



HIGH DEFINITION INDUCTION LOG  
COMPENSATED Z-DENS LOG  
COMPENSATED NEUTRON LOG  
GAMMA RAY LOG  
CALIPER LOG

FILE NO: US094604J	COMPANY WPX ENERGY INC	
API NO: 05045225210000	WELL YOUBERG RU 443-7	
	FIELD RULISON	
	COUNTY GARFIELD	
	STATE COLORADO	
Ver. 4.01 SEC 7 T7S R93W PAD: RU 44-7 RIG: NABORS 576	LOCATION: SHL: 1168' FSL 1181' FEL BHL: 1568' FSL 737' FEL SEC 7 TWP 7S RGE 93W	OTHER SERVICES XMAC ORIT
PERMANENT DATUM LOG MEASURED FROM DRILL. MEAS. FROM	GL ELEVATION 7917 FT KB 26 FT ABOVE P.D. KB	ELEVATIONS: KB 7943 FT DF GL 7917 FT

DATE	08-Feb-2015	
RUN	TRIP	1
SERVICE ORDER	US094604J	
DEPTH DRILLER	10047 FT	
DEPTH LOGGER	10051 FT	
BOTTOM LOGGED INTERVAL	10043 FT	
TOP LOGGED INTERVAL	0 FT	
CASING DRILLER	9.625 IN @ 1305 FT	
CASING LOGGER	1308 FT	
BIT SIZE	8.75 IN	
TYPE OF FLUID IN HOLE	LSND	
DENSITY	VISCOSITY	60 CP
PH	FLUID LOSS	4.8 C3
SOURCE OF SAMPLE	MUD TANK	
RM AT MEAS. TEMP.	3.3 OHMM @ 67.1 DEGF	
RMF AT MEAS. TEMP.	2.475 OHMM @ 67.1 DEGF	
RMC AT MEAS. TEMP.	4.125 OHMM @ 67.1 DEGF	
SOURCE OF RMF	RMC	CALCULATED
RM AT BHT	1.57 OHMM @ 208 DEGF	
TIME SINCE CIRCULATION	6 HOURS	
MAX. RECORDED TEMP.	208 DEGF	
EQUIP. NO.	LOCATION	6685
RECORDED BY	W. QUIGLEY	
WITNESSED BY	MR. RICK OAKS	

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BOREHOLE RECORD		
BIT SIZE	FROM	TO
8.75 IN	1305 FT	10047 FT

CASING RECORD				
SIZE	WEIGHT	GRADE	FROM	TO
9.625 IN	32.3 LB/F		0 FT	1305 FT

REMARKS

RUN 1 TRIP 1: HDIL XMAC ZDL CN GR RAN IN COMBINATION

BVOL CVOL CALCULATED IN CUBIC FT  
CVOL CALCULATED USING PROPOSED 4.5" CASING  
CALIPER VERIFIED INSIDE CASING

RHO MATRIX: 2.68 G/CC  
RHO FLUID: 1.00 G/CC

CN MATRIX: SANDSTONE  
CN RAN DECENTRALIZED

HDIL RAN WITH 1.5" STANDOFFS  
ABC TO CALCULATE STANDOFF

THANK YOU FOR CHOOSING BAKER HUGHES WIRELINE SERVICES  
 CREW: OLSON/COATE/QUIGLEY  
 RIG: NABORS 576

### EQUIPMENT DATA

RUN	TRIP	TOOL	SERIES NO.	SERIAL NO.	POSITION
1	1	PWR ADAPTER	4430XB	12088588	FREE
1	1	SWIVEL	3944XD	10195796	FREE
1	1	TTRM	3981XA	10516527	FREE
1	1	TELEMETRY	3514XB	10197691	FREE
1	1	GAMMA RAY	1329XA	10196895	DECENTRALIZED
1	1	NEUTRON	2246XA	10202048	DECENTRALIZED
1	1	DENSITY	2234XA	10211833	CALIPER DEVICE
1	1	KNUCKLE	3939XA	10299278	FREE
1	1	CENTRALIZER	4341XA	10202020	CENTRALIZER
1	1	ORIENTATION	4401XB	10304309	CENTRALIZED
1	1	ACOUSTIC EA	1677EA	10076613	CENTRALIZED
1	1	ACOU RECVR	1678MB	10175410	CENTRALIZED
1	1	ACOU ISO	1678PB	10086347	CENTRALIZED
1	1	ACOU XMIT	1678BA	10070339	CENTRALIZED
1	1	ACOU FA	1678FA	10083715	CENTRALIZED
1	1	CENTRALIZER	4341XA	10239054	CENTRALIZER
1	1	HDIL EA	1515EA	10318637	FREE
1	1	HDIL	1515MA	10037719	STOOD OFF

## MAIN LOG 2"/100FT SCALE

ECLIPS 6.2i ECLIPS General Release Rel 6.2i Wed Jun 12 12:21:40 CDT 2013  
 Updates: 1 Patches: 5

Plotted: Sun Feb 8 20:44:42 2015

### PARAMETER AND FILTER SUMMARY REPORT

FILE: /dat1a/94604J/n777q02.prm  
 LOGGING MODE: DEPTH DIRECTION: UP  
 TOP DEPTH: 1219.250 ft BOTTOM DEPTH: 10075.293 ft

#### SYMMETRIC FILTER

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
TTRM	FILTER ()	medium (1)		TOP	BOTTOM
	FILTER (.h)	medium (1)		"	"
	FILTER (.i)	medium (1)		"	"
Y AXIS CALIPER	FILTER ()	medium (1)		"	"
TENSION	FILTER ()	medium (1)		"	"
GR	FILTER ()	medium (1)		"	"
CALIPER	FILTER ()	medium (1)		"	"
	FILTER (.h)	medium (1)		"	"
	FILTER (.i)	medium (1)		"	"
SP-SPDH	FILTER ()	medium (1)		"	"

#### BOREHOLE & CEMENT

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
BIT SIZE	BIT SIZE	8.750	in	TOP	BOTTOM
MUD SAMPLE RESISTIVITY	MUD SAMPLE TEMP	67.1	degF	"	"
	MUD SAMPLE RES	3.300	ohm.m	"	"
BOREHOLE TEMP from GRADIENT	Known BH REF TEMP	67.1	degF	"	"
	at BH REF DEPTH	0.0	ft	"	"
	BH TEMP GRADIENT	1.222	degF/ft	"	"

BOREHOLE CORR DIAMETER SOURCE	CALIPER/FIXED DIA. (mbh*)	USE CALIPER	1.200	with TEMP GRADIENT	0.01 degF/ft	"	"
BOREHOLE CORR DIAMETER	FIXED DIAMETER (mbh*)		8.750			"	"
BH MUD RESISTIVITY SOURCE	RMUD SOURCE (HDIL)	TOOL MEASURED				"	"

### HDIL PROCESSING

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
HDIL TEMPERATURE CORRECTION	TEMP CORR SOURCE	USE RXTEMP		TOP	BOTTOM
ADAPTIVE BOREHOLE CORRECTION	ABC PROCESSING	ON		"	"
	ABC to CALCULATE	STANDOFF		"	"
	STANDOFF	1.50	in	"	"
	TOOL POSITION	ECCENTERED		"	"
	Rmud MULTIPLIER	1.000		"	"

### CURVE DESCRIPTION REPORT

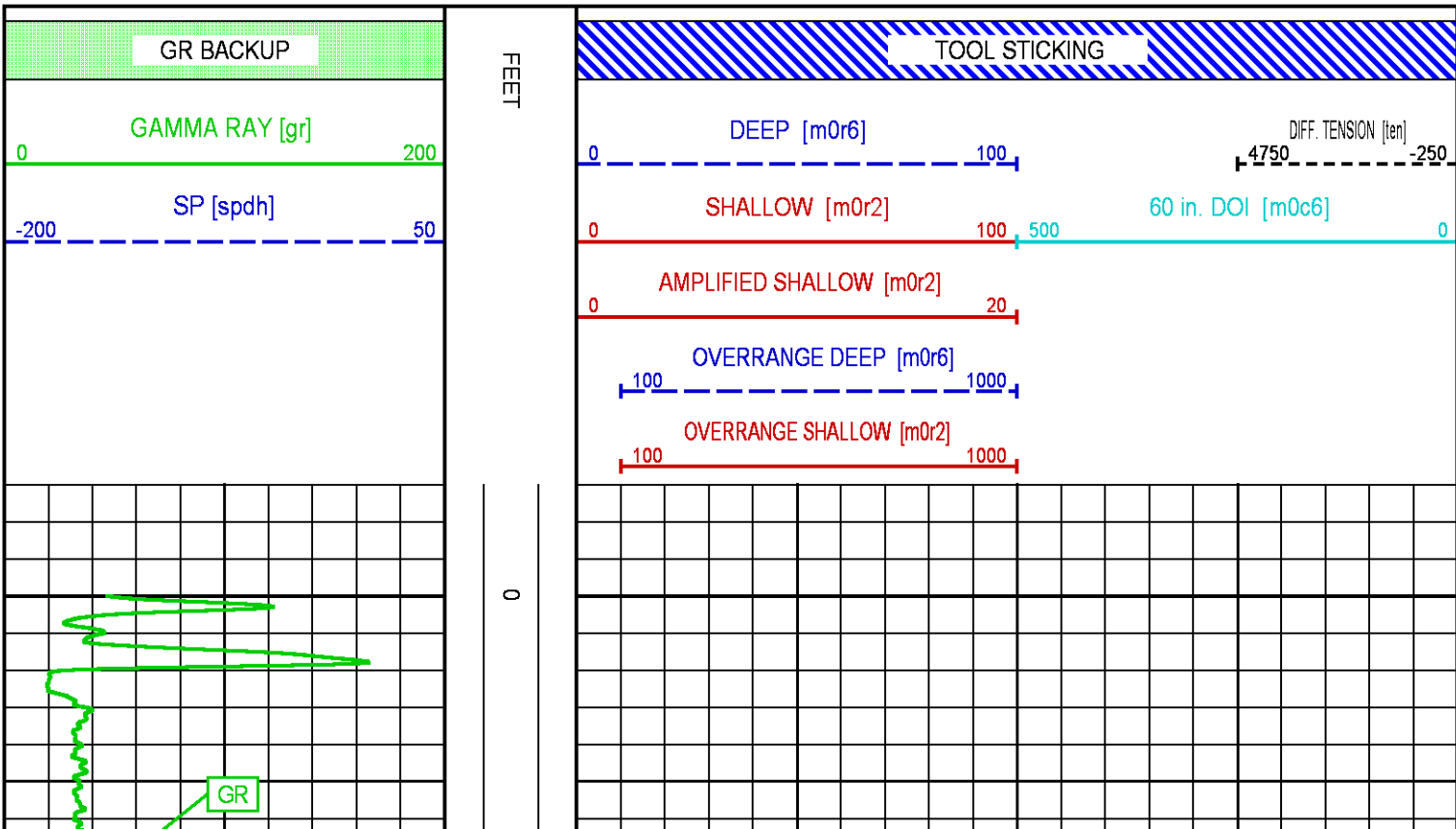
CURVE NAME	CREATION DATE	CURVE DESCRIPTION
F1:GR	Feb 8 14:20:00 2015	GAMMA RAY
F1:M0C6	Feb 8 14:20:00 2015	FOCUSED CONDUCTIVITY, 60-INCH DOI
F1:M0R2	Feb 8 14:20:00 2015	TRUE FOCUSED RESISTIVITY FOR HDIL, 20-INCH DOI
F1:M0R6	Feb 8 14:20:00 2015	TRUE FOCUSED RESISTIVITY FOR HDIL, 60-INCH DOI
F1:SPDH	Feb 8 14:20:00 2015	SPONTANEOUS POTENTIAL PROCESSED IN COMMON REMOTE
F1:TEN	Feb 8 14:20:00 2015	DIFFERENTIAL TENSION

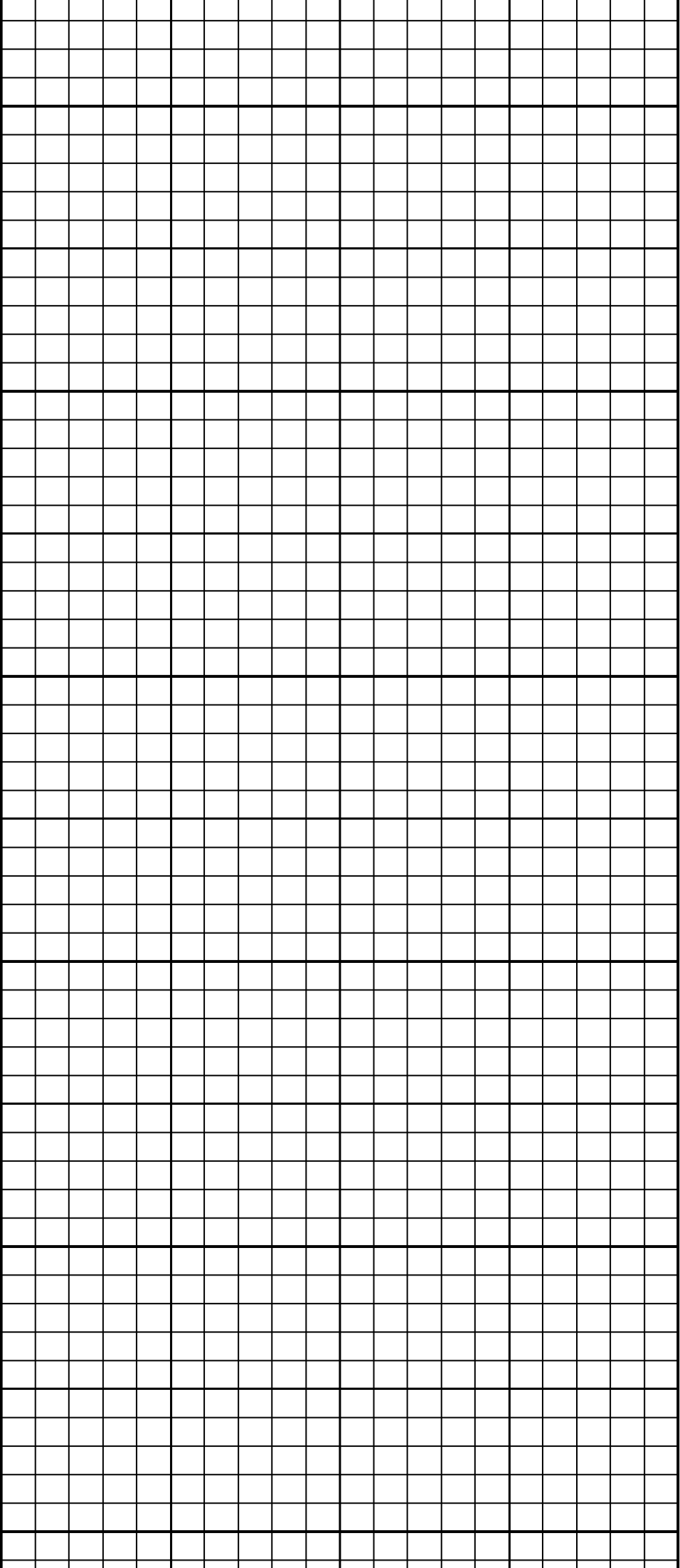
### CURVE MEASURE POINT OFFSET

CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
GR	107.25	M0R2	8.00	SPDH	14.00		
M0C6	8.00	M0R6	8.00	TEN	0.00		

Presentation : cas6685:/dat1a/94604J/WPX\_2IN.fvpdf [2"/100" Scale]  
Plot Interval : -22.5 - 10081 Feet

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Created On : Feb 8 14:20:00 2015  
Company : WPX ENERGY INC  
Well : YUBERG RU 443-7  
Field : RULISON  
File Interval : -22.5 - 10081 Feet  
OCT : n777q





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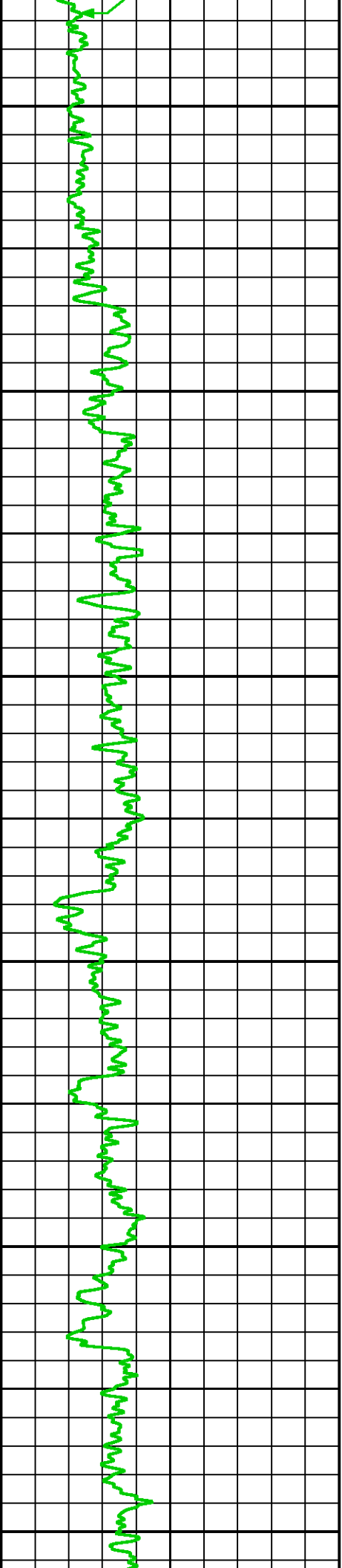
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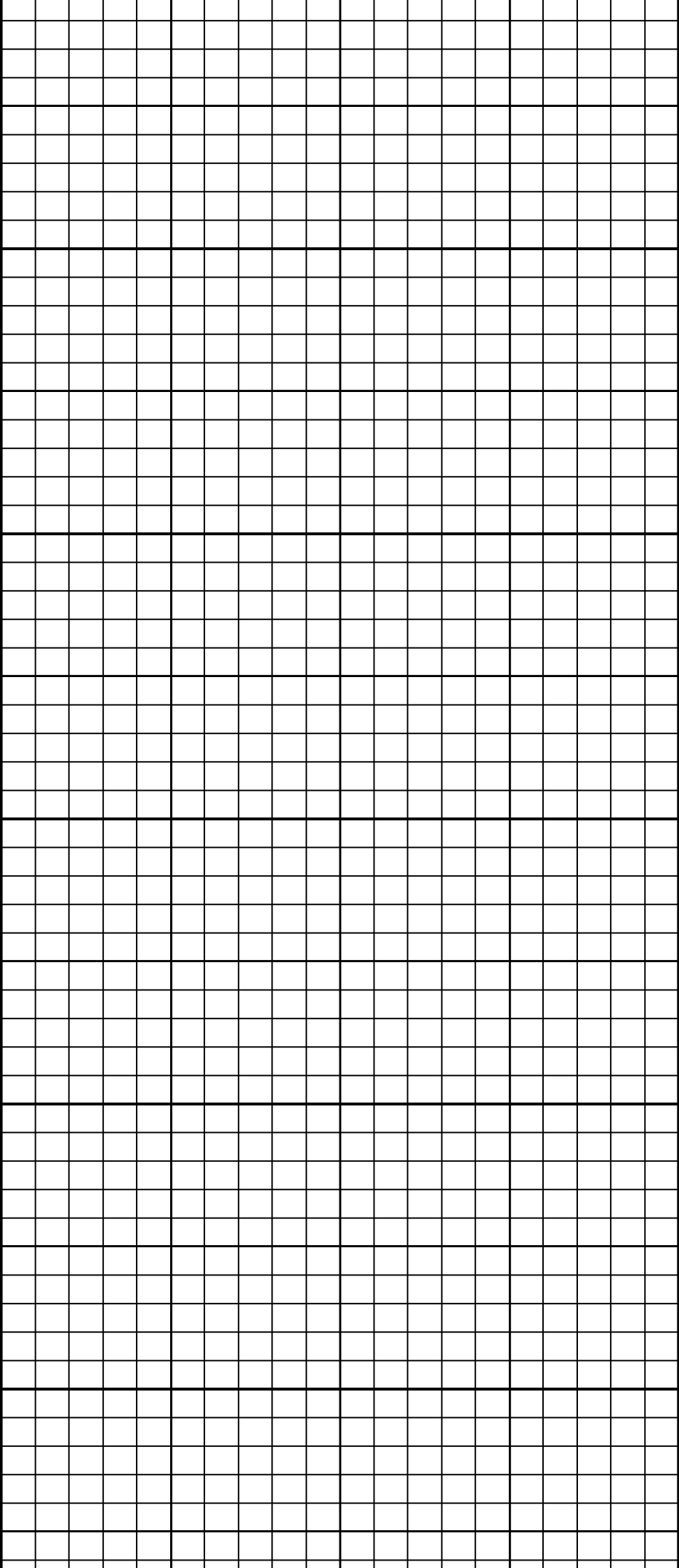
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400

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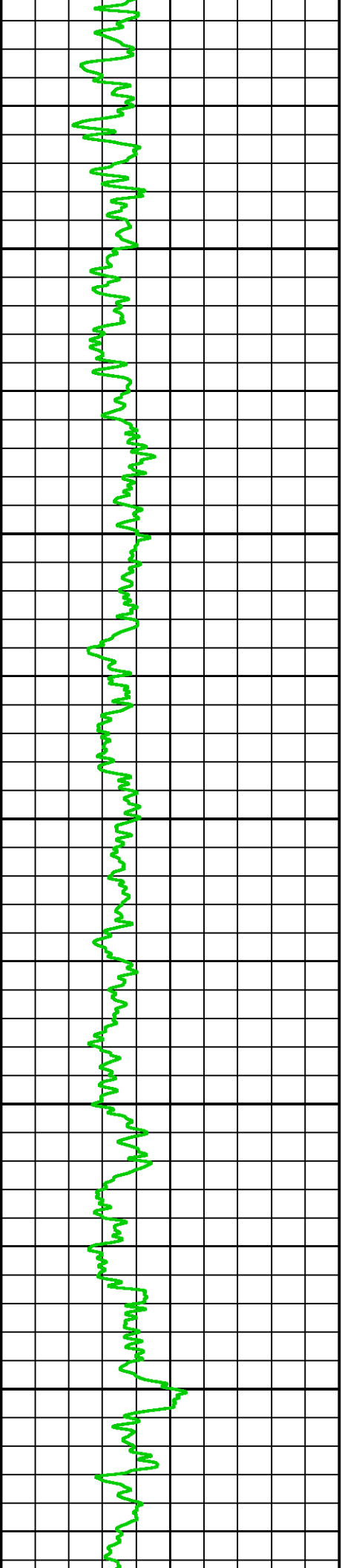
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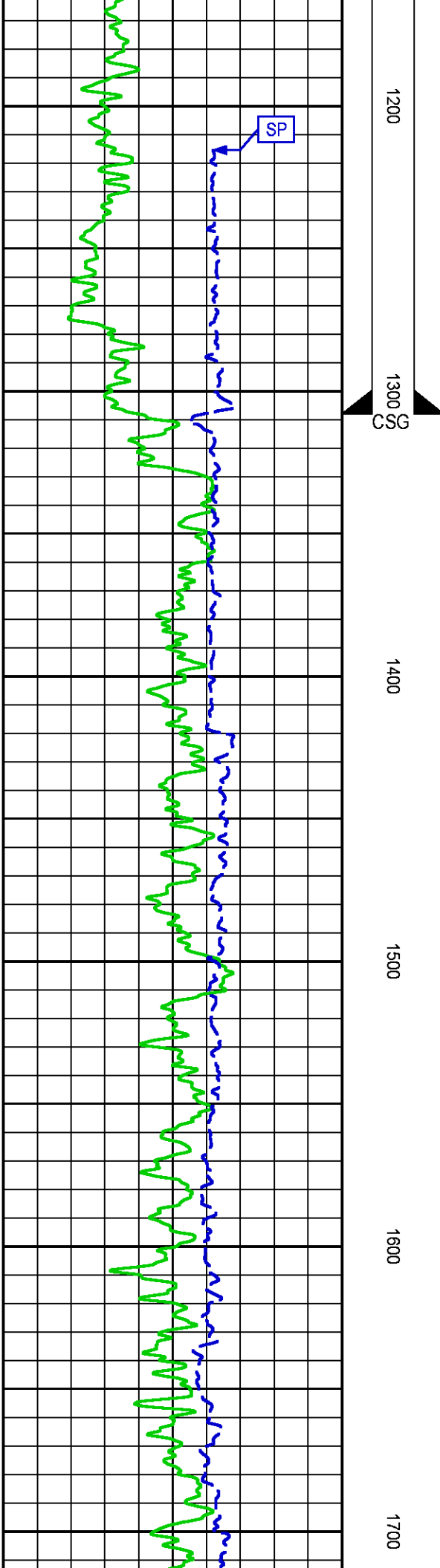
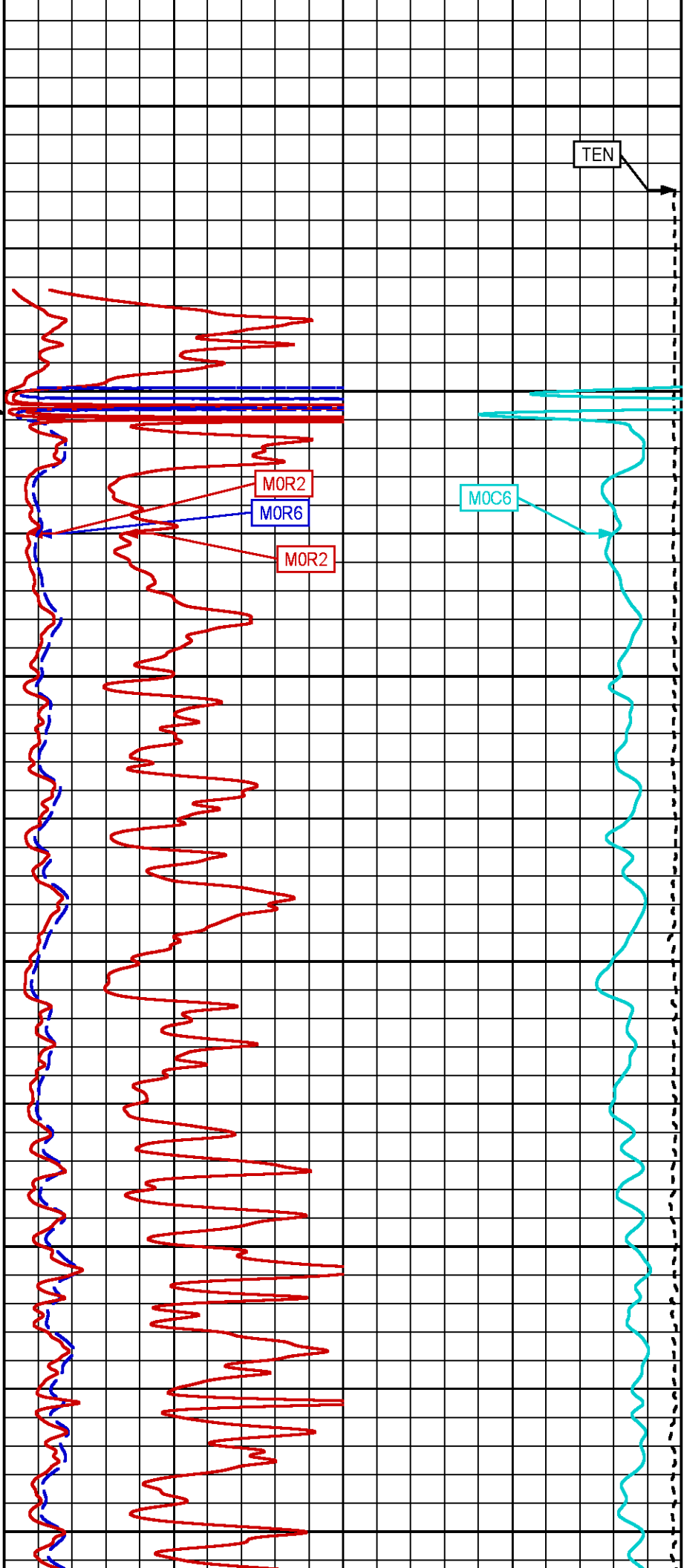
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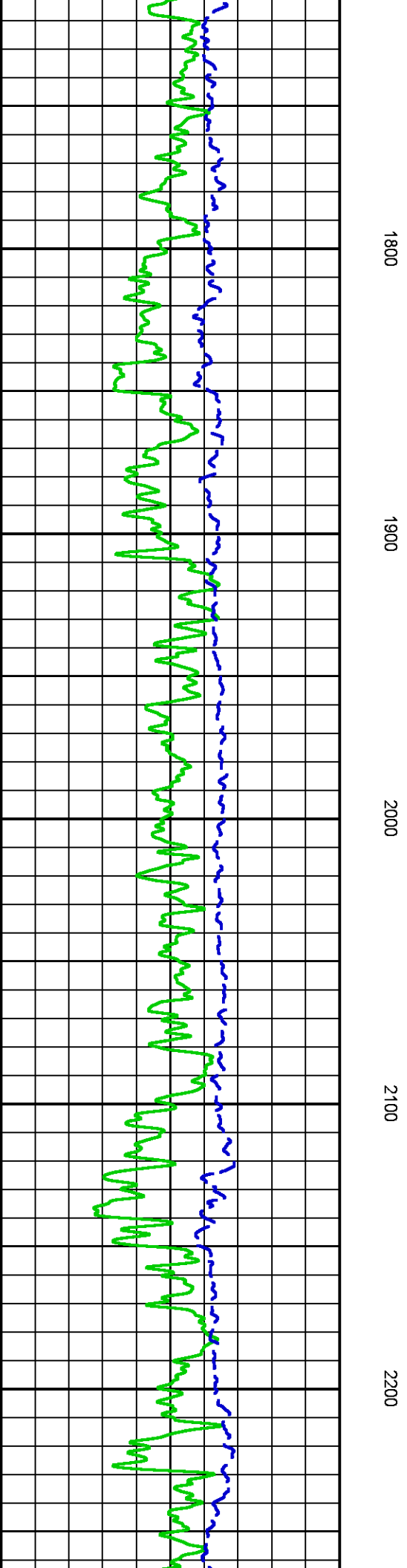
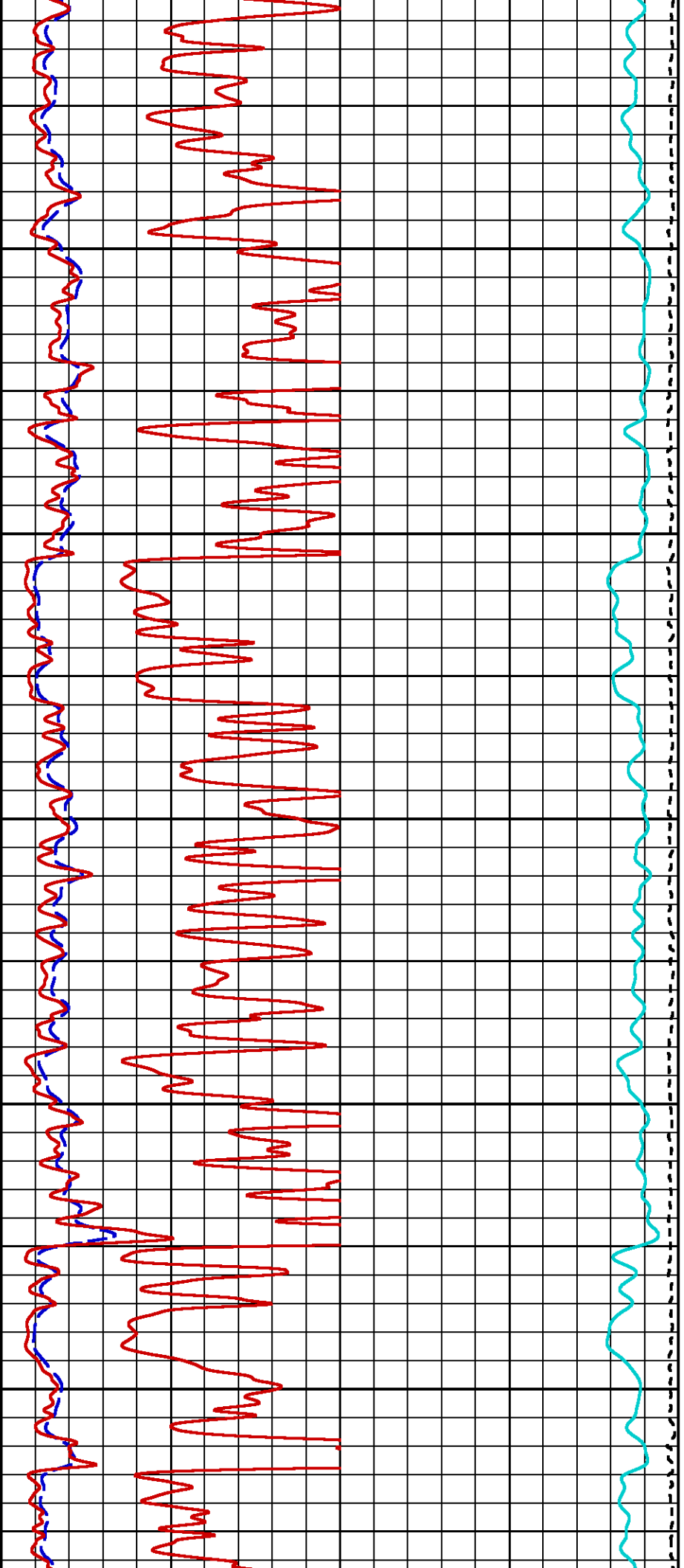
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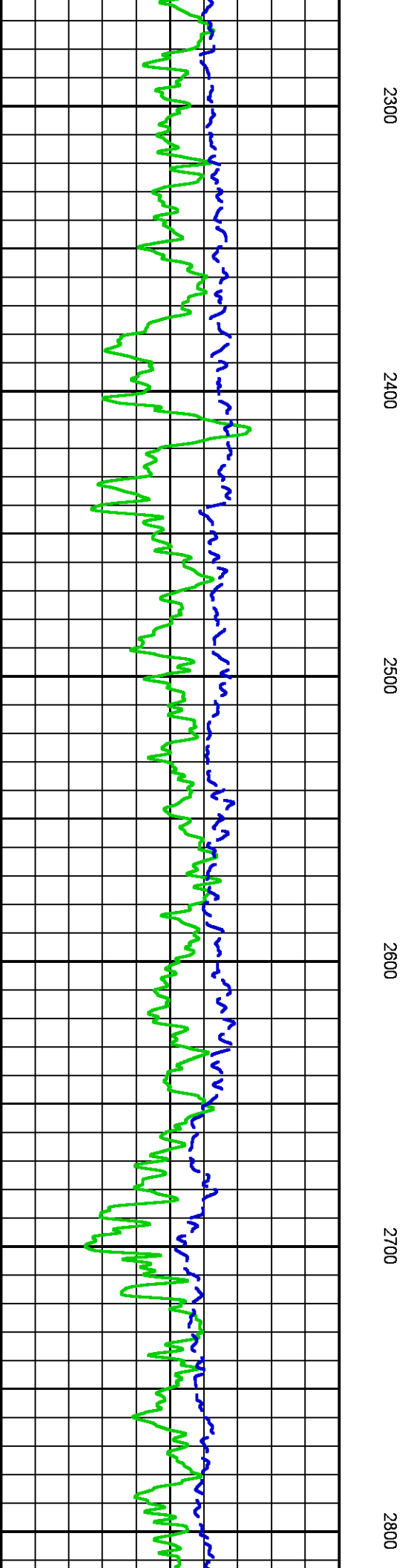
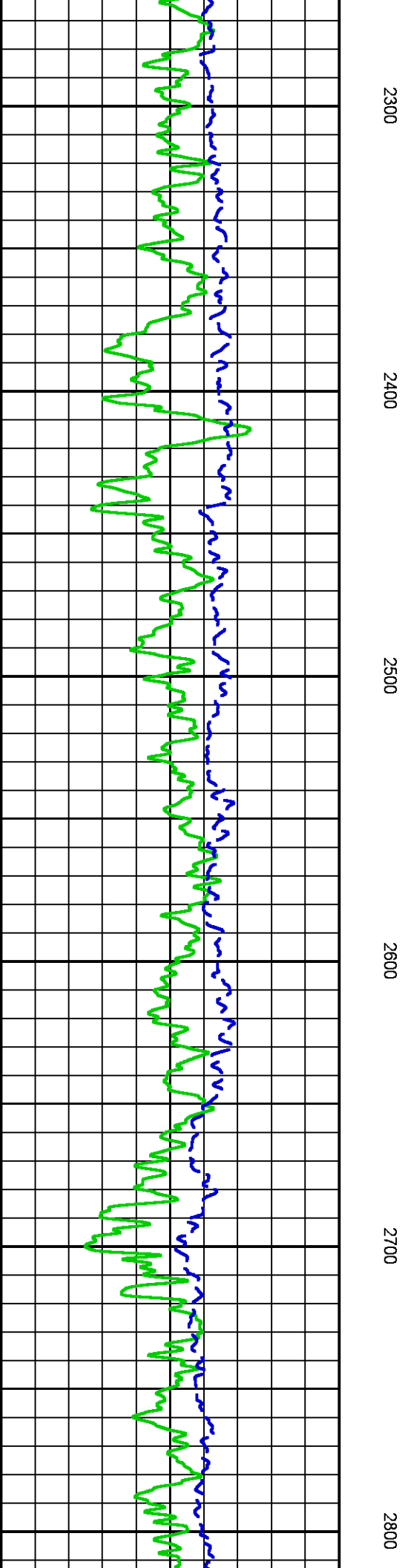
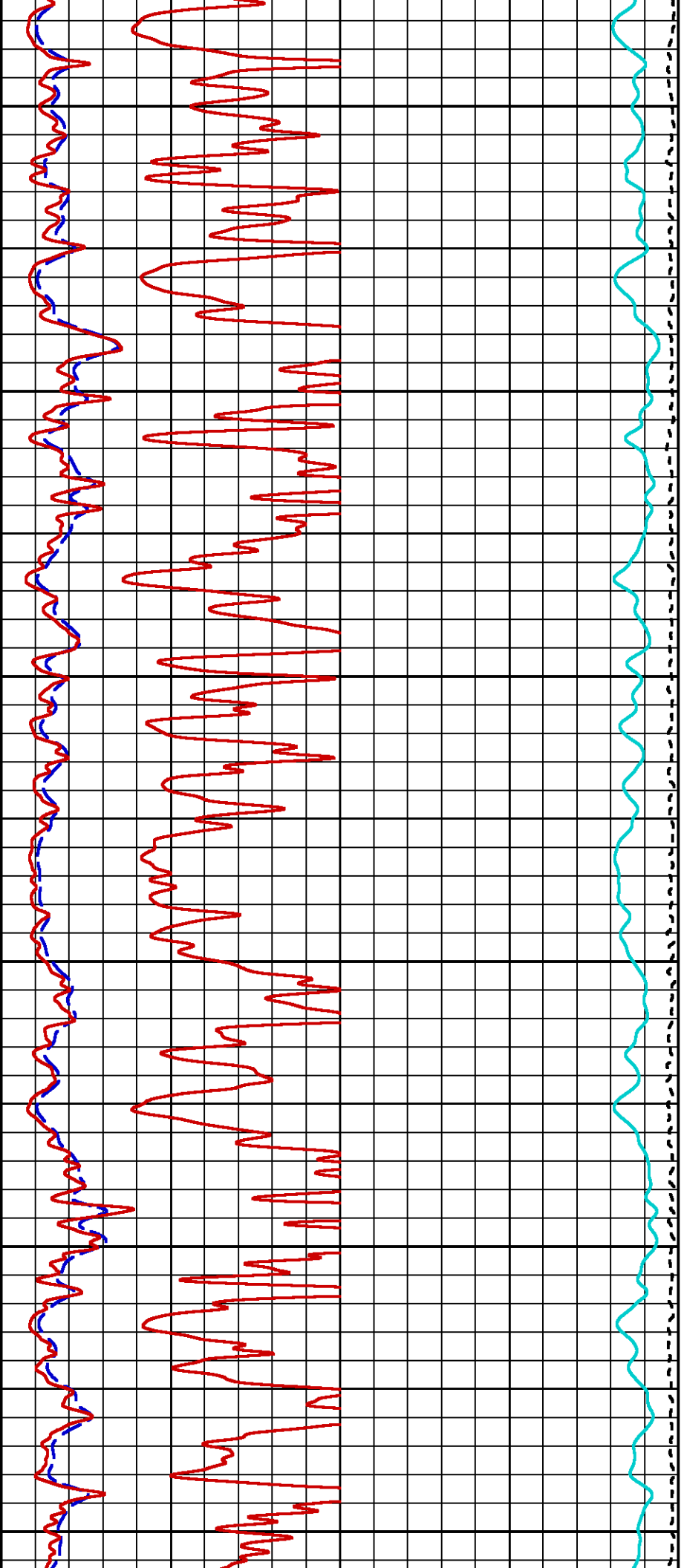
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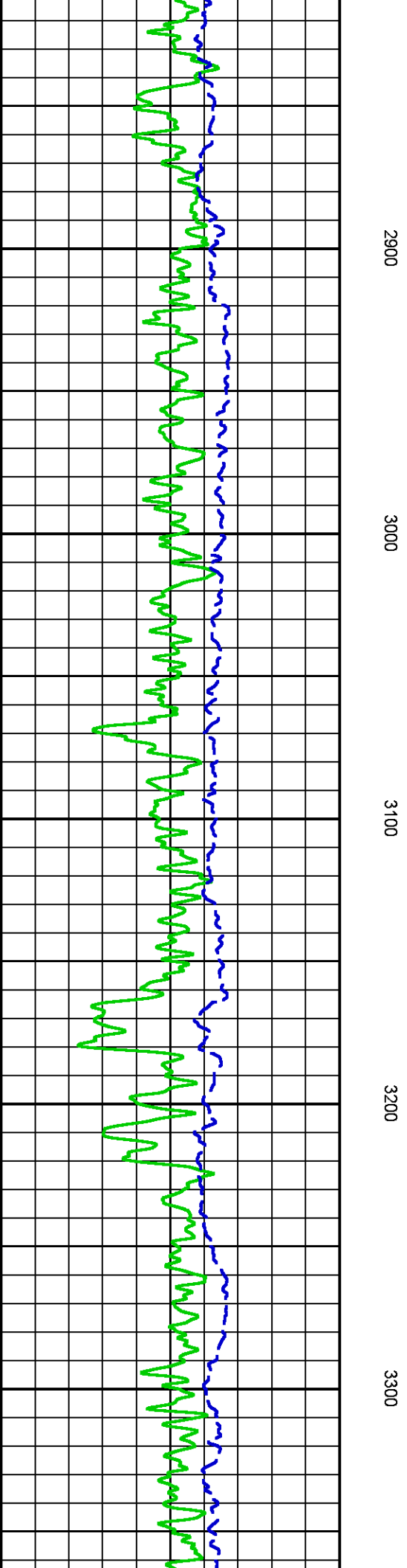
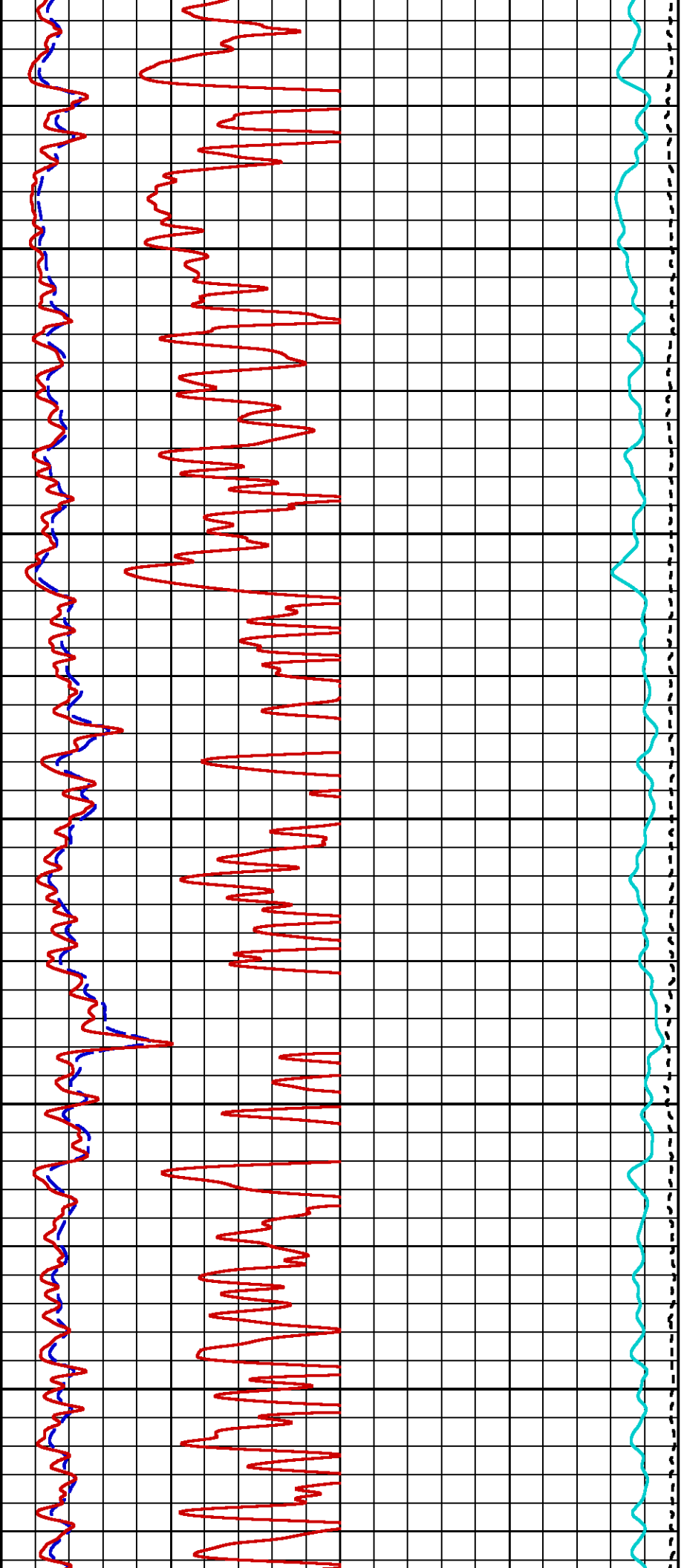


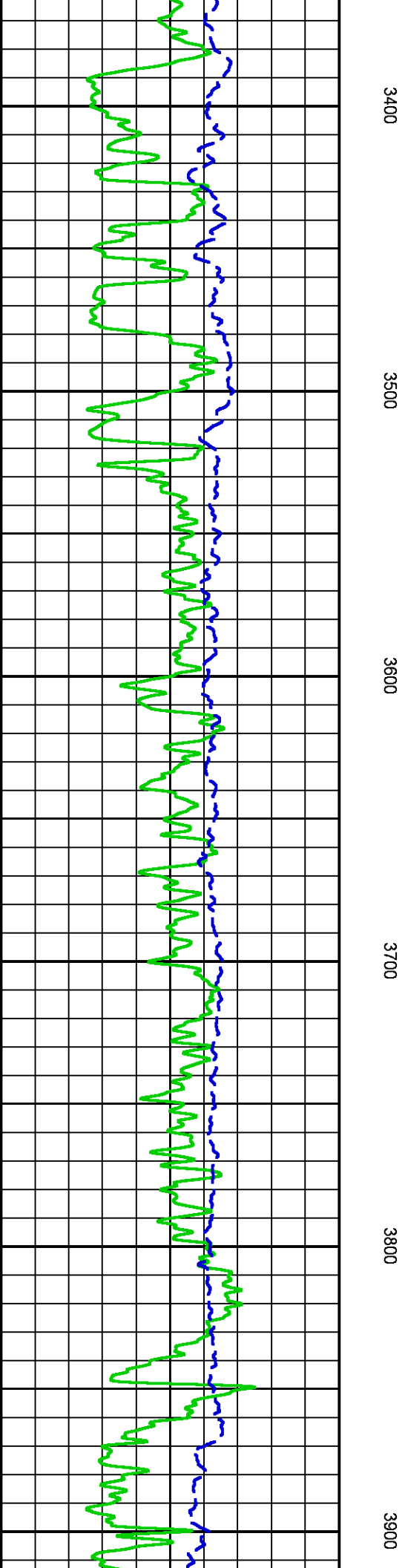
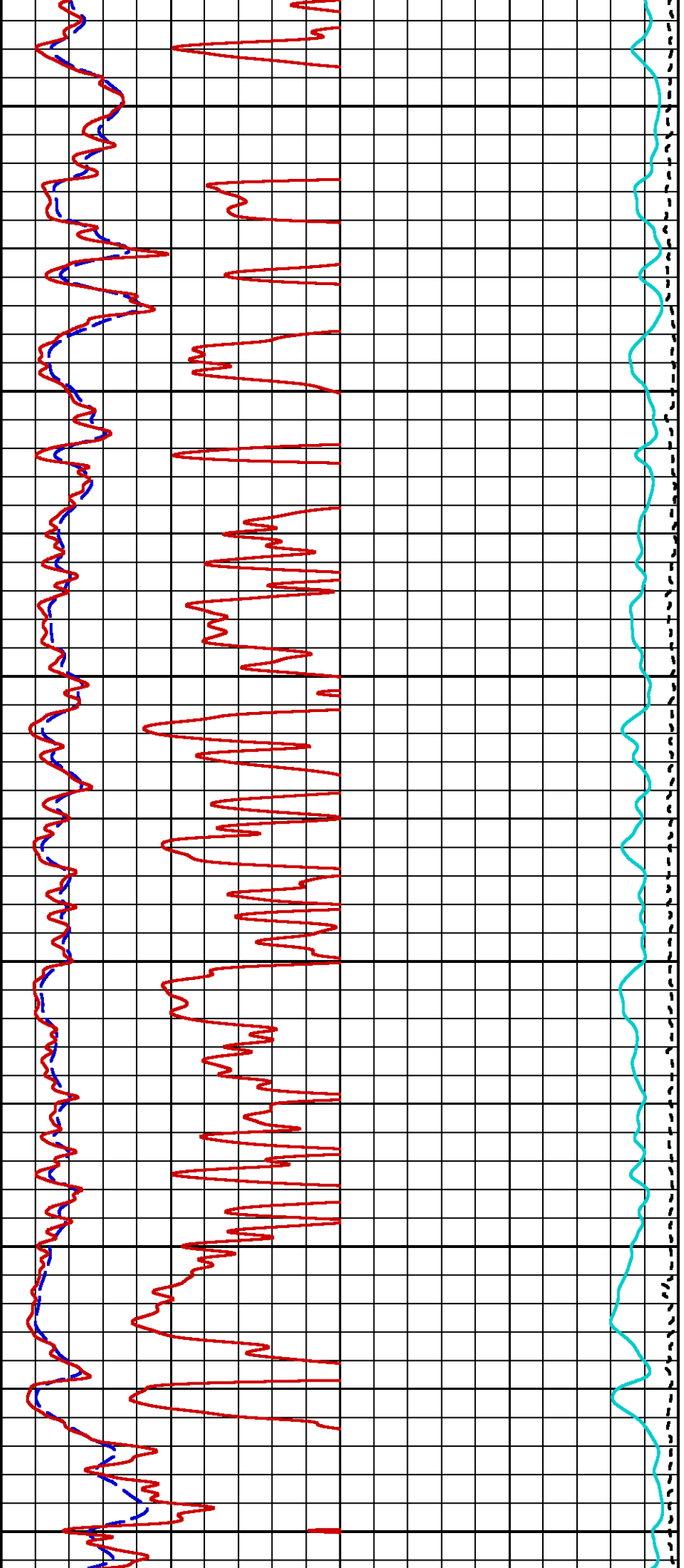


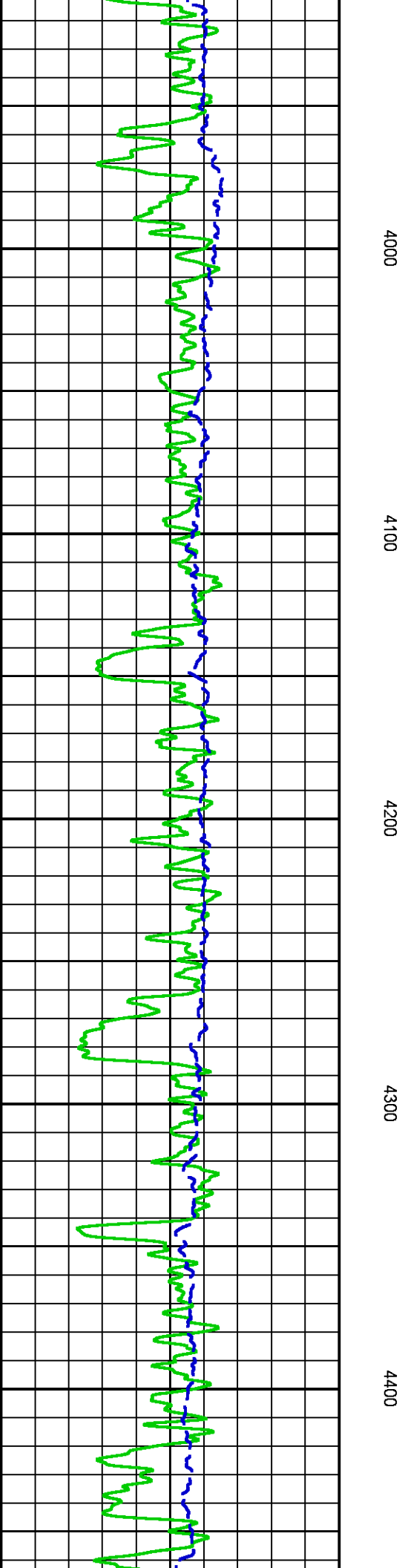
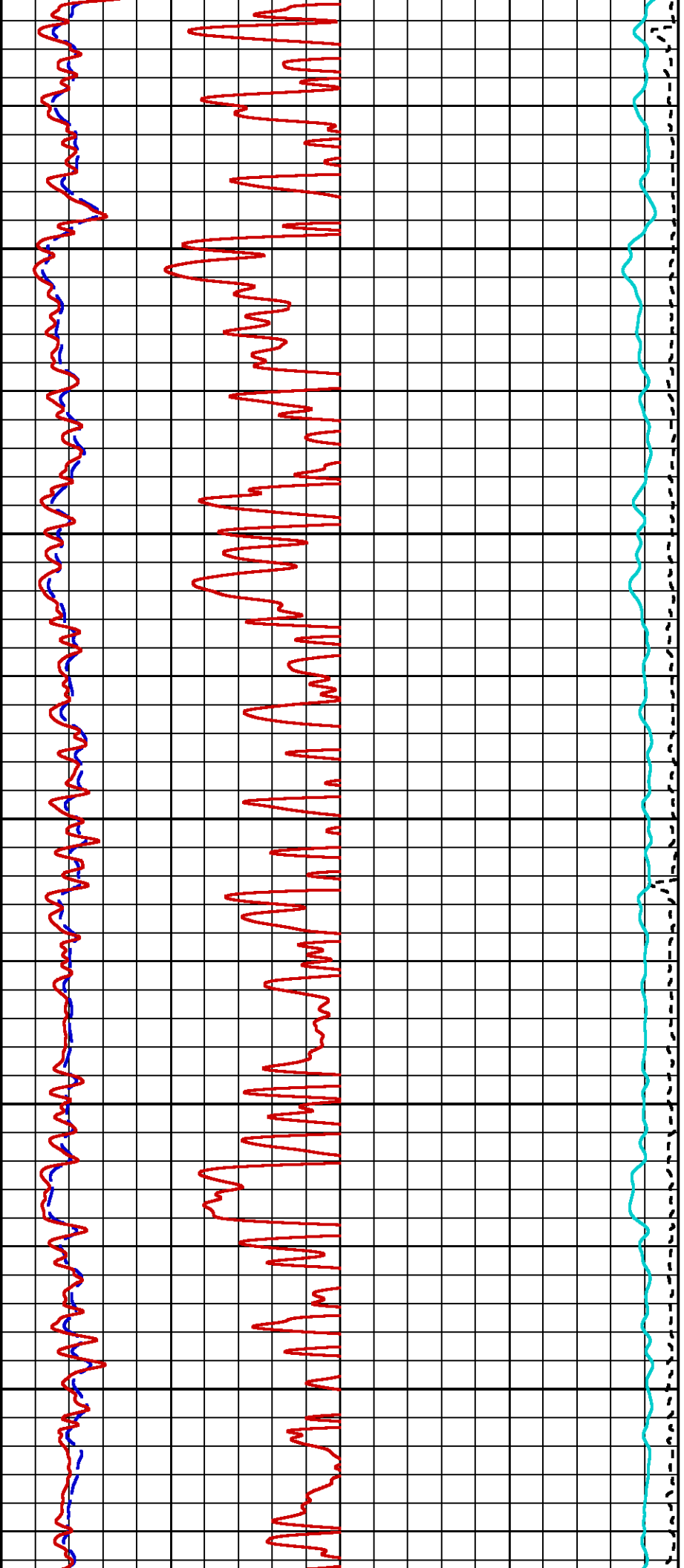


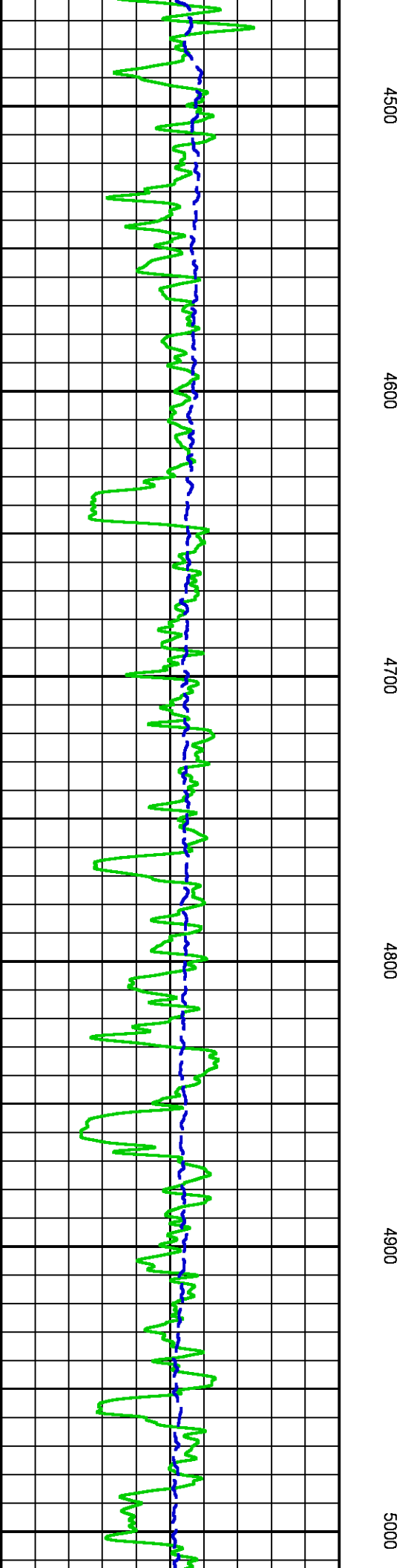
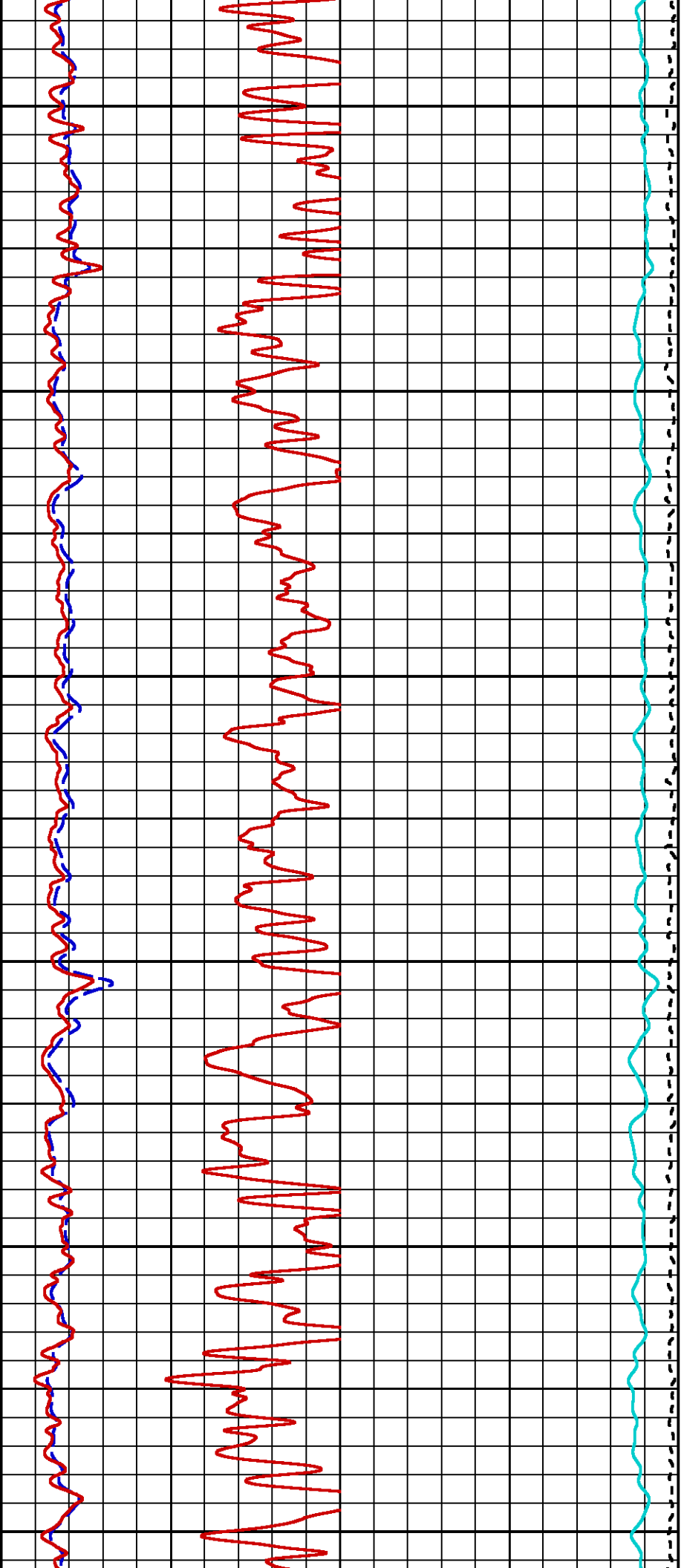


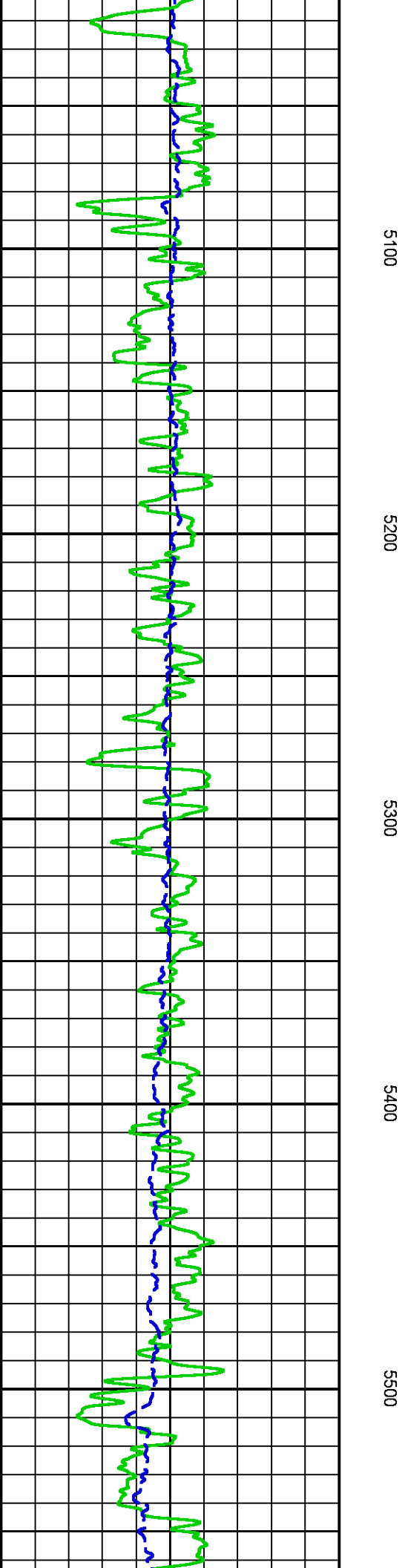
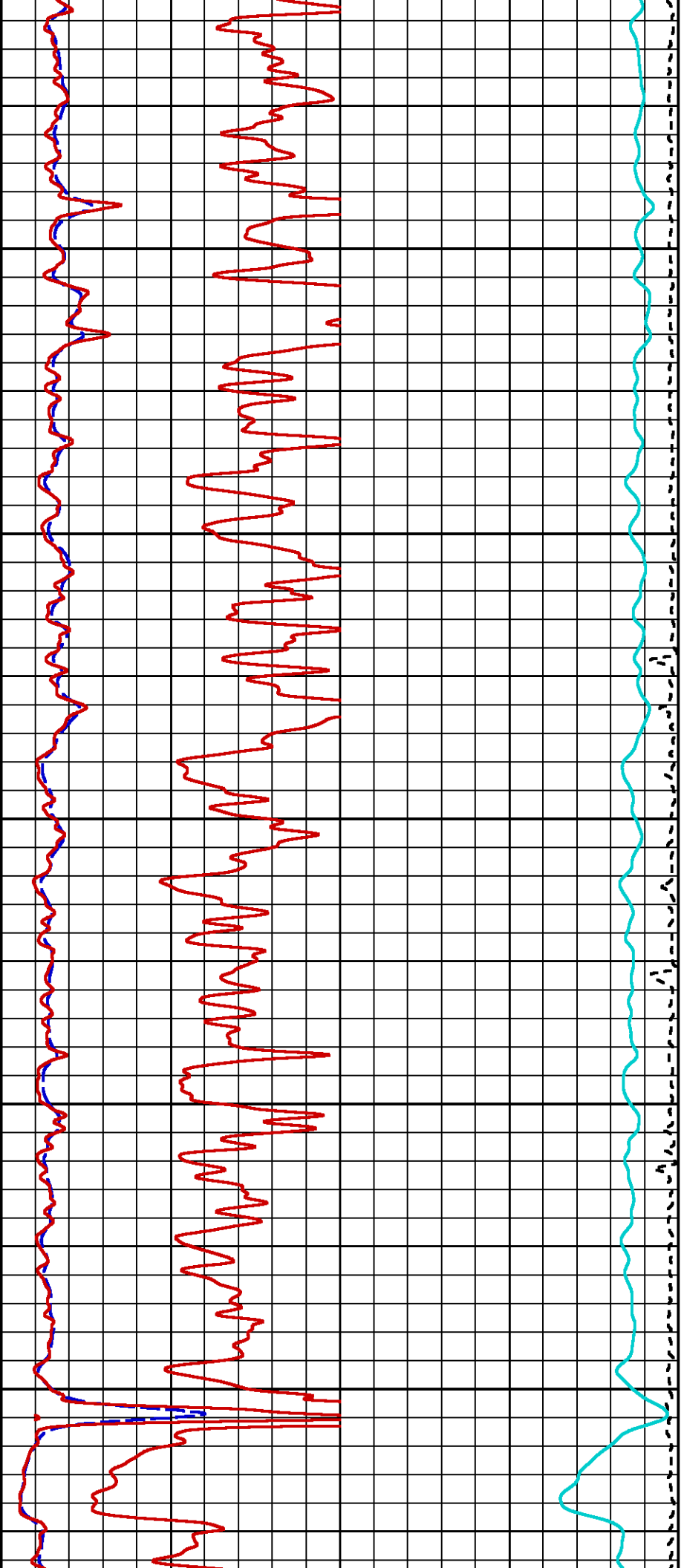


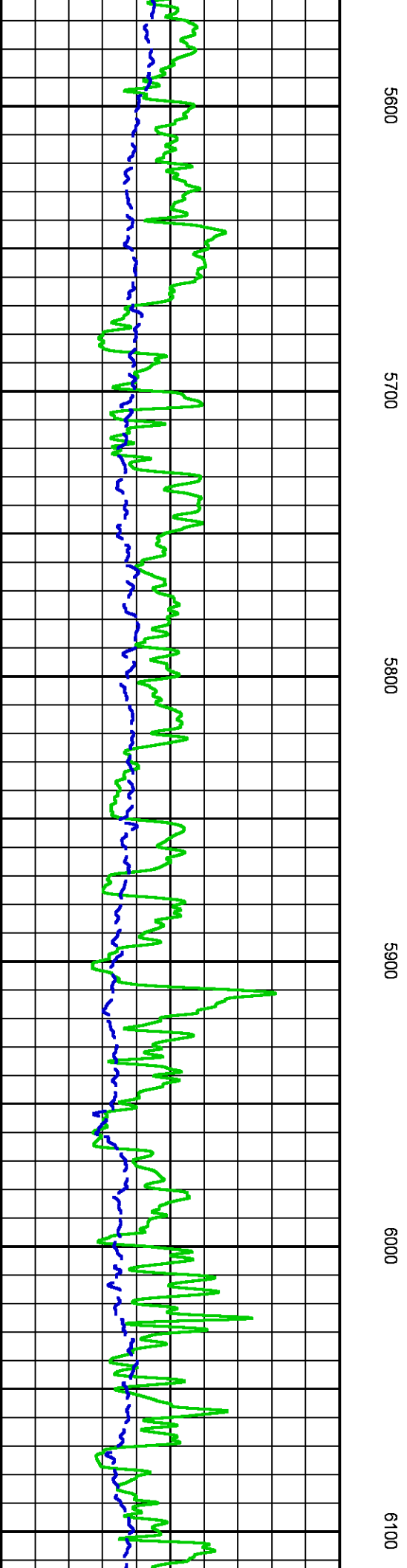
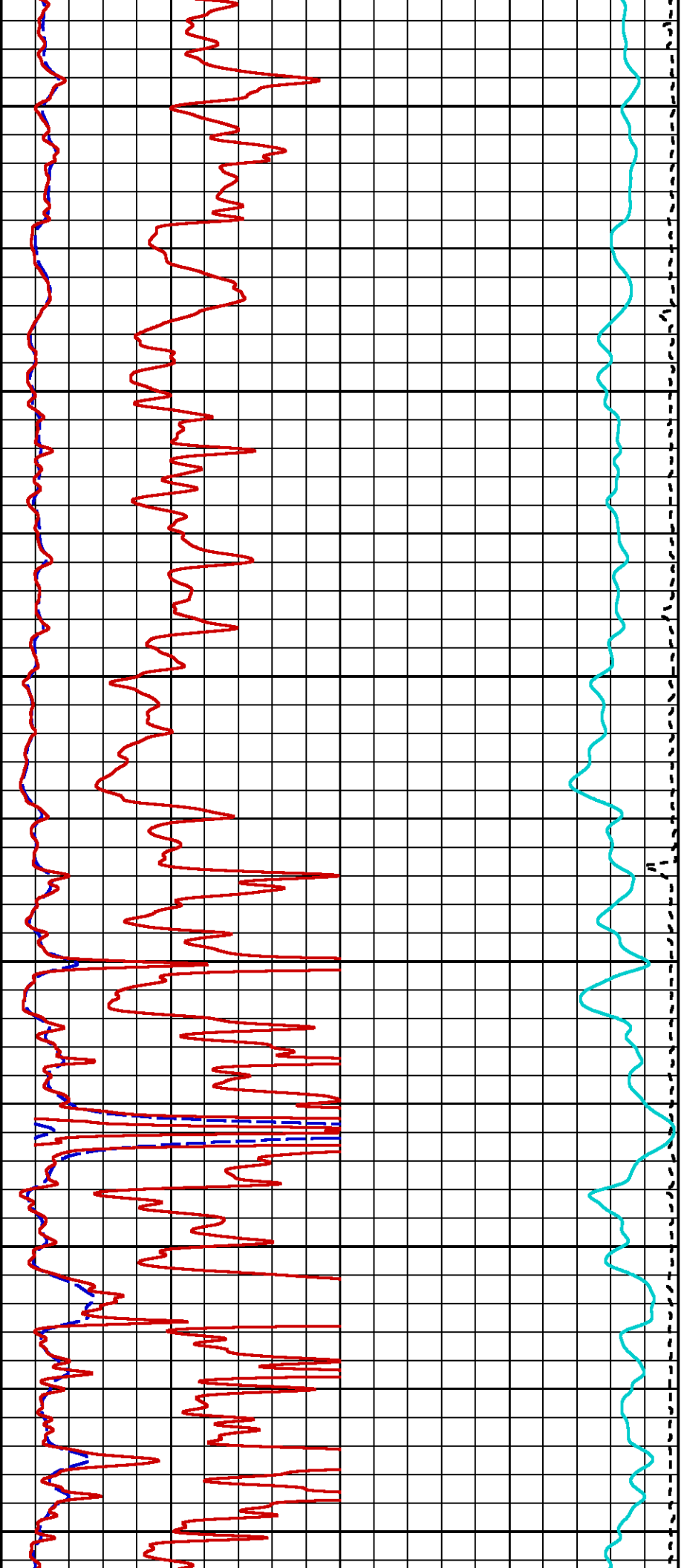


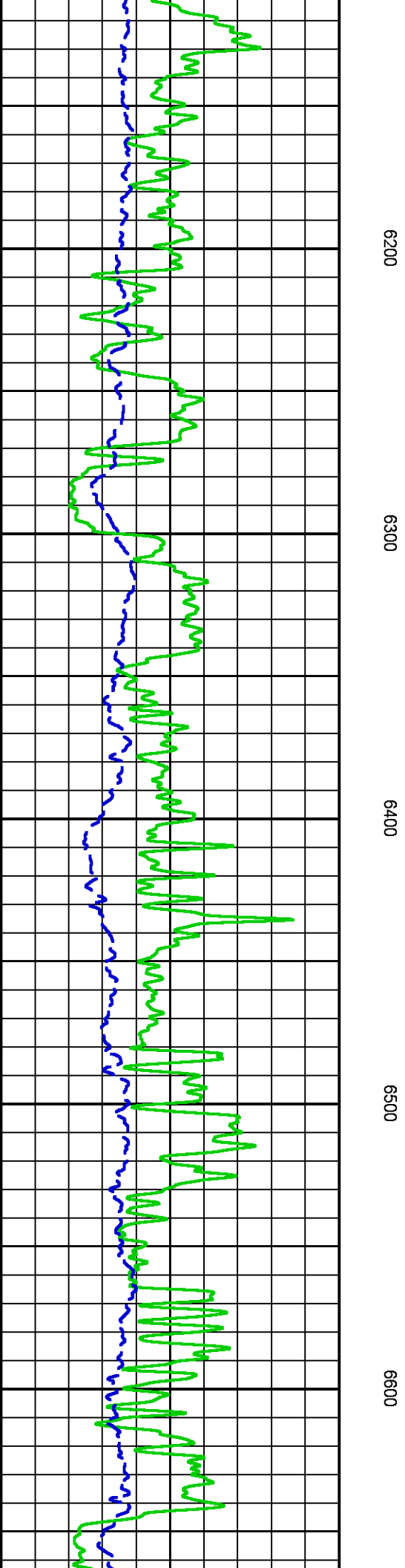


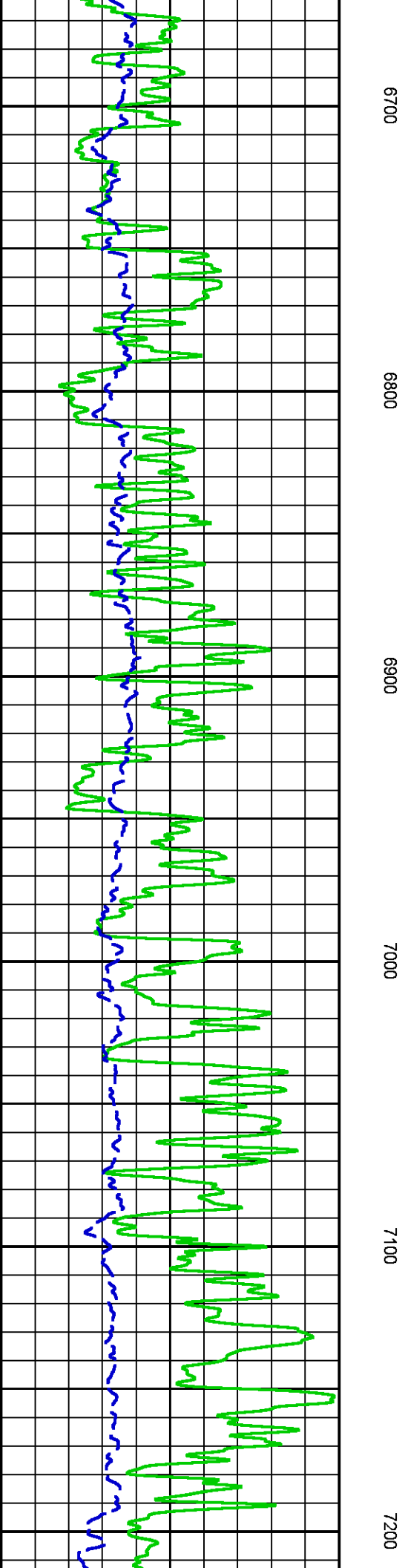
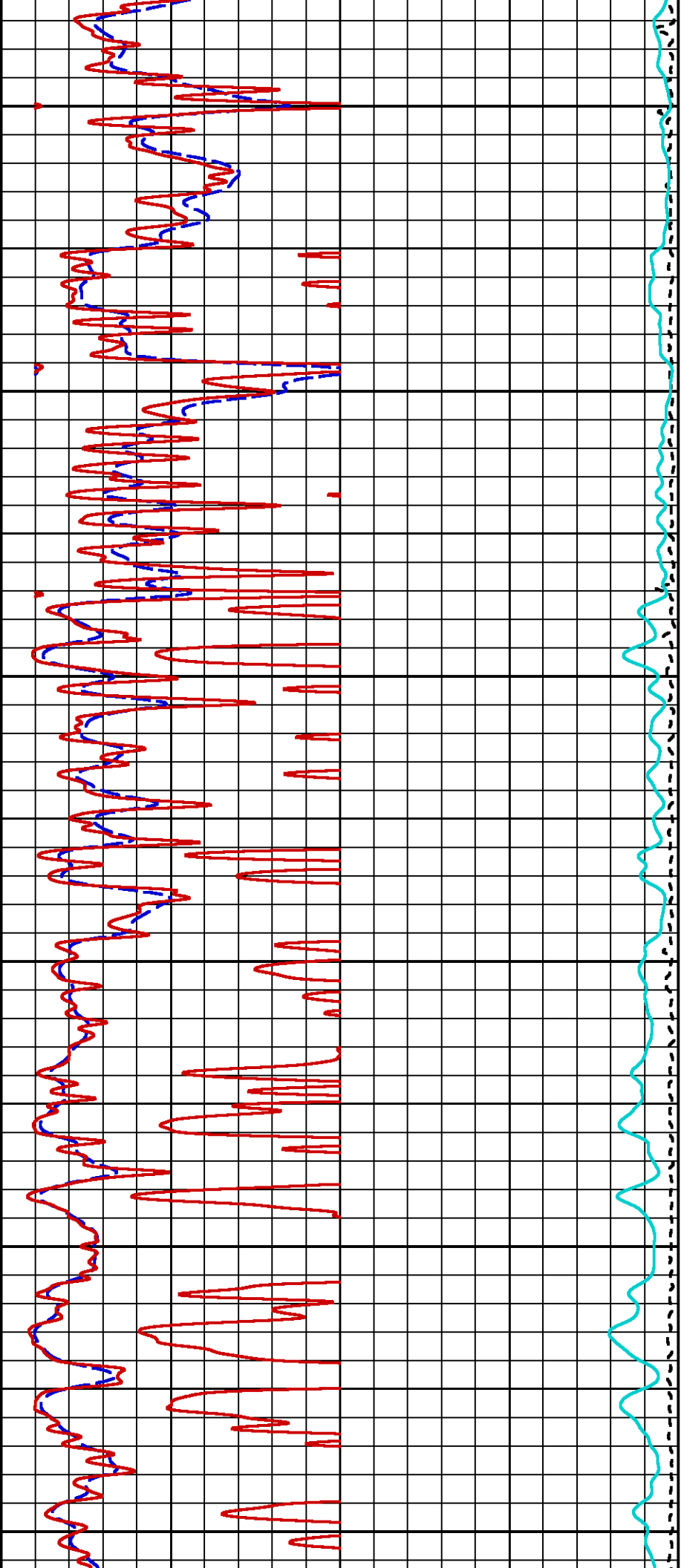




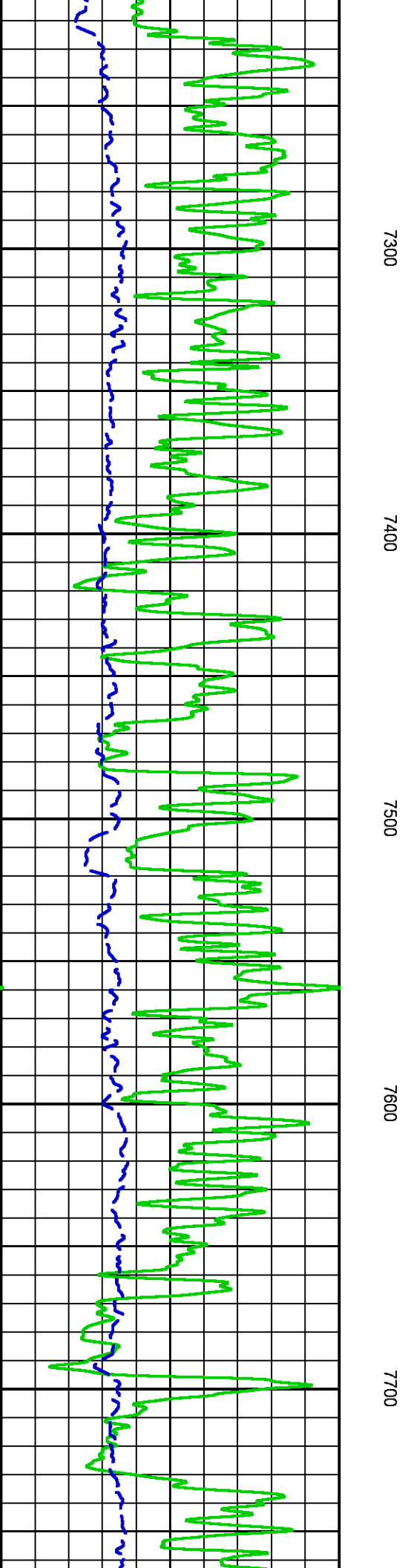
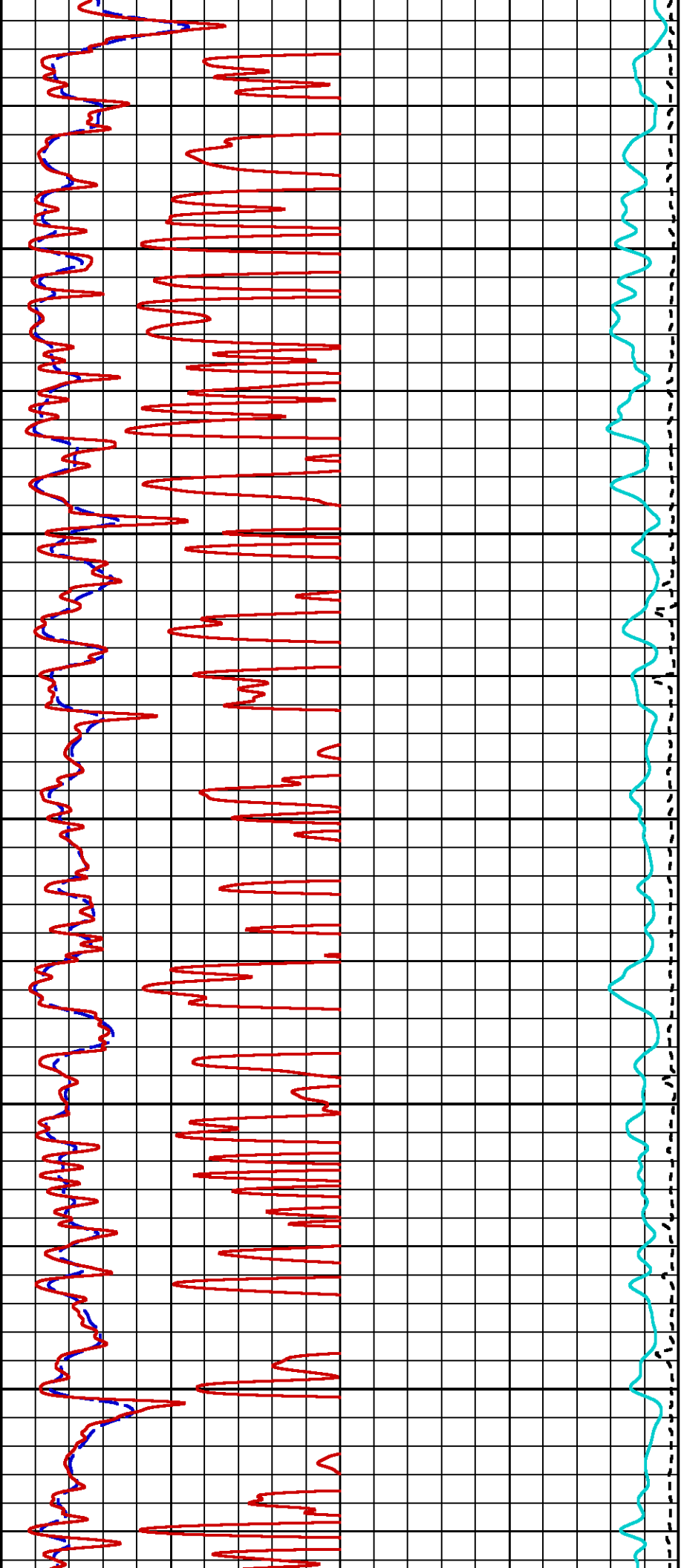


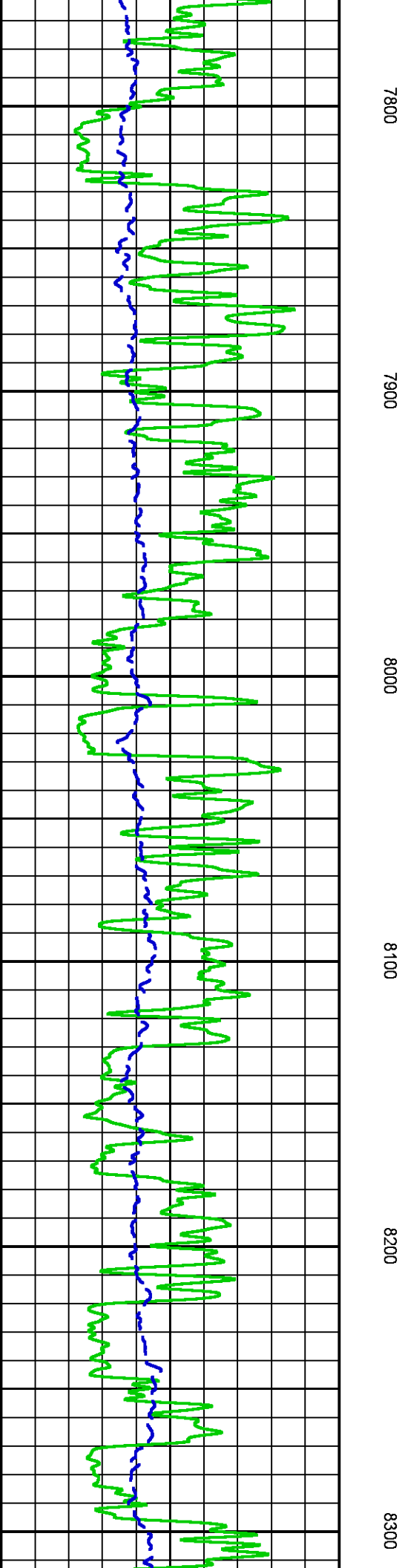
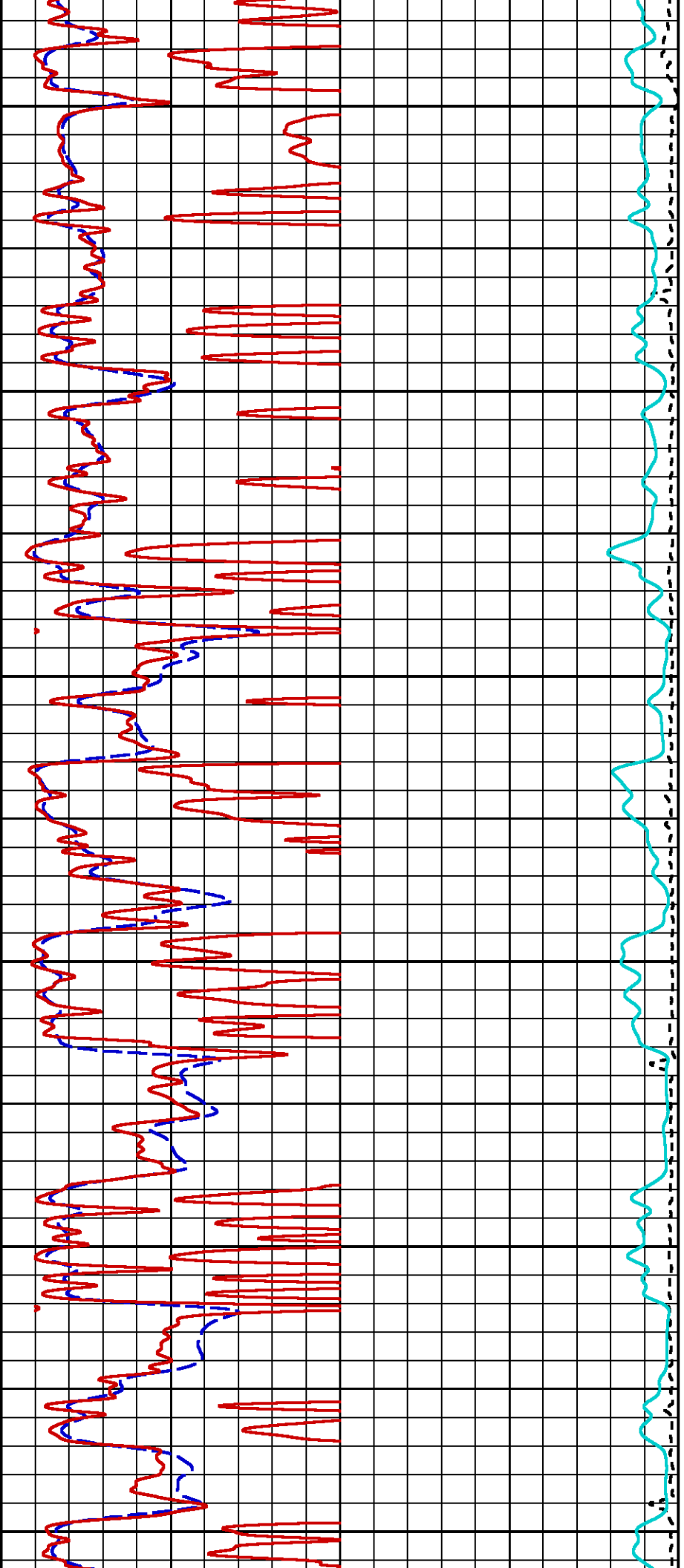


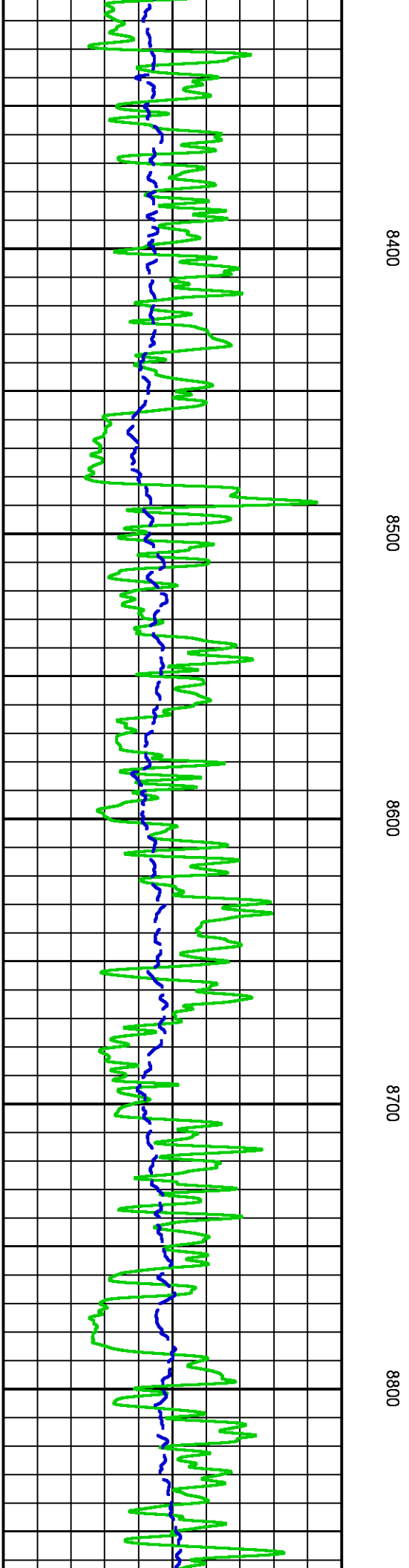
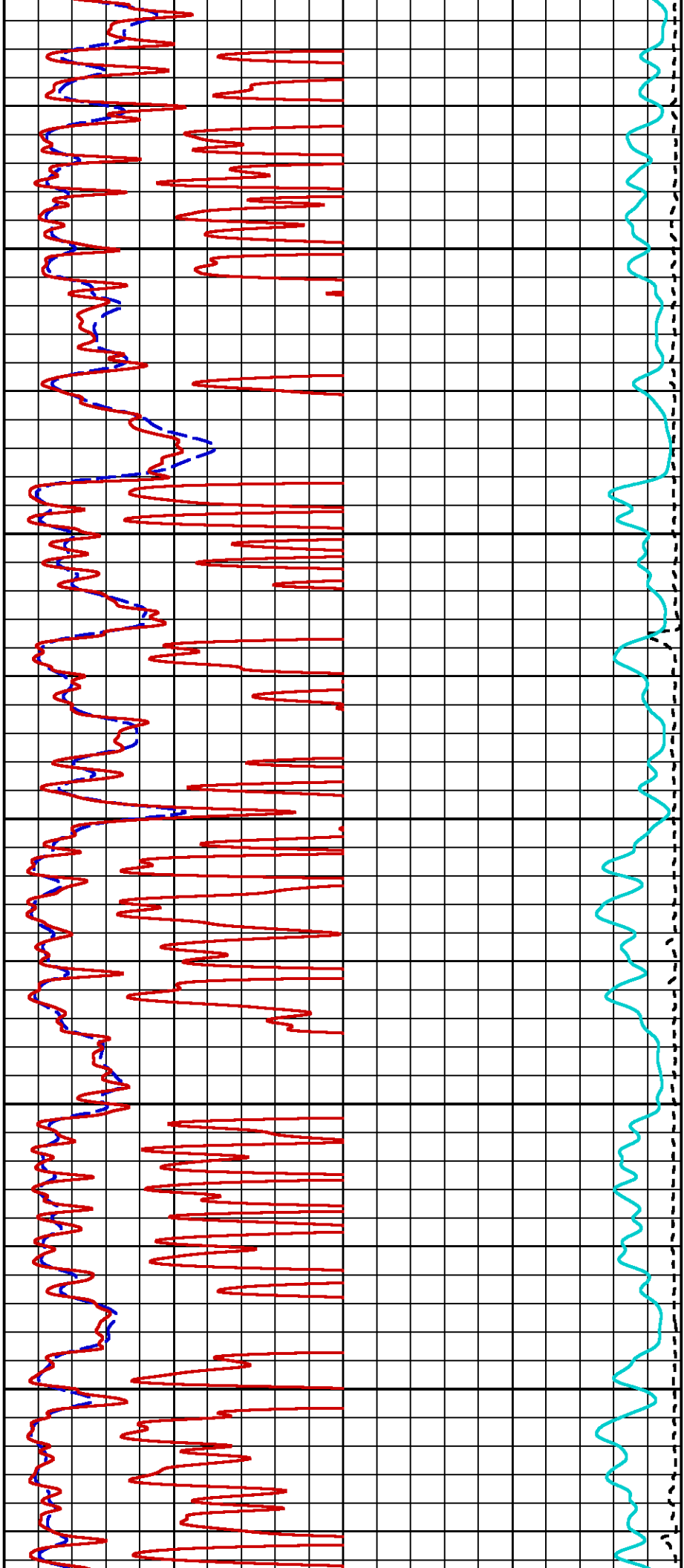


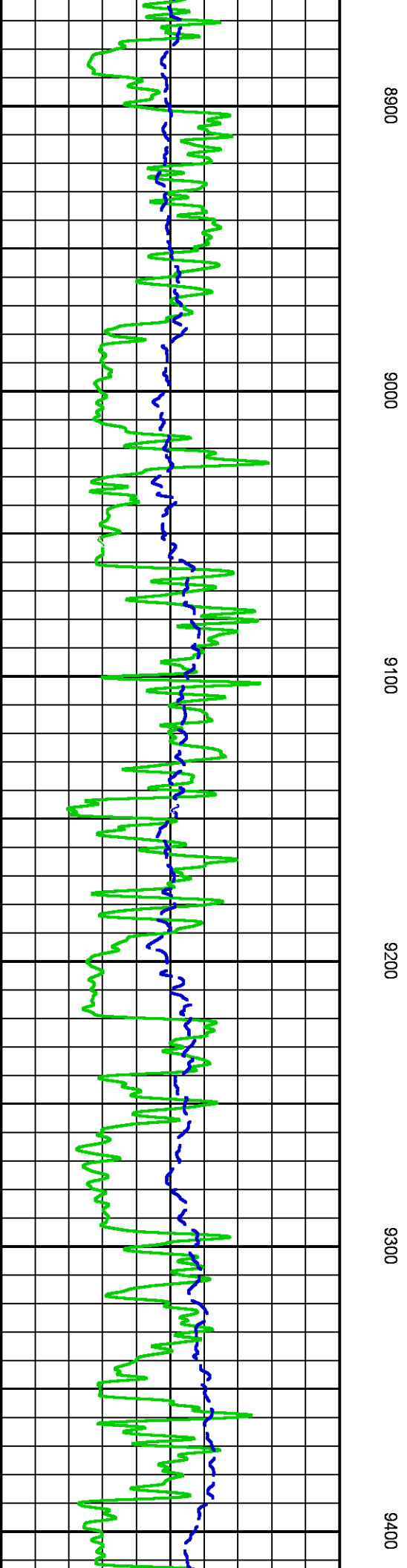
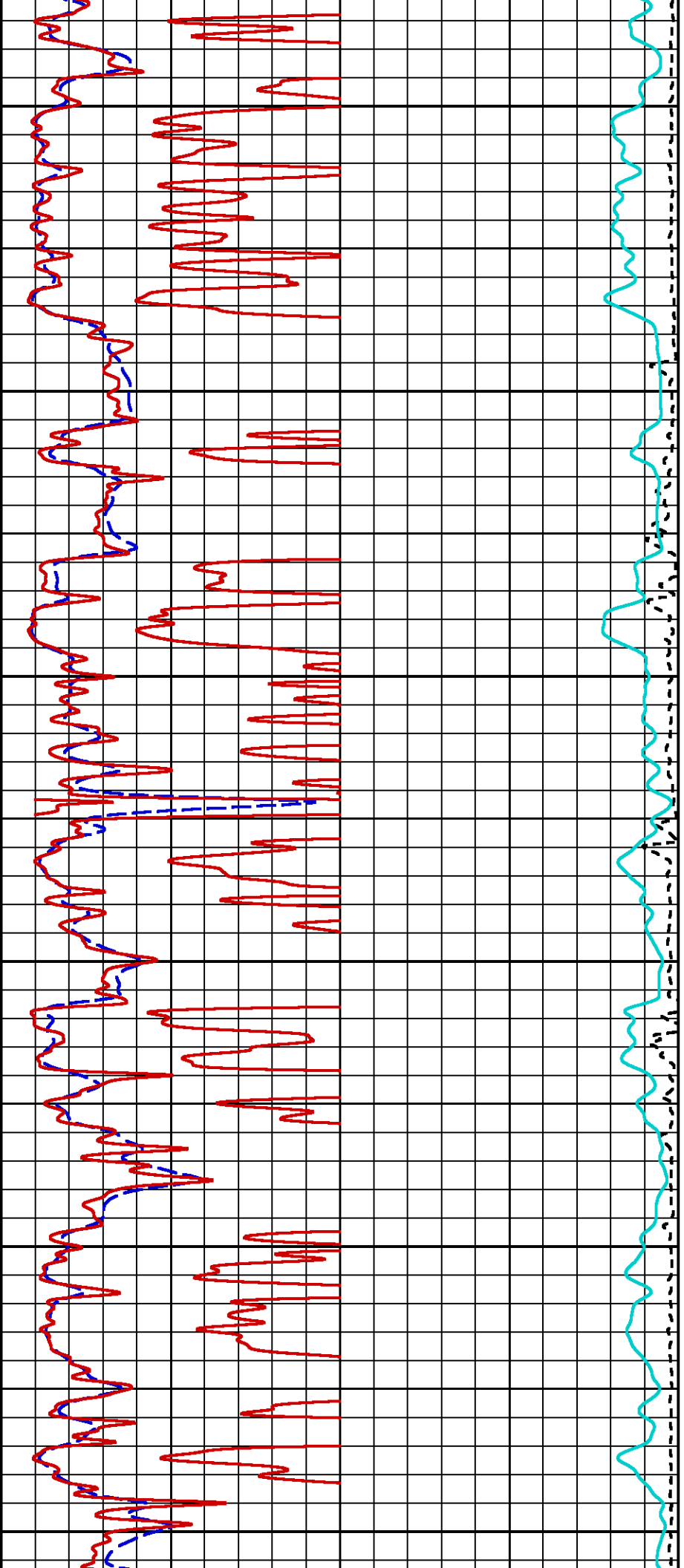


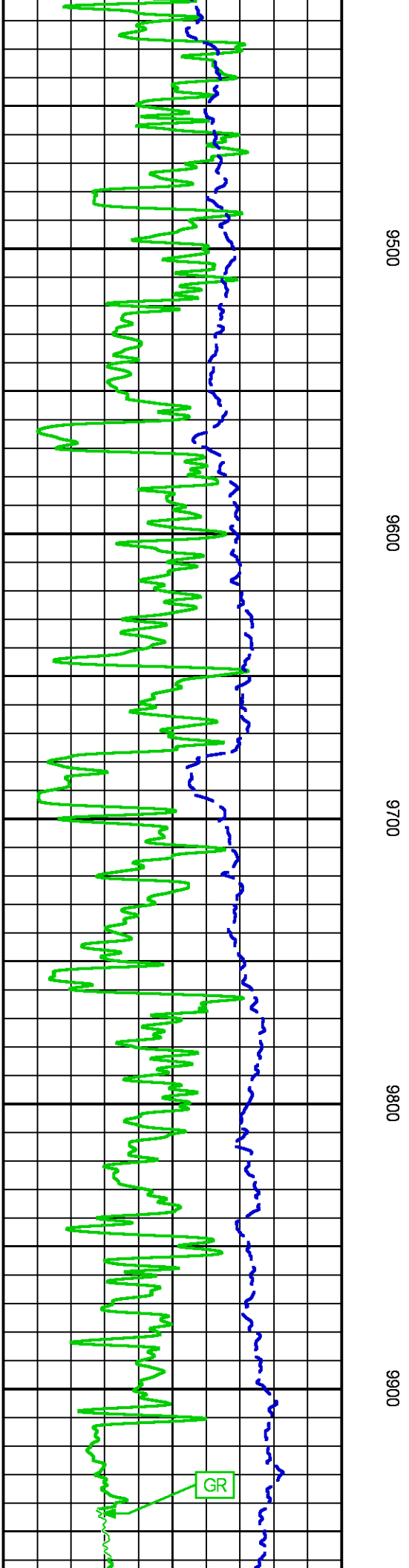
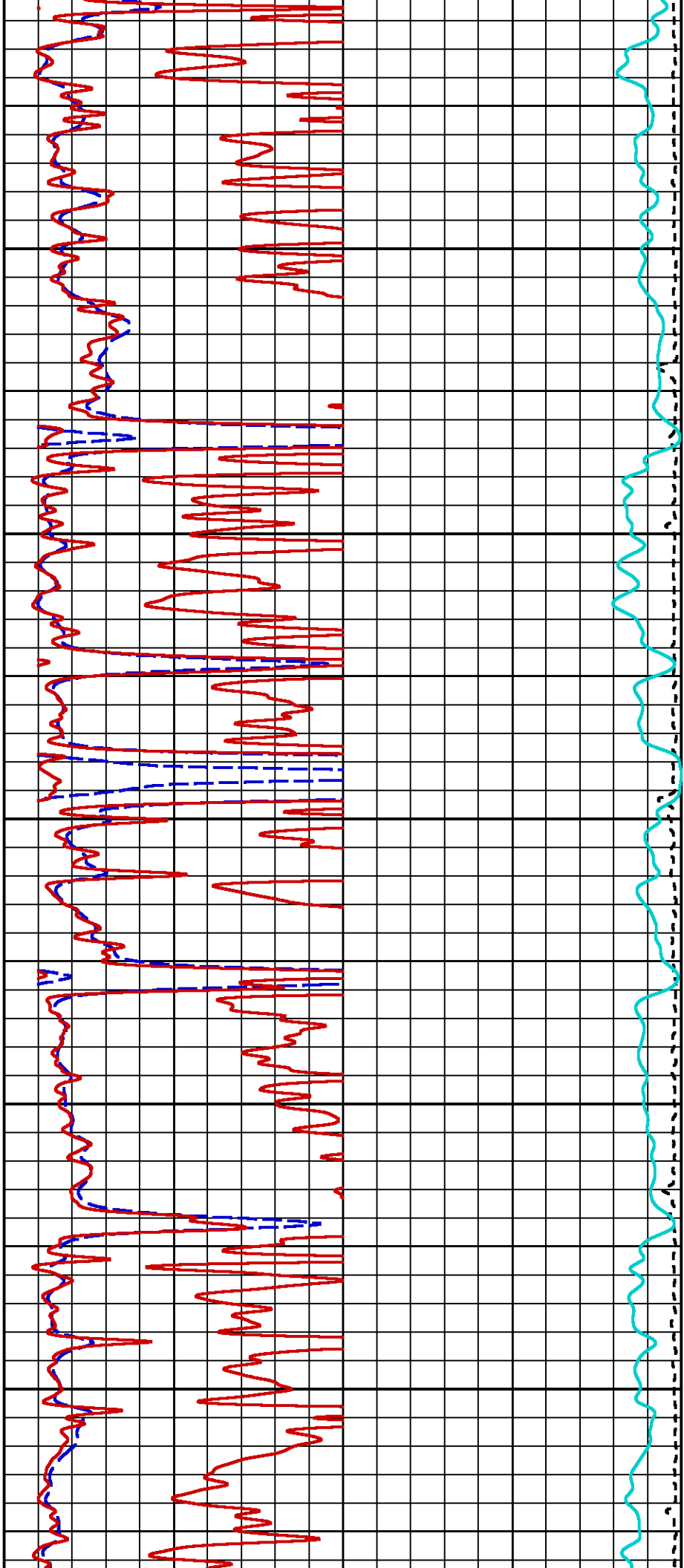


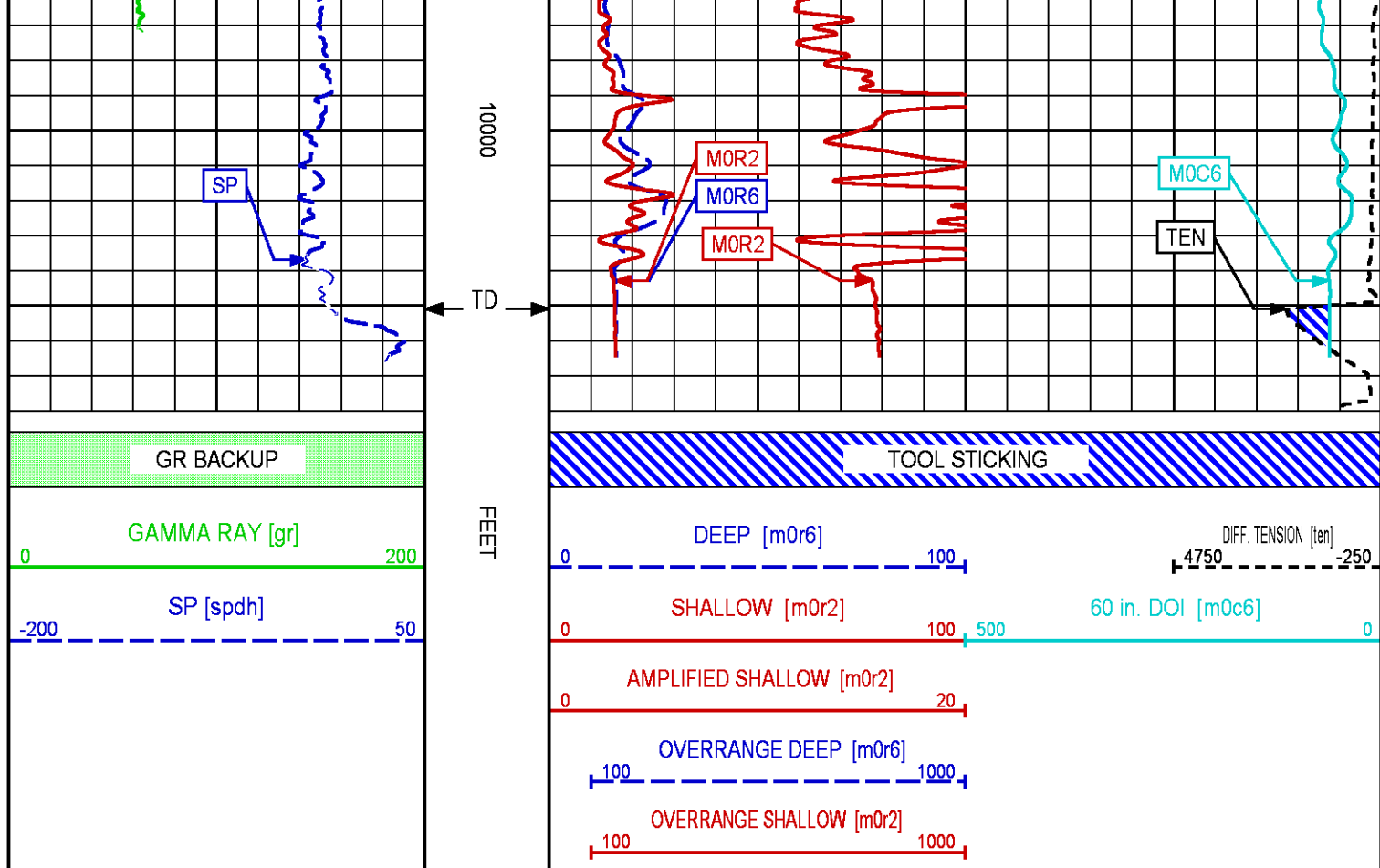












## MAIN LOG 5"/100FT SCALE

ECLIPS 6.2i ECLIPS General Release Rel 6.2i Wed Jun 12 12:21:40 CDT 2013

Updates: 1 Patches: 5

Plotted: Sun Feb 8 20:28:01 2015

### PARAMETER AND FILTER SUMMARY REPORT

FILE: /dat1a/94604J/n777q02.prm  
 LOGGING MODE: DEPTH DIRECTION: UP  
 TOP DEPTH: 1219.250 ft BOTTOM DEPTH: 10075.293 ft

#### SYMMETRIC FILTER

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
TTRM	FILTER ()	medium (1)		TOP	BOTTOM
	FILTER (.h)	medium (1)		"	"
	FILTER (.i)	medium (1)		"	"
Y AXIS CALIPER	FILTER ()	medium (1)		"	"
TENSION	FILTER ()	medium (1)		"	"
GR	FILTER ()	medium (1)		"	"
CN	FILTER ()	medium (1)		"	"
CALIPER	FILTER ()	medium (1)		"	"
	FILTER (.h)	medium (1)		"	"
	FILTER (.i)	medium (1)		"	"
ZDL MED RES	FILTER (hrd1*)	medium		"	"
	FILTER (hrd1s*)	medium		"	"
	FILTER (hrd2*)	medium		"	"
	FILTER (hrd2s*)	medium		"	"

	FILTER (H2S )	medium	"	"
SP-SPDH	FILTER (soft*)	medium	"	"
	FILTER ()	medium (1)	"	"

BOREHOLE & CEMENT					
MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
CASING - BOREHOLE & CEMENT VOLUME	CASING O.D.	4.500	in	TOP	BOTTOM
	CASING THICKNESS	0.000	in	"	"
BIT SIZE	BIT SIZE	8.750	in	"	"
MUD SAMPLE RESISTIVITY	MUD SAMPLE TEMP	67.1	degF	"	"
	MUD SAMPLE RES	3.300	ohm.m	"	"
BOREHOLE TEMP from GRADIENT	Known BH REF TEMP	67.1	degF	"	"
	at BH REF DEPTH	0.0	ft	"	"
	with TEMP GRADIENT	1.200	0.01 degF/ft	"	"
BOREHOLE CORR DIAMETER SOURCE	CALIPER/FIXED DIA. (cnbh*)	USE CALIPER		"	"
	CALIPER/FIXED DIA. (mbh*)	USE CALIPER		"	"
BOREHOLE CORR DIAMETER	FIXED DIAMETER (cnbh*)	8.750	in	"	"
	FIXED DIAMETER (mbh*)	8.750	in	"	"
BH MUD RESISTIVITY SOURCE	RMUD SOURCE (HDIL)	TOOL MEASURED		"	"

CN PROCESSING					
MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
2446 CN MATRIX	2446 MATRIX	SANDSTONE		TOP	BOTTOM
CN SALINITY CORRECTION	SALINITY	600	ppm	"	"
CN TOOL STANDOFF	ENABLE STANDOFF CORR	OFF		"	"
	STANDOFF AMOUNT	0.00	in	"	"
CN CASING & CEMENT CORRECTION	CORRECTION	OFF		"	"
	BIT SIZE BEHIND CSNG	7.875	in	"	"

ZDL PROCESSING					
MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
DENSITY POROSITY	RHOmatrix	2.680	g/cm3	TOP	BOTTOM
	RHOfluid	1.000	g/cm3	"	"
ZDL	DENX TRACKING	ON		"	"
TRACKING TIME	Logging Spd for Gain	Over 10 ft/min		"	"

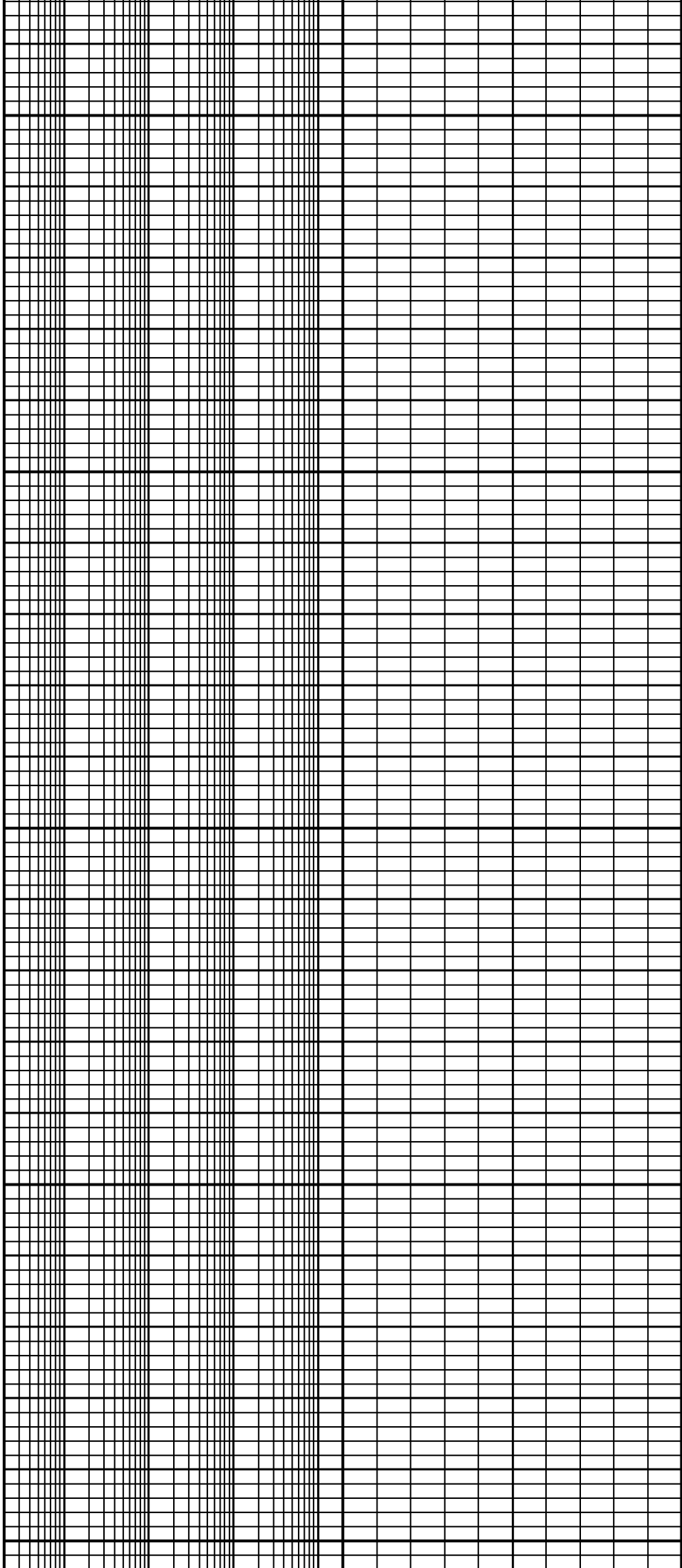
HDIL PROCESSING					
MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
HDIL TEMPERATURE CORRECTION	TEMP CORR SOURCE	USE RXTEMP		TOP	BOTTOM
ADAPTIVE BOREHOLE CORRECTION	ABC PROCESSING	ON		"	"
	ABC to CALCULATE	STANDOFF		"	"
	STANDOFF	1.50	in	"	"
	TOOL POSITION	ECCENTERED		"	"
	Rmud MULTIPLIER	1.000		"	"

CURVE DESCRIPTION REPORT		
CURVE NAME	CREATION DATE	CURVE DESCRIPTION
F1:BIT	Feb 8 14:20:00 2015	BIT SIZE
F1:BVOL	Feb 8 14:20:00 2015	BOREHOLE VOLUME
F1:CAL	Feb 8 14:20:00 2015	CALIPER
F1:CNCF	Feb 8 14:20:00 2015	FIELD NORMALIZED COMPENSATED NEUTRON POROSITY
F1:CVOL	Feb 8 14:20:00 2015	CEMENT VOLUME
F1:GR	Feb 8 14:20:00 2015	GAMMA RAY
F1:M2R1	Feb 8 14:20:00 2015	VERTICAL 2-FOOT RESOLUTION MATCHED RESISTIVITY, 10-INCH DOI
F1:M2R6	Feb 8 14:20:00 2015	VERTICAL 2-FOOT RESOLUTION MATCHED RESISTIVITY, 60-INCH DOI
F1:M2R9	Feb 8 14:20:00 2015	VERTICAL 2-FOOT RESOLUTION MATCHED RESISTIVITY, 90-INCH DOI
F1:PE	Feb 8 14:20:00 2015	PHOTO ELECTRIC CROSS-SECTION
F1:PORZ	Feb 8 14:20:00 2015	POROSITY FOR SELECTABLE MATRIX
F1:SPDH	Feb 8 14:20:00 2015	SPONTANEOUS POTENTIAL PROCESSED IN COMMON REMOTE
F1:TEN	Feb 8 14:20:00 2015	DIFFERENTIAL TENSION
F1:ZCOR	Feb 8 14:20:00 2015	DENSITY CORRECTION

CURVE MEASURE POINT OFFSET							
CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
BIT	0.00	GR	107.25	M2R9	8.00	SPDH	14.00

Presentation	: cas6685:/dat1a/94604J/WPX_MAIN.fvpdf [5"/100' Scale]
Plot Interval	: -22.5 - 10081 Feet
Data File 1	: F1 : cas6685:/dat1a/94604J/n777q02_MAIN.xtf
Created On	: Feb 8 14:20:00 2015
Company	: WPX ENERGY INC
Well	: YOUBERG RU 443-7
Field	: RULISON
File Interval	: -22.5 - 10081 Feet
OCT	: n777q

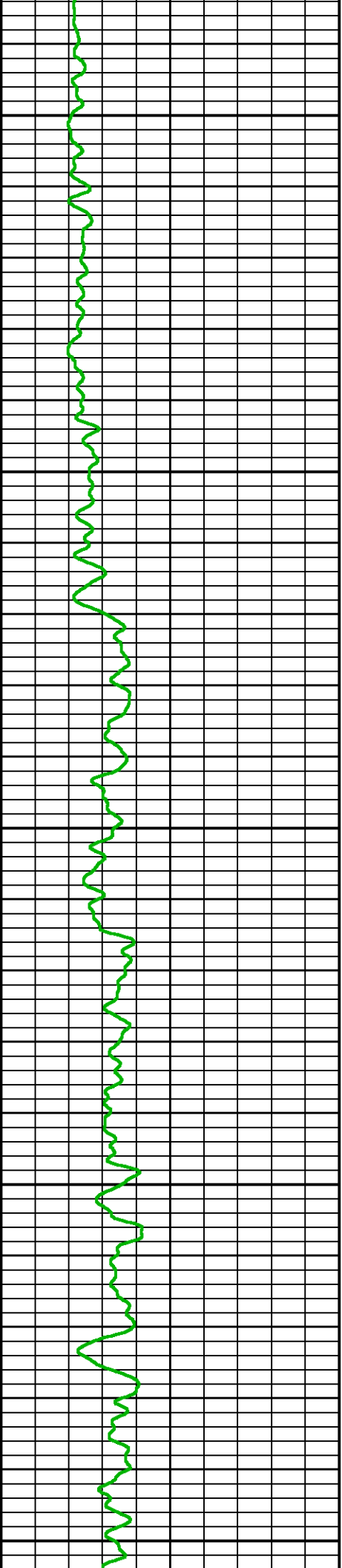


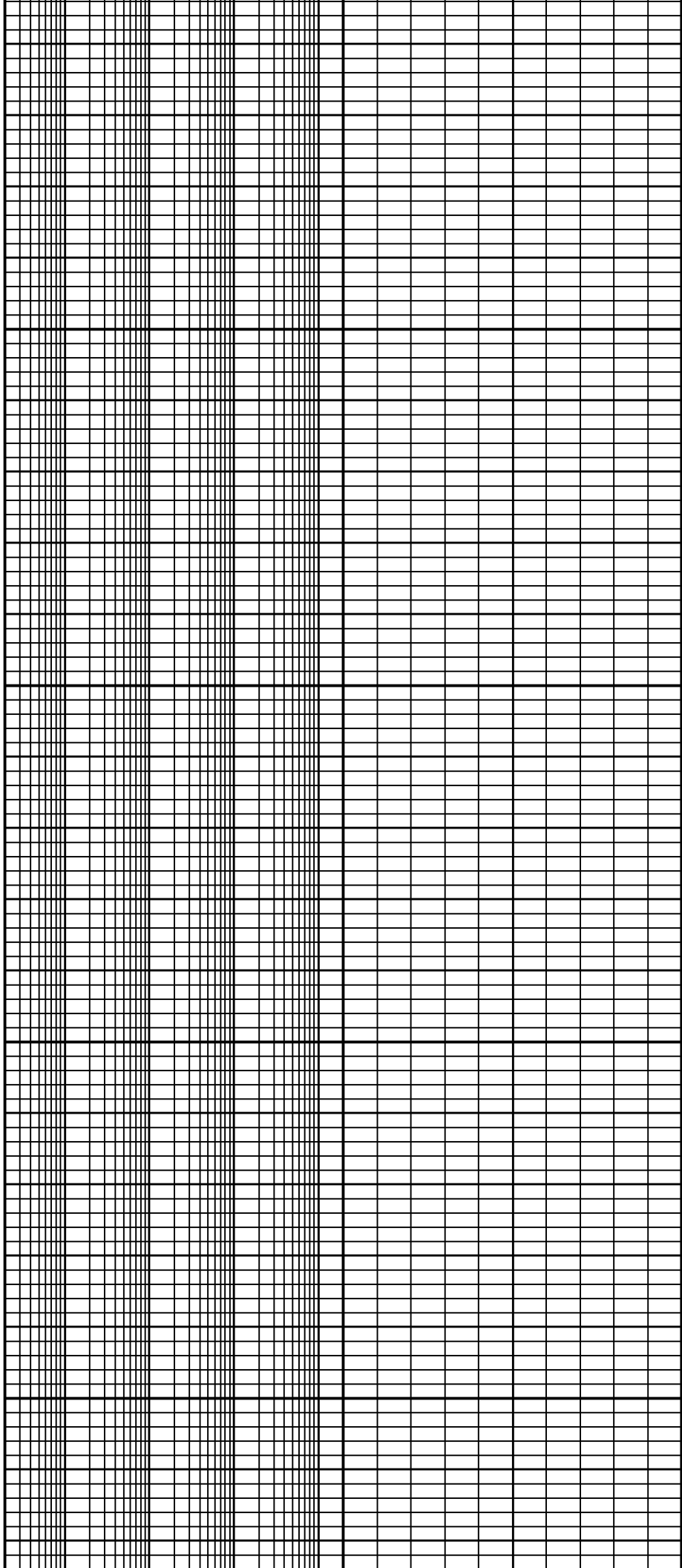


100

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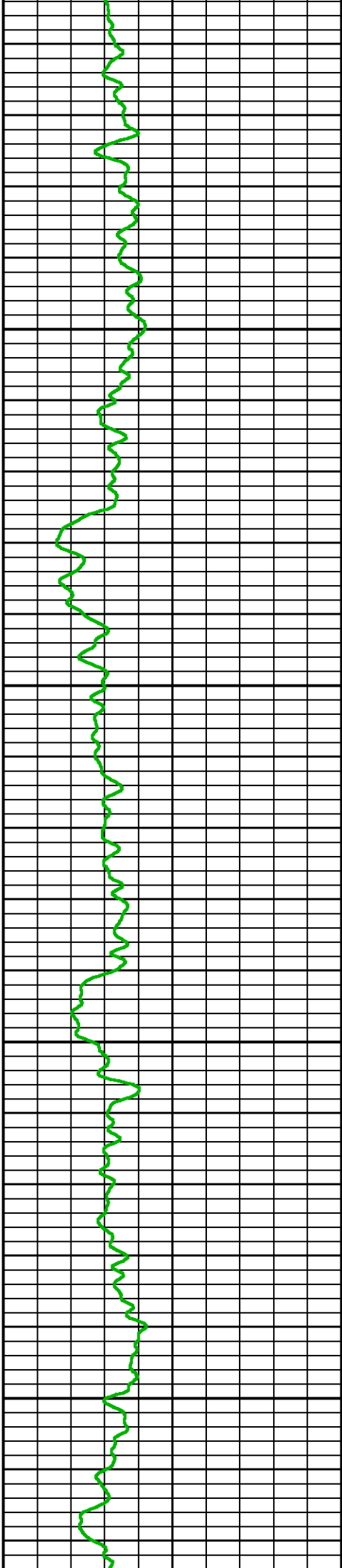
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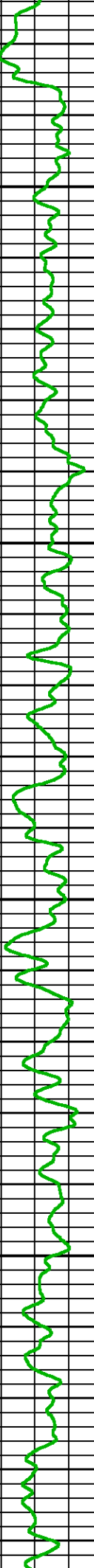
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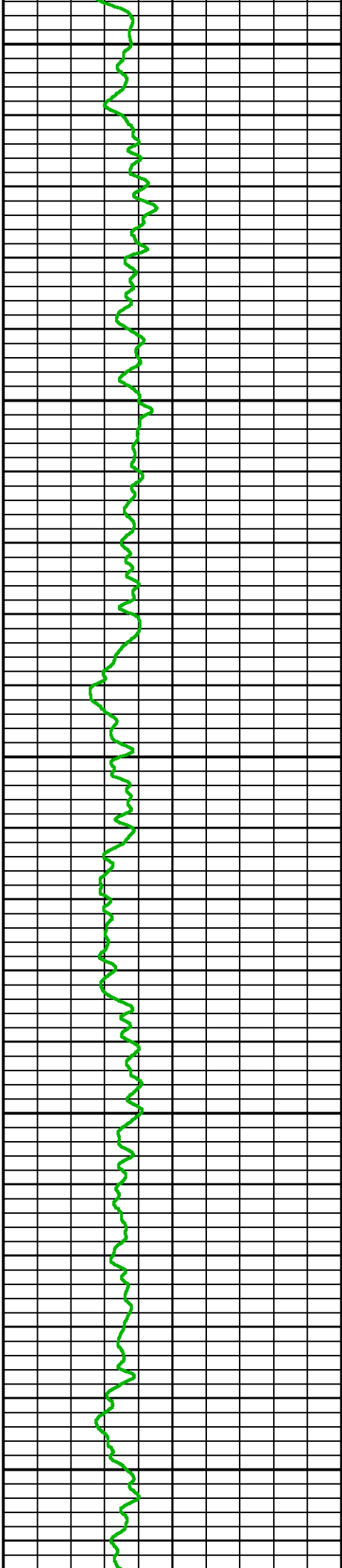
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600

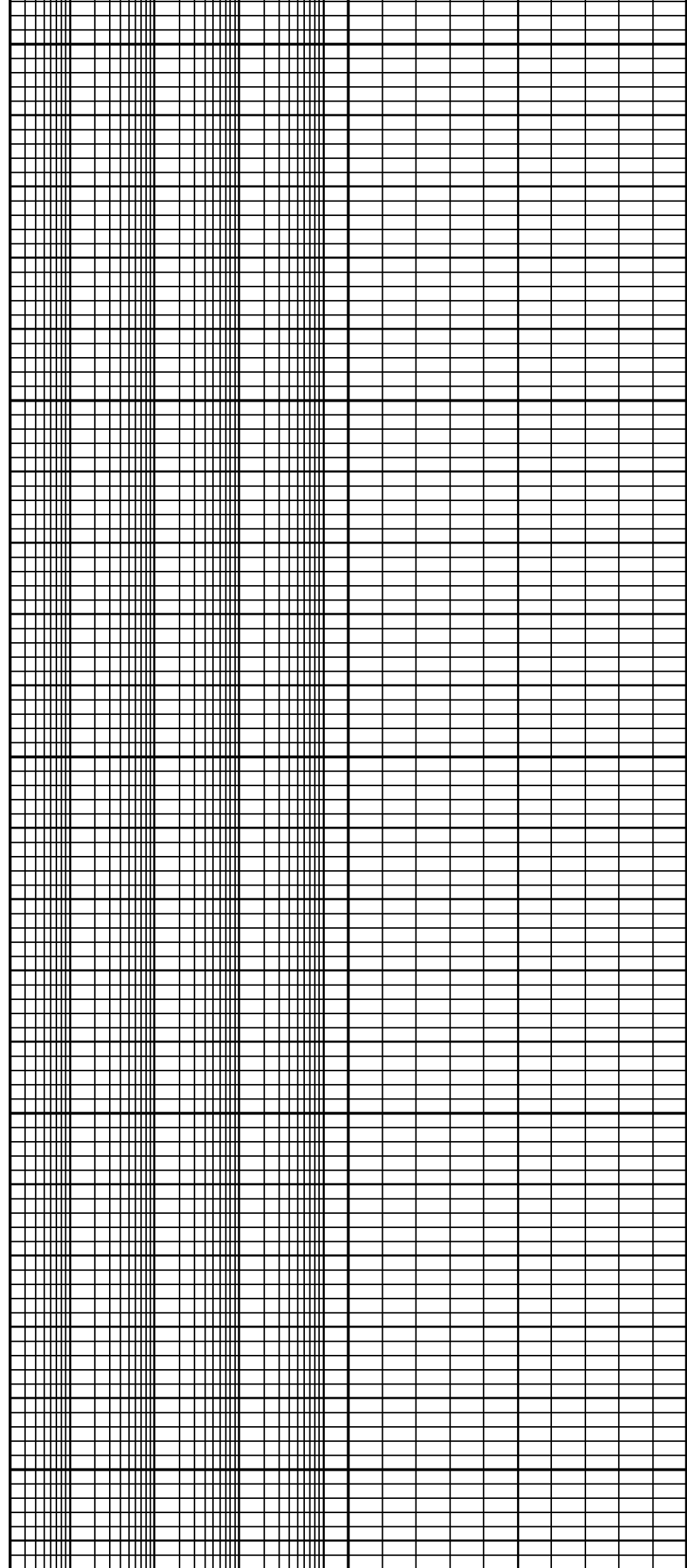
700





008

006



1000

1100

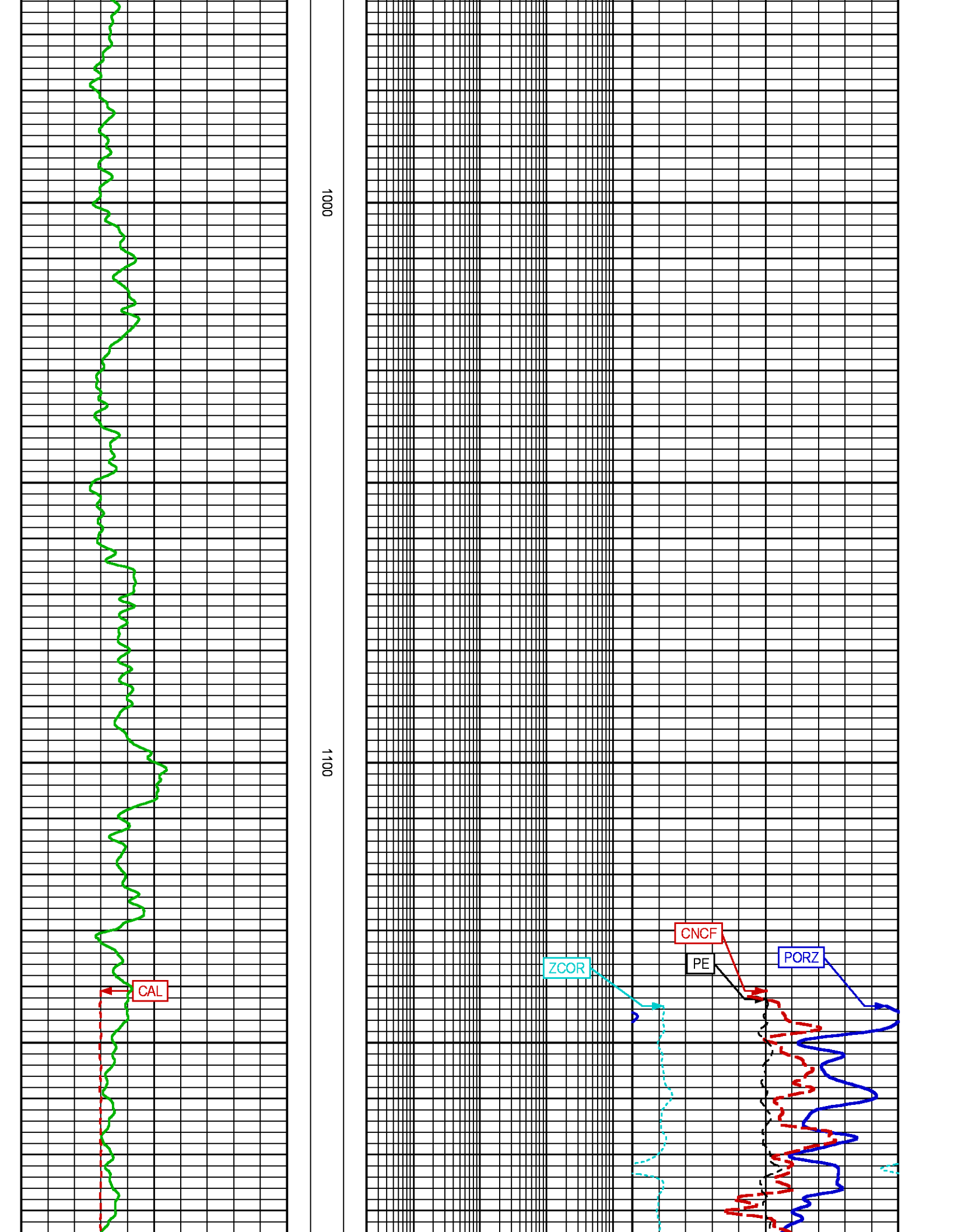
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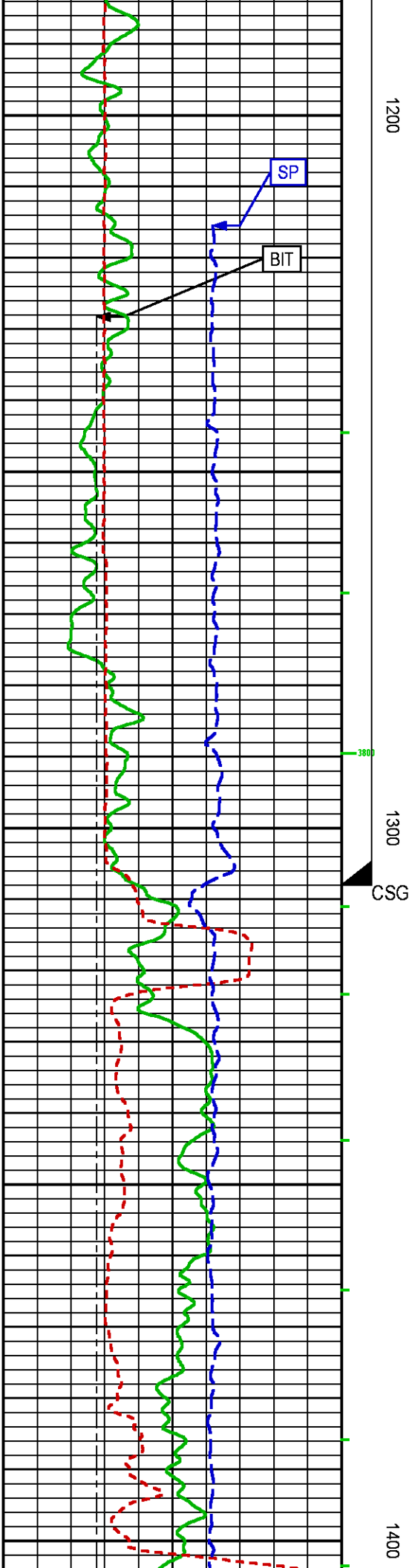
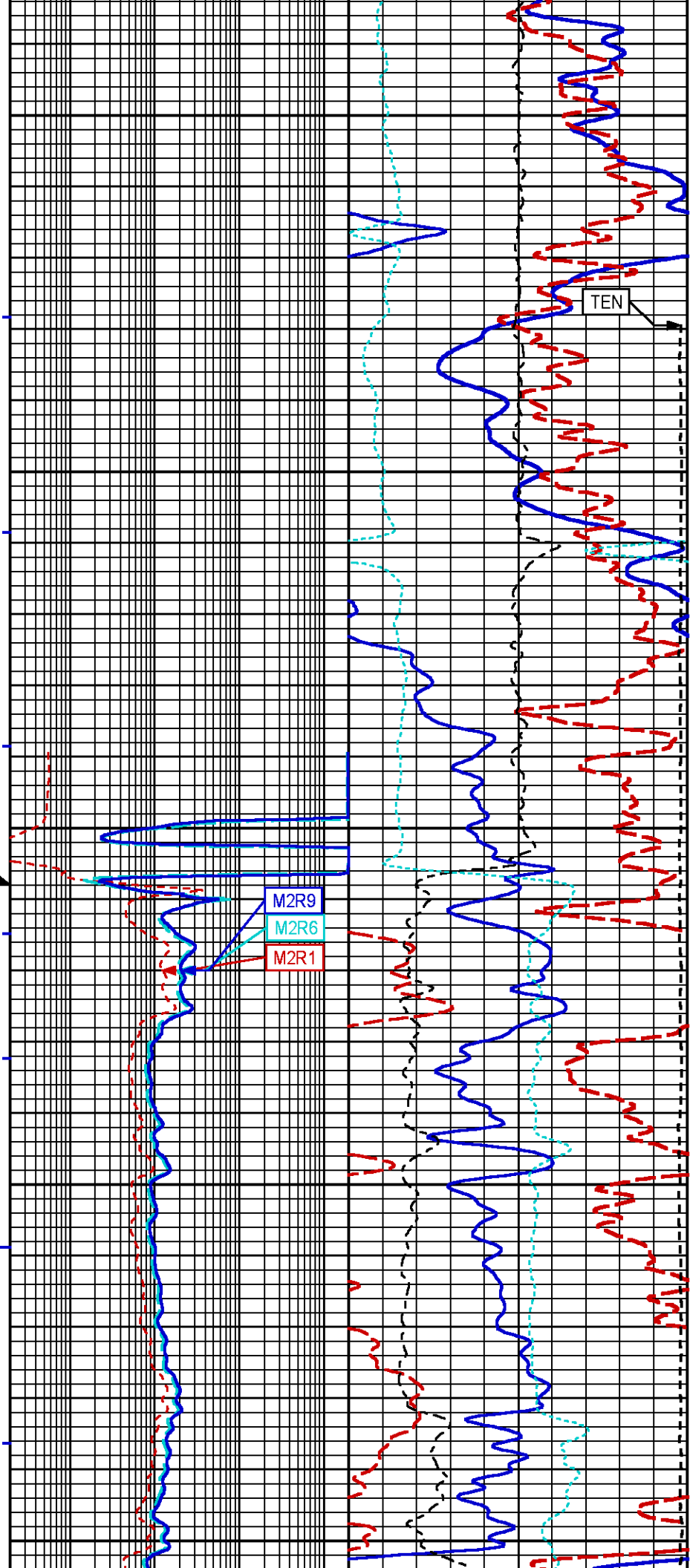
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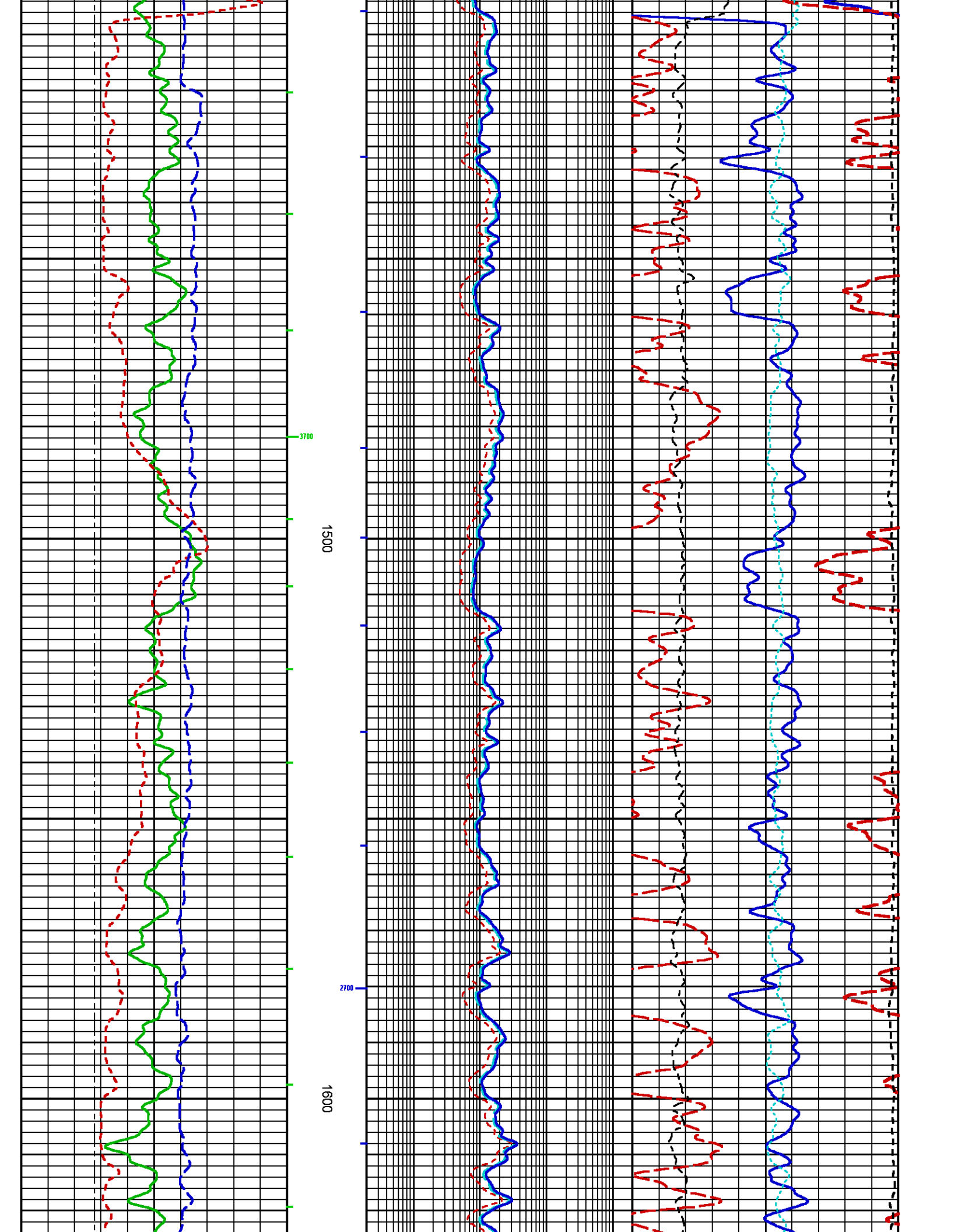
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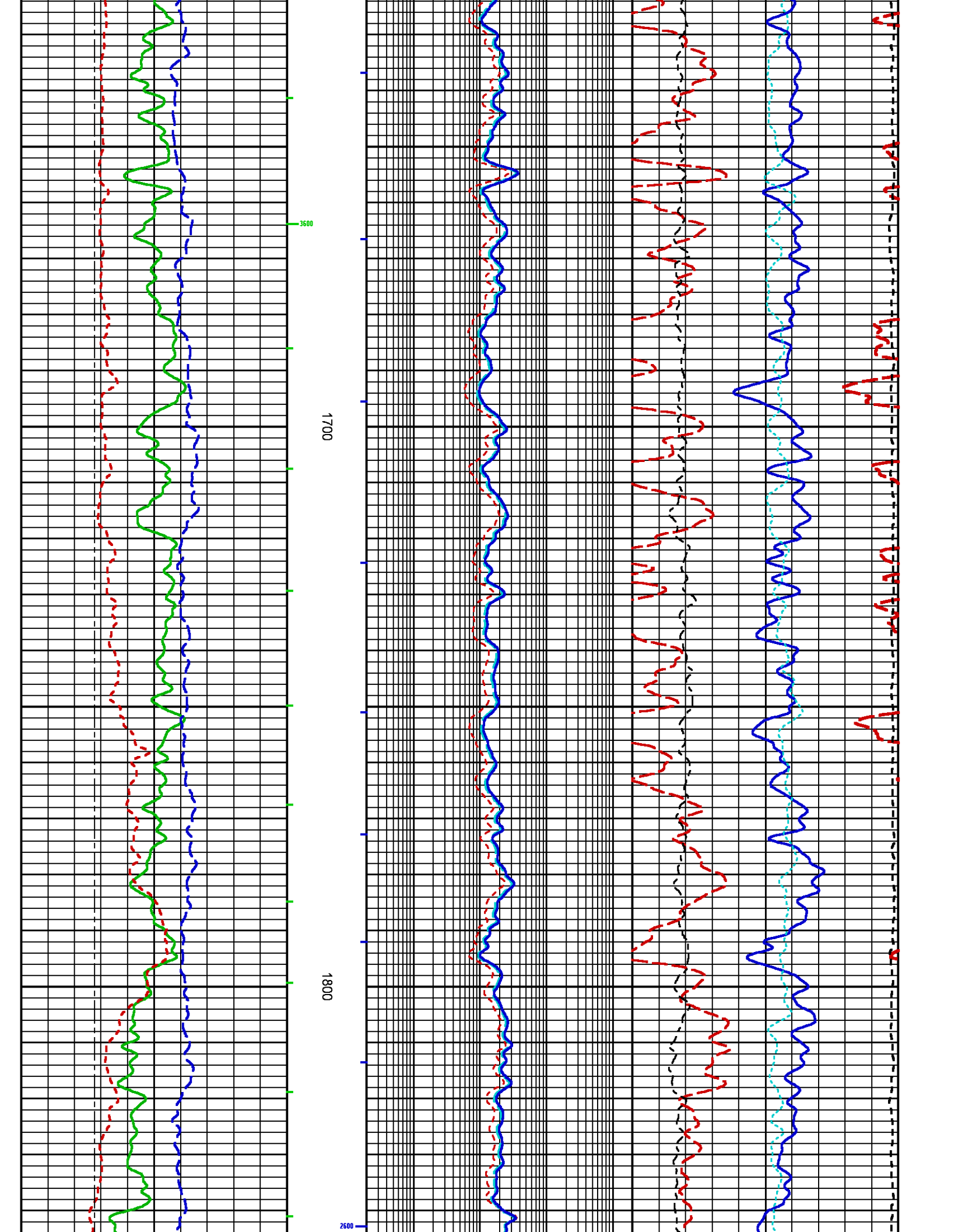
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PORZ

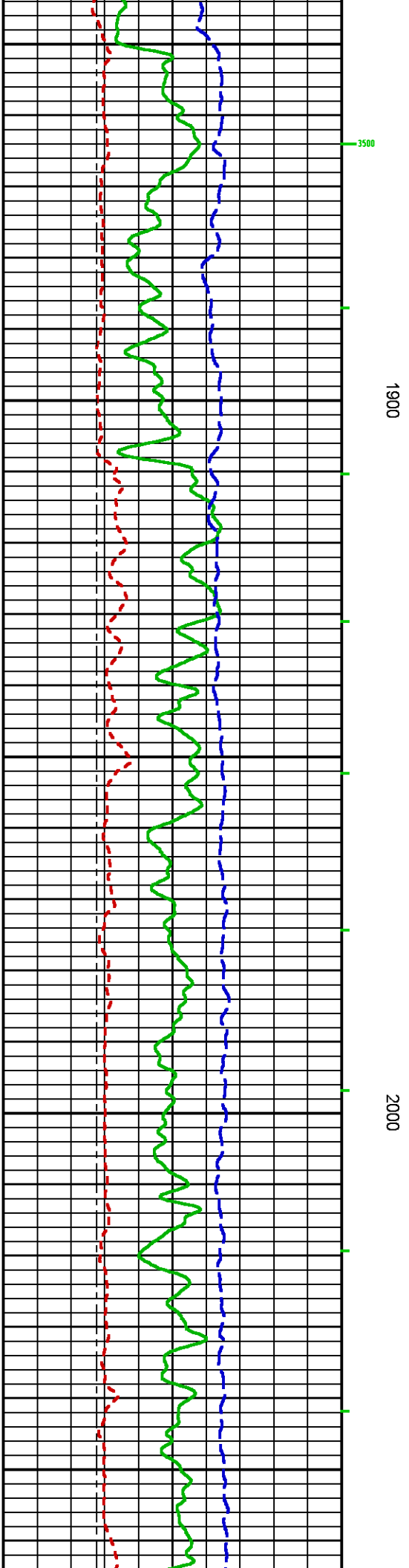
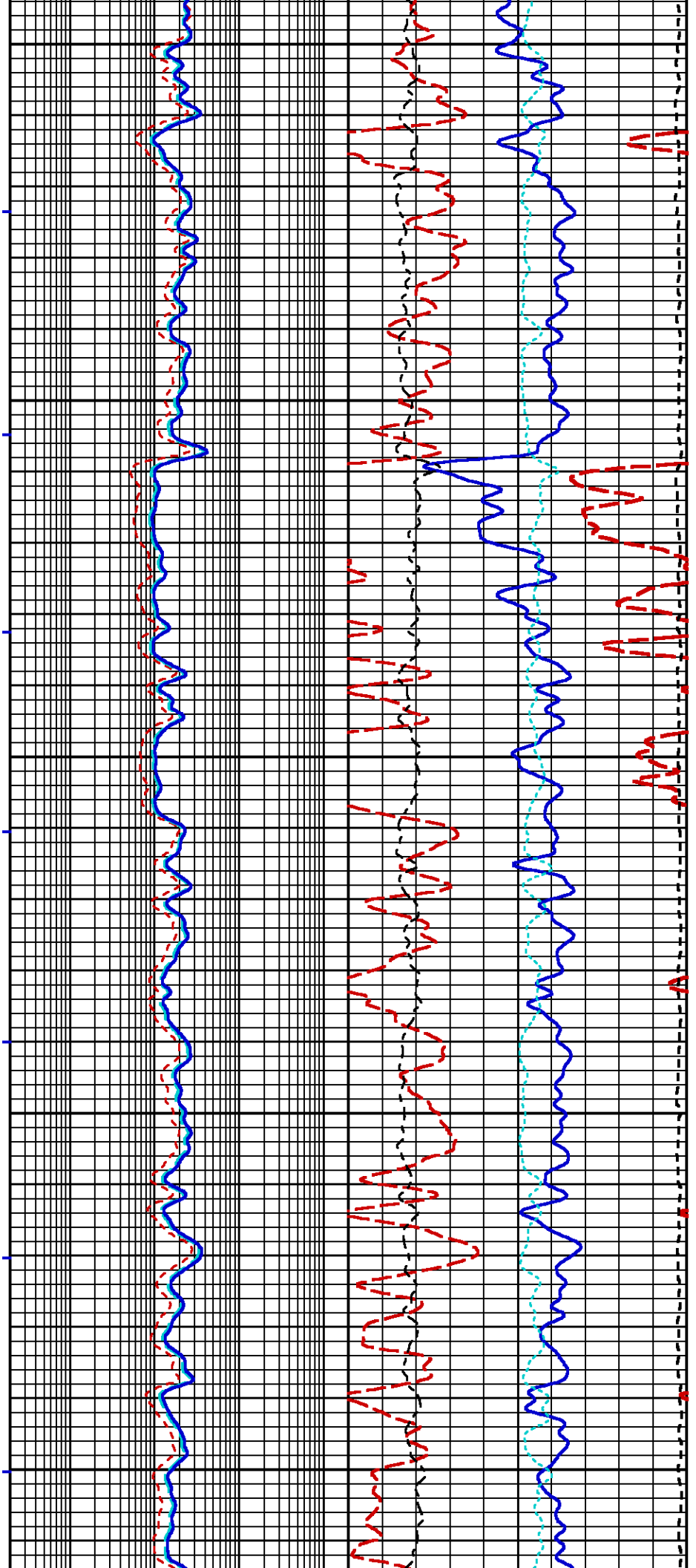


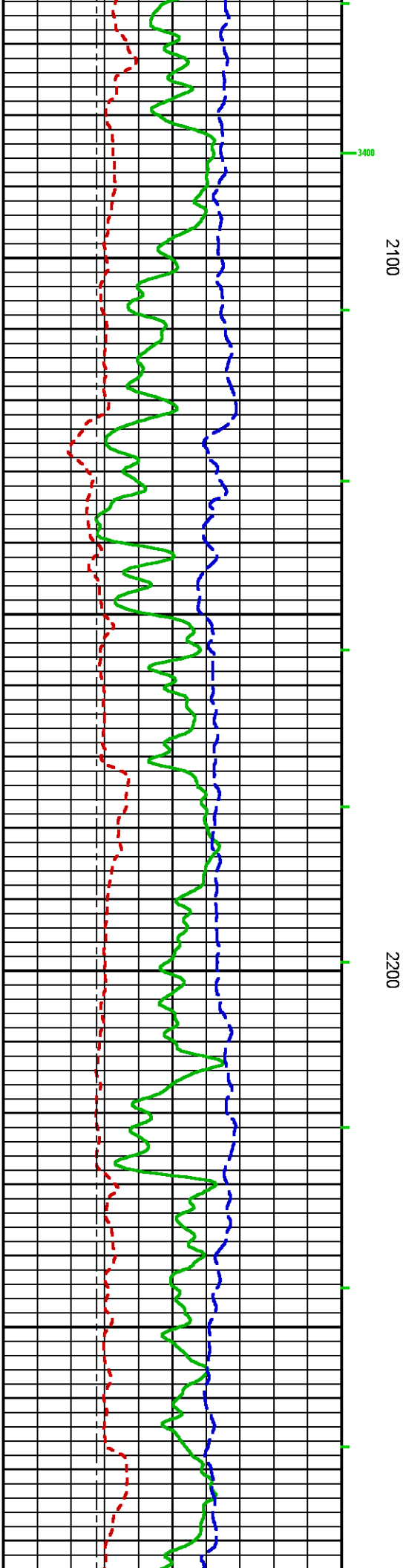
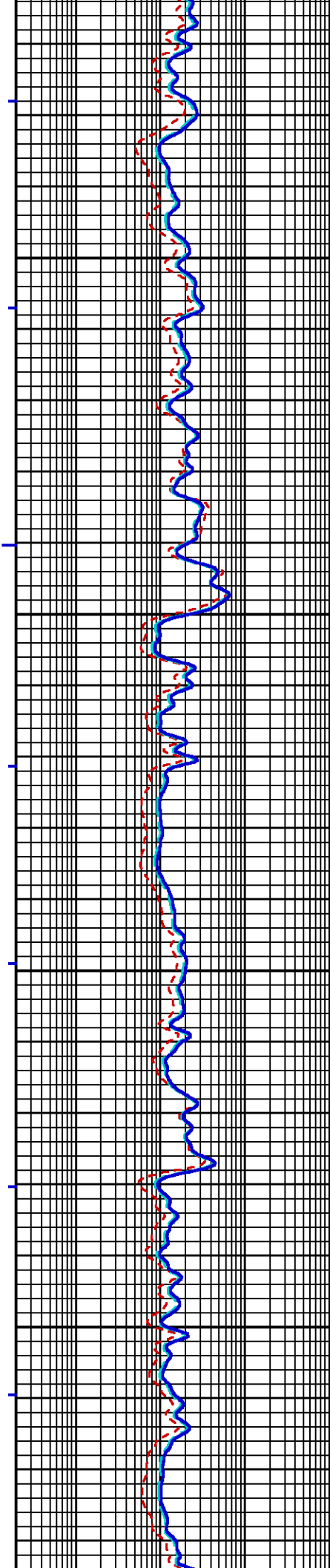
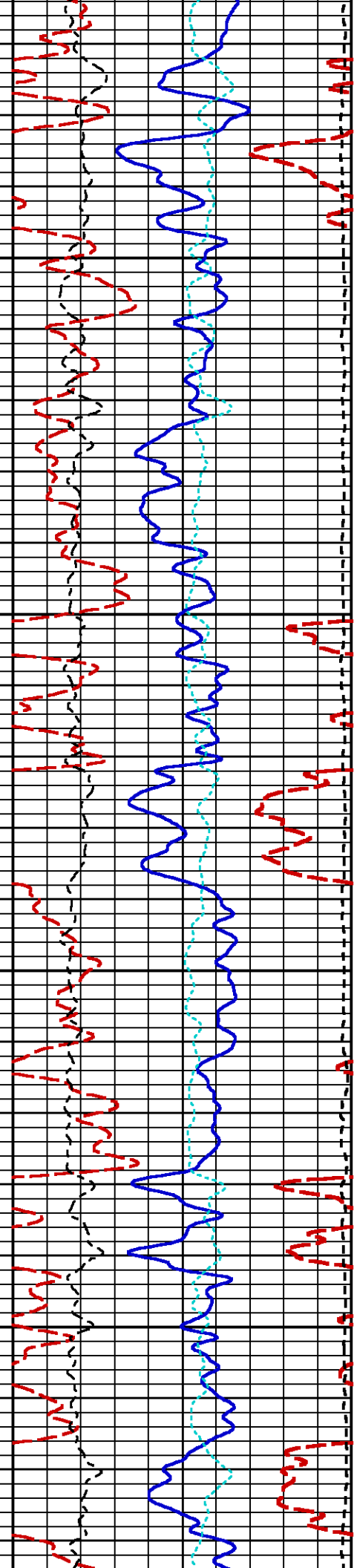


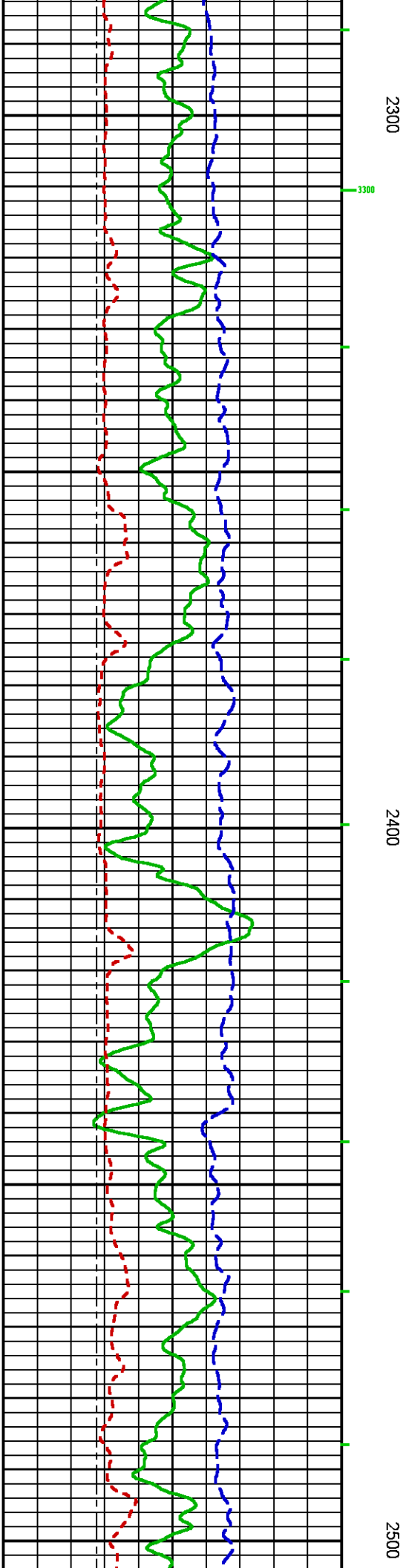
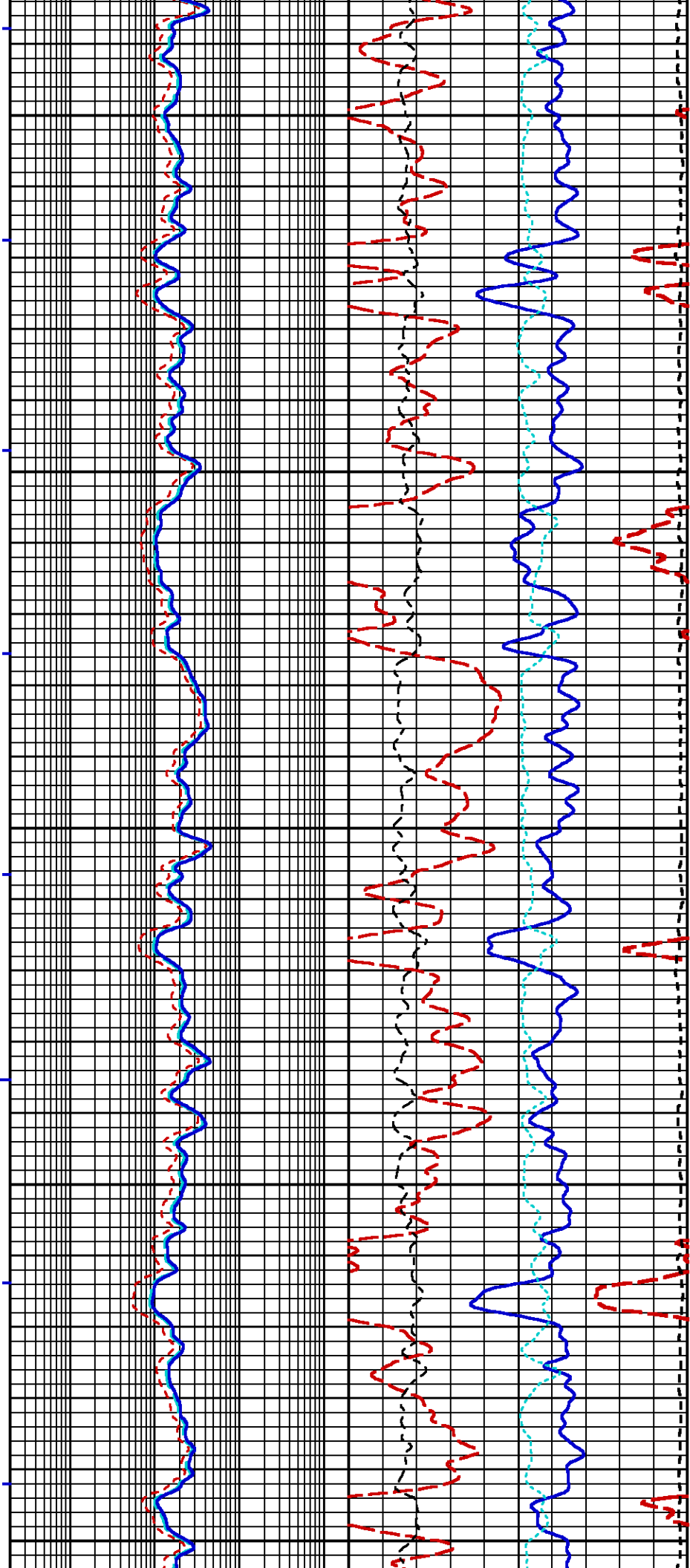


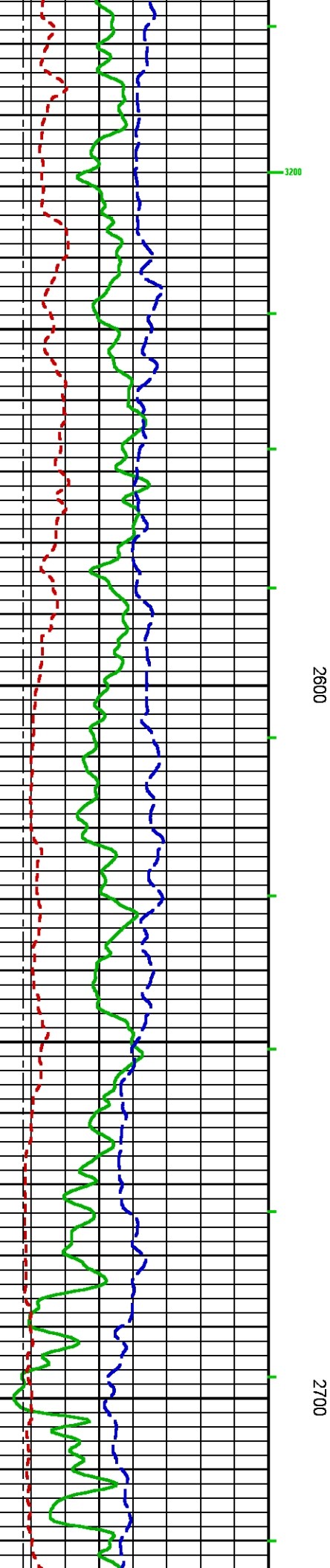
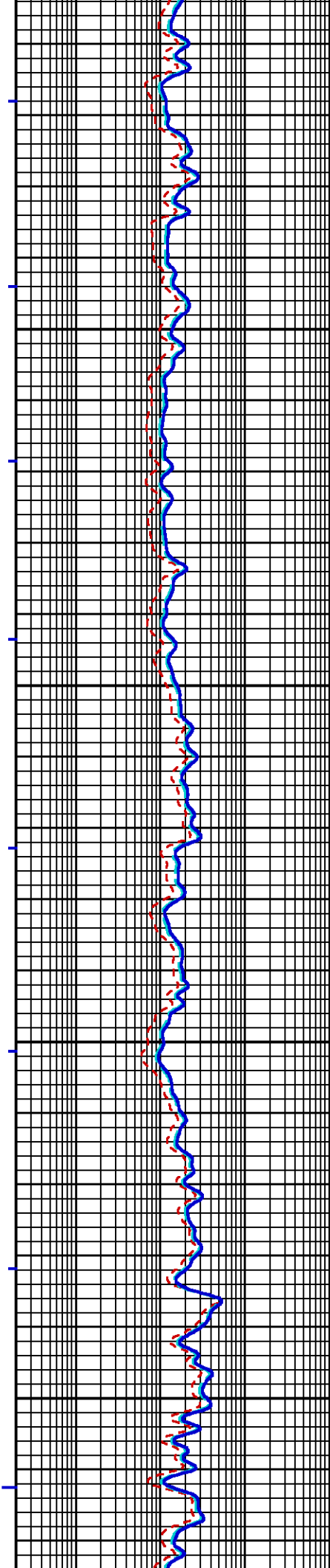
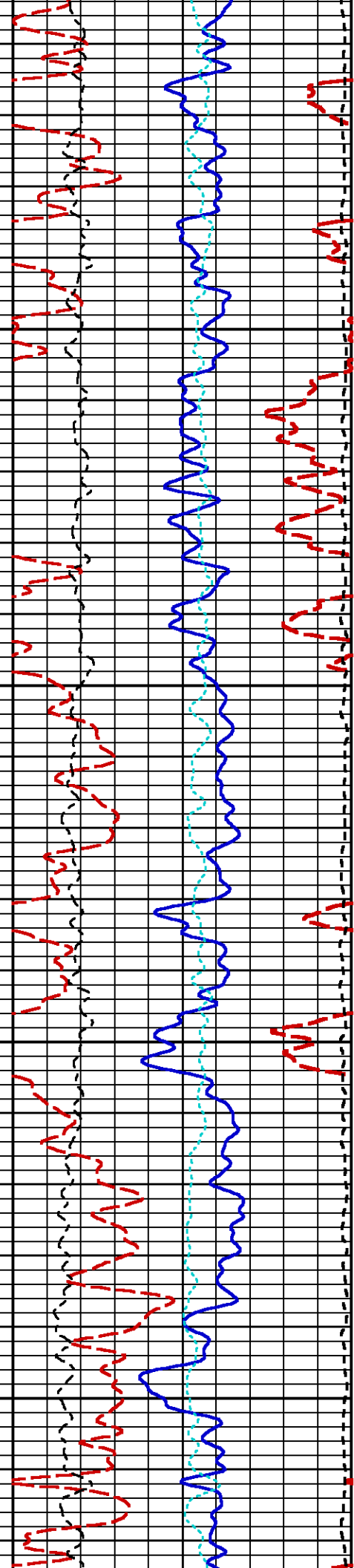


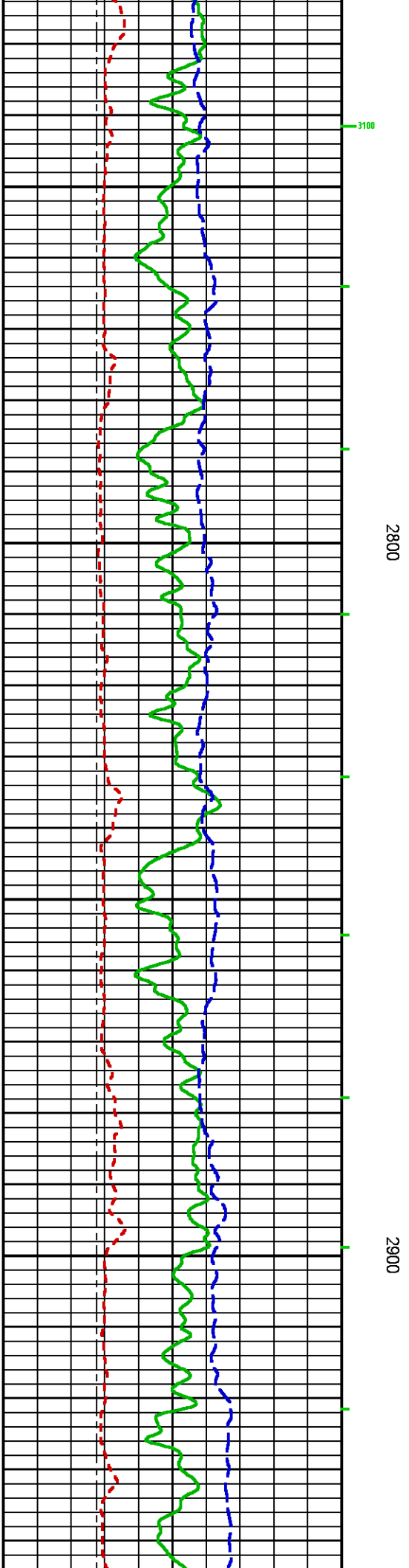
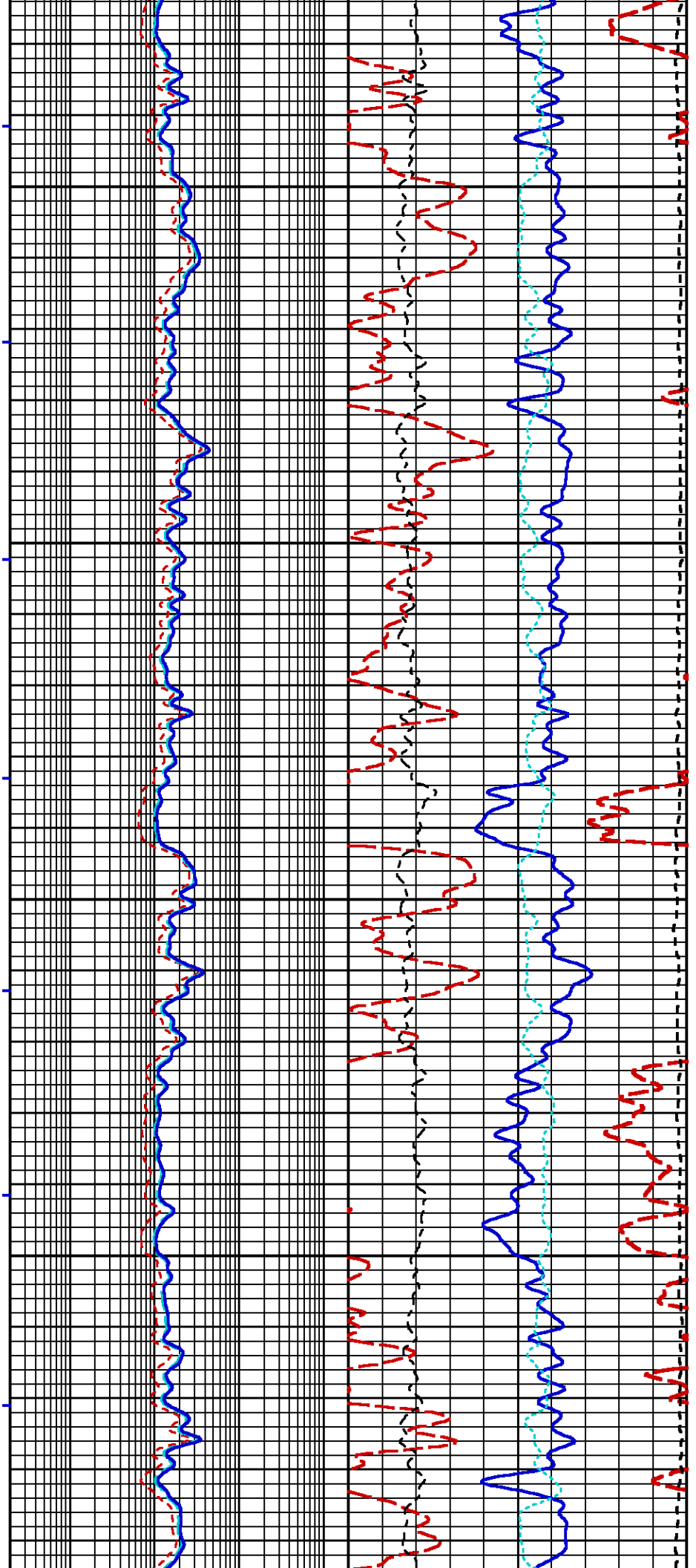


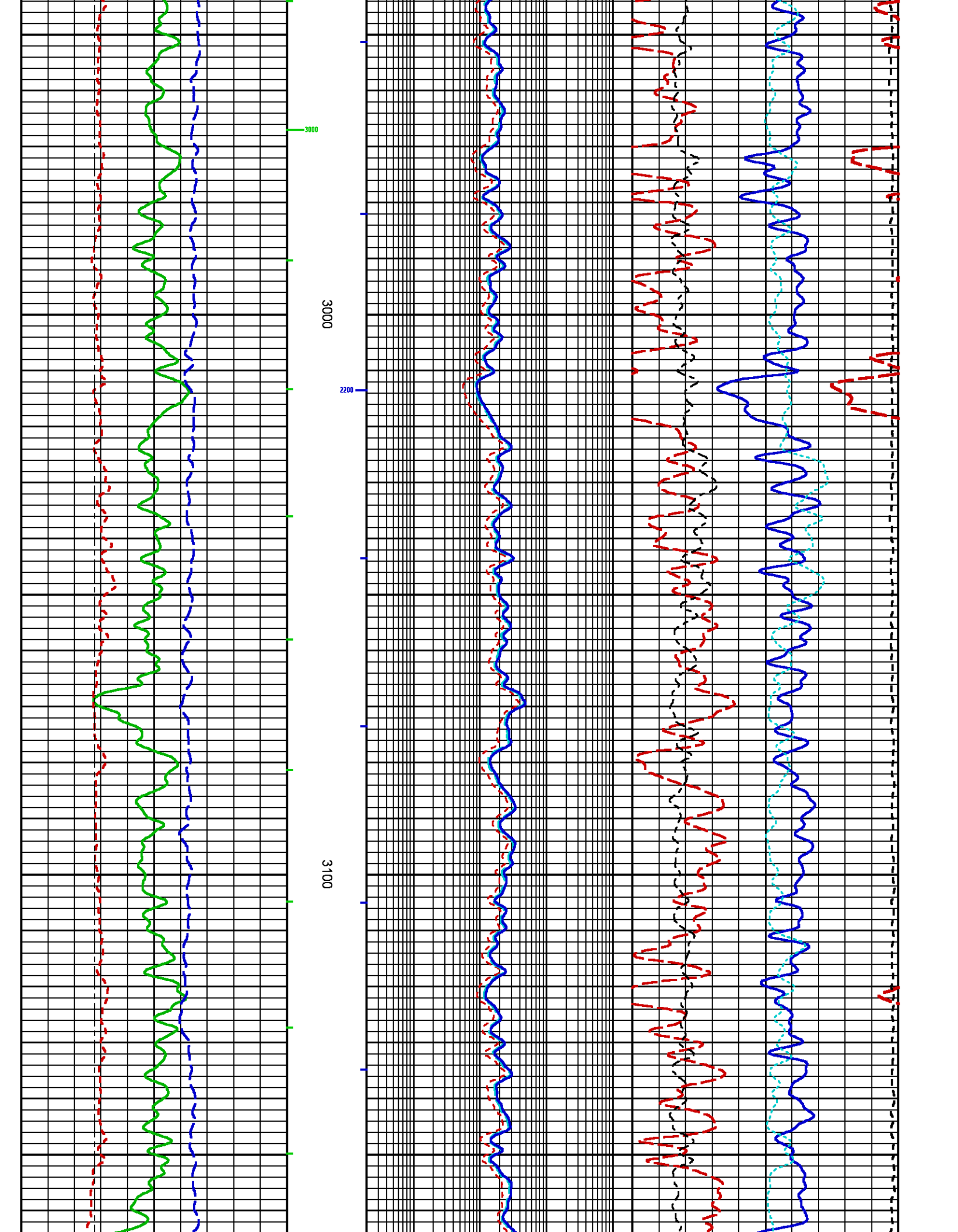


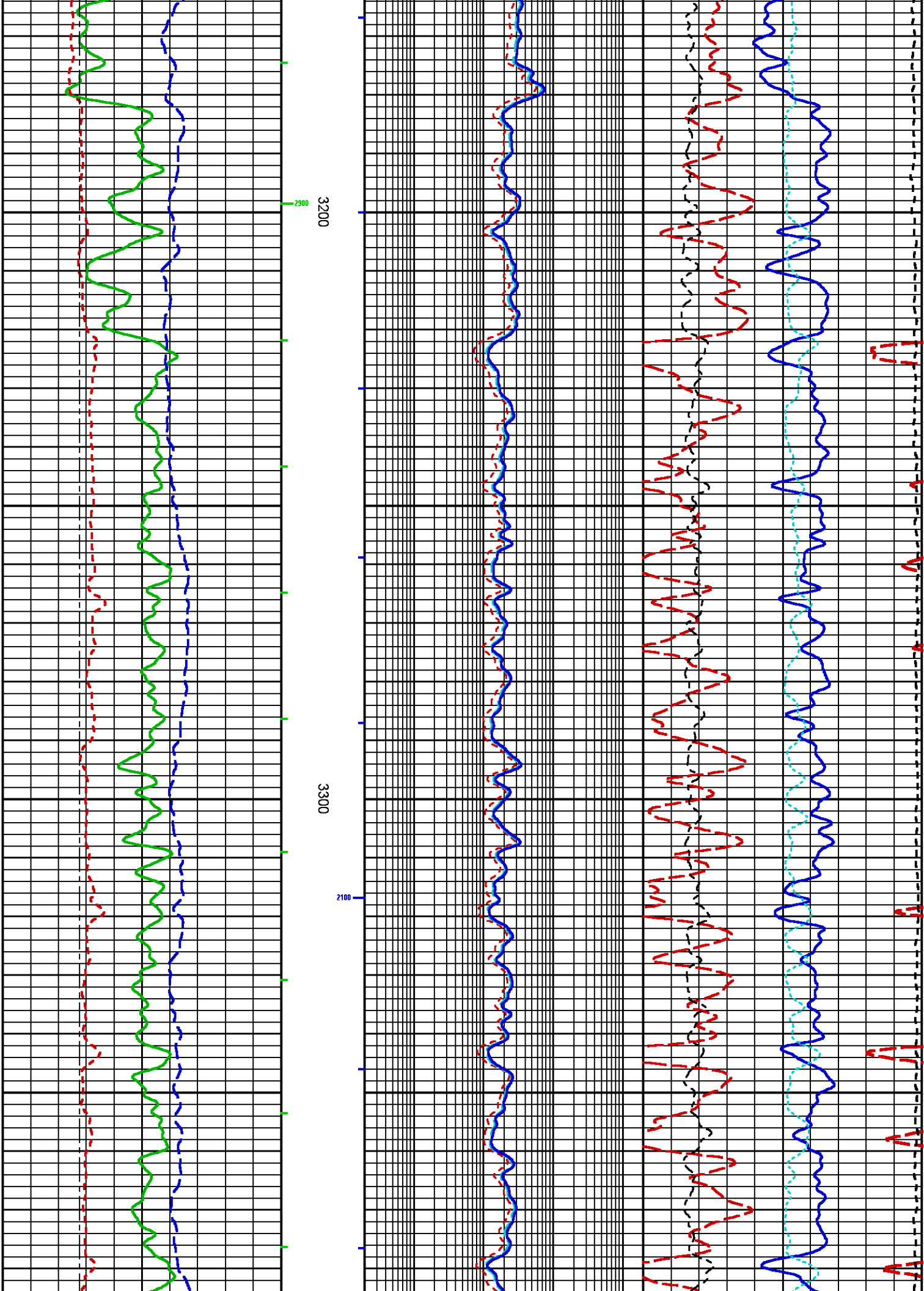




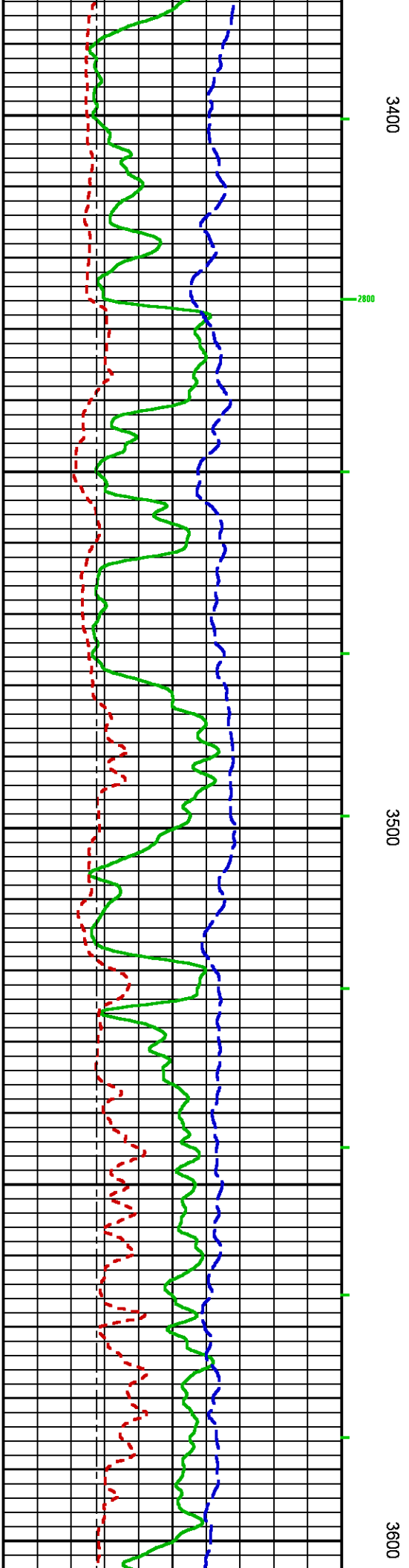
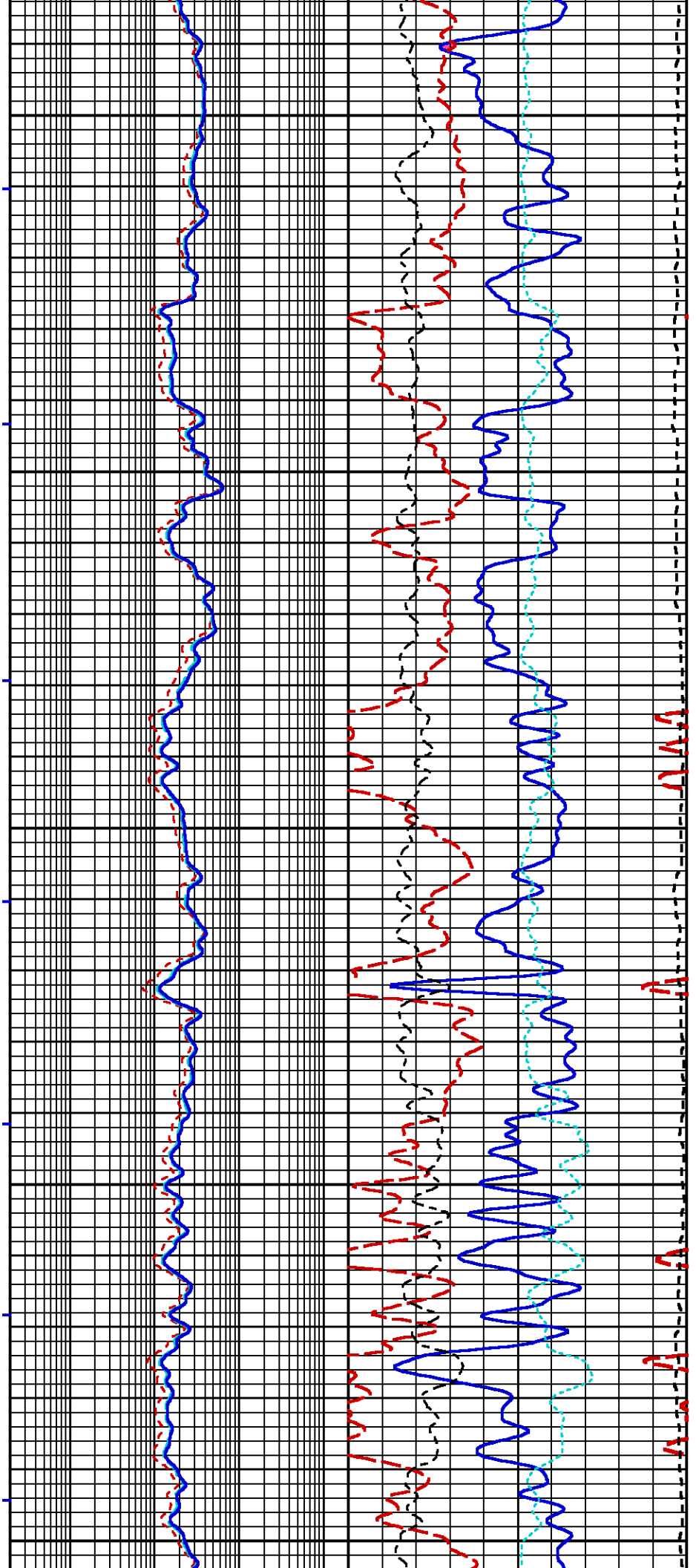




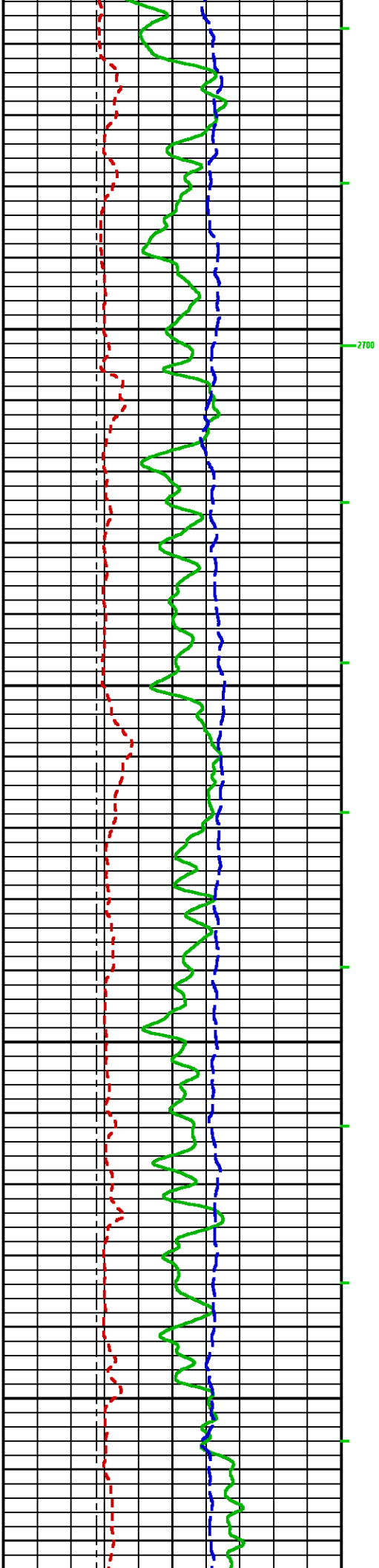
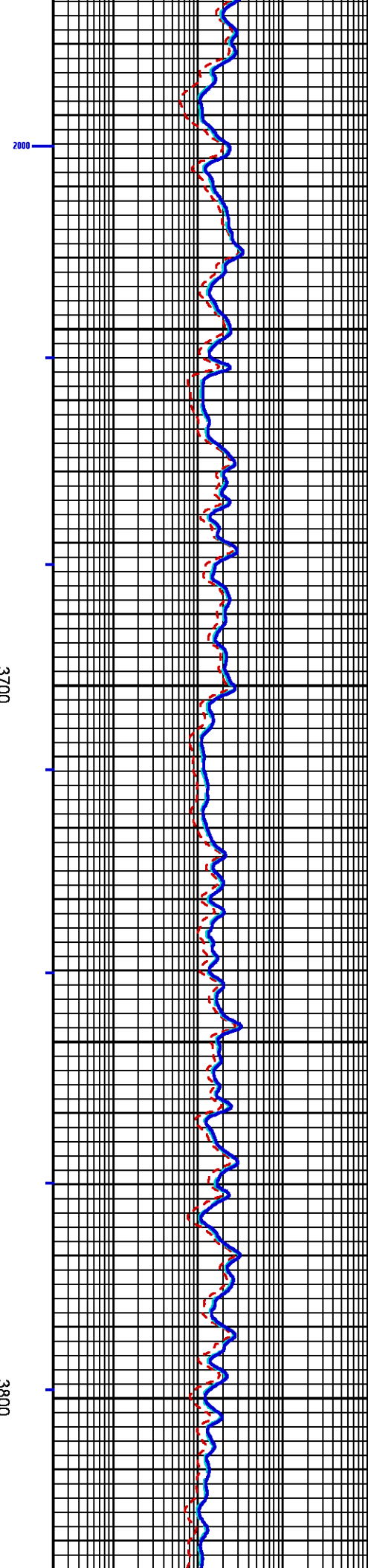
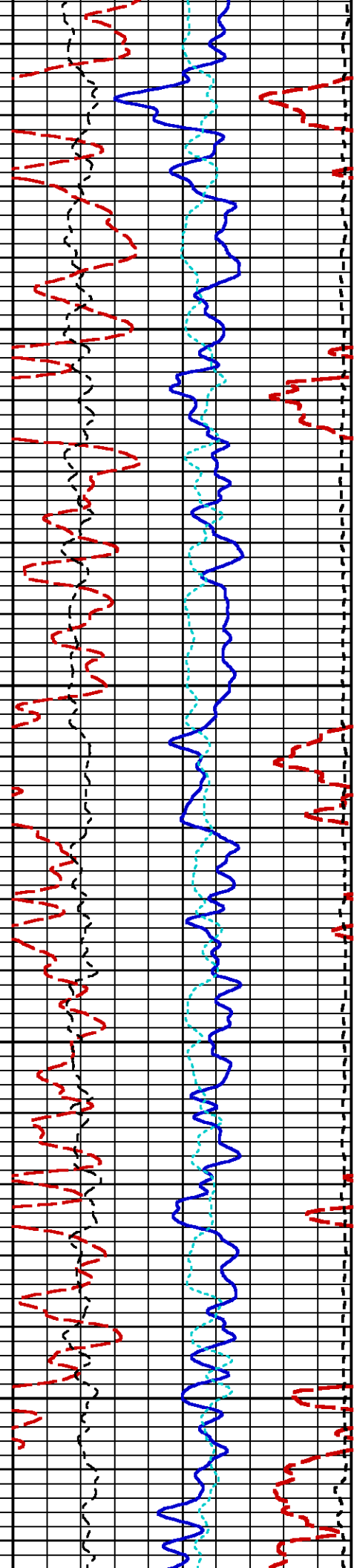


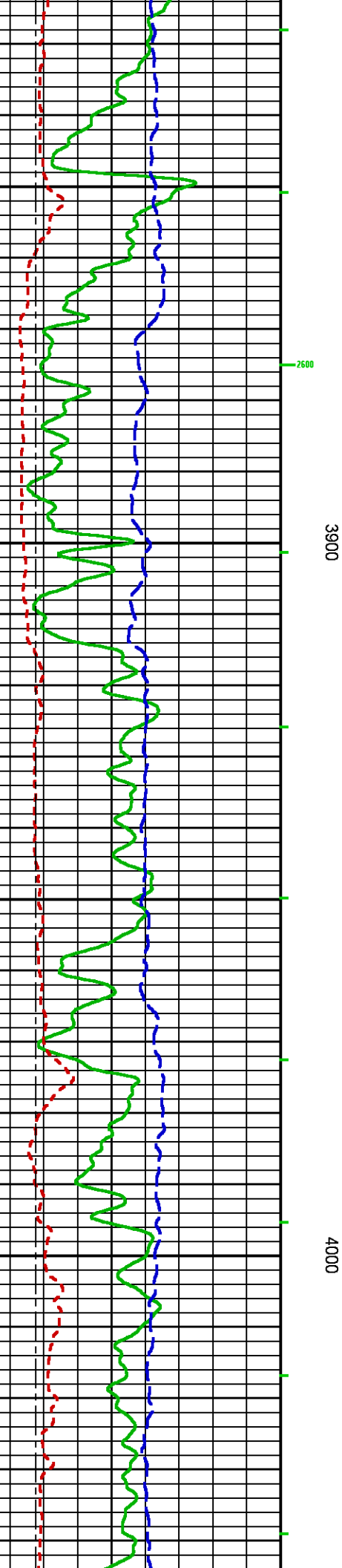
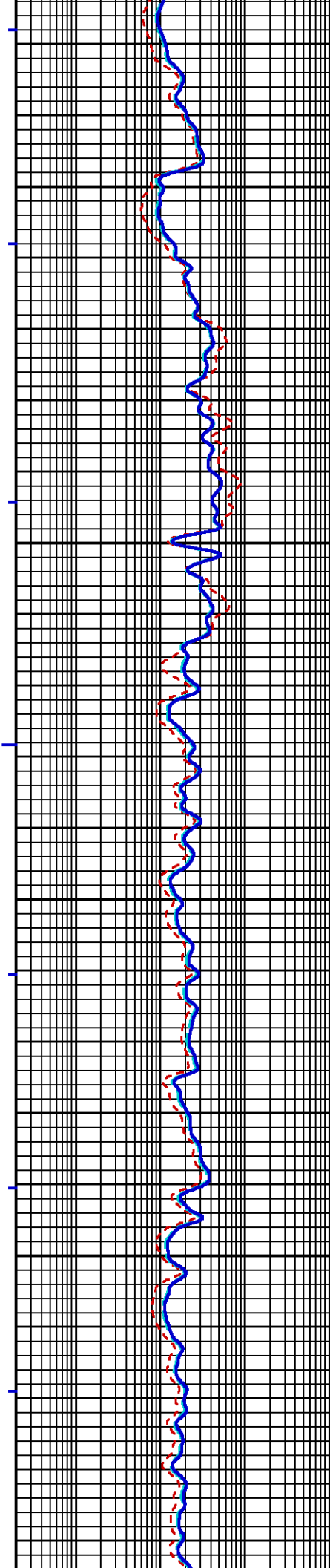
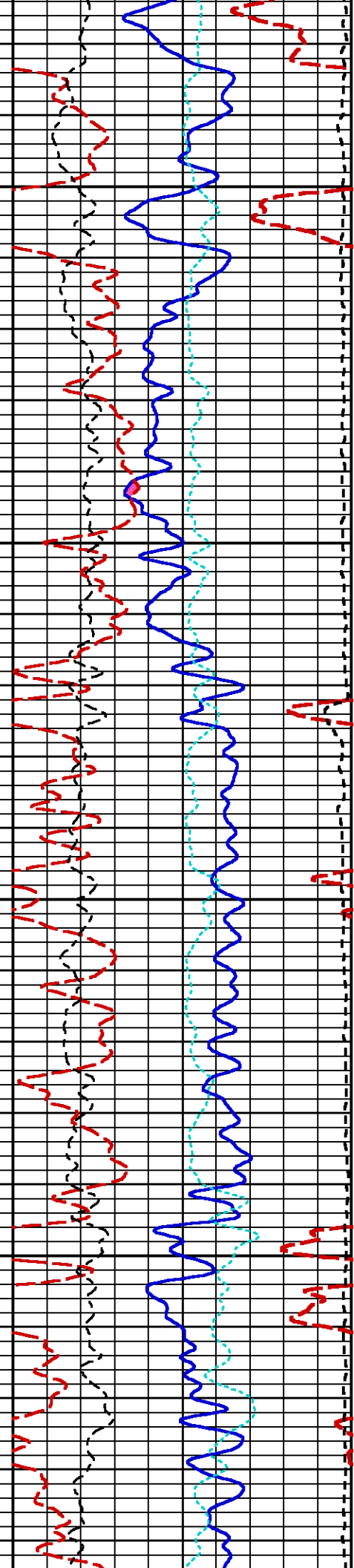


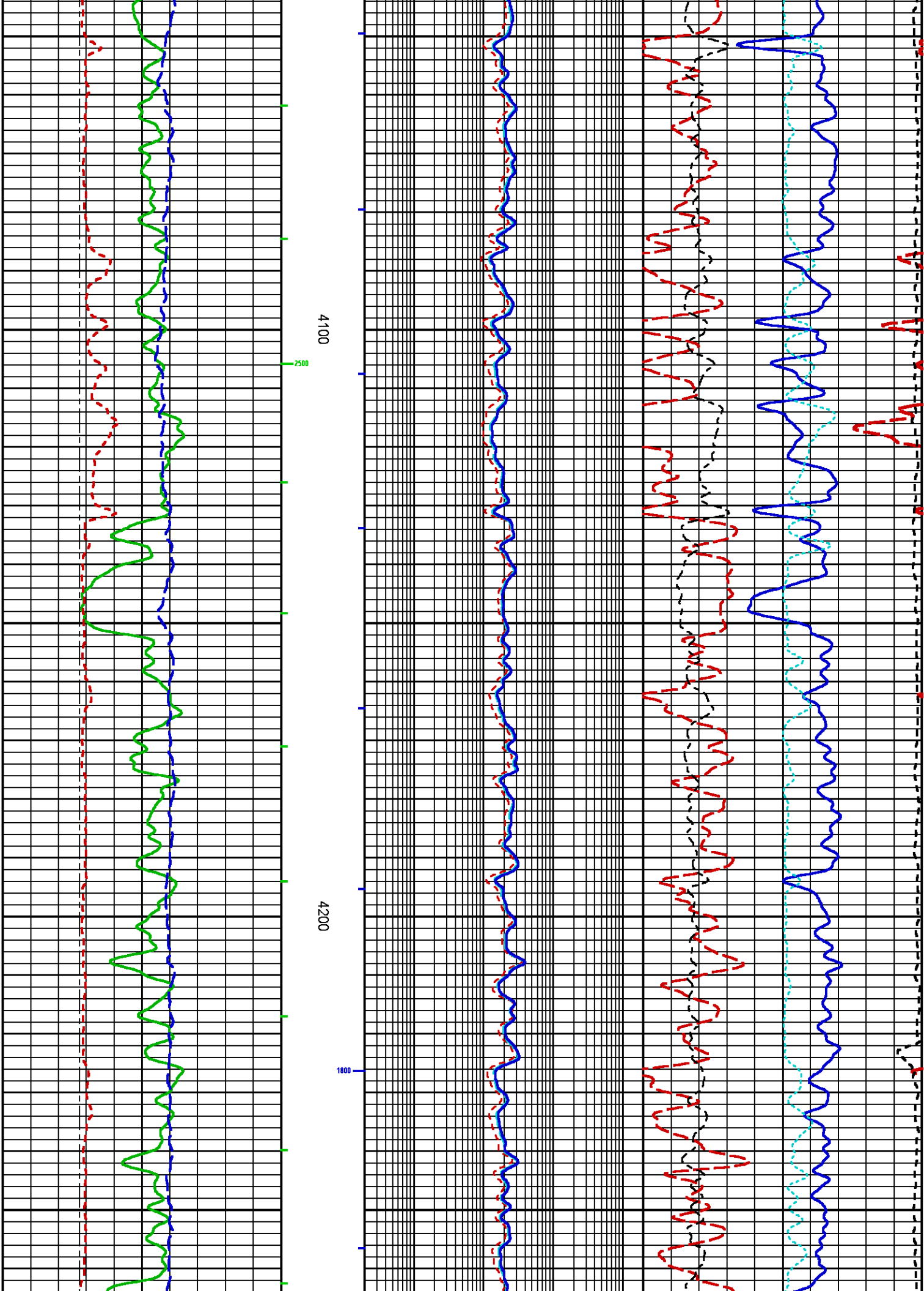


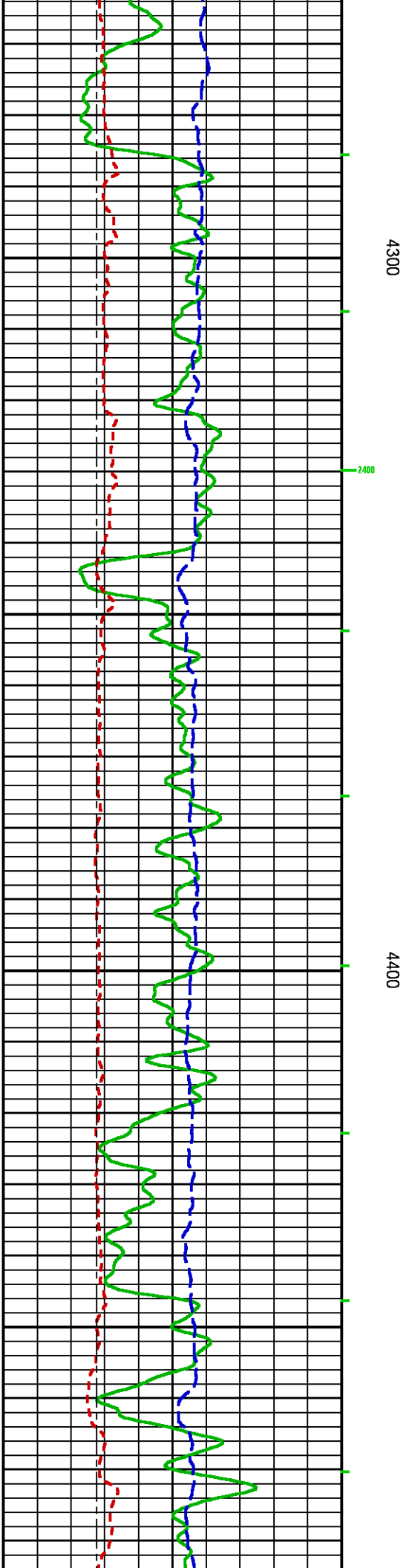
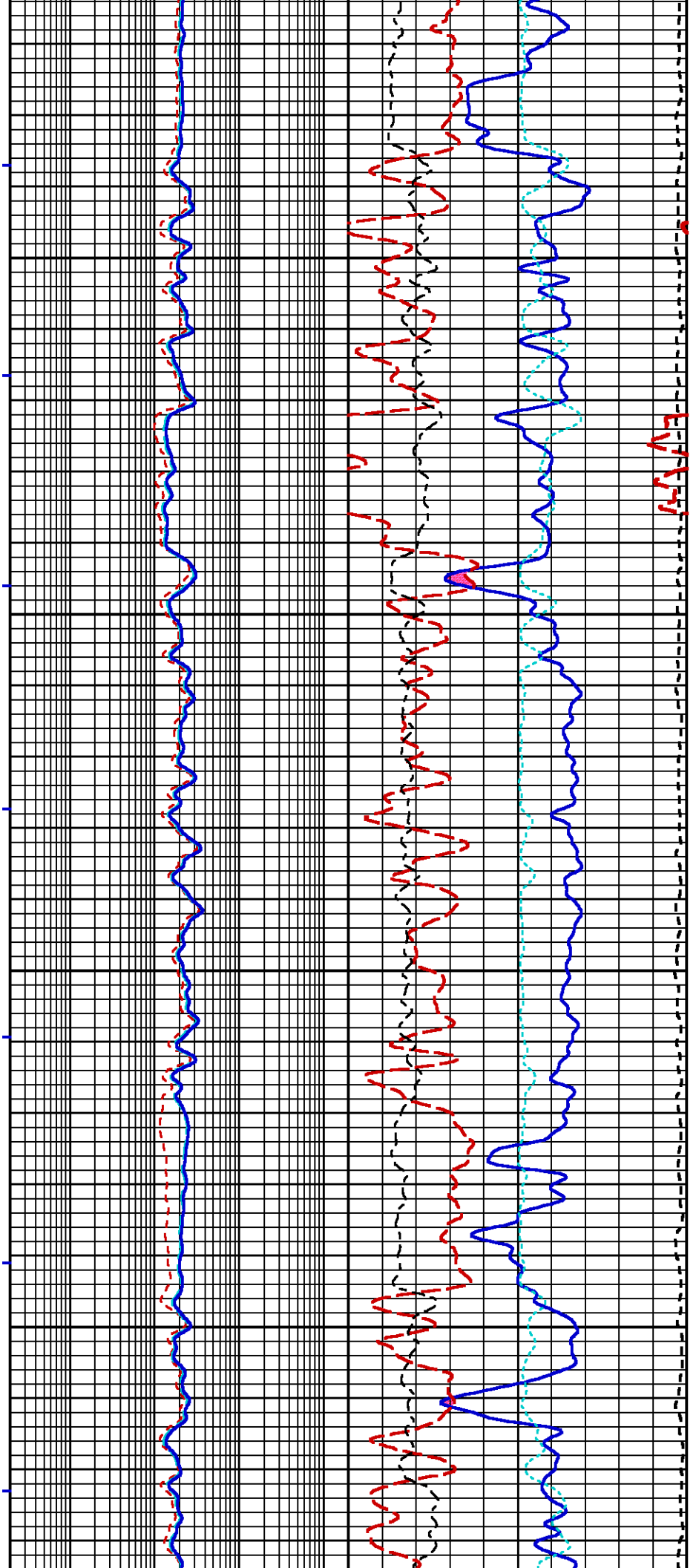


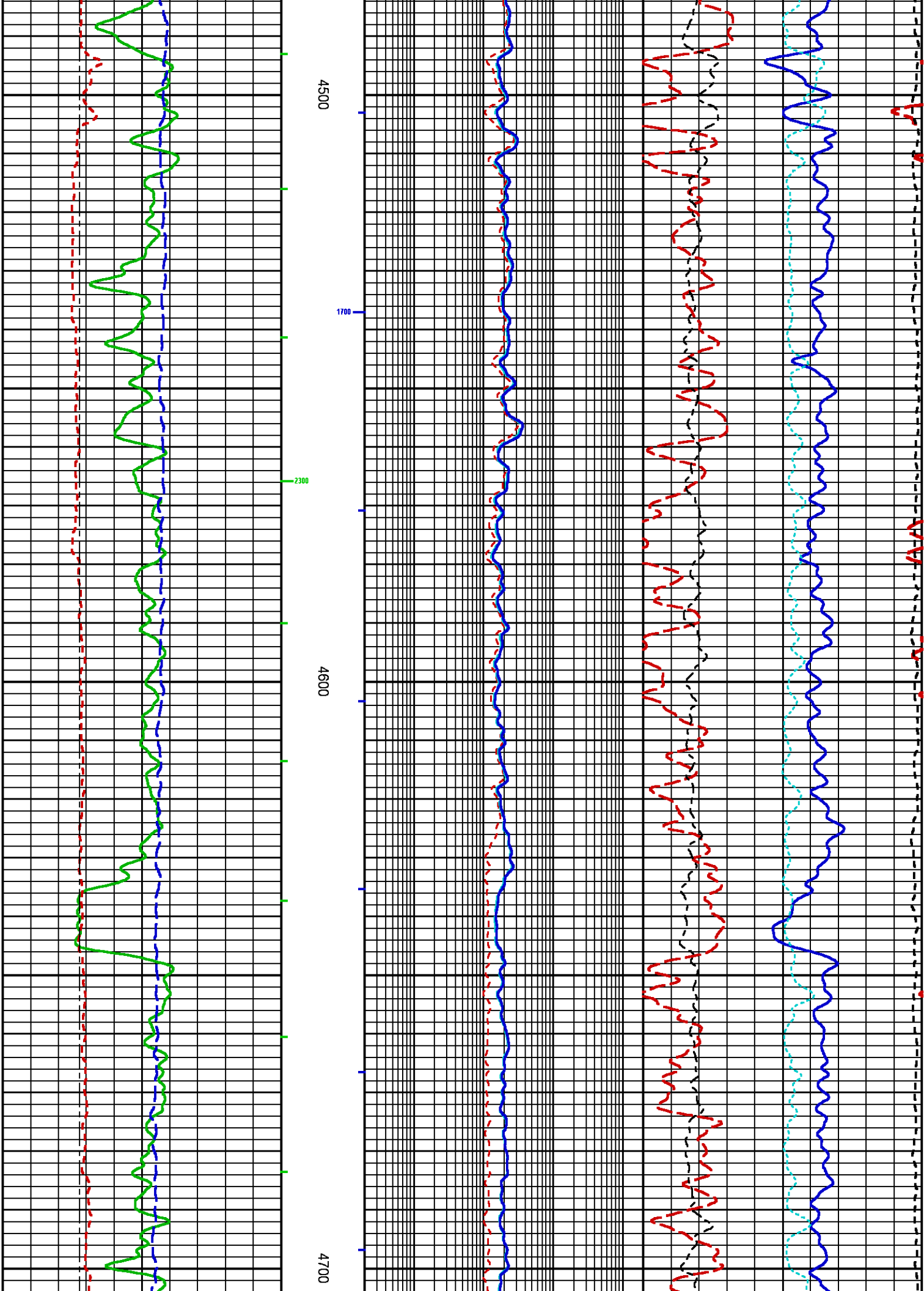


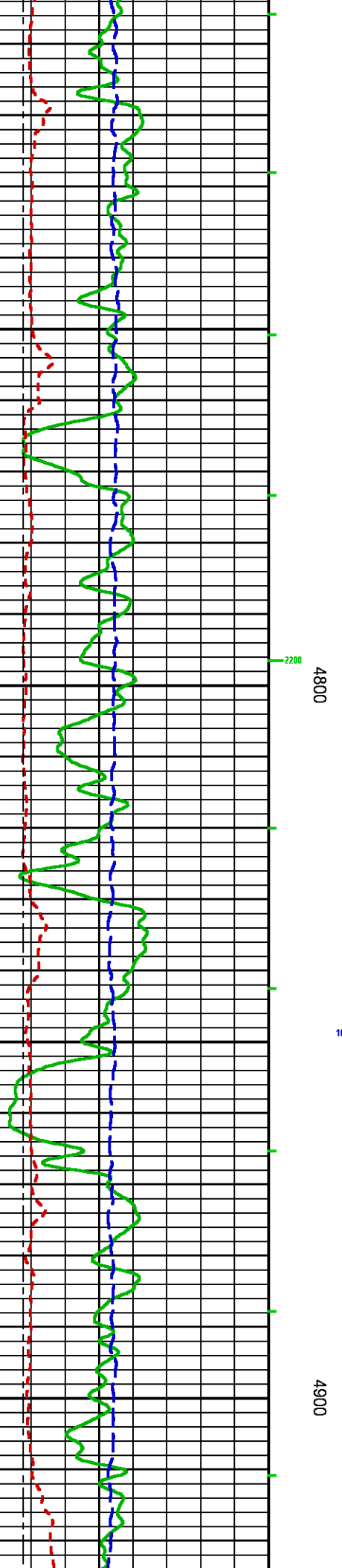
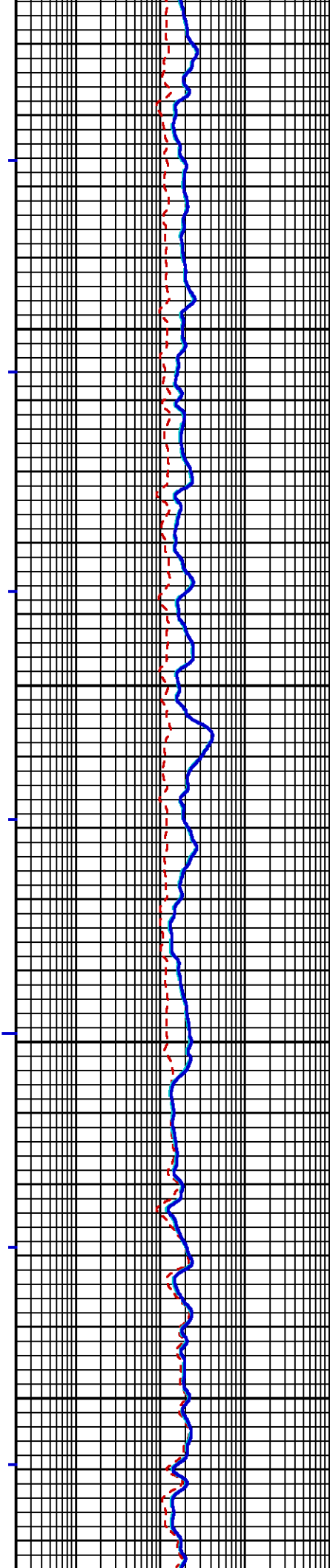
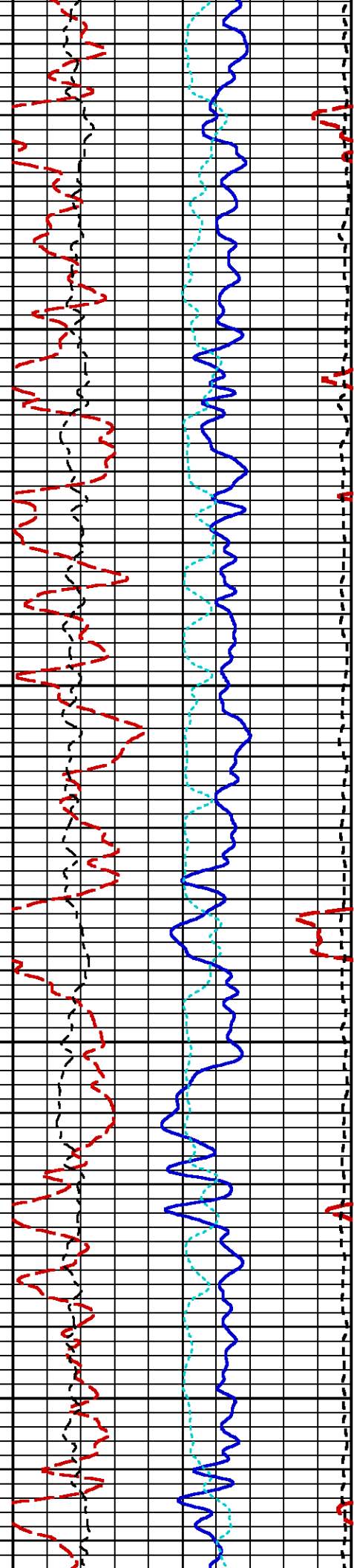


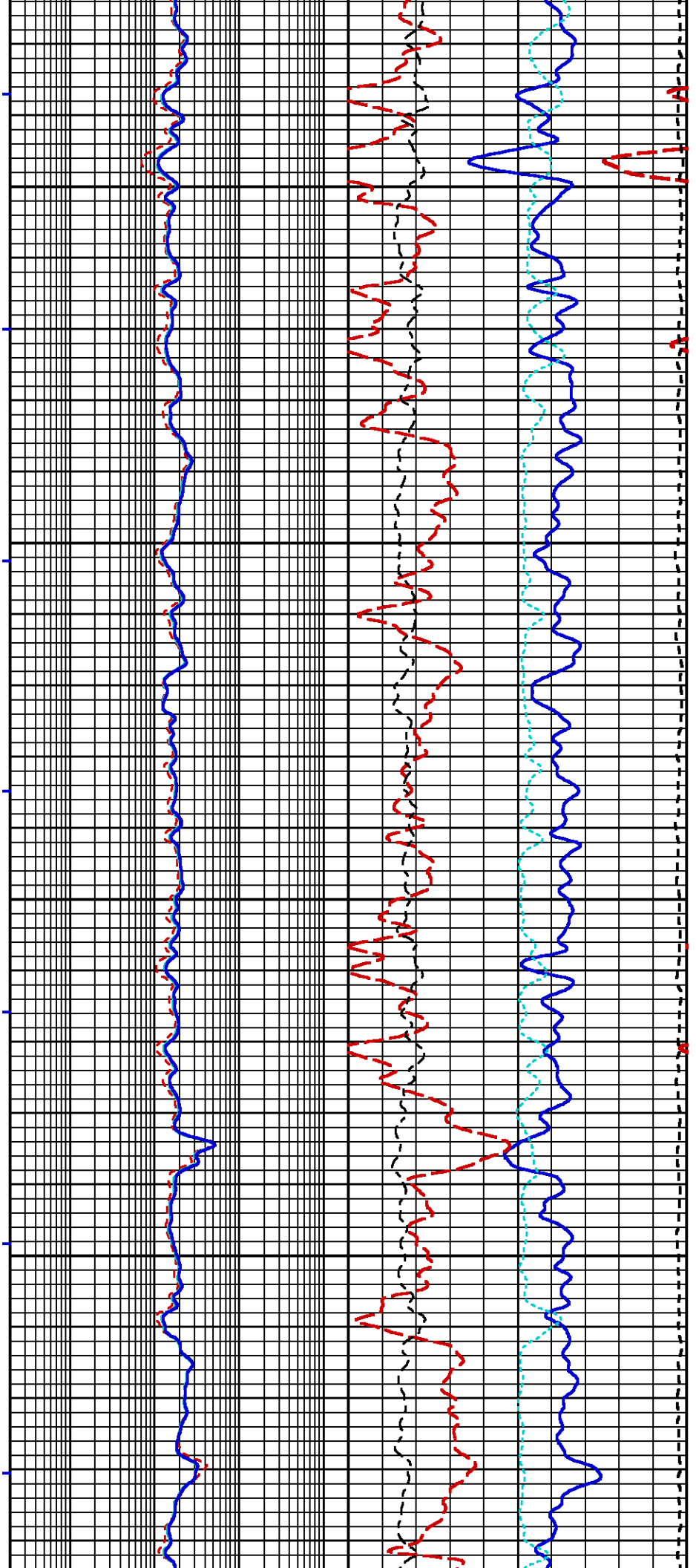








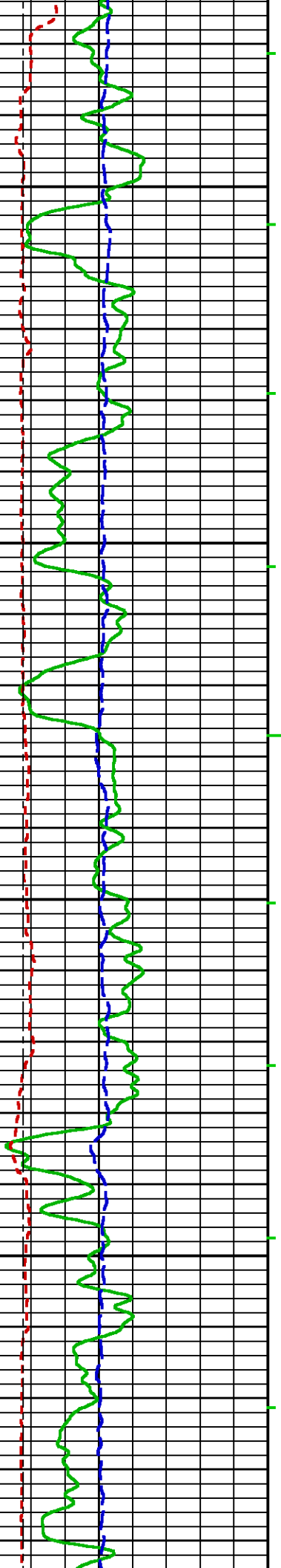


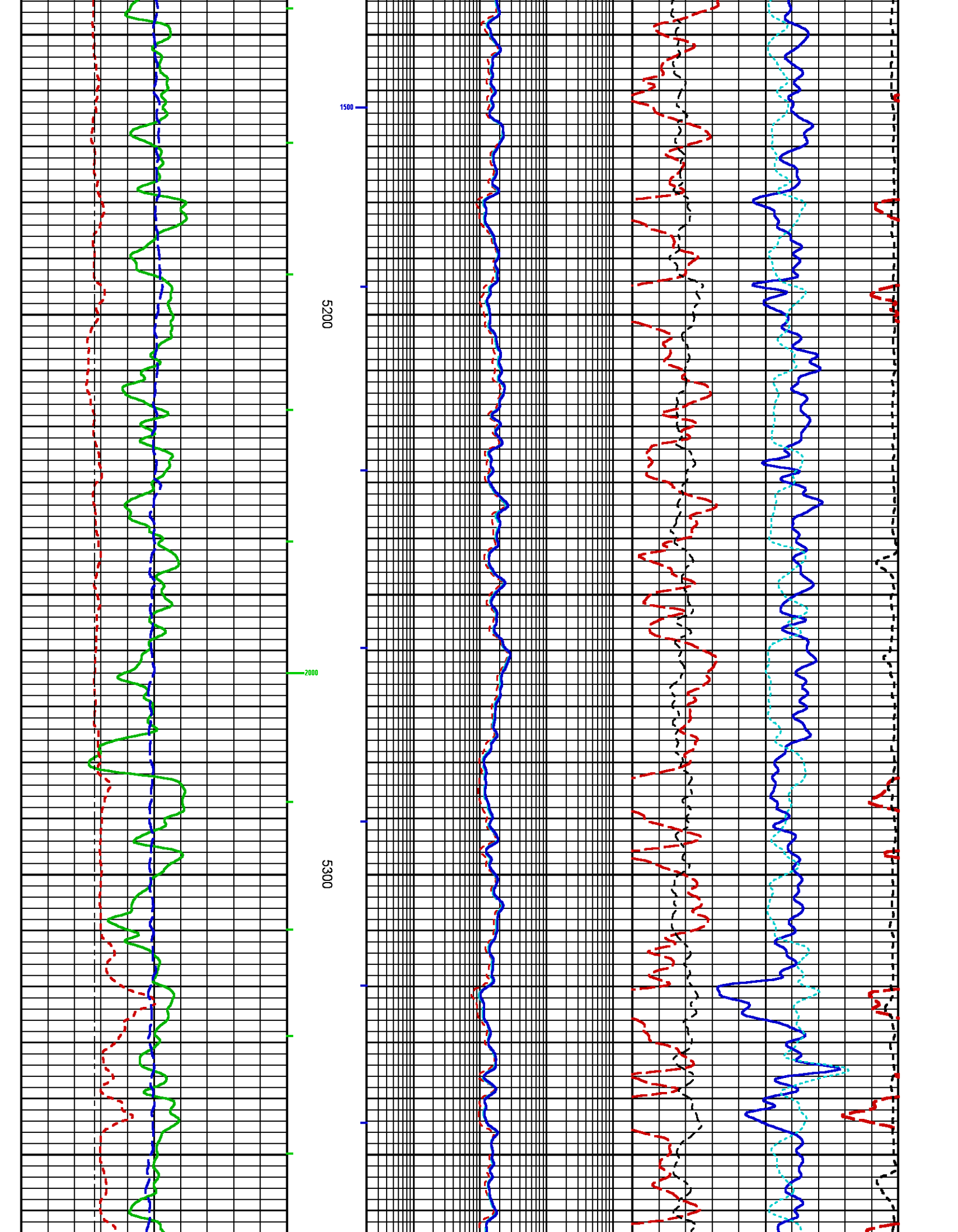


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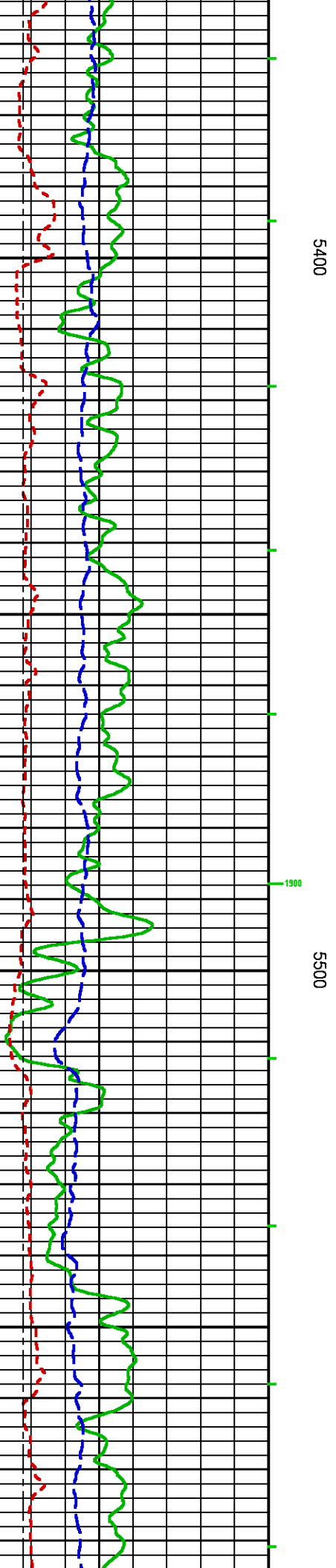
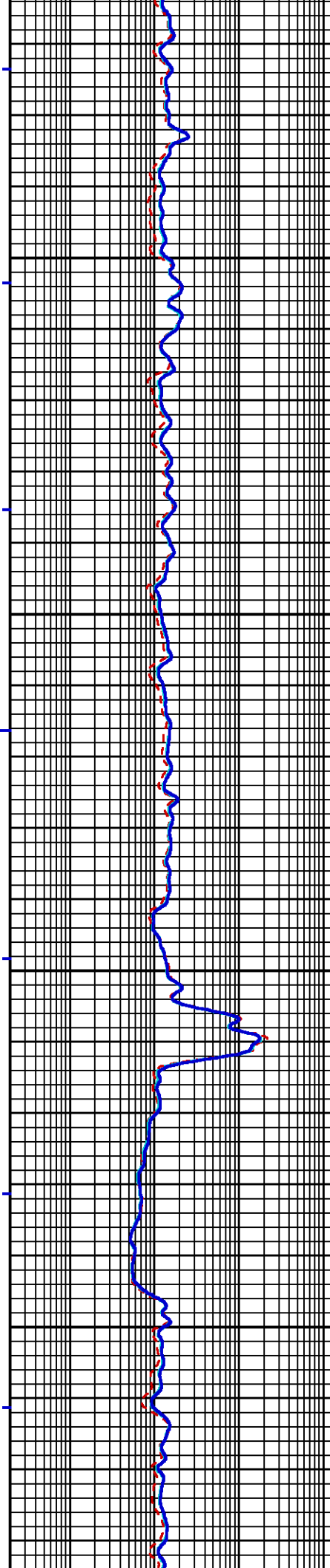
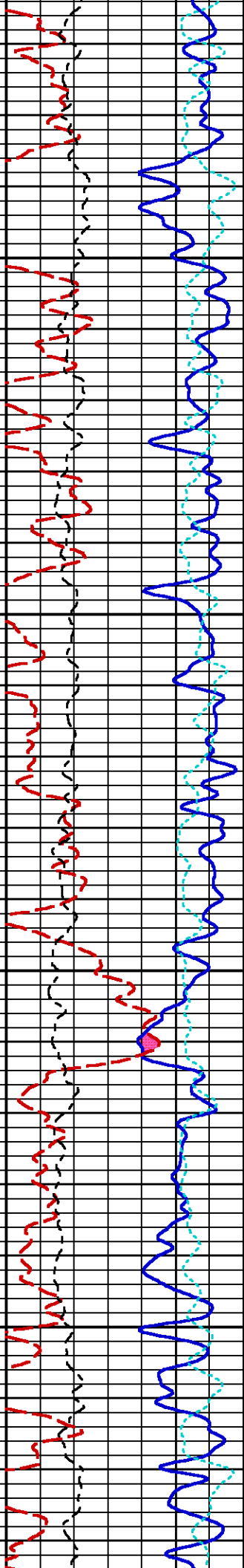
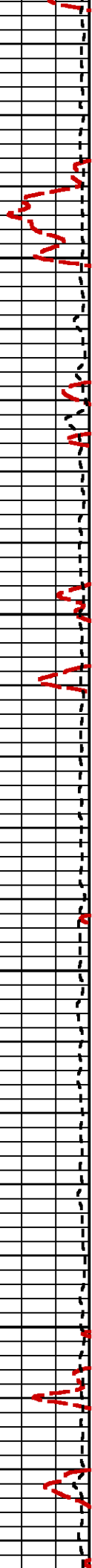
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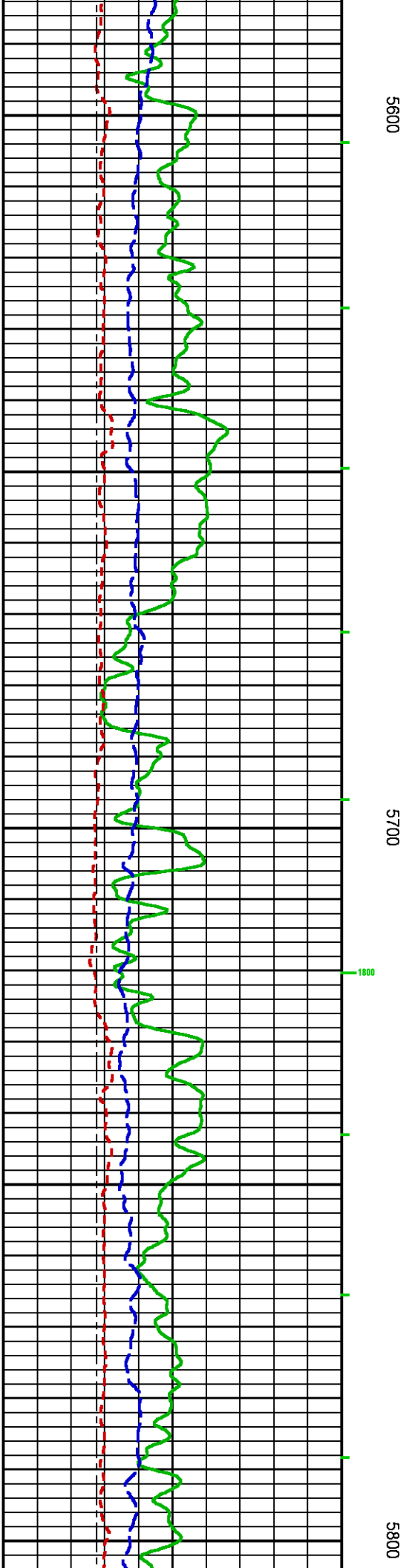
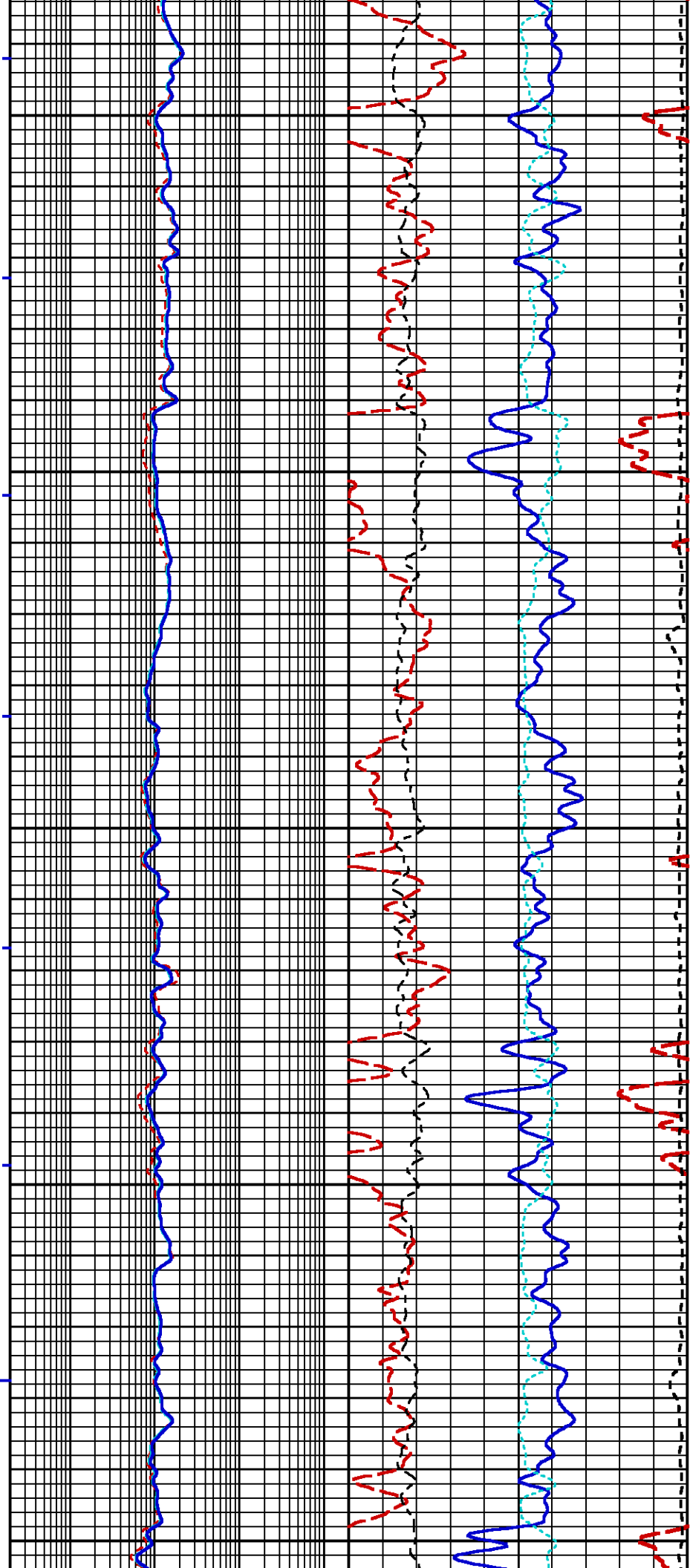
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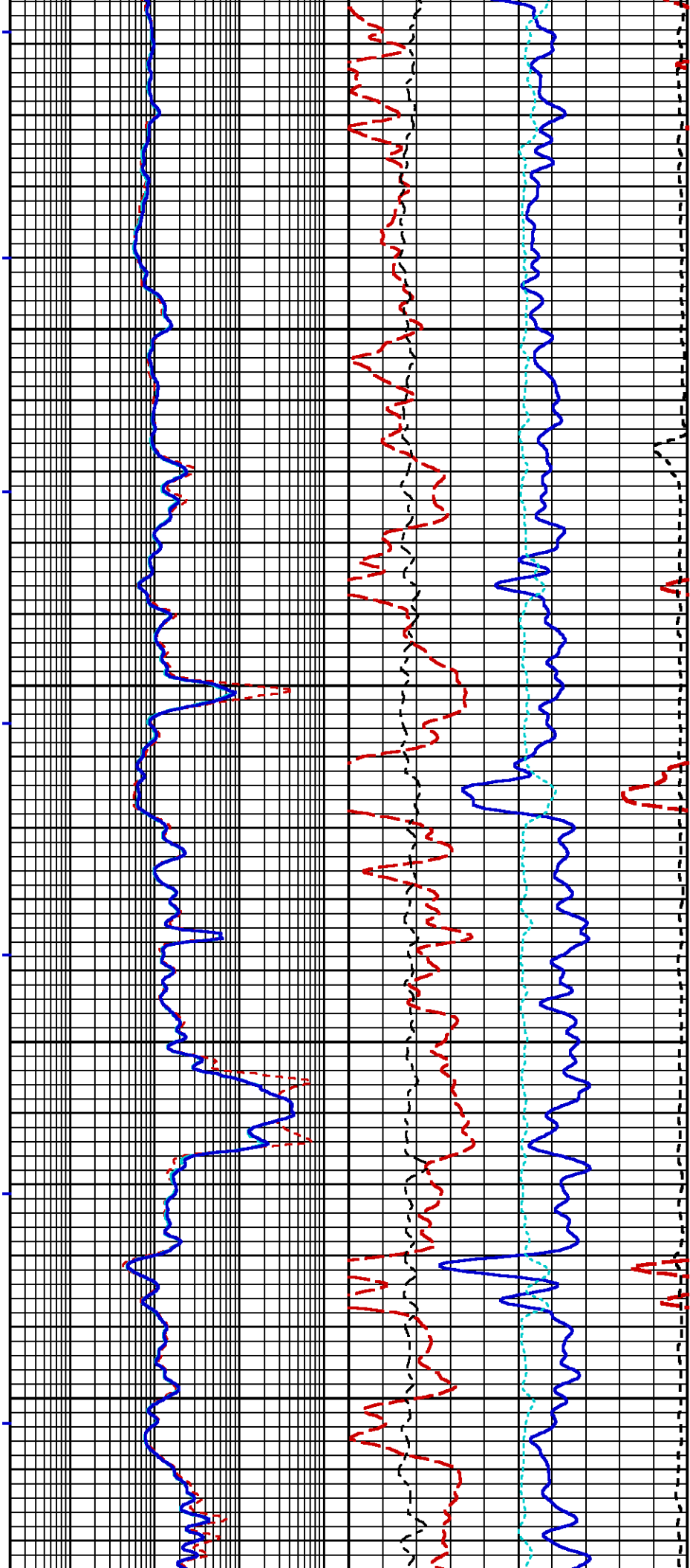








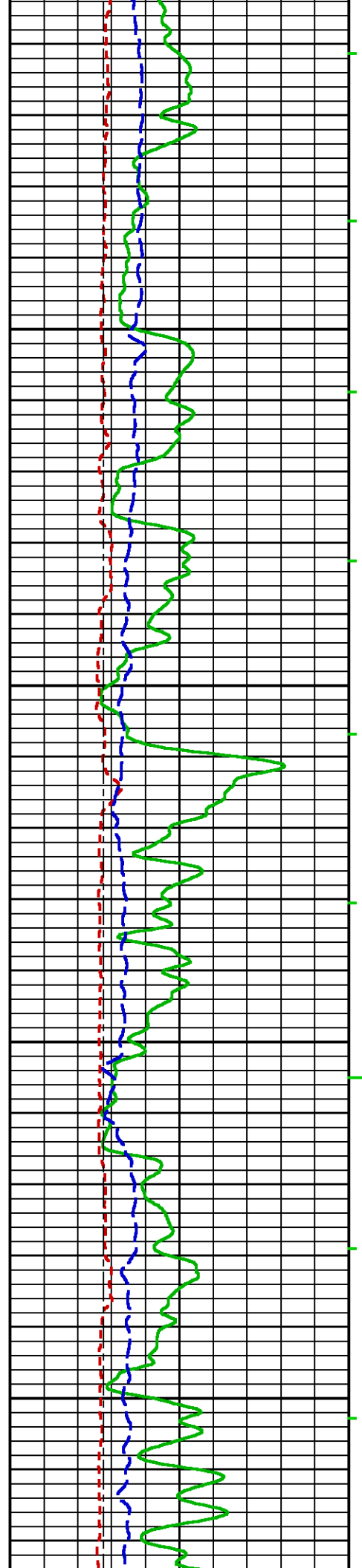


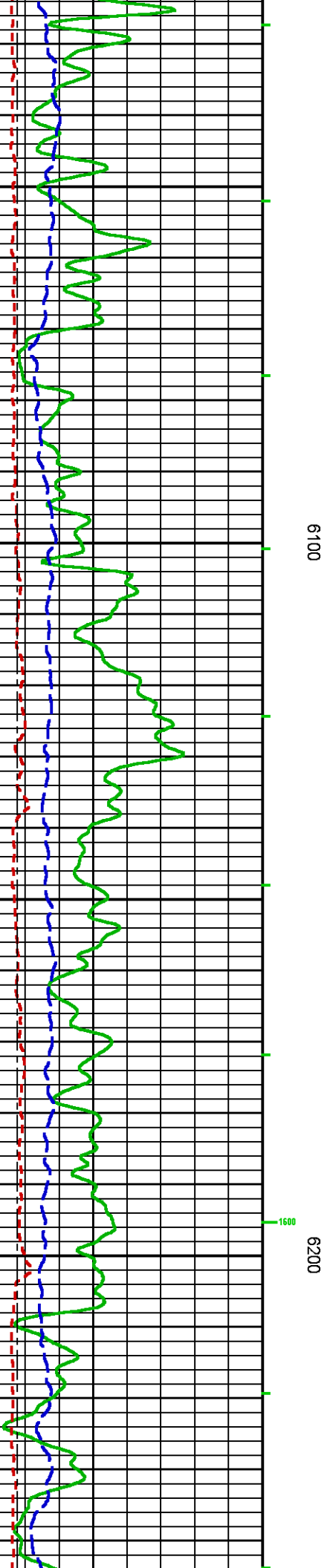
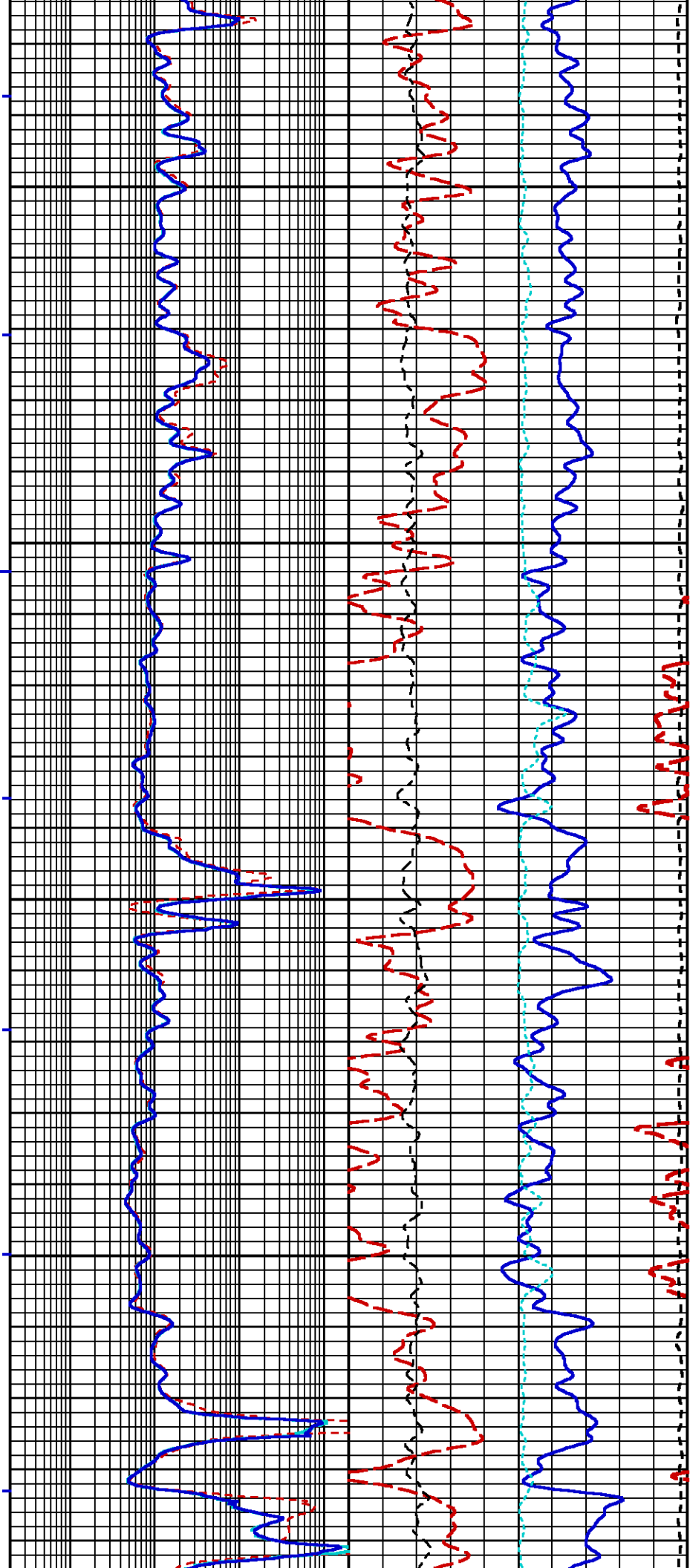


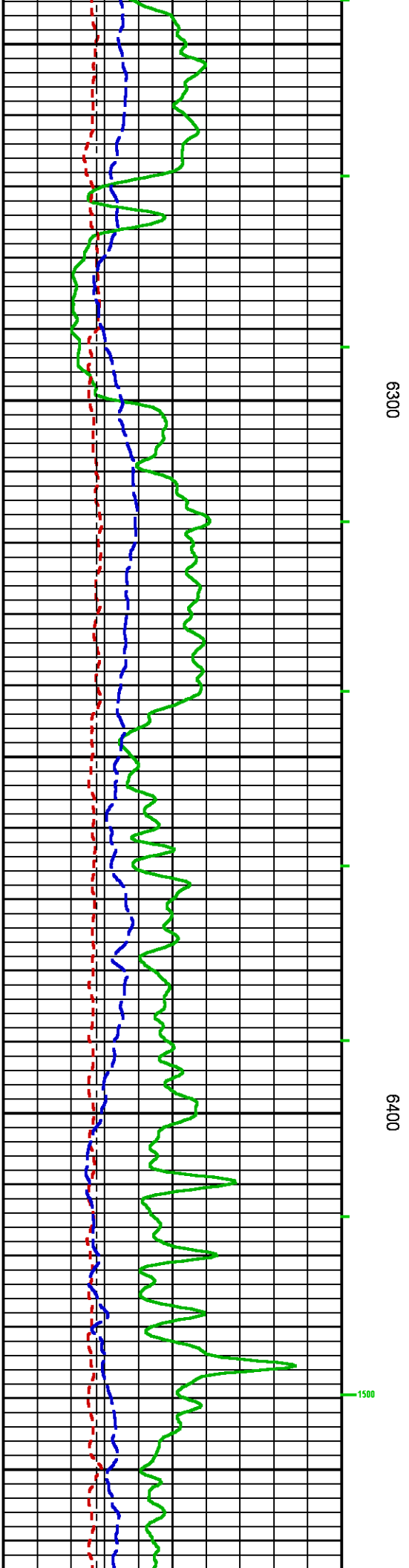
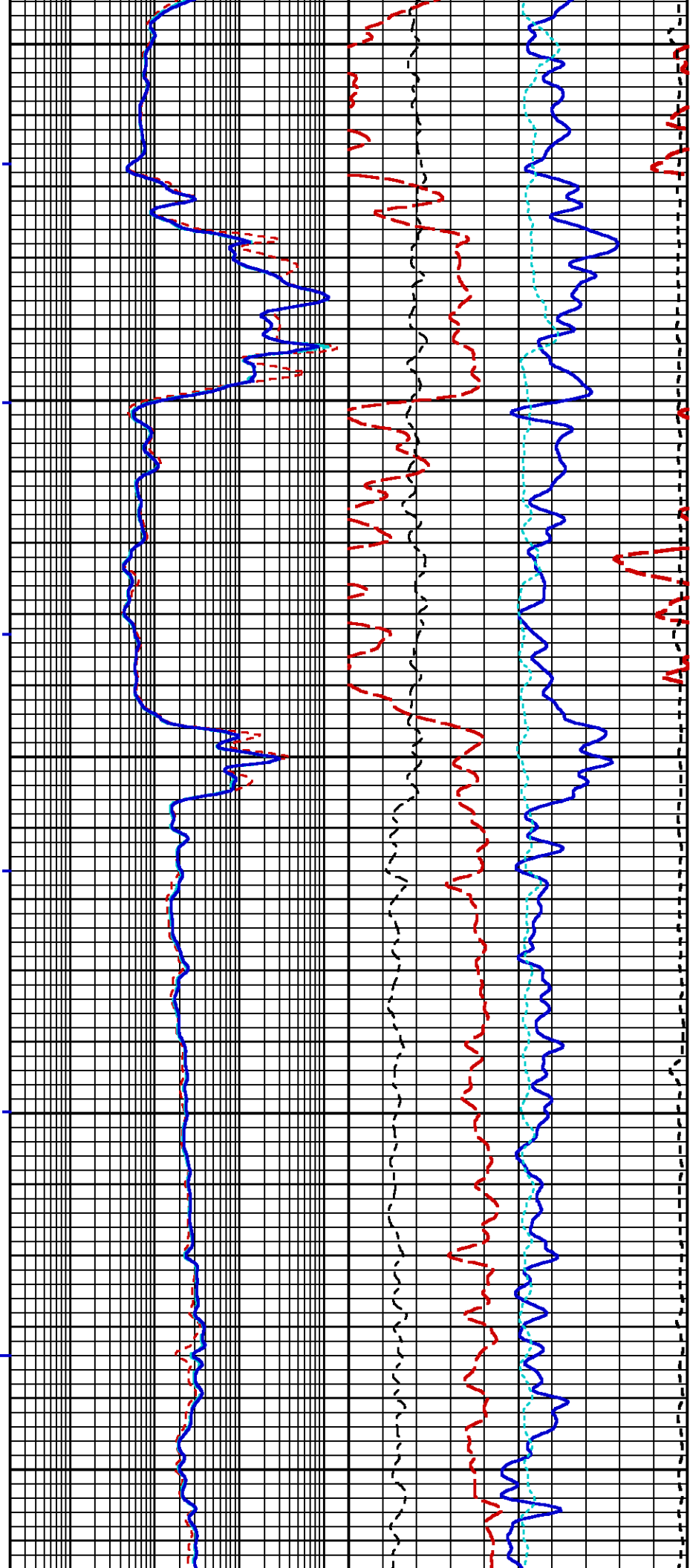
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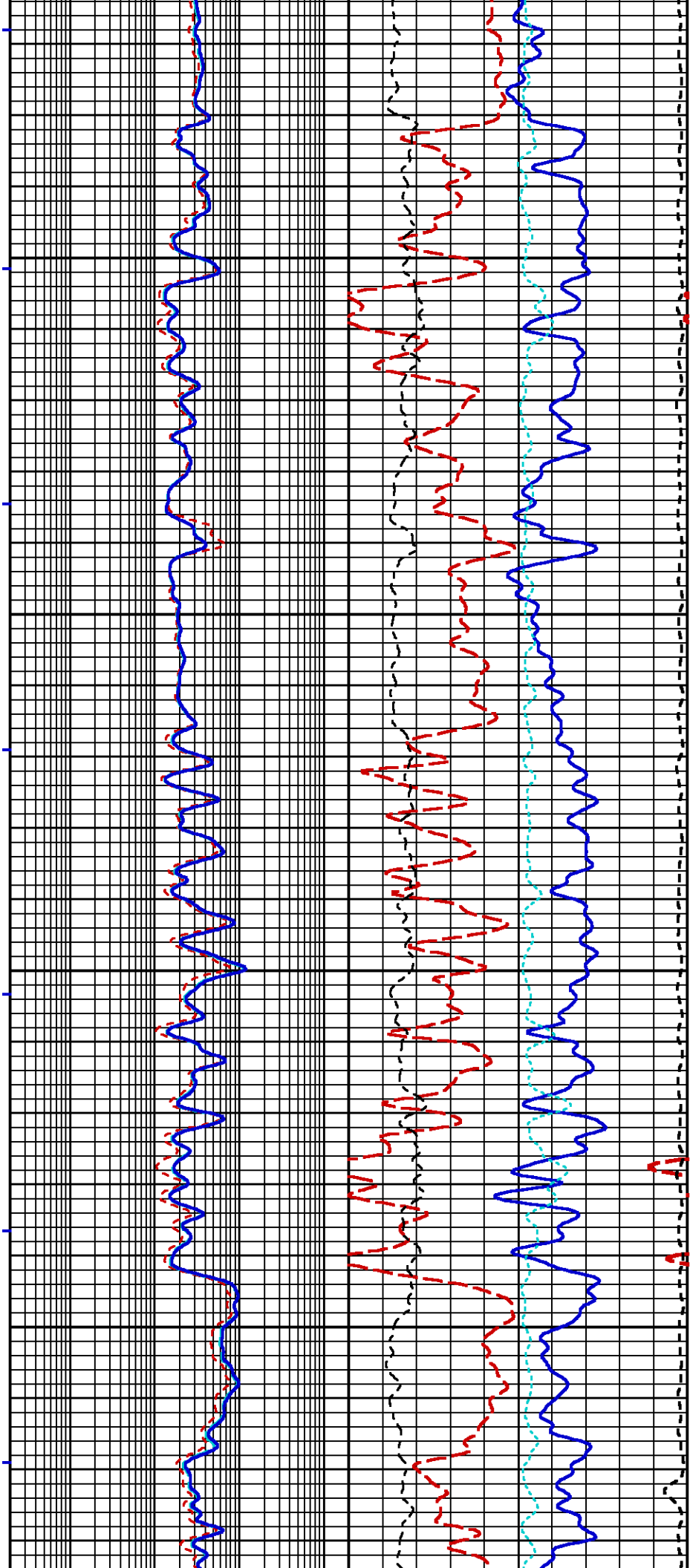
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1700



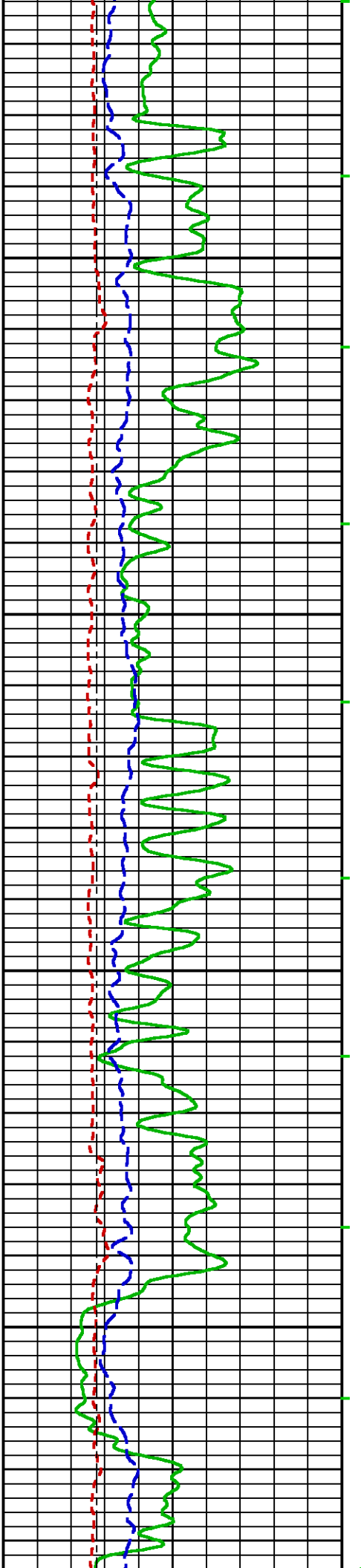


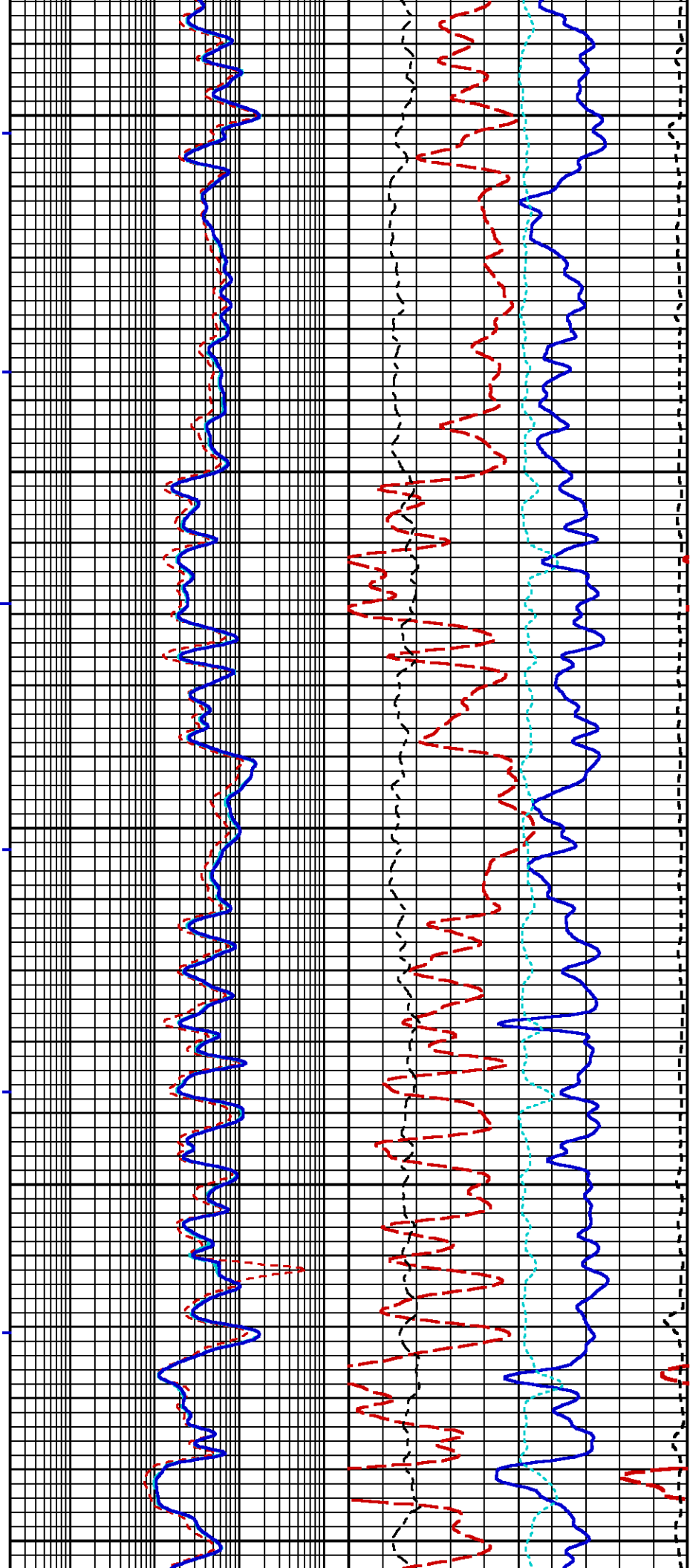




6500

6600



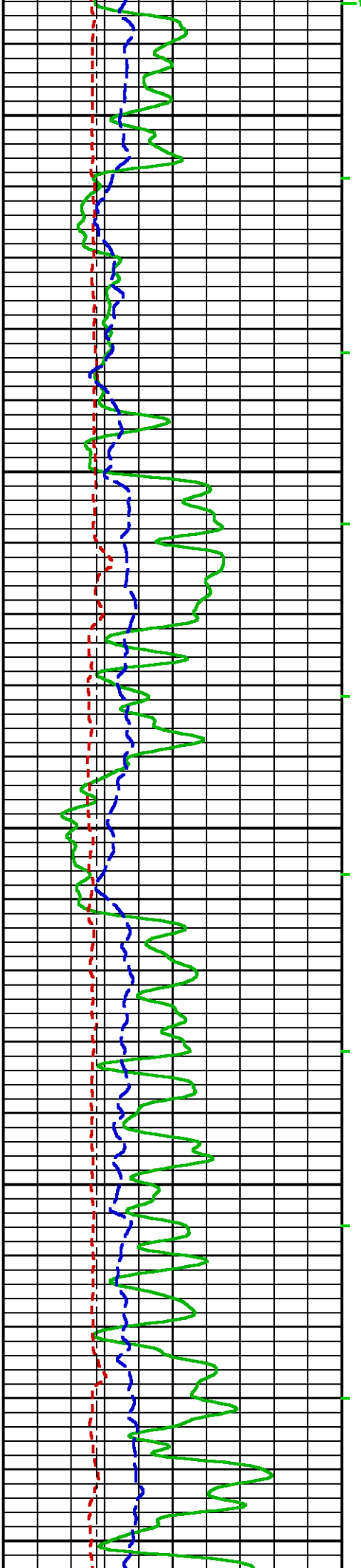


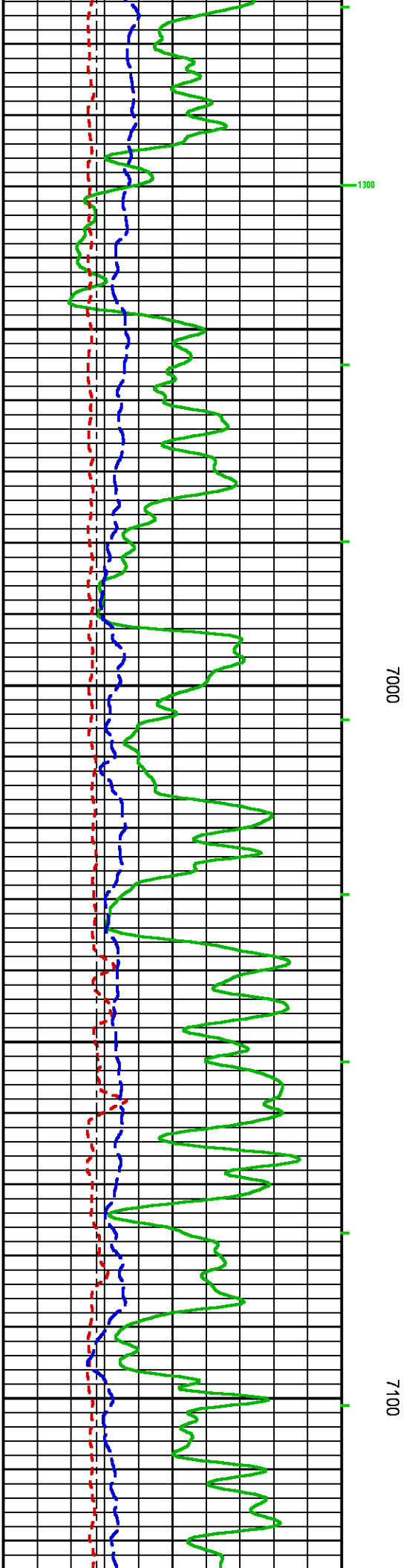
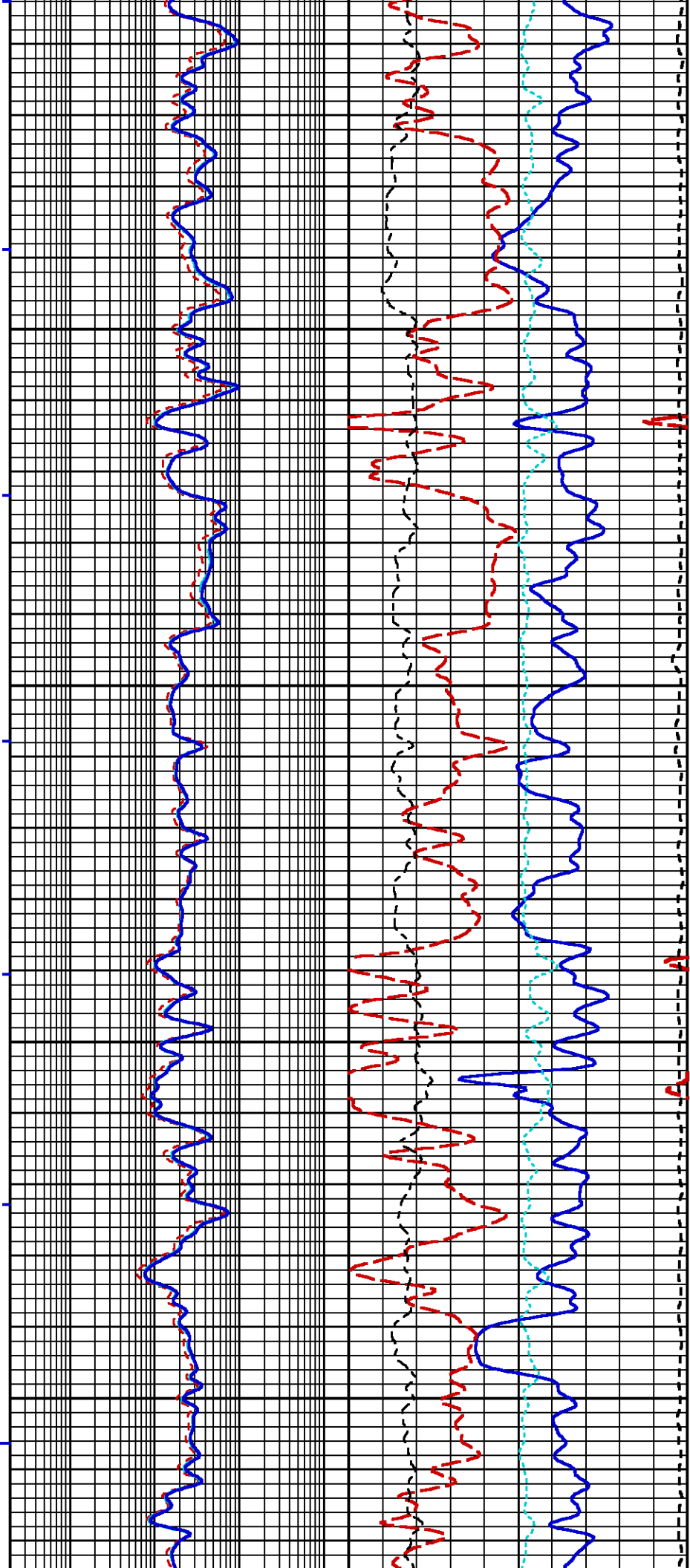
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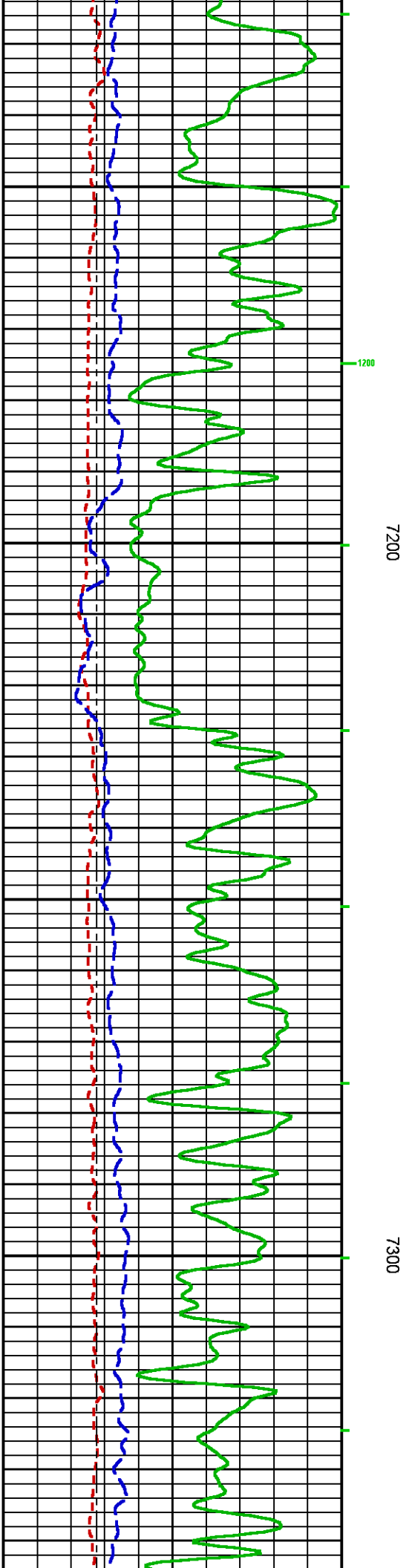
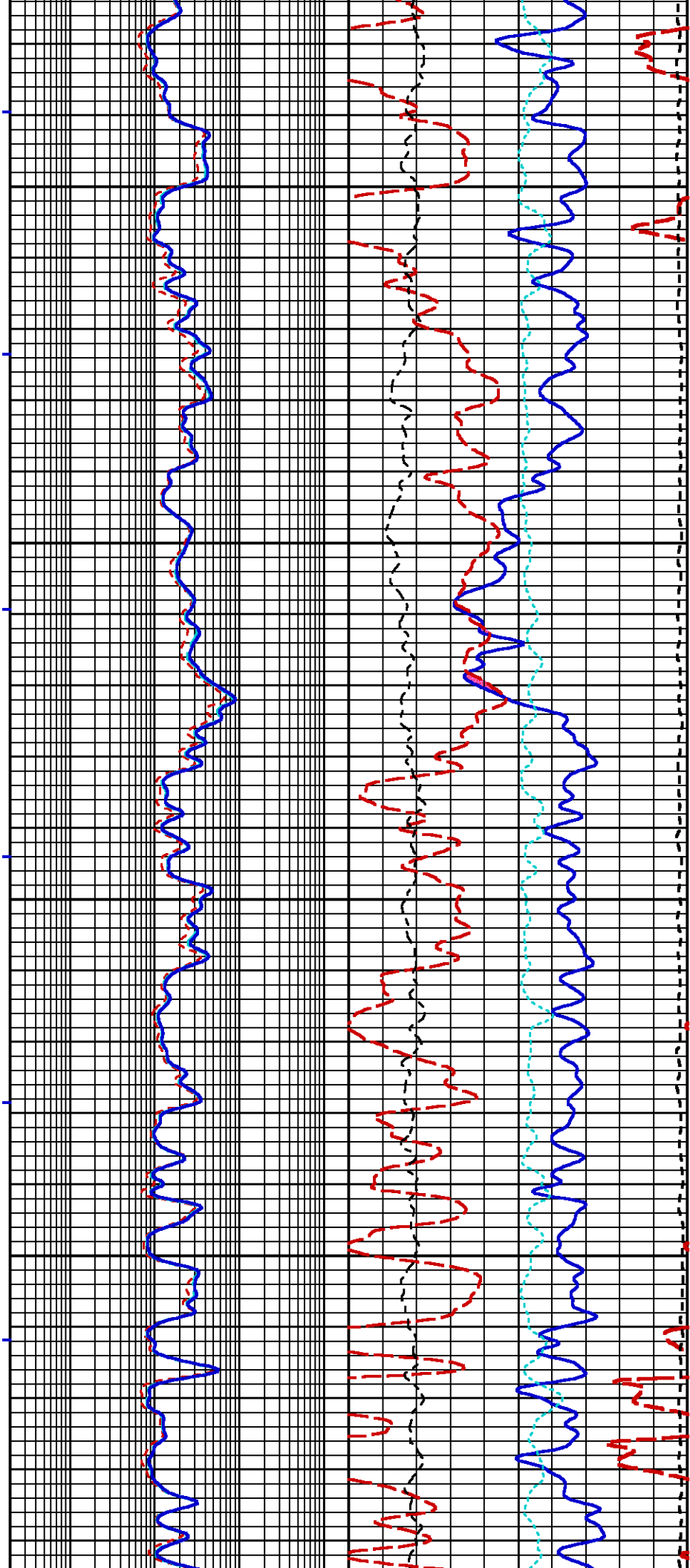
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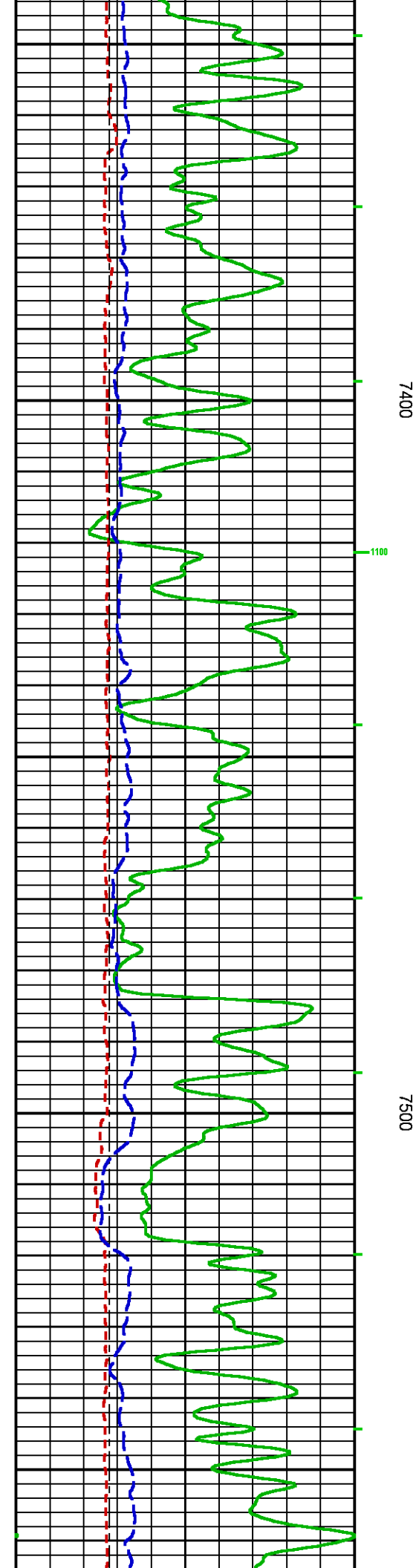
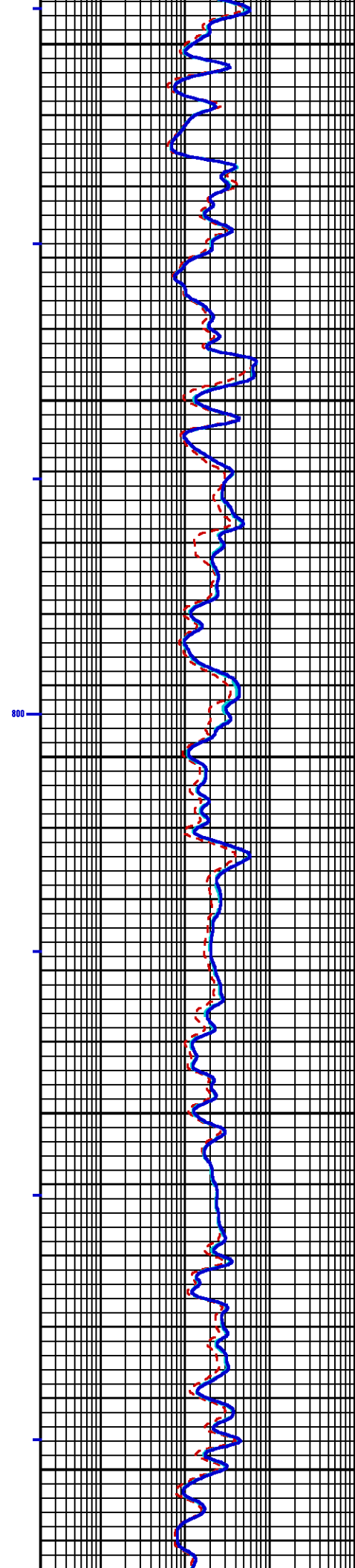
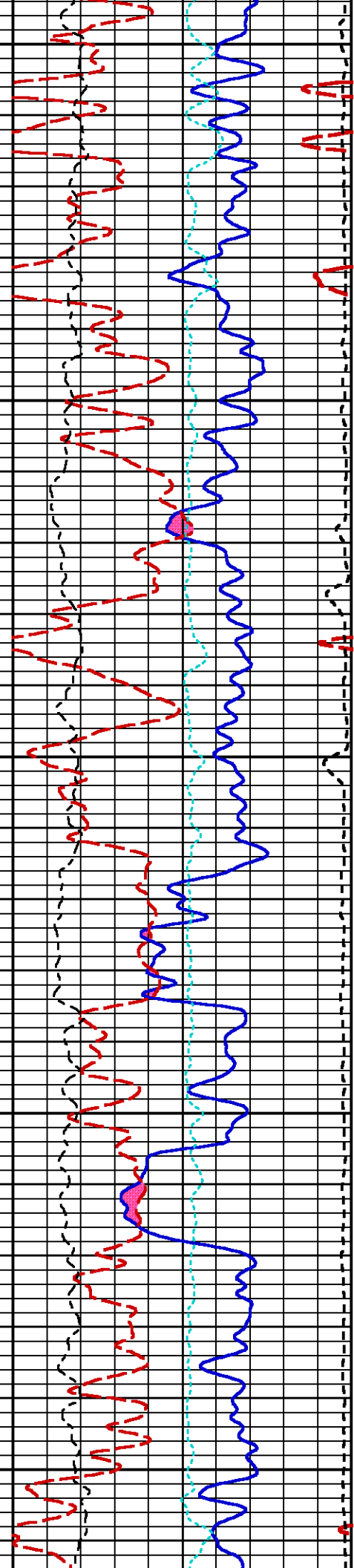
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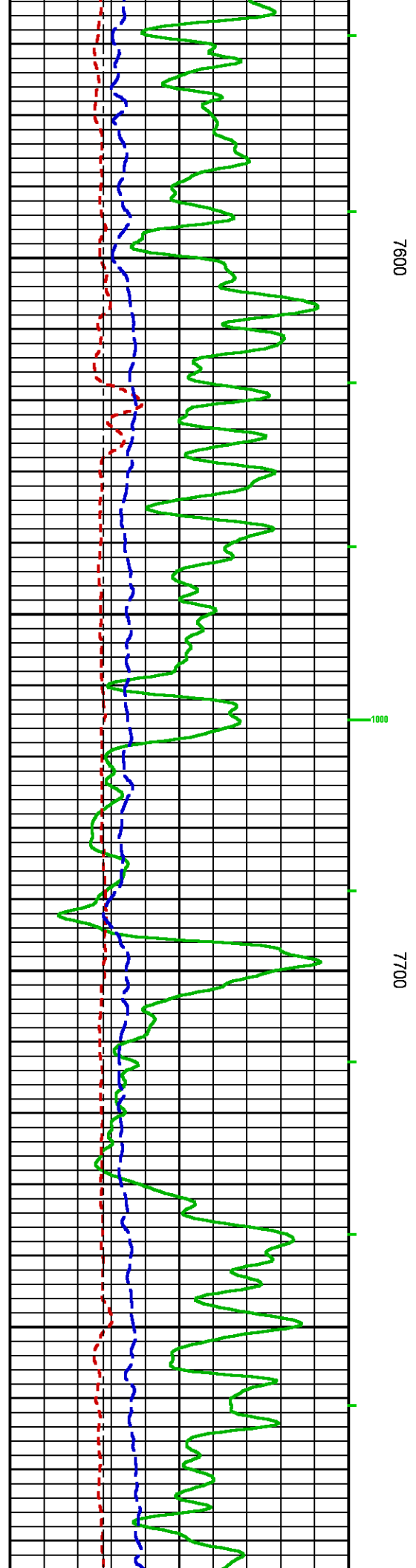
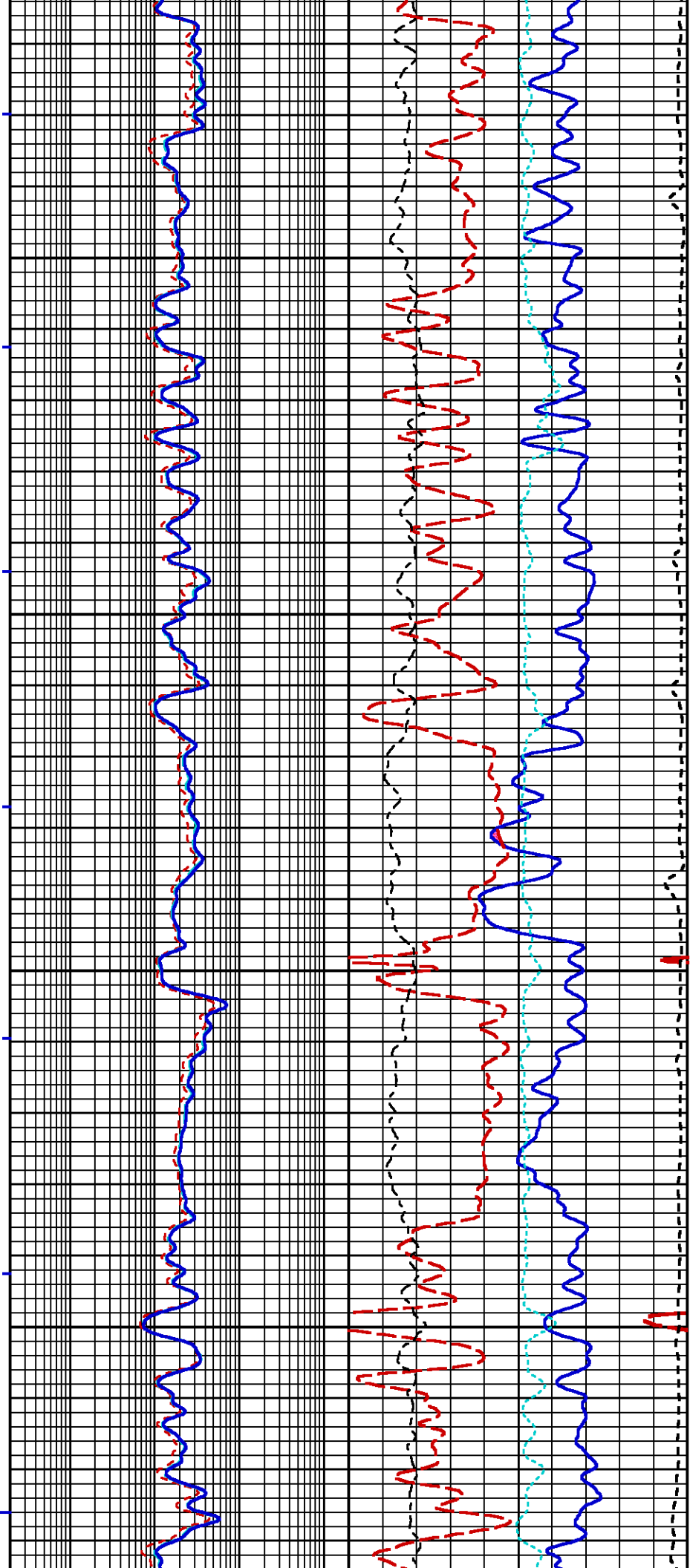


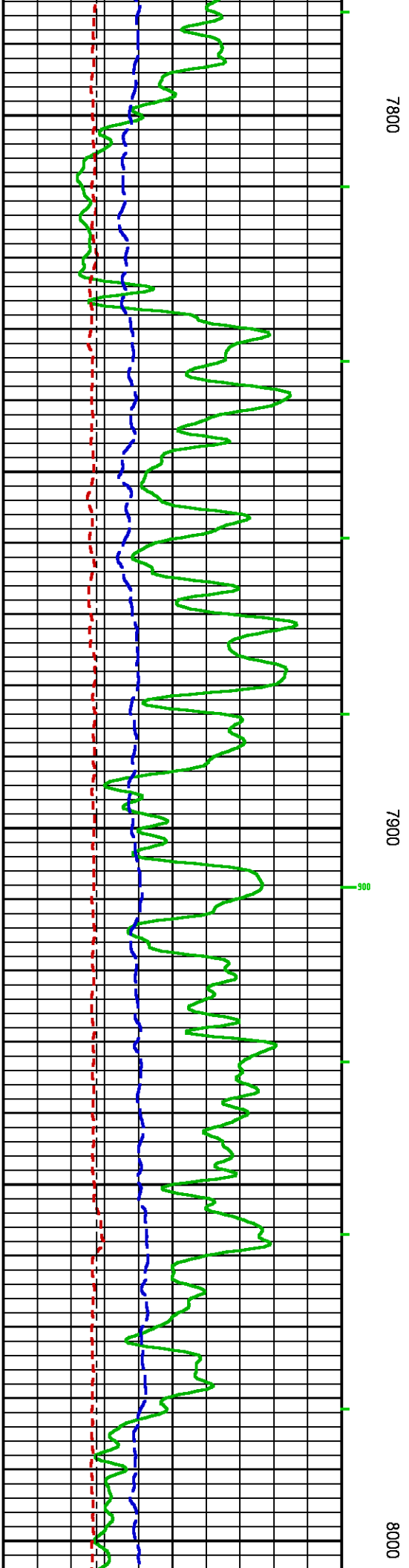
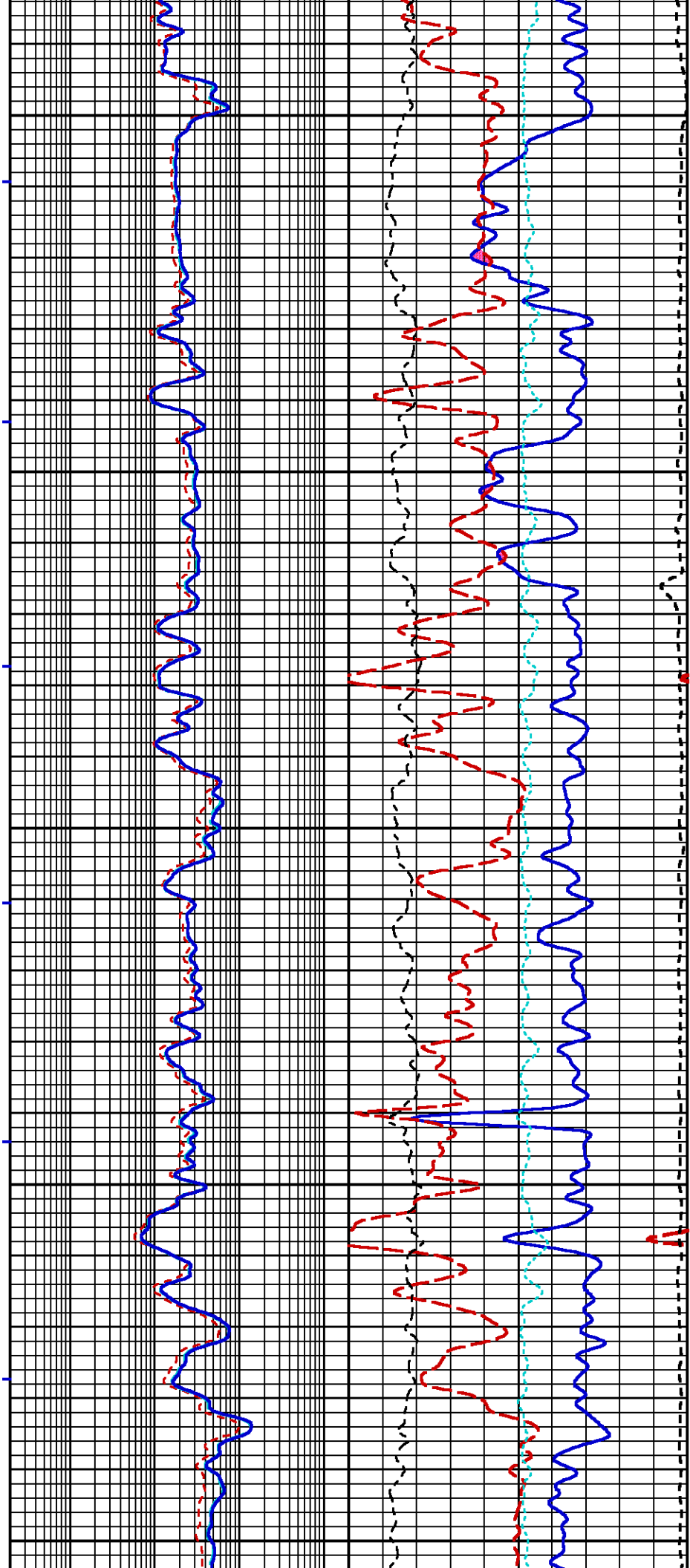


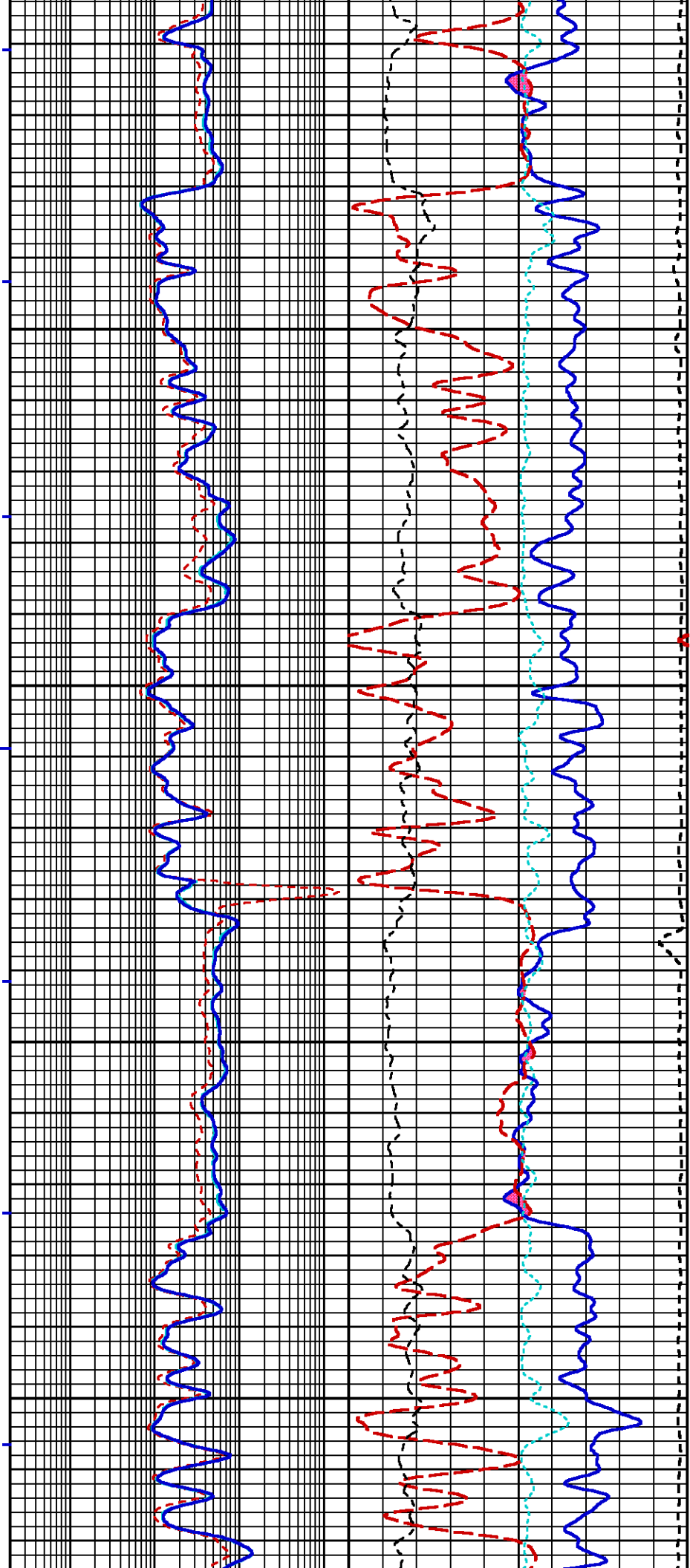










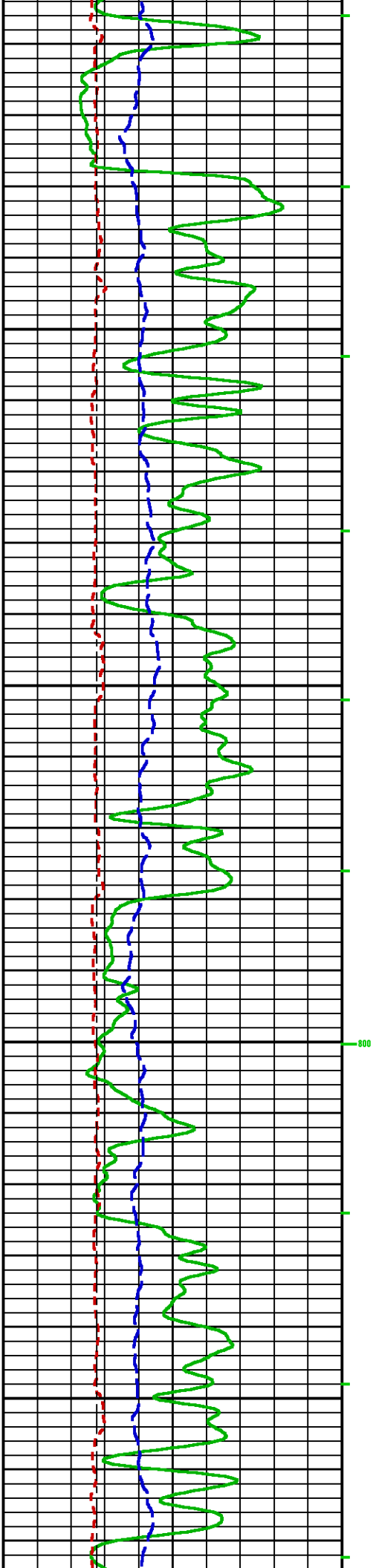


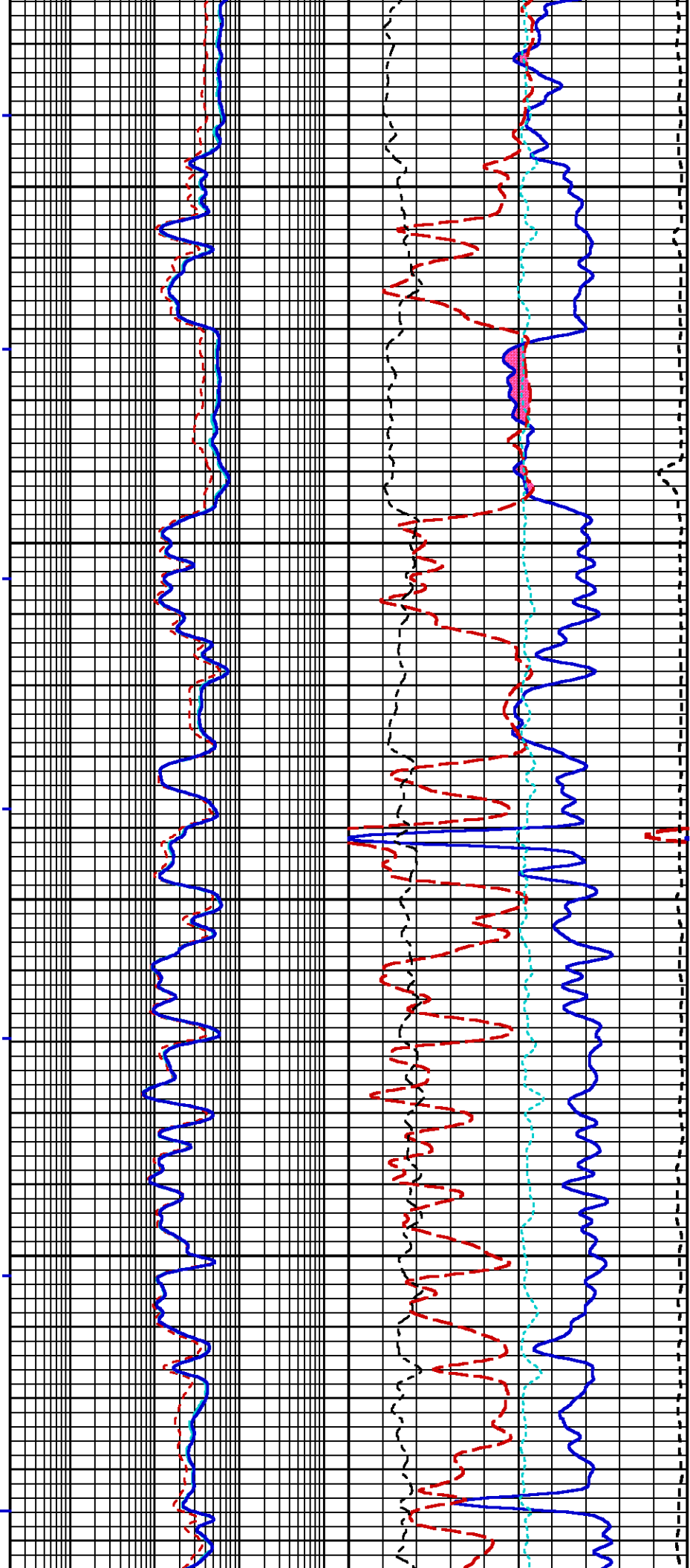
8100

600

8200

800



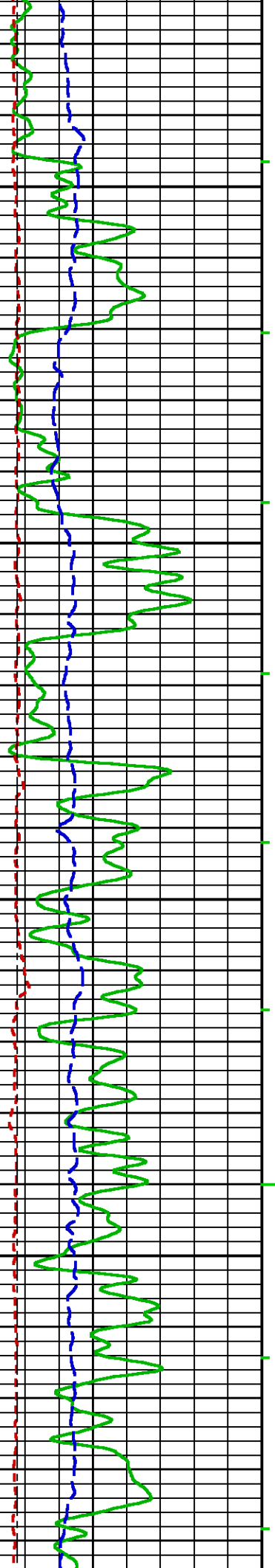


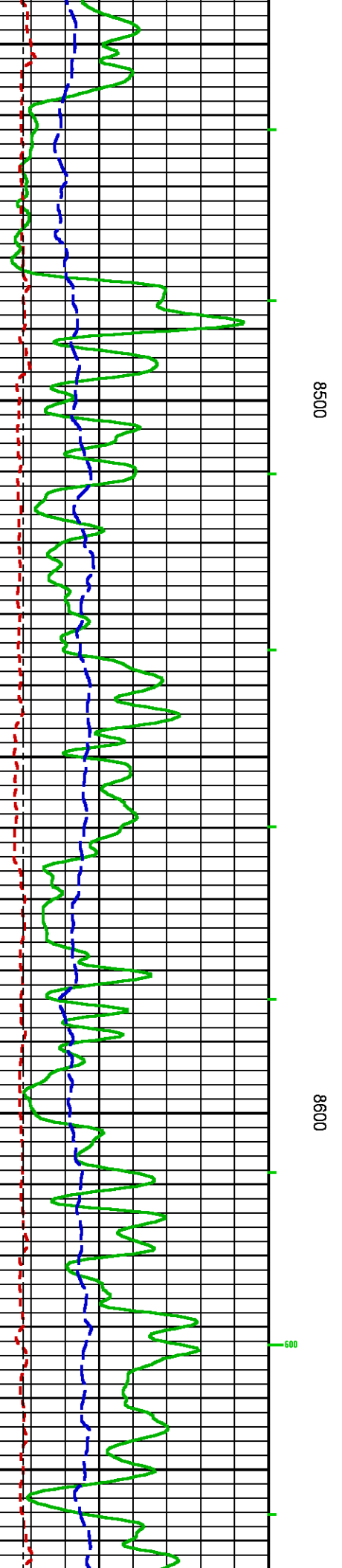
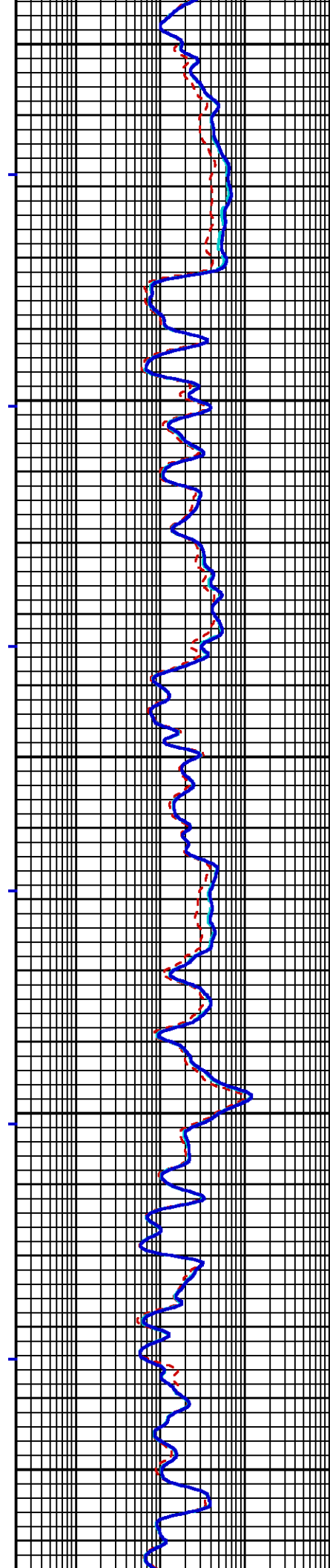
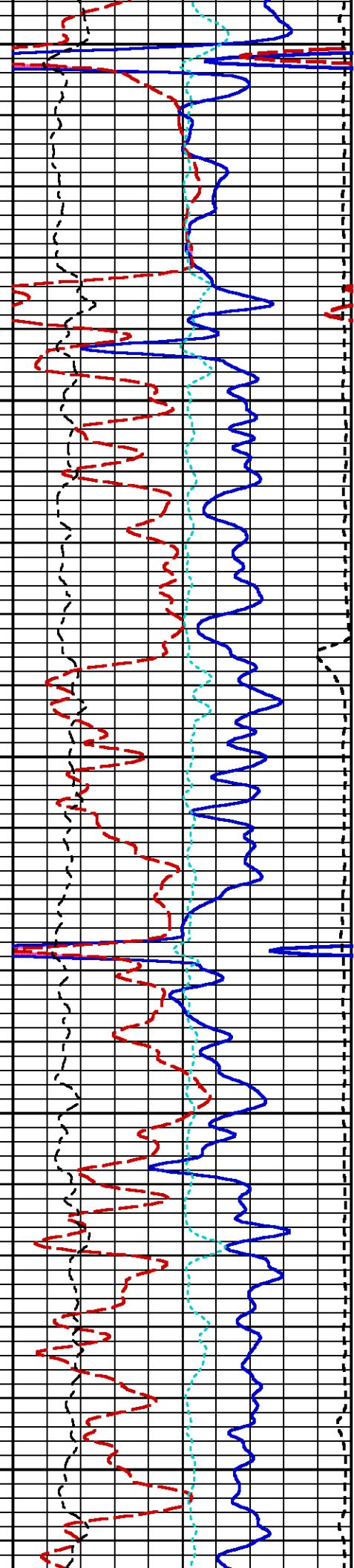
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8400

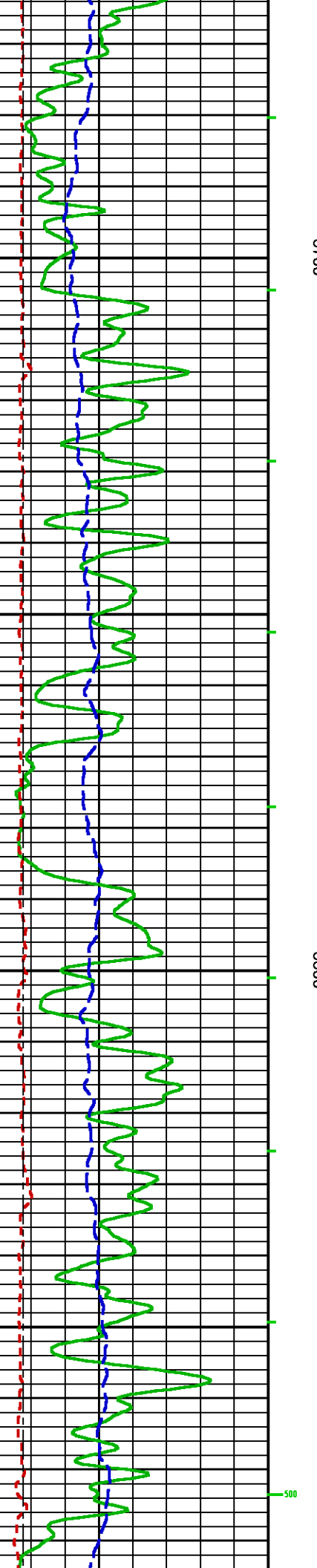
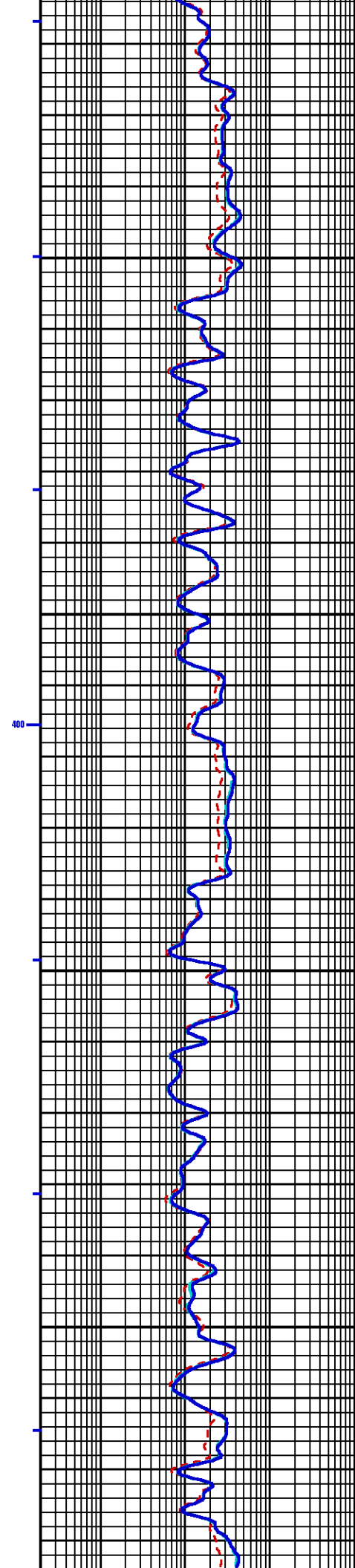
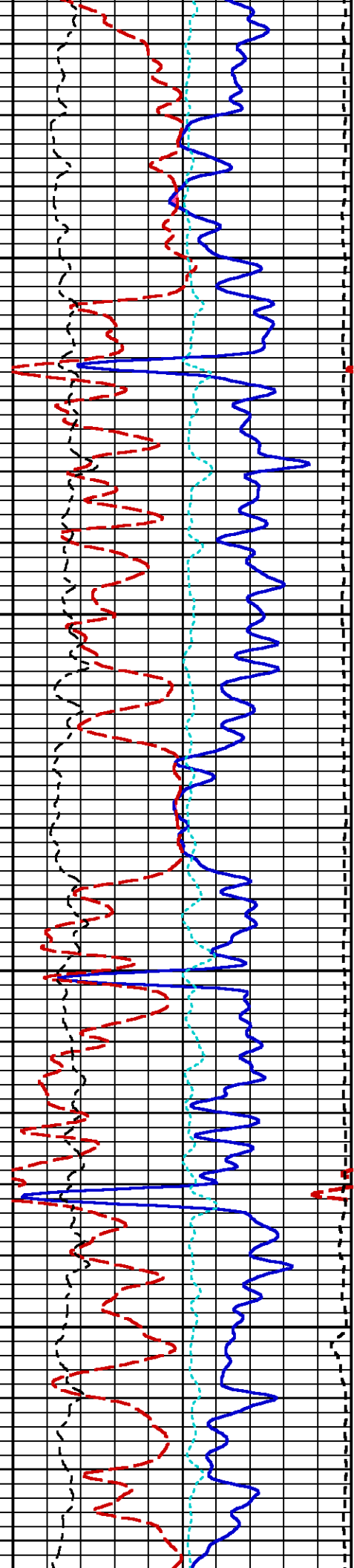
500

700

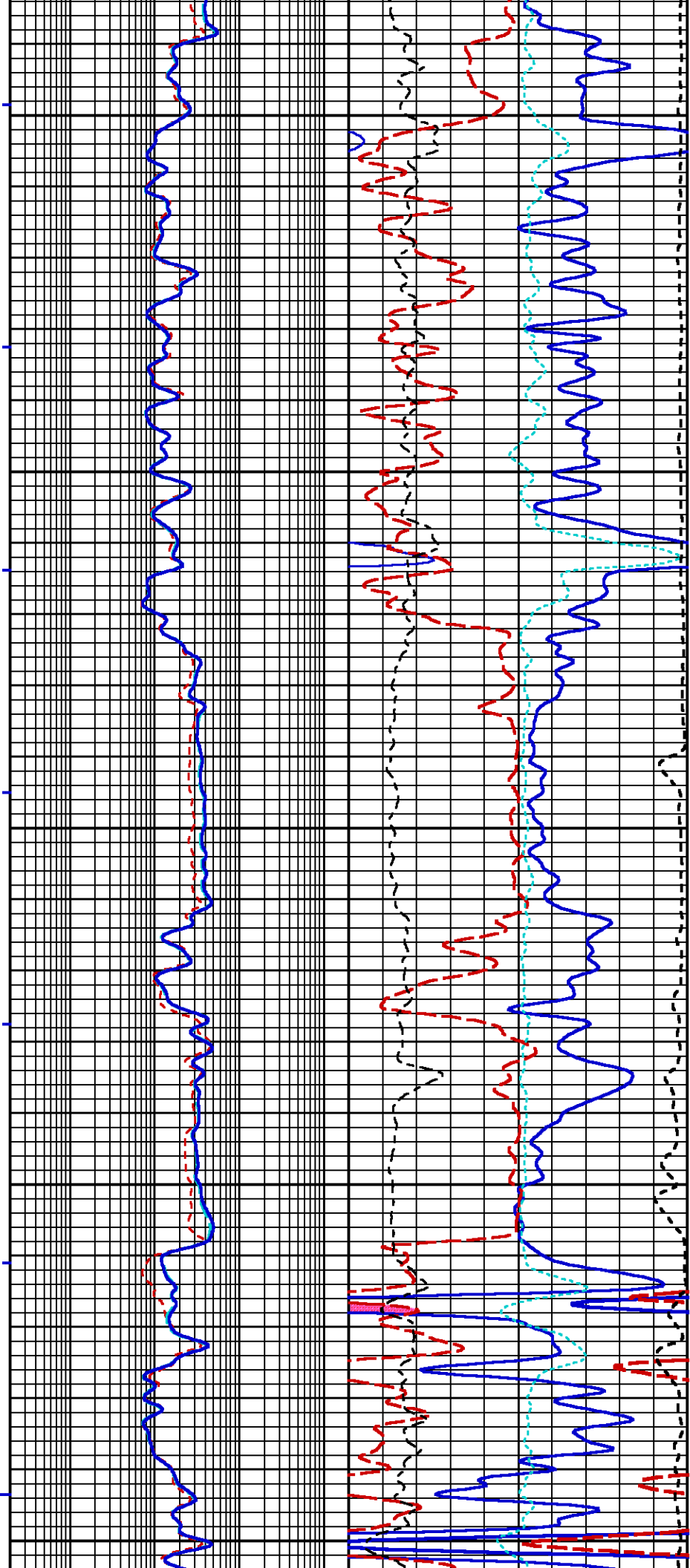








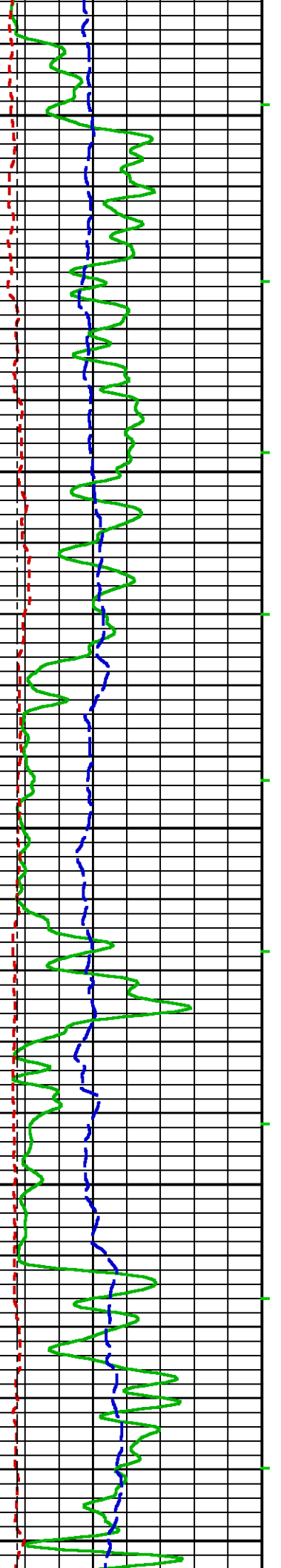


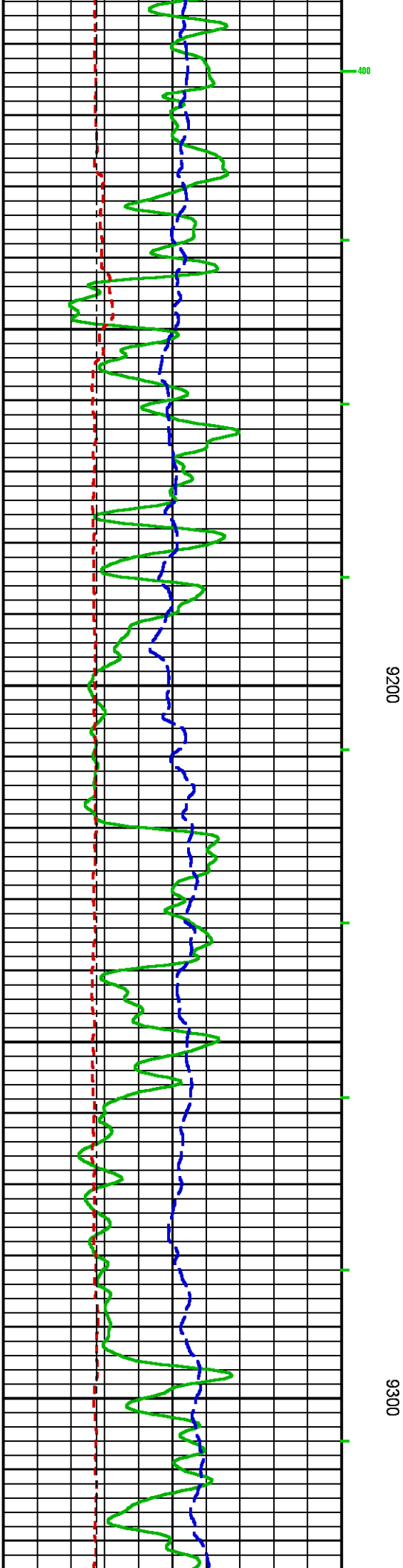
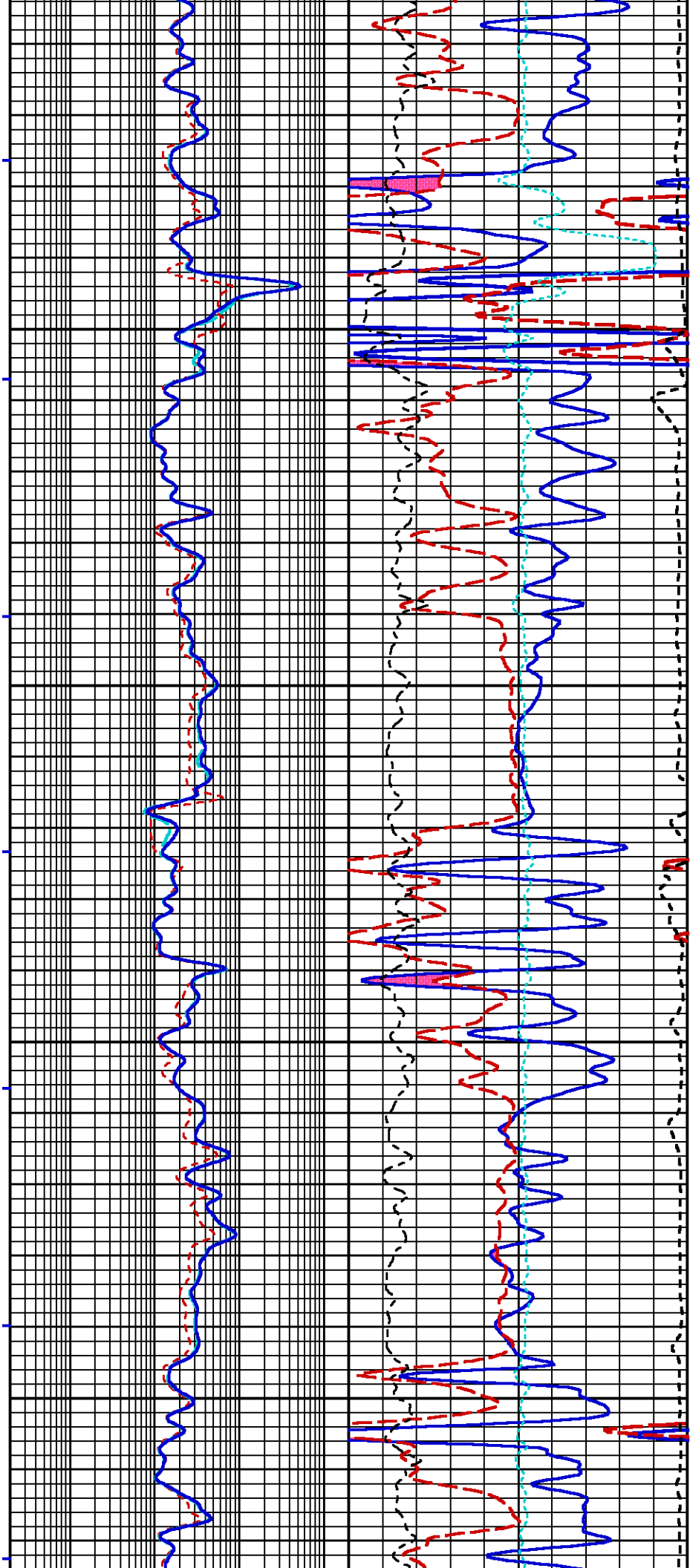


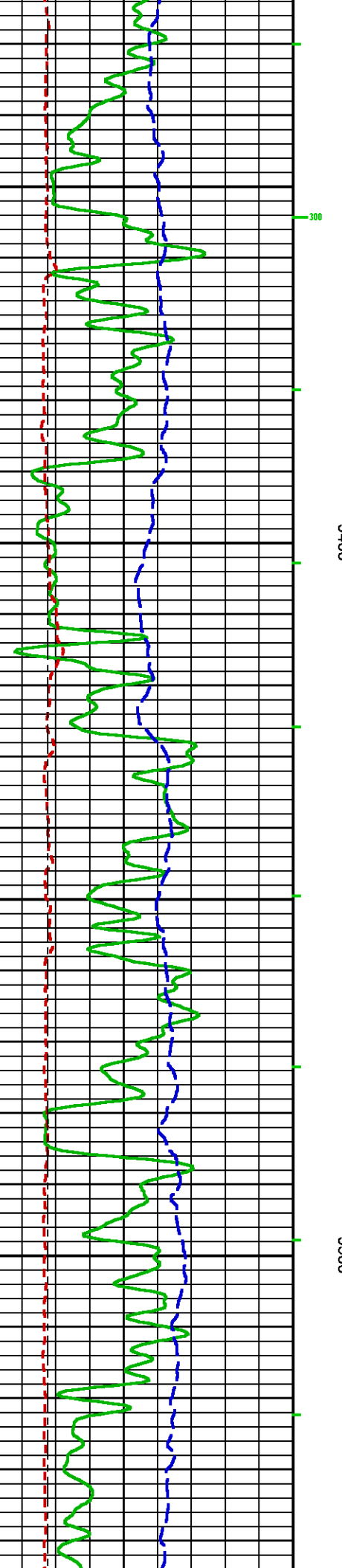
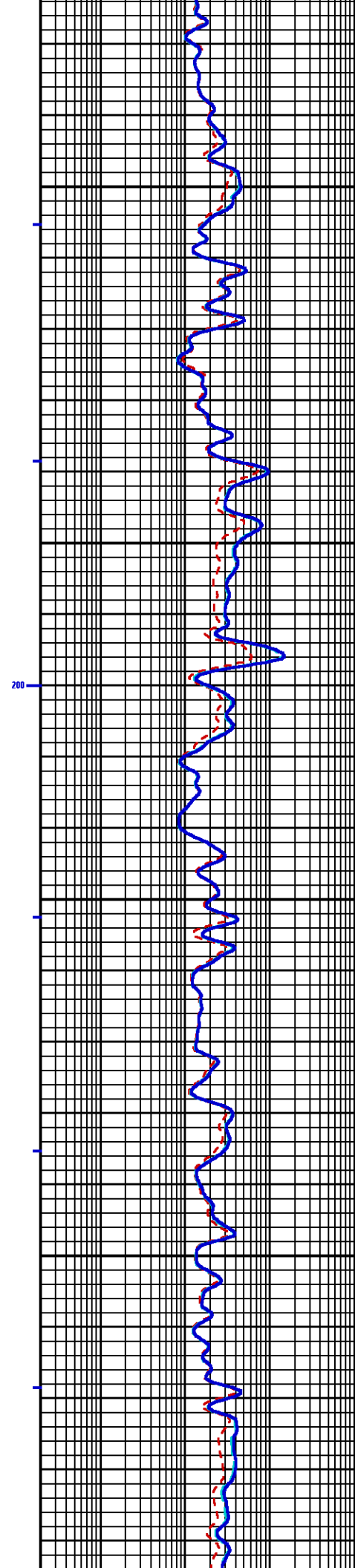
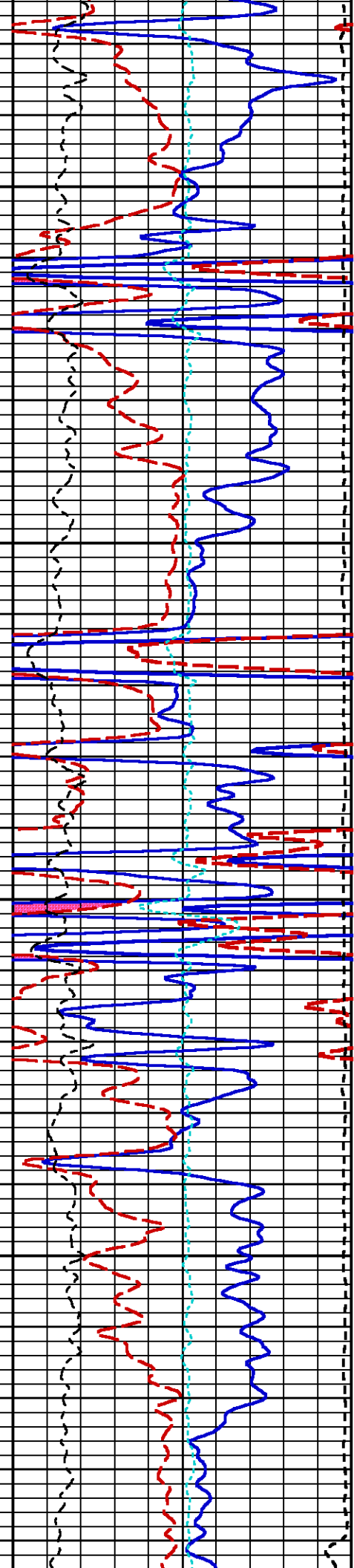
8900

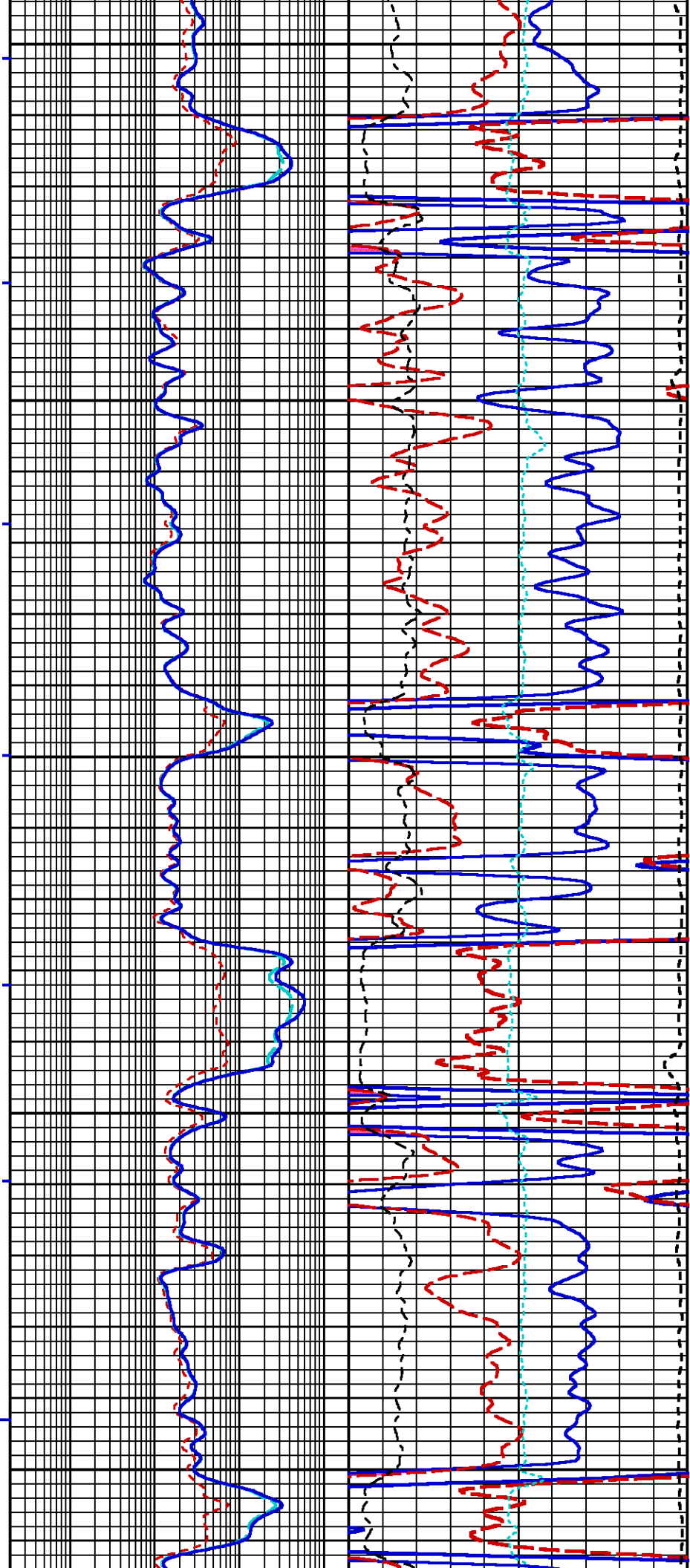
9000

9100







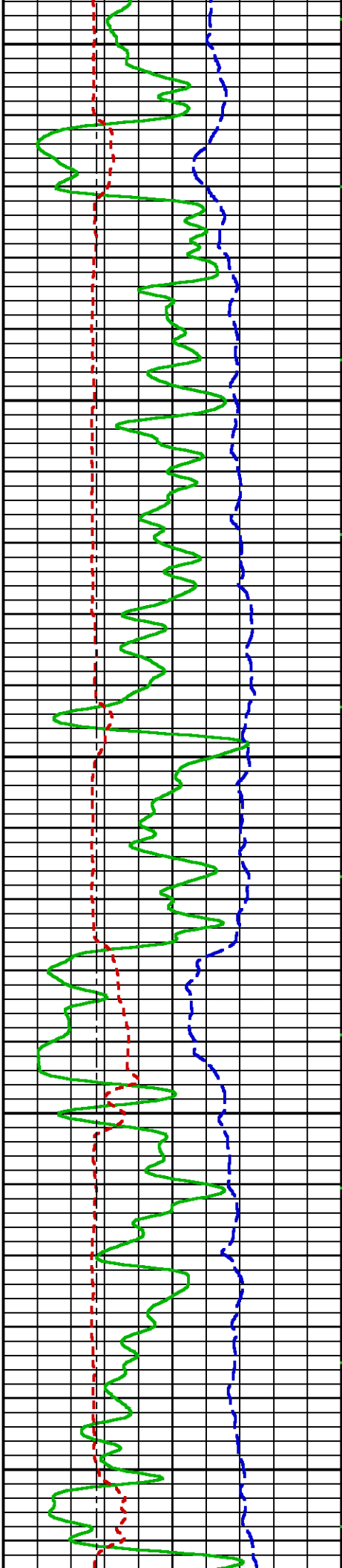


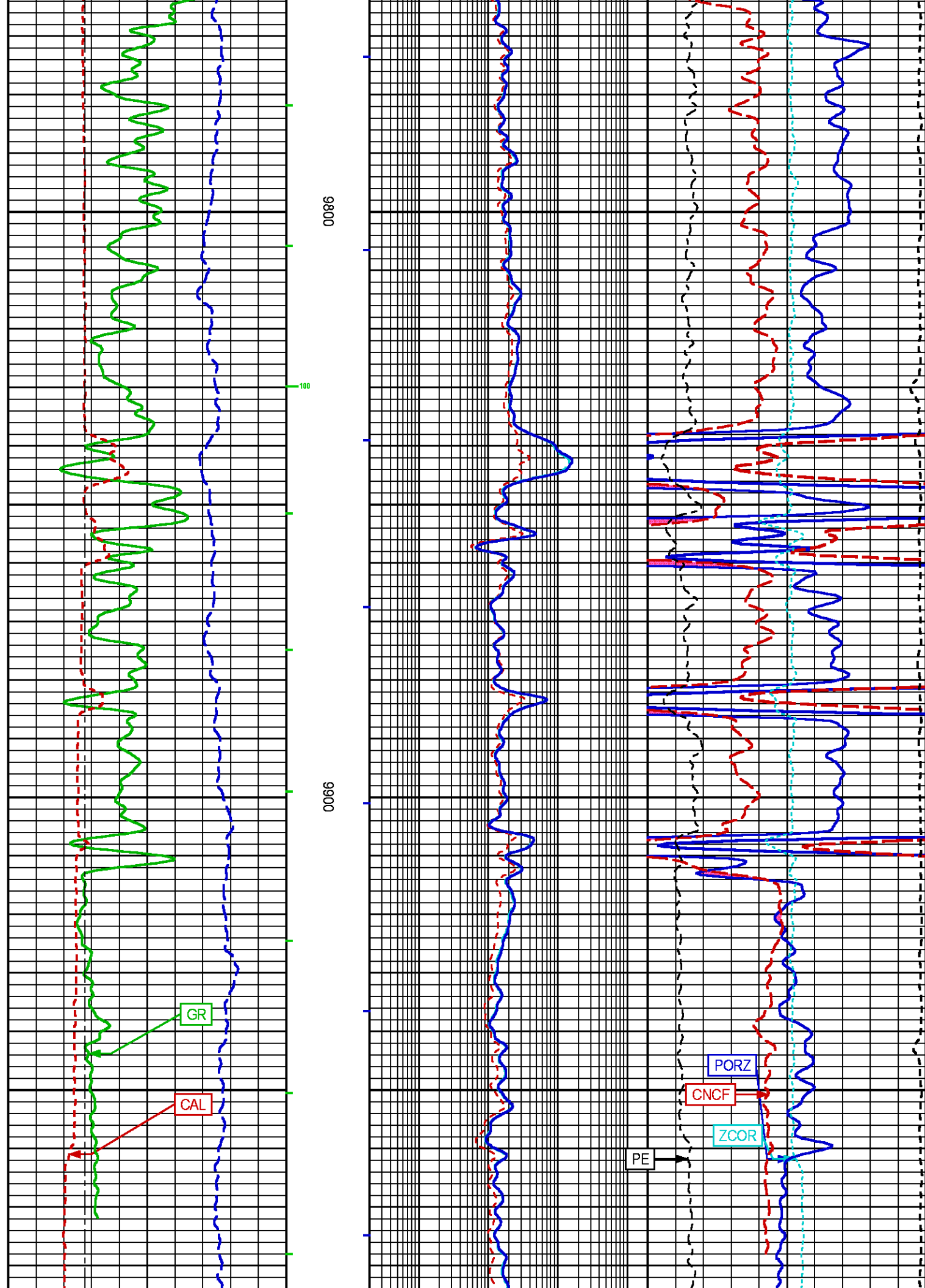
9600

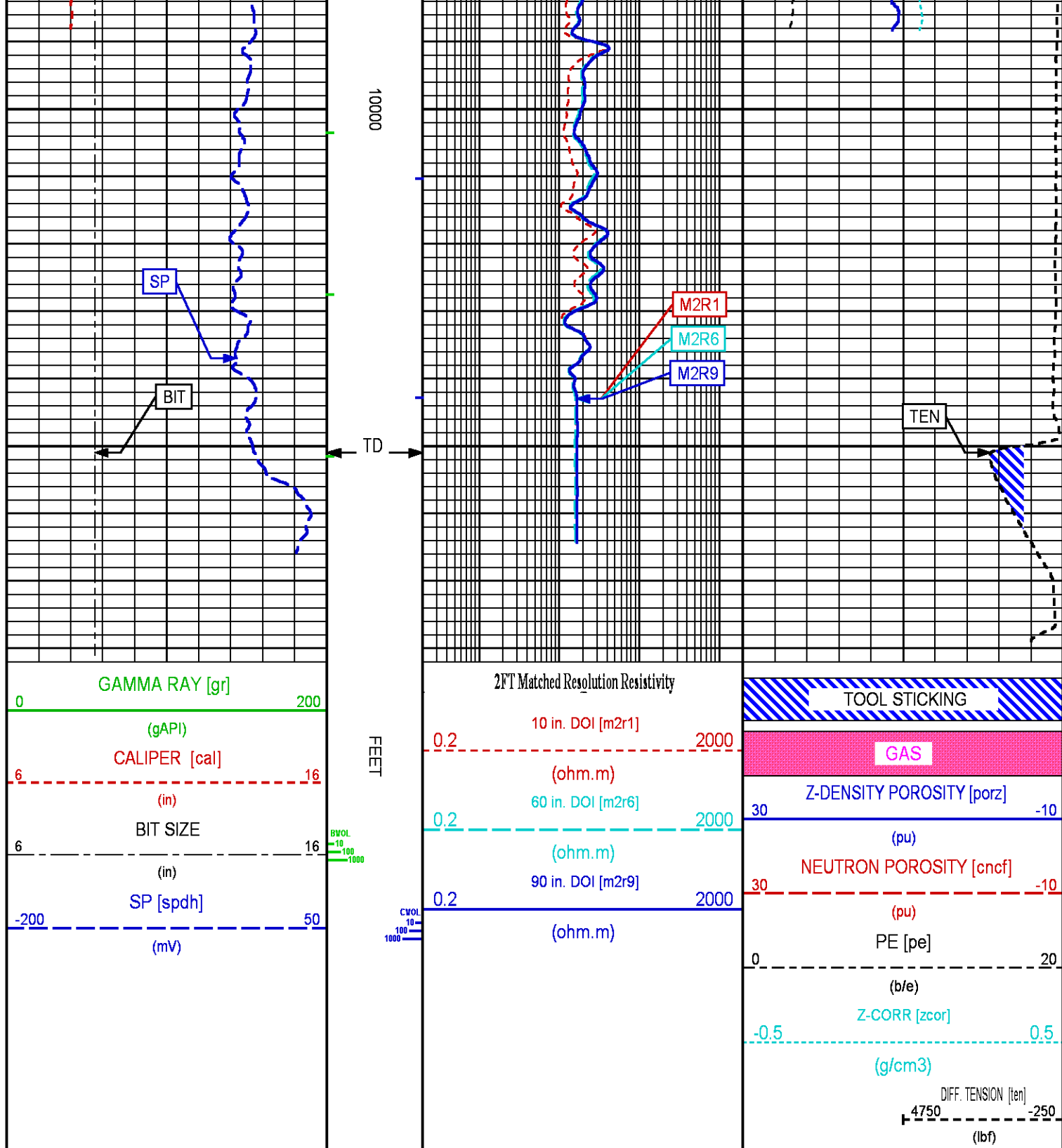
9700

100

200







REPEAT LOG 5"/100FT SCALE

PARAMETER AND FILTER SUMMARY REPORT

FILE: /dat1a/94604J/n777q01.prm  
LOGGING MODE: DEPTH DIRECTION: UP  
TOP DEPTH: 1234.119 ft BOTTOM DEPTH: 1580.319 ft

SYMMETRIC FILTER

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
TTRM	FILTER ()	medium (1)		TOP	BOTTOM
	FILTER (.h)	medium (1)		"	"
	FILTER (.i)	medium (1)		"	"
Y AXIS CALIPER	FILTER ()	medium (1)		"	"
TENSION	FILTER ()	medium (1)		"	"
GR	FILTER ()	medium (1)		"	"
CN	FILTER ()	medium (1)		"	"
CALIPER	FILTER ()	medium (1)		"	"
	FILTER (.h)	medium (1)		"	"
	FILTER (.i)	medium (1)		"	"
ZDL MED RES	FILTER (hrd1*)	medium		"	"
	FILTER (hrd1s*)	medium		"	"
	FILTER (hrd2*)	medium		"	"
	FILTER (hrd2s*)	medium		"	"
	FILTER (soft*)	medium		"	"
SP-SPDH	FILTER ()	medium (1)		"	"

BOREHOLE & CEMENT

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
CASING - BOREHOLE & CEMENT VOLUME	CASING O.D.	4.500	in	TOP	BOTTOM
	CASING THICKNESS	0.000	in	"	"
BIT SIZE	BIT SIZE	8.750	in	"	"
MUD SAMPLE RESISTIVITY	MUD SAMPLE TEMP	67.1	degF	"	"
	MUD SAMPLE RES	3.300	ohm.m	"	"
BOREHOLE TEMP from GRADIENT	Known BH REF TEMP	67.1	degF	"	"
	at BH REF DEPTH	0.0	ft	"	"
	with TEMP GRADIENT	1.200	0.01 degF/ft	"	"
BOREHOLE CORR DIAMETER SOURCE	CALIPER/FIXED DIA. (cnbh*)	USE CALIPER		"	"
	CALIPER/FIXED DIA. (mbh*)	USE CALIPER		"	"
BOREHOLE CORR DIAMETER	FIXED DIAMETER (cnbh*)	8.750	in	"	"
	FIXED DIAMETER (mbh*)	8.750	in	"	"
BH MUD RESISTIVITY SOURCE	RMUD SOURCE (HDIL)	TOOL MEASURED		"	"

CN PROCESSING

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
2446 CN MATRIX	2446 MATRIX	SANDSTONE		TOP	BOTTOM
CN SALINITY CORRECTION	SALINITY	600	ppm	"	"
CN TOOL STANDOFF	ENABLE STANDOFF CORR	OFF		"	"
	STANDOFF AMOUNT	0.00	in	"	"
CN CASING & CEMENT CORRECTION	CORRECTION	OFF		"	"
	BIT SIZE BEHIND CSNG	7.875	in	"	"

ZDL PROCESSING

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
DENSITY POROSITY	RHOfmatrix	2.680	g/cm3	TOP	BOTTOM
	RHOfluid	1.000	g/cm3	"	"
ZDL	DENX TRACKING	ON		"	"
TRACKING TIME	Logging Spd for Gain	Over 10 ft/min		"	"

HDIL PROCESSING

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
HDIL TEMPERATURE CORRECTION	TEMP CORR SOURCE	USE RXTEMP		TOP	BOTTOM
ADAPTIVE BOREHOLE CORRECTION	ABC PROCESSING	ON		"	"
	ABC to CALCULATE	STANDOFF		"	"
	STANDOFF	1.50	in	"	"
	TOOL POSITION	ECCENTERED		"	"
	Rmud MULTIPLIER	1.000		"	"

# CURVE DESCRIPTION REPORT

**CURVE NAME    CREATION DATE    CURVE DESCRIPTION**

F1:BIT	Feb 8 13:19:49 2015	BIT SIZE
F1:BVOL	Feb 8 13:19:49 2015	BOREHOLE VOLUME
F1:CAL	Feb 8 13:19:49 2015	CALIPER
F1:CNCF	Feb 8 13:19:49 2015	FIELD NORMALIZED COMPENSATED NEUTRON POROSITY
F1:CVOL	Feb 8 13:19:49 2015	CEMENT VOLUME
F1:GR	Feb 8 13:19:49 2015	GAMMA RAY
F1:M2R1	Feb 8 13:19:49 2015	VERTICAL 2-FOOT RESOLUTION MATCHED RESISTIVITY, 10-INCH DOI
F1:M2R6	Feb 8 13:19:49 2015	VERTICAL 2-FOOT RESOLUTION MATCHED RESISTIVITY, 60-INCH DOI
F1:M2R9	Feb 8 13:19:49 2015	VERTICAL 2-FOOT RESOLUTION MATCHED RESISTIVITY, 90-INCH DOI
F1:PE	Feb 8 13:19:49 2015	PHOTO ELECTRIC CROSS-SECTION
F1:PORZ	Feb 8 13:19:49 2015	POROSITY FOR SELECTABLE MATRIX
F1:SPDH	Feb 8 13:19:49 2015	SPONTANEOUS POTENTIAL PROCESSED IN COMMON REMOTE
F1:TEN	Feb 8 13:19:49 2015	DIFFERENTIAL TENSION
F1:ZCOR	Feb 8 13:19:49 2015	DENSITY CORRECTION

## CURVE MEASURE POINT OFFSET

CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
BIT	0.00	GR	107.25	M2R9	8.00	SPDH	14.00
CAL	90.00	M2R1	8.00	PE	89.25	TEN	0.00
CNCF	100.25	M2R6	8.00	PORZ	89.25	ZCOR	89.25

**Presentation** : cas6685:/dat1a/94604J/WPX\_REPEAT.fvpdf [5"/100' Scale]

**Plot Interval** : 1280 - 1560 Feet

**Data File 1** : F1 : cas6685:/dat1a/94604J/n777q01\_REPEAT.xtf

**Created On** : Feb 8 13:19:49 2015

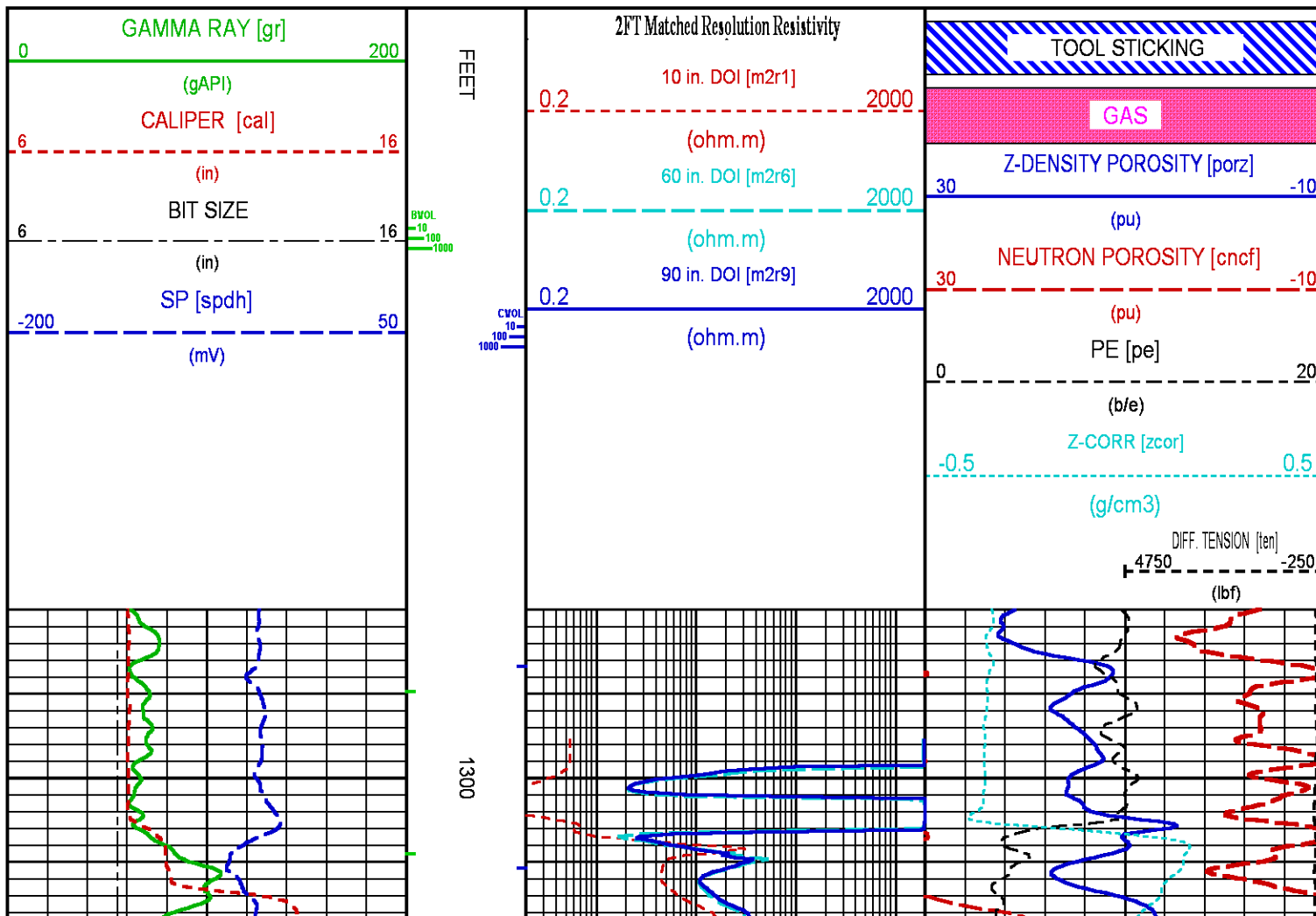
**Company** : WPX ENERGY INC

**Well** : YOUNBERG RU 443-7

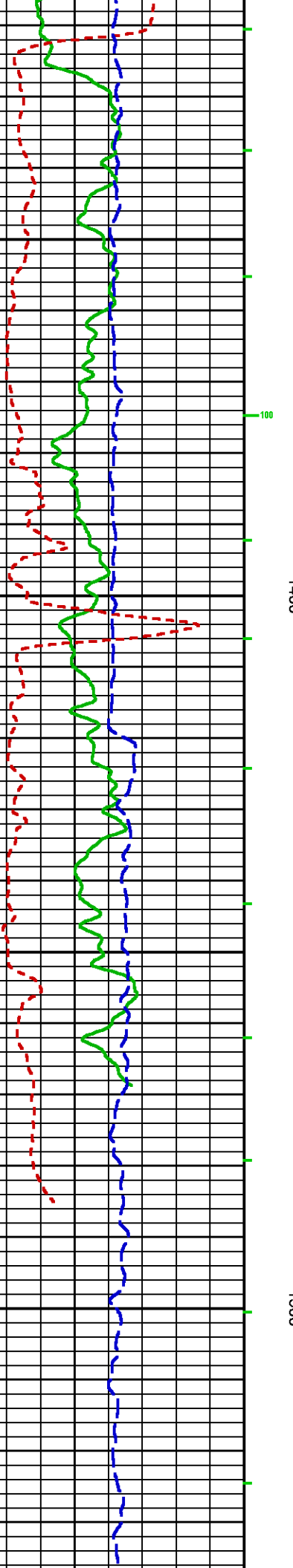
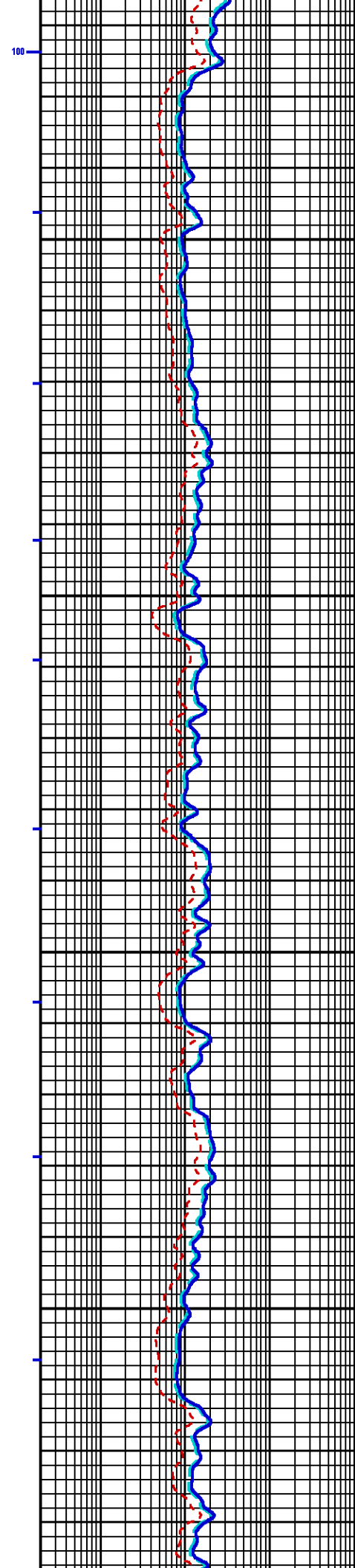
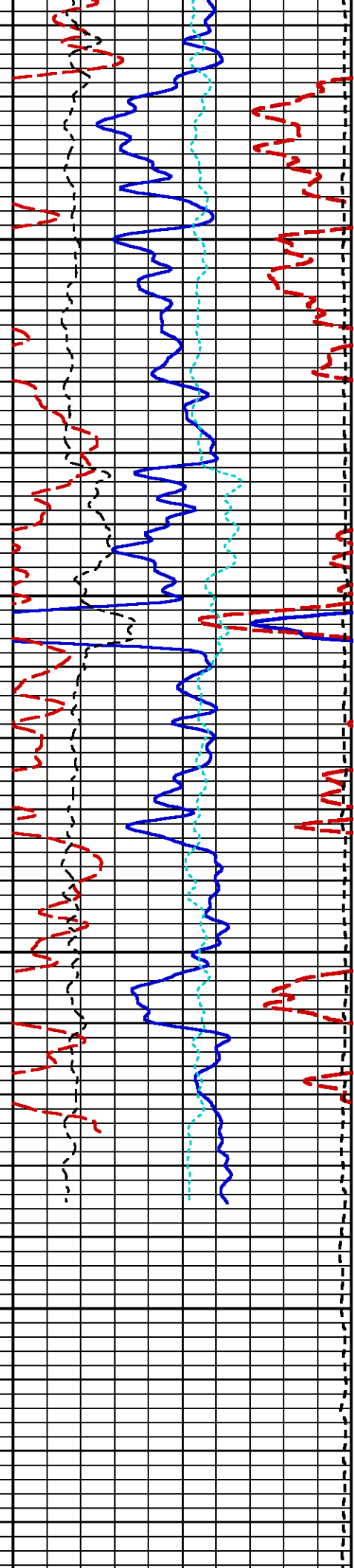
**Field** : RULISON

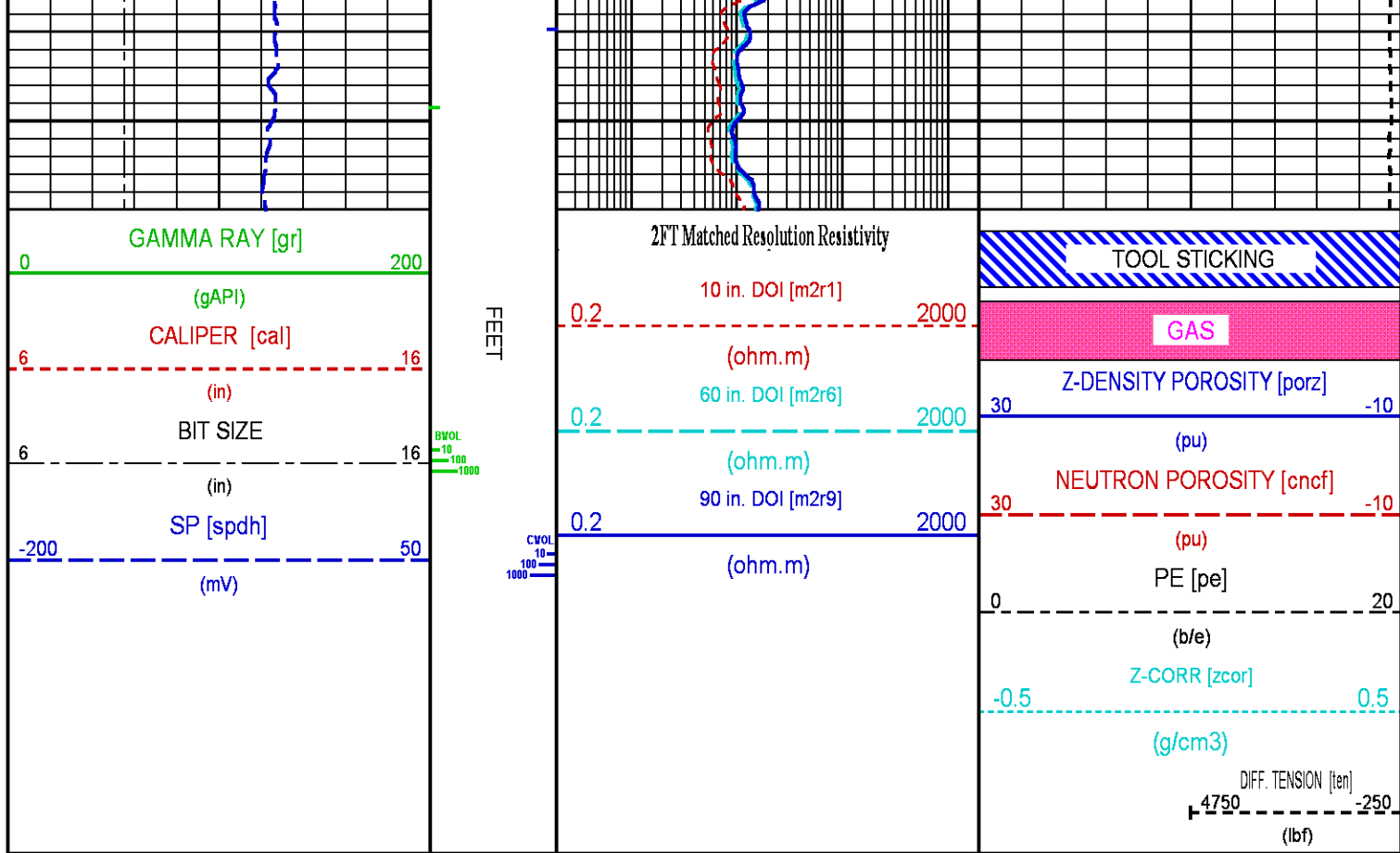
**File Interval** : 1113.75 - 10065.8 Feet

**OCT** : n777q









## CALIBRATION / VERIFICATION SUMMARY

Source File: /dat1a/94604J/n777q.tp1

### CHT PRIMARY CALIBRATION SUMMARY

TOOL #: 3981XA 10516527

DATE/TIME PERFORMED: Sun Feb 8 13:02:35 2015

UNIT #: 3885TC 6685

	Signal Low (raw)	Signal High (raw)	Scale Mult	Scale Add	Engr Low (lbf)	Engr High (lbf)
CHT	-151.45	501.03	3.98	403.51	-200.00	2400.00

### GR PRIMARY CALIBRATION SUMMARY

TOOL #: 1329XA 10196895

DATE/TIME PERFORMED: Thu Jan 22 12:13:32 2015

UNIT #: 3885TC 6685

CALB JIG #: 4702NK VBA-905

	BACKGROUND CALBRTR ON		CR DIFF	MULT	BACKGROUND CALBRTR ON		CALBRTR
	(cts/s)	(cts/s)	(cts/s)		(gAPI)	(gAPI)	(gAPI)
GR	359.51	1231.11	871.6	0.172	61.87	211.87	150
			830.0 960.0				

## GR PRIMARY VERIFICATION SUMMARY

TOOL #: 1329XA 10196895

DATE/TIME PERFORMED: Thu Jan 22 12:16:01 2015

UNIT #: 3885TC 6685

VERI JIG #: 4702NK VBA-905

	BACKGROUND CALBRTR ON		MULT	BACKGROUND CALBRTR ON		DIFF.
	(cts/s)	(cts/s)		(gAPI)	(gAPI)	(gAPI)
GR	353.31	1231.76	0.172	60.80	211.98	151.18
						140.00 160.00

## GR BEFORE LOG VERIFICATION SUMMARY

TOOL #: 1329XA 10196895

DATE/TIME PERFORMED: Sat Feb 7 11:14:06 2015

DAYS SINCE CAL: 15

UNIT #: 3885TC 6685

VERI JIG #: 4702NK VBA-905

	BACKGROUND CALBRTR ON		MULT	BACKGROUND CALBRTR ON		DIFF.
	(cts/s)	(cts/s)		(gAPI)	(gAPI)	(gAPI)
GR	342.42	1228.29	0.172	58.93	211.39	152.46
						141.18 161.18

## GR AFTER LOG VERIFICATION SUMMARY

TOOL #: 1329XA 10196895

DATE/TIME PERFORMED: Sun Feb 8 19:53:56 2015

DAYS SINCE CAL: 17

UNIT #: 3885TC 6685

VERI JIG #: 4702NK VBA-905

	BACKGROUND CALBRTR ON		MULT	BACKGROUND CALBRTR ON		DIFF.
	(cts/s)	(cts/s)		(gAPI)	(gAPI)	(gAPI)
GR	139.31	1035.73	0.172	23.98	178.25	154.27
						142.46 162.46

## CN PRIMARY CALIBRATION SUMMARY

TOOL #: 2446XA 10202048

DATE/TIME PERFORMED: Fri Nov 28 11:56:25 2014

UNIT #: 3885TC 6685

CALIBRATOR #: 2437XB 112674

SOURCE #: 4717XS N-1026

	MEASURED	DEADTM CORR	DTC	NOMINAL	CORRECTION	POROSITY
	CPS	CPS	SSN/LSN	SSN/LSN	FACTOR	(pu)
LSN	604.84	613.75				

SSN 1578.25 1629.69

RATIO 2.65530 2.75100 1.03604  
0.97000 1.07000

CN 21.358

## CN PRIMARY VERIFICATION SUMMARY

TOOL #: 2446XA 10202048 DATE/TIME PERFORMED: Fri Nov 28 12:04:12 2014

UNIT #: 3885TC 6685 ICE BLOCK #: 4717ND VD-147

	MEASURED CPS	DEADTM CORR CPS	DTC SSN/LSN	CORRECTION FACTOR	DTC CORR SSN/LSN	POROSITY (pu)
LSN	1521.10	1578.78				
SSN	3625.93	3909.53				
RATIO			2.47630	1.03604	2.56741	
CN						18.781

## CN BEFORE LOG VERIFICATION SUMMARY

TOOL #: 2446XA 10202048 DATE/TIME PERFORMED: Sat Feb 7 11:21:57 2015 DAYS SINCE CAL: 70

UNIT #: 3885TC 6685 ICE BLOCK #: 4717ND VD-147

	MEASURED CPS	DEADTM CORR CPS	DTC SSN/LSN	CORRECTION FACTOR	DTC CORR SSN/LSN	POROSITY (pu)
LSN	1510.14	1566.96				
SSN	3611.83	3893.12				
RATIO			2.48450	1.03604	2.57550	
CN						18.890 16.781 20.781

## CN AFTER LOG VERIFICATION SUMMARY

TOOL #: 2446XA 10202048 DATE/TIME PERFORMED: Sun Feb 8 19:45:40 2015 DAYS SINCE CAL: 72

UNIT #: 3885TC 6685 ICE BLOCK #: 4717ND VD-147

	MEASURED CPS	DEADTM CORR CPS	DTC SSN/LSN	CORRECTION FACTOR	DTC CORR SSN/LSN	POROSITY (pu)
LSN	1494.86	1550.52				
SSN	3588.50	3866.03				

SSN 3586.50 3666.03

RATIO

2.49337

1.03604

2.58499

CN

19.023

16.890

20.890

## CAL PRIMARY CALIBRATION SUMMARY

TOOL #: 2234XA 10211833

DATE/TIME PERFORMED: Fri Feb 6 14:12:06 2015

UNIT #: 3885TC 6685

	SMALL RING	LARGE RING	MULT	ADD	SMALL RING	LARGE RING
					(in)	(in)
CALIPER	1804.4	2312.0	0.00788	-7.21907	7.000	11.000

## CAL BEFORE LOG VERIFICATION SUMMARY

TOOL #: 2234XA 10211833

DATE/TIME PERFORMED: Sun Feb 8 13:32:21 2015

DAYS SINCE CAL: 1

UNIT #: 3885TC 6685

	I.D.	MULT	ADD	I.D.
				(in)
CALIPER	2140.0	0.00788	-7.86267	9.001

## CAL AFTER LOG VERIFICATION SUMMARY

TOOL #: 2234XA 10211833

DATE/TIME PERFORMED: Sun Feb 8 19:21:37 2015

DAYS SINCE CAL: 2

UNIT #: 3885TC 6685

	I.D.	MULT	ADD	I.D.
				(in)
CALIPER	2135.6	0.00788	-7.86267	8.966
				8.501 9.501

## ZDL PRIMARY CALIBRATION SUMMARY

TOOL: 2234XA 10211833

DATE/TIME PERFORMED: Fri Feb 6 14:36:13 2015

UNIT: 3885TC 6685

CALB BLKS: 2225XA 094292

CS SRC: 4703NT 34631B

SS CS PK

LS CS PK

SS\_BKGD

LS BKGD

(Channel)	(Channel)	(cps)	(cps)
224.6	224.8	1308.0	1602.4
220.0 230.0	220.0 230.0		

	SS (cps)	LS (cps)	SHR	DEN (g/cm3)	CORR (g/cm3)	PE (b/e)
MG (LO PE)	23287.0	12584.7	0.598 0.565 0.665	1.697	0.002	2.300
AL	13594.0	1261.5		2.717	-0.004	
AL + SHIM	18743.1	2216.9		2.629	0.157	
MG + SHIM (HI PE)	11188.5	5834.6	0.233 0.210 0.270			8.730
RATIO AL + SHIM/AL	1.38 1.32 1.42	1.76 1.64 1.84				
RATIO MG/AL	1.71 1.65 1.78	9.98 9.40 10.20				

## ZDL BEFORE LOG VERIFICATION SUMMARY

TOOL #: 2234XA 10211833      DATE/TIME PERFORMED: Sat Feb 7 11:10:38 2015      DAYS SINCE CAL: 0

UNIT #: 3885TC 6685

	TOTAL (cps)	CSPK (Channel)	HV (V)
LS	1597.7 1502.4 1702.4	224.0 220.0 230.0	1199.6 1100.0 1550.0
SS	1307.0 1208.0 1408.0	224.4 220.0 230.0	1282.9 1100.0 1550.0
	LV (V)	PAD CURRENT (mA)	
	5.0 4.8 5.2	69.6 50.0 120.0	

## ZDL AFTER LOG VERIFICATION SUMMARY

TOOL #: 2234XA 10211833      DATE/TIME PERFORMED: Sun Feb 8 19:48:32 2015      DAYS SINCE CAL: 2

UNIT #: 3885TC 6685

	TOTAL (cps)	CSPK (Channel)	HV (V)
LS	1582.1 1502.4 1702.4	224.9 220.0 230.0	1196.0 1100.0 1550.0
SS	1304.4 1208.0 1408.0	228.6 220.0 230.0	1282.0 1100.0 1550.0
	LV (V)	PAD CURRENT (mA)	
	5.0 4.8 5.2	66.8 50.0 120.0	

## XMACE\_OR PRIMARY CALIBRATION SUMMARY

TOOL #: 1678MC 10175410

DATE/TIME PERFORMED: Sat Feb 7 11:08:43 2015

UNIT #: 3885TC 6685

ORIENTATION #: 4401XB 10304309

	DEV (deg)	QA (mG)	MEAS RB (deg)	RB OFFSET (deg)	ROTATED RB (deg)
ORIT TBM CHECK	89.8	1000.2	0.4		
		990.0 1010.0	357.5 2.5		
XMAC-F1 ORIENT			339.2	339.2	0.0

## XMACE\_OR BEFORE LOG VERIFICATION SUMMARY

TOOL #: 1678MC 10175410

DATE/TIME PERFORMED: Sat Feb 7 11:11:08 2015

DAYS SINCE CAL: 0

UNIT #: 3885TC 6685

	DEV (deg)	QA (mG)	ROTATED RB (deg)
XMAC-F1 ORIENT	89.9	999.6	-0.0
		990.0 1010.0	-1.5 1.5

## HDIL PRIMARY CALIBRATION SUMMARY

TOOL #: 1515MA 10037719

DATE/TIME PERFORMED: Thu Nov 13 09:50:32 2014

UNIT #: 3885TC 6685

GRCOND ID & DATE: 86 082996

ZERO DATA(mv)    10 KHz    30 KHz    50 KHz    70 KHz    90 KHz    110 KHz    130 KHz    150 KHz

Coil 0 R	-0.014 -0.200 0.200	-0.007 -0.100 0.100	-0.004 -0.100 0.100	-0.005 -0.100 0.100	-0.007 -0.100 0.100	-0.004 -0.100 0.100	-0.005 -0.100 0.100	-0.007 -0.100 0.100
Coil 0 Q	0.007 -1.000 1.000	0.010 -0.200 0.200	0.003 -0.100 0.100	0.000 -0.100 0.100	0.003 -0.100 0.100	0.001 -0.100 0.100	-0.001 -0.100 0.100	0.001 -0.100 0.100
Coil 1 R	0.003 -0.200 0.200	0.001 -0.100 0.100	0.001 -0.100 0.100	0.005 -0.100 0.100	0.005 -0.100 0.100	0.000 -0.100 0.100	-0.001 -0.100 0.100	-0.003 -0.100 0.100
Coil 1 Q	-0.005 -1.000 1.000	-0.005 -0.200 0.200	-0.004 -0.100 0.100	0.000 -0.100 0.100	0.002 -0.100 0.100	0.003 -0.100 0.100	0.003 -0.100 0.100	0.001 -0.100 0.100
Coil 2 R	-0.003 -0.200 0.200	0.004 -0.100 0.100	0.004 -0.100 0.100	0.001 -0.100 0.100	-0.001 -0.100 0.100	0.001 -0.100 0.100	0.005 -0.100 0.100	0.008 -0.100 0.100
Coil 2 Q	0.000 -1.000 1.000	0.003 -0.200 0.200	0.002 -0.100 0.100	-0.001 -0.100 0.100	-0.003 -0.100 0.100	-0.005 -0.100 0.100	-0.008 -0.100 0.100	-0.007 -0.100 0.100
Coil 3 R	0.008 -0.100 0.100	0.003 -0.100 0.100	0.001 -0.100 0.100	0.000 -0.100 0.100	0.002 -0.100 0.100	-0.003 -0.100 0.100	-0.001 -0.100 0.100	0.003 -0.100 0.100
Coil 3 Q	-0.008 -0.100 0.100	-0.010 -0.100 0.100	-0.001 -0.100 0.100	0.001 -0.100 0.100	-0.001 -0.100 0.100	-0.002 -0.100 0.100	0.001 -0.100 0.100	-0.002 -0.100 0.100

Coil 4 R	-0.500	0.500	-0.200	0.200	-0.100	0.100	-0.100	0.100	-0.100	0.100	-0.100	0.100
	-0.018		-0.002		-0.003		0.002		0.000		0.003	
Coil 4 Q	-0.200	0.200	-0.200	0.200	-0.200	0.200	-0.200	0.200	-0.200	0.200	-0.200	0.200
	-0.005		0.000		-0.001		-0.002		-0.002		-0.005	
Coil 5 R	-1.000	1.000	-0.400	0.400	-0.200	0.200	-0.200	0.200	-0.200	0.200	-0.200	0.200
	0.006		0.006		0.010		0.004		0.007		0.003	
Coil 5 Q	-0.400	0.400	-0.400	0.400	-0.400	0.400	-0.400	0.400	-0.400	0.400	-0.400	0.400
	0.002		0.008		0.005		0.006		0.003		0.007	
Coil 6 R	-2.000	2.000	-0.800	0.800	-0.400	0.400	-0.400	0.400	-0.400	0.400	-0.400	0.400
	-0.009		0.025		-0.004		-0.010		-0.010		0.007	
Coil 6 Q	-1.000	1.000	-1.000	1.000	-1.000	1.000	-1.000	1.000	-1.000	1.000	-1.000	1.000
	-0.007		-0.009		-0.005		-0.003		-0.009		-0.016	
	-5.000	5.000	-2.000	2.000	-1.000	1.000	-1.000	1.000	-1.000	1.000	-1.000	1.000

ELEC. GAINS	10 KHz	30 KHz	50 KHz	70 KHz	90 KHz	110 KHz	130 KHz	150 KHz
Coil 0 M	126.10	124.58	121.66	117.42	111.99	105.53	98.07	89.86
	100.00	150.00	98.00	150.00	96.00	140.00	92.00	140.00
Coil 0 P	7.576	23.866	39.857	55.806	71.652	87.561	103.363	119.210
	6.000	9.000	19.000	28.000	32.000	47.000	44.000	66.000
Coil 1 M	218.74	216.13	211.04	203.71	194.40	183.22	170.23	155.86
	180.00	270.00	180.00	270.00	170.00	250.00	160.00	230.00
Coil 1 P	7.672	24.163	40.380	56.559	72.622	88.727	104.795	120.846
	6.000	9.000	19.000	28.000	32.000	48.000	45.000	67.000
Coil 2 M	439.55	434.39	424.49	410.17	391.82	369.24	343.63	314.98
	360.00	540.00	360.00	540.00	350.00	530.00	340.00	510.00
Coil 2 P	7.854	24.676	41.254	57.796	74.247	90.778	107.177	123.719
	6.000	9.000	19.000	29.000	32.000	48.000	45.000	67.000
Coil 3 M	710.73	701.78	684.38	659.19	627.14	589.70	546.74	500.83
	590.00	880.00	580.00	870.00	570.00	850.00	550.00	830.00
Coil 3 P	7.709	24.300	40.580	56.766	72.756	88.773	104.523	120.284
	6.000	10.000	20.000	29.000	33.000	49.000	46.000	69.000
Coil 4 M	1137.4	1120.8	1088.4	1043.0	986.8	922.5	852.2	778.2
	900.0	1400.0	900.0	1300.0	850.0	1300.0	800.0	1200.0
Coil 4 P	7.954	25.036	41.688	58.181	74.361	90.417	106.102	121.746
	6.000	10.000	20.000	30.000	33.000	50.000	46.000	70.000
Coil 5 M	2337.5	2315.9	2272.5	2207.0	2118.8	2007.2	1872.5	1719.7
	1900.0	2800.0	1800.0	2700.0	1800.0	2600.0	1700.0	2500.0
Coil 5 P	8.016	25.325	42.420	59.616	76.841	94.241	111.617	129.106
	6.000	10.000	20.000	31.000	34.000	51.000	48.000	72.000
Coil 6 M	6073.4	5992.9	5836.8	5615.4	5335.5	5003.9	4628.6	4222.2
	4700.0	7100.0	4700.0	7000.0	4600.0	6900.0	4400.0	6600.0
Coil 6 P	8.222	26.238	43.841	61.368	78.701	96.015	113.161	130.345
	7.000	10.000	22.000	32.000	36.000	54.000	51.000	76.000

AM Factor	10 KHz	30 KHz	50 KHz	70 KHz	90 KHz	110 KHz	130 KHz	150 KHz
Coil 0 R	479	-87	-145	-157	-158	-157	-155	-153
	-200	800	-500	200	-600	100	-800	50
Coil 0 Q	2068	739	408	251	154	87	34	-10
	-3000	6000	-1000	2000	-1000	1200	-500	900
Coil 1 R	566	85	22	0	-10	-17	-20	-22
	450	650	20	130	-30	60	-50	40
Coil 1 Q	1229	492	308	222	170	137	112	94
	0	2500	0	900	0	600	0	450
Coil 2 R	186.8	27.0	6.6	-0.1	-3.5	-5.8	-6.1	-6.8
	0	2500	0	900	0	350	0	300



	140.0	230.0	0.0	51.0	-10.0	25.0	-15.0	15.0	-16.0	10.0	-16.0	7.0	-16.0	5.0	-16.0	3.0
Coil 2 Q	417.2	167.9	108.0	81.1	66.3	57.4	51.3	47.7								
	-200.0	1000.0	0.0	350.0	0.0	220.0	0.0	160.0	0.0	130.0	0.0	110.0	0.0	100.0	0.0	90.0
Coil 3 R	48.6	6.6	1.7	0.0	-0.6	-1.3	-1.7	-2.3								
	37.0	62.0	0.0	12.0	-3.0	6.0	-4.0	4.0	-5.0	2.0	-5.0	1.0	-6.0	1.0	-6.0	1.0
Coil 3 Q	72.4	33.3	24.4	21.4	20.5	20.6	21.5	22.0								
	-140.0	280.0	-40.0	100.0	-20.0	70.0	-10.0	60.0	-10.0	50.0	-10.0	50.0	-10.0	50.0	-10.0	50.0
Coil 4 R	11.46	0.58	-0.61	-1.21	-1.41	-1.53	-1.52	-1.62								
	2.00	18.00	-3.00	6.00	-3.50	3.00	-3.90	2.00	-4.20	2.00	-4.50	2.00	-4.70	2.00	-5.00	2.00
Coil 4 Q	19.94	11.58	11.05	12.40	13.96	15.97	17.82	20.00								
	-100.00	100.00	-30.00	50.00	-20.00	40.00	-10.00	40.00	-10.00	40.00	-10.00	45.00	-10.00	50.00	-10.00	60.00
Coil 5 R	2.25	-0.29	-0.58	-0.65	-0.70	-0.79	-0.81	-0.82								
	-2.00	5.80	-3.20	2.40	-4.50	3.10	-4.70	3.20	-4.80	3.20	-5.00	3.30	-5.20	3.40	-5.40	3.50
Coil 5 Q	15.39	8.27	8.73	10.20	12.04	13.94	16.04	18.20								
	-60.00	70.00	-20.00	30.00	-20.00	30.00	-20.00	35.00	-20.00	45.00	-20.00	50.00	-20.00	60.00	-30.00	70.00
Coil 6 R	-2.45	-1.06	-0.64	-0.51	-0.45	-0.41	-0.48	-0.50								
	-4.80	1.00	-5.70	3.80	-6.50	4.90	-6.90	5.40	-7.30	5.80	-7.50	6.00	-7.70	6.10	-7.90	6.30
Coil 6 Q	2.63	3.11	5.13	7.39	9.61	11.87	14.01	16.32								
	-30.00	30.00	-20.00	25.00	-20.00	35.00	-30.00	50.00	-35.00	60.00	-40.00	70.00	-50.00	80.00	-60.00	100.00

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

Coil 0 M	0.999	0.996	0.992	0.991	0.990	0.989	0.989	0.990
	0.900	1.100	0.900	1.100	0.900	1.100	0.900	1.100
Coil 0 P	0.132	0.245	0.318	0.274	0.226	0.171	0.131	0.084
	-2.000	2.000	-2.000	2.000	-2.000	2.000	-2.000	2.000
Coil 1 M	0.982	0.980	0.976	0.975	0.973	0.972	0.971	0.970
	0.900	1.100	0.900	1.100	0.900	1.100	0.900	1.100
Coil 1 P	0.133	0.273	0.361	0.365	0.362	0.306	0.306	0.245
	-2.000	2.000	-2.000	2.000	-2.000	2.000	-2.000	2.000
Coil 2 M	1.009	1.006	1.005	1.004	1.003	1.002	1.003	1.001
	0.900	1.100	0.900	1.100	0.900	1.100	0.900	1.100
Coil 2 P	0.111	0.082	0.123	0.150	0.179	0.157	0.142	0.198
	-2.000	2.000	-2.000	2.000	-2.000	2.000	-2.000	2.000
Coil 3 M	1.013	1.012	1.011	1.009	1.008	1.007	1.008	1.009
	0.900	1.100	0.900	1.100	0.900	1.100	0.900	1.100
Coil 3 P	0.048	0.110	0.182	0.212	0.185	0.162	0.101	0.150
	-2.000	2.000	-2.000	2.000	-2.000	2.000	-2.000	2.000
Coil 4 M	1.024	1.023	1.023	1.022	1.021	1.020	1.020	1.019
	0.900	1.100	0.900	1.100	0.900	1.100	0.900	1.100
Coil 4 P	0.096	0.143	0.156	0.206	0.233	0.259	0.209	0.224
	-2.000	2.000	-2.000	2.000	-2.000	2.000	-2.000	2.000
Coil 5 M	1.029	1.028	1.028	1.026	1.024	1.024	1.022	1.021
	0.900	1.100	0.900	1.100	0.900	1.100	0.900	1.100
Coil 5 P	0.057	0.041	0.110	0.135	0.114	0.048	0.061	0.025
	-2.000	2.000	-2.000	2.000	-2.000	2.000	-2.000	2.000
Coil 6 M	1.029	1.030	1.029	1.026	1.025	1.030	1.030	1.027
	0.900	1.100	0.900	1.100	0.900	1.100	0.900	1.100
Coil 6 P	0.051	0.196	0.173	0.301	0.215	0.140	0.156	0.059
	-2.000	2.000	-2.000	2.000	-2.000	2.000	-2.000	2.000

PARMS

TCID 0

TCID 1

Cal Temp  
(degF)

T Factor

IDs

1.617

0.832

48.8

1.04

# HDIL BEFORE LOG VERIFICATION SUMMARY

TOOL #: 1515MA 10037719

DATE/TIME PERFORMED: Sat Feb 7 11:10:41 2015

DAYS SINCE CAL: 86

UNIT #: 3885TC 6685

ZERO DATA(mv) 10 KHz 30 KHz 50 KHz 70 KHz 90 KHz 110 KHz 130 KHz 150 KHz

Coil 0 R	<div>-0.011</div> <div>-0.200 0.200</div>	<div>-0.004</div> <div>-0.100 0.100</div>	<div>-0.002</div> <div>-0.100 0.100</div>	<div>-0.004</div> <div>-0.100 0.100</div>	<div>-0.005</div> <div>-0.100 0.100</div>	<div>-0.003</div> <div>-0.100 0.100</div>	<div>-0.004</div> <div>-0.100 0.100</div>	<div>-0.008</div> <div>-0.100 0.100</div>
Coil 0 Q	<div>0.008</div> <div>-1.000 1.000</div>	<div>0.011</div> <div>-0.200 0.200</div>	<div>0.002</div> <div>-0.100 0.100</div>	<div>0.001</div> <div>-0.100 0.100</div>	<div>0.004</div> <div>-0.100 0.100</div>	<div>0.002</div> <div>-0.100 0.100</div>	<div>0.001</div> <div>-0.100 0.100</div>	<div>0.002</div> <div>-0.100 0.100</div>
Coil 1 R	<div>0.004</div> <div>-0.200 0.200</div>	<div>0.003</div> <div>-0.100 0.100</div>	<div>0.003</div> <div>-0.100 0.100</div>	<div>0.007</div> <div>-0.100 0.100</div>	<div>0.006</div> <div>-0.100 0.100</div>	<div>0.002</div> <div>-0.100 0.100</div>	<div>-0.001</div> <div>-0.100 0.100</div>	<div>-0.004</div> <div>-0.100 0.100</div>
Coil 1 Q	<div>-0.006</div> <div>-1.000 1.000</div>	<div>-0.005</div> <div>-0.200 0.200</div>	<div>-0.004</div> <div>-0.100 0.100</div>	<div>-0.000</div> <div>-0.100 0.100</div>	<div>0.003</div> <div>-0.100 0.100</div>	<div>0.005</div> <div>-0.100 0.100</div>	<div>0.004</div> <div>-0.100 0.100</div>	<div>0.001</div> <div>-0.100 0.100</div>
Coil 2 R	<div>-0.006</div> <div>-0.200 0.200</div>	<div>0.003</div> <div>-0.100 0.100</div>	<div>0.002</div> <div>-0.100 0.100</div>	<div>0.001</div> <div>-0.100 0.100</div>	<div>0.003</div> <div>-0.100 0.100</div>	<div>0.003</div> <div>-0.100 0.100</div>	<div>0.007</div> <div>-0.100 0.100</div>	<div>0.011</div> <div>-0.100 0.100</div>
Coil 2 Q	<div>-0.001</div> <div>-1.000 1.000</div>	<div>0.003</div> <div>-0.200 0.200</div>	<div>0.005</div> <div>-0.100 0.100</div>	<div>-0.001</div> <div>-0.100 0.100</div>	<div>-0.003</div> <div>-0.100 0.100</div>	<div>-0.006</div> <div>-0.100 0.100</div>	<div>-0.007</div> <div>-0.100 0.100</div>	<div>-0.007</div> <div>-0.100 0.100</div>
Coil 3 R	<div>0.007</div> <div>-0.100 0.100</div>	<div>0.004</div> <div>-0.100 0.100</div>	<div>0.003</div> <div>-0.100 0.100</div>	<div>0.005</div> <div>-0.100 0.100</div>	<div>0.006</div> <div>-0.100 0.100</div>	<div>0.002</div> <div>-0.100 0.100</div>	<div>0.001</div> <div>-0.100 0.100</div>	<div>0.003</div> <div>-0.100 0.100</div>
Coil 3 Q	<div>-0.007</div> <div>-0.500 0.500</div>	<div>-0.011</div> <div>-0.200 0.200</div>	<div>-0.002</div> <div>-0.100 0.100</div>	<div>0.001</div> <div>-0.100 0.100</div>	<div>0.001</div> <div>-0.100 0.100</div>	<div>0.001</div> <div>-0.100 0.100</div>	<div>0.001</div> <div>-0.100 0.100</div>	<div>-0.001</div> <div>-0.100 0.100</div>
Coil 4 R	<div>-0.016</div> <div>-0.200 0.200</div>	<div>0.000</div> <div>-0.200 0.200</div>	<div>-0.000</div> <div>-0.200 0.200</div>	<div>-0.002</div> <div>-0.200 0.200</div>	<div>0.001</div> <div>-0.200 0.200</div>	<div>0.005</div> <div>-0.200 0.200</div>	<div>-0.001</div> <div>-0.200 0.200</div>	<div>0.007</div> <div>-0.200 0.200</div>
Coil 4 Q	<div>-0.010</div> <div>-1.000 1.000</div>	<div>0.004</div> <div>-0.400 0.400</div>	<div>-0.003</div> <div>-0.200 0.200</div>	<div>-0.007</div> <div>-0.200 0.200</div>	<div>-0.005</div> <div>-0.200 0.200</div>	<div>-0.008</div> <div>-0.200 0.200</div>	<div>-0.001</div> <div>-0.200 0.200</div>	<div>0.000</div> <div>-0.200 0.200</div>
Coil 5 R	<div>-0.001</div> <div>-0.400 0.400</div>	<div>0.003</div> <div>-0.400 0.400</div>	<div>0.004</div> <div>-0.400 0.400</div>	<div>0.003</div> <div>-0.400 0.400</div>	<div>0.011</div> <div>-0.400 0.400</div>	<div>0.004</div> <div>-0.400 0.400</div>	<div>0.001</div> <div>-0.400 0.400</div>	<div>-0.003</div> <div>-0.400 0.400</div>
Coil 5 Q	<div>0.001</div> <div>-2.000 2.000</div>	<div>0.009</div> <div>-0.800 0.800</div>	<div>-0.000</div> <div>-0.400 0.400</div>	<div>0.000</div> <div>-0.400 0.400</div>	<div>0.014</div> <div>-0.400 0.400</div>	<div>0.006</div> <div>-0.400 0.400</div>	<div>0.001</div> <div>-0.400 0.400</div>	<div>-0.003</div> <div>-0.400 0.400</div>
Coil 6 R	<div>-0.008</div> <div>-1.000 1.000</div>	<div>-0.008</div> <div>-1.000 1.000</div>	<div>-0.005</div> <div>-1.000 1.000</div>	<div>0.003</div> <div>-1.000 1.000</div>	<div>-0.017</div> <div>-1.000 1.000</div>	<div>-0.007</div> <div>-1.000 1.000</div>	<div>0.000</div> <div>-1.000 1.000</div>	<div>0.011</div> <div>-1.000 1.000</div>
Coil 6 Q	<div>-0.040</div> <div>-5.000 5.000</div>	<div>-0.004</div> <div>-2.000 2.000</div>	<div>0.004</div> <div>-1.000 1.000</div>	<div>0.013</div> <div>-1.000 1.000</div>	<div>0.004</div> <div>-1.000 1.000</div>	<div>-0.025</div> <div>-1.000 1.000</div>	<div>0.002</div> <div>-1.000 1.000</div>	<div>-0.008</div> <div>-1.000 1.000</div>

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

Coil 0 M	<div>126.06</div> <div>100.00 150.00</div>	<div>124.56</div> <div>100.00 150.00</div>	<div>121.70</div> <div>98.00 150.00</div>	<div>117.32</div> <div>96.00 140.00</div>	<div>111.95</div> <div>92.00 140.00</div>	<div>105.33</div> <div>87.00 130.00</div>	<div>97.93</div> <div>82.00 120.00</div>	<div>89.41</div> <div>76.00 110.00</div>
Coil 0 P	<div>7.566</div> <div>6.000 9.000</div>	<div>23.868</div> <div>19.000 28.000</div>	<div>39.886</div> <div>32.000 47.000</div>	<div>55.896</div> <div>44.000 66.000</div>	<div>71.717</div> <div>57.000 85.000</div>	<div>87.691</div> <div>70.000 100.000</div>	<div>103.424</div> <div>82.000 120.000</div>	<div>119.357</div> <div>95.000 140.000</div>
Coil 1 M	<div>218.44</div> <div>180.00 270.00</div>	<div>215.82</div> <div>180.00 270.00</div>	<div>210.83</div> <div>170.00 260.00</div>	<div>203.29</div> <div>170.00 250.00</div>	<div>194.04</div> <div>160.00 250.00</div>	<div>182.54</div> <div>160.00 230.00</div>	<div>169.70</div> <div>150.00 220.00</div>	<div>155.07</div> <div>140.00 200.00</div>
Coil 1 P	<div>7.669</div> <div>6.000 9.000</div>	<div>24.184</div> <div>19.000 28.000</div>	<div>40.433</div> <div>32.000 48.000</div>	<div>56.669</div> <div>45.000 67.000</div>	<div>72.721</div> <div>57.000 86.000</div>	<div>88.895</div> <div>70.000 110.000</div>	<div>104.841</div> <div>83.000 120.000</div>	<div>121.088</div> <div>96.000 140.000</div>
Coil 2 M	<div>439.60</div> <div>360.00 540.00</div>	<div>434.48</div> <div>360.00 540.00</div>	<div>424.81</div> <div>350.00 530.00</div>	<div>410.02</div> <div>340.00 510.00</div>	<div>391.81</div> <div>330.00 500.00</div>	<div>368.76</div> <div>310.00 470.00</div>	<div>343.13</div> <div>300.00 440.00</div>	<div>313.81</div> <div>270.00 410.00</div>
Coil 2 P	<div>7.845</div> <div>6.000 9.000</div>	<div>24.683</div> <div>19.000 29.000</div>	<div>41.288</div> <div>32.000 48.000</div>	<div>57.885</div> <div>45.000 67.000</div>	<div>74.309</div> <div>58.000 87.000</div>	<div>90.927</div> <div>71.000 110.000</div>	<div>107.257</div> <div>84.000 130.000</div>	<div>123.897</div> <div>96.000 140.000</div>
Coil 3 M	<div>711.10</div> <div>590.00 880.00</div>	<div>702.18</div> <div>580.00 870.00</div>	<div>685.21</div> <div>570.00 850.00</div>	<div>659.10</div> <div>550.00 830.00</div>	<div>627.19</div> <div>530.00 800.00</div>	<div>588.90</div> <div>500.00 760.00</div>	<div>546.19</div> <div>470.00 710.00</div>	<div>499.40</div> <div>440.00 650.00</div>
Coil 3 P	<div>7.703</div> <div>6.000 10.000</div>	<div>24.311</div> <div>20.000 29.000</div>	<div>40.616</div> <div>33.000 49.000</div>	<div>56.870</div> <div>46.000 69.000</div>	<div>72.840</div> <div>59.000 89.000</div>	<div>88.938</div> <div>72.000 110.000</div>	<div>104.609</div> <div>85.000 130.000</div>	<div>120.468</div> <div>98.000 150.000</div>

Coil 4 M	1138.6	1122.0	1090.2	1043.5	987.8	921.7	851.8	776.1
	900.0 1400.0	900.0 1300.0	900.0 1300.0	850.0 1300.0	800.0 1200.0	800.0 1200.0	750.0 1100.0	700.0 1000.0
Coil 4 P	7.951	25.050	41.731	58.289	74.446	90.580	106.205	121.937
	6.000 10.000	20.000 30.000	33.000 50.000	46.000 70.000	60.000 90.000	73.000 110.000	86.000 130.000	99.000 150.000
Coil 5 M	2338.3	2316.7	2274.4	2206.0	2119.0	2003.9	1869.8	1712.7
	1900.0 2800.0	1800.0 2800.0	1800.0 2700.0	1800.0 2600.0	1700.0 2500.0	1600.0 2400.0	1500.0 2200.0	1400.0 2100.0
Coil 5 P	8.016	25.346	42.475	59.737	76.943	94.423	111.711	129.321
	6.000 10.000	20.000 31.000	34.000 51.000	48.000 72.000	62.000 93.000	76.000 110.000	89.000 130.000	100.000 150.000
Coil 6 M	6065.1	5985.1	5833.3	5605.6	5328.5	4988.1	4619.4	4203.0
	4700.0 7100.0	4700.0 7000.0	4600.0 6900.0	4400.0 6600.0	4200.0 6400.0	4000.0 6000.0	3700.0 5600.0	3400.0 5100.0
Coil 6 P	8.218	26.244	43.876	61.463	78.766	96.181	113.235	130.517
	7.000 10.000	22.000 32.000	36.000 54.000	51.000 76.000	65.000 98.000	80.000 120.000	94.000 140.000	110.000 160.000

## HDIL AFTER LOG VERIFICATION SUMMARY

TOOL #:	1515MA 10037719	DATE/TIME PERFORMED:	Sun Feb 8 19:23:20 2015	DAYS SINCE CAL:	87
UNIT #:		3885TC 6685			

ZERO DATA(mv)	10 KHz	30 KHz	50 KHz	70 KHz	90 KHz	110 KHz	130 KHz	150 KHz
Coil 0 R	-0.010	-0.005	-0.004	-0.007	-0.010	-0.006	-0.007	-0.009
	-0.091 0.069	-0.064 0.056	-0.032 0.028	-0.034 0.026	-0.035 0.025	-0.033 0.027	-0.034 0.026	-0.038 0.022
Coil 0 Q	0.007	0.011	0.004	0.002	0.003	0.001	-0.001	-0.001
	-0.032 0.048	-0.109 0.131	-0.028 0.032	-0.029 0.031	-0.026 0.034	-0.028 0.032	-0.029 0.031	-0.028 0.032
Coil 1 R	0.005	0.002	0.002	0.001	-0.003	-0.005	-0.007	-0.007
	-0.076 0.084	-0.047 0.053	-0.027 0.033	-0.023 0.037	-0.024 0.036	-0.028 0.032	-0.031 0.029	-0.034 0.026
Coil 1 Q	-0.004	-0.002	-0.001	0.003	0.004	0.003	0.002	-0.001
	-0.406 0.394	-0.105 0.095	-0.034 0.026	-0.030 0.030	-0.027 0.033	-0.025 0.035	-0.026 0.034	-0.029 0.031
Coil 2 R	0.002	0.007	0.006	0.001	0.002	0.006	0.006	0.011
	-0.076 0.064	-0.027 0.033	-0.028 0.032	-0.029 0.031	-0.027 0.033	-0.027 0.033	-0.023 0.037	-0.019 0.041
Coil 2 Q	0.004	0.003	0.006	0.001	-0.004	-0.004	-0.009	-0.007
	-0.351 0.349	-0.097 0.103	-0.025 0.035	-0.031 0.029	-0.033 0.027	-0.036 0.024	-0.037 0.023	-0.037 0.023
Coil 3 R	0.010	0.007	0.003	0.007	0.005	-0.001	0.002	0.004
	-0.033 0.047	-0.036 0.044	-0.037 0.043	-0.035 0.045	-0.034 0.046	-0.038 0.042	-0.039 0.041	-0.037 0.043
Coil 3 Q	-0.011	-0.008	-0.005	0.002	0.001	0.004	0.002	-0.001
	-0.207 0.193	-0.091 0.069	-0.042 0.038	-0.039 0.041	-0.039 0.041	-0.039 0.041	-0.039 0.041	-0.041 0.039
Coil 4 R	-0.021	-0.007	-0.003	-0.005	-0.007	0.001	0.000	0.001
	-0.076 0.044	-0.060 0.060	-0.060 0.060	-0.062 0.058	-0.059 0.061	-0.055 0.065	-0.061 0.059	-0.053 0.067
Coil 4 Q	-0.001	-0.001	0.002	-0.004	-0.002	-0.004	-0.004	-0.003
	-0.310 0.290	-0.096 0.104	-0.063 0.057	-0.067 0.053	-0.065 0.055	-0.068 0.052	-0.061 0.059	-0.060 0.060
Coil 5 R	0.004	0.002	0.013	0.009	0.006	-0.008	0.005	-0.003
	-0.121 0.119	-0.117 0.123	-0.116 0.124	-0.117 0.123	-0.109 0.131	-0.116 0.124	-0.119 0.121	-0.123 0.117
Coil 5 Q	-0.001	0.005	0.006	0.001	0.005	0.009	-0.002	0.000
	-0.599 0.601	-0.241 0.259	-0.120 0.120	-0.120 0.120	-0.106 0.134	-0.114 0.126	-0.119 0.121	-0.123 0.117
Coil 6 R	0.032	0.023	-0.009	-0.020	-0.007	0.010	0.006	0.009
	-0.308 0.292	-0.308 0.292	-0.305 0.295	-0.297 0.303	-0.317 0.283	-0.307 0.293	-0.300 0.300	-0.289 0.311
Coil 6 Q	0.003	-0.015	0.018	-0.004	0.004	0.007	-0.008	-0.003
	-1.540 1.460	-0.604 0.596	-0.296 0.304	-0.287 0.313	-0.296 0.304	-0.325 0.275	-0.298 0.302	-0.308 0.292

ELEC. GAINS	10 KHz	30 KHz	50 KHz	70 KHz	90 KHz	110 KHz	130 KHz	150 KHz
Coil 0 M	126.10	124.57	121.67	117.23	111.83	105.11	97.58	89.10
	123.53 128.58	122.07 127.05	119.26 124.13	114.98 119.67	109.71 114.19	103.22 107.44	95.97 99.89	87.63 91.20
Coil 0 P	7.604	23.966	40.056	56.127	72.011	88.052	103.789	119.809

Coil 1 M

4.566	10.566	20.868	26.868	36.886	42.886	52.896	58.896	68.717	74.717	84.691	90.691	100.424	106.424	116.357	122.357
218.18	215.54	210.51	202.88	193.54	181.89	169.03	154.24								
214.07	222.81	211.51	220.14	206.61	215.04	199.22	207.35	190.16	197.92	178.89	186.19	166.30	173.09	151.97	158.17

Coil 1 P

7.703	24.277	40.600	56.898	73.000	89.233	105.267	121.501								
4.669	10.669	21.184	27.184	37.433	43.433	53.669	59.669	69.721	75.721	85.895	91.895	101.841	107.841	118.088	124.088

Coil 2 M

440.08	434.88	425.12	410.06	391.59	368.20	342.41	312.58								
430.81	448.40	425.79	443.17	416.31	433.30	401.82	418.22	383.97	399.64	361.38	376.13	336.27	350.00	307.54	320.09

Coil 2 P

7.878	24.773	41.452	58.094	74.582	91.240	107.623	124.298								
4.845	10.845	21.683	27.683	38.288	44.288	54.885	60.885	71.309	77.309	87.927	93.927	104.257	110.257	120.897	126.897

Coil 3 M

712.17	703.13	685.83	659.47	627.21	588.39	545.15	497.66								
696.88	725.32	688.14	716.23	671.51	698.91	645.92	672.28	614.65	639.74	577.12	600.68	535.27	557.11	489.41	509.39

Coil 3 P

7.747	24.415	40.796	57.103	73.149	89.293	105.034	120.928								
4.703	10.703	21.311	27.311	37.616	43.616	53.870	59.870	69.840	75.840	85.938	91.938	101.809	107.809	117.468	123.468

Coil 4 M

1140.9	1124.1	1091.9	1044.7	988.1	921.4	850.8	774.2								
1115.8	1161.4	1099.5	1144.4	1068.4	1112.0	1022.6	1064.4	968.0	1007.5	903.2	940.1	834.8	868.8	760.6	791.6

Coil 4 P

7.989	25.147	41.903	58.517	74.745	90.927	106.608	122.396								
4.951	10.951	22.050	28.050	38.731	44.731	55.289	61.289	71.446	77.446	87.580	93.580	103.205	109.205	118.937	124.937

Coil 5 M

2340.7	2318.6	2275.4	2205.9	2116.7	2000.0	1864.1	1706.1								
2291.5	2385.1	2270.4	2363.1	2228.9	2319.9	2161.9	2250.2	2076.6	2161.4	1963.8	2043.9	1832.4	1907.2	1678.4	1746.9

Coil 5 P

8.054	25.441	42.643	59.951	77.222	94.749	112.080	129.717								
5.016	11.016	22.346	28.346	39.475	45.475	56.737	62.737	73.943	79.943	91.423	97.423	108.711	114.711	126.321	132.321

Coil 6 M

6062.1	5981.4	5827.4	5597.4	5318.2	4976.3	4599.7	4183.9								
5943.8	6186.4	5885.4	6104.8	5716.7	5950.0	5493.4	5717.7	5222.0	5435.1	4888.3	5087.9	4527.0	4711.8	4118.9	4287.1

Coil 6 P

8.258	26.330	44.025	61.648	79.004	96.443	113.565	130.880								
5.218	11.218	23.244	29.244	40.876	46.876	58.463	64.463	75.766	81.766	93.181	99.181	110.235	116.235	127.517	133.517

## INSTRUMENT CONFIGURATION

Source File: /dat1a/94604.J/n777q~GSLAM-tdg

### CABLEHEAD

Diameter : 3.38"  
Length : 5.50'  
Weight : 24 lbs  
Series : CABL338  
Mnemonic : CBLH  
Measure Point: 2.75': CABLEHEAD TOP

### DOWNHOLE POWER ADAPTER

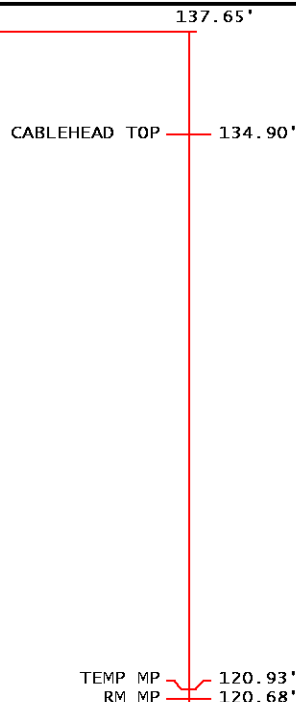
Diameter : 3.62"  
Length : 5.27'  
Weight : 86 lbs  
Series : 4430XB  
Mnemonic : DHPA

### SWIVEL

Diameter : 3.38"  
Length : 3.50'  
Weight : 68 lbs  
Series : 3944XD  
Mnemonic : SWVL

### TTRM SUB

Diameter : 3.63"  
Length : 3.83'  
Weight : 62 lbs  
Series : 3981XA  
Mnemonic : TTRM  
Measure Point: 1.38': TEMP MP  
Measure Point: 1.13': RM MP



#### WTS COMMON REMOTE

Diameter : 3.63"  
Length : 6.36'  
Weight : 126 lbs  
Series : 3514XB  
Mnemonic : WTS

#### DIGITAL SPECTRALOG

Diameter : 3.63"  
Length : 7.31'  
Weight : 130 lbs  
Series : 1329XA  
Mnemonic : DSL  
Measure Point: 1.60': GR MP

GR MP 107.47'

#### COMPENSATED NEUTRON

Diameter : 3.63"  
Length : 7.59'  
Weight : 150 lbs  
Series : 2446XA  
Mnemonic : CN  
Measure Point: 2.63': LSN MP  
Measure Point: 2.24': SSN MP

LSN MP 100.92'  
SSN MP 100.52'

#### Z-DENSILOG

Diameter : 4.88"  
Length : 11.22'  
Weight : 360 lbs  
Series : 2234XA  
Mnemonic : ZDL  
Measure Point: 3.19': CAL MP  
Measure Point: 2.47': LSD MP  
Measure Point: 2.07': SSD MP

CAL MP 90.26'  
LSD MP 89.54'  
SSD MP 89.14'

#### KNUCKLE JOINT (DOUBLE)

Diameter : 3.38"  
Length : 4.65'  
Weight : 90 lbs  
Series : 3939XA  
Mnemonic : KNJT

#### 4 ARM BOW SPRING CENTRALIZER

Diameter : 3.38"  
Length : 4.12'  
Weight : 72 lbs  
Series : 4341XA  
Mnemonic : CENT

#### DIGITAL ORIENTATION

Diameter : 3.38"  
Length : 10.81'  
Weight : 110 lbs  
Series : 4401XB  
Mnemonic : ORIT  
Measure Point: 0.00': ORIENT MP

ORIENT MP 67.49'

ARRAY ACOUSTILOG ELECTRONICS, 8 CHANNEL

Diameter : 3.38"  
Length : 7.82'  
Weight : 102 lbs  
Series : 1677EA  
Mnemonic : XMAC

CROSS MULTIPOLE ARRAY ACOUSTILOG

Diameter : 3.75"  
Length : 10.91'  
Weight : 224 lbs  
Series : 1678MC  
Mnemonic : XMF1  
Measure Point: 5.50': R8  
Measure Point: 5.00': R7  
Measure Point: 4.50': R6  
Measure Point: 4.00': R5  
Measure Point: 3.50': R4  
Measure Point: 3.00': R3  
Measure Point: 2.50': R2  
Measure Point: 2.00': R1

R8 — 54.26'  
R7 — 53.76'  
R6 — 53.26'  
R5 — 52.76'  
R4 — 52.26'  
R3 — 51.76'  
R2 — 51.26'  
R1 — 50.76'

SHEAR WAVE ACOUSTILOG

Diameter : 3.63"  
Length : 5.00'  
Weight : 135 lbs  
Series : 1678PB  
Mnemonic : XMAC

MONOPOLE T2 — 42.26'  
QUADRUPOLE T5 — 42.26'

MULTI-POLE ARRAY ACOUSTIC

Diameter : 3.88"  
Length : 7.92'  
Weight : 170 lbs  
Series : 1678BA  
Mnemonic : XMAC  
Measure Point: 6.42': QUADRUPOLE T5  
Measure Point: 6.42': MONOPOLE T2  
Measure Point: 4.67': Y-DIPOLE T4  
Measure Point: 4.67': X-DIPOLE T3  
Measure Point: 2.92': MONOPOLE T1

X-DIPOLE T3 — 40.51'  
Y-DIPOLE T4 — 40.51'

MONOPOLE T1 — 38.76'

MULTI-POLE ARRAY ACOUSTIC

Diameter : 3.38"  
Length : 4.32'  
Weight : 58 lbs  
Series : 1678FA  
Mnemonic : MAC

4 ARM BOW SPRING CENTRALIZER

Diameter : 3.38"  
Length : 4.12'  
Weight : 72 lbs  
Series : 4341XA  
Mnemonic : CENT

HIGH DEFINITION INDUCTION TOOL

Diameter : 3.62"  
Length : 27.13'  
Weight : 415 lbs  
Series : 1515XA

SP MP — 14.19'


Mnemonic : HDIL  
Measure Point: 13.91': SP MP  
Measure Point: 7.44': XMTR MP

XMTR MP 7.72'

BULL PLUG 3 3/8

0.00'

TOTAL LENGTH: 137.65'  
TOTAL WEIGHT: 2482 lbs  
MAX DIAMETER: 0'4.88"

	COMPANY	<u>WPX ENERGY INC</u>		FILE NO:	<u>US094604J</u>
	WELL	<u>YOUBERG RU 443-7</u>			
	FIELD	<u>RULISON</u>		API NO:	<u>05045225210000</u>
	COUNTY	<u>GARFIELD</u>	STATE	<u>COLORADO</u>	
LOCATION:		ELEVATIONS:		SEC 7 T7S R93W	
SHL: 1168' FSL 1181' FEL		KB 7943 FT		PAD: RU 44-7	
BHL: 1568' FSL 737' FEL		DF		RIG: NABORS 576	
SEC <u>7</u> TWP <u>7S</u> RGE <u>93W</u>		GL 7917 FT			
		DATE		<u>08-Feb-2015</u>	