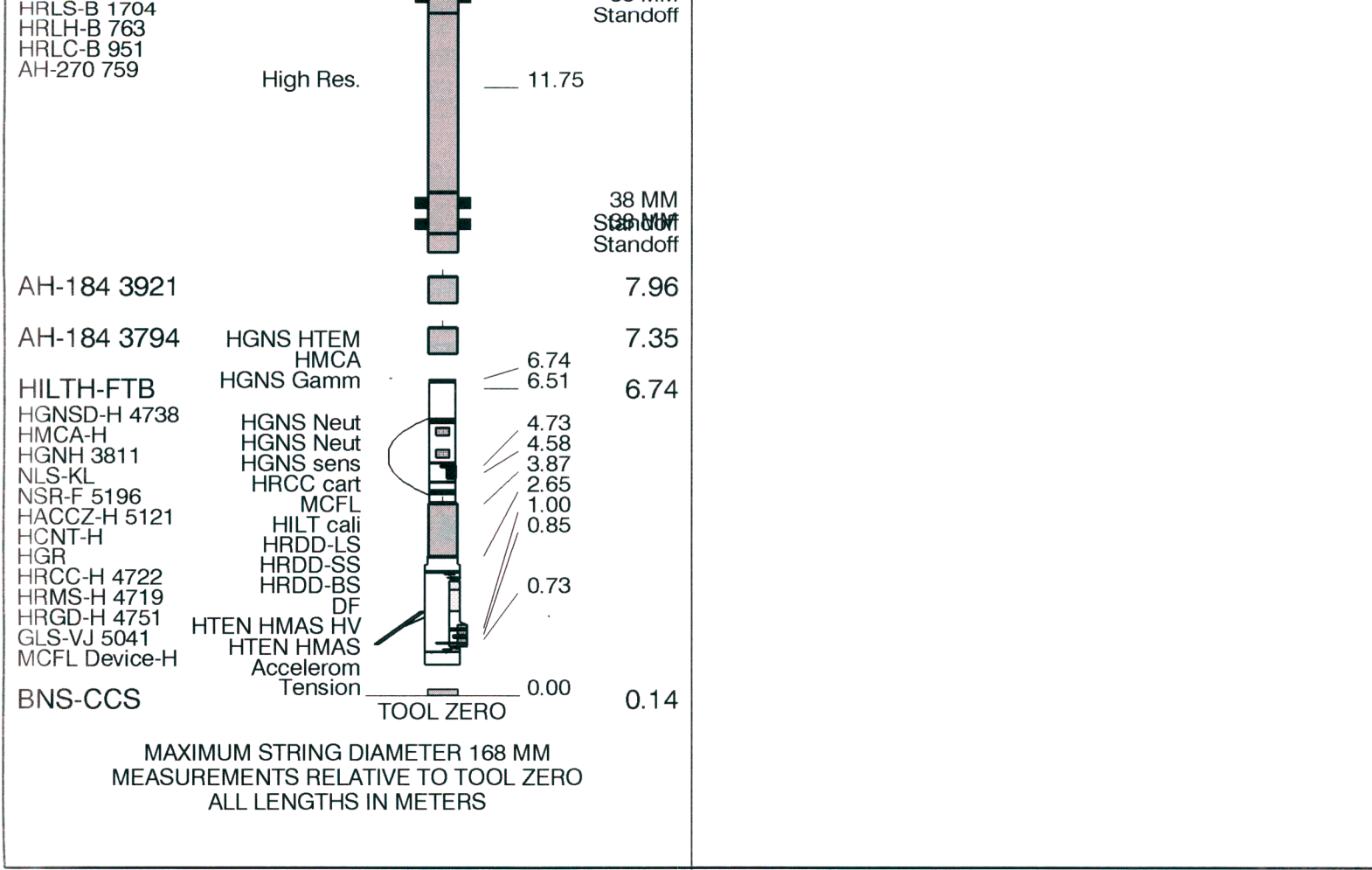
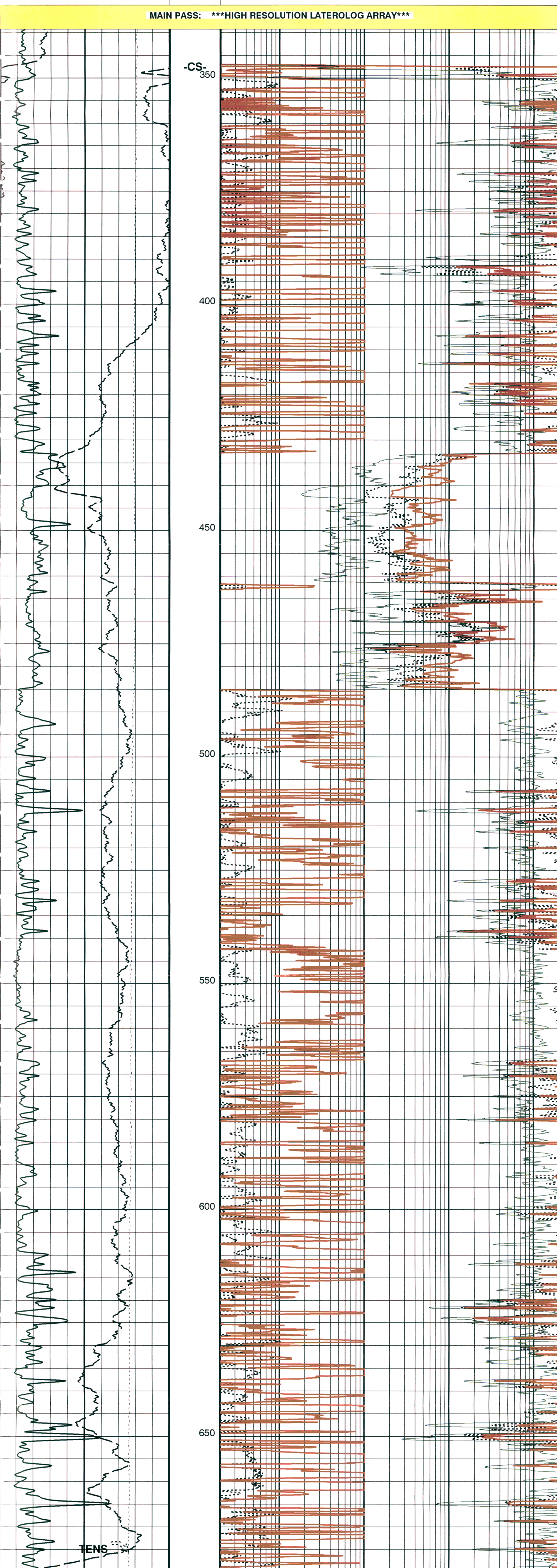
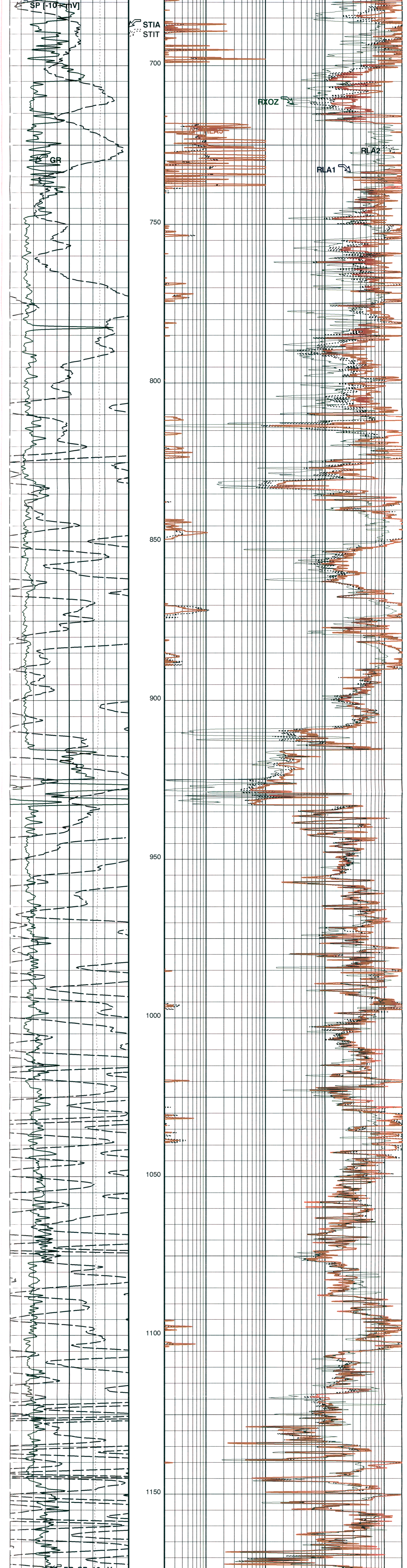


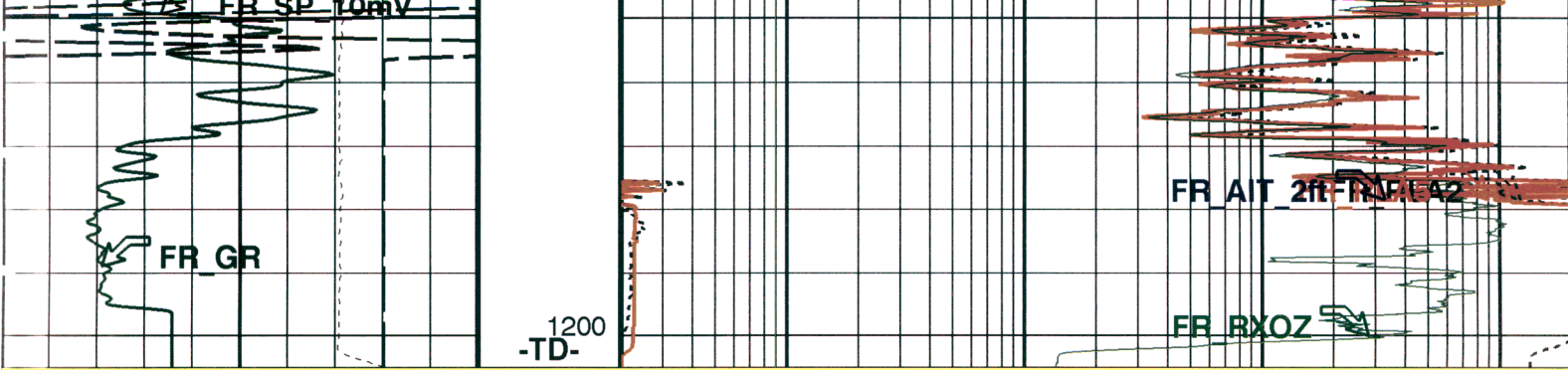


Input DLIS Files						
DEFAULT	TLD_MCFL_CNL_HRLA_011LUP	FN:17	PRODUCER	23-Feb-2008 16:24	1202.4 M	-13.7 M
Output DLIS Files						
DEFAULT	TLD_MCFL_CNL_HRLA_013PUP	FN:21	PRODUCER	23-Feb-2008 18:53	1202.4 M	301.4 M
BACKUP	TLD_MCFL_CNL_HRLA_013PUP	FN:22	PRODUCER	23-Feb-2008 18:53	1202.4 M	301.4 M
OP System Version: 15C0-309						
MCM						
HILTH-FTB	SRPC-3402-Q3_2007	HRLT-B		15C0-309		
HILTH2-FTB	SRPC-3402-Q3_2007	HNGC-B		SPC-3530-NUCL		
HNGS-BA	SPC-3530-NUCL	DTC-H		15C0-309		
SPA-A	9936					

PIP SUMMARY						
Time Mark Every 60 S						
		Tension (TENS)		Std. Res. Invaded Zone Resistivity (RXOZ)		
		25000 (N) 0		0.2	(OHMM)	2000
SP [-10+ mV] (SP)		HRLT Resistivity 5 (RLA5)				
-80	(MV)		20	0.2	(OHMM)	2000
Gamma Ray (GR)		HRLT Resistivity 2 (RLA2)				
0	(GAPI)		150	0.2	(OHMM)	2000







Gamma Ray (GR) (GAPI)		HRLT Resistivity 2 (RLA2) (OHMM)	
0	150	0.2	2000
SP [-10+ mV] (SP) (MV)		HRLT Resistivity 5 (RLA5) (OHMM)	
-80	20	0.2	2000
Tension (TENS) 25000 (N)		Std. Res. Invaded Zone Resistivity (RXOZ) (OHMM)	
	0	0.2	2000

PIP SUMMARY	
Time Mark Every 60 S	

Parameters		
DLIS Name	Description	Value
MPOF	HILTH-FTB: High resolution Integrated Logging Tool-DTS MCFL Processing Operation Mode	ON
KFAC_HRLT	HRLT-B: High Resolution Laterolog Array - B HRLT K Factor Option	SONDE
SPNV	SPA-A 9936: SP ADAPTOR SP Next Value	0 MV
SPVD	DIR: Directional Survey Computation TVD of Starting Point	0 M
TIMD	Along-hole depth of Tie-in Point	348 M
TIVD	TVD of Tie-in Point	348 M
LBFR	STI: Stuck Tool Indicator Trigger for MAXIS First Reading Label	TDL
STKT	STI Stuck Threshold	1.524 M
TDD	Total Depth - Driller	1200.00 M
TDL	Total Depth - Logger	1201.00 M
System and Miscellaneous		
BS	Bit Size	222.000 MM
DO	Depth Offset for Playback	0.0 M
DORL	Depth Offset for Repeat Analysis	0.0 M
PP	Playback Processing	RECOMPUTE
Format: HRLA_S2 Vertical Scale: 1:600		Graphics File Created: 23-Feb-2008 18:53

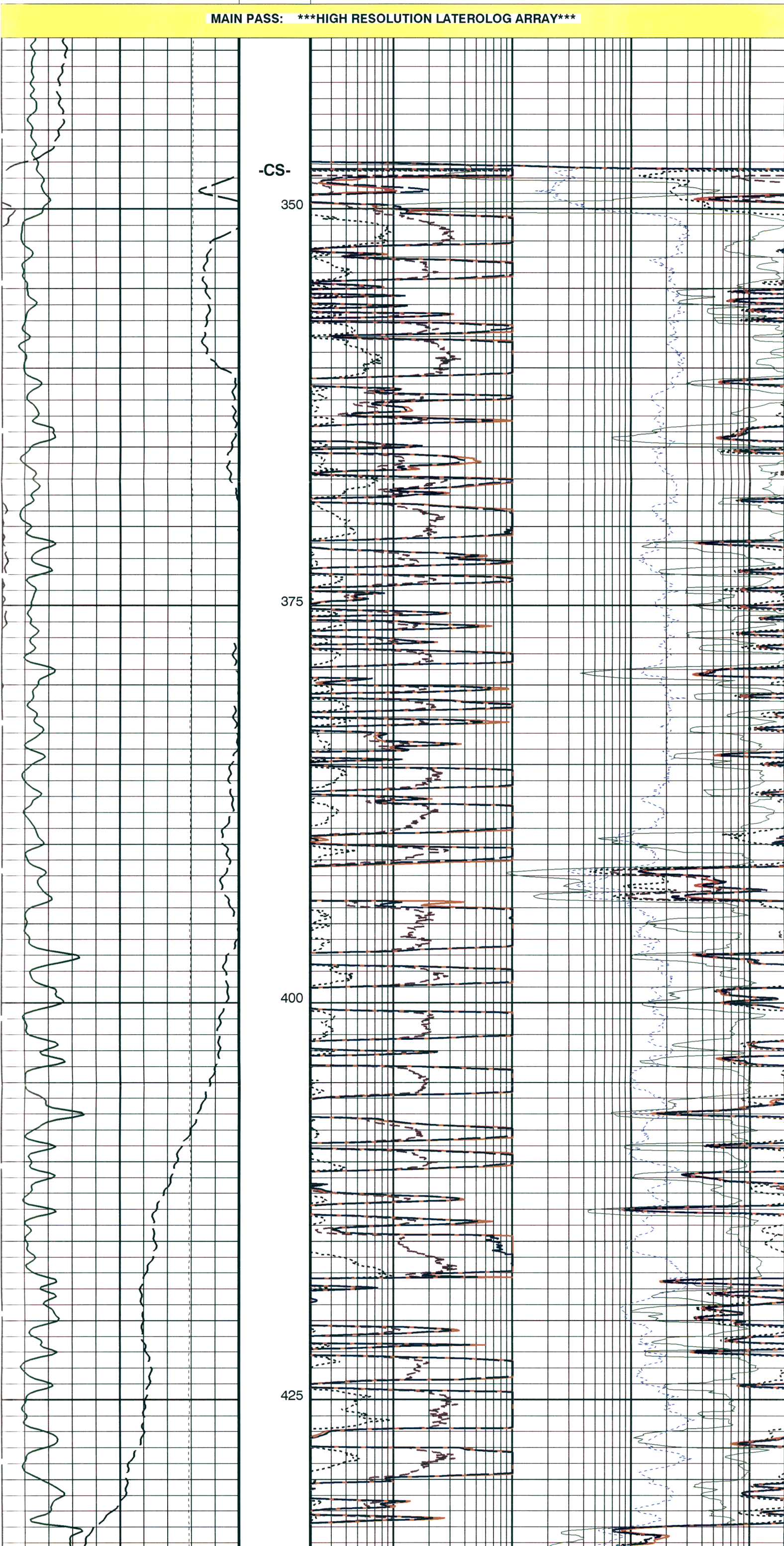
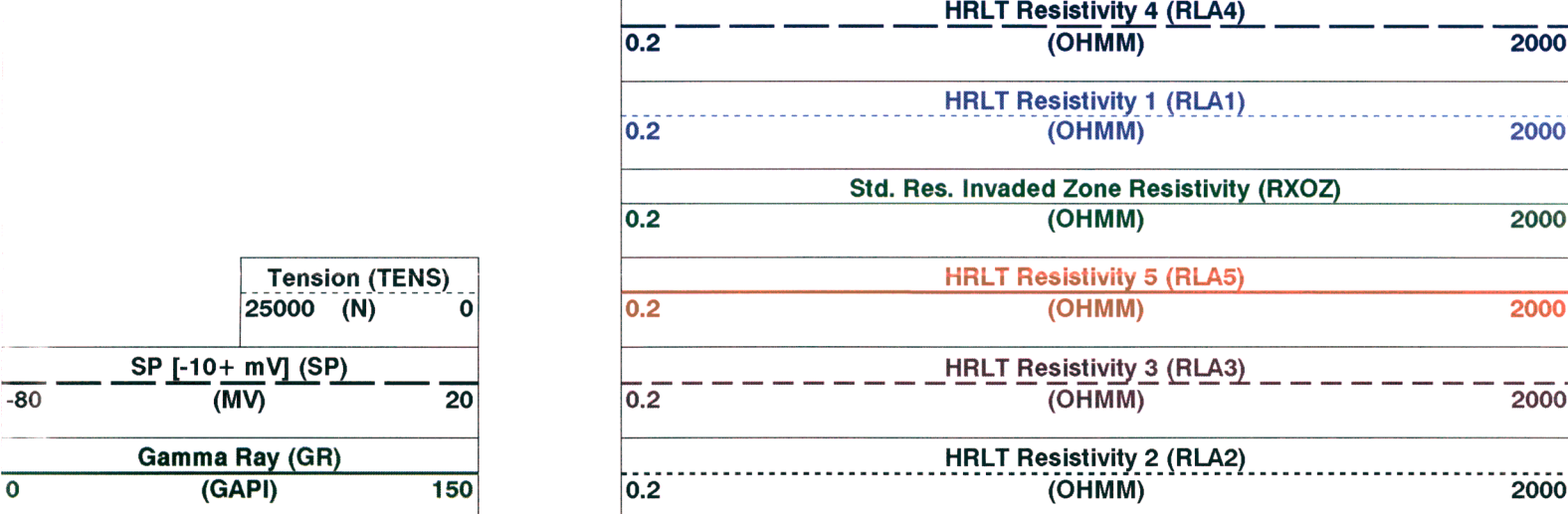
OP System Version: 15C0-309			
MCM			
HILTH-FTB	SRPC-3402-Q3_2007	HRLT-B	15C0-309
HILTH2-FTB	SRPC-3402-Q3_2007	HNGC-B	SPC-3530-NUCL
HNGS-BA	SPC-3530-NUCL	DTC-H	15C0-309
SPA-A	9936		

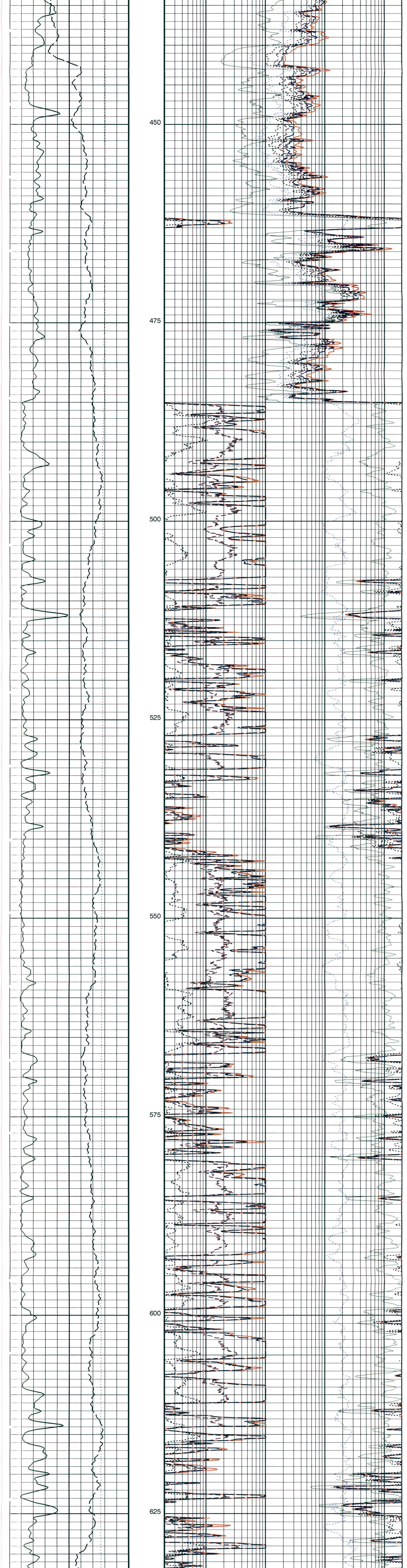
Input DLIS Files						
DEFAULT	TLD_MCFL_CNL_HRLA_011LUP	FN:17	PRODUCER	23-Feb-2008 16:24	1202.4 M	-13.7 M
Output DLIS Files						
DEFAULT	TLD_MCFL_CNL_HRLA_013PUP	FN:21	PRODUCER	23-Feb-2008 18:53		
BACKUP	TLD_MCFL_CNL_HRLA_013PUP	FN:22	PRODUCER	23-Feb-2008 18:53		

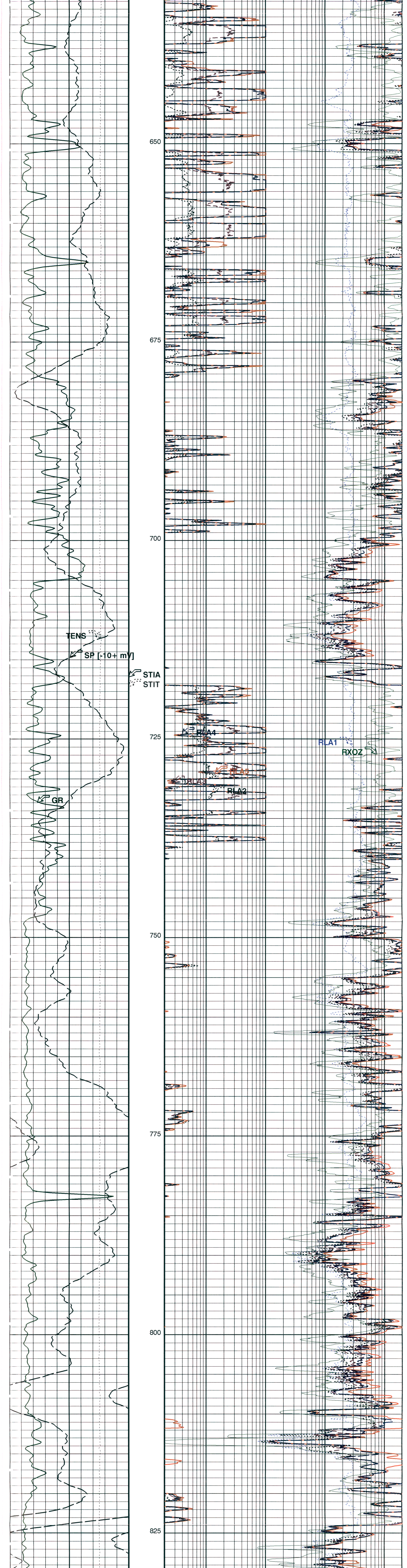
Input DLIS Files						
DEFAULT	TLD_MCFL_CNL_HRLA_011LUP	FN:17	PRODUCER	23-Feb-2008 16:24	1202.4 M	-13.7 M
Output DLIS Files						
DEFAULT	TLD_MCFL_CNL_HRLA_013PUP	FN:21	PRODUCER	23-Feb-2008 18:53	1202.4 M	301.4 M
BACKUP	TLD_MCFL_CNL_HRLA_013PUP	FN:22	PRODUCER	23-Feb-2008 18:53	1202.4 M	301.4 M

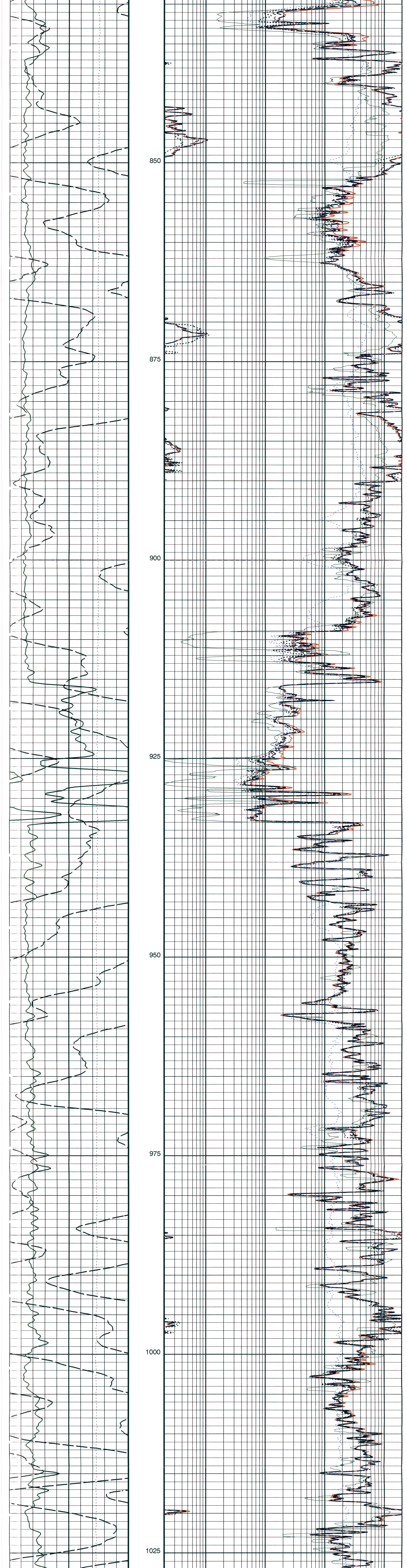
OP System Version: 15C0-309			
MCM			
HILTH-FTB	SRPC-3402-Q3_2007	HRLT-B	15C0-309
HILTH2-FTB	SRPC-3402-Q3_2007	HNGC-B	SPC-3530-NUCL
HNGS-BA	SPC-3530-NUCL	DTC-H	15C0-309
SPA-A	9936		

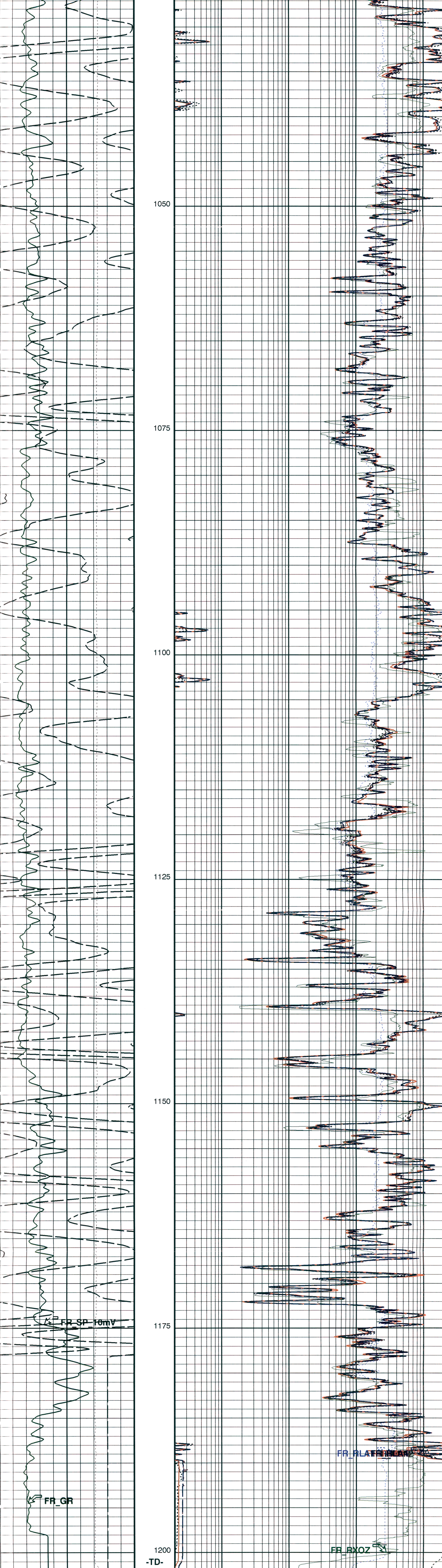
PIP SUMMARY	
Time Mark Every 60 S	











MAIN PASS: ***HIGH RESOLUTION LATEROLOG ARRAY***

Gamma Ray (GR)	
(GAPI)	
0	150
SP [-10+ mV] (SP)	
(MV)	
-80	20
Tension (TENS)	
25000 (N)	
0	0

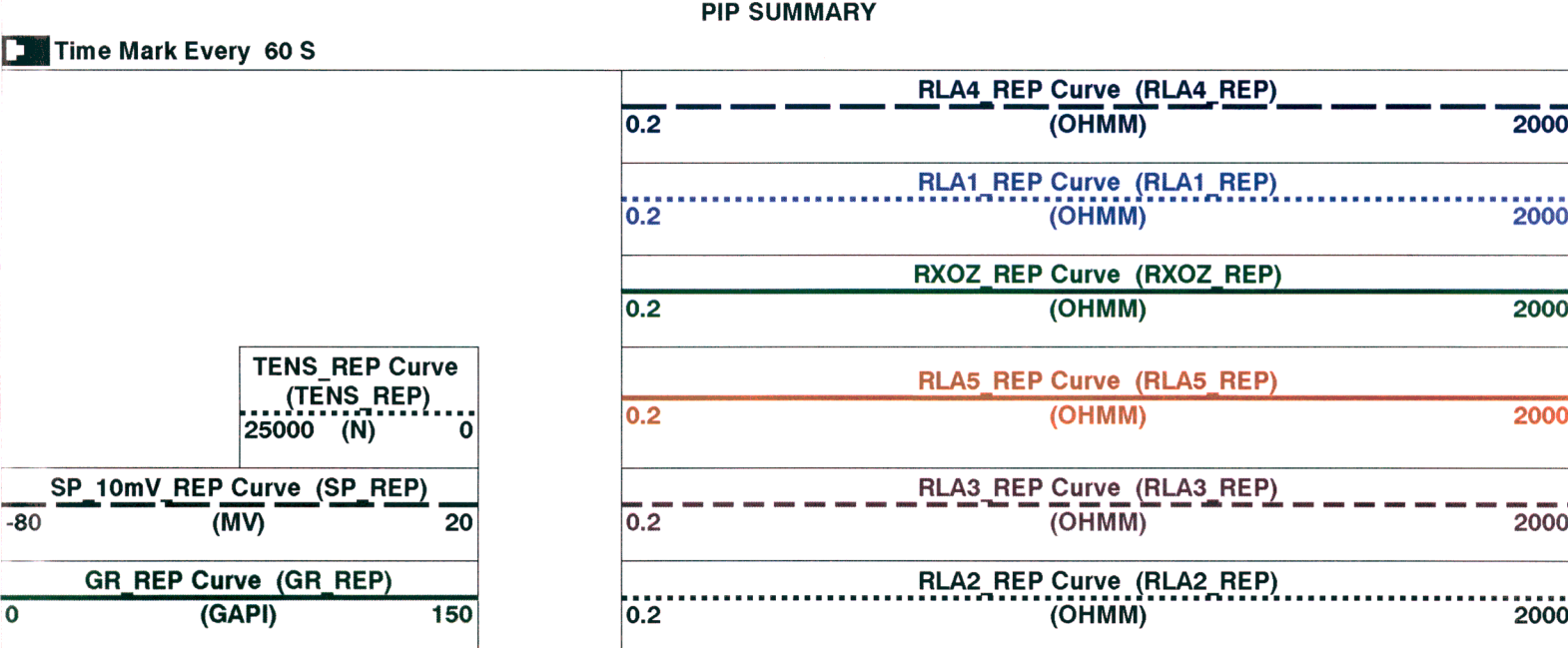
0.2	HRLT Resistivity 2 (RLA2)	2000
(OHMM)		
0.2	HRLT Resistivity 3 (RLA3)	2000
(OHMM)		
0.2	HRLT Resistivity 5 (RLA5)	2000
(OHMM)		
0.2	Std. Res. Invaded Zone Resistivity (RXOZ)	2000
(OHMM)		
0.2	HRLT Resistivity 1 (RLA1)	2000
(OHMM)		
0.2	HRLT Resistivity 4 (RLA4)	2000
(OHMM)		

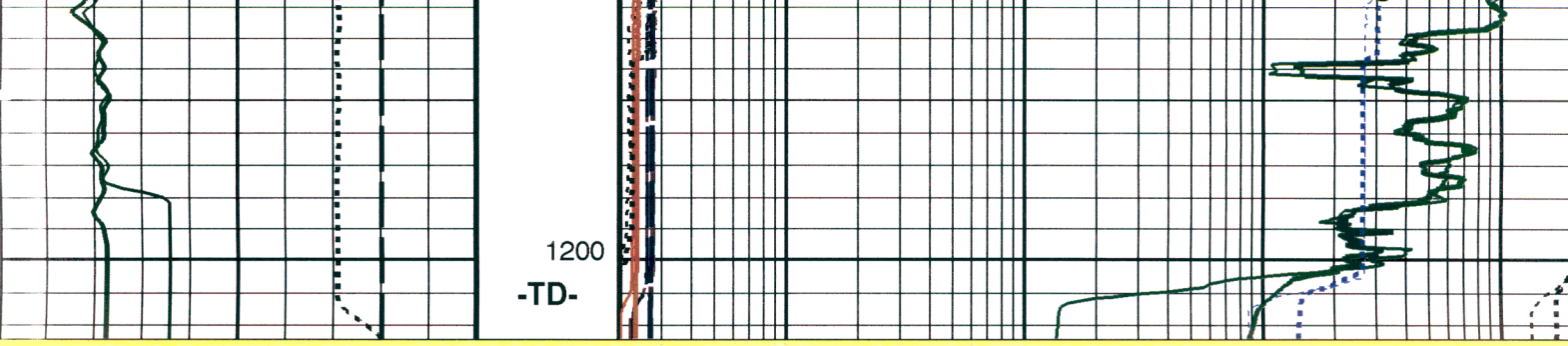
Parameters			
DLIS Name	Description	Value	
MPOF	HILTH-FTB: High resolution Integrated Logging Tool-DTS MCFL Processing Operation Mode	ON	
KFAC_HRLT	HRLT-B: High Resolution Laterolog Array - B HRLT K Factor Option	SONDE	
SPNV	SPA-A 9936: SP ADAPTOR SP Next Value	0	MV
SPVD	DIR: Directional Survey Computation TVD of Starting Point	0	M
TIMD	Along-hole depth of Tie-in Point	348	M
TIVD	TVD of Tie-in Point	348	M
LBFR	STI: Stuck Tool Indicator Trigger for MAXIS First Reading Label	TDL	
STKT	STI Stuck Threshold	1.524	M
TDD	Total Depth - Driller	1200.00	M
TDL	Total Depth - Logger	1201.00	M
	System and Miscellaneous		
BS	Bit Size	222.000	MM
DO	Depth Offset for Playback	0.0	M
DORL	Depth Offset for Repeat Analysis	0.0	M
PP	Playback Processing	RECOMPUTE	
Format: HRLA_S5 Vertical Scale: 1:240		Graphics File Created: 23-Feb-2008 18:53	
OP System Version: 15C0-309			
MCM			
HILTH-FTB	SRPC-3402-Q3_2007	HRLT-B	15C0-309
HILTH2-FTB	SRPC-3402-Q3_2007	HNGC-B	SPC-3530-NUCL
HNGS-BA	SPC-3530-NUCL	DTC-H	15C0-309
SPA-A	9936		

Input DLIS Files						
DEFAULT	TLD_MCFL_CNL_HRLA_011LUP	FN:17	PRODUCER	23-Feb-2008 16:24	1202.4 M	-13.7 M

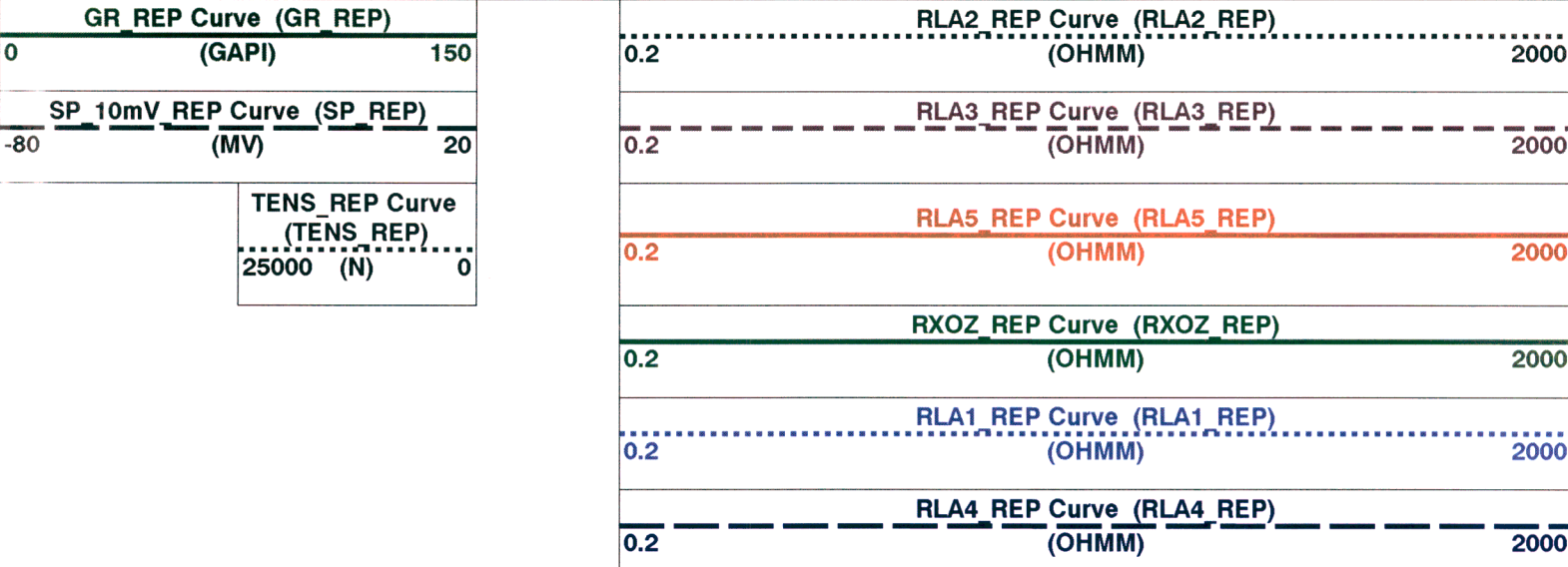
Output DLIS Files				
DEFAULT	TLD_MCFL_CNL_HRLA_013PUP	FN:21	PRODUCER	23-Feb-2008 18:53
BACKUP	TLD_MCFL_CNL_HRLA_013PUP	FN:22	PRODUCER	23-Feb-2008 18:53

Input DLIS Files						
DEFAULT	TLD_MCFL_CNL_HRLA_011LUP	FN:17	PRODUCER	23-Feb-2008 16:24	1202.4 M	-13.7 M
DEFAULT	TLD_MCFL_CNL_HRLA_012PUP	FN:19	PRODUCER	23-Feb-2008 18:38	1205.5 M	1074.1 M
Output DLIS Files						
DEFAULT	TLD_MCFL_CNL_HRLA_013PUP	FN:21	PRODUCER	23-Feb-2008 18:53		
BACKUP	TLD_MCFL_CNL_HRLA_013PUP	FN:22	PRODUCER	23-Feb-2008 18:53		
OP System Version: 15C0-309						
MCM						
HILTH-FTB	SRPC-3402-Q3_2007	HRLT-B	15C0-309			
HILTH2-FTB	SRPC-3402-Q3_2007	HNGC-B	SPC-3530-NUCL			
HNGS-BA	SPC-3530-NUCL	DTC-H	15C0-309			
SPA-A	9936					





REPEAT ANALYSIS: ***HIGH RESOLUTION LATEROLOG ARRAY***



PIP SUMMARY

Time Mark Every 60 S

Parameters			
DLIS Name	Description	Value	
MPOF	HILTH-FTB: High resolution Integrated Logging Tool-DTS MCFL Processing Operation Mode	ON	
KFAC_HRLT	HRLT-B: High Resolution Laterolog Array - B HRLT K Factor Option	SONDE	
SPNV	SPA-A 9936: SP ADAPTOR SP Next Value	0	MV
SPVD	DIR: Directional Survey Computation		
TIMD	TVD of Starting Point	0	M
TIVD	Along-hole depth of Tie-in Point	348	M
	TVD of Tie-in Point	348	M
	System and Miscellaneous		
BS	Bit Size	222.000	MM
DO	Depth Offset for Playback	0.0	M
DORL	Depth Offset for Repeat Analysis	0.0	M
PP	Playback Processing	RECOMPUTE	

Format: HRLA_S5_REP Vertical Scale: 1:240 Graphics File Created: 23-Feb-2008 18:53

OP System Version: 15C0-309			
MCM			
HILTH-FTB	SRPC-3402-Q3_2007	HRLT-B	15C0-309
HILTH2-FTB	SRPC-3402-Q3_2007	HNGC-B	SPC-3530-NUCL
HNGS-BA	SPC-3530-NUCL	DTC-H	15C0-309
SPA-A	9936		

Input DLIS Files						
DEFAULT	TLD_MCFL_CNL_HRLA_011LUP	FN:17	PRODUCER	23-Feb-2008 16:24	1202.4 M	-13.7 M
DEFAULT	TLD_MCFL_CNL_HRLA_012PUP	FN:19	PRODUCER	23-Feb-2008 18:38	1205.5 M	1074.1 M

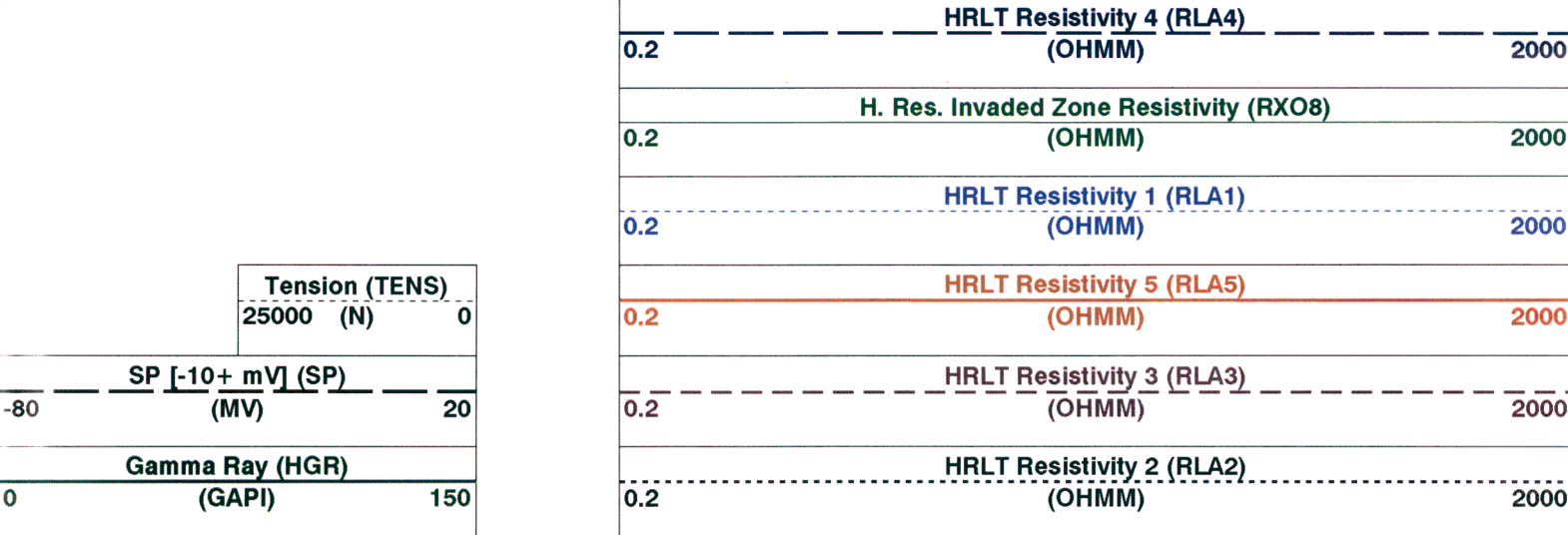
Output DLIS Files						
DEFAULT	TLD_MCFL_CNL_HRLA_013PUP	FN:21	PRODUCER	23-Feb-2008 18:53		
BACKUP	TLD_MCFL_CNL_HRLA_013PUP	FN:22	PRODUCER	23-Feb-2008 18:53		

Input DLIS Files						
DEFAULT	TLD_MCFL_CNL_HRLA_013PUP	FN:21	PRODUCER	23-Feb-2008 18:53	1202.4 M	301.4 M

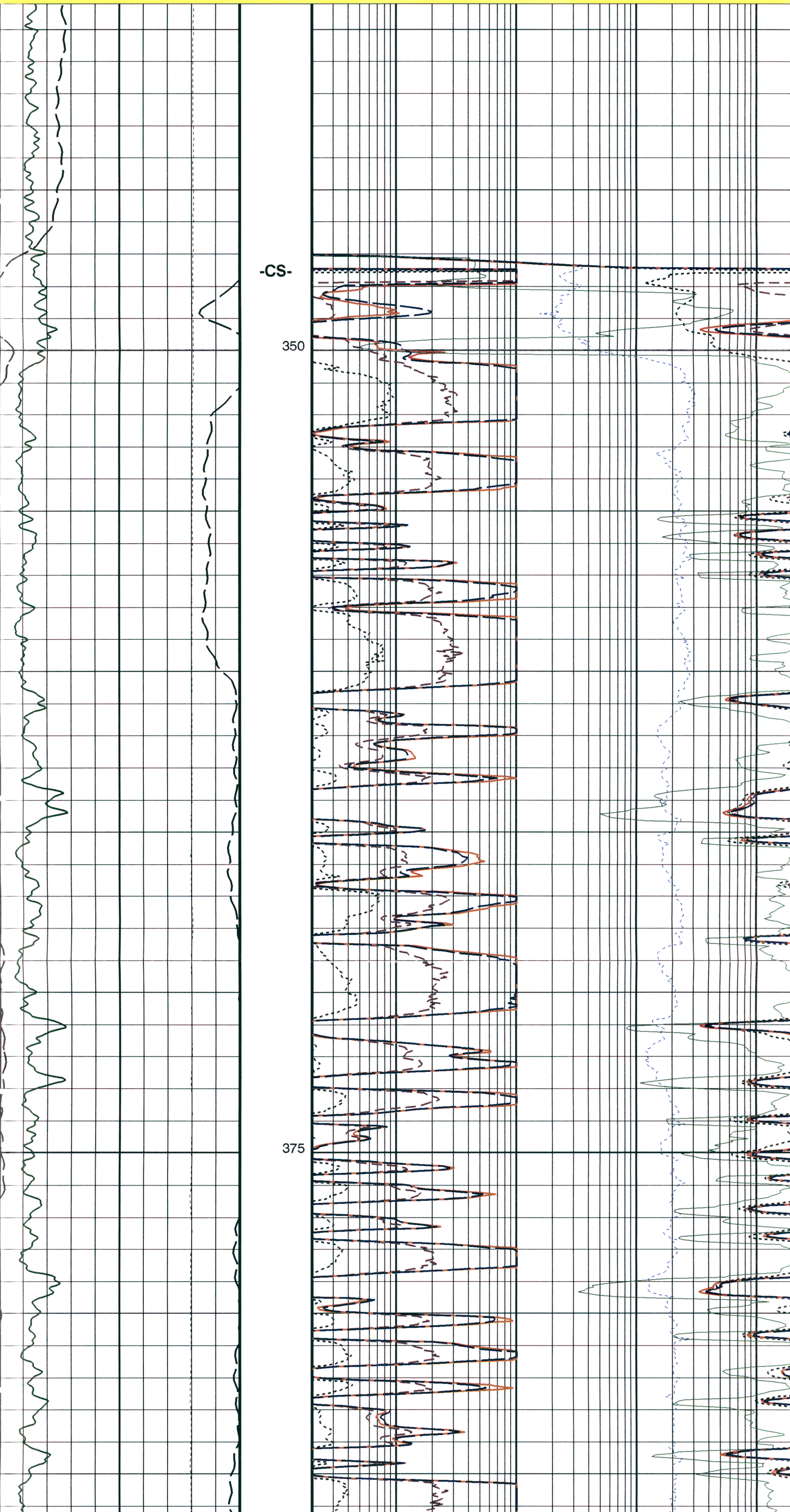
OP System Version: 15C0-309			
MCM			
HILTH-FTB	SRPC-3402-Q3_2007	HRLT-B	15C0-309
HILTH2-FTB	SRPC-3402-Q3_2007	HNGC-B	SPC-3530-NUCL
HNGS-BA	SPC-3530-NUCL	DTC-H	15C0-309
SPA-A	9936		

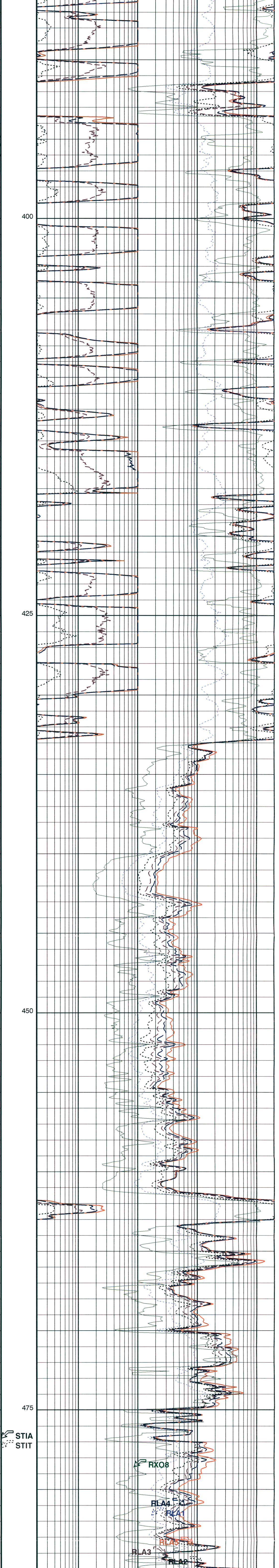
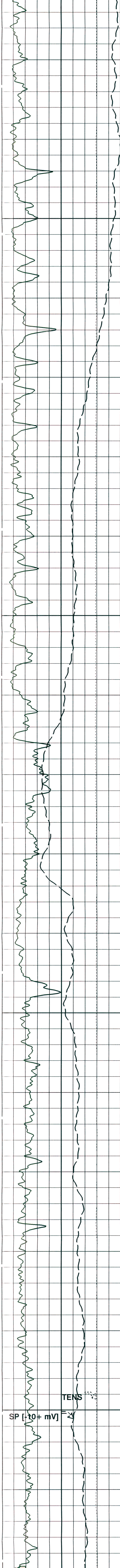
PIP SUMMARY

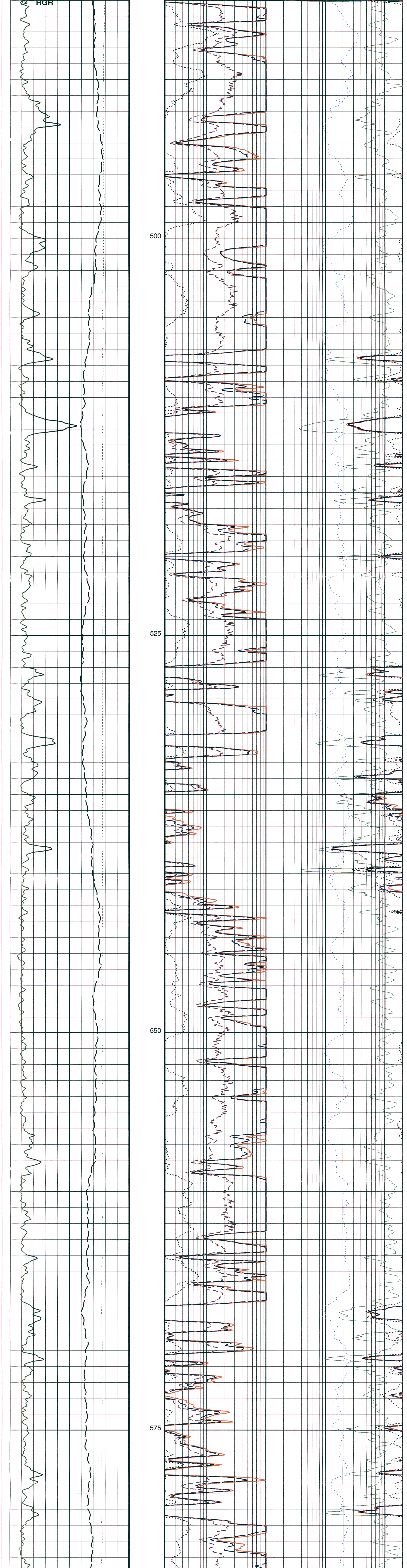
Time Mark Every 60 S

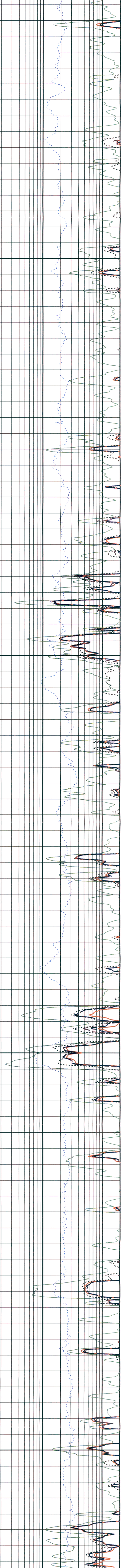
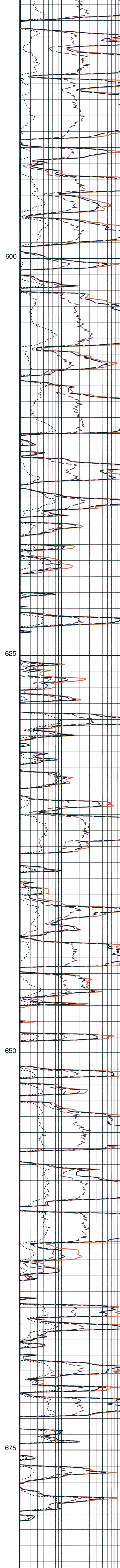
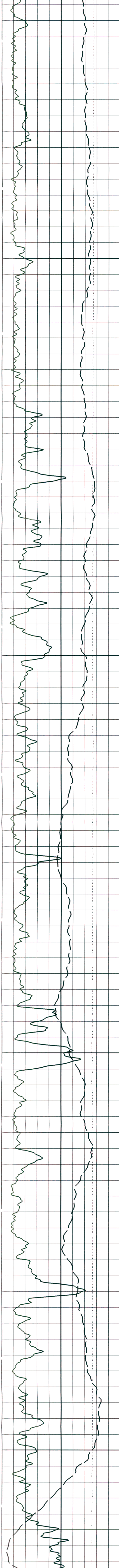


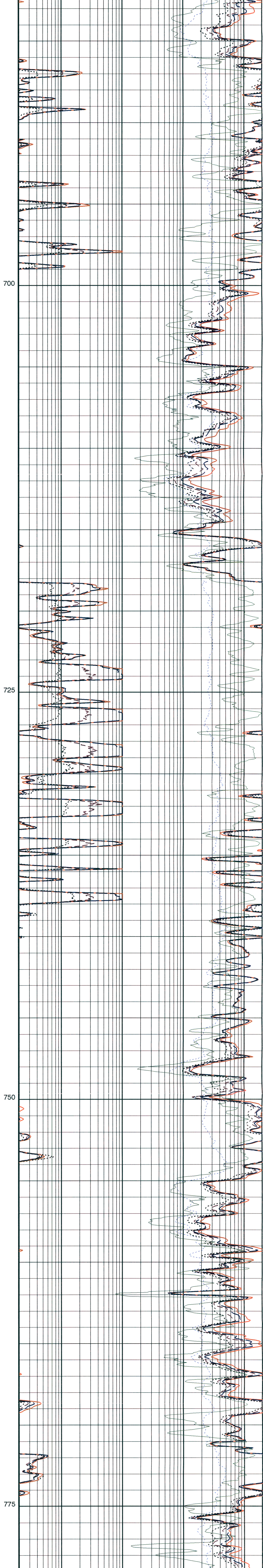
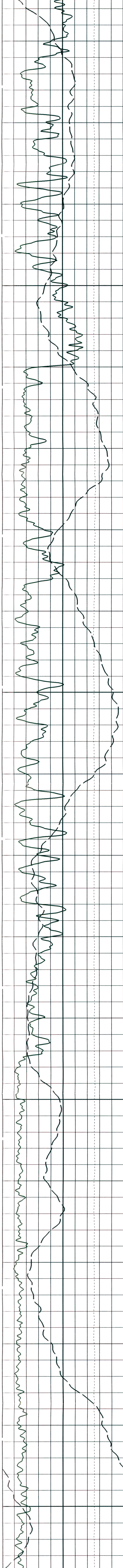
HIRES PASS: ***HIGH RESOLUTION LATEROLOG ARRAY***

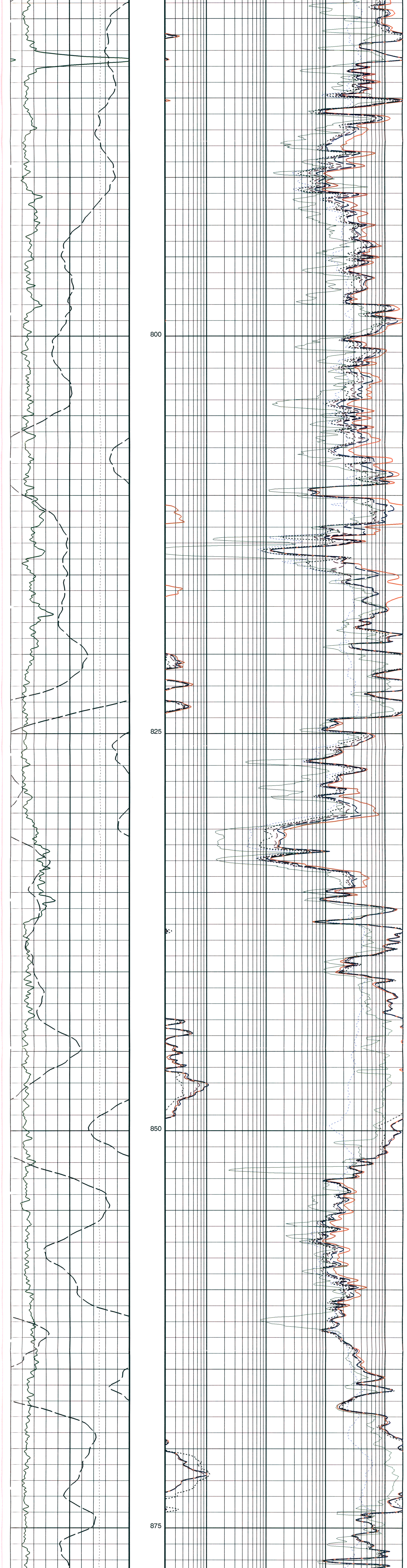


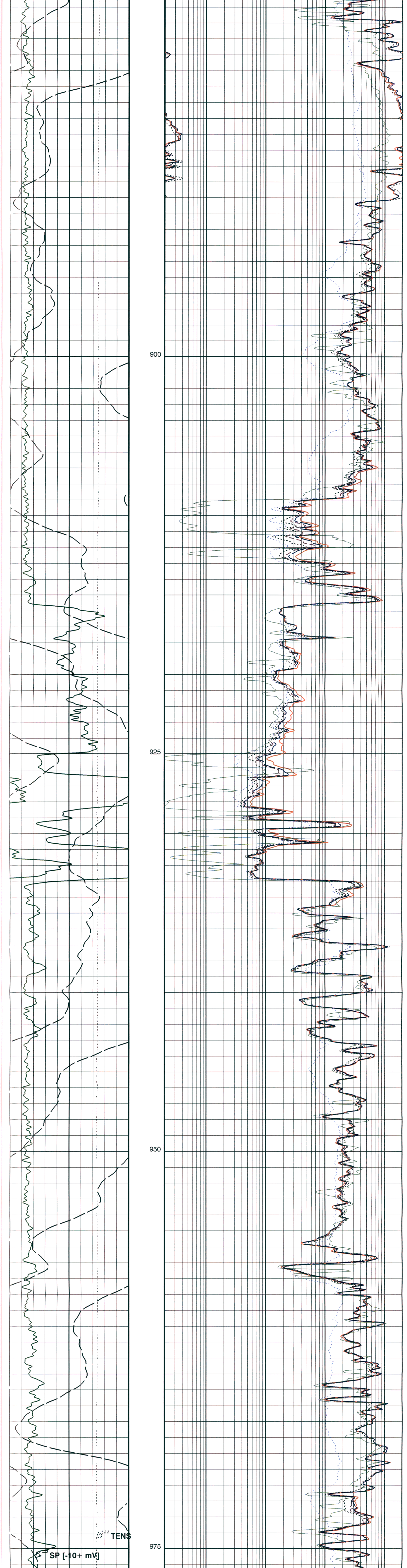


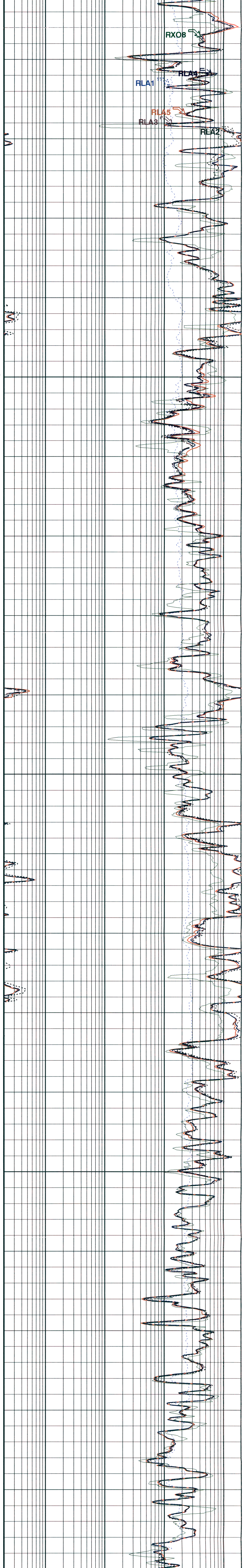
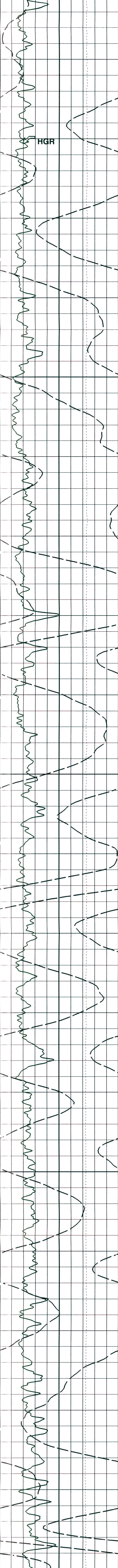


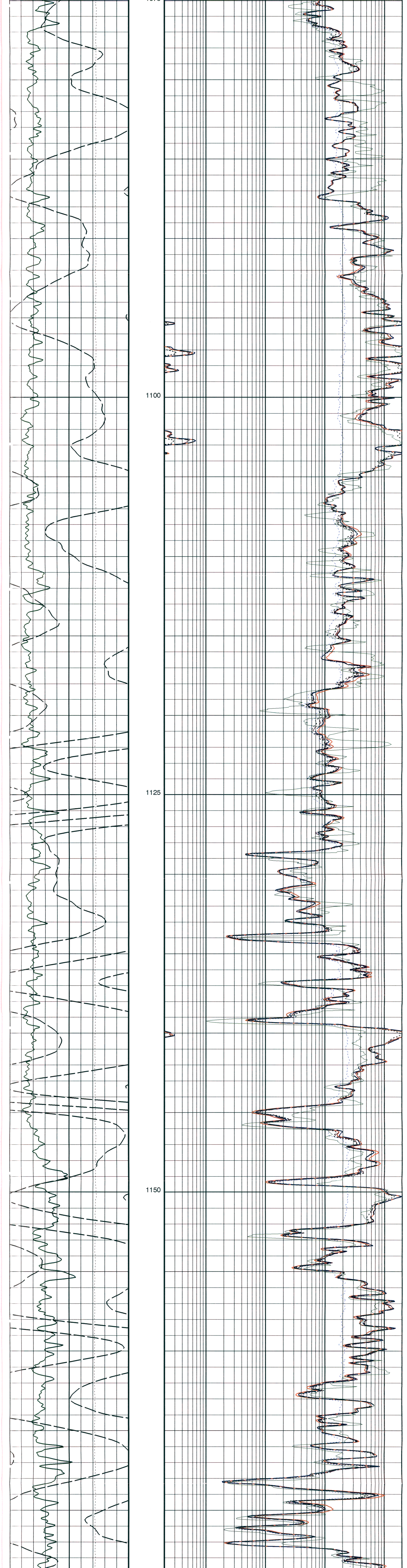


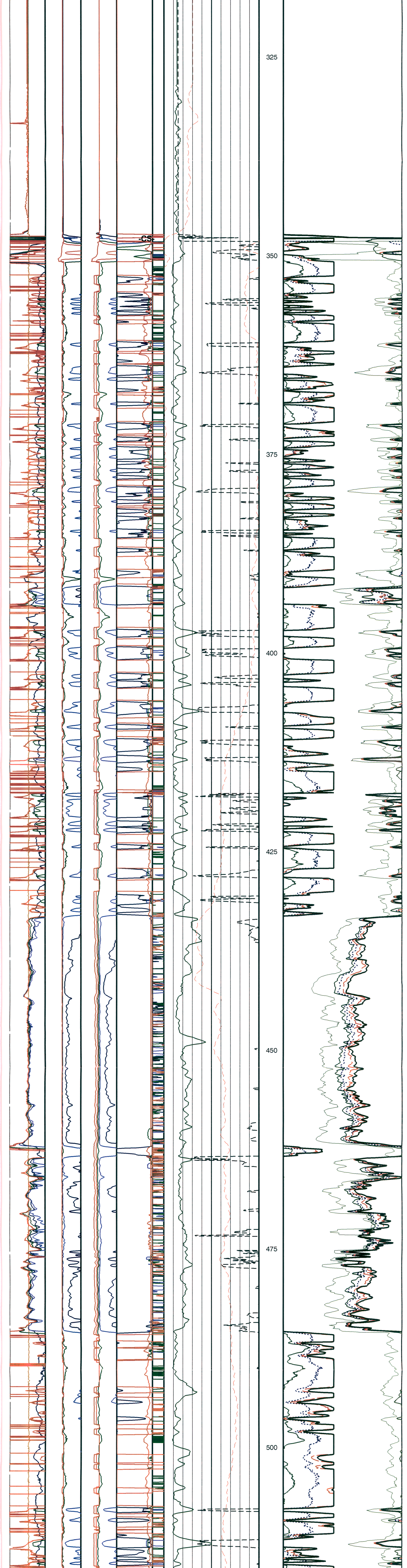


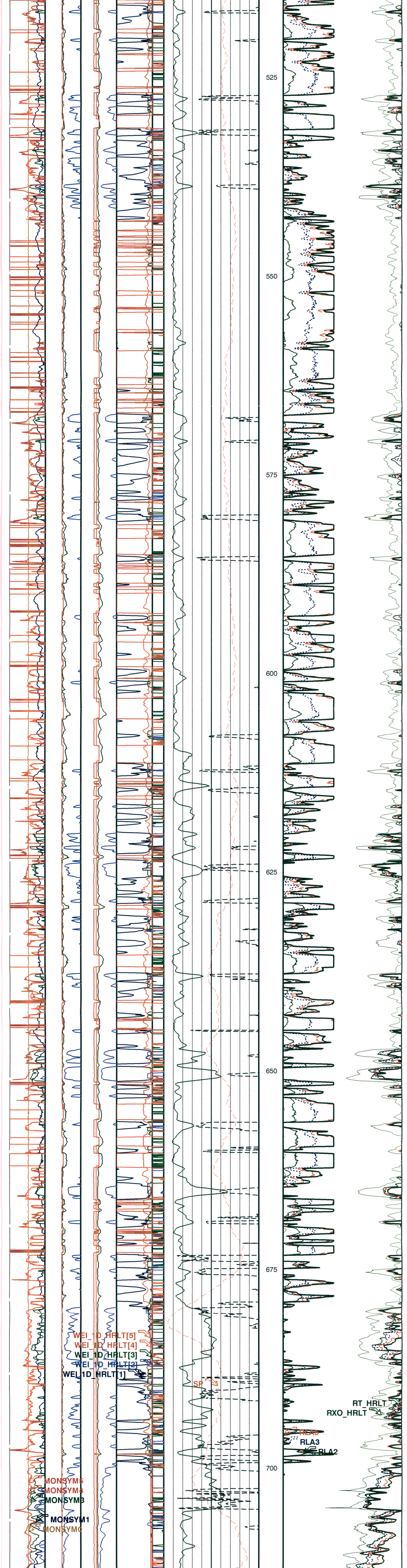


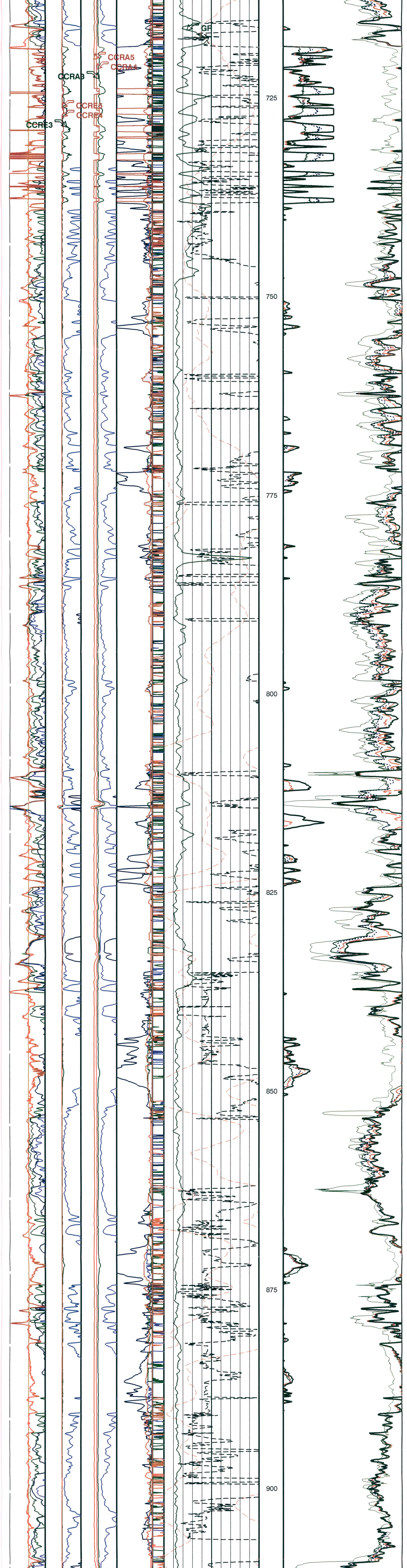


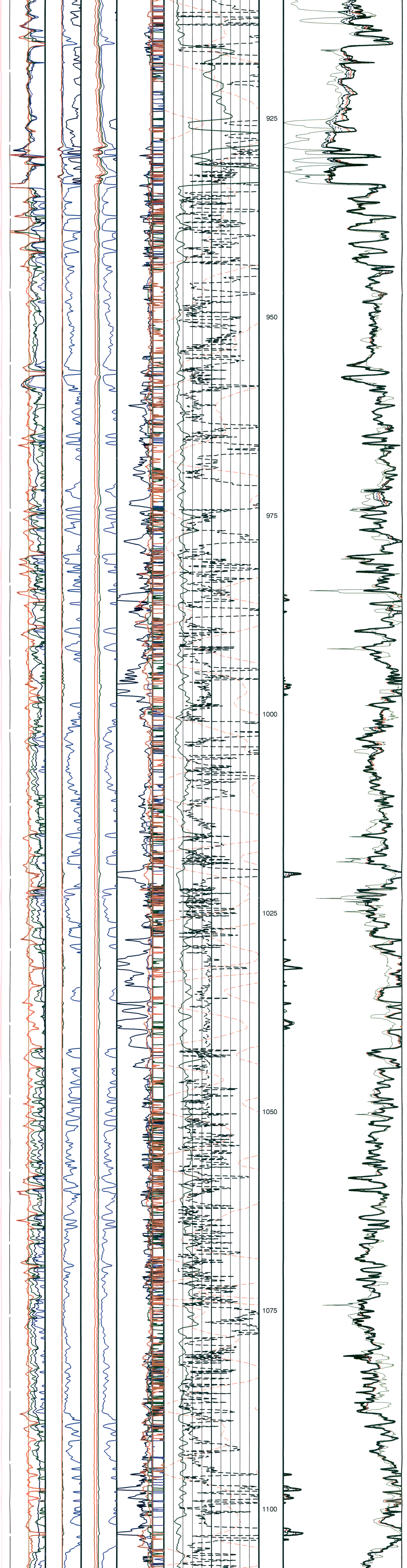


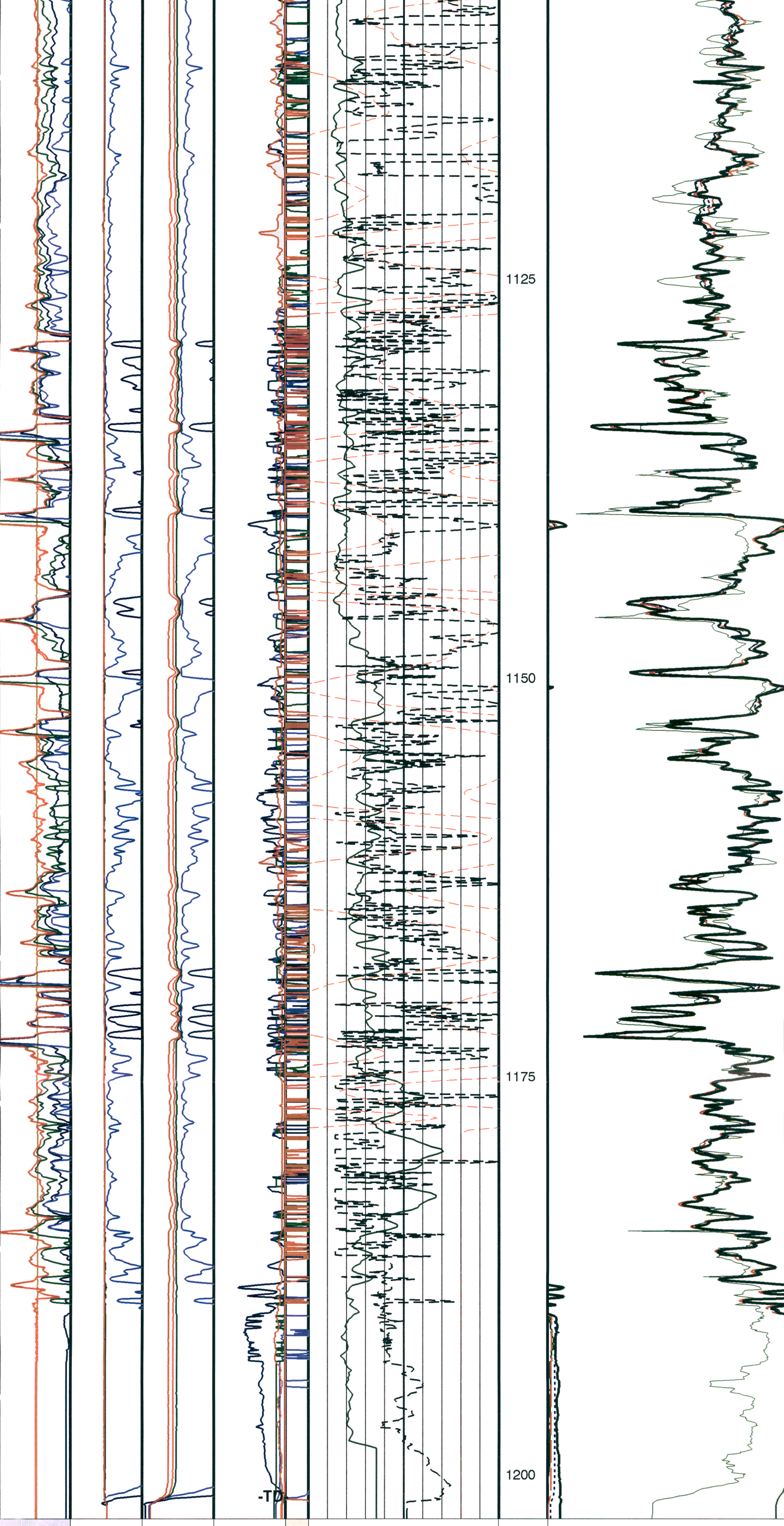












Hardware	(CCRE1) (----	(CCRA1) (----	(WEI_1D_ HRLT[1]) 0 (----) 1	In ve rs io n	(GR) (GAPI)	150	(RLA2) (OHMM)	2000
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LOG QUALITY CONTROL: *** HIRES LATEROLOG ARRAY ***

(MONSYM0) -4 (----) 4	(CCRE2) (----	(CCRA2) (----	(WEI_1D_ HRLT[2]) 0 (----) 1	(IN VE RR 1) (----) 0.5 1.5	(DI_HRLT) (IN)	26	(RLA3) (OHMM)	2000
(MONSYM1) -4 (----) 4	(CCRE3) (----	(CCRA3) (----	(WEI_1D_ HRLT[3]) 0 (----) 1	(IN VE RR 2) (----) 0.5 1.5	(SP) (MV)	20	(RLA5) (OHMM)	2000
(MONSYM2) -4 (----) 4	(CCRE4) (----	(CCRA4) (----	(WEI_1D_ HRLT[4]) 0 (----) 1	(IN VE RR 3) (----) 0.5 1.5			(RXO_HRLT) (OHMM)	2000
(MONSYM3) -4 (----) 4	(CCRE5) (----	(CCRA5) (----	(WEI_1D_ HRLT[5]) 0 (----) 1	(IN VE RR 4) (----) 0.5 1.5			(RT_HRLT) (OHMM)	2000
(MONSYM4) -4 (----) 4	Eccentr	Borehole	Weights	(IN VE RR 5) (----) 0.5 1.5				
(MONSYM5) -4 (----) 4								

PIP SUMMARY

Time Mark Every 60 S

Parameters			
DLIS Name	Description	Value	
HILTH-FTB: High resolution Integrated Logging Tool-DTS			
BHT	Bottom Hole Temperature (used in calculations)	27.3	DEGC
GCSE	Generalized Caliper Selection	HCAL	
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
GTSE	Generalized Temperature Selection	HSTS_HTEM	
SHT	Surface Hole Temperature	23	DEGC
HRLT-B: High Resolution Laterolog Array - B			
BHT	Bottom Hole Temperature (used in calculations)	27.3	DEGC
GCSE	Generalized Caliper Selection	HCAL	
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
GTSE	Generalized Temperature Selection	HSTS_HTEM	
KFAC_HRLT	HRLT K Factor Option	SONDE	
PROCINV	Inversion Selection	ON	
PROCMSFL	Inversion Micro-Resistivity Selection	RXOZ	
PROCMSO	Mechanical Standoff Fin Size	38.1	MM
PROCRM	Processing Mud Resistivity Select	HRLT_Compute	
PROCSPD	Sonde Position	Eccentered	
SHT	Surface Hole Temperature	23	DEGC
HILTH2-FTB: High resolution Integrated Logging Tool-DTS2			
BHT	Bottom Hole Temperature (used in calculations)	27.3	DEGC
GCSE	Generalized Caliper Selection	HCAL	
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
GTSE	Generalized Temperature Selection	HSTS_HTEM	
SHT	Surface Hole Temperature	23	DEGC
HNGBA: Hostile Natural Gamma Ray Sonde			
BHT	Bottom Hole Temperature (used in calculations)	27.3	DEGC
GCSE	Generalized Caliper Selection	HCAL	
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
GTSE	Generalized Temperature Selection	HSTS_HTEM	
SHT	Surface Hole Temperature	23	DEGC
SPA-A 9936: SP ADAPTOR			
SPNV	SP Next Value	0	MV
DIR: Directional Survey Computation			
SPVD	TVD of Starting Point	0	M
TIMD	Along-hole depth of Tie-in Point	348	M
TIVD	TVD of Tie-in Point	348	M
HOLEV: Integrated Hole/Cement Volume			
BHT	Bottom Hole Temperature (used in calculations)	27.3	DEGC
GCSE	Generalized Caliper Selection	HCAL	
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
GTSE	Generalized Temperature Selection	HSTS_HTEM	
SHT	Surface Hole Temperature	23	DEGC
System and Miscellaneous			
BS	Bit Size	222.000	MM
DO	Depth Offset for Playback	0.0	M
DORL	Depth Offset for Repeat Analysis	0.0	M
MST	Mud Sample Temperature	20.10	DEGC
PP	Playback Processing	RECOMPUTE	
TD	Total Depth	1201	M

Format: HRLT_LQC

Vertical Scale: 1:240

Graphics File Created: 23-Feb-2008 18:53

HILTH-FTB	SRPC-3402-Q3_2007	HRLT-B	15C0-309
HILTH2-FTB	SRPC-3402-Q3_2007	HNGC-B	SPC-3530-NUCL
HNGS-BA	SPC-3530-NUCL	DTC-H	15C0-309
SPA-A	9936		

Input DLIS Files						
DEFAULT	TLD_MCFL_CNL_HRLA_011LUP	FN:17	PRODUCER	23-Feb-2008 16:24	1202.4 M	-13.7 M
Output DLIS Files						
DEFAULT	TLD_MCFL_CNL_HRLA_013PUP	FN:21	PRODUCER	23-Feb-2008 18:53		
BACKUP	TLD_MCFL_CNL_HRLA_013PUP	FN:22	PRODUCER	23-Feb-2008 18:53		

Calibration and Check Summary							
Measurement	Nominal	Master	Before	After	Change	Limit	Units
High resolution Integrated Logging Tool-DTS Wellsite Calibration - Stab Measurement Summary							
Before: 22-Feb-2008 10:39							
BS Window Ratio	0.7422	N/A	0.7431	N/A	N/A	N/A	CPS
BS Window Sum	29980	N/A	30020	N/A	N/A	N/A	
SS Window Ratio	0.4886	N/A	0.4888	N/A	N/A	N/A	
SS Window Sum	12830	N/A	12820	N/A	N/A	N/A	CPS
LS Window Ratio	0.2997	N/A	0.2984	N/A	N/A	N/A	CPS
LS Window Sum	1524	N/A	1522	N/A	N/A	N/A	
High resolution Integrated Logging Tool-DTS Wellsite Calibration - Photo-multiplier High Voltages Calibrations							
Before: 22-Feb-2008 10:39							
BS PM High Voltage (Command)	1366	N/A	1359	N/A	N/A	N/A	V
SS PM High Voltage (Command)	1294	N/A	1303	N/A	N/A	N/A	V
LS PM High Voltage (Command)	1244	N/A	1249	N/A	N/A	N/A	V
High resolution Integrated Logging Tool-DTS Wellsite Calibration - Crystal Quality Resolutions Calibration							
Before: 22-Feb-2008 10:39							
BS Crystal Resolution	10.62	N/A	10.61	N/A	N/A	N/A	%
SS Crystal Resolution	9.106	N/A	9.391	N/A	N/A	N/A	%
LS Crystal Resolution	8.132	N/A	8.035	N/A	N/A	N/A	%
High resolution Integrated Logging Tool-DTS Wellsite Calibration - MCFL Calibration							
Before: 22-Feb-2008 10:34							
Raw B0 Resistivity	3875	N/A	3882	N/A	N/A	N/A	OHMM
Raw B1 Resistivity	3830	N/A	3836	N/A	N/A	N/A	OHMM
Raw B2 Resistivity	3830	N/A	3837	N/A	N/A	N/A	OHMM
High resolution Integrated Logging Tool-DTS Wellsite Calibration - HILT Caliper Calibration							
Before: 22-Feb-2008 10:32							
HILT Caliper Zero Measurement	200.0	N/A	184.6	N/A	N/A	N/A	MM
HILT Caliper Plus Measurement	306.0	N/A	303.3	N/A	N/A	N/A	MM
High resolution Integrated Logging Tool-DTS Wellsite Calibration - Detector Calibration							
Before: 22-Feb-2008 13:39							
Gamma Ray Background	30.00	N/A	10.57	N/A	N/A	N/A	GAPI
Gamma Ray (Jig - Bkg)	180.7	N/A	180.7	N/A	N/A	16.43	GAPI
Gamma Ray (Calibrated)	162.0	N/A	162.0	N/A	N/A	15.00	GAPI
High resolution Integrated Logging Tool-DTS Wellsite Calibration - Zero Measurement							
Master: 15-Jan-2008 15:00 Before: 22-Feb-2008 13:32							
CNTC Background	26.64	26.64	26.88	N/A	N/A	3.996	CPS
CFTC Background	26.42	26.42	27.40	N/A	N/A	3.963	CPS
High resolution Integrated Logging Tool-DTS Wellsite Calibration - Ratio Measurement							
Master: 15-Jan-2008 15:00							
Thermal Near Corr. (Tank)	5800	6123	N/A	N/A	N/A	N/A	CPS
Thermal Far Corr. (Tank)	2400	2592	N/A	N/A	N/A	N/A	CPS
CNTC/CFTC (Tank)	2.159	2.362	N/A	N/A	N/A	N/A	
High resolution Integrated Logging Tool-DTS Wellsite Calibration - Accelerometer Calibration							
Before: 23-Feb-2008 14:50							
Z-Axis Acceleration	9.810	N/A	9.811	N/A	N/A	N/A	M/S2
High resolution Integrated Logging Tool-DTS Master Calibration - Inversion results							
Master: 15-Feb-2008 14:33							
Rho Aluminum	2596	2598	--	--	--	--	K/M3
Rho Magnesium	1686	1687	--	--	--	--	K/M3
Pe Aluminum	2.570	2.555	--	--	--	--	
Pe Magnesium	2.650	2.616	--	--	--	--	
High resolution Integrated Logging Tool-DTS Master Calibration - Deviation Summary							
Master: 15-Feb-2008 14:33							
BS Average Deviation	0	0.4449	--	--	--	--	%
BS Max Deviation	0	1.303	--	--	--	--	%
SS Average Deviation	0	0.2374	--	--	--	--	%
SS Max Deviation	0	0.6135	--	--	--	--	%
LS Average Deviation	0	0.6376	--	--	--	--	%
LS Max Deviation	0	1.442	--	--	--	--	%
High Resolution Laterolog Array - B Wellsite Calibration - HRLT M01							
Before: 23-Feb-2008 14:50							
HRLT M0-M1 Voltage Plus - 0	0	N/A	-321.1	N/A	N/A	9.681	UV
HRLT M0-M1 Voltage Plus - 1	0	N/A	-368.7	N/A	N/A	9.681	UV
HRLT M0-M1 Voltage Plus - 2	0	N/A	-338.6	N/A	N/A	9.681	UV
HRLT M0-M1 Voltage Plus - 3	0	N/A	-337.3	N/A	N/A	9.681	UV
HRLT M0-M1 Voltage Plus - 4	0	N/A	-324.0	N/A	N/A	9.681	UV
HRLT M0-M1 Voltage Plus - 5	0	N/A	-327.7	N/A	N/A	9.681	UV
HRLT M0-M1 Voltage Plus - 6	0	N/A	359.4	N/A	N/A	9.681	UV
HRLT M0-M1 Voltage Plus - 7	0	N/A	-322.7	N/A	N/A	9.681	UV
High Resolution Laterolog Array - B Wellsite Calibration - HRLT M12							
Before: 23-Feb-2008 14:50							
HRLT M1-M2 Voltage Plus - 0	0	N/A	1765	N/A	N/A	53.42	UV
HRLT M1-M2 Voltage Plus - 1	0	N/A	2019	N/A	N/A	53.42	UV
HRLT M1-M2 Voltage Plus - 2	0	N/A	1851	N/A	N/A	53.42	UV
HRLT M1-M2 Voltage Plus - 3	0	N/A	1846	N/A	N/A	53.42	UV
HRLT M1-M2 Voltage Plus - 4	0	N/A	1777	N/A	N/A	53.42	UV
HRLT M1-M2 Voltage Plus - 5	0	N/A	1800	N/A	N/A	53.42	UV
HRLT M1-M2 Voltage Plus - 6	0	N/A	-1976	N/A	N/A	53.42	UV
HRLT M1-M2 Voltage Plus - 7	0	N/A	1781	N/A	N/A	53.42	UV
High Resolution Laterolog Array - B Wellsite Calibration - HRLT M23							
Before: 23-Feb-2008 14:50							
HRLT M2-M3 Voltage Plus - 0	0	N/A	1749	N/A	N/A	53.42	UV
HRLT M2-M3 Voltage Plus - 1	0	N/A	2018	N/A	N/A	53.42	UV
HRLT M2-M3 Voltage Plus - 2	0	N/A	1851	N/A	N/A	53.42	UV
HRLT M2-M3 Voltage Plus - 3	0	N/A	1849	N/A	N/A	53.42	UV
HRLT M2-M3 Voltage Plus - 4	0	N/A	1772	N/A	N/A	53.42	UV
HRLT M2-M3 Voltage Plus - 5	0	N/A	1795	N/A	N/A	53.42	UV
HRLT M2-M3 Voltage Plus - 6	0	N/A	-1963	N/A	N/A	53.42	UV
HRLT M2-M3 Voltage Plus - 7	0	N/A	1781	N/A	N/A	53.42	UV
High Resolution Laterolog Array - B Wellsite Calibration - HRLT V34							
Before: 23-Feb-2008 14:50							
HRLT A3-A4 Voltage Plus - 0	0	N/A	68930	N/A	N/A	2100	UV
HRLT A3-A4 Voltage Plus - 1	0	N/A	79220	N/A	N/A	2100	UV
HRLT A3-A4 Voltage Plus - 2	0	N/A	72960	N/A	N/A	2100	UV
HRLT A3-A4 Voltage Plus - 3	0	N/A	73170	N/A	N/A	2100	UV
HRLT A3-A4 Voltage Plus - 4	0	N/A	70140	N/A	N/A	2100	UV
HRLT A3-A4 Voltage Plus - 5	0	N/A	71070	N/A	N/A	2100	UV
HRLT A3-A4 Voltage Plus - 6	0	N/A	-75920	N/A	N/A	2100	UV
HRLT A3-A4 Voltage Plus - 7	0	N/A	70000	N/A	N/A	2100	UV
High Resolution Laterolog Array - B Wellsite Calibration - HRLT V45							
Before: 23-Feb-2008 14:50							
HRLT A4-A5 Voltage Plus - 0	0	N/A	68800	N/A	N/A	2100	UV
HRLT A4-A5 Voltage Plus - 1	0	N/A	79010	N/A	N/A	2100	UV
HRLT A4-A5 Voltage Plus - 2	0	N/A	72780	N/A	N/A	2100	UV
HRLT A4-A5 Voltage Plus - 3	0	N/A	73000	N/A	N/A	2100	UV
HRLT A4-A5 Voltage Plus - 4	0	N/A	69990	N/A	N/A	2100	UV
HRLT A4-A5 Voltage Plus - 5	0	N/A	70920	N/A	N/A	2100	UV
HRLT A4-A5 Voltage Plus - 6	0	N/A	-75720	N/A	N/A	2100	UV
HRLT A4-A5 Voltage Plus - 7	0	N/A	70000	N/A	N/A	2100	UV
High Resolution Laterolog Array - B Wellsite Calibration - HRLT V56							
Before: 23-Feb-2008 14:50							
HRLT A5-A6 Voltage Plus - 0	0	N/A	69210	N/A	N/A	2100	UV
HRLT A5-A6 Voltage Plus - 1	0	N/A	79600	N/A	N/A	2100	UV
HRLT A5-A6 Voltage Plus - 2	0	N/A	73290	N/A	N/A	2100	UV
HRLT A5-A6 Voltage Plus - 3	0	N/A	73480	N/A	N/A	2100	UV
HRLT A5-A6 Voltage Plus - 4	0	N/A	70410	N/A	N/A	2100	UV
HRLT A5-A6 Voltage Plus - 5	0	N/A	71340	N/A	N/A	2100	UV
HRLT A5-A6 Voltage Plus - 6	0	N/A	-76280	N/A	N/A	2100	UV
HRLT A5-A6 Voltage Plus - 7	0	N/A	70000	N/A	N/A	2100	UV
High Resolution Laterolog Array - B Wellsite Calibration - HRLT VTP							
Before: 23-Feb-2008 14:50							
HRLT Torpedo-M0 Voltage - 0	0	N/A	-68600	N/A	N/A	2100	UV
HRLT Torpedo-M0 Voltage - 1	0	N/A	-79280	N/A	N/A	2100	UV
HRLT Torpedo-M0 Voltage - 2	0	N/A	-73020	N/A	N/A	2100	UV
HRLT Torpedo-M0 Voltage - 3	0	N/A	-73260	N/A	N/A	2100	UV
HRLT Torpedo-M0 Voltage - 4	0	N/A	-70220	N/A	N/A	2100	UV
HRLT Torpedo-M0 Voltage - 5	0	N/A	-71150	N/A	N/A	2100	UV
HRLT Torpedo-M0 Voltage - 6	0	N/A	75910	N/A	N/A	2100	UV
HRLT Torpedo-M0 Voltage - 7	0	N/A	-70000	N/A	N/A	2100	UV
High Resolution Laterolog Array - B Wellsite Calibration - HRLT VBD							
Before: 23-Feb-2008 14:50							
HRLT Bridle#9-M0 Voltage - 0	0	N/A	-68580	N/A	N/A	2100	UV
HRLT Bridle#9-M0 Voltage - 1	0	N/A	-79240	N/A	N/A	2100	UV
HRLT Bridle#9-M0 Voltage - 2	0	N/A	-72990	N/A	N/A	2100	UV
HRLT Bridle#9-M0 Voltage - 3	0	N/A	-73230	N/A	N/A	2100	UV
HRLT Bridle#9-M0 Voltage - 4	0	N/A	-70220	N/A	N/A	2100	UV
HRLT Bridle#9-M0 Voltage - 5	0	N/A	-71150	N/A	N/A	2100	UV
HRLT Bridle#9-M0 Voltage - 6	0	N/A	75880	N/A	N/A	2100	UV
HRLT Bridle#9-M0 Voltage - 7	0	N/A	-70000	N/A	N/A	2100	UV
High Resolution Laterolog Array - B Wellsite Calibration - HRLT ISO							
Before: 23-Feb-2008 14:50							
HRLT Source Current Plus - 0	0	N/A	286.2	N/A	N/A	8.520	UA
HRLT Source Current Plus - 1	0	N/A	281.1	N/A	N/A	8.520	UA
HRLT Source Current Plus - 2	0	N/A	281.1	N/A	N/A	8.520	UA
HRLT Source Current Plus - 3	0	N/A	281.1	N/A	N/A	8.520	UA
HRLT Source Current Plus - 4	0	N/A	281.1	N/A	N/A	8.520	UA
HRLT Source Current Plus - 5	0	N/A	281.1	N/A	N/A	8.520	UA
HRLT Source Current Plus - 6	0	N/A	281.1	N/A	N/A	8.520	UA
HRLT Source Current Plus - 7	0	N/A	281.1	N/A	N/A	8.520	UA
High Resolution Laterolog Array - B Wellsite Calibration - HRLT MV							
Before: 23-Feb-2008 14:50							
HRLT Vertical Voltage PI - 0	0	N/A	-323.0	N/A	N/A	9.681	UV
HRLT Vertical Voltage PI - 1	0	N/A	-361.3	N/A	N/A	9.681	UV
HRLT Vertical Voltage PI - 2	0	N/A	-331.3	N/A	N/A	9.681	UV
HRLT Vertical Voltage PI - 3	0	N/A	-328.4	N/A	N/A	9.681	UV
HRLT Vertical Voltage PI - 4	0	N/A	-312.8	N/A	N/A	9.681	UV
HRLT Vertical Voltage PI - 5	0	N/A	-331.8	N/A	N/A	9.681	UV
HRLT Vertical Voltage PI - 6	0	N/A	366.8	N/A	N/A	9.681	UV
HRLT Vertical Voltage PI - 7	0	N/A	-322.7	N/A	N/A	9.681	UV
High resolution Integrated Logging Tool-DTS2 Wellsite Calibration - Stab Measurement Summary							
Before: 22-Feb-2008 13:21							
BS2 Window Ratio	0.7383	N/A	0.7364	N/A	N/A	N/A	CPS
BS2 Window Sum	26790	N/A	26850	N/A	N/A	N/A	
SS2 Window Ratio	0.4880	N/A	0.4877	N/A	N/A	N/A	
SS2 Window Sum	12320	N/A	12280	N/A	N/A	N/A	CPS
LS2 Window Ratio	0.2973	N/A	0.3011	N/A	N/A	N/A	CPS
LS2 Window Sum	1478	N/A	1470	N/A	N/A	N/A	
High resolution Integrated Logging Tool-DTS2 Wellsite Calibration - Photo-multiplier High Voltages Calibrations							
Before: 22-Feb-2008 13:21							
BS2 PM High Voltage (Command)	1403	N/A	1390	N/A	N/A	N/A	V
SS2 PM High Voltage (Command)	1315	N/A	1297	N/A	N/A	N/A	V
LS2 PM High Voltage (Command)	1334	N/A	1323	N/A	N/A	N/A	V
High resolution Integrated Logging Tool-DTS2 Wellsite Calibration - Crystal Quality Resolutions Calibration							
Before: 22-Feb-2008 13:21							
BS2 Crystal Resolution	11.04	N/A	10.88	N/A	N/A	N/A	%
SS2 Crystal Resolution	9.084	N/A	9.371	N/A	N/A	N/A	%
LS2 Crystal Resolution	8.323	N/A	8.459	N/A	N/A	N/A	%
High resolution Integrated Logging Tool-DTS2 Wellsite Calibration - MCFL2 Calibration							
Before: 22-Feb-2008 13:13							
Raw B0 Resistivity	3875	N/A	3842	N/A	N/A	N/A	OHMM
Raw B1 Resistivity	3830	N/A	3815	N/A	N/A	N/A	OHMM
Raw B2 Resistivity	3830	N/A	3819	N/A	N/A	N/A	OHMM
High resolution Integrated Logging Tool-DTS2 Wellsite Calibration - HILT2 Caliper Calibration							
Before: 22-Feb-2008 13:09							
HILT2 Caliper Zero Measurement	200.0	N/A	176.5	N/A	N/A	N/A	MM
HILT2 Caliper Plus Measurement	306.0	N/A	290.3	N/A	N/A	N/A	MM

Master: 22-Feb-2008 12:27								
Rho Aluminum	2596	2601	--	--	--	--	--	K/M3
Rho Magnesium	1686	1686	--	--	--	--	--	K/M3
Pe Aluminum	2.570	2.561	--	--	--	--	--	
Pe Magnesium	2.650	2.617	--	--	--	--	--	
High resolution Integrated Logging Tool-DTS2 Master Calibration - Deviation Summary								
Master: 22-Feb-2008 12:27								
BS2 Average Deviation	0	0.2741	--	--	--	--	--	%
BS2 Max Deviation	0	1.036	--	--	--	--	--	%
SS2 Average Deviation	0	0.3569	--	--	--	--	--	%
SS2 Max Deviation	0	1.416	--	--	--	--	--	%
LS2 Average Deviation	0	0.5074	--	--	--	--	--	%
LS2 Max Deviation	0	1.283	--	--	--	--	--	%
Hostile Natural Gamma Ray Sonde Wellsite Calibration - Detector 1 Check								
Master: 4-Jan-2008 9:55 Before: 22-Feb-2008 14:24								
Na 511 Peak Loc	40.00	39.78	39.66	N/A	N/A	1.000		
Na 511 Peak Res	15.00	15.38	14.95	N/A	N/A	2.000	%	
High Voltage	1150	1258	1238	N/A	N/A	N/A	V	
Na 1785 Peak Loc	142.6	143.7	143.5	N/A	N/A	7.000		
Na 1785 Peak Res	8.500	8.442	7.671	N/A	N/A	2.000	%	
Temperature	15.50	22.14	13.05	N/A	N/A	N/A	DEGC	
Na Count Rate	45.00	35.30	33.55	N/A	N/A	8.000	CPS	
Hostile Natural Gamma Ray Sonde Wellsite Calibration - Detector 2 Check								
Master: 4-Jan-2008 9:55 Before: 22-Feb-2008 14:24								
Na 511 Peak Loc	40.00	39.66	39.58	N/A	N/A	1.000		
Na 511 Peak Res	15.50	14.86	16.08	N/A	N/A	2.000	%	
High Voltage	1150	1273	1255	N/A	N/A	N/A	V	
Na 1785 Peak Loc	142.6	142.7	143.1	N/A	N/A	7.000		
Na 1785 Peak Res	8.500	8.234	8.070	N/A	N/A	2.000	%	
Temperature	15.50	21.49	12.34	N/A	N/A	N/A	DEGC	
Na Count Rate	45.00	35.28	33.40	N/A	N/A	8.000	CPS	
Hostile Natural Gamma Ray Sonde Wellsite Calibration - Ratio Of Detector 1 To Detector 2								
Master: 4-Jan-2008 9:55 Before: 22-Feb-2008 14:24								
Coincidence Count Rate Ratio	1.000	1.001	1.004	N/A	N/A	0.05000		
Hostile Natural Gamma Ray Sonde Master Calibration - Detector 1 Calibration								
Master: 4-Jan-2008 9:50								
Na 511 Peak Set Point	40.00	41.00	--	--	--	--		
Th Peak Loc	209.6	211.0	--	--	--	--		
Th Peak Res	7.000	6.765	--	--	--	--	%	
Background Count Rate	142.5	82.05	--	--	--	--	CPS	
Gain Ratio	1.000	1.009	--	--	--	--		
Hostile Natural Gamma Ray Sonde Master Calibration - Detector 2 Calibration								
Master: 4-Jan-2008 9:50								
Na 511 Peak Set Point	40.00	41.00	--	--	--	--		
Th Peak Loc	209.6	211.2	--	--	--	--		
Th Peak Res	7.000	7.094	--	--	--	--	%	
Background Count Rate	142.5	80.00	--	--	--	--	CPS	
Gain Ratio	1.000	1.013	--	--	--	--		
The GLS-VJ source activity is acceptable.								
The HGNS Neutron Master Calibration was done with the following parameters :								
NCT-B Water Temperature	19.4	DEGC.						
Thermal Housing Size	85.750	MM.						
NSR-F serial number	5196							
The GLS-VJ2 source activity is acceptable.								

High resolution Integrated Logging Tool-DTS / Equipment Identification			
Primary Equipment:			
HILT high-Resolution Mechanical Sonde	HRMS - H	4719	
HILT Rxo Gamma-ray Device	HRGD - H	4751	
HILT Micro Cylindrically Focused Log Dev	MCFL - H		
GR Logging Source	GLS - VJ	5041	
HILT High Res. Control Cartridge	HRCC - H	4722	
HILT Gamma-Ray Neutron Sonde-DTS	HGNS - H	4738	
HGNS Gamma-Ray Device	HGR -		
HGNS Neutron Detector with Alpha Source	HCNT - H		
Auxiliary Equipment:			
Neutron Calibration Tank	NCT - B		
Gamma Source Radioactive	GSR - U/Y	11	
HGNS Housing	HGNH -	3811	

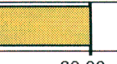
High resolution Integrated Logging Tool-DTS Wellsite Calibration							
Stab Measurement Summary							
Phase	BS Window Ratio	Value	Phase	SS Window Ratio	Value	Phase	LS Window Ratio
Before		0.7431	Before		0.4888	Before	
	0.7051 (Minimum) 0.7422 (Nominal) 0.7793 (Maximum)			0.4642 (Minimum) 0.4886 (Nominal) 0.5131 (Maximum)			0.2848 (Minimum) 0.2997 (Nominal) 0.3147 (Maximum)
Phase	BS Window Sum CPS	Value	Phase	SS Window Sum CPS	Value	Phase	LS Window Sum CPS
Before		30020	Before		12820	Before	
	28480 (Minimum) 29980 (Nominal) 31480 (Maximum)			12190 (Minimum) 12830 (Nominal) 13470 (Maximum)			1448 (Minimum) 1524 (Nominal) 1600 (Maximum)
Before: 22-Feb-2008 10:39							

High resolution Integrated Logging Tool-DTS Wellsite Calibration							
Photo-multiplier High Voltages Calibrations							
Phase	BS PM High Voltage (Command) V	Value	Phase	SS PM High Voltage (Command) V	Value	Phase	LS PM High Voltage (Command) V
Before		1359	Before		1303	Before	
	1266 (Minimum) 1366 (Nominal) 1466 (Maximum)			1194 (Minimum) 1294 (Nominal) 1394 (Maximum)			1144 (Minimum) 1244 (Nominal) 1344 (Maximum)
Before: 22-Feb-2008 10:39							

High resolution Integrated Logging Tool-DTS Wellsite Calibration							
Crystal Quality Resolutions Calibration							
Phase	BS Crystal Resolution %	Value	Phase	SS Crystal Resolution %	Value	Phase	LS Crystal Resolution %
Before		10.61	Before		9.391	Before	
	9.623 (Minimum) 10.62 (Nominal) 11.62 (Maximum)			8.106 (Minimum) 9.106 (Nominal) 10.11 (Maximum)			7.132 (Minimum) 8.132 (Nominal) 9.132 (Maximum)
Before: 22-Feb-2008 10:39							

High resolution Integrated Logging Tool-DTS Wellsite Calibration							
MCFL Calibration							
Phase	Raw B0 Resistivity OHMM	Value	Phase	Raw B1 Resistivity OHMM	Value	Phase	Raw B2 Resistivity OHMM
Before		3882	Before		3836	Before	
	3565 (Minimum) 3875 (Nominal) 4185 (Maximum)			3524 (Minimum) 3830 (Nominal) 4136 (Maximum)			3524 (Minimum) 3830 (Nominal) 4136 (Maximum)
Before: 22-Feb-2008 10:34							

High resolution Integrated Logging Tool-DTS Wellsite Calibration							
HILT Caliper Calibration							
Phase	HILT Caliper Zero Measurement MM	Value	Phase	HILT Caliper Plus Measurement MM	Value		
Before		184.6	Before		303.3		
	150.0 (Minimum) 200.0 (Nominal) 250.0 (Maximum)			229.5 (Minimum) 306.0 (Nominal) 382.5 (Maximum)			
Before: 22-Feb-2008 10:32							

High resolution Integrated Logging Tool-DTS Wellsite Calibration							
Detector Calibration							
Phase	Gamma Ray Background GAPI	Value	Phase	Gamma Ray (Jig - Bkg) GAPI	Value	Phase	Gamma Ray (Calibrated) GAPI
Before		10.57	Before		180.7	Before	
	0 (Minimum) 30.00 (Nominal) 120.0 (Maximum)			164.3 (Minimum) 180.7 (Nominal) 197.2 (Maximum)			147.0 (Minimum) 162.0 (Nominal) 177.0 (Maximum)
Before: 22-Feb-2008 13:39							

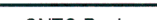
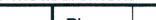
High resolution Integrated Logging Tool-DTS Wellsite Calibration							
Zero Measurement							
Phase	CNTC Background CPS	Value	Phase	CFTC Background CPS	Value		
Master		26.64	Master		26.42		
Before		26.88	Before		27.40		
	5.000 (Minimum) 26.64 (Nominal) 40.00 (Maximum)			5.000 (Minimum) 26.42 (Nominal) 40.00 (Maximum)			
Master: 15-Jan-2008 15:00				Before: 22-Feb-2008 13:32			

High resolution Integrated Logging Tool-DTS Wellsite Calibration							
Ratio Measurement							
Phase	Thermal Near Corr. (Tank) CPS	Value	Phase	Thermal Far Corr. (Tank) CPS	Value	Phase	CNTC/CFTC (Tank)
Master		6123	Master		2592	Master	
	4700 (Minimum) 5800 (Nominal) 6900 (Maximum)			1900 (Minimum) 2400 (Nominal) 2900 (Maximum)			2.120 (Minimum) 2.159 (Nominal) 2.540 (Maximum)
Master: 15-Jan-2008 15:00							

High resolution Integrated Logging Tool-DTS Wellsite Calibration			
Accelerometer Calibration			
Phase	Z-Axis Acceleration M/S2	Value	
Before		9.811	
	9.610 (Minimum) 9.810 (Nominal) 10.01 (Maximum)		
Before: 23-Feb-2008 14:50			

High resolution Integrated Logging Tool-DTS Master Calibration							
Inversion results							
Phase	Rho Aluminum K/M3	Value	Phase	Rho Magnesium K/M3	Value		
Master		2598	Master		1687		
	2586 (Minimum) 2596 (Nominal) 2606 (Maximum)			1676 (Minimum) 1686 (Nominal) 1696 (Maximum)			
Phase	Pe Aluminum	Value	Phase	Pe Magnesium	Value		
Master		2.555	Master		2.616		
	2.470 (Minimum) 2.570 (Nominal) 2.670 (Maximum)			2.550 (Minimum) 2.650 (Nominal) 2.750 (Maximum)			
Master: 15-Feb-2008 14:33							

High resolution Integrated Logging Tool-DTS Master Calibration							
Deviation Summary							
Phase	BS Average Deviation %	Value	Phase	SS Average Deviation %	Value	Phase	LS Average Deviation %
Master		0.4449	Master		0.2374	Master	
	-0.6000 (Minimum) 0 (Nominal) 0.6000 (Maximum)			-1.000 (Minimum) 0 (Nominal) 1.000 (Maximum)			-1.500 (Minimum) 0 (Nominal) 1.500 (Maximum)
Phase	BS Max Deviation %	Value	Phase	SS Max Deviation %	Value	Phase	LS Max Deviation %
Master		1.303	Master		0.6135	Master	
	-1.600 (Minimum) 0 (Nominal) 1.600 (Maximum)			-2.500 (Minimum) 0 (Nominal) 2.500 (Maximum)			-3.500 (Minimum) 0 (Nominal) 3.500 (Maximum)
Master: 15-Feb-2008 14:33							

High resolution Integrated Logging Tool-DTS Master Calibration							
Zero Measurement							
Phase	CNTC Background	CPS	Value	Phase	CFTC Background	CPS	Value
Master			26.64	Master			26.42
	5.000 (Minimum)	26.64 (Nominal)	40.00 (Maximum)		5.000 (Minimum)	26.42 (Nominal)	40.00 (Maximum)
Master: 15-Jan-2008 15:00							

High Resolution Laterolog Array - B / Equipment Identification			
Primary Equipment:			
HRLT Sonde	HRLS - B	1704	
Auxiliary Equipment:			
HRLT lower Housing	HLRH - B	763	
HRLT Lower Cartridge	HLRC - B	951	
HRLT upper Housing	HRUH - B	1716	
HRLT Upper Cartridge	HRUC - B	1714	

High Resolution Laterolog Array - B Wellsite Calibration						
HRLT M01						
Idx	Phase	HRLT M0-M1 Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		-321.1	-322.7	-280.7	-379.7
1	Before		-368.7	-322.7	-280.7	-379.7
2	Before		-338.6	-322.7	-280.7	-379.7
3	Before		-337.3	-322.7	-280.7	-379.7
4	Before		-324.0	-322.7	-280.7	-379.7
5	Before		-327.7	-322.7	-280.7	-379.7
6	Before		359.4	322.7	379.7	280.7
7	Before		-322.7	-322.7	-280.7	-379.7
		(Minimum) (Nominal) (Maximum)				
Before: 23-Feb-2008 14:50						

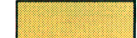
High Resolution Laterolog Array - B Wellsite Calibration						
HRLT M12						
Idx	Phase	HRLT M1-M2 Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		1765	1781	2095	1549
1	Before		2019	1781	2095	1549
2	Before		1851	1781	2095	1549
3	Before		1846	1781	2095	1549
4	Before		1777	1781	2095	1549
5	Before		1800	1781	2095	1549
6	Before		-1976	-1781	-1549	-2095
7	Before		1781	1781	2095	1549
		(Minimum) (Nominal) (Maximum)				
Before: 23-Feb-2008 14:50						

High Resolution Laterolog Array - B Wellsite Calibration						
HRLT M23						
Idx	Phase	HRLT M2-M3 Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		1749	1781	2095	1549
1	Before		2018	1781	2095	1549
2	Before		1851	1781	2095	1549
3	Before		1849	1781	2095	1549
4	Before		1772	1781	2095	1549
5	Before		1795	1781	2095	1549
6	Before		-1963	-1781	-1549	-2095
7	Before		1781	1781	2095	1549
		(Minimum) (Nominal) (Maximum)				
Before: 23-Feb-2008 14:50						

High Resolution Laterolog Array - B Wellsite Calibration						
HRLT V34						
Idx	Phase	HRLT A3-A4 Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		68930	70000	82360	60900
1	Before		79220	70000	82360	60900
2	Before		72960	70000	82360	60900
3	Before		73170	70000	82360	60900
4	Before		70140	70000	82360	60900
5	Before		71070	70000	82360	60900
6	Before		-75920	-70000	-60900	-82360
7	Before		70000	70000	82360	60900
		(Minimum) (Nominal) (Maximum)				
Before: 23-Feb-2008 14:50						

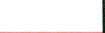
High Resolution Laterolog Array - B Wellsite Calibration						
HRLT V45						
Idx	Phase	HRLT A4-A5 Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		68800	70000	82360	60900
1	Before		79010	70000	82360	60900
2	Before		72780	70000	82360	60900
3	Before		73000	70000	82360	60900
4	Before		69990	70000	82360	60900
5	Before		70920	70000	82360	60900
6	Before		-75720	-70000	-60900	-82360
7	Before		70000	70000	82360	60900
		(Minimum) (Nominal) (Maximum)				
Before: 23-Feb-2008 14:50						

High Resolution Laterolog Array - B Wellsite Calibration						
HRLT V56						
Idx	Phase	HRLT A5-A6 Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		69210	70000	82360	60900
1	Before		79600	70000	82360	60900
2	Before		73290	70000	82360	60900
3	Before		73480	70000	82360	60900
4	Before		70410	70000	82360	60900
5	Before		71340	70000	82360	60900
6	Before		-76280	-70000	-60900	-82360
7	Before		70000	70000	82360	60900
		(Minimum) (Nominal) (Maximum)				
Before: 23-Feb-2008 14:50						

High Resolution Laterolog Array - B Wellsite Calibration						
HRLT VTP						
Idx	Phase	HRLT Torpedo-M0 Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		-68600	-70000	-60900	-82360
1	Before		-79280	-70000	-60900	-82360
2	Before		-73020	-70000	-60900	-82360
3	Before		-73260	-70000	-60900	-82360
4	Before		-70220	-70000	-60900	-82360
5	Before		-71150	-70000	-60900	-82360
6	Before		75910	70000	82360	60900
7	Before		-70000	-70000	-60900	-82360
		(Minimum) (Nominal) (Maximum)				
Before: 23-Feb-2008 14:50						

High Resolution Laterolog Array - B Wellsite Calibration						
HRLT VBD						
Idx	Phase	HRLT Bridle#9-M0 Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		-68580	-70000	-60900	-82360
1	Before		-79240	-70000	-60900	-82360
2	Before		-72990	-70000	-60900	-82360
3	Before		-73230	-70000	-60900	-82360
4	Before		-70220	-70000	-60900	-82360
5	Before		-71150	-70000	-60900	-82360
6	Before		75880	70000	82360	60900
7	Before		-70000	-70000	-60900	-82360
		(Minimum) (Nominal) (Maximum)				
Before: 23-Feb-2008 14:50						

High Resolution Laterolog Array - B Wellsite Calibration						
HRLT ISO						
Idx	Phase	HRLT Source Current Plus UA	Value	Nominal	Maximum	Minimum
0	Before		286.2	284.0	334.1	247.0
1	Before		281.1	281.1	330.7	244.4
2	Before		281.1	281.1	330.7	244.4
3	Before		281.1	281.1	330.7	244.4
4	Before		281.1	281.1	330.7	244.4
5	Before		281.1	281.1	330.7	244.4
6	Before		281.1	281.1	330.7	244.4
7	Before		281.1	281.1	330.7	244.4
		(Minimum) (Nominal) (Maximum)				
Before: 23-Feb-2008 14:50						

High Resolution Laterolog Array - B Wellsite Calibration						
HRLT MV						
Idx	Phase	HRLT Vertical Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		-323.0	-322.7	-280.7	-379.7
1	Before		-361.3	-322.7	-280.7	-379.7
2	Before		-331.3	-322.7	-280.7	-379.7
3	Before		-328.4	-322.7	-280.7	-379.7
4	Before		-312.8	-322.7	-280.7	-379.7
5	Before		-331.8	-322.7	-280.7	-379.7
6	Before		366.8	322.7	379.7	280.7

Before			-322.7	-322.7	-280.7	-379.7
	(Minimum)	(Nominal)	(Maximum)			
Before: 23-Feb-2008 14:50						

High resolution Integrated Logging Tool-DTS2 / Equipment Identification			
Primary Equipment:			
HILT2 high-Resolution Mechanical Sonde	HRMS - H2	3983	
HILT2 Rxo Gamma-ray Device	HRGD - H2	4709	
HILT2 Micro Cylindrically Focused Log De	MCFL - H2		
GR Logging Source	GLS - VJ2	1984	
HILT2 High Res. Control Cartridge	HRCC - H2	3990	
HILT2 HTBC DTS mode	HTBC - H2	3733	
HTBC2 Communication Assembly DTS Mode	HMCA - H	3733	
Auxiliary Equipment:			

High resolution Integrated Logging Tool-DTS2 Wellsite Calibration											
Stab Measurement Summary											
Phase	BS2 Window Ratio		Value	Phase	SS2 Window Ratio		Value	Phase	LS2 Window Ratio		Value
Before			0.7364	Before			0.4877	Before			0.3011
	0.7014 (Minimum)	0.7383 (Nominal)	0.7753 (Maximum)		0.4636 (Minimum)	0.4880 (Nominal)	0.5124 (Maximum)		0.2824 (Minimum)	0.2973 (Nominal)	0.3122 (Maximum)
Phase	BS2 Window Sum CPS		Value	Phase	SS2 Window Sum CPS		Value	Phase	LS2 Window Sum CPS		Value
Before			26850	Before			12280	Before			1470
	25450 (Minimum)	26790 (Nominal)	28130 (Maximum)		11710 (Minimum)	12320 (Nominal)	12940 (Maximum)		1405 (Minimum)	1478 (Nominal)	1552 (Maximum)
Before: 22-Feb-2008 13:21											

High resolution Integrated Logging Tool-DTS2 Wellsite Calibration														
Photo-multiplier High Voltages Calibrations														
Phase BS2 PM High Voltage (Command) V			Value	Phase SS2 PM High Voltage (Command) V			Value	Phase LS2 PM High Voltage (Command) V			Value			
Before				1390	Before				1297	Before				1323
1303 (Minimum)		1403 (Nominal)		1503 (Maximum)	1215 (Minimum)		1315 (Nominal)		1415 (Maximum)	1234 (Minimum)		1334 (Nominal)		1434 (Maximum)
Before: 22-Feb-2008 13:21														

High resolution Integrated Logging Tool-DTS2 Wellsite Calibration											
Crystal Quality Resolutions Calibration											
Phase	BS2 Crystal Resolution %		Value	Phase	SS2 Crystal Resolution %		Value	Phase	LS2 Crystal Resolution %		Value
Before			10.88	Before			9.371	Before			8.459
	10.04 (Minimum)	11.04 (Nominal)	12.04 (Maximum)		8.084 (Minimum)	9.084 (Nominal)	10.08 (Maximum)		7.323 (Minimum)	8.323 (Nominal)	9.323 (Maximum)
Before: 22-Feb-2008 13:21											

High resolution Integrated Logging Tool-DTS2 Wellsite Calibration											
MCFL2 Calibration											
Phase	Raw B0 Resistivity OHMM		Value	Phase	Raw B1 Resistivity OHMM		Value	Phase	Raw B2 Resistivity OHMM		Value
Before			3842	Before			3815	Before			3819
	3565 (Minimum)	3875 (Nominal)	4185 (Maximum)		3524 (Minimum)	3830 (Nominal)	4136 (Maximum)		3524 (Minimum)	3830 (Nominal)	4136 (Maximum)
Before: 22-Feb-2008 13:13											

High resolution Integrated Logging Tool-DTS2 Wellsite Calibration							
HILT2 Caliper Calibration							
Phase	HILT2 Caliper Zero Measurement MM	Value	Phase	HILT2 Caliper Plus Measurement MM	Value		
Before		176.5	Before		290.3		
	150.0 (Minimum)	200.0 (Nominal)	250.0 (Maximum)	229.5 (Minimum)	306.0 (Nominal)	382.5 (Maximum)	
Before: 22-Feb-2008 13:09							

High resolution Integrated Logging Tool-DTS2 Master Calibration							
Inversion results							
Phase	Rho Aluminum K/M3	Value	Phase	Rho Magnesium K/M3	Value		
Master		2601	Master		1686		
	2586 (Minimum)	2596 (Nominal)	2606 (Maximum)	1676 (Minimum)	1686 (Nominal)	1696 (Maximum)	
Phase	Pe Aluminum	Value	Phase	Pe Magnesium	Value		
Master		2.561	Master		2.617		
	2.470 (Minimum)	2.570 (Nominal)	2.670 (Maximum)	2.550 (Minimum)	2.650 (Nominal)	2.750 (Maximum)	
Master: 22-Feb-2008 12:27							

High resolution Integrated Logging Tool-DTS2 Master Calibration											
Deviation Summary											
Phase	BS2 Average Deviation %		Value	Phase	SS2 Average Deviation %		Value	Phase	LS2 Average Deviation %		Value
Master			0.2741	Master			0.3569	Master			0.5074
	-0.6000 (Minimum)	0 (Nominal)	0.6000 (Maximum)		-1.000 (Minimum)	0 (Nominal)	1.000 (Maximum)		-1.500 (Minimum)	0 (Nominal)	1.500 (Maximum)
Phase	BS2 Max Deviation %		Value	Phase	SS2 Max Deviation %		Value	Phase	LS2 Max Deviation %		Value
Master			1.036	Master			1.416	Master			1.283
	-1.600 (Minimum)	0 (Nominal)	1.600 (Maximum)		-2.500 (Minimum)	0 (Nominal)	2.500 (Maximum)		-3.500 (Minimum)	0 (Nominal)	3.500 (Maximum)
Master: 22-Feb-2008 12:27											

Hostile Natural Gamma Ray Cartridge - B / Equipment Identification			
Primary Equipment:			
HNGC Cartridge	HNGC - B 4	405	
Auxiliary Equipment:			
HNGC Housing	HNGH - A	346	

Hostile Natural Gamma Ray Sonde / Equipment Identification			
Primary Equipment:			
HNGS Sonde	HNGS - BA	163	
Auxiliary Equipment:			
HNGS Sonde Housing	HNSH - BA	160	
Gamma Source Radioactive	GSR - U	1237	

Hostile Natural Gamma Ray Sonde Wellsite Calibration											
Detector 1 Check											
Phase	Na 511 Peak Loc		Value	Phase	Na 511 Peak Res %		Value	Phase	High Voltage V		Value
Master			39.78	Master			15.38	Master			1258
Before			39.66	Before			14.95	Before			1238
37.50 (Minimum) 40.00 (Nominal) 43.50 (Maximum)				12.00 (Minimum) 15.50 (Nominal) 19.00 (Maximum)				900.0 (Minimum) 1150 (Nominal) 1600 (Maximum)			
Phase	Na 1785 Peak Loc		Value	Phase	Na 1785 Peak Res %		Value	Phase	Temperature DEGC		Value
Master			143.7	Master			8.442	Master			22.14
Before			143.5	Before			7.671	Before			13.05
135.0 (Minimum) 142.6 (Nominal) 150.3 (Maximum)				7.000 (Minimum) 8.500 (Nominal) 11.00 (Maximum)				-28.89 (Minimum) 15.50 (Nominal) 60.00 (Maximum)			
Phase	Na Count Rate CPS		Value								
Master			35.30								
Before			33.55								
10.00 (Minimum) 45.00 (Nominal) 100.0 (Maximum)											
Master: 4-Jan-2008 9:55				Before: 22-Feb-2008 14:24							

Hostile Natural Gamma Ray Sonde Wellsite Calibration																		
Detector 2 Check																		
Phase	Na 511 Peak Loc		Value	Phase	Na 511 Peak Res %		Value	Phase	High Voltage V		Value							
Master			39.66	Master			14.86	Master			1273							
Before			39.58	Before			16.08	Before			1255							
37.50 (Minimum)			40.00 (Nominal)	43.50 (Maximum)			12.00 (Minimum)			15.50 (Nominal)	19.00 (Maximum)	900.0 (Minimum)			1150 (Nominal)	1600 (Maximum)		
Phase	Na 1785 Peak Loc		Value	Phase	Na 1785 Peak Res %		Value	Phase	Temperature DEGC		Value							
Master			142.7	Master			8.234	Master			21.49							
Before			143.1	Before			8.070	Before			12.34							
135.0 (Minimum)			142.6 (Nominal)	150.3 (Maximum)			7.000 (Minimum)			8.500 (Nominal)	11.00 (Maximum)	-28.89 (Minimum)			15.50 (Nominal)	60.00 (Maximum)		
Phase	Na Count Rate CPS		Value															
Master			35.28															
Before			33.40															
10.00 (Minimum)			45.00 (Nominal)	100.0 (Maximum)														
Master: 4-Jan-2008 9:55				Before: 22-Feb-2008 14:24														

Hostile Natural Gamma Ray Sonde Wellsite Calibration			
Ratio Of Detector 1 To Detector 2			
Phase	Coincidence Count Rate Ratio	Value	
Master		1.001	
Before		1.004	
	0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)
Master: 4-Jan-2008 9:55			
Before: 22-Feb-2008 14:24			

Hostile Natural Gamma Ray Sonde Master Calibration											
Detector 1 Calibration											
Phase	Na 511 Peak Set Point		Value	Phase	Th Peak Loc		Value	Phase	Th Peak Res %		Value
Master			41.00	Master			211.0	Master			6.765
	38.00 (Minimum)	40.00 (Nominal)	43.00 (Maximum)		201.0 (Minimum)	209.6 (Nominal)	218.3 (Maximum)		5.000 (Minimum)	7.000 (Nominal)	9.000 (Maximum)
Phase	Background Count Rate CPS			Value	Phase	Gain Ratio			Value		
Master				82.05	Master				1.009		
	10.00 (Minimum)	142.5 (Nominal)	265.0 (Maximum)		0.9400 (Minimum)	1.000 (Nominal)	1.060 (Maximum)				
Master: 4-Jan-2008 9:50											

Hostile Natural Gamma Ray Sonde Master Calibration											
Detector 2 Calibration											
Phase	Na 511 Peak Set Point		Value	Phase	Th Peak Loc		Value	Phase	Th Peak Res %		Value
Master			41.00	Master			211.2	Master			7.094
	38.00 (Minimum)	40.00 (Nominal)	43.00 (Maximum)		201.0 (Minimum)	209.6 (Nominal)	218.3 (Maximum)		5.000 (Minimum)	7.000 (Nominal)	9.000 (Maximum)
Phase	Background Count Rate CPS		Value	Phase	Gain Ratio		Value				
Master			80.00	Master			1.013				
	10.00 (Minimum)	142.5 (Nominal)	265.0 (Maximum)		0.9400 (Minimum)	1.000 (Nominal)	1.060 (Maximum)				
Master: 4-Jan-2008 9:50											

DTS Telemetry Tool / Equipment Identification			
Primary Equipment:			
DTC-H Auxiliary Cartridge	DTCH - A	9397	
DTC-H Telemetry Cartridge	DTCH - A	9397	
Auxiliary Equipment:			
DTCH Telemetry Cartridge Housing	ECH - KC	10485	

Company: **PETRO-CANADA**

Schlumberger

Well: **PETRO-CANADA BLACKWATER KWIJKA M-59**

Field: **KWIJKA**

Province: **NORTHWEST TERRITORIES**

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PLATFORM EXPRESS

HIGH RESOLUTION LATEROLOG ARRAY