



FILE NO: CH093342	COMPANY WPX ENERGY
API NO: 05045224650000	WELL GM 342-12
	FIELD GRAND VALLEY
	COUNTY GARFIELD
	STATE COLORADO

Version 12 7S 96W GM 21-12 PAD NABORS 573	LOCATION: SHL: 1186' FNL & 1918' FWL BHL: 1599' FNL & 1139' FEL (SENE) SEC 12 TWP 7S RGE 96W	OTHER SERVICES BOND LOG
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PERMANENT DATUM LOG MEASURED FROM DRILL. MEAS. FROM	GL KB ELEVATION 26 FT ABOVE P.D. KB GL	ELEVATIONS: KB 5151 FT DF GL 5125 FT
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DATE	27-Dec-2014
RUN	1
TRIP	1
SERVICE ORDER	US093342
DEPTH DRILLER	7047 FT
DEPTH LOGGER	7014 FT
BOTTOM LOGGED INTERVAL	7004 FT
TOP LOGGED INTERVAL	3745 FT
TIME STARTED	11:30
TIME FINISHED	18:00
OPERATOR RIG TIME	6.5 HOURS
TYPE OF FLUID IN HOLE	WATER
FLUID DENSITY	NA
FLUID SALINITY	NA
FLUID LEVEL	64 FT
LOGGED CEMENT TOP	NA
WELLHEAD PRESSURE	0 PSI
MAXIMUM HOLE DEVIATION	NA
NOMINAL LOGGING SPEED	10 FMIN
MAX. RECORDED TEMP.	212 DEGF
REFERENCE LOG	BAKER HUGHES BOND LOG
REFERENCE LOG DATE	27-Dec-2014
EQUIP. NO.	4271
LOCATION	GRAND JCT.
RECORDED BY	P. EDWARDS
WITNESSED BY	O. JACOBS

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
13.5 IN	0 FT	1707 FT
8.75 IN	1707 FT	7044 FT

CASING RECORD				
SIZE	WEIGHT	GRADE	FROM	TO
9.625 IN			0 FT	1707 FT
4.5 IN	11.6 LB/F	I-80	0 FT	7044 FT

REMARKS

RUN 1 TRIP 1: All data on this log is shifted and depth matched using the Gamma Ray curve to the Baker Hughes bond log dated 12/27/2014 at the client's request.

The depth matching process creates potential for collar lengths to vary from those recorded on other cased hole wireline units without a Gamma Ray reference.

The amount of linear shift is 3 feet.

Logged in PNC-3D mode.

BHT = 212 degF

SJ = 3823' - 3845'

EQUIPMENT DATA

RUN	TRIP	TOOL	SERIES NO.	SERIAL NO.	POSITION
1	1	PCM	8250EA	10397894	FREE
1	1	TEL/CCL	8248ED	10387150	FREE
1	1	GR	2812LA	10274382	FREE
1	1	RPM	8281EA	10423671	FREE
1	1	RPM	8283PA	10585555	FREE
1	1	RPM	8281FA	10460082	FREE
1	1	TEMP	8255XA	Z120516	FREE

MAIN SECTION PNC-3D MODE

ECLIPS 6.2wu1 PC-ECLIPS General Release Rel 6.2w Update 1 Fri Apr 25 10:54:53 Central Daylight Time 2014

Plotted: Sun Dec 28 09:04:38 2014

PARAMETER AND FILTER SUMMARY REPORT

FILE: D:\WELLDATA\WPX\GM 342-12\354h02.prm
 LOGGING MODE: DEPTH DIRECTION: UP
 TOP DEPTH: 3742.750 ft BOTTOM DEPTH: 7017.133 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	8.75	in	" "
	CASING SIZE	4.50	in	" "
	MATRIX	SANDSTONE		" "
	CORRECTION BUFFER	11		" "

CURVE DESCRIPTION REPORT

CURVE NAME	CREATION DATE	CURVE DESCRIPTION
F1:CCL	Dec 27 14:31:25 2014	CASING COLLAR LOCATOR
F1:GR	Dec 27 14:31:25 2014	GAMMA RAY
F1:ISS	Dec 27 14:31:25 2014	INELASTIC SHORT SPACE COUNT RATE
F1:LS	Dec 27 14:31:25 2014	LONG SPACE COUNT RATE
F1:RATO	Dec 27 14:31:25 2014	SHORT/LONG SPACE COUNT RATE RATIO
F1:RICS	Dec 27 14:31:25 2014	SHORT SPACE INELASTIC TO CAPTURE COUNT RATE RATIO (ISS/CSS)
F1:SGFC	Dec 27 14:31:25 2014	CORRECTED FORMATION SIGMA
F1:SS	Dec 27 14:31:25 2014	SHORT SPACE COUNT RATE

CURVE MEASURE POINT OFFSET

CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
CCL	25.00	ISS	12.75	RATO	12.75	SGFC	12.75
GR	22.75	LS	12.75	RICS	12.75	SS	12.75

Presentation : BH19G15WM1:D:\WELLDATA\WPX\GM 342-12\342RPM_MAIN.fvpdf [5"/100' Scale]

Plot Interval : 3740 - 7010 Feet

Plot Interval : 5740 - 7015 Feet

Data File 1 : F1 : BHI9G15WM1:D:\WELLDATA\WPX\GM 342-12\342_RPM_MAIN.xtf
Created On : Dec 27 09:38:32 2014
Company : WPX ENERGY
Well : GM 342-12
Field : GRAND VALLEY
File Interval : 26.5 - 7016 Feet
OCT : n354h

GR BACKUP

FEET

ISS [iss]

0 1E+006

(1)

GAMMA RAY [gr]

0 150

(gAPI)

CCL
(mV)

3800

GR

ISS

LS [ls]

0 29000

(1)

SS [ss]

0 290000

(1)

RATO [rato]

17

0

(1)

RICS [rics]

39

9

(1)

SGFC [sgfc]

60

0

(1)

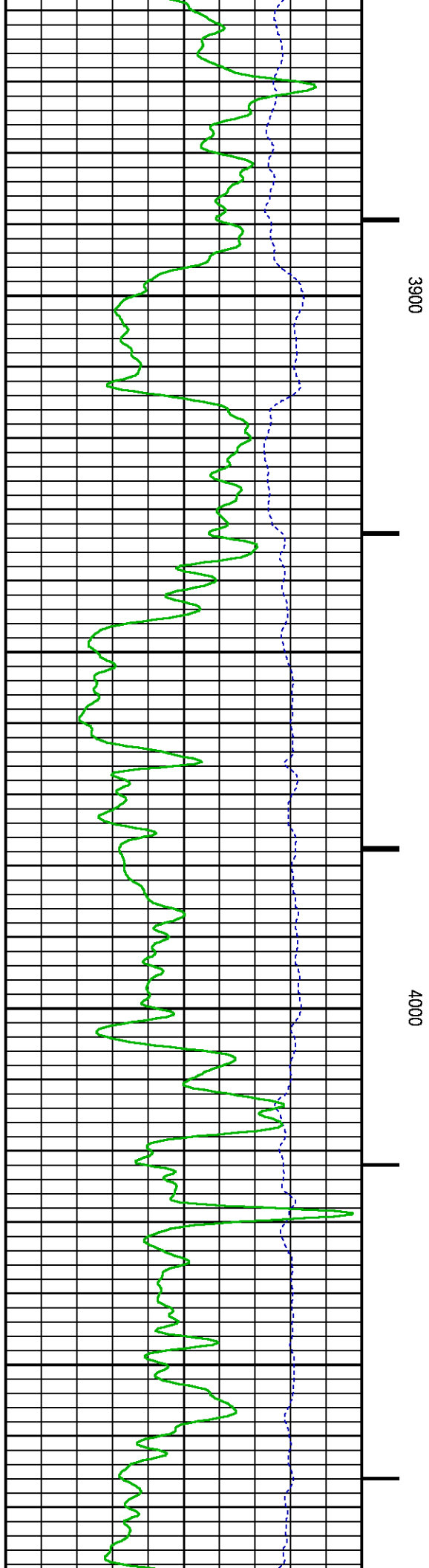
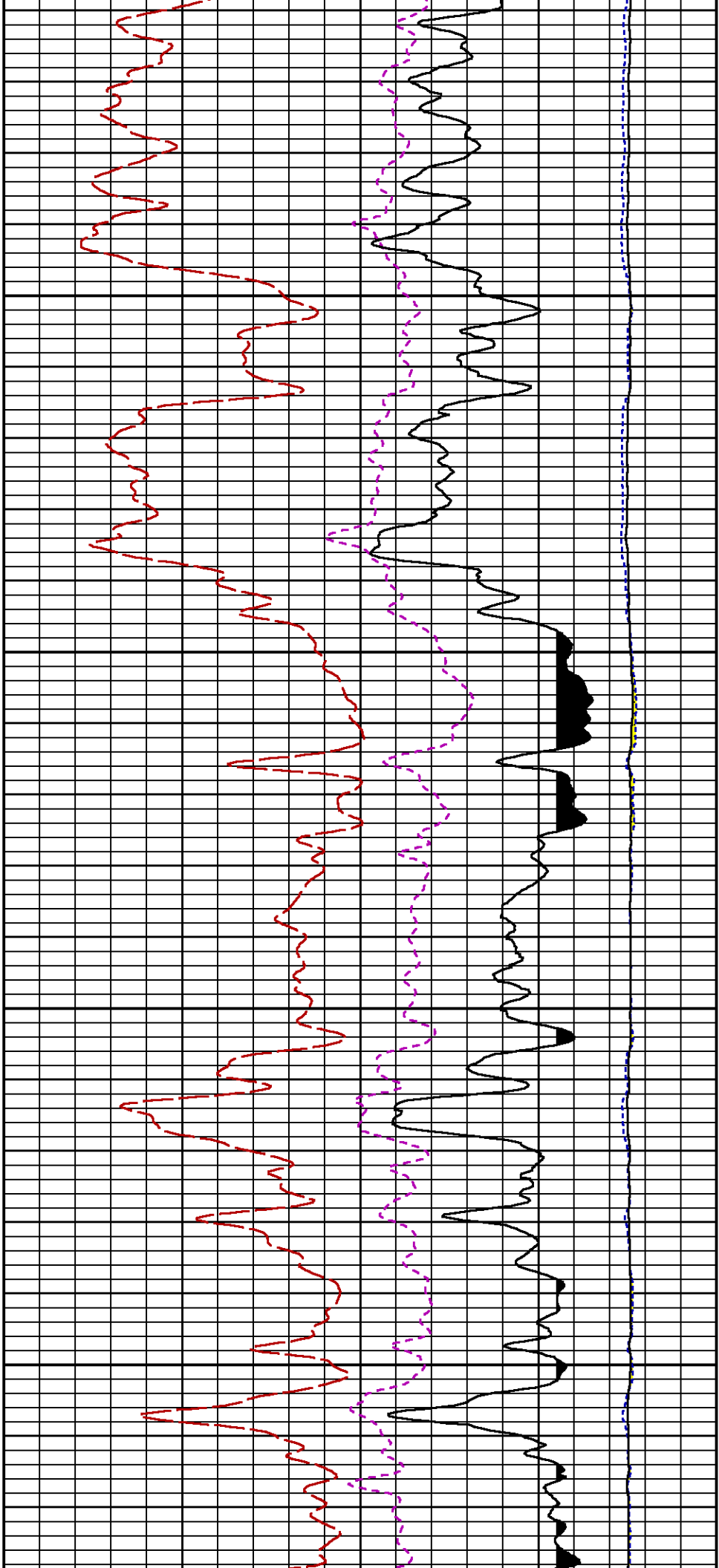
RATO

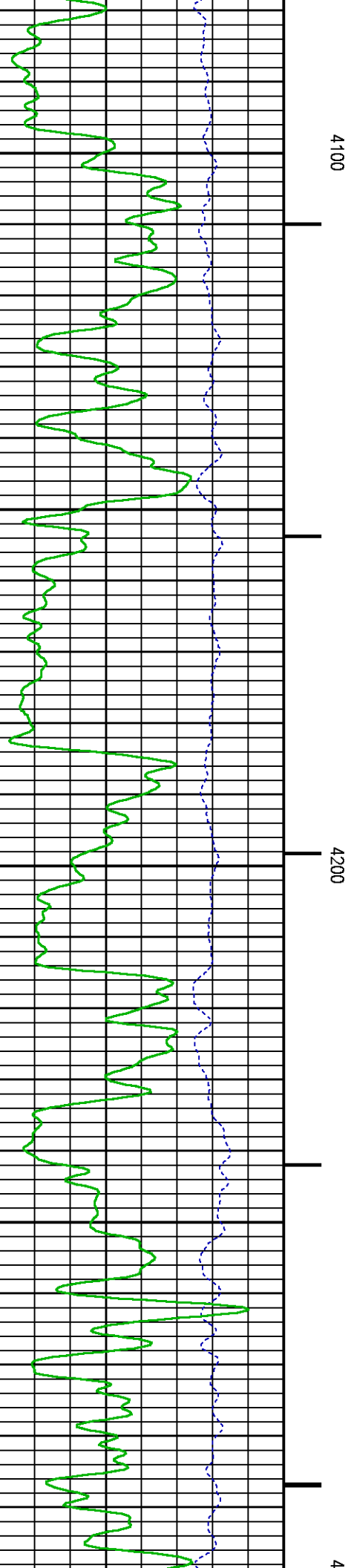
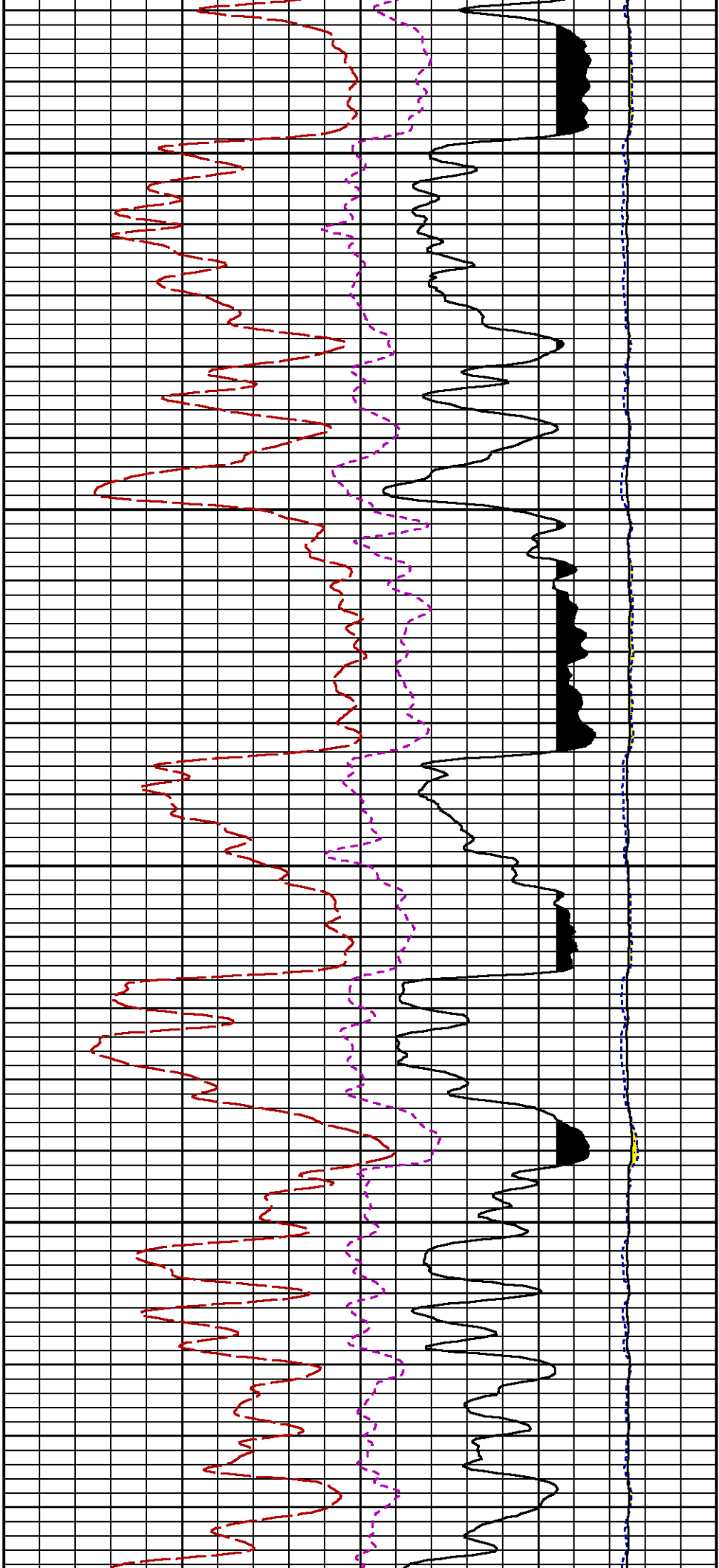
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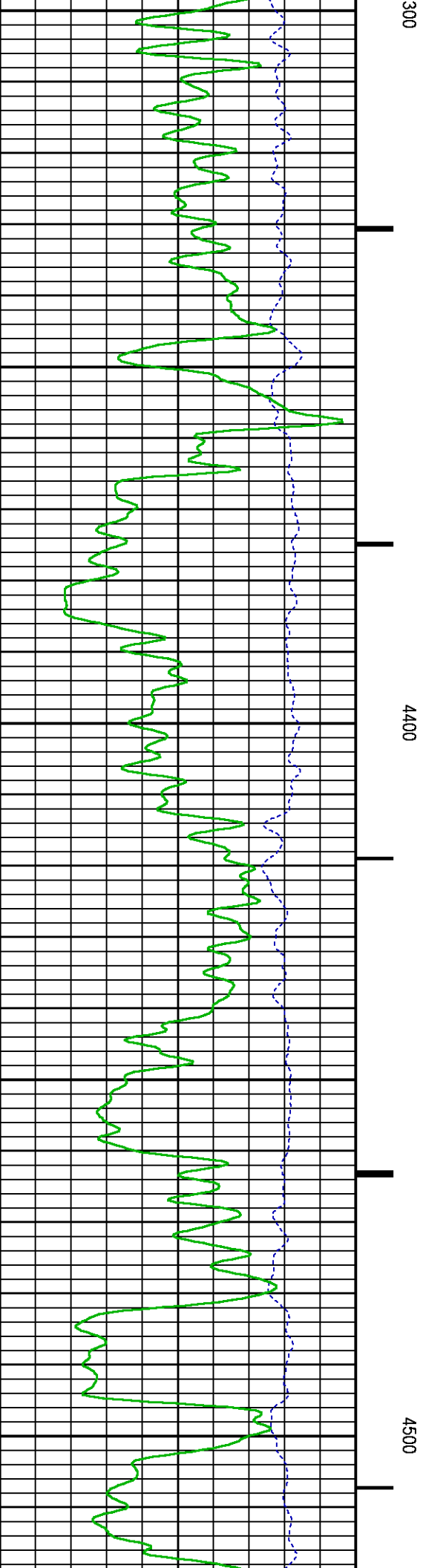
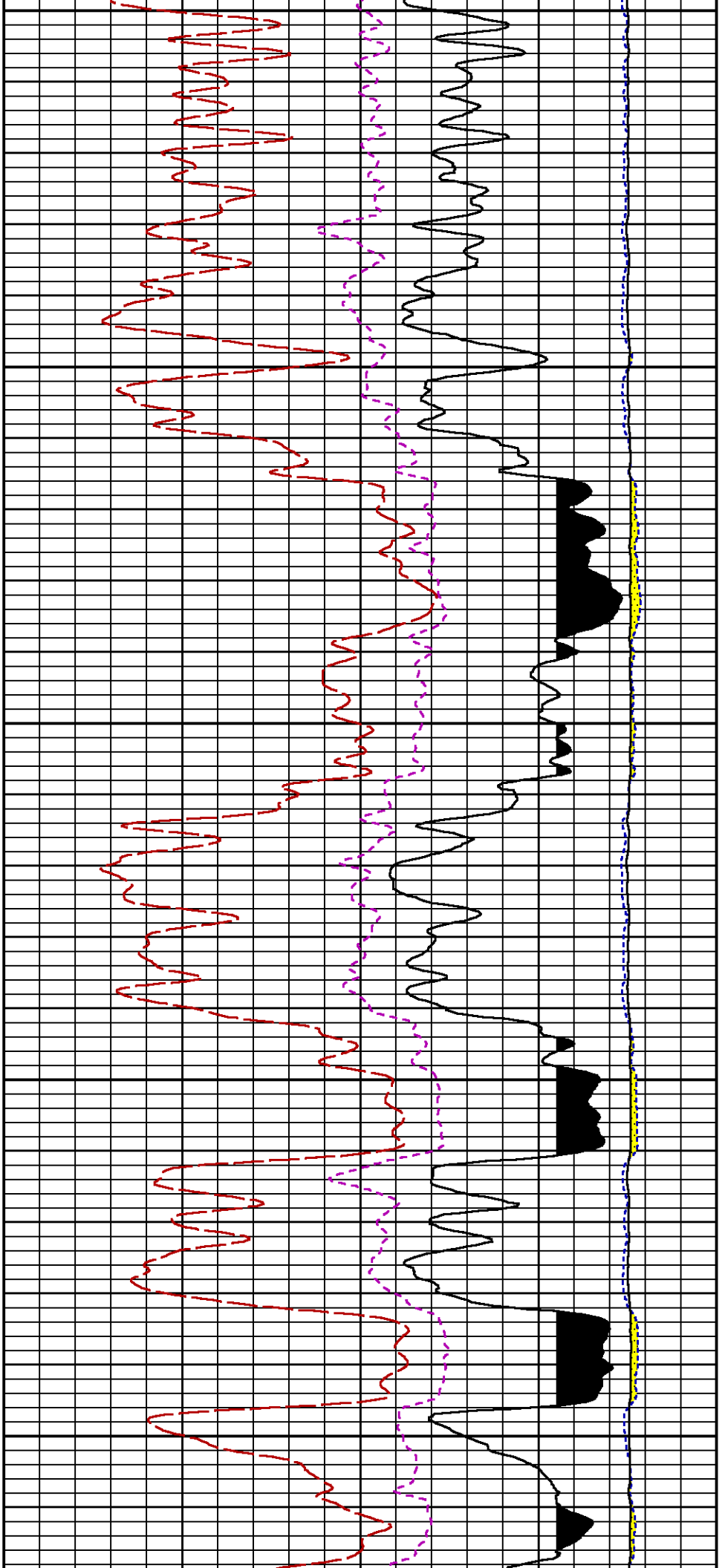
LS

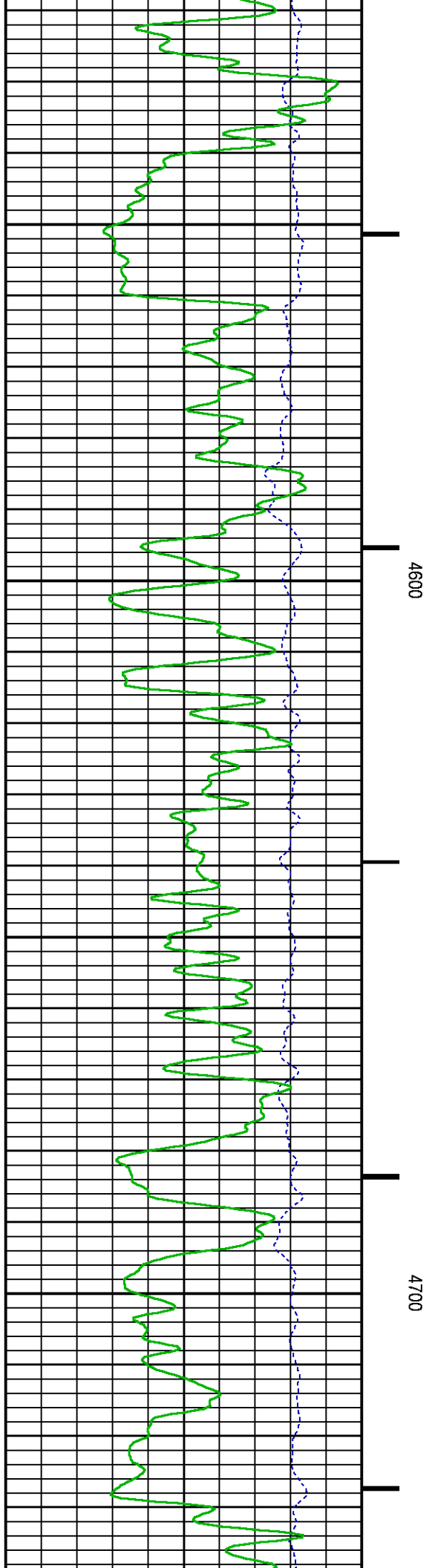
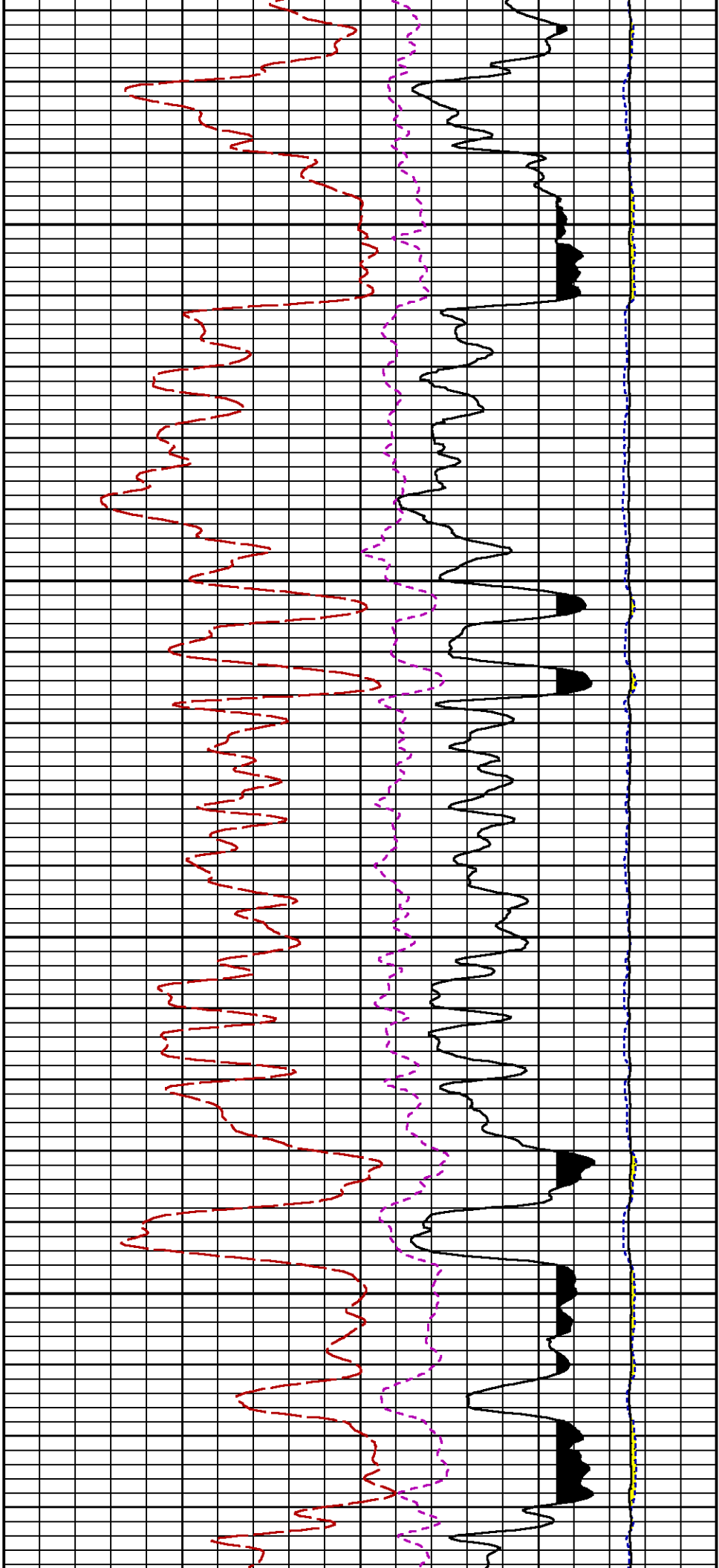
SS

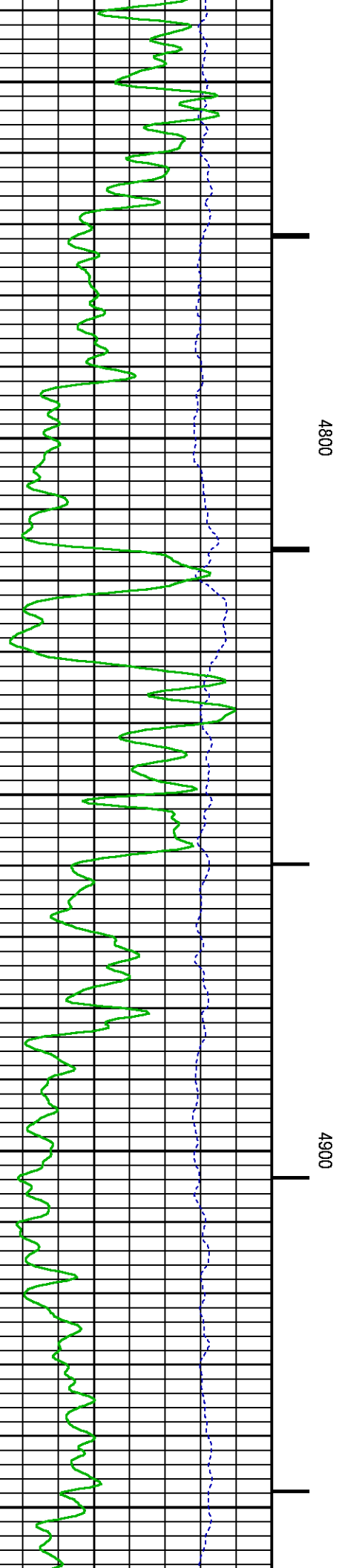
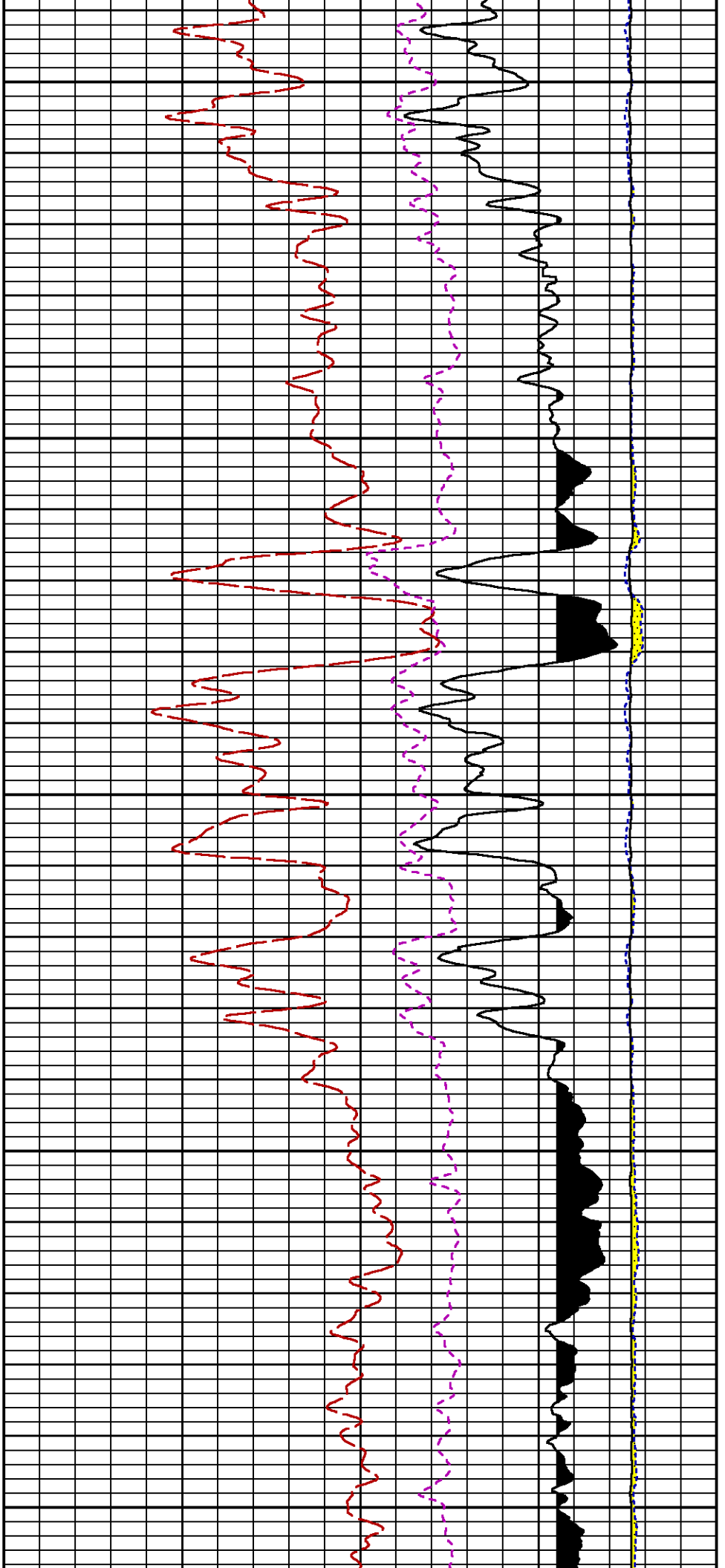
SGFC

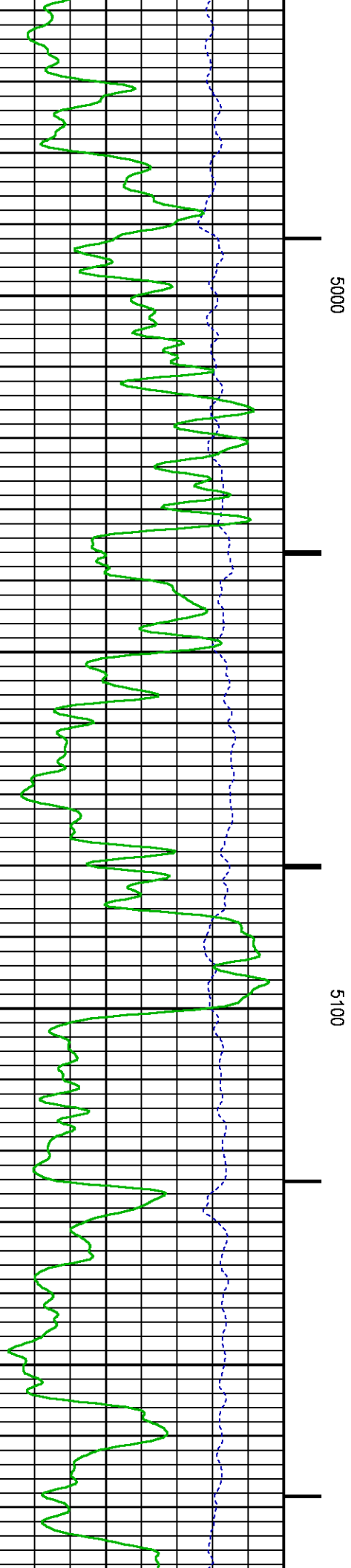
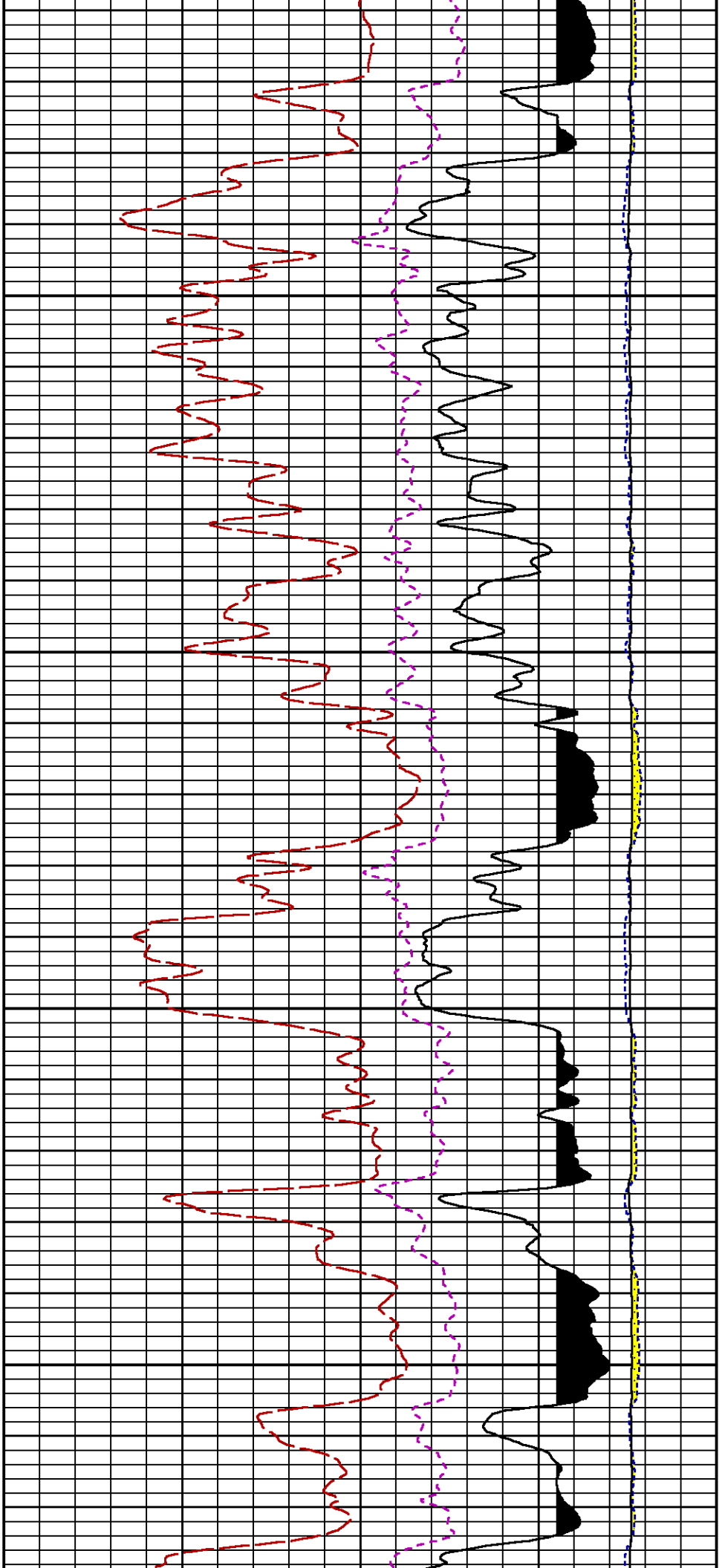


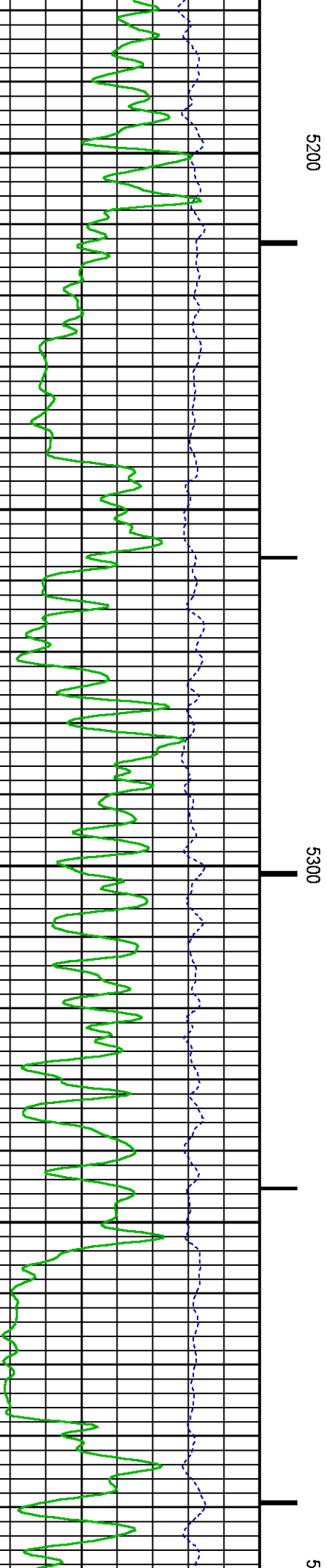
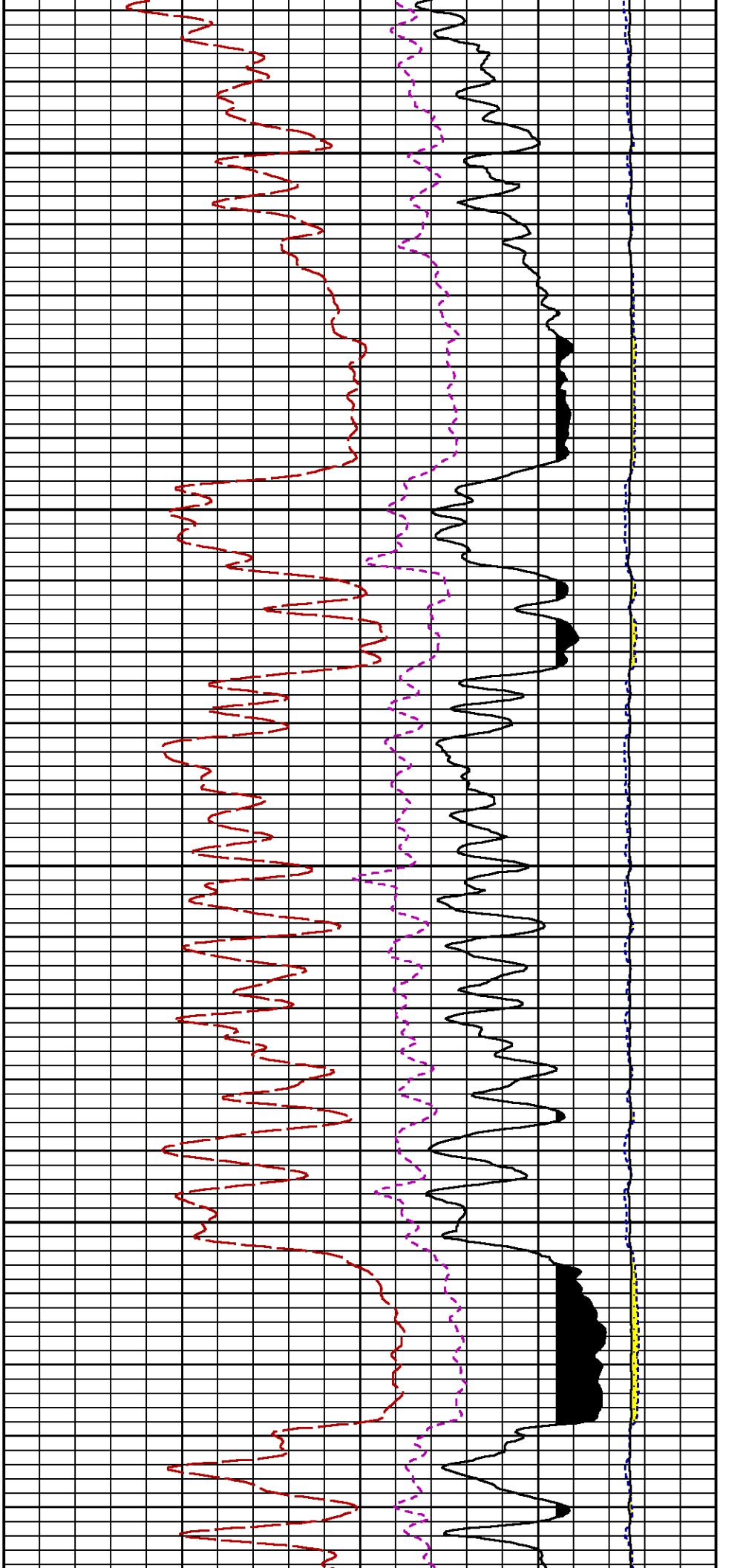


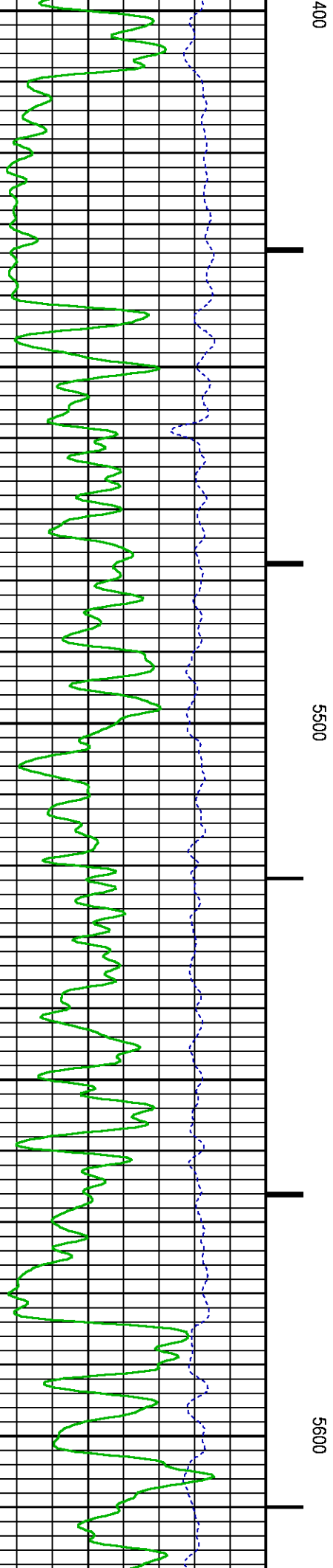
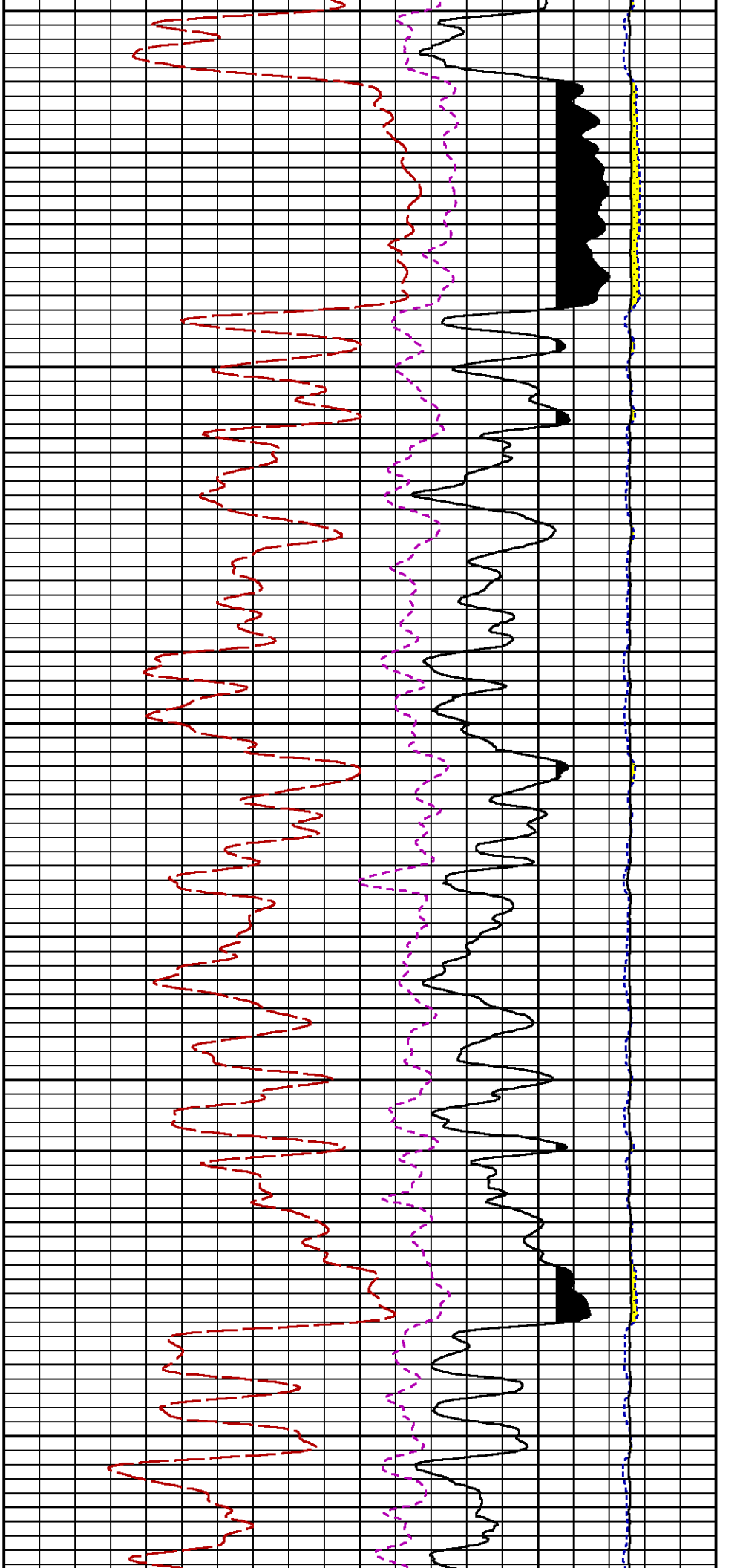


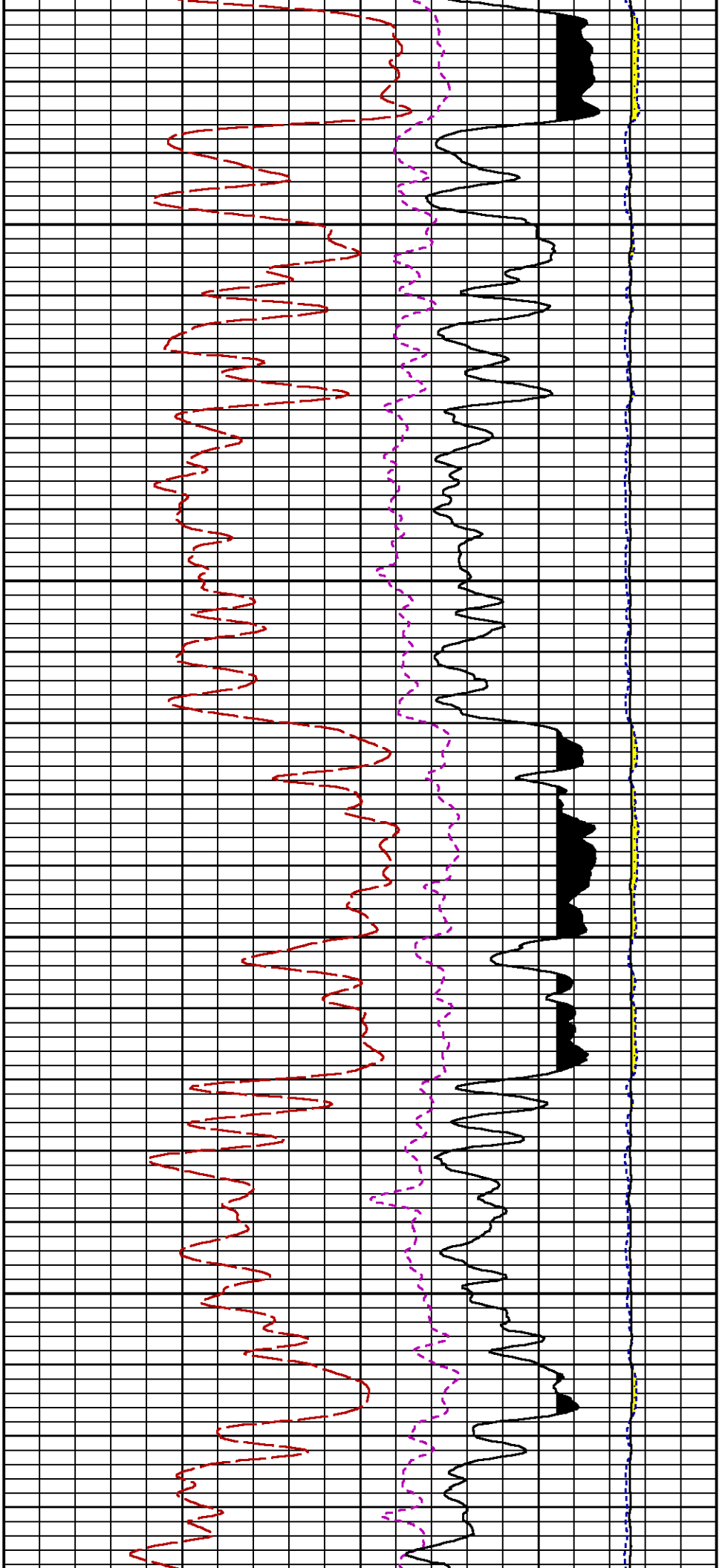






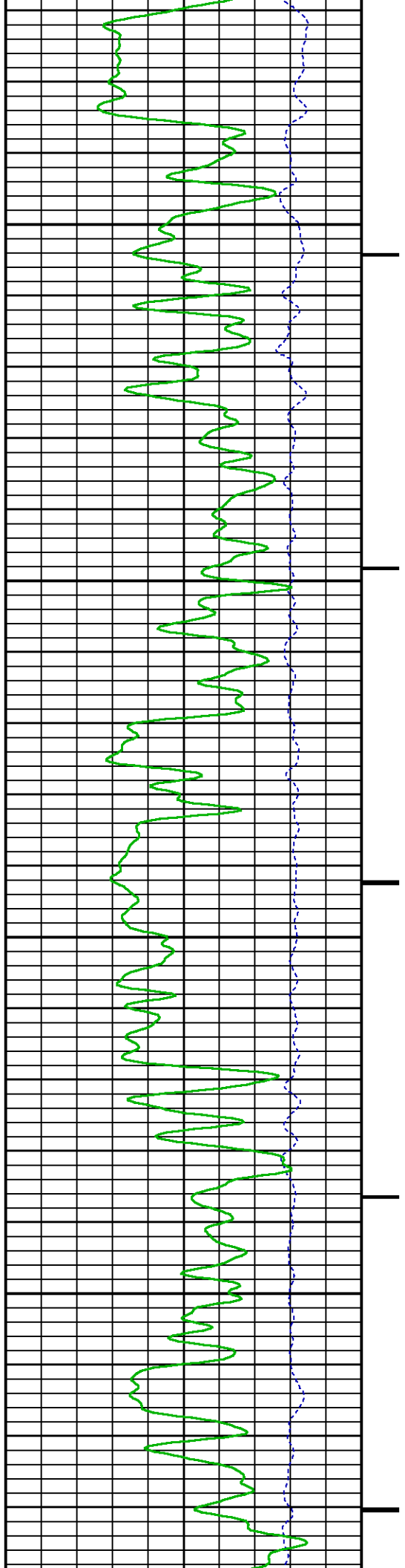


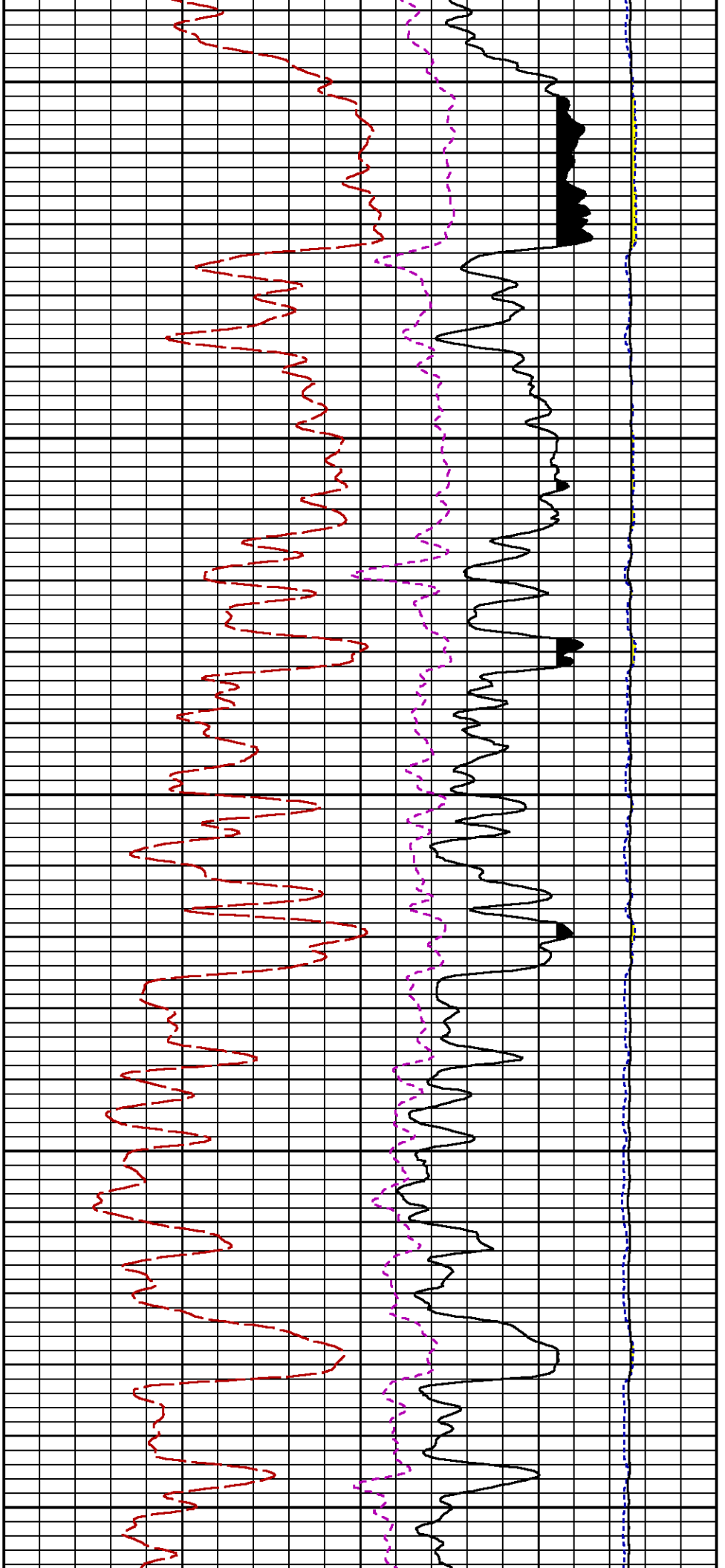




5700

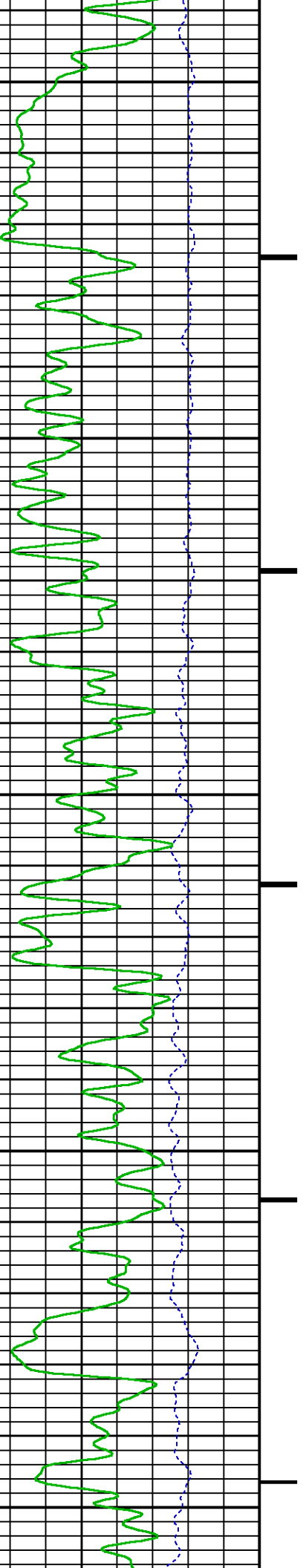
5800

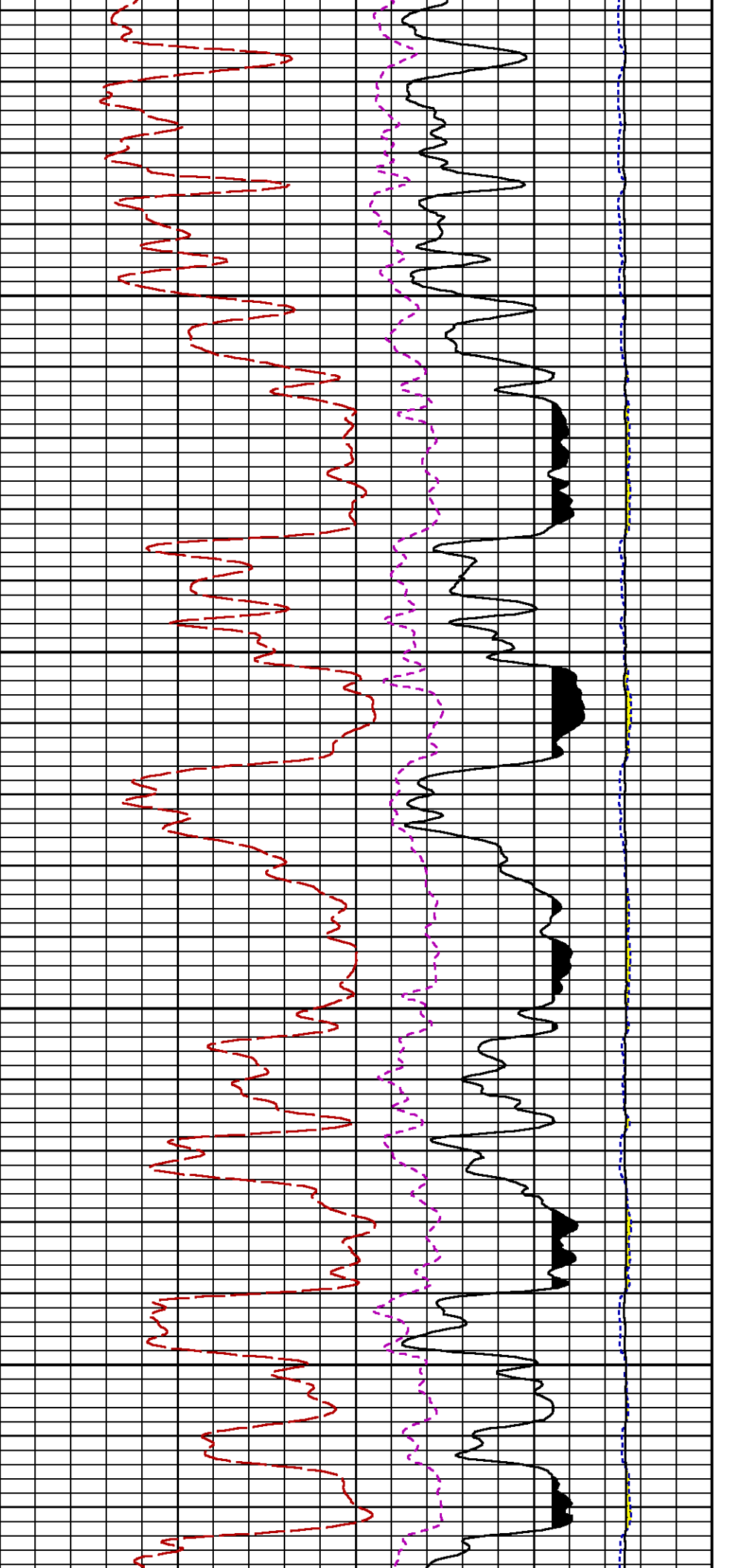




5900

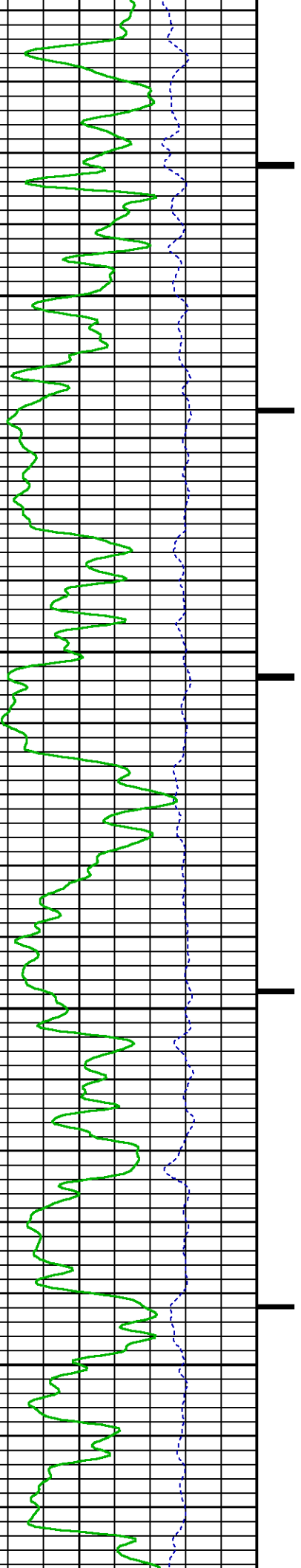
6000

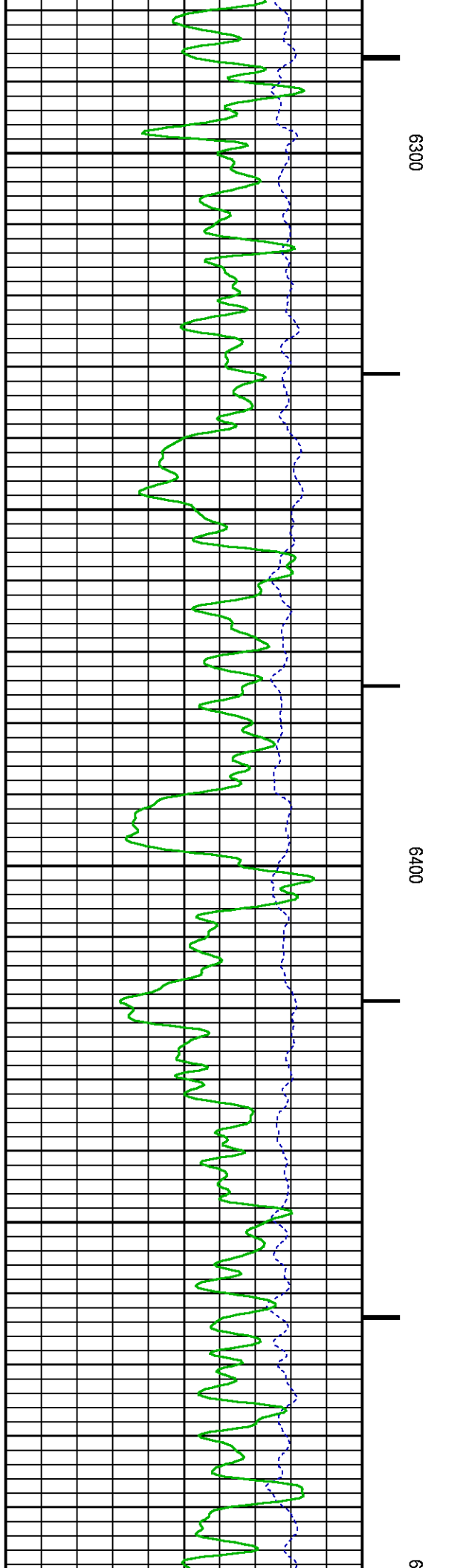
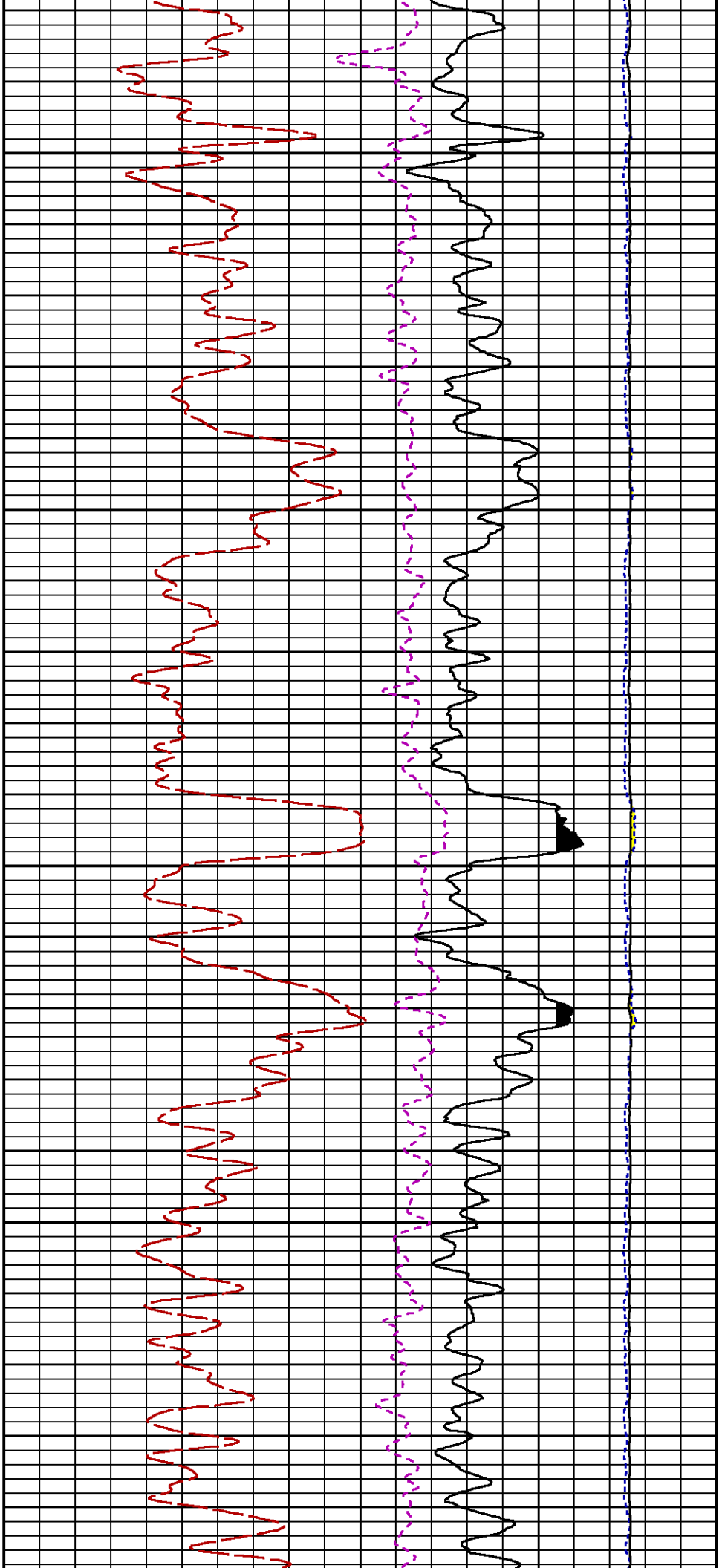


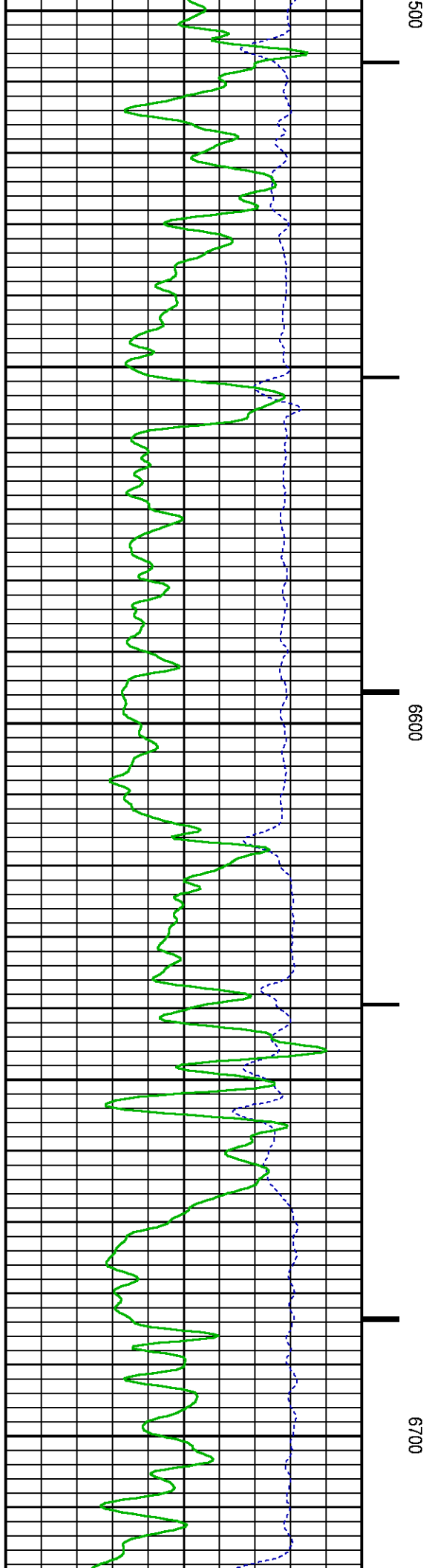
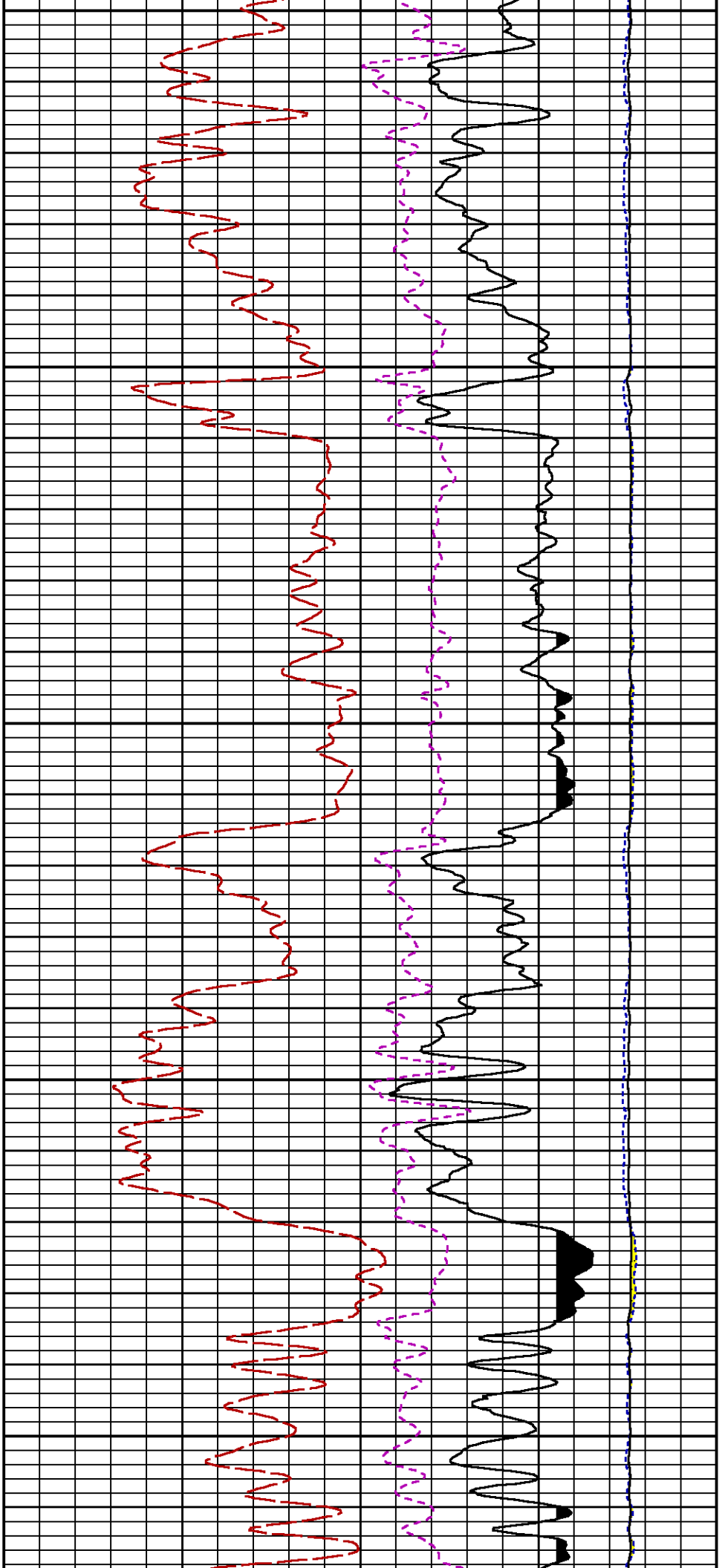


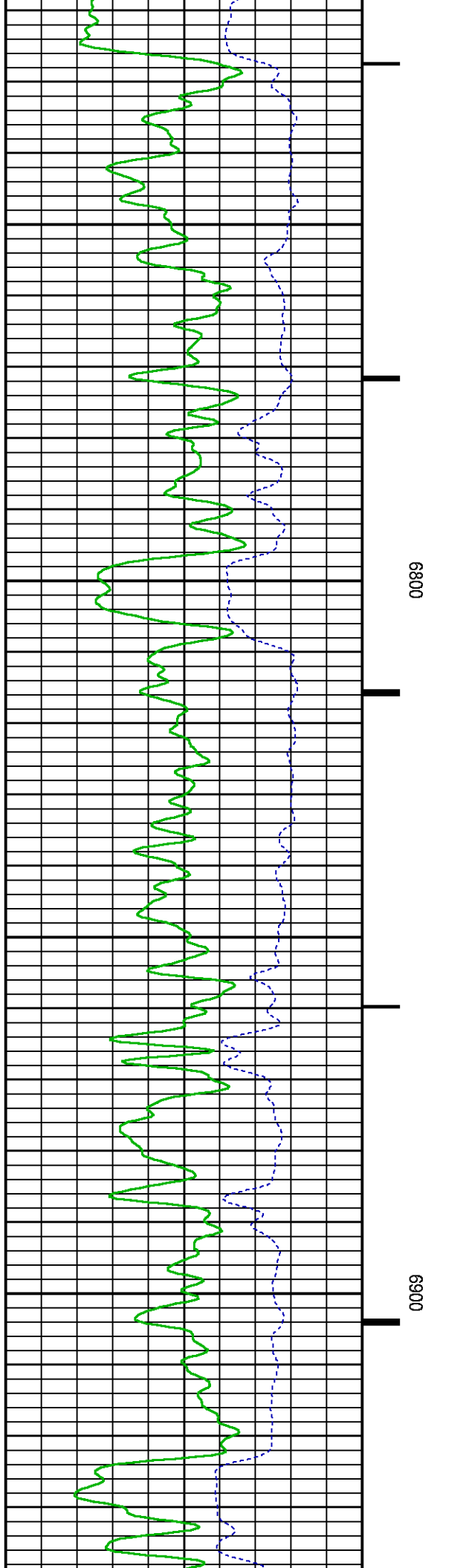
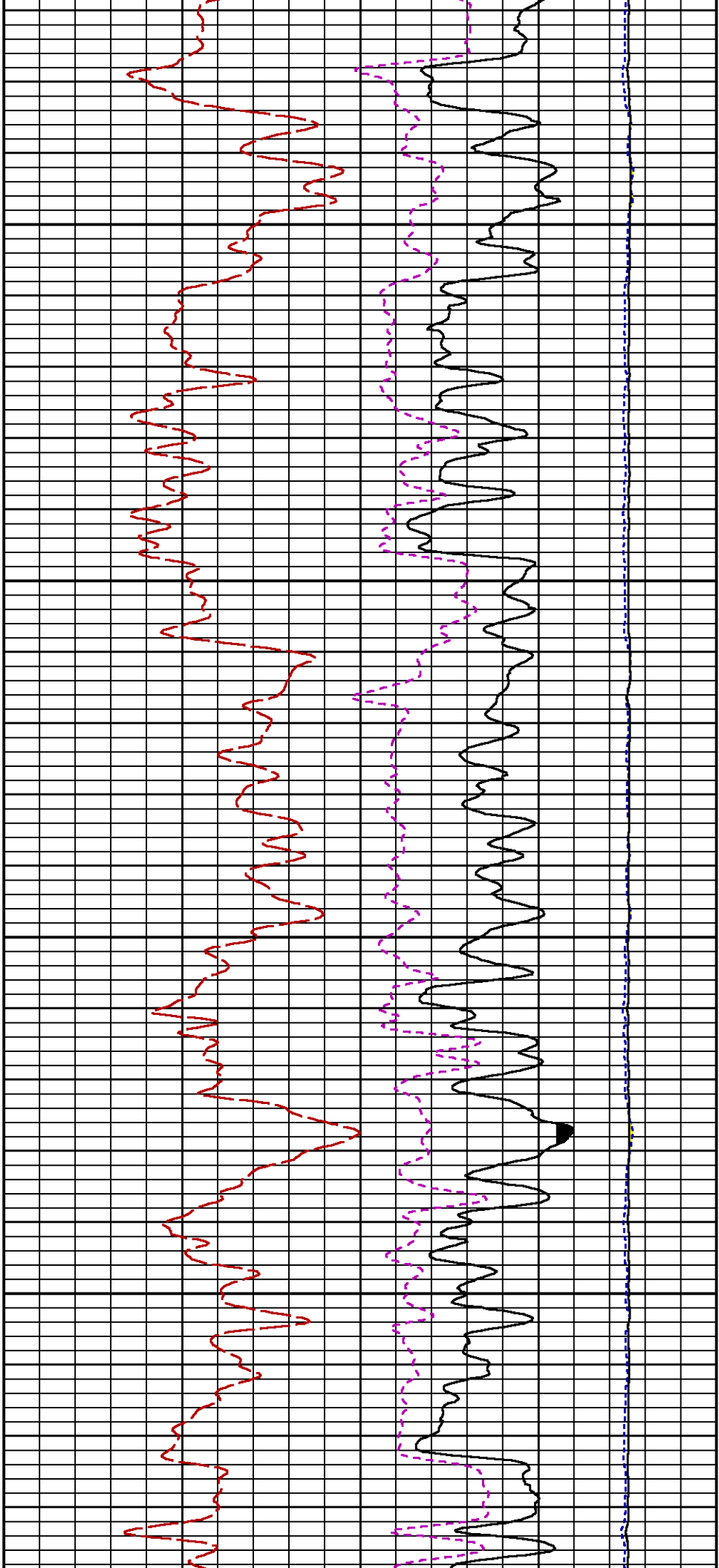
6100

6200









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

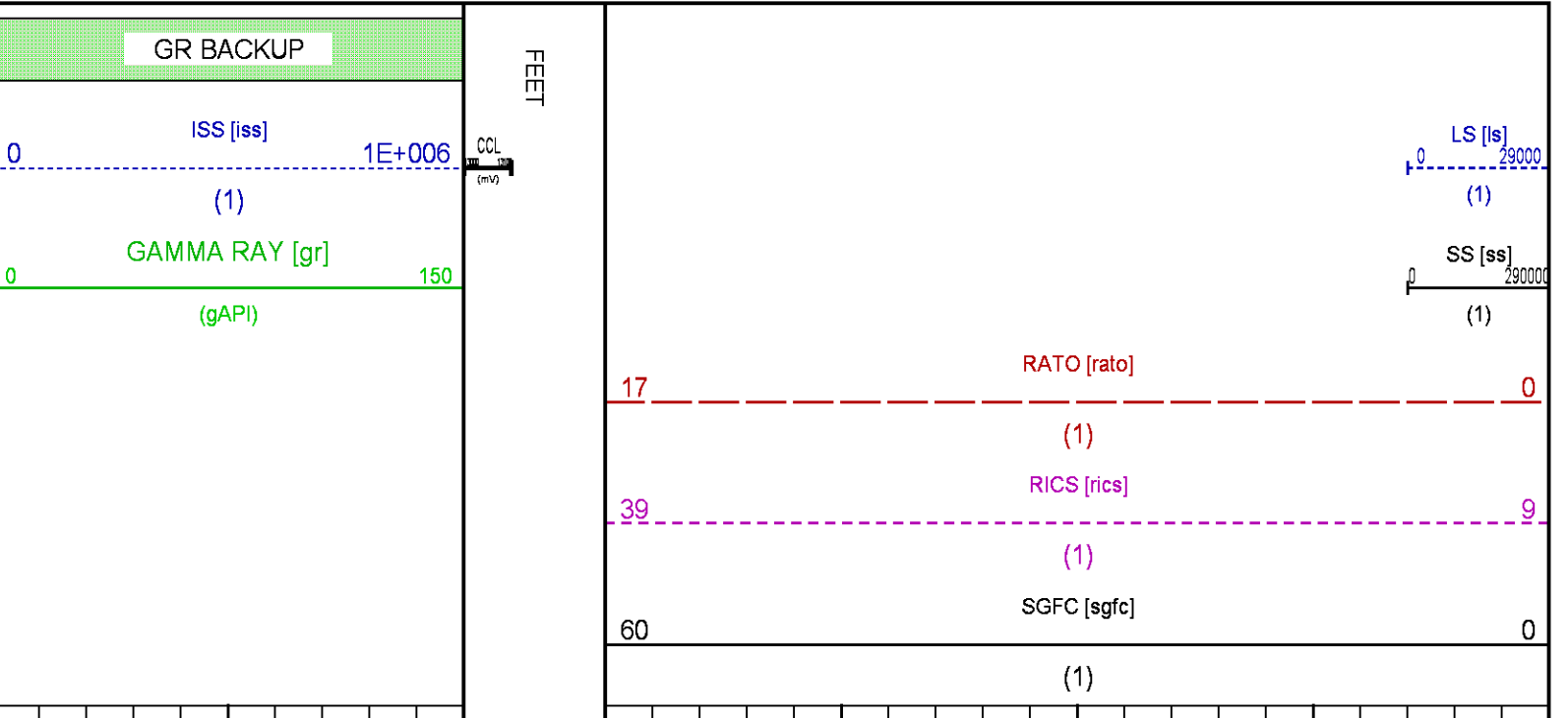
RPM PROCESSING				
MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)
PNC Parameters	BOREHOLE CONTENTS	FLUID		TOP BOTTOM
	OPEN/CASED HOLE	CASED HOLE		" "
	BOREHOLE SIZE	8.75	in	" "
	CASING SIZE	4.50	in	" "
	MATRIX	SANDSTONE		" "
	CORRECTION BUFFER	11		" "

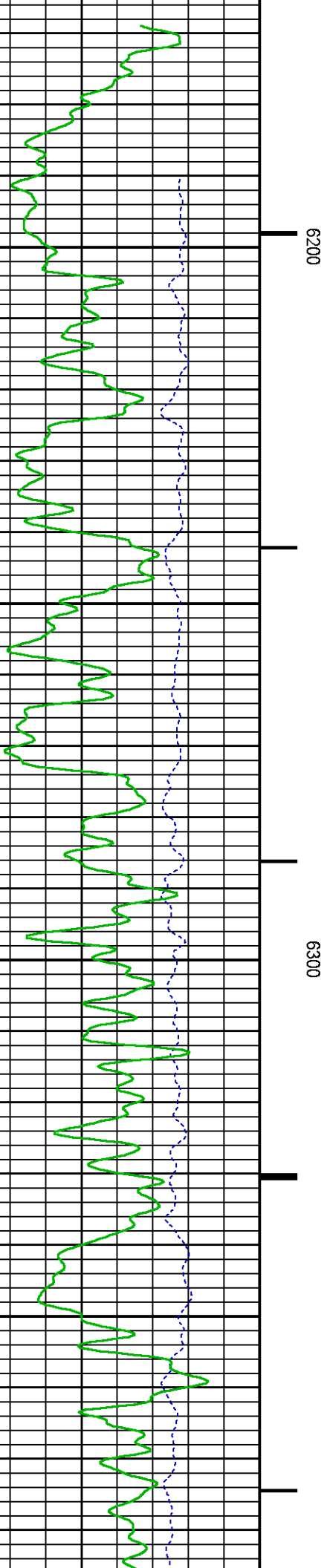
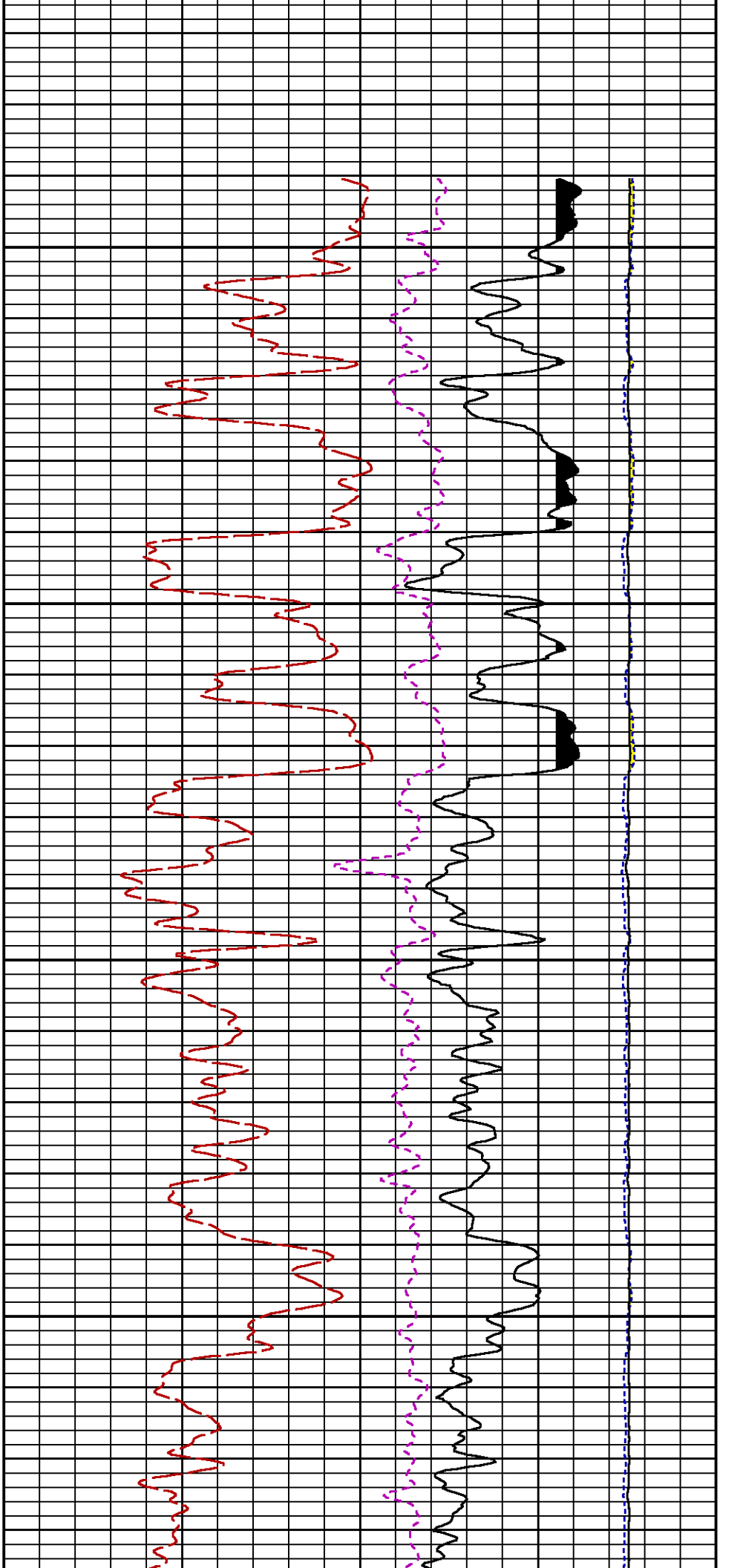
CURVE DESCRIPTION REPORT		
CURVE NAME	CREATION DATE	CURVE DESCRIPTION
F1:CCL	Dec 27 14:06:26 2014	CASING COLLAR LOCATOR
F1:GR	Dec 27 14:06:26 2014	GAMMA RAY
F1:ISS	Dec 27 14:06:26 2014	INELASTIC SHORT SPACE COUNT RATE
F1:LS	Dec 27 14:06:26 2014	LONG SPACE COUNT RATE
F1:RATO	Dec 27 14:06:26 2014	SHORT/LONG SPACE COUNT RATE RATIO
F1:RICS	Dec 27 14:06:26 2014	SHORT SPACE INELASTIC TO CAPTURE COUNT RATE RATIO (ISS/CSS)
F1:SGFC	Dec 27 14:06:26 2014	CORRECTED FORMATION SIGMA
F1:SS	Dec 27 14:06:26 2014	SHORT SPACE COUNT RATE

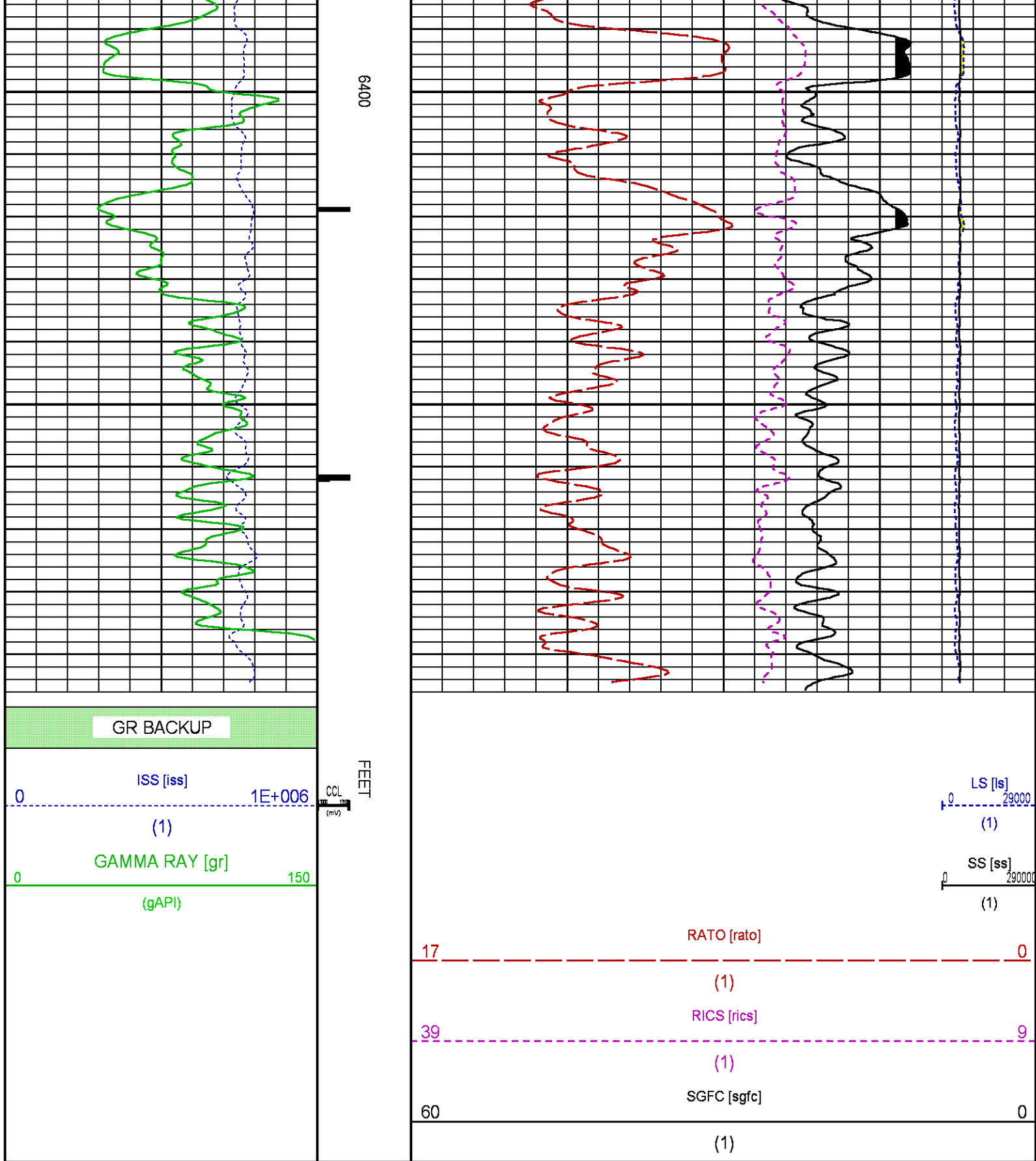
CURVE MEASURE POINT OFFSET							
CURVE		OFFSET (ft)		CURVE		OFFSET (ft)	
CCL	25.00	ISS	12.75	RATO	12.75	SGFC	12.75
GR	22.75	LS	12.75	RICS	12.75	SS	12.75

Presentation : BHUGHES-06627:C:\dat1a\093342\342RPM_REPEAT.fvpdf [5"/100' Scale]
Plot Interval : 6165.5 - 6495.75 Feet

Data File 1 : F1 : BHUGHES-06627:C:\dat1a\093342\342_RPM_REPEAT.xtf
Created On : Dec 27 14:06:26 2014
Company : WPX ENERGY
Well : GM 342-12
Field : GRAND VALLEY
File Interval : 6164.75 - 6510.75 Feet
OCT : n354h







CALIBRATION / VERIFICATION SUMMARY

GR PRIMARY CALIBRATION SUMMARY

TOOL #: 2812LA 10274382

DATE/TIME PERFORMED: Tue Dec 09 14:04:49 2014

UNIT #: 3885TD Z004271

CALB JIG #: 4702NK WA-612

	BACKGROUND (cts/s)	CALBRTR ON (cts/s)	CR DIFF (cts/s)	MULT	BACKGROUND (gAPI)	CALBRTR ON (gAPI)	CALBRTR (gAPI)
GR	61.18	268.02	206.8	1.015	62.11	272.11	210

GR PRIMARY VERIFICATION SUMMARY

TOOL #: 2812LA 10274382

DATE/TIME PERFORMED: Tue Dec 09 14:07:05 2014

UNIT #: 3885TD Z004271

VERI JIG #: 4702NK WA-612

	BACKGROUND (cts/s)	CALBRTR ON (cts/s)	MULT	BACKGROUND (gAPI)	CALBRTR ON (gAPI)	DIFF. (gAPI)
GR	63.11	273.93	1.015	64.07	278.11	214.04
						200.00 220.00

RPM_PNC_3D PRIMARY CALIBRATION SUMMARY

TOOL: 8283PA 10585555

DATE/TIME PERFORMED: Tue Dec 09 13:08:21 2014

UNIT: 3885TD Z004271

CALIBRATOR: 2437XB 112674

SOURCE: 8281AA 11765054

HOURS: 8281AA 670

	ISS	Mtr VIts (V)	SS Gain	LS Gain	XLS Gain	EA Temp (degF)	Sync Delay (usec)	RCAL
Raw Data	801712	124	2342	2286	2235	111	7	0.9721
Interpolated	1300000	147	2317	2281	2228			

	ISS	BKS	BKL	BKX	SGA1	SDA1	SGA2	SDA2
Raw Data	801712	6404	989	140	26.08	0.15	24.23	0.33
					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	801712	170477	26574	89502	31836	8242	54189	13205
Fit Quality %		0.952	0.776	0.752	0.741	1.017	0.683	0.990

	ISS	RBOR	RIN ISS/ILS	RIN13 ISS/IXS	RICS ISS/CSS	RATO SS/LS	RTWO SS2/LS	RONE CSS/CLS
Raw Data	801712	1.43	4.70	30.18	14.80	10.86	3.86	4.10
		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 %		0.051	0.164	0.223	0.184	0.174	0.189	0.168
Reduced	1392560	1.43	4.71	30.20	14.80	10.88	3.87	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

TPSETEMP PRIMARY CALIBRATION SUMMARY

TOOL #: 8255XA 120516

DATE/TIME PERFORMED: Tue Nov 18 15:59:55 2014

UNIT #: 2570LE 4271

	T(0)	T(1)	T(2)	T(3)
Corr Coeff for Temp	-8.673169E+00	9.576065E-02	6.395448E-06	-9.461013E-10

INSTRUMENT CONFIGURATION

Source File: D:\WELLDATA\WPX\GM 342-12\RPM-tdg.meta

A3 CABLEHEAD

Diameter : 1.37"

PCM POWER SUPPLY

Diameter : 1.70"
Length : 3.86'
Weight : 18 lbs
Series : 8250EA
Mnemonic : PCM

TELEMETRY / CCL

Diameter : 1.70"
Length : 4.46'
Weight : 20 lbs
Series : 8248ED
Mnemonic : PCM
Measure Point: 1.00': CCL MP

SONDEX GAMMA RAY

Diameter : 1.69"
Length : 2.17'
Weight : 11 lbs
Series : 2812LA
Mnemonic : GR
Measure Point: 0.63': GR MP

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

33.24'

CCL MP 25.19'

GR MP 22.64'

XLS DETECTOR 13.58'
LS DETECTOR 13.16'
SS DETECTOR 12.91'

RPM SOURCE SECTION

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

TEMPERATURE / PRESSURE

Diameter : 1.70"
Length : 3.30'
Weight : 13 lbs
Series : 8255XA
Mnemonic : SRPL
Measure Point: 1.52': TEMP MP


TEMP MP
PRES MP

1.65'

BULL PLUG 1 11/16

0.00'

TOTAL LENGTH: 33.24'
TOTAL WEIGHT: 140 lbs
MAX DIAMETER: 0'1.70"

	COMPANY <u>WPX ENERGY</u>		FILE NO: <u>CH093342</u>
	WELL <u>GM 342-12</u>		
	FIELD <u>GRAND VALLEY</u>		API NO: <u>05045224650000</u>
	COUNTY <u>GARFIELD</u>	STATE <u>COLORADO</u>	
LOCATION: SHL: 1186' FNL & 1918' FWL BHL: 1599' FNL & 1139' FEL (SENE)		ELEVATIONS: KB 5151 FT DF GL 5125 FT	12 7S 96W GM 21-12 PAD NABORS 573
SEC <u>12</u> TWP <u>7S</u> RGE <u>96W</u>		DATE <u>27-Dec-2014</u>	