

[illegible]

Schlumberger

Company: **Noble Energy Inc**

Well: Suman-George Trusts 42-34

Field: **Wildcat**County: **Yuma**

State: Colorado

Platform Express Triple Combo

Wildcat

Wildcat

SENE Sec. 34 ,T 1S , R 45W

Suman-George Trusts 42-34

Field:
Location:
Well:
Company:

Field:
Location:
Well:
Company:

LOCATION			
SENE Sec. 34 , T 1S , R 45W	Elev.:	K.B.	3915.00 ft
SHL: 2260 FNL / 1100 FEL		G.L.	3909.00 ft
Lat. / Long.: 39.92693 / -102.39629		D.F.	3914.00 ft
Permanent Datum:	Ground Level	Elev.:	3909.00 ft
Log Measured From:	Kelly Bushing	6.00 ft	above Perm. Datum
Drilling Measured From:	Kelly Bushing		
API Serial No. 051251173300	Section 34	Township 1S	Range 45W

[illegible]

Logging Date	19-Feb-2010			Logging Date			
Run Number	1			Run Number			
Depth Driller	2407 ft			Depth Driller			
Schlumberger Depth	2407 ft			Schlumberger Depth			
Bottom Log Interval	2399 ft			Bottom Log Interval			
Top Log Interval	368 ft			Top Log Interval			
Casing Driller Size @ Depth	7.000 in @ 362 ft			Casing Driller Size @ Depth	@		
Casing Schlumberger	368 ft			Casing Schlumberger			
Bit Size	6.250 in			Bit Size			
Type Fluid In Hole	KCL Polymer			Type Fluid In Hole			
Density	6.4 lbm/gal	Viscosity	30 s	Density		Viscosity	
Fluid Loss	PH			Fluid Loss		PH	
Source Of Sample	Flowline			Source Of Sample			
RM @ Measured Temperature	0.198 ohm.m @ 45 degF			RM @ Measured Temperature	@		
RMF @ Measured Temperature	0.148 ohm.m @ 45 degF			RMF @ Measured Temperature	@		
RMC @ Measured Temperature	0.297 ohm.m @ 45 degF			RMC @ Measured Temperature	@		
Source RMF	Calculated	RMC	Calculated	Source RMF		RMC	
RM @ MRT	0.106 @ 90	RMF @ MRT	0.079 @ 90	RM @ MRT	@	RMF @ MRT	@
Maximum Recorded Temperatures	90 degF			Maximum Recorded Temperatures			
Circulation Stopped	19-Feb-2010	Time	22:30	Circulation Stopped		Time	
Logger On Bottom	19-Feb-2010	Time	1:10	Logger On Bottom		Time	
Unit Number	3021	Location	Fort Morgan, CO	Unit Number		Location	
Recorded By	Jared R. Hoskins, P. Grant			Recorded By			
Witnessed By	Sam Chartier			Witnessed By			

[illegible]

DEPTH SUMMARY LISTING

Date Created: 20-FEB-2010 1:15:22

Depth System Equipment

Depth Measuring Device		Tension Device		Logging Cable	
Type:	IDW-B	Type:	CMTD-B/A	Type:	7-39P LXS
Serial Number:	3713	Serial Number:	2787	Serial Number:	6171
Calibration Date:	13-Sep-2009	Calibration Date:	11-Feb-2010	Length:	13115 FT
Calibrator Serial Number:	33	Calibrator Serial Number:	100513	Conveyance Method:	Wireline
Calibration Cable Type:	7-39P LXS	Number of Calibration Points:	8	Rig Type:	LAND
Wheel Correction 1:	-7	Calibration RMS:	16		
Wheel Correction 2:	-5	Calibration Peak Error:	29		

Depth Control Parameters

Log Sequence:	First Log In the Well
Rig Up Length At Surface:	0.00 FT
Rig Up Length At Bottom:	0.00 FT
Rig Up Length Correction:	0.00 FT
Stretch Correction:	0.00 FT
Tool Zero Check At Surface:	0.00 FT

Depth Control Remarks

1. All Schlumberger depth policy procedures applied
2. This is the primary depth reference
- 3.
- 4.
- 5.
- 6.

DISCLAIMER

THE USE OF AND RELIANCE UPON THIS RECORDED-DATA BY THE HEREIN NAMED COMPANY (AND ANY OF ITS AFFILIATES, PARTNERS, REPRESENTATIVES, AGENTS, CONSULTANTS AND EMPLOYEES) IS SUBJECT TO THE TERMS AND CONDITIONS AGREED UPON BETWEEN SCHLUMBERGER AND THE COMPANY, INCLUDING: (a) RESTRICTIONS ON USE OF THE RECORDED-DATA; (b) DISCLAIMERS AND WAIVERS OF WARRANTIES AND REPRESENTATIONS REGARDING COMPANY'S USE OF AND RELIANCE UPON THE RECORDED-DATA; AND (c) CUSTOMER'S FULL AND SOLE RESPONSIBILITY FOR ANY INFERENCE DRAWN OR DECISION MADE IN CONNECTION WITH THE USE OF THIS RECORDED-DATA.

OTHER SERVICES1 OS1: None OS2: OS3: OS4: OS5:	OTHER SERVICES2 OS1: OS2: OS3: OS4: OS5:
REMARKS: RUN NUMBER 1	REMARKS: RUN NUMBER 2
1. This is the first run in hole.	
2. Tool run as per tool sketch.	
3. Limestone matrix 2.71 g/cc.	
4. Rmf and Rmc calculated using GEN-7	

Rig: Excell 2	
Crew: Ian Derry & Shane Walker	

RUN 1			RUN 2		
SERVICE ORDER #:		B8ED-00015	SERVICE ORDER #:		
PROGRAM VERSION:		17C0-154	PROGRAM VERSION:		
FLUID LEVEL:			FLUID LEVEL:		
LOGGED INTERVAL	START	STOP	LOGGED INTERVAL	START	STOP

EQUIPMENT DESCRIPTION					
RUN 1			RUN 2		

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

DOWNHOLE EQUIPMENT

LEH-QT

LEH-QT

HGNS HTEM

HMCA

TelStatus

CTEM

HILTB-CTS

HGNSC-B

HMCA

TCC-B

HGNH

NLS-KL

NSR-F 5168

HACCZ 419

HCNT

HGR

HRCC-B

HRMS-B

HRGD-B

GLS-VJ 5363

MCFL Device

HILT Nucl. LS 42767

HILT Nucl. SS 42767

HILT Nucl. BS 42767

AIT-H

AHIS-BA 397

AHRM-A

NPV-N

HGNS Gamm

HGNS Neut

HGNS Neut

HGNS sens

HRCC cart

MCFL

HILT cali

HRDD-LS

HRDD-SS

HRDD-BS

40.6

37.6

36.9

31.1

30.6

28.2

24.2

18.8

18.3

17.9

37.6

Induction
Temperatu
Power Sup

7.9

SP SENSOR
HTEN HMAS
Accelerom HV
Mud Resis
Tension

0.1

0.0

TOOL ZERO

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

Production String

(in)

(ft)

OD

ID

MD

Well Schematic

(ft)

(in)

MD

OD

ID

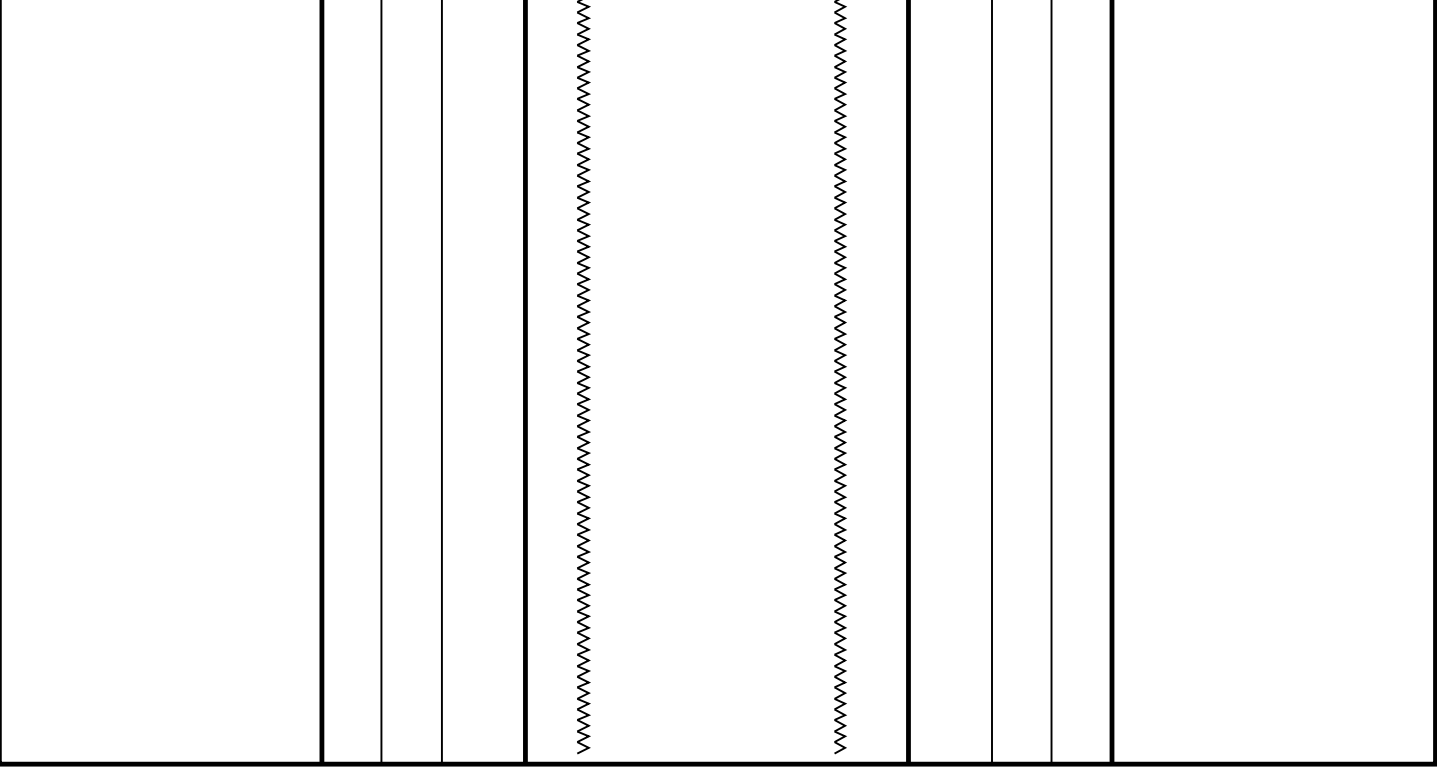
Casing String

Casing String

Casing Shoe
Borehole Segment

362.0
362.0

7.000
6.250



All depths are driller's depths

Schlumberger

COMBO LOG 2" = 100'

MAXIS Field Log

Output DLIS Files

DEFAULT AIT_TLD_MCFL_CNL_010LUP FN:9 PRODUCER 20-Feb-2010 01:21 2424.0 FT 328.0 FT

Integrated Hole/Cement Volume Summary

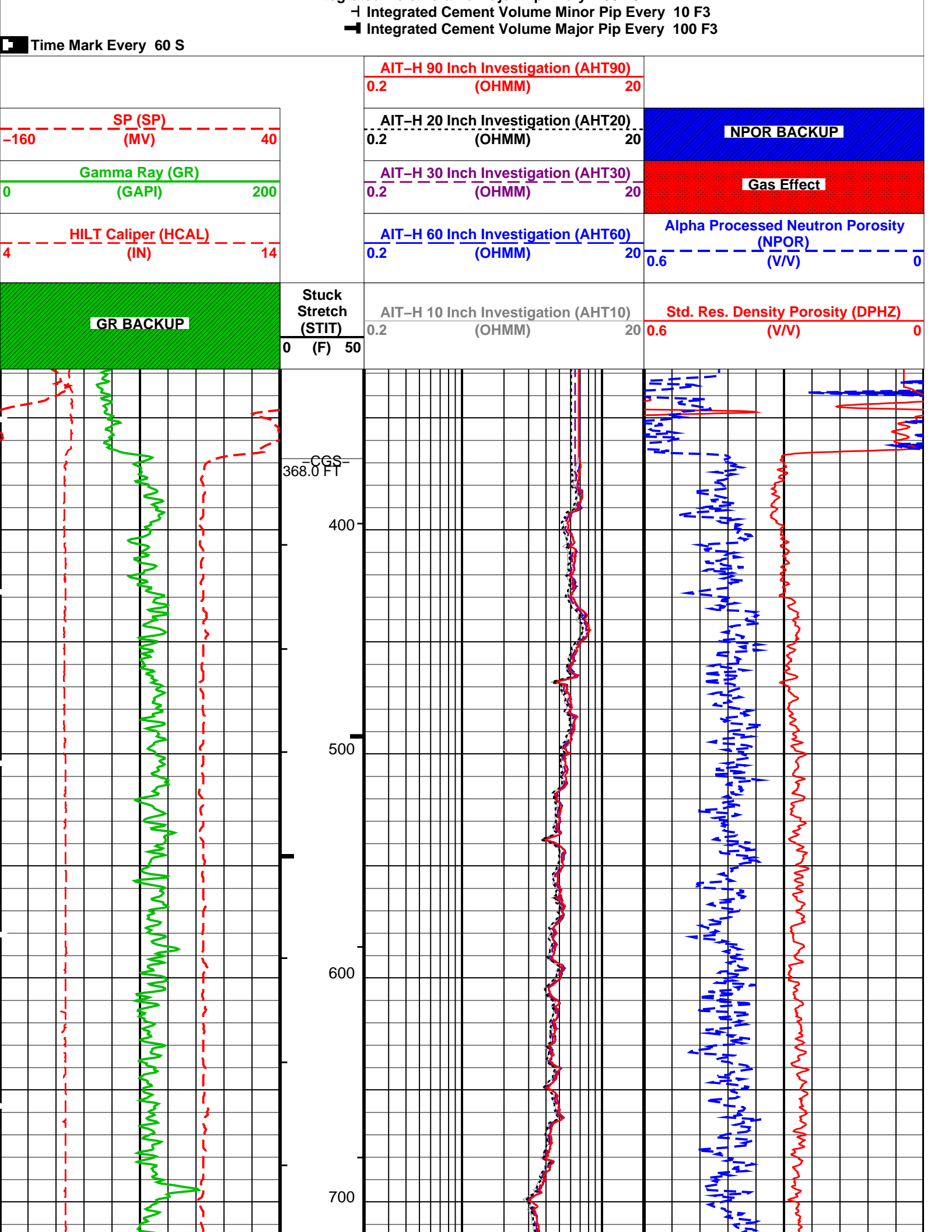
Hole Volume = 438.38 F3
Cement Volume = 213.11 F3 (assuming 4.50 IN casing O.D.)
Computed from 2407.0 FT to 368.0 FT using data channel(s) HCAL

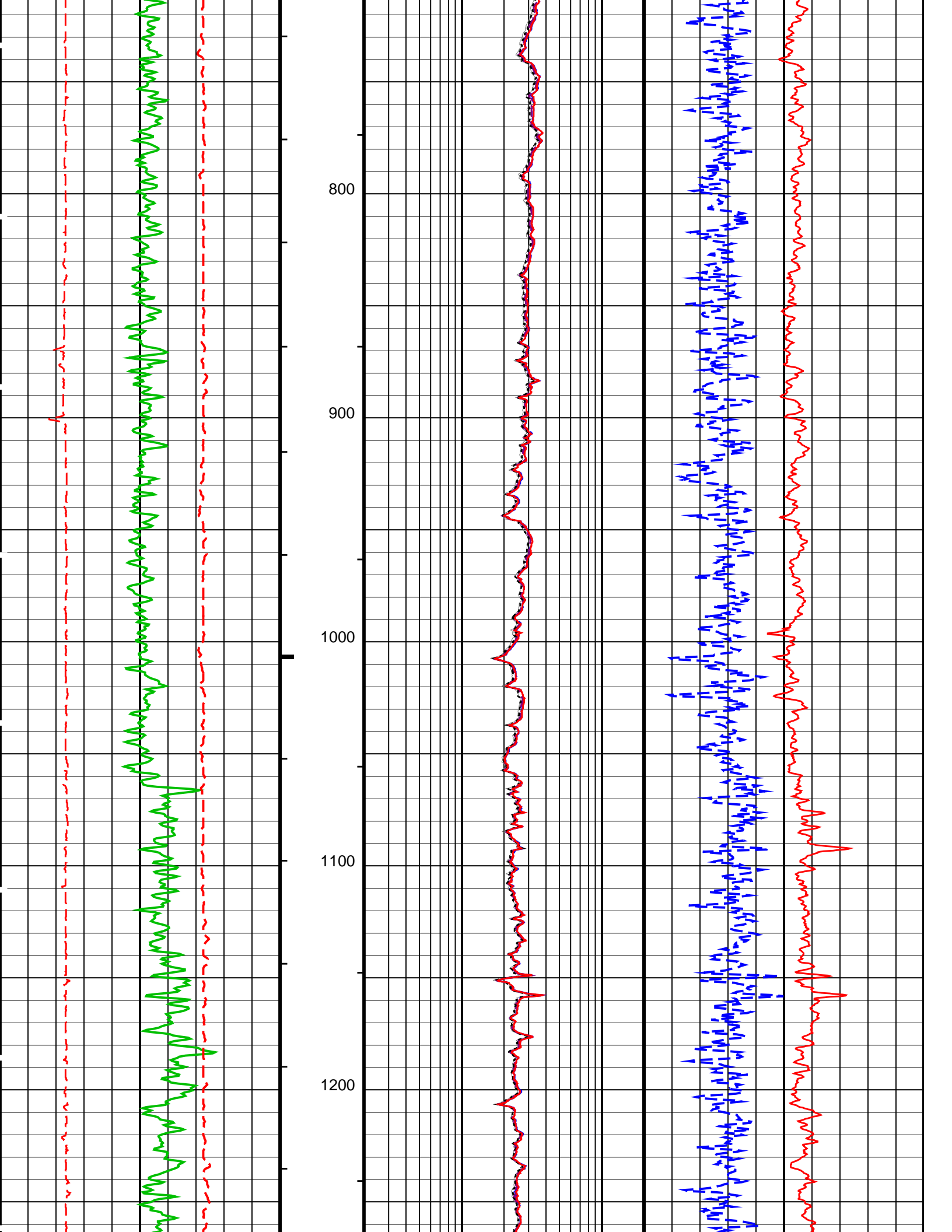
OP System Version: 17C0-154

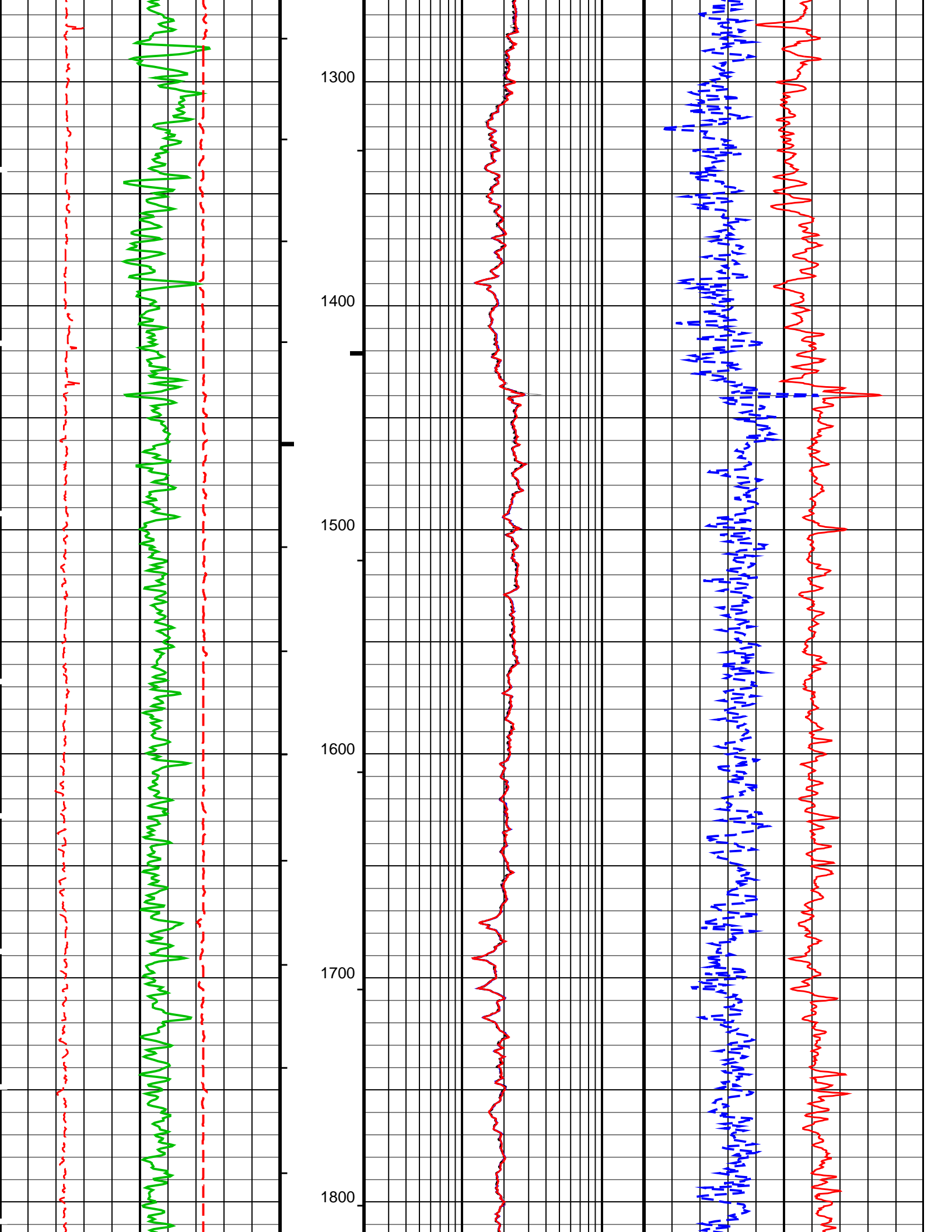
HILTB-CTS 17C0-154

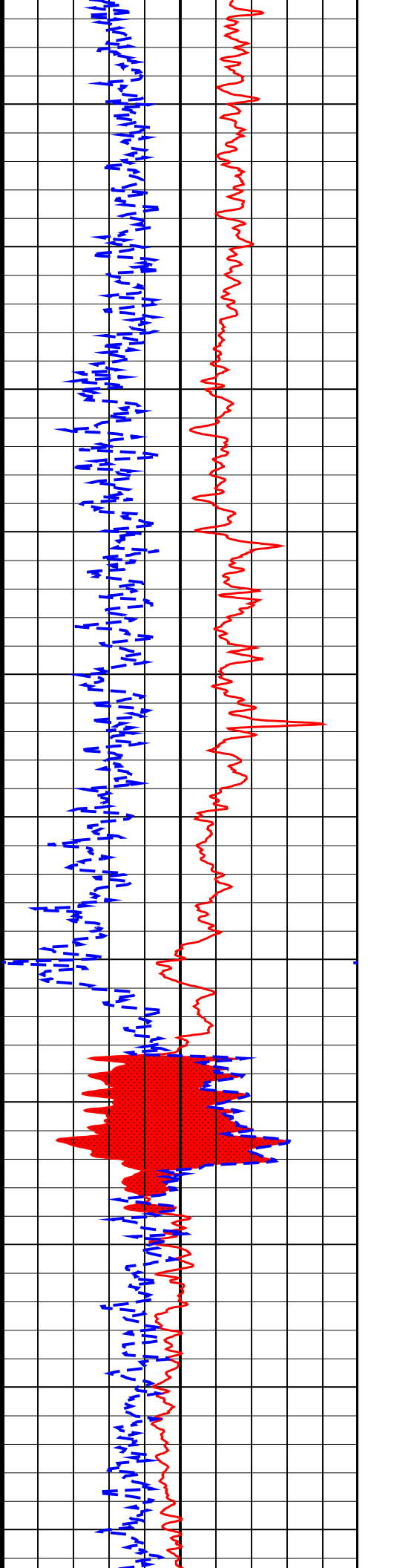
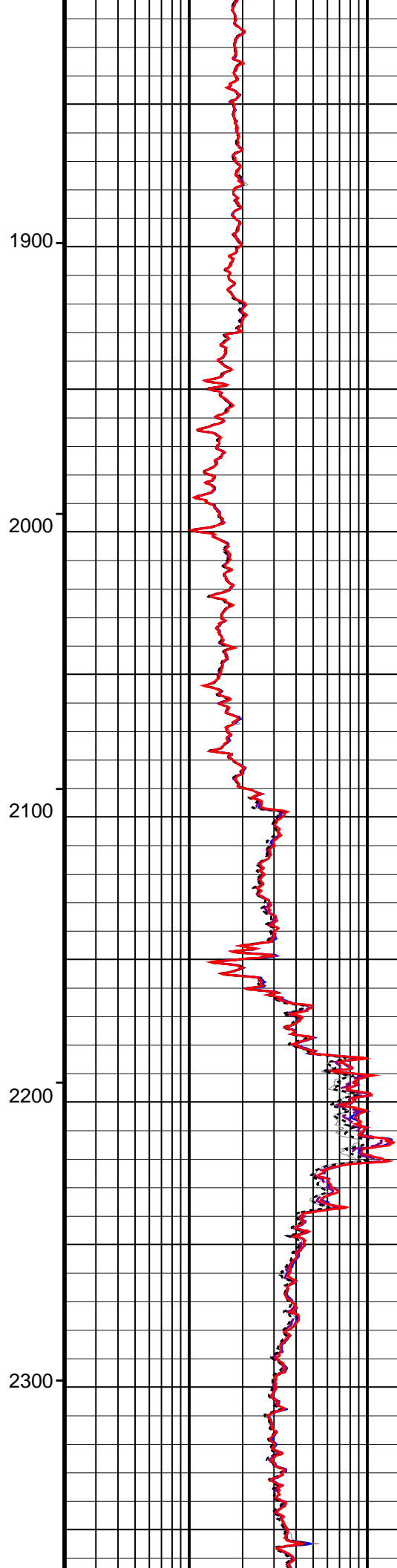
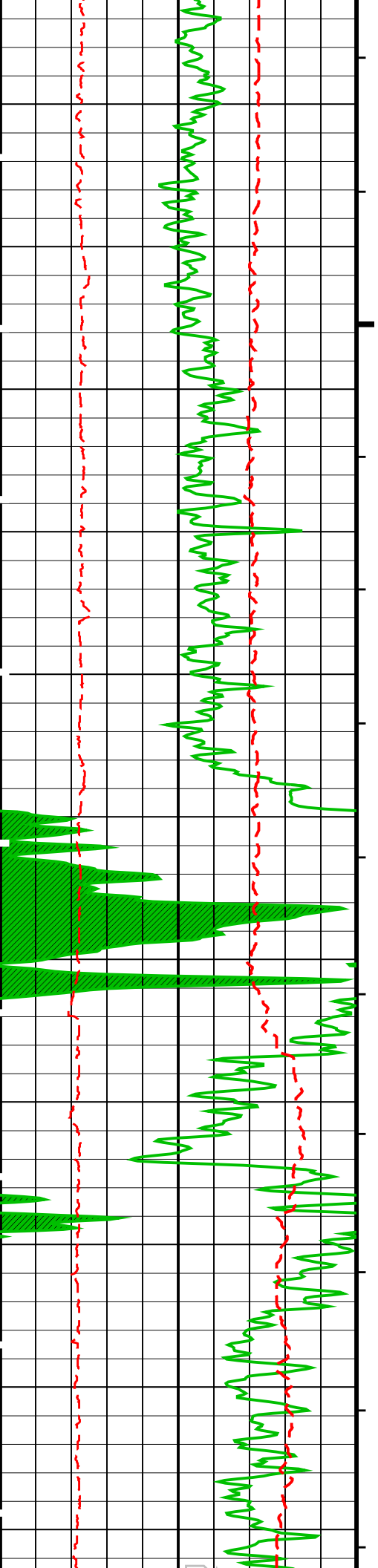
PIP SUMMARY

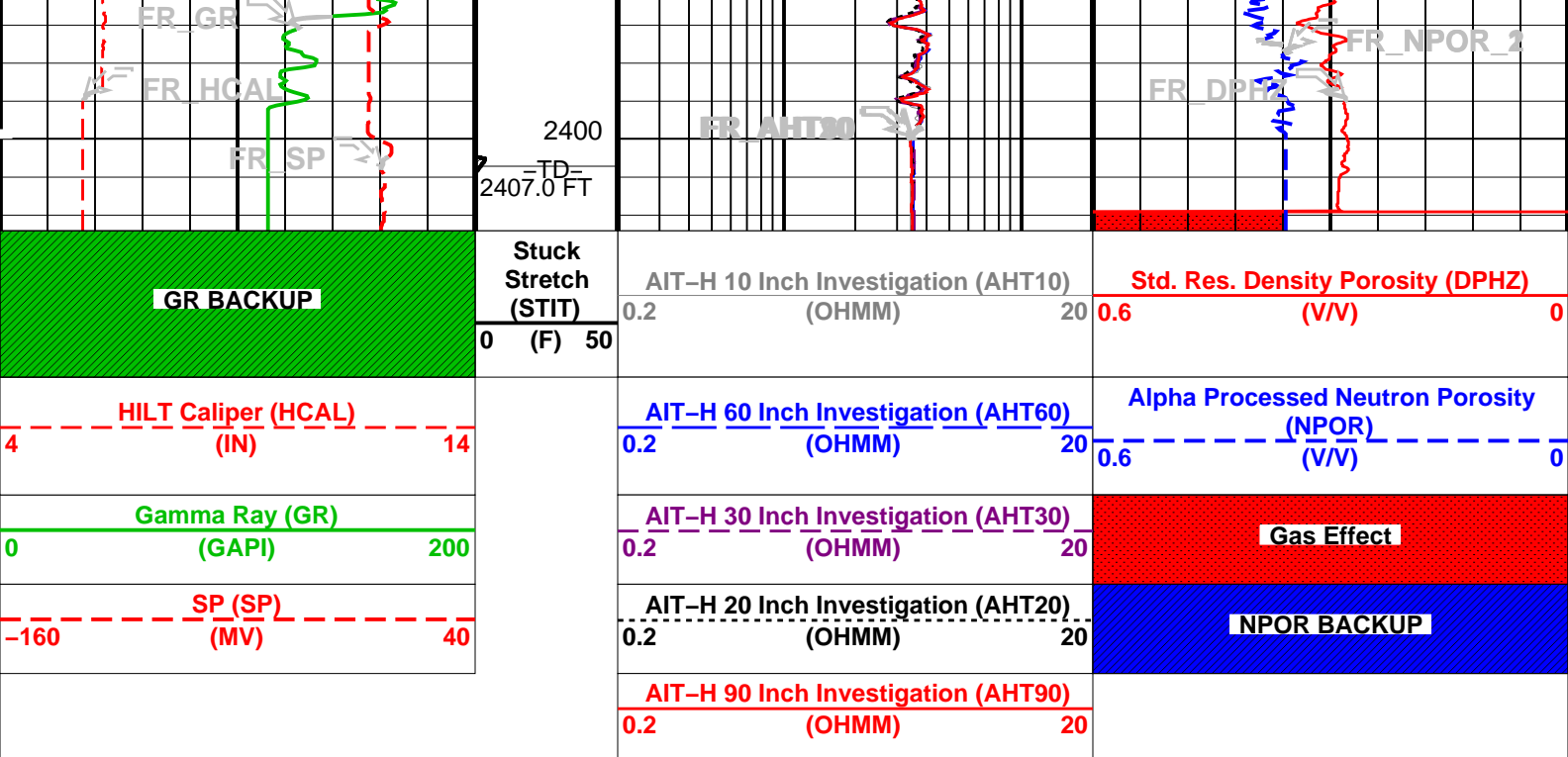
- └ Integrated Hole Volume Minor Pip Every 10 F3
- └ Integrated Hole Volume Major Pip Every 100 F3











PIP SUMMARY

- └ Integrated Hole Volume Minor Pip Every 10 F3
- └ Integrated Hole Volume Major Pip Every 100 F3
- └ Integrated Cement Volume Minor Pip Every 10 F3
- └ Integrated Cement Volume Major Pip Every 100 F3

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
HILTB-CTS: High resolution Integrated Logging Tool-CTS		
AHBHM	Array Induction Borehole Correction Mode	2_ComputeStandoff
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	0.125 IN
AHTRSV	Array Induction Response Set Version for Two ft Resolution	41.70.24.20
BHFL	Borehole Fluid Type	WATER
BHFL_TLD	HILT Nuclear Mud Base	WATER
BHS	Borehole Status	OPEN
BHT	Bottom Hole Temperature (used in calculations)	90 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	AITH_RESIST
GTSE	Generalized Temperature Selection	HSTS_HTEM
HSCO	Hole Size Correction Option	YES
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE
MCCO	Mud Cake Correction Option	NO
MCOR	Mud Correction	NATU
MDEN	Matrix Density	2.71 G/C3
MWCO	Mud Weight Correction Option	NO
NAAC	HRDD APS Activation Correction	OFF
NMT	HILT Nuclear Mud Type	NOBARITE
NPRM	HRDD Processing Mode	NOBARITE

NPRM	HRDD Processing Mode	StdRes	1	IN
NSAR	HRDD Depth Sampling Rate			
PTCO	Pressure/Temperature Correction Option		NO	
SDAT	Standoff Data Source		SOCN	
SHT	Surface Hole Temperature		68	DEGF
SOCN	Standoff Distance		0.125	IN
SOCO	Standoff Correction Option		YES	
SPNV	SP Next Value		0	MV
STI: Stuck Tool Indicator				
LBFR	Trigger for MAXIS First Reading Label		TDL	
STKT	STI Stuck Threshold		2.5	FT
TDD	Total Depth – Driller		2407.00	FT
TDL	Total Depth – Logger		2407.00	FT
HOLEV: Integrated Hole/Cement Volume				
BHS	Borehole Status		OPEN	
BHT	Bottom Hole Temperature (used in calculations)		90	DEGF
FCD	Future Casing (Outer) Diameter		4.5	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		HCAL	
MATR	Rock Matrix for Neutron Porosity Corrections		LIMESTONE	
SHT	Surface Hole Temperature		68	DEGF
FEQL: Formation Evaluation Quick Look				
FEXP	Form Factor Exponent		2	
FNUM	Form Factor Numerator		1	
PERT: Preliminary Evaluation – Real Time				
BHS	Borehole Status		OPEN	
BHT	Bottom Hole Temperature (used in calculations)		90	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	
MATR	Rock Matrix for Neutron Porosity Corrections		LIMESTONE	
SHT	Surface Hole Temperature		68	DEGF
System and Miscellaneous				
BS	Bit Size		6.250	IN
BSAL	Borehole Salinity		-50000.00	PPM
CSIZ	Current Casing Size		7.000	IN
CWEI	Casing Weight		17.00	LB/F
DFD	Drilling Fluid Density		6.40	LB/G
DORL	Depth Offset for Repeat Analysis		0.0	FT
FLEV	Fluid Level		-50000.00	FT
MST	Mud Sample Temperature		45.00	DEGF
RMFS	Resistivity of Mud Filtrate Sample		0.1485	OHMM
TD	Total Depth		2407	FT

Format: COMBO_LOG_S2 Vertical Scale: 2" per 100' Graphics File Created: 20-Feb-2010 01:21

OP System Version: 17C0-154

HILTB-CTS 17C0-154

Output DLIS Files

DEFAULT AIT_TLD_MCFL_CNL_010LUP FN:9 PRODUCER 20-Feb-2010 01:21

Schlumberger

COMBO LOG 5" = 100'

MAXIS Field Log

Output DLIS Files

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Hole Volume = 438.38 F3

Cement Volume = 213.11 F3 (assuming 4.50 IN casing O.D.)

Computed from 2407.0 FT to 368.0 FT using data channel(s) HCAL

OP System Version: 17C0-154

HILTB-CTS

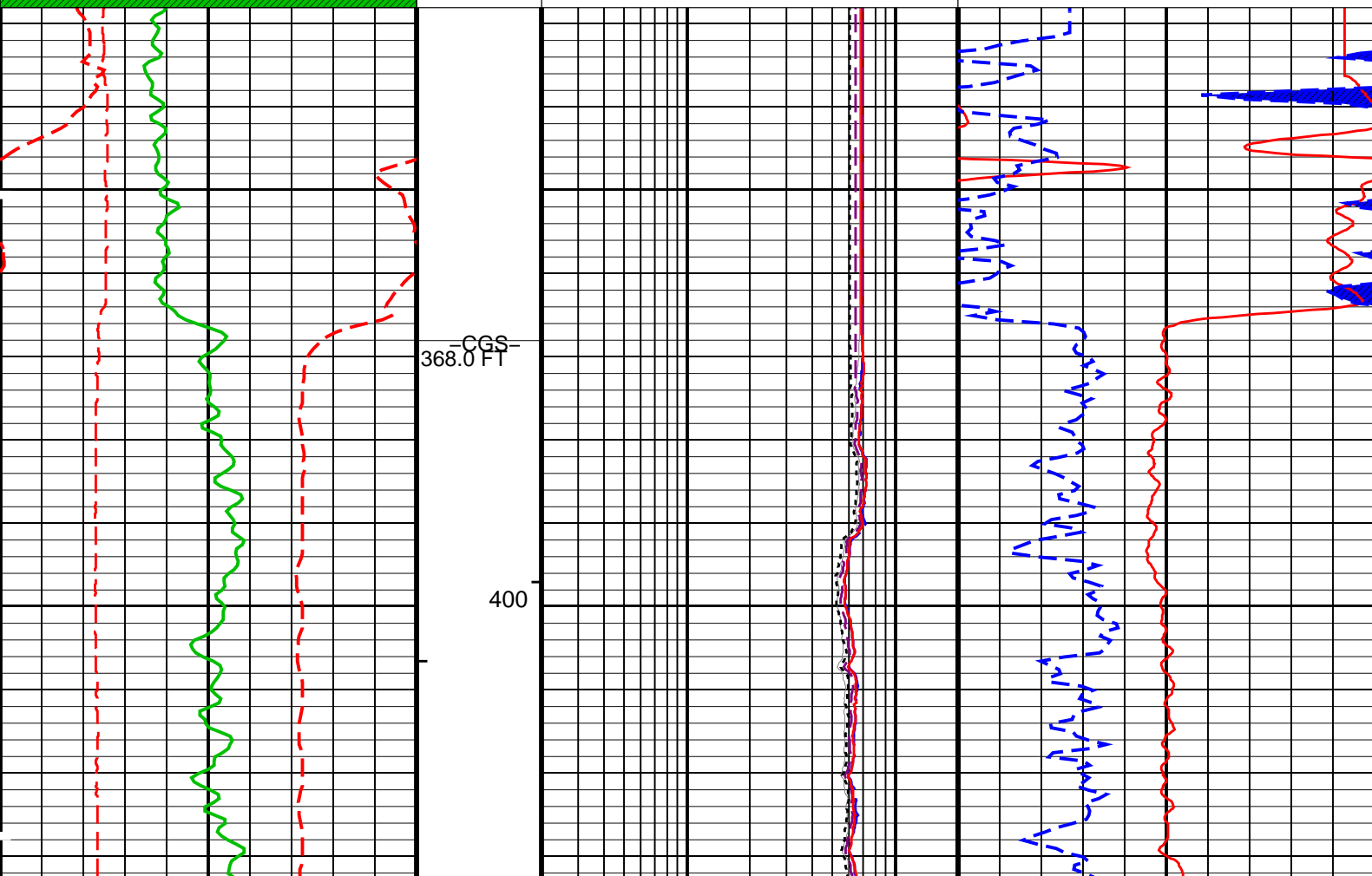
17C0-154

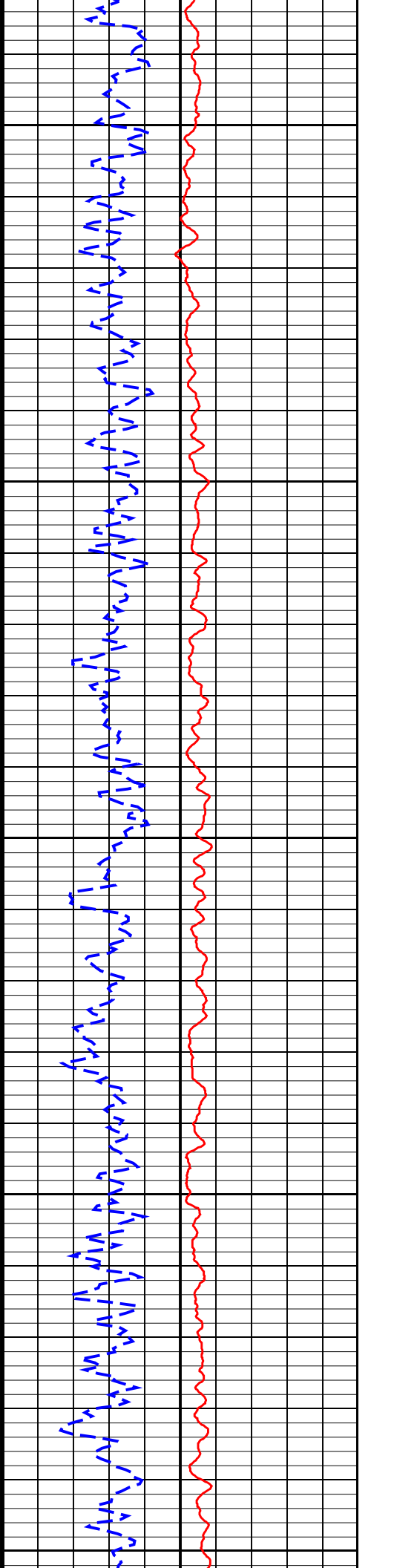
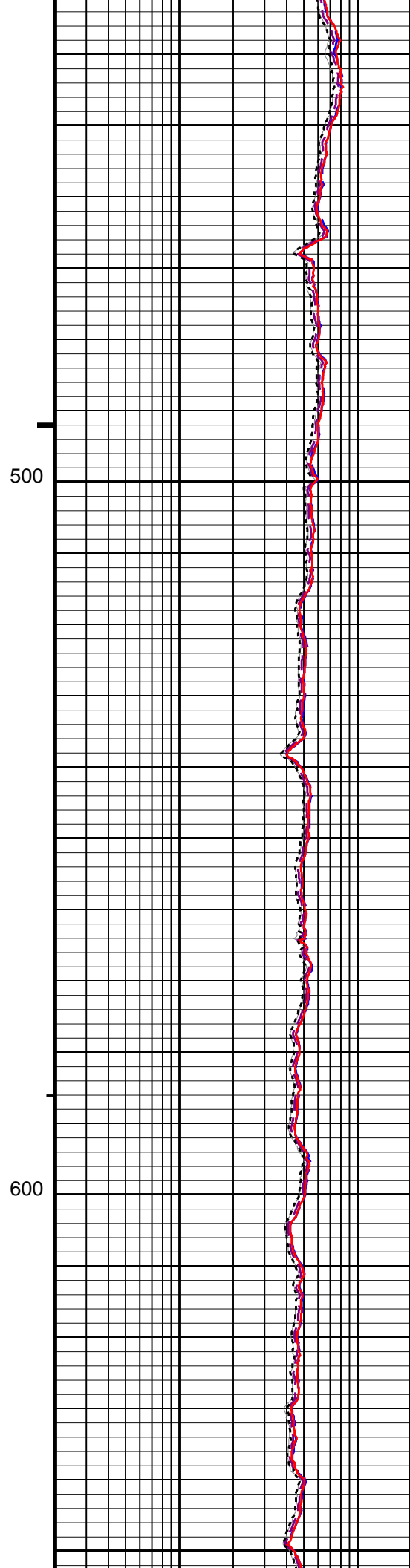
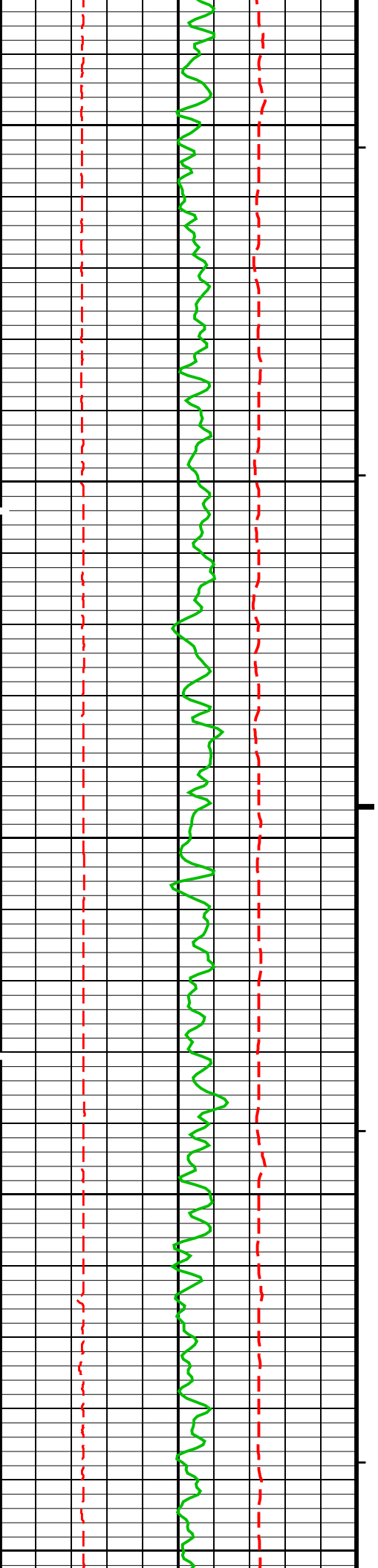
PIP SUMMARY

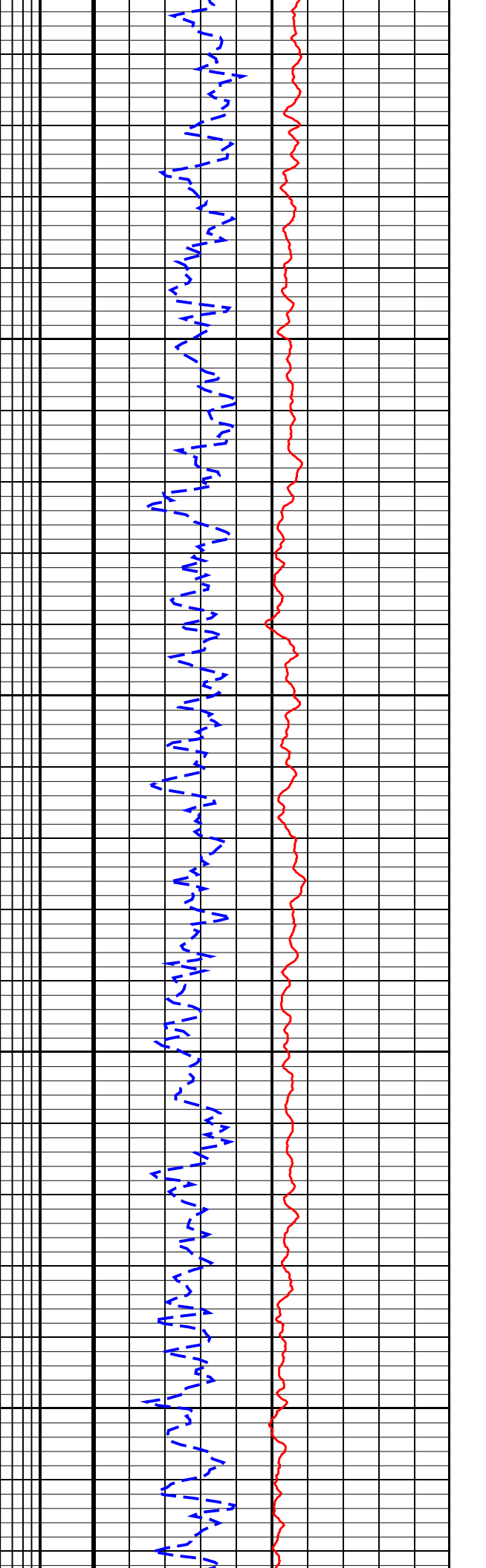
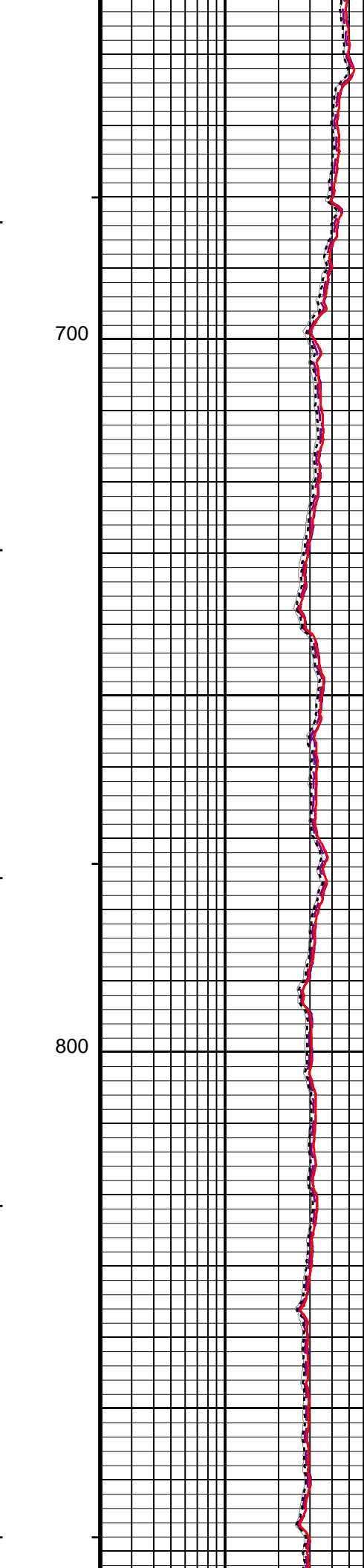
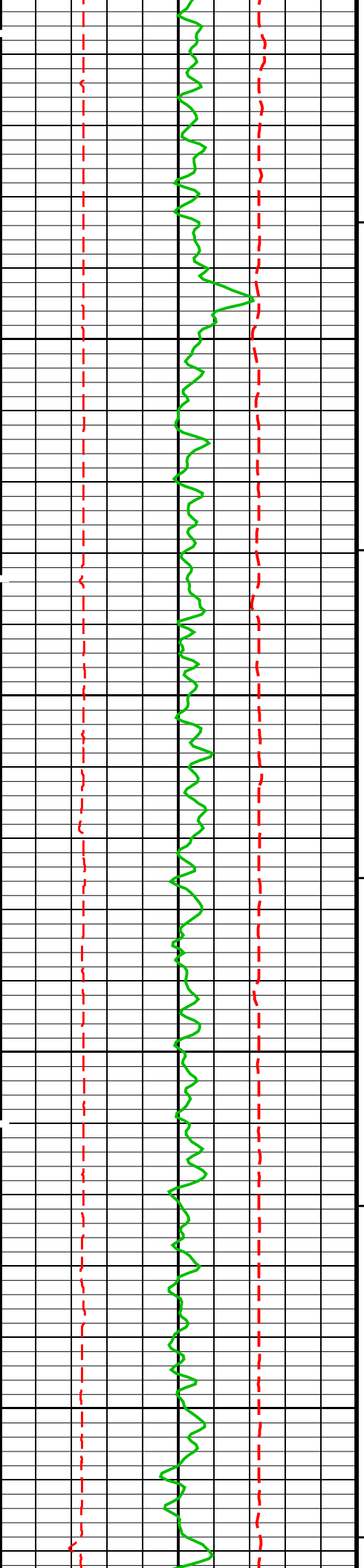
- └ Integrated Hole Volume Minor Pip Every 10 F3
- └ Integrated Hole Volume Major Pip Every 100 F3
- └ Integrated Cement Volume Minor Pip Every 10 F3
- └ Integrated Cement Volume Major Pip Every 100 F3

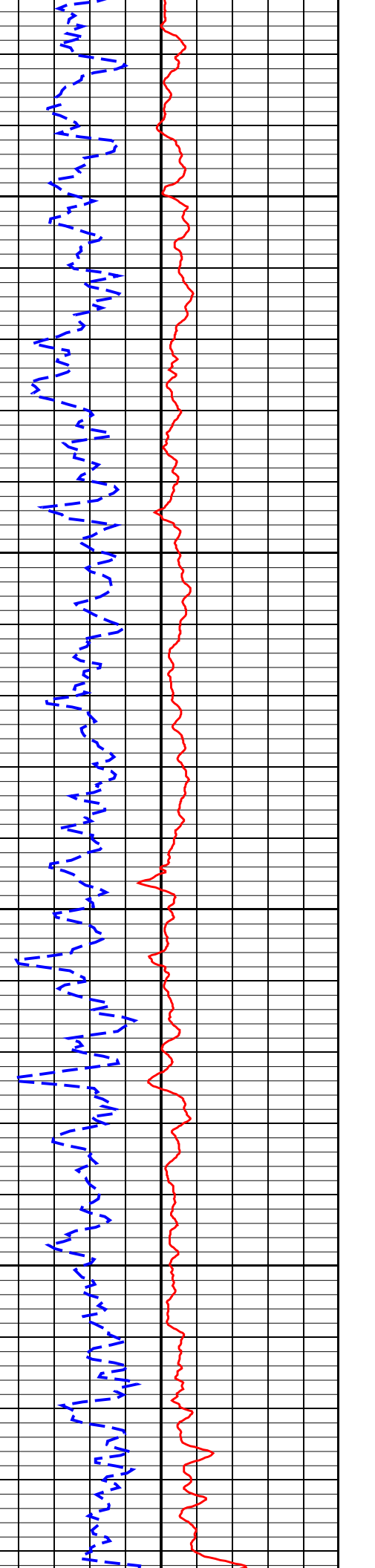
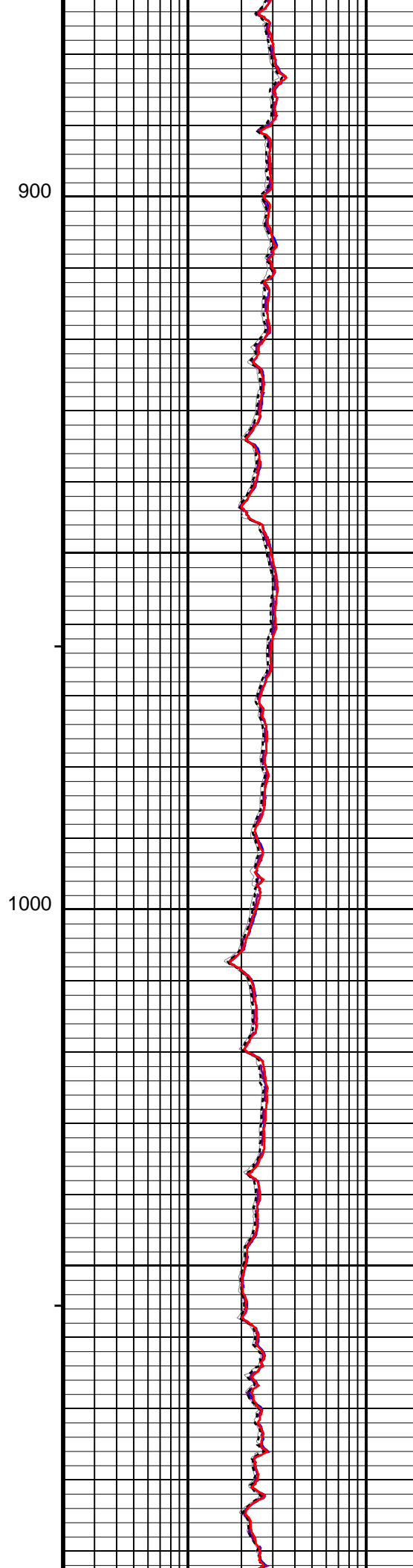
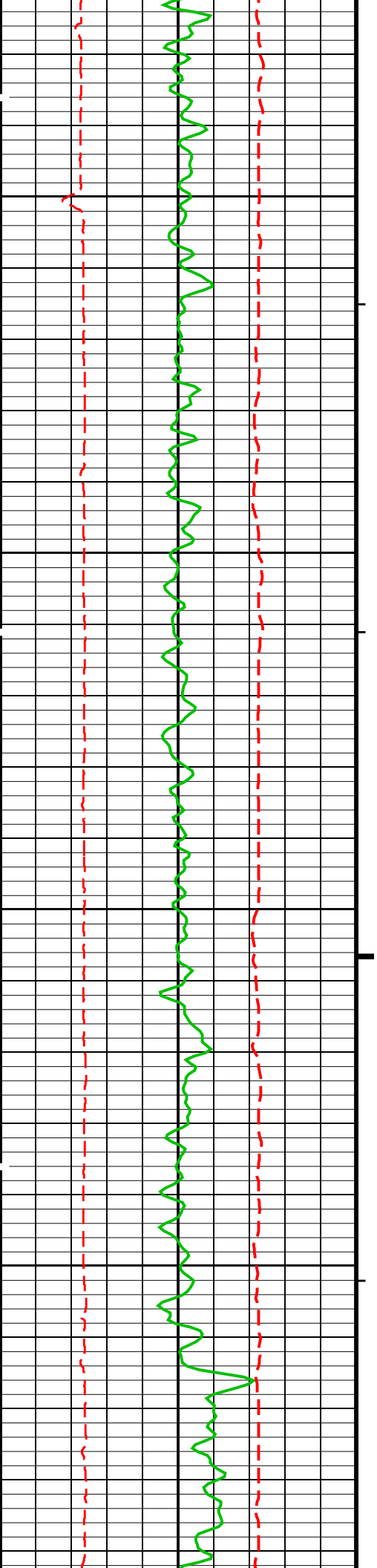
Time Mark Every 60 S

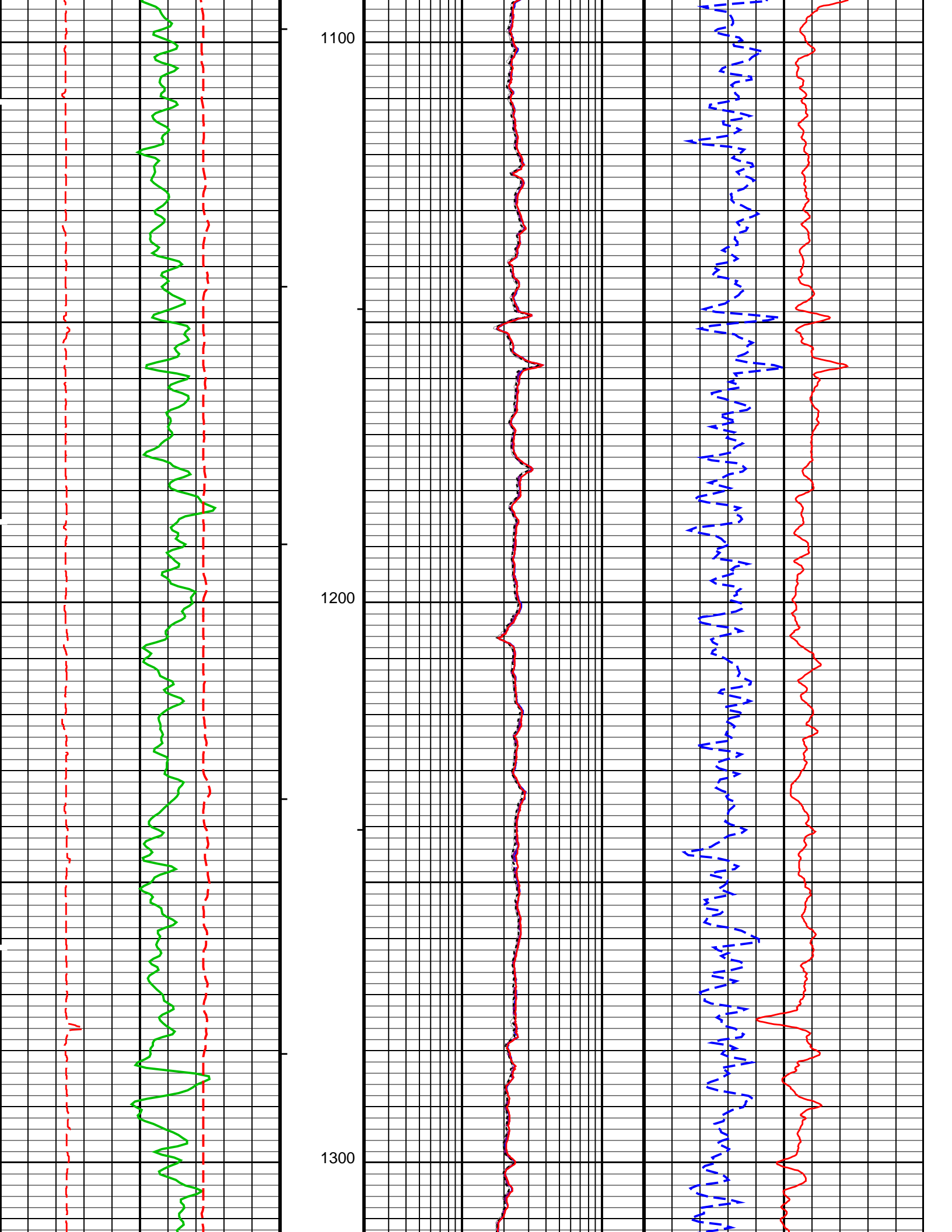
<div>SP (SP) (MV) -160 40</div> <div>Gamma Ray (GR) (GAPI) 0 200</div> <div>HILT Caliper (HCAL) (IN) 4 14</div> <div>GR BACKUP</div>	<div>AIT-H 90 Inch Investigation (AHT90) 0.2 (OHMM) 20</div> <div>AIT-H 20 Inch Investigation (AHT20) 0.2 (OHMM) 20</div> <div>AIT-H 30 Inch Investigation (AHT30) 0.2 (OHMM) 20</div> <div>AIT-H 60 Inch Investigation (AHT60) 0.2 (OHMM) 20</div> <div>AIT-H 10 Inch Investigation (AHT10) 0.2 (OHMM) 20</div>	NPOR BACKUP
		Gas Effect
		Alpha Processed Neutron Porosity (NPOR) 0.6 (V/V) 0
		Std. Res. Density Porosity (DPHZ) 0.6 (V/V) 0

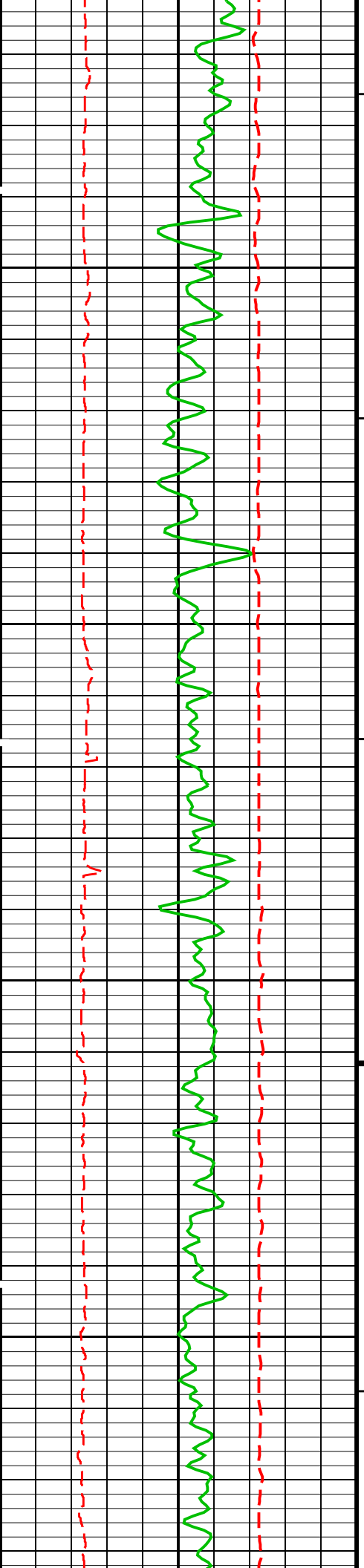






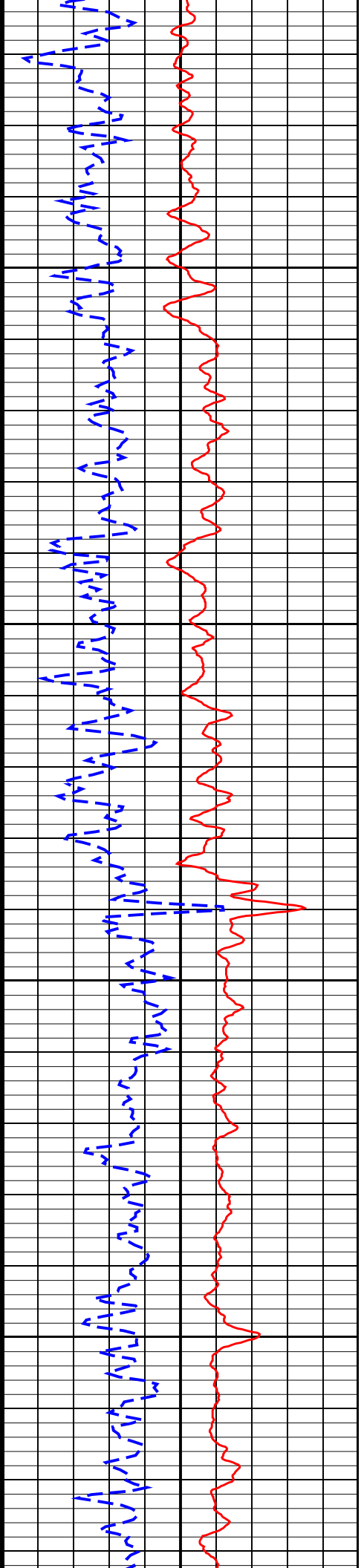
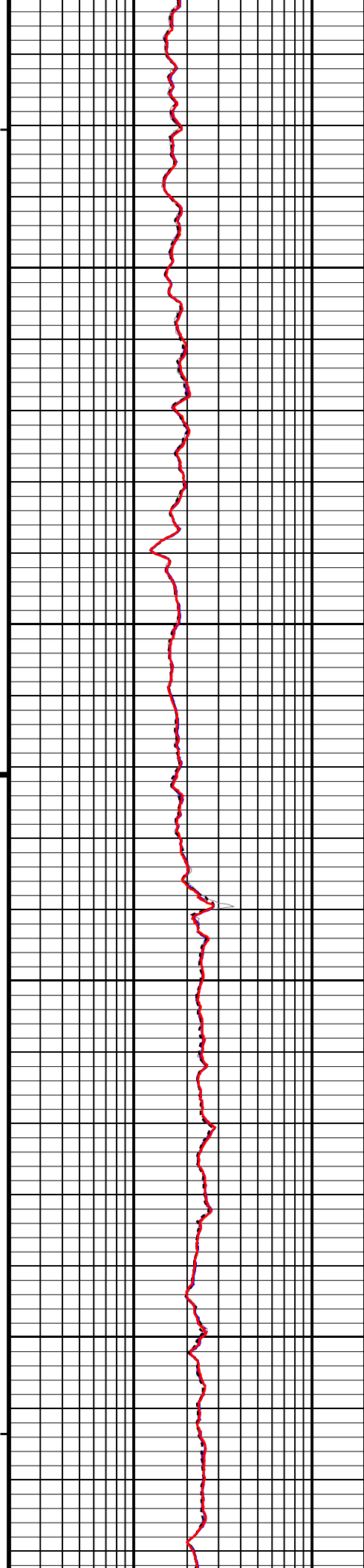


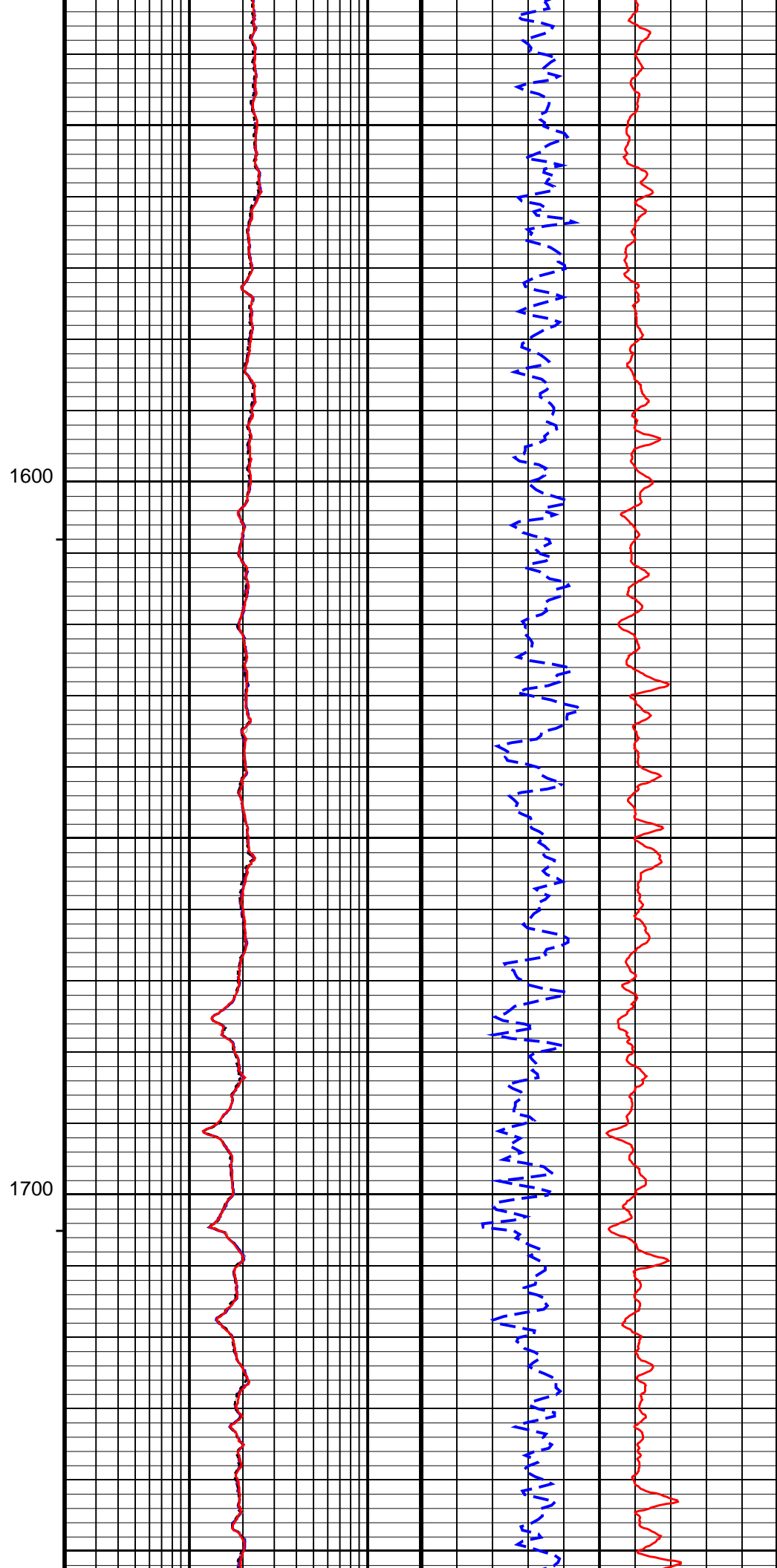
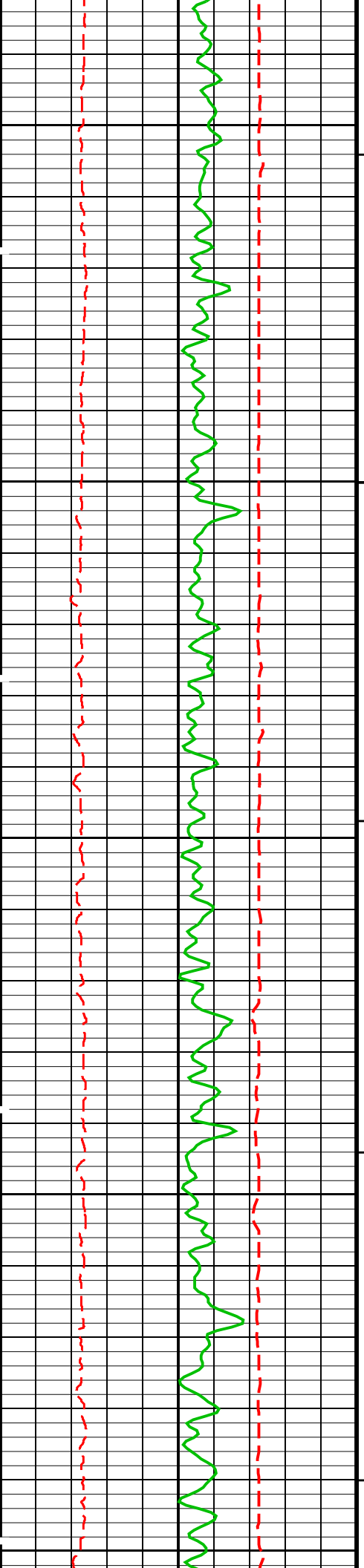


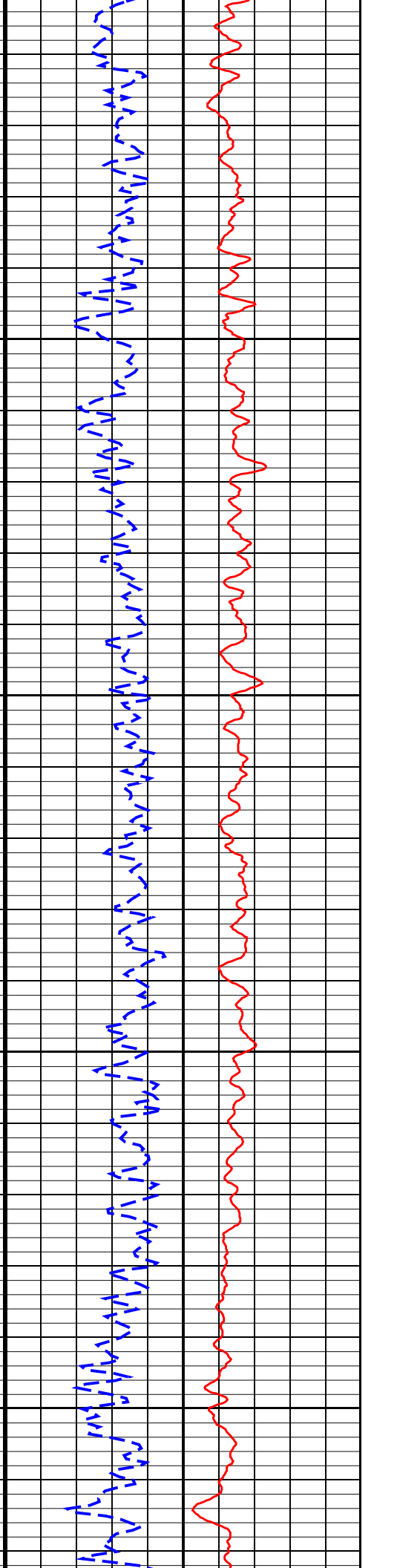
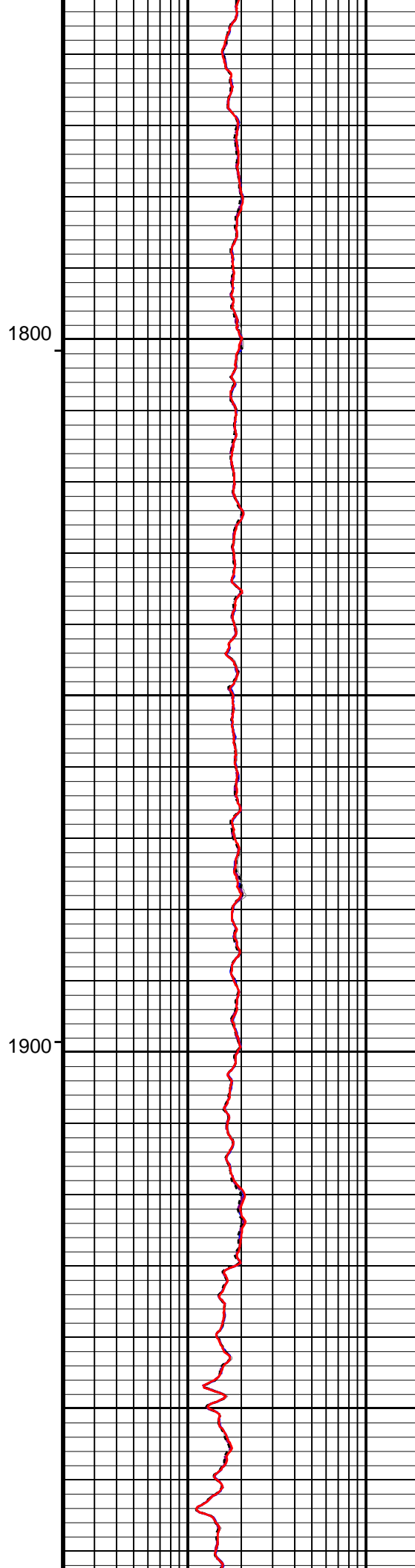
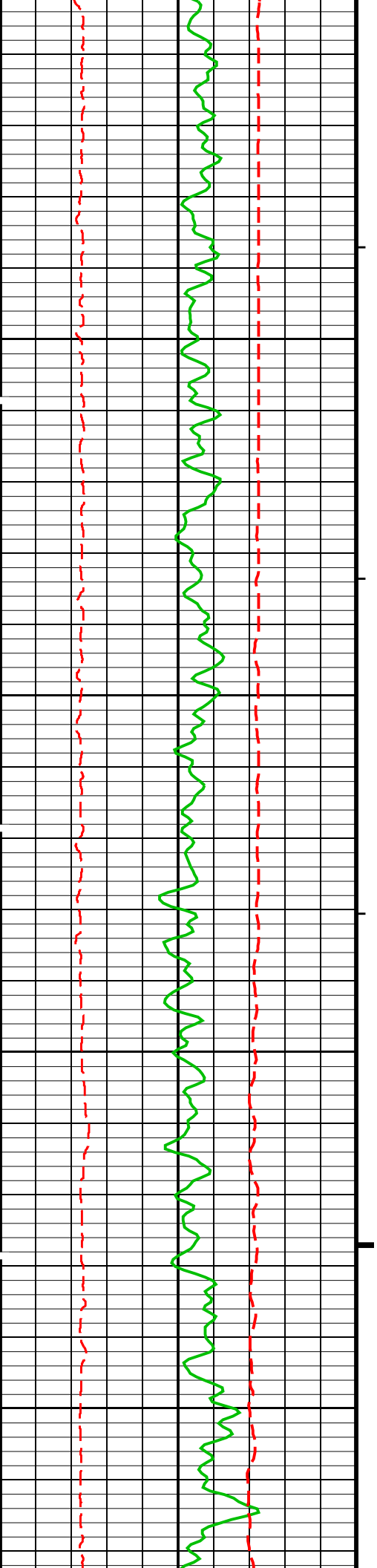


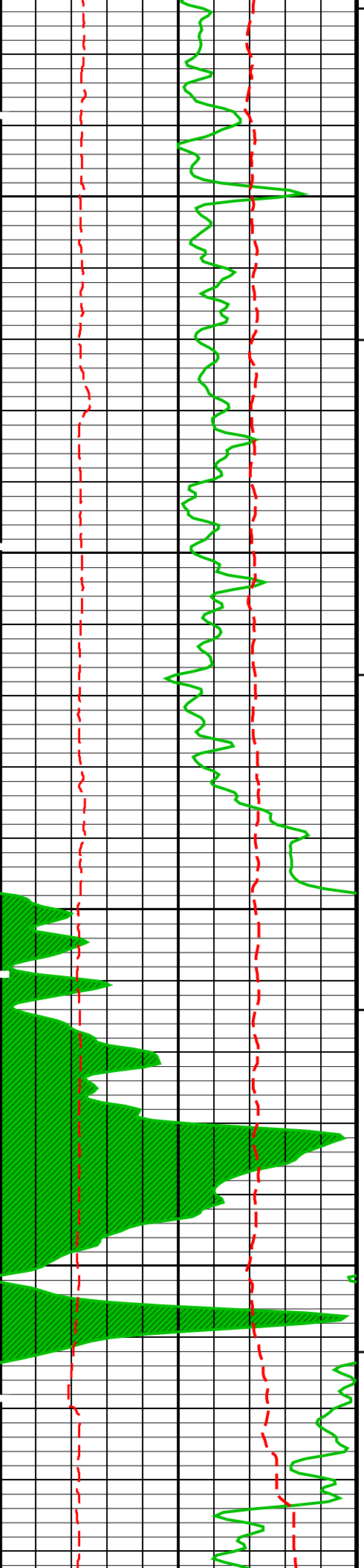
1400

1500



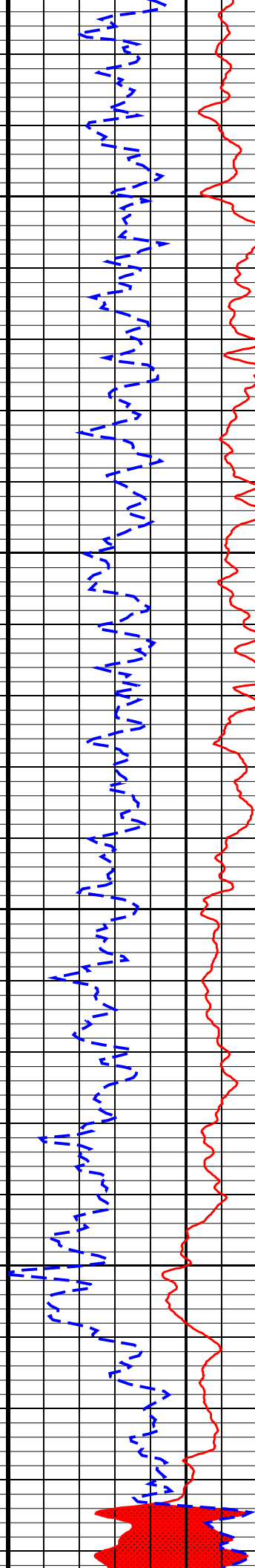
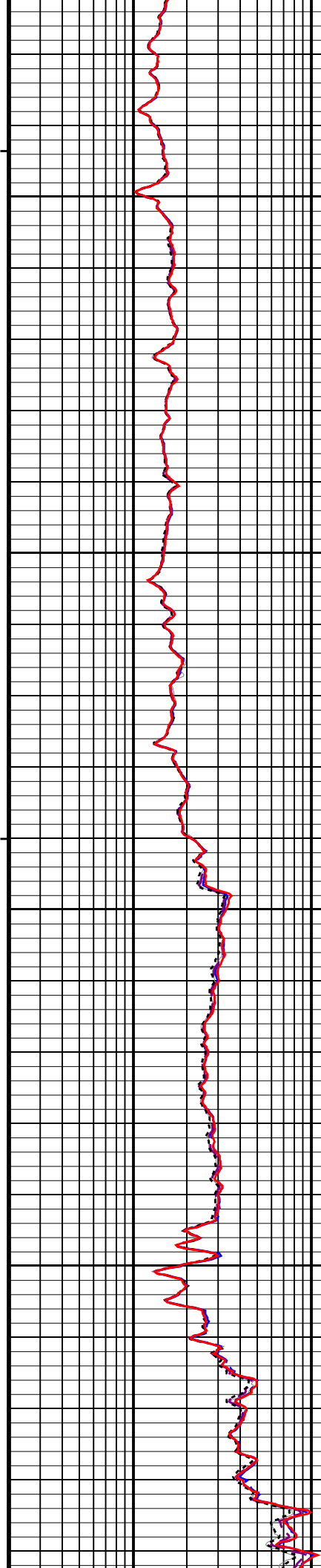


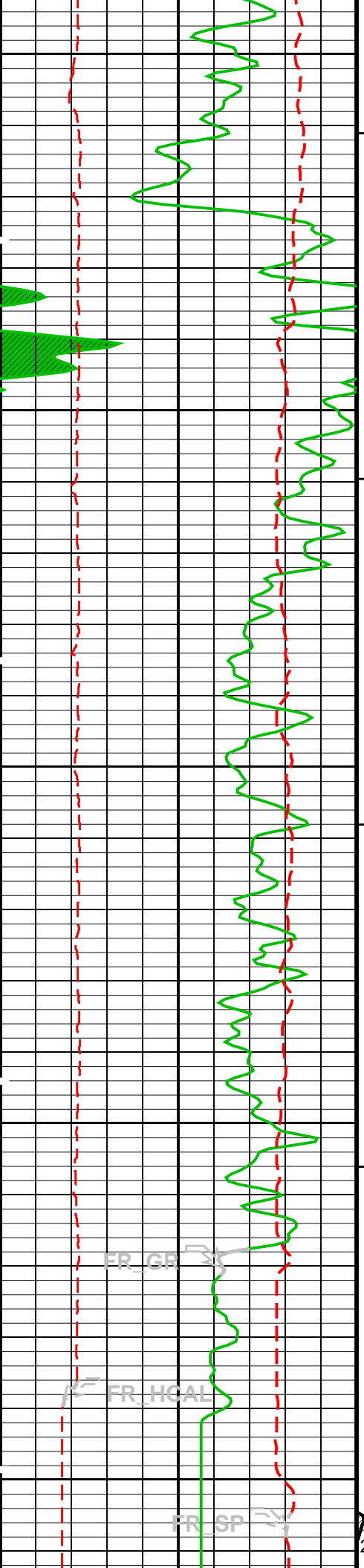




2000

2100





2200

2300

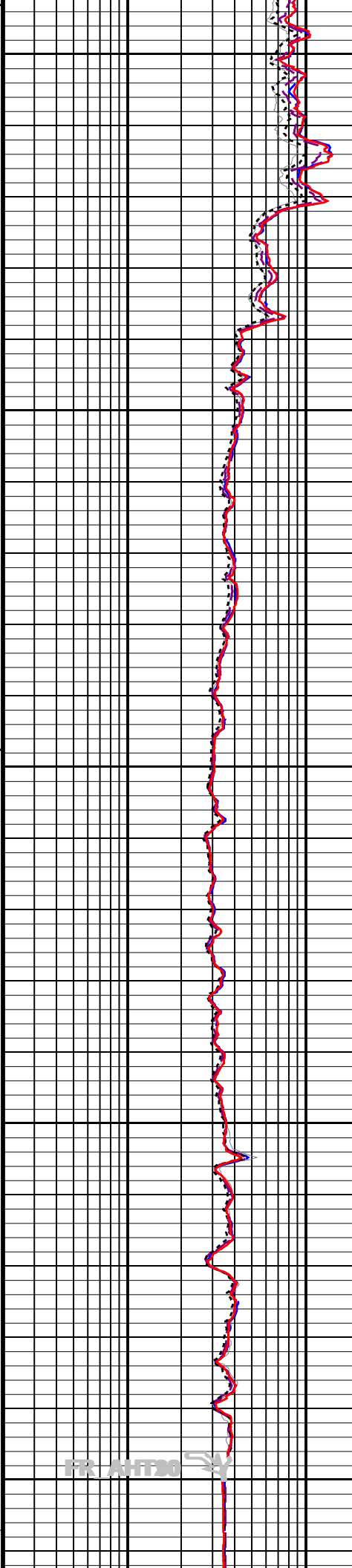
2400

TD
2407.0 FT

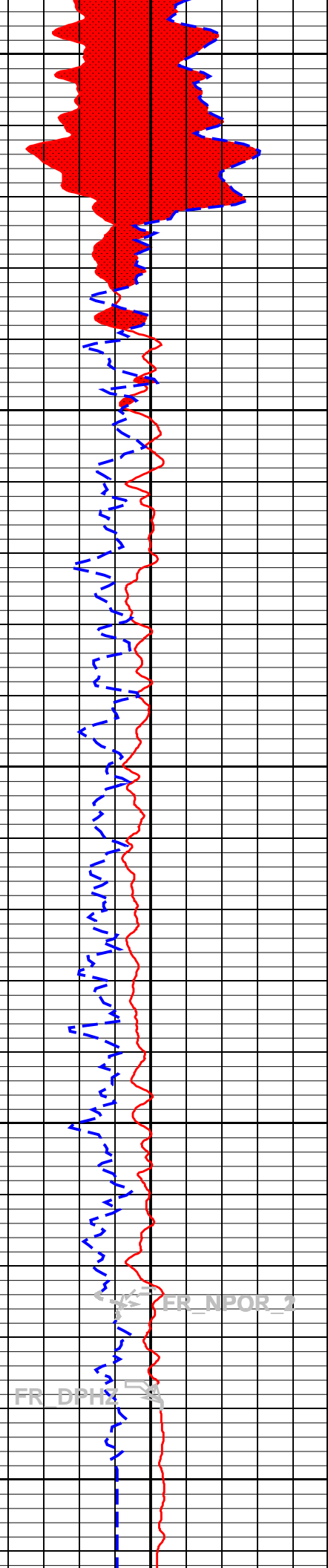
FR_GR

FR_HCAL

FR_SP



FR_AHT30



FR_DPH2

FR_NPOR_1

<div>GR BACKUP</div> <div> <div>HILT Caliper (HCAL) (IN)</div> <div>Gamma Ray (GR) (GAPI)</div> <div>SP (SP) (MV)</div> </div>	<div>Stuck Stretch (STIT)</div> <div>0 (F) 50</div>	<div>AIT-H 10 Inch Investigation (AHT10)</div> <div>0.2 (OHMM) 20</div>	<div>Std. Res. Density Porosity (DPHZ)</div> <div>0.6 (V/V) 0</div>
		<div>AIT-H 60 Inch Investigation (AHT60)</div> <div>0.2 (OHMM) 20</div>	<div>Alpha Processed Neutron Porosity (NPOR)</div> <div>0.6 (V/V) 0</div>
		<div>AIT-H 30 Inch Investigation (AHT30)</div> <div>0.2 (OHMM) 20</div>	Gas Effect
		<div>AIT-H 20 Inch Investigation (AHT20)</div> <div>0.2 (OHMM) 20</div>	NPOR BACKUP
		<div>AIT-H 90 Inch Investigation (AHT90)</div> <div>0.2 (OHMM) 20</div>	

<div>PIP SUMMARY</div> <div> <div> <div>└ Integrated Hole Volume Minor Pip Every 10 F3</div> <div>└ Integrated Hole Volume Major Pip Every 100 F3</div> <div>└ Integrated Cement Volume Minor Pip Every 10 F3</div> <div>└ Integrated Cement Volume Major Pip Every 100 F3</div> </div> <div>Time Mark Every 60 S</div> </div>			
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Parameters			
DLIS Name	Description	Value	
HILTB-CTS: High resolution Integrated Logging Tool-CTS			
AHBHM	Array Induction Borehole Correction Mode	2_ComputeStandoff	
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	0.125	IN
AHTRSV	Array Induction Response Set Version for Two ft Resolution	41.70.24.20	
BHFL	Borehole Fluid Type	WATER	
BHFL_TLD	HILT Nuclear Mud Base	WATER	
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	90	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	AITH_RESIST	
GTSE	Generalized Temperature Selection	HSTS_HTEM	
HSCO	Hole Size Correction Option	YES	
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
MCCO	Mud Cake Correction Option	NO	
MCOR	Mud Correction	NATU	
MDEN	Matrix Density	2.71	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	
SHT	Surface Hole Temperature	68	DEGF

SOCCN	Standoff Distance	0.125	IN
SOCO	Standoff Correction Option	YES	
SPNV	SP Next Value	0	MV
STI: Stuck Tool Indicator			
LBFR	Trigger for MAXIS First Reading Label	TDL	
STKT	STI Stuck Threshold	2.5	FT
TDD	Total Depth – Driller	2407.00	FT
TDL	Total Depth – Logger	2407.00	FT
HOLEV: Integrated Hole/Cement Volume			
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	90	DEGF
FCD	Future Casing (Outer) Diameter	4.5	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	HCAL	
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
SHT	Surface Hole Temperature	68	DEGF
FEQL: Formation Evaluation Quick Look			
FEXP	Form Factor Exponent	2	
FNUM	Form Factor Numerator	1	
PERT: Preliminary Evaluation – Real Time			
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	90	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	
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
SHT	Surface Hole Temperature	68	DEGF
System and Miscellaneous			
BS	Bit Size	6.250	IN
BSAL	Borehole Salinity	-50000.00	PPM
CSIZ	Current Casing Size	7.000	IN
CWEI	Casing Weight	17.00	LB/F
DFD	Drilling Fluid Density	6.40	LB/G
DORL	Depth Offset for Repeat Analysis	0.0	FT
FLEV	Fluid Level	-50000.00	FT
MST	Mud Sample Temperature	45.00	DEGF
RMFS	Resistivity of Mud Filtrate Sample	0.1485	OHMM
TD	Total Depth	2407	FT

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Output DLIS Files

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Schlumberger

REPEAT ANALYSIS

MAXIS Field Log

Input DLIS Files

DEFAULT AIT_TLD_MCFL_CNL_007LUP FN:6 PRODUCER 20-Feb-2010 01:20 2418.0 FT 1966.2 FT

Output DLIS Files

DEFAULT AIT_TLD_MCFL_CNL_010LUP FN:9 PRODUCER 20-Feb-2010 01:21

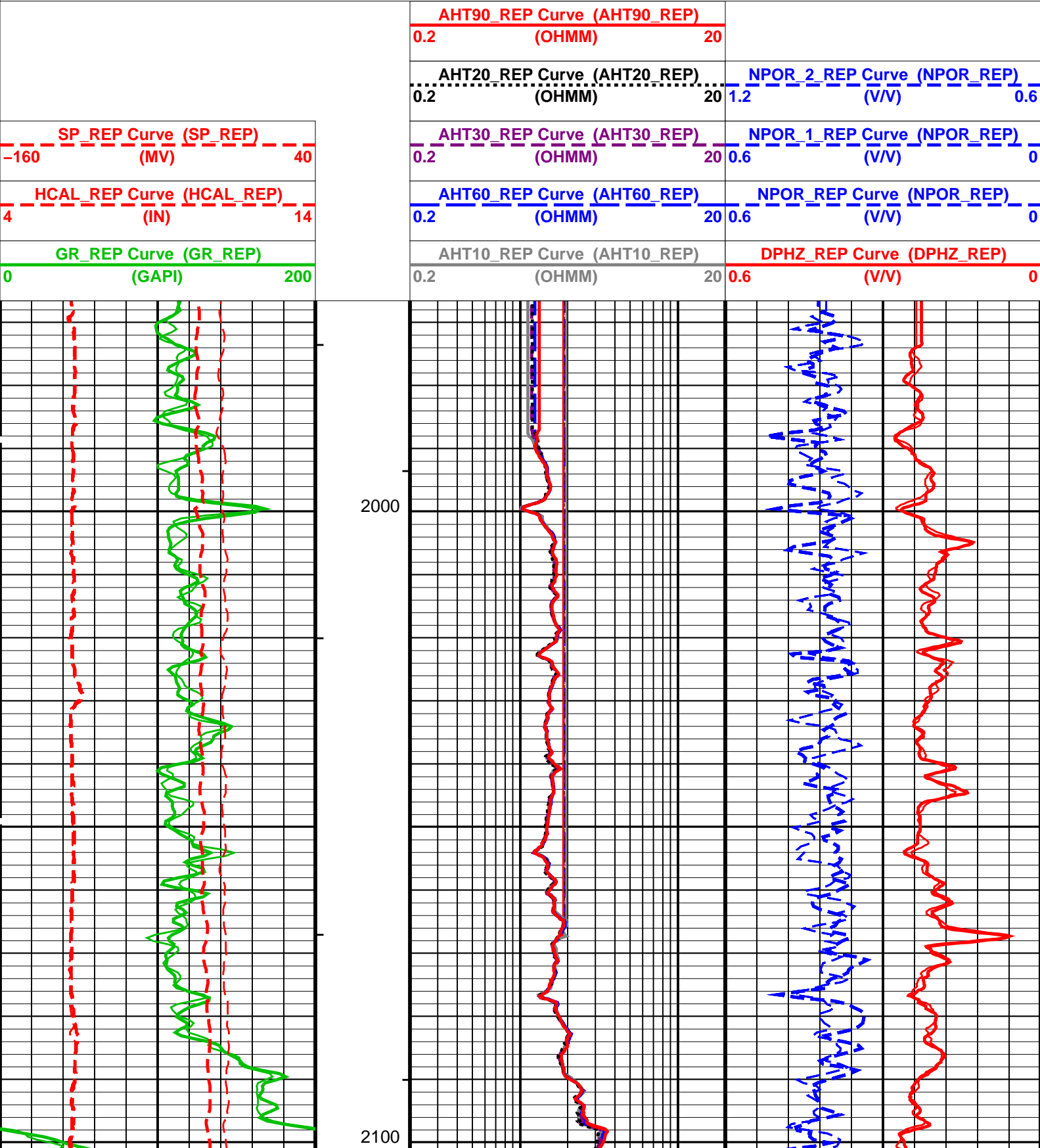
OP System Version: 17C0-154

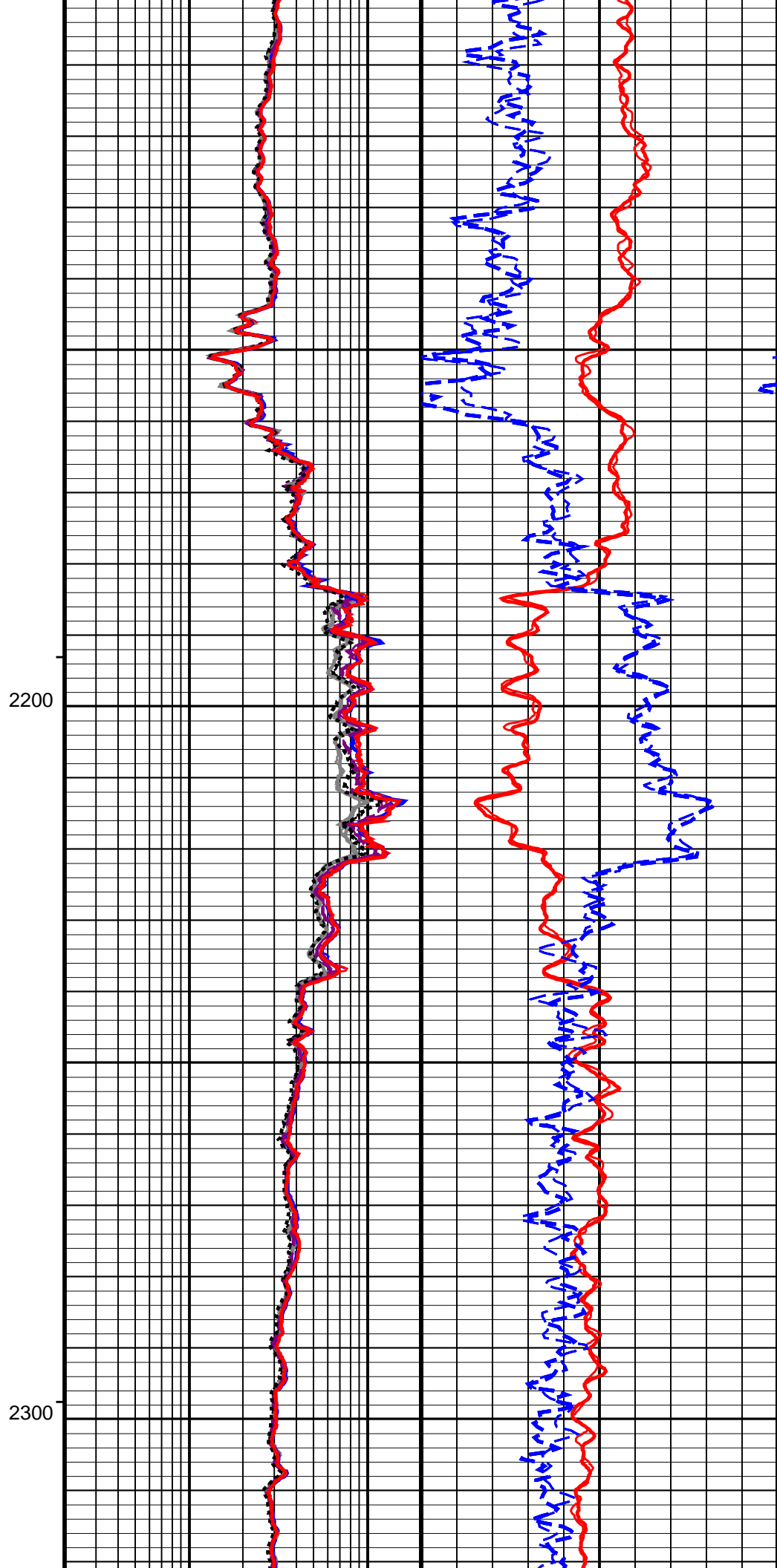
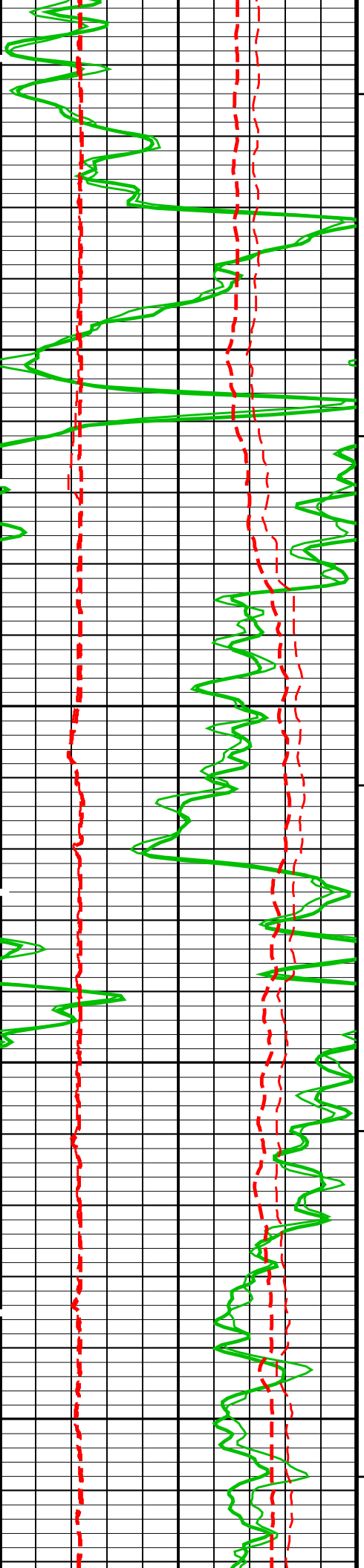
HILTB-CTS 17C0-154

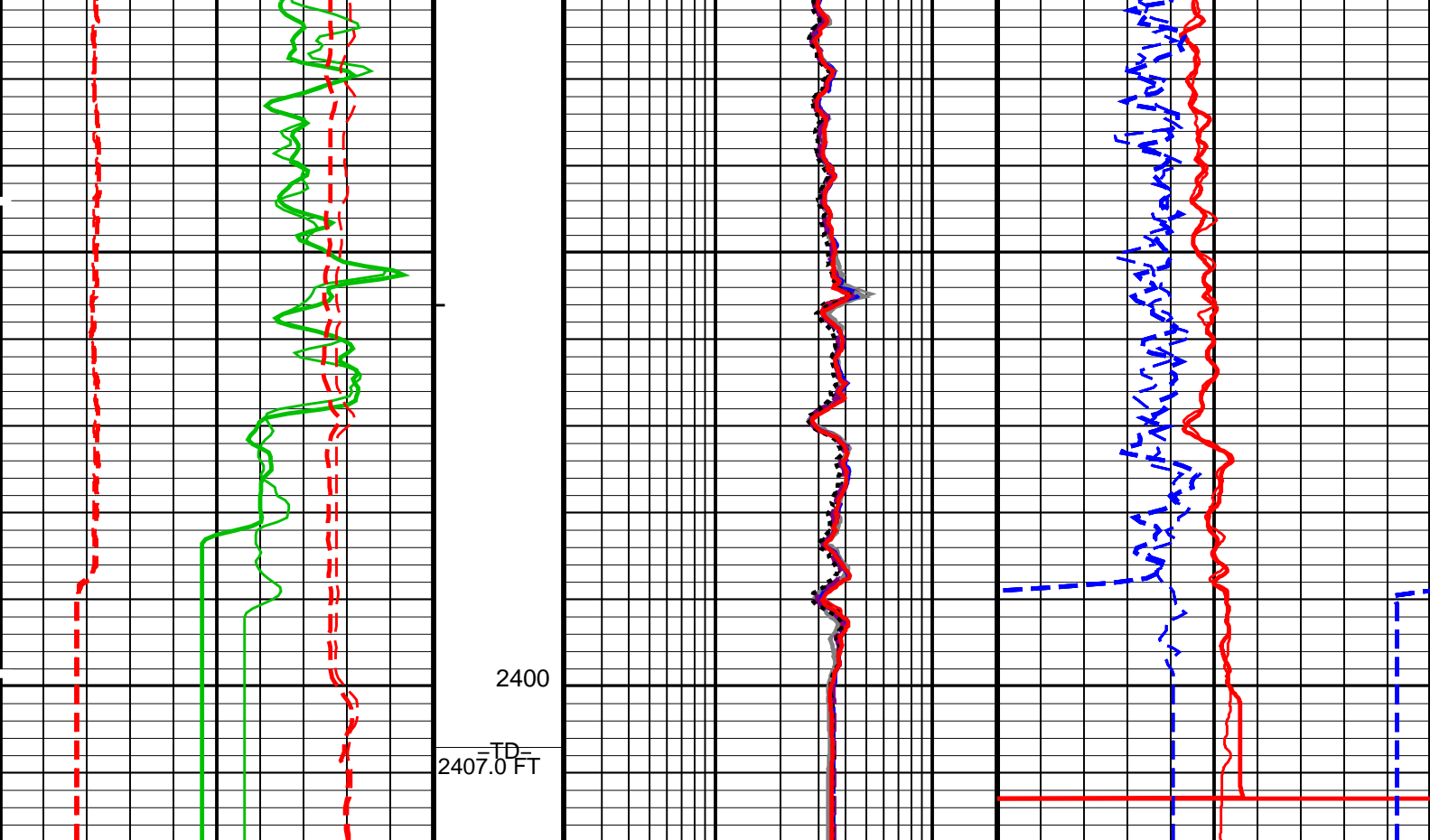
PIP SUMMARY

- └ Integrated Hole Volume Minor Pip Every 10 F3
- └ Integrated Hole Volume Major Pip Every 100 F3
- └ Integrated Cement Volume Minor Pip Every 10 F3
- └ Integrated Cement Volume Major Pip Every 100 F3

Time Mark Every 60 S







GR_REP Curve (GR_REP) (GAPI)	AHT10_REP Curve (AHT10_REP) (OHMM)	DPHZ_REP Curve (DPHZ_REP) (V/V)
0 200	0.2 20	0.6 0
HCAL_REP Curve (HCAL_REP) (IN)	AHT60_REP Curve (AHT60_REP) (OHMM)	NPOR_REP Curve (NPOR_REP) (V/V)
4 14	0.2 20	0.6 0
SP_REP Curve (SP_REP) (MV)	AHT30_REP Curve (AHT30_REP) (OHMM)	NPOR_1_REP Curve (NPOR_REP) (V/V)
-160 40	0.2 20	0.6 0
	AHT20_REP Curve (AHT20_REP) (OHMM)	NPOR_2_REP Curve (NPOR_REP) (V/V)
	0.2 20	1.2 0.6
	AHT90_REP Curve (AHT90_REP) (OHMM)	
	0.2 20	

PIP SUMMARY

- └ Integrated Hole Volume Minor Pip Every 10 F3
- └ Integrated Hole Volume Major Pip Every 100 F3
- └ Integrated Cement Volume Minor Pip Every 10 F3
- └ Integrated Cement Volume Major Pip Every 100 F3

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
HILTB-CTS: High resolution Integrated Logging Tool-CTS		
AHBHM	Array Induction Borehole Correction Mode	2_ComputeStandoff
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	0.125 IN
AHTRSV	Array Induction Response Set Version for Two ft Resolution	41.70.24.20
BHFL	Borehole Fluid Type	WATER
BHFL TLD	HIL T Nuclear Mud Base	WATER

BHFL_TLD	HILT Nuclear Mud Base	WATER	
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	90	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
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GTSE	Generalized Temperature Selection	HSTS_HTEM	
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SDAT	Standoff Data Source	SOCN	
SHT	Surface Hole Temperature	68	DEGF
SOCN	Standoff Distance	0.125	IN
SOCO	Standoff Correction Option	YES	
SPNV	SP Next Value	0	MV
STI: Stuck Tool Indicator			
TDL	Total Depth - Logger	2407.00	FT
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FLEV	Fluid Level	-50000.00	FT
MST	Mud Sample Temperature	45.00	DEGF
RMFS	Resistivity of Mud Filtrate Sample	0.1485	OHMM
TD	Total Depth	2407	FT

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OP System Version: 17C0-154

HILTB-CTS 17C0-154

Input DLIS Files

DEFAULT AIT_TLD_MCFL_CNL_007LUP FN:6 PRODUCER 20-Feb-2010 01:20 2418.0 FT 1966.2 FT

Output DLIS Files

DEFAULT

AIT_TLD_MCFL_CNL_010LUP

FN:9

PRODUCER

20-Feb-2010 01:21

Company: **Noble Energy Inc**

Schlumberger

Well: **Suman-George Trusts 42-34**

Field: **Wildcat**

County: **Yuma**

State: **Colorado**

Platform Express

Triple Combo