



FILE NO:	CH095183
API NO:	05045225160000
COMPANY	WPX ENERGY
WELL	YOUBERG RU 643-7
FIELD	RULISON
COUNTY	GARFIELD
STATE	COLORADO

Version	7 7S 93W RU 44-7 PAD NABORS 576	LOCATION:	SHL: 1162' FSL & 1181' FEL BHL: 1297' FSL & 754' FEL (NESE) SEC 7 TWP 7S RGE 93W	OTHER SERVICES	BOND LOG
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PERMANENT DATUM	GL	ELEVATION	7917 FT	ELEVATIONS:	KB 7943 FT DF GL 7917 FT
LOG MEASURED FROM	KB	26 FT	ABOVE P.D.		
DRILL. MEAS. FROM	KB				

DATE		10-Mar-2015			
RUN	TRIP	1	1		
SERVICE ORDER		US095183			
DEPTH DRILLER		9942 FT			
DEPTH LOGGER		9876 FT			
BOTTOM LOGGED INTERVAL		9866 FT			
TOP LOGGED INTERVAL		5851 FT			
TIME STARTED		08:30			
TIME FINISHED		14:30			
OPERATOR RIG TIME		6 HOURS			
TYPE OF FLUID IN HOLE		WATER			
FLUID DENSITY		NA			
FLUID SALINITY		NA			
FLUID LEVEL		72 FT			
LOGGED CEMENT TOP		NA			
WELLHEAD PRESSURE		0 PSI			
MAXIMUM HOLE DEVIATION		NA			
NOMINAL LOGGING SPEED		10 F/MIN			
MAX. RECORDED TEMP.		252 DEGF			
REFERENCE LOG		BAKER HUGHES BOND LOG			
REFERENCE LOG DATE		09-Mar-2015			
EQUIP. NO.	LOCATION	4271	GRAND JCT.		
RECORDED BY	FLOYD RENEAU				
WITNESSED BY	TED VONFELDT				

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	26 FT	1303 FT
8.75 IN	1303 FT	9942 FT

CASING RECORD				
SIZE	WEIGHT	GRADE	FROM	TO
9.6.25 IN			26 FT	1303 FT
4.5 IN	11.6 LB/F	I-80	26 FT	9942 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 3/8/2015 at the client's request.

The amount of linear shift is 2 feet.

Logged in PNC-3D mode.

BHT = 252 degF

SJ = 6409'-6431'

Thanks you for choosing Baker-Hughes.

## EQUIPMENT DATA

RUN	TRIP	TOOL	SERIES NO.	SERIAL NO.	POSITION
1	1	PCM	8250EA	Z166326	FREE
1	1	TEL/CCL	8248ED	10586851	FREE
1	1	GR	2812LA	10274382	FREE
1	1	RPM	8281EA	10273848	FREE
1	1	RPM	8283PA	10203151	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  
Updates: 46 Patches: 5

Plotted: Tue Mar 10 14:09:34 2015

## PARAMETER AND FILTER SUMMARY REPORT

FILE: C:\dat1a\095183\543\543\_RPM\_MAIN.fvpdf  
LOGGING MODE: DEPTH DIRECTION: UP  
TOP DEPTH: 5839.750 ft BOTTOM DEPTH: 9878.000 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	8.50	in	" "
	CASING SIZE	4.50	in	" "
	MATRIX	SANDSTONE		" "
	CORRECTION BUFFER	11		" "

## CURVE DESCRIPTION REPORT

CURVE NAME	CREATION DATE	CURVE DESCRIPTION
F1:CCL	Mar 10 09:57:43 2015	CASING COLLAR LOCATOR
F1:GR	Mar 10 09:57:43 2015	GAMMA RAY
F1:ISS	Mar 10 09:57:43 2015	INELASTIC SHORT SPACE COUNT RATE
F1:LS	Mar 10 09:57:43 2015	LONG SPACE COUNT RATE
F1:RATO	Mar 10 09:57:43 2015	SHORT/LONG SPACE COUNT RATE RATIO
F1:RICS	Mar 10 09:57:43 2015	SHORT SPACE INELASTIC TO CAPTURE COUNT RATE RATIO (ISS/CSS)
F1:SGFC	Mar 10 09:57:43 2015	CORRECTED FORMATION SIGMA
F1:SS	Mar 10 09:57:43 2015	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\095183\543\_RPM\_MAIN.fvpdf [5"/100' Scale]  
Plot Interval : 5845 - 9885 Feet

Data File 1 : F1 : BHUGHES-06627:C:\dat1a\095183\543\_RPM\_MAIN.xtf  
Created On : Mar 10 09:57:43 2015  
Company : WPX ENERGY  
Well : XCHURBEN-01-543-2

Well : YOOBERG RU 543-7  
Field : RULISON  
File Interval : 27.5 - 9878.75 Feet  
OCT : n354h

GR BACKUP

ISS [iss]

0 1E+006

(1)

GAMMA RAY [gr]

0 150

(gAPI)

FEET

CCL  
(mV)

5900

LS [ls]

0 29000

(1)

SS [ss]

0 29000

(1)

RATO [rato]

17

0

(1)

RICS [rics]

37

7

(1)

SGFC [sgfc]

60

0

(1)

GR

ISS

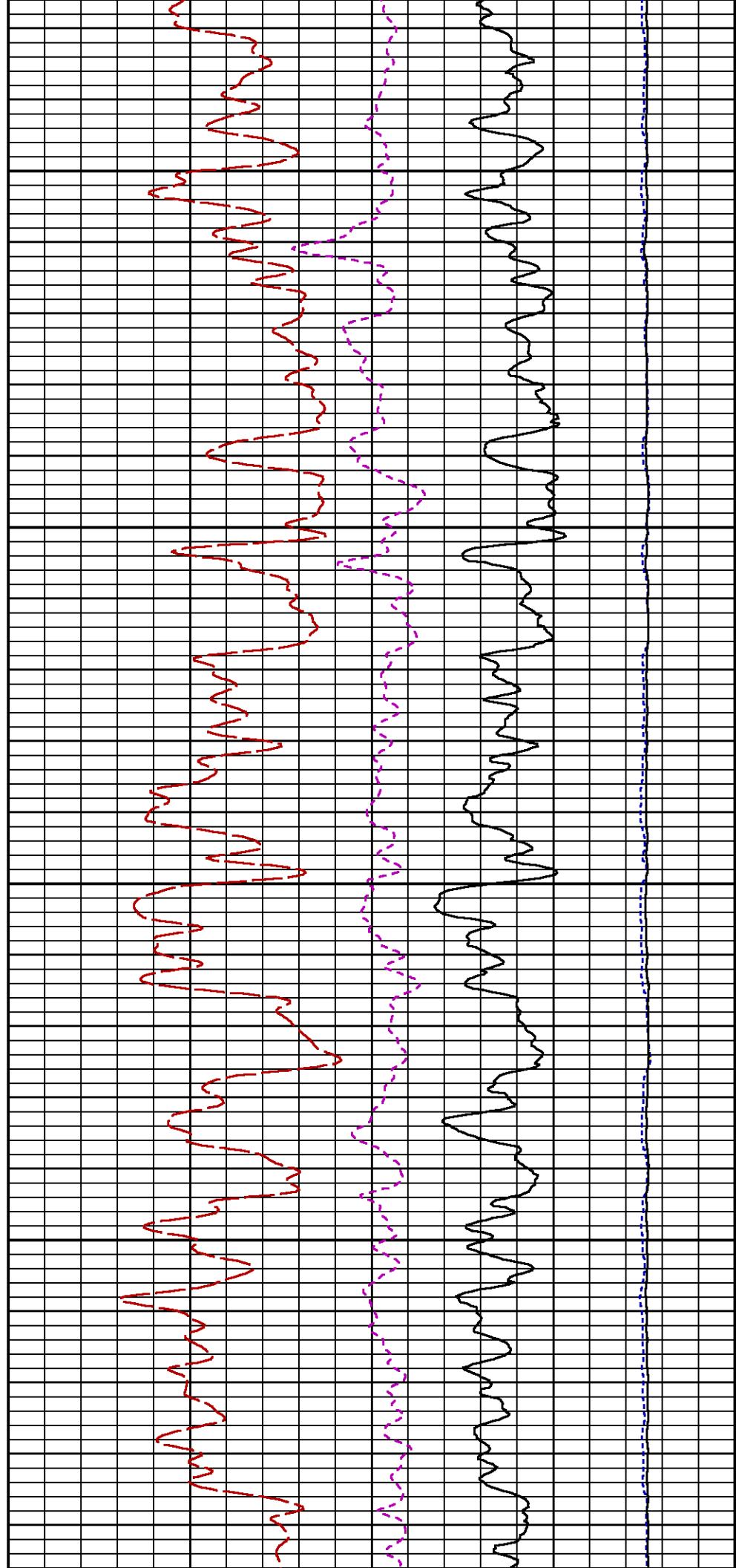
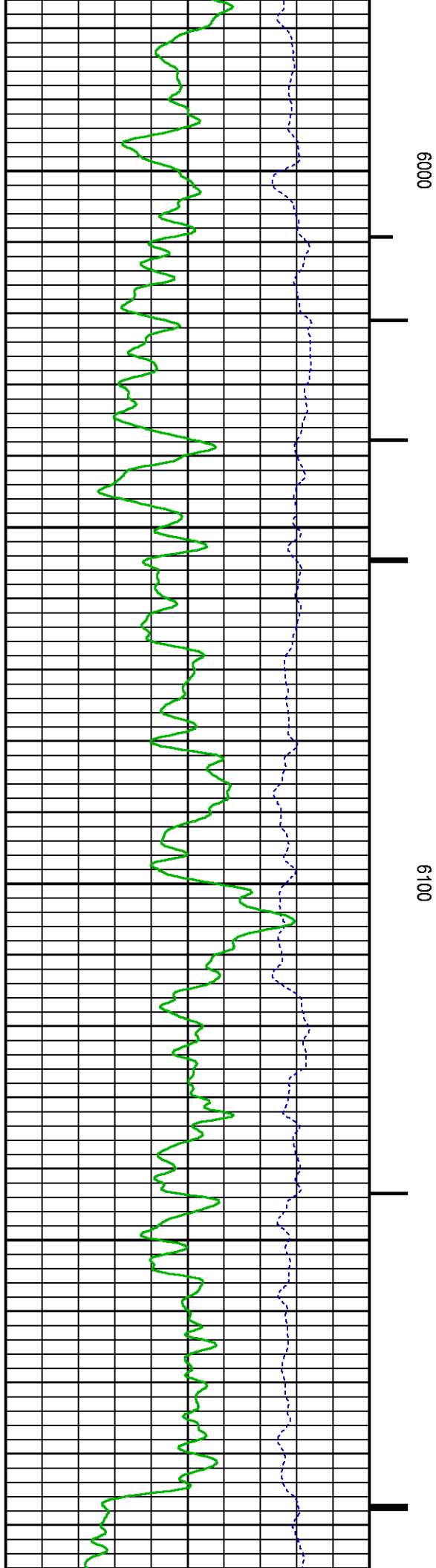
RATO

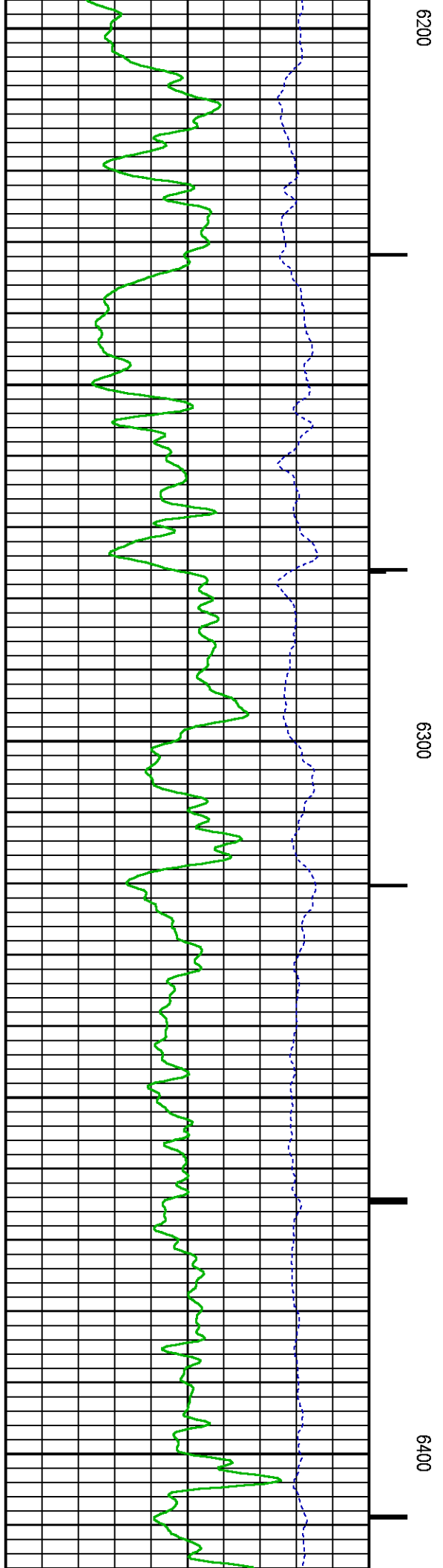
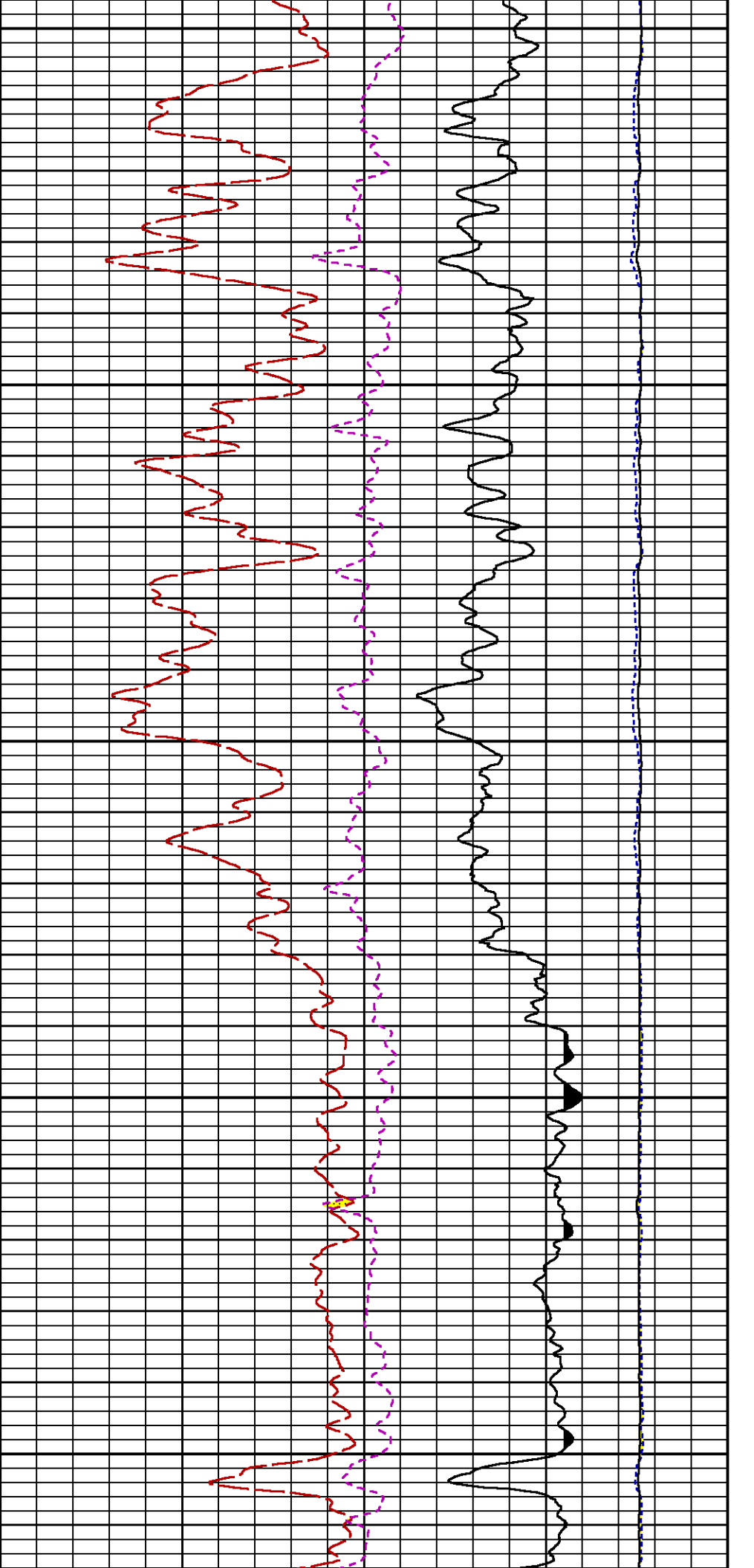
RICS

SGFC

LS

SS

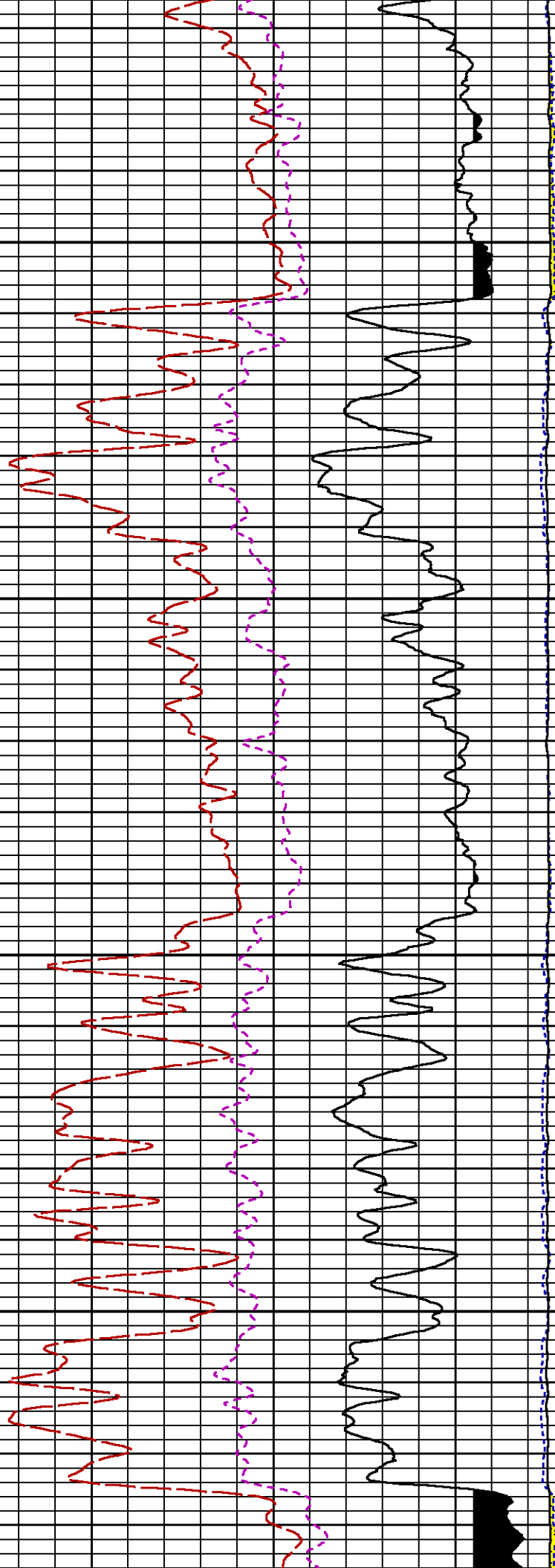
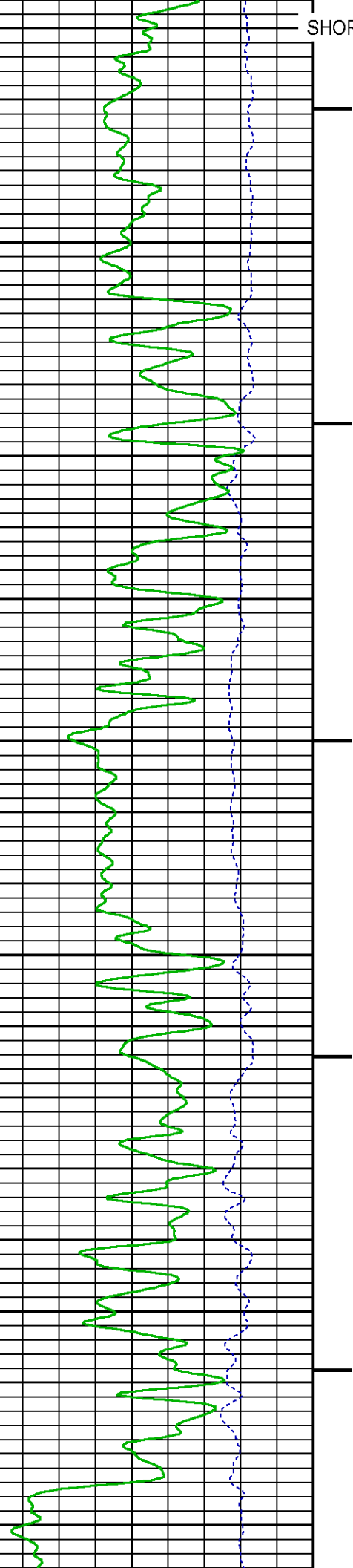


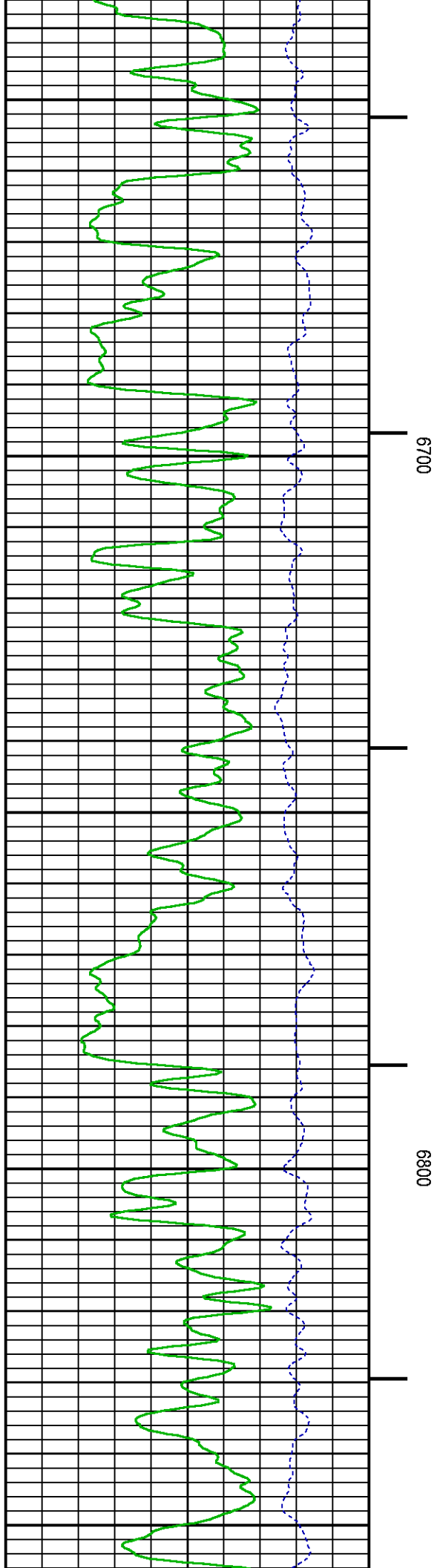
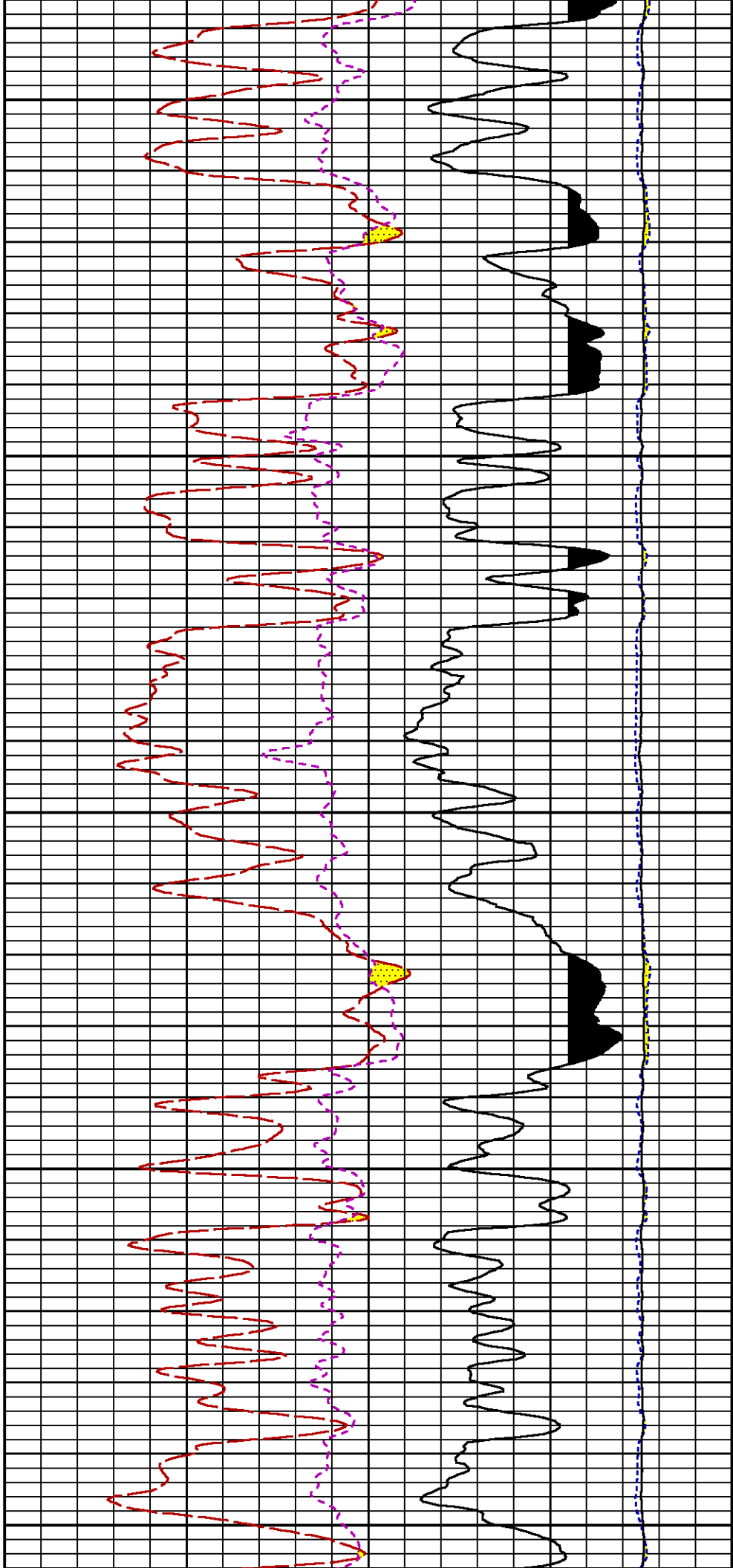


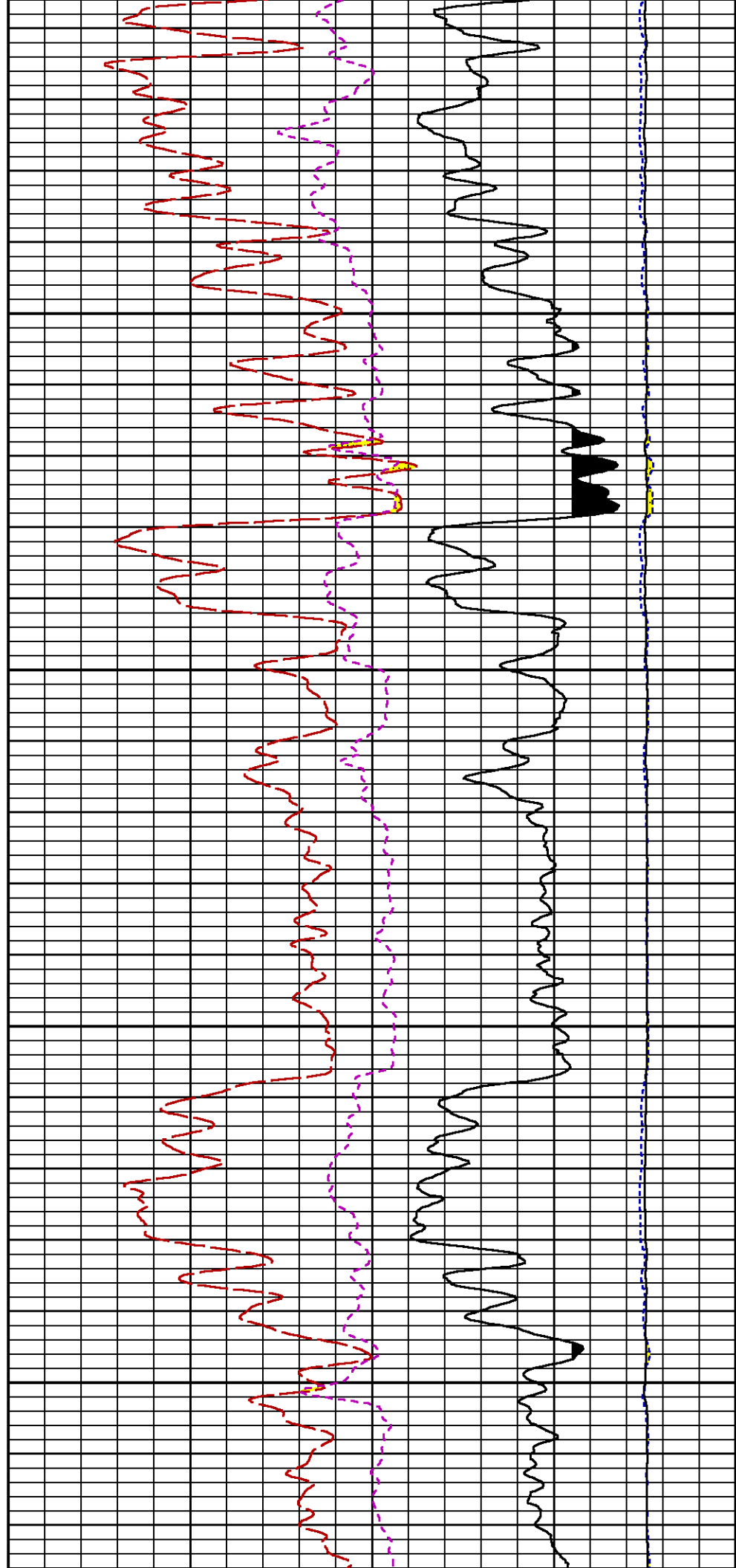
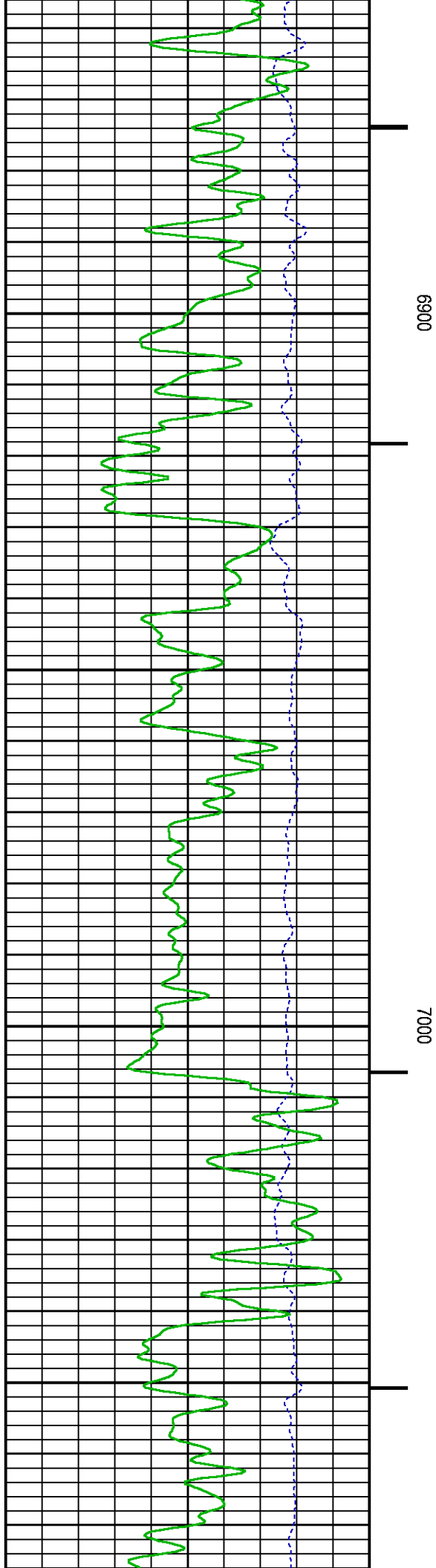
SHORT JOINT

0099

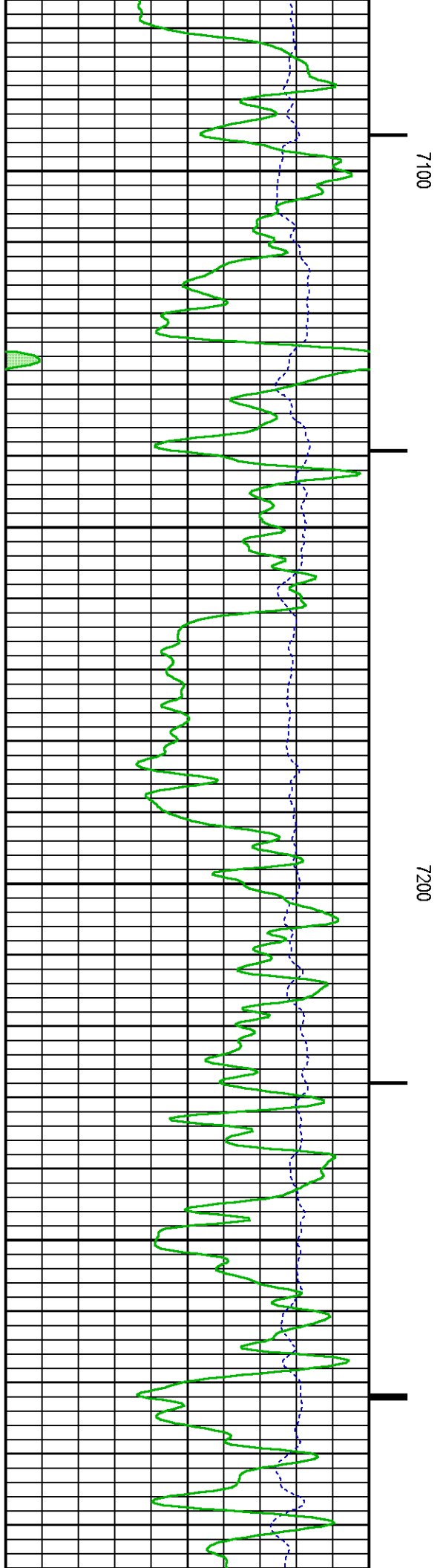
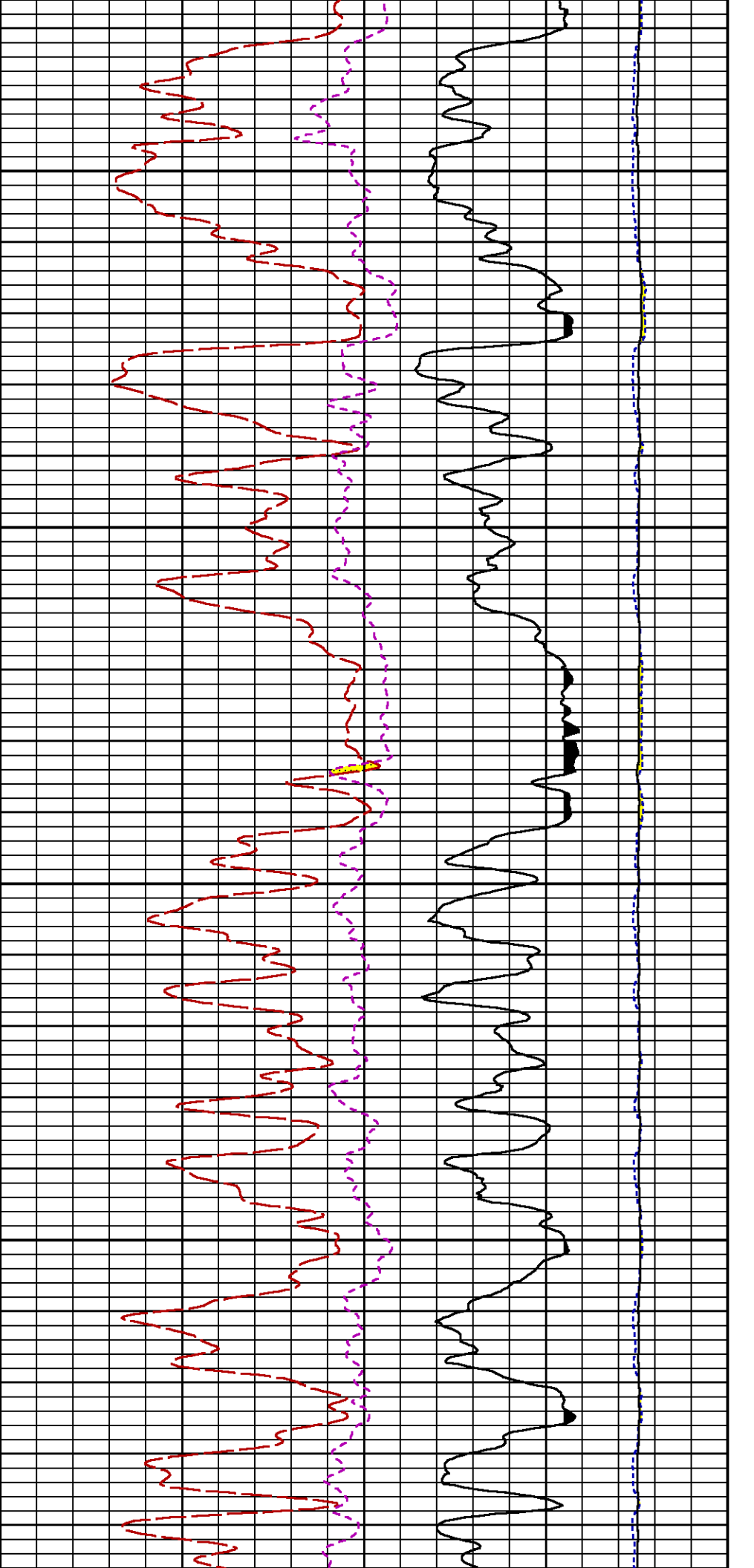
6600

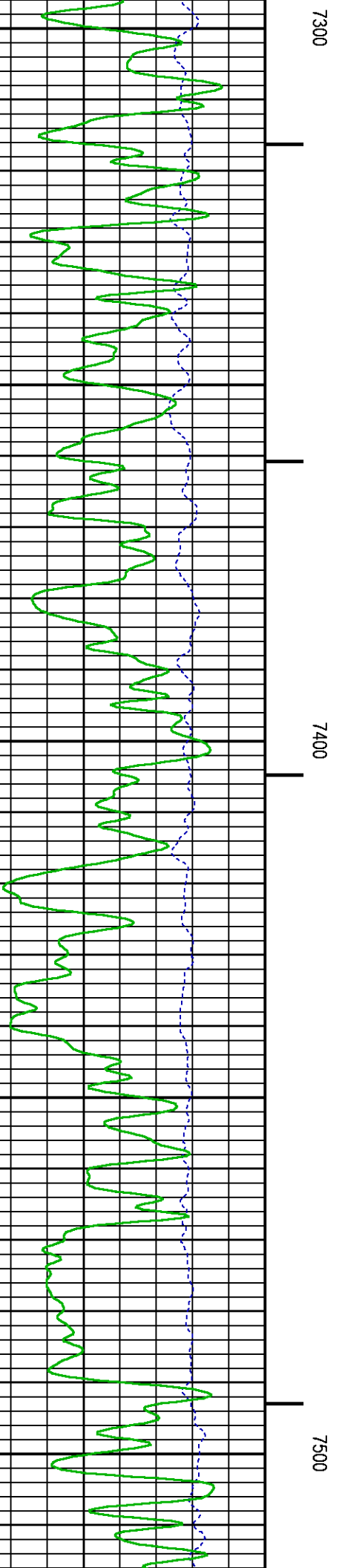
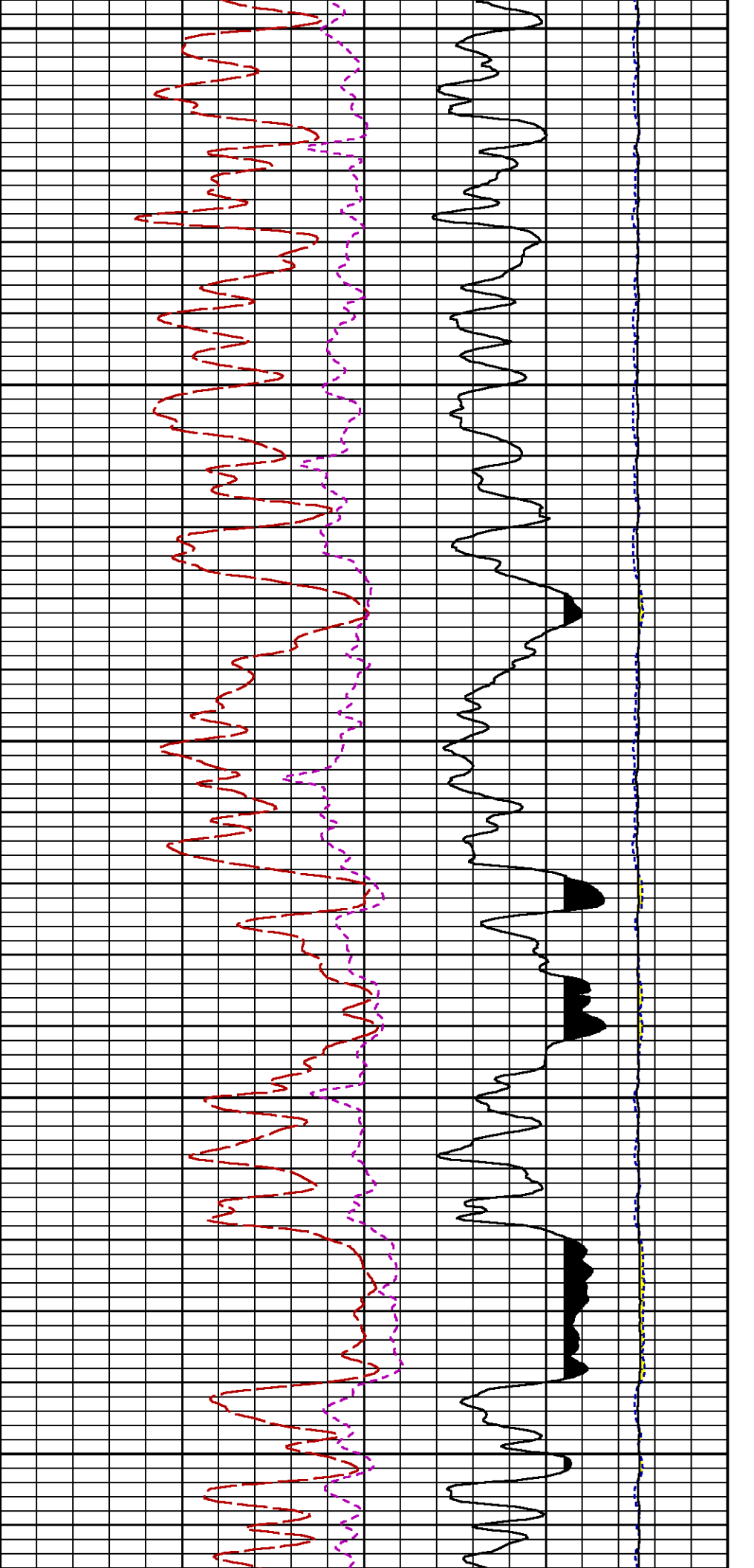


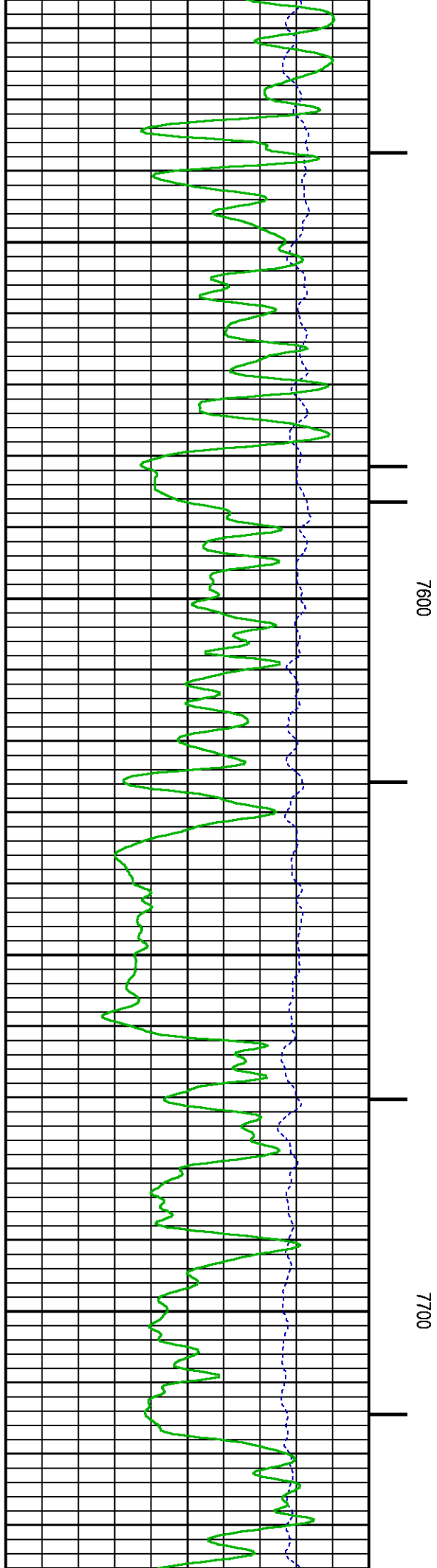
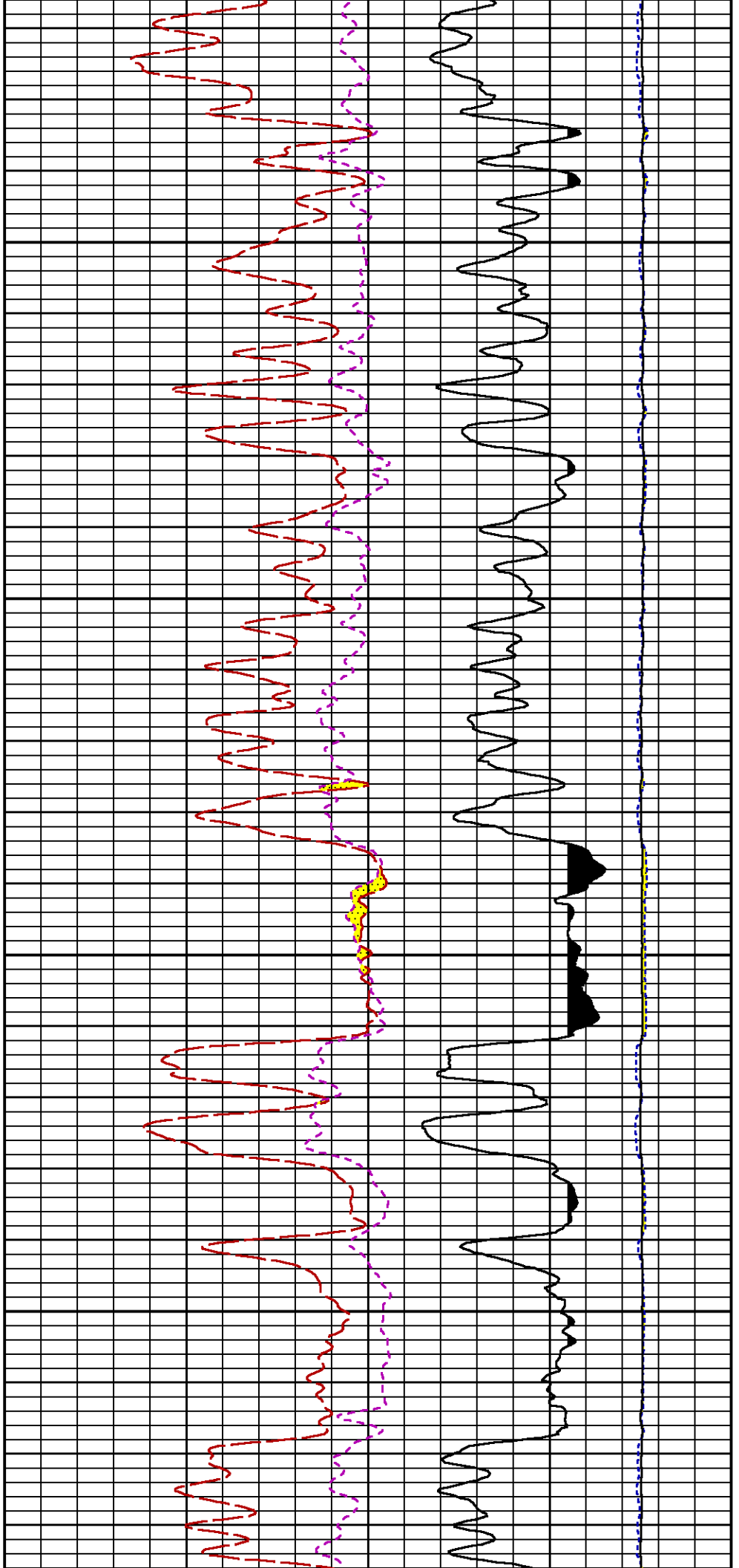


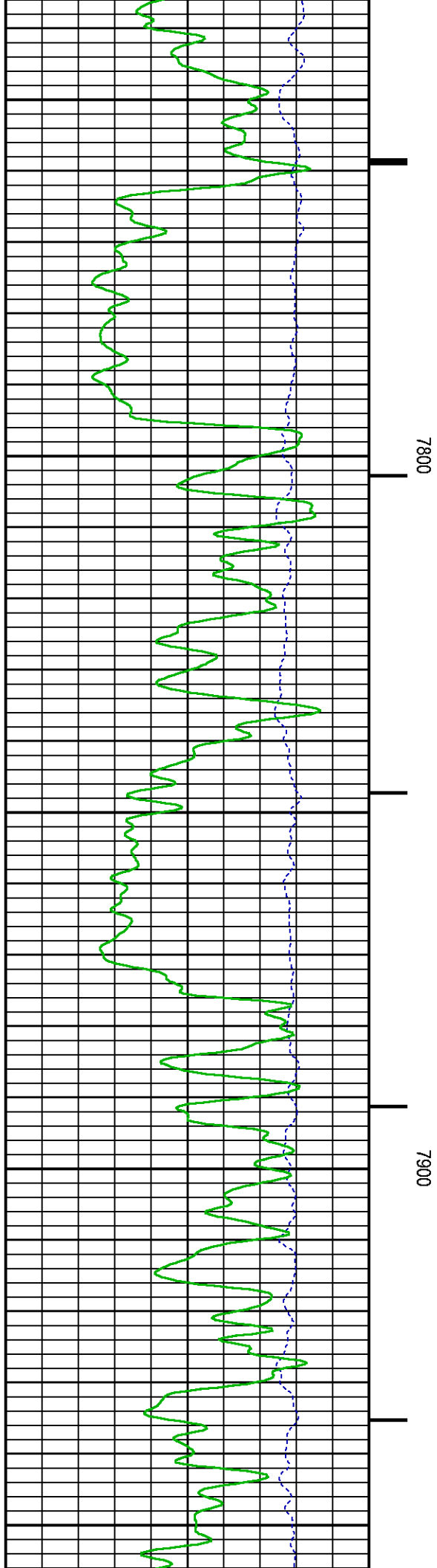
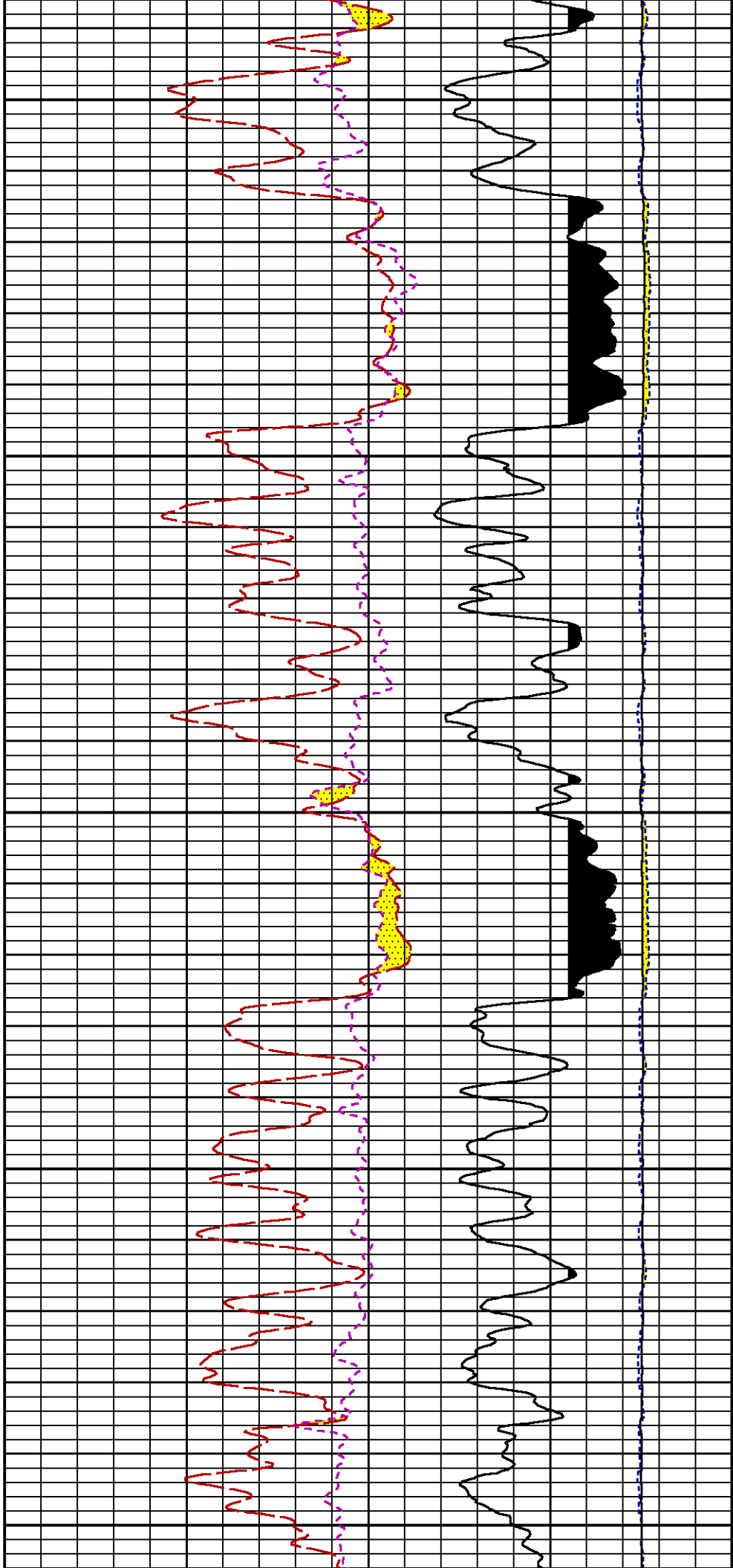


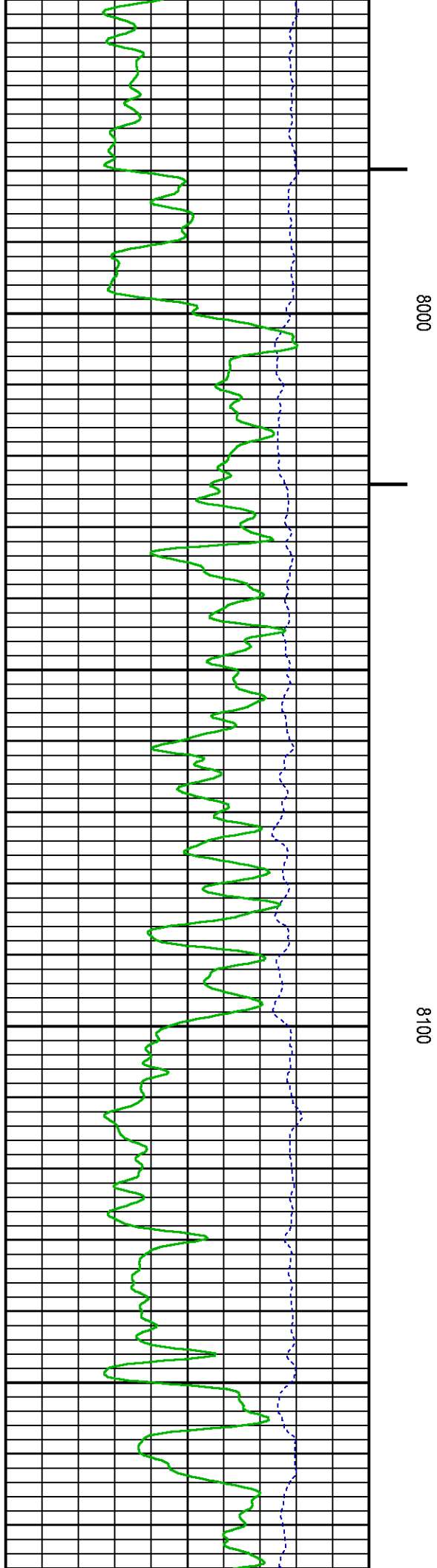
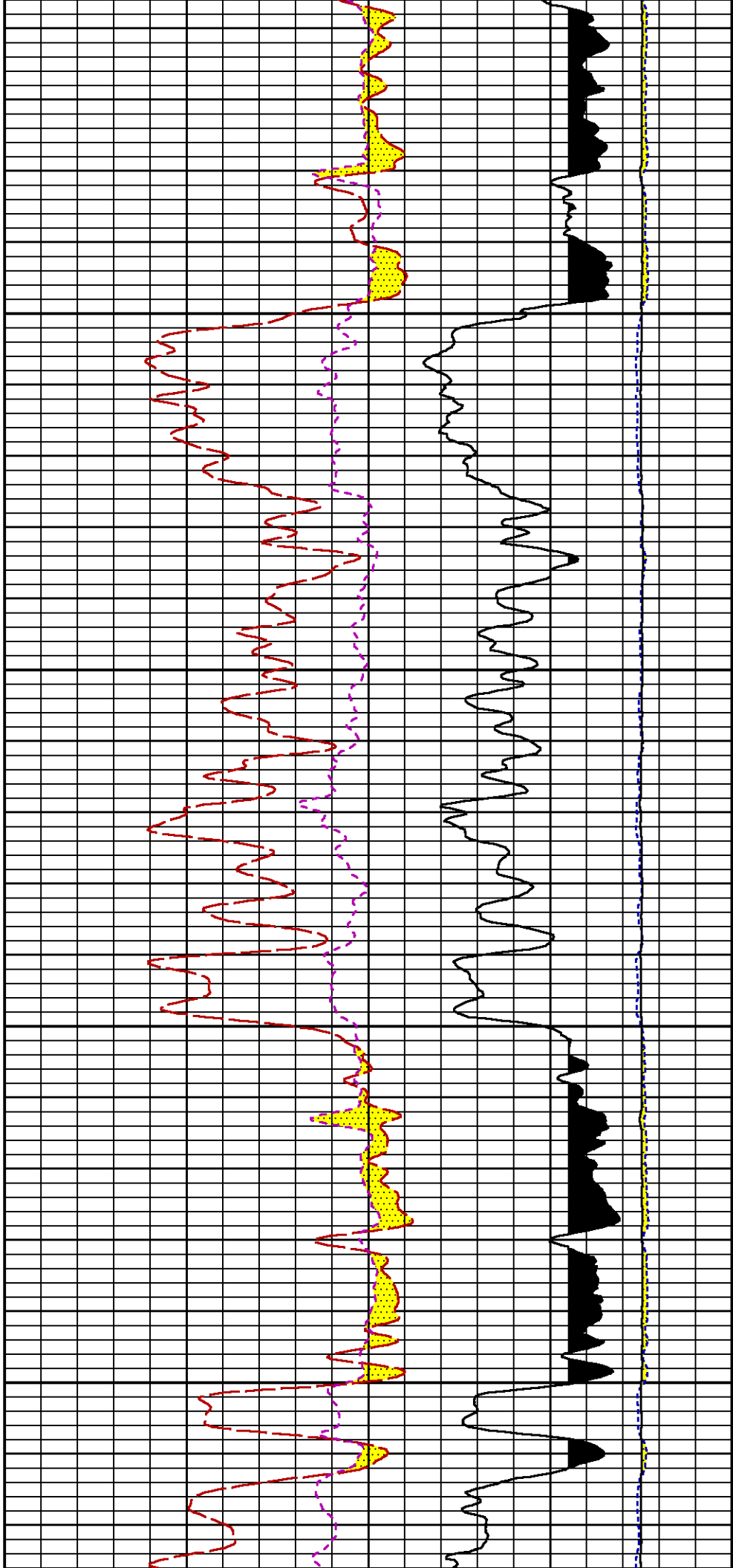


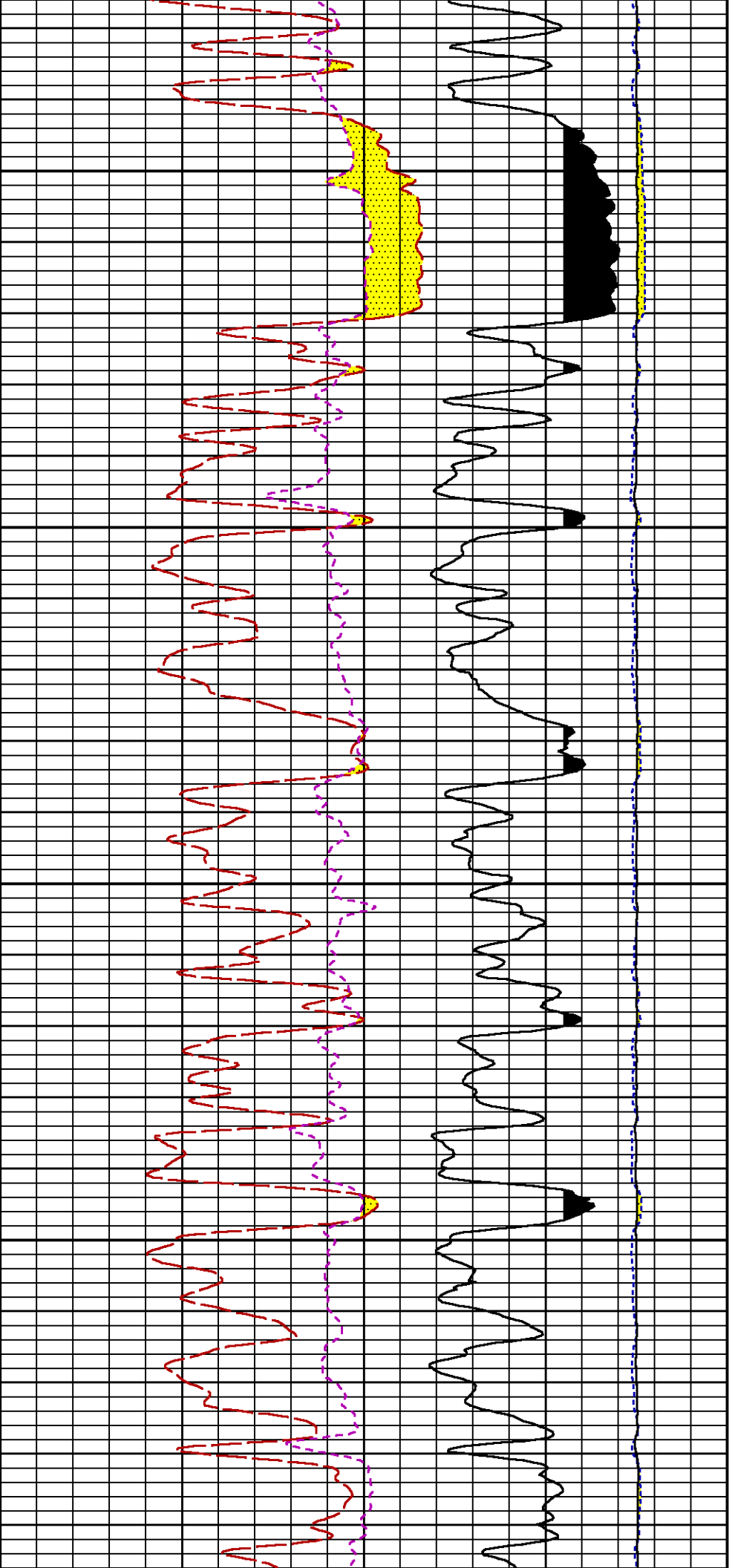






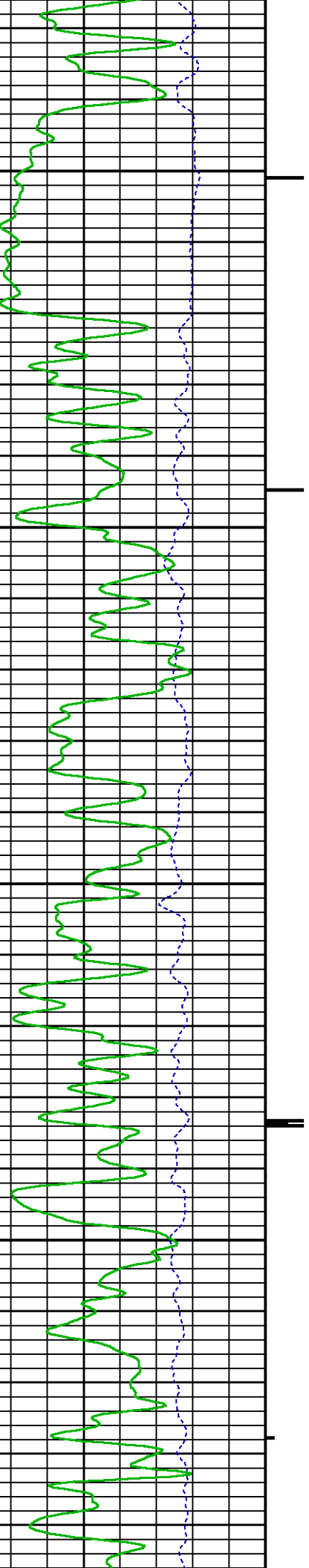


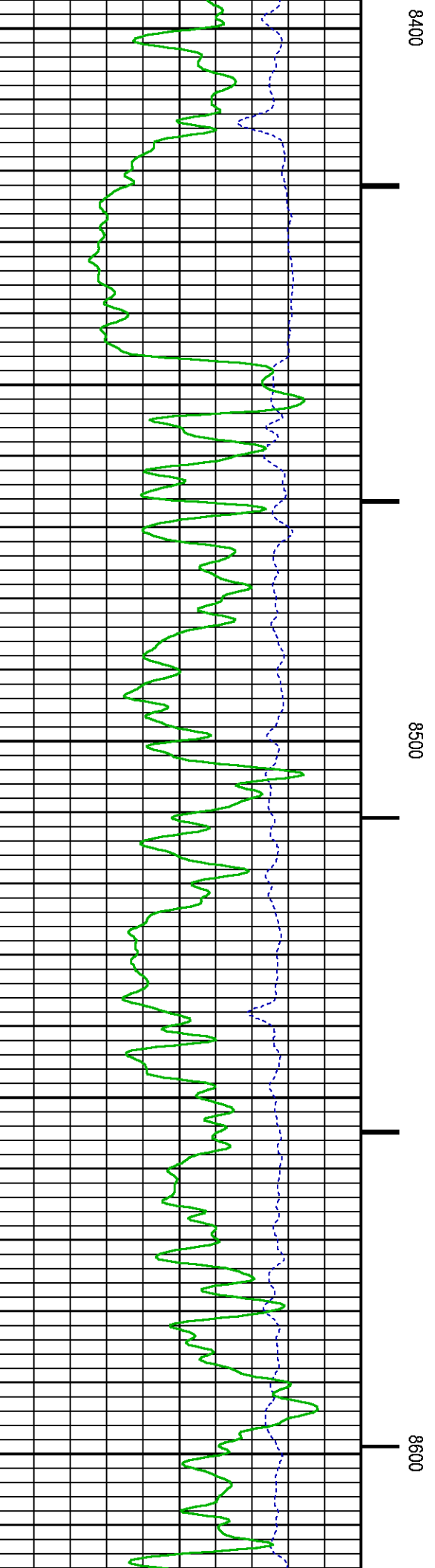
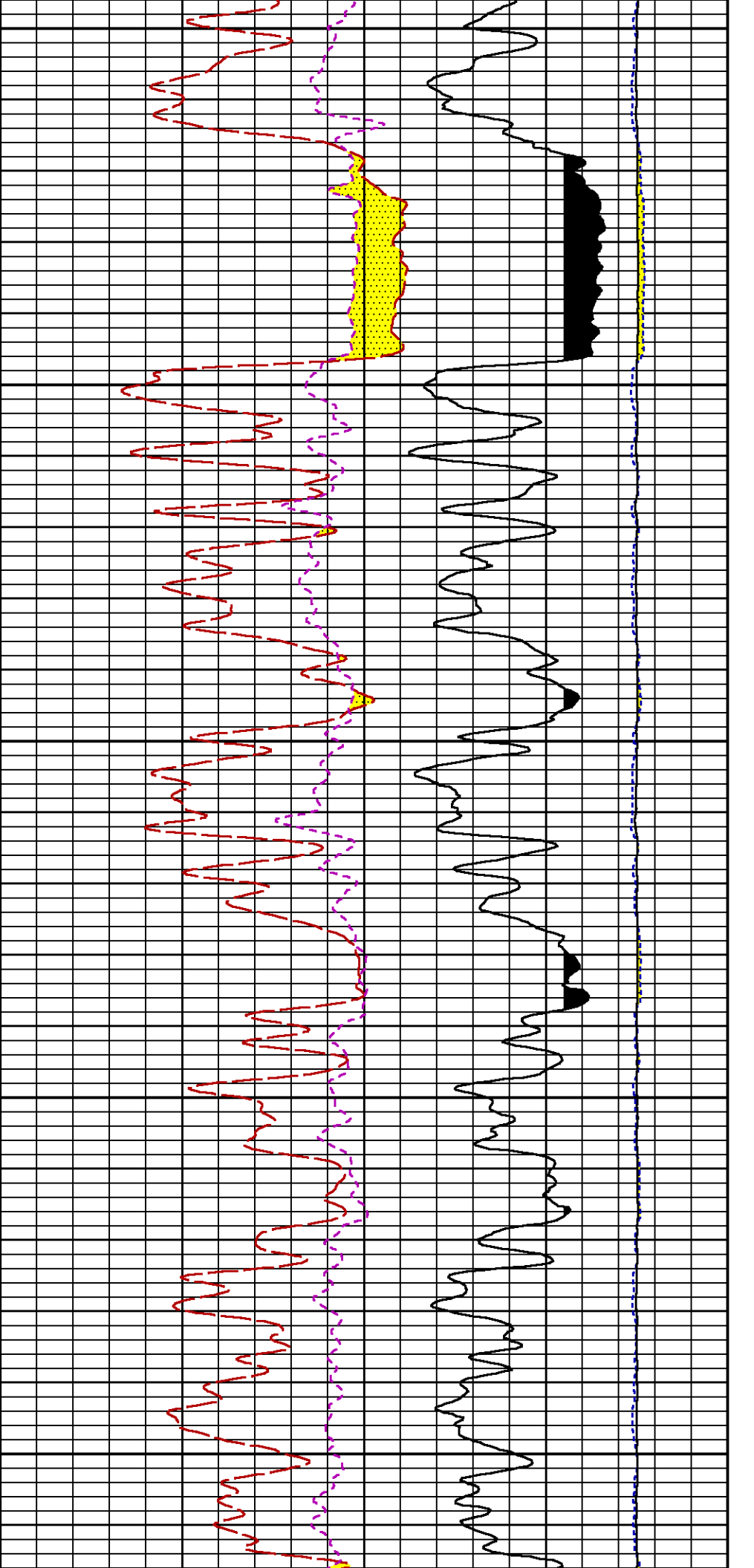


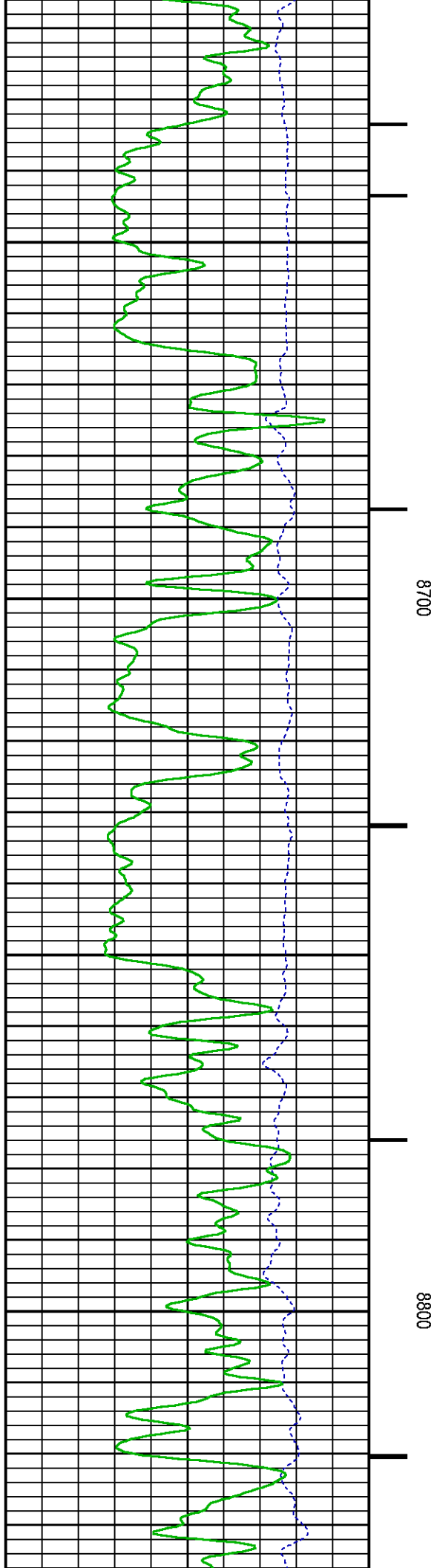
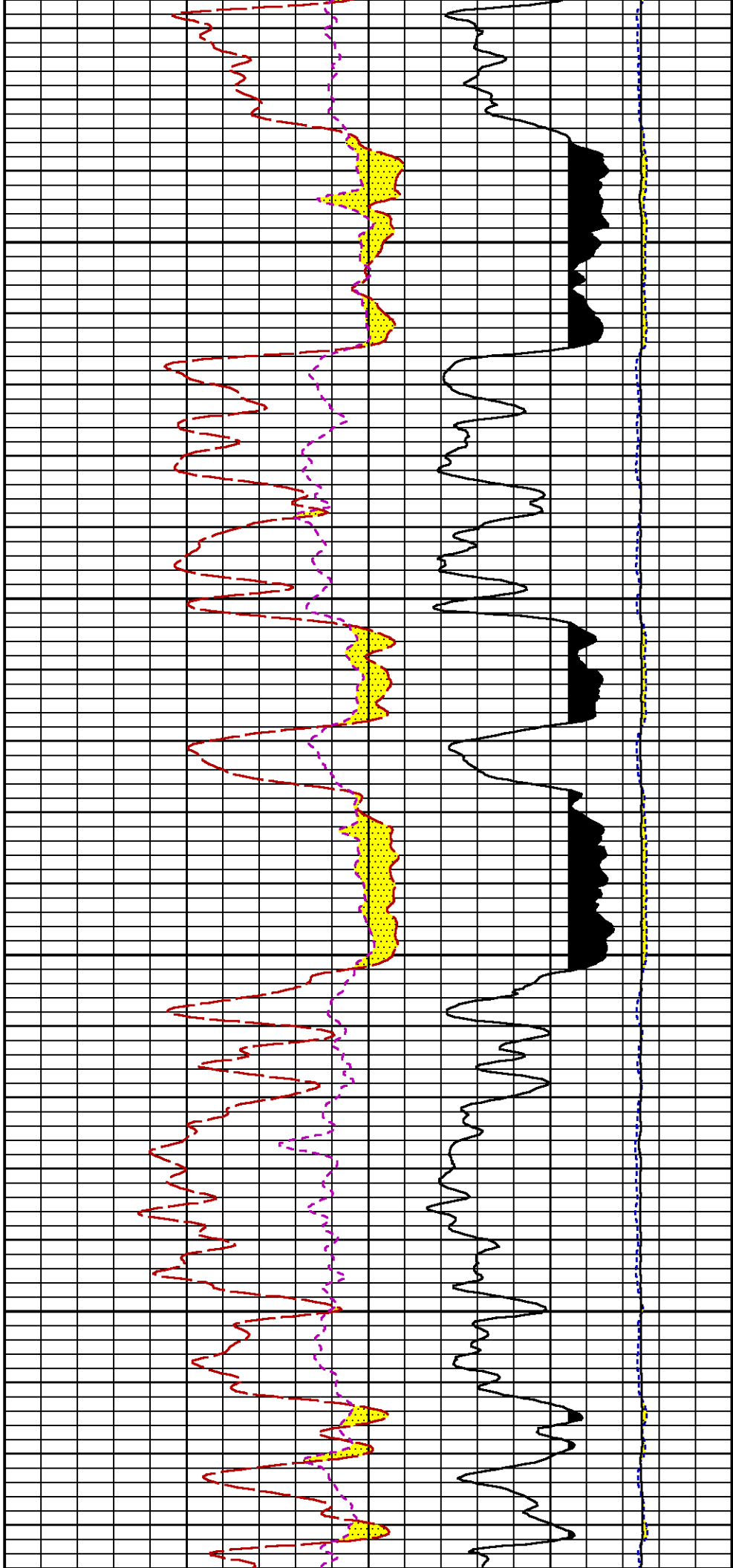


8200

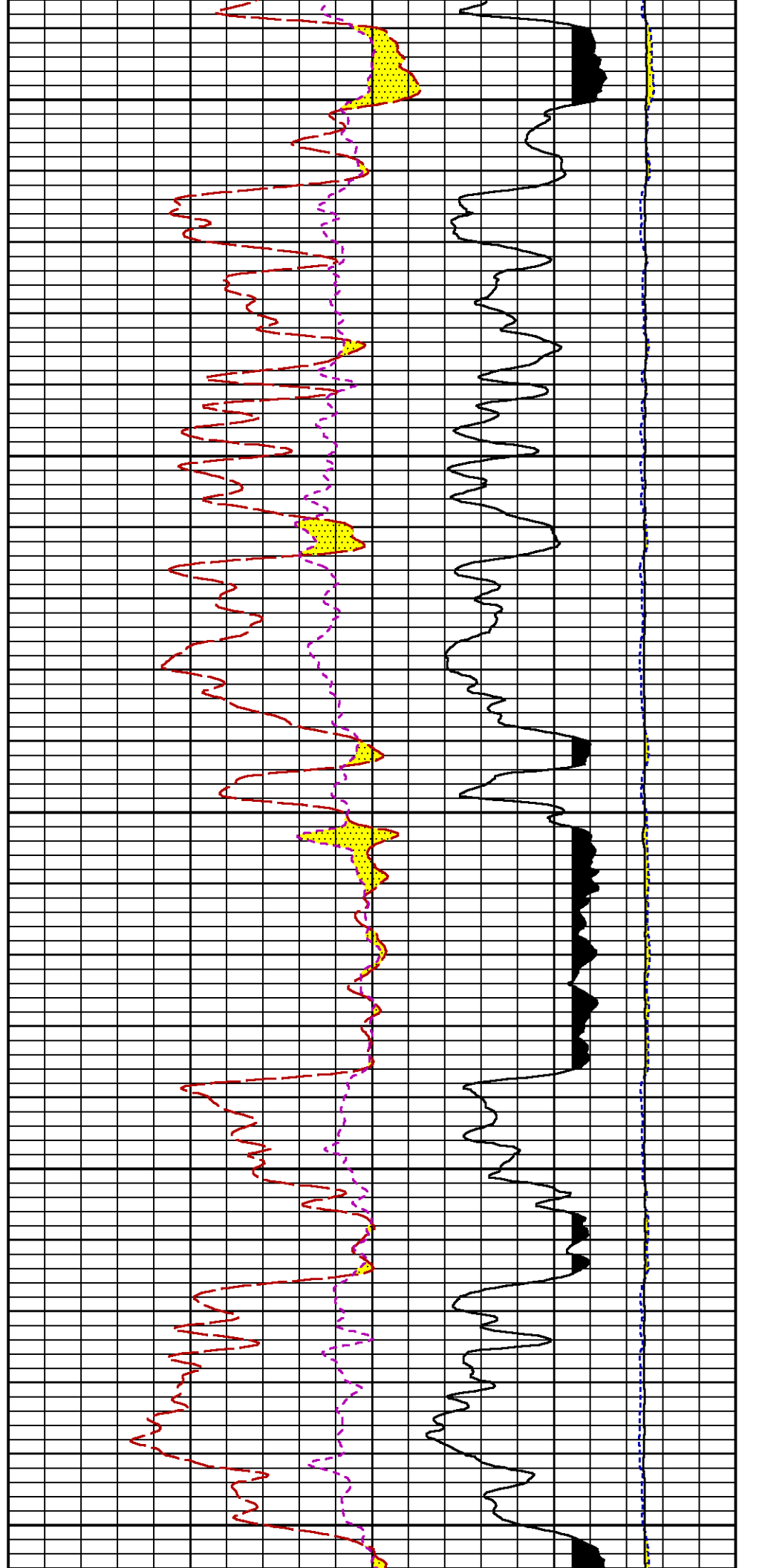
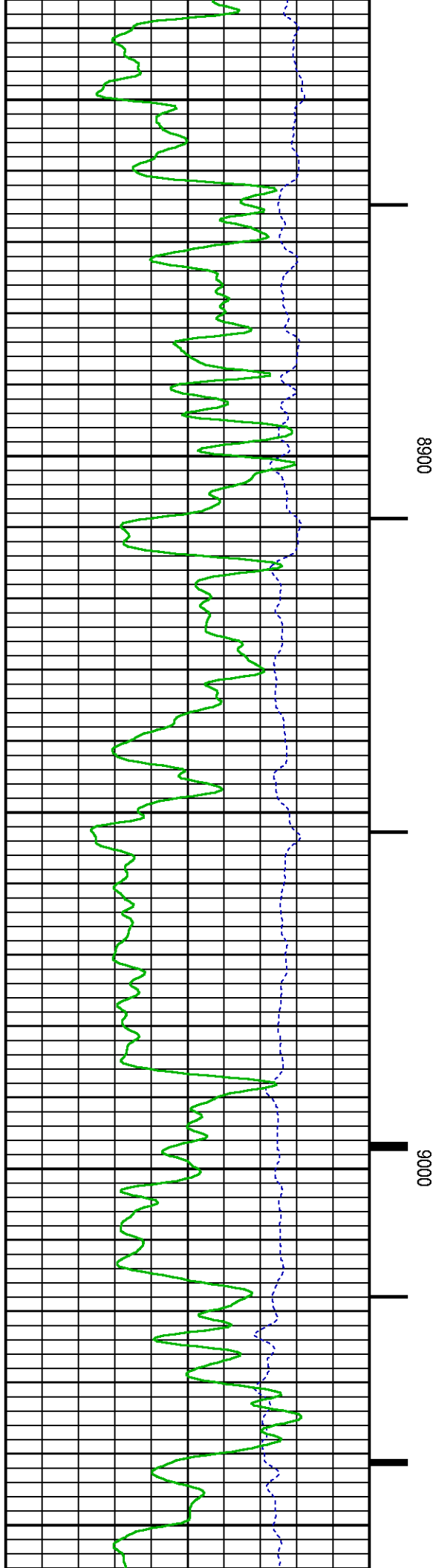
8300

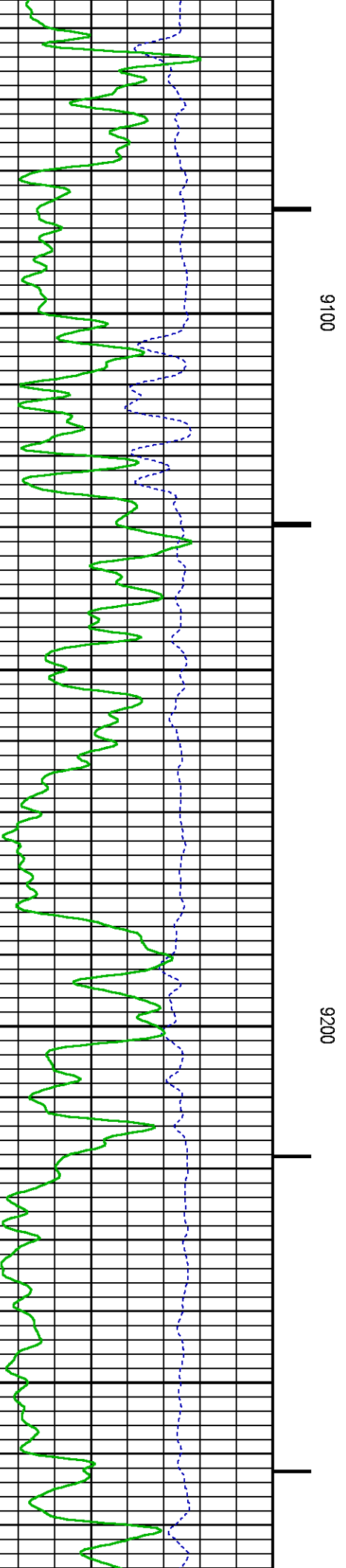
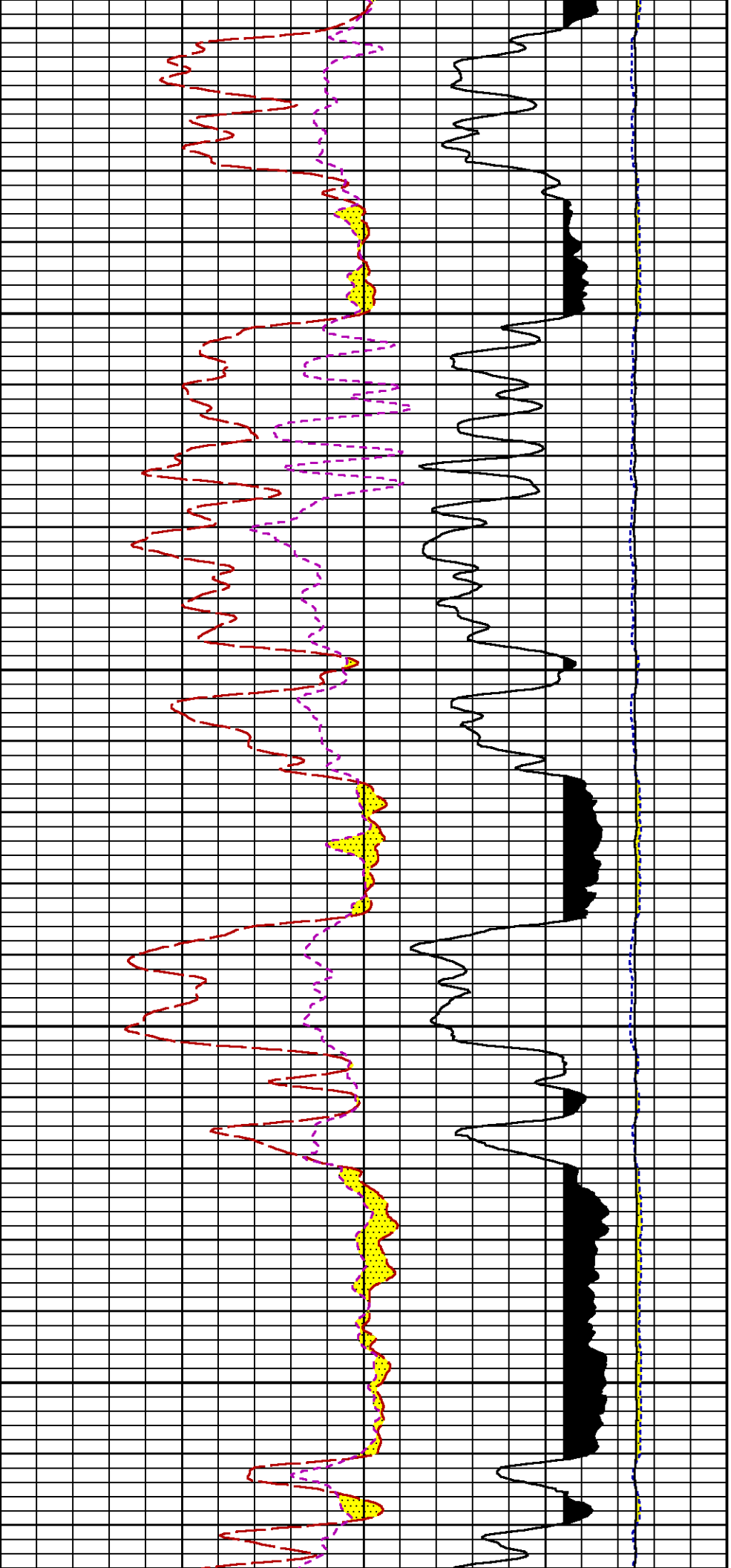


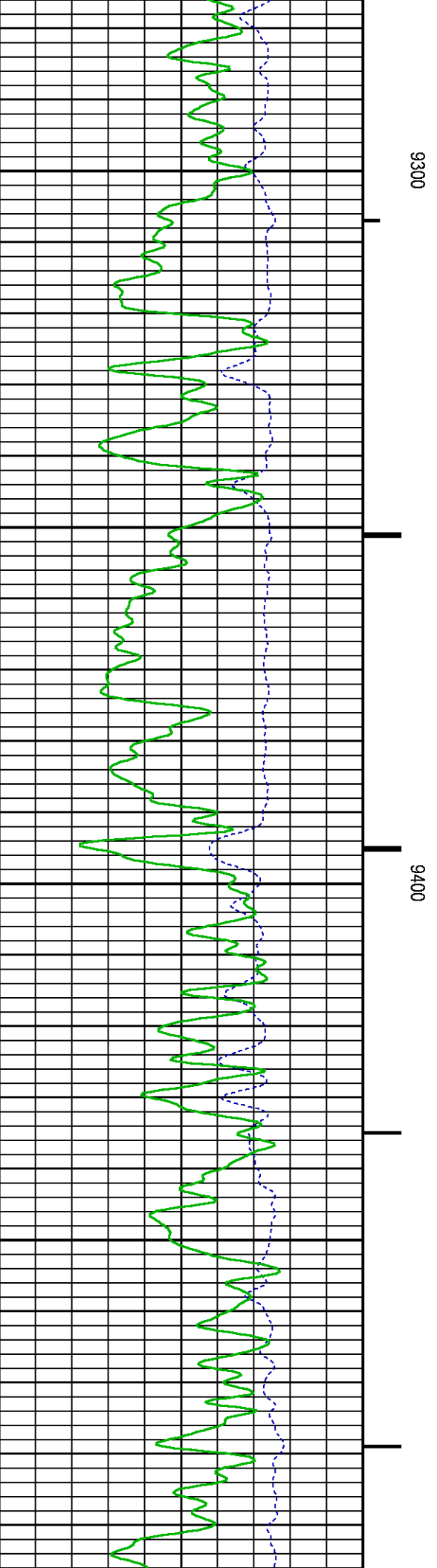
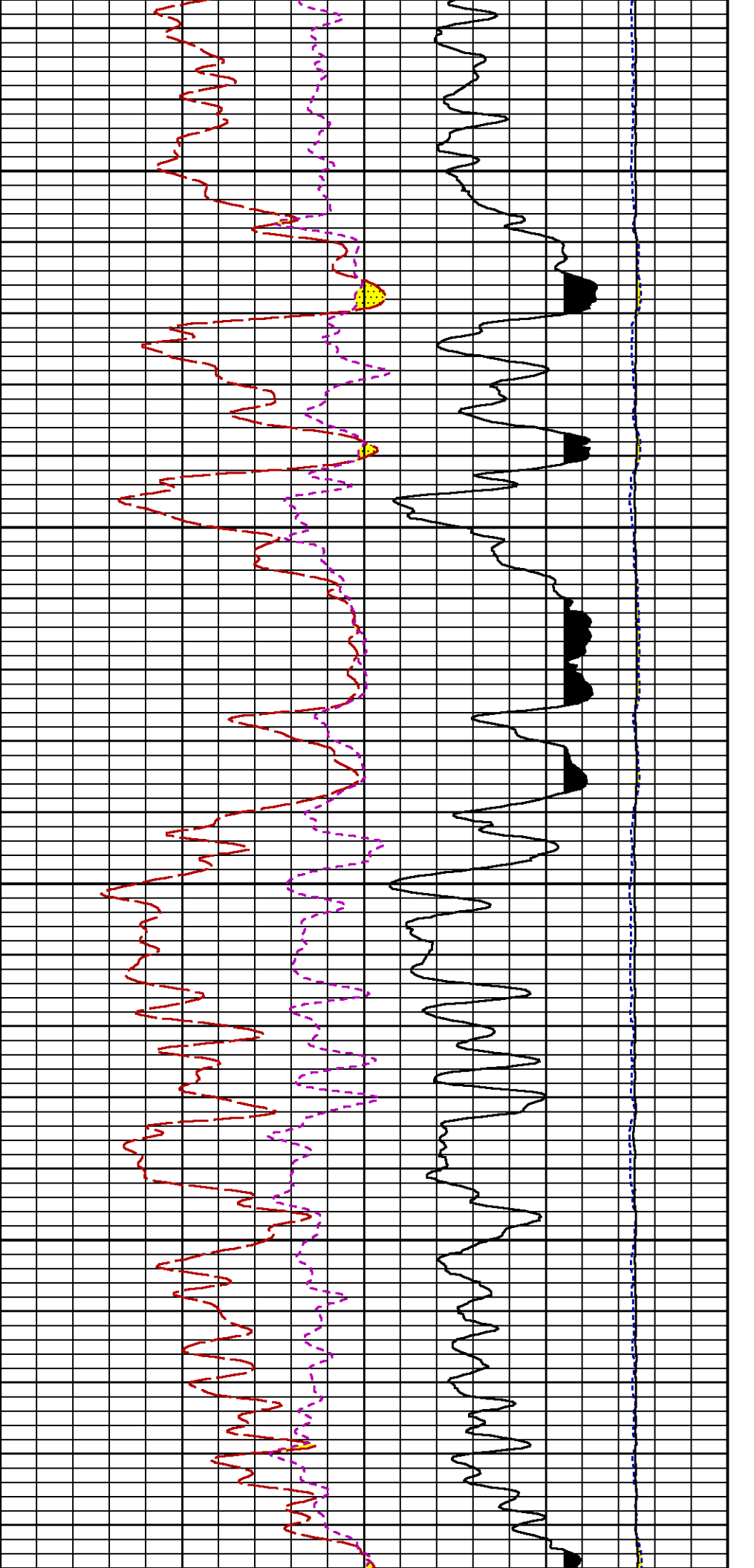


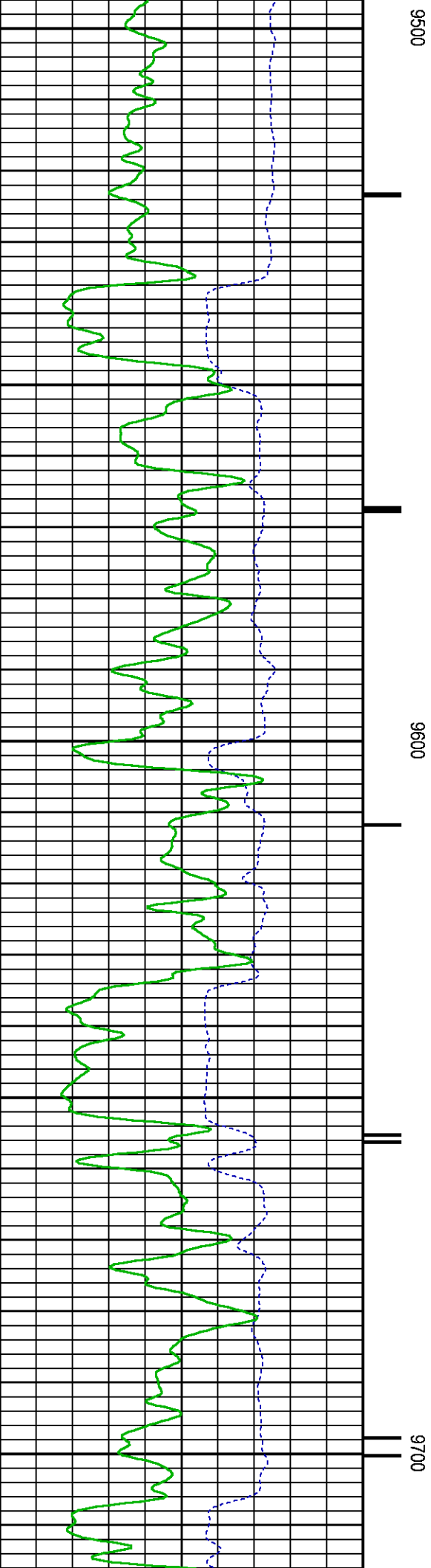
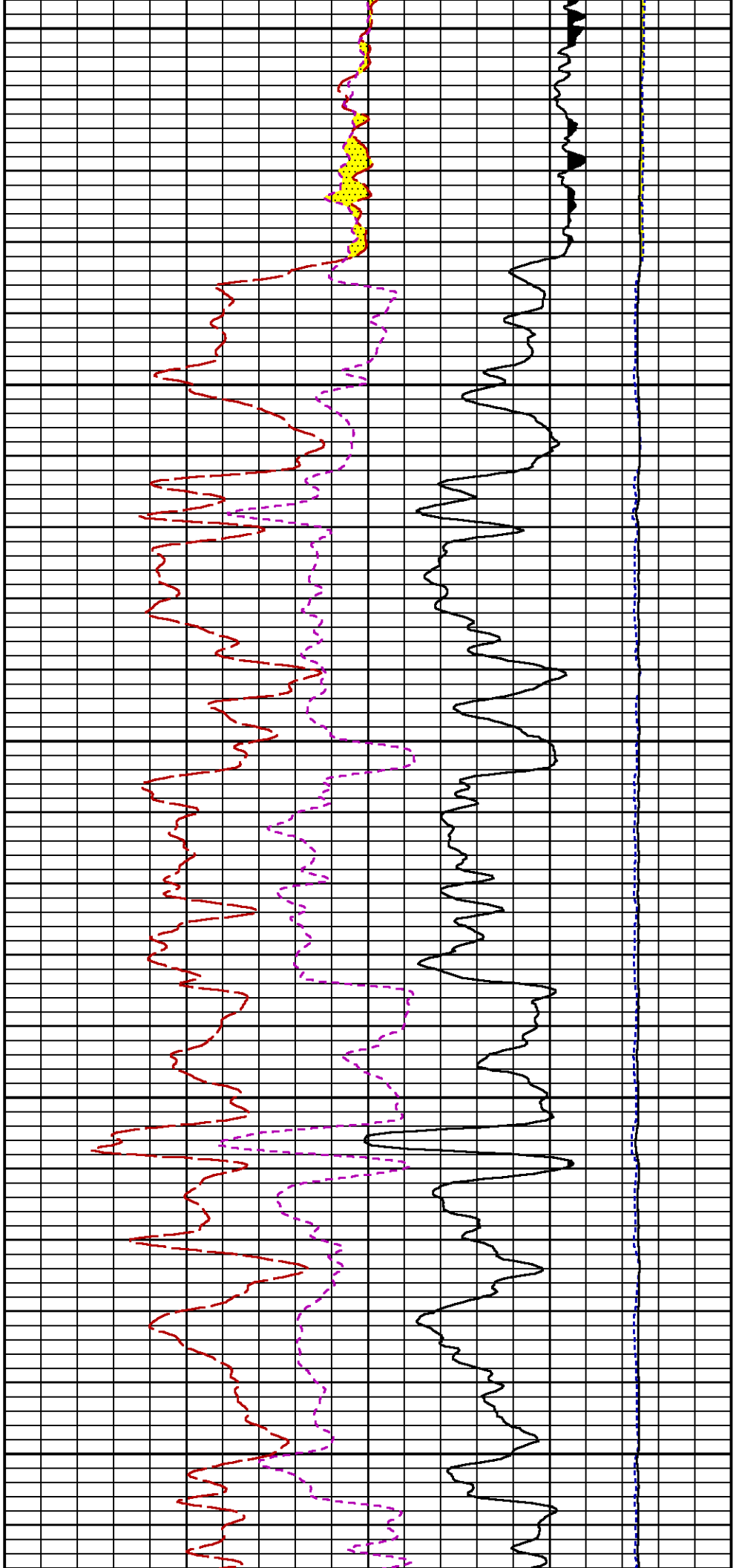


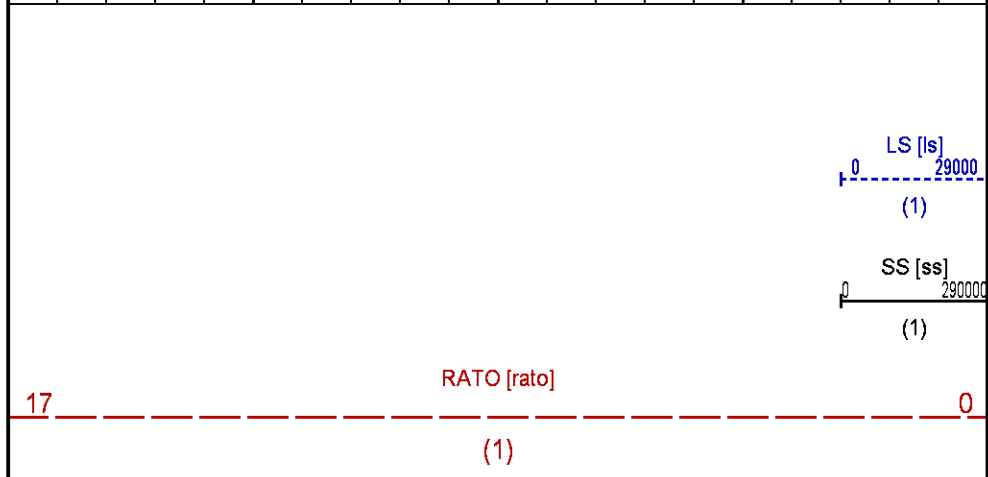
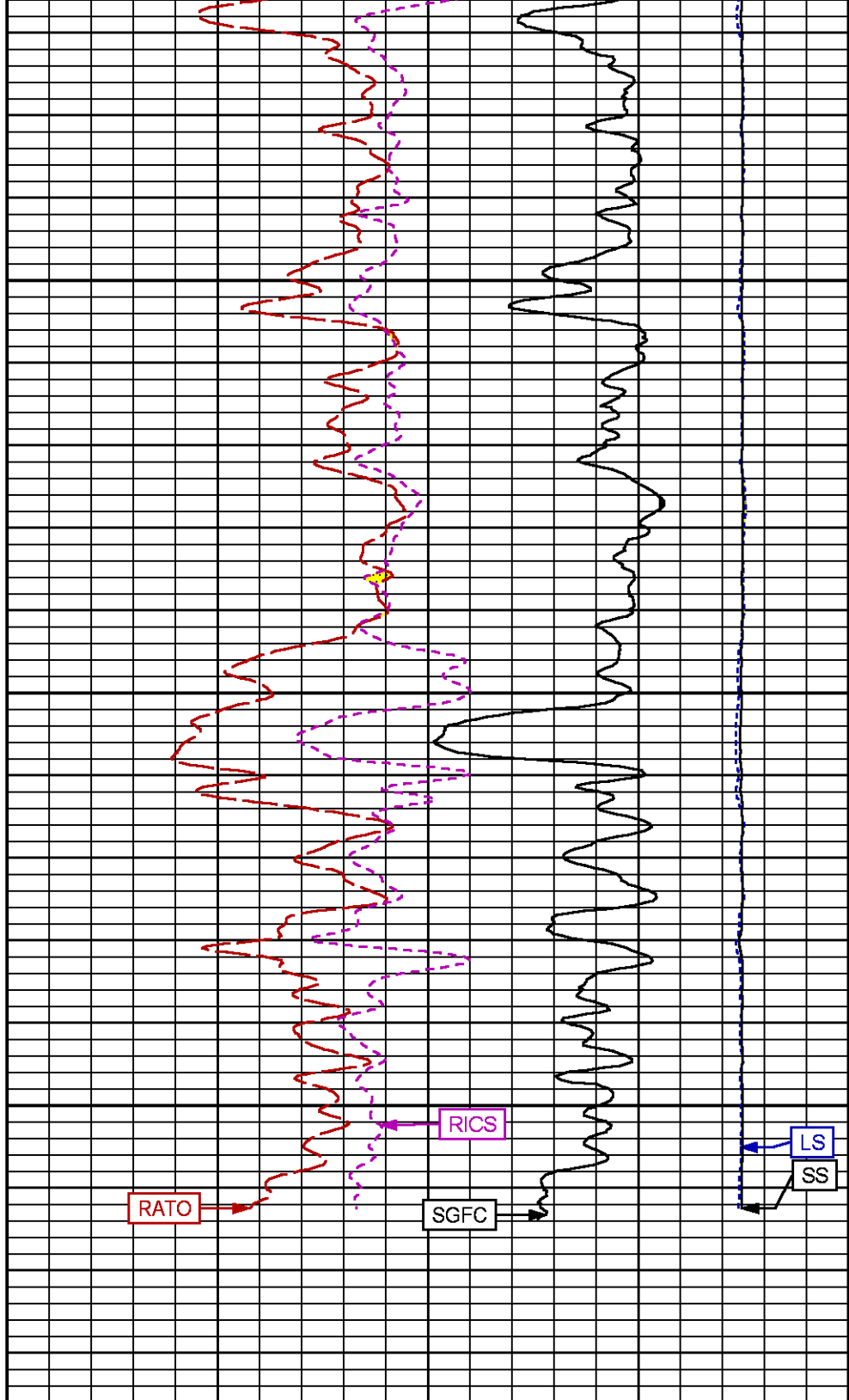
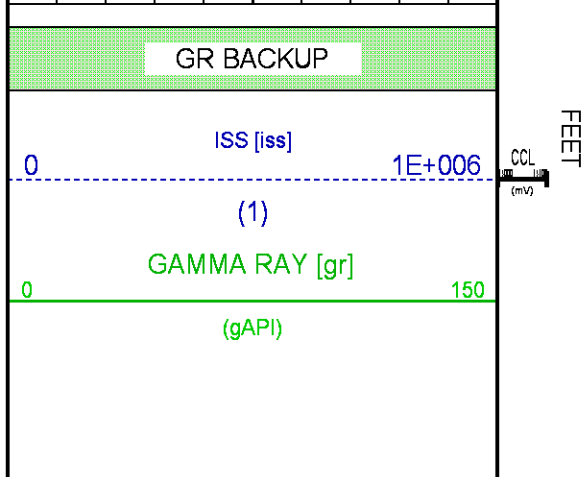
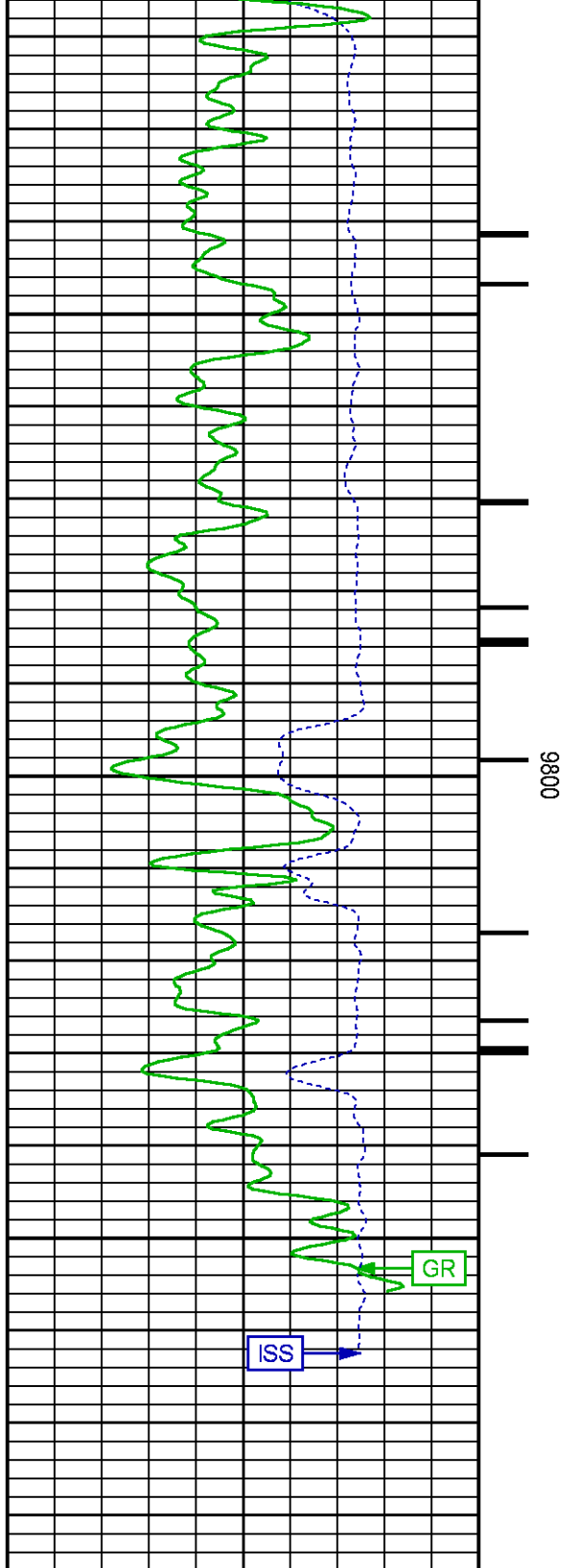












		37	RICS [rics]	7
			(1)	
		60	SGFC [sgfc]	0
			(1)	

## REPEAT 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  
Updates: 46 Patches: 5

Plotted: Tue Mar 10 10:48:02 2015

### PARAMETER AND FILTER SUMMARY REPORT

FILE: C:\dat1a\095183\543\h01.prm  
LOGGING MODE: DEPTH DIRECTION: UP  
TOP DEPTH: 9107.250 ft BOTTOM DEPTH: 9440.371 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	8.50	in	" "
	CASING SIZE	4.50	in	" "
	MATRIX	SANDSTONE		" "
	CORRECTION BUFFER	11		" "

### CURVE DESCRIPTION REPORT

CURVE NAME	CREATION DATE	CURVE DESCRIPTION
F1:CCL	Mar 10 09:32:33 2015	CASING COLLAR LOCATOR
F1:GR	Mar 10 09:32:33 2015	GAMMA RAY
F1:ISS	Mar 10 09:32:33 2015	INELASTIC SHORT SPACE COUNT RATE
F1:LS	Mar 10 09:32:33 2015	LONG SPACE COUNT RATE
F1:RATO	Mar 10 09:32:33 2015	SHORT/LONG SPACE COUNT RATE RATIO
F1:RICS	Mar 10 09:32:33 2015	SHORT SPACE INELASTIC TO CAPTURE COUNT RATE RATIO (ISS/CSS)
F1:SGFC	Mar 10 09:32:33 2015	CORRECTED FORMATION SIGMA
F1:SS	Mar 10 09:32:33 2015	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\095183\543\_RPM\_REPEAT.fvpdf [5"/100' Scale]  
Plot Interval : 9084 - 9424.75 Feet

Data File 1 : F1 : BHUGHES-06627:C:\dat1a\095183\543\_RPM\_REPEAT.xtf  
Created On : Mar 10 09:32:33 2015  
Company : WPX ENERGY  
Well : YOUBERG RU 543-7

Field : RULISON  
File Interval : 9083.25 - 9439.75 Feet  
OCT : n354h

GR BACKUP

FEET

ISS [iss]

0 1E+006

(1)

GAMMA RAY [gr]

0 150

(gAPI)

CCL  
(mV)

9100

9200

LS [ls]

0 29000

(1)

SS [ss]

0 290000

(1)

RATO [rato]

17 0

(1)

RICS [rics]

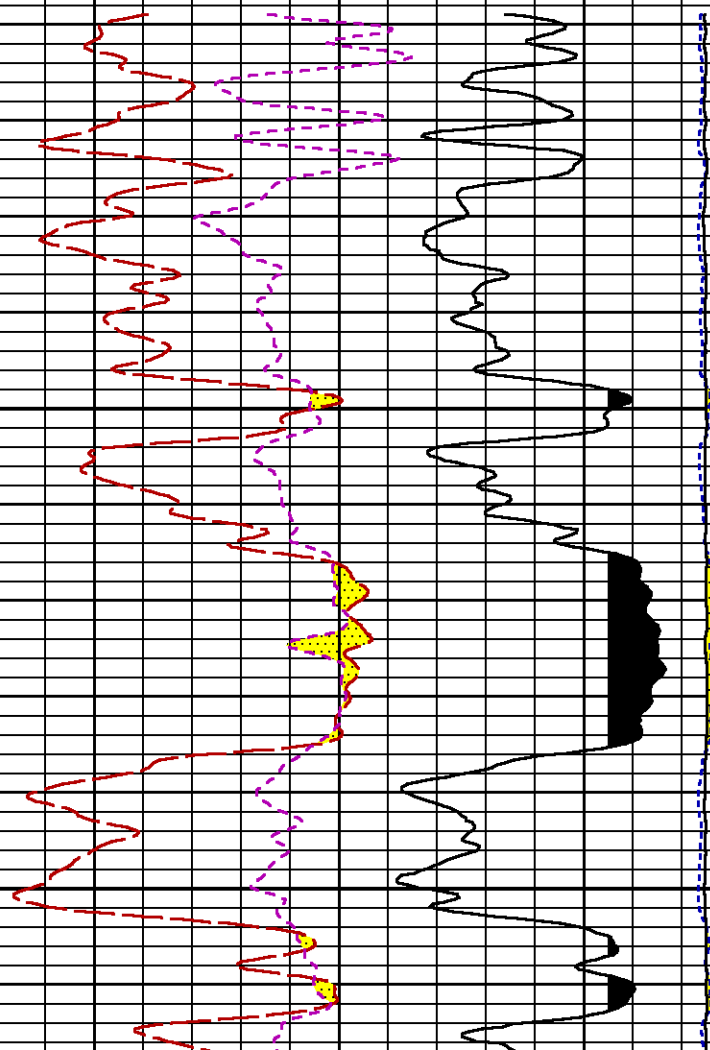
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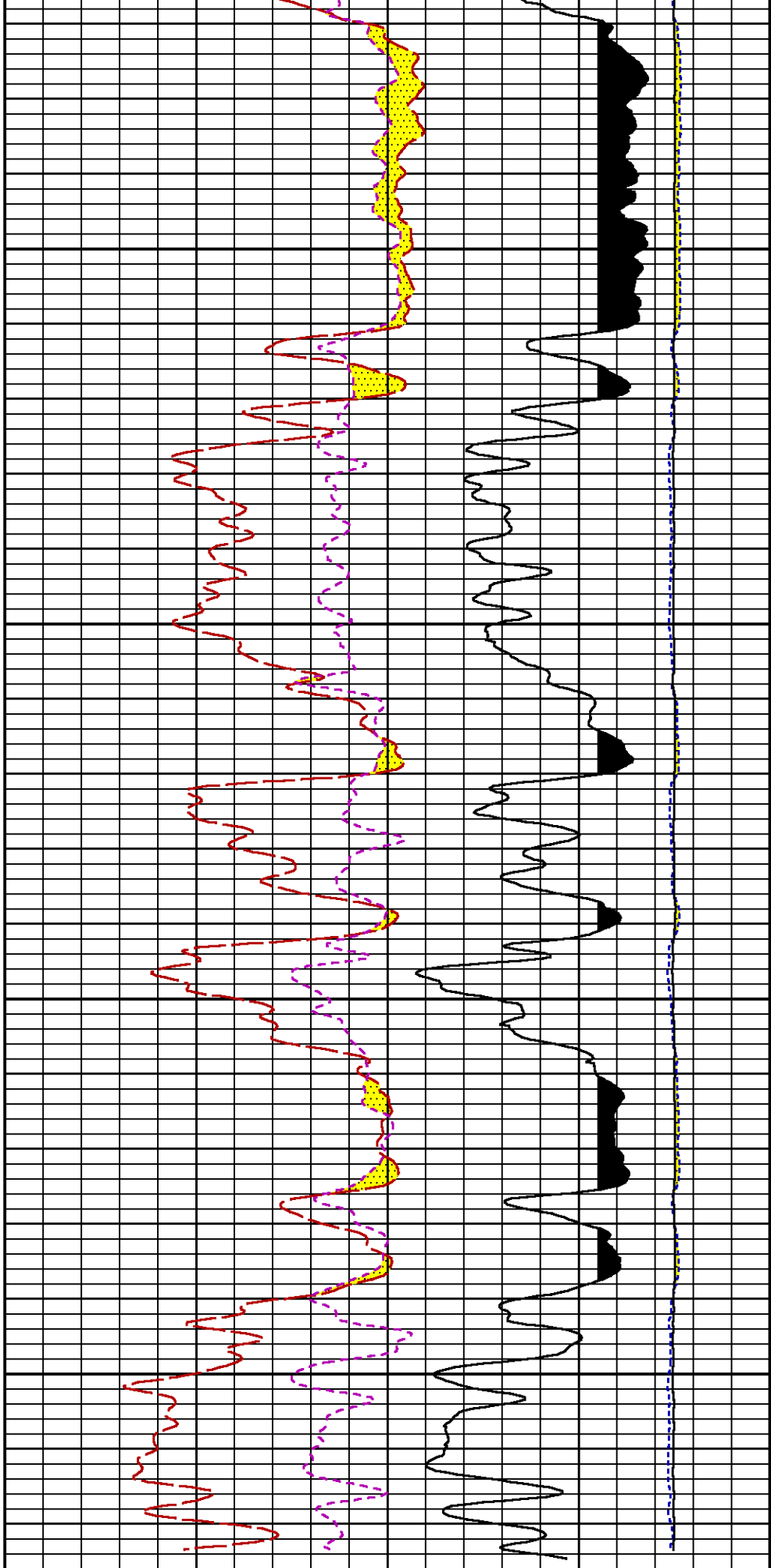
(1)

SGFC [sgfc]

60 0

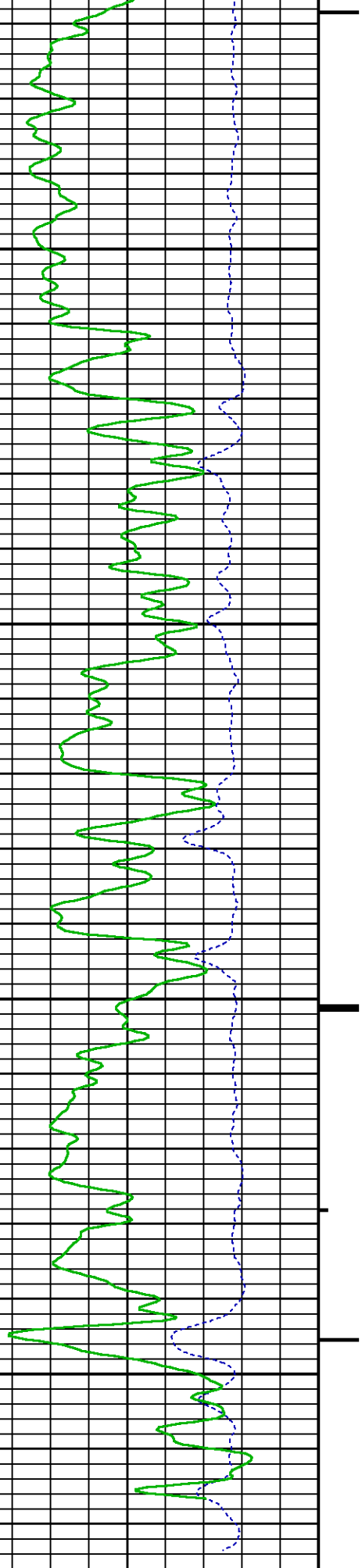
(1)





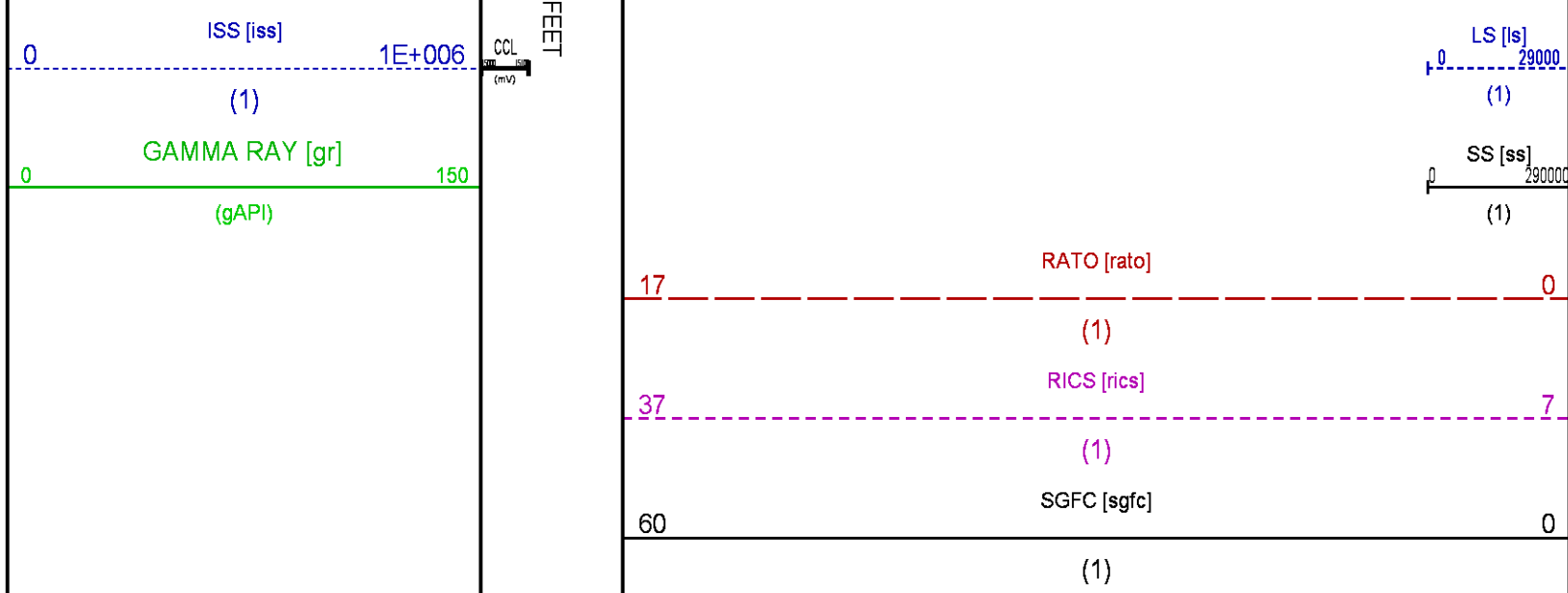
9300

9400



GR BACKUP





## CALIBRATION / VERIFICATION SUMMARY

Source File: C:\dat1a\095183\354h.tp1

### GR PRIMARY CALIBRATION SUMMARY

TOOL #: 2812LA 10274382

DATE/TIME PERFORMED: Wed Mar 04 12:56:32 2015

UNIT #: 3885TD Z004271

CALB JIG #: 4702NK WA612

	BACKGROUND	CALBRTR ON	CR DIFF	MULT	BACKGROUND	CALBRTR ON	CALBRTR
	(cts/s)	(cts/s)	(cts/s)		(gAPI)	(gAPI)	(gAPI)
GR	60.18	286.47	226.3	0.928	55.85	265.85	210

### GR PRIMARY VERIFICATION SUMMARY

TOOL #: 2812LA 10274382

DATE/TIME PERFORMED: Wed Mar 04 13:01:58 2015

UNIT #: 3885TD Z004271

VERI JIG #: 4702NK WA612

	BACKGROUND	CALBRTR ON	MULT	BACKGROUND	CALBRTR ON	DIFF.
	(cts/s)	(cts/s)		(gAPI)	(gAPI)	(gAPI)
GR	61.24	283.22	0.928	56.84	262.84	206.00
						200.00 220.00

### RPM\_PNC\_3D PRIMARY CALIBRATION SUMMARY

TOOL: 8283PA 10213151

DATE/TIME PERFORMED: Wed Mar 04 11:53:36 2015

UNIT: 3885TD Z004271

CALIBRATOR: 2437XB GJ

SOURCE: 8281AA 11803641

HOURS: 8281AA 268

	ISS	Mtr Vlt (V)	SS Gain	LS Gain	XLS Gain	EA Temp (degF)	Sync Delay (usec)	RCAL
Raw Data	808780	124	2258	2367	2449	105	7	0.9681

Interpolated	1300000	148	2240	2363	2430
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	ISS	BKS	BKL	BKX	SGA1	SDA1	SGA2	SDA2
Raw Data	808780	6352	1008	144	26.09	0.15	24.26	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	808780	168868	26825	89644	31904	8223	54257	13166
Fit Quality %		1.028	0.912	1.044	1.050	1.054	0.946	1.085

	ISS	RBOR	RIN ISS/ILS	RIN13 ISS/IXS	RICS ISS/CSS	RATO SS/LS	RTWO SS2/LS	ROME CSS/CLS
Raw Data	808780	1.43	4.79	30.16	14.91	10.91	3.88	4.12
		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 %		0.078	0.134	0.201	0.133	0.038	0.042	0.060
Reduced	1415035	1.43	4.80	30.21	14.94	10.91	3.88	4.12
		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

33.24'

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

CCL MP — 25.19'

#### SONDEX GAMMA RAY

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

GR MP — 22.64'

#### 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 — 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 — 1.65'  
PRES MP

BULL PLUG 1 11/16

0.00'

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

	COMPANY	WPX ENERGY		FILE NO:	
	WELL	YOUBERG RU 543-7			CH095183
	FIELD	RULISON		API NO:	
	COUNTY	GARFIELD	STATE	COLORADO	05045225160000
	LOCATION:	SHL: 1162' FSL & 1181' FEL BHL: 1297' FSL & 754' FEL (NESE)		ELEVATIONS:	7 7S 93W RU 44-7 PAD NABORS 576
	SEC 7	TWP 7S	RGE 93W	KB 7943 FT DF GL 7917 FT	
				DATE	10-Mar-2015