



FILE NO: CH138186J	COMPANY LARAMIE ENERGY LLC
API NO: 05045238130000	WELL CC 0697-03-13E
	FIELD GRAND VALLEY
	COUNTY GARFIELD STATE COLORADO

Ver. 4.11	LOCATION: SHL: 3081.0' FNL & 1310.0' FEL SHL: 3081.0' FNL & 1310.0' FEL SEC 3 TWP 6S RGE 97W	OTHER SERVICES NONE
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PERMANENT DATUM LOG MEASURED FROM DRILL. MEAS. FROM	GL KB KB	ELEVATION 30 FT 8428 FT 8428 FT	ABOVE P.D.
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DATE	31-Aug-2018
RUN	2
TRIP	1
SERVICE ORDER	US138186J
DEPTH DRILLER	9710 FT
DEPTH LOGGER	9690 FT
BOTTOM LOGGED INTERVAL	9690 FT
TOP LOGGED INTERVAL	4580 FT
TIME STARTED	11:30
TIME FINISHED	17:00
OPERATOR RIG TIME	5.5 HOURS
TYPE OF FLUID IN HOLE	WATER
FLUID DENSITY	NA
FLUID SALINITY	NA
FLUID LEVEL	NA
LOGGED CEMENT TOP	NA
WELLHEAD PRESSURE	0 PSI
MAXIMUM HOLE DEVIATION	NA
NOMINAL LOGGING SPEED	15 FMIN
MAX. RECORDED TEMP.	258 DEGF
REFERENCE LOG	NA
REFERENCE LOG DATE	NA
EQUIP. NO.	ML-4291
LOCATION	GRAND JCT.
RECORDED BY	M. BAUKA
WITNESSED BY	NA

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.

REMARKS

RUN 2 TRIP 1: *2 OPERATIONS IN WELLBORE*

OPERATION 1: RAL/GR/CCL RUN CENTRALIZED

OPERATION 2: RPM/GR/CCL RUN IN PNC-3D MODE

LOGGED WITH 0 PSI ON WELLHEAD

RAL/GR/CC: COULD NOT GET TO TD DUE TO WELL CONDITIONS. STOPPING AT 4725 FT

RPM/GR/CCL: NO REFERENCE LOG TO CORRELATE WITH. ALL DEPTHS ARE DRILLER'S DEPTH

EQUIPMENT DATA

RUN	TRIP	TOOL	SERIES NO.	SERIAL NO.	POSITION
2	1	PCM	8250EA	Z166326	FREE
2	1	TEL/CCL	8248ED	10387150	FREE
2	1	GR	2812LA	11608516	FREE
2	1	RPM	8281EA	10190985	FREE

2	1	RPM	8283PA	10068031	FREE
2	1	RPM	8281FA	10076673	FREE
2	1	TEMP	8255XA	166341	FREE

RPM MAIN PASS G-SAND

ECLIPS 7.0i ECLIPS General Release Rel 7.0i Thu Jun 08 20:36:10 CDT 2017

Updates: 1

Plotted: Fri Aug 31 18:20:51 2018

PARAMETER AND FILTER SUMMARY REPORT

FILE: /dat1a/LARAMIE_CC_0697-03-13E/p354h03.prm
 LOGGING MODE: DEPTH DIRECTION: UP
 TOP DEPTH: 4511.644 ft BOTTOM DEPTH: 5210.668 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	7.87	in	"	"
	LARGEST CASING OD	4.50	in	"	"
	MATRIX	SANDSTONE		"	"

CURVE DESCRIPTION REPORT

CURVE NAME	CREATION DATE	CURVE DESCRIPTION
F1:CCL	Aug 31 16:10:36 2018	CASING COLLAR LOCATOR
F1:GR	Aug 31 16:10:36 2018	GAMMA RAY
F1:ISS	Aug 31 16:10:36 2018	INELASTIC SHORT SPACE COUNT RATE
F1:LS	Aug 31 16:10:36 2018	LONG SPACE COUNT RATE
F1:RATO	Aug 31 16:10:36 2018	SHORT/LONG SPACE COUNT RATE RATIO
F1:RICS	Aug 31 16:10:36 2018	SHORT SPACE INELASTIC TO CAPTURE COUNT RATE RATIO (ISS/CSS)
F1:SGFC	Aug 31 16:10:36 2018	BOREHOLE AND DIFFUSION CORRECTED SIGMA
F1:SS	Aug 31 16:10:36 2018	SHORT SPACE COUNT RATE

CURVE MEASURE POINT OFFSET

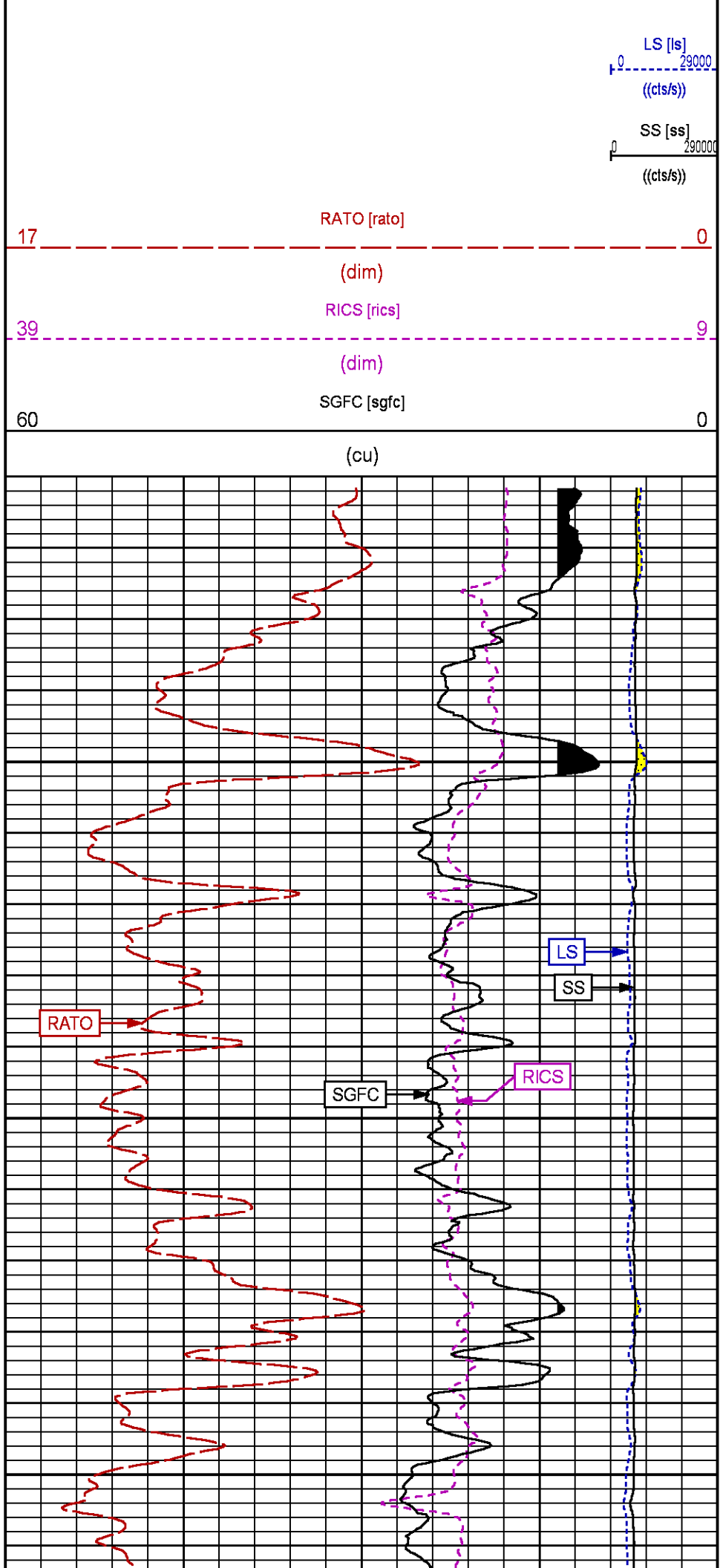
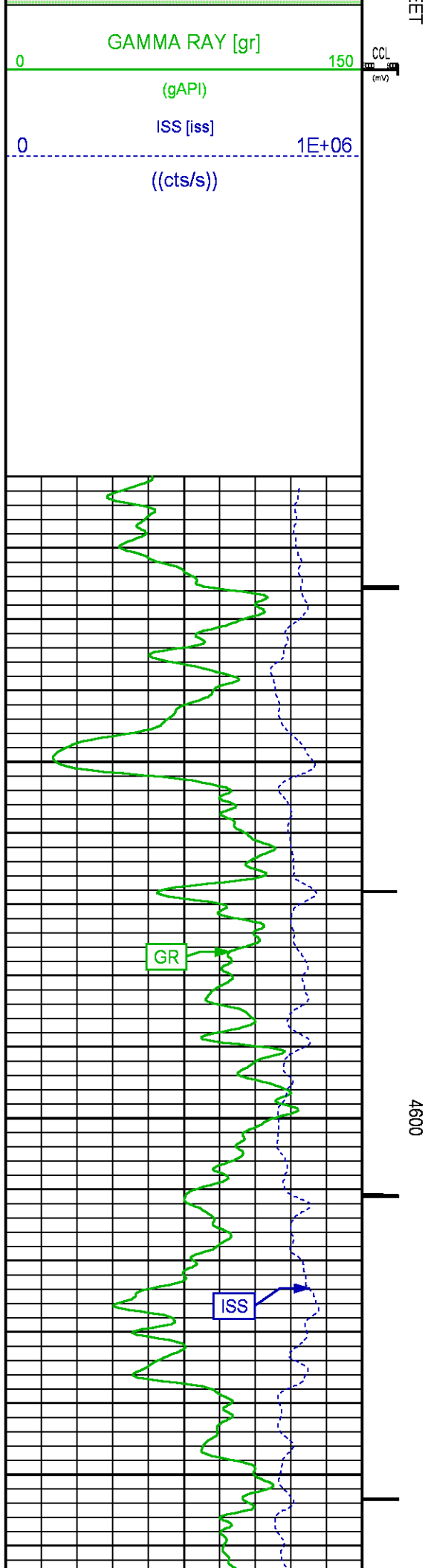
CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
CCL	-25.00	ISS	-12.75	RATO	-12.75	SGFC	-12.75
GR	-22.75	LS	-12.75	RICS	-12.75	SS	-12.75

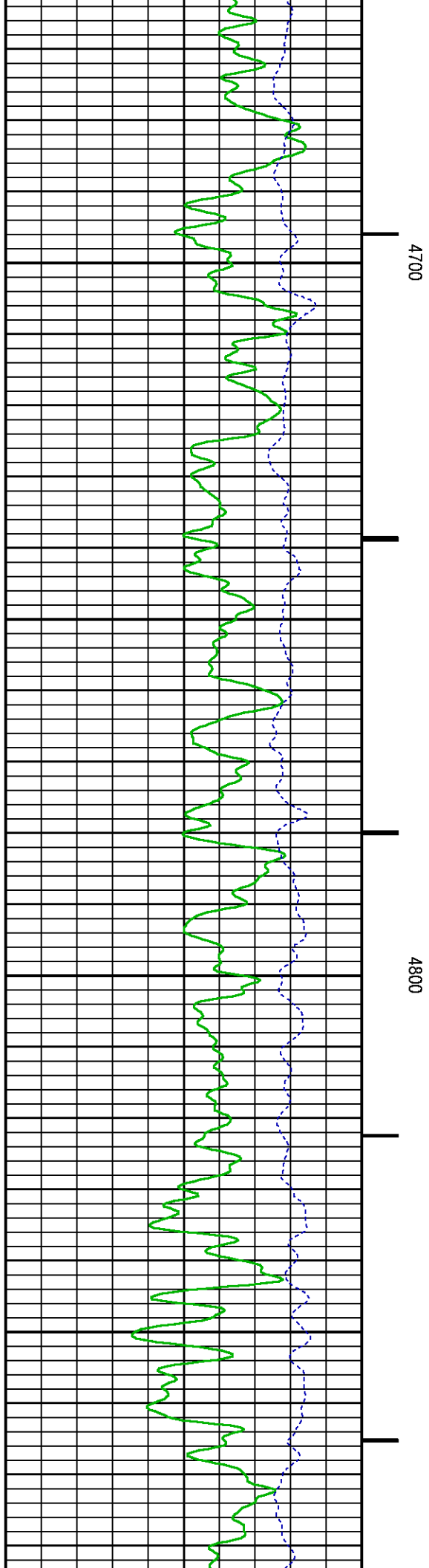
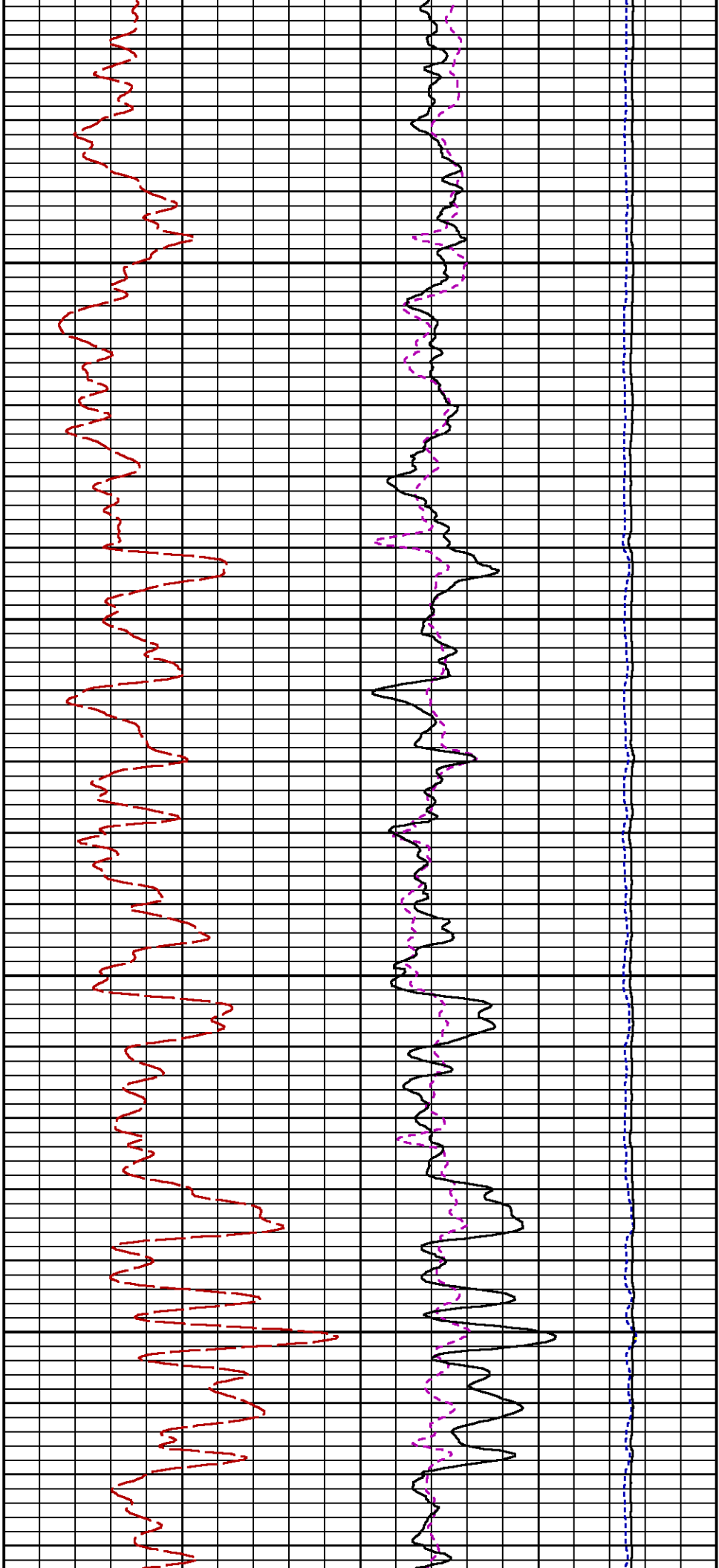
Presentation : SysA:/dat1a/LARAMIE_CC_0697-03-13E/CC_0697-03-13E_RPM_MAIN_GS.fvpdf [5"/100' Scale]
 Plot Interval : 4510 - 5215 Feet

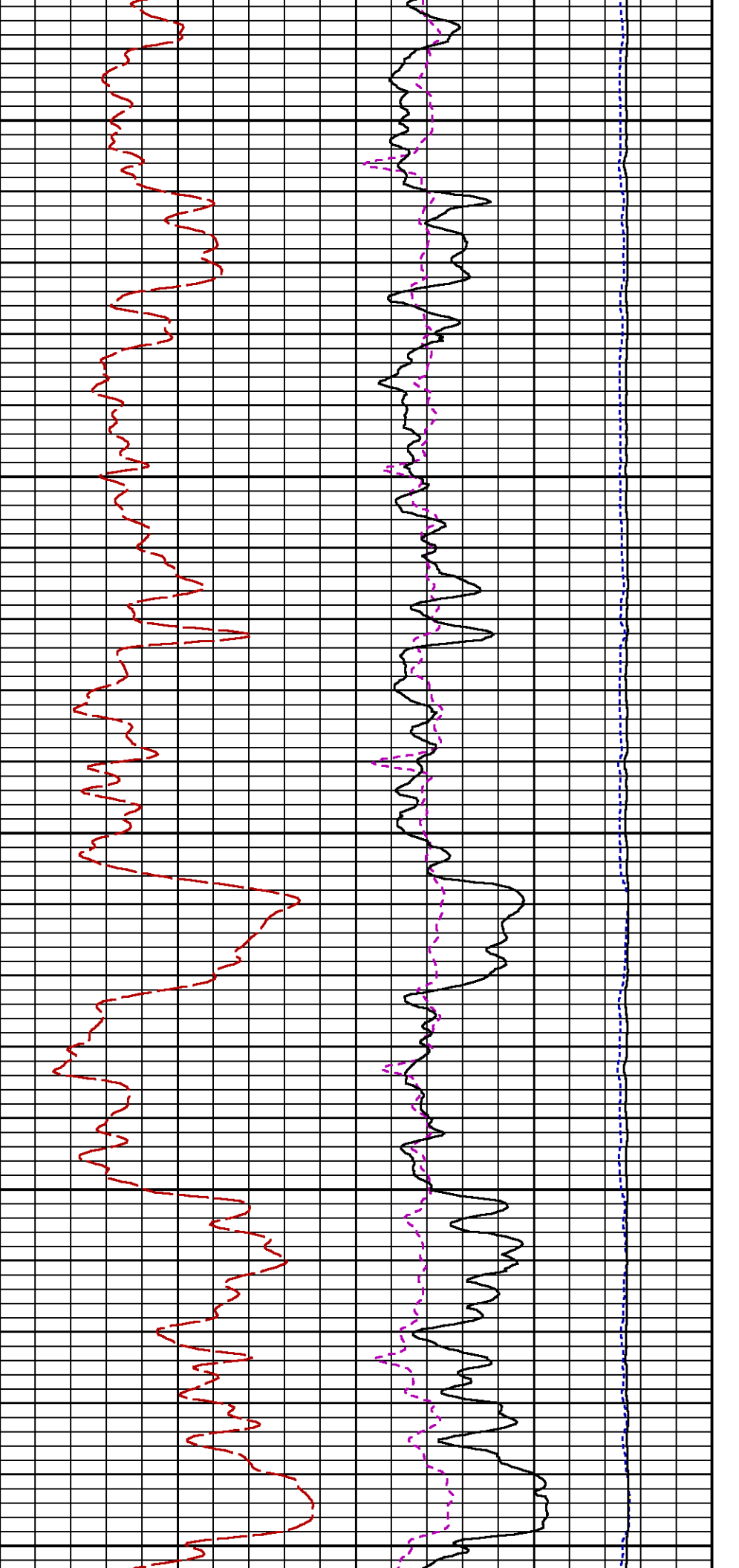
Data File 1 : F1 : SysA:/dat1a/LARAMIE_CC_0697-03-13E/45_LARAMIE_CC_0697-03-13E_RPM_MAIN_GS.xtf
 Created On : Aug 31 16:10:36 2018
 Company : LARAMIE ENERGY LLC
 Well : CC 0697-03-13E
 Field : GRAND VALLEY
 File Interval : 4486 - 5208.75 Feet
 OCT : p354h

GR BACKUP

FE



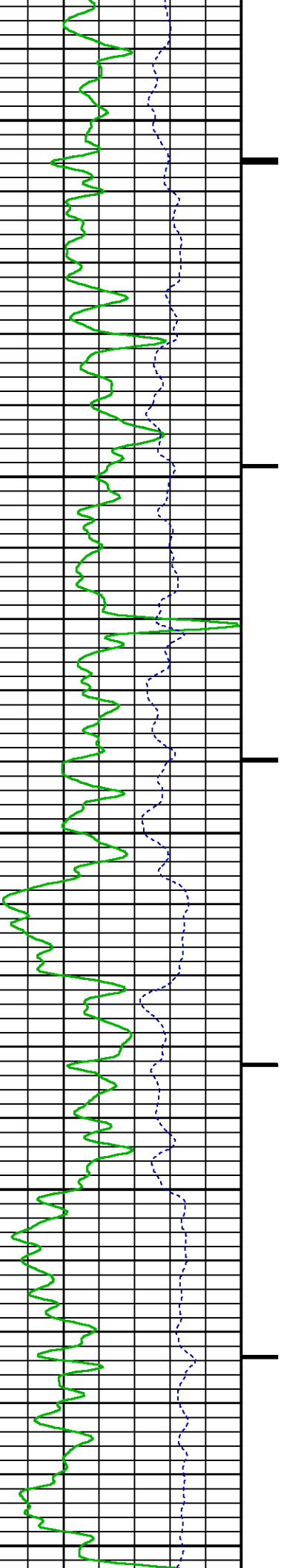


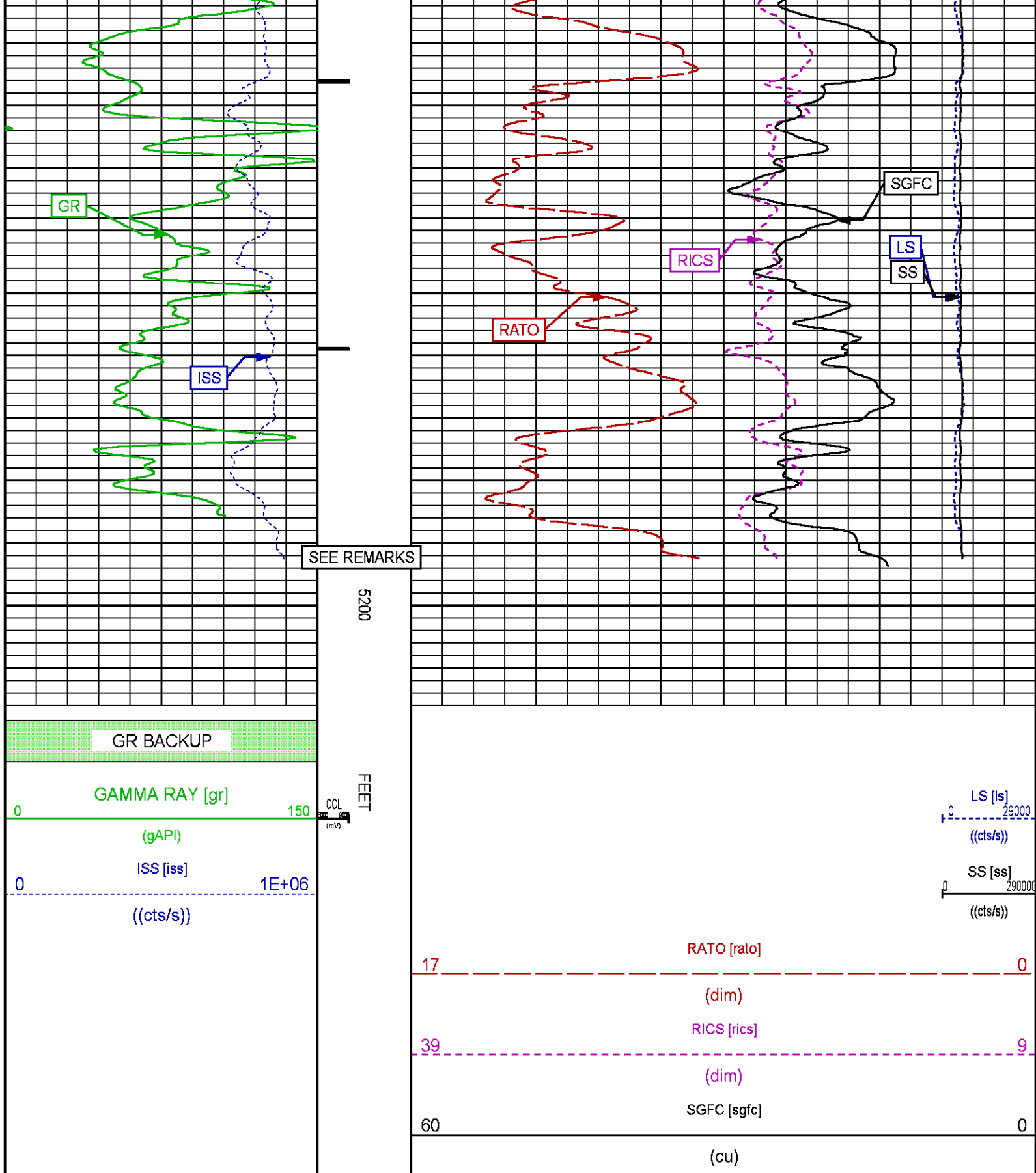


4900

5000

5100





RPM MAIN PASS WILLIAMS FORK

Plotted: Fri Aug 31 18:25:22 2018

PARAMETER AND FILTER SUMMARY REPORT

FILE: /dat1a/LARAMIE_CC_0697-03-13E/p354h01.prm
LOGGING MODE: DEPTH DIRECTION: UP
TOP DEPTH: 6338.190 ft BOTTOM DEPTH: 9701.913 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	7.87	in	" "
	LARGEST CASING OD	4.50	in	" "
	MATRIX	SANDSTONE		" "

CURVE DESCRIPTION REPORT

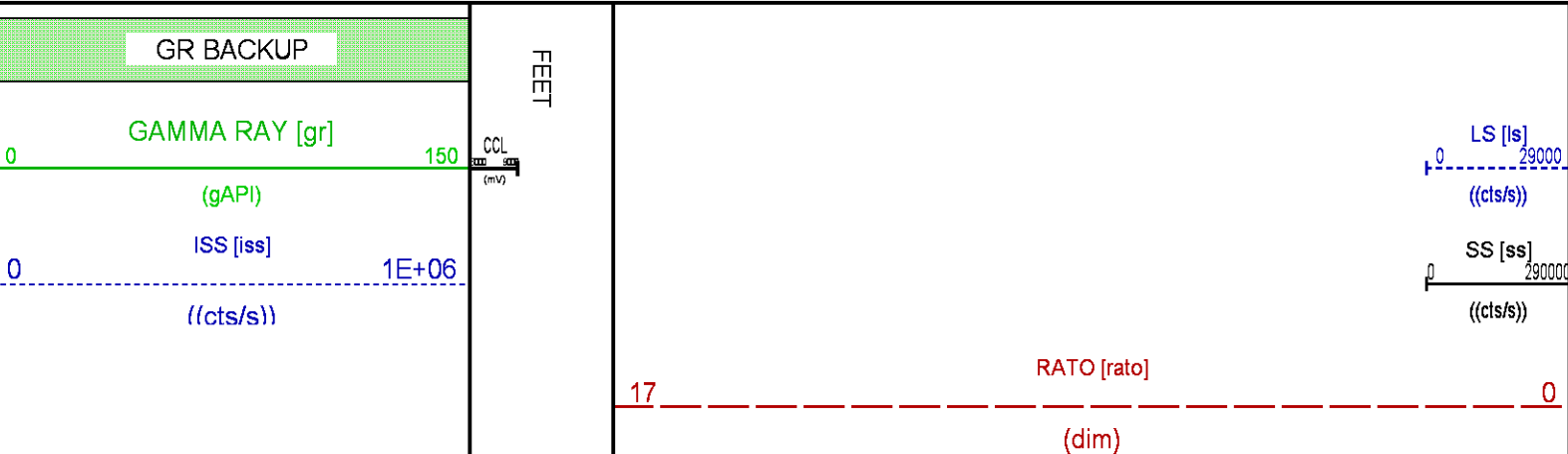
CURVE NAME	CREATION DATE	CURVE DESCRIPTION
F1:CCL	Aug 31 12:07:30 2018	CASING COLLAR LOCATOR
F1:GR	Aug 31 12:07:30 2018	GAMMA RAY
F1:ISS	Aug 31 12:07:30 2018	INELASTIC SHORT SPACE COUNT RATE
F1:LS	Aug 31 12:07:30 2018	LONG SPACE COUNT RATE
F1:RATO	Aug 31 12:07:30 2018	SHORT/LONG SPACE COUNT RATE RATIO
F1:RICS	Aug 31 12:07:30 2018	SHORT SPACE INELASTIC TO CAPTURE COUNT RATE RATIO (ISS/CSS)
F1:SGFC	Aug 31 12:07:30 2018	BOREHOLE AND DIFFUSION CORRECTED SIGMA
F1:SS	Aug 31 12:07:30 2018	SHORT SPACE COUNT RATE

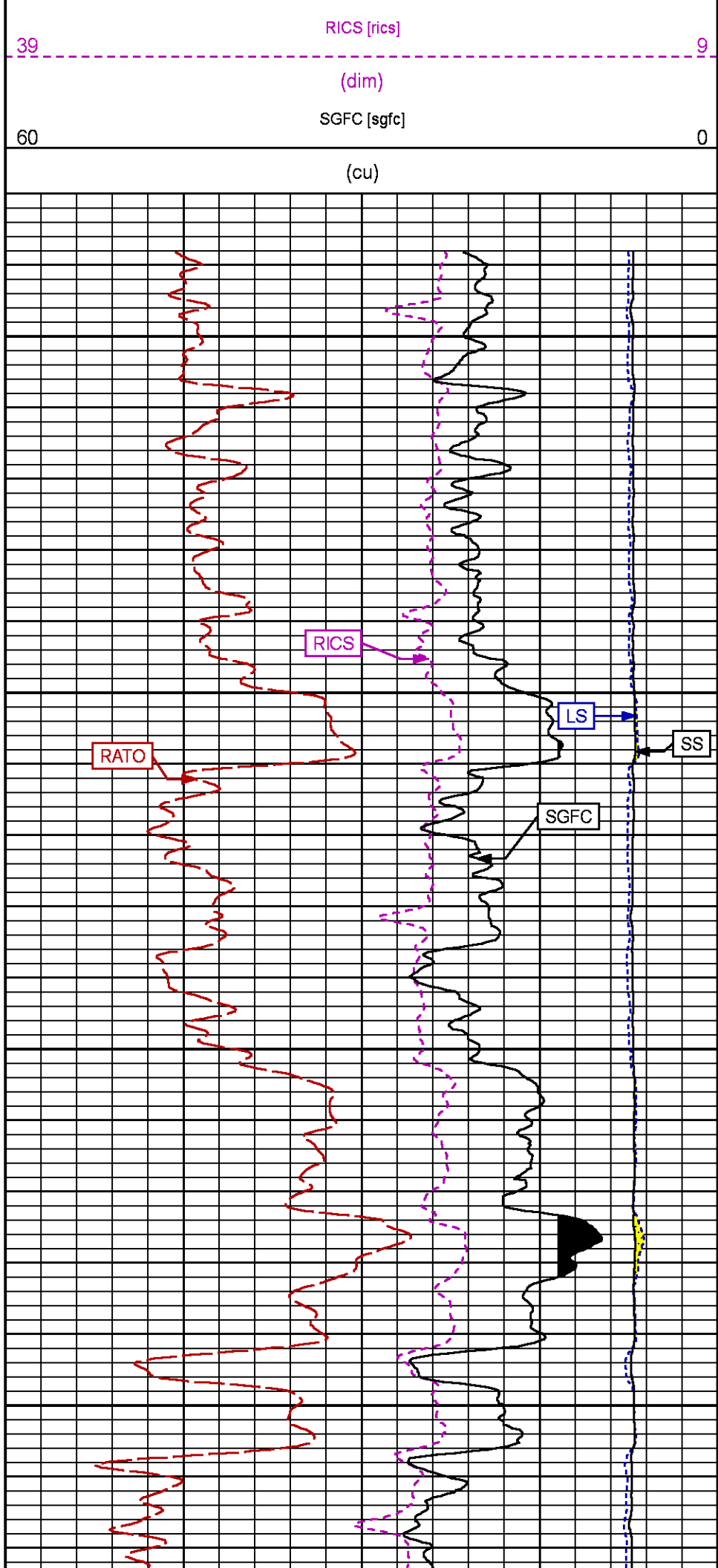
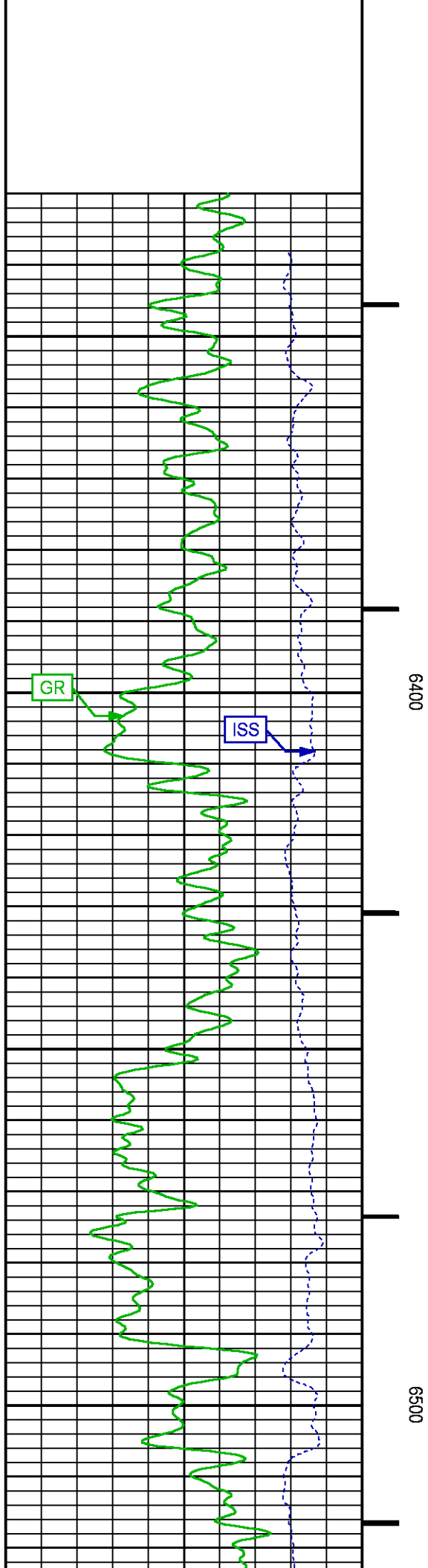
CURVE MEASURE POINT OFFSET

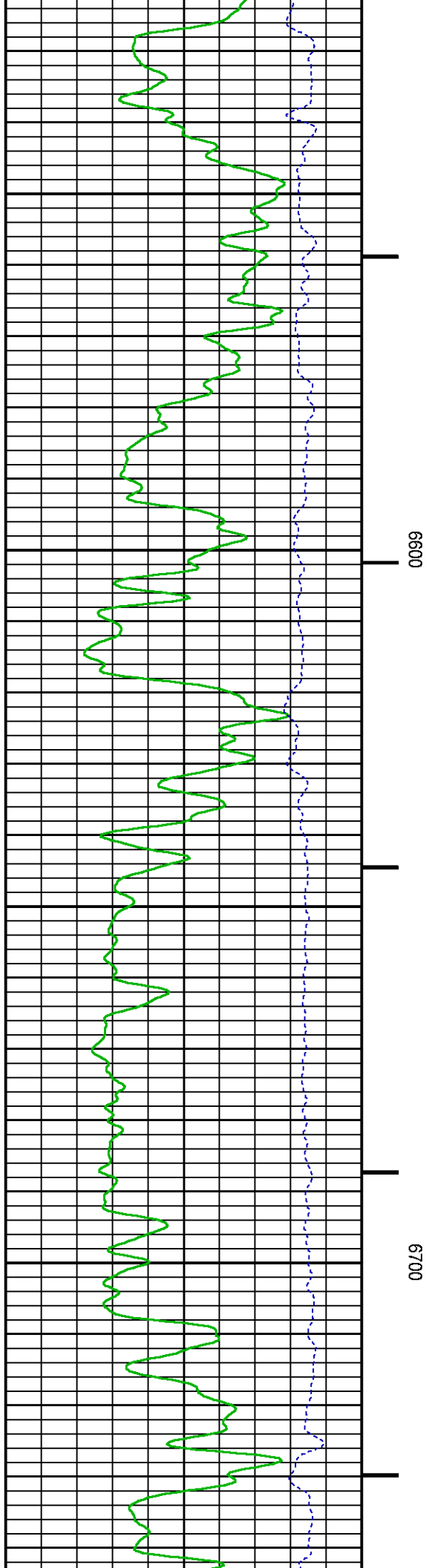
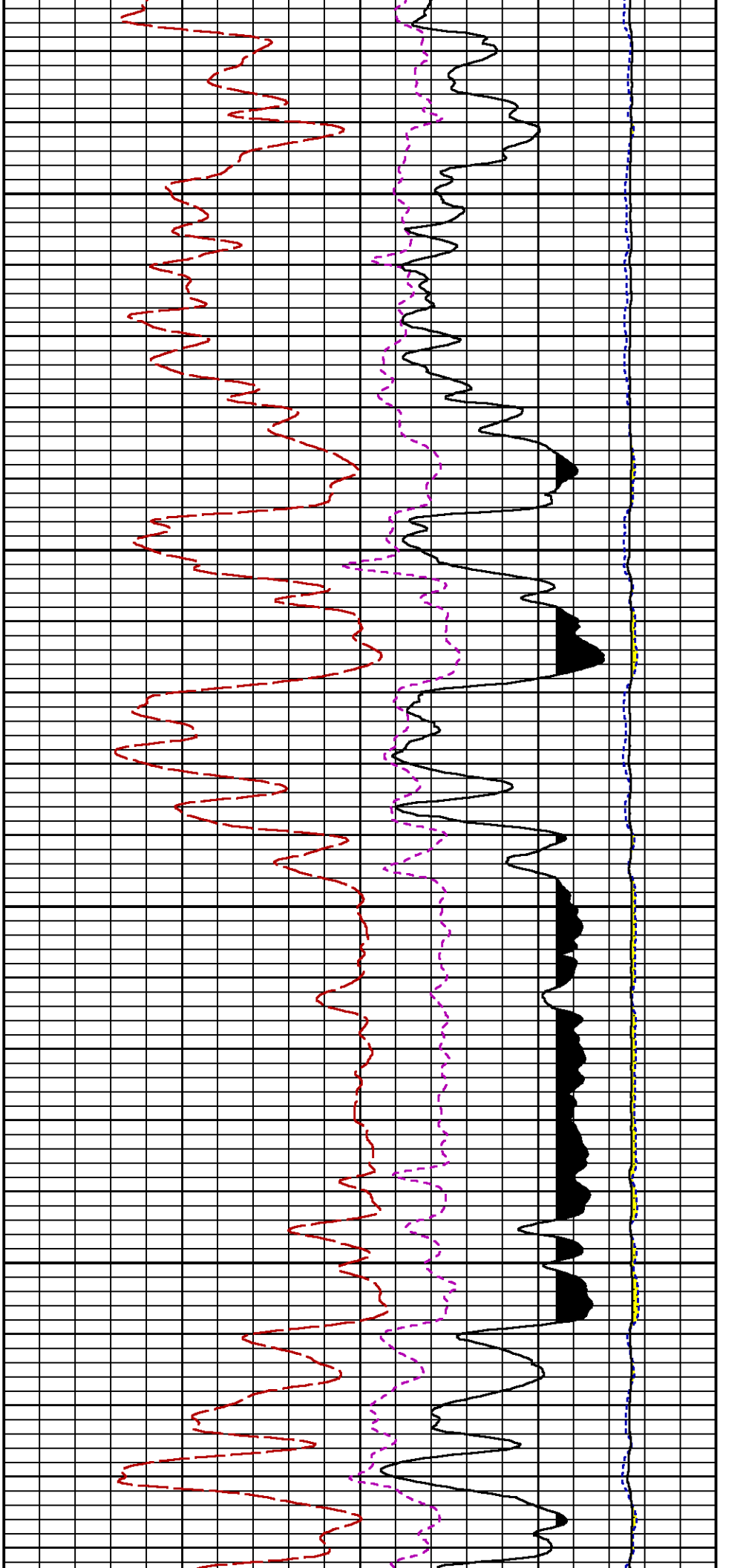
CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
CCL	-25.00	ISS	-12.75	RATO	-12.75	SGFC	-12.75
GR	-22.75	LS	-12.75	RICS	-12.75	SS	-12.75

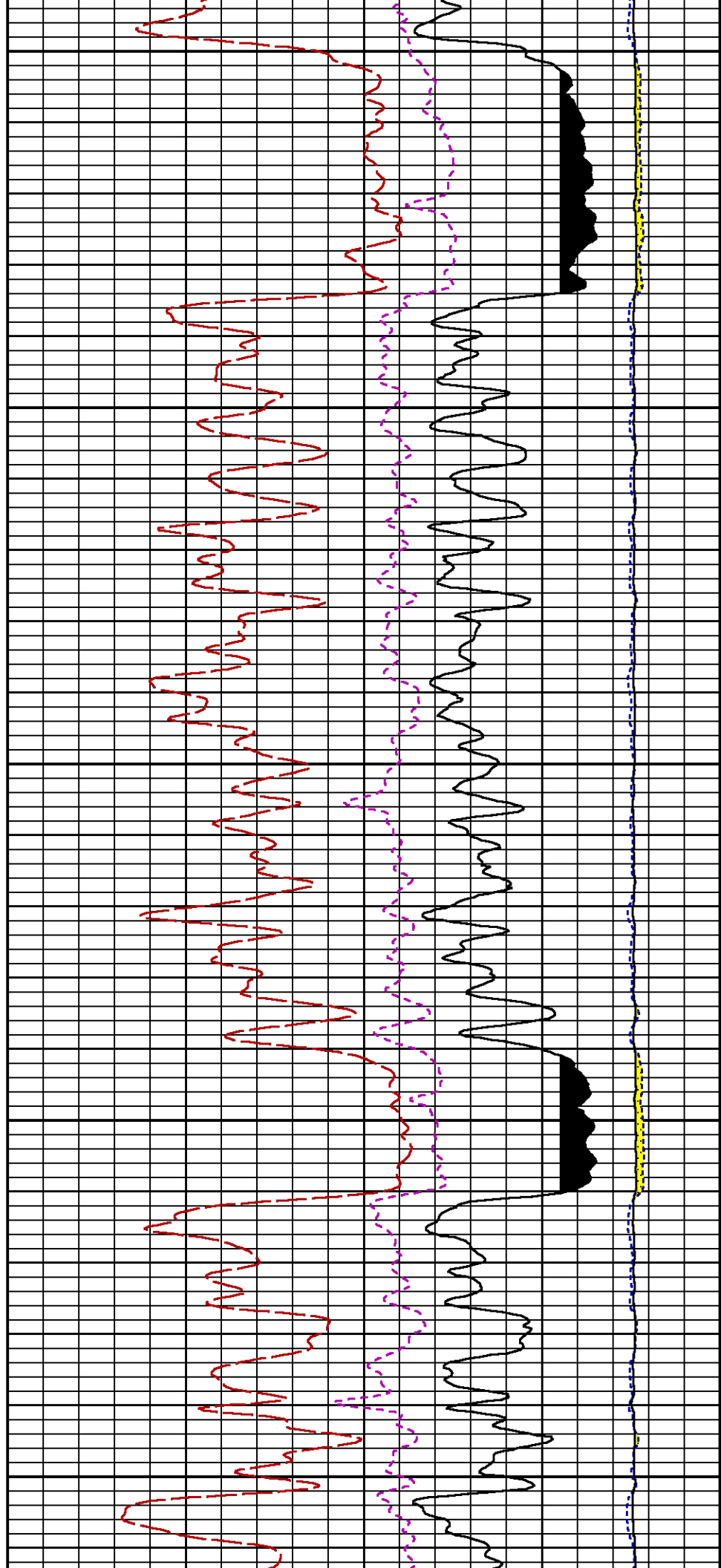
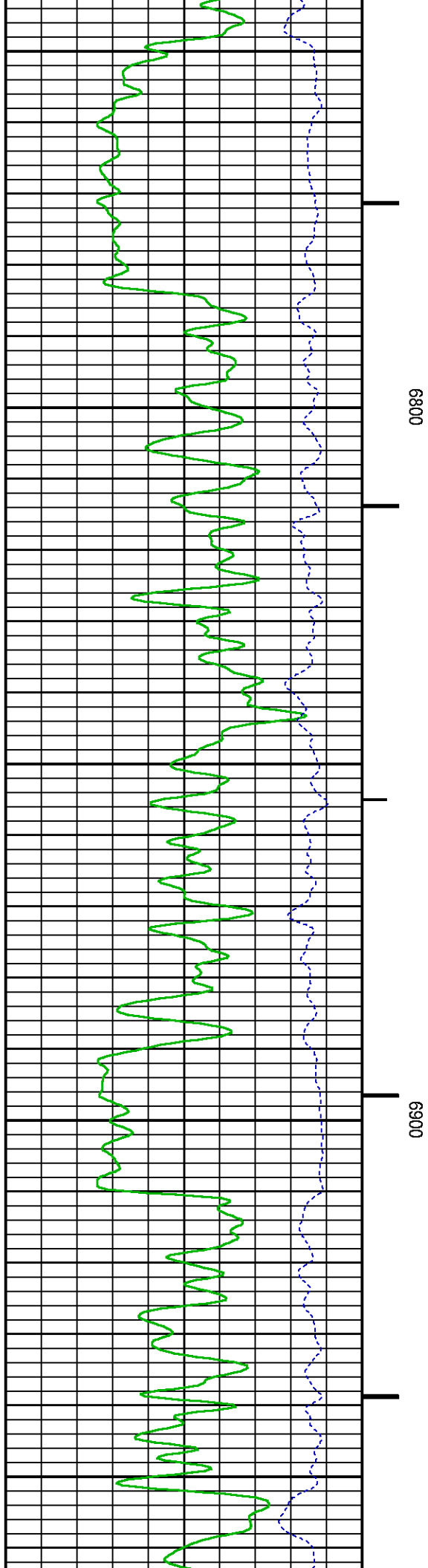
Presentation : SysA:/dat1a/LARAMIE_CC_0697-03-13E/CC_0697-03-13E_RPM_MAIN_WF.fvpdf [5"/100' Scale]
Plot Interval : 6330 - 9710 Feet

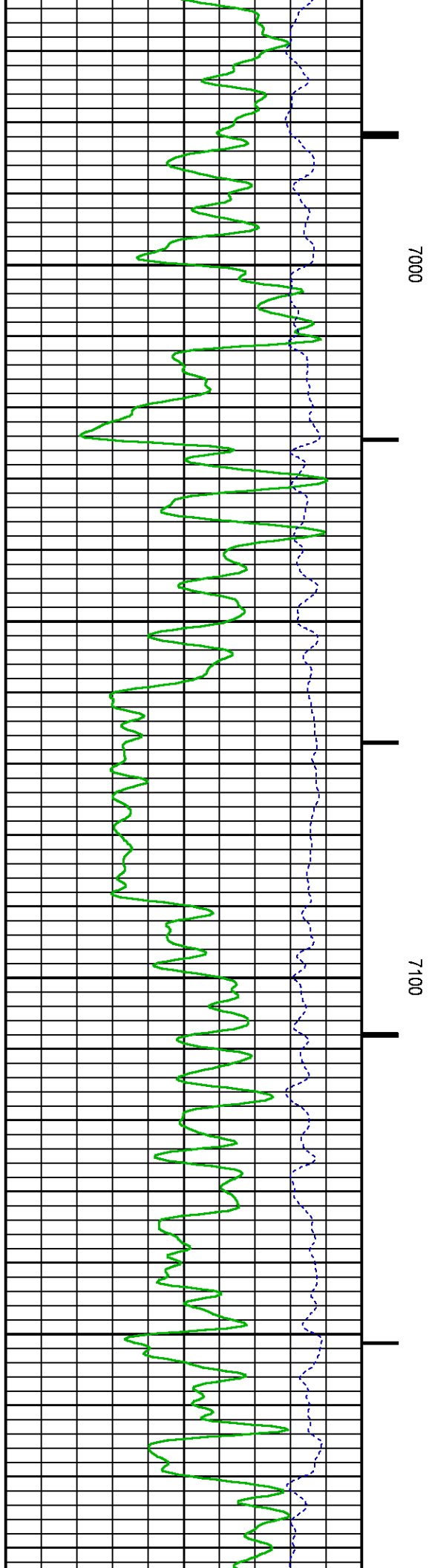
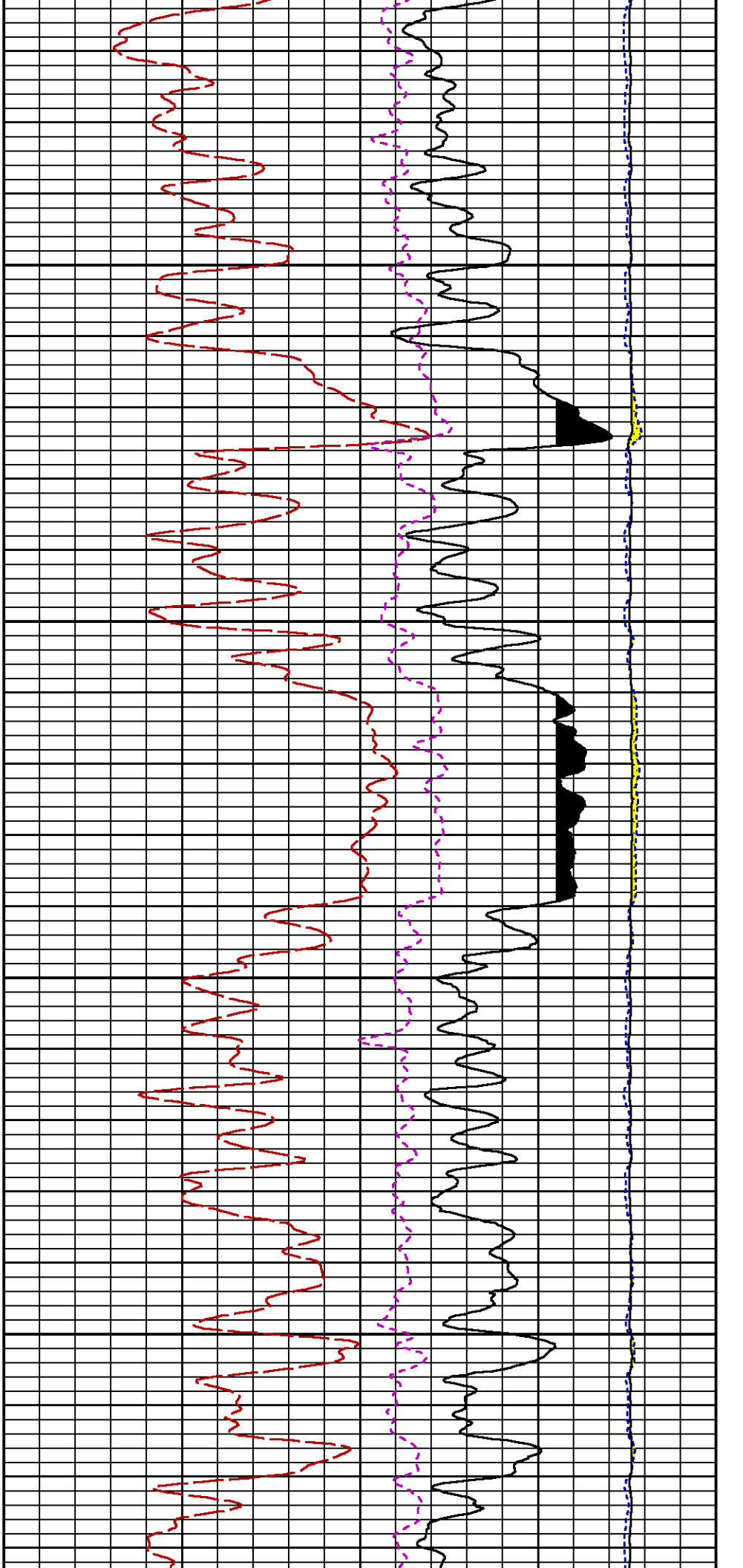
Data File 1 : F1 : SysA:/dat1a/LARAMIE_CC_0697-03-13E/45_LARAMIE_CC_0697-03-13E_RPM_MAIN_WF.xtf
Created On : Aug 31 12:07:30 2018
Company : LARAMIE ENERGY LLC
Well : CC 0697-03-13E
Field : GRAND VALLEY
File Interval : 6312.5 - 9700.5 Feet
OCT : p354h

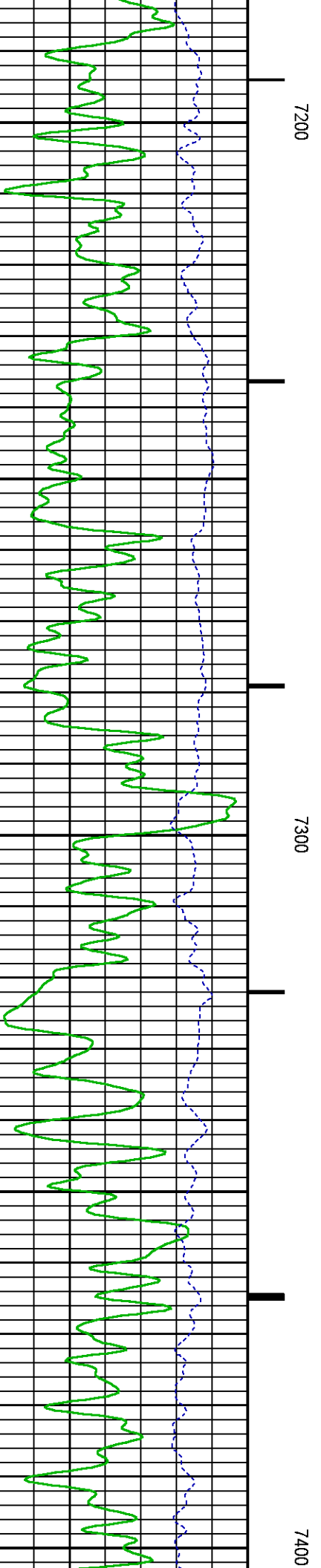
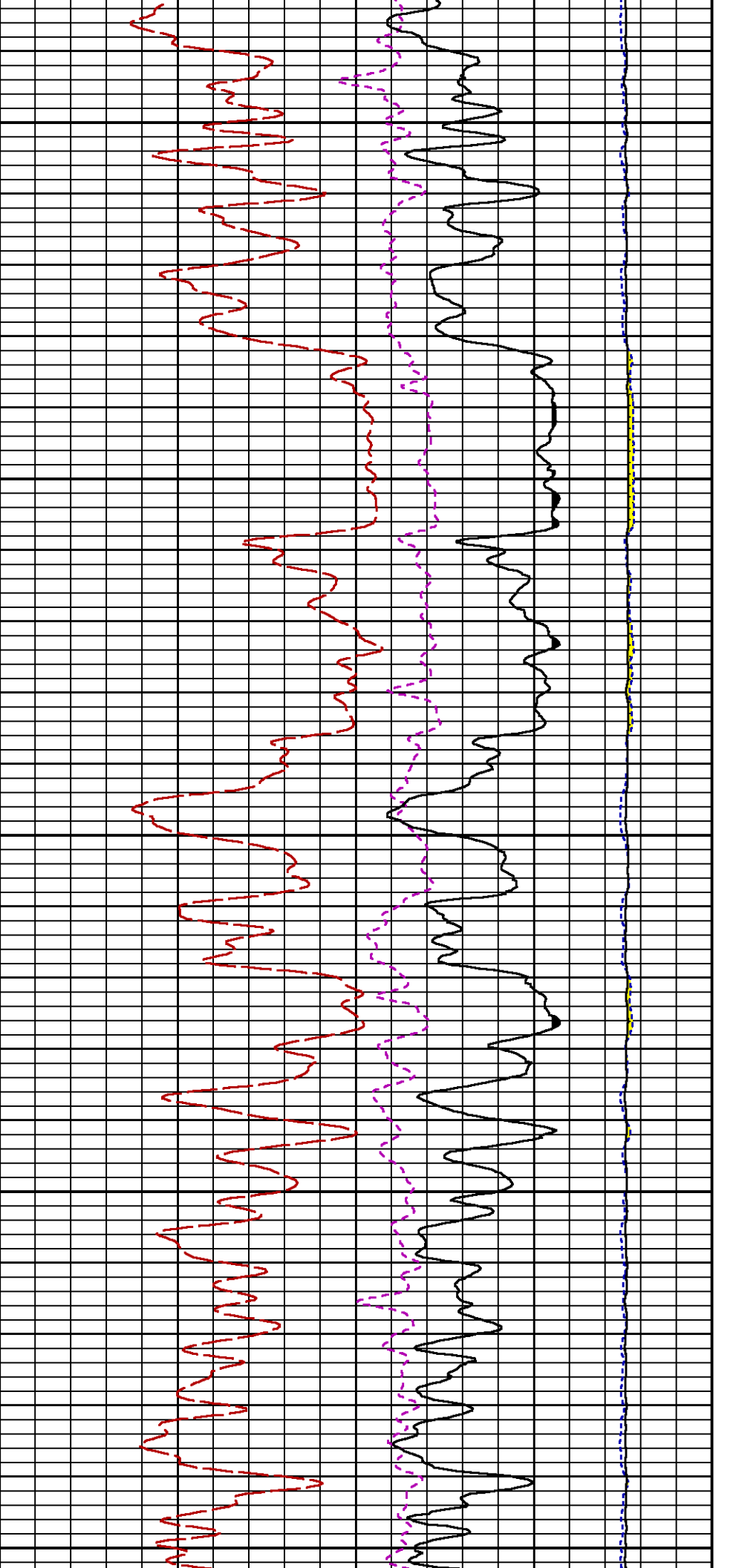


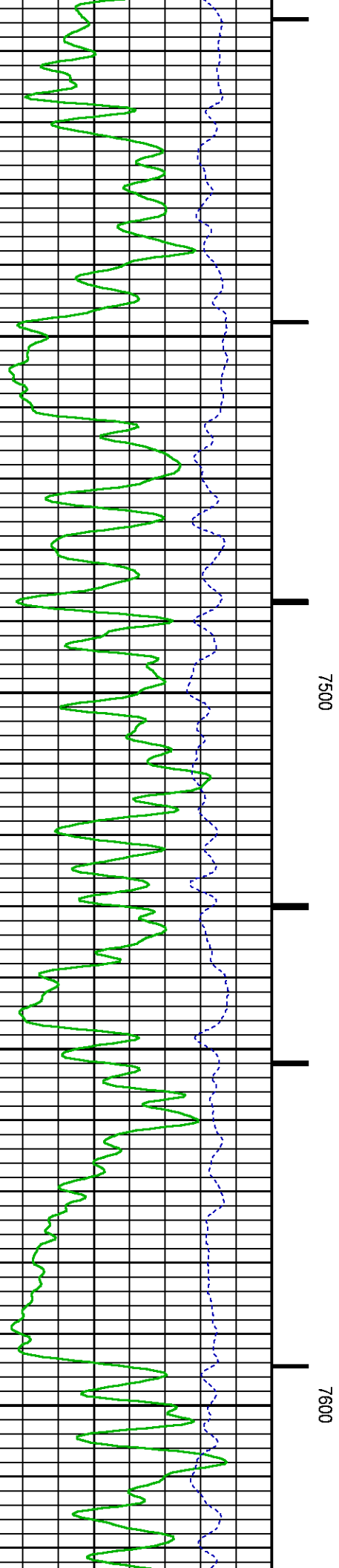
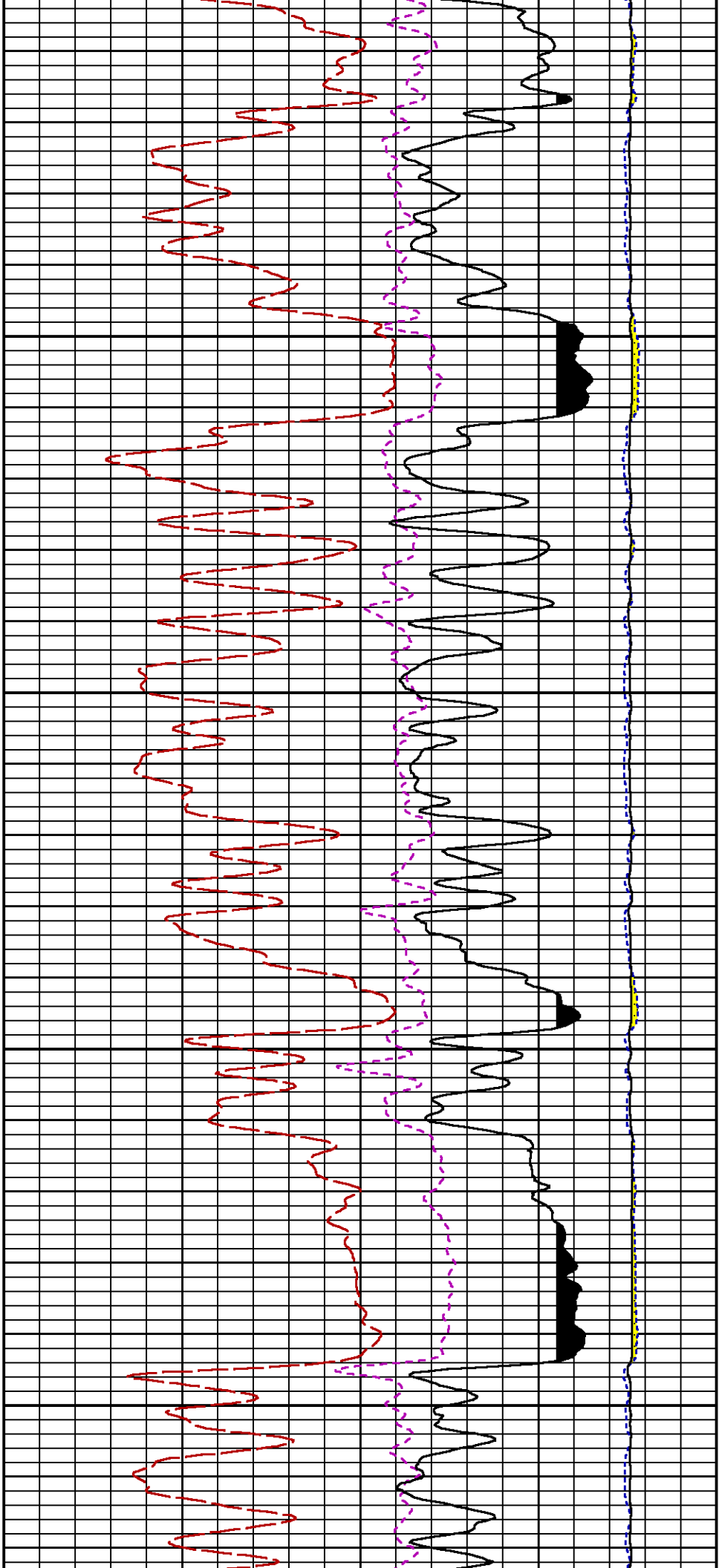


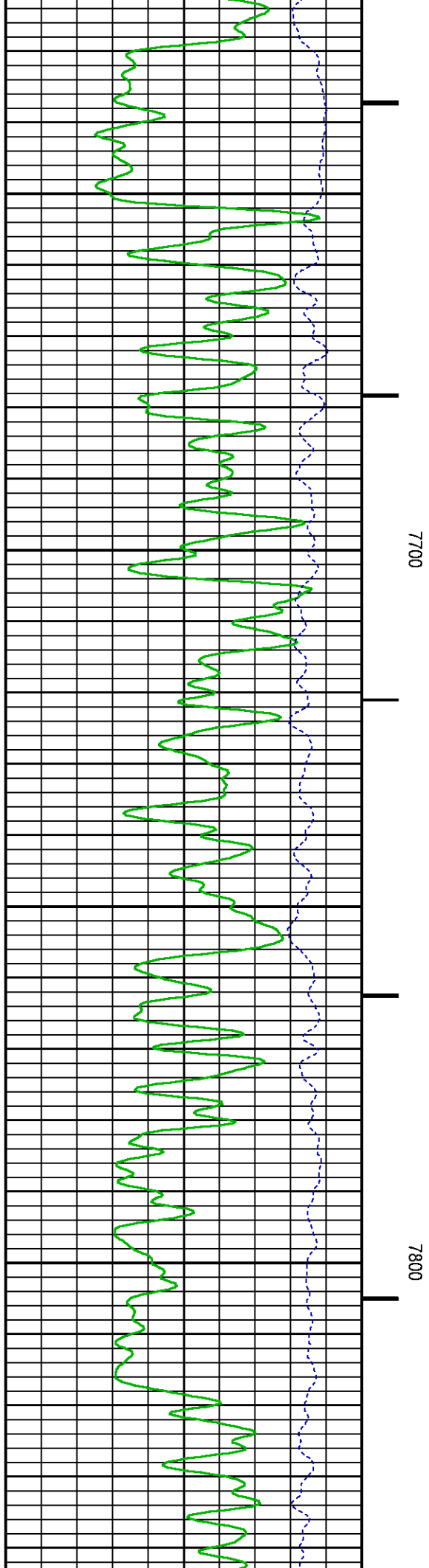
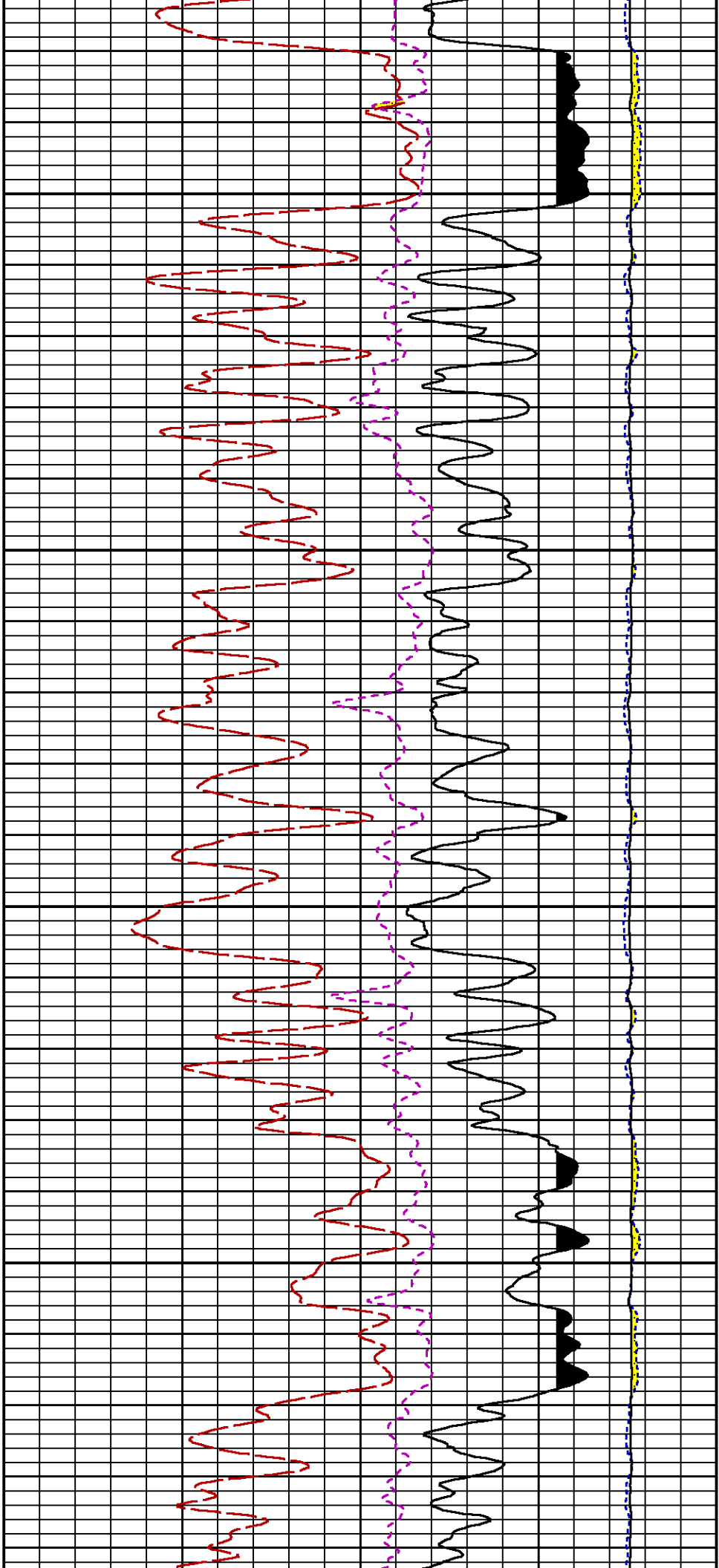


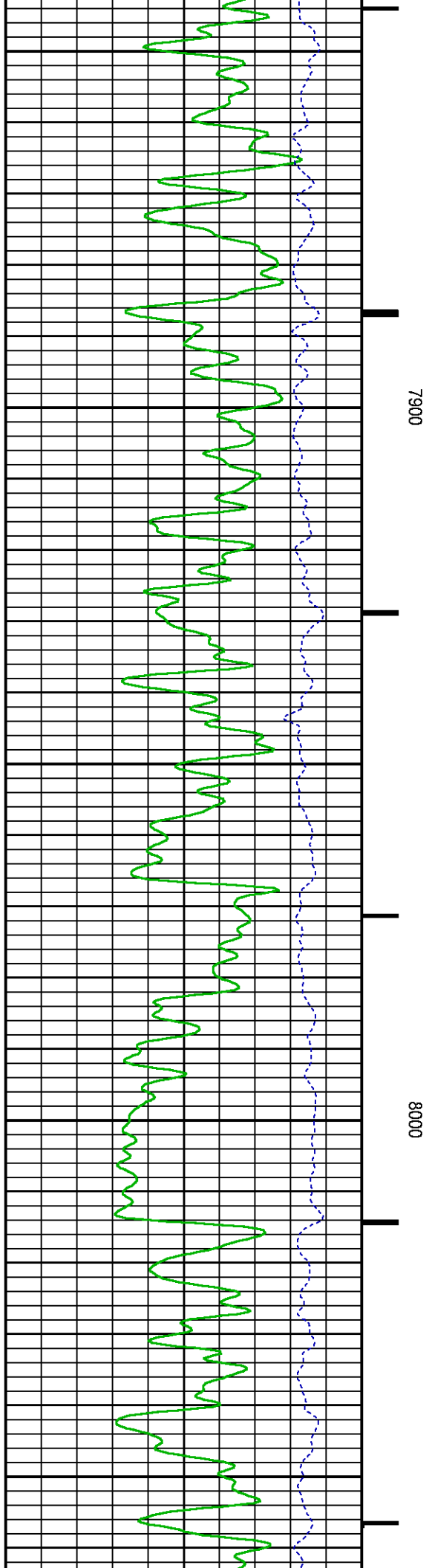
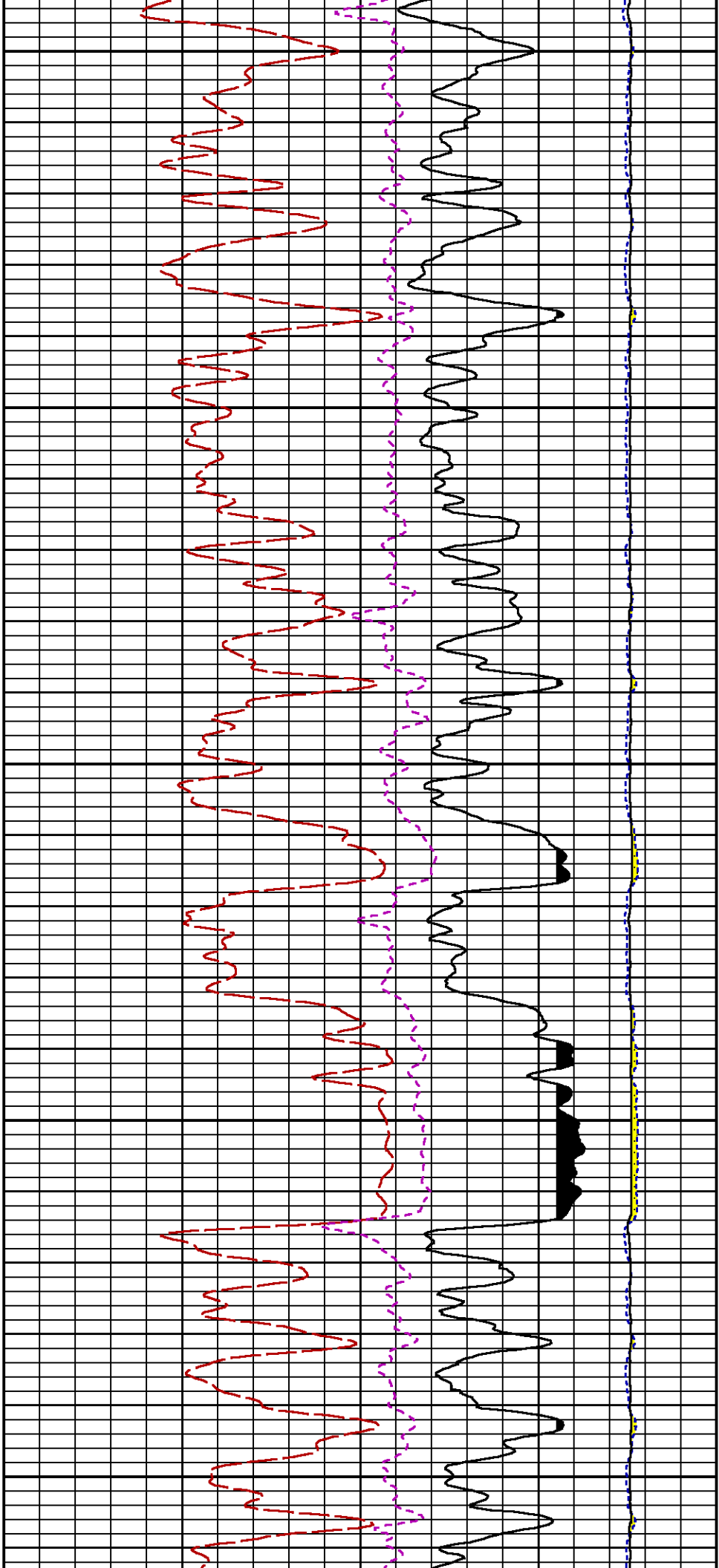


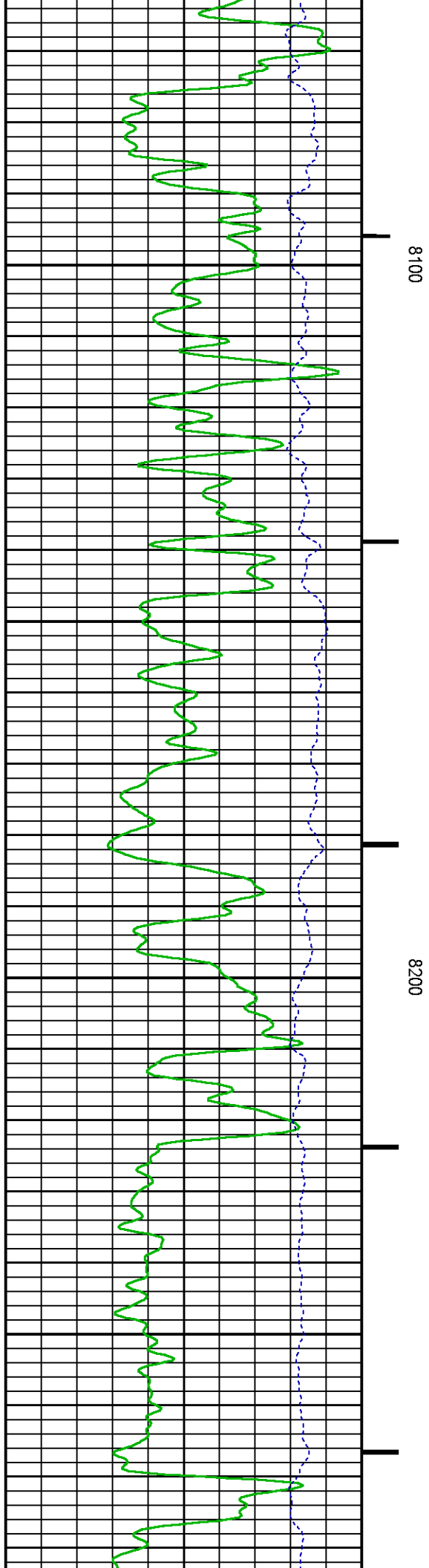
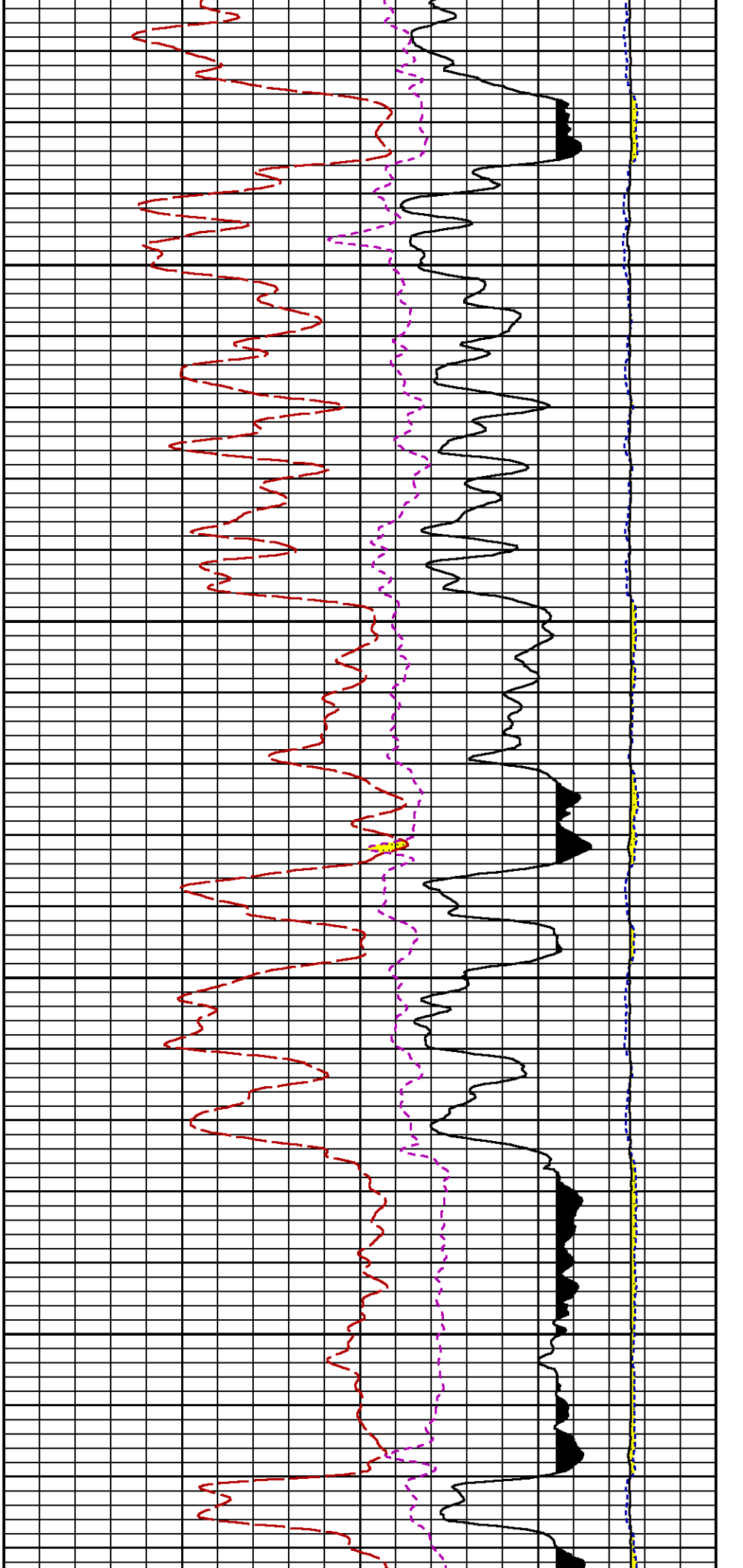


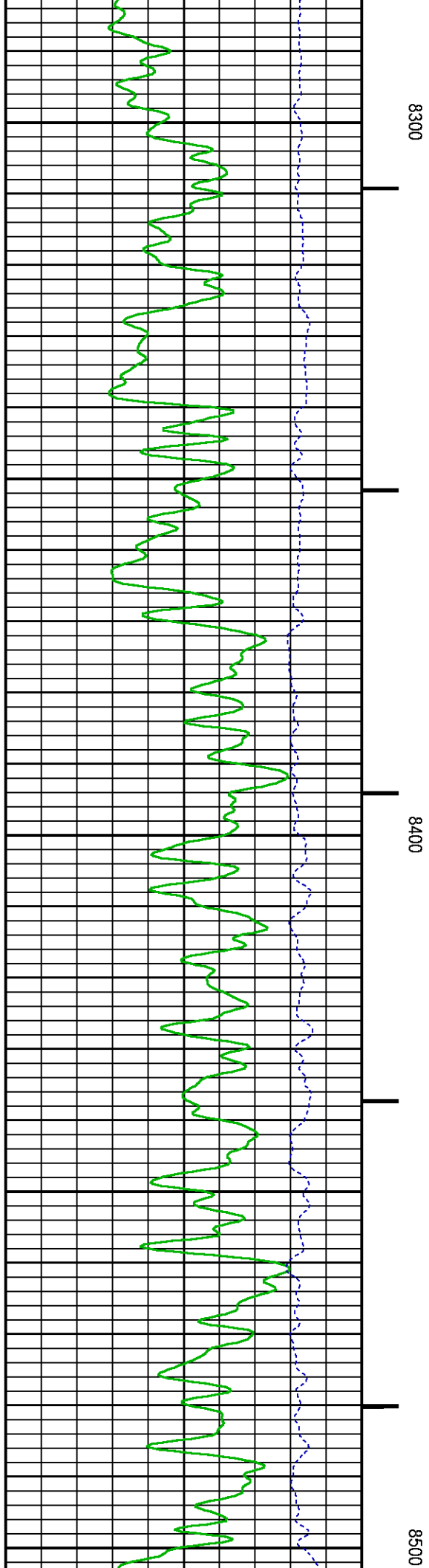
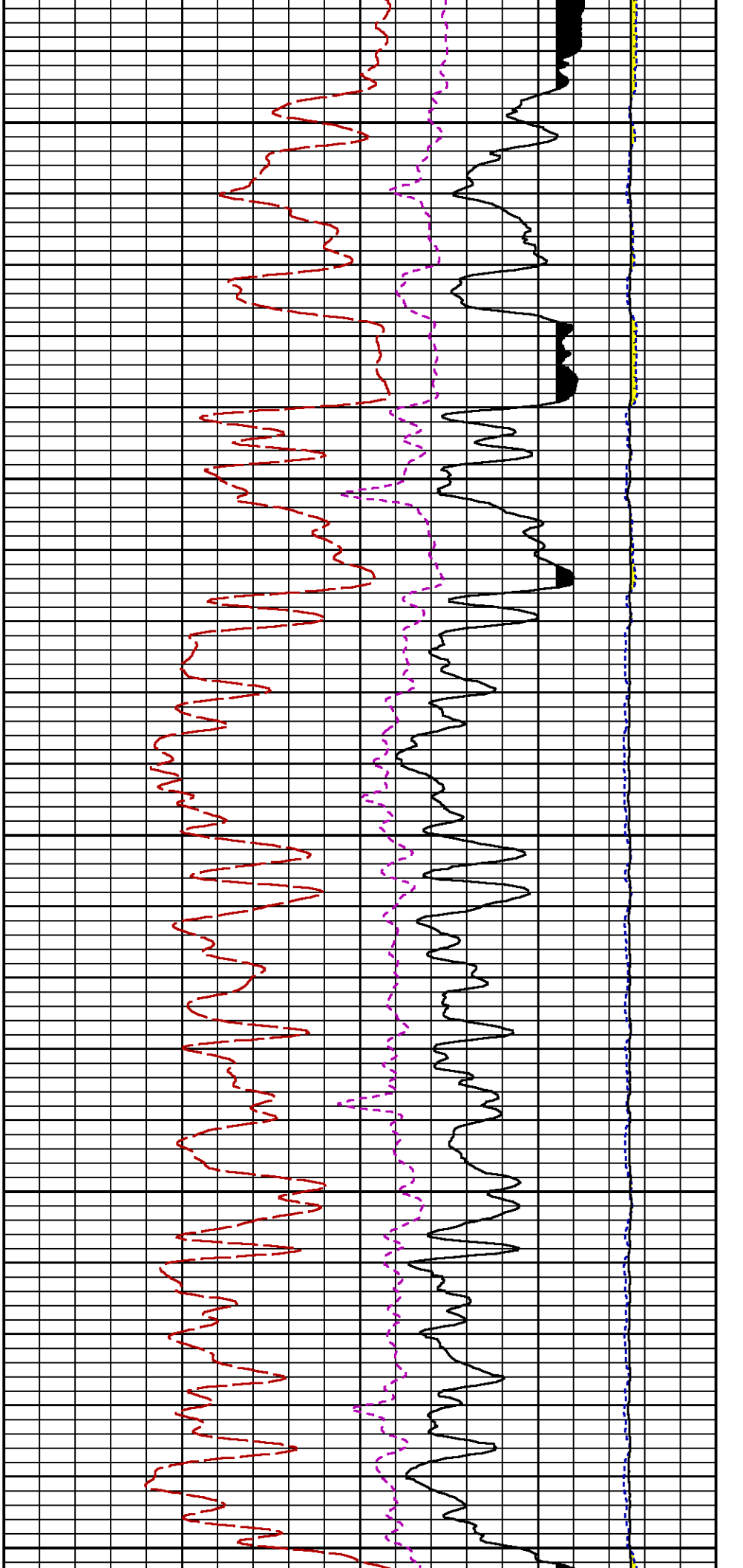


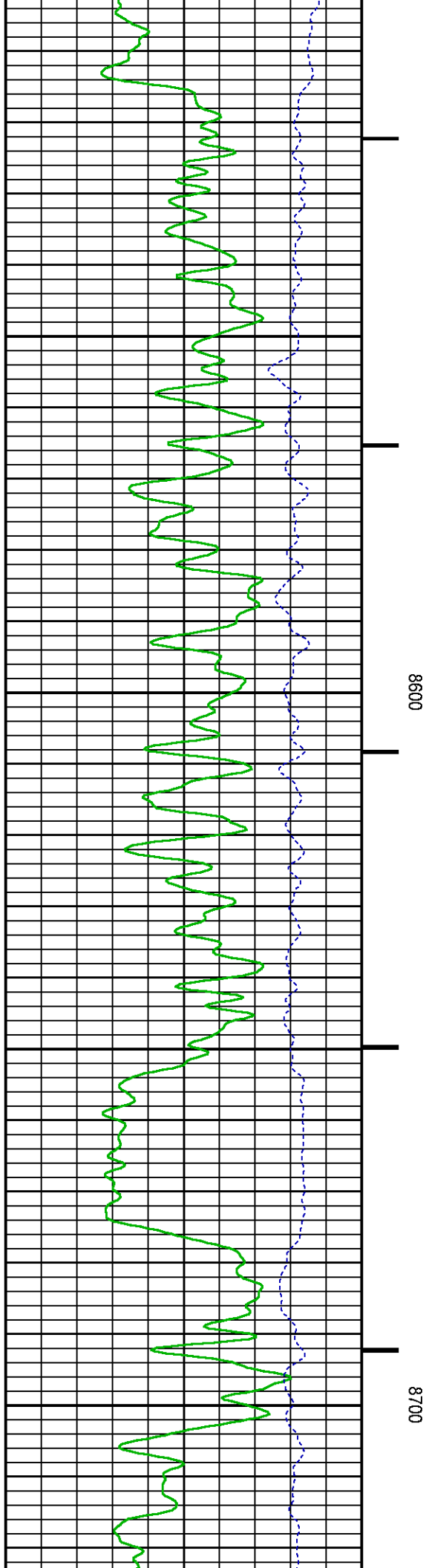
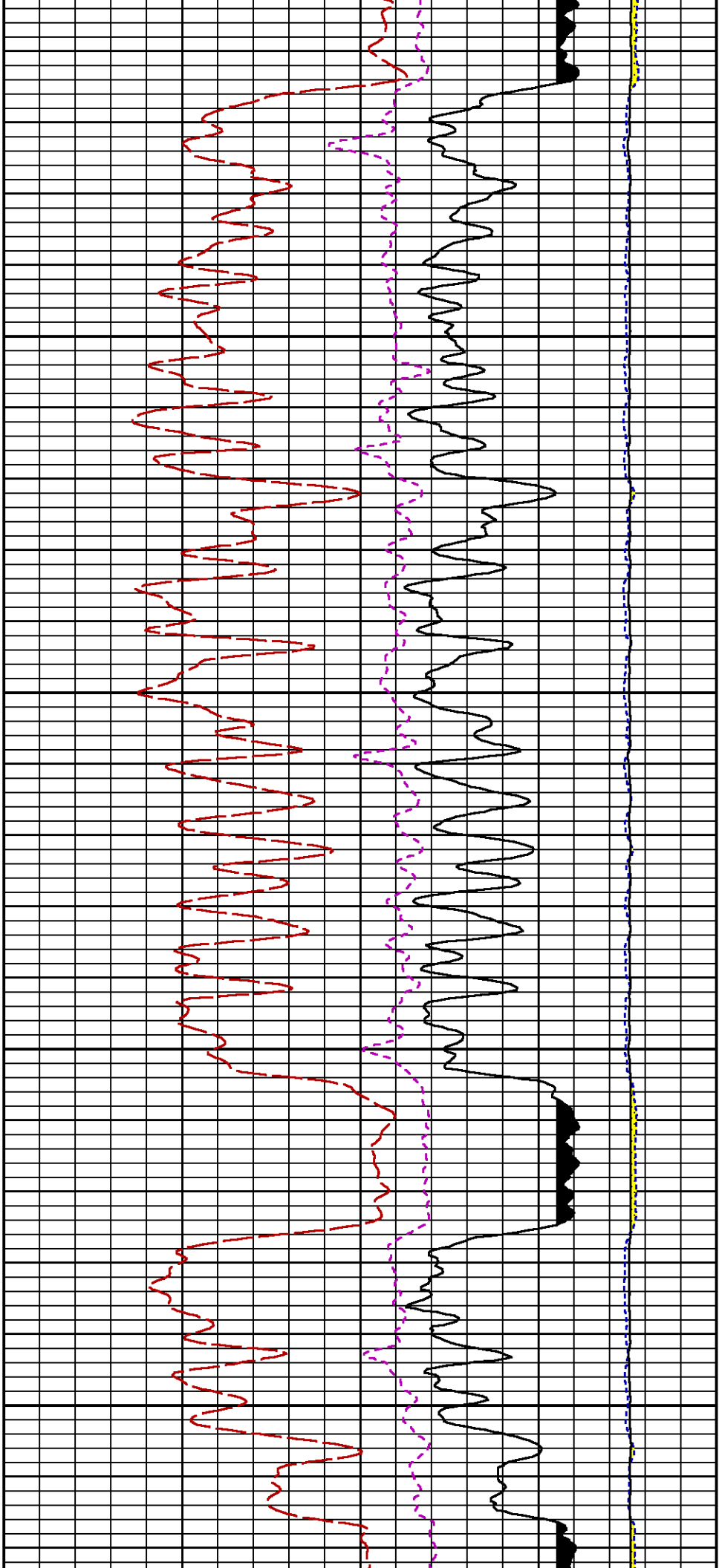


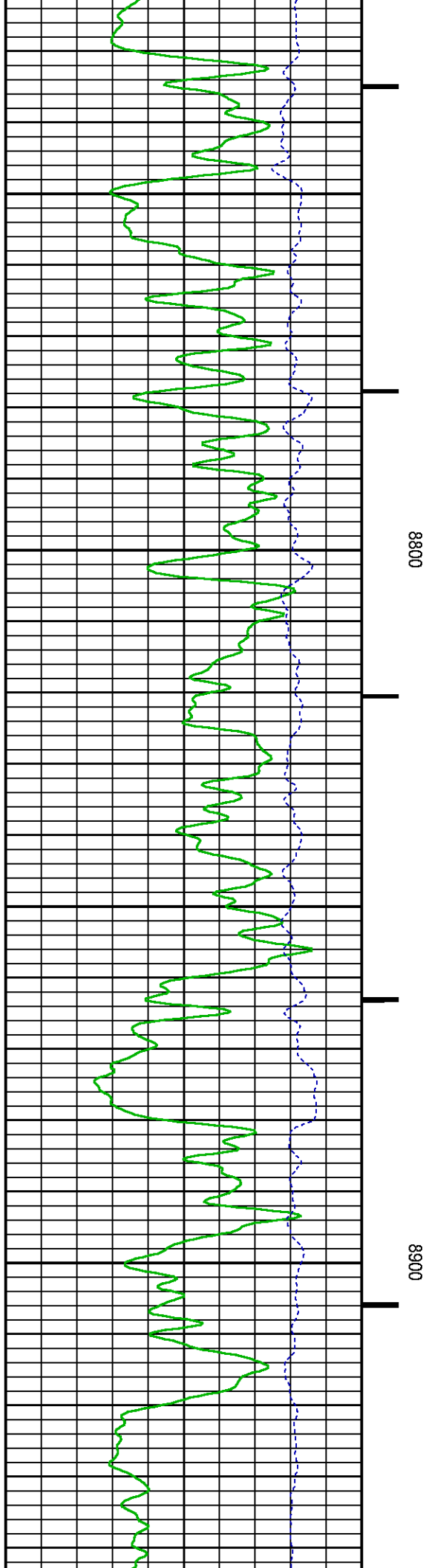
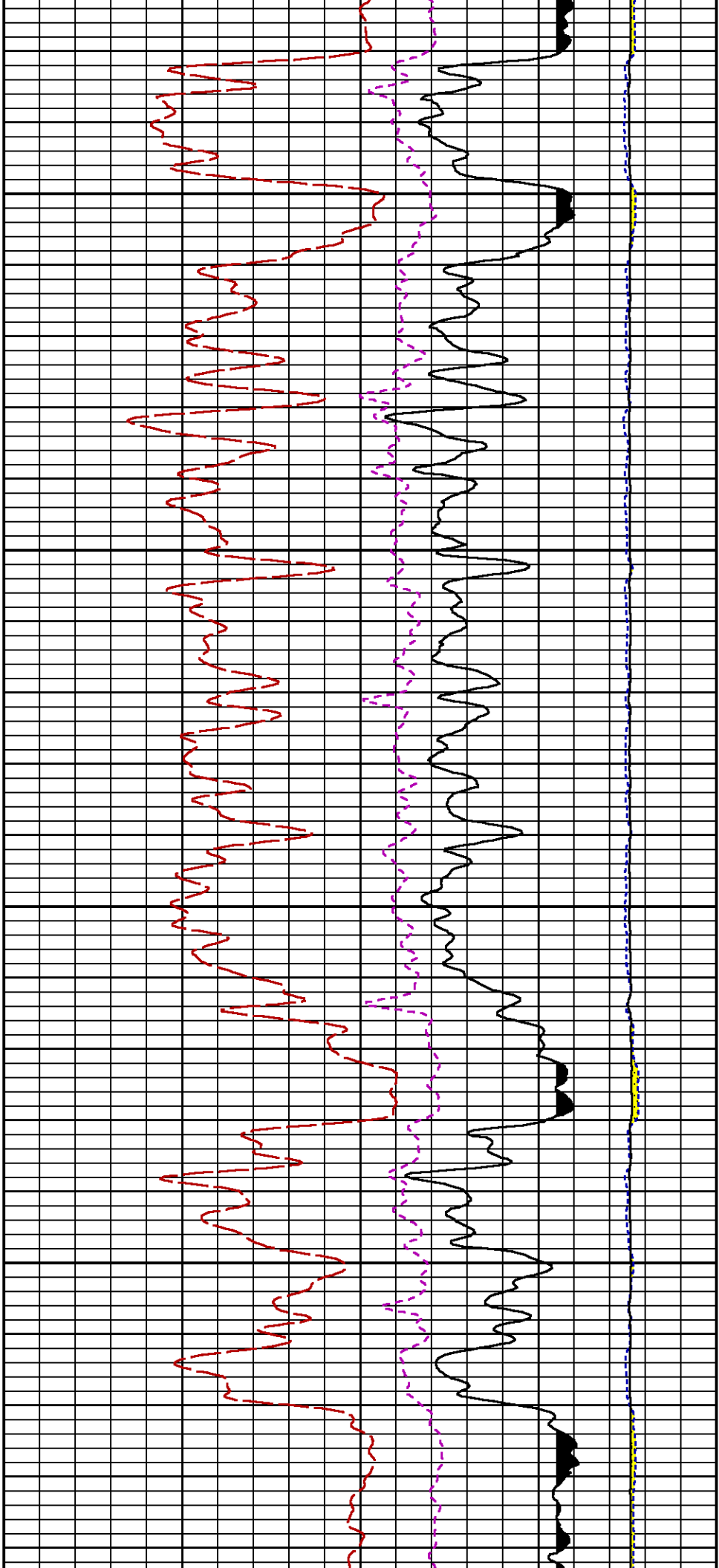


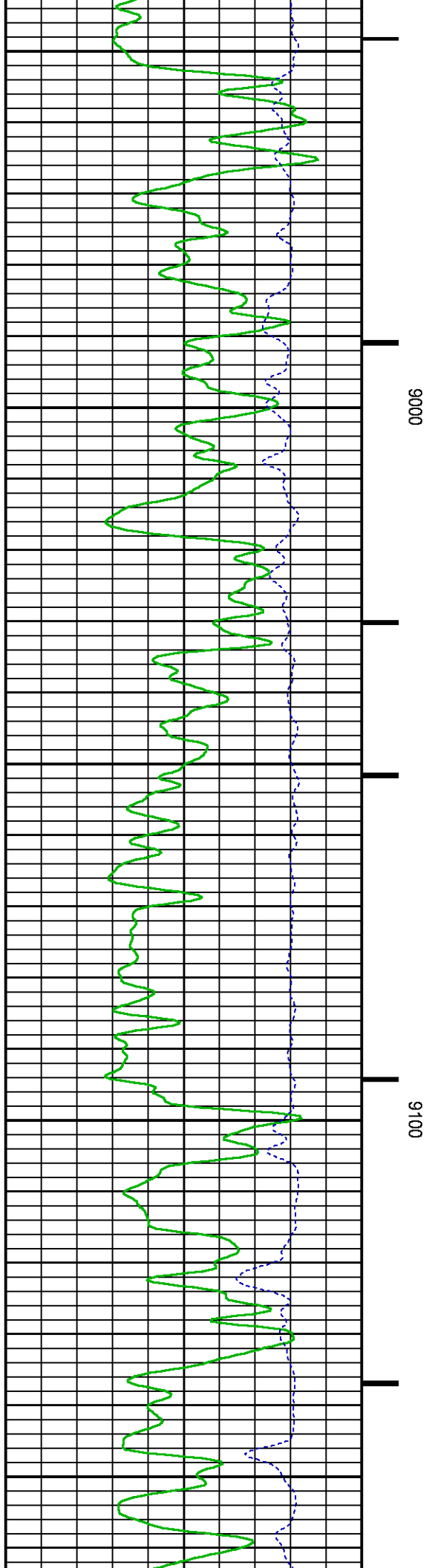
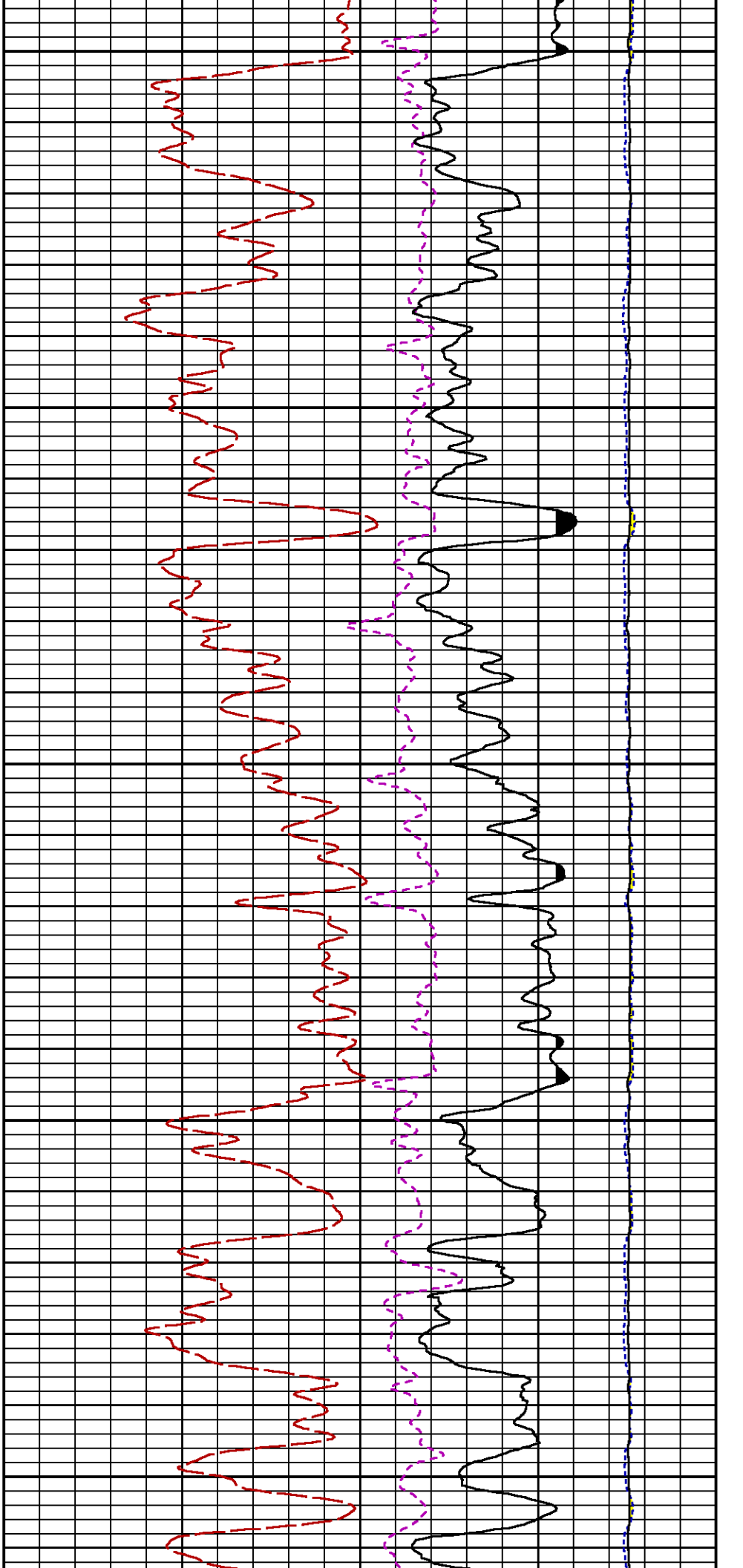


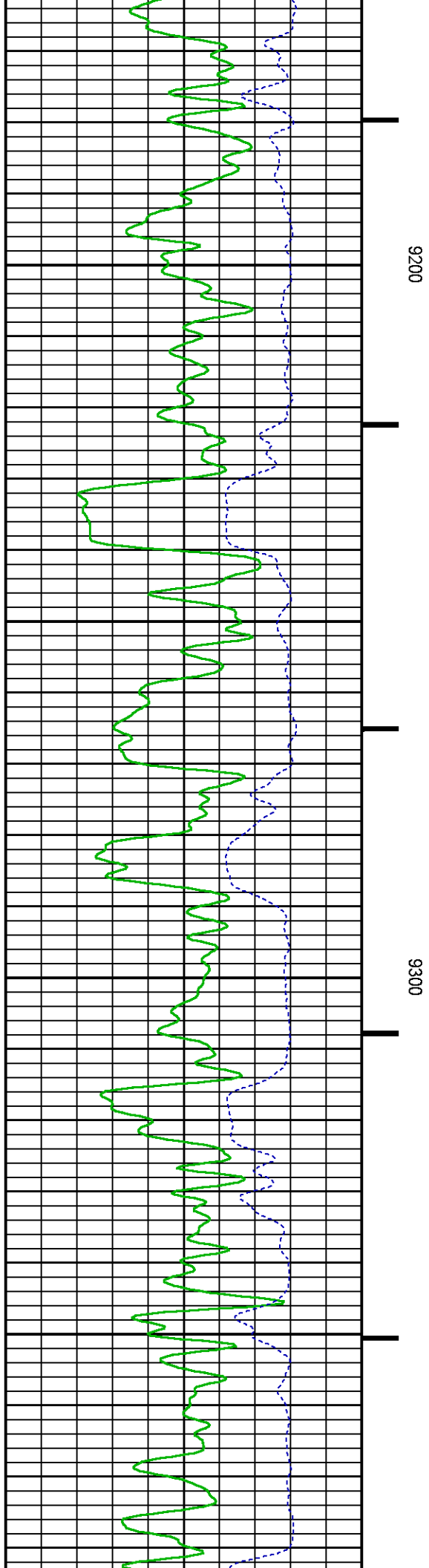
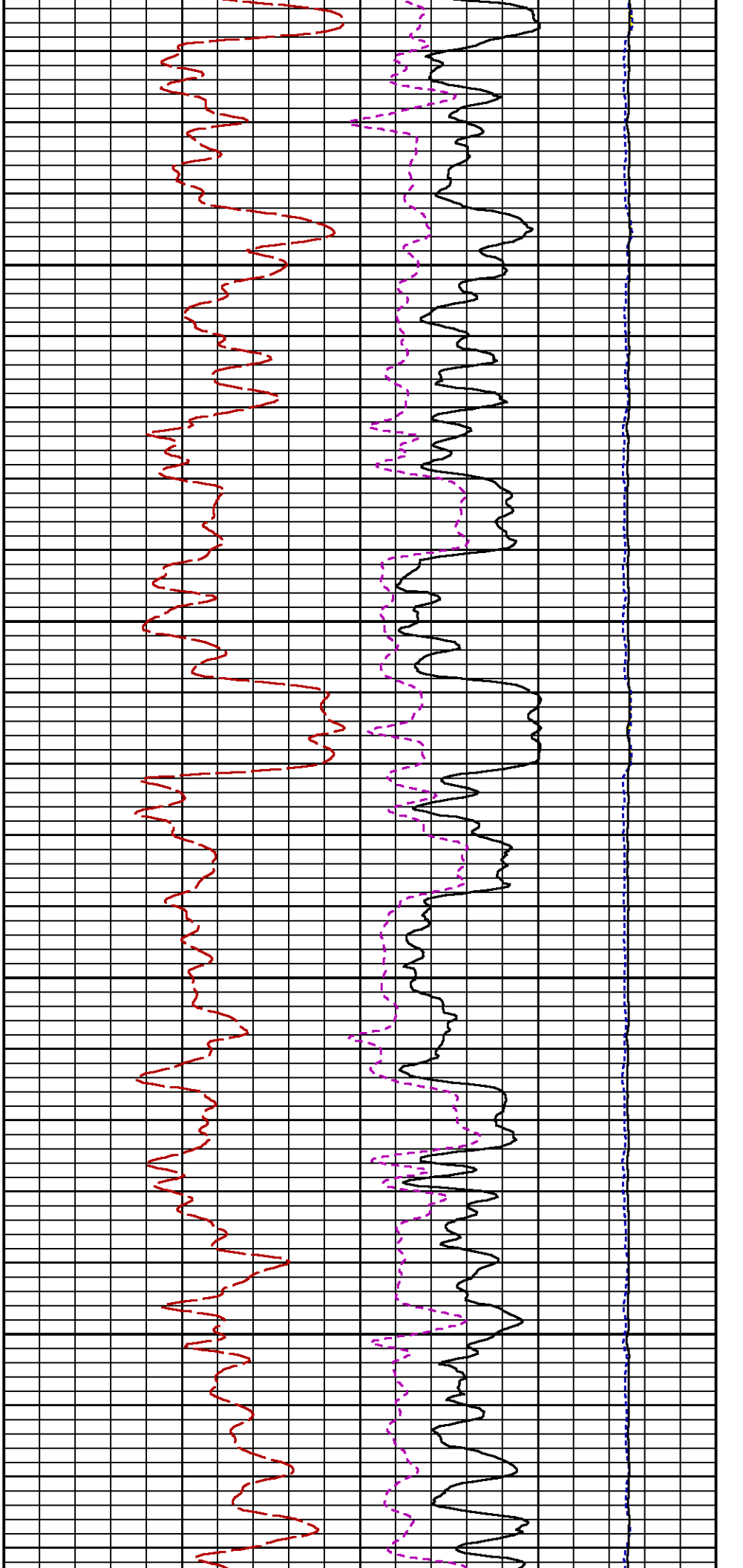


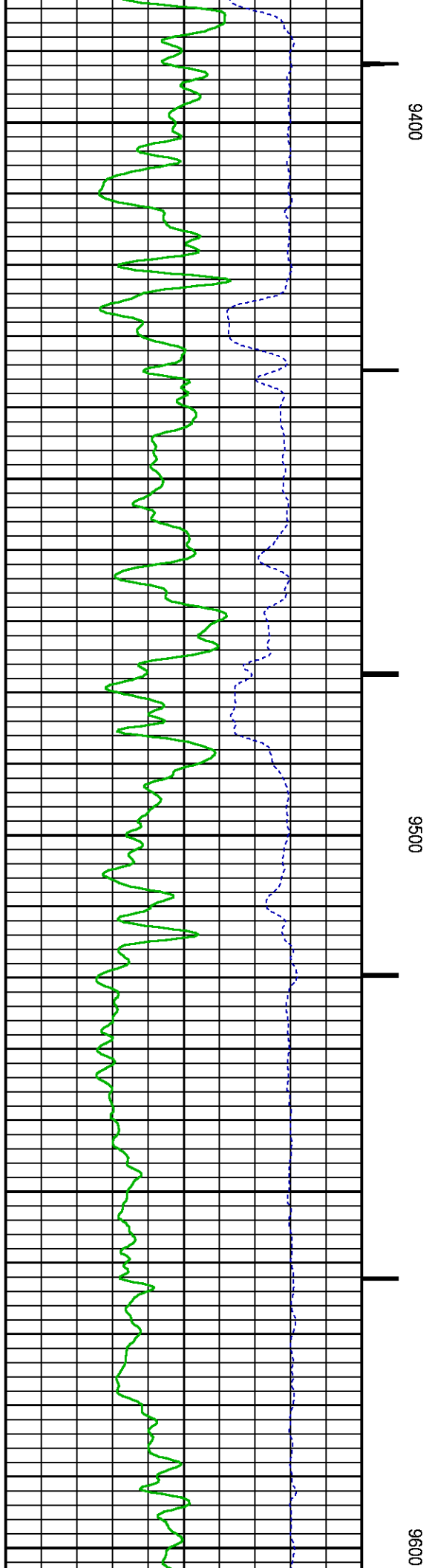
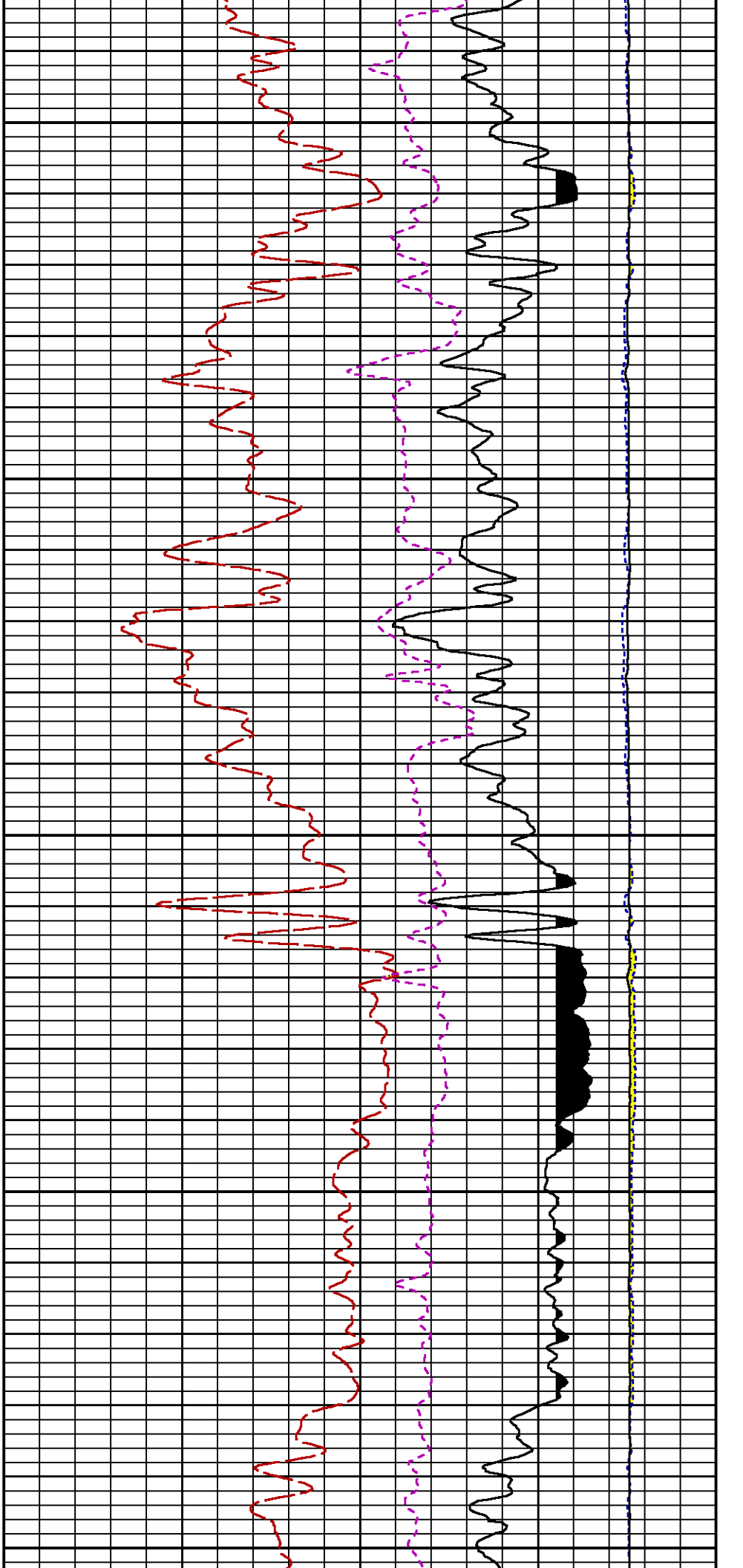


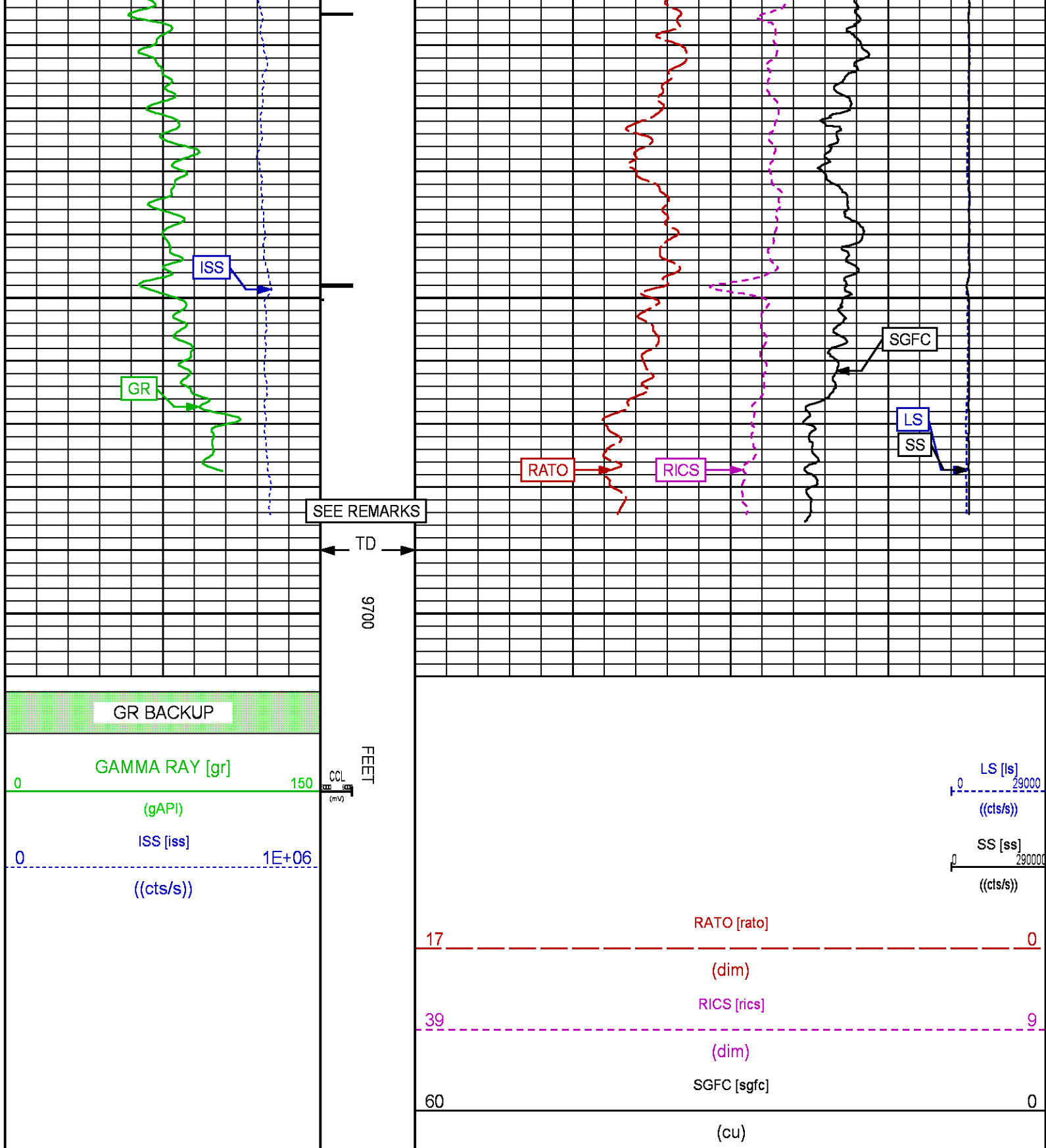












REPEAT PASS

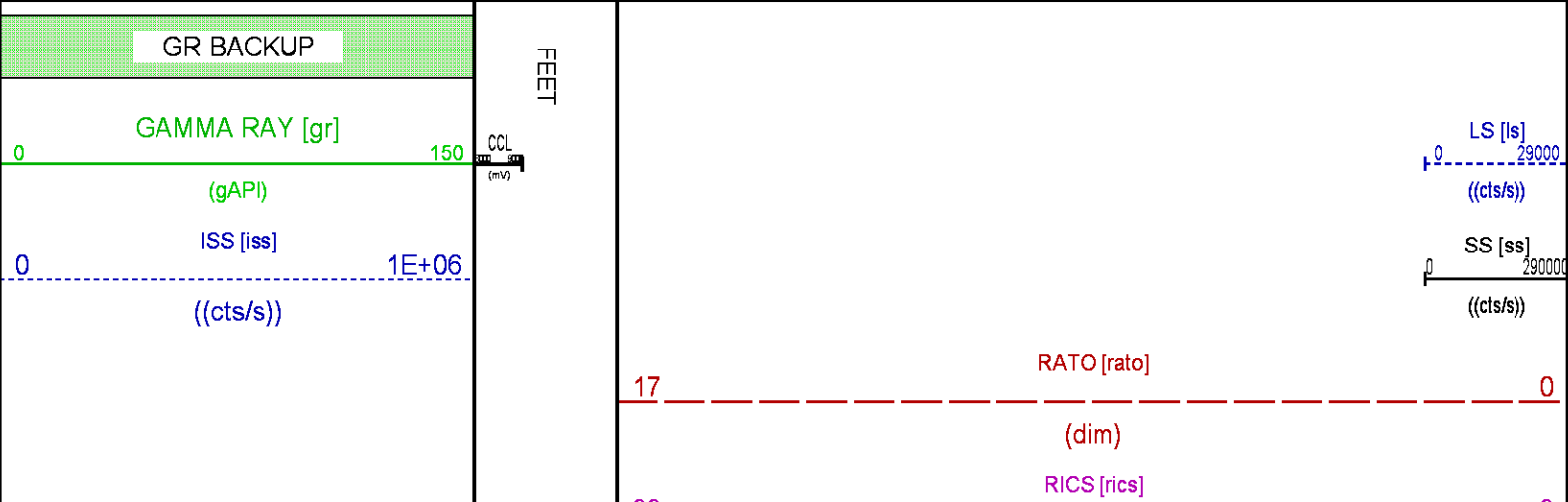
Plotted: Fri Aug 31 16:02:49 2018

PARAMETER AND FILTER SUMMARY REPORT				
FILE: /dat1a/LARAMIE_CC_0697-03-13E/p354h02.prm LOGGING MODE: DEPTH DIRECTION: UP TOP DEPTH: 6826.677 ft BOTTOM DEPTH: 7075.229 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	7.87	in	" "
	LARGEST CASING OD	4.50	in	" "
	MATRIX	SANDSTONE		" "

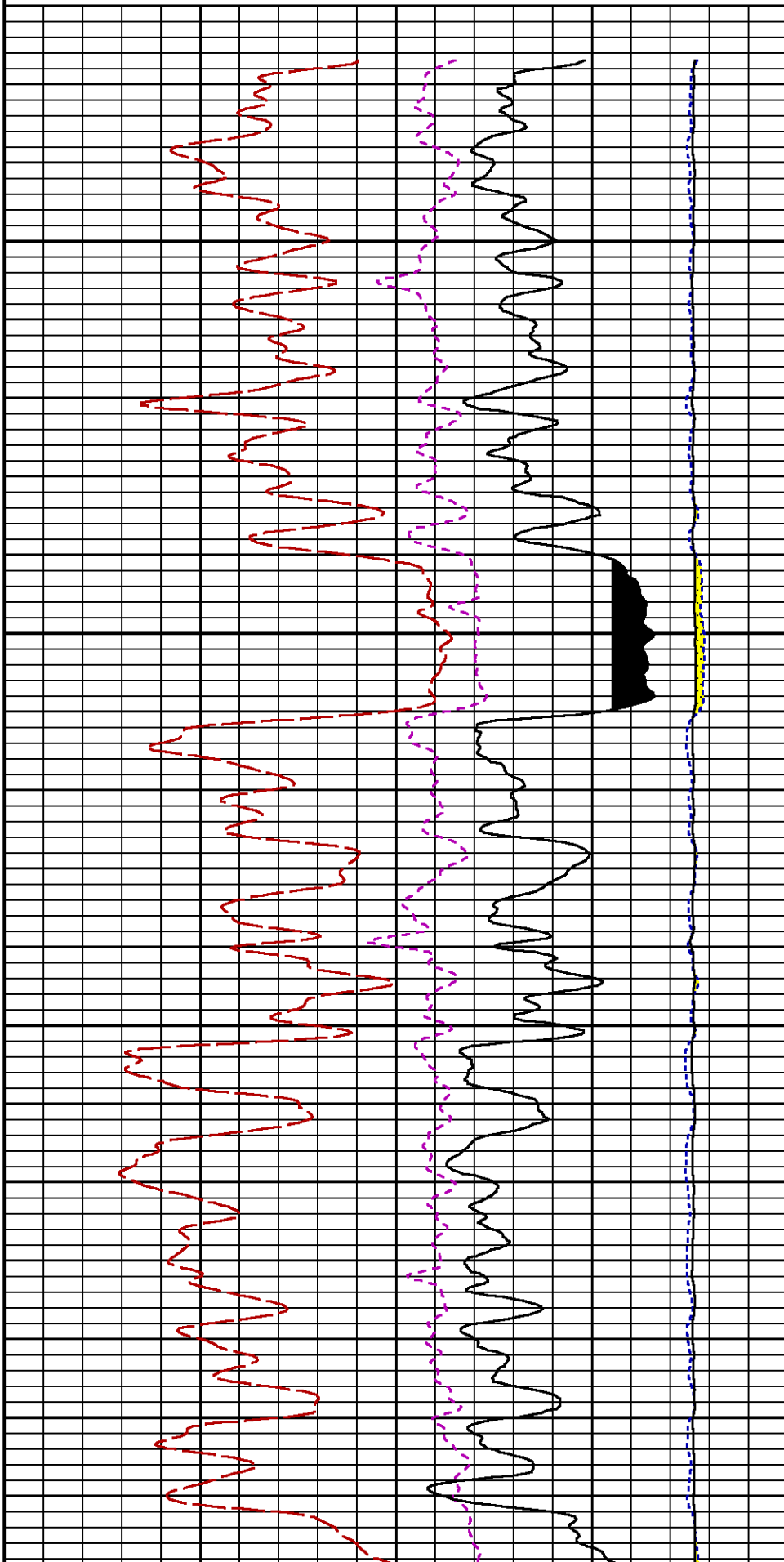
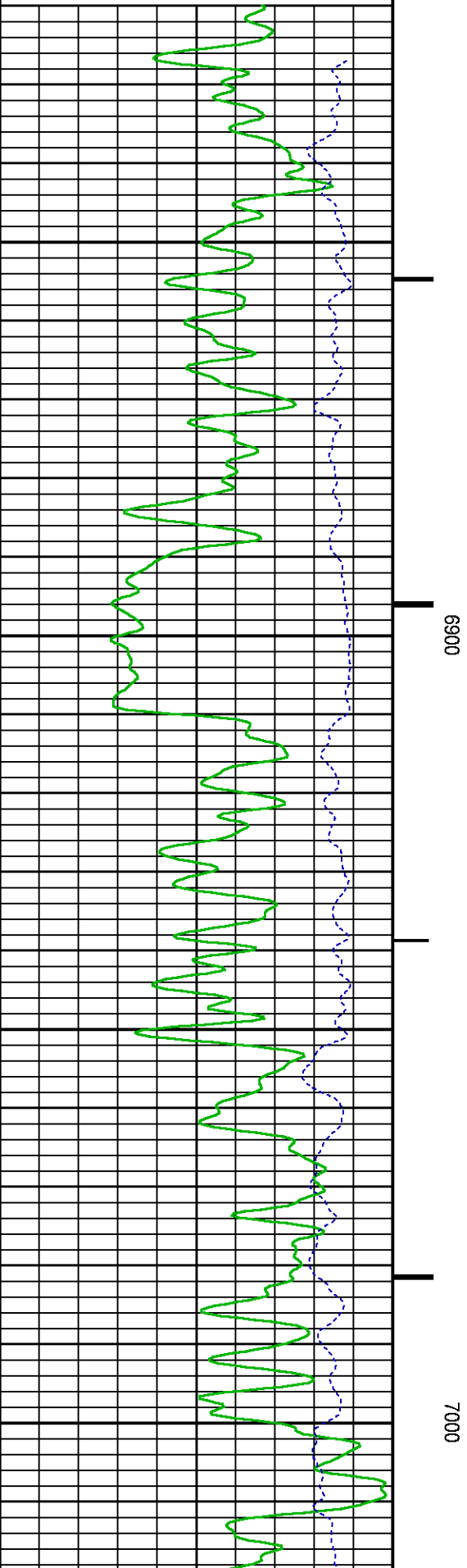
CURVE DESCRIPTION REPORT		
CURVE NAME	CREATION DATE	CURVE DESCRIPTION
F1:CCL	Aug 31 15:38:16 2018	CASING COLLAR LOCATOR
F1:GR	Aug 31 15:38:16 2018	GAMMA RAY
F1:ISS	Aug 31 15:38:16 2018	INELASTIC SHORT SPACE COUNT RATE
F1:LS	Aug 31 15:38:16 2018	LONG SPACE COUNT RATE
F1:RATO	Aug 31 15:38:16 2018	SHORT/LONG SPACE COUNT RATE RATIO
F1:RICS	Aug 31 15:38:16 2018	SHORT SPACE INELASTIC TO CAPTURE COUNT RATE RATIO (ISS/CSS)
F1:SGFC	Aug 31 15:38:16 2018	BOREHOLE AND DIFFUSION CORRECTED SIGMA
F1:SS	Aug 31 15:38:16 2018	SHORT SPACE COUNT RATE

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

Presentation	: SysA:/dat1a/LARAMIE_CC_0697-03-13E/CC_0697-03-13E_RPM_REPEAT.fvpdf [5"/100' Scale]
Plot Interval	: 6820 - 7072.25 Feet
Data File 1	: F1 : SysA:/dat1a/LARAMIE_CC_0697-03-13E/45_LARAMIE_CC_0697-03-13E_RPM_REPEAT.xtf
Created On	: Aug 31 15:38:16 2018
Company	: LARAMIE ENERGY LLC
Well	: CC 0697-03-13E
Field	: GRAND VALLEY
File Interval	: 6801.25 - 7072.5 Feet
OCT	: p354h



(cu)



RPM_PNC_3D PRIMARY CALIBRATION SUMMARY

TOOL: 8283PA 10068031

DATE/TIME PERFORMED: Fri Jul 20 13:10:46 2018

UNIT: 5753XD 10412898

CALIBRATOR: 2437XB 112674

SOURCE: 8281AA 10047980

HOURS: 8281AA 113

	ISS	Mtr Vits (V)	SS Gain	LS Gain	XLS Gain	EA Temp (degF)	Sync Delay (usec)	RCAL
Raw Data	790366	118	2168	2162	2249	117	7.0	0.9778
Interpolated	1300000	138	2150	2155	2241			

	ISS	BKS	BKL	BKX	SGA1	SDA1	SGA2	SDA2
Raw Data	790366	5846	959	130	25.92	0.15	24.08	0.34
					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	790366	164656	25413	85377	30385	7913	51786	12693
Fit Quality %		0.660	0.561	0.640	0.651	0.713	0.642	0.721

	ISS	RBOR	RIN ISS/ILS	RIN13 ISS/IXS	RICS ISS/CSS	RATO SS/LS	RTWO SS2/LS	RONE CSS/CLS
Raw Data	790366	1.43	4.80	31.11	15.26	10.79	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 %		0.041	0.070	0.118	0.054	0.071	0.063	0.062
Reduced	1393463	1.43	4.79	31.05	15.24	10.80	3.84	4.08
		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

Source File: /dat1a/LARAMIE_CC_0697-03-13E/p354h~GR_SONDEX-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 : 8248EA
Mnemonic : PCM
Measure Point: 1.00': CCL MP

33.24'

CCL MP 25.19'

GAMMA RAY, 1 11/16"

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 MP
Measure Point: 5.04': LS MP
Measure Point: 4.79': SS MP

XLS MP 13.58'
LS MP 13.16'
SS MP 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"



WELL	CC 0697-03-13E		CH138186J
FIELD	GRAND VALLEY		API NO:
COUNTY	GARFIELD	STATE	COLORADO
LOCATION:		ELEVATIONS:	
SHL: 3081.0' FNL & 1310.0' FEL		KB 8458 FT	
SHL: 3081.0' FNL & 1310.0' FEL		DF	
		GL 8428 FT	
SEC	3	TWP	6S
RGE	97W	DATE	31-Aug-2018