

**Company: SANDIA TECHNOLOGIES, LLC**

**Well: NYSTA TANDEM LOT 1**

**Field: WILDCAT**

**County: ROCKLAND**

**State: NEW YORK**

## SPONTANEOUS POTENTIAL

### GAMMA RAY

County: ROCKLAND  
 Field: WILDCAT  
 Location: LAT: 41.1039  
 Well: NYSTA TANDEM LOT 1  
 Company: SANDIA TECHNOLOGIES, LLC

LOCATION		LAT: 41.1039	Elev.: K.B. 402.00 ft
		LONG: -74.027	G.L. 386.00 ft
		D.F. 402.00 ft	
Permanent Datum:	GROUND LEVEL	Elev.: 386.00 ft	
Log Measured From:	KELLY BUSHING	16.00 ft above Perm. Datum	
Drilling Measured From:	KELLY BUSHING		
API Serial No.	Section	Township	QUAD
31-087-27016-00-00		CLARKSTOWN	

Logging Date	1-Sep-2011	
Run Number	1	
Depth Driller	1528 ft	
Schlumberger Depth	1500 ft	
Bottom Log Interval	1500 ft	
Top Log Interval	0 ft	
Casing Driller Size @ Depth	13.375 in @ 603 ft	
Casing Schlumberger	602 ft	
Bit Size	12.250 in	
Type Fluid In Hole	FRESH WATER BASED MUD	
Density	Viscosity	
Fluid Loss	PH	
Source Of Sample	MEASURED	
RM @ Measured Temperature	@	77 degF
RMF @ Measured Temperature	@	77 degF
RMC @ Measured Temperature	@	77 degF
Source RMF	CALCULATED	CALCULATED
RM @ MRT	7.490 @ 68	5.617 @ 68
Maximum Recorded Temperatures	68 degF	
Circulation Stopped	Time	
Logger On Bottom	Time	21:56
Unit Number	Location	
Recorded By	TIM ZOTARA	
Witnessed By	DAN COLLINS	

Logging Date			
Run Number			
Depth Driller			
Schlumberger Depth			
Bottom Log Interval			
Top Log Interval			
Casing Driller Size @ Depth		@	
Casing Schlumberger			
Bit Size			
Type Fluid In Hole			
Density	Viscosity		
Fluid Loss	PH		
Source Of Sample			
RM @ Measured Temperature	@		
RMF @ Measured Temperature	@		
RMC @ Measured Temperature	@		
Source RMF			
RM @ MRT	@		@
Maximum Recorded Temperatures			
Circulation Stopped	Time		
Logger On Bottom	Time		
Unit Number	Location		
Recorded By			
Witnessed By			

Run 1

Run 2

Run

## DEPTH SUMMARY LISTING

Date Created: 1-SEP-2011 17:30:17

### Depth System Equipment

Depth Measuring Device	Tension Device	Logging Cable
Type: IDW-B Serial Number: 2828 Calibration Date: 1-Jan-2011 Calibrator Serial Number: 33 Calibration Cable Type: 7-39P LXS Wheel Correction 1: -5 Wheel Correction 2: -4	Type: CMTD-B/A Serial Number: 2929 Calibration Date: 2-Aug-2011 Calibrator Serial Number: 1095 Number of Calibration Points: 10 Calibration RMS: 45 Calibration Peak Error: 71	Type: 7-39P LXS Serial Number: 3039 Length: 16000 FT Conveyance Method: Wireline Rig Type: LAND

### Depth Control Parameters

Log Sequence:	Subsequent Log In the Well
Reference Log Name:	PLATFORM EXPRESS
Reference Log Run Number:	ONE
Reference Log Date:	31-Aug-2011

### Depth Control Remarks

1. ALL SCHLUMBERGER DEPTH CONTROL POLICIES FOLLOWED
2. IDW USED AS PRIMARY DEPTH DEVICE
3. Z-CHART USED AS SECONDARY DEPTH DEVICE
- 4.
- 5.
- 6.

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OTHER SERVICES1	OTHER SERVICES2
OS1: PEX-AIT	OS1:
OS2: CMR-ECS-HNGS	OS2:
OS3: PPC-SSCAN-FMI	OS3:
OS4: MDT-MSCT	OS4:
OS5: CBL/VDL-USIT	OS5:
REMARKS: RUN NUMBER 1	REMARKS: RUN NUMBER 2
THANK YOU FOR CHOOSING SCHLUMBERGER	

TOOLS RUN AS PER TOOL SKETCH, W/BOWSPRING & STANDOFFS ON AIT  
 ALL WELLSITE DATA, PERMIT, MUD REPORT, SOP PROVIDED BY CLIENT

RUN1: PEX-AIT	RUN2: CMR-ECS-HNGS	RUN3: PPC-SSCAN-FMI
RUN4: MSCT	RUN5: MDT	RUN6: CBL/VDL-USIT

GEO REQUESTED MATR = SANDSTONE / MDEN = 2.65 G/CC  
 3 MAX TEMP THERMOMETERS RUN IN HEAD, PER RUN, MAX TEMP FROM HTEM.

SLB CREW: THIMLAR / CANNON

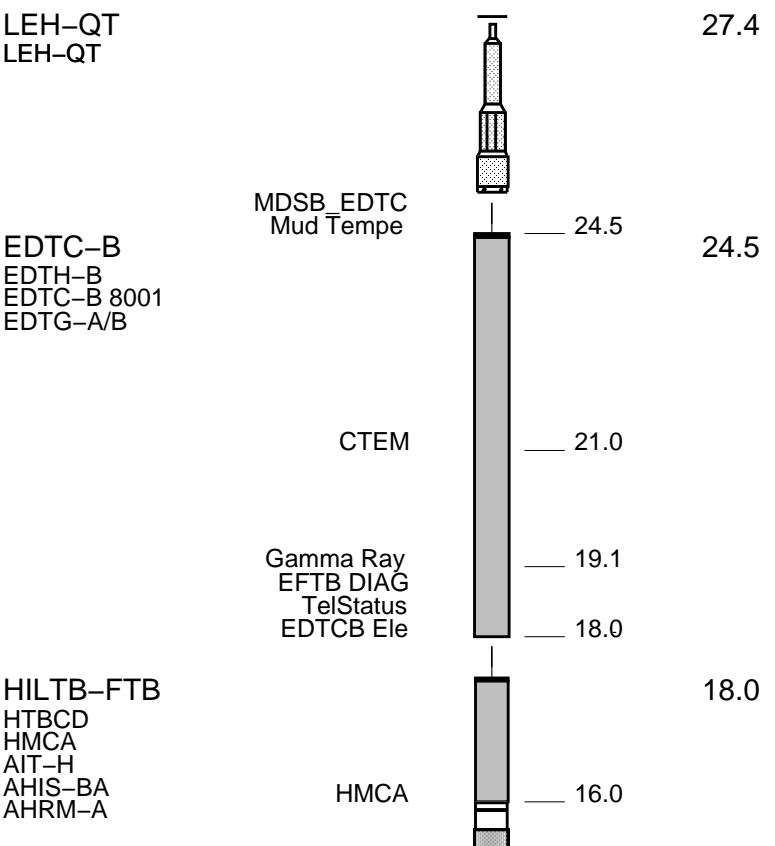
RUN 1			RUN 2		
SERVICE ORDER #:		AXPS-00185	SERVICE ORDER #:		
PROGRAM VERSION:		19C0-187	PROGRAM VERSION:		
FLUID LEVEL:		0 ft	FLUID LEVEL:		
LOGGED INTERVAL	START	STOP	LOGGED INTERVAL	START	STOP

## EQUIPMENT DESCRIPTION

RUN 1 RUN 2

**SURFACE EQUIPMENT**  
 WITM (EDTS)-A

**DOWNHOLE EQUIPMENT**



RUN 2

Induction  
Temperatu  
Power Sup

7.9

SP SENSOR  
DF ACCZ  
HTEN HMAS HV  
Mud Resis  
Tension

0.1

0.0

TOOL ZERO

MAXIMUM STRING DIAMETER 3.88 IN  
MEASUREMENTS RELATIVE TO TOOL ZERO  
ALL LENGTHS IN FEET

**Schlumberger**

**MAIN 2"**

MAXIS Field Log

**Input DLIS Files**

DEFAULT	AIT_TLD_MCFL_CNL_146LUP	FN:222	PRODUCER	01-Sep-2011 21:56	1506.0 FT	1.0 FT
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**Output DLIS Files**

DEFAULT	AIT_TLD_MCFL_CNL_148PUP	FN:226	PRODUCER	01-Sep-2011 22:21	1506.0 FT	-23.5 FT
RTB	AIT_TLD_MCFL_CNL_148PUP	FN:227	PRODUCER	01-Sep-2011 22:21	1506.0 FT	-23.5 FT

**OP System Version: 19C0-187**

HILTB-FTB	19C0-187	EDTC-B	19C0-187
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**PIP SUMMARY**

Time Mark Every 60 S

GR > 400  
From LHT1 to ECGR 2

GR > 200  
From LHT1 to ECGR 1

Tension (TENS)

(LBF)

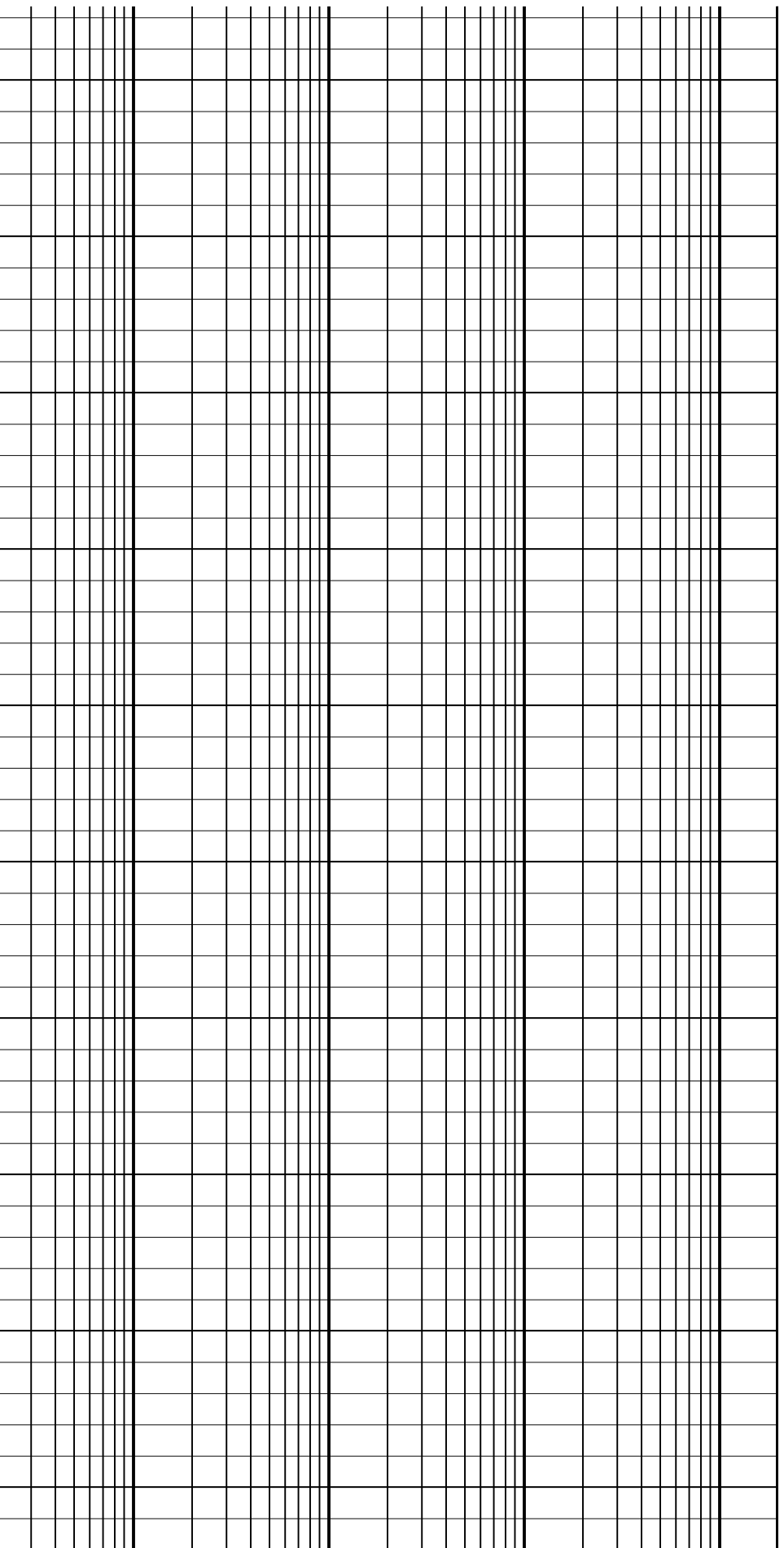
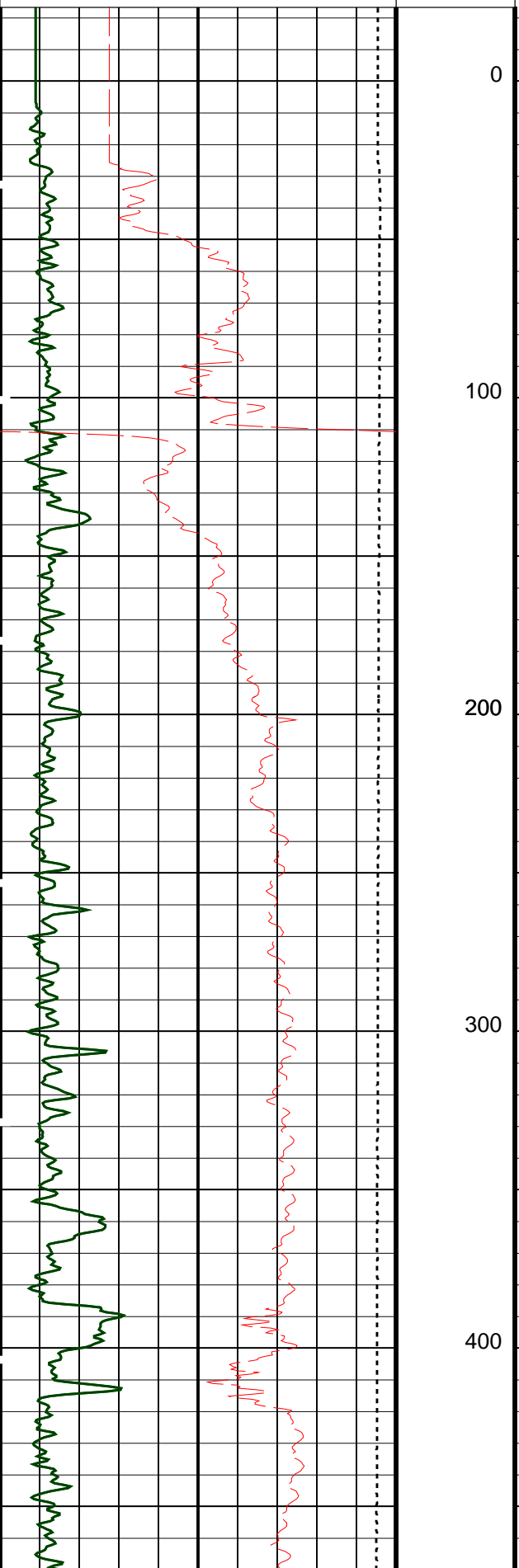
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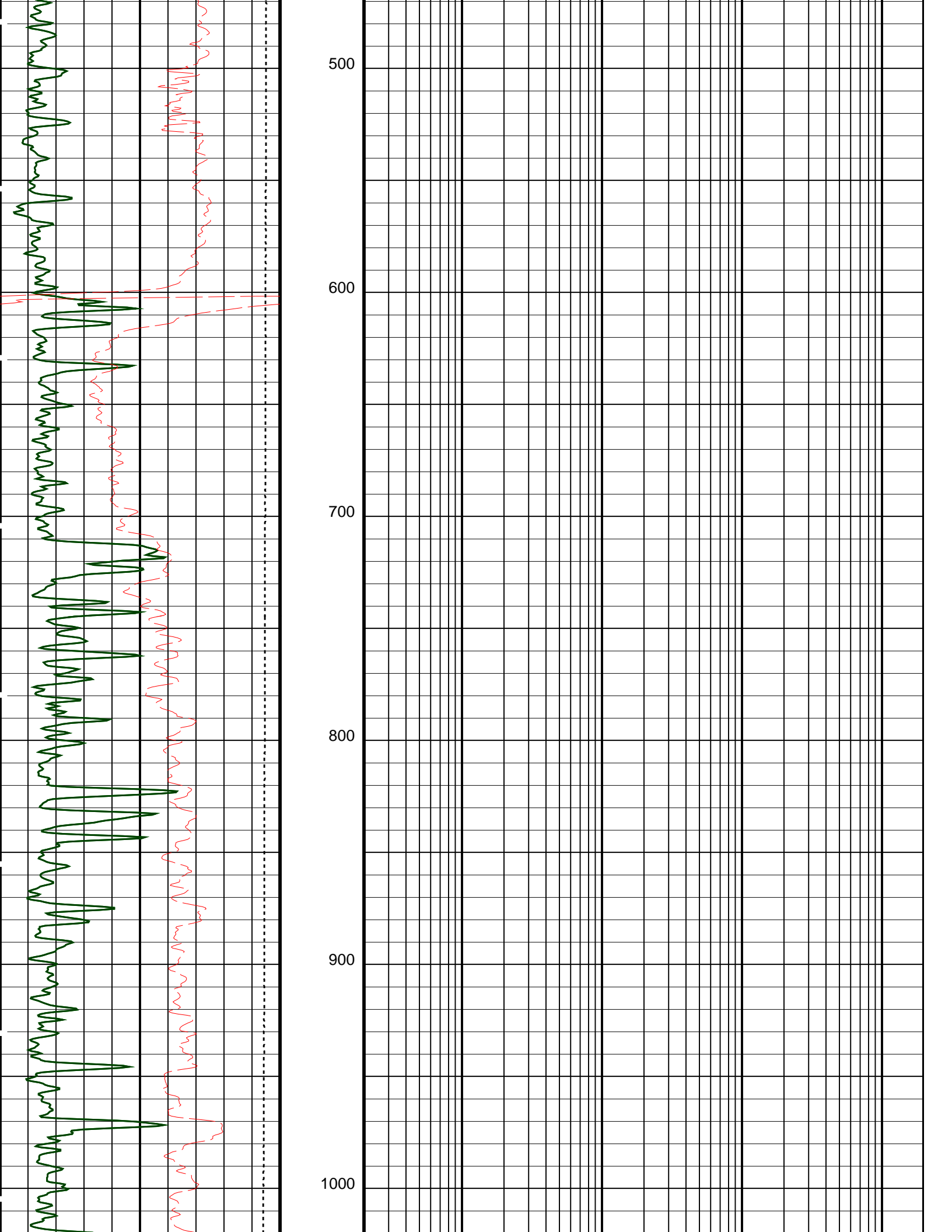
File: Cam\_CommaRow(OP\_EDTC)

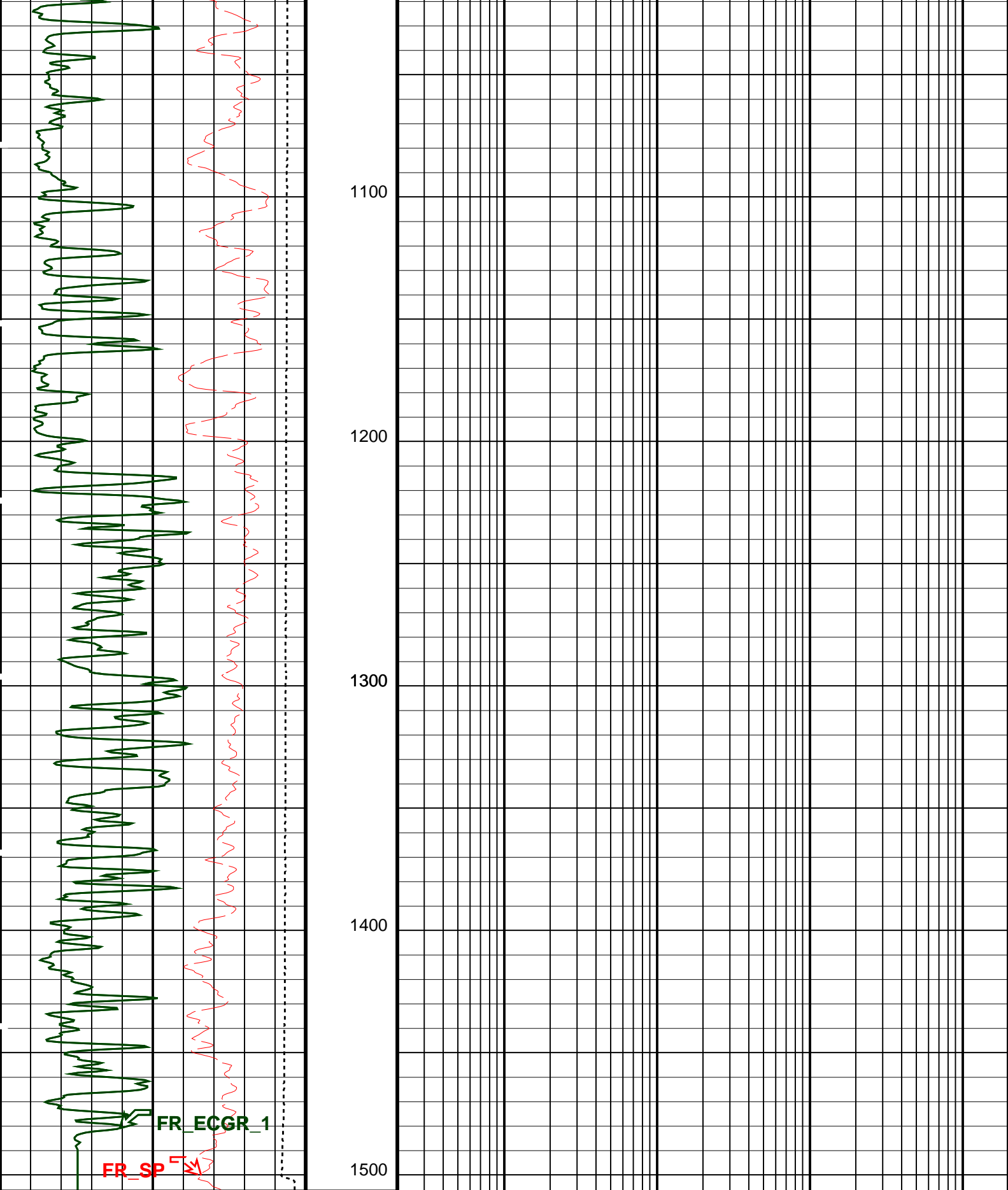
Env. Corr. GammaRay (GR\_EDTC)  
(GAPI) 0 200

SP (SP)  
(MV) -60 40

Stuck  
Stretch  
(STIT)  
0 (F) 50







-60	SP (SP) (MV)	40	Stuck Stretch (STIT) 0 (F) 50
0	Env. Corr. GammaRay (GR_EDTC) (GAPI)	200	

Tension (TENS) 10000 (LBF)	0
GR > 200 From LHT1 to ECGR 1	
GR > 400 From LHT1 to ECGR 2	

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
SPNV	HILTB-FTB: High resolution Integrated Logging Tool-DTS SP Next Value	0 MV
	STI: Stuck Tool Indicator	
LBFR	Trigger for MAXIS First Reading Label	TDL
STKT	STI Stuck Threshold	2.5 FT
TDD	Total Depth - Driller	1528.00 FT
TDL	Total Depth - Logger	1500.00 FT
	System and Miscellaneous	
DO	Depth Offset for Playback	0.0 FT
PP	Playback Processing	NORMAL

Format: AIT2 Vertical Scale: 2" per 100' Graphics File Created: 01-Sep-2011 22:21

OP System Version: 19C0-187

HILTB-FTB 19C0-187 EDTC-B 19C0-187

Input DLIS Files

DEFAULT AIT\_TLD\_MCFL\_CNL\_146LUP FN:222 PRODUCER 01-Sep-2011 21:56 1506.0 FT 1.0 FT

Output DLIS Files

DEFAULT AIT\_TLD\_MCFL\_CNL\_148PUP FN:226 PRODUCER 01-Sep-2011 22:21  
RTB AIT\_TLD\_MCFL\_CNL\_148PUP FN:227 PRODUCER 01-Sep-2011 22:21

Schlumberger

MAIN 5"

MAXIS Field Log

Input DLIS Files

DEFAULT AIT\_TLD\_MCFL\_CNL\_146LUP FN:222 PRODUCER 01-Sep-2011 21:56 1506.0 FT 1.0 FT

Output DLIS Files

DEFAULT AIT\_TLD\_MCFL\_CNL\_148PUP FN:226 PRODUCER 01-Sep-2011 22:21 1506.0 FT -23.5 FT  
RTB AIT\_TLD\_MCFL\_CNL\_148PUP FN:227 PRODUCER 01-Sep-2011 22:21 1506.0 FT -23.5 FT

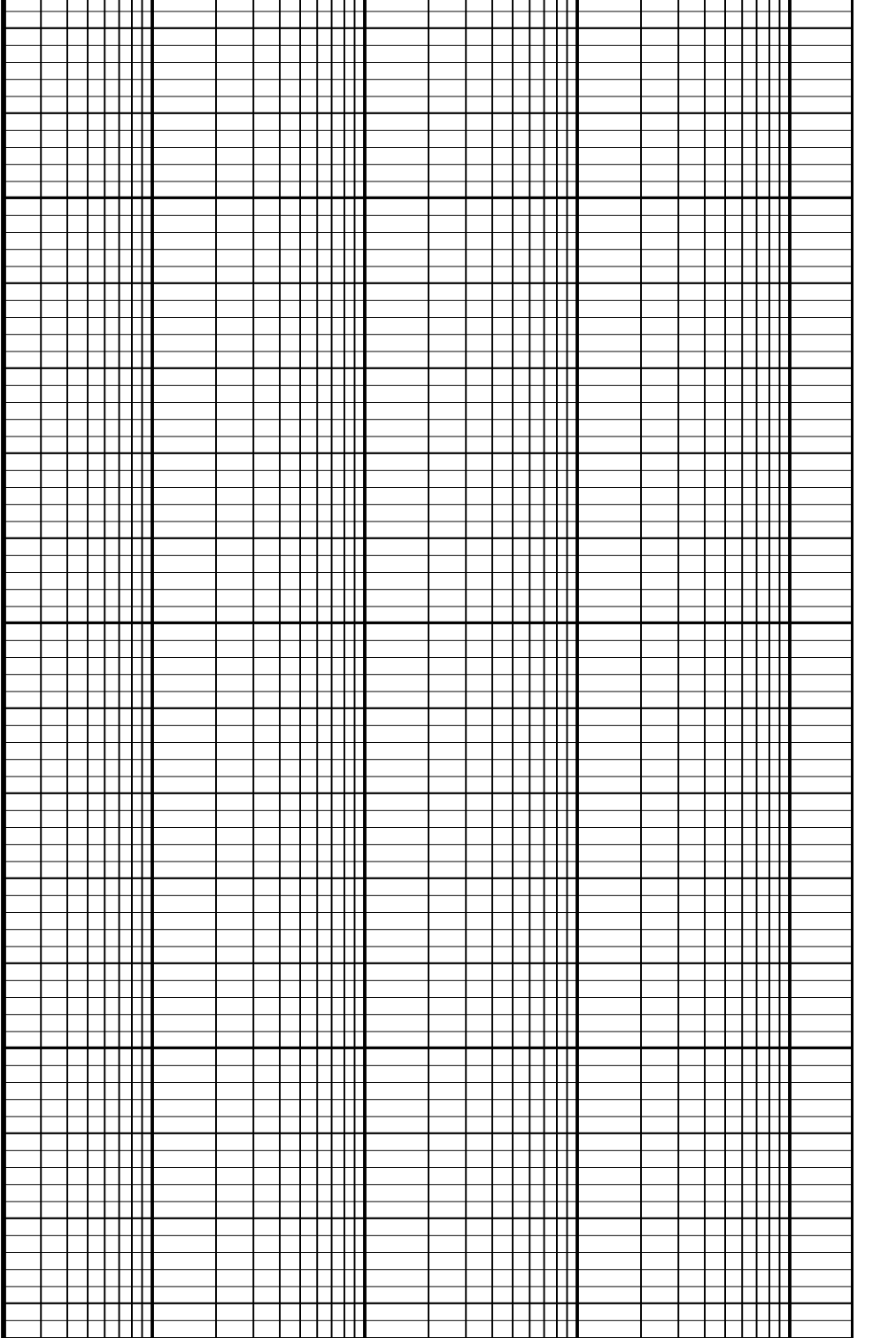
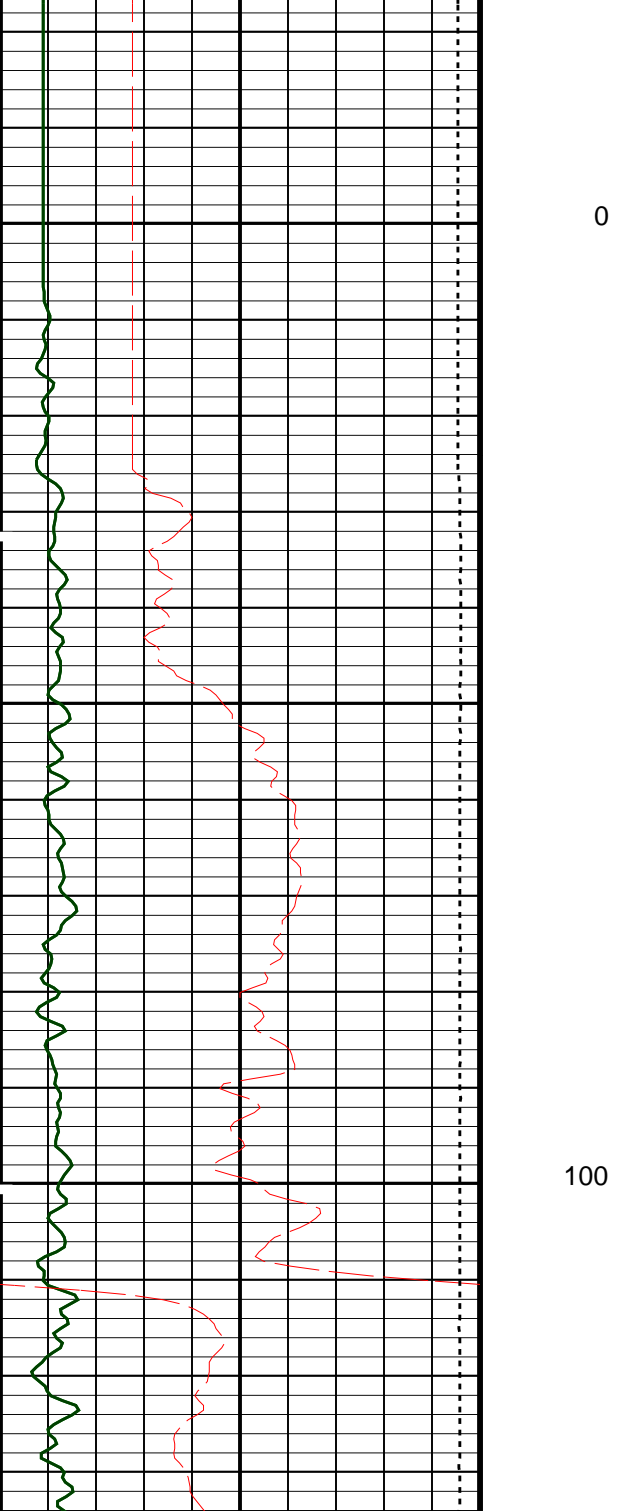
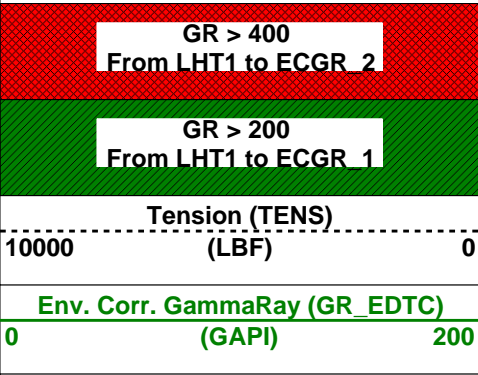
OP System Version: 19C0-187

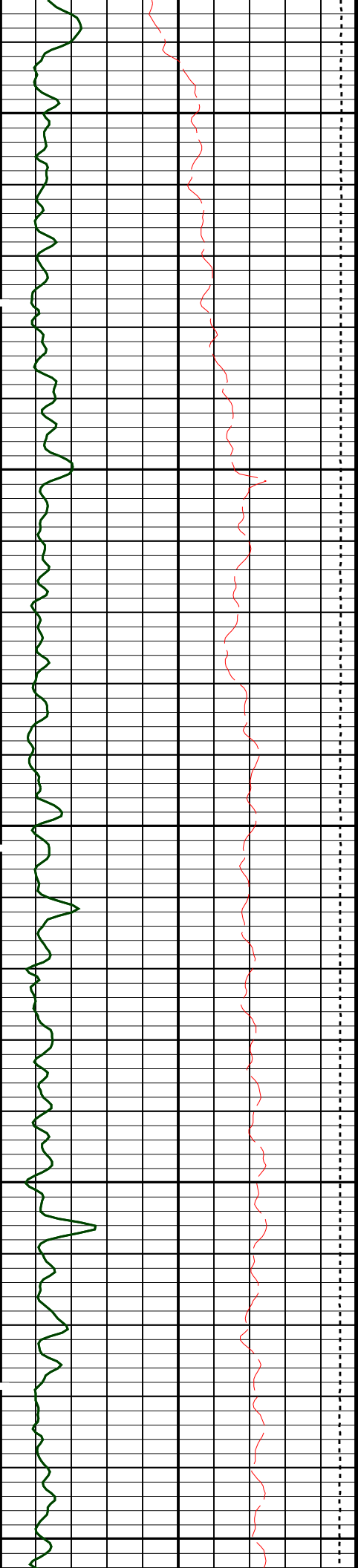
HILTB-FTB 19C0-187 EDTC-B 19C0-187



PIP SUMMARY

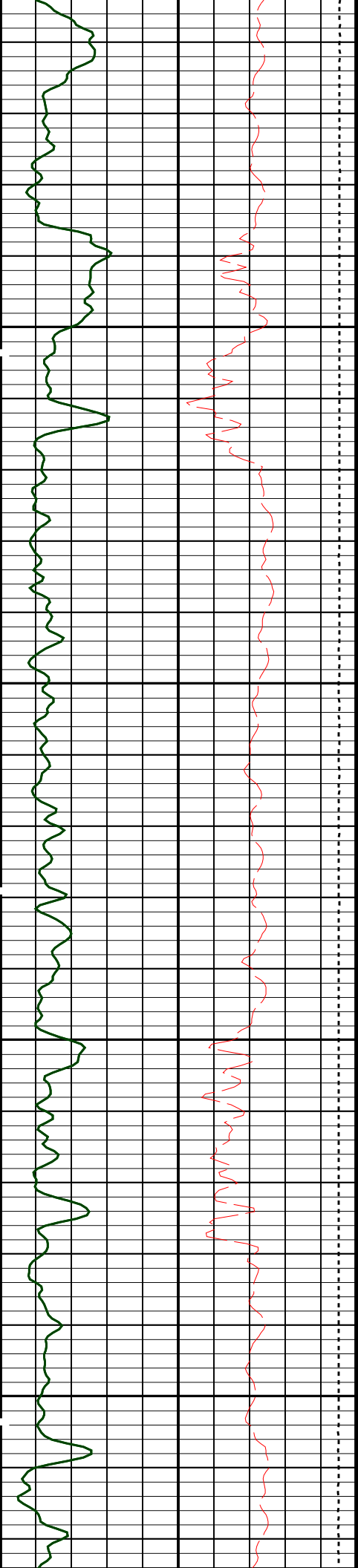
Time Mark Every 60 S





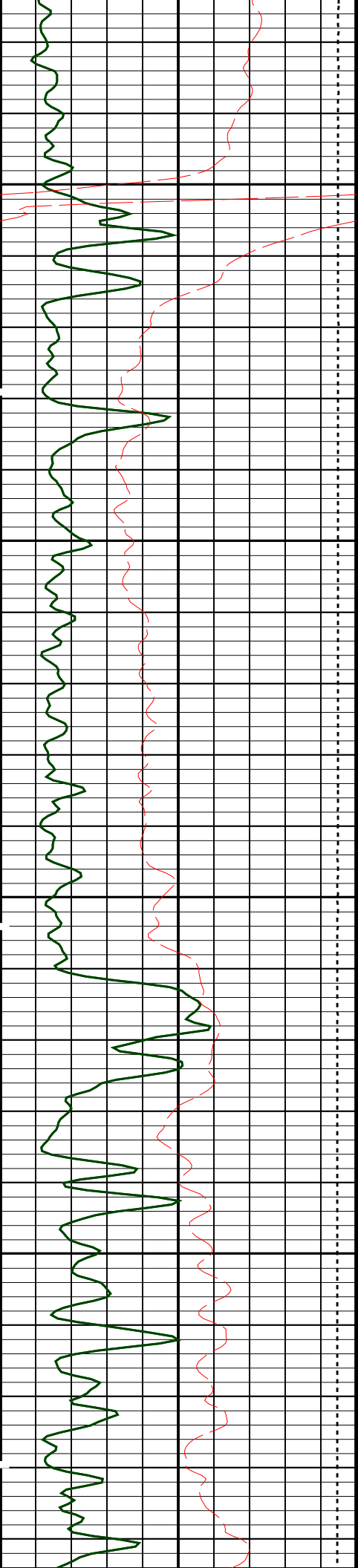
200

300



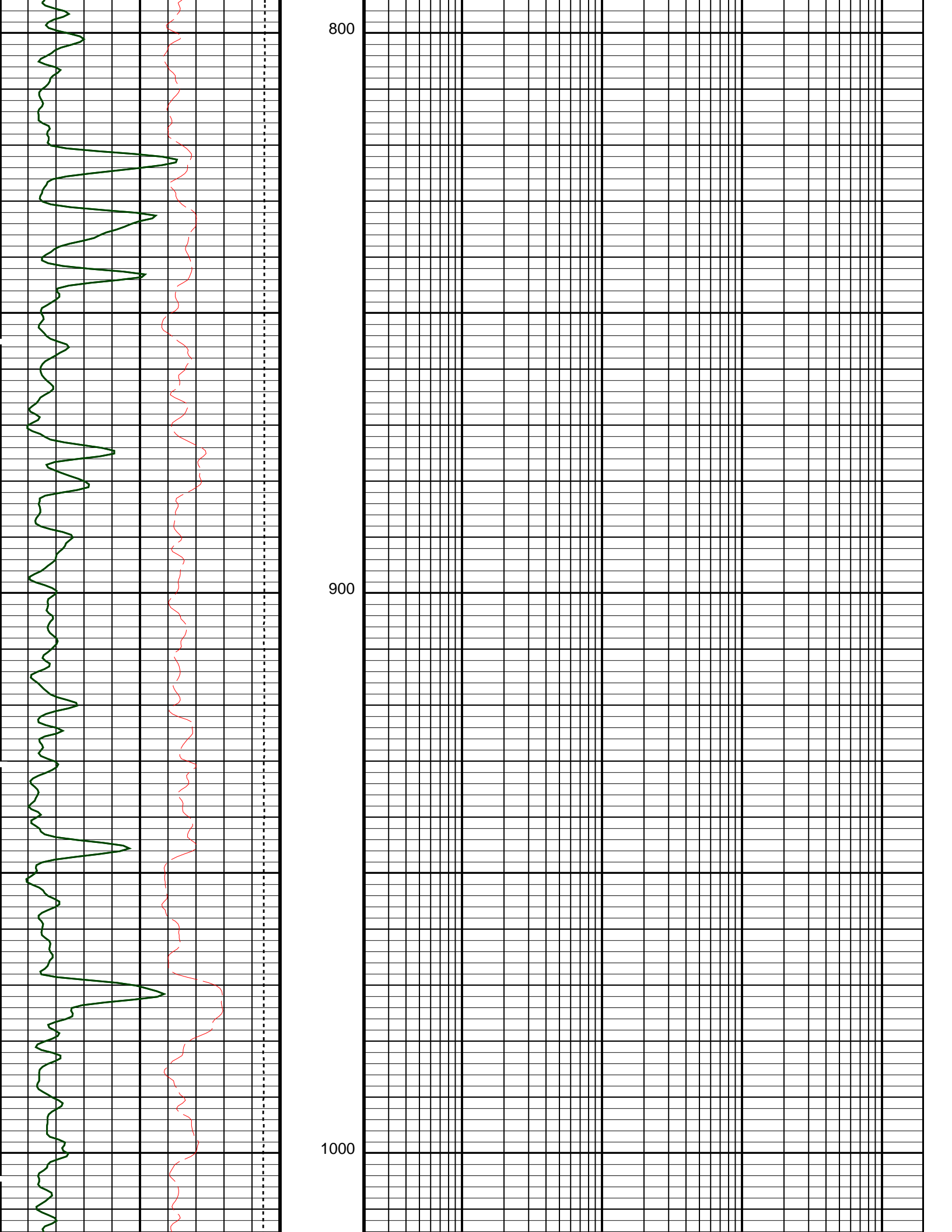
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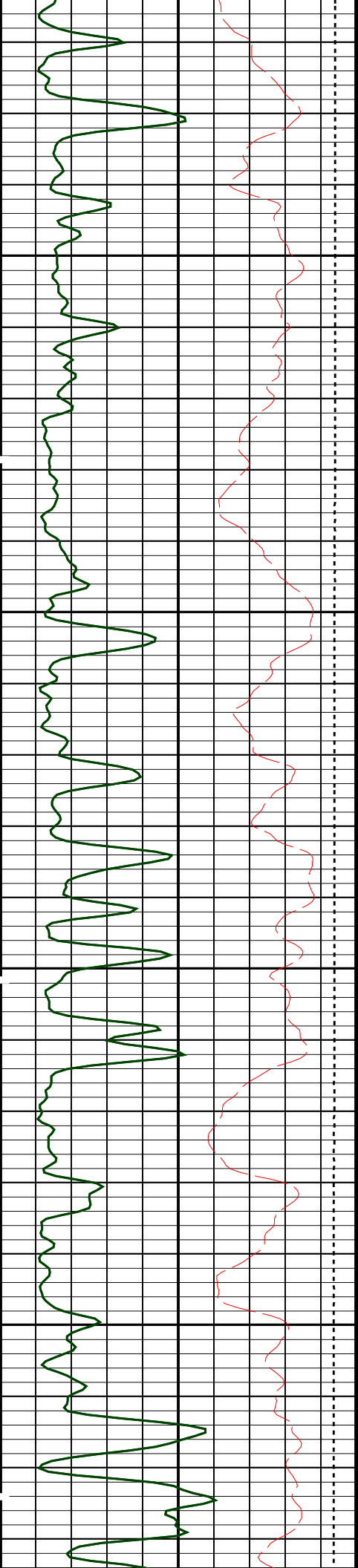
500



600

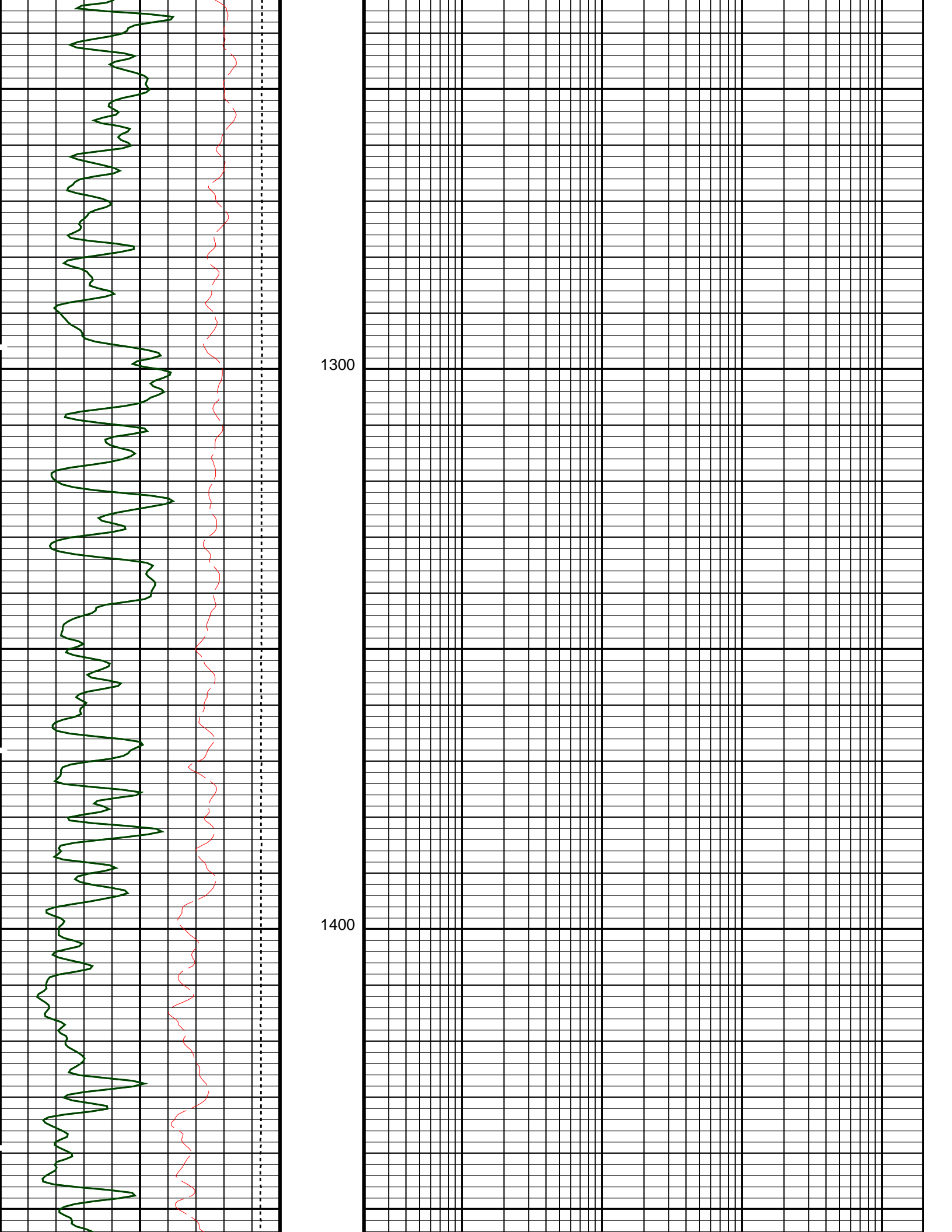
700

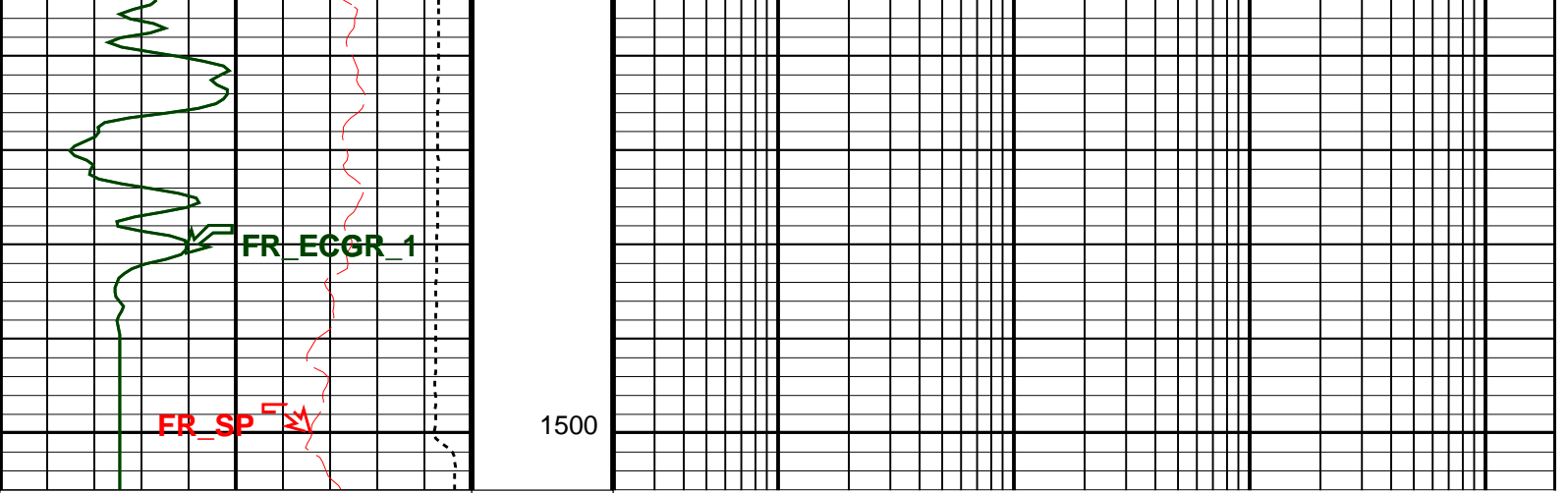




1100

1200





SP (SP) (MV)	-60	40	Stuck Stretch (STIT)	0	(F)	50
Env. Corr. GammaRay (GR_EDTC) (GAPI)	0	200				
Tension (TENS) (LBF)	10000	0				
GR > 200 From LHT1 to ECGR 1						
GR > 400 From LHT1 to ECGR 2						

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value	
HILTB-FTB: High resolution Integrated Logging Tool-DTS			
AHAPL	Array Induction Answer Product Level(Depth Log/View only)	3_BholeCorr_BasicLogs_Radial_Processing	
AHBHM	Array Induction Borehole Correction Mode	0_ComputeMudResistivity	
AHBHV	Array Induction Borehole Correction Code Version Number	900	
AHBLM	Array Induction Basic Logs Mode	6_One_Two_and_Four	
AHBLV	Array Induction Basic Logs Code Version Number	223	
AHCDE	Array Induction Casing Detection Enable	Yes	
AHCEN	Array Induction Tool Centering Flag (in Borehole)	Eccentered	
AHDITM	Array Induction Desired Tool Mode	0x00_Log_000	
AHEBC	Array Induction Enable Borehole Correction	Yes	
AHEBL	Array Induction Enable Basic Logs	Yes	
AHERP	Array Induction Enable Radial Processing	Yes	
AHETP	Array Induction Enable Sonde Error Temp&Pres Corr	Yes	
AHFRSV	Array Induction Response Set Version for Four ft Resolution	41.70.24.20	
AHIGS	Array Induction Select Akima Interpolation Gating	On	
AHLNV	Array Induction Log Not Valid Flag	Log_Valid-No_Default_Parameters	
AHMRD	Array Induction Mud Resistivity Calibration Depth	0	FT
AHMRF	Array Induction Mud Resistivity Factor	1	
AHORSV	Array Induction Response Set Version for One ft Resolution	41.70.24.20	
AHRFV	Array Induction Radial Profiling Code Version Number	701	
AHRPM	Array Induction Radial Processing Mode	1_Two	
AHRPV	Array Induction Radial Parametrization Code Version Number	232	
AHSTA	Array Induction Tool Standoff	1.5	IN
AHTNO	Array Induction Tool Serial Number	266	
AHTRSV	Array Induction Response Set Version for Two ft Resolution	41.70.24.20	
AHTSE	Array Induction Temperature Selection (Sonde Error Correction)	Internal	
AHTTY	Array Induction Tool Type (of acquired data)	HAIT	
AHULV	Array Induction User Level Control	Normal	
ARTS	AIT Rt Selection (for ALLRES computation)	AITH_TwoResA90	
BHFL_TLD	HILT Nuclear Mud Base	WATER	
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	67.7	DEGF
EXSICL	External Shale Indicator Clean Value	20	
EXSISH	External Shale Indicator Shale Value	150	



FEXP	Form Factor Exponent	2	
FNUM	Form Factor Numerator	1	
FPHI	Form Factor Porosity Source	DPHZ	
GCSE	Generalized Caliper Selection	BS	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.01	DF/F
GRSE	Generalized Mud Resistivity Selection	AITH_RESIST	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
HDCOD	HILT Density Coal detection	2	G/C3
HDSAD	HILT Density Salt detection	2.1	G/C3
HILT_GAS_DENSITY	HILT Gas Downhole Density	0	G/C3
HILT_GAS_OPTION	HILT Gas Computation Option	OFF	
HNCOD	HILT Neutron Coal detection	45	PU
HNSAD	HILT Neutron Salt detection	5	PU
HPHIECUT	HILT effective Porosity Cutoff	5	PU
HSIS	HILT Shale Indicator Selection	GR	
HSWCUT	HILT Water Saturation from AITH cutoff	50	%
ISSBAR	Barite Mud Switch	NOBARITE	
MATR	Rock Matrix for Neutron Porosity Corrections	SANDSTONE	
NMT	HILT Nuclear Mud Type	NOBARITE	
PHIMAX	HILT max porosity	35	PU
RTCO	RTCO - Rt Invasion Correction	YES	
SEXP_HILT	HILT Saturation Exponent	2	
SHT	Surface Hole Temperature	65	DEGF
SPNV	SP Next Value	0	MV
EDTC-B: Enhanced DTS Cartridge			
BHFL	Borehole Fluid Type	WATER	
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	67.7	DEGF
BSCO	Borehole Salinity Correction Option	NO	
CCCO	Casing & Cement Thickness Correction Option	NO	
DPPM	Density Porosity Processing Mode	HIRS	
FSAL	Formation Salinity	-50000	PPM
FSCO	Formation Salinity Correction Option	NO	
GCSE	Generalized Caliper Selection	BS	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.01	DF/F
GRSE	Generalized Mud Resistivity Selection	AITH_RESIST	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
HSCO	Hole Size Correction Option	YES	
ISSBAR	Barite Mud Switch	NOBARITE	
ISSBAR_EDTC	Nuclear Mud Type	NOBARITE	
MATR	Rock Matrix for Neutron Porosity Corrections	SANDSTONE	
MCCO	Mud Cake Correction Option	NO	
MCOR	Mud Correction	NATU	
MWCO	Mud Weight Correction Option	NO	
PTCO	Pressure/Temperature Correction Option	NO	
SDAT	Standoff Data Source	SOCN	
SHT	Surface Hole Temperature	65	DEGF
SOCN	Standoff Distance	0.125	IN
SOCO	Standoff Correction Option	NO	
TPOS_EDTC	EDTC Tool Centered/Eccentered	Eccentered	
U-ETELM_EDTS	Telemetry Mode for eWAFE	Standard_EDTS	
U-TELM_EDTS	Telemetry Mode for WAFE	Standard_EDTS	
STI: Stuck Tool Indicator			
LBFR	Trigger for MAXIS First Reading Label	TDL	
STKT	STI Stuck Threshold	2.5	FT
TDD	Total Depth - Driller	1528.00	FT
TDL	Total Depth - Logger	1500.00	FT
ALLRES: Basic Resistivity Transforms			
ARTS	AIT Rt Selection (for ALLRES computation)	AITH_TwoResA90	
RTCO	RTCO - Rt Invasion Correction	YES	
System and Miscellaneous			
ALTDCHAN	Name of alternate depth channel	SpeedCorrectedDepth	
BS	Bit Size	12.250	IN
BSAL	Borehole Salinity	120.00	PPM
CSIZ	Current Casing Size	13.375	IN
CWEI	Casing Weight	48.00	LB/F
DFD	Drilling Fluid Density	9.30	LB/G
DO	Depth Offset for Playback	0.0	FT
FLEV	Fluid Level	0.00	FT
MST	Mud Sample Temperature	76.60	DEGF
PBVSADP	Use alternate depth channel for playback	NO	
PP	Playback Processing	NORMAL	
RMFS	Resistivity of Mud Filtrate Sample	5.0175	OHMM
RW	Resistivity of Connate Water	1.0000	OHMM
TD	Total Depth	1500	FT
TWS	Temperature of Connate Water Sample	100.00	DEGF

Format: AIT5 Vertical Scale: 5" per 100'

Graphics File Created: 01-Sep-2011 22:21

## OP System Version: 19C0-187

Input DLIS Files						
DEFAULT	AIT_TLD_MCFL_CNL_146LUP	FN:222	PRODUCER	01-Sep-2011 21:56	1506.0 FT	1.0 FT

Output DLIS Files						
DEFAULT	AIT_TLD_MCFL_CNL_148PUP	FN:226	PRODUCER	01-Sep-2011 22:21		
RTB	AIT_TLD_MCFL_CNL_148PUP	FN:227	PRODUCER	01-Sep-2011 22:21		



# REPEAT SECTION

MAXIS Field Log

Input DLIS Files						
DEFAULT	AIT_TLD_MCFL_CNL_144LUP	FN:219	PRODUCER	01-Sep-2011 21:49	1506.0 FT	1151.5 FT

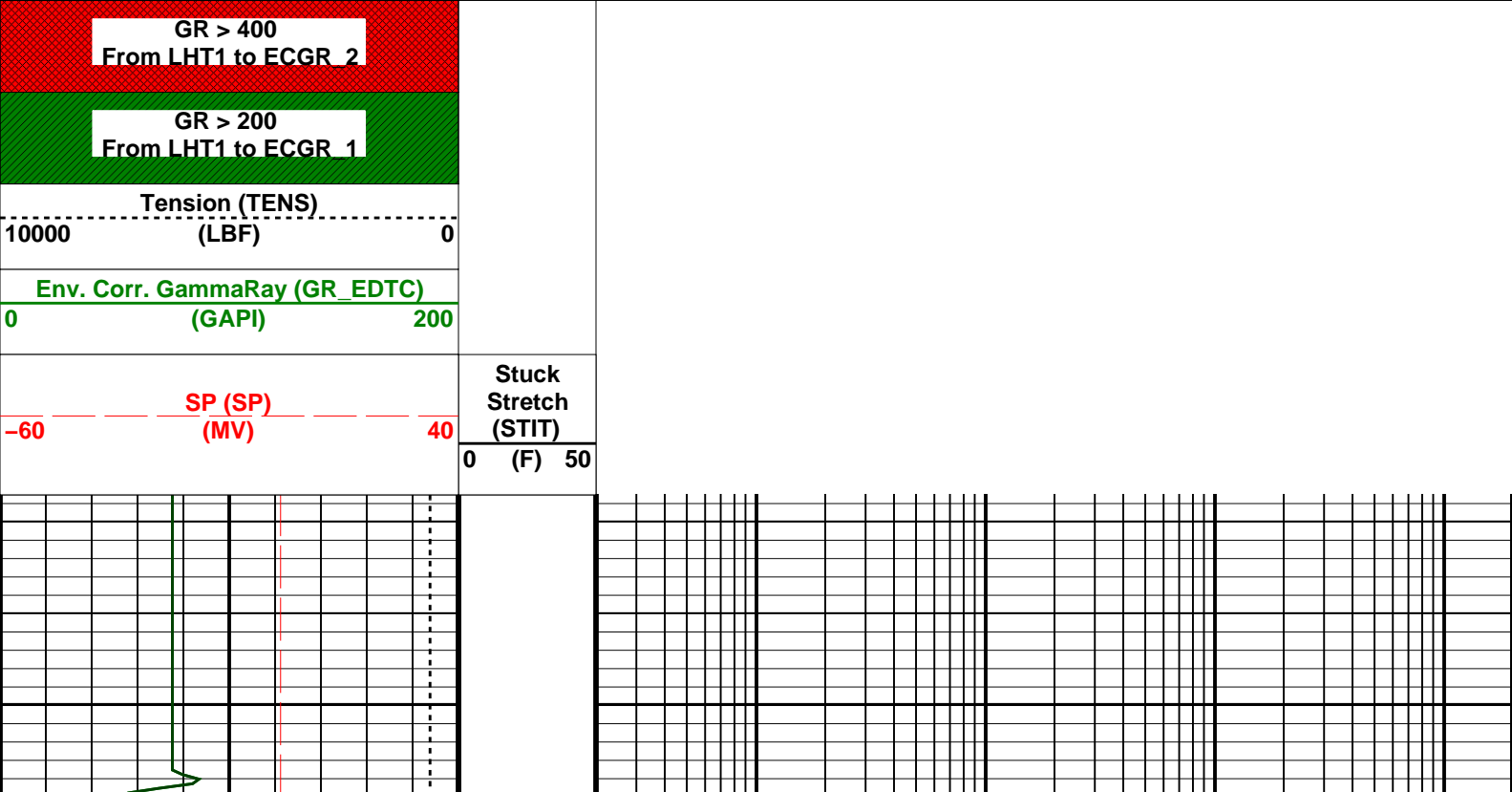
Output DLIS Files						
DEFAULT	AIT_TLD_MCFL_CNL_147PUP	FN:224	PRODUCER	01-Sep-2011 22:20	1506.0 FT	1127.2 FT
RTB	AIT_TLD_MCFL_CNL_147PUP	FN:225	PRODUCER	01-Sep-2011 22:21	1506.0 FT	1127.1 FT

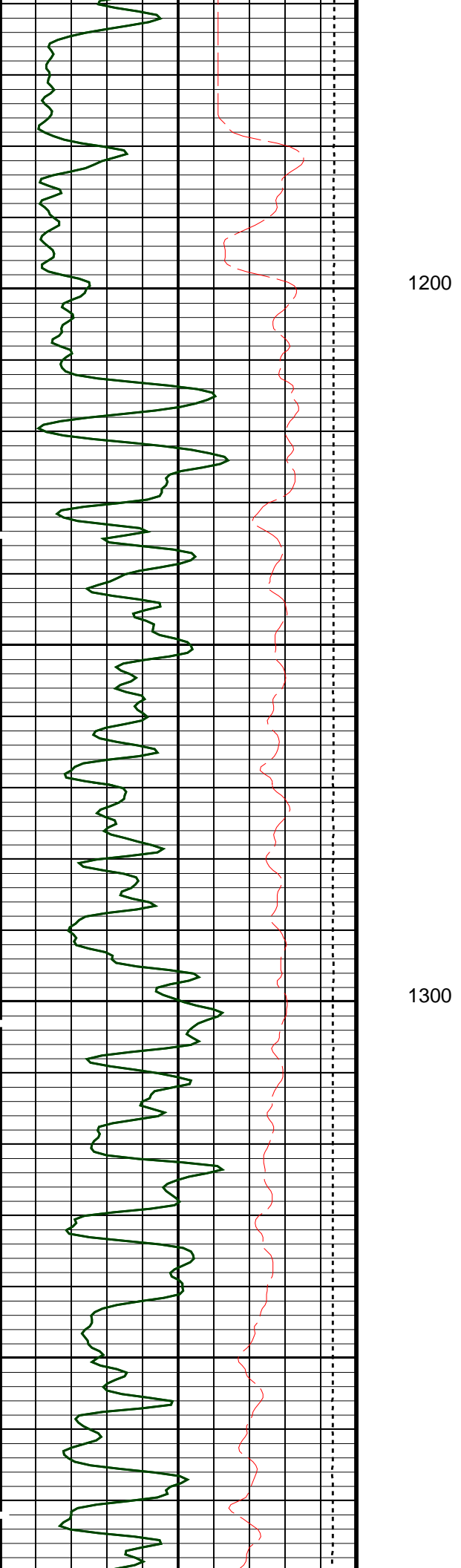
## OP System Version: 19C0-187

HILTB-FTB	19C0-187	EDTC-B	19C0-187
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### PIP SUMMARY

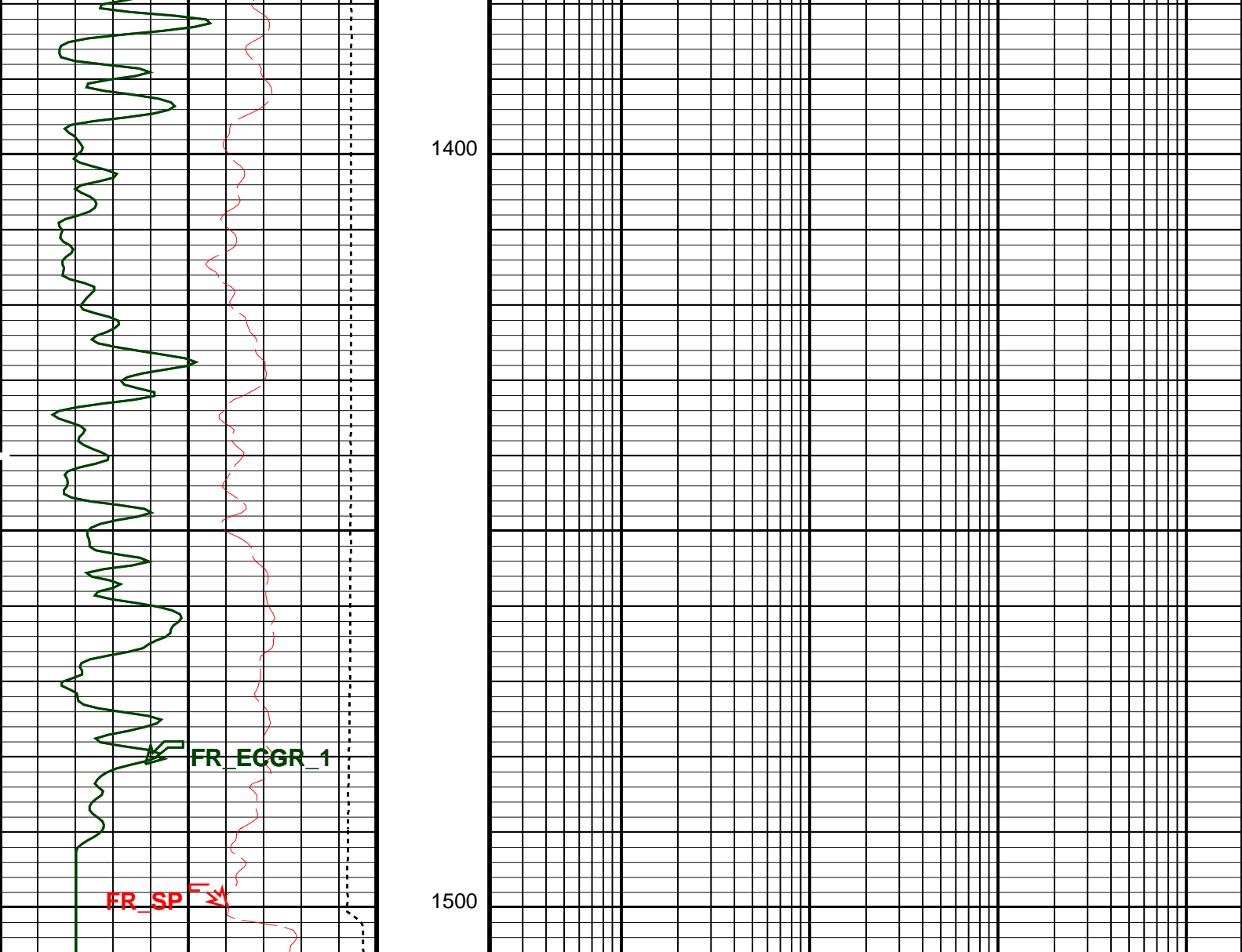
Time Mark Every 60 S





1200

1300



-60	SP (SP) (MV)	40	Stuck Stretch (STIT) 0 (F) 50
Env. Corr. GammaRay (GR_EDTC) (GAPI)			
0		200	
Tension (TENS) (LBF)			
10000		0	
GR > 200 From LHT1 to ECGR 1			
GR > 400 From LHT1 to ECGR 2			

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
HILTB-FTB: High resolution Integrated Logging Tool-DTS		
AHAPL	Array Induction Answer Product Level(Depth Log/View only)	3_BholeCorr_BasicLogs_Radial_Processing
AHBHM	Array Induction Borehole Correction Mode	0_ComputeMudResistivity
AHBHV	Array Induction Borehole Correction Code Version Number	900
AHBLM	Array Induction Basic Logs Mode	6_One_Two_and_Four
AHBLV	Array Induction Basic Logs Code Version Number	223

AHBLV	Array Induction Basic Logs Code Version Number	Z23	
AHCADE	Array Induction Casing Detection Enable	Yes	
AHCEN	Array Induction Tool Centering Flag (in Borehole)	Eccentered	
AHDITM	Array Induction Desired Tool Mode	0x00_Log_000	
AHEBC	Array Induction Enable Borehole Correction	Yes	
AHEBL	Array Induction Enable Basic Logs	Yes	
AHERP	Array Induction Enable Radial Processing	Yes	
AHETP	Array Induction Enable Sonde Error Temp&Pres Corr	Yes	
AHFRSV	Array Induction Response Set Version for Four ft Resolution	41.70.24.20	
AHIGS	Array Induction Select Akima Interpolation Gating	On	
AHLNV	Array Induction Log Not Valid Flag	Log_Valid-No_Default_Parameters	
AHMRD	Array Induction Mud Resistivity Calibration Depth	0	FT
AHMRF	Array Induction Mud Resistivity Factor	1	
AHORSV	Array Induction Response Set Version for One ft Resolution	41.70.24.20	
AHRFV	Array Induction Radial Profiling Code Version Number	701	
AHRPM	Array Induction Radial Processing Mode	1_Two	
AHRPV	Array Induction Radial Parametrization Code Version Number	232	
AHSTA	Array Induction Tool Standoff	1.5	IN
AHTNO	Array Induction Tool Serial Number	266	
AHTRSV	Array Induction Response Set Version for Two ft Resolution	41.70.24.20	
AHTSE	Array Induction Temperature Selection (Sonde Error Correction)	Internal	
AHTTY	Array Induction Tool Type (of acquired data)	HAIT	
AHULV	Array Induction User Level Control	Normal	
ARTS	AIT Rt Selection (for ALLRES computation)	AITH_TwoResA90	
BHFL_TLD	HILT Nuclear Mud Base	WATER	
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	67.7	DEGF
EXSICL	External Shale Indicator Clean Value	20	
EXSISH	External Shale Indicator Shale Value	150	
FEXP	Form Factor Exponent	2	
FNUM	Form Factor Numerator	1	
FPHI	Form Factor Porosity Source	DPHZ	
GCSE	Generalized Caliper Selection	BS	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.01	DF/F
GRSE	Generalized Mud Resistivity Selection	AITH_RESIST	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
HDCOD	HILT Density Coal detection	2	G/C3
HDSAD	HILT Density Salt detection	2.1	G/C3
HILT_GAS_DENSITY	HILT Gas Downhole Density	0	G/C3
HILT_GAS_OPTION	HILT Gas Computation Option	OFF	
HNCOD	HILT Neutron Coal detection	45	PU
HNSAD	HILT Neutron Salt detection	5	PU
HPHIECUT	HILT effective Porosity Cutoff	5	PU
HSIS	HILT Shale Indicator Selection	GR	
HSWCUT	HILT Water Saturation from AITH cutoff	50	%
ISSBAR	Barite Mud Switch	NOBARITE	
MATR	Rock Matrix for Neutron Porosity Corrections	SANDSTONE	
NMT	HILT Nuclear Mud Type	NOBARITE	
PHIMAX	HILT max porosity	35	PU
RTCO	RTCO - Rt Invasion Correction	YES	
SEXP_HILT	HILT Saturation Exponent	2	
SHT	Surface Hole Temperature	65	DEGF
SPNV	SP Next Value	0	MV
<b>EDTC-B: Enhanced DTS Cartridge</b>			
BHFL	Borehole Fluid Type	WATER	
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	67.7	DEGF
BSCO	Borehole Salinity Correction Option	NO	
CCCO	Casing & Cement Thickness Correction Option	NO	
DPPM	Density Porosity Processing Mode	HIRS	
FSAL	Formation Salinity	-50000	PPM
FSCO	Formation Salinity Correction Option	NO	
GCSE	Generalized Caliper Selection	BS	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.01	DF/F
GRSE	Generalized Mud Resistivity Selection	AITH_RESIST	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
HSCO	Hole Size Correction Option	YES	
ISSBAR	Barite Mud Switch	NOBARITE	
ISSBAR_EDTC	Nuclear Mud Type	NOBARITE	
MATR	Rock Matrix for Neutron Porosity Corrections	SANDSTONE	
MCCO	Mud Cake Correction Option	NO	
MCOR	Mud Correction	NATU	
MWCO	Mud Weight Correction Option	NO	
PTCO	Pressure/Temperature Correction Option	NO	
SDAT	Standoff Data Source	SOCN	
SHT	Surface Hole Temperature	65	DEGF
SOCN	Standoff Distance	0.125	IN
SOCO	Standoff Correction Option	NO	
TPOS_EDTC	EDTC Tool Centered/Eccentered	Eccentered	
U-ETELM_EDTS	Telemetry Mode for eWAFE	Standard_EDTS	
U-TELM_EDTS	Telemetry Mode for WAFE	Standard_EDTS	
<b>STI: Stuck Tool Indicator</b>			
LBFR	Trigger for MAXIS First Reading Label	TDL	

STKT	STI Stuck Threshold	2.5	FT
TDD	Total Depth – Driller	1528.00	FT
TDL	Total Depth – Logger	1500.00	FT
<b>ALLRES: Basic Resistivity Transforms</b>			
ARTS	AIT Rt Selection (for ALLRES computation)	AITH_TwoResA90	
RTCO	RTCO – Rt Invasion Correction	YES	
<b>System and Miscellaneous</b>			
ALTDPCCHAN	Name of alternate depth channel	SpeedCorrectedDepth	
BS	Bit Size	12.250	IN
BSAL	Borehole Salinity	120.00	PPM
CSIZ	Current Casing Size	13.375	IN
CWEI	Casing Weight	48.00	LB/F
DFD	Drilling Fluid Density	9.30	LB/G
DO	Depth Offset for Playback	0.0	FT
FLEV	Fluid Level	0.00	FT
MST	Mud Sample Temperature	76.60	DEGF
PBVSADP	Use alternate depth channel for playback	NO	
PP	Playback Processing	NORMAL	
RMFS	Resistivity of Mud Filtrate Sample	5.0175	OHMM
RW	Resistivity of Connate Water	1.0000	OHMM
TD	Total Depth	1500	FT
TWS	Temperature of Connate Water Sample	100.00	DEGF

Format: AIT5    Vertical Scale: 5" per 100'    Graphics File Created: 01-Sep-2011 22:21

## OP System Version: 19C0-187

HILTB-FTB	19C0-187	EDTC-B	19C0-187
<b>Input DLIS Files</b>			
DEFAULT	AIT_TLD_MCFL_CNL_144LUP	FN:219    PRODUCER	01-Sep-2011 21:49    1506.0 FT    1151.5 FT
<b>Output DLIS Files</b>			
DEFAULT	AIT_TLD_MCFL_CNL_147PUP	FN:224    PRODUCER	01-Sep-2011 22:20
RTB	AIT_TLD_MCFL_CNL_147PUP	FN:225    PRODUCER	01-Sep-2011 22:21



# CALIBRATIONS

MAXIS Field Log

### Calibration and Check Summary

Measurement	Nominal	Master	Before	After	Change	Limit	Units
High resolution Integrated Logging Tool-DTS Wellsite Calibration – Electronics Calibration Check – Thru Cal Mag. & Phase							
Master: 6-Aug-2011 16:30    Before: 31-Aug-2011 0:06							
Thru Cal Magnitude – 0	0	0.6173	0.6206	N/A	N/A	N/A	V
Thru Cal Magnitude – 1	0	1.268	1.275	N/A	N/A	N/A	V
Thru Cal Magnitude – 2	0	0.6304	0.6336	N/A	N/A	N/A	V
Thru Cal Magnitude – 3	0	0.7095	0.7133	N/A	N/A	N/A	V
Thru Cal Magnitude – 4	0	1.338	1.346	N/A	N/A	N/A	V
Thru Cal Magnitude – 5	0	1.939	1.950	N/A	N/A	N/A	V
Thru Cal Magnitude – 6	0	1.942	1.954	N/A	N/A	N/A	V
Thru Cal Magnitude – 7	0	1.409	1.420	N/A	N/A	N/A	V
Phase – 0	0	56.89	57.26	N/A	N/A	N/A	DEG
Phase – 1	0	55.87	56.24	N/A	N/A	N/A	DEG
Phase – 2	0	52.18	52.55	N/A	N/A	N/A	DEG
Phase – 3	0	51.42	51.80	N/A	N/A	N/A	DEG
Phase – 4	0	45.13	45.52	N/A	N/A	N/A	DEG
Phase – 5	0	43.26	43.66	N/A	N/A	N/A	DEG
Phase – 6	0	43.23	43.63	N/A	N/A	N/A	DEG

Phase - 7 0 39.29 39.78 N/A N/A N/A DEG

High resolution Integrated Logging Tool-DTS Wellsite Calibration - Electronics Calibration Check - Auxilliary

Master: 6-Aug-2011 16:30 Before: 31-Aug-2011 0:06

Array Induction SPA Plus	990.5	992.2	992.3	N/A	N/A	N/A	MV
Array Induction SPA Zero	0	0.1089	0.1246	N/A	N/A	N/A	MV
Array Induction Temperature PI	0.9150	0.9198	0.9199	N/A	N/A	N/A	V
Array Induction Temperature Ze	0	0.0001174	0.0001156	N/A	N/A	N/A	V

High resolution Integrated Logging Tool-DTS Wellsite Calibration - Test Loop Gain Correction

Master: 6-Aug-2011 16:30

Test Loop Gain Magnitude - 0	0	1.013	N/A	N/A	N/A	N/A	V
Test Loop Gain Magnitude - 1	0	1.020	N/A	N/A	N/A	N/A	V
Test Loop Gain Magnitude - 2	0	1.017	N/A	N/A	N/A	N/A	V
Test Loop Gain Magnitude - 3	0	1.012	N/A	N/A	N/A	N/A	V
Test Loop Gain Magnitude - 4	0	0.9963	N/A	N/A	N/A	N/A	V
Test Loop Gain Magnitude - 5	0	0.9850	N/A	N/A	N/A	N/A	V
Test Loop Gain Magnitude - 6	0	0.9962	N/A	N/A	N/A	N/A	V
Test Loop Gain Magnitude - 7	0	1.004	N/A	N/A	N/A	N/A	V
Phase - 0	0	0.4261	N/A	N/A	N/A	N/A	DEG
Phase - 1	0	0.5058	N/A	N/A	N/A	N/A	DEG
Phase - 2	0	-0.03668	N/A	N/A	N/A	N/A	DEG
Phase - 3	0	0.01138	N/A	N/A	N/A	N/A	DEG
Phase - 4	0	-0.08016	N/A	N/A	N/A	N/A	DEG
Phase - 5	0	-0.08056	N/A	N/A	N/A	N/A	DEG
Phase - 6	0	0.2283	N/A	N/A	N/A	N/A	DEG
Phase - 7	0	-0.1412	N/A	N/A	N/A	N/A	DEG

High resolution Integrated Logging Tool-DTS Wellsite Calibration - Sonde Error Correction

Master: 6-Aug-2011 16:30

R Sonde Error Correction - 0	0	-57.85	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Correction - 1	0	170.7	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Correction - 2	0	107.7	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Correction - 3	0	59.25	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Correction - 4	0	23.57	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Correction - 5	0	15.55	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Correction - 6	0	9.962	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Correction - 7	0	-0.2422	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Correction - 0	0	80.96	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Correction - 1	0	-89.23	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Correction - 2	0	70.54	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Correction - 3	0	115.8	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Correction - 4	0	8.618	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Correction - 5	0	8.733	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Correction - 6	0	2.435	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Correction - 7	0	-2.719	N/A	N/A	N/A	N/A	MM/M

High resolution Integrated Logging Tool-DTS Wellsite Calibration - Mud Gain Correction

Master: 6-Aug-2011 16:30

Coarse - Mag, Real, Imag - 0	0	1.003	N/A	N/A	N/A	N/A	
Coarse - Mag, Real, Imag - 1	0	1.003	N/A	N/A	N/A	N/A	
Coarse - Mag, Real, Imag - 2	0	1.003	N/A	N/A	N/A	N/A	
Fine - Mag, Real, Imag - 0	0	1.002	N/A	N/A	N/A	N/A	
Fine - Mag, Real, Imag - 1	0	1.002	N/A	N/A	N/A	N/A	
Fine - Mag, Real, Imag - 2	0	1.002	N/A	N/A	N/A	N/A	

Enhanced DTS Cartridge Wellsite Calibration - EDTC Accelerometer Calibration

Before: 31-Aug-2011 0:09

EDTC Z-Axis Acceleration	32.19	N/A	32.11	N/A	N/A	N/A	F/S2
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Enhanced DTS Cartridge Wellsite Calibration - Detector Calibration

Before: 29-Aug-2011 17:01

Gamma Ray (Jig - Bkg)	147.5	N/A	147.5	N/A	N/A	13.41	GAPI
Gamma Ray (Calibrated)	160.0	N/A	160.0	N/A	N/A	15.00	GAPI

High resolution Integrated Logging Tool-DTS / Equipment Identification

Primary Equipment:

Array Induction Tool - H	AIT - H
Rm/SP Bottom Nose	AHRM - A
Array Induction Sonde	AHIS - BA
HILT HTBC DTS mode	HTBC -
HTBC Communication Assembly DTS Mode	HMCA -

Auxiliary Equipment:

High resolution Integrated Logging Tool–DTS Wellsite Calibration							
Electronics Calibration Check – Thru Cal Mag. & Phase							
Idx	Phase	Value	Thru Cal Magnitude V	Nominal	Value	Phase DEG	Nominal
0	Master	0.6173		0.6050	56.89		71.00
	Before	0.6206			57.26		
1	Master	1.268		1.270	55.87		70.00
	Before	1.275			56.24		
2	Master	0.6304		0.6230	52.18		66.00
	Before	0.6336			52.55		
3	Master	0.7095		0.7040	51.42		65.00
	Before	0.7133			51.80		
4	Master	1.338		1.337	45.13		59.00
	Before	1.346			45.52		
5	Master	1.939		1.955	43.26		57.00
	Before	1.950			43.66		
6	Master	1.942		1.955	43.23		57.00
	Before	1.954			43.63		
7	Master	1.409		1.415	39.29		53.00
	Before	1.420			39.78		
		60.00 % (Minimum)	(Nominal)	140.0 % (Maximum)	Nom -60.0 (Minimum)	(Nominal)	Nom + 60.0 (Maximum)
Master: 6–Aug–2011 16:30				Before: 31–Aug–2011 0:06			

High resolution Integrated Logging Tool–DTS Wellsite Calibration							
Electronics Calibration Check – Auxilliary							
Phase	Array Induction SPA Plus MV	Value	Phase	Array Induction SPA Zero MV	Value		
Master		992.2	Master		0.1089		
Before		992.3	Before		0.1246		
941.0 (Minimum)		990.5 (Nominal)	1040 (Maximum)	-50.00 (Minimum)		0 (Nominal)	50.00 (Maximum)
Phase	Array Induction Temperature Plus V	Value	Phase	Array Induction Temperature Zero V	Value		
Master		0.9198	Master		0.0001174		
Before		0.9199	Before		0.0001156		
0.8700 (Minimum)		0.9150 (Nominal)	0.9600 (Maximum)	-0.05000 (Minimum)		0 (Nominal)	0.05000 (Maximum)
Master: 6–Aug–2011 16:30			Before: 31–Aug–2011 0:06				

High resolution Integrated Logging Tool–DTS Wellsite Calibration								
Test Loop Gain Correction								
Idx	Value	Test Loop Gain Magnitude V	Value	Phase DEG				
0	1.013		0.4261					
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)	-3.000 (Minimum)		0 (Nominal)	3.000 (Maximum)
1	1.020		0.5058					
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)	-3.000 (Minimum)		0 (Nominal)	3.000 (Maximum)
2	1.017		-0.03668					
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)	-3.000 (Minimum)		0 (Nominal)	3.000 (Maximum)
3	1.012		0.01138					
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)	-3.000 (Minimum)		0 (Nominal)	3.000 (Maximum)
4	0.9963		-0.08016					
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)	-3.000 (Minimum)		0 (Nominal)	3.000 (Maximum)



5	0.9850		-0.08056	
	0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)	-3.000 (Minimum)
				0 (Nominal)
				3.000 (Maximum)
6	0.9962		0.2283	
	0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)	-3.000 (Minimum)
				0 (Nominal)
				3.000 (Maximum)
7	1.004		-0.1412	
	0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)	-3.000 (Minimum)
				0 (Nominal)
				3.000 (Maximum)

Master: 6-Aug-2011 16:30

High resolution Integrated Logging Tool-DTS Wellsite Calibration							
Sonde Error Correction							
Idx	Value	R Sonde Error Correction MM/M			Value	X Sonde Error Correction MM/M	
0	-57.85				80.96		
		-231.0 (Minimum)	-56.00 (Nominal)	119.0 (Maximum)		-2250 (Minimum)	0 (Nominal)
							2250 (Maximum)
1	170.7				-89.23		
		114.0 (Minimum)	159.0 (Nominal)	204.0 (Maximum)		-625.0 (Minimum)	0 (Nominal)
							625.0 (Maximum)
2	107.7				70.54		
		66.00 (Minimum)	111.0 (Nominal)	156.0 (Maximum)		-350.0 (Minimum)	0 (Nominal)
							350.0 (Maximum)
3	59.25				115.8		
		39.00 (Minimum)	64.00 (Nominal)	89.00 (Maximum)		-250.0 (Minimum)	0 (Nominal)
							250.0 (Maximum)
4	23.57				8.618		
		15.00 (Minimum)	25.00 (Nominal)	35.00 (Maximum)		-63.00 (Minimum)	0 (Nominal)
							63.00 (Maximum)
5	15.55				8.733		
		4.000 (Minimum)	14.00 (Nominal)	24.00 (Maximum)		-50.00 (Minimum)	0 (Nominal)
							50.00 (Maximum)
6	9.962				2.435		
		5.000 (Minimum)	10.00 (Nominal)	15.00 (Maximum)		-30.00 (Minimum)	0 (Nominal)
							30.00 (Maximum)
7	-0.2422				-2.719		
		-5.000 (Minimum)	0 (Nominal)	5.000 (Maximum)		-30.00 (Minimum)	0 (Nominal)
							30.00 (Maximum)

Master: 6-Aug-2011 16:30

High resolution Integrated Logging Tool-DTS Wellsite Calibration							
Mud Gain Correction							
Idx	Value	Coarse - Mag, Real, Imag			Value	Fine - Mag, Real, Imag	
0	1.003				1.002		
		0.8000 (Minimum)	1.000 (Nominal)	1.200 (Maximum)		0.8000 (Minimum)	1.000 (Nominal)
							1.200 (Maximum)
1	1.003				1.002		
		0.8000 (Minimum)	1.000 (Nominal)	1.200 (Maximum)		0.8000 (Minimum)	1.000 (Nominal)
							1.200 (Maximum)
2	1.003				1.002		
		0.8000 (Minimum)	1.000 (Nominal)	1.200 (Maximum)		0.8000 (Minimum)	1.000 (Nominal)
							1.200 (Maximum)

Master: 6-Aug-2011 16:30

High resolution Integrated Logging Tool-DTS Master Calibration								
Electronics Calibration Check - Thru Cal Mag. & Phase								
Idx	Phase	Value	Thru Cal Magnitude V		Nominal	Value	Phase DEG	Nominal
0	Master	0.6173			0.6050	56.89		71.00
1	Master	1.268			1.270	55.87		70.00
2	Master	0.6304			0.6230	52.18		66.00
3	Master	0.7095			0.7040	51.42		65.00
4	Master	1.338			1.337	45.13		59.00
5	Master	1.939			1.955	43.26		57.00

6	Master	1.942		1.955	43.23		57.00
7	Master	1.409		1.415	39.29		53.00
		60.00 % (Minimum)	(Nominal)	140.0 % (Maximum)	Nom -60.00 (Minimum)	(Nominal)	Nom + 60.00 (Maximum)

Master: 6-Aug-2011 16:30

High resolution Integrated Logging Tool-DTS Master Calibration						
Electronics Calibration Check - Auxilliary						
Phase	Array Induction SPA Plus MV	Value	Phase	Array Induction SPA Zero MV	Value	
Master		992.2	Master		0.1089	
	941.0 (Minimum)	990.5 (Nominal)	1040 (Maximum)	-50.00 (Minimum)	0 (Nominal)	50.00 (Maximum)
Phase	Array Induction Temperature Plus V	Value	Phase	Array Induction Temperature Zero V	Value	
Master		0.9198	Master		0.0001174	
	0.8700 (Minimum)	0.9150 (Nominal)	0.9600 (Maximum)	-0.05000 (Minimum)	0 (Nominal)	0.05000 (Maximum)

Master: 6-Aug-2011 16:30

High resolution Integrated Logging Tool-DTS Master Calibration							
Test Loop Gain Correction							
Idx	Value	Test Loop Gain Magnitude V		Value	Phase DEG		
0	1.013			0.4261			
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)	-3.000 (Minimum)	0 (Nominal)	3.000 (Maximum)
1	1.020			0.5058			
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)	-3.000 (Minimum)	0 (Nominal)	3.000 (Maximum)
2	1.017			-0.03668			
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)	-3.000 (Minimum)	0 (Nominal)	3.000 (Maximum)
3	1.012			0.01138			
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)	-3.000 (Minimum)	0 (Nominal)	3.000 (Maximum)
4	0.9963			-0.08016			
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)	-3.000 (Minimum)	0 (Nominal)	3.000 (Maximum)
5	0.9850			-0.08056			
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)	-3.000 (Minimum)	0 (Nominal)	3.000 (Maximum)
6	0.9962			0.2283			
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)	-3.000 (Minimum)	0 (Nominal)	3.000 (Maximum)
7	1.004			-0.1412			
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)	-3.000 (Minimum)	0 (Nominal)	3.000 (Maximum)

Master: 6-Aug-2011 16:30

High resolution Integrated Logging Tool-DTS Master Calibration							
Sonde Error Correction							
Idx	Value	R Sonde Error Correction MM/M		Value	X Sonde Error Correction MM/M		
0	-57.85			80.96			
		-231.0 (Minimum)	-56.00 (Nominal)	119.0 (Maximum)	-2250 (Minimum)	0 (Nominal)	2250 (Maximum)
1	170.7			-89.23			
		114.0 (Minimum)	159.0 (Nominal)	204.0 (Maximum)	-625.0 (Minimum)	0 (Nominal)	625.0 (Maximum)
2	107.7			70.54			
		66.00 (Minimum)	111.0 (Nominal)	156.0 (Maximum)	-350.0 (Minimum)	0 (Nominal)	350.0 (Maximum)
3	59.25			115.8			
		39.00 (Minimum)	64.00 (Nominal)	89.00 (Maximum)	-250.0 (Minimum)	0 (Nominal)	250.0 (Maximum)
4	23.57			8.618			
		15.00 (Minimum)	25.00 (Nominal)	35.00 (Maximum)	-63.00 (Minimum)	0 (Nominal)	63.00 (Maximum)

5	15.55		8.733	
	4.000 (Minimum)	14.00 (Nominal)	24.00 (Maximum)	-50.00 (Minimum)
				0 (Nominal)
				50.00 (Maximum)
6	9.962		2.435	
	5.000 (Minimum)	10.00 (Nominal)	15.00 (Maximum)	-30.00 (Minimum)
				0 (Nominal)
				30.00 (Maximum)
7	-0.2422		-2.719	
	-5.000 (Minimum)	0 (Nominal)	5.000 (Maximum)	-30.00 (Minimum)
				0 (Nominal)
				30.00 (Maximum)

Master: 6-Aug-2011 16:30

High resolution Integrated Logging Tool-DTS Master Calibration								
Mud Gain Correction								
Idx	Value	Coarse - Mag, Real, Imag			Value	Fine - Mag, Real, Imag		
0	1.003				1.002			
		0.8000 (Minimum)	1.000 (Nominal)	1.200 (Maximum)		0.8000 (Minimum)	1.000 (Nominal)	1.200 (Maximum)
1	1.003				1.002			
		0.8000 (Minimum)	1.000 (Nominal)	1.200 (Maximum)		0.8000 (Minimum)	1.000 (Nominal)	1.200 (Maximum)
2	1.003				1.002			
		0.8000 (Minimum)	1.000 (Nominal)	1.200 (Maximum)		0.8000 (Minimum)	1.000 (Nominal)	1.200 (Maximum)

Master: 6-Aug-2011 16:30

### Enhanced DTS Cartridge / Equipment Identification

**Primary Equipment:**

EDTC Gamma Ray Detector  
Enhanced DTS Cartridge

EDTG - A/B

EDTC - B

8001

**Auxiliary Equipment:**

EDTC Housing

EDTH - B

Enhanced DTS Cartridge Wellsite Calibration			
EDTC Accelerometer Calibration			
Phase	EDTC Z-Axis Acceleration F/S2		Value
Before			32.11
	31.53 (Minimum)	32.19 (Nominal)	32.84 (Maximum)

Before: 31-Aug-2011 0:09

Enhanced DTS Cartridge Wellsite Calibration									
Detector Calibration									
Phase	Gamma Ray Background GAPI			Value	Phase	Gamma Ray (Jig - Bkg) GAPI			Value
Before				36.36	Before				147.5
	0 (Minimum)	30.00 (Nominal)	120.0 (Maximum)			134.1 (Minimum)	147.5 (Nominal)	160.9 (Maximum)	
					Before				160.0
						145.0 (Minimum)	160.0 (Nominal)	175.0 (Maximum)	

Before: 29-Aug-2011 17:01

Company: **SANDIA TECHNOLOGIES, LLC**

**Schlumberger**

Well: **NYSTA TANDEM LOT 1**

Field: **WILDCAT**

County: **ROCKLAND**

County:

**ROCKLAND**

State:

**NEW YORK**

SPONTANEOUS POTENTIAL

GAMMA RAY