W1	
System and Miscellaneous			
DO	Depth Offset for Playback	0.0	M
PP	Playback Processing	NORMAL	

Format: DSST_STONELEY_SPECTRUM Vertical Scale: 1:200 Graphics File Created: 19-Mar-2002 17:48

OP System Version: 10C0-306

MCM

MEST-B	10C0-306	NGT-C	10C0-306
DTA-A	10C0-306	DSST-B	10C0-306
DTC-H	10C0-306		

Input DLIS Files

DEFAULT	FMS_NGS_DSI_018LUP	FN:27	PRODUCER	16-Mar-2002 17:38	5381.5 M	5168.8 M
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Calibration and Check Summary

Measurement	Nominal	Master	Before	After	Change	Limit	Units
Micro Electrical Scanner - B (Slim) Wellsite Calibration - Caliper Calibration							
Before: Calibration out of date 9-Feb-2002 1:17							
Caliper 1 Zero Measurement	12.00	N/A	12.30	N/A	N/A	N/A	IN
Caliper 2 Zero Measurement	12.00	N/A	11.85	N/A	N/A	N/A	IN
Caliper 1 Plus Measurement	15.75	N/A	16.17	N/A	N/A	N/A	IN
Caliper 2 Plus Measurement	15.75	N/A	15.92	N/A	N/A	N/A	IN
Micro Electrical Scanner - B (Slim) Wellsite Calibration - CROUZET ACCELEROMETER PROM HAS BEEN READ CORRECTLY							
Before: 16-Mar-2002 16:01							
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: 16-Mar-2002 16:01							
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	
Natural Gamma Spectroscopy - C Wellsite Calibration - Background Measurement							
Master: 9-Feb-2002 2:01 Before: 9-Feb-2002 2:06							
WINDOW 1 Background	100.0	13.34	13.36	N/A	N/A	100.0	CPS
WINDOW 2 Background	50.00	2.716	2.850	N/A	N/A	50.00	CPS
WINDOW 3 Background	10.00	0.6901	0.6701	N/A	N/A	10.00	CPS
WINDOW 4 Background	6.000	0.2750	0.1950	N/A	N/A	6.000	CPS
WINDOW 5 Background	10.00	0.3700	0.2750	N/A	N/A	10.00	CPS
SGR Background	30.00	4.549	4.539	N/A	N/A	N/A	GAPI

Natural Gamma Spectroscopy - C Wellsite Calibration - Normalized Jig Measurement

Master: 9-Feb-2002 1:52 Before: 9-Feb-2002 2:11

WINDOW 1 Jig	376.0	383.5	380.9	N/A	N/A	22.56	CPS
WINDOW 2 Jig	167.0	168.6	170.0	N/A	N/A	10.02	CPS
WINDOW 3 Jig	24.00	24.29	23.62	N/A	N/A	1.440	CPS
WINDOW 4 Jig	14.00	14.14	13.79	N/A	N/A	2.800	CPS
WINDOW 5 Jig	22.50	21.90	22.68	N/A	N/A	4.500	CPS
SGR Jig	160.0	160.4	160.0	N/A	N/A	7.000	GAPI

Natural Gamma Spectroscopy - C Master Calibration - Master Quality Control Values

Master: 9-Feb-2002 1:48

Photomultiplier Res. CARC3	8.000	10.19	--	--	--	--	
APU WINDOW Jig	1350	1168	--	--	--	--	CPS
APL WINDOW Jig	1350	1167	--	--	--	--	CPS

The NGT PCSL Value is set to 14.469 KEV

Micro Electrical Scanner - B (Slim) / Equipment Identification

Primary Equipment:			
MEST Sonde - B	MEDS - B		724
MEST Preamplifier Cartridge - AB	MEPC - AB		
GPIT Cartridge - A	GPIC - A		719
MEST Acquisition Cartridge - A	MEAC - A		
Auxiliary Equipment:			
MEST-B Preamplifier Cartridge Housing	MEPH - A		702
MEST Acquisition Cartridge Housing (Slim)	MEAH - B		701

Natural Gamma Spectroscopy - C / Equipment Identification

Primary Equipment:			
NGT Cartridge	NGC - C		1731
NGT Sonde	NGD - A		1720
Auxiliary Equipment:			
NGT Cartridge Housing	NGCH - A		1733
NGT Sonde Housing	NGH - B		1721
Gamma Source Radioactive	GSR - U		

Natural Gamma Spectroscopy - C Wellsite Calibration

Background Measurement

Phase	WINDOW 1 Background CPS	Value	Phase	WINDOW 2 Background CPS	Value	Phase	WINDOW 3 Background CPS	Value
Master		13.34	Master		2.716	Master		0.6901
Before		13.36	Before		2.850	Before		0.6701
0 (Minimum) 100.0 (Nominal) 400.0 (Maximum)			0 (Minimum) 50.00 (Nominal) 200.0 (Maximum)			0 (Minimum) 10.00 (Nominal) 40.00 (Maximum)		
Phase	WINDOW 4 Background CPS	Value	Phase	WINDOW 5 Background CPS	Value	Phase	SGR Background GAPI	Value
Master		0.2750	Master		0.3700	Master		4.549
Before		0.1950	Before		0.2750	Before		4.539
0 (Minimum) 6.000 (Nominal) 24.00 (Maximum)			0 (Minimum) 10.00 (Nominal) 40.00 (Maximum)			0 (Minimum) 30.00 (Nominal) 120.0 (Maximum)		
Master: 9-Feb-2002 2:01			Before: 9-Feb-2002 2:06					

Natural Gamma Spectroscopy - C Wellsite Calibration

Normalized Jig Measurement

Phase	WINDOW 1 Jig CPS	Value	Phase	WINDOW 2 Jig CPS	Value	Phase	WINDOW 3 Jig CPS	Value
Master		383.5	Master		168.6	Master		24.29
Before		380.9	Before		170.0	Before		23.62
354.0 (Minimum) 376.0 (Nominal) 398.0 (Maximum)			155.0 (Minimum) 167.0 (Nominal) 179.0 (Maximum)			21.50 (Minimum) 24.00 (Nominal) 26.50 (Maximum)		
Phase	WINDOW 4 Jig CPS	Value	Phase	WINDOW 5 Jig CPS	Value	Phase	SGR Jig GAPI	Value
Master		14.14	Master		21.90	Master		160.4
Before		13.79	Before		22.68	Before		160.0

12.50 (Minimum)	14.00 (Nominal)	15.50 (Maximum)	20.00 (Minimum)	22.50 (Nominal)	25.00 (Maximum)	148.0 (Minimum)	160.0 (Nominal)	172.0 (Maximum)
Master: 9-Feb-2002 1:52			Before: 9-Feb-2002 2:11					

Natural Gamma Spectroscopy - C Wellsite Calibration							
Quality Control Values							
Phase	DHVF Jig V		Value	Phase	Quality Windows Ratio Jig		Value
Master			1354	Master			2.274
Before			1353	Before			2.241
	1088 (Minimum)	1450 (Nominal)	1813 (Maximum)		2.150 (Minimum)	2.240 (Nominal)	2.330 (Maximum)
Master: 9-Feb-2002 1:52			Before: 9-Feb-2002 2:11				

Natural Gamma Spectroscopy - C Wellsite Calibration		
Quality Control Values Check		
Phase	Thorium peak Form Factor Jig	Value
Before		-0.02104
	-0.2000 (Minimum)	0 (Nominal)
Before: 9-Feb-2002 2:11		

Natural Gamma Spectroscopy - C Master Calibration											
Master Quality Control Values											
Phase	Photomultiplier Res. CARC3		Value	Phase	APU WINDOW Jig CPS		Value	Phase	APL WINDOW Jig CPS		Value
Master			10.19	Master			1168	Master			1167
	4.500 (Minimum)	8.000 (Nominal)	11.50 (Maximum)		700.0 (Minimum)	1350 (Nominal)	1600 (Maximum)		700.0 (Minimum)	1350 (Nominal)	1600 (Maximum)
Phase	Thorium peak Form Factor Jig		Value								
Master			-0.05045								
	-0.1000 (Minimum)	0 (Nominal)	0.1000 (Maximum)								
Master: 9-Feb-2002 1:48											

Company:	Lamont Doherty	Schlumberger
Well:	ODP Leg 201, Site 1230A PRU-4A	
Field:	Peru Margin	
Rig:	JOIDES Resolution	
Ocean:	Pacific	
	Dipole Shear Sonic Compressional and Dipole Shear Natural Gamma Ray	