Schlumberger

Company: **SANDIA TECHNOLOGIES, LLC**

Well: **NYSTA TANDEM LOT 1**
Field: **WILDCAT**
County: **ROCKLAND** State: **NEW YORK**

PLATFORM EXPRESS
ARRAY INDUCTION
GAMMA RAY / CALIPER

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

LAT: 41.1039
LONG: −74.027

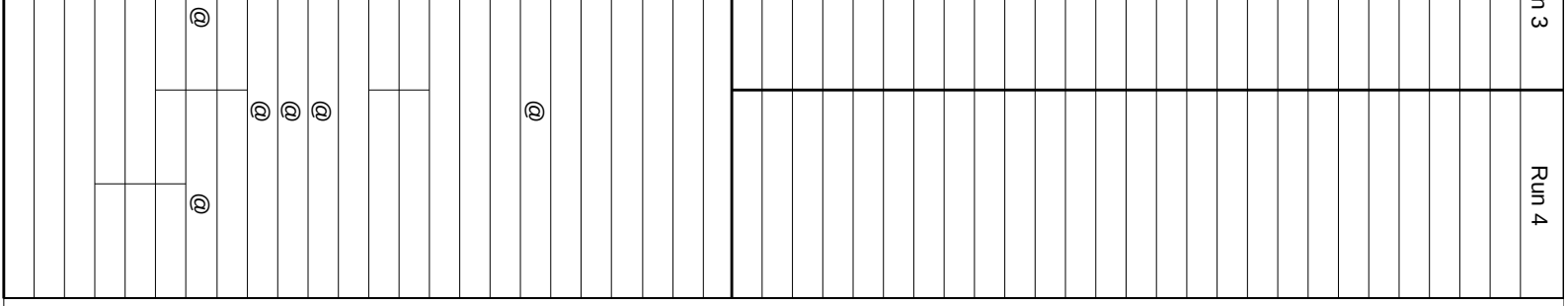
Elev.: K.B. 402.00 ft
G.L. 386.00 ft
D.F. 402.00 ft

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	

	Run 1	Run 2	Run 3
Logging Date	31−Aug−2011		
Run Number	1		
Depth Driller	1528 ft		
Schlumberger Depth	1500 ft		
Bottom Log Interval	1492 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		
MUD Density / Viscosity	9.3 lbm/gal		
MUD Fluid Loss / PH			
MUD Source Of Sample	MEASURED		
RM @ Measured Temperature	6.690 ohm.m @ 77 degF	@	@
RMF @ Measured Temperature	5.017 ohm.m @ 77 degF	@	@
RMC @ Measured Temperature	10.035 ohm.m @ 77 degF	@	@
Source RMF / RMC	CALCULATED / CALCULATED		
RM @ MRT / RMF @ MRT	7.490 @ 68 / 5.617 @ 68	@ / @	@ / @
Maximum Recorded Temperatures	68 degF		
Circulation Stopped / Time			
Logger On Bottom / Time	31−Aug−2011 / 1:02		
Unit Number / Location	3039 / BRADFORD		
Recorded By	TIM ZOTARA		
Witnessed By	DAN COLLINS		

	Run 1	Run 2	Run 3
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			
MUD Density / Viscosity			
MUD Fluid Loss / PH			
MUD Source Of Sample			
RM @ Measured Temperature	@		
RMF @ Measured Temperature	@		
RMC @ Measured Temperature	@		
Source RMF / RMC			
RM @ MRT / RMF @ MRT	@ / @		
Maximum Recorded Temperatures			
Circulation Stopped / Time			
Logger On Bottom / Time			
Unit Number / Location			
Recorded By			
Witnessed By			



DEPTH SUMMARY LISTING

Date Created: 31−AUG−2011 1:45:23

Depth System Equipment

Depth Measuring Device		Tension Device		Logging Cable	
Type:	IDW−B	Type:	CMTD−B/A	Type:	7−39P LXS
Serial Number:	2828	Serial Number:	2929	Serial Number:	3039
Calibration Date:	1−JAN−2011	Calibration Date:	2−AUG−2011	Length:	13300 FT
Calibrator Serial Number:	33	Calibrator Serial Number:	1095		
Calibration Cable Type:	7−39P LXS	Number of Calibration Points:	10	Conveyance Method:	Wireline
Wheel Correction 1:	−5	Calibration RMS:	45	Rig Type:	LAND
Wheel Correction 2:	−4	Calibration Peak Error:	71		

Depth Control Parameters

Log Sequence: First Log In the Well

Rig Up Length At Surface:
Rig Up Length At Bottom:
Rig Up Length Correction:
Stretch Correction:
Tool Zero Check At Surface: 0.50 FT

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.

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

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

REMARKS: RUN NUMBER 2

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.

RUN1 LOGGED AT: REPEAT & MAIN @ 1600'/HR

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

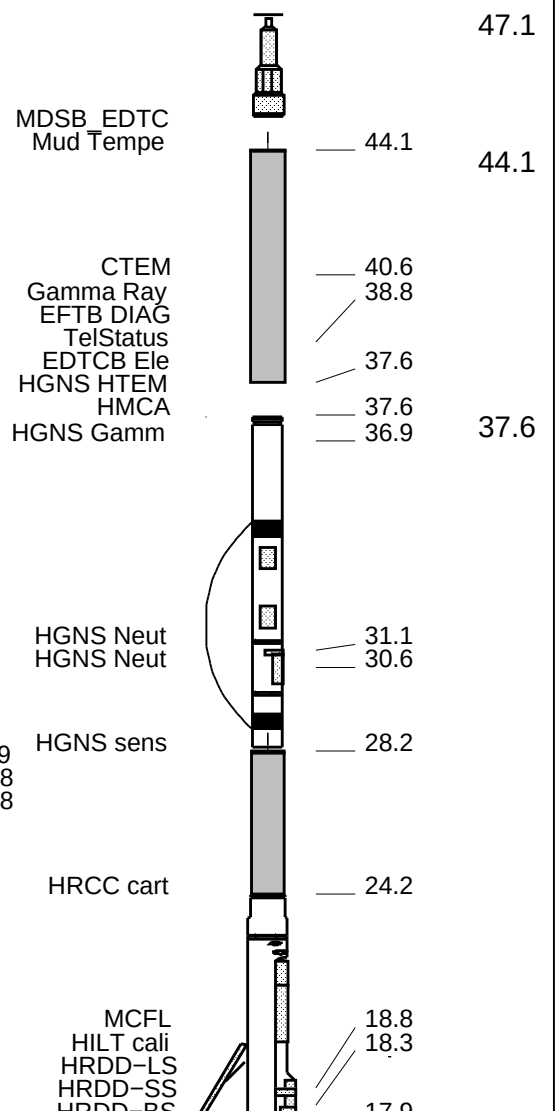
RUN 1 RUN 2

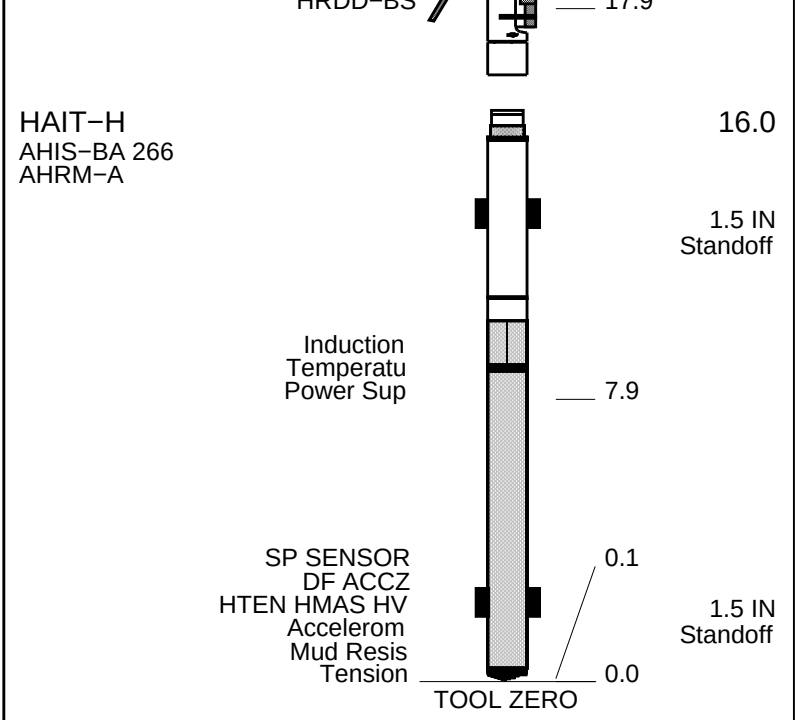
SURFACE EQUIPMENT

GSR−U 1289
NCT−B
CNB−AB
NCS−VB

WITM (EDTS)−A

DOWNHOLE EQUIPMENT





Schlumberger

MAIN 2"

MAXIS Field Log

Input DLIS Files

DEFAULT	AIT_TLD_MCFL_CNL_014LUP	FN:18	PRODUCER	31−Aug−2011 01:02	1512.0 FT	−16.0 FT

Output DLIS Files

DEFAULT	AIT_TLD_MCFL_CNL_025PUP	FN:36	PRODUCER	31−Aug−2011 04:05	1512.0 FT	−15.0 FT
RTB	AIT_TLD_MCFL_CNL_025PUP	FN:37	PRODUCER	31−Aug−2011 04:05	1512.0 FT	−15.0 FT

OP System Version: 19C0−187

HAIT−H	SRPC−5047−H1−2011−OP19_b	HILTB−FTB	SRPC−5047−H1−2011−OP19_b
EDTC−B	19C0−187		

PIP SUMMARY

Time Mark Every 60 S

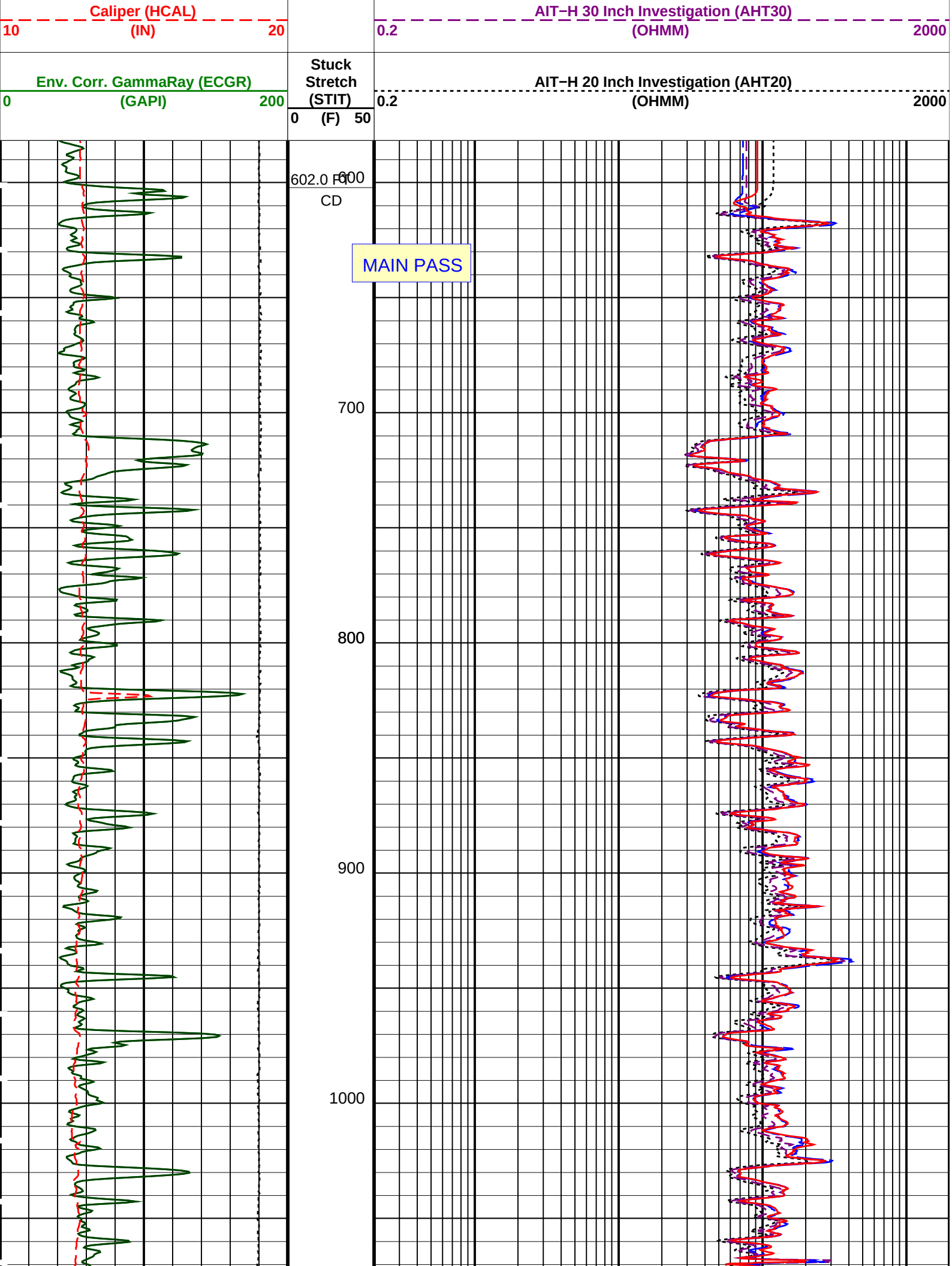
GR > 400
From LHT1 to ECGR_2

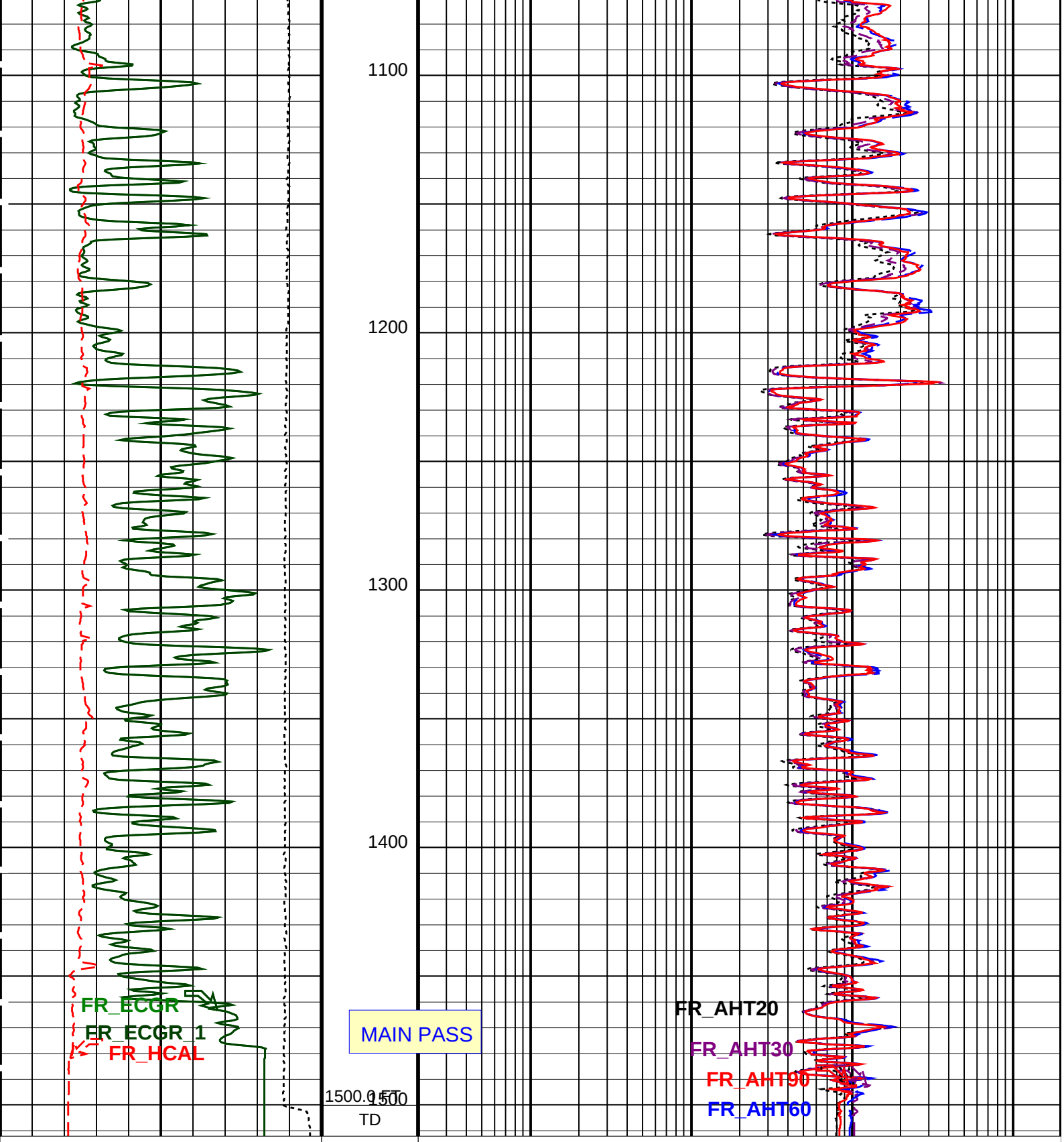
GR > 200
From LHT1 to ECGR_1

Tension (TENS)
10000 (LBF) 0

AIT−H 90 Inch Investigation (AHT90)
0.2 (OHMM) 2000

AIT−H 60 Inch Investigation (AHT60)
0.2 (OHMM) 2000


Caliper (HCAL)
10
(IN)
20
AIT−H 30 Inch Investigation (AHT30)
0.2
(OHMM)
2000
Env. Corr. GammaRay (ECGR)
0
(GAPI)
200
Stuck Stretch (STIT)
0
(F)
50
AIT−H 20 Inch Investigation (AHT20)
0.2
(OHMM)
2000
602.0 FT
CD
600
MAIN PASS
700
800
900
1000



Env. Corr. GammaRay (ECGR)
0 (GAPI) 200

Caliper (HCAL)
10 (IN) 20

Tension (TENS)
10000 (LBF) 0

GR > 200
From LHT1 to ECGR_1

Stuck Stretch (STIT)
0 (F) 50

AIT−H 20 Inch Investigation (AHT20)
0.2 (OHMM) 2000

AIT−H 30 Inch Investigation (AHT30)
0.2 (OHMM) 2000

AIT−H 60 Inch Investigation (AHT60)
0.2 (OHMM) 2000

AIT−H 90 Inch Investigation (AHT90)
0.2 (OHMM) 2000

GR > 400
From LHT1 to ECGR_2

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value	
	HAIT−H: Array Induction Tool − H		
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	
AHFRSV	Array Induction Response Set Version for Four ft Resolution	41.70.24.20	
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	
AHRPV	Array Induction Radial Parametrization Code Version Number	232	
AHSTA	Array Induction Tool Standoff	1.5	IN
AHTRSV	Array Induction Response Set Version for Two ft Resolution	41.70.24.20	
BHT	Bottom Hole Temperature (used in calculations)	67.7	DEGF
FEXP	Form Factor Exponent	2	
FNUM	Form Factor Numerator	1	
GCSE	Generalized Caliper Selection	HCAL	
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	HSTS_HTEM	
SHT	Surface Hole Temperature	65	DEGF
	HILTB−FTB: High resolution Integrated Logging Tool−DTS		
BHT	Bottom Hole Temperature (used in calculations)	67.7	DEGF
FEXP	Form Factor Exponent	2	
FNUM	Form Factor Numerator	1	
GCSE	Generalized Caliper Selection	HCAL	
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	HSTS_HTEM	
NMT	HILT Nuclear Mud Type	NOBARITE	
SHT	Surface Hole Temperature	65	DEGF
SOCN	Standoff Distance	0.125	IN
SOCO	Standoff Correction Option	NO	
	EDTC−B: Enhanced DTS Cartridge		
BHT	Bottom Hole Temperature (used in calculations)	67.7	DEGF
GCSE	Generalized Caliper Selection	HCAL	
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	HSTS_HTEM	
SHT	Surface Hole Temperature	65	DEGF
SOCN	Standoff Distance	0.125	IN
SOCO	Standoff Correction Option	NO	
	HOLEV: Integrated Hole/Cement Volume		
BHT	Bottom Hole Temperature (used in calculations)	67.7	DEGF
GCSE	Generalized Caliper Selection	HCAL	
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	HSTS_HTEM	
SHT	Surface Hole Temperature	65	DEGF
	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		
BS	Bit Size	12.250	IN
DO	Depth Offset for Playback	0.0	FT
FLEV	Fluid Level	0.00	FT
MST	Mud Sample Temperature	76.60	DEGF
PP	Playback Processing	RECOMPUTE	
TD	Total Depth	1500	FT

Format: AIT2 Vertical Scale: 2" per 100' Graphics File Created: 31−Aug−2011 04:05

OP System Version: 19C0−187

HAIT−H	SRPC−5047−H1−2011−OP19_b	HILTB−FTB	SRPC−5047−H1−2011−OP19_b
EDTC−B	19C0−187		

Input DLIS Files

DEFAULT	AIT_TLD_MCFL_CNL_014LUP	FN:18	PRODUCER	31−Aug−2011 01:02	1512.0 FT	−16.0 FT

Output DLIS Files

DEFAULT	AIT_TLD_MCFL_CNL_025PUP	FN:36	PRODUCER	31−Aug−2011 04:05		
RTB	AIT_TLD_MCFL_CNL_025PUP	FN:37	PRODUCER	31−Aug−2011 04:05		

Schlumberger

MAIN 5"

MAXIS Field Log

Input DLIS Files

DEFAULT	AIT_TLD_MCFL_CNL_014LUP	FN:18	PRODUCER	31−Aug−2011 01:02	1512.0 FT	−16.0 FT

Output DLIS Files

DEFAULT	AIT_TLD_MCFL_CNL_025PUP	FN:36	PRODUCER	31−Aug−2011 04:05	1512.0 FT	−15.0 FT
RTB	AIT_TLD_MCFL_CNL_025PUP	FN:37	PRODUCER	31−Aug−2011 04:05	1512.0 FT	−15.0 FT

OP System Version: 19C0−187

HAIT−H	SRPC−5047−H1−2011−OP19_b	HILTB−FTB	SRPC−5047−H1−2011−OP19_b
EDTC−B	19C0−187		

PIP SUMMARY

Time Mark Every 60 S

GR > 400
From LHT1 to ECGR_2

GR > 200
From LHT1 to ECGR_1

Tension (TENS)
10000 (LBF) 0

Caliper (HCAL)
10 (IN) 20

Env. Corr. GammaRay (ECGR)
0 (GAPI) 200

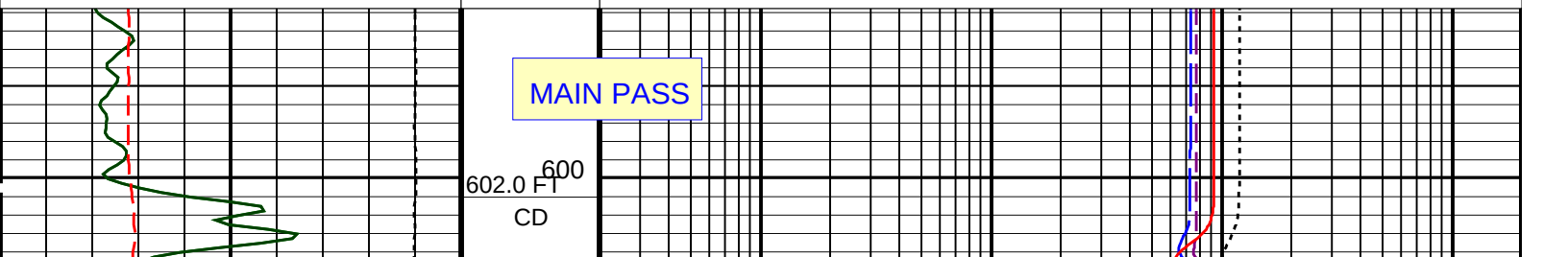
Stuck Stretch (STIT)
0 (F) 50

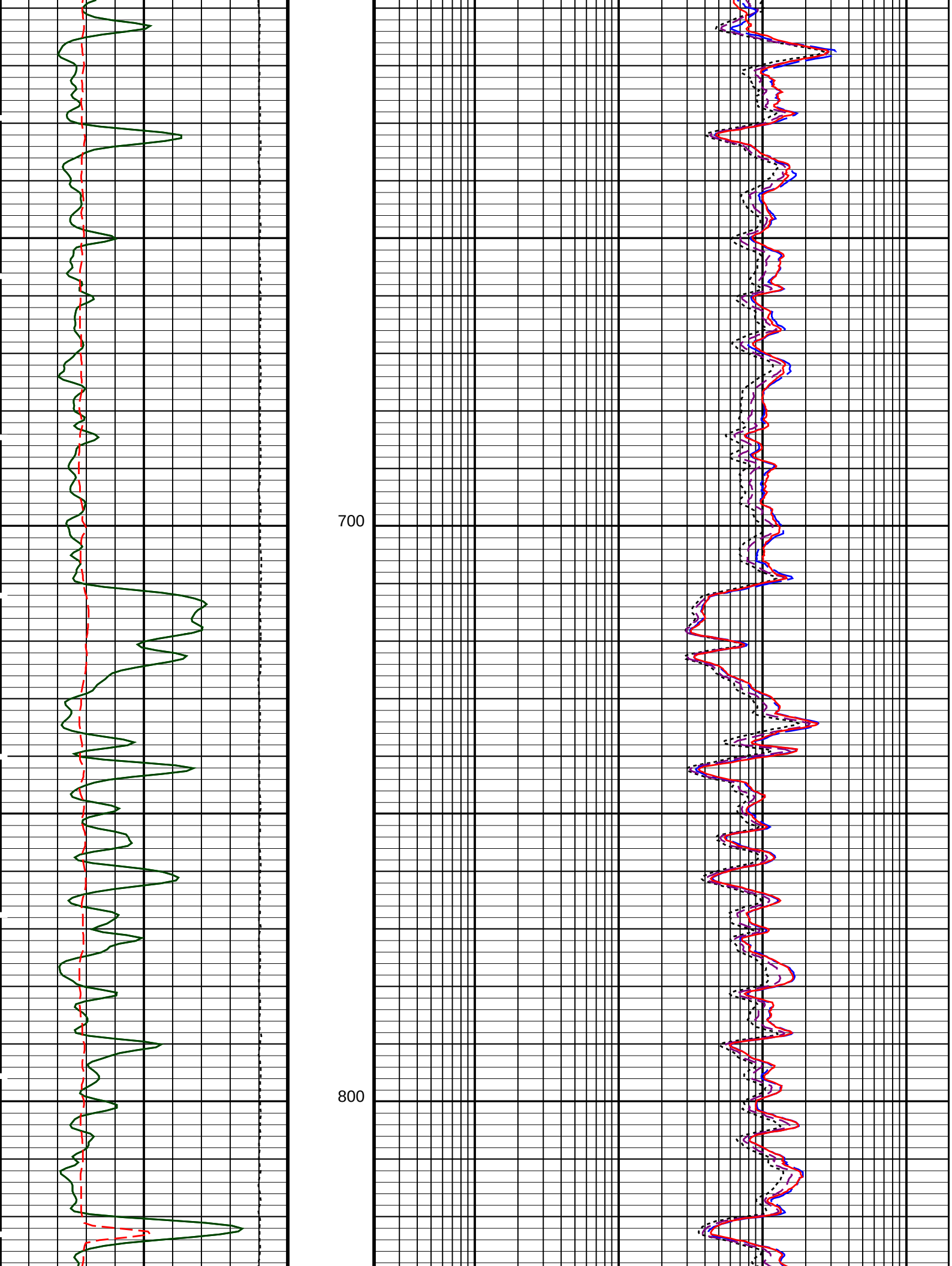
AIT−H 90 Inch Investigation (AHT90)
0.2 (OHMM) 2000

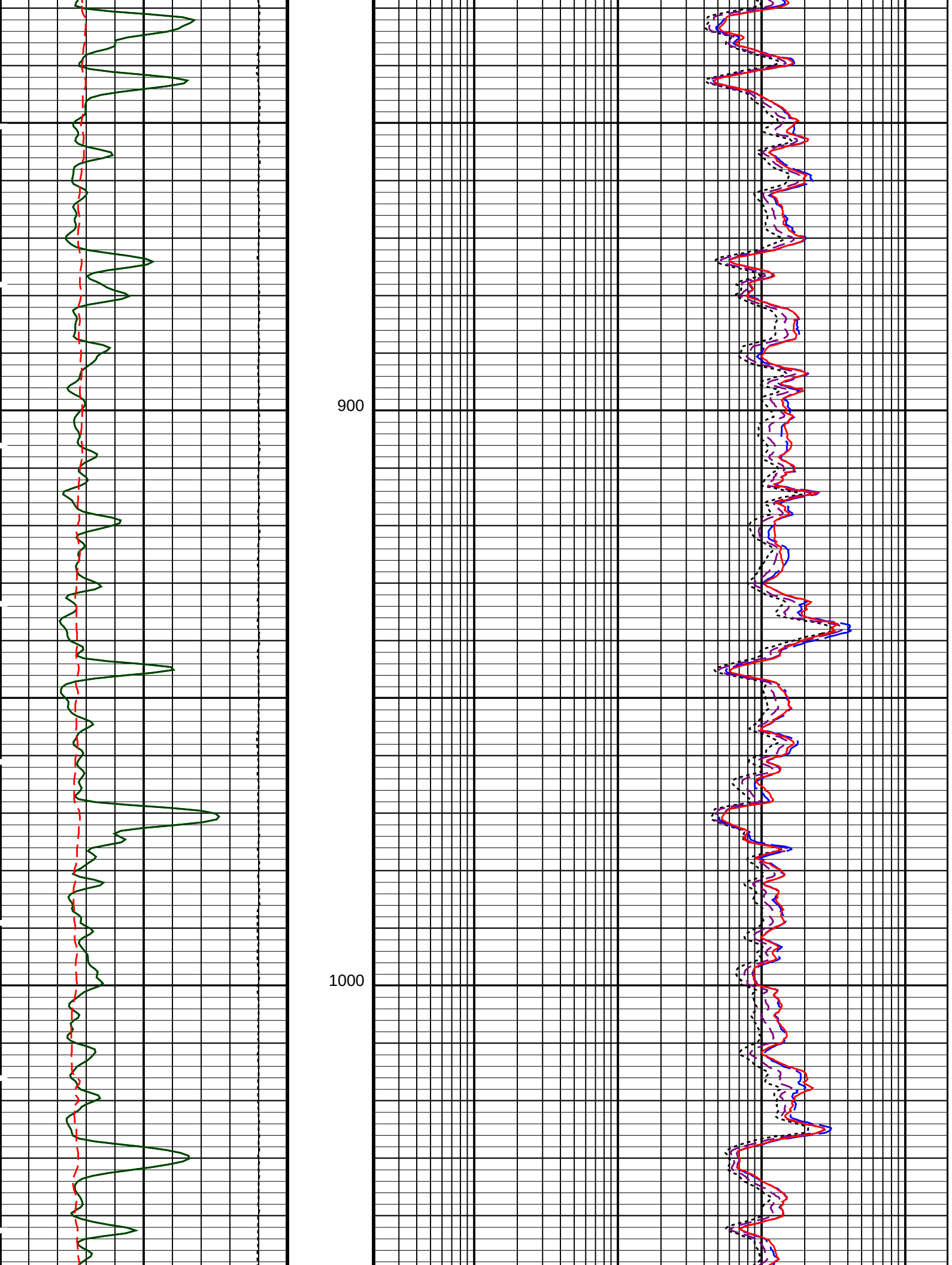
AIT−H 60 Inch Investigation (AHT60)
0.2 (OHMM) 2000

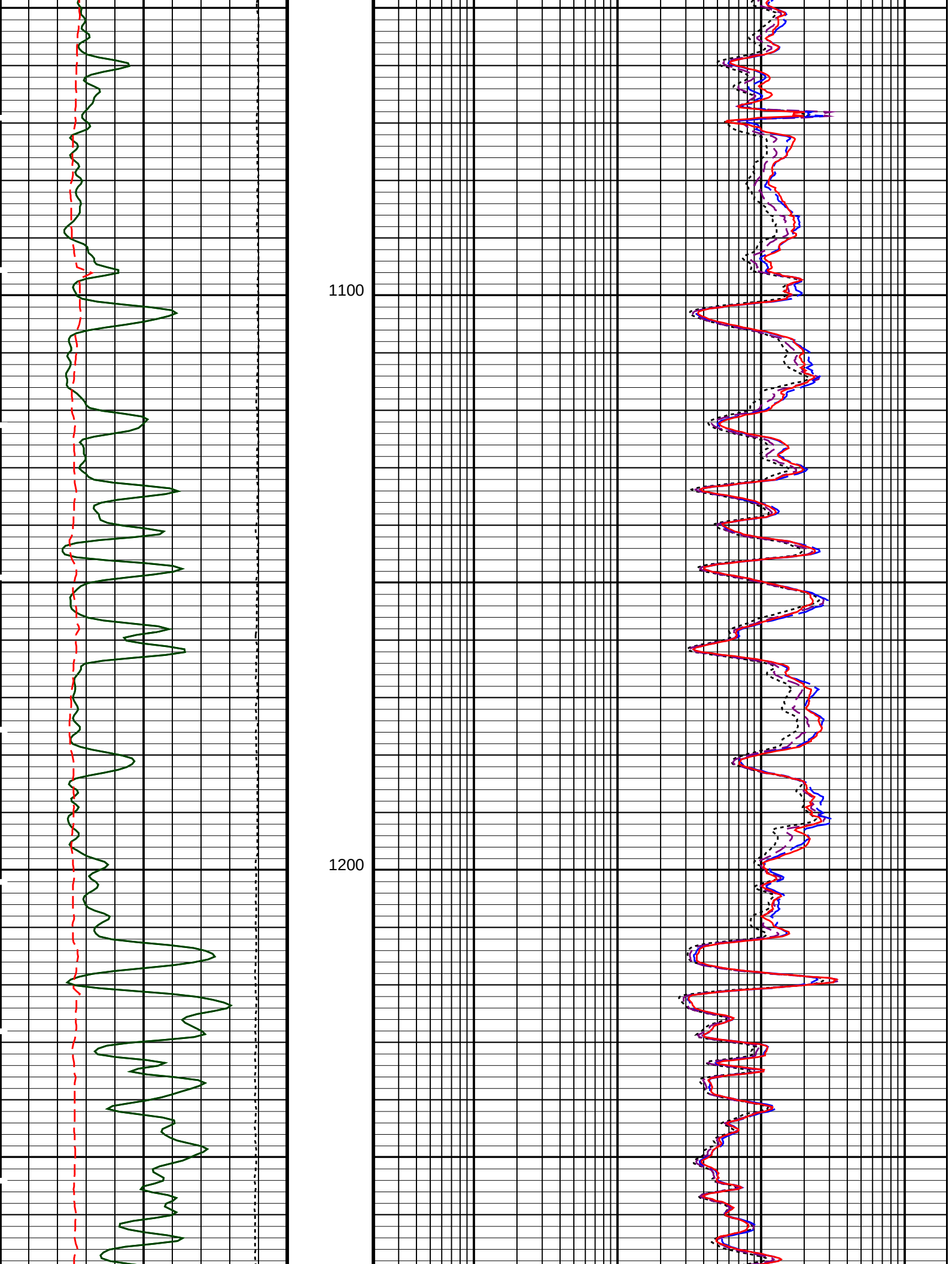
AIT−H 30 Inch Investigation (AHT30)
0.2 (OHMM) 2000

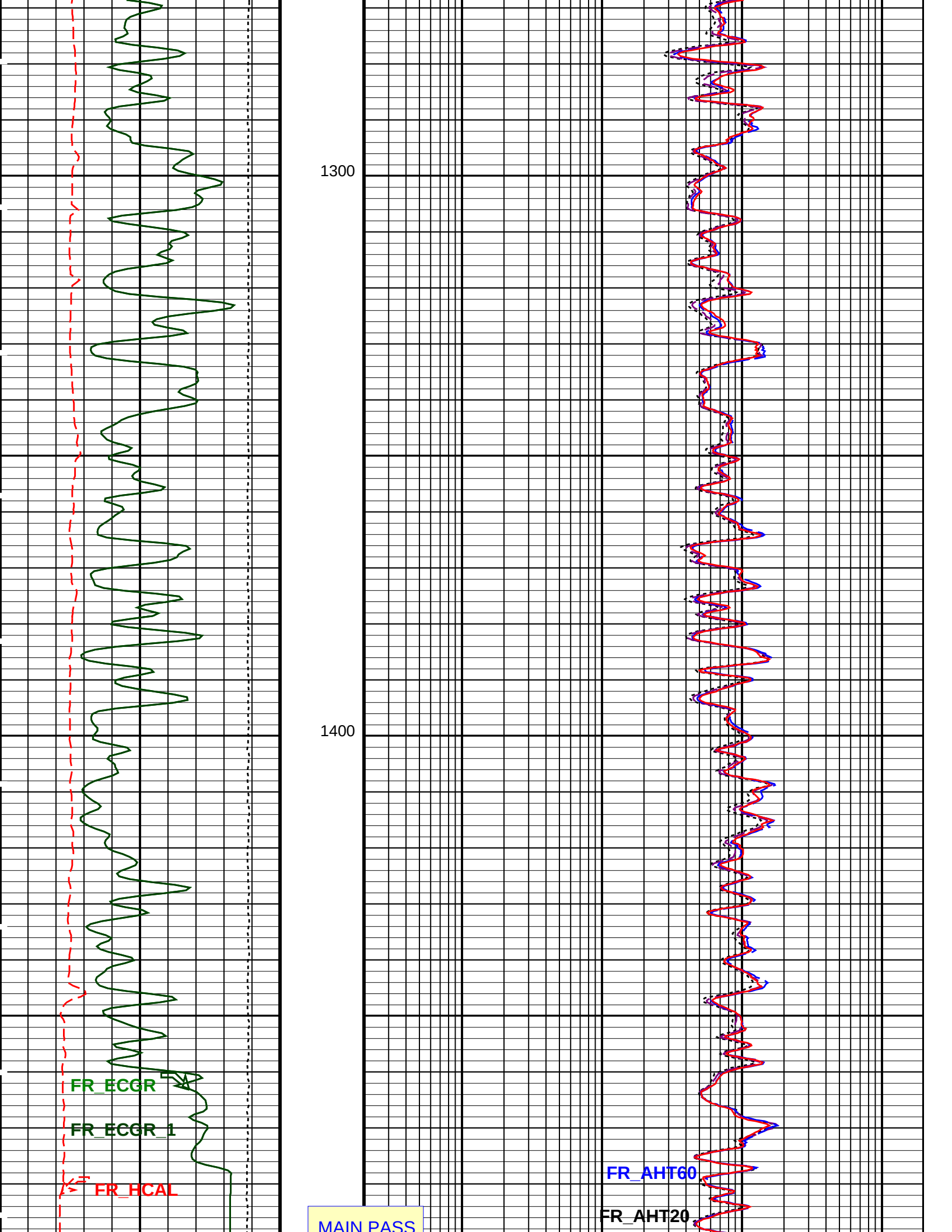
AIT−H 20 Inch Investigation (AHT20)
0.2 (OHMM) 2000

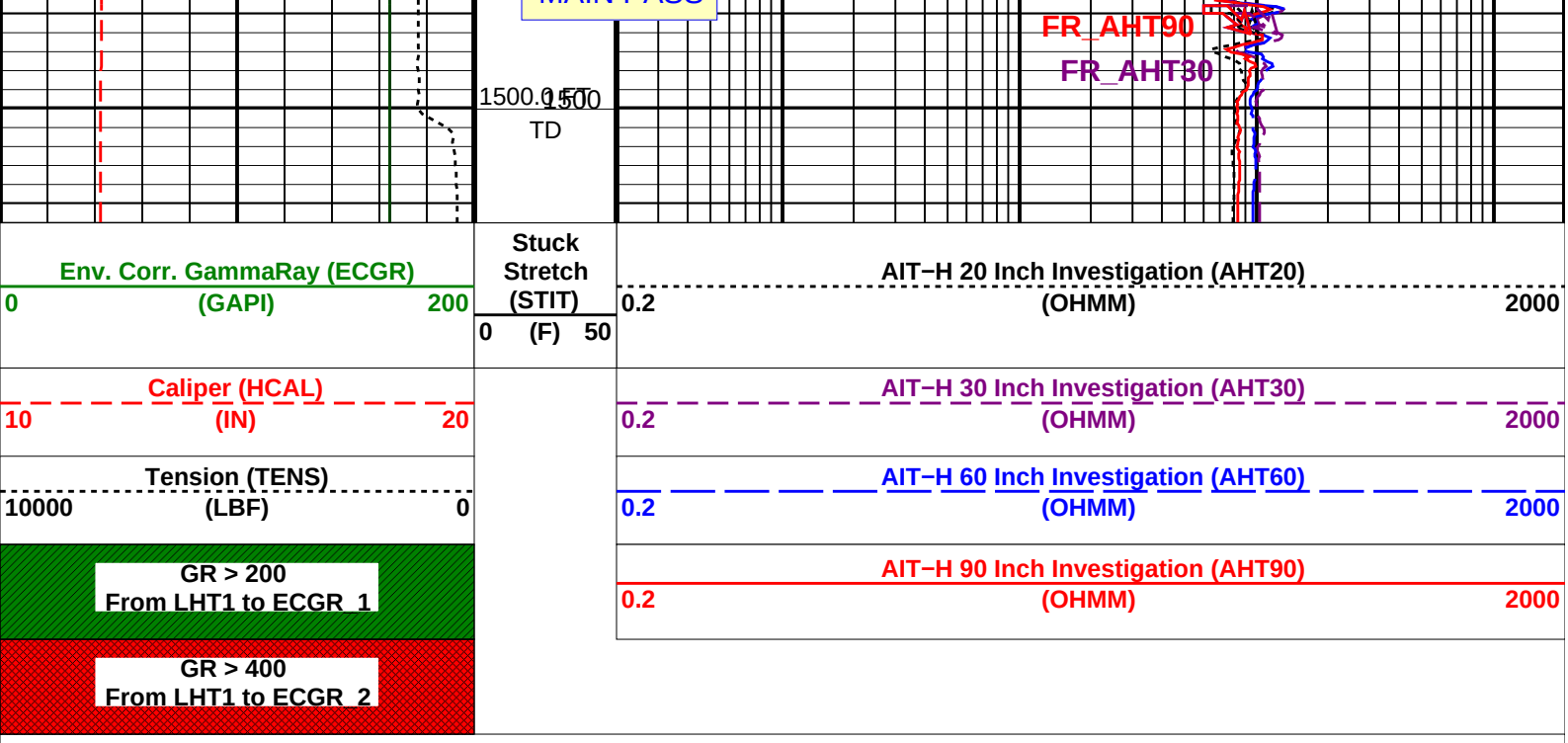



700
800


900
1000


1100
1200


1300
1400
FR_ECGR
FR_ECGR_1
FR_HCAL
FR_AHT60
FR_AHT20
MAIN PASS



Parameters

DLIS Name	Description	Value	
	HAIT−H: Array Induction Tool − H		
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	
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	67.7	DEGF
FEXP	Form Factor Exponent	2	
FNUM	Form Factor Numerator	1	
FPHI	Form Factor Porosity Source	DPHZ	
GCSE	Generalized Caliper Selection	HCAL	
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	HSTS_HTEM	
ISSBAR	Barite Mud Switch	NOBARITE	
MATR	Rock Matrix for Neutron Porosity Corrections	SANDSTONE	
RTCO	RTCO − Rt Invasion Correction	YES	
SHT	Surface Hole Temperature	65	DEGF
SPNV	SP Next Value	0	MV
	HILTB−FTB: High resolution Integrated Logging Tool−DTS		

BHFL	Borehole Fluid Type	WATER	
BHFL_TLD	HILT Nuclear Mud Base	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	
DHC	Density Hole Correction	BS	
DPPM	Density Porosity Processing Mode	HIRS	
EXSICL	External Shale Indicator Clean Value	20	
EXSISH	External Shale Indicator Shale Value	150	
FD	Fluid Density	1.1	G/C3
FEXP	Form Factor Exponent	2	
FNUM	Form Factor Numerator	1	
FPHI	Form Factor Porosity Source	DPHZ	
FSAL	Formation Salinity	−50000	PPM
FSCO	Formation Salinity Correction Option	NO	
GCLF	Germany Coal−like Formation Option	NO	
GCSE	Generalized Caliper Selection	HCAL	
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	HSTS_HTEM	
HACPP	Accelerometer PROM Presence	PRESENT_FILE	
HART	Accelerometer Reference Temperature	68	DEGF
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
HSCO	Hole Size Correction Option	YES	
HSIS	HILT Shale Indicator Selection	GR	
HSSO	HRDD Nuclear Source Strength Option	NORMAL	
HSWCUT	HILT Water Saturation from AITH cutoff	50	%
ISSBAR	Barite Mud Switch	NOBARITE	
MATR	Rock Matrix for Neutron Porosity Corrections	SANDSTONE	
MCCO	Mud Cake Correction Option	NO	
MCOR	Mud Correction	NATU	
MDEN	Matrix Density	2.65	G/C3
MHC0	MCFL B0 Contrast Correction Coefficient	2.2e−005	OHMS
MHC1	MCFL B1 Contrast Correction Coefficient	3.2e−005	OHMS
MHCC	MCFL High Contrast Correction Switch	NO	
MPOF	MCFL Processing Operation Mode	ON	
MWCO	Mud Weight Correction Option	NO	
NAAC	HRDD APS Activation Correction	OFF	
NMT	HILT Nuclear Mud Type	NOBARITE	
NPRM	HRDD Processing Mode	HiRes	
NSAR	HRDD Depth Sampling Rate	1	IN
PEA_FILTER	PEA Filter	NO_FILTER	
PEFC_FILTER	PEFC Filter	NO_FILTER	
PHIMAX	HILT max porosity	35	PU
PTCO	Pressure/Temperature Correction Option	NO	
SDAT	Standoff Data Source	SOCN	
SEXP_HILT	HILT Saturation Exponent	2	
SHT	Surface Hole Temperature	65	DEGF
SOCN	Standoff Distance	0.125	IN
SOCO	Standoff Correction Option	NO	
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	
FSCO	Formation Salinity Correction Option	NO	
GCSE	Generalized Caliper Selection	HCAL	
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	HSTS_HTEM	
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	
ALLRES: Basic Resistivity Transforms			
ARTS	AIT Rt Selection (for ALLRES computation)	AITH_TwoResA90	
RTCO	RTCO − Rt Invasion Correction	YES	
HOLEV: Integrated Hole/Cement Volume			
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	67.7	DEGF
FCD	Future Casing (Outer) Diameter	9.625	IN
GCSE	Generalized Caliper Selection	HCAL	
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	HSTS_HTEM	
HVCS	Integrated Hole Volume Caliper Selection	AUTOMATIC	
ISSBAR	Barite Mud Switch	NOBARITE	
MATR	Rock Matrix for Neutron Porosity Corrections	SANDSTONE	
SHT	Surface Hole Temperature	65	DEGF
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			
ALTDPCHAN	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	RECOMPUTE	
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: 31−Aug−2011 04:05**

OP System Version: 19C0−187

HAIT−H	SRPC−5047−H1−2011−OP19_b	HILTB−FTB	SRPC−5047−H1−2011−OP19_b
EDTC−B	19C0−187		

Input DLIS Files

DEFAULT	AIT_TLD_MCFL_CNL_014LUP	FN:18	PRODUCER	31−Aug−2011 01:02	1512.0 FT	−16.0 FT

Output DLIS Files

DEFAULT	AIT_TLD_MCFL_CNL_025PUP	FN:36	PRODUCER	31−Aug−2011 04:05
RTB	AIT_TLD_MCFL_CNL_025PUP	FN:37	PRODUCER	31−Aug−2011 04:05

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REPEAT SECTION

MAXIS Field Log

Input DLIS Files

DEFAULT	AIT_TLD_MCFL_CNL_012LUP	FN:14	PRODUCER	31−Aug−2011 00:37	1506.0 FT	1112.0 FT

Output DLIS Files

DEFAULT	AIT_TLD_MCFL_CNL_022PUP	FN:30	PRODUCER	31-Aug-2011 03:58	1506.0 FT	1112.0 FT
RTB	AIT_TLD_MCFL_CNL_022PUP	FN:31	PRODUCER	31-Aug-2011 03:58	1506.0 FT	1112.0 FT

OP System Version: 19C0-187

HAIT-H	SRPC-5047-H1-2011-OP19_b	HILTB-FTB	SRPC-5047-H1-2011-OP19_b
EDTC-B	19C0-187		

PIP SUMMARY

Time Mark Every 60 S

GR > 400
From LHT1 to ECGR_2

GR > 200
From LHT1 to ECGR_1

Tension (TENS)
10000 (LBF) 0

Caliper (HCAL)
10 (IN) 20

Env. Corr. GammaRay (ECGR)
0 (GAPI) 200

Stuck Stretch (STIT)
0 (F) 50

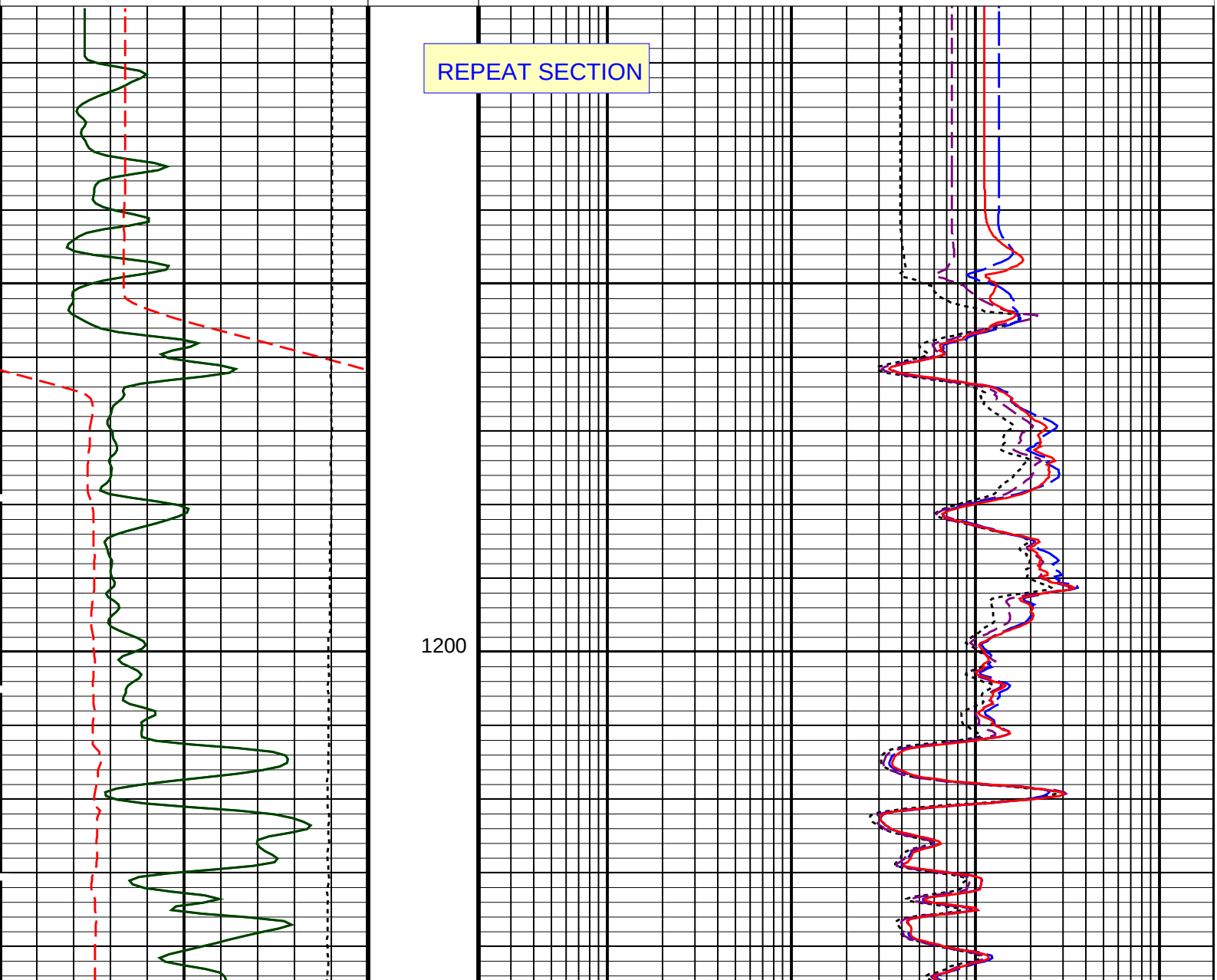
AIT-H 90 Inch Investigation (AHT90)
0.2 (OHMM) 2000

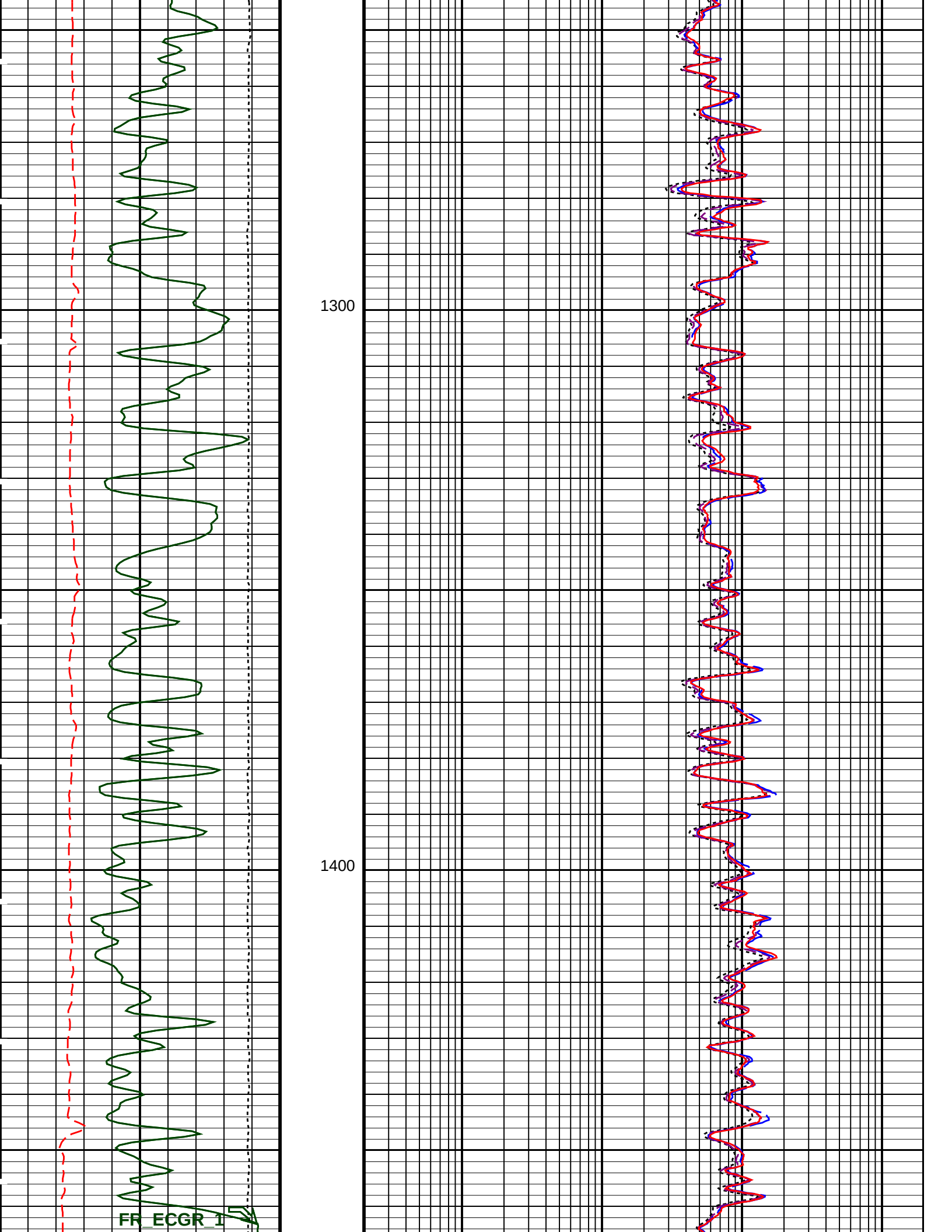
AIT-H 60 Inch Investigation (AHT60)
0.2 (OHMM) 2000

AIT-H 30 Inch Investigation (AHT30)
0.2 (OHMM) 2000

AIT-H 20 Inch Investigation (AHT20)
0.2 (OHMM) 2000

REPEAT SECTION

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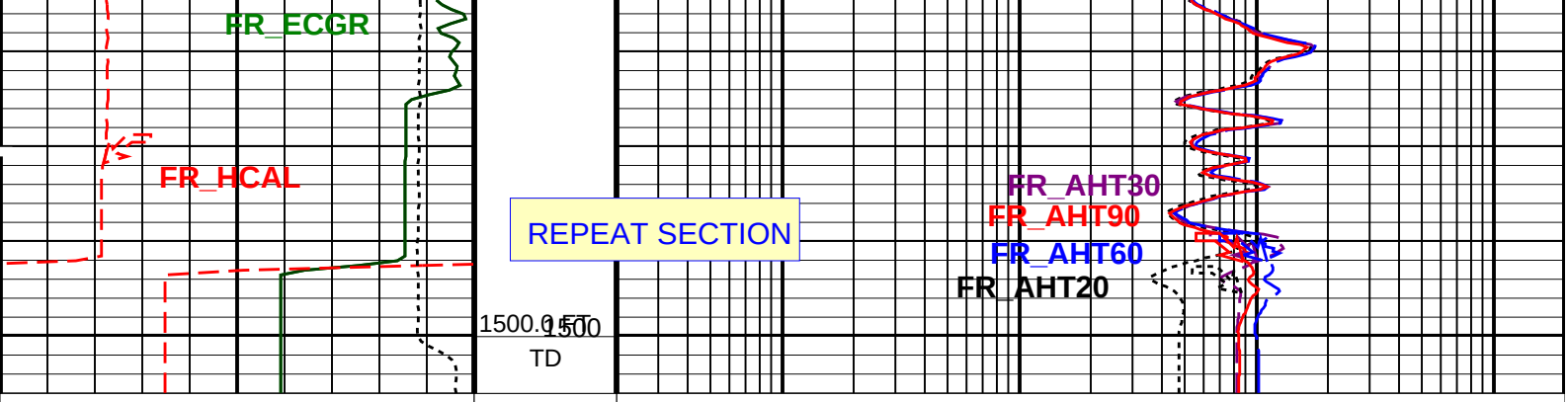
1400
FR_ECGR_1



Env. Corr. GammaRay (ECGR)
0 (GAPI) 200

Stuck Stretch (STIT)
0 (F) 50

AIT−H 20 Inch Investigation (AHT20)
0.2 (OHMM) 2000

Caliper (HCAL)
10 (IN) 20

AIT−H 30 Inch Investigation (AHT30)
0.2 (OHMM) 2000

Tension (TENS)
10000 (LBF) 0

AIT−H 60 Inch Investigation (AHT60)
0.2 (OHMM) 2000

AIT−H 90 Inch Investigation (AHT90)
0.2 (OHMM) 2000

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	
	HAIT−H: Array Induction Tool − H		
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	
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	67.7	DEGF
FEXP	Form Factor Exponent	2	
FNUM	Form Factor Numerator	1	
FPHI	Form Factor Porosity Source	DPHZ	
GCSE	Generalized Caliper Selection	HCAL	
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	HSTS_HTEM	
ISSBAR	Barite Mud Switch	NOBARITE	
MATR	Rock Matrix for Neutron Porosity Corrections	SANDSTONE	
RTCO	RTCO − Rt Invasion Correction	YES	
SHT	Surface Hole Temperature	65	DEGF
SPNV	SP Next Value	0	MV
HILTB−FTB: High resolution Integrated Logging Tool−DTS			
BHFL	Borehole Fluid Type	WATER	
BHFL_TLD	HILT Nuclear Mud Base	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	
DHC	Density Hole Correction	BS	
DPPM	Density Porosity Processing Mode	HIRS	
EXSICL	External Shale Indicator Clean Value	20	
EXSISH	External Shale Indicator Shale Value	150	
FD	Fluid Density	1.1	G/C3
FEXP	Form Factor Exponent	2	
FNUM	Form Factor Numerator	1	
FPHI	Form Factor Porosity Source	DPHZ	
FSAL	Formation Salinity	−50000	PPM
FSCO	Formation Salinity Correction Option	NO	
GCLF	Germany Coal−like Formation Option	NO	
GCSE	Generalized Caliper Selection	HCAL	
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	HSTS_HTEM	
HACPP	Accelerometer PROM Presence	PRESENT_FILE	
HART	Accelerometer Reference Temperature	68	DEGF
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
HSCO	Hole Size Correction Option	YES	
HSIS	HILT Shale Indicator Selection	GR	
HSSO	HRDD Nuclear Source Strength Option	NORMAL	
HSWCUT	HILT Water Saturation from AITH cutoff	50	%
ISSBAR	Barite Mud Switch	NOBARITE	
MATR	Rock Matrix for Neutron Porosity Corrections	SANDSTONE	
MCCO	Mud Cake Correction Option	NO	
MCOR	Mud Correction	NATU	
MDEN	Matrix Density	2.65	G/C3
MHC0	MCFL B0 Contrast Correction Coefficient	2.2e−005	OHMS
MHC1	MCFL B1 Contrast Correction Coefficient	3.2e−005	OHMS
MHCC	MCFL High Contrast Correction Switch	NO	
MPOF	MCFL Processing Operation Mode	ON	
MWCO	Mud Weight Correction Option	NO	
NAAC	HRDD APS Activation Correction	OFF	
NMT	HILT Nuclear Mud Type	NOBARITE	
NPRM	HRDD Processing Mode	HiRes	
NSAR	HRDD Depth Sampling Rate	1	IN
PEA_FILTER	PEA Filter	NO_FILTER	
PEFC_FILTER	PEFC Filter	NO_FILTER	
PHIMAX	HILT max porosity	35	PU
PTCO	Pressure/Temperature Correction Option	NO	
SDAT	Standoff Data Source	SOCN	
SEXP_HILT	HILT Saturation Exponent	2	
SHT	Surface Hole Temperature	65	DEGF
SOCN	Standoff Distance	0.125	IN
SOCO	Standoff Correction Option	NO	
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	
FSCO	Formation Salinity Correction Option	NO	
GCSE	Generalized Caliper Selection	HCAL	
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	HSTS_HTEM	
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	
ALLRES: Basic Resistivity Transforms			
ARTS	AIT Rt Selection (for ALLRES computation)	AITH_TwoResA90	
RTCO	RTCO − Rt Invasion Correction	YES	
HOLEV: Integrated Hole/Cement Volume			
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	67.7	DEGF
FCD	Future Casing (Outer) Diameter	9.625	IN
GCSE	Generalized Caliper Selection	HCAL	
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	HSTS_HTEM	
HVCS	Integrated Hole Volume Caliper Selection	AUTOMATIC	
ISSBAR	Barite Mud Switch	NOBARITE	
MATR	Rock Matrix for Neutron Porosity Corrections	SANDSTONE	
SHT	Surface Hole Temperature	65	DEGF
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			
ALTDPCHAN	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	RECOMPUTE	
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: 31−Aug−2011 03:58

OP System Version: 19C0−187

HAIT−H	SRPC−5047−H1−2011−OP19_b	HILTB−FTB	SRPC−5047−H1−2011−OP19_b
EDTC−B	19C0−187		

Input DLIS Files

DEFAULT	AIT_TLD_MCFL_CNL_012LUP	FN:14	PRODUCER	31−Aug−2011 00:37	1506.0 FT	1112.0 FT

Output DLIS Files

DEFAULT	AIT_TLD_MCFL_CNL_022PUP	FN:30	PRODUCER	31−Aug−2011 03:58
RTB	AIT_TLD_MCFL_CNL_022PUP	FN:31	PRODUCER	31−Aug−2011 03:58

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REPEAT ANALYSIS

MAXIS Field Log

Input DLIS Files

Input DLIS Files

DEFAULT	AIT_TLD_MCFL_CNL_012LUP	FN:14	PRODUCER	31−Aug−2011 00:37	1506.0 FT	1112.0 FT
DEFAULT	AIT_TLD_MCFL_CNL_014LUP	FN:18	PRODUCER	31−Aug−2011 01:02	1512.0 FT	−16.0 FT

Output DLIS Files

DEFAULT	AIT_TLD_MCFL_CNL_024PUP	FN:34	PRODUCER	31−Aug−2011 04:03	1506.0 FT	1112.0 FT
RTB	AIT_TLD_MCFL_CNL_024PUP	FN:35	PRODUCER	31−Aug−2011 04:03	1506.0 FT	1112.0 FT

OP System Version: 19C0−187

HAIT−H	SRPC−5047−H1−2011−OP19_b	HILTB−FTB	SRPC−5047−H1−2011−OP19_b
EDTC−B	19C0−187		

PIP SUMMARY

Time Mark Every 60 S

GR > 400
From LHT1 to ECGR_2

GR > 200
From LHT1 to ECGR_1

TENS_REP Curve (TENS_REP)
10000 (LBF) 0

HCAL_REP Curve (HCAL_REP)
10 (IN) 20

ECGR_2_REP Curve (ECGR_REP)
400 (GAPI) 600

ECGR_1_REP Curve (ECGR_REP)
200 (GAPI) 400

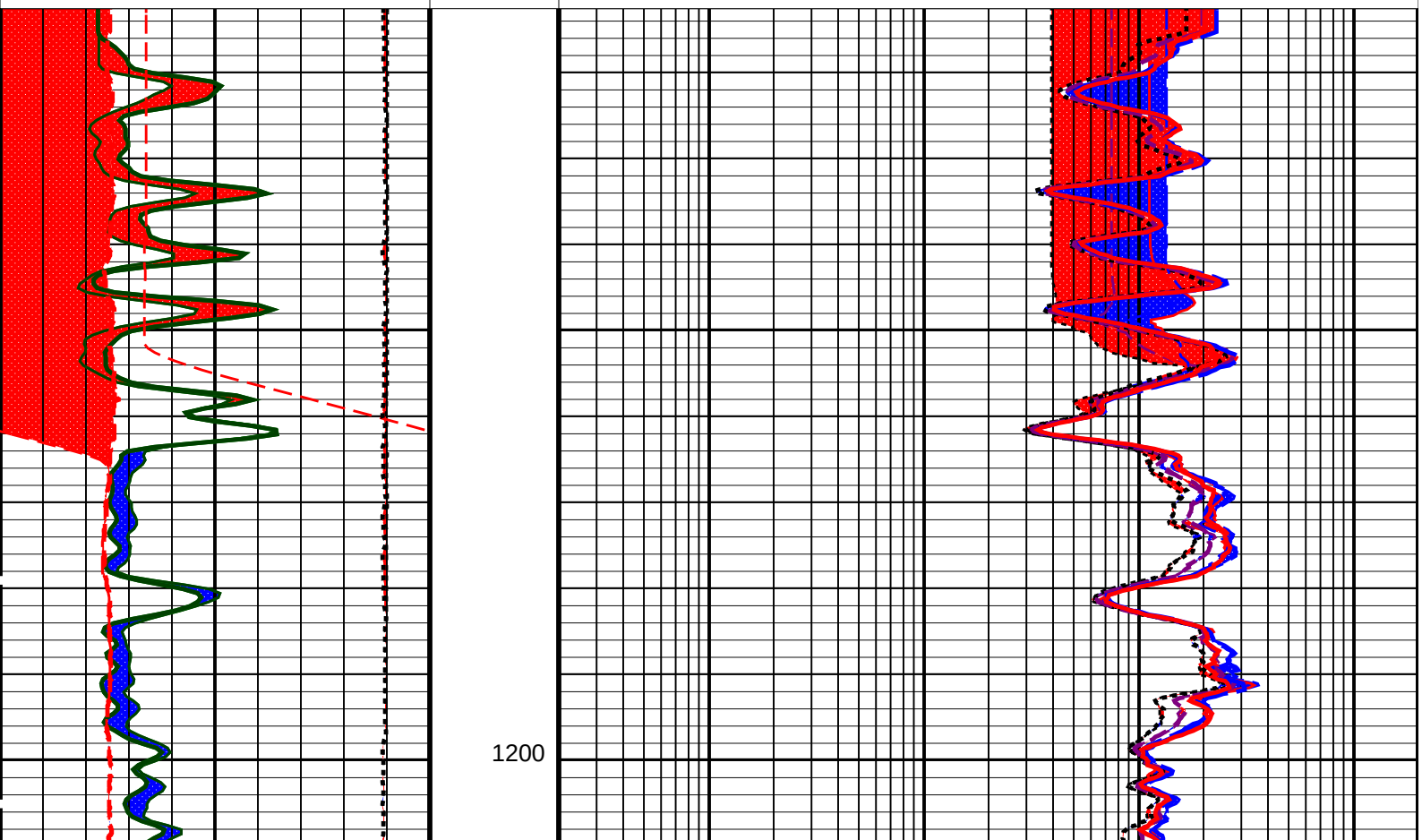
ECGR_REP Curve (ECGR_REP)
0 (GAPI) 200

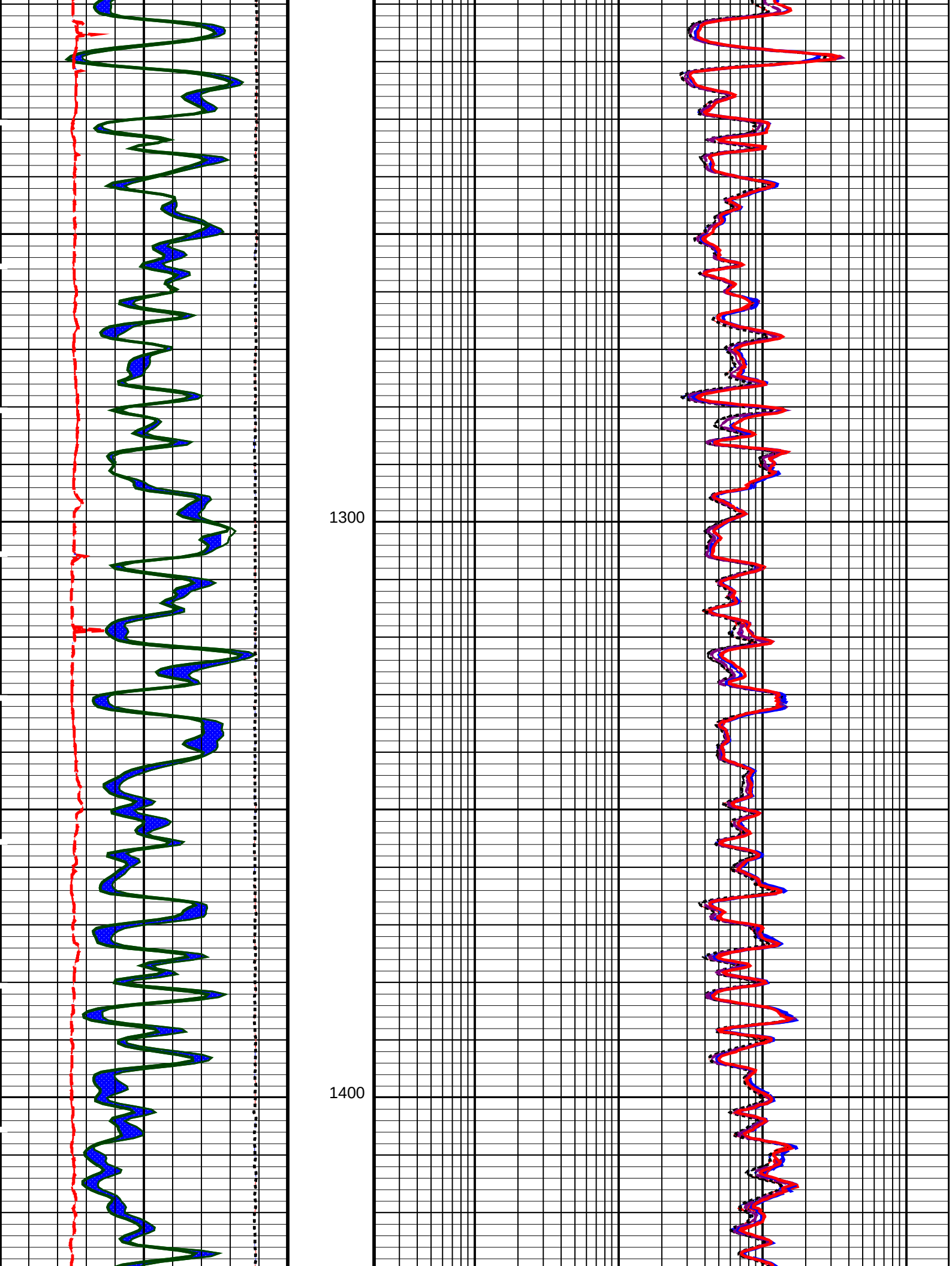
AHT90_REP Curve (AHT90_REP)
0.2 (OHMM) 2000

AHT60_REP Curve (AHT60_REP)
0.2 (OHMM) 2000

AHT30_REP Curve (AHT30_REP)
0.2 (OHMM) 2000

AHT20_REP Curve (AHT20_REP)
0.2 (OHMM) 2000

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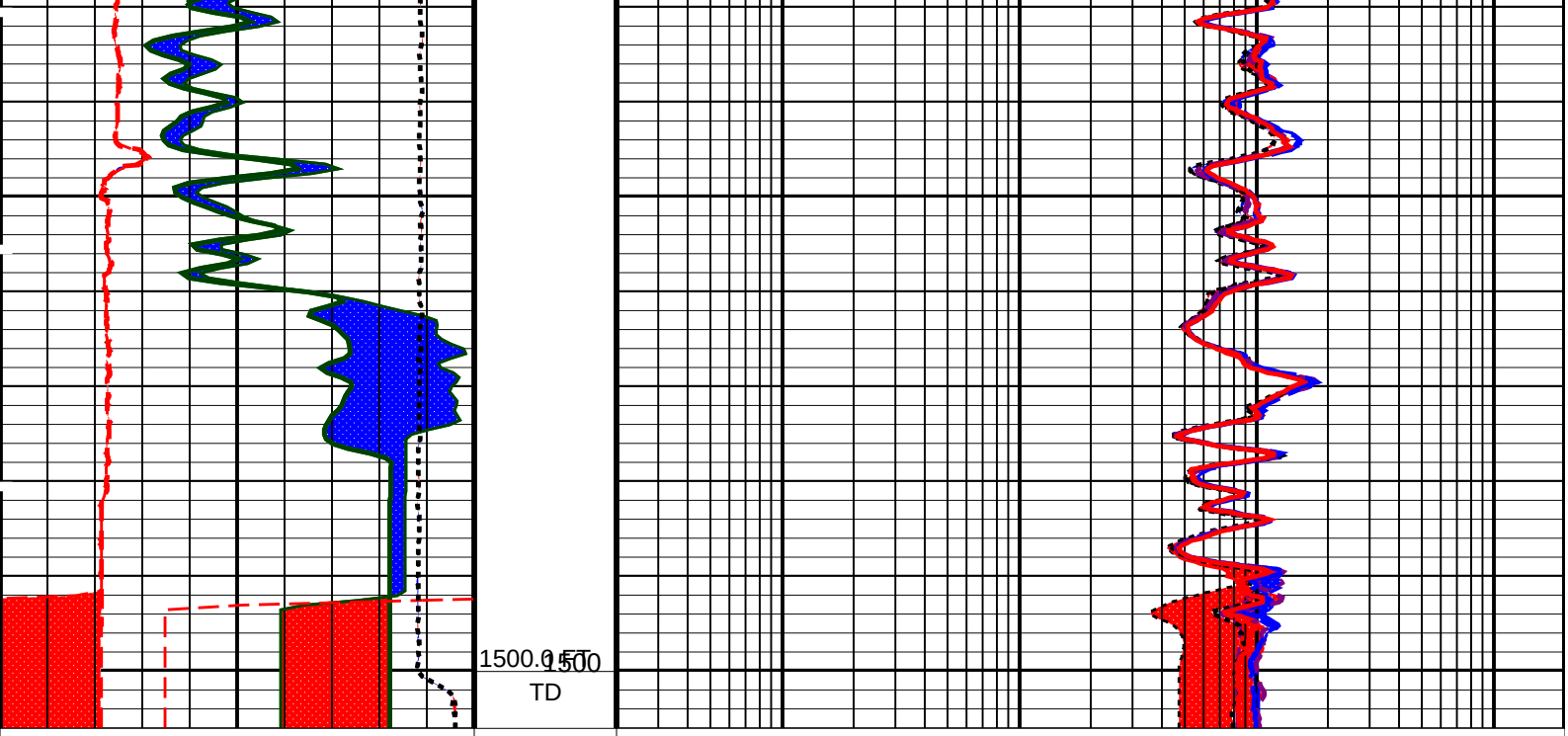

ECGR_REP Curve (ECGR_REP)
0 (GAPI) 200

ECGR_1_REP Curve (ECGR_REP)
200 (GAPI) 400

ECGR_2_REP Curve (ECGR_REP)
400 (GAPI) 600

HCAL_REP Curve (HCAL_REP)
10 (IN) 20

TENS_REP Curve (TENS_REP)
10000 (LBF) 0

GR > 200
From LHT1 to ECGR_1

GR > 400
From LHT1 to ECGR_2

AHT20_REP Curve (AHT20_REP)
0.2 (OHMM) 2000

AHT30_REP Curve (AHT30_REP)
0.2 (OHMM) 2000

AHT60_REP Curve (AHT60_REP)
0.2 (OHMM) 2000

AHT90_REP Curve (AHT90_REP)
0.2 (OHMM) 2000

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value	
	HAIT−H: Array Induction Tool − H		
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	
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	67.7	DEGF
FEXP	Form Factor Exponent	2	
FNUM	Form Factor Numerator	1	
FPHI	Form Factor Porosity Source	DPHZ	
GCSE	Generalized Caliper Selection	HCAL	
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	HSTS_HTEM	
ISSBAR	Barite Mud Switch	NOBARITE	
MATR	Rock Matrix for Neutron Porosity Corrections	SANDSTONE	
RTCO	RTCO − Rt Invasion Correction	YES	
SHT	Surface Hole Temperature	65	DEGF
SPNV	SP Next Value	0	MV
HILTB−FTB: High resolution Integrated Logging Tool−DTS			
BHFL	Borehole Fluid Type	WATER	
BHFL_TLD	HILT Nuclear Mud Base	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	
DHC	Density Hole Correction	BS	
DPPM	Density Porosity Processing Mode	HIRS	
EXSICL	External Shale Indicator Clean Value	20	
EXSISH	External Shale Indicator Shale Value	150	
FD	Fluid Density	1.1	G/C3
FEXP	Form Factor Exponent	2	
FNUM	Form Factor Numerator	1	
FPHI	Form Factor Porosity Source	DPHZ	
FSAL	Formation Salinity	−50000	PPM
FSCO	Formation Salinity Correction Option	NO	
GCLF	Germany Coal−like Formation Option	NO	
GCSE	Generalized Caliper Selection	HCAL	
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	HSTS_HTEM	
HACPP	Accelerometer PROM Presence	PRESENT_FILE	
HART	Accelerometer Reference Temperature	68	DEGF
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
HSCO	Hole Size Correction Option	YES	
HSIS	HILT Shale Indicator Selection	GR	
HSSO	HRDD Nuclear Source Strength Option	NORMAL	
HSWCUT	HILT Water Saturation from AITH cutoff	50	%
ISSBAR	Barite Mud Switch	NOBARITE	
MATR	Rock Matrix for Neutron Porosity Corrections	SANDSTONE	
MCCO	Mud Cake Correction Option	NO	
MCOR	Mud Correction	NATU	
MDEN	Matrix Density	2.65	G/C3
MHC0	MCFL B0 Contrast Correction Coefficient	2.2e−005	OHMS
MHC1	MCFL B1 Contrast Correction Coefficient	3.2e−005	OHMS
MHCC	MCFL High Contrast Correction Switch	NO	
MPOF	MCFL Processing Operation Mode	ON	
MWCO	Mud Weight Correction Option	NO	
NAAC	HRDD APS Activation Correction	OFF	
NMT	HILT Nuclear Mud Type	NOBARITE	
NPRM	HRDD Processing Mode	HiRes	
NSAR	HRDD Depth Sampling Rate	1	IN
PEA_FILTER	PEA Filter	NO_FILTER	
PEFC_FILTER	PEFC Filter	NO_FILTER	
PHIMAX	HILT max porosity	35	PU
PTCO	Pressure/Temperature Correction Option	NO	
SDAT	Standoff Data Source	SOCN	
SEXP_HILT	HILT Saturation Exponent	2	
SHT	Surface Hole Temperature	65	DEGF
SOCN	Standoff Distance	0.125	IN
SOCO	Standoff Correction Option	NO	
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	
FSCO	Formation Salinity Correction Option	NO	
GCSE	Generalized Caliper Selection	HCAL	
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	HSTS_HTEM	
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	
ALLRES: Basic Resistivity Transforms			
ARTS	AIT Rt Selection (for ALLRES computation)	AITH_TwoResA90	
RTCO	RTCO − Rt Invasion Correction	YES	
HOLEV: Integrated Hole/Cement Volume			
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	67.7	DEGF
FCD	Future Casing (Outer) Diameter	9.625	IN
GCSE	Generalized Caliper Selection	HCAL	
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	HSTS_HTEM	
HVCS	Integrated Hole Volume Caliper Selection	AUTOMATIC	
ISSBAR	Barite Mud Switch	NOBARITE	
MATR	Rock Matrix for Neutron Porosity Corrections	SANDSTONE	
SHT	Surface Hole Temperature	65	DEGF
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			
ALTDPCHAN	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
DORL	Depth Offset for Repeat Analysis	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	RECOMPUTE	
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_REP **Vertical Scale: 5" per 100'** **Graphics File Created: 31−Aug−2011 04:03**

OP System Version: 19C0−187

HAIT−H	SRPC−5047−H1−2011−OP19_b	HILTB−FTB	SRPC−5047−H1−2011−OP19_b
EDTC−B	19C0−187		

Input DLIS Files

DEFAULT	AIT_TLD_MCFL_CNL_012LUP	FN:14	PRODUCER	31−Aug−2011 00:37	1506.0 FT	1112.0 FT
DEFAULT	AIT_TLD_MCFL_CNL_014LUP	FN:18	PRODUCER	31−Aug−2011 01:02	1512.0 FT	−16.0 FT

Output DLIS Files

DEFAULT	AIT_TLD_MCFL_CNL_024PUP	FN:34	PRODUCER	31−Aug−2011 04:03

Schlumberger

CALIBRATIONS

MAXIS Field Log

Calibration and Check Summary

Measurement	Nominal	Master	Before	After	Change	Limit	Units
Array Induction Tool − H Wellsite Calibration − Electronics Calibration Check − Thru Cal Mag. & Phase							
Before: 31−Aug−2011 0:06							
Thru Cal Magnitude − 0	0	N/A	0.6206	N/A	N/A	N/A	V
Thru Cal Magnitude − 1	0	N/A	1.275	N/A	N/A	N/A	V
Thru Cal Magnitude − 2	0	N/A	0.6336	N/A	N/A	N/A	V
Thru Cal Magnitude − 3	0	N/A	0.7133	N/A	N/A	N/A	V
Thru Cal Magnitude − 4	0	N/A	1.346	N/A	N/A	N/A	V
Thru Cal Magnitude − 5	0	N/A	1.950	N/A	N/A	N/A	V
Thru Cal Magnitude − 6	0	N/A	1.954	N/A	N/A	N/A	V
Thru Cal Magnitude − 7	0	N/A	1.420	N/A	N/A	N/A	V
Phase − 0	0	N/A	57.26	N/A	N/A	N/A	DEG
Phase − 1	0	N/A	56.24	N/A	N/A	N/A	DEG
Phase − 2	0	N/A	52.55	N/A	N/A	N/A	DEG
Phase − 3	0	N/A	51.80	N/A	N/A	N/A	DEG
Phase − 4	0	N/A	45.52	N/A	N/A	N/A	DEG
Phase − 5	0	N/A	43.66	N/A	N/A	N/A	DEG
Phase − 6	0	N/A	43.63	N/A	N/A	N/A	DEG
Phase − 7	0	N/A	39.78	N/A	N/A	N/A	DEG
Array Induction Tool − H Wellsite Calibration − Electronics Calibration Check − Auxilliary							
Before: 31−Aug−2011 0:06							
Array Induction SPA Plus	990.5	N/A	992.3	N/A	N/A	N/A	MV
Array Induction SPA Zero	0	N/A	0.1246	N/A	N/A	N/A	MV
Array Induction Temperature Pl	0.9150	N/A	0.9199	N/A	N/A	N/A	V
Array Induction Temperature Ze	0	N/A	0.0001156	N/A	N/A	N/A	V
High resolution Integrated Logging Tool−DTS Wellsite Calibration − Stab Measurement Summary							
Before: 29−Aug−2011 17:02							
BS Window Ratio	0.7410	N/A	0.7410	N/A	N/A	N/A	
BS Window Sum	29350	N/A	29240	N/A	N/A	N/A	CPS
SS Window Ratio	0.4864	N/A	0.4858	N/A	N/A	N/A	
SS Window Sum	12980	N/A	12970	N/A	N/A	N/A	CPS
LS Window Ratio	0.2989	N/A	0.2965	N/A	N/A	N/A	
LS Window Sum	1337	N/A	1333	N/A	N/A	N/A	CPS
High resolution Integrated Logging Tool−DTS Wellsite Calibration − Photo−multiplier High Voltages Calibrations							
Before: 29−Aug−2011 17:02							
BS PM High Voltage (Command)	1694	N/A	1697	N/A	N/A	N/A	V
SS PM High Voltage (Command)	1854	N/A	1864	N/A	N/A	N/A	V
LS PM High Voltage (Command)	1518	N/A	1526	N/A	N/A	N/A	V
High resolution Integrated Logging Tool−DTS Wellsite Calibration − Crystal Quality Resolutions Calibration							
Before: 29−Aug−2011 17:02							
BS Crystal Resolution	10.58	N/A	10.59	N/A	N/A	N/A	%
SS Crystal Resolution	10.51	N/A	10.70	N/A	N/A	N/A	%
LS Crystal Resolution	8.311	N/A	8.290	N/A	N/A	N/A	%
High resolution Integrated Logging Tool−DTS Wellsite Calibration − MCFL Calibration							
Before: 29−Aug−2011 17:03							
Raw B0 Resistivity	3875	N/A	3889	N/A	N/A	N/A	OHMM
Raw B1 Resistivity	3830	N/A	3823	N/A	N/A	N/A	OHMM
Raw B2 Resistivity	3830	N/A	3832	N/A	N/A	N/A	OHMM
High resolution Integrated Logging Tool−DTS Wellsite Calibration − HILT Caliper Calibration							
Before: 29−Aug−2011 17:05							

HILT Caliper Zero Measurement	8.000	N/A	7.753	N/A	N/A	N/A	IN
HILT Caliper Plus Measurement	12.00	N/A	12.04	N/A	N/A	N/A	IN
High resolution Integrated Logging Tool−DTS Wellsite Calibration − Detector Calibration							
Before: 29−Aug−2011 17:00							
Gamma Ray Background	30.00	N/A	34.87	N/A	N/A	N/A	GAPI
Gamma Ray (Jig − Bkgd)	165.0	N/A	159.5	N/A	N/A	15.00	GAPI
High resolution Integrated Logging Tool−DTS Wellsite Calibration − Zero Measurement							
Master: 15−Aug−2011 17:17 Before: 29−Aug−2011 17:02							
CNTC Background	28.35	28.35	28.34	N/A	N/A	4.253	CPS
CFTC Background	28.21	28.21	29.07	N/A	N/A	4.232	CPS
High resolution Integrated Logging Tool−DTS Wellsite Calibration − Ratio Measurement							
Master: 15−Aug−2011 17:17							
Thermal Near Corr. (Tank)	5800	4709	N/A	N/A	N/A	N/A	CPS
Thermal Far Corr. (Tank)	2400	2062	N/A	N/A	N/A	N/A	CPS
CNTC/CFTC (Tank)	2.159	2.284	N/A	N/A	N/A	N/A	
High resolution Integrated Logging Tool−DTS Wellsite Calibration − Accelerometer Calibration							
Before: 31−Aug−2011 0:05							
Z−Axis Acceleration	32.19	N/A	32.16	N/A	N/A	N/A	F/S2
High resolution Integrated Logging Tool−DTS Master Calibration − Inversion results							
Master: 29−Aug−2011 15:18							
Rho Aluminum	2.596	2.598	−−	−−	−−	−−	G/C3
Rho Magnesium	1.686	1.688	−−	−−	−−	−−	G/C3
Pe Aluminum	2.570	2.550	−−	−−	−−	−−	
Pe Magnesium	2.650	2.623	−−	−−	−−	−−	
High resolution Integrated Logging Tool−DTS Master Calibration − Deviation Summary							
Master: 29−Aug−2011 15:18							
BS Average Deviation	0	0.1847	−−	−−	−−	−−	%
BS Max Deviation	0	0.6784	−−	−−	−−	−−	%
SS Average Deviation	0	0.2826	−−	−−	−−	−−	%
SS Max Deviation	0	1.081	−−	−−	−−	−−	%
LS Average Deviation	0	0.4174	−−	−−	−−	−−	%
LS Max Deviation	0	1.083	−−	−−	−−	−−	%
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
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

The GLS−VJ source activity is acceptable.

The HGNS Neutron Master Calibration was done with the following parameters :

NCT−B Water Temperature 70.0 DEGF.
Thermal Housing Size 3.375 IN.
NSR−F serial number 460

Array Induction Tool − H / Equipment Identification

Primary Equipment:

Rm/SP Bottom Nose	AHRM − A	
Array Induction Sonde	AHIS − BA	266

Auxiliary Equipment:

Array Induction Tool − H Wellsite Calibration

Electronics Calibration Check − Thru Cal Mag. & Phase

Idx	Phase	Value	Thru Cal Magnitude V	Nominal	Value	Phase DEG	Nominal
0	Before	0.6206		0.6050	57.26		71.00
1	Before	1.275		1.270	56.24		70.00
2	Before	0.6336		0.6330	52.55		66.00

2	Before	0.6336	0.6230	52.55		66.00
3	Before	0.7133	0.7040	51.80		65.00
4	Before	1.346	1.337	45.52		59.00
5	Before	1.950	1.955	43.66		57.00
6	Before	1.954	1.955	43.63		57.00
7	Before	1.420	1.415	39.78		53.00
		60.00 % (Minimum)	140.0 % (Maximum)	Nom −60.00 (Minimum)	Nom + 60.00 (Maximum)	

Before: 31−Aug−2011 0:06

Array Induction Tool − H Wellsite Calibration

Electronics Calibration Check − Auxilliary

Phase	Array Induction SPA Plus MV	Value
Before		992.3
	941.0 (Minimum) 990.5 (Nominal) 1040 (Maximum)	

Phase	Array Induction SPA Zero MV	Value
Before		0.1246
	−50.00 (Minimum) 0 (Nominal) 50.00 (Maximum)	

Phase	Array Induction Temperature Plus V	Value
Before		0.9199
	0.8700 (Minimum) 0.9150 (Nominal) 0.9600 (Maximum)	

Phase	Array Induction Temperature Zero V	Value
Before		0.0001156
	−0.05000 (Minimum) 0 (Nominal) 0.05000 (Maximum)	

Before: 31−Aug−2011 0:06

High resolution Integrated Logging Tool−DTS / Equipment Identification

Primary Equipment:

HILT high−Resolution Mechanical Sonde	HRMS − B	4852
HILT Rxo Gamma−ray Device	HRGD − B	4883
HILT Micro Cylindrically Focused Log Dev	MCFL −	
GR Logging Source	GLS − VJ	5109
HILT High Res. Control Cartridge	HRCC − B	4864
HILT Gamma−Ray Neutron Sonde−DTS	HGNS − B	
HGNS Gamma−Ray Device	HGR −	
HGNS Neutron Detector with Alpha Source	HCNT −	

Auxiliary Equipment:

Neutron Calibration Tank	NCT − B	
Gamma Source Radioactive	GSR − U/Y	
HGNS Housing	HGNH −	

High resolution Integrated Logging Tool−DTS Wellsite Calibration

Stab Measurement Summary

Phase	BS Window Ratio	Value
Before		0.7410
	0.7039 (Minimum) 0.7410 (Nominal) 0.7780 (Maximum)	

Phase	SS Window Ratio	Value
Before		0.4858
	0.4621 (Minimum) 0.4864 (Nominal) 0.5107 (Maximum)	

Phase	LS Window Ratio	Value
Before		0.2965
	0.2839 (Minimum) 0.2989 (Nominal) 0.3138 (Maximum)	

Phase	BS Window Sum CPS	Value
Before		29240
	27890 (Minimum) 29350 (Nominal) 30820 (Maximum)	

Phase	SS Window Sum CPS	Value
Before		12970
	12330 (Minimum) 12980 (Nominal) 13630 (Maximum)	

Phase	LS Window Sum CPS	Value
Before		1333
	1270 (Minimum) 1337 (Nominal) 1404 (Maximum)	

Before: 29−Aug−2011 17:02

High resolution Integrated Logging Tool−DTS Wellsite Calibration

Photo−multiplier High Voltages Calibrations

Phase	BS PM High Voltage (Command) V	Value
Before		1697
	1594 (Minimum) 1694 (Nominal) 1794 (Maximum)	

Phase	SS PM High Voltage (Command) V	Value
Before		1864
	1754 (Minimum) 1854 (Nominal) 1954 (Maximum)	

Phase	LS PM High Voltage (Command) V	Value
Before		1526
	1418 (Minimum) 1518 (Nominal) 1618 (Maximum)	

Before: 29−Aug−2011 17:02

High resolution Integrated Logging Tool−DTS Wellsite Calibration

Crystal Quality Resolutions Calibration

Phase	BS Crystal Resolution %	Value
Before		10.59
	9.576 10.58 11.58	

Phase	SS Crystal Resolution %	Value
Before		10.70
	9.511 10.51 11.51	

Phase	LS Crystal Resolution %	Value
Before		8.290
	7.311 8.311 9.311	

(Minimum)	(Nominal)	(Maximum)	(Minimum)	(Nominal)	(Maximum)	(Minimum)	(Nominal)	(Maximum)

Before: 29−Aug−2011 17:02

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	Value
Before		3889	Before		3823	Before		3832
3565 (Minimum)	3875 (Nominal)	4185 (Maximum)	3524 (Minimum)	3830 (Nominal)	4136 (Maximum)	3524 (Minimum)	3830 (Nominal)	4136 (Maximum)

Before: 29−Aug−2011 17:03

High resolution Integrated Logging Tool−DTS Wellsite Calibration

HILT Caliper Calibration

Phase	HILT Caliper Zero Measurement IN	Value	Phase	HILT Caliper Plus Measurement IN	Value
Before		7.753	Before		12.04
6.000 (Minimum)	8.000 (Nominal)	10.00 (Maximum)	9.000 (Minimum)	12.00 (Nominal)	15.00 (Maximum)

Before: 29−Aug−2011 17:05

High resolution Integrated Logging Tool−DTS Wellsite Calibration

Detector Calibration

Phase	Gamma Ray Background GAPI	Value	Phase	Gamma Ray (Jig − Bkgd) GAPI	Value
Before		34.87	Before		159.5
0 (Minimum)	30.00 (Nominal)	120.0 (Maximum)	157.1 (Minimum)	165.0 (Nominal)	206.3 (Maximum)

Before: 29−Aug−2011 17:00

High resolution Integrated Logging Tool−DTS Wellsite Calibration

Zero Measurement

Phase	CNTC Background CPS	Value	Phase	CFTC Background CPS	Value
Master		28.35	Master		28.21
Before		28.34	Before		29.07
5.000 (Minimum)	28.35 (Nominal)	40.00 (Maximum)	5.000 (Minimum)	28.21 (Nominal)	40.00 (Maximum)

Master: 15−Aug−2011 17:17 Before: 29−Aug−2011 17:02

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)	Value
Master		4709	Master		2062	Master		2.284
4700 (Minimum)	5800 (Nominal)	6900 (Maximum)	1900 (Minimum)	2400 (Nominal)	2900 (Maximum)	2.120 (Minimum)	2.159 (Nominal)	2.540 (Maximum)

Master: 15−Aug−2011 17:17

High resolution Integrated Logging Tool−DTS
Wellsite Calibration

Accelerometer Calibration

Phase	Z−Axis Acceleration F/S2	Value
Before		32.16
31.53 (Minimum)	32.19 (Nominal)	32.84 (Maximum)

Before: 31−Aug−2011 0:05

High resolution Integrated Logging Tool−DTS Master Calibration

Inversion results

Phase	Rho Aluminum G/C3	Value	Phase	Rho Magnesium G/C3	Value
Master		2.598	Master		1.688
2.586 (Minimum)	2.596 (Nominal)	2.606 (Maximum)	1.676 (Minimum)	1.686 (Nominal)	1.696 (Maximum)
Phase	Pe Aluminum	Value	Phase	Pe Magnesium	Value
Master		2.550	Master		2.623
2.470 (Minimum)	2.570 (Nominal)	2.670 (Maximum)	2.550 (Minimum)	2.650 (Nominal)	2.750 (Maximum)

Master: 29−Aug−2011 15:18

High resolution Integrated Logging Tool−DTS Master Calibration

Deviation Summary

Phase	BS Average Deviation %	Value	Phase	SS Average Deviation %	Value	Phase	LS Average Deviation %	Value
Master		0.1847	Master		0.2826	Master		0.4174
	−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 %	Value
Master		0.6784	Master		1.081	Master		1.083
	−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: 29−Aug−2011 15:18

High resolution Integrated Logging Tool−DTS Master Calibration

Zero Measurement

Phase	CNTC Background CPS	Value	Phase	CFTC Background CPS	Value
Master		28.35	Master		28.21
	5.000 (Minimum) 28.35 (Nominal) 40.00 (Maximum)			5.000 (Minimum) 28.21 (Nominal) 40.00 (Maximum)	

Master: 15−Aug−2011 17:17

High resolution Integrated Logging Tool−DTS Master Calibration

Tank Measurement

Phase	Thermal Near Corr. (Tank) CPS	Value	Phase	Thermal Far Corr. (Tank) CPS	Value	Phase	CNTC/CFTC (Tank)	Value
Master		4709	Master		2062	Master		2.284
	4700 (Minimum) 5800 (Nominal) 6900 (Maximum)			1900 (Minimum) 2400 (Nominal) 2900 (Maximum)			2.120 (Minimum) 2.159 (Nominal) 2.540 (Maximum)	

Master: 15−Aug−2011 17:17

Enhanced DTS Cartridge / Equipment Identification

Primary Equipment:

EDTC Gamma Ray Detector	EDTG − A/B
Enhanced DTS Cartridge	EDTC − B

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	Phase	Gamma Ray (Calibrated) GAPI	Value
Before		36.36	Before		147.5	Before		160.0
	0 (Minimum) 30.00 (Nominal) 120.0 (Maximum)			134.1 (Minimum) 147.5 (Nominal) 160.9 (Maximum)			145.0 (Minimum) 160.0 (Nominal) 175.0 (Maximum)	

Before: 29−Aug−2011 17:01

Well:	**NYSTA TANDEM LOT 1**
Field:	**WILDCAT**
County:	**ROCKLAND**
State:	**NEW YORK**

PLATFORM EXPRESS
ARRAY INDUCTION
GAMMA RAY / CALIPER