



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

FILE NO: US094602J	COMPANY WPX ENERGY INC
API NO: 05045224990000	WELL WPX GM 522-28
	FIELD GRAND VALLEY
	COUNTY GARFIELD
	STATE COLORADO
Ver. 3.87 SEC 28 T6S R96W PAD: GM 323-28 RIG: H&P 318	LOCATION: SHL: 1545' FSL 2312' FWL BHL: 2244' FNL 2442' FWL SEC 28 TWP 6S RGE 96W
	OTHER SERVICES NONE
PERMANENT DATUM LOG MEASURED FROM DRILL. MEAS. FROM	ELEVATIONS: GL 5476 FT KB 5500 FT DF GL 5476 FT

DATE		02-Feb-2015			
RUN	TRIP	1	1		
SERVICE ORDER		US094602J			
DEPTH DRILLER		7054 FT			
DEPTH LOGGER		7058 FT			
BOTTOM LOGGED INTERVAL		7055 FT			
TOP LOGGED INTERVAL		0 FT			
CASING DRILLER		9.625 IN @ 1216 FT			@
CASING LOGGER		1216 FT			
BIT SIZE		8.75 IN			
TYPE OF FLUID IN HOLE		LSND			
DENSITY	VISCOSITY	11.2 LB/G	60 CP		
PH	FLUID LOSS	8.8	4 C3		
SOURCE OF SAMPLE		FLOWLINE			
RM AT MEAS. TEMP.		0.84 OHMM @ 73.8 DEGF			@
RMF AT MEAS. TEMP.		0.63 OHMM @ 73.8 DEGF			@
RMC AT MEAS. TEMP.		1.05 OHMM @ 73.8 DEGF			@
SOURCE OF RMF	RMC	CALCULATED	CALCULATED		
RM AT BHT		0.625 OHMM @ 196 DEGF			@
TIME SINCE CIRCULATION		12 HOURS			
MAX. RECORDED TEMP.		196 DEGF			
EQUIP. NO.	LOCATION	6670	GRAND JCT		
RECORDED BY		W. QUIGLEY			
WITNESSED BY		MR. HARRY SAMSON			

IN MAKING INTERPRETATIONS OF LOGS OUR EMPLOYEES WILL GIVE THE 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
8.75 IN	1216 FT	7054 FT

CASING RECORD				
SIZE	WEIGHT	GRADE	FROM	TO
9.625 IN	32.3 LB/F		0 FT	1216 FT

REMARKS

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

BVOL CVOL CALCULATED IN CUBIC FEET
BVOL 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

ABC TO CALCULATE: MUD CONDUCTIVITY

THANK YOU FOR CHOOSING BAKER HUGHES WIRELINE SERVICES

CREW: HOLLAR/FAVORITE/QUIGLEY
RIG: H&P 318

TOOLSTRING RAN SLICK DUE TO BOREHOLE CONCERNS

EQUIPMENT DATA

RUN	TRIP	TOOL	SERIES NO.	SERIAL NO.	POSITION
1	1	SWIVEL	3950XA	10119949	FREE
1	1	TTMA	3980XA	10123540	FREE
1	1	TEL/GR	3518FB/EG	10126400/10139870	FREE
1	1	NEUTRON	2436XA	10137930	FREE
1	1	DENSITY	2223XA	10102922	CALIPER DEVICE
1	1	KNUCKLE	3930XA	10102172	FREE
1	1	HDIL	1530XA	10118612	FREE

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: 4

Plotted: Tue Feb 3 00:43:40 2015

PARAMETER AND FILTER SUMMARY REPORT

File: /dat1a/OH094602J/n970a02.prm
LOGGING MODE: DEPTH DIRECTION: UP
TOP DEPTH: 1098.676 ft BOTTOM DEPTH: 7066.622 ft

SYMMETRIC FILTER

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
GR MED RES	FILTER ()	medium (1)		TOP	BOTTOM
CALIPER	FILTER ()	medium (1)		"	"
TENSION	FILTER ()	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
BOREHOLE CORR DIAMETER SOURCE	CALIPER/FIXED DIA. (mbh*)	USE CALIPER		"	"
BOREHOLE CORR DIAMETER	FIXED DIAMETER (mbh*)	8.750	in	"	"
BH MUD RESISTIVITY SOURCE	RMUD SOURCE (HDIL)	TOOL MEASURED		"	"
MUD SAMPLE RESISTIVITY	MUD SAMPLE TEMP	73.8	degF	"	"
	MUD SAMPLE RES	0.840	ohm.m	"	"
BOREHOLE TEMP from GRADIENT	Known BH REF TEMP	73.8	degF	"	"
	at BH REF DEPTH	0.0	ft	"	"
	with TEMP GRADIENT	1.200	0.01 degF/ft	"	"

ACCELERATION PROCESSING

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

HDIL PROCESSING

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
HDIL TEMPERATURE CORRECTION	TEMP CORRECTION	ON		TOP	BOTTOM
ADAPTIVE BOREHOLE CORRECTION	ABC PROCESSING	ON		"	"
	ABC to CALCULATE	MUD CONDUCTIVITY		"	"
	STANDOFF	1.50	in	"	"

CURVE DESCRIPTION REPORT

CURVE NAME	CREATION DATE	CURVE DESCRIPTION
F1:GR	Feb 2 22:04:01 2015	GAMMA RAY
F1:M0C6	Feb 2 22:04:01 2015	FOCUSED CONDUCTIVITY, 60-INCH DOI
F1:M0R2	Feb 2 22:04:01 2015	TRUE FOCUSED RESISTIVITY FOR HDIL, 20-INCH DOI
F1:M0R6	Feb 2 22:04:01 2015	TRUE FOCUSED RESISTIVITY FOR HDIL, 60-INCH DOI
F1:SP	Feb 2 22:04:01 2015	SPONTANEOUS POTENTIAL
F1:TEN	Feb 2 22:04:01 2015	DIFFERENTIAL TENSION

CURVE MEASURE POINT OFFSET

CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
GR	35.00	M0R2	2.75	SP	1.25		
M0C6	2.75	M0R6	2.75	TEN	0.00		

Presentation : HL6670:/dat1a/OH094602J/WPX_2IN.fvpdf [2"/100' Scale]
Plot Interval : -5.75 - 7084.5 Feet

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Created On : Feb 2 22:04:01 2015
Company : WPX ENERGY INC
Well : WPX GM 522-28
Field : GRAND VALLEY
File Interval : -5.75 - 7084.5 Feet
OCT : n970a

GR BACKUP

GAMMA RAY [gr]

0 200

SP [sp]

-200 50

FEET

0

100

GR

TOOL STICKING

DEEP [m0r6]

0 100

SHALLOW [m0r2]

0 100 500

AMPLIFIED SHALLOW [m0r2]

0 20

OVERRANGE DEEP [m0r6]

100 1000

OVERRANGE SHALLOW [m0r2]

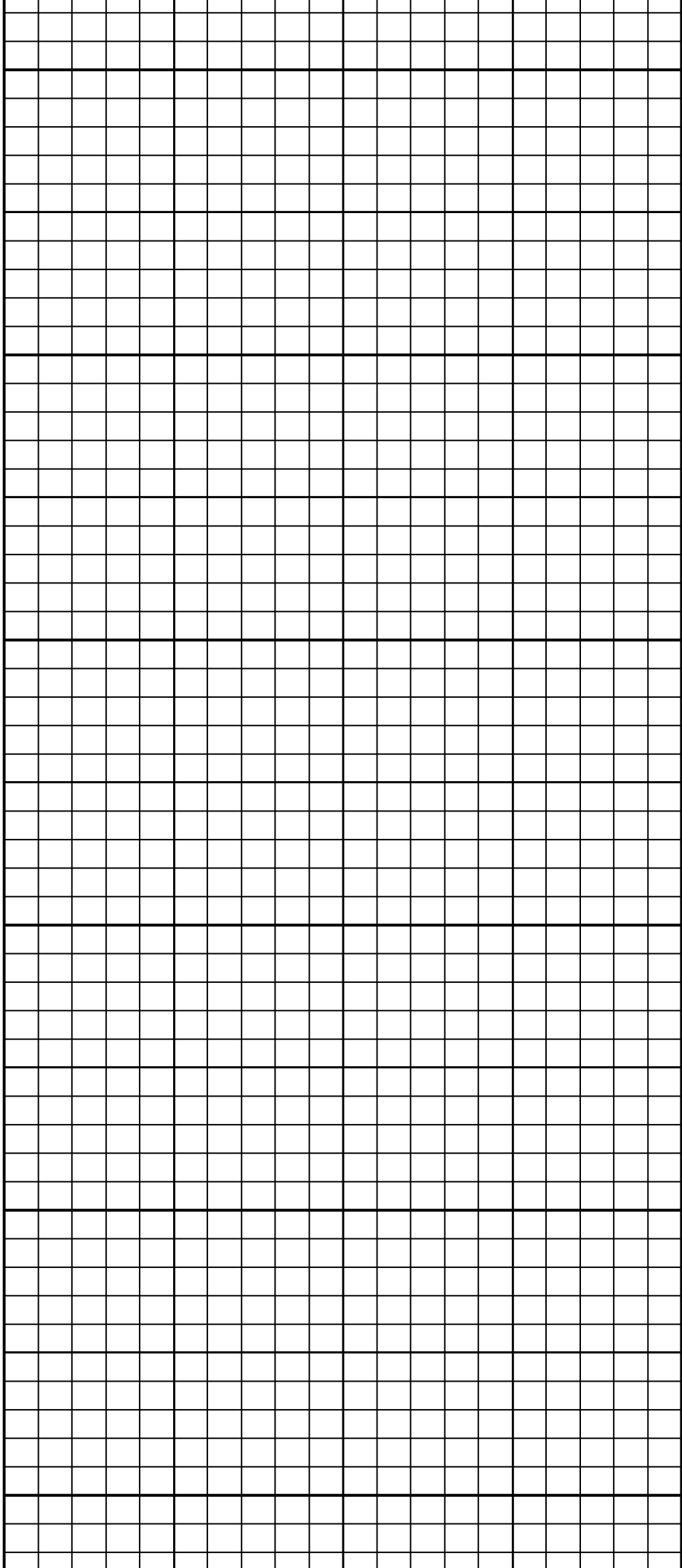
100 1000

DIFF. TENSION [ten]

4750 -250

60 in. DOI [m0c6]

0



200

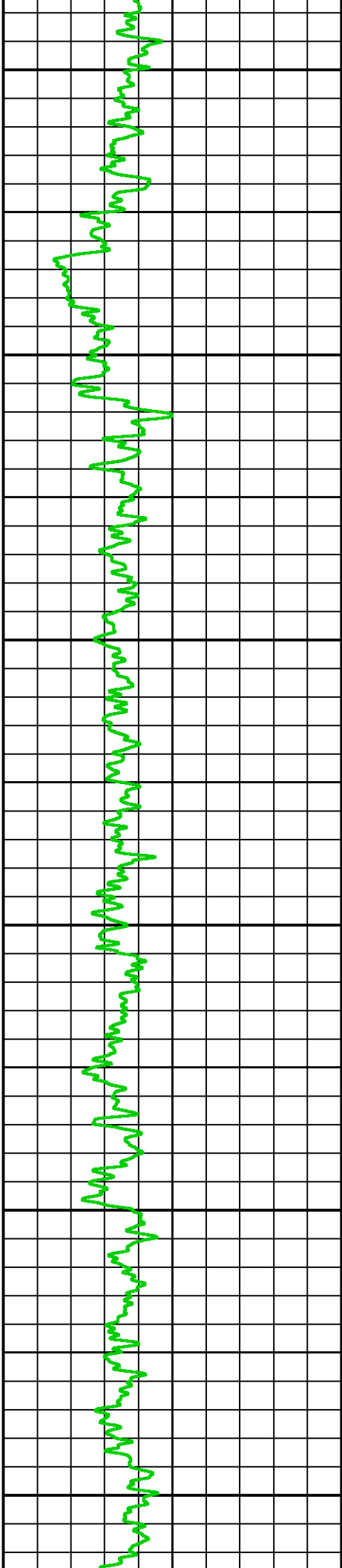
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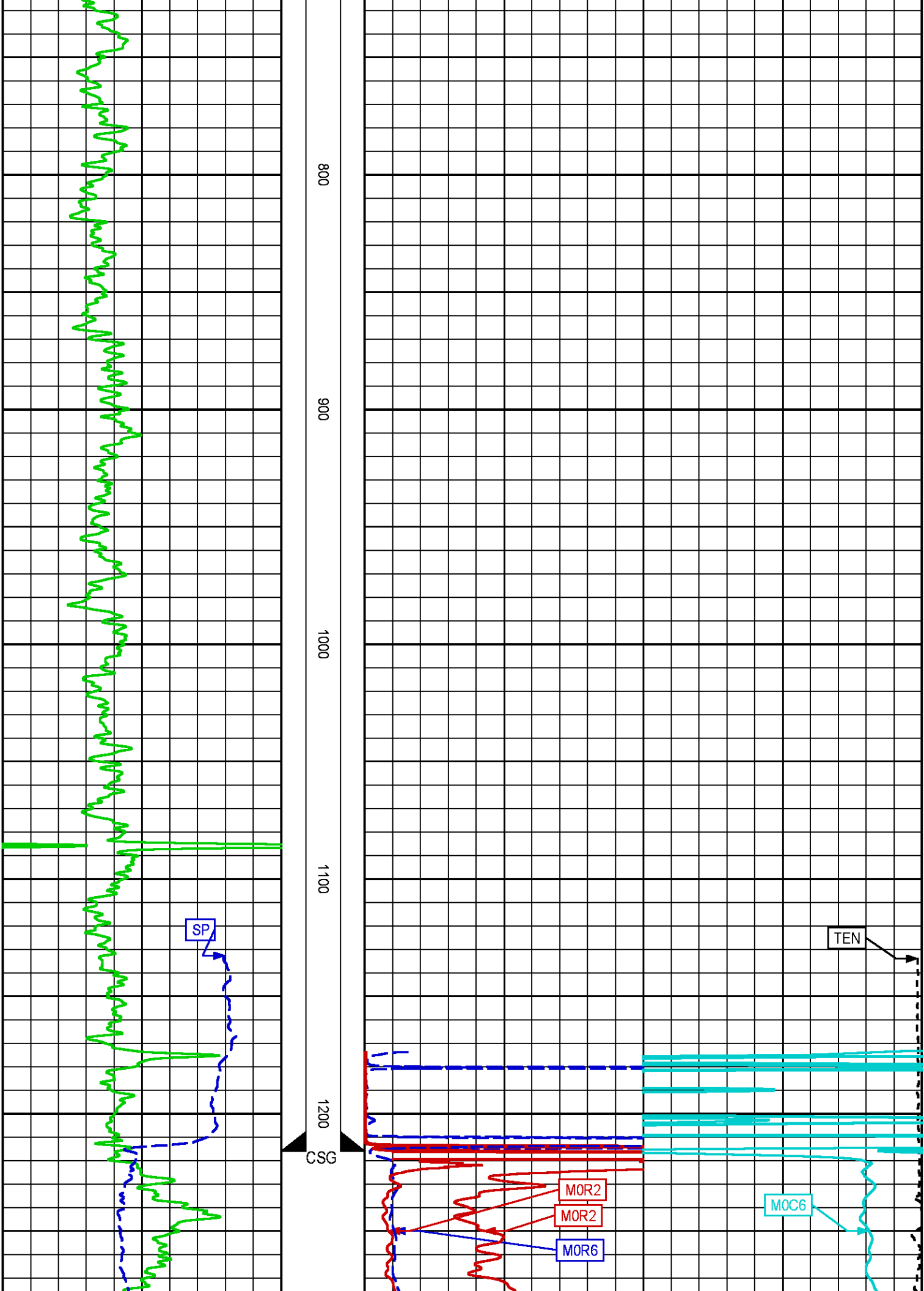
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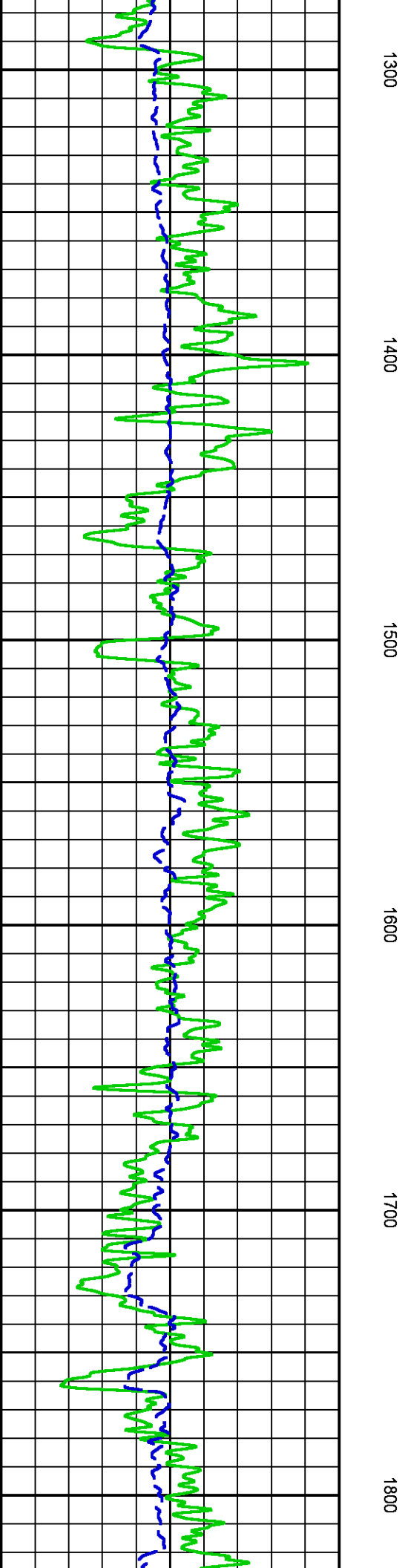
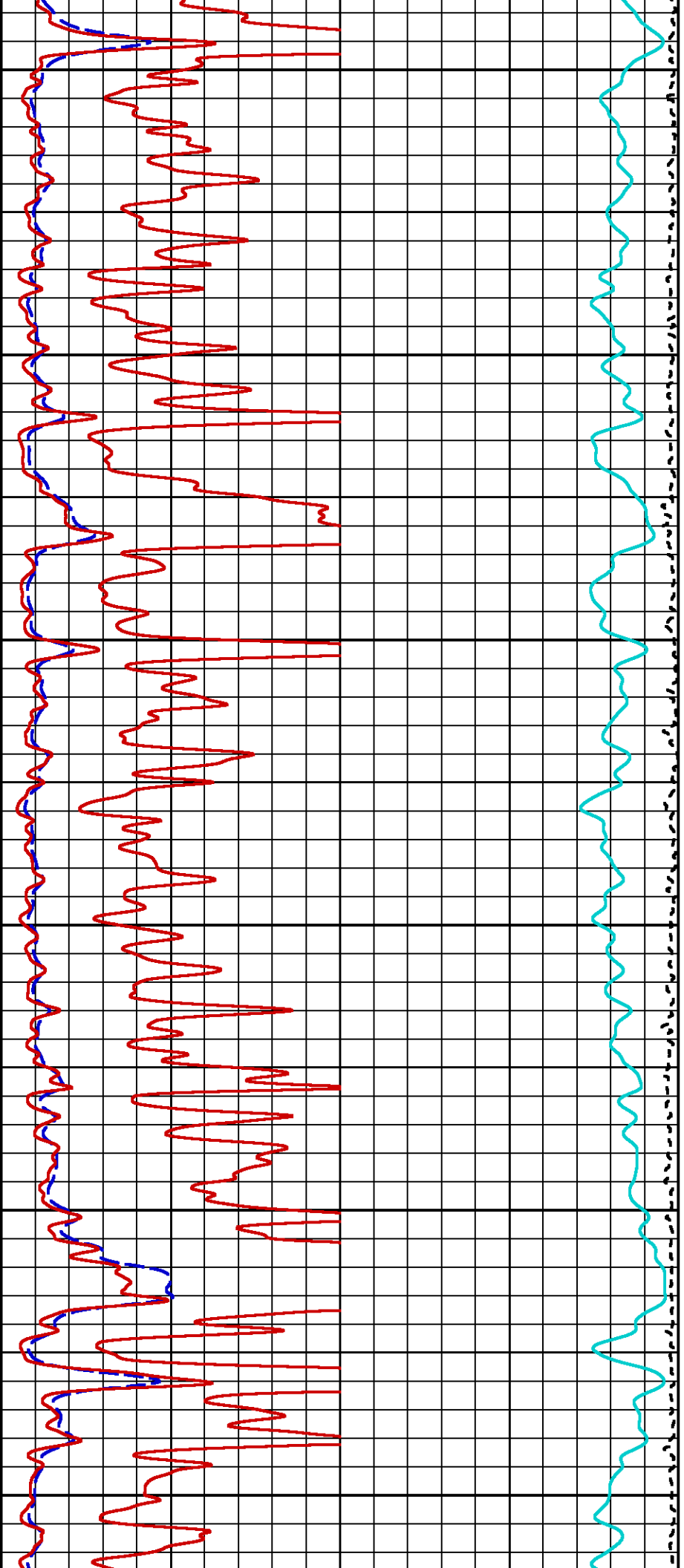
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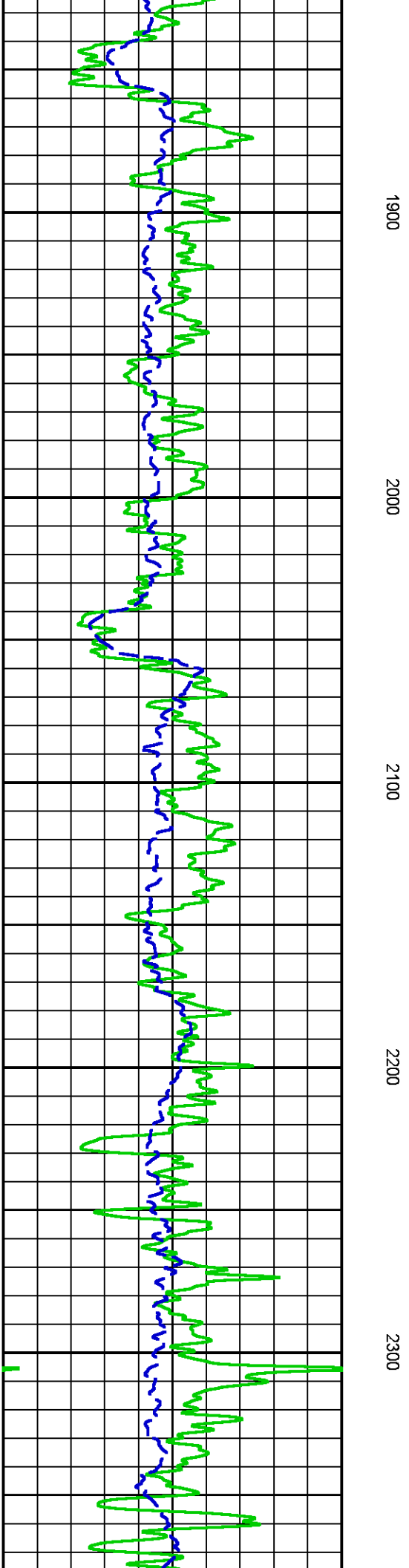
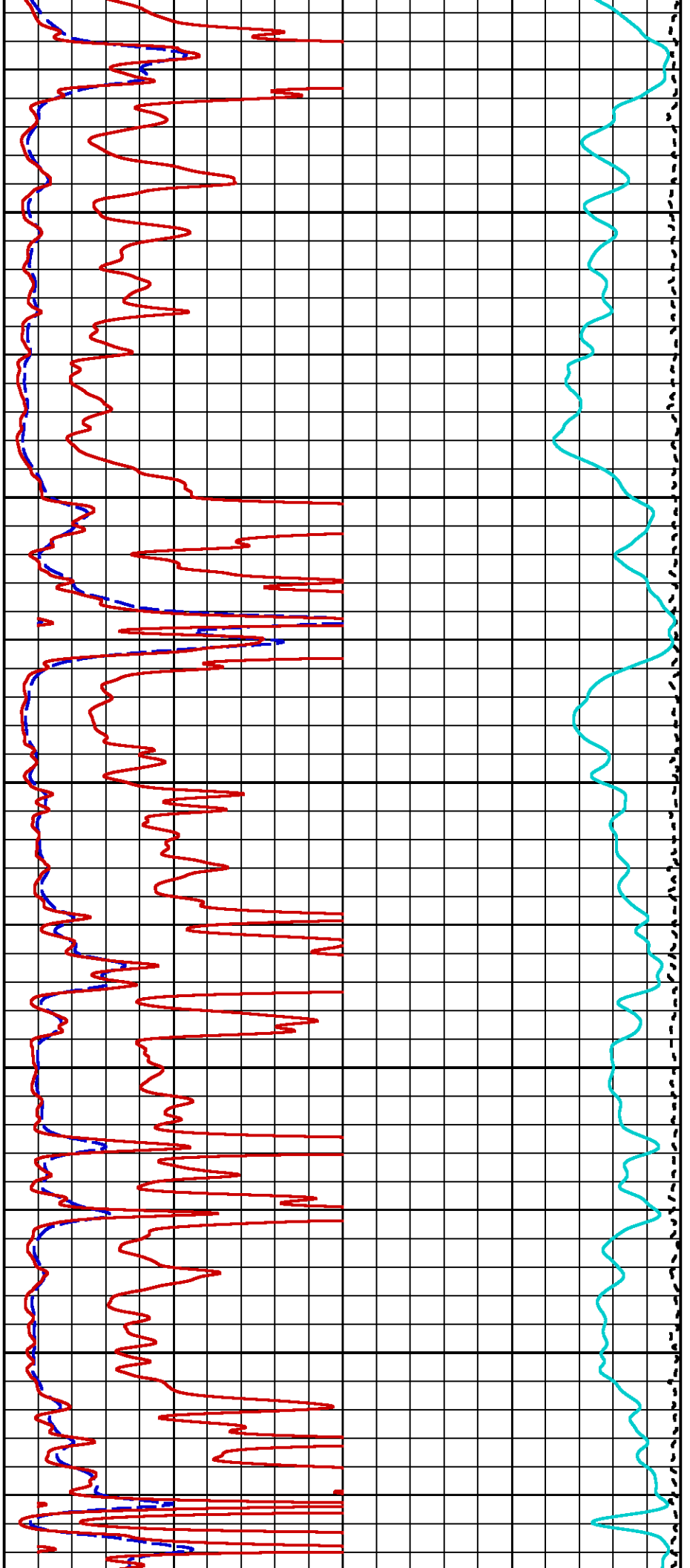
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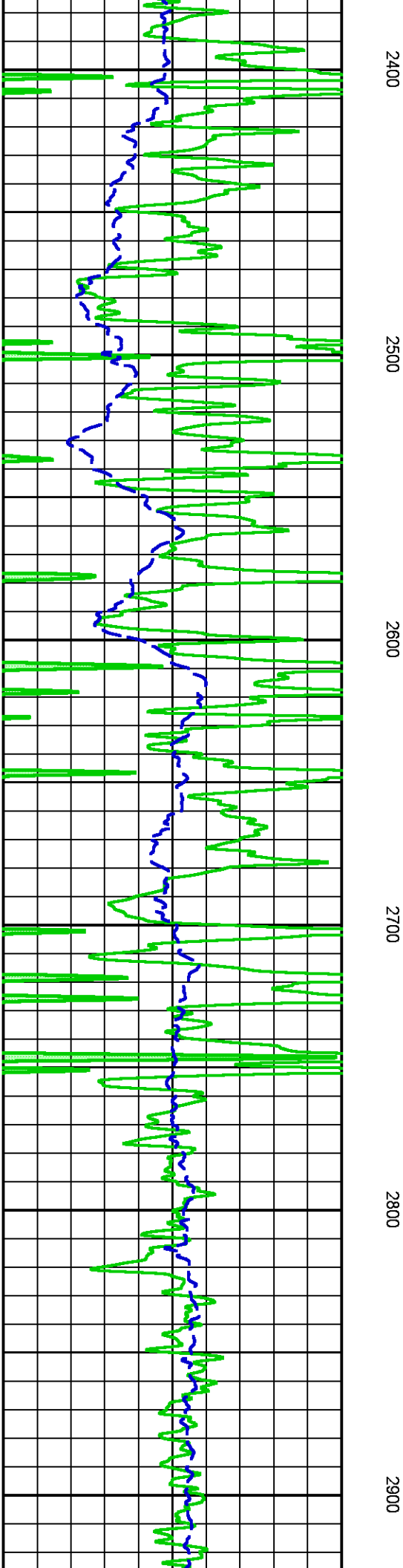
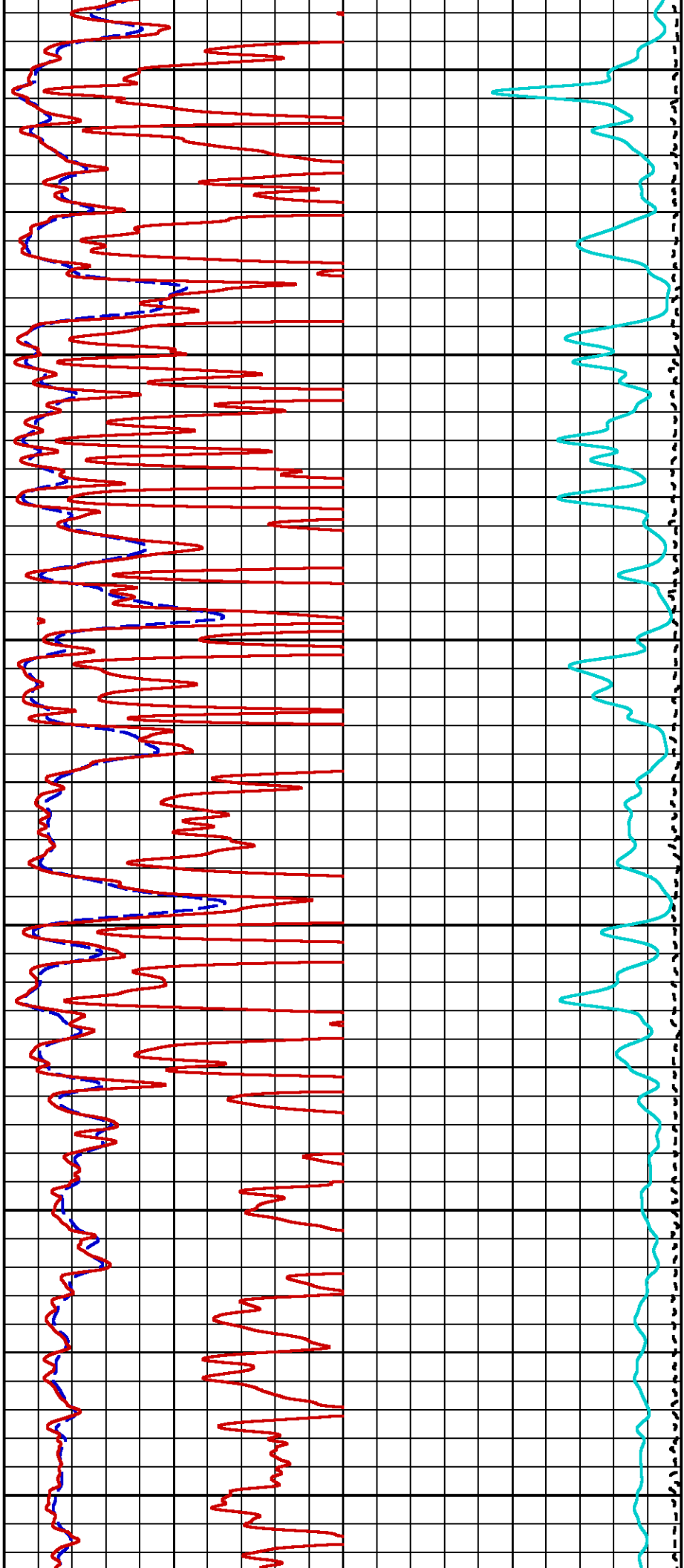
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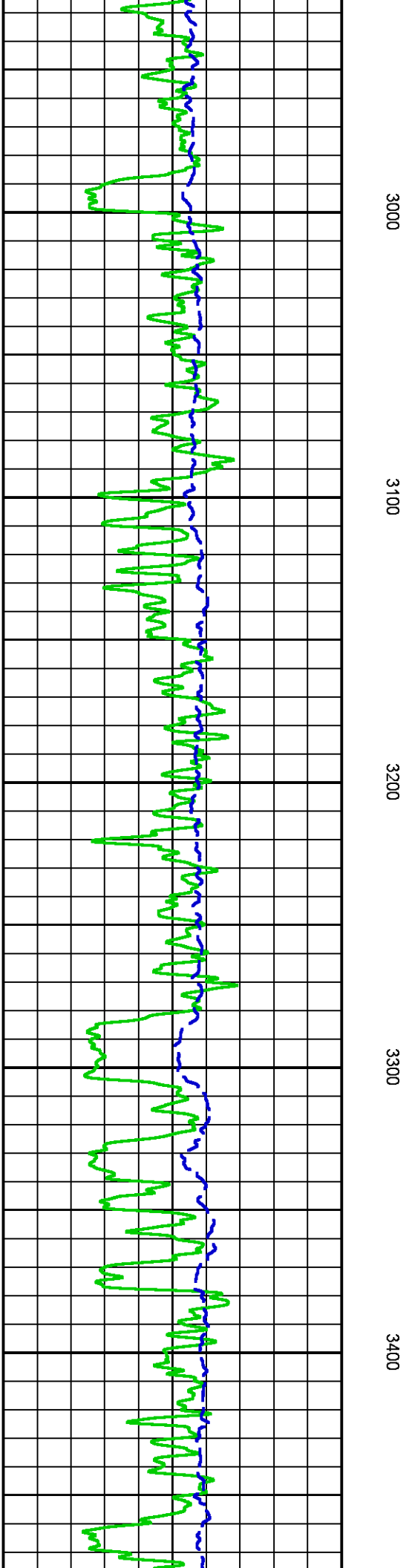
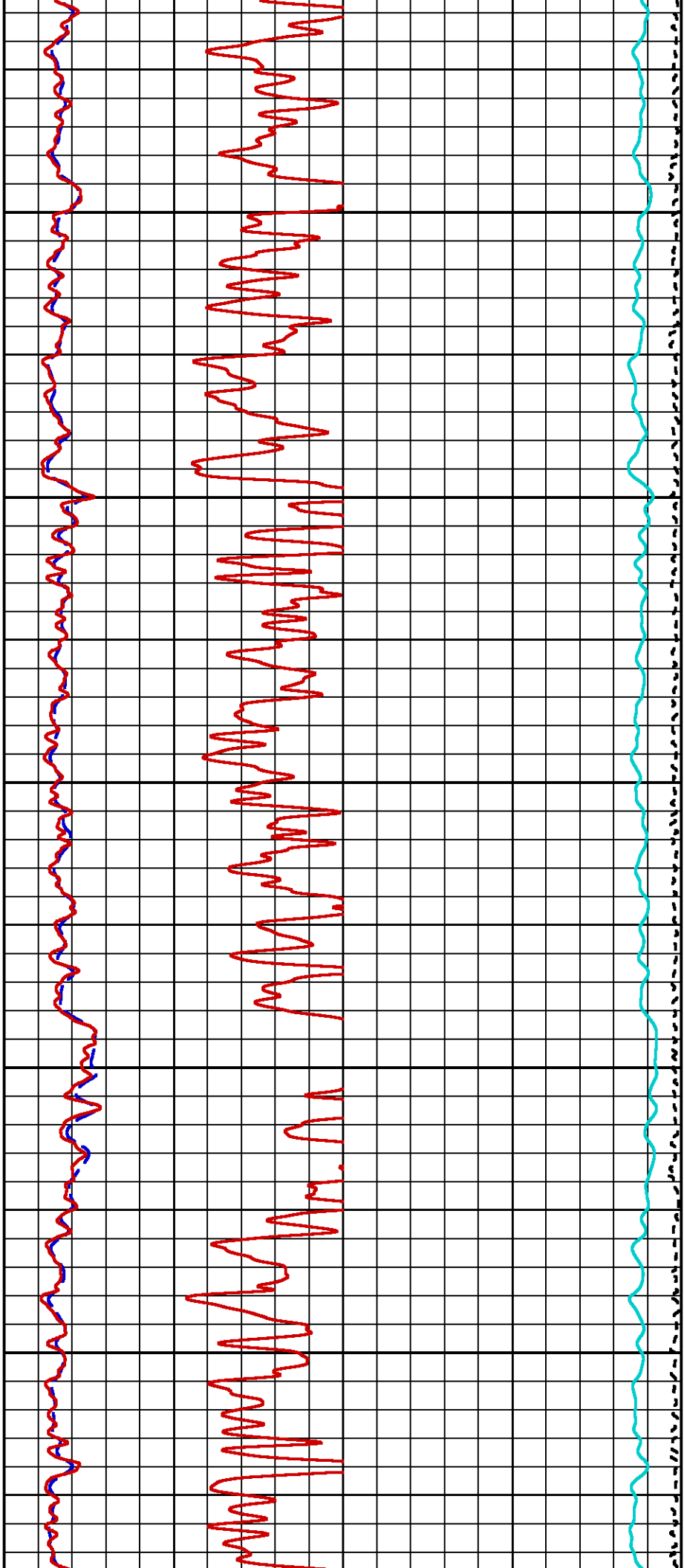


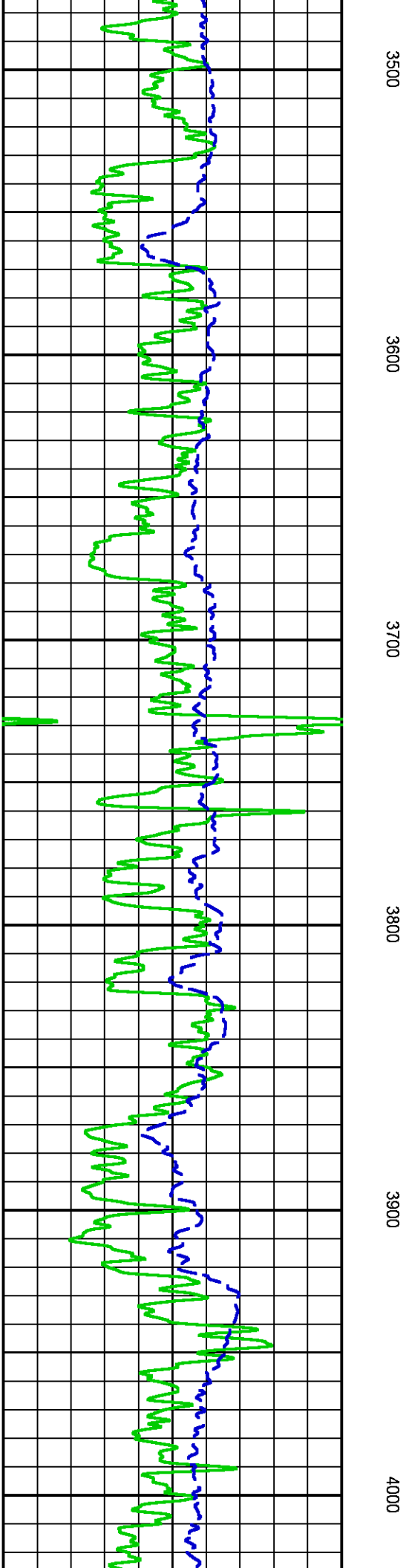
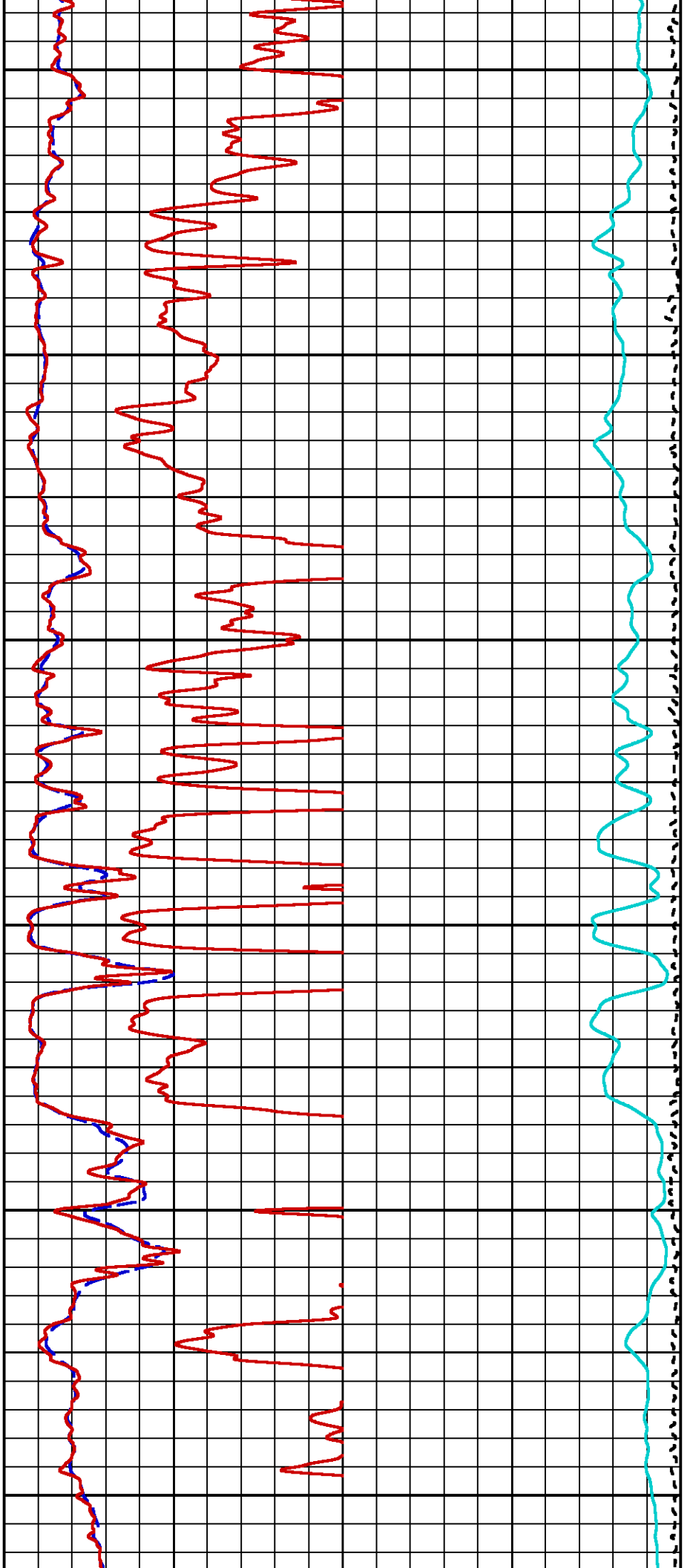


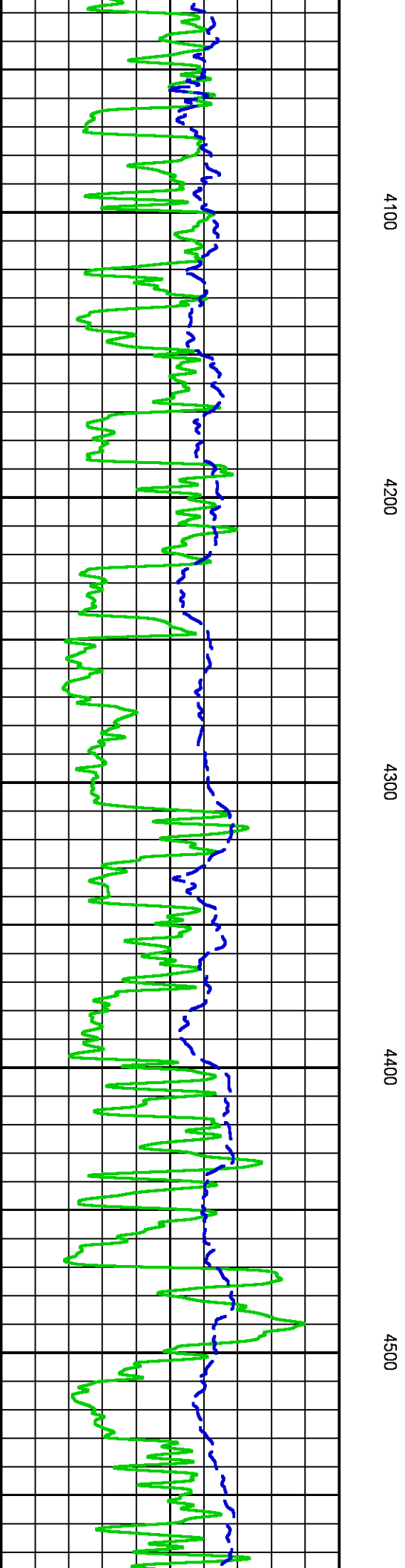
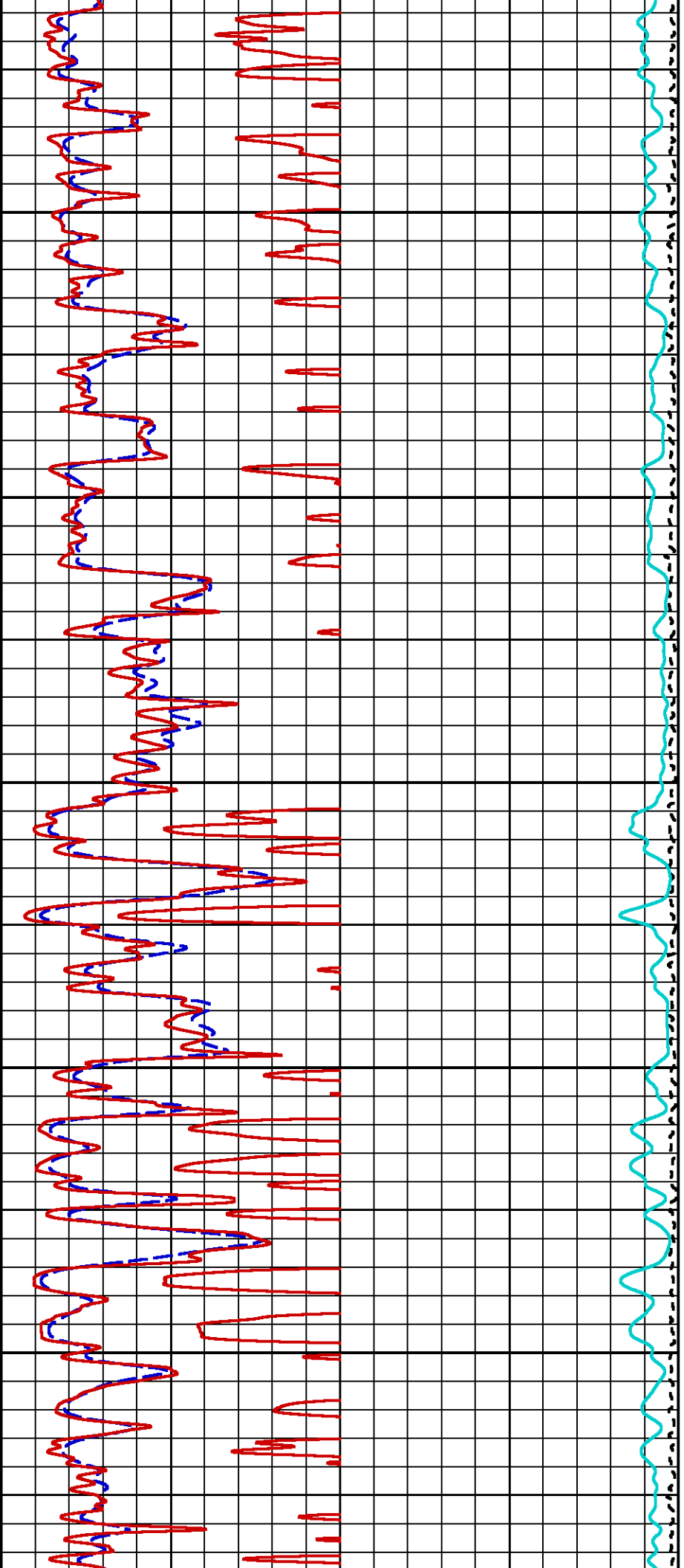


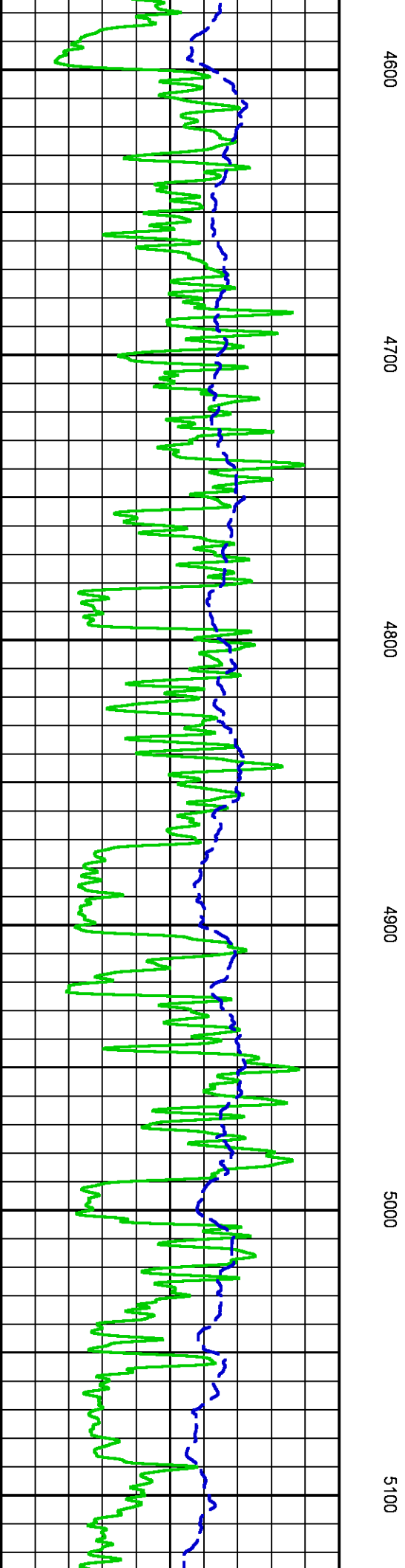
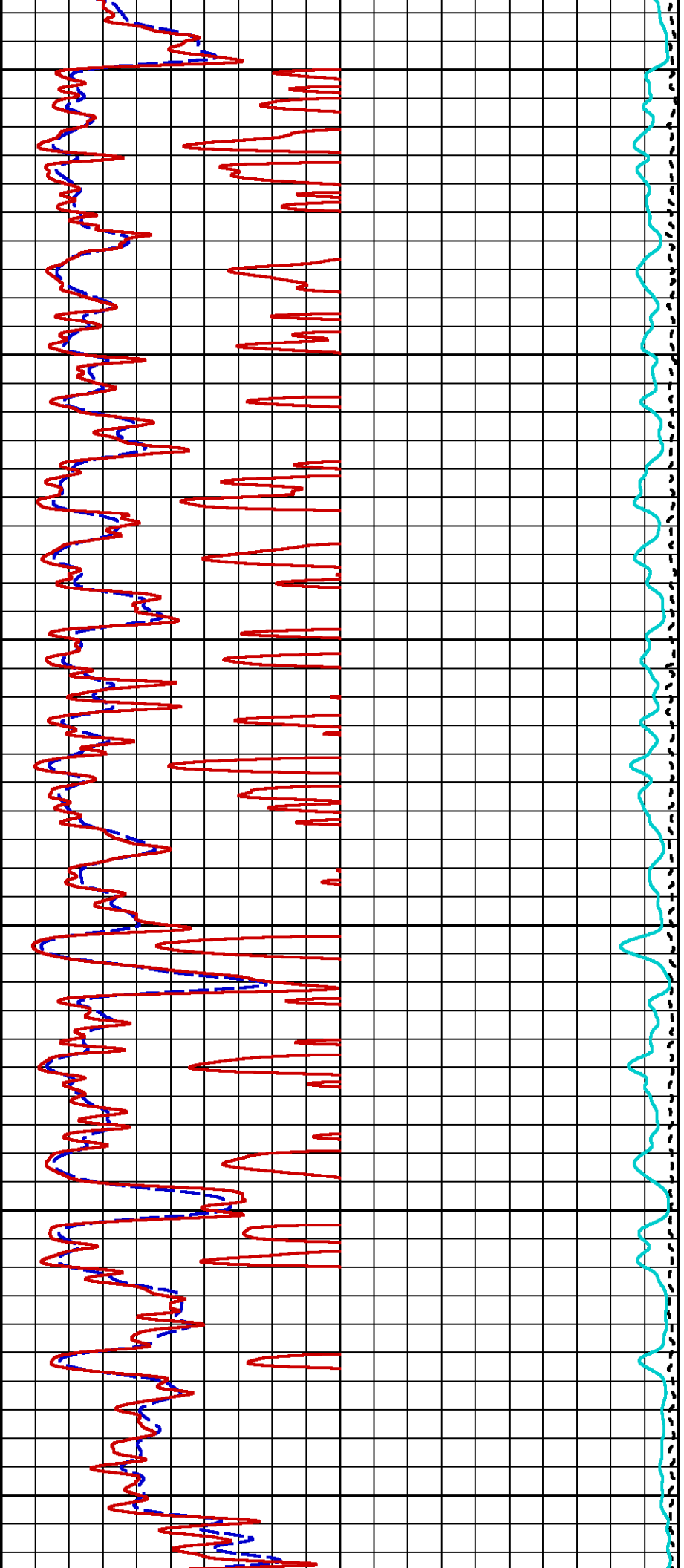


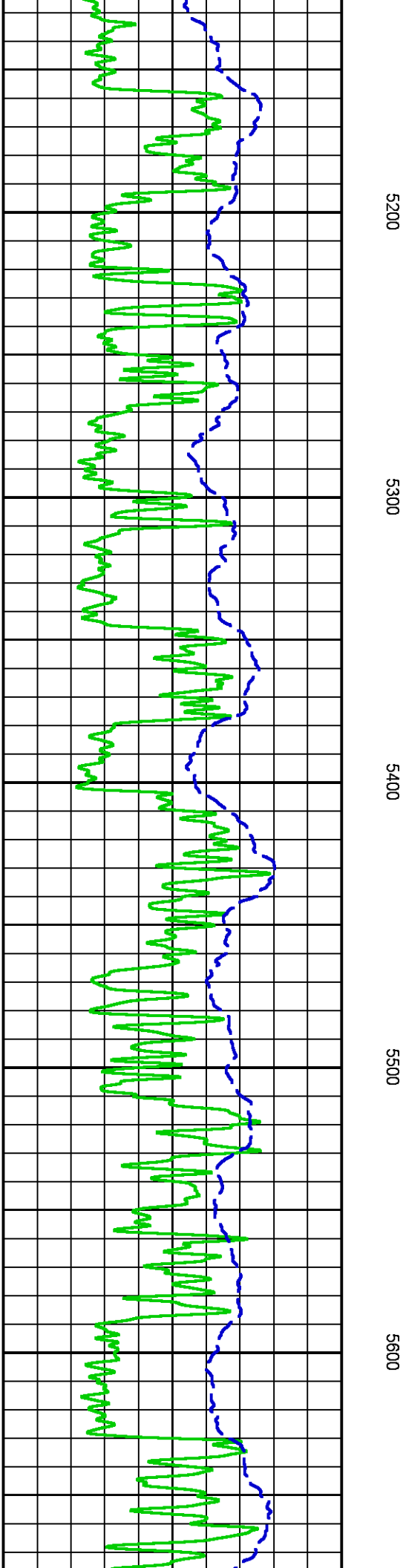
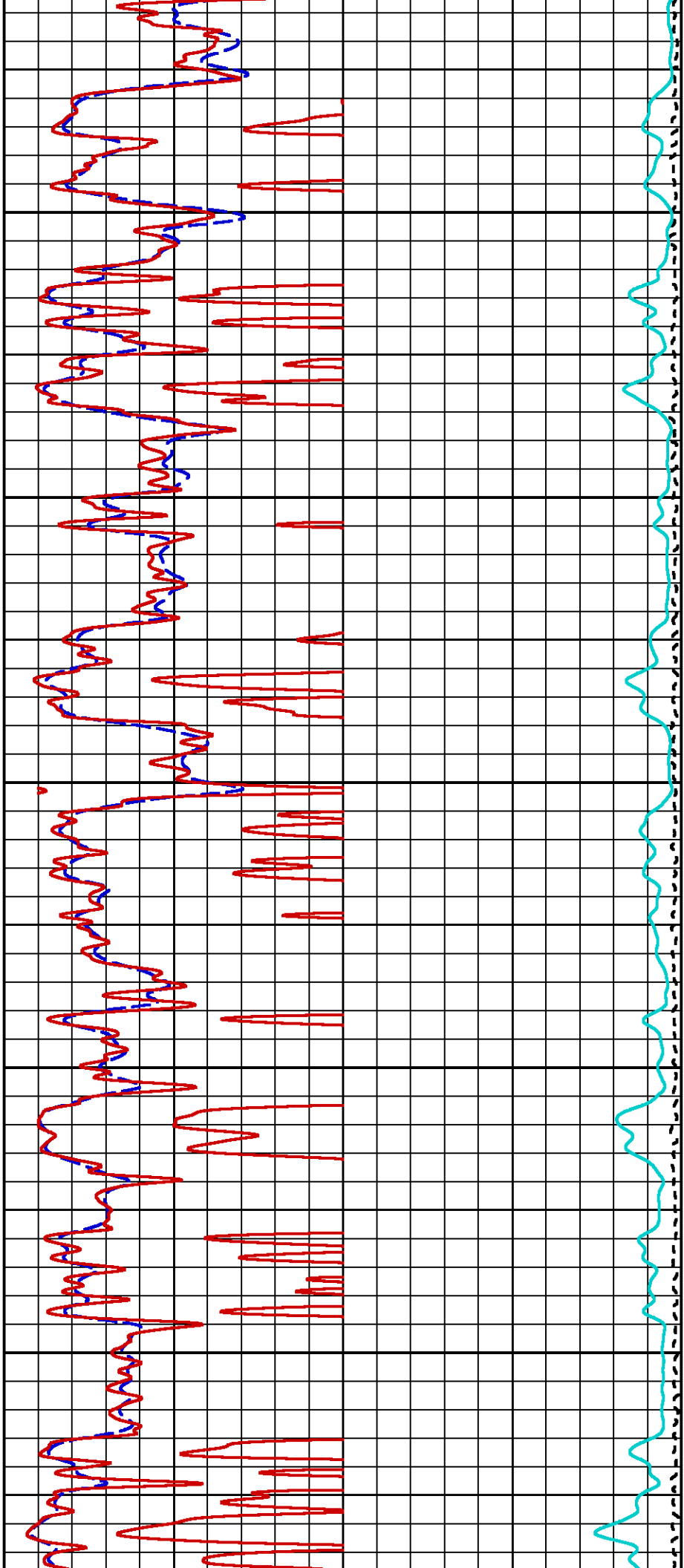


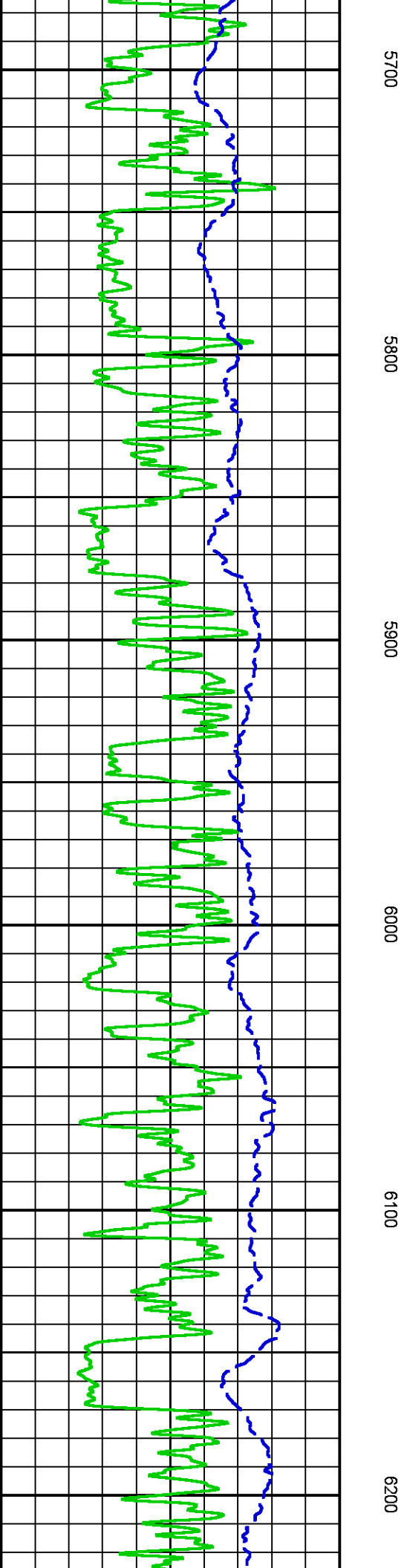
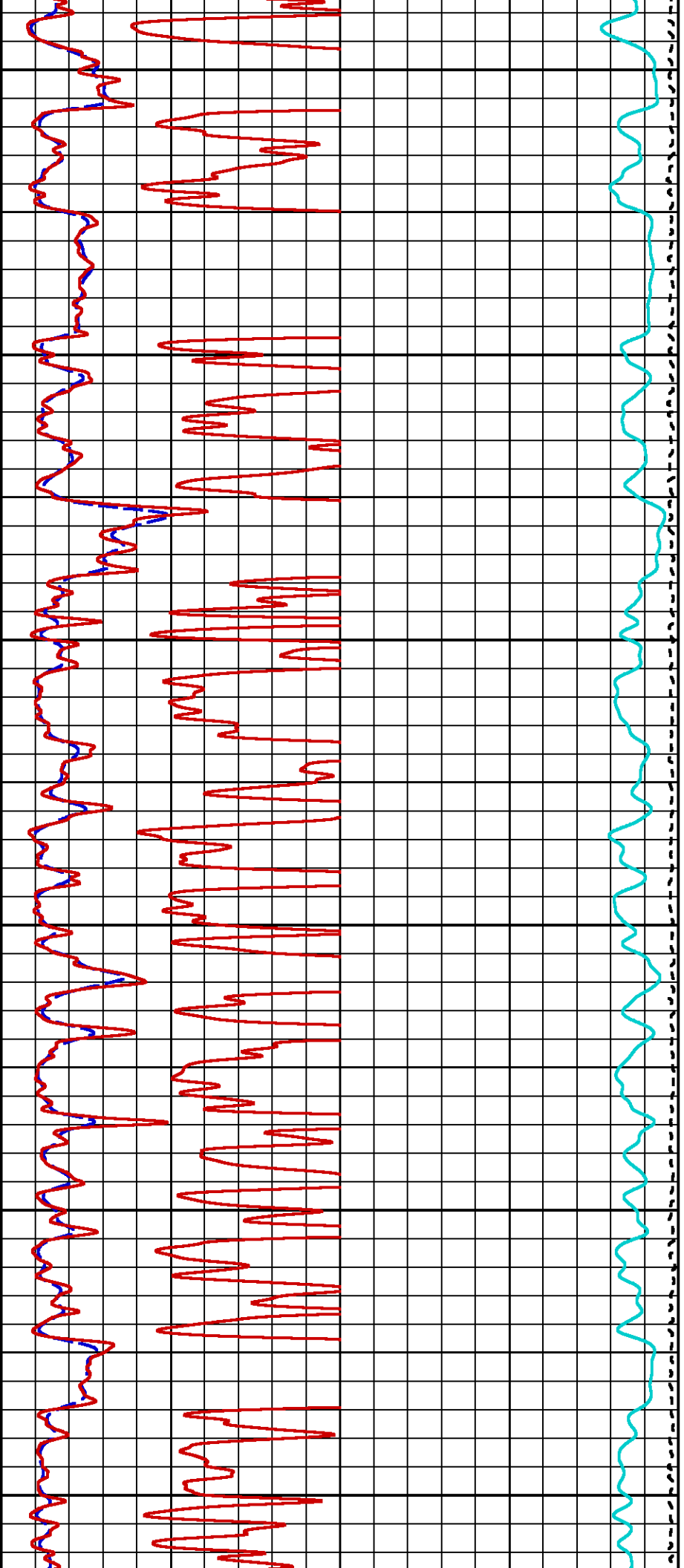


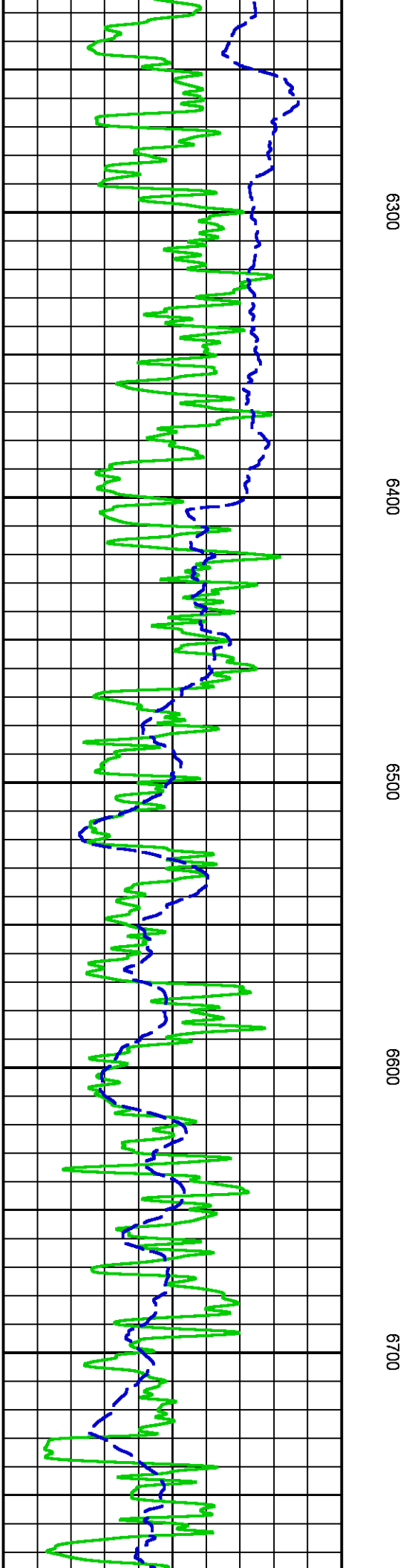
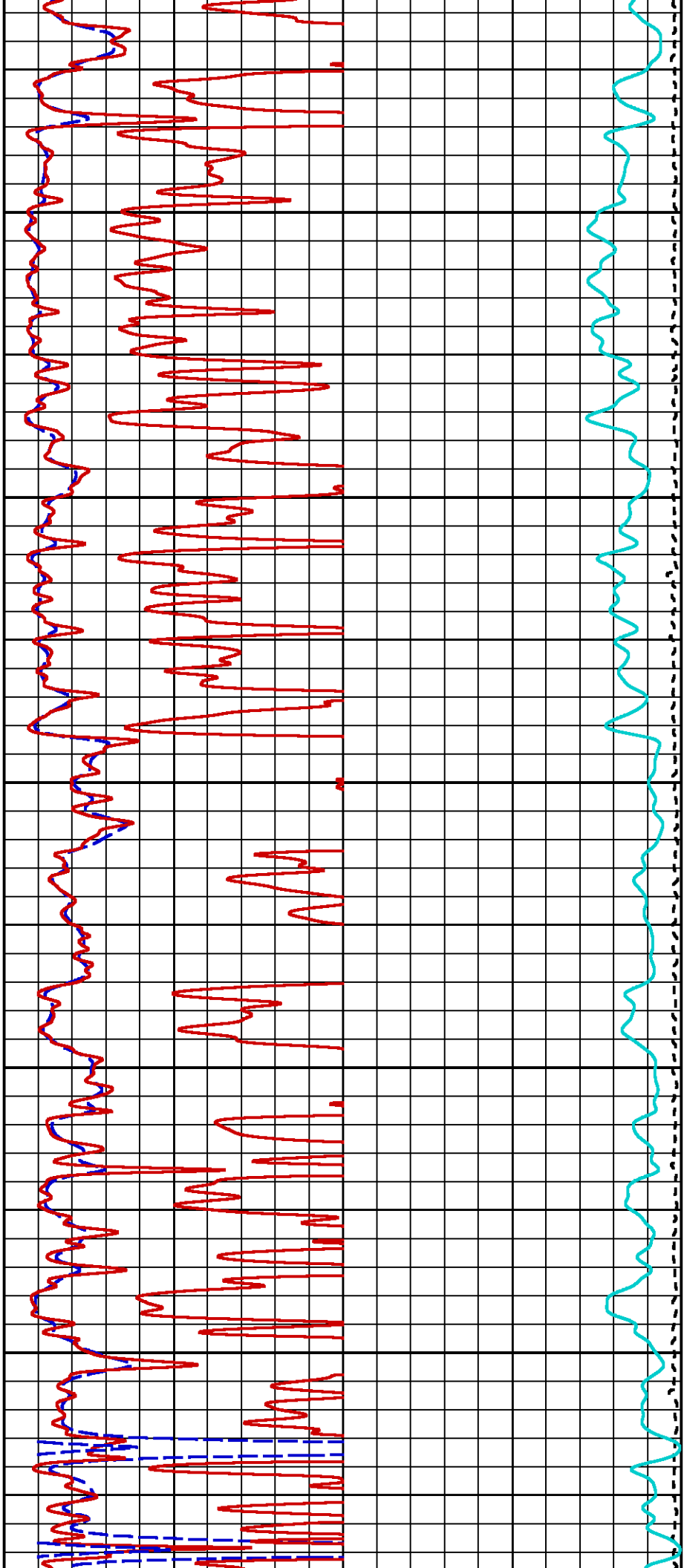


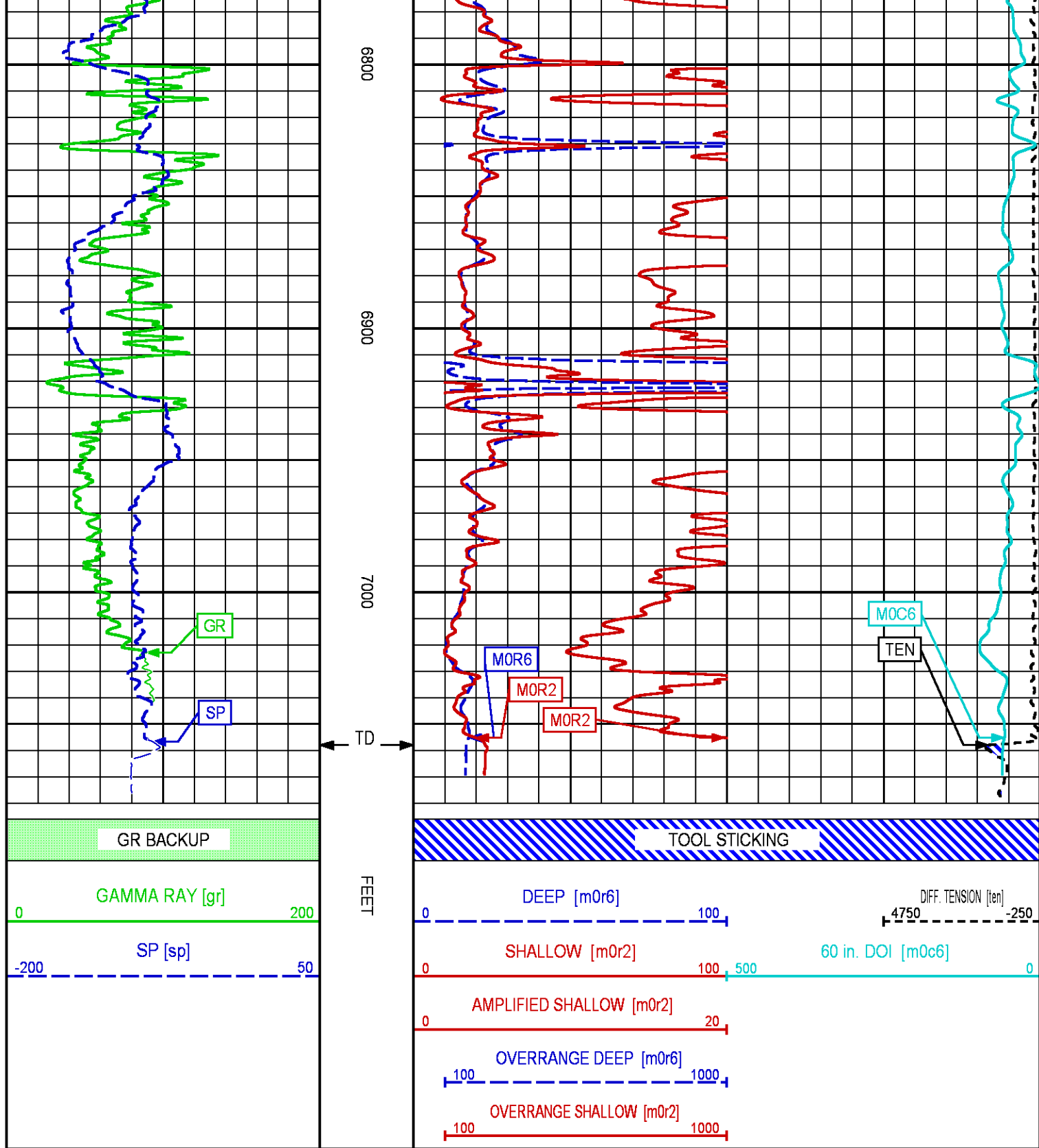












MAIN LOG 5"/100FT SCALE

PARAMETER AND FILTER SUMMARY REPORT

File: /dat1a/OH094602J/n970a02.prm
LOGGING MODE: DEPTH DIRECTION: UP
TOP DEPTH: 1098.676 ft BOTTOM DEPTH: 7066.622 ft

SYMMETRIC FILTER

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
GR MED RES	FILTER ()	medium (1)		TOP	BOTTOM
CALIPER	FILTER ()	medium (1)		"	"
TENSION	FILTER ()	medium (1)		"	"
CN MED RES	FILTER ()	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	"	"
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		"	"
MUD SAMPLE RESISTIVITY	MUD SAMPLE TEMP	73.8	degF	"	"
	MUD SAMPLE RES	0.840	ohm.m	"	"
BOREHOLE TEMP from GRADIENT	Known BH REF TEMP	73.8	degF	"	"
	at BH REF DEPTH	0.0	ft	"	"
	with TEMP GRADIENT	1.200	0.01 degF/ft	"	"

ACCELERATION PROCESSING

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

CN PROCESSING

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
CN MATRIX	2436 MATRIX	SANDSTONE		TOP	BOTTOM
CN BOREHOLE CORRECTION	SALINITY	1200	ppm	"	"
	BOREHOLE CORRECTION	ON		"	"
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	Air Filled Borehole	NO		TOP	BOTTOM
	RHOmatrix	2.680	g/cm3	"	"
	RHOfluid	1.000	g/cm3	"	"

HDIL PROCESSING

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

CURVE DESCRIPTION REPORT

CURVE NAME CREATION DATE CURVE DESCRIPTION

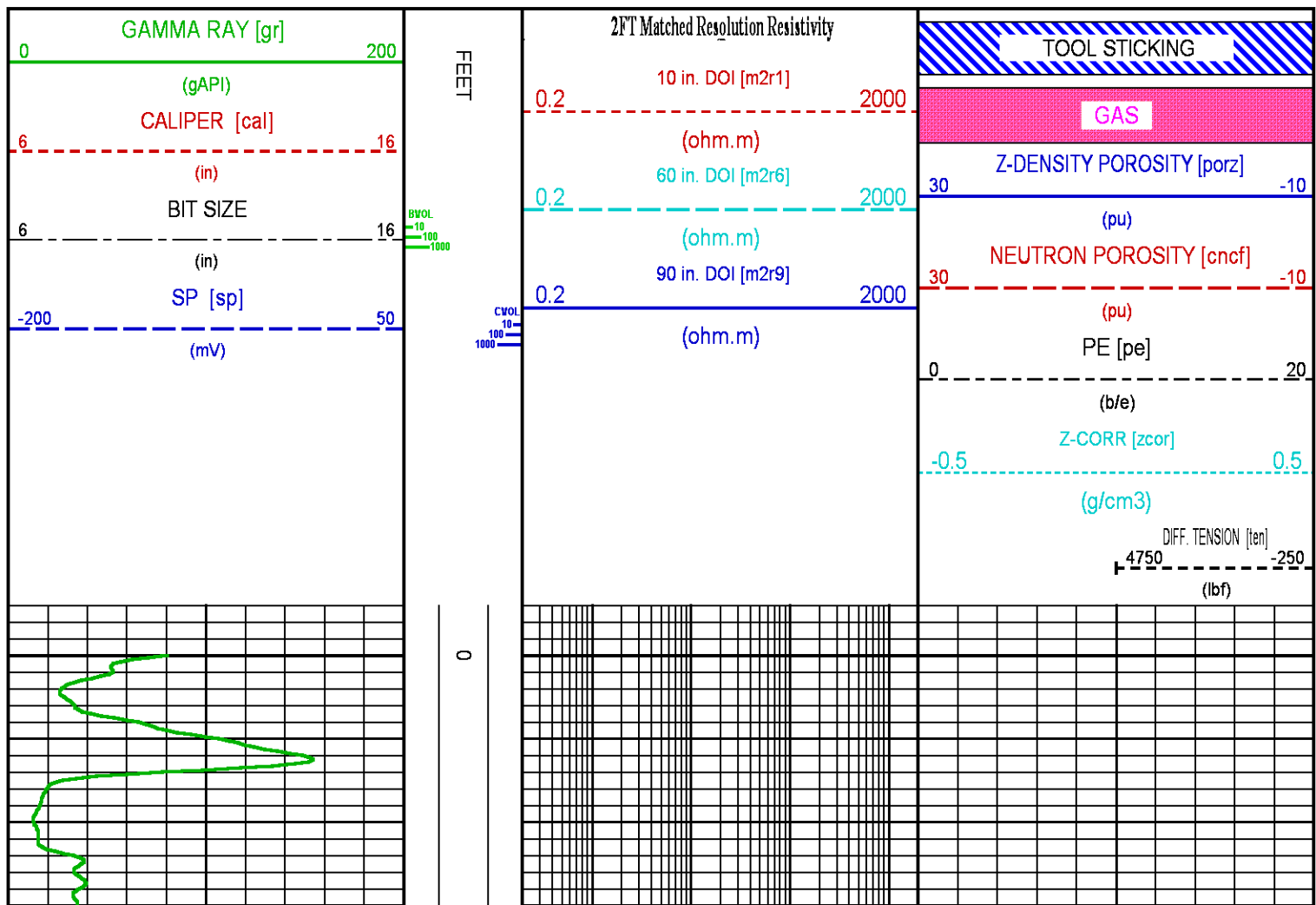
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F1:BVOL	Feb 2 22:04:01 2015	BOREHOLE VOLUME
F1:CAL	Feb 2 22:04:01 2015	CALIPER
F1:CNCF	Feb 2 22:04:01 2015	FIELD NORMALIZED COMPENSATED NEUTRON POROSITY
F1:CVOL	Feb 2 22:04:01 2015	CEMENT VOLUME
F1:GR	Feb 2 22:04:01 2015	GAMMA RAY
F1:M2R1	Feb 2 22:04:01 2015	VERTICAL 2-FOOT RESOLUTION MATCHED RESISTIVITY, 10-INCH DOI
F1:M2R6	Feb 2 22:04:01 2015	VERTICAL 2-FOOT RESOLUTION MATCHED RESISTIVITY, 60-INCH DOI
F1:M2R9	Feb 2 22:04:01 2015	VERTICAL 2-FOOT RESOLUTION MATCHED RESISTIVITY, 90-INCH DOI
F1:PE	Feb 2 22:04:01 2015	PHOTO ELECTRIC CROSS-SECTION
F1:PORZ	Feb 2 22:04:01 2015	POROSITY FOR SELECTABLE MATRIX
F1:SP	Feb 2 22:04:01 2015	SPONTANEOUS POTENTIAL
F1:TEN	Feb 2 22:04:01 2015	DIFFERENTIAL TENSION
F1:ZCOR	Feb 2 22:04:01 2015	DENSITY CORRECTION

CURVE MEASURE POINT OFFSET

CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
BIT	0.00	GR	35.00	M2R9	2.75	SP	1.25
CAL	18.12	M2R1	2.75	PE	18.00	TEN	0.00
CNCF	27.38	M2R6	2.75	PORZ	18.00	ZCOR	18.00

Presentation : HL6670:/dat1a/OH094602J/WPX_MAIN.fvpdf [5"/100' Scale]
Plot Interval : -5.75 - 7084.5 Feet

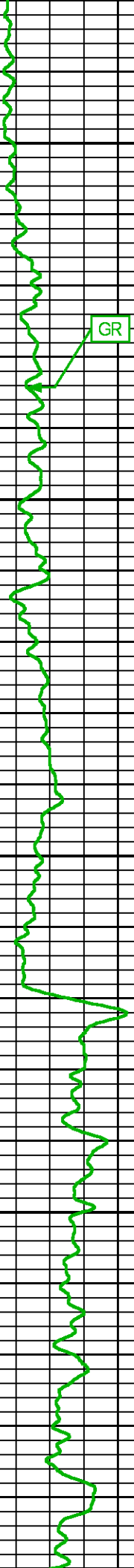
Data File 1 : F1 : HL6670:/dat1a/OH094602J/n970a02_MAIN.xtf
Created On : Feb 2 22:04:01 2015
Company : WPX ENERGY INC
Well : WPX GM 522-28
Field : GRAND VALLEY
File Interval : -5.75 - 7084.5 Feet
OCT : n970a

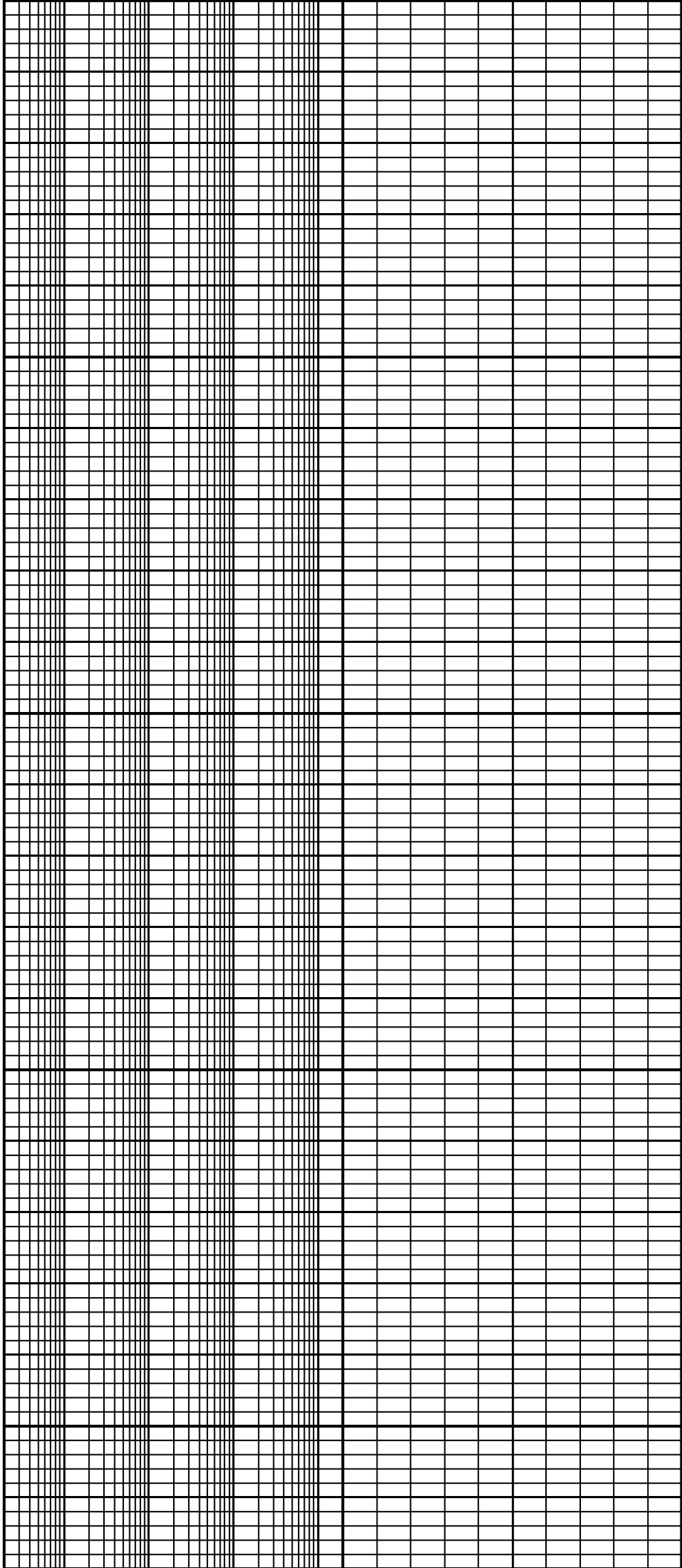


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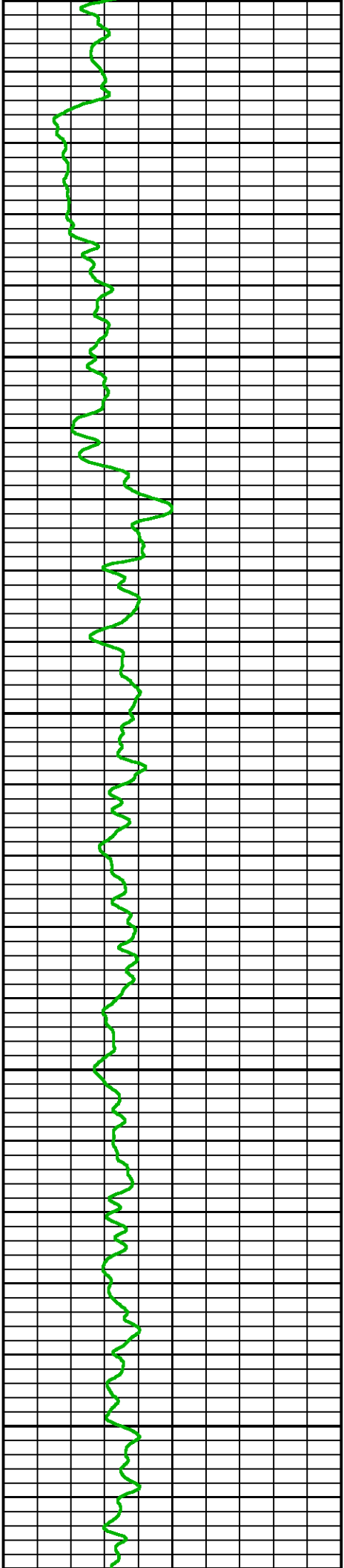
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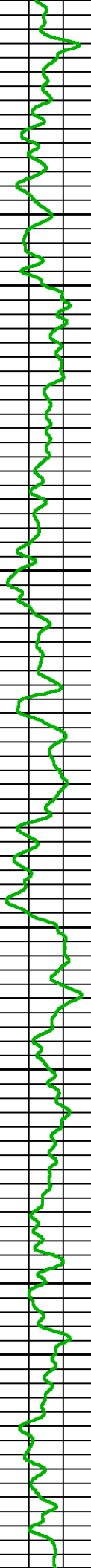




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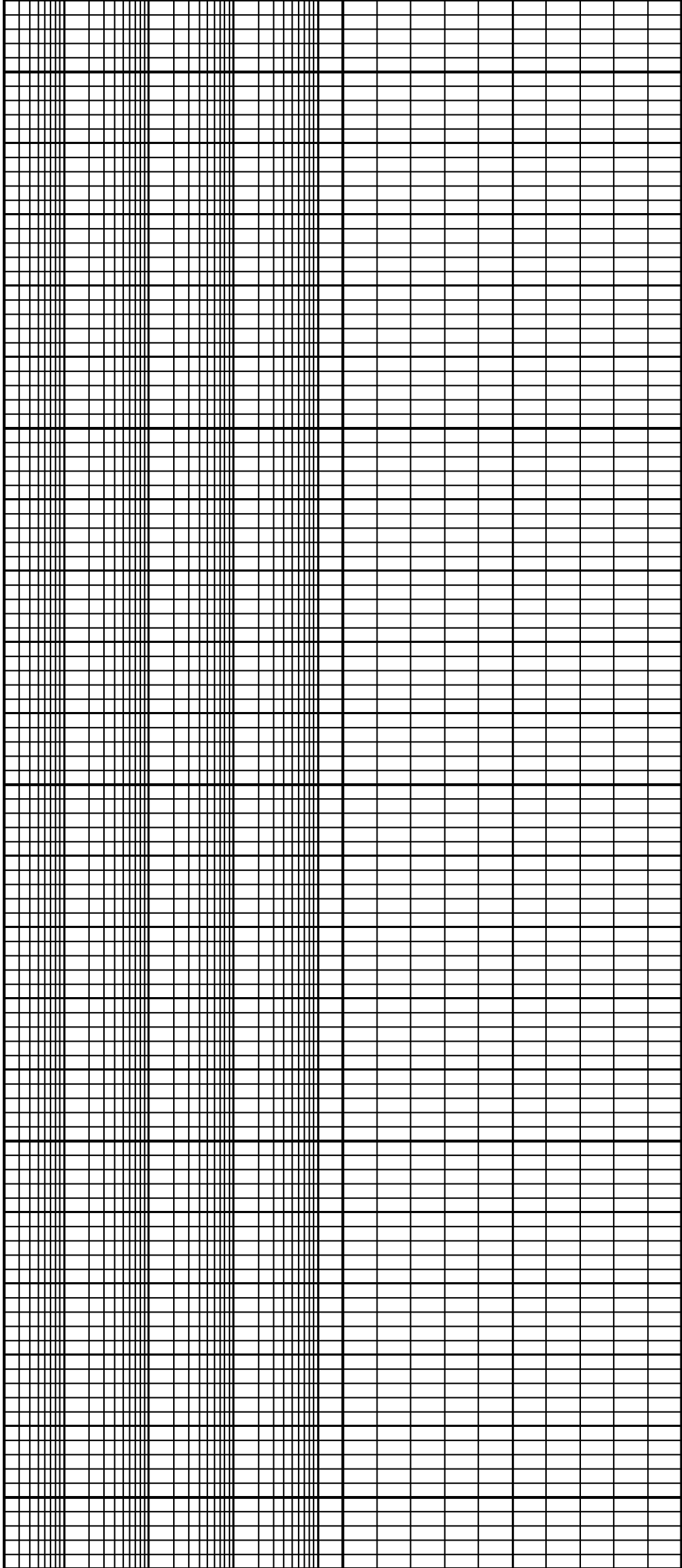
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500

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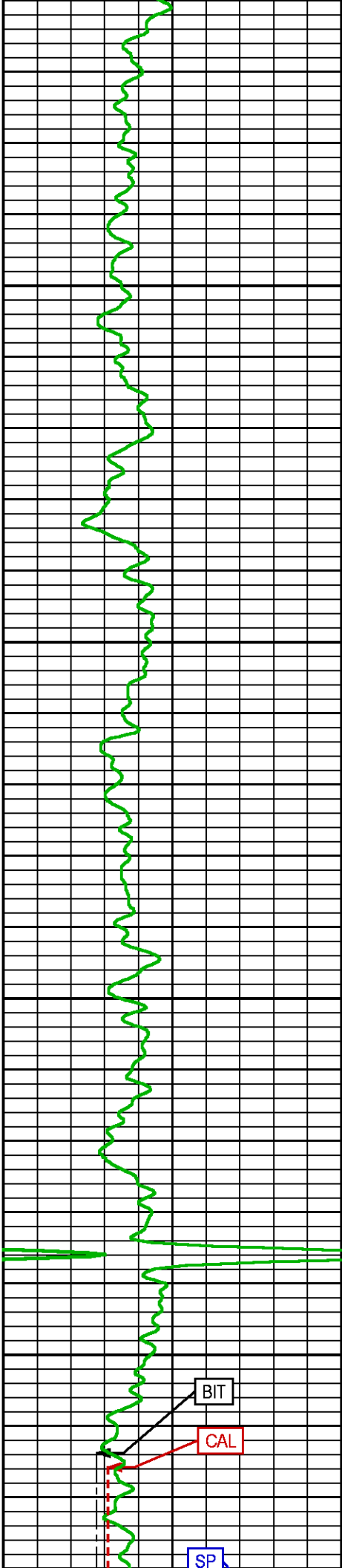


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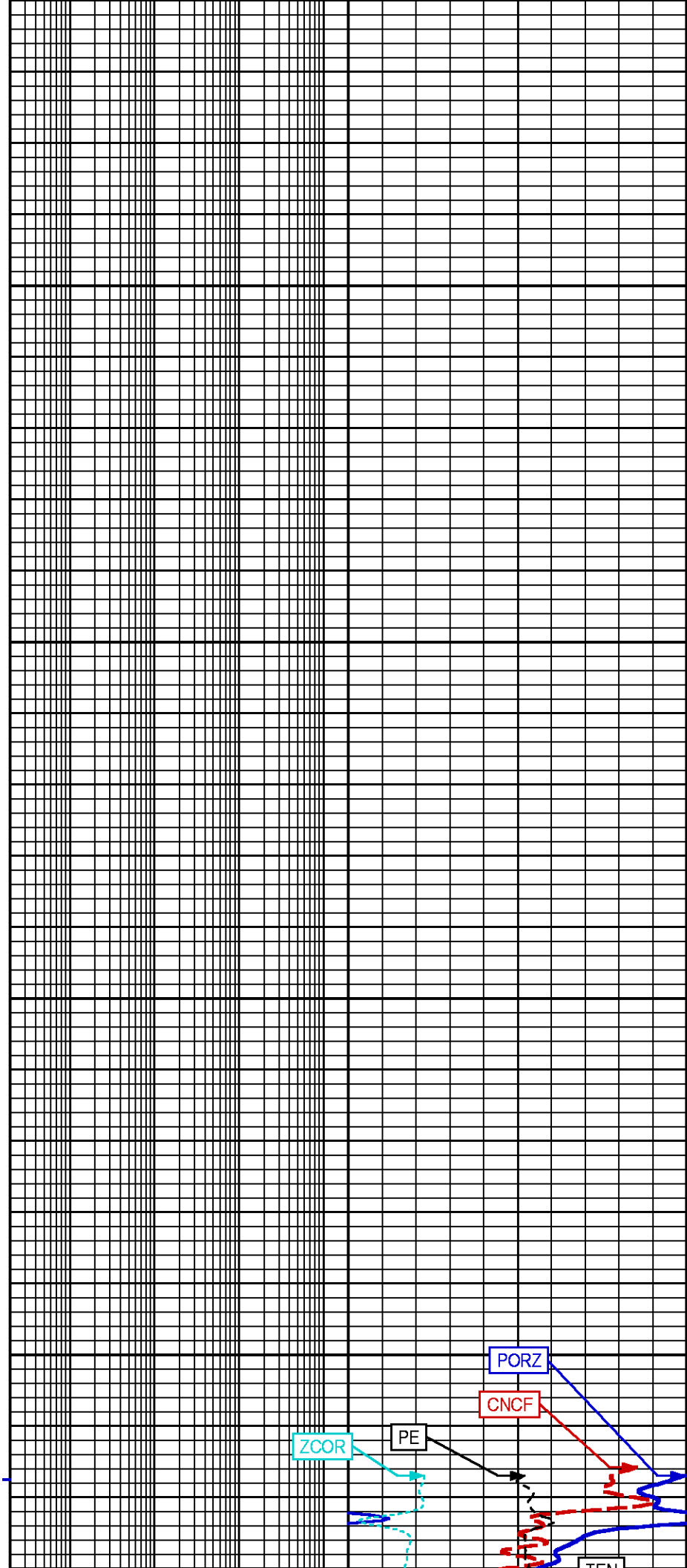
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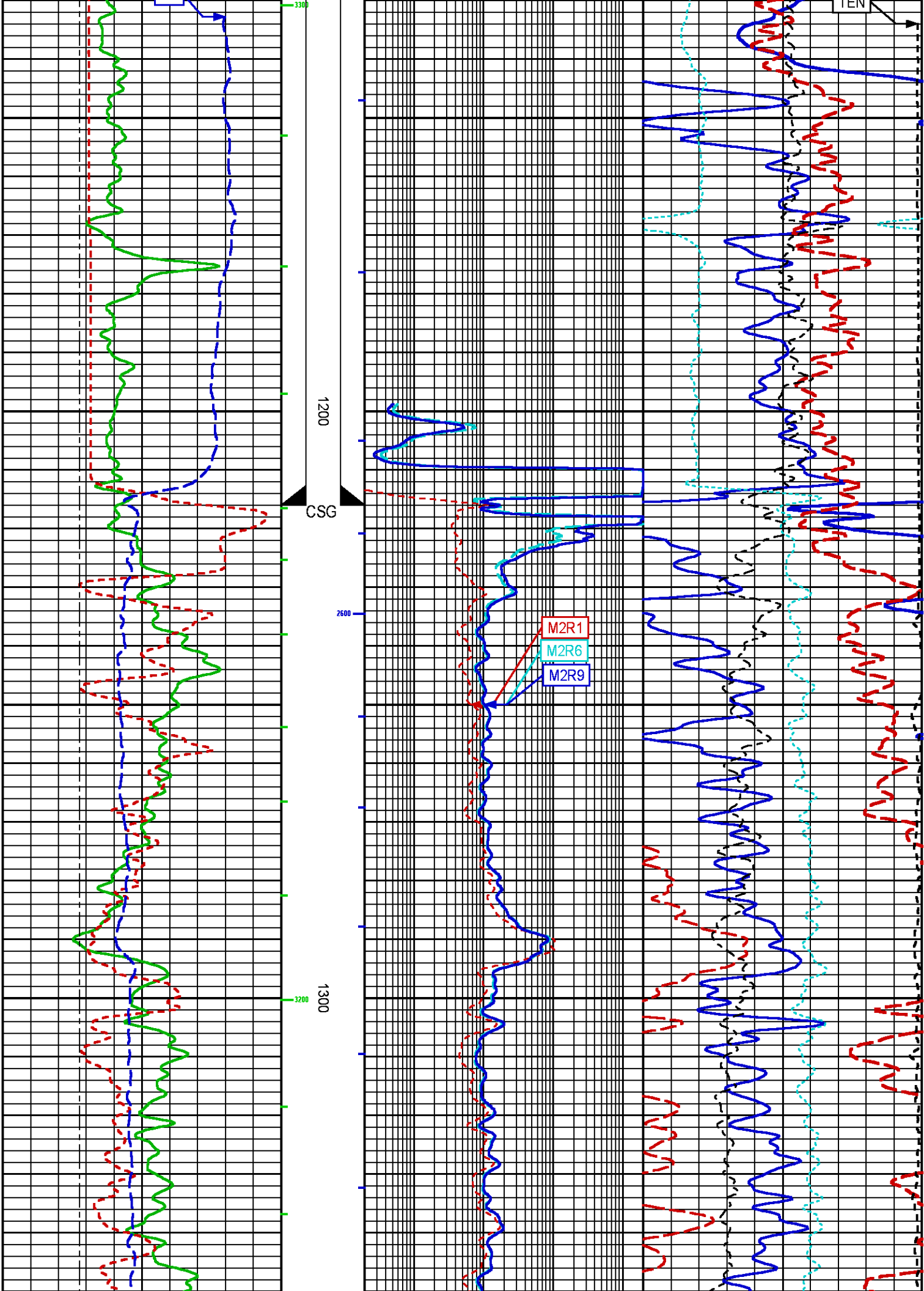


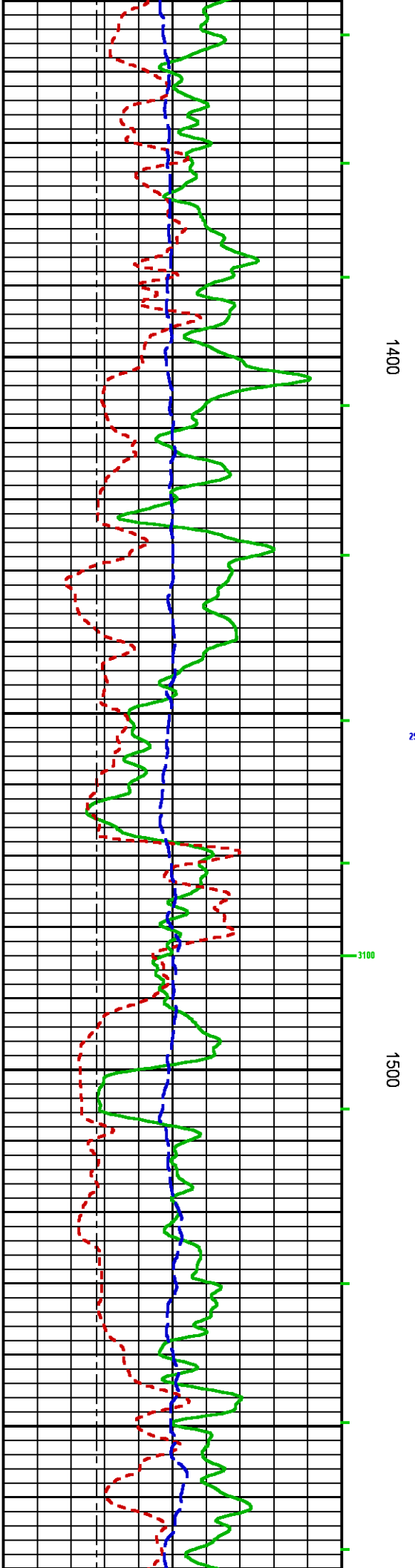
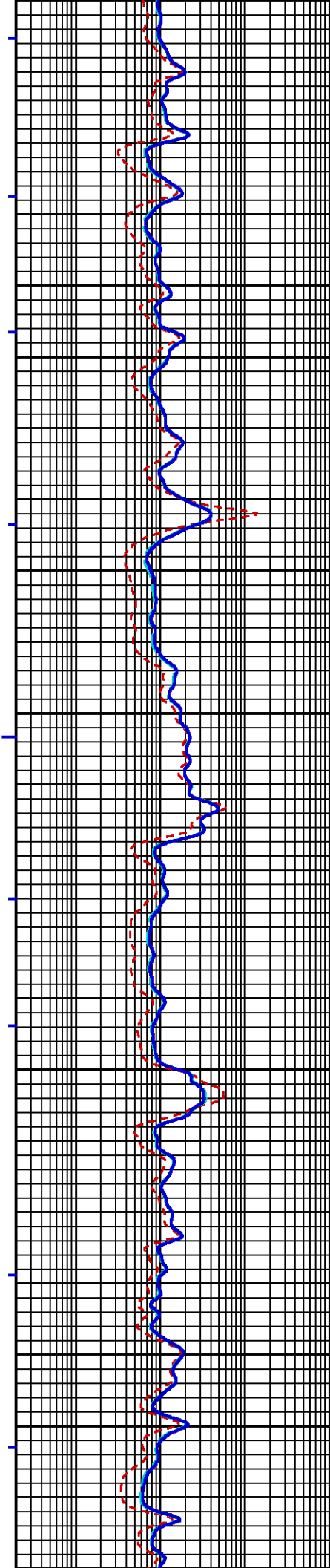
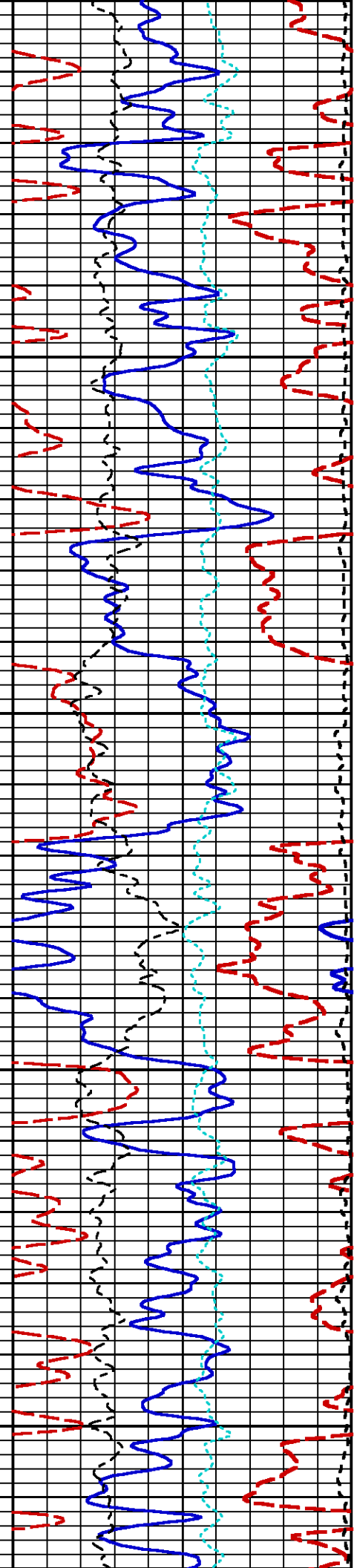
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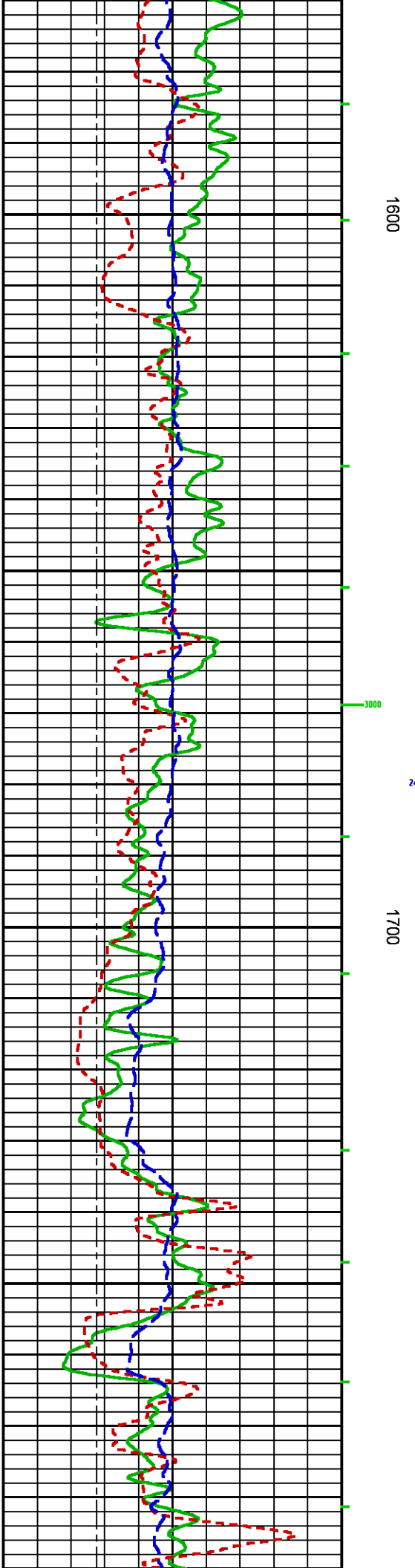
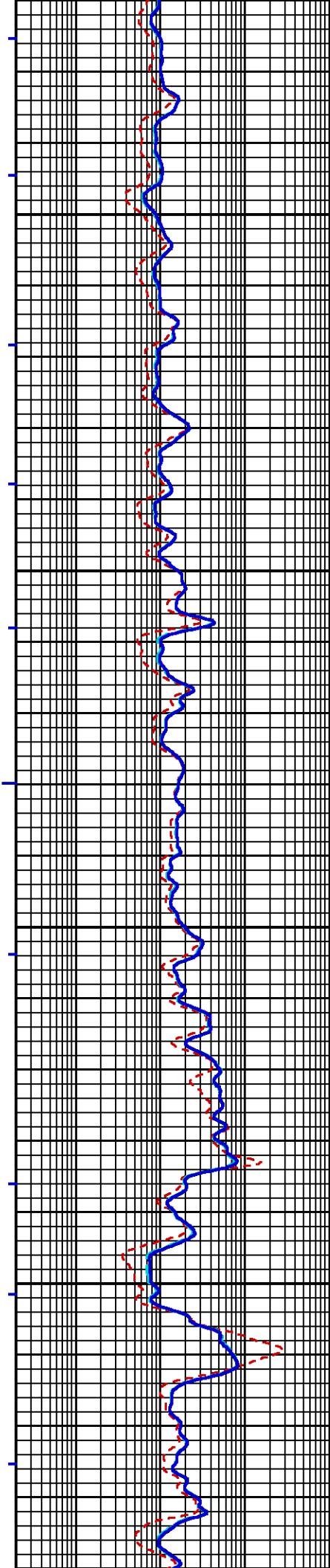
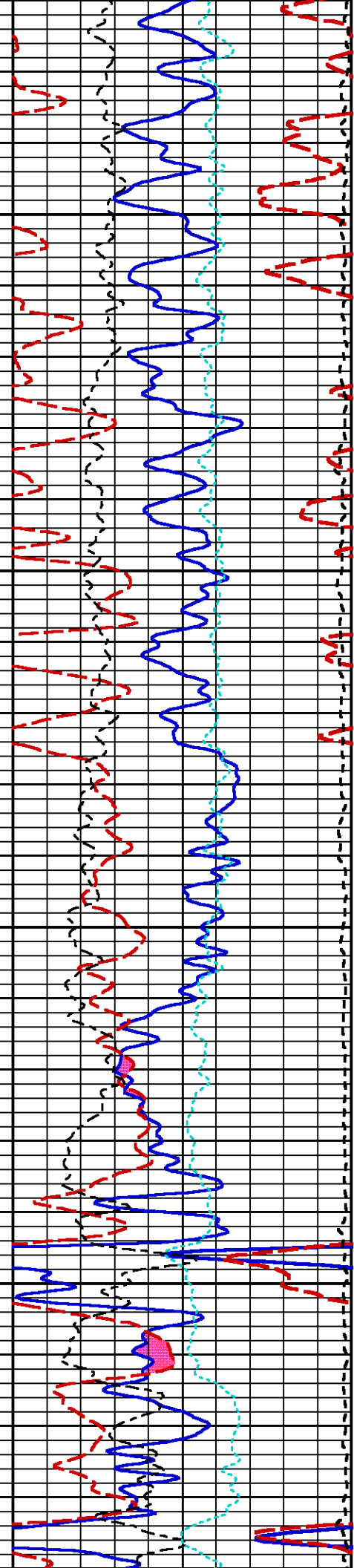
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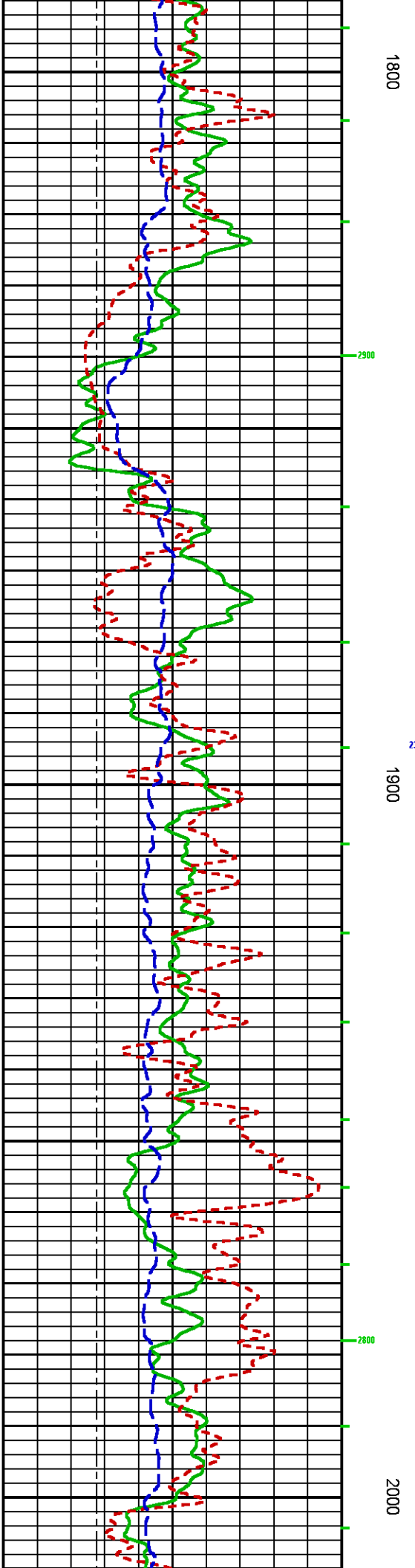
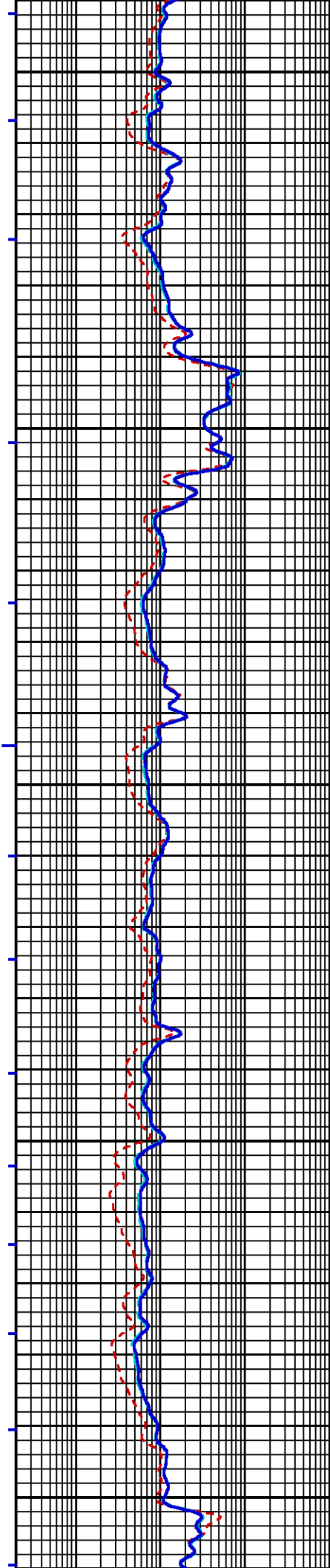
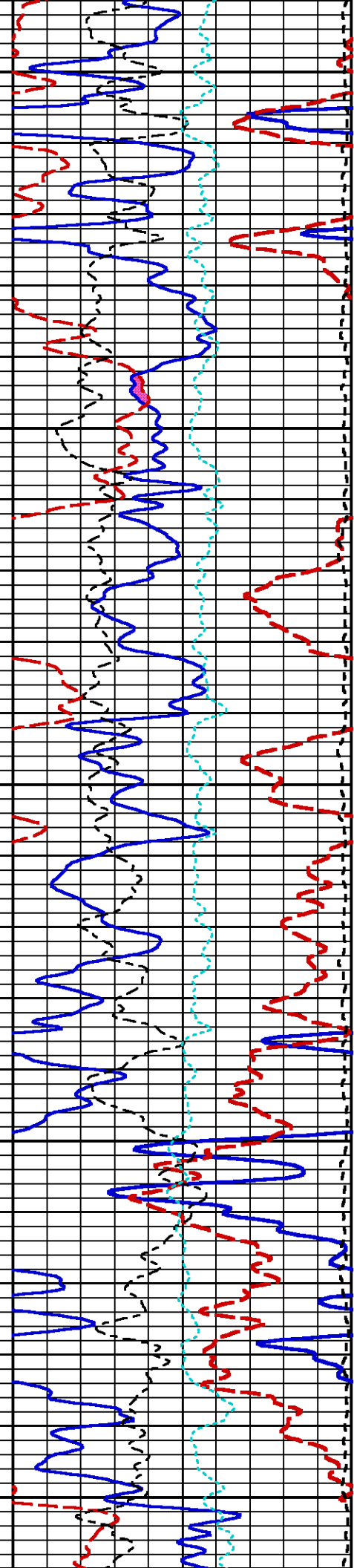


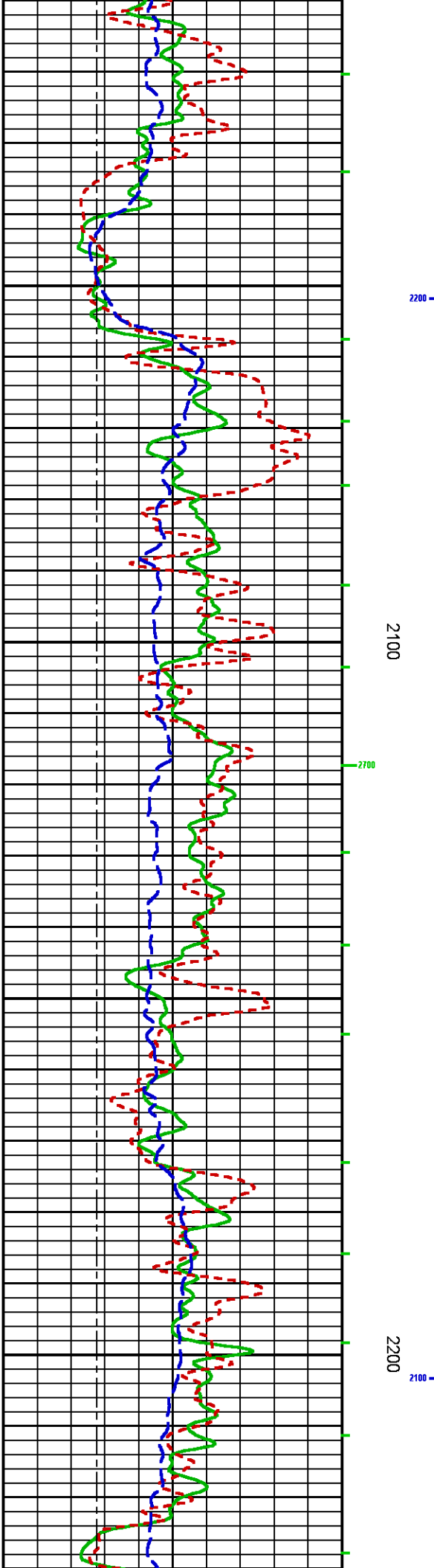
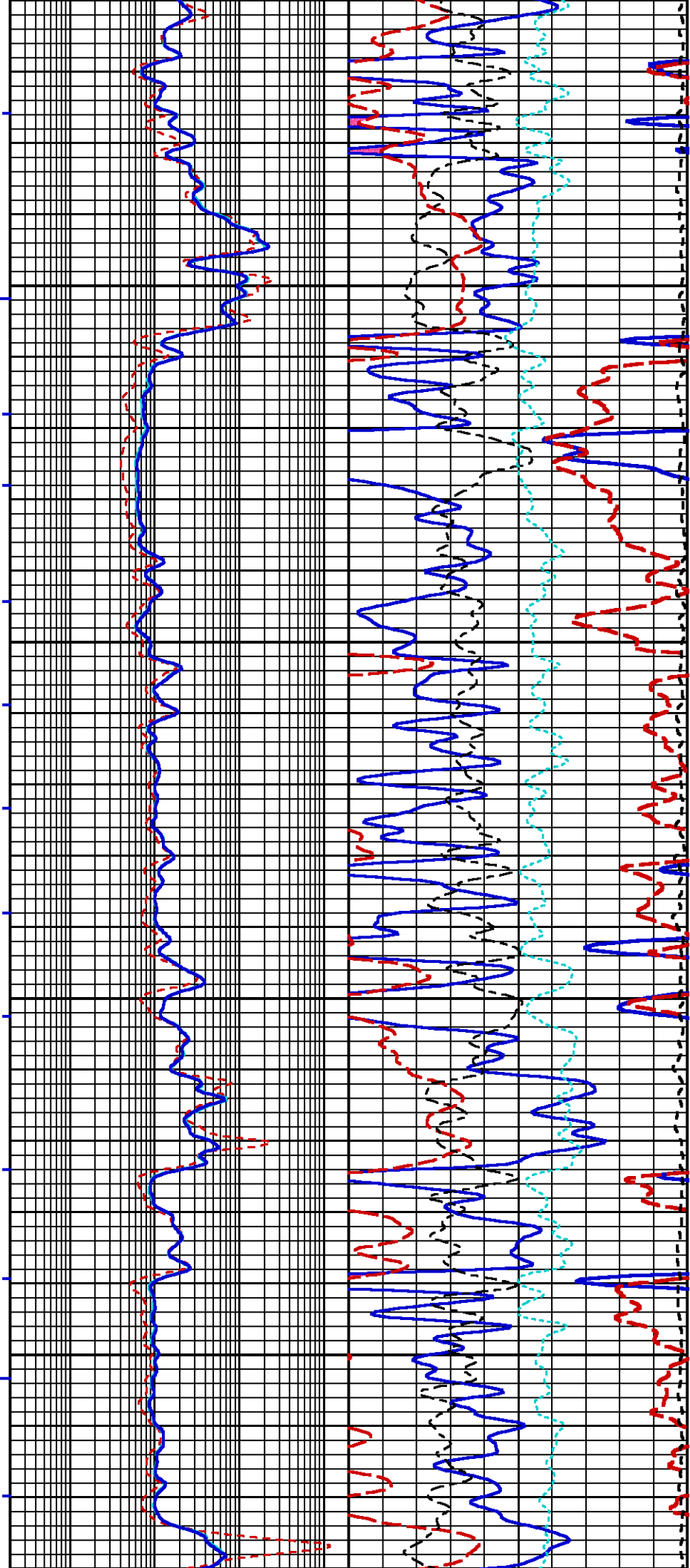
TEN

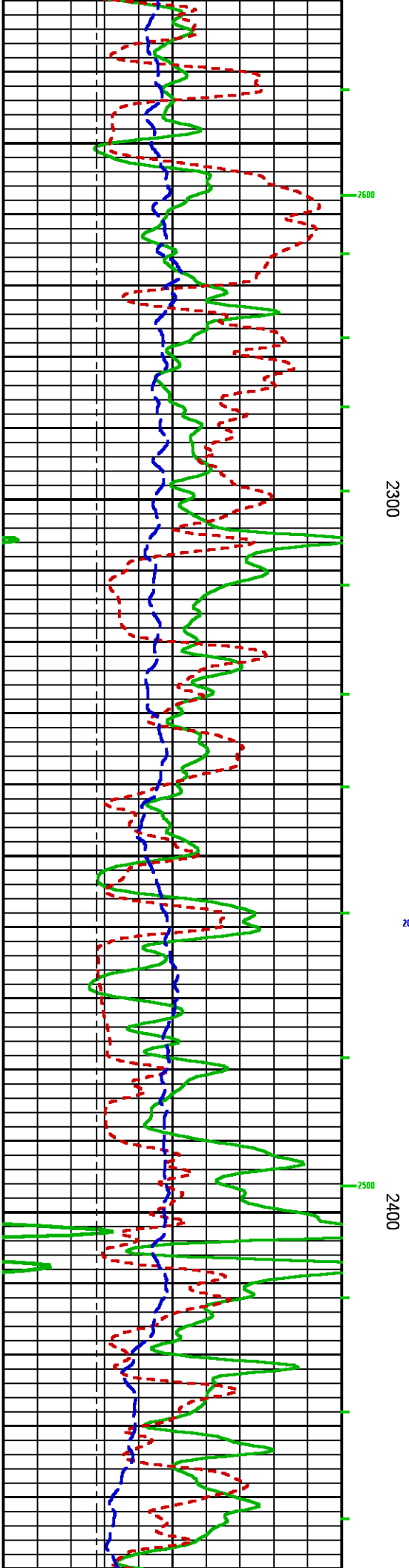
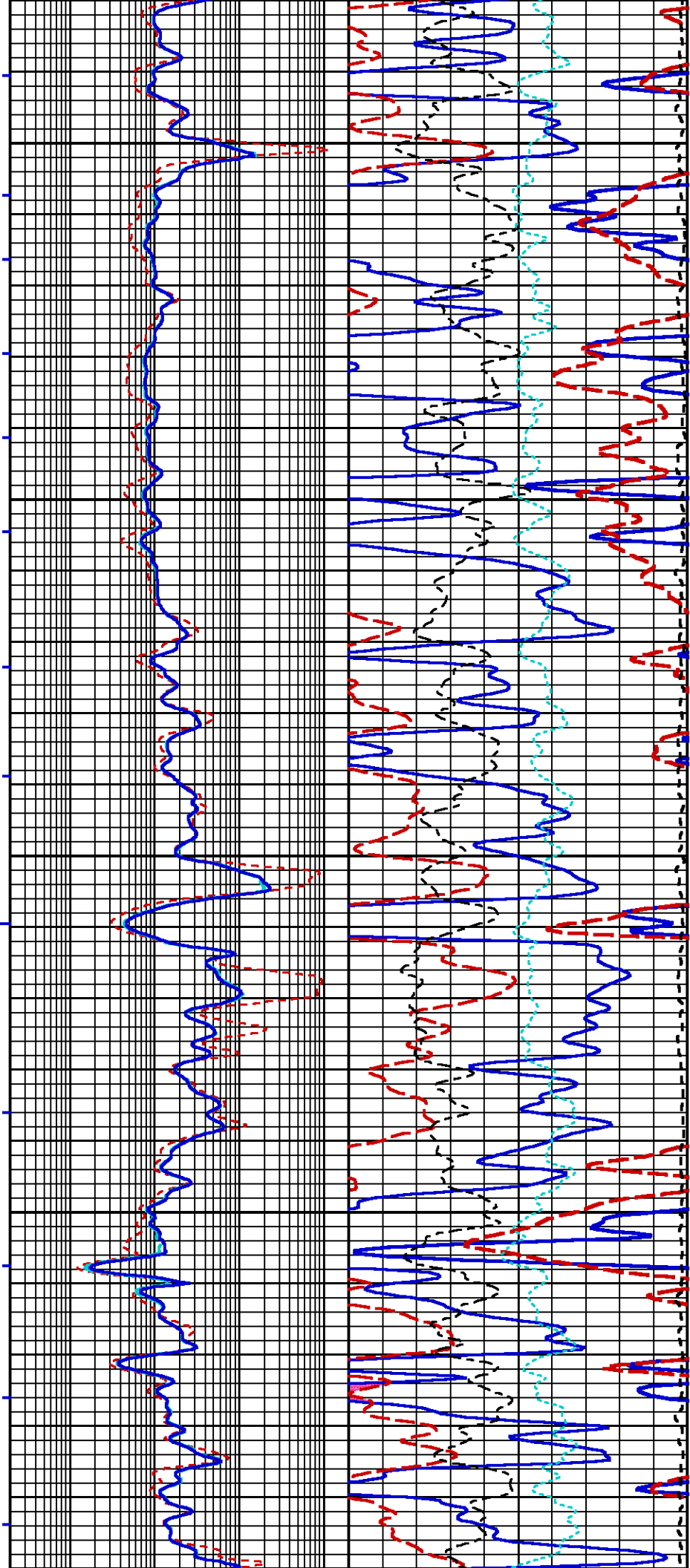


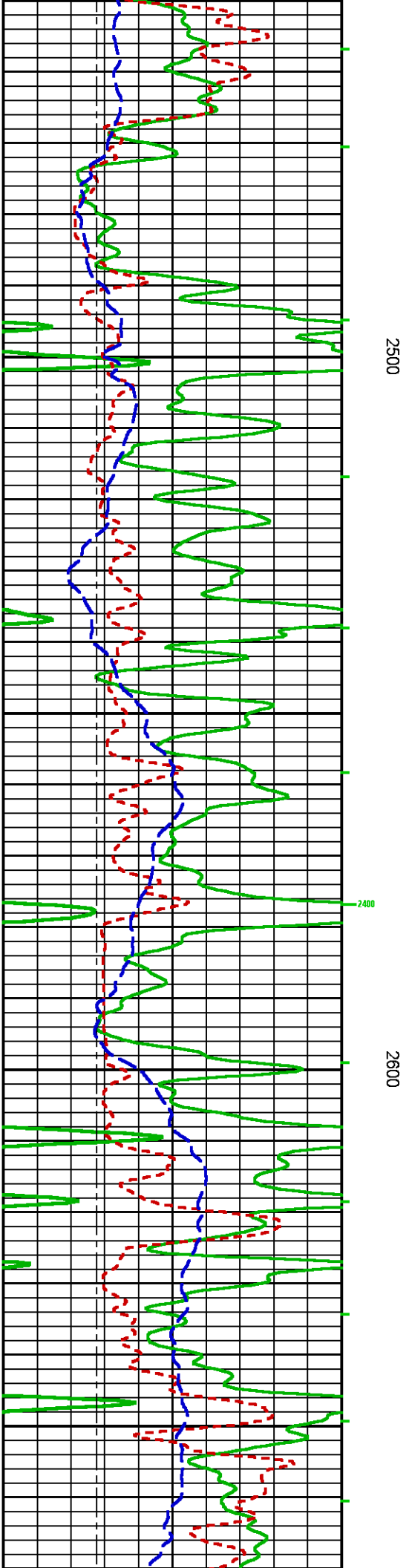
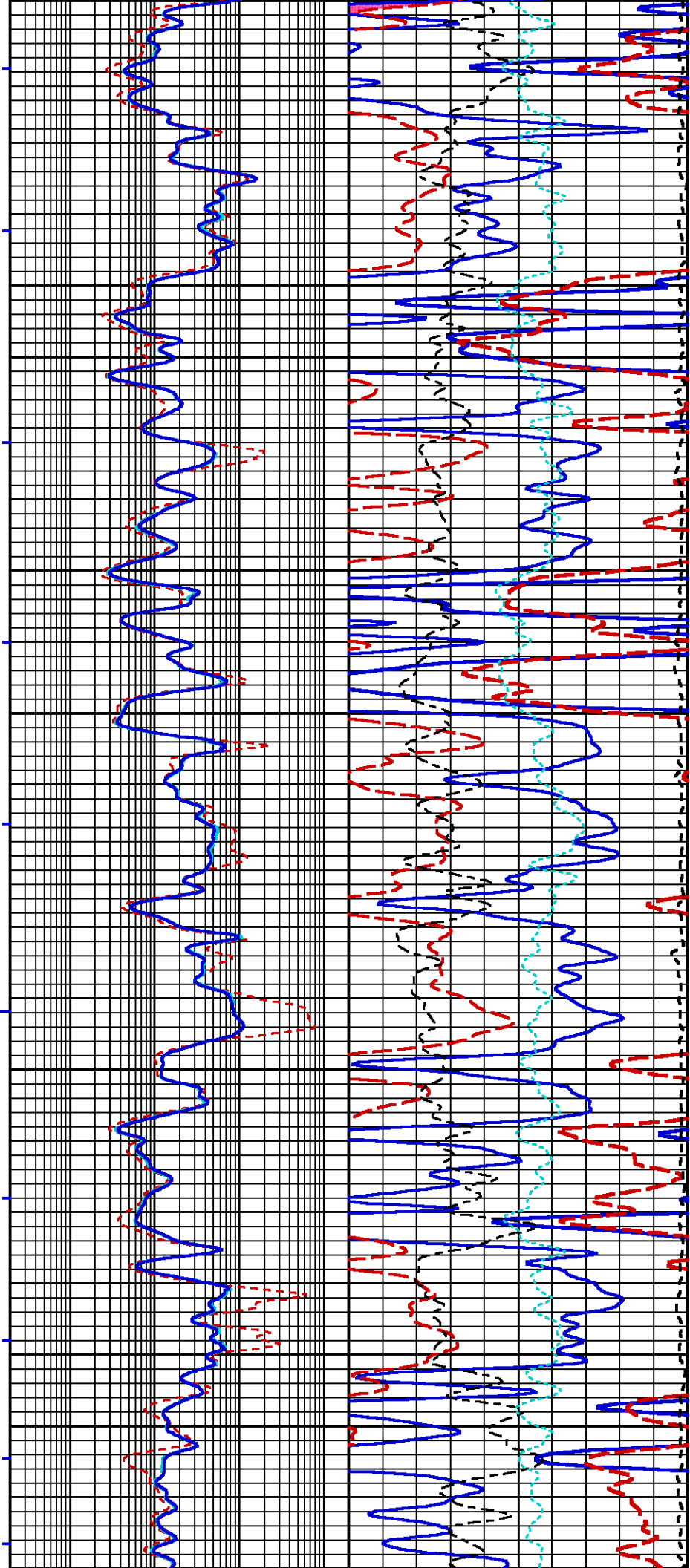


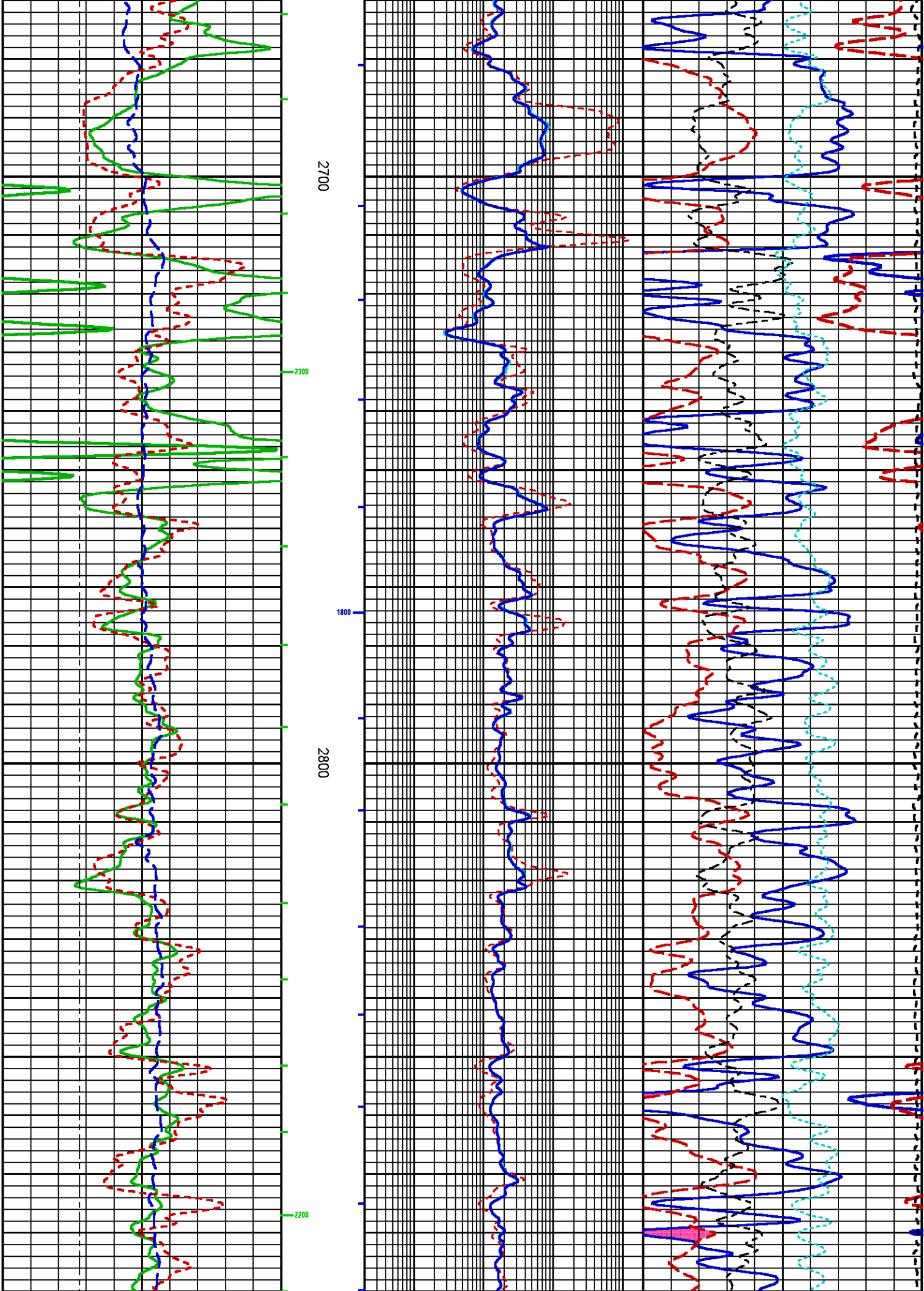


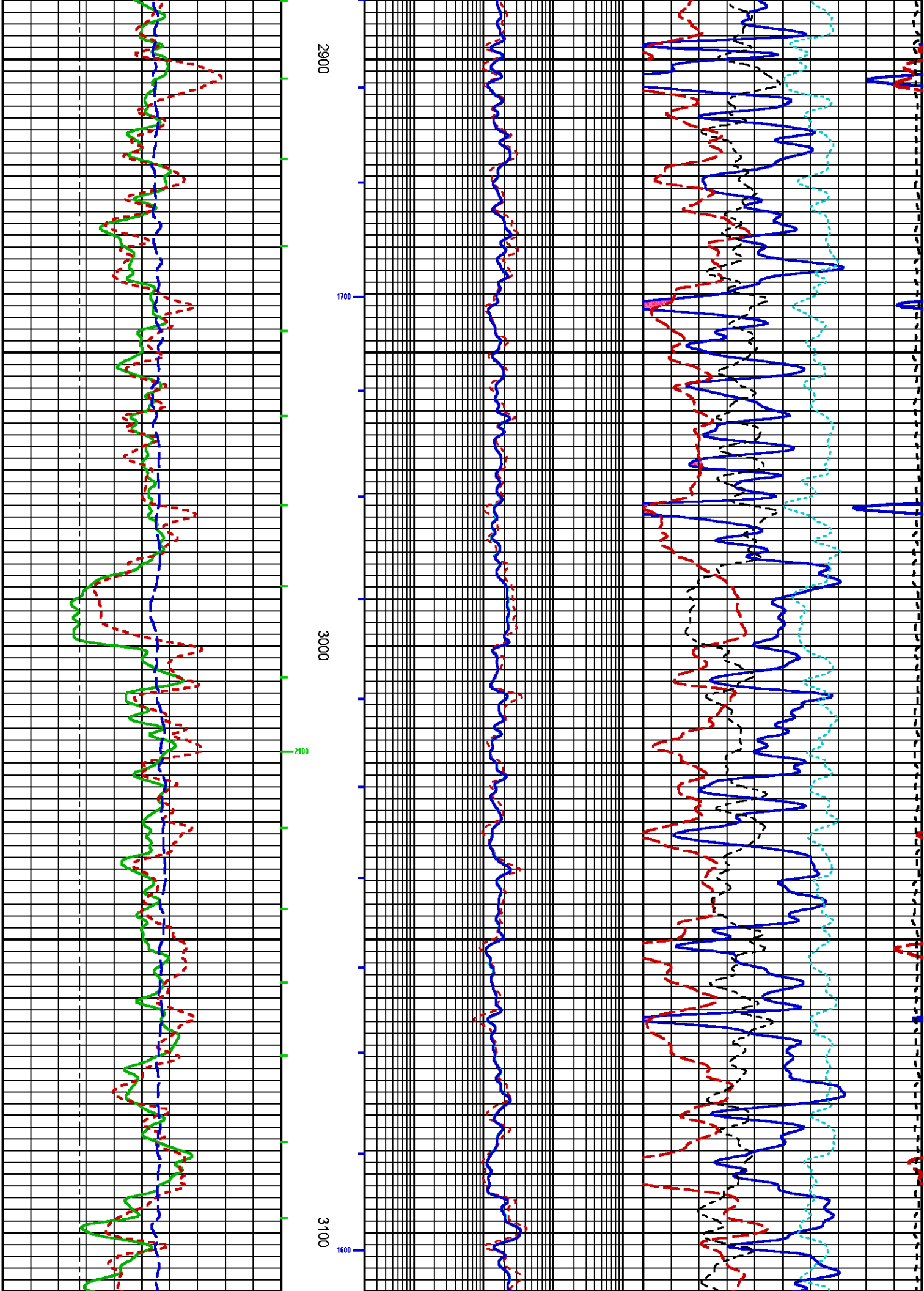


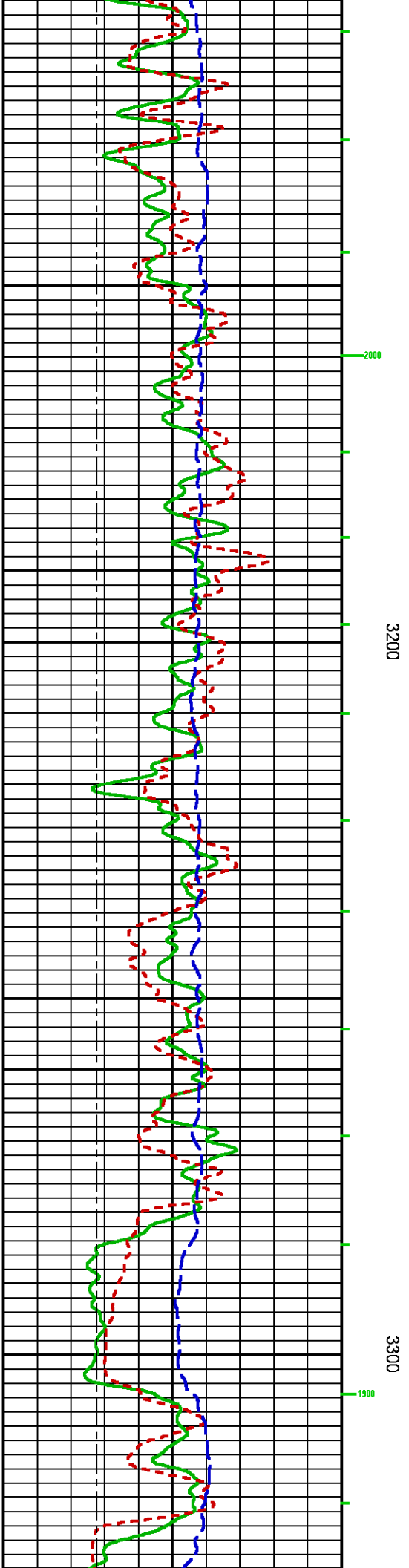
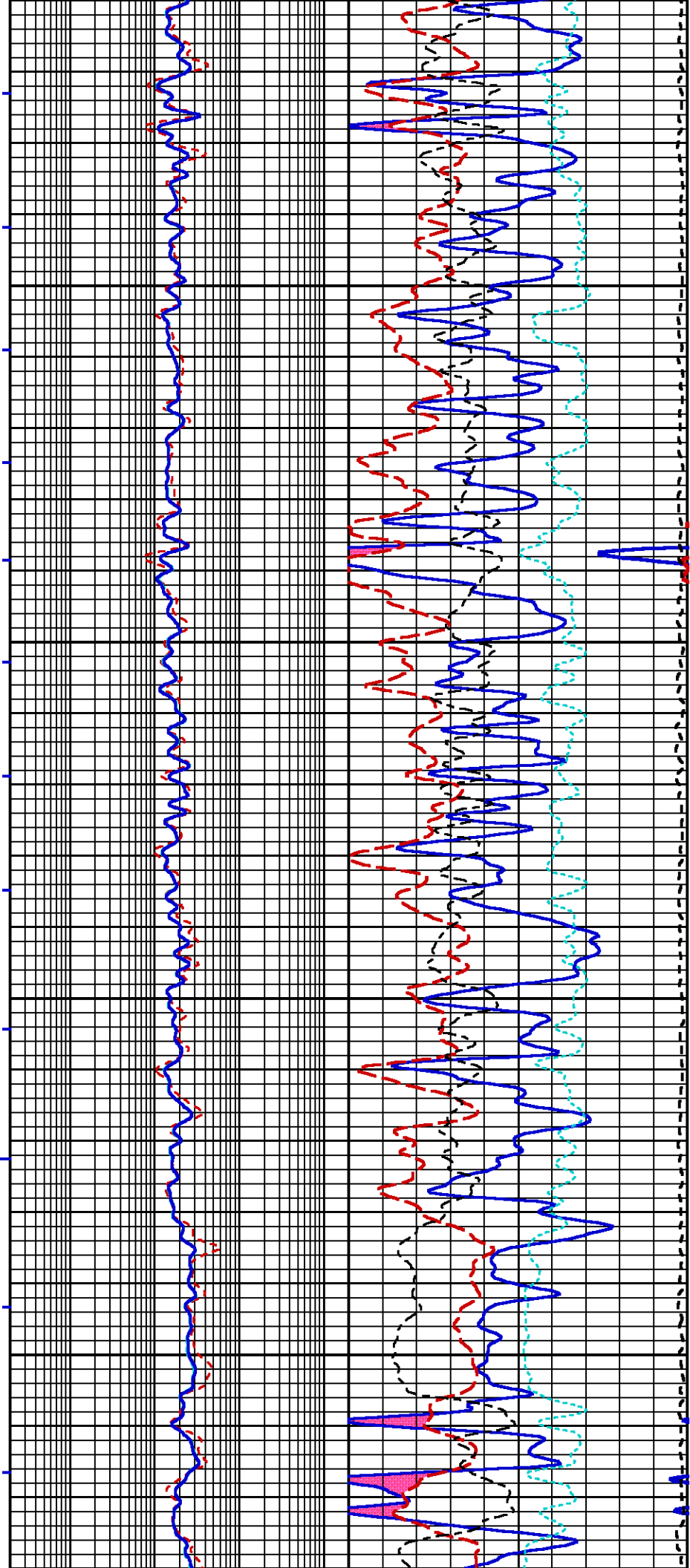


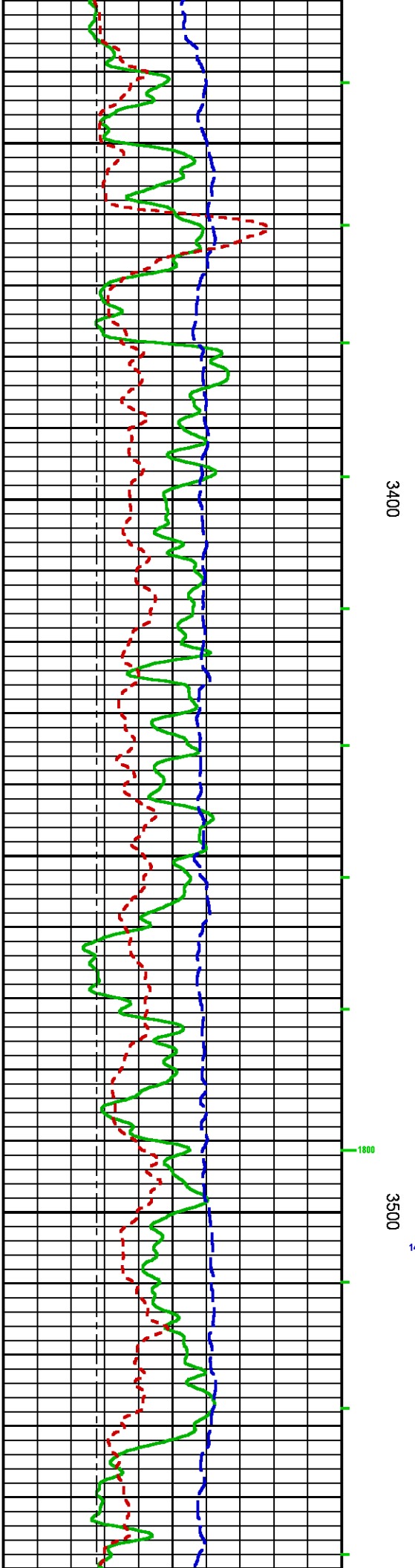
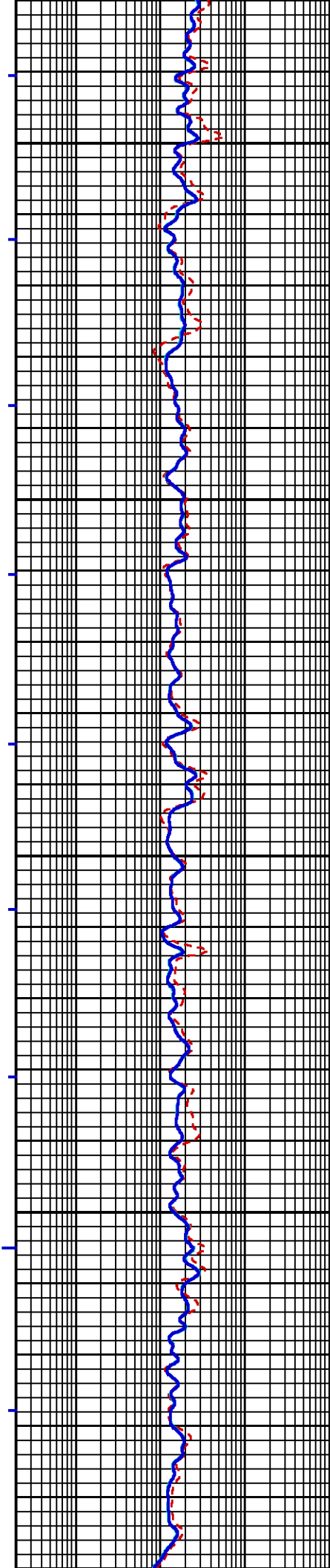
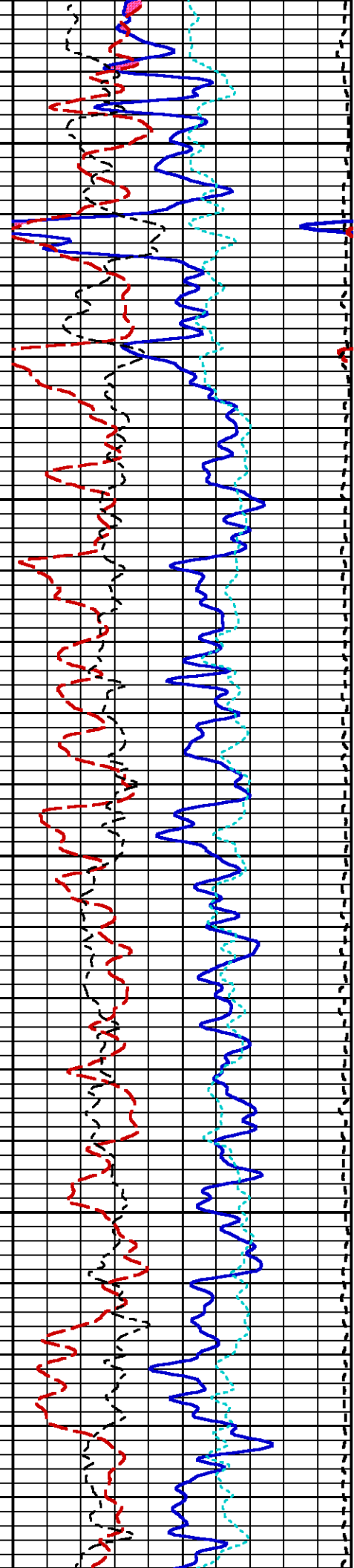


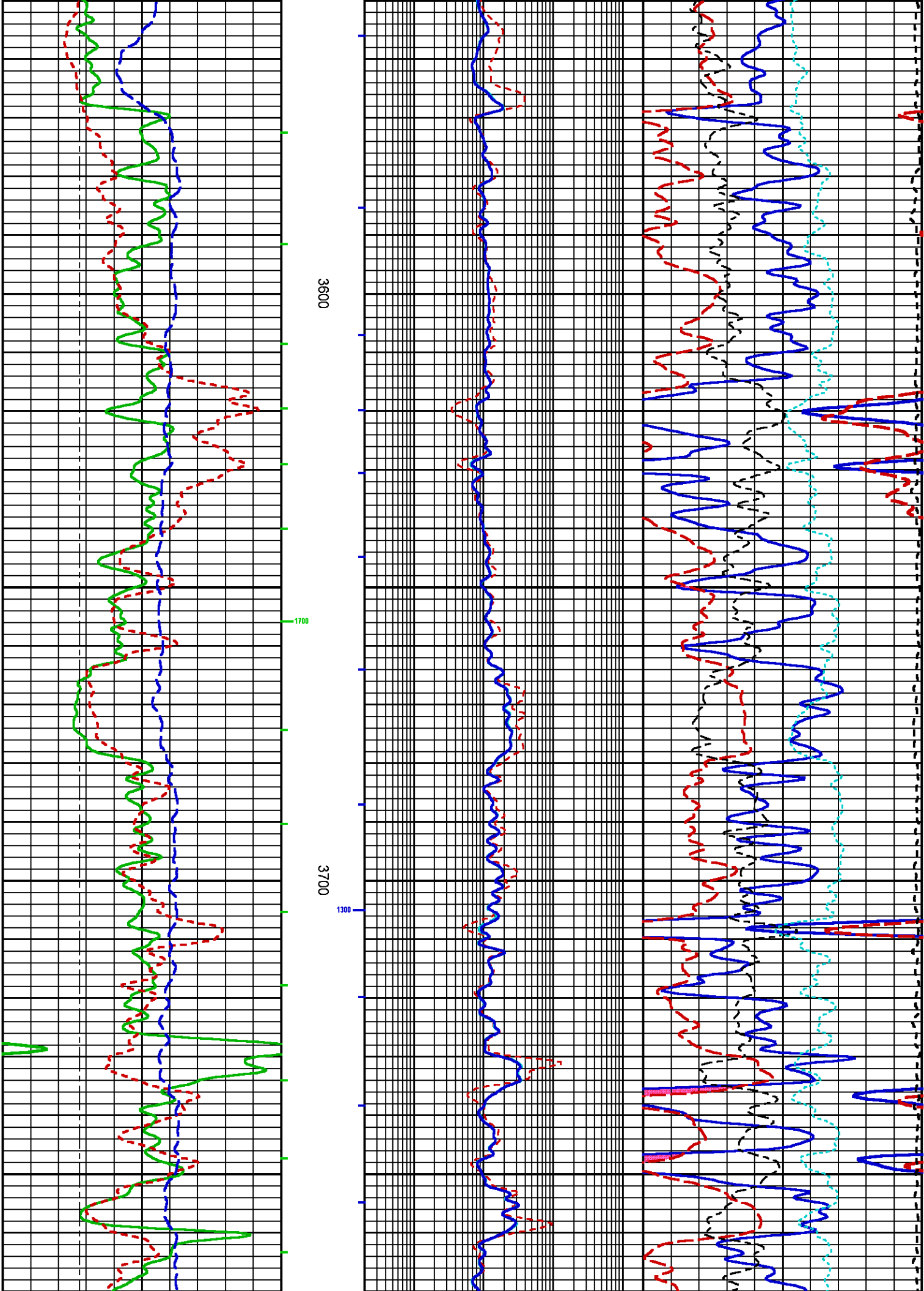


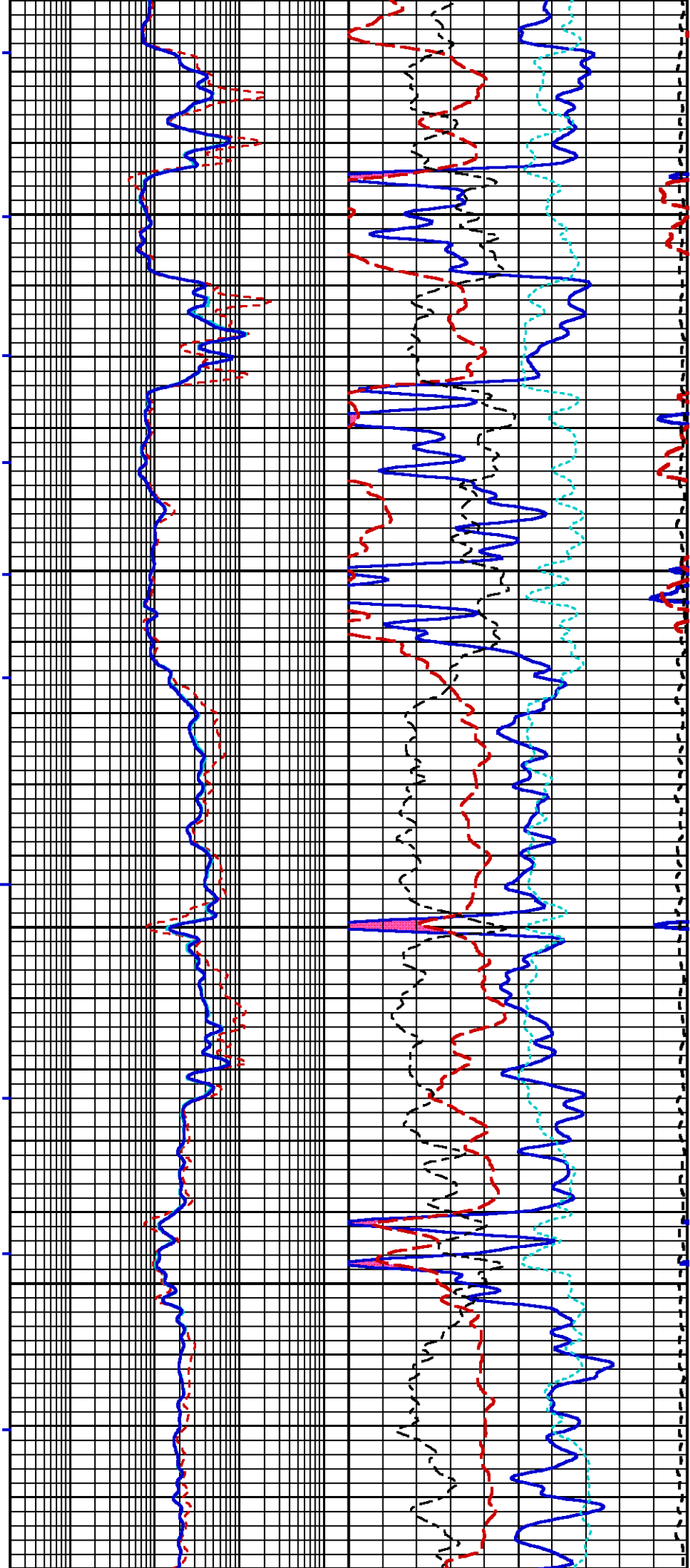










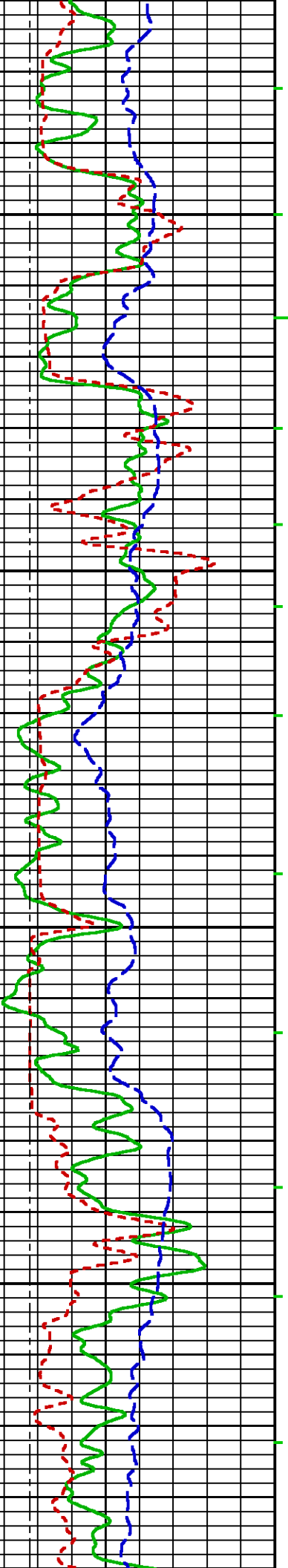


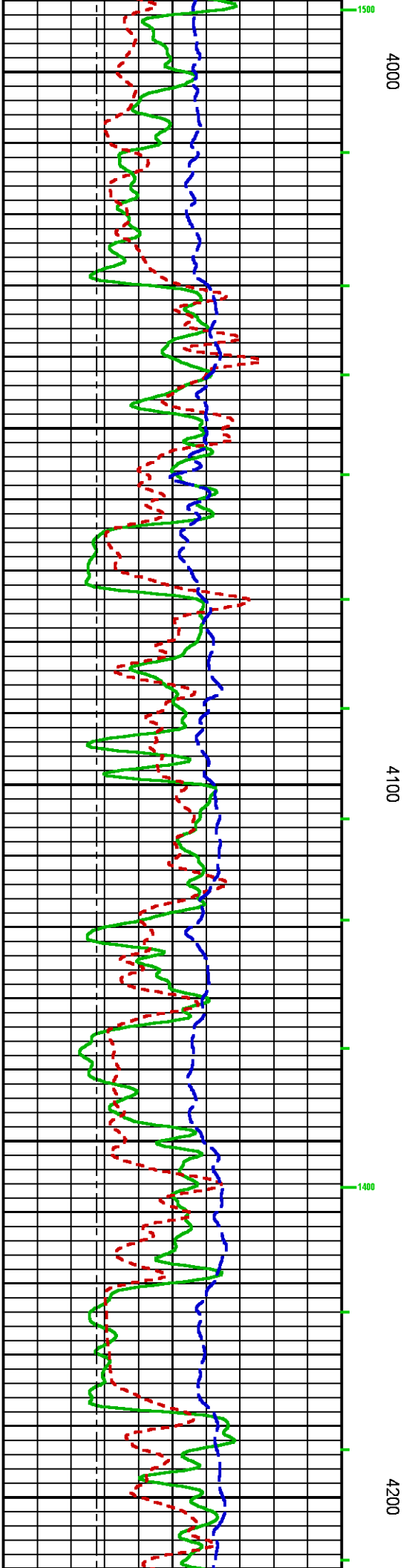
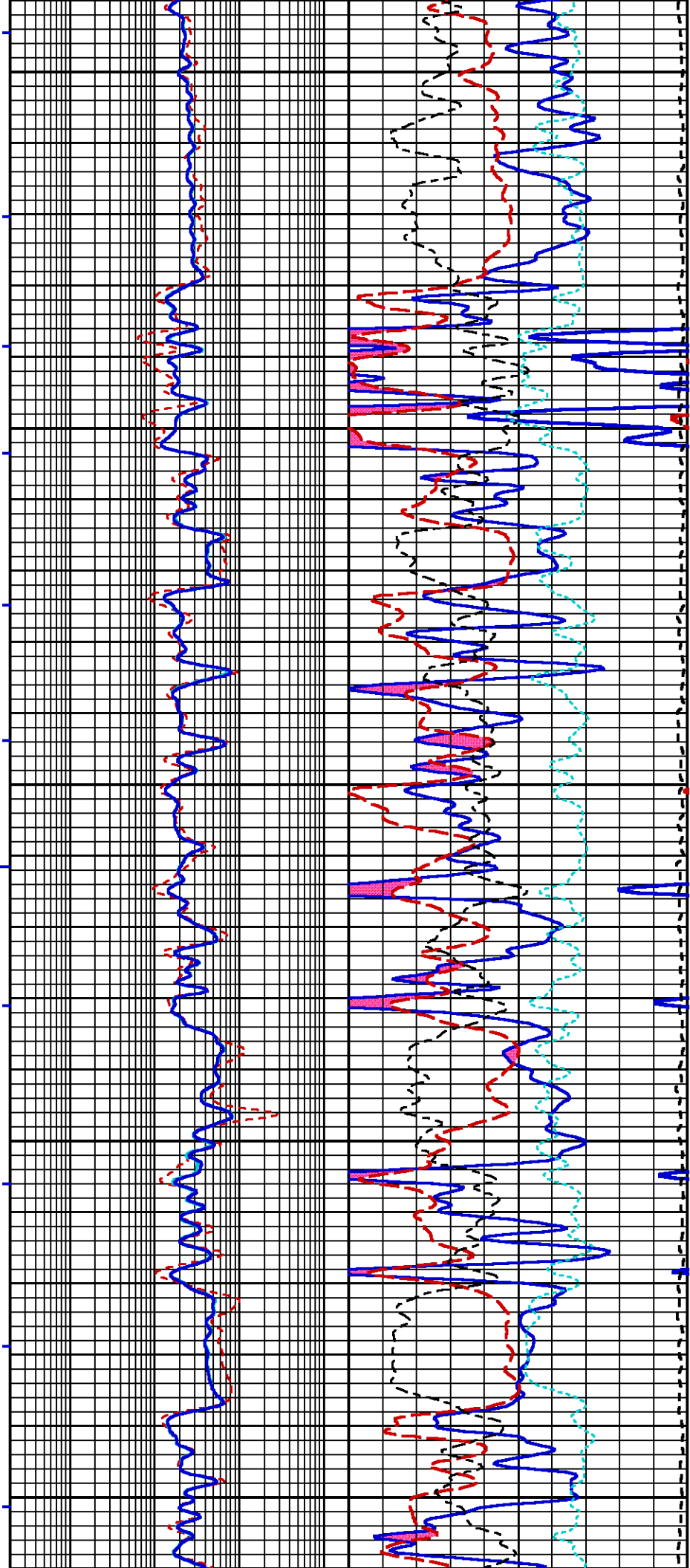
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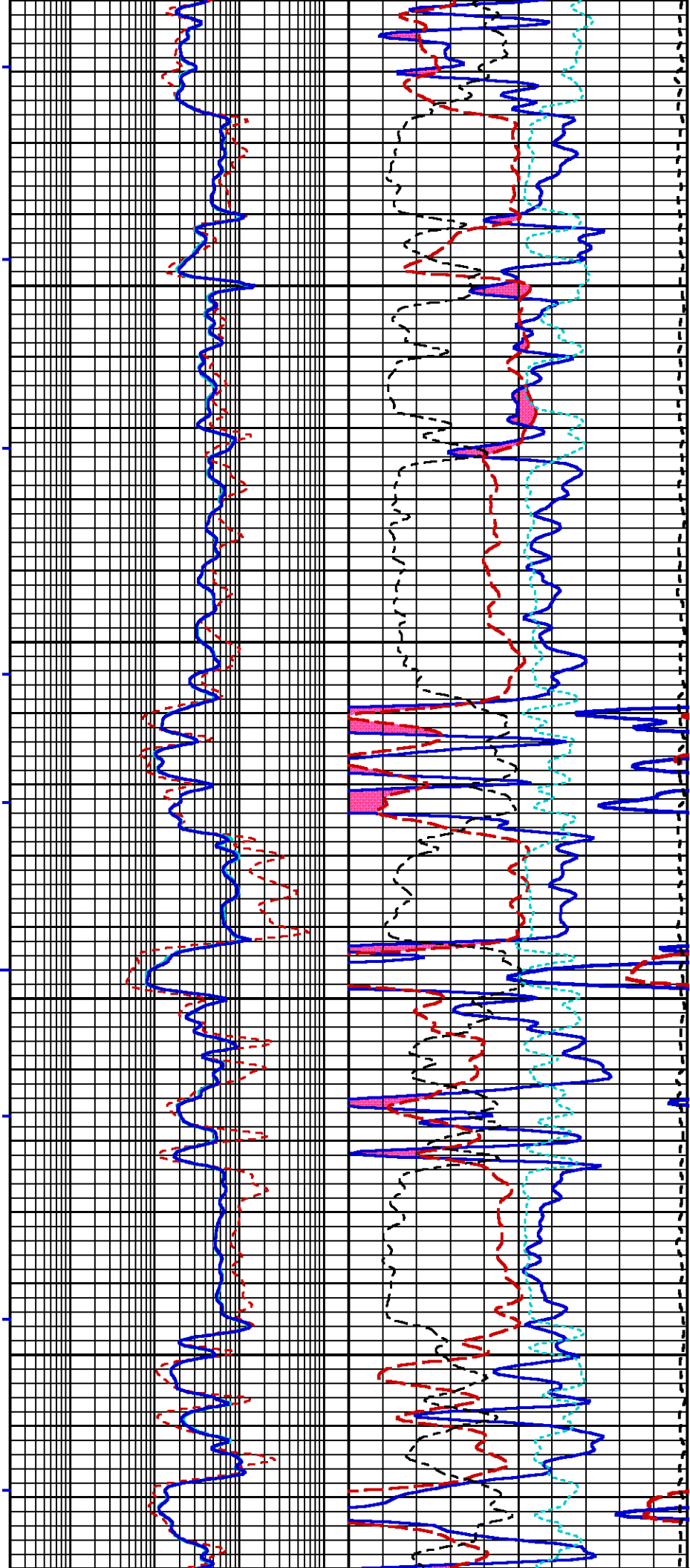
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1200

3900





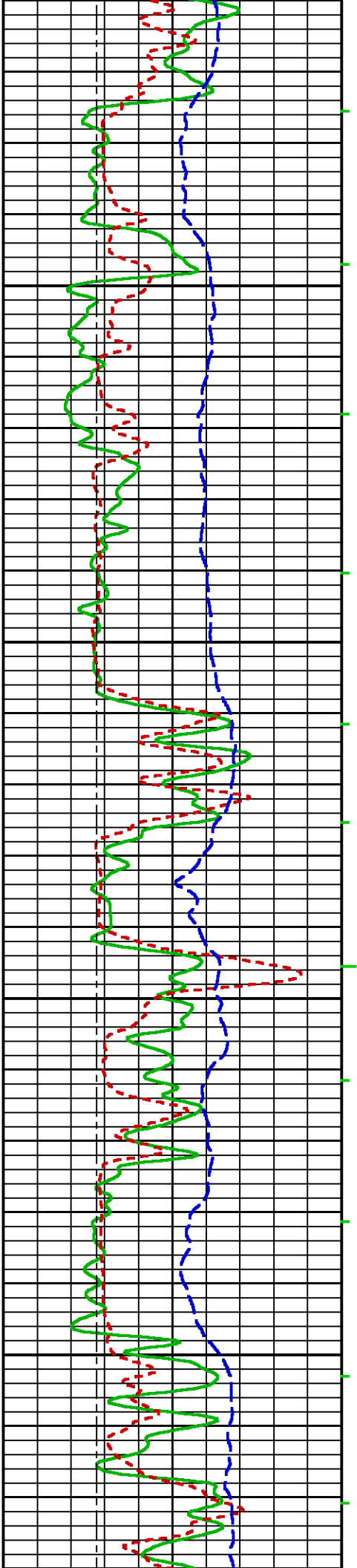


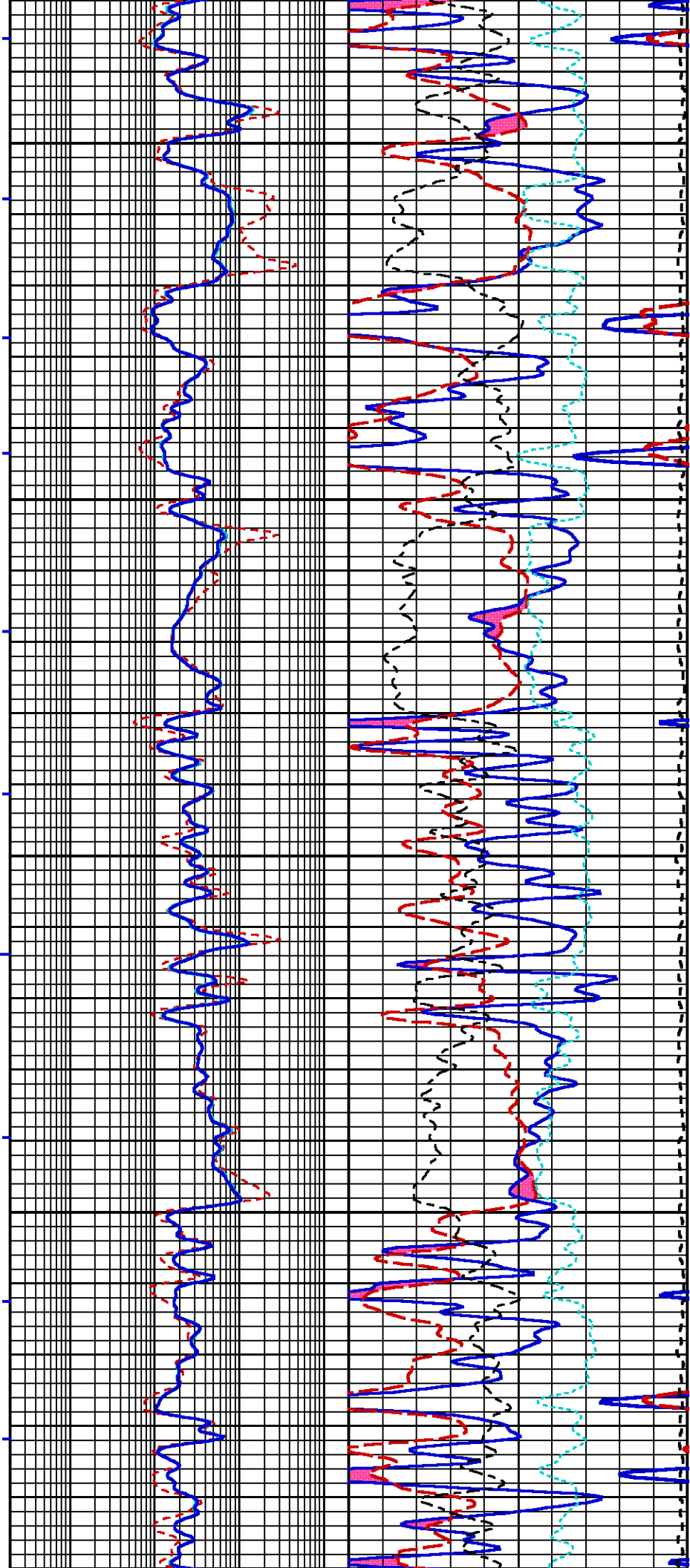
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1000

4400

1300



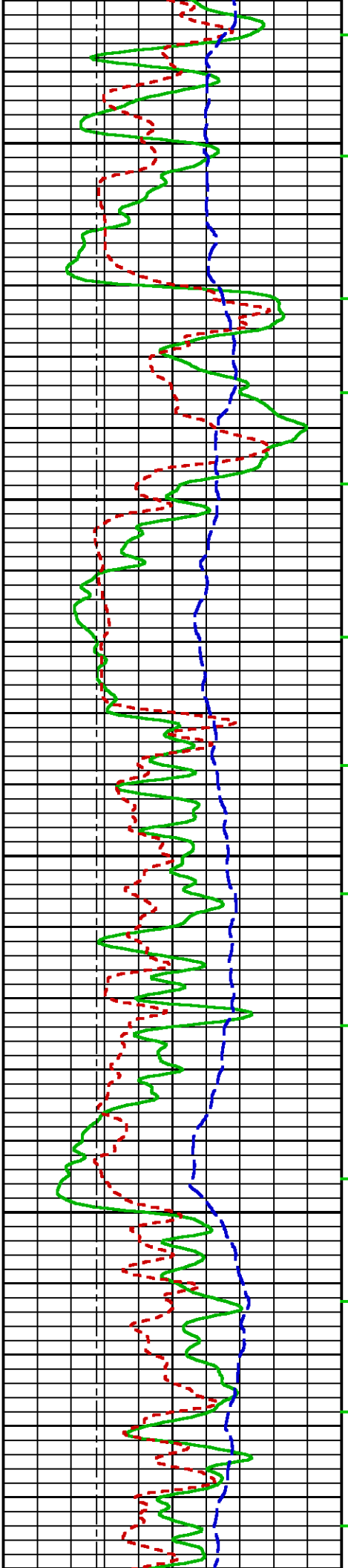


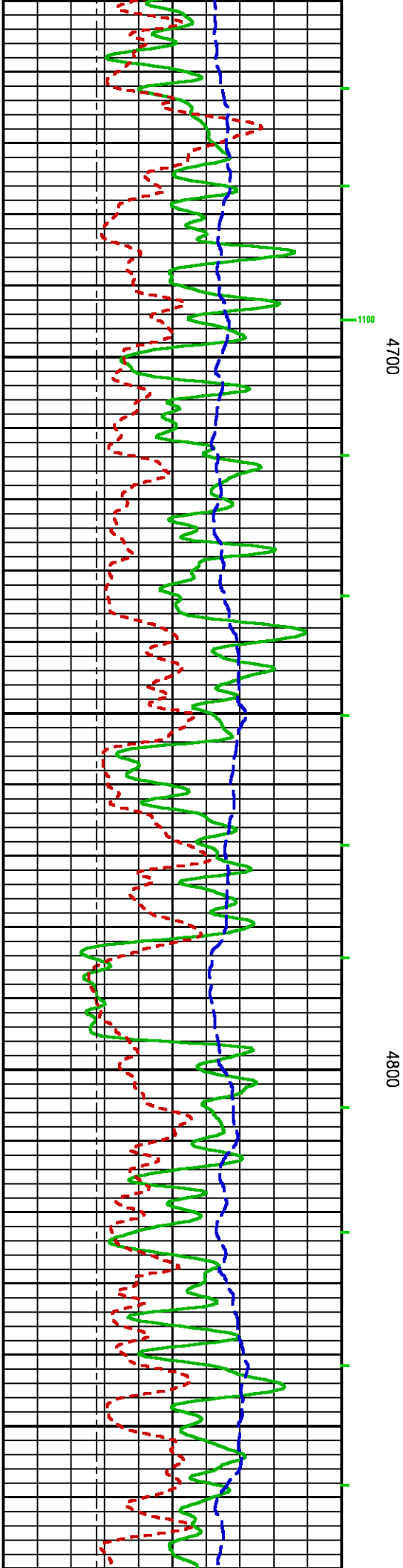
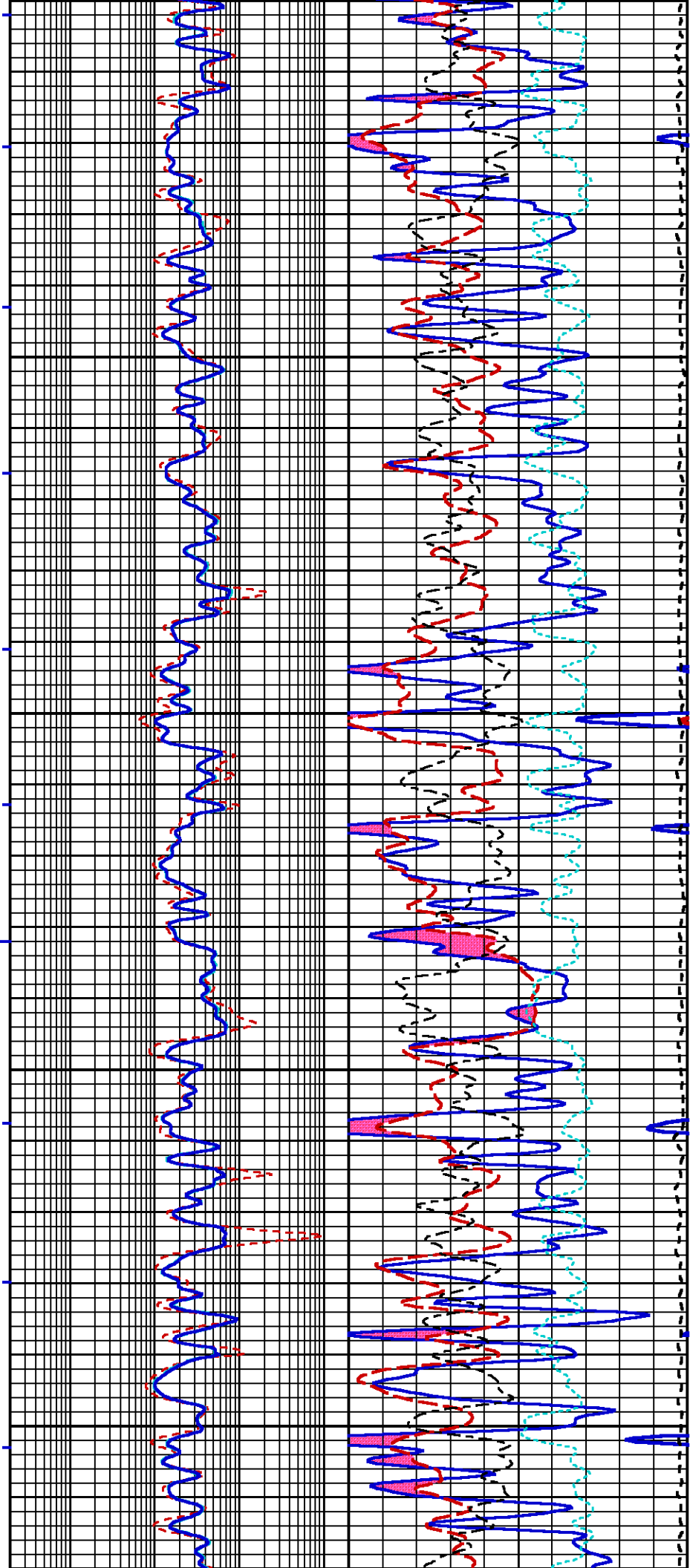
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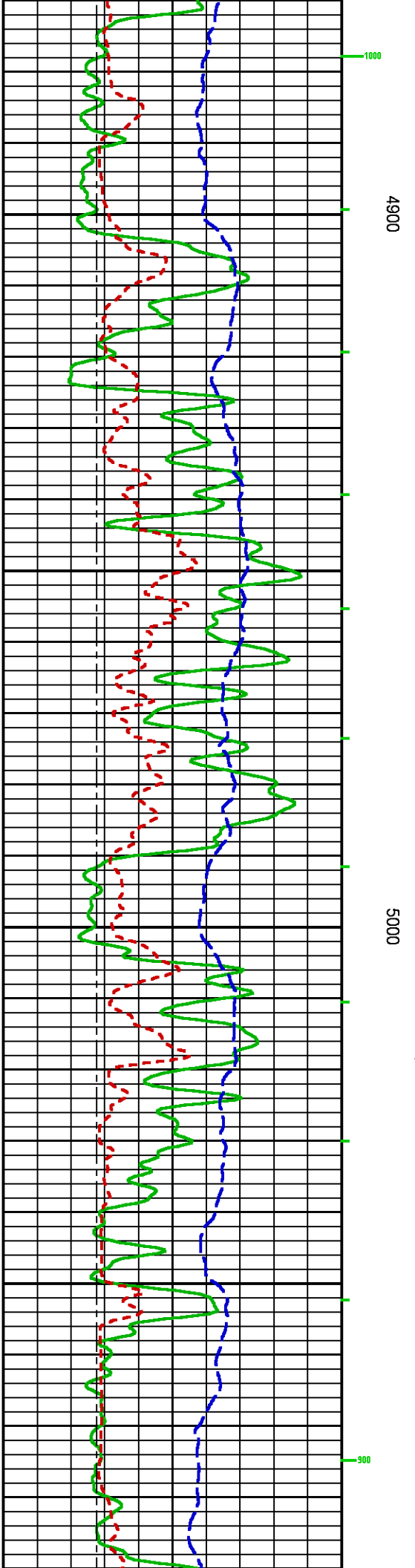
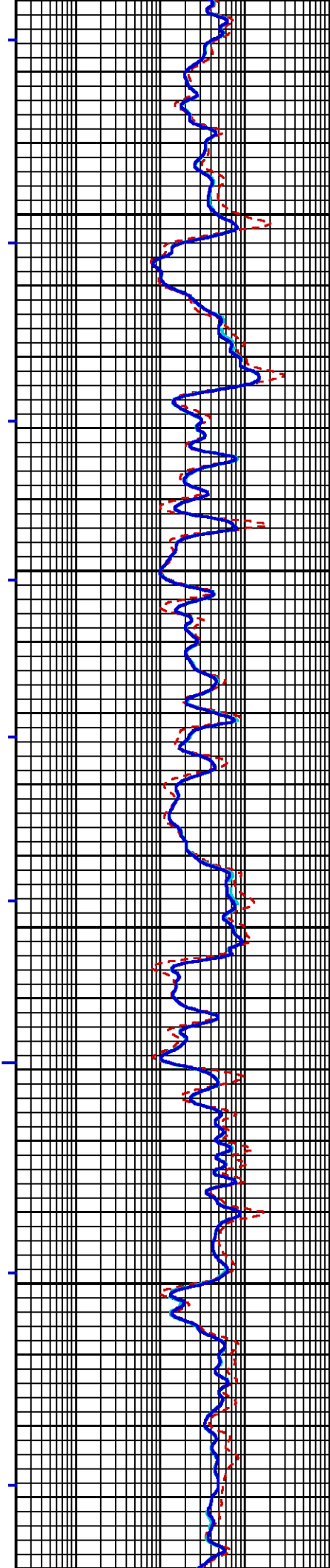
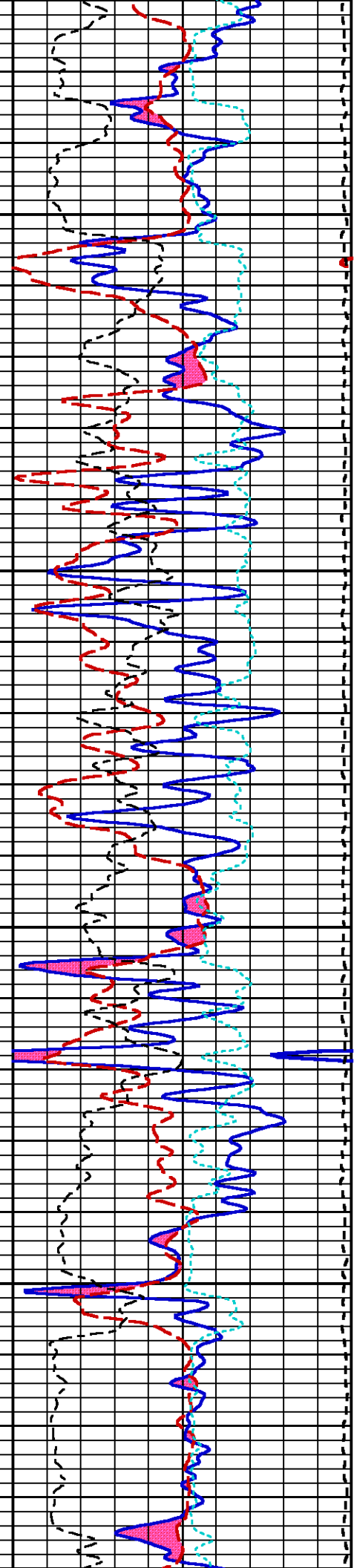
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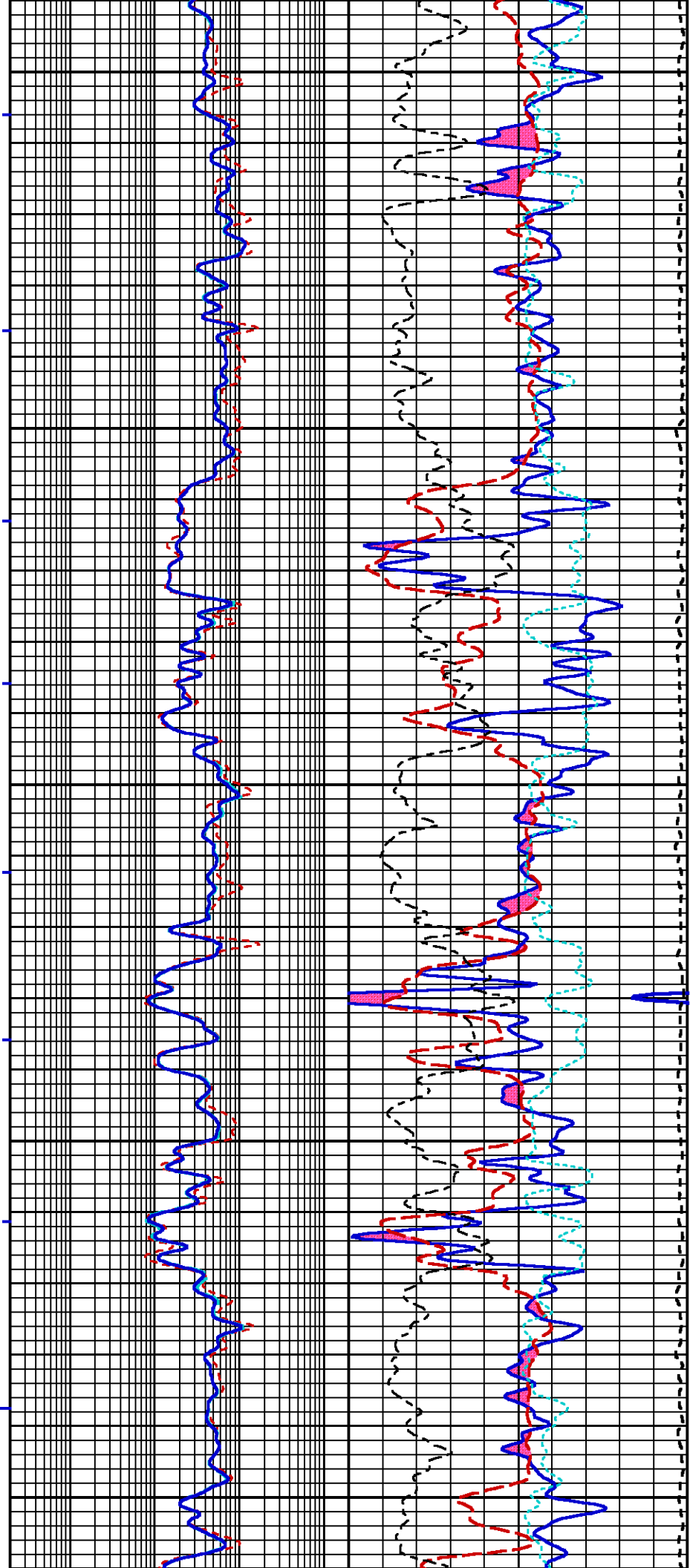
4600

1200









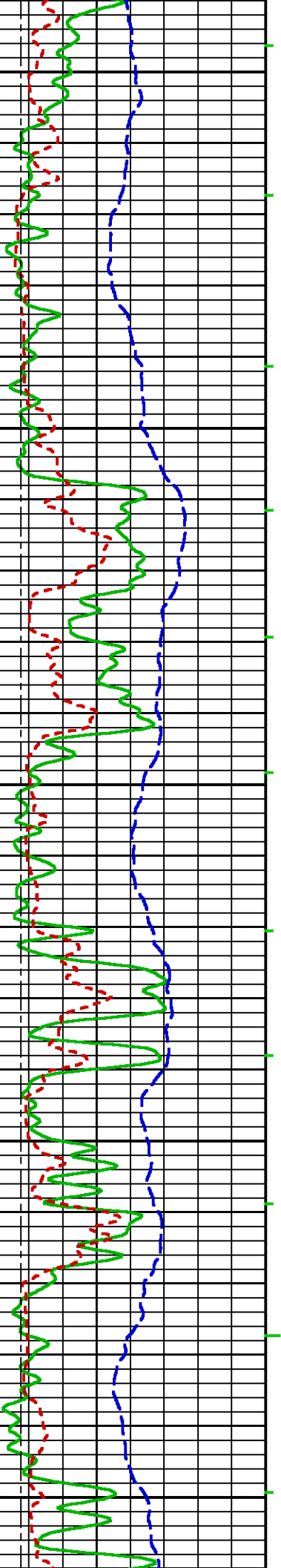
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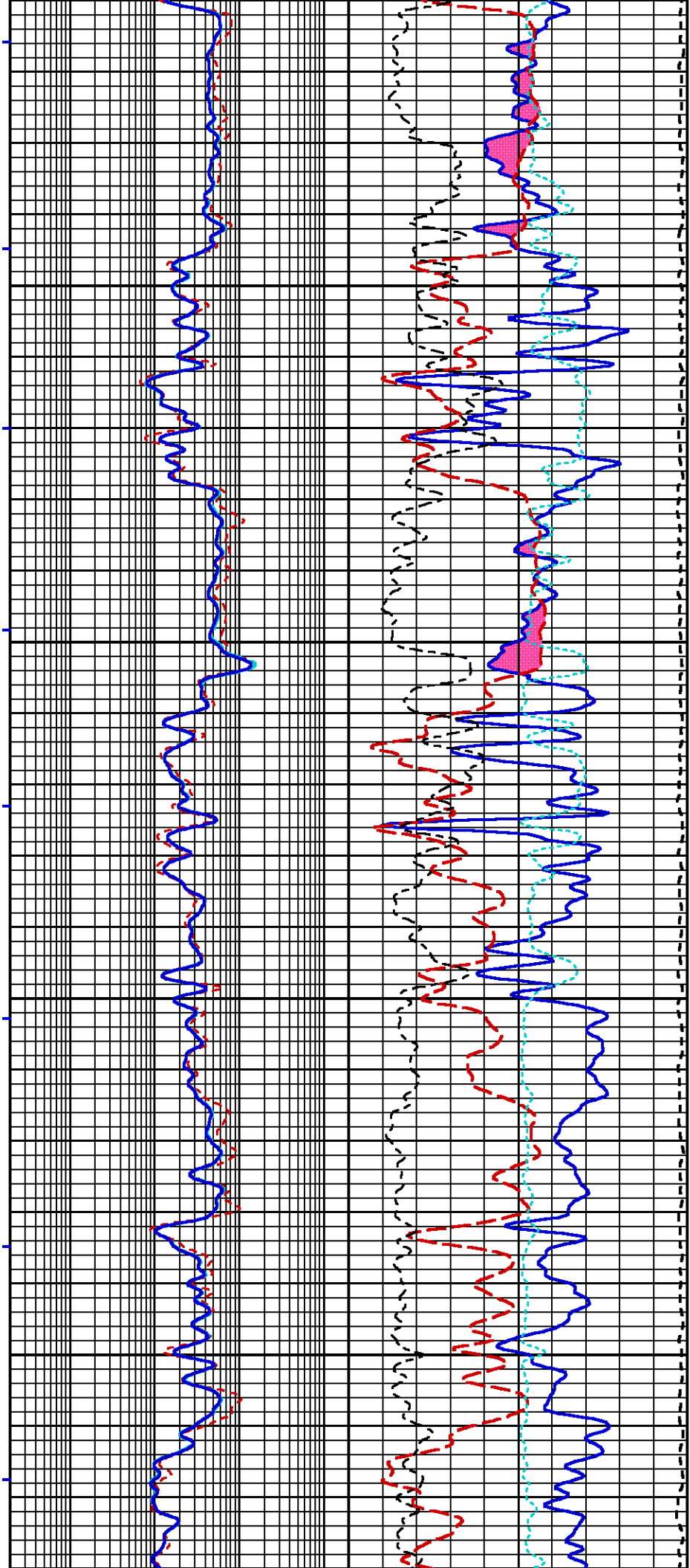
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5300

600

800

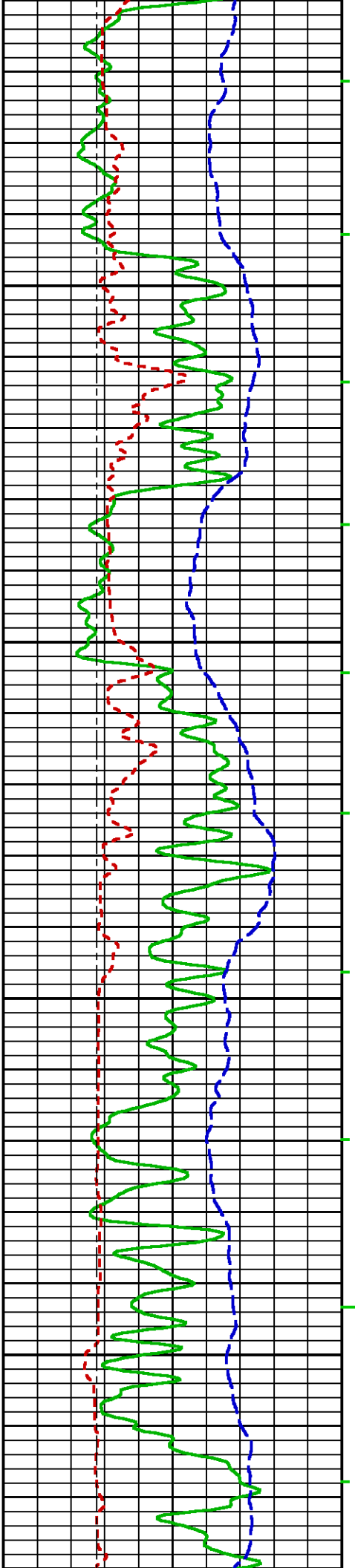


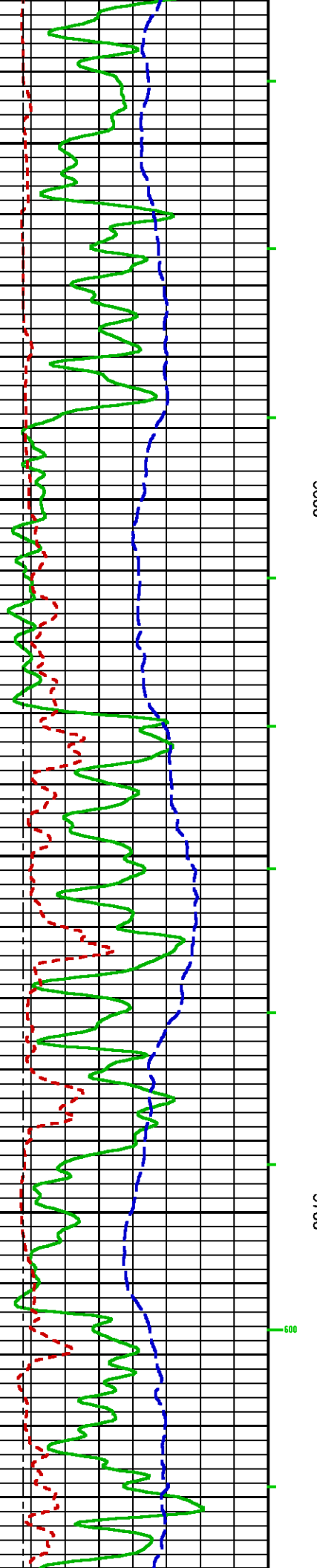
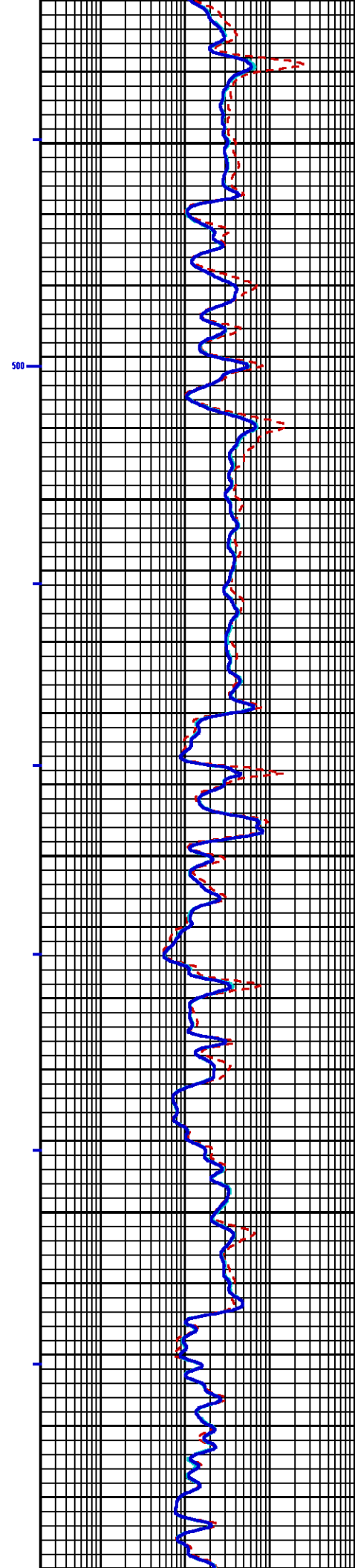
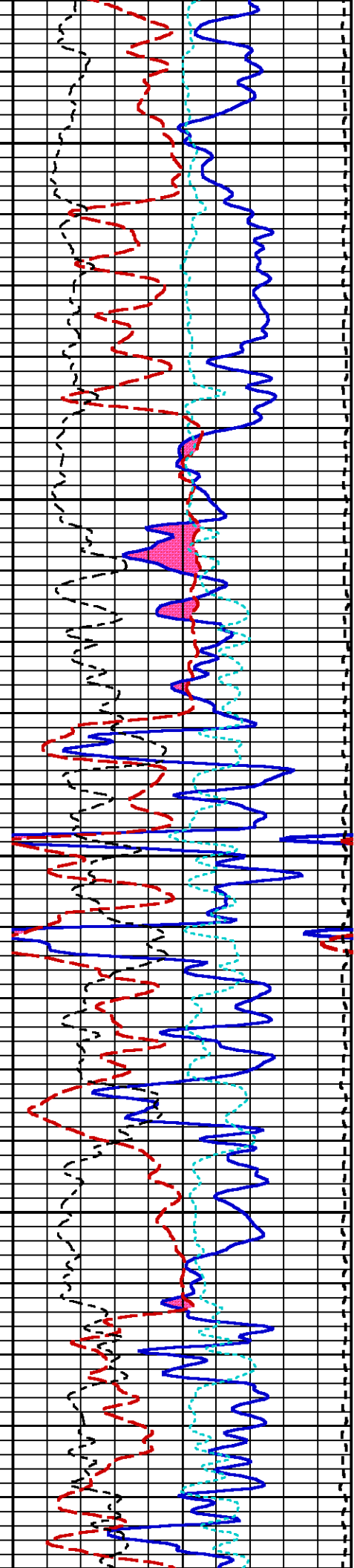


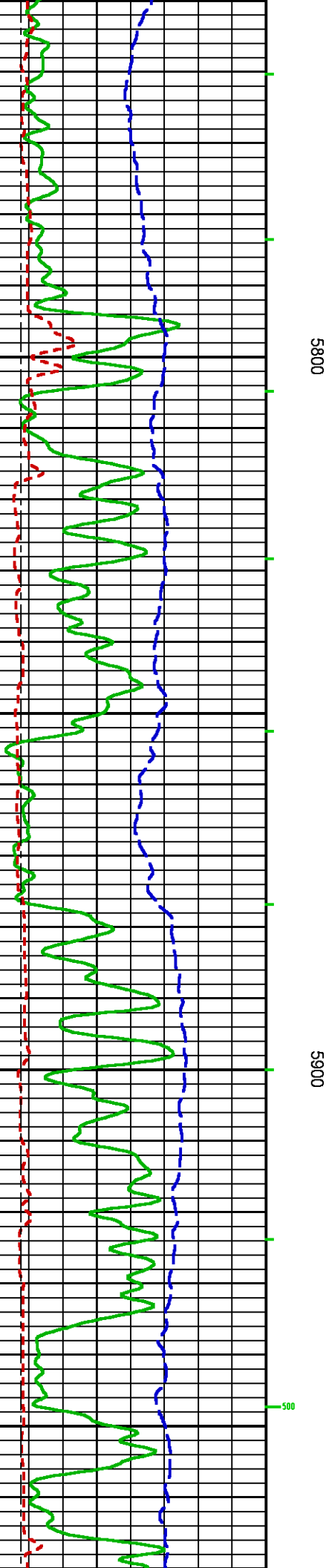
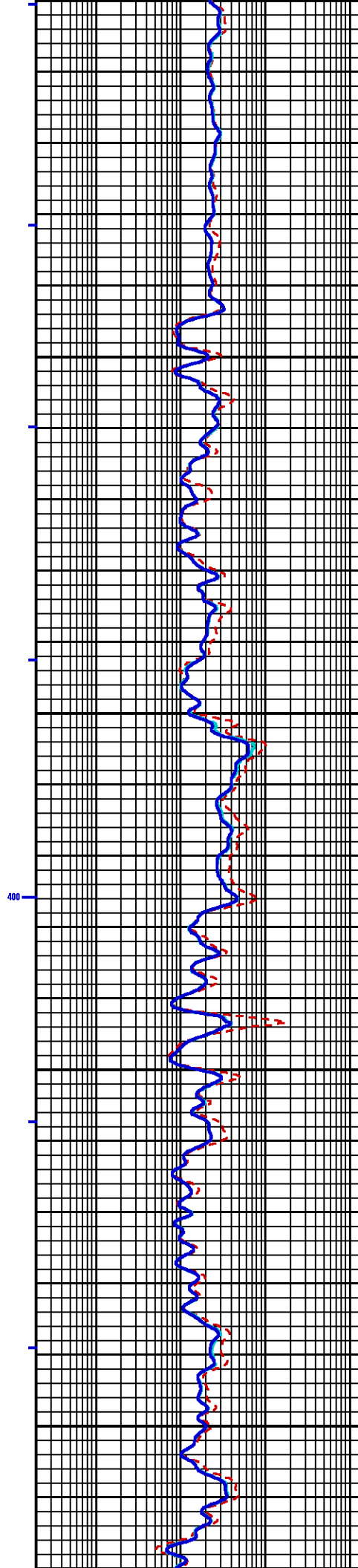
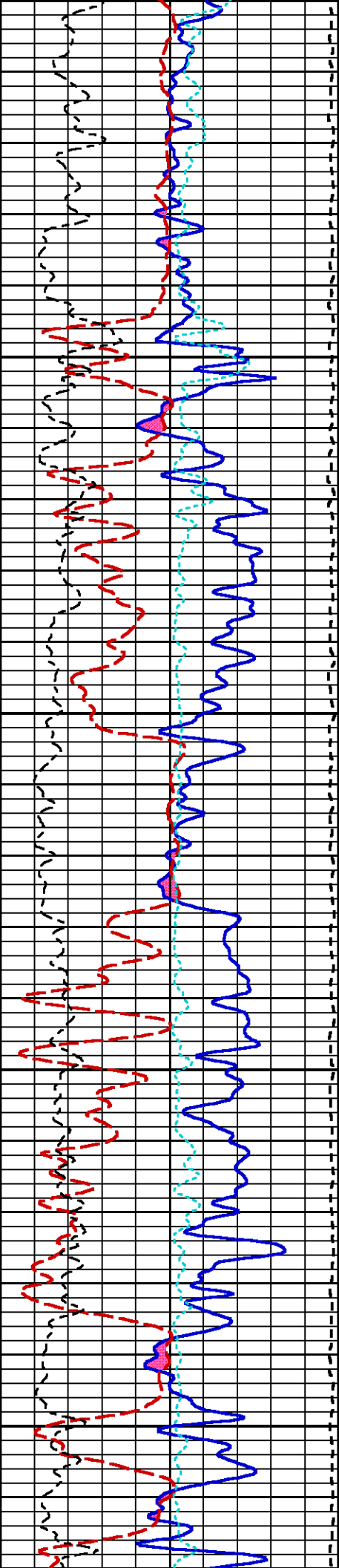
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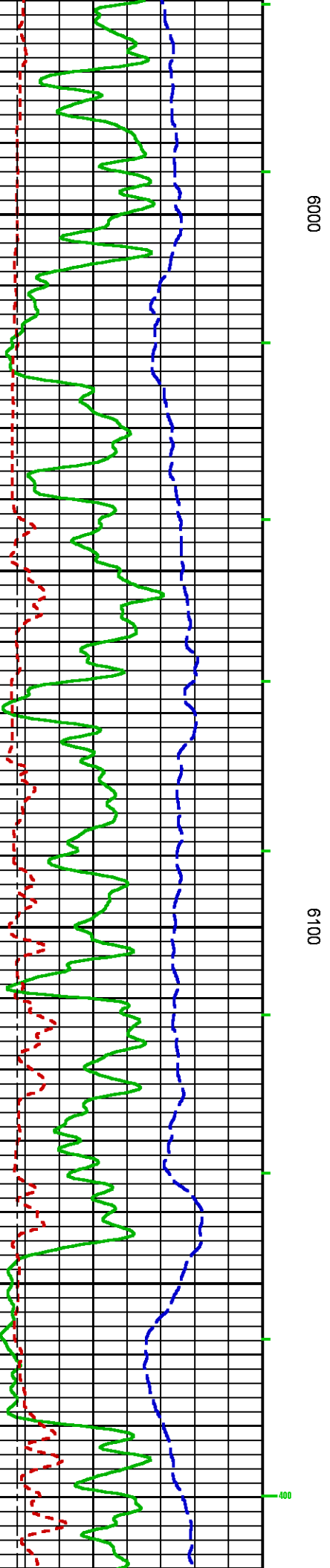
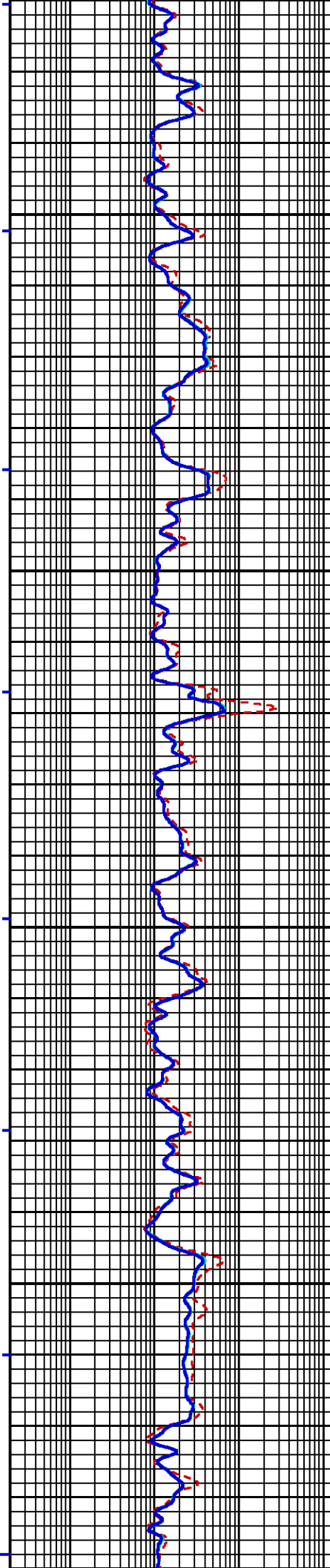
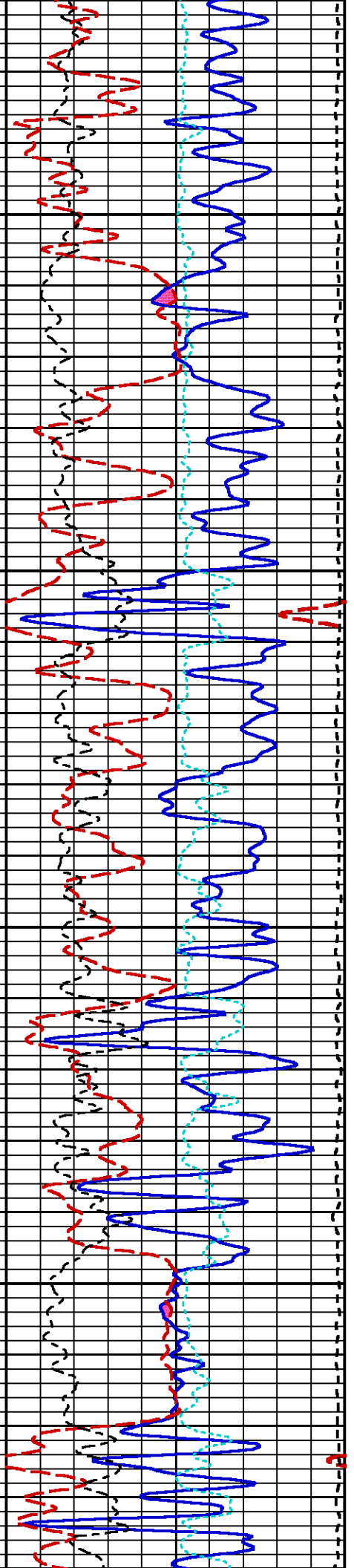
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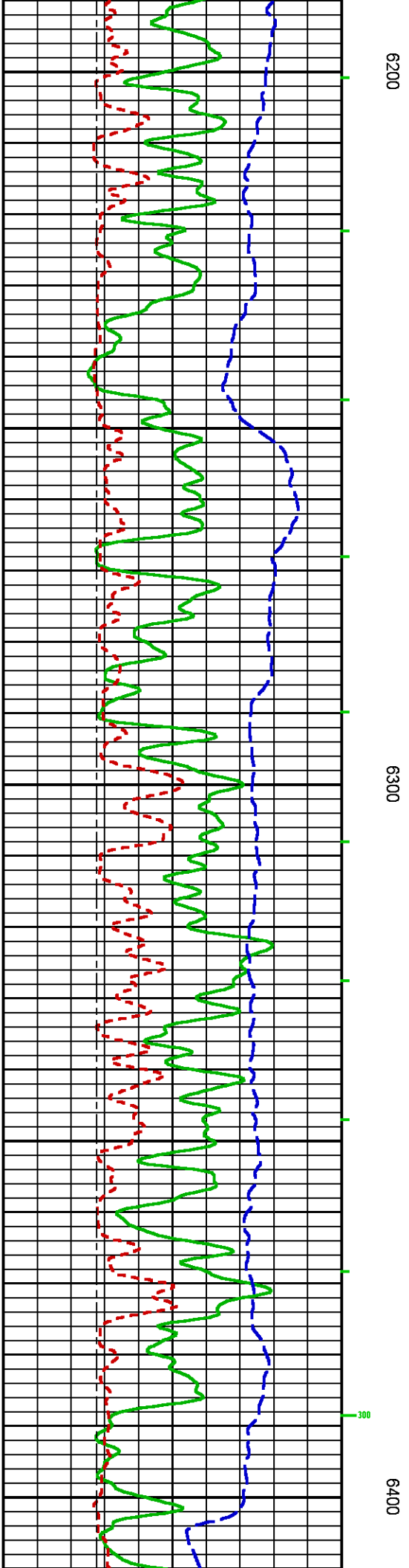
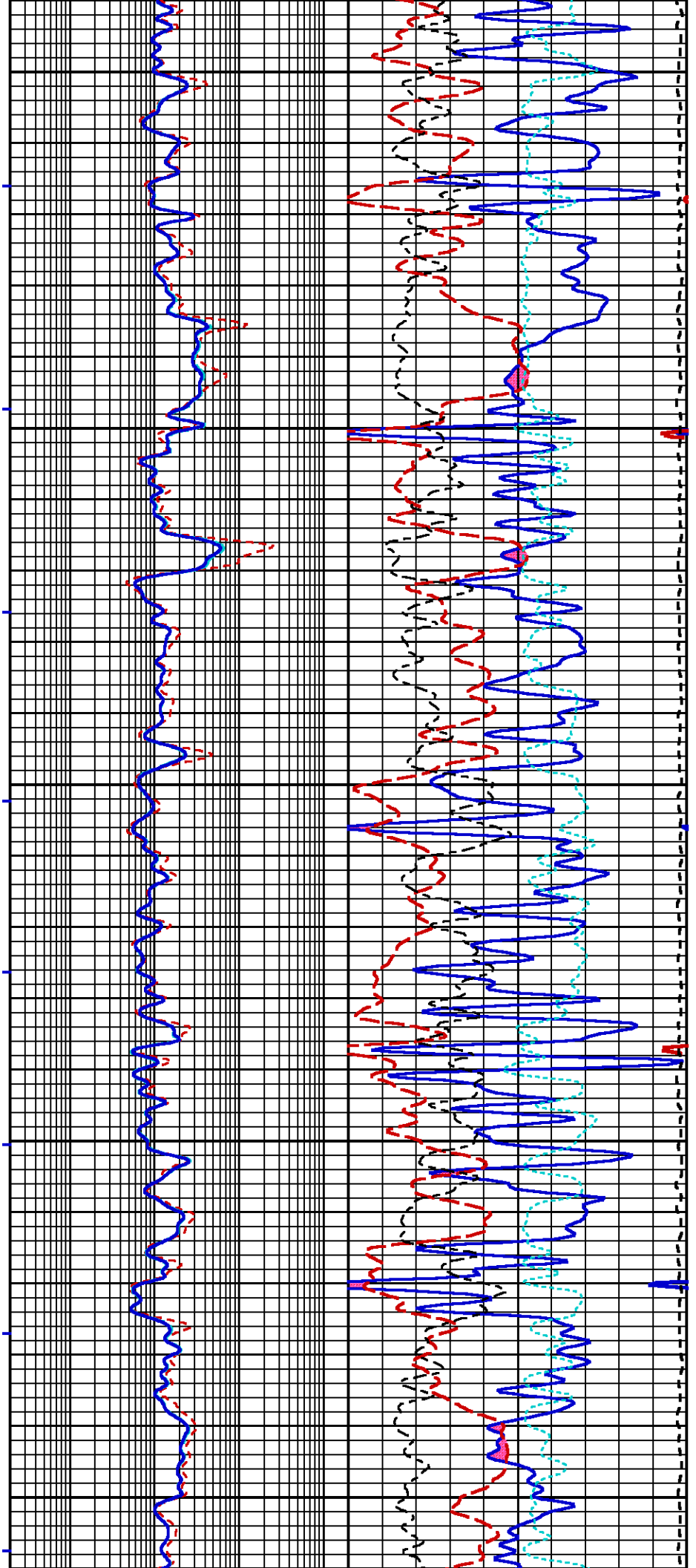
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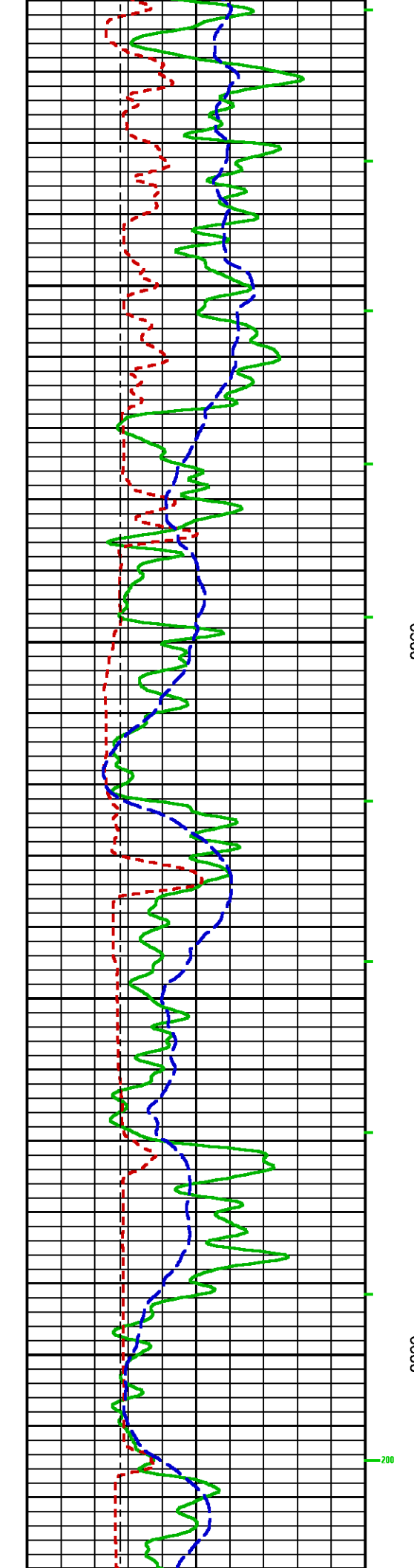
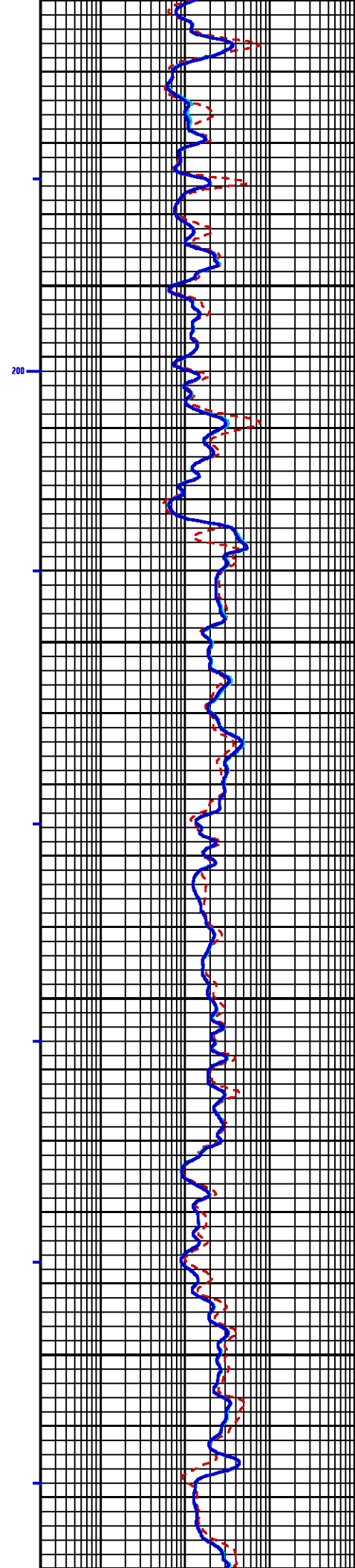
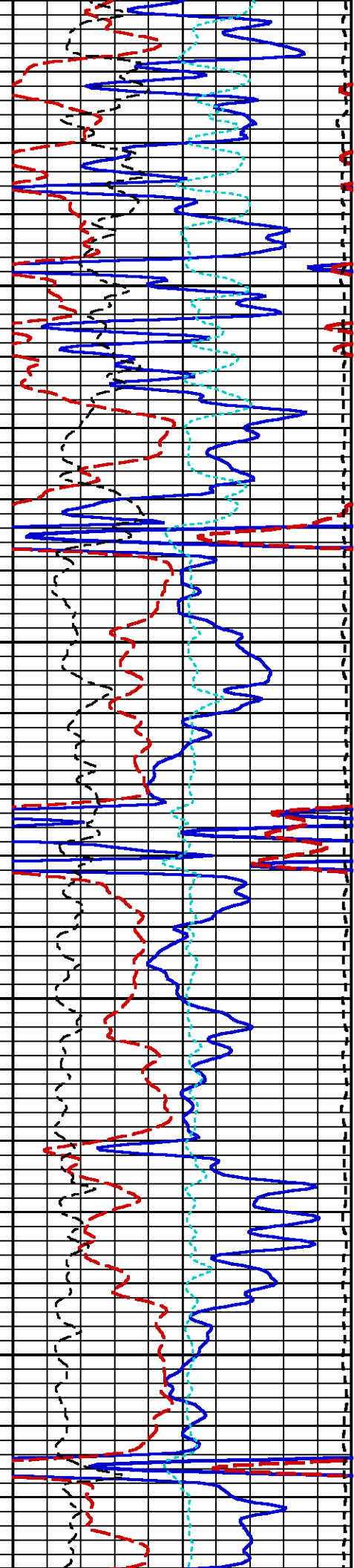


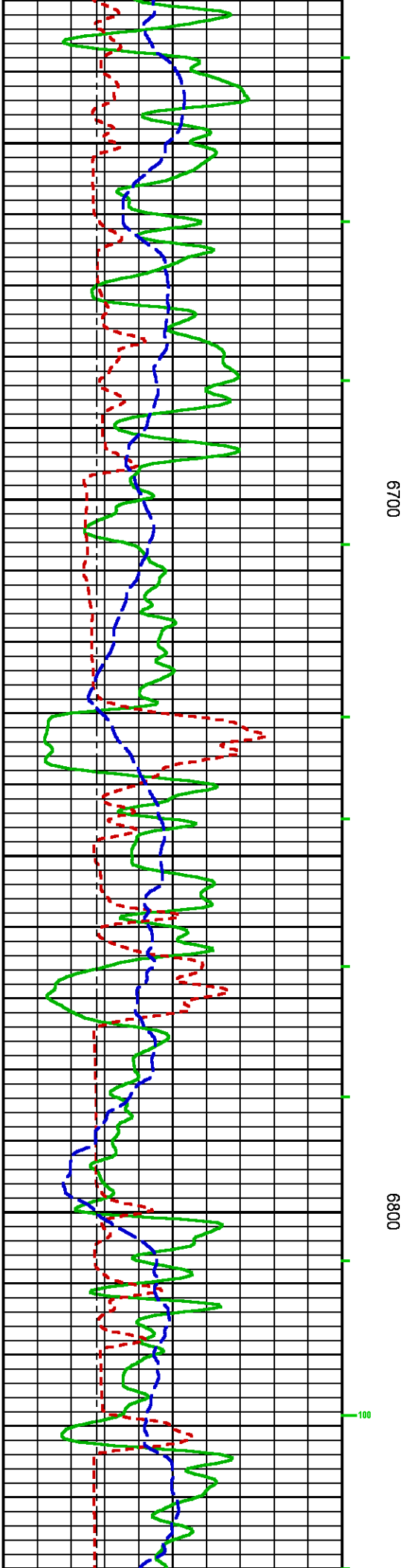
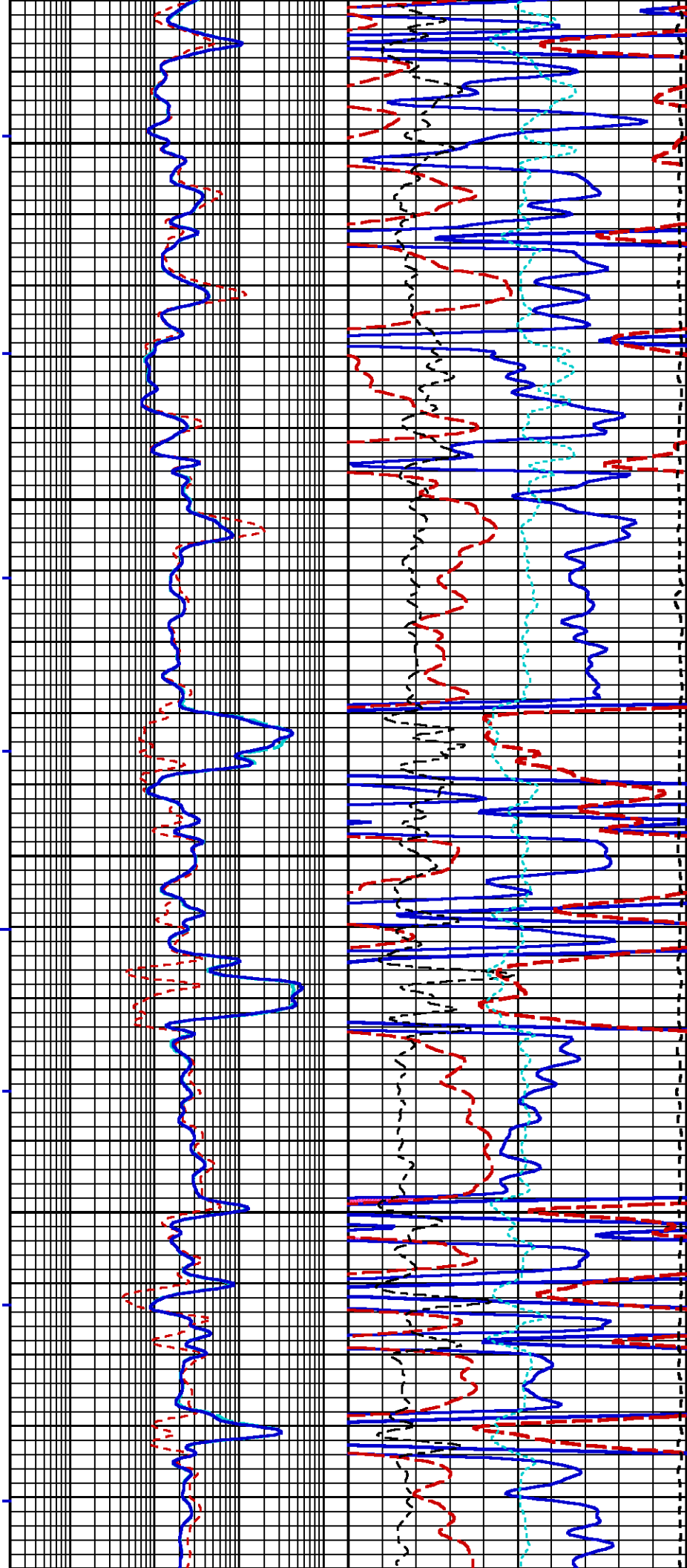


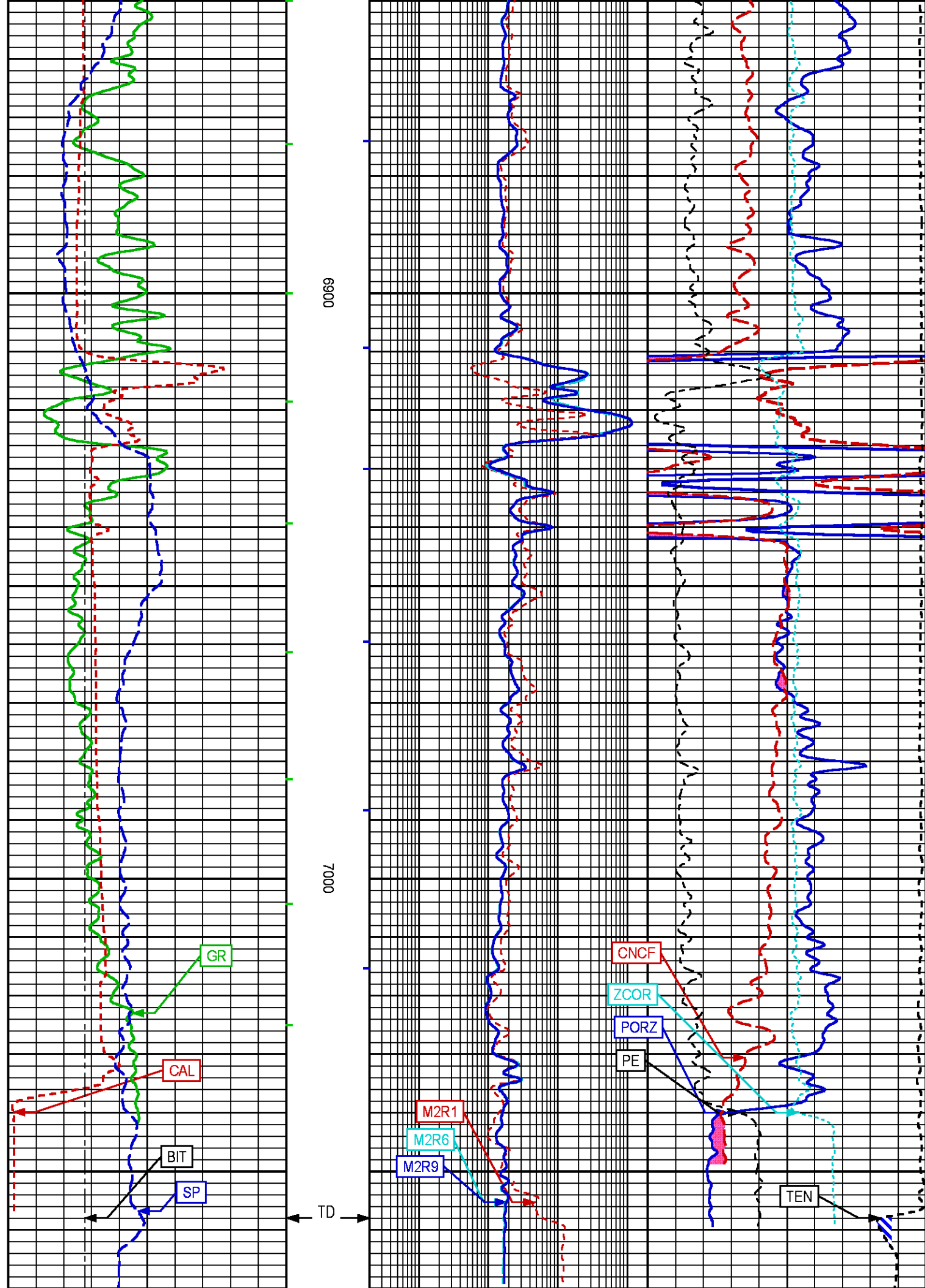


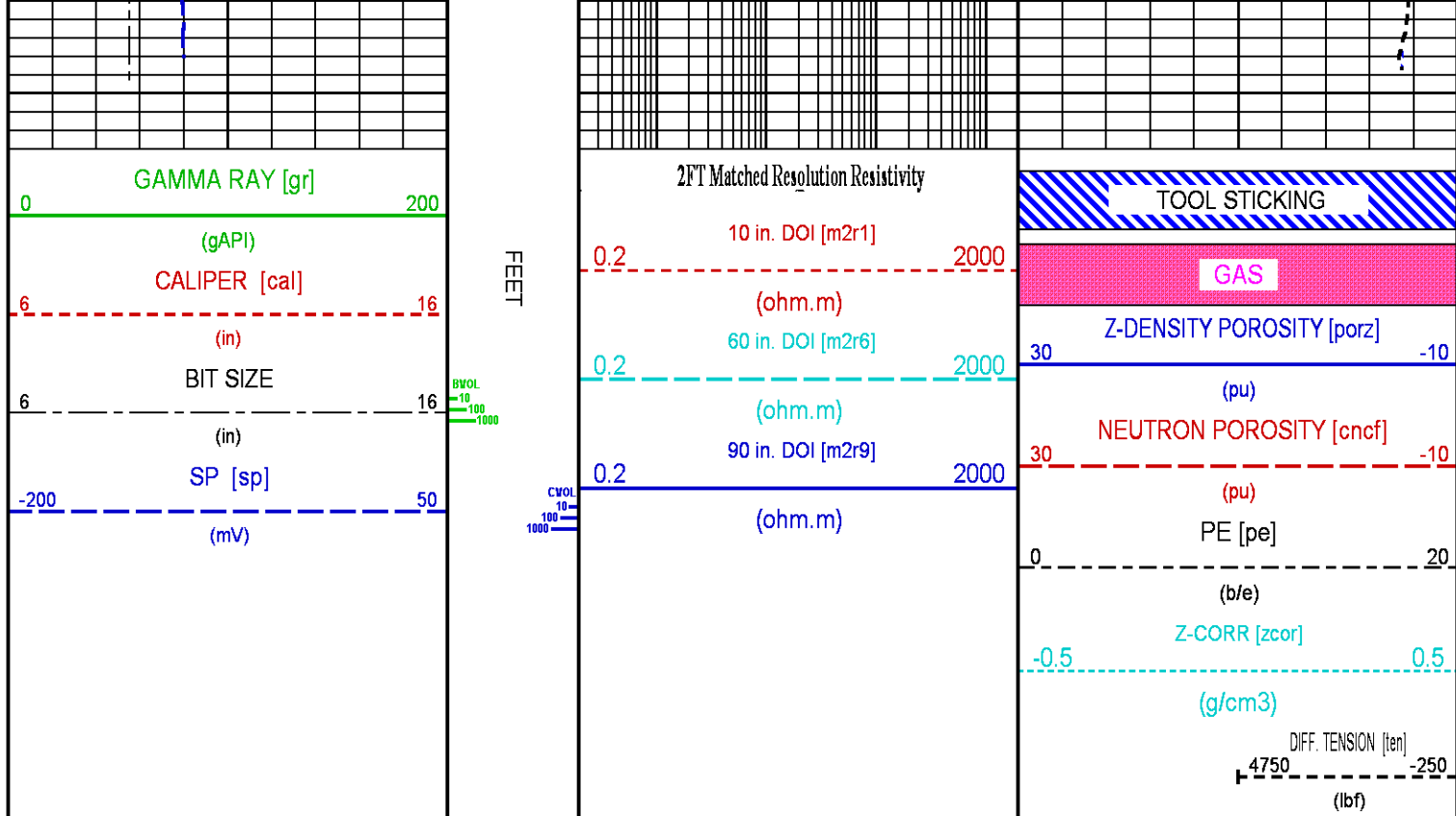












REPEAT LOG 5"/100FT SCALE

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

Updates: 1 Patches: 4

Plotted: Mon Feb 2 21:19:08 2015

PARAMETER AND FILTER SUMMARY REPORT

FILE: /dat1a/OH094602J/n970a01.prm
 LOGGING MODE: DEPTH DIRECTION: UP
 TOP DEPTH: 1119.528 ft BOTTOM DEPTH: 1489.922 ft

SYMMETRIC FILTER

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
GR MED RES	FILTER ()	medium (1)		TOP	BOTTOM
CALIPER	FILTER ()	medium (1)		"	"
TENSION	FILTER ()	medium (1)		"	"
CN MED RES	FILTER ()	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	"	"

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		"	"
MUD SAMPLE RESISTIVITY	MUD SAMPLE TEMP	73.8	degF	"	"
	MUD SAMPLE RES	0.840	ohm.m	"	"
BOREHOLE TEMP from GRADIENT	Known BH REF TEMP	73.8	degF	"	"
	at BH REF DEPTH	0.0	ft	"	"
	with TEMP GRADIENT	1.200	0.01 degF/ft	"	"

ACCELERATION PROCESSING

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

CN PROCESSING

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
CN MATRIX	2436 MATRIX	SANDSTONE		TOP	BOTTOM
CN BOREHOLE CORRECTION	SALINITY	1200	ppm	"	"
	BOREHOLE CORRECTION	ON		"	"
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	Air Filled Borehole	NO		TOP	BOTTOM
	RHOmatrix	2.680	g/cm3	"	"
	RHOfluid	1.000	g/cm3	"	"

HDIL PROCESSING

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

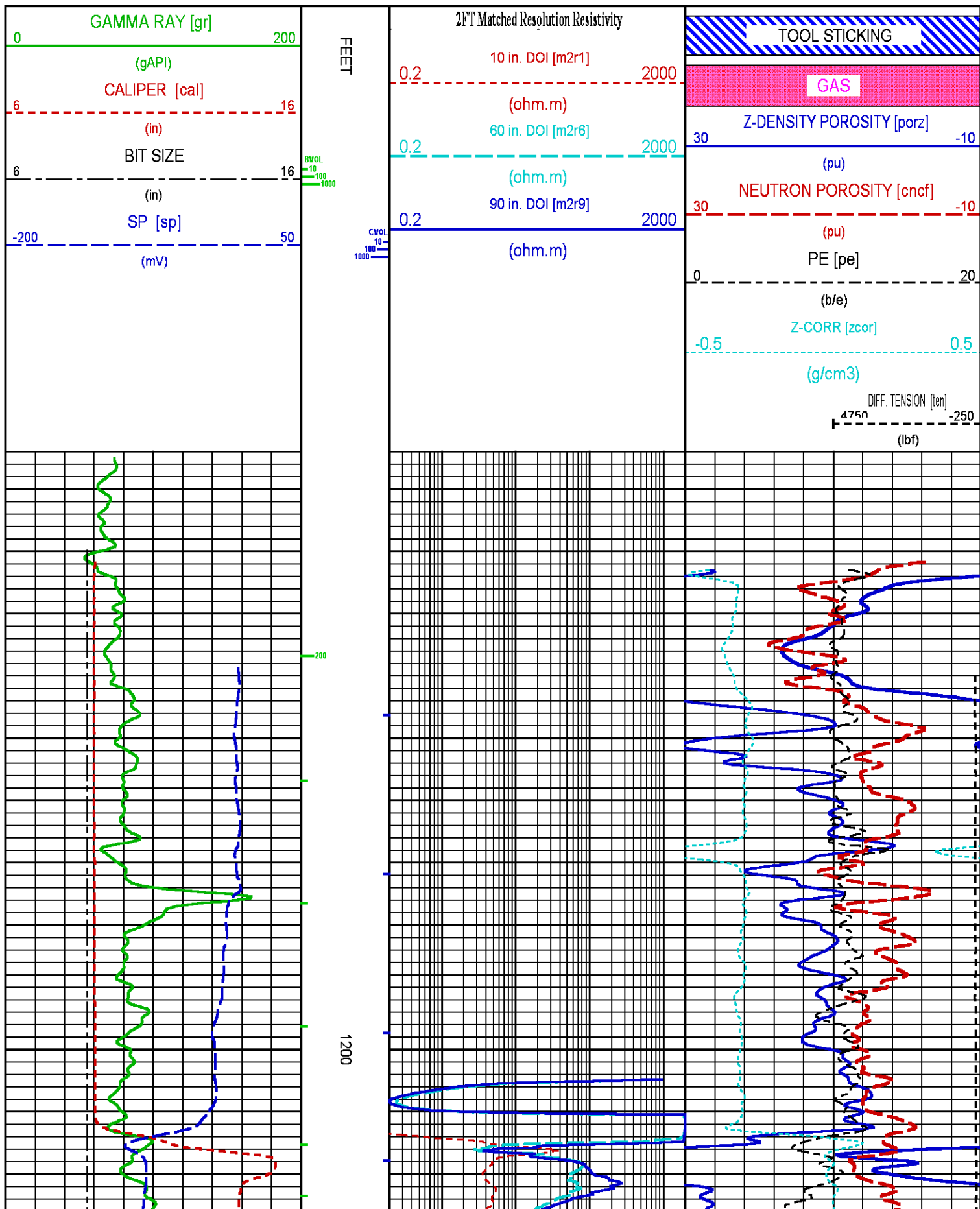
CURVE DESCRIPTION REPORT

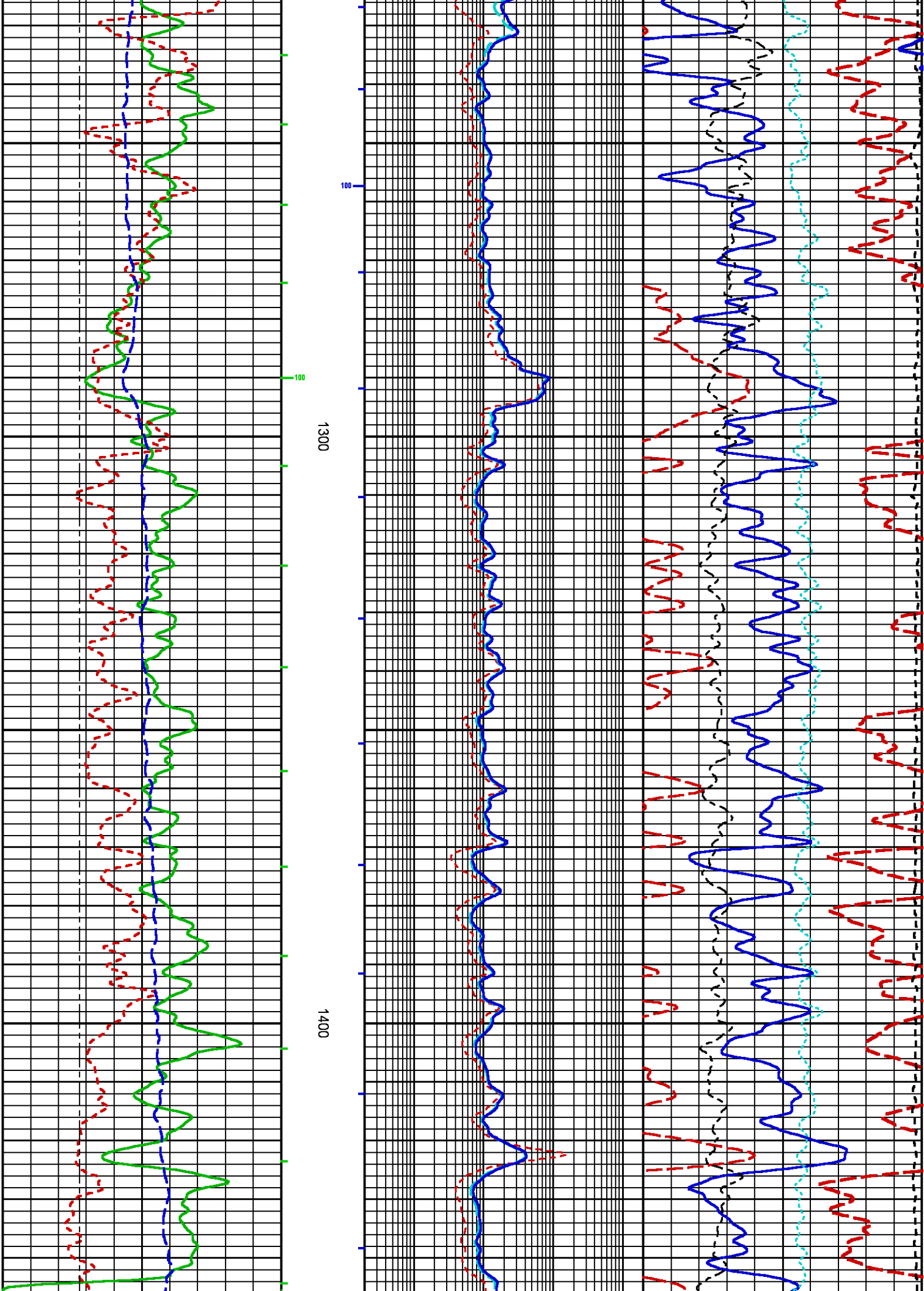
CURVE NAME	CREATION DATE	CURVE DESCRIPTION
F1:BIT	Feb 2 20:46:32 2015	BIT SIZE
F1:BVOL	Feb 2 20:46:32 2015	BOREHOLE VOLUME
F1:CAL	Feb 2 20:46:32 2015	CALIPER
F1:CNCf	Feb 2 20:46:32 2015	FIELD NORMALIZED COMPENSATED NEUTRON POROSITY
F1:CVOL	Feb 2 20:46:32 2015	CEMENT VOLUME
F1:GR	Feb 2 20:46:32 2015	GAMMA RAY
F1:M2R1	Feb 2 20:46:32 2015	VERTICAL 2-FOOT RESOLUTION MATCHED RESISTIVITY, 10-INCH DOI
F1:M2R6	Feb 2 20:46:32 2015	VERTICAL 2-FOOT RESOLUTION MATCHED RESISTIVITY, 60-INCH DOI
F1:M2R9	Feb 2 20:46:32 2015	VERTICAL 2-FOOT RESOLUTION MATCHED RESISTIVITY, 90-INCH DOI
F1:PE	Feb 2 20:46:32 2015	PHOTO ELECTRIC CROSS-SECTION
F1:PORZ	Feb 2 20:46:32 2015	POROSITY FOR SELECTABLE MATRIX
F1:SP	Feb 2 20:46:32 2015	SPONTANEOUS POTENTIAL
F1:TEN	Feb 2 20:46:32 2015	DIFFERENTIAL TENSION
F1:ZCOR	Feb 2 20:46:32 2015	DENSITY CORRECTION

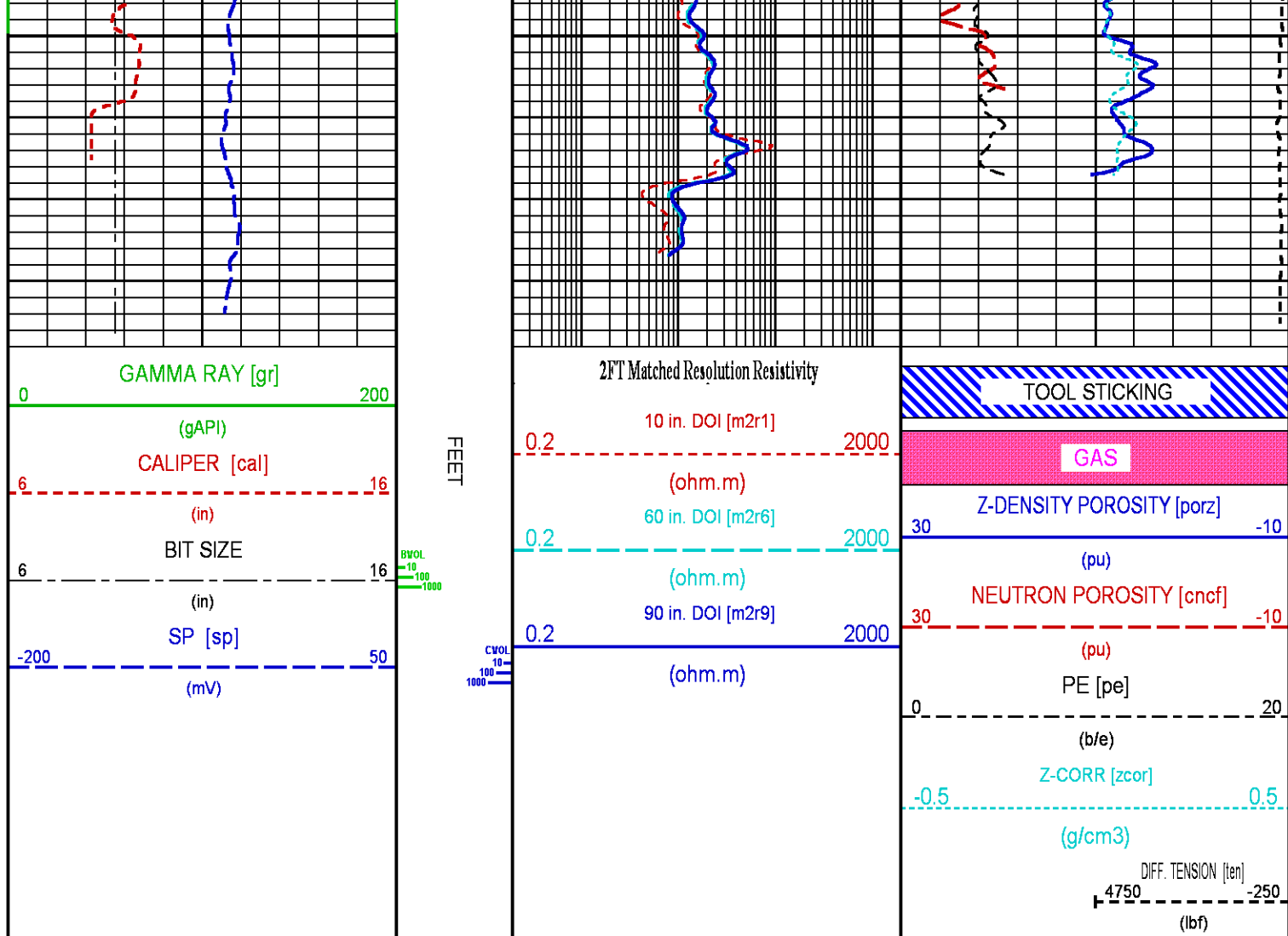
CURVE MEASURE POINT OFFSET

CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
BIT	0.00	GR	35.00	M2R9	2.75	SP	1.25
CAL	18.12	M2R1	2.75	PE	18.00	TEN	0.00
CNCf	27.38	M2R6	2.75	PORZ	18.00	ZCOR	18.00

File Interval : F1 : HL6670:/dat1a/OH094602J/n970a01_REPEAT.xtf
Created On : Feb 2 20:46:32 2015
Company : WPX ENERGY INC
Well : WPX GM 522-28
Field : GRAND VALLEY
File Interval : 0 - 1492.25 Feet
OCT : n970a







CALIBRATION / VERIFICATION SUMMARY

Source File: /dat1a/OH094602J/n970a.tp1

TTMA PRIMARY CALIBRATION SUMMARY

TOOL #: 3980XA 10123540

DATE/TIME PERFORMED: Fri Jun 29 13:29:37 2012

UNIT #: 3882TD HL6670

ACCEL #: 3980XA 10138909

ACCEL CAL DATE: 10:12 01/02/2005

GAIN OFFSET
(ohm.m)

Rm K Factors 0.14570 -0.01679

	Sig Low (ohm)	Sig High (ohm)	Mult Factor	Add Factor	Engr Low (ohm)	Engr High (ohm)
Rm Measurements	0.25	9.95	1.005386	0.000586	0.25	10.00

TTMA BEFORE LOG VERIFICATION SUMMARY

TOOL #: 3980XA 10123540

DATE/TIME PERFORMED: Mon Feb 2 21:19:59 2015

DAYS SINCE CAL: 948

UNIT #: 3880TA HL6670

	CHT (lbf)	MUD TEMP (degF)	RES M Q (ohm)	ACCEL Q
CAL	19480	498.26	9.99	990.14
	18680 20280	490.46 504.86	8.00 12.00	980.00 1020.00
ZERO	-24209	-436.02	0.251	989.317
	-25010 -23410	-444.46 -430.06	0.200 0.300	980.000 1020.000

TTMA AFTER LOG VERIFICATION SUMMARY

TOOL #: 3980XA 10123540

DATE/TIME PERFORMED: Mon Feb 2 23:50:55 2015

DAYS SINCE CAL: 948

UNIT #: 3880TA HL6670

	CHT (lbf)	MUD TEMP (degF)	RES M Q (ohm)	ACCEL Q
CAL	19471	500.30	9.93	995.84
	18680 20280	490.46 504.86	8.00 12.00	980.00 1020.00
ZERO	-24209	-436.02	0.246	995.422
	-25010 -23410	-444.46 -430.06	0.200 0.300	980.000 1020.000

GR PRIMARY CALIBRATION SUMMARY

Tool #: 3518EG 10139870

DATE/TIME PERFORMED: Mon Jan 26 10:05:11 2015

Unit #: 3885TC 6685

Jig Series: 4702NK VBA-905

Background	Calibrator ON	Jig Value (gAPI)	Mult	Background (gAPI)	Calibrator ON (gAPI)
71.26	778.61	185	0.262	18.64	203.64
			0.230 0.280		

GR BEFORE LOG VERIFICATION SUMMARY

TOOL #: 3518EG 10139870

DATE/TIME PERFORMED: Mon Feb 2 20:31:50 2015

DAYS SINCE CAL: 7

UNIT #: 3880TA HL6670

Jig: INTRNL N/A

Counts	TEMP (degF)	HV (V)
976.67	55.54	1361.74
929.00 1027.00	536.00	1237.00 1512.00

GR AFTER LOG VERIFICATION SUMMARY

TOOL #: 3518EG 10139870 DATE/TIME PERFORMED: Mon Feb 2 23:50:57 2015 DAYS SINCE CAL: 7

UNIT #: 3880TA HL6670 Jig: INTRNL N/A

Counts		TEMP (degF)	HV (V)	
976.33		127.97	1365.44	
929.00	1027.00	536.00	1237.00	1512.00

CN PRIMARY CALIBRATION SUMMARY

TOOL #: 2436XA 10137930 DATE/TIME PERFORMED: Wed Dec 24 10:51:21 2014

UNIT #: 3885TC 6685 CALIBRATOR #: 2437XB 112674 SOURCE #: 4718XA N-0897

SSN DT CPS	LSN DT CPS	SSN/LSN	MCF	CNRATIO	CN PU
4561.05	785.11	5.80945	0.98753	5.73700	25.241
			0.95000	1.05000	

CN BEFORE LOG VERIFICATION SUMMARY

TOOL #: 2436XA 10137930 DATE/TIME PERFORMED: Mon Feb 2 20:32:07 2015 DAYS SINCE CAL: 40

UNIT #: 3880TA HL6670 CALIBRATOR #: INTRNL N/A

SSN DT CPS	LSN DT CPS	SSN/LSN	TEMP (degF)	HV (V)	LV (V)
991.41	993.42	0.99797	44.6	1352.7	4.612
		0.95000	1.05000	280.4	1250.0
				1450.0	4.300
					5.000

CN AFTER LOG VERIFICATION SUMMARY

TOOL #: 2436XA 10137930 DATE/TIME PERFORMED: Mon Feb 2 23:51:00 2015 DAYS SINCE CAL: 40

UNIT #: 3880TA HL6670 CALIBRATOR #: INTRNL N/A

SSN DT CPS	LSN DT CPS	SSN/LSN	TEMP (degF)	HV (V)	LV (V)
991.74	994.11	0.99762	120.5	1364.4	4.612
		0.95000	1.05000	280.4	1250.0
				1450.0	4.300
					5.000

CAL PRIMARY CALIBRATION SUMMARY

CAL PRIMARY CALIBRATION SUMMARY

TOOL #: 2223XA 10102922

DATE/TIME PERFORMED: Wed Jan 14 13:01:23 2015

UNIT #: 3880TA HL6670

	SIZE (in)	VALUE	MULTIPLIER	ADD
SMALL RING (Arm)	7.000	1376.0		
LARGE RING (Arm)	11.000	2616.0	0.00323	2.56129
PAD CLOSED		1529.6	0.00250	-3.82400

CAL BEFORE LOG VERIFICATION SUMMARY

TOOL #: 2223XA 10102922

DATE/TIME PERFORMED: Mon Feb 2 20:54:59 2015

DAYS SINCE CAL: 19

UNIT #: 3880TA HL6670

	VALUE	MULTIPLIER	ADD	SIZE (in)
ARM	2088.0	0.00323	2.56129	9.3
PAD	1660.4	0.00250	-3.82400	0.3

	ACTUAL (in)	MEASURED (in)
DIAMETER (arm+pad)	9.001	9.0
		8.6 9.4

CAL AFTER LOG VERIFICATION SUMMARY

TOOL #: 2223XA 10102922

DATE/TIME PERFORMED: Mon Feb 2 23:50:03 2015

DAYS SINCE CAL: 19

UNIT #: 3880TA HL6670

	VALUE	MULTIPLIER	ADD	SIZE (in)
ARM	2085.2	0.00323	2.56129	9.3
PAD	1689.2	0.00250	-3.82400	0.4

	ACTUAL (in)	MEASURED (in)
DIAMETER (arm+pad)	9.001	9.1
		8.6 9.4

ZDL PRIMARY CALIBRATION SUMMARY

TOOL: 2223XA 10102922

DATE/TIME PERFORMED: Wed Jan 14 12:48:14 2015

UNIT: 3880TA HL6670

CALB BLKS: 2225XA 094292F

CS SRC: 4705XA 16068B

PAD TYPE: PADTYP 7.5" PAD

	SS CS PK (Channel)	LS CS PK (Channel)	SS_BKGD (cps)	LS BKGD (cps)		
	225.6	224.4	1242.9	1362.2		
	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)	36233.3	12226.0	0.755	1.679	0.000	1.900
			0.720 0.890			
AL	22477.1	1373.0		2.667	-0.016	
AL + SHIM	29774.2	2373.4		2.558	0.098	
MG + SHIM (HI PE)	17538.2	5720.8	0.300			8.550
			0.280 0.360			
RATIO AL + SHIM/AL	1.32	1.73				
	1.30 1.40	1.60 1.80				
RATIO MG/AL	1.61	8.90				
	1.58 1.70	8.55 9.55				

ZDL BEFORE LOG VERIFICATION SUMMARY

TOOL #: 2223XA 10102922

DATE/TIME PERFORMED: Mon Feb 2 20:32:20 2015

DAYS SINCE CAL: 19

UNIT #: 3880TA HL6670

	TOTAL (cps)	CSPK (Channel)	HV (V)
LS	3342.1	224.9	1341.0
	3332.1 3352.1	220.0 230.0	1250.0 1550.0
SS	22354.8	224.2	1320.3
	22344.8 22364.8	220.0 230.0	1250.0 1550.0
	LV (V)	PAD CURRENT (mA)	
	5.0	70.4	
	4.8 5.2	50.0 120.0	

ZDL AFTER LOG VERIFICATION SUMMARY

TOOL #: 2223XA 10102922

DATE/TIME PERFORMED: Mon Feb 2 23:50:07 2015

DAYS SINCE CAL: 19

UNIT #: 3880TA HL6670

	TOTAL (cps)	CSPK (Channel)	HV (V)
LS	3342.1	224.9	1341.0
	3332.1 3352.1	220.0 230.0	1250.0 1550.0
SS	22354.8	224.2	1320.3
	22344.8 22364.8	220.0 230.0	1250.0 1550.0

LS	3342.1	3352.1	224.9	230.0	1434.3	1550.0
SS	22354.8	224.7	1336.0			
	22344.8	22364.8	220.0	230.0	1250.0	1550.0
	LV		PAD CURRENT			
	(V)		(mA)			
	5.0		68.8			
	4.8	5.2	50.0	120.0		

HDIL PRIMARY CALIBRATION SUMMARY

TOOL #: 1530XA 10118612

DATE/TIME PERFORMED: Thu Nov 13 11:27:23 2014

UNIT #: 3885TC 6685

GRCOND ID & DATE: 86 101801

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

Coil 0 R	-0.0013 -0.2000 0.2000	0.0002 -0.1000 0.1000	0.0004 -0.1000 0.1000	0.0001 -0.1000 0.1000	-0.0004 -0.1000 0.1000	0.0004 -0.1000 0.1000	-0.0001 -0.1000 0.1000	0.0002 -0.1000 0.1000
Coil 0 Q	0.0014 -0.5000 0.5000	0.0004 -0.2000 0.2000	0.0005 -0.1000 0.1000	-0.0002 -0.1000 0.1000	-0.0003 -0.1000 0.1000	-0.0002 -0.1000 0.1000	0.0004 -0.1000 0.1000	0.0001 -0.1000 0.1000
Coil 1 R	0.0056 -0.2000 0.2000	0.0011 -0.1000 0.1000	-0.0005 -0.1000 0.1000	0.0003 -0.1000 0.1000	-0.0007 -0.1000 0.1000	0.0001 -0.1000 0.1000	-0.0015 -0.1000 0.1000	0.0030 -0.1000 0.1000
Coil 1 Q	0.0023 -0.5000 0.5000	-0.0026 -0.2000 0.2000	0.0007 -0.1000 0.1000	-0.0001 -0.1000 0.1000	-0.0011 -0.1000 0.1000	0.0002 -0.1000 0.1000	-0.0002 -0.1000 0.1000	0.0012 -0.1000 0.1000
Coil 2 R	0.0063 -0.2000 0.2000	-0.0033 -0.1000 0.1000	0.0024 -0.1000 0.1000	-0.0022 -0.1000 0.1000	0.0012 -0.1000 0.1000	0.0005 -0.1000 0.1000	-0.0001 -0.1000 0.1000	-0.0031 -0.1000 0.1000
Coil 2 Q	0.0001 -0.5000 0.5000	0.0033 -0.2000 0.2000	0.0011 -0.1000 0.1000	0.0008 -0.1000 0.1000	-0.0003 -0.1000 0.1000	0.0023 -0.1000 0.1000	-0.0000 -0.1000 0.1000	-0.0013 -0.1000 0.1000
Coil 3 R	0.0198 -0.3000 0.3000	0.0001 -0.1000 0.1000	0.0002 -0.1000 0.1000	0.0003 -0.1000 0.1000	0.0016 -0.1000 0.1000	0.0004 -0.1000 0.1000	0.0018 -0.1000 0.1000	0.0012 -0.1000 0.1000
Coil 3 Q	0.0043 -0.5000 0.5000	-0.0042 -0.2000 0.2000	-0.0046 -0.1000 0.1000	-0.0012 -0.1000 0.1000	-0.0021 -0.1000 0.1000	-0.0025 -0.1000 0.1000	0.0015 -0.1000 0.1000	0.0008 -0.1000 0.1000
Coil 4 R	0.0695 -0.5000 0.5000	-0.0020 -0.2000 0.2000	-0.0046 -0.2000 0.2000	0.0073 -0.2000 0.2000	0.0013 -0.2000 0.2000	0.0001 -0.2000 0.2000	-0.0007 -0.2000 0.2000	-0.0006 -0.2000 0.2000
Coil 4 Q	0.0079 -1.0000 1.0000	-0.0151 -0.4000 0.4000	0.0055 -0.2000 0.2000	0.0001 -0.2000 0.2000	-0.0050 -0.2000 0.2000	0.0005 -0.2000 0.2000	-0.0027 -0.2000 0.2000	-0.0020 -0.2000 0.2000
Coil 5 R	0.1371 -1.2000 1.2000	-0.0130 -0.4000 0.4000	-0.0208 -0.4000 0.4000	0.0039 -0.4000 0.4000	0.0009 -0.4000 0.4000	0.0073 -0.4000 0.4000	0.0111 -0.4000 0.4000	0.0065 -0.4000 0.4000
Coil 5 Q	0.0671 -1.5000 1.5000	-0.0297 -0.8000 0.8000	0.0011 -0.4000 0.4000	-0.0003 -0.4000 0.4000	-0.0049 -0.4000 0.4000	0.0028 -0.4000 0.4000	0.0009 -0.4000 0.4000	-0.0174 -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	161.66 136.00 186.00	160.27 134.00 184.00	157.39 131.00 181.00	153.10 126.00 176.00	147.45 122.00 170.00	140.43 118.00 161.00	132.23 112.00 150.00	122.85 105.00 139.00
Coil 0 P	7.658 6.000 9.000	25.280 21.000 30.000	42.458 35.000 50.000	59.597 49.000 71.000	76.731 63.000 91.000	93.874 77.000 109.000	111.025 92.000 130.000	128.123 106.000 151.000
Coil 1 M	281.20 238.00 328.00	278.93 235.00 325.00	274.21 230.00 320.00	267.16 225.00 312.00	257.82 218.00 302.00	246.25 208.00 288.00	232.56 196.00 266.00	216.79 184.00 244.00
Coil 1 P	7.531 6.000 9.000	25.002 21.000 30.000	42.015 35.000 51.000	58.991 49.000 71.000	75.982 63.000 92.000	93.004 78.000 112.000	110.067 93.000 130.000	127.121 107.000 151.000
Coil 2 M	569.81 460.00 660.00	565.82 450.00 650.00	555.27 440.00 640.00	549.72 430.00 630.00	521.22 400.00 600.00	487.22 360.00 550.00	460.62 330.00 520.00	426.85 300.00 480.00

Coil 2 P	<div>0.997</div> <div>-1.5001.500</div>	<div>0.992</div> <div>-1.5001.500</div>	<div>0.924</div> <div>-1.5001.500</div>	<div>0.904</div> <div>-1.5001.500</div>	<div>0.933</div> <div>-1.5001.500</div>	<div>0.233</div> <div>-1.5001.500</div>	<div>0.219</div> <div>-1.5001.500</div>	<div>0.192</div> <div>-1.5001.500</div>
Coil 3 M	<div>0.997</div> <div>0.9001.100</div>	<div>0.997</div> <div>0.9001.100</div>	<div>0.997</div> <div>0.9001.100</div>	<div>0.996</div> <div>0.9001.100</div>	<div>0.995</div> <div>0.9001.100</div>	<div>0.994</div> <div>0.9001.100</div>	<div>0.993</div> <div>0.9001.100</div>	<div>0.991</div> <div>0.9001.100</div>
Coil 3 P	<div>0.024</div> <div>-1.5001.500</div>	<div>0.092</div> <div>-1.5001.500</div>	<div>0.158</div> <div>-1.5001.500</div>	<div>0.222</div> <div>-1.5001.500</div>	<div>0.266</div> <div>-1.5001.500</div>	<div>0.270</div> <div>-1.5001.500</div>	<div>0.346</div> <div>-1.5001.500</div>	<div>0.375</div> <div>-1.5001.500</div>
Coil 4 M	<div>1.001</div> <div>0.9001.100</div>	<div>1.001</div> <div>0.9001.100</div>	<div>1.001</div> <div>0.9001.100</div>	<div>1.000</div> <div>0.9001.100</div>	<div>1.000</div> <div>0.9001.100</div>	<div>0.999</div> <div>0.9001.100</div>	<div>0.998</div> <div>0.9001.100</div>	<div>0.998</div> <div>0.9001.100</div>
Coil 4 P	<div>0.002</div> <div>-1.5001.500</div>	<div>0.057</div> <div>-1.5001.500</div>	<div>0.116</div> <div>-1.5001.500</div>	<div>0.171</div> <div>-1.5001.500</div>	<div>0.232</div> <div>-1.5001.500</div>	<div>0.263</div> <div>-1.5001.500</div>	<div>0.300</div> <div>-1.5001.500</div>	<div>0.331</div> <div>-1.5001.500</div>
Coil 5 M	<div>1.001</div> <div>0.9001.100</div>	<div>1.000</div> <div>0.9001.100</div>	<div>1.000</div> <div>0.9001.100</div>	<div>0.999</div> <div>0.9001.100</div>	<div>0.998</div> <div>0.9001.100</div>	<div>0.996</div> <div>0.9001.100</div>	<div>0.996</div> <div>0.9001.100</div>	<div>0.994</div> <div>0.9001.100</div>
Coil 5 P	<div>0.001</div> <div>-1.5001.500</div>	<div>0.060</div> <div>-1.5001.500</div>	<div>0.136</div> <div>-1.5001.500</div>	<div>0.170</div> <div>-1.5001.500</div>	<div>0.227</div> <div>-1.5001.500</div>	<div>0.333</div> <div>-1.5001.500</div>	<div>0.313</div> <div>-1.5001.500</div>	<div>0.365</div> <div>-1.5001.500</div>

PARMS TCID 0 TCID 1 Cal Temp T Factor
(degF)

IDs 2.563 0.840 38.8 1.00

HDIL BEFORE LOG VERIFICATION SUMMARY

TOOL #: 1530XA 10118612 DATE/TIME PERFORMED: Mon Feb 2 20:33:13 2015 DAYS SINCE CAL: 81

UNIT #: 3880TA HL6670

ZERO DATA(mv)	10 KHz	30 KHz	50 KHz	70 KHz	90 KHz	110 KHz	130 KHz	150 KHz
Coil 0 R	<div>0.001</div> <div>-0.2000.200</div>	<div>-0.001</div> <div>-0.1000.100</div>	<div>0.000</div> <div>-0.1000.100</div>	<div>0.000</div> <div>-0.1000.100</div>	<div>-0.001</div> <div>-0.1000.100</div>	<div>-0.000</div> <div>-0.1000.100</div>	<div>0.000</div> <div>-0.1000.100</div>	<div>0.000</div> <div>-0.1000.100</div>
Coil 0 Q	<div>0.001</div> <div>-0.5000.500</div>	<div>0.001</div> <div>-0.2000.200</div>	<div>0.001</div> <div>-0.1000.100</div>	<div>-0.001</div> <div>-0.1000.100</div>	<div>0.000</div> <div>-0.1000.100</div>	<div>-0.000</div> <div>-0.1000.100</div>	<div>0.000</div> <div>-0.1000.100</div>	<div>0.000</div> <div>-0.1000.100</div>
Coil 1 R	<div>0.006</div> <div>-0.2000.200</div>	<div>0.002</div> <div>-0.1000.100</div>	<div>-0.001</div> <div>-0.1000.100</div>	<div>0.000</div> <div>-0.1000.100</div>	<div>0.000</div> <div>-0.1000.100</div>	<div>-0.000</div> <div>-0.1000.100</div>	<div>-0.001</div> <div>-0.1000.100</div>	<div>0.001</div> <div>-0.1000.100</div>
Coil 1 Q	<div>0.003</div> <div>-0.5000.500</div>	<div>-0.002</div> <div>-0.2000.200</div>	<div>-0.000</div> <div>-0.1000.100</div>	<div>-0.000</div> <div>-0.1000.100</div>	<div>-0.000</div> <div>-0.1000.100</div>	<div>0.001</div> <div>-0.1000.100</div>	<div>-0.000</div> <div>-0.1000.100</div>	<div>0.000</div> <div>-0.1000.100</div>
Coil 2 R	<div>0.004</div> <div>-0.2000.200</div>	<div>-0.002</div> <div>-0.1000.100</div>	<div>0.001</div> <div>-0.1000.100</div>	<div>-0.000</div> <div>-0.1000.100</div>	<div>0.001</div> <div>-0.1000.100</div>	<div>-0.000</div> <div>-0.1000.100</div>	<div>-0.003</div> <div>-0.1000.100</div>	<div>0.001</div> <div>-0.1000.100</div>
Coil 2 Q	<div>-0.002</div> <div>-0.5000.500</div>	<div>0.003</div> <div>-0.2000.200</div>	<div>0.002</div> <div>-0.1000.100</div>	<div>0.001</div> <div>-0.1000.100</div>	<div>-0.000</div> <div>-0.1000.100</div>	<div>0.000</div> <div>-0.1000.100</div>	<div>-0.000</div> <div>-0.1000.100</div>	<div>0.001</div> <div>-0.1000.100</div>
Coil 3 R	<div>0.019</div> <div>-0.3000.300</div>	<div>-0.004</div> <div>-0.1000.100</div>	<div>0.000</div> <div>-0.1000.100</div>	<div>-0.003</div> <div>-0.1000.100</div>	<div>0.001</div> <div>-0.1000.100</div>	<div>0.001</div> <div>-0.1000.100</div>	<div>0.001</div> <div>-0.1000.100</div>	<div>-0.003</div> <div>-0.1000.100</div>
Coil 3 Q	<div>0.001</div> <div>-0.5000.500</div>	<div>-0.003</div> <div>-0.2000.200</div>	<div>0.007</div> <div>-0.1000.100</div>	<div>-0.001</div> <div>-0.1000.100</div>	<div>-0.001</div> <div>-0.1000.100</div>	<div>0.002</div> <div>-0.1000.100</div>	<div>-0.000</div> <div>-0.1000.100</div>	<div>-0.001</div> <div>-0.1000.100</div>
Coil 4 R	<div>0.059</div> <div>-0.5000.500</div>	<div>-0.005</div> <div>-0.2000.200</div>	<div>-0.008</div> <div>-0.2000.200</div>	<div>0.005</div> <div>-0.2000.200</div>	<div>-0.003</div> <div>-0.2000.200</div>	<div>0.003</div> <div>-0.2000.200</div>	<div>-0.001</div> <div>-0.2000.200</div>	<div>-0.000</div> <div>-0.2000.200</div>
Coil 4 Q	<div>0.003</div> <div>-1.0001.000</div>	<div>-0.010</div> <div>-0.4000.400</div>	<div>0.002</div> <div>-0.2000.200</div>	<div>-0.003</div> <div>-0.2000.200</div>	<div>-0.004</div> <div>-0.2000.200</div>	<div>0.002</div> <div>-0.2000.200</div>	<div>0.001</div> <div>-0.2000.200</div>	<div>-0.001</div> <div>-0.2000.200</div>
Coil 5 R	<div>0.138</div> <div>-1.2001.200</div>	<div>-0.007</div> <div>-0.4000.400</div>	<div>-0.015</div> <div>-0.4000.400</div>	<div>0.016</div> <div>-0.4000.400</div>	<div>-0.008</div> <div>-0.4000.400</div>	<div>-0.009</div> <div>-0.4000.400</div>	<div>-0.008</div> <div>-0.4000.400</div>	<div>0.005</div> <div>-0.4000.400</div>
Coil 5 Q	<div>0.058</div> <div>-1.5001.500</div>	<div>-0.025</div> <div>-0.8000.800</div>	<div>0.004</div> <div>-0.4000.400</div>	<div>0.008</div> <div>-0.4000.400</div>	<div>-0.001</div> <div>-0.4000.400</div>	<div>0.006</div> <div>-0.4000.400</div>	<div>-0.004</div> <div>-0.4000.400</div>	<div>-0.000</div> <div>-0.4000.400</div>

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

Coil 0 M	161.54	169.12	157.25	152.26	147.24	149.22	122.99	122.72
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Coil 0 M	161.54		160.12		157.25		152.96		147.31		140.33		132.08		122.73	
	136.00	186.00	134.00	184.00	131.00	181.00	126.00	176.00	122.00	170.00	118.00	161.00	112.00	150.00	105.00	139.00
Coil 0 P	7.734		25.324		42.505		59.650		76.792		93.949		111.107		128.227	
	-1.000	12.000	19.000	30.000	35.000	50.000	49.000	71.000	63.000	91.000	77.000	110.000	92.000	130.000	105.000	151.000
Coil 1 M	281.22		278.90		274.18		267.14		257.78		246.25		232.51		216.78	
	237.00	327.00	235.00	325.00	230.00	320.00	225.00	312.00	218.00	302.00	208.00	288.00	196.00	266.00	184.00	244.00
Coil 1 P	7.622		25.051		42.064		59.043		76.041		93.073		110.139		127.222	
	-1.000	12.000	19.000	30.000	35.000	51.000	49.000	71.000	63.000	92.000	77.000	112.000	92.000	132.000	105.000	153.000
Coil 2 M	569.16		564.35		554.61		540.00		520.59		496.67		468.24		435.46	
	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	7.808		25.517		42.834		60.123		77.432		94.776		112.158		129.549	
	-1.000	12.000	19.000	31.000	35.000	51.000	49.000	71.000	63.000	92.000	77.000	114.000	92.000	135.000	105.000	156.000
Coil 3 M	921.37		913.09		896.30		871.10		838.18		797.58		749.89		695.58	
	772.00	1060.00	764.00	1050.00	752.00	1030.00	728.00	1010.00	700.00	970.00	665.00	925.00	626.00	868.00	589.00	799.00
Coil 3 P	7.916		25.840		43.360		60.826		78.295		95.752		113.210		130.611	
	-2.000	13.000	19.000	31.000	35.000	52.000	49.000	72.000	63.000	93.000	77.000	114.000	92.000	135.000	105.000	156.000
Coil 4 M	1447.1		1433.9		1407.0		1366.9		1314.3		1249.5		1173.6		1088.9	
	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	7.885		25.770		43.256		60.689		78.120		95.546		112.957		130.284	
	-2.000	13.000	19.000	31.000	35.000	52.000	49.000	73.000	63.000	93.000	78.000	114.000	92.000	135.000	105.000	156.000
Coil 5 M	2941.9		2920.3		2874.6		2805.9		2713.6		2598.6		2460.7		2302.3	
	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	7.627		25.068		42.130		59.194		76.281		93.456		110.701		127.967	
	-2.000	13.000	19.000	31.000	35.000	52.000	49.000	73.000	63.000	94.000	79.000	114.000	93.000	135.000	106.000	156.000

HDIL AFTER LOG VERIFICATION SUMMARY

TOOL #:

1530XA 10118612

DATE/TIME PERFORMED:

Mon Feb 2 23:51:14 2015

DAYS SINCE CAL:

81

UNIT #:

3880TA HL6670

ZERO DATA(mv)		10 KHz	30 KHz	50 KHz	70 KHz	90 KHz	110 KHz	130 KHz	150 KHz
Coil 0 R	0.001	-0.000	0.001	0.001	-0.000	-0.001	-0.001	-0.000	
	-0.079 0.081	-0.061 0.059	-0.030 0.030	-0.030 0.030	-0.031 0.029	-0.030 0.030	-0.030 0.030	-0.030 0.030	
Coil 0 Q	0.001	-0.000	-0.001	0.001	-0.000	-0.000	-0.000	-0.000	
	-0.039 0.041	-0.119 0.121	-0.029 0.031	-0.031 0.029	-0.030 0.030	-0.030 0.030	-0.030 0.030	-0.030 0.030	
Coil 1 R	0.005	0.002	-0.002	0.000	-0.001	-0.001	0.000	0.002	
	-0.074 0.086	-0.048 0.052	-0.031 0.029	-0.030 0.030	-0.030 0.030	-0.030 0.030	-0.031 0.029	-0.029 0.031	
Coil 1 Q	0.008	0.000	-0.000	0.000	0.000	0.002	0.001	0.001	
	-0.397 0.403	-0.102 0.098	-0.030 0.030	-0.030 0.030	-0.030 0.030	-0.029 0.031	-0.030 0.030	-0.030 0.030	
Coil 2 R	0.003	0.002	-0.002	-0.002	0.002	-0.001	0.002	-0.001	
	-0.066 0.074	-0.032 0.028	-0.029 0.031	-0.030 0.030	-0.029 0.031	-0.030 0.030	-0.033 0.027	-0.029 0.031	
Coil 2 Q	0.000	0.003	-0.001	0.001	-0.001	0.001	0.002	0.000	
	-0.352 0.348	-0.097 0.103	-0.028 0.032	-0.029 0.031	-0.030 0.030	-0.030 0.030	-0.030 0.030	-0.029 0.031	
Coil 3 R	0.021	-0.003	-0.003	-0.002	0.002	-0.003	-0.000	0.004	
	-0.021 0.059	-0.044 0.036	-0.040 0.040	-0.043 0.037	-0.039 0.041	-0.039 0.041	-0.039 0.041	-0.043 0.037	
Coil 3 Q	-0.004	-0.001	0.001	-0.002	-0.003	0.002	0.001	-0.004	
	-0.199 0.201	-0.083 0.077	-0.033 0.047	-0.041 0.039	-0.041 0.039	-0.038 0.042	-0.040 0.040	-0.041 0.039	
Coil 4 R	0.059	0.002	-0.008	0.002	0.000	0.005	0.007	-0.000	
	-0.001 0.119	-0.065 0.055	-0.068 0.052	-0.055 0.065	-0.063 0.057	-0.057 0.063	-0.061 0.059	-0.060 0.060	
Coil 4 Q	0.000	-0.015	0.002	0.002	-0.002	-0.001	-0.002	-0.001	
	-0.297 0.303	-0.110 0.090	-0.058 0.062	-0.063 0.057	-0.064 0.056	-0.058 0.062	-0.059 0.061	-0.061 0.059	
Coil 5 R	0.145	-0.009	-0.012	0.010	0.008	0.003	0.004	0.002	
	0.018 0.258	-0.127 0.113	-0.135 0.105	-0.104 0.136	-0.128 0.112	-0.129 0.111	-0.128 0.112	-0.115 0.125	
Coil 5 Q	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
	-0.000 0.000	-0.000 0.000	-0.000 0.000	-0.000 0.000	-0.000 0.000	-0.000 0.000	-0.000 0.000	-0.000 0.000	

Coil 5 Q

0.089	-0.028	0.008	0.003	0.006	0.002	-0.003	0.004
-0.542	0.658	-0.275	0.225	-0.116	0.124	-0.112	0.128
-0.121	0.119	-0.114	0.126	-0.124	0.116	-0.120	0.120

ELEC. GAINS

10 KHz

30 KHz

50 KHz

70 KHz

90 KHz

110 KHz

130 KHz

150 KHz

Coil 0 M

160.98	159.56	156.68	152.39	146.74	139.76	131.57	122.20
158.31	164.77	158.92	163.32	154.11	160.40	149.90	156.02
144.36	150.26	137.53	143.14	129.44	134.72	120.28	125.19

Coil 0 P

7.193	25.234	42.558	59.801	77.027	94.258	111.487	128.691
4.734	10.734	22.324	28.324	39.505	45.505	56.650	62.650
73.792	79.792	90.949	96.949	108.107	114.107	125.227	131.227

Coil 1 M

281.14	278.80	274.06	266.97	257.61	246.02	232.27	216.55
275.60	286.85	273.32	284.48	268.69	279.66	261.80	272.48
252.62	262.93	241.32	251.17	227.86	237.16	212.45	221.12

Coil 1 P

7.116	24.972	42.123	59.196	76.272	93.387	110.517	127.669
4.622	10.622	22.051	28.051	39.064	45.064	56.043	62.043
73.041	79.041	90.073	96.073	107.139	113.139	124.222	130.222

Coil 2 M

566.29	561.52	551.80	537.26	517.97	494.08	465.81	433.18
557.77	580.54	553.06	575.64	543.52	565.70	529.20	550.80
510.17	531.00	486.74	506.60	458.88	477.61	426.75	444.17

Coil 2 P

7.219	25.404	42.863	60.252	77.651	95.057	112.522	129.973
4.808	10.808	22.517	28.517	39.834	45.834	57.123	63.123
74.432	80.432	91.776	97.776	109.158	115.158	126.549	132.549

Coil 3 M

920.51	912.19	895.34	870.22	837.16	796.31	748.87	694.60
902.95	939.80	894.82	931.35	878.38	914.23	853.68	888.52
821.42	854.94	781.63	813.53	734.89	764.89	681.66	709.49

Coil 3 P

7.341	25.731	43.389	60.958	78.505	96.027	113.547	131.031
4.916	10.916	22.840	28.840	40.360	46.360	57.826	63.826
75.295	81.295	92.752	98.752	110.210	116.210	127.611	133.611

Coil 4 M

1450.0	1436.7	1409.6	1369.2	1316.1	1250.9	1175.0	1089.5
1418.2	1476.1	1405.2	1462.5	1378.9	1435.1	1339.6	1394.2
1288.0	1340.6	1224.5	1274.4	1150.1	1197.1	1067.1	1110.7

Coil 4 P

7.314	25.662	43.280	60.807	78.310	95.803	113.281	130.670
4.885	10.885	22.770	28.770	40.256	46.256	57.689	63.689
75.120	81.120	92.546	98.546	109.957	115.957	127.284	133.284

Coil 5 M

2929.5	2907.8	2862.0	2793.1	2700.1	2585.2	2447.5	2290.6
2883.0	3000.7	2861.9	2978.7	2817.1	2932.1	2749.7	2862.0
2659.4	2767.9	2546.6	2650.5	2411.5	2509.9	2256.3	2348.4

Coil 5 P

7.111	24.975	42.176	59.321	76.499	93.742	111.032	128.387
4.627	10.627	22.068	28.068	39.130	45.130	56.194	62.194
73.281	79.281	90.456	96.456	107.701	113.701	124.967	130.967

INSTRUMENT CONFIGURATION

Source File: /dat1a/OH094602J/n970a~tdg

53.65'

CABLEHEAD

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

CABLEHEAD TOP 50.90'

WTS ADAPTOR

Diameter : 3.62"
 Length : 0.98'

FOCUS SWIVEL

Diameter : 3.13"
Length : 2.58'
Weight : 50 lbs
Series : 3950XA
Mnemonic : SWVL

FOCUS TEN/TEMP/MUD RES/ACCEL

Diameter : 3.13"
Length : 4.31'
Weight : 61 lbs
Series : 3980XA
Mnemonic : TTMA

FOCUS TELEMETRY (POWER SECTION)

Diameter : 3.13"
Length : 3.71'
Weight : 48 lbs
Series : 3518FB
Mnemonic : TMGR

FOCUS EB/EG TELEMETRY GAMMA RAY

Diameter : 3.12"
Length : 5.83'
Weight : 63 lbs
Series : 3518EG
Mnemonic : GR
Measure Point: 4.24': GR MP

GR MP — 34.97'

FOCUS COMPENSATED NEUTRON

Diameter : 3.13"
Length : 4.81'
Weight : 65 lbs
Series : 2436XA
Mnemonic : CN
Measure Point: 1.92': LSN MP
Measure Point: 1.46': SSN MP

LSN MP — 27.83'

SSN MP — 27.38'

FOCUS Z-DENSILOG

Diameter : 3.75"
Length : 9.58'
Weight : 200 lbs
Series : 2223XA
Mnemonic : ZDL
Measure Point: 4.33': CR1 MP
Measure Point: 1.69': LSD / CR2 MP
Measure Point: 1.29': SSD MP

CR1 MP — 20.67'

LSD / CR2 MP 18.02'
SSD MP 17.63'

FOCUS KNUCKLE JOINT

Diameter : 3.13"
Length : 1.50'
Weight : 30 lbs
Series : 3930XA

FOCUS KNUCKLE JOINT

Diameter : 3.13"
Length : 1.50'
Weight : 30 lbs
Series : 3930XA

FOCUS HIGH DEFINITION INDUCTION TOOL

Diameter : 3.13"
Length : 13.33'
Weight : 115 lbs
Series : 1530XA
Mnemonic : HDIL
Measure Point: 7.17': COIL 5 MP
Measure Point: 5.67': COIL 4 MP
Measure Point: 4.17': COIL 3 MP
Measure Point: 3.67': COIL 2 MP
Measure Point: 3.17': COIL 1 MP
Measure Point: 2.67': COIL 0 MP
Measure Point: 1.14': SP MP

COIL 5 MP 7.17'

COIL 4 MP 5.67'

COIL 3 MP 4.17'

COIL 2 MP 3.67'

COIL 1 MP 3.17'

COIL 0 MP 2.67'

SP MP 1.14'

0.00'

TOTAL LENGTH: 53.65'
TOTAL WEIGHT: 754 lbs
MAX DIAMETER: 0'3.75"



COMPANY	WPX ENERGY INC		FILE NO:	US094602J
WELL	WPX GM 522-28		API NO:	05045224990000
FIELD	GRAND VALLEY			
COUNTY	GARFIELD	STATE	COLORADO	
LOCATION:		ELEVATIONS:	SEC 28 T6S R96W	
SHL: 1545' FSL 2312' FWL		KB 5500 FT	PAD: GM 323-28	
BHL: 2244' FNL 2442' FWL		DF	RIG: H&P 318	
SEC 28 TWP 6S RGE 96W		GL 5476 FT		
		DATE	02-Feb-2015	