



FILE NO: CH094748	COMPANY WELL FIELD COUNTY	WPX ENERGY YOUBERG RU 41-7 RULISON GARFIELD	STATE CO
API NO: 05045223500000			

Ver. 3.87 7 7S 93W RU 42-7 PAD NABORS 574	LOCATION: SHL: 2441' FNL & 389' FEL BHL: 285' FNL & 464' FEL SEC 7 TWP 7S RGE 93W	OTHER SERVICES BOND LOG
--	--	----------------------------

PERMANENT DATUM LOG MEASURED FROM DRILL. MEAS. FROM	GL KB KB GL	ELEVATION 26 FT ABOVE P.D. 7737 FT 7763 FT 7737 FT
---	----------------------	---

DATE	11-Feb-2015
RUN	1
SERVICE ORDER	US094748
DEPTH DRILLER	10320 FT
DEPTH LOGGER	10306 FT
BOTTOM LOGGED INTERVAL	10296 FT
TOP LOGGED INTERVAL	6221 FT
TIME STARTED	12:00
TIME FINISHED	18:00
OPERATOR RIG TIME	6 HOURS
TYPE OF FLUID IN HOLE	WATER
FLUID DENSITY	NA
FLUID SALINITY	NA
FLUID LEVEL	89 FT
LOGGED CEMENT TOP	NA
WELLHEAD PRESSURE	0 PSI
MAXIMUM HOLE DEVIATION	NA
NOMINAL LOGGING SPEED	10 FPM
MAX. RECORDED TEMP.	248 DEGF
REFERENCE LOG	BAKER HUGHES BOND LOG
REFERENCE LOG DATE	11-Feb-2015
EQUIP. NO.	HL-6670
LOCATION	GRAND JCT.
RECORDED BY	NEWELL
WITNESSED BY	TED VONFELDT

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	1141 FT
8.75 IN	1141 FT	10328 FT

CASING RECORD				
SIZE	WEIGHT	GRADE	FROM	TO
9.625 IN			0 FT	1141 FT
4.5 IN	11.6 LB/F	P-110	0 FT	10328 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 11/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 4 feet.

Logged in PNC-3D mode.

BHT = 248 degF
SJ = 6649' - 6671'

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: Wed Feb 11 17:38:05 2015

PARAMETER AND FILTER SUMMARY REPORT

FILE: /dat1a/CH094748/n354h02.prm
 LOGGING MODE: DEPTH DIRECTION: UP
 TOP DEPTH: 6213.500 ft BOTTOM DEPTH: 10313.530 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 11 13:18:30 2015	CASING COLLAR LOCATOR
F1:GR	Feb 11 13:18:30 2015	GAMMA RAY
F1:ISS	Feb 11 13:18:30 2015	INELASTIC SHORT SPACE COUNT RATE
F1:LS	Feb 11 13:18:30 2015	LONG SPACE COUNT RATE
F1:RATO	Feb 11 13:18:30 2015	SHORT/LONG SPACE COUNT RATE RATIO
F1:RICS	Feb 11 13:18:30 2015	SHORT SPACE INELASTIC TO CAPTURE COUNT RATE RATIO (ISS/CSS)
F1:SGFC	Feb 11 13:18:30 2015	CORRECTED FORMATION SIGMA
F1:SS	Feb 11 13:18:30 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/CH094748/41RPM_MAIN.fvpdf [5"/100' Scale]
 Plot Interval : 6215 - 10311 Feet

Data File 1 : F1 : HL6670:/dat1a/CH094748/41RPM_MAIN.xtf
 Created On : Feb 11 13:18:30 2015
 Company : WBY ENERGY

Company : WPA ENERGY
Well : YOUNBERG RU 41-7
Field : RULISON
File Interval : 6188 - 10310.8 Feet
OCT : n354h

GR BACKUP

FEET

ISS [iss]

1E+06

(1)

GAMMA RAY [gr]

150

(gAPI)

GR

ISS

6300

LS [ls]

29000

(1)

SS [ss]

290000

(1)

RATO [rato]

17

0

(1)

RICS [rics]

39

9

(1)

SGFC [sgfc]

60

0

(1)

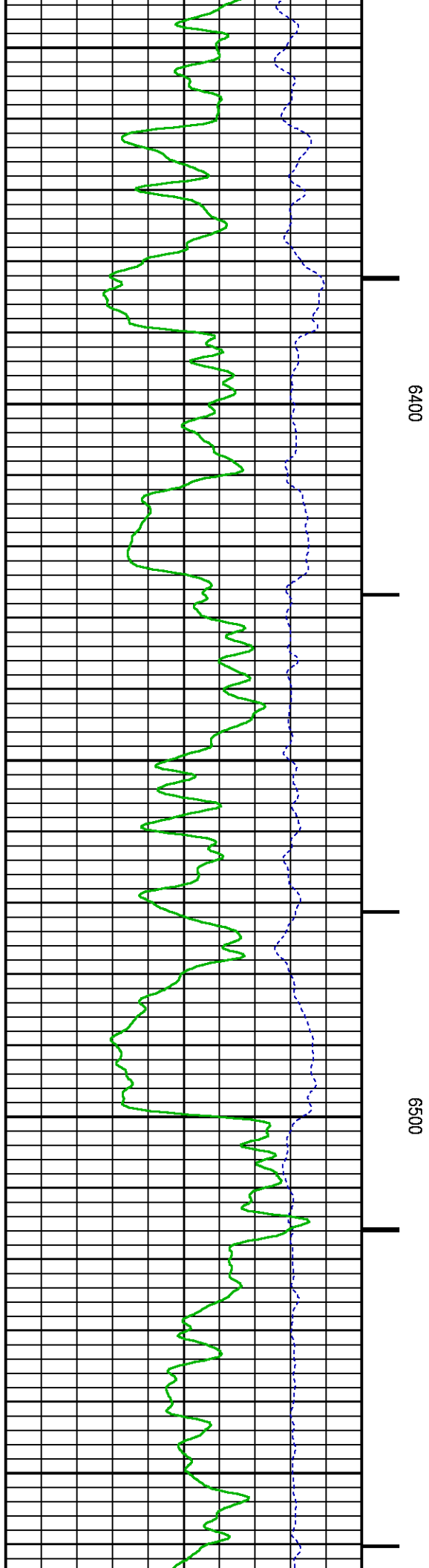
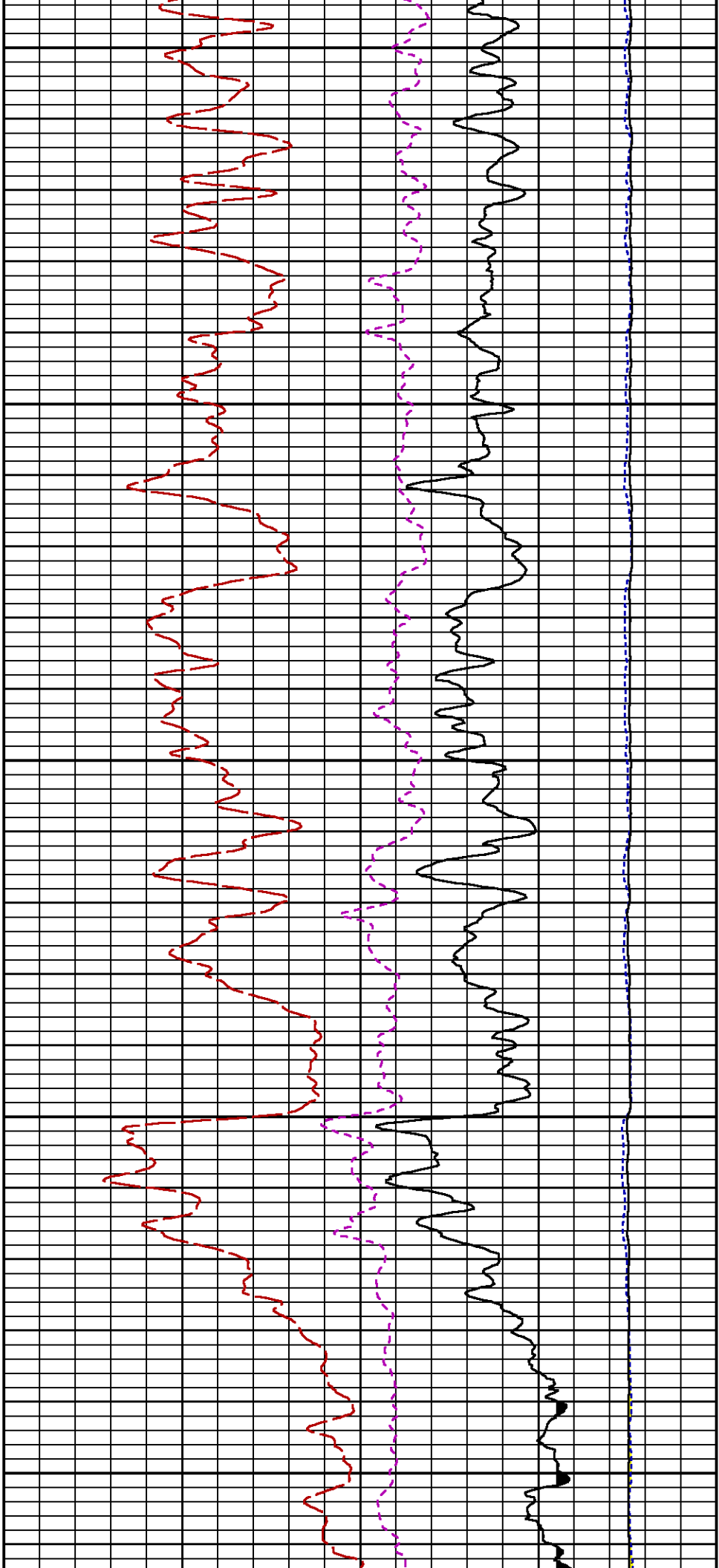
RATO

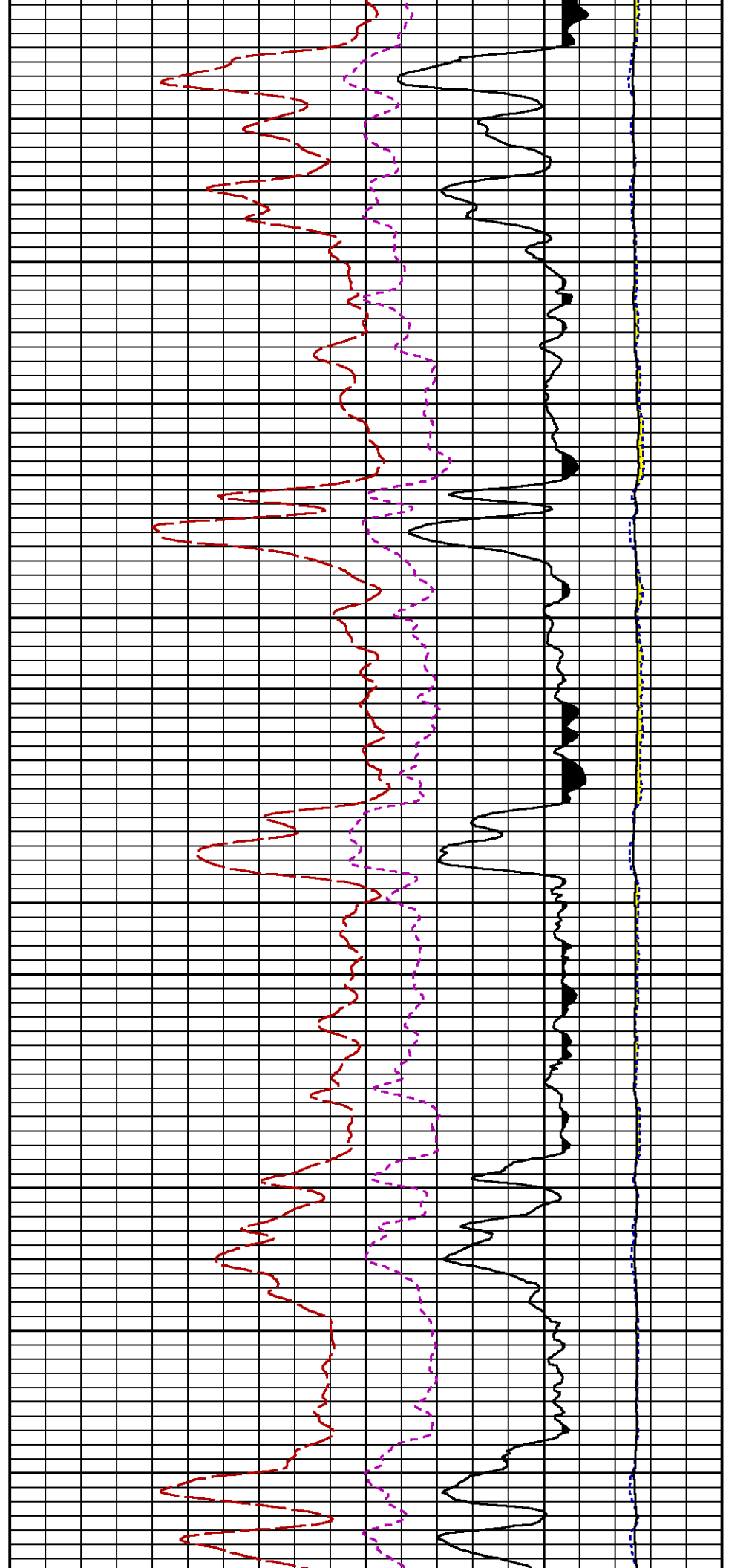
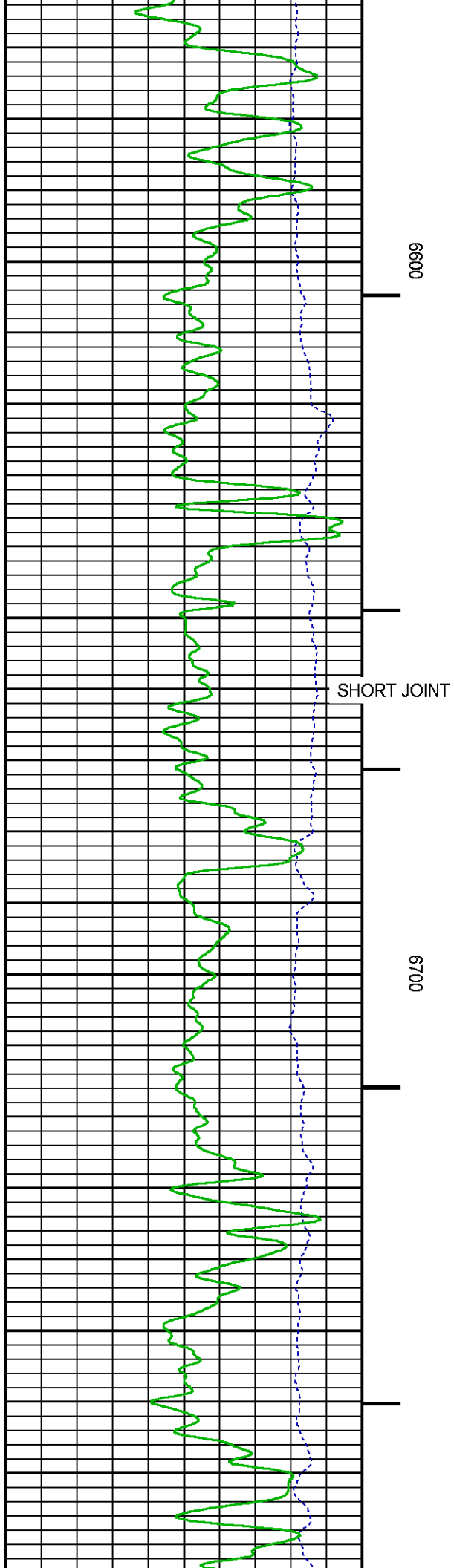
RICS

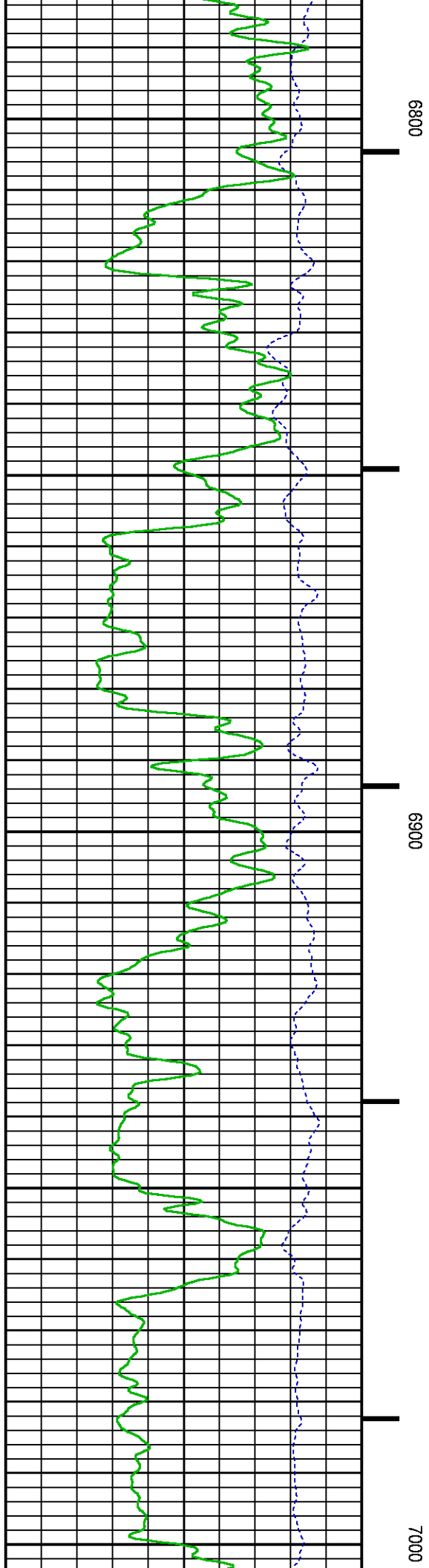
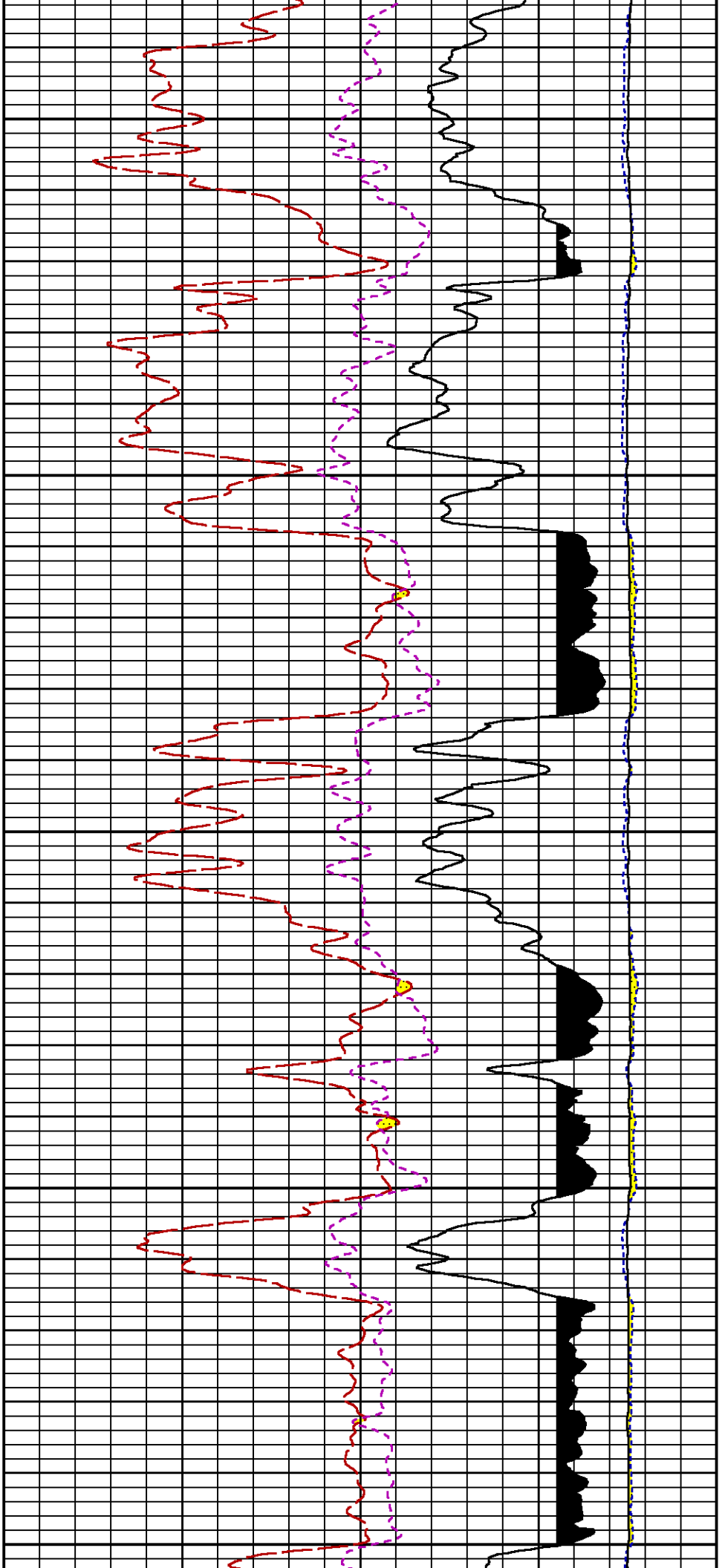
LS

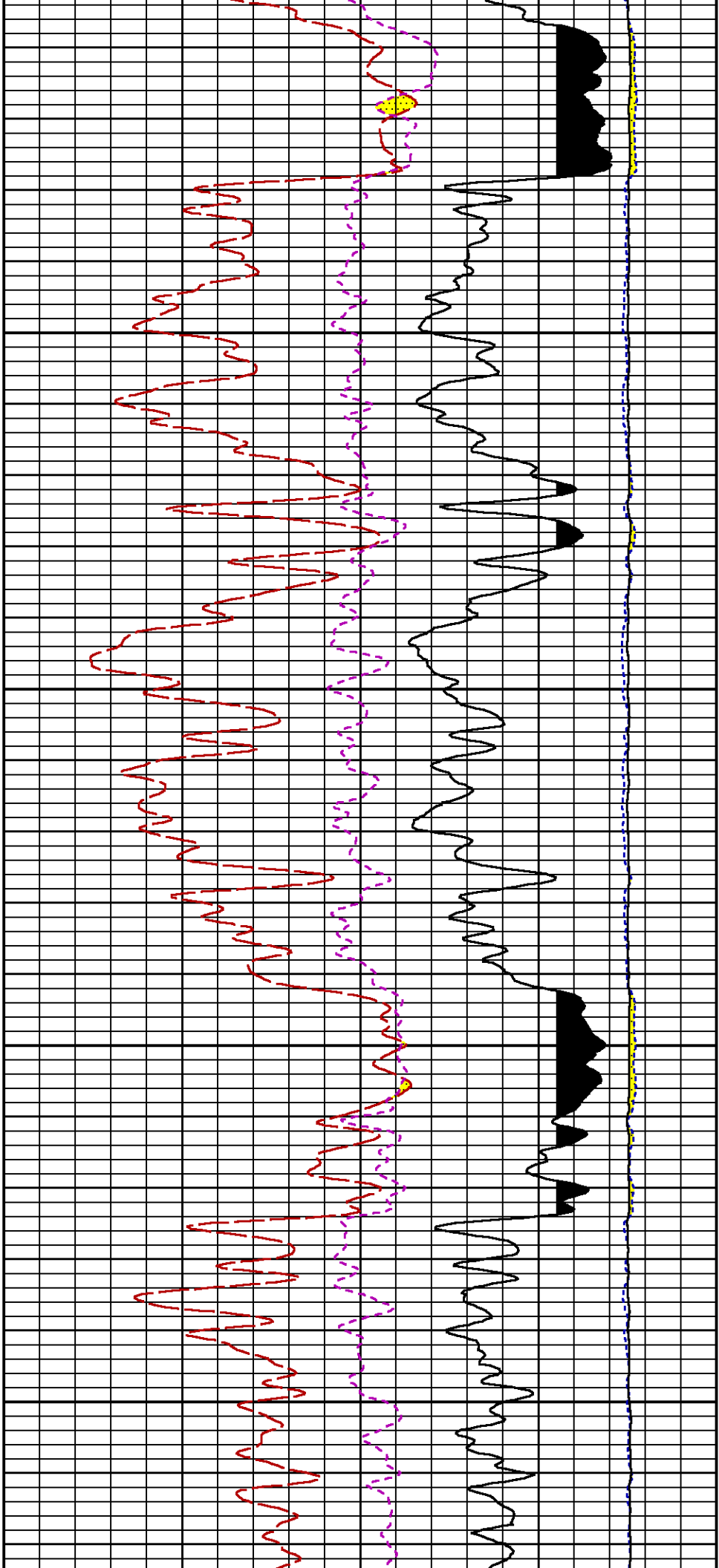
SS

SGFC



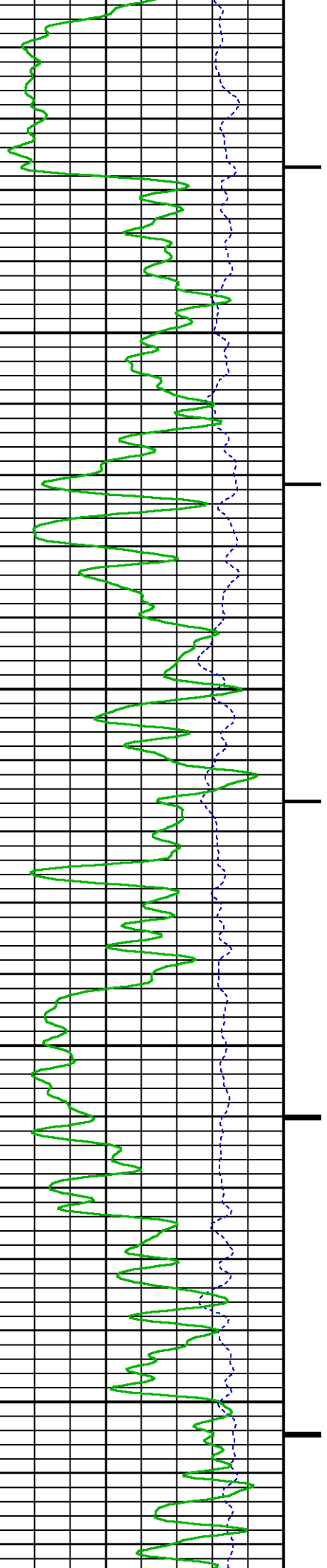


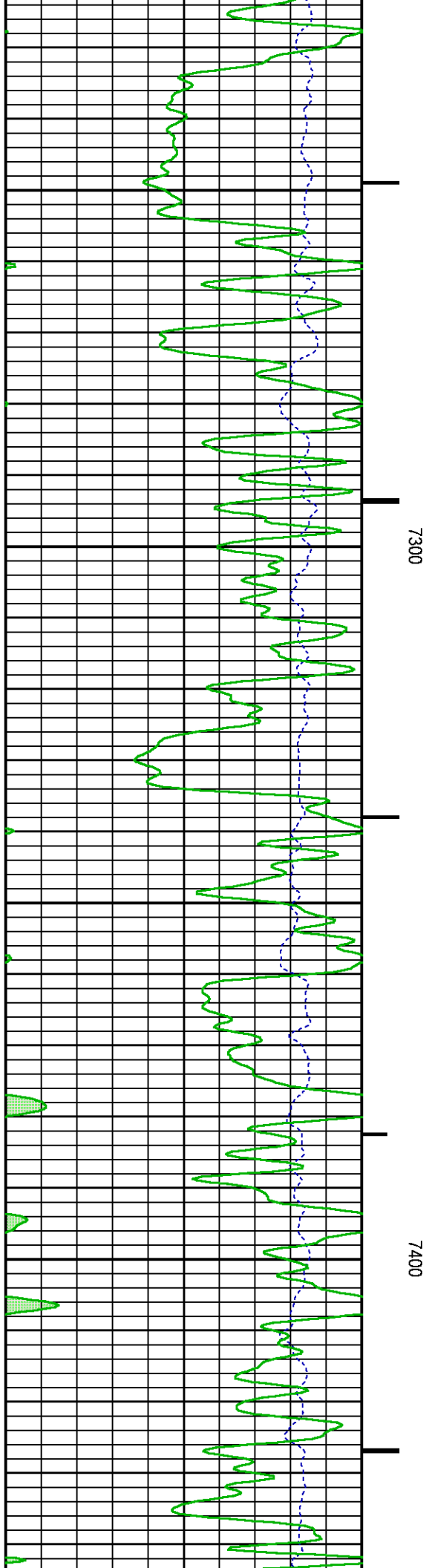
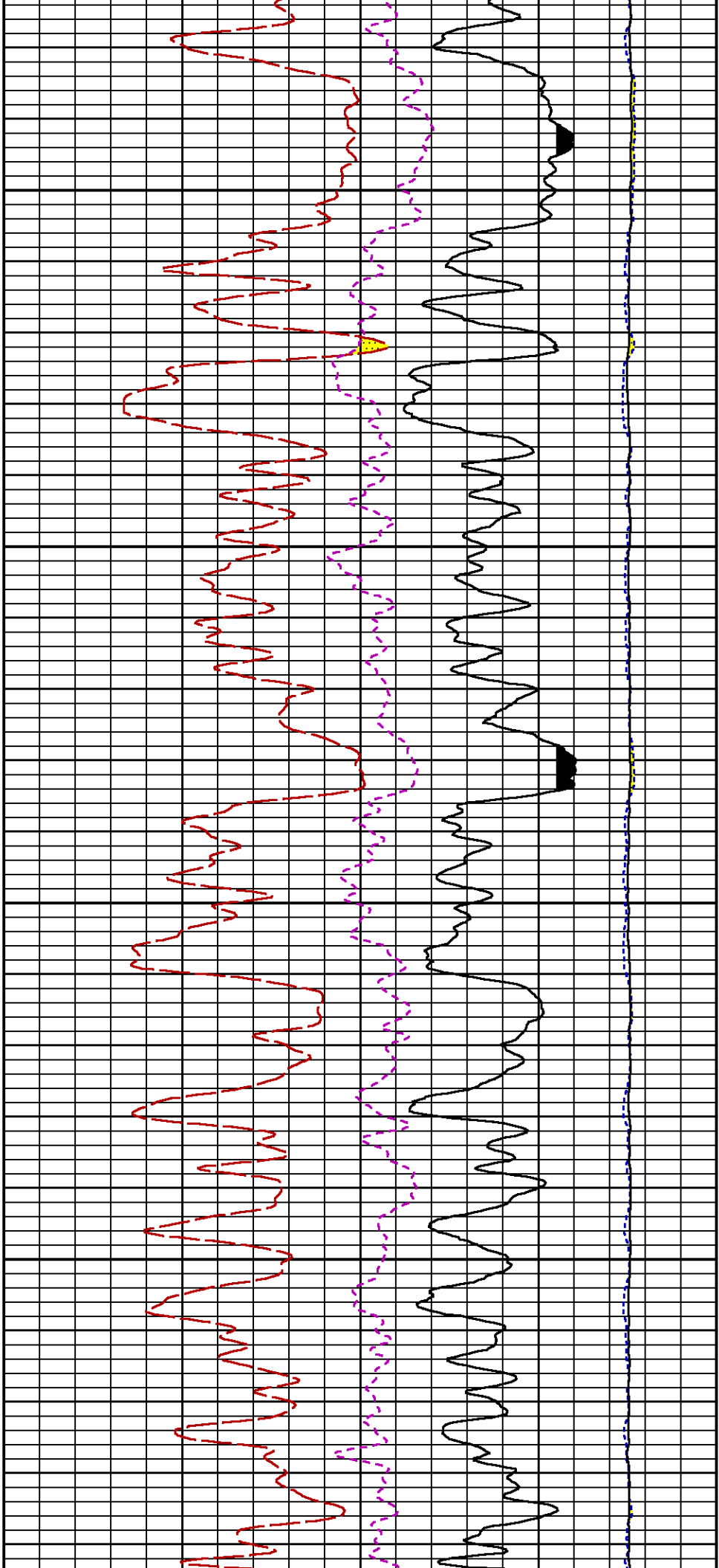


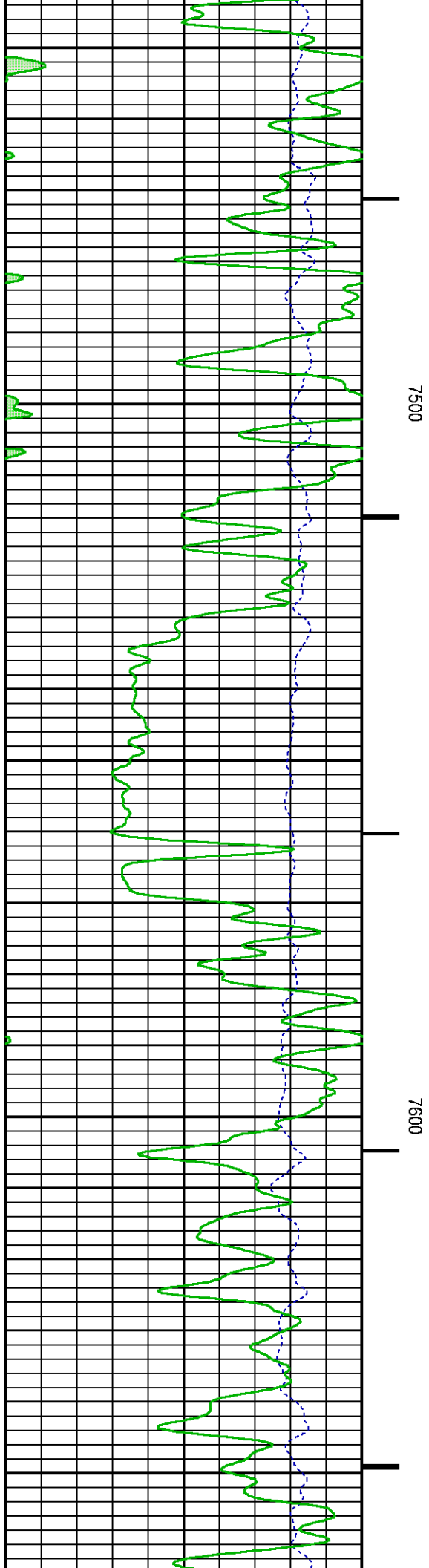
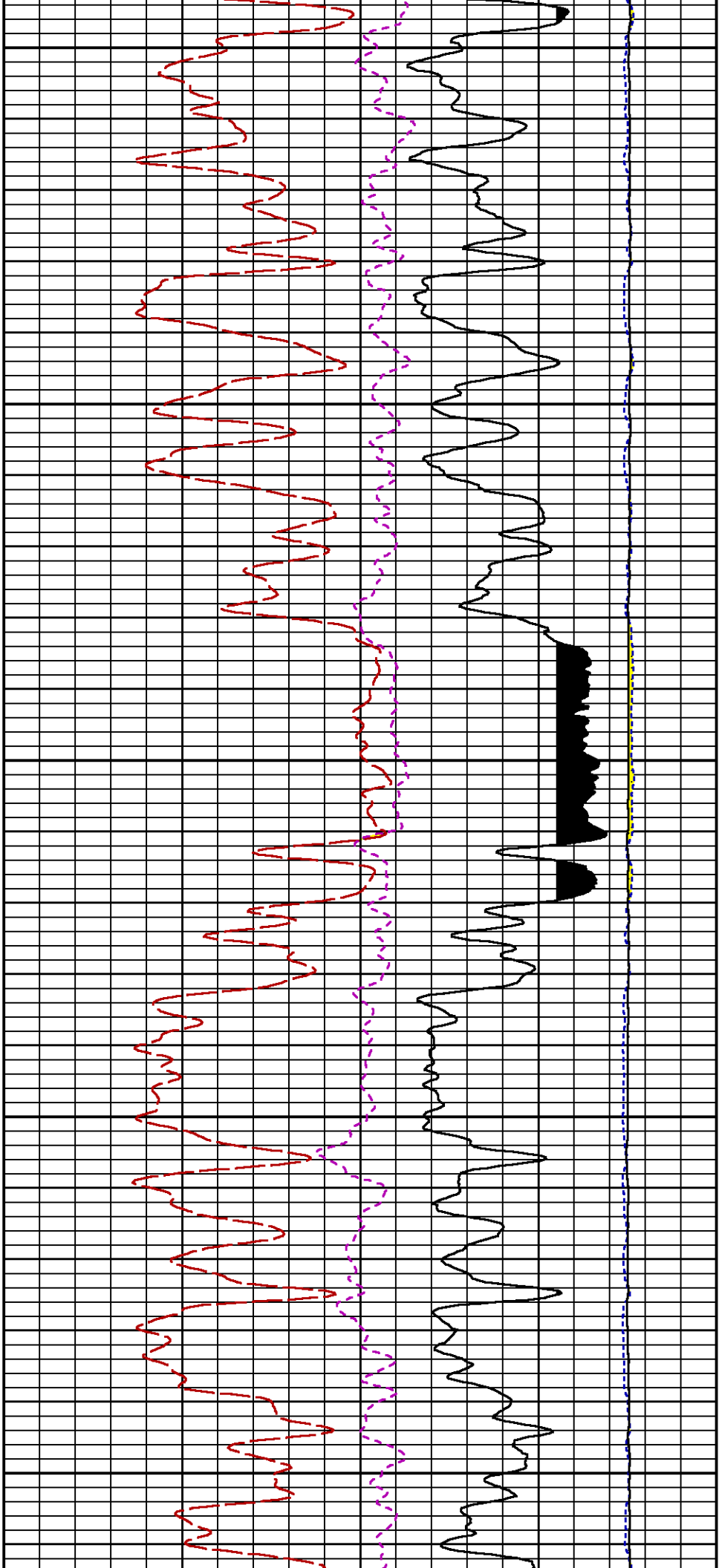


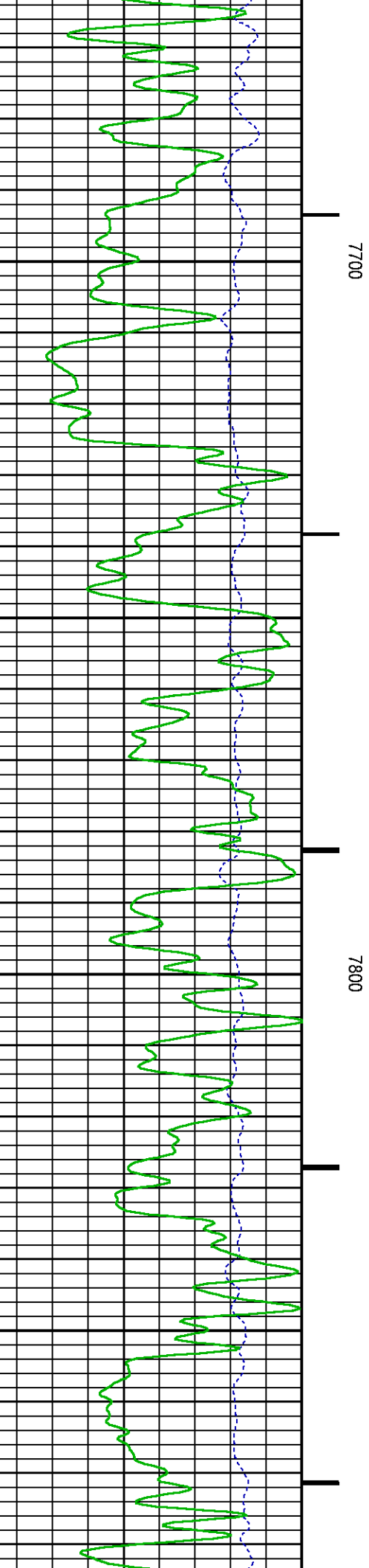
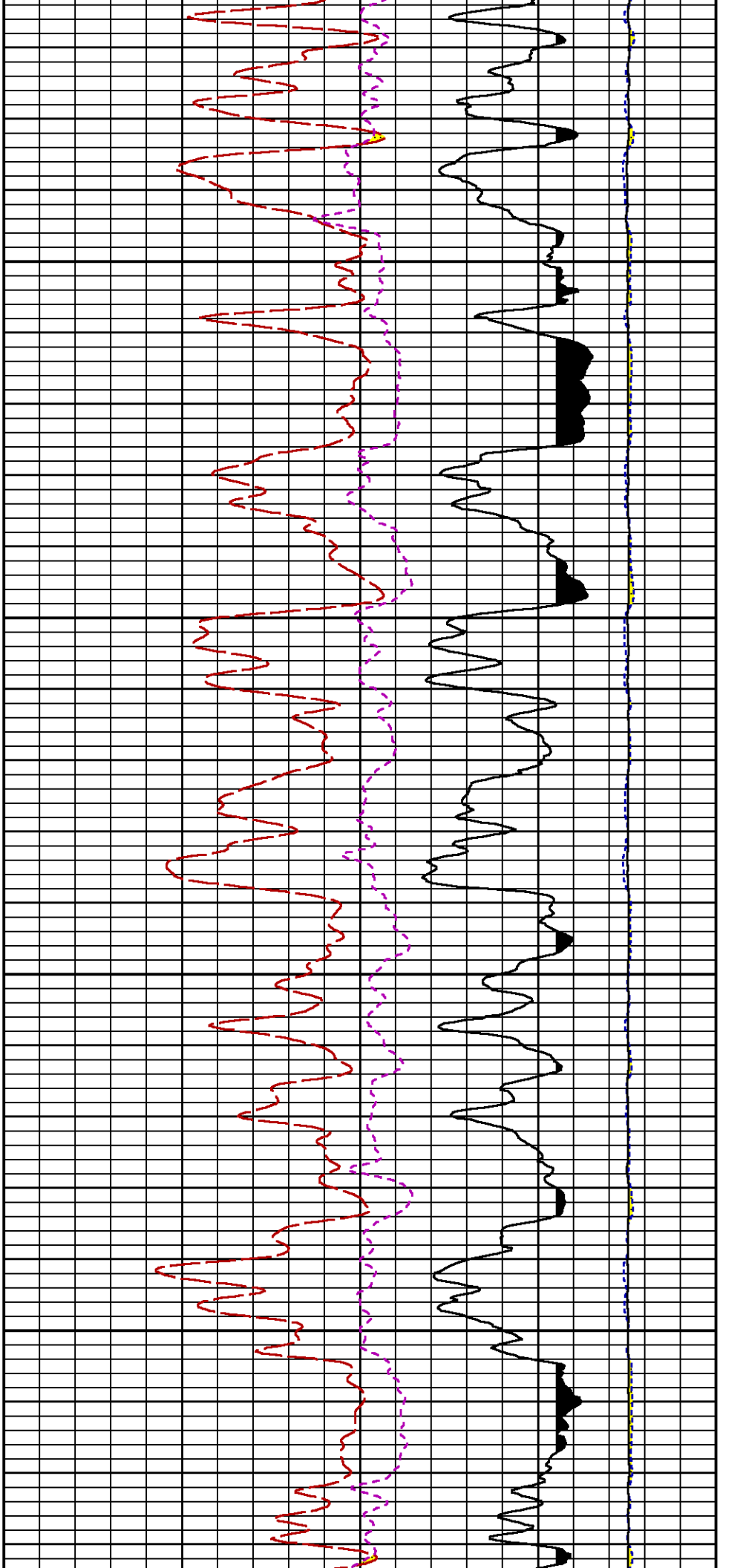
7100

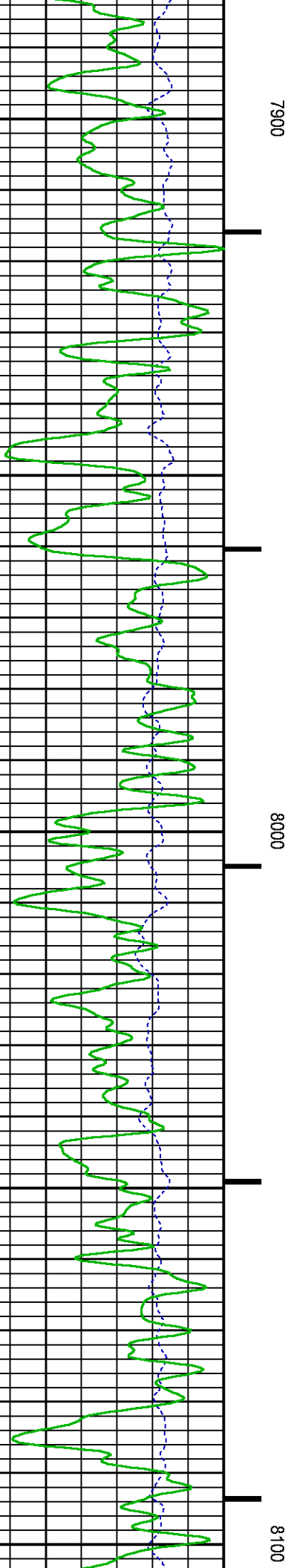
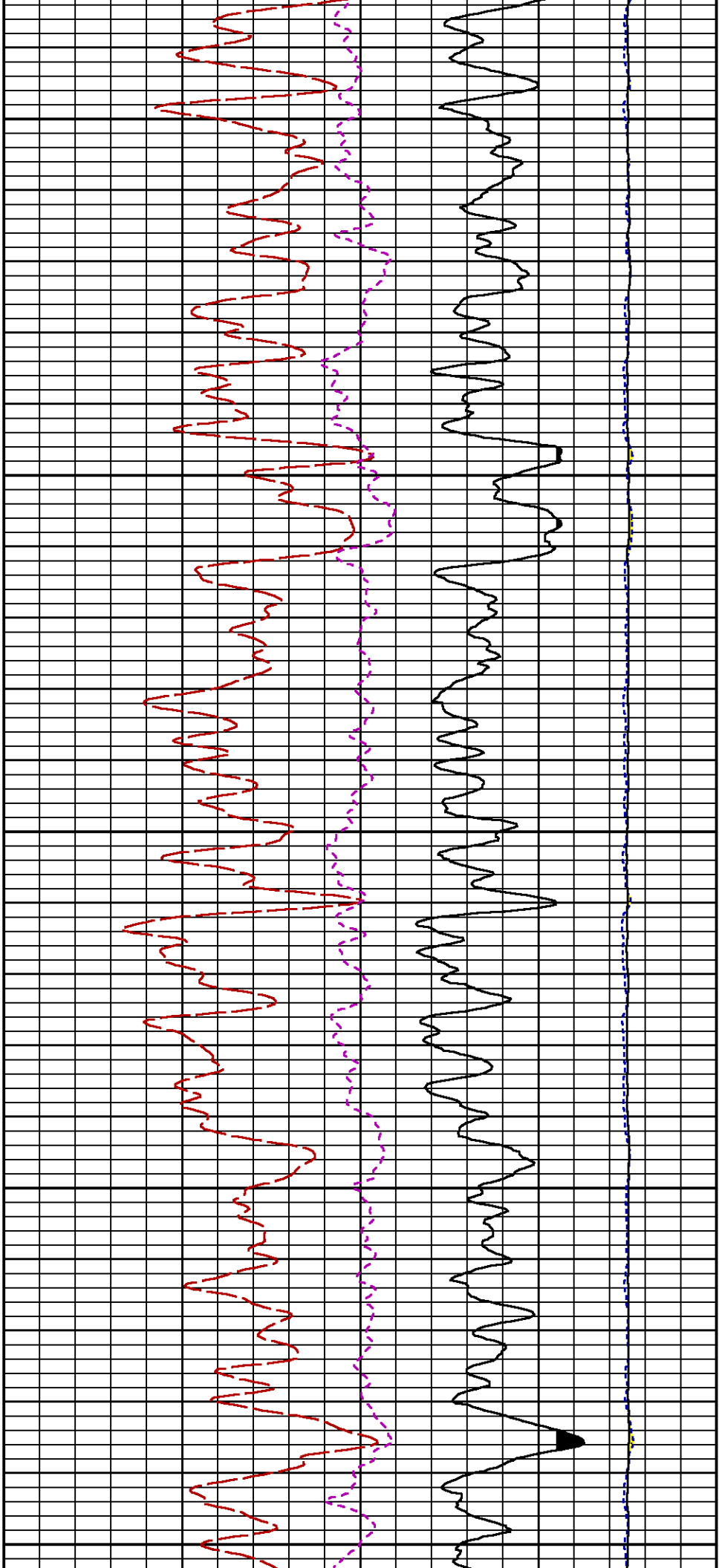
7200

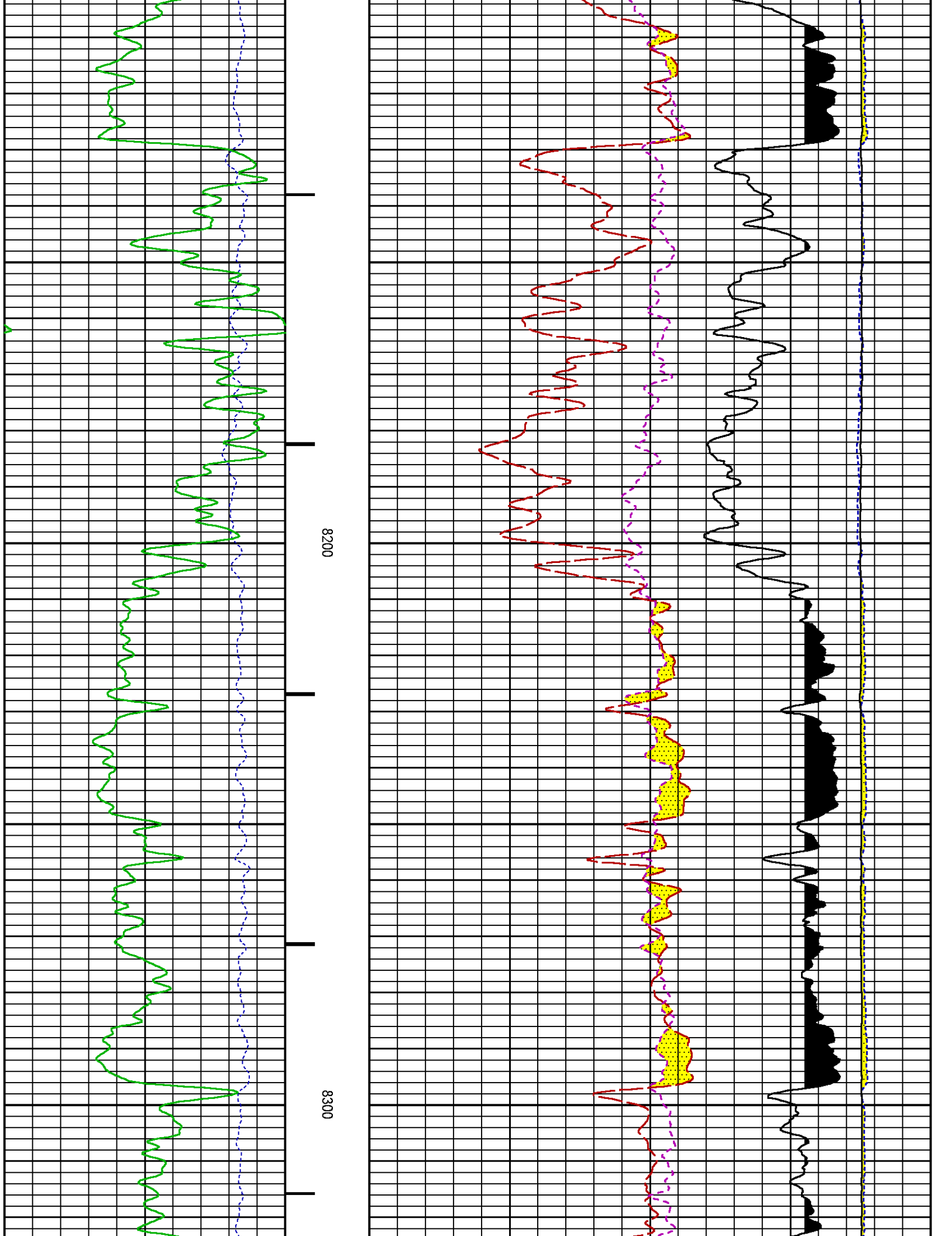


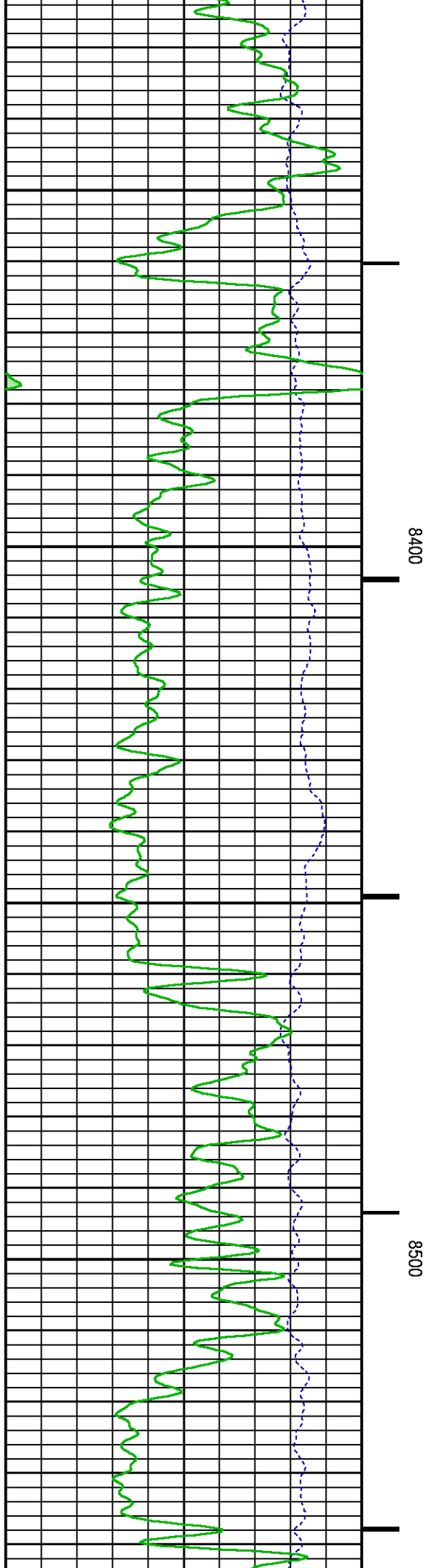
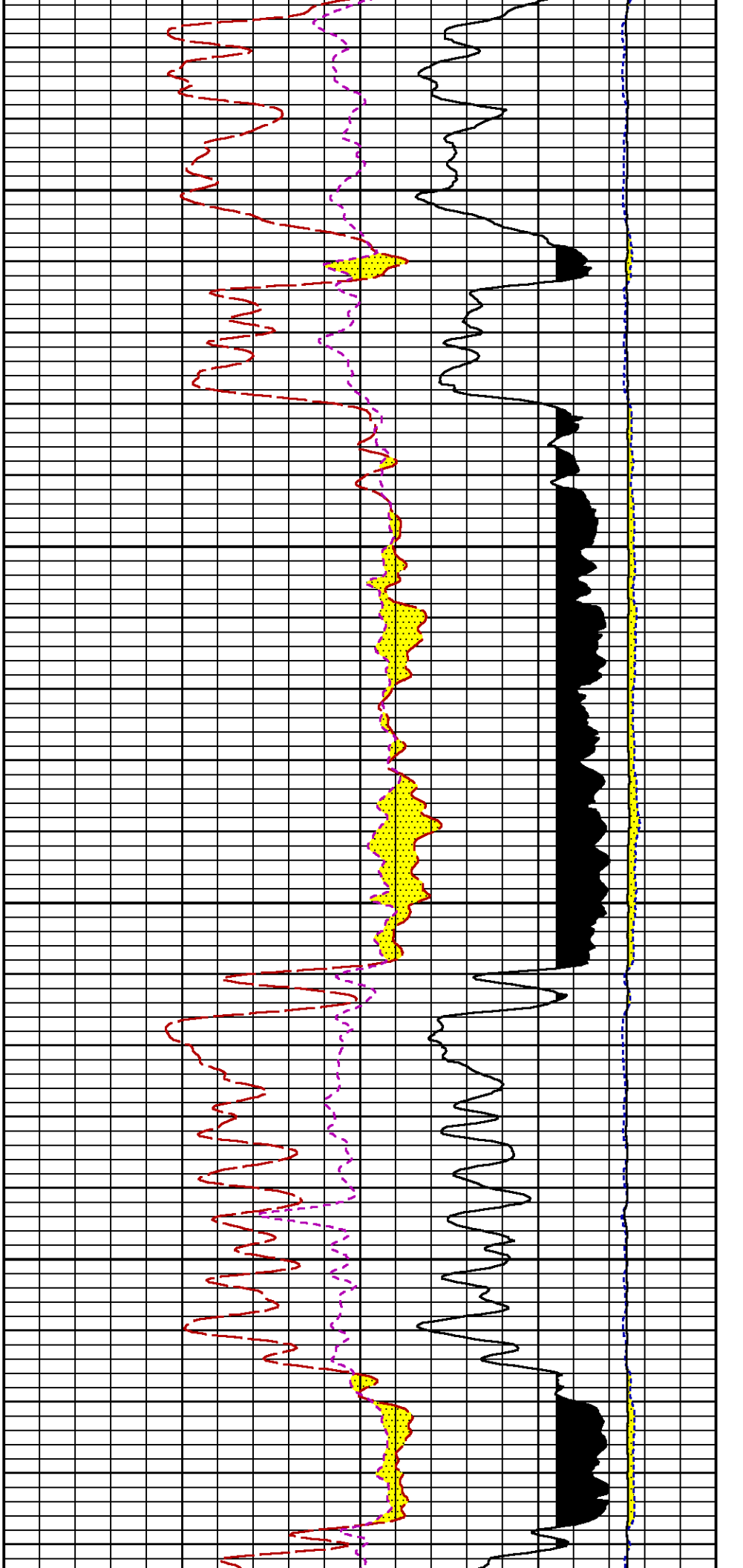


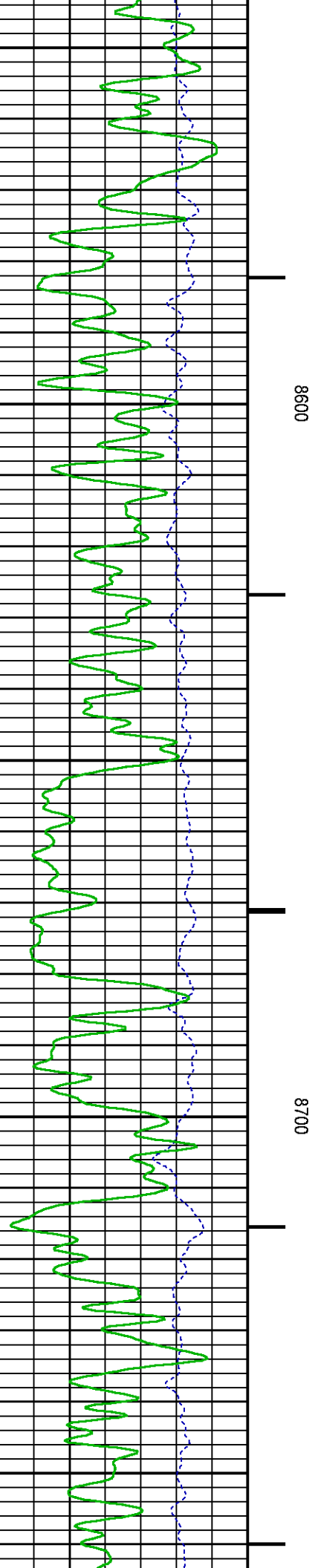
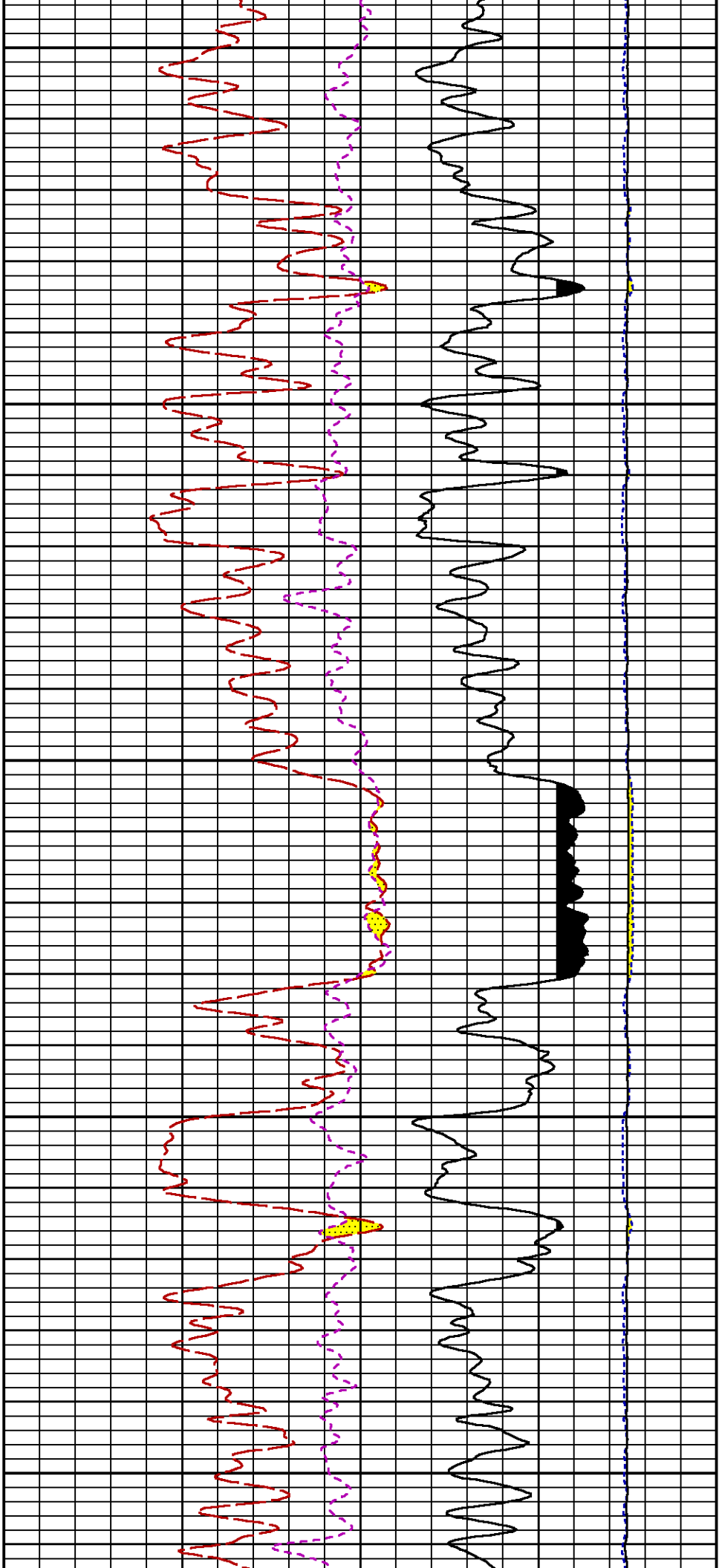


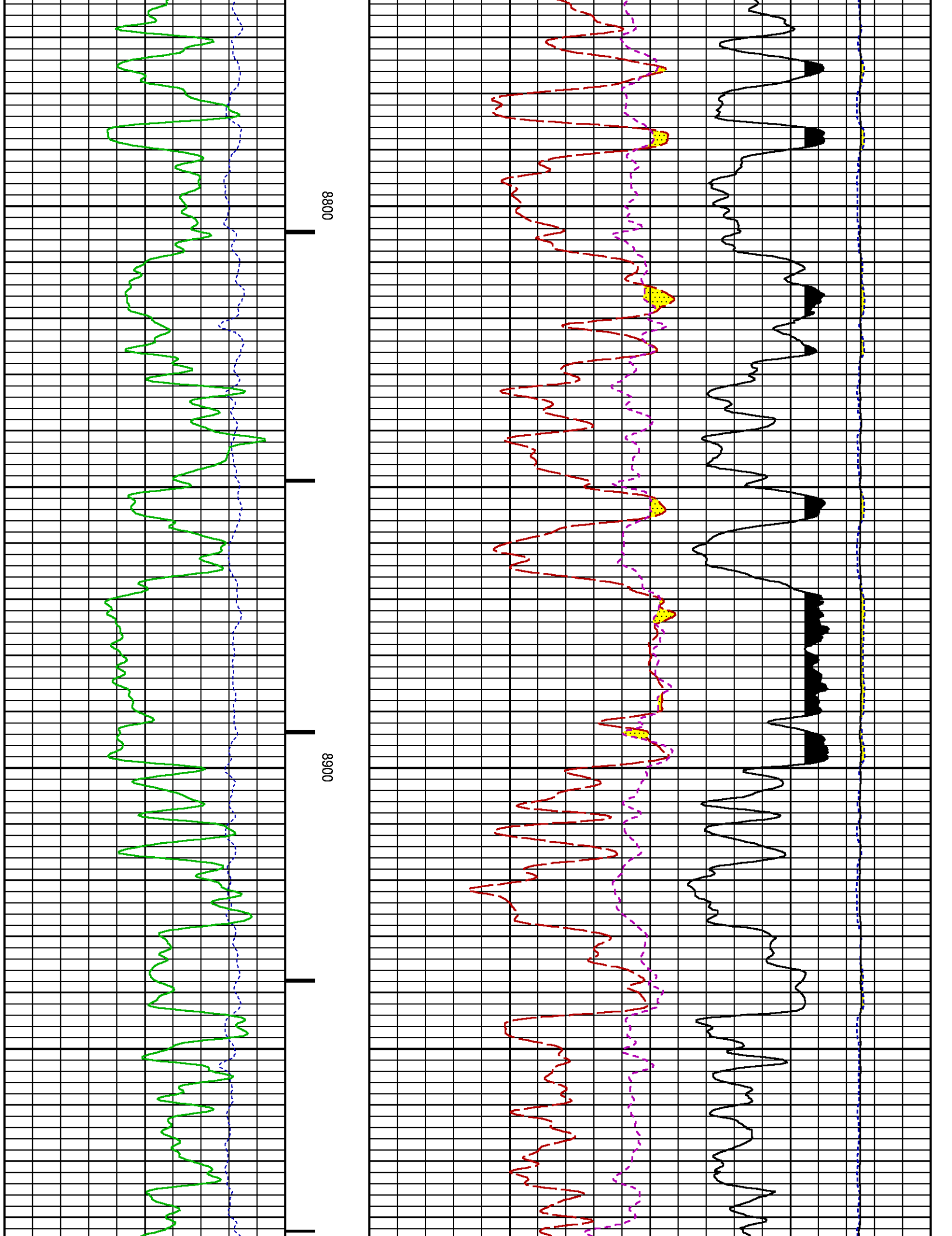


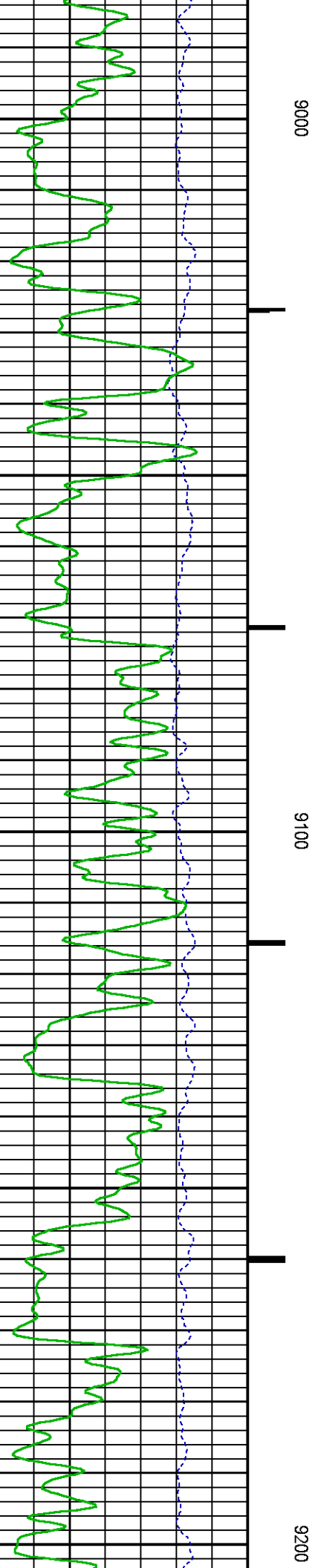
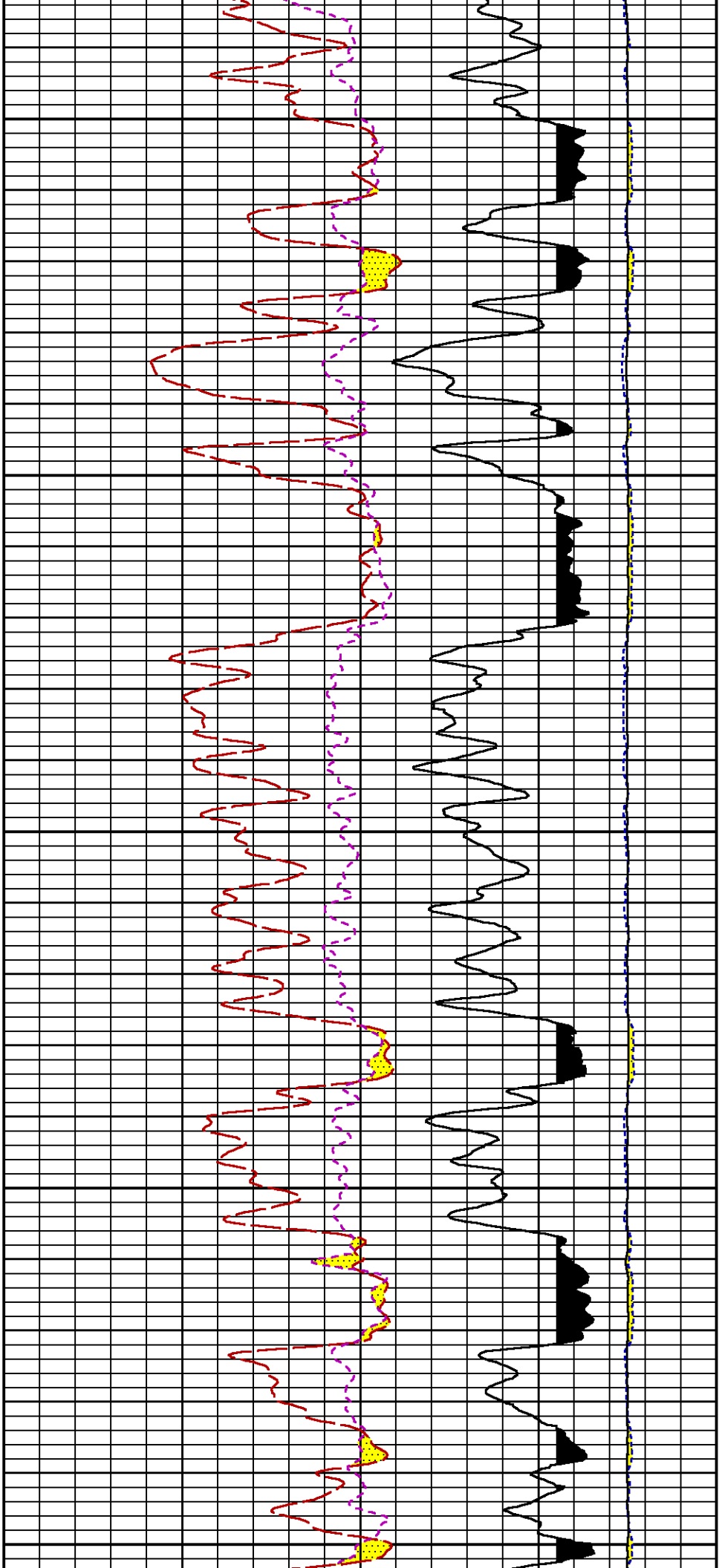


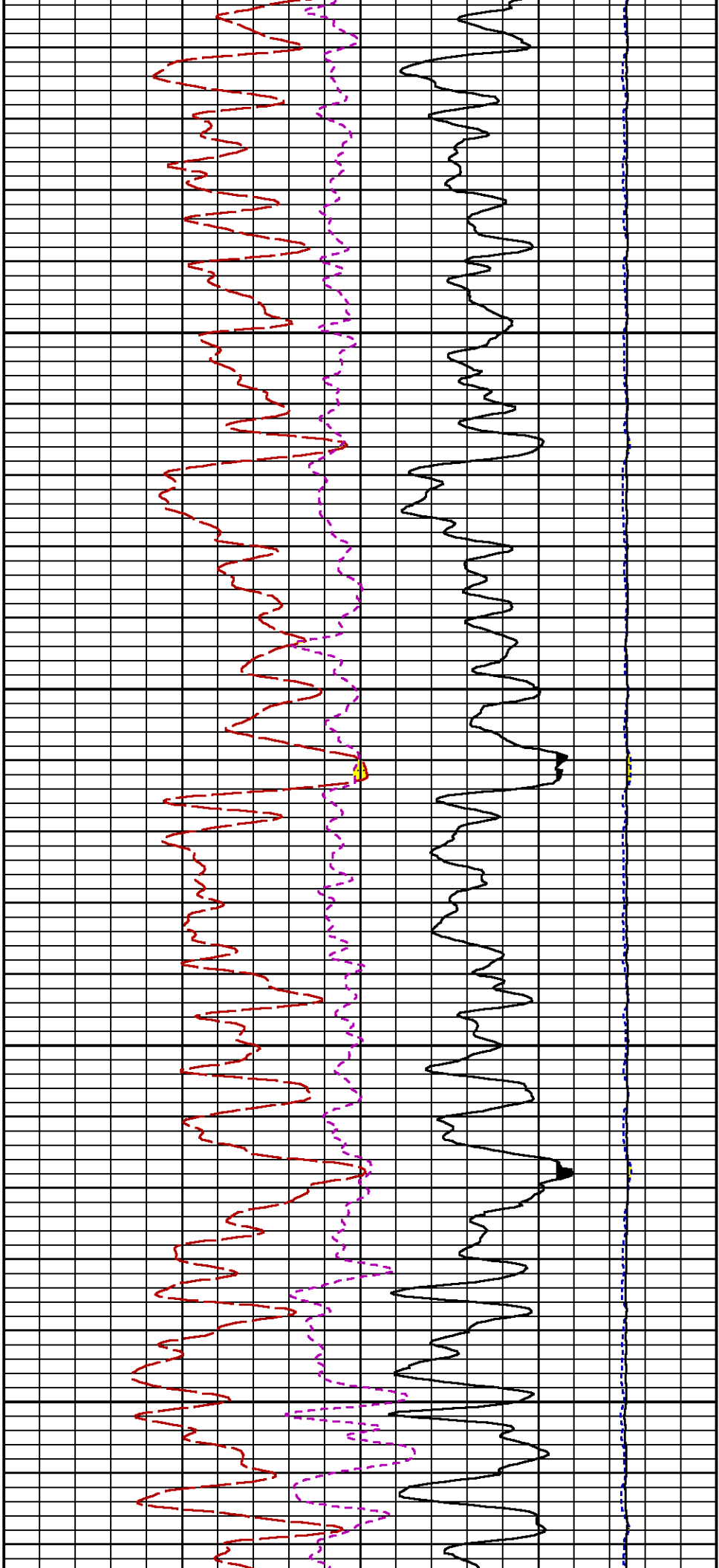






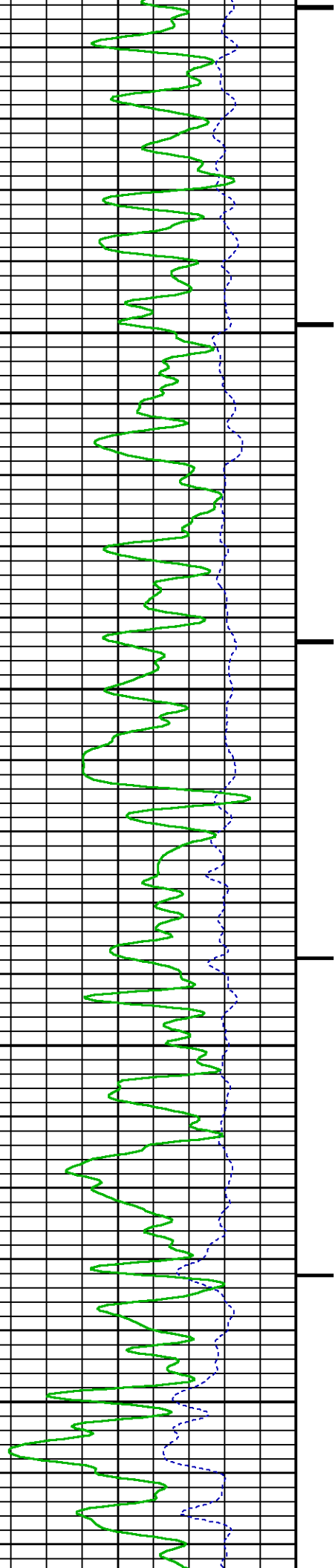


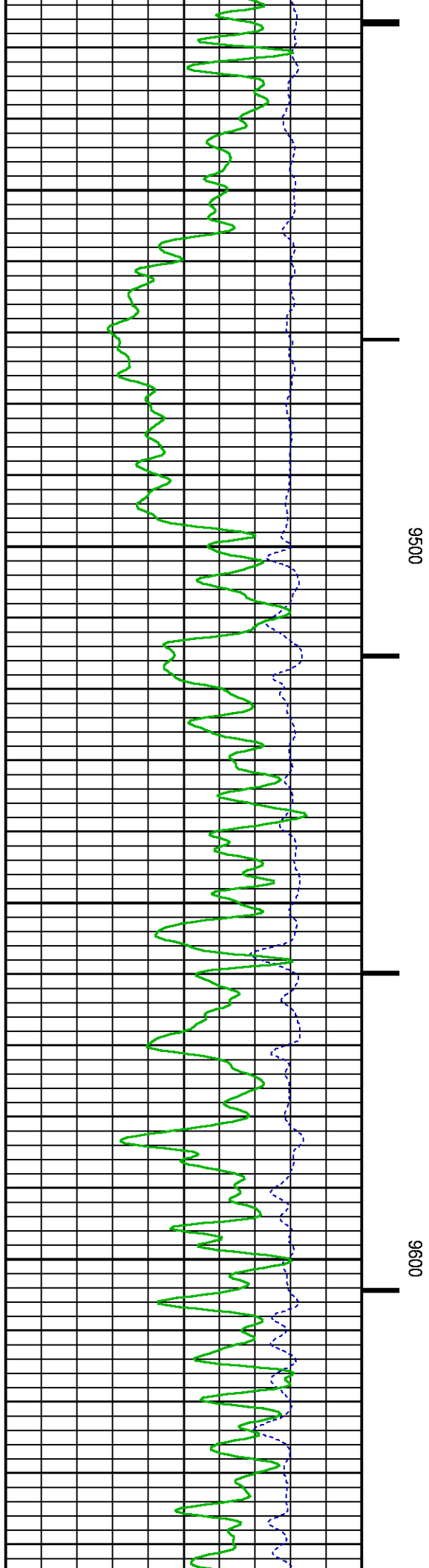
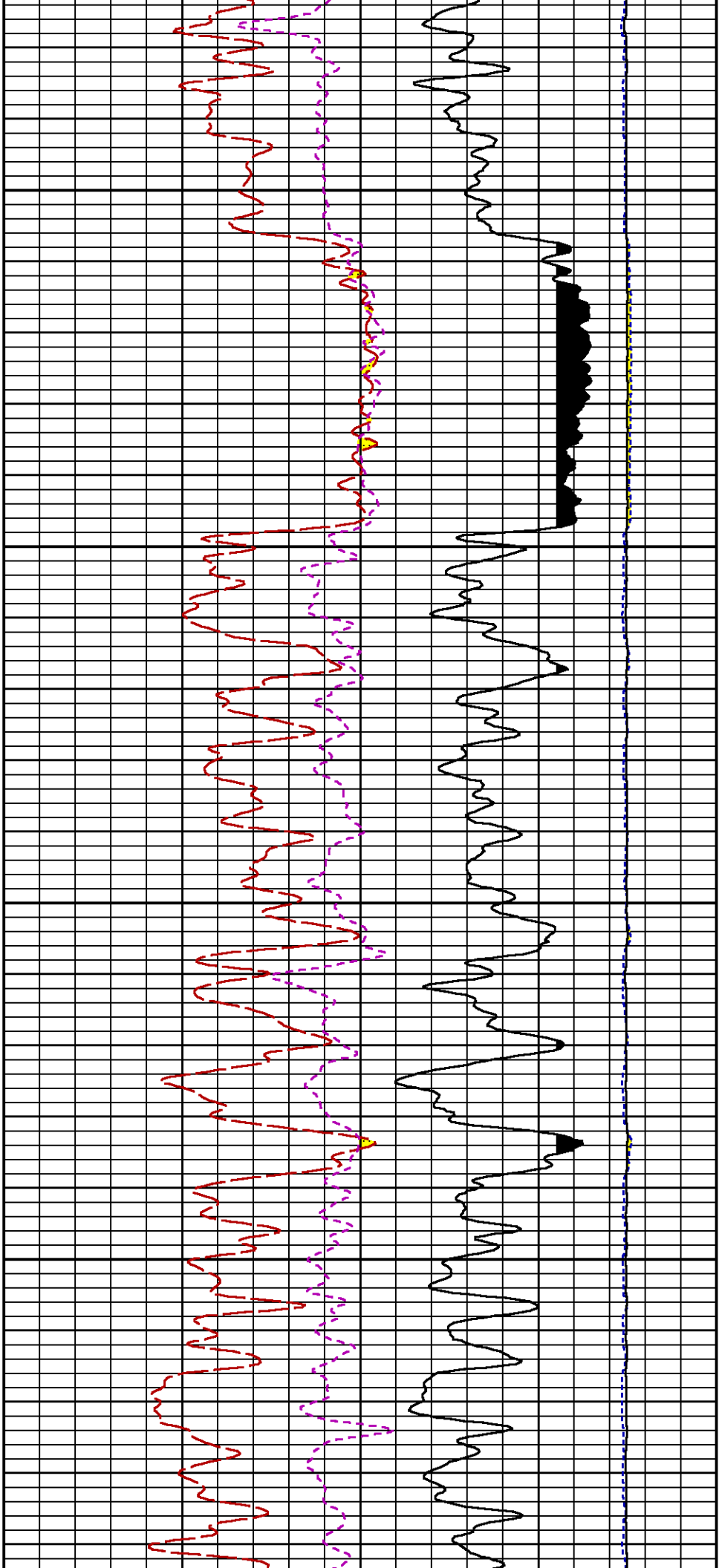


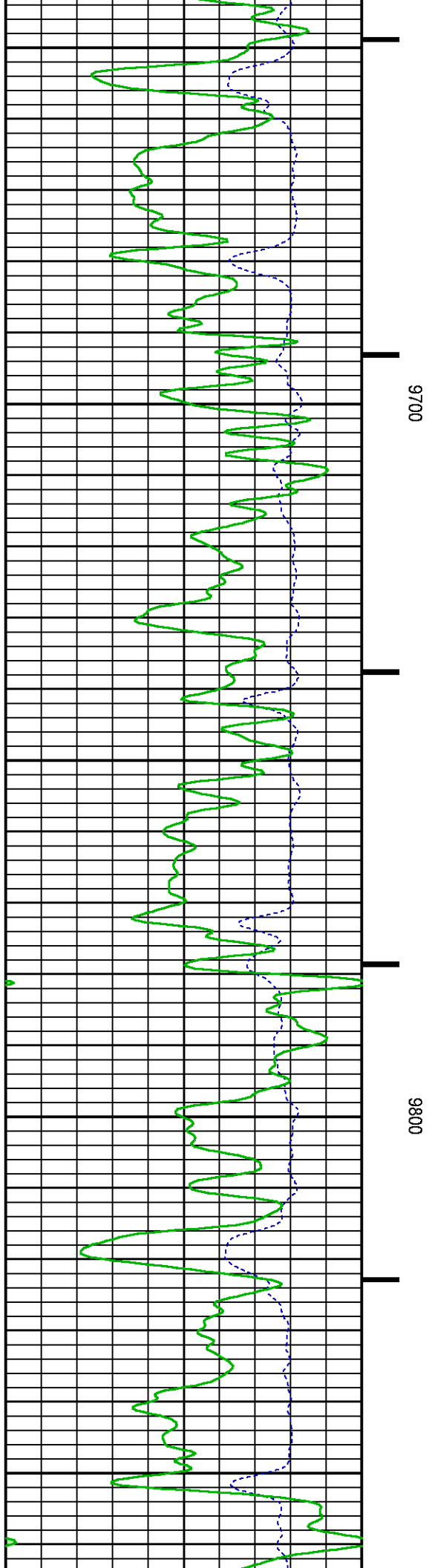
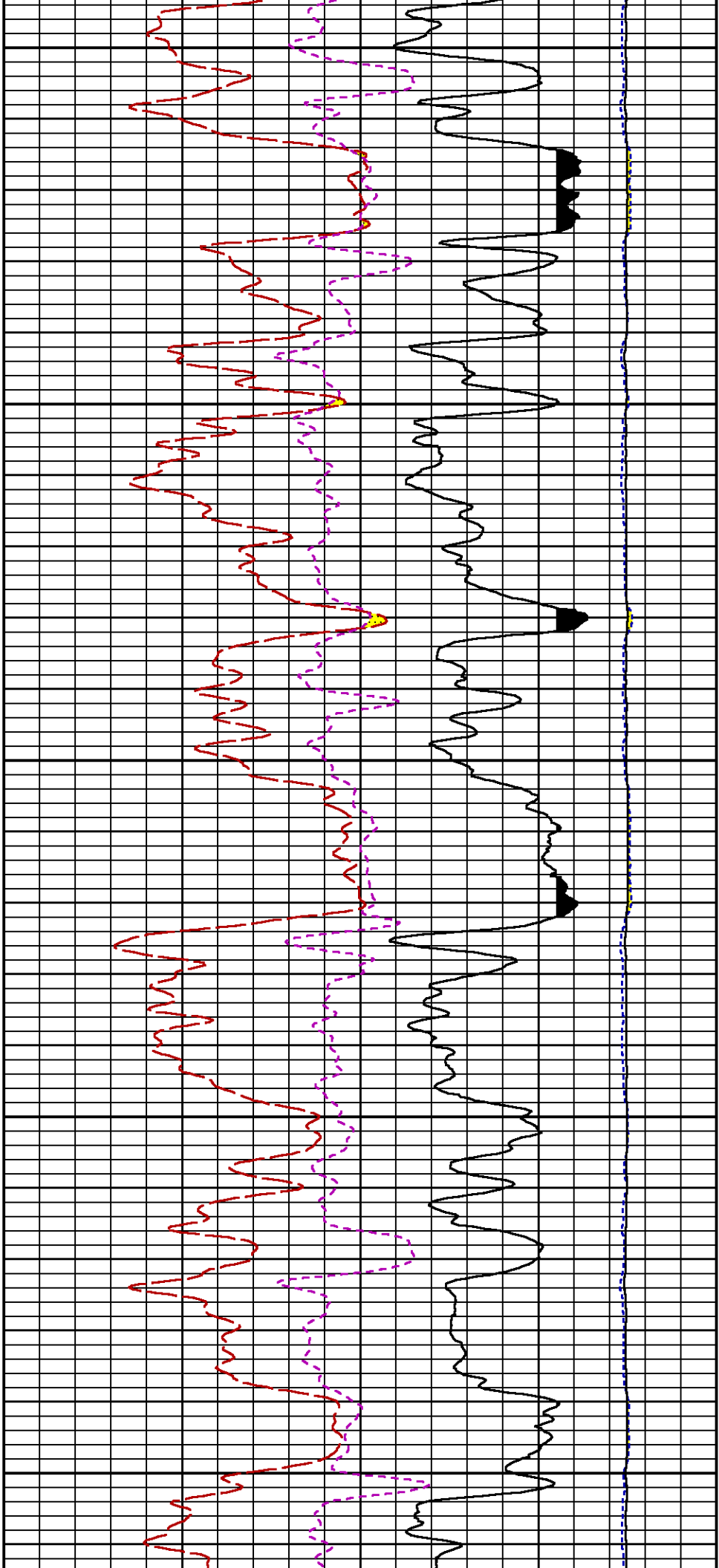


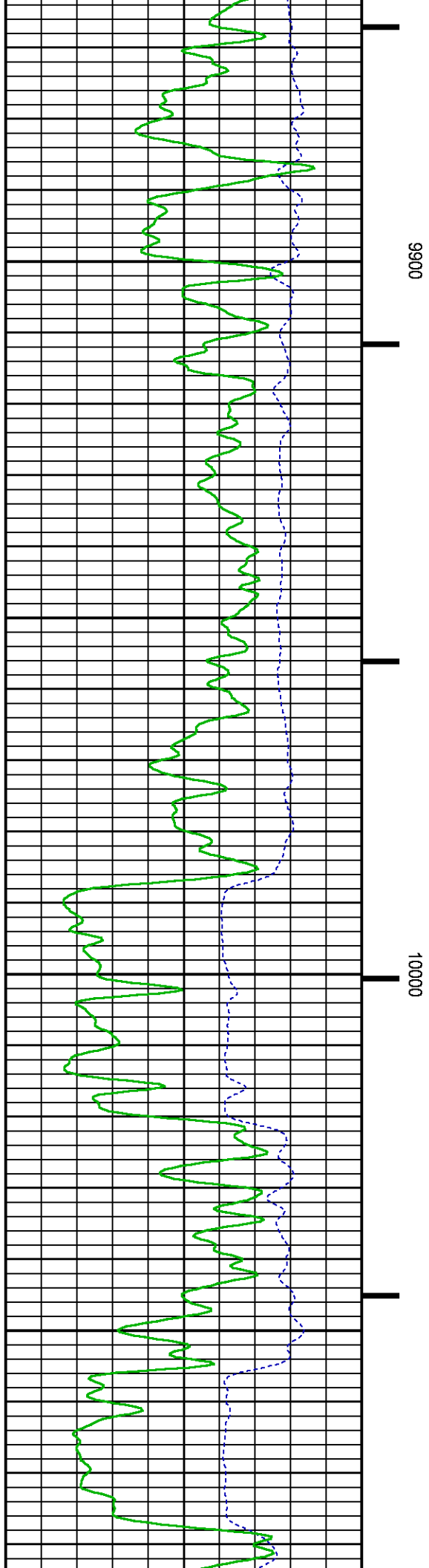
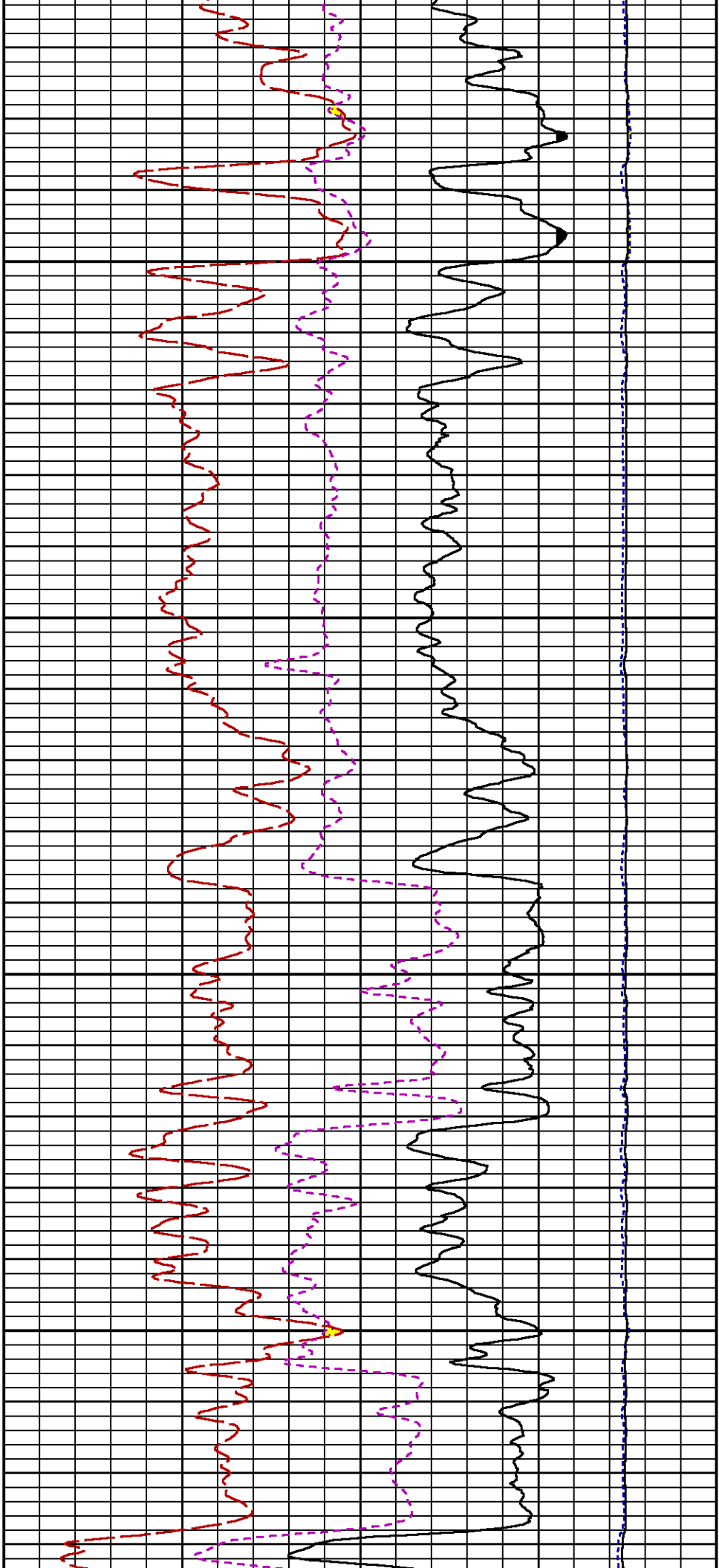
9300

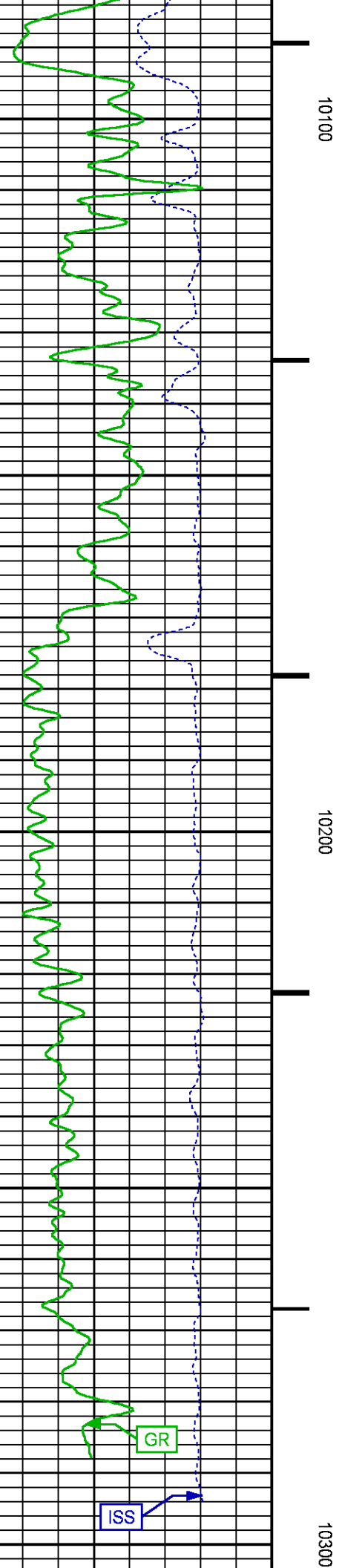
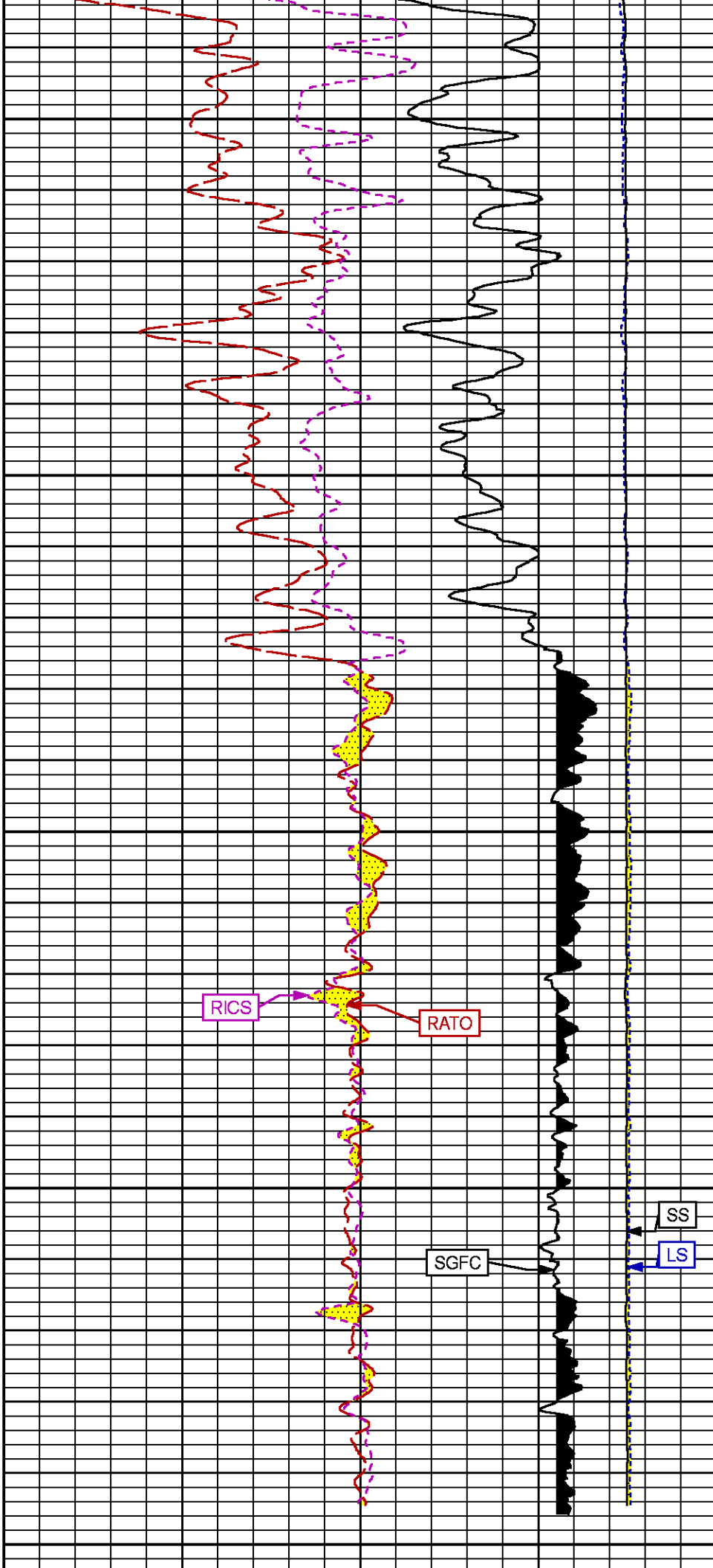
9400

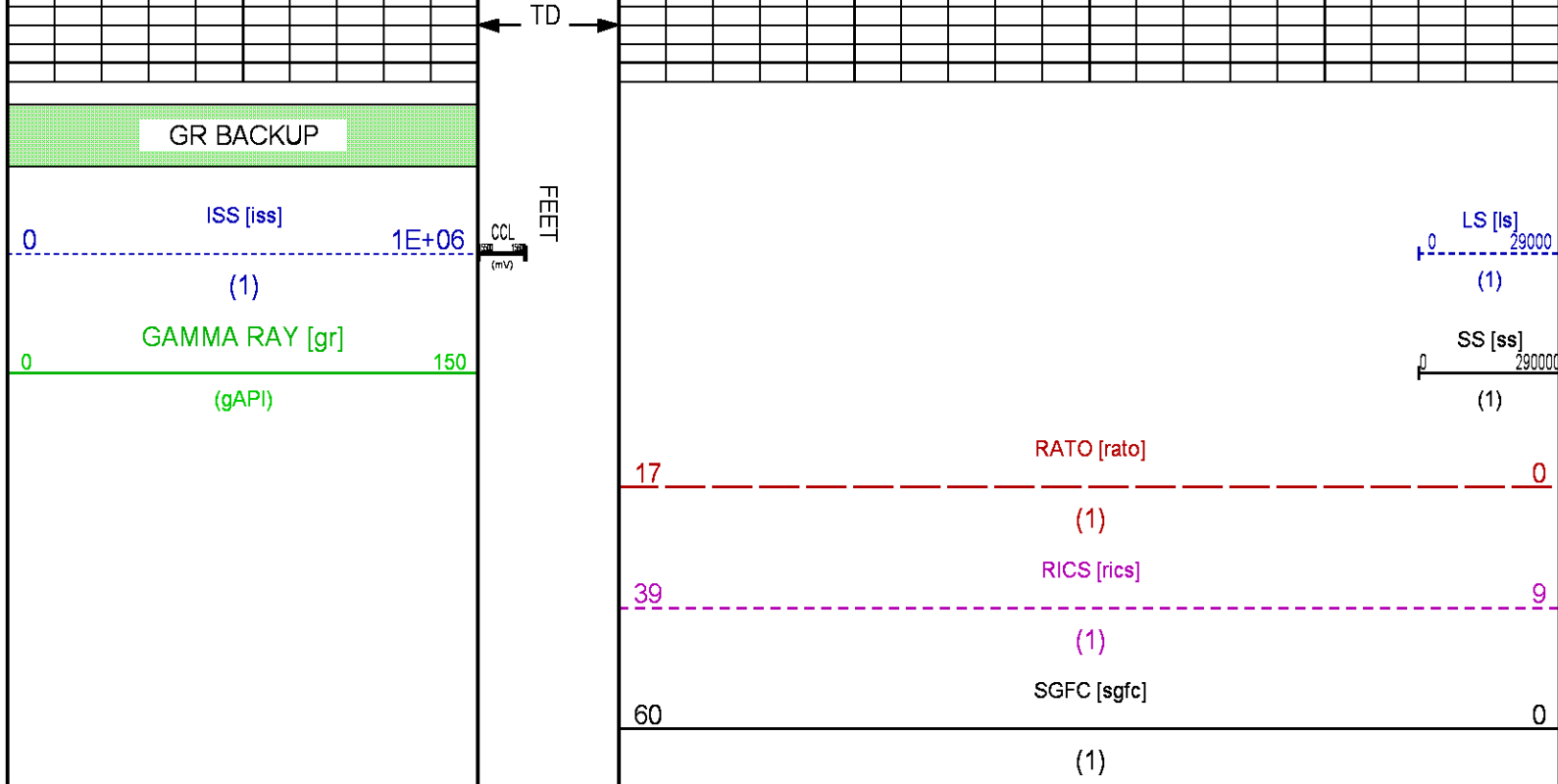












REPEAT SECTION PNC-3D MODE

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

Updates: 1 Patches: 4

Plotted: Wed Feb 11 17:38:40 2015

PARAMETER AND FILTER SUMMARY REPORT

FILE: /dat1a/CH094748/n354h01.prm
LOGGING MODE: DEPTH DIRECTION: UP
TOP DEPTH: 9487.750 ft BOTTOM DEPTH: 9836.000 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	Feb 11 12:48:12 2015	CASING COLLAR LOCATOR
F1:GR	Feb 11 12:48:12 2015	GAMMA RAY
F1:ISS	Feb 11 12:48:12 2015	INELASTIC SHORT SPACE COUNT RATE

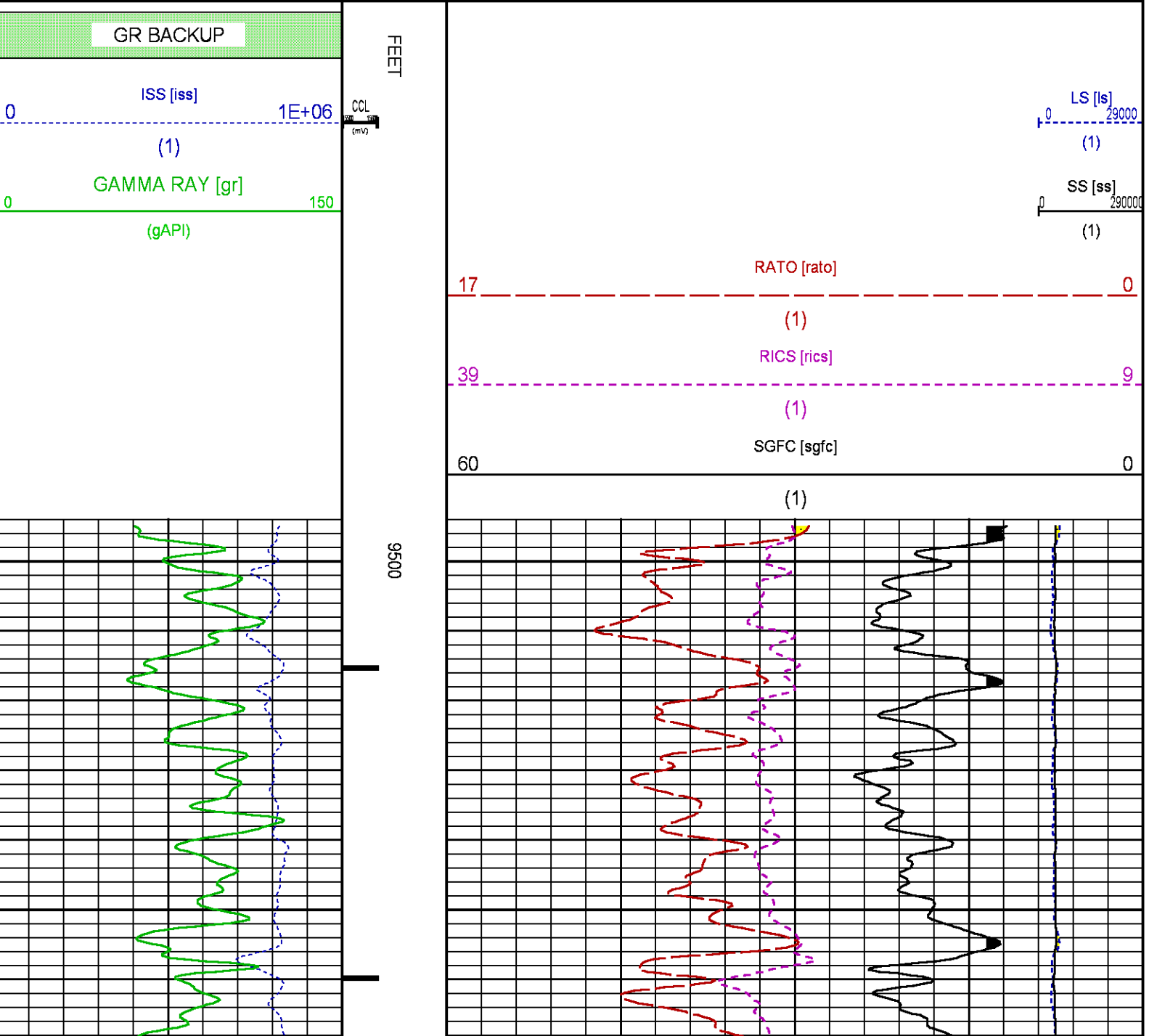
F1:ISS	Feb 11 12:48:12 2015	INELASTIC SHORT SPACE COUNT RATE
F1:LS	Feb 11 12:48:12 2015	LONG SPACE COUNT RATE
F1:RATO	Feb 11 12:48:12 2015	SHORT/LONG SPACE COUNT RATE RATIO
F1:RICS	Feb 11 12:48:12 2015	SHORT SPACE INELASTIC TO CAPTURE COUNT RATE RATIO (ISS/CSS)
F1:SGFC	Feb 11 12:48:12 2015	CORRECTED FORMATION SIGMA
F1:SS	Feb 11 12:48:12 2015	SHORT SPACE COUNT RATE

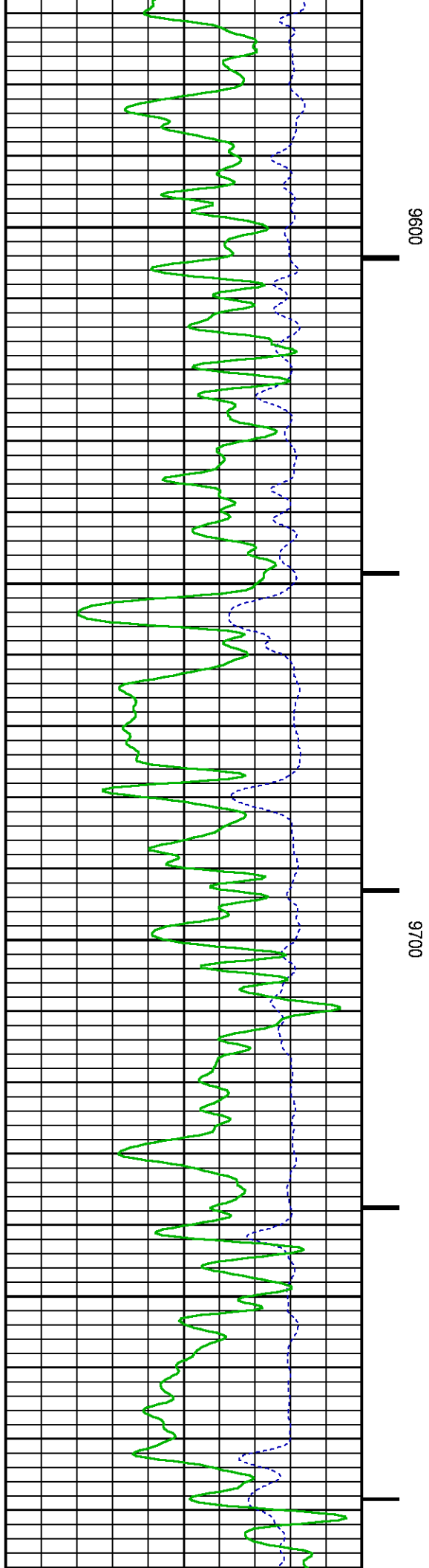
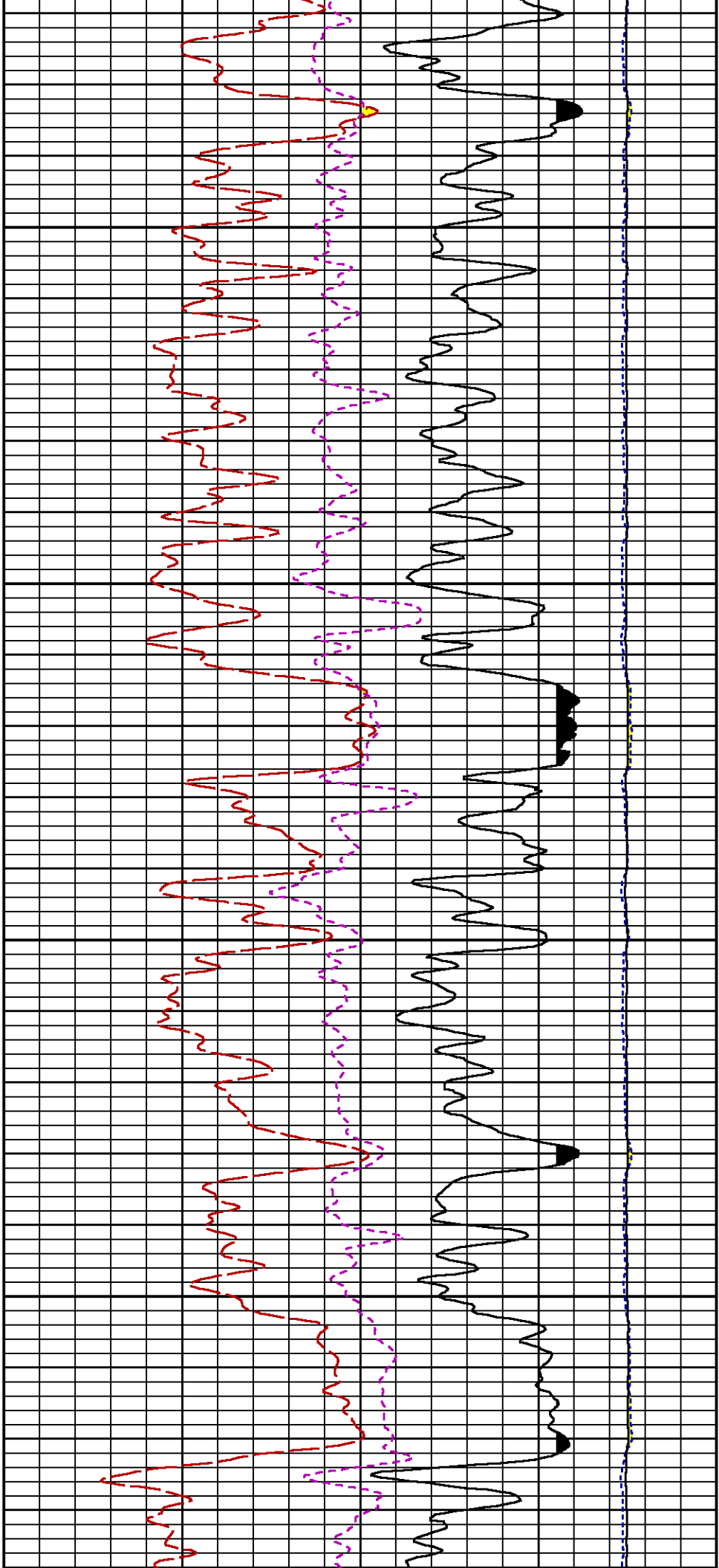
CURVE MEASURE POINT OFFSET

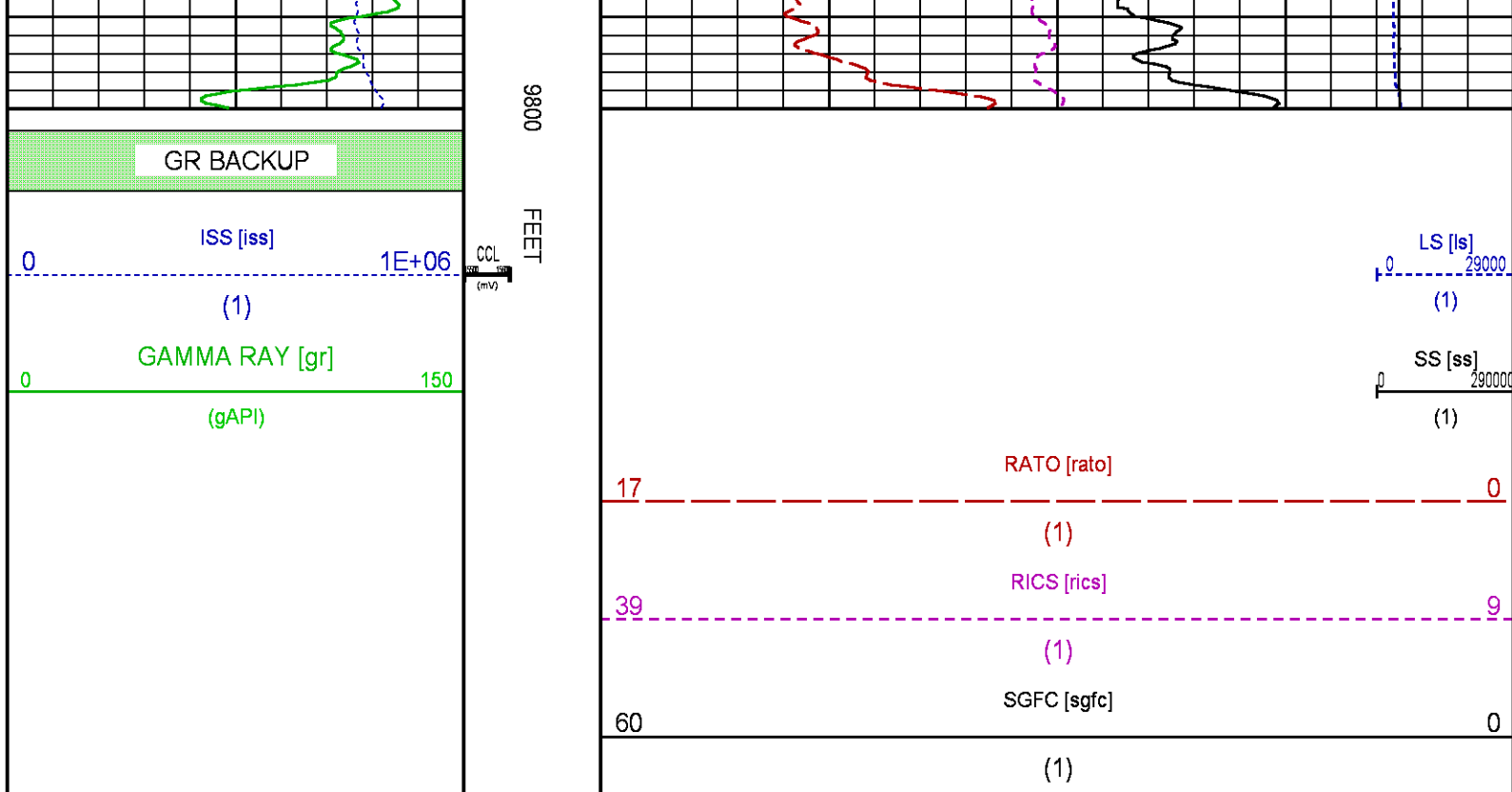
CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
CCL	25.00	ISS	12.75	RATO	12.75	SGFC	12.75
GR	22.75	LS	12.75	RICS	12.75	SS	12.75

Presentation : HL6670:/dat1a/CH094748/41RPM_REPEAT.fvpdf [5"/100' Scale]
Plot Interval : 9495 - 9800 Feet

Data File 1 : F1 : HL6670:/dat1a/CH094748/41RPM_REPEAT.xtf
Created On : Feb 11 12:48:12 2015
Company : WPX ENERGY
Well : YOUNBERG RU 41-7
Field : RULISON
File Interval : 9465.75 - 9838.75 Feet
OCT : n354h







CALIBRATION / VERIFICATION SUMMARY

Source File: /dat1a/CH094748/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
D	20000.0	120	2000.0	2000.0	2000.0	20	7	2.0000

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
Reduced	1409820	1.43	4.74	30.55	14.96	10.74	3.82	4.06
		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/CH094748/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

33.24'

SONDEX GAMMA RAY

Diameter : 1.69"
Length : 2.17'
Weight : 10 lbs
Series : 2812LA
Mnemonic : GR
Measure Point: 0.62': GR MP

CCL MP 25.19'

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 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	WPX ENERGY		FILE NO:	CH094748
	WELL	YOUBERG RU 41-7		API NO:	05045223500000
	FIELD	RULISON			
	COUNTY	GARFIELD	STATE	CO	
	LOCATION:		ELEVATIONS:		
	SHL: 2441' FNL & 389' FEL		KB 7763 FT		7 7S 93W
	BHL: 285' FNL & 464' FEL		DF		RU 42-7 PAD
	SEC 7 TWP 7S RGE 93W		GL 7737 FT		NABORS 574
			DATE		11-Feb-2015