



FILE NO: CH096026	COMPANY WELL FIELD COUNTY	WPX ENERGY YOUNBERG RU 44-7 RULISON GARFIELD	STATE CO
API NO: 05045225220000			

Ver. 4.01 7 7S 93W RU 44-7 PAD NABORS 576	LOCATION: SHL: 1148' FSL & 1182' FEL BHL: 993' FSL & 750' FEL SEC 7 TWP 7S RGE 93W	OTHER SERVICES BOND LOG
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PERMANENT DATUM LOG MEASURED FROM DRILL. MEAS. FROM	GL KB KB KB	ELEVATION 26 FT 7917 FT 7917 FT	ABOVE P.D. ELEVATIONS: KB 7943 FT DF GL 7917 FT
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DATE	21-Apr-2015
RUN	1
SERVICE ORDER	US096026
DEPTH DRILLER	9546 FT
DEPTH LOGGER	9534 FT
BOTTOM LOGGED INTERVAL	9524 FT
TOP LOGGED INTERVAL	5846 FT
TIME STARTED	10:30
TIME FINISHED	16:00
OPERATOR RIG TIME	5.5 HOURS
TYPE OF FLUID IN HOLE	WATER
FLUID DENSITY	NA
FLUID SALINITY	NA
FLUID LEVEL	60 FT
LOGGED CEMENT TOP	NA
WELLHEAD PRESSURE	0 PSI
MAXIMUM HOLE DEVIATION	NA
NOMINAL LOGGING SPEED	10 FMIN
MAX. RECORDED TEMP.	235 DEGF
REFERENCE LOG	BAKER HUGHES BOND LOG
REFERENCE LOG DATE	21-Apr-2015
EQUIP. NO.	HL-6670
LOCATION	GRAND JCT.
RECORDED BY	NEWELL
WITNESSED BY	KENT HEIL

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	1302 FT
8.75 IN	1302 FT	9893 FT

CASING RECORD				
SIZE	WEIGHT	GRADE	FROM	TO
9.625 IN			26 FT	1302 FT
4.5 IN	11.6 LB/F	P-110	26 FT	9893 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 21/APR/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 +9 feet.

Logged in PNC-3D mode.

BHT = 235 degF
SJ = 6226' - 6248'

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	8262XA	10485470	FREE
1	1	RPM	8281EA	10190984	FREE
1	1	RPM	8283PA	10414345	FREE
1	1	RPM	8281FA	10401926	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: 6

Plotted: Tue Apr 21 15:50:52 2015

PARAMETER AND FILTER SUMMARY REPORT

FILE: /dat1a/CH096026/n353h02.prm
LOGGING MODE: DEPTH DIRECTION: UP
TOP DEPTH: 5835.500 ft BOTTOM DEPTH: 9560.221 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	Apr 21 11:40:06 2015	CASING COLLAR LOCATOR
F1:GR	Apr 21 11:40:06 2015	GAMMA RAY
F1:ISS	Apr 21 11:40:06 2015	INELASTIC SHORT SPACE COUNT RATE
F1:LS	Apr 21 11:40:06 2015	LONG SPACE COUNT RATE
F1:RATO	Apr 21 11:40:06 2015	SHORT/LONG SPACE COUNT RATE RATIO
F1:RICS	Apr 21 11:40:06 2015	SHORT SPACE INELASTIC TO CAPTURE COUNT RATE RATIO (ISS/CSS)
F1:SGFC	Apr 21 11:40:06 2015	CORRECTED FORMATION SIGMA
F1:SS	Apr 21 11:40:06 2015	SHORT SPACE COUNT RATE

CURVE MEASURE POINT OFFSET

CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
CCL	26.00	ISS	12.75	RATO	12.75	SGFC	12.75
GR	23.00	LS	12.75	RICS	12.75	SS	12.75

Presentation : HL6670:/dat1a/CH096026/44RPM_MAIN.fvpdf [5"/100' Scale]
Plot Interval : 5835 - 9539 Feet

Data File 1 : F1 : HL6670:/dat1a/CH096026/44RPM_MAIN.xtf
Created On : Apr 21 11:40:06 2015
Company : WBY ENERGY

Company : WPA ENERGY
Well : YOUNBERG RU 44-7
Field : RULISON
File Interval : 5809.25 - 9556.5 Feet
OCT : n353h

GR BACKUP

FEET

ISS [iss]

1E+06

(1)

GAMMA RAY [gr]

150

(gAPI)

RATO [rato]

17

0

(1)

RICS [rics]

38

8

(1)

SGFC [sgfc]

60

0

(1)

LS [ls]

29000

(1)

SS [ss]

290000

(1)

GR

ISS

5900

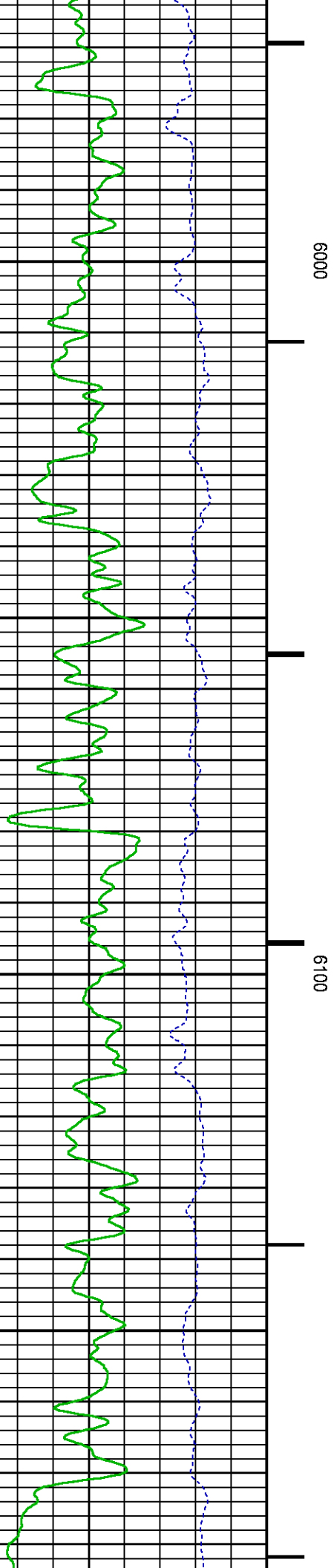
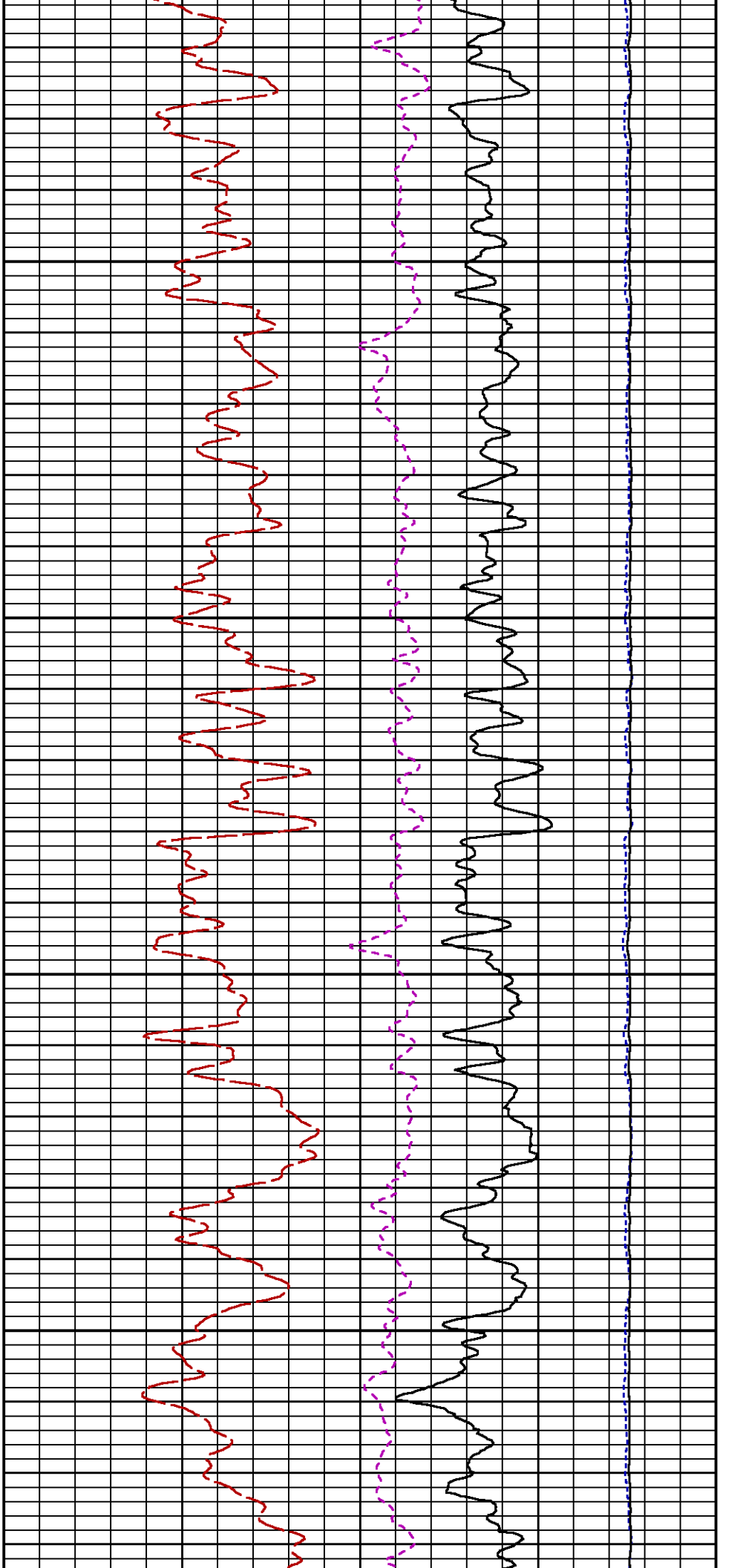
RICS

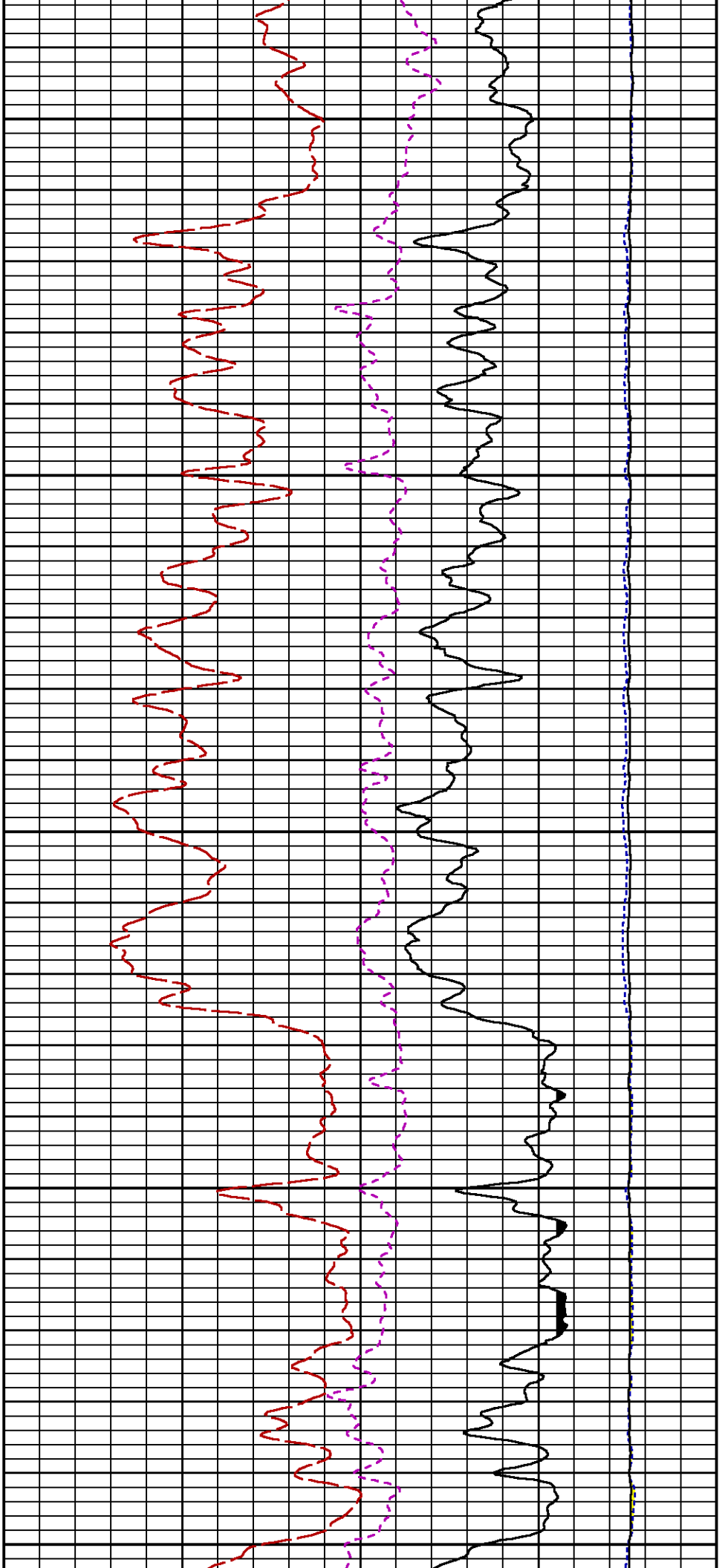
SGFC

RATO

SS

LS



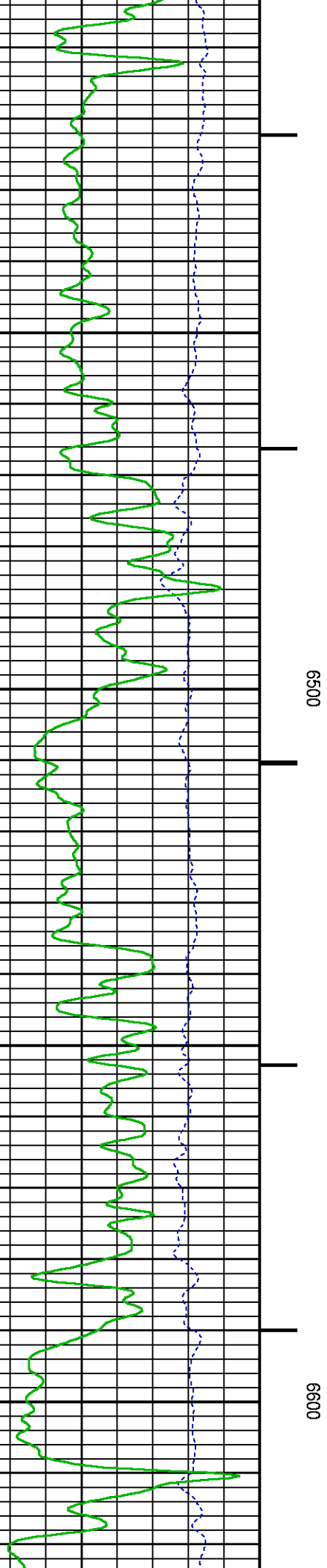
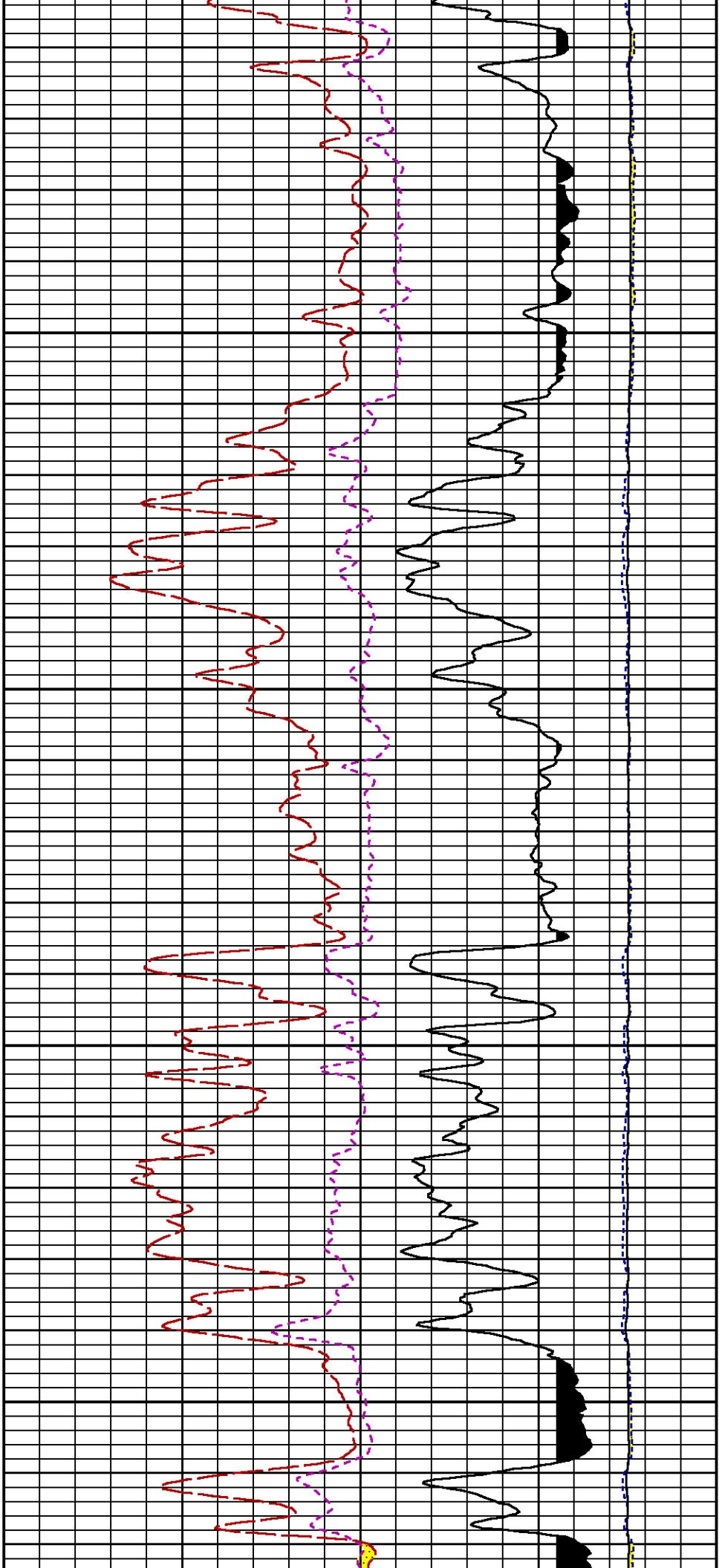


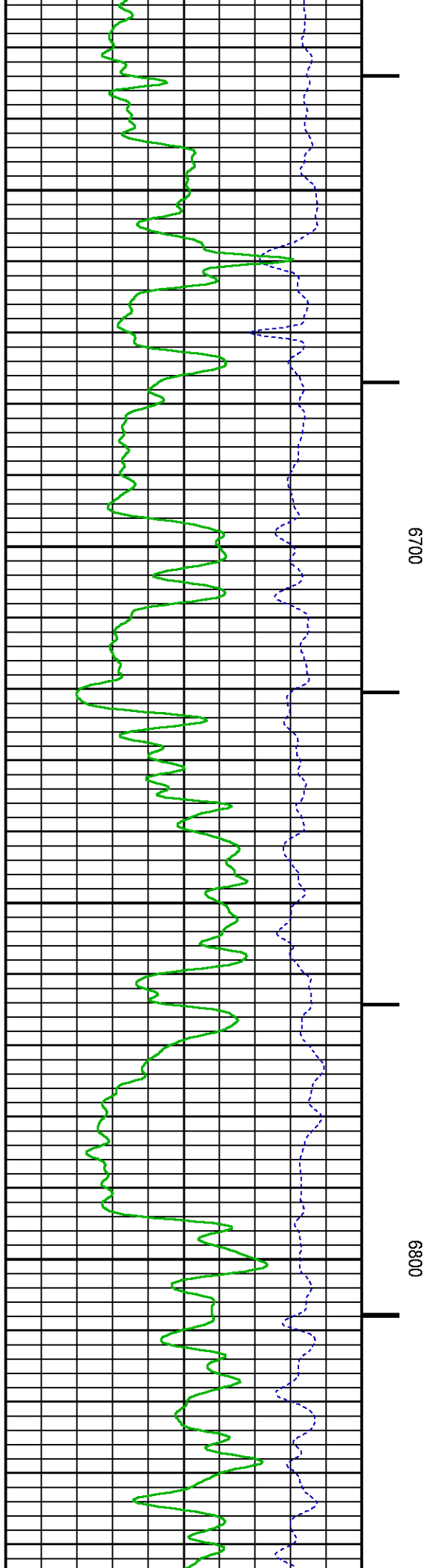
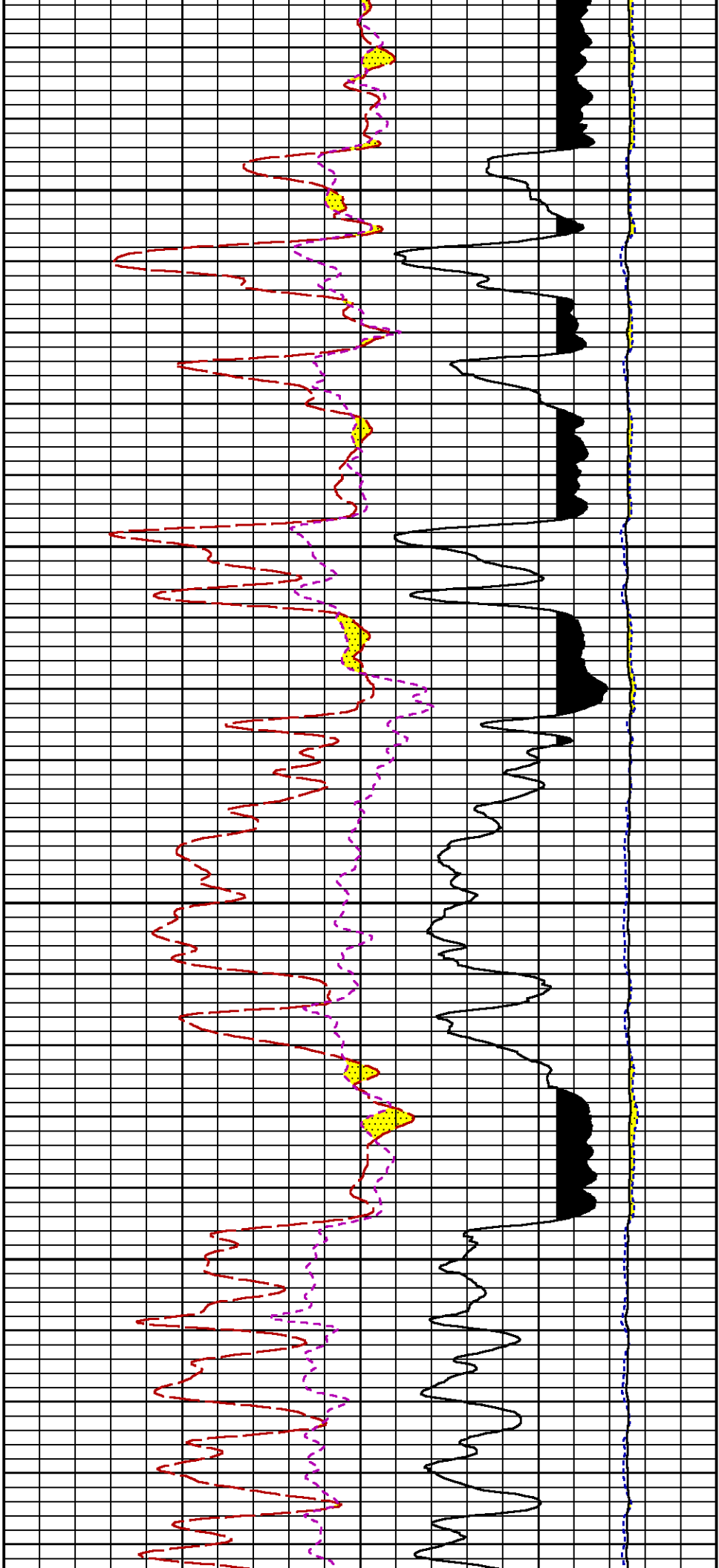
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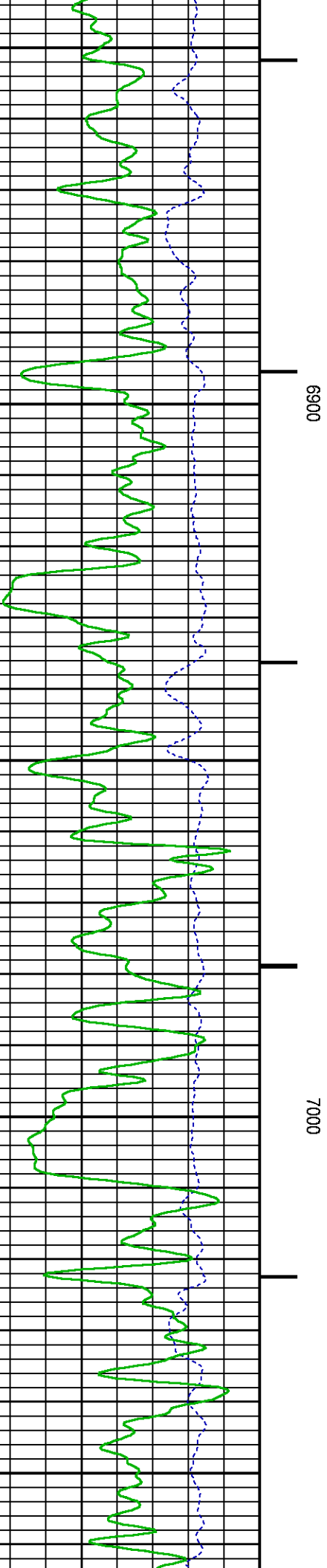
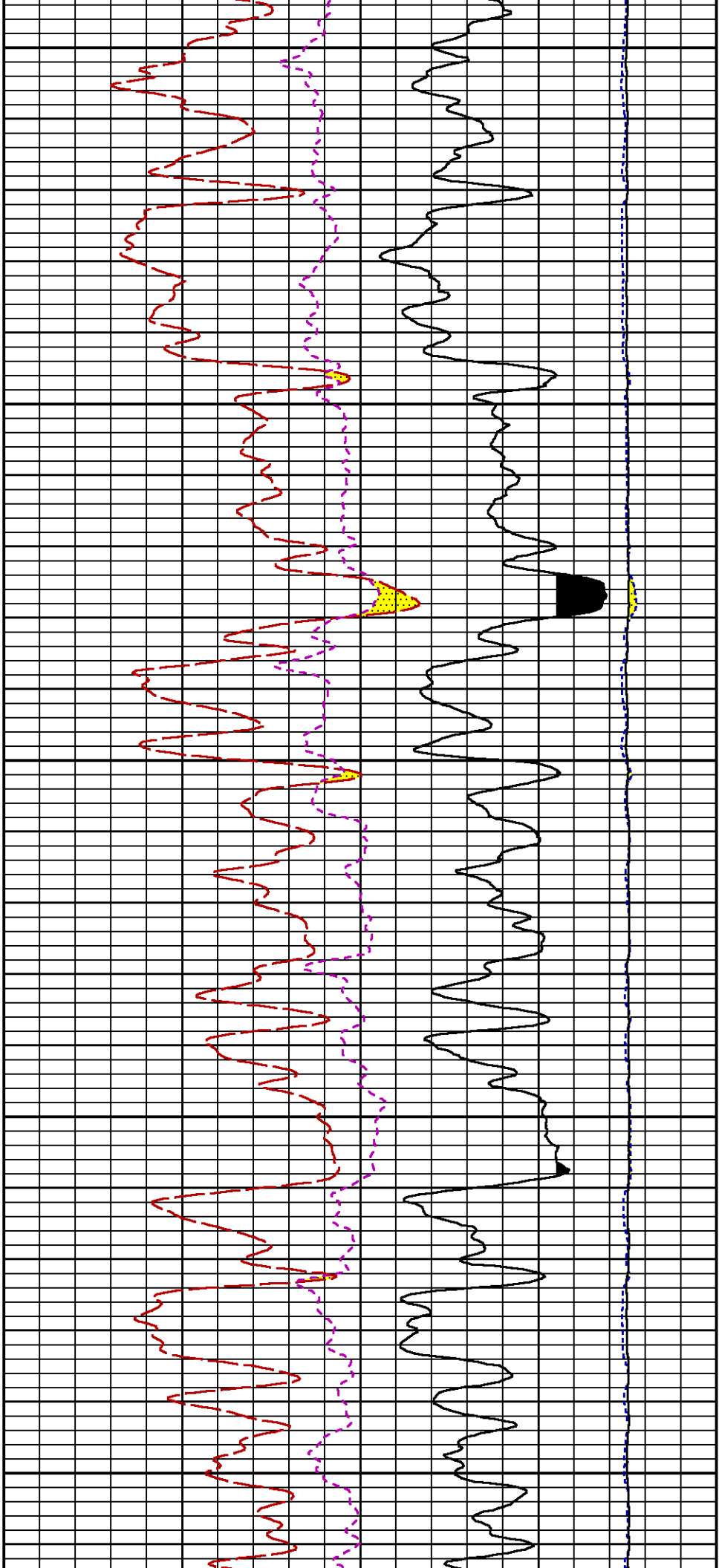
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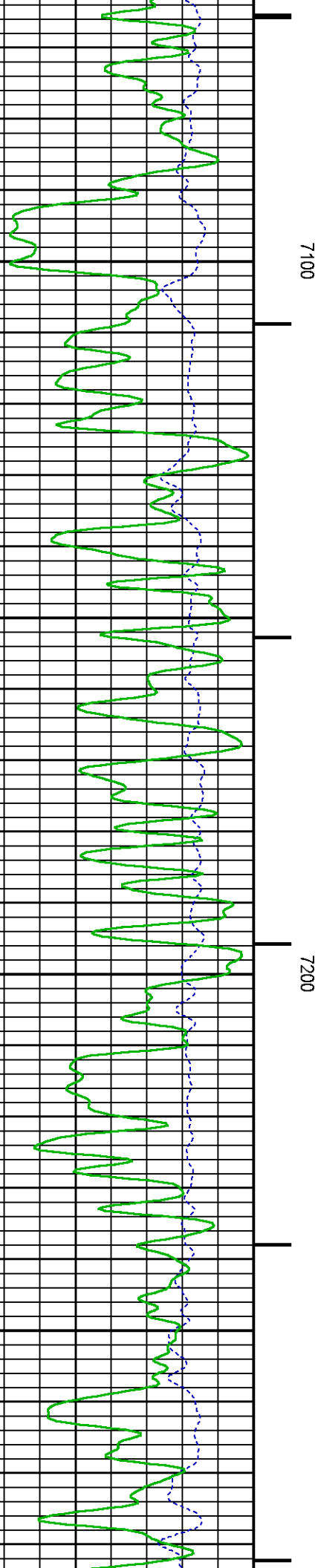
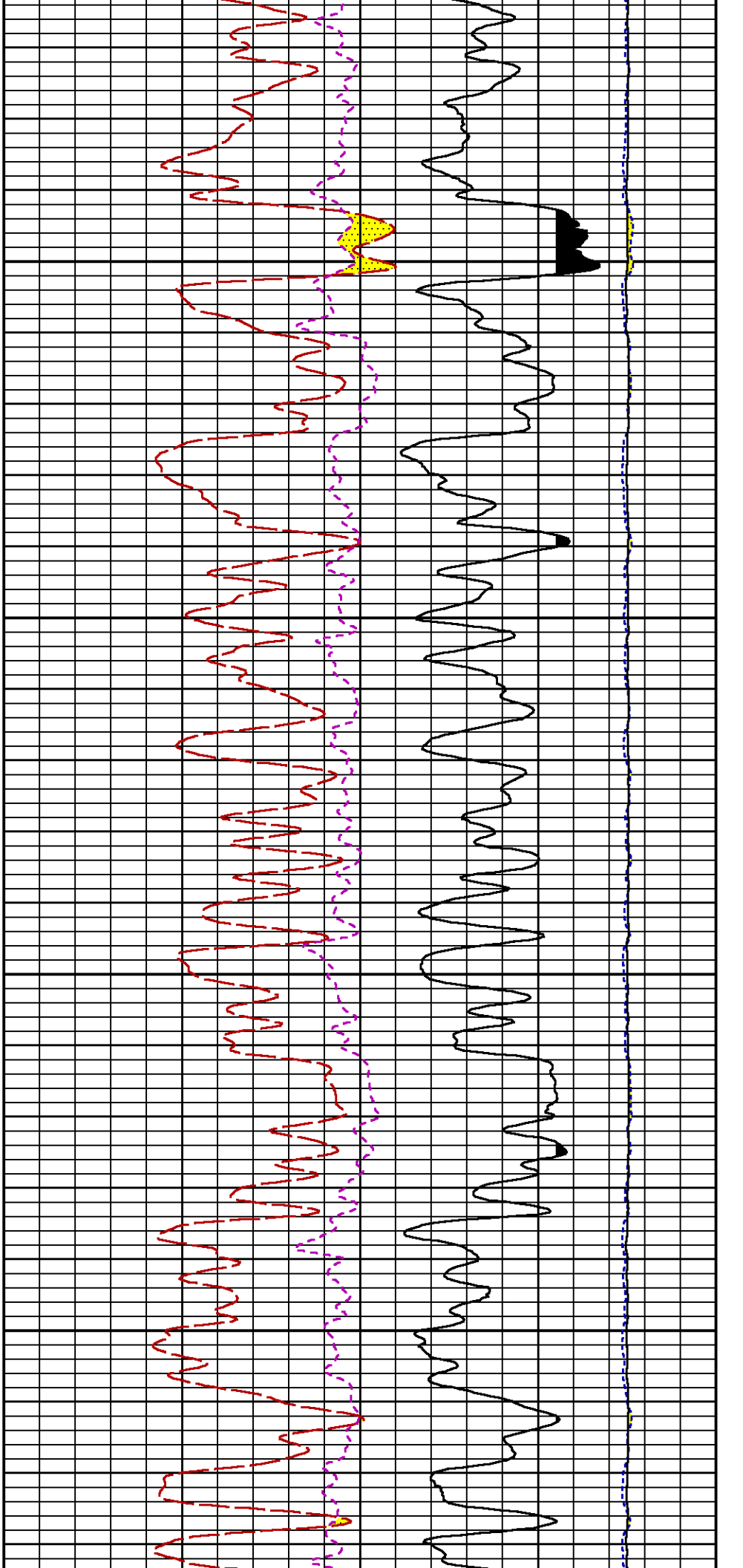
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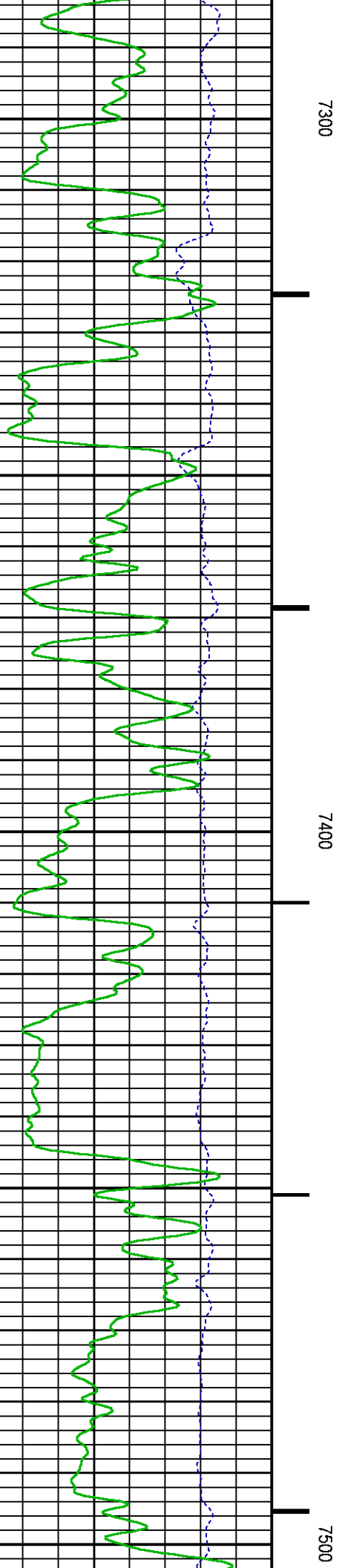
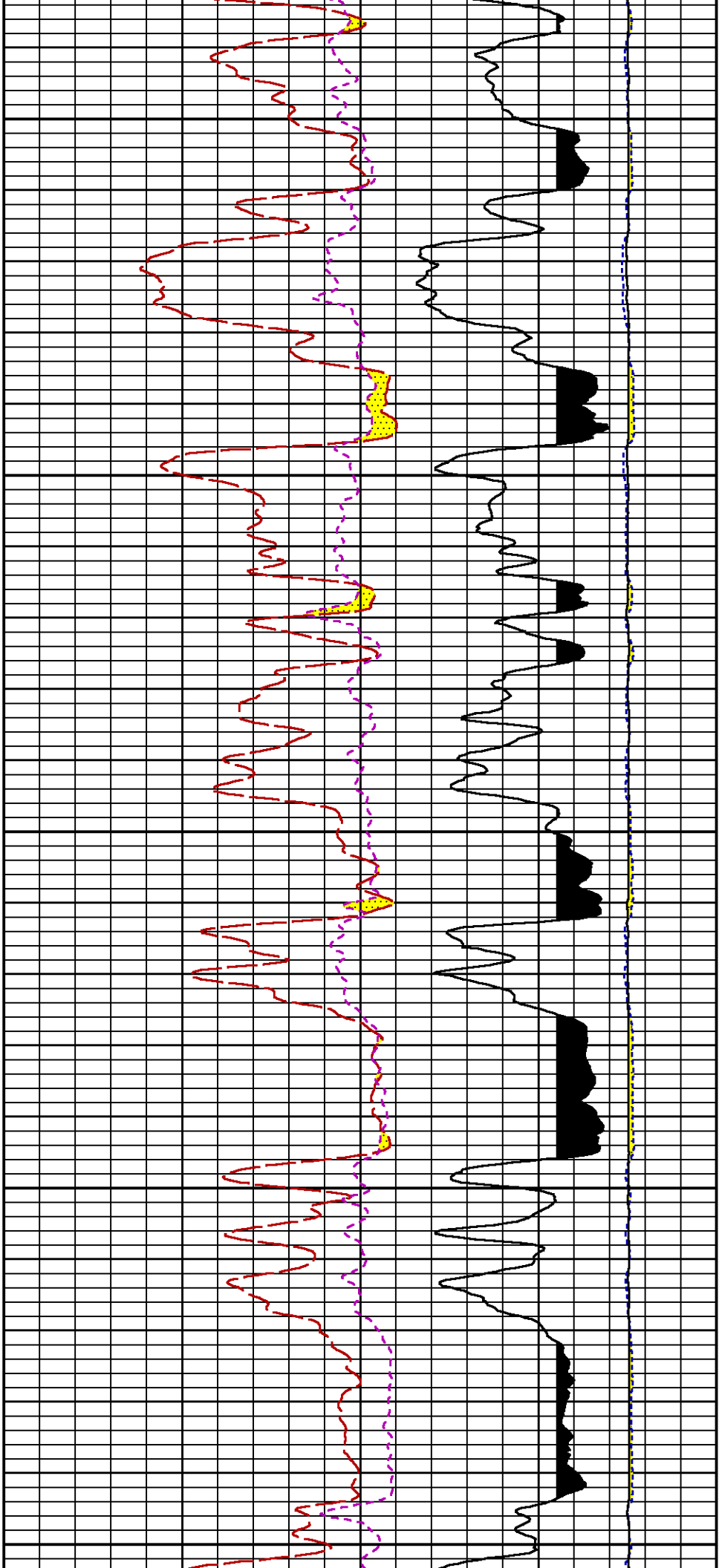
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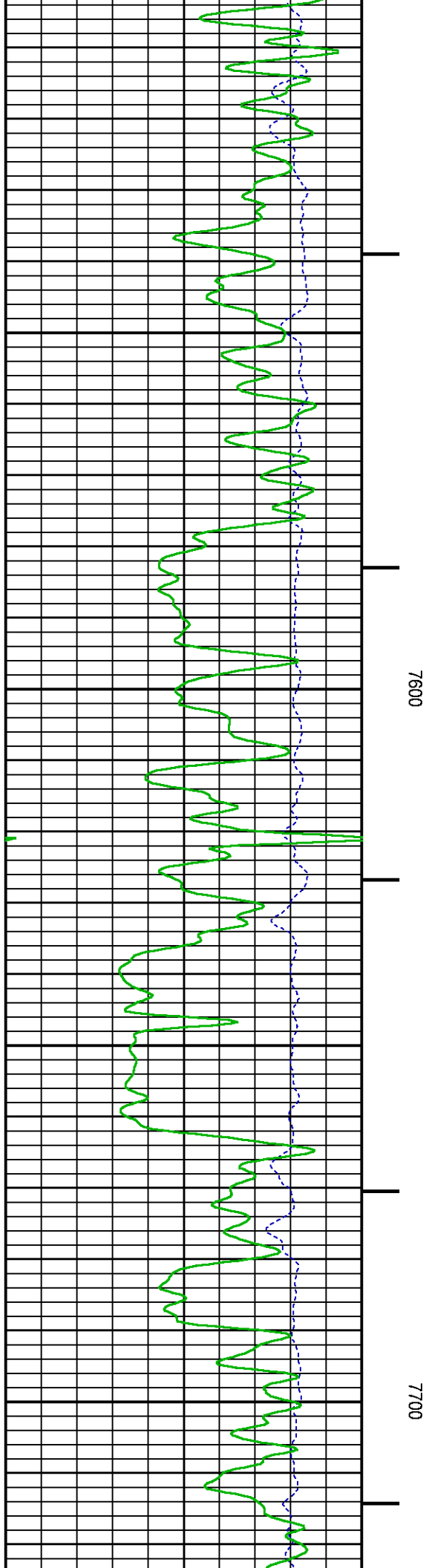
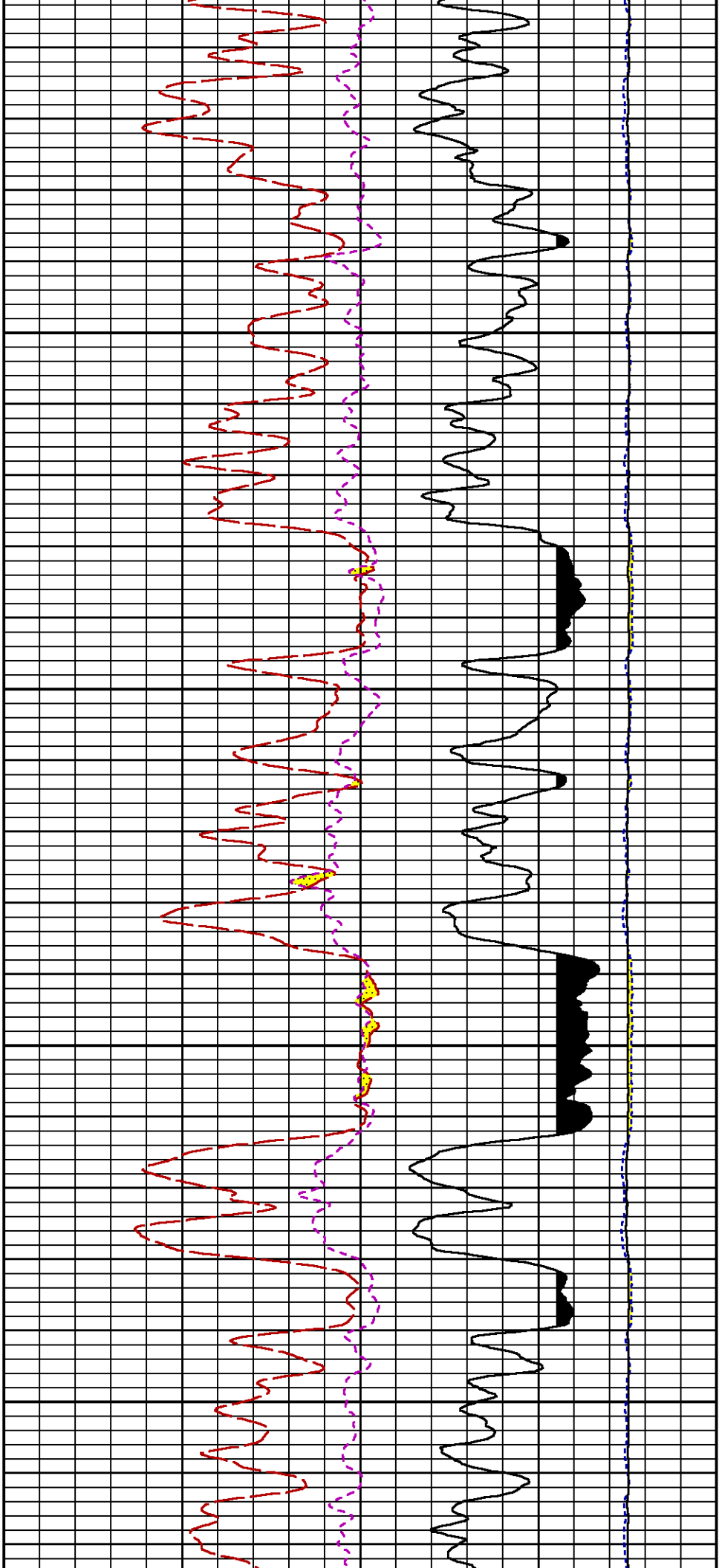


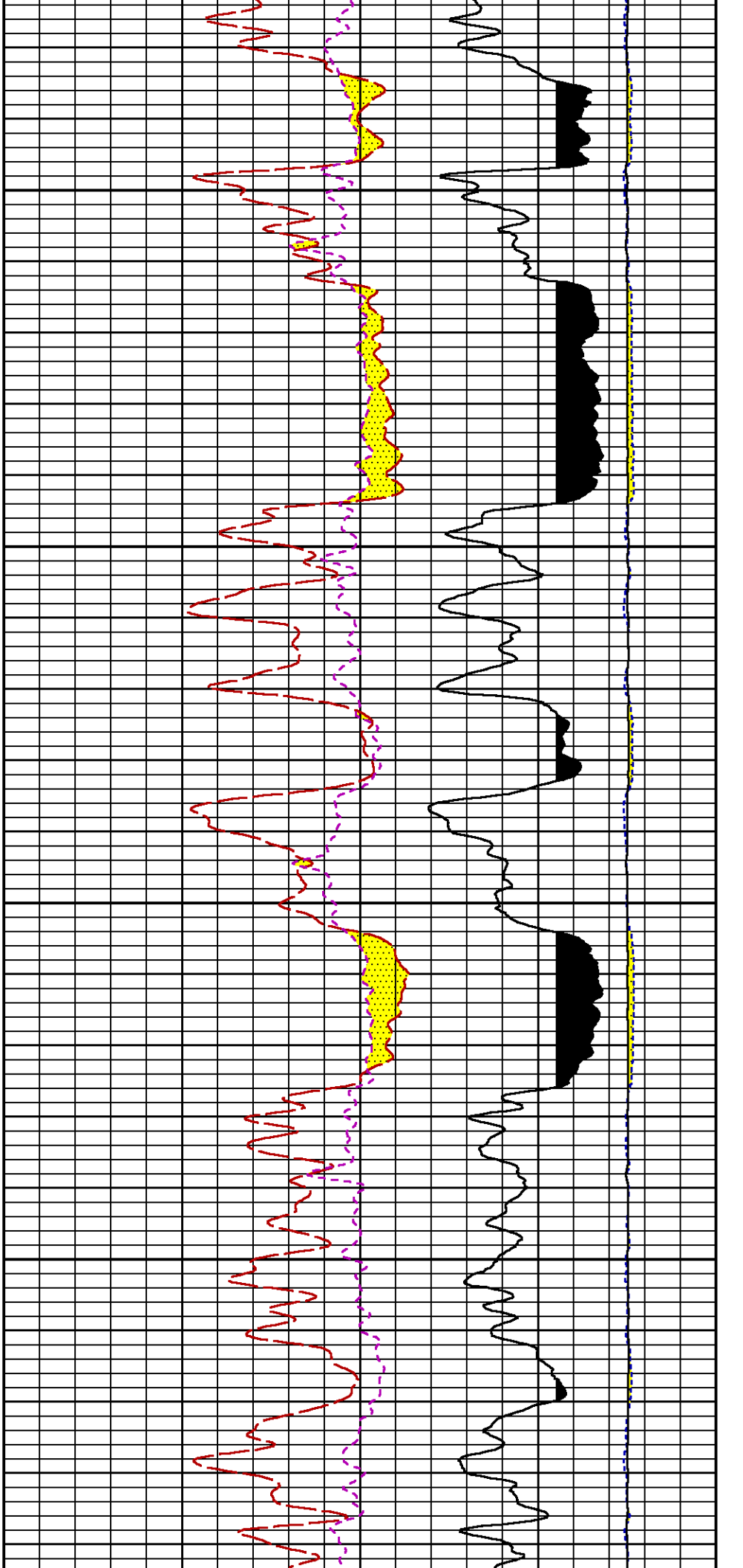






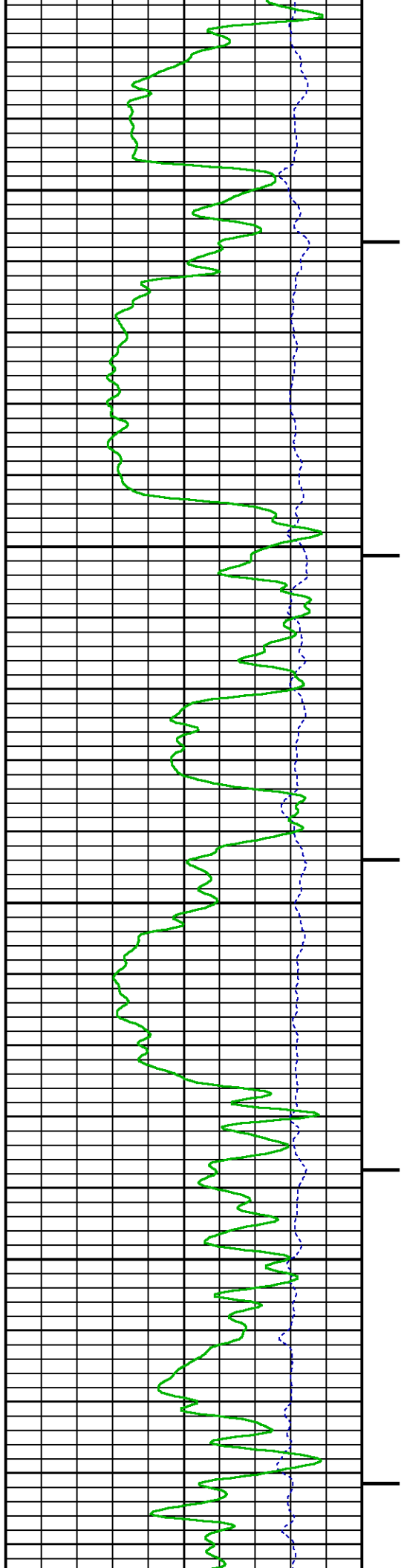


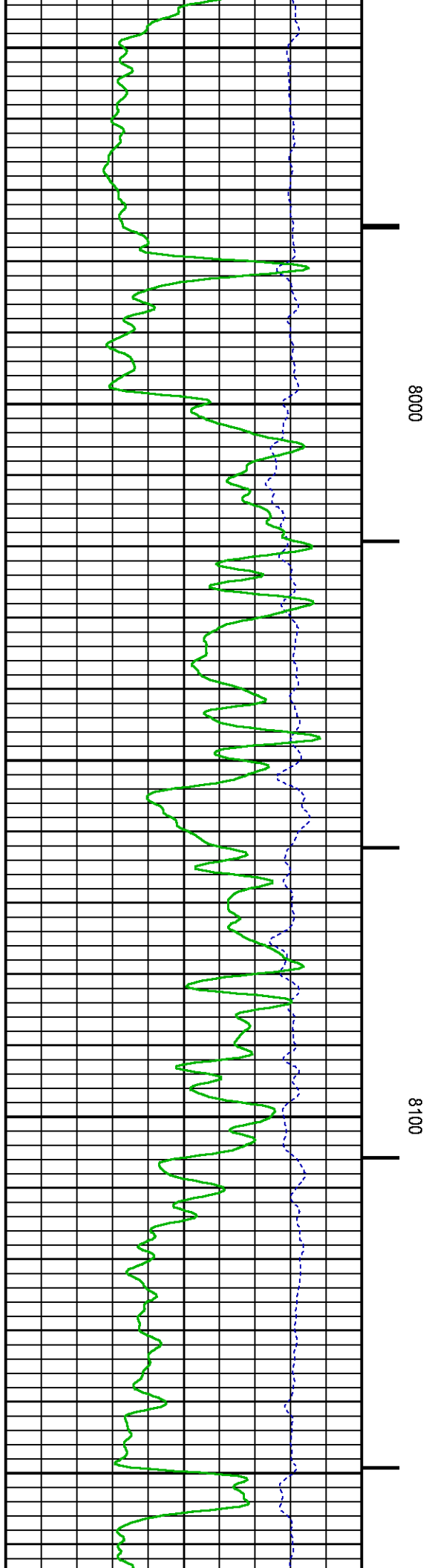
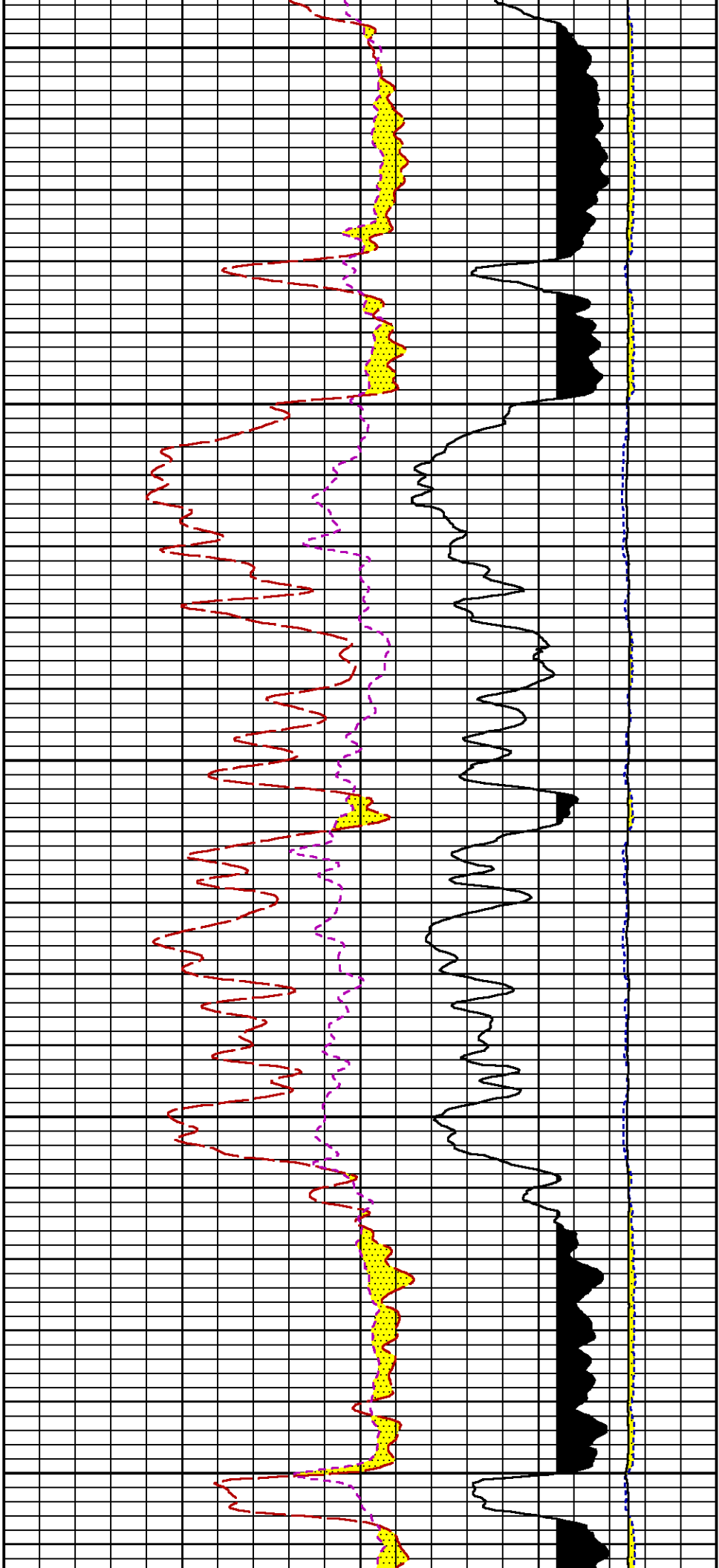


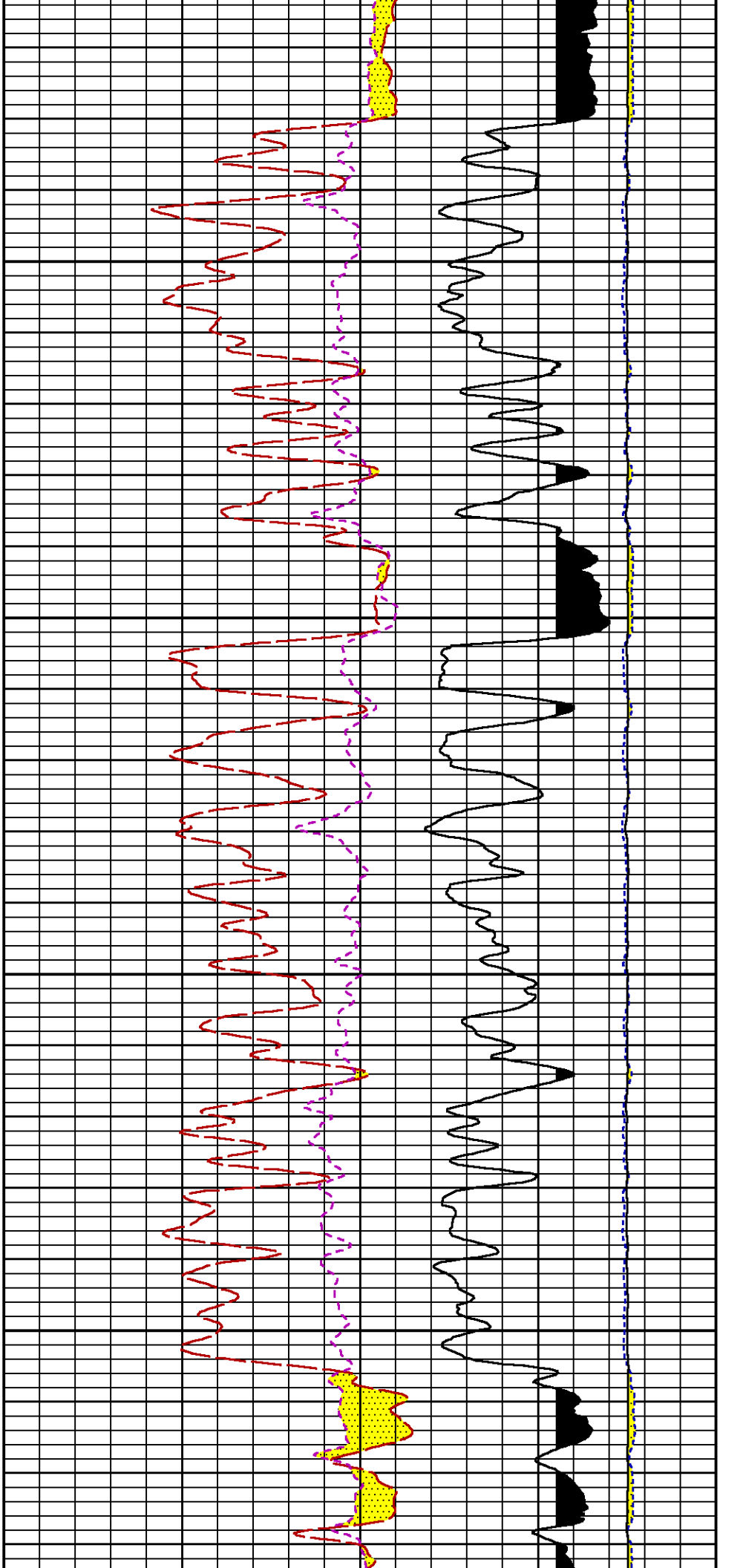


7800

7900

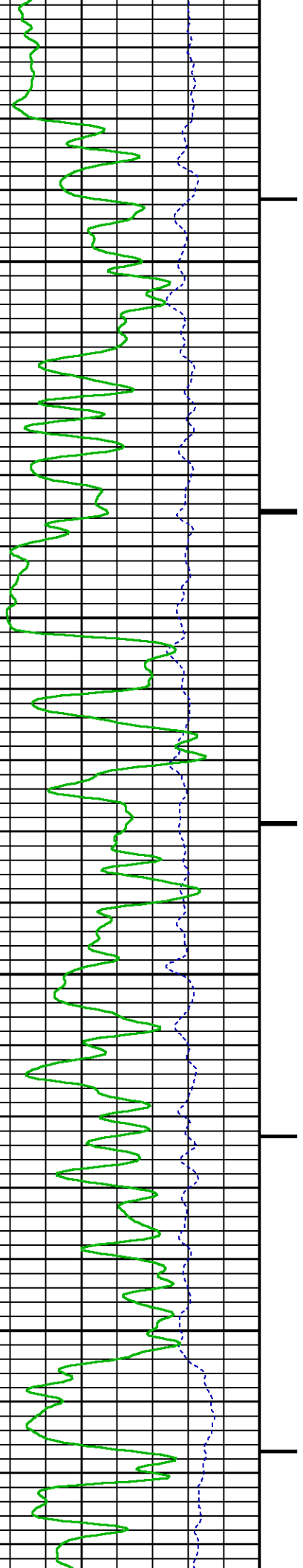


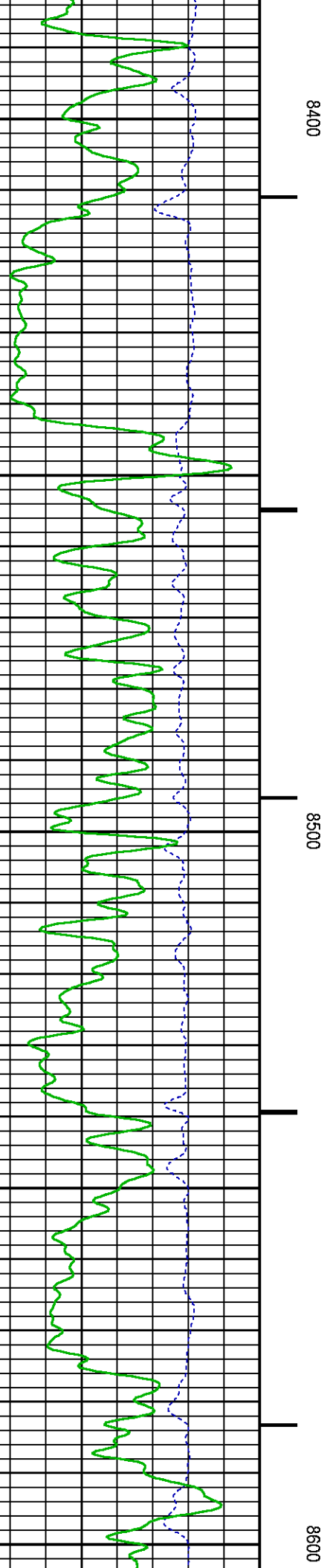
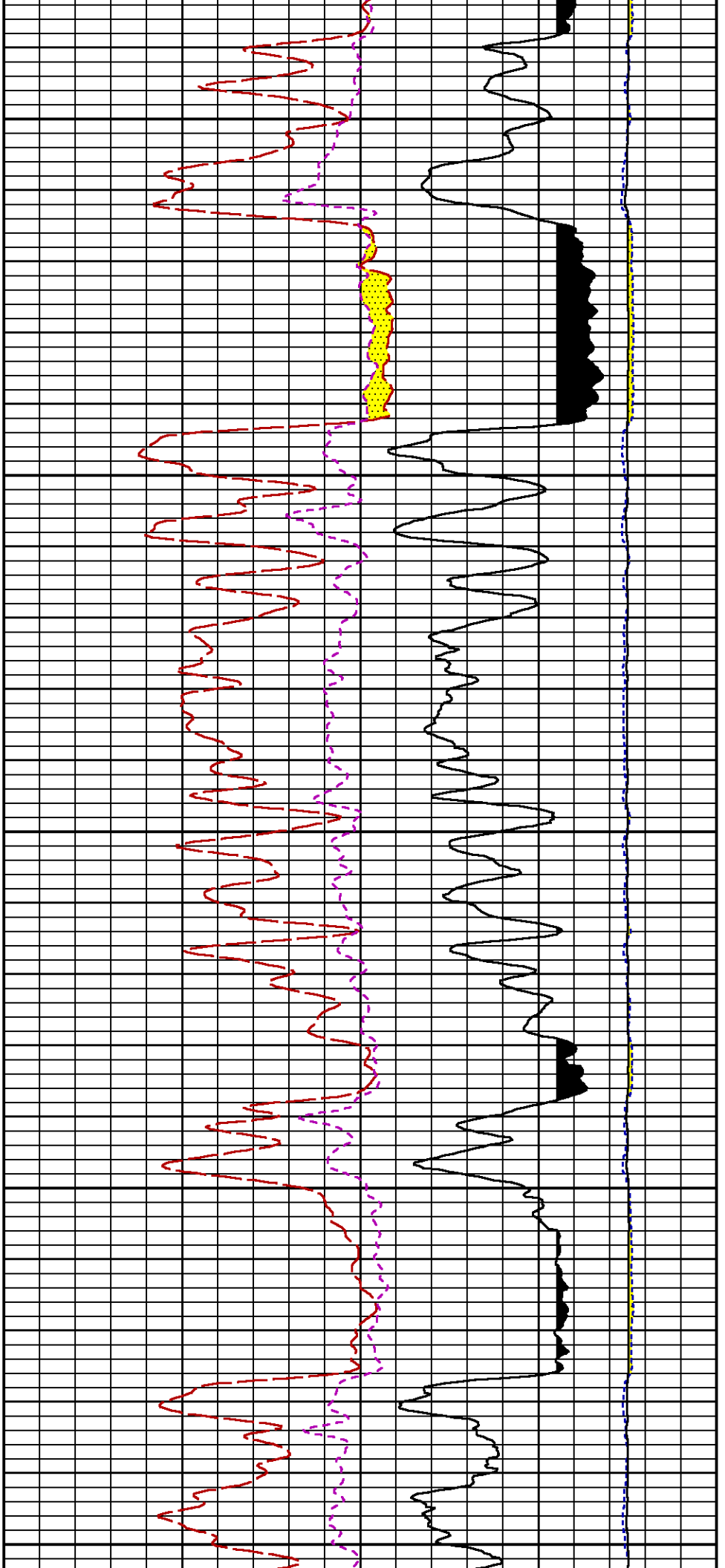


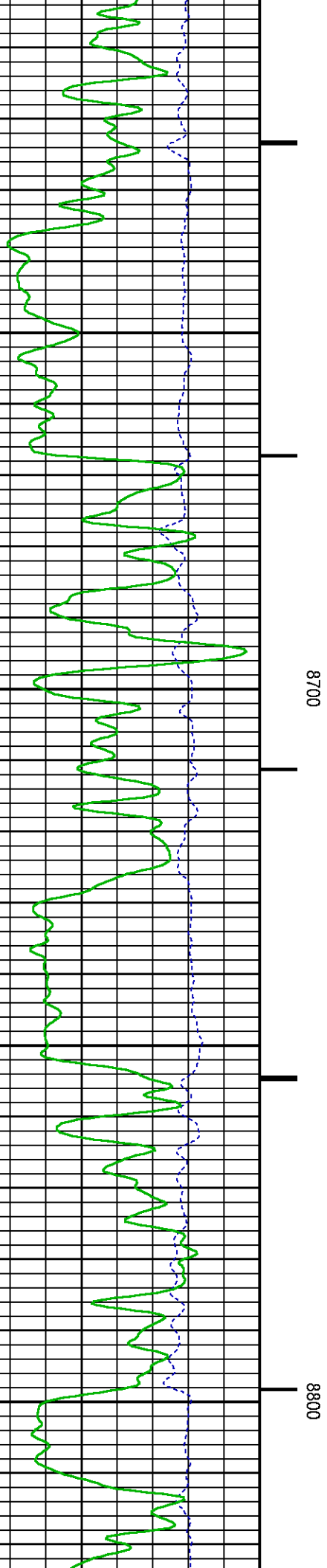
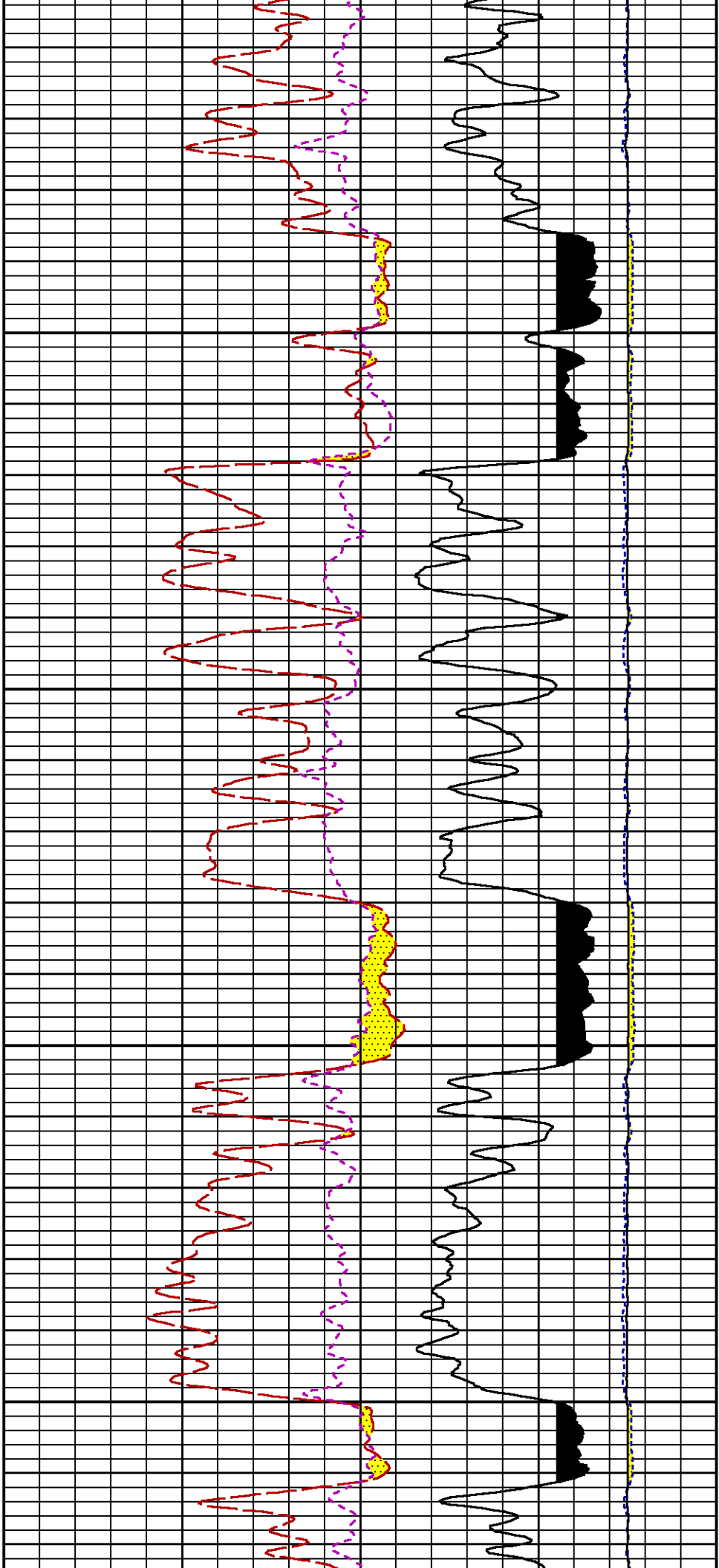


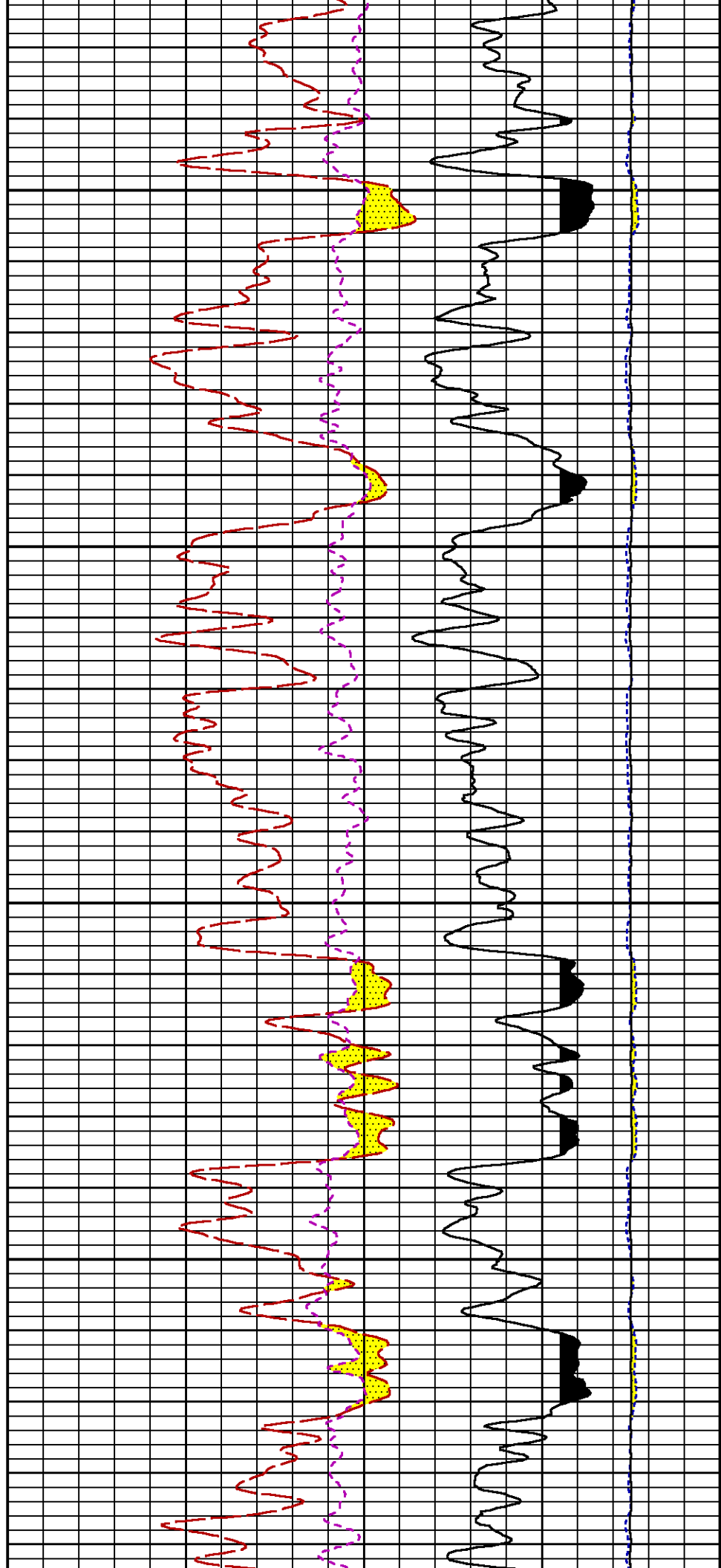
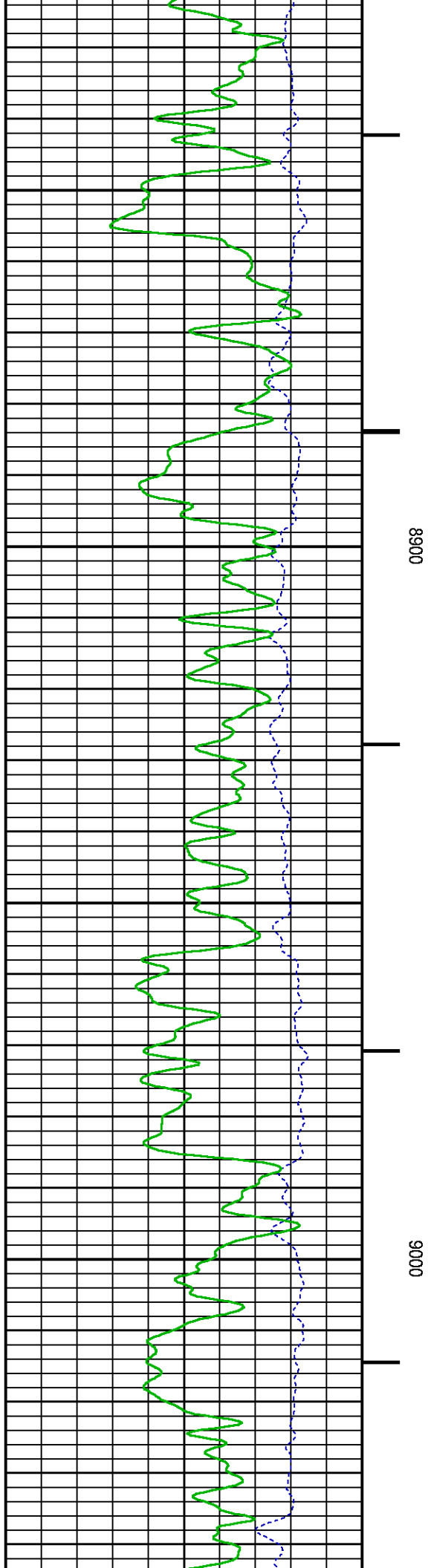
8200

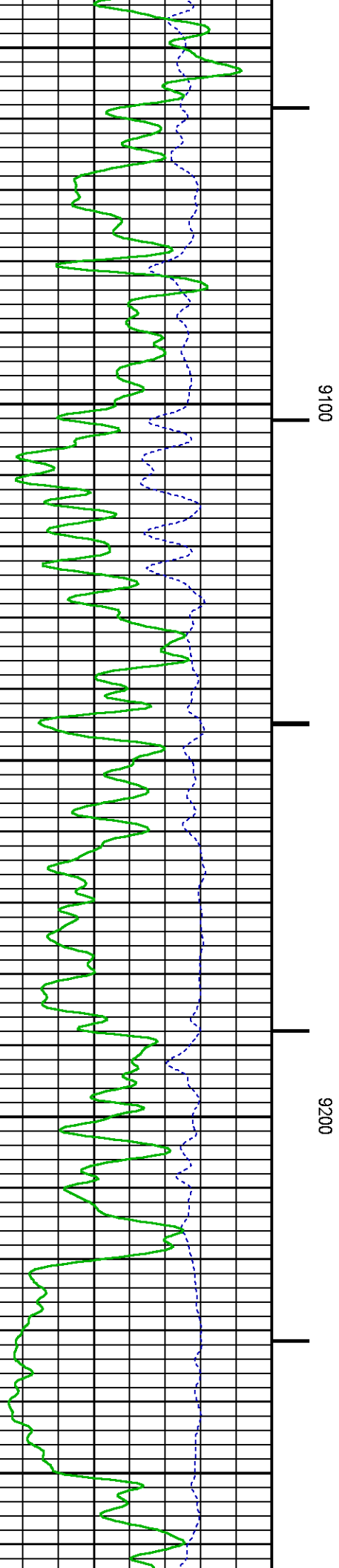
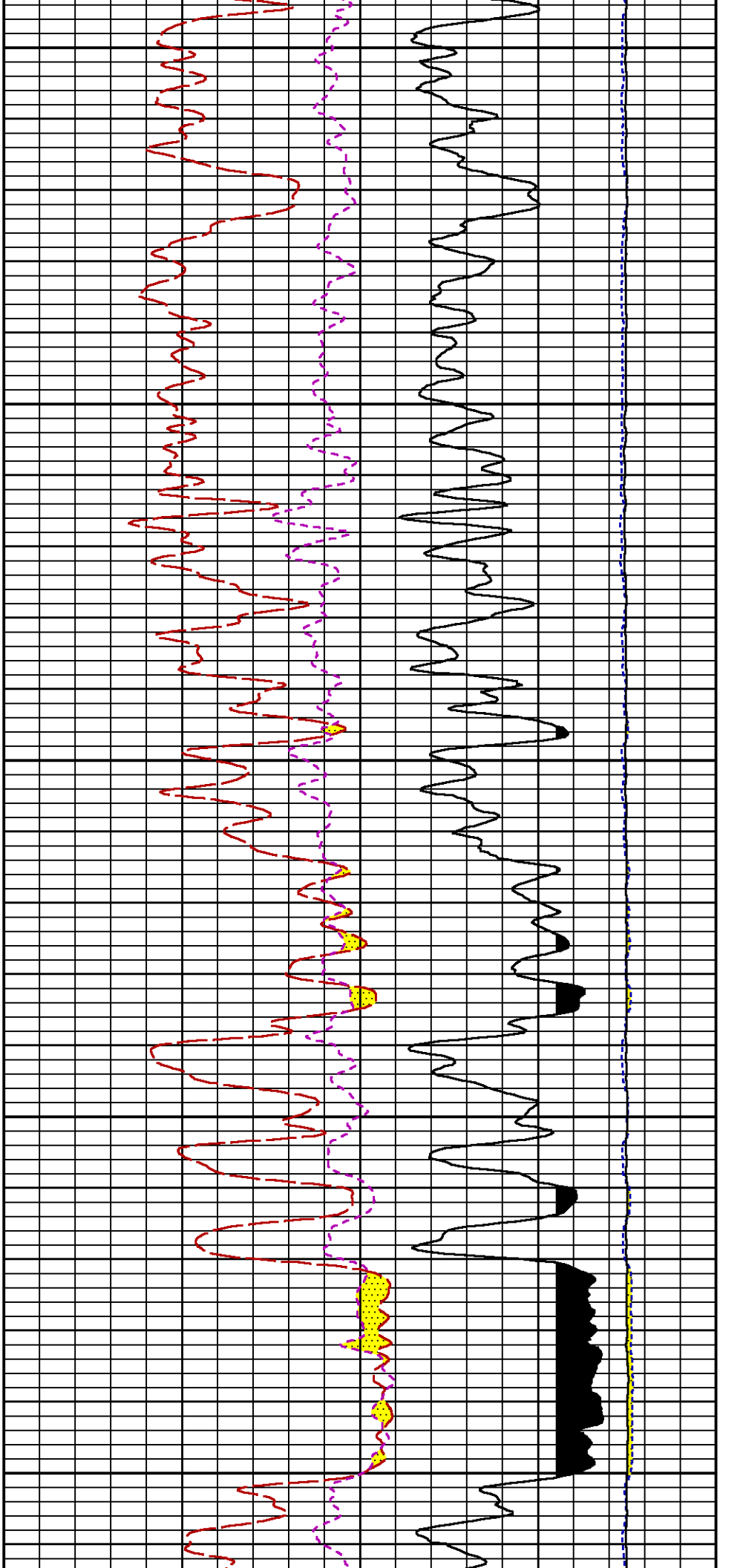
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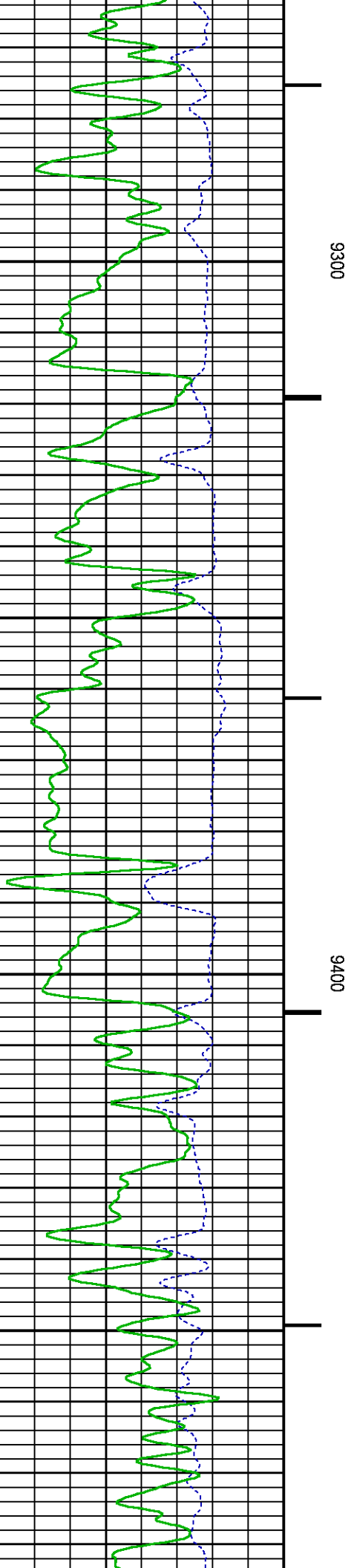
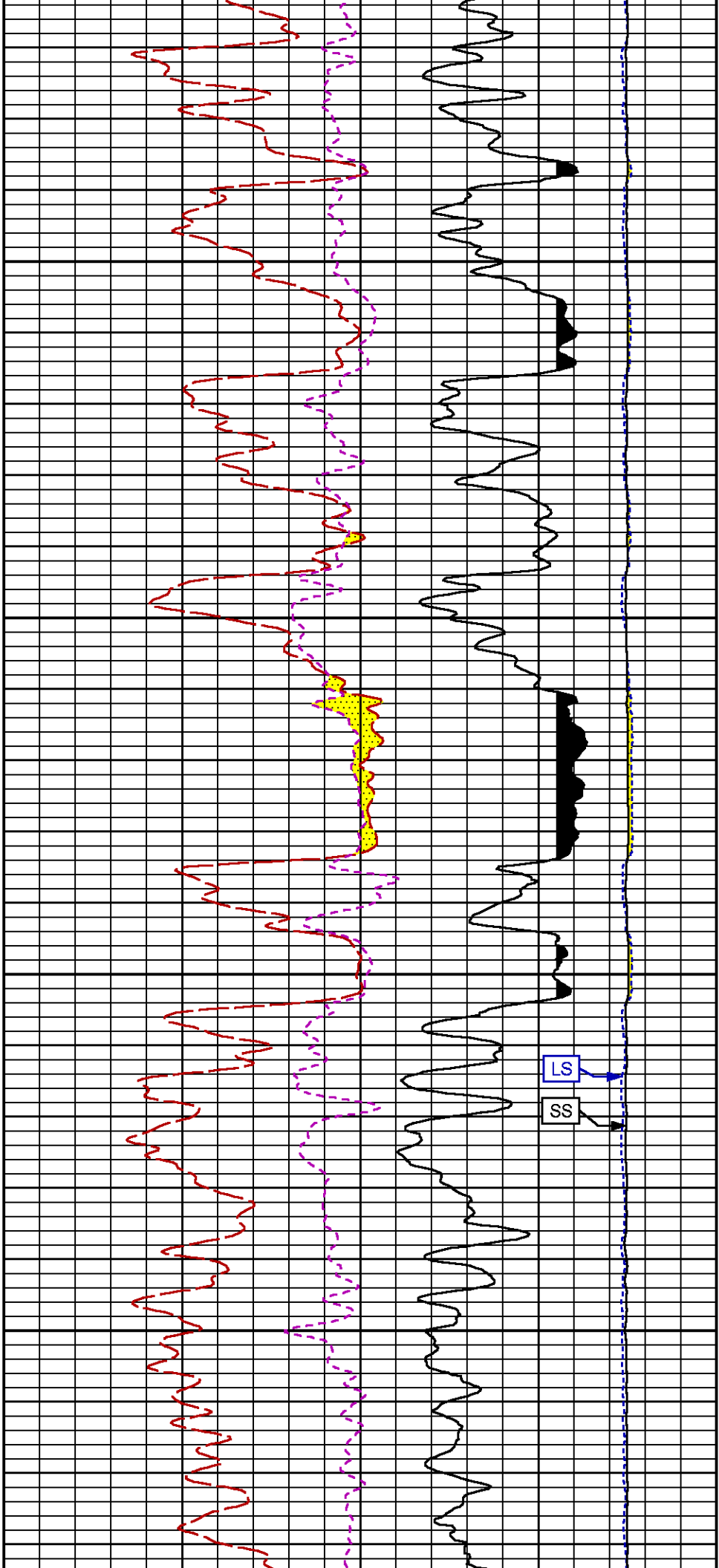


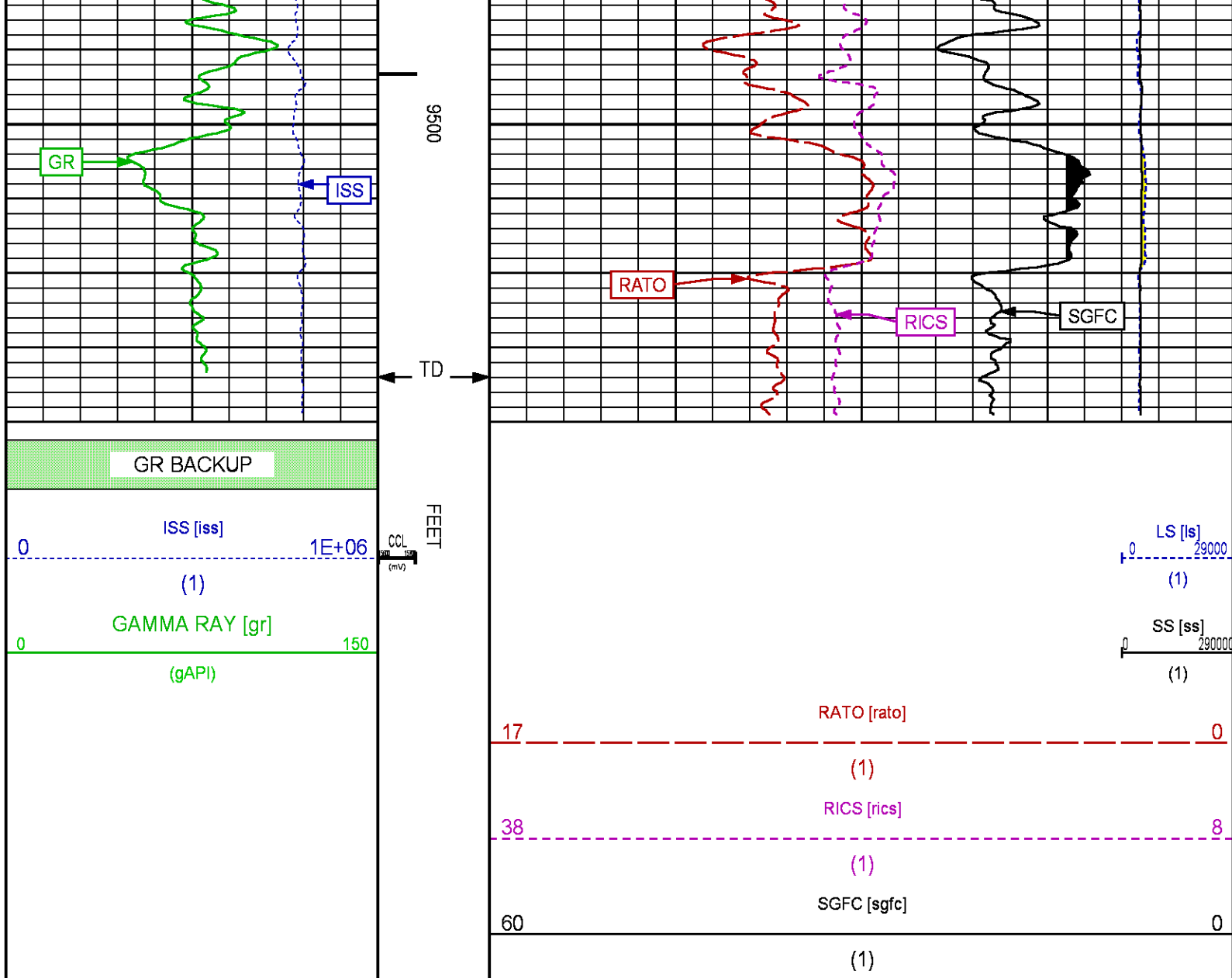












REPEAT SECTION PNC-3D MODE

ECLIPS 6.2i ECLIPS General Release Rel 6.2i Wed Jun 12 12:21:40 CDT 2013
Updates: 1 Patches: 6

Plotted: Tue Apr 21 15:06:55 2015

PARAMETER AND FILTER SUMMARY REPORT

FILE: /dat1a/CH096026/n353h01.prm
LOGGING MODE: DEPTH DIRECTION: UP
TOP DEPTH: 8706.000 ft BOTTOM DEPTH: 9042.000 ft

SYMMETRIC FILTER

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

PRM PROCESSING

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
PNC Parameters	BOREHOLE CONTENTS	FI 111D		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

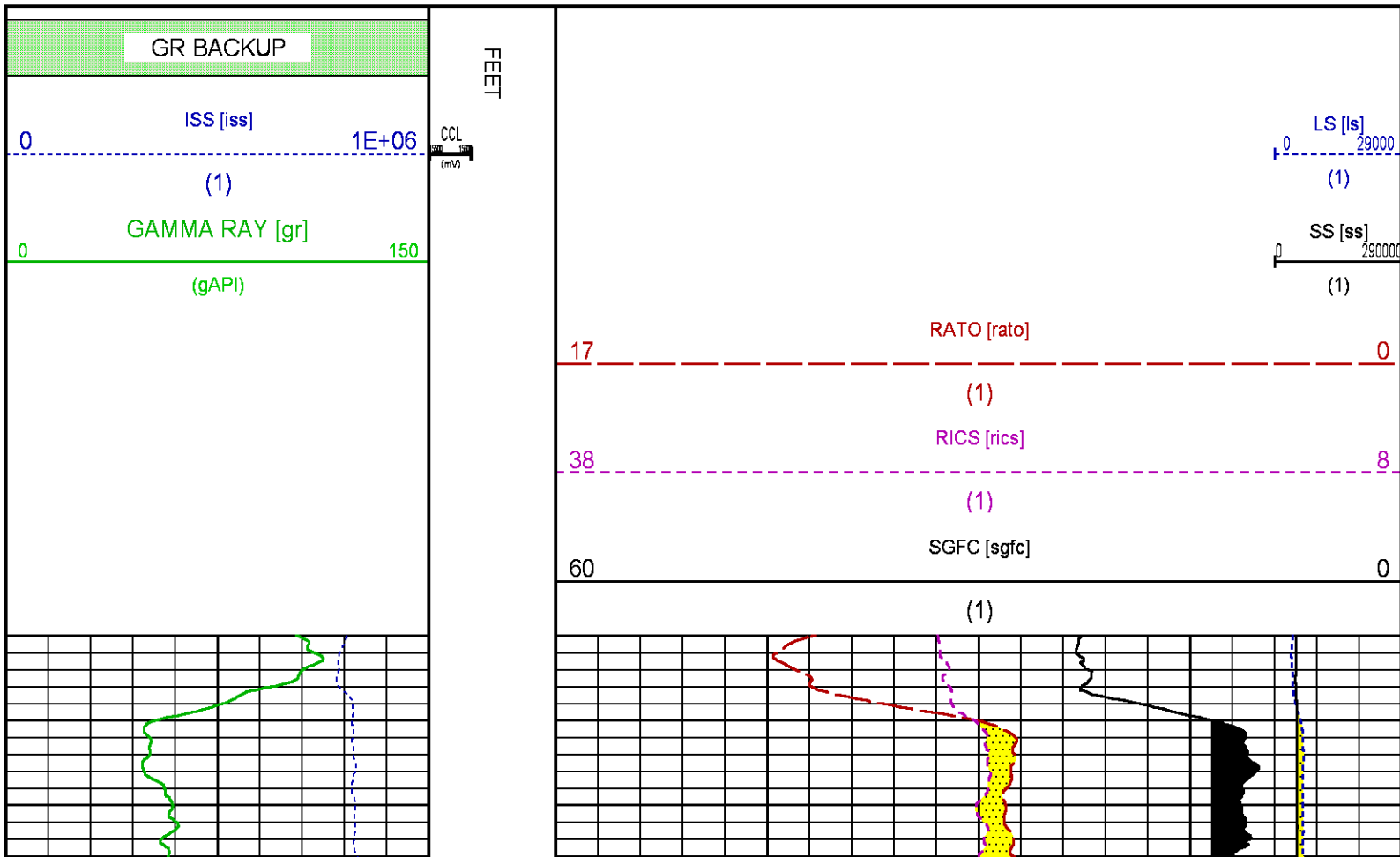
CURVE NAME	CREATION DATE	CURVE DESCRIPTION
F1:CCL	Apr 21 11:10:36 2015	CASING COLLAR LOCATOR
F1:GR	Apr 21 11:10:36 2015	GAMMA RAY
F1:ISS	Apr 21 11:10:36 2015	INELASTIC SHORT SPACE COUNT RATE
F1:LS	Apr 21 11:10:36 2015	LONG SPACE COUNT RATE
F1:RATO	Apr 21 11:10:36 2015	SHORT/LONG SPACE COUNT RATE RATIO
F1:RICS	Apr 21 11:10:36 2015	SHORT SPACE INELASTIC TO CAPTURE COUNT RATE RATIO (ISS/CSS)
F1:SGFC	Apr 21 11:10:36 2015	CORRECTED FORMATION SIGMA
F1:SS	Apr 21 11:10:36 2015	SHORT SPACE COUNT RATE

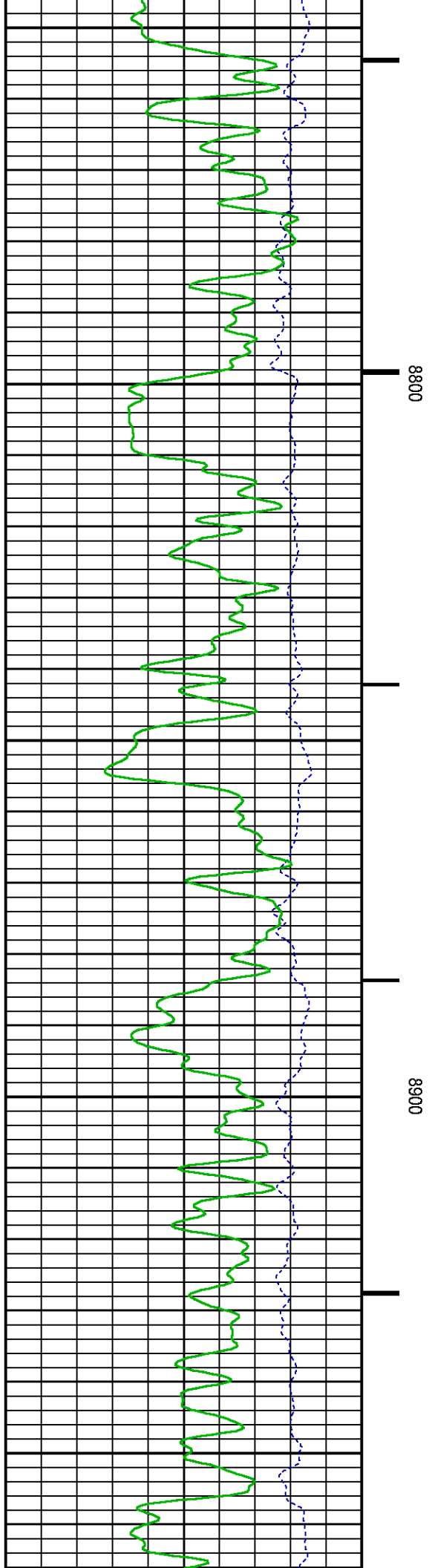
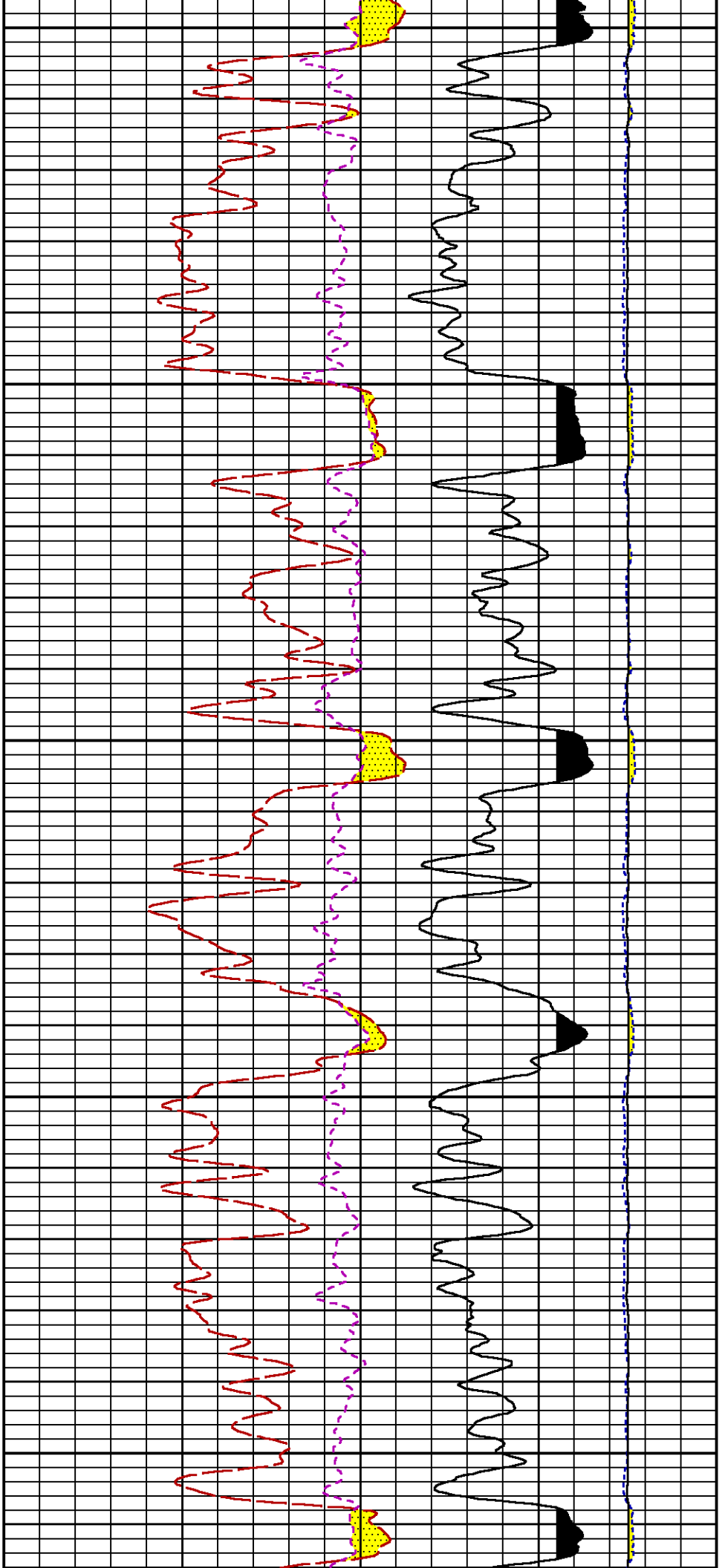
CURVE MEASURE POINT OFFSET

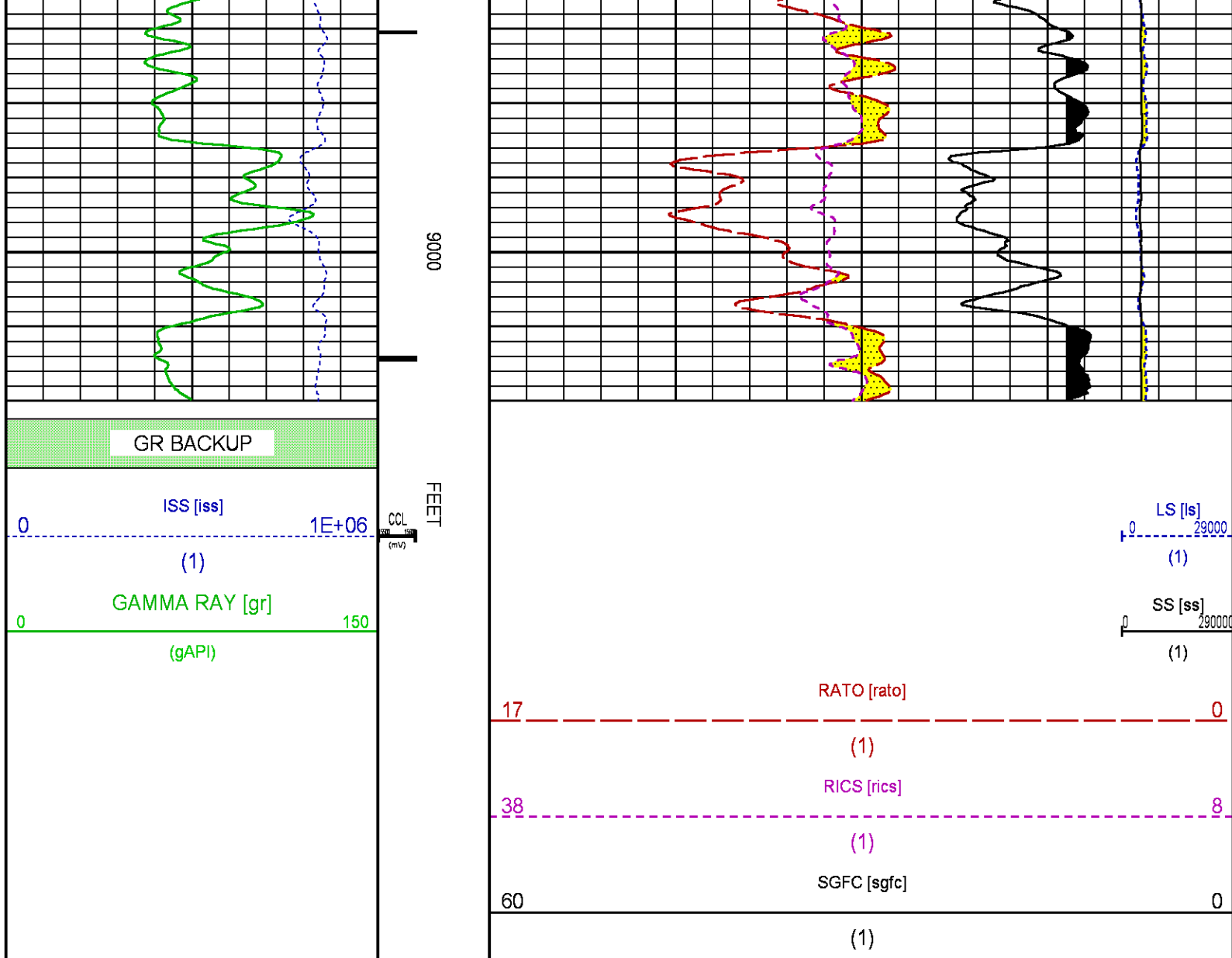
CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
CCL	26.00	ISS	12.75	RATO	12.75	SGFC	12.75
GR	23.00	LS	12.75	RICS	12.75	SS	12.75

Presentation : HL6670:/dat1a/CH096026/44RPM_REPEAT.fvpdf [5"/100' Scale]
Plot Interval : 8720 - 9020 Feet

Data File 1 : F1 : HL6670:/dat1a/CH096026/44RPM_REPEAT.xtf
Created On : Apr 21 11:10:36 2015
Company : WPX ENERGY
Well : YOUNBERG RU 44-7
Field : RULISON
File Interval : 8691.75 - 9053.25 Feet
OCT : n353h







CALIBRATION / VERIFICATION SUMMARY

Source File: /dat1a/CH096026/n353h.tp1

GR PRIMARY CALIBRATION SUMMARY

TOOL #: 8262XA 10485470

DATE/TIME PERFORMED: Sat Apr 11 17:37:20 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	107.51	431.53	324.0	0.571	61.38	246.38	185

GR PRIMARY VERIFICATION SUMMARY

TOOL #: 8262XA 10485470

DATE/TIME PERFORMED: Sat Apr 11 17:39:23 2015

UNIT #: 3880TA HL6670

VERI JIG #: 4702NK DA-041

	BACKGROUND (cts/s)	CALBRTR ON (cts/s)	MULT	BACKGROUND (gAPI)	CALBRTR ON (gAPI)	DIFF. (gAPI)
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GR	(cts/s) 105.78	(cts/s) 435.11	(cts/s) 0.571	(gAPI) 60.39	(gAPI) 248.43	(gAPI) 188.03
						175.00 195.00

RPM_PNC_3D PRIMARY CALIBRATION SUMMARY

TOOL: 8283PA 10414345

DATE/TIME PERFORMED: Mon Mar 30 14:44:41 2015

UNIT: 3880TA HL6670

CALIBRATOR: 2437XB 112674

SOURCE: 8281AA 10160601

HOURS: 8281AA 18

	ISS	Mtr VIts (V)	SS Gain	LS Gain	XLS Gain	EA Temp (degF)	Sync Delay (usec)	RCAL
Raw Data	813444	125	2267	2258	2255	104	7	0.9806
Interpolated	1300000	148	2248	2253	2251			

	ISS	BKS	BKL	BKX	SGA1	SDA1	SGA2	SDA2
Raw Data	813444	6376	1024	140	25.99	0.14	24.25	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	813444	172913	26730	91420	32541	8488	55360	13607
Fit Quality %		0.896	0.910	0.837	0.834	0.826	0.760	0.879

	ISS	RBOR	RIN ISS/ILS	RIN13 ISS/IXS	RICS ISS/CSS	RATO SS/LS	RTWO SS2/LS	RONE CSS/CLS
Raw Data	813444	1.43	4.70	30.44	14.69	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 %		0.046	0.209	0.227	0.168	0.126	0.123	0.101
Reduced	1369035	1.43	4.73	30.63	14.77	10.78	3.84	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

34.08'

A3 CABLEHEAD
Diameter : 1.37"

PCM POWER SUPPLY
Diameter : 1.70"
Length : 3.86"



Source File: /dat1a/CH096026/RPM_8262-tdg

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 — 26.03'

GAMMA RAY

Diameter : 1.70"
Length : 3.02'
Weight : 15 lbs
Series : 8262XA
Mnemonic : GR
Measure Point: 0.89': GR MP

GR MP — 22.90'

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: 34.08'
 TOTAL WEIGHT: 144 lbs
 MAX DIAMETER: 0'1.70"

	COMPANY <u>WPX ENERGY</u> WELL <u>YOUBERG RU 44-7</u> FIELD <u>RULISON</u> COUNTY <u>GARFIELD</u> STATE <u>CO</u>	FILE NO: <u>CH096026</u> API NO: <u>05045225220000</u>	
	LOCATION: SHL: 1148' FSL & 1182' FEL BHL: 993' FSL & 750' FEL SEC <u>7</u> TWP <u>7S</u> RGE <u>93W</u>	ELEVATIONS: KB 7943 FT DF GL 7917 FT	7 7S 93W RU 44-7 PAD NABORS 576
	DATE <u>21-Apr-2015</u>		