



FILE NO:	COMPANY
CH093574	WPX ENERGY
API NO:	WELL
05045224700000	GM 32-12
	FIELD
	GRAND VALLEY
	COUNTY
	GARFIELD
	STATE
	COLORADO

Version	LOCATION:	OTHER SERVICES
12 7S 96W	SHL: 1181' FNL & 1912' FWL	BOND LOG
GM 21-12 PAD	BHL: 2001' FNL & 1704' FEL (SWNE)	
NABORS 573	SEC 12	TWP 7S
	RGE 96W	

PERMANENT DATUM	GL	ELEVATION	5125 FT
LOG MEASURED FROM	KB	26 FT	ABOVE P.D.
DRILL. MEAS. FROM	KB		
		ELEVATIONS:	
		KB	5151 FT
		DF	
		GL	5125 FT

DATE	28-Dec-2014	
RUN	TRIP	1
SERVICE ORDER	US093574	
DEPTH DRILLER	6780 FT	
DEPTH LOGGER	6713 FT	
BOTTOM LOGGED INTERVAL	6703 FT	
TOP LOGGED INTERVAL	3488 FT	
TIME STARTED	11:30	
TIME FINISHED	15:30	
OPERATOR RIG TIME	4 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	10 F/MN	
MAX. RECORDED TEMP.	210 DEGF	
REFERENCE LOG	BAKER HUGHES BOND LOG	
REFERENCE LOG DATE	28-Dec-2014	
EQUIP. NO.	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	1619 FT
8.75 IN	1619 FT	6793 FT

CASING RECORD				
SIZE	WEIGHT	GRADE	FROM	TO
9.625 IN			0 FT	1619 FT
4.5 IN	11.6 LB/F	I-80	0 FT	6793 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 12/29/2014 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 1 foot.

Logged with Zero PSI at wellhead.

BHT = 210 degF

SJ = 3130' - 3152'

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: Mon Dec 29 10:31:33 2014

PARAMETER AND FILTER SUMMARY REPORT

FILE: D:\WELLDATA\WPX\GM 32-12\354h02.prm
LOGGING MODE: DEPTH DIRECTION: UP
TOP DEPTH: 3473.750 ft BOTTOM DEPTH: 6713.285 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		"	"

PARAMETER AND FILTER SUMMARY REPORT

FILE: D:\WELLDATA\WPX\GM 32-12\012g02.prm
LOGGING MODE: DEPTH DIRECTION: UP
TOP DEPTH: 25.250 ft BOTTOM DEPTH: 6710.750 ft

SYMMETRIC FILTER

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

RAL CCL PROCESSING

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
CCL FLOOR	CCL FLOOR	0		TOP	BOTTOM

CURVE DESCRIPTION REPORT

CURVE NAME	CREATION DATE	CURVE DESCRIPTION
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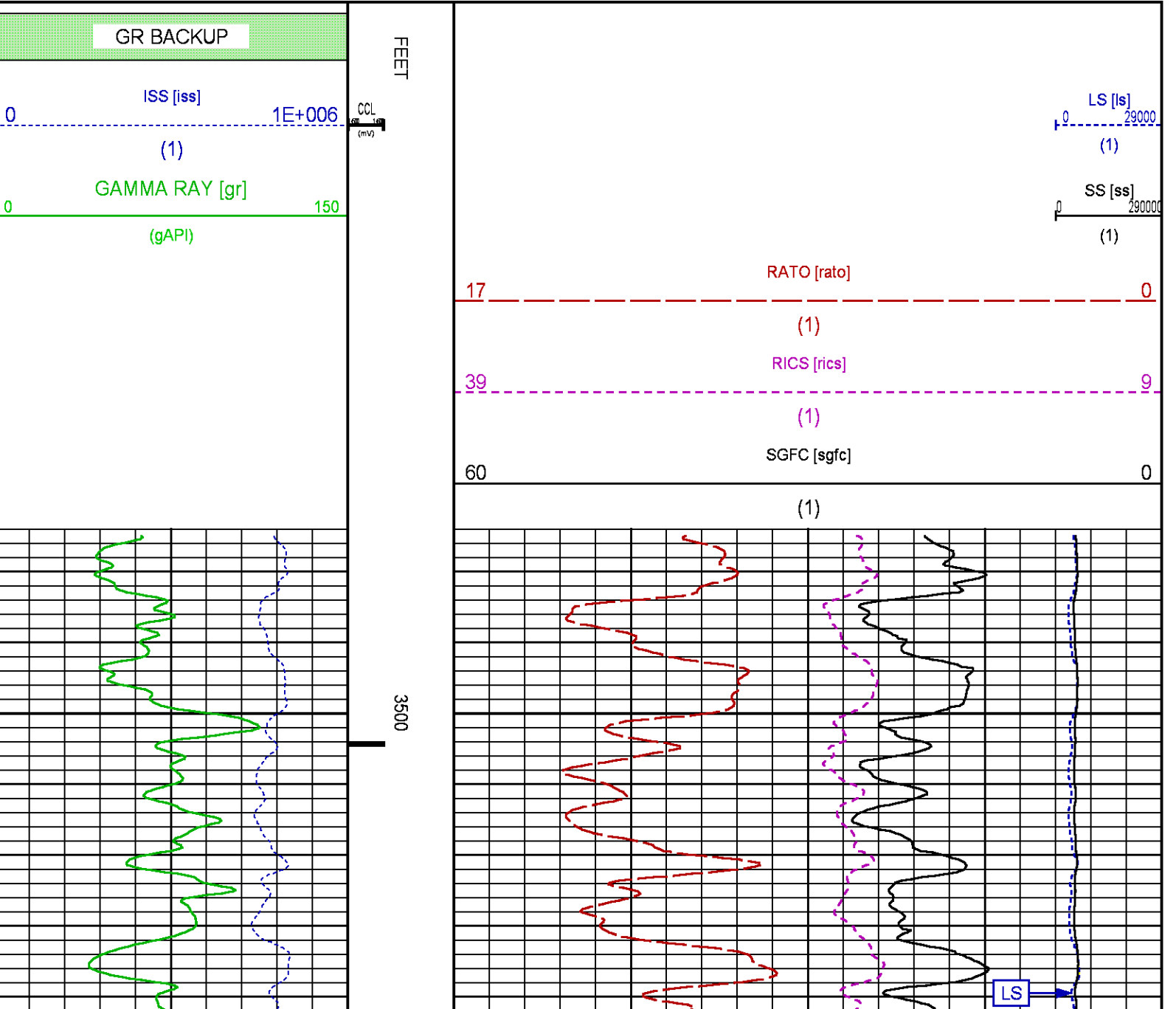
F1:CCL	Dec 28 11:49:11 2014	CASING COLLAR LOCATOR
F1:GR	Dec 28 11:49:11 2014	GAMMA RAY
F1:ISS	Dec 28 11:49:11 2014	INELASTIC SHORT SPACE COUNT RATE
F1:LS	Dec 28 11:49:11 2014	LONG SPACE COUNT RATE
F1:RATO	Dec 28 11:49:11 2014	SHORT/LONG SPACE COUNT RATE RATIO
F1:RICS	Dec 28 11:49:11 2014	SHORT SPACE INELASTIC TO CAPTURE COUNT RATE RATIO (ISS/CSS)
F1:SGFC	Dec 28 11:49:11 2014	CORRECTED FORMATION SIGMA
F1:SS	Dec 28 11:49:11 2014	SHORT SPACE COUNT RATE

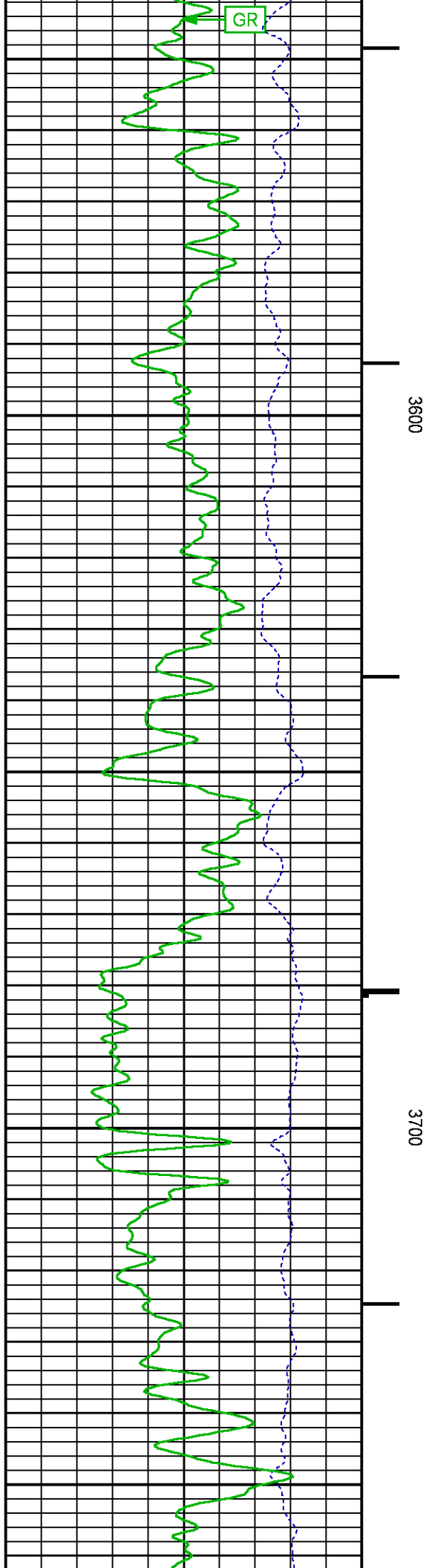
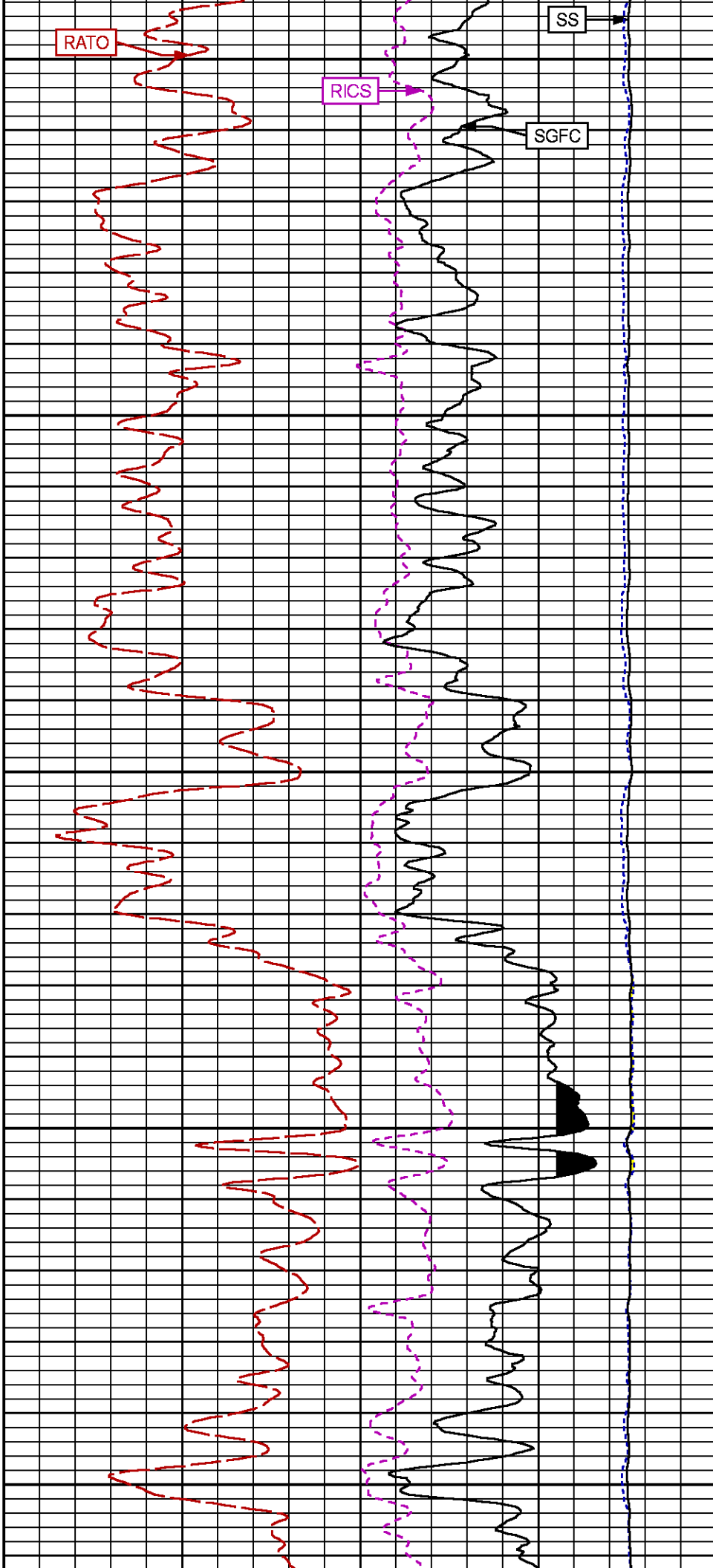
CURVE MEASURE POINT OFFSET

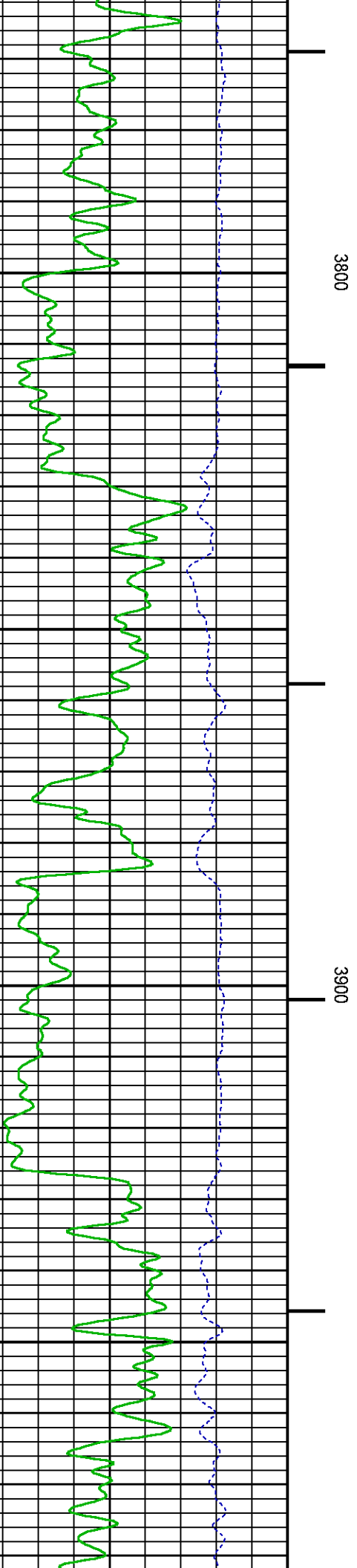
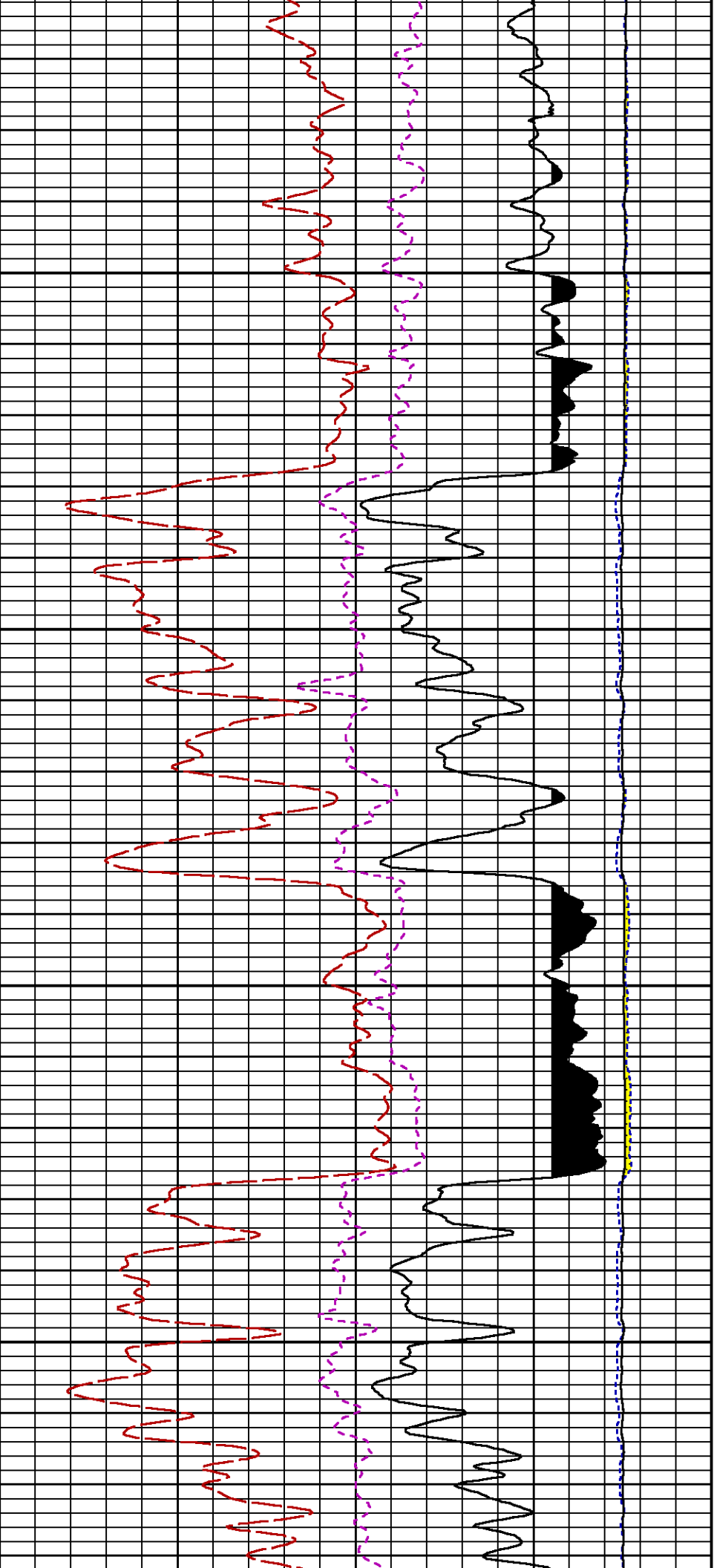
CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
CCL	25.00	ISS	12.75	RATO	12.75	SGFC	12.75
GR	22.75	LS	12.75	RICS	12.75	SS	12.75

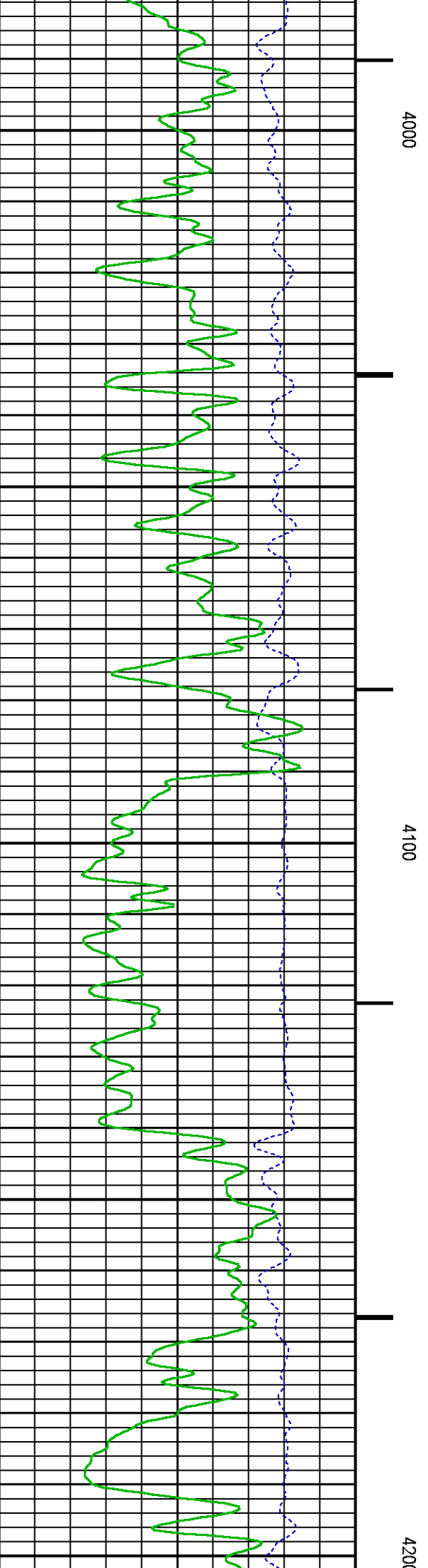
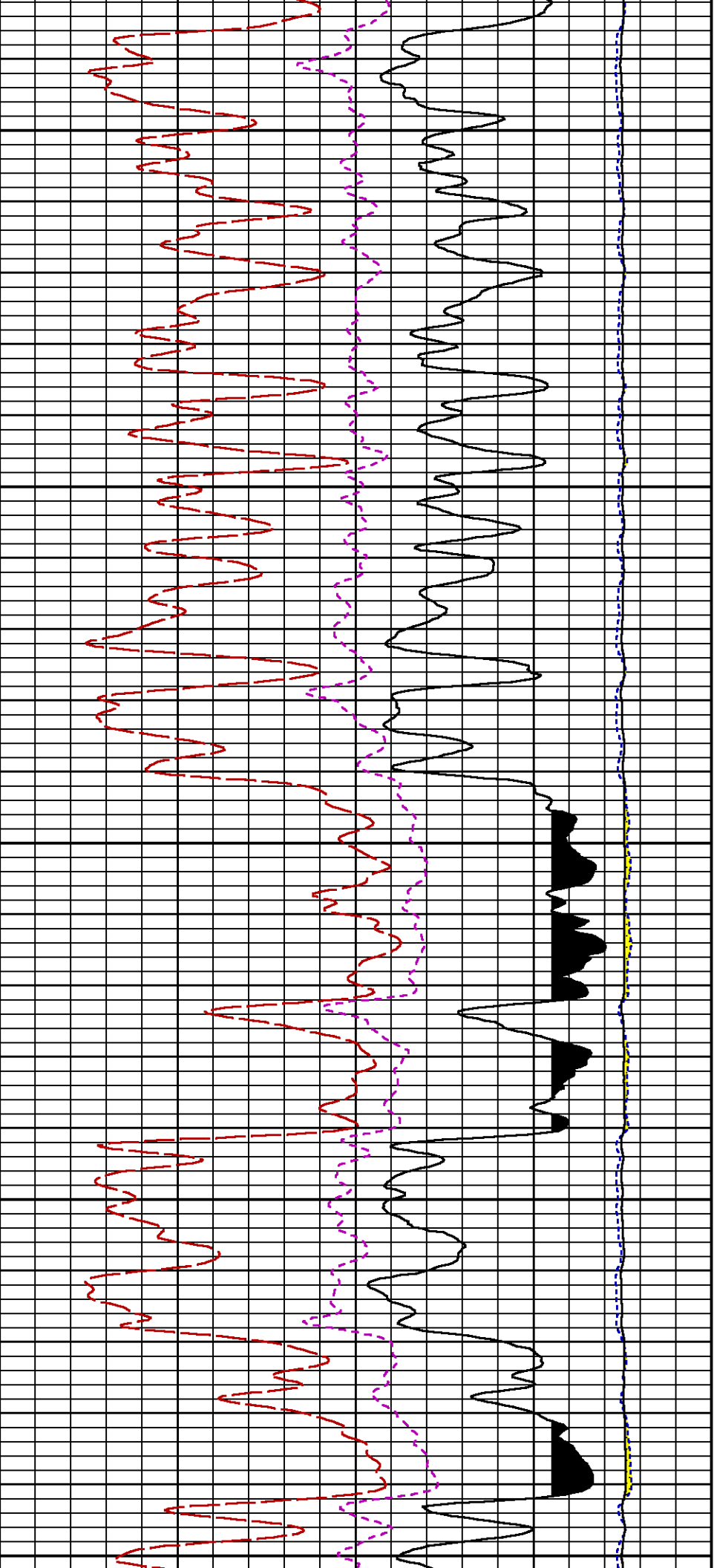
Presentation : BHI9G15WM1:D:\WELLDATA\WPX\IGM 32-12\32RPM_MAIN.fvpdf [5"/100' Scale]
Plot Interval : 3475 - 6718 Feet

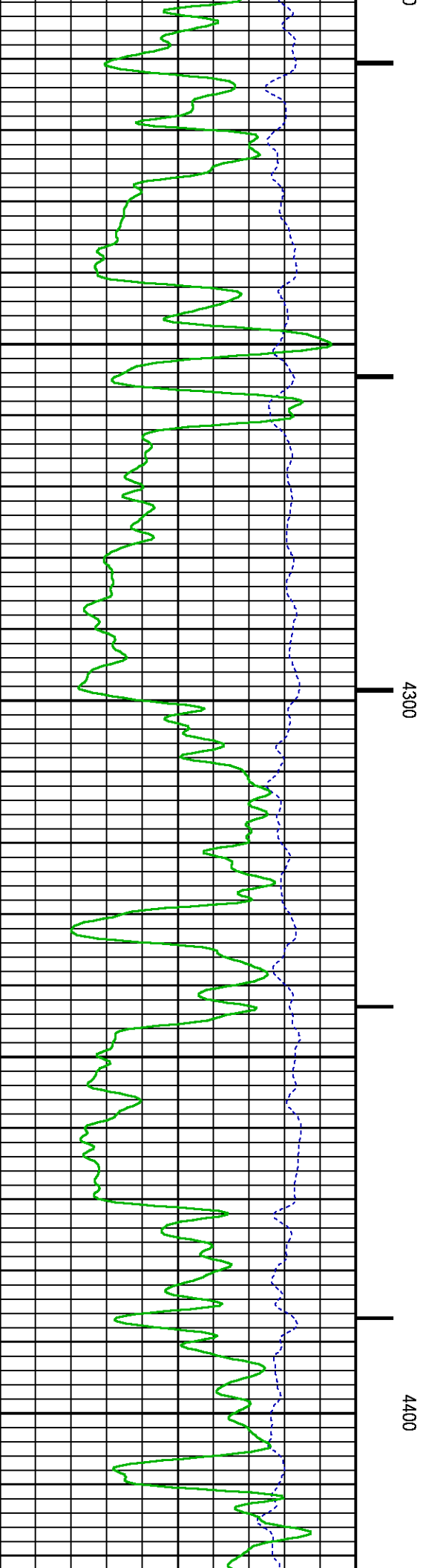
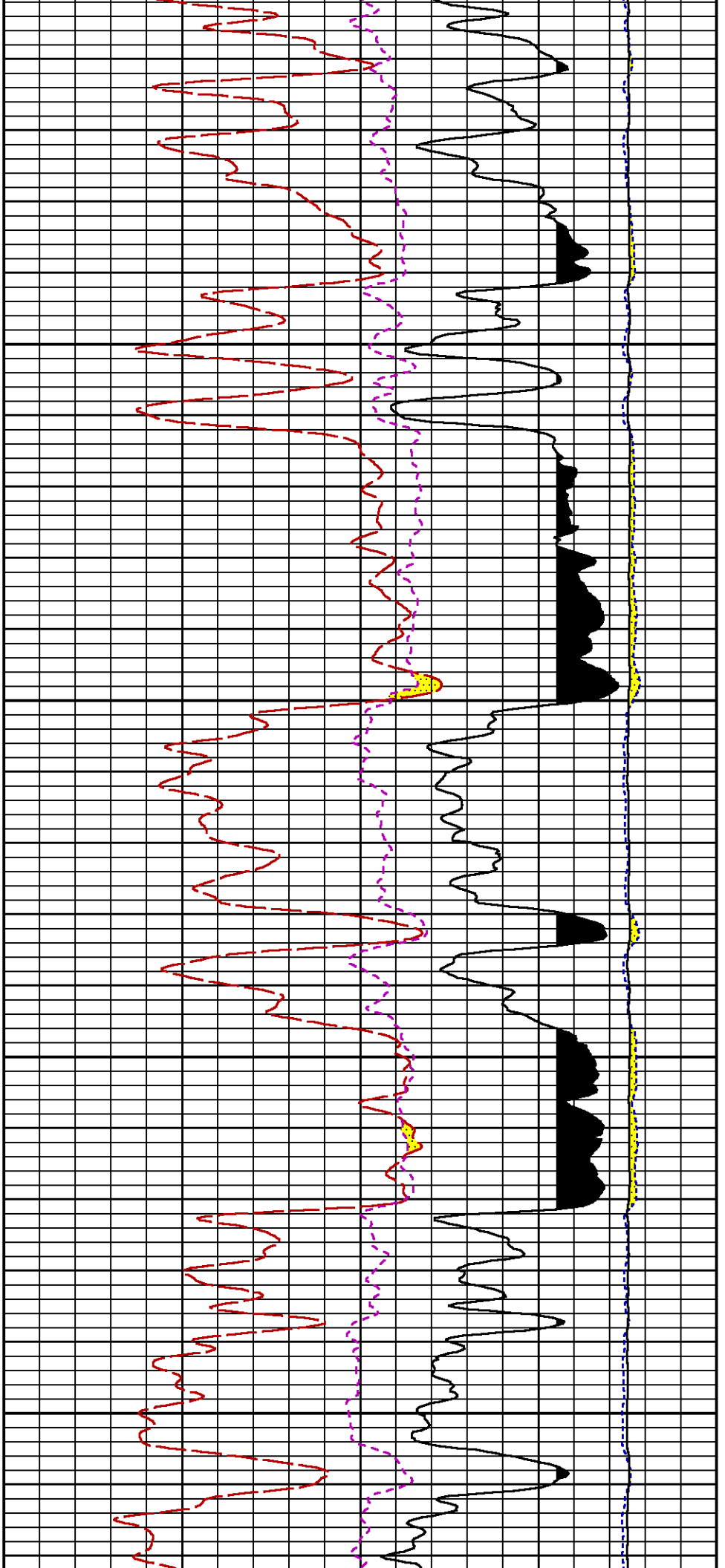
Data File 1 : F1 : BHI9G15WM1:D:\WELLDATA\WPX\IGM 32-12\32_RPM_MAIN.xtf
Created On : Dec 28 11:49:11 2014
Company : WPX ENERGY
Well : GM 32-12
Field : GRAND VALLEY
File Interval : 29.75 - 6712 Feet
OCT : n354h

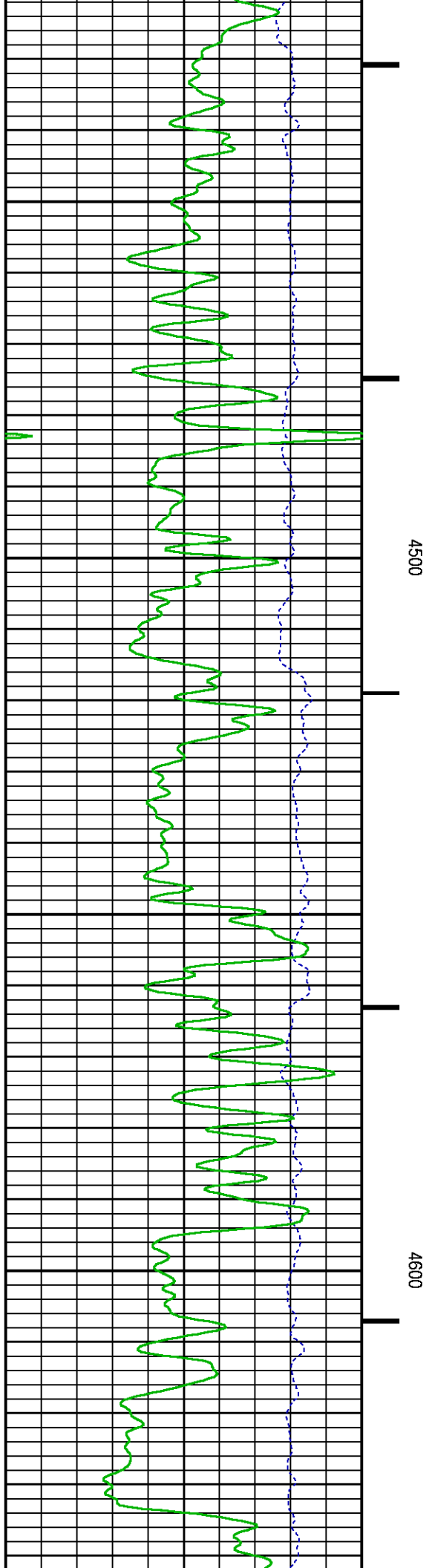
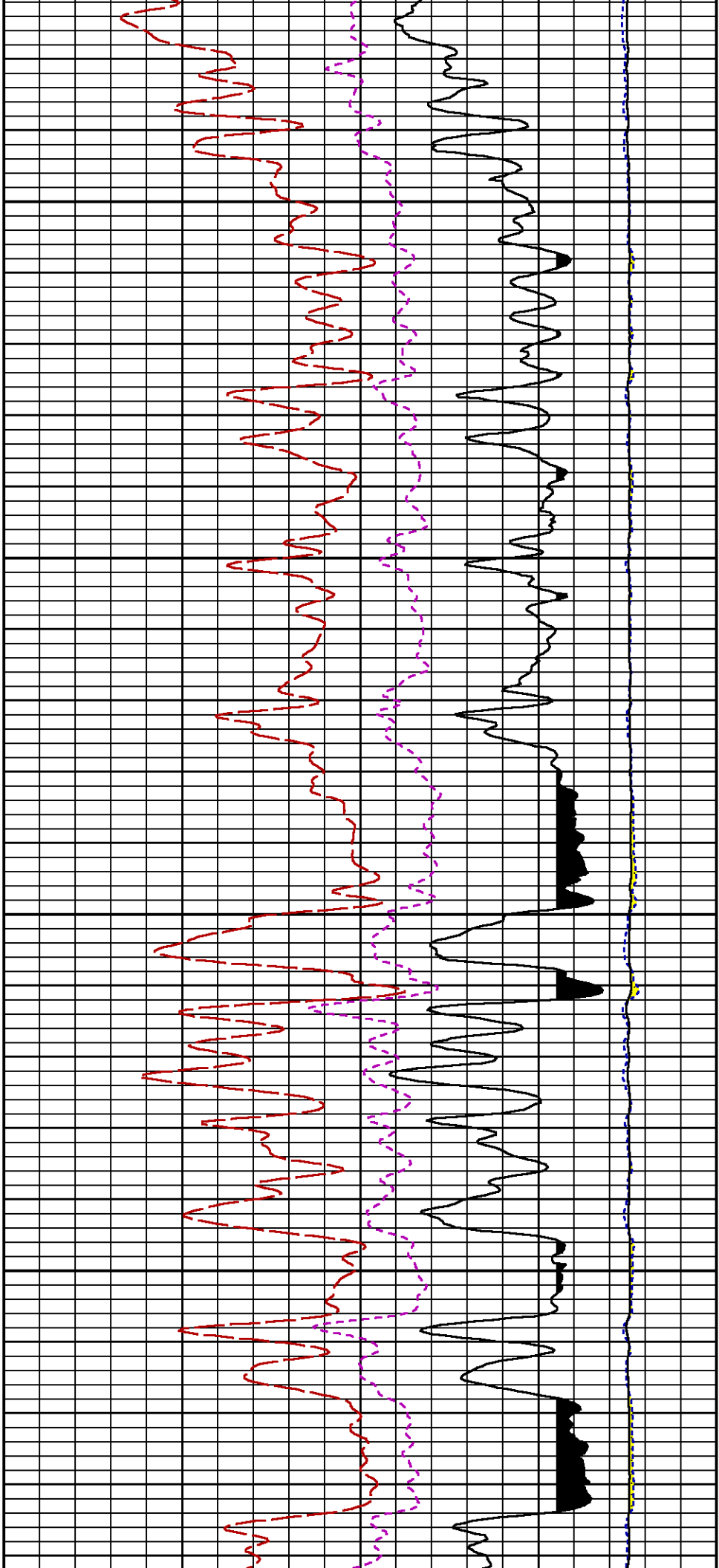


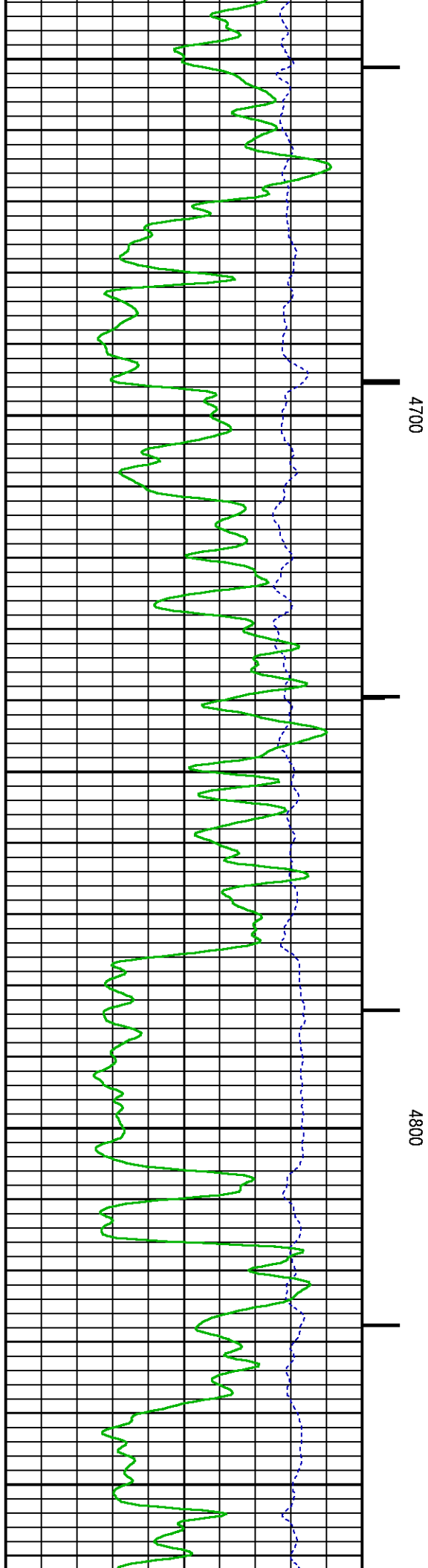
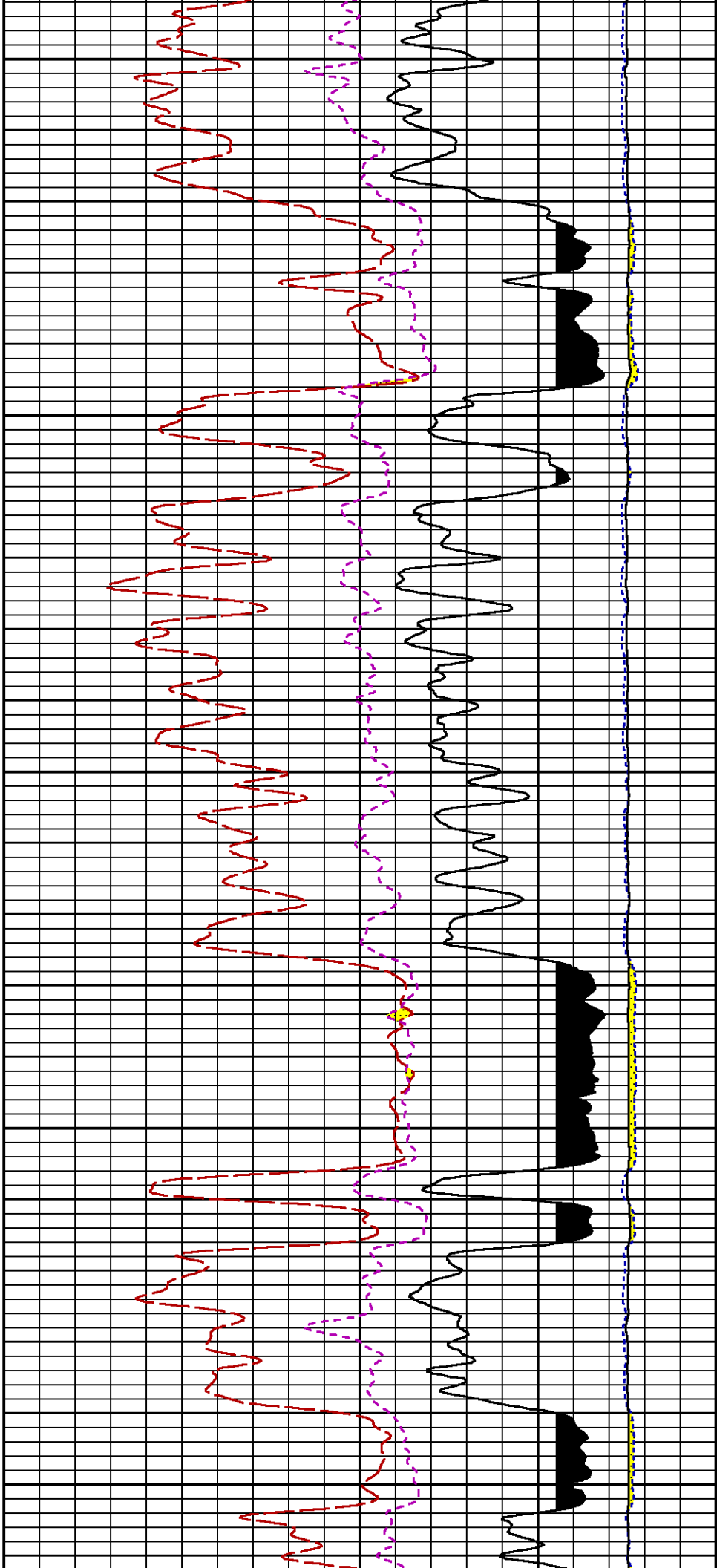


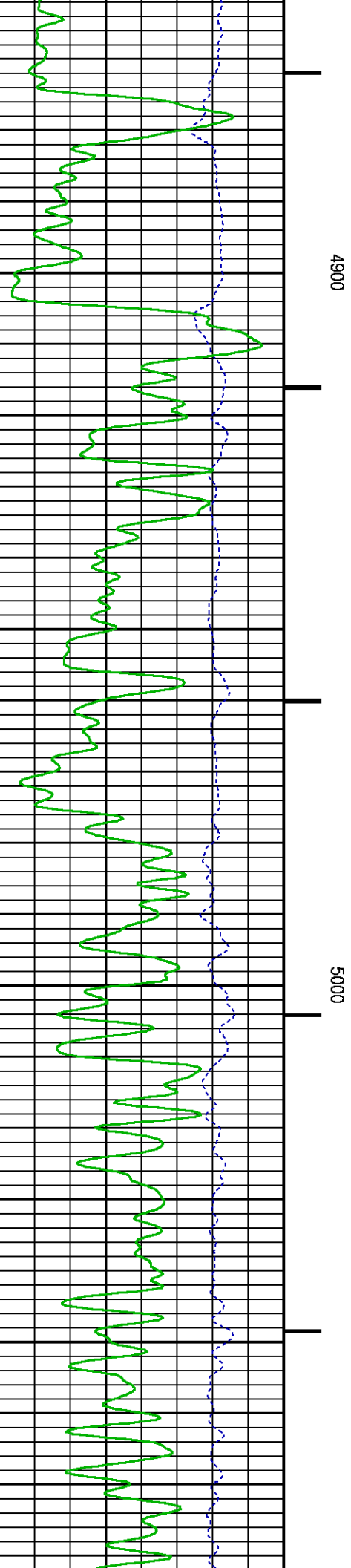
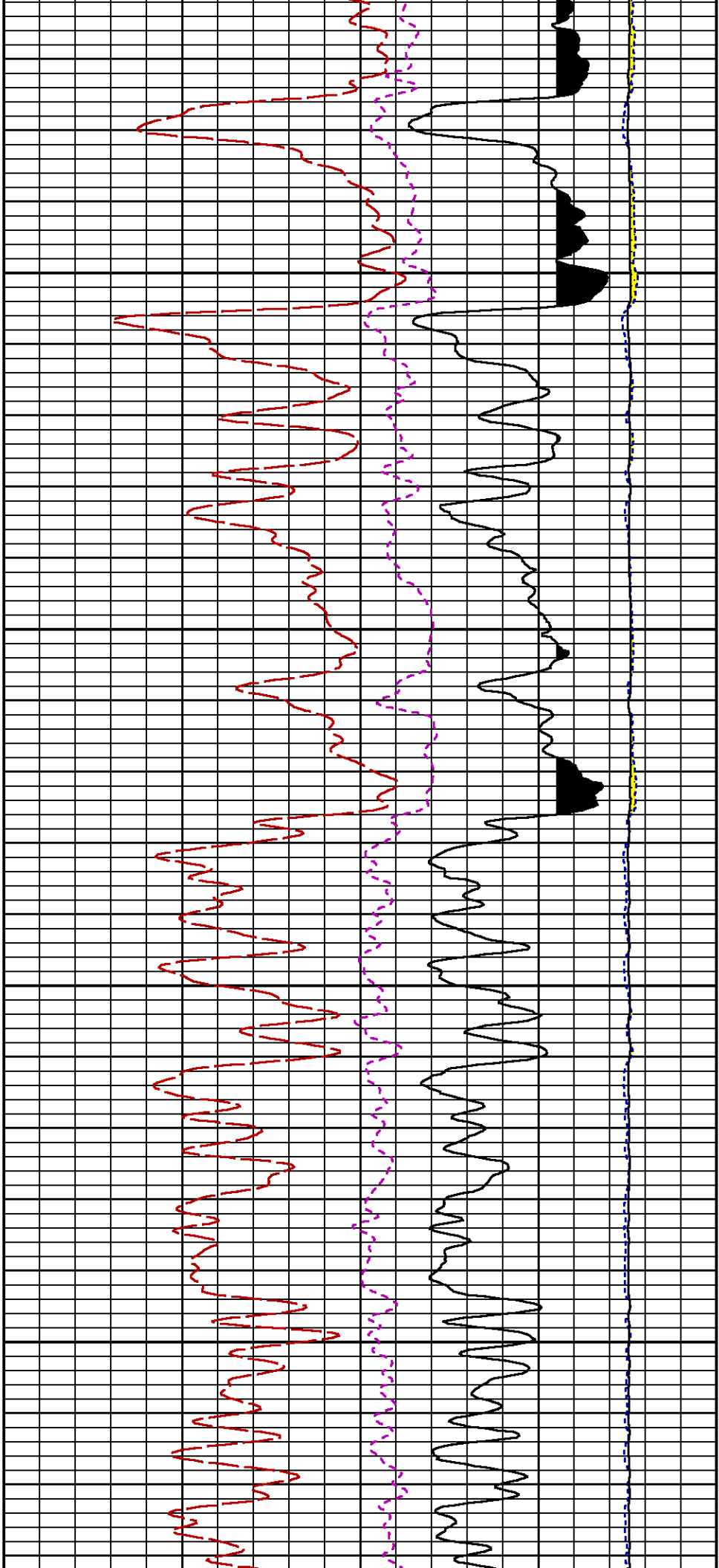


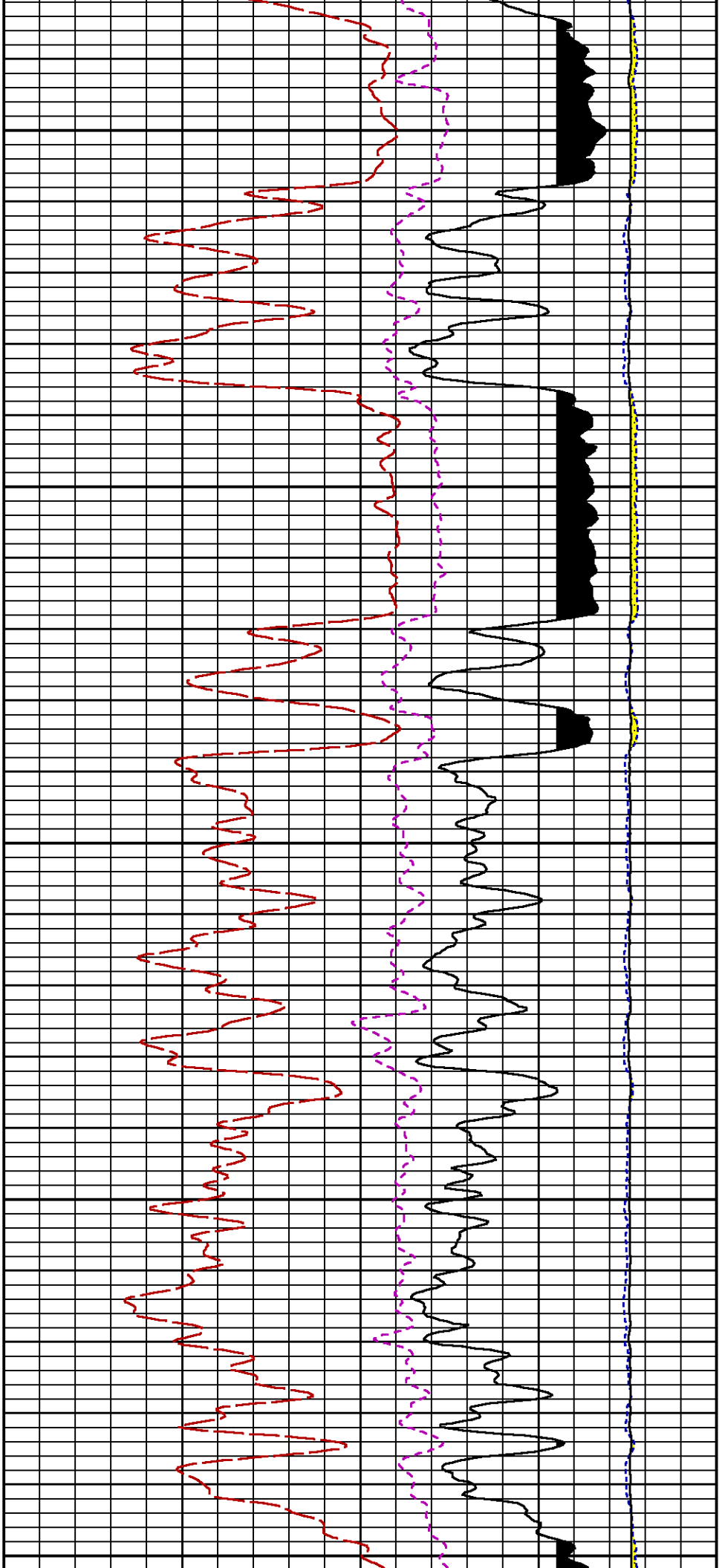








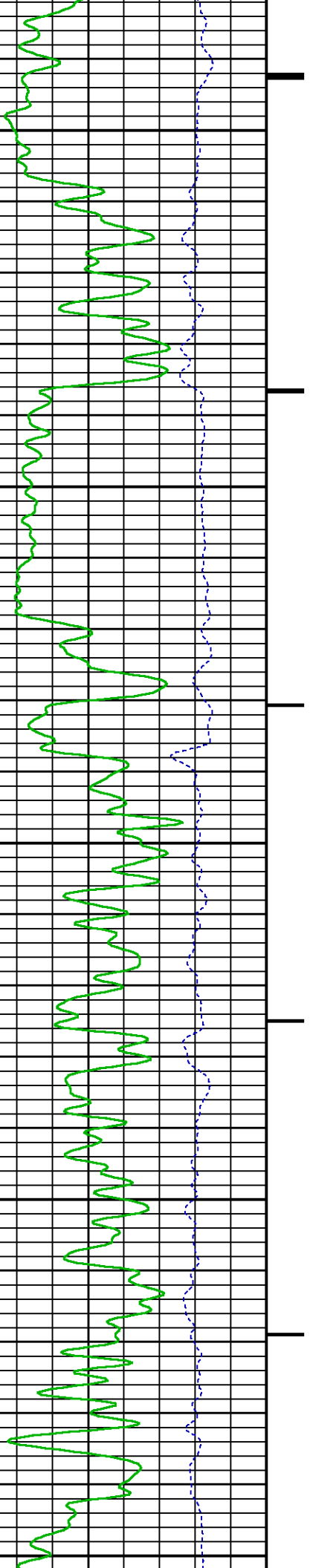


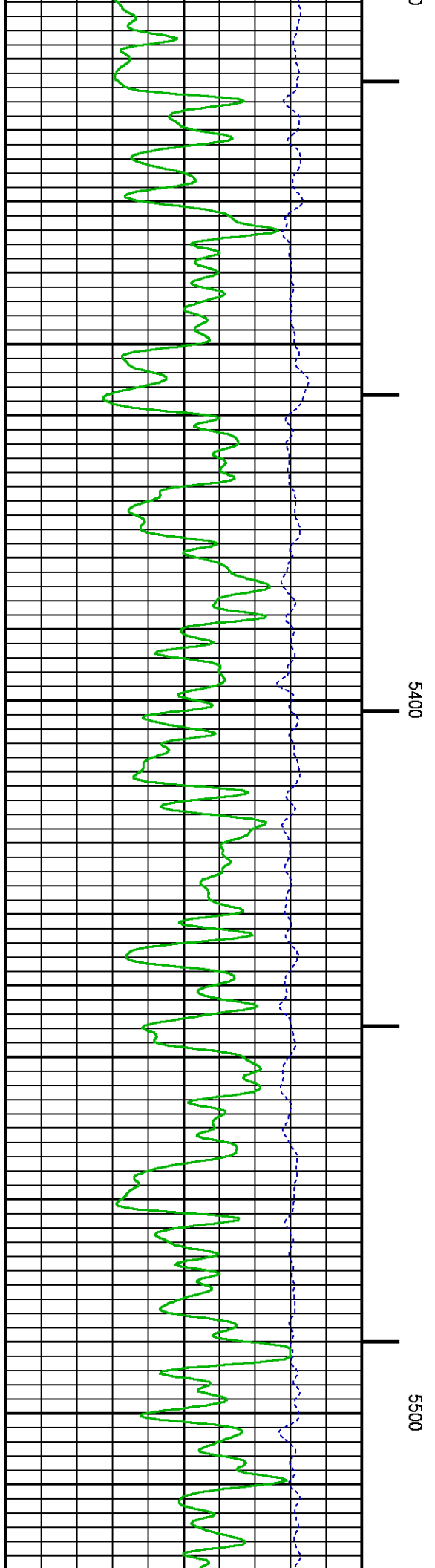
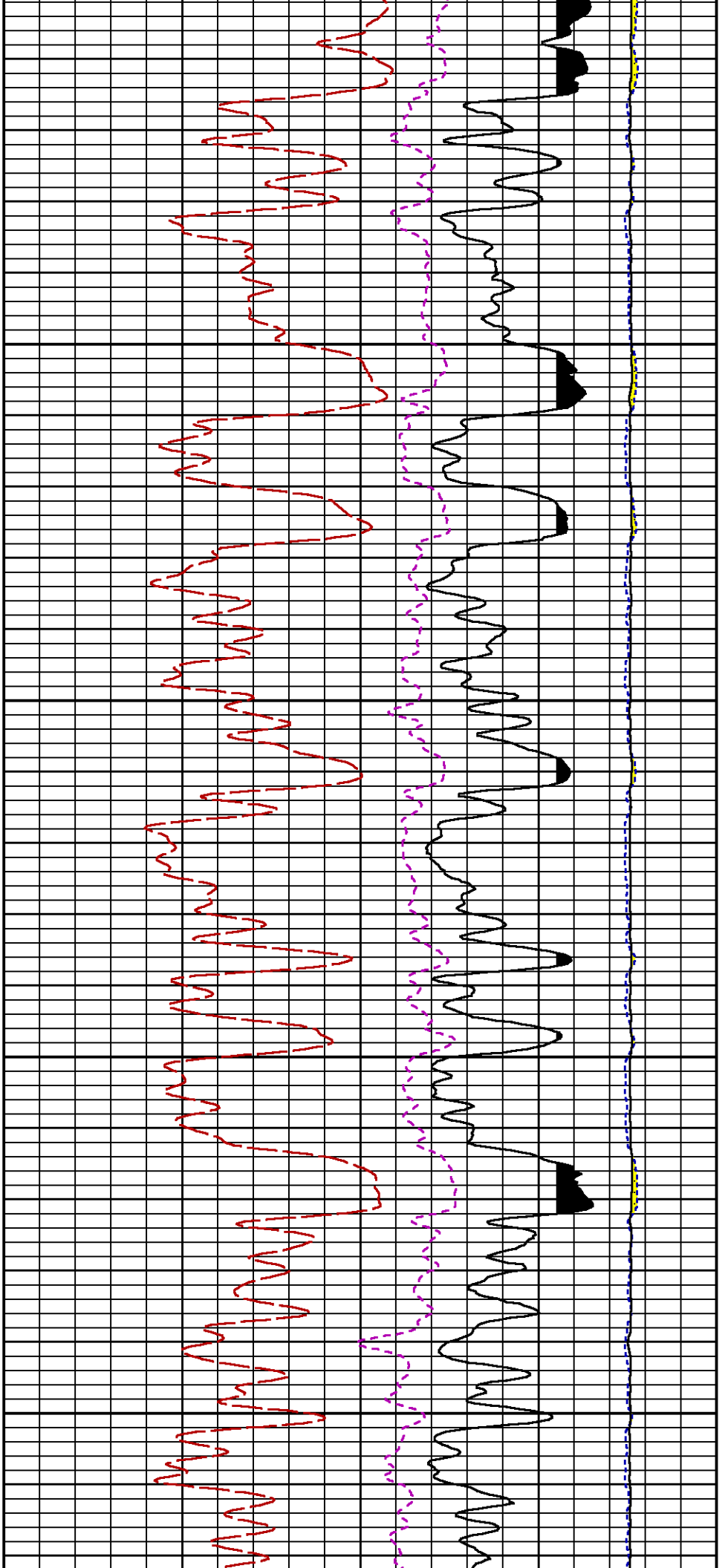


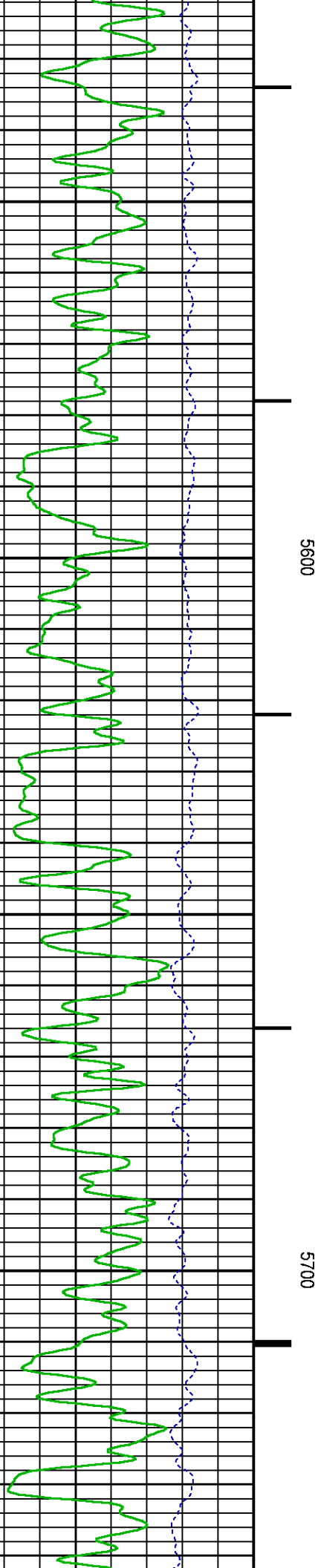
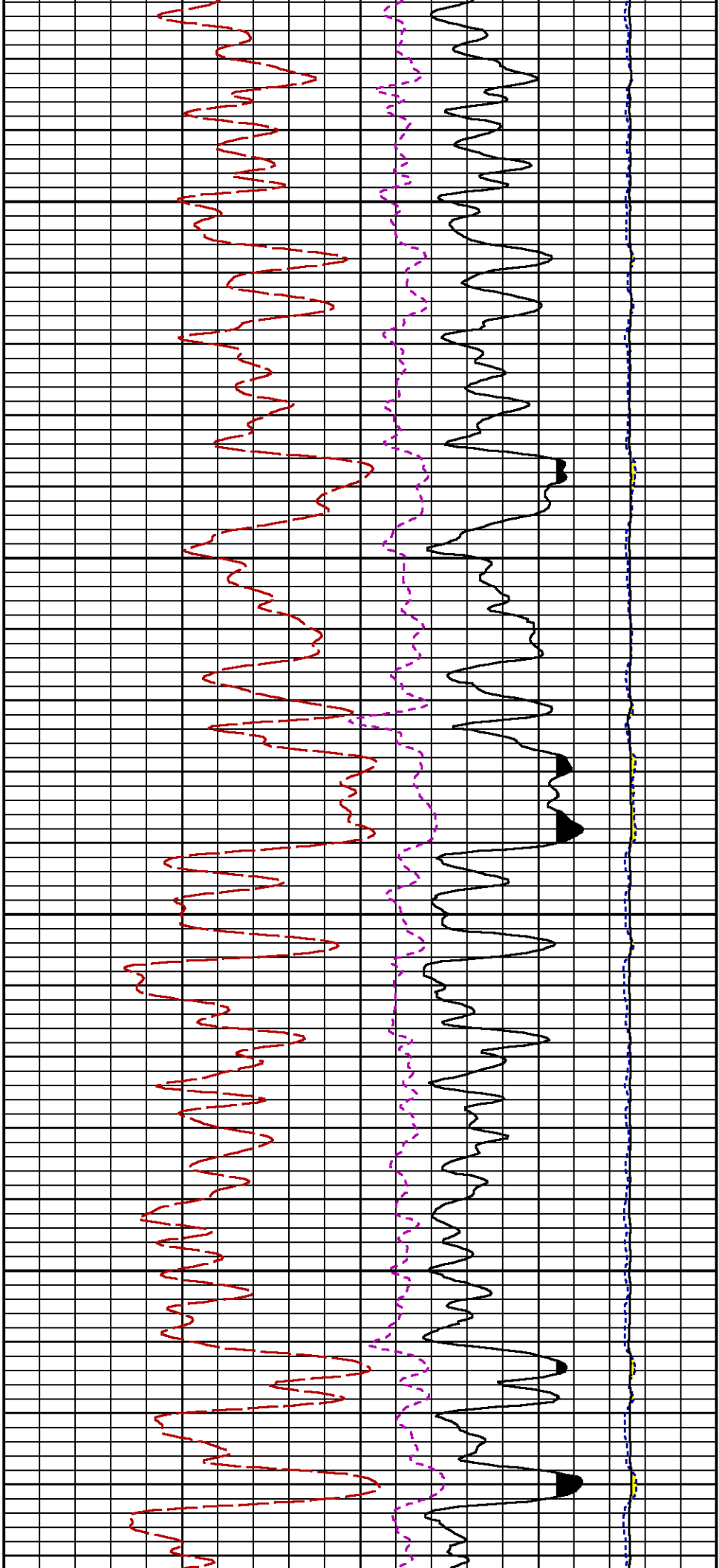
5100

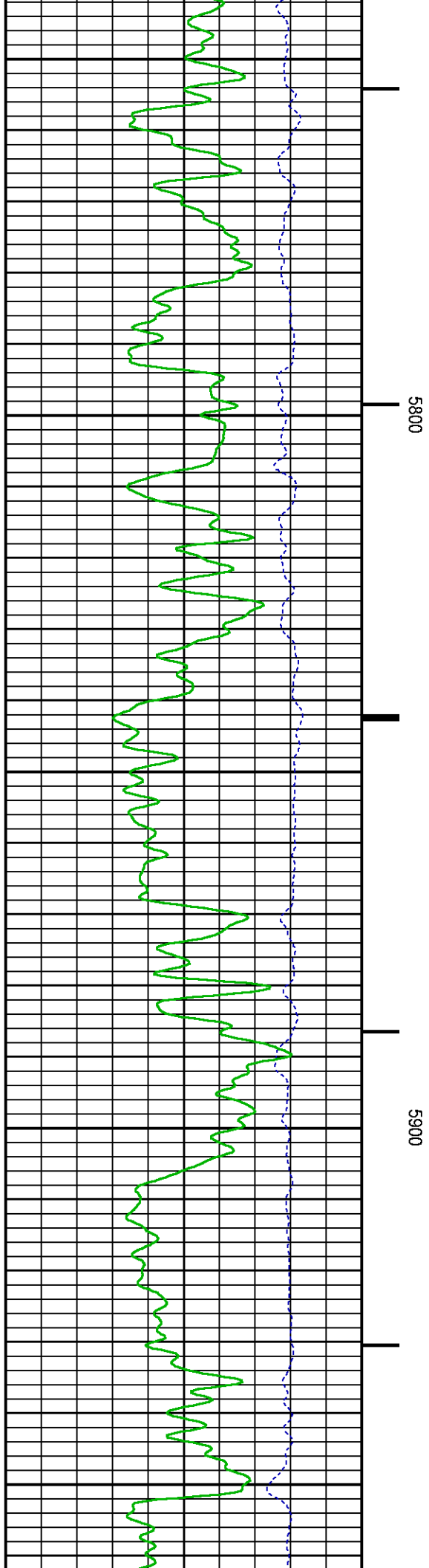
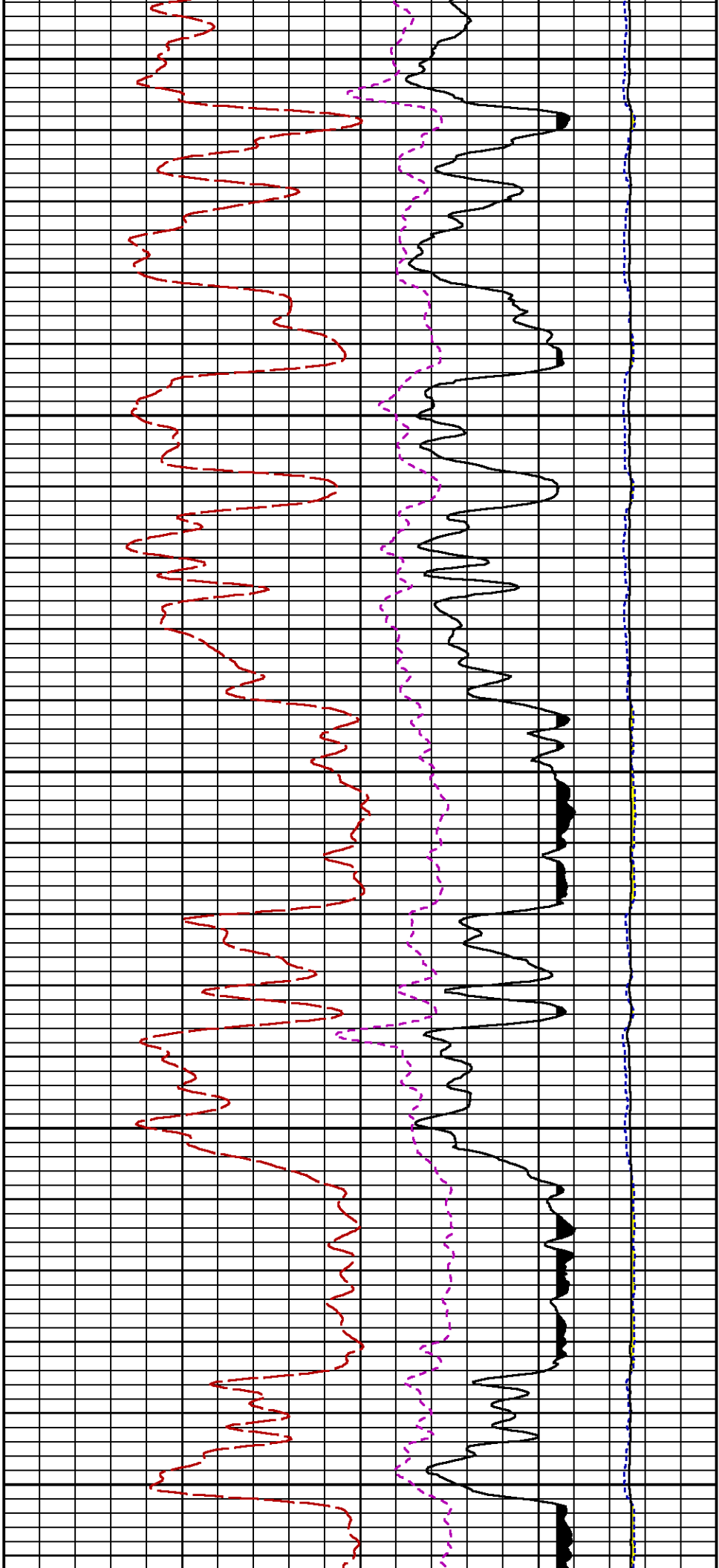
5200

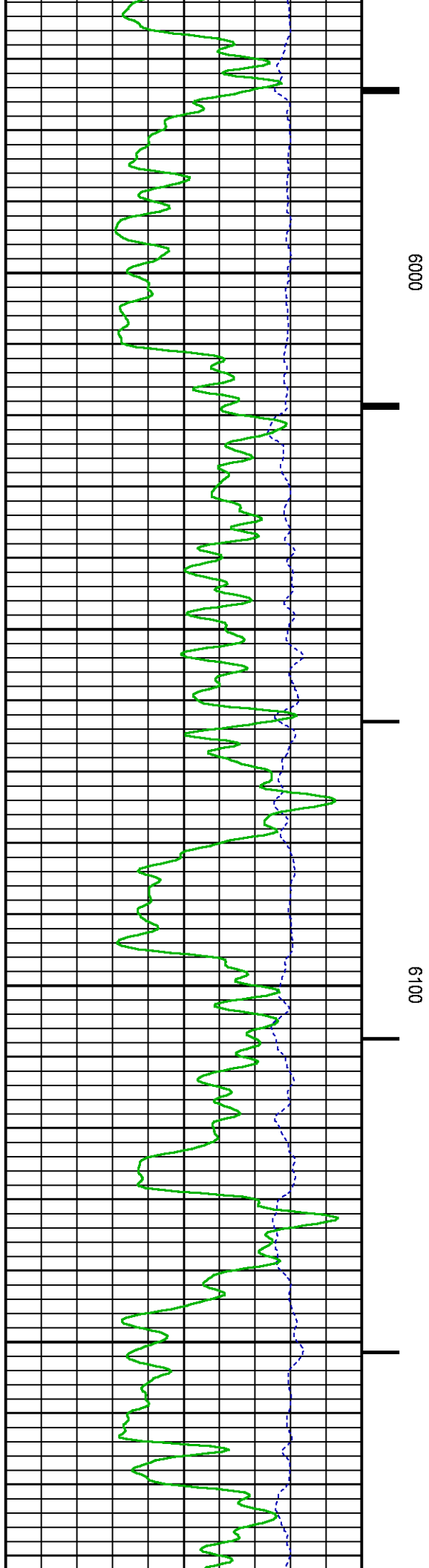
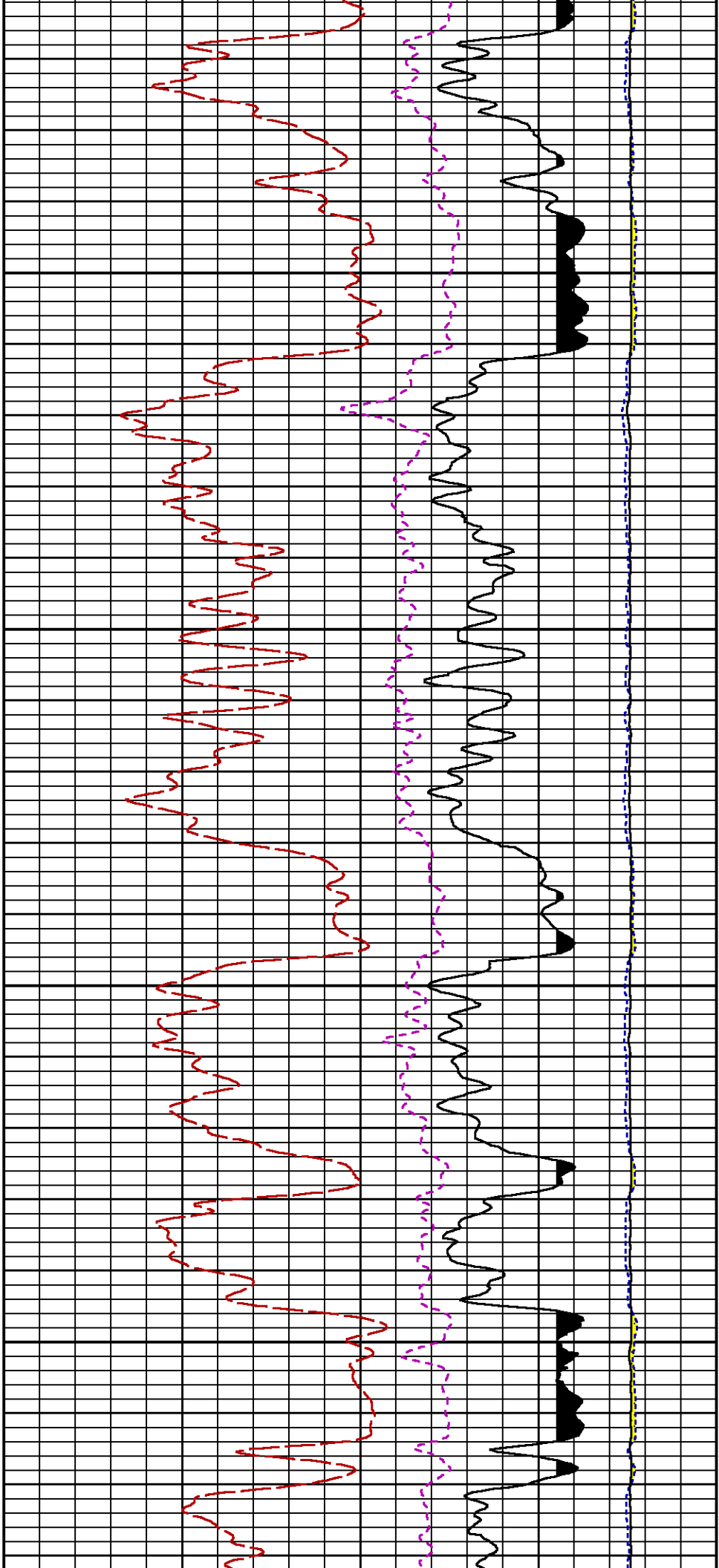
5300

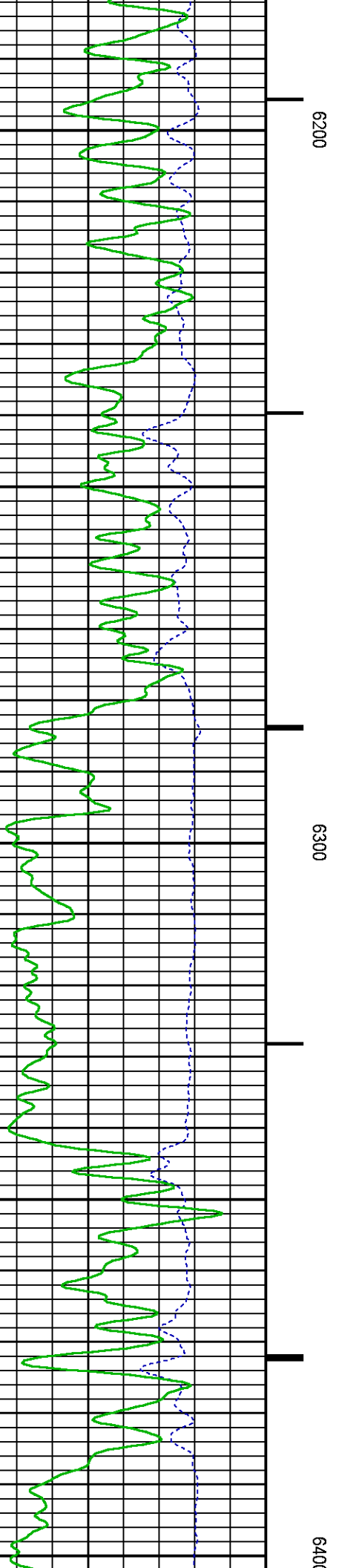
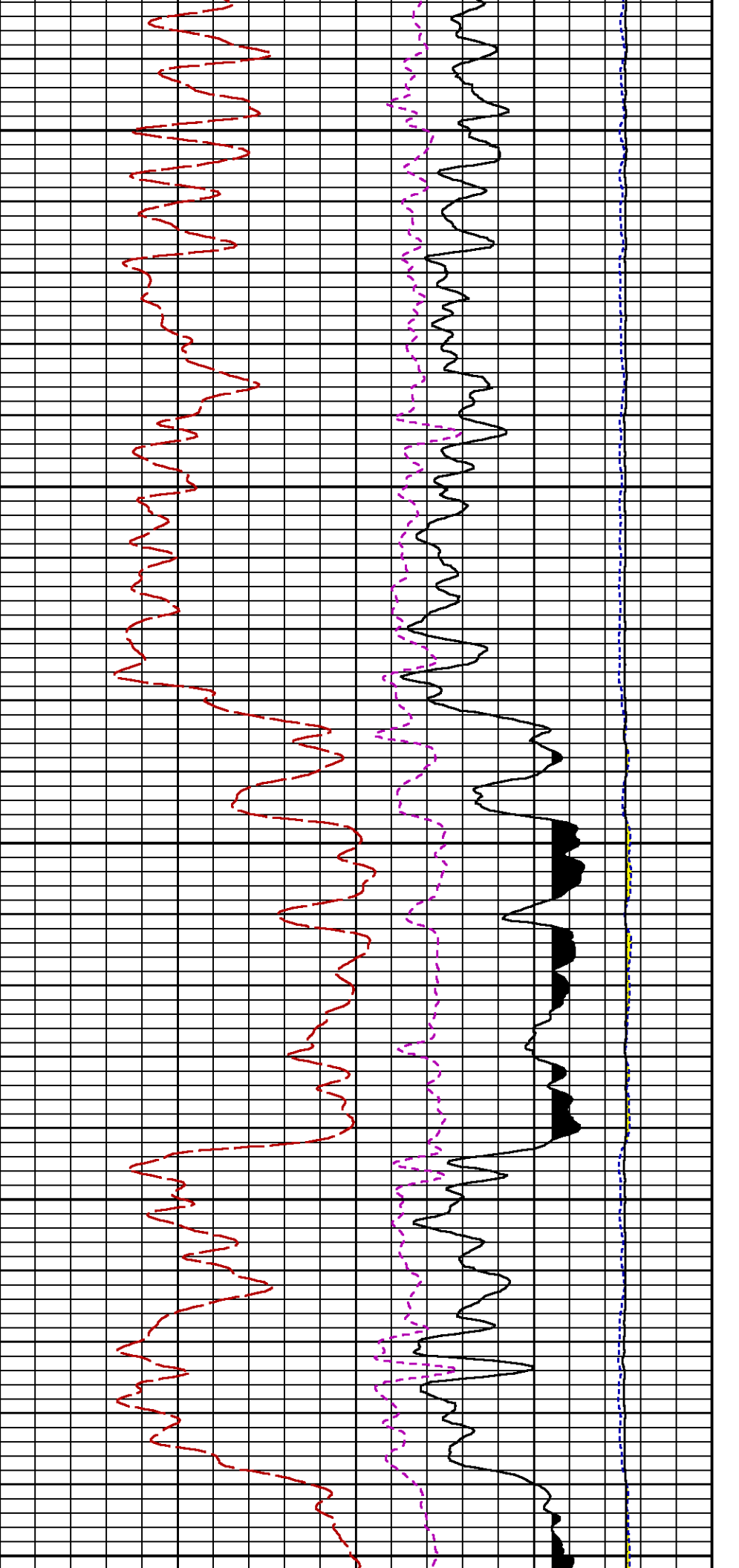


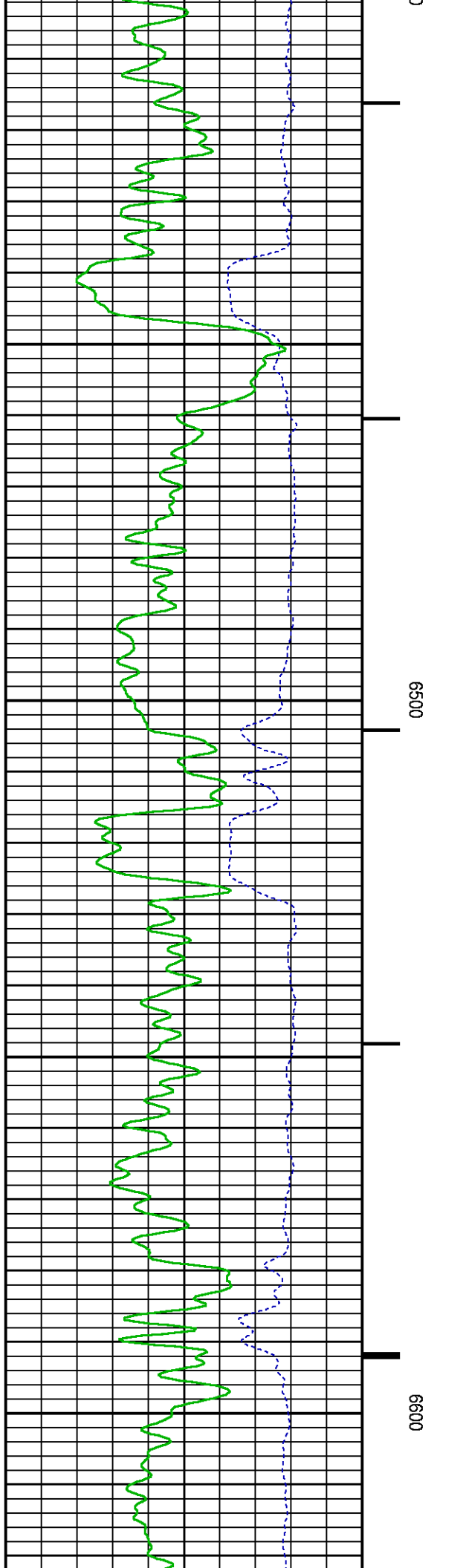
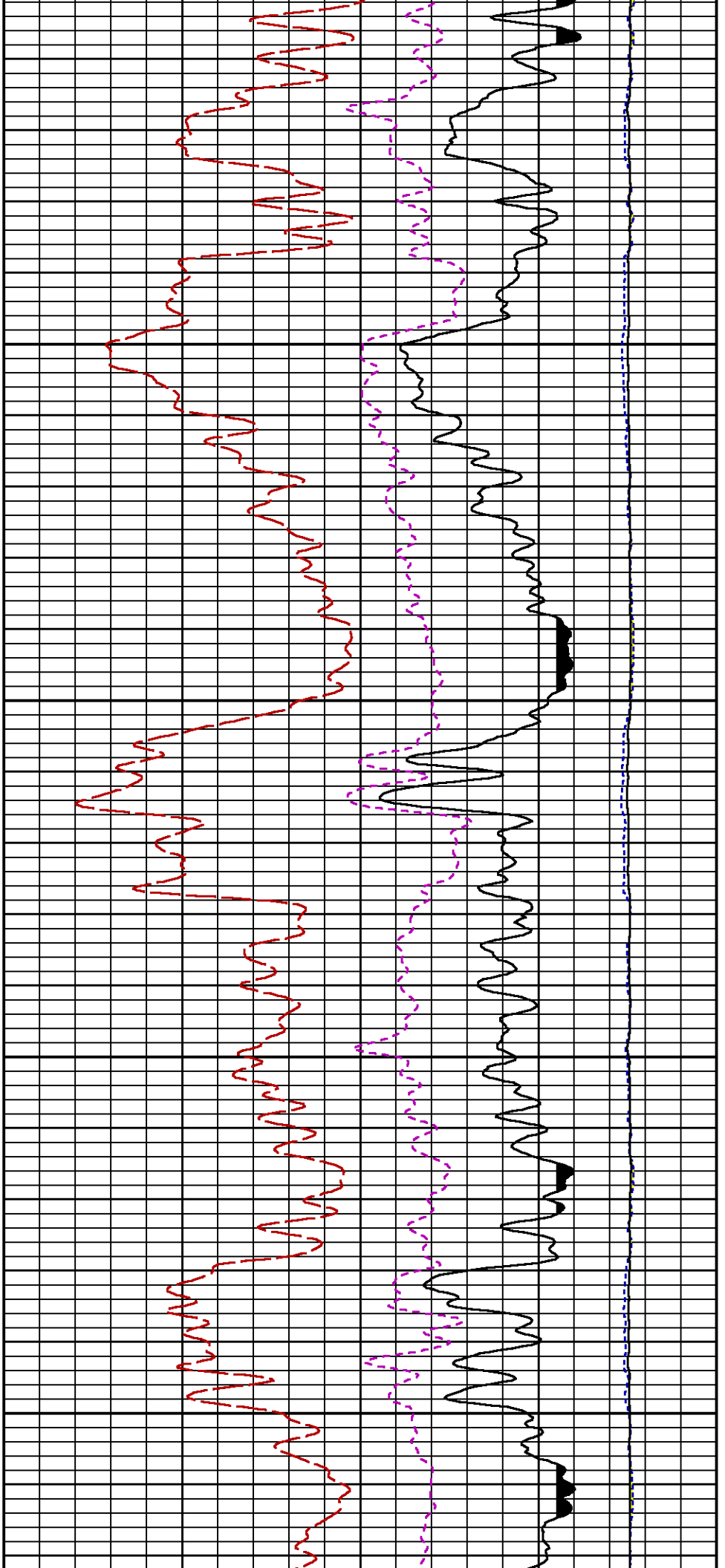


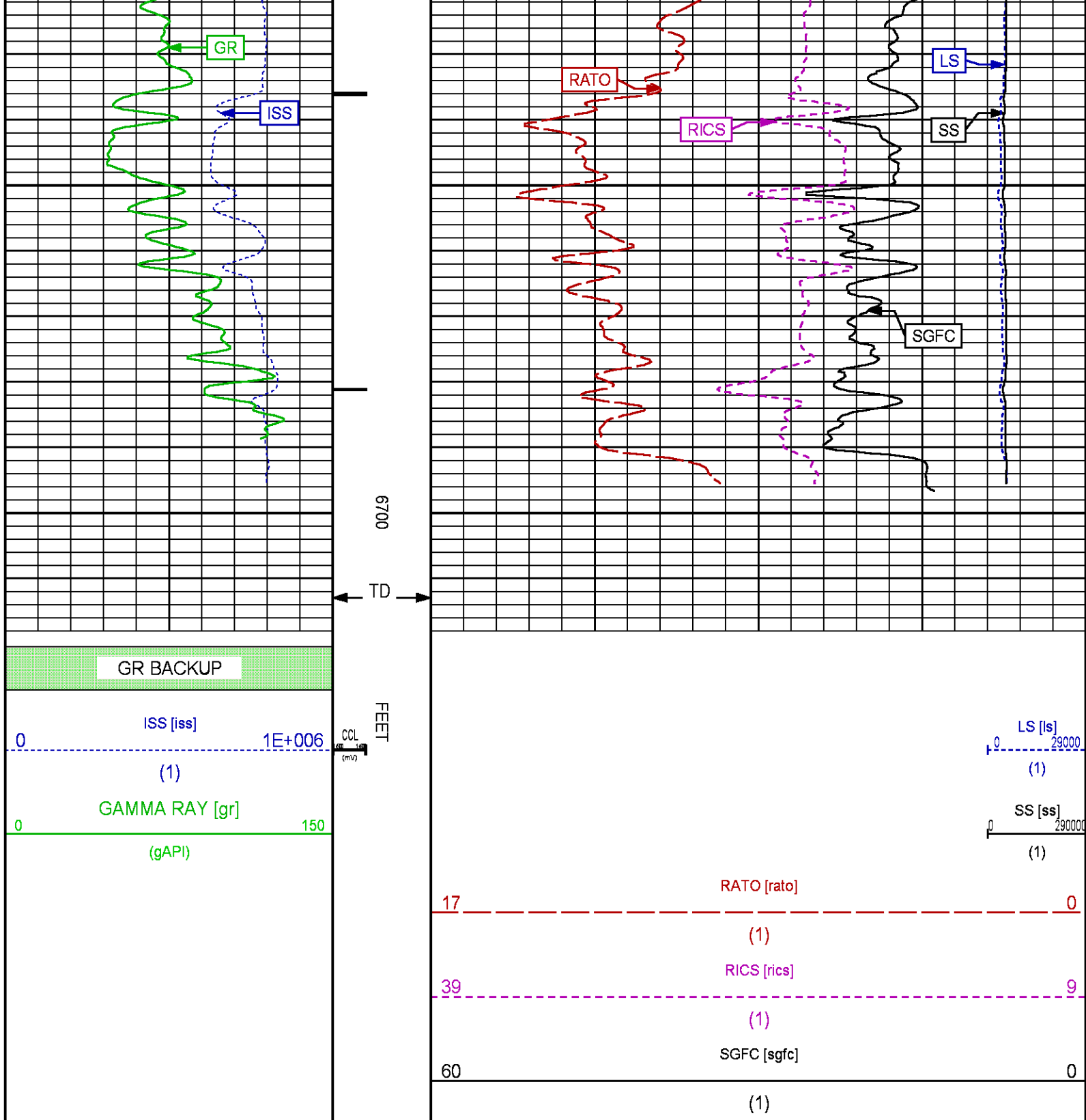












REPEAT SECTION PNC-3D MODE

PARAMETER AND FILTER SUMMARY REPORT

FILE: C:\dat1a\093574\354h01.prm
 LOGGING MODE: DEPTH DIRECTION: UP
 TOP DEPTH: 5867.500 ft BOTTOM DEPTH: 6203.609 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

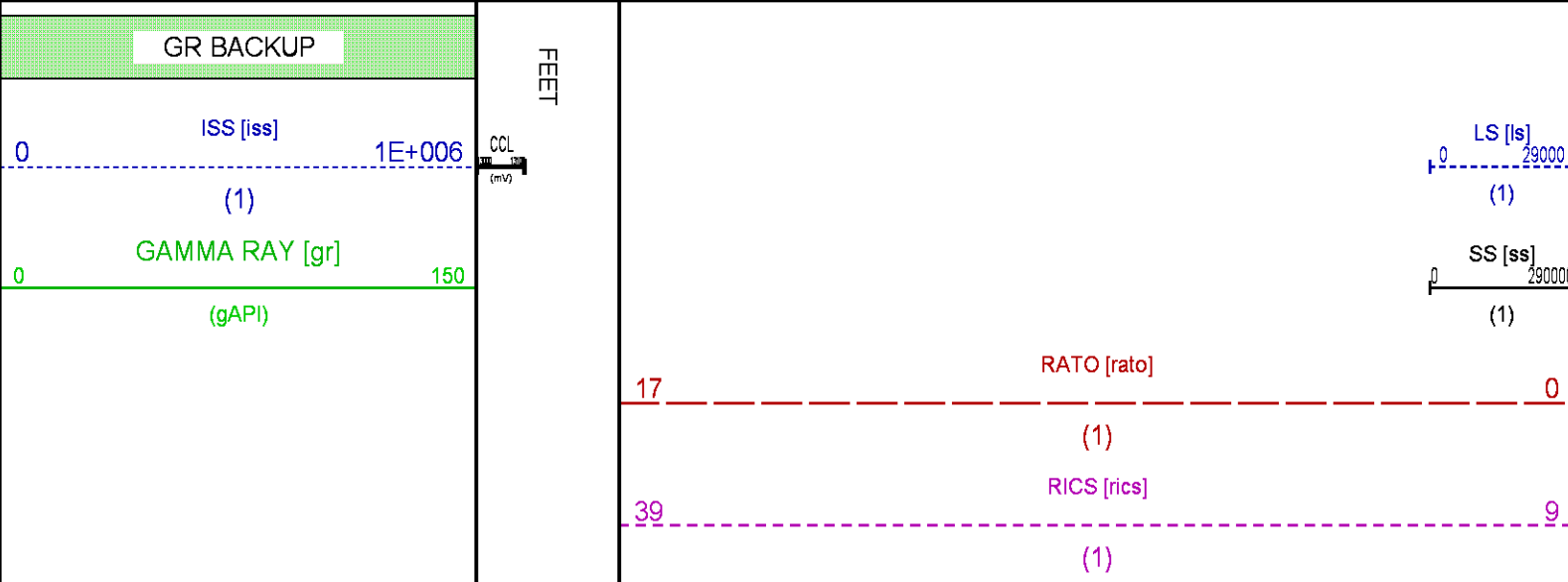
CURVE NAME	CREATION DATE	CURVE DESCRIPTION
F1:CCL	Dec 28 11:22:16 2014	CASING COLLAR LOCATOR
F1:GR	Dec 28 11:22:16 2014	GAMMA RAY
F1:ISS	Dec 28 11:22:16 2014	INELASTIC SHORT SPACE COUNT RATE
F1:LS	Dec 28 11:22:16 2014	LONG SPACE COUNT RATE
F1:RATO	Dec 28 11:22:16 2014	SHORT/LONG SPACE COUNT RATE RATIO
F1:RICS	Dec 28 11:22:16 2014	SHORT SPACE INELASTIC TO CAPTURE COUNT RATE RATIO (ISS/CSS)
F1:SGFC	Dec 28 11:22:16 2014	CORRECTED FORMATION SIGMA
F1:SS	Dec 28 11:22:16 2014	SHORT SPACE COUNT RATE

CURVE MEASURE POINT OFFSET

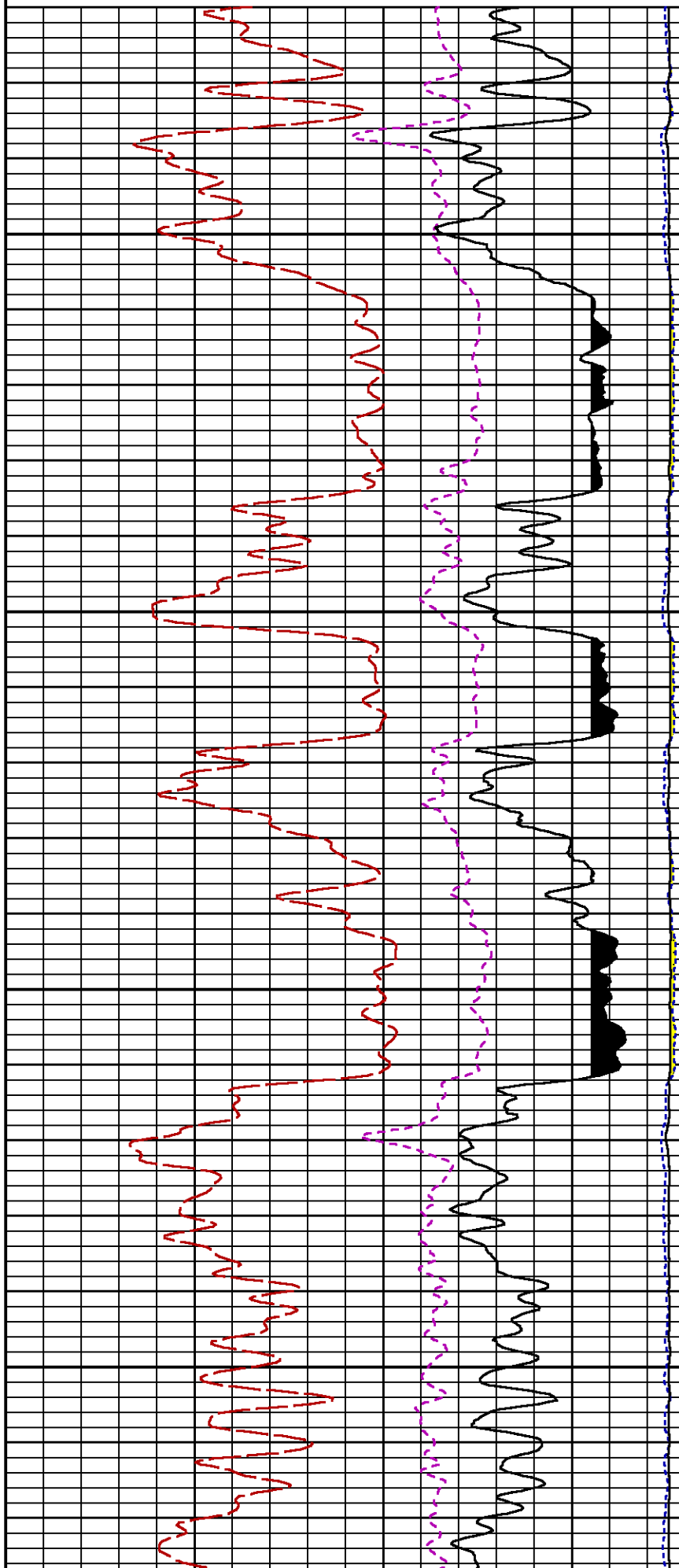
CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
CCL	25.00	ISS	12.75	RATO	12.75	SGFC	12.75
GR	22.75	LS	12.75	RICS	12.75	SS	12.75

Presentation : BHUGHES-06627:C:\dat1a\093574\32RPM_REPEAT.fvpdf [5"/100' Scale]
 Plot Interval : 5870 - 6170 Feet

Data File 1 : F1 : BHUGHES-06627:C:\dat1a\093574\32_RPM_REPEAT.xtf
 Created On : Dec 28 11:22:16 2014
 Company : WPX ENERGY
 Well : GM 32-12
 Field : GRAND VALLEY
 File Interval : 5842.75 - 6202 Feet
 OCT : n354h

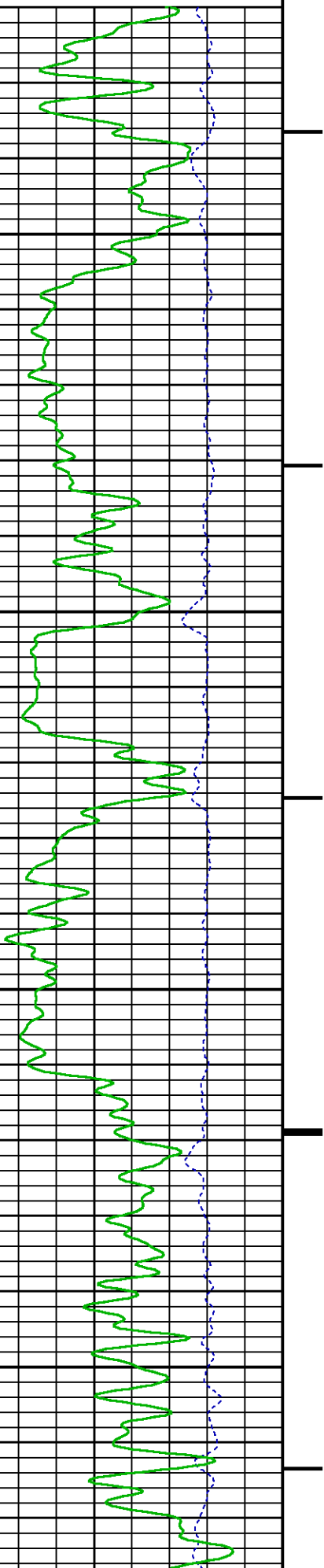


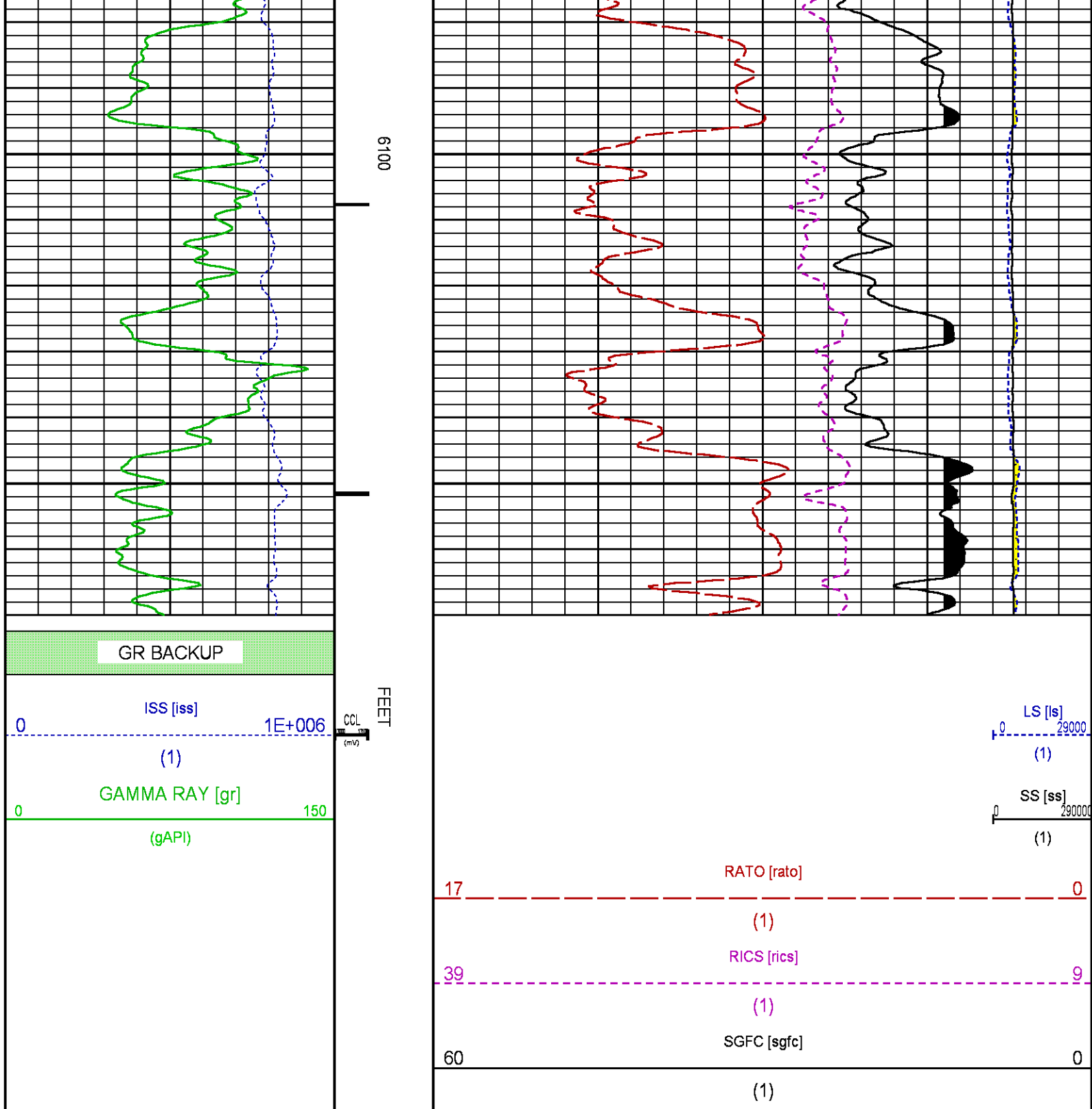
(1)



5900

6000





CALIBRATION / VERIFICATION SUMMARY

Source File: D:\WELLDATA\WPX\GM 32-12\354h.lp1

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 Vlts (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			
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	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	10.89 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

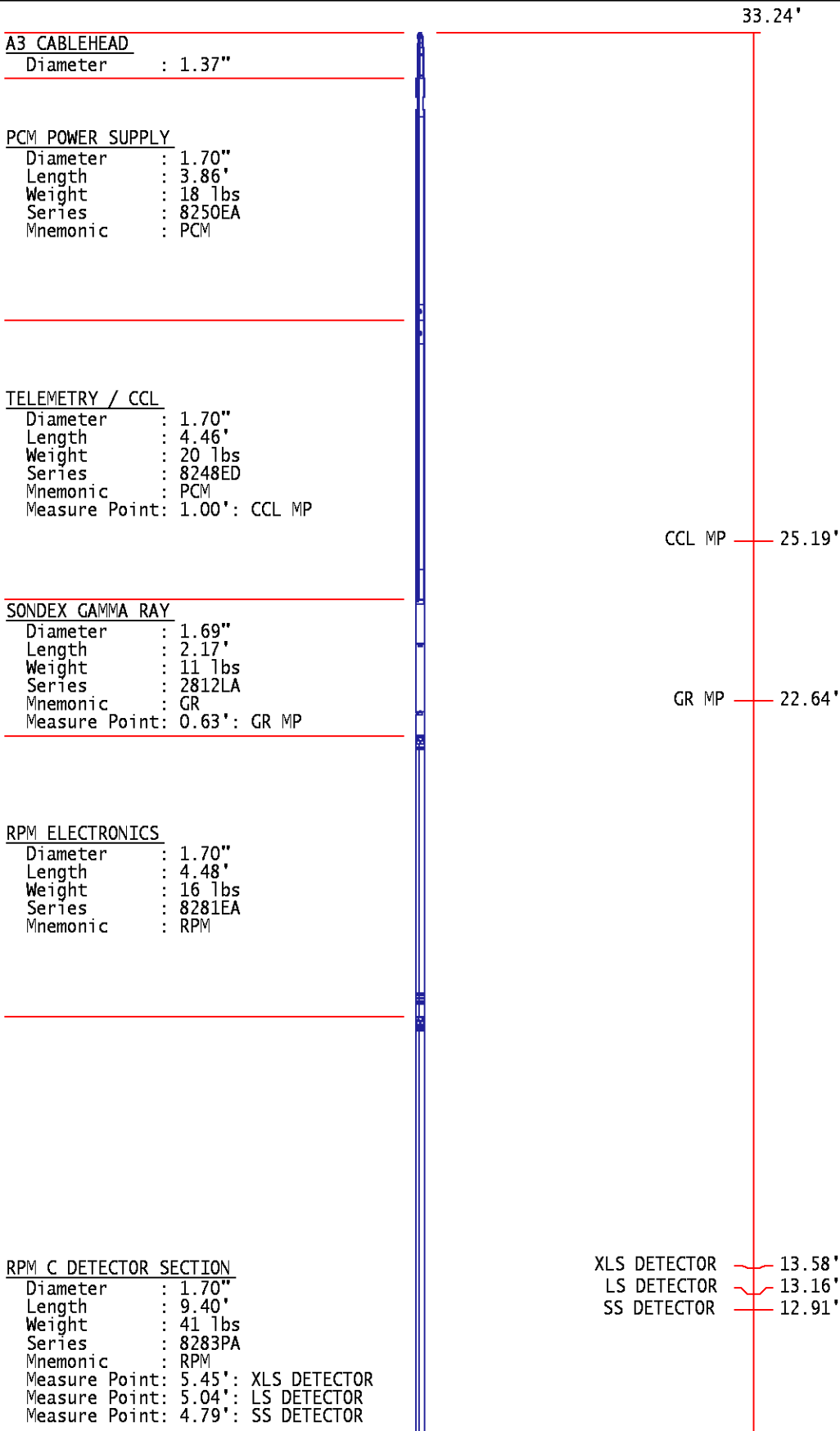
TPSETEMP PRIMARY CALIBRATION SUMMARY

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



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

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

0.00'



COMPANY
WELL
FIELD
COUNTY

WPX ENERGY
GM 32-12
GRAND VALLEY
GARFIELD

STATE **COLORADO**

FILE NO:

CH093574

API NO:

05045224700000

LOCATION:

SHL: 1181' FNL & 1912' FWL
BHL: 2001' FNL & 1704' FEL (SWNE)

ELEVATIONS:

KB 5151 FT
DF
GL 5125 FT

12 7S 96W

GM 21-12 PAD
NABORS 573

SEC **12** **TWP** **7S** **RGE** **96W**

DATE **28-Dec-2014**