



## DEPTH SUMMARY LISTING

Date Created: 10-MAR-2007 2:12:37

### Depth System Equipment

Depth Measuring Device	Tension Device	Logging Cable
Type: IDW-B Serial Number: 107 Calibration Date: 26-JAN-2007 Calibrator Serial Number: 4 Calibration Cable Type: 7-46P-XS Wheel Correction 1: -5 Wheel Correction 2: -5	Type: CMTD-B/A Serial Number: 5055 Calibration Date: 16-FEB-2007 Calibrator Serial Number: -999 Calibration Gain: 0.89 Calibration Offset: 400.00	Type: 7-46P-XS Serial Number: -999 Length: 7000.04 M Conveyance Method: Wireline Rig Type: LAND

### Depth Control Parameters

Log Sequence:	Subsequent Log In the Well
Reference Log Name:	PLATFORM EXPRESS: COMPENSATED NEUTRON LITHO DENSITY LOC
Reference Log Run Number:	ONE
Reference Log Date:	03-MAR-2007

### Depth Control Remarks

1. SPEED CORRECTION NOT APPLIED AT WELLSITE	
2.	
3.	
4.	
5.	
6.	

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OTHER SERVICES1	OTHER SERVICES2
OS1:	OS1:
OS2:	OS2:
OS3:	OS3:
OS4:	OS4:
OS5:	OS5:
REMARKS: RUN NUMBER 1	REMARKS: RUN NUMBER 2

AIT-TLD-HGNS LOGGED FROM 1310-1296M FOR NEB REQUIREMENTS

RIG: AKITA 62

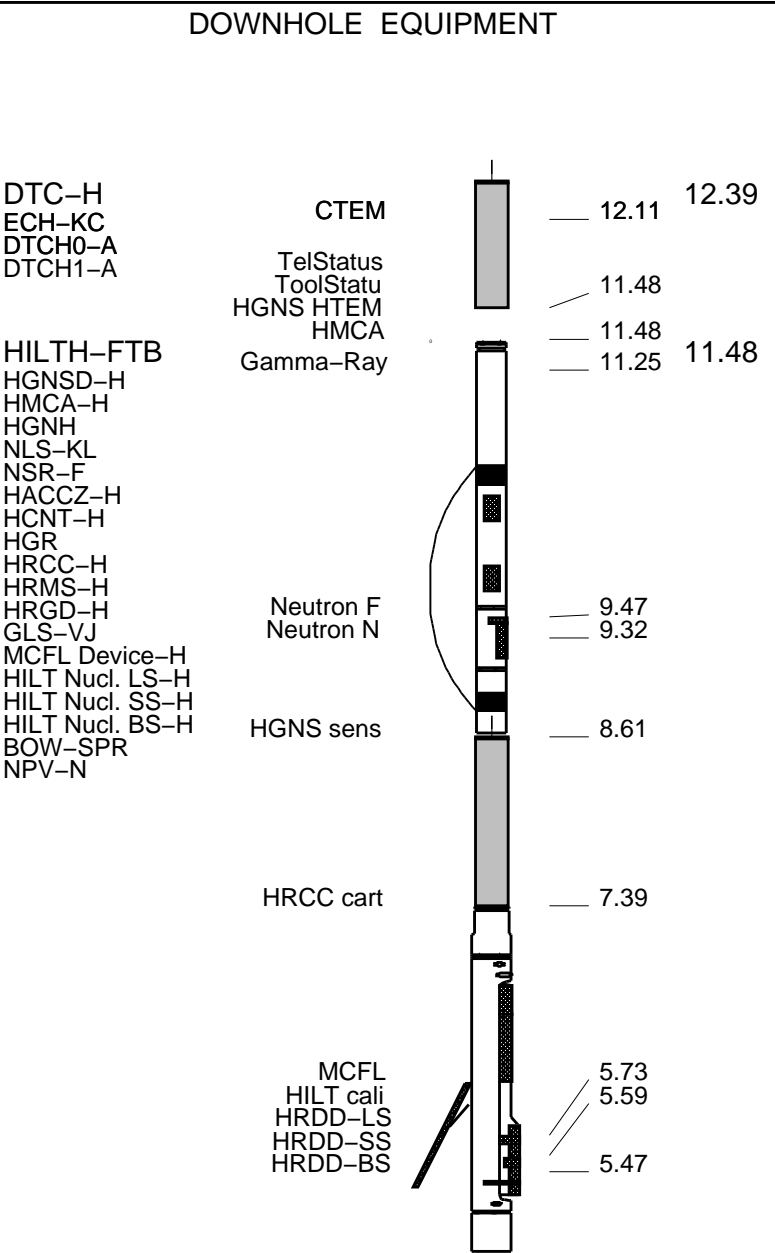
CREW: JAMES MACDONALD / MARK KIMBALL / MIKE KLOC

RUN 1			RUN 2		
SERVICE ORDER #:	11709034		SERVICE ORDER #:		
PROGRAM VERSION:	14C0-302		PROGRAM VERSION:		
FLUID LEVEL:			FLUID LEVEL:		
LOGGED INTERVAL	START	STOP	LOGGED INTERVAL	START	STOP

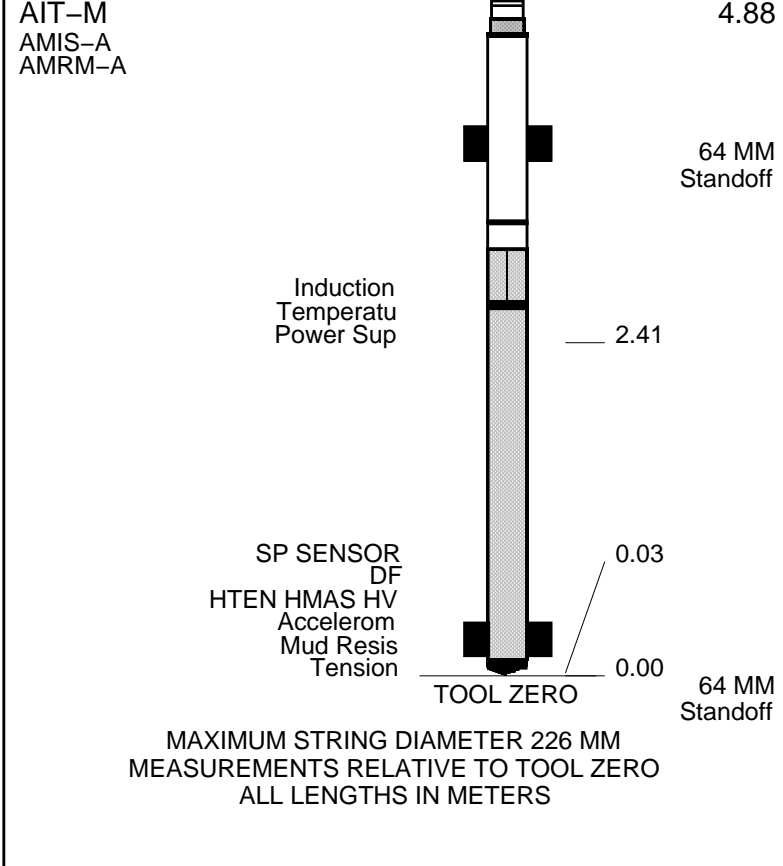
## EQUIPMENT DESCRIPTION

RUN 1 RUN 2

**SURFACE EQUIPMENT**  
 WITM (DTS)-A  
 GSR-U/Y  
 NCT-B  
 CNB-AB  
 NCS-VB



RUN 2



### Output DLIS Files

DEFAULT      AIT\_TLD\_MCFL\_CNL\_017LUP      FN:16      PRODUCER      09-Mar-2007 19:31      1314.0 M      1221.3 M

### OP System Version: 14C0-302

MCM

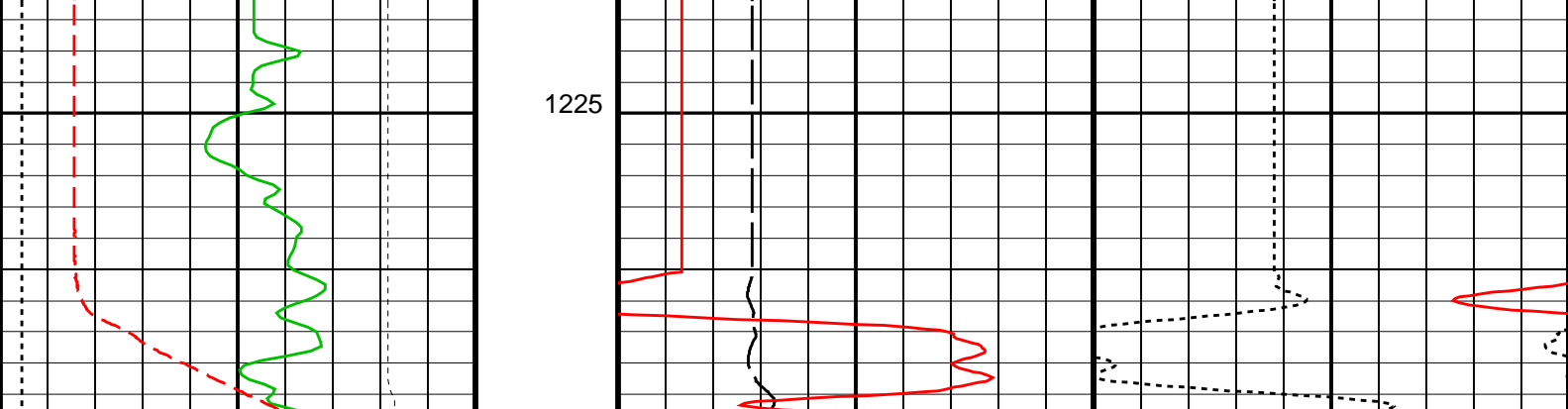
AIT-M                      14C0-302                                      HILTH-FTB                      14C0-302  
DTC-H                      14C0-302

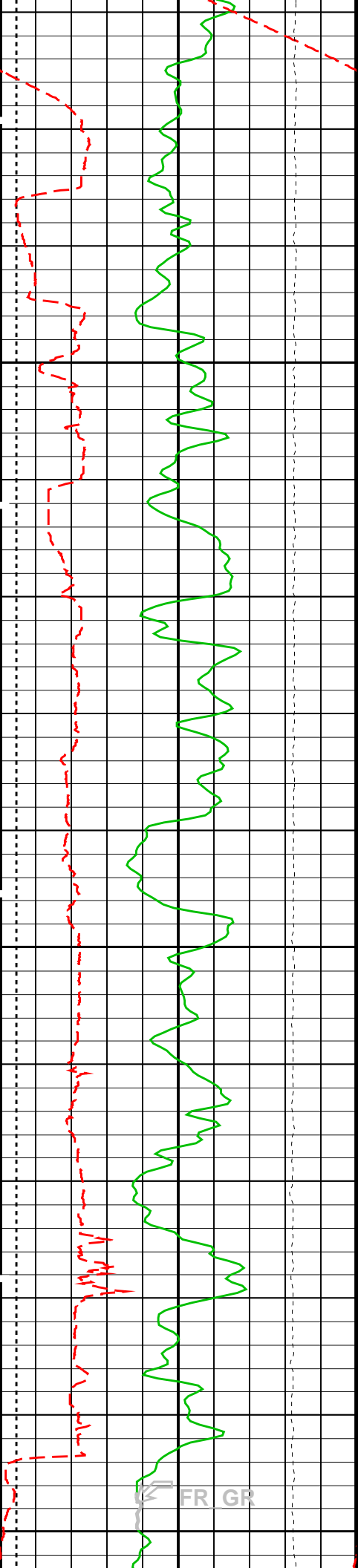
### PIP SUMMARY

Time Mark Every 60 S

Tension (TENS)		25000 (N)		0	
Caliper (HCAL)		300 (MM)		550	
Gamma Ray (GR)		0 (GAPI)		150	
Bit Size (BS)		300 (MM)		550	
Std. Res. Formation Density (RHOZ)			2000 (K/M3)		
Std. Res. Formation Pe (PEFZ)			10 450 (----)		
Density Correction (HDRA)			-50 (K/M3)		

**MAIN PASS: \*\*\* DENSITY - SANDSTONE 2650 KG/M3\*\*\***

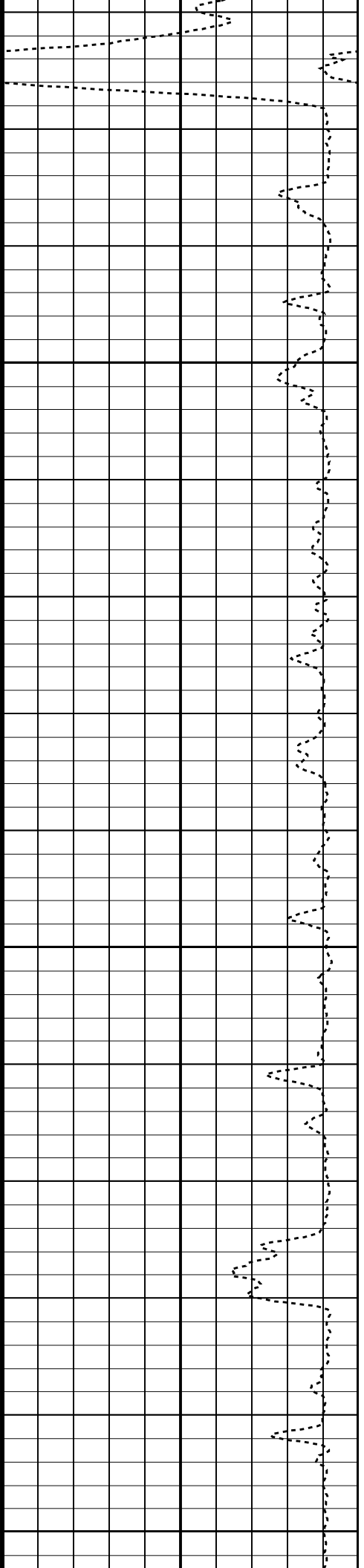
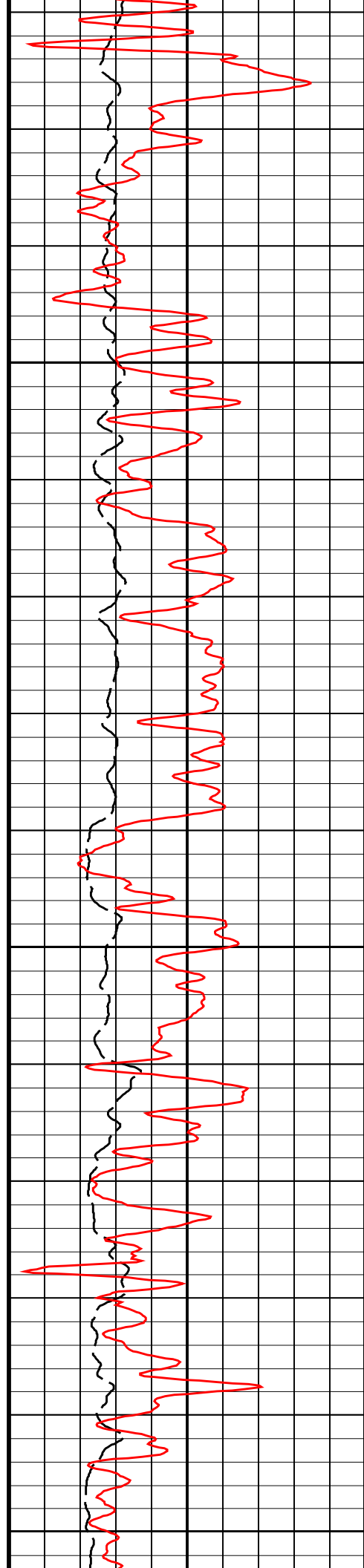


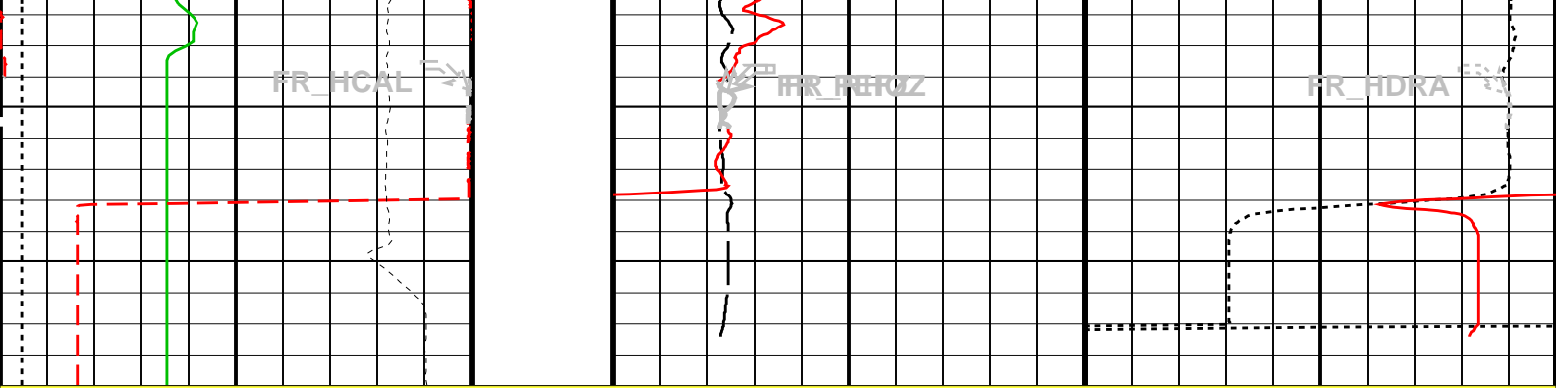


1250

1275

1300





MAIN PASS: \*\*\* DENSITY - SANDSTONE 2650 KG/M3\*\*\*

Bit Size (BS) (MM)		300	550	Std. Res. Formation Pe (PEFZ)		0	10	450	Density Correction (HDRA) (K/M3)		-50		
Gamma Ray (GR) (GAPI)		0	150	Std. Res. Formation Density (RHOZ) (K/M3)								2000	3000
Caliper (HCAL) (MM)		300	550										
Tension (TENS) (N)		25000	0										

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
HILTH-FTB: High resolution Integrated Logging Tool-DTS		
BHFL_TLD	HILT Nuclear Mud Base	WATER
DHC	Density Hole Correction	BS
NAAC	HRDD APS Activation Correction	OFF
NMT	HILT Nuclear Mud Type	NOBARITE
NPRM	HRDD Processing Mode	HiRes
NSAR	HRDD Depth Sampling Rate	25.4 MM
STI: Stuck Tool Indicator		
LBFR	Trigger for MAXIS First Reading Label	TDL
STKT	STI Stuck Threshold	1.524 M
TDD	Total Depth - Driller	1310.00 M
TDL	Total Depth - Logger	1310.00 M
System and Miscellaneous		
BS	Bit Size	311.150 MM
DFD	Drilling Fluid Density	1115.00 K/M3

Format: DENS Vertical Scale: 1:240 Graphics File Created: 09-Mar-2007 19:31

OP System Version: 14C0-302

MCM

AIT-M	14C0-302	HILTH-FTB	14C0-302
DTC-H	14C0-302		

Output DLIS Files

DEFAULT	AIT_TLD_MCFL_CNL_017LUP	FN:16	PRODUCER	09-Mar-2007 19:31
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Output DLIS Files

DEFAULT	AIT_TLD_MCFL_CNL_017LUP	FN:16	PRODUCER	09-Mar-2007 19:31	1314.0 M	1221.3 M
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OP System Version: 14C0-302

MCM

AIT-M	14C0-302	HILTH-FTB	14C0-302
DTC-H	14C0-302		

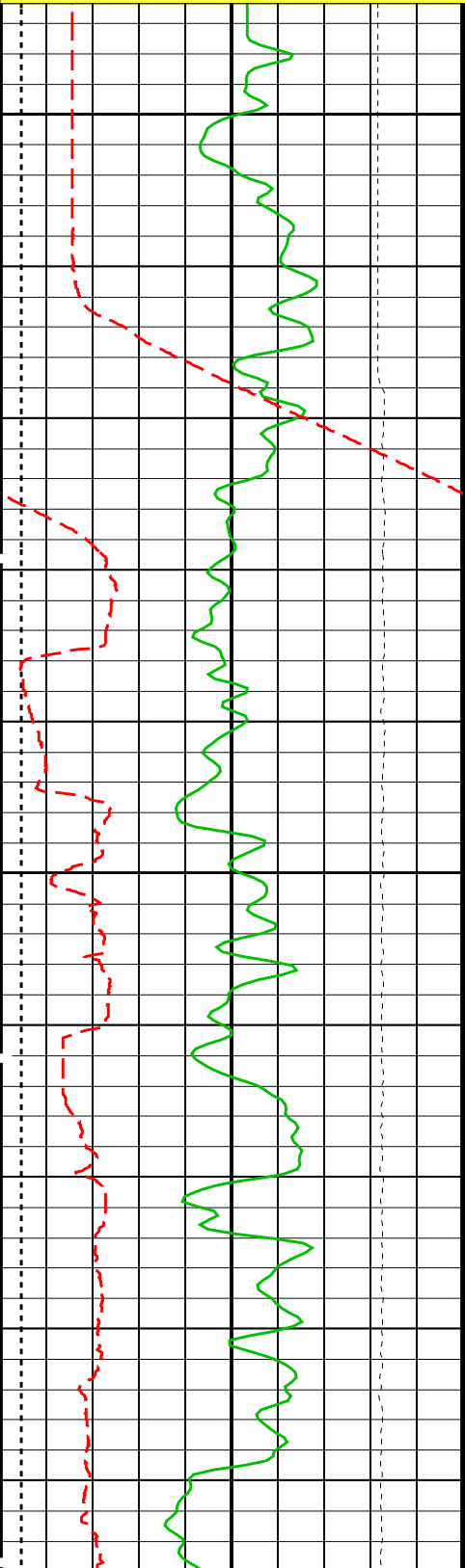
PIP SUMMARY

Time Mark Every 60 S

Tension (TENS)		
25000 (N)		0
Caliper (HCAL)		
300 (MM)		550
Gamma Ray (GR)		
0 (GAPI)		150
Bit Size (BS)		
300 (MM)		550

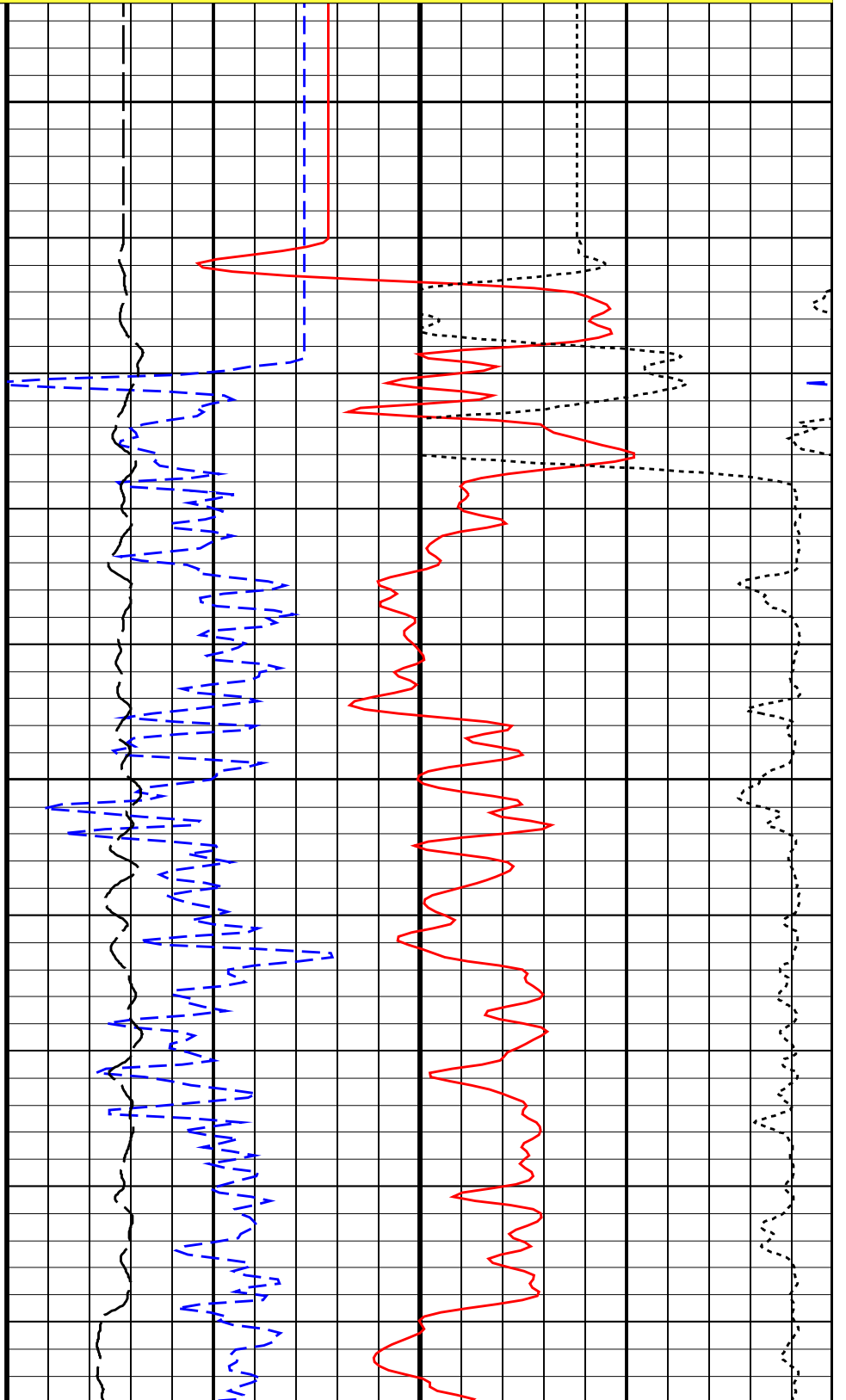
Std. Res. Formation Pe (PEFZ)		Density Correction (HDRA)	
0 (---	10	450 (K/M3)	-50
NPOR for SAND (NPOR_SAN)			
0.6 (V/V)			0
DPHI for SAND (DPHI_SAN)			
0.6 (V/V)			0

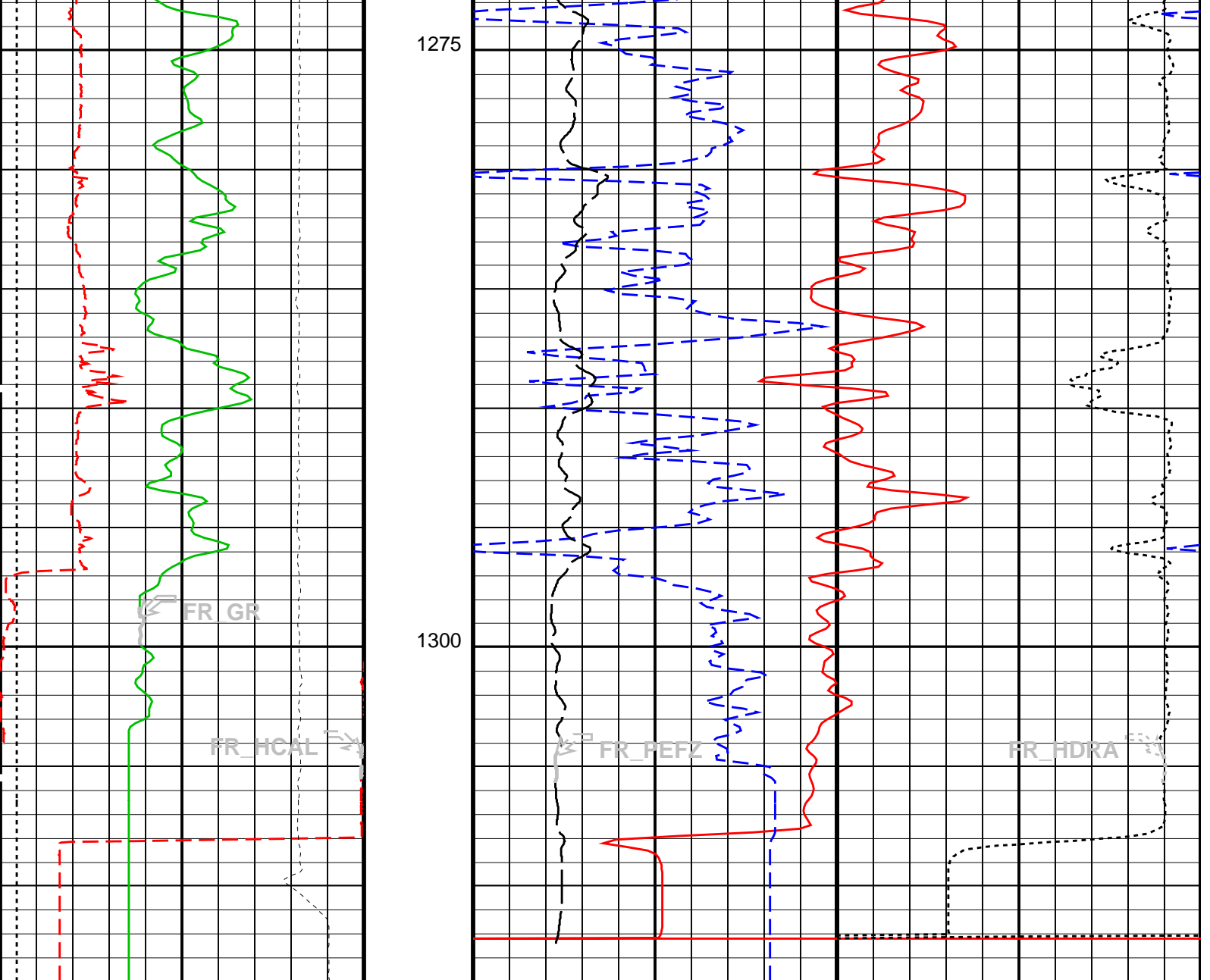
MAIN PASS: \*\*\*PEX DENSITY POROSITY - SANDSTONE 2650 KG/M3 \*\*\*



1225

1250





MAIN PASS: \*\*\*PEX DENSITY POROSITY - SANDSTONE 2650 KG/M3 \*\*\*

Bit Size (BS) (MM)	300	550	DPHI for SAND (DPHI_SAN) (V/V)		0.6	0	
Gamma Ray (GR) (GAPI)	0	150	NPOR for SAND (NPOR_SAN) (V/V)		0.6	0	
Caliper (HCAL) (MM)	300	550	Std. Res. Formation Pe (PEFZ) (----	10	Density Correction (HDRA) (K/M3)	450	-50
Tension (TENS) 25000 (N)		0					

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
AIT-M	Array Induction Tool - M	
BHS	Borehole Status	OPEN
GDEV	Average Angular Deviation of Borehole from Normal	0 DEG
GGRD	Geothermal Gradient	0.01 DF/F
HILTH-FTB	High resolution Integrated Logging Tool-DTS	
BHFL	Borehole Fluid Type	WATER
BHFL_TLD	HILT Nuclear Mud Base	WATER



BHS	Borehole Status	OPEN	
BSCO	Borehole Salinity Correction Option	NO	
CCCO	Casing & Cement Thickness Correction Option	NO	
DHC	Density Hole Correction	BS	
FD	Fluid Density	1000	K/M3
FSAL	Formation Salinity	-50000	PPM
FSCO	Formation Salinity Correction Option	NO	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.01	DF/F
HSCO	Hole Size Correction Option	YES	
MCCO	Mud Cake Correction Option	NO	
MCOR	Mud Correction	NATU	
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	25.4	MM
PTCO	Pressure/Temperature Correction Option	NO	
SDAT	Standoff Data Source	SOCN	
SOCN	Standoff Distance	3.175	MM
SOCO	Standoff Correction Option	YES	
STI: Stuck Tool Indicator			
LBFR	Trigger for MAXIS First Reading Label	TDL	
STKT	STI Stuck Threshold	1.524	M
TDD	Total Depth - Driller	1310.00	M
TDL	Total Depth - Logger	1310.00	M
System and Miscellaneous			
BS	Bit Size	311.150	MM
BSAL	Borehole Salinity	-50000.00	PPM
CSIZ	Current Casing Size	339.700	MM
CWEI	Casing Weight	81.11	KG/M
DFD	Drilling Fluid Density	1115.00	K/M3
MST	Mud Sample Temperature	19.70	DEGC
RMFS	Resistivity of Mud Filtrate Sample	0.1200	OHMM

Format: PORO-SAND45-CAN Vertical Scale: 1:240 Graphics File Created: 09-Mar-2007 19:31

**OP System Version: 14C0-302**  
MCM

AIT-M	14C0-302	HILTH-FTB	14C0-302
DTC-H	14C0-302		

**Output DLIS Files**

DEFAULT AIT\_TLD\_MCFL\_CNL\_017LUP FN:16 PRODUCER 09-Mar-2007 19:31

**Output DLIS Files**

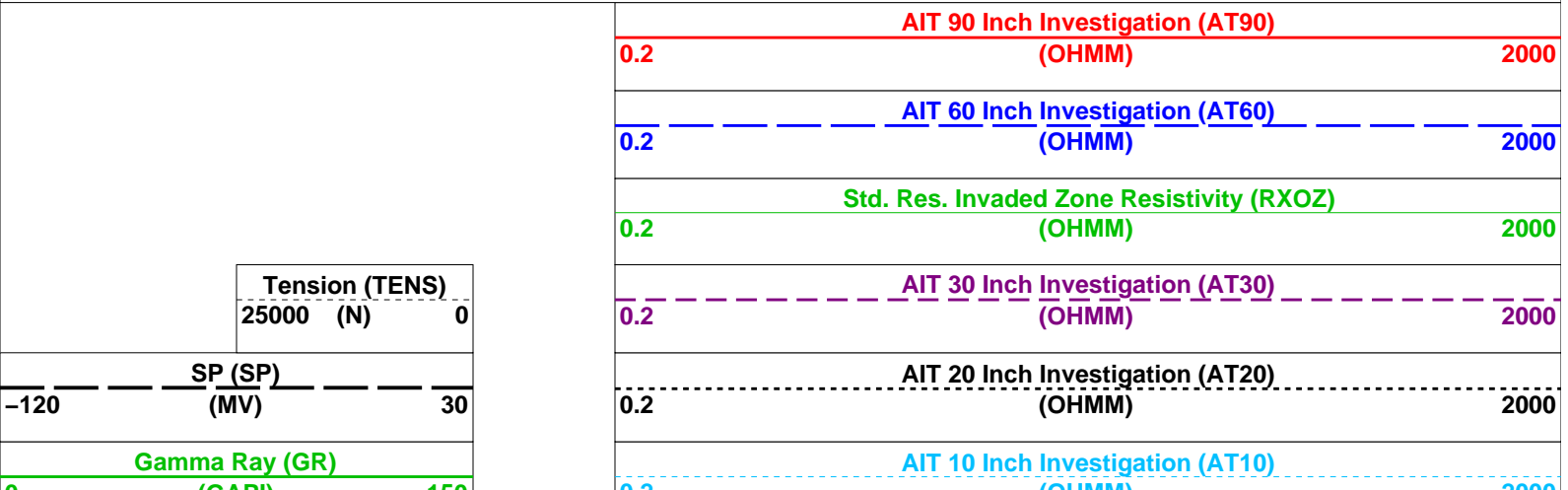
DEFAULT AIT\_TLD\_MCFL\_CNL\_017LUP FN:16 PRODUCER 09-Mar-2007 19:31 1314.0 M 1221.2 M

**OP System Version: 14C0-302**  
MCM

AIT-M	14C0-302	HILTH-FTB	14C0-302
DTC-H	14C0-302		

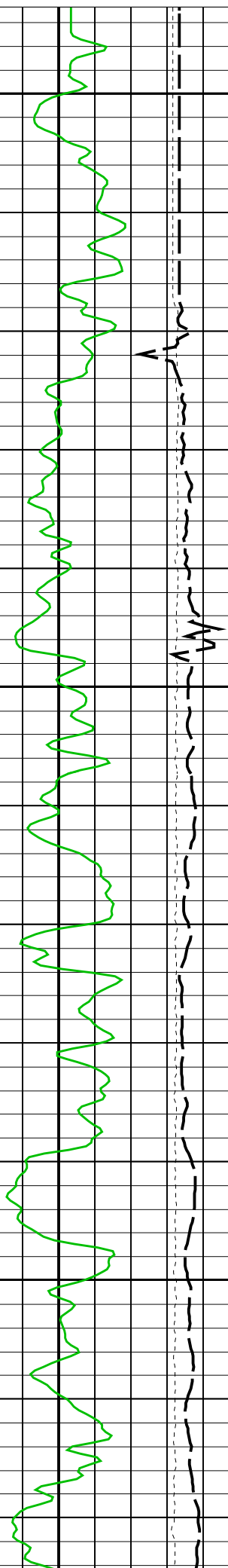
**PIP SUMMARY**

Time Mark Every 60 S



(GAPI)

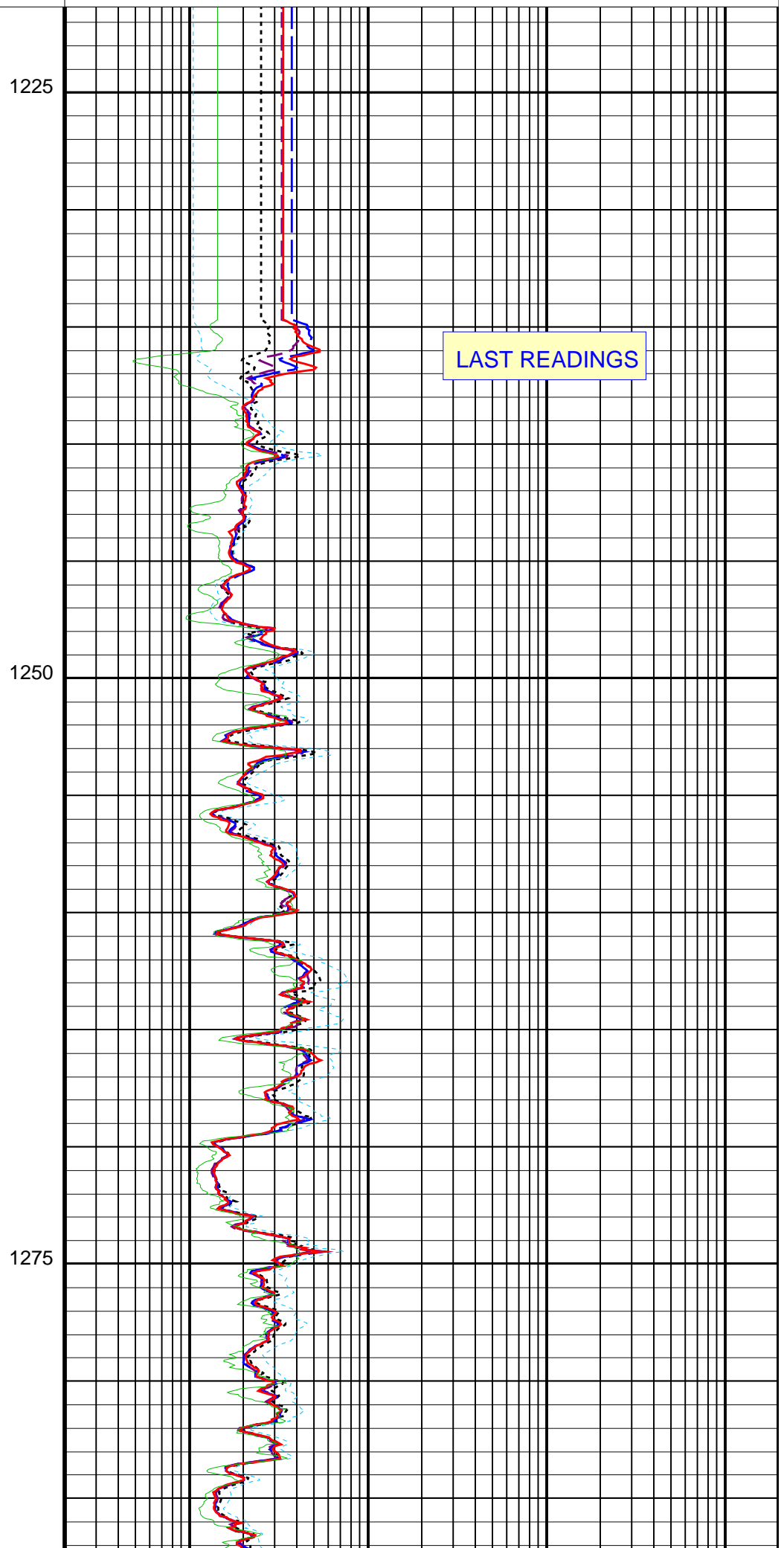
150



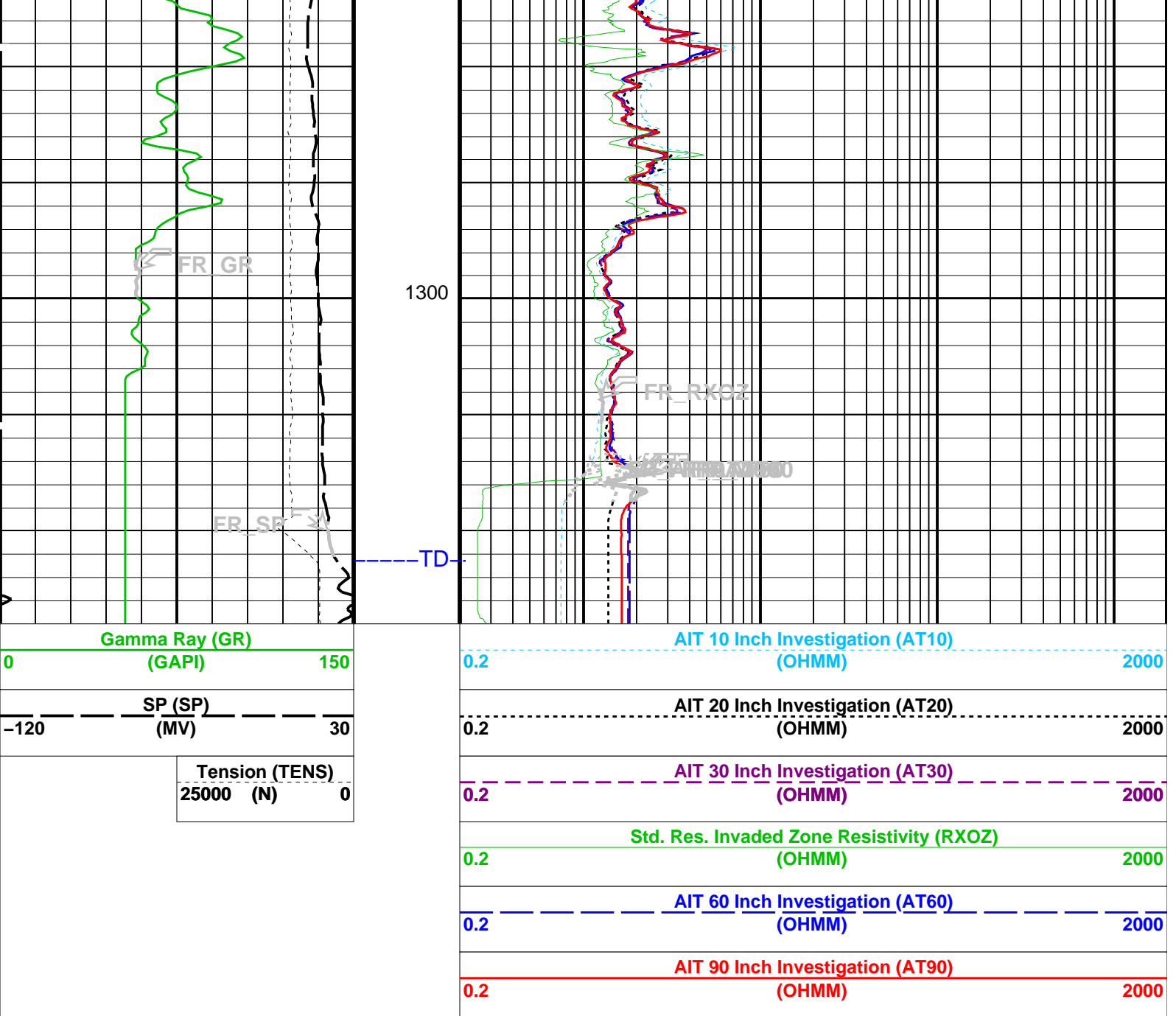
0.2

(OHMM)

2000



LAST READINGS



PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
AIT-M: Array Induction Tool - M		
ABHM	Array Induction Borehole Correction Mode	2_ComputeStandoff
ABHV	Array Induction Borehole Correction Code Version Number	880
ABLM	Array Induction Basic Logs Mode	6_One_Two_and_Four
ABLV	Array Induction Basic Logs Code Version Number	108
ACDE	Array Induction Casing Detection Enable	No
ACEN	Array Induction Tool Centering Flag (in Borehole)	Eccentered
ACSED	Array Induction Casing Shoe Estimated Depth	-50000
AETP	Array Induction Enable Sonde Error Temp&Pres Corr	Yes
AFRSV	Array Induction Response Set Version for Four ft Resolution	40.70.24.21
AIGS	Array Induction Select Akima Interpolation Gating	On
AMRF	Array Induction Mud Resistivity Factor	1
AORSV	Array Induction Response Set Version for One ft Resolution	40.70.24.21
ARFV	Array Induction Radial Profiling Code Version Number	700
ARPV	Array Induction Radial Parametrization Code Version Number	223
ASTA	Array Induction Tool Standoff	64
ATRSV	Array Induction Response Set Version for Two ft Resolution	40.70.24.21
ATSE	Array Induction Temperature Selection(Sonde Error Correction)	Internal
AULV	Array Induction User Level Control	Normal
BHT	Bottom Hole Temperature (used in calculations)	55.4
FEYP	Form Factor Exponent	2

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	AITM_RESIST	
GTSE	Generalized Temperature Selection	HSTS_HTEM	
SHT	Surface Hole Temperature	41	DEGF
SPNV	SP Next Value	0	MV
<b>HILTH-FTB: High resolution Integrated Logging Tool-DTS</b>			
BHT	Bottom Hole Temperature (used in calculations)	55.4	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	AITM_RESIST	
GTSE	Generalized Temperature Selection	HSTS_HTEM	
MPOF	MCFL Processing Operation Mode	ON	
SHT	Surface Hole Temperature	41	DEGF
<b>STI: Stuck Tool Indicator</b>			
LBFR	Trigger for MAXIS First Reading Label	TDL	
STKT	STI Stuck Threshold	1.524	M
TDD	Total Depth - Driller	1310.00	M
TDL	Total Depth - Logger	1310.00	M
<b>System and Miscellaneous</b>			
BS	Bit Size	311.150	MM
DFD	Drilling Fluid Density	1115.00	K/M3
MST	Mud Sample Temperature	19.70	DEGC
TD	Total Depth	1310.03	M

Format: AITM-2FT-CAN    Vertical Scale: 1:240    Graphics File Created: 09-Mar-2007 19:31

**OP System Version: 14C0-302**  
MCM

AIT-M	14C0-302	HILTH-FTB	14C0-302
DTC-H	14C0-302		

**Output DLIS Files**

DEFAULT	AIT_TLD_MCFL_CNL_017LUP	FN:16	PRODUCER	09-Mar-2007 19:31
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**Output DLIS Files**

DEFAULT	AIT_TLD_MCFL_CNL_017LUP	FN:16	PRODUCER	09-Mar-2007 19:31	1314.0 M	1221.3 M
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**HRDD Processing Flags Statistical Analysis:**

Percentages computed on interval 4268.2 to 4035.3 ft (1300.9 to 1230.0 m)

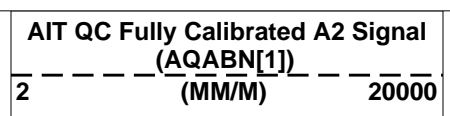
Pef Flags Up	7.6 %				
Density Flags Up	4.7 %				
		Window 1	Window 2	Window 3	Window 4
BS Average Reconstruction Error	2.01 %	2.01 %	0.83 %	0.40 %	
SS Average Reconstruction Error	-0.31 %	-0.31 %	-0.72 %	-0.42 %	0.35 %
LS Average Reconstruction Error	2.48 %	2.48 %	0.90 %	-0.08 %	-0.07 %

**OP System Version: 14C0-302**  
MCM

AIT-M	14C0-302	HILTH-FTB	14C0-302
DTC-H	14C0-302		

**PIP SUMMARY**

Time Mark Every 60 S



AIT Mud Full Cal (AMF) (OHMM) 0.02 200		AIT QC Fully Calibrated A3 Signal (AQABN[2]) 2 (MM/M) 20000			
Std. Res. Resistivity Standoff (RSOZ) (MM) 65 0		AIT QC Fully Calibrated A4 Signal (AQABN[3]) 2 (MM/M) 20000			
Gamma Ray (GR) (GAPI) 0 150		AIT QC Fully Calibrated A5 Signal (AQABN[4]) 2 (MM/M) 20000			
Bit Size (BS) (MM) 300 550		AIT QC Fully Calibrated A6 Signal (AQABN[5]) 2 (MM/M) 20000			
AIT Input Bhole Diameter (AIBD) (MM) 300 550		AIT QC Fully Calibrated A7 Signal (AQABN[6]) 2 (MM/M) 20000		BS Delta Rho (HDRB) (G/C3) -0.5 0.5	
AIT Bhole/Form Signal Ratio (ABFR) (----) 0 25		AIT QC Fully Calibrated A8 Signal (AQABN[7]) 2 (MM/M) 20000		Delta Neutron Porosity (DNPH) (V/V) -0.1 0.1	
HGNS Deviation (GDEV) (DEG) -5 45		AIT QC Fully Calibrated A1 Signal (AQABN[0]) 2 (MM/M) 20000		GR Borehole Correction Factor (CFGR) (----) 0.5 1.5	
Tension (TENS) (N) 25000 0					

\*\*\* Flag Tracks \*\*\*

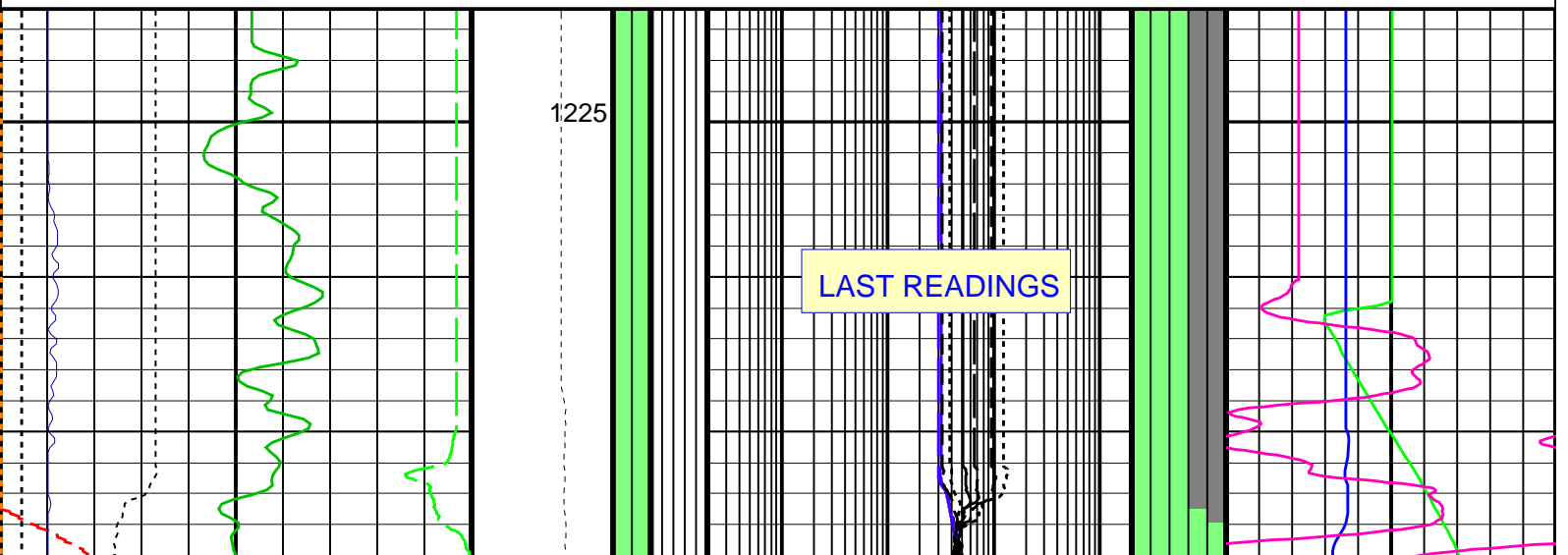
White = Absent Green = Good Yellow = Warn Red/Black = Bad

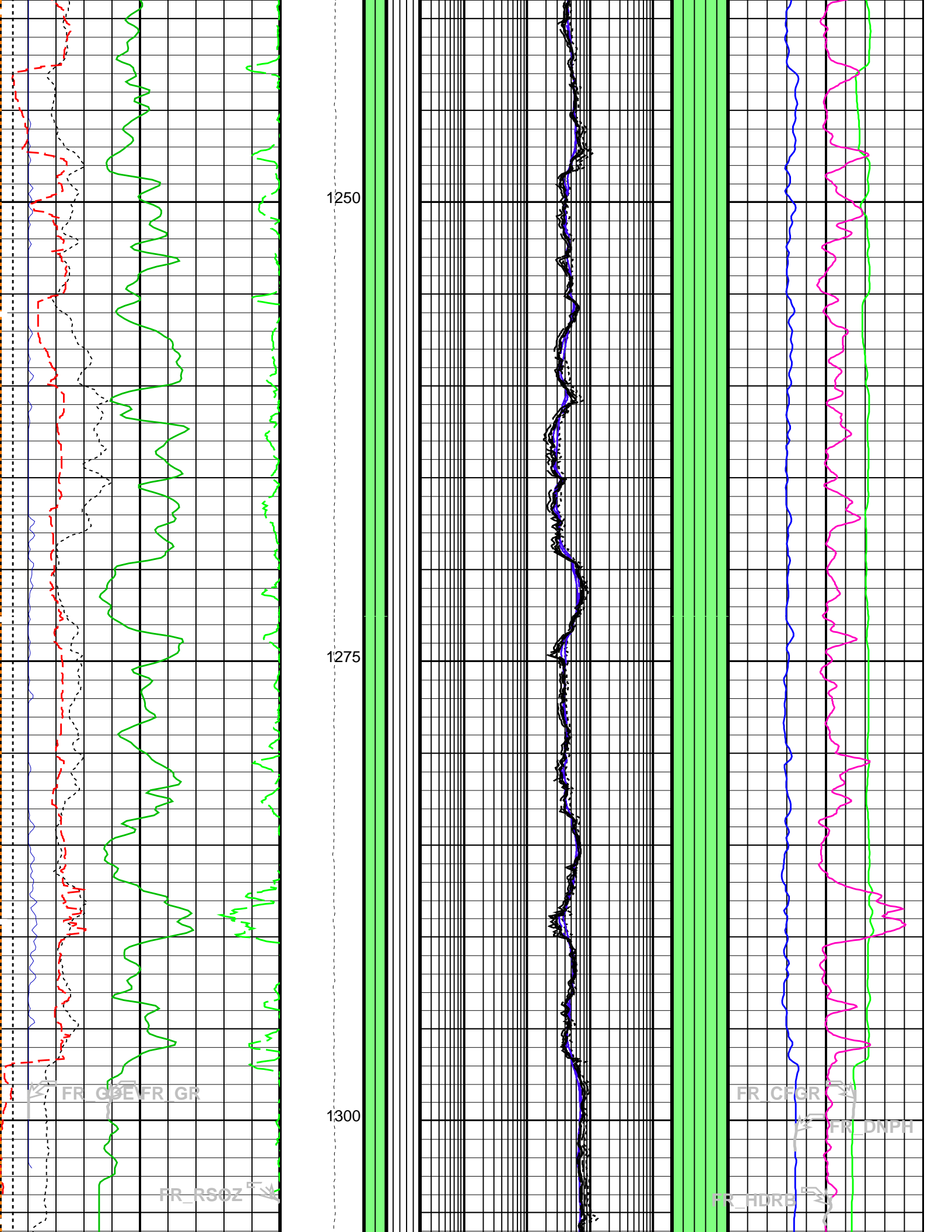
RESISTIVITY TRACK :

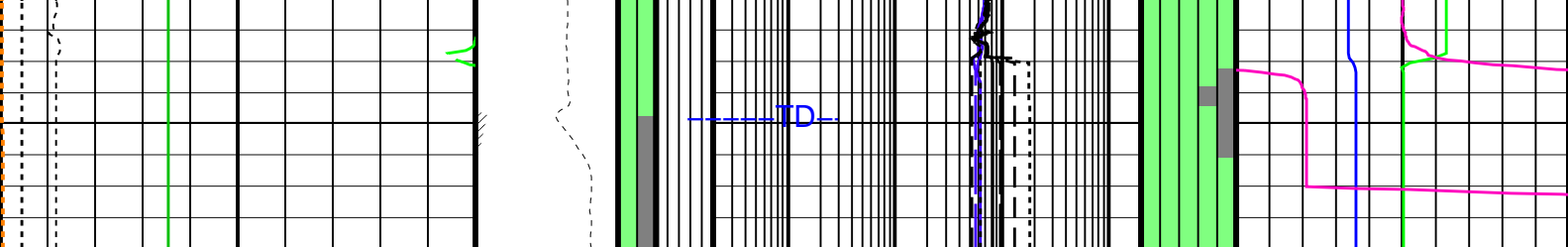
1. MCFL Hardware
2. RXO Processing
3. HAIT Hardware
4. HAIT Array[1-2]
5. HAIT Array[3-4]
6. HAIT Array[5-6]
7. HAIT Array[7-8]

NUCLEAR TRACK :

1. Accelerometer
2. Density Detector
3. Neutron Porosity
4. Density Computation
5. Pef Computation







\*\*\* Flag Tracks \*\*\*

White = Absent Green = Good Yellow = Warn Red/Black = Bad

RESISTIVITY TRACK :

1. MCFL Hardware
2. RXO Processing
3. HAIT Hardware
4. HAIT Array[1-2]
5. HAIT Array[3-4]
6. HAIT Array[5-6]
7. HAIT Array[7-8]

NUCLEAR TRACK :

1. Accelerometer
2. Density Detector
3. Neutron Porosity
4. Density Computation
5. Pef Computation

<b>HGNS Deviation (GDEV)</b> -5 (DEG) 45	<b>Tension (TENS)</b> (N) 25000 0	<b>AIT QC Fully Calibrated A1 Signal</b> (AQABN[0]) 2 (MM/M) 20000	<b>GR Borehole Correction Factor (CFGR)</b> 0.5 (----) 1.5
<b>AIT Bhole/Form Signal Ratio (ABFR)</b> 0 (----) 25		<b>AIT QC Fully Calibrated A8 Signal</b> (AQABN[7]) 2 (MM/M) 20000	<b>Delta Neutron Porosity (DNPH)</b> -0.1 (V/V) 0.1
<b>AIT Input Bhole Diameter (AIBD)</b> 300 (MM) 550		<b>AIT QC Fully Calibrated A7 Signal</b> (AQABN[6]) 2 (MM/M) 20000	<b>BS Delta Rho (HDRB)</b> -0.5 (G/C3) 0.5
<b>Bit Size (BS)</b> 300 (MM) 550		<b>AIT QC Fully Calibrated A6 Signal</b> (AQABN[5]) 2 (MM/M) 20000	
<b>Gamma Ray (GR)</b> 0 (GAPI) 150		<b>AIT QC Fully Calibrated A5 Signal</b> (AQABN[4]) 2 (MM/M) 20000	
<b>Std. Res. Resistivity Standoff (RSOZ)</b> 65 (MM) 0		<b>AIT QC Fully Calibrated A4 Signal</b> (AQABN[3]) 2 (MM/M) 20000	
<b>AIT Mud Full Cal (AMF)</b> 0.02 (OHMM) 200		<b>AIT QC Fully Calibrated A3 Signal</b> (AQABN[2]) 2 (MM/M) 20000	
		<b>AIT QC Fully Calibrated A2 Signal</b> (AQABN[1]) 2 (MM/M) 20000	

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
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Variable Name	Description	Value	Units
<b>AIT-M: Array Induction Tool - M</b>			
ABHM	Array Induction Borehole Correction Mode	2_ComputeStandoff	
ABLM	Array Induction Basic Logs Mode	6_One_Two_and_Four	
ACEN	Array Induction Tool Centering Flag (in Borehole)	Eccentered	
AETP	Array Induction Enable Sonde Error Temp&Pres Corr	Yes	
AIGS	Array Induction Select Akima Interpolation Gating	On	
AMRF	Array Induction Mud Resistivity Factor	1	
ASTA	Array Induction Tool Standoff	64	MM
ATSE	Array Induction Temperature Selection(Sonde Error Correction)	Internal	
AULV	Array Induction User Level Control	Normal	
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	55.4	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	AITM_RESIST	
GTSE	Generalized Temperature Selection	HSTS_HTEM	
MATR	Rock Matrix for Neutron Porosity Corrections	SANDSTONE	
SHT	Surface Hole Temperature	41	DEGF
<b>HILTH-FTB: High resolution Integrated Logging Tool-DTS</b>			
BHFL	Borehole Fluid Type	WATER	
BHFL_TLD	HILT Nuclear Mud Base	WATER	
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	55.4	DEGF
BSCO	Borehole Salinity Correction Option	NO	
CCCO	Casing & Cement Thickness Correction Option	NO	
DHC	Density Hole Correction	BS	
FEXP	Form Factor Exponent	2	
FNUM	Form Factor Numerator	1	
FSAL	Formation Salinity	-50000	PPM
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	AITM_RESIST	
GTSE	Generalized Temperature Selection	HSTS_HTEM	
HSCO	Hole Size Correction Option	YES	
MATR	Rock Matrix for Neutron Porosity Corrections	SANDSTONE	
MCCO	Mud Cake Correction Option	NO	
MCOR	Mud Correction	NATU	
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	25.4	MM
PTCO	Pressure/Temperature Correction Option	NO	
SDAT	Standoff Data Source	SOCN	
SHT	Surface Hole Temperature	41	DEGF
SOCN	Standoff Distance	3.175	MM
SOCO	Standoff Correction Option	YES	
<b>STI: Stuck Tool Indicator</b>			
LBFR	Trigger for MAXIS First Reading Label	TDL	
STKT	STI Stuck Threshold	1.524	M
TDD	Total Depth - Driller	1310.00	M
TDL	Total Depth - Logger	1310.00	M
<b>System and Miscellaneous</b>			
BS	Bit Size	311.150	MM
BSAL	Borehole Salinity	-50000.00	PPM
CSIZ	Current Casing Size	339.700	MM
CWEI	Casing Weight	81.11	KG/M
DFD	Drilling Fluid Density	1115.00	K/M3
MST	Mud Sample Temperature	19.70	DEGC
RMFS	Resistivity of Mud Filtrate Sample	0.1200	OHMM
TD	Total Depth	1310.03	M

Format: HILT-IND-LQC-CAN      Vertical Scale: 1:24C      Graphics File Created: 09-Mar-2007 19:31

**OP System Version: 14C0-302**  
MCM

AIT-M	14C0-302	HILTH-FTB	14C0-302
DTC-H	14C0-302		

**Output DLIS Files**

DEFAULT	AIT_TLD_MCFL_CNL_017LUP	FN:16	PRODUCER	09-Mar-2007 19:31
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Calibration and Check Summary

Measurement	Nominal	Master	Before	After	Change	Limit	Units
Array Induction Tool – M Wellsite Calibration – Electronics Calibration Check – Thru Cal Mag. & Phase							
Master: 9-Jan-2007 16:33 Before: 2-Mar-2007 21:07							
Thru Cal Magnitude – 0	0	0.6106	0.6119	N/A	N/A	N/A	V
Thru Cal Magnitude – 1	0	1.251	1.254	N/A	N/A	N/A	V
Thru Cal Magnitude – 2	0	0.6204	0.6215	N/A	N/A	N/A	V
Thru Cal Magnitude – 3	0	0.6999	0.7012	N/A	N/A	N/A	V
Thru Cal Magnitude – 4	0	1.310	1.313	N/A	N/A	N/A	V
Thru Cal Magnitude – 5	0	1.909	1.912	N/A	N/A	N/A	V
Thru Cal Magnitude – 6	0	1.905	1.909	N/A	N/A	N/A	V
Thru Cal Magnitude – 7	0	1.370	1.372	N/A	N/A	N/A	V
Thru Cal Phase – 0	0	194.5	192.9	N/A	N/A	N/A	DEG
Thru Cal Phase – 1	0	193.4	191.8	N/A	N/A	N/A	DEG
Thru Cal Phase – 2	0	189.7	188.2	N/A	N/A	N/A	DEG
Thru Cal Phase – 3	0	189.0	187.4	N/A	N/A	N/A	DEG
Thru Cal Phase – 4	0	182.7	181.1	N/A	N/A	N/A	DEG
Thru Cal Phase – 5	0	181.0	179.4	N/A	N/A	N/A	DEG
Thru Cal Phase – 6	0	181.1	179.5	N/A	N/A	N/A	DEG
Thru Cal Phase – 7	0	180.5	178.8	N/A	N/A	N/A	DEG

Array Induction Tool – M Wellsite Calibration – Electronics Calibration Check – Auxiliary							
Master: 9-Jan-2007 16:33 Before: 2-Mar-2007 21:07							
Array Induction SPA Plus	991.0	992.5	992.9	N/A	N/A	N/A	MV
Array Induction SPA Zero	0	-0.1065	-0.06589	N/A	N/A	N/A	MV
Array Induction Temperature PI	0.9170	0.9193	0.9197	N/A	N/A	N/A	V
Array Induction Temperature Ze	0	-0.0001016	-0.00007390	N/A	N/A	N/A	V

Array Induction Tool – M Wellsite Calibration – Test Loop Gain Correction							
Master: 9-Jan-2007 16:33							
Test Loop Gain Correctio – 0	0	1.044	N/A	N/A	N/A	N/A	V
Test Loop Gain Correctio – 1	0	1.044	N/A	N/A	N/A	N/A	V
Test Loop Gain Correctio – 2	0	1.026	N/A	N/A	N/A	N/A	V
Test Loop Gain Correctio – 3	0	1.018	N/A	N/A	N/A	N/A	V
Test Loop Gain Correctio – 4	0	1.005	N/A	N/A	N/A	N/A	V
Test Loop Gain Correctio – 5	0	1.004	N/A	N/A	N/A	N/A	V
Test Loop Gain Correctio – 6	0	1.013	N/A	N/A	N/A	N/A	V
Test Loop Gain Correctio – 7	0	1.025	N/A	N/A	N/A	N/A	V
Test Loop Gain Correctio – 0	0	0.7534	N/A	N/A	N/A	N/A	DEG
Test Loop Gain Correctio – 1	0	0.6562	N/A	N/A	N/A	N/A	DEG
Test Loop Gain Correctio – 2	0	0.06160	N/A	N/A	N/A	N/A	DEG
Test Loop Gain Correctio – 3	0	0.1409	N/A	N/A	N/A	N/A	DEG
Test Loop Gain Correctio – 4	0	0.1225	N/A	N/A	N/A	N/A	DEG
Test Loop Gain Correctio – 5	0	0.05437	N/A	N/A	N/A	N/A	DEG
Test Loop Gain Correctio – 6	0	0.4129	N/A	N/A	N/A	N/A	DEG
Test Loop Gain Correctio – 7	0	0.09432	N/A	N/A	N/A	N/A	DEG

Array Induction Tool – M Wellsite Calibration – Sonde Error Correction							
Master: 9-Jan-2007 16:33							
R Sonde Error Correction – 0	0	-18.53	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Correction – 1	0	176.7	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Correction – 2	0	101.8	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Correction – 3	0	56.95	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Correction – 4	0	23.72	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Correction – 5	0	11.78	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Correction – 6	0	9.211	N/A	N/A	N/A	N/A	MM/M
R Sonde Error Correction – 7	0	-2.205	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Correction – 0	0	186.1	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Correction – 1	0	-10.08	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Correction – 2	0	2.897	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Correction – 3	0	-11.83	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Correction – 4	0	45.25	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Correction – 5	0	4.755	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Correction – 6	0	4.629	N/A	N/A	N/A	N/A	MM/M
X Sonde Error Correction – 7	0	5.289	N/A	N/A	N/A	N/A	MM/M

Array Induction Tool – M Wellsite Calibration – Mud Gain Correction							
Master: 9-Jan-2007 16:33							
Coarse – Mag, Real, Imag – 0	0	1.054	N/A	N/A	N/A	N/A	
Coarse – Mag, Real, Imag – 1	0	1.067	N/A	N/A	N/A	N/A	
Coarse – Mag, Real, Imag – 2	0	1.067	N/A	N/A	N/A	N/A	
Fine – Mag, Real, Imag – 0	0	1.077	N/A	N/A	N/A	N/A	
Fine – Mag, Real, Imag – 1	0	1.077	N/A	N/A	N/A	N/A	
Fine – Mag, Real, Imag – 2	0	1.077	N/A	N/A	N/A	N/A	

Before: 2-Mar-2007 21:28							
BS Window Ratio	0.7427	N/A	0.7435	N/A	N/A	N/A	
BS Window Sum	29280	N/A	29240	N/A	N/A	N/A	CPS
SS Window Ratio	0.4849	N/A	0.4833	N/A	N/A	N/A	
SS Window Sum	13080	N/A	13060	N/A	N/A	N/A	CPS
LS Window Ratio	0.3035	N/A	0.2974	N/A	N/A	N/A	
LS Window Sum	1545	N/A	1536	N/A	N/A	N/A	CPS
High resolution Integrated Logging Tool-DTS Wellsite Calibration – Photo-multiplier High Voltages Calibrations							
Before: 2-Mar-2007 21:28							
BS PM High Voltage (Command)	1376	N/A	1352	N/A	N/A	N/A	V
SS PM High Voltage (Command)	1421	N/A	1410	N/A	N/A	N/A	V
LS PM High Voltage (Command)	1301	N/A	1310	N/A	N/A	N/A	V
High resolution Integrated Logging Tool-DTS Wellsite Calibration – Crystal Quality Resolutions Calibration							
Before: 2-Mar-2007 21:28							
BS Crystal Resolution	10.78	N/A	10.84	N/A	N/A	N/A	%
SS Crystal Resolution	8.916	N/A	8.780	N/A	N/A	N/A	%
LS Crystal Resolution	8.952	N/A	9.048	N/A	N/A	N/A	%
High resolution Integrated Logging Tool-DTS Wellsite Calibration – MCFL Calibration							
Before: 2-Mar-2007 21:29							
Raw B0 Resistivity	3875	N/A	3870	N/A	N/A	N/A	OHMM
Raw B1 Resistivity	3830	N/A	3819	N/A	N/A	N/A	OHMM
Raw B2 Resistivity	3830	N/A	3828	N/A	N/A	N/A	OHMM
High resolution Integrated Logging Tool-DTS Wellsite Calibration – HILT Caliper Calibration							
Before: 2-Mar-2007 21:51							
HILT Caliper Zero Measurement	254.0	N/A	199.8	N/A	N/A	N/A	MM
HILT Caliper Plus Measurement	508.0	N/A	382.4	N/A	N/A	N/A	MM
High resolution Integrated Logging Tool-DTS Wellsite Calibration – Detector Calibration							
Before: 2-Mar-2007 21:25							
Gamma Ray Background	30.00	N/A	23.72	N/A	N/A	N/A	GAPI
Gamma Ray (Jig – Bkg)	185.1	N/A	185.1	N/A	N/A	16.83	GAPI
Gamma Ray (Calibrated)	165.0	N/A	165.0	N/A	N/A	15.00	GAPI
High resolution Integrated Logging Tool-DTS Wellsite Calibration – Zero Measurement							
Master: 10-Jan-2007 15:23 Before: 2-Mar-2007 21:23							
CNTC Background	26.53	26.53	26.48	N/A	N/A	3.980	CPS
CFTC Background	29.66	29.66	29.06	N/A	N/A	4.449	CPS
High resolution Integrated Logging Tool-DTS Wellsite Calibration – Ratio Measurement							
Master: 10-Jan-2007 15:23							
Thermal Near Corr. (Tank)	6031	6292	N/A	N/A	N/A	N/A	CPS
Thermal Far Corr. (Tank)	2793	2647	N/A	N/A	N/A	N/A	CPS
CNTC/CFTC (Tank)	2.159	2.377	N/A	N/A	N/A	N/A	
High resolution Integrated Logging Tool-DTS Wellsite Calibration – Accelerometer Calibration							
Before: 3-Mar-2007 6:35							
Z-Axis Acceleration	9.810	N/A	9.812	N/A	N/A	N/A	M/S2
High resolution Integrated Logging Tool-DTS Master Calibration – Inversion results							
Master: 14-Feb-2007 15:55							
Rho Aluminum	2596	2599	---	---	---	---	K/M3
Rho Magnesium	1686	1686	---	---	---	---	K/M3
Pe Aluminum	2.570	2.556	---	---	---	---	
Pe Magnesium	2.650	2.631	---	---	---	---	
High resolution Integrated Logging Tool-DTS Master Calibration – Deviation Summary							
Master: 14-Feb-2007 15:55							
BS Average Deviation	0	0.2316	---	---	---	---	%
BS Max Deviation	0	0.7406	---	---	---	---	%
SS Average Deviation	0	0.2254	---	---	---	---	%
SS Max Deviation	0	1.106	---	---	---	---	%
LS Average Deviation	0	0.6026	---	---	---	---	%
LS Max Deviation	0	1.170	---	---	---	---	%

The GLS-VJ source activity is acceptable.

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

NCT-B Water Temperature 18.0 DEGC.  
Thermal Housing Size 85.725 MM.  
NSR-F serial number 5196

Array Induction Tool – M / Equipment Identification

Primary Equipment:  
Rm/SP Bottom Nose  
Array Induction Sonde

AMRM – A  
AMIS – A

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Auxiliary Equipment:

Array Induction Tool – M Wellsite Calibration							
Electronics Calibration Check – Thru Cal Mag. & Phase							
Idx	Phase	Value	Thru Cal Magnitude V	Nominal	Value	Thru Cal Phase DEG	Nominal
0	Master	0.6106		0.6100	194.5		197.0
	Before	0.6119			192.9		
1	Master	1.251		1.270	193.4		196.0
	Before	1.254			191.8		
2	Master	0.6204		0.6200	189.7		192.0
	Before	0.6215			188.2		
3	Master	0.6999		0.7000	189.0		191.0
	Before	0.7012			187.4		
4	Master	1.310		1.340	182.7		185.0
	Before	1.313			181.1		
5	Master	1.909		1.960	181.0		182.0
	Before	1.912			179.4		
6	Master	1.905		1.960	181.1		181.0
	Before	1.909			179.5		
7	Master	1.370		1.410	180.5		175.0
	Before	1.372			178.8		
		60.00 % (Minimum)	(Nominal)	140.0 % (Maximum)	Nom -60.00 (Minimum)	(Nominal)	Nom + 60.00 (Maximum)

Master: 9-Jan-2007 16:33

Before: 2-Mar-2007 21:07

Array Induction Tool – M Wellsite Calibration						
Electronics Calibration Check – Auxiliary						
Phase	Array Induction SPA Plus MV	Value	Phase	Array Induction SPA Zero MV	Value	
Master		992.5	Master		-0.1065	
Before		992.9	Before		-0.06589	
		941.0 (Minimum)	991.0 (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		0.9193	Master		-0.0001016	
Before		0.9197	Before		-7.390E-00	
		0.8710 (Minimum)	0.9170 (Nominal)	0.9630 (Maximum)		
				-0.05000 (Minimum)	0 (Nominal)	0.05000 (Maximum)

Master: 9-Jan-2007 16:33

Before: 2-Mar-2007 21:07

Array Induction Tool – M Wellsite Calibration						
Test Loop Gain Correction						
Idx	Value	Test Loop Gain Correction Magnitude V	Value	Test Loop Gain Correction Phase DEG		
0	1.044		0.7534			
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)		
				-3.000 (Minimum)	0 (Nominal)	3.000 (Maximum)
1	1.044		0.6562			
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)		
				-3.000 (Minimum)	0 (Nominal)	3.000 (Maximum)
2	1.026		0.06160			
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)		
				-3.000 (Minimum)	0 (Nominal)	3.000 (Maximum)



1	Master	1.251		1.270	193.4		196.0
2	Master	0.6204		0.6200	189.7		192.0
3	Master	0.6999		0.7000	189.0		191.0
4	Master	1.310		1.340	182.7		185.0
5	Master	1.909		1.960	181.0		182.0
6	Master	1.905		1.960	181.1		181.0
7	Master	1.370		1.410	180.5		175.0
		60.00 % (Minimum)	(Nominal)	140.0 % (Maximum)	Nom -60.00 (Minimum)	(Nominal)	Nom + 60.00 (Maximum)

Master: 9-Jan-2007 16:33

Array Induction Tool – M Master Calibration						
Electronics Calibration Check – Auxiliary						
Phase	Array Induction SPA Plus MV	Value	Phase	Array Induction SPA Zero MV	Value	
Master		992.5	Master		-0.1065	
		941.0 (Minimum)	991.0 (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		0.9193	Master		-0.0001016	
		0.8710 (Minimum)	0.9170 (Nominal)	0.9630 (Maximum)		
				-0.05000 (Minimum)	0 (Nominal)	0.05000 (Maximum)

Master: 9-Jan-2007 16:33

Array Induction Tool – M Master Calibration						
Test Loop Gain Correction						
Idx	Value	Test Loop Gain Correction Magnitude V	Value	Test Loop Gain Correction Phase DEG		
0	1.044		0.7534			
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)		
				-3.000 (Minimum)	0 (Nominal)	3.000 (Maximum)
1	1.044		0.6562			
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)		
				-3.000 (Minimum)	0 (Nominal)	3.000 (Maximum)
2	1.026		0.06160			
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)		
				-3.000 (Minimum)	0 (Nominal)	3.000 (Maximum)
3	1.018		0.1409			
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)		
				-3.000 (Minimum)	0 (Nominal)	3.000 (Maximum)
4	1.005		0.1225			
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)		
				-3.000 (Minimum)	0 (Nominal)	3.000 (Maximum)
5	1.004		0.05437			
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)		
				-3.000 (Minimum)	0 (Nominal)	3.000 (Maximum)
6	1.013		0.4129			
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)		
				-3.000 (Minimum)	0 (Nominal)	3.000 (Maximum)
7	1.025		0.09432			
		0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)		
				-3.000 (Minimum)	0 (Nominal)	3.000 (Maximum)

Master: 9-Jan-2007 16:33

Array Induction Tool – M Master Calibration						
Sonde Error Correction						
Idx	Value	R Sonde Error Correction MM/M	Value	X Sonde Error Correction MM/M		
0	-18.53		186.1			
		-231.0 (Minimum)	-56.00 (Nominal)	119.0 (Maximum)		
				-2250 (Minimum)	0 (Nominal)	2250 (Maximum)
1	176.7		-10.08			
		114.0 (Minimum)	159.0 (Nominal)	204.0 (Maximum)		
				-625.0 (Minimum)	0 (Nominal)	625.0 (Maximum)
2	101.8		2.897			
		66.00 (Minimum)	111.0 (Nominal)	156.0 (Maximum)		
				-350.0 (Minimum)	0 (Nominal)	350.0 (Maximum)

3	56.95	00.00 (Minimum)	111.0 (Nominal)	150.0 (Maximum)	-11.83	-250.0 (Minimum)	0 (Nominal)	250.0 (Maximum)
4	23.72	39.00 (Minimum)	64.00 (Nominal)	89.30 (Maximum)	45.25	-63.00 (Minimum)	0 (Nominal)	63.00 (Maximum)
5	11.78	4.000 (Minimum)	14.00 (Nominal)	24.00 (Maximum)	4.755	-50.00 (Minimum)	0 (Nominal)	50.00 (Maximum)
6	9.211	5.000 (Minimum)	10.00 (Nominal)	15.00 (Maximum)	4.629	-30.00 (Minimum)	0 (Nominal)	30.00 (Maximum)
7	-2.205	-5.000 (Minimum)	0 (Nominal)	5.000 (Maximum)	5.289	-30.00 (Minimum)	0 (Nominal)	30.00 (Maximum)

Master: 9-Jan-2007 16:33

Array Induction Tool – M Master Calibration								
Mud Gain Correction								
Idx	Value	Coarse – Mag, Real, Imag			Value	Fine – Mag, Real, Imag		
0	1.054	0.8000 (Minimum)	1.000 (Nominal)	1.200 (Maximum)	1.077	0.8000 (Minimum)	1.000 (Nominal)	1.200 (Maximum)
1	1.067	0.8000 (Minimum)	1.000 (Nominal)	1.200 (Maximum)	1.077	0.8000 (Minimum)	1.000 (Nominal)	1.200 (Maximum)
2	1.067	0.8000 (Minimum)	1.000 (Nominal)	1.200 (Maximum)	1.077	0.8000 (Minimum)	1.000 (Nominal)	1.200 (Maximum)

Master: 9-Jan-2007 16:33

High resolution Integrated Logging Tool–DTS / Equipment Identification			
<b>Primary Equipment:</b>			
HILT high-Resolution Mechanical Sonde	HRMS – H	4707	
HILT Rxo Gamma-ray Device	HRGD – H	4761	
HILT Micro Cylindrically Focused Log Dev	MCFL – H		
GR Logging Source	GLS – VJ	1904	
HILT High Res. Control Cartridge	HRCC – H	4721	
HILT Gamma-Ray Neutron Sonde–DTS	HGNS – H	4730	
HILT Gamma-Ray Device	HGR –		
HILT Neutron Detector with Alpha Source	HCNT – H		
<b>Auxiliary Equipment:</b>			
Neutron Calibration Tank	NCT – B		
Gamma Source Radioactive	GSR – U/Y	6710	

High resolution Integrated Logging Tool–DTS Wellsite Calibration									
Stab Measurement Summary									
Phase	BS Window Ratio			Value	Phase	SS Window Ratio			Value
Before	0.7056 (Minimum)	0.7427 (Nominal)	0.7799 (Maximum)	0.7435	Before	0.4606 (Minimum)	0.4849 (Nominal)	0.5091 (Maximum)	0.4833
Before	0.2883 (Minimum)	0.3035 (Nominal)	0.3186 (Maximum)	0.2974	Before	12430 (Minimum)	13080 (Nominal)	13740 (Maximum)	13060
Before	1468 (Minimum)	1545 (Nominal)	1622 (Maximum)	1536	Before	1276 (Minimum)	1376 (Nominal)	1476 (Maximum)	1352

Before: 2-Mar-2007 21:28

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
Before	1276 (Minimum)	1376 (Nominal)	1476 (Maximum)	1352	Before	1321 (Minimum)	1421 (Nominal)	1521 (Maximum)	1410
Before	1201 (Minimum)	1301 (Nominal)	1401 (Maximum)	1310	Before	1201 (Minimum)	1301 (Nominal)	1401 (Maximum)	1310

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 %		Value
Before			10.84	Before			8.780	Before			9.048
	9.775 (Minimum)	10.78 (Nominal)	11.78 (Maximum)		7.916 (Minimum)	8.916 (Nominal)	9.916 (Maximum)		7.952 (Minimum)	8.952 (Nominal)	9.952 (Maximum)

Before: 2-Mar-2007 21:28

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			3870	Before			3819	Before			3828
	3565 (Minimum)	3875 (Nominal)	4185 (Maximum)		3524 (Minimum)	3830 (Nominal)	4136 (Maximum)		3524 (Minimum)	3830 (Nominal)	4136 (Maximum)

Before: 2-Mar-2007 21:29

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			199.8	Before			382.4
	190.5 (Minimum)	254.0 (Nominal)	317.5 (Maximum)		381.0 (Minimum)	508.0 (Nominal)	635.0 (Maximum)

Before: 2-Mar-2007 21:51

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		Value
Before			23.72	Before			185.1	Before			165.0
	0 (Minimum)	30.00 (Nominal)	120.0 (Maximum)		168.3 (Minimum)	185.1 (Nominal)	201.9 (Maximum)		150.0 (Minimum)	165.0 (Nominal)	180.0 (Maximum)

Before: 2-Mar-2007 21:25

High resolution Integrated Logging Tool-DTS Wellsite Calibration							
Zero Measurement							
Phase	CNTC Background CPS		Value	Phase	CFTC Background CPS		Value
Master			26.53	Master			29.66
Before			26.48	Before			29.06
	5.000 (Minimum)	26.53 (Nominal)	40.00 (Maximum)		5.000 (Minimum)	29.66 (Nominal)	40.00 (Maximum)

Master: 10-Jan-2007 15:23      Before: 2-Mar-2007 21:23

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			6292	Master			2647	Master			2.377
	5000 (Minimum)	6031 (Nominal)	7200 (Maximum)		2075 (Minimum)	2793 (Nominal)	3125 (Maximum)		2.120 (Minimum)	2.159 (Nominal)	2.540 (Maximum)

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High resolution Integrated Logging Tool-DTS Wellsite Calibration		
Accelerometer Calibration		
Phase	Z-Axis Acceleration M/S2	Value
Before		9.812
	9.610 (Minimum)	9.810 (Nominal)
		10.01 (Maximum)

Before: 3-Mar-2007 6:35

High resolution Integrated Logging Tool-DTS Master Calibration							
Inversion results							
Phase	Rho Aluminum K/M3		Value	Phase	Rho Magnesium K/M3		Value
Master			2599	Master			1686
	2596 (Minimum)	2596 (Nominal)	2606 (Maximum)		1676 (Minimum)	1696 (Nominal)	1696 (Maximum)

Phase	Pe Aluminum	Value	Phase	Pe Magnesium	Value
Master		2.556	Master		2.631
	2.470 (Minimum)      2.570 (Nominal)      2.670 (Maximum)			2.550 (Minimum)      2.650 (Nominal)      2.750 (Maximum)	

Master: 14-Feb-2007 15:55

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		0.2316	Master		0.2254	Master		0.6026
	-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		0.7406	Master		1.106	Master		1.170
	-1.600 (Minimum)      0 (Nominal)      1.600 (Maximum)			-2.500 (Minimum)      0 (Nominal)      2.500 (Maximum)			-3.500 (Minimum)      0 (Nominal)      3.500 (Maximum)	

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High resolution Integrated Logging Tool-DTS Master Calibration					
Zero Measurement					
Phase	CNTC Background CPS	Value	Phase	CFTC Background CPS	Value
Master		26.53	Master		29.66
	5.000 (Minimum)      26.53 (Nominal)      40.00 (Maximum)			5.000 (Minimum)      29.66 (Nominal)      40.00 (Maximum)	

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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		6292	Master		2647	Master		2.377
	5000 (Minimum)      6031 (Nominal)      7200 (Maximum)			2075 (Minimum)      2793 (Nominal)      3125 (Maximum)			2.120 (Minimum)      2.159 (Nominal)      2.540 (Maximum)	

Master: 10-Jan-2007 15:23

Company: **JOGMEC**

**Schlumberger**

Well: **AURORA/JOGMEC/NRCAN MALLIK 2L-38**

Field: **MALLIK**

Province: **NWT**

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