



FILE NO: CH094658	COMPANY WELL FIELD COUNTY	WPX ENERGY PUCKETT GM 313-21 GRAND VALLEY GARFIELD	STATE CO
API NO: 05045221940000			

Ver. 3.87 21 6S 96W GM 11-28 PAD CYCLONE 17	LOCATION: SHL: 1279' FNL & 1066' FWL(28 6S 96W) BHL: 2042' FSL & 1174' FWL(21 6S 96W) SEC 21 TWP 6S RGE 96W	OTHER SERVICES BOND LOG
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PERMANENT DATUM LOG MEASURED FROM DRILL. MEAS. FROM	GL KB ELEVATION 21 FT 5604 FT ABOVE P.D. KB GL	ELEVATIONS: KB 5625 FT DF GL 5604 FT
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DATE	07-Feb-2015
RUN	1
SERVICE ORDER	US094658
DEPTH DRILLER	8144 FT
DEPTH LOGGER	8084 FT
BOTTOM LOGGED INTERVAL	8074 FT
TOP LOGGED INTERVAL	4715 FT
TIME STARTED	11:30
TIME FINISHED	16:30
OPERATOR RIG TIME	5 HOURS
TYPE OF FLUID IN HOLE	WATER
FLUID DENSITY	NA
FLUID SALINITY	NA
FLUID LEVEL	73 FT
LOGGED CEMENT TOP	NA
WELLHEAD PRESSURE	0 PSI
MAXIMUM HOLE DEVIATION	NA
NOMINAL LOGGING SPEED	10 FMIN
MAX. RECORDED TEMP.	236 DEGF
REFERENCE LOG	BAKER HUGHES BOND LOG
REFERENCE LOG DATE	07-Feb-2015
EQUIP. NO.	HL-6670
LOCATION	GRAND JCT.
RECORDED BY	NEWELL
WITNESSED BY	KYLE KOHL

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	1345 FT
8.75 IN	1345 FT	8156 FT

CASING RECORD				
SIZE	WEIGHT	GRADE	FROM	TO
9.625 IN			0 FT	1345 FT
4.5 IN	11.6 LB/F	I-80	0 FT	8156 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 07/FEB/2015 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 in PNC-3D mode.

BHT = 236 degF
SJ = 4588' - 4610'

EQUIPMENT DATA

RUN	TRIP	TOOL	SERIES NO.	SERIAL NO.	POSITION
1	1	PCM	8250EA	10586851	FREE
1	1	TEL/CCL	8248ED	10460262	FREE
1	1	GR	2812LA	11701636	FREE
1	1	RPM	8281EA	10273848	FREE
1	1	RPM	8283PA	10169251	FREE
1	1	RPM	8281FA	10238007	FREE
1	1	TEMP	8255XA	11774568	FREE

MAIN SECTION PNC-3D MODE

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

Updates: 1 Patches: 4

Plotted: Sat Feb 7 15:45:20 2015

PARAMETER AND FILTER SUMMARY REPORT

FILE: /dat1a/CH094658/n354h02.prm
 LOGGING MODE: DEPTH DIRECTION: UP
 TOP DEPTH: 4709.250 ft BOTTOM DEPTH: 8089.898 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	Feb 7 12:11:57 2015	CASING COLLAR LOCATOR
F1:GR	Feb 7 12:11:57 2015	GAMMA RAY
F1:ISS	Feb 7 12:11:57 2015	INELASTIC SHORT SPACE COUNT RATE
F1:LS	Feb 7 12:11:57 2015	LONG SPACE COUNT RATE
F1:RATO	Feb 7 12:11:57 2015	SHORT/LONG SPACE COUNT RATE RATIO
F1:RICS	Feb 7 12:11:57 2015	SHORT SPACE INELASTIC TO CAPTURE COUNT RATE RATIO (ISS/CSS)
F1:SGFC	Feb 7 12:11:57 2015	CORRECTED FORMATION SIGMA
F1:SS	Feb 7 12:11:57 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 : HL6670:/dat1a/CH094658/313RPM_MAIN.fvpdf [5"/100' Scale]
 Plot Interval : 4710 - 8089 Feet

Data File 1 : F1 : HL6670:/dat1a/CH094658/313RPM_MAIN.xtf
 Created On : Feb 7 12:11:57 2015
 Company : WBY ENERGY

Company : WPA ENERGY
Well : PUCKETT GM 313-21
Field : GRAND VALLEY
File Interval : 4684.5 - 8087 Feet
OCT : n354h

GR BACKUP

FEET

ISS [iss]

1E+06

(1)

GAMMA RAY [gr]

150

(gAPI)

CCL
(m)

LS [ls]

29000

(1)

SS [ss]

290000

(1)

RATO [rato]

17

0

(1)

RICS [rics]

40

10

(1)

SGFC [sgfc]

60

0

(1)

GR

ISS

RATO

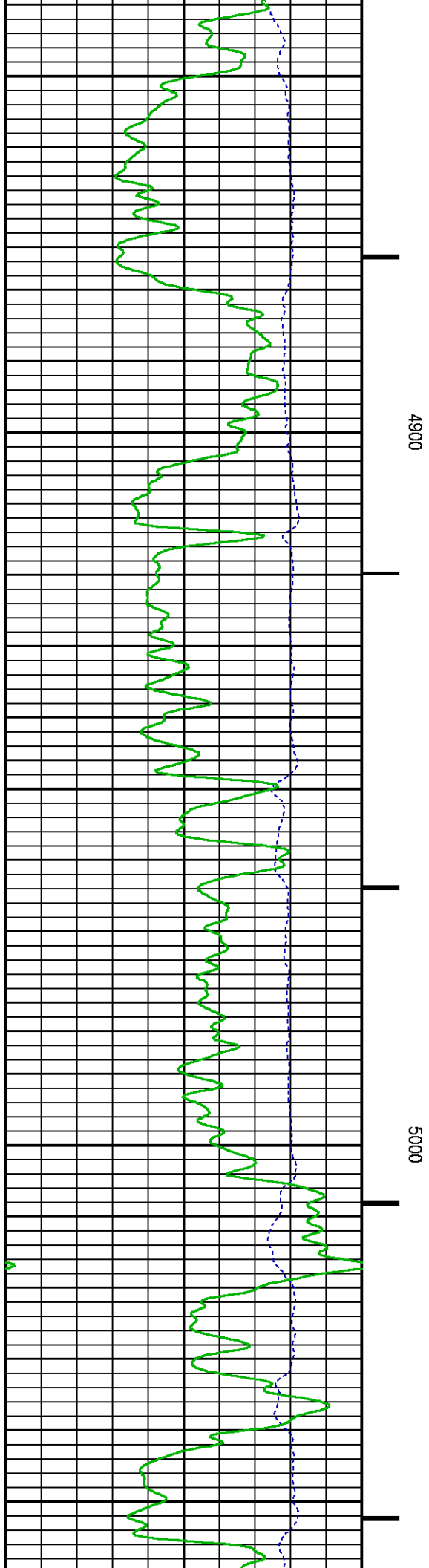
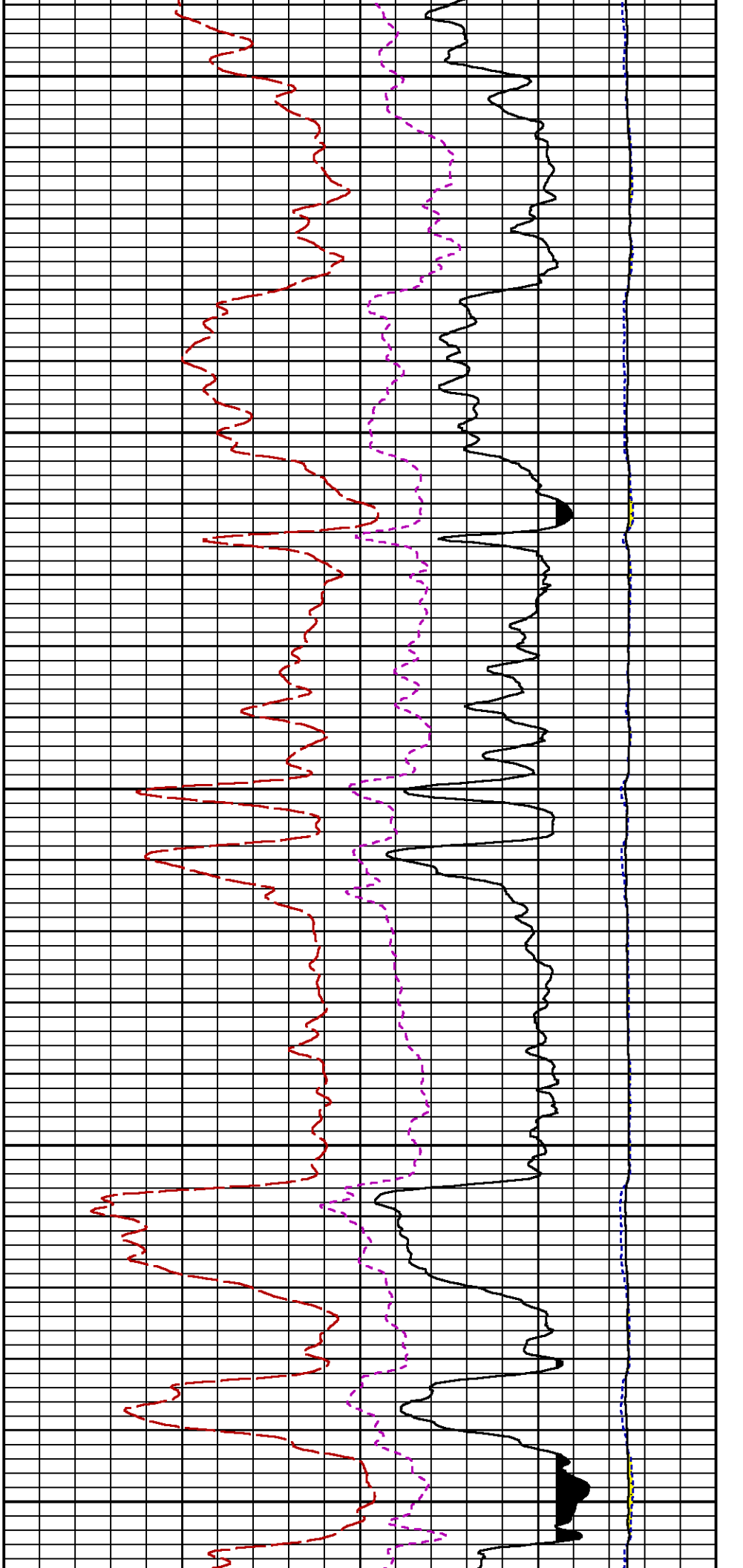
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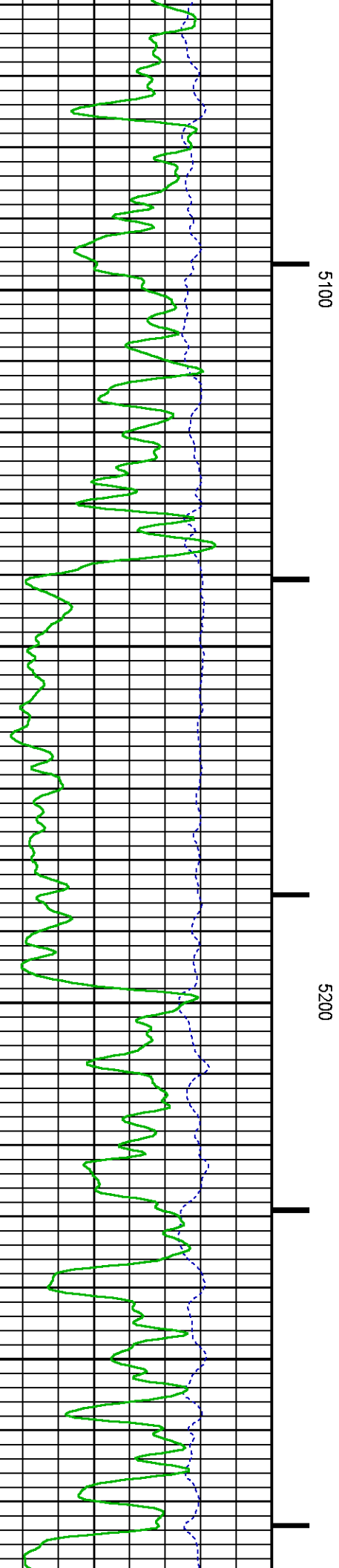
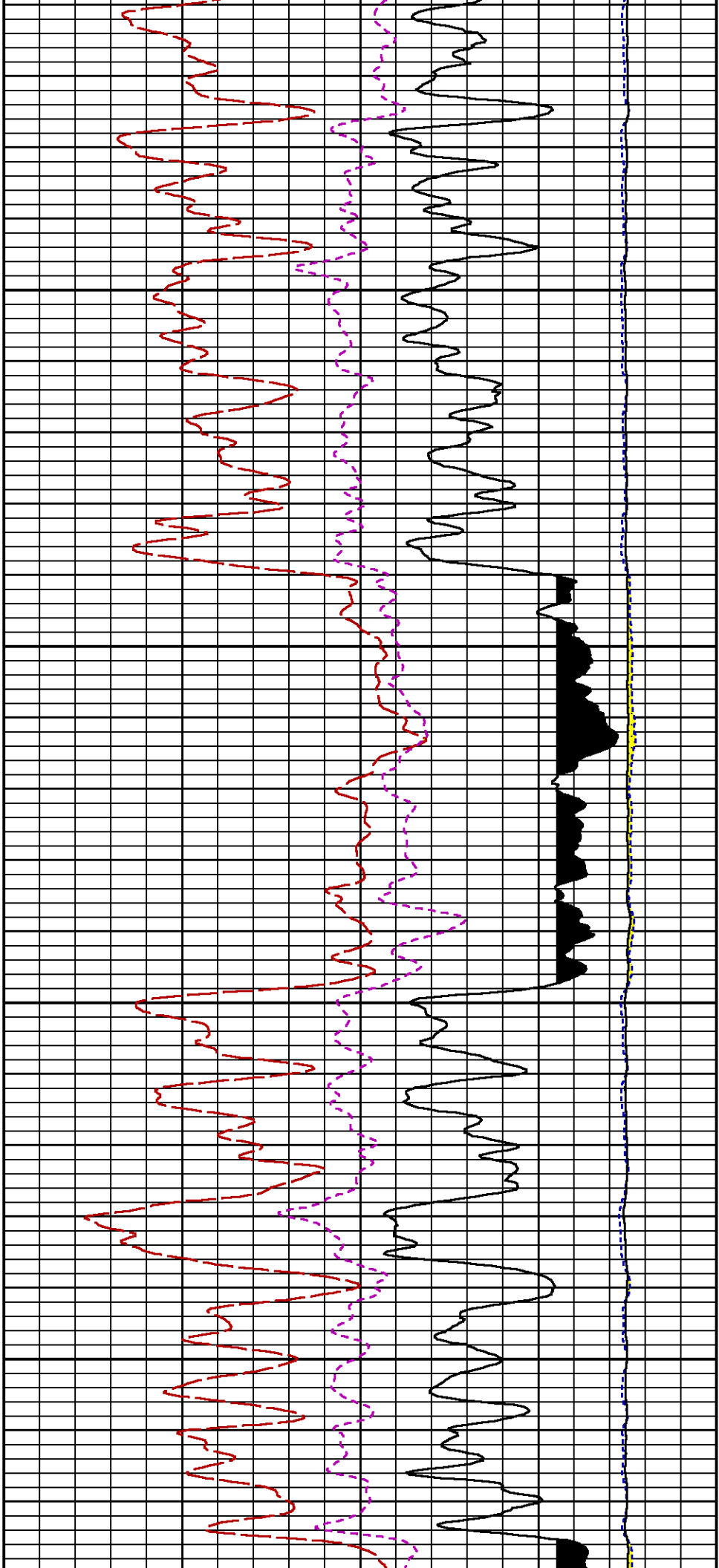
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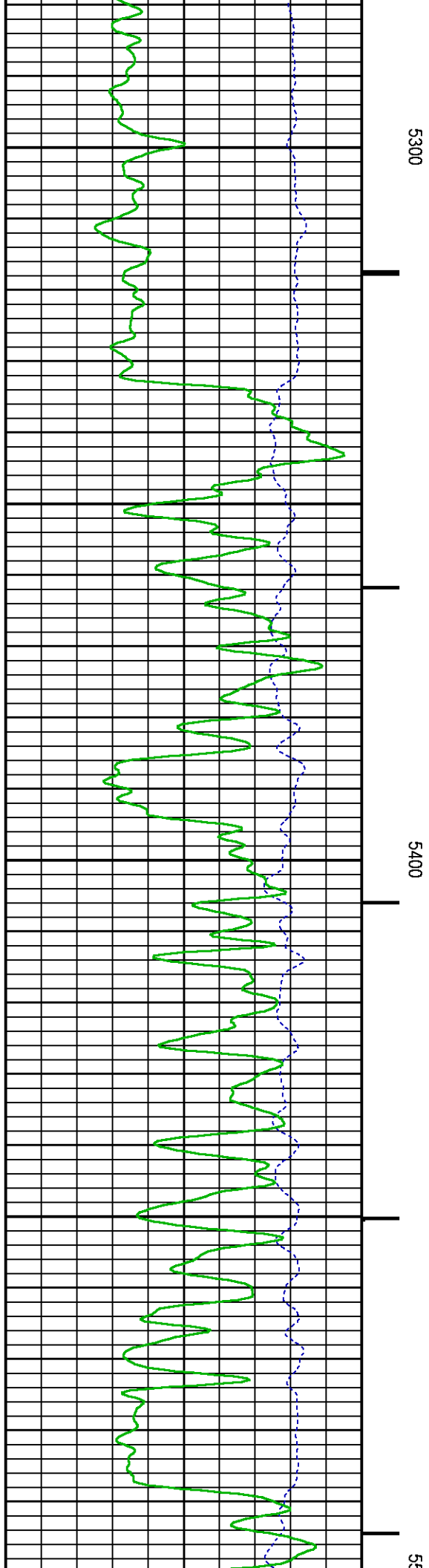
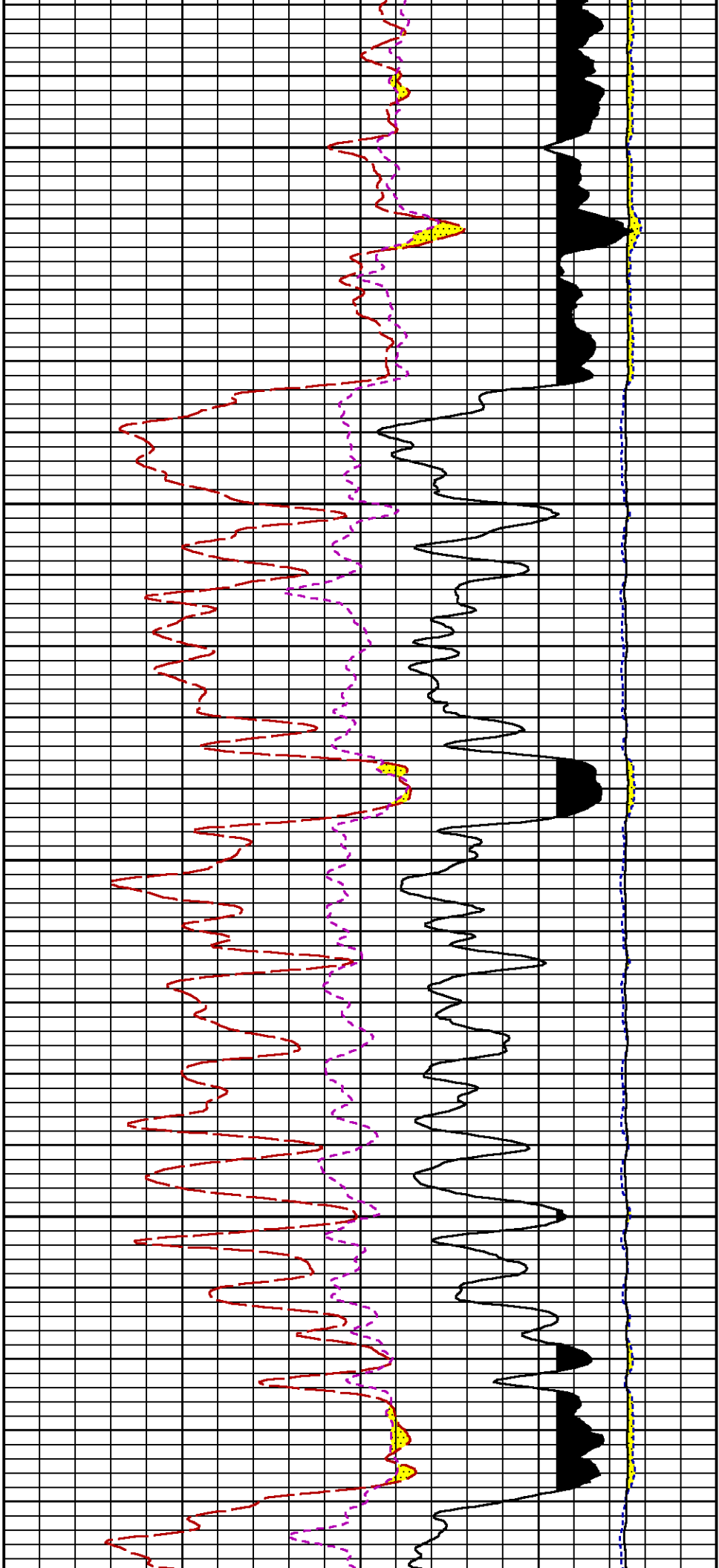
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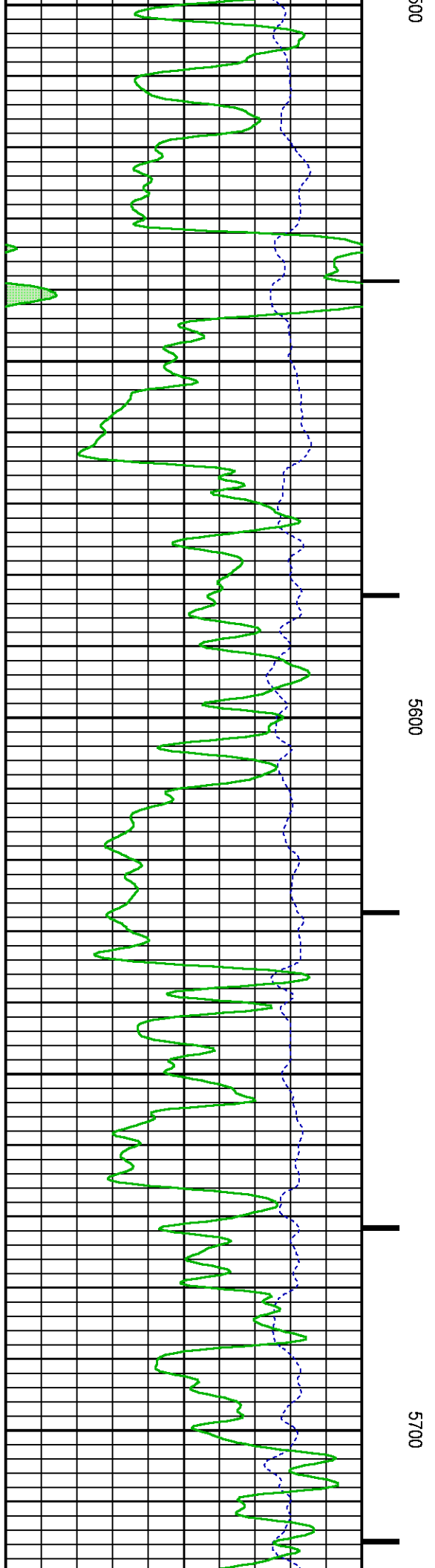
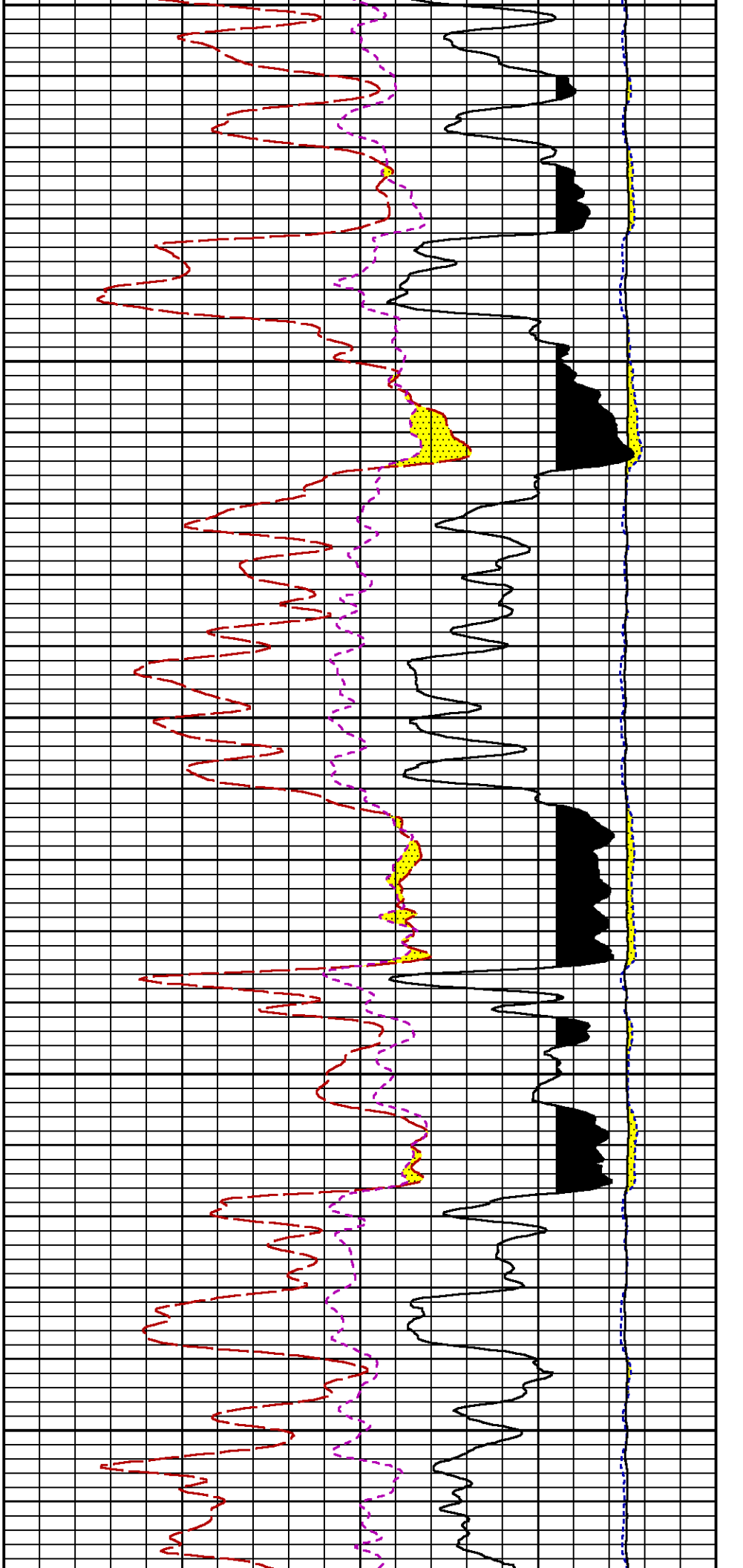
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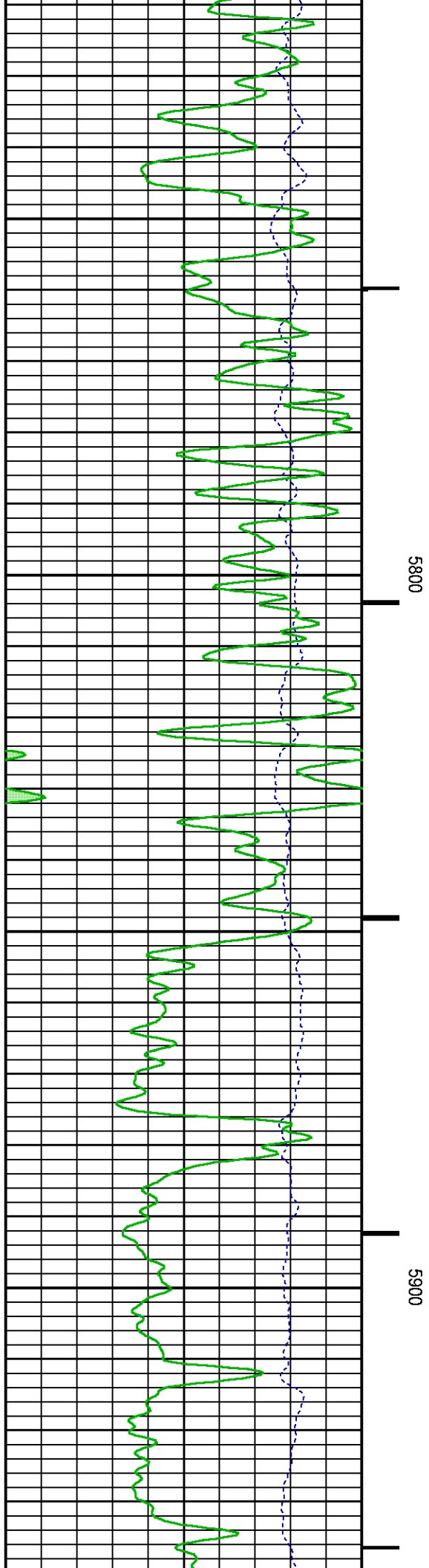
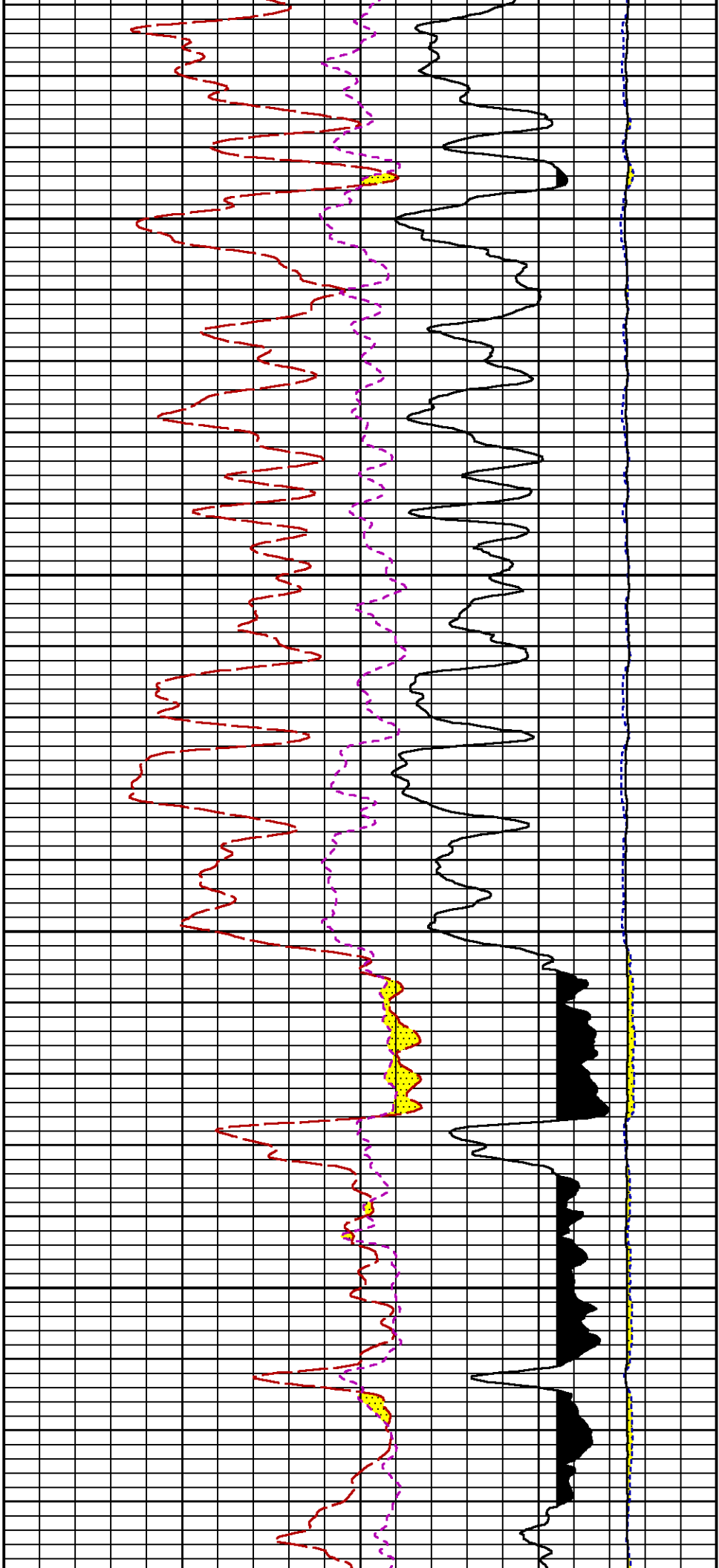
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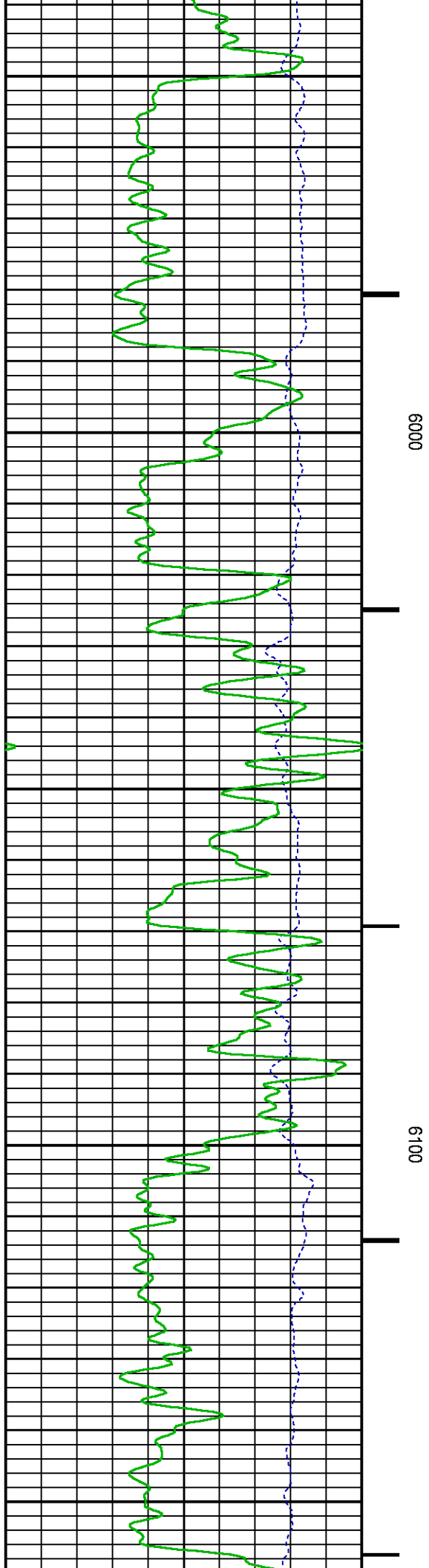
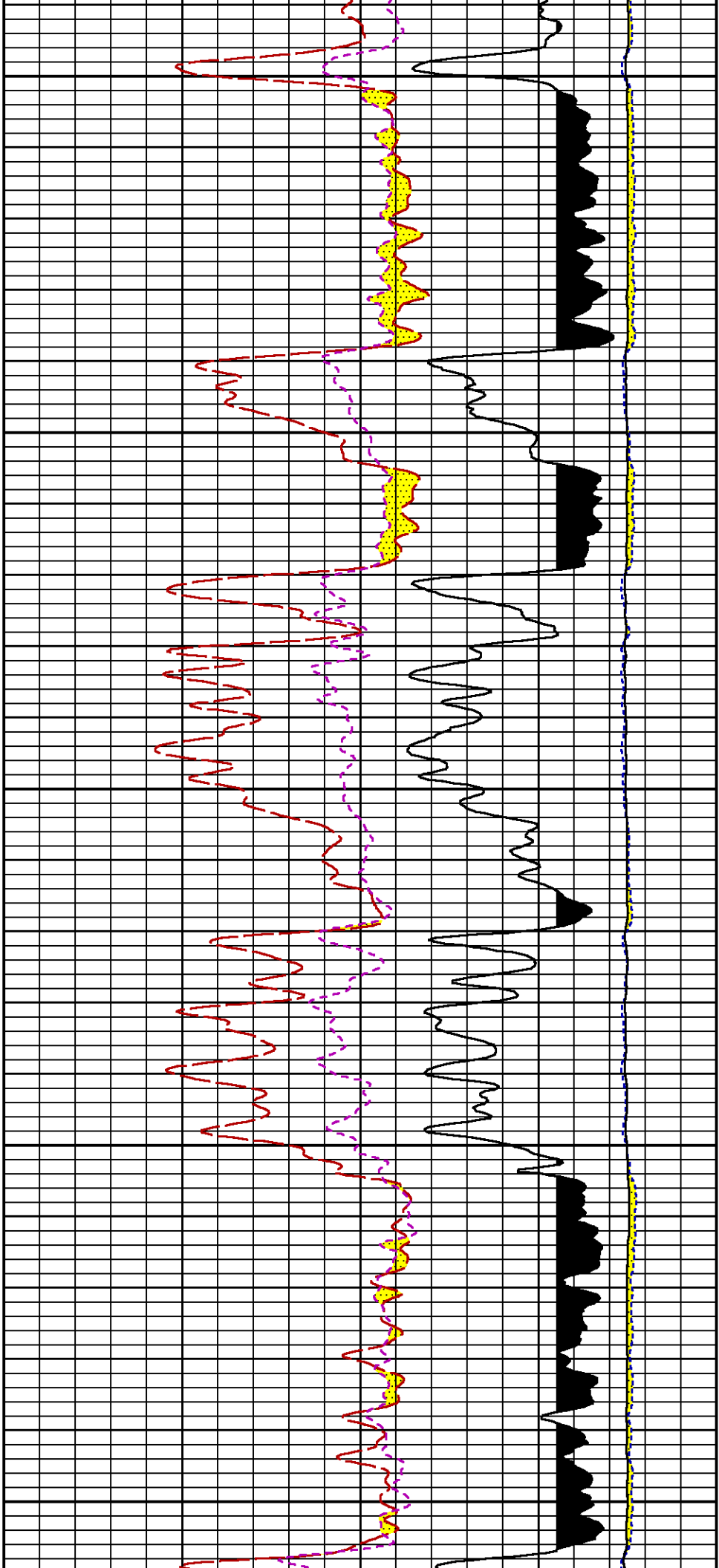


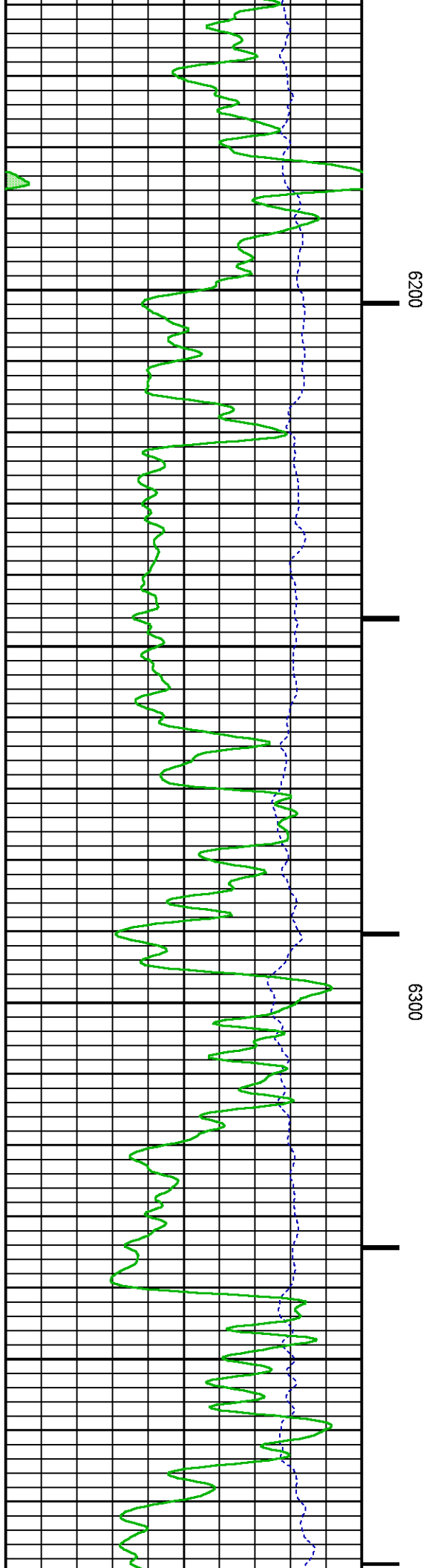
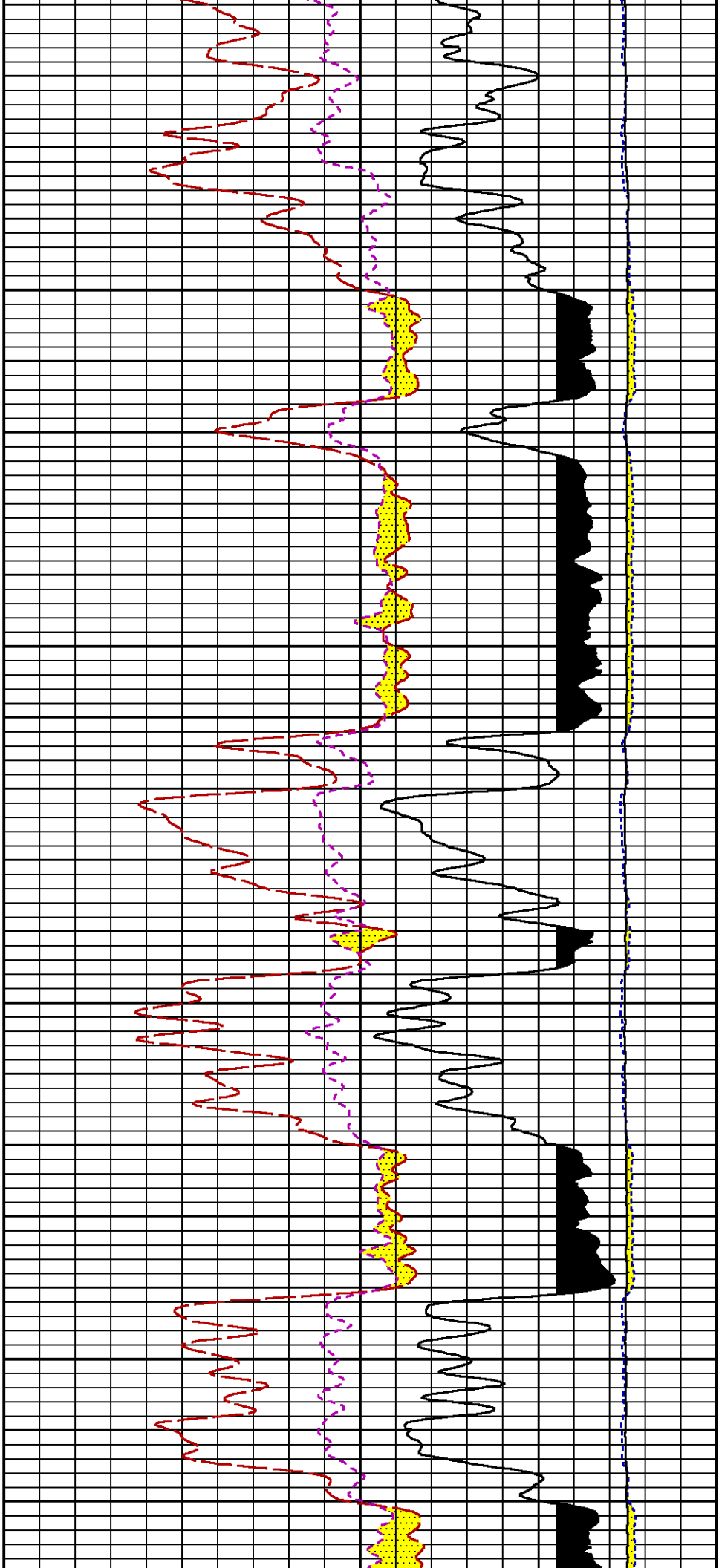


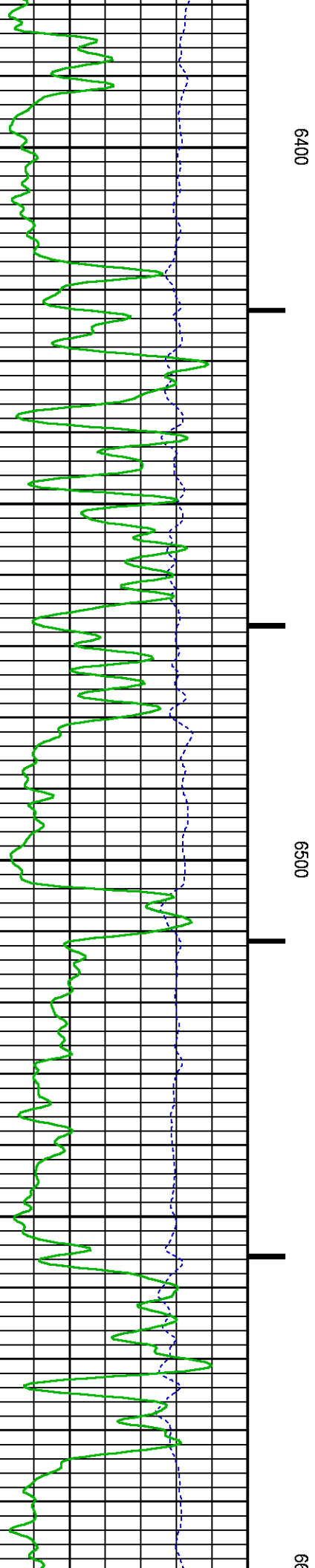
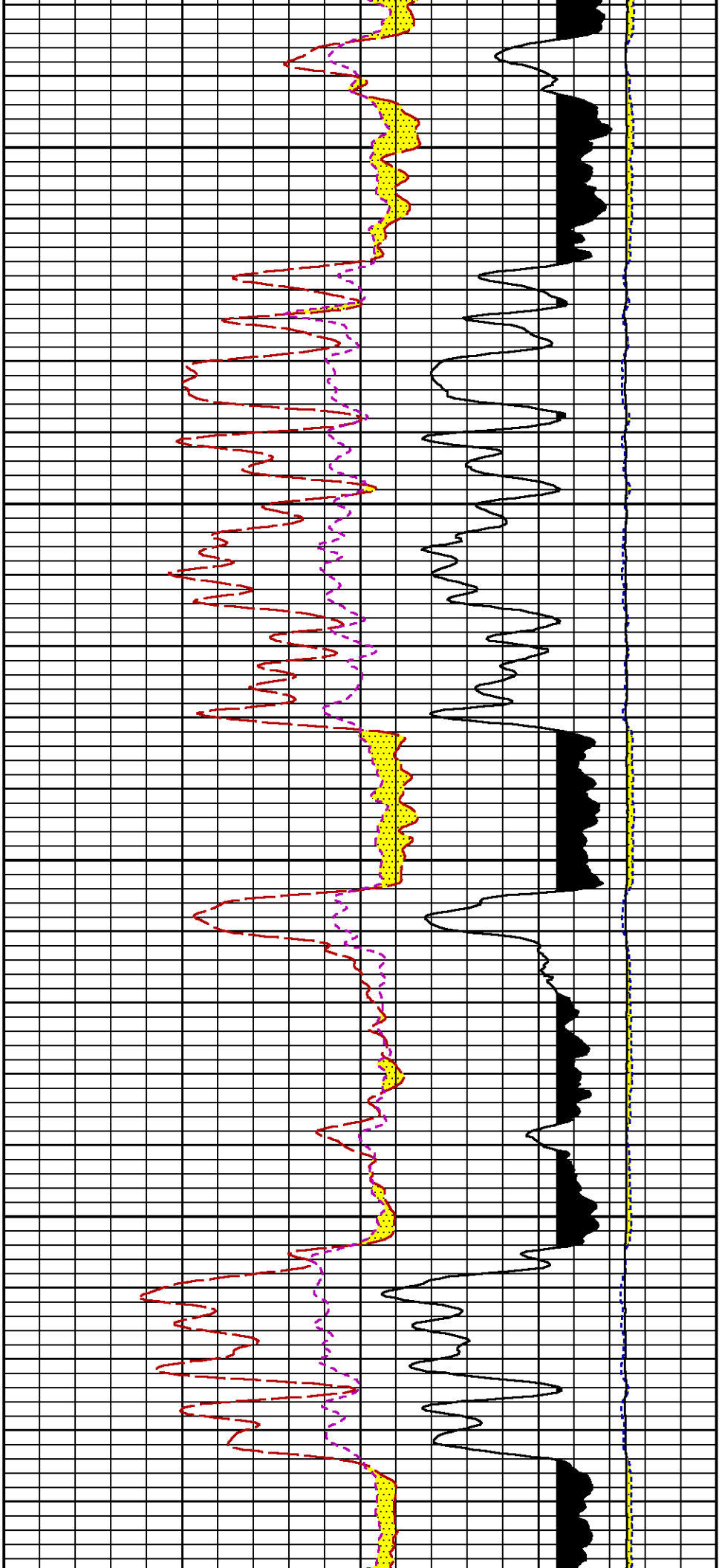


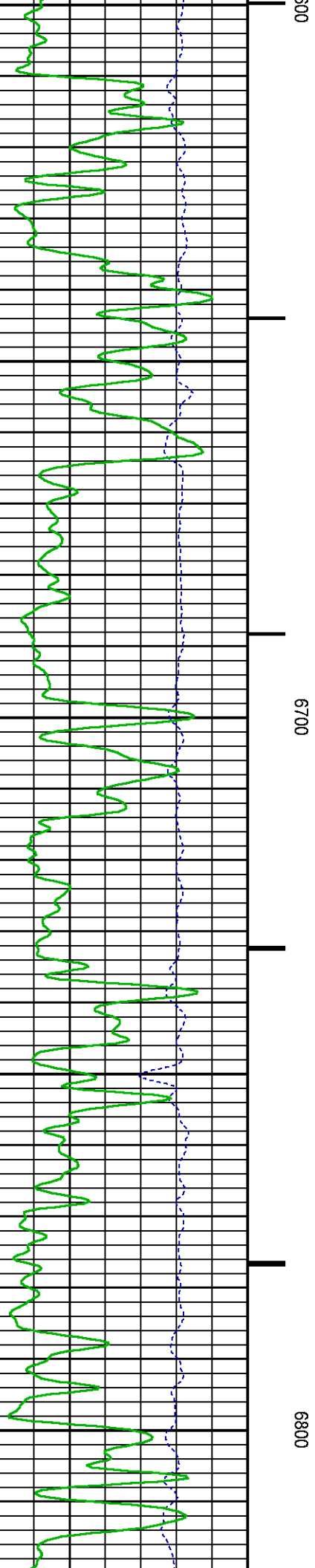
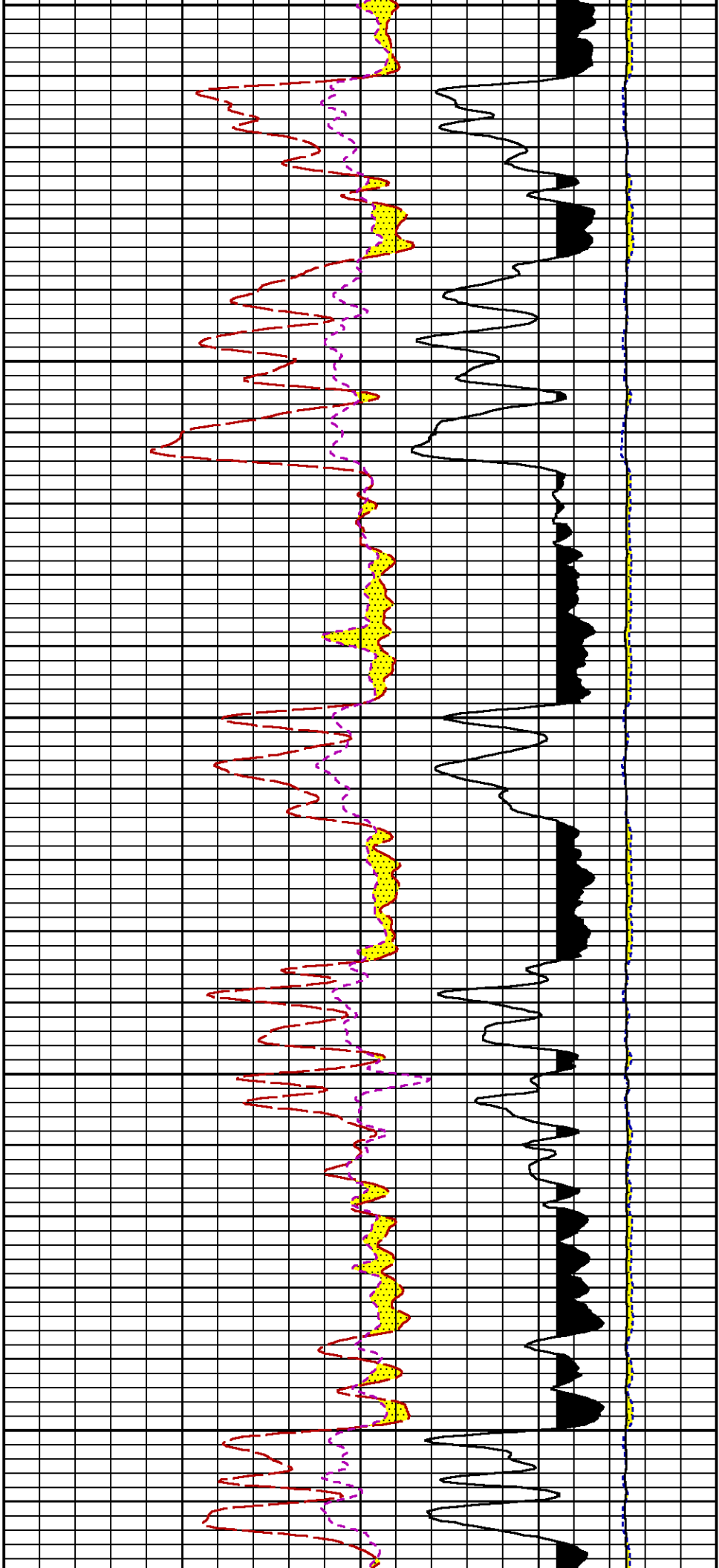


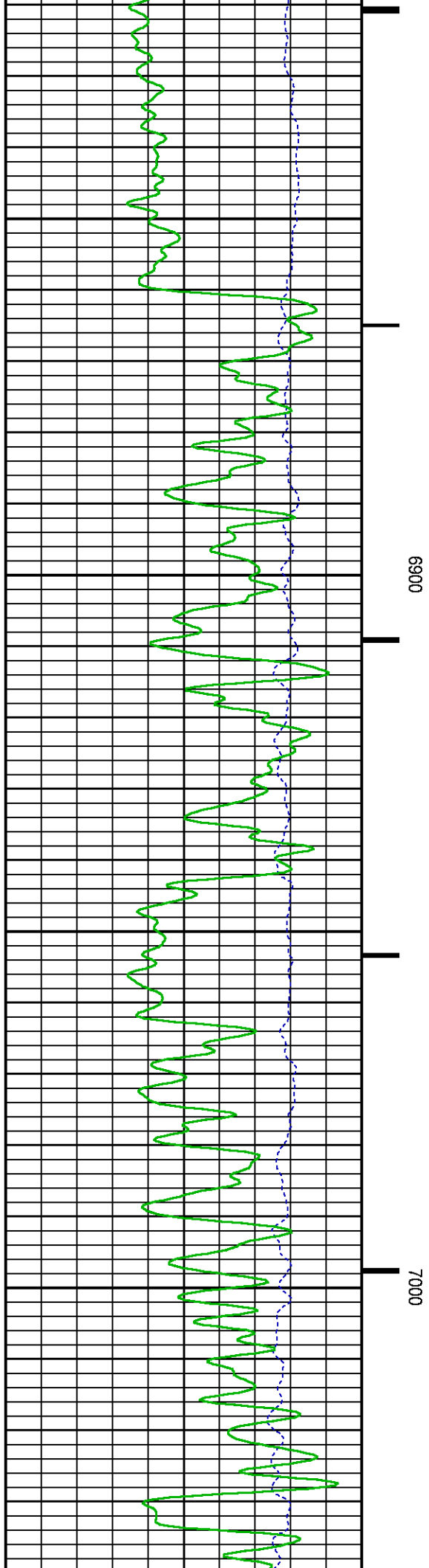
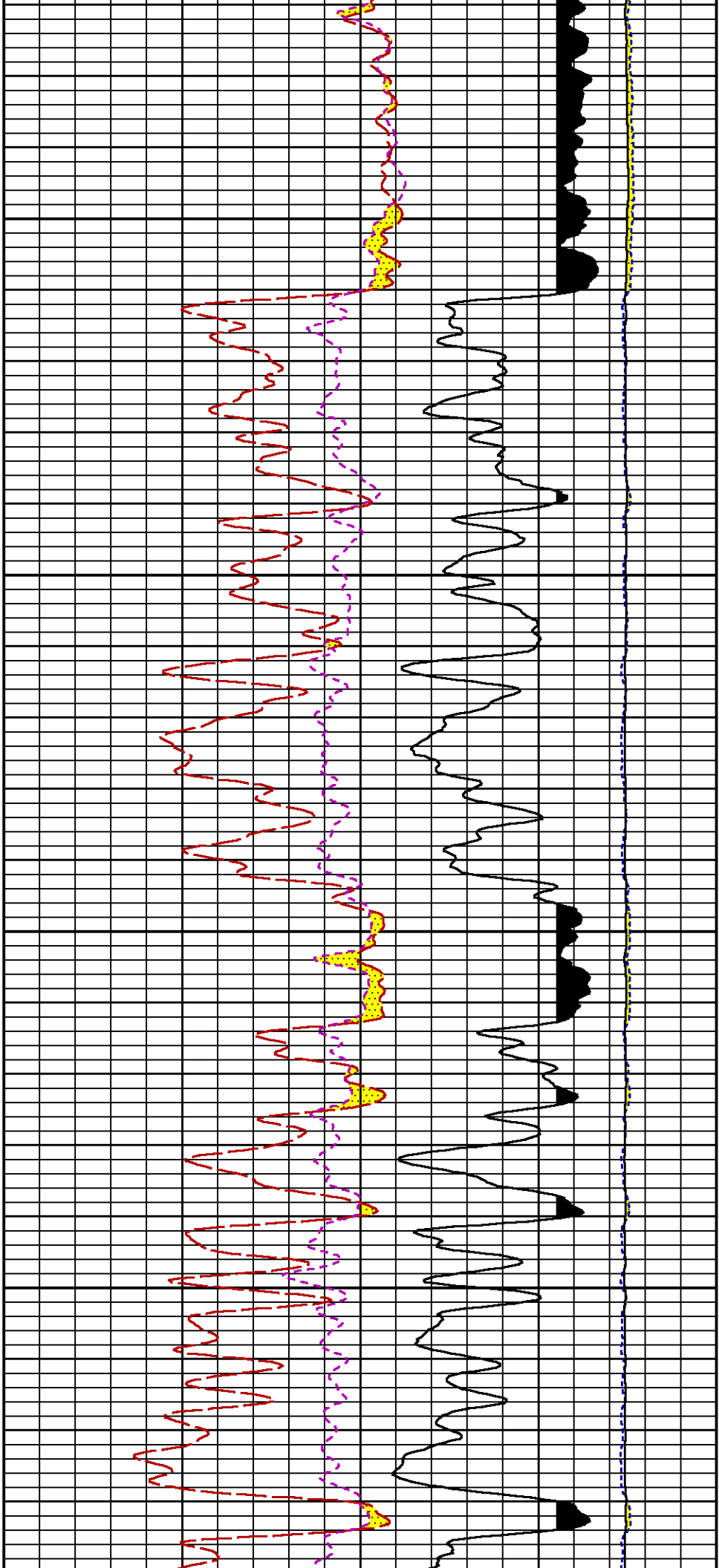


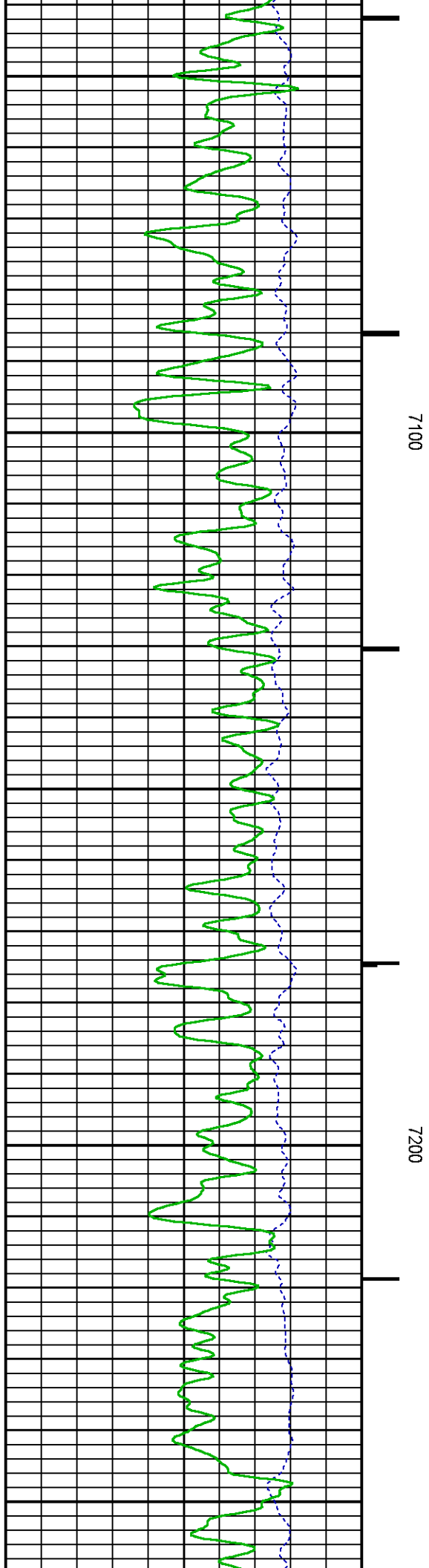
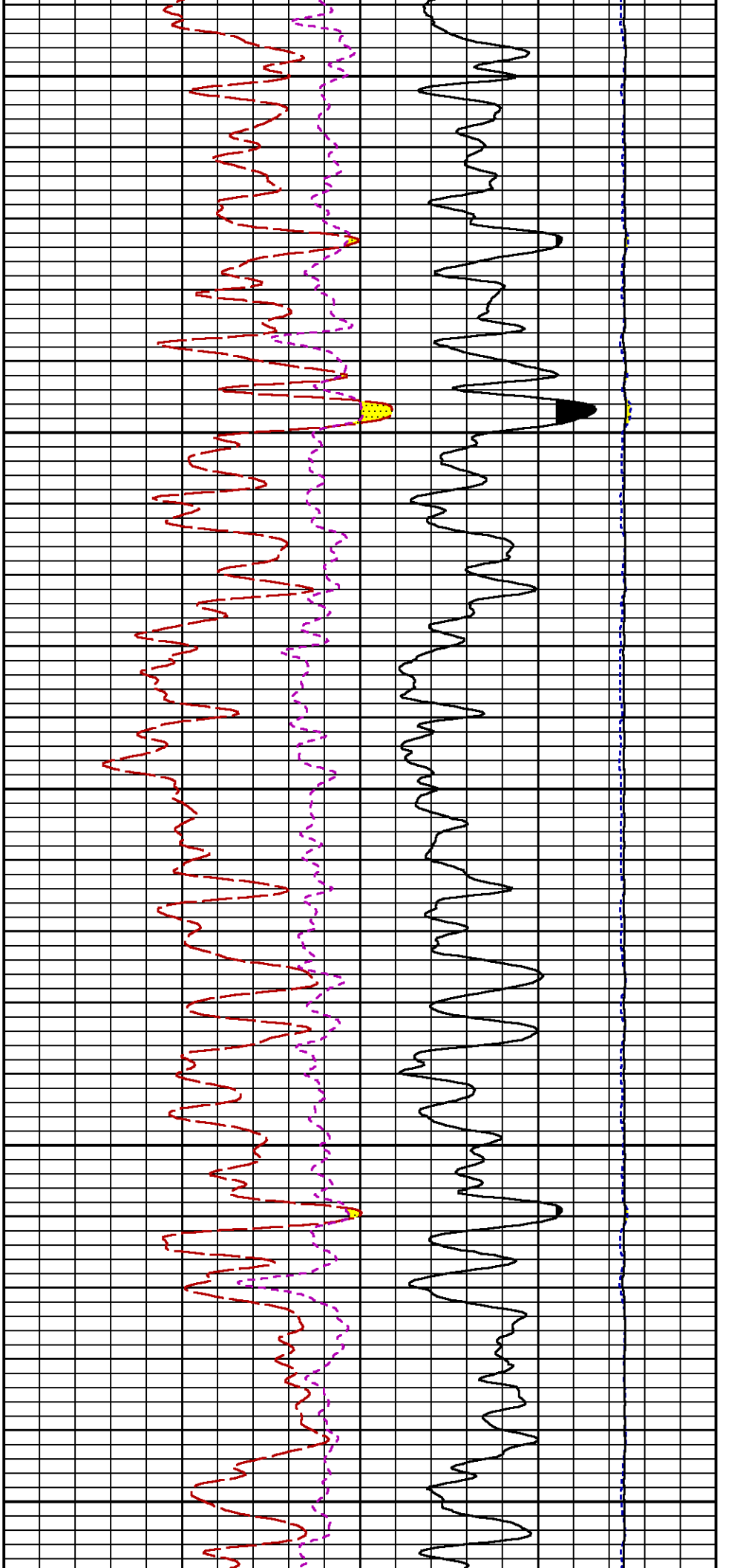


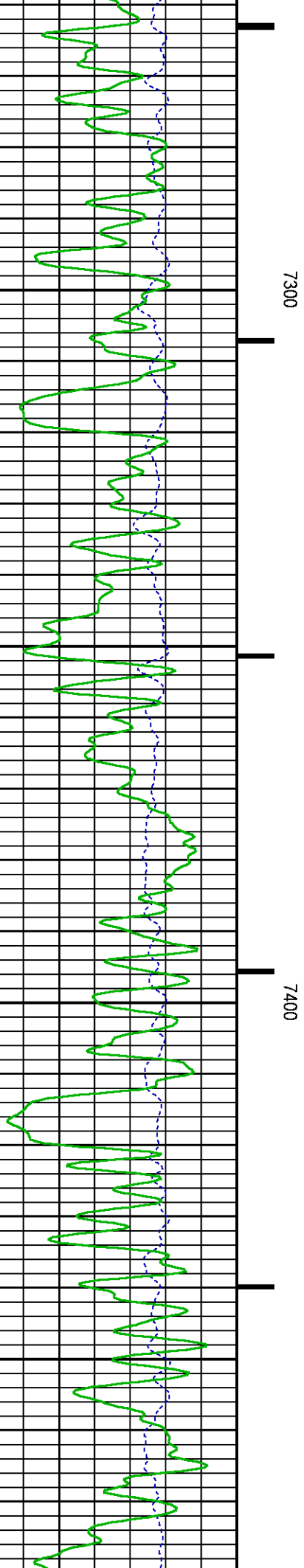
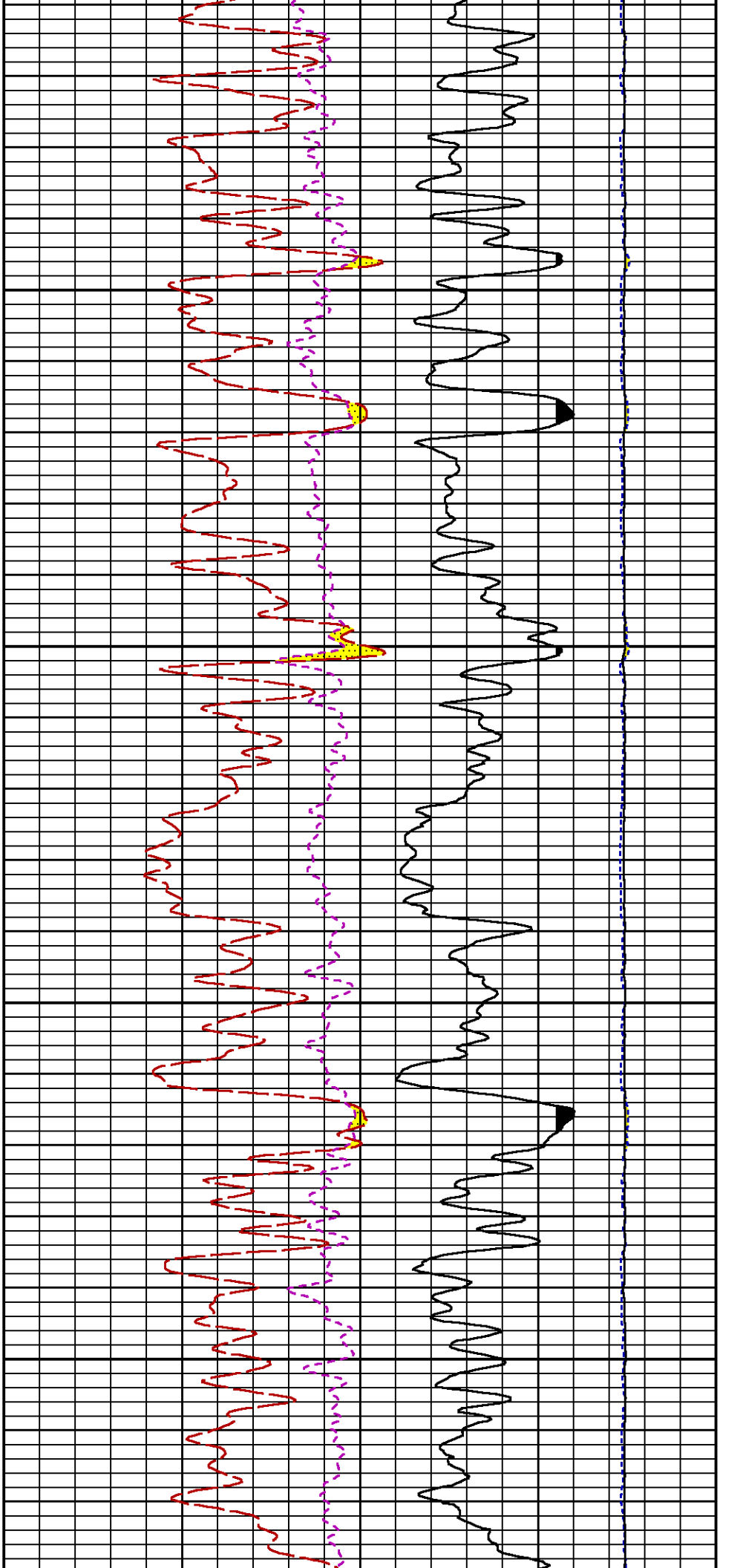


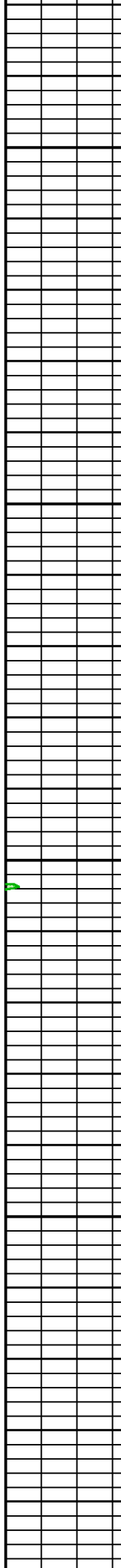
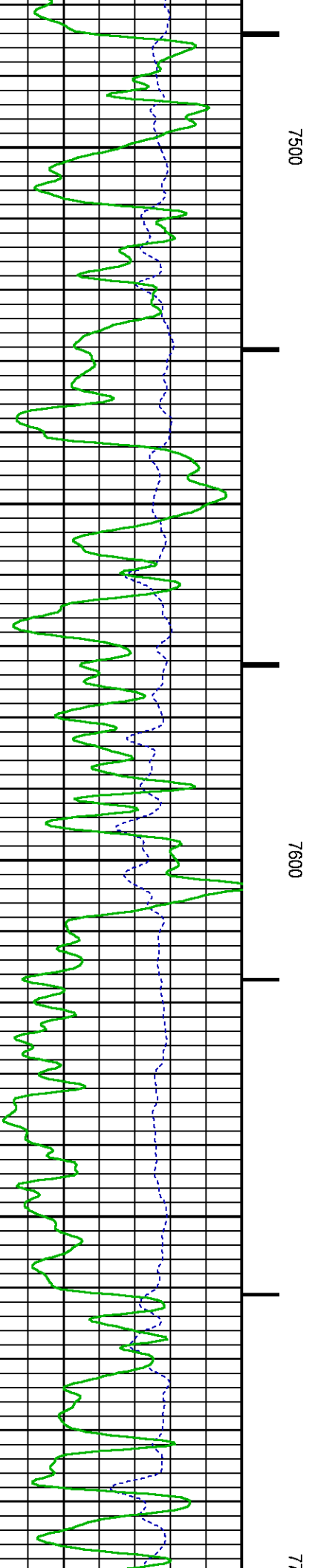
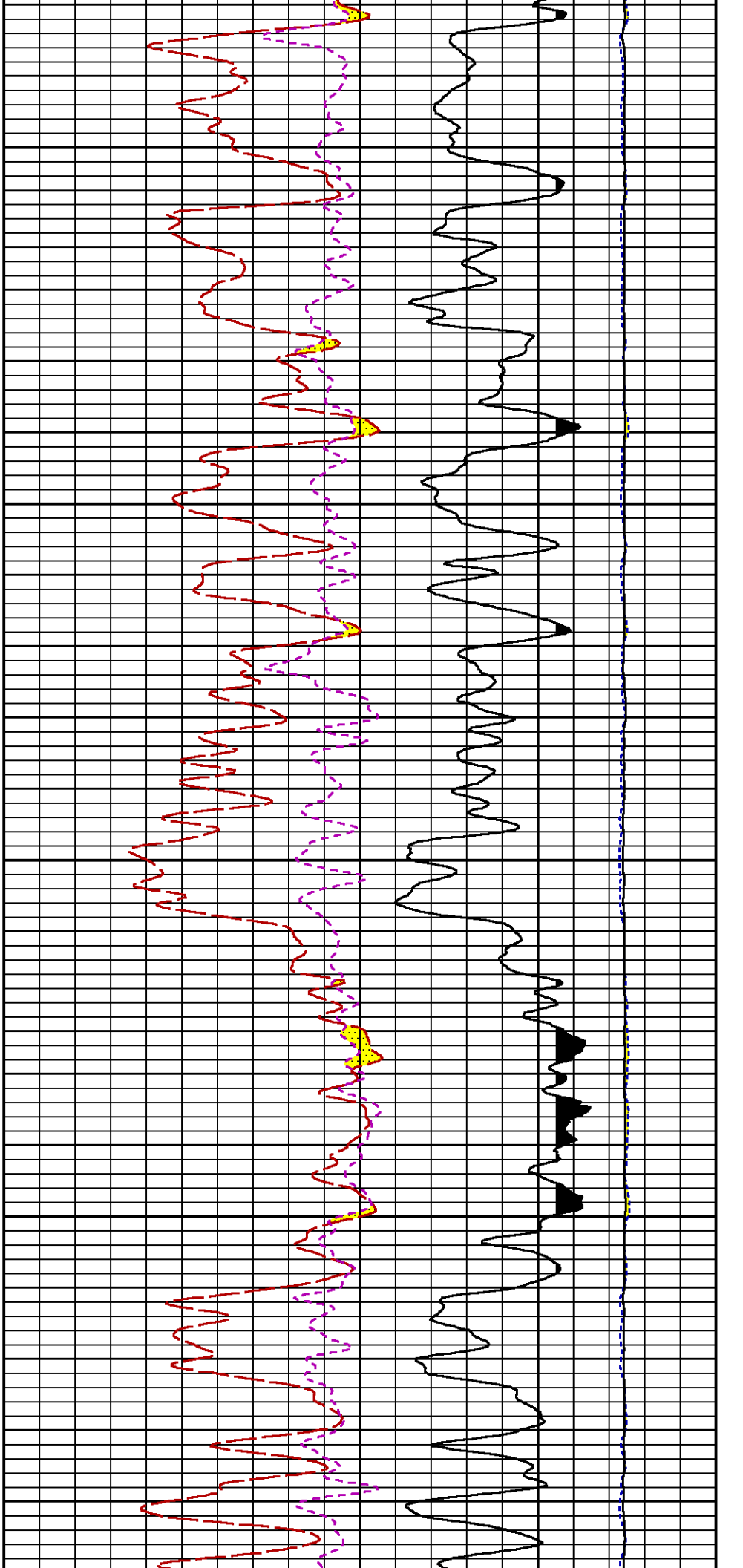


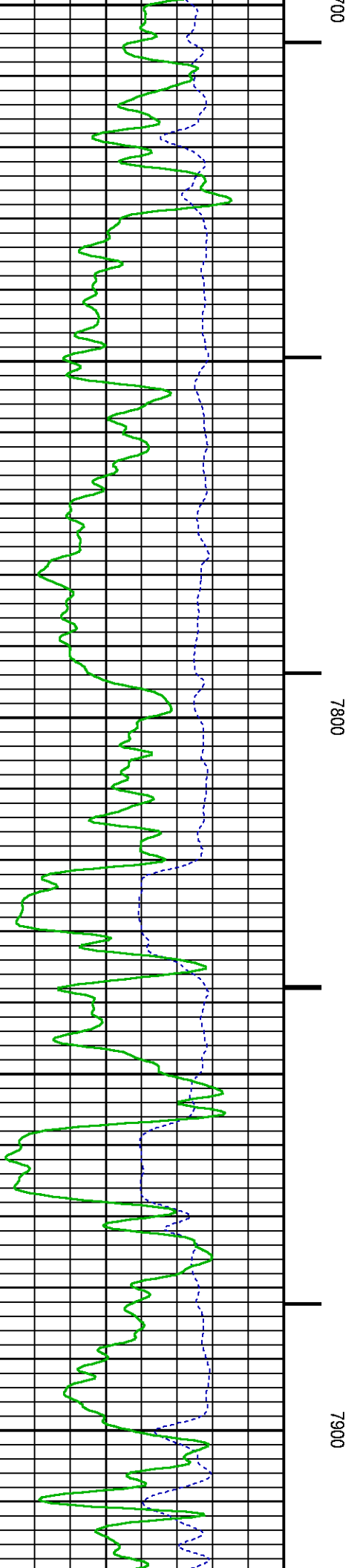
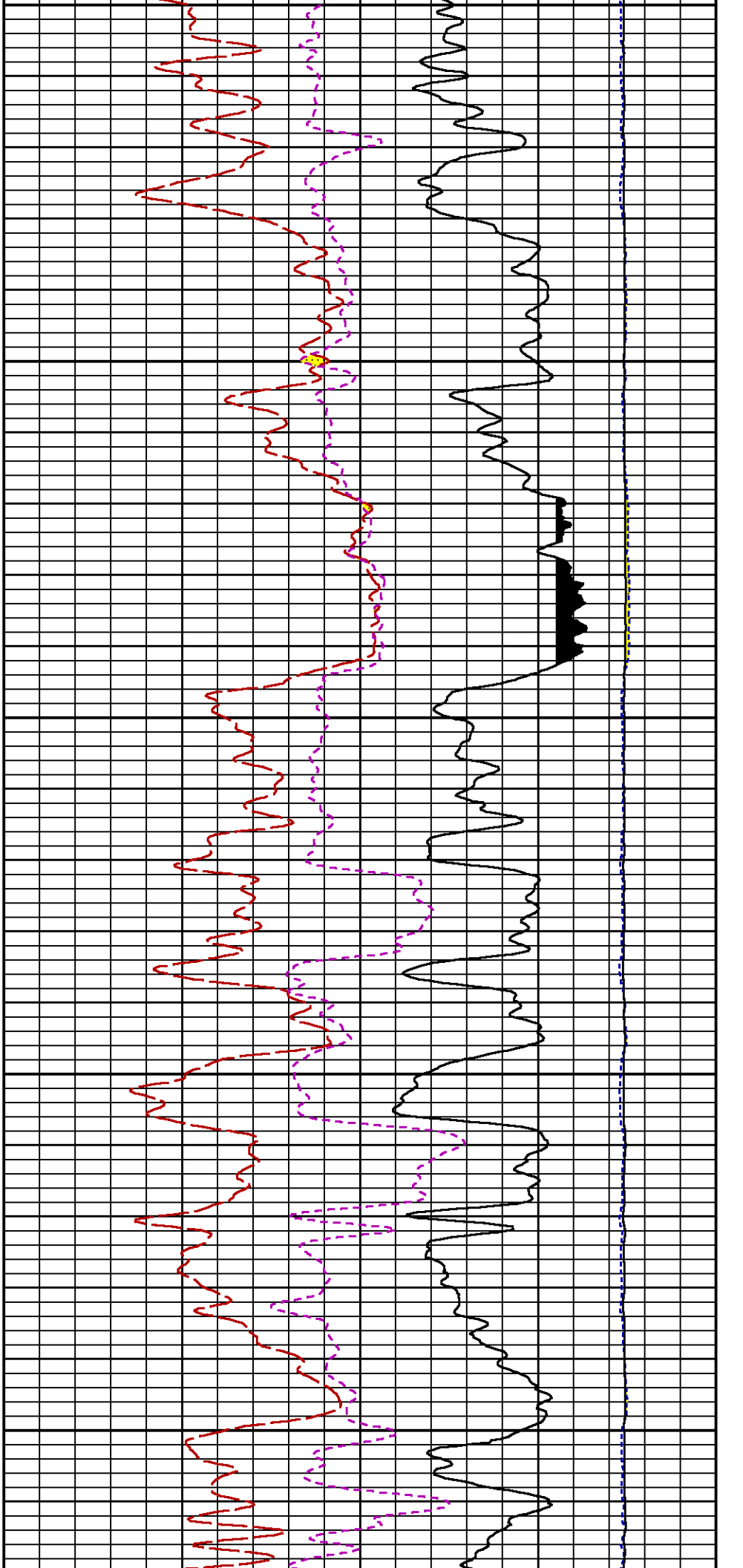


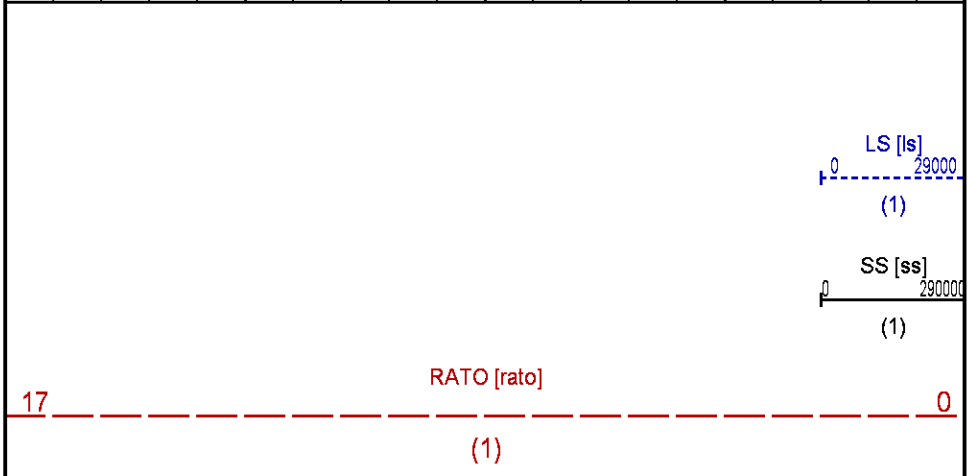
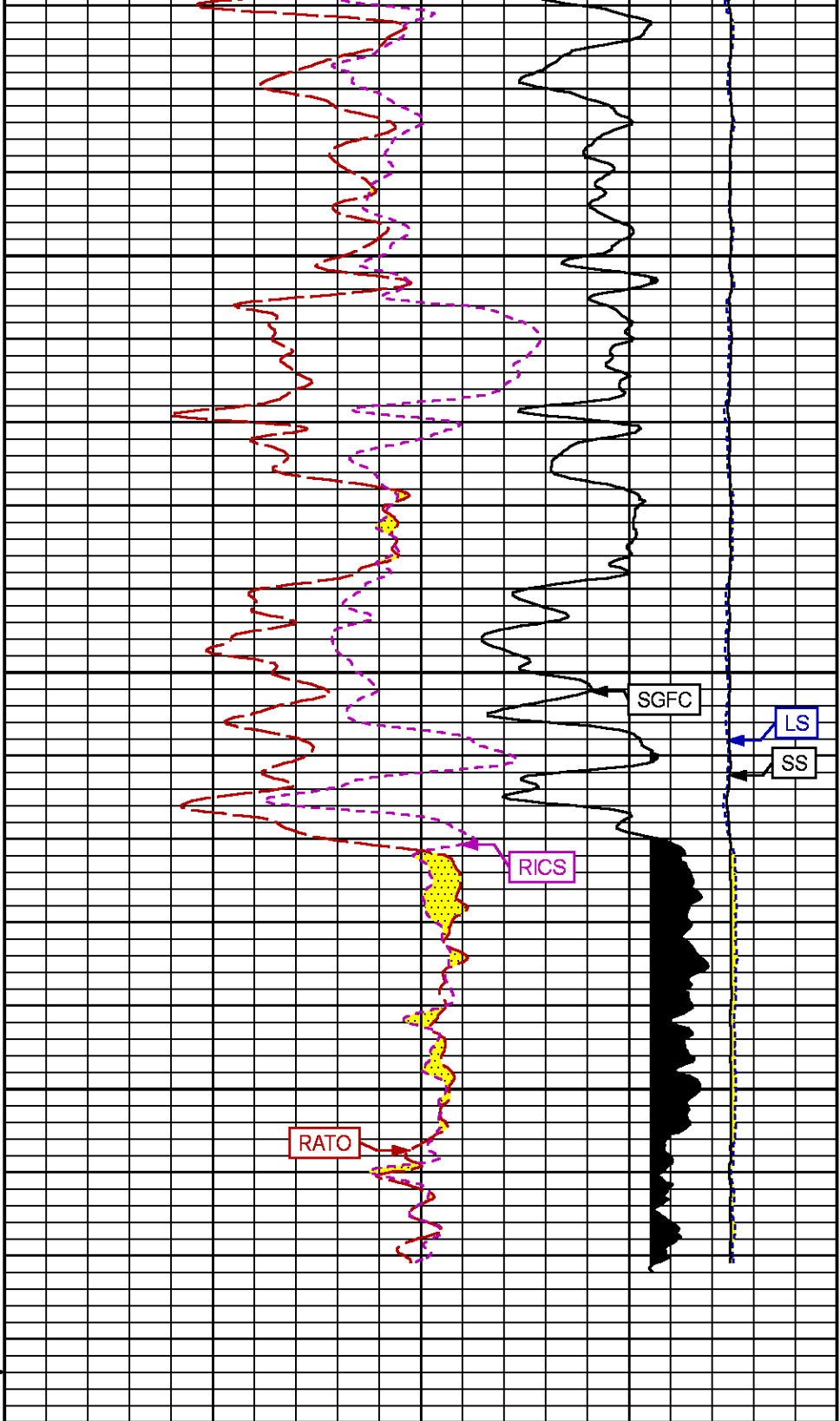
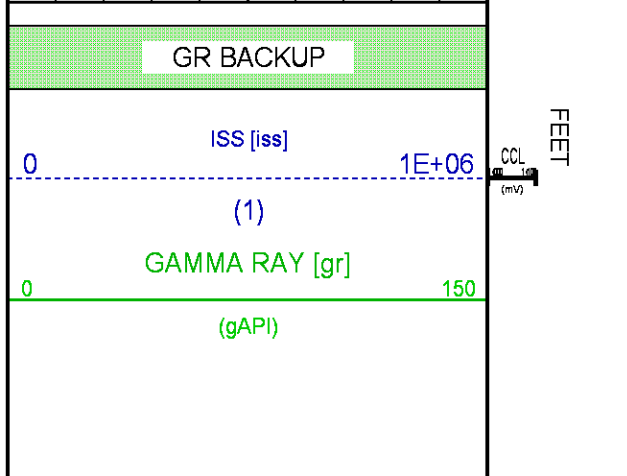
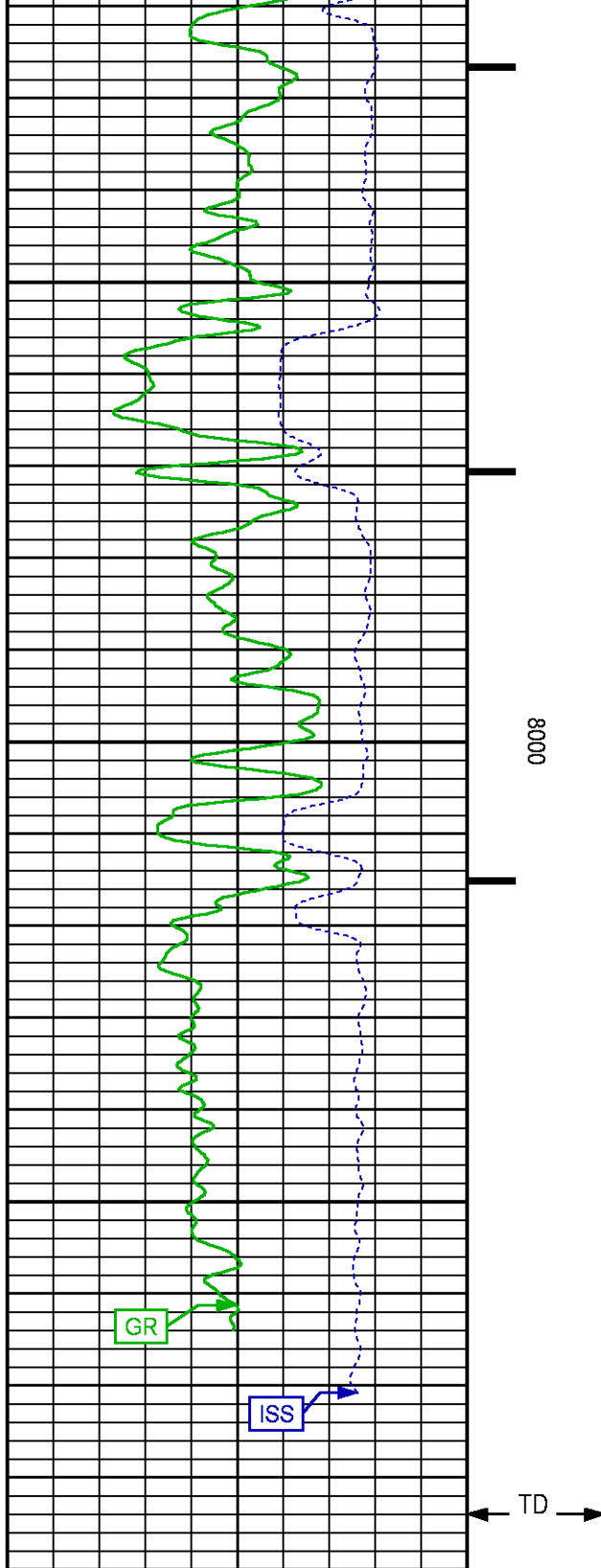












		RICS [rics]	10
		(1)	
		SGFC [sgfc]	0
		(1)	

REPEAT SECTION PNC-3D MODE

ECLIPS 6.2i ECLIPS General Release Rel 6.2i Wed Jun 12 12:21:40 CDT 2013
Updates: 1 Patches: 4

Plotted: Sat Feb 7 15:46:10 2015

PARAMETER AND FILTER SUMMARY REPORT

FILE:	/dat1a/CH094658/n354h01.prm		
LOGGING MODE:	DEPTH	DIRECTION:	UP
TOP DEPTH:	7267.250 ft	BOTTOM DEPTH:	7598.246 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	Feb 7 11:43:09 2015	CASING COLLAR LOCATOR
F1:GR	Feb 7 11:43:09 2015	GAMMA RAY
F1:ISS	Feb 7 11:43:09 2015	INELASTIC SHORT SPACE COUNT RATE
F1:LS	Feb 7 11:43:09 2015	LONG SPACE COUNT RATE
F1:RATO	Feb 7 11:43:09 2015	SHORT/LONG SPACE COUNT RATE RATIO
F1:RICS	Feb 7 11:43:09 2015	SHORT SPACE INELASTIC TO CAPTURE COUNT RATE RATIO (ISS/CSS)
F1:SGFC	Feb 7 11:43:09 2015	CORRECTED FORMATION SIGMA
F1:SS	Feb 7 11:43:09 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	: HL6670:/dat1a/CH094658/313RPM_REPEAT.fvpdf [5"/100' Scale]
Plot Interval	: 7270 - 7570 Feet
Data File 1	: F1 : HL6670:/dat1a/CH094658/313RPM_REPEAT.xtf
Created On	: Feb 7 11:43:09 2015
Company	: WPX ENERGY
Well	: BUCKETT CM 313 21

Well : FOCKETT GM 513-21
Field : GRAND VALLEY
File Interval : 7241.25 - 7595 Feet
OCT : n354h

GR BACKUP

FEET

ISS [iss]

1E+06

(1)

GAMMA RAY [gr]

150

(gAPI)

CCL
(mV)

7300

7400

LS [ls]

29000

(1)

SS [ss]

290000

(1)

RATO [rato]

17

0

(1)

RICS [rics]

40

10

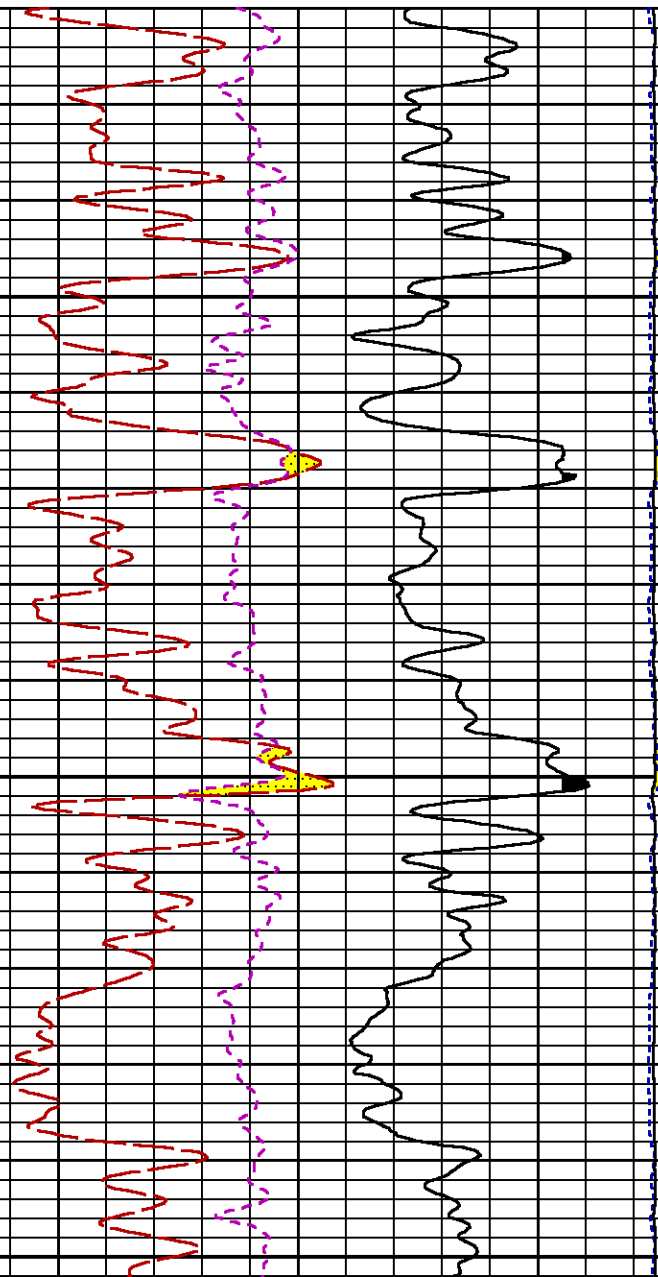
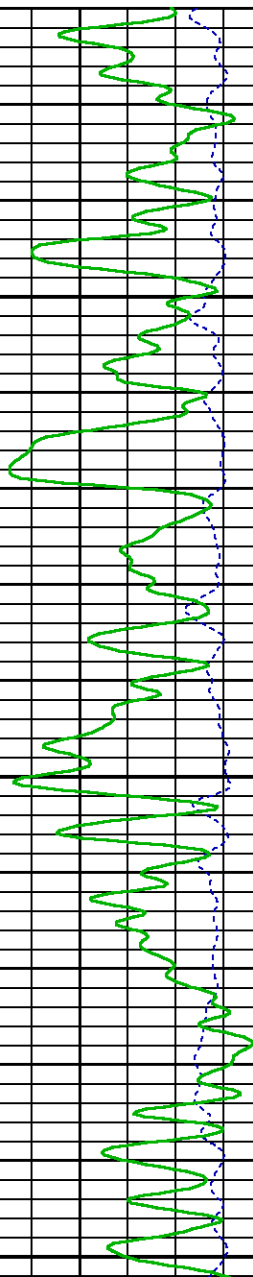
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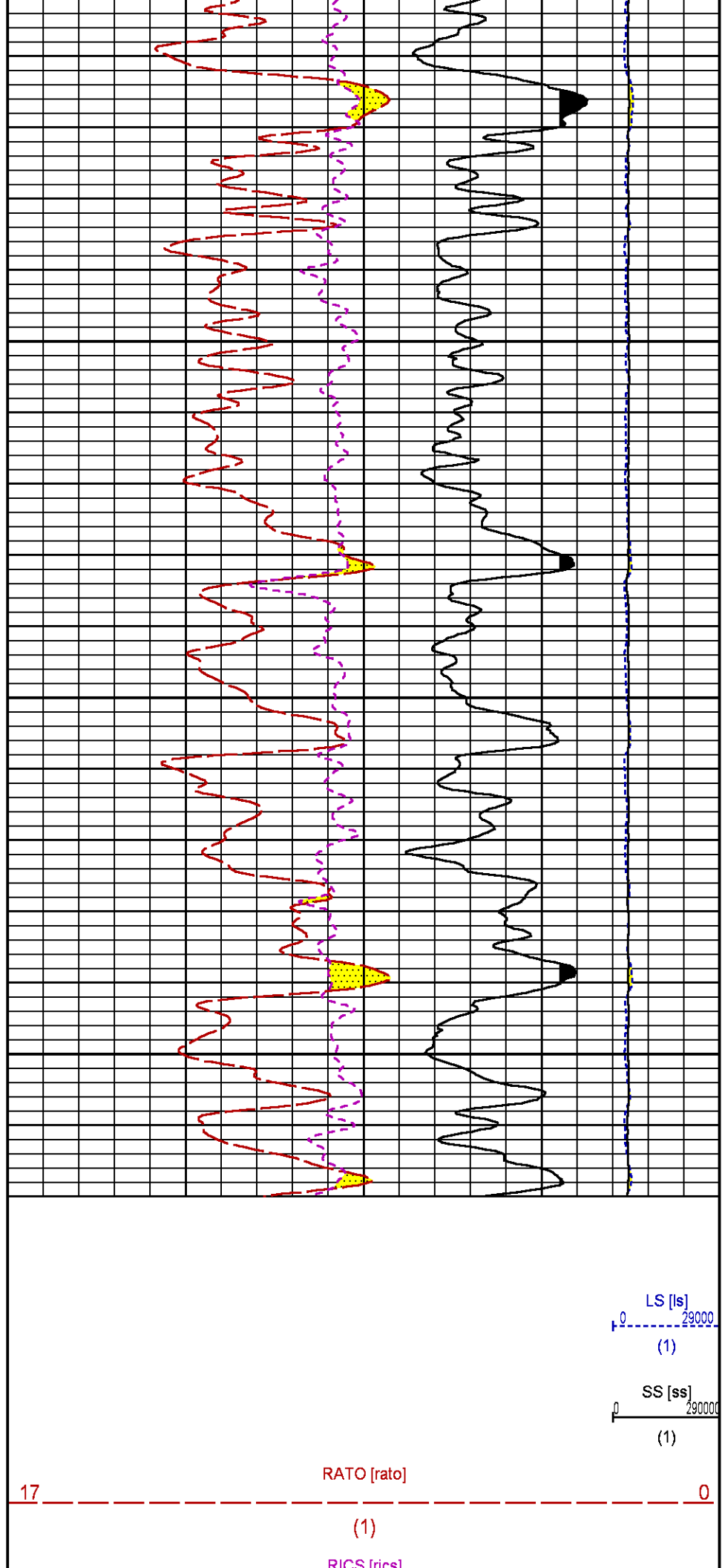
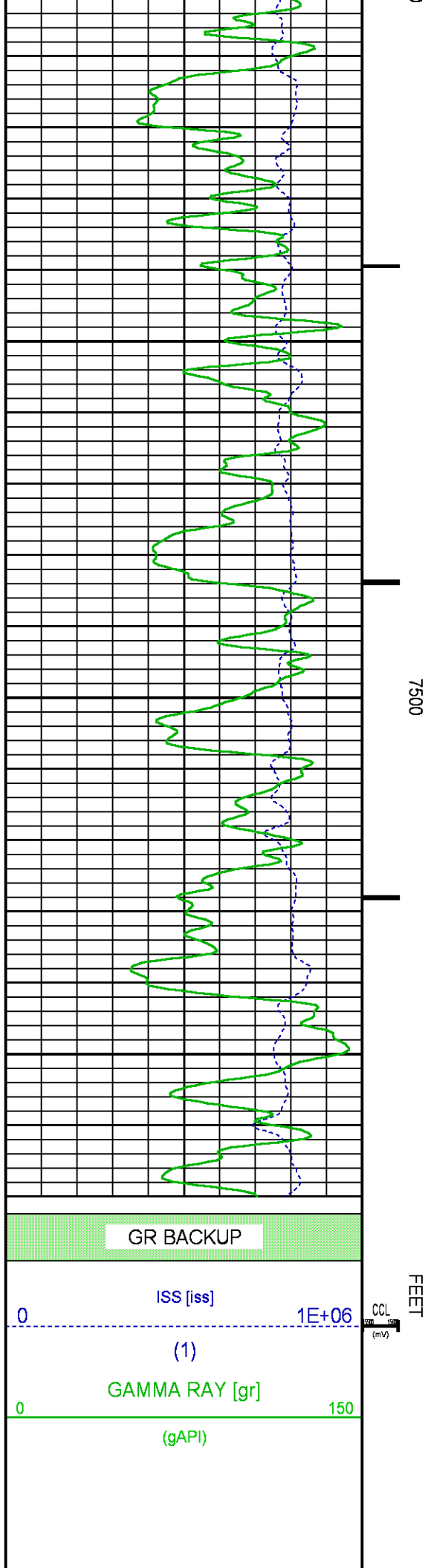
SGFC [sgfc]

60

0

(1)





40	RISC [ms]	10
	(1)	
60	SGFC [sgfc]	0
	(1)	

CALIBRATION / VERIFICATION SUMMARY

Source File: /dat1a/CH094658/n354h.tp1

GR PRIMARY CALIBRATION SUMMARY

TOOL #: 2812LA 11701636

DATE/TIME PERFORMED: Tue Jan 27 10:08:15 2015

UNIT #: 3880TA HL6670

CALB JIG #: 4702NK DA-041

	BACKGROUND (cts/s)	CALBRTR ON (cts/s)	CR DIFF (cts/s)	MULT	BACKGROUND (gAPI)	CALBRTR ON (gAPI)	CALBRTR (gAPI)
GR	67.64	269.00	201.4	1.043	70.55	280.55	210

GR PRIMARY VERIFICATION SUMMARY

TOOL #: 2812LA 11701636

DATE/TIME PERFORMED: Tue Jan 27 10:10:48 2015

UNIT #: 3880TA HL6670

VERI JIG #: 4702NK DA-041

	BACKGROUND (cts/s)	CALBRTR ON (cts/s)	MULT	BACKGROUND (gAPI)	CALBRTR ON (gAPI)	DIFF. (gAPI)
GR	67.49	265.24	1.043	70.39	276.63	206.25
						200.00 220.00

RPM_PNC_3D PRIMARY CALIBRATION SUMMARY

TOOL: 8283PA 10169251

DATE/TIME PERFORMED: Tue Jan 27 10:04:14 2015

UNIT: 3880TA HL6670

CALIBRATOR: 2437XB 112674

SOURCE: 8281AA 10220684

HOURS: 8281AA 268

	ISS	Mtr Vits (V)	SS Gain	LS Gain	XLS Gain	EA Temp (degF)	Sync Delay (usec)	RCAL
Raw Data	803394	122	2321	2309	2329	93	7	0.9803
Interpolated	1300000	146	2297	2301	2324			

	ISS	BKS	BKL	BKX	SGA1	SDA1	SGA2	SDA2
Raw Data	803394	7751	1281	156	26.03	0.15	24.25	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	803394	169527	26361	88858	31643	8252	53759	13211
Fit Quality %		1.273	1.202	1.268	1.285	1.237	1.182	1.269

	ISS	RBOR	RIN ISS/ILS	RIN13 ISS/IXS	RICS ISS/CSS	RATO SS/LS	RTWO SS2/LS	RONE CSS/CLS
Raw Data	803394	1.43	4.74	30.49	14.95	10.77	3.84	4.07
		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 %		0.044	0.072	0.089	0.025	0.185	0.202	0.178
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Reduced	1409820	1.43	4.74	30.55	14.96	10.74	3.82	4.06
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TPSETEMP PRIMARY CALIBRATION SUMMARY

TOOL #: 8255XA 11774568

DATE/TIME PERFORMED: Wed May 14 12:39:45 2014

UNIT #: 3880TA HL6670

	T(0)	T(1)	T(2)	T(3)
Corr Coeff for Temp	-9.274653E+00	1.055639E-01	2.143764E-06	-2.782846E-10

INSTRUMENT CONFIGURATION

Source File: /dat1a/CH094658/RPM-tdg

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 : 10 lbs
Series : 2812LA
Mnemonic : GR
Measure Point: 0.62': GR MP

RPM ELECTRONICS

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

33.24'

CCL MP 25.19'

GR MP 22.64'

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 <u>WPX ENERGY</u>		FILE NO: <u>CH094658</u>
	WELL <u>PUCKETT GM 313-21</u>		API NO: <u>05045221940000</u>
	FIELD <u>GRAND VALLEY</u>		
	COUNTY <u>GARFIELD</u>	STATE <u>CO</u>	
LOCATION: SHL: 1279' FNL & 1066' FWL(28 6S 96W) BHL: 2042' FSL & 1174' FWL(21 6S 96W)		ELEVATIONS: KB 5625 FT DF GL 5604 FT	21 6S 96W GM 11-28 PAD CYCLONE 17
SEC <u>21</u> TWP <u>6S</u> RGE <u>96W</u>		DATE <u>07-Feb-2015</u>	