



FILE NO: CH091033	COMPANY WELL FIELD COUNTY	WPX ENERGY FEDERAL SG 33-28 GRAND VALLEY GARFIELD STATE CO
API NO: 05045219600000		

Ver. 3.87 28 7S 96W SG 43-28 PAD H&P 318	LOCATION: SHL: 2256' FSL & 481' FEL BHL: 2295' FSL & 2187' FEL SEC 28 TWP 7S RGE 96W	OTHER SERVICES BOND LOG
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PERMANENT DATUM LOG MEASURED FROM DRILL. MEAS. FROM	GL ELEVATION 5119 FT KB 24 FT ABOVE P.D. KB	ELEVATIONS: KB 5143 FT DF GL 5119 FT
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DATE	02-Oct-2014
RUN	1
SERVICE ORDER	US091033
DEPTH DRILLER	6070 FT
DEPTH LOGGER	6046 FT
BOTTOM LOGGED INTERVAL	6036 FT
TOP LOGGED INTERVAL	2758 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	65 FT
LOGGED CEMENT TOP	NA
WELLHEAD PRESSURE	0 PSI
MAXIMUM HOLE DEVIATION	NA
NOMINAL LOGGING SPEED	10 FMIN
MAX. RECORDED TEMP.	187 DEGF
REFERENCE LOG	BAKER HUGHES BOND LOG
REFERENCE LOG DATE	02-Oct-2014
EQUIP. NO.	6670
LOCATION	NEWELL GRAND JCT.
RECORDED BY	JEFF BRADY
WITNESSED BY	

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	1695 FT
8.75 IN	1695 FT	6096 FT

CASING RECORD				
SIZE	WEIGHT	GRADE	FROM	TO
9.625 IN			0 FT	1695 FT
4.5 IN	11.6 LB/F	I-80	0 FT	6096 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 02/OCT/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 2 feet.

Logged in PNC-3D mode.

BHT = 187 degF
SJ = 2422' - 2444'

Thank you for choosing Baker Hughes ... The best choice!

EQUIPMENT DATA

RUN	TRIP	TOOL	SERIES NO.	SERIAL NO.	POSITION
1	1	PCM	8250EA	10408796	FREE
1	1	TEL/CCL	8248ED	10590814	FREE
1	1	GR	2812LA	11701636	FREE
1	1	RPM	8281EA	10190984	FREE
1	1	RPM	8283PA	10160383	FREE
1	1	RPM	8281FA	10307727	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: 3

Plotted: Thu Oct 2 15:25:38 2014

PARAMETER AND FILTER SUMMARY REPORT

FILE: /dat1a/CH91033/n353h02.prm
LOGGING MODE: DEPTH DIRECTION: UP
TOP DEPTH: 2732.000 ft BOTTOM DEPTH: 6050.822 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	Oct 2 11:42:39 2014	CASING COLLAR LOCATOR
F1:GR	Oct 2 11:42:39 2014	GAMMA RAY
F1:ISS	Oct 2 11:42:39 2014	INELASTIC SHORT SPACE COUNT RATE
F1:LS	Oct 2 11:42:39 2014	LONG SPACE COUNT RATE
F1:RATO	Oct 2 11:42:39 2014	SHORT/LONG SPACE COUNT RATE RATIO
F1:RICS	Oct 2 11:42:39 2014	SHORT SPACE INELASTIC TO CAPTURE COUNT RATE RATIO (ISS/CSS)
F1:SGFC	Oct 2 11:42:39 2014	CORRECTED FORMATION SIGMA
F1:SS	Oct 2 11:42:39 2014	SHORT SPACE COUNT RATE

CURVE MEASURE POINT OFFSET

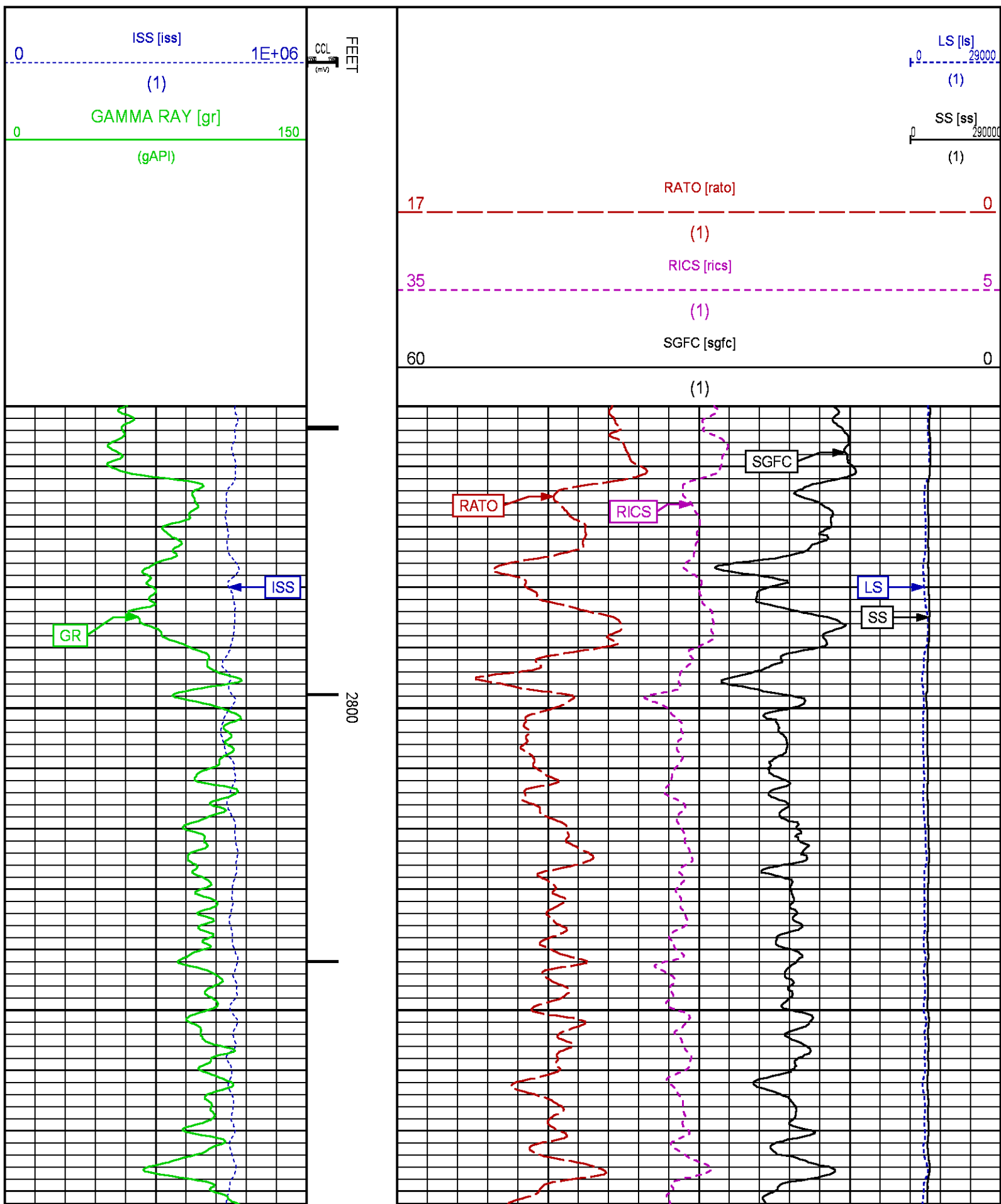
CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
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GR	22.75	LS	12.75	RICS	12.75	SS	12.75

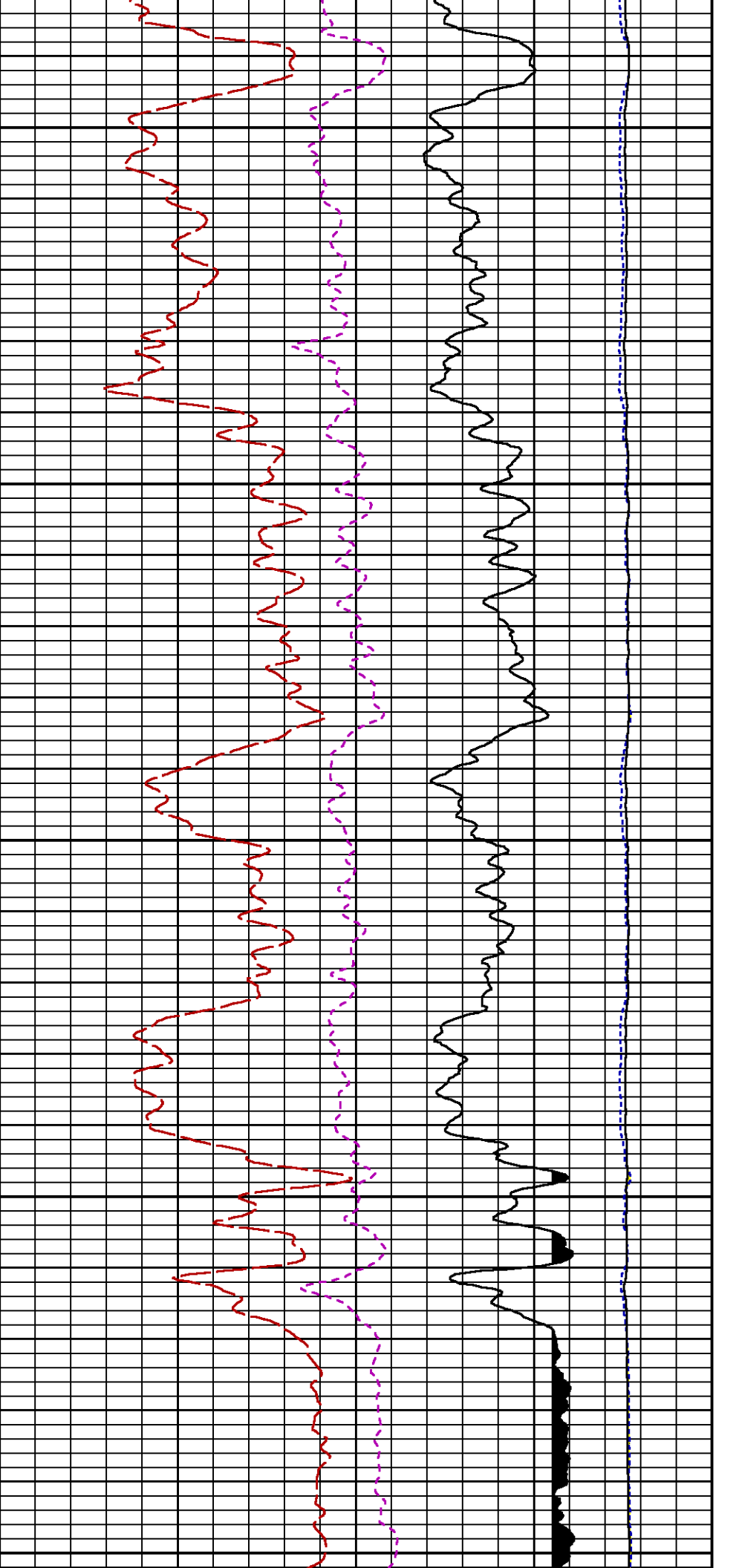
Presentation : HL6670:/dat1a/CH91033/RPM_MAIN.fvpdf [5"/100' Scale]

Plot Interval : 2750 - 6051 Feet

Data File 1 : F1 : HL 6670:/dat1a/CH91033/RPM_MAIN.vtf

Data File : FT: HEC070.dat
Created On : Oct 2 11:42:39 2014
Company : WPX ENERGY
Well : FEDERAL SG 33-28
Field : PARACHUTE
File Interval : 24.25 - 6051 Feet
OCT : n353h

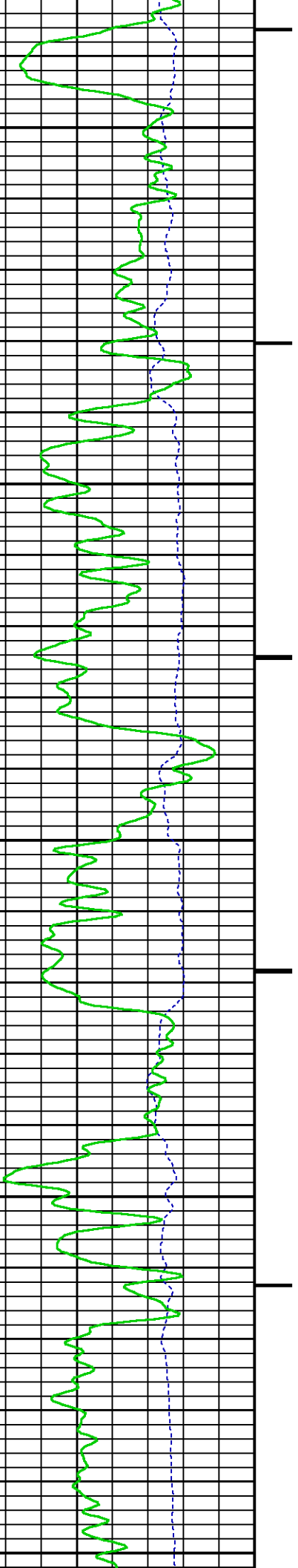


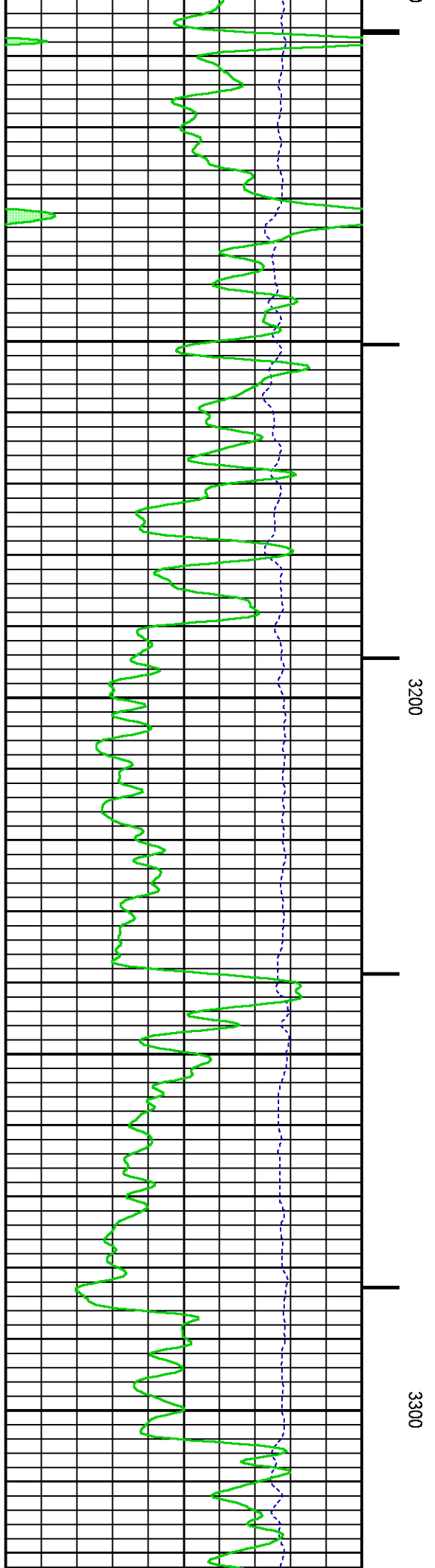
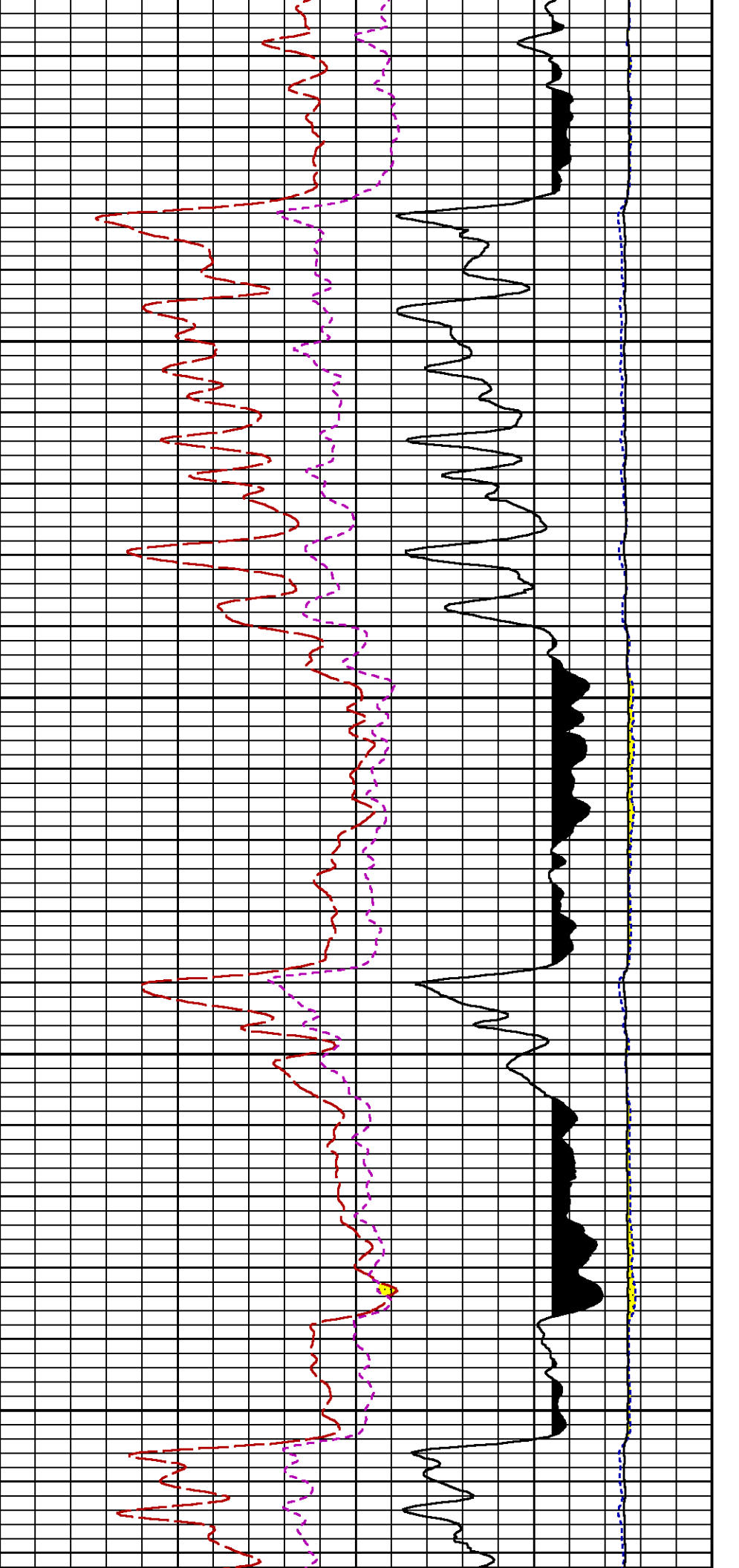


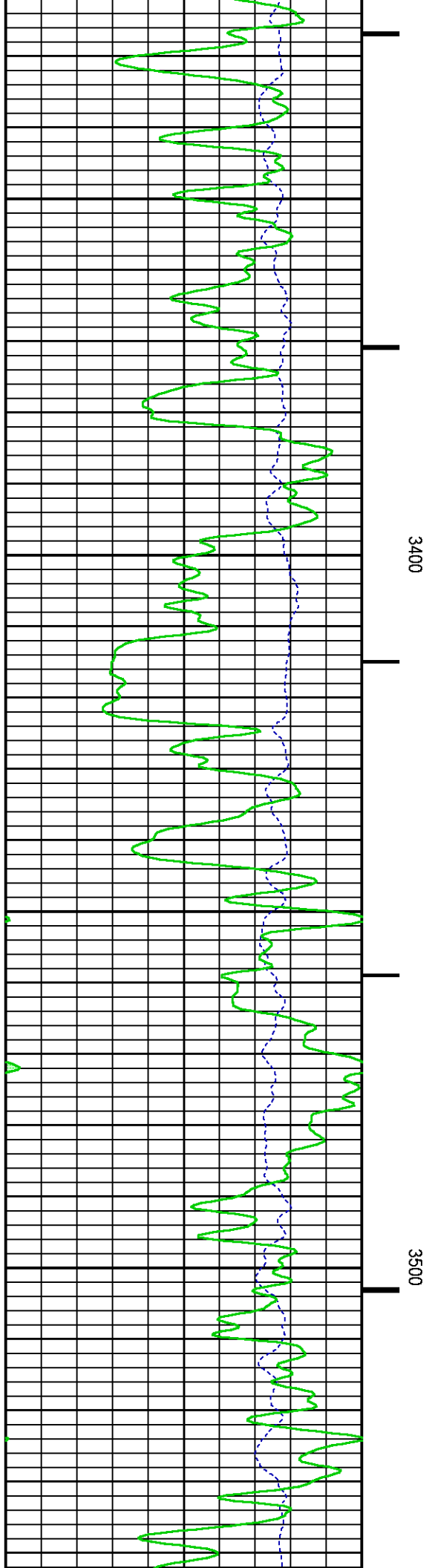
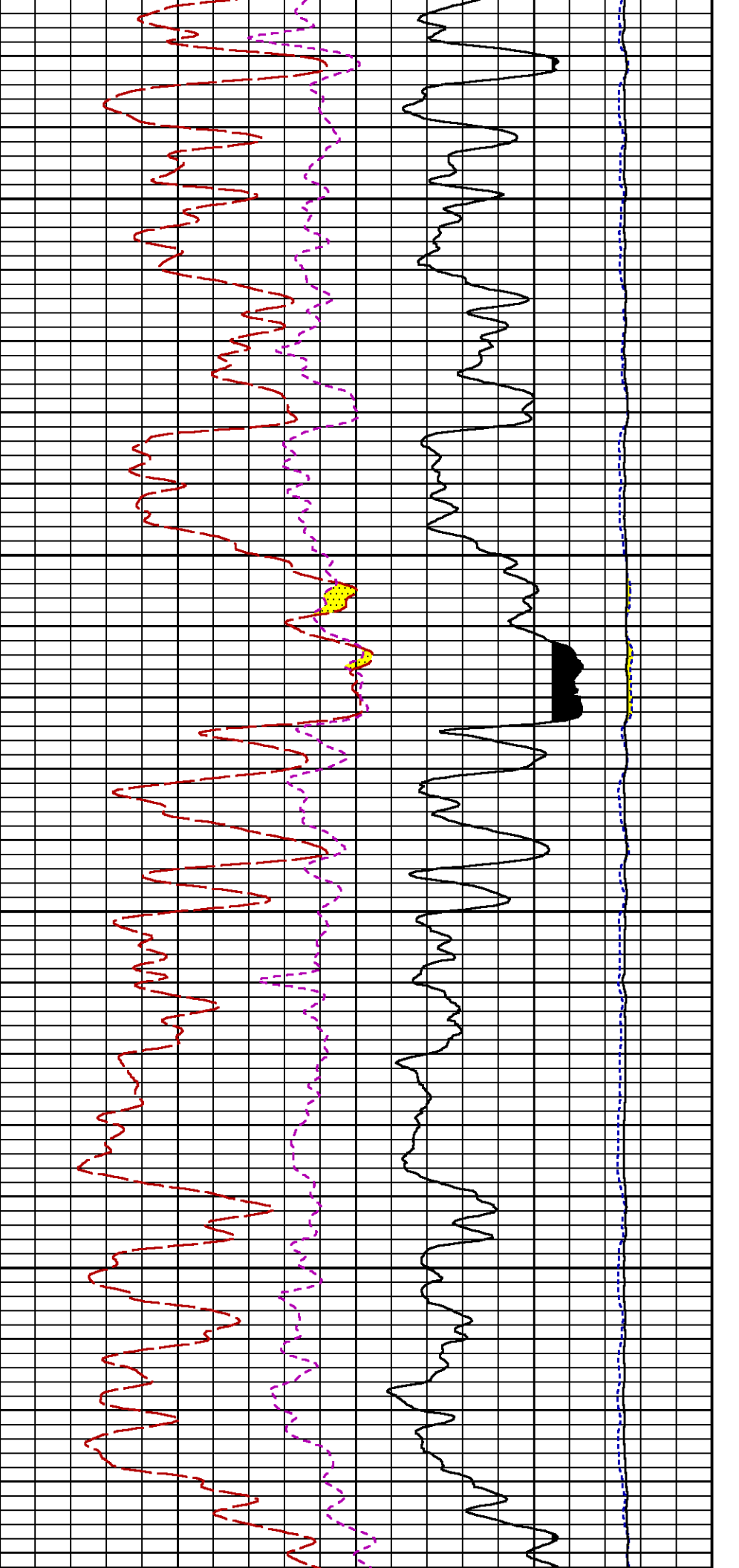
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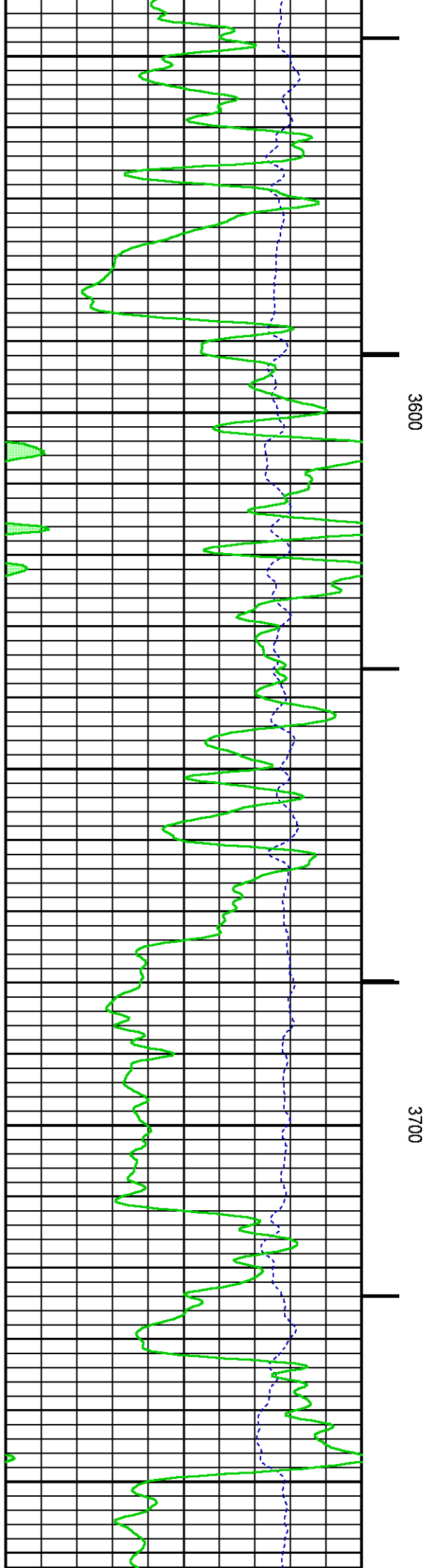
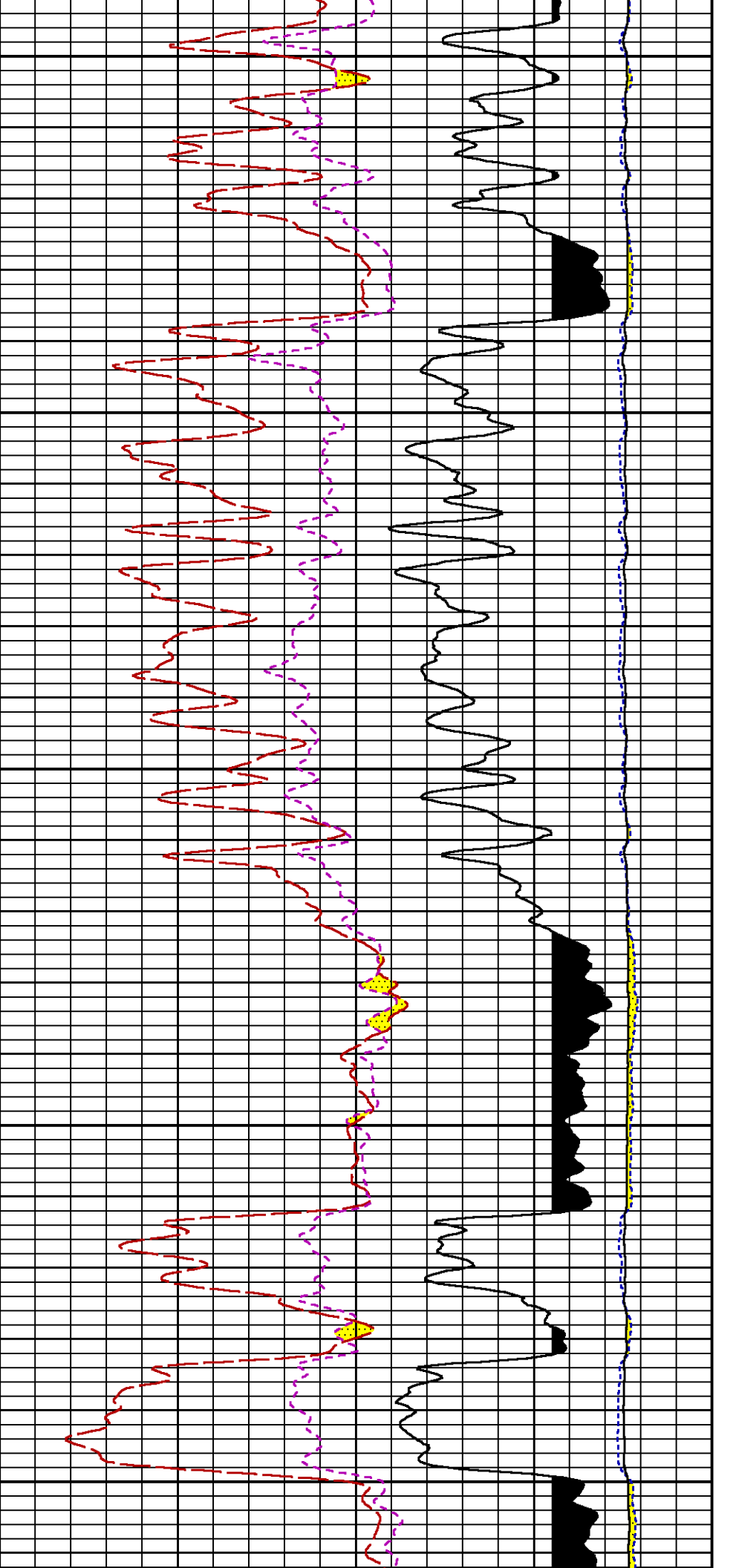
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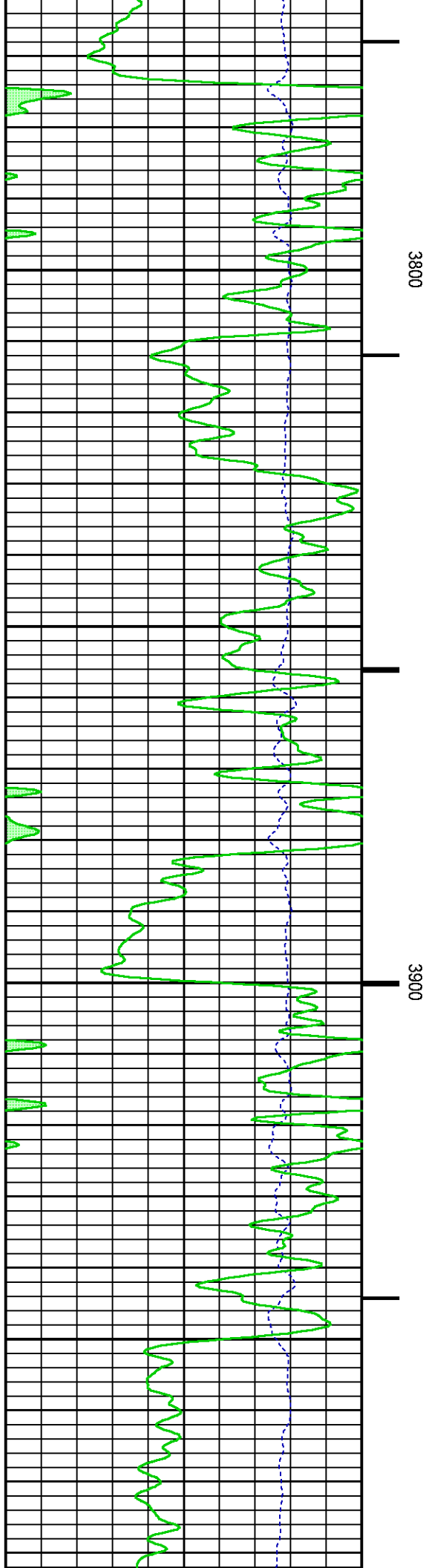
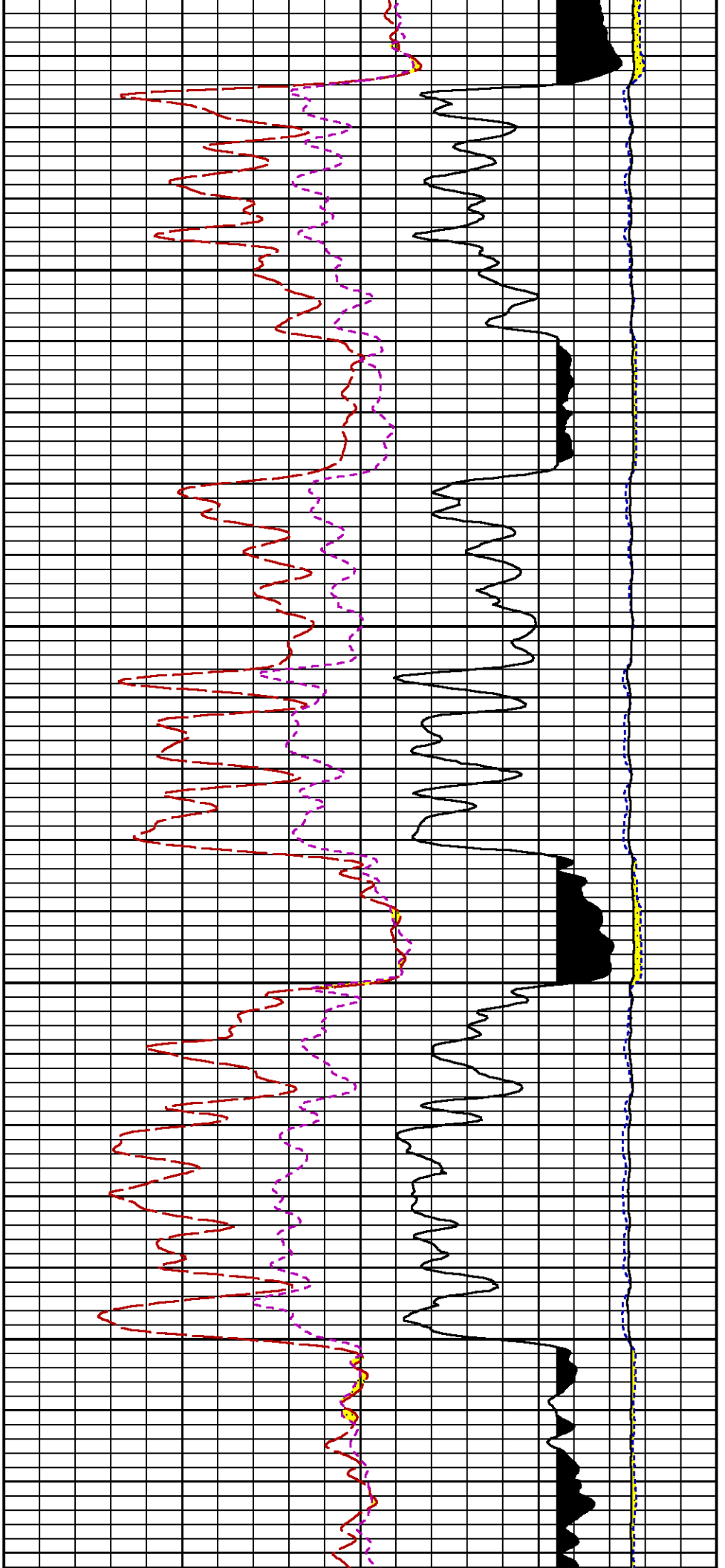
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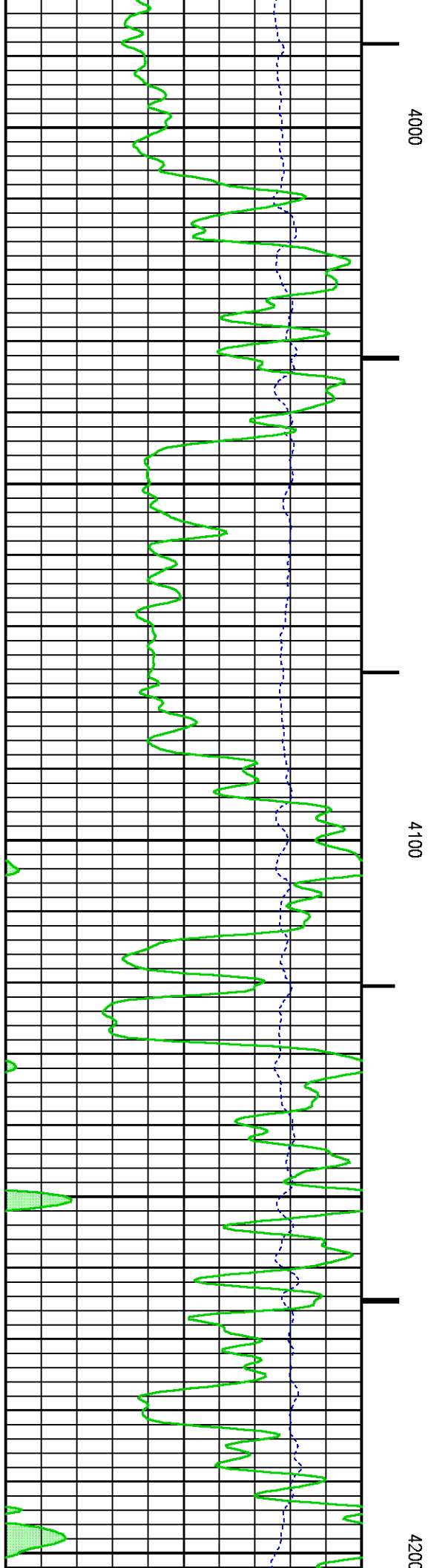
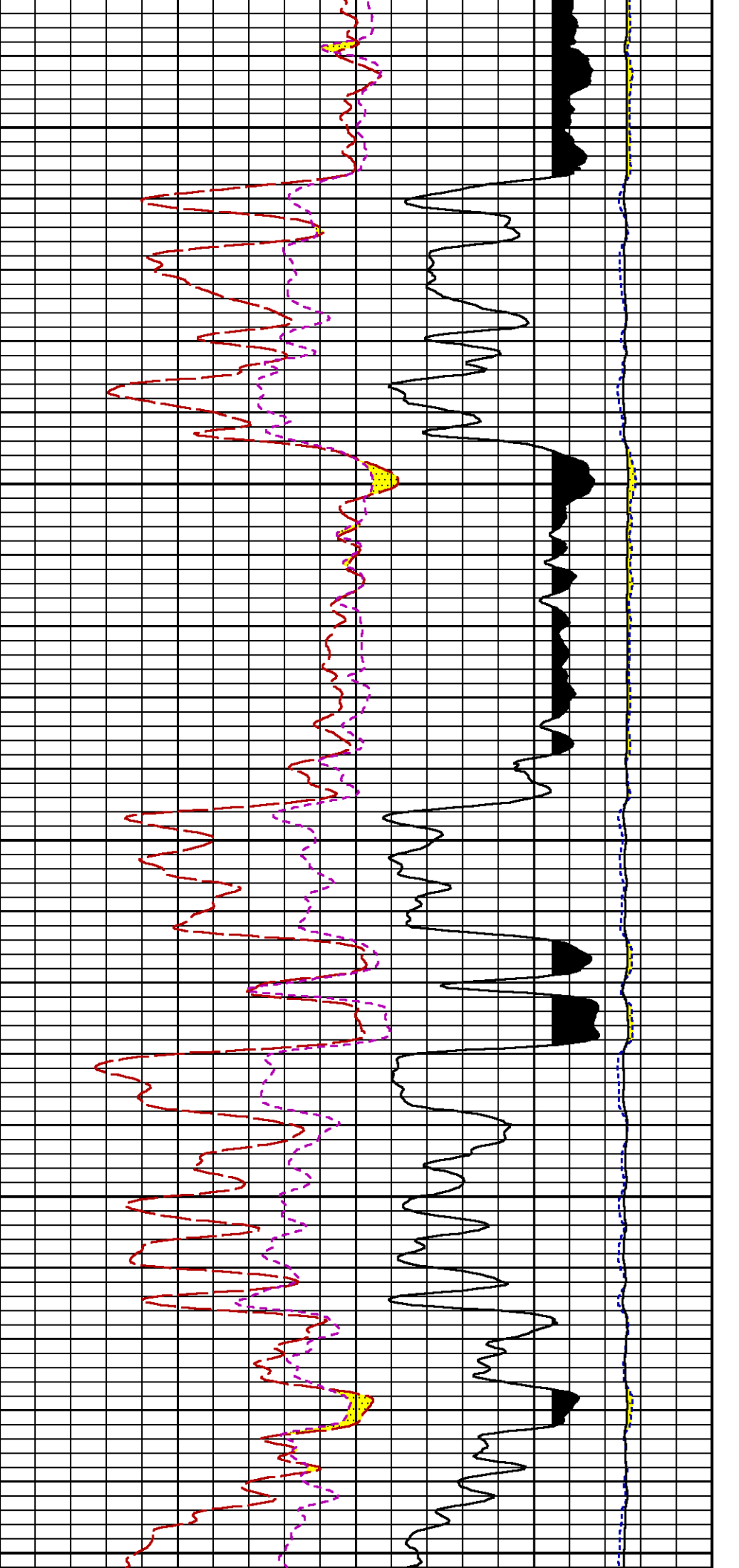


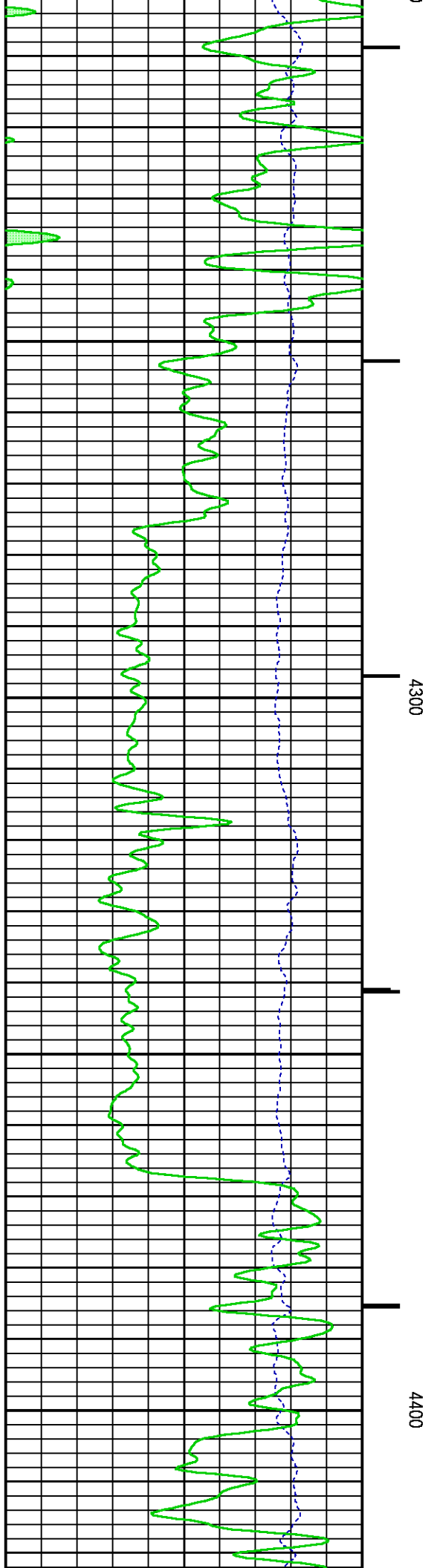
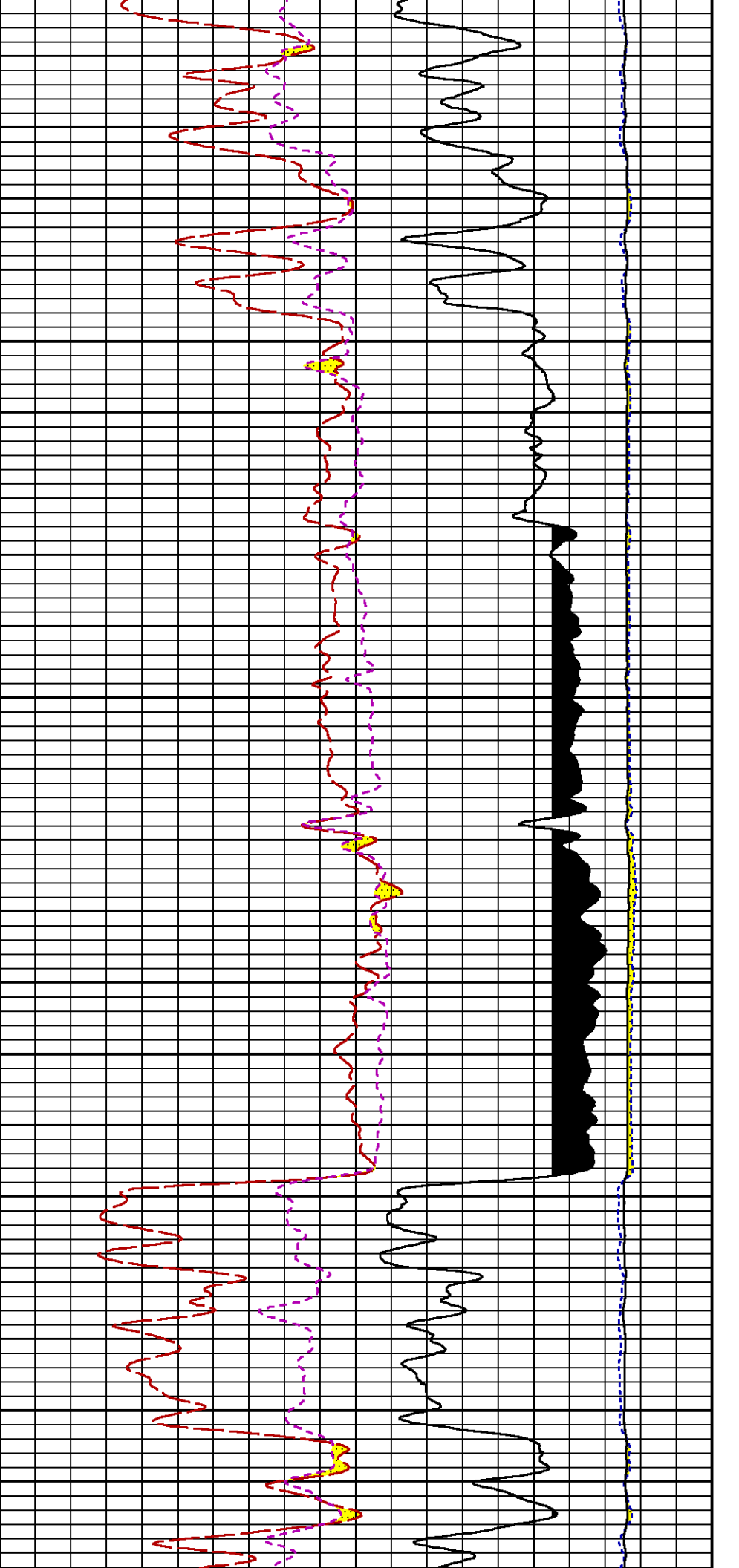


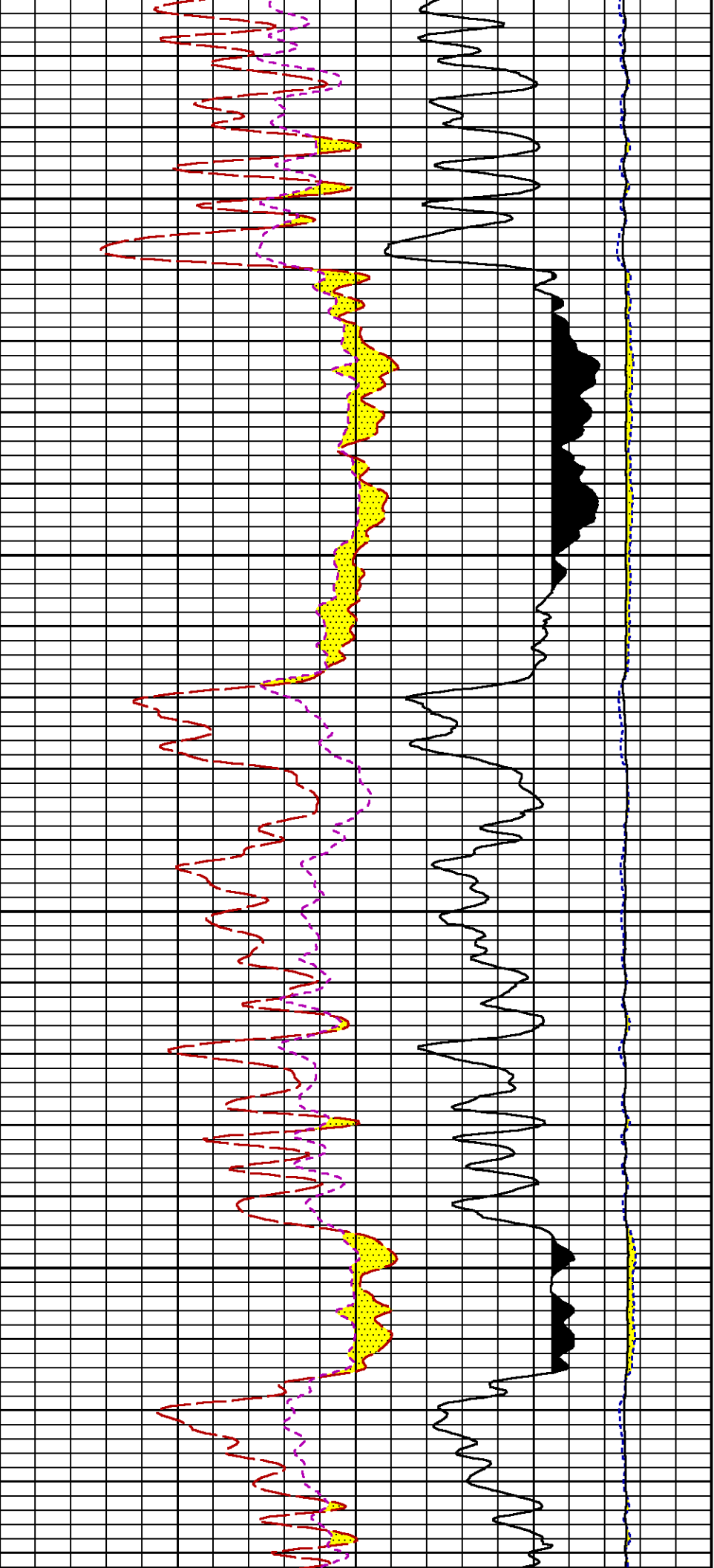






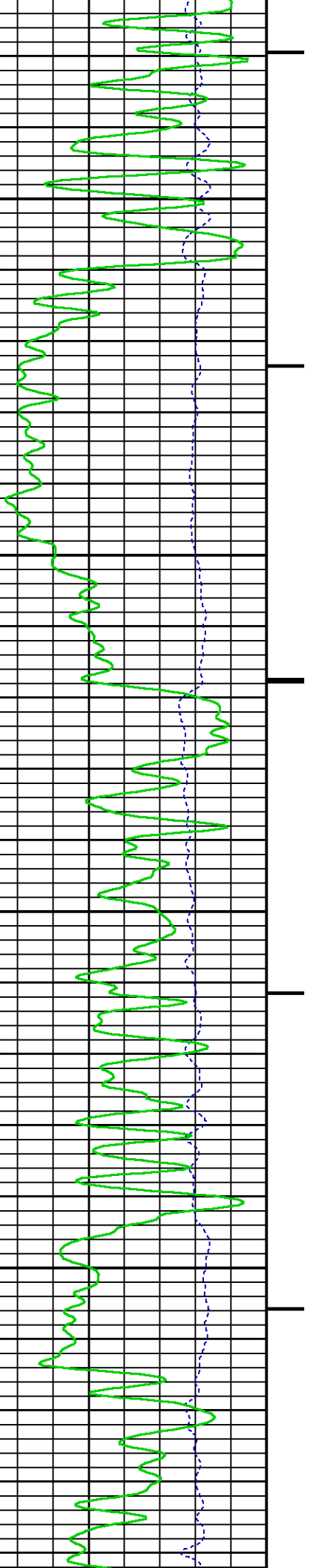


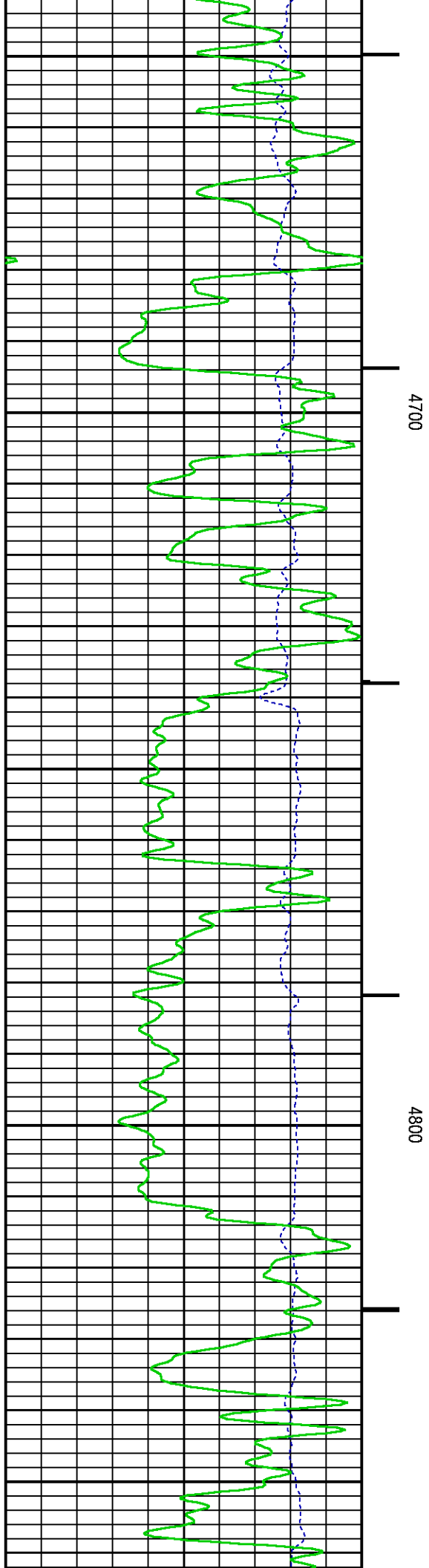
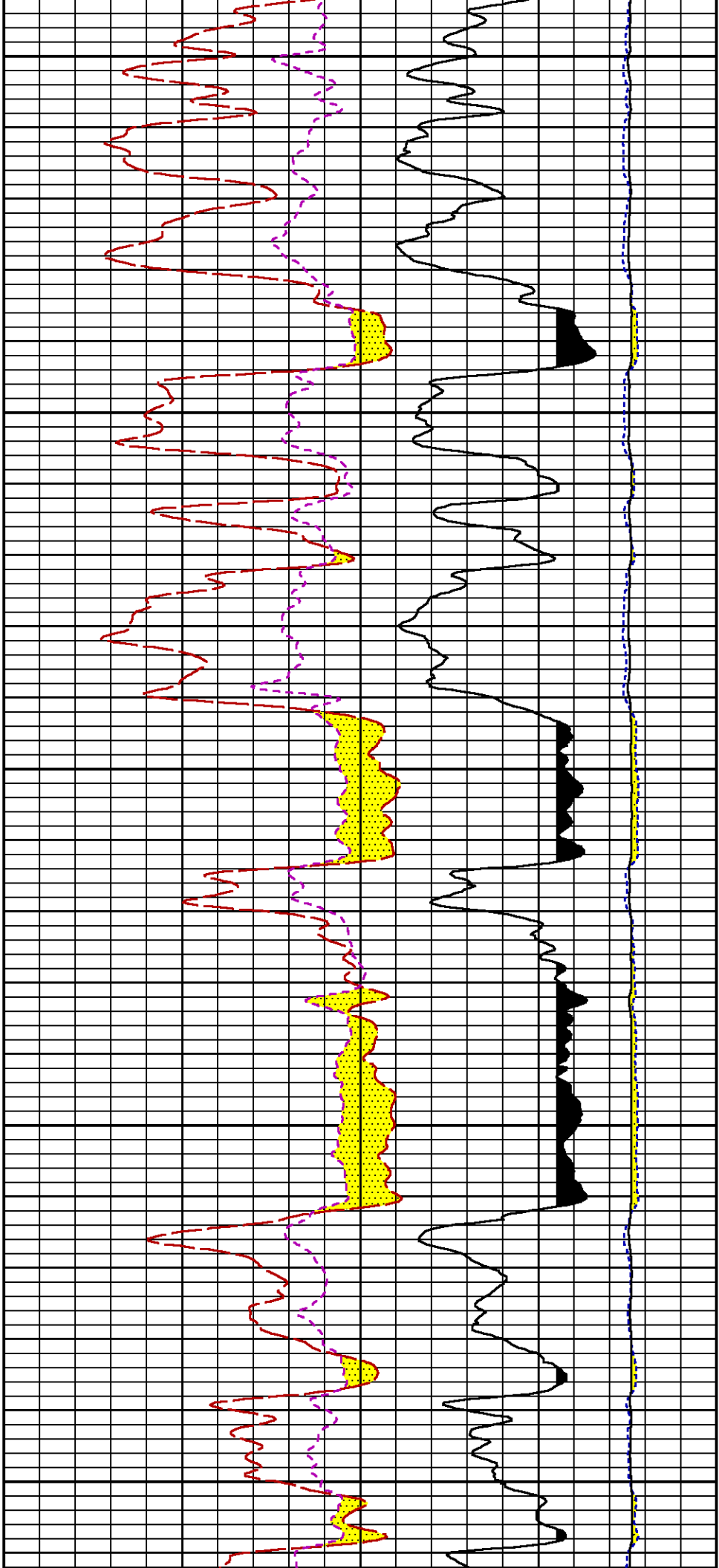


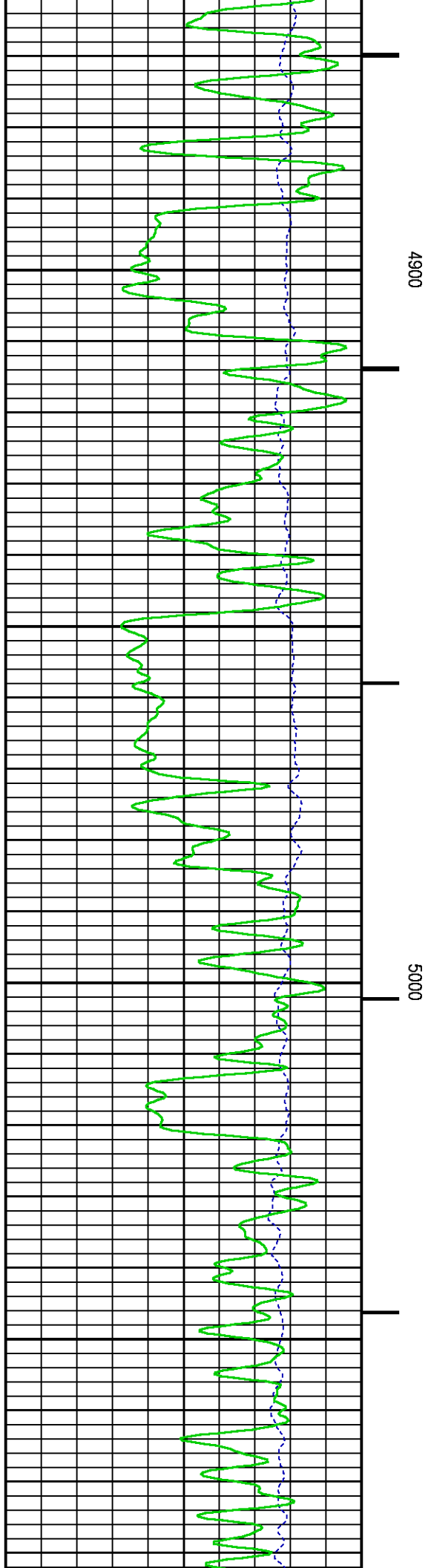
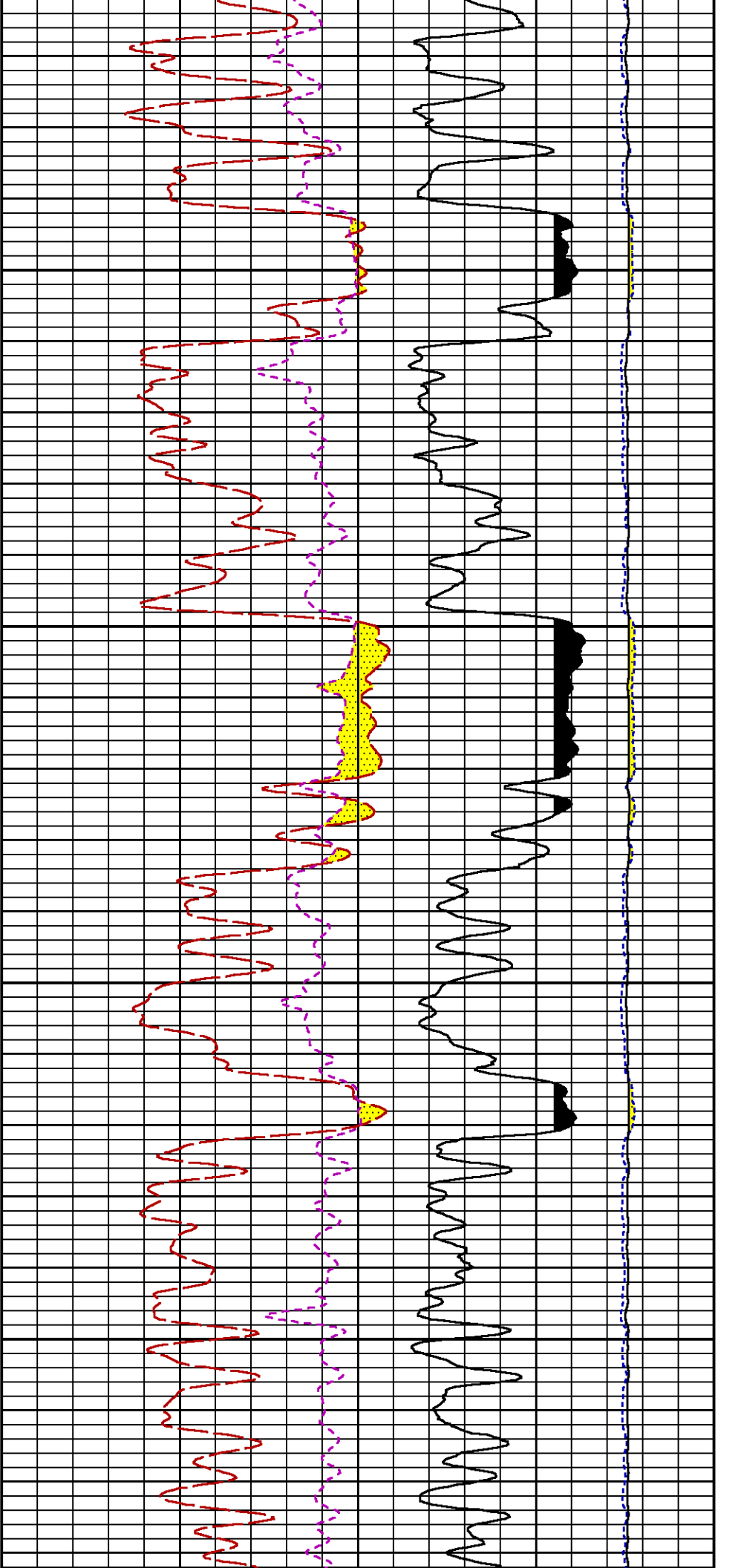


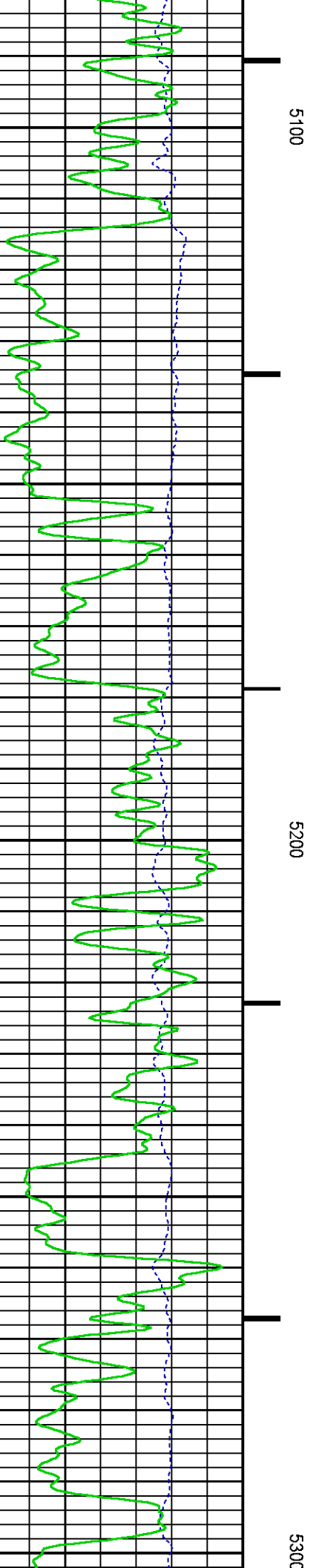
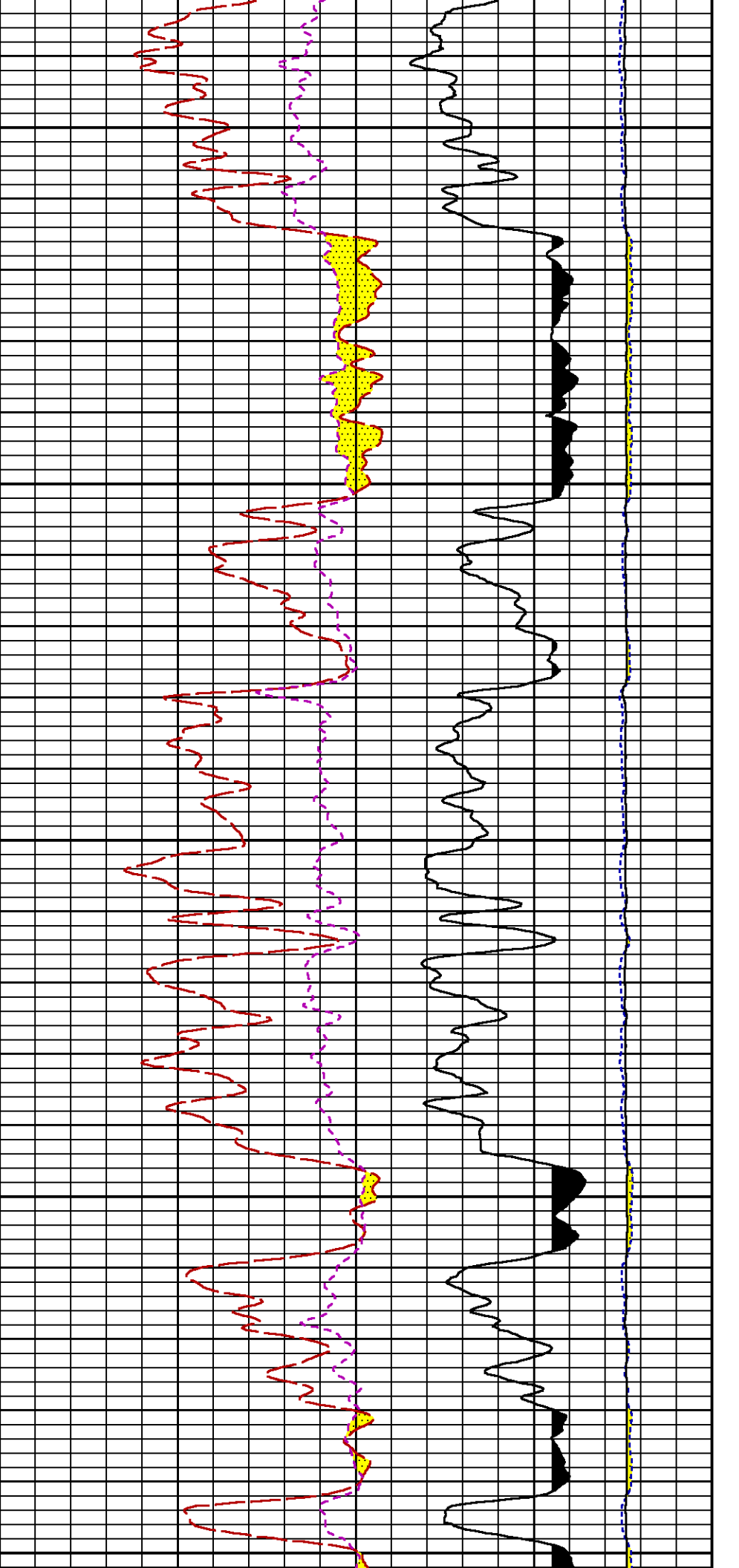
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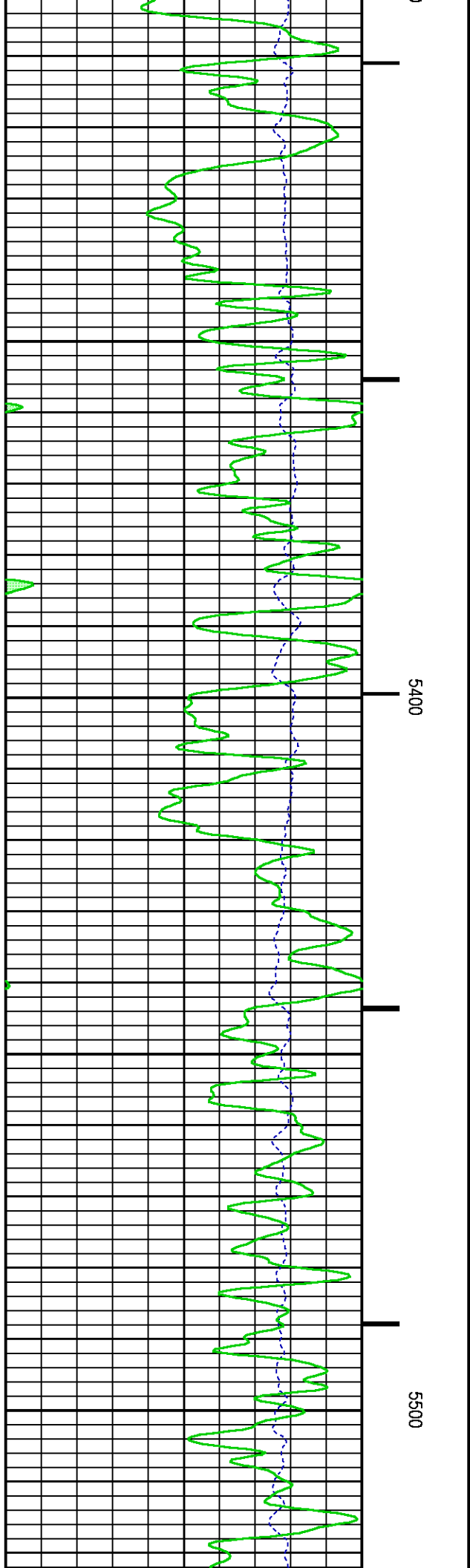
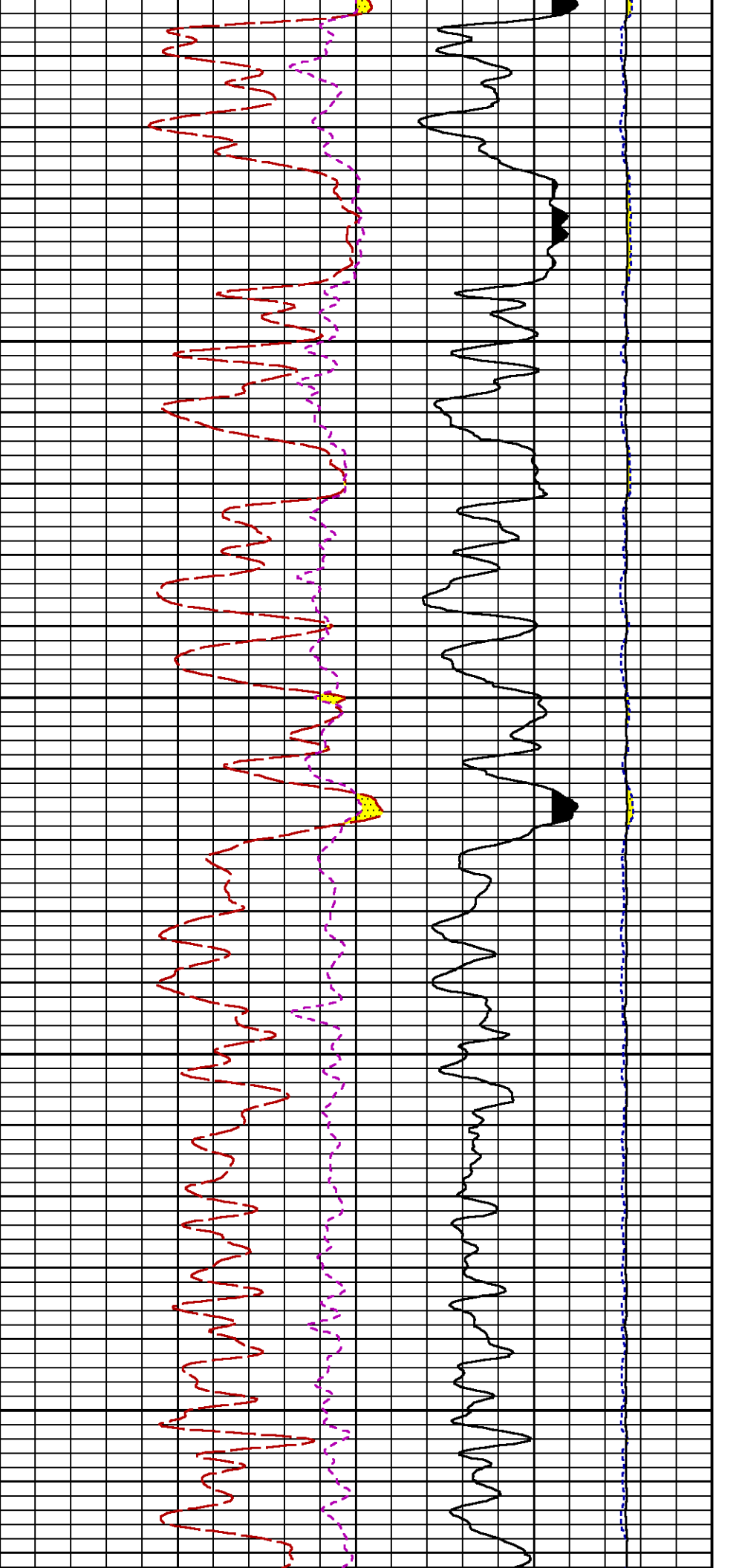
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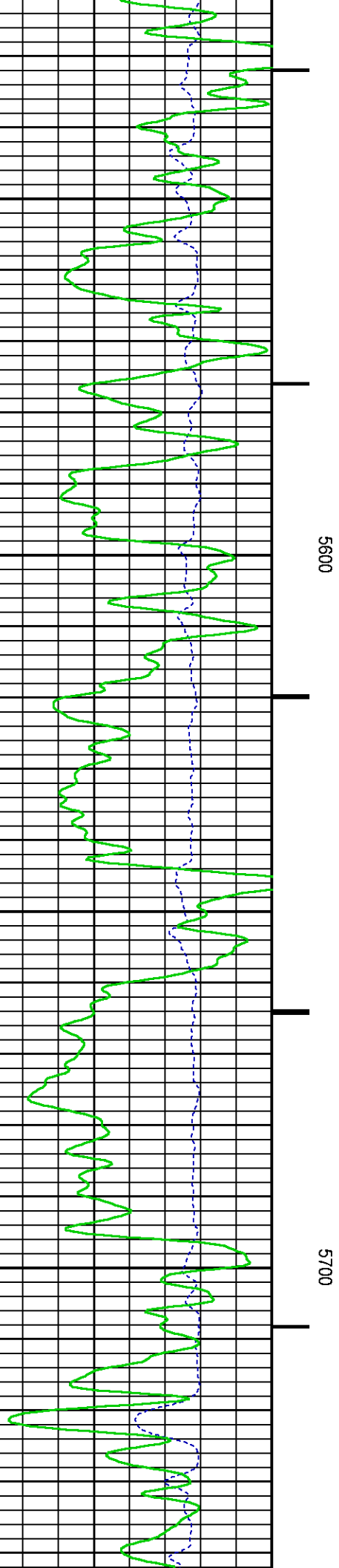
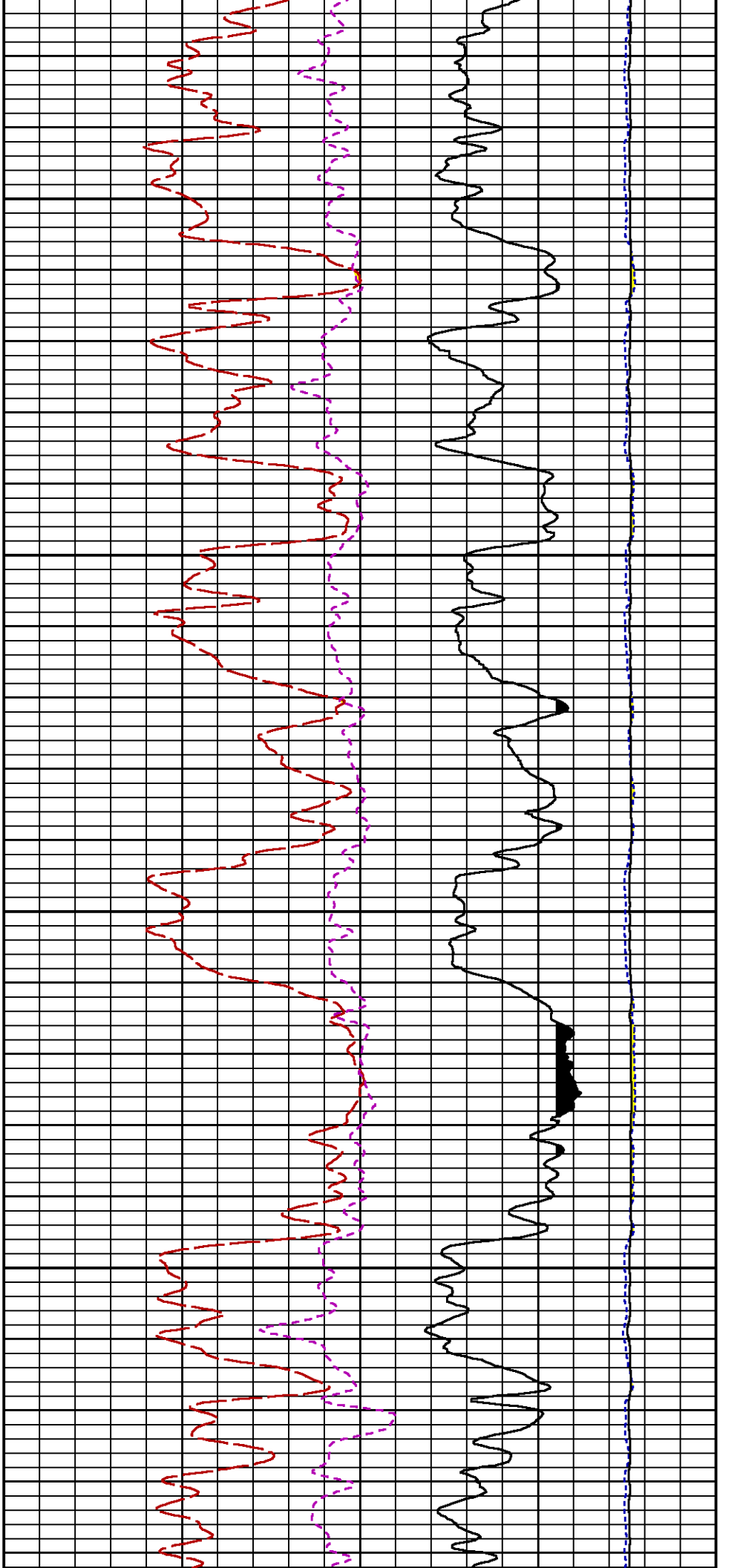


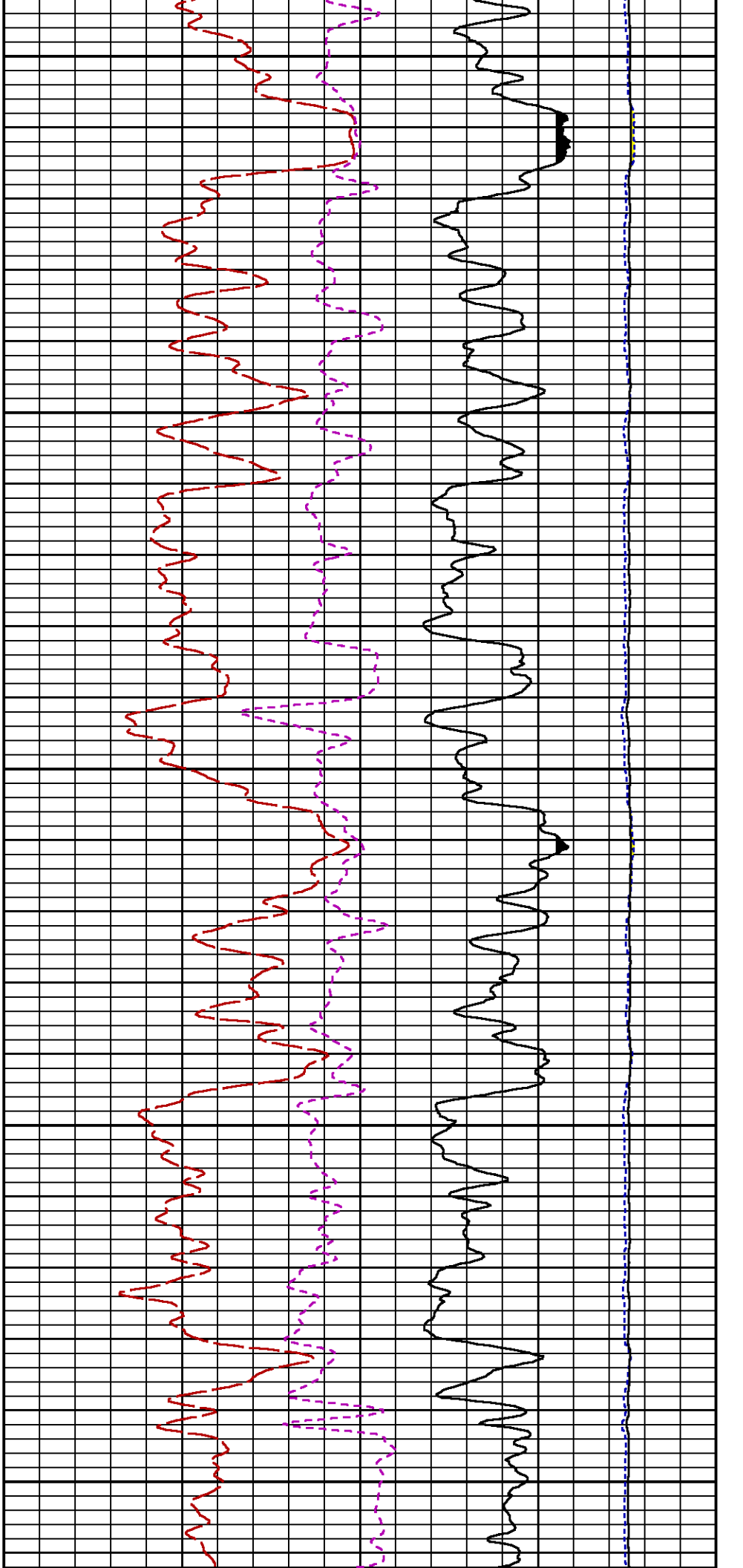






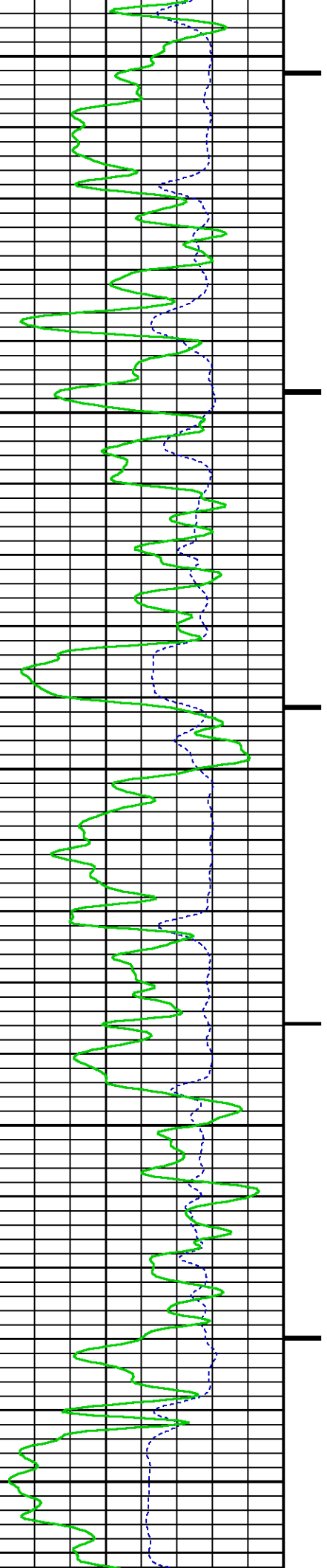


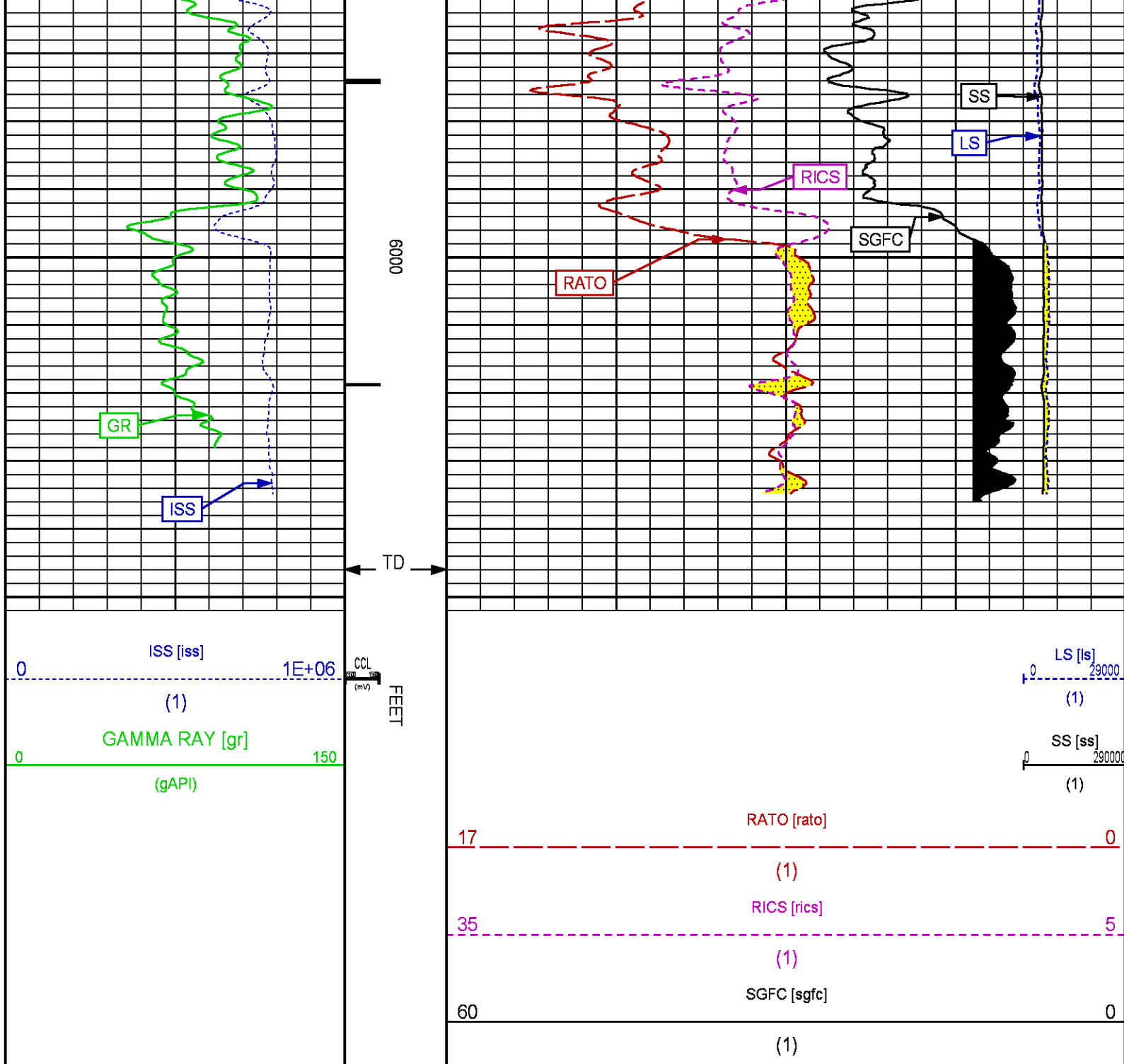




5800

5900





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: 3

Plotted: Thu Oct 2 15:27:04 2014

PARAMETER AND FILTER SUMMARY REPORT

FILE: /dat1a/CH91033/n353h01.prm
 LOGGING MODE: 1
 FILTER: 1

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

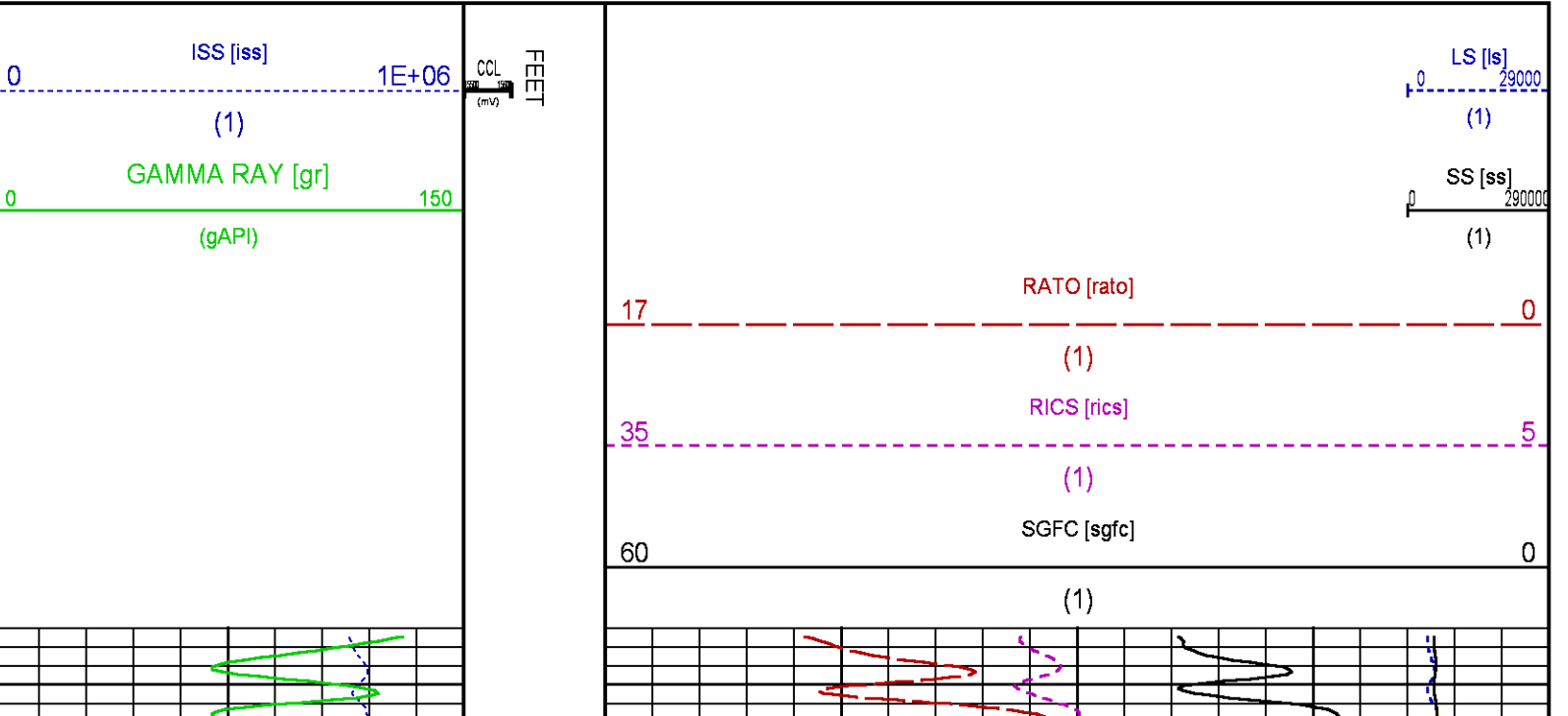
RPM PROCESSING				
MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)
PNC Parameters	BOREHOLE CONTENTS	FLUID		TOP BOTTOM
	OPEN/CASED HOLE	CASED HOLE		" "
	BOREHOLE SIZE	8.75	in	" "
	CASING SIZE	4.50	in	" "
	MATRIX	SANDSTONE		" "
	CORRECTION BUFFER	11		" "

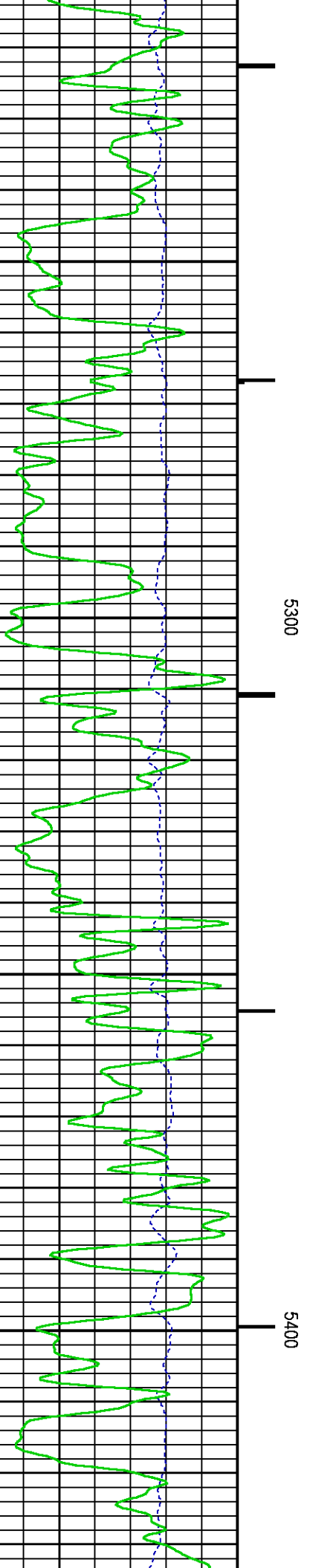
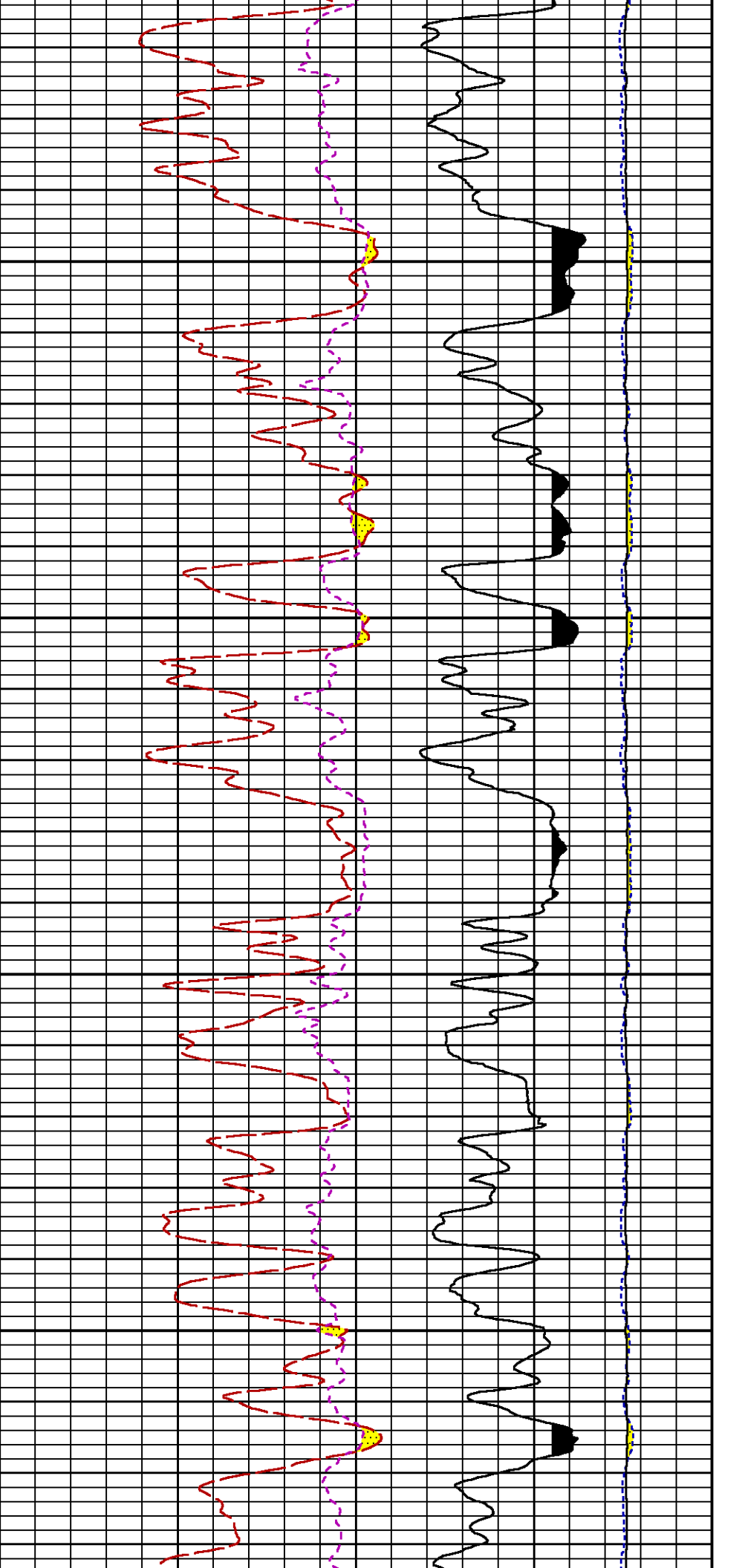
CURVE DESCRIPTION REPORT		
CURVE NAME	CREATION DATE	CURVE DESCRIPTION
F1:CCL	Oct 2 11:14:41 2014	CASING COLLAR LOCATOR
F1:GR	Oct 2 11:14:41 2014	GAMMA RAY
F1:ISS	Oct 2 11:14:41 2014	INELASTIC SHORT SPACE COUNT RATE
F1:LS	Oct 2 11:14:41 2014	LONG SPACE COUNT RATE
F1:RATO	Oct 2 11:14:41 2014	SHORT/LONG SPACE COUNT RATE RATIO
F1:RICS	Oct 2 11:14:41 2014	SHORT SPACE INELASTIC TO CAPTURE COUNT RATE RATIO (ISS/CSS)
F1:SGFC	Oct 2 11:14:41 2014	CORRECTED FORMATION SIGMA
F1:SS	Oct 2 11:14:41 2014	SHORT SPACE COUNT RATE

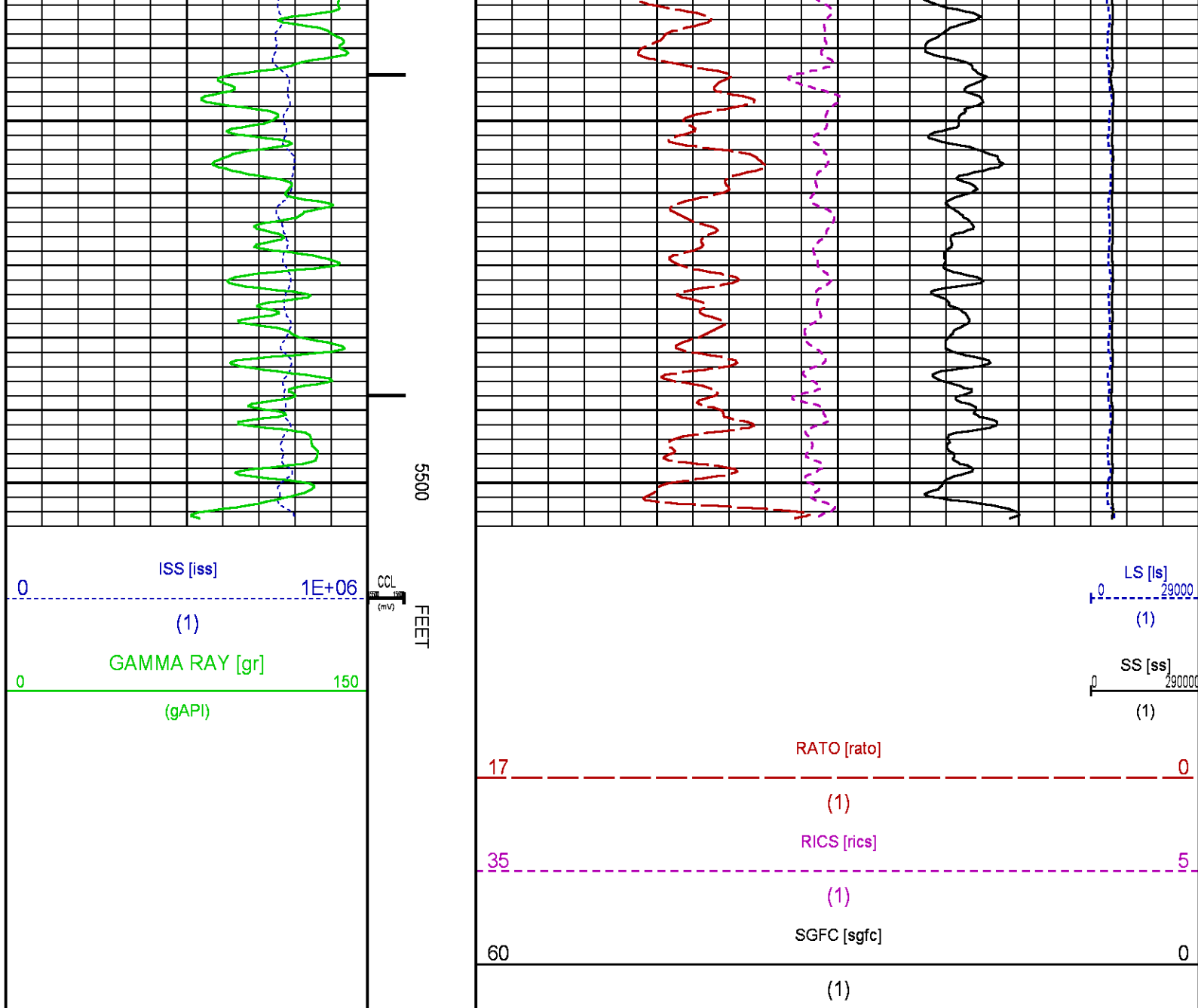
CURVE MEASURE POINT OFFSET							
CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
CCL	25.00	ISS	12.75	RATO	12.75	SGFC	12.75
GR	22.75	LS	12.75	RICS	12.75	SS	12.75

Presentation : HL6670:/dat1a/CH91033/RPM_REPEAT.fvpdf [5"/100' Scale]
Plot Interval : 5205 - 5505 Feet

Data File 1 : F1 : HL6670:/dat1a/CH91033/RPM_REPEAT.xtf
Created On : Oct 2 11:14:41 2014
Company : WPX ENERGY
Well : FEDERAL SG 33-28
Field : PARACHUTE
File Interval : 5166.5 - 5530.25 Feet
OCT : n353h







CALIBRATION / VERIFICATION SUMMARY

Source File: /dat1a/CH91033/n353h.tp1

GR PRIMARY CALIBRATION SUMMARY

TOOL #: 2812LA 11701636

DATE/TIME PERFORMED: Fri Sep 19 13:54:48 2014

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	62.60	247.49	184.9	1.136	71.10	281.10	210

GR PRIMARY VERIFICATION SUMMARY

TOOL #: 2812LA 11701636

DATE/TIME PERFORMED: Fri Sep 19 13:58:02 2014

UNIT #: 3880TA HL6670

VERI JIG #: 4702NK DA-041

	BACKGROUND (cts/s)	CALBRTR ON (cts/s)	MULT	BACKGROUND (gAPI)	CALBRTR ON (gAPI)	DIFF. (gAPI)
GR	62.87	246.87	1.136	71.41	280.40	208.99
						200.00 220.00

RPM_PNC_3D PRIMARY CALIBRATION SUMMARY

TOOL: 8283PA 10160383

DATE/TIME PERFORMED: Fri Sep 19 12:14:02 2014

UNIT: 3880TA HL6670

CALIBRATOR: 2437XB 112674

SOURCE: 8281AA 11765055

HOURS: 8281AA 26

	ISS	Mtr Vits (V)	SS Gain	LS Gain	XLS Gain	EA Temp (degF)	Sync Delay (usec)	RCAL
Raw Data	808984	125	2266	2248	2204	106	7	0.9787
Interpolated	1300000	147	2248	2241	2203			

	ISS	BKS	BKL	BKX	SGA1	SDA1	SGA2	SDA2
Raw Data	808984	6144	961	135	26.00	0.15	24.17	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	808984	169502	25754	87811	31275	8150	53111	13030
Fit Quality %		0.839	1.141	0.863	0.904	0.868	0.819	0.849

	ISS	RBOR	RIN ISS/ILS	RIN13 ISS/IXS	RICS ISS/CSS	RATO SS/LS	RTWO SS2/LS	RONE CSS/CLS
Raw Data	808984	1.43	4.77	31.43	15.23	10.78	3.84	4.08
		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 %		0.079	0.119	0.133	0.012	0.167	0.146	0.108
Reduced	1387260	1.43	4.78	31.49	15.26	10.75	3.83	4.07
		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 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/CH91033/RPM-tdg

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 : 10 lbs
Series : 2812LA
Mnemonic : GR
Measure Point: 0.62': 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
 PRES MP 1.65'

BULL PLUG 1 11/16

0.00'

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

 BAKER HUGHES 	COMPANY <u>WPX ENERGY</u> WELL <u>FEDERAL SG 33-28</u> FIELD <u>GRAND VALLEY</u> COUNTY <u>GARFIELD</u> STATE <u>CO</u>		FILE NO: <u>CH091033</u>
	LOCATION: SHL: 2256' FSL & 481' FEL BHL: 2295' FSL & 2187' FEL		API NO: <u>05045219600000</u>
	ELEVATIONS: KB 5143 FT DF		28 7S 96W SG 43-28 PAD H&P 318



SEC 28 TWP 7S RGE 96W

GL 5119 FT

DATE 02-Oct-2014