

Schlumberger

Company: **High Sierra Water Services LLC**

Well: **SWD C4A**

Field: **Wattenberg**

County: **Weld**

State: **Colorado**

Schlumberger

Company: **High Sierra Water Services LLC**

Well: **SWD C4A**

Field: **Wattenberg**

County: **Weld**

State: **Colorado**

Schlumberger

Company: **High Sierra Water Services LLC**

Well: **SWD C4A**

Field: **Wattenberg**

County: **Weld**

State: **Colorado**

Schlumberger

Company: **High Sierra Water Services LLC**

Well: **SWD C4A**

Field: **Wattenberg**

County: **Weld**

State: **Colorado**

Schlumberger

Company: **High Sierra Water Services LLC**

Well: **SWD C4A**

Field: **Wattenberg**

County: **Weld**

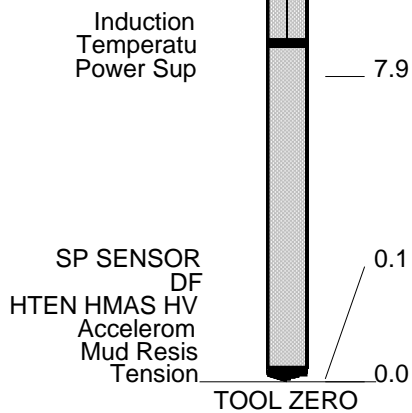
State: **Colorado**

[illegible]

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

OTHER SERVICES1	OTHER SERVICES2
OS1:	OS1:
OS2:	OS2:
OS3:	OS3:
OS4:	OS4:
OS5:	OS5:
REMARKS: RUN NUMBER 1	REMARKS: RUN NUMBER 2
This is the first run in hole.	
Toolstring run as per tool sketch.	
Matrix:	
Sandstone: 2.65 – surface to 9450	
Limestone 2 71– 9450–10100	

AIT-M
AMIS-A 1372
AMRM-A



MAXIMUM STRING DIAMETER 4.63 IN
MEASUREMENTS RELATIVE TO TOOL ZERO
ALL LENGTHS IN FEET

Schlumberger

COMBO LOG 5" = 100'

MAXIS Field Log

Company: High Sierra Water Services LLC Well: SWD C4B

Input DLIS Files

DEFAULT AIT_TLD_MCFL_CNL_009PUP FN:8 PRODUCER 09-Dec-2012 04:56 10453.5 FT 8967.5 FT

Output DLIS Files

DEFAULT AIT_TLD_MCFL_CNL_012PUP FN:11 PRODUCER 09-Dec-2012 05:19 10453.5 FT 8967.5 FT

OP System Version: 19C1-222

AIT-M 19C1-222 HILTH-FTB 19C1-222
DTC-H 19C1-222

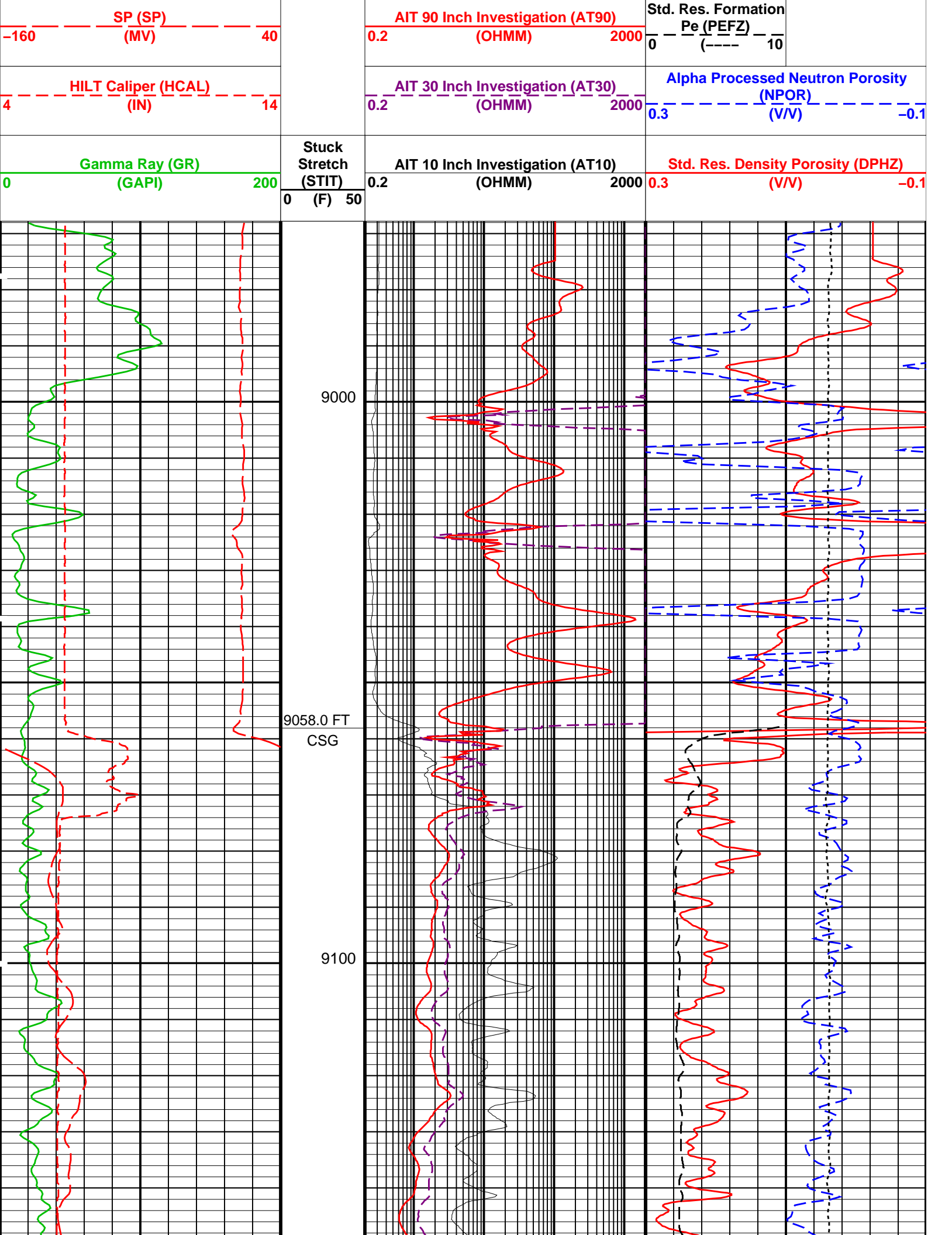
Changed Parameter Summary

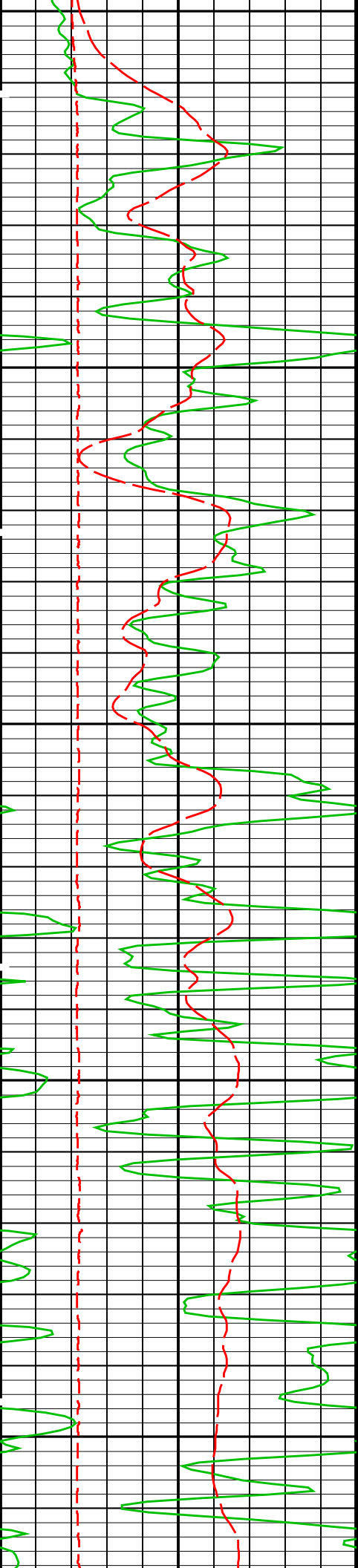
DLIS Name	New Value	Previous Value	Depth & Time
MATR	DOLOMITE	SANDSTONE	10453.5 05:19:16
MDEN	2.85 G/C3	2.65 G/C3	10453.5 05:19:16

PIP SUMMARY

Time Mark Every 60 S

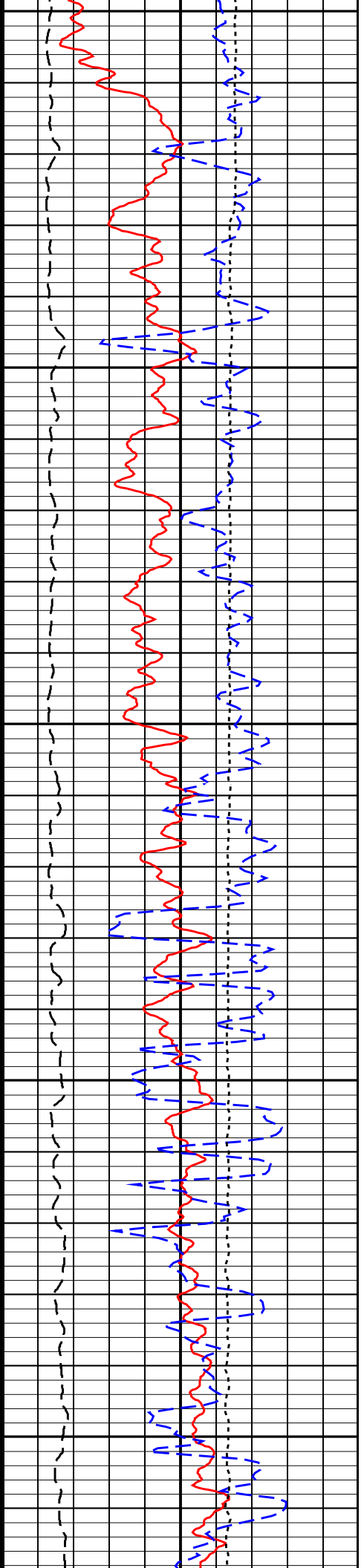
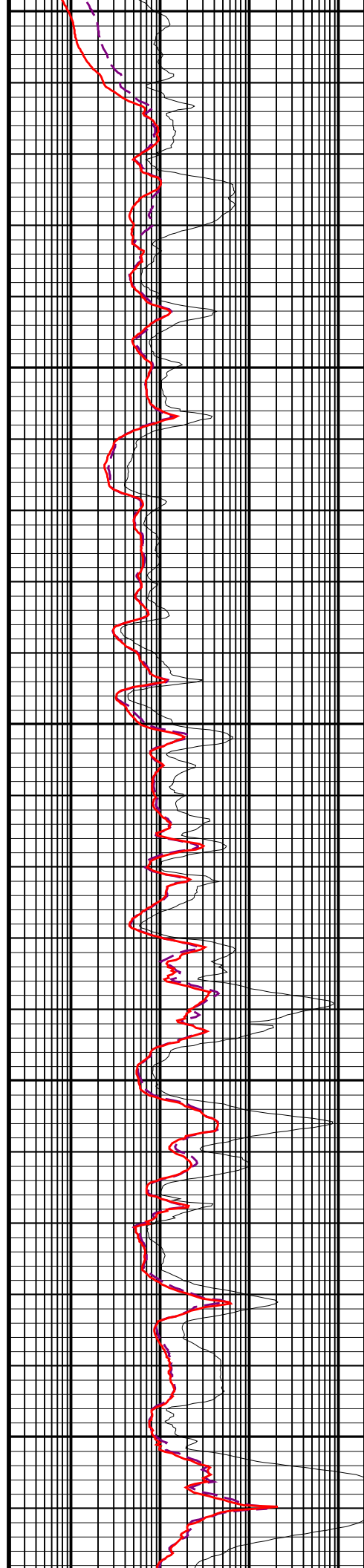
Tension (TENS)
10000 (LBF) 0

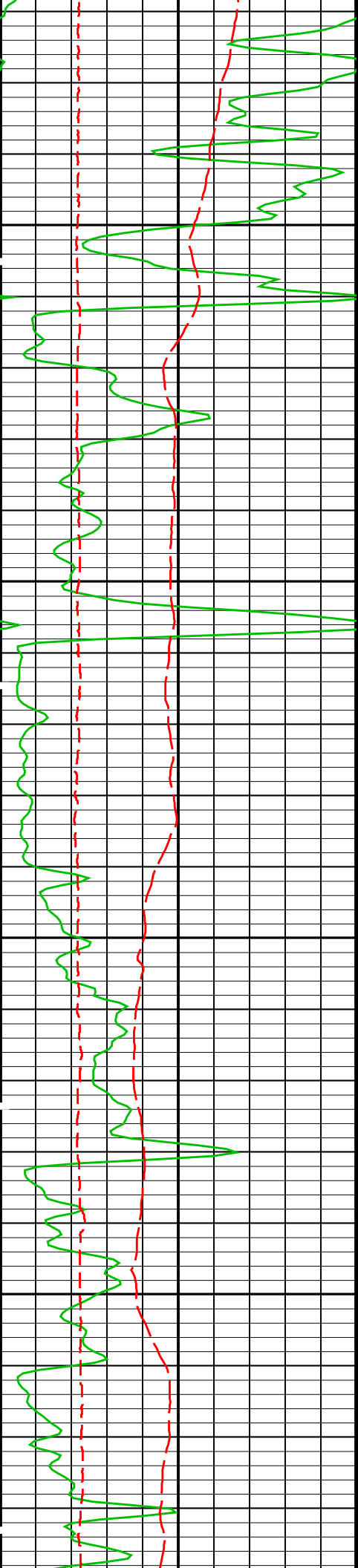




9200

9300

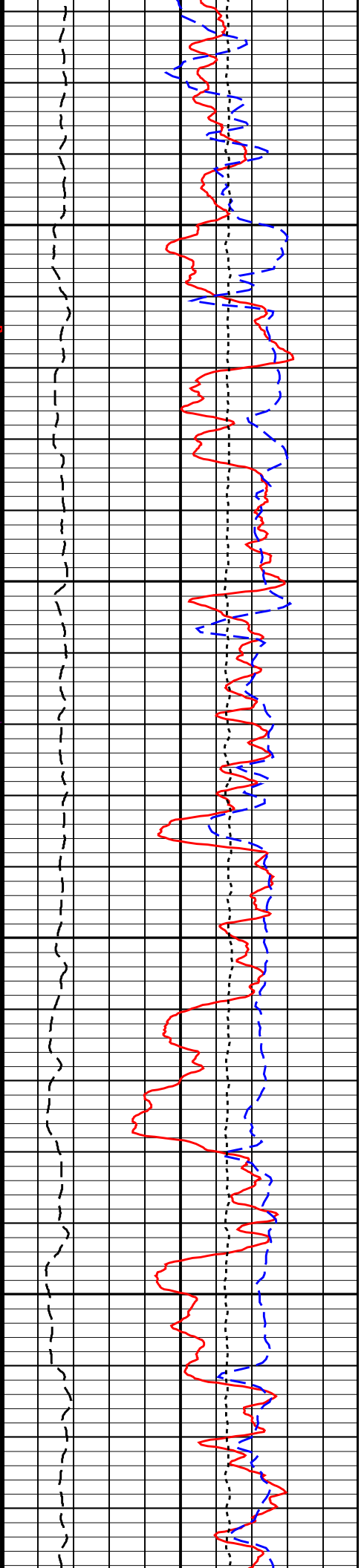
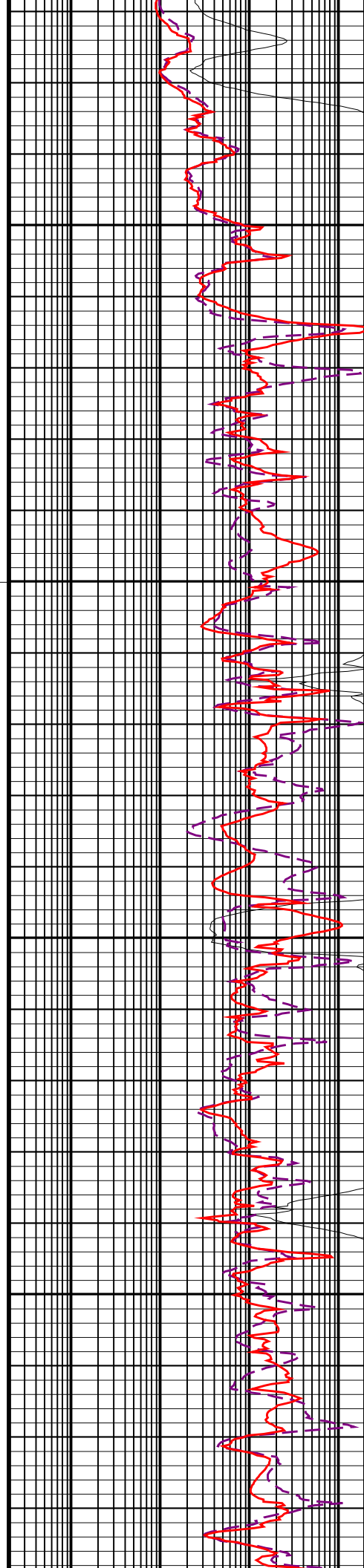




9400

9450.0 FT
MTX CHG

9500

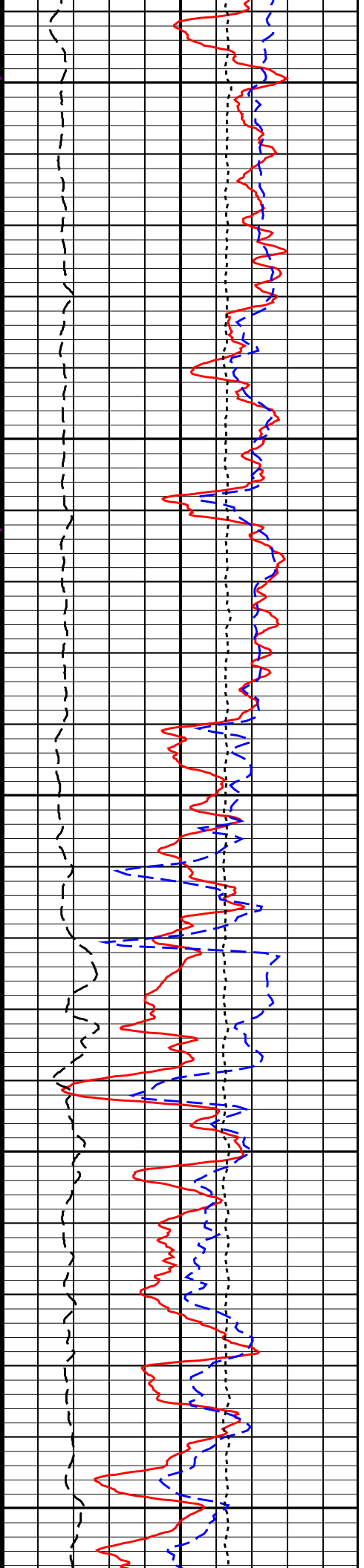
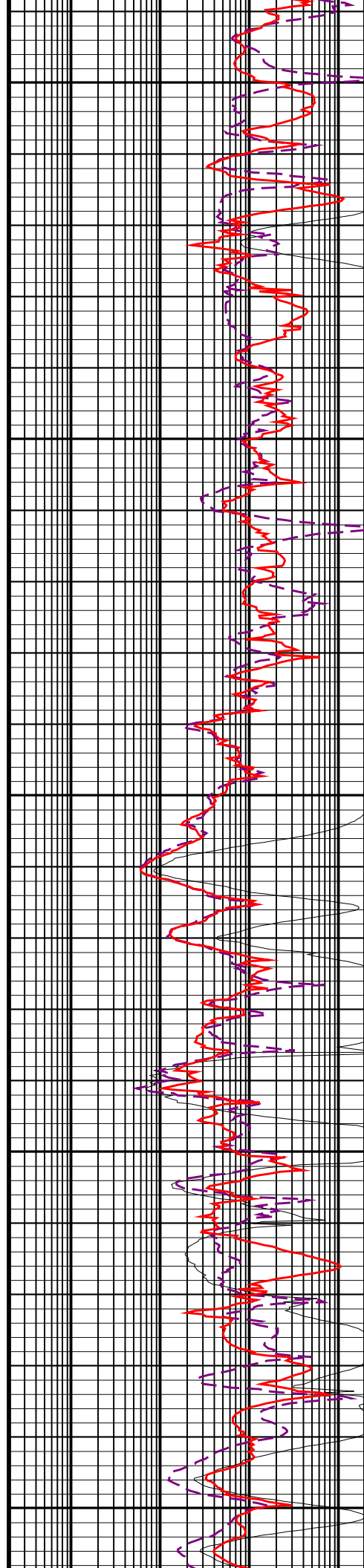


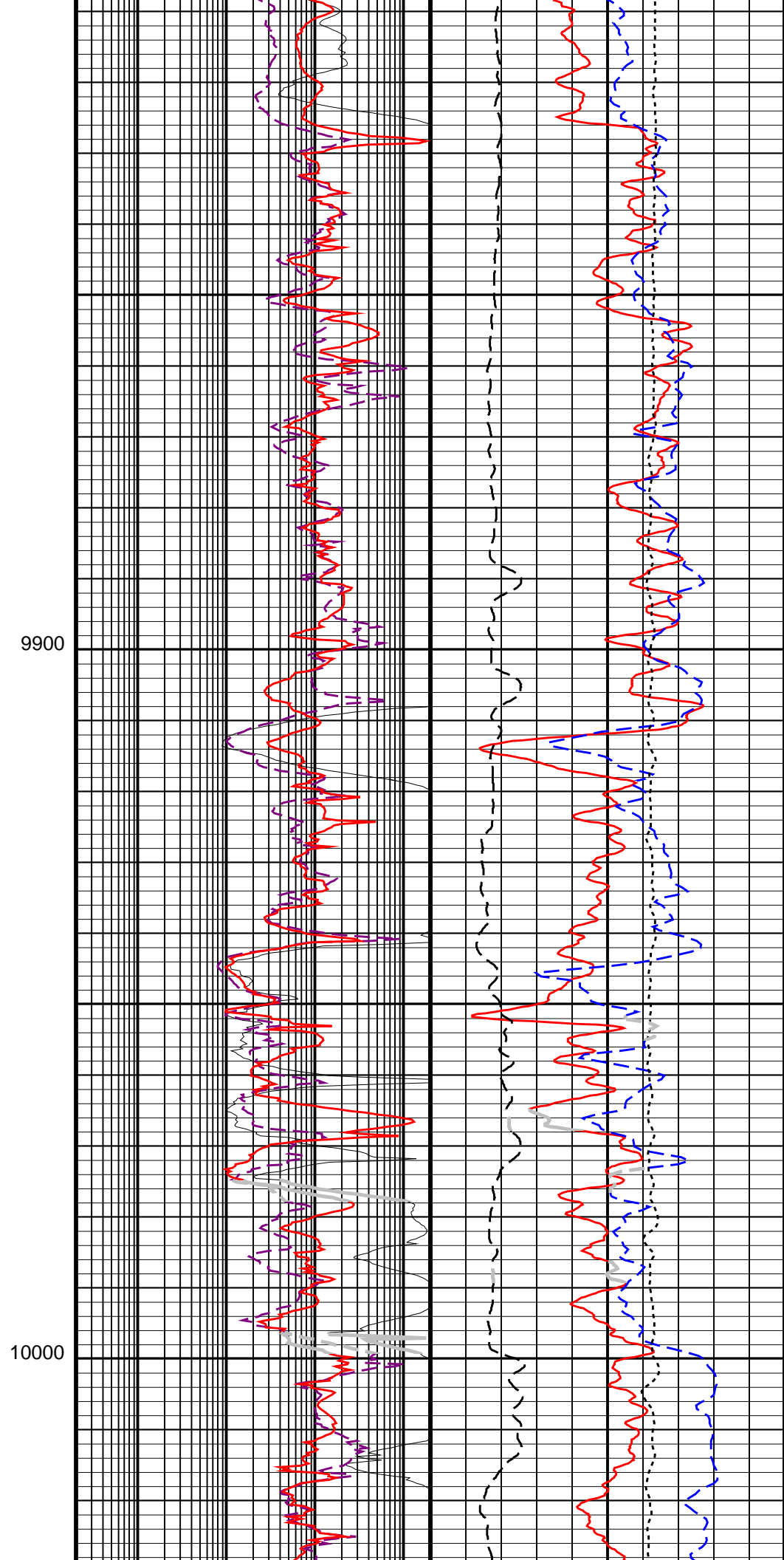
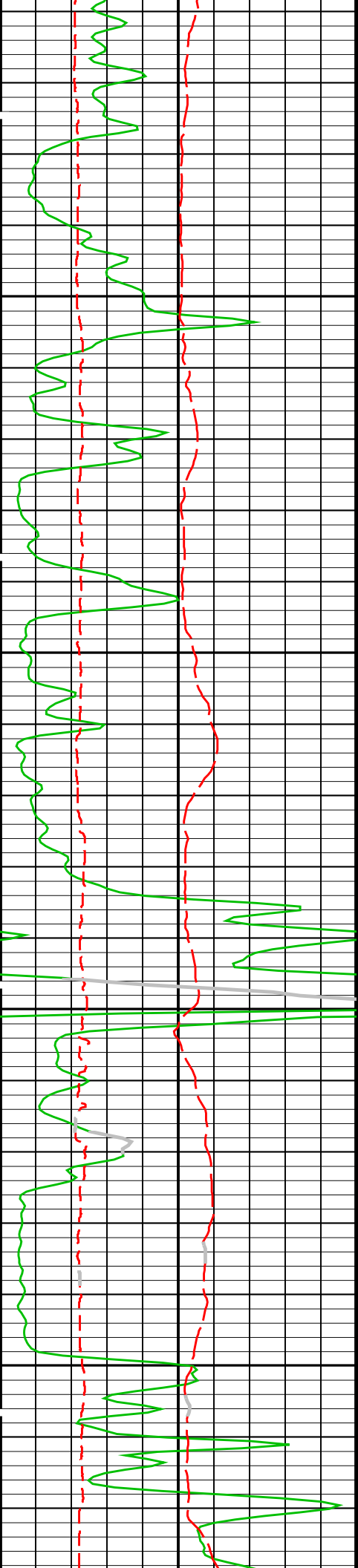


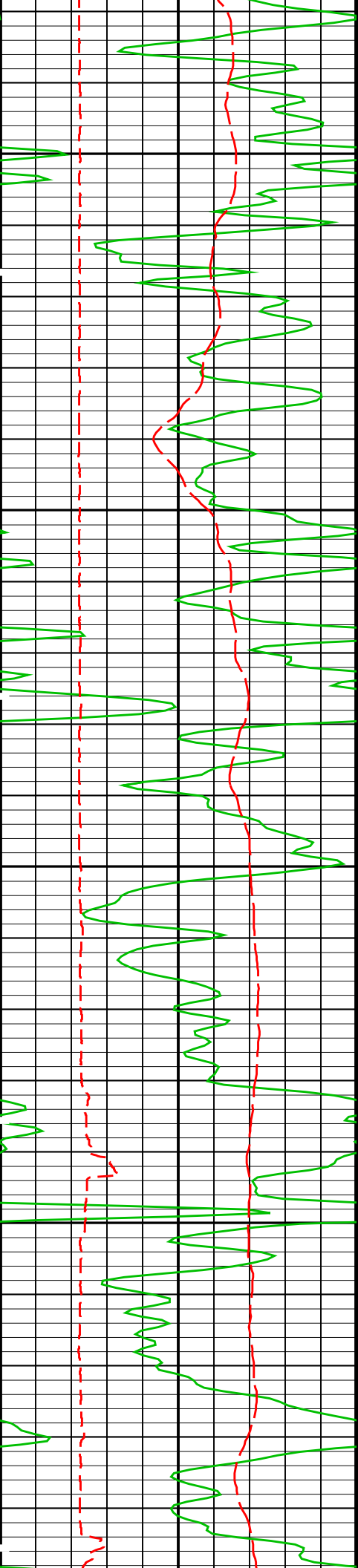
9600

9700

9800

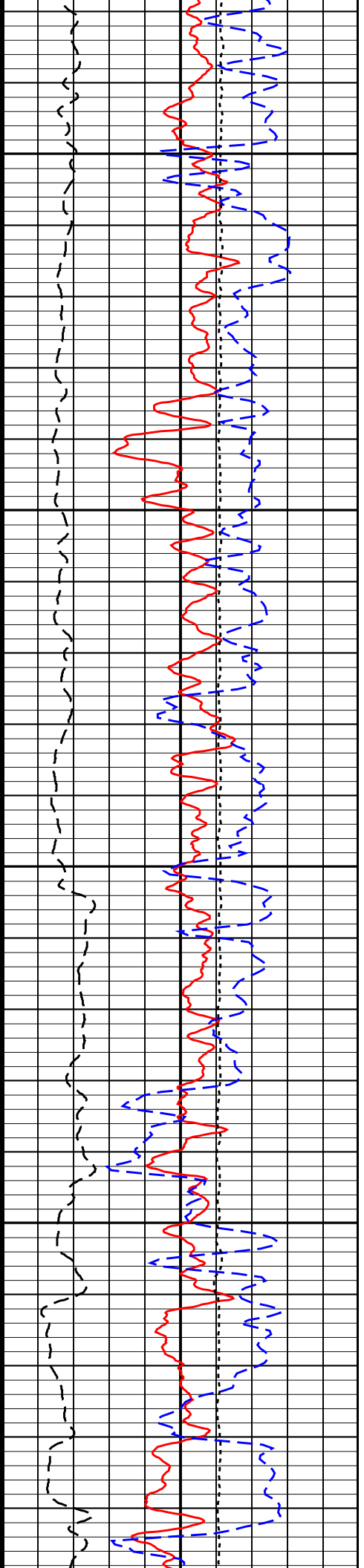
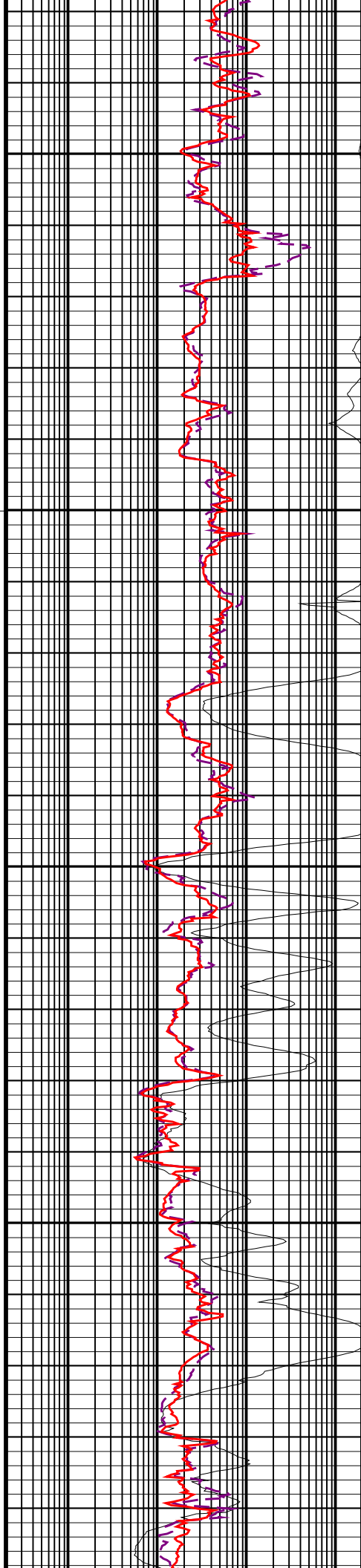


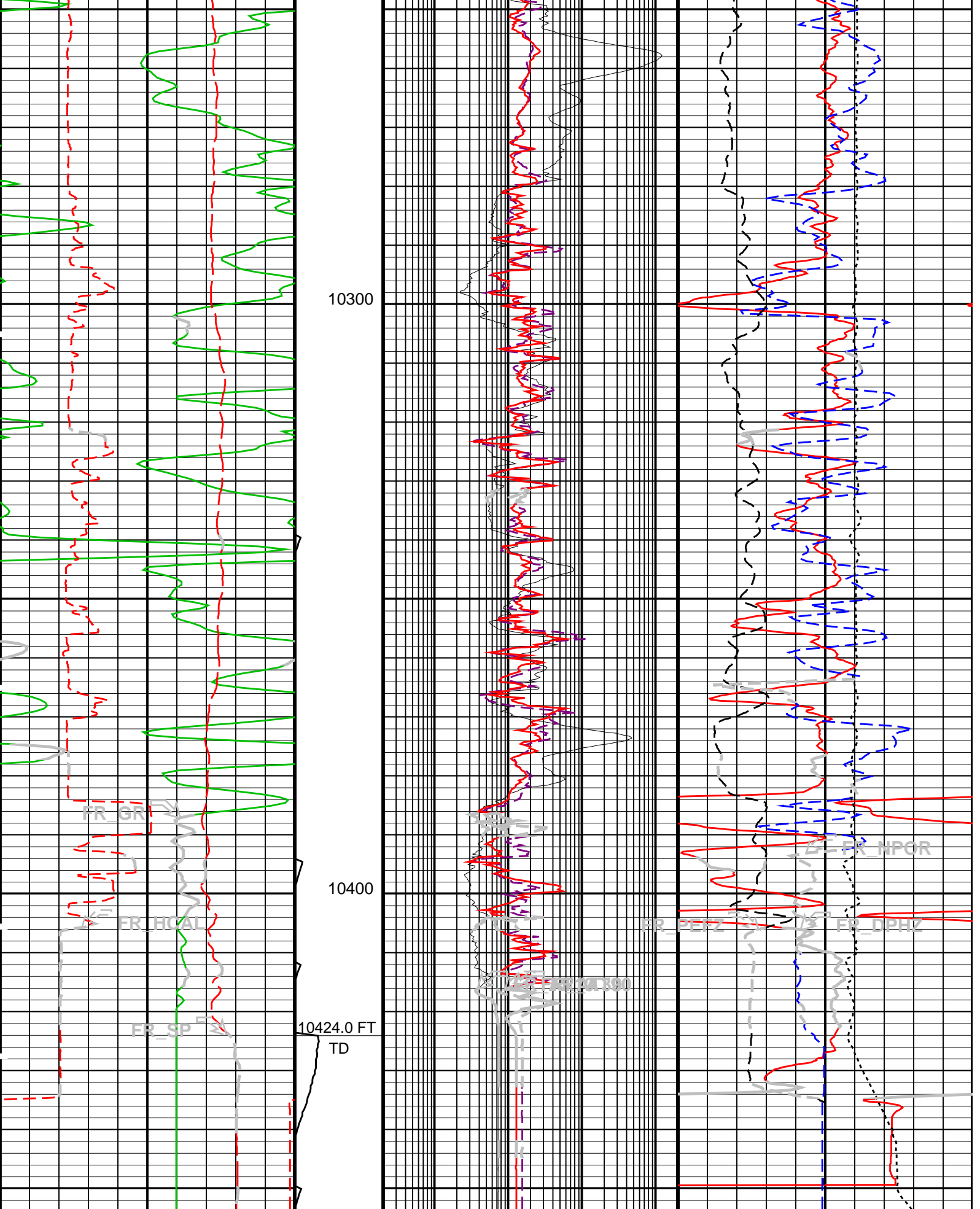




10100000
MTX CHG

10200





Gamma Ray (GR) (GAPI)		Stuck Stretch (STIT) (F)	AIT 10 Inch Investigation (AT10) (OHMM)		Std. Res. Density Porosity (DPHZ) (V/V)
0	200	0 50	0.2	2000	0.3 -0.1

<div>HILT Caliper (HCAL)</div> <div>4 (IN) 14</div>		<div>AIT 30 Inch Investigation (AT30)</div> <div>0.2 (OHMM) 2000</div>		<div>Alpha Processed Neutron Porosity (NPOR)</div> <div>0.3 (V/V) -0.1</div>	
<div>SP (SP)</div> <div>-160 (MV) 40</div>		<div>AIT 90 Inch Investigation (AT90)</div> <div>0.2 (OHMM) 2000</div>		<div>Std. Res. Formation Pe (PEFZ)</div> <div>0 (----) 10</div>	
				<div>Tension (TENS)</div> <div>10000 (LBF) 0</div>	

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value	
AIT-M: Array Induction Tool – M			
ABHM	Array Induction Borehole Correction Mode	1_ComputeElectricalDiameter	
ABHV	Array Induction Borehole Correction Code Version Number	900	
ABLM	Array Induction Basic Logs Mode	6_One_Two_and_Four	
ABLV	Array Induction Basic Logs Code Version Number	223	
ACDE	Array Induction Casing Detection Enable	No	
ACEN	Array Induction Tool Centering Flag (in Borehole)	Eccentered	
ACSED	Array Induction Casing Shoe Estimated Depth	–50000	FT
AETP	Array Induction Enable Sonde Error Temp&Pres Corr	Yes	
AFRSV	Array Induction Response Set Version for Four ft Resolution	41.70.24.20	
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	41.70.24.20	
ARFV	Array Induction Radial Profiling Code Version Number	701	
ARPV	Array Induction Radial Parametrization Code Version Number	232	
ASTA	Array Induction Tool Standoff	0.25	IN
ATRSV	Array Induction Response Set Version for Two ft Resolution	41.70.24.20	
ATSE	Array Induction Temperature Selection(Sonde Error Correction)	Internal	
AULV	Array Induction User Level Control	Normal	
AZRSV	Array Induction Response Set Version for Z Resolution	00.10.25.00	
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	287	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	CHART_GEN_9	
GTSE	Generalized Temperature Selection	HSTS_HTEM	
MATR	Rock Matrix for Neutron Porosity Corrections	SANDSTONE	
SHT	Surface Hole Temperature	68	DEGF
SPNV	SP Next Value	0	MV
HILTH-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)	287	DEGF
BSCO	Borehole Salinity Correction Option	NO	
CCCO	Casing & Cement Thickness Correction Option	NO	
DHC	Density Hole Correction	BS	
FD	Fluid Density	1	G/C3
FEXP	Form Factor Exponent	2	
FNUM	Form Factor Numerator	1	
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	CHART_GEN_9	
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	
MDEN	Matrix Density	2.65	G/C3
MWCO	Mud Weight Correction Option	NO	
NAAC	HRDD APS Activation Correction	OFF	
NMT	HILT Nuclear Mud Type	NOBARITE	
NPRM	HRDD Processing Mode	StdRes	
NSAR	HRDD Depth Sampling Rate	1	IN
PTCO	Pressure/Temperature Correction Option	NO	
SDAT	Standoff Data Source	SOCN	

SDAT	Standard Data Source	68	DEGF
SHT	Surface Hole Temperature	0.125	IN
SOCN	Standoff Distance	YES	
SOCO	Standoff Correction Option		
FEQL: Formation Evaluation Quick Look			
FEXP	Form Factor Exponent	2	
FNUM	Form Factor Numerator	1	
HOLEV: Integrated Hole/Cement Volume			
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	287	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	CHART_GEN_9	
GTSE	Generalized Temperature Selection	HSTS_HTEM	
MATR	Rock Matrix for Neutron Porosity Corrections	SANDSTONE	
SHT	Surface Hole Temperature	68	DEGF
PERT: Preliminary Evaluation – Real Time			
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	287	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	CHART_GEN_9	
GTSE	Generalized Temperature Selection	HSTS_HTEM	
MATR	Rock Matrix for Neutron Porosity Corrections	SANDSTONE	
SHT	Surface Hole Temperature	68	DEGF
STI: Stuck Tool Indicator			
LBFR	Trigger for MAXIS First Reading Label	TDL	
STKT	STI Stuck Threshold	2.5	FT
TDD	Total Depth – Driller	10420.00	FT
TDL	Total Depth – Logger	10424.00	FT
System and Miscellaneous			
BS	Bit Size	6.125	IN
BSAL	Borehole Salinity	-50000.00	PPM
CSIZ	Current Casing Size	7.000	IN
CWEI	Casing Weight	9.00	LB/F
DFD	Drilling Fluid Density	9.00	LB/G
DO	Depth Offset for Playback	0.0	FT
FLEV	Fluid Level	-50000.00	FT
MST	Mud Sample Temperature	118.00	DEGF
PP	Playback Processing	RECOMPUTE	
RMFS	Resistivity of Mud Filtrate Sample	0.1740	OHMM
TD	Total Depth	10424	FT

Format: COMBO Vertical Scale: 5" per 100' Graphics File Created: 09-Dec-2012 05:19

OP System Version: 19C1-222

AIT-M	19C1-222	HILTH-FTB	19C1-222
DTC-H	19C1-222		

Input DLIS Files

DEFAULT	AIT_TLD_MCFL_CNL_009PUP	FN:8	PRODUCER	09-Dec-2012 04:56	10453.5 FT	8967.5 FT
---------	-------------------------	------	----------	-------------------	------------	-----------

Output DLIS Files

DEFAULT	AIT_TLD_MCFL_CNL_012PUP	FN:11	PRODUCER	09-Dec-2012 05:19
---------	-------------------------	-------	----------	-------------------

Company: **High Sierra Water Services LLC**

Schlumberger

Well: **SWD C4A**
Field: **Wattenberg**
County: **Weld**
State: **Colorado**

Platform Express
Triple Combo