

Output DLIS Files						
DEFAULT	GHMT .025	FN:22	PRODUCER	10-Apr-2000 06:57	3493.2 M	3225.1 M
GHMTDSI_CUST	GHMT .025	FN:23	PRODUCER	10-Apr-2000 06:57	3493.2 M	3225.0 M

Output DLIS Files						
DEFAULT	GHMT .025	FN:22	PRODUCER	10-Apr-2000 06:57	3493.2 M	3225.1 M
GHMTDSI_CUST	GHMT .025	FN:23	PRODUCER	10-Apr-2000 06:57	3493.2 M	3225.0 M

OP System Version: 9C1-303			
MCM			
GHMT-A	9C1-303	NGT-C	9C1-303
DTA-A	9C1-303	DSST-B	9C1-303
DTC-H	9C1-303		

OP System Version: 9C1-303			
MCM			
GHMT-A	9C1-303	NGT-C	9C1-303
DTA-A	9C1-303	DSST-B	9C1-303
DTC-H	9C1-303		

PIP SUMMARY

PIP SUMMARY

Main Log	Delta-T Shear - Lower Dipole (DT1)	
	440 (US/F)	40

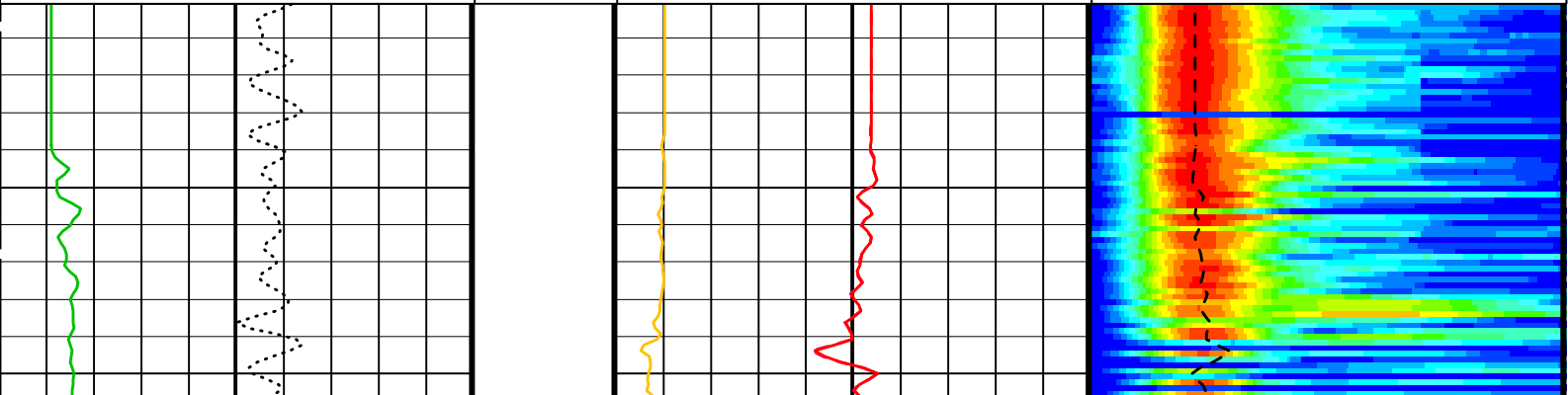
<p>Tension (TENS) (LBF)</p> <p>10000 0</p>	<p>Delta-T Shear / RA - Lower Dipole (DT1R) (US/F)</p> <p>440 40</p>	<p>Min Amplitude Max</p> <p>Rec.Array L.Dipole Slow Proj. CVDL (SPR1) (US/F)</p> <p>75 775</p>
<p>Spectroscopy Gamma Ray (SGR) (GAPI)</p> <p>0 150</p>	<p>Peak Coherence / RA - Lower Dipole (CHR1) (----)</p> <p>0 10</p>	<p>Delta-T Shear / RA - Lower Dipole (DT1R) (US/F)</p> <p>75 775</p>

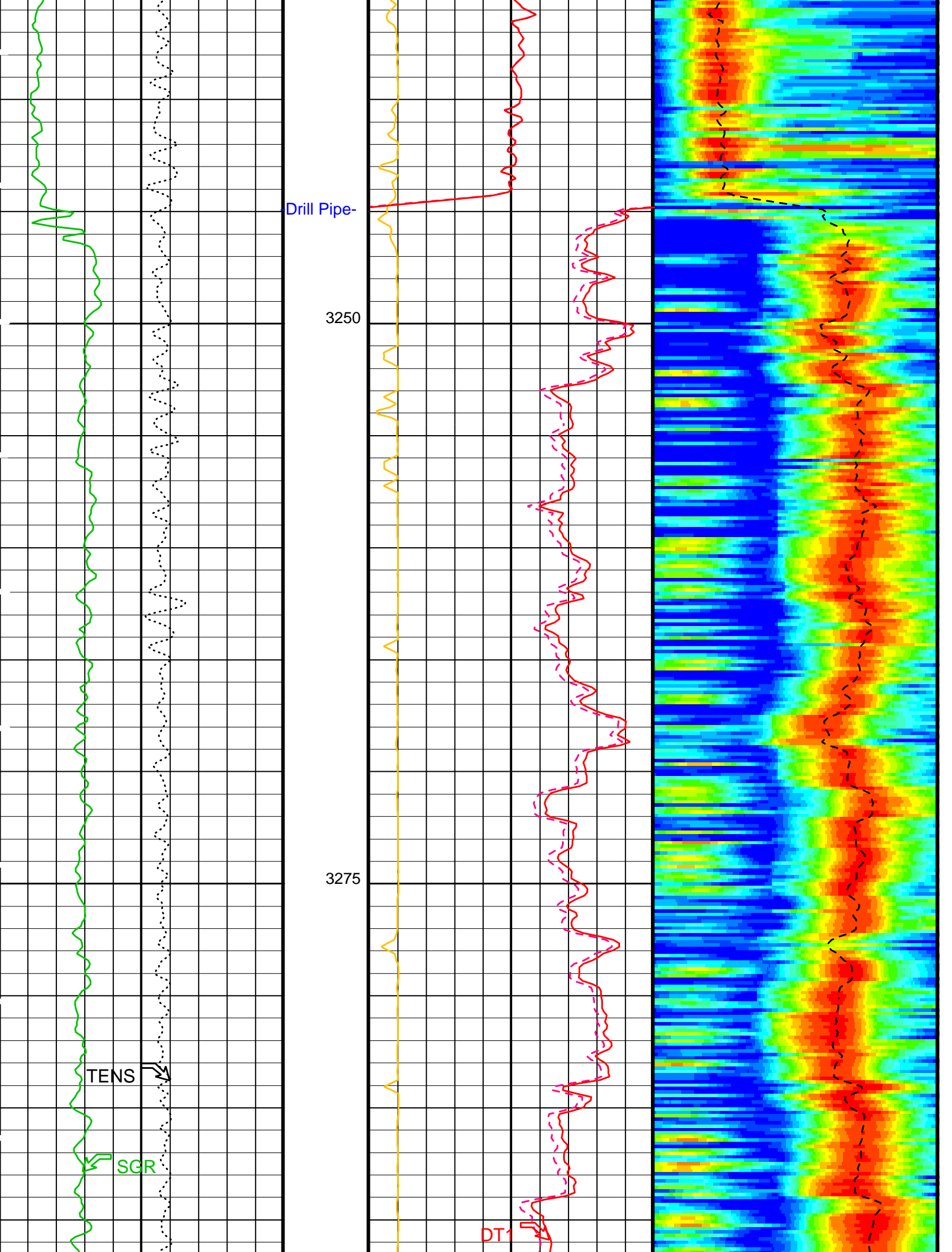
<p>Tension (TENS) (LBF)</p> <p>10000 0</p>	<p>Delta-T Shear / RA - Lower Dipole (DT1R) (US/F)</p> <p>440 40</p>	<p>Min Amplitude Max</p> <p>Rec.Array L.Dipole Slow Proj. CVDL (SPR1) (US/F)</p> <p>75 775</p>
<p>Spectroscopy Gamma Ray (SGR) (GAPI)</p> <p>0 150</p>	<p>Peak Coherence / RA - Lower Dipole (CHR1) (----)</p> <p>0 10</p>	<p>Delta-T Shear / RA - Lower Dipole (DT1R) (US/F)</p> <p>75 775</p>

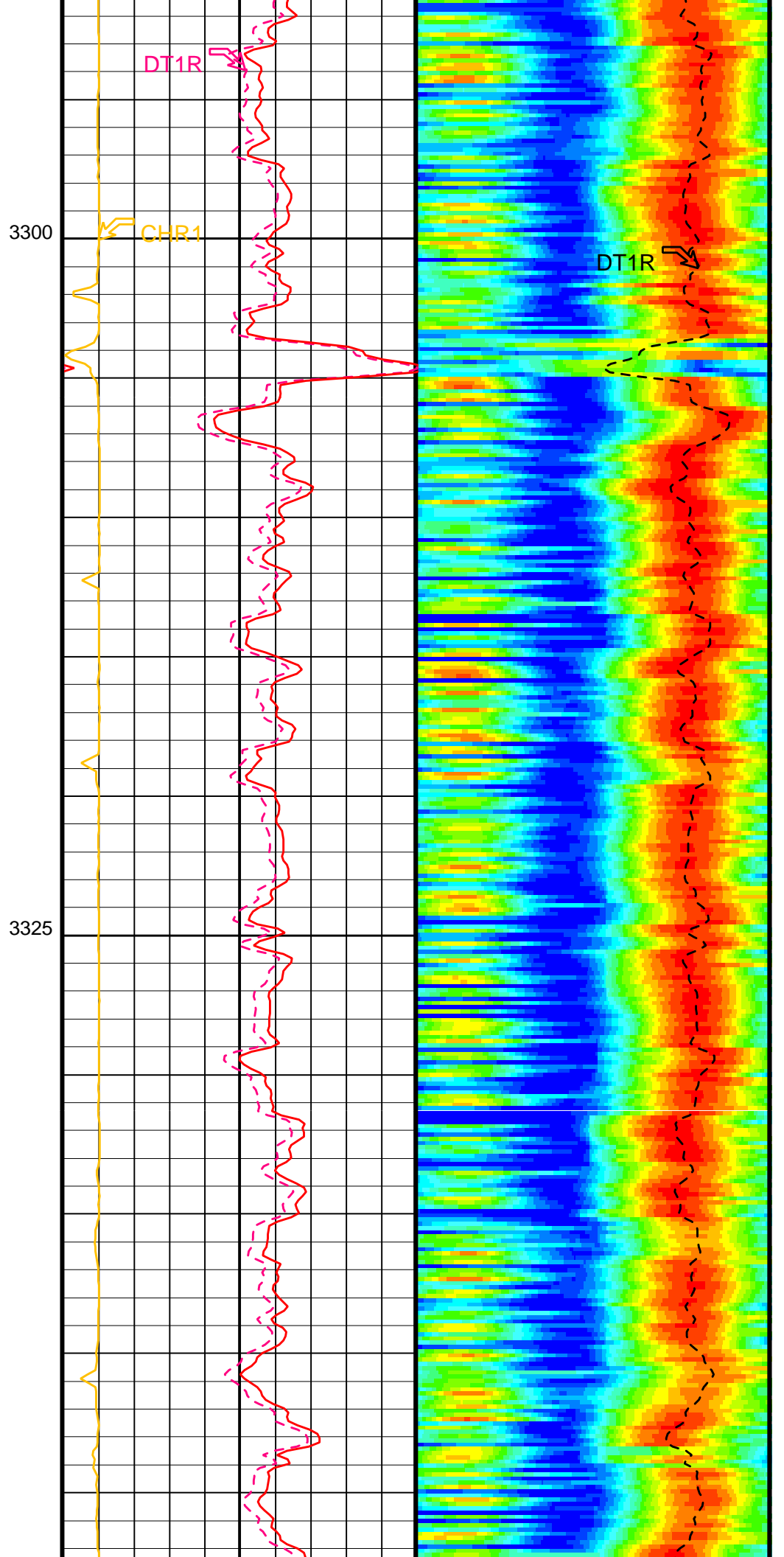
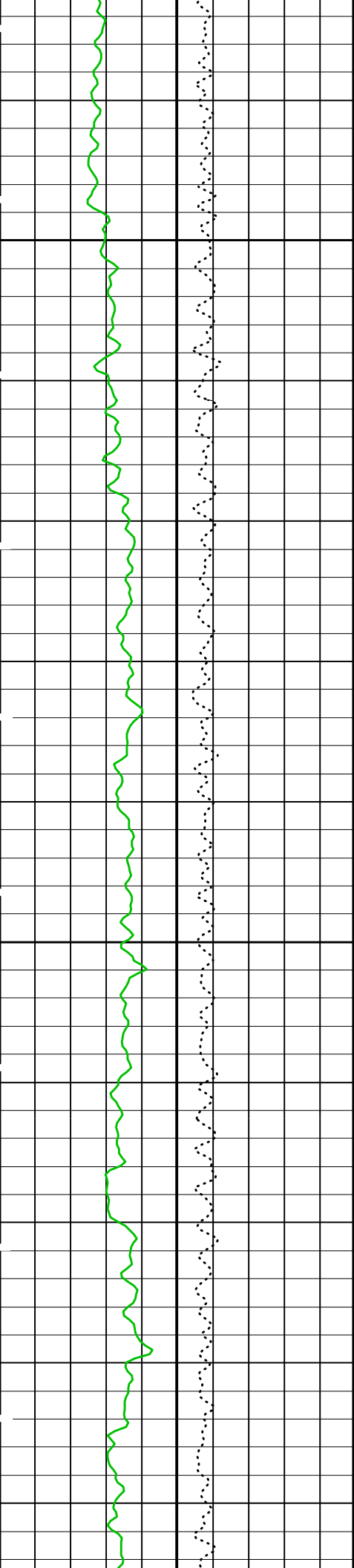
Main Log	Delta-T Shear - Lower Dipole (DT1)	
	440 (US/F)	40

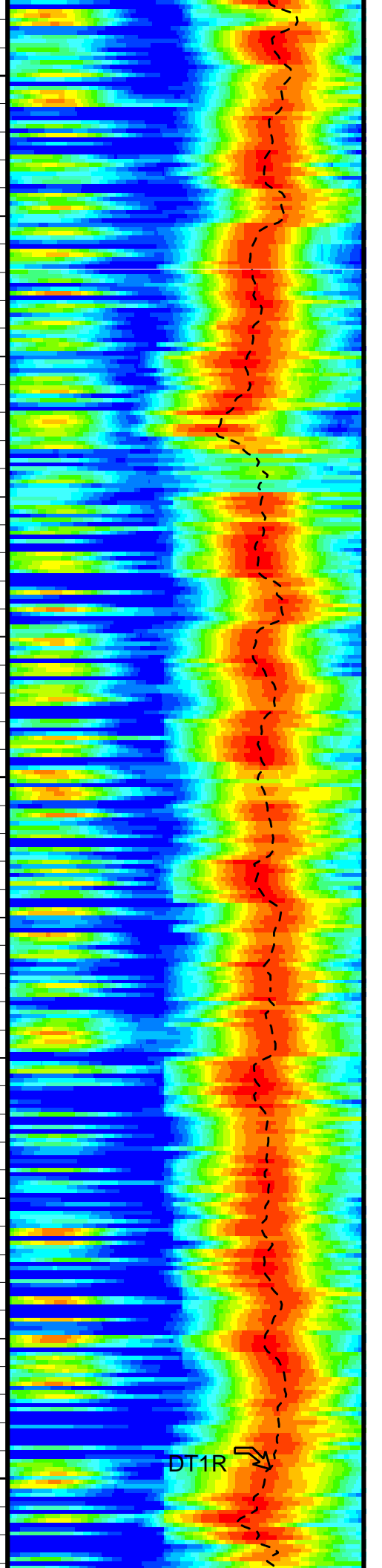
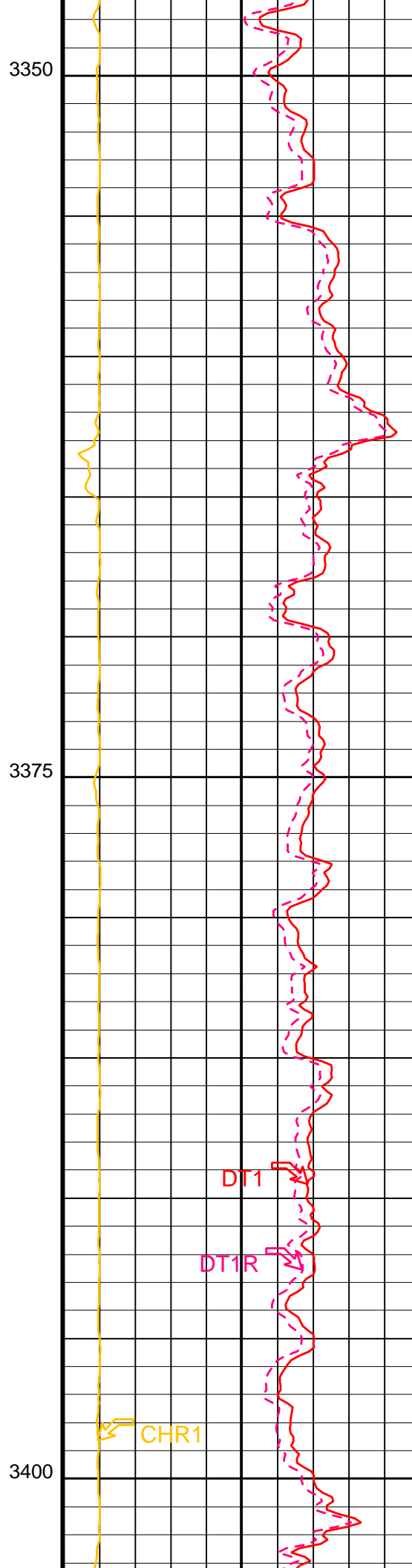
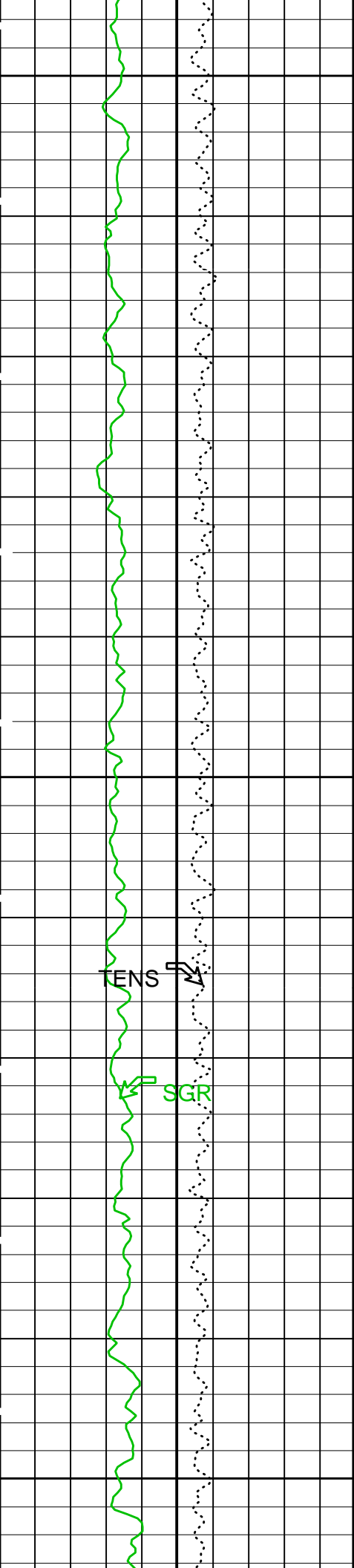
Spectroscopy Gamma Ray (SGR)		Peak Coherence / RA - Lower Dipole (CHR1)		Delta-T Shear / RA - Lower Dipole (DT1R)	
0	150	0	10	75	775
(GAPI)		(----		(US/F)	

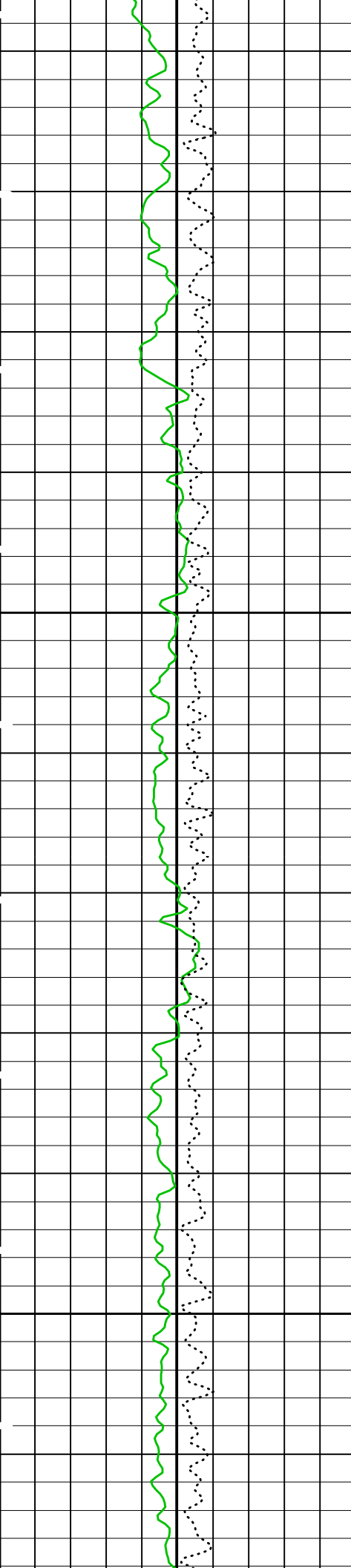
Spectroscopy Gamma Ray (SGR)		Peak Coherence / RA - Lower Dipole (CHR1)		Delta-T Shear / RA - Lower Dipole (DT1R)	
0	150	0	10	75	775
(GAPI)		(----		(US/F)	





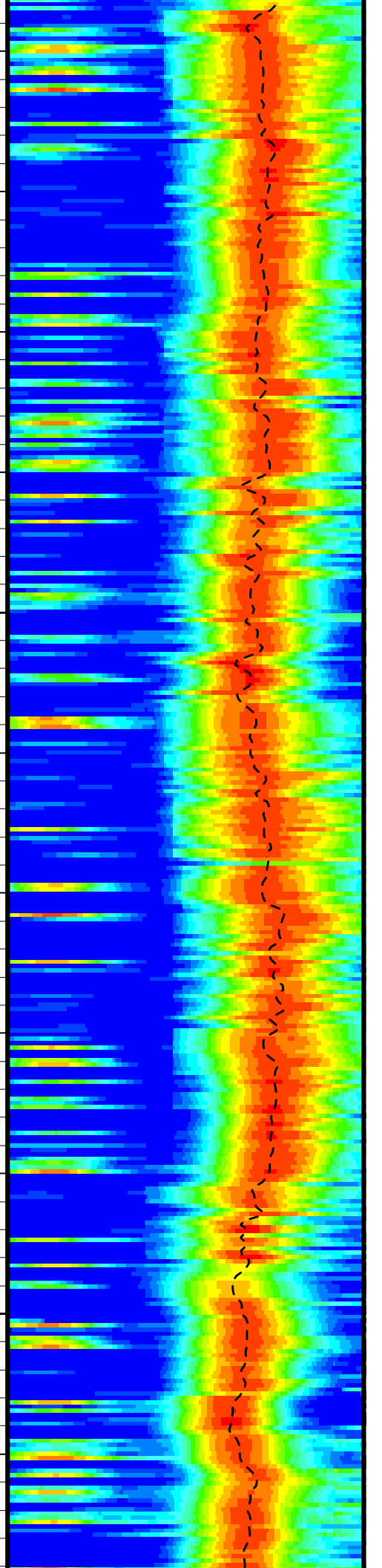
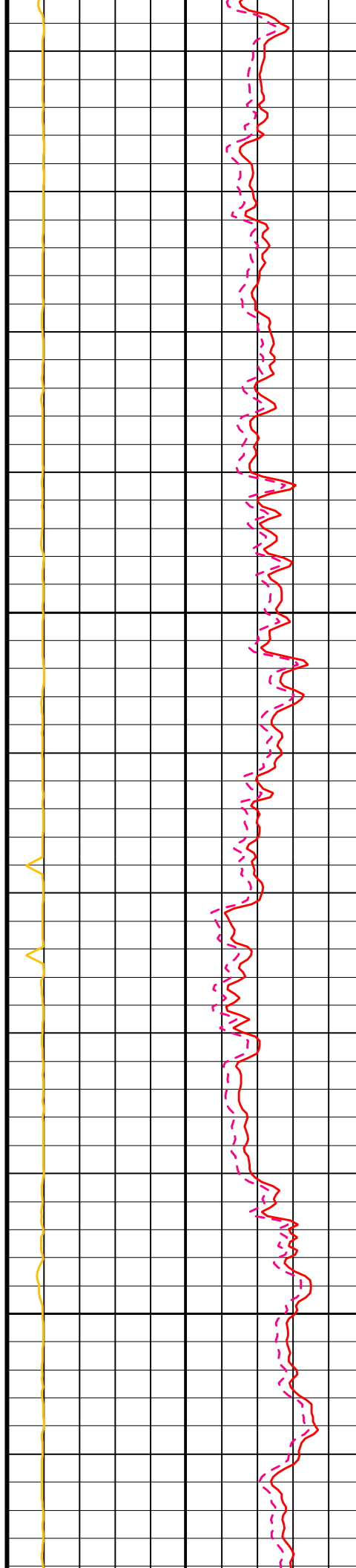


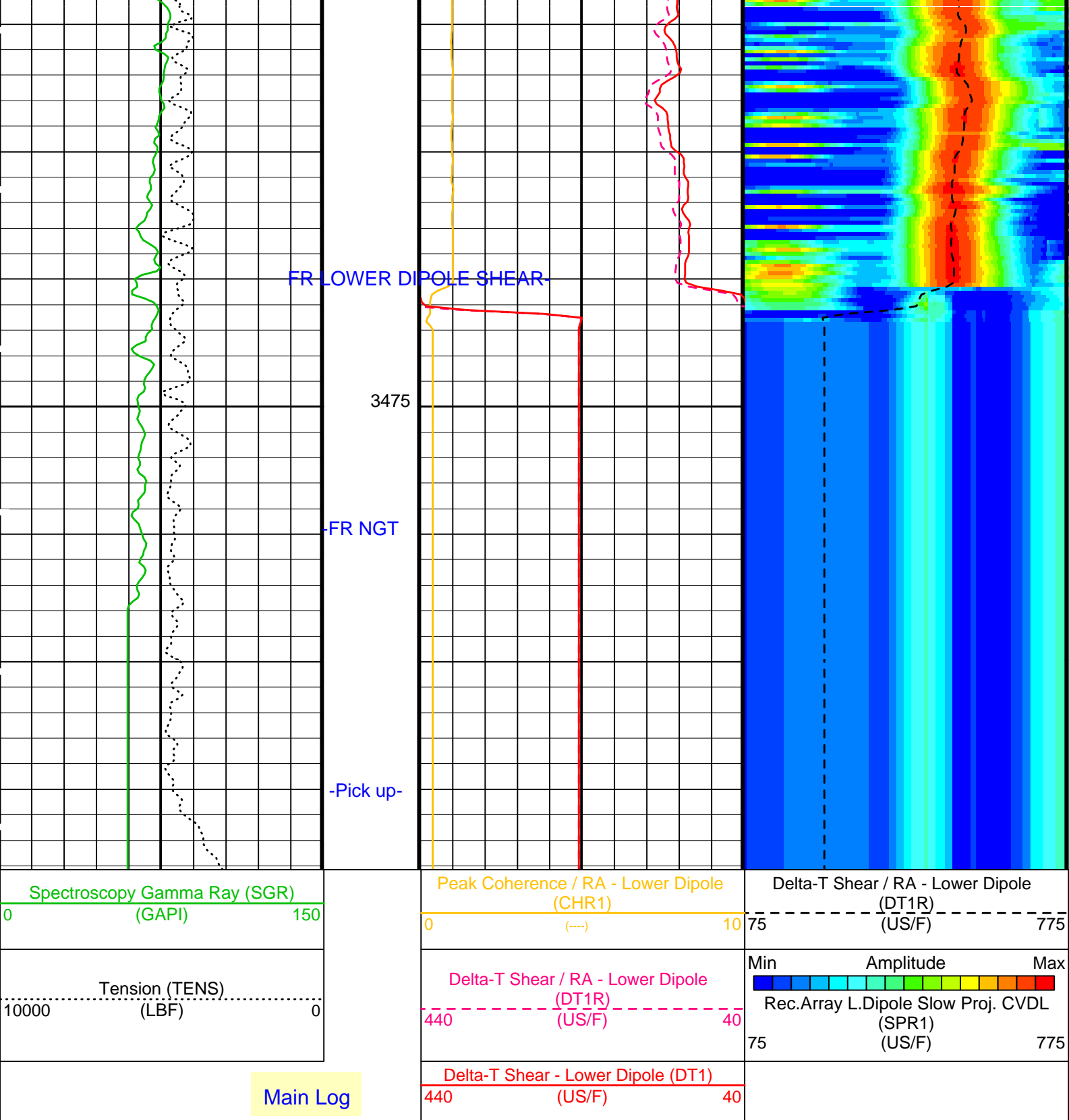




3425

3450





PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
BS	Bit Size	9.875 IN
CBAR	Constant Barite	1
CGMI	Spectro Computed Gamma Ray Minimum	0 GAPI
CGSH	Spectro Computed Gamma Ray Shale	100 GAPI
DDE1	Digitizing Delay 1	0 US
DDEX	Digitizing Delay X	0 US
DFD	Drilling Fluid Density	8.51 LB/G
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	40	US
DTCS	Compressional Delta-T Source for DTCO Channel	PS_COMP	
DWC1	Digitizer Word Count 1	512	
DWCX	Digitizer Word Count X	512	
KMIN	Potassium Minimum	0	
KSHA	Potassium Shale	0.02	
LTXG	Lower Dipole Transmitter Geometry	156	IN
NFO	NGT Filtering Option	KALMAN	
PMUD	Potassium Mud	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
SAM1	DSST Sonic Acquisition Mode 1 - Lower Dipole Mode	LFD_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	B.3-1.5K	
SGMI	Spectro Gamma Ray Minimum	0	GAPI
SGSH	Spectro Gamma Ray Shale	100	GAPI
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
TMIN	Thorium Minimum	0	PPM
TSHA	Thorium Shale	12	PPM
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
TW11	STC Integration Time Window - Lower Dipole	1600	US
TWSX	Transmitter Waveform Select X	0	
UMIN	Uranium Minimum	0	PPM
USHA	Uranium Shale	3	PPM

Format: DSST_LOWER_DIPOLE_VDL_COLOR Vertical Scale: 1:200 Graphics File Created: 10-Apr-2000 06:57

OP System Version: 9C1-303

MCM

GHMT-A	9C1-303	NGT-C	9C1-303
DTA-A	9C1-303	DSST-B	9C1-303
DTC-H	9C1-303		

Output DLIS Files

DEFAULT	GHMT .025	FN:22 PRODUCER	10-Apr-2000 06:57
GHMTDSI_CUST	GHMT .025	FN:23 PRODUCER	10-Apr-2000 06:57

Output DLIS Files

DEFAULT	GHMT .026	FN:24 PRODUCER	10-Apr-2000 07:53	3345.2 M	3230.7 M
GHMTDSI_CUST	GHMT .026	FN:25 PRODUCER	10-Apr-2000 07:53	3345.2 M	3230.7 M

OP System Version: 9C1-303

MCM

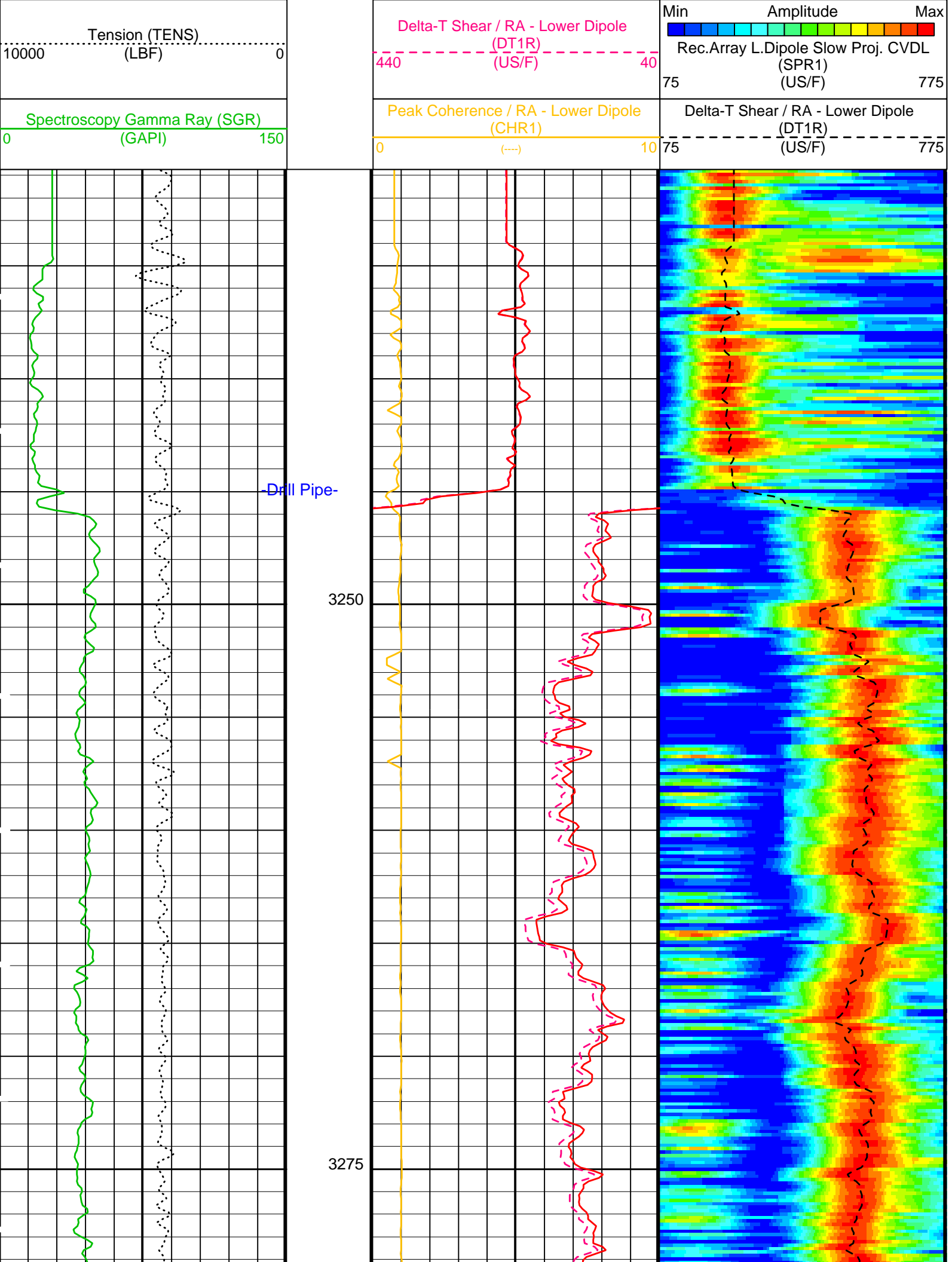
GHMT-A	9C1-303	NGT-C	9C1-303
DTA-A	9C1-303	DSST-B	9C1-303
DTC-H	9C1-303		

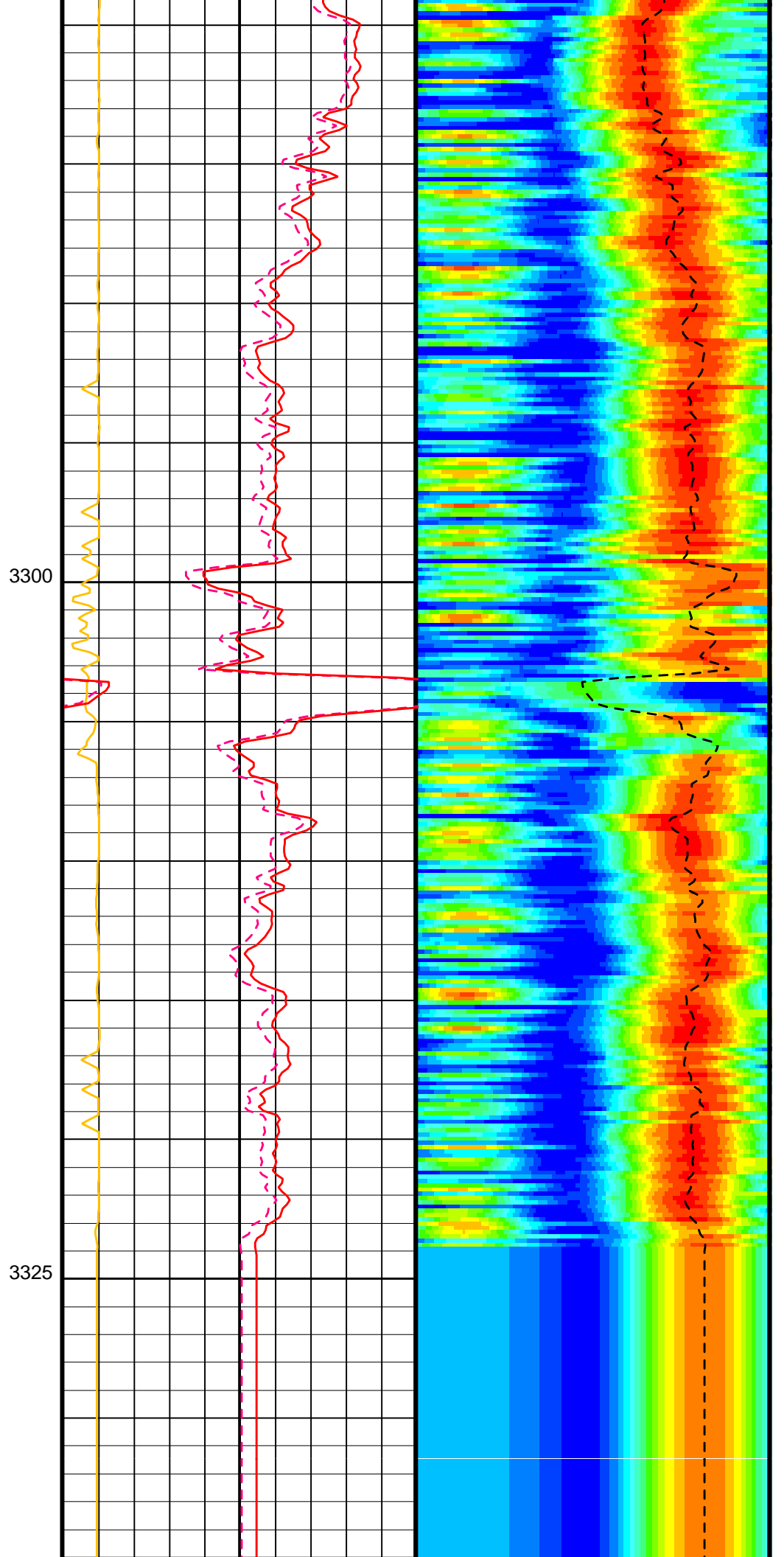
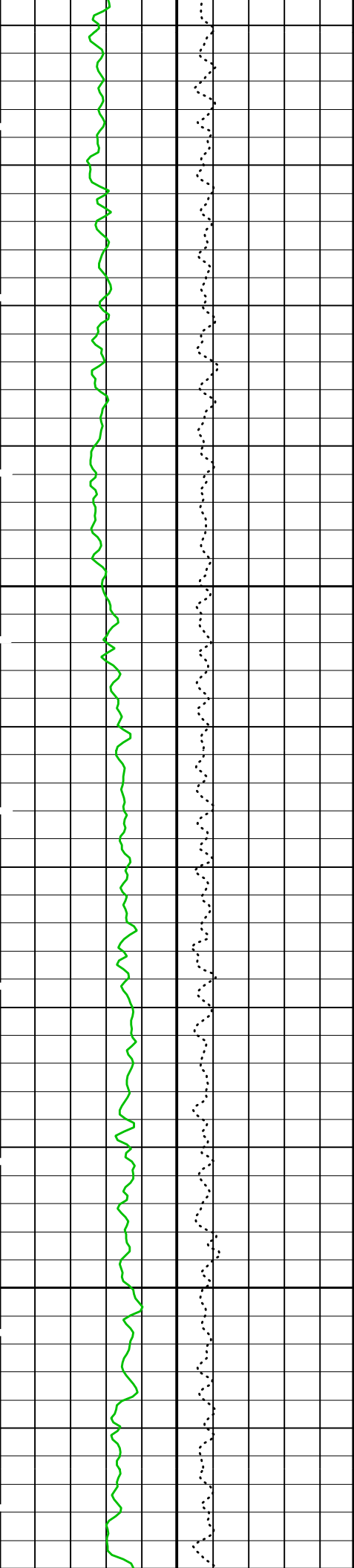
PIP SUMMARY

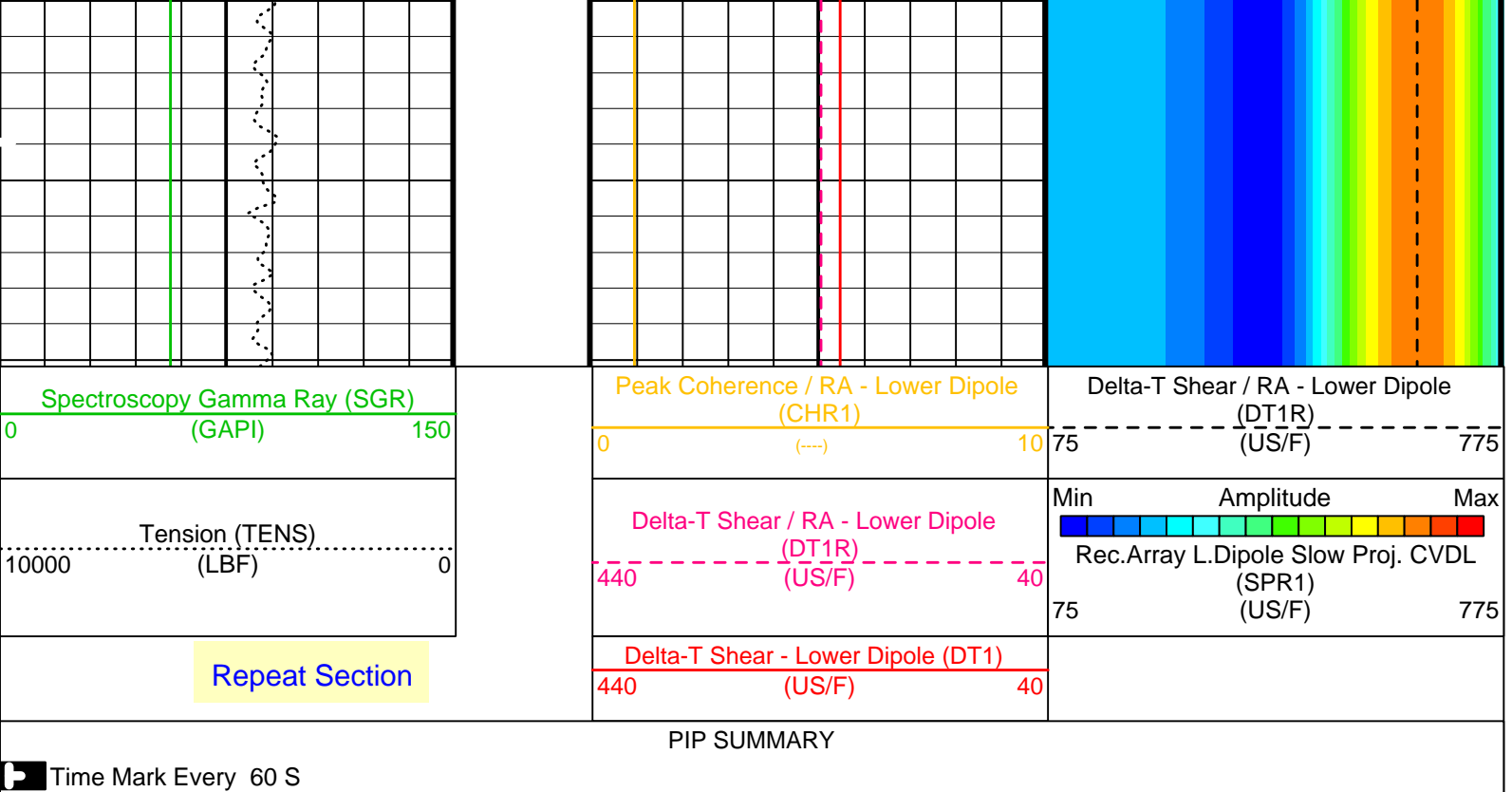
 Time Mark Every 60 S

Repeat Section

Delta-T Shear - Lower Dipole (DT1)
440 (US/F) 40







Time Mark Every 60 S

Parameters

DLIS Name	Description	Value	
BS	Bit Size	9.875	IN
CBAR	Constant Barite	1	
CGMI	Spectro Computed Gamma Ray Minimum	0	GAPI
CGSH	Spectro Computed Gamma Ray Shale	100	GAPI
DDE1	Digitizing Delay 1	0	US
DDEX	Digitizing Delay X	0	US
DFD	Drilling Fluid Density	8.51	LB/G
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	40	US
DTCS	Compressional Delta-T Source for DTCO Channel	PS_COMP	
DWC1	Digitizer Word Count 1	512	
DWCX	Digitizer Word Count X	512	
KMIN	Potassium Minimum	0	
KSHA	Potassium Shale	0.02	
LTXG	Lower Dipole Transmitter Geometry	156	IN
NFO	NGT Filtering Option	KALMAN	
PMUD	Potassium Mud	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
SAM1	DSST Sonic Acquisition Mode 1 - Lower Dipole Mode	LFD_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	B.3-1.5K	
SGMI	Spectro Gamma Ray Minimum	0	GAPI
SGSH	Spectro Gamma Ray Shale	100	GAPI
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
TMIN	Thorium Minimum	0	PPM

UMIN	Uranium Minimum	0	PPM
TSHA	Thorium Shale	12	PPM
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
TW11	STC Integration Time Window - Lower Dipole	1600	US
TWSX	Transmitter Waveform Select X	0	
UMIN	Uranium Minimum	0	PPM
USHA	Uranium Shale	3	PPM

Format: DSST_LOWER_DIPOLE_VDL_COLOR Vertical Scale: 1:200 Graphics File Created: 10-Apr-2000 07:53

OP System Version: 9C1-303

MCM

GHMT-A	9C1-303	NGT-C	9C1-303
DTA-A	9C1-303	DSST-B	9C1-303
DTC-H	9C1-303		

Output DLIS Files

DEFAULT	GHMT .026	FN:24 PRODUCER	10-Apr-2000 07:53
GHMTDSI_CUST	GHMT .026	FN:25 PRODUCER	10-Apr-2000 07:53

Calibration and Check Summary

Measurement	Nominal	Master	Before	After	Change	Limit	Units
Natural Gamma Spectroscopy - C Wellsite Calibration - Background Measurement							
Master: Calibration out of date	6-JAN-2000 4:01	Before: 18-MAR-2000 8:16					
WINDOW 1 Background	100.0	11.24	12.46	N/A	N/A	100.0	CPS
WINDOW 2 Background	50.00	2.775	3.522	N/A	N/A	50.00	CPS
WINDOW 3 Background	10.00	0.8498	0.9159	N/A	N/A	10.00	CPS
WINDOW 4 Background	6.000	0.3150	0.3186	N/A	N/A	6.000	CPS
WINDOW 5 Background	10.00	0.4801	0.4875	N/A	N/A	10.00	CPS
SGR Background	30.00	4.096	4.631	N/A	N/A	N/A	GAPI
Natural Gamma Spectroscopy - C Wellsite Calibration - Normalized Jig Measurement							
Master: Calibration out of date	6-JAN-2000 3:55	Before: 18-MAR-2000 8:21					
WINDOW 1 Jig	376.0	383.7	380.7	N/A	N/A	22.56	CPS
WINDOW 2 Jig	167.0	168.9	168.6	N/A	N/A	10.02	CPS
WINDOW 3 Jig	24.00	23.84	23.73	N/A	N/A	1.440	CPS
WINDOW 4 Jig	14.00	13.72	13.77	N/A	N/A	2.800	CPS
WINDOW 5 Jig	22.50	22.02	22.83	N/A	N/A	4.500	CPS
SGR Jig	160.0	160.7	160.0	N/A	N/A	7.000	GAPI
Natural Gamma Spectroscopy - C Master Calibration - Master Quality Control Values							
Master: Calibration out of date	6-JAN-2000 3:52						
Photomultiplier Res. CARC3	8.000	9.090	--	--	--	--	
APU WINDOW Jig	1350	963.1	--	--	--	--	CPS
APL WINDOW Jig	1350	962.8	--	--	--	--	CPS

The NGT PCSL Value is set to 83.674 KEV

Natural Gamma Spectroscopy - C / Equipment Identification

Primary Equipment:			
NGT Cartridge	NGC - C	1921	
NGT Sonde	NGD - A	1736	
Auxiliary Equipment:			
NGT Cartridge Housing	NGCH - A	752	
NGT Sonde Housing	NGH - B	3	
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
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Master	<div><div></div></div>	11.24	Master	<div><div></div></div>	2.775	Master	<div><div></div></div>	0.8498			
Before	<div><div></div></div>	12.46	Before	<div><div></div></div>	3.522	Before	<div><div></div></div>	0.9159			
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	<div><div></div></div>	0.3150	Master	<div><div></div></div>	0.4801	Master	<div><div></div></div>	4.096			
Before	<div><div></div></div>	0.3186	Before	<div><div></div></div>	0.4875	Before	<div><div></div></div>	4.631			
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: Calibration out of date 6-JAN-2000 4:01 Before: 18-MAR-2000 8:16											

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			383.7	Master			168.9	Master			23.84		
Before			380.7	Before			168.6	Before			23.73		
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			13.72	Master			22.02	Master			160.7		
Before			13.77	Before			22.83	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: Calibration out of date 6-JAN-2000 3:55 Before: 18-MAR-2000 8:21													

Natural Gamma Spectroscopy - C Wellsite Calibration											
Quality Control Values											
Phase	DHVF Jig V			Value	Phase	Quality Windows Ratio Jig			Value		
Master				1503	Master				2.272		
Before				1516	Before				2.258		
1088 (Minimum)		1450 (Nominal)		1813 (Maximum)		2.150 (Minimum)		2.240 (Nominal)		2.330 (Maximum)	
Master: Calibration out of date 6-JAN-2000 3:55						Before: 18-MAR-2000 8:21					

Natural Gamma Spectroscopy - C Wellsite Calibration		
Quality Control Values Check		
Phase	Thorium peak Form Factor Jig	Value
Before		-0.03137
-0.2000 (Minimum) 0 (Nominal) 0.2000 (Maximum)		
Before: 18-MAR-2000 8:21		

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			9.090	Master			963.1	Master			962.8
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			-0.05460								
-0.1000 (Minimum) 0 (Nominal) 0.1000 (Maximum)											
Master: Calibration out of date 6-JAN-2000 3:52											

COMPANY:	Edmund Doherty	BOTTOM LOG INTERVAL	3471 M
		SCHLUMBERGER DEPTH	3497.5
WELL:	ODP Leg 189, Site 1170 (WSTR-2A)	DEPTH DRILLER	3496 M
FIELD:	Tasmanian Seaway, West Tasmania Site	KELLY BUSHING	11.2 M
COUNTY:	Offshore	DRILL FLOOR	10.9 M
STATE:	Indian Ocean	GROUND LEVEL	-2716 M

Schlumberger

Dipole Sonic Lower Dipole
Shear, Gamma Ray