



FILE NO: CH107932	COMPANY WELL FIELD COUNTY	WPX ENERGY FEDERAL GM 542-8 GRAND VALLEY GARFIELD STATE COLORADO
API NO: 05045225340000		

Ver. 4.06 SEC. 8 T. 7S R. 96W PAD: MV 16-9 RIG: H&P 318	LOCATION: SHL:669FNL&549FWL, S9 T7S R96W BHL:2378FNL&306FEL, S8 T7S R96W SEC 8 TWP 7S RGE 96W	OTHER SERVICES RAL
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PERMANENT DATUM LOG MEASURED FROM DRILL. MEAS. FROM	G.L. ELEVATION 6087 FT K.B. 24 FT ABOVE P.D. K.B.	ELEVATIONS: KB 6111 FT DF GL 6087 FT
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DATE	20-Jun-2016
RUN	1
SERVICE ORDER	US107932
DEPTH DRILLER	6922 FT
DEPTH LOGGER	6870 FT
BOTTOM LOGGED INTERVAL	6868 FT
TOP LOGGED INTERVAL	3727 FT
TIME STARTED	01:00
TIME FINISHED	06:30
OPERATOR RIG TIME	4.5 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	10 FMIN
MAX. RECORDED TEMP.	206 DEGF
REFERENCE LOG	BAKER HUGHES BOND LOG
REFERENCE LOG DATE	19-JUN-2016
EQUIP. NO.	HL-6685
LOCATION	GRAND JCT.
RECORDED BY	SPENCER
WITNESSED BY	T.RAGSDALE

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
8.75 IN	1662 FT	6961 FT

CASING RECORD				
SIZE	WEIGHT	GRADE	FROM	TO
4.5 IN	11.6 LB/F		24 FT	6860 FT

REMARKS

RUN 1 TRIP 1: ALL DATA ON THIS LOG HAS BEEN DEPTH MATCHED TO THE GAMMA RAY CURVE ON THE BAKER HUGHES BOND LOG DATED 19-JUN-2016. DEPTH MATCHING MAY CHANGE COLLAR LENGTHS.
AMOUNT OF LINEAR SHIFT IS +10.5 FEET

LOGGED IN PNC-3D MODE

SJ = 3760' - 3782'
BHT = 206 DEGF

THANKS FOR CHOOSING BAKER HUGHES WIRELINE CREW: QUIGLEY / OLSON

EQUIPMENT DATA

RUN	TRIP	TOOL	SERIES NO.	SERIAL NO.	POSITION
1	1	RAL	1426XA	10417452	CENTRALIZED
1	1	GR / CCL	1355XA	11871510	CENTRALIZED

MAIN SECTION PNC-3D MODE

ECLIPS 6.2i ECLIPS General Release Rel 6.2i Wed Jun 12 12:21:40 CDT 2013
 Updates: 1,36 Patches: 9

Plotted: Mon Jun 20 05:04:22 2016

PARAMETER AND FILTER SUMMARY REPORT					
FILE: /dat1a/CH107932/n353hx03.prm LOGGING MODE: DEPTH DIRECTION: UP TOP DEPTH: 3711.500 ft BOTTOM DEPTH: 6873.250 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	Jun 20 01:46:25 2016	CASING COLLAR LOCATOR
F1:GR	Jun 20 01:46:25 2016	GAMMA RAY
F1:ISS	Jun 20 01:46:25 2016	INELASTIC SHORT SPACE COUNT RATE
F1:LS	Jun 20 01:46:25 2016	LONG SPACE COUNT RATE
F1:RATO	Jun 20 01:46:25 2016	SHORT/LONG SPACE COUNT RATE RATIO
F1:RICS	Jun 20 01:46:25 2016	SHORT SPACE INELASTIC TO CAPTURE COUNT RATE RATIO (ISS/CSS)
F1:SGFC	Jun 20 01:46:25 2016	CORRECTED FORMATION SIGMA
F1:SS	Jun 20 01:46:25 2016	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	: cas6685:/dat1a/CH107932/WPX_RPM_MAIN.fvpdf [5"/100' Scale]
Plot Interval	: 3685 - 6873.25 Feet
Data File 1	: F1 : cas6685:/dat1a/CH107932/main.xtf
Created On	: Jun 20 01:46:25 2016
Company	: WPX ENERGY
Well	: FEDERAL GM 542-8
Field	: GRAND VALLEY
File Interval	: 16 - 6873.25 Feet
OCT	: n353hx

GR BACKUP

FEET

ISS [iss]

1E+06

(cts/s)

GAMMA RAY [gr]

150

(gAPI)

CCL
(mV)

3700

SHORT JOINT

3800

RATO [rato]

17

0

(dim)

RICS [rics]

39

9

(dim)

SGFC [sgfc]

60

0

(cu)

LS [ls]

29000

(cts/s)

SS [ss]

290000

(cts/s)

GR

ISS

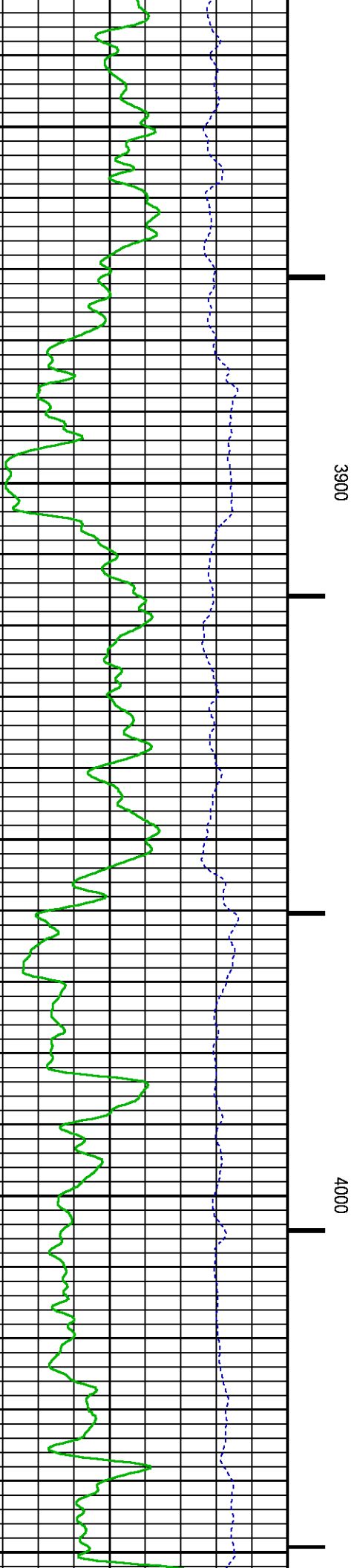
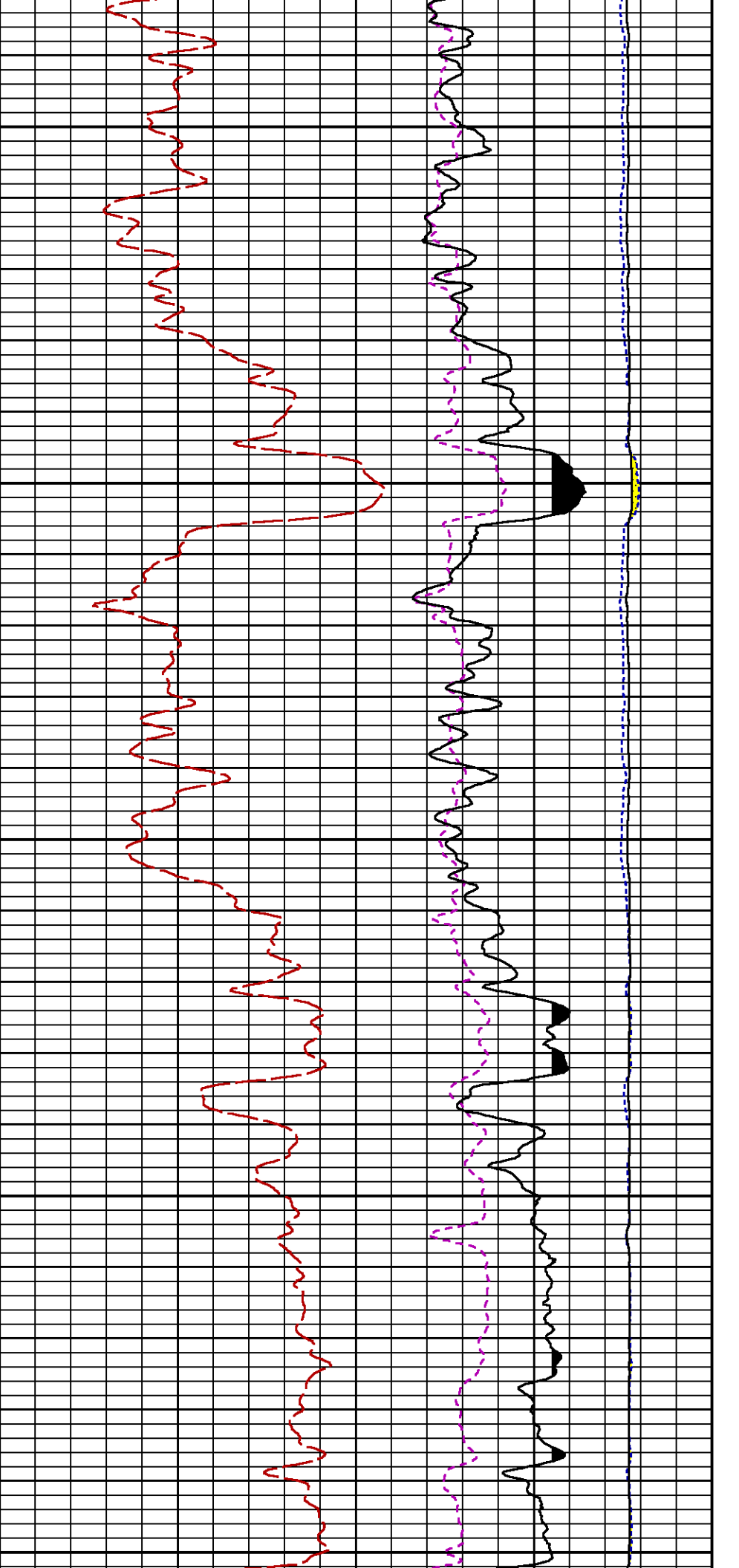
RATO

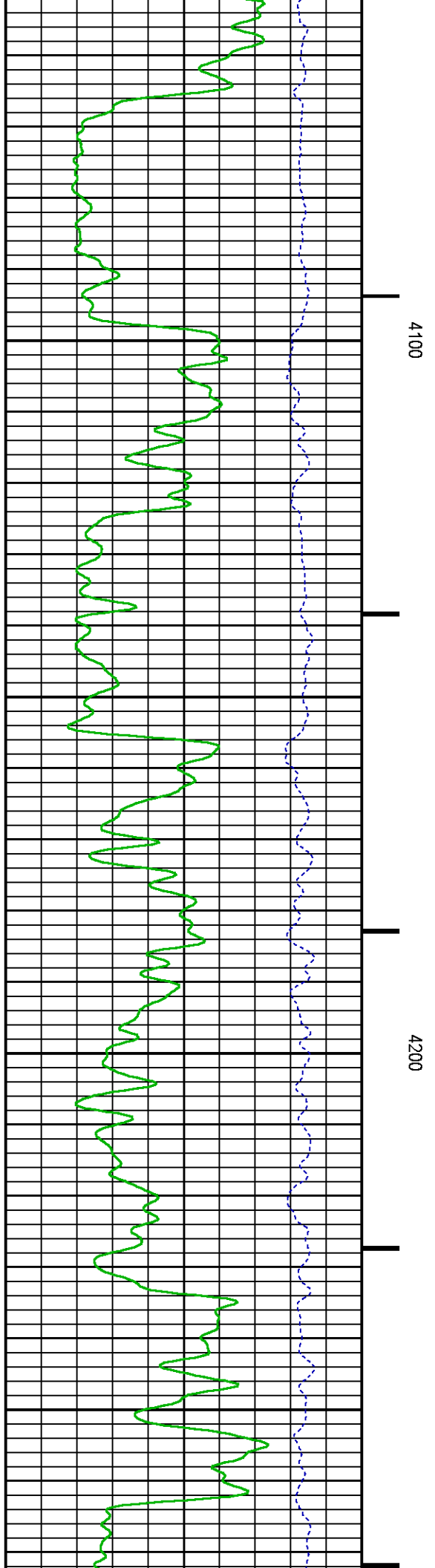
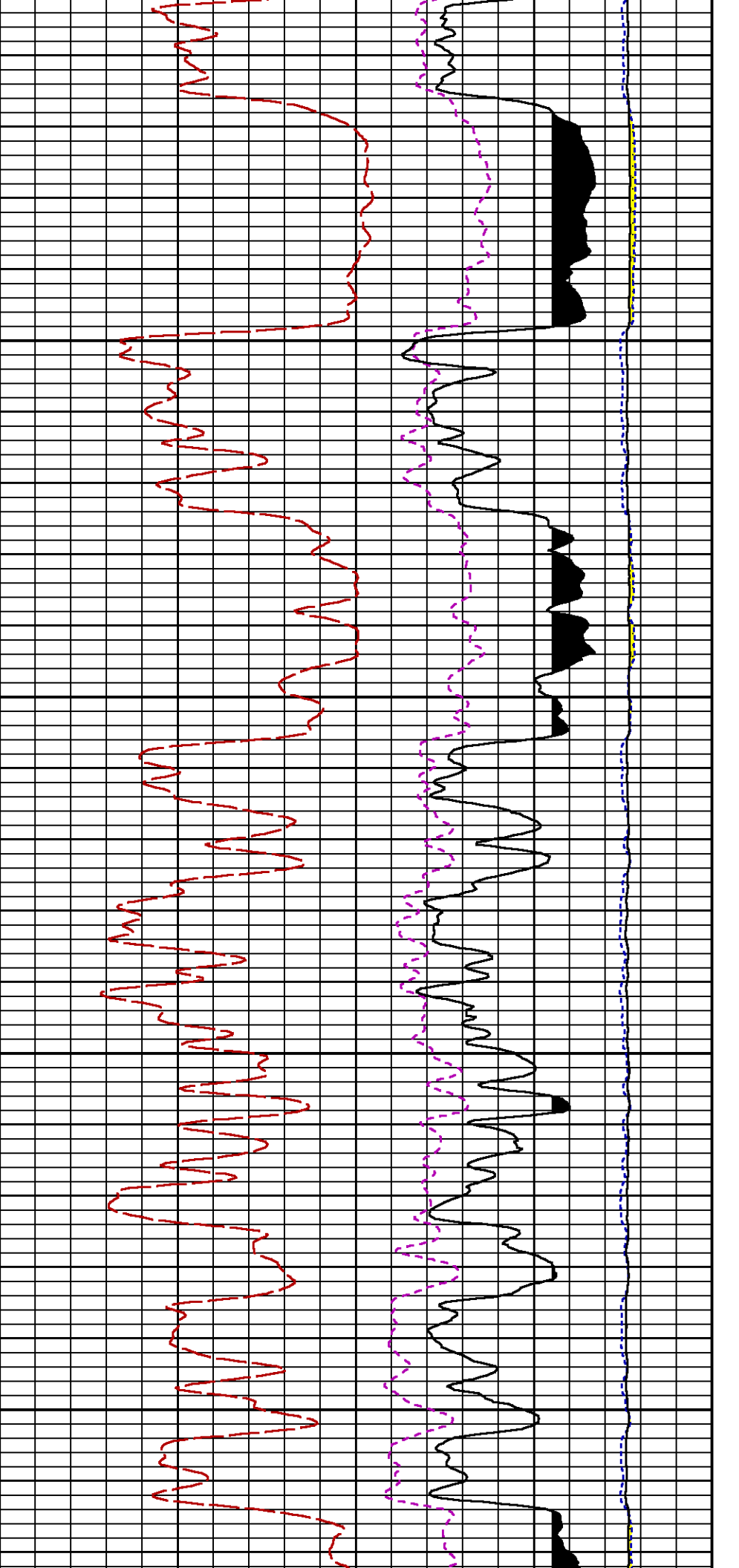
RICS

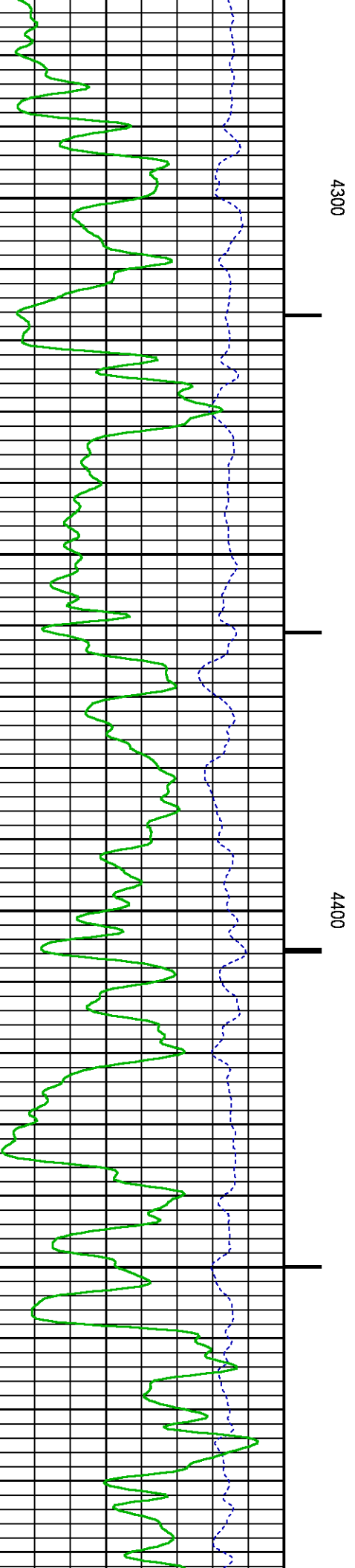
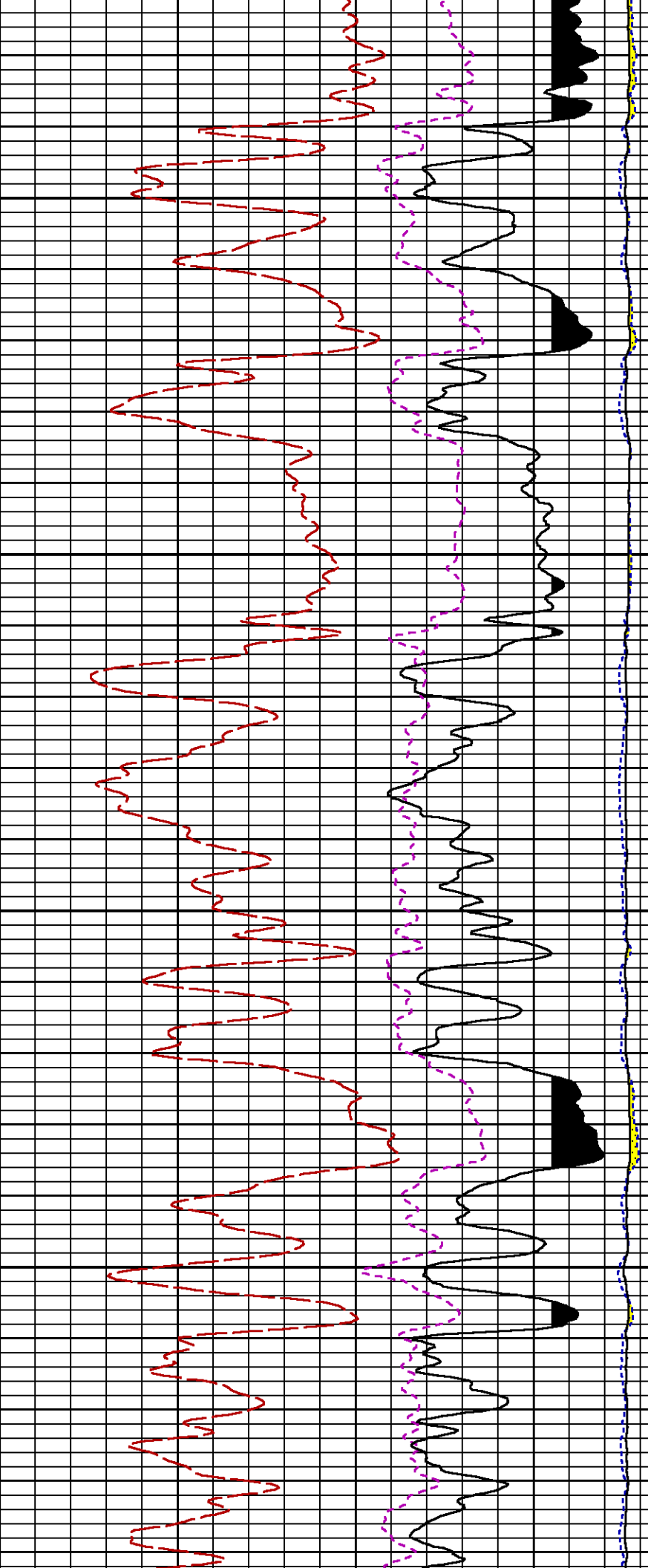
LS

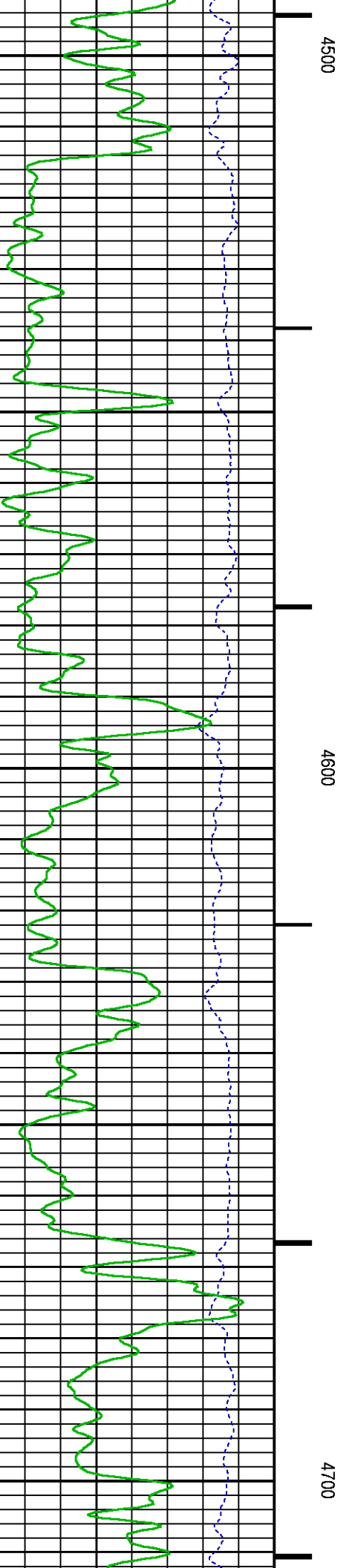
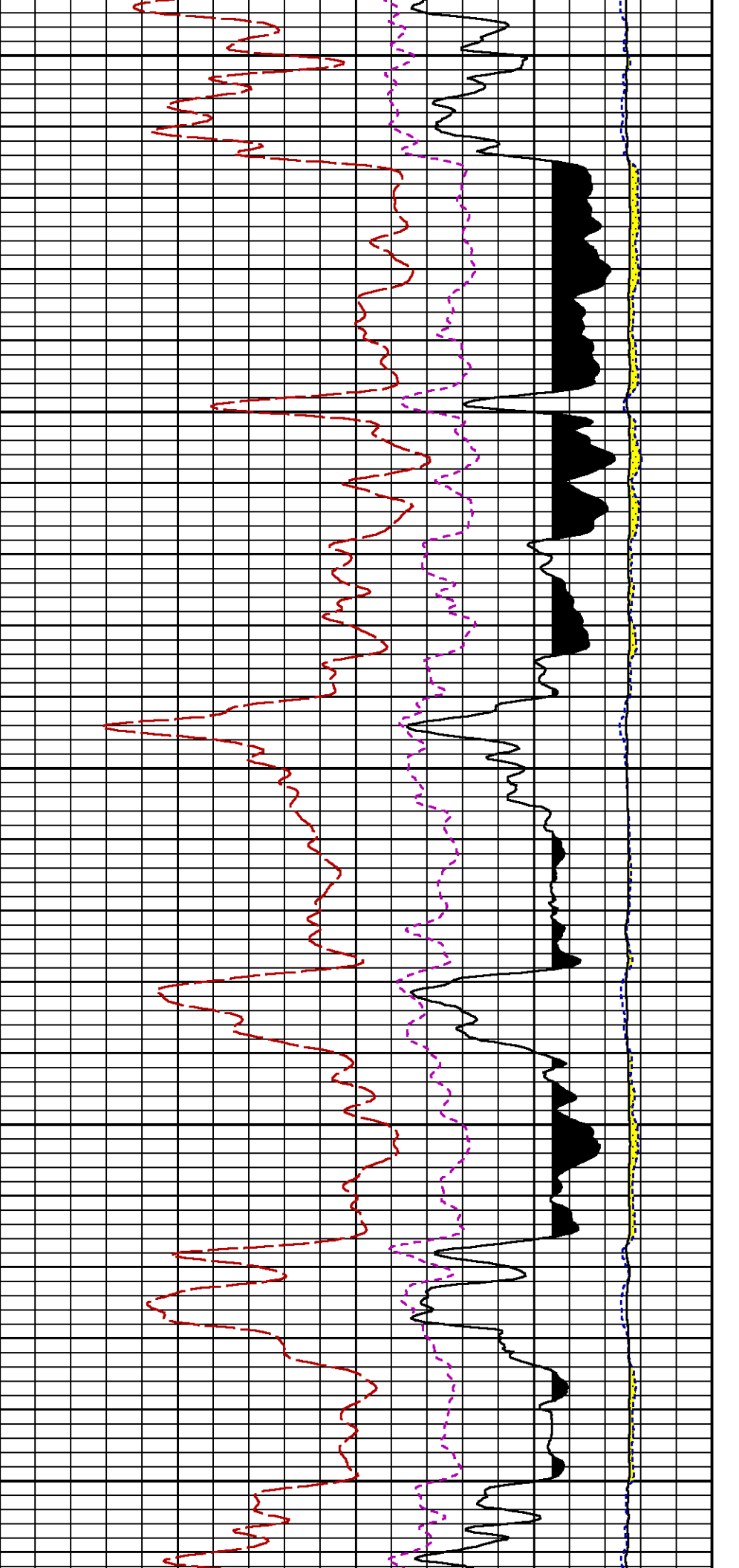
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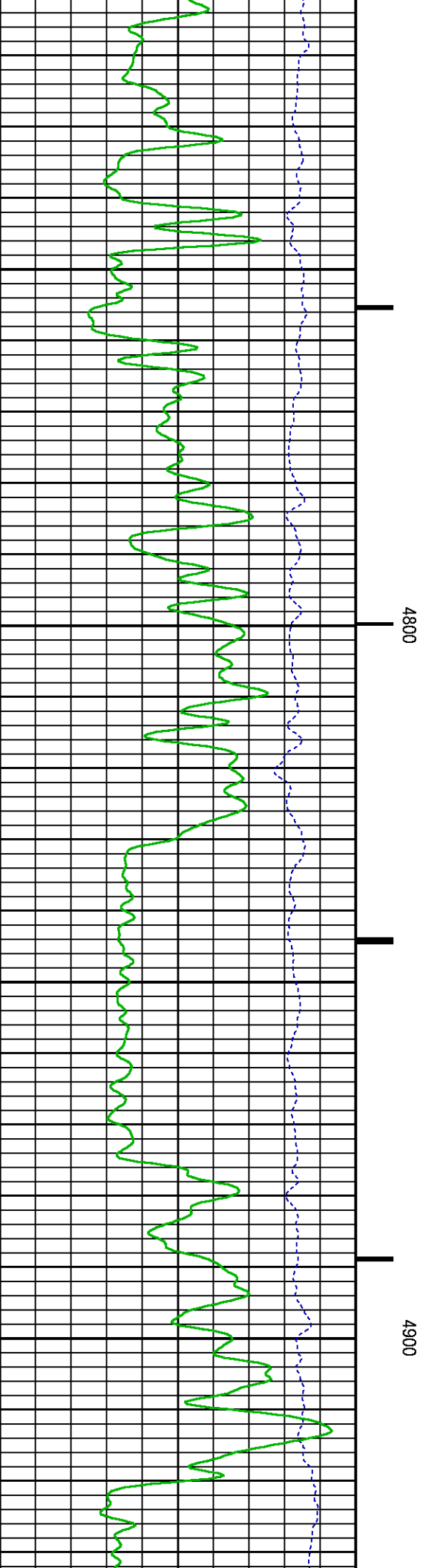
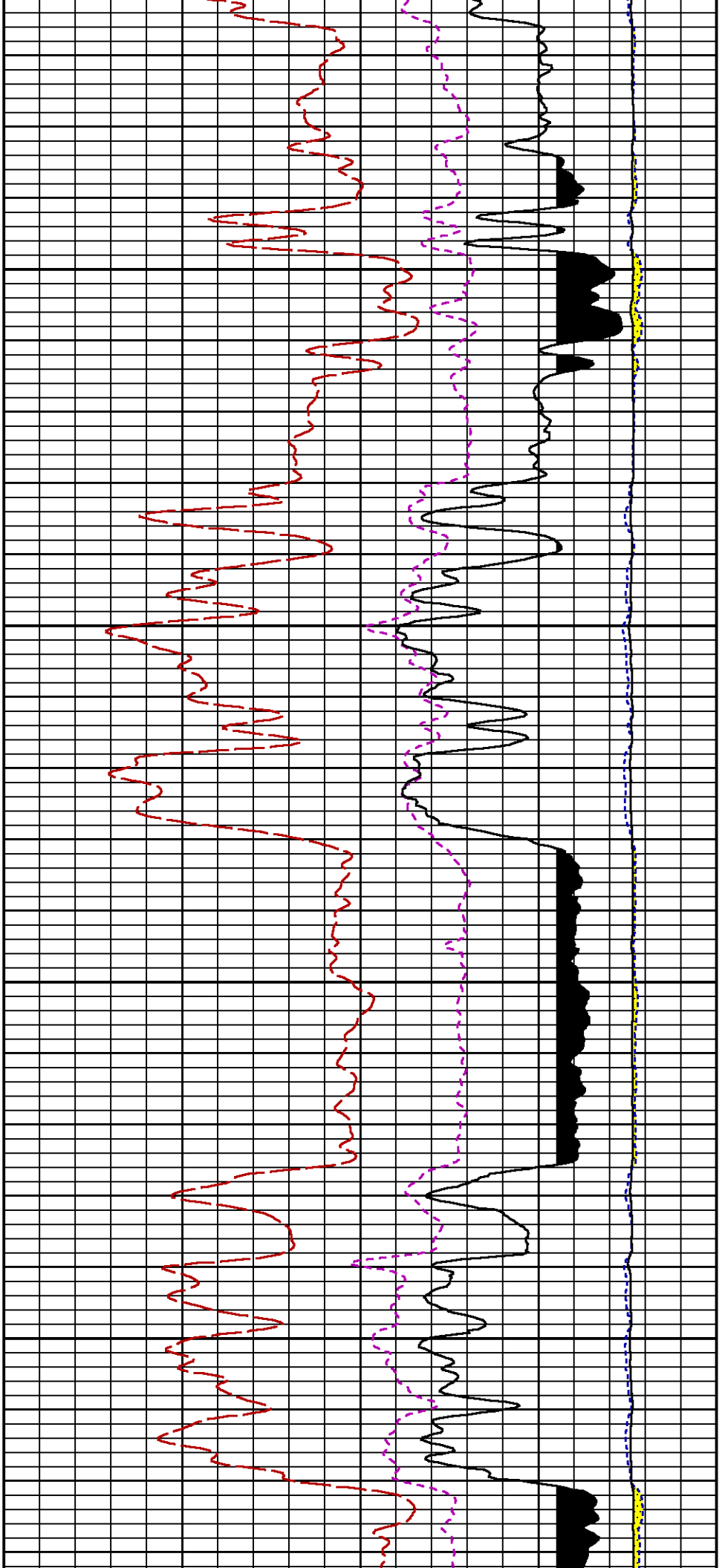
SGFC

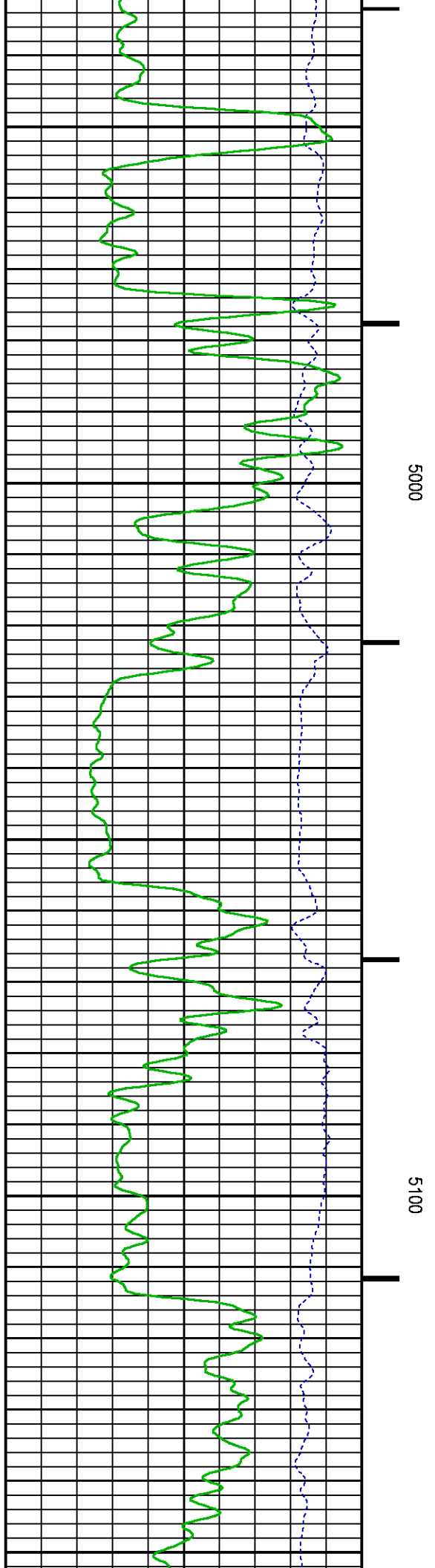
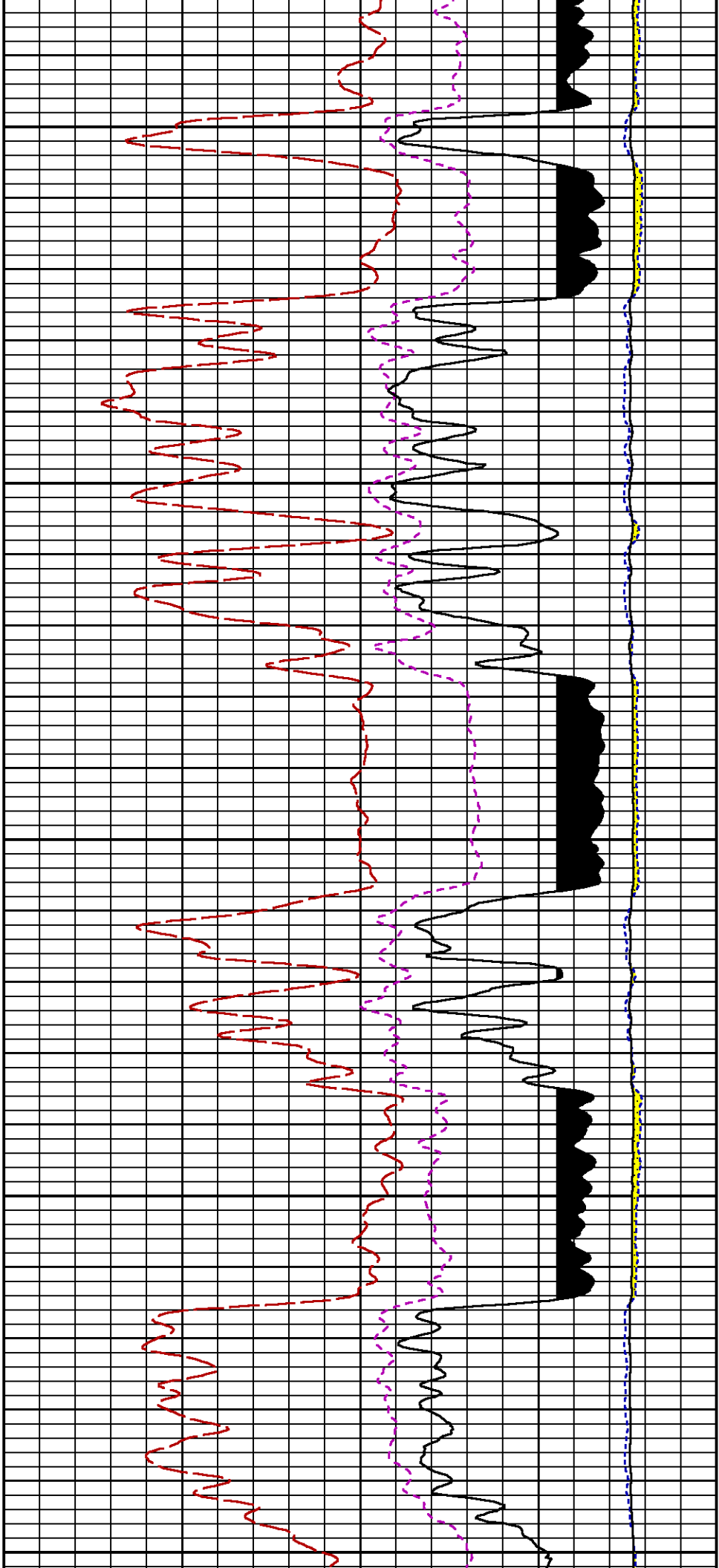


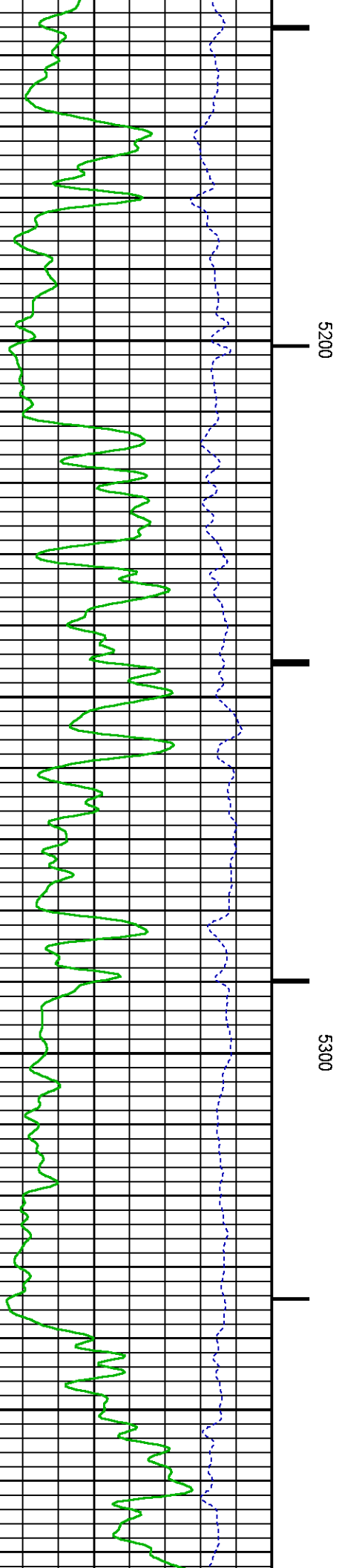
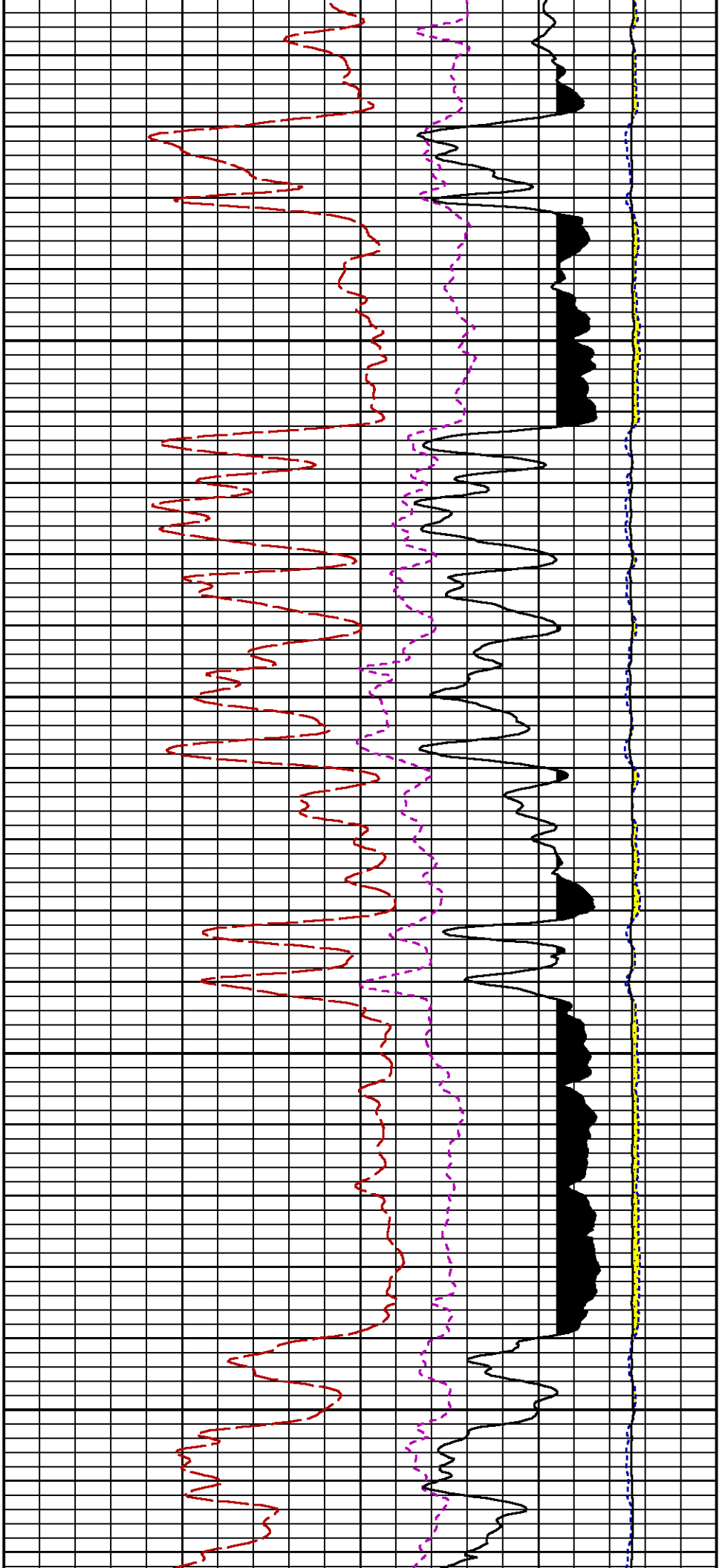


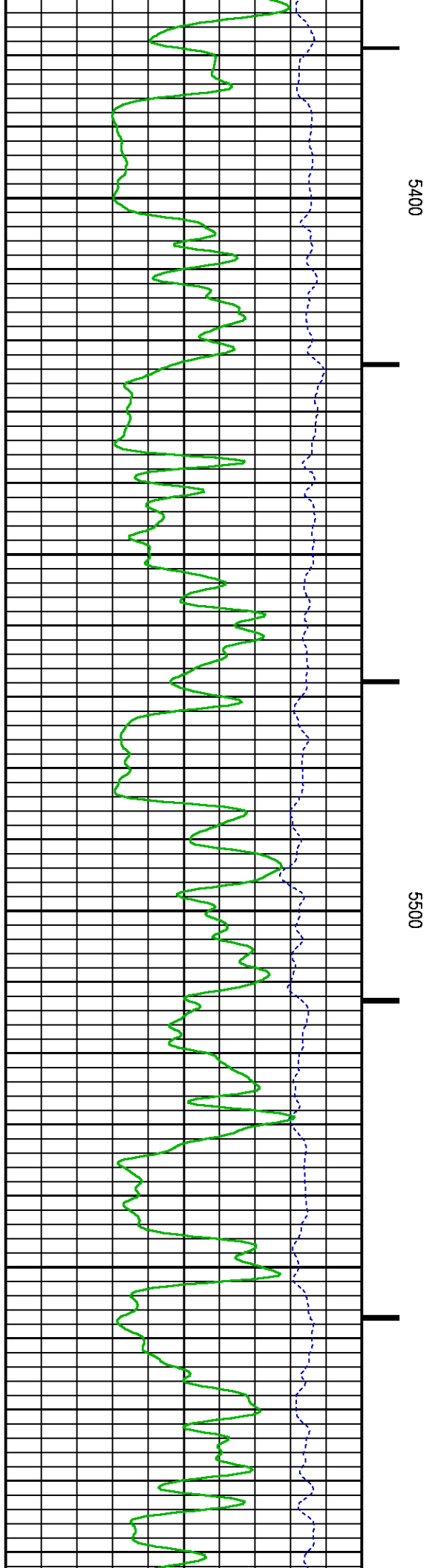
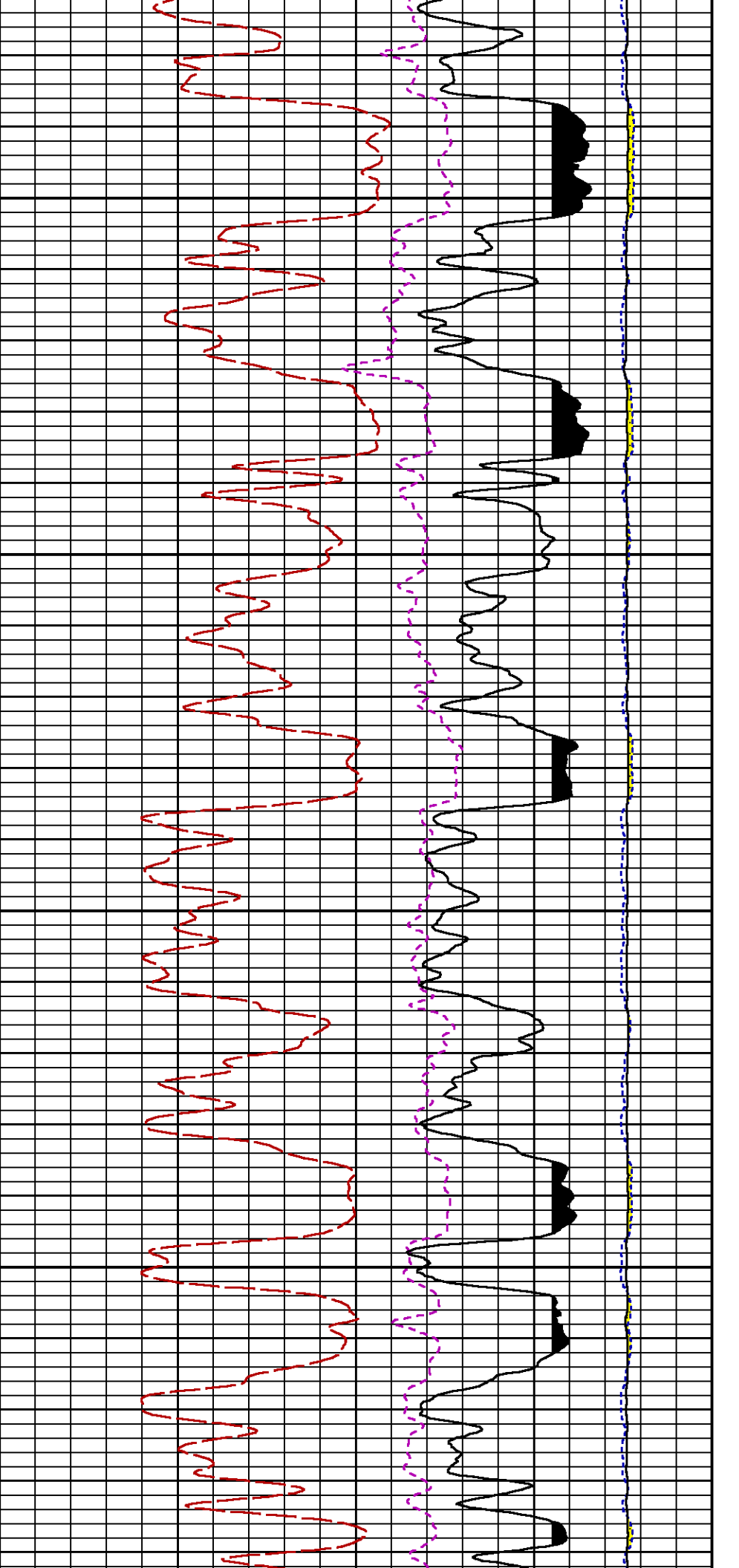


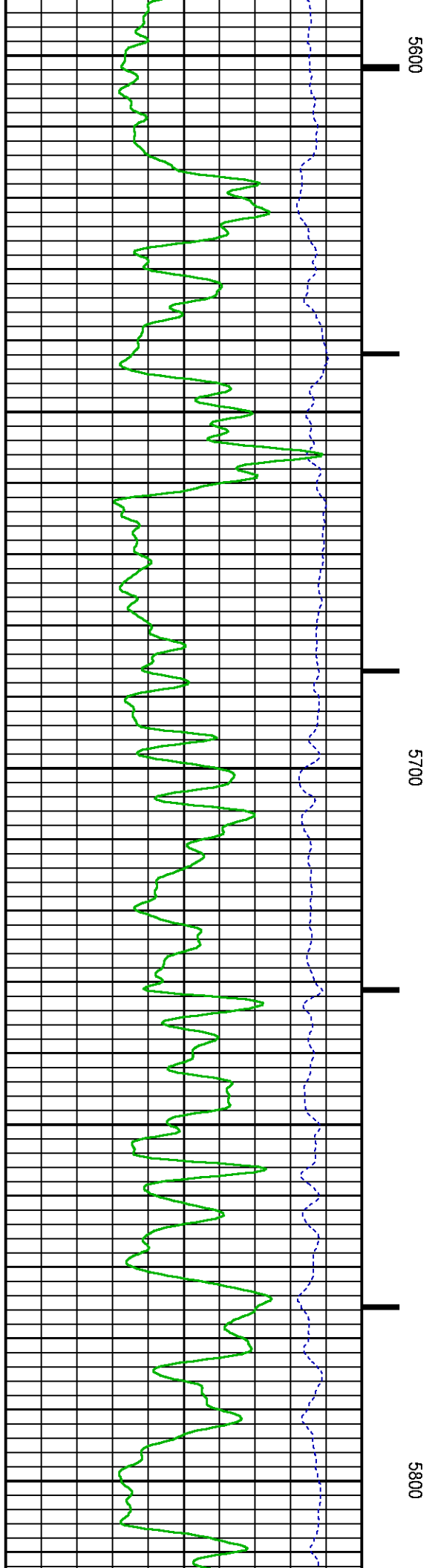
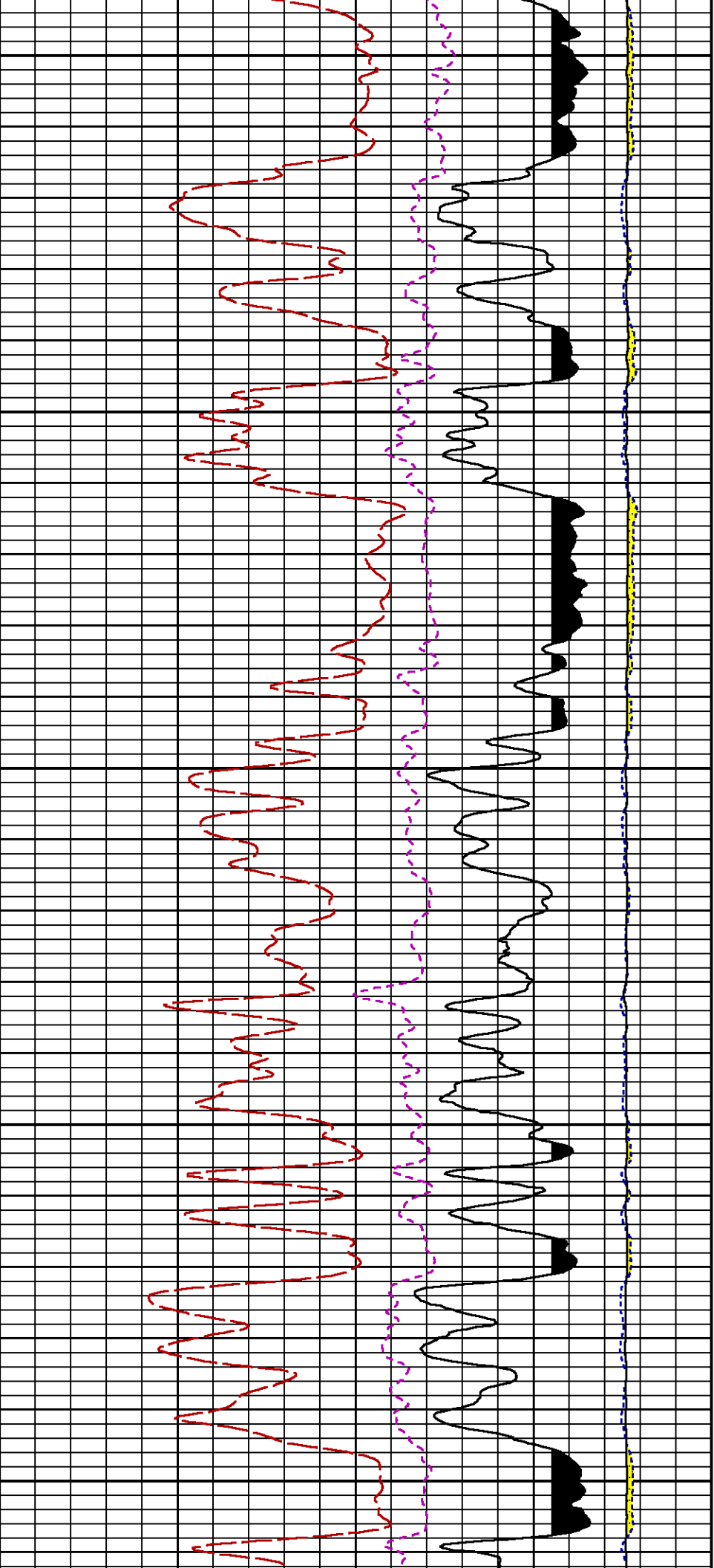


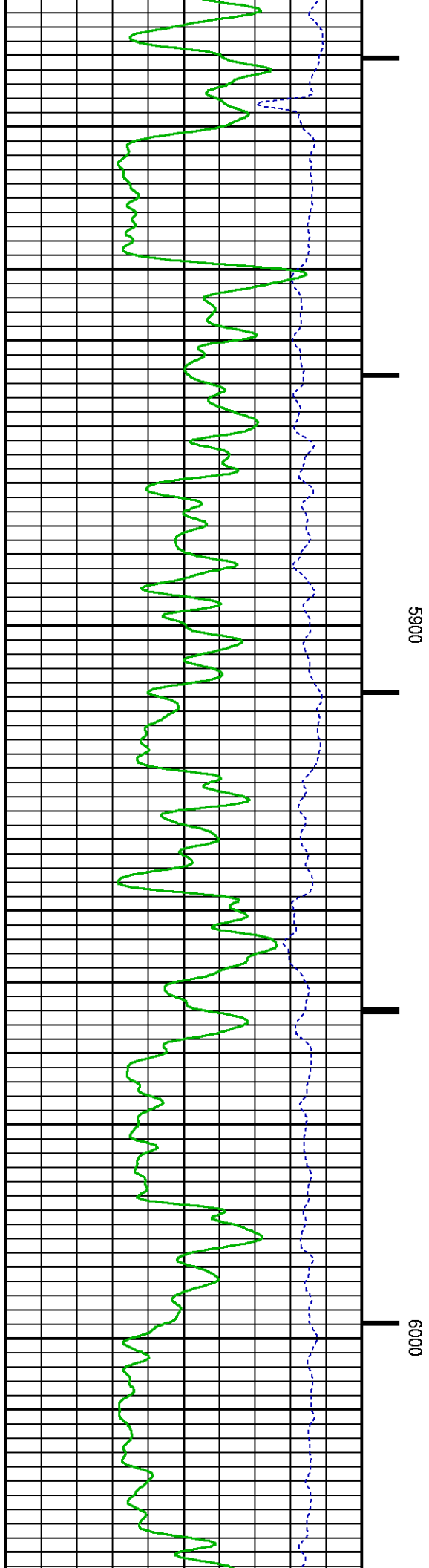
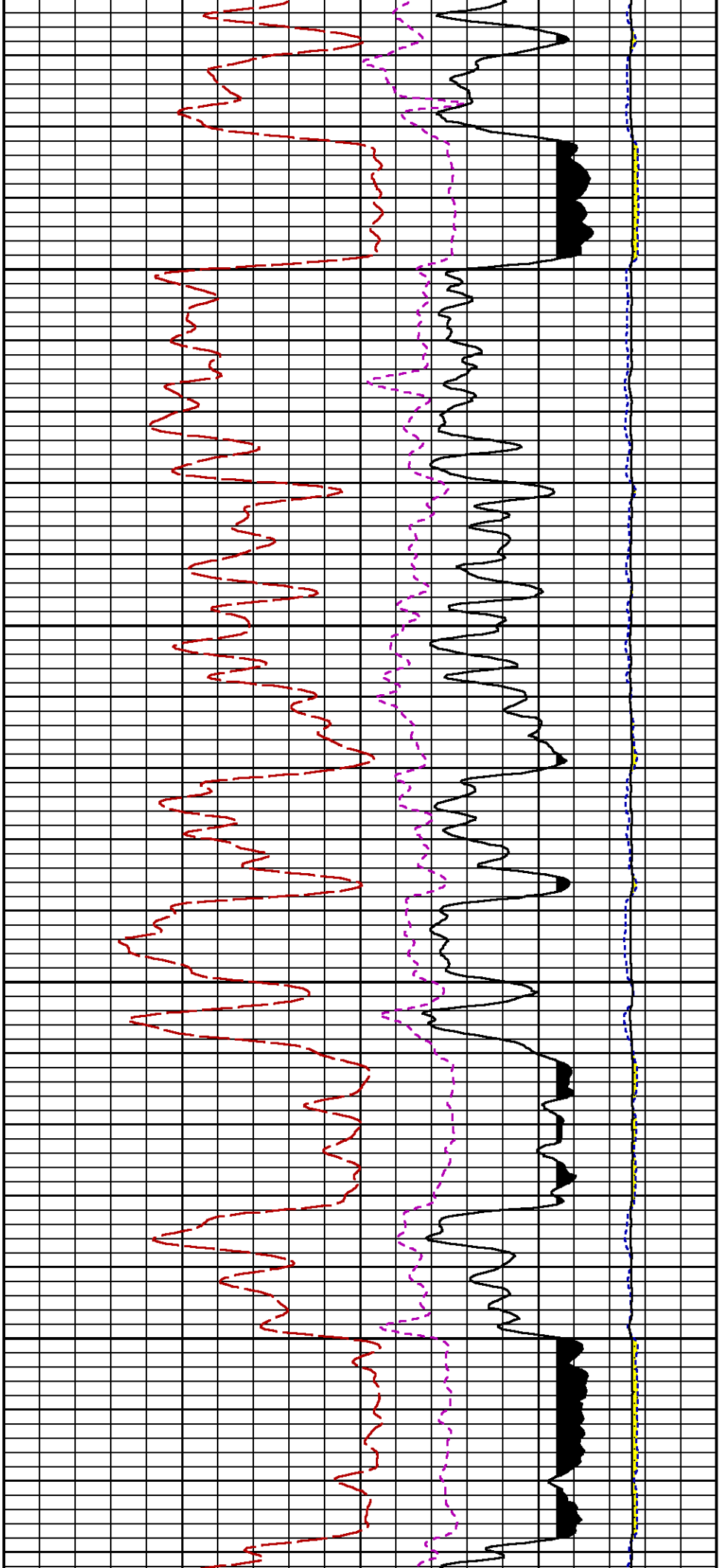


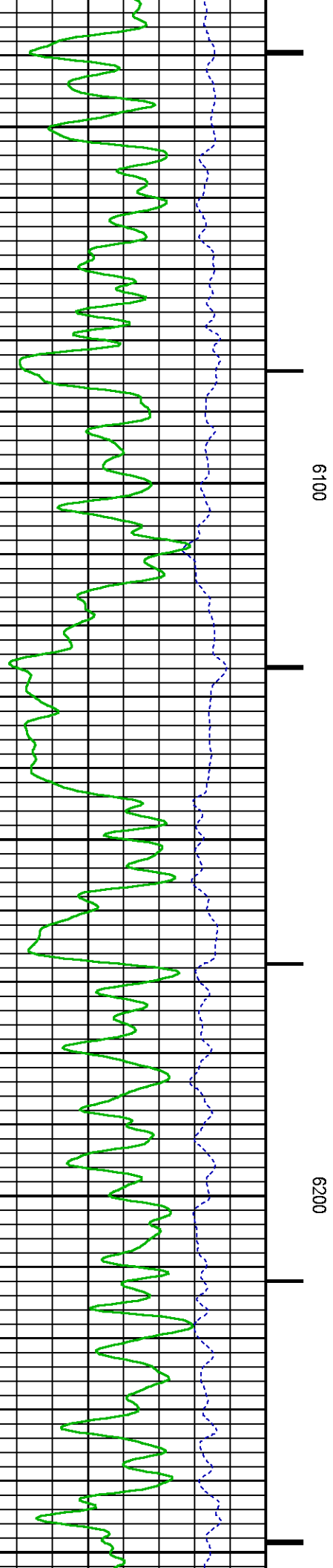
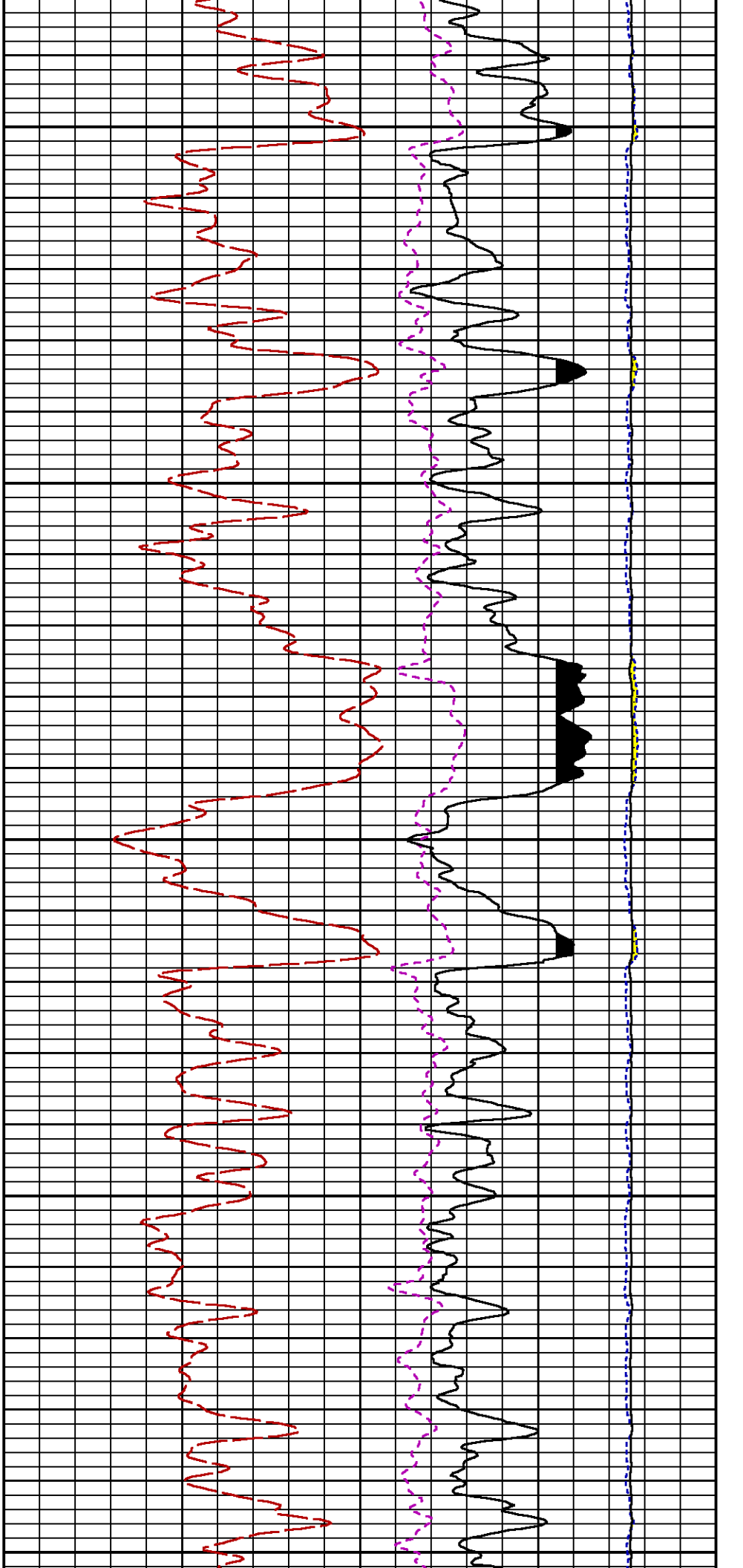


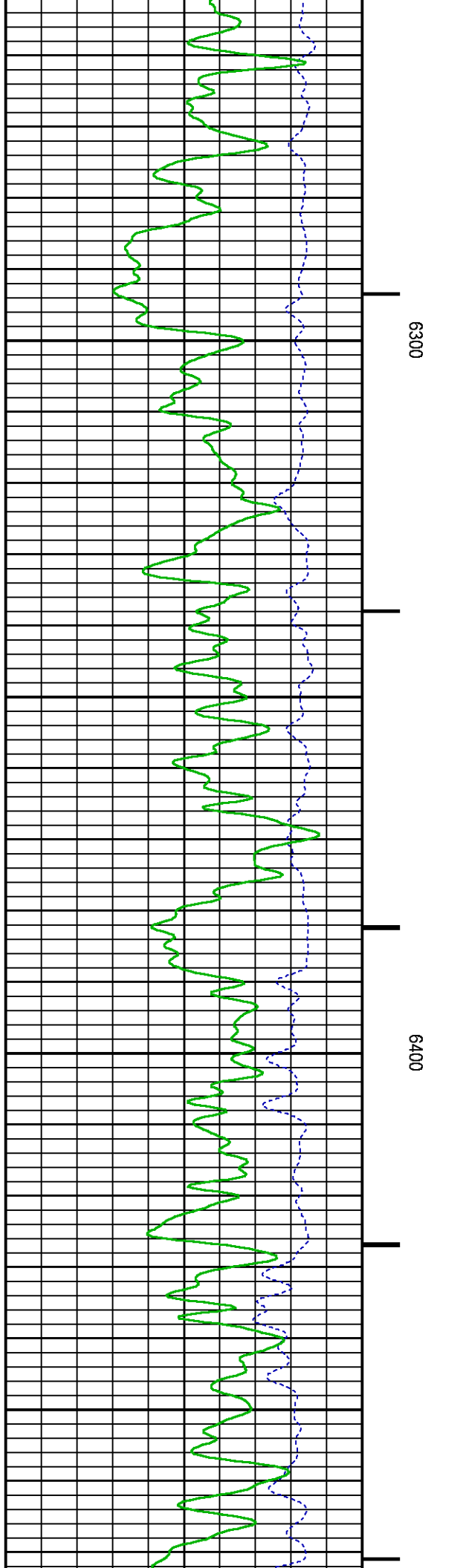
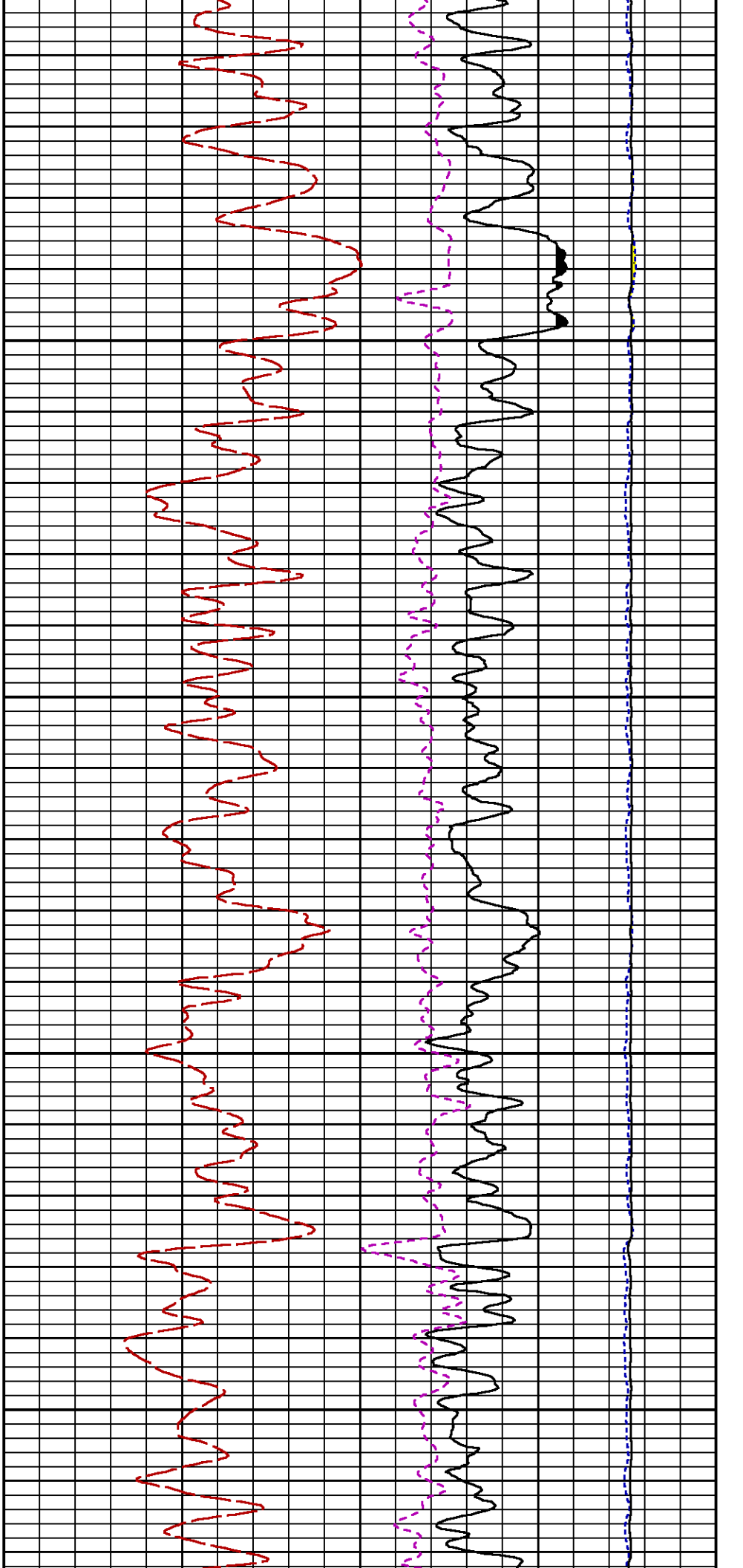


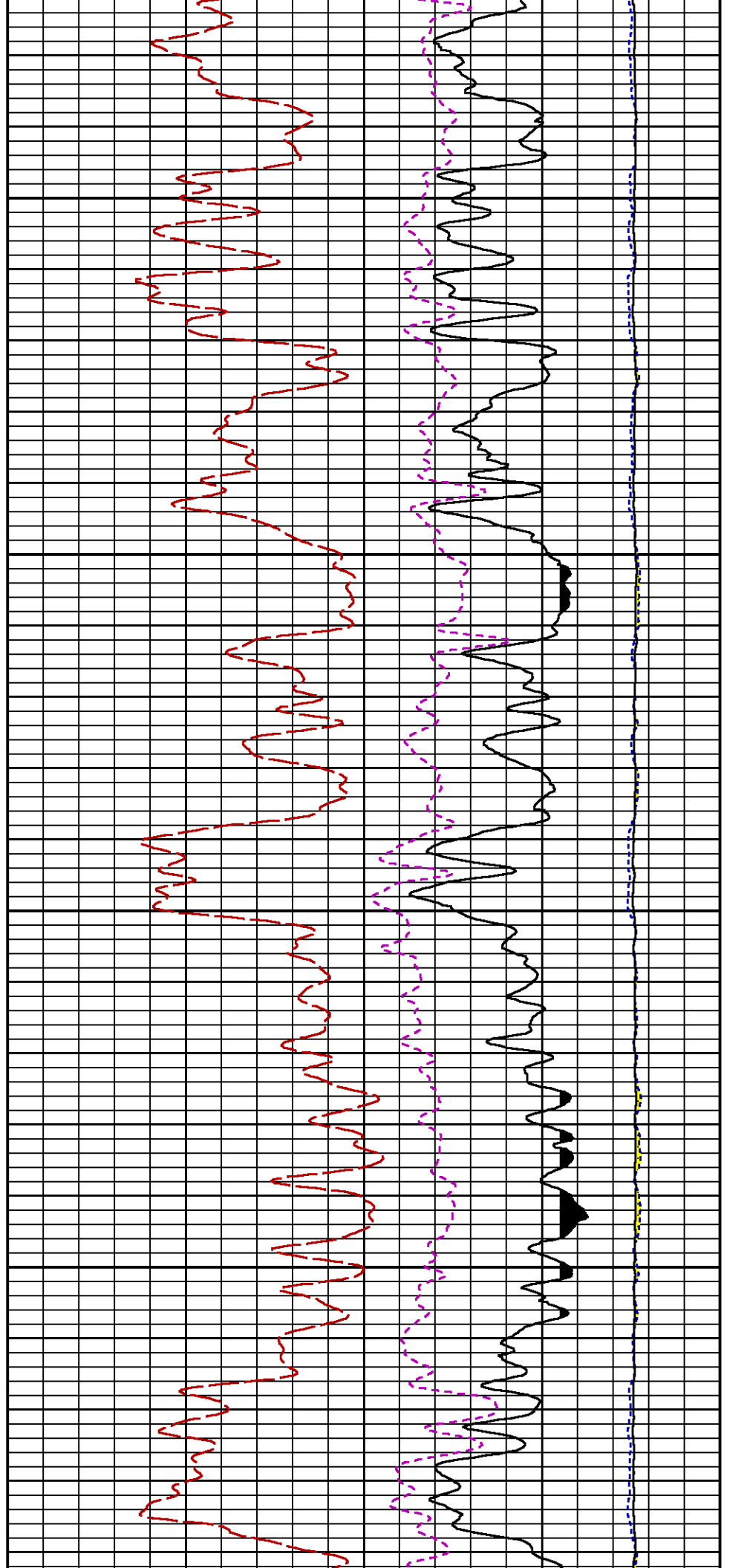
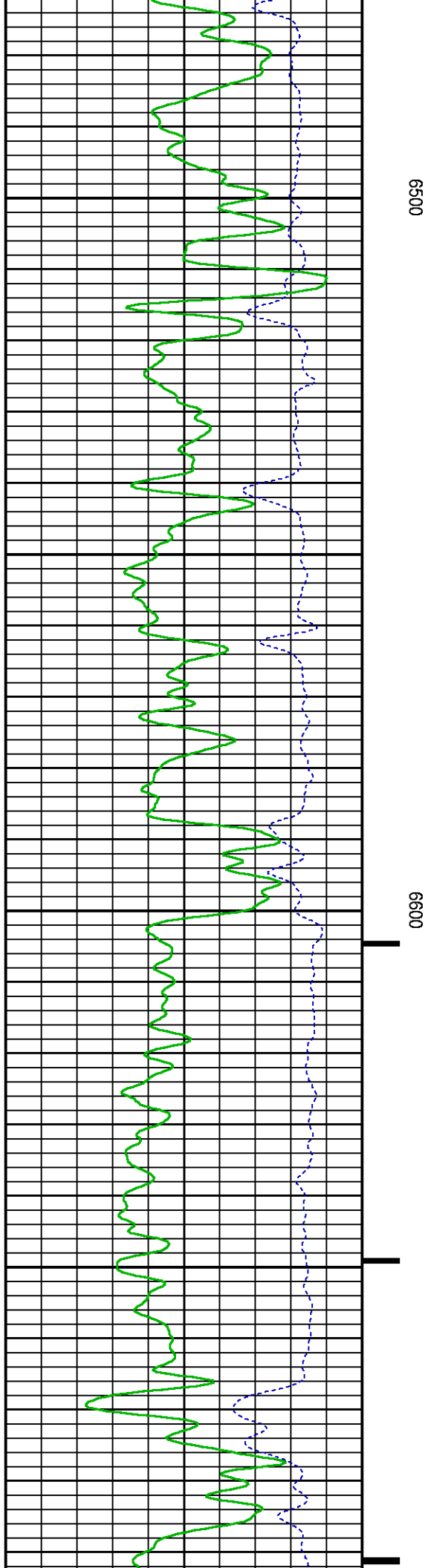


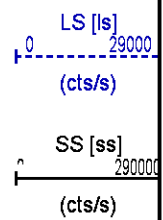
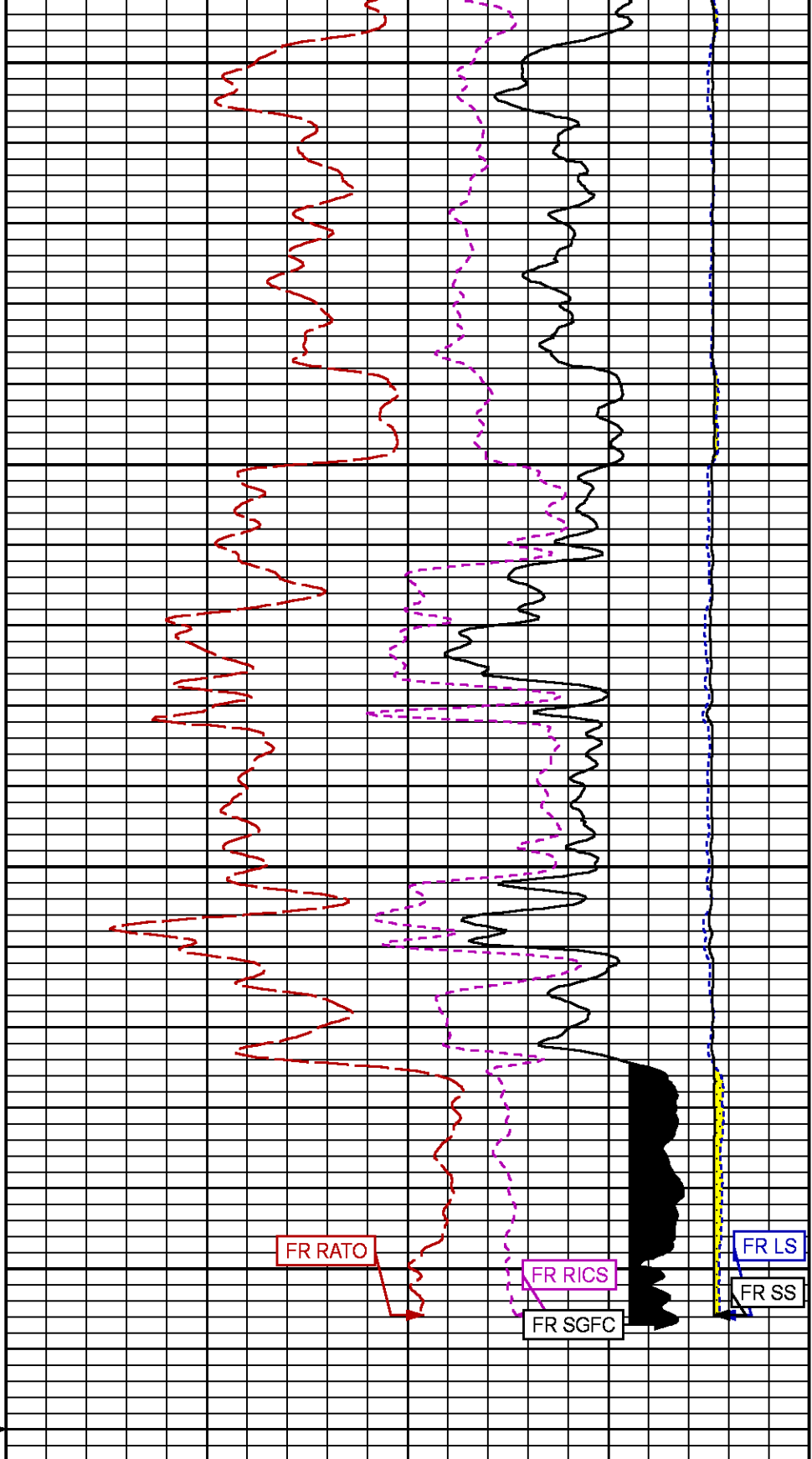
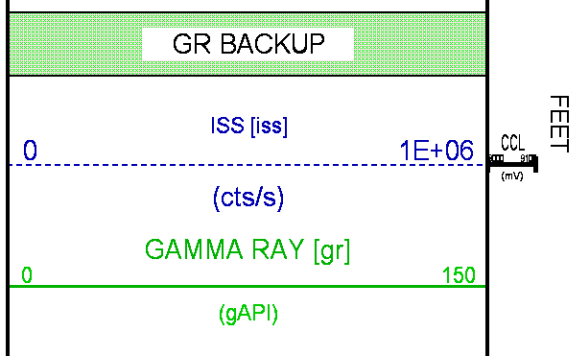
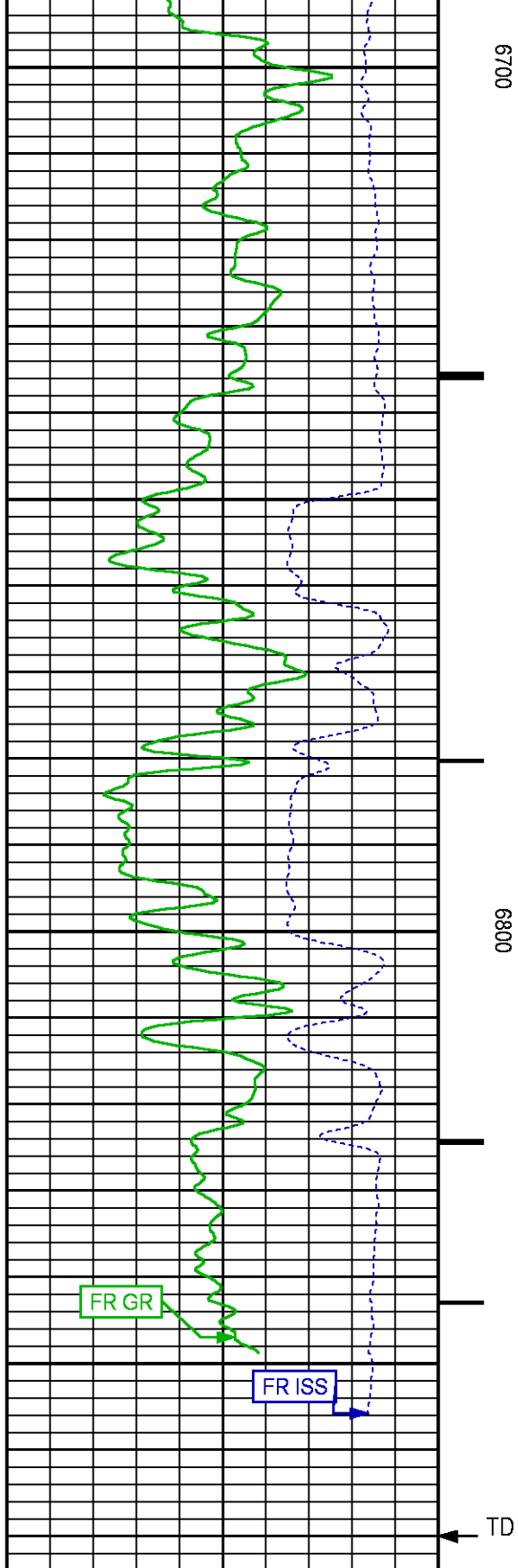












		RATO [rato]	17	0
		(dim)		
		RICS [rics]	39	9
		(dim)		
		SGFC [sgfc]	60	0
		(cu)		

REPEAT SECTION PNC-3D MODE

ECLIPS 6.2i ECLIPS General Release Rel 6.2i Wed Jun 12 12:21:40 CDT 2013
Updates: 1,36 Patches: 9

Plotted: Mon Jun 20 01:59:41 2016

PARAMETER AND FILTER SUMMARY REPORT

FILE: /dat1a/CH107932/n353hx02.prm
LOGGING MODE: DEPTH DIRECTION: UP
TOP DEPTH: 6377.500 ft BOTTOM DEPTH: 6597.750 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

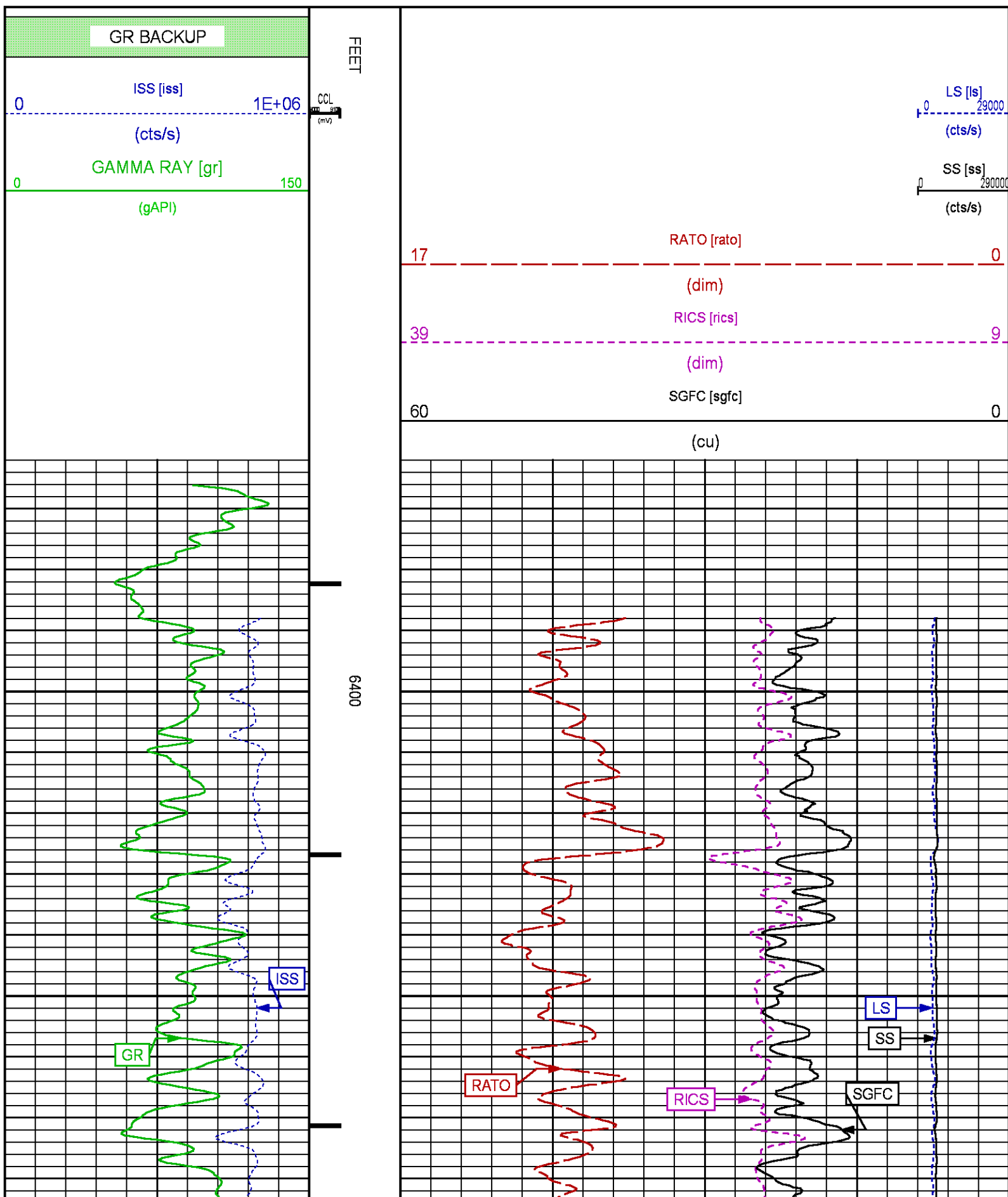
CURVE NAME	CREATION DATE	CURVE DESCRIPTION
F1:CCL	Jun 20 01:29:18 2016	CASING COLLAR LOCATOR
F1:GR	Jun 20 01:29:18 2016	GAMMA RAY
F1:ISS	Jun 20 01:29:18 2016	INELASTIC SHORT SPACE COUNT RATE
F1:LS	Jun 20 01:29:18 2016	LONG SPACE COUNT RATE
F1:RATO	Jun 20 01:29:18 2016	SHORT/LONG SPACE COUNT RATE RATIO
F1:RICS	Jun 20 01:29:18 2016	SHORT SPACE INELASTIC TO CAPTURE COUNT RATE RATIO (ISS/CSS)
F1:SGFC	Jun 20 01:29:18 2016	CORRECTED FORMATION SIGMA
F1:SS	Jun 20 01:29:18 2016	SHORT SPACE COUNT RATE

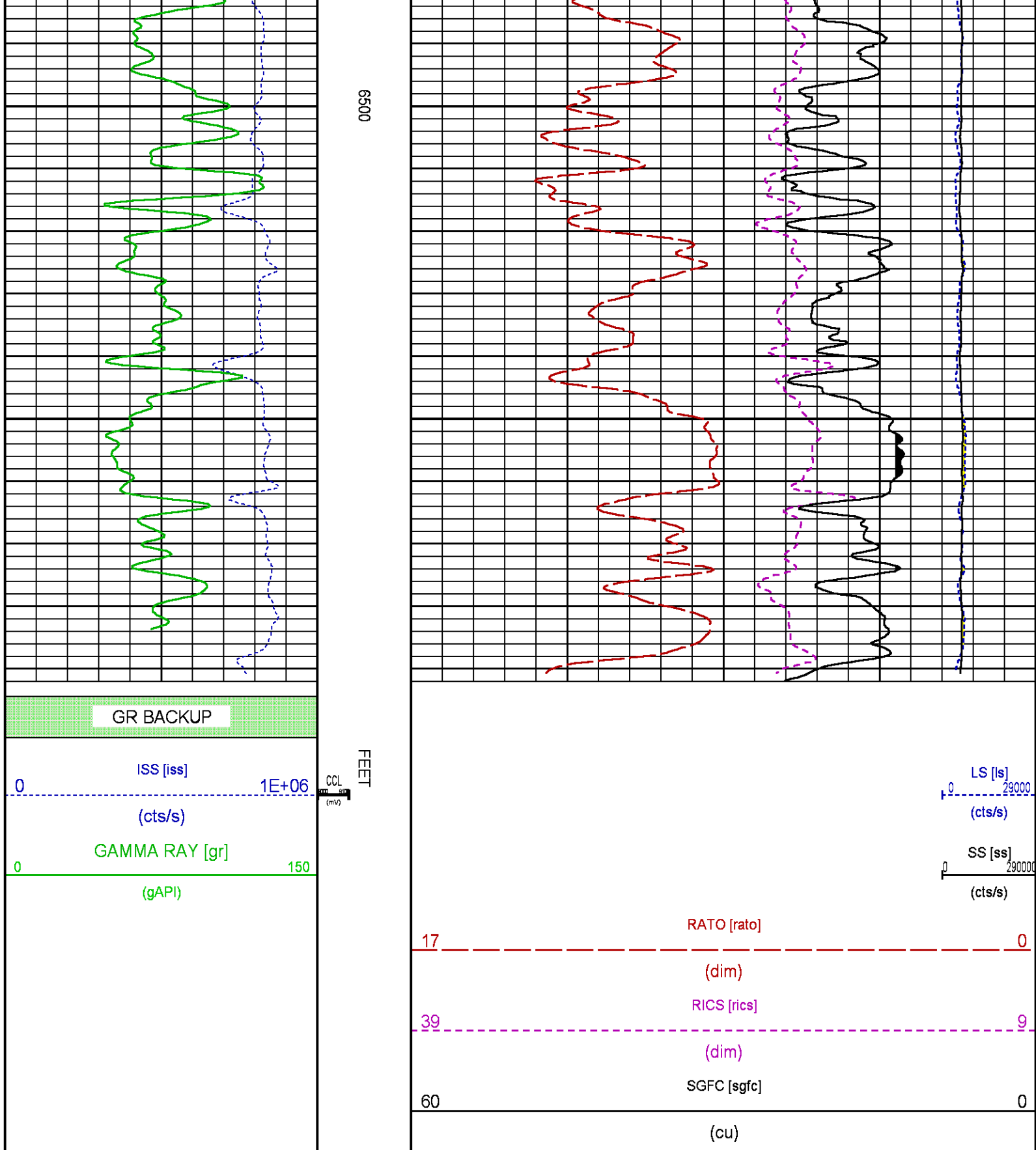
CURVE MEASURE POINT OFFSET

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 : cas6685:/dat1a/CH107932/WPX_RPM_RPT.fvpdf [5"/100' Scale]
Plot Interval : 6362 - 6592 Feet

Data File 1 : F1 : cas6685:/dat1a/CH107932/repeat.xtf
Created On : Jun 20 01:29:18 2016
Company : WPX ENERGY
Well : FEDERAL GM 542-8
Field : GRAND VALLEY
File Interval : 6350.75 - 6608.25 Feet
OCT : n353hx





CALIBRATION / VERIFICATION SUMMARY

GR PRIMARY CALIBRATION SUMMARY

TOOL #: 8262XA 10485470

DATE/TIME PERFORMED: Fri Jun 17 11:22:43 2016

UNIT #: 3885TC 6685

CALB JIG #: 4702NK BA-905

	BACKGROUND (cts/s)	CALBRTR ON (cts/s)	CR DIFF (cts/s)	MULT	BACKGROUND (gAPI)	CALBRTR ON (gAPI)	CALBRTR (gAPI)
GR	106.31	456.42	350.1	0.514	54.66	234.66	180

GR PRIMARY VERIFICATION SUMMARY

TOOL #: 8262XA 10485470

DATE/TIME PERFORMED: Fri Jun 17 11:24:51 2016

UNIT #: 3885TC 6685

VERI JIG #: 4702NK BA-905

	BACKGROUND (cts/s)	CALBRTR ON (cts/s)	MULT	BACKGROUND (gAPI)	CALBRTR ON (gAPI)	DIFF. (gAPI)
GR	104.33	455.69	0.514	53.64	234.28	180.64
						170.00 190.00

RPM_PNC_3D PRIMARY CALIBRATION SUMMARY

TOOL: 8283PA 10169251

DATE/TIME PERFORMED: Fri Jun 17 11:17:30 2016

UNIT: 3885TC 6685

CALIBRATOR: 2437XB GJ_SHOP

SOURCE: 8281AA 11765055

HOURS: 8281AA 202

	ISS	Mtr VIts (V)	SS Gain	LS Gain	XLS Gain	EA Temp (degF)	Sync Delay (usec)	RCAL
Raw Data	809107	120	2330	2299	2351	132	7.0	0.9797
Interpolated	1300000	140	2308	2293	2348			

	ISS	BKS	BKL	BKX	SGA1	SDA1	SGA2	SDA2
Raw Data	809107	7256	1203	154	25.99	0.15	24.02	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	809107	166665	26353	87355	31074	8120	52945	13003
Fit Quality %		0.718	0.914	0.858	0.879	0.823	0.834	0.791

	ISS	RBOR	RIN ISS/LS	RIN13 ISS/IXS	RICS ISS/CSS	RATO SS/LS	RTWO SS2/LS	RONE CSS/CLS
Raw Data	809107	1.43	4.86	30.72	15.28	10.76	3.83	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 %		0.093	0.239	0.137	0.092	0.055	0.061	0.073
Reduced	1386218	1.43	4.86	30.72	15.30	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 Z166341

DATE/TIME PERFORMED: Wed Oct 21 14:25:56 2015

UNIT #: 3885TC 6685

	T(0)	T(1)	T(2)	T(3)
Corr Coeff for Temp	-1.828341E+01	9.988427E-02	8.122243E-07	-3.138442E-11

INSTRUMENT CONFIGURATION

Source File: /dat1a/CH107932/n353hx~joe-tdg

A3 CABLEHEAD

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

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

RPM SOURCE SECTION

Diameter : 1.70"
Length : 4.70'
Weight : 18 lbs
Series : 8281FA
Mnemonic : RPM

34.08'

CCL MP 26.03'

GR MP 22.90'

XLS DETECTOR 13.58'
LS DETECTOR 13.16'
SS DETECTOR 12.91'

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'

0.00'

BULL PLUG 1 11/16

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

	COMPANY <u>WPX ENERGY</u>		FILE NO:
	WELL <u>FEDERAL GM 542-8</u>		<u>CH107932</u>
	FIELD <u>GRAND VALLEY</u>		API NO:
	COUNTY <u>GARFIELD</u>	STATE <u>COLORADO</u>	<u>05045225340000</u>
LOCATION: <u>SHL:669'FNL&549'FWL, S9 T7S R96W</u> <u>BHL:2378'FNL&306'FEL, S8 T7S R96W</u>		ELEVATIONS: KB <u>6111 FT</u> DF GL <u>6087 FT</u>	<u>SEC.8 T.7S R.96W</u> <u>PAD: MV 16-9</u> <u>RIG: H&P 318</u>
SEC <u>8</u> TWP <u>7S</u> RGE <u>96W</u>		DATE <u>20-Jun-2016</u>	