



FILE NO: CH096691	COMPANY WELL FIELD COUNTY	WPX ENERGY YOUBERG RU 533_7 RULISON GARFIELD	STATE COLORADO
API NO: 05045225190000			

Ver. 4.01 7 7S 93W RU 44-7 PAD NABORS 576	LOCATION: SHL: 1132' FSL & 1193' FEL BHL: 1685' FSL & 2288' FEL SEC 7 TWP 7 RGE 93W	OTHER SERVICES BOND LOG
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PERMANENT DATUM LOG MEASURED FROM DRILL. MEAS. FROM	GL KB KB KB	ELEVATION 7917 FT 26 FT ABOVE P.D.
		ELEVATIONS: KB 7943 FT DF GL 7917 FT

DATE	02-JUL-2015
RUN	1
SERVICE ORDER	US096691
DEPTH DRILLER	10071 FT
DEPTH LOGGER	10004 FT
BOTTOM LOGGED INTERVAL	9994 FT
TOP LOGGED INTERVAL	6030 FT
TIME STARTED	12:00
TIME FINISHED	17:30
OPERATOR RIG TIME	5.5 HOURS
TYPE OF FLUID IN HOLE	WATER
FLUID DENSITY	NA
FLUID SALINITY	NA
FLUID LEVEL	86 FT
LOGGED CEMENT TOP	SEE LOG
WELLHEAD PRESSURE	0 PSI
MAXIMUM HOLE DEVIATION	NA
NOMINAL LOGGING SPEED	10 FMIN
MAX. RECORDED TEMP.	253 DEGF
REFERENCE LOG	BAKER HUGHES BOND LOG
REFERENCE LOG DATE	02-JUL-2015
EQUIP. NO.	6670
LOCATION	GRAND JCT.
RECORDED BY	P. EDWARDS
WITNESSED BY	B. O'DELL

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	1313 FT
8.75 IN	1313 FT	10091 FT

CASING RECORD				
SIZE	WEIGHT	GRADE	FROM	TO
9.625 IN			26 FT	1313 FT
4.5 IN	11.6 LB/F	P-110	26 FT	10091 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 2/JUL/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.

Logged in PNC-3D mode.

The amount of linear shift is -5

Logged with zero PSI at wellhead.

BHT = 253 degF

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	10274382	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: Thu Jul 2 17:12:56 2015

PARAMETER AND FILTER SUMMARY REPORT

FILE: /dat1a/CH096691/n354h02.prm
LOGGING MODE: DEPTH DIRECTION: UP
TOP DEPTH: 6013.750 ft BOTTOM DEPTH: 10019.500 ft

SYMMETRIC FILTER

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
GR	FILTER (1)	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	Jul 2 13:03:03 2015	CASING COLLAR LOCATOR
F1:GR	Jul 2 13:03:03 2015	GAMMA RAY
F1:ISS	Jul 2 13:03:03 2015	INELASTIC SHORT SPACE COUNT RATE
F1:LS	Jul 2 13:03:03 2015	LONG SPACE COUNT RATE
F1:RATO	Jul 2 13:03:03 2015	SHORT/LONG SPACE COUNT RATE RATIO
F1:RICS	Jul 2 13:03:03 2015	SHORT SPACE INELASTIC TO CAPTURE COUNT RATE RATIO (ISS/CSS)
F1:SGFC	Jul 2 13:03:03 2015	CORRECTED FORMATION SIGMA
F1:SS	Jul 2 13:03:03 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/CH096691/RPM_MAIN.fvpdf [5"/100' Scale]
Plot Interval : 6030 - 10009 Feet

Data File 1 : F1 : HL6670:/dat1a/CH096691/n354h02MAIN_533.xtf
Created On : Jul 2 13:03:03 2015
Company : WPX ENERGY
Well : YOUNBERG RU 533_7
Field : RULISON
File Interval : 30.5 - 10019.5 Feet
OCT : n354h

GR BACKUP

ISS [iss]

(1)

GAMMA RAY [gr]

(gAPI)

FEET

CCL
(mV)

6100

LS [ls]

(1)

SS [ss]

(1)

RATO [rato]

(1)

RICS [rics]

(1)

SGFC [sgfc]

(1)

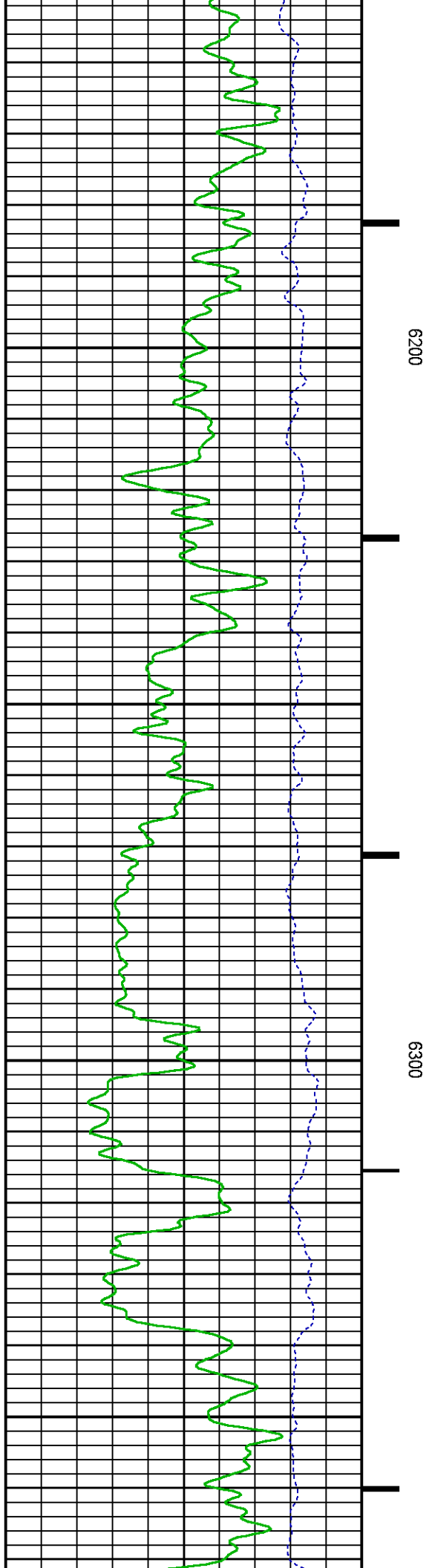
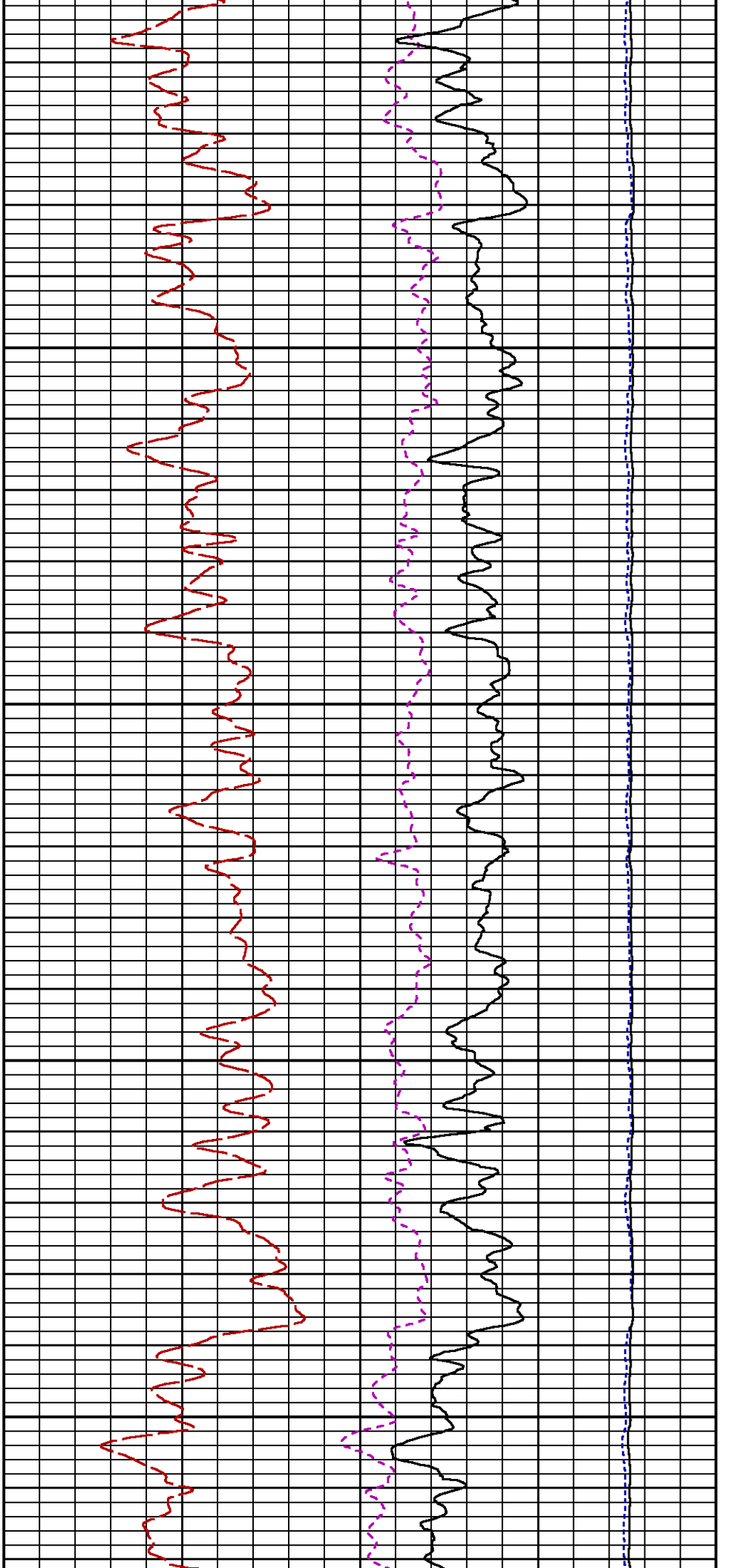
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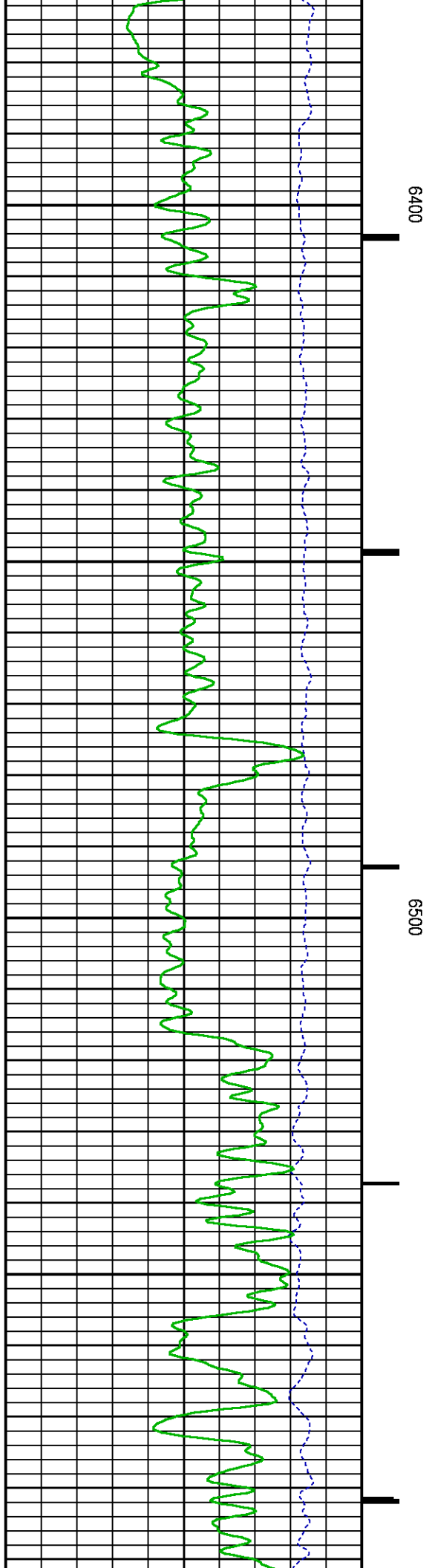
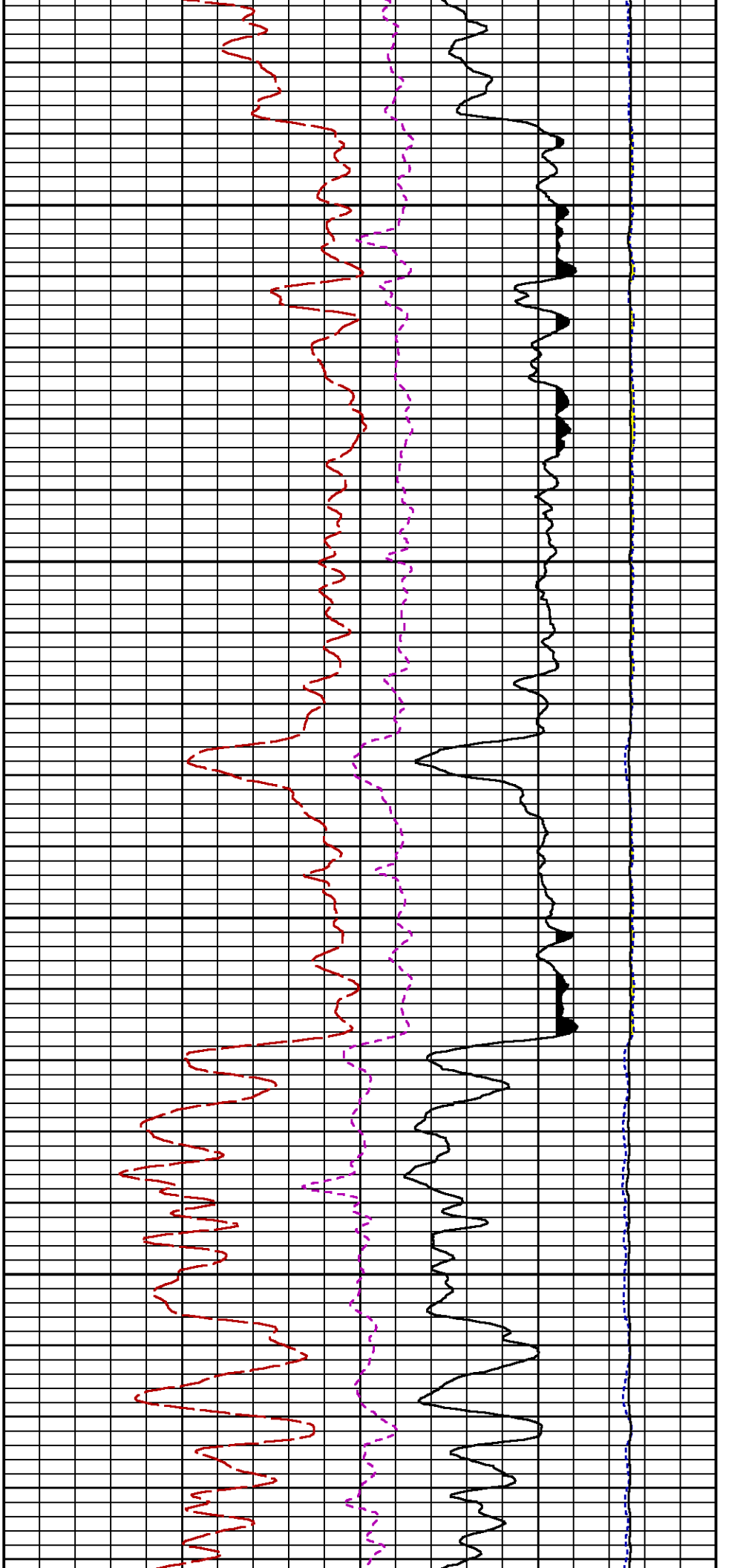
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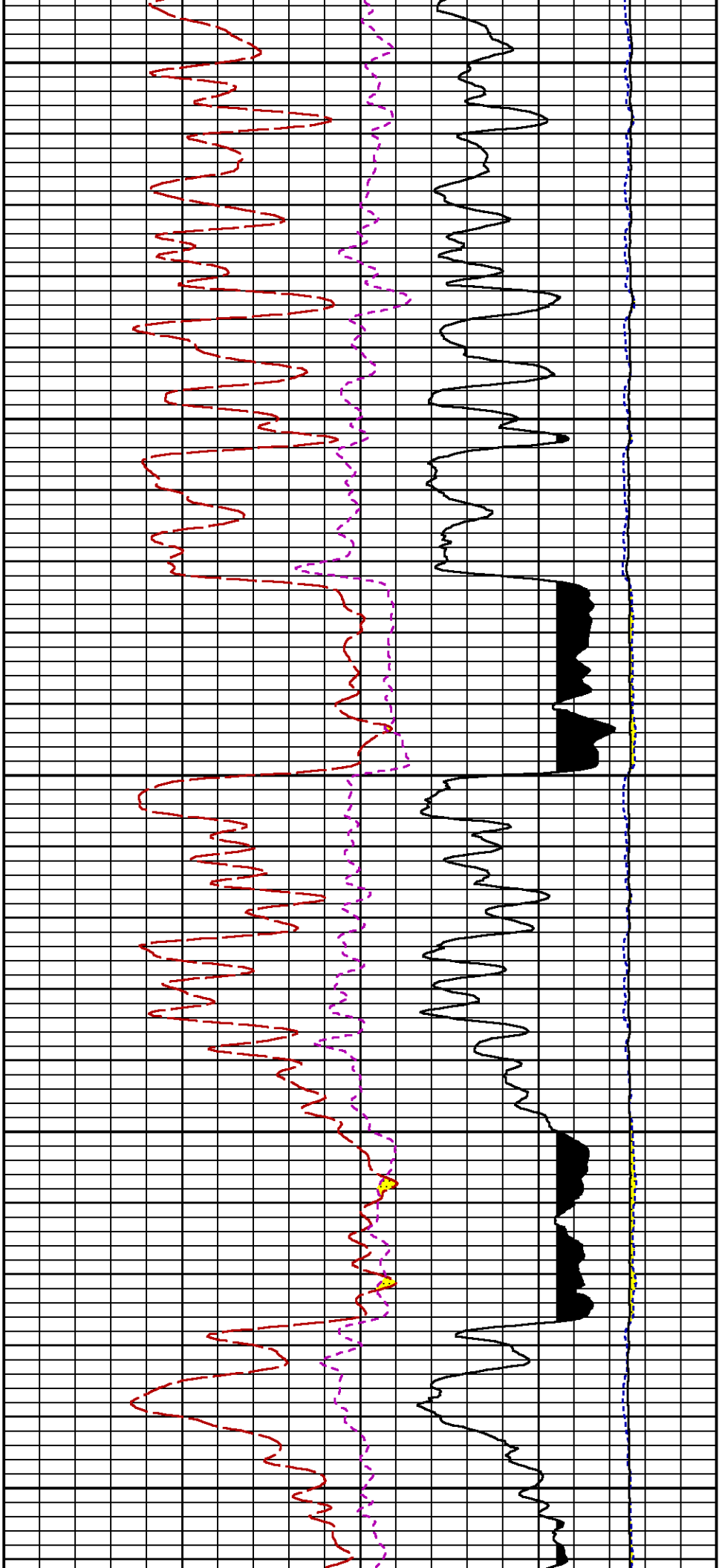
RATO

RICS

SGFC



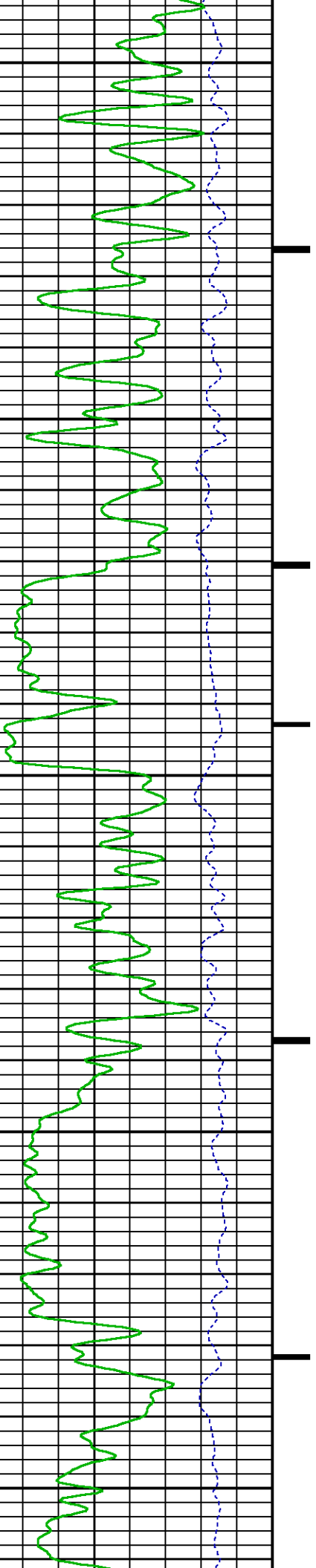


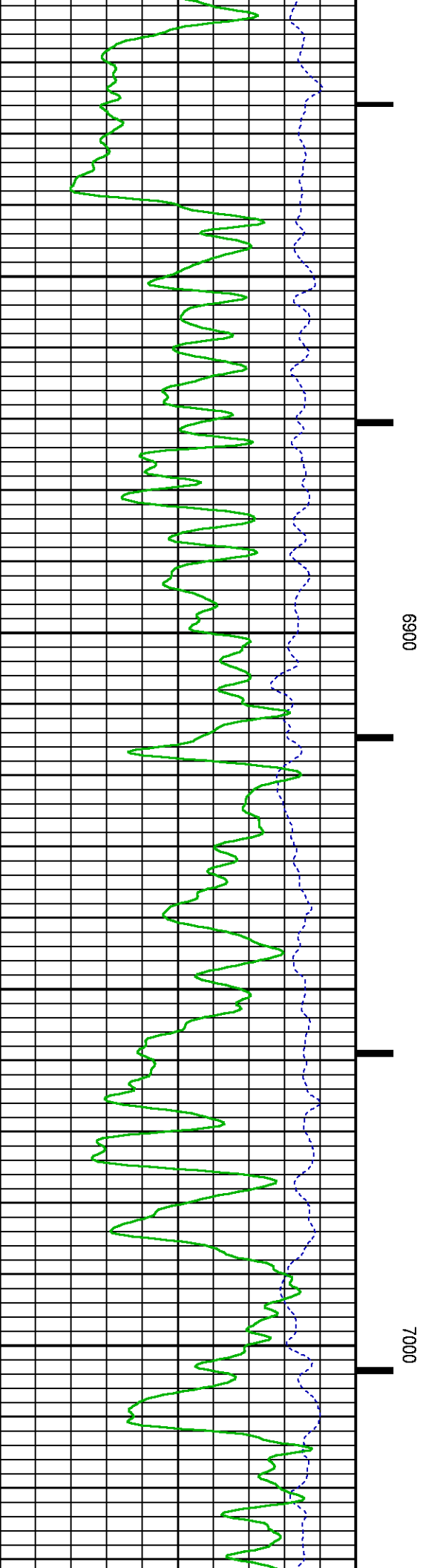
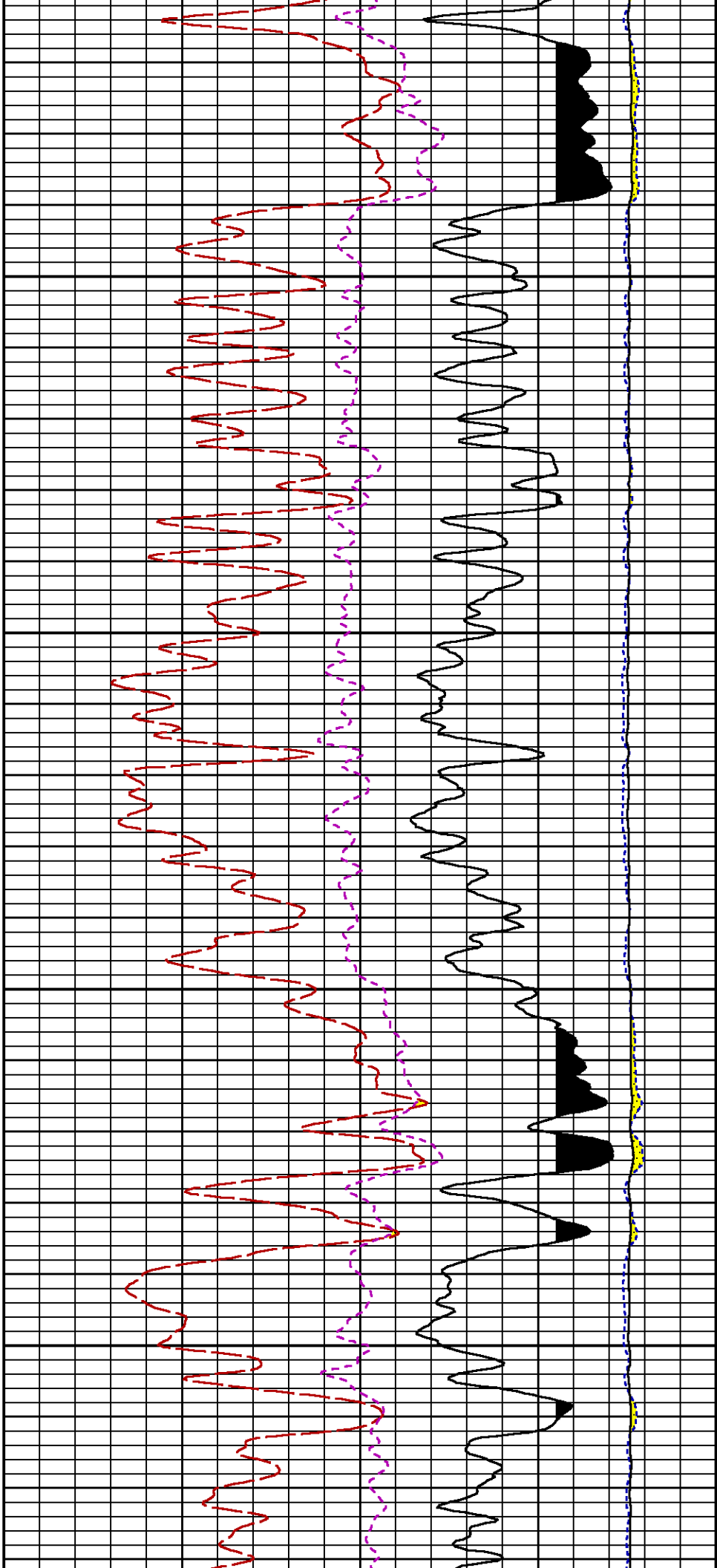


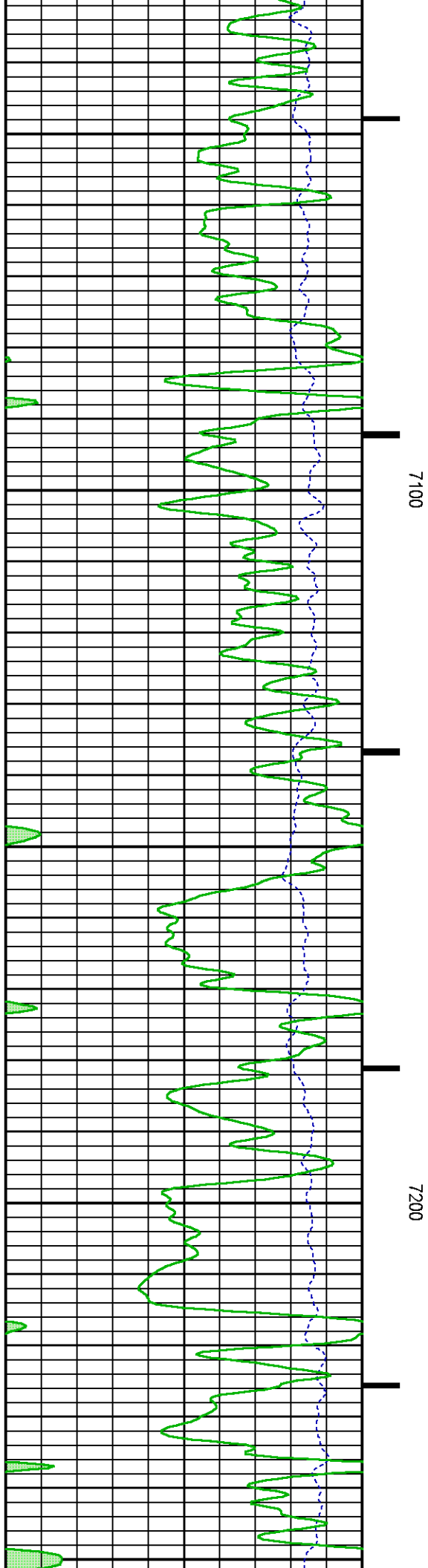
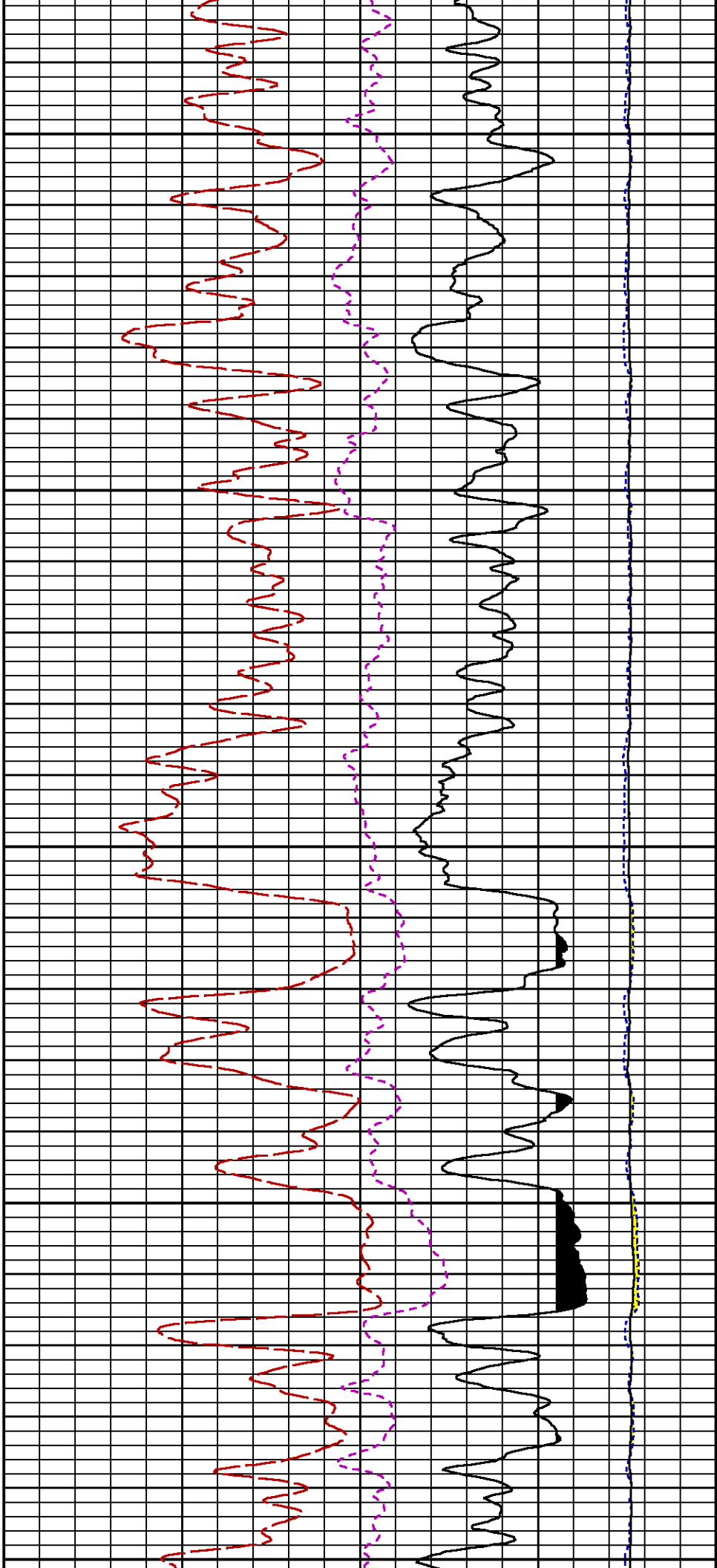
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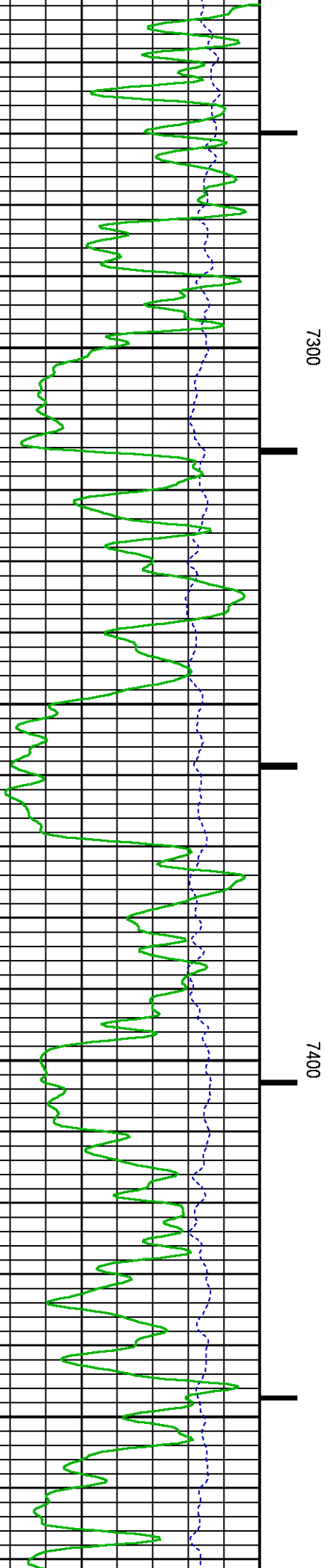
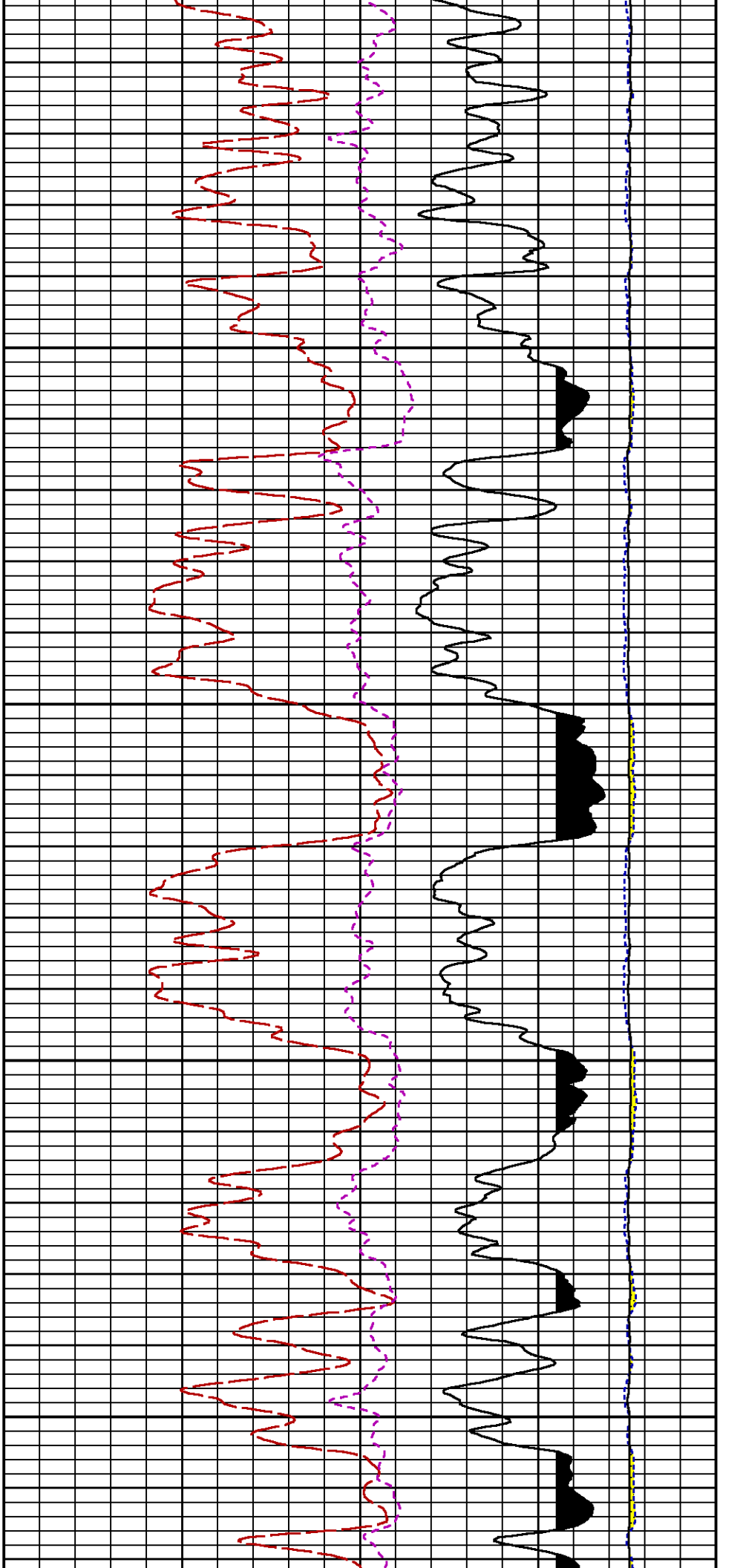
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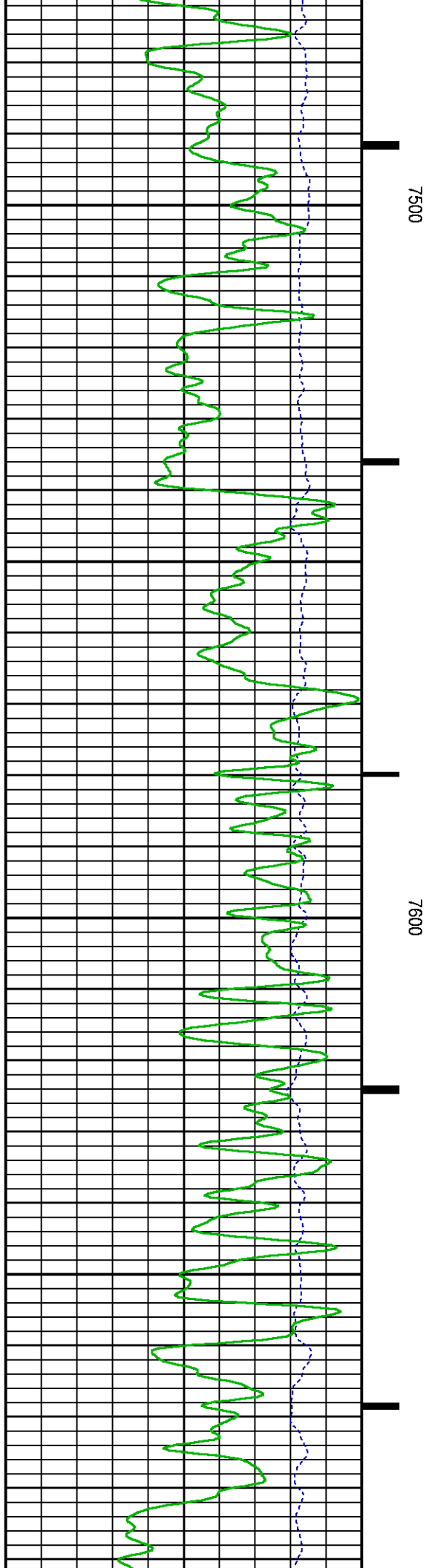
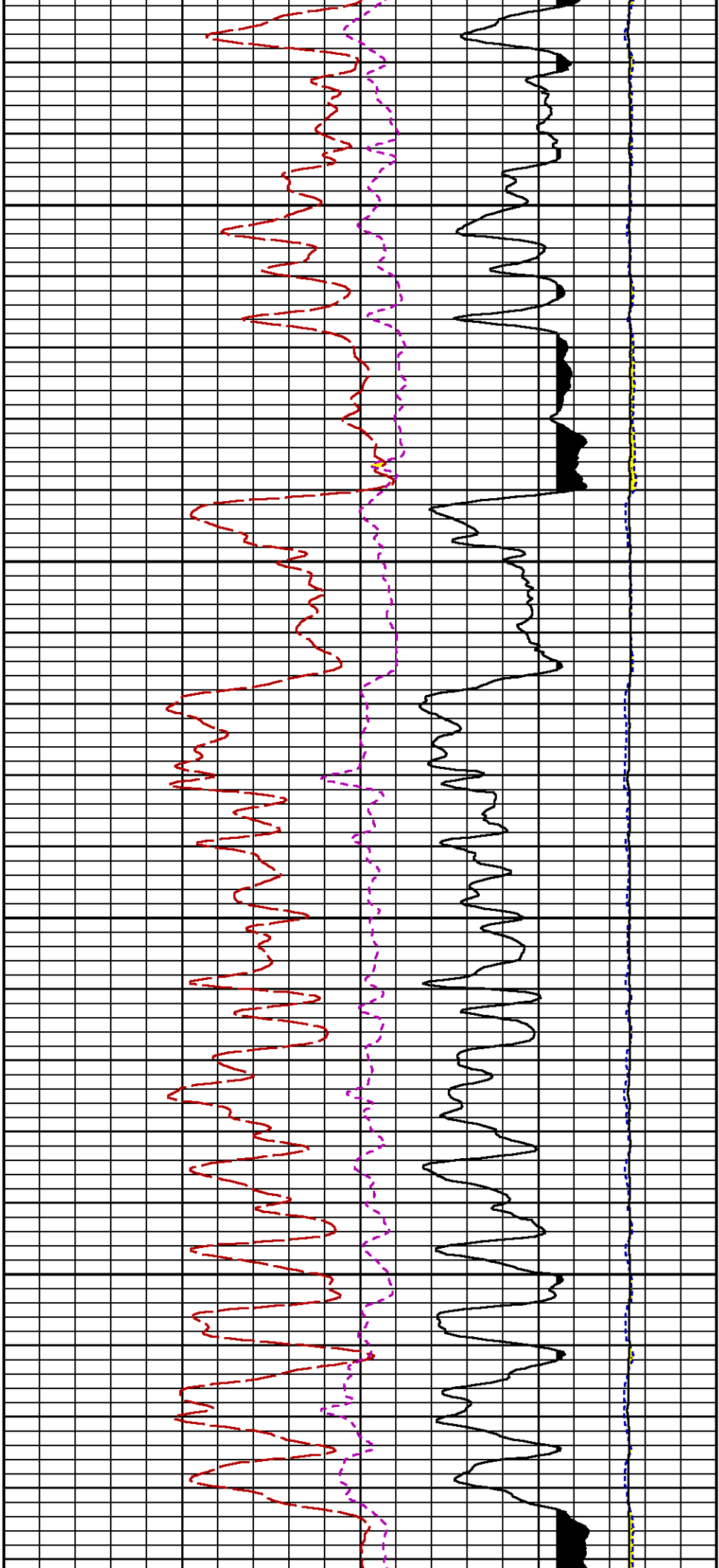
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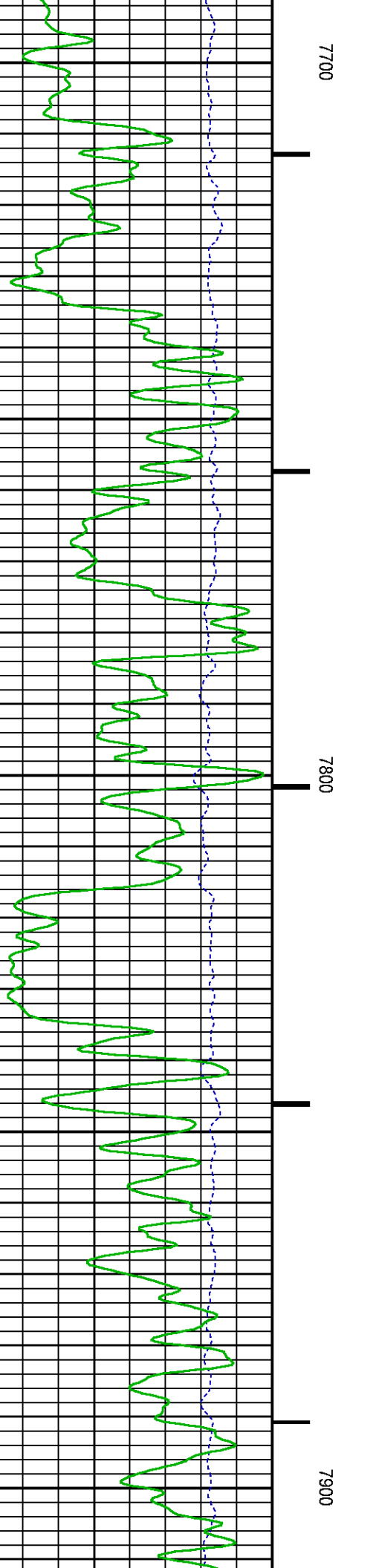
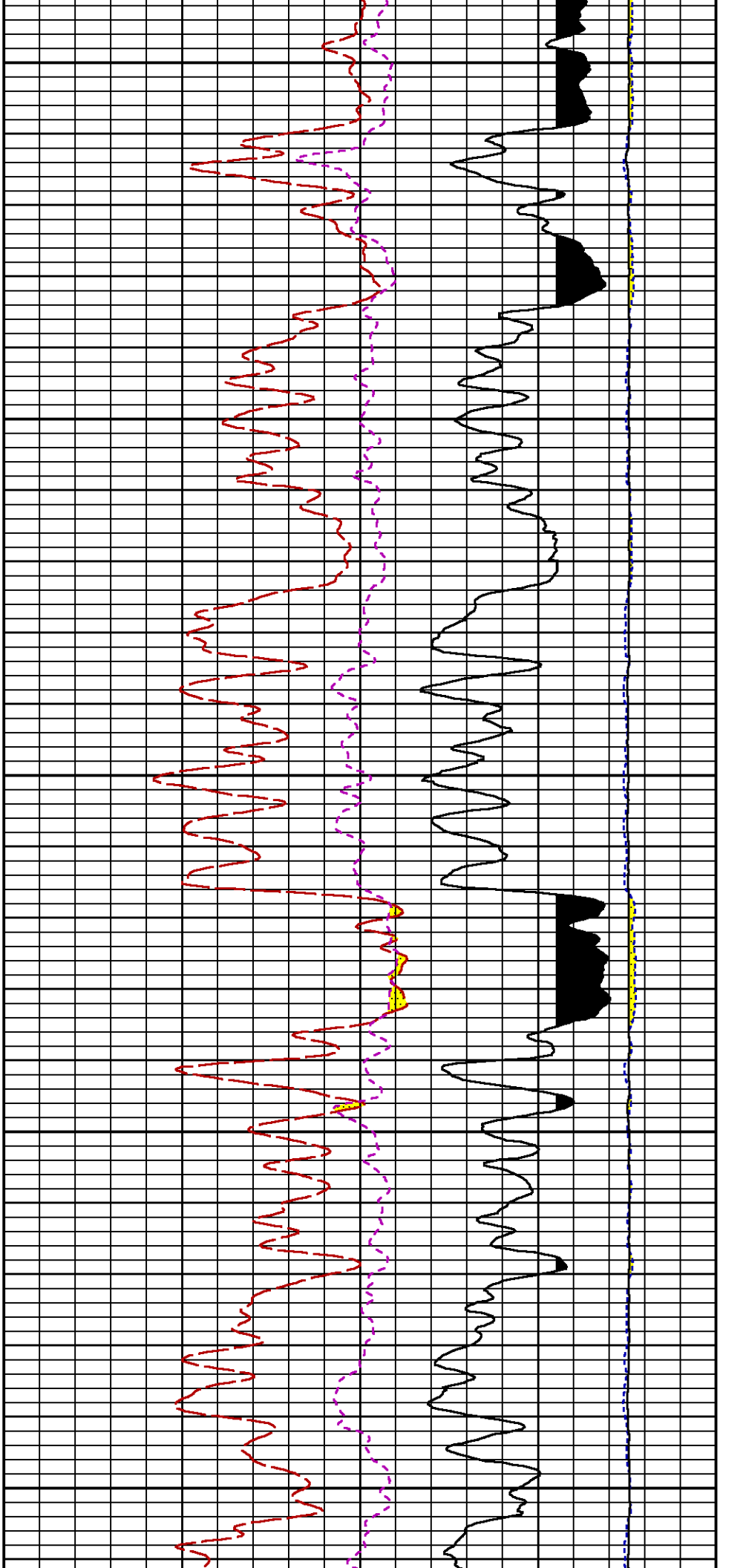


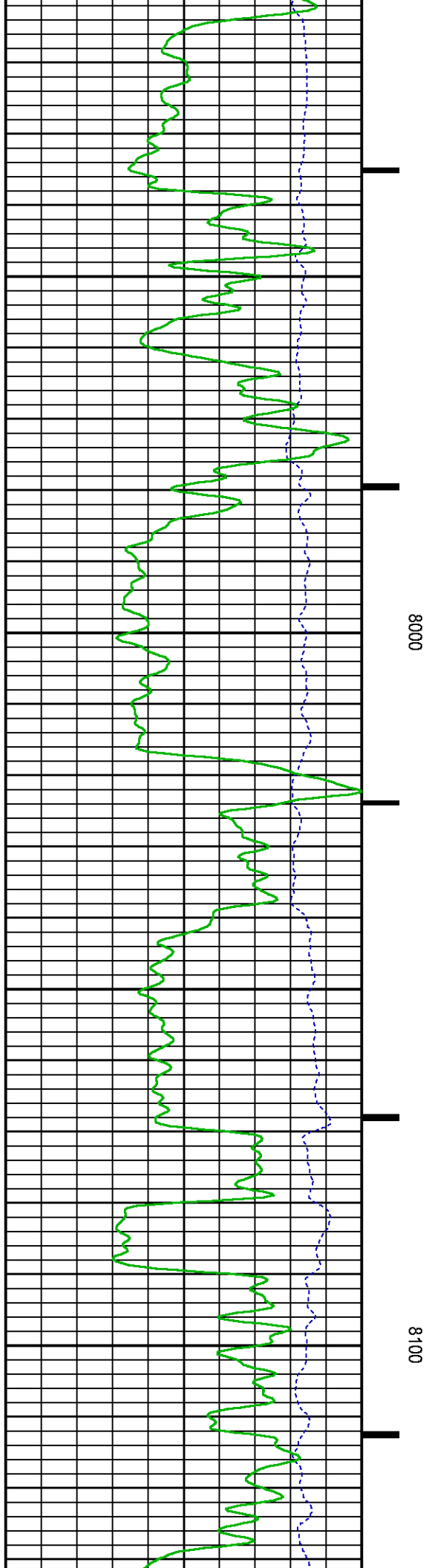
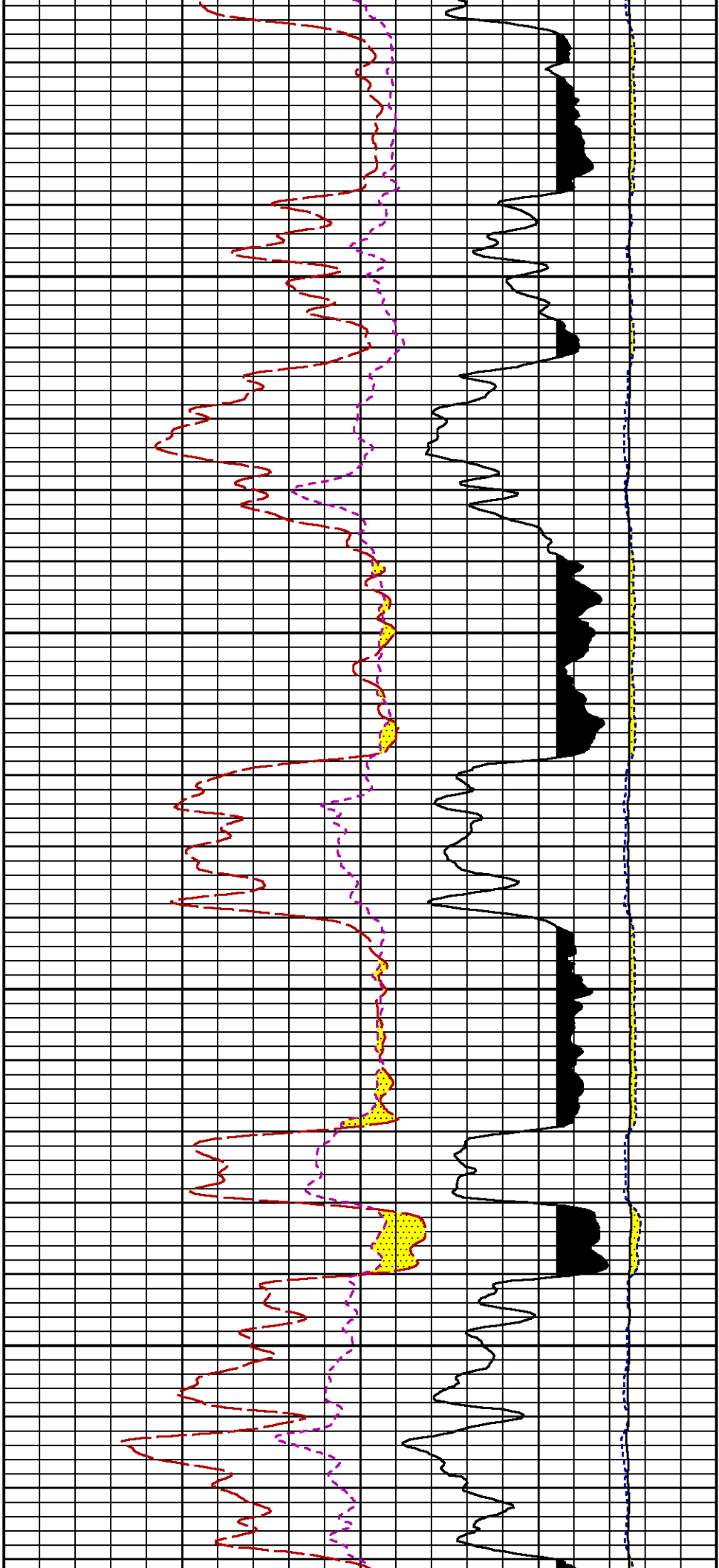


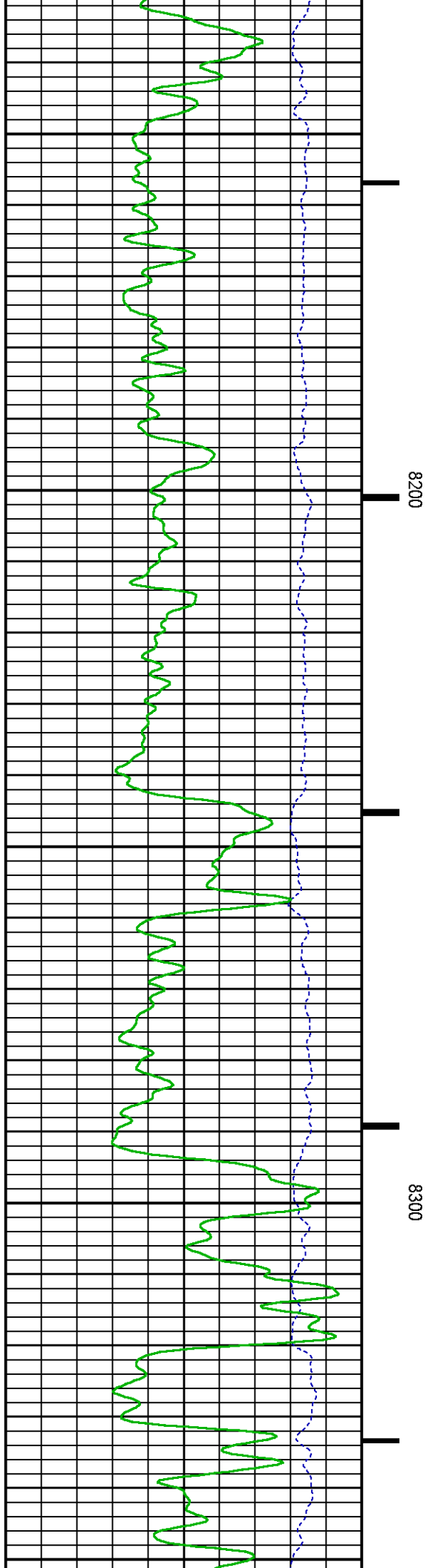
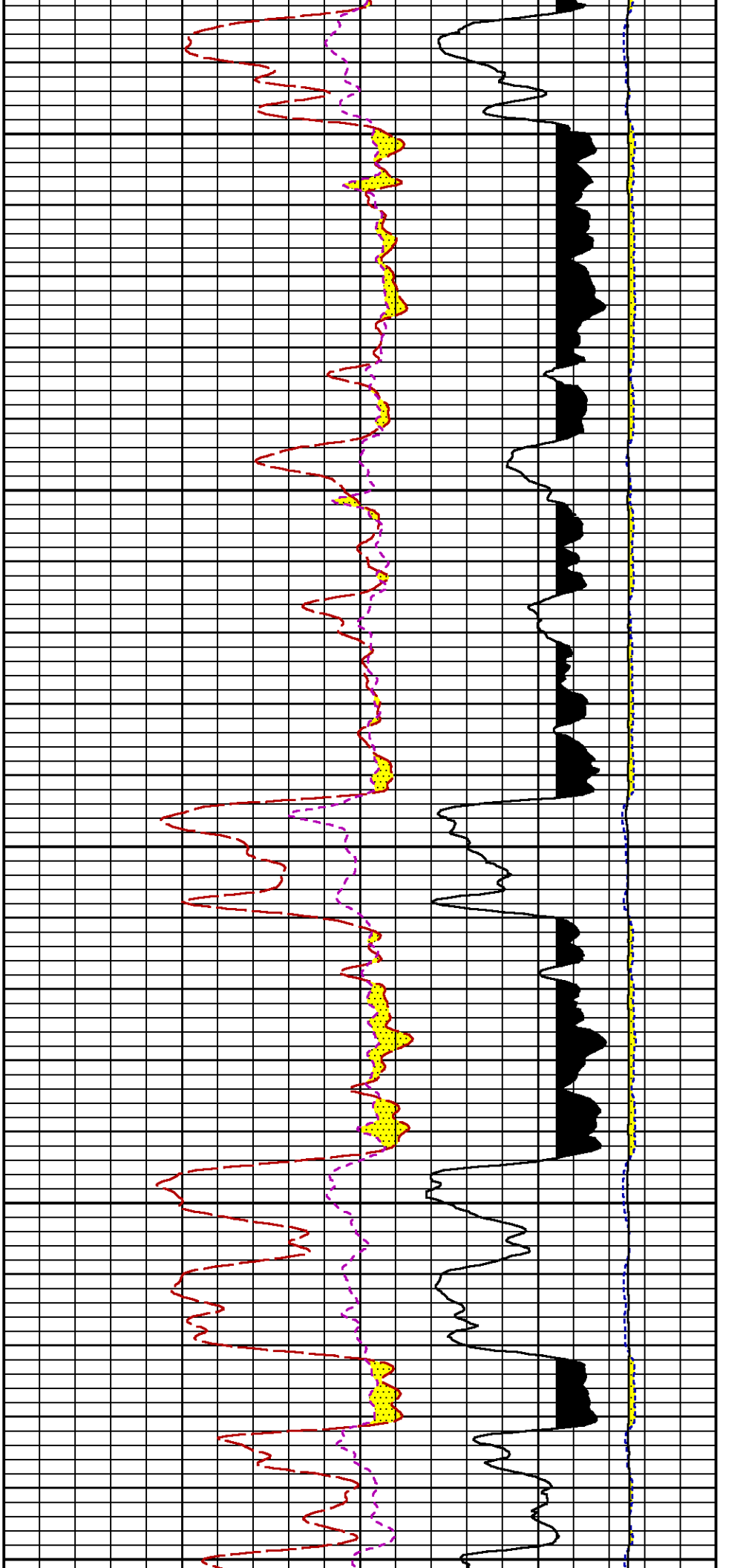


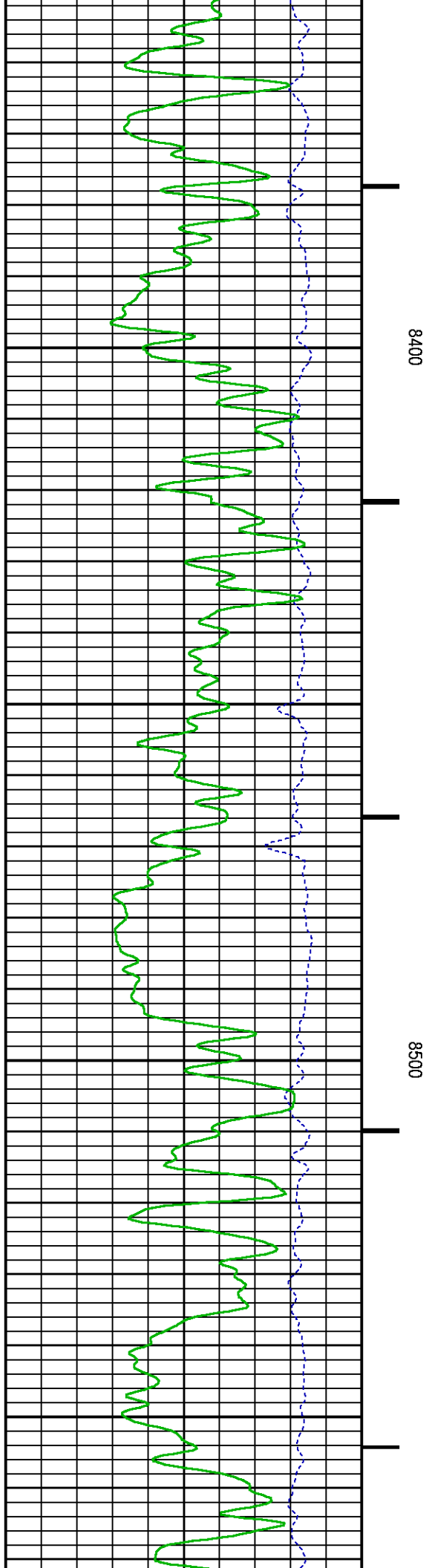
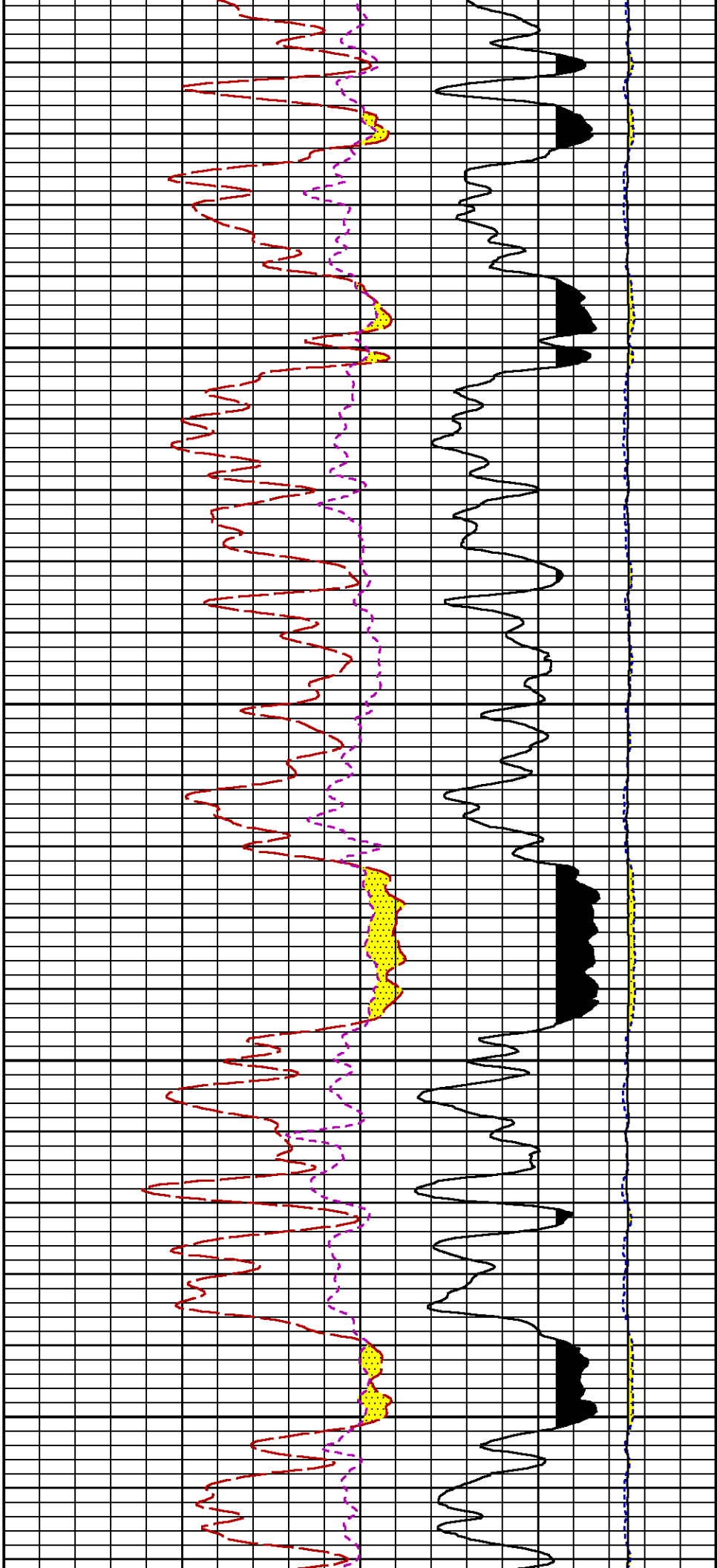


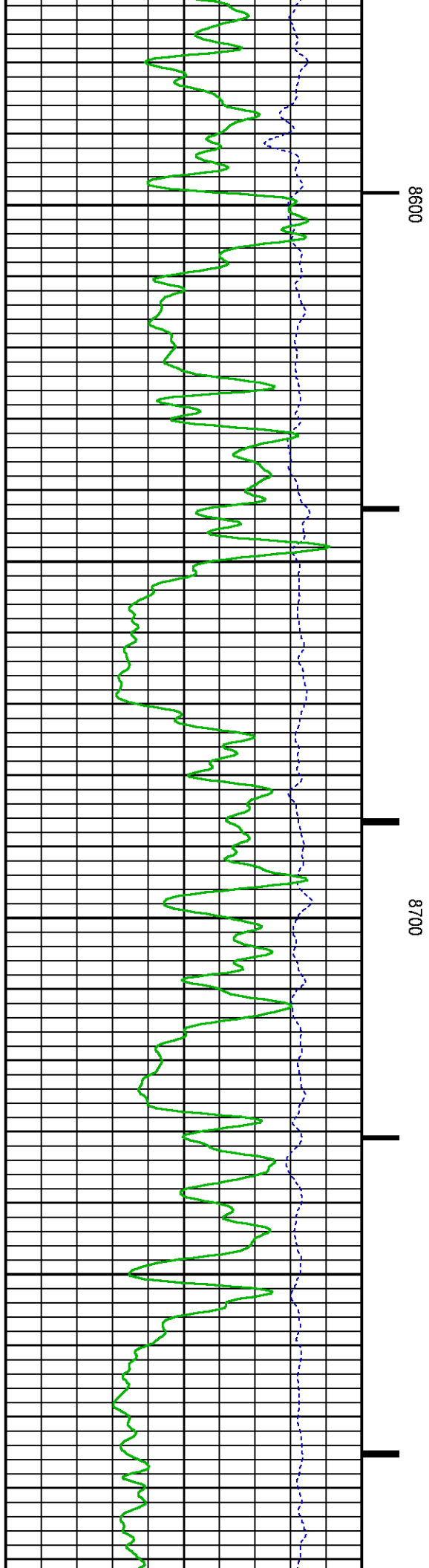
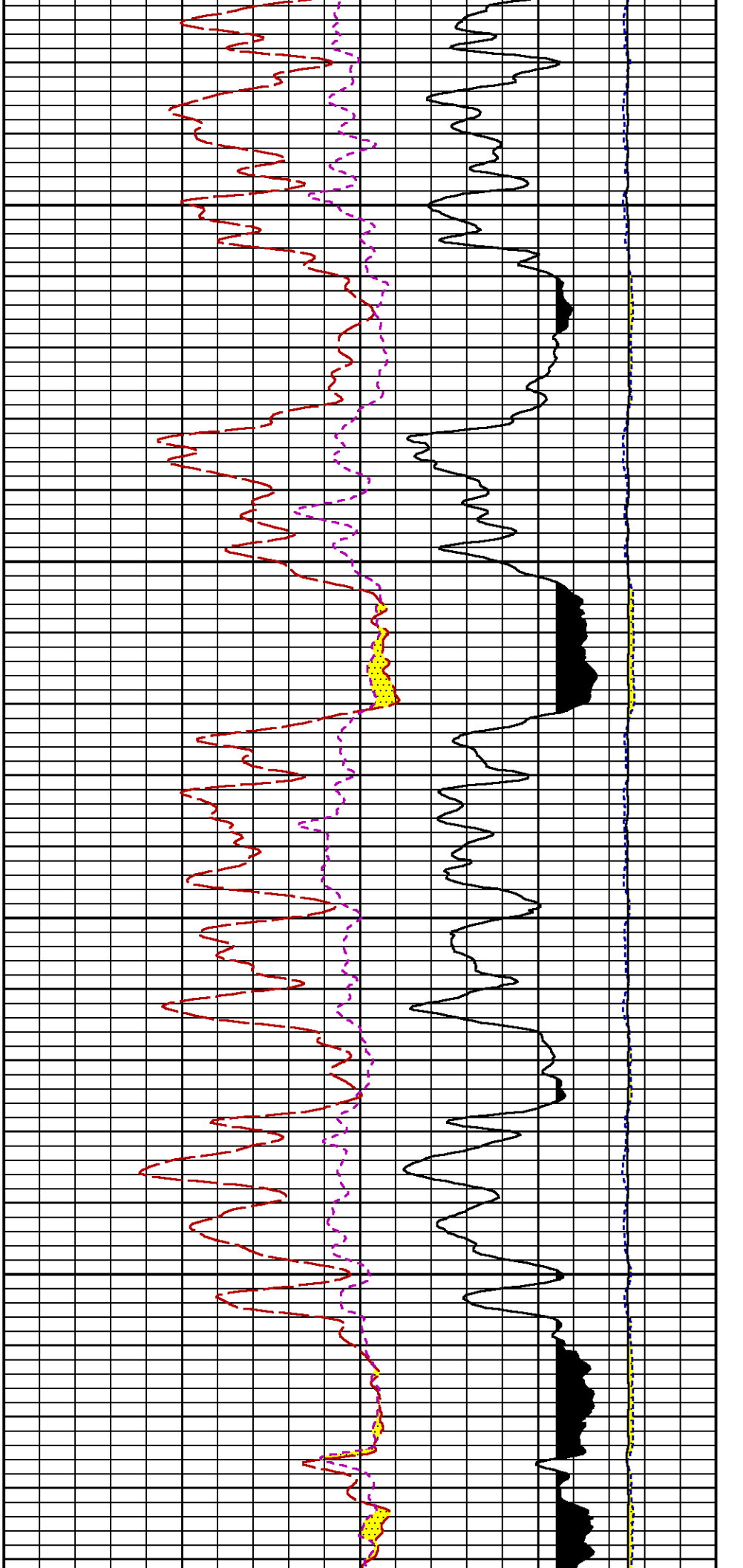


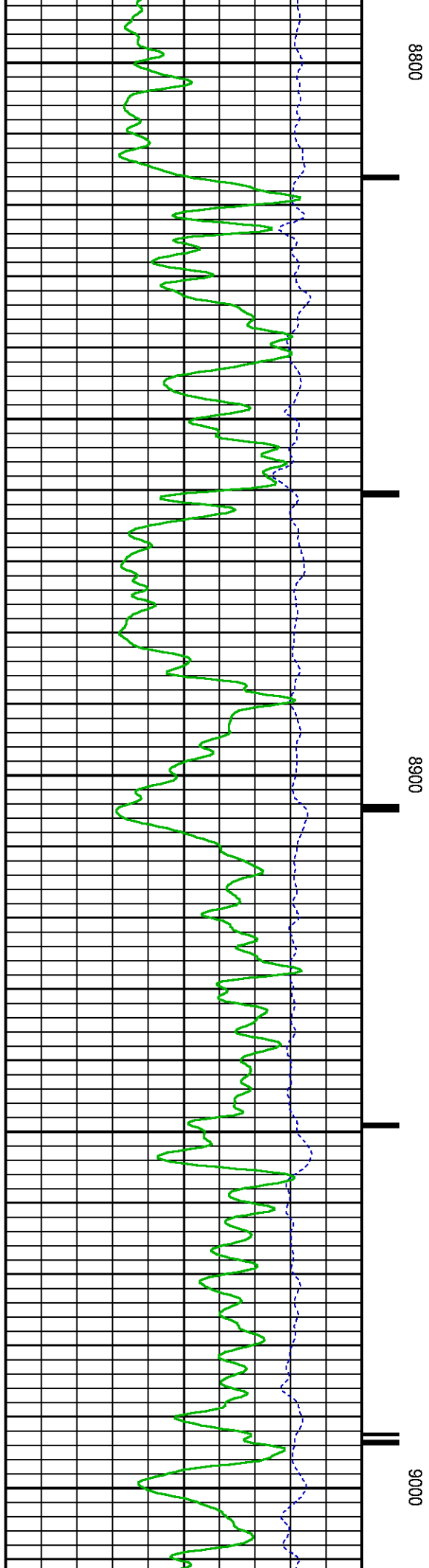
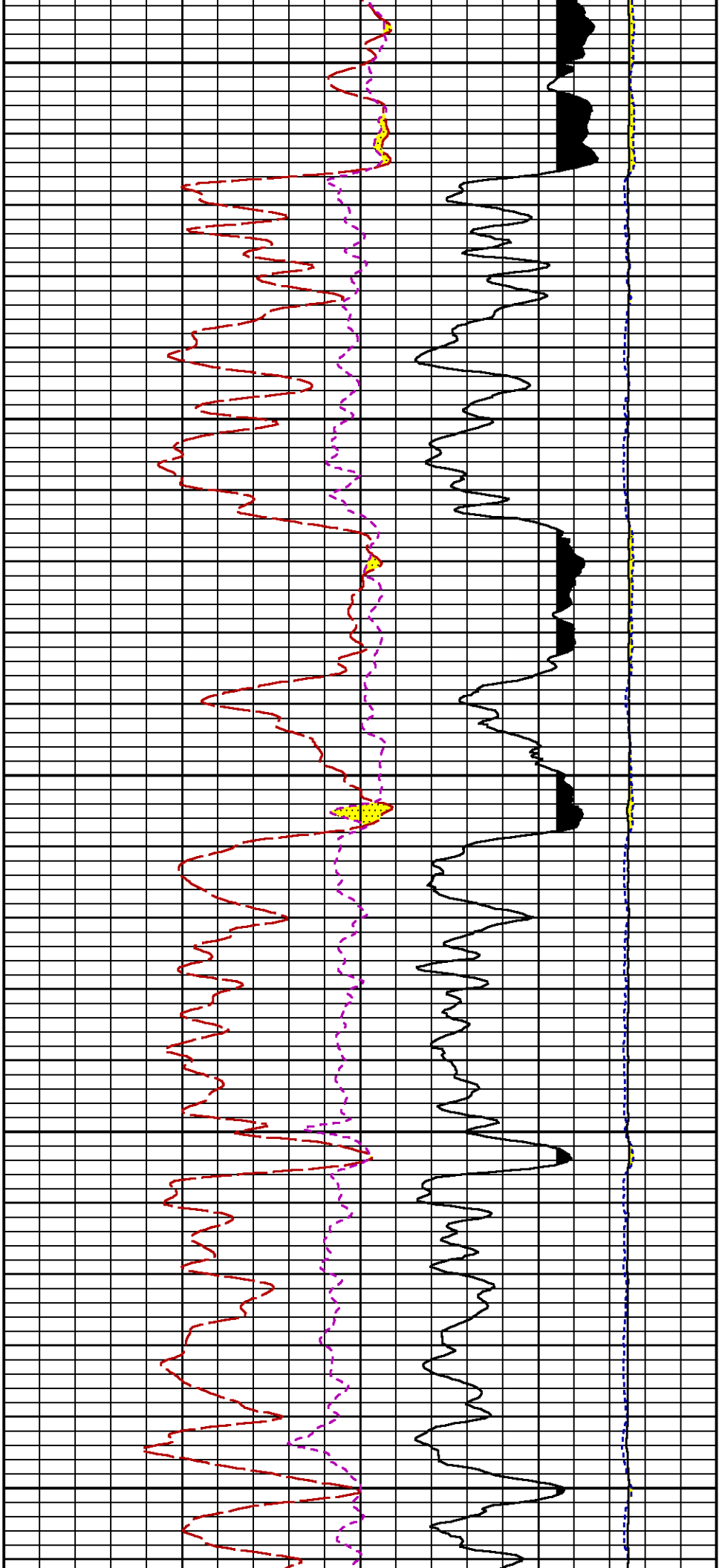


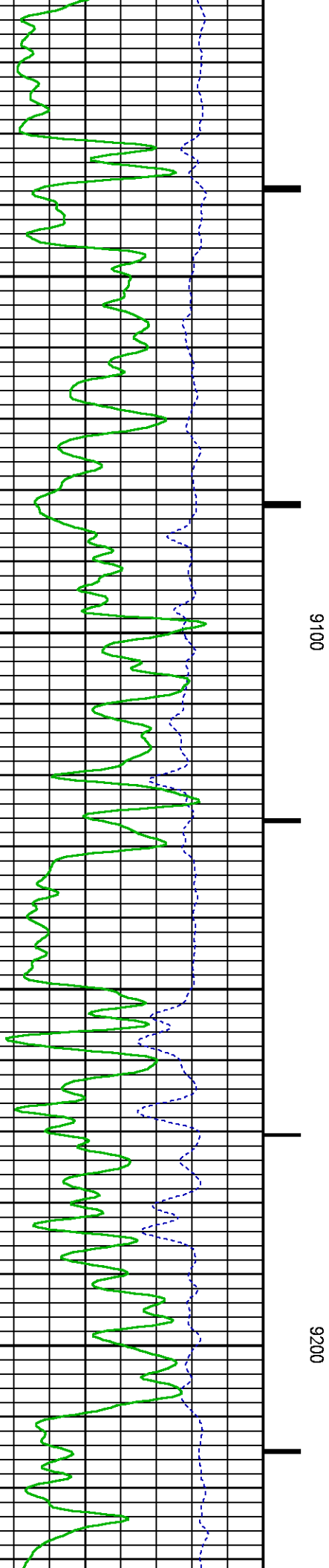
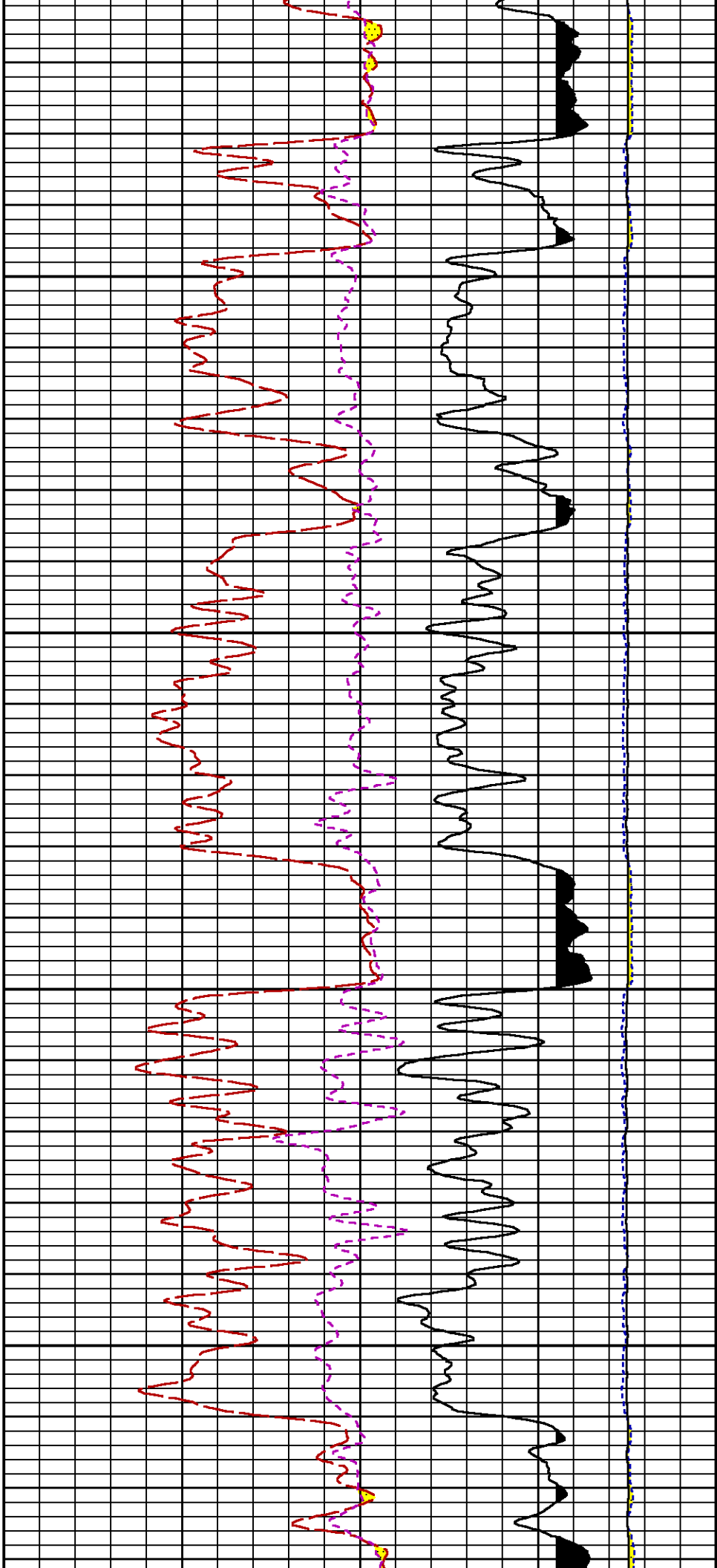


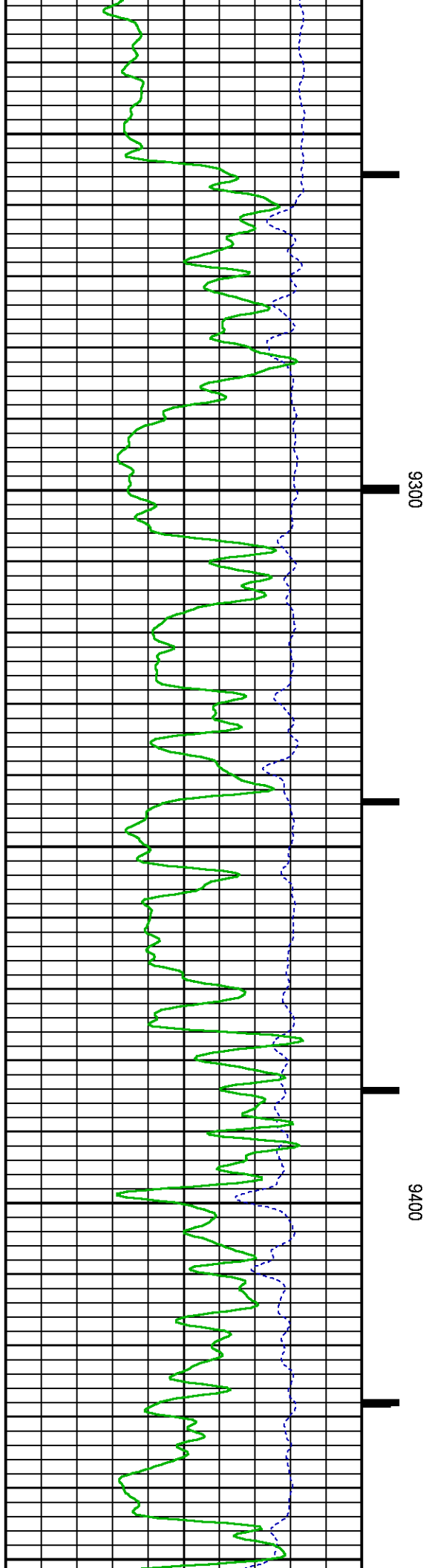
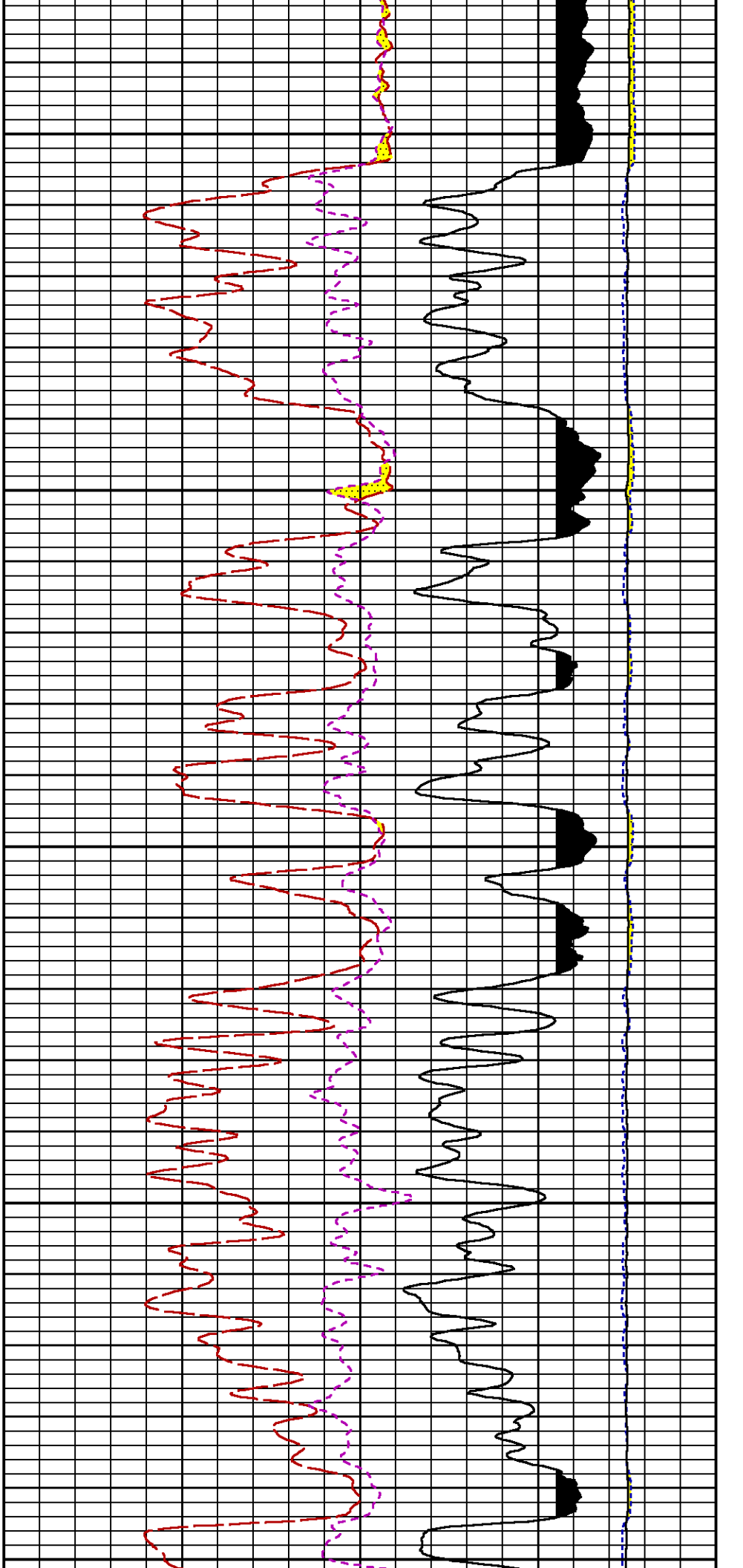


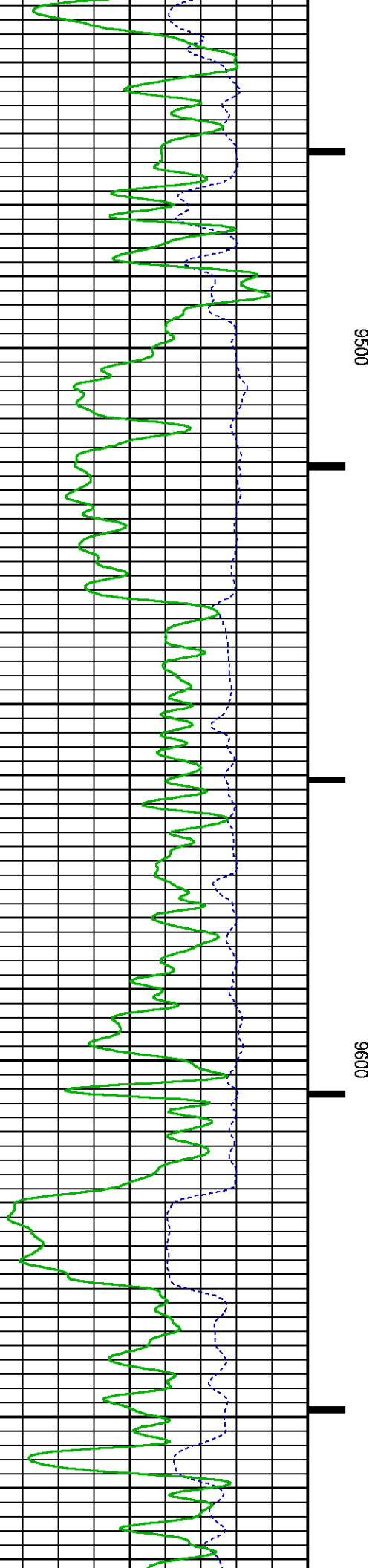
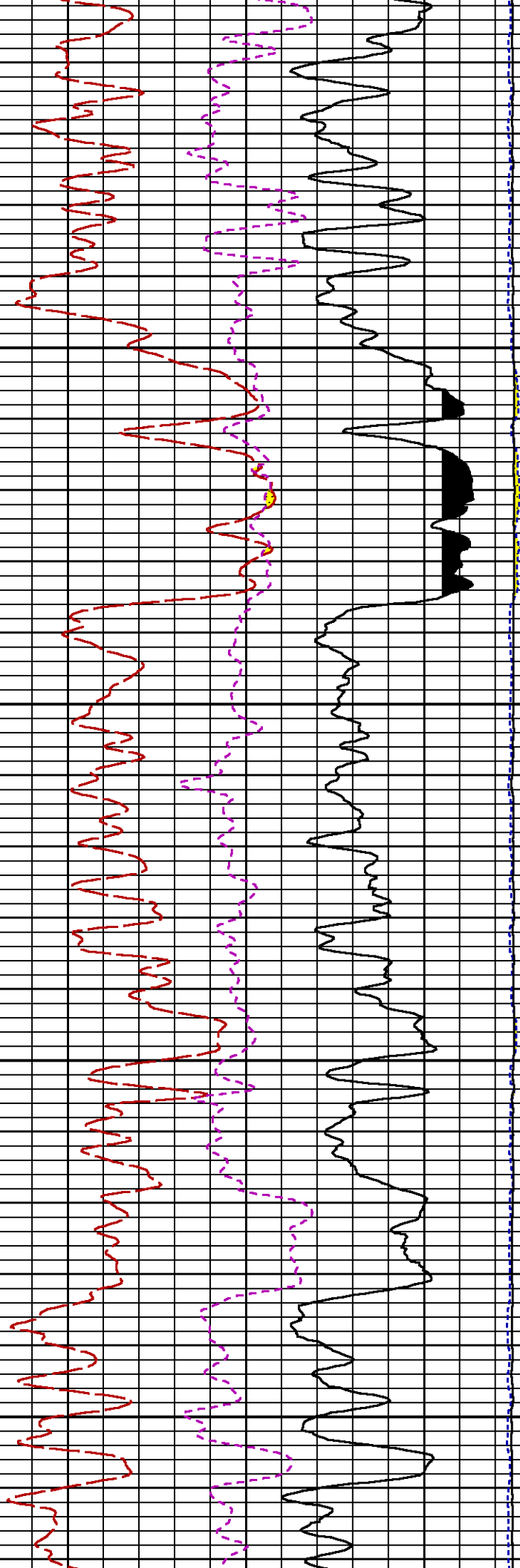


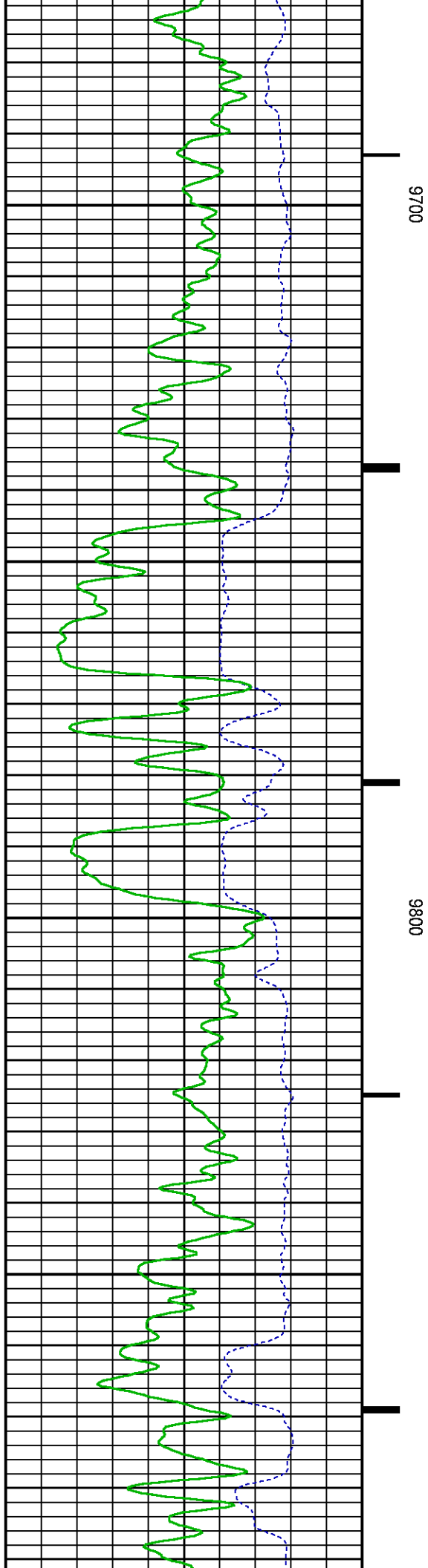
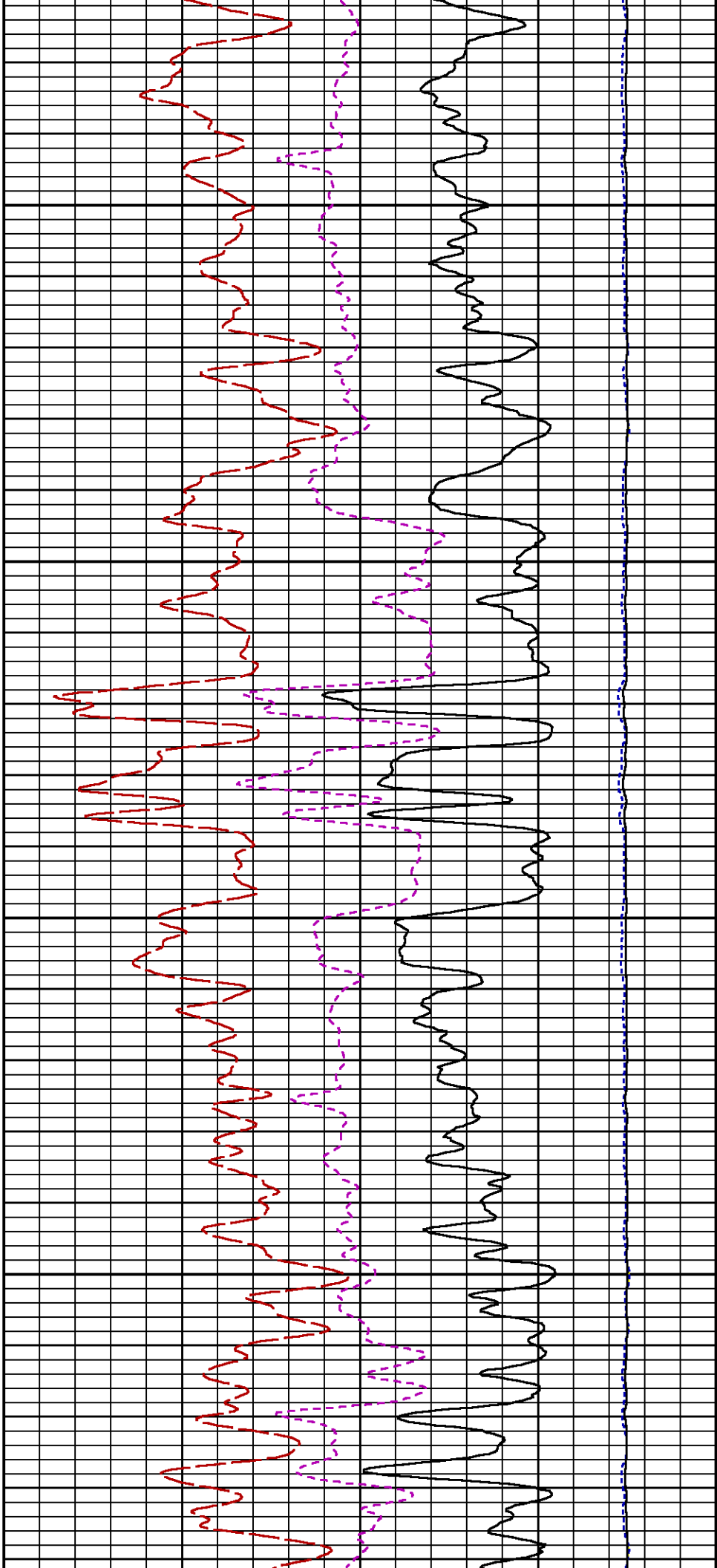


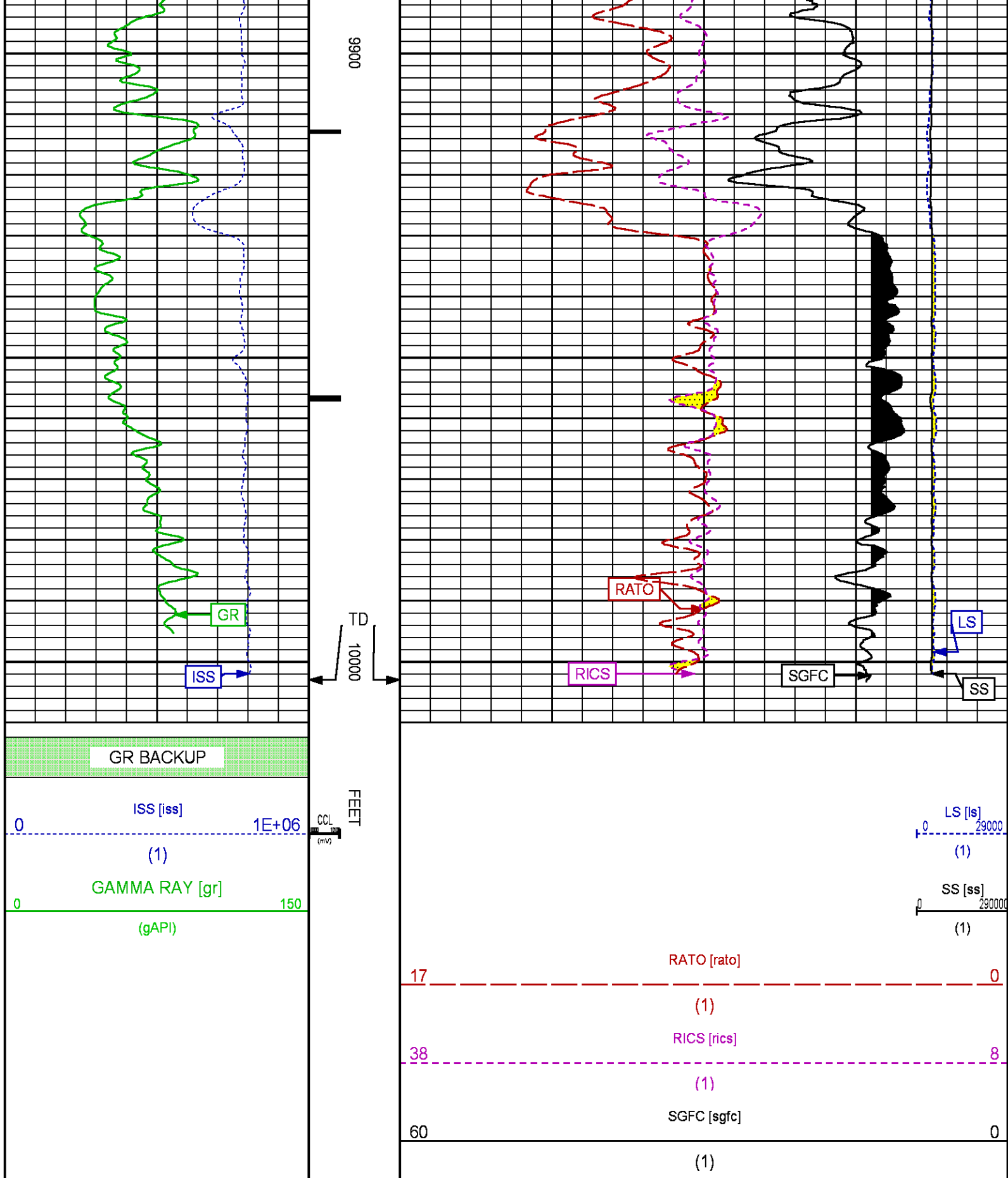












REPEAT SECTION PNC-3D MODE

Plotted: Thu Jul 2 14:22:30 2015

PARAMETER AND FILTER SUMMARY REPORT

FILE: /dat1a/CH096691/n354h01.prm
LOGGING MODE: DEPTH DIRECTION: UP
TOP DEPTH: 9253.250 ft BOTTOM DEPTH: 9534.000 ft

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

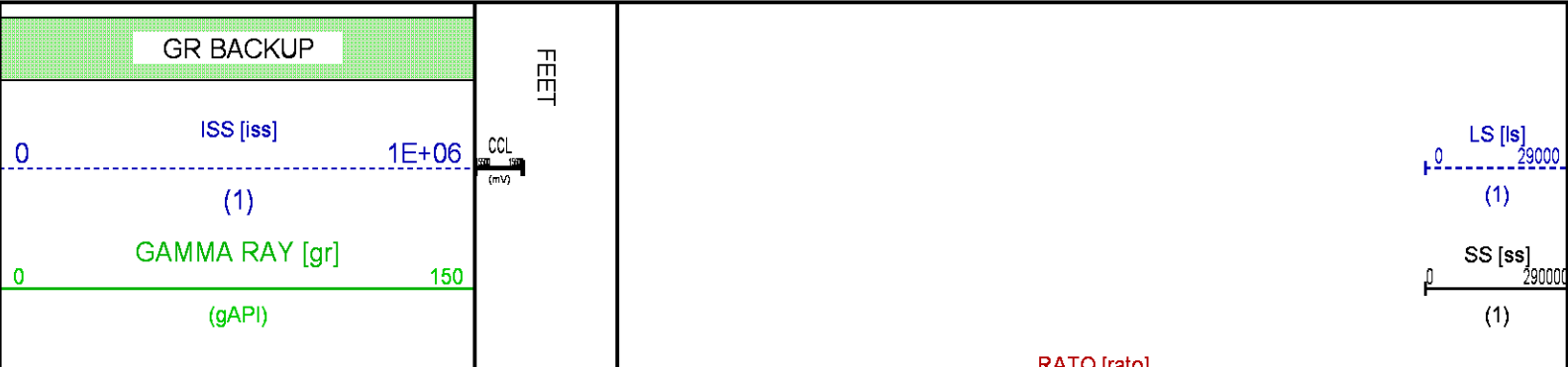
RPM PROCESSING				
MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)
PNC Parameters	BOREHOLE CONTENTS	FLUID		TOP BOTTOM
	OPEN/CASED HOLE	CASED HOLE		" "
	BOREHOLE SIZE	8.75	in	" "
	CASING SIZE	4.50	in	" "
	MATRIX	SANDSTONE		" "
	CORRECTION BUFFER	11		" "

CURVE DESCRIPTION REPORT		
CURVE NAME	CREATION DATE	CURVE DESCRIPTION
F1:CCL	Jul 2 12:36:32 2015	CASING COLLAR LOCATOR
F1:GR	Jul 2 12:36:32 2015	GAMMA RAY
F1:ISS	Jul 2 12:36:32 2015	INELASTIC SHORT SPACE COUNT RATE
F1:LS	Jul 2 12:36:32 2015	LONG SPACE COUNT RATE
F1:RATO	Jul 2 12:36:32 2015	SHORT/LONG SPACE COUNT RATE RATIO
F1:RICS	Jul 2 12:36:32 2015	SHORT SPACE INELASTIC TO CAPTURE COUNT RATE RATIO (ISS/CSS)
F1:SGFC	Jul 2 12:36:32 2015	CORRECTED FORMATION SIGMA
F1:SS	Jul 2 12:36:32 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/CH096691/RPM_REPEAT.fvpdf [5"/100" Scale]
Plot Interval : 9250 - 9520 Feet

Data File 1 : F1 : HL6670:/dat1a/CH096691/n354h01.xtf
Created On : Jul 2 12:36:32 2015
Company : WPX ENERGY
Well : YOUNBERG RU 533_7
Field : RULISON
File Interval : 9222.5 - 9527.75 Feet
OCT : n354h



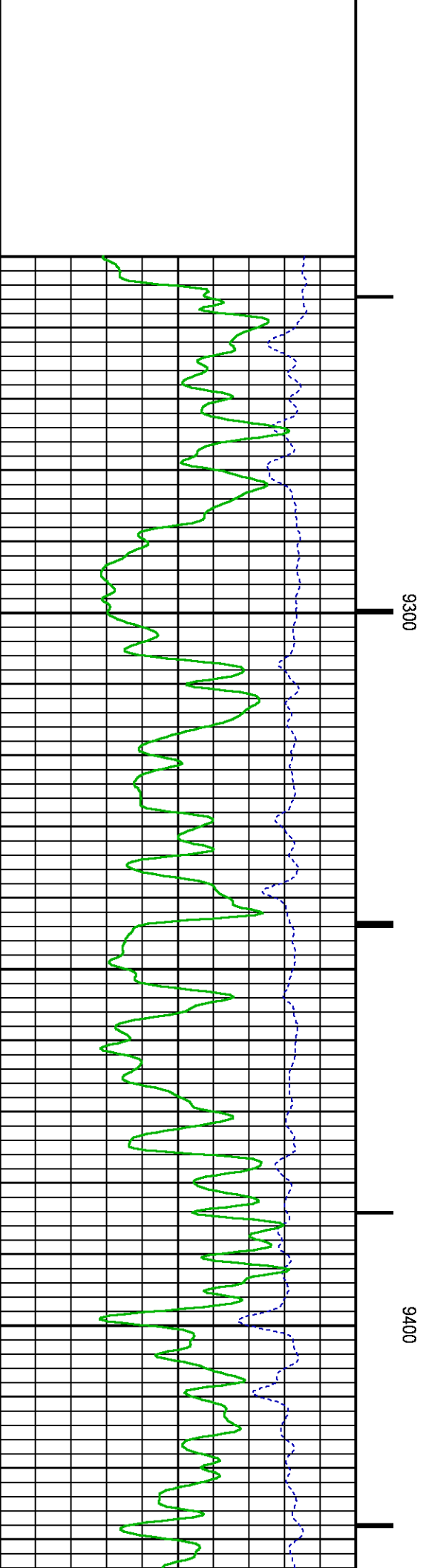
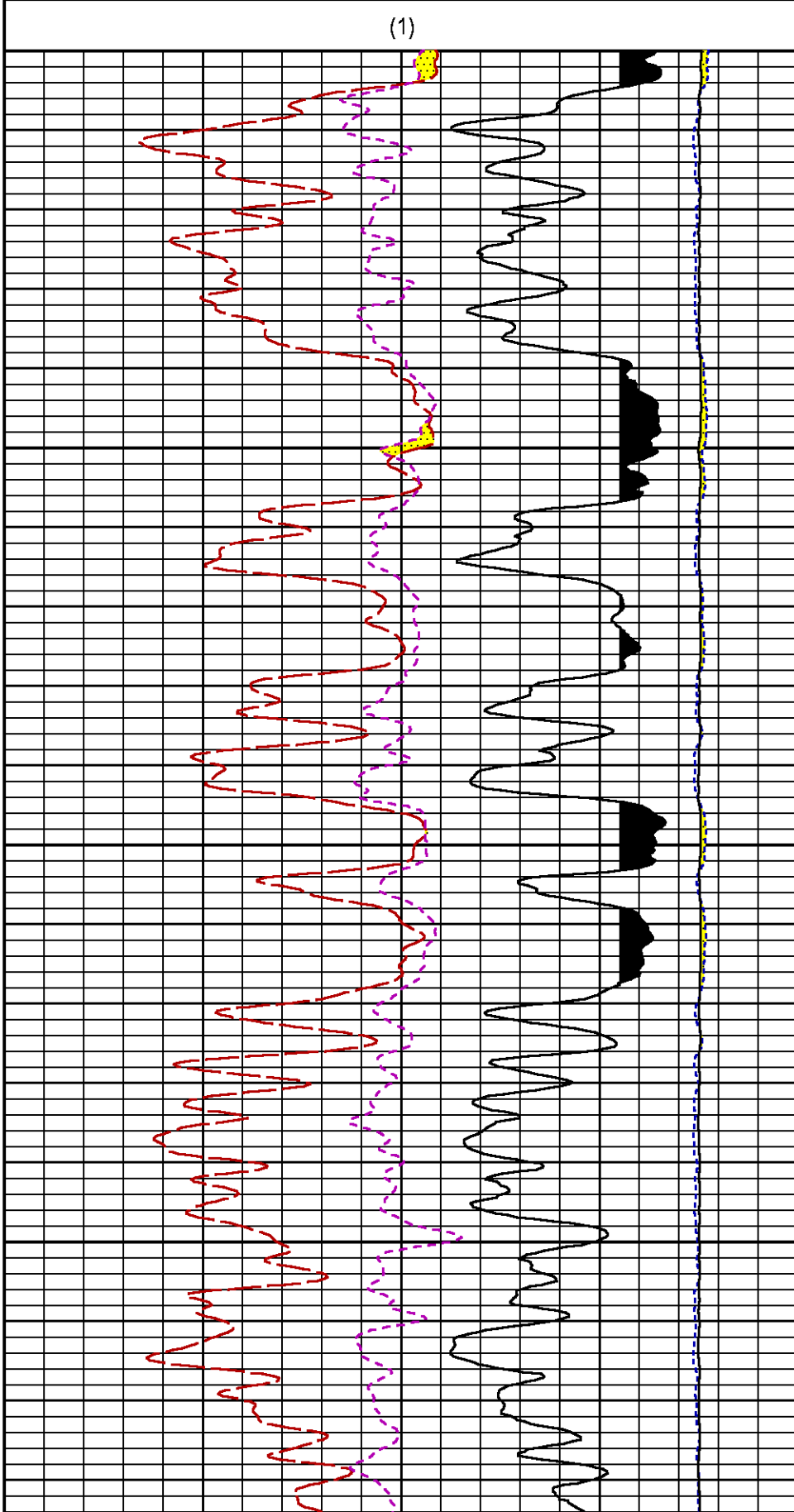
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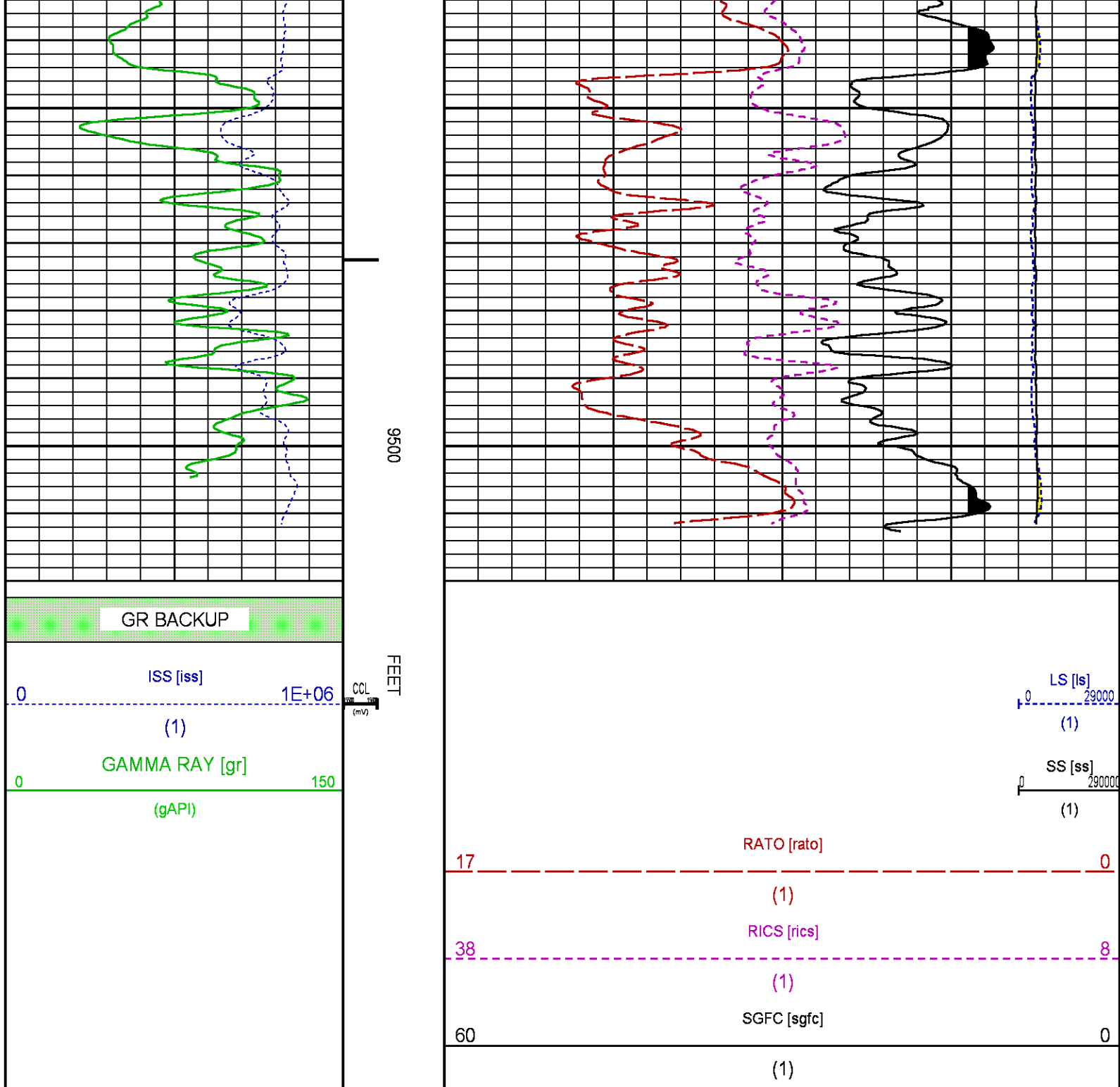
(1)

38 RICS [rics] 8

(1)

60 SGFC [sgfc] 0





CALIBRATION / VERIFICATION SUMMARY

Source File: /dat1a/CH096691/n354h.tp1

GR PRIMARY CALIBRATION SUMMARY

TOOL #: 2812LA 10274382

DATE/TIME PERFORMED: Mon Jun 29 13:50:46 2015

UNIT #: 3880TA HL6670

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 53.69 250.18 196.5 1.069 57.38 267.38 210

GR PRIMARY VERIFICATION SUMMARY

TOOL #: 2812LA 10274382

DATE/TIME PERFORMED: Mon Jun 29 13:52:57 2015

UNIT #: 3880TA HL6670

VERI JIG #: 4702NK WA-612

	BACKGROUND (cts/s)	CALBRTR ON (cts/s)	MULT	BACKGROUND (gAPI)	CALBRTR ON (gAPI)	DIFF. (gAPI)
GR	54.84	255.69	1.069	58.62	273.27	214.66
						200.00 220.00

RPM_PNC_3D PRIMARY CALIBRATION SUMMARY

TOOL: 8283PA 10414345

DATE/TIME PERFORMED: Mon Jun 29 13:21:43 2015

UNIT: 3880TA HL6670

CALIBRATOR: 2437XB 112674

SOURCE: 8281AA 10160601

HOURS: 8281AA 35

	ISS	Mtr Vits (V)	SS Gain	LS Gain	XLS Gain	EA Temp (degF)	Sync Delay (usec)	RCAL
Raw Data	789473	123	2266	2250	2244	111	7	0.9752

Interpolated	1300000	144	2249	2245	2242
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	ISS	BKS	BKL	BKX	SGA1	SDA1	SGA2	SDA2
Raw Data	789473	5721	905	127	25.91	0.15	24.01	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	789473	159387	24447	85326	30418	7922	51779	12657
Fit Quality %		0.817	0.981	0.689	0.679	0.788	0.643	0.795

	ISS	RBOR	RIN ISS/ILS	RIN13 ISS/IXS	RICS ISS/CSS	RATO SS/LS	RTWO SS2/LS	RONE CSS/CLS
Raw Data	789473	1.44	4.95	32.31	15.25	10.77	3.84	4.09
		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 %		0.015	0.061	0.086	0.097	0.069	0.063	0.073
Reduced	1393911	1.44	4.94	32.28	15.21	10.79	3.85	4.09
		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

TPSITEEMP PRIMARY CALIBRATION SUMMARY

TOOL #: 8255XA 11774568

DATE/TIME PERFORMED: Thu May 7 07:52:05 2015

UNIT #: 3880TA HL6670

	T(0)	T(1)	T(2)	T(3)
Corr Coeff for Ptfes	-1.089847E+01	1.064572E-01	3.162229E-07	5.808012E-11

TPSPRES PRIMARY CALIBRATION SUMMARY

GAUGE #: 8255XA 11774568

DATE/TIME PERFORMED: Thu May 7 08:08:15 2015

UNIT #: 3880TA HL6670

	Temp	G	H	I	J
0		5.757116E+05	2.756916E+02	2.333345E-04	-6.169285E-09
1		-8.476257E+01	3.280890E-02	-2.151323E-06	8.959875E-11
2		6.895835E-01	-2.638656E-04	9.921076E-09	-4.102106E-13
3		-1.434187E-03	5.654808E-07	-1.414922E-11	5.870839E-16
4		1.408894E-16	7.548284E-20	2.001050E-24	-7.758373E-29
Coef Test	350.0	5.690279E+05	2.790962E+02	8.905545E-05	1.107021E-10

INSTRUMENT CONFIGURATION

Source File: /dat1a/CH096691/n353h~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

GAMMA RAY

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

34.08'

CCL MP 26.03'

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 1.65'
PRES MP

BULL PLUG 1 11/16

0.00'

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



COMPANY WPX ENERGY
WELL YOUBERG RU 533 7
FIELD RULISON
COUNTY GARFIELD STATE COLORADO

FILE NO:
CH096691
API NO:
05045225190000

LOCATION:
SHL: 1132' FSL & 1193' FEL
BHL: 1685' FSL & 2288' FEL

ELEVATIONS:
KB 7943 FT
DF

7 7S 93W
RU 44-7 PAD
NABORS 576



SEC 7 TWP 7 RGE 93W

GL 7917 FT	
DATE	02-Jul-2015