BAKER HUGHES

HIGH DEFINITION INDUCTION LOG℠
COMPENSATED Z-DENSILOG℠
COMPENSATED NEUTRON LOG
GAMMA RAY LOG
CALIPER LOG

FILE NO:	625566
API NO:	05045220510000
COMPANY	WPX ENERGY ROCKY MOUNTAIN LLC
WELL	FEDERAL GM 702-4 HN1
FIELD	GRAND VALLEY
COUNTY	GARFIELD
STATE	CO

Ver. 3.87
S4 T7S 96W
PAD: GM 32-4
RIG: AZTEC 1000

LOCATION:
SHL: 1401' FNL; 2354' FEL
BHL: 1974' FNL; 1702' FEL
SEC 9 TWP 7S RGE 96W

OTHER SERVICES
NONE

PERMANENT DATUM	GL	ELEVATION	5532 FT
LOG MEASURED FROM	KB	25 FT	ABOVE P.D.
DRILL. MEAS. FROM	KB		

ELEVATIONS:
KB 5557 FT
DF
GL 5532 FT

DATE		05-Aug-2013			
RUN	TRIP	1	1		
SERVICE ORDER		625566			
DEPTH DRILLER		10777 FT			
DEPTH LOGGER		10112 FT			
BOTTOM LOGGED INTERVAL		10075 FT			
TOP LOGGED INTERVAL		0 FT			
CASING DRILLER		13.375 IN @ 2472 FT		@	
CASING LOGGER		2470 FT			
BIT SIZE		9.875 IN			
TYPE OF FLUID IN HOLE		WBM			
DENSITY	VISCOSITY	12.9 LB/G	70 CP		
PH	FLUID LOSS	10.1	6 C3		
SOURCE OF SAMPLE		FLOWLINE			
RM AT MEAS. TEMP.		0.93 OHMM @ 81 DEGF		@	
RMF AT MEAS. TEMP.		0.69 OHMM @ 81 DEGF		@	
RMC AT MEAS. TEMP.		1.16 OHMM @ 81 DEGF		@	
SOURCE OF RMF	RMC	CALCULATED	CALCULATED		
RM AT BHT		NA @ 213 DEGF		@	
TIME SINCE CIRCULATION		21HRS			
MAX. RECORDED TEMP.		233 DEGF			
EQUIP. NO.	LOCATION	6670	GRAND JUNC		
RECORDED BY		PATTON			
WITNESSED BY		F. MOORE / A. BRUNK			

CASING RECORD

SIZE	WEIGHT	GRADE	FROM	TO
20 IN			0 FT	120 FT
13.375 IN	68 LB/F		0 FT	2436 FT

BOREHOLE RECORD

BIT SIZE	FROM	TO
9.875 IN	2472 FT	10777 FT

REMARKS

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

BVOL CVOL CALCULATED IN CUBIC FEET
CVOL CALCULATED USING PROPOSED 7.625IN CASING
CALIPER VERIFIED INSIDE CASING

CN MATRIX: SANDSTONE

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

HDIL RAN WITH 1.5IN STANDOFFS
ARC TO CALCULATE MUD CONDUCTIVITY

ABC TO CALCULATE MUD CONDUCTIVITY

TOOL DRAG AND STICKING CAUSE SOME DATA SPIKES DOWNHOLE
CLOSED CALIPER AT 8560' TO PULL THROUGH TIGHT SPOT. OPENED AT 8540'
STRING RAN WITHOUT TTRM DUE TO TOOL FAILURE
TEMPERATURES RECORDED FROM RX AND TX TEMP DUE TO LACK OF TTRM
SP INVALID IN PLACES DUE TO OUTSIDE INTERFERENCE

THANK YOU FOR CHOOSING BAKER HUGHES WIRLEINE SERVICES
CREW: PATTON/COATE/HOLLAR
RIG: AZTEC 1000

EQUIPMENT DATA

RUN	TRIP	TOOL	SERIES NO.	SERIAL NO.	POSITION
1	1	TEL	3514XA	10197691	FREE
1	1	GR	1329XA	10196895	FREE
1	1	CN	2446XA	10202034	DECENTRALIZED
1	1	ZDL	2223XA	10211833	PAD DEVICE
1	1	KNUCKLE	3939XA	1015406	FREE
1	1	HDIL EA	1515EA	10049592	STOOD OFF
1	1	HDIL MA	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
Patches: 1

Plotted: Tue Aug 6 09:08:39 2013

PARAMETER AND FILTER SUMMARY REPORT

FILE: /dat1a/625566/nu779xR-FINAL106.prm
LOGGING MODE: DEPTH DIRECTION: UP
TOP DEPTH: 2353.500 ft BOTTOM DEPTH: 10093.524 ft

SYMMETRIC FILTER

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

BOREHOLE & CEMENT

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
BIT SIZE	BIT SIZE	9.375	in	TOP	BOTTOM
MUD SAMPLE RESISTIVITY	MUD SAMPLE TEMP	77.0	degF	"	"
	MUD SAMPLE RES	0.930	ohm.m	"	"
BOREHOLE TEMP from GRADIENT	Known BH REF TEMP	81.0	degF	"	"
	at BH REF DEPTH	0.0	ft	"	"
	with TEMP GRADIENT	1.200	0.01 degF/ft	"	"
BOREHOLE CORR DIAMETER SOURCE	CALIPER/FIXED DIA. (mbh*)	USE CALIPER		"	"
BOREHOLE CORR DIAMETER	FIXED DIAMETER (mbh*)	9.375	in	"	"
BH MUD RESISTIVITY SOURCE	RMUD SOURCE (HDIL)	MUD SAMP DERIVED		"	"

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	1.200		"	"

CURVE DESCRIPTION REPORT

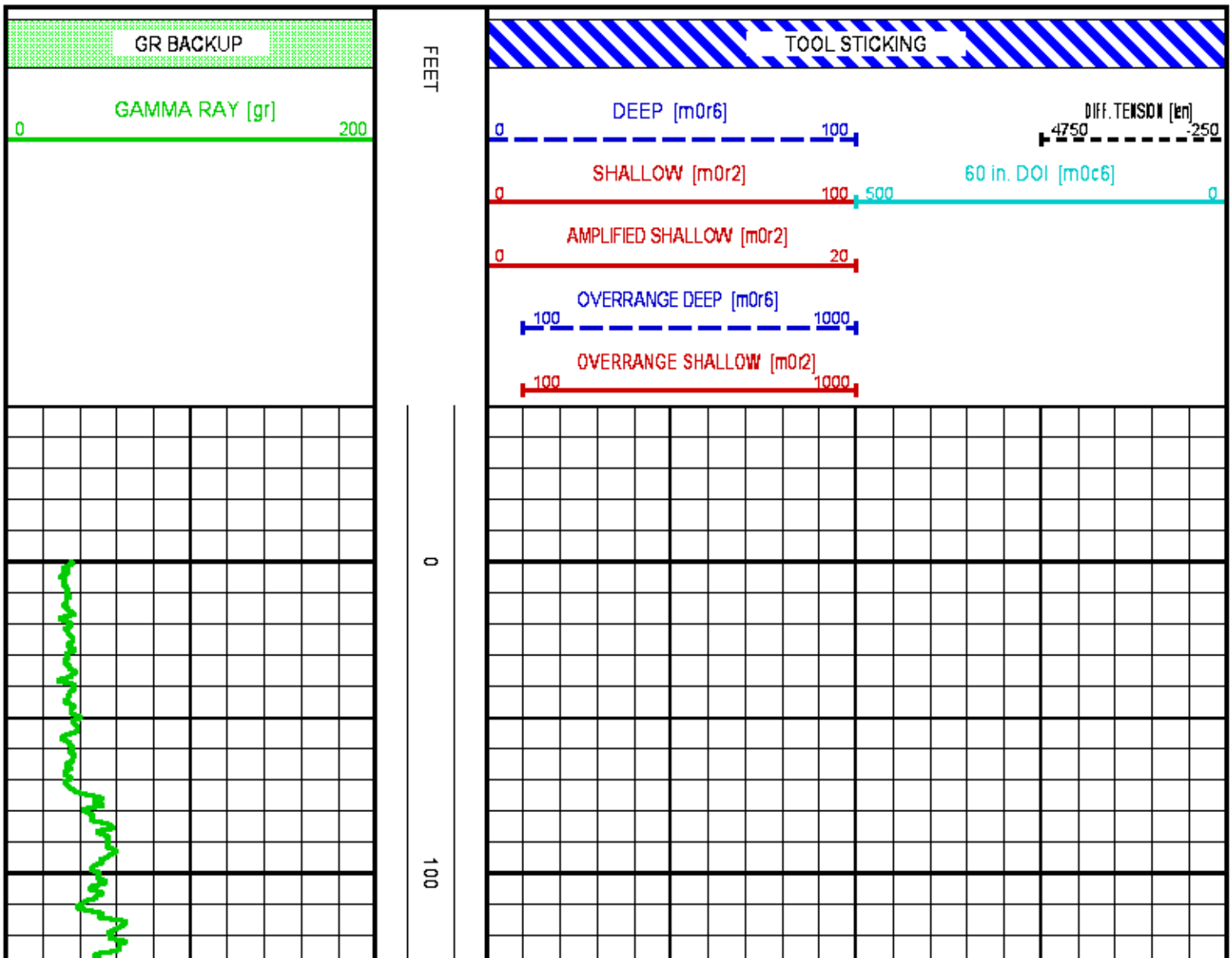
CURVE NAME	CREATION DATE	CURVE DESCRIPTION
F1:GR	Aug 6 08:43:02 2013	GAMMA RAY
F1:MOC6	Aug 6 08:43:02 2013	FOCUSED CONDUCTIVITY, 60-INCH DOI
F1:MOR2	Aug 6 08:43:02 2013	TRUE FOCUSED RESISTIVITY FOR HDIL, 20-INCH DOI
F1:MOR6	Aug 6 08:43:02 2013	TRUE FOCUSED RESISTIVITY FOR HDIL, 60-INCH DOI
F1:TEN	Aug 6 08:43:02 2013	DIFFERENTIAL TENSION

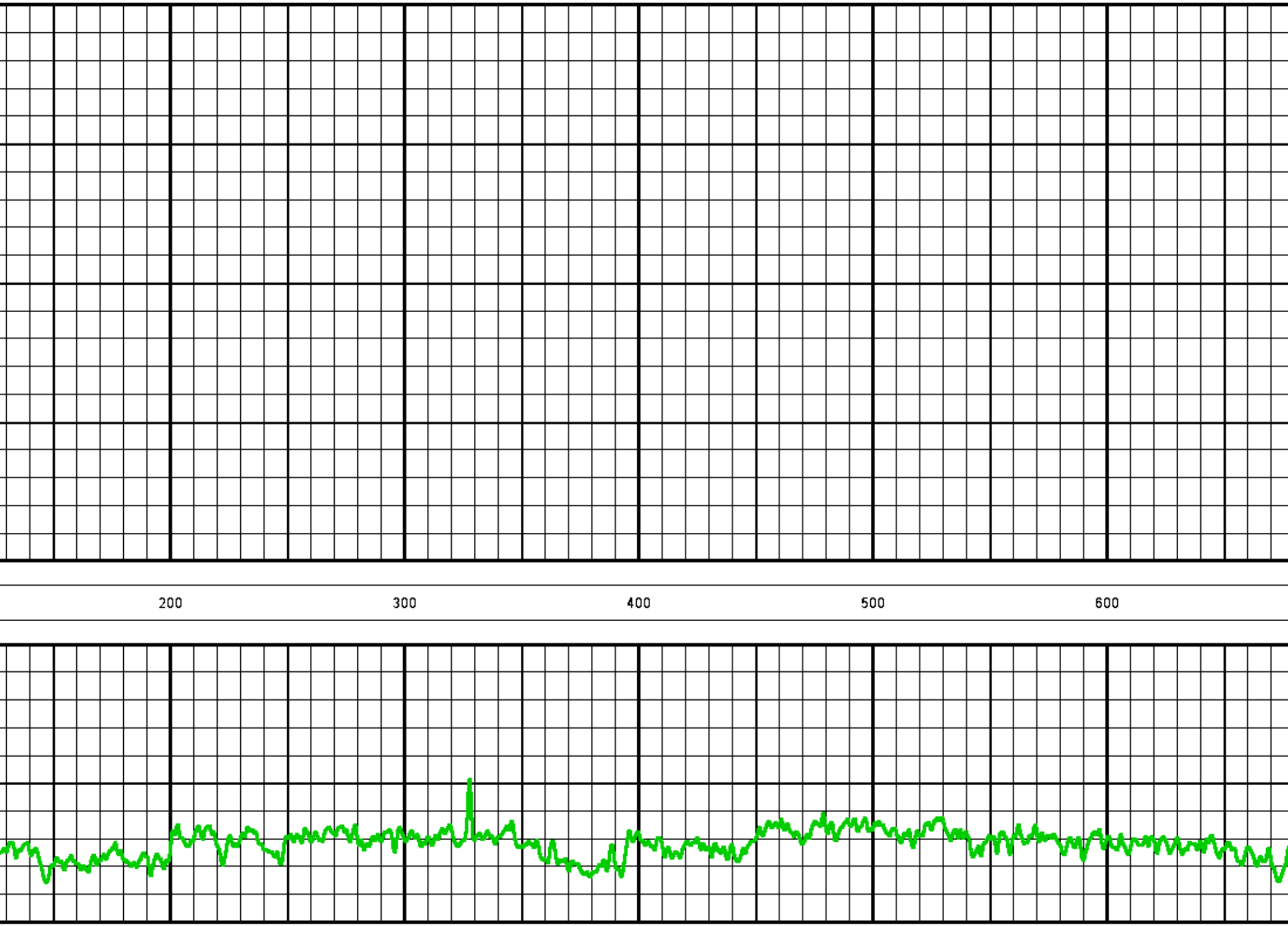
CURVE MEASURE POINT OFFSET

CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
GR	52.25	MOR2	8.00	TEN	0.00		
MOC6	8.00	MOR6	8.00				

Presentation : HL6670:/dat1a/625566/WPX_2IN-FINAL1.fvpdf [2"/100' Scale]
Plot Interval : -43.25 - 10119.8 Feet

Data File 1 : F1 : HL6670:/dat1a/625566/nu779xR-FINAL106.xtf
Created On : Aug 6 08:43:02 2013
Company : WPX ENERGY ROCKY MOUNTAIN LLC
Well : FEDERAL GM 702-4-HN1
Field : GRAND VALLEY
File Interval : -43.25 - 10119.8 Feet
OCT : nu779x

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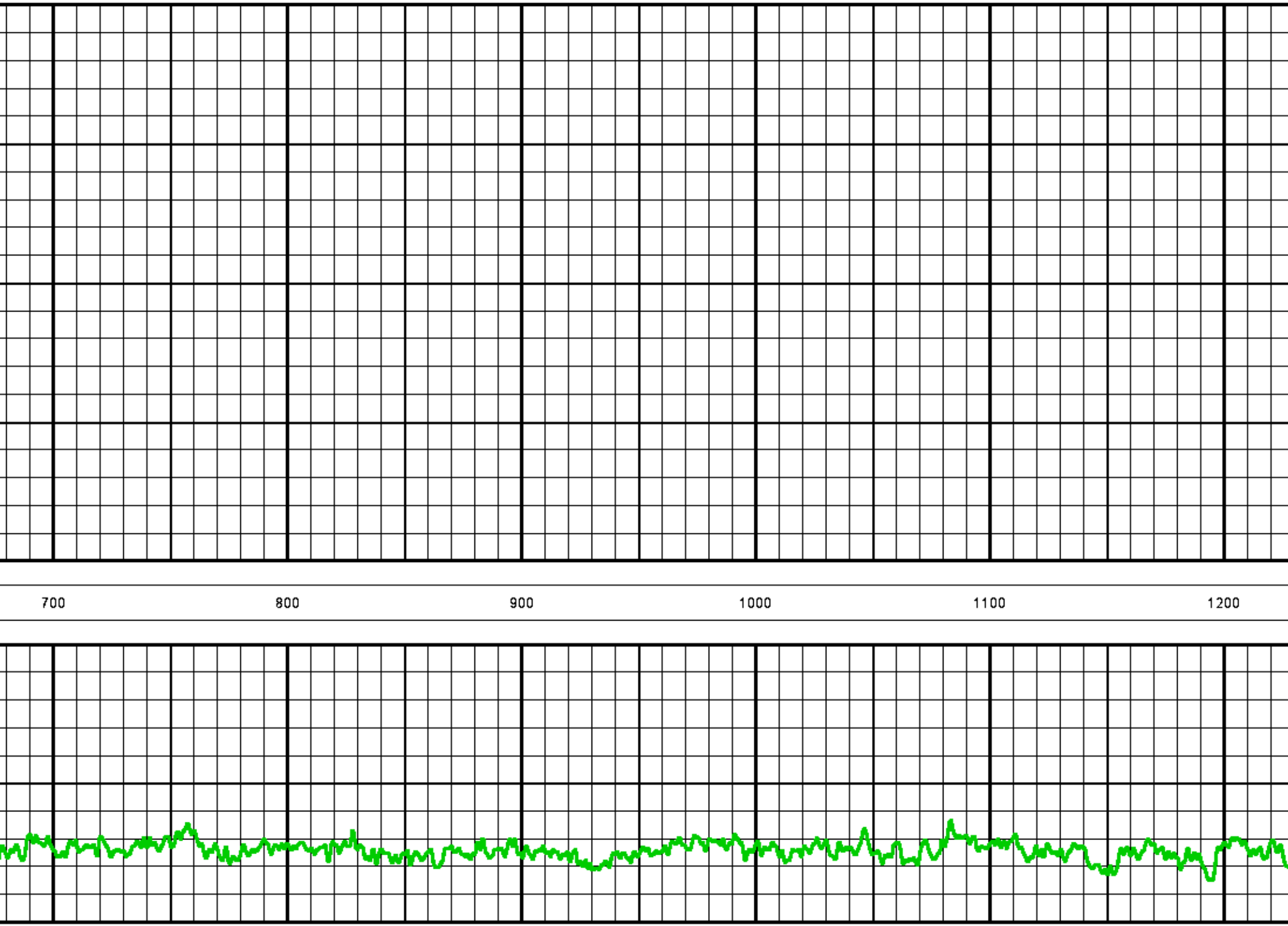
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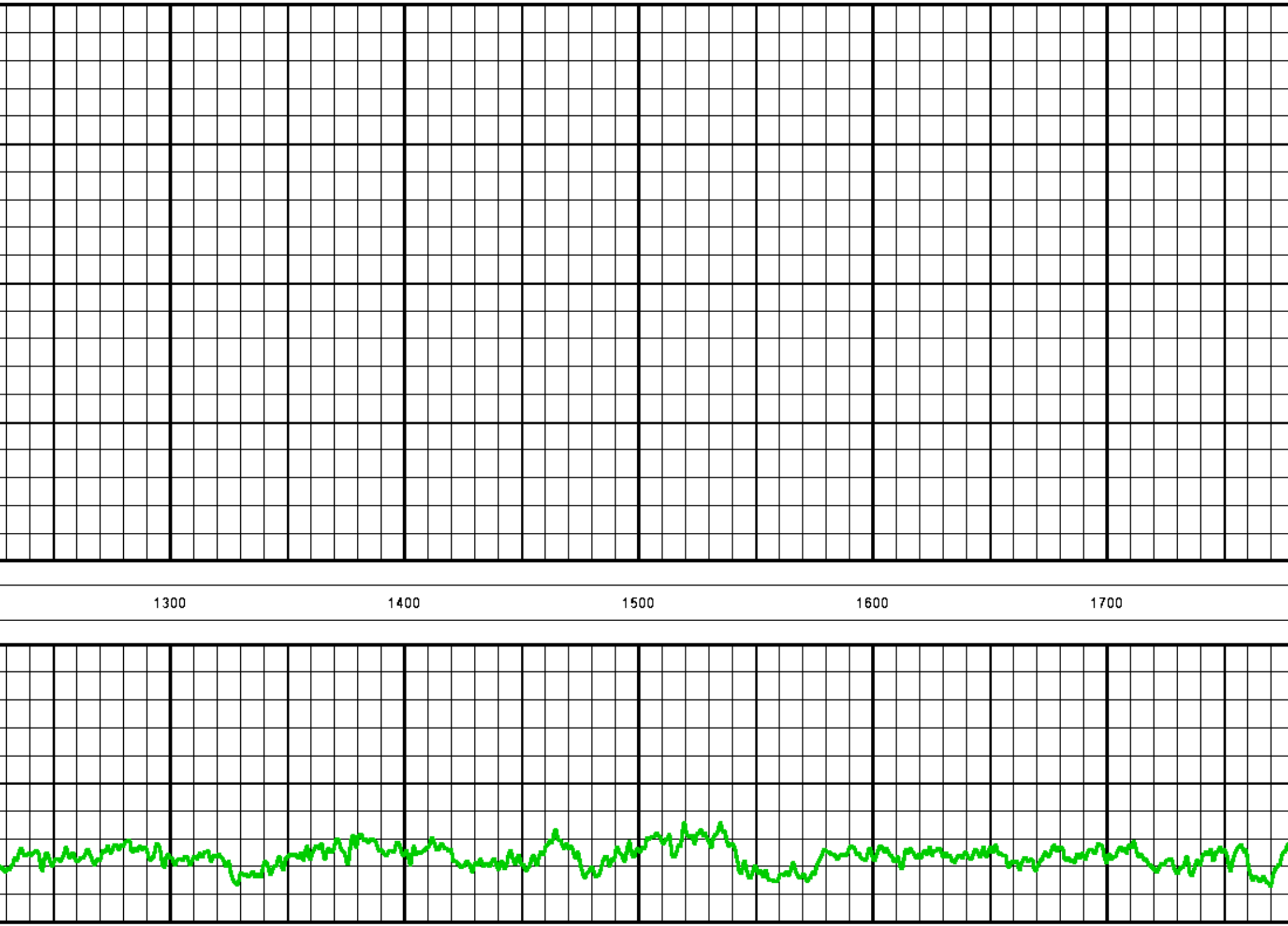
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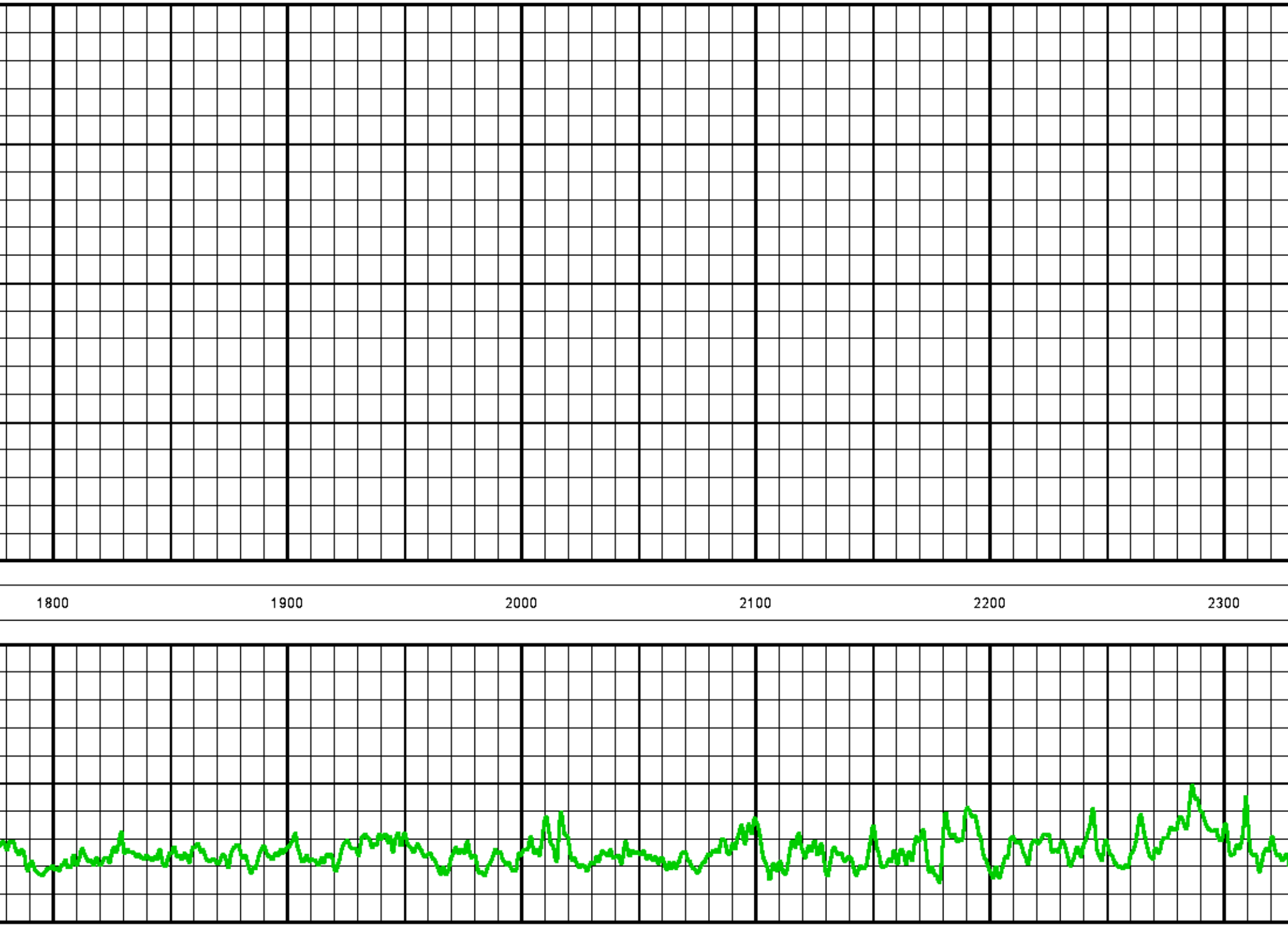
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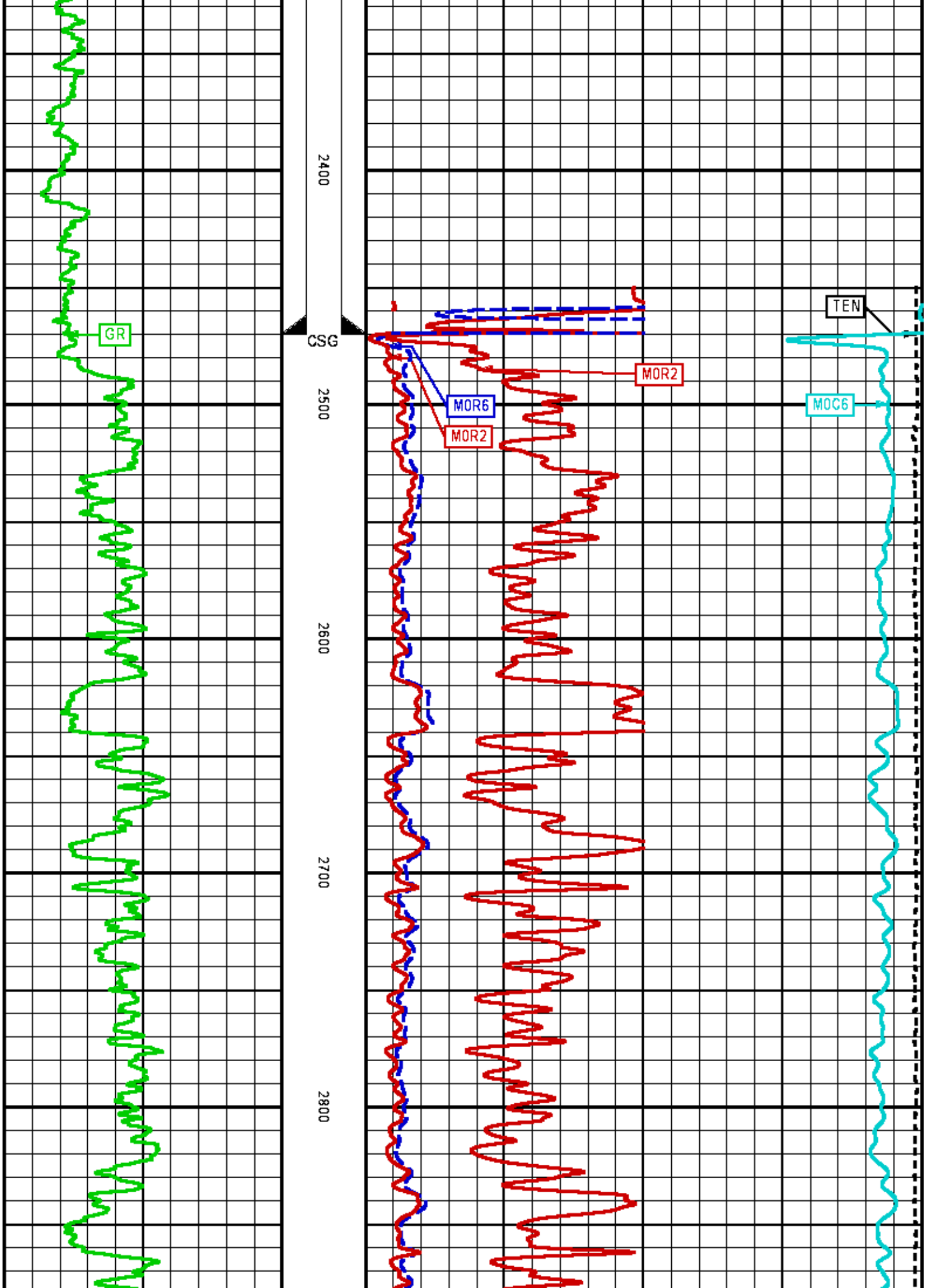
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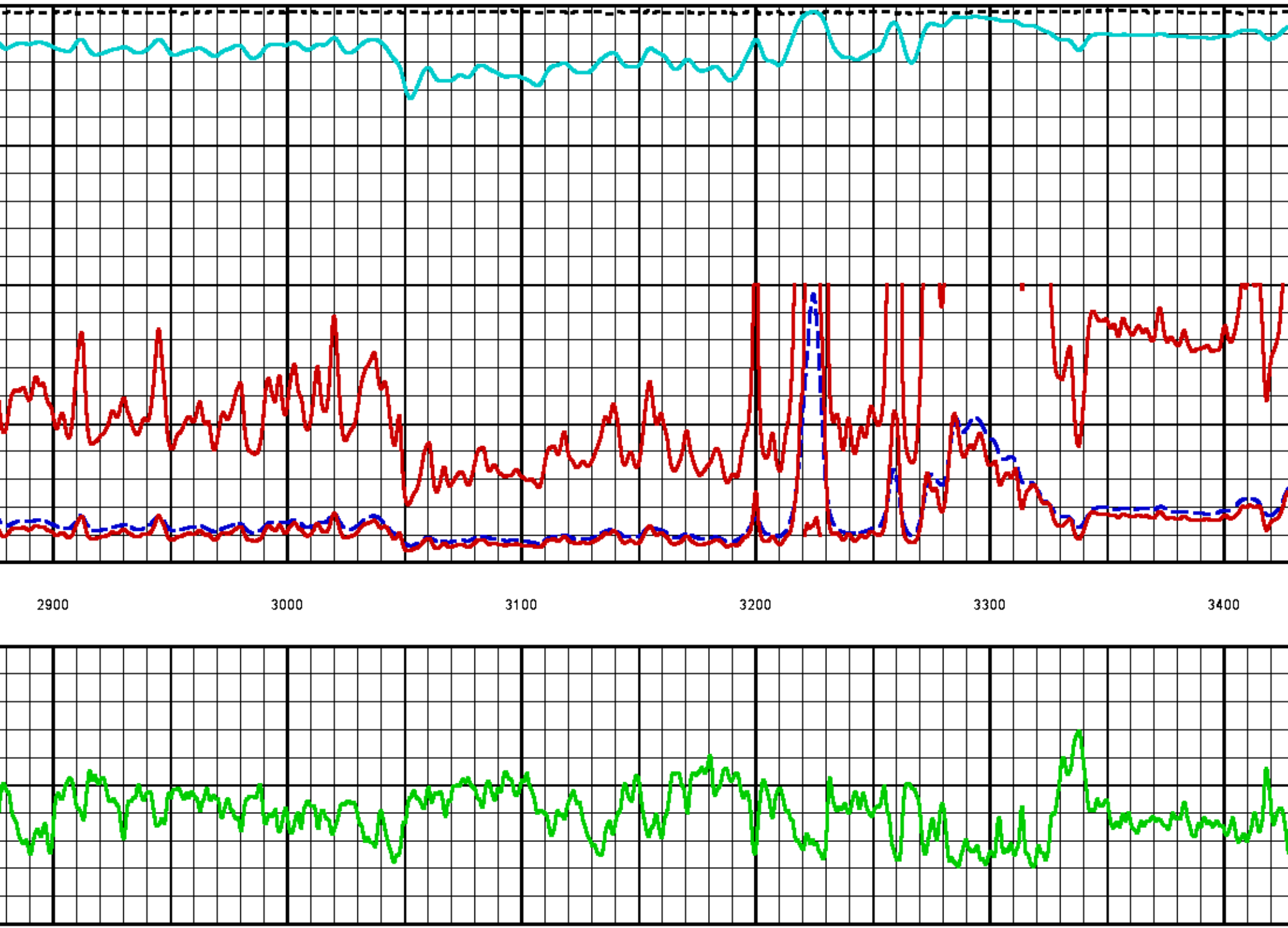
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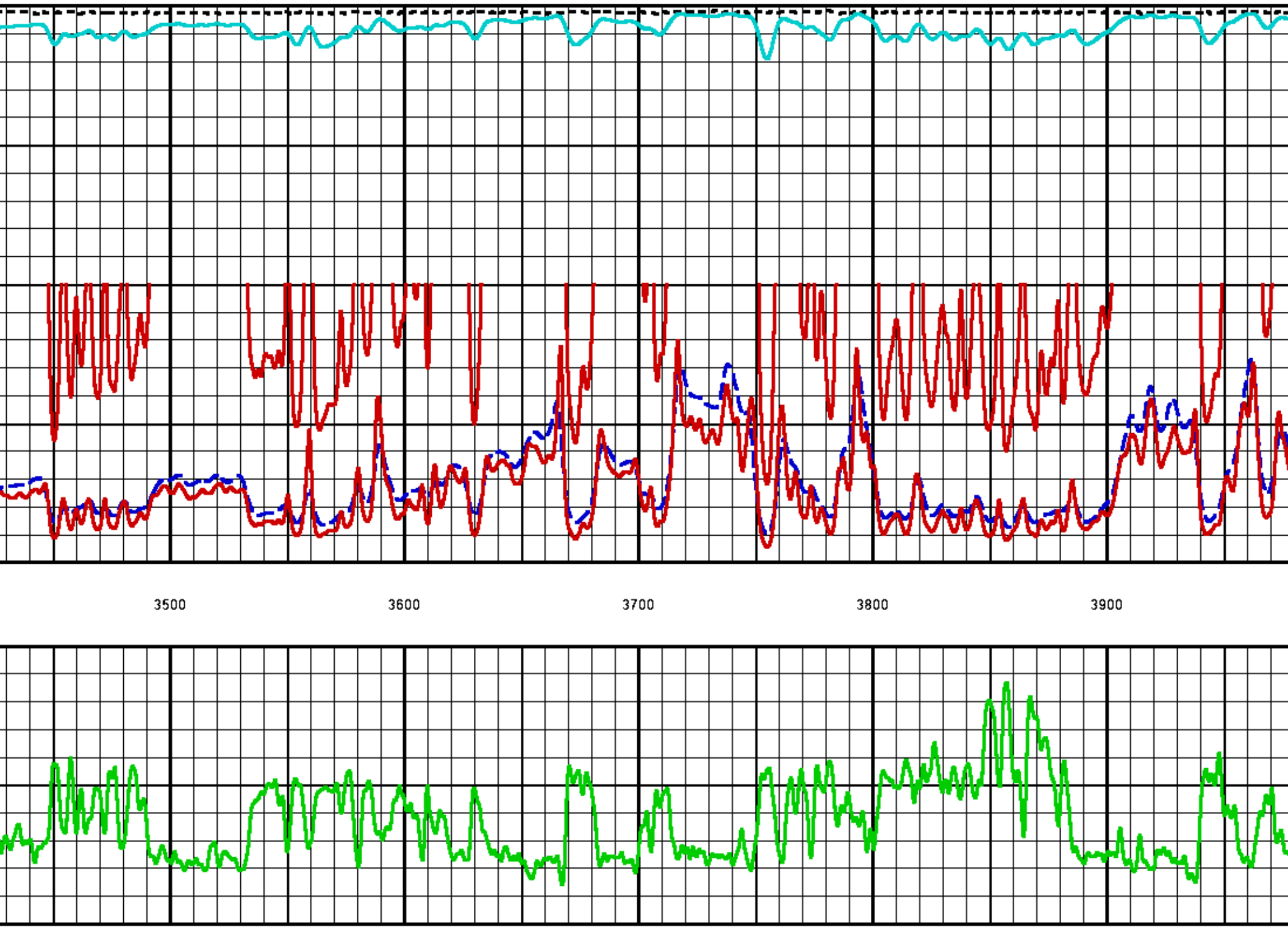
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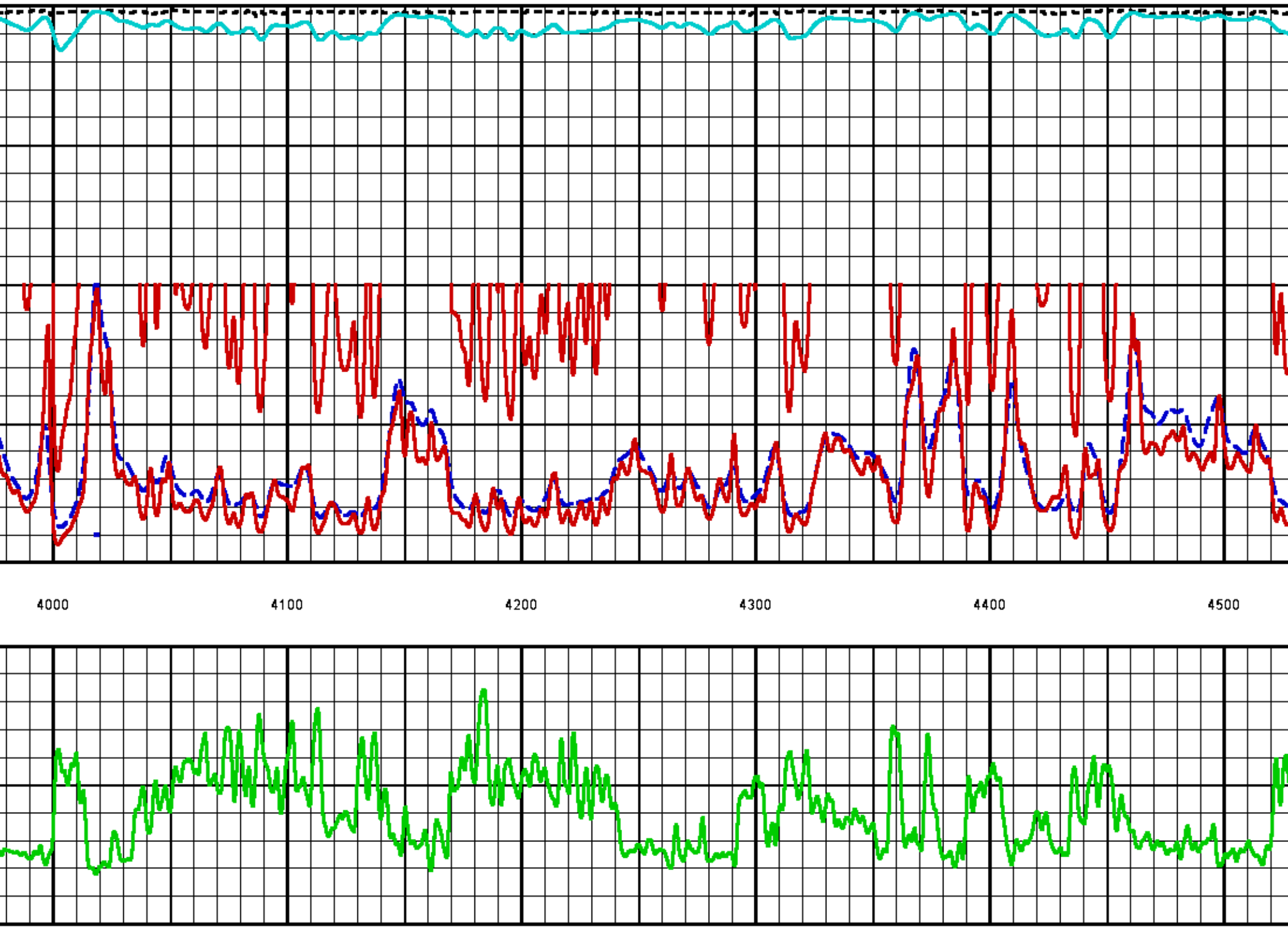
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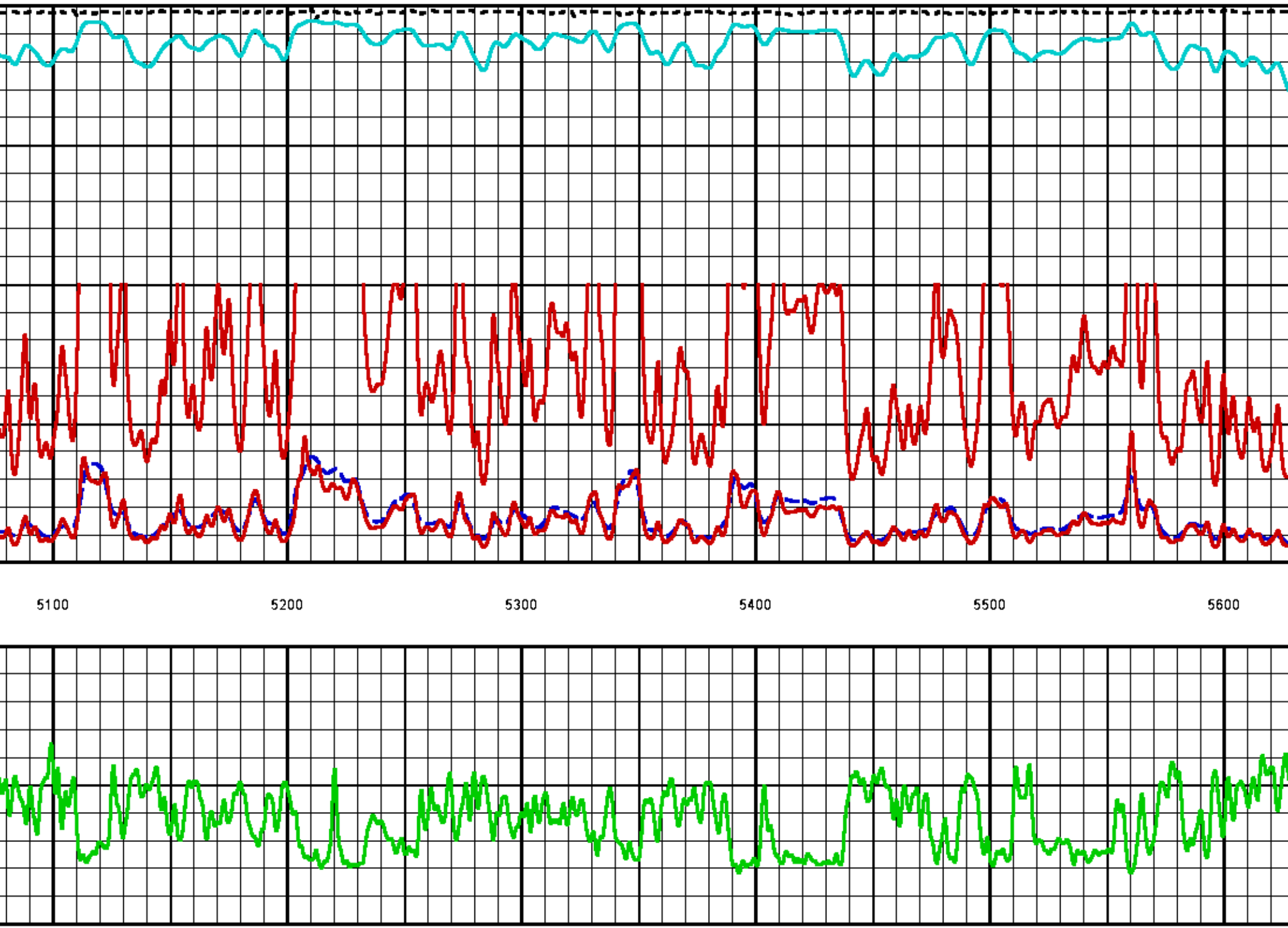
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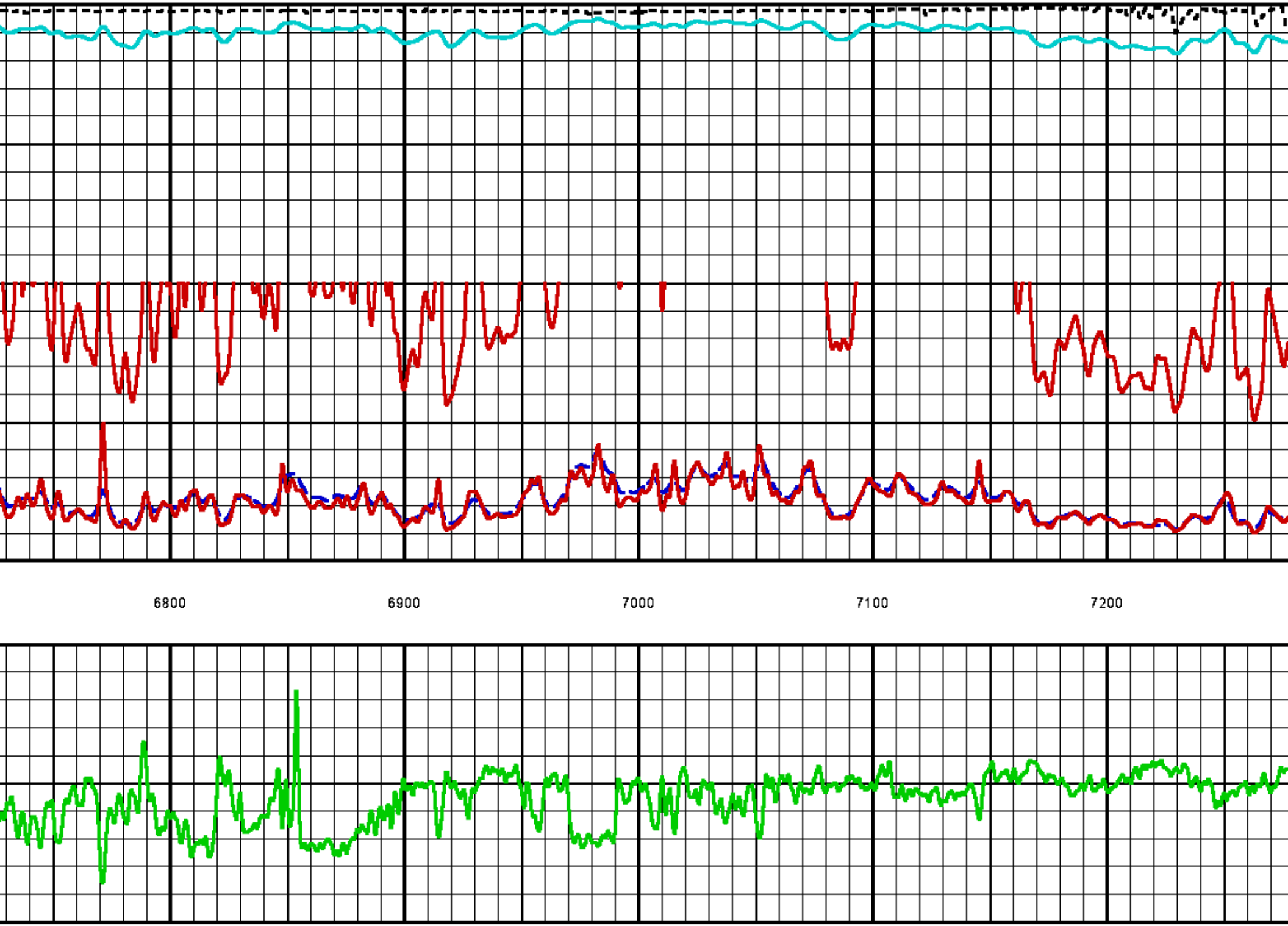
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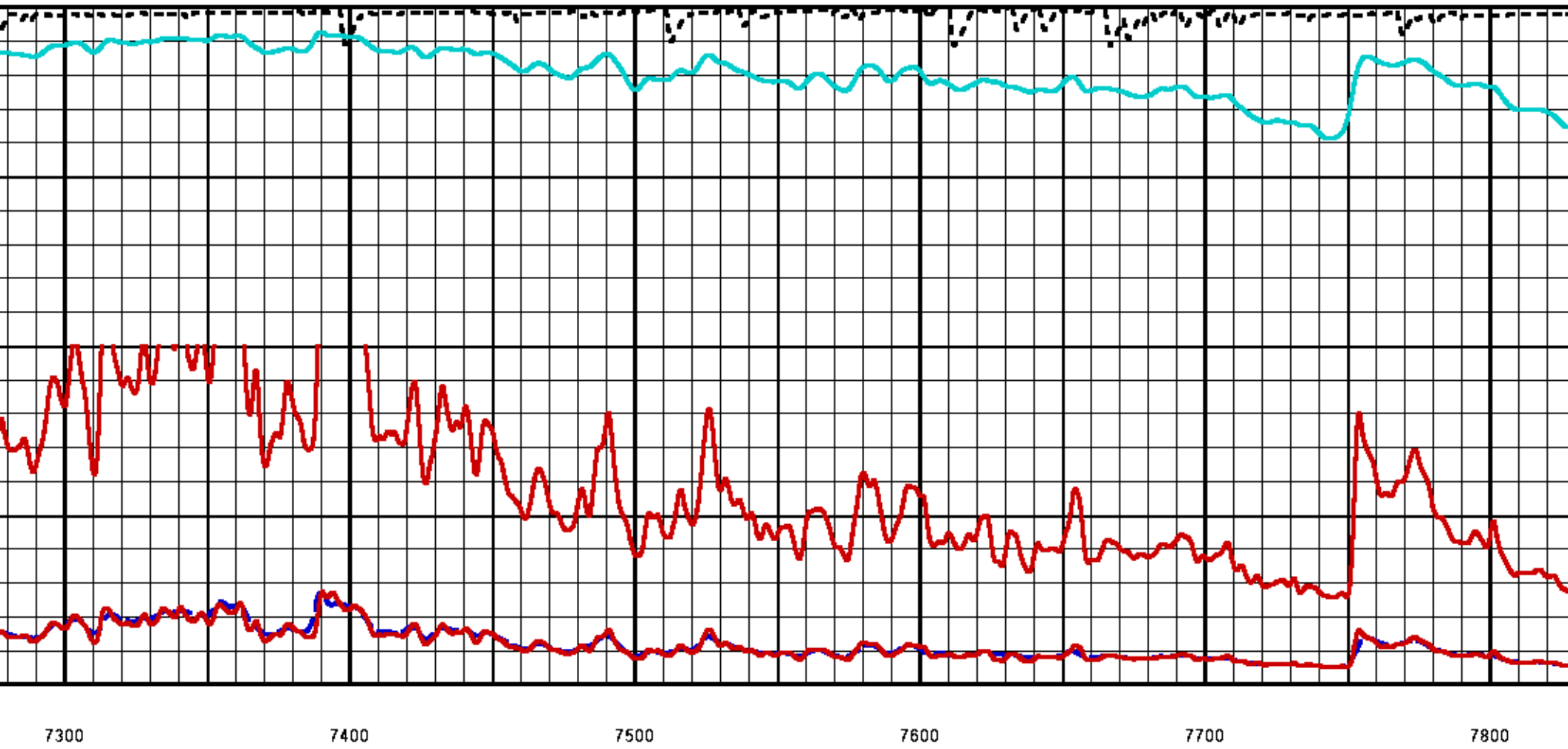
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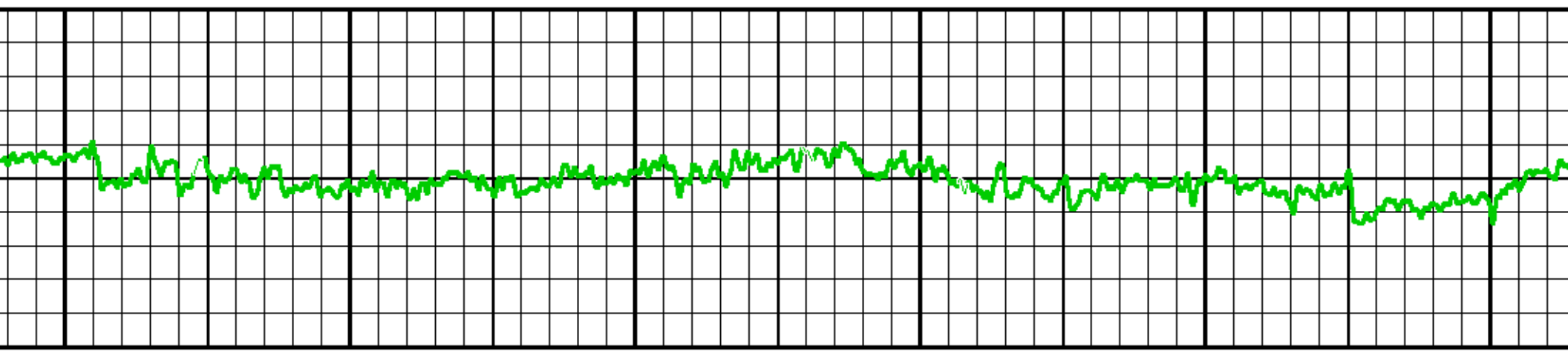

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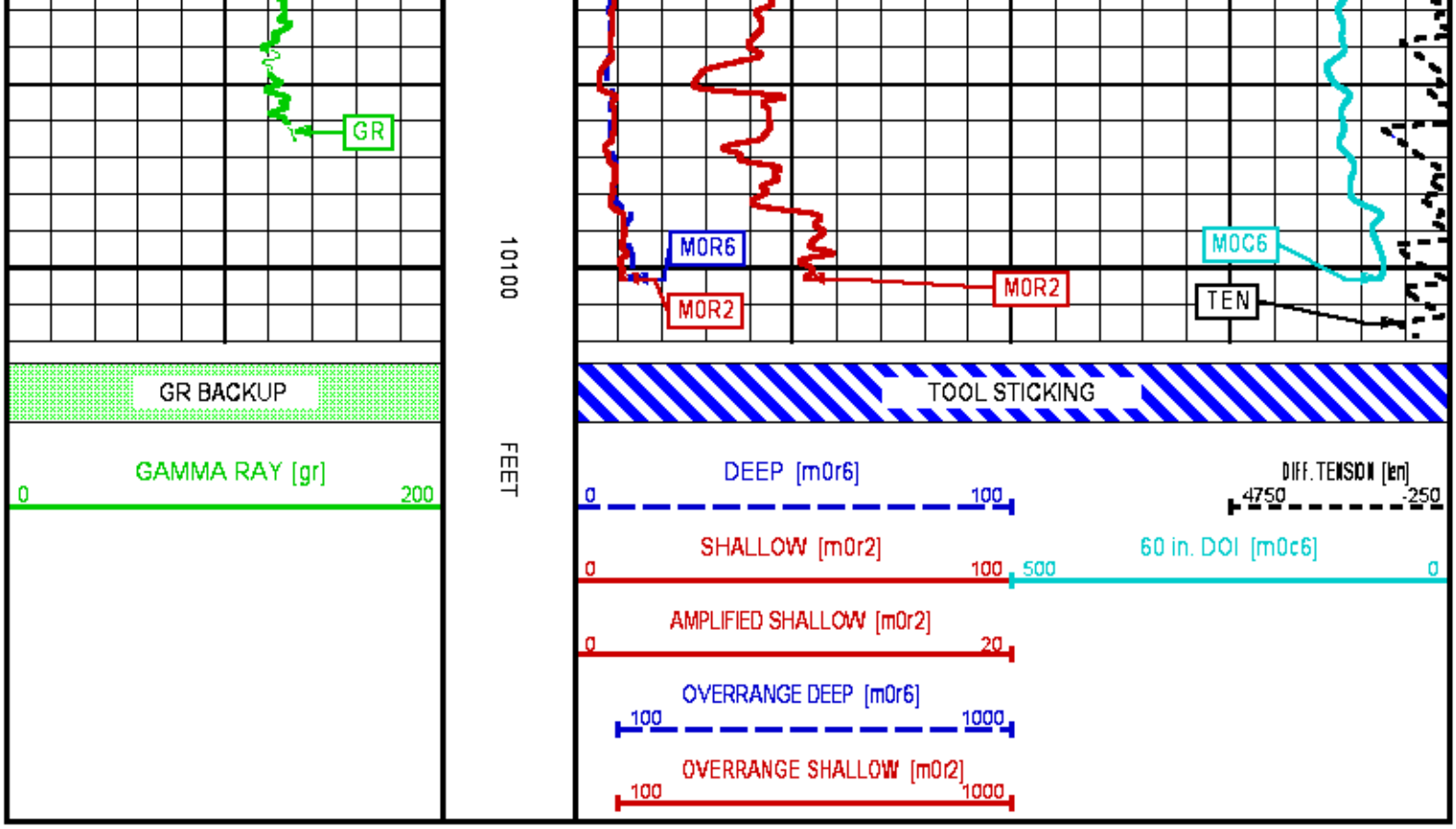


MAIN LOG 5"/100FT SCALE

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

Plotted: Tue Aug 6 09:07:14 2013

PARAMETER AND FILTER SUMMARY REPORT

FILE: /dat1a/625566/nu779xR-FINAL106.prm
LOGGING MODE: DEPTH DIRECTION: UP
TOP DEPTH: 2353.500 ft BOTTOM DEPTH: 10093.524 ft

SYMMETRIC FILTER

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
				TOP	BOTTOM
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		"	"

BOREHOLE & CEMENT

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
				TOP	BOTTOM
CASING, BOREHOLE & CEMENT VOLUME	CASING O.D.	7.625	in		

CASING - BOREHOLE & CEMENT VOLUME	CASING O.D.	7.625	in	"	"
	CASING THICKNESS	0.000	in	"	"
BIT SIZE	BIT SIZE	9.375	in	"	"
MUD SAMPLE RESISTIVITY	MUD SAMPLE TEMP	77.0	degF	"	"
	MUD SAMPLE RES	0.930	ohm.m	"	"
BOREHOLE TEMP from GRADIENT	Known BH REF TEMP	81.0	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*)	9.375	in	"	"
	FIXED DIAMETER (mbh*)	9.375	in	"	"
BH MUD RESISTIVITY SOURCE	RMUD SOURCE (HDIL)	MUD SAMP DERIVED		"	"

CN PROCESSING

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
2446 CN MATRIX	2446 MATRIX	SANDSTONE		TOP	BOTTOM
CN SALINITY CORRECTION	SALINITY	800	ppm	"	"
CN TOOL STANDOFF	ENABLE STANDOFF CORR	OFF		"	"
	STANDOFF AMOUNT	0.00	in	"	"
CN CASING & CEMENT CORRECTION	CORRECTION	OFF		"	"
	BIT SIZE BEHIND CSNG	13.375	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		"	"

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	1.200		"	"

CURVE DESCRIPTION REPORT

CURVE NAME	CREATION DATE	CURVE DESCRIPTION
F1:BIT	Aug 6 08:43:02 2013	BIT SIZE
F1:BVOL	Aug 6 08:43:02 2013	BOREHOLE VOLUME
F1:CAL	Aug 6 08:43:02 2013	CALIPER
F1:CNCF	Aug 6 08:43:02 2013	FIELD NORMALIZED COMPENSATED NEUTRON POROSITY
F1:CVOL	Aug 6 08:43:02 2013	CEMENT VOLUME
F1:GR	Aug 6 08:43:02 2013	GAMMA RAY
F1:M2R1	Aug 6 08:43:02 2013	VERTICAL 2-FOOT RESOLUTION MATCHED RESISTIVITY, 10-INCH DOI
F1:M2R6	Aug 6 08:43:02 2013	VERTICAL 2-FOOT RESOLUTION MATCHED RESISTIVITY, 60-INCH DOI
F1:M2R9	Aug 6 08:43:02 2013	VERTICAL 2-FOOT RESOLUTION MATCHED RESISTIVITY, 90-INCH DOI
F1:PE	Aug 6 08:43:02 2013	PHOTO ELECTRIC CROSS-SECTION
F1:PORZ	Aug 6 08:43:02 2013	POROSITY FOR SELECTABLE MATRIX
F1:TEN	Aug 6 08:43:02 2013	DIFFERENTIAL TENSION
F1:ZCOR	Aug 6 08:43:02 2013	DENSITY CORRECTION

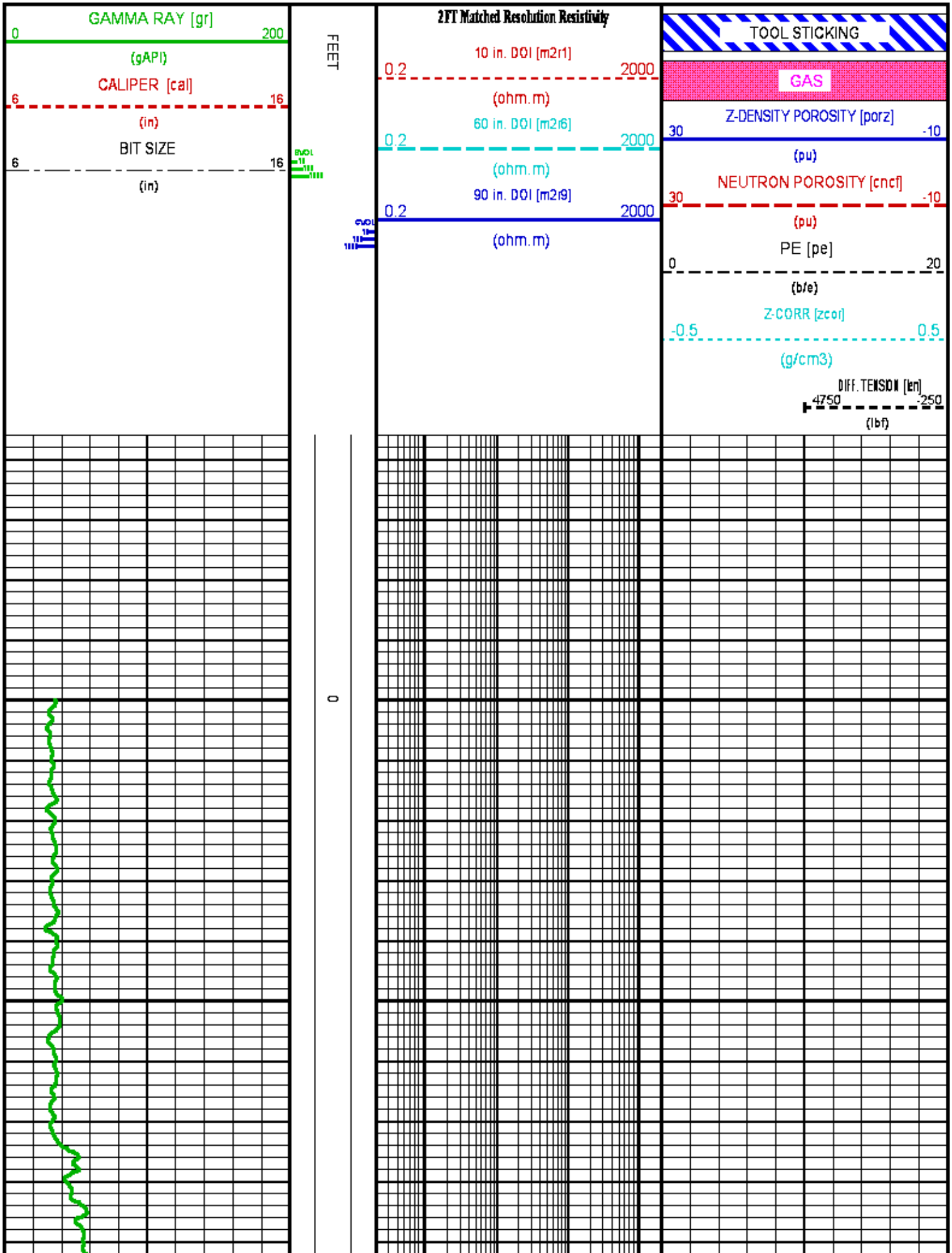
CURVE MEASURE POINT OFFSET

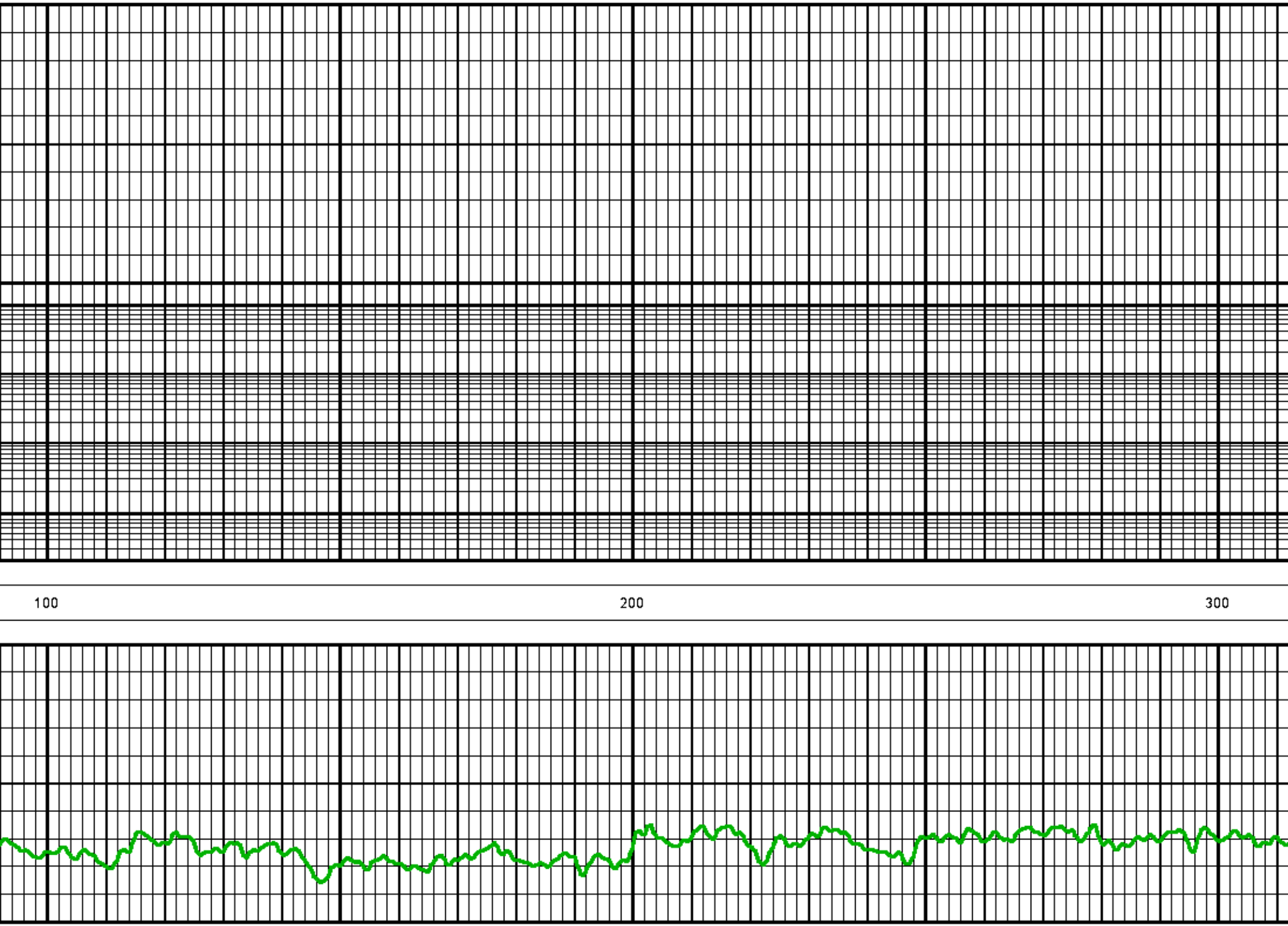
CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
BIT	0.00	GR	52.25	M2R9	8.00	TEN	0.00
CAL	35.00	M2R1	8.00	PE	34.25	ZCOR	34.25
CNCF	45.25	M2R6	8.00	PORZ	34.25		

Presentation : HL6670:/dat1a/625566/WPX_MAIN-FINAL1.fvpdf [5"/100' Scale]
Plot Interval : -43.25 - 10119.8 Feet

Data File 1 : F1 : HL6670:/dat1a/625566/nu779xR-FINAL106.xtf
Created On : Aug 6 08:43:02 2013
Company : WPX ENERGY ROCKY MOUNTAIN LLC
Well : FEDERAL GM 702-4-HN1

Field : GRAND VALLEY
File Interval : -43.25 - 10119.8 Feet
OCT : nu779x

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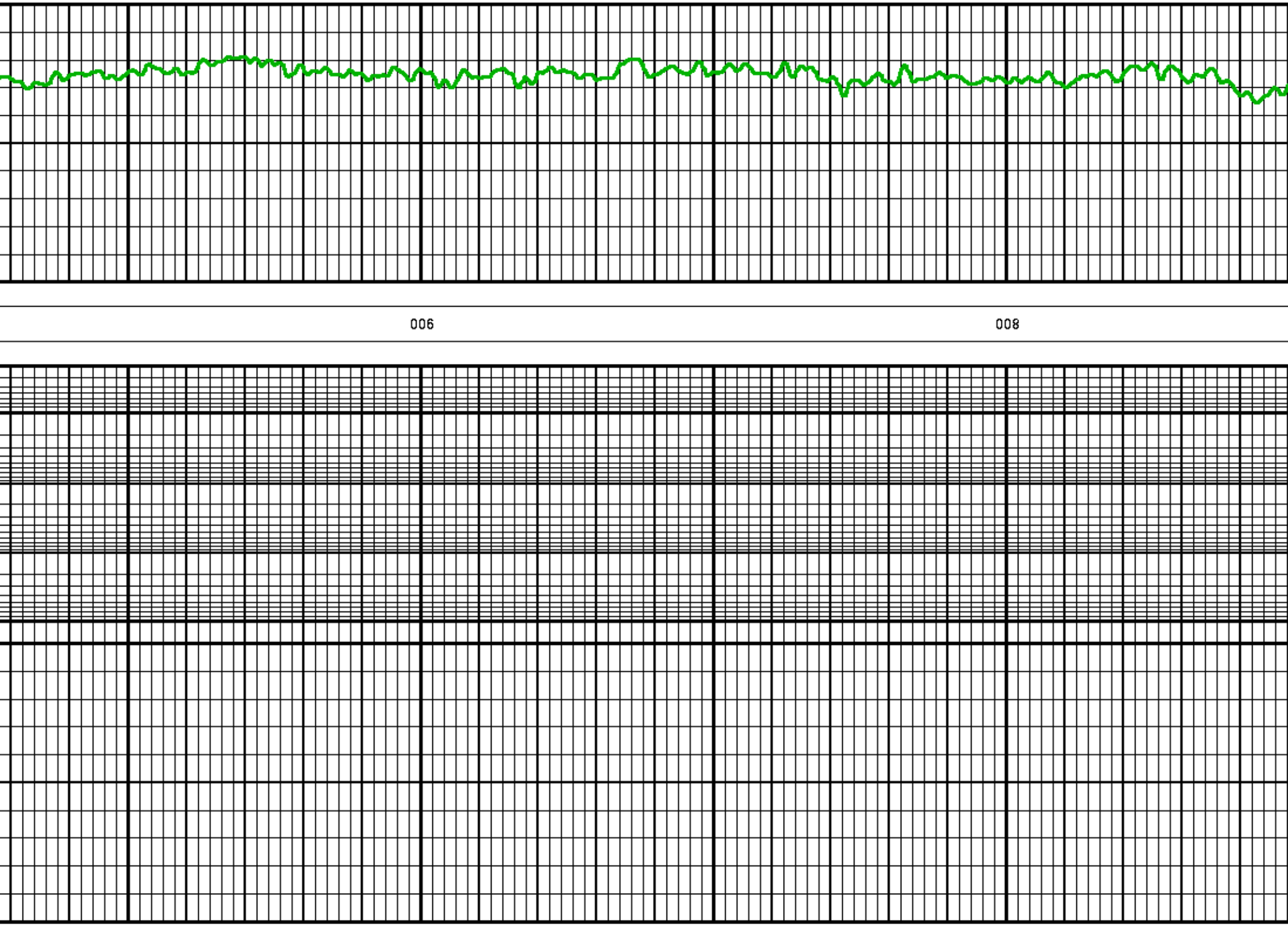
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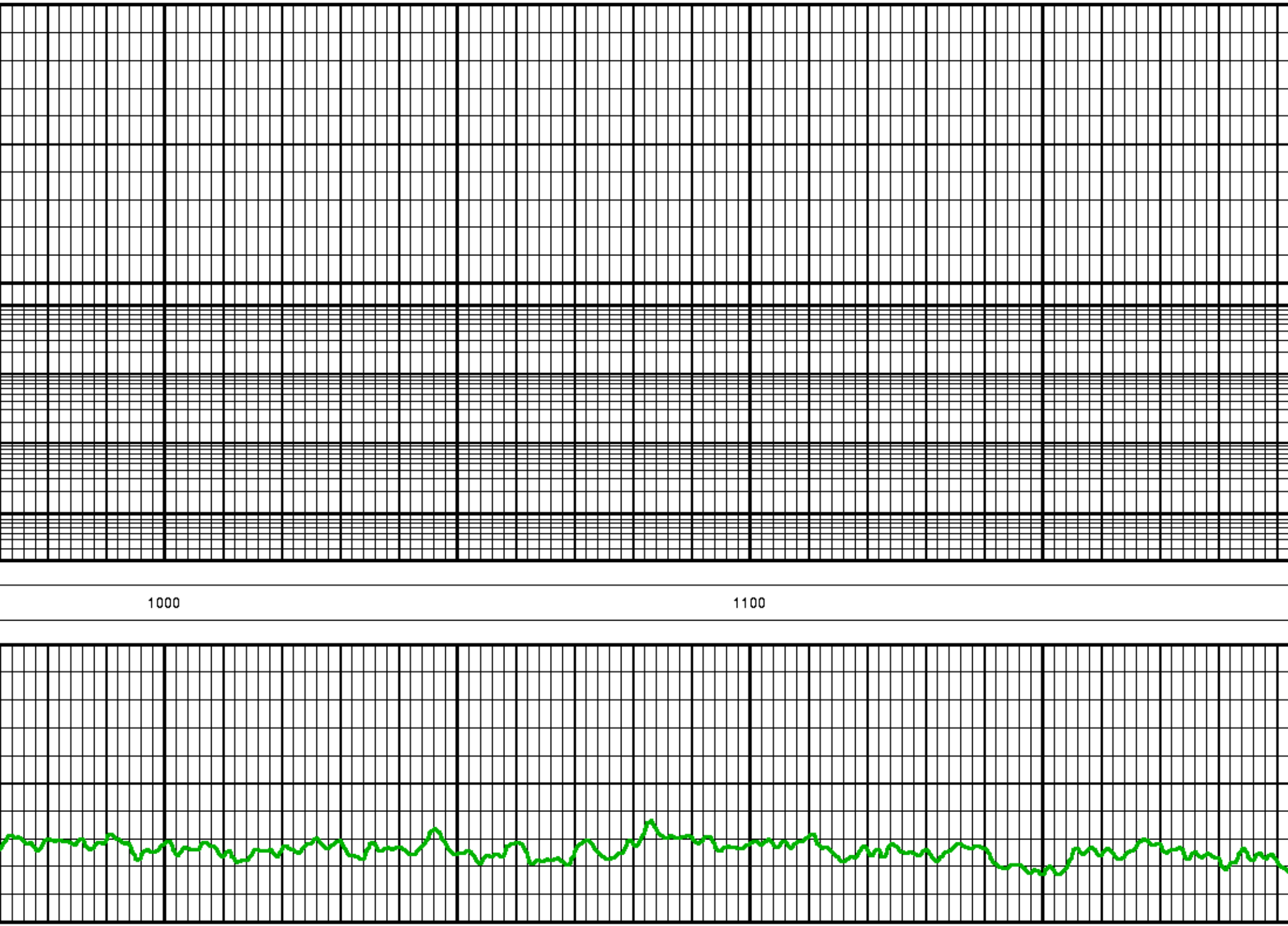
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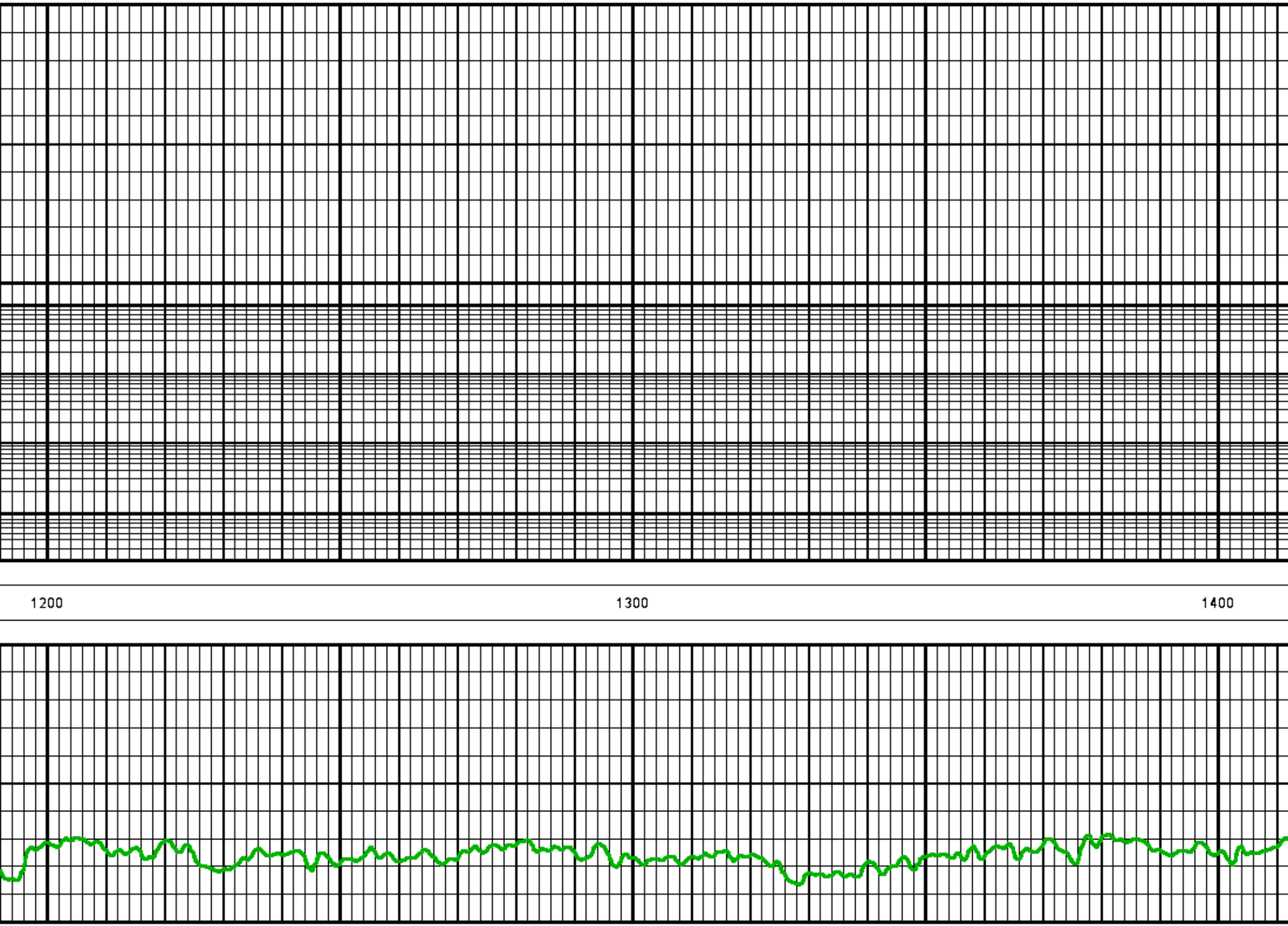
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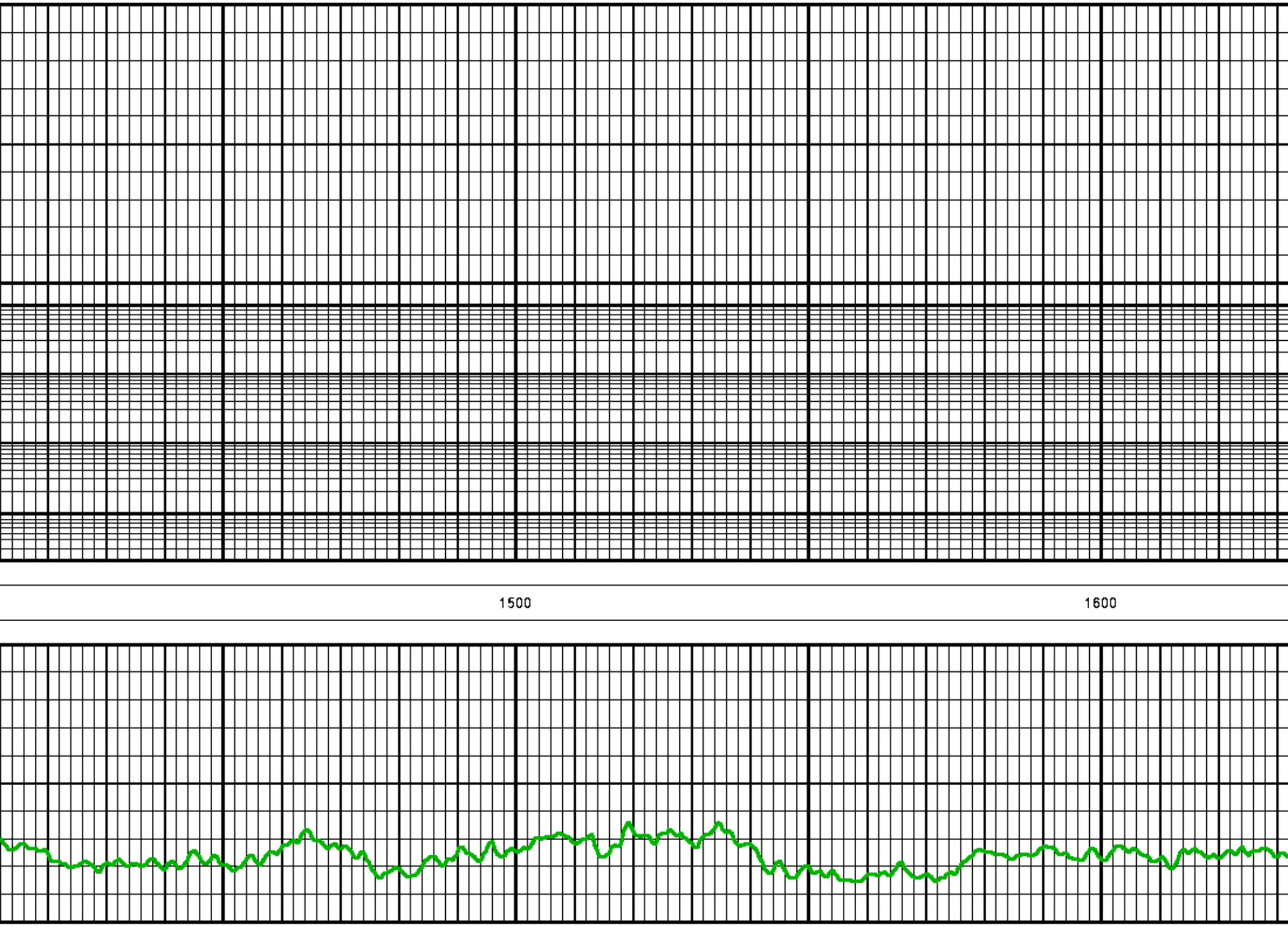
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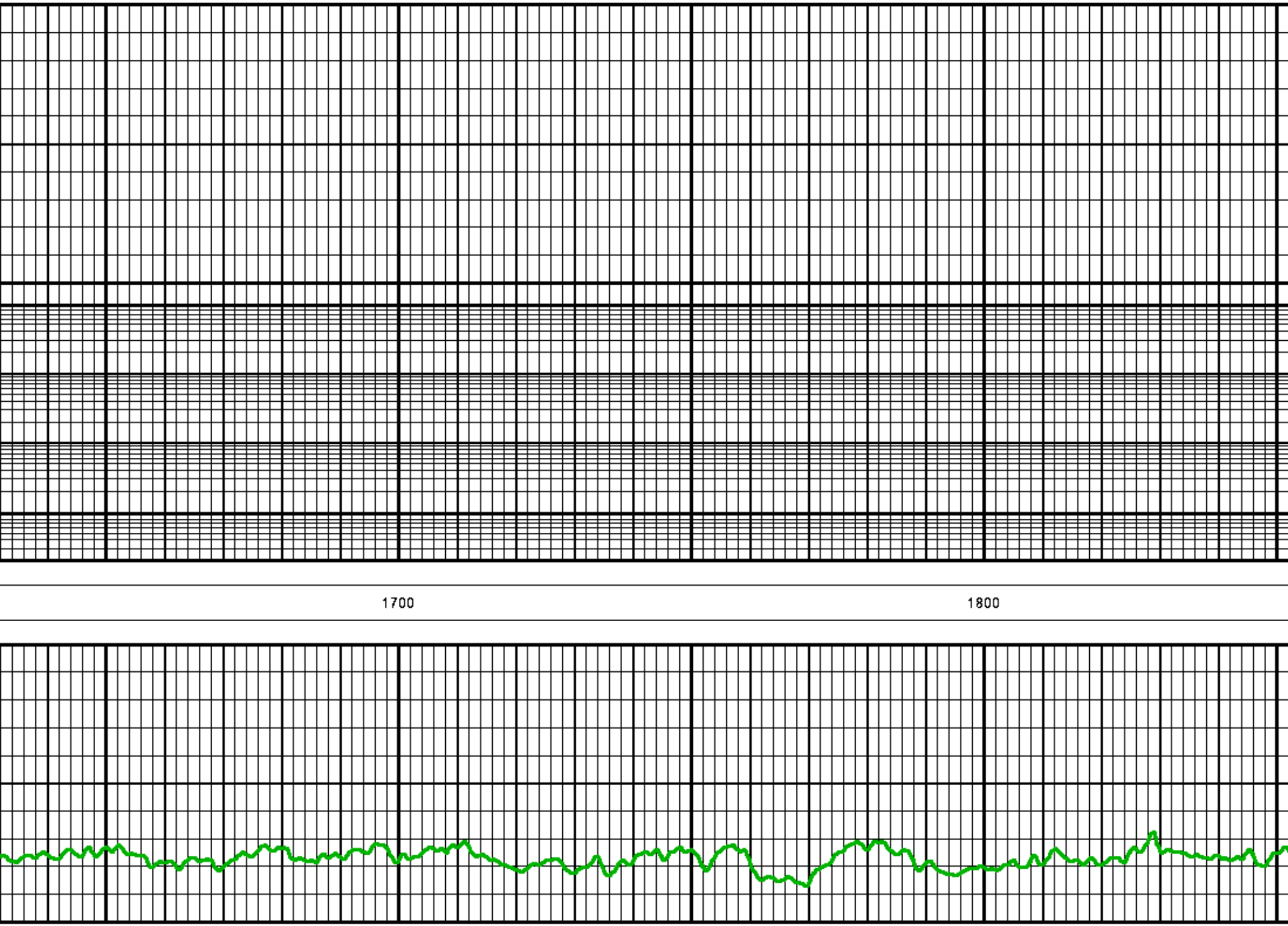
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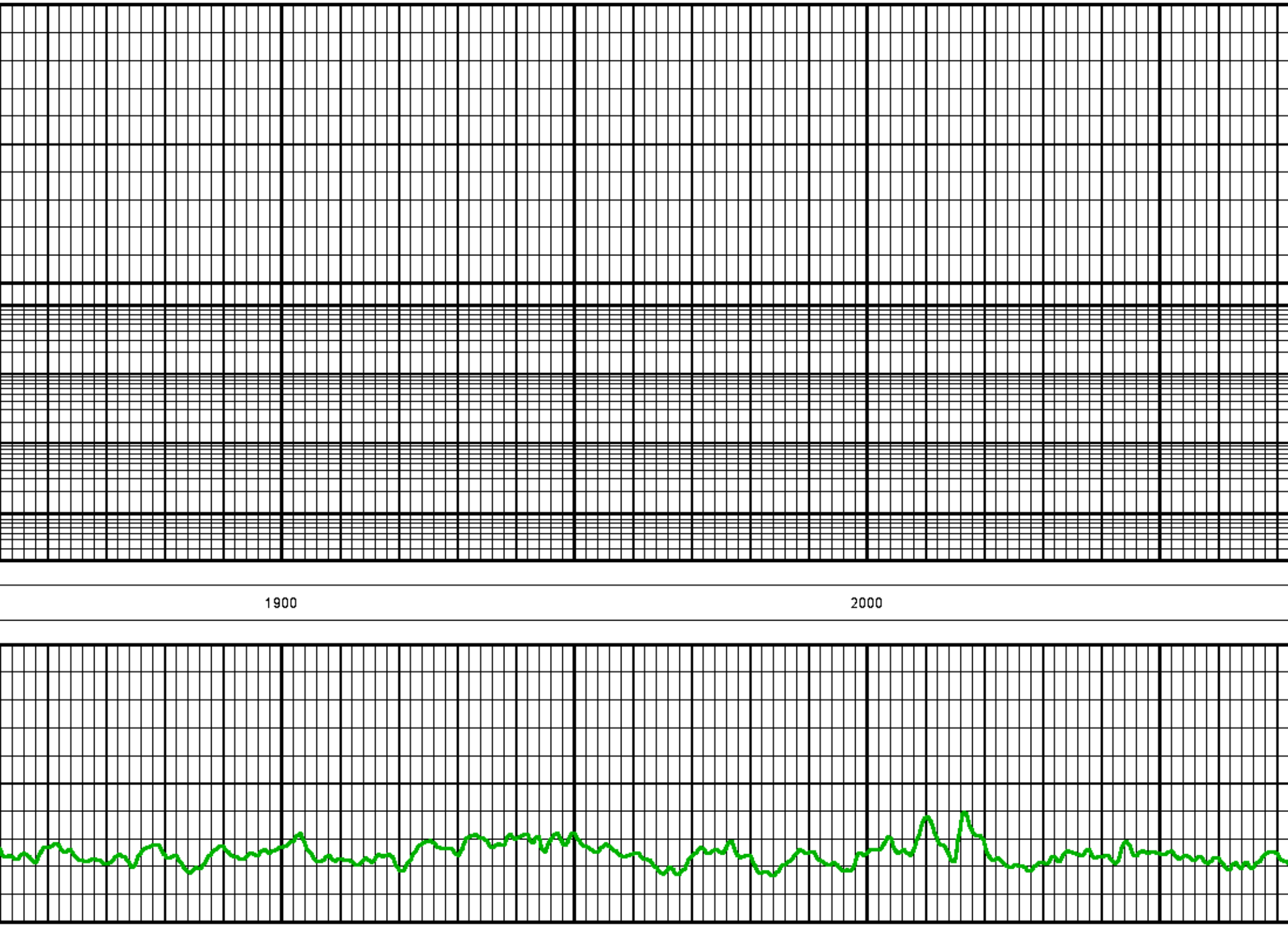
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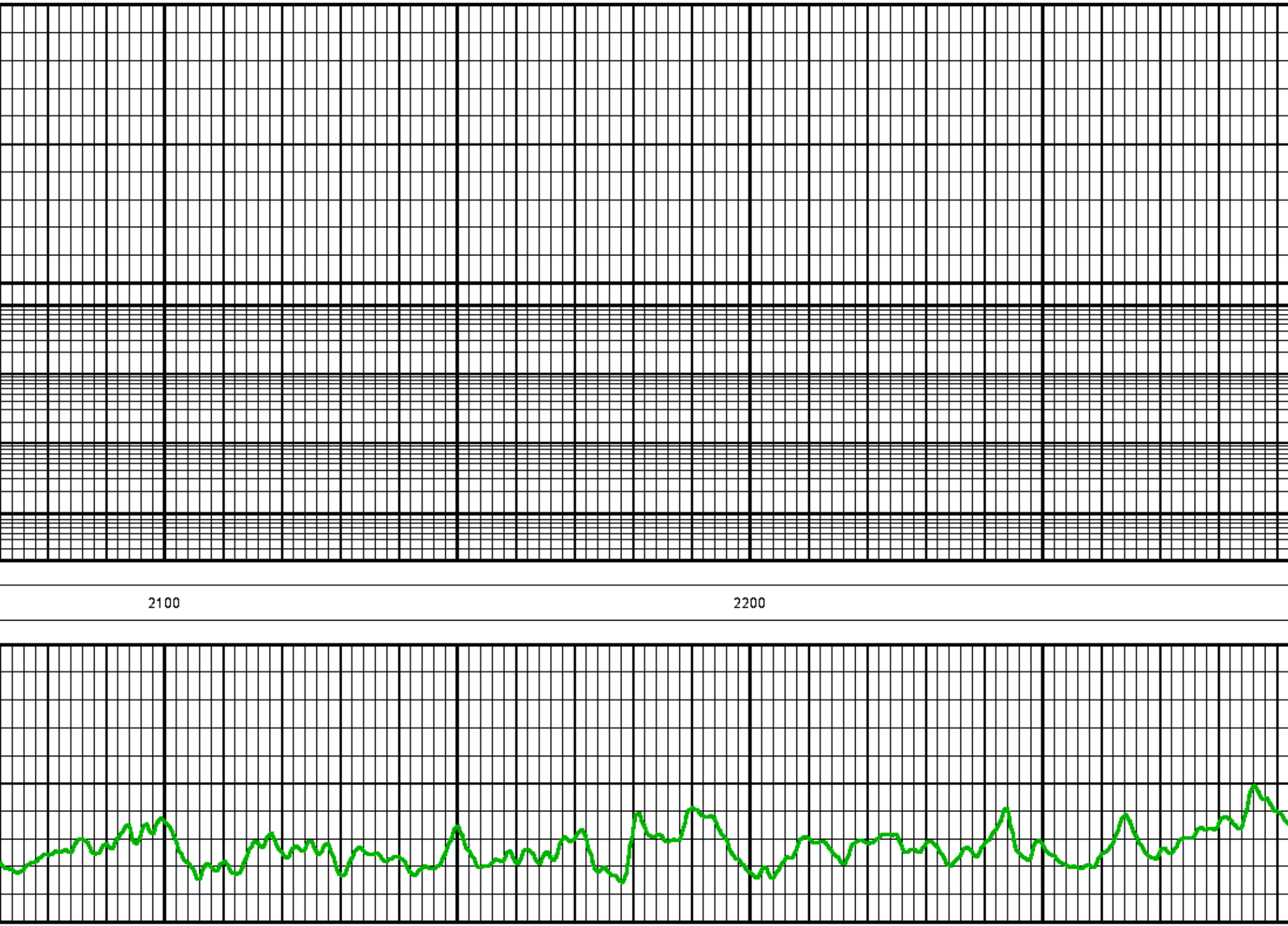
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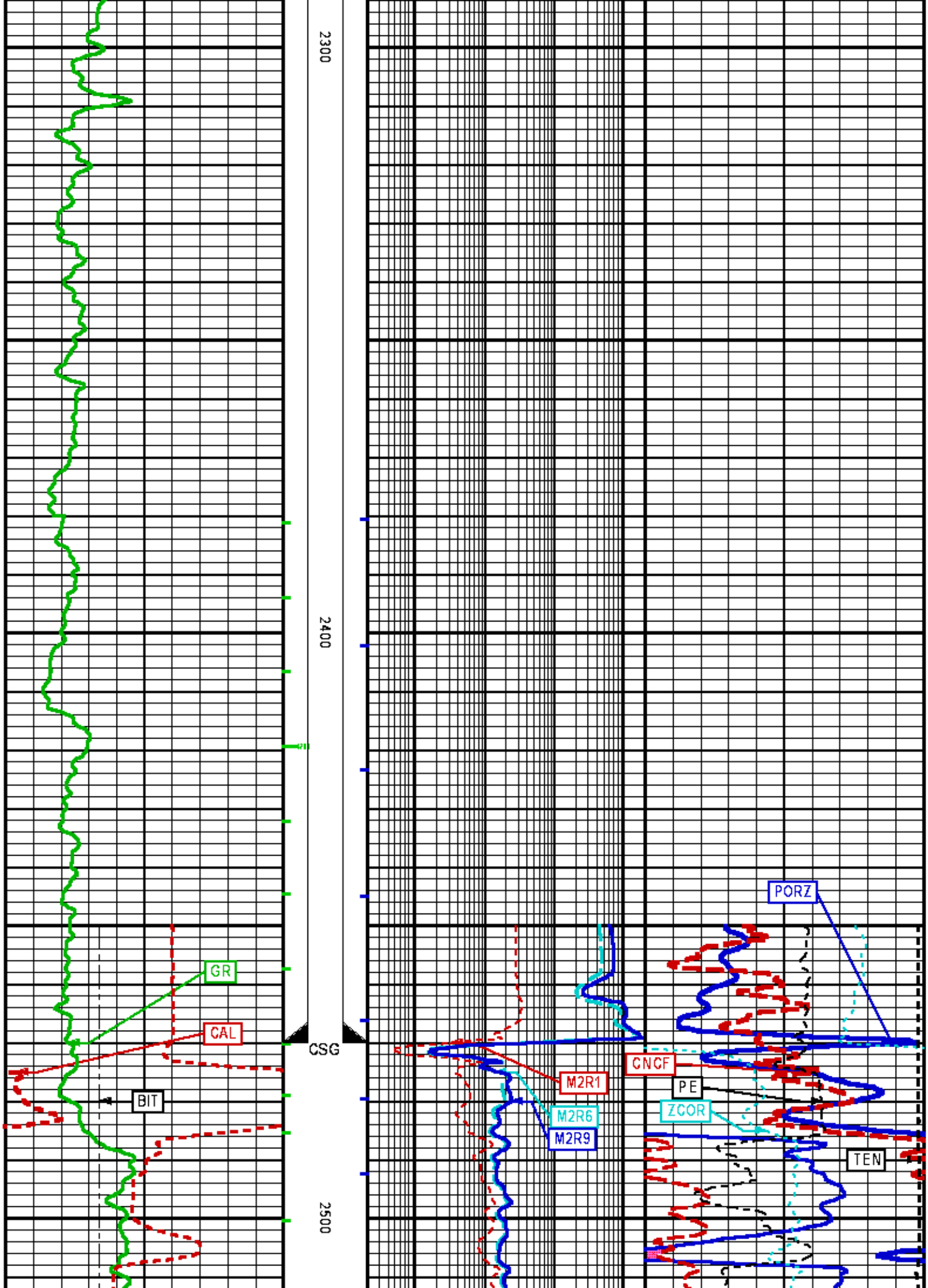
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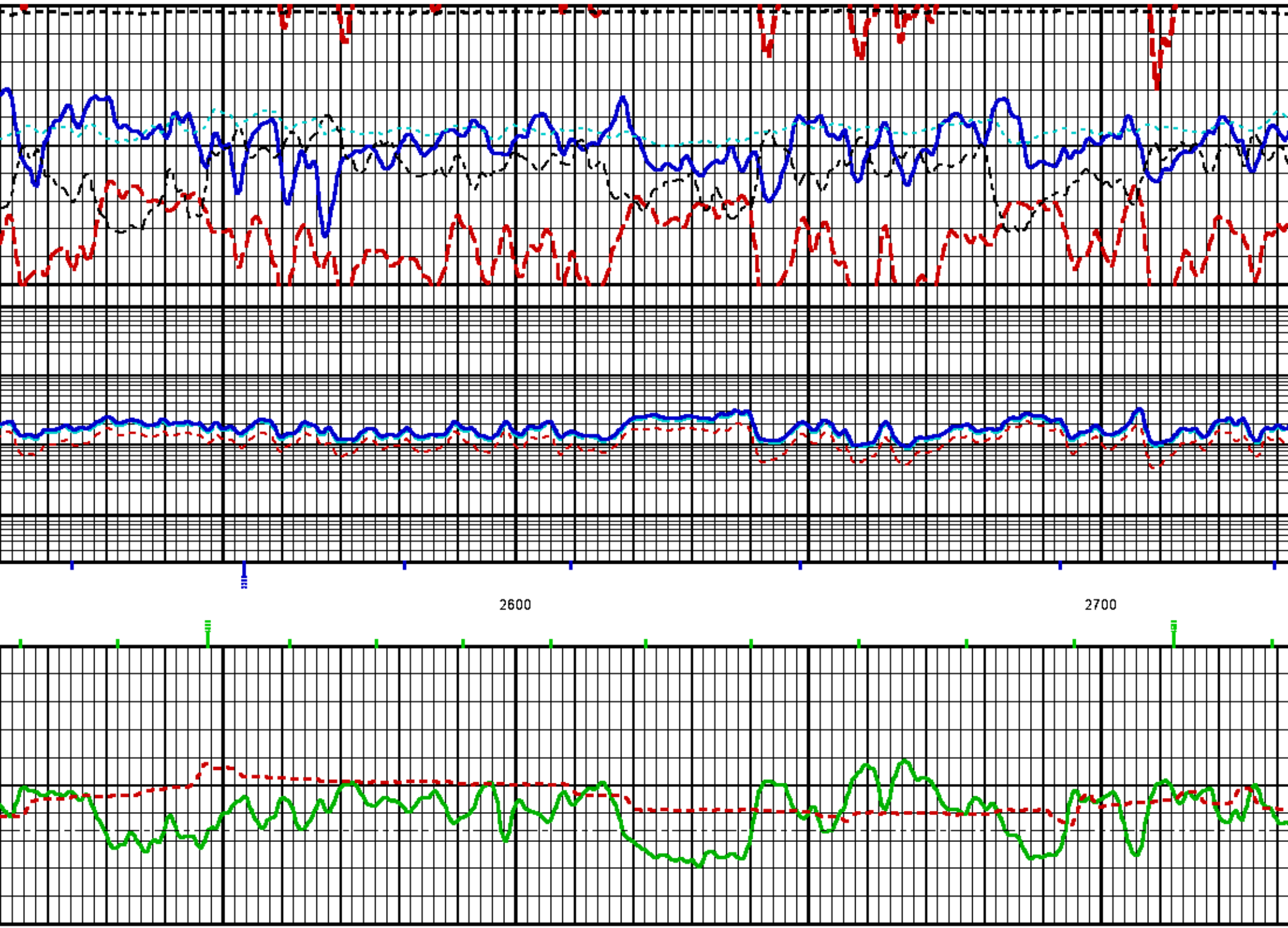
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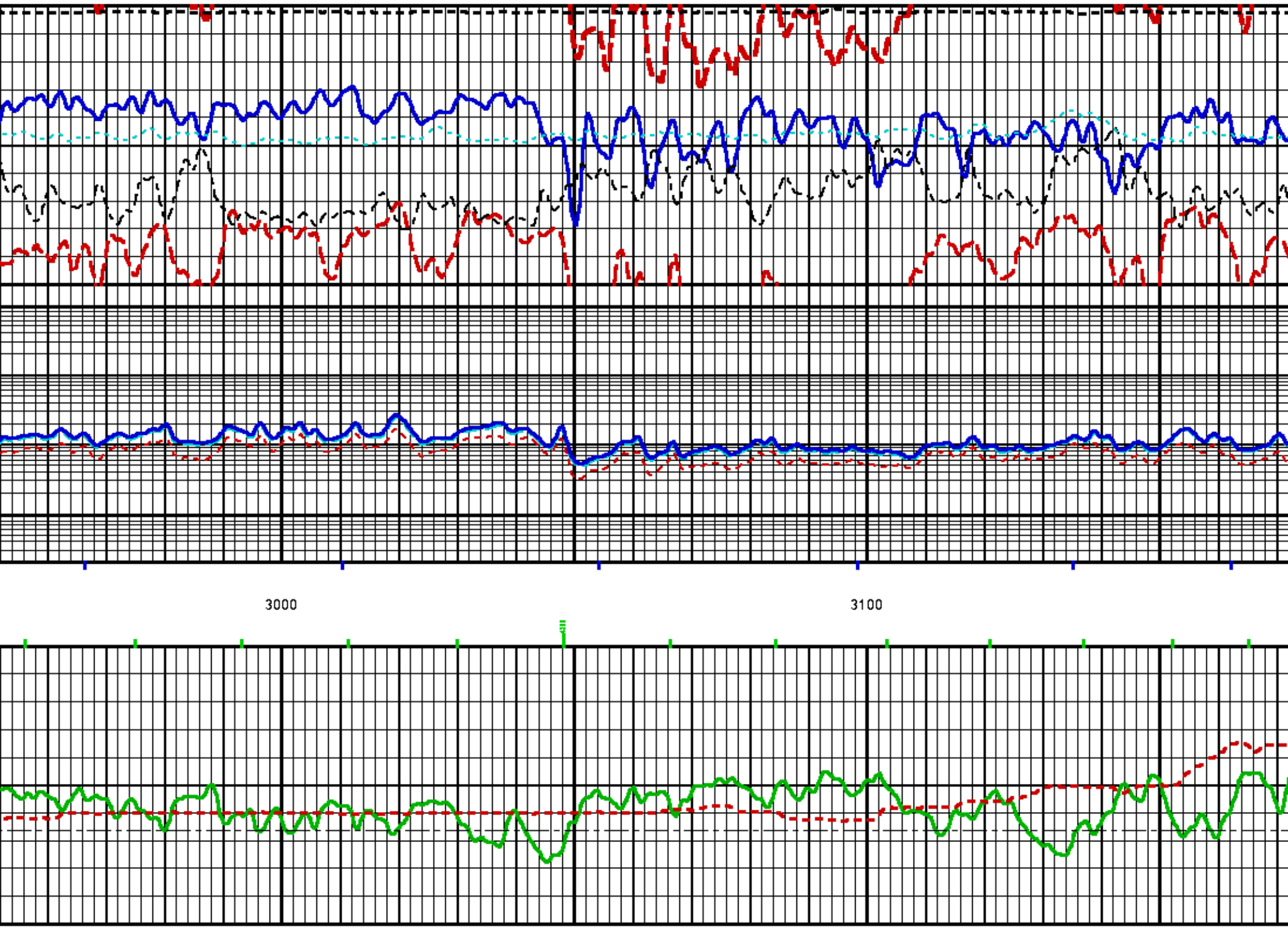
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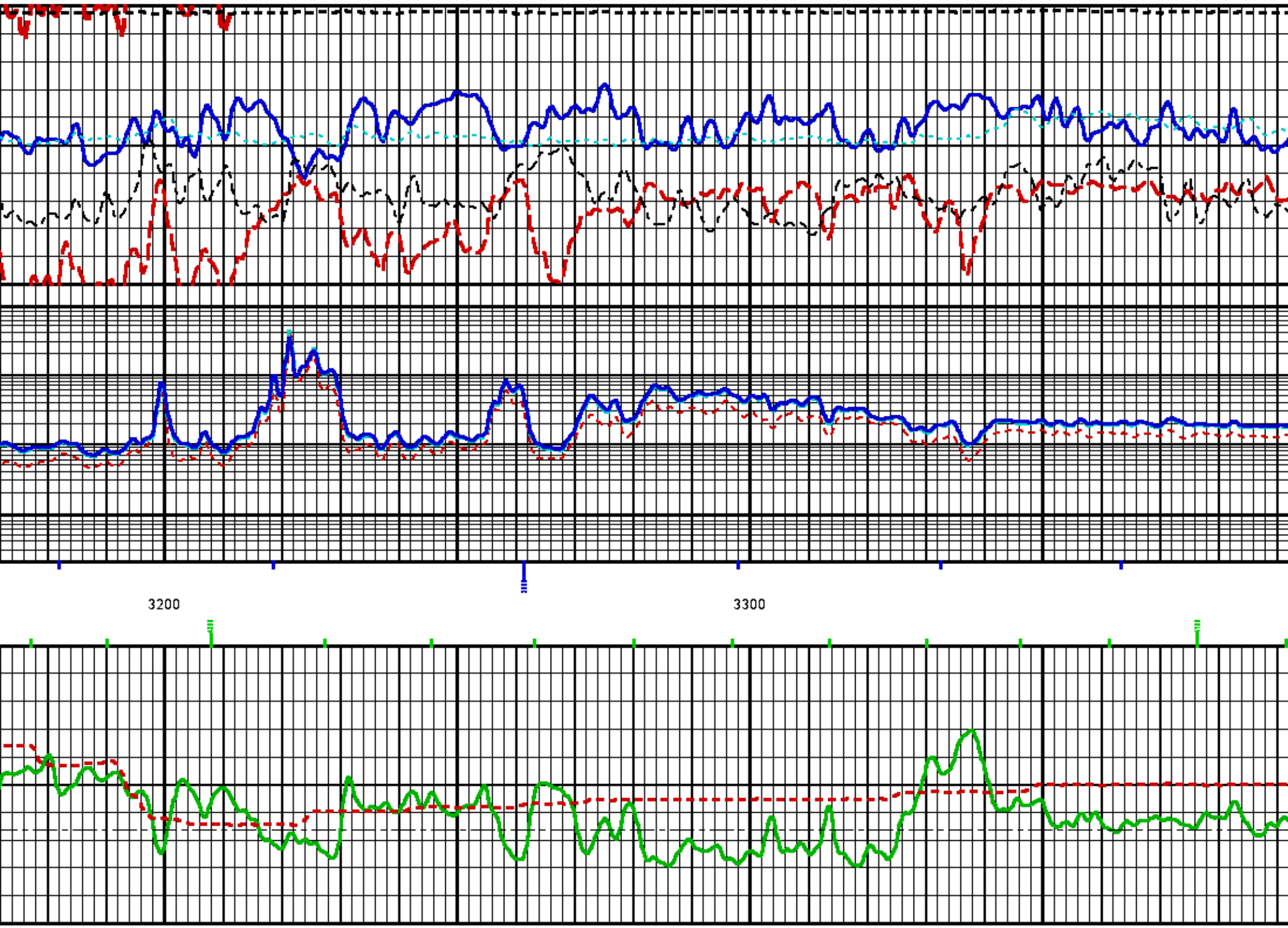
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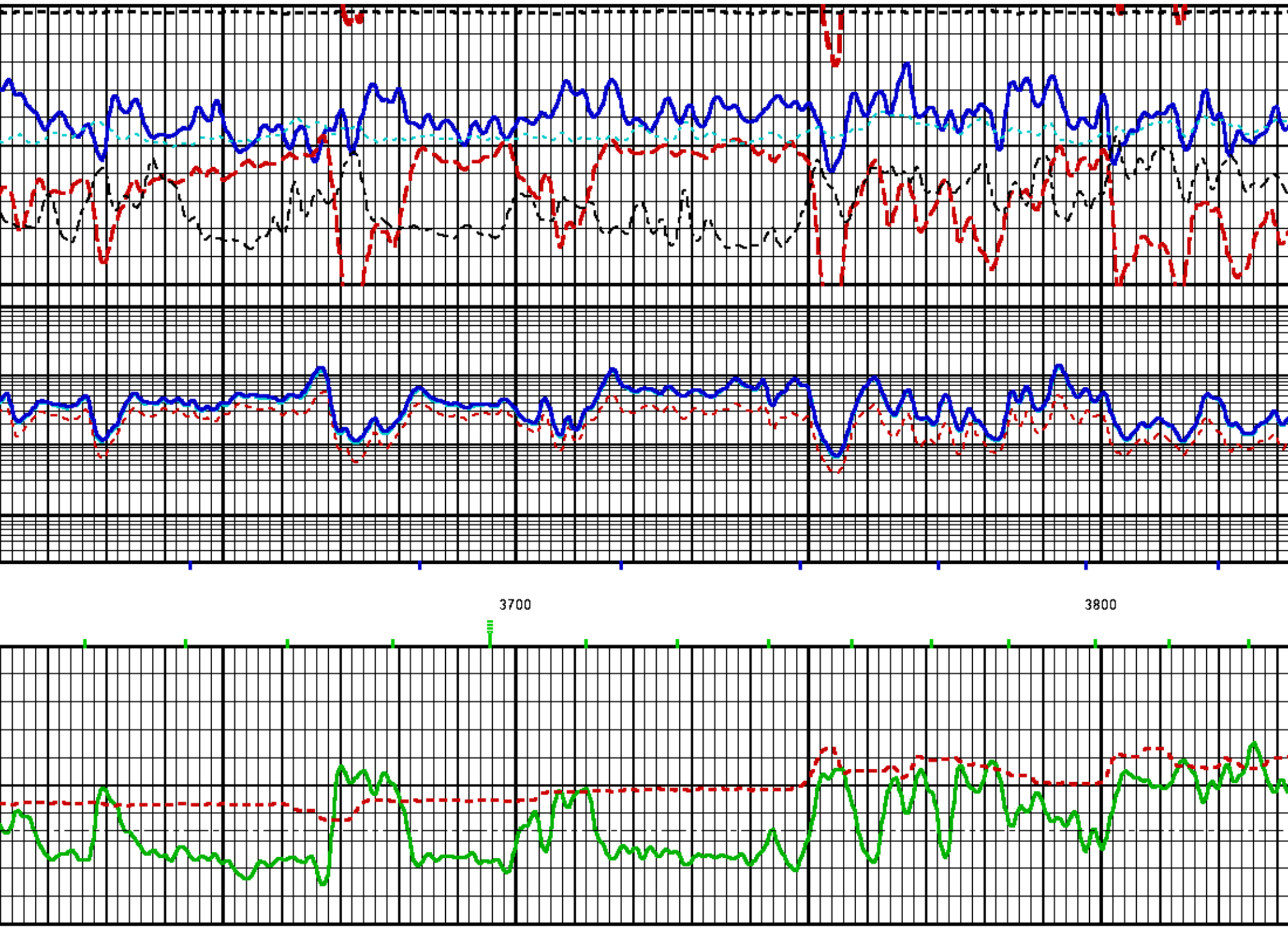
3500
3600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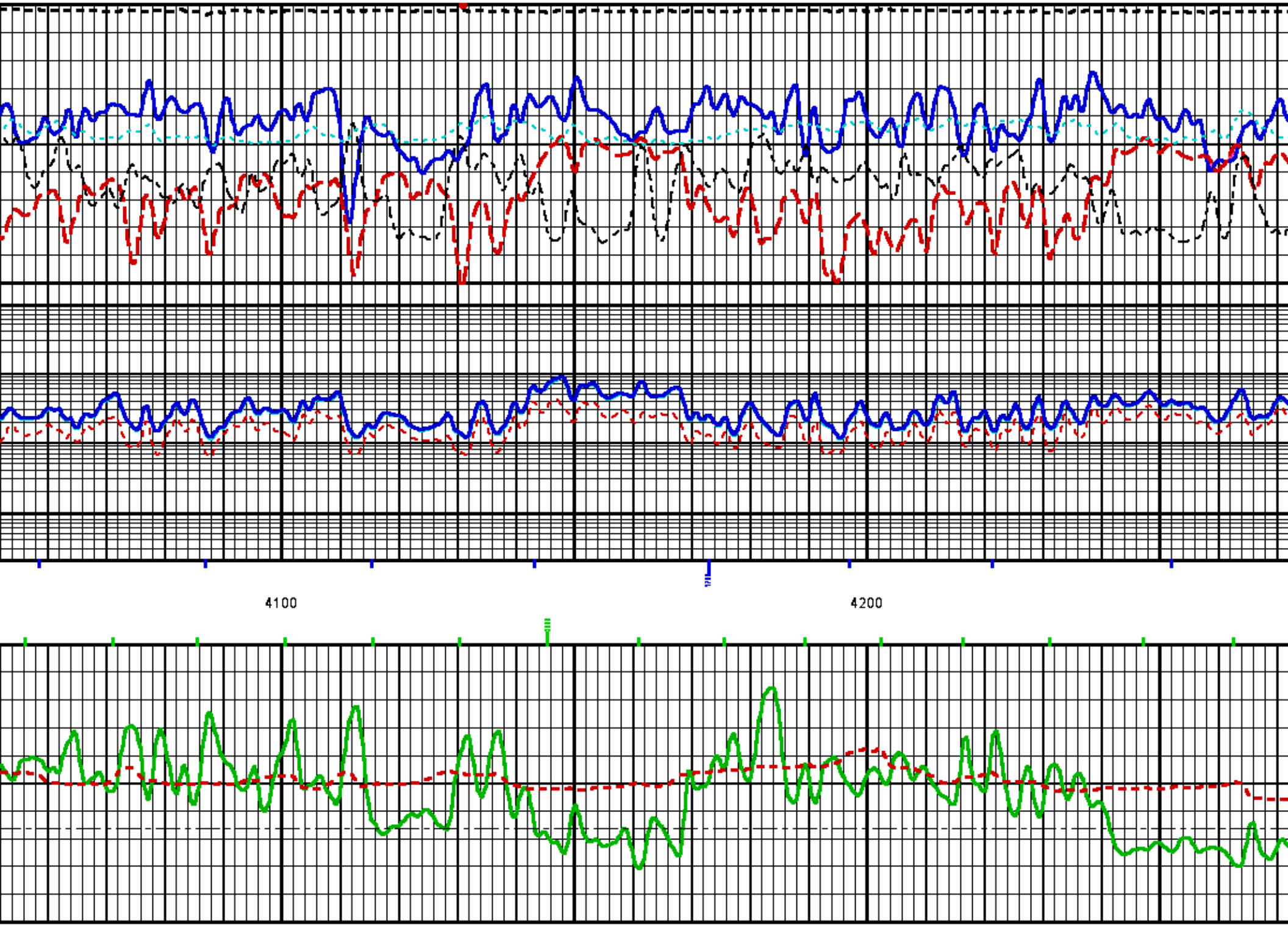
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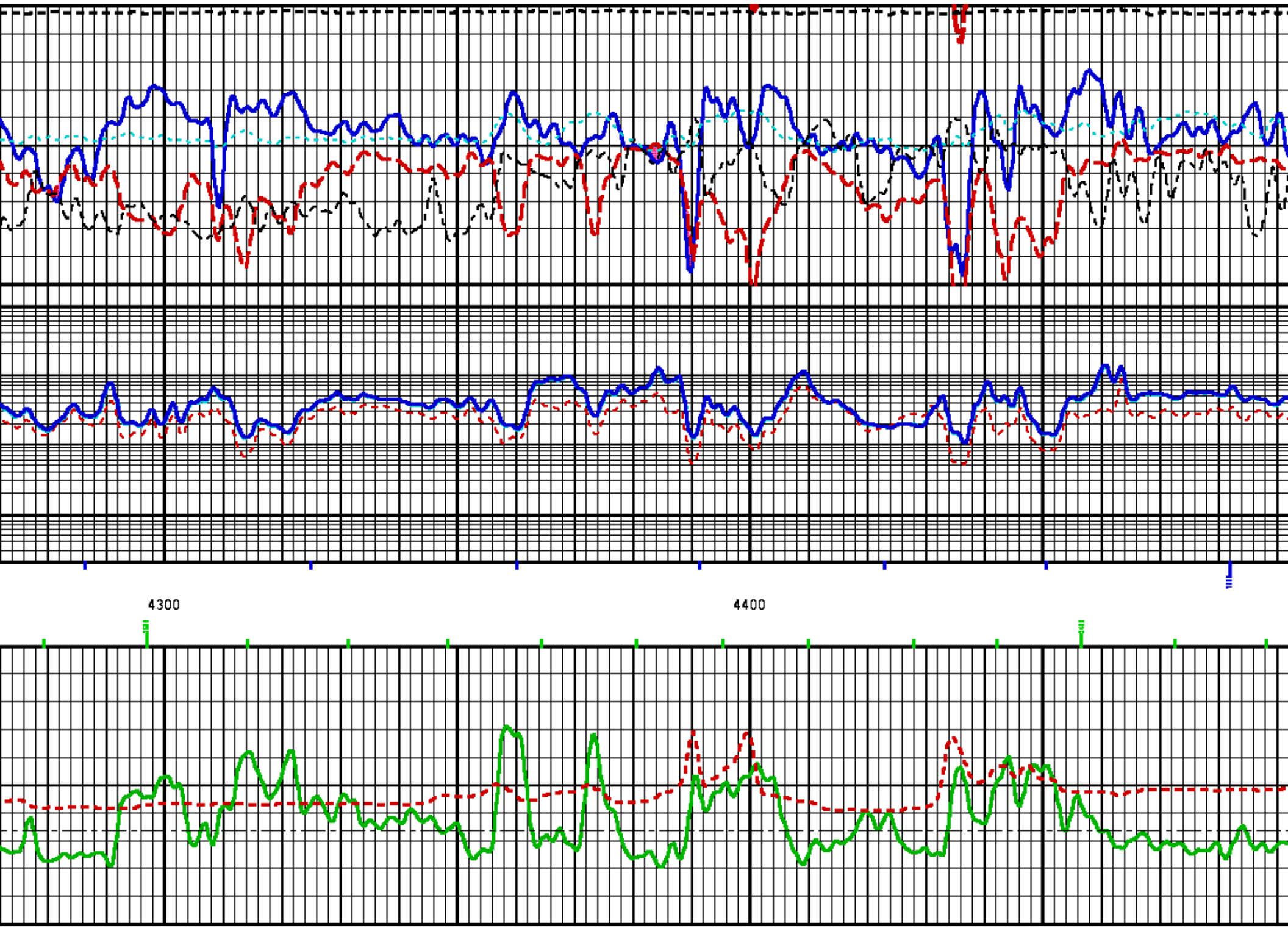
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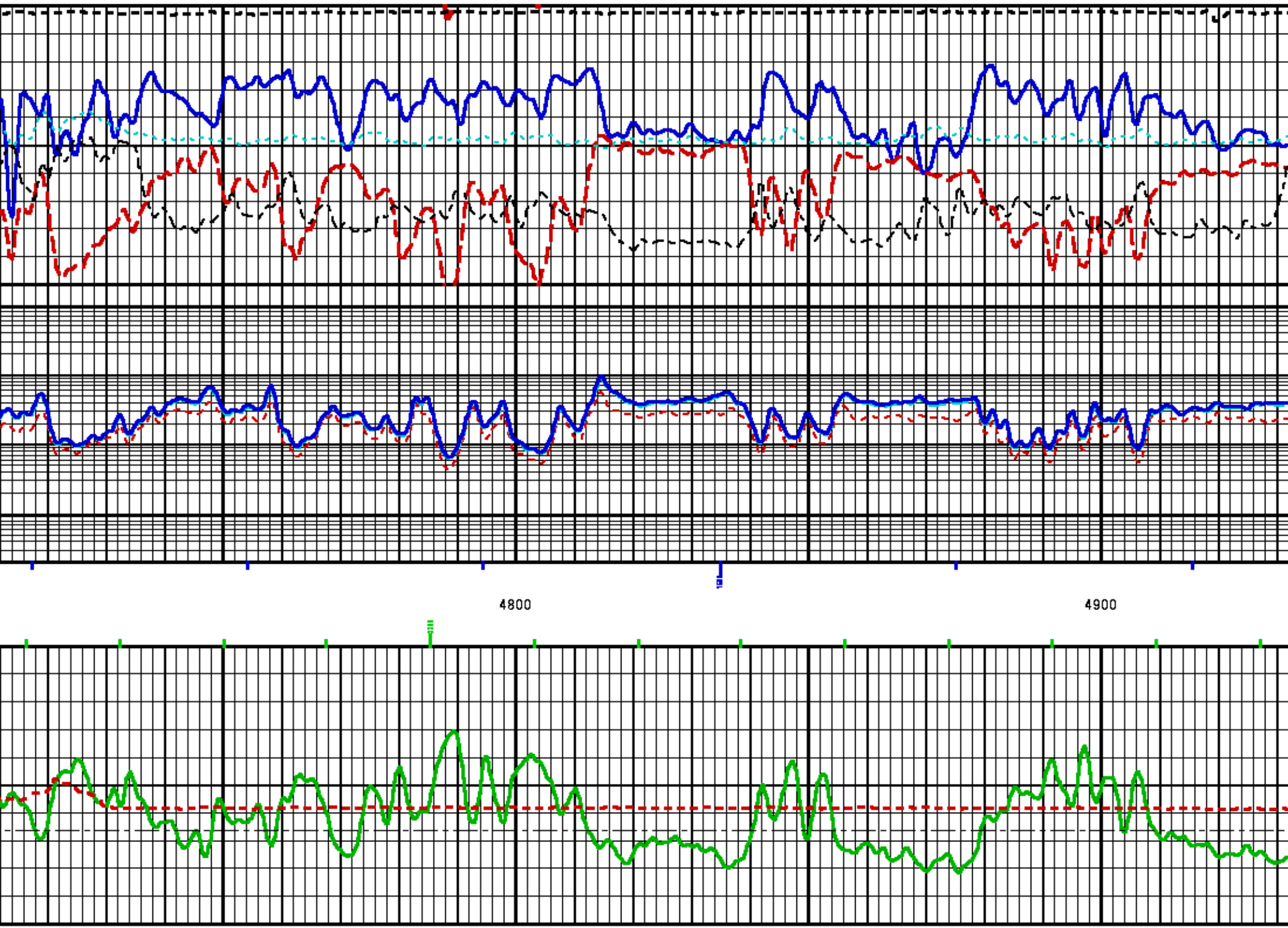
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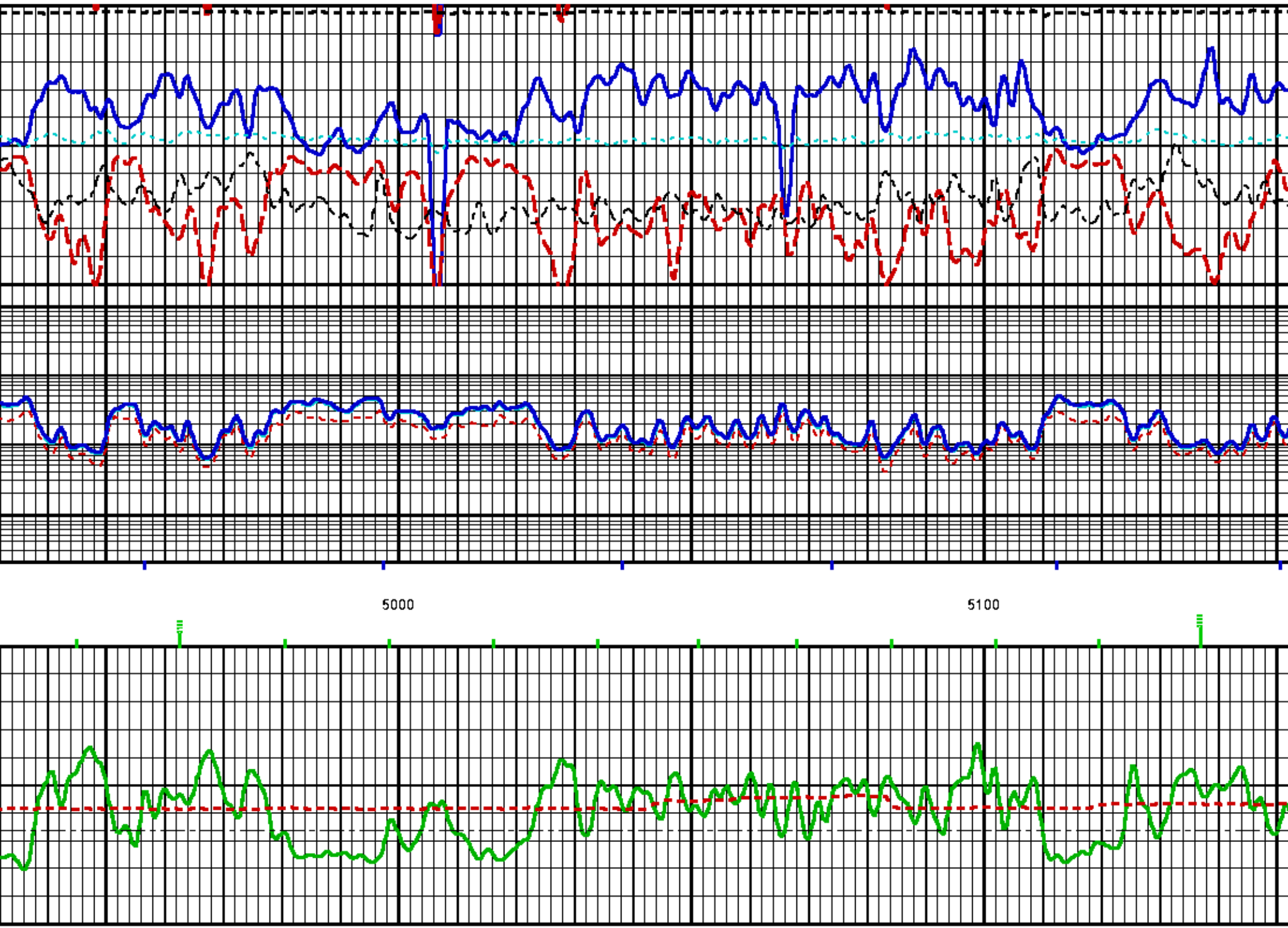
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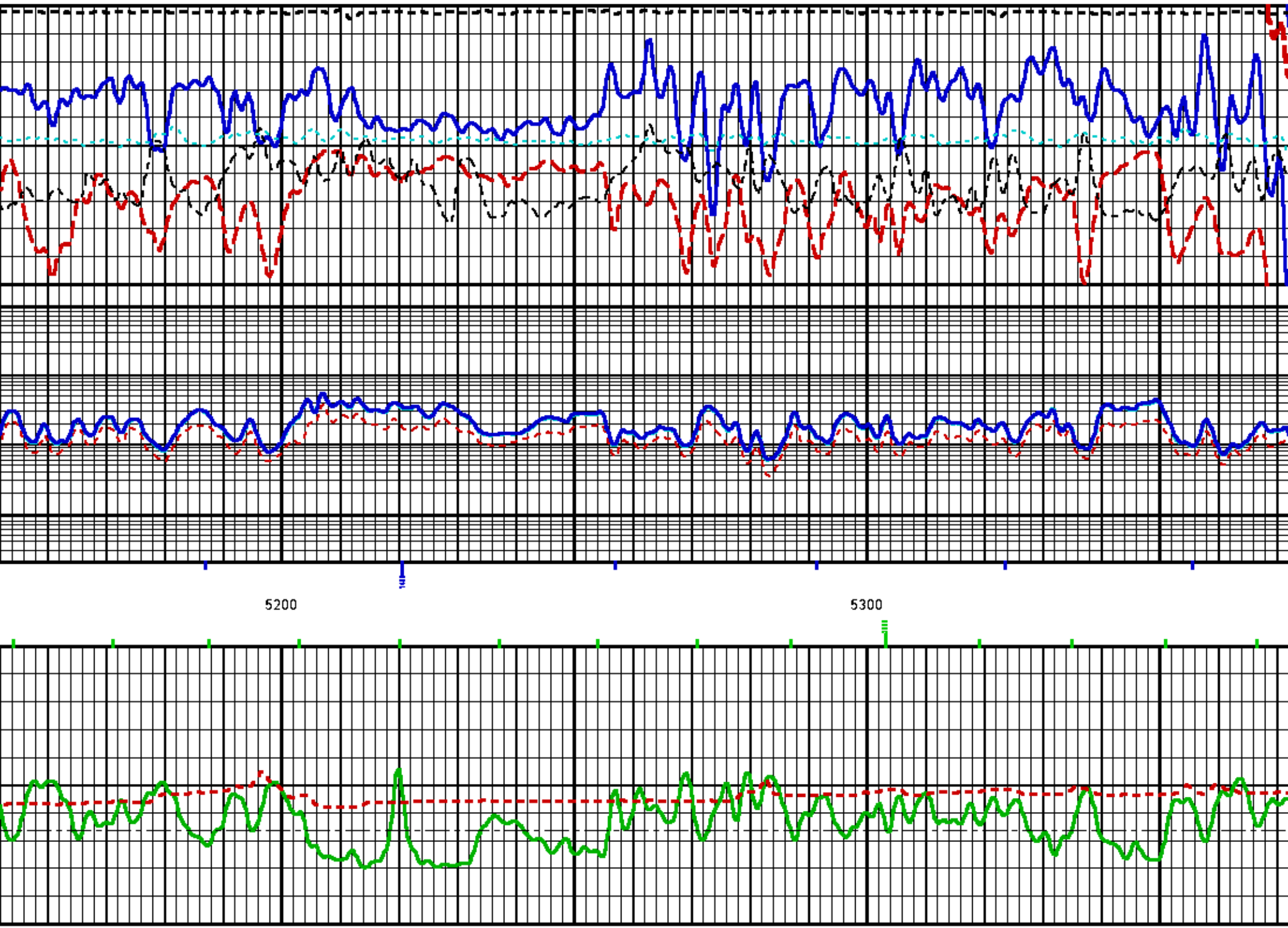
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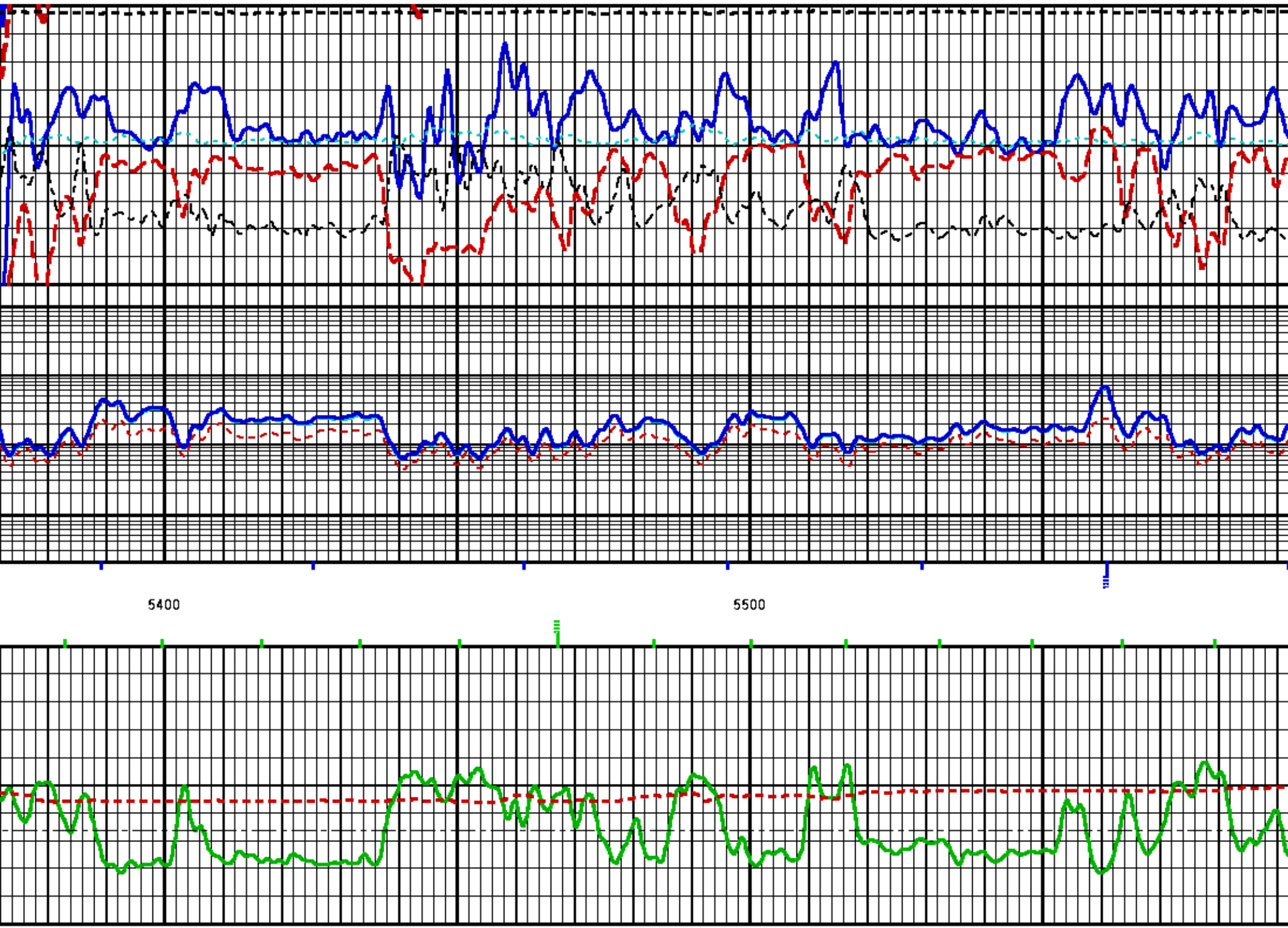
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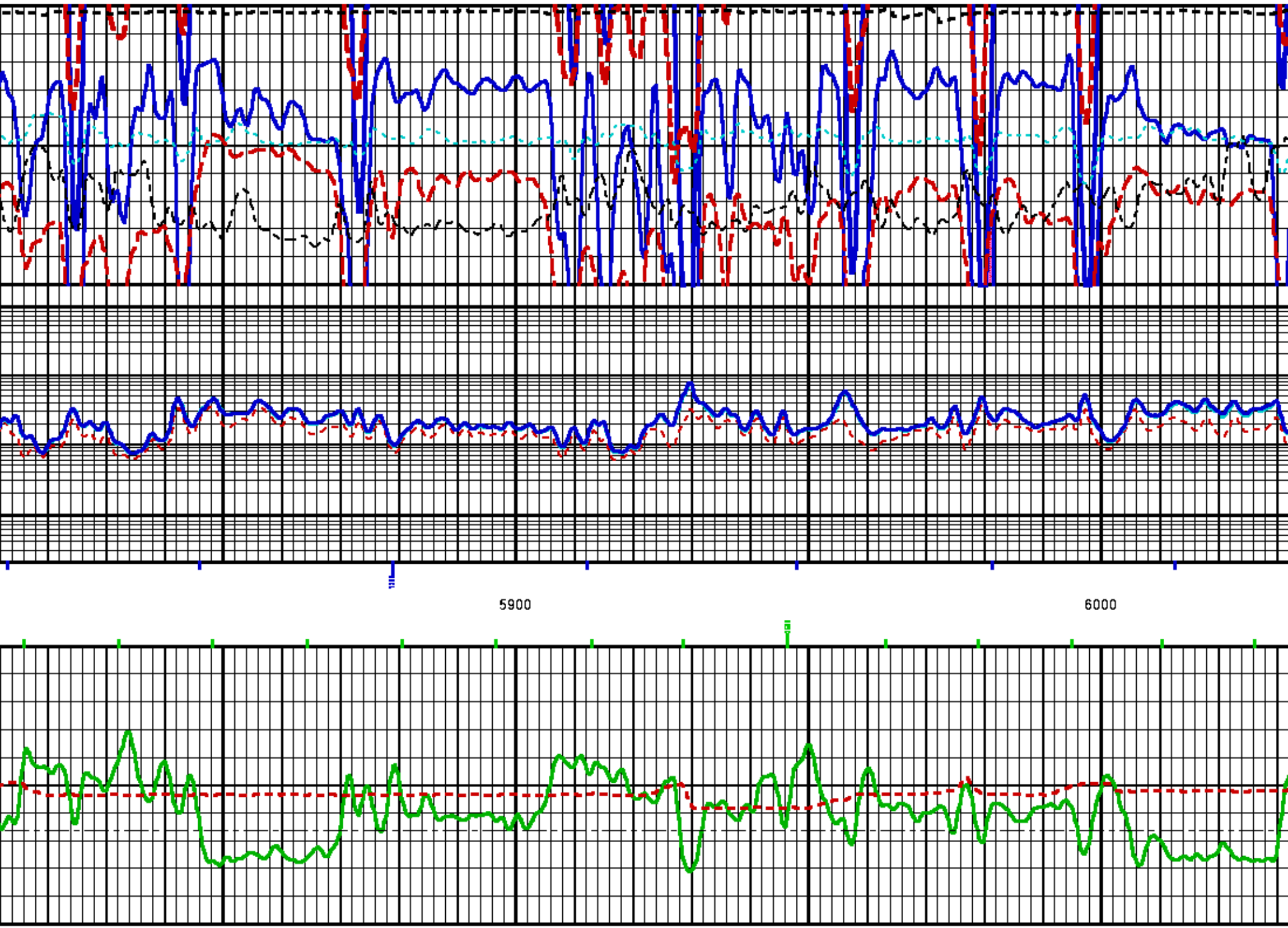
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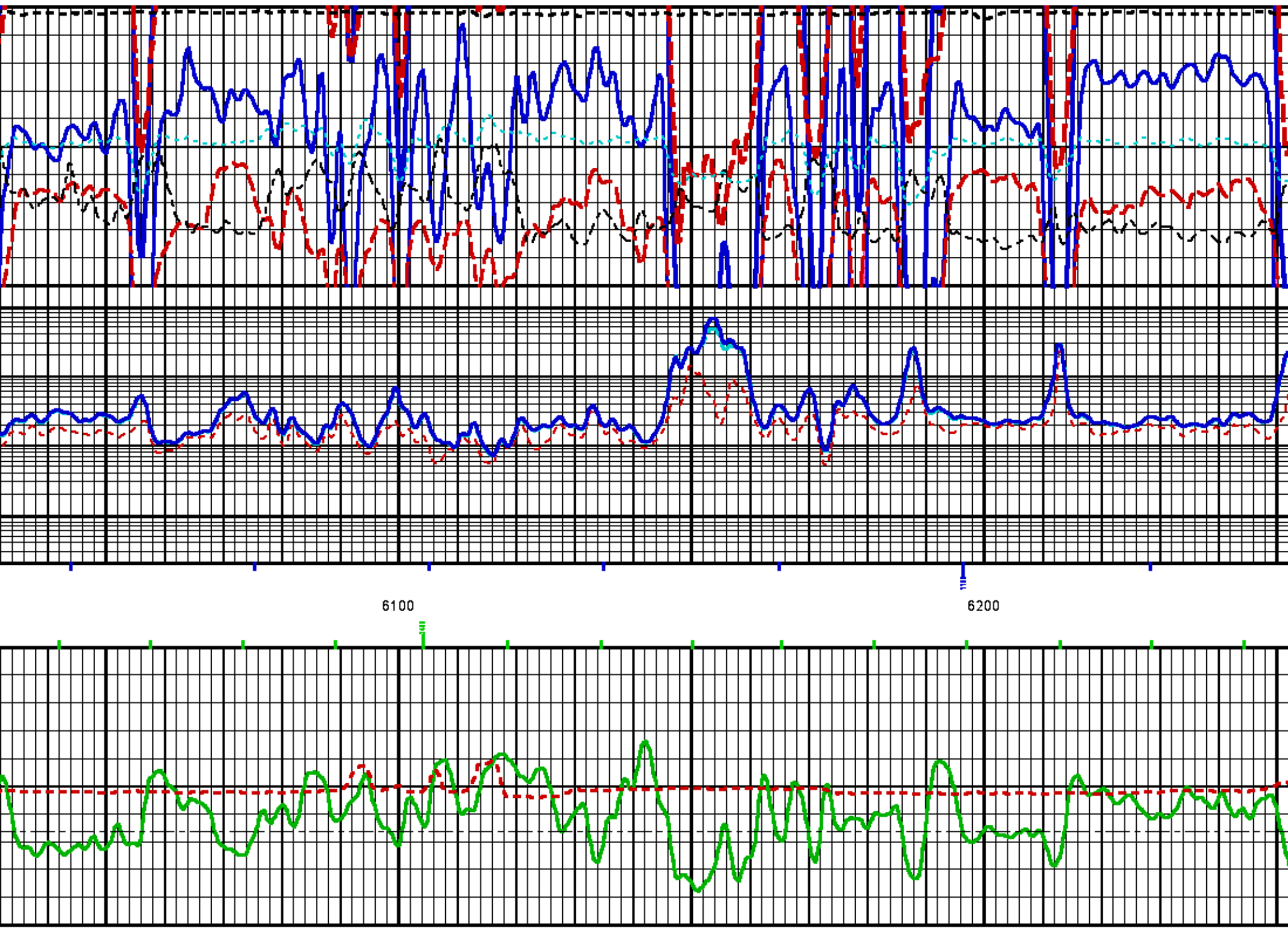
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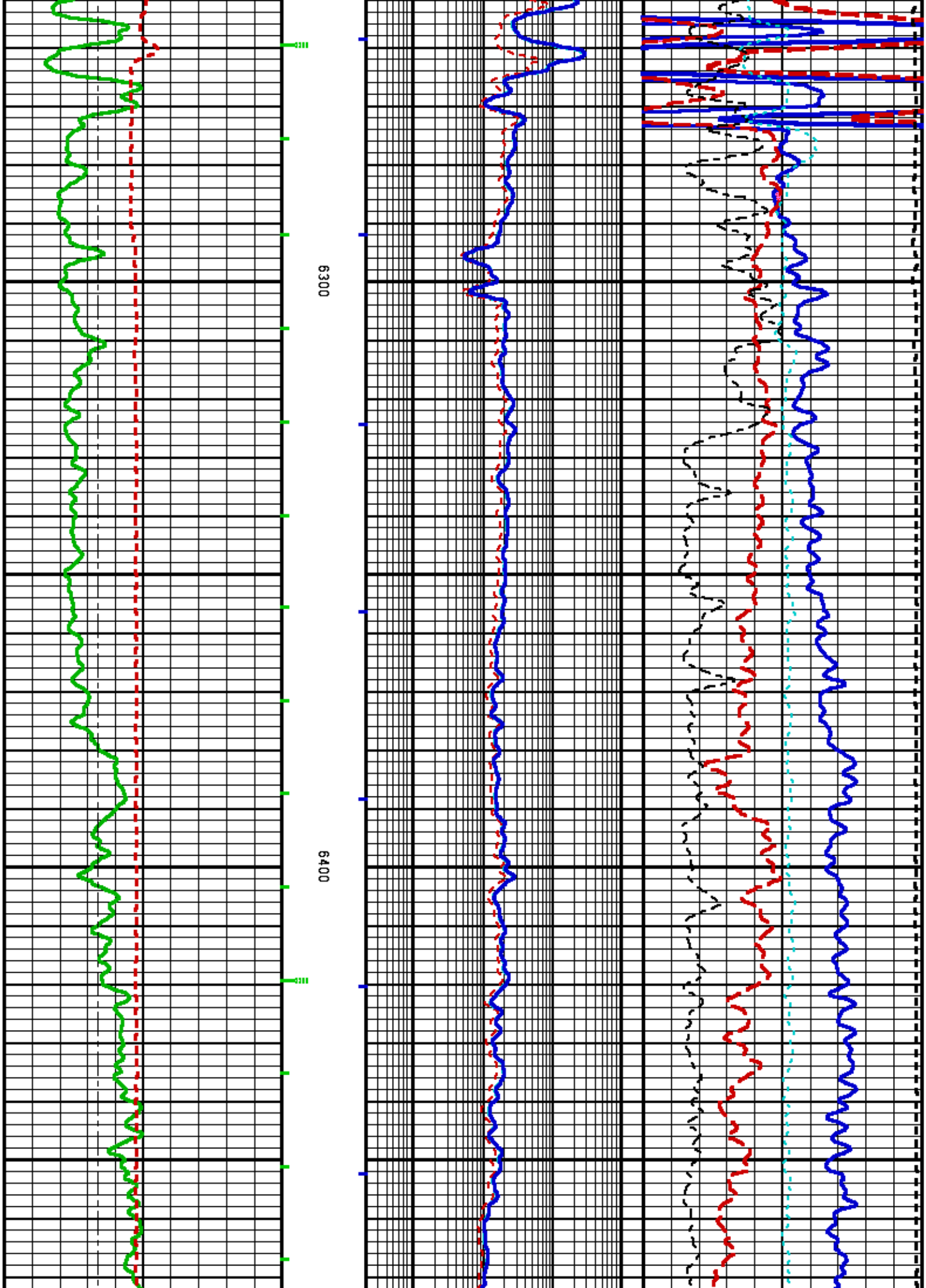
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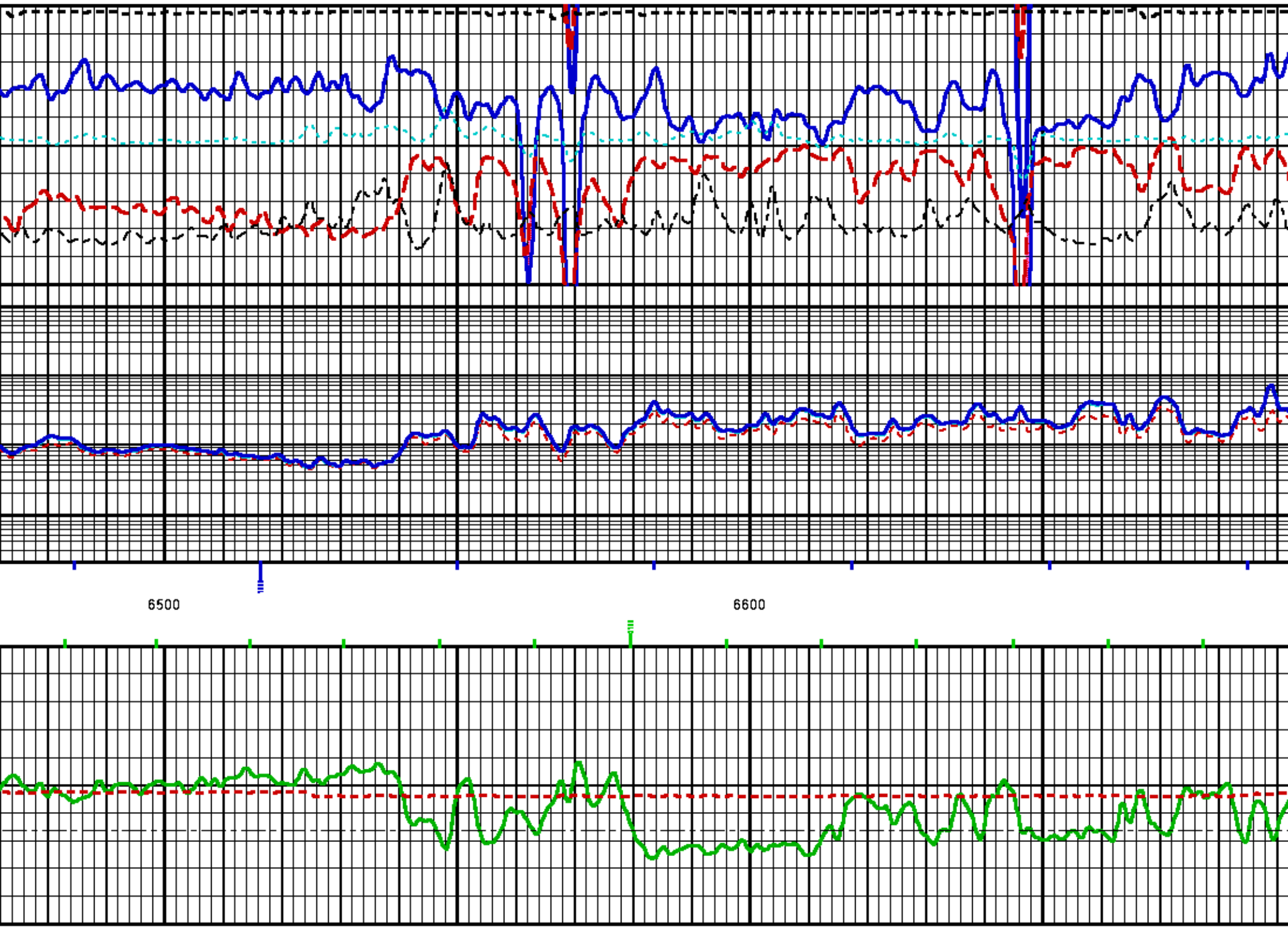
6400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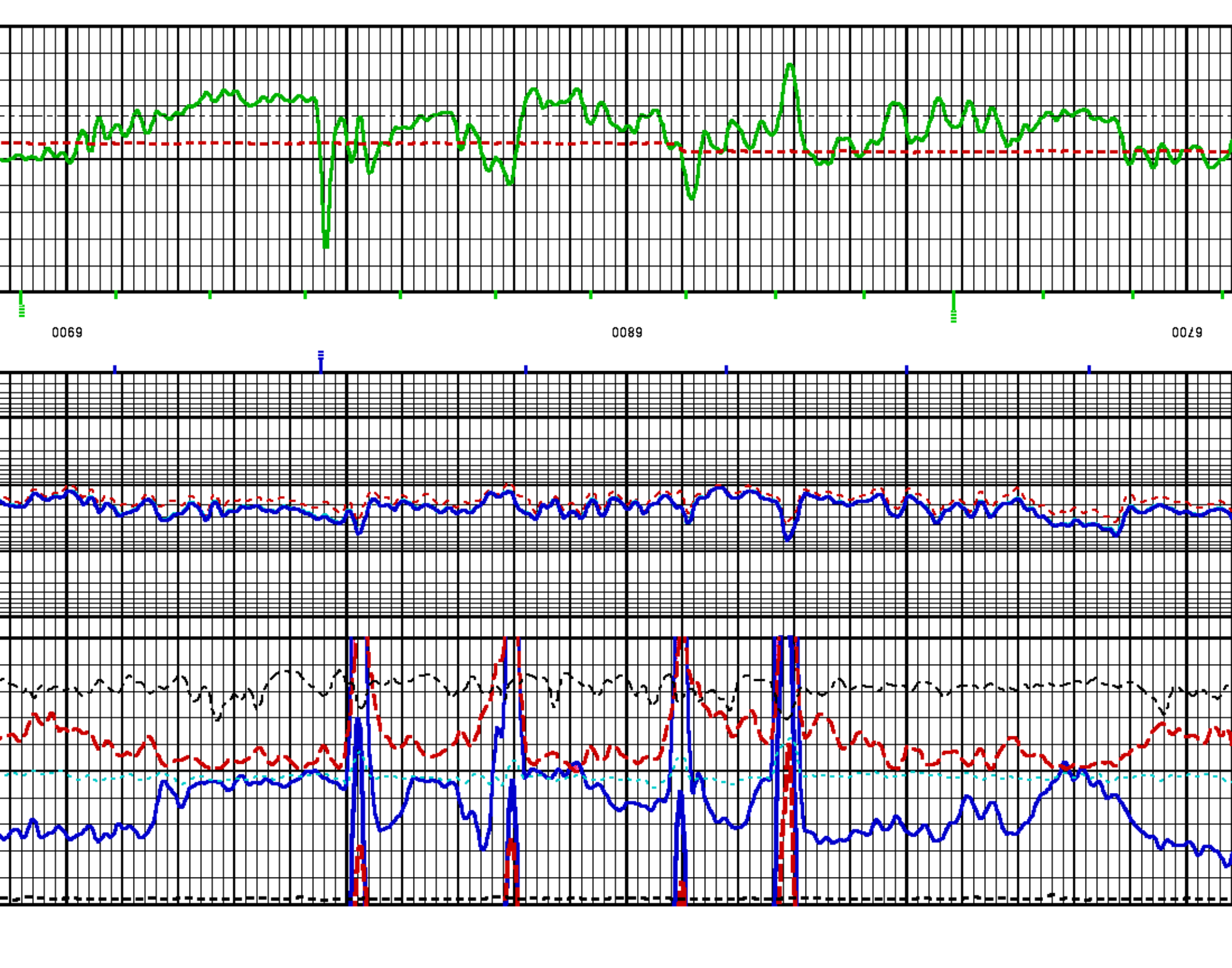
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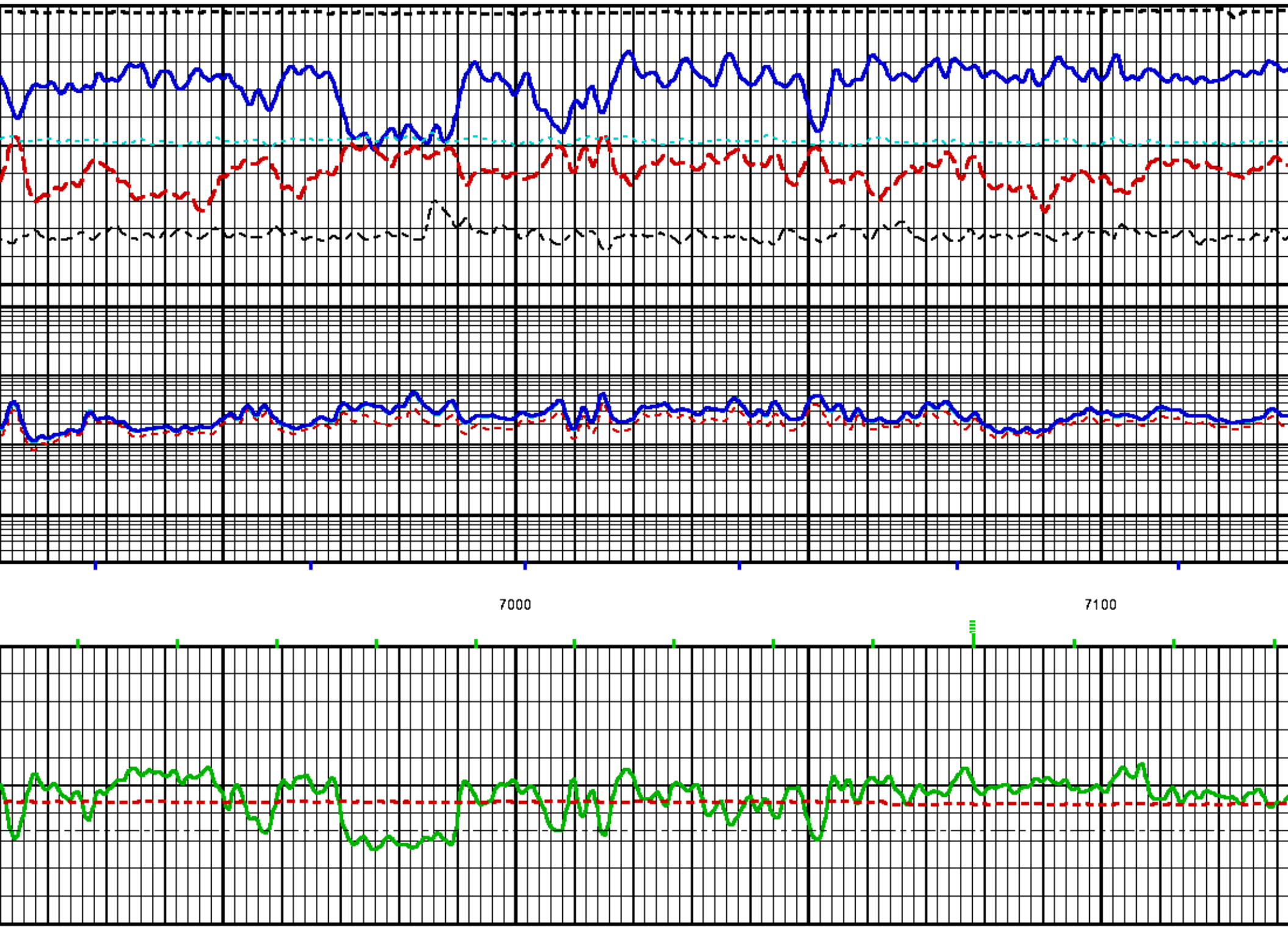
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7100

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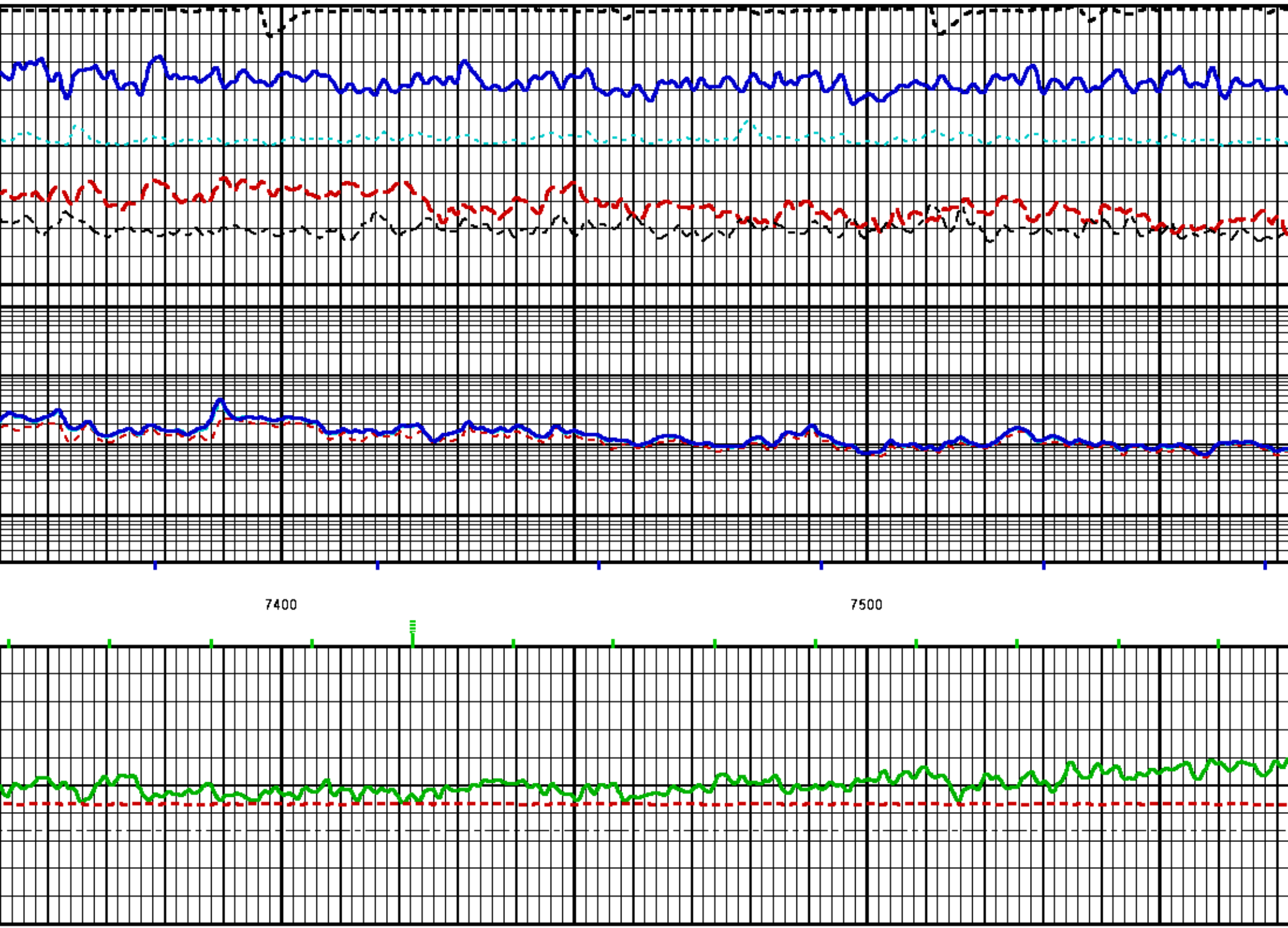
7300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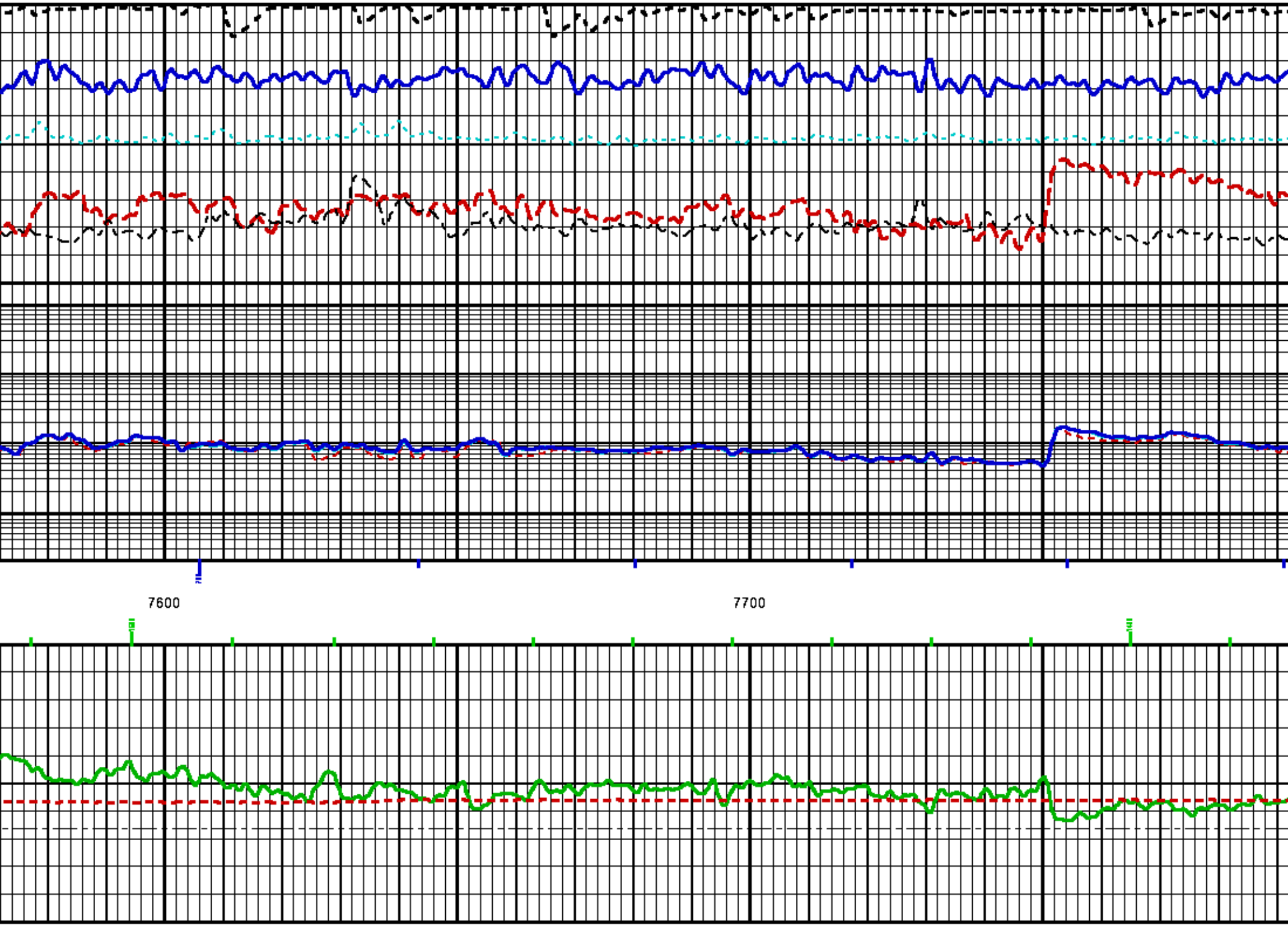
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7700

7800
7900
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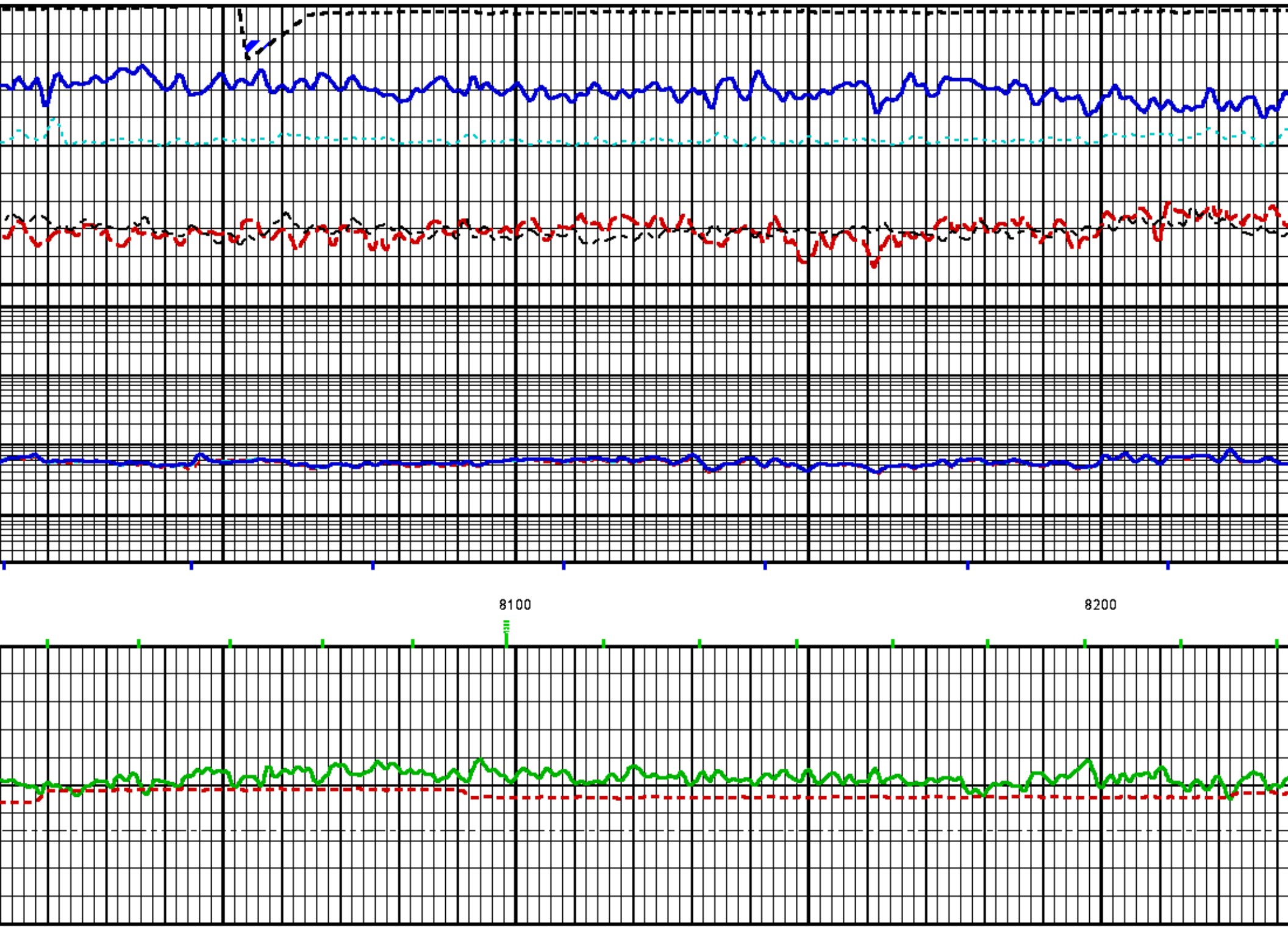
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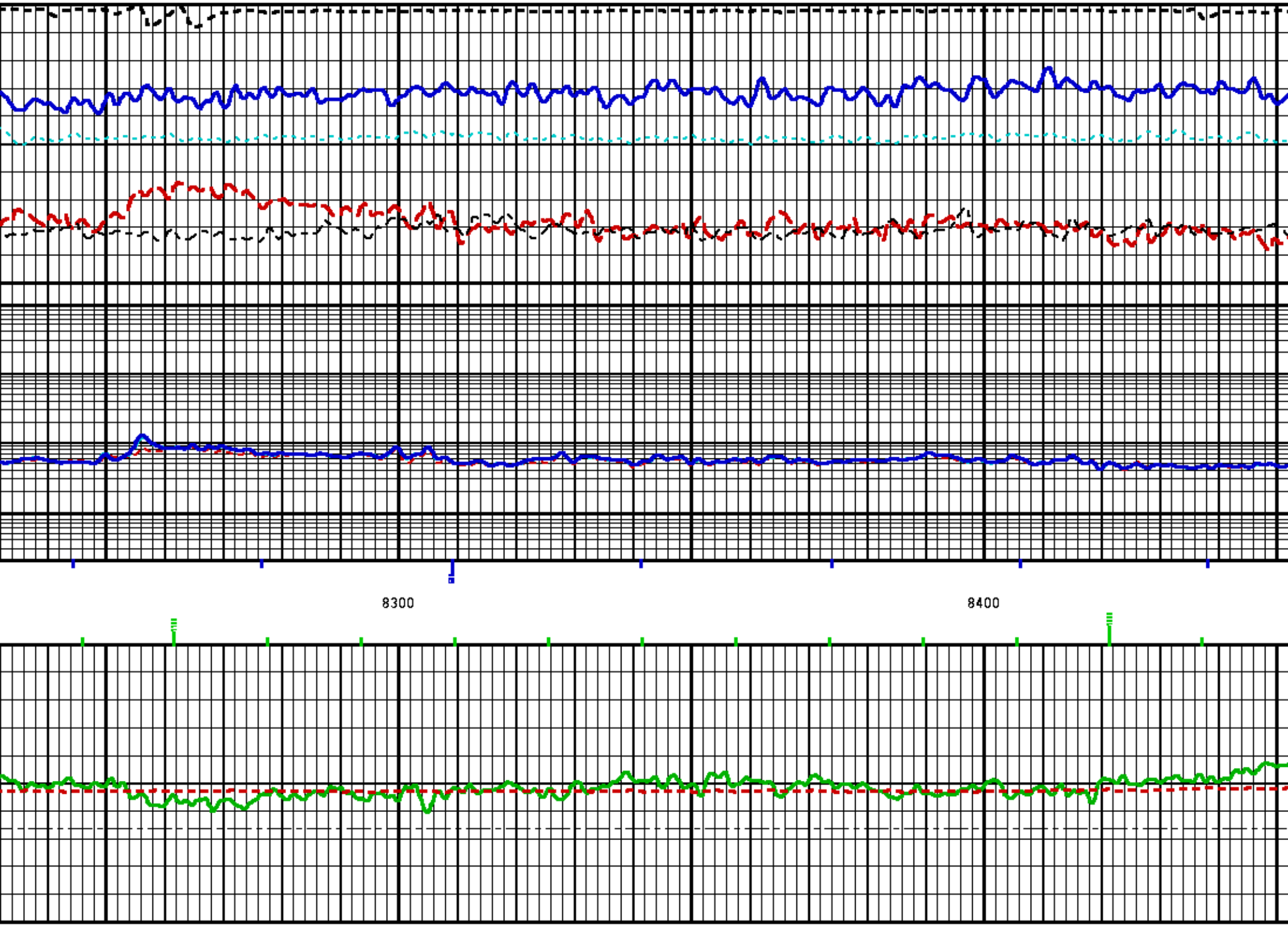
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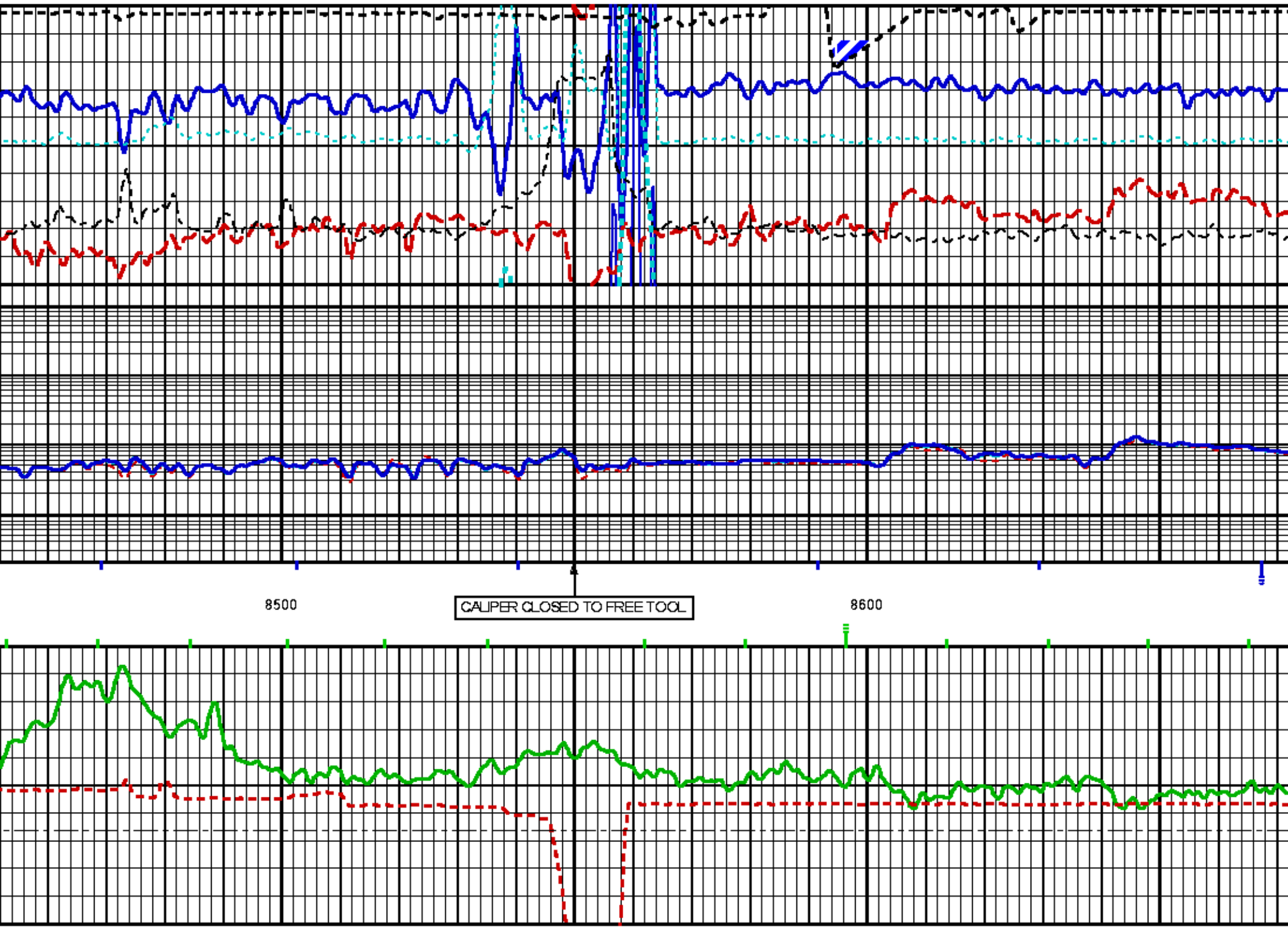
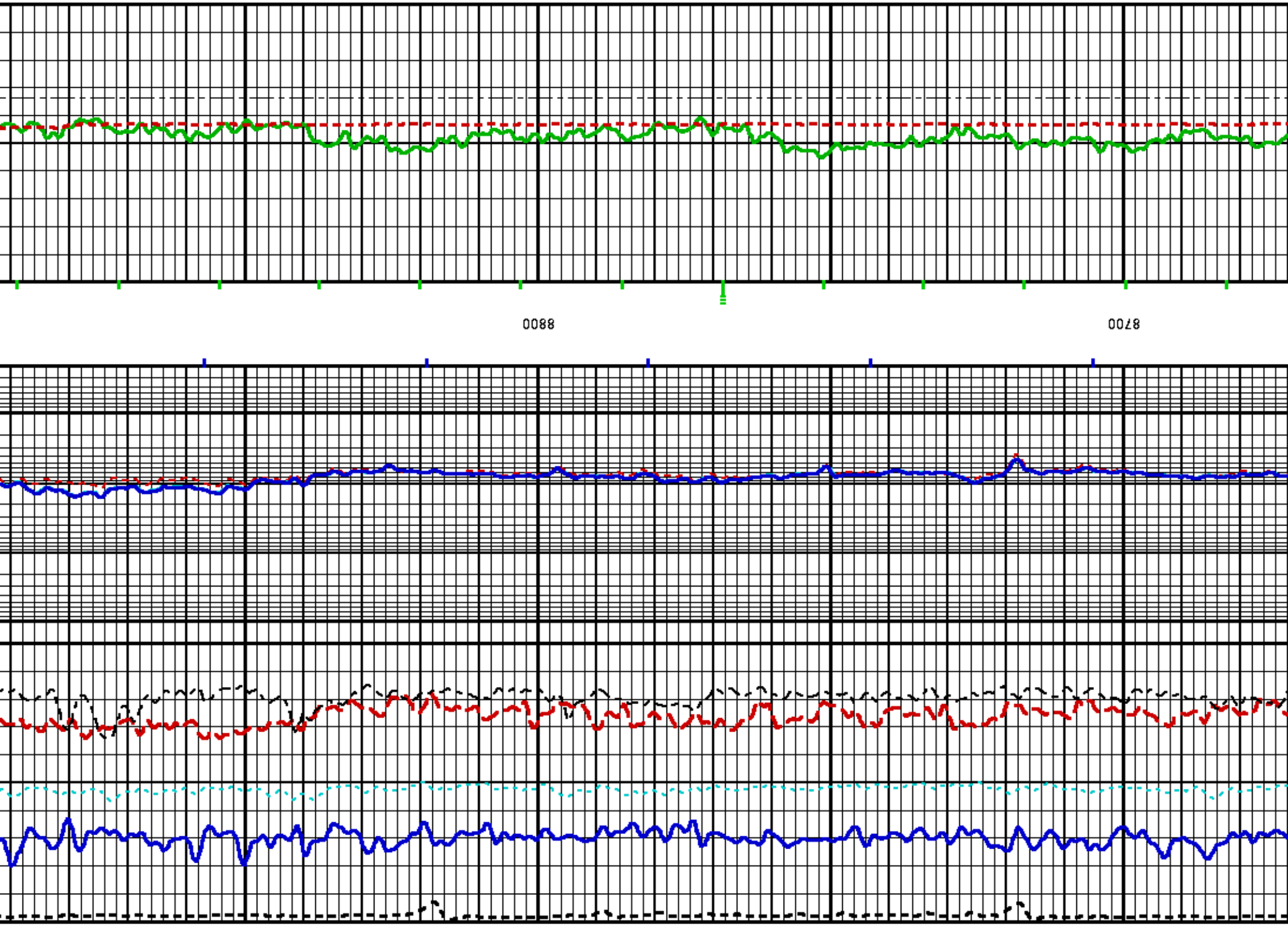
8400


8500
CALIPER CLOSED TO FREE TOOL
8600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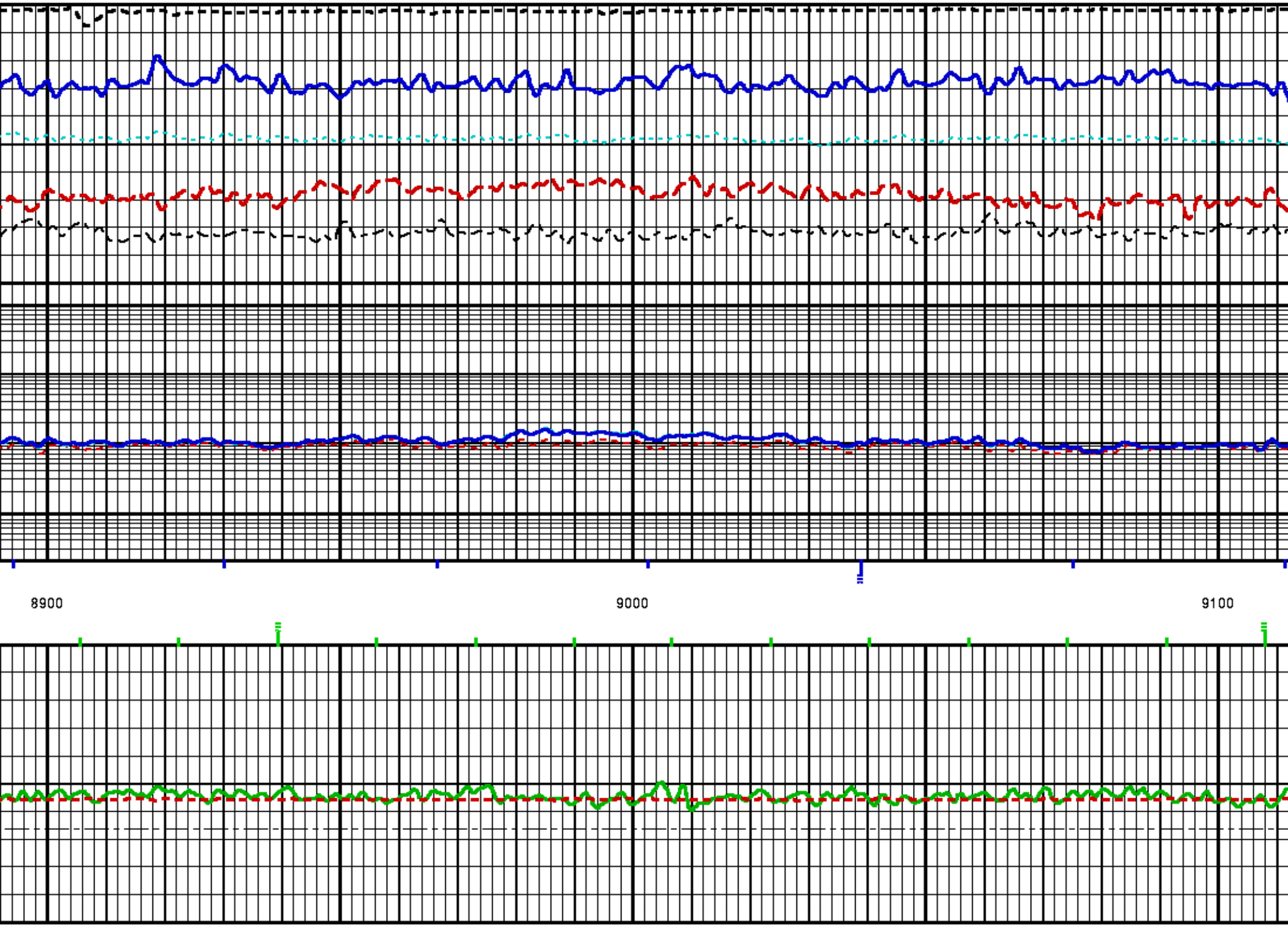
8700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9000
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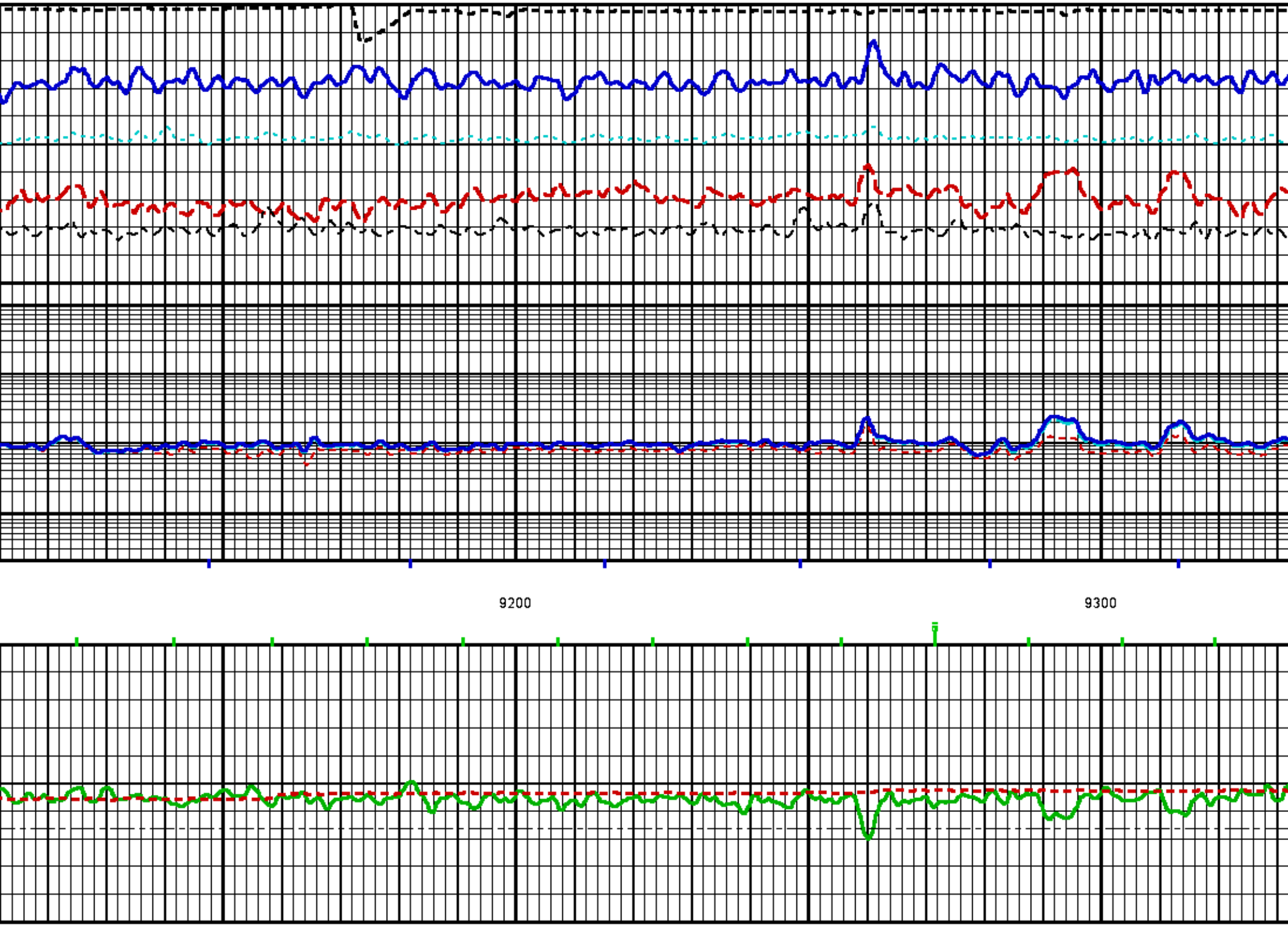
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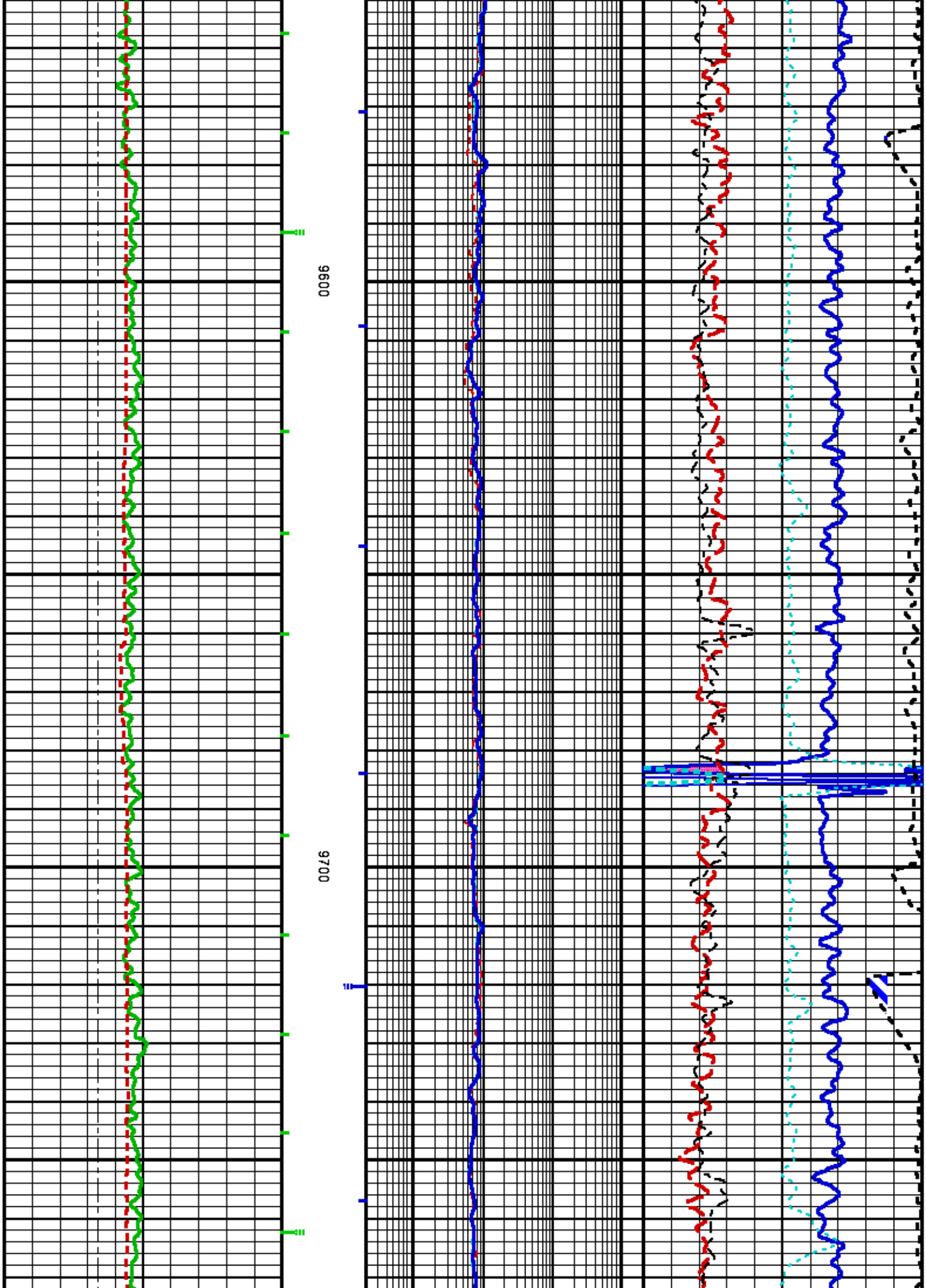
9300

9400
9500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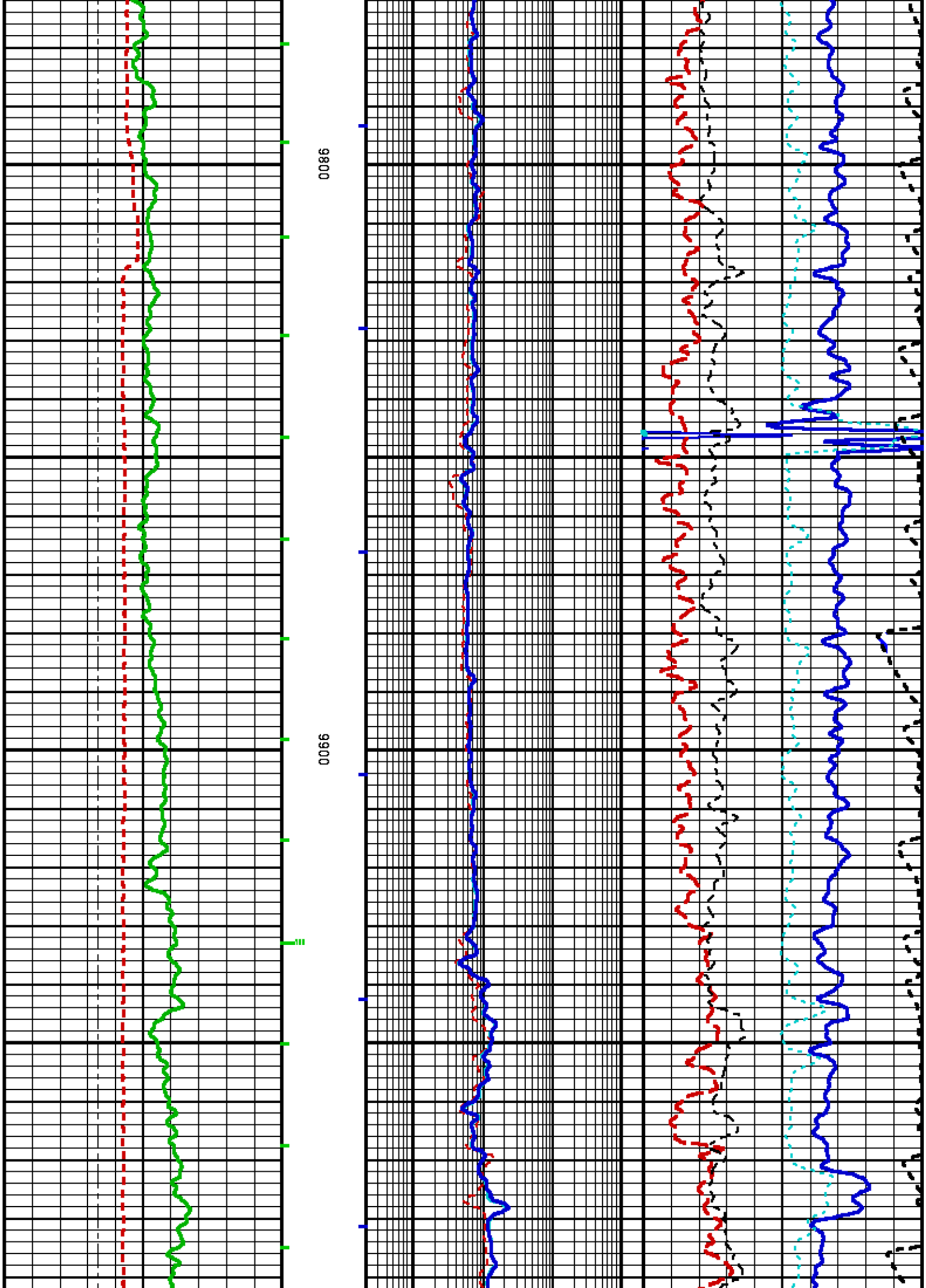
9700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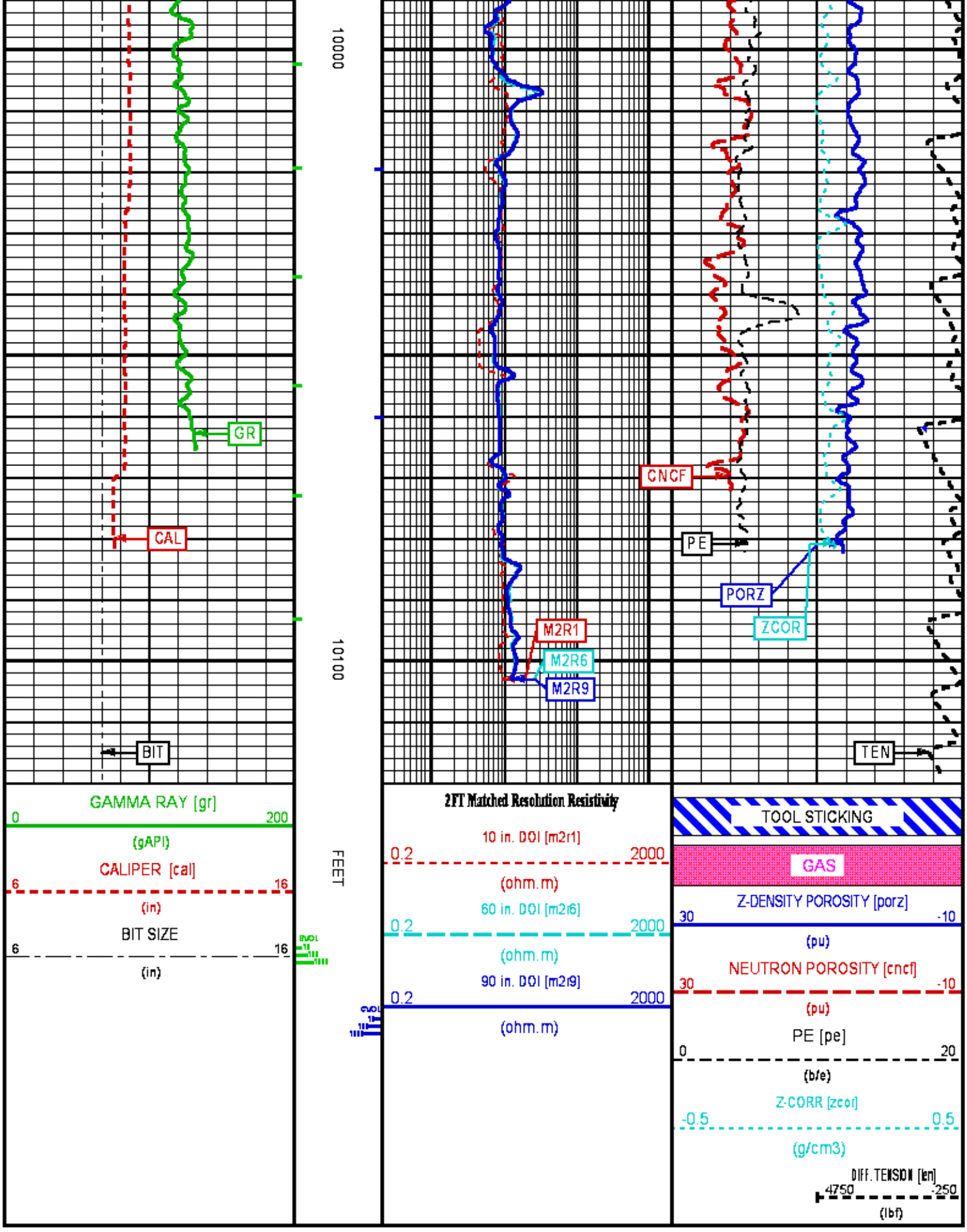
9900


10000
10100
FEET
GR
CAL
BIT
CNCF
PE
PORZ
ZCOR
M2R1
M2R6
M2R9
TEN
GAMMA RAY [gr]
0
200
(gAPI)
CALIPER [cal]
6
16
(in)
BIT SIZE
6
16
(in)
2FT Matched Resolution Resistivity
10 in. DOI [m2r1]
0.2
2000
(ohm.m)
60 in. DOI [m2r6]
0.2
2000
(ohm.m)
90 in. DOI [m2r9]
0.2
2000
(ohm.m)
TOOL STICKING
GAS
Z-DENSITY POROSITY [porz]
30
-10
(pu)
NEUTRON POROSITY [cncf]
30
-10
(pu)
PE [pe]
0
20
(b/e)
Z-CORR [zcor]
-0.5
0.5
(g/cm3)
DIFF. TENSION [ten]
4750
-250
(lbf)

REPEAT LOG 5"/100FT SCALE

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

Plotted: Tue Aug 6 09:15:38 2013

PARAMETER AND FILTER SUMMARY REPORT

FILE: /dat1a/625566/nu779xR-REPEAT107.prm
LOGGING MODE: DEPTH DIRECTION: UP
TOP DEPTH: 2352.000 ft BOTTOM DEPTH: 2779.033 ft

SYMMETRIC FILTER

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
Y AXIS CALIPER	FILTER ()	medium (1)		TOP	BOTTOM
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		"	"

BOREHOLE & CEMENT

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
CASING - BOREHOLE & CEMENT VOLUME	CASING O.D.	7.625	in	TOP	BOTTOM
	CASING THICKNESS	0.000	in	"	"
BIT SIZE	BIT SIZE	9.375	in	"	"
MUD SAMPLE RESISTIVITY	MUD SAMPLE TEMP	77.0	degF	"	"
	MUD SAMPLE RES	0.930	ohm.m	"	"
BOREHOLE TEMP from GRADIENT	Known BH REF TEMP	81.0	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*)	9.375	in	"	"
	FIXED DIAMETER (mbh*)	9.375	in	"	"
BH MUD RESISTIVITY SOURCE	RMUD SOURCE (HDIL)	MUD SAMP DERIVED		"	"

CN PROCESSING

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
2446 CN MATRIX	2446 MATRIX	SANDSTONE		TOP	BOTTOM
CN SALINITY CORRECTION	SALINITY	800	ppm	"	"
CN TOOL STANDOFF	ENABLE STANDOFF CORR	OFF		"	"
	STANDOFF AMOUNT	0.00	in	"	"
CN CASING & CEMENT CORRECTION	CORRECTION	OFF		"	"
	BIT SIZE BEHIND CSNG	13.375	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		"	"

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	1.200		"	"

CURVE DESCRIPTION REPORT

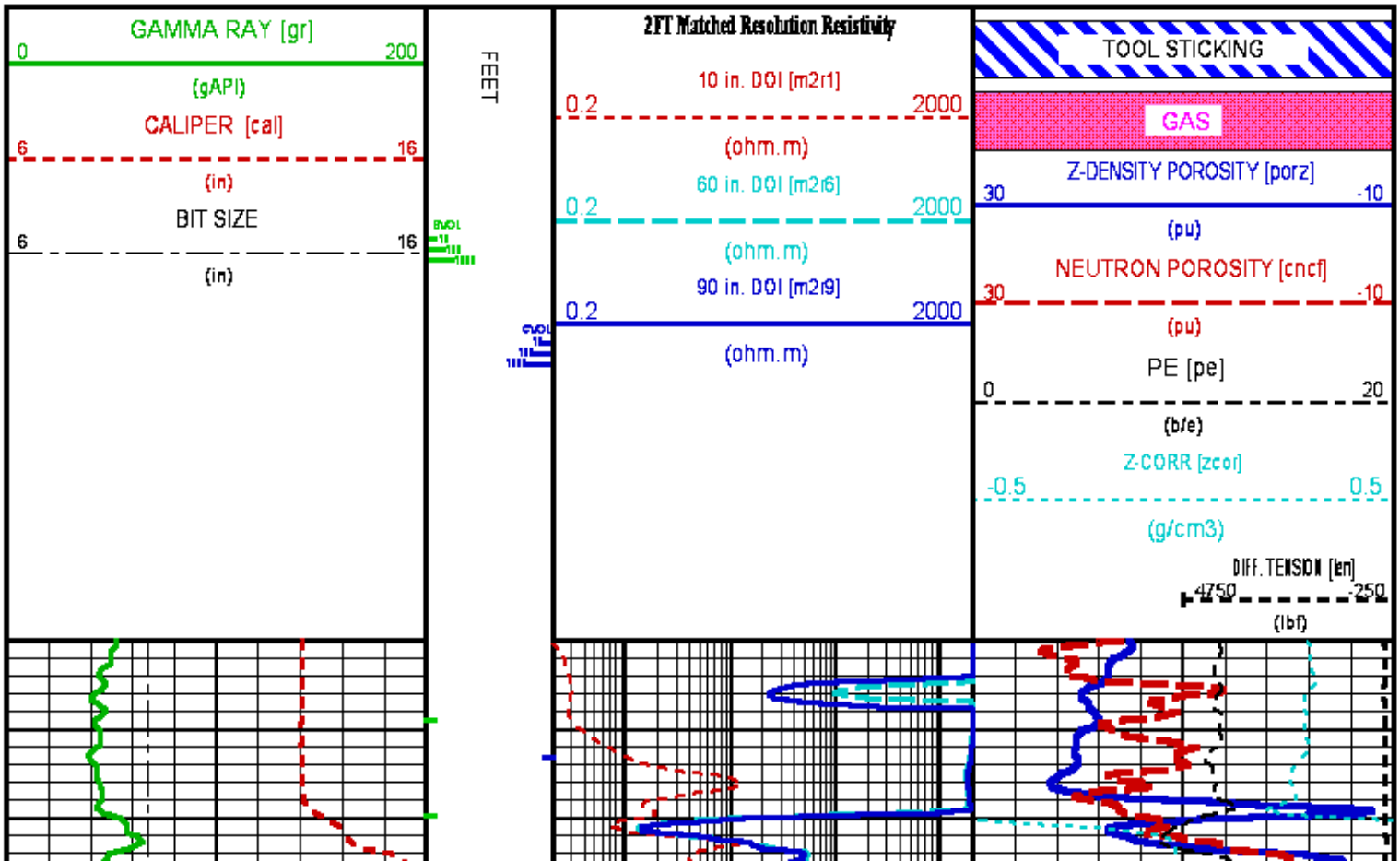
CURVE NAME	CREATION DATE	CURVE DESCRIPTION
F1:BIT	Aug 6 09:10:49 2013	BIT SIZE
F1:BVOL	Aug 6 09:10:49 2013	BOREHOLE VOLUME
F1:CAL	Aug 6 09:10:49 2013	CALIPER
F1:CNCF	Aug 6 09:10:49 2013	FIELD NORMALIZED COMPENSATED NEUTRON POROSITY
F1:CVOL	Aug 6 09:10:49 2013	CEMENT VOLUME
F1:GR	Aug 6 09:10:49 2013	GAMMA RAY
F1:M2R1	Aug 6 09:10:49 2013	VERTICAL 2-FOOT RESOLUTION MATCHED RESISTIVITY, 10-INCH DOI
F1:M2R6	Aug 6 09:10:49 2013	VERTICAL 2-FOOT RESOLUTION MATCHED RESISTIVITY, 60-INCH DOI
F1:M2R9	Aug 6 09:10:49 2013	VERTICAL 2-FOOT RESOLUTION MATCHED RESISTIVITY, 90-INCH DOI
F1:PE	Aug 6 09:10:49 2013	PHOTO ELECTRIC CROSS-SECTION
F1:PORZ	Aug 6 09:10:49 2013	POROSITY FOR SELECTABLE MATRIX
F1:TEN	Aug 6 09:10:49 2013	DIFFERENTIAL TENSION
F1:ZCOR	Aug 6 09:10:49 2013	DENSITY CORRECTION

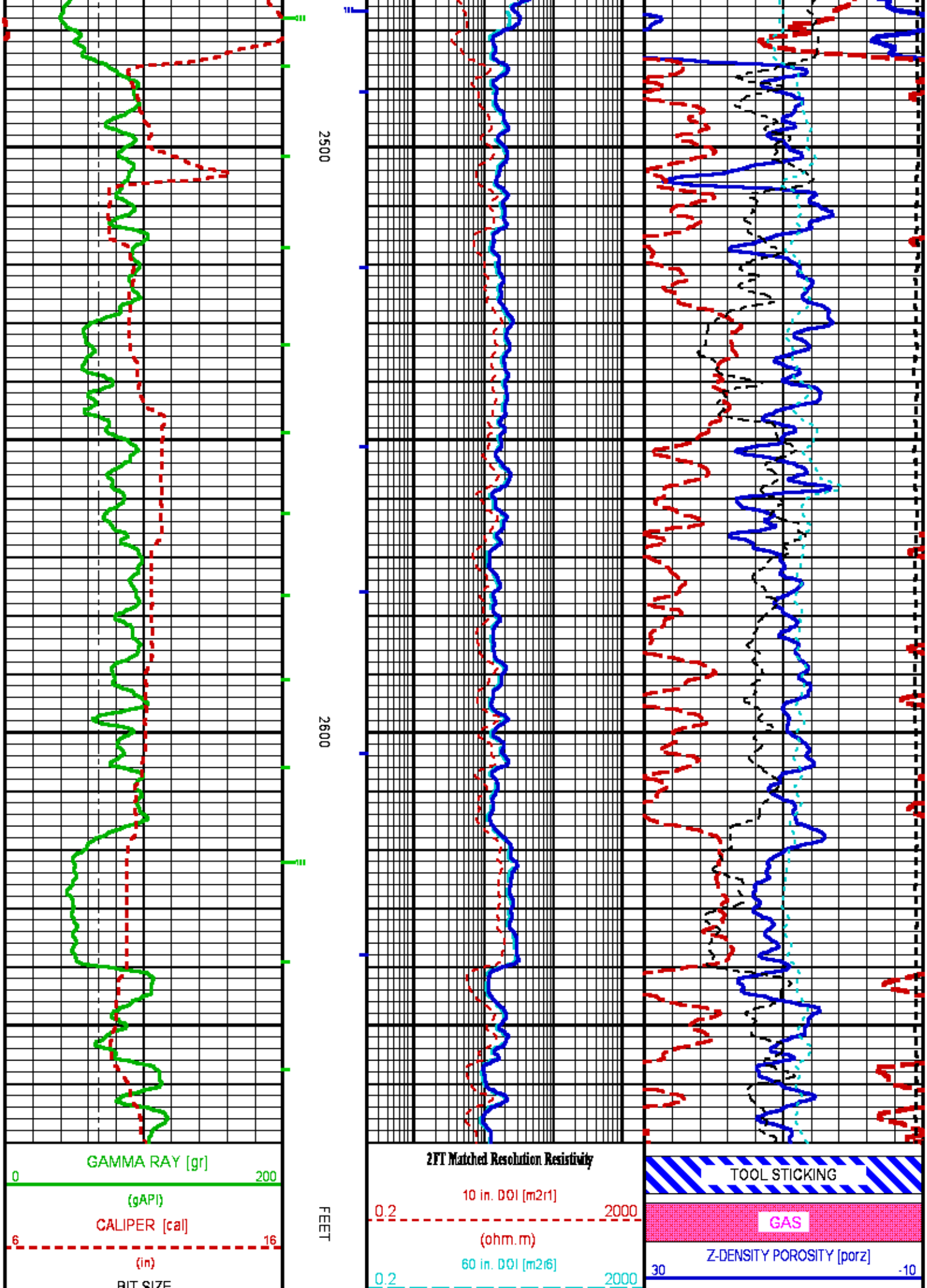
CURVE MEASURE POINT OFFSET

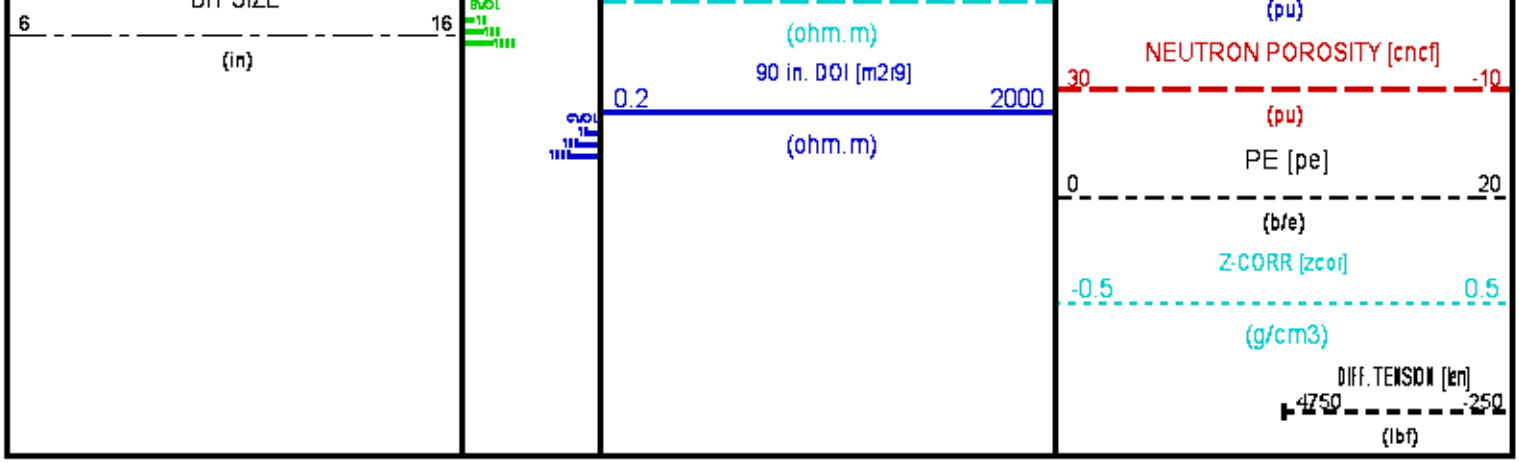
CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
BIT	0.00	GR	52.25	M2R9	8.00	TEN	0.00
CAL	35.00	M2R1	8.00	PE	34.25	ZCOR	34.25
CNCF	45.25	M2R6	8.00	PORZ	34.25		

Presentation : HL6670:/dat1a/625566/WPX_REPEAT-FINAL1.fvpdf [5"/100' Scale]
Plot Interval : 2450 - 2670 Feet

Data File 1 : F1 : HL6670:/dat1a/625566/nu779xR-REPEAT107.xtf
Created On : Aug 6 09:10:49 2013
Company : WPX ENERGY ROCKY MOUNTAIN LLC
Well : FEDERAL GM 702-4-HN1
Field : GRAND VALLEY
File Interval : 2322 - 2803.5 Feet
OCT : nu779x




2500
2600
FEET
GAMMA RAY [gr]
0
200
(gAPI)
CALIPER [cal]
6
16
(in)
BIT SIZE
2FT Matched Resolution Resistivity
10 in. DOI [m2r1]
0.2
2000
(ohm.m)
60 in. DOI [m2r6]
0.2
2000
TOOL STICKING
GAS
Z-DENSITY POROSITY [porz]
30
-10



CALIBRATION / VERIFICATION SUMMARY

Source File: /mnt1m/625566/nu779x.tp1

GR PRIMARY CALIBRATION SUMMARY

TOOL #: 1329XA 10196895 DATE/TIME PERFORMED: Mon Jul 22 10:05:21 2013

UNIT #: 3880TA HL6670 CALB JIG #: 4702NK VBA-905

	BACKGROUND (cts/s)	CALBRTR ON (cts/s)	CR DIFF (cts/s)	MULT	BACKGROUND (gAPI)	CALBRTR ON (gAPI)	CALBRTR (gAPI)
GR	341.24	1249.42	908.2 (850.0 950.0)	0.165	56.36	206.36	150

GR PRIMARY VERIFICATION SUMMARY

TOOL #: 1329XA 10196895 DATE/TIME PERFORMED: Mon Jul 22 10:10:34 2013

UNIT #: 3880TA HL6670 VERI JIG #: 4702NK VBA-905

	BACKGROUND (cts/s)	CALBRTR ON (cts/s)	MULT	BACKGROUND (gAPI)	CALBRTR ON (gAPI)	DIFF. (gAPI)
GR	341.24	1247.76	0.165	56.36	206.09	149.72 (140.00 160.00)

GR BEFORE LOG VERIFICATION SUMMARY

TOOL #: 1329XA 10196895 DATE/TIME PERFORMED: Mon Aug 5 03:57:46 2013 DAYS SINCE CAL: 13

UNIT #: 3880TA HL6670 VERI JIG #: 4702NK VBA-905

	BACKGROUND (cts/s)	CALBRTR ON (cts/s)	MULT	BACKGROUND (gAPI)	CALBRTR ON (gAPI)	DIFF. (gAPI)
GR	219.82	1123.96	0.165	36.31	185.64	149.33 (139.32 159.32)

GR AFTER LOG VERIFICATION SUMMARY

TOOL #: 1329XA 10196895 DATE/TIME PERFORMED: Mon Aug 5 10:39:34 2013 DAYS SINCE CAL: 14

UNIT #: 3880TA HL6670 VERI JIG #: 4702NK VBA-905

	BACKGROUND (cts/s)	CALBRTR ON (cts/s)	MULT	BACKGROUND (gAPI)	CALBRTR ON (gAPI)	DIFF. (gAPI)
GR	173.04	1075.82	0.165	28.58	177.69	149.11 (139.33 159.33)

CN PRIMARY CALIBRATION SUMMARY

TOOL #: 2446XA 10202034 DATE/TIME PERFORMED: Mon May 6 09:40:26 2013

UNIT #: 3880TA HL6670 CALIBRATOR #: 2437XB 112674 SOURCE #: 4717XS N-0897

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

LSN	588.42	596.85				
SSN	1551.07	1600.72				
RATIO			2.68196	2.75100	1.02574 (0.97000 – 1.07000)	
CN						21.358

CN PRIMARY VERIFICATION SUMMARY

TOOL #: 2446XA 10202034 DATE/TIME PERFORMED: Mon May 6 09:46:13 2013

UNIT #: 3880TA HL6670 ICE BLOCK #: 4717ND D-0147

	MEASURED CPS	DEADTM CORR CPS	DTC SSN/LSN	CORRECTION FACTOR	DTC CORR SSN/LSN	POROSITY (pu)
LSN	1577.06	1639.13				
SSN	3665.94	3956.09				
RATIO			2.41353	1.02574	2.47712	
CN						17.552

CN BEFORE LOG VERIFICATION SUMMARY

TOOL #: 2446XA 10202034 DATE/TIME PERFORMED: Mon Aug 5 04:00:45 2013 DAYS SINCE CAL: 90

UNIT #: 3880TA HL6670 ICE BLOCK #: 4717ND D-0147

	MEASURED CPS	DEADTM CORR CPS	DTC SSN/LSN	CORRECTION FACTOR	DTC CORR SSN/LSN	POROSITY (pu)
LSN	1572.34	1634.05				
SSN	3686.98	3980.58				
RATIO			2.43602	1.02574	2.50052	
CN						17.868 (15.552 – 19.552)

CN AFTER LOG VERIFICATION SUMMARY

TOOL #: 2446XA 10202034 DATE/TIME PERFORMED: Mon Aug 5 10:36:27 2013 DAYS SINCE CAL: 91

UNIT #: 3880TA HL6670 ICE BLOCK #: 4717ND D-0147

	MEASURED CPS	DEADTM CORR CPS	DTC SSN/LSN	CORRECTION FACTOR	DTC CORR SSN/LSN	POROSITY (pu)
LSN	1573.23	1635.01				
SSN	3693.96	3988.70				
RATIO			2.43955	1.02574	2.50430	
CN						17.919 (15.000 – 19.000)

CAL PRIMARY CALIBRATION SUMMARY

TOOL #: 2234XA 10211833 DATE/TIME PERFORMED: Mon Jul 22 09:21:21 2013

UNIT #: 3880TA HL6670

	SMALL RING	LARGE RING	MULT	ADD	SMALL RING (in)	LARGE RING (in)
CALIPER	1840.0	2350.0	0.00784	-7.43137	7.000	11.000

CAL BEFORE LOG VERIFICATION SUMMARY

TOOL #: 2234XA 10211833 DATE/TIME PERFORMED: Mon Aug 5 04:22:42 2013 DAYS SINCE CAL: 13

UNIT #: 3880TA HL6670

	I.D.	MULT	ADD	I.D. (in)
CALIPER	2565.6	0.00784	-7.70735	12.415

CAL AFTER LOG VERIFICATION SUMMARY

TOOL #: 2234XA 10211833 DATE/TIME PERFORMED: Mon Aug 5 09:45:42 2013 DAYS SINCE CAL: 14

UNIT #: 3880TA HL6670

	I.D.	MULT	ADD	I.D. (in)
CALIPER	2510.0	0.00784	-7.70735	11.979 (11.915 – 12.915)

ZDL PRIMARY CALIBRATION SUMMARY

TOOL: 2234XA 10211833 DATE/TIME PERFORMED: Mon Jul 22 09:12:25 2013

UNIT: 3880TA HL6670 CALB BLKS: 2225XA 094292 CS SRC: 4703NT 34631B

SS CS PK (Channel)	LS CS PK (Channel)	SS_BKGD (cps)	LS BKGD (cps)
223.2 (220.0 – 250.0)	224.4 (220.0 – 250.0)	1351.6	1654.9

	SS (cps)	LS (cps)	SHR	DEN (g/cm3)	CORR (g/cm3)	PE (b/e)
MG (LO PE)	23908.1	13213.4	0.574 (0.555 – 0.655)	1.697	0.002	2.300
AL	13950.4	1327.1		2.717	-0.004	
AL + SHIM	19302.4	2332.6		2.629	0.157	
MG + SHIM (HI PE)	11500.4	6134.2	0.224 (0.210 – 0.270)			8.730
RATIO AL + SHIM/AL	1.38 (1.32 – 1.42)	1.76 (1.61 – 1.81)				
RATIO MG/AL	1.71 (1.65 – 1.75)	9.96 (9.40 – 10.20)				

ZDL BEFORE LOG VERIFICATION SUMMARY

TOOL #: 2234XA 10211833 DATE/TIME PERFORMED: Mon Aug 5 04:03:21 2013 DAYS SINCE CAL: 13

UNIT #: 3880TA HL6670

	TOTAL (cps)	CSPK (Channel)	HV (V)
LS	1639.3 (1551.8 – 1751.8)	224.8 (220.0 – 250.0)	1188.0 (1100.0 – 1550.0)
SS	1351.6 (1251.8 – 1451.8)	224.5 (220.0 – 250.0)	1236.1 (1100.0 – 1550.0)

LV (V)	PAD CURRENT (mA)
5.0 (4.8 – 5.2)	66.6 (50.0 – 120.0)

ZDL AFTER LOG VERIFICATION SUMMARY

TOOL #: 2234XA 10211833 DATE/TIME PERFORMED: Mon Aug 5 10:36:08 2013 DAYS SINCE CAL: 14

UNIT #: 3880TA HL6670

	TOTAL (cps)	CSPK (Channel)	HV (V)
LS	1633.2 (1551.8 – 1751.8)	224.7 (220.0 – 250.0)	1190.1 (1100.0 – 1550.0)
SS	1344.7 (1251.8 – 1451.8)	223.5 (220.0 – 250.0)	1239.9 (1100.0 – 1550.0)

LV (V)	PAD CURRENT (mA)
5.0 (4.8 – 5.2)	65.4 (50.0 – 120.0)

HDIL PRIMARY CALIBRATION SUMMARY

TOOL #: 1515MA 10037719 DATE/TIME PERFORMED: Mon May 6 14:14:34 2013

UNIT #: 3880TA HL6670 GRCOND ID & DATE: 126 083096

ZERO DATA(mv)	10 KHz	30 KHz	50 KHz	70 KHz	90 KHz	110 KHz	130 KHz	150 KHz
Coil 0 R	-0.010 (-0.200 – 0.200)	-0.004 (-0.100 – 0.100)	-0.003 (-0.100 – 0.100)	-0.004 (-0.100 – 0.100)	-0.006 (-0.100 – 0.100)	-0.003 (-0.100 – 0.100)	-0.003 (-0.100 – 0.100)	-0.006 (-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)	0.001 (-0.100 – 0.100)	0.003 (-0.100 – 0.100)	0.002 (-0.100 – 0.100)	-0.000 (-0.100 – 0.100)	0.000 (-0.100 – 0.100)

Coil 1 R	0.005	0.004	0.004	0.008	0.006	0.003	0.001	-0.001
	-0.200 0.200	-0.100 0.100	-0.100 0.100	-0.100 0.100	-0.100 0.100	-0.100 0.100	-0.100 0.100	-0.100 0.100
Coil 1 Q	-0.005	-0.006	-0.005	-0.001	0.002	0.003	0.003	0.001
	-1.000 1.000	-0.200 0.200	-0.100 0.100	-0.100 0.100	-0.100 0.100	-0.100 0.100	-0.100 0.100	-0.100 0.100
Coil 2 R	-0.003	0.001	0.003	0.000	0.002	0.004	0.006	0.007
	-0.200 0.200	-0.100 0.100	-0.100 0.100	-0.100 0.100	-0.100 0.100	-0.100 0.100	-0.100 0.100	-0.100 0.100
Coil 2 Q	0.000	0.001	0.003	-0.001	-0.003	-0.005	-0.004	-0.004
	-1.000 1.000	-0.200 0.200	-0.100 0.100	-0.100 0.100	-0.100 0.100	-0.100 0.100	-0.100 0.100	-0.100 0.100
Coil 3 R	0.006	0.005	-0.001	0.005	0.006	0.001	0.003	0.002
	-0.100 0.100	-0.100 0.100	-0.100 0.100	-0.100 0.100	-0.100 0.100	-0.100 0.100	-0.100 0.100	-0.100 0.100
Coil 3 Q	-0.012	-0.008	-0.005	-0.003	-0.003	0.000	-0.001	0.001
	-0.500 0.500	-0.200 0.200	-0.100 0.100	-0.100 0.100	-0.100 0.100	-0.100 0.100	-0.100 0.100	-0.100 0.100
Coil 4 R	-0.014	-0.002	-0.002	-0.002	0.003	0.005	0.004	0.003
	-0.200 0.200	-0.200 0.200	-0.200 0.200	-0.200 0.200	-0.200 0.200	-0.200 0.200	-0.200 0.200	-0.200 0.200
Coil 4 Q	-0.005	0.003	-0.003	-0.005	-0.003	-0.011	-0.002	-0.001
	-1.000 1.000	-0.400 0.400	-0.200 0.200	-0.200 0.200	-0.200 0.200	-0.200 0.200	-0.200 0.200	-0.200 0.200
Coil 5 R	-0.000	0.009	0.008	0.006	-0.002	-0.007	-0.006	-0.000
	-0.400 0.400	-0.400 0.400	-0.400 0.400	-0.400 0.400	-0.400 0.400	-0.400 0.400	-0.400 0.400	-0.400 0.400
Coil 5 Q	-0.008	0.000	0.001	0.008	0.001	0.005	-0.001	-0.002
	-2.000 2.000	-0.800 0.800	-0.400 0.400	-0.400 0.400	-0.400 0.400	-0.400 0.400	-0.400 0.400	-0.400 0.400
Coil 6 R	-0.025	-0.009	-0.006	-0.014	0.001	-0.009	0.026	-0.003
	-1.000 1.000	-1.000 1.000	-1.000 1.000	-1.000 1.000	-1.000 1.000	-1.000 1.000	-1.000 1.000	-1.000 1.000
Coil 6 Q	-0.013	-0.019	0.018	0.020	-0.011	-0.018	-0.010	-0.009
	-5.000 5.000	-2.000 2.000	-1.000 1.000	-1.000 1.000	-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	126.06	124.56	121.65	117.39	112.01	105.55	98.11	89.87
	100.00 150.00	100.00 150.00	98.00 150.00	88.00 140.00	82.00 140.00	81.00 130.00	82.00 120.00	78.00 110.00
Coil 0 P	7.576	23.876	39.879	55.867	71.690	87.667	103.419	119.326
	5.000 9.000	19.000 28.000	32.000 47.000	44.000 68.000	57.000 86.000	70.000 100.000	82.000 120.000	95.000 140.000
Coil 1 M	218.46	215.88	210.82	203.50	194.17	183.00	170.11	155.91
	160.00 270.00	160.00 270.00	170.00 260.00	170.00 250.00	160.00 250.00	160.00 230.00	150.00 200.00	140.00 200.00
Coil 1 P	7.671	24.176	40.412	56.616	72.673	88.834	104.819	121.024
	5.000 9.000	19.000 28.000	32.000 48.000	45.000 67.000	57.000 86.000	70.000 110.000	83.000 120.000	96.000 140.000
Coil 2 M	439.75	434.65	424.82	410.44	392.05	369.70	343.89	315.45
	360.00 540.00	360.00 540.00	350.00 550.00	340.00 510.00	330.00 500.00	310.00 470.00	300.00 440.00	270.00 410.00
Coil 2 P	7.854	24.685	41.281	57.844	74.290	90.860	107.265	123.825
	5.000 9.000	19.000 28.000	32.000 48.000	45.000 67.000	58.000 87.000	71.000 110.000	84.000 130.000	98.000 140.000
Coil 3 M	711.51	702.62	685.33	659.99	627.93	590.44	547.48	501.87
	530.00 880.00	560.00 870.00	570.00 850.00	550.00 830.00	550.00 800.00	500.00 780.00	470.00 710.00	440.00 650.00
Coil 3 P	7.710	24.313	40.609	56.829	72.819	88.884	104.619	120.421
	5.000 10.000	20.000 29.000	33.000 49.000	46.000 68.000	59.000 88.000	72.000 110.000	85.000 130.000	98.000 150.000
Coil 4 M	1139.1	1122.5	1090.5	1044.7	988.7	924.2	854.1	780.1
	800.0 1400.0	800.0 1500.0	800.0 1500.0	850.0 1500.0	800.0 1200.0	800.0 1200.0	750.0 1100.0	700.0 1000.0
Coil 4 P	7.951	25.042	41.710	58.233	74.398	90.519	106.185	121.876
	5.000 10.000	20.000 30.000	33.000 50.000	48.000 70.000	60.000 90.000	73.000 110.000	86.000 130.000	99.000 150.000
Coil 5 M	2366.6	2336.3	2277.4	2191.7	2083.7	1956.3	1812.5	1657.4
	1900.0 2800.0	1800.0 2800.0	1800.0 2900.0	1800.0 2800.0	1700.0 2500.0	1600.0 2400.0	1500.0 2200.0	1400.0 2100.0
Coil 5 P	8.214	25.814	43.098	60.322	77.309	94.321	111.019	127.761
	5.000 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	103.000 150.000
Coil 6 M	6038.8	5960.9	5808.6	5589.4	5311.2	4981.8	4608.5	4207.7
	4700.0 7100.0	4700.0 7000.0	4800.0 6800.0	4700.0 6600.0	4200.0 6400.0	4000.0 6000.0	3700.0 5600.0	3400.0 5100.0
Coil 6 P	8.133	25.841	43.183	60.470	77.506	94.596	111.365	128.250
	5.000 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

AM Factor	10 KHz	30 KHz	50 KHz	70 KHz	90 KHz	110 KHz	130 KHz	150 KHz
Coil 0 R	476	-85	-142	-153	-154	-153	-151	-150
	-300 800	-500 300	-800 100	-800 50	-800 30	-800 30	-500 30	-500 30
Coil 0 Q	1802	649	354	213	126	64	16	-24
	-3000 6000	-1000 2000	-1000 1200	-500 800	-400 700	-400 600	-400 500	-400 400
Coil 1 R	567	86	23	2	-10	-15	-20	-23
	450 680	20 130	-30 80	-50 40	-55 30	-60 20	-60 10	-60 10
Coil 1 Q	1215	488	306	222	171	137	113	94
	0 2500	0 800	0 600	0 450	0 350	0 300	0 250	0 250
Coil 2 R	187.9	27.5	7.2	0.5	-3.2	-4.6	-6.0	-6.6
	140.0 250.0	0.0 51.0	-10.0 25.0	-15.0 15.0	-16.0 10.0	-16.0 9.0	-16.0 5.0	-16.0 3.0
Coil 2 Q	415.6	167.5	108.0	82.1	67.4	58.9	52.8	49.0
	-200.0 1000.0	0.0 350.0	0.0 260.0	0.0 180.0	0.0 150.0	0.0 110.0	0.0 100.0	0.0 90.0
Coil 3 R	48.7	6.9	2.1	0.4	-0.5	-1.1	-1.5	-2.2
	37.0 62.0	0.0 12.0	-3.0 8.0	-4.0 4.0	-5.0 2.0	-5.0 1.0	-5.0 1.0	-5.0 1.0
Coil 3 Q	70.7	33.1	24.5	21.7	21.1	21.5	22.5	23.2
	-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	11.25	1.20	-0.22	-0.70	-1.07	-1.28	-1.41	-1.60
	2.00 18.00	-3.00 6.00	-3.50 3.00	-3.50 2.00	-4.20 2.00	-4.50 2.00	-4.30 2.00	-5.00 2.00
Coil 4 Q	16.69	10.79	10.89	12.35	14.21	16.20	18.45	20.69
	-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	2.47	-0.05	-0.25	-0.47	-0.59	-0.68	-0.78	-0.64
	-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	15.05	8.42	8.98	10.41	12.22	14.24	16.14	18.57
	-80.00 70.00	-40.00 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	-2.44	-0.57	-0.36	-0.39	-0.38	-0.35	-0.38	-0.55
	-4.80 1.00	-5.10 3.80	-6.50 4.80	-6.80 5.40	-7.30 5.80	-7.50 6.00	-7.70 6.10	-7.90 6.30
Coil 6 Q	2.39	3.16	5.44	7.75	9.85	12.06	14.27	16.66
	-30.00 30.00	-40.00 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	0.997	0.995	0.991	0.990	0.989	0.988	0.988	0.988
	0.900 1.100	0.900 1.100	0.900 1.100	0.900 1.100	0.900 1.100	0.900 1.100	0.900 1.100	0.900 1.100
Coil 0 P	0.074	0.202	0.272	0.244	0.173	0.167	0.066	0.046
	-2.000 2.000	-2.000 2.000	-2.000 2.000	-2.000 2.000	-2.000 2.000	-2.000 2.000	-2.000 2.000	-2.000 2.000
Coil 1 M	0.981	0.979	0.976	0.975	0.973	0.972	0.972	0.972

Coil 1 P	0.095	0.237	0.325	0.347	0.342	0.310	0.229	0.245
Coil 2 M	1.007	1.004	1.004	1.003	1.003	1.002	1.002	1.002
Coil 2 P	0.090	0.050	0.076	0.102	0.114	0.108	0.093	0.116
Coil 3 M	1.002	1.001	1.001	0.999	0.997	0.997	0.997	1.000
Coil 3 P	0.016	0.081	0.156	0.192	0.161	0.159	0.094	0.153
Coil 4 M	1.013	1.012	1.012	1.011	1.010	1.009	1.009	1.009
Coil 4 P	0.086	0.127	0.129	0.197	0.184	0.228	0.166	0.159
Coil 5 M	1.019	1.019	1.019	1.017	1.016	1.016	1.015	1.014
Coil 5 P	0.035	-0.010	0.046	0.069	0.013	-0.074	-0.113	-0.124
Coil 6 M	1.017	1.020	1.019	1.017	1.017	1.023	1.023	1.022
Coil 6 P	-0.060	0.069	0.016	0.120	-0.002	-0.087	-0.121	-0.135

PARMS	TCID 0	TCID 1	Cal Temp (degF)	T Factor
IDs	1.617	0.832	73.1	1.04

HDIL BEFORE LOG VERIFICATION SUMMARY

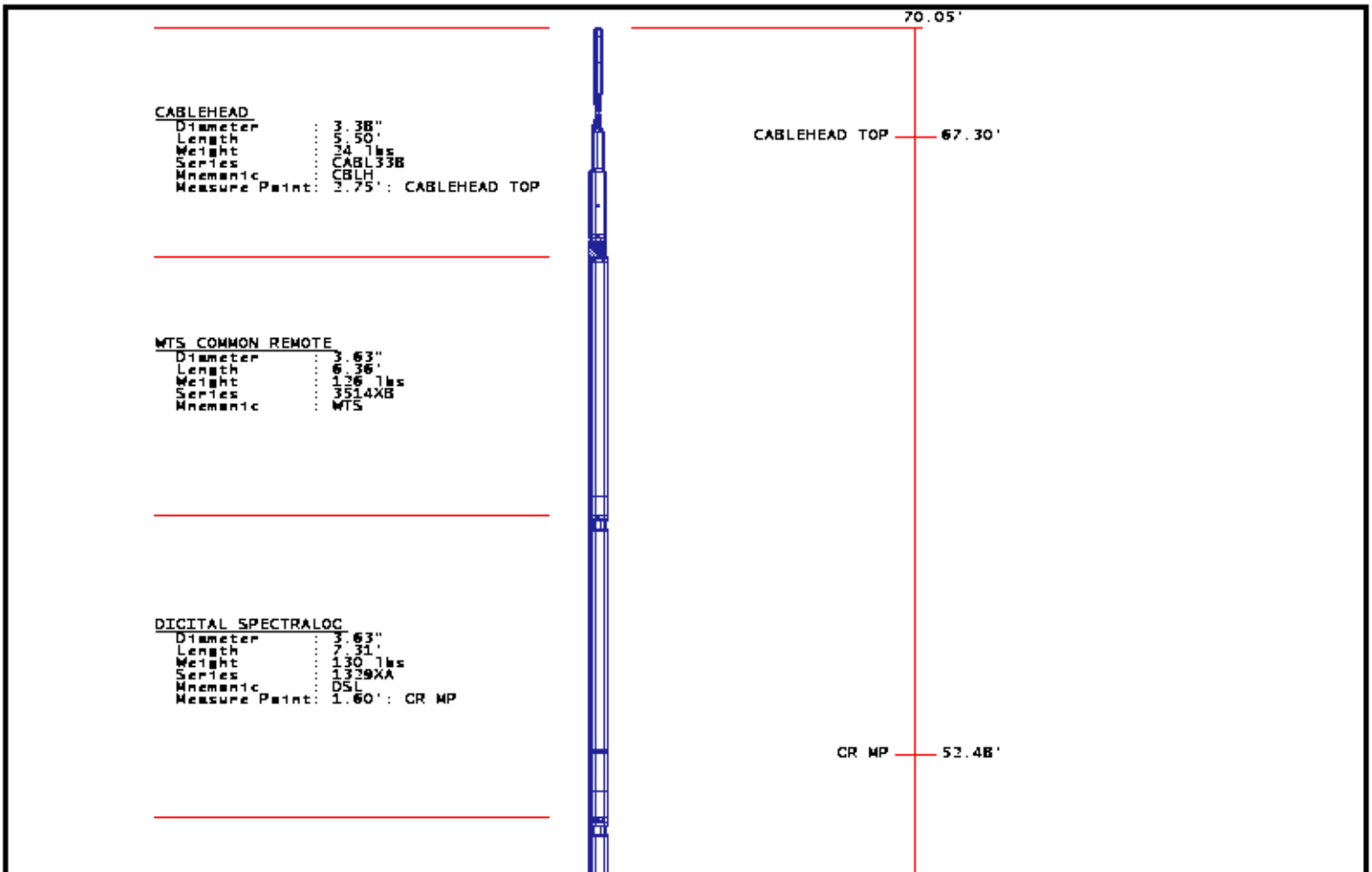
NOT DONE

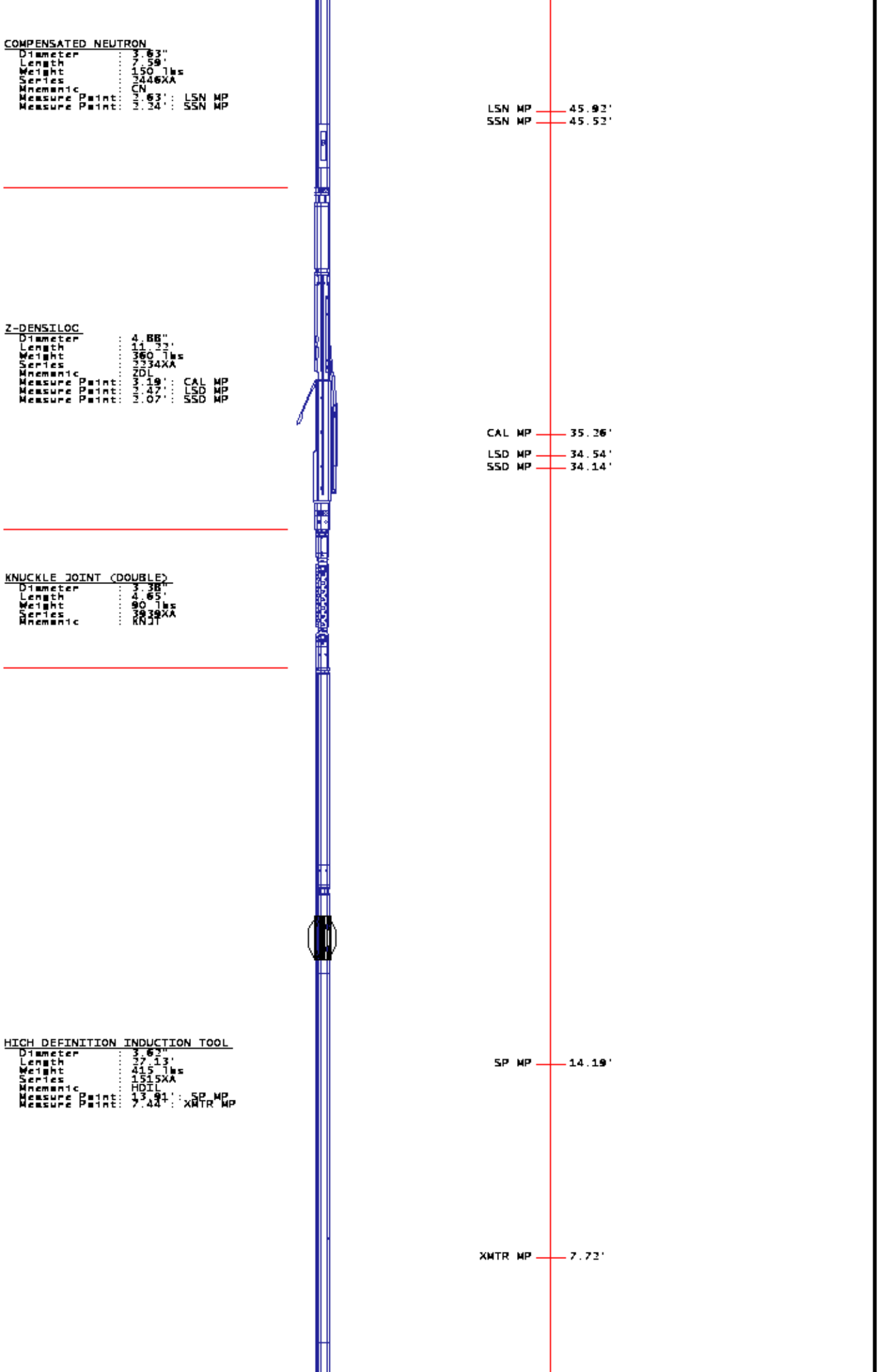
HDIL AFTER LOG VERIFICATION SUMMARY

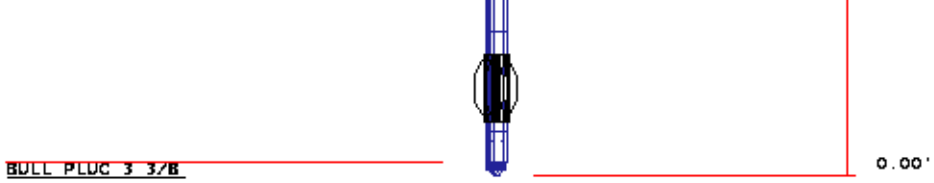
NOT DONE

INSTRUMENT CONFIGURATION

Source File: /mnt1m/625566/nu779x~M8LAM2-tmp




COMPENSATED NEUTRON
Diameter : 3.63"
Length : 7.59'
Weight : 150 lbs
Series : 3446XA
Mnemonic : CN
Measure Point: 3.63' : LSN MP
Measure Point: 3.24' : SSN MP
LSN MP 45.93'
SSN MP 45.53'
Z-DENSILOG
Diameter : 4.88"
Length : 11.33'
Weight : 360 lbs
Series : 7234XA
Mnemonic : ZDL
Measure Point: 3.19' : CAL MP
Measure Point: 2.47' : LSD MP
Measure Point: 2.07' : SSD MP
CAL MP 35.26'
LSD MP 34.54'
SSD MP 34.14'
KNUCKLE JOINT (DOUBLE)
Diameter : 3.38"
Length : 4.65'
Weight : 90 lbs
Series : 3939XA
Mnemonic : KNJT
HIGH DEFINITION INDUCTION TOOL
Diameter : 3.63"
Length : 27.13'
Weight : 415 lbs
Series : 1515XA
Mnemonic : HDIL
Measure Point: 13.91' : SP MP
Measure Point: 7.44' : XMTR MP
SP MP 14.19'
XMTR MP 7.72'



TOTAL LENGTH: 70.05'
TOTAL WEIGHT: 1301 lbs
MAX DIAMETER: 0'4.88"

BAKER HUGHES
EOLIPS

COMPANY	WPX ENERGY ROCKY MOUNTAIN LLC		FILE NO: 625566
WELL	FEDERAL GM 702-4 HN1		API NO: 05045220510000
FIELD	GRAND VALLEY		
COUNTY	GARFIELD	STATE CO	

LOCATION:

SHL: 1401' FNL; 2354' FEL
BHL: 1974' FNL; 1702' FEL

SEC 9 TWP 7S RGE 96W

ELEVATIONS:

KB 5557 FT
DF
GL 5532 FT

S4 T7S 96W
PAD: GM 32-4
RIG: AZTEC 1000

DATE 05-Aug-2013