



FILE NO:

COMPANY

LARAMIE ENERGY

WELL

BRUTON 19-02W

API NO:

FIELD

VEGA

05077104230000

COUNTY

MESA

STATE COLORADO

Ver. 4.06

LOCATION:

SHL: LAT:39.262995N;LONG:107.815083W

OTHER SERVICES
RAL

BHL: LAT:39.268693N;LONG:107.816128W

SEC 19 TWP 9S RGE 93W

PERMANENT DATUM

GL

ELEVATION

7262 FT

LOG MEASURED FROM

KB

24 FT

ABOVE P.D.

DRILL. MEAS. FROM

KB

ELEVATIONS:

KB 7286 FT

DF 7286 FT

GL 7262 FT

DATE

28-AUG-2017

RUN

TRIP

2

1

SERVICE ORDER

US127293

DEPTH DRILLER

7962 FT

DEPTH LOGGER

7895 FT

BOTTOM LOGGED INTERVAL

7895 FT

TOP LOGGED INTERVAL

2400 FT

TIME STARTED

13:00

TIME FINISHED

19:00

OPERATOR RIG TIME

6 HOURS

TYPE OF FLUID IN HOLE

WATER

FLUID DENSITY

NA

FLUID SALINITY

NA

FLUID LEVEL

50 FT

LOGGED CEMENT TOP

1577 FT

WELLHEAD PRESSURE

0 PSI

MAXIMUM HOLE DEVIATION

NA

NOMINAL LOGGING SPEED

15 FMIN

MAX. RECORDED TEMP.

236 DEGF

REFERENCE LOG

NA

REFERENCE LOG DATE

NA

EQUIP. NO.

LOCATION

HL-6670

WOODWARD

S.YASSA

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

RUN 2 TRIP 1: *2 OPERATIONS IN WELL*

**OPERATION 2: RPM/GR/CCL/TEMP RUN IN COMBINATION **

LOGGED WITH 0 PSI ON WELLHEAD

SJ: 6093' - 6115'

SJ: 7083' - 7101'

CREW: G.SUAREZ , J.PENA

EQUIPMENT DATA

RUN	TRIP	TOOL	SERIES NO.	SERIAL NO.	POSITION
2	1	TELEMETRY	8250EA/8248EA	10185091/10323398	FREE
2	1	GAMMA RAY	8262XA	10485470	FREE
2	1	RPM	8281EA	10387162	FREE
2	1	RPM	8283PA	10184883	FREE
2	1	RPM	8281FA	10315572	FREE
2	1	TEMP	8255XA	120516	FREE

G-SAND SECTION PNC 3D MODE

ECLIPS 6.2i ECLIPS General Release Rel 6.2i Wed Jun 12 12:21:40 CDT 2013
 Updates: 1 Patches: 9

Plotted: Mon Aug 28 18:52:10 2017

PARAMETER AND FILTER SUMMARY REPORT

FILE: /dat1a/LARAMIE_BRUTON_19_02W/RPM3D03.prm
 LOGGING MODE: DEPTH DIRECTION: UP
 TOP DEPTH: 2397.750 ft BOTTOM DEPTH: 3129.750 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	" "
	CASING SIZE	4.50	in	" "
	MATRIX	SANDSTONE		" "
	CORRECTION BUFFER	11		" "

CURVE DESCRIPTION REPORT

CURVE NAME	CREATION DATE	CURVE DESCRIPTION
F1:CCL	Aug 28 18:02:28 2017	CASING COLLAR LOCATOR
F1:GR	Aug 28 18:02:28 2017	GAMMA RAY
F1:ISS	Aug 28 18:02:28 2017	INELASTIC SHORT SPACE COUNT RATE
F1:LS	Aug 28 18:02:28 2017	LONG SPACE COUNT RATE
F1:RATO	Aug 28 18:02:28 2017	SHORT/LONG SPACE COUNT RATE RATIO
F1:RICS	Aug 28 18:02:28 2017	SHORT SPACE INELASTIC TO CAPTURE COUNT RATE RATIO (ISS/CSS)
F1:SGFC	Aug 28 18:02:28 2017	CORRECTED FORMATION SIGMA
F1:SS	Aug 28 18:02:28 2017	SHORT SPACE COUNT RATE

CURVE MEASURE POINT OFFSET

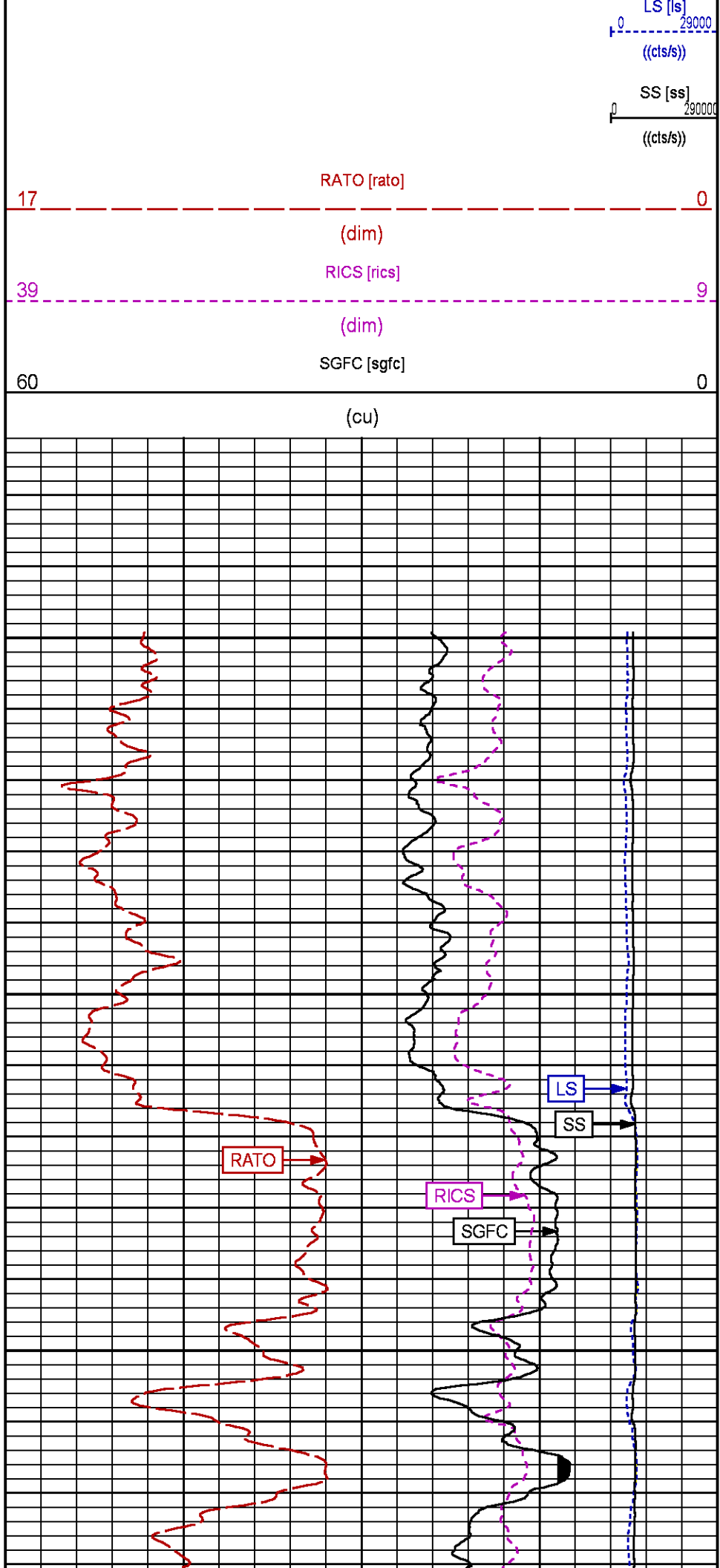
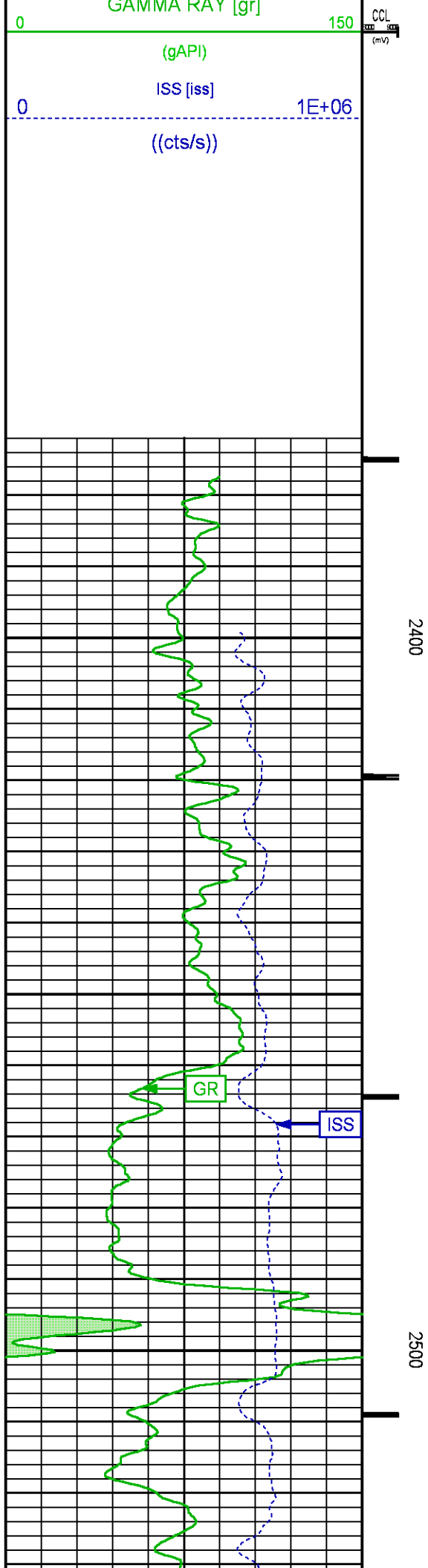
CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
CCL	26.00	ISS	12.75	RATO	12.75	SGFC	12.75
GR	23.00	LS	12.75	RICS	12.75	SS	12.75

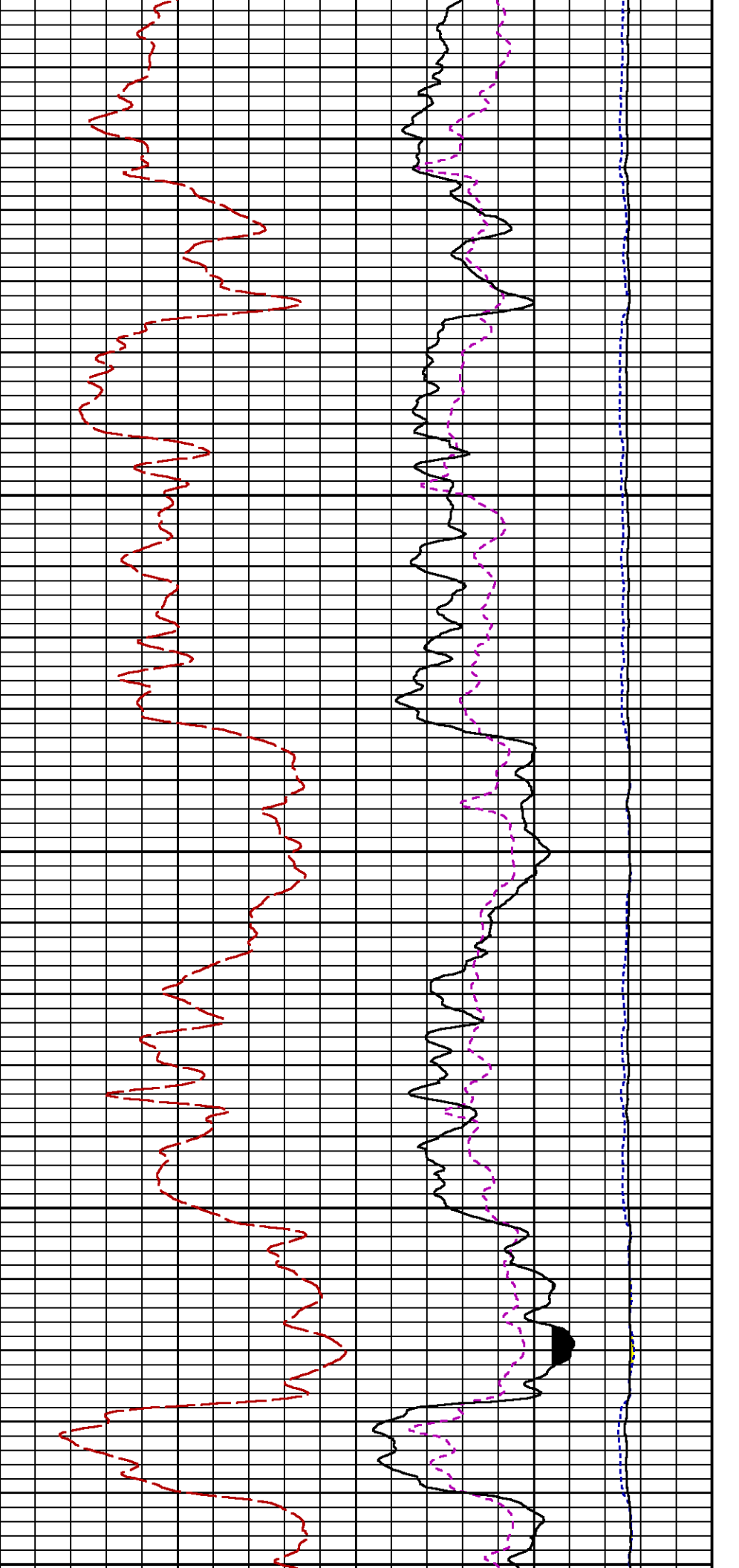
Presentation : cpu100:/dat1a/LARAMIE_BRUTON_19_02W/BRUTON_19_02W_RPM_GSAND.fvpdf [5"/100' Scale]
 Plot Interval : 2373.25 - 3121.5 Feet

Data File 1 : F1 : cpu100:/dat1a/LARAMIE_BRUTON_19_02W/BRUTON_19_02W_RPM_GSAND.xtf
 Created On : Aug 28 18:02:28 2017
 Company : LARAMIE ENERGY
 Well : BRUTON 19-02W
 Field : VEGA
 File Interval : 2372.5 - 3130.25 Feet
 OCT : RPM3D

GR BACKUP

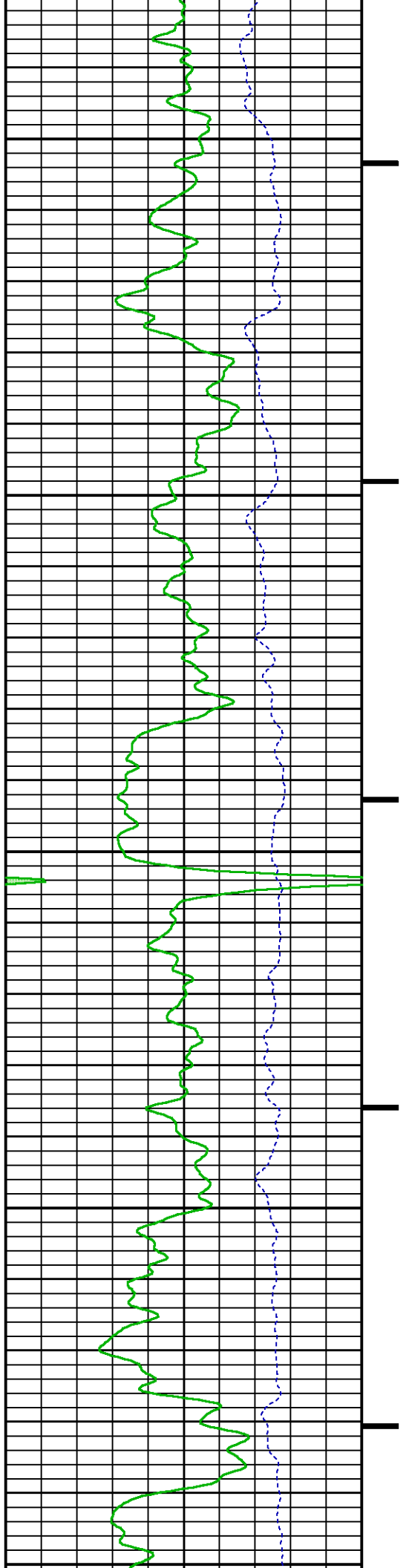
FEET



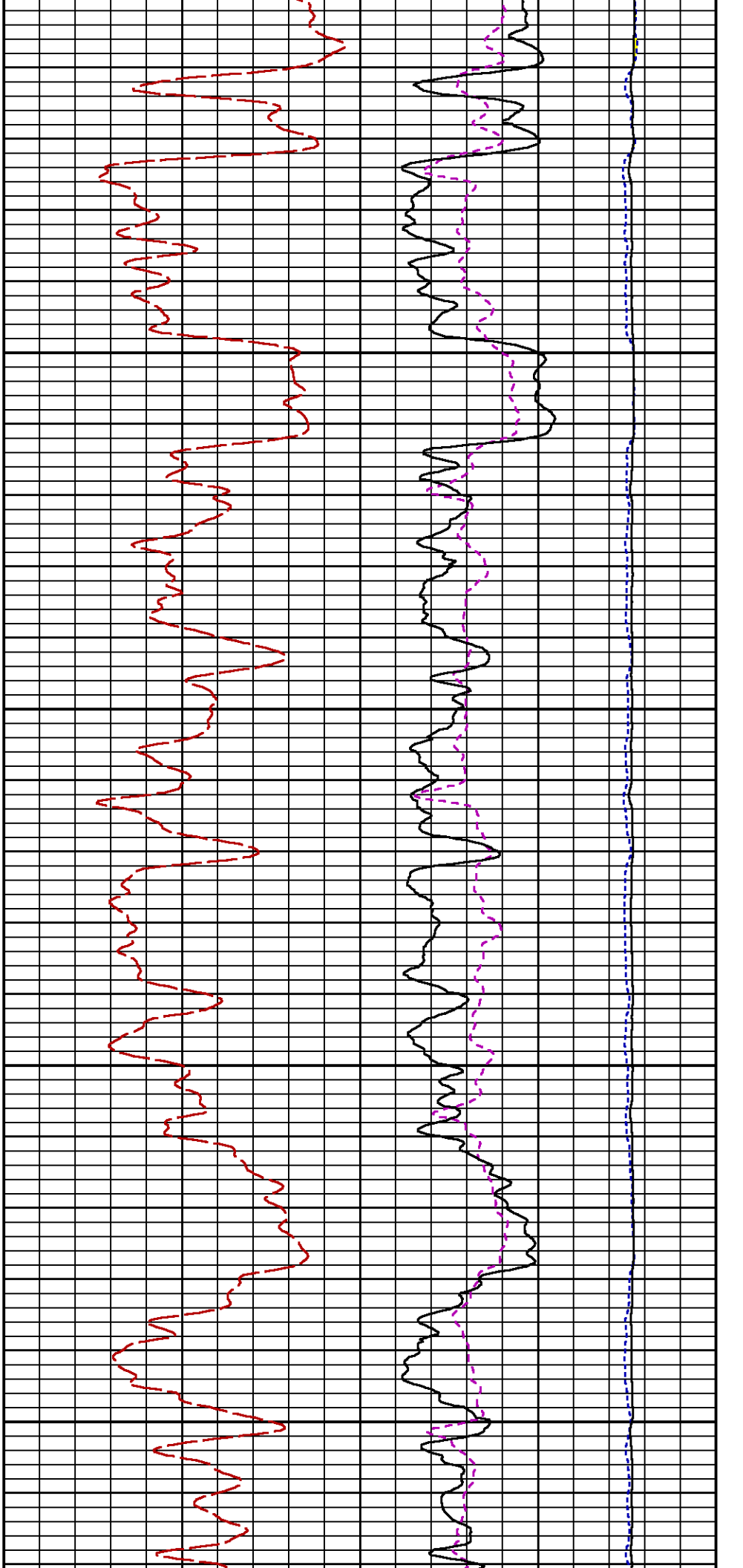


2600

2700

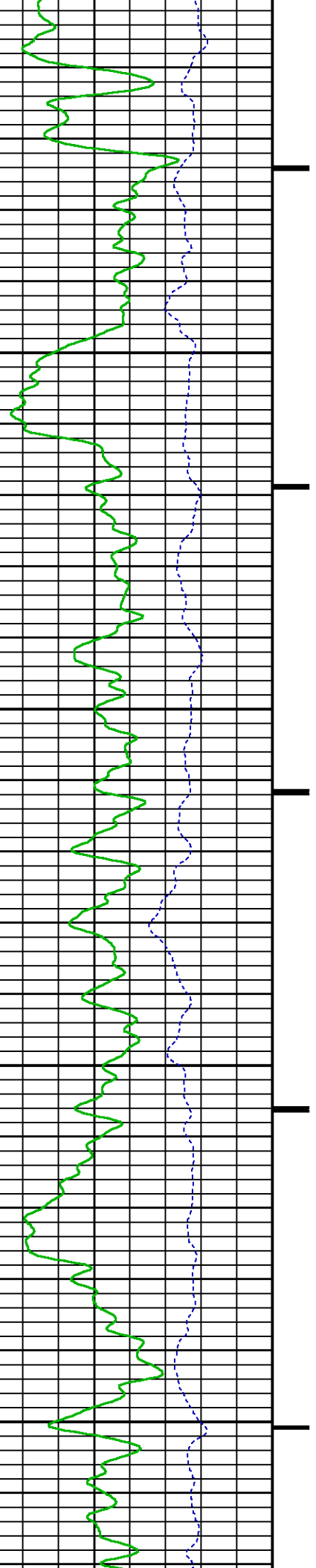
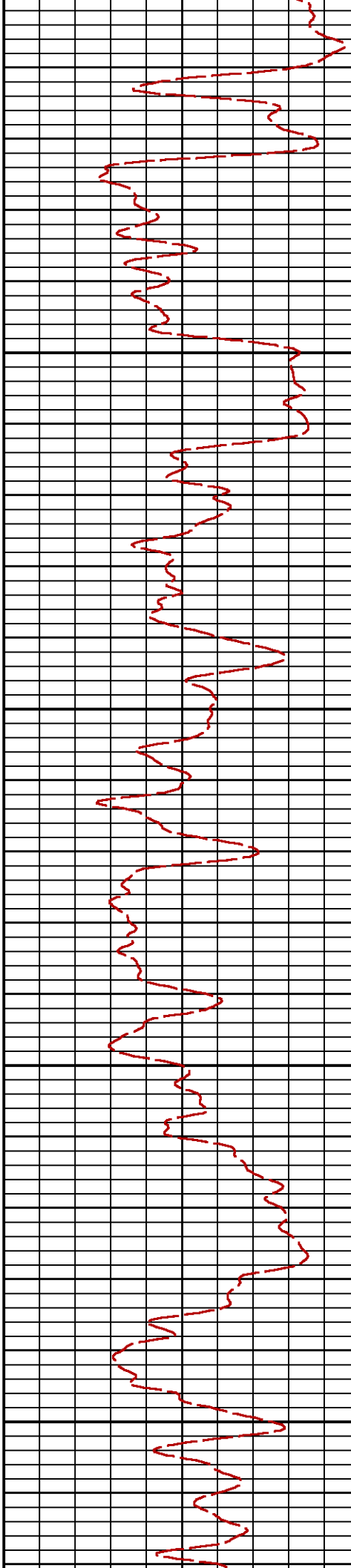


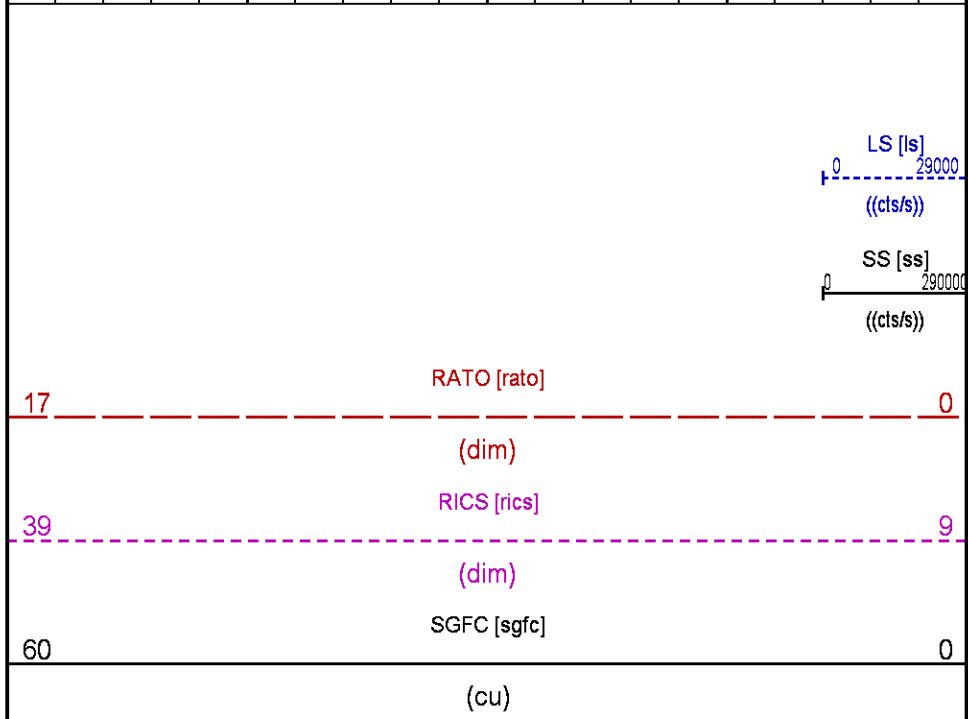
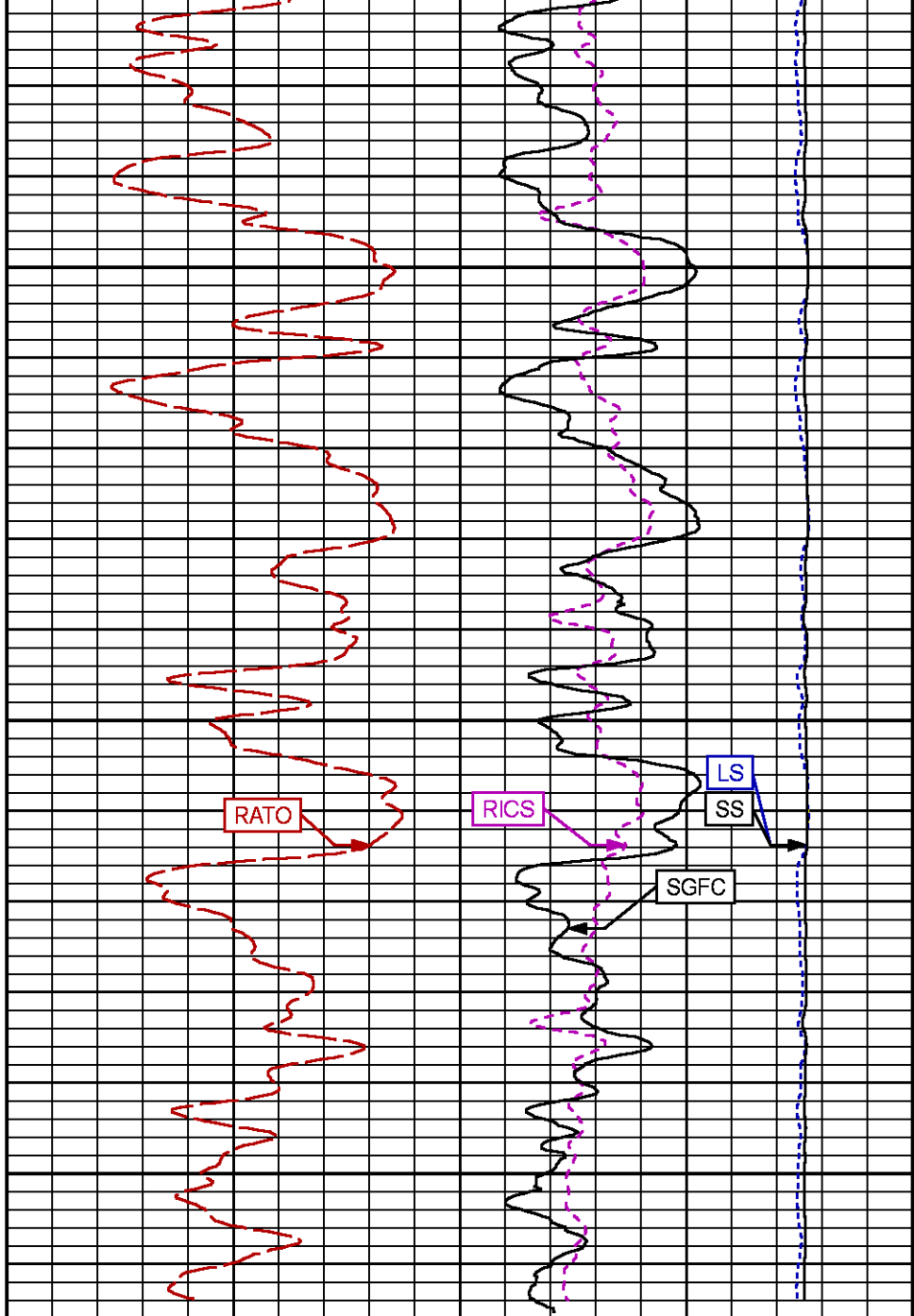
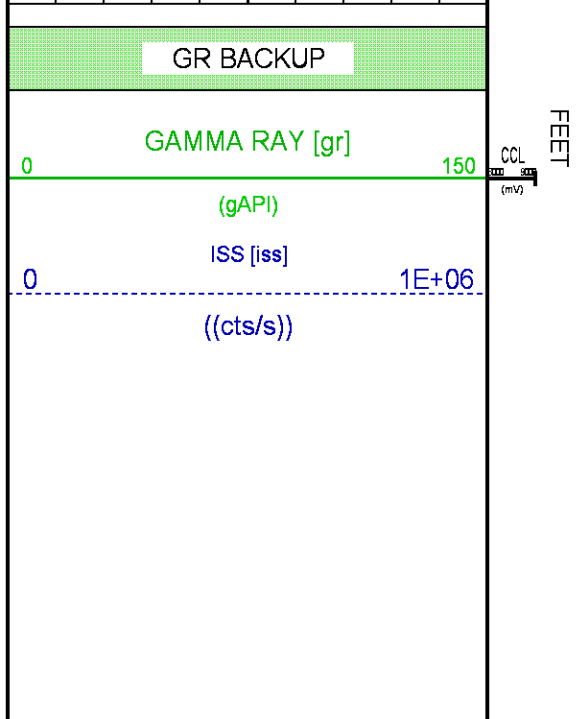
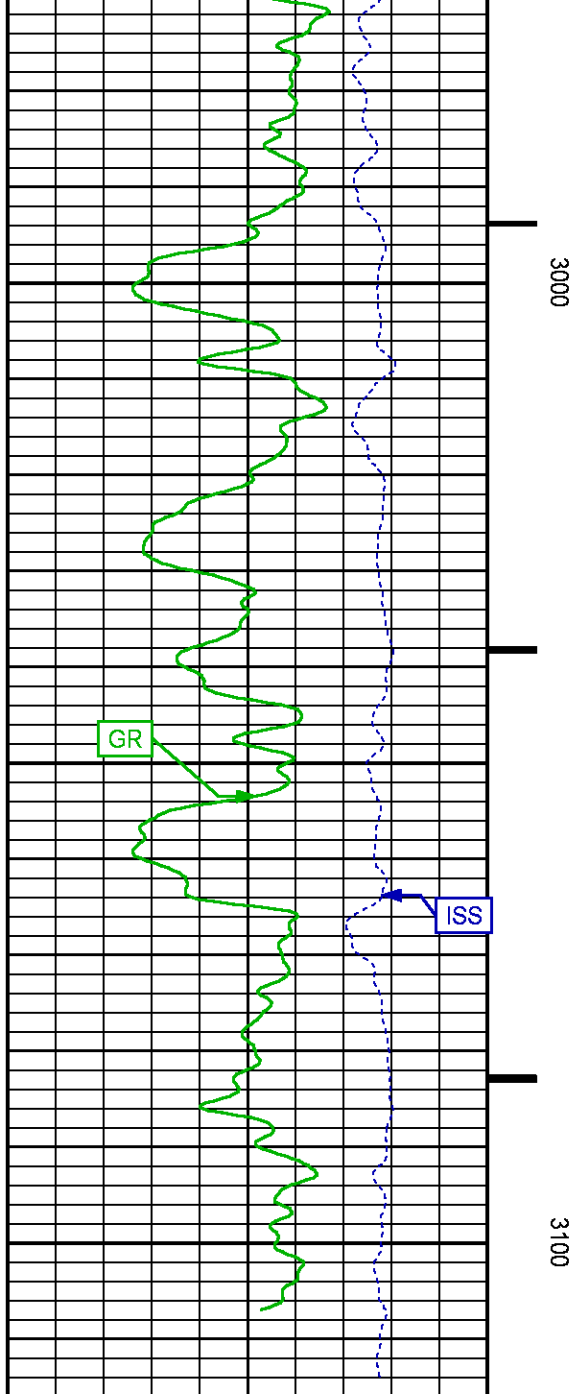
2680



2800

2900





MAIN PASS PNC-3D MODE

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

Updates: 1 Patches: 9

Plotted: Mon Aug 28 18:04:07 2017

PARAMETER AND FILTER SUMMARY REPORT

FILE: /dat1a/LARAMIE_BRUTON_19_02W/RPM3D02.prm
 LOGGING MODE: DEPTH DIRECTION: UP
 TOP DEPTH: 4199.750 ft BOTTOM DEPTH: 7913.250 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	" "
	CASING SIZE	4.50	in	" "
	MATRIX	SANDSTONE		" "
	CORRECTION BUFFER	11		" "

CURVE DESCRIPTION REPORT

CURVE NAME	CREATION DATE	CURVE DESCRIPTION
F1:CCL	Aug 28 14:05:08 2017	CASING COLLAR LOCATOR
F1:GR	Aug 28 14:05:08 2017	GAMMA RAY
F1:ISS	Aug 28 14:05:08 2017	INELASTIC SHORT SPACE COUNT RATE
F1:LS	Aug 28 14:05:08 2017	LONG SPACE COUNT RATE
F1:RATO	Aug 28 14:05:08 2017	SHORT/LONG SPACE COUNT RATE RATIO
F1:RICS	Aug 28 14:05:08 2017	SHORT SPACE INELASTIC TO CAPTURE COUNT RATE RATIO (ISS/CSS)
F1:SGFC	Aug 28 14:05:08 2017	CORRECTED FORMATION SIGMA
F1:SS	Aug 28 14:05:08 2017	SHORT SPACE COUNT RATE

CURVE MEASURE POINT OFFSET

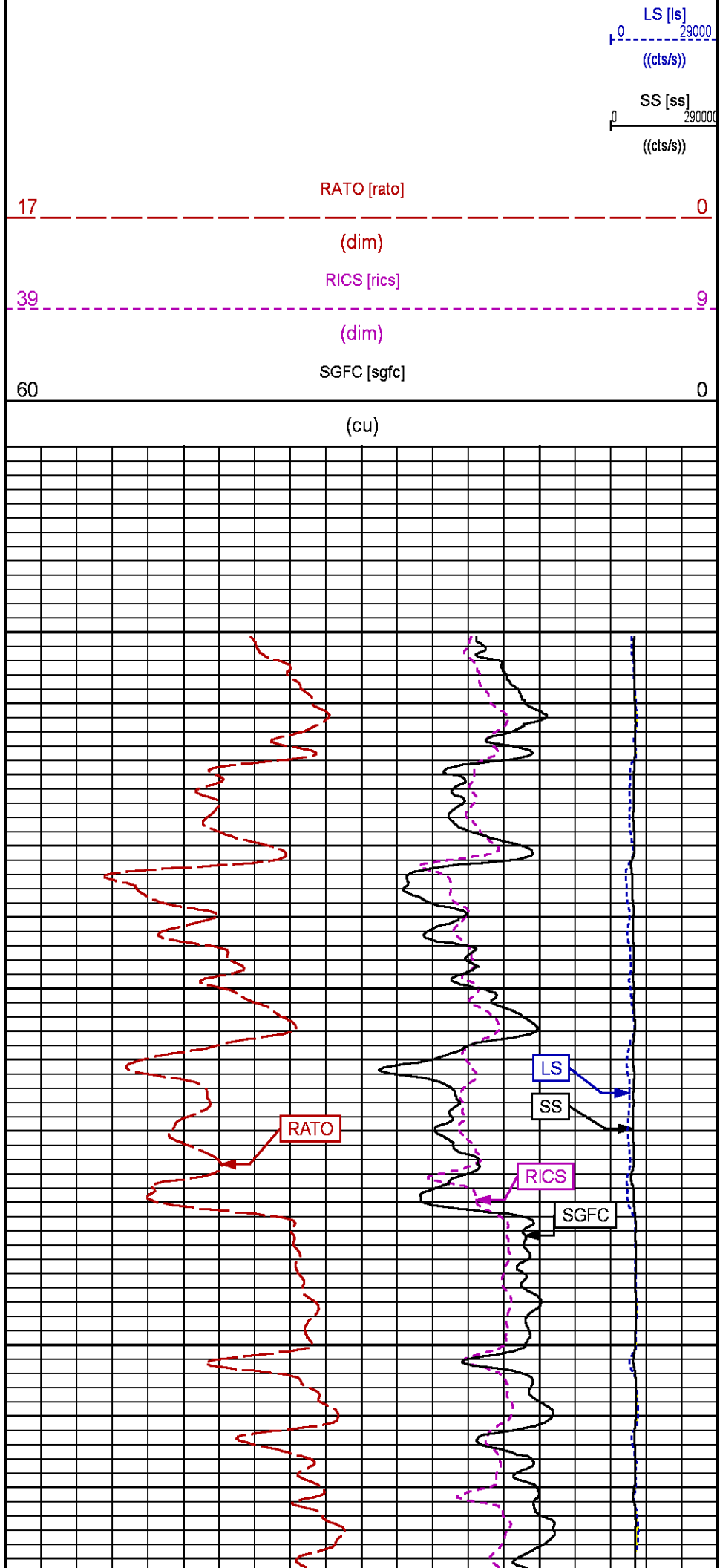
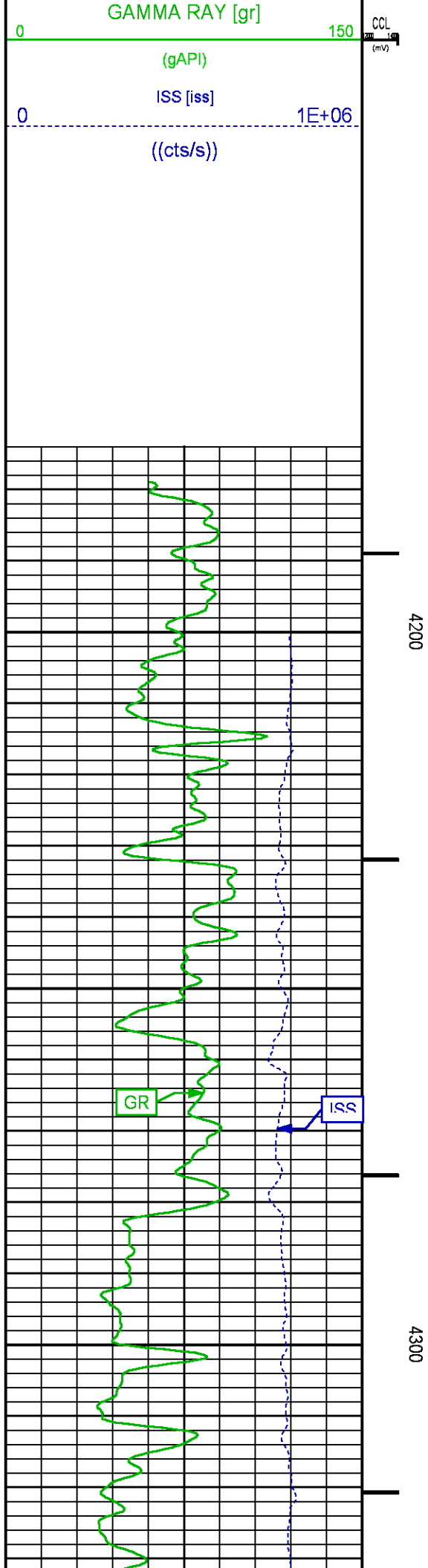
CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
CCL	26.00	ISS	12.75	RATO	12.75	SGFC	12.75
GR	23.00	LS	12.75	RICS	12.75	SS	12.75

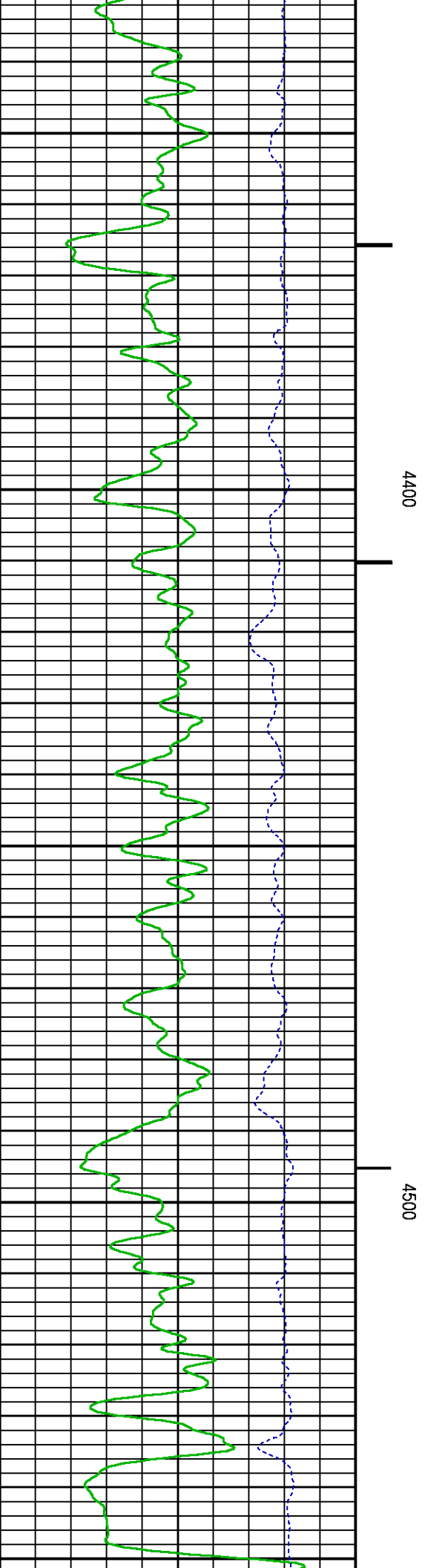
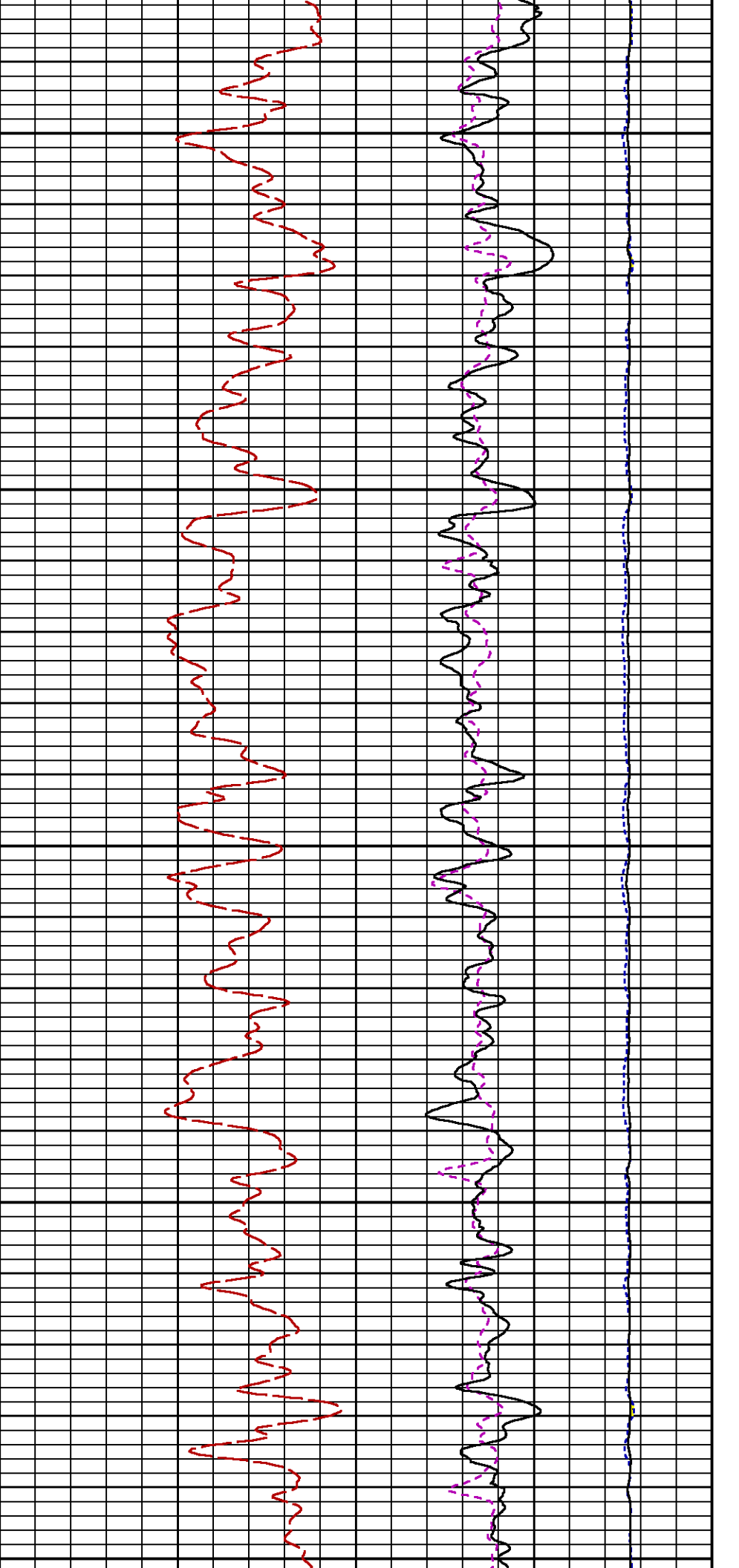
Presentation : cpu100:/dat1a/LARAMIE_BRUTON_19_02W/BRUTON_19_02W_RPM_MAIN.fvpdf [5"/100' Scale]
 Plot Interval : 4174.75 - 7904.5 Feet

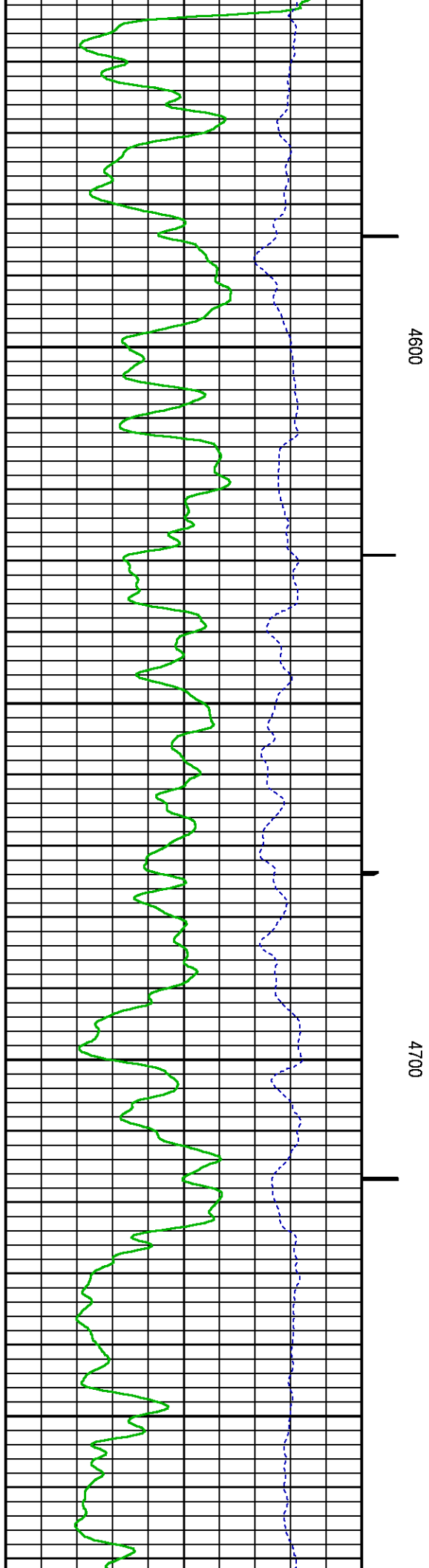
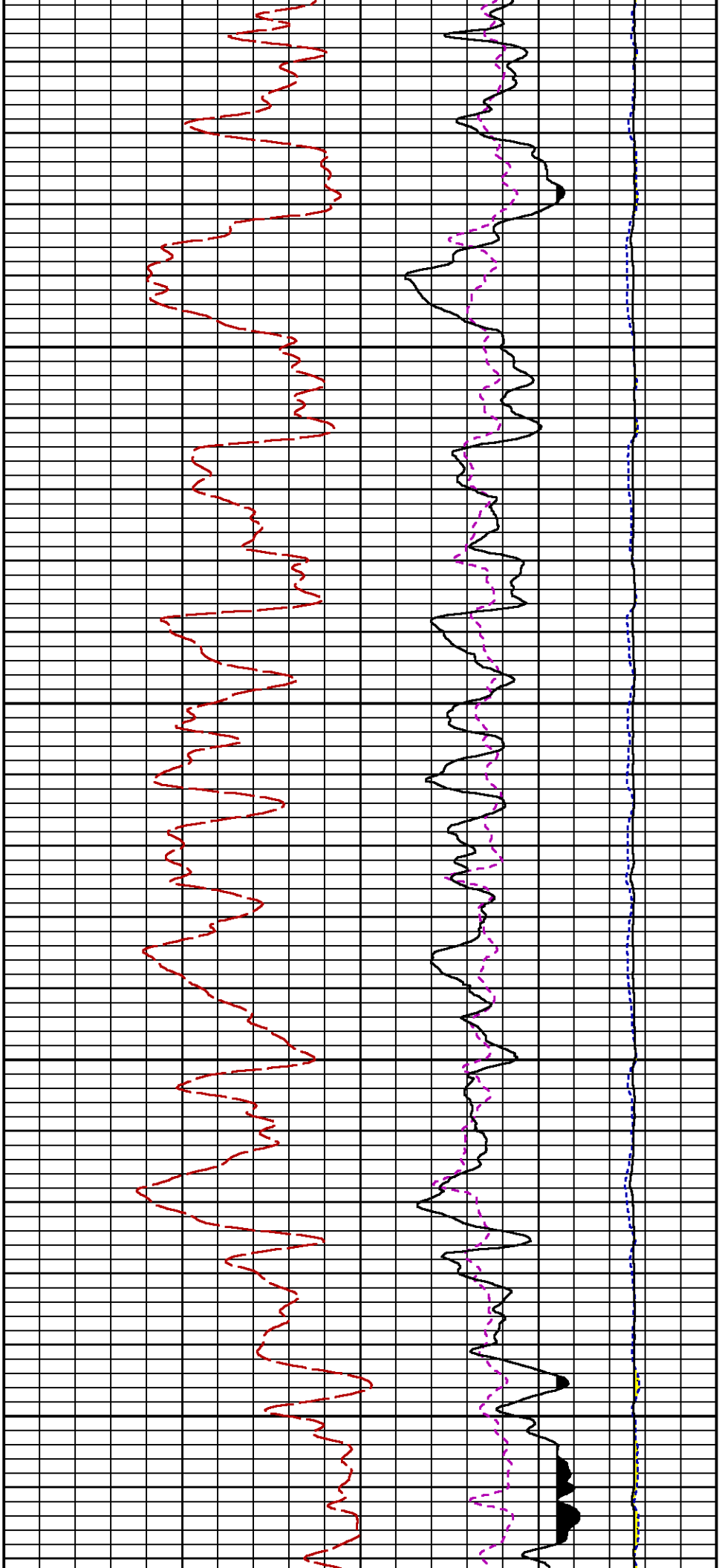
Data File 1 : F1 : cpu100:/dat1a/LARAMIE_BRUTON_19_02W/BURTON_19_02W_RPM_MAIN.xtf
 Created On : Aug 28 14:05:08 2017
 Company : LARAMIE ENERGY
 Well : BRUTON 19-02W
 Field : VEGA
 File Interval : 4174 - 7913.25 Feet
 OCT : RPM3D

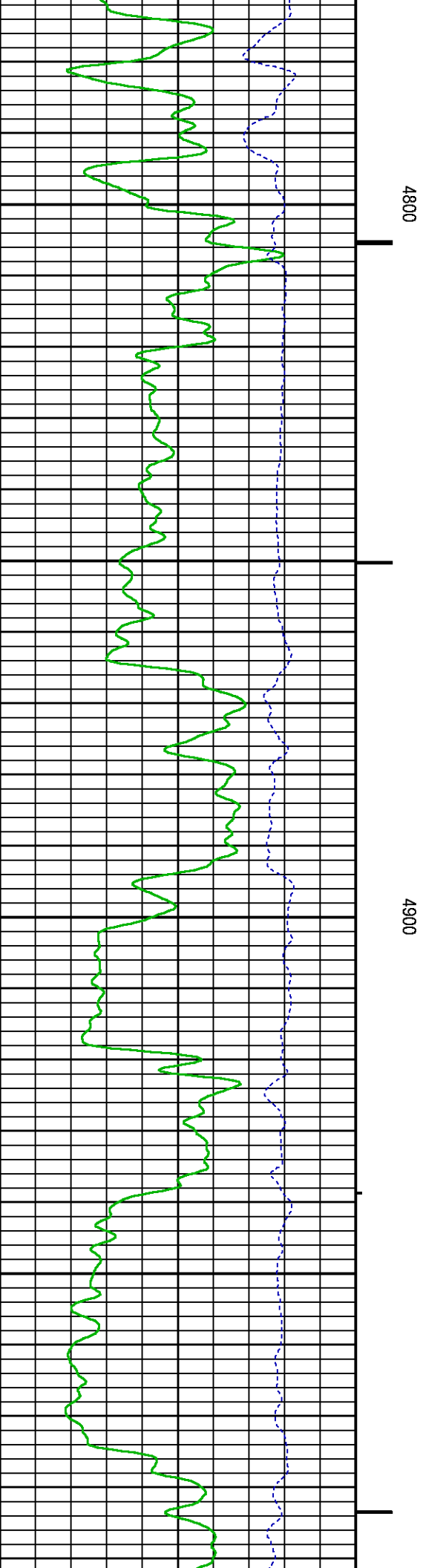
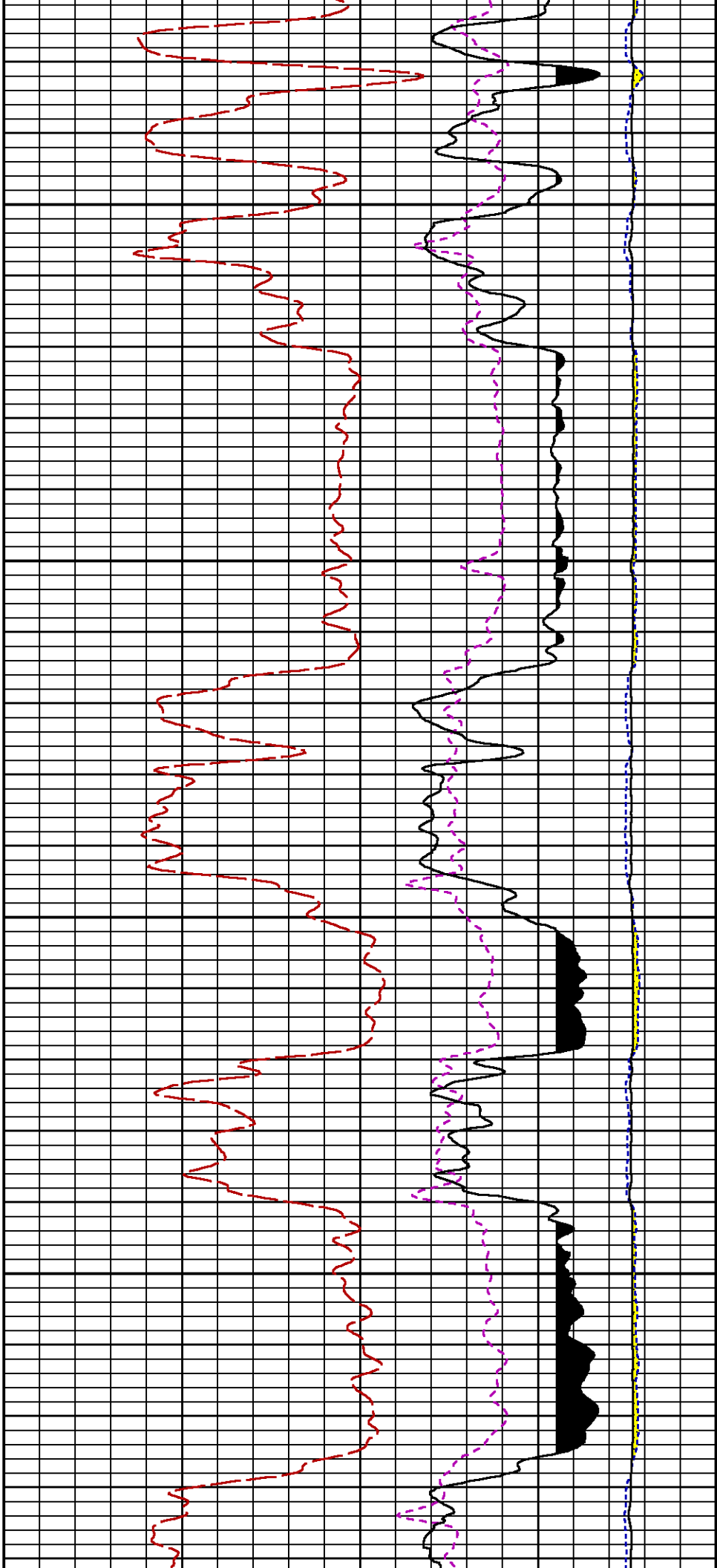
GR BACKUP

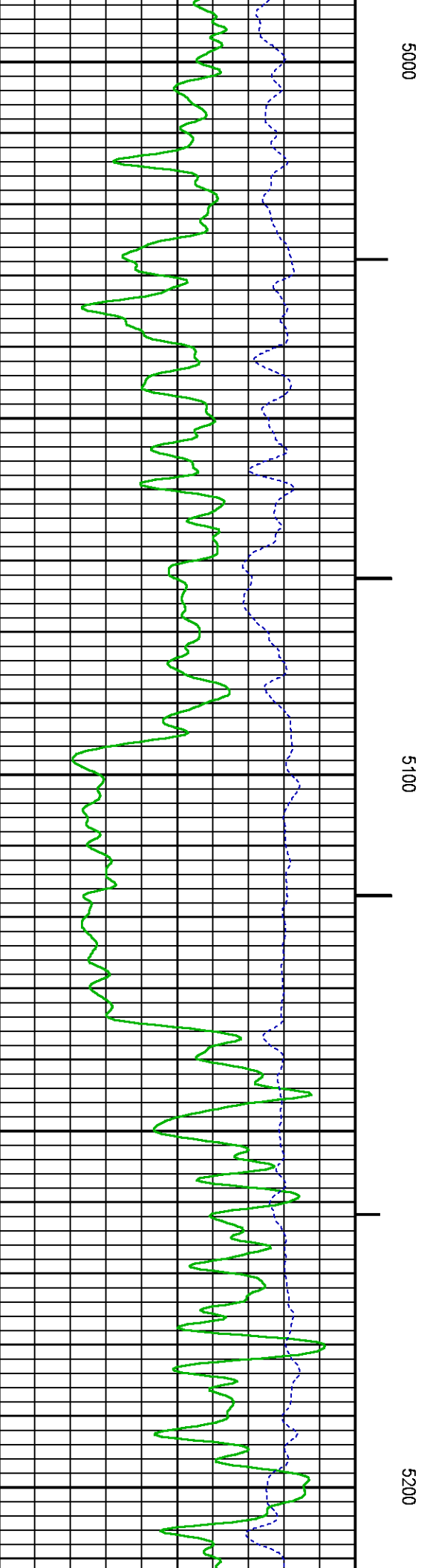
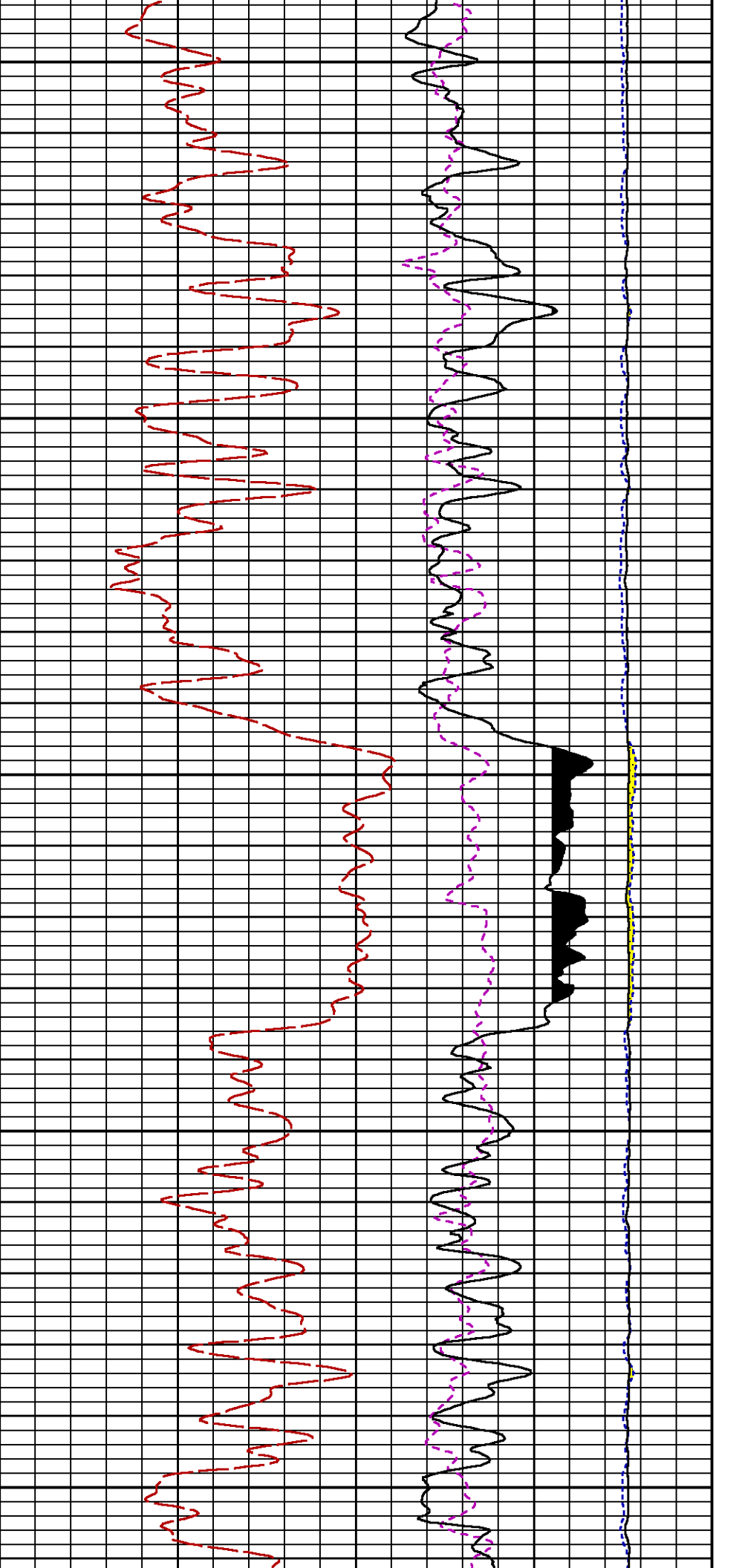
FEET

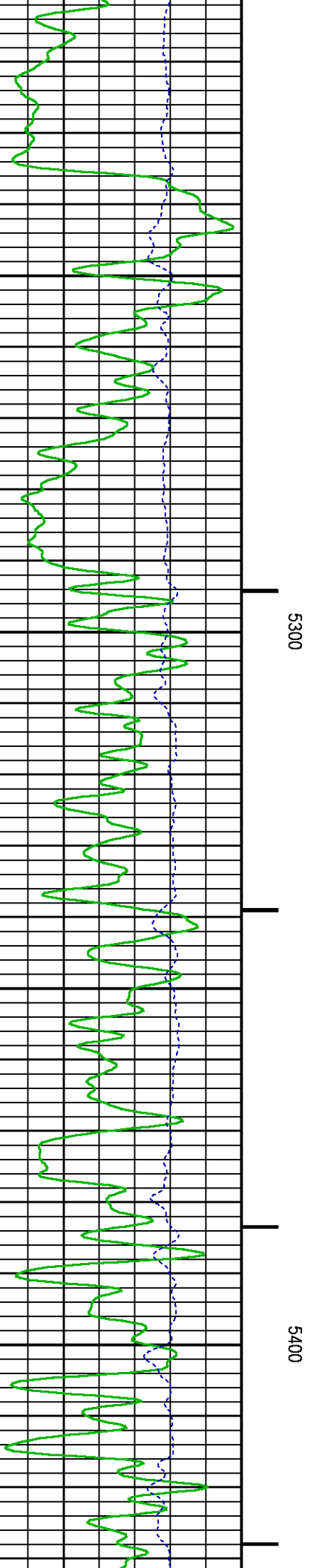
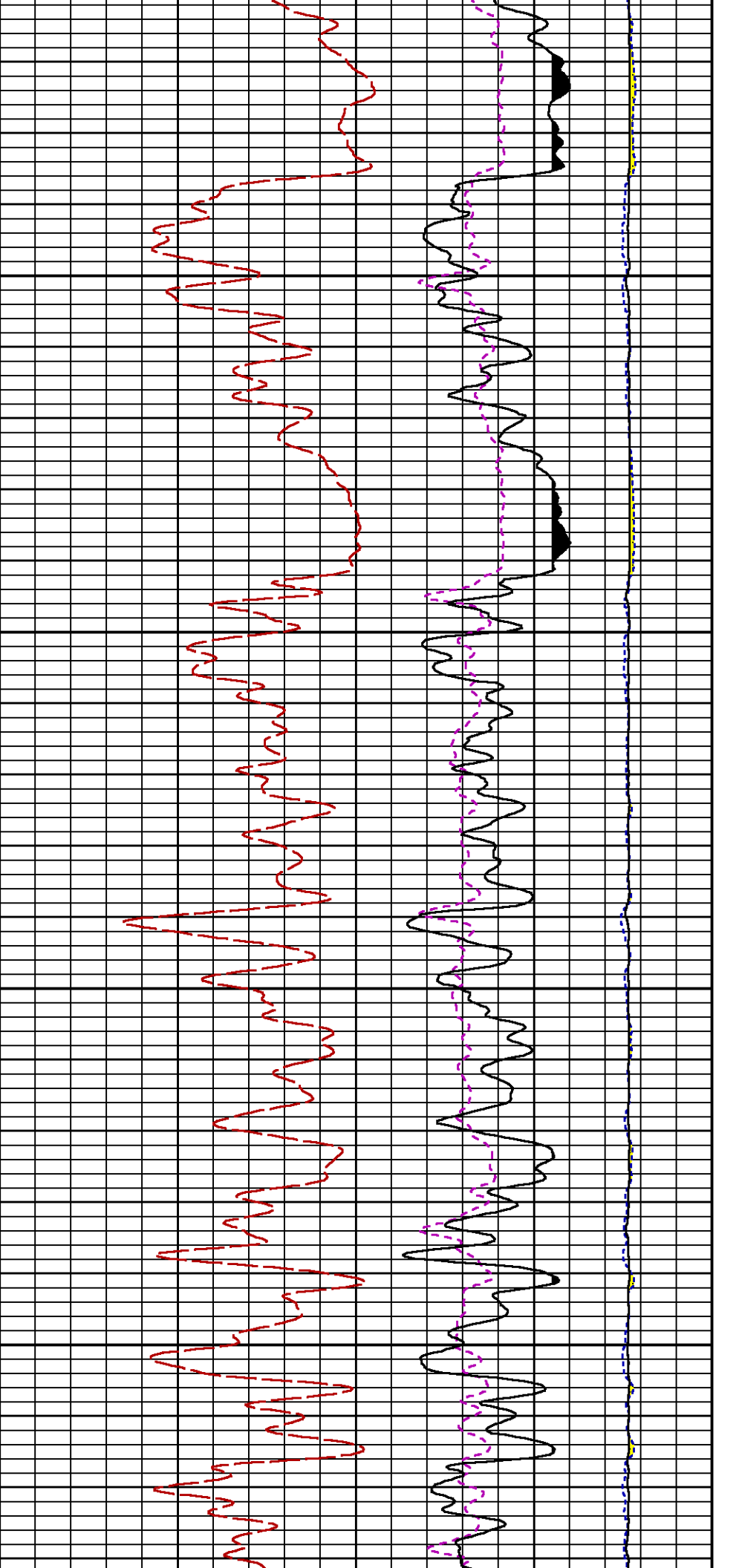


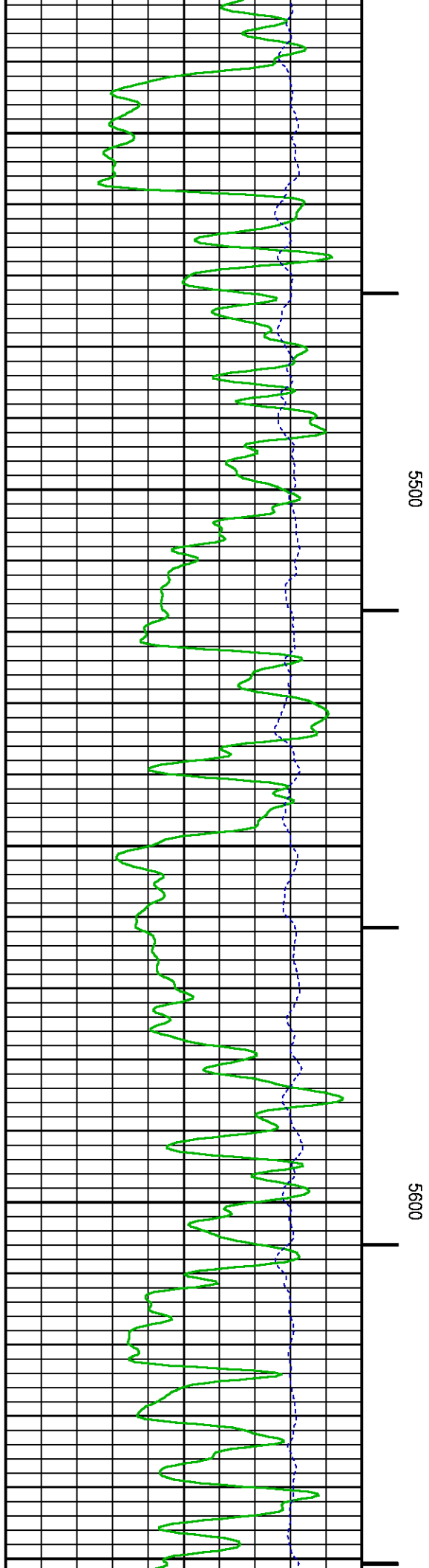
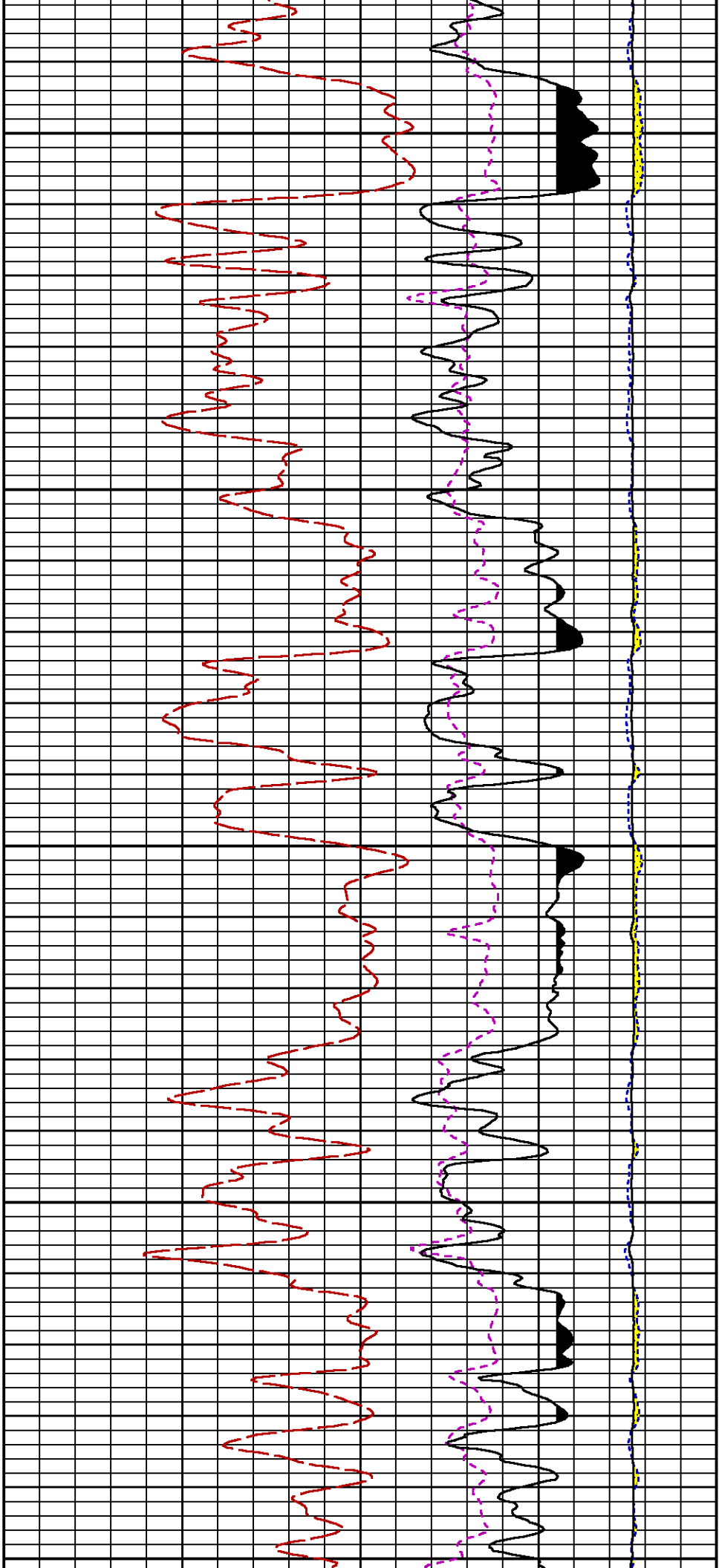


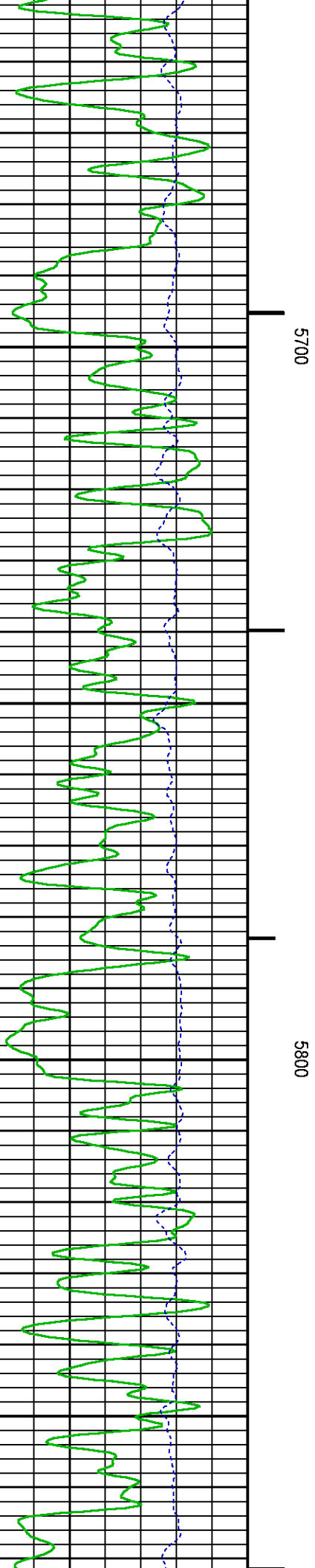
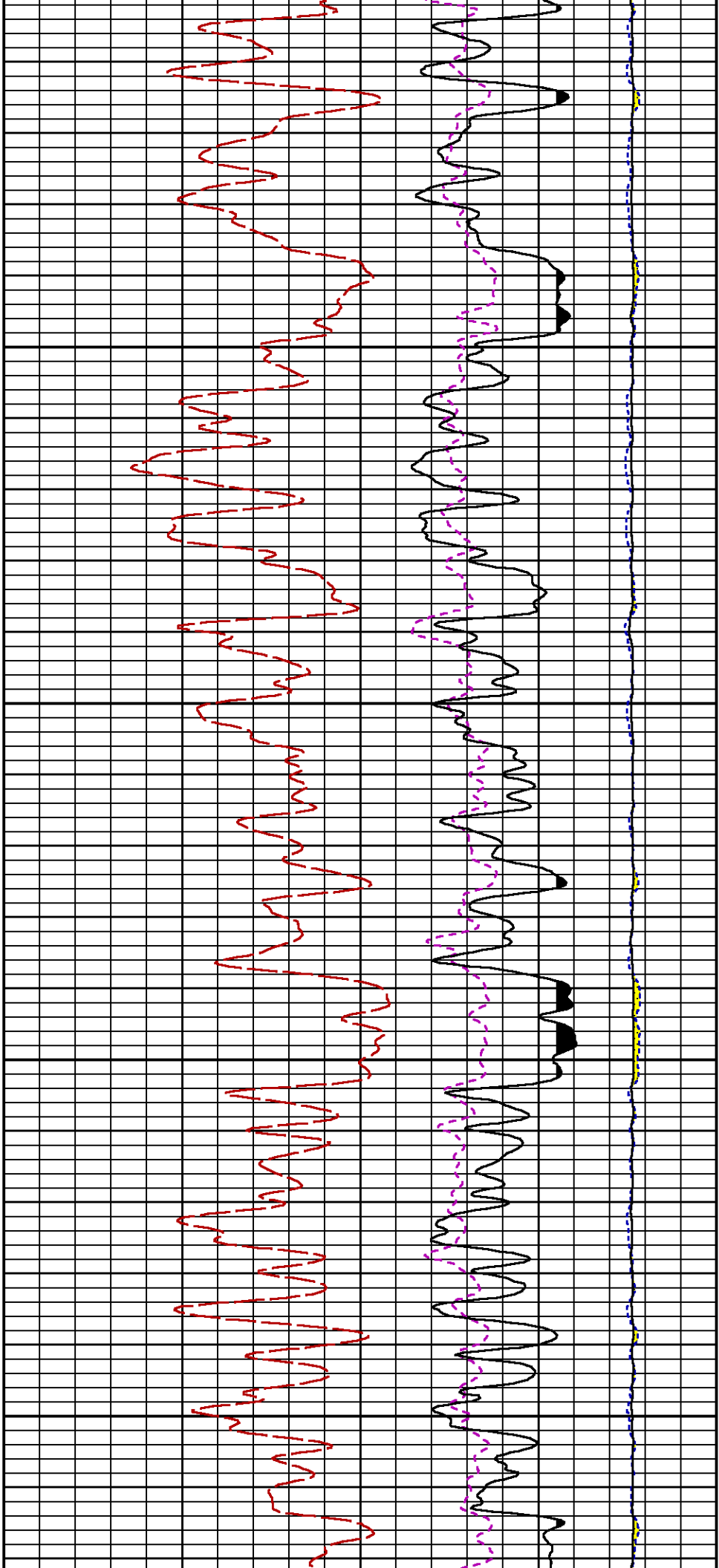


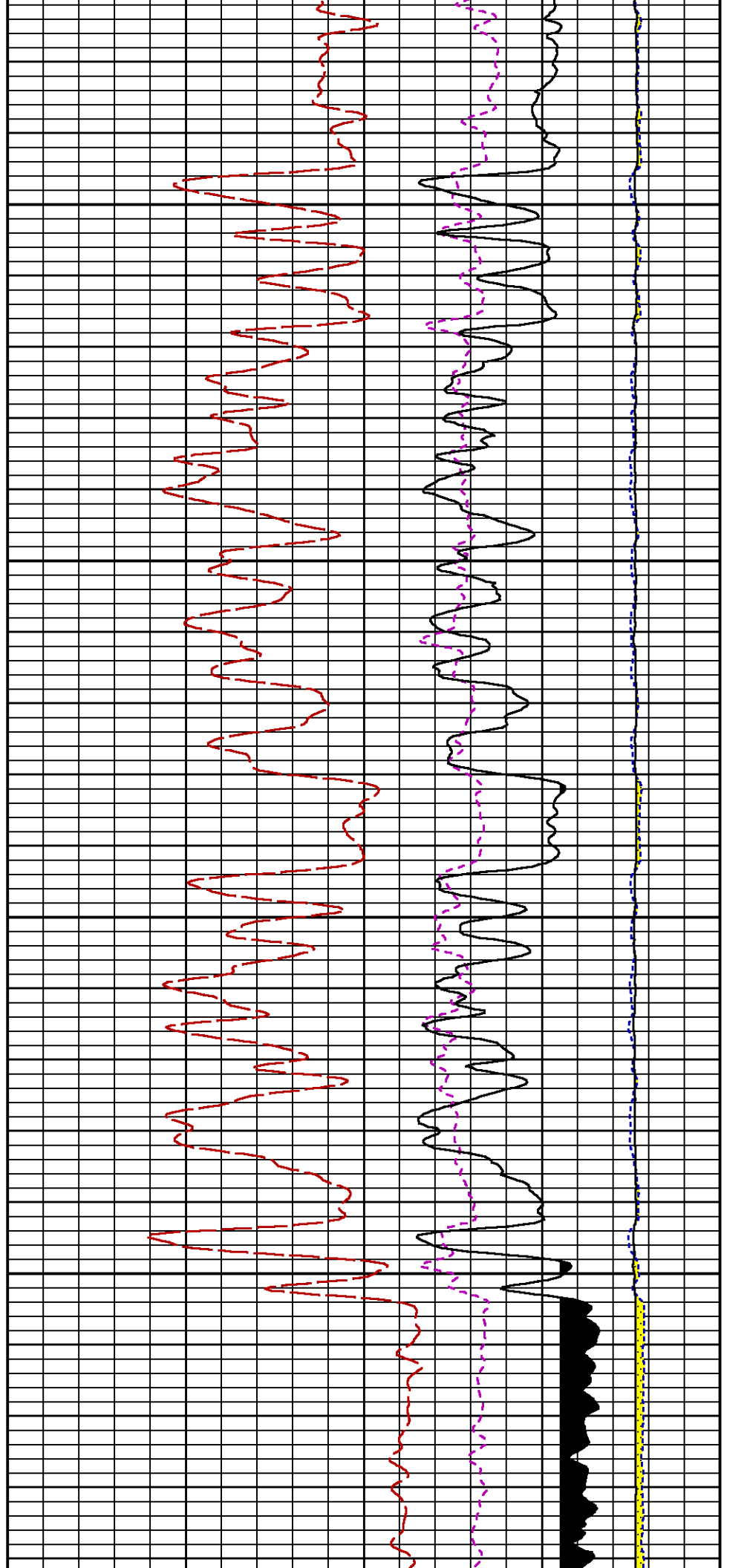
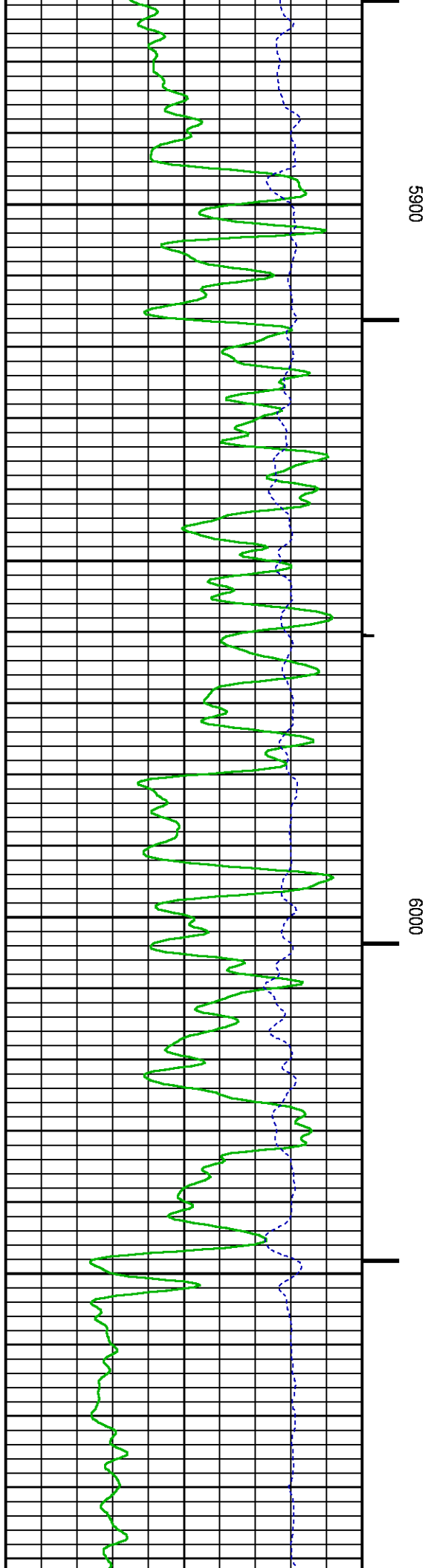


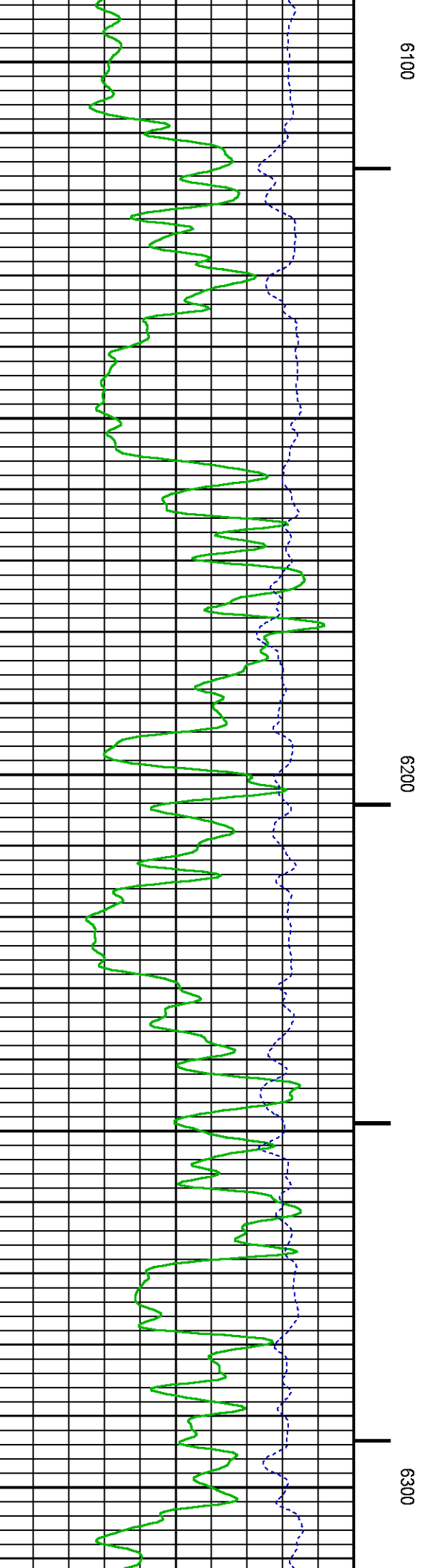
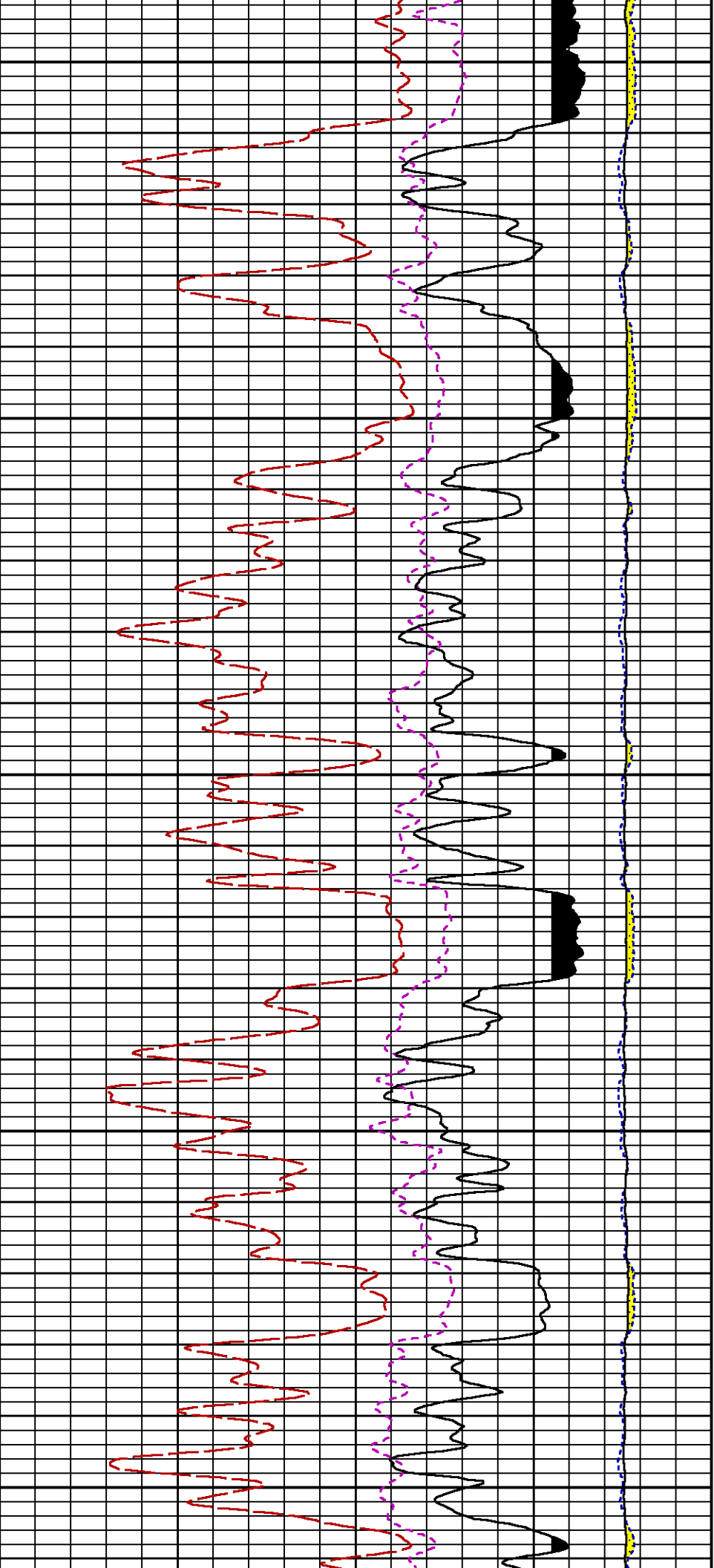


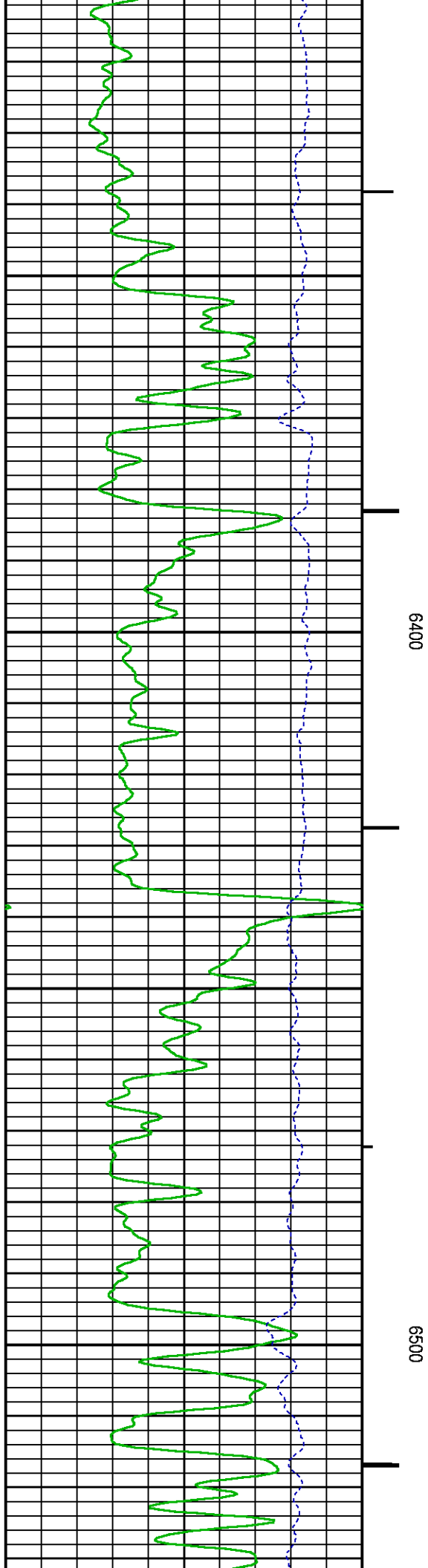
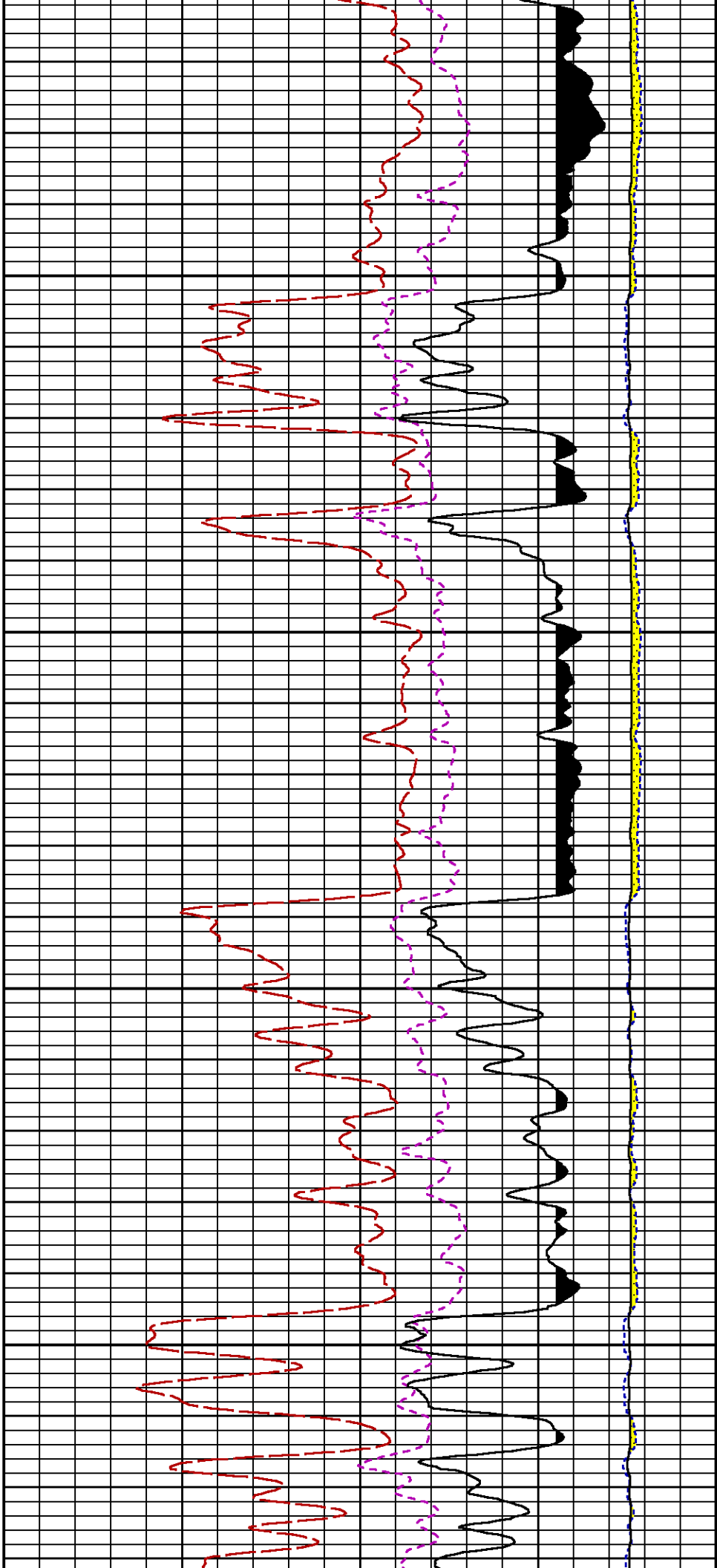


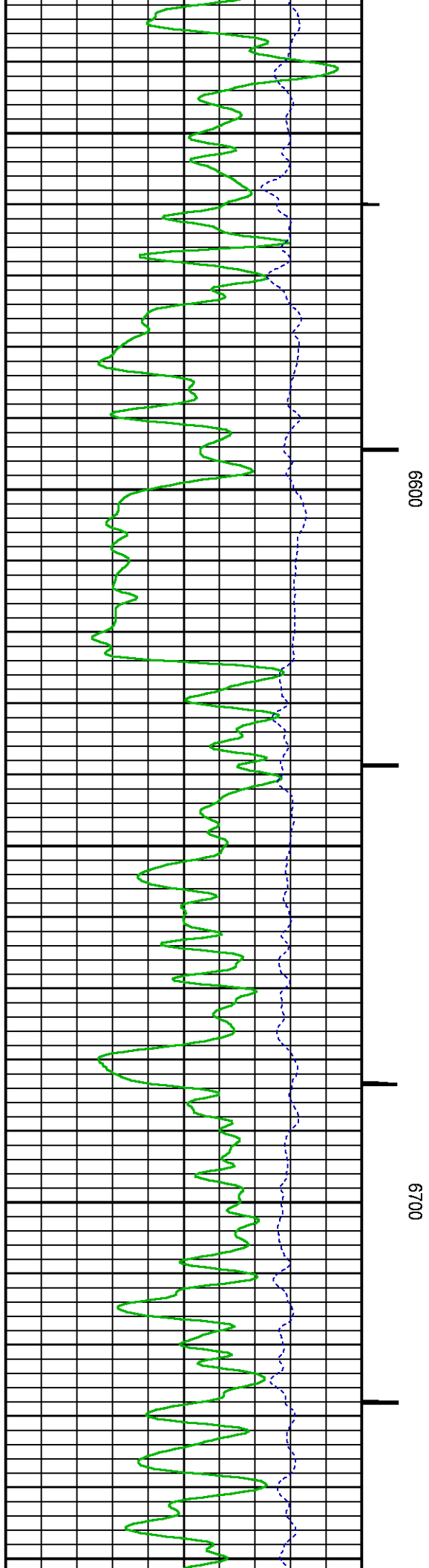
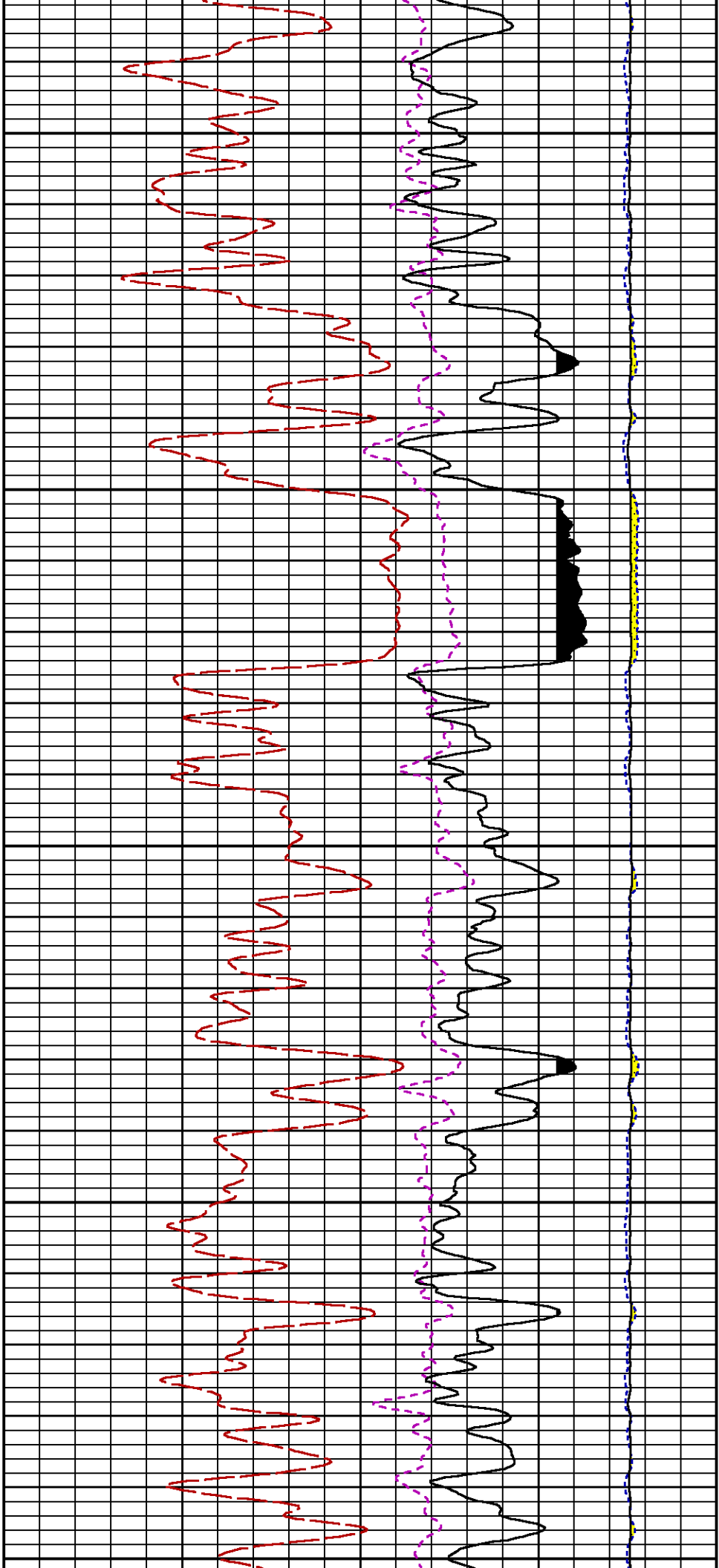


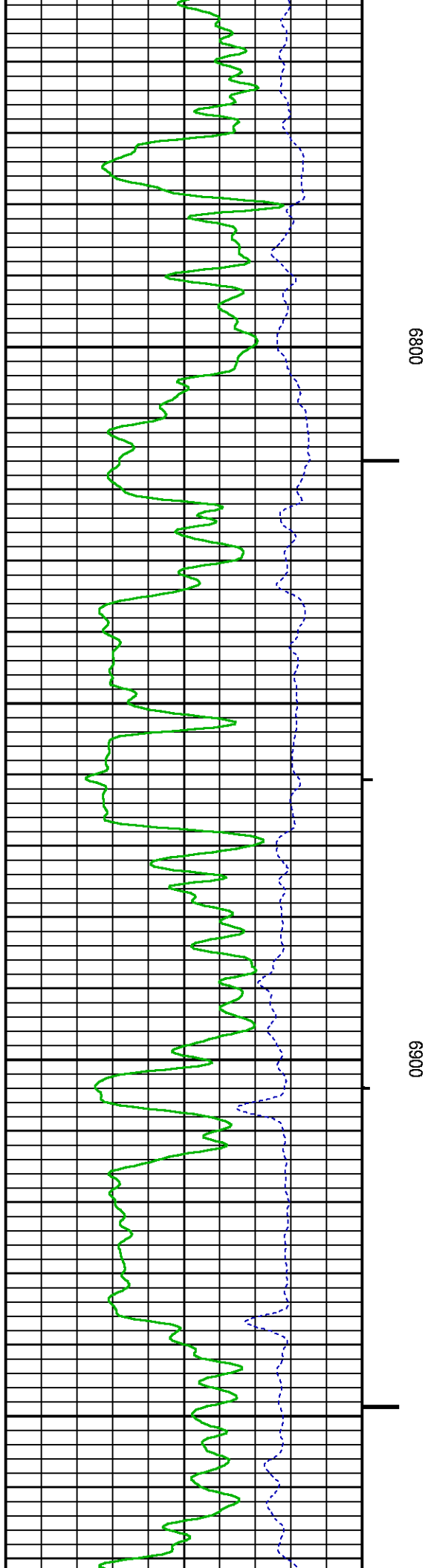
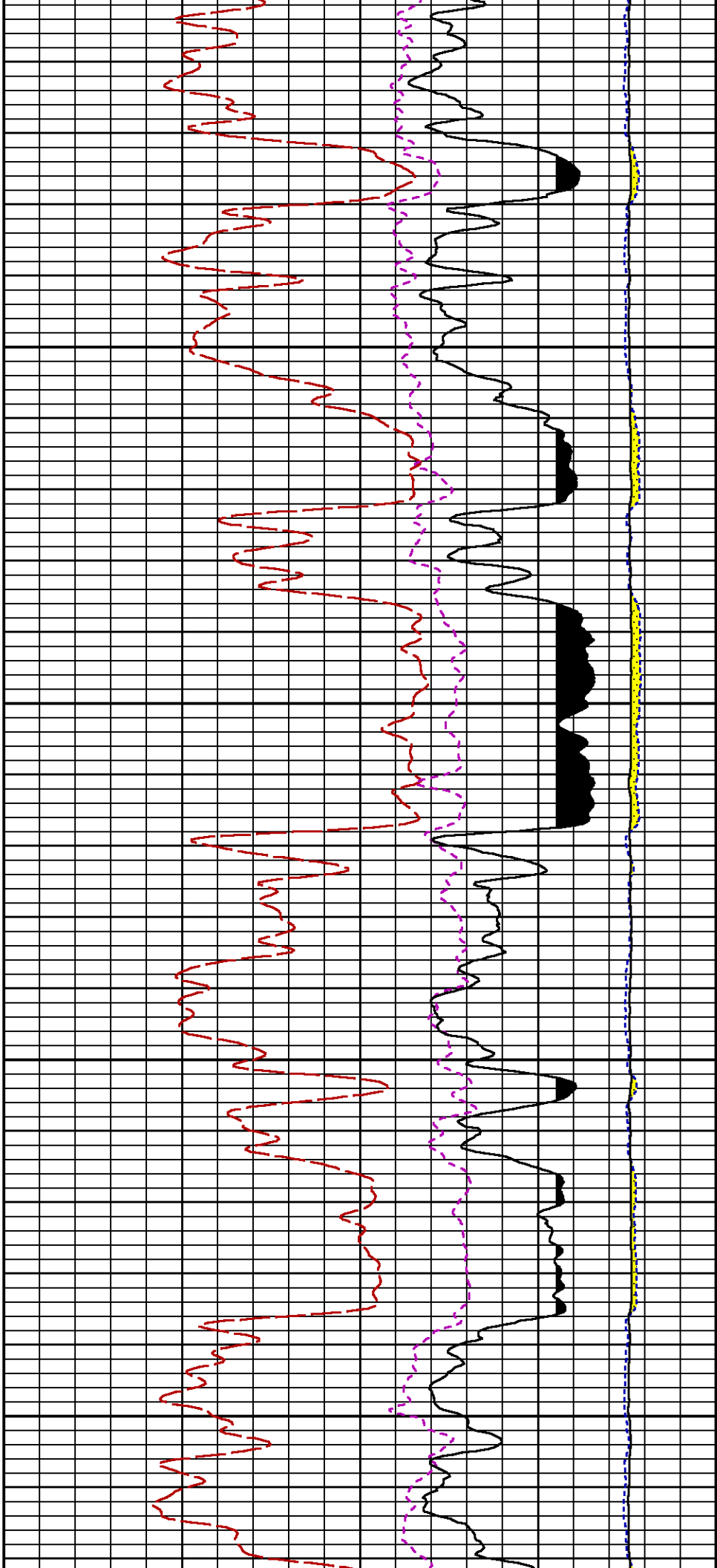


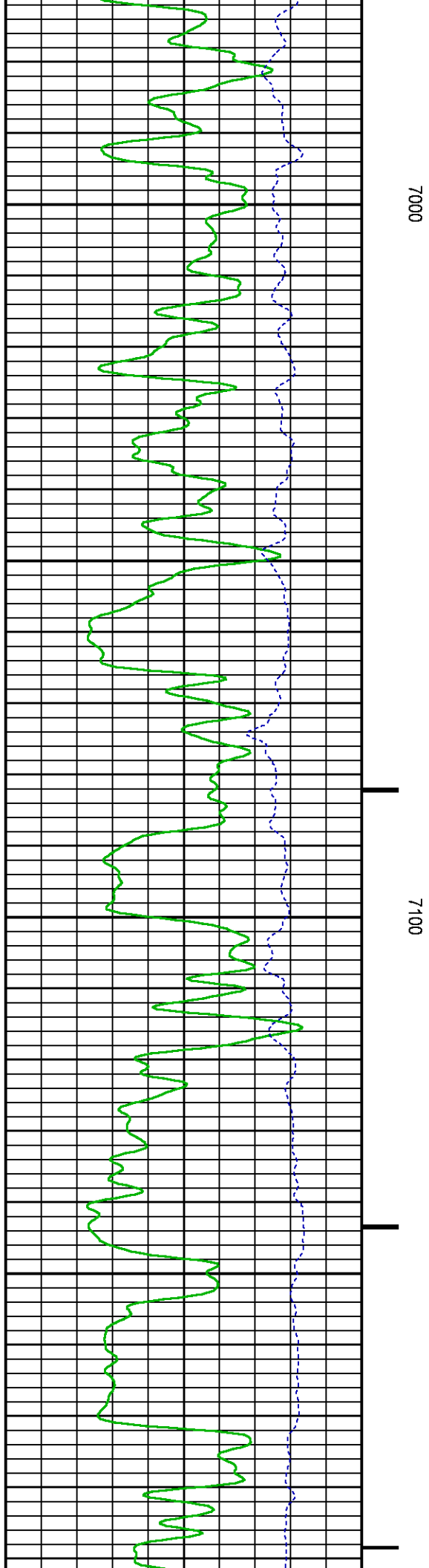
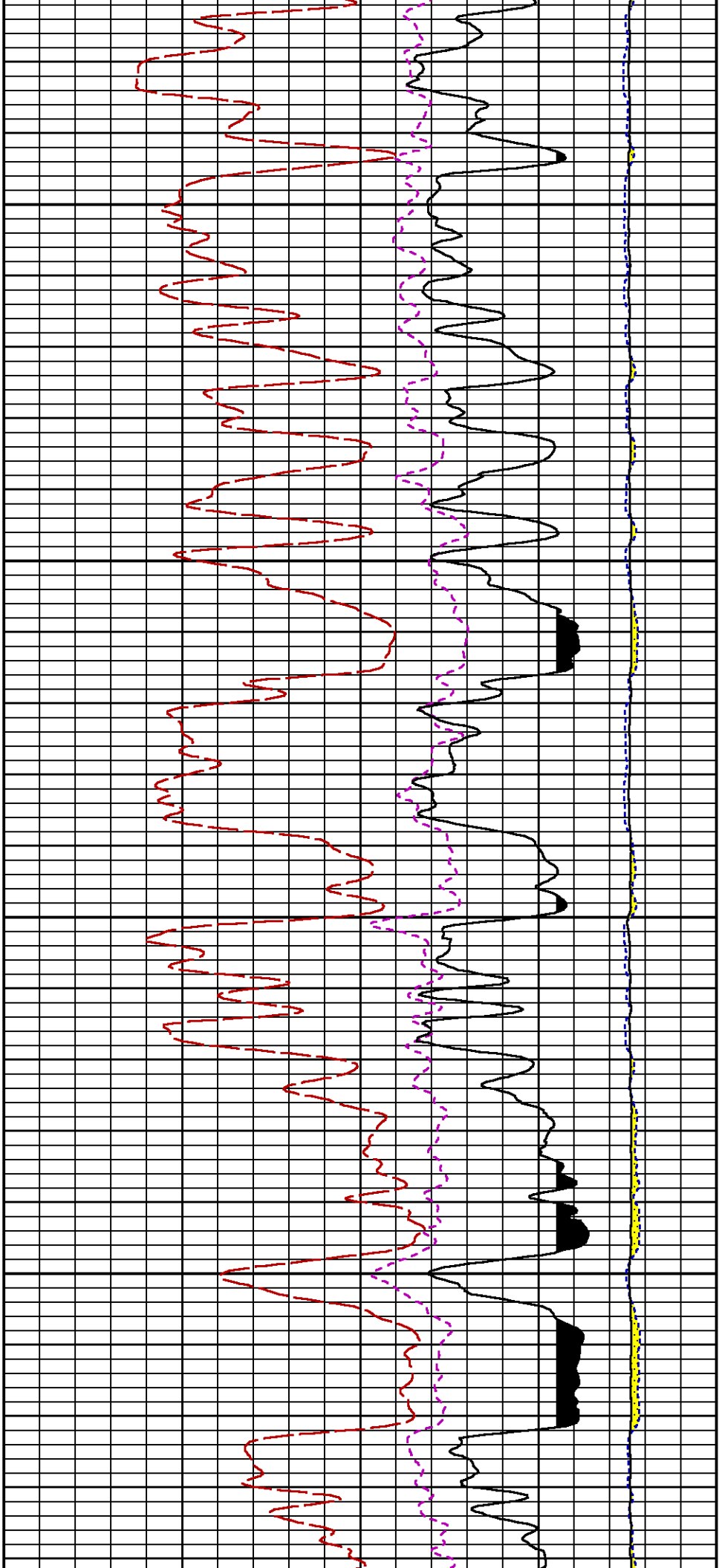


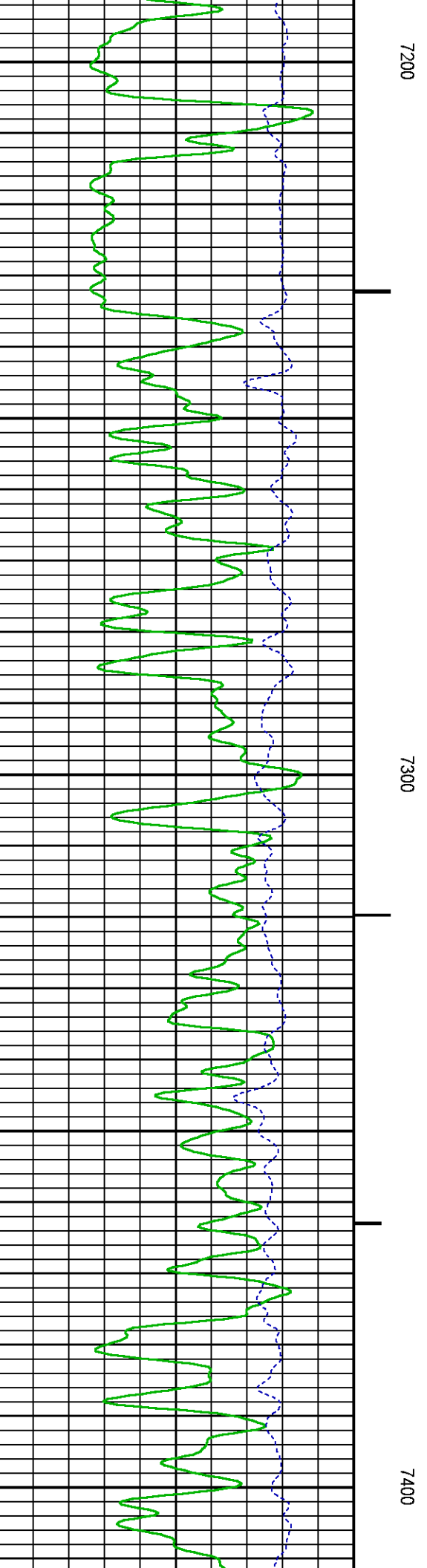
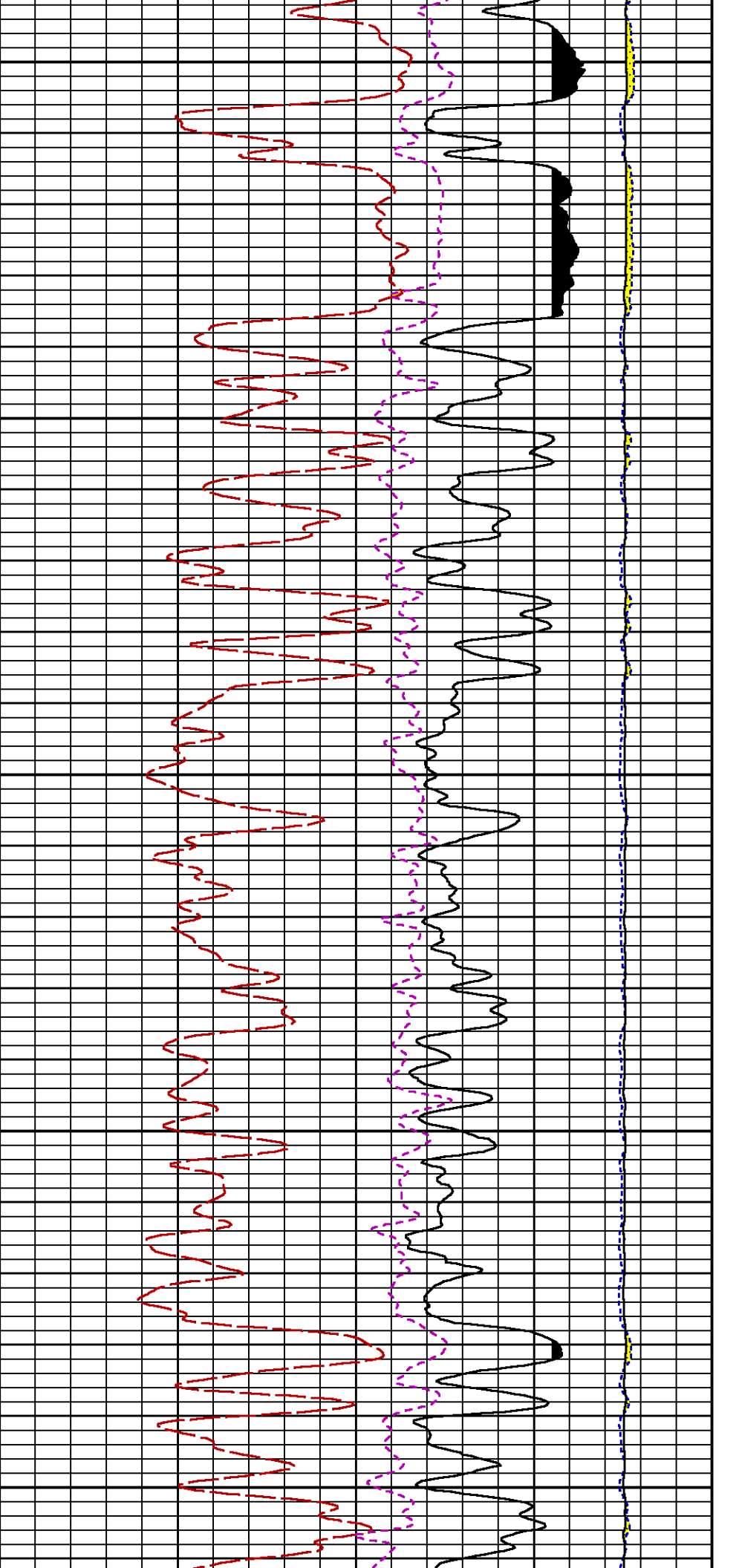


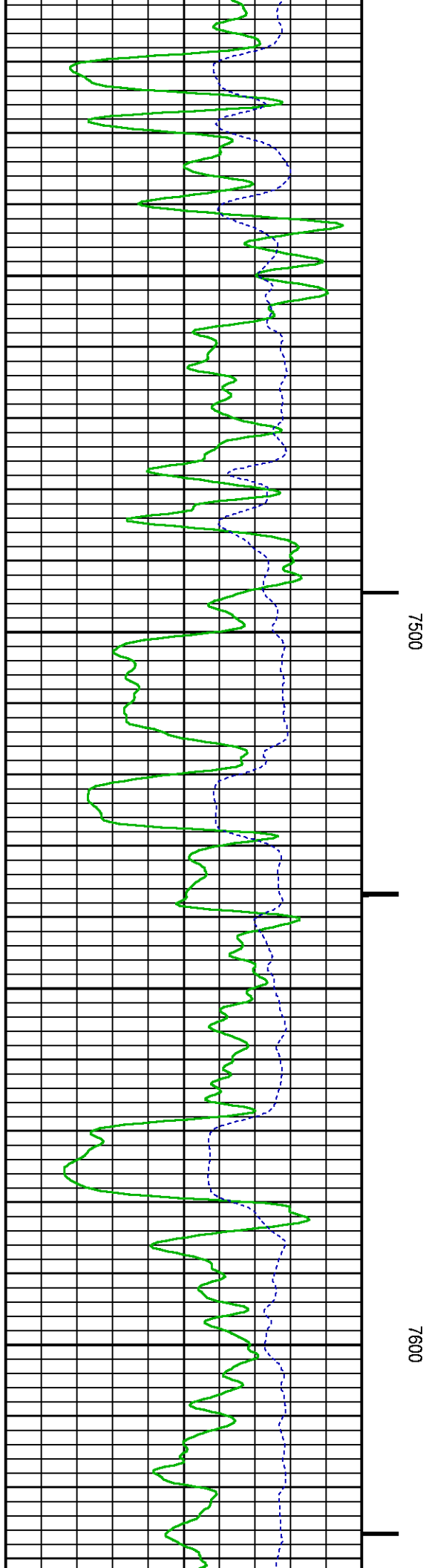
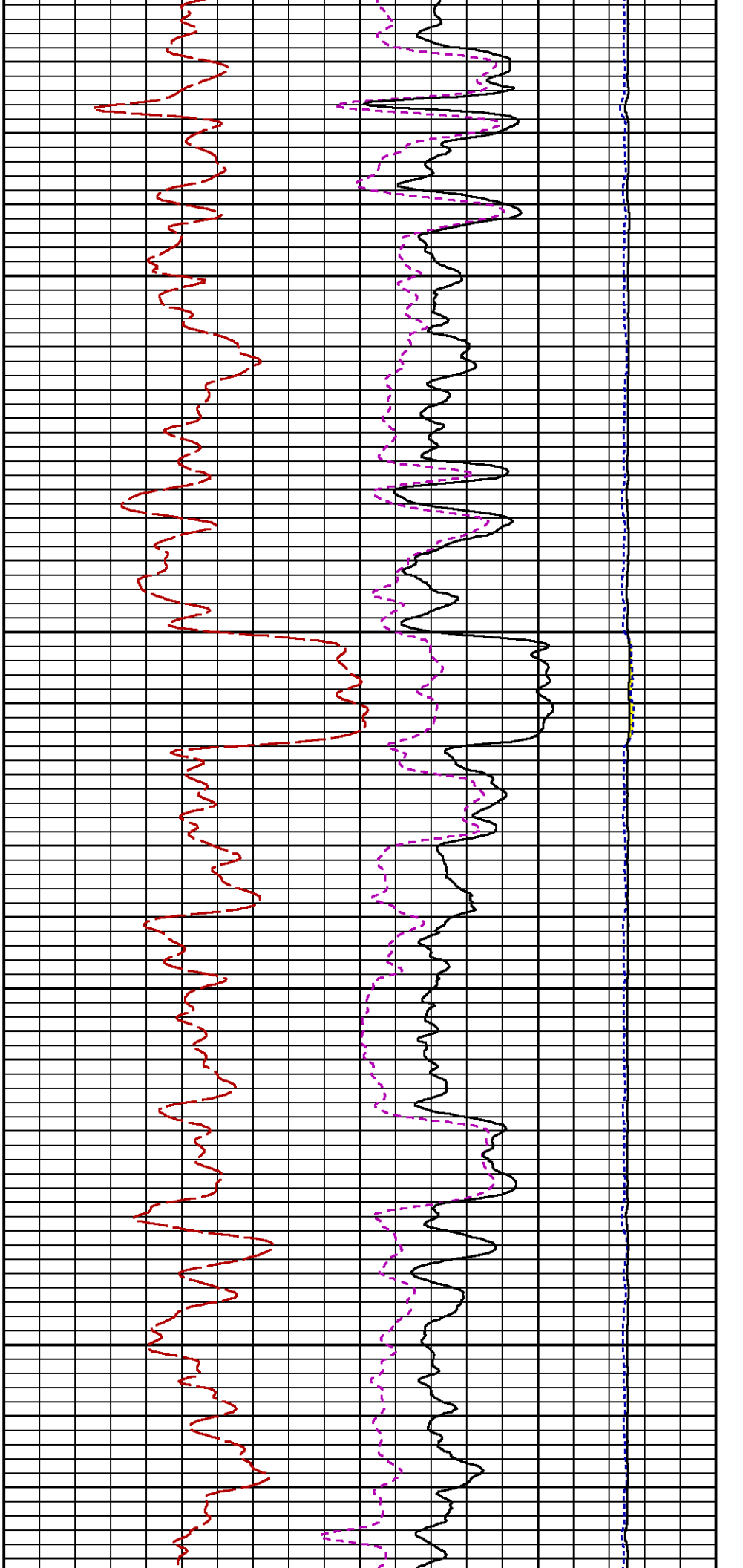


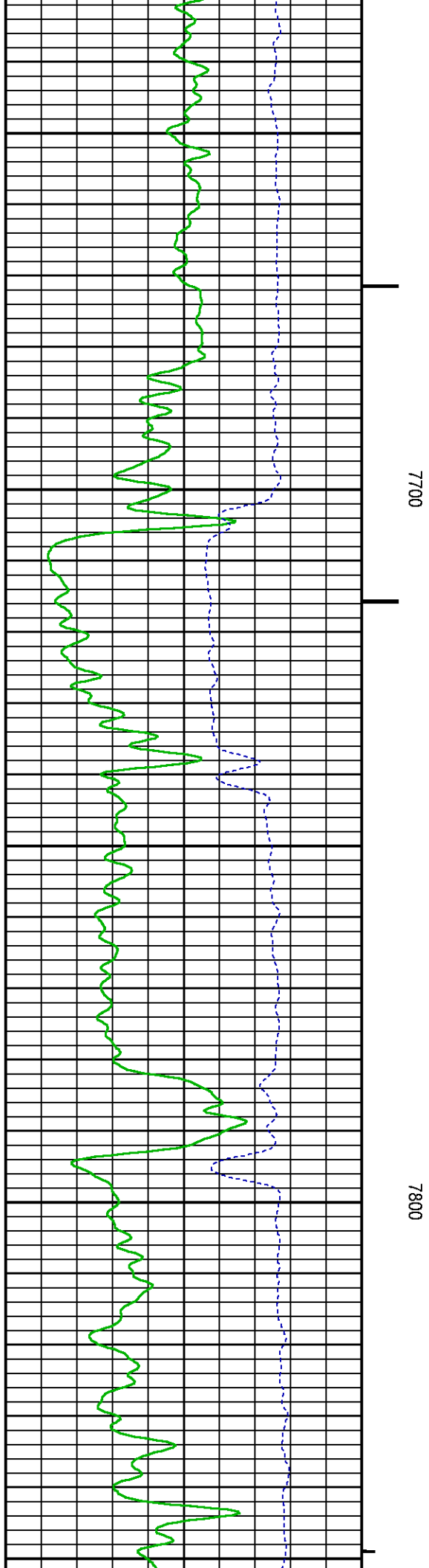
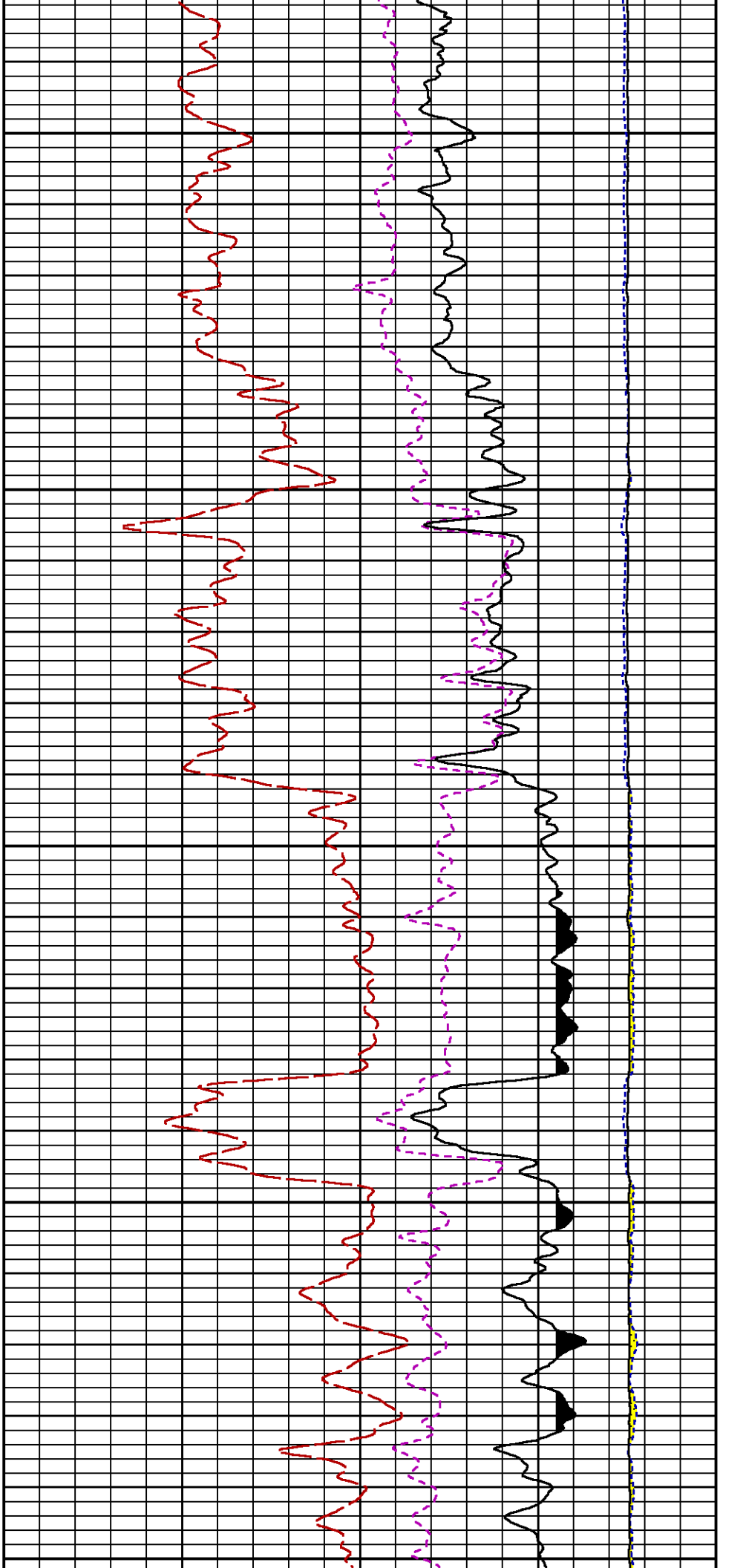


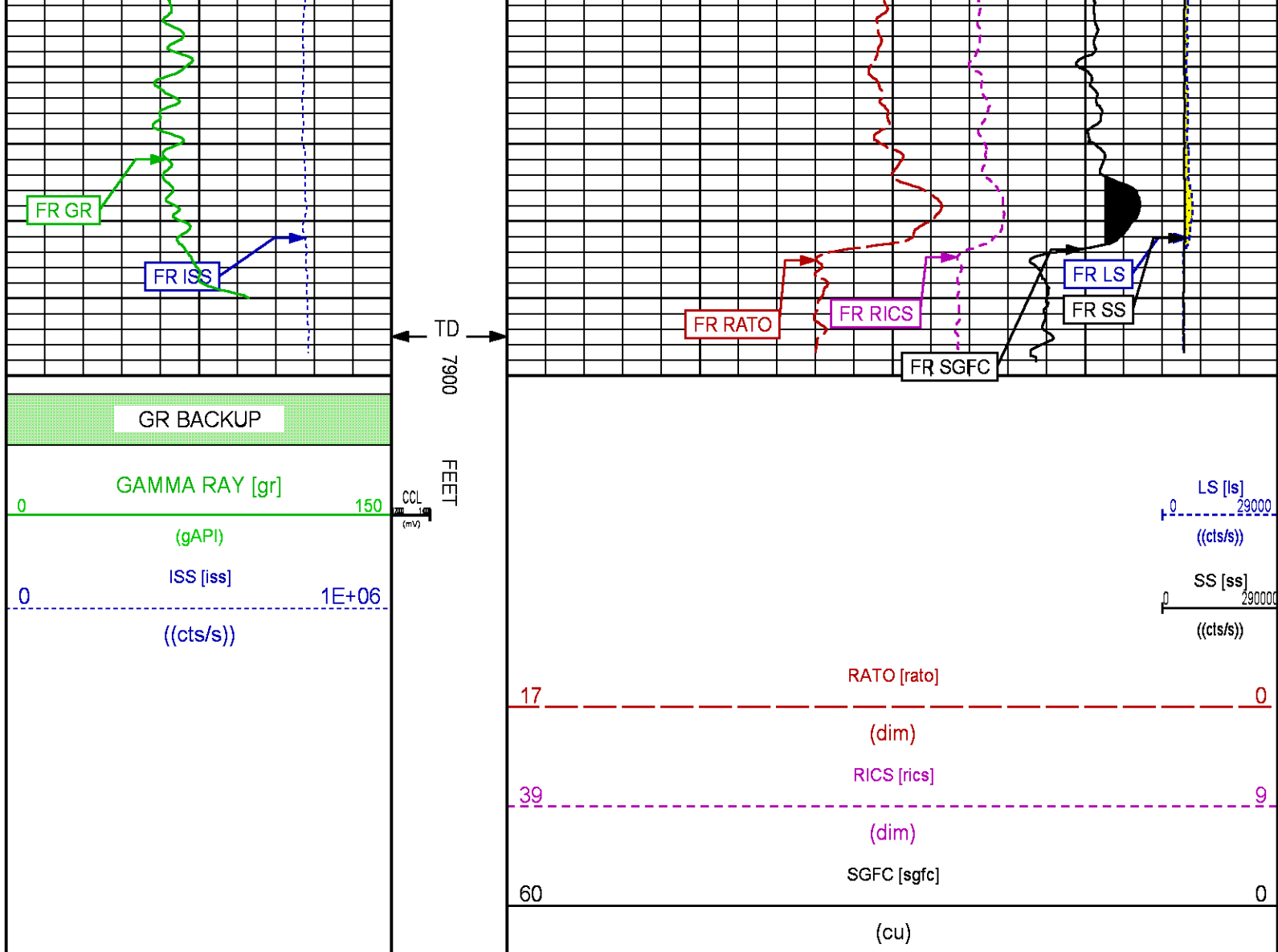












REPEAT PASS PNC-3D MODE

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

Updates: 1 Patches: 9

Plotted: Mon Aug 28 14:06:00 2017

PARAMETER AND FILTER SUMMARY REPORT

FILE: /dat1a/LARAMIE_BRUTON_19_02W/RPM3D01.prm
 LOGGING MODE: DEPTH DIRECTION: UP
 TOP DEPTH: 7316.500 ft BOTTOM DEPTH: 7539.250 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)
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PNC Parameters	BOREHOLE CONTENTS	FLUID	TOP	BOTTOM
	OPEN/CASED HOLE	CASED HOLE	"	"
	BOREHOLE SIZE	7.88	in	"
	CASING SIZE	4.50	in	"
	MATRIX	SANDSTONE	"	"
	CORRECTION BUFFER	11	"	"

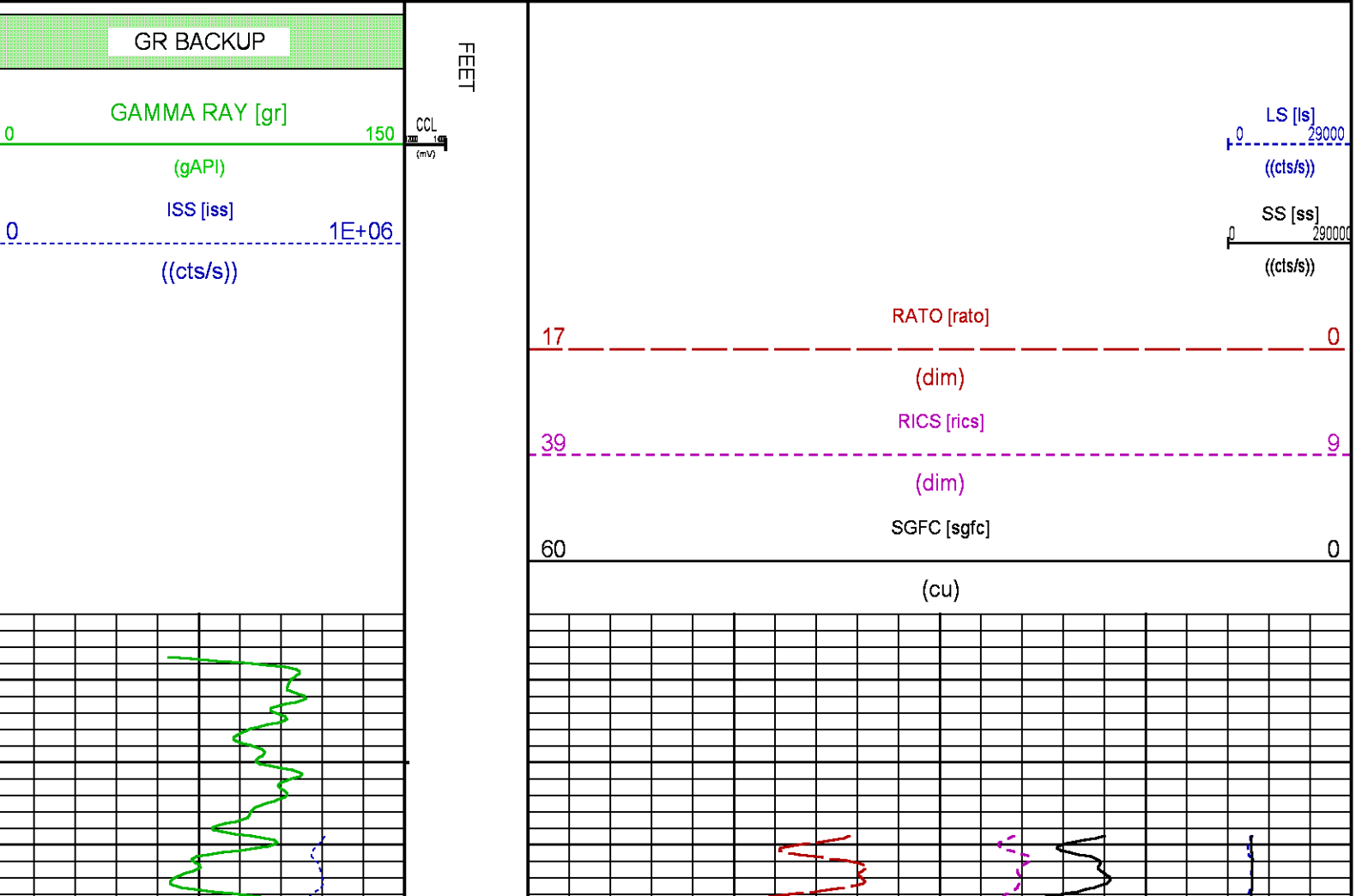
CURVE DESCRIPTION REPORT

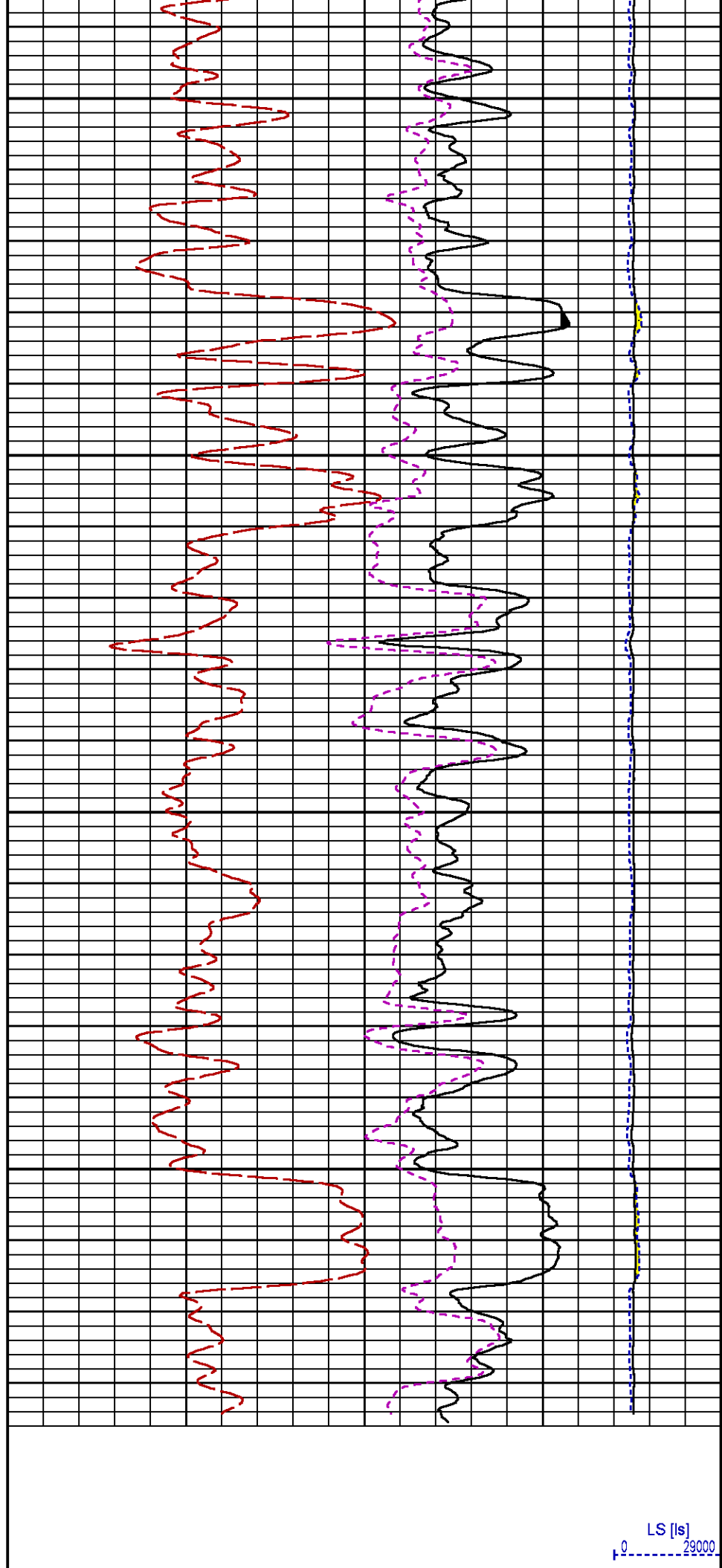
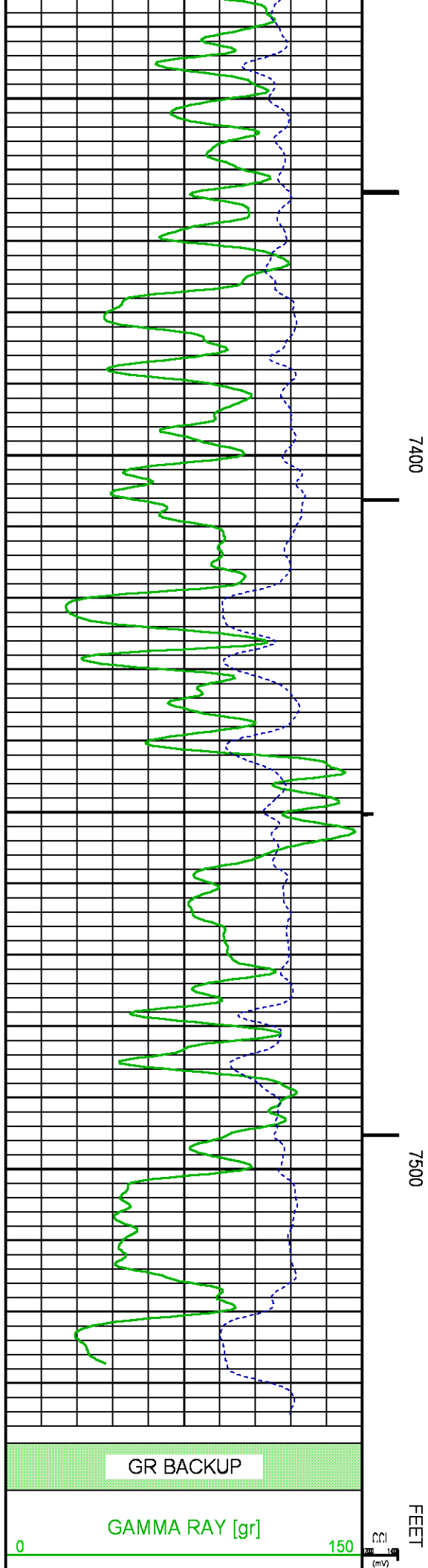
CURVE NAME	CREATION DATE	CURVE DESCRIPTION
F1:CCL	Aug 28 13:48:27 2017	CASING COLLAR LOCATOR
F1:GR	Aug 28 13:48:27 2017	GAMMA RAY
F1:ISS	Aug 28 13:48:27 2017	INELASTIC SHORT SPACE COUNT RATE
F1:LS	Aug 28 13:48:27 2017	LONG SPACE COUNT RATE
F1:RATO	Aug 28 13:48:27 2017	SHORT/LONG SPACE COUNT RATE RATIO
F1:RICS	Aug 28 13:48:27 2017	SHORT SPACE INELASTIC TO CAPTURE COUNT RATE RATIO (ISS/CSS)
F1:SGFC	Aug 28 13:48:27 2017	CORRECTED FORMATION SIGMA
F1:SS	Aug 28 13:48:27 2017	SHORT SPACE COUNT RATE

CURVE MEASURE POINT OFFSET

CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
CCL	26.00	ISS	12.75	RATO	12.75	SGFC	12.75
GR	23.00	LS	12.75	RICS	12.75	SS	12.75

Presentation	: cpu100:BRUTON_19_02W_RPM_REPEAT.fvpdf [5"/100' Scale]
Plot Interval	: 7303 - 7541.75 Feet
Data File 1	: F1 : cpu100:/dat1a/LARAMIE_BRUTON_19_02W/BRUTON_19_02W_RPM_REPEAT.xtf
Created On	: Aug 28 13:48:27 2017
Company	: LARAMIE ENERGY
Well	: BRUTON 19-02W
Field	: VEGA
File Interval	: 7302.25 - 7550.5 Feet
OCT	: RPM3D



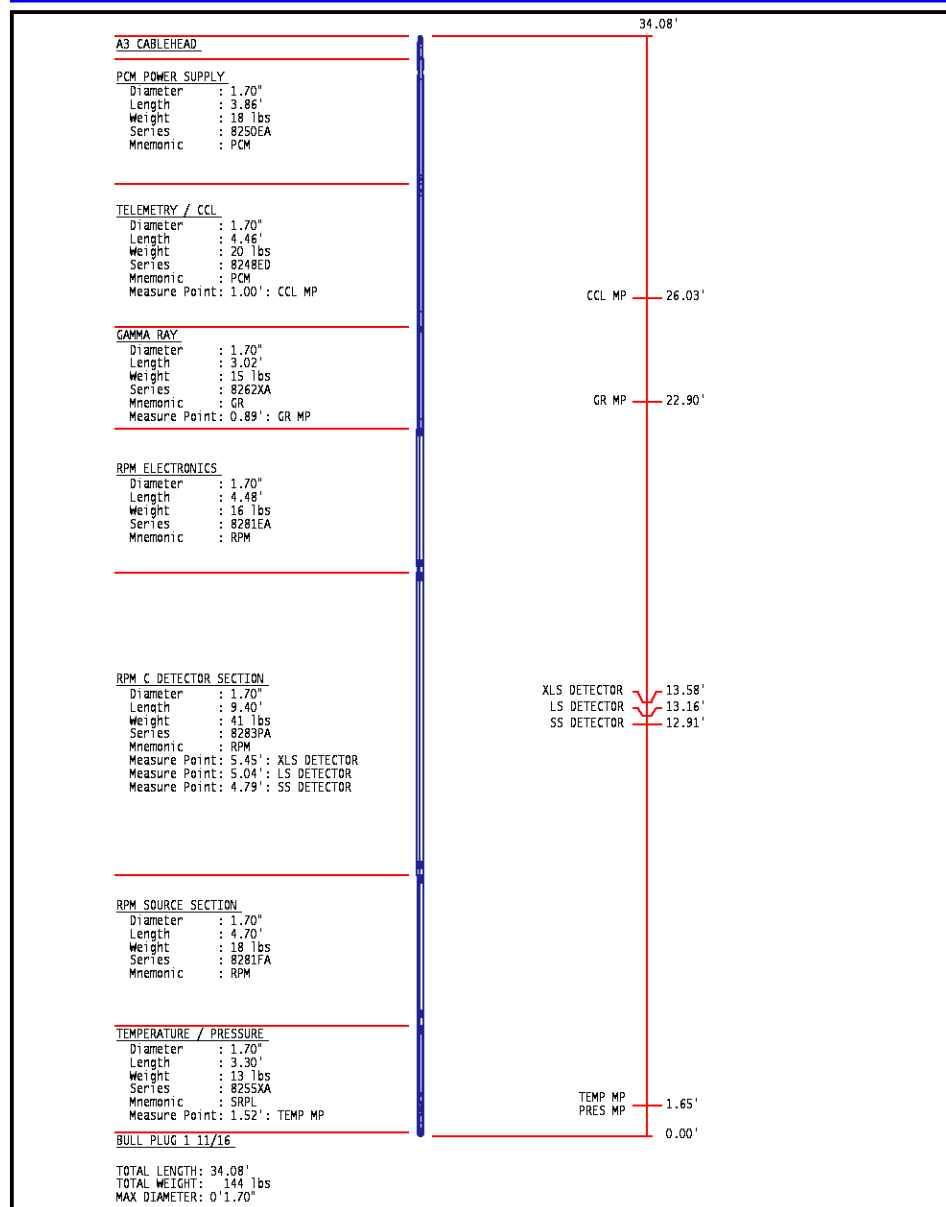


	ISS	RBOR	RIN	RIN13	RICS	RATO	RTWO	RONE	
		ISS/LS	ISS/XS	ISS/CS	SS/LS	SS/LS	SS/LS	CS/LS	
Raw Data	807240	1.44	4.90	31.88	15.44	10.65	3.80	4.04	
		1.42	1.45	3.55	5.53	22.20	32.75	10.99	18.34
Full Simulation		0.850	0.405	0.117	0.444	0.284	0.444	0.284	

Fit Quality %		0.052	0.128	0.117	0.144	0.021	0.011	0.031							
Reduced	1232260	1.44	4.91	31.91	15.45	10.65	3.80	4.04							
		1.42	1.46	4.93	5.52	27.80	32.70	15.70	16.34	10.08	11.10	3.57	3.86	3.76	4.22

INSTRUMENT CONFIGURATION

Source File: /data1a/LARAMIE_BRUTON_19_02W/RPM-1dg



COMPANY LARAMIE ENERGY
WELL BRUTON 19-02W
FIELD VEGA
COUNTY MESA **STATE** COLORADO

FILE NO: _____
API NO: 05077104230000

LOCATION:
SHL: LAT:39.262995N;LONG:107.815083W
BHL: LAT:39.268693N;LONG:107.816128W
SEC 19 **TWP** 9S **RGE** 93W

ELEVATIONS:
KB 7286 FT
DF 7286 FT
GL 7262 FT
DATE 28-AUG-2017

