



Baker Atlas

HIGH DEFINITION INDUCTION LOG<sup>SM</sup>  
GAMMA RAY LOG  
CALIPER LOG

FILE NO:	COMPANY	NALCOR ENERGY INC.	
API NO:	WELL	NALCOR ET AL FINNEGAN #1	
	FIELD	FINNEGAN	
	PROVINCE	NEWFOUNDLAND AND LABRADOR	
Ver. 3.87	LOCATION:	OTHER SERVICES	
LICENSE: 2010-128-04	LAT 49.920 N LONG 63.330 W	DZDL-CN-GR-XYCAL XMAC-GR-3CAL STAR-GR-3CAL RCI / RCOR / VSP CVL	
PERMANENT DATUM LOG MEASURED FROM DRILL MEAS. FROM	G.L. ELEVATION 118.75 M K.B. 6.25 M ABOVE P.D. KELLY BUSHING	ELEVATIONS: KB 125.00 M DF GL 118.75 M	
DATE	02-NOV-2010		
RUN	TRIP	1	2
SERVICE ORDER	CA208041		
DEPTH DRILLER	2285.0 M		
DEPTH LOGGER	2280.4 M		
BOTTOM LOGGED INTERVAL	2279.6 M		
TOP LOGGED INTERVAL	570.0 M		
CASING DRILLER	339.7 MM	② 570.0 M	
CASING LOGGER	570.0 M		
BIT SIZE	311.0 MM		
TYPE OF FLUID IN HOLE	GELCHEM		
DENSITY	1290.0 G/L	78.0 S	
PH	9.0	5.6 ML	
SOURCE OF SAMPLE	TOOL MEASURED		
RM AT MEAS. TEMP.	0.788 OHMM	② 39.7 DEGC	②
RMF AT MEAS. TEMP.	0.669 OHMM	② 39.7 DEGC	②
RMC AT MEAS. TEMP.	0.945 OHMM	② 39.7 DEGC	②
SOURCE OF RMF	CALCULATED	CALCULATED	
RM AT BHT	0.662 OHMM	② 53.3 DEGC	②
TIME SINCE CIRCULATION	25.7 HOURS		
MAX. RECORDED TEMP.	53.3 DEGC		
EQUIP. NO.	HL4291	OH NISKU	
RECORDED BY	S.CREWE		
WITNESSED BY	R.STRICKLAND/N.WATSON		

IN MAKING INTERPRETATIONS OF LOGS OUR EMPLOYEES WILL GIVE CUSTOMER THE BENEFIT OF THEIR BEST JUDGEMENT. BUT SINCE ALL INTERPRETATIONS ARE OPINIONS BASED ON INFERENCES FROM ELECTRICAL OR OTHER MEASUREMENTS, WE CANNOT, AND WE DO NOT GUARANTEE THE ACCURACY OR CORRECTNESS OF ANY INTERPRETATION. WE SHALL NOT BE LIABLE OR RESPONSIBLE FOR ANY LOSS, COST, DAMAGES, OR EXPENSES WHATSOEVER INCURRED OR SUSTAINED BY THE CUSTOMER RESULTING FROM ANY INTERPRETATION MADE BY ANY OF OUR EMPLOYEES.

#### BOREHOLE RECORD

BIT SIZE	FROM	TO
444.5 MM	0.0 M	570.0 M
311.0 MM	570.0 M	2285.0 M

#### CASING RECORD

SIZE	WEIGHT	GRADE	FROM	TO
339.7 MM	81.1 KG/M	K-55	0.0 M	570.0 M
244.5 MM				

#### REMARKS

RUN 1 TRIP 2 : TIME STOPPED CIRCULATION: 02-NOV-2010 03:00 AM

SAMPLE MEASURED: RM 1.078 ② 8.3 DEG  
RMF 0.916 ② 8.3 DEG  
RMC 2.278 ② 8.3 DEG  
CABLEHEAD THERMOMETER READINGS: 54 DEG

BOREHOLE AND TEMPERATURE CORRECTIONS HAVE BEEN APPLIED TO HDIL DATA.  
HDIL RECORDED WITH AND CORRECTED TO 38.0 MM STANDOFF.  
CALIPER PRESENTED WITH HDIL TO ASSIST WITH THE QC OF THE DATA.

RIG: STONEHAM 11

CREW:  
S.CREWE, B.BARSS, M.BAHAR, J.HENNESSEY, K.HASTIUK, J.WOODS, J.JEWEL, R.PERRY.

# EQUIPMENT DATA

RUN	TRIP	TOOL	SERIES NO.	SERIAL NO.	POSITION
1	2	SWIVEL	3944XB	73682	FREE
1	2	DHPA	4430XB	10152148	FREE
1	2	TIMA	3981XB	152403	FREE
1	2	COMM	3514XB	150740	FREE
1	2	WTS DGR/SLJ	1329XB	370830	FREE
1	2	WTS DBL KNJ	3939XA	10238695	FREE
1	2	ORIT	4401XB	166976	FREE
1	2	STAR II PS	1022PA	184596	FREE
1	2	F/ GOM	1036EA	10379942	FREE
1	2	STAR MANDRE	4236MA	10103666	6-PAD_DEVICE
1	2	WTS ISO SUB	3992XA	176946	FREE
1	2	FOC/WTS TR	3526EB	10108224	FREE
1	2	FOC/WTS PWR	3526FB	10127059	FREE
1	2	DBL KNJT	3931XA	10334137	FREE
1	2	TIMA SUB	3980XA	10091959	FREE
1	2	FOCUS CN	2436XA	10394243	DECENTRALIZED
1	2	FOCUS ZDEN	2223XA	10116105	PAD_DEVICE
1	2	DBL KNJT	3931XA	10480674	FREE
1	2	ALGNMNT SUB	4408NA	402986	FREE
1	2	FOCUS ZDEN	2223XA	10141929	PAD_DEVICE
1	2	DBL KNJT	3931XA	10480675	FREE
1	2	FOCUS HDIL	1530XA	402505	STANDOFF

## INSTRUMENT CONFIGURATION

Source File: /dat1a/pass/nalcor\_run1/r1t2-tdg

### CABLEHEAD

Diameter : 8.6 cm  
Length : 167.6 cm  
Weight : 10.9 kg  
Series : CABL338  
Mnemonic : CBLH

### SWIVEL

Diameter : 8.6 cm  
Length : 101.6 cm  
Weight : 30.0 kg  
Series : 3944XB

### DOWNHOLE POWER ADAPTER

Diameter : 9.2 cm  
Length : 160.7 cm  
Weight : 39.1 kg  
Series : 4430XB  
Mnemonic : DHPA

### TTRM SUB

Diameter : 9.2 cm  
Length : 116.8 cm  
Weight : 28.2 kg  
Series : 3981XA  
Mnemonic : TTRM

### WTS COMMON REMOTE

Diameter : 9.2 cm  
Length : 194.0 cm  
Weight : 57.3 kg  
Series : 3514XB  
Mnemonic : WTS



42.98 m

CABLEHEAD TOP 42.14 m

TEMP MP 37.93 m  
RM MP 37.85 m

#### DIGITAL SPECTRALOG

Diameter : 9.2 cm  
Length : 222.8 cm  
Weight : 59.1 kg  
Series : 1329XA  
Mnemonic : DSL

#### KNUCKLE JOINT (DOUBLE)

Diameter : 8.6 cm  
Length : 141.8 cm  
Weight : 40.9 kg  
Series : 3939XA  
Mnemonic : KNT

#### DIGITAL ORIENTATION

Diameter : 8.6 cm  
Length : 329.4 cm  
Weight : 50.0 kg  
Series : 4401XB  
Mnemonic : ORIT

#### C6PC IMAGER POWER SUPPLY

Diameter : 9.2 cm  
Length : 276.9 cm  
Weight : 52.7 kg  
Series : 1022PA  
Mnemonic : C6PC

#### C6PC IMAGER ELECTRONICS

Diameter : 9.2 cm  
Length : 276.9 cm  
Weight : 42.7 kg  
Series : 1036EA  
Mnemonic : C6PC

#### C6PC IMAGER MANDREL

Diameter : 13.3 cm  
Length : 381.0 cm  
Weight : 126.4 kg  
Series : 4236MA  
Mnemonic : C6PC

GR MP 33.83 m

ORIENT MP 28.63 m

PAD MP 20.29 m

**ISOLATION RETURN SUB**

Diameter : 9.2 cm  
Length : 63.5 cm

**WTS FOCUS TELEMETRY TRANSFORMER SUB**

Diameter : 9.2 cm  
Length : 165.7 cm  
Weight : 30.5 kg  
Series : 3528EB  
Mnemonic : ADAP

**WTS FOCUS POWER ADAPTOR**

Diameter : 9.2 cm  
Length : 110.2 cm  
Weight : 70.9 kg  
Series : 3528FB  
Mnemonic : ADAP

**FOCUS KNUCKLE JOINT**

Diameter : 8.0 cm

**FOCUS KNUCKLE JOINT**

Diameter : 8.0 cm

**FOCUS TEN/TEMP/MUD RES/ACCEL**

Diameter : 8.0 cm  
Length : 131.4 cm  
Weight : 27.7 kg  
Series : 3980XA  
Mnemonic : TTMA

**FOCUS COMPENSATED NEUTRON**

Diameter : 8.0 cm  
Length : 146.7 cm  
Weight : 29.5 kg  
Series : 2436XA  
Mnemonic : CN

**FOCUS Z-DENS LOG**

Diameter : 9.5 cm  
Length : 292.1 cm  
Weight : 90.9 kg  
Series : 2223XA  
Mnemonic : ZDL

**FOCUS KNUCKLE JOINT**

Diameter : 8.0 cm

**FOCUS KNUCKLE JOINT**

Diameter : 8.0 cm

**FOCUS ALIGNMENT SUB****FOCUS Z-DENS LOG**

Diameter : 9.5 cm  
Length : 292.1 cm  
Weight : 90.9 kg  
Series : 2223XA  
Mnemonic : ZDL

**FOCUS KNUCKLE JOINT**

Diameter : 8.0 cm

**FOCUS KNUCKLE JOINT**

Diameter : 8.0 cm

LSN MP 12.78 m  
SSN MP 12.64 m

CR1 MP 10.59 m

LSD / CR2 MP 9.79 m  
SSD MP 9.66 m

CR1 MP 6.45 m

LSD / CR2 MP 5.65 m  
SSD MP 5.52 m

**FOCUS HIGH DEFINITION INDUCTION TOOL**

Diameter : 8.0 cm  
Length : 406.4 cm  
Weight : 52.3 kg  
Series : 1530XA  
Mnemonic : HDIL

COIL 5 MP 2.34 m  
COIL 4 MP 1.88 m  
COIL 3 MP 1.42 m  
COIL 2 MP 1.27 m  
COIL 1 MP 1.12 m  
COIL 0 MP 0.97 m  
SP MP 0.50 m  
0.00 m

FOCUS PINEAPPLE / CABBAGE

TOTAL LENGTH: 42.98 m  
TOTAL WEIGHT: 1076.4 kg  
MAX DIAMETER: 15.6 cm

## MAIN LOG - UPPER PRESENTATION

ECLIPS 6.1i Aug 06, 2010  
Patches: 1

Wed Nov 3 15:10:59 2010

Pcrplt /main/62

Cplot

Pdf\_Cpp /main/16

Fileview 5.50

### PARAMETER AND FILTER SUMMARY REPORT

File: /data/pass/nalcor\_run1/m980g03.prm  
LOGGING MODE: DEPTH DIRECTION: UP  
TOP DEPTH: 542.107 m BOTTOM DEPTH: 2283.998 m

#### SYMMETRIC FILTER

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (m)	
CHT	FILTER ( )	medium (1)		TOP	BOTTOM
TENSION	FILTER ( )	medium (1)		"	"
GR	FILTER ( )	medium (1)		"	"
SP-SPDH	FILTER ( )	medium (1)		"	"

#### BOREHOLE & CEMENT

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (m)	
CASING - BOREHOLE & CEMENT VOLUME	CASING O.D.	244.500	mm	TOP	BOTTOM
CALIPER SELECTION	X-Y VS MULTI-ARM SEL	MULTI-ARM CAL		"	"
BIT SIZE	BIT SIZE	311.000	mm	"	"
BH MUD RESISTIVITY SOURCE	RMUD SOURCE (HDIL)	BH TEMP DERIVED		"	"
MUD SAMPLE RESISTIVITY	MUD SAMPLE TEMP	25.0	degC	"	"
	MUD SAMPLE RES	0.600	ohm.m	"	"
BOREHOLE TEMP from GRADIENT	Known BH REF TEMP	25.0	degC	"	"
	at BH REF DEPTH	0.0	m	"	"
	with TEMP GRADIENT	2.187	0.01 degC/m	"	"
BOREHOLE CORR DIAMETER SOURCE	CALIPER/FIXED DIA. (mbh*)	USE CALIPER		"	"
BOREHOLE CORR DIAMETER	FIXED DIAMETER (mbh*)	311.000	mm	"	"
X-Y COMBINED CALIPER PROCESSING-FOCMYS	Caliper - FOCUS	Y-Axis		"	"

#### ACCELERATION PROCESSING

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (m)	
ACCEL CORR SWITCH	ACCEL DEPTH CORR	CORRECTION ON		TOP	BOTTOM

#### HDIL PROCESSING

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (m)	
------------------	-----------	-------	-------	--------------	--

HDIL TEMPERATURE CORRECTION	TEMP CORRECTION	ON	TOP	BOTTOM
ADAPTIVE BOREHOLE CORRECTION	ABC PROCESSING	ON	''	''
	ABC to CALCULATE	MUD CONDUCTIVITY	''	''
	STANDOFF	38.10	''	''
	TOOL POSITION	ECCENTERED	''	''
	Rmud MULTIPLIER	1.000	''	''

## CURVE DESCRIPTION REPORT

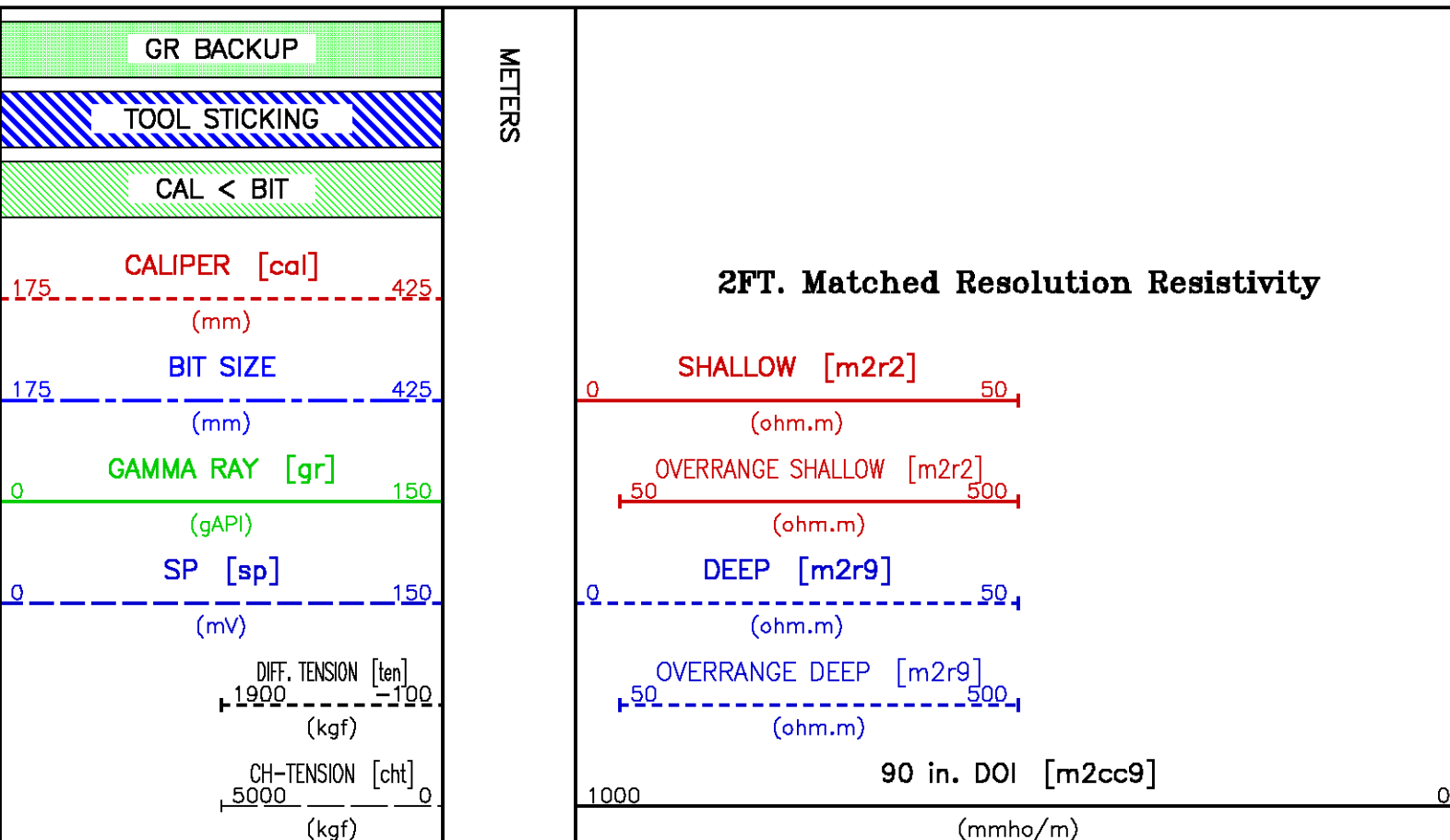
CURVE NAME	CREATION DATE	CURVE DESCRIPTION
F1:BIT	Nov 3 01:15:13 2010	BIT SIZE
F1:CAL	Nov 3 01:15:13 2010	CALIPER
F1:CHT	Nov 3 01:15:13 2010	CABLE HEAD TENSION
F1:GR	Nov 3 01:15:13 2010	GAMMA RAY
F1:M2CC9	Nov 3 01:15:13 2010	HDIL 2-FOOT RESOLUTION COMPRESSED CONDUCTIVITY, 90-INCH DOI
F1:M2R2	Nov 3 01:15:13 2010	VERTICAL 2-FOOT RESOLUTION MATCHED RESISTIVITY, 20-INCH DOI
F1:M2R9	Nov 3 01:15:13 2010	VERTICAL 2-FOOT RESOLUTION MATCHED RESISTIVITY, 90-INCH DOI
F1:MMRK	Nov 3 01:15:13 2010	MINUTE MARK
F1:SP	Nov 3 01:15:13 2010	SPONTANEOUS POTENTIAL
F1:TEN	Nov 3 01:15:13 2010	DIFFERENTIAL TENSION

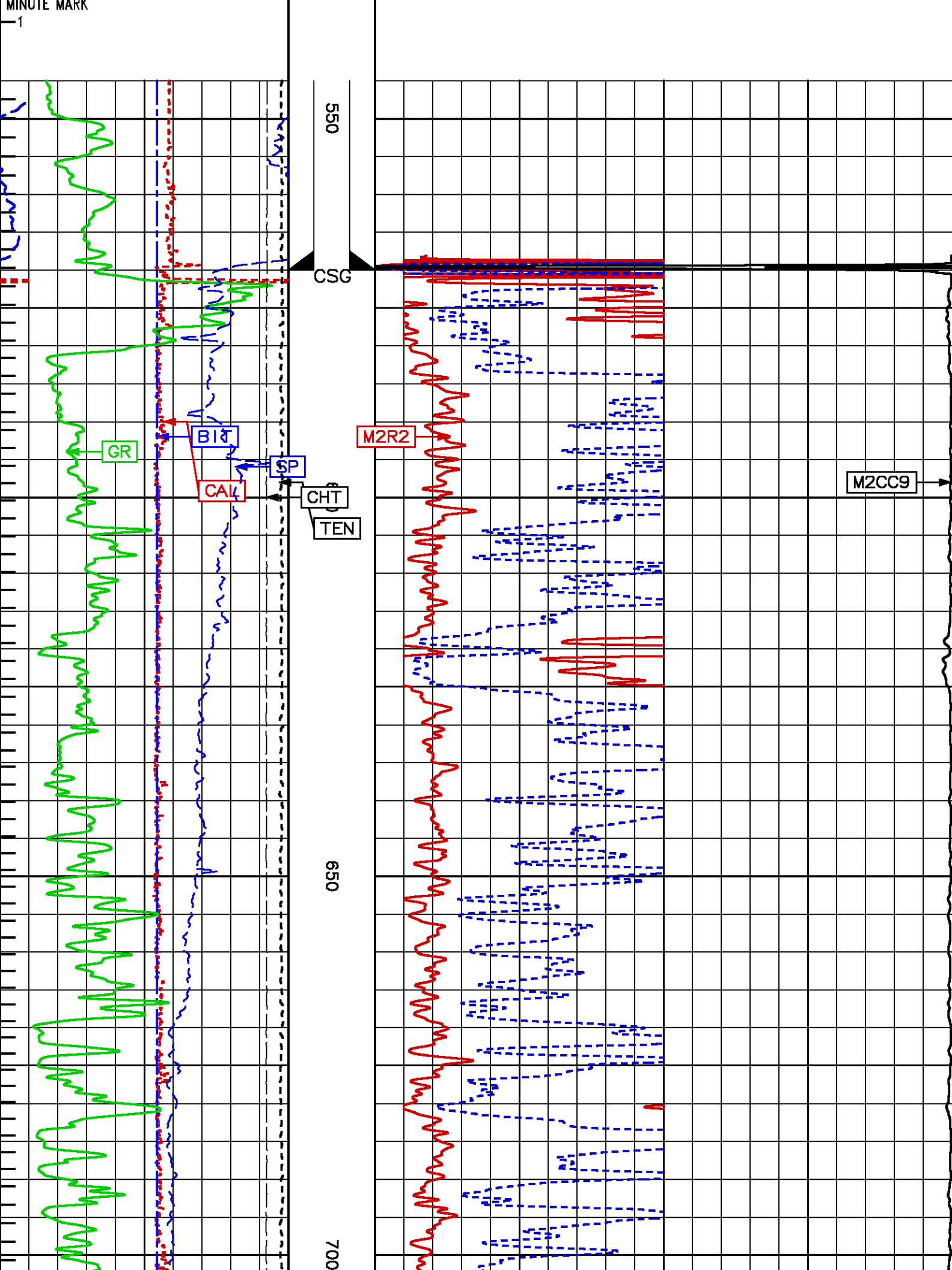
## CURVE MEASURE POINT OFFSET

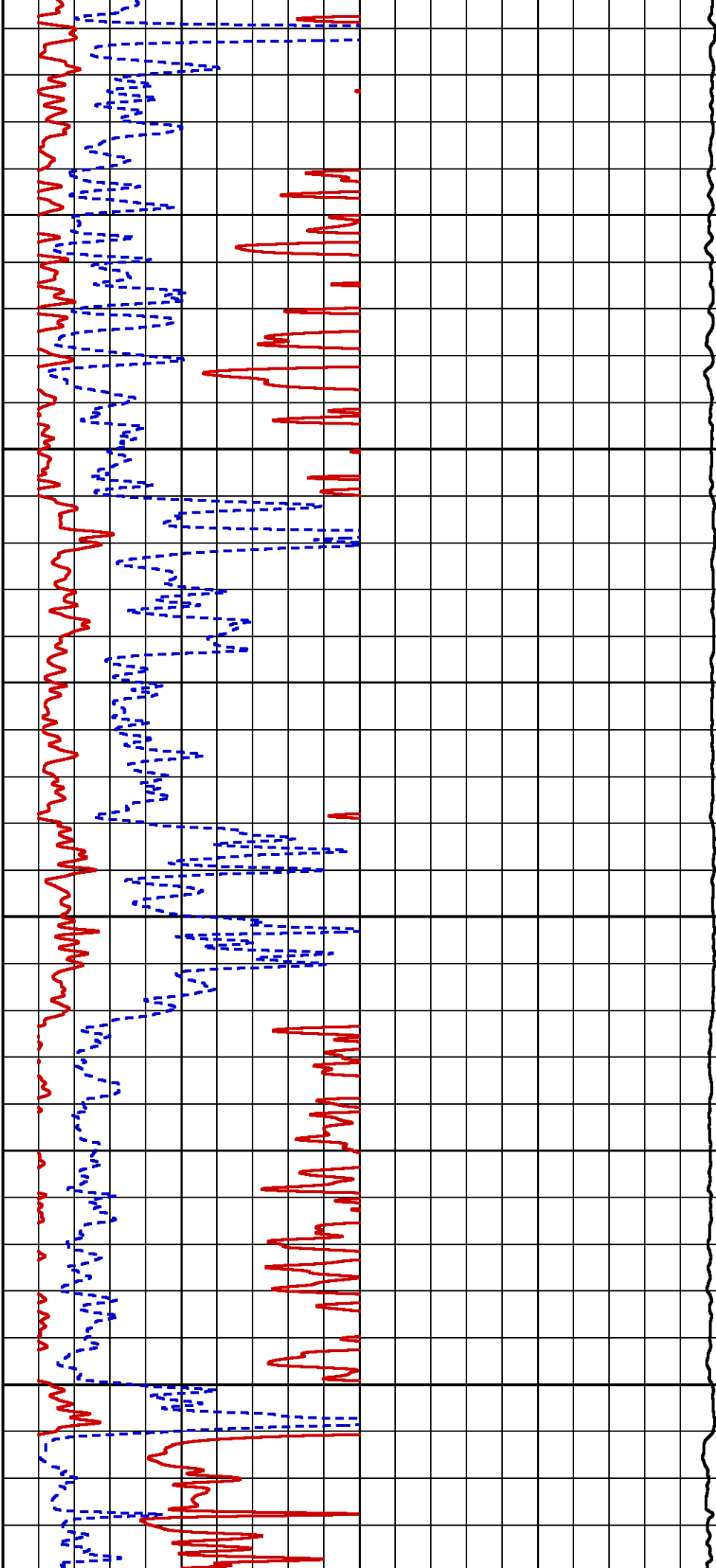
CURVE	OFFSET (m)	CURVE	OFFSET (m)	CURVE	OFFSET (m)	CURVE	OFFSET (m)
BIT	0.00	GR	33.68	M2R9	0.84		
CAL	5.52	M2CC9	0.84	SP	0.38		
CHT	0.00	M2R2	0.84	TEN	0.00		

Presentation : cpu1:/dat1a/pass/nalcor\_run1/fhdil\_upper.pdf [1:600 Scale]  
Plot Interval : 545 - 2300 Meters

Data File 1 : F1 : cpu1:/dat1a/pass/nalcor\_run1/r1t2\_mainl.xtf  
Created On : Nov 3 01:15:13 2010  
Company : NALCOR ENERGY  
Well : NALCOR ET AL FINNEGAN 31  
Field : FINNEGAN  
File Interval : 504.749 - 2283.98 Meters  
Oct : m980g



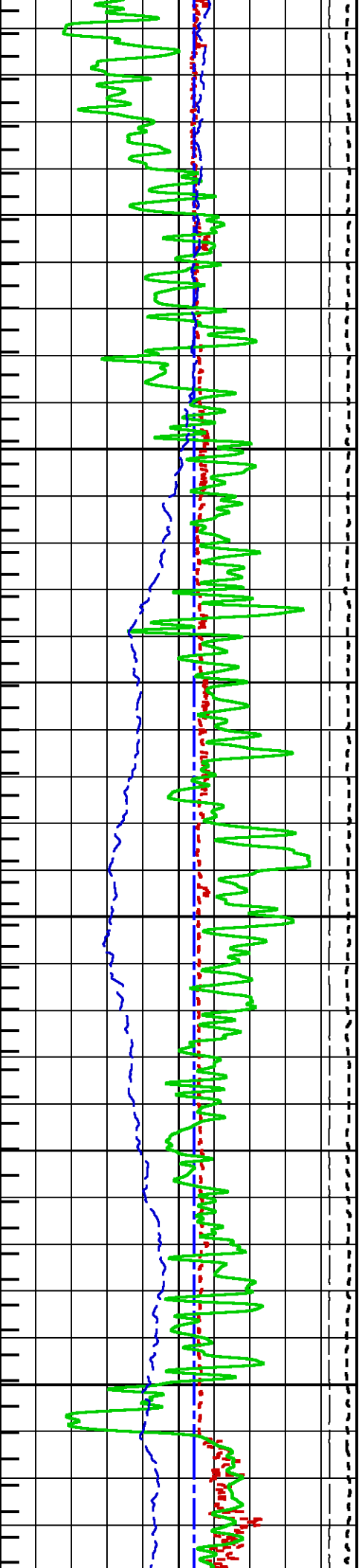




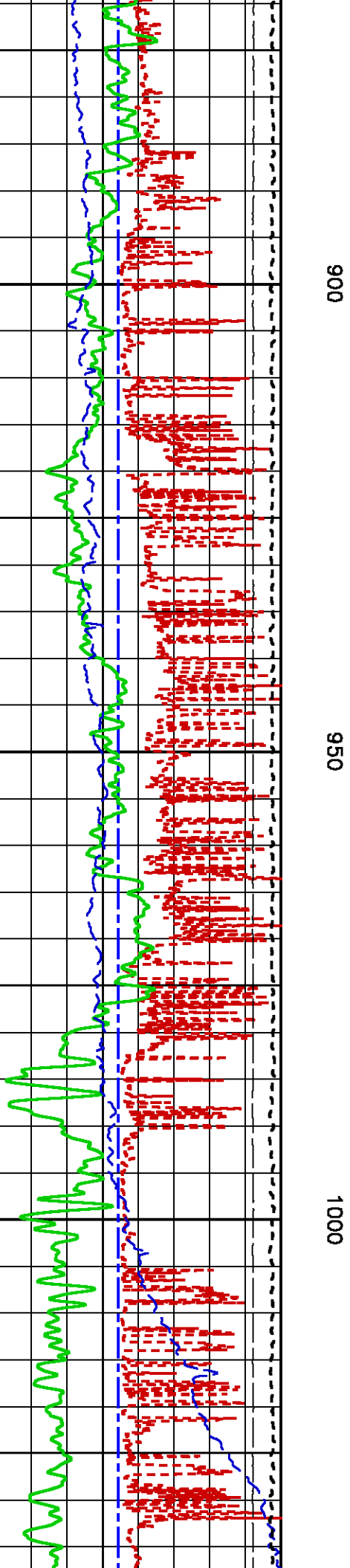
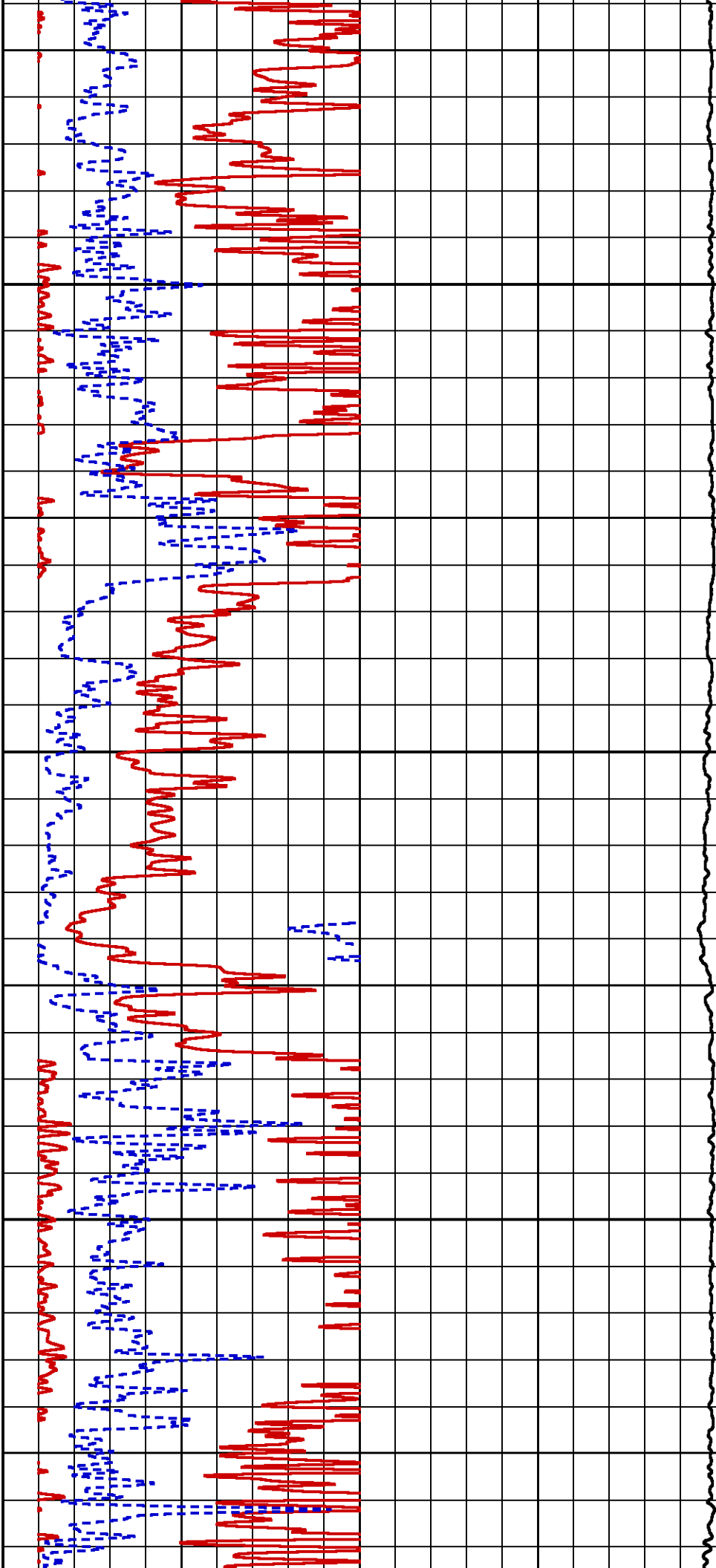
750

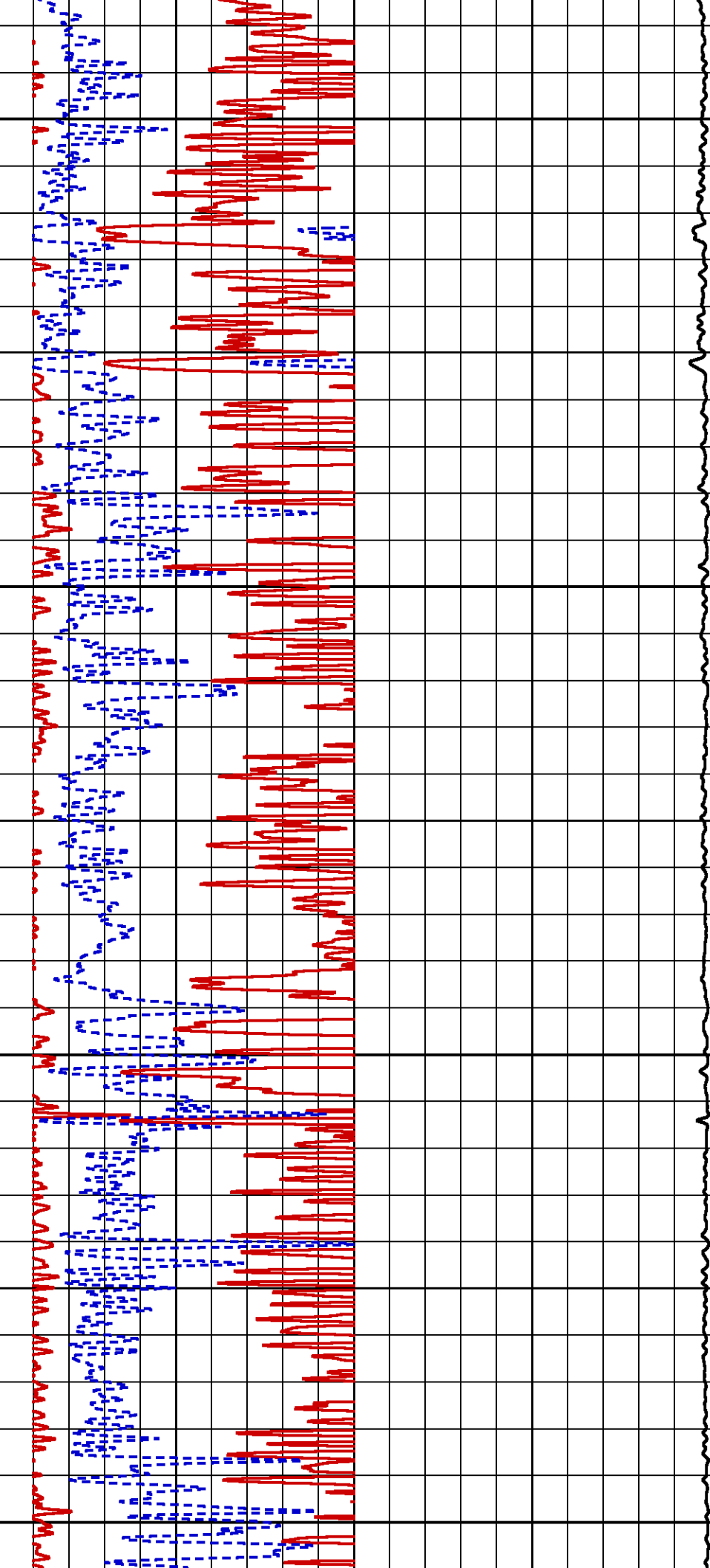
800

850







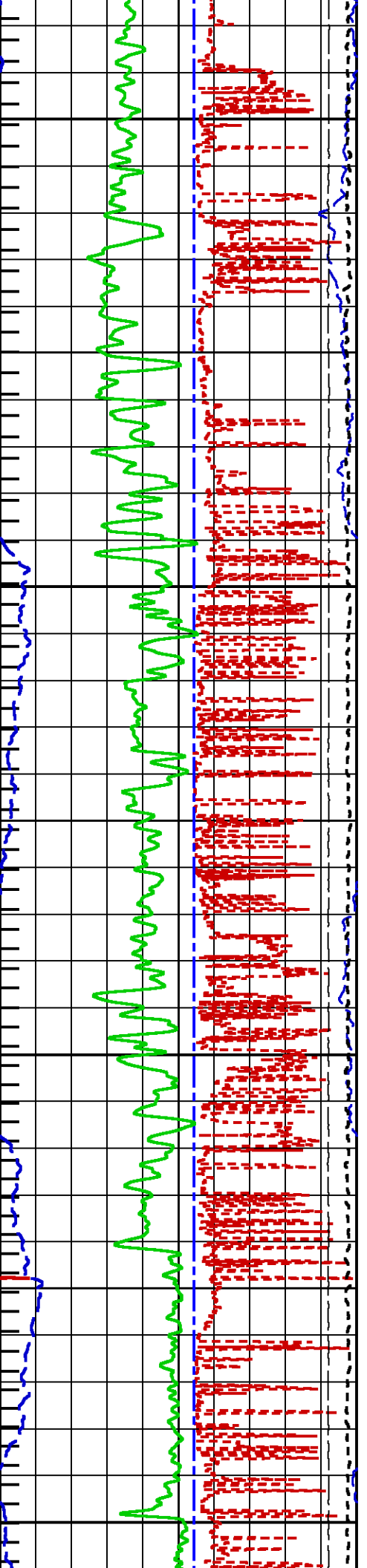


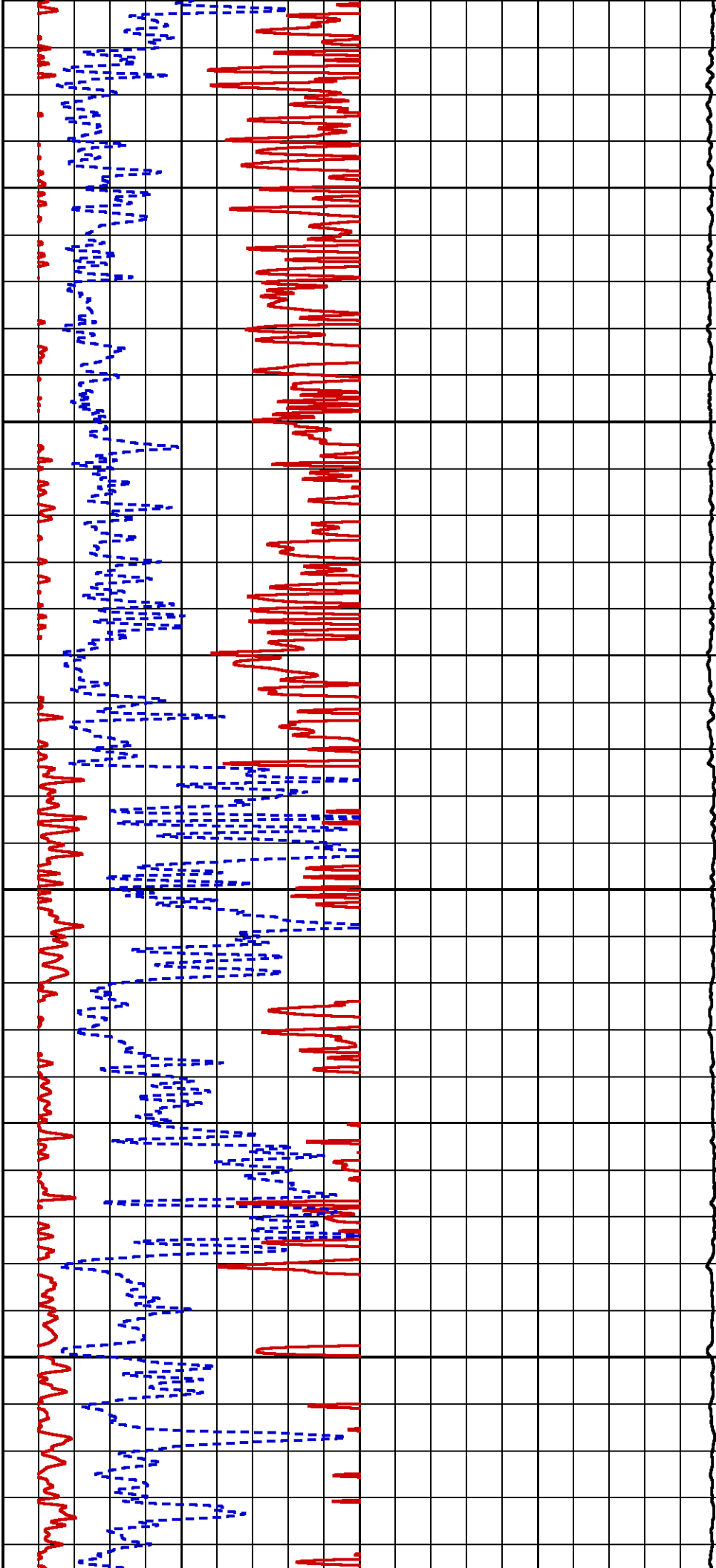
1050

1100

1150

1200

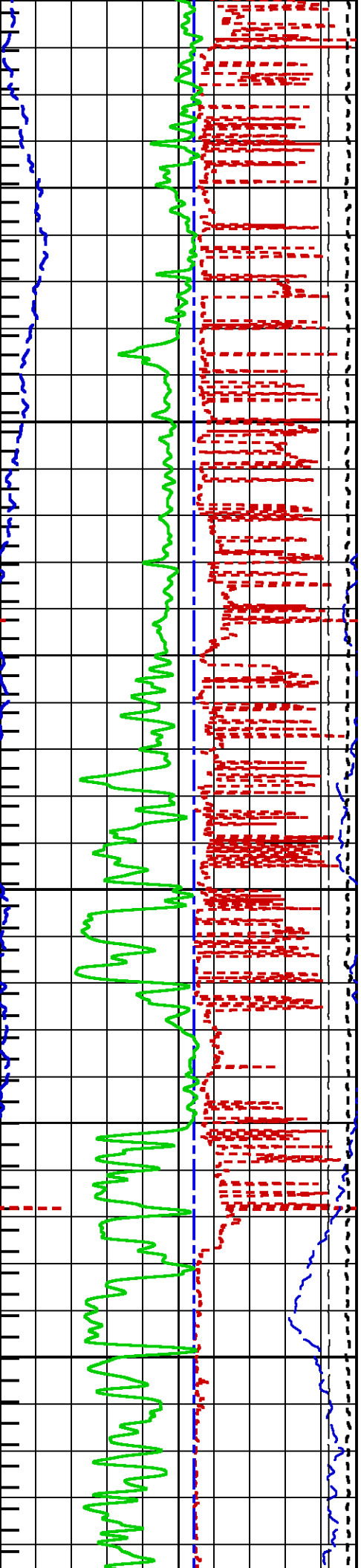


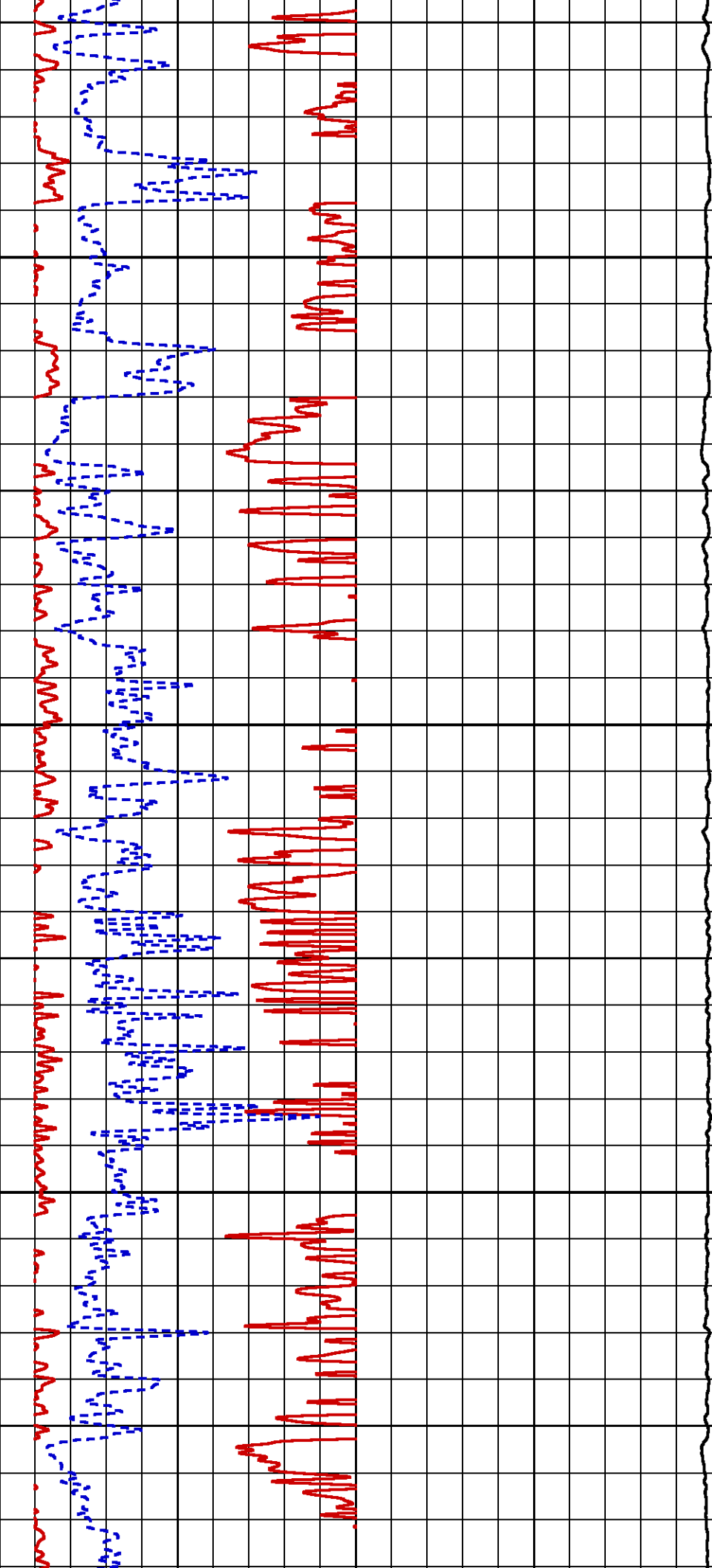


1250

1300

1350

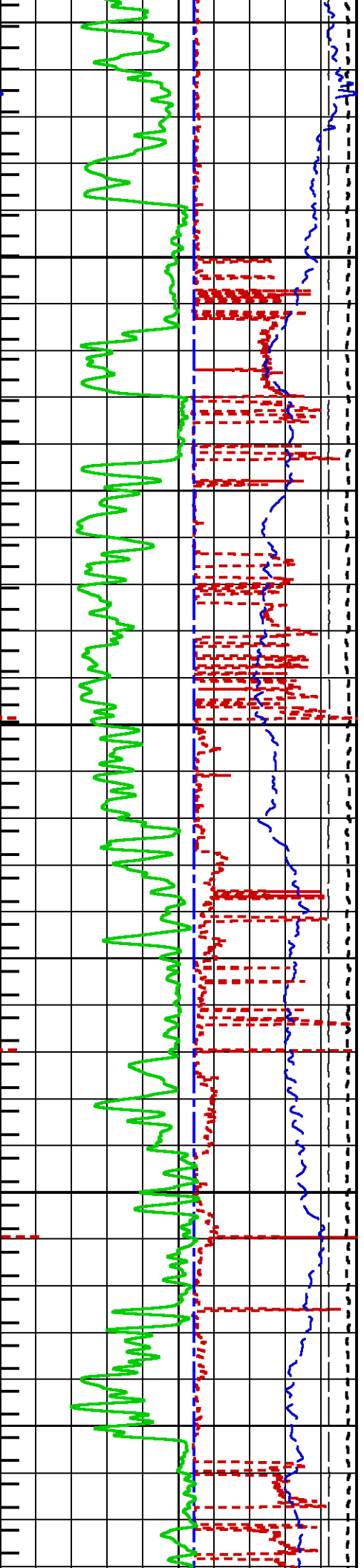


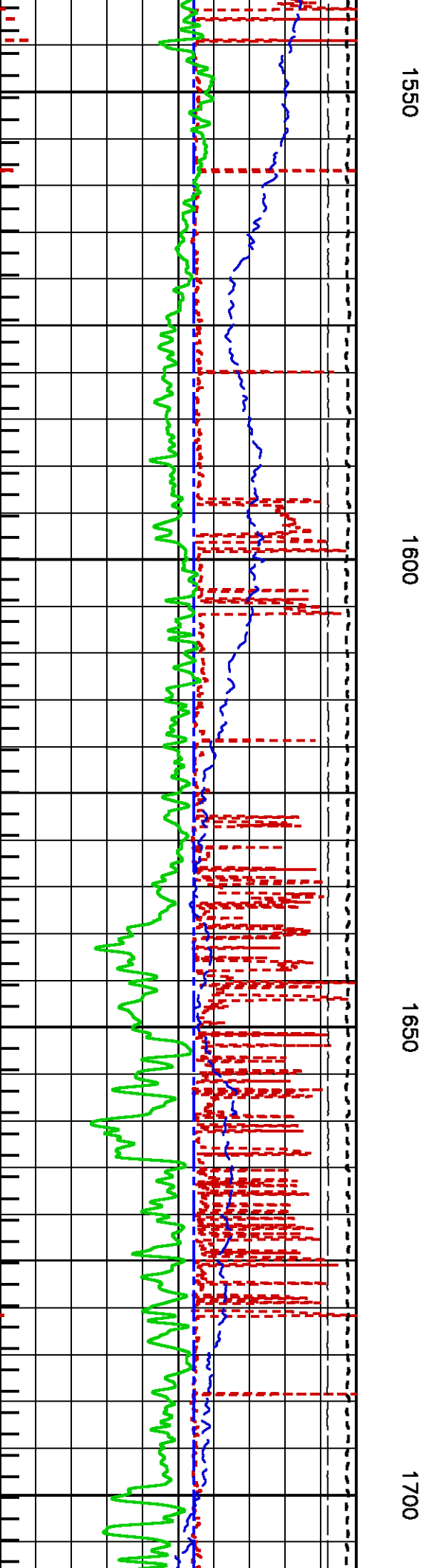
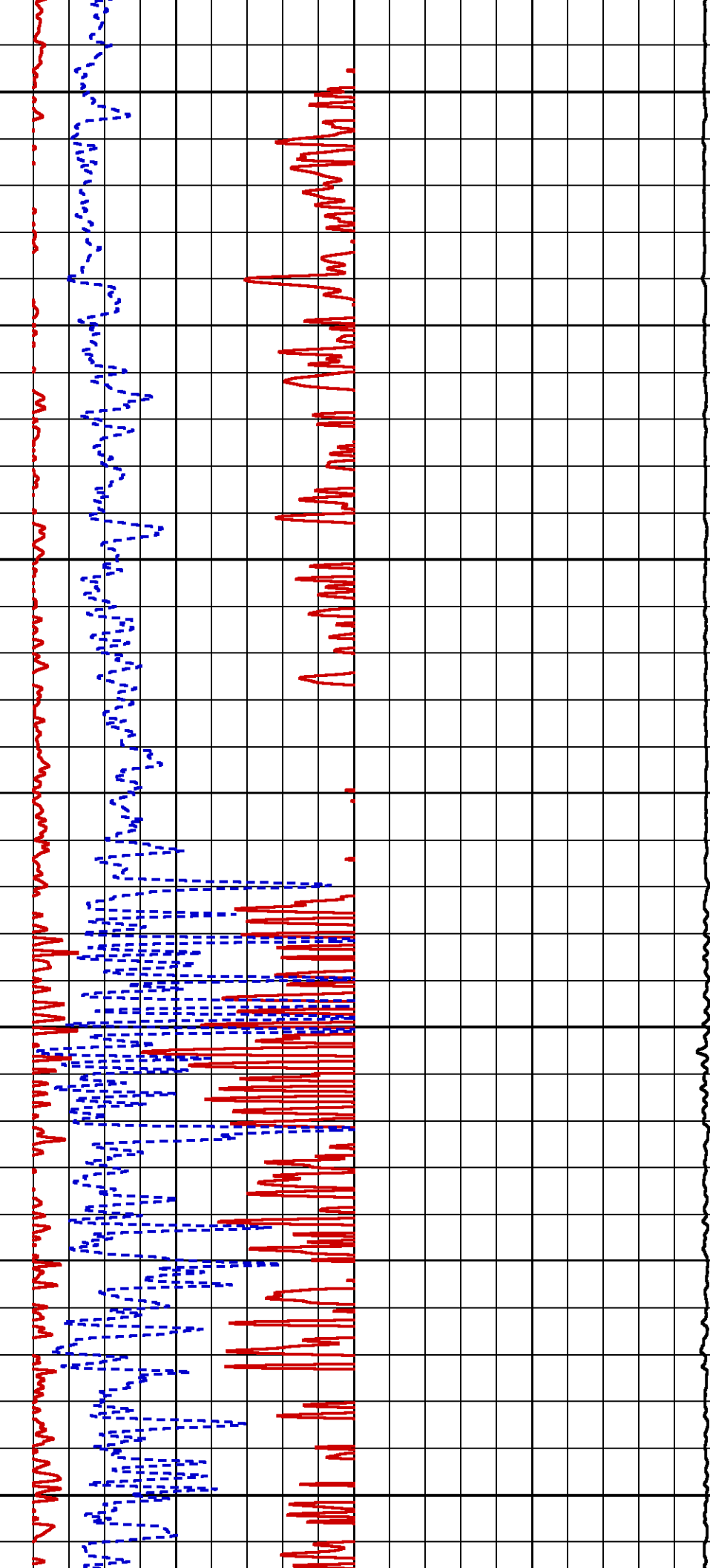


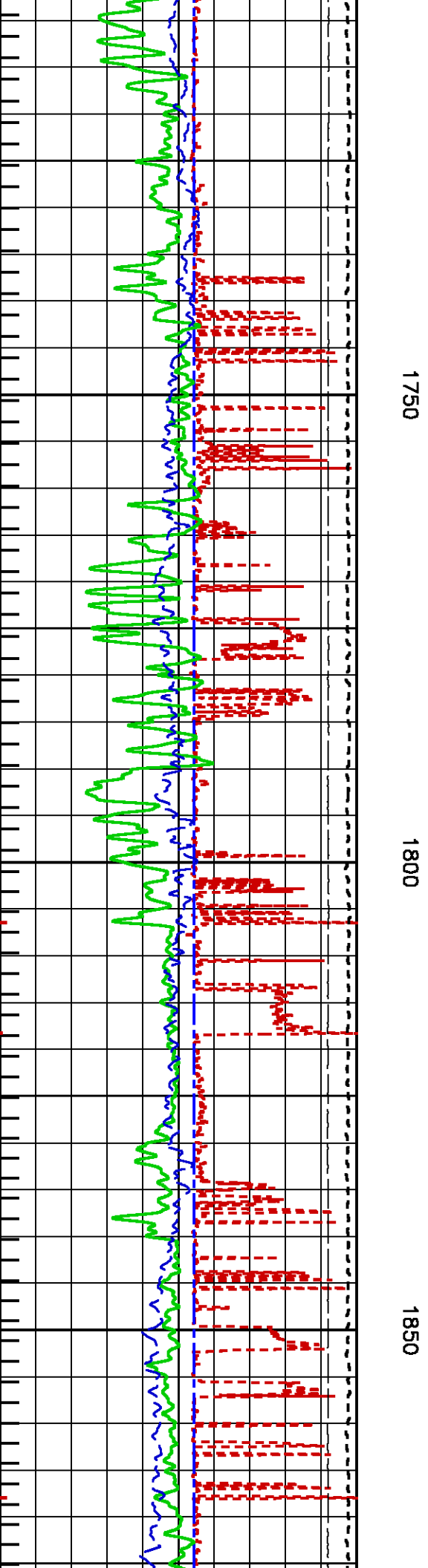
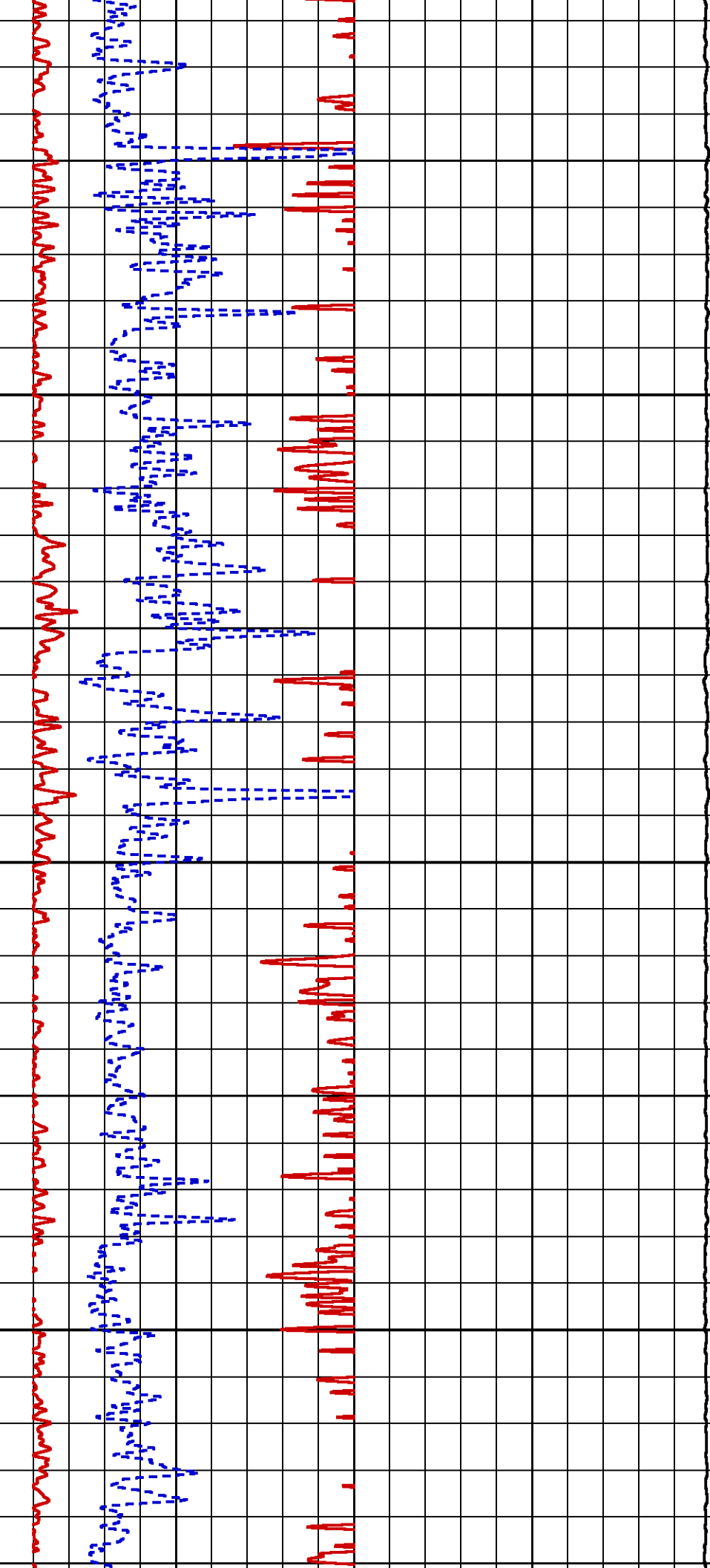
1400

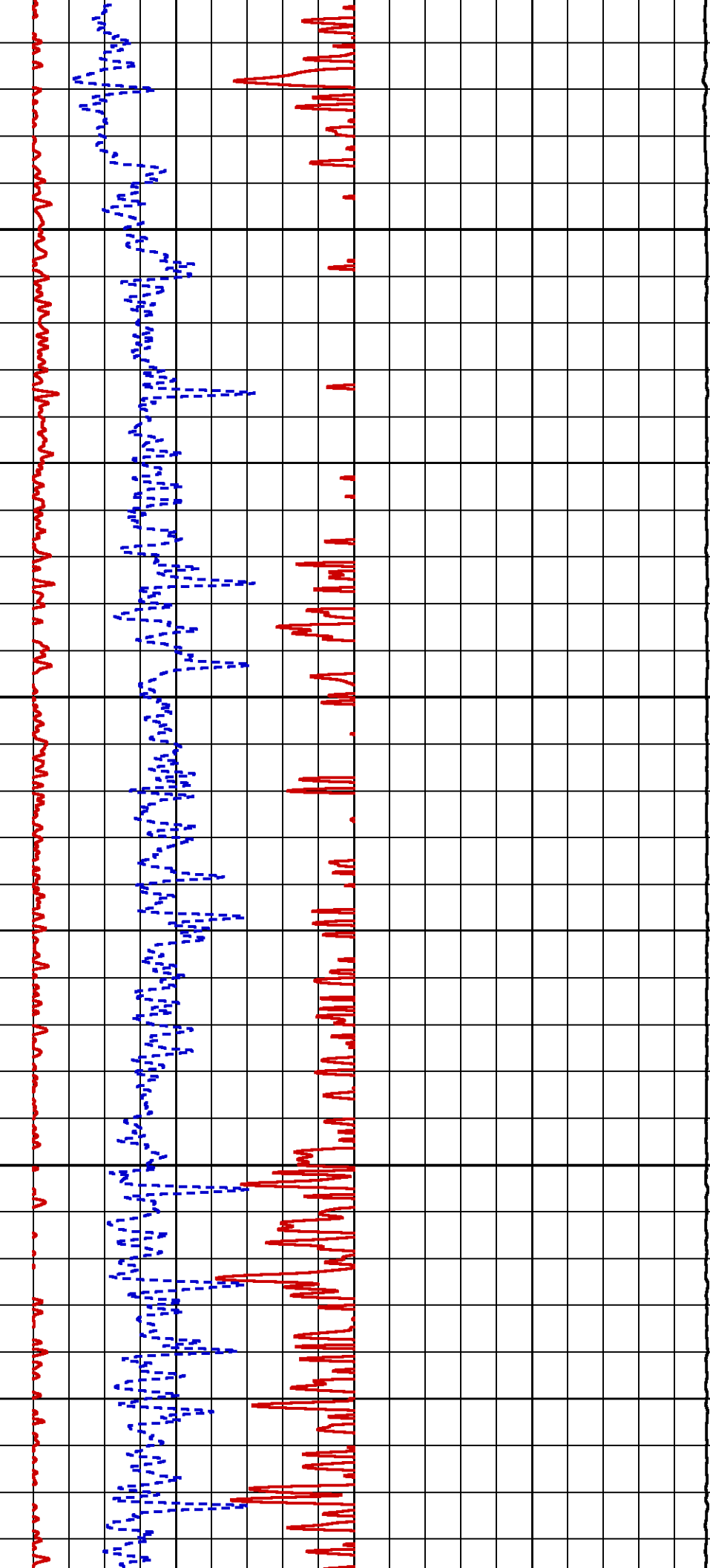
1450

1500





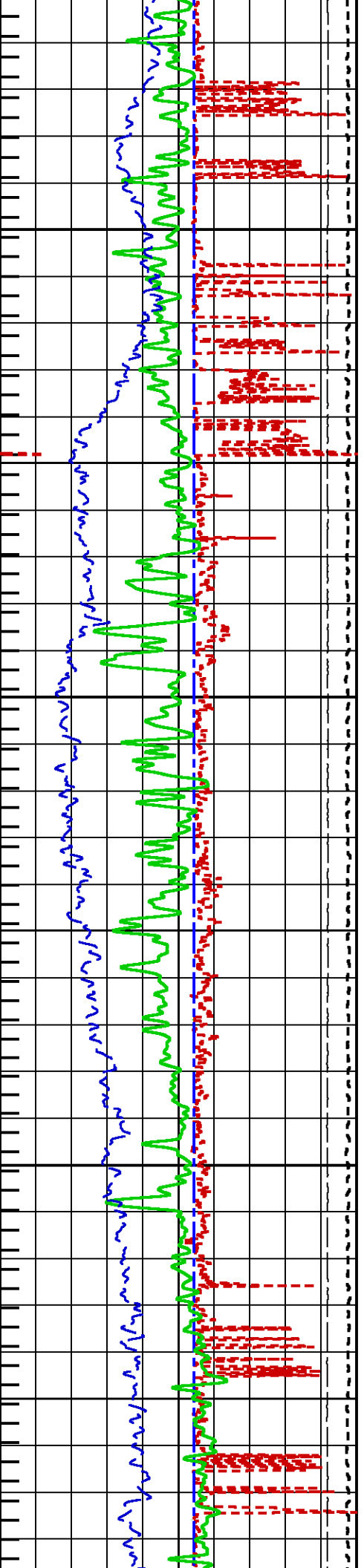


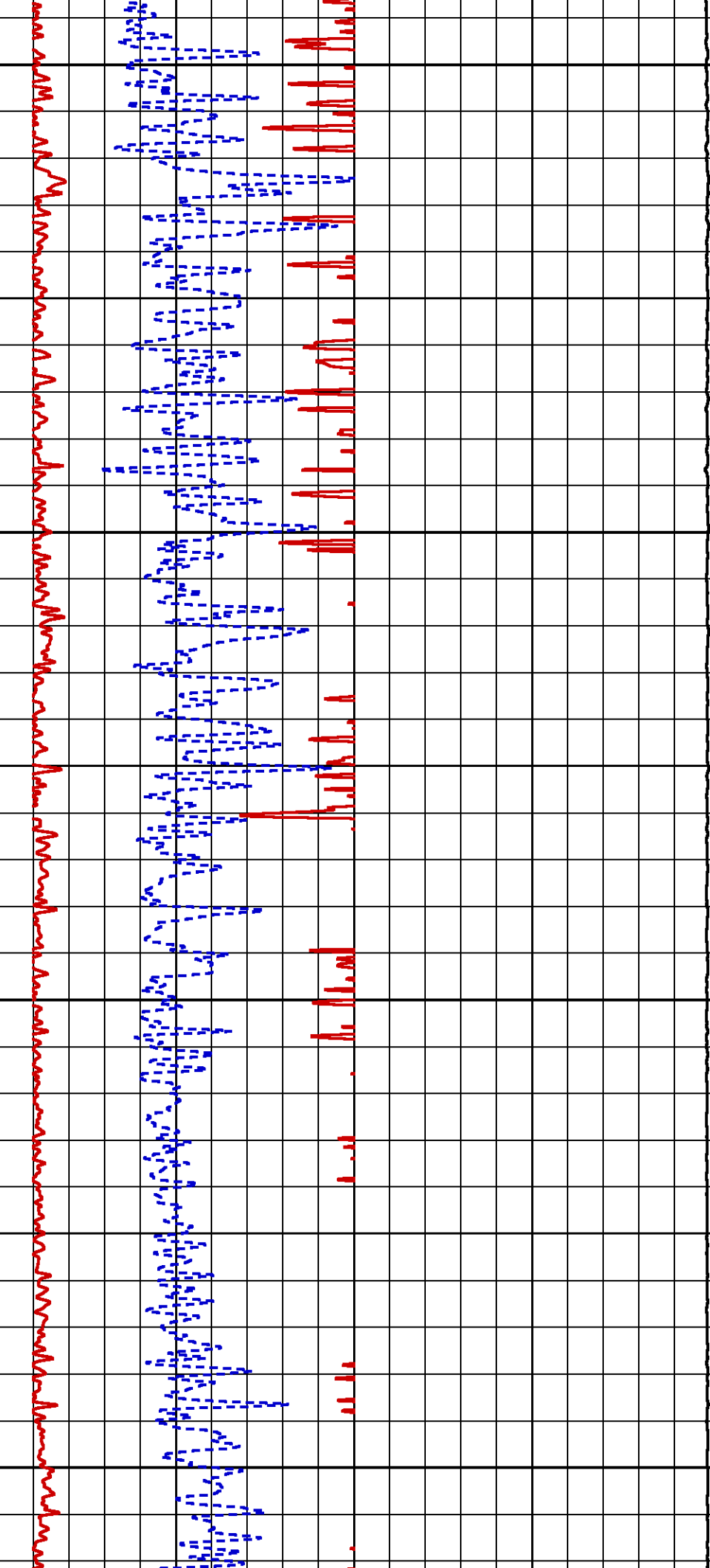


1900

1950

2000



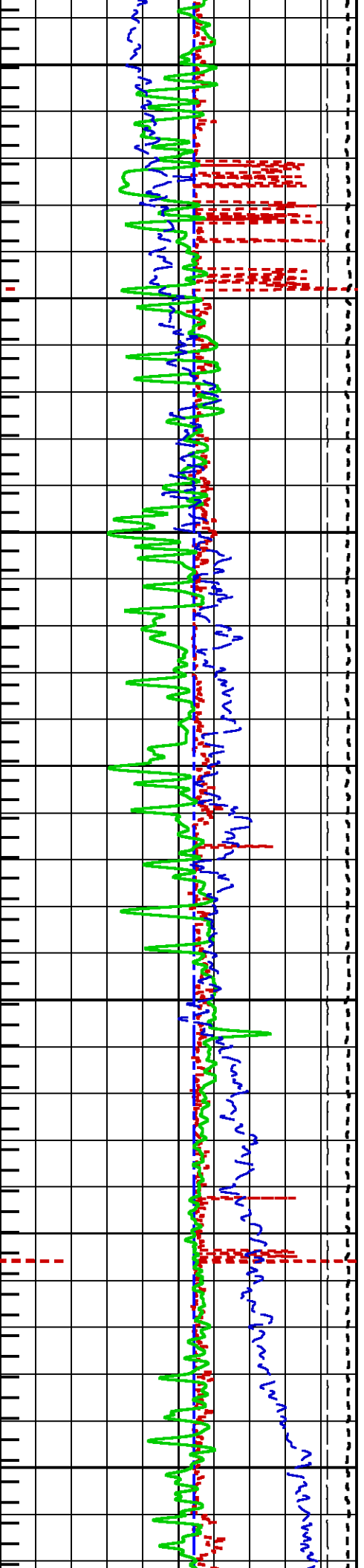


2050

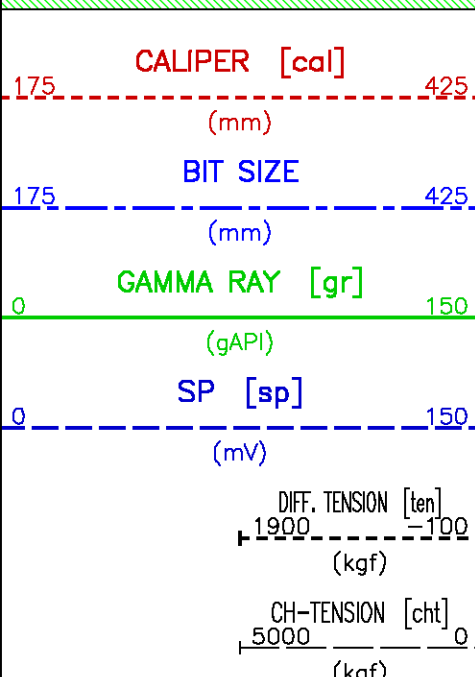
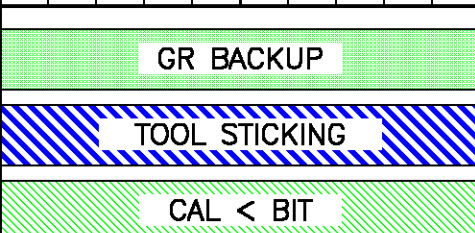
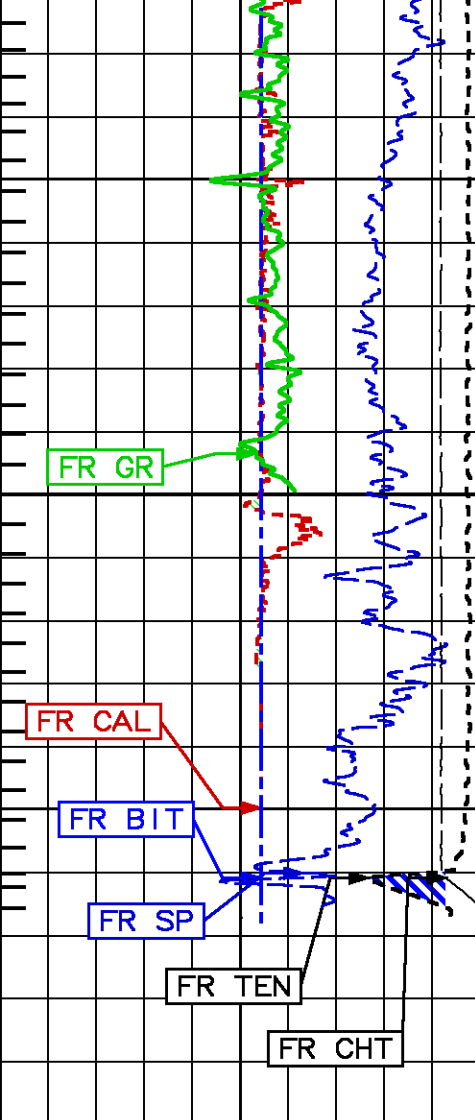
2100

2150

2200





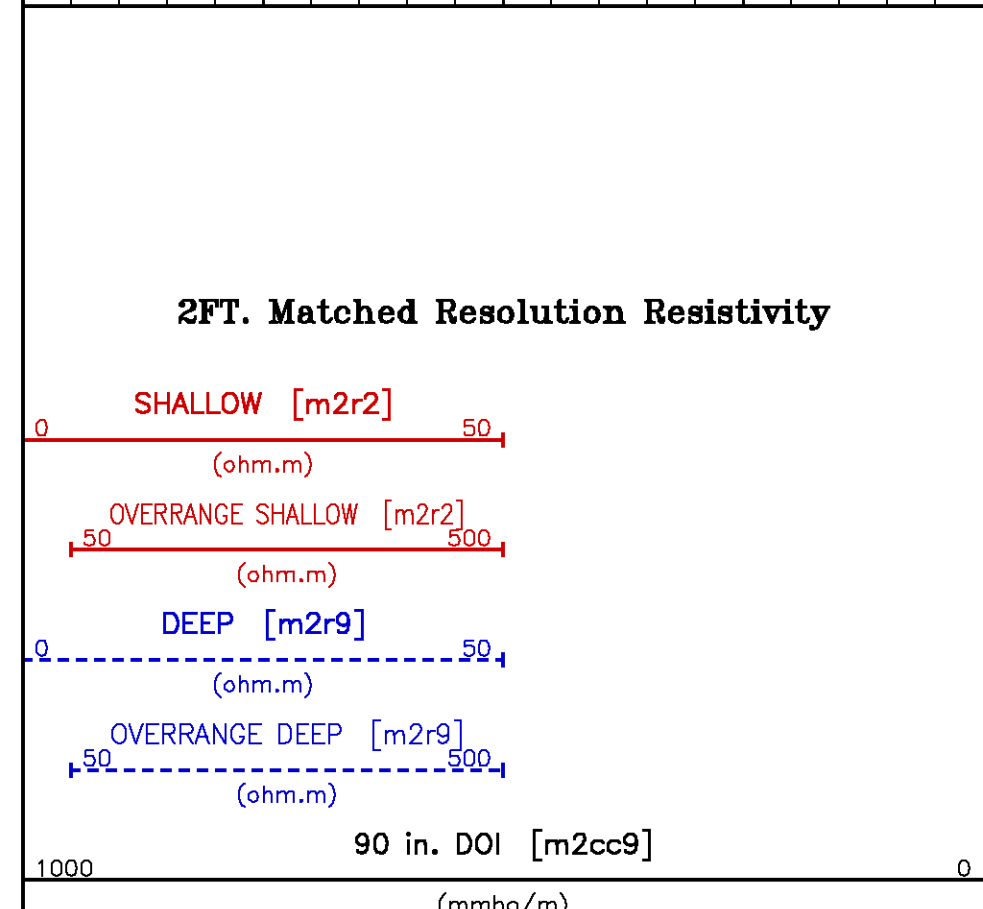
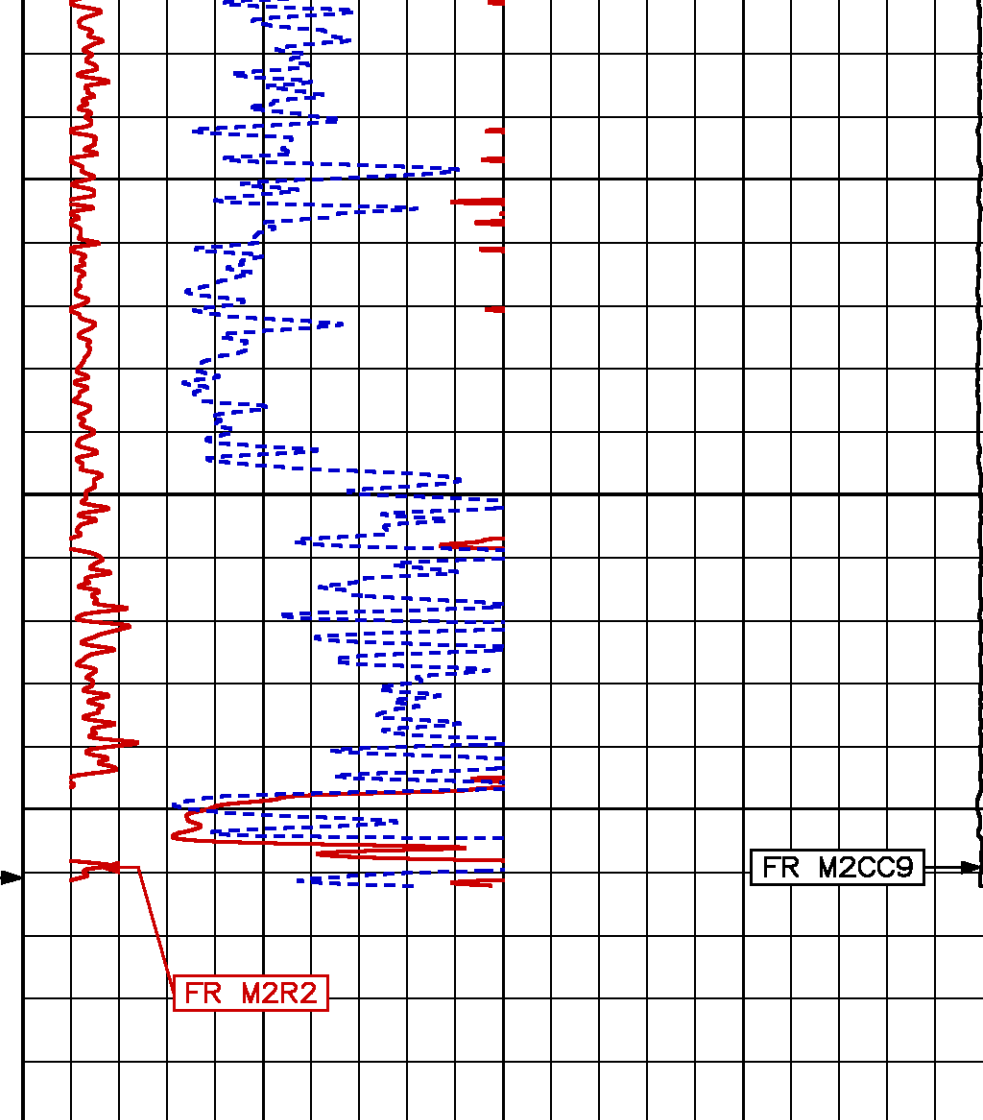


2250

2300

METERS

TD



# MAIN LOG

ECLIPS 6.11 Aug 06, 2010  
Patches: 1

Wed Nov 3 15:08:38 2010

Pcrplt /main/62

Cplot

Pdf\_Cpp /main/16

Fileview 5.50

## PARAMETER AND FILTER SUMMARY REPORT

File: /data/pass/nalcor\_run1/m980g03.prm  
LOGGING MODE: DEPTH DIRECTION: UP  
TOP DEPTH: 542.107 m BOTTOM DEPTH: 2283.998 m

### SYMMETRIC FILTER

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (m)	
CHT	FILTER ( )	medium (1)		TOP	BOTTOM
TENSION	FILTER ( )	medium (1)		''	''
GR	FILTER ( )	medium (1)		''	''
SP-SPDH	FILTER ( )	medium (1)		''	''

### BOREHOLE & CEMENT

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (m)	
CASING - BOREHOLE & CEMENT VOLUME	CASING O.D.	244.500	mm	TOP	BOTTOM
CALIPER SELECTION	X-Y VS MULTI-ARM SEL	MULTI-ARM CAL		''	''
BIT SIZE	BIT SIZE	311.000	mm	''	''
BH MUD RESISTIVITY SOURCE	RMUD SOURCE (HDIL)	BH TEMP DERIVED		''	''
MUD SAMPLE RESISTIVITY	MUD SAMPLE TEMP	25.0	degC	''	''
	MUD SAMPLE RES	0.600	ohm.m	''	''
BOREHOLE TEMP from GRADIENT	Known BH REF TEMP	25.0	degC	''	''
	at BH REF DEPTH	0.0	m	''	''
	with TEMP GRADIENT	2.187	0.01 degC/m	''	''
				''	''
BOREHOLE CORR DIAMETER SOURCE	CALIPER/FIXED DIA. (mbh*)	USE CALIPER		''	''
BOREHOLE CORR DIAMETER	FIXED DIAMETER (mbh*)	311.000	mm	''	''
X-Y COMBINED CALIPER PROCESSING-FOCM5Y	Caliper - FOCUS	Y-Axis		''	''

### ACCELERATION PROCESSING

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (m)	
ACCEL CORR SWITCH	ACCEL DEPTH CORR	CORRECTION ON		TOP	BOTTOM

### HDIL PROCESSING

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (m)	
HDIL TEMPERATURE CORRECTION	TEMP CORRECTION	ON		TOP	BOTTOM
ADAPTIVE BOREHOLE CORRECTION	ABC PROCESSING	ON		''	''
	ABC to CALCULATE	MUD CONDUCTIVITY		''	''
	STANDOFF	38.10	mm	''	''
	TOOL POSITION	ECCENTERED		''	''
	Rmud MULTIPLIER	1.000		''	''

### CURVE DESCRIPTION REPORT

CURVE NAME	CREATION DATE	CURVE DESCRIPTION
F1:BIT	Nov 3 01:15:13 2010	BIT SIZE
F1:CAL	Nov 3 01:15:13 2010	CALIPER
F1:CHT	Nov 3 01:15:13 2010	CABLE HEAD TENSION

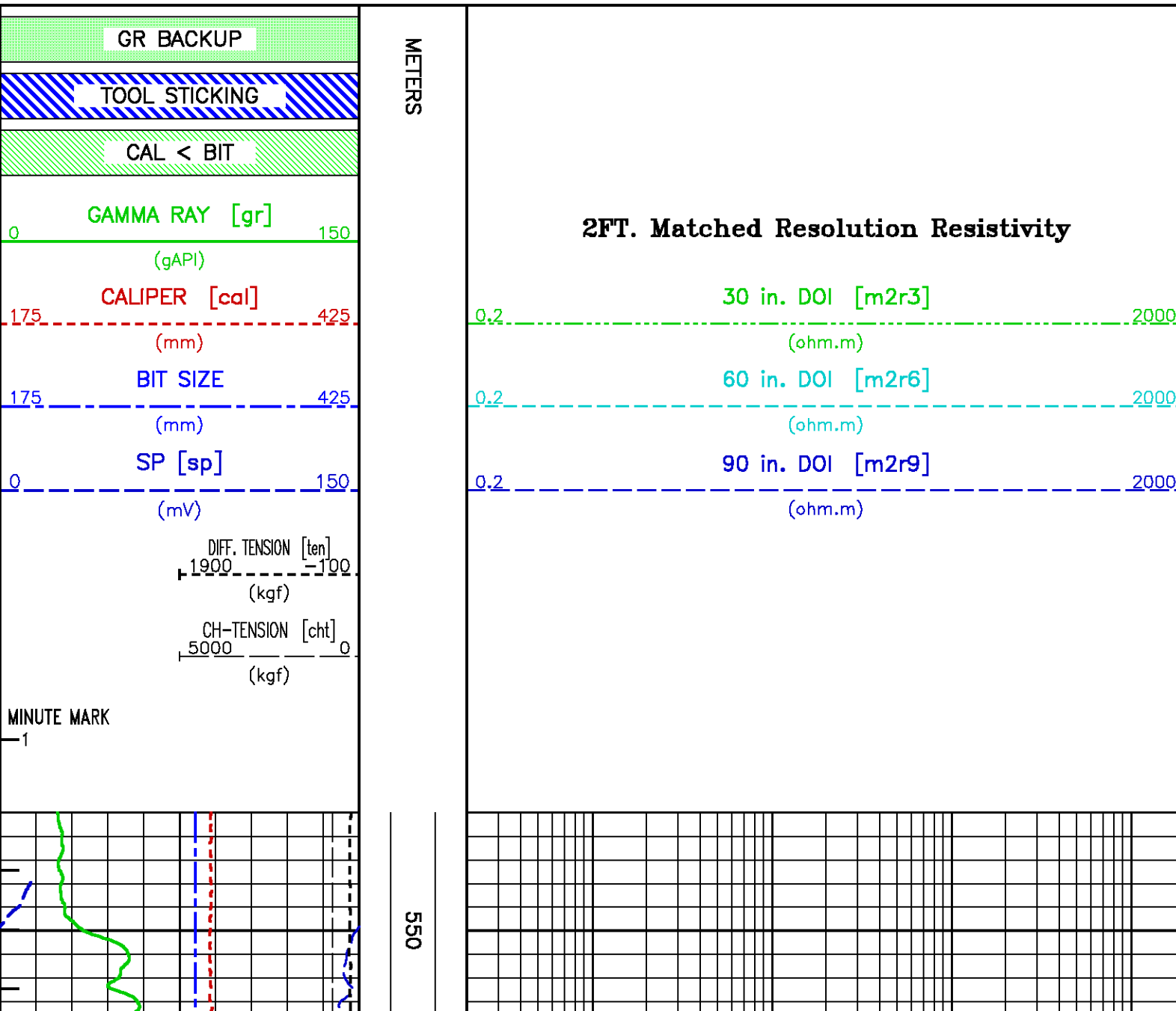
F1:CHT	Nov	3	01:15:13	2010	CABLE HEAD TENSION
F1:GR	Nov	3	01:15:13	2010	GAMMA RAY
F1:M2R3	Nov	3	01:15:13	2010	VERTICAL 2-FOOT RESOLUTION MATCHED RESISTIVITY, 30-INCH DOI
F1:M2R6	Nov	3	01:15:13	2010	VERTICAL 2-FOOT RESOLUTION MATCHED RESISTIVITY, 60-INCH DOI
F1:M2R9	Nov	3	01:15:13	2010	VERTICAL 2-FOOT RESOLUTION MATCHED RESISTIVITY, 90-INCH DOI
F1:MMRK	Nov	3	01:15:13	2010	MINUTE MARK
F1:SP	Nov	3	01:15:13	2010	SPONTANEOUS POTENTIAL
F1:TEN	Nov	3	01:15:13	2010	DIFFERENTIAL TENSION

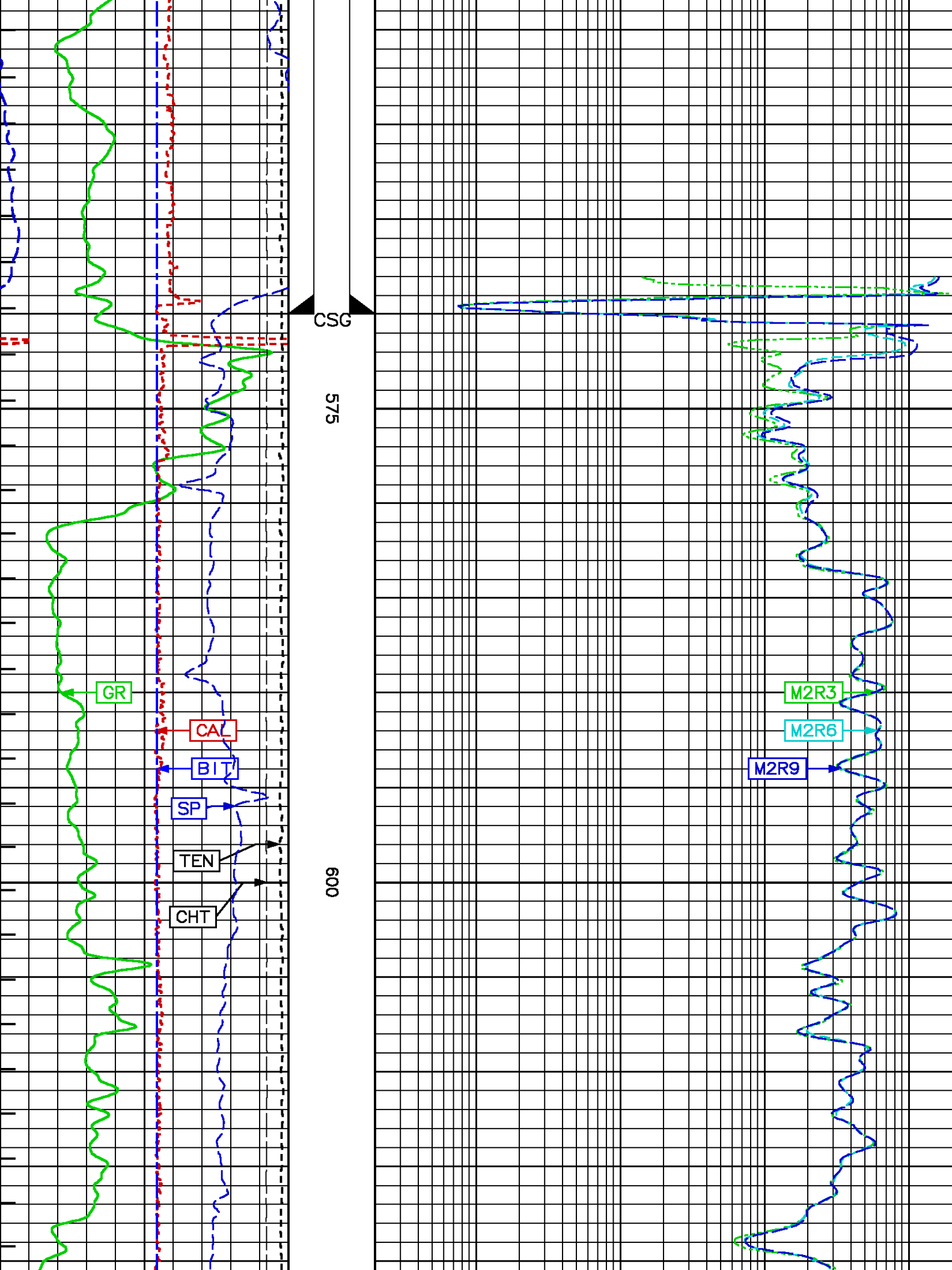
### CURVE MEASURE POINT OFFSET

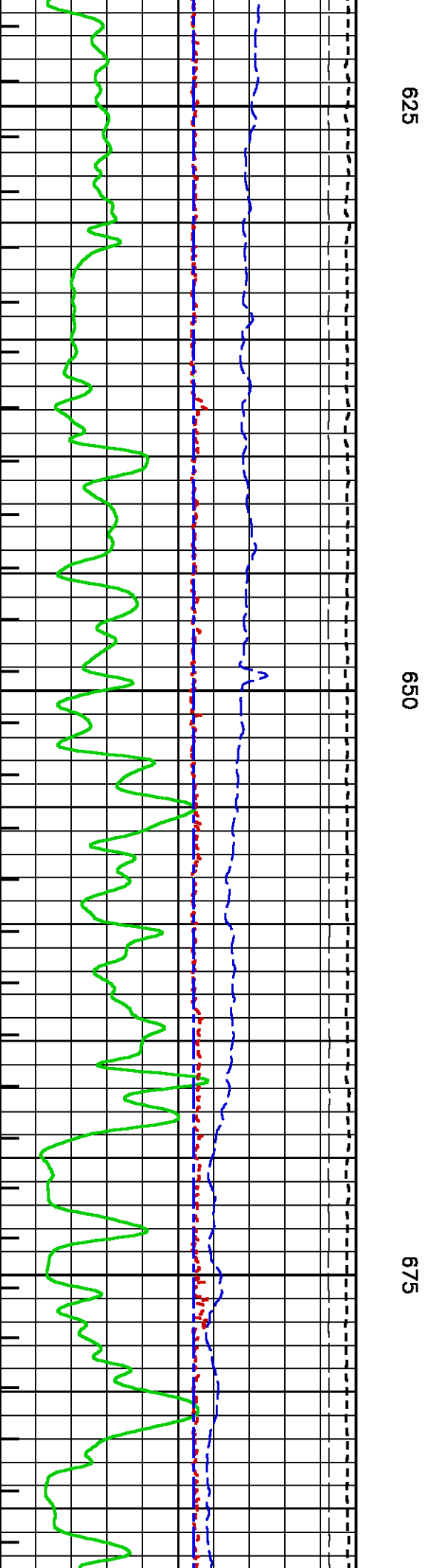
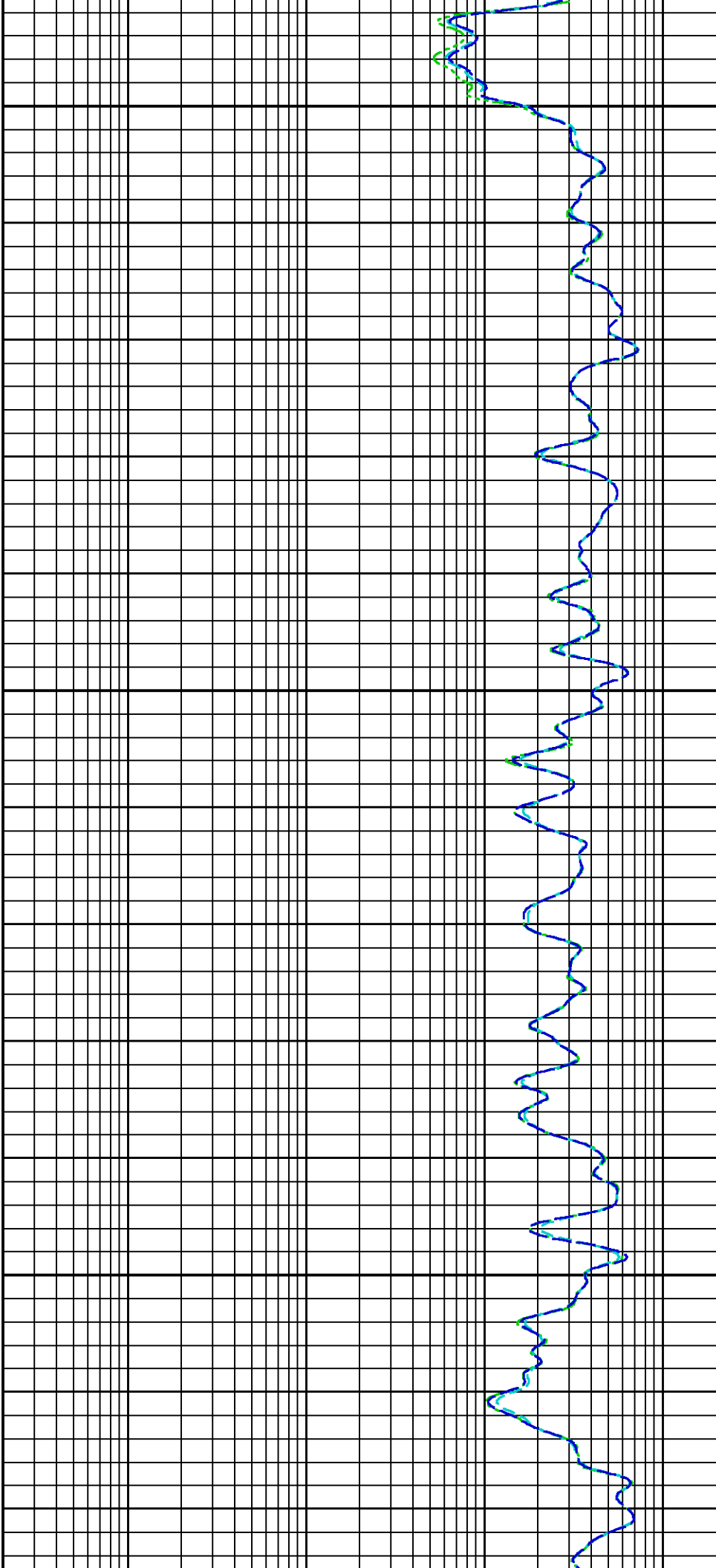
CURVE	OFFSET (m)	CURVE	OFFSET (m)	CURVE	OFFSET (m)	CURVE	OFFSET (m)
BIT	0.00	GR	33.68	M2R9	0.84		
CAL	5.52	M2R3	0.84	SP	0.38		
CHT	0.00	M2R6	0.84	TEN	0.00		

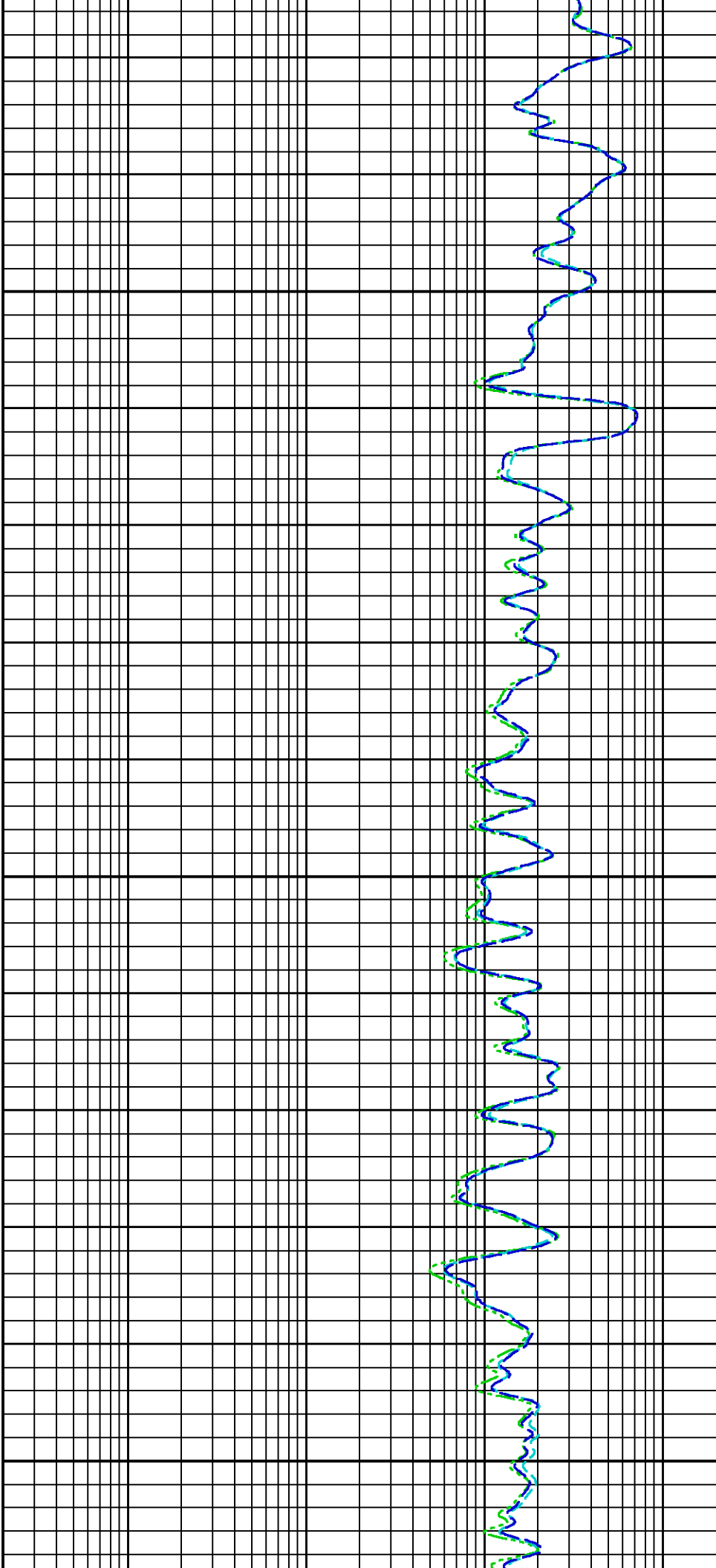
Presentation : cpu1:/dat1a/pass/nalcor\_run1/fhdil\_main.pdf [1:240 Scale]  
 Plot Interval : 545 - 2283.94 Meters

Data File 1 : F1 : cpu1:/dat1a/pass/nalcor\_run1/r1t2\_main.xtf  
 Created On : Nov 3 01:15:13 2010  
 Company : NALCOR ENERGY  
 Well : NALCOR ET AL FINNEGAN 31  
 Field : FINNEGAN  
 File Interval : 504.749 - 2283.98 Meters  
 Oct : m980g





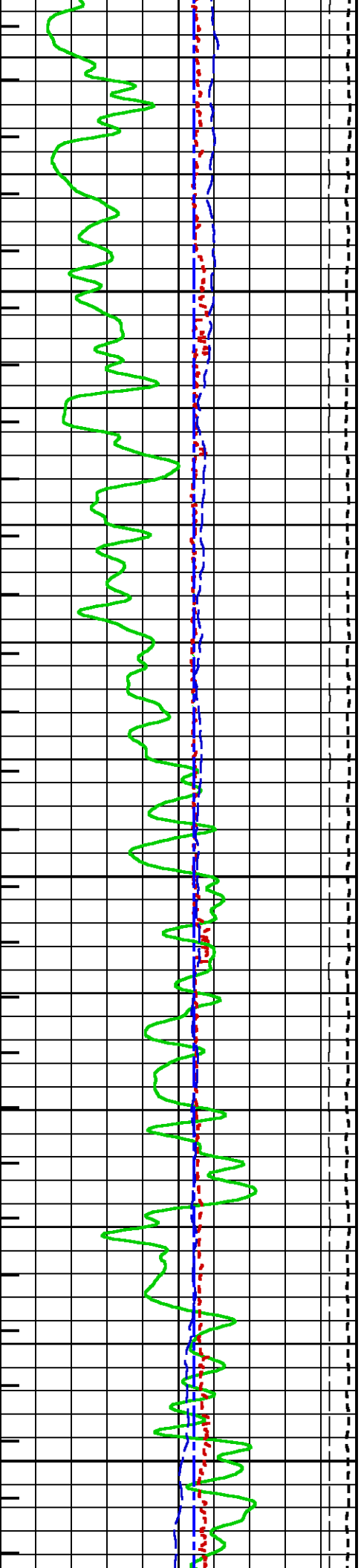


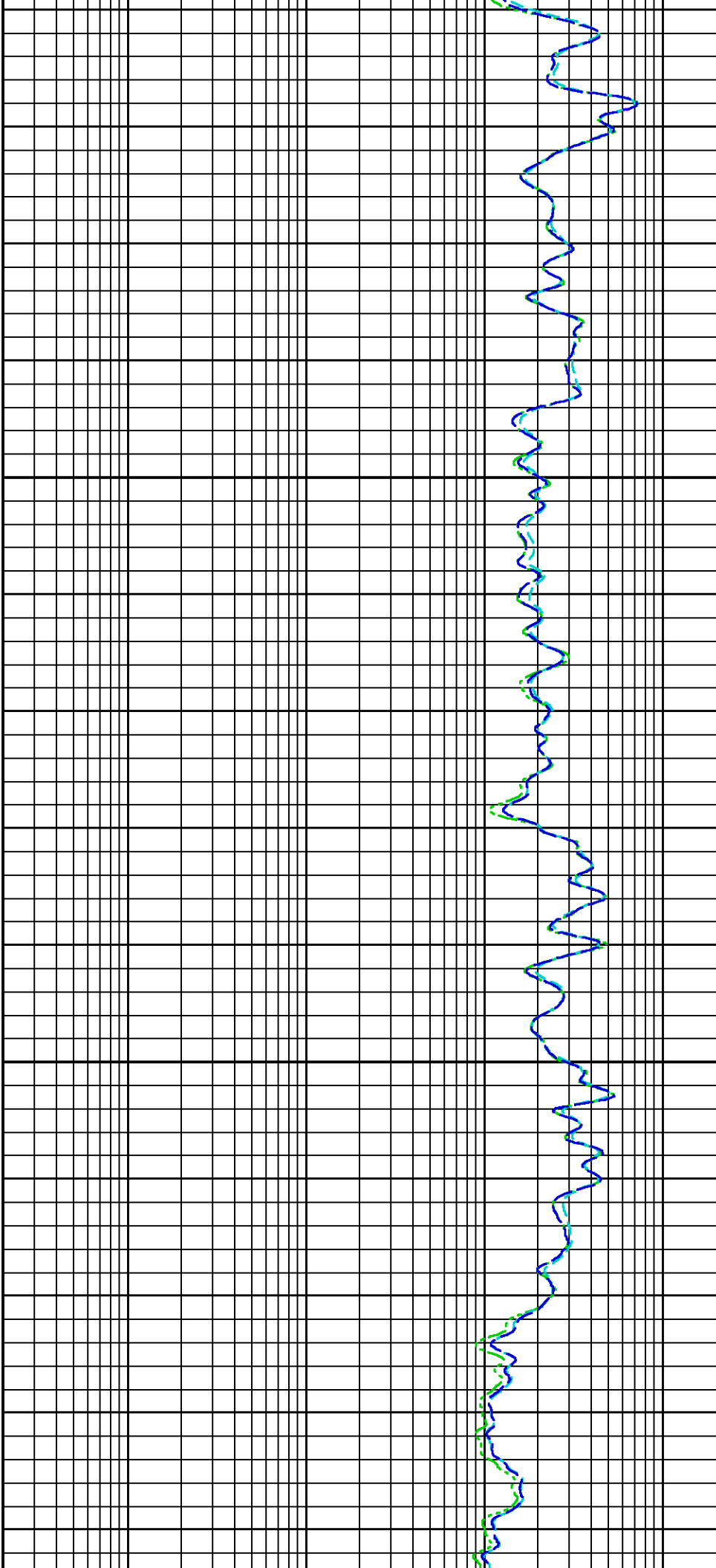


700

725

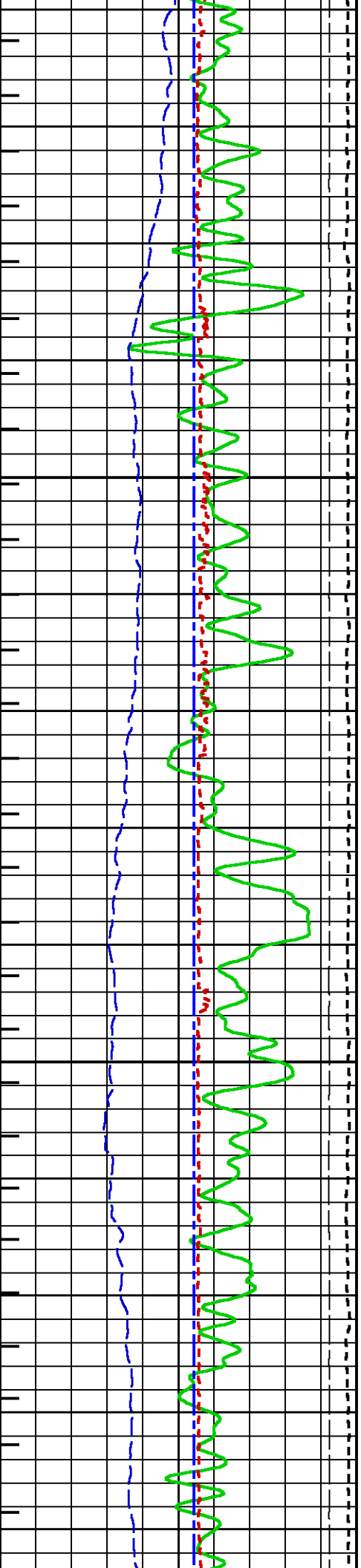
750

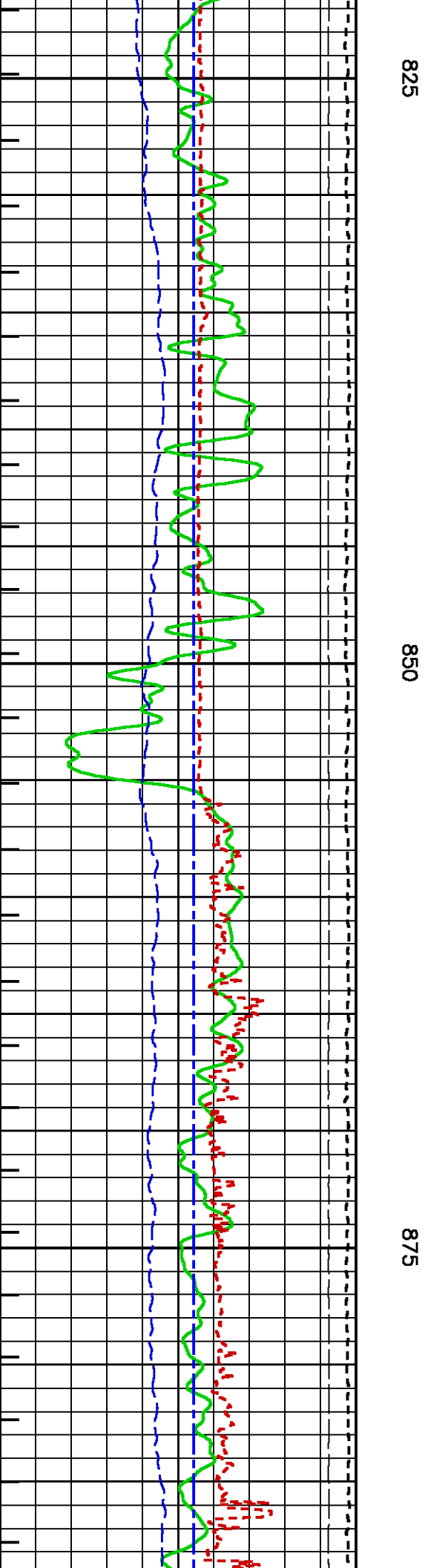
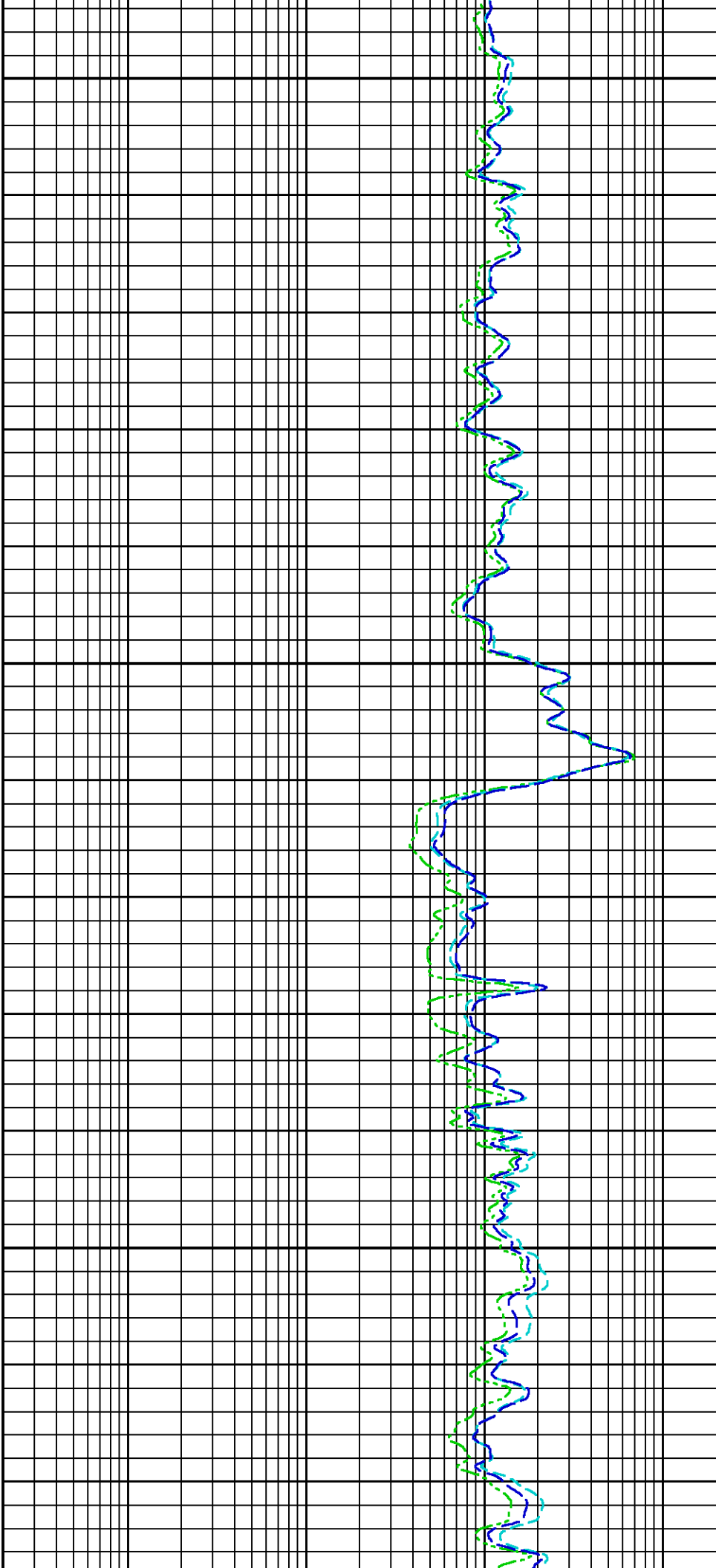




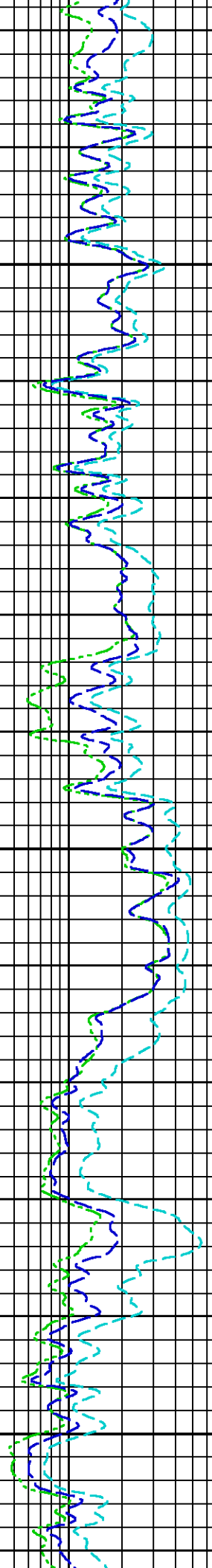
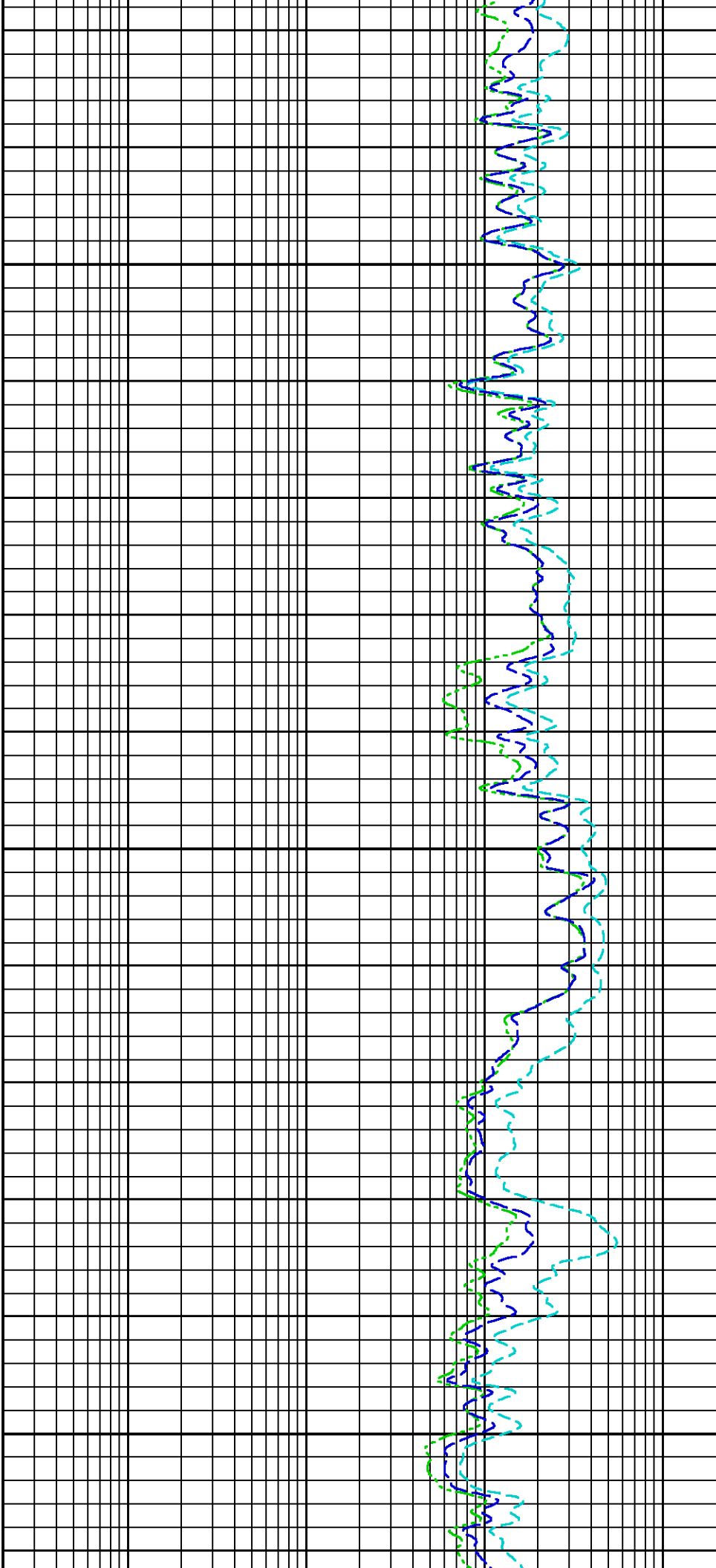
775

800





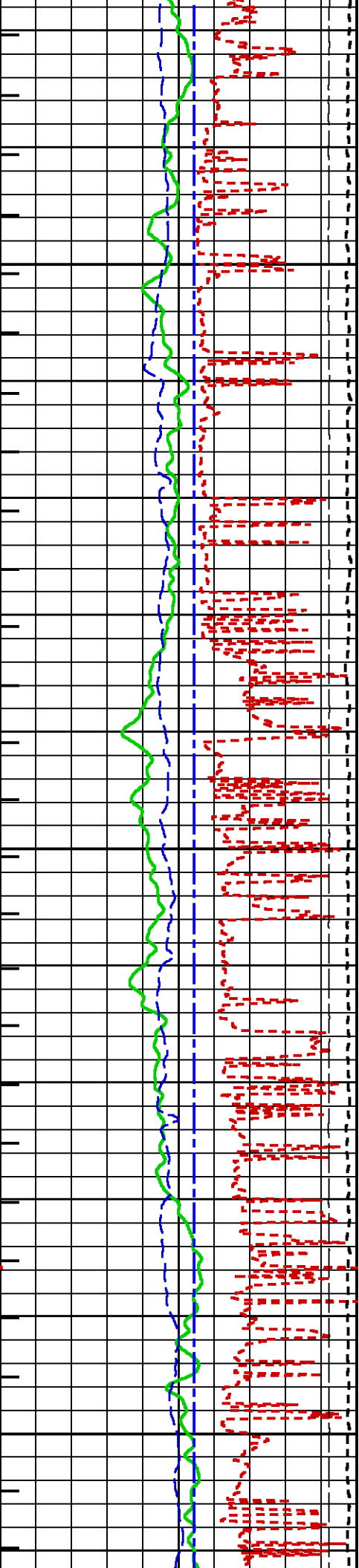


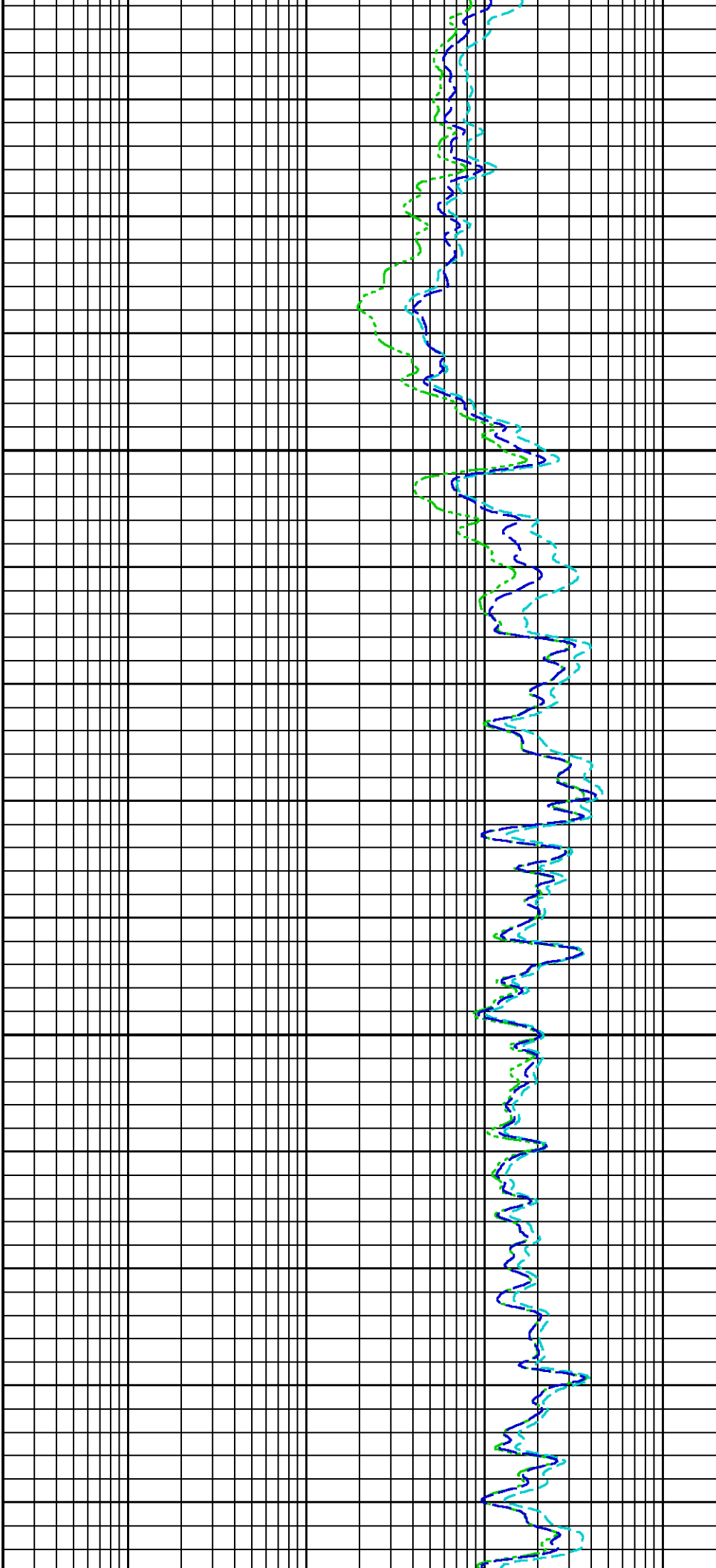


900

925

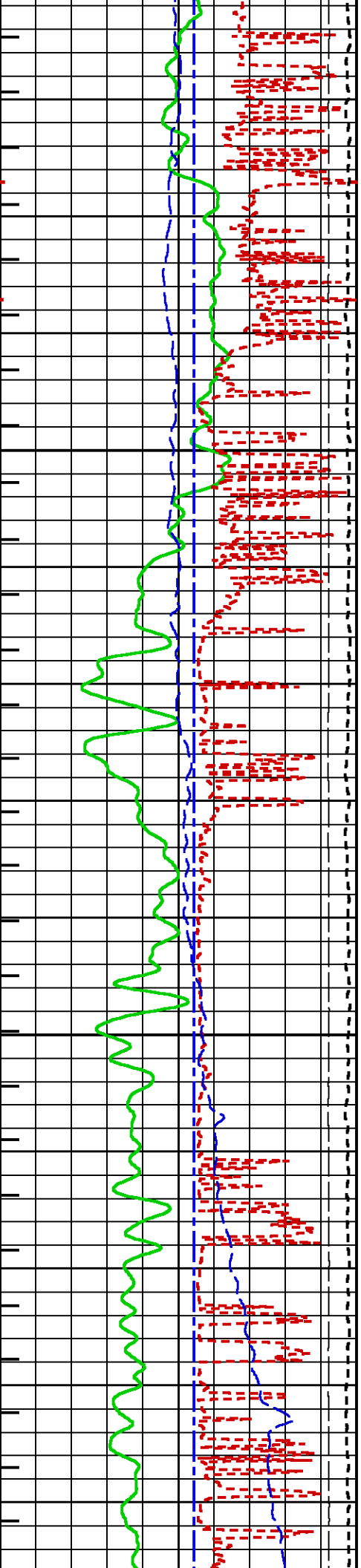
950

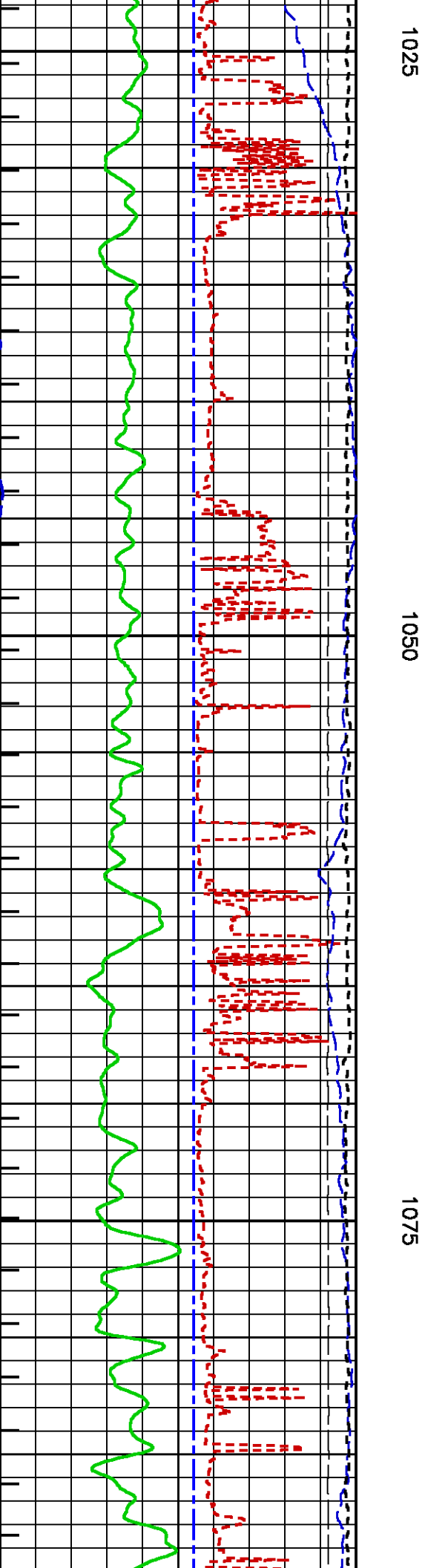
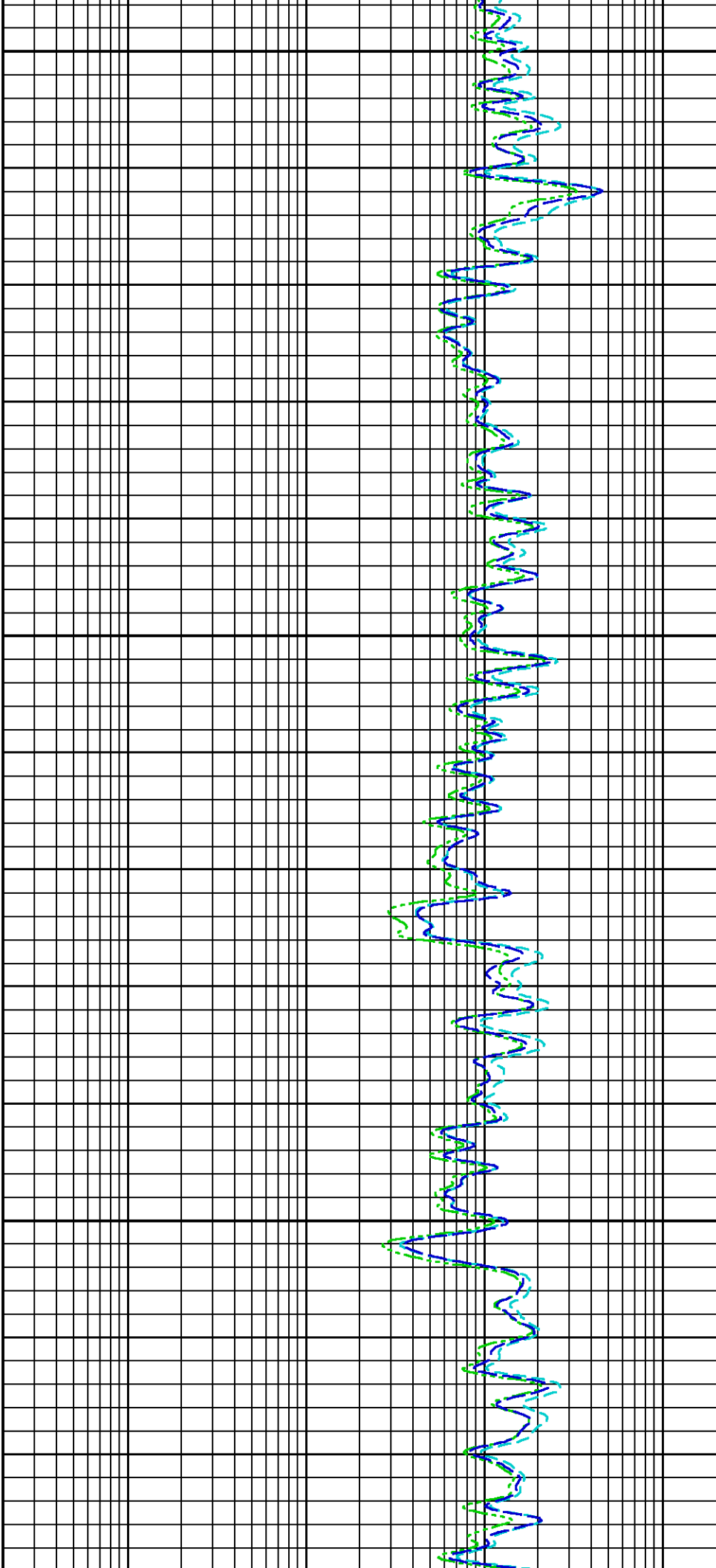


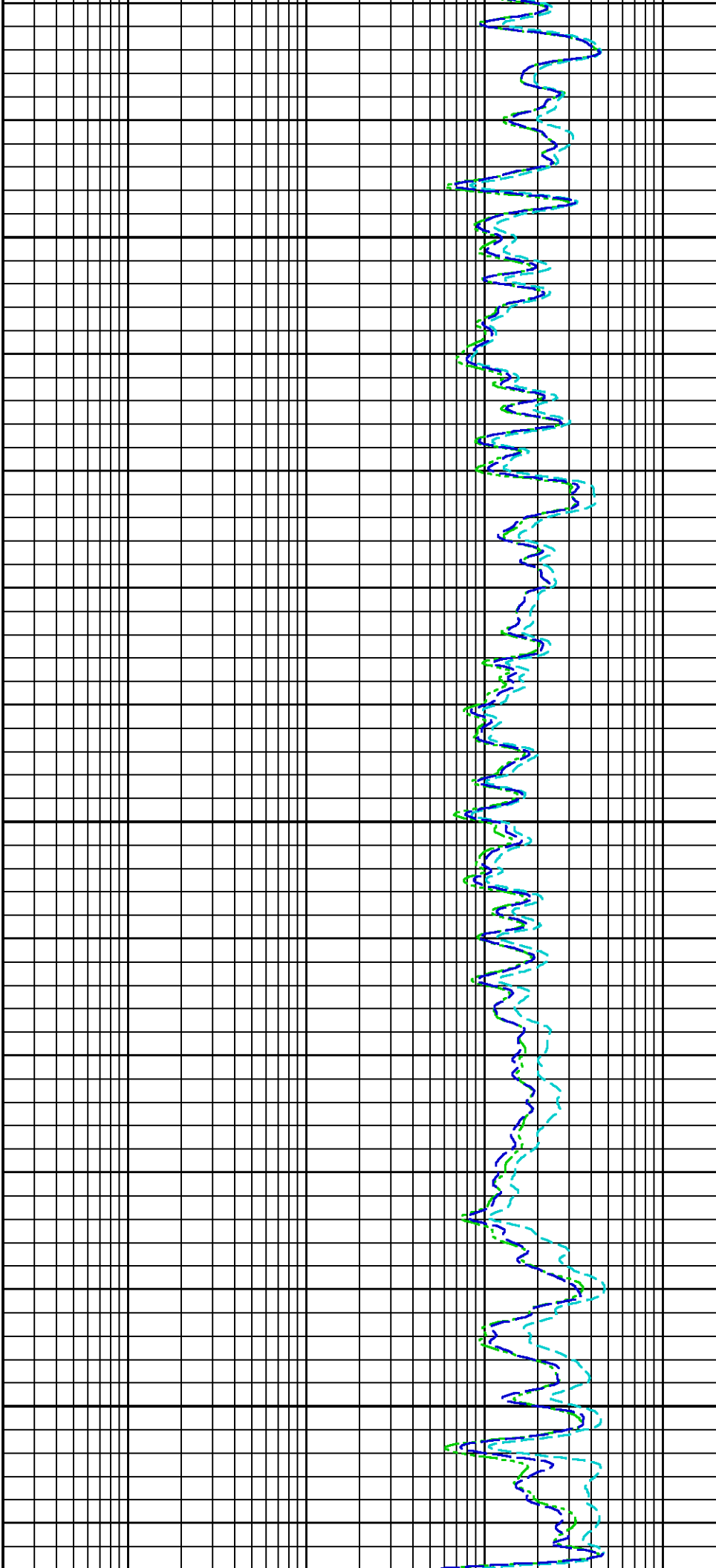


975

1000



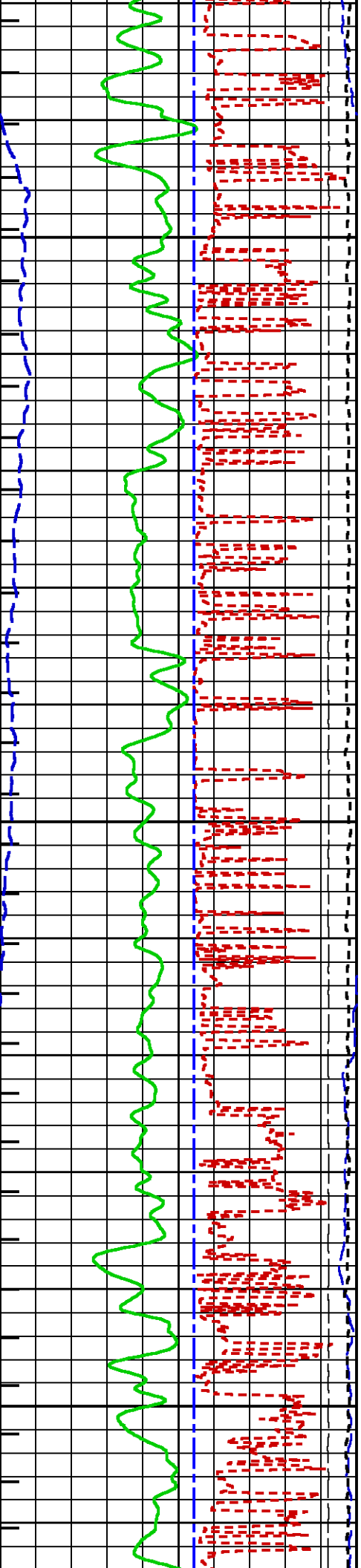


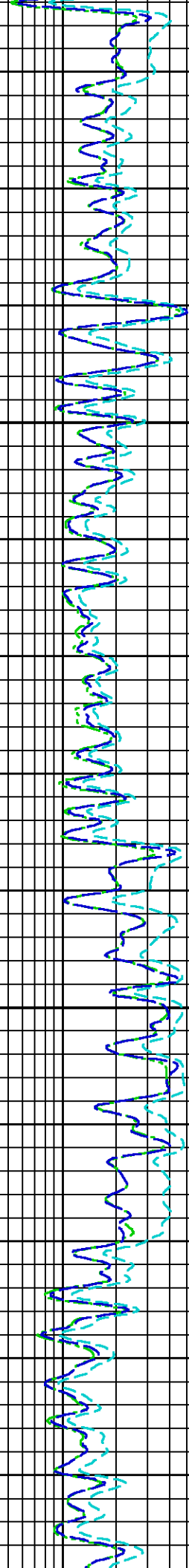
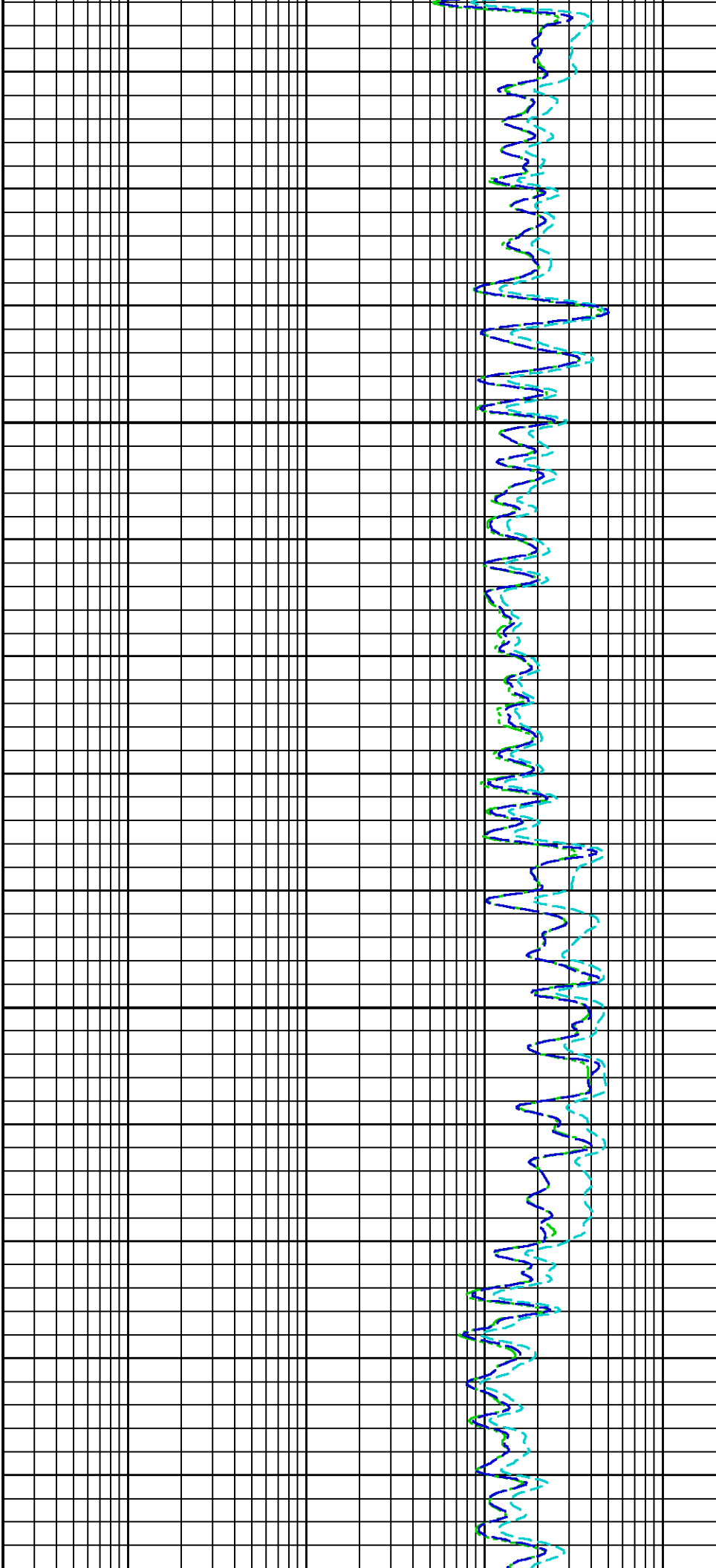


1100

1125

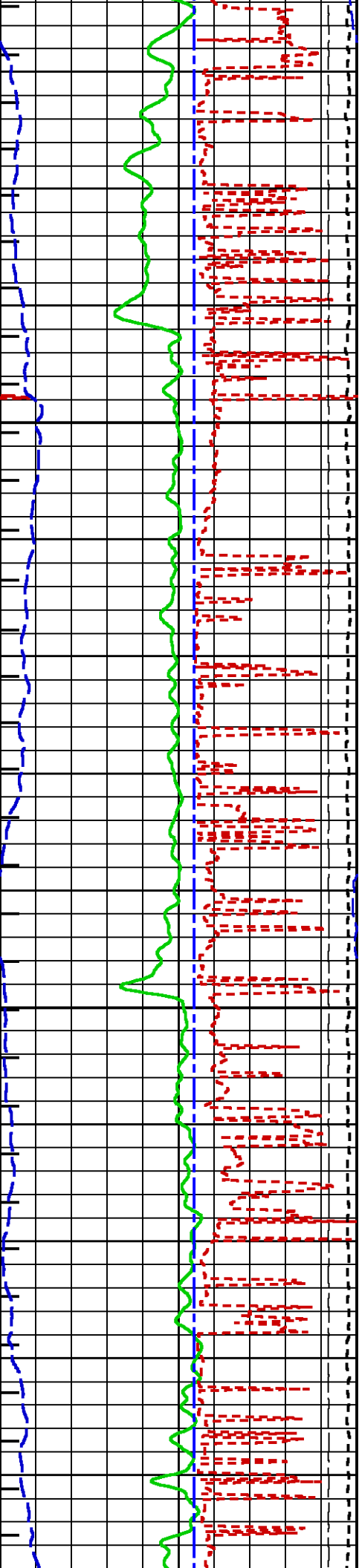
1150

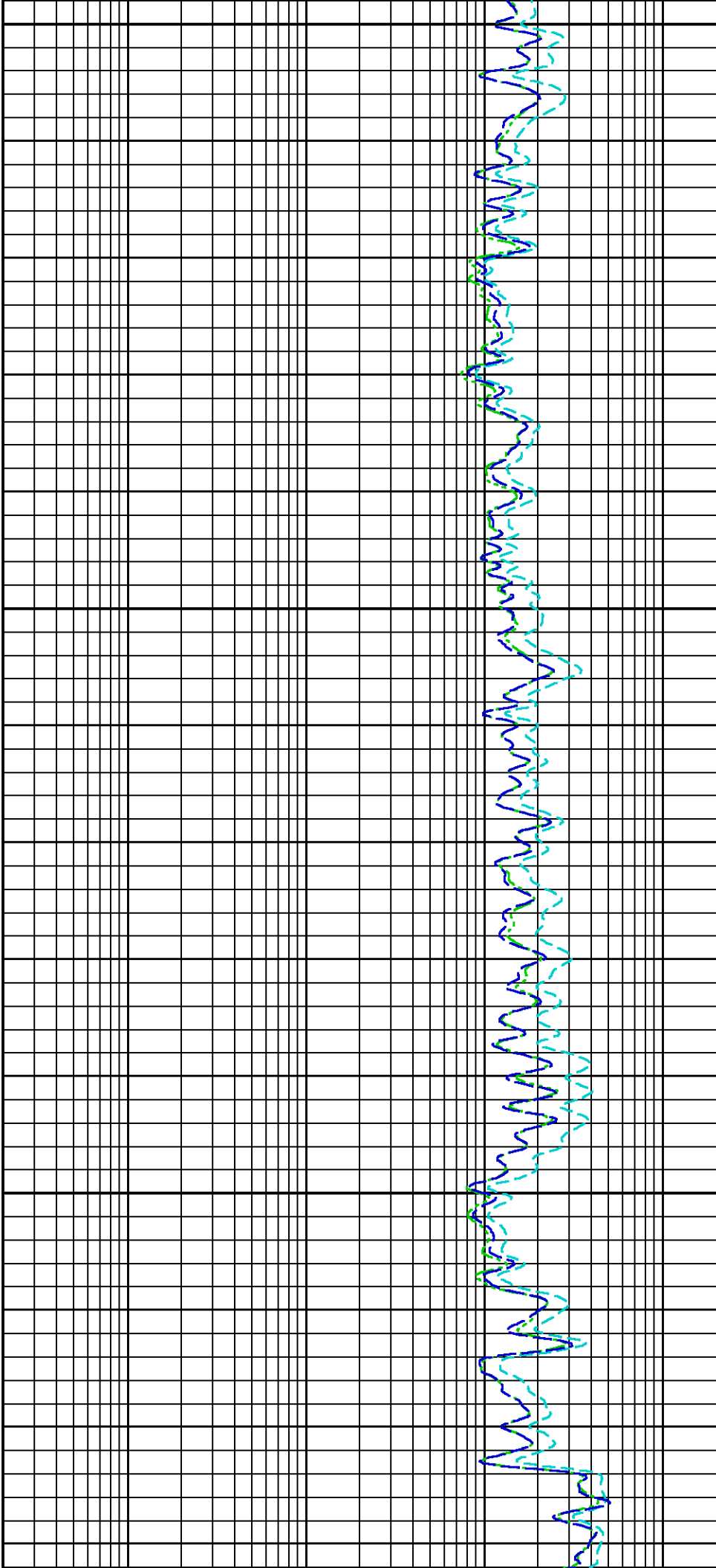




1175

1200

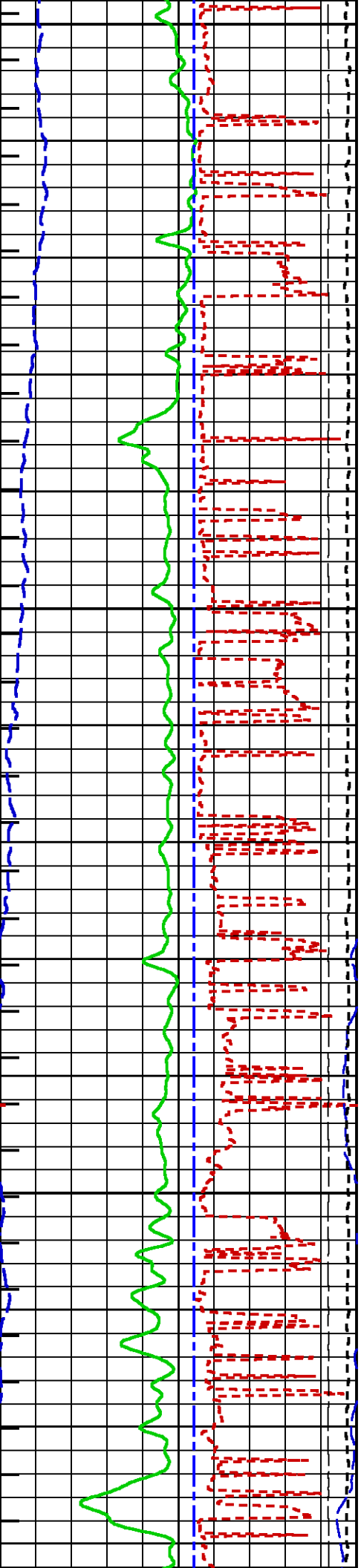


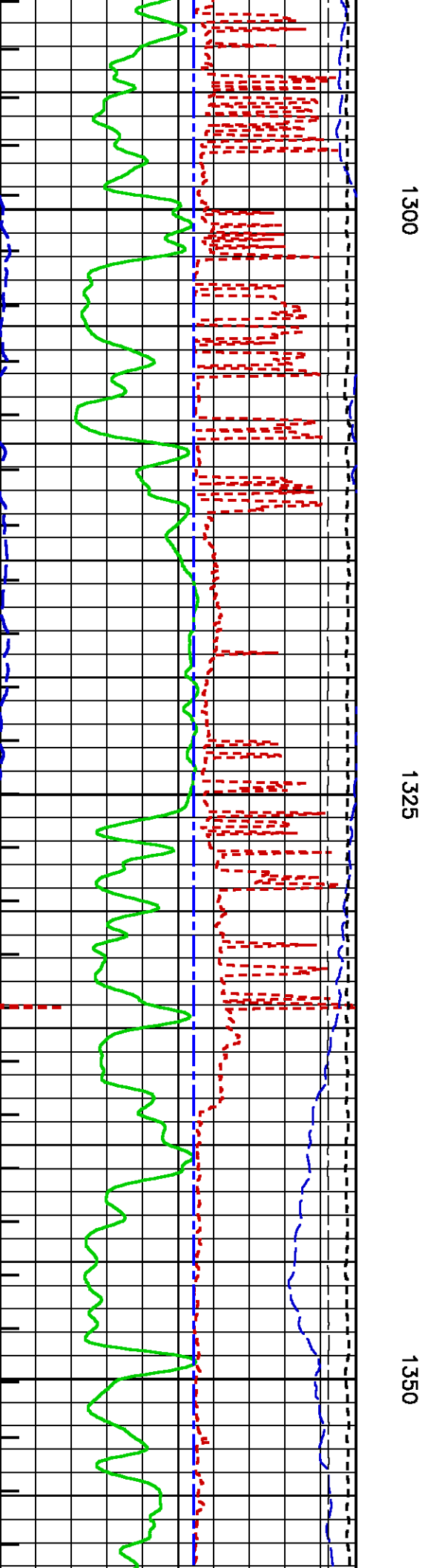
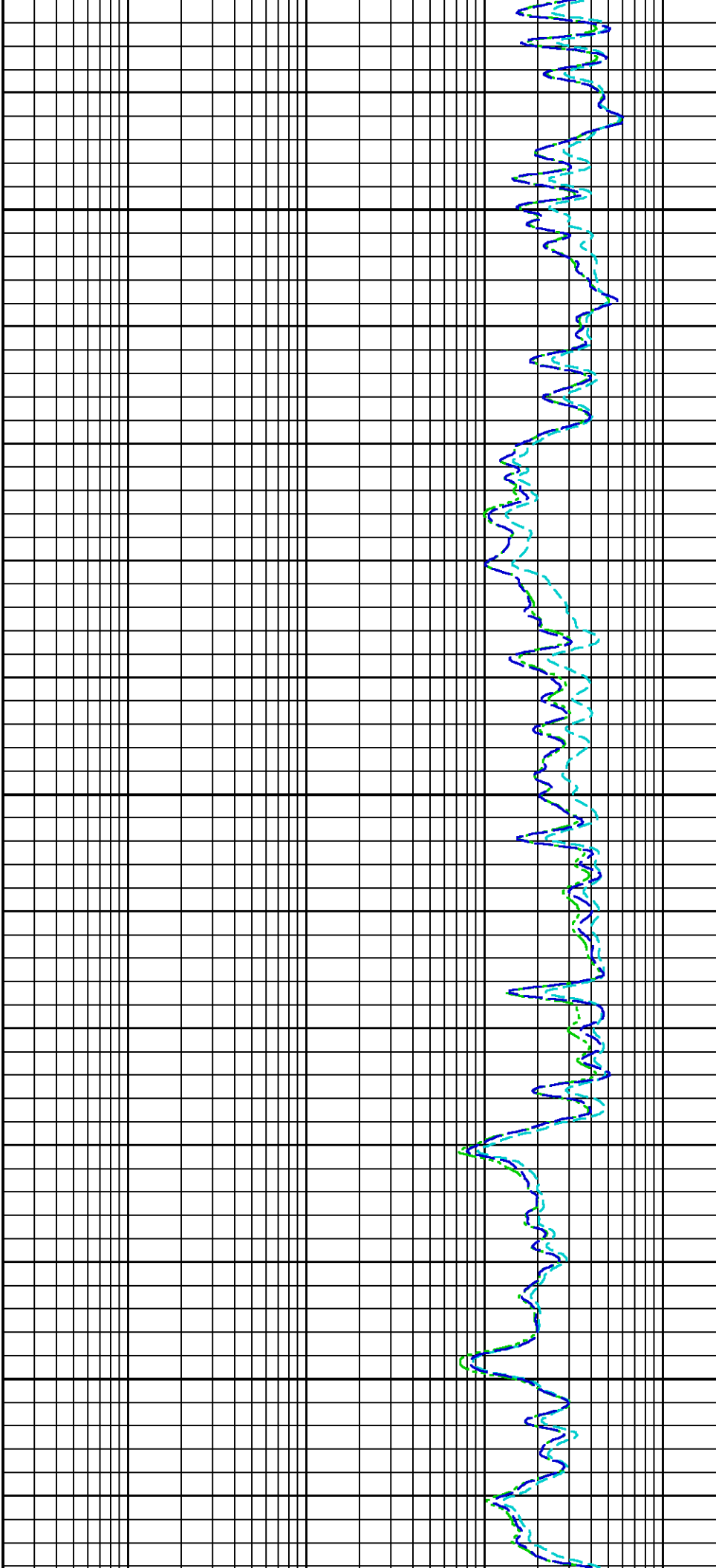


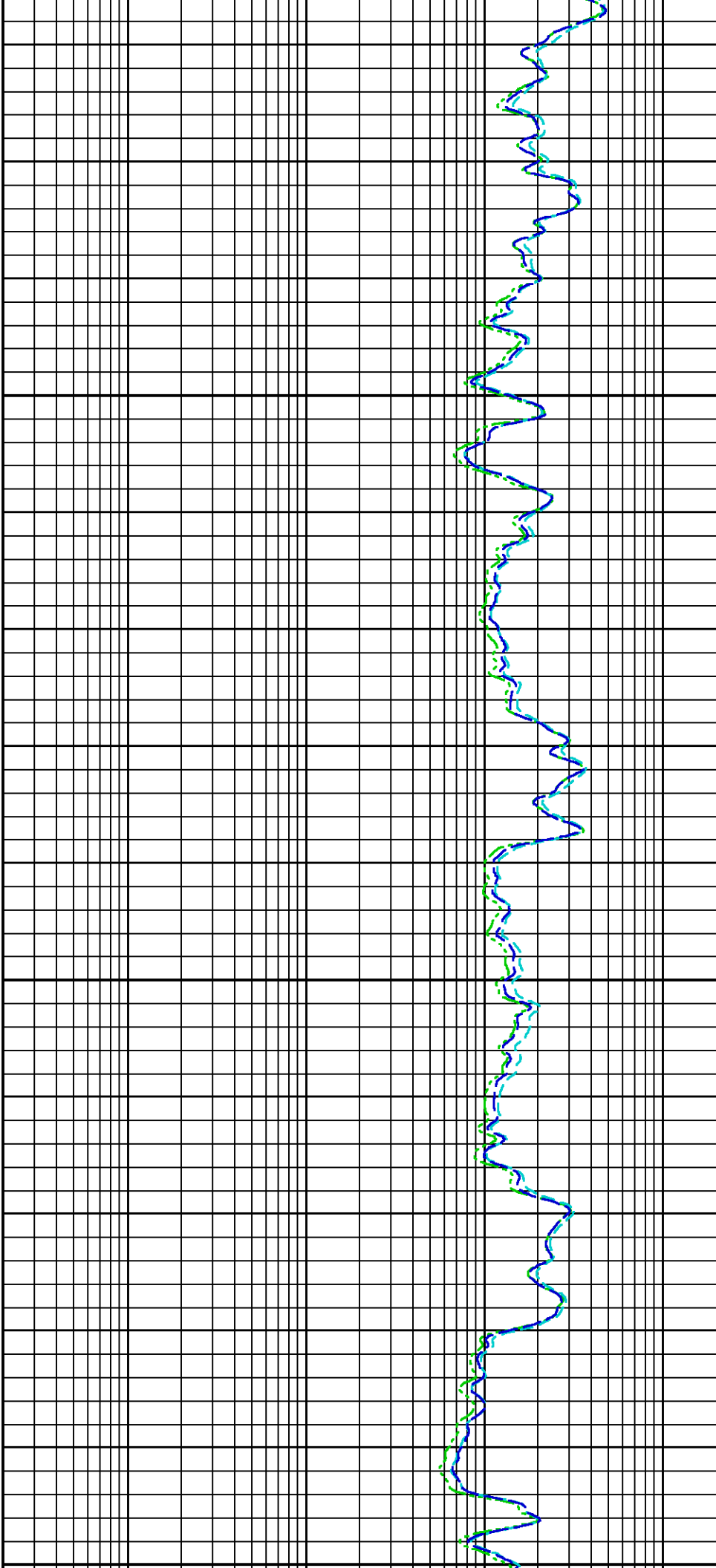
1225

1250

1275



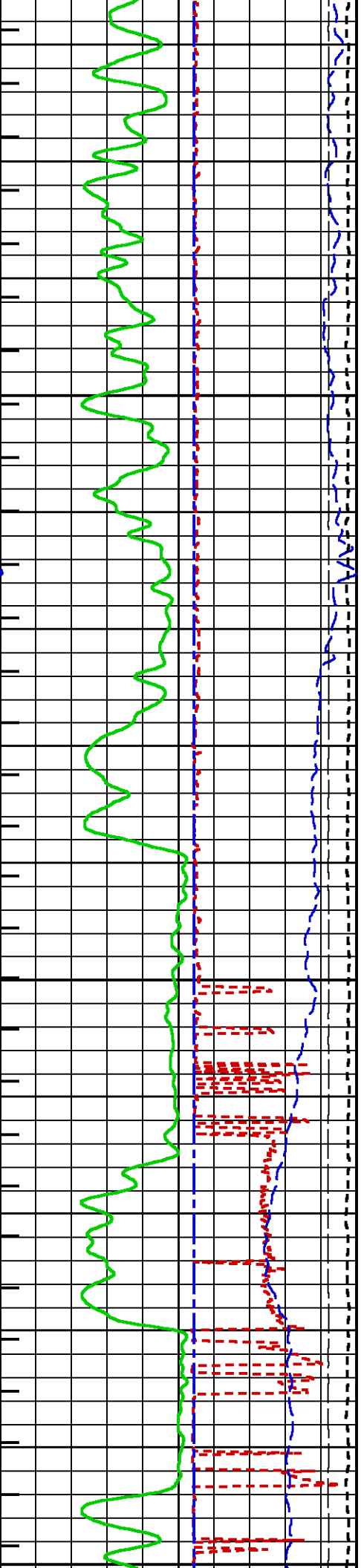




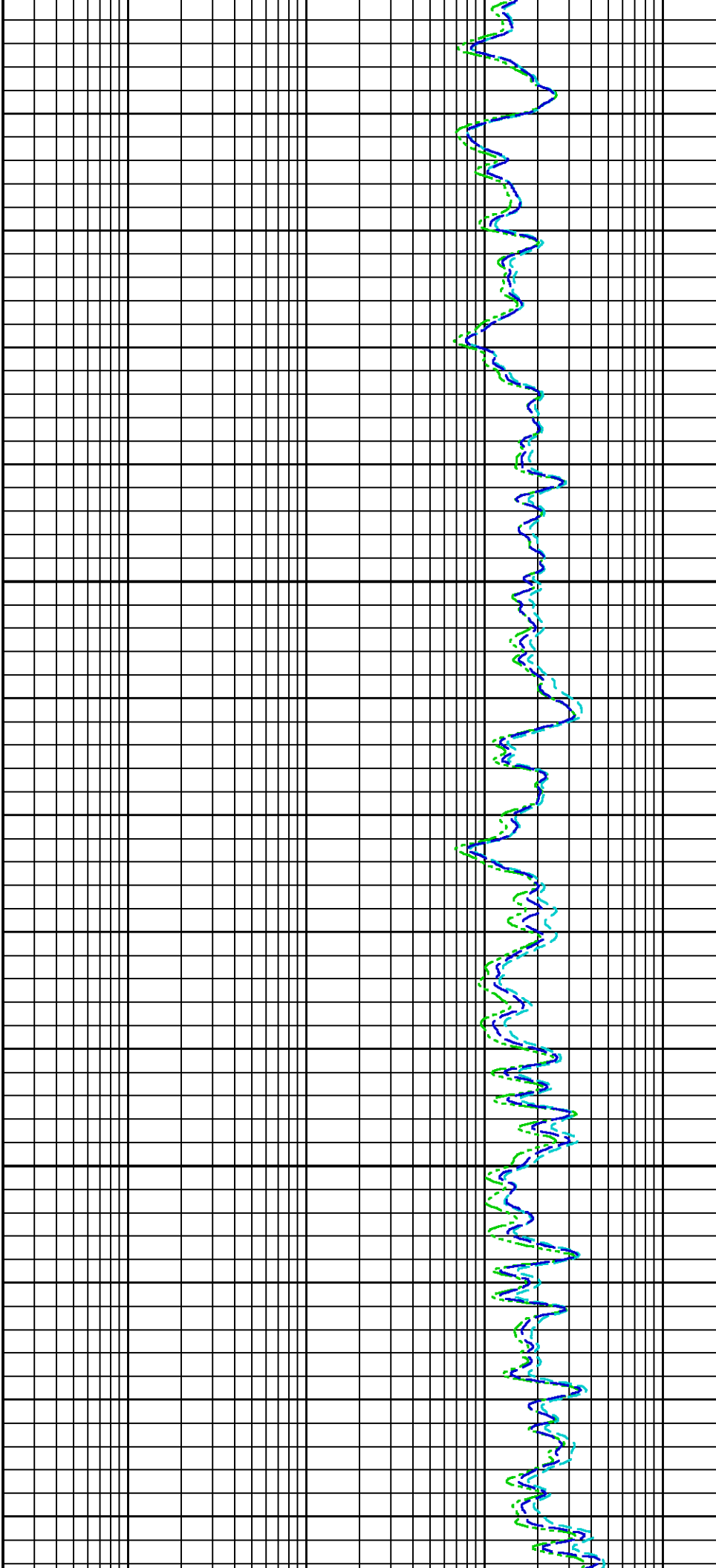
1375

1400

14



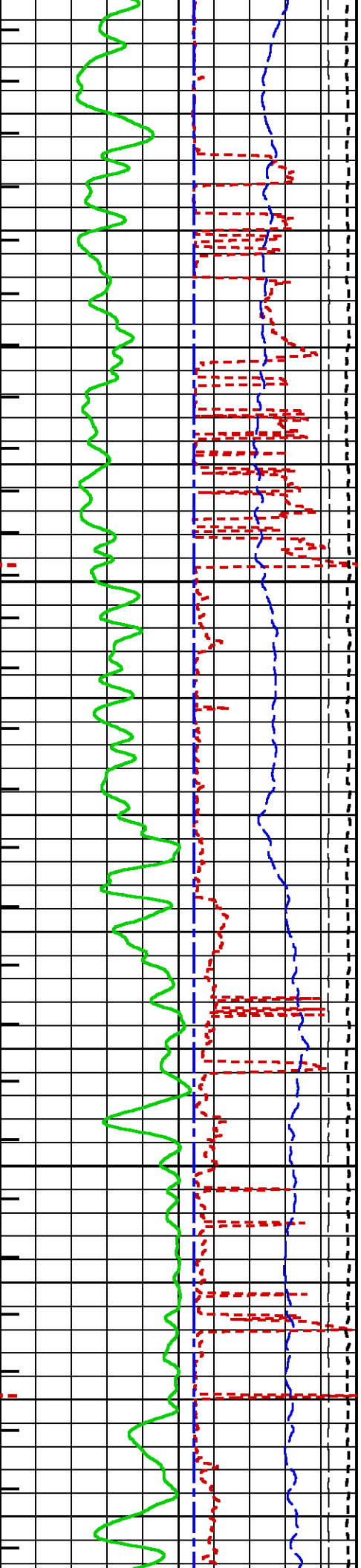


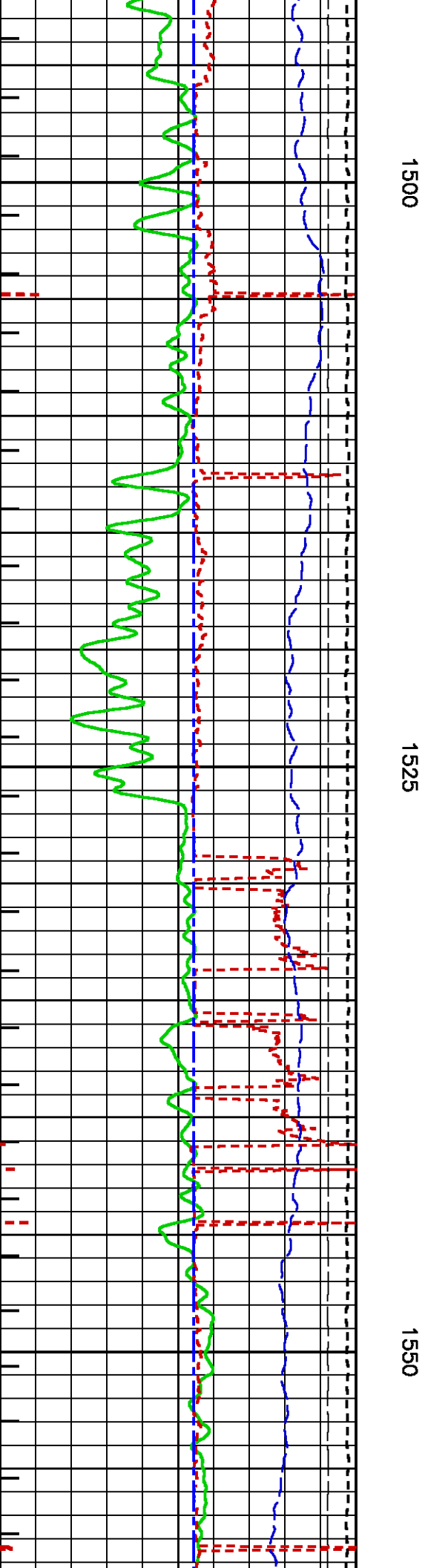
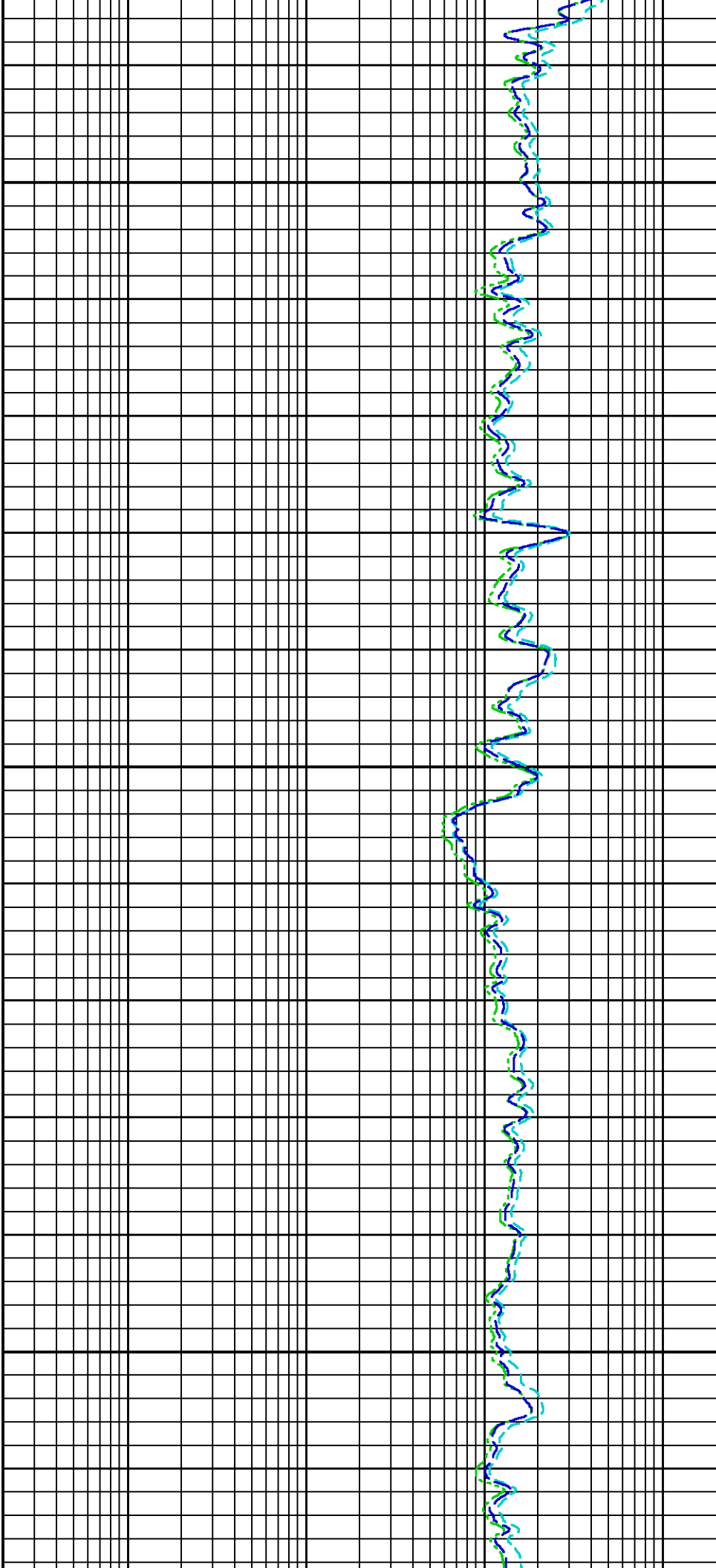


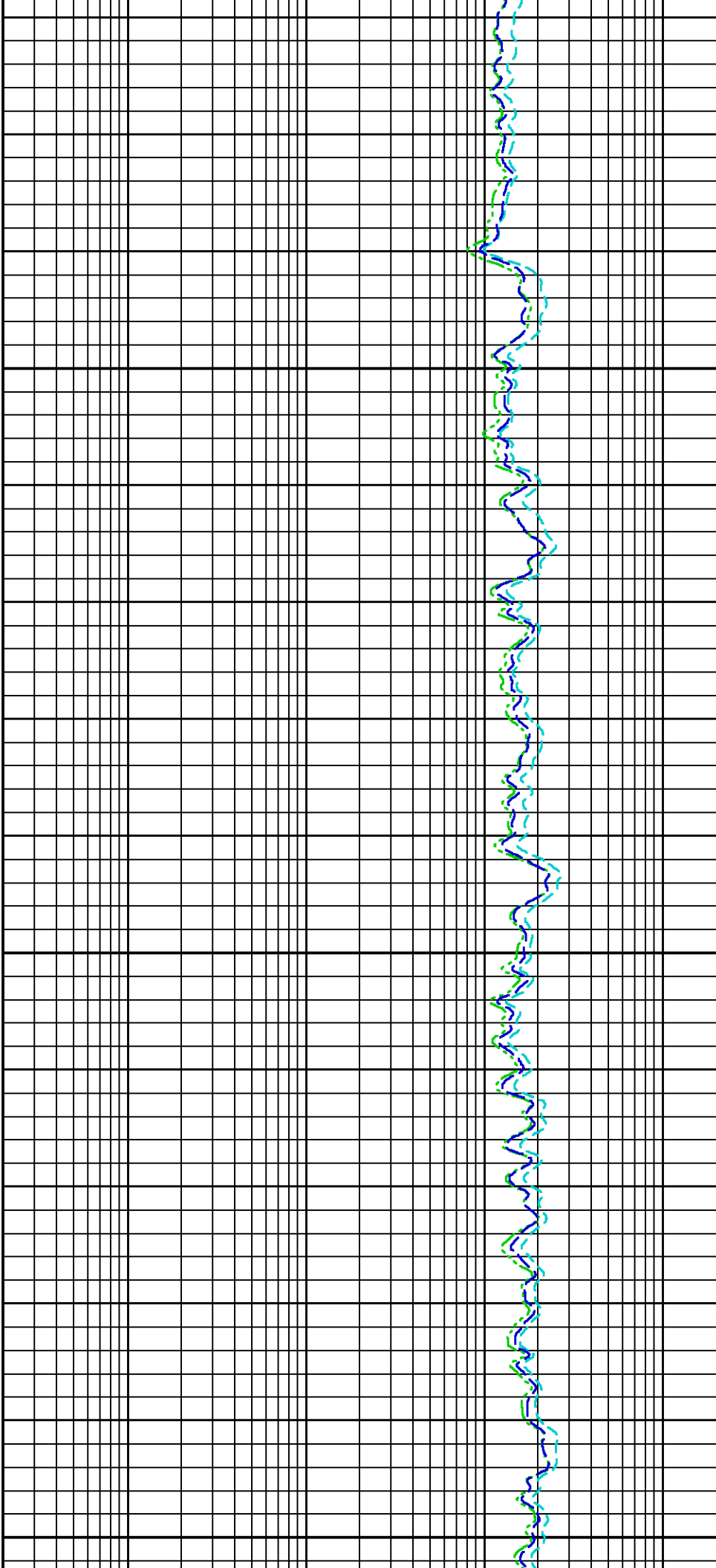
25

1450

1475



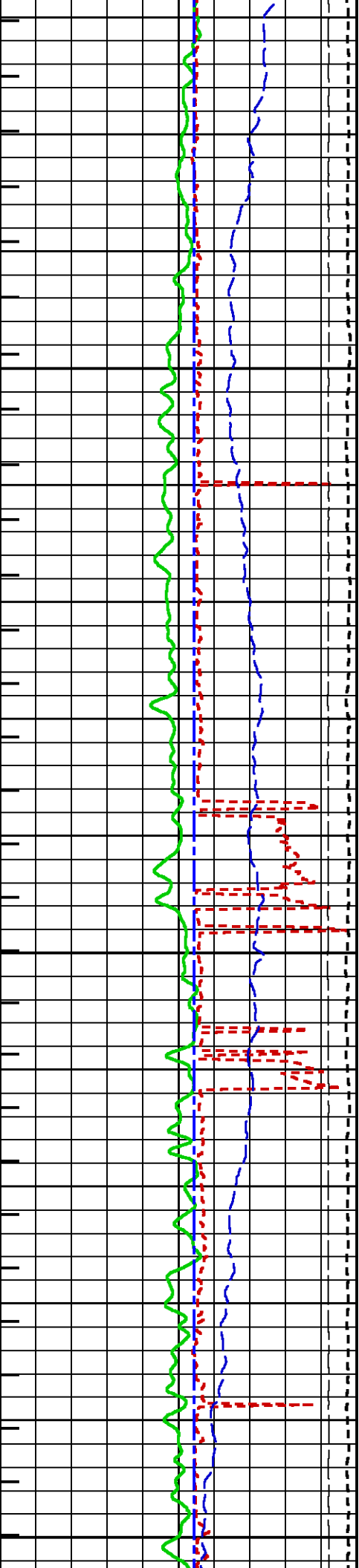


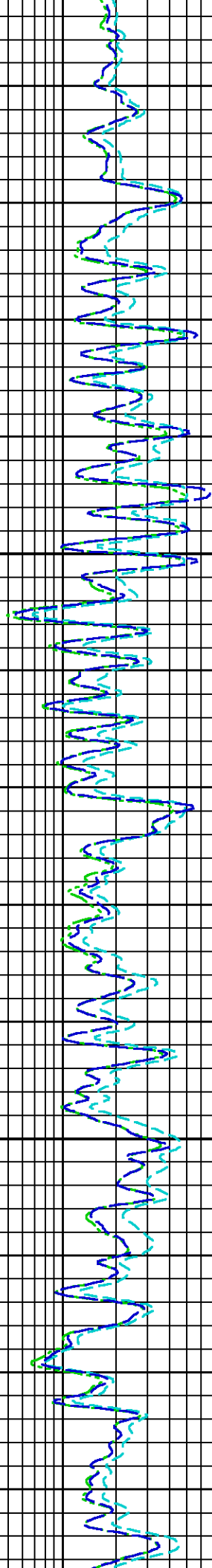
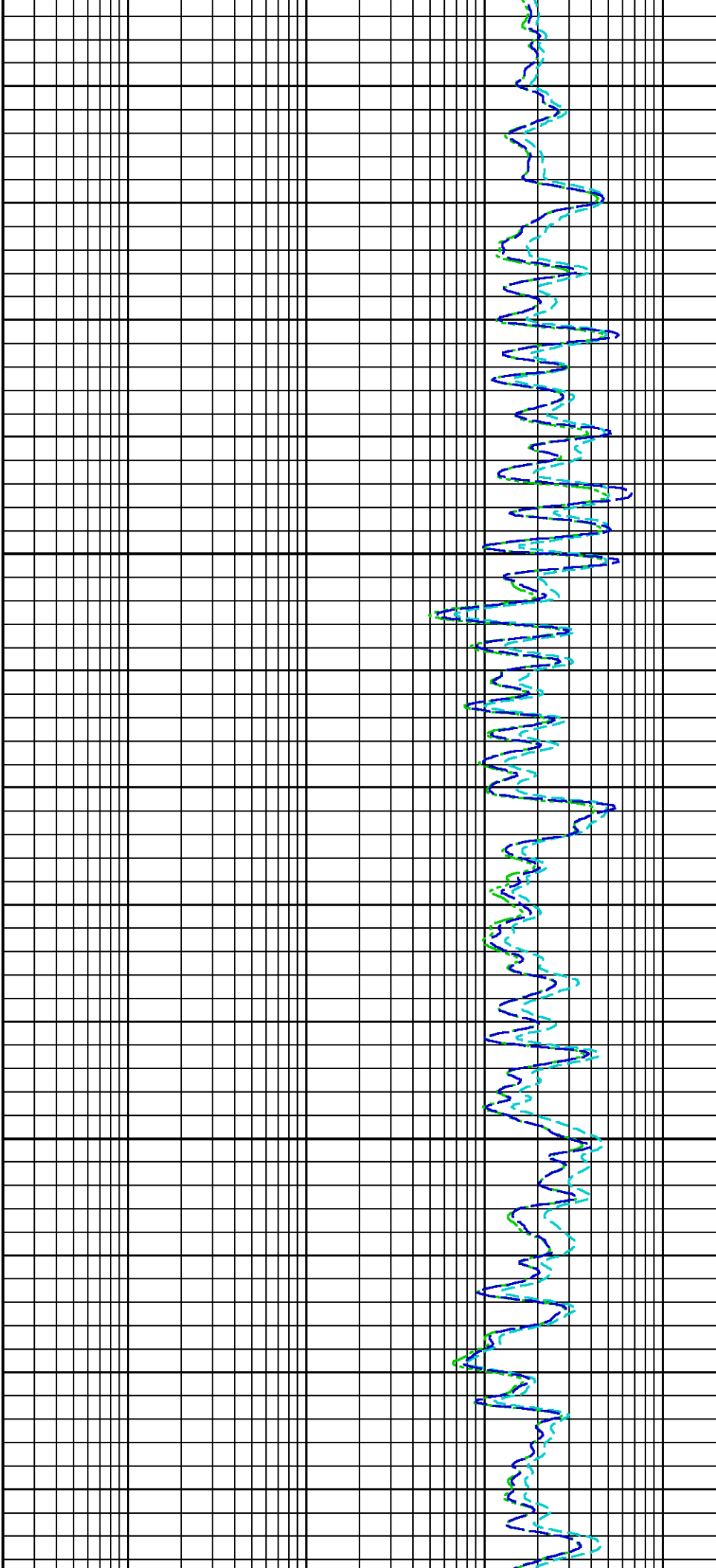


1575

1600

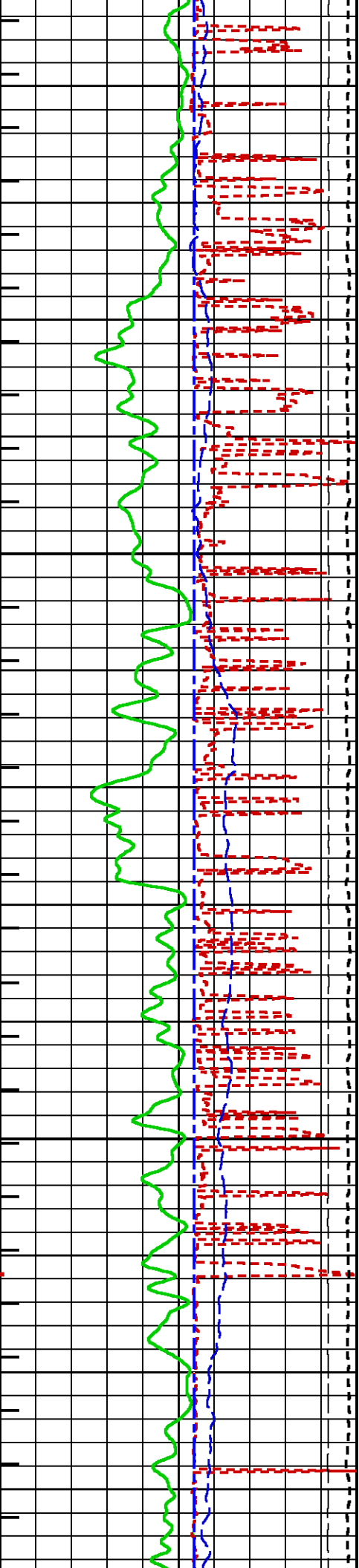
1625

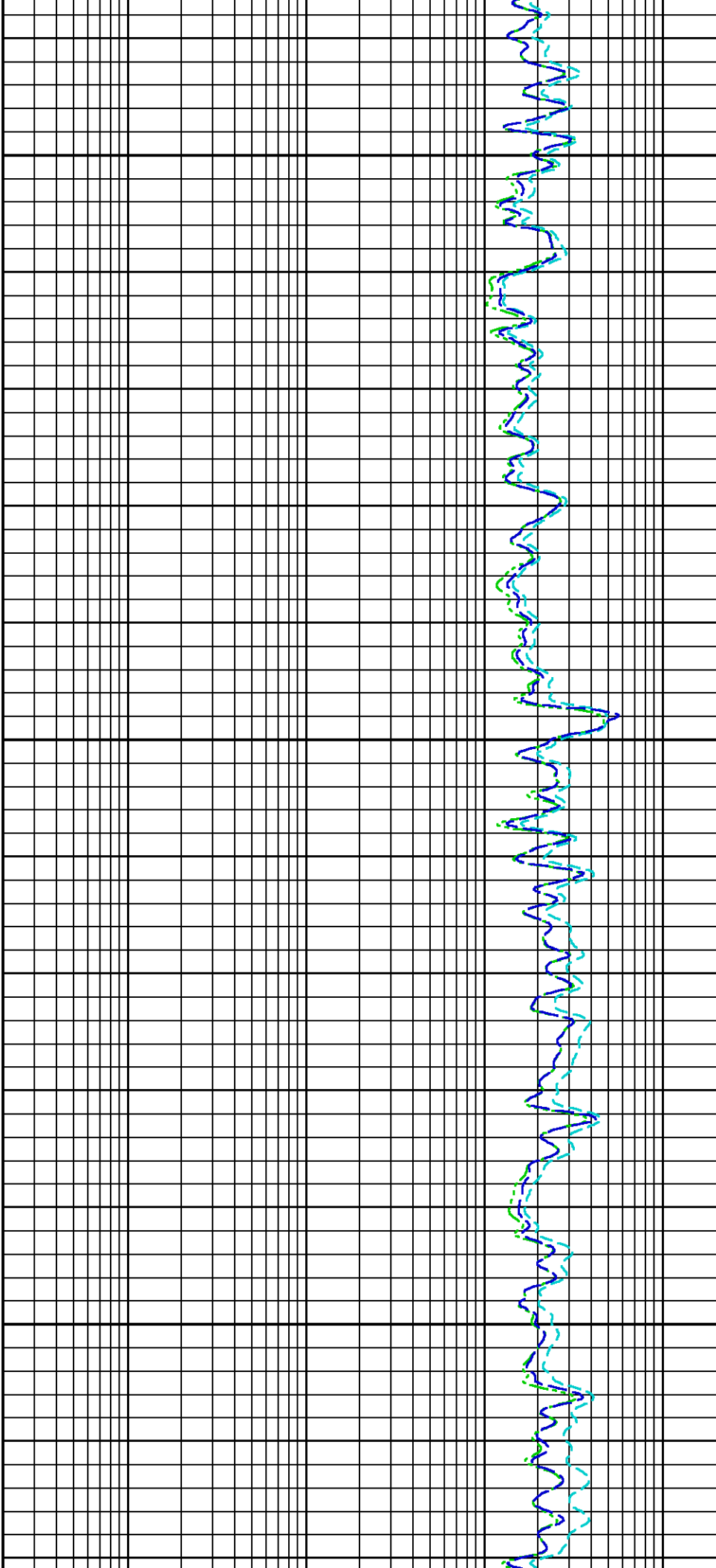




1650

1675

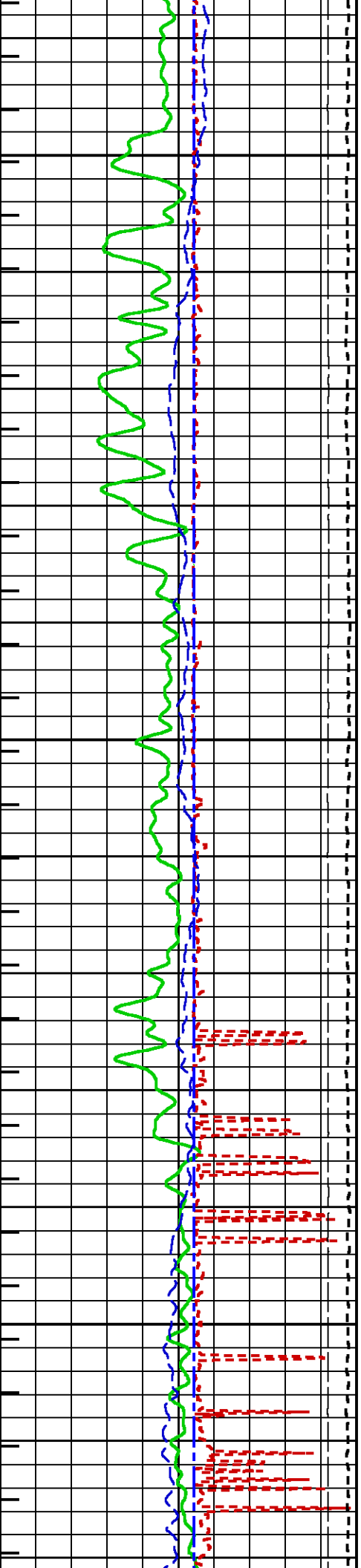


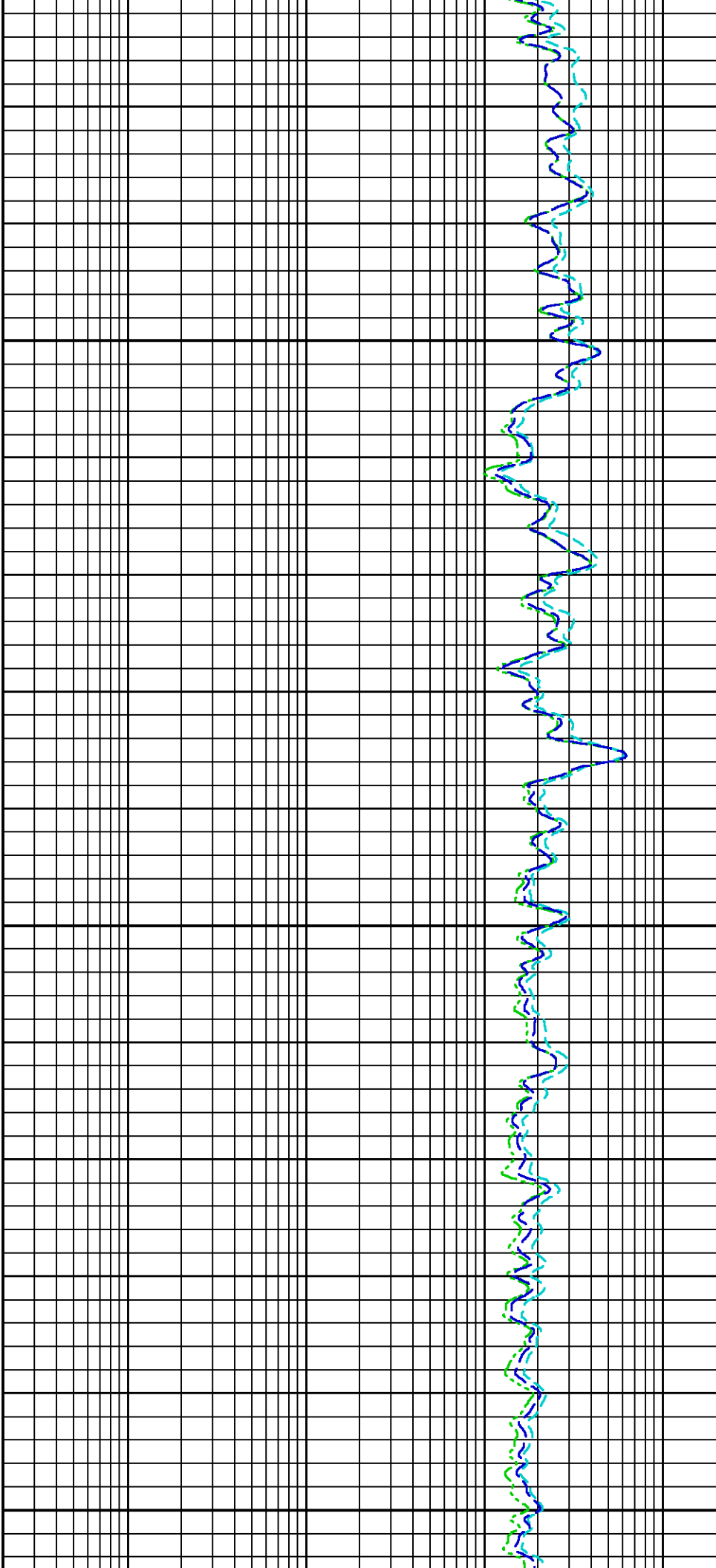


1700

1725

1750

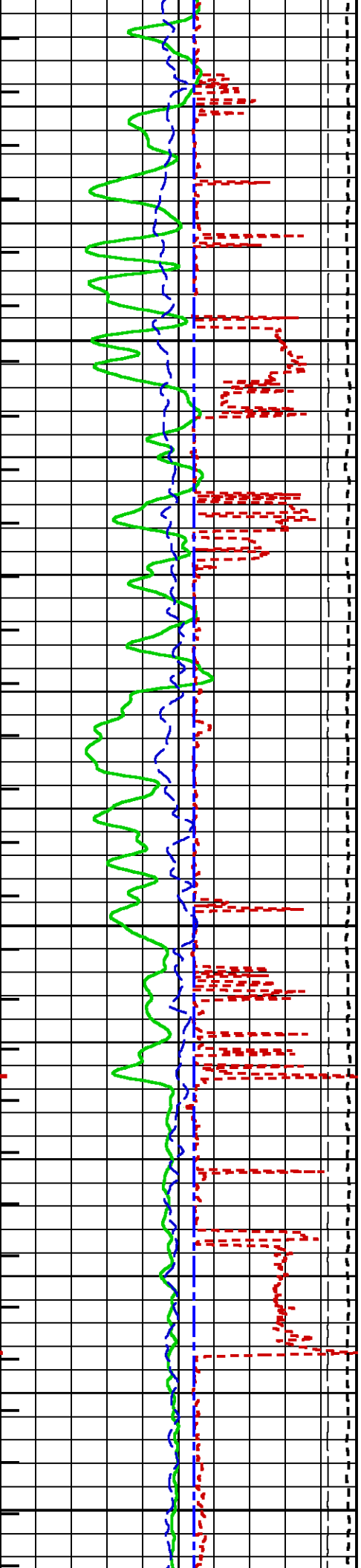


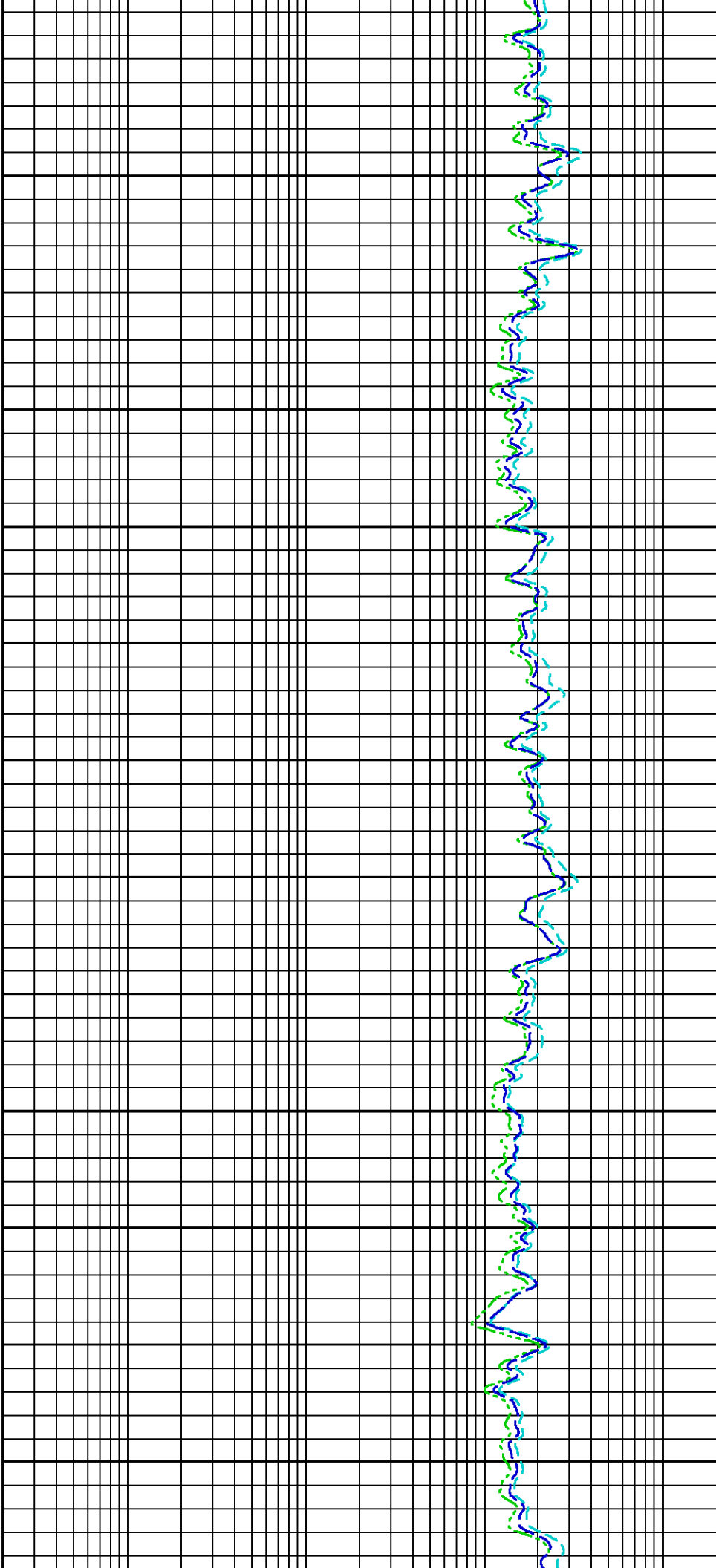


1775

1800

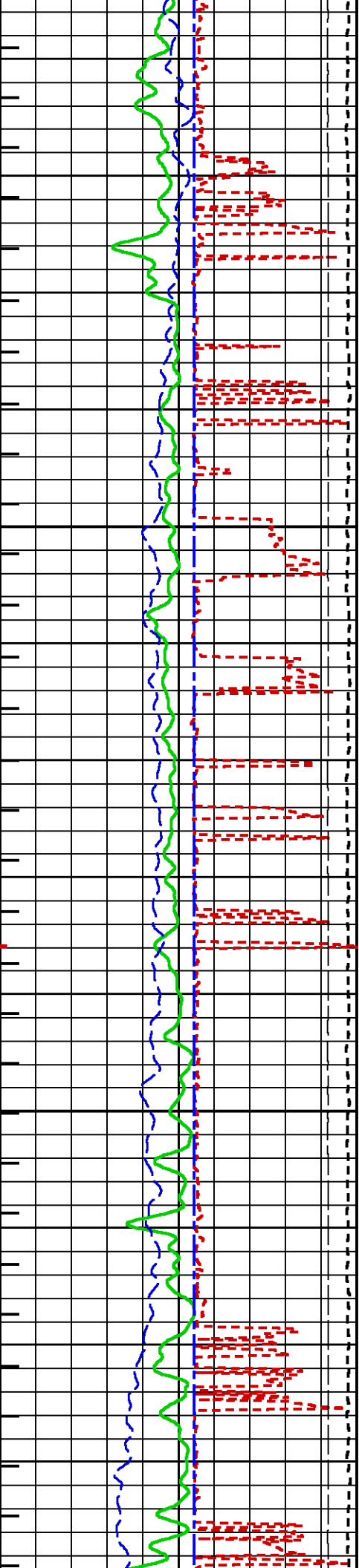
1825

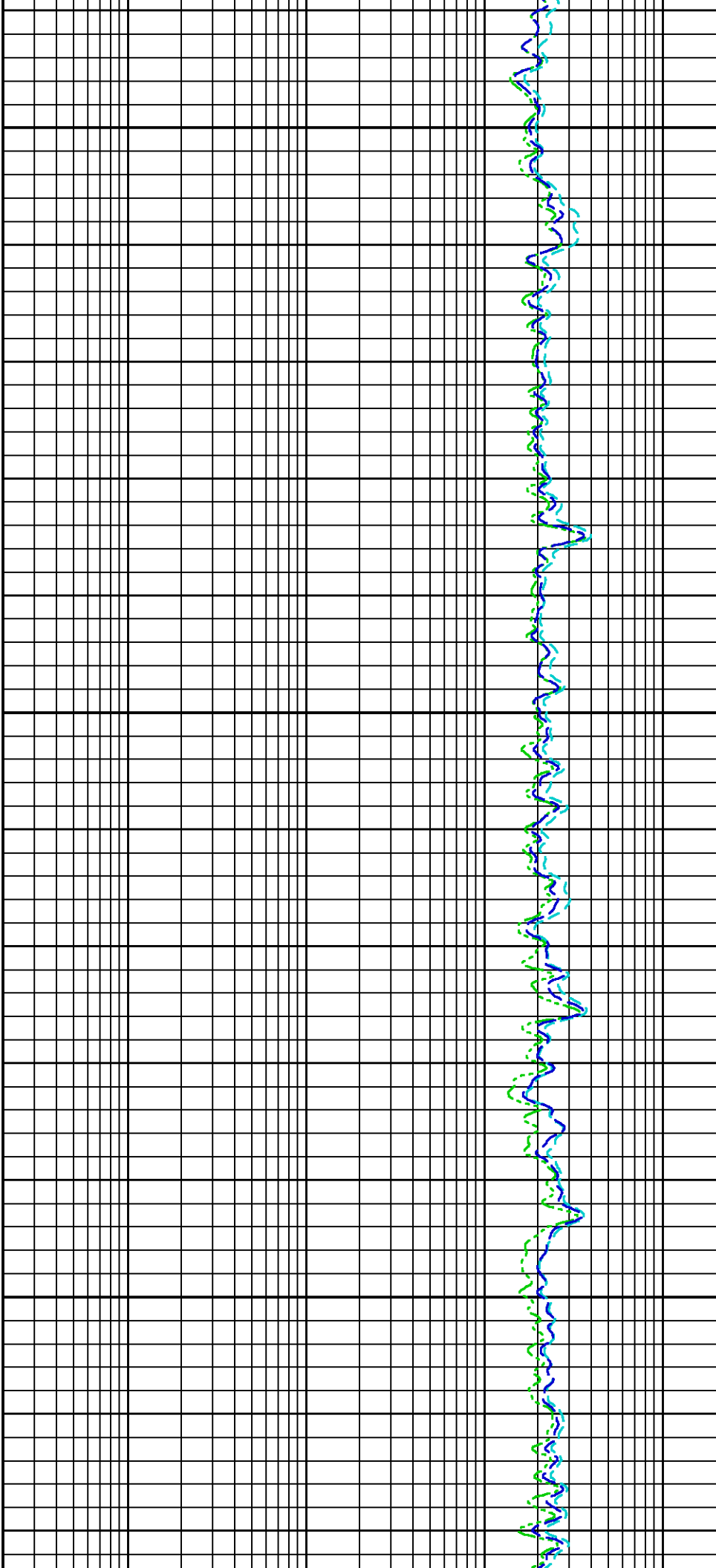




1850

1875

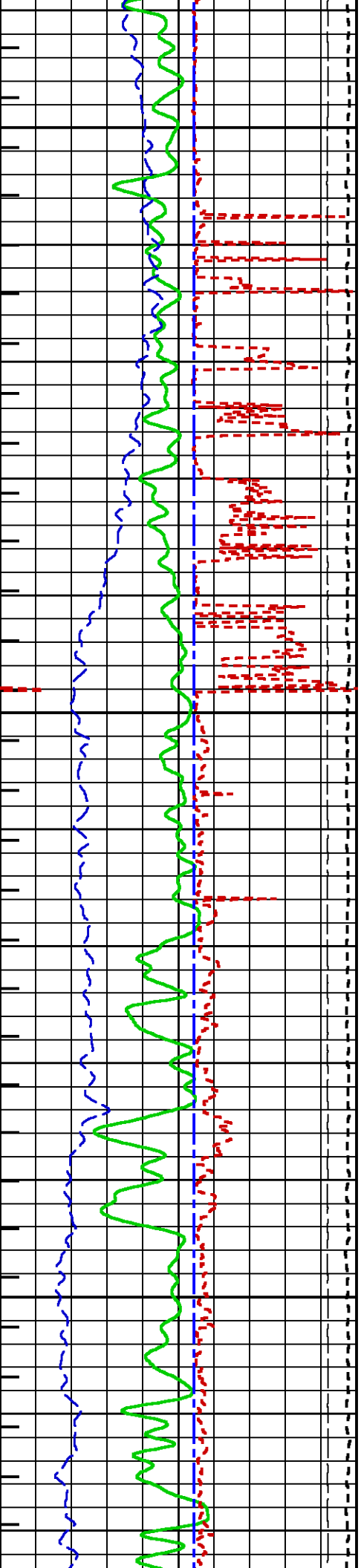




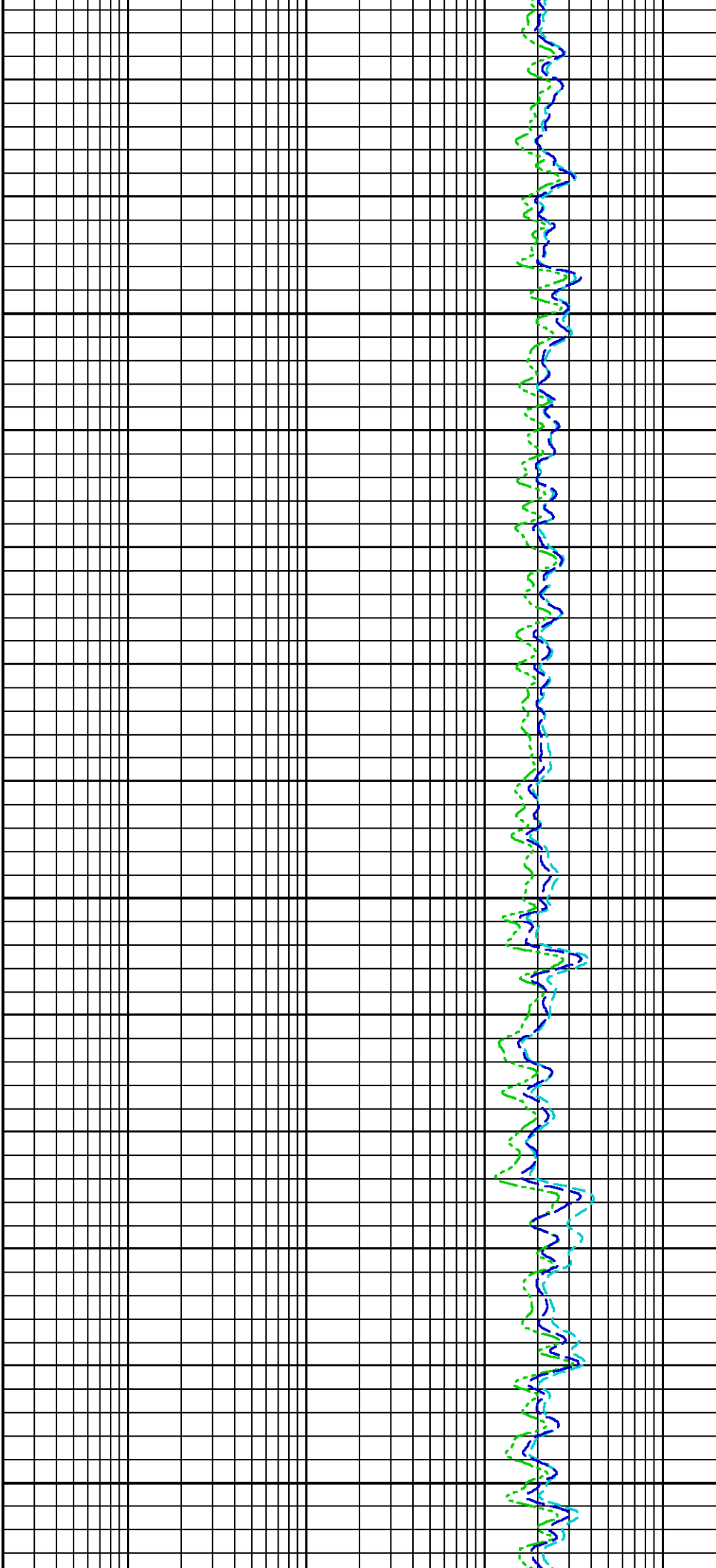
1900

1925

1950



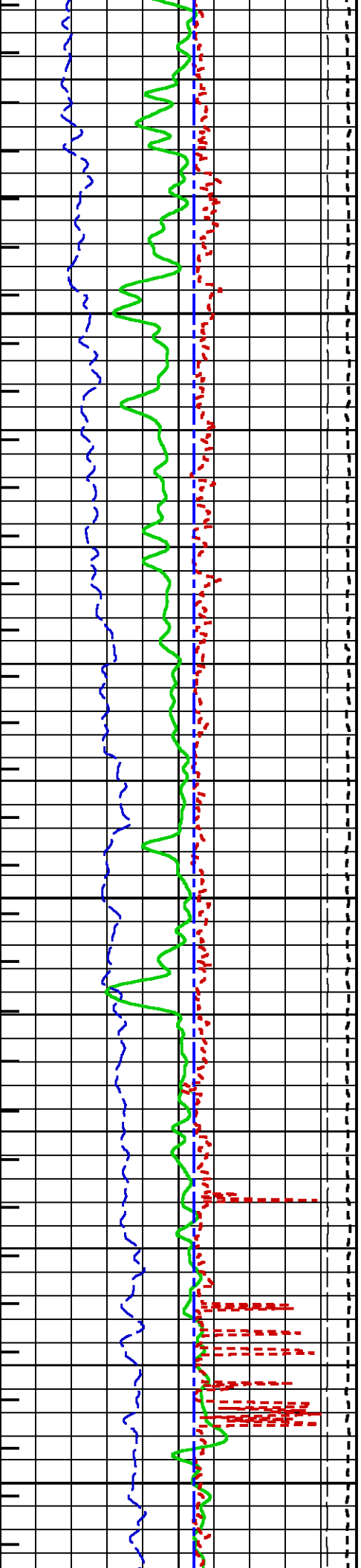


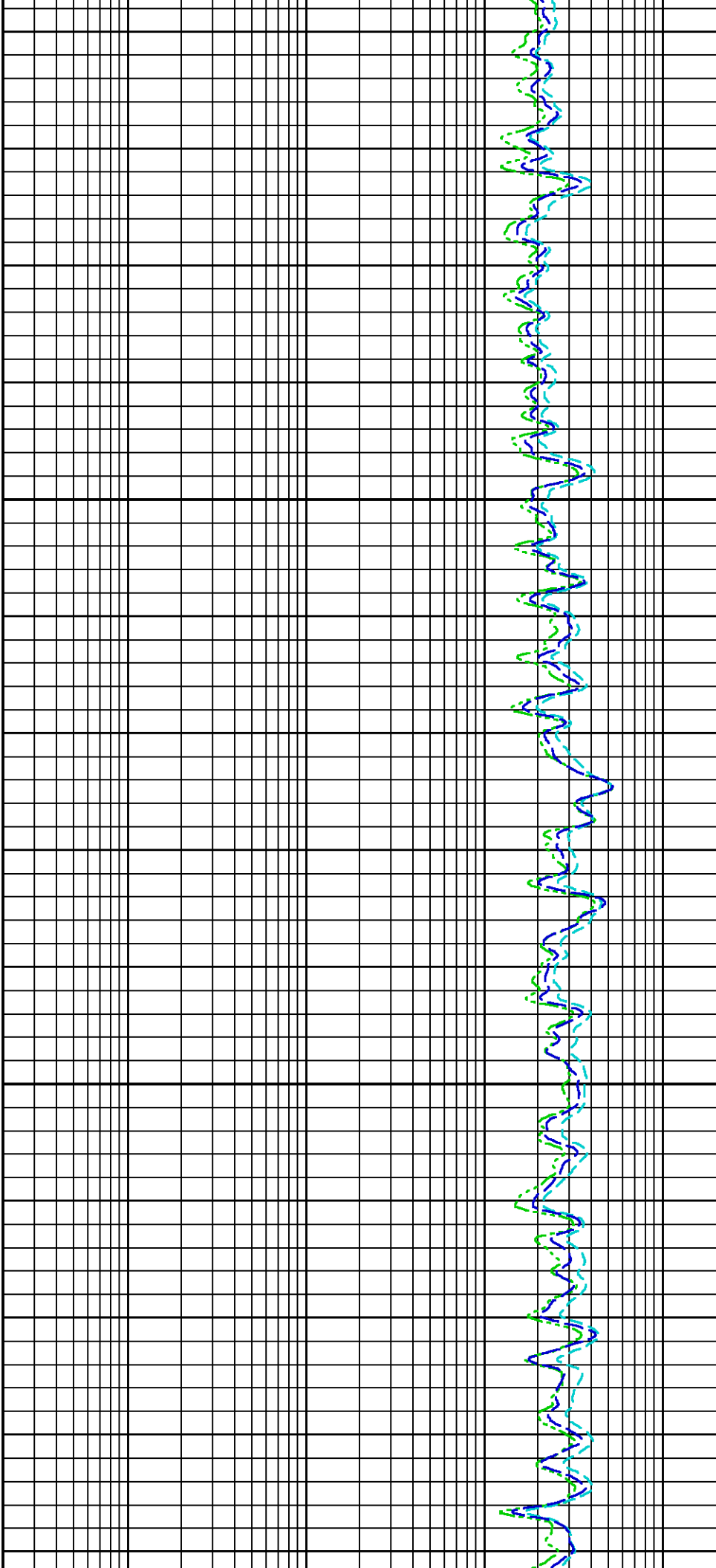


1975

2000

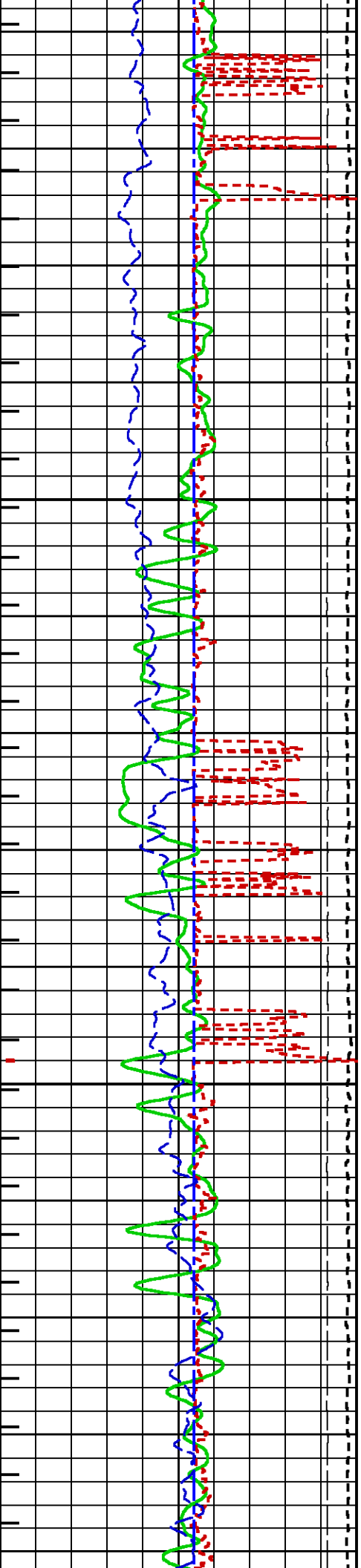
2025

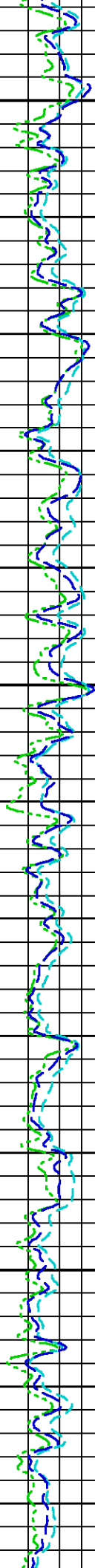
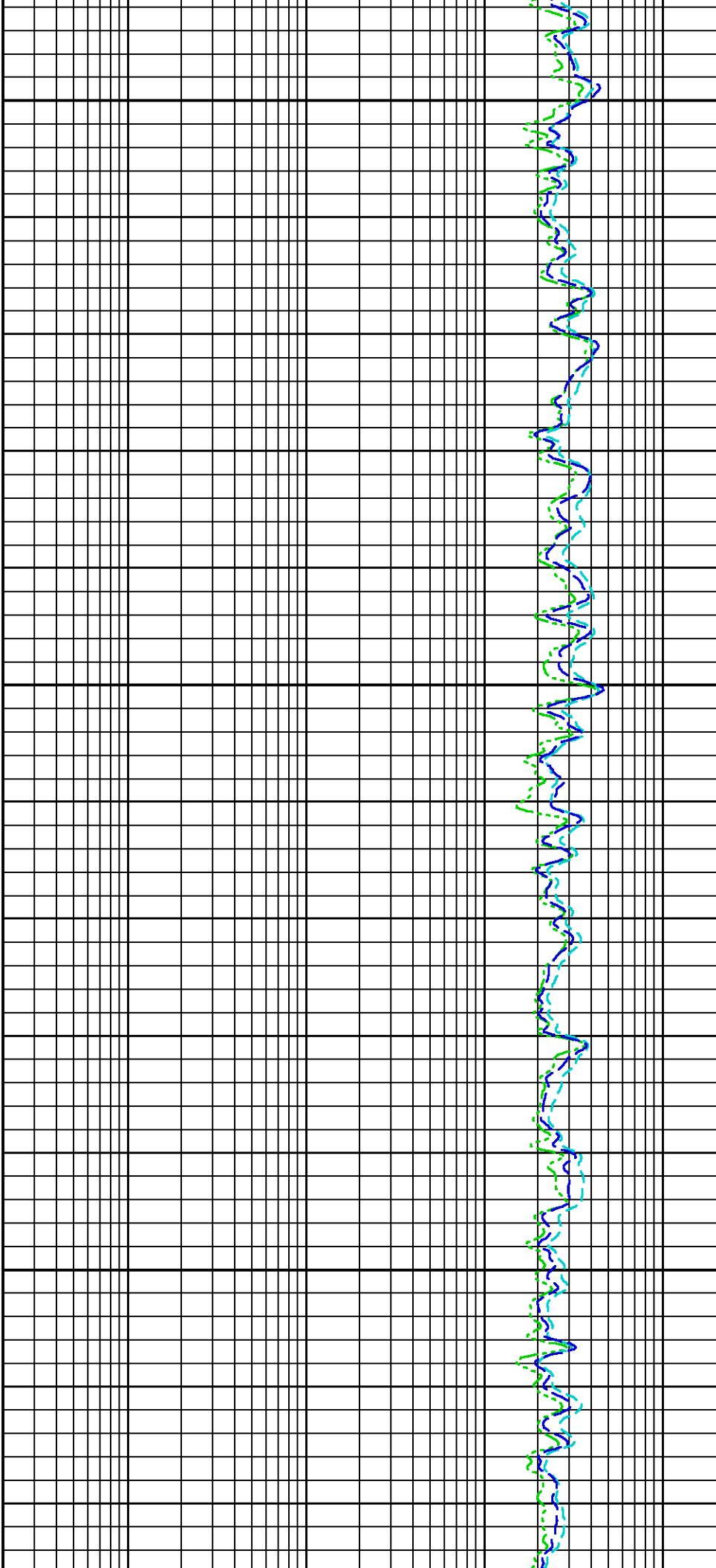




2050

2075

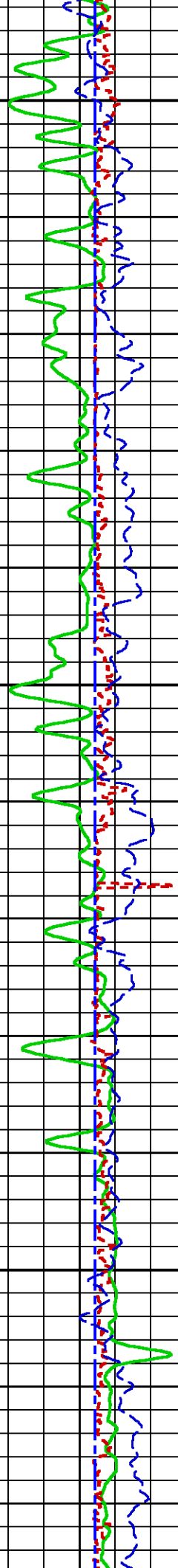


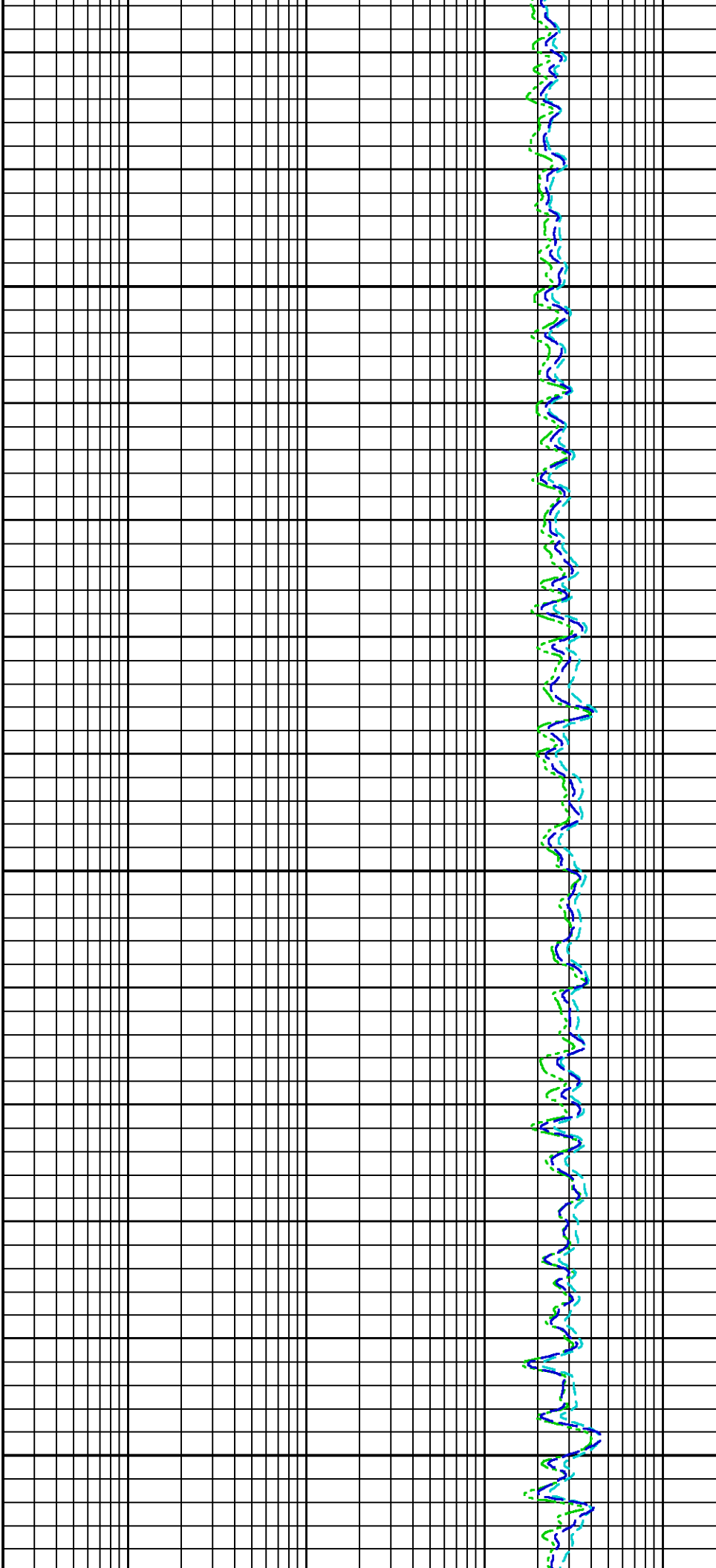


2100

2125

2150

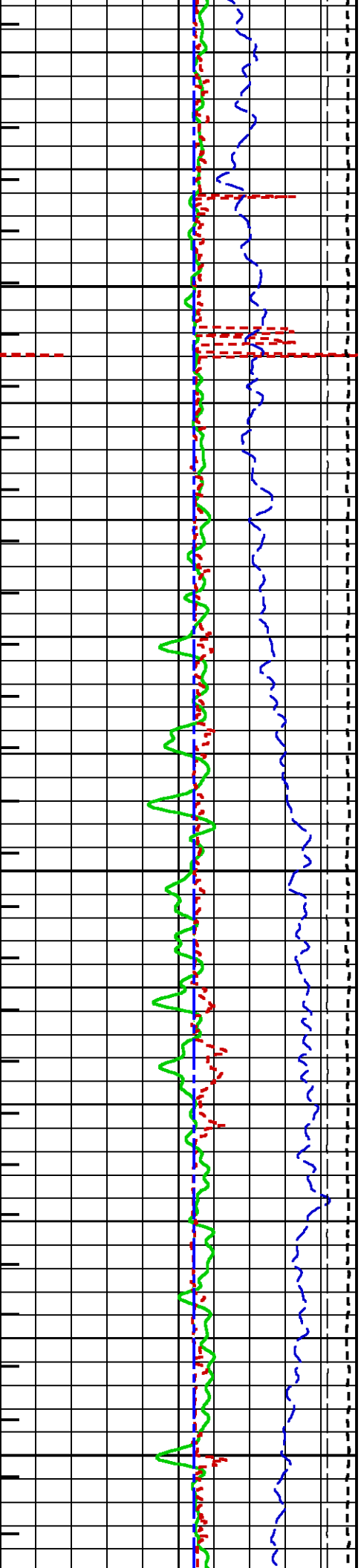


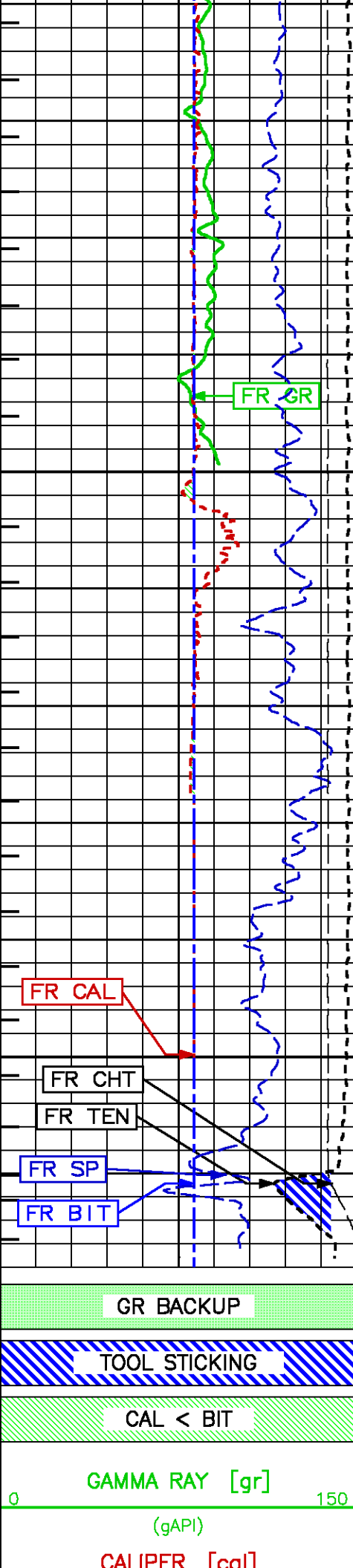


2175

2200

2225

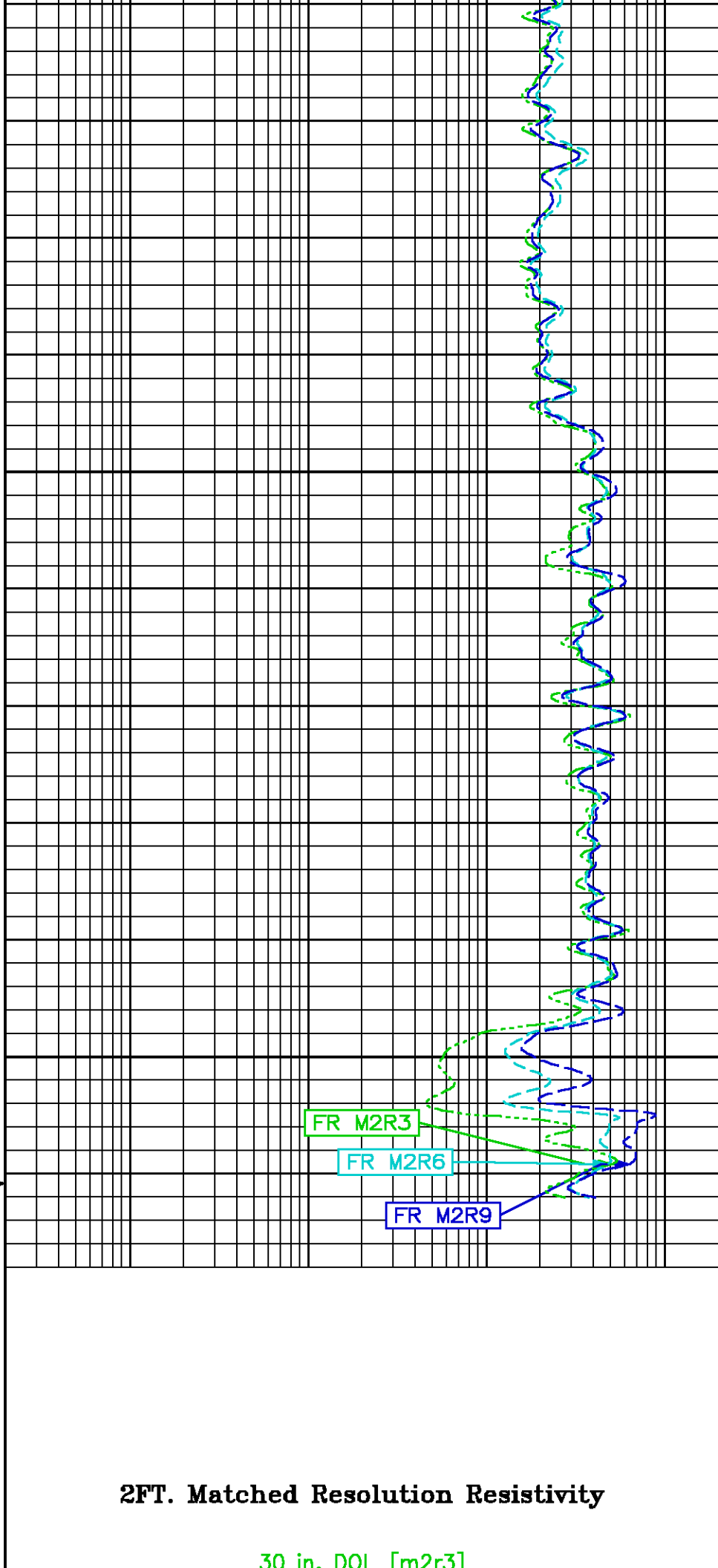


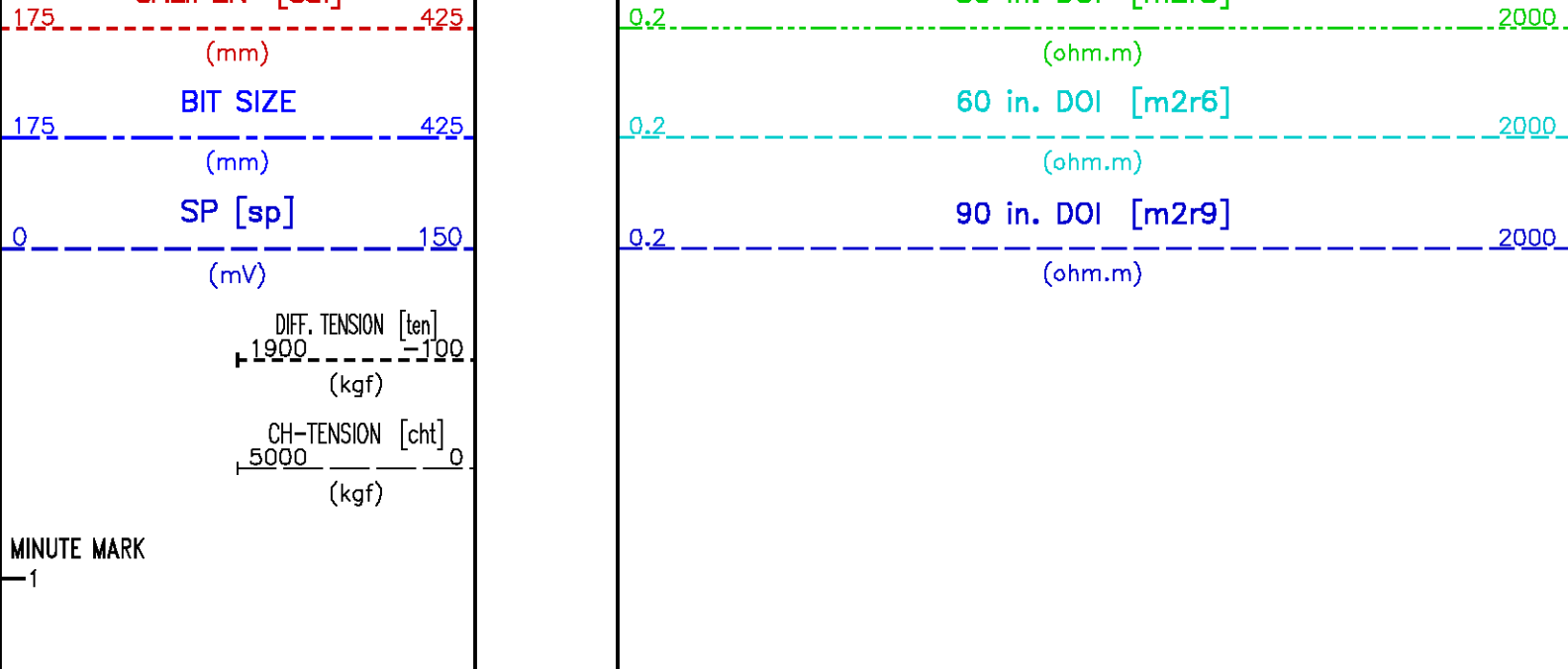


2250

2275

METERS





## REPEAT LOG

ECLIPS 6.1i Aug 06, 2010  
Patches: 1

Wed Nov 3 06:41:19 2010

Pcrplt /main/62

Cplot

Pdf\_Cpp /main/16

Fileview 5.50

### PARAMETER AND FILTER SUMMARY REPORT

FILE: /data/pass/nalcor\_run1/m980g01.prm  
LOGGING MODE: DEPTH DIRECTION: UP  
TOP DEPTH: 564.238 m BOTTOM DEPTH: 649.999 m

#### SYMMETRIC FILTER

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (m)	
CHT	FILTER ()	medium (1)		TOP	BOTTOM
TENSION	FILTER ()	medium (1)		"	"
GR	FILTER ()	medium (1)		"	"
SP-SPDH	FILTER ()	medium (1)		"	"

#### BOREHOLE & CEMENT

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (m)	
CASING - BOREHOLE & CEMENT VOLUME	CASING O.D.	244.500	mm	TOP	BOTTOM
CALIPER SELECTION	X-Y VS MULTI-ARM SEL	MULTI-ARM CAL		"	"
BIT SIZE	BIT SIZE	311.000	mm	"	"
BH MUD RESISTIVITY SOURCE	RMUD SOURCE (HDIL)	MUD SAMP DERIVED TOOL MEASURED		TOP 582.171	582.171 BOTTOM
MUD SAMPLE RESISTIVITY	MUD SAMPLE TEMP	25.0	degC	TOP	BOTTOM
	MUD SAMPLE RES	0.600	ohm.m	TOP	579.458
		1.000	ohm.m	579.458	BOTTOM
BOREHOLE TEMP from GRADIENT	Known BH REF TEMP	25.0	degC	TOP	BOTTOM
	at BH REF DEPTH	0.0	m	"	"
	with TEMP GRADIENT	2.187	0.01 degC/m	"	"
BOREHOLE CORR DIAMETER SOURCE	CALIPER/FIXED DIA. (mbh*)	USE CALIPER		"	"
BOREHOLE CORR DIAMETER	FIXED DIAMETER (mbh*)	311.000	mm	"	"
X-Y COMBINED CALIPER PROCESSING-FOCMYSY	Caliper - FOCUS	Average		"	"

## ACCELERATION PROCESSING

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (m)	
ACCEL CORR SWITCH	ACCEL DEPTH CORR	CORRECTION ON		TOP	BOTTOM

## HDIL PROCESSING

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (m)	
HDIL TEMPERATURE CORRECTION	TEMP CORRECTION	ON		TOP	BOTTOM
ADAPTIVE BOREHOLE CORRECTION	ABC PROCESSING	ON		''	''
	ABC to CALCULATE	MUD CONDUCTIVITY		TOP	580.738
	STANDOFF	38.10	mm	580.738	BOTTOM
	TOOL POSITION	ECCENTERED		TOP	BOTTOM
	Rmud MULTIPLIER	1.000		''	''

## CURVE DESCRIPTION REPORT

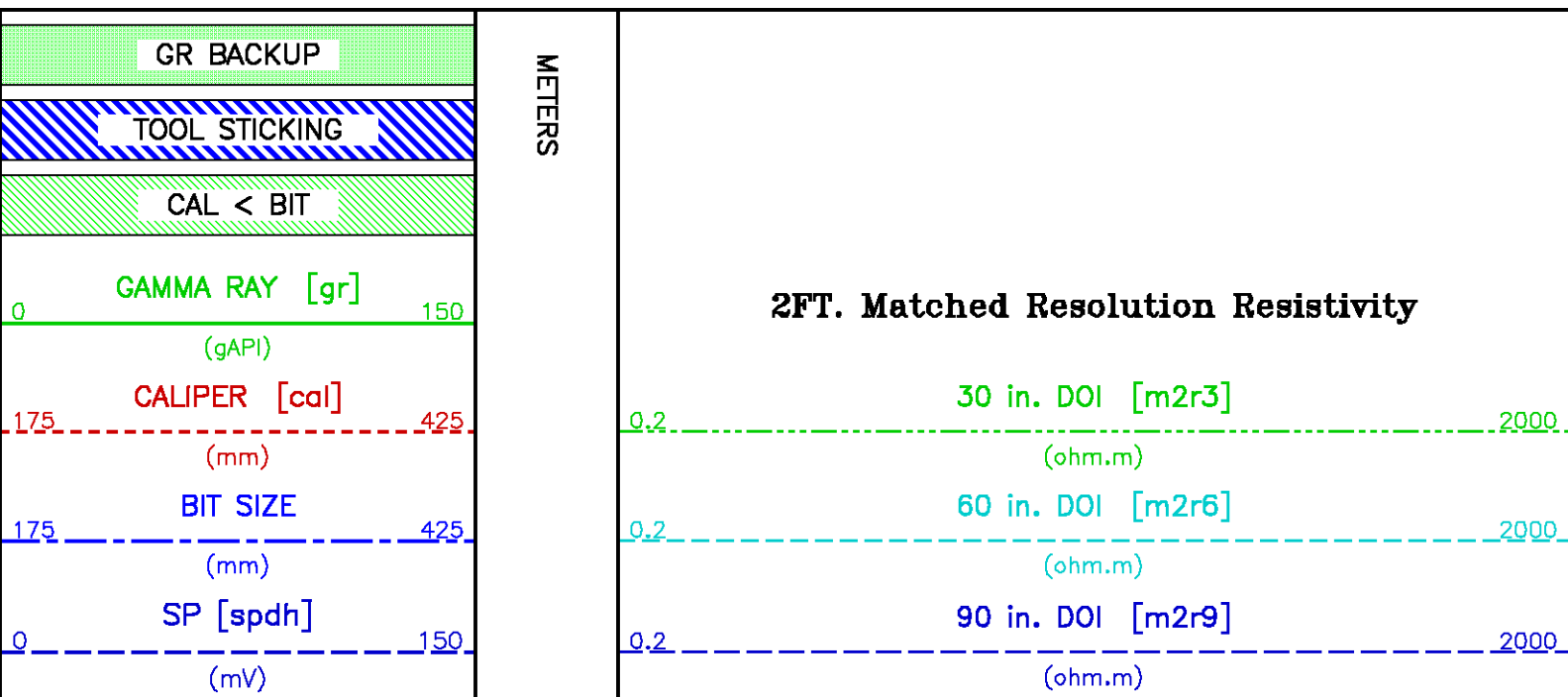
CURVE NAME	CREATION DATE	CURVE DESCRIPTION		
F1:BIT	Nov 2 22:33:11 2010	BIT SIZE		
F1:CAL	Nov 2 22:33:11 2010	CALIPER		
F1:CHT	Nov 2 22:33:11 2010	CABLE HEAD TENSION		
F1:GR	Nov 2 22:33:11 2010	GAMMA RAY		
F1:M2R3	Nov 2 22:33:11 2010	VERTICAL 2-FOOT RESOLUTION MATCHED RESISTIVITY, 30-INCH DOI		
F1:M2R6	Nov 2 22:33:11 2010	VERTICAL 2-FOOT RESOLUTION MATCHED RESISTIVITY, 60-INCH DOI		
F1:M2R9	Nov 2 22:33:11 2010	VERTICAL 2-FOOT RESOLUTION MATCHED RESISTIVITY, 90-INCH DOI		
F1:MMRK	Nov 2 22:33:11 2010	MINUTE MARK		
F1:SPDH	Nov 2 22:33:11 2010	SPONTANEOUS POTENTIAL PROCESSED IN COMMON REMOTE		
F1:TEN	Nov 2 22:33:11 2010	DIFFERENTIAL TENSION		

## CURVE MEASURE POINT OFFSET

CURVE	OFFSET (m)	CURVE	OFFSET (m)	CURVE	OFFSET (m)	CURVE	OFFSET (m)
BIT	0.00	GR	33.68	M2R9	0.84		
CAL	5.52	M2R3	0.84	SPDH	0.38		
CHT	0.00	M2R6	0.84	TEN	0.00		

Presentation : cpu1:/data/pass/nalcor\_run1/fhdl\_rpt.pdf [1:240 Scale]  
Plot Interval : 526.847 – 649.986 Meters

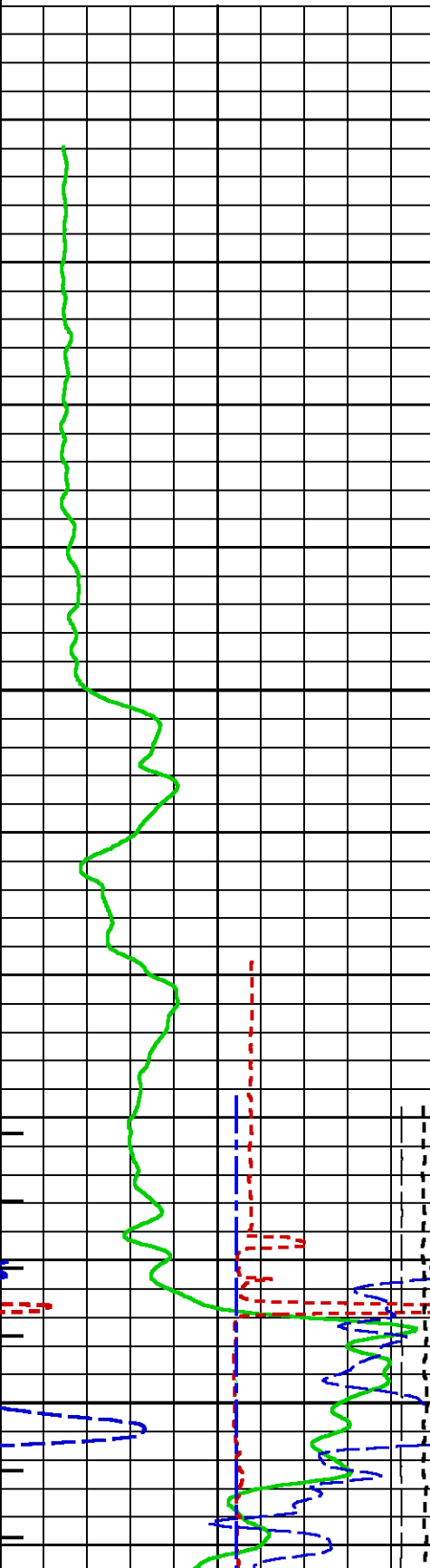
Data File 1 : F1 : cpu1:/data/pass/nalcor\_run1/r1t2\_repeat.xtf  
Created On : Nov 2 22:33:11 2010  
Company : NALCOR ENERGY  
Well : NALCOR ET AL FINNEGAN 31  
Field : FINNEGAN  
File Interval : 526.847 – 649.986 Meters  
Oct : m980g



DIFF. TENSION [ten]  
1900 -100  
(kgf)

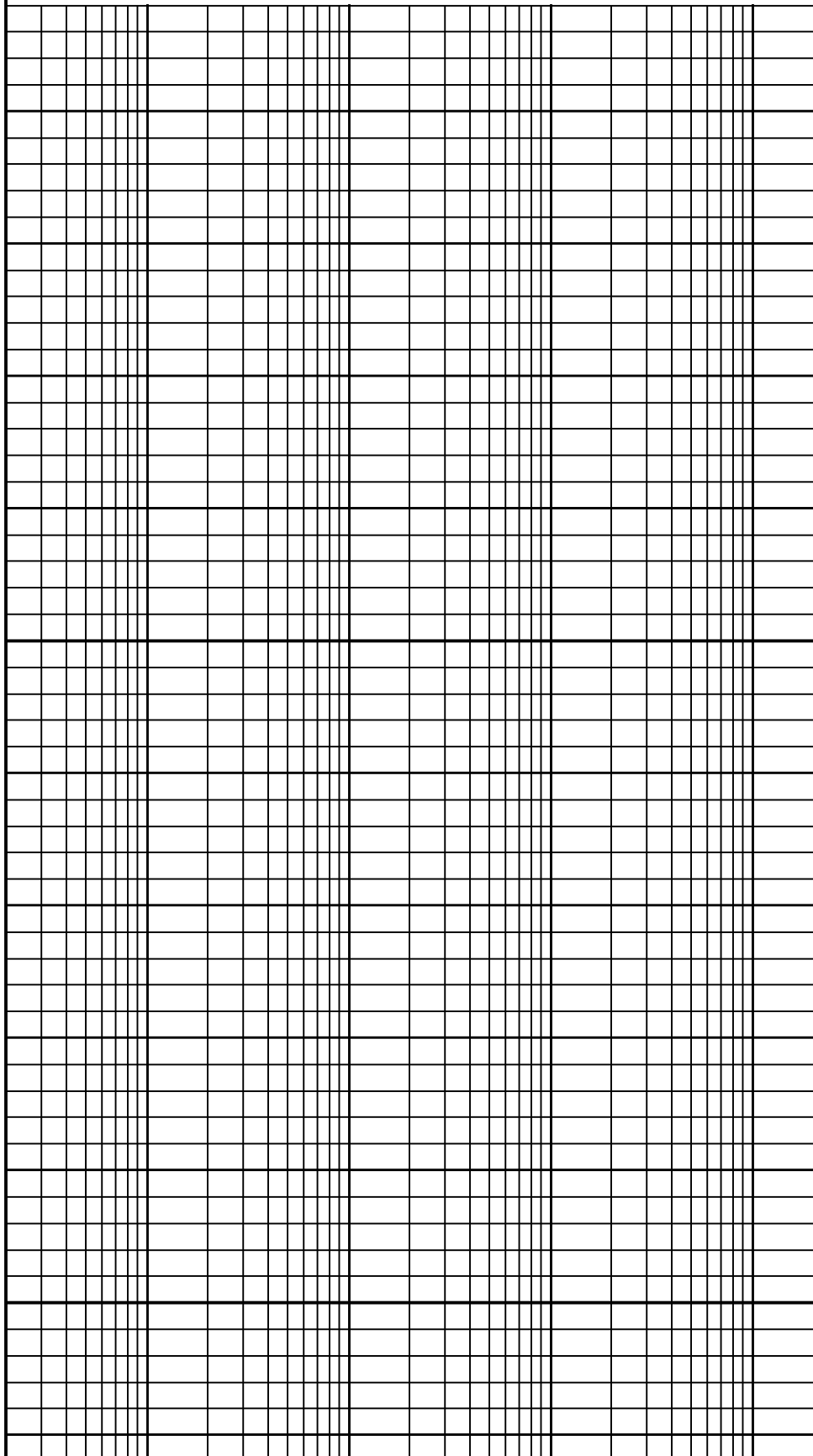
CH-TENSION [cht]  
5000 0  
(kgf)

MINUTE MARK  
1

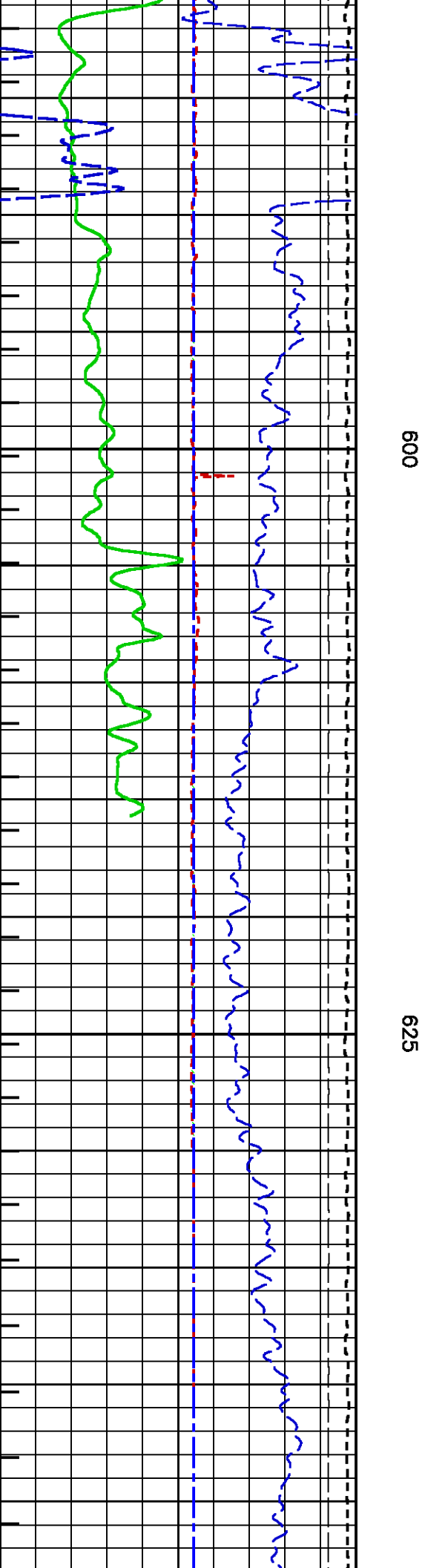
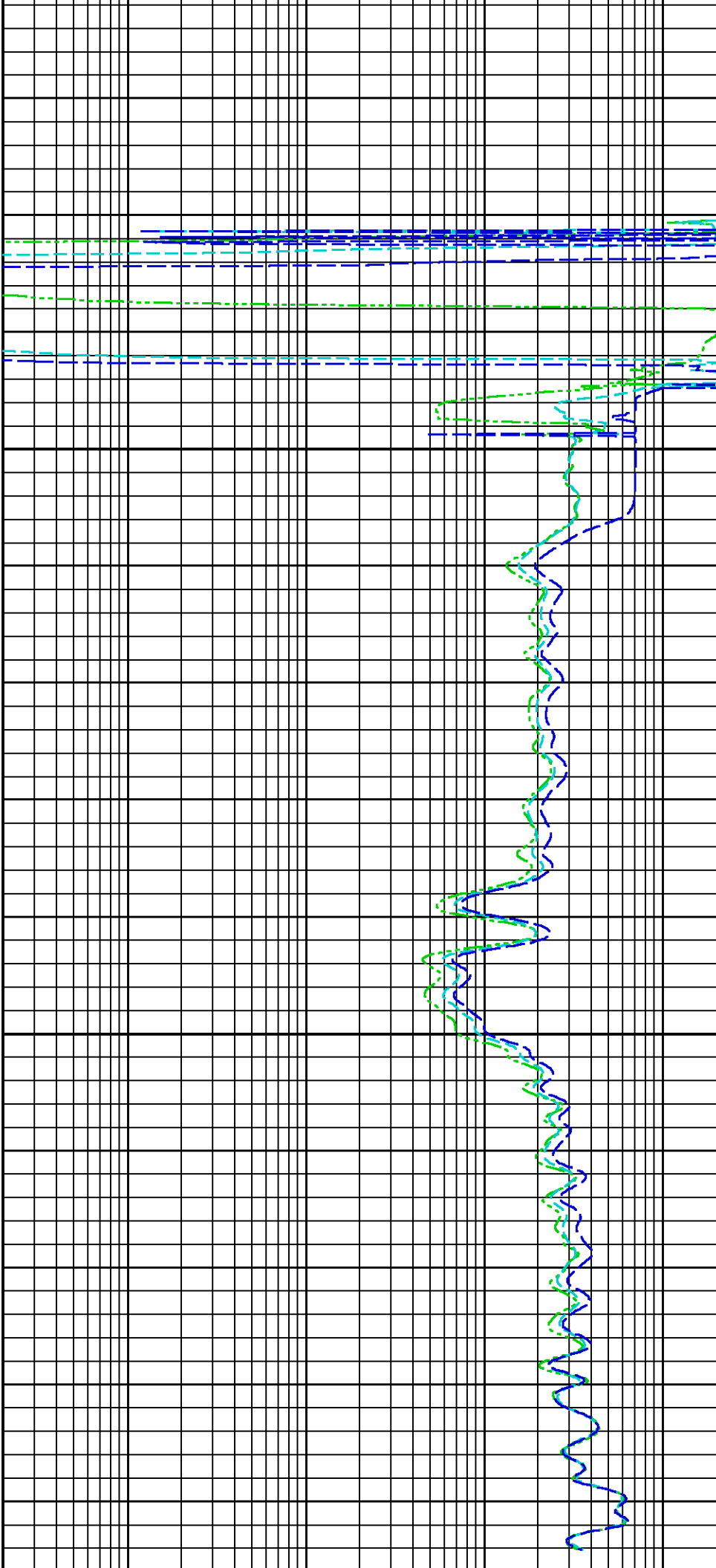


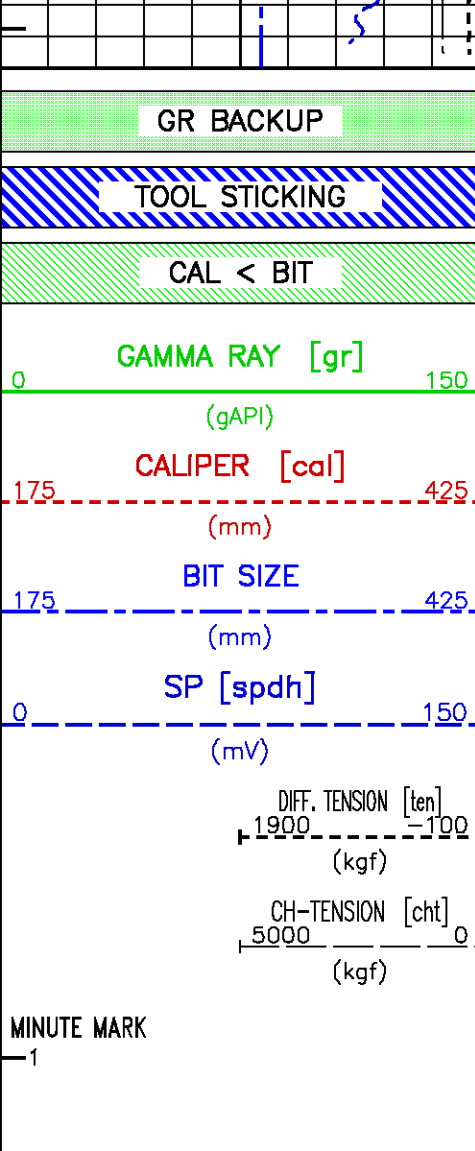
550

575

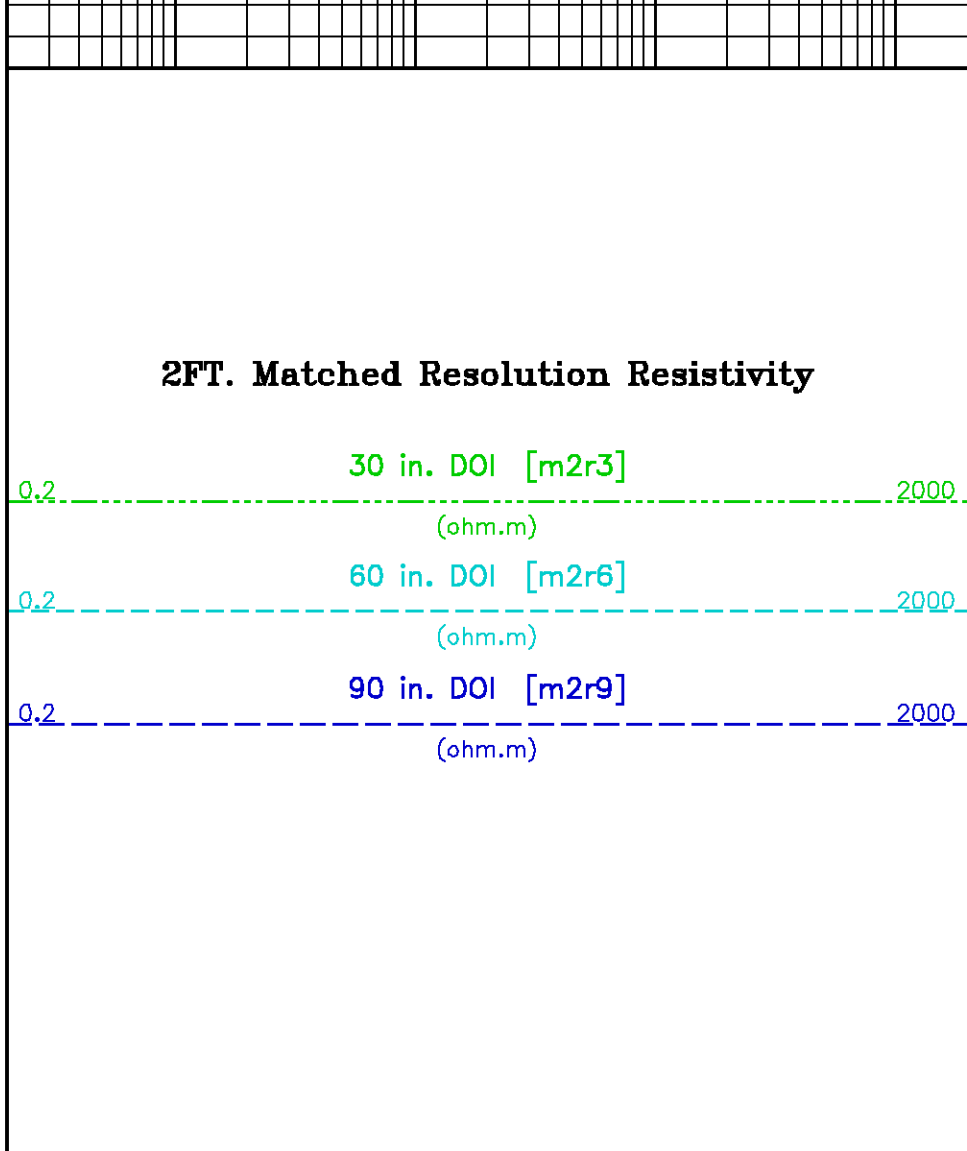








650  
METERS



## CALIBRATION / VERIFICATION SUMMARY

Source File: /dat1a/pass/nalcor\_run1/r112\_cals.tp1

### GR PRIMARY CALIBRATION SUMMARY

TOOL #: 1329XA 370830

DATE/TIME PERFORMED: Wed Oct 6 11:15:46 2010

UNIT #: 3885TF 004291

CALB JIG #: 4702NK DA-549

	BACKGROUND CALBRTR ON (cts/s)	CALBRTR ON (cts/s)	CR DIFF (cts/s)	MULT	BACKGROUND CALBRTR ON (gAPI)	CALBRTR ON (gAPI)	CALBRTR (gAPI)
GR	323.76	1232.13	908.4	0.165	53.46	203.46	150
			830.0 960.0				

### GR PRIMARY VERIFICATION SUMMARY

TOOL #: 1329XA 370830

DATE/TIME PERFORMED: Wed Oct 6 11:23:02 2010

UNIT #: 3885TF 004291

VERI JIG #: 4702NK DA-549

	BACKGROUND (cts/s)	CALBRTR ON (cts/s)	MULT	BACKGROUND (gAPI)	CALBRTR ON (gAPI)	DIFF. (gAPI)
GR	323.58	1229.64	0.165	53.43	203.05	149.62
						140.00 160.00

## GR BEFORE LOG VERIFICATION SUMMARY

TOOL #: 1329XA 370830

DATE/TIME PERFORMED: Tue Nov 2 09:15:17 2010

DAYS SINCE CAL: 26

UNIT #: 3885TF 004291

VERI JIG #: 4702NK DA-549

	BACKGROUND (cts/s)	CALBRTR ON (cts/s)	MULT	BACKGROUND (gAPI)	CALBRTR ON (gAPI)	DIFF. (gAPI)
GR	103.00	1024.82	0.165	17.01	169.23	152.22
						139.62 159.62

## CAL PRIMARY CALIBRATION SUMMARY

TOOL #: 2223XA 10116105

DATE/TIME PERFORMED: Wed Oct 6 10:56:50 2010

UNIT #: 3885TF 004291

	SIZE (mm)	VALUE	MULTIPLIER	ADD
SMALL RING (Arm)	177.000	1147.2		
LARGE RING (Arm)	279.400	2130.0	0.10419	57.47083
PAD CLOSED		2208.8	0.06350	-140.25879

## CAL BEFORE LOG VERIFICATION SUMMARY

TOOL #: 2223XA 10116105

DATE/TIME PERFORMED: Tue Nov 2 23:15:52 2010

DAYS SINCE CAL: 27

UNIT #: 3885TF 004291

	VALUE	MULTIPLIER	ADD	SIZE (mm)
ARM	2436.0	0.10419	57.47083	311.3
PAD	1764.0	0.06350	-140.25879	-28.2

ACTUAL MEASURED

	ACTUAL (mm)	MEASURED (mm)
DIAMETER (arm+pad)	320.400	323.0
		310.2 330.6

## CAL AFTER LOG VERIFICATION SUMMARY

TOOL #: 2223XA 10116105 DATE/TIME PERFORMED: Wed Nov 3 14:33:05 2010 DAYS SINCE CAL: 28

UNIT #: 3885TF 004291

	VALUE	MULTIPLIER	ADD	SIZE (mm)
ARM	2368.0	0.10419	57.47083	304.2
PAD	1860.0	0.06350	-140.25879	-22.1

	ACTUAL (mm)	MEASURED (mm)
DIAMETER (arm+pad)	320.400	322.0
		310.2 330.6

## CAL[2] PRIMARY CALIBRATION SUMMARY

TOOL #: 2223XA 10141929 DATE/TIME PERFORMED: Wed Oct 6 10:51:41 2010

UNIT #: 3885TF 004291

	SIZE (mm)	VALUE	MULTIPLIER	ADD
SMALL RING (Arm)	177.000	1131.2		
LARGE RING (Arm)	279.400	2106.0	0.10505	58.17064
PAD CLOSED		2228.0	0.06350	-141.47800

## CAL[2] BEFORE LOG VERIFICATION SUMMARY

TOOL #: 2223XA 10141929 DATE/TIME PERFORMED: Tue Nov 2 23:14:34 2010 DAYS SINCE CAL: 27

UNIT #: 3885TF 004291

	VALUE	MULTIPLIER	ADD	SIZE (mm)
ARM	2156.0	0.10505	58.17064	284.7
PAD	2580.0	0.06350	-141.47800	22.4

	ACTUAL (mm)	MEASURED (mm)
DIAMETER (arm+pad)	320.400	319.0
		310.2 330.6

## CAL[2] AFTER LOG VERIFICATION SUMMARY

TOOL #: 2223XA 10141929 DATE/TIME PERFORMED: Wed Nov 3 14:36:27 2010 DAYS SINCE CAL: 28

UNIT #: 3885TF 004291

	VALUE	MULTIPLIER	ADD	SIZE (mm)
ARM	2180.0	0.10505	58.17064	287.2
PAD	2770.0	0.06350	-141.47800	34.4

	ACTUAL (mm)	MEASURED (mm)
DIAMETER (arm+pad)	320.400	321.6
		310.2 330.6

## HDIL PRIMARY CALIBRATION SUMMARY

TOOL #: 1530XA 402505 DATE/TIME PERFORMED: Wed May 19 15:56:59 2010

UNIT #: 3885TF 004291 GRCOND ID & DATE: Nlsku 52208

ZERO DATA(mv)	10 KHz	30 KHz	50 KHz	70 KHz	90 KHz	110 KHz	130 KHz	150 KHz
Coil 0 R	-0.0101 -0.2000 0.2000	0.0024 -0.1000 0.1000	0.0019 -0.1000 0.1000	-0.0008 -0.1000 0.1000	0.0005 -0.1000 0.1000	-0.0004 -0.1000 0.1000	0.0002 -0.1000 0.1000	0.0000 -0.1000 0.1000
Coil 0 Q	0.0060 -0.5000 0.5000	0.0015 -0.2000 0.2000	-0.0016 -0.1000 0.1000	0.0003 -0.1000 0.1000	0.0013 -0.1000 0.1000	-0.0010 -0.1000 0.1000	-0.0007 -0.1000 0.1000	0.0005 -0.1000 0.1000
Coil 1 R	-0.0120 -0.2000 0.2000	0.0022 -0.1000 0.1000	0.0015 -0.1000 0.1000	0.0007 -0.1000 0.1000	0.0017 -0.1000 0.1000	-0.0012 -0.1000 0.1000	0.0002 -0.1000 0.1000	0.0008 -0.1000 0.1000
Coil 1 Q	0.0025 -0.5000 0.5000	0.0038 -0.2000 0.2000	-0.0028 -0.1000 0.1000	0.0005 -0.1000 0.1000	0.0009 -0.1000 0.1000	-0.0004 -0.1000 0.1000	0.0011 -0.1000 0.1000	0.0019 -0.1000 0.1000
Coil 2 R	-0.0152 -0.2000 0.2000	0.0021 -0.1000 0.1000	0.0005 -0.1000 0.1000	-0.0016 -0.1000 0.1000	0.0014 -0.1000 0.1000	-0.0012 -0.1000 0.1000	0.0026 -0.1000 0.1000	-0.0020 -0.1000 0.1000
Coil 2 Q	-0.0016 -0.5000 0.5000	0.0000 -0.2000 0.2000	-0.0015 -0.1000 0.1000	-0.0008 -0.1000 0.1000	-0.0009 -0.1000 0.1000	0.0004 -0.1000 0.1000	-0.0011 -0.1000 0.1000	0.0016 -0.1000 0.1000
Coil 3 R	-0.0254 -0.3000 0.3000	0.0002 -0.1000 0.1000	-0.0023 -0.1000 0.1000	0.0057 -0.1000 0.1000	-0.0047 -0.1000 0.1000	0.0012 -0.1000 0.1000	-0.0003 -0.1000 0.1000	0.0033 -0.1000 0.1000
Coil 3 Q	-0.0144 -0.5000 0.5000	0.0088 -0.2000 0.2000	-0.0107 -0.1000 0.1000	-0.0054 -0.1000 0.1000	-0.0002 -0.1000 0.1000	0.0014 -0.1000 0.1000	0.0006 -0.1000 0.1000	-0.0008 -0.1000 0.1000
Coil 4 R	-0.1475 -0.5000 0.5000	0.0144 -0.2000 0.2000	0.0166 -0.2000 0.2000	-0.0127 -0.2000 0.2000	0.0049 -0.2000 0.2000	-0.0002 -0.2000 0.2000	0.0066 -0.2000 0.2000	0.0023 -0.2000 0.2000
Coil 4 Q	-0.0568 -1.0000 1.0000	0.0465 -0.4000 0.4000	-0.0228 -0.2000 0.2000	-0.0059 -0.2000 0.2000	0.0112 -0.2000 0.2000	-0.0080 -0.2000 0.2000	0.0001 -0.2000 0.2000	0.0023 -0.2000 0.2000

Coil 5 R	-0.2493	-0.0174	0.0218	-0.0218	-0.0073	-0.0014	-0.0113	0.0170
	-1.2000 1.2000	-0.4000 0.4000	-0.4000 0.4000	-0.4000 0.4000	-0.4000 0.4000	-0.4000 0.4000	-0.4000 0.4000	-0.4000 0.4000
Coil 5 Q	-0.1180	0.0805	-0.0158	-0.0080	0.0180	-0.0196	0.0284	0.0145
	-1.5000 1.5000	-0.8000 0.8000	-0.4000 0.4000	-0.4000 0.4000	-0.4000 0.4000	-0.4000 0.4000	-0.4000 0.4000	-0.4000 0.4000

ELEC. GAINS      10 KHz      30 KHz      50 KHz      70 KHz      90 KHz      110 KHz      130 KHz      150 KHz

Coil 0 M	160.96	159.52	156.59	152.20	146.39	139.19	130.73	121.07
	136.00 166.00	134.00 184.00	131.00 181.00	126.00 176.00	122.00 170.00	118.00 181.00	112.00 150.00	105.00 139.00
Coil 0 P	7.673	25.983	43.719	61.406	79.097	96.808	114.500	132.156
	6.000 9.000	21.000 30.000	35.000 50.000	49.000 71.000	63.000 91.000	77.000 109.000	92.000 130.000	106.000 151.000
Coil 1 M	289.43	286.57	280.85	272.33	261.16	247.50	231.62	213.67
	238.00 328.00	235.00 325.00	230.00 320.00	225.00 312.00	218.00 302.00	208.00 288.00	196.00 268.00	184.00 244.00
Coil 1 P	7.896	26.518	44.578	62.563	80.523	98.470	116.362	134.171
	6.000 9.000	21.000 30.000	35.000 51.000	49.000 71.000	63.000 92.000	78.000 112.000	93.000 130.000	107.000 151.000
Coil 2 M	579.91	574.50	563.50	547.06	525.34	498.60	467.03	431.19
	479.00 659.00	474.00 654.00	463.00 643.00	450.00 622.00	432.00 602.00	412.00 572.00	390.00 540.00	359.00 499.00
Coil 2 P	7.841	26.421	44.438	62.402	80.361	98.321	116.242	134.097
	6.000 9.000	21.000 31.000	35.000 51.000	49.000 71.000	63.000 92.000	76.000 115.000	92.000 135.000	105.000 155.000
Coil 3 M	922.88	914.45	897.14	871.53	837.76	796.22	747.74	692.80
	772.00 1060.00	764.00 1050.00	752.00 1030.00	728.00 1010.00	700.00 970.00	665.00 925.00	628.00 868.00	589.00 799.00
Coil 3 P	7.639	25.867	43.517	61.095	78.649	96.208	113.723	131.178
	6.000 10.000	21.000 30.000	35.000 51.000	49.000 72.000	63.000 93.000	76.000 114.000	90.000 135.000	104.000 156.000
Coil 4 M	1449.6	1438.1	1414.0	1377.4	1328.4	1266.3	1191.8	1105.8
	1210.0 1700.0	1205.0 1690.0	1180.0 1650.0	1140.0 1590.0	1120.0 1530.0	1070.0 1450.0	1000.0 1350.0	942.0 1240.0
Coil 4 P	7.845	26.311	44.273	62.229	80.253	98.354	116.493	134.623
	6.000 10.000	21.000 31.000	35.000 52.000	49.000 73.000	63.000 93.000	77.000 114.000	91.000 135.000	105.000 156.000
Coil 5 M	2995.7	2966.1	2902.8	2810.0	2690.3	2544.2	2379.3	2195.5
	2450.0 3450.0	2420.0 3400.0	2410.0 3320.0	2350.0 3200.0	2280.0 3080.0	2150.0 2950.0	2020.0 2750.0	1870.0 2570.0
Coil 5 P	7.948	26.868	45.168	63.350	81.453	99.464	117.384	135.164
	6.000 10.000	20.000 31.000	35.000 52.000	49.000 73.000	63.000 94.000	79.000 113.000	93.000 134.000	106.000 156.000

AM Factor      10 KHz      30 KHz      50 KHz      70 KHz      90 KHz      110 KHz      130 KHz      150 KHz

Coil 0 R	-1438	-751	-556	-462	-403	-361	-329	-305
	-3200 940	-1400 -20	-930 -150	-760 -180	-860 -130	-600 -120	-550 -110	-520 -92
Coil 0 Q	-254	-524	-469	-434	-413	-401	-393	-390
	-15000 11000	-5800 3800	-3700 2100	-2700 1400	-2200 1000	-1800 790	-1600 620	-1500 490
Coil 1 R	-200	-157	-139	-127	-117	-109	-102	-96
	-750 460	-360 83	-280 9	-230 -10	-200 -26	-180 -35	-160 -46	-150 -49
Coil 1 Q	528	115	44	13	-6	-19	-28	-35
	-3300 3300	-1100 980	-630 530	-470 380	-380 280	-320 190	-290 150	-260 120
Coil 2 R	7.1	-28.0	-31.3	-30.5	-29.2	-27.5	-26.0	-24.3
	-85.0 76.0	-84.0 -0.4	-57.0 -12.0	-51.0 -16.0	-46.0 -17.0	-42.0 -16.0	-39.0 -15.0	-37.0 -13.0
Coil 2 Q	122.8	45.3	25.5	17.2	12.2	9.8	9.2	8.5
	-1500.0 1900.0	-500.0 610.0	-290.0 350.0	-220.0 280.0	-160.0 190.0	-140.0 160.0	-110.0 130.0	-99.0 120.0
Coil 3 R	3.2	-8.6	-9.9	-9.6	-9.0	-8.6	-7.7	-7.6
	-23.0 21.0	-22.0 1.6	-21.0 -1.3	-20.0 -1.8	-19.0 -2.0	-19.0 -1.3	-19.0 -0.8	-19.0 -0.0
Coil 3 Q	31.7	15.0	11.5	11.4	11.9	13.0	14.7	16.7
	-540.0 530.0	-180.0 180.0	-100.0 110.0	-71.0 81.0	-51.0 66.0	-37.0 58.0	-28.0 53.0	-21.0 51.0
Coil 4 R	-4.89	-4.95	-4.73	-4.41	-4.57	-4.13	-3.96	-3.49
	-18.00 13.00	-12.00 2.70	-11.00 1.50	-9.80 0.52	-9.90 0.96	-10.00 1.50	-11.00 2.30	-11.00 2.80
Coil 4 Q	24.07	10.40	9.88	11.08	13.14	15.40	18.18	20.45
	-250.00 280.00	-79.00 98.00	-43.00 64.00	-27.00 51.00	-18.00 48.00	-11.00 42.00	-5.50 42.00	-1.00 42.00
Coil 5 R	-3.28	-3.21	-2.63	-2.39	-2.05	-2.52	-2.44	-1.84
	-56.00 51.00	-8.40 3.80	-6.90 1.10	-6.90 1.20	-9.30 2.90	-14.00 6.30	-19.00 9.80	-24.00 13.00
Coil 5 Q	25.55	14.58	7.54	5.15	2.55	12.54	15.54	15.55
	150.00 150.00	100.00 100.00	50.00 50.00	25.00 25.00	12.50 12.50	62.50 62.50	75.00 75.00	75.00 75.00

Coil 5 Q	-23.09	-1.72	3.04	6.18	9.76	12.54	15.54	18.52
	-88.00 69.00	-26.00 27.00	-14.00 22.00	-7.00 22.00	-2.50 24.00	1.10 26.00	4.10 29.00	7.10 32.00

MM Factor	10 KHz	30 KHz	50 KHz	70 KHz	90 KHz	110 KHz	130 KHz	150 KHz
Coil 0 M	0.975	0.985	0.990	0.993	0.994	0.994	0.995	0.994
	0.850 1.100	0.880 1.100	0.870 1.100	0.880 1.100	0.880 1.100	0.880 1.100	0.880 1.100	0.880 1.100
Coil 0 P	-0.401	-0.631	-0.520	-0.382	-0.283	-0.199	-0.142	-0.095
	-1.500 1.500	-1.500 1.500	-1.500 1.500	-1.500 1.500	-1.500 1.500	-1.500 1.500	-1.500 1.500	-1.500 1.500
Coil 1 M	0.972	0.983	0.988	0.990	0.991	0.991	0.991	0.990
	0.850 1.100	0.880 1.100	0.870 1.100	0.880 1.100	0.880 1.100	0.880 1.100	0.880 1.100	0.880 1.100
Coil 1 P	-0.368	-0.599	-0.461	-0.315	-0.198	-0.113	-0.063	-0.011
	-1.500 1.500	-1.500 1.500	-1.500 1.500	-1.500 1.500	-1.500 1.500	-1.500 1.500	-1.500 1.500	-1.500 1.500
Coil 2 M	0.990	0.991	0.992	0.992	0.993	0.993	0.993	0.993
	0.890 1.100	0.890 1.100	0.890 1.100	0.890 1.100	0.890 1.100	0.890 1.100	0.890 1.100	0.890 1.100
Coil 2 P	-0.003	-0.055	-0.065	-0.071	-0.062	-0.042	-0.045	-0.030
	-1.500 1.500	-1.500 1.500	-1.500 1.500	-1.500 1.500	-1.500 1.500	-1.500 1.500	-1.500 1.500	-1.500 1.500
Coil 3 M	0.998	0.999	0.999	1.000	1.001	1.001	1.001	1.001
	0.900 1.100	0.900 1.100	0.900 1.100	0.900 1.100	0.900 1.100	0.900 1.100	0.900 1.100	0.900 1.100
Coil 3 P	-0.004	-0.038	-0.059	-0.055	-0.057	-0.012	0.014	0.017
	-1.500 1.500	-1.500 1.500	-1.500 1.500	-1.500 1.500	-1.500 1.500	-1.500 1.500	-1.500 1.500	-1.500 1.500
Coil 4 M	0.998	0.998	0.999	1.000	1.001	1.001	1.001	1.001
	0.900 1.100	0.900 1.100	0.900 1.100	0.900 1.100	0.900 1.100	0.900 1.100	0.900 1.100	0.900 1.100
Coil 4 P	-0.029	-0.071	-0.105	-0.114	-0.088	-0.060	-0.040	-0.056
	-1.500 1.500	-1.500 1.500	-1.500 1.500	-1.500 1.500	-1.500 1.500	-1.500 1.500	-1.500 1.500	-1.500 1.500
Coil 5 M	1.002	1.003	1.004	1.005	1.006	1.005	1.007	1.006
	0.900 1.100	0.900 1.100	0.900 1.100	0.900 1.100	0.900 1.100	0.900 1.100	0.900 1.100	0.900 1.100
Coil 5 P	-0.074	-0.071	-0.103	-0.106	-0.084	0.021	-0.004	-0.022
	-1.500 1.500	-1.500 1.500	-1.500 1.500	-1.500 1.500	-1.500 1.500	-1.500 1.500	-1.500 1.500	-1.500 1.500

PARMS TCID 0 TCID 1 Cal Temp T Factor  
(degC)  
IDs 2.785 0.809 22.0 1.00

## HDIL BEFORE LOG VERIFICATION SUMMARY

TOOL #: 1530XA 402505 DATE/TIME PERFORMED: Wed Nov 3 01:07:49 2010 DAYS SINCE CAL: 167

UNIT #: 3885TF 004291

ZERO DATA(mv)	10 KHz	30 KHz	50 KHz	70 KHz	90 KHz	110 KHz	130 KHz	150 KHz
Coil 0 R	-0.010	0.002	0.001	-0.002	0.000	0.000	0.001	0.001
	-0.200 0.200	-0.100 0.100	-0.100 0.100	-0.100 0.100	-0.100 0.100	-0.100 0.100	-0.100 0.100	-0.100 0.100
Coil 0 Q	0.009	0.003	-0.002	-0.001	0.000	-0.000	0.001	0.000
	-0.500 0.500	-0.200 0.200	-0.100 0.100	-0.100 0.100	-0.100 0.100	-0.100 0.100	-0.100 0.100	-0.100 0.100
Coil 1 R	-0.016	0.003	0.002	-0.000	0.000	-0.001	-0.000	0.003
	-0.200 0.200	-0.100 0.100	-0.100 0.100	-0.100 0.100	-0.100 0.100	-0.100 0.100	-0.100 0.100	-0.100 0.100
Coil 1 Q	0.009	0.002	0.002	-0.001	0.001	-0.002	0.001	0.000
	-0.500 0.500	-0.200 0.200	-0.100 0.100	-0.100 0.100	-0.100 0.100	-0.100 0.100	-0.100 0.100	-0.100 0.100
Coil 2 R	-0.006	0.003	0.004	-0.001	0.002	-0.000	0.000	0.001
	-0.200 0.200	-0.100 0.100	-0.100 0.100	-0.100 0.100	-0.100 0.100	-0.100 0.100	-0.100 0.100	-0.100 0.100
Coil 2 Q	0.004	0.001	-0.007	-0.005	0.001	-0.000	-0.001	0.001
	-0.500 0.500	-0.200 0.200	-0.100 0.100	-0.100 0.100	-0.100 0.100	-0.100 0.100	-0.100 0.100	-0.100 0.100

Coil 3 R	<b>-0.040</b> -0.300 0.300	<b>-0.007</b> -0.100 0.100	<b>0.007</b> -0.100 0.100	<b>0.001</b> -0.100 0.100	<b>0.001</b> -0.100 0.100	<b>-0.001</b> -0.100 0.100	<b>-0.009</b> -0.100 0.100	<b>-0.002</b> -0.100 0.100
Coil 3 Q	<b>-0.005</b> -0.500 0.500	<b>0.017</b> -0.200 0.200	<b>-0.010</b> -0.100 0.100	<b>-0.001</b> -0.100 0.100	<b>0.011</b> -0.100 0.100	<b>0.002</b> -0.100 0.100	<b>0.005</b> -0.100 0.100	<b>0.004</b> -0.100 0.100
Coil 4 R	<b>-0.158</b> -0.500 0.500	<b>0.012</b> -0.200 0.200	<b>0.019</b> -0.200 0.200	<b>-0.022</b> -0.200 0.200	<b>0.024</b> -0.200 0.200	<b>0.012</b> -0.200 0.200	<b>0.003</b> -0.200 0.200	<b>0.010</b> -0.200 0.200
Coil 4 Q	<b>-0.030</b> -1.000 1.000	<b>0.059</b> -0.400 0.400	<b>-0.019</b> -0.200 0.200	<b>-0.016</b> -0.200 0.200	<b>0.014</b> -0.200 0.200	<b>0.001</b> -0.200 0.200	<b>0.005</b> -0.200 0.200	<b>0.000</b> -0.200 0.200
Coil 5 R	<b>-0.328</b> -1.200 1.200	<b>-0.006</b> -0.400 0.400	<b>0.038</b> -0.400 0.400	<b>-0.017</b> -0.400 0.400	<b>0.063</b> -0.400 0.400	<b>0.005</b> -0.400 0.400	<b>-0.000</b> -0.400 0.400	<b>-0.015</b> -0.400 0.400
Coil 5 Q	<b>-0.126</b> -1.500 1.500	<b>0.100</b> -0.800 0.800	<b>-0.024</b> -0.400 0.400	<b>-0.005</b> -0.400 0.400	<b>0.021</b> -0.400 0.400	<b>-0.011</b> -0.400 0.400	<b>-0.023</b> -0.400 0.400	<b>0.005</b> -0.400 0.400

ELEC. GAINS	10 KHz	30 KHz	50 KHz	70 KHz	90 KHz	110 KHz	130 KHz	150 KHz
Coil 0 M	<b>161.00</b> 136.00 188.00	<b>159.58</b> 134.00 184.00	<b>156.70</b> 131.00 181.00	<b>152.37</b> 126.00 178.00	<b>146.65</b> 122.00 170.00	<b>139.56</b> 118.00 181.00	<b>131.14</b> 112.00 150.00	<b>121.51</b> 105.00 139.00
Coil 0 P	<b>7.720</b> -1.000 12.000	<b>26.020</b> 19.000 30.000	<b>43.783</b> 35.000 50.000	<b>61.493</b> 49.000 71.000	<b>79.211</b> 63.000 91.000	<b>96.955</b> 77.000 110.000	<b>114.690</b> 92.000 130.000	<b>132.415</b> 105.000 151.000
Coil 1 M	<b>289.26</b> 237.00 327.00	<b>286.42</b> 235.00 325.00	<b>280.75</b> 230.00 320.00	<b>272.32</b> 225.00 312.00	<b>261.28</b> 218.00 302.00	<b>247.76</b> 208.00 288.00	<b>231.90</b> 196.00 268.00	<b>214.02</b> 184.00 244.00
Coil 1 P	<b>7.926</b> -1.000 12.000	<b>26.573</b> 19.000 30.000	<b>44.670</b> 35.000 51.000	<b>62.700</b> 49.000 71.000	<b>80.700</b> 63.000 92.000	<b>98.686</b> 77.000 112.000	<b>116.633</b> 92.000 132.000	<b>134.515</b> 105.000 153.000
Coil 2 M	<b>581.55</b> 479.00 659.00	<b>576.16</b> 474.00 654.00	<b>565.24</b> 463.00 643.00	<b>548.95</b> 450.00 622.00	<b>527.36</b> 432.00 602.00	<b>500.67</b> 412.00 572.00	<b>469.27</b> 390.00 540.00	<b>433.55</b> 359.00 499.00
Coil 2 P	<b>7.857</b> -1.000 12.000	<b>26.471</b> 19.000 31.000	<b>44.532</b> 35.000 51.000	<b>62.527</b> 49.000 71.000	<b>80.529</b> 63.000 92.000	<b>98.543</b> 77.000 114.000	<b>116.519</b> 92.000 135.000	<b>134.425</b> 105.000 156.000
Coil 3 M	<b>924.17</b> 772.00 1060.00	<b>915.71</b> 764.00 1050.00	<b>898.55</b> 752.00 1030.00	<b>873.04</b> 728.00 1010.00	<b>839.72</b> 700.00 970.00	<b>798.55</b> 665.00 925.00	<b>750.06</b> 628.00 868.00	<b>695.45</b> 589.00 799.00
Coil 3 P	<b>7.669</b> -2.000 13.000	<b>25.930</b> 19.000 31.000	<b>43.628</b> 35.000 52.000	<b>61.249</b> 49.000 72.000	<b>78.850</b> 63.000 93.000	<b>96.467</b> 77.000 114.000	<b>114.045</b> 92.000 135.000	<b>131.555</b> 105.000 156.000
Coil 4 M	<b>1453.2</b> 1210.0 1700.0	<b>1441.7</b> 1205.0 1690.0	<b>1417.9</b> 1180.0 1650.0	<b>1381.7</b> 1140.0 1590.0	<b>1332.8</b> 1120.0 1530.0	<b>1271.8</b> 1070.0 1450.0	<b>1197.0</b> 1000.0 1350.0	<b>1110.4</b> 942.0 1240.0
Coil 4 P	<b>7.881</b> -2.000 13.000	<b>26.384</b> 19.000 31.000	<b>44.395</b> 35.000 52.000	<b>62.401</b> 49.000 73.000	<b>80.482</b> 63.000 93.000	<b>98.624</b> 78.000 114.000	<b>116.859</b> 92.000 135.000	<b>135.058</b> 105.000 156.000
Coil 5 M	<b>3002.9</b> 2450.0 3450.0	<b>2973.0</b> 2420.0 3400.0	<b>2910.2</b> 2410.0 3320.0	<b>2818.3</b> 2350.0 3200.0	<b>2697.5</b> 2280.0 3080.0	<b>2555.2</b> 2150.0 2950.0	<b>2391.0</b> 2020.0 2750.0	<b>2206.9</b> 1870.0 2570.0
Coil 5 P	<b>7.992</b> -2.000 13.000	<b>26.946</b> 19.000 31.000	<b>45.306</b> 35.000 52.000	<b>63.543</b> 49.000 75.000	<b>81.710</b> 63.000 94.000	<b>99.749</b> 79.000 114.000	<b>117.736</b> 93.000 135.000	<b>135.582</b> 106.000 156.000

## HDIL AFTER LOG VERIFICATION SUMMARY

TOOL #: **1530XA 402505** DATE/TIME PERFORMED: **Wed Nov 3 14:23:40 2010** DAYS SINCE CAL: **167**

UNIT #: **3885TF 004291**

ZERO DATA(mv)	10 KHz	30 KHz	50 KHz	70 KHz	90 KHz	110 KHz	130 KHz	150 KHz
Coil 0 R	<b>-0.012</b> -0.090 0.070	<b>0.002</b> -0.058 0.062	<b>0.001</b> -0.029 0.031	<b>-0.002</b> -0.032 0.028	<b>-0.000</b> -0.030 0.030	<b>0.001</b> -0.030 0.030	<b>-0.000</b> -0.029 0.031	<b>-0.000</b> -0.029 0.031
Coil 0 Q	<b>0.009</b> -0.031 0.049	<b>0.005</b> -0.117 0.123	<b>-0.002</b> -0.032 0.028	<b>-0.000</b> -0.031 0.029	<b>0.000</b> -0.030 0.030	<b>-0.001</b> -0.030 0.030	<b>0.000</b> -0.029 0.031	<b>-0.000</b> -0.030 0.030
Coil 1 R	<b>-0.015</b> -0.096 0.064	<b>0.003</b> -0.047 0.053	<b>0.001</b> -0.028 0.032	<b>-0.002</b> -0.030 0.030	<b>0.001</b> -0.030 0.030	<b>0.000</b> -0.031 0.029	<b>-0.000</b> -0.030 0.030	<b>0.003</b> -0.027 0.033
Coil 1 Q	<b>0.009</b> -0.031 0.049	<b>0.003</b> -0.047 0.053	<b>-0.004</b> -0.032 0.028	<b>0.000</b> -0.031 0.029	<b>0.000</b> -0.030 0.030	<b>-0.002</b> -0.030 0.030	<b>0.000</b> -0.029 0.031	<b>0.001</b> -0.030 0.030



	-0.391	0.409	-0.098	0.102	-0.028	0.032	-0.031	0.029	-0.029	0.031	-0.032	0.028	-0.029	0.031	-0.030	0.030
Coil 2 R	-0.009	-0.003	0.003	0.002	0.004	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.000	0.000
	-0.076	0.064	-0.027	0.033	-0.026	0.034	-0.031	0.029	-0.028	0.032	-0.030	0.030	-0.030	0.030	-0.029	0.031
Coil 2 Q	0.009	0.003	0.001	-0.000	0.002	-0.004	-0.004	-0.004	0.004	0.002	-0.004	-0.004	-0.004	-0.004	0.004	0.004
	-0.346	0.354	-0.099	0.101	-0.037	0.023	-0.035	0.025	-0.029	0.031	-0.030	0.030	-0.031	0.029	-0.029	0.031
Coil 3 R	-0.041	-0.001	0.014	-0.005	0.000	0.002	0.006	-0.000	0.000	0.002	0.006	0.006	0.006	0.006	-0.000	-0.000
	-0.080	0.000	-0.047	0.033	-0.033	0.047	-0.039	0.041	-0.039	0.041	-0.041	0.039	-0.049	0.031	-0.042	0.038
Coil 3 Q	0.000	0.011	-0.007	0.004	0.004	0.001	0.001	-0.001	0.004	0.004	0.001	0.001	0.001	0.001	-0.001	-0.001
	-0.205	0.195	-0.063	0.097	-0.050	0.030	-0.041	0.039	-0.029	0.051	-0.038	0.042	-0.035	0.045	-0.036	0.044
Coil 4 R	-0.182	0.007	0.033	-0.029	-0.004	-0.004	-0.002	0.010	-0.004	-0.004	-0.002	0.010	-0.004	-0.004	0.010	0.010
	-0.218	-0.098	-0.048	0.072	-0.041	0.079	-0.082	0.038	-0.038	0.084	-0.048	0.072	-0.057	0.083	-0.050	0.070
Coil 4 Q	-0.026	0.067	-0.018	0.000	0.010	-0.009	0.005	0.007	-0.026	0.067	-0.018	0.000	0.010	-0.009	0.005	0.007
	-0.330	0.270	-0.041	0.159	-0.079	0.041	-0.076	0.044	-0.048	0.074	-0.059	0.061	-0.055	0.085	-0.060	0.080
Coil 5 R	-0.318	-0.001	0.050	-0.045	-0.016	0.016	-0.010	0.007	-0.318	-0.001	0.050	-0.045	-0.016	0.016	-0.010	0.007
	-0.448	-0.208	-0.128	0.114	-0.082	0.158	-0.137	0.103	-0.057	0.183	-0.115	0.125	-0.120	0.120	-0.135	0.105
Coil 5 Q	-0.130	0.108	-0.060	-0.006	0.022	-0.023	-0.005	0.006	-0.130	0.108	-0.060	-0.006	0.022	-0.023	-0.005	0.006
	-0.726	0.474	-0.150	0.350	-0.144	0.098	-0.125	0.115	-0.099	0.141	-0.131	0.109	-0.143	0.097	-0.115	0.125

ELEC. GAINS    10 KHz    30 KHz    50 KHz    70 KHz    90 KHz    110 KHz    130 KHz    150 KHz

Coil 0 M	161.00	159.57	156.67	152.33	146.57	139.47	130.99	121.40
	157.78   164.22	156.38   162.77	153.56   159.83	149.32   155.41	143.72   149.58	138.76   142.35	128.51   133.76	119.08   123.94
Coil 0 P	7.705	26.000	43.746	61.453	79.156	96.881	114.612	132.310
	4.720   10.720	23.020   29.020	40.783   46.783	58.493   64.493	76.211   82.211	93.955   99.955	111.690   117.690	129.415   135.415
Coil 1 M	289.30	286.45	280.74	272.32	261.18	247.59	231.71	213.83
	283.47   295.04	280.69   292.15	275.13   286.36	266.87   277.76	256.06   266.51	242.81   252.72	227.28   236.54	209.74   218.30
Coil 1 P	7.929	26.558	44.637	62.653	80.634	98.602	116.535	134.392
	4.926   10.926	23.573   29.573	41.670   47.670	59.700   65.700	77.700   83.700	95.686   101.686	113.633   119.633	131.515   137.515
Coil 2 M	580.93	575.49	564.52	548.21	526.48	499.75	468.28	432.55
	589.92   593.18	584.63   587.88	553.94   576.55	537.97   559.93	516.82   537.91	490.86   510.69	459.88   478.85	424.87   442.22
Coil 2 P	7.862	26.455	44.495	62.485	80.471	98.454	116.423	134.301
	4.857   10.857	23.471   29.471	41.532   47.532	59.527   65.527	77.529   83.529	95.543   101.543	113.519   119.519	131.425   137.425
Coil 3 M	923.78	915.30	898.09	872.54	838.92	797.57	749.15	694.27
	905.89   942.66	897.40   934.02	880.58   916.52	855.58   890.50	822.93   858.52	782.58   814.52	735.08   765.06	681.54   709.36
Coil 3 P	7.670	25.910	43.582	61.193	78.782	96.369	113.927	131.412
	4.669   10.669	22.930   28.930	40.628   46.628	58.249   64.249	75.850   81.850	93.487   99.487	111.045   117.045	128.555   134.555
Coil 4 M	1452.3	1440.9	1416.9	1380.5	1331.7	1269.6	1195.2	1108.8
	1424.1   1482.3	1412.8   1470.5	1389.5   1446.2	1354.1   1409.3	1308.1   1359.4	1246.3   1297.2	1173.1   1221.0	1088.2   1132.7
Coil 4 P	7.881	26.358	44.348	62.346	80.382	98.525	116.717	134.869
	4.881   10.881	23.384   29.384	41.395   47.395	59.401   65.401	77.482   83.482	95.624   101.624	113.859   119.859	132.058   138.058
Coil 5 M	3001.2	2971.4	2907.9	2815.6	2696.9	2551.3	2385.3	2203.0
	2942.8   3082.9	2913.6   3032.5	2852.0   2968.4	2761.9   2874.6	2643.5   2751.4	2504.1   2606.3	2343.1   2438.6	2162.7   2251.0
Coil 5 P	7.991	26.926	45.258	63.466	81.560	99.643	117.621	135.457
	4.992   10.992	23.948   29.948	42.306   48.306	60.543   66.543	78.710   84.710	96.749   102.749	114.736   120.736	132.582   138.582



COMPANY  
WELL  
FIELD  
PROVINCE

NALCOR ENERGY INC.  
NALCOR ET AL FINNEGAN #1  
FINNEGAN  
NEWFOUNDLAND AND LABRADOR

FILE NO:

API NO:

LOCATION:

ELEVATIONS:

KB 125.00 M  
DF

LICENSE:

2016-122-01

Baker Atlas





LAT 49.920 N LONG 63.330 W

GL 118.75 M

2010-128-04

DATE 02-NOV-2010