



FILE NO:	COMPANY	LARAMIE ENERGY
API NO:	WELL	BRUTON 30-04W
05077104570000	FIELD	VEGA
	COUNTY	MESA
	STATE	COLORADO
Version	LOCATION:	OTHER SERVICES
	SHL: LAT:39.252692N;LONG:107.814294W	RAL
	BHL: LAT:39.252937N;LONG:107.816234W	
	SEC 30 TWP 9S RGE 93W	
PERMANENT DATUM	GL	ELEVATION
LOG MEASURED FROM	KB	30 FT ABOVE P.D.
DRILL. MEAS. FROM	KB	
		ELEVATIONS:
		KB 7634 FT
		DF 7634 FT
		GL 7504 FT
DATE	29-OCT-2017	
RUN	TRIP	
	2	1
SERVICE ORDER	US128859	
DEPTH DRILLER	8309 FT	
DEPTH LOGGER	8252 FT	
BOTTOM LOGGED INTERVAL	8252 FT	
TOP LOGGED INTERVAL	2360 FT	
TIME STARTED	12:00	
TIME FINISHED	19:00	
OPERATOR RIG TIME	07 HOURS	
TYPE OF FLUID IN HOLE	WATER	
FLUID DENSITY	NA	
FLUID SALINITY	NA	
FLUID LEVEL	62 FT	
LOGGED CEMENT TOP	NA	
WELLHEAD PRESSURE	0 PSI	
MAXIMUM HOLE DEVIATION	NA	
NOMINAL LOGGING SPEED	15 FMIN	
MAX. RECORDED TEMP.	245 DEGF	
REFERENCE LOG	BAKER RAL/GR	
REFERENCE LOG DATE	29-OCT-2017	
EQUIP. NO.	HL-6670	WOODWARD
RECORDED BY	S.YASSA	
WITNESSED BY	MR. CHUCK MALLARY	

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.

REMARKS

RUN2 TRIP 1: *2 OPERATIONS IN WELL*

OPERATION 1: RAL/GR/CCL RUN CENTRALIZED

LOGGED WITH 0 PSI ON WELLHEAD

SJ: 6747' - 6769'

SJ: 5621' - 5643'

CREW: C.GOLOBY , J.PENA

EQUIPMENT DATA					
RUN	TRIP	TOOL	SERIES NO.	SERIAL NO.	POSITION
2	1	TELEMETRY	8250EA/8248EA	12151903/12211009	FREE
2	1	GAMMA RAY	2812LA	11781299	FREE
2	1	RPM	8281EA	10273848	FREE
2	1	RPM	8283PA	10322619	FREE
2	1	RPM	8281FA	10238007	FREE

MAIN PASS PNC-3D MODE

ECLIPS 7.0w PC-ECLIPS General Release Rel 7.0w Fri Jun 09 11:02:06 Central Daylight Time 2017
Patches: 1

Plotted: Sun Oct 29 20:21:46 2017

PARAMETER AND FILTER SUMMARY REPORT

FILE: C:\dat1a\BRUTON_30_04\WBRPM3D102.prm
LOGGING MODE: DEPTH DIRECTION: UP
TOP DEPTH: 2352.750 ft BOTTOM DEPTH: 8252.901 ft

SYMMETRIC FILTER

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
GR	FILTER ()	medium (1)		TOP	BOTTOM

RPM PROCESSING

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
PNC Parameters	BOREHOLE CONTENTS	FLUID		TOP	BOTTOM
	OPEN/CASED HOLE	CASED HOLE		"	"
	BOREHOLE SIZE	7.88	in	"	"
	LARGEST CASING OD	4.50	in	"	"
	MATRIX	SANDSTONE		"	"
	CORRECTION BUFFER	11		"	"

CURVE DESCRIPTION REPORT

CURVE NAME	CREATION DATE	CURVE DESCRIPTION
F1:CCL	N/A	CASING COLLAR LOCATOR
F1:GR	N/A	GAMMA RAY
F1:ISS	N/A	INELASTIC SHORT SPACE COUNT RATE
F1:LS	N/A	LONG SPACE COUNT RATE
F1:RATO	N/A	SHORT/LONG SPACE COUNT RATE RATIO
F1:RICS	N/A	SHORT SPACE INELASTIC TO CAPTURE COUNT RATE RATIO (ISS/CSS)
F1:SGFC	N/A	BOREHOLE AND DIFFUSION CORRECTED SIGMA
F1:SS	N/A	SHORT SPACE COUNT RATE

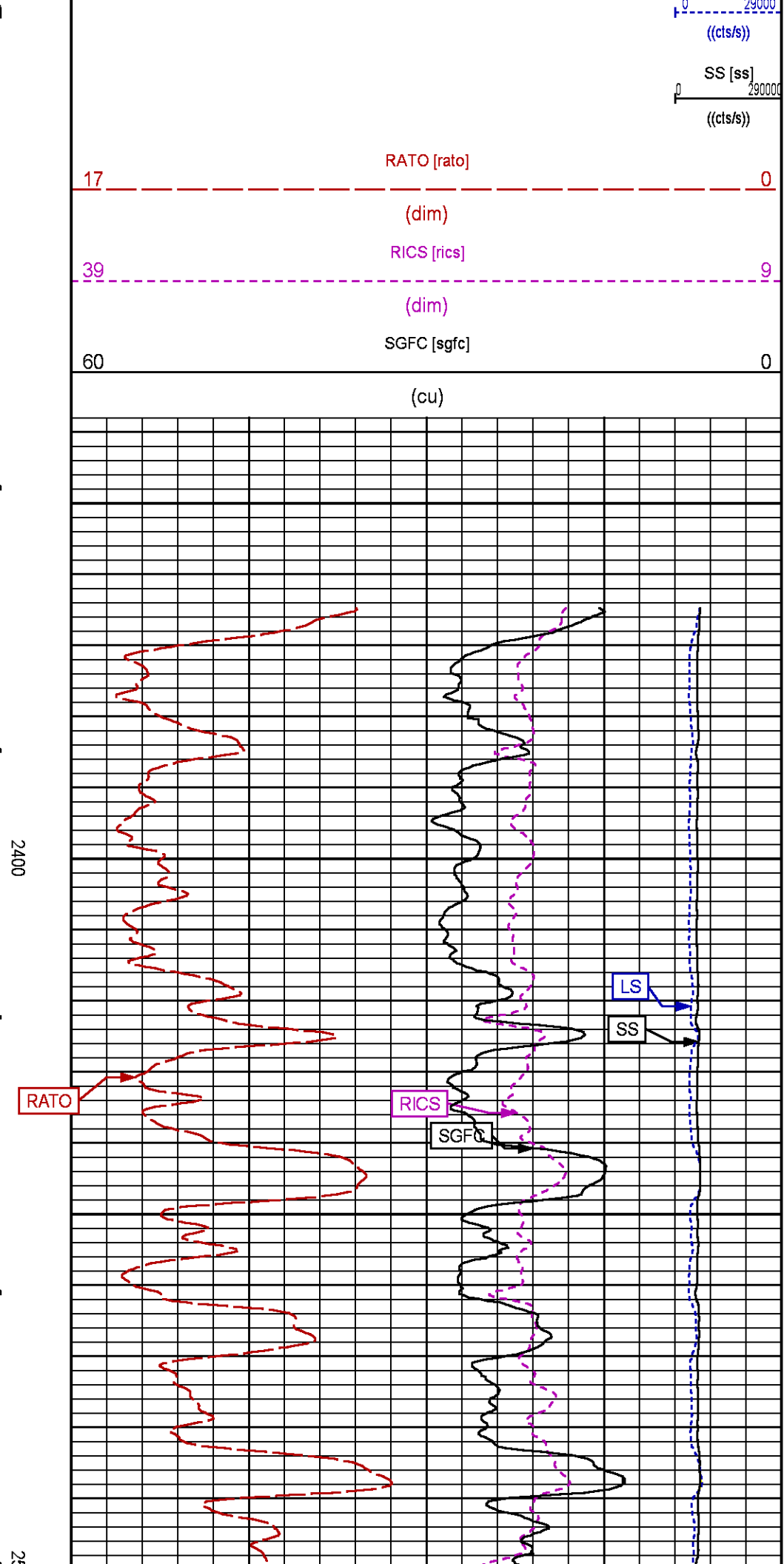
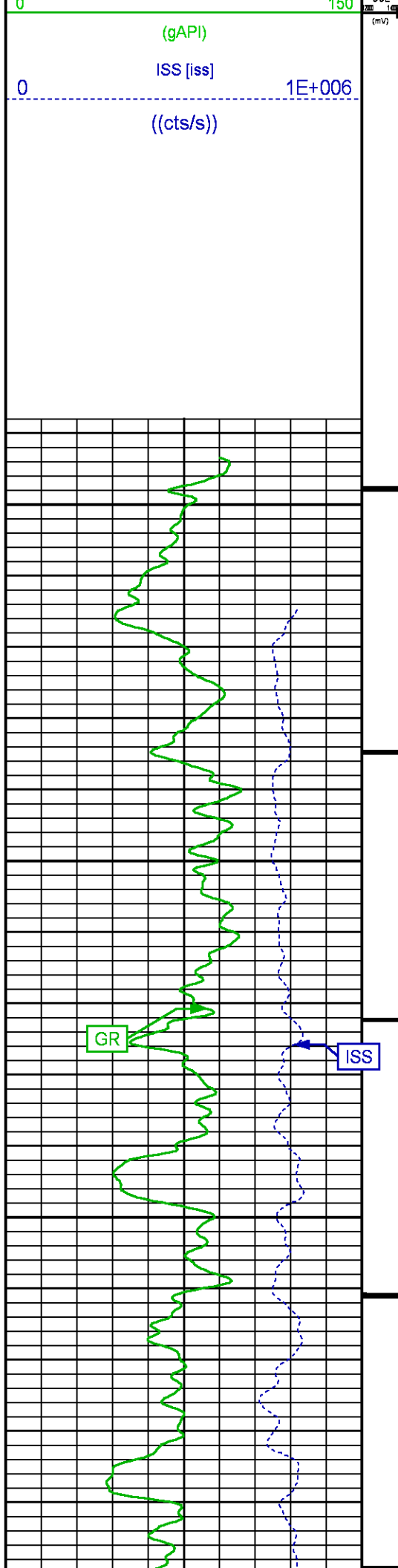
CURVE MEASURE POINT OFFSET

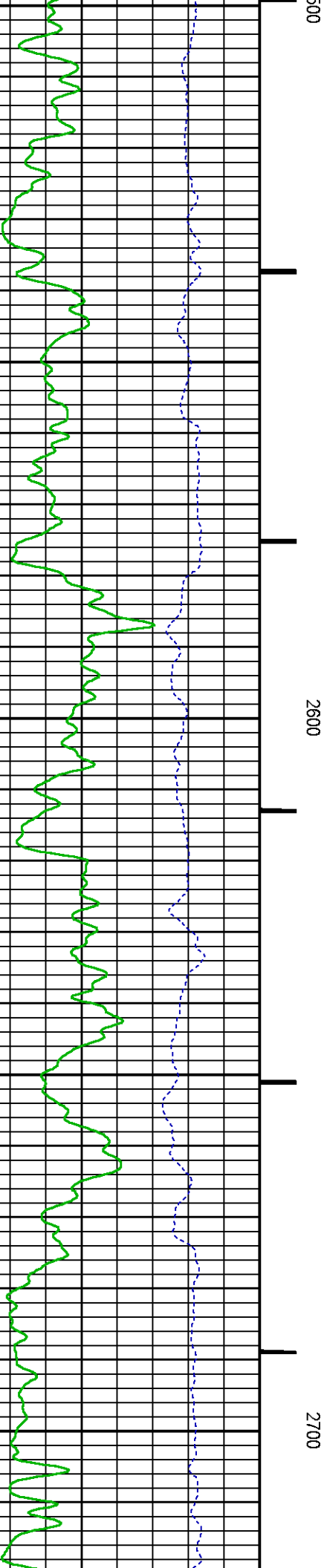
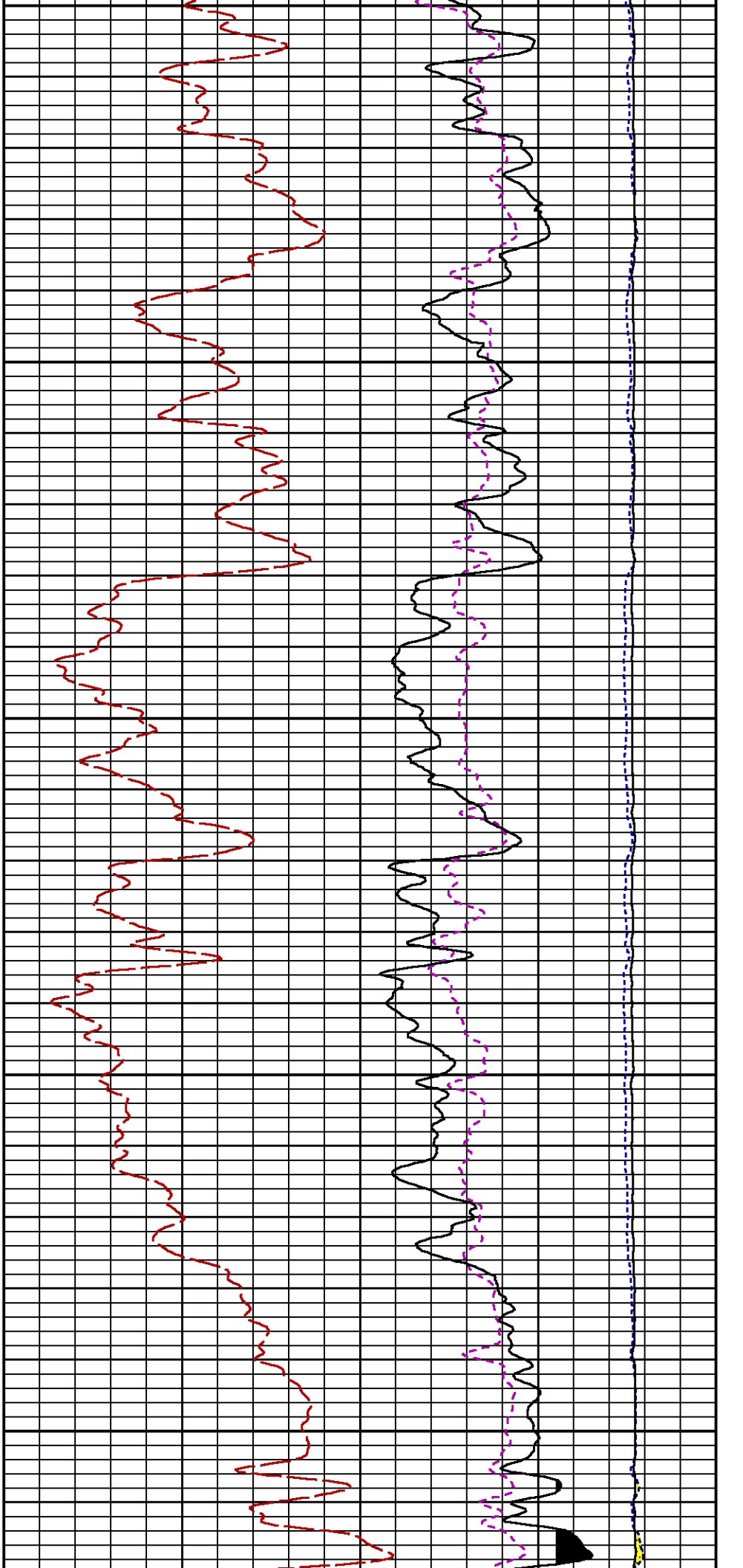
CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
CCL	-21.75	ISS	-9.50	RATO	-9.50	SGFC	-9.50
GR	-19.25	LS	-9.50	RICS	-9.50	SS	-9.50

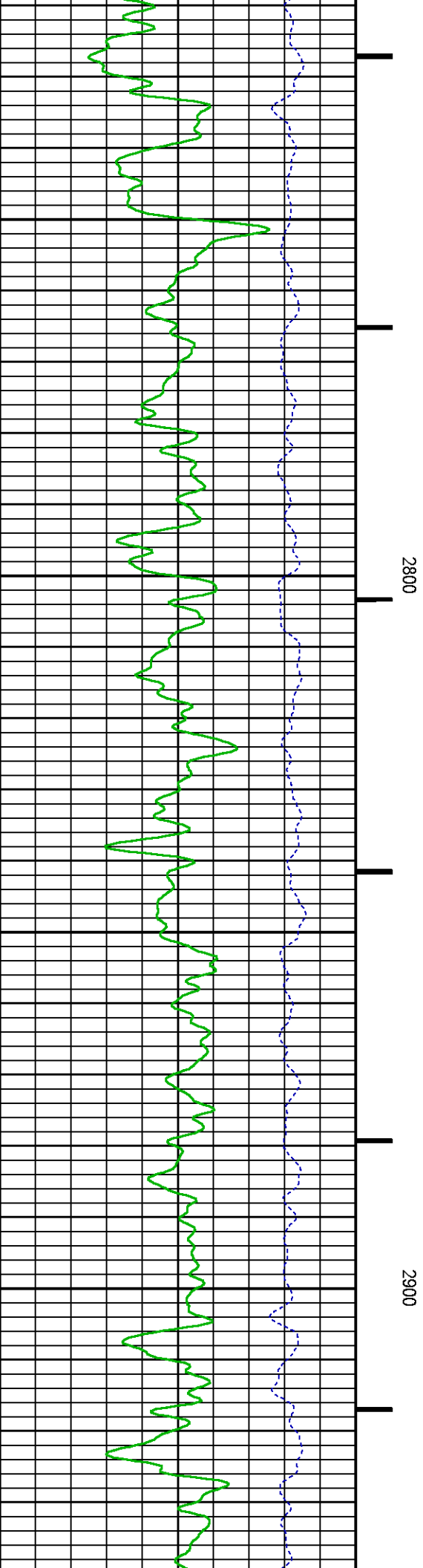
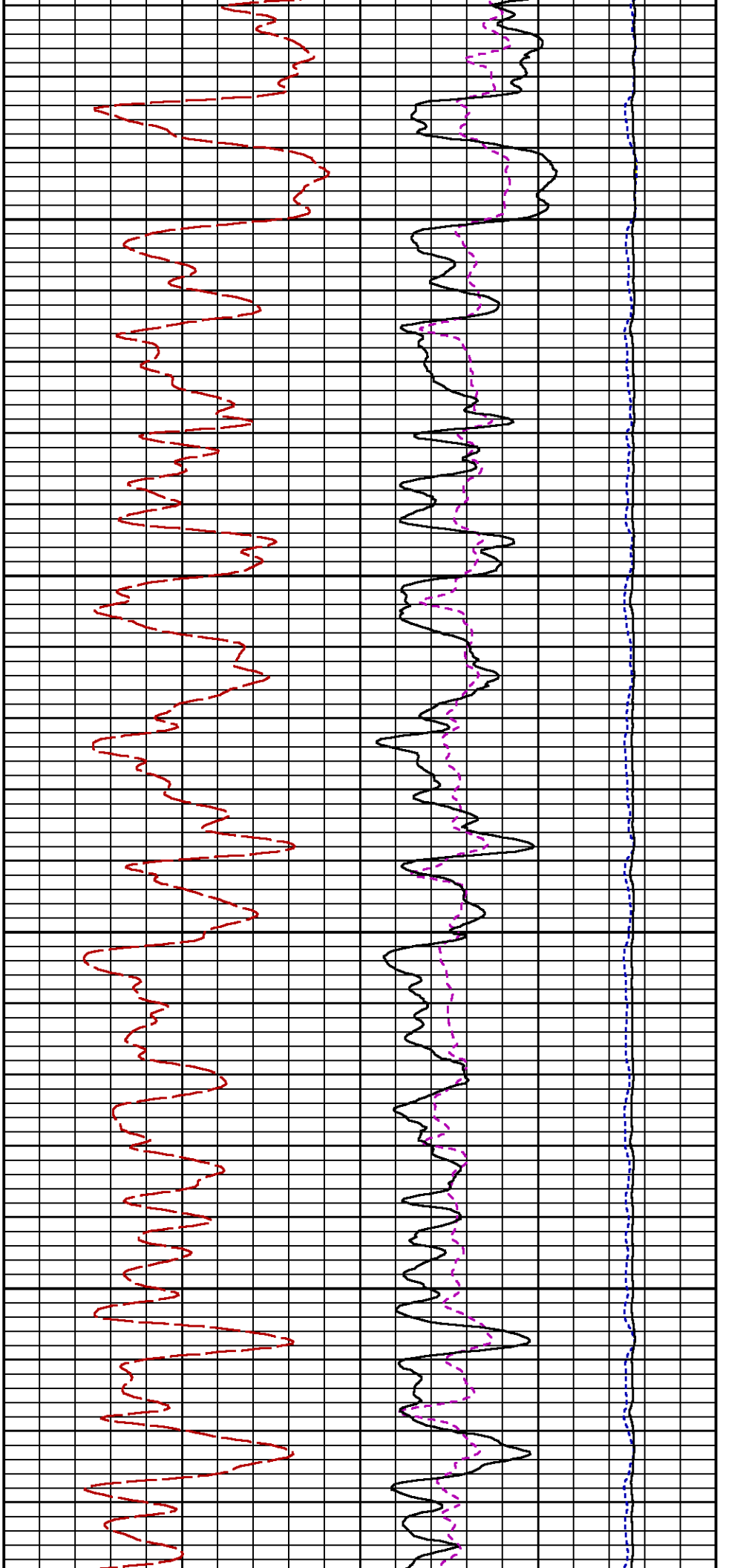
Presentation : BHI78FR4H2:C:\dat1a\BRUTON_30_04\WBRUTON_30_04W_RPM_MAIN.fvpdf [5"/100' Scale]
Plot Interval : 2330.75 - 8252 Feet

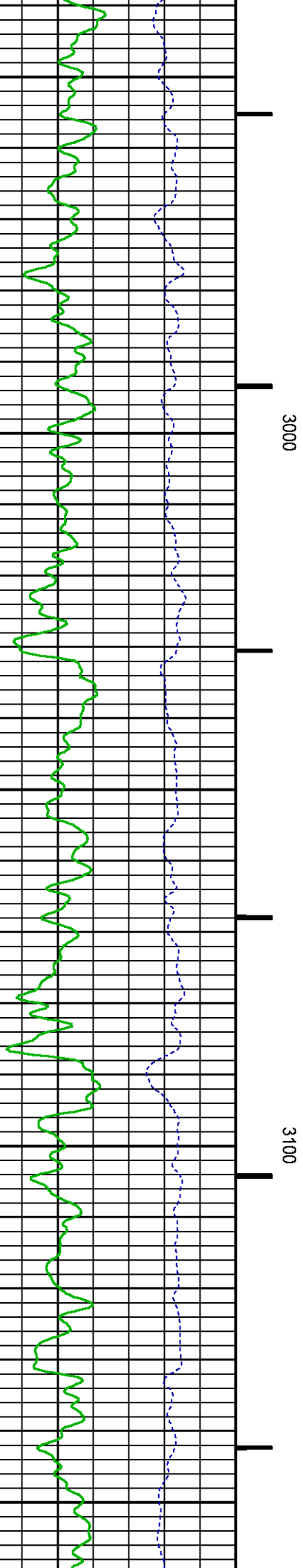
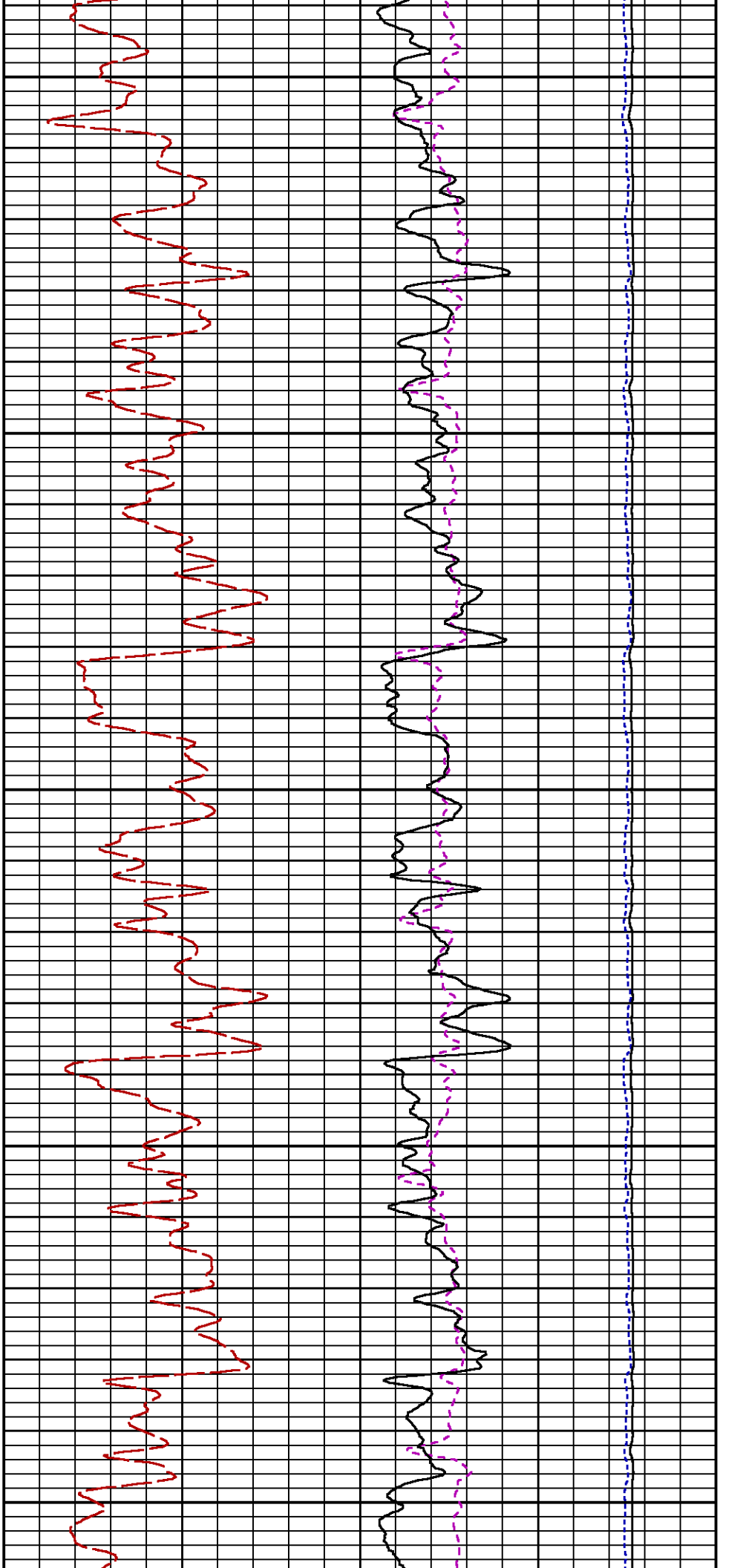
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Created On : N/A
Company : LARAMIE ENERGY II LLC
Well : BRUTON 30-04W
Field : VEGA
File Interval : 2330 - 8252 Feet
OCT : RPM3D1

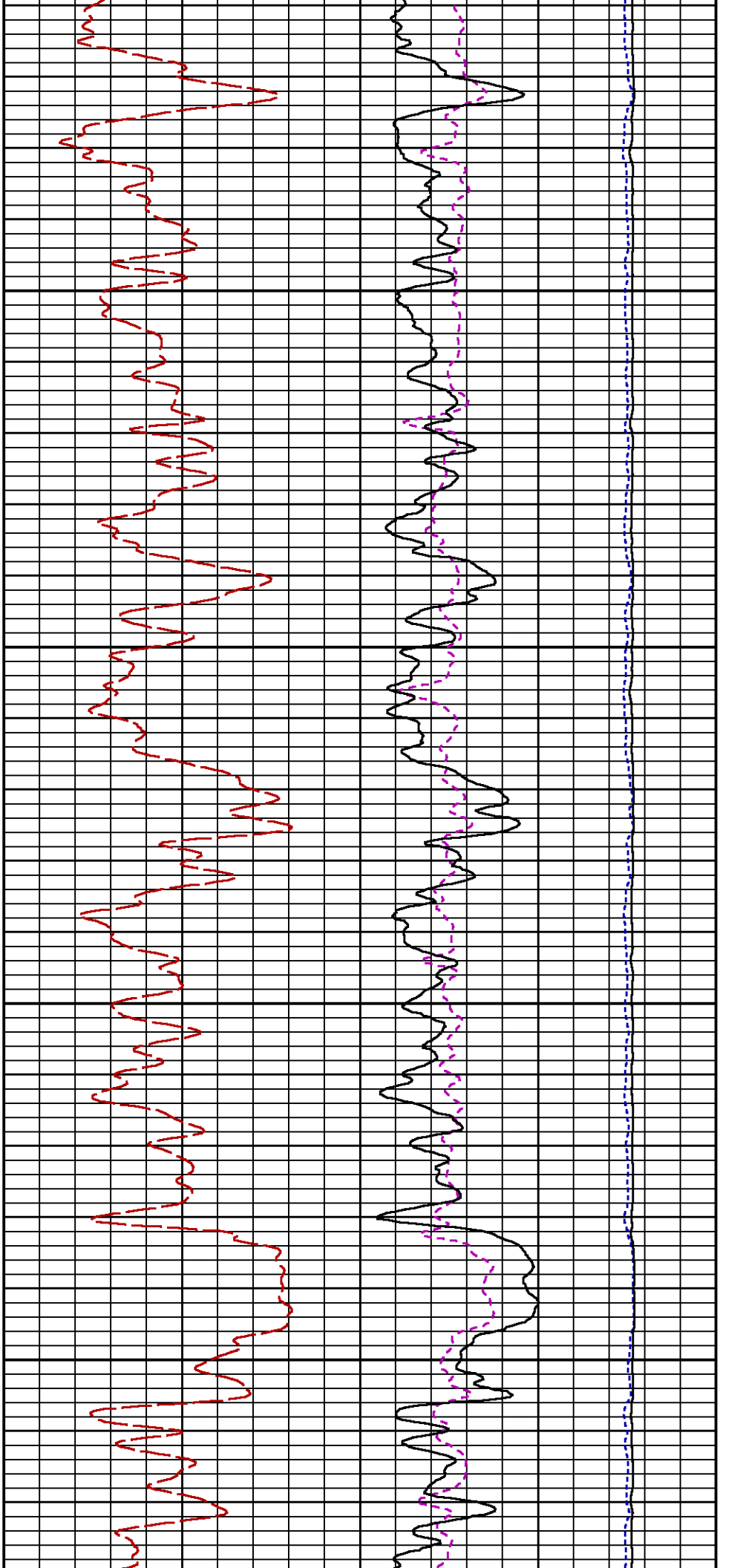






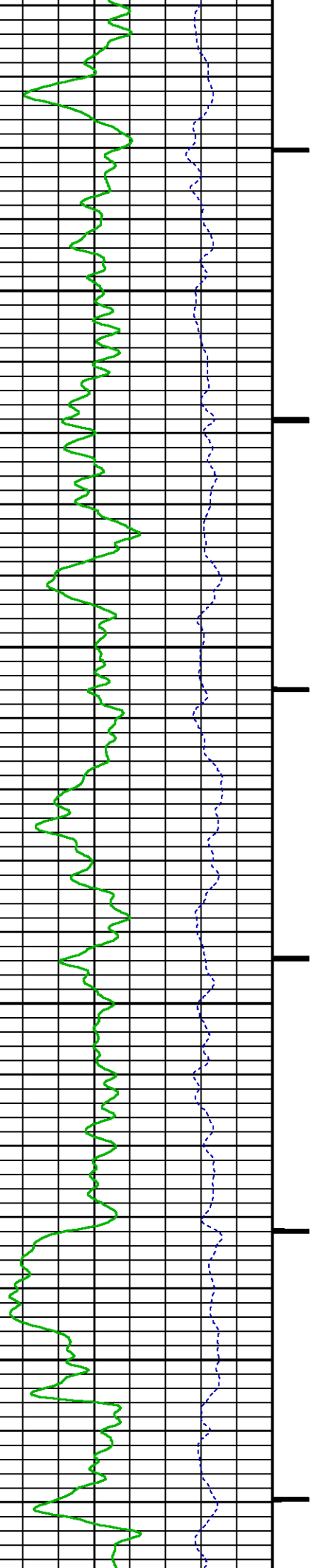


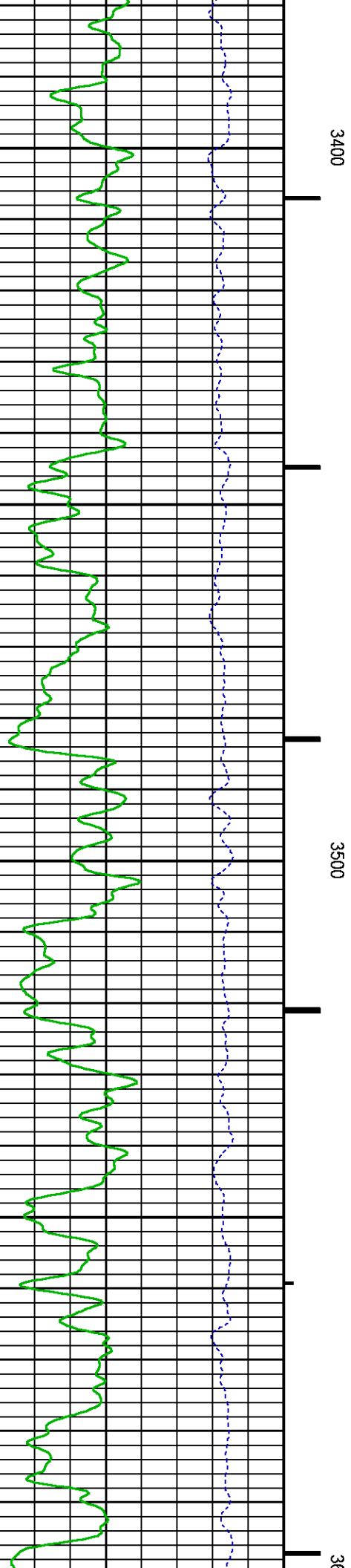
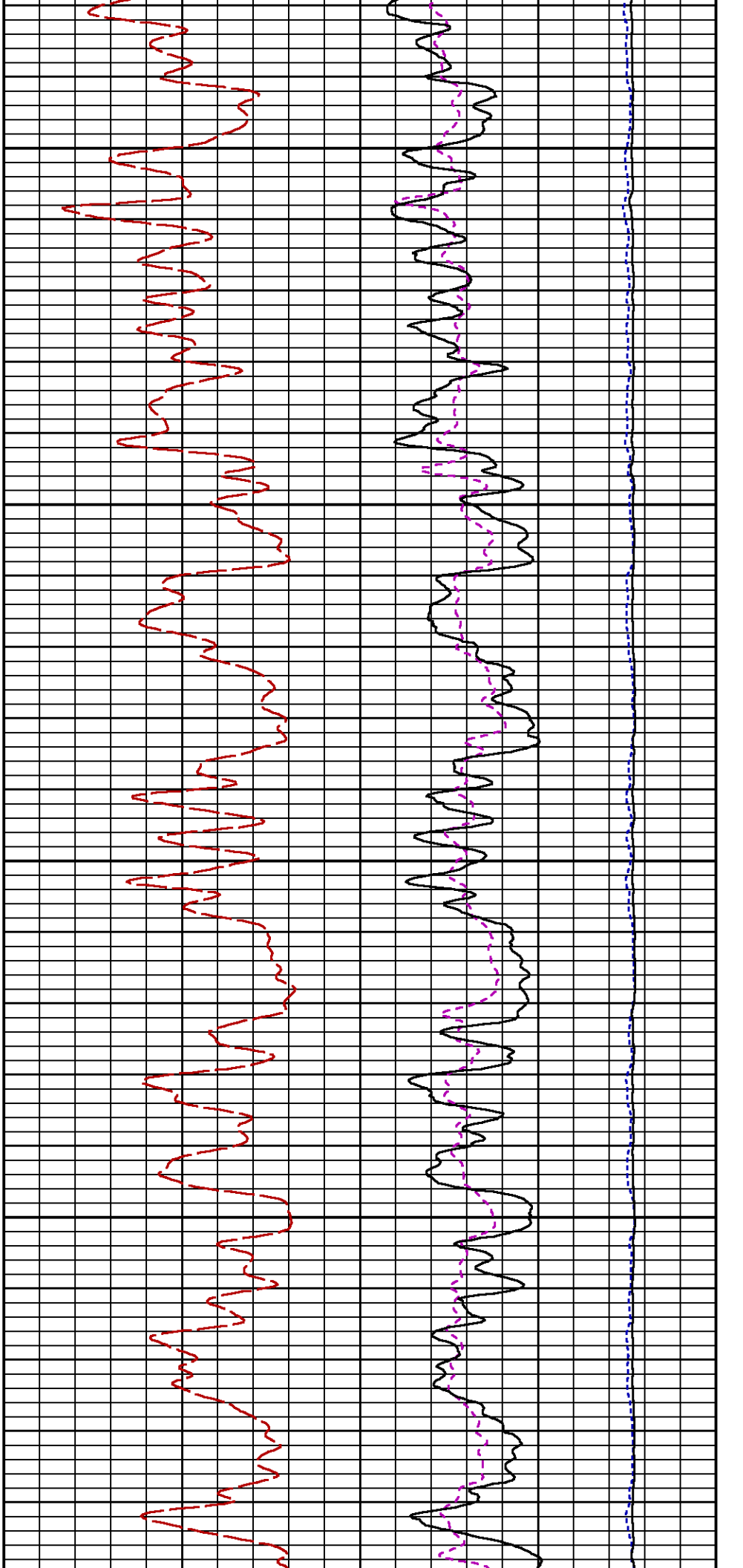


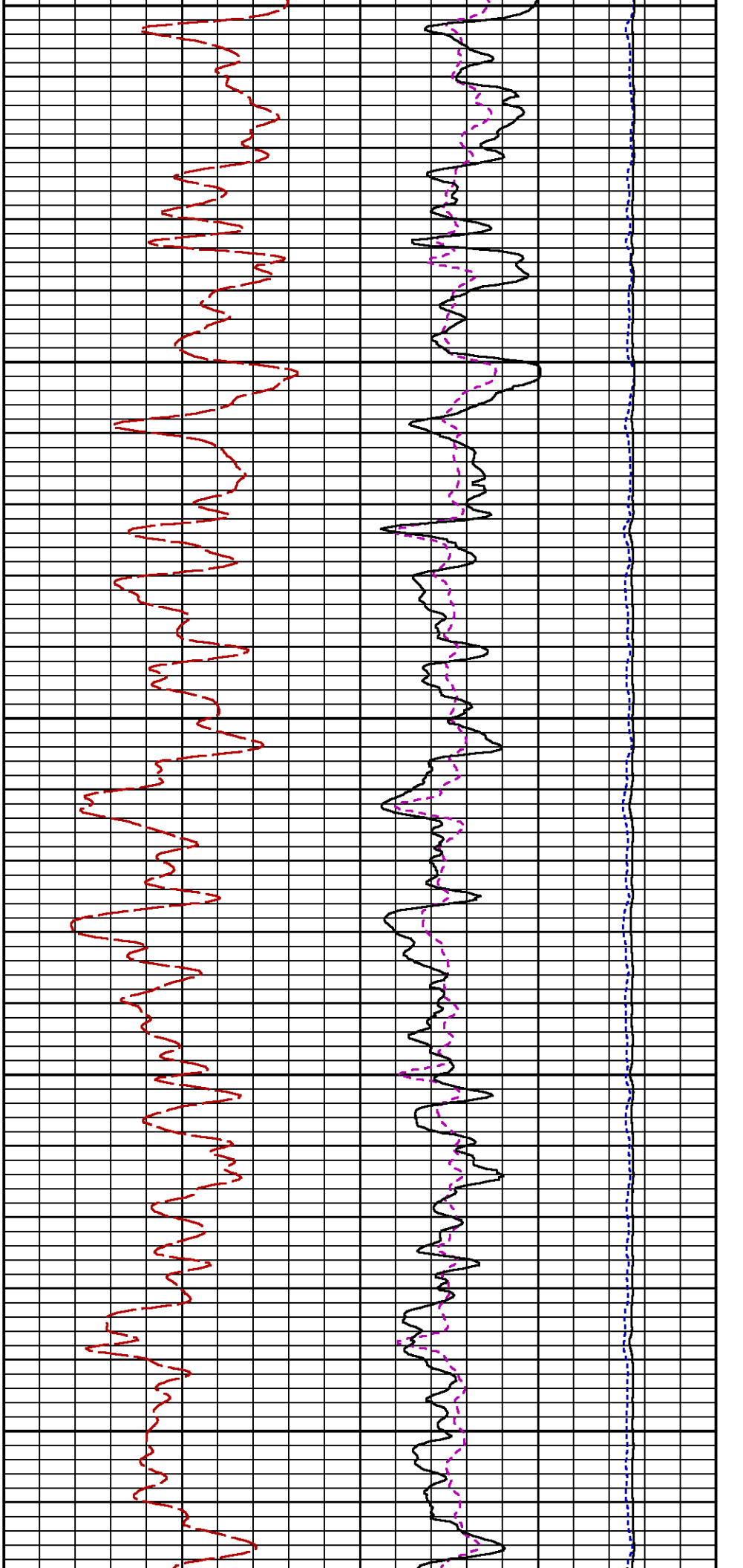


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3300



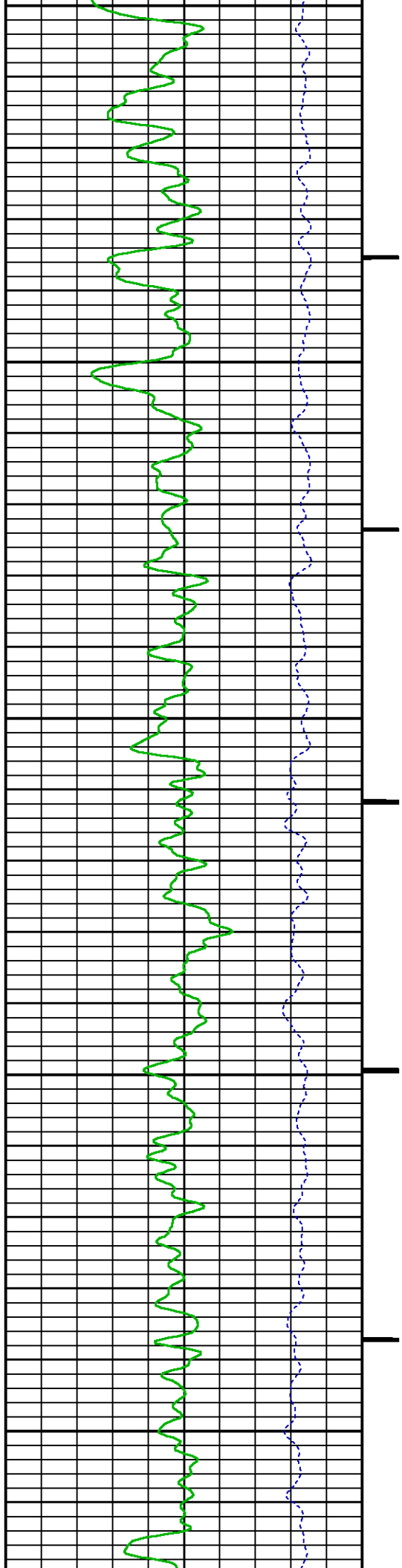


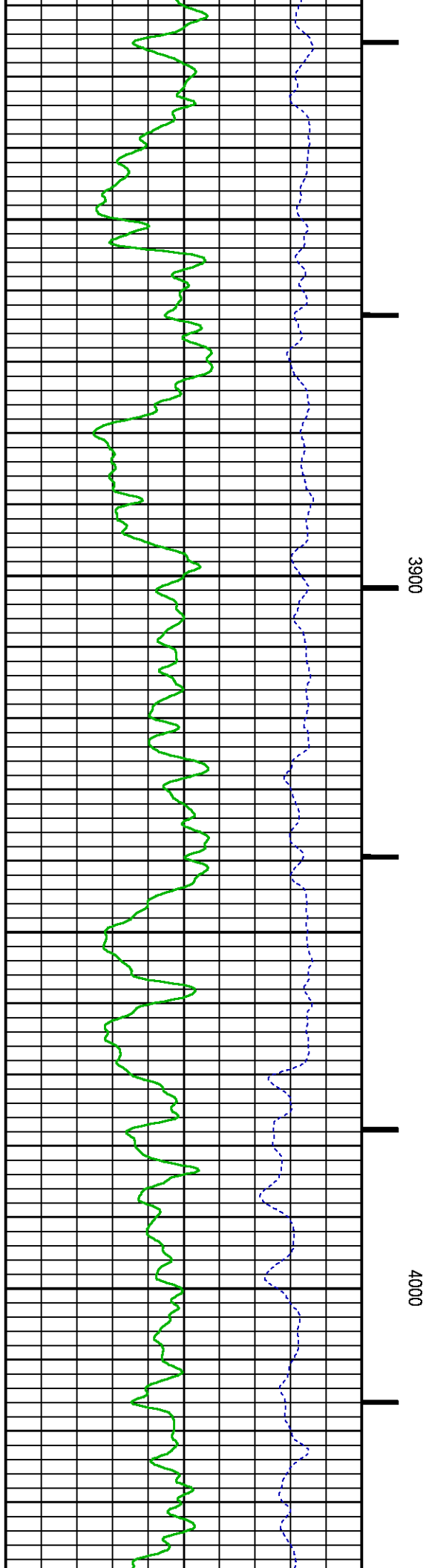
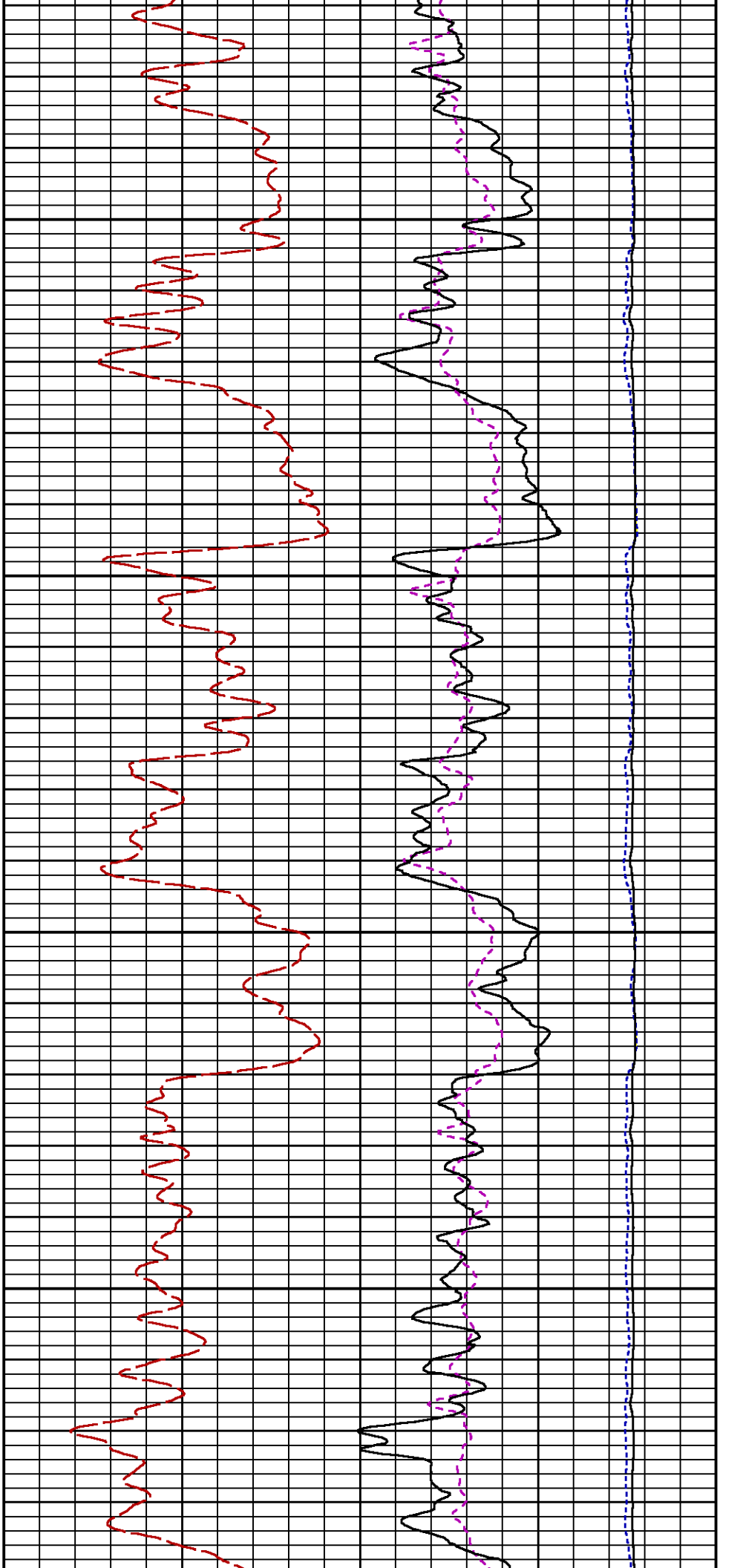


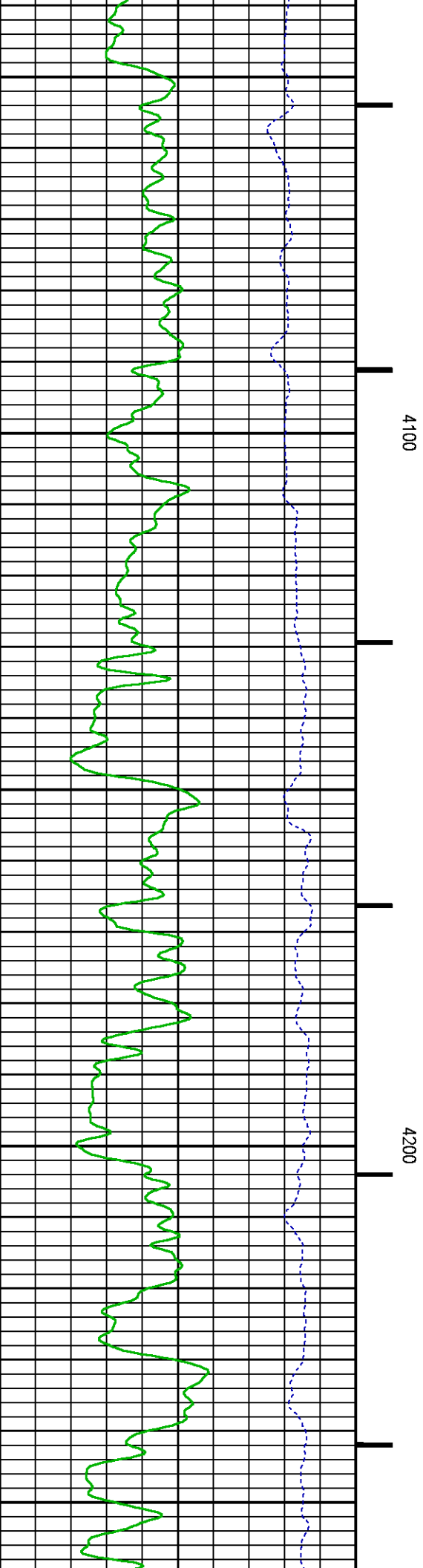
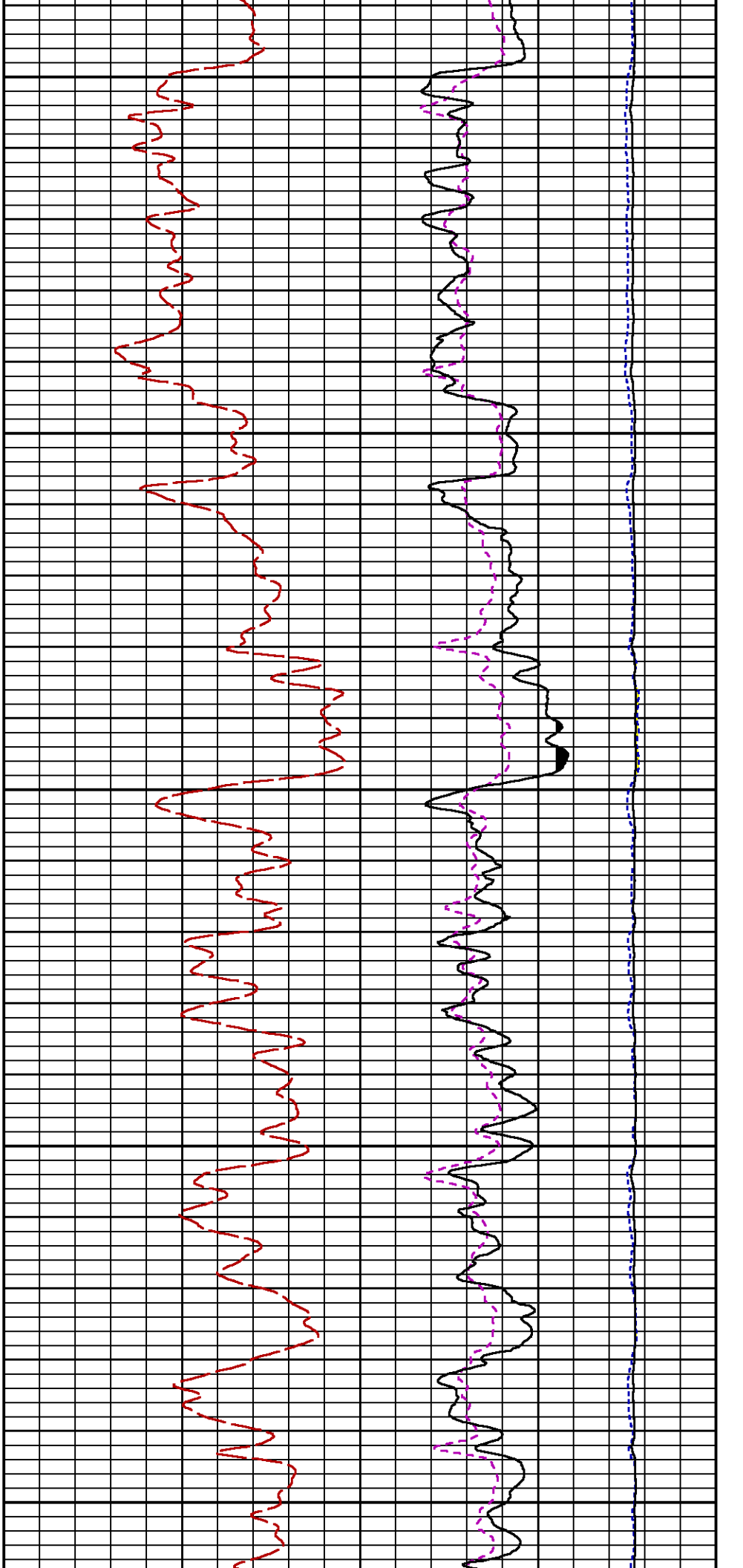
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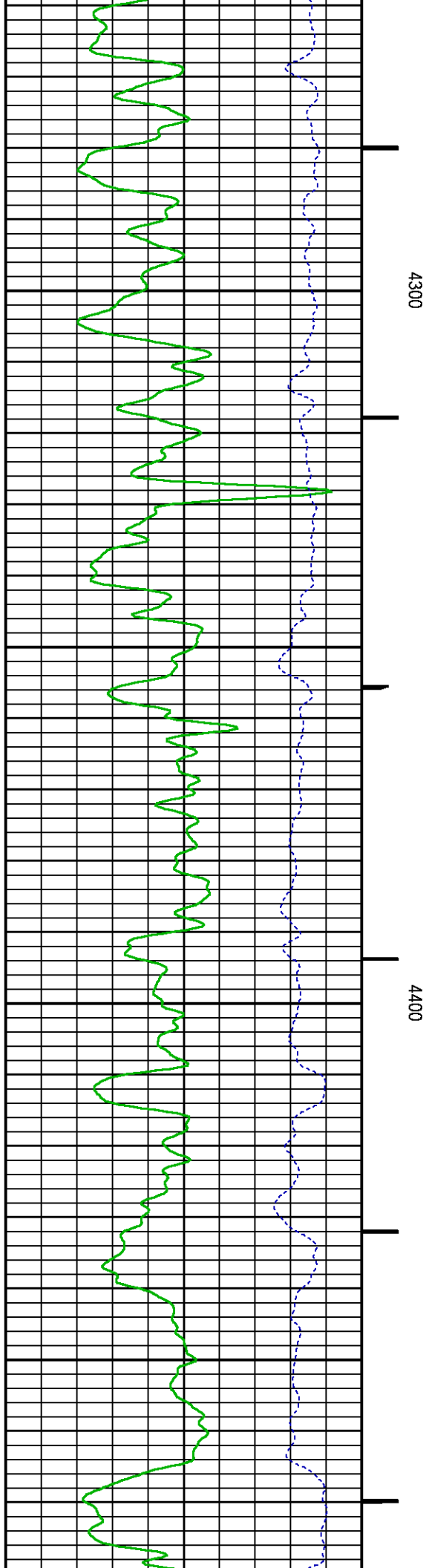
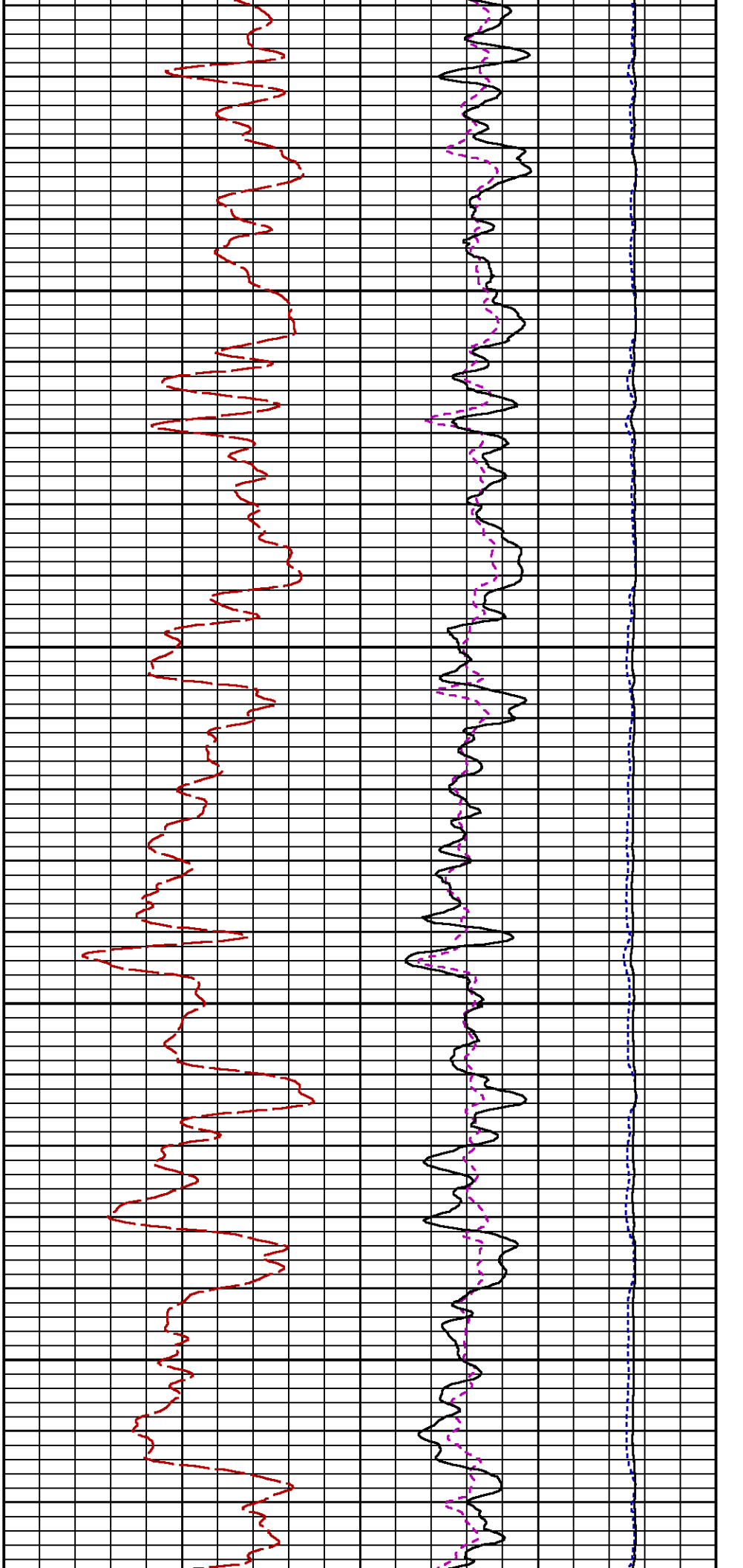
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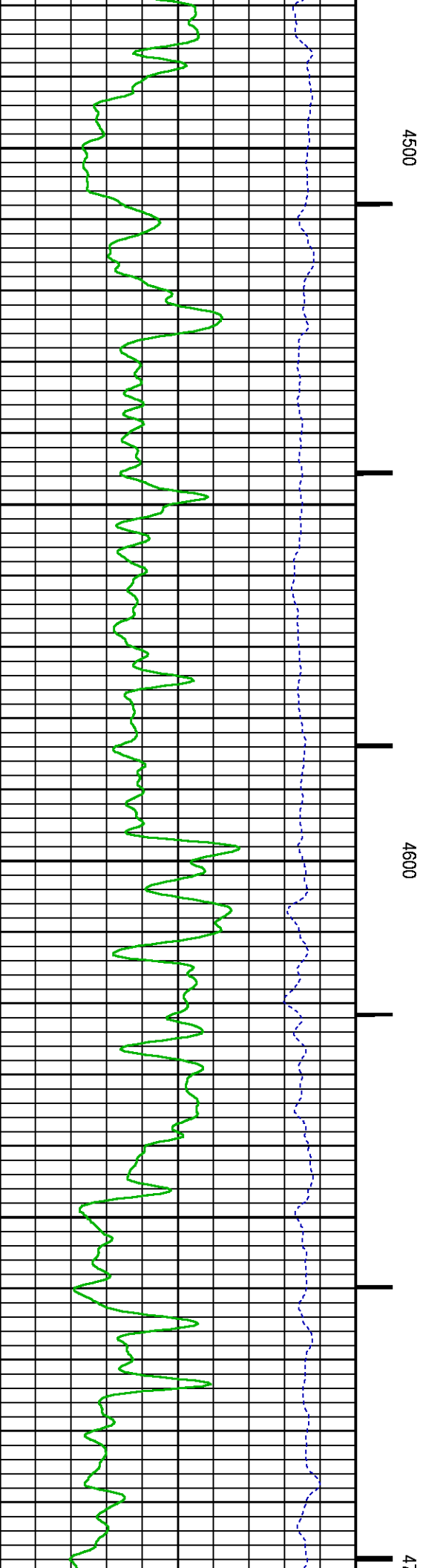
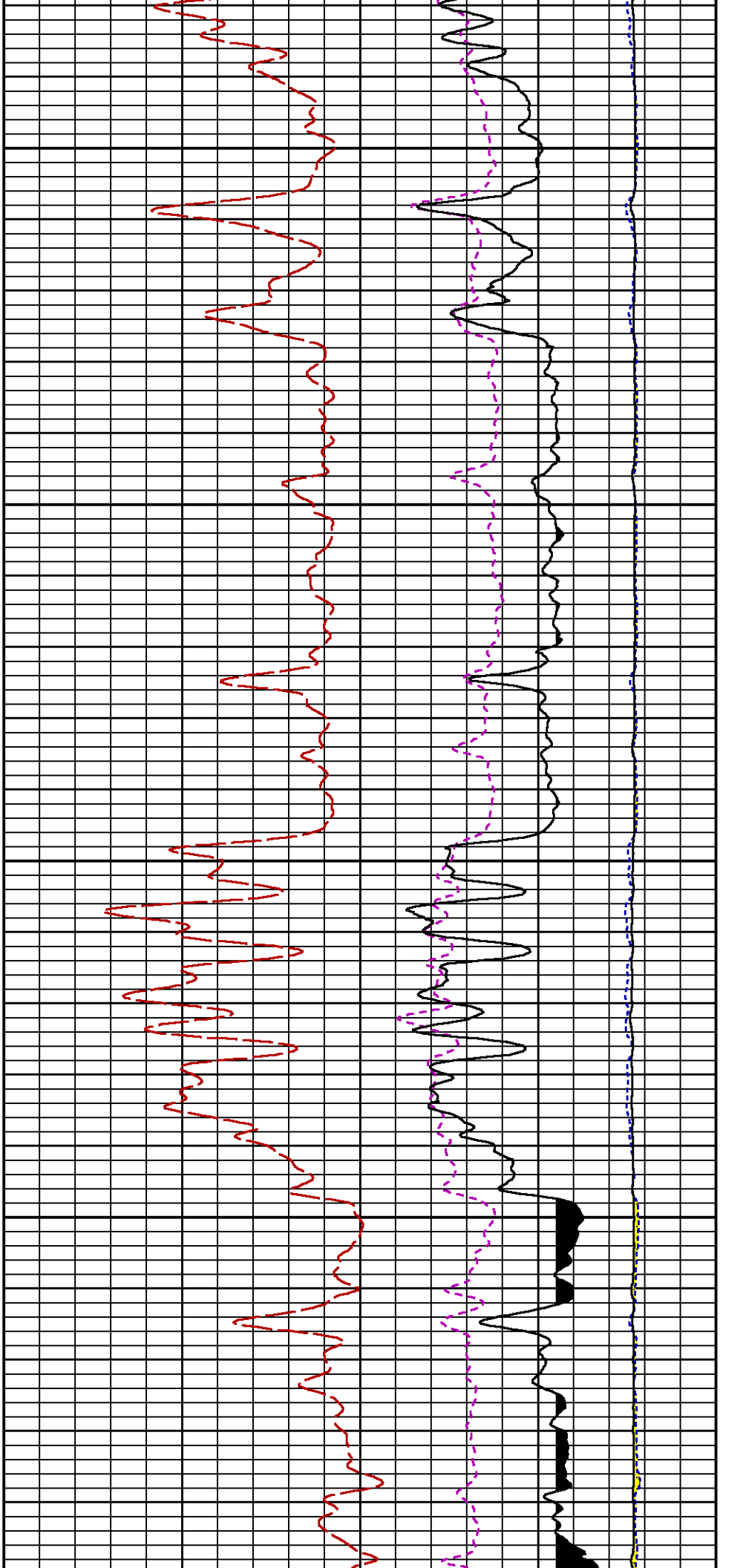
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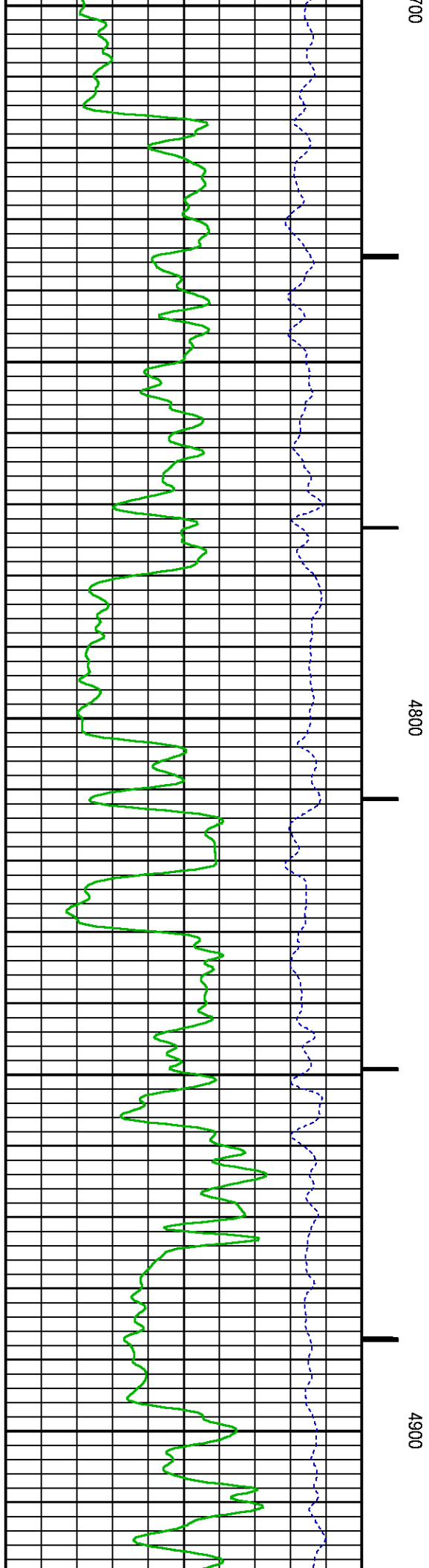
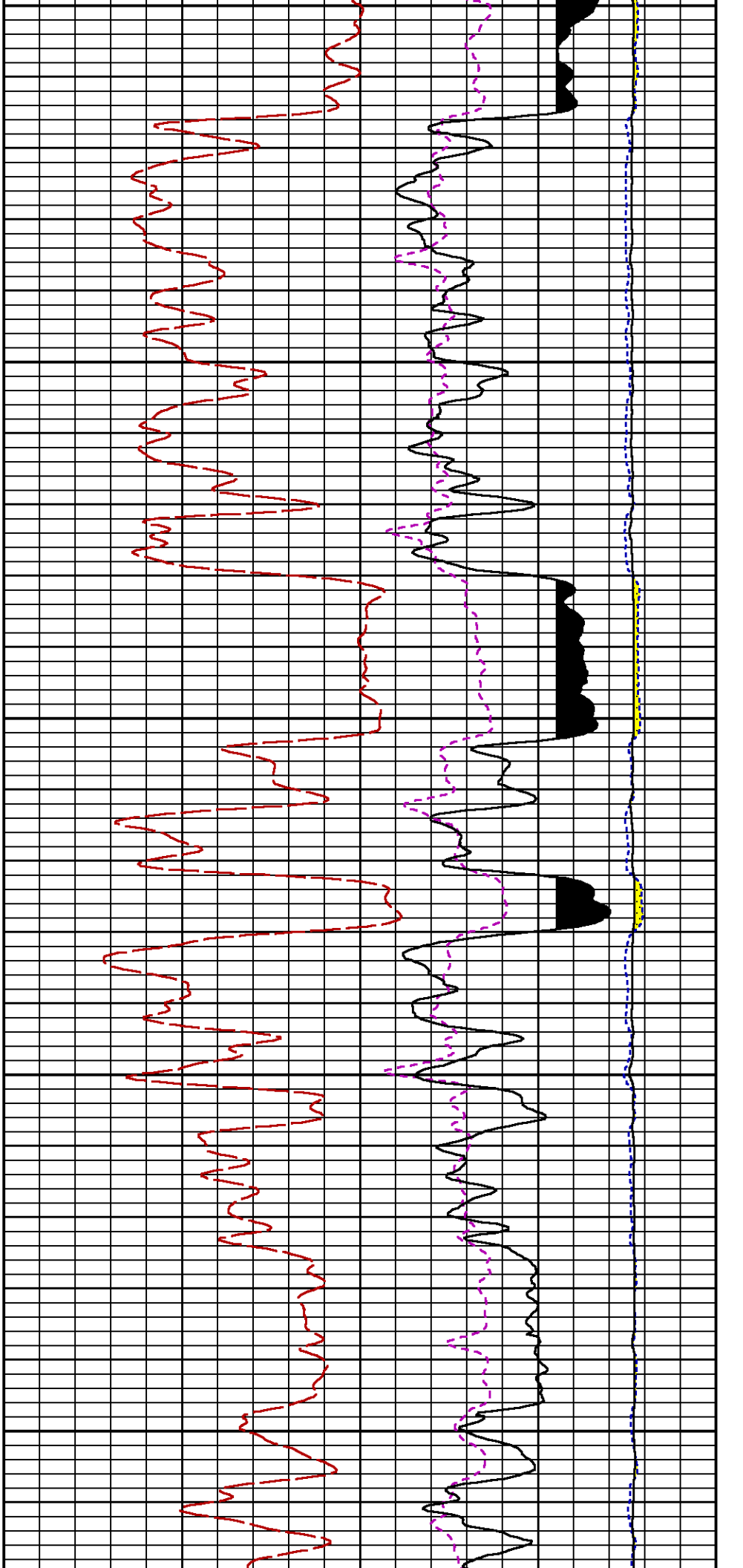


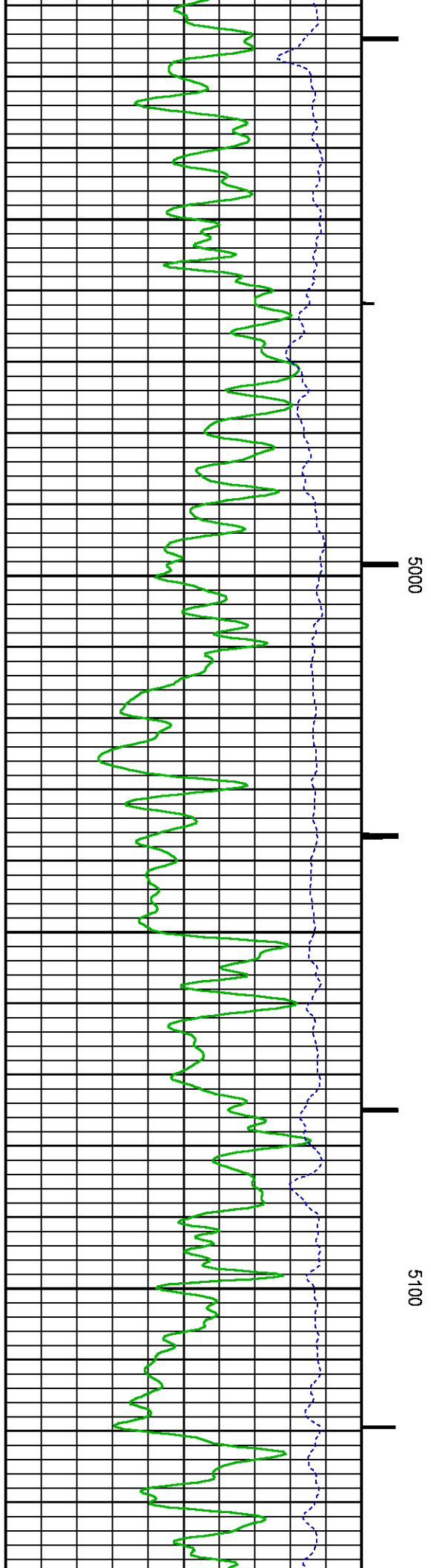
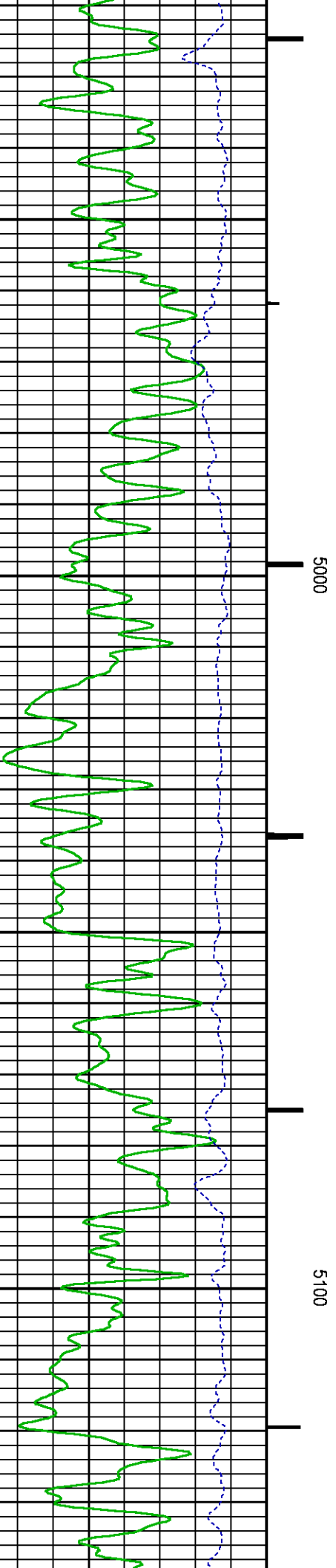
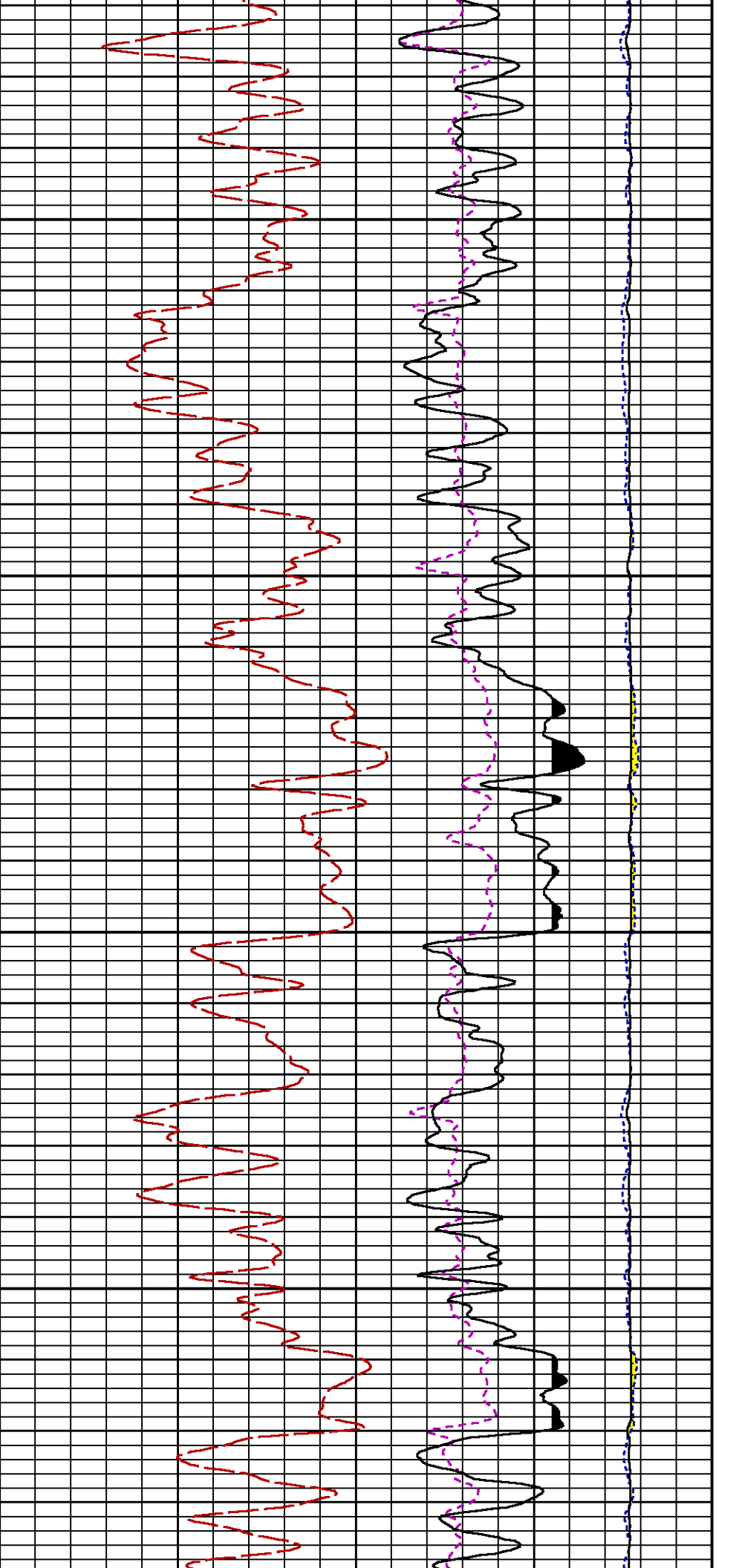


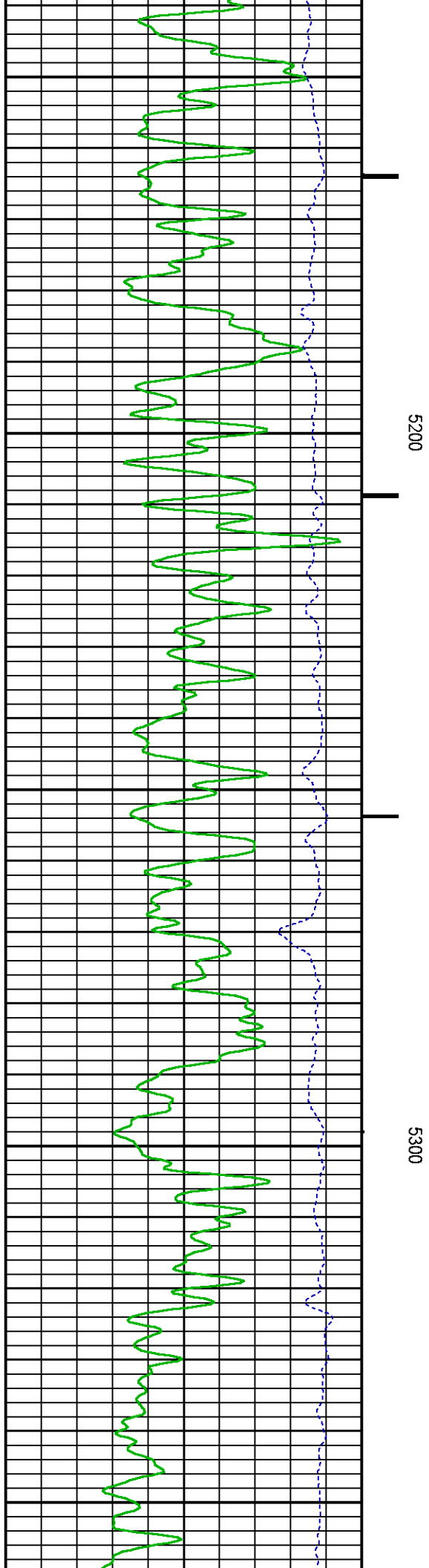
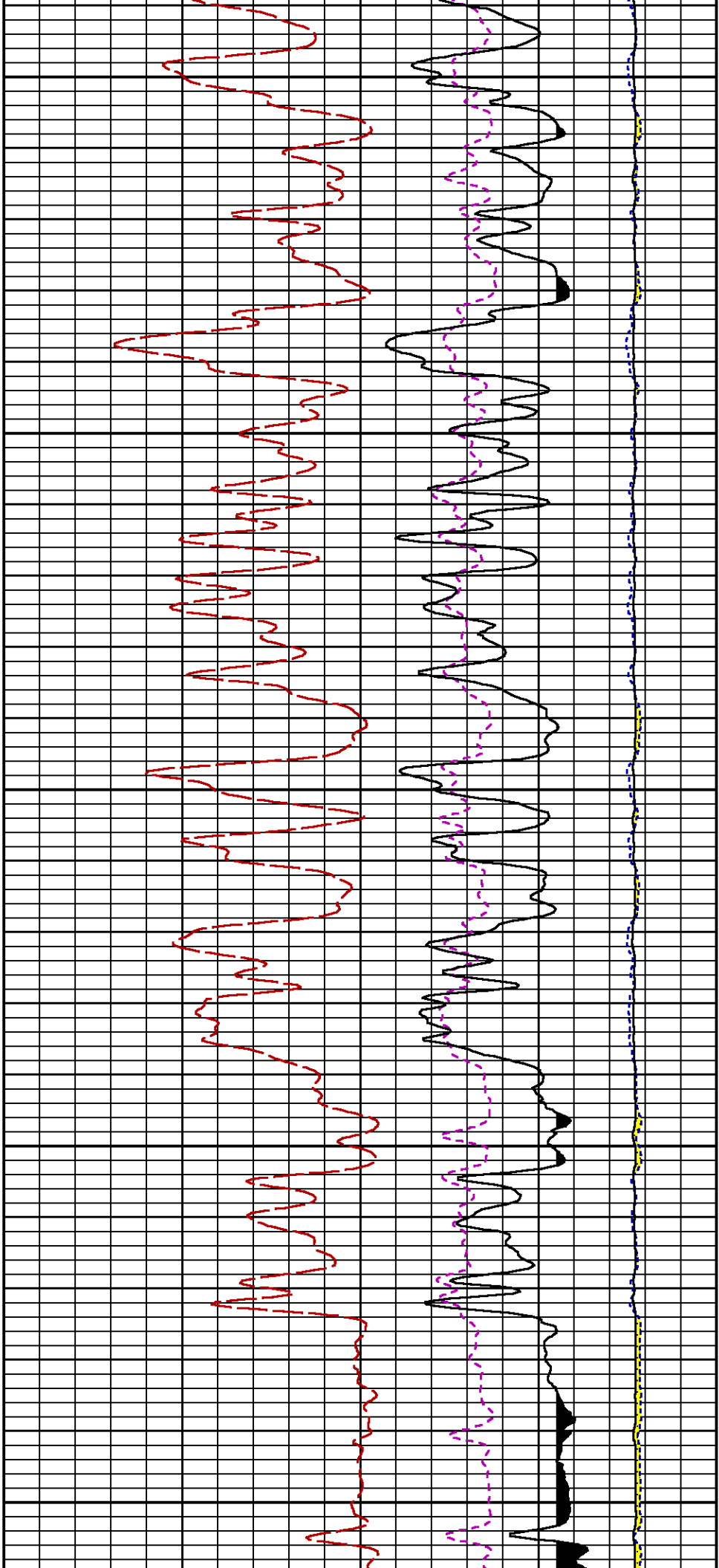


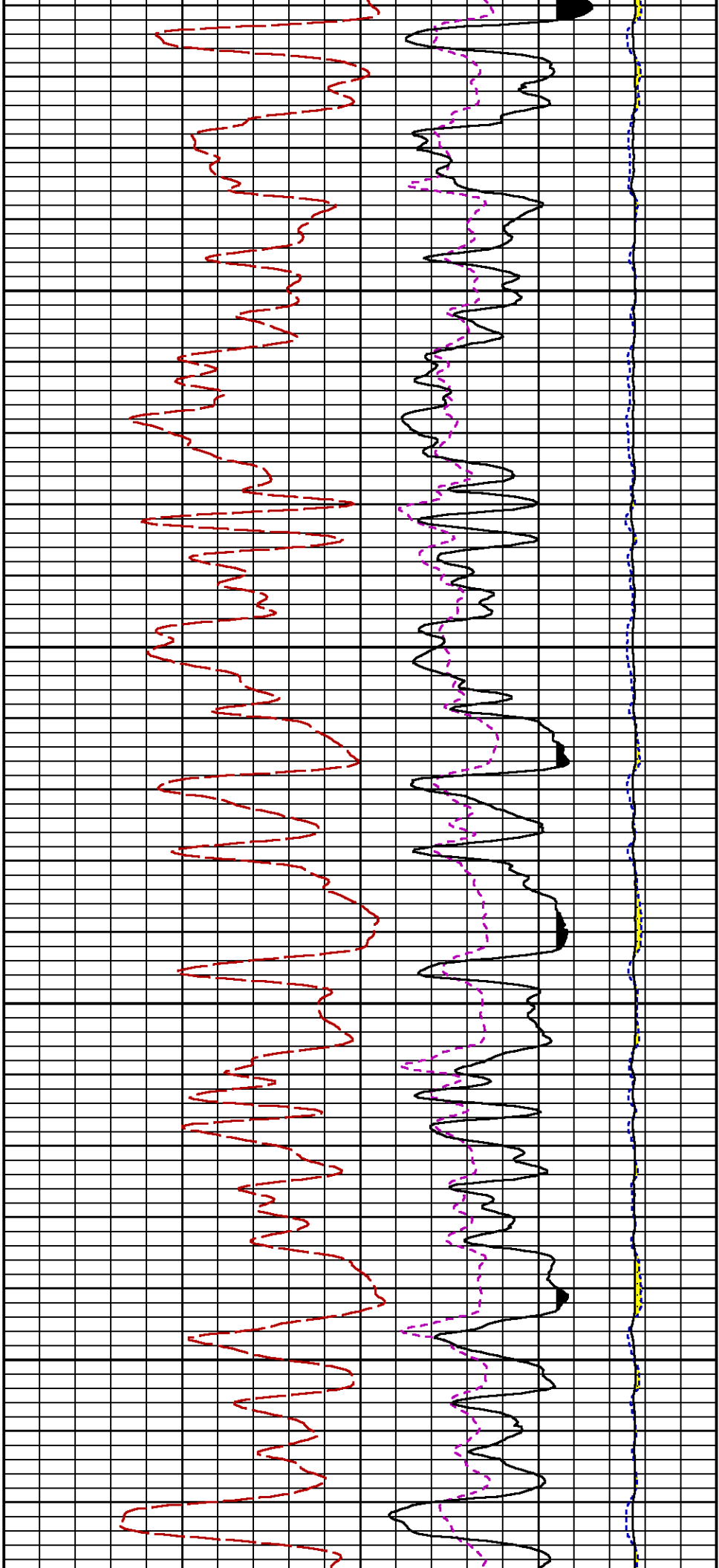






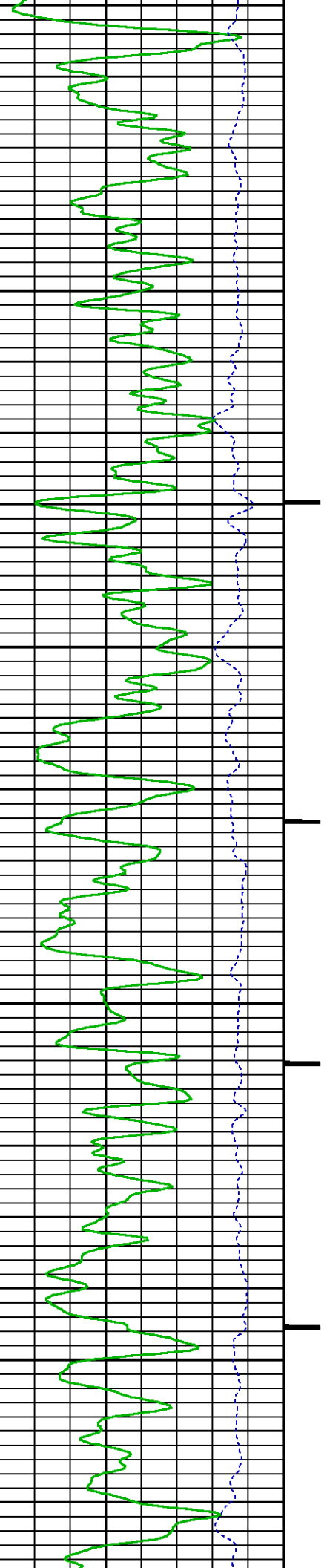


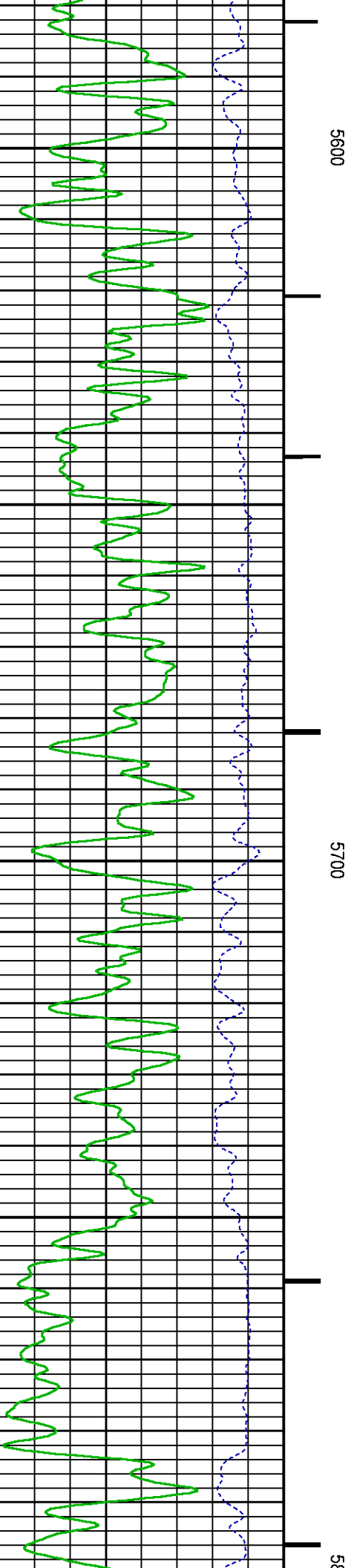
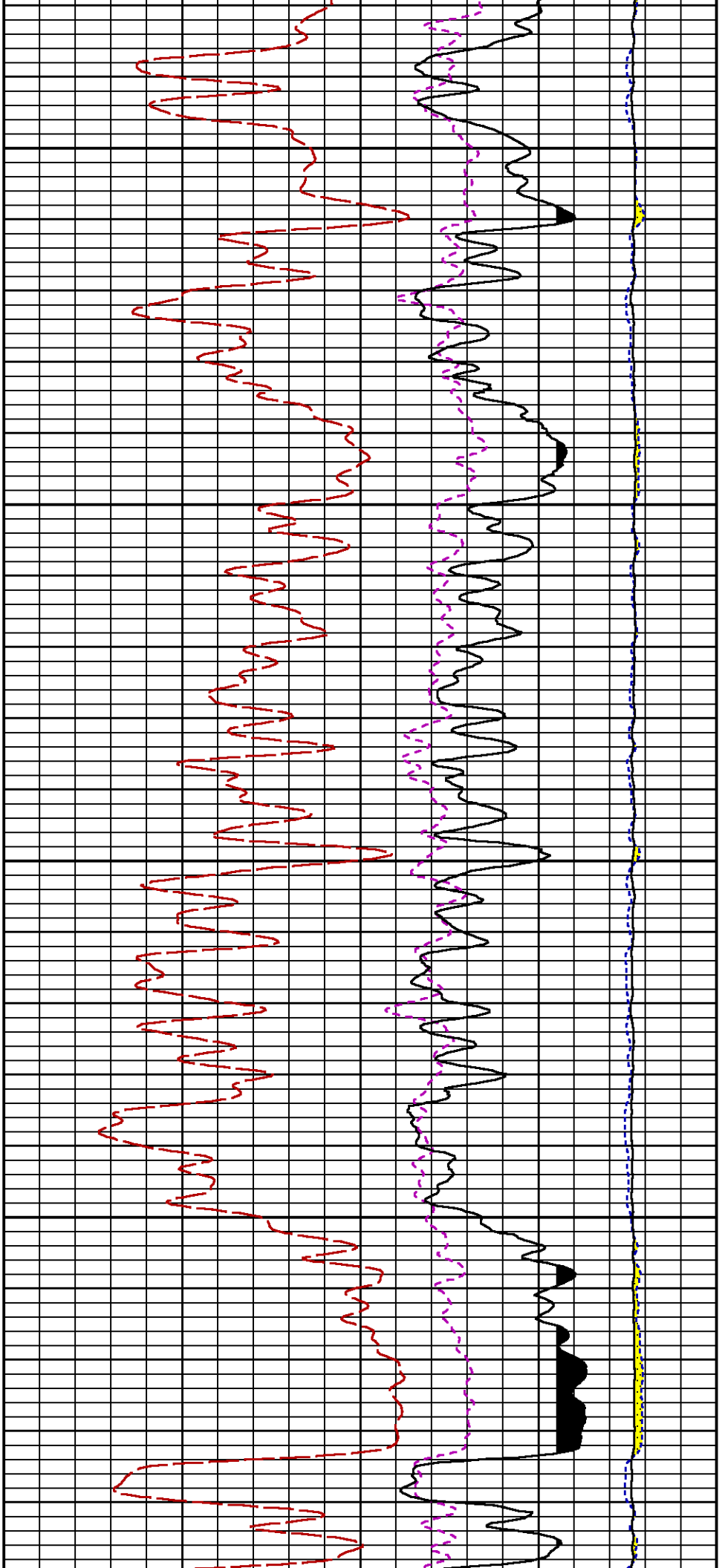


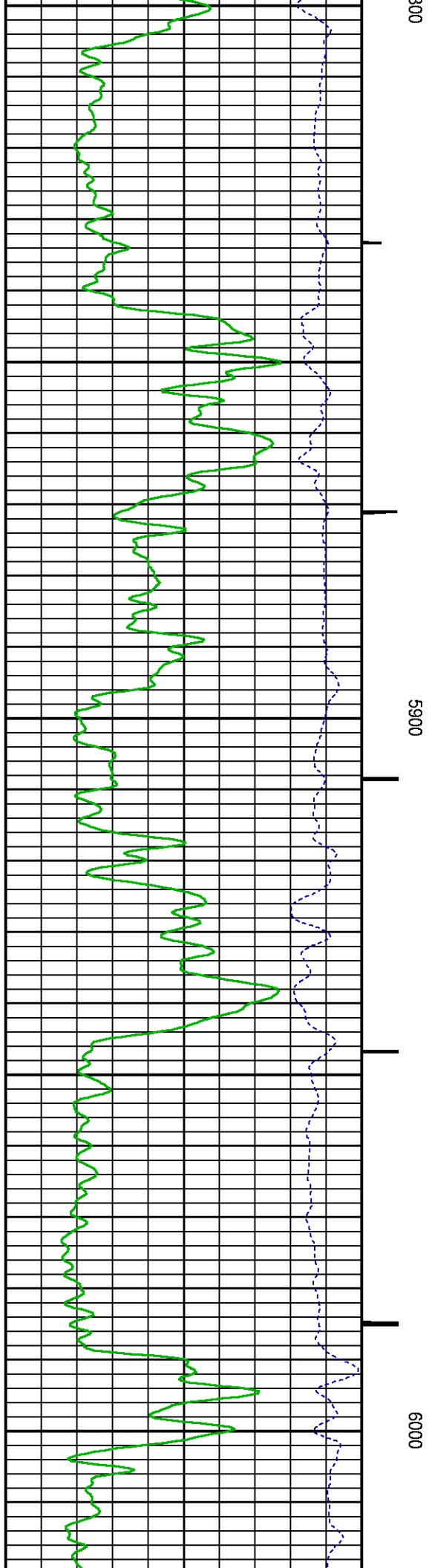
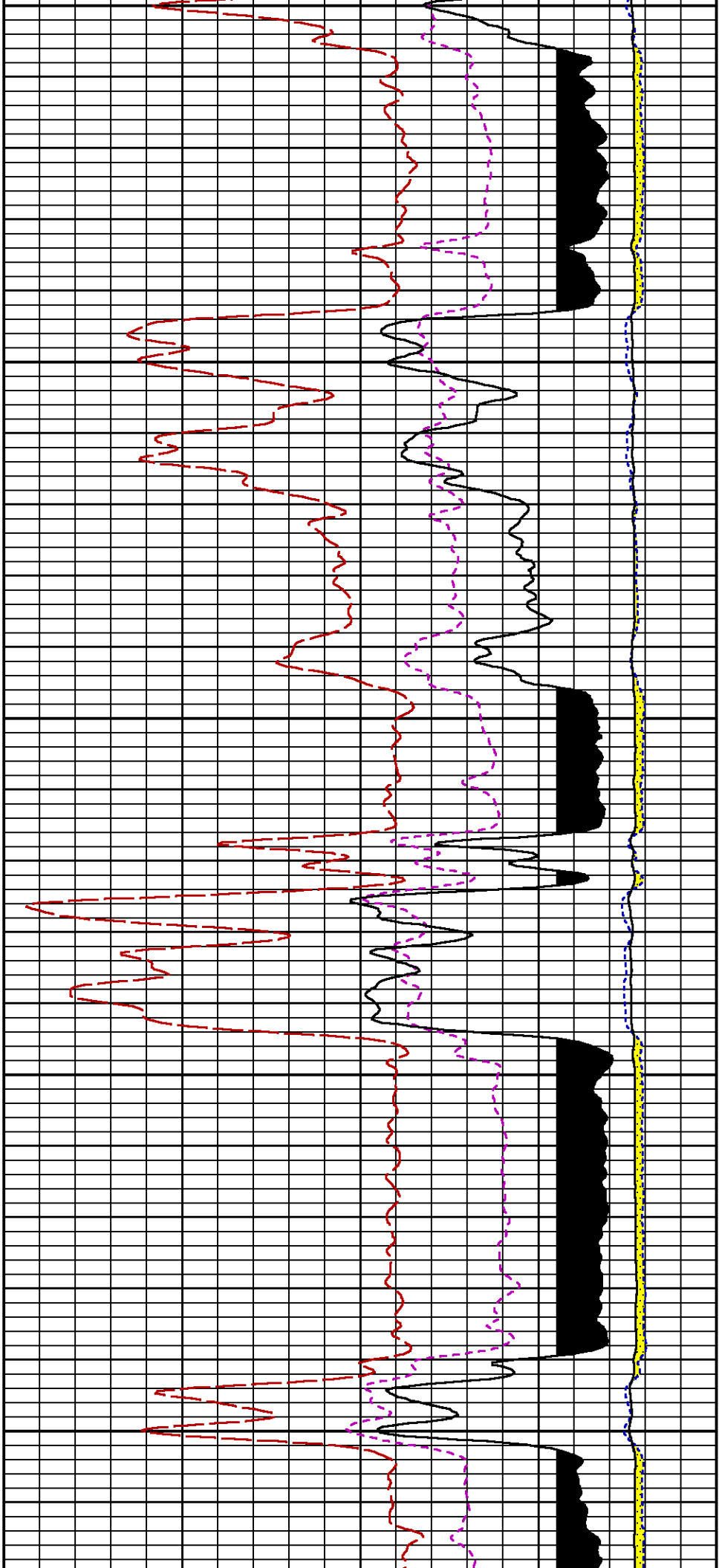


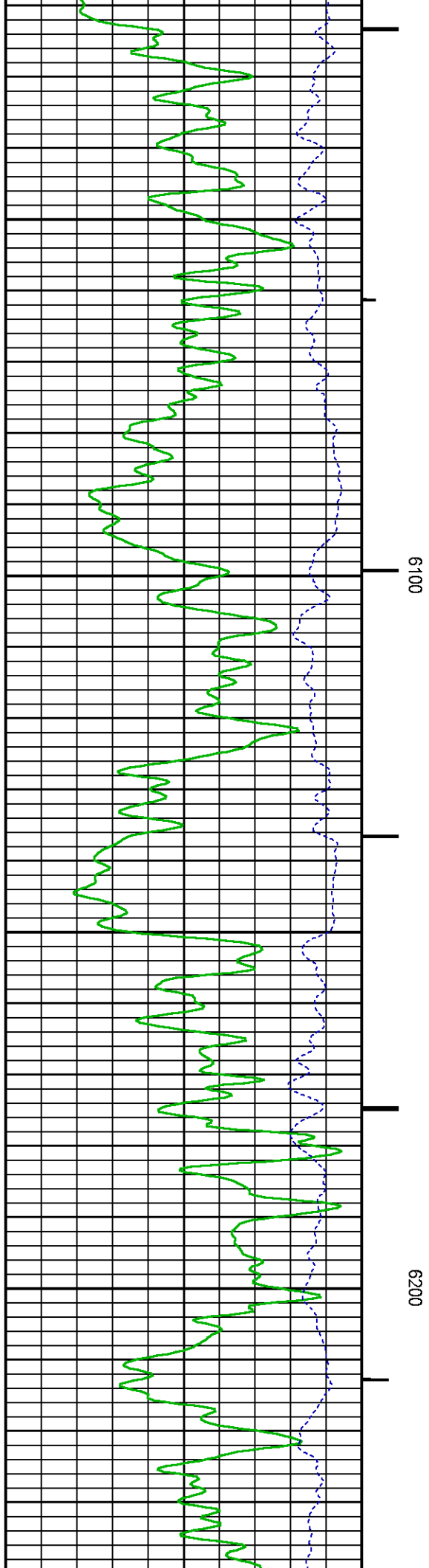
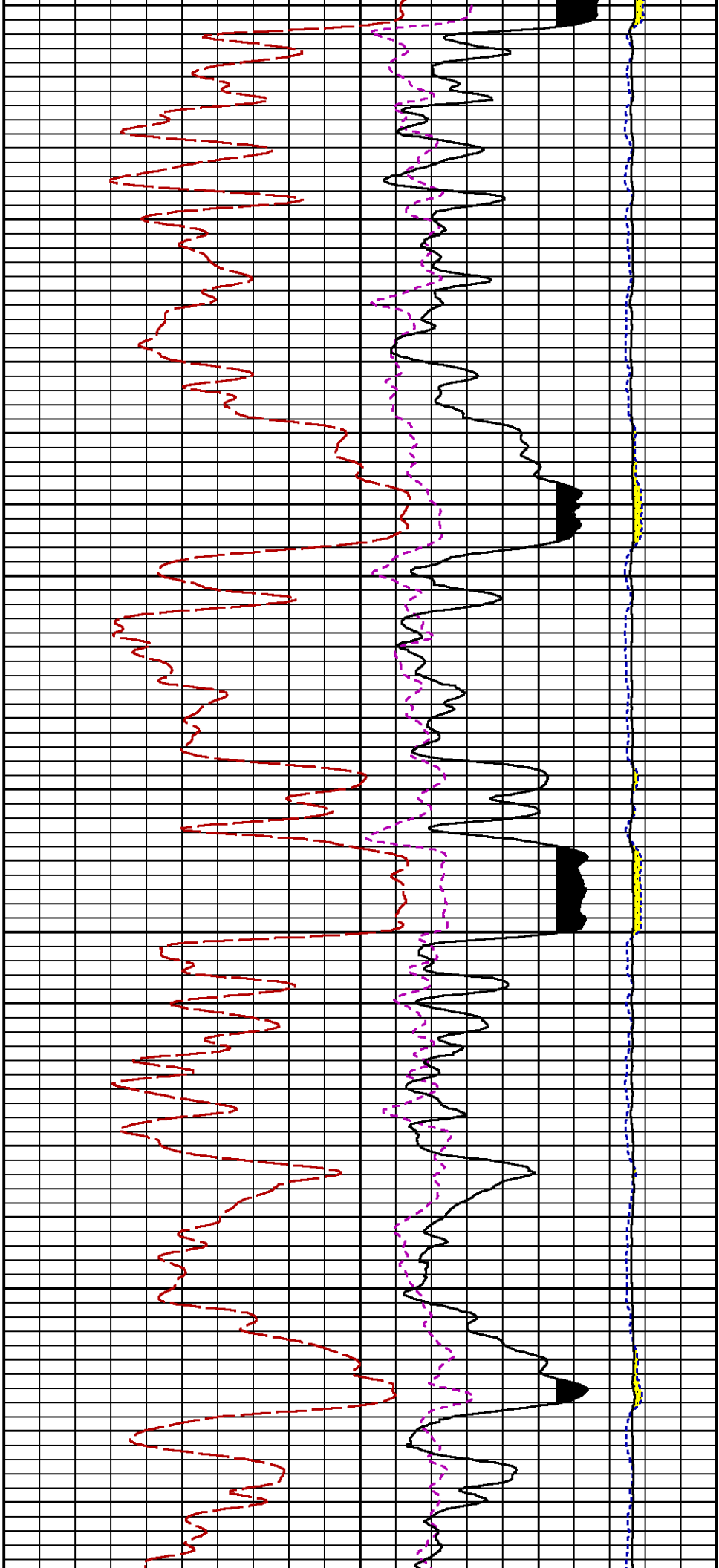
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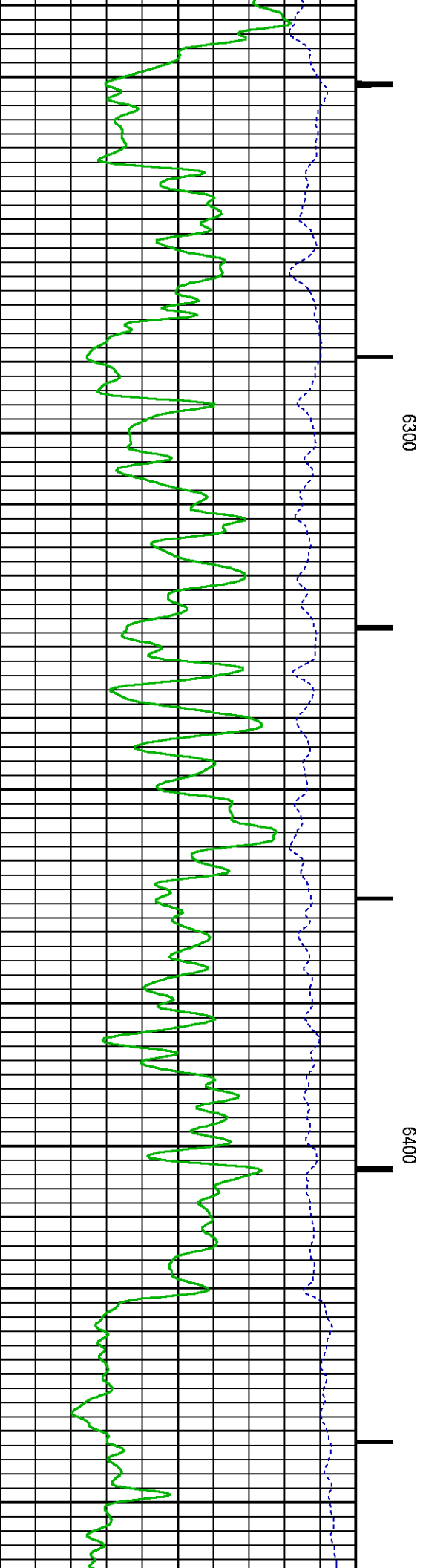
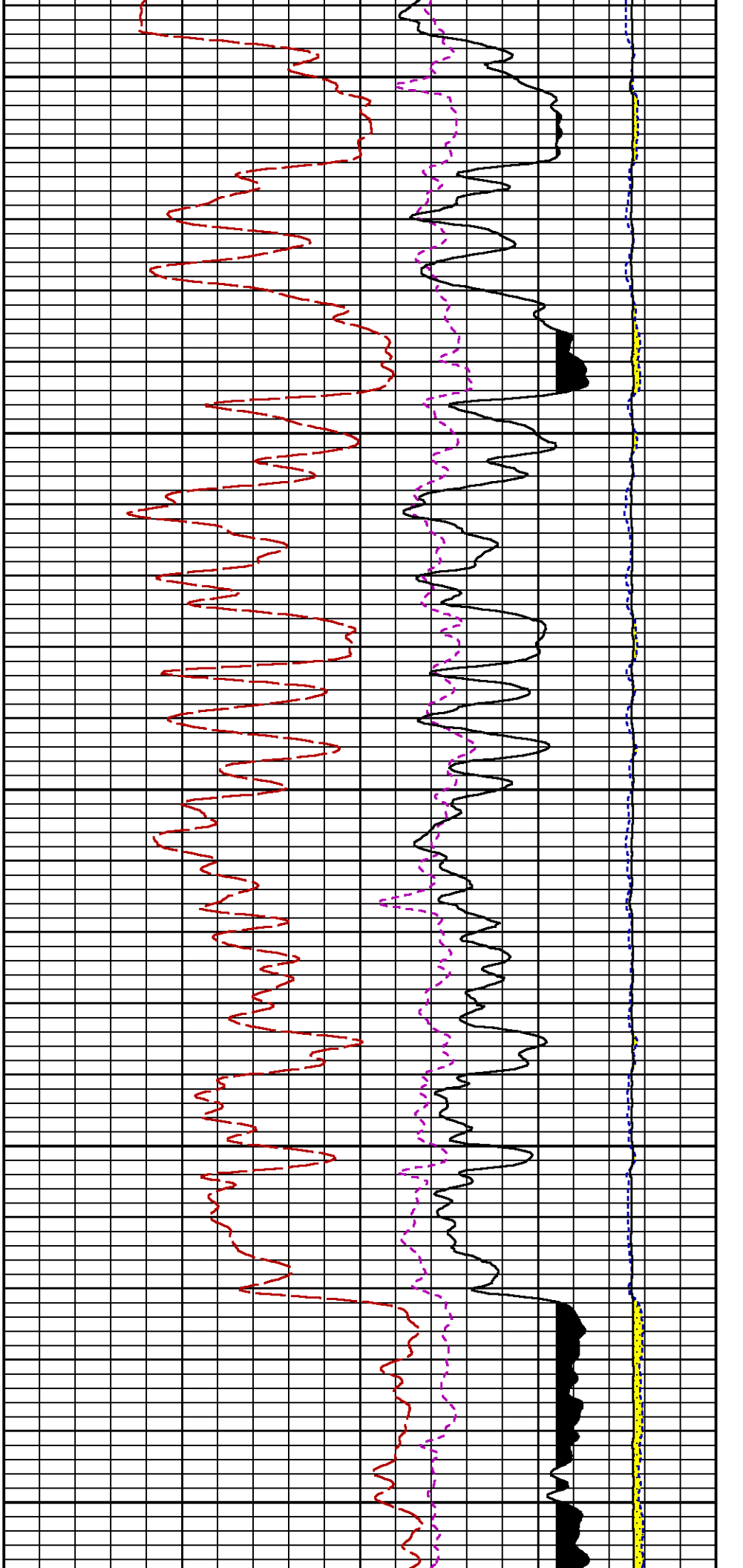
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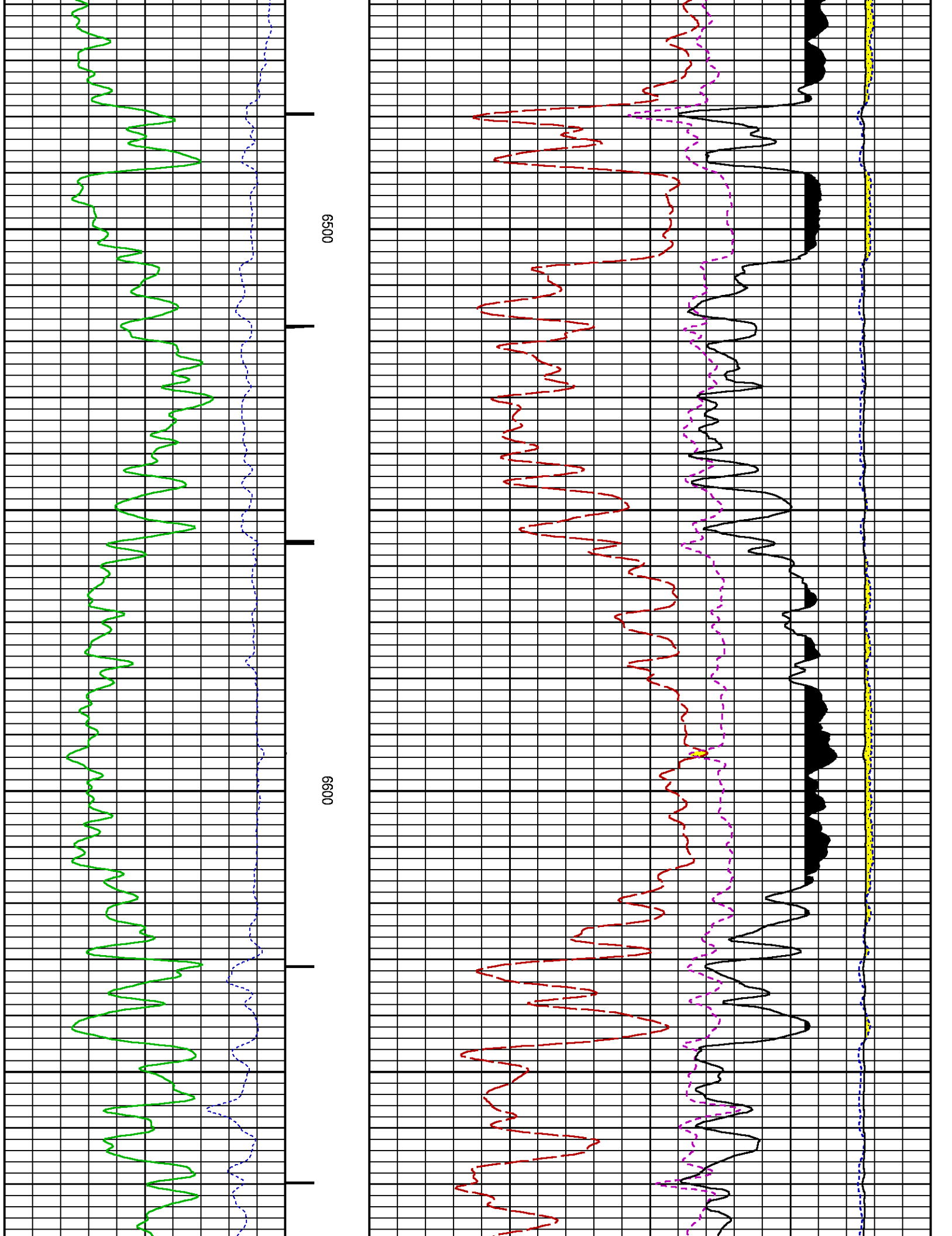


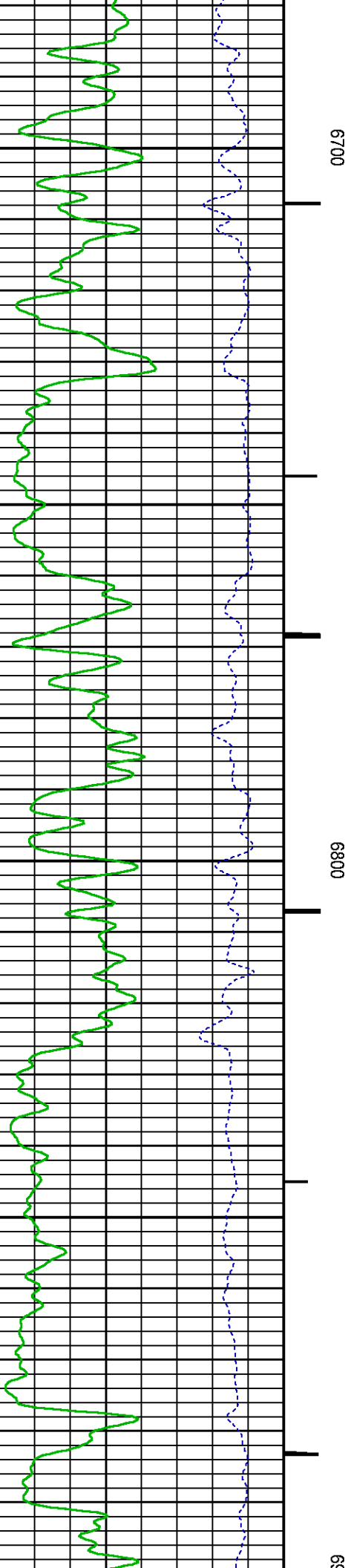
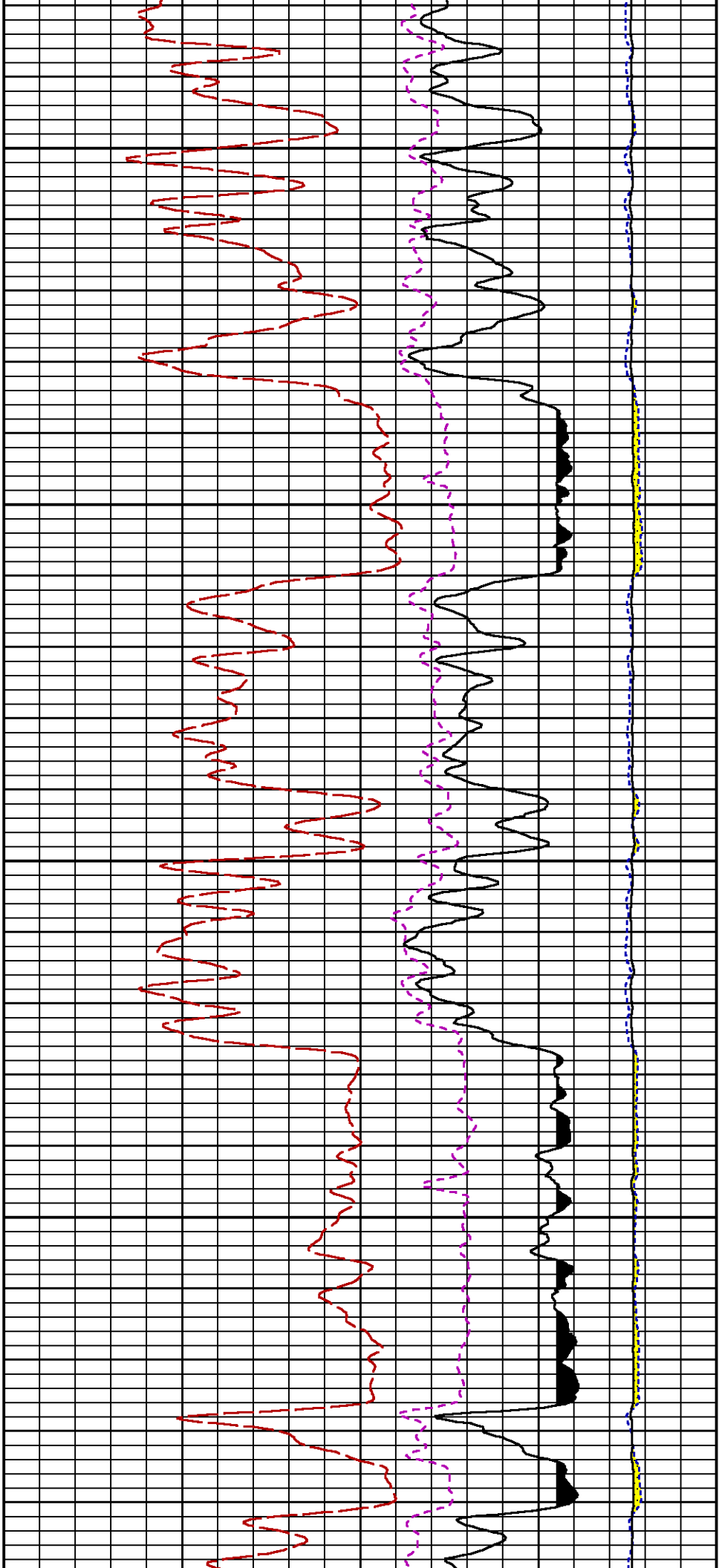


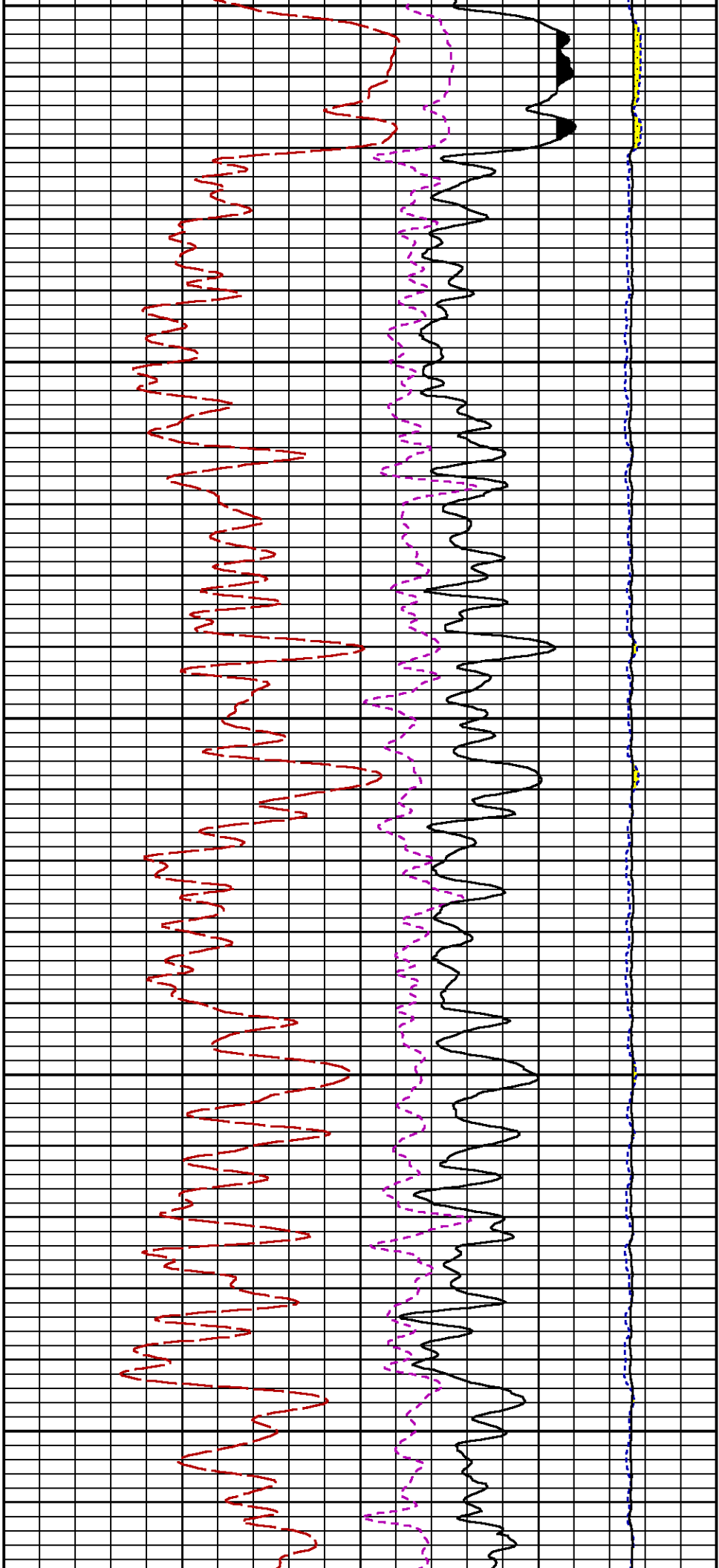








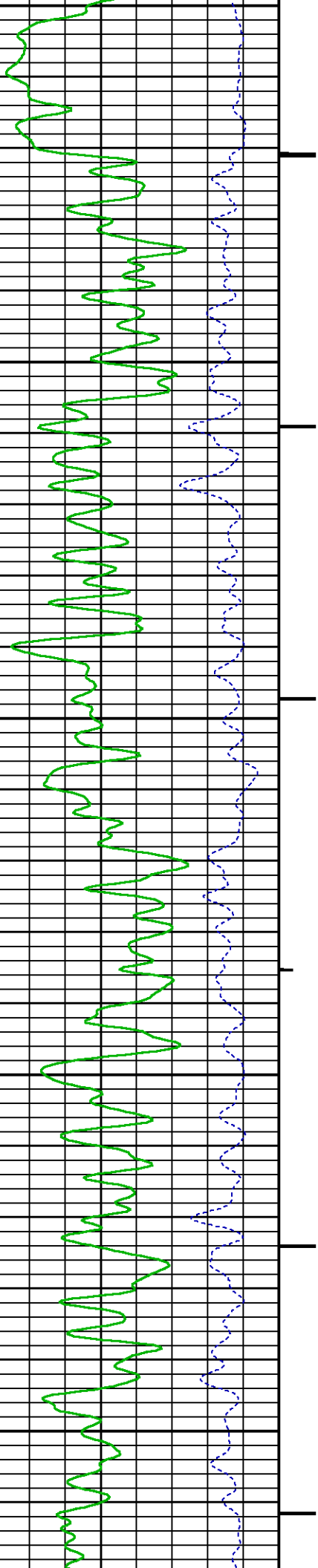


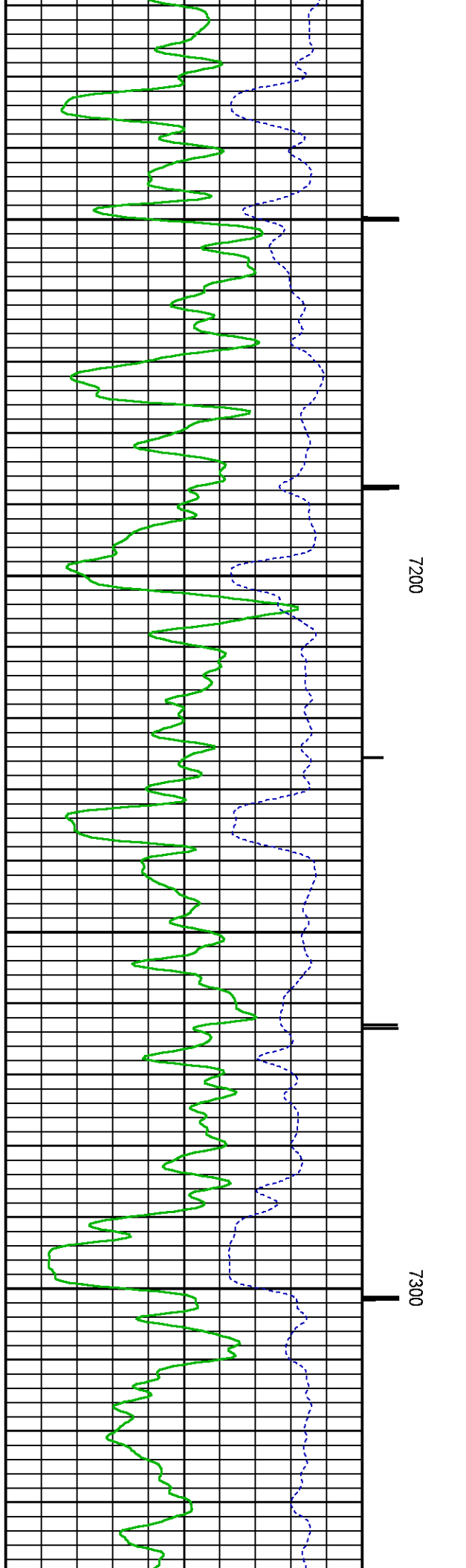
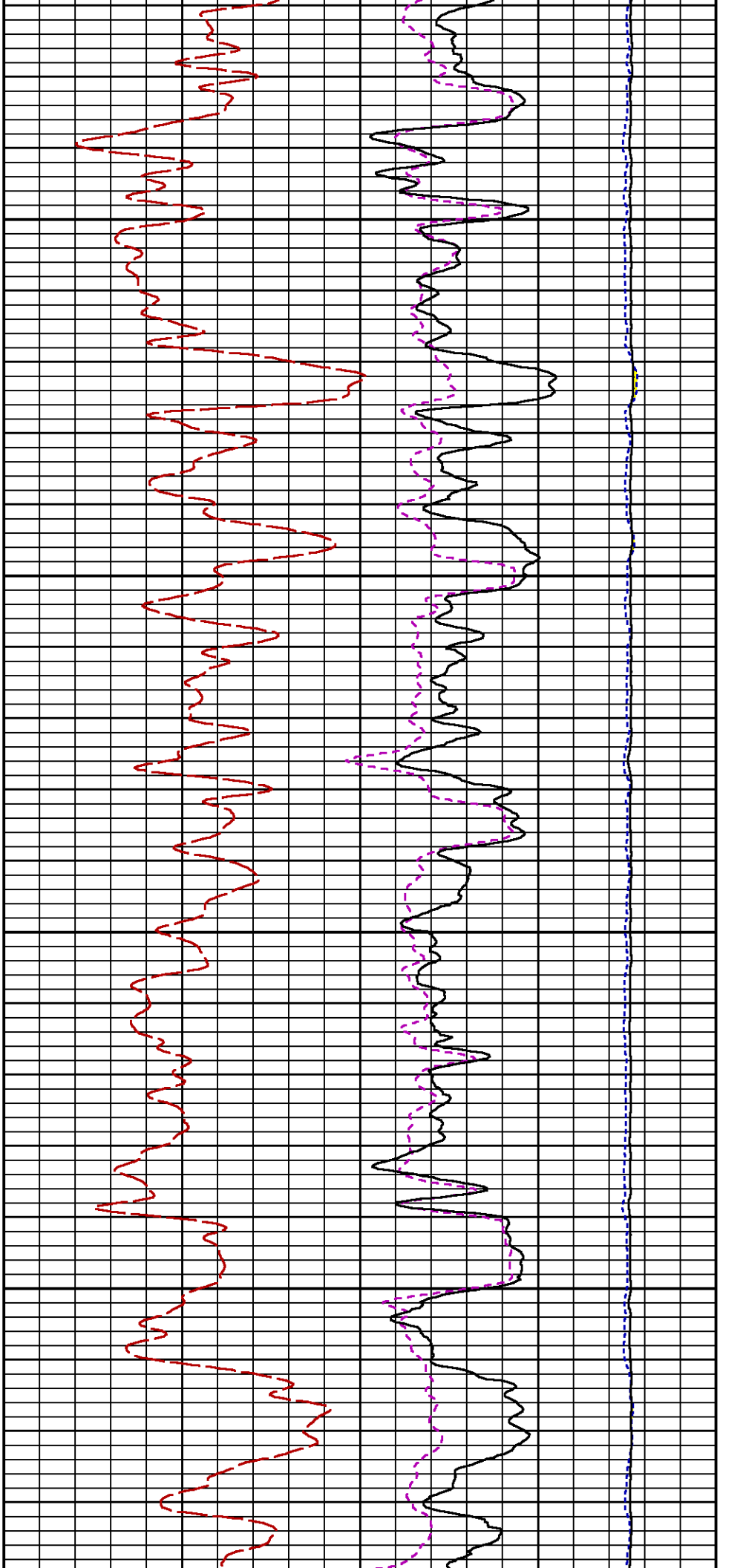


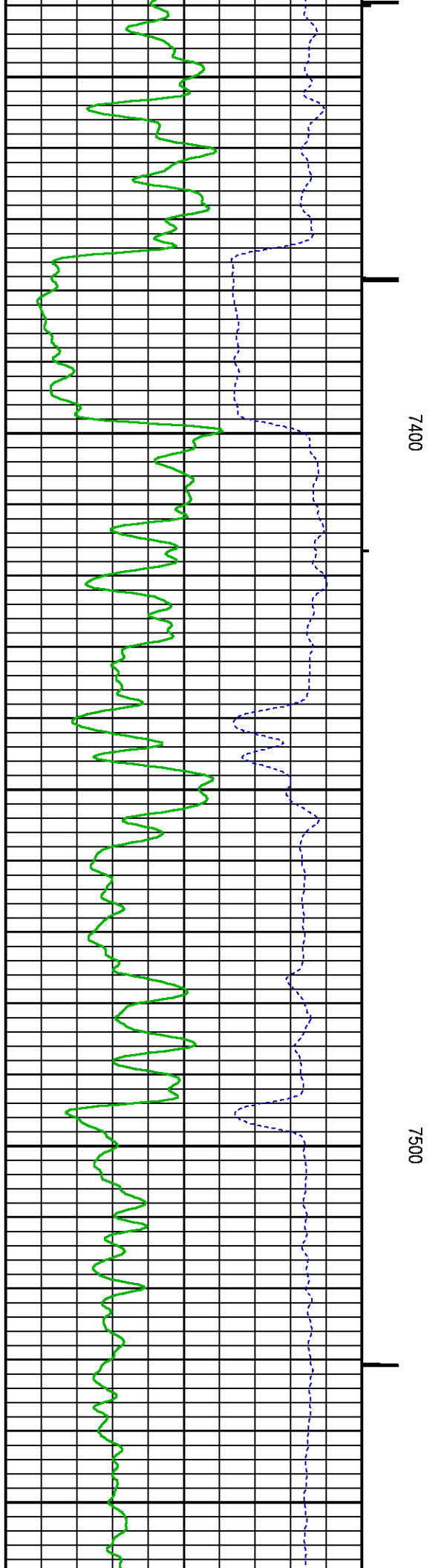
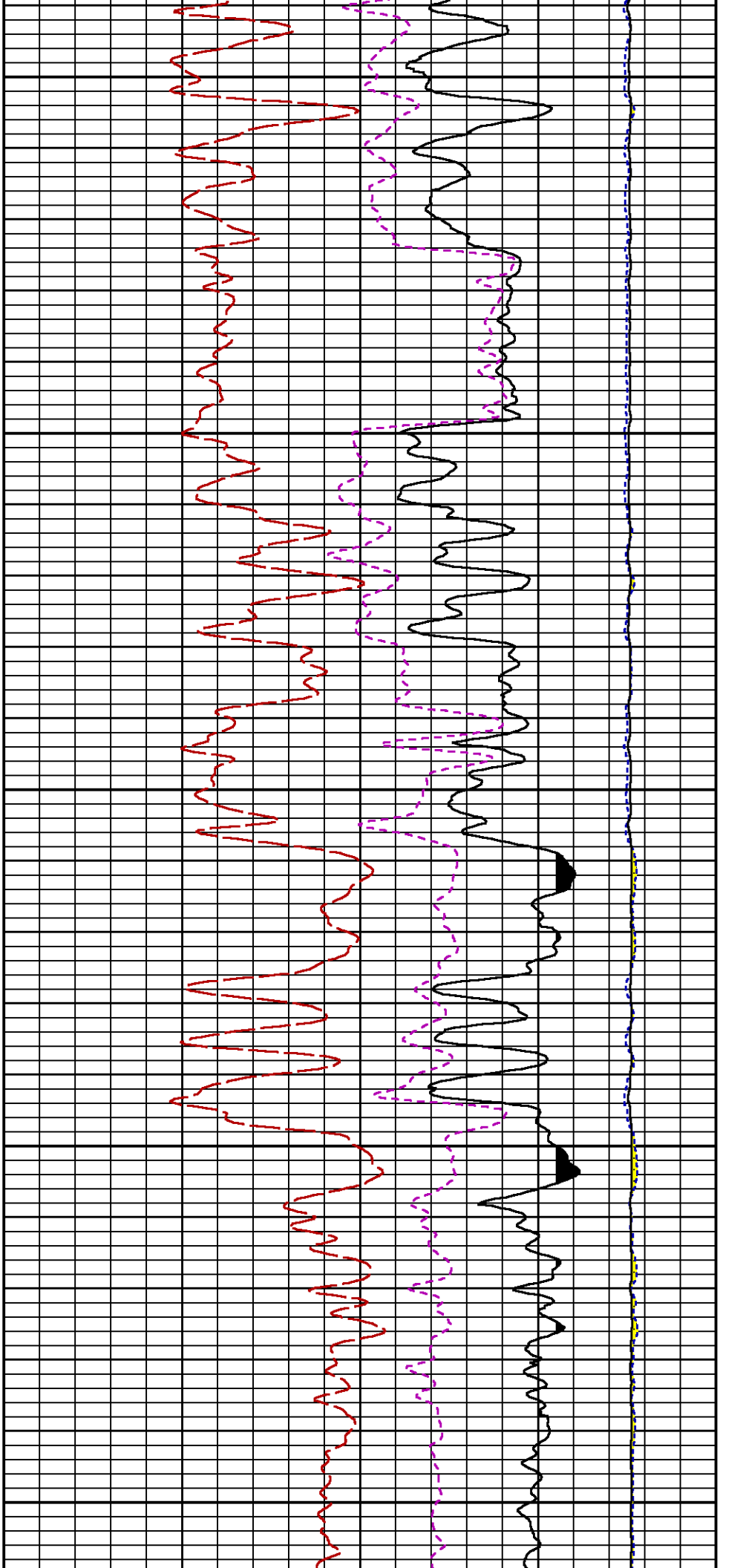
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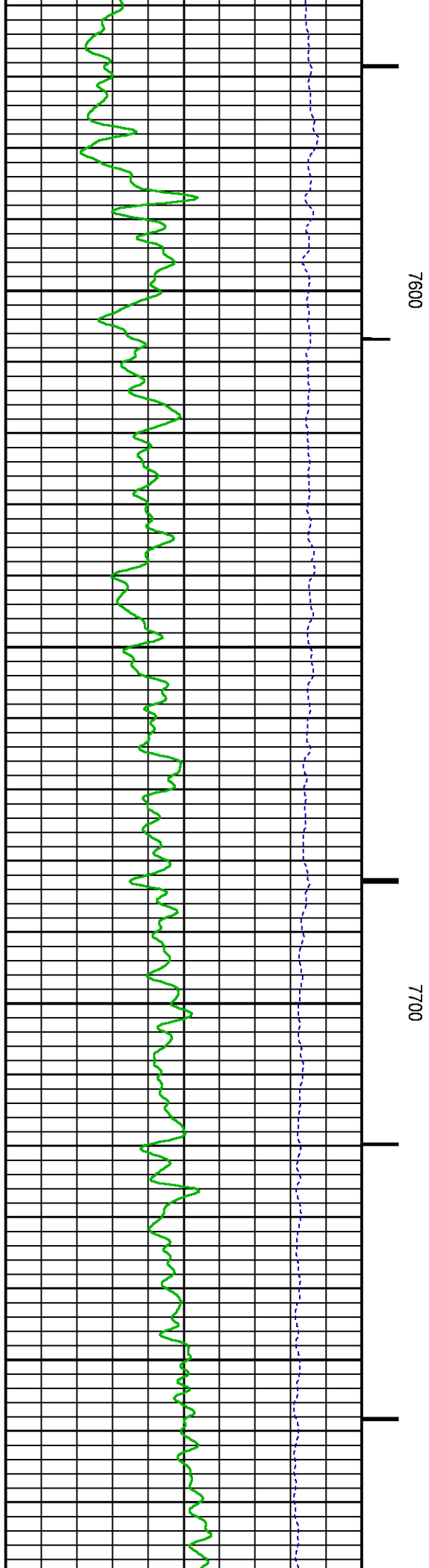
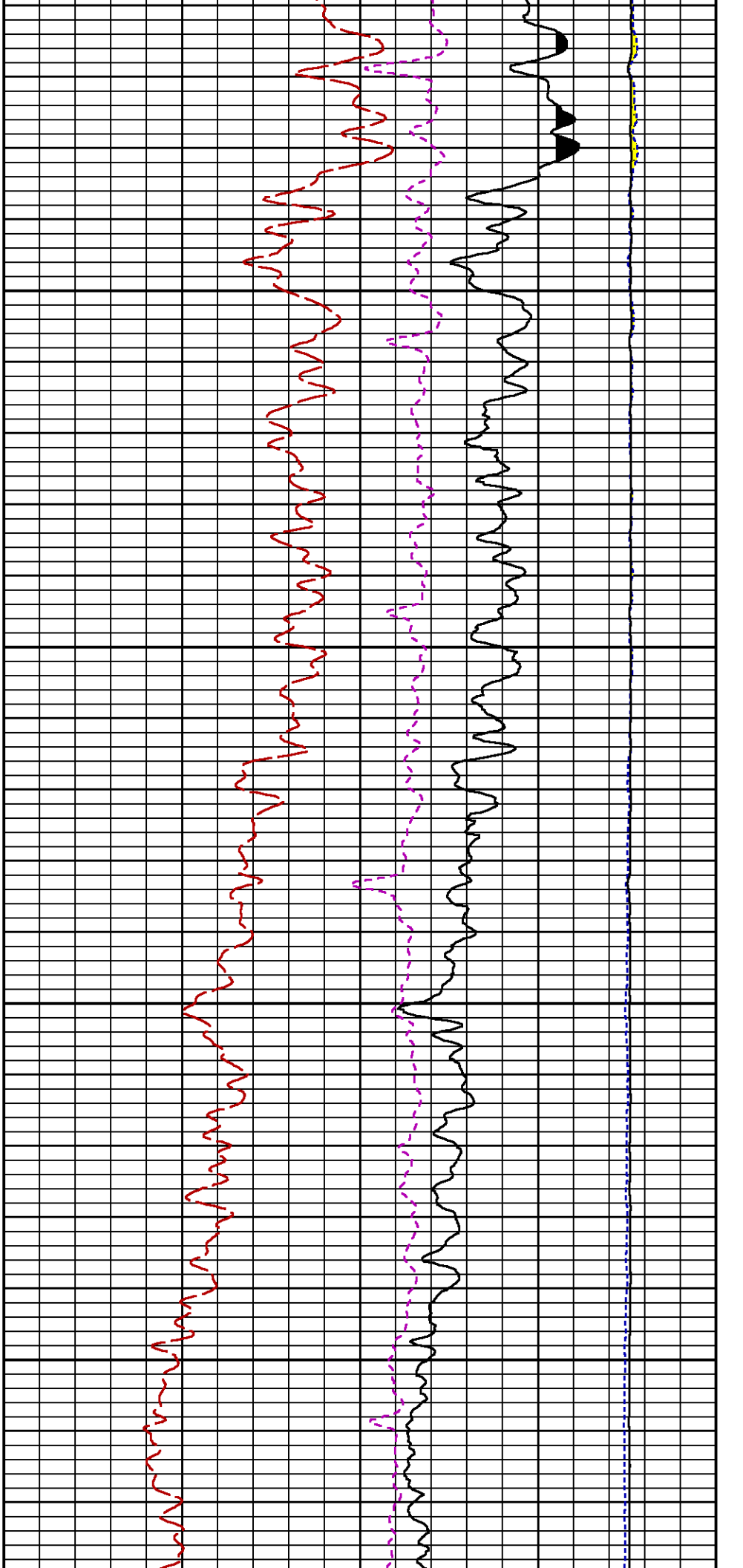
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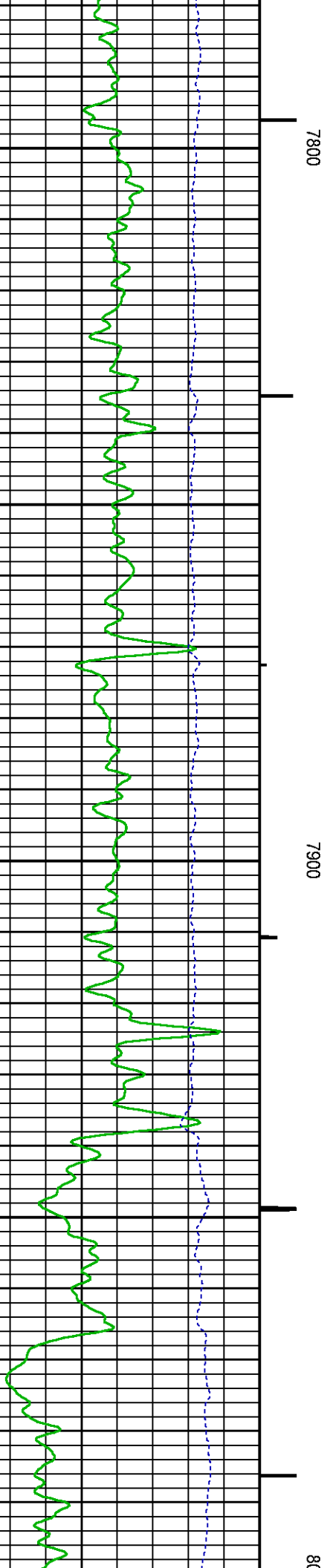
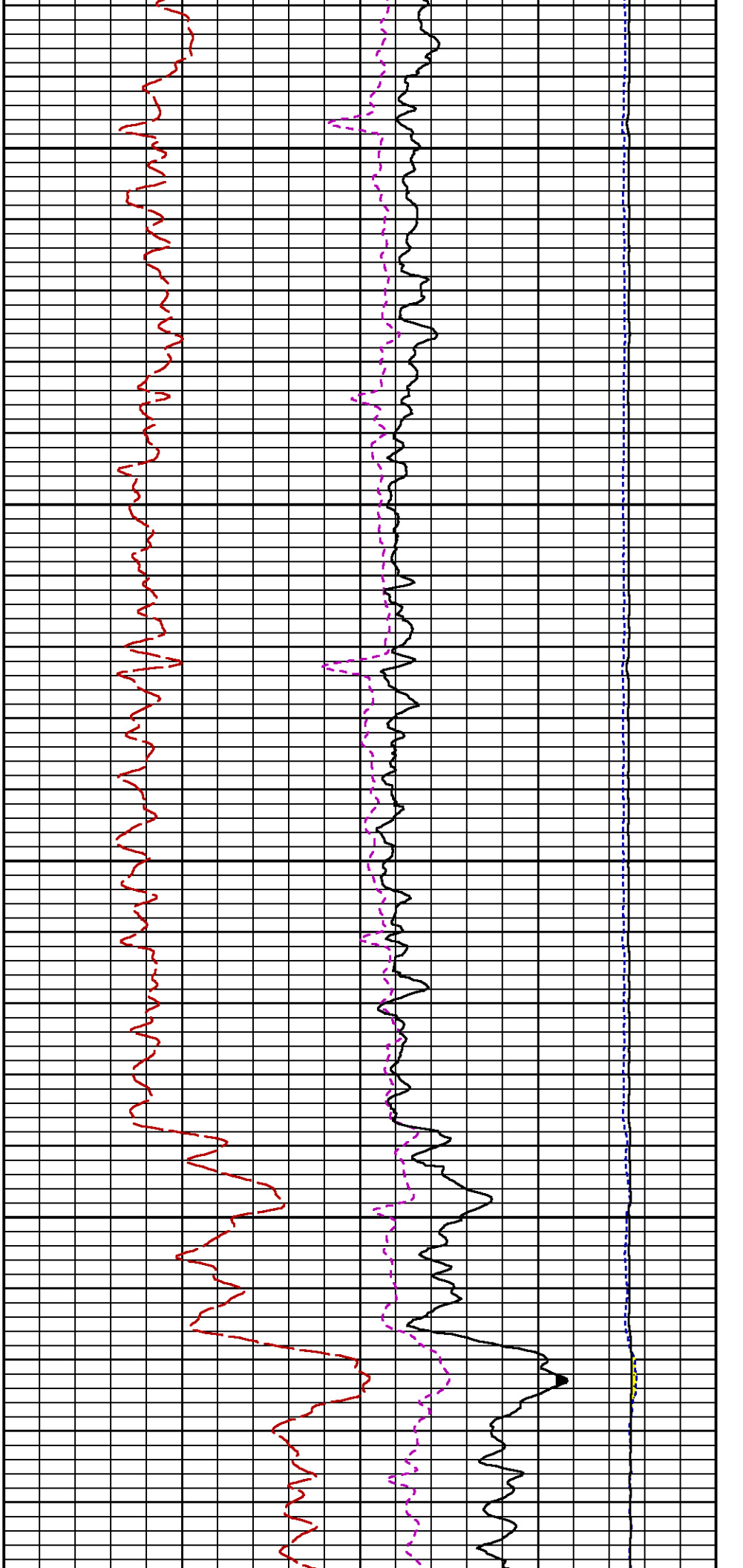
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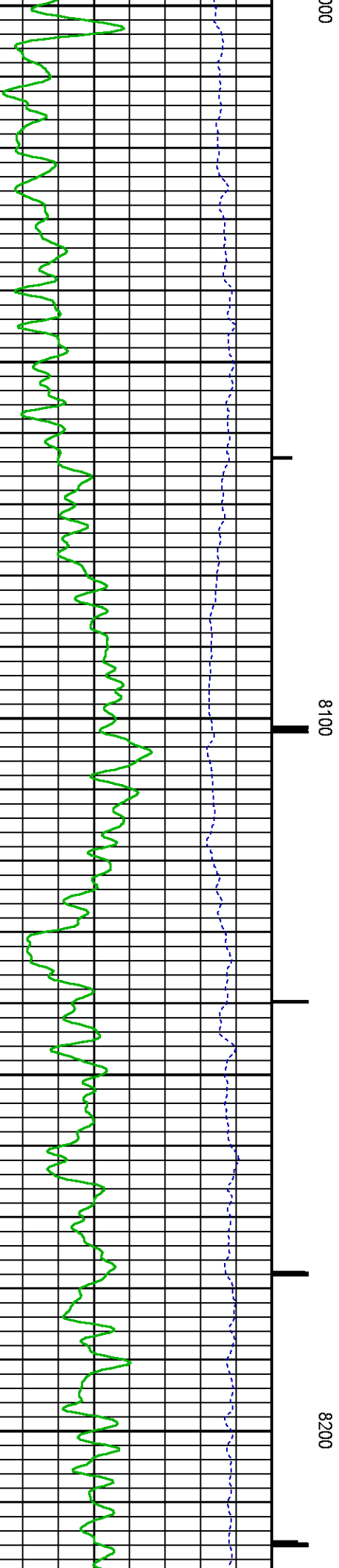
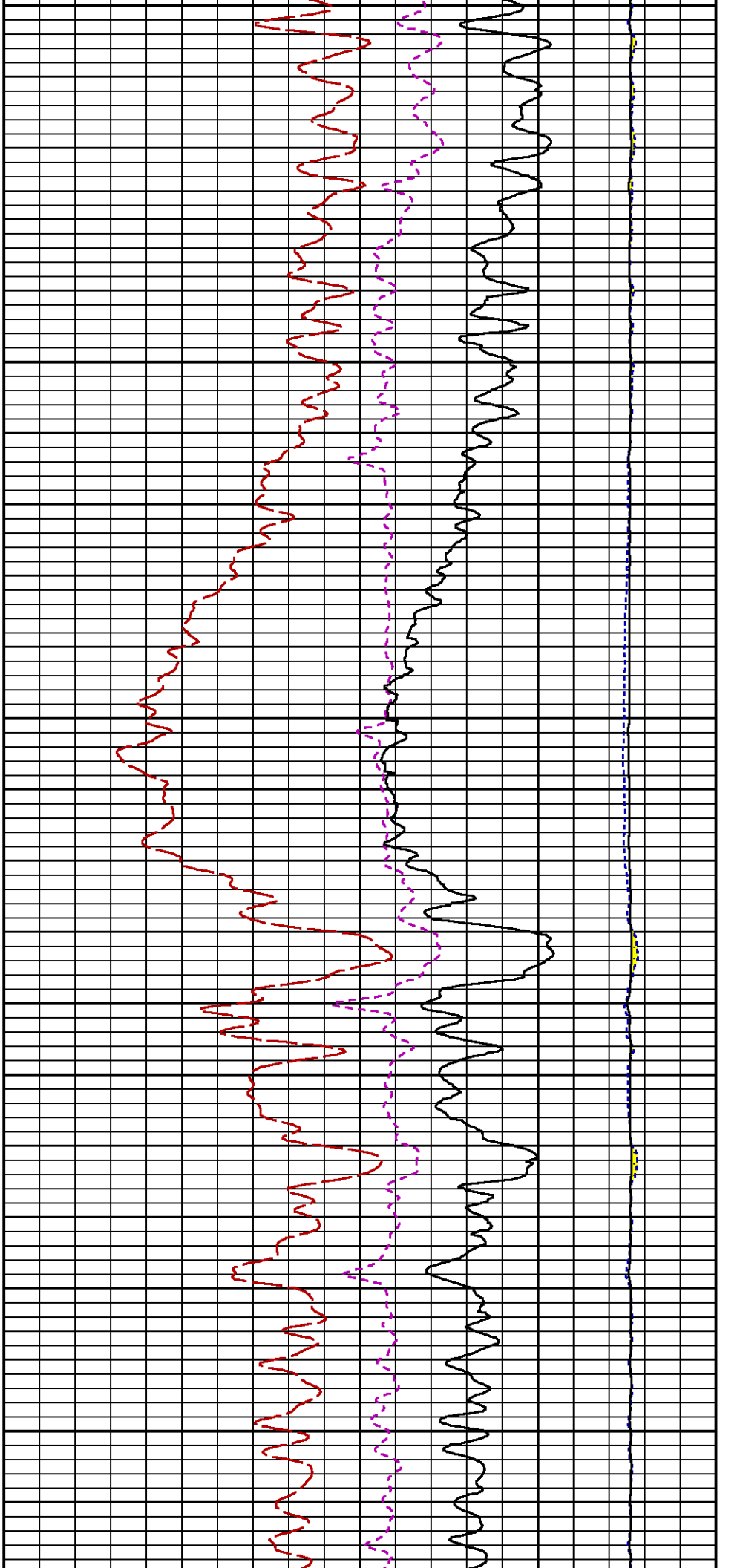












BOREHOLE SIZE	7.88	in	"	"
LARGEST CASING OD	4.50	in	"	"
MATRIX	SANDSTONE		"	"
CORRECTION BUFFER	11		"	"

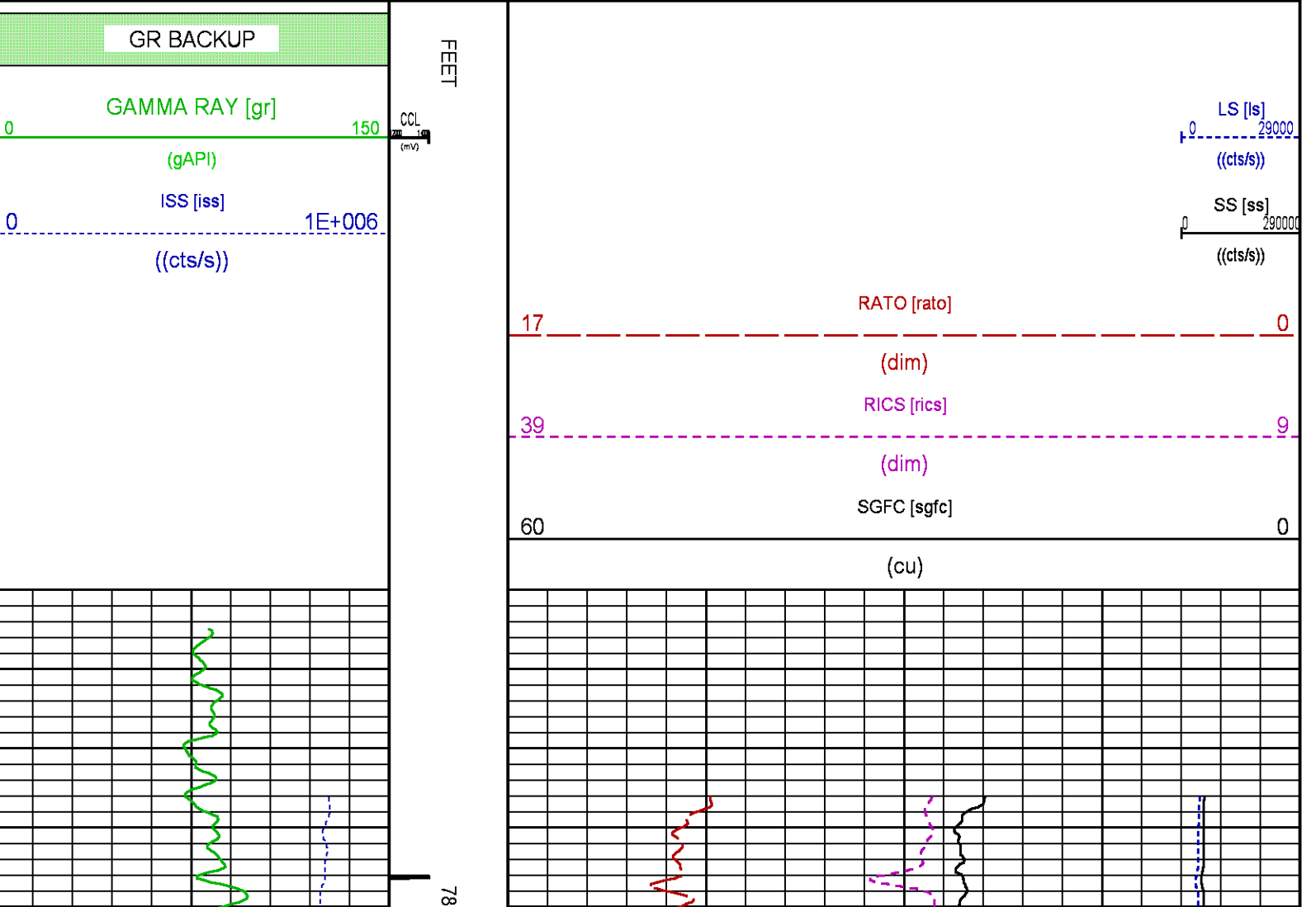
CURVE DESCRIPTION REPORT

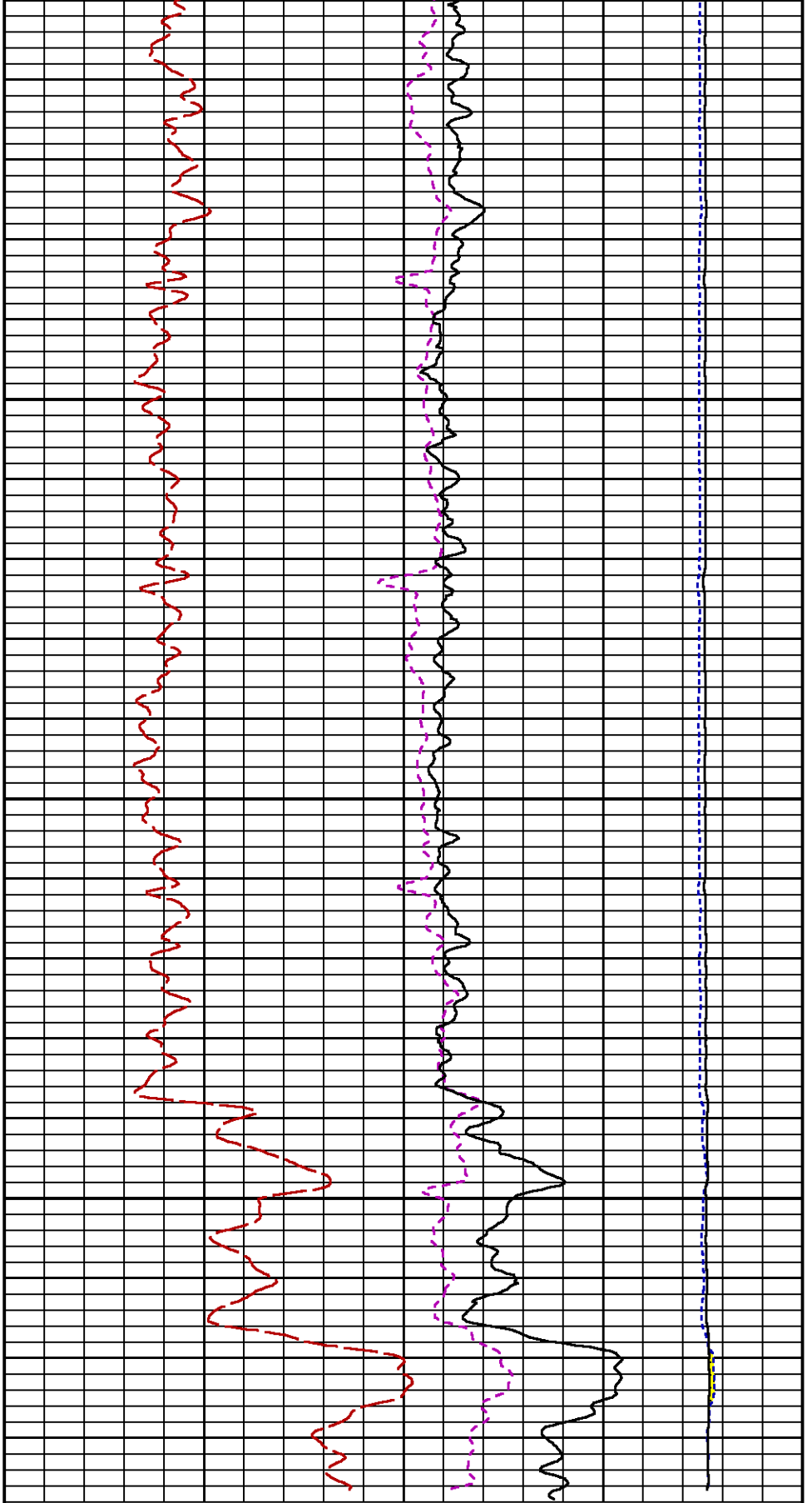
CURVE NAME	CREATION DATE	CURVE DESCRIPTION
F1:CCL	N/A	CASING COLLAR LOCATOR
F1:GR	N/A	GAMMA RAY
F1:ISS	N/A	INELASTIC SHORT SPACE COUNT RATE
F1:LS	N/A	LONG SPACE COUNT RATE
F1:RATO	N/A	SHORT/LONG SPACE COUNT RATE RATIO
F1:RICS	N/A	SHORT SPACE INELASTIC TO CAPTURE COUNT RATE RATIO (ISS/CSS)
F1:SGFC	N/A	BOREHOLE AND DIFFUSION CORRECTED SIGMA
F1:SS	N/A	SHORT SPACE COUNT RATE

CURVE MEASURE POINT OFFSET

CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
CCL	-21.75	ISS	-9.50	RATO	-9.50	SGFC	-9.50
GR	-19.25	LS	-9.50	RICS	-9.50	SS	-9.50

Presentation	: BHI78FR4H2:C:\dat1a\BRUTON_30_04W\BRUTON_30_04W_RPM_RPT.fvpdf [5"/100' Scale]
Plot Interval	: 7753 - 7985.75 Feet
Data File 1	: F1 : BHI78FR4H2:C:\dat1a\BRUTON_30_04W\BRUTON_30_04W_RPM_RPT.xtf
Created On	: N/A
Company	: LARAMIE ENERGY II LLC
Well	: BRUTON 30-04W
Field	: VEGA
File Interval	: 7752.25 - 7992 Feet
OCT	: RPM3D1





LS [ls]
0 29000
((cts/s))

SS [ss]
0 290000

000

7900

FEET

GR BACKUP

GAMMA RAY [gr]

0 150

(gAPI)

ISS [iss]

0 1E+006

CCL
(mV)

((cts/s))

((cts/s))

	RATO [rato]	
17		0
	(dim)	
	RICS [rics]	
39		9
	(dim)	
	SGFC [sgfc]	
60		0
	(cu)	

CALIBRATION / VERIFICATION SUMMARY

Source File: C:\dat1a\BRUTON_30_04\WRPM3D1.tp1

GR PRIMARY CALIBRATION SUMMARY

TOOL #: 2812LA 11781299

DATE/TIME PERFORMED: Sat Oct 18 17:17:39 2014

UNIT #: 3882TD HL6756

CALB JIG #: 4702NK BA_491

	BACKGROUND (cts/s)	CALBRTR ON (cts/s)	CR DIFF (cts/s)	MULT	BACKGROUND (gAPI)	CALBRTR ON (gAPI)	CALBRTR (gAPI)
GR	17.82	198.84	181.0	0.829	14.77	164.77	150

GR PRIMARY VERIFICATION SUMMARY

TOOL #: 2812LA 11781299

DATE/TIME PERFORMED: Sat Oct 18 17:20:28 2014

UNIT #: 3882TD HL6756

VERI JIG #: 4702NK BA_491

	BACKGROUND (cts/s)	CALBRTR ON (cts/s)	MULT	BACKGROUND (gAPI)	CALBRTR ON (gAPI)	DIFF. (gAPI)
GR	18.44	196.51	0.829	15.28	162.83	147.55
						140.00 160.00

RPM_PNC_3D PRIMARY CALIBRATION SUMMARY

TOOL: 8283PA 10322619

DATE/TIME PERFORMED: Thu Jul 13 11:23:55 2017

UNIT: 3882TD HL6728

CALIBRATOR: 2437XB 120057

SOURCE: 8281AA 10220684

HOURS: 8281AA 8

	ISS	Mtr Vltz (V)	SS Gain	LS Gain	XLS Gain	EA Temp (degF)	Sync Delay (usec)	RCAL
Raw Data	813723	126	2224	2172	2143	131	9.0	0.9718

Interpolated	1300000	146	2209	2166	2140			
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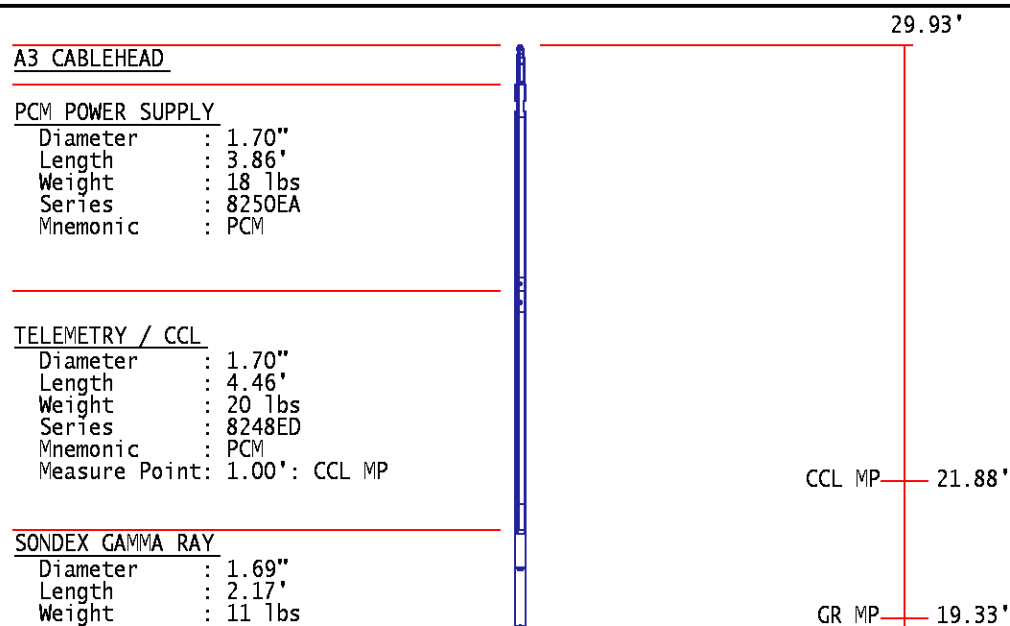
	ISS	BKS	BKL	BKX	SGA1	SDA1	SGA2	SDA2
Raw Data	813723	5787	918	134	25.92	0.15	23.93	0.32
					25.35 26.40	0.00 0.20	23.60 24.80	0.00 0.40

	ISS	ILS	IXS	SS	SS2	LS	CSS	CLS
Raw Data	813723	165485	25318	89785	31988	8302	54497	13275
Fit Quality %		0.438	0.183	0.362	0.406	0.457	0.395	0.481

	ISS	RBOR	RIN ISS/ILS	RIN13 ISS/IXS	RICS ISS/CSS	RATO SS/LS	RTWO SS2/LS	RONE CSS/CLS
Raw Data	813723	1.44	4.92	32.16	14.93	10.82	3.85	4.11
		1.42 1.45	3.55 5.52	22.20 32.70	10.99 16.34	10.06 11.10	3.57 3.95	3.76 4.22
Fit Quality %		0.025	0.019	0.383	0.030	0.090	0.055	0.066
Reduced	1296078	1.44	4.93	32.11	14.98	10.82	3.86	4.11
		1.42 1.45	4.33 5.52	27.60 32.70	13.70 16.34	10.06 11.10	3.57 3.95	3.76 4.22

INSTRUMENT CONFIGURATION

Source File: C:\dat1a\BRUTON_30_04WRPM3D1~-tdg.meta



Series : 2812LA

RPM ELECTRONICS

Diameter : 1.70"
Length : 4.48'
Weight : 16 lbs
Series : 8281EA
Mnemonic : RPM

RPM C DETECTOR SECTION

Diameter : 1.70"
Length : 9.40'
Weight : 41 lbs
Series : 8283PA
Mnemonic : RPM
Measure Point: 5.45': XLS DETECTOR
Measure Point: 5.04': LS DETECTOR
Measure Point: 4.79': SS DETECTOR

XLS DETECTOR 10.27'
LS DETECTOR 9.86'
SS DETECTOR 9.61'

RPM SOURCE SECTION

Diameter : 1.70"
Length : 4.70'
Weight : 18 lbs
Series : 8281FA
Mnemonic : RPM

BULL PLUG 1 11/16

0.00'

TOTAL LENGTH: 29.93'
TOTAL WEIGHT: 127 lbs
MAX DIAMETER: 0'1.70"



COMPANY	LARAMIE ENERGY	
WELL	BRUTON 30-04W	
FIELD	VEGA	
COUNTY	MESA	STATE COLORADO

FILE NO:	
API NO:	05077104570000

LOCATION:

SHL: LAT:39.252692N;LONG:107.814294W

BHL: LAT:39.252937N;LONG:107.816234W

SEC 30 TWP 9S RGE 93W

ELEVATIONS:

KB 7534 FT

DF 7534 FT

GL 7504 FT

DATE 29-OCT-2017