



FILE NO: CH088608  
API NO: 05045224100000  
COMPANY: WPX ENERGY  
WELL: HICKS PA 34-6  
FIELD: PARACHUTE  
COUNTY: GARFIELD STATE: CO

Ver. 3.87  
6 7S 95W  
PA 24-6 PAD  
AZTEC 1000  
LOCATION: SHL: 793' FSL & 2224' FWL  
BHL: 1138' FSL & 1890' FEL  
SEC 6 TWP 7S RGE 95W  
OTHER SERVICES: BOND LOG

PERMANENT DATUM: GL ELEVATION 5135 FT  
LOG MEASURED FROM: KB 25 FT ABOVE P.D.  
DRILL. MEAS. FROM: KB  
ELEVATIONS: KB 5160 FT  
DF  
GL 5135 FT

DATE	22-JUL-2014
RUN	TRIP 1
SERVICE ORDER	US088608
DEPTH DRILLER	6651 FT
DEPTH LOGGER	6631 FT
BOTTOM LOGGED INTERVAL	6621 FT
TOP LOGGED INTERVAL	3188 FT
TIME STARTED	12:30
TIME FINISHED	17:30
OPERATOR RIG TIME	5 HOURS
TYPE OF FLUID IN HOLE	WATER
FLUID DENSITY	NA
FLUID SALINITY	NA
FLUID LEVEL	70 FT
LOGGED CEMENT TOP	NA
WELLHEAD PRESSURE	0 PSI
MAXIMUM HOLE DEVIATION	NA
NOMINAL LOGGING SPEED	10 FMN
MAX. RECORDED TEMP.	211 DEGF
REFERENCE LOG	BAKER HUGHES BOND LOG
REFERENCE LOG DATE	22-Jul-2014
EQUIP. NO.	6670
LOCATION	NEWELL
RECORDED BY	GRAND JCT.
WITNESSED BY	DUSTIN WELSH

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	1295 FT
8.75 IN	1295 FT	6681 FT

#### CASING RECORD

SIZE	WEIGHT	GRADE	FROM	TO
9.625 IN			0 FT	1295 FT
4.5 IN	11.6 LB/F	I-80	0 FT	6681 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 22/JULY/2014 at the client's request.

The depth matching process creates potential for collar lengths to vary from those recored on other cased hole wireline units without a gamma ray reference.

Amount of linear shift is 4 feet.

Logged in PNC-3D mode.

BHT = 211 degF  
SJ = 2998' - 3018'

## EQUIPMENT DATA

RUN	TRIP	TOOL	SERIES NO.	SERIAL NO.	POSITION
1	1	PCM	8250EA	10314363	FREE
1	1	TEL/CCL	8248ED	Z120493	FREE
1	1	GR	2812LA	11701636	FREE
1	1	RPM	8281EA	10294755	FREE
1	1	RPM	8283PA	10466231	FREE
1	1	RPM	8281FA	10307727	FREE
1	1	TEMP	8255XA	11774568	FREE

## MAIN SECTION PNC 3-D MODE

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

Updates: 1 Patches: 1

Plotted: Tue Jul 22 17:25:59 2014

## PARAMETER AND FILTER SUMMARY REPORT

FILE: /dat1a/88608/n354h02.prm  
 LOGGING MODE: DEPTH DIRECTION: UP  
 TOP DEPTH: 3167.250 ft BOTTOM DEPTH: 6634.156 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

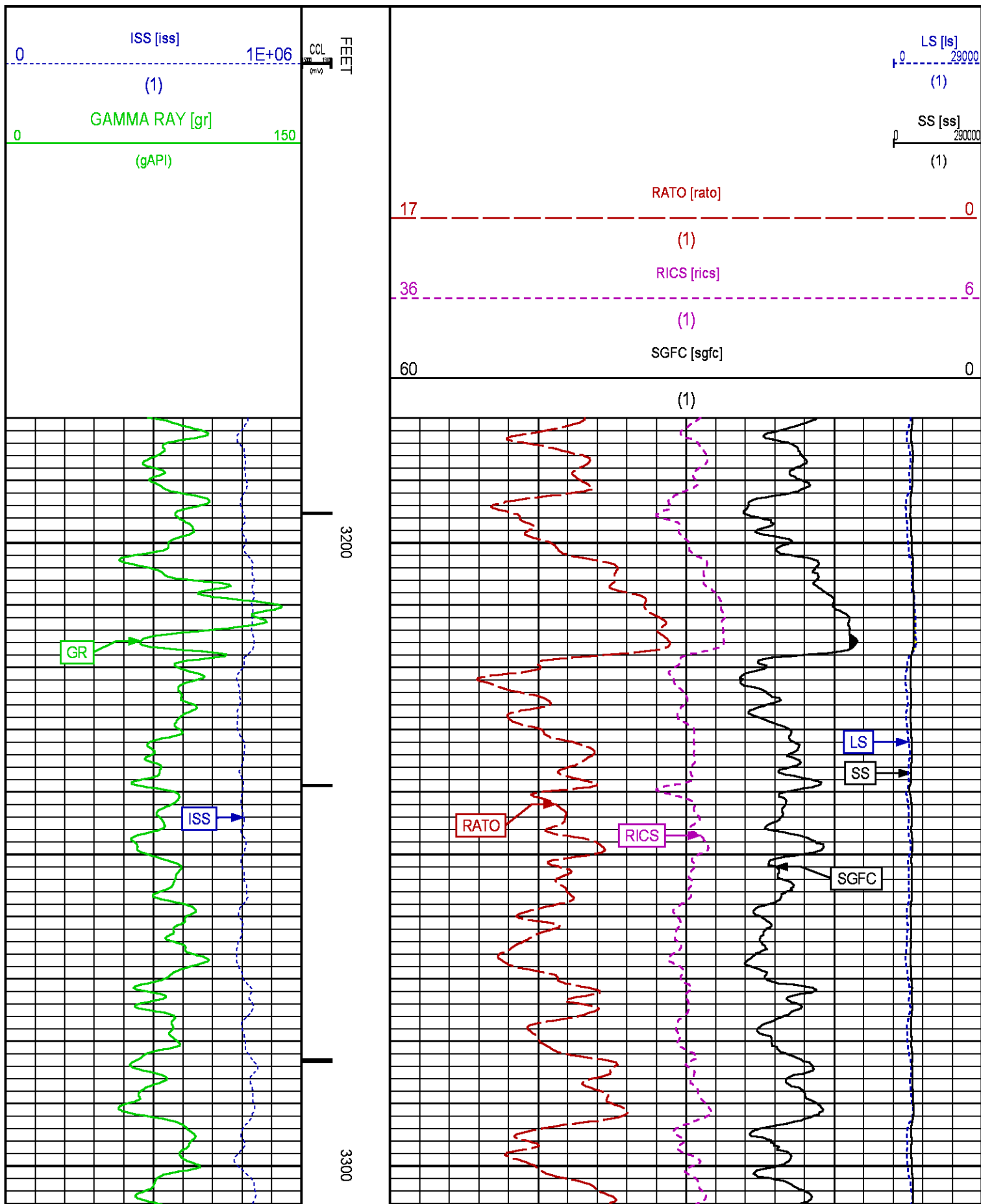
CURVE NAME	CREATION DATE	CURVE DESCRIPTION
F1:CCL	Jul 22 13:27:43 2014	CASING COLLAR LOCATOR
F1:GR	Jul 22 13:27:43 2014	GAMMA RAY
F1:ISS	Jul 22 13:27:43 2014	INELASTIC SHORT SPACE COUNT RATE
F1:LS	Jul 22 13:27:43 2014	LONG SPACE COUNT RATE
F1:RATO	Jul 22 13:27:43 2014	SHORT/LONG SPACE COUNT RATE RATIO
F1:RICS	Jul 22 13:27:43 2014	SHORT SPACE INELASTIC TO CAPTURE COUNT RATE RATIO (ISS/CSS)
F1:SGFC	Jul 22 13:27:43 2014	CORRECTED FORMATION SIGMA
F1:SS	Jul 22 13:27:43 2014	SHORT SPACE COUNT RATE

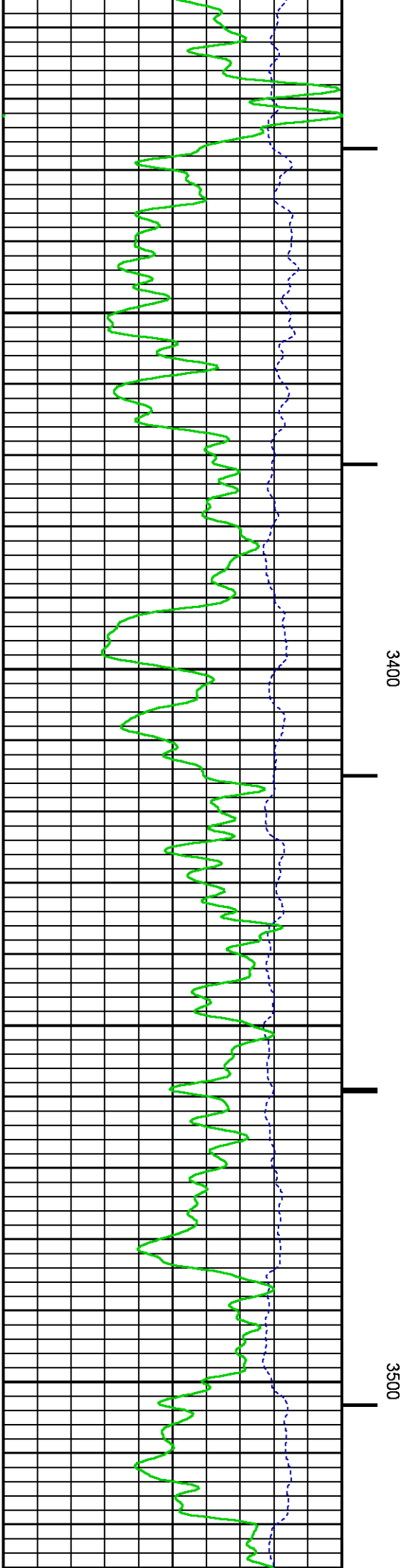
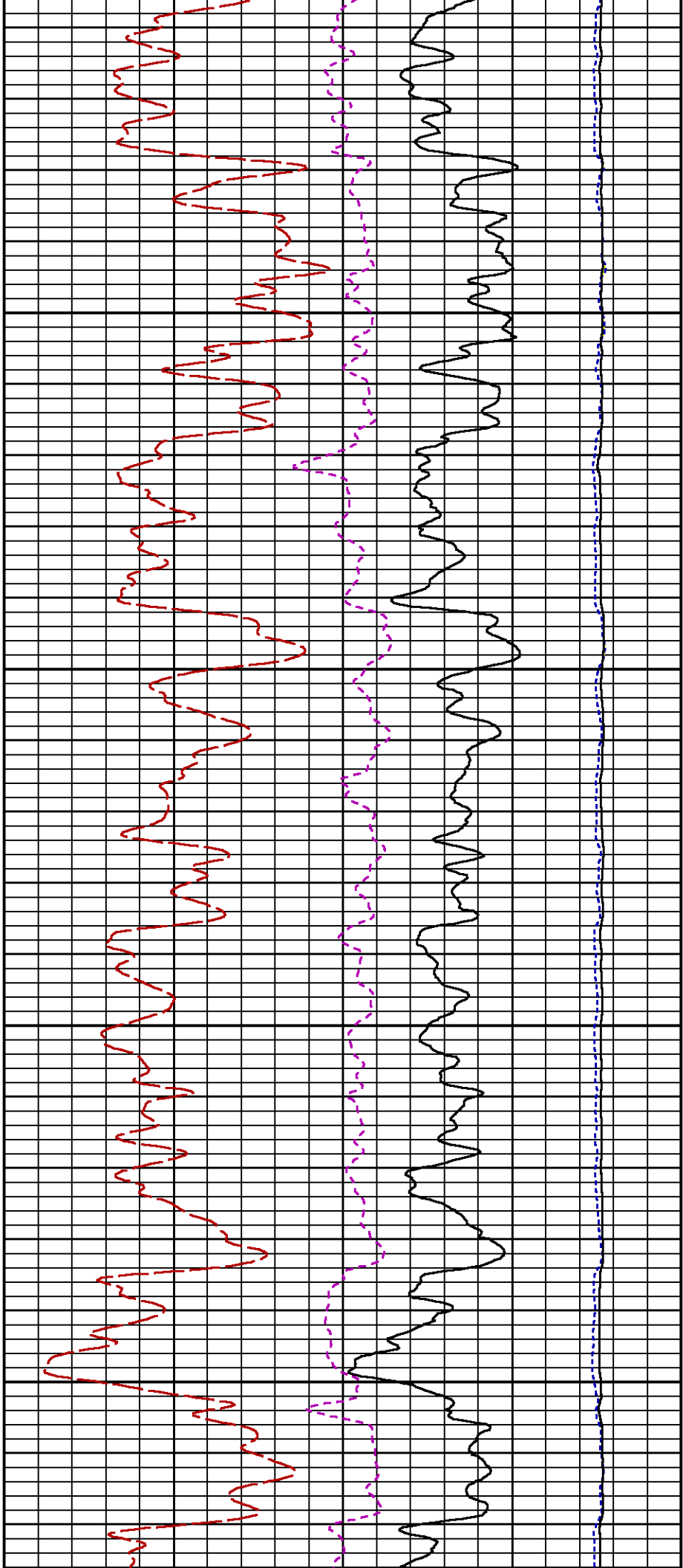
## CURVE MEASURE POINT OFFSET

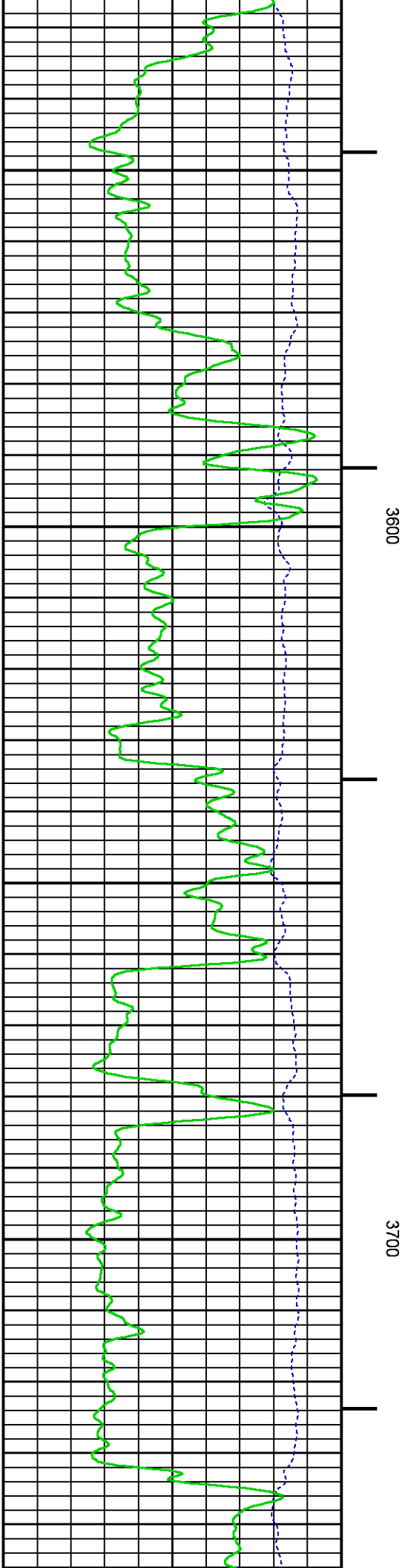
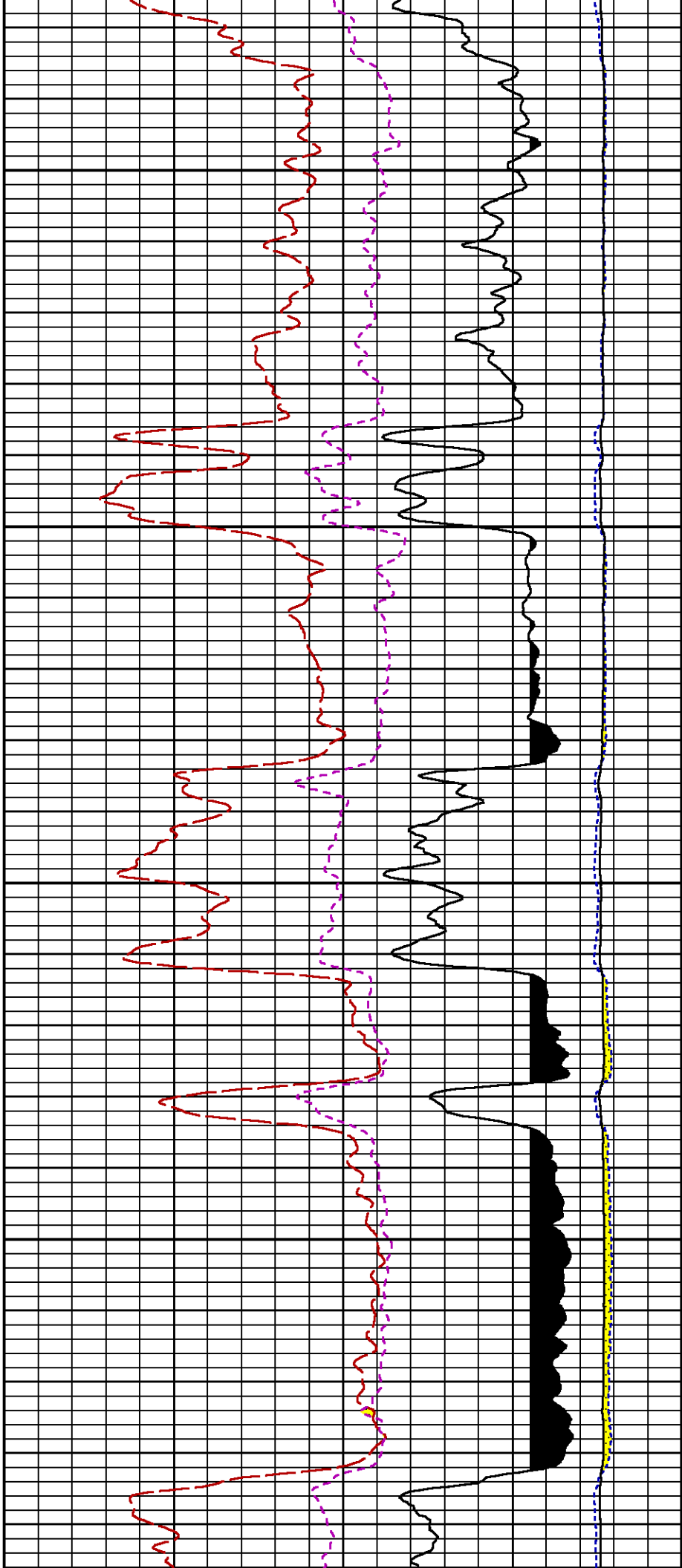
CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
CCL	25.00	ISS	12.75	RATO	12.75	SGFC	12.75
GR	22.75	LS	12.75	RICS	12.75	SS	12.75

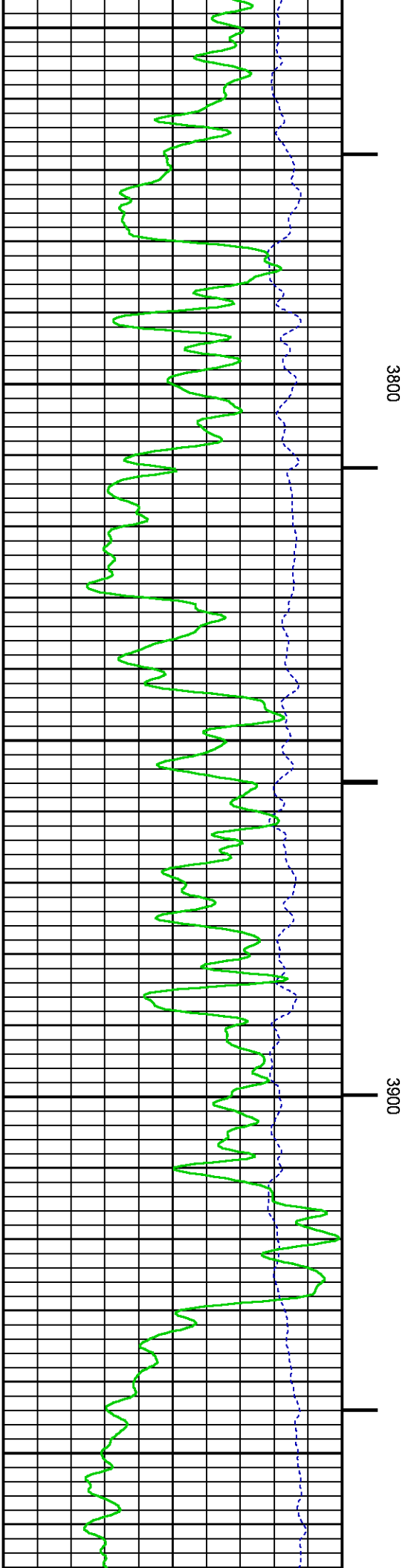
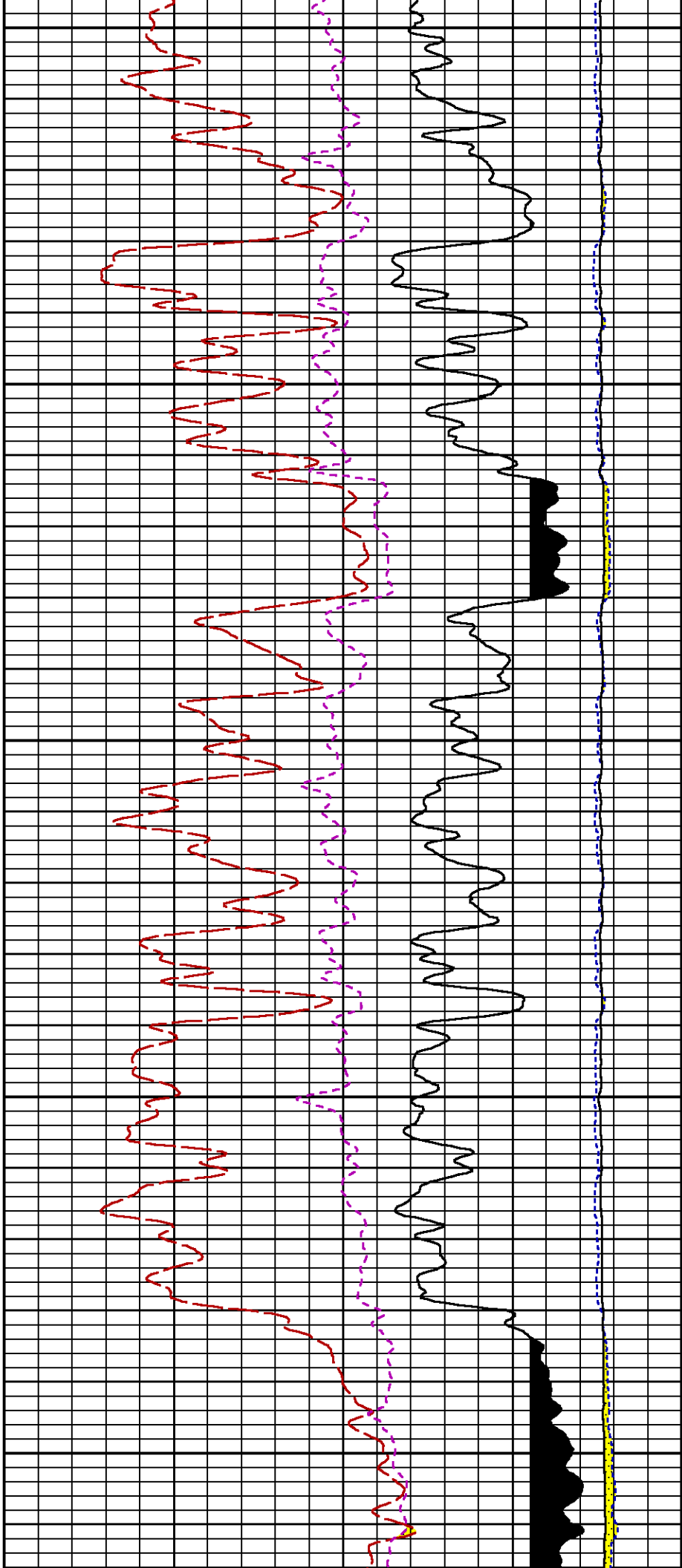
Plot Interval : 3180 - 6636 Feet

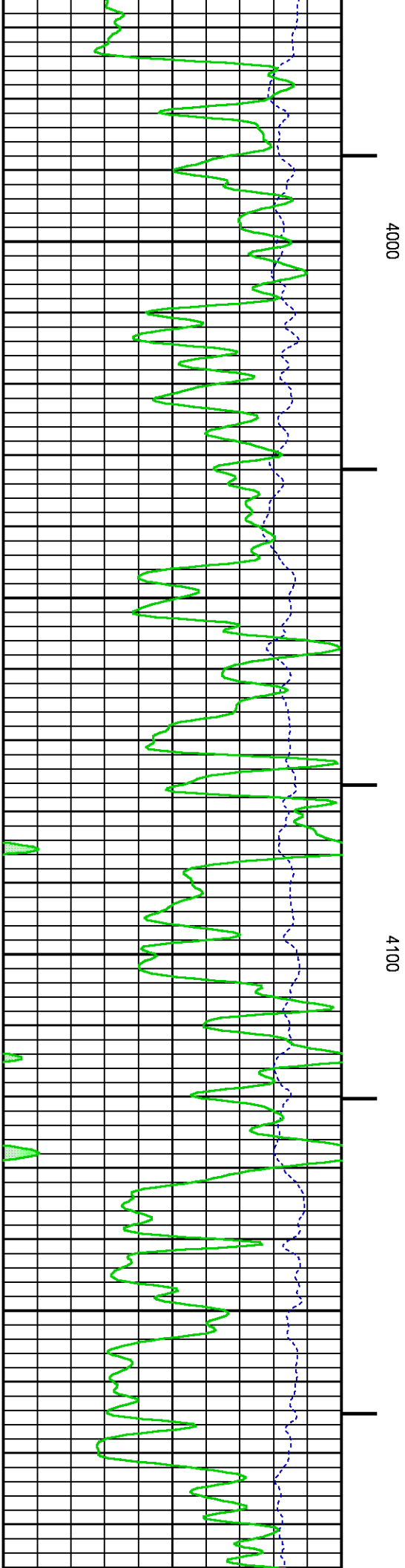
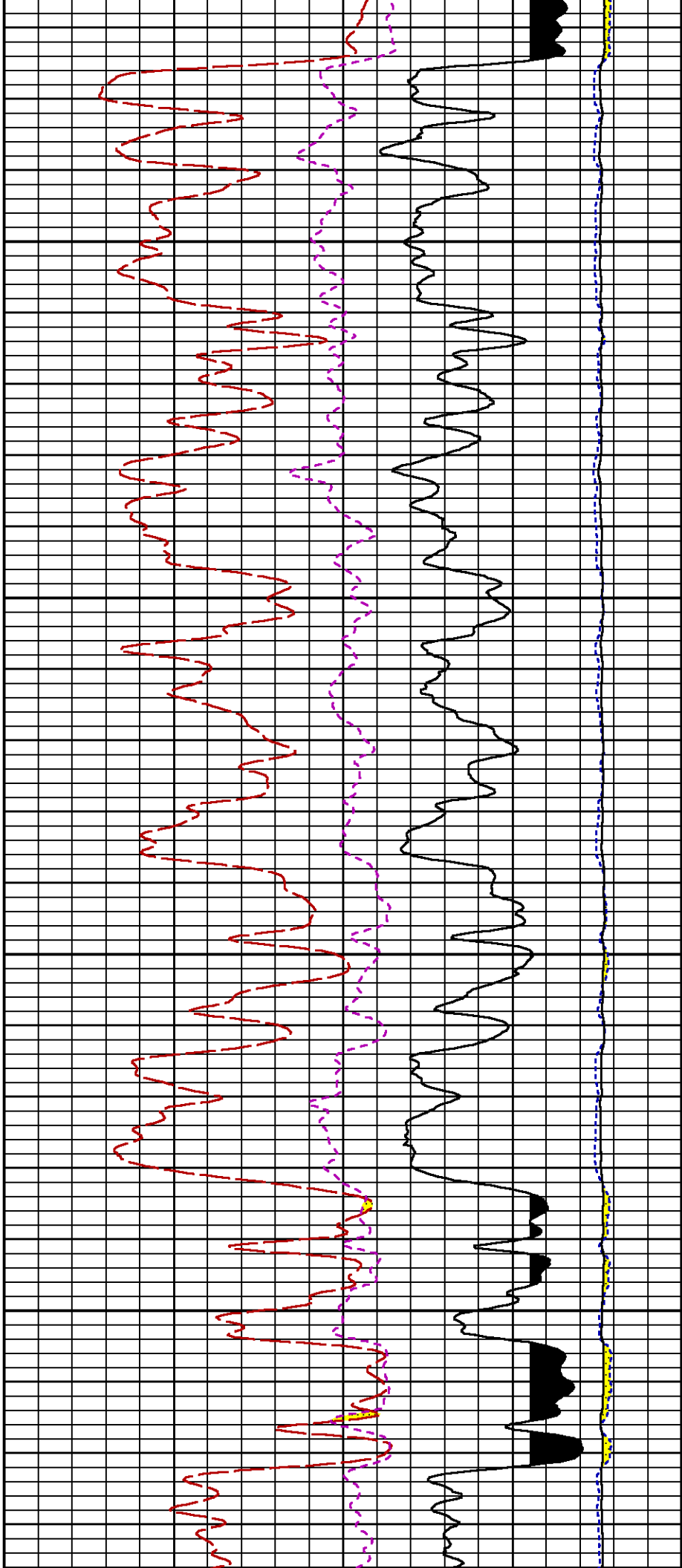
Data File 1 : F1 : HL6670:/dat1a/88608/34\_RPM\_MAIN.xtf  
Created On : Jul 22 13:27:43 2014  
Company : WPX ENERGY  
Well : HICKS PA 34-6  
Field : PARACHUTE  
File Interval : 27.25 - 6630.5 Feet  
OCT : n354h

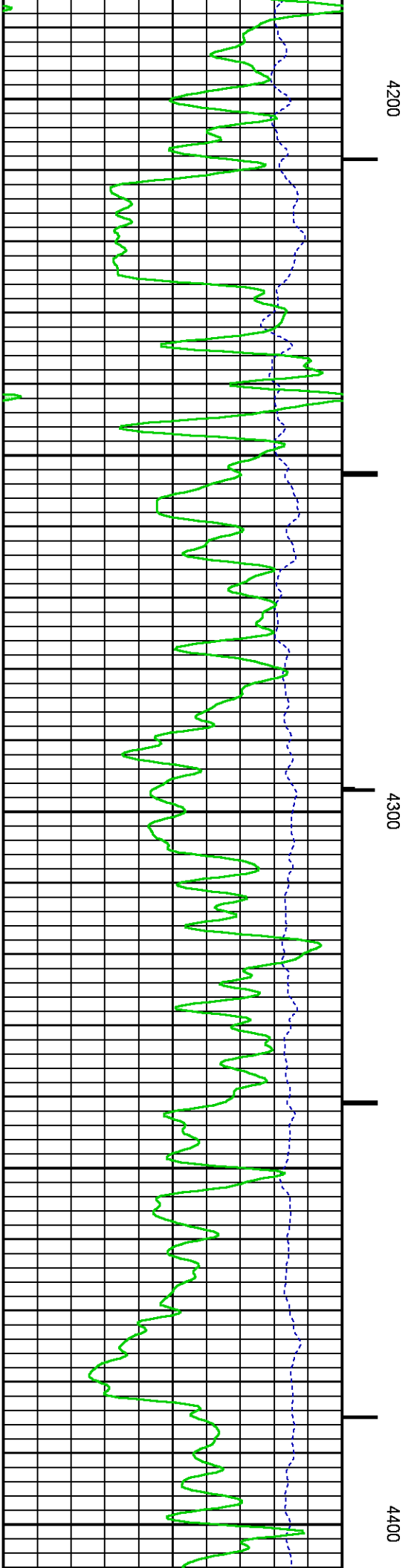
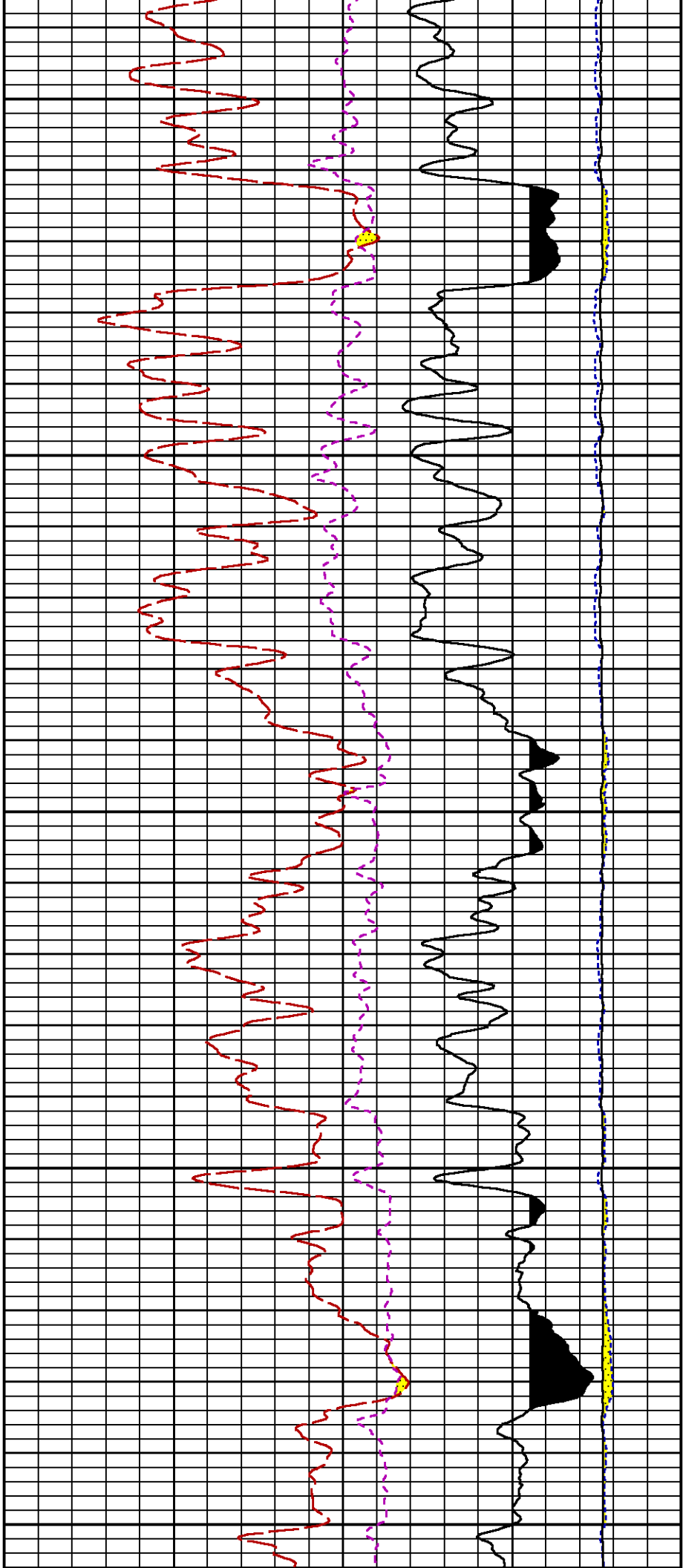




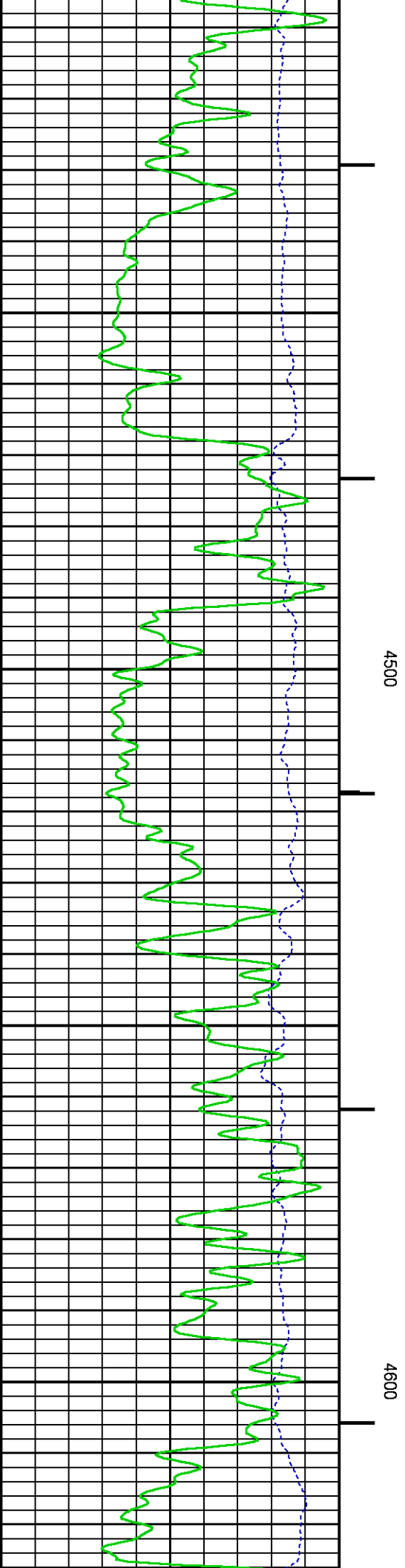
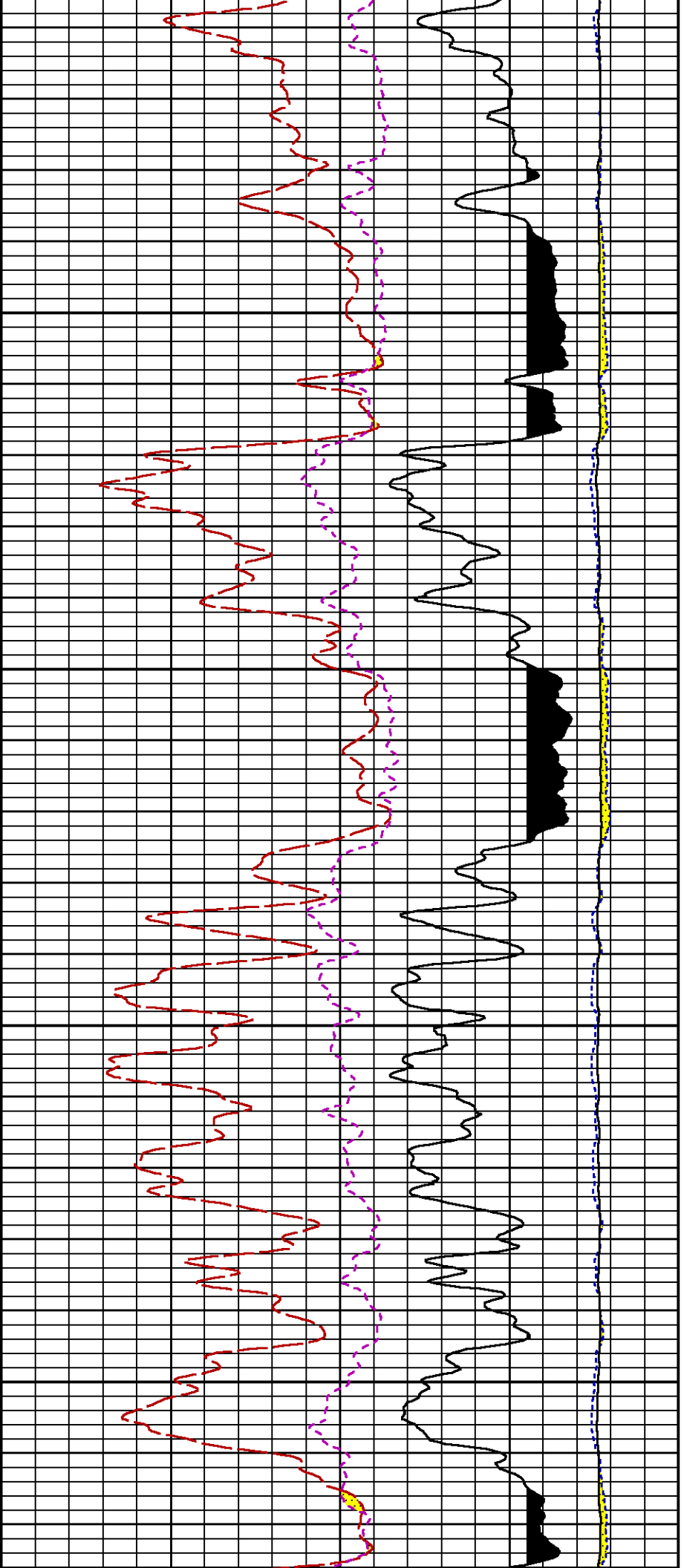


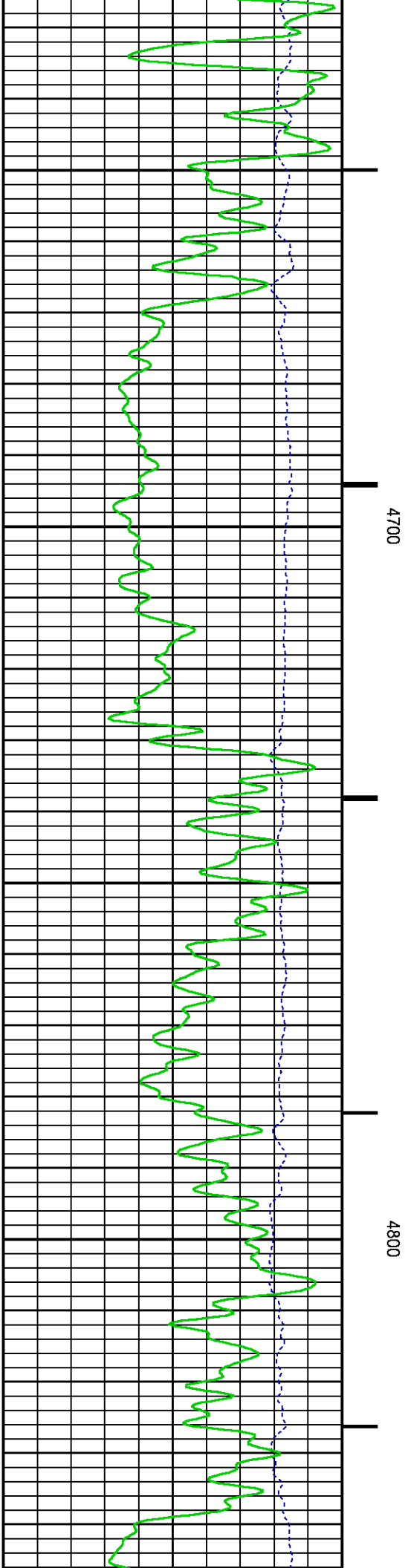
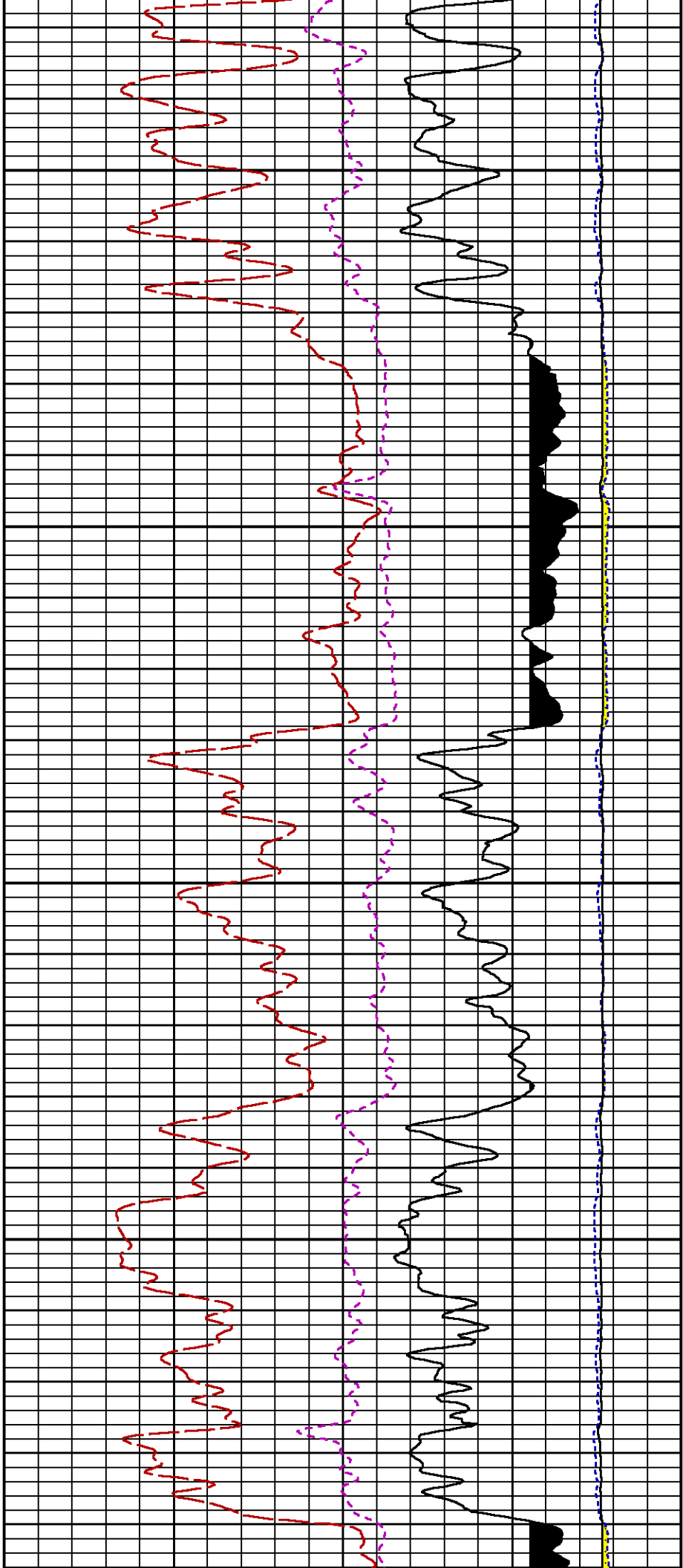


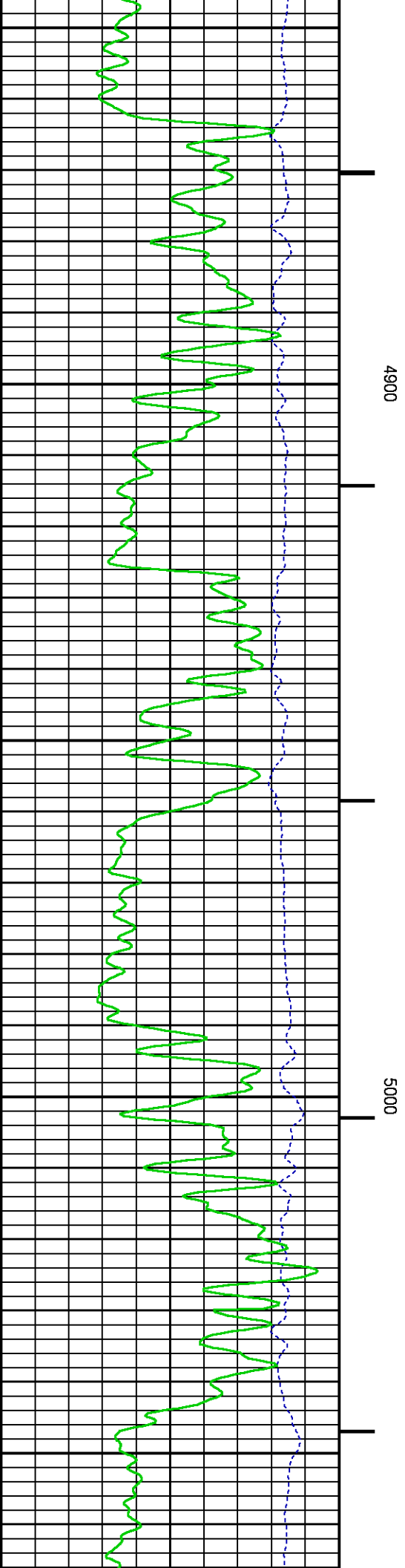
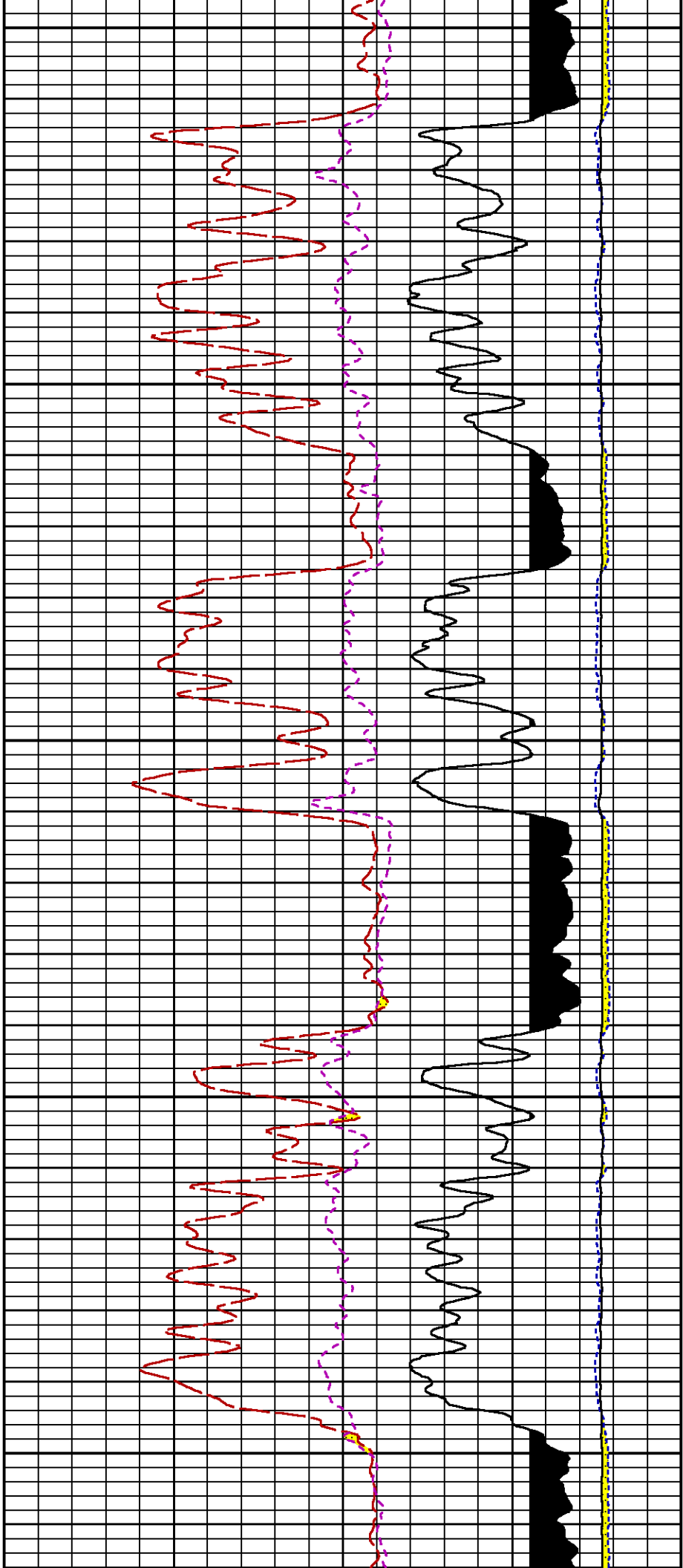


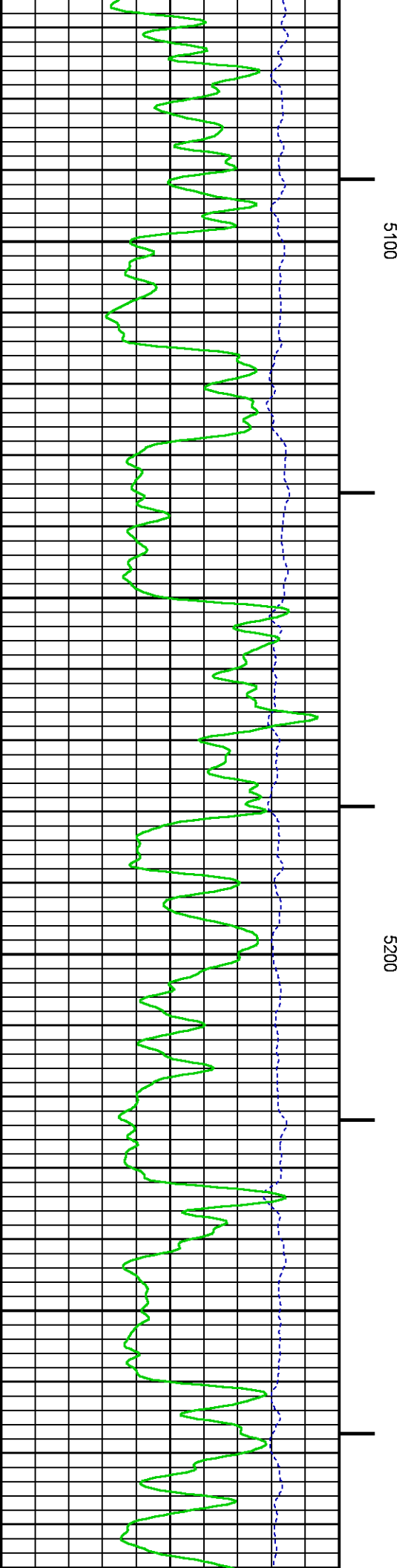
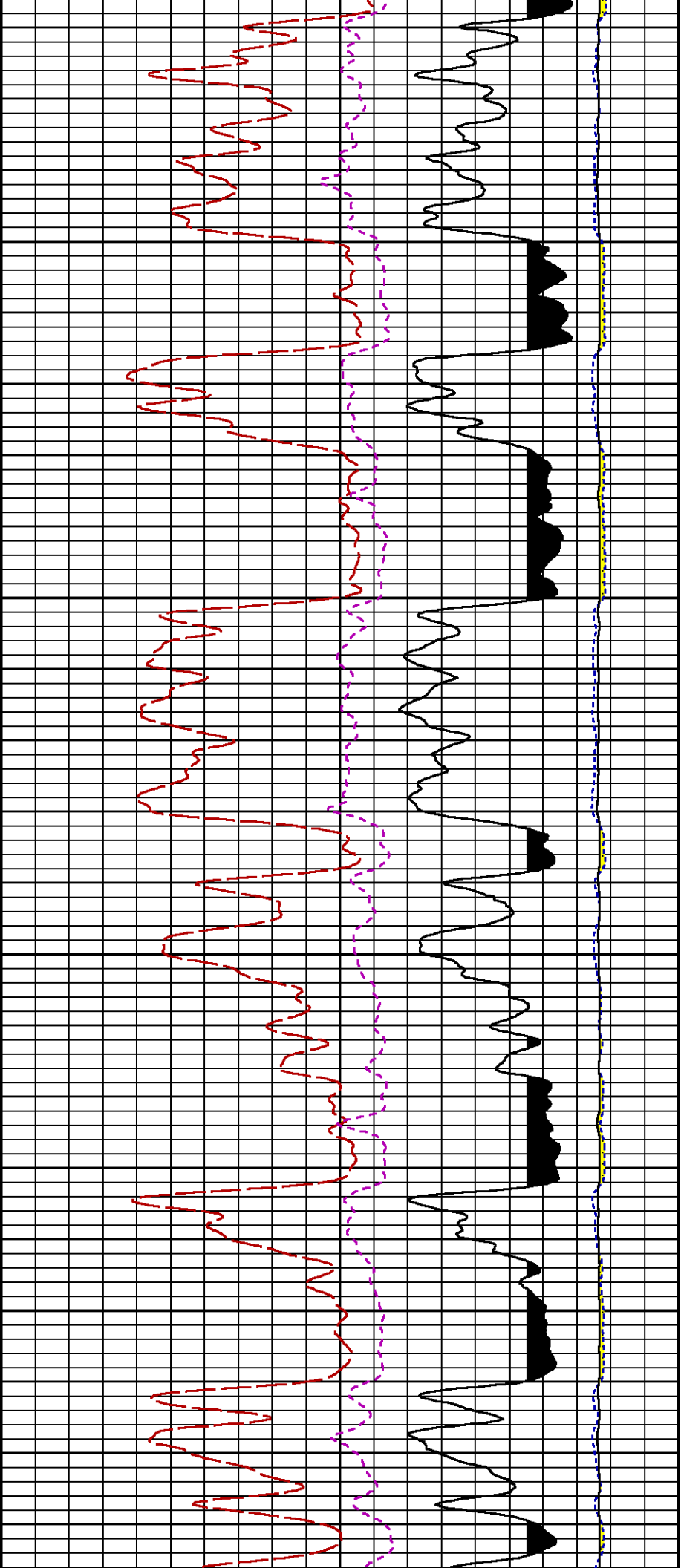


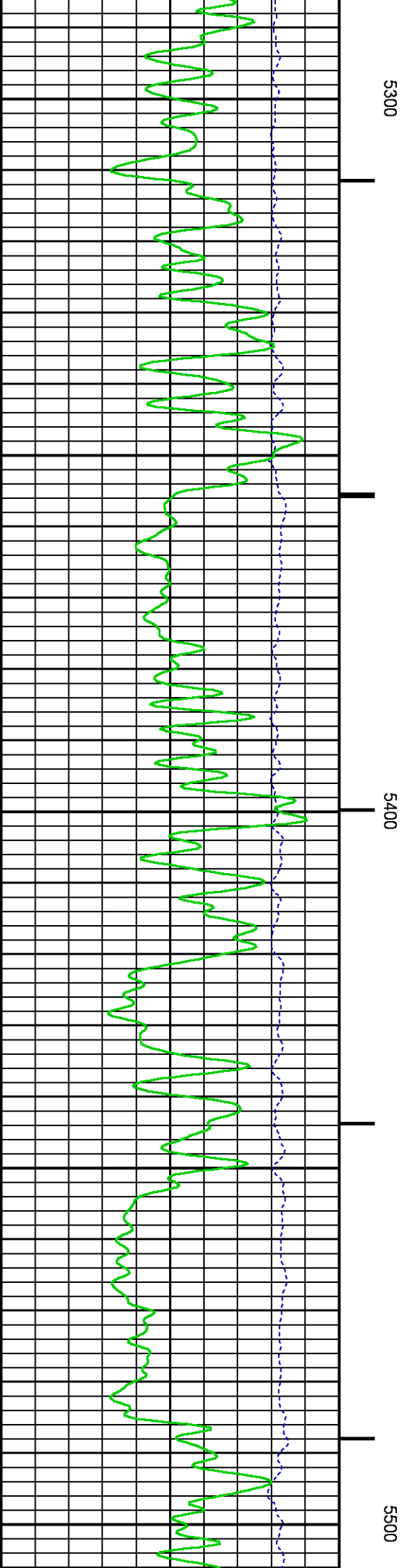
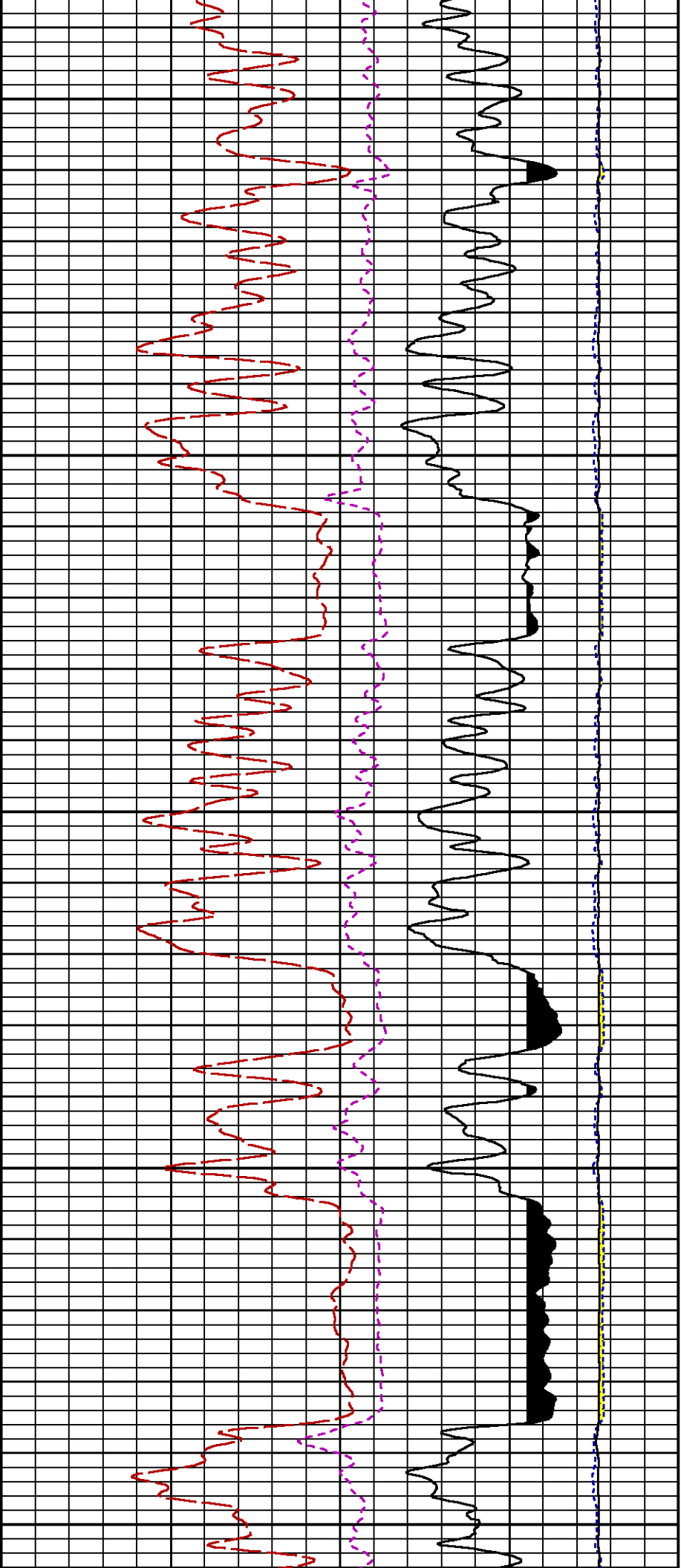


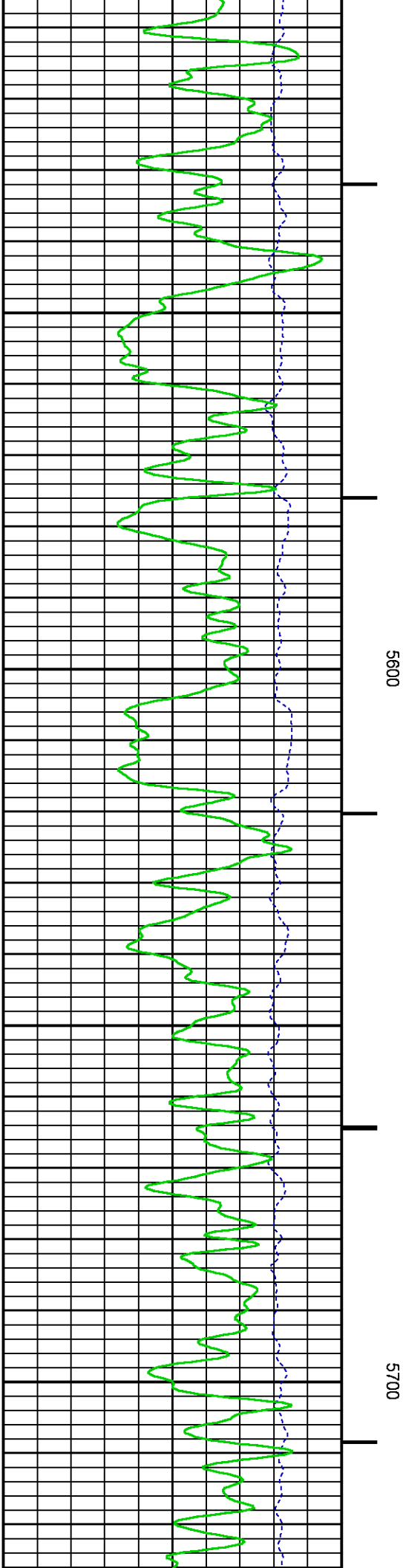
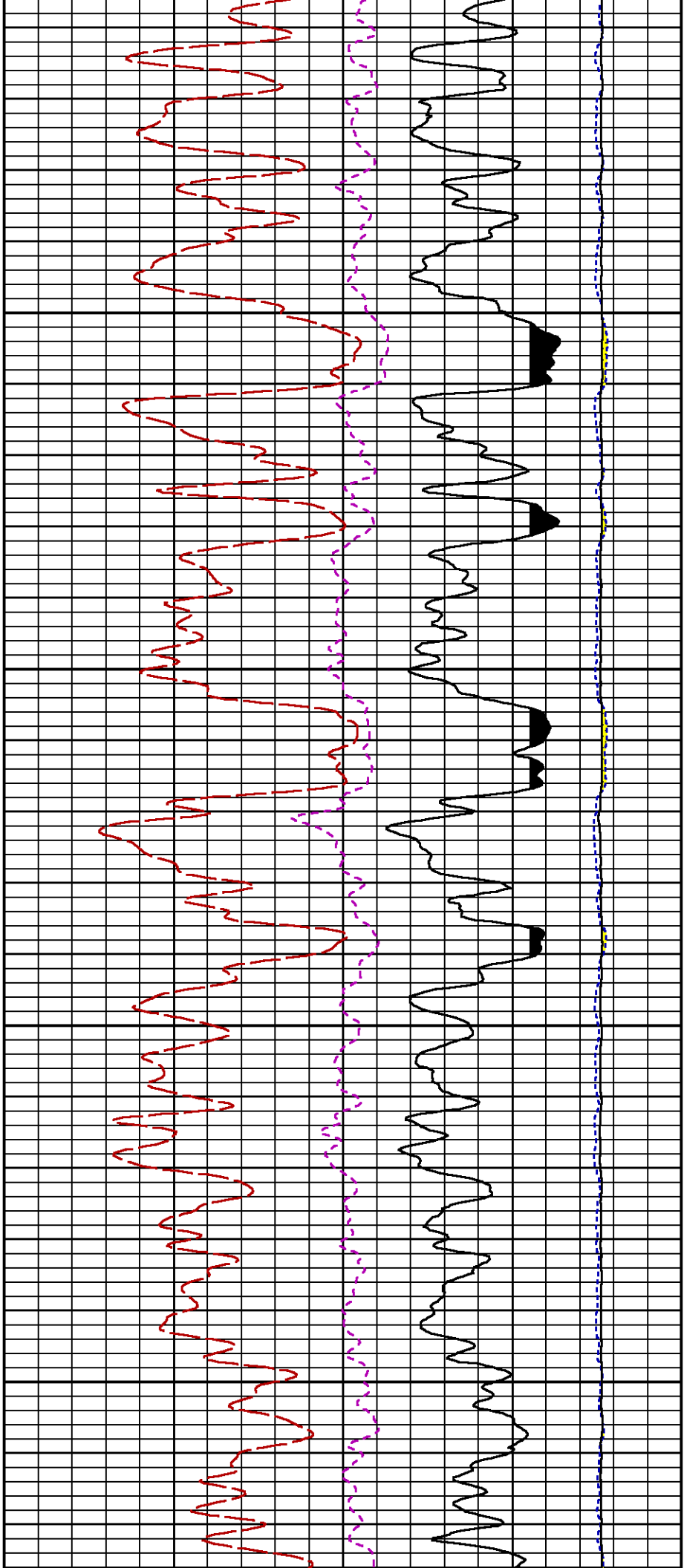


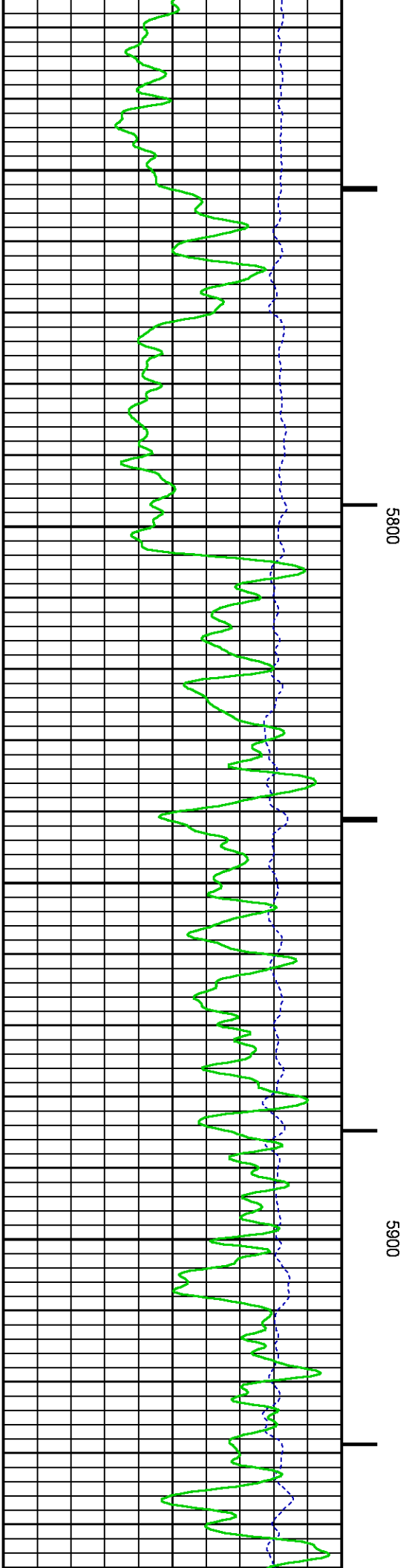
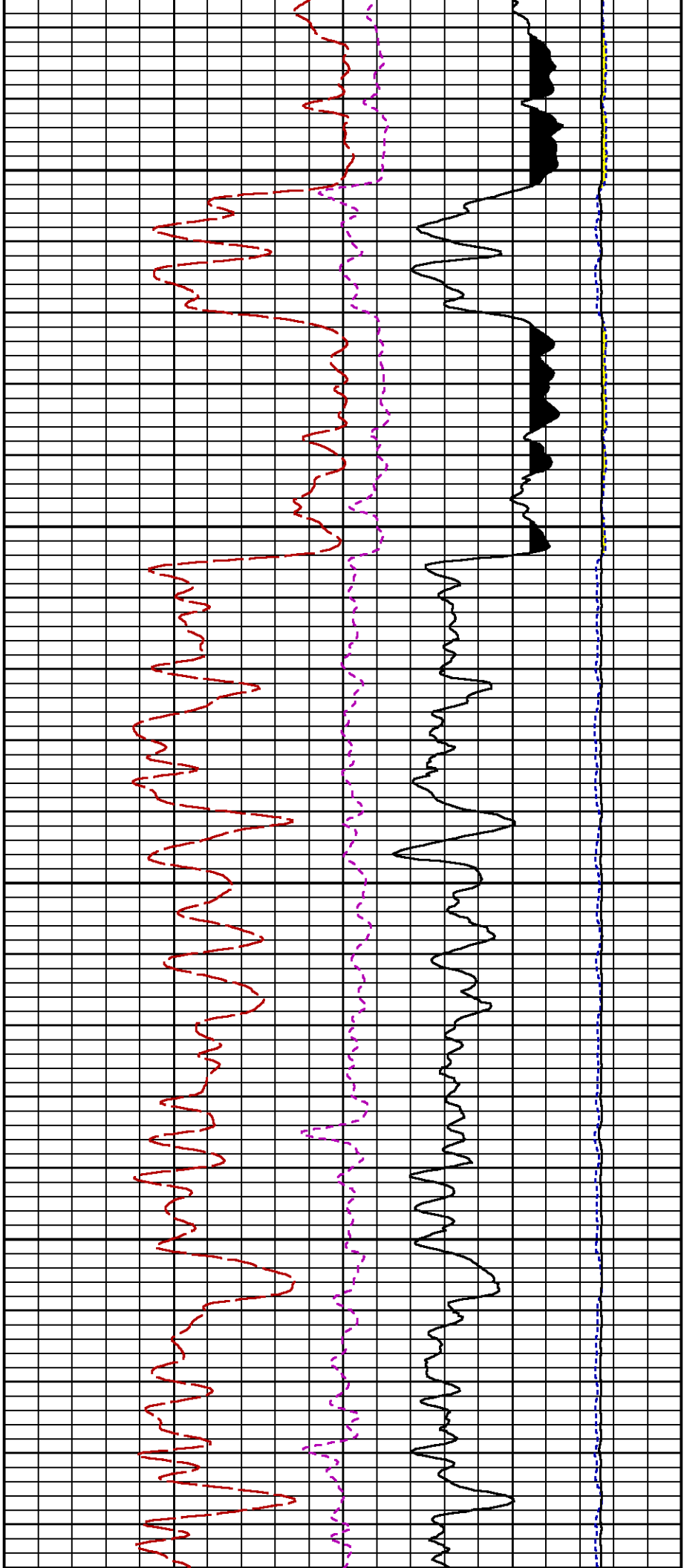


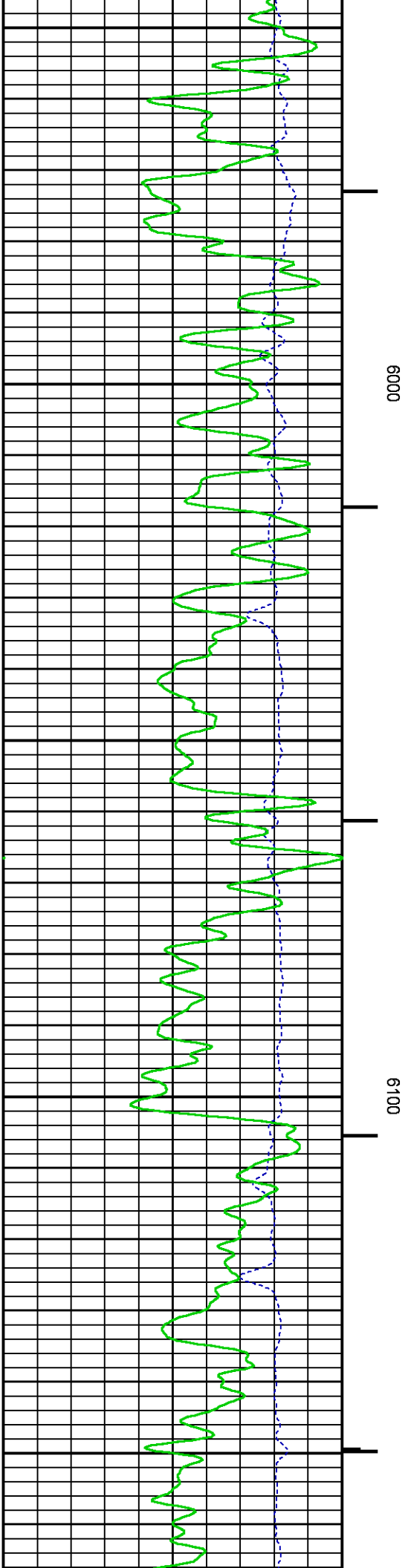
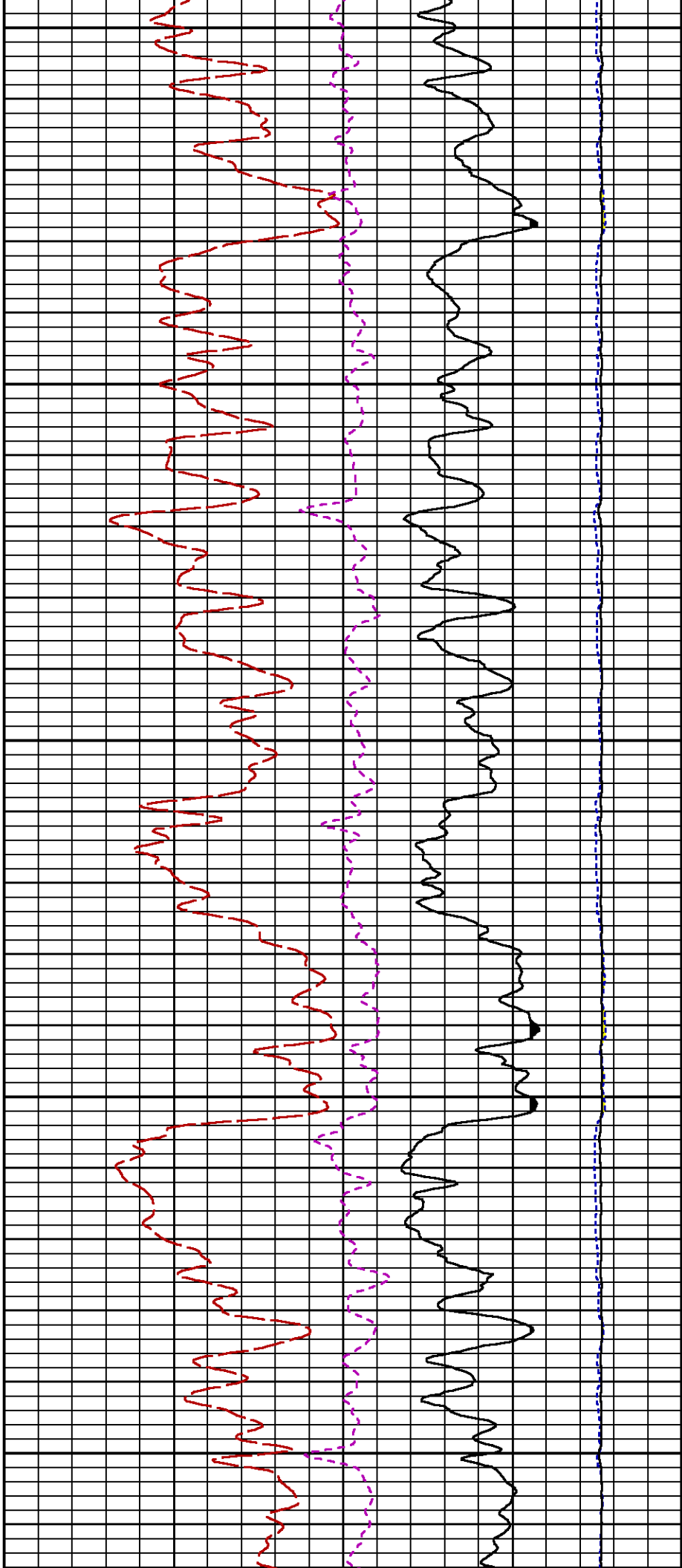




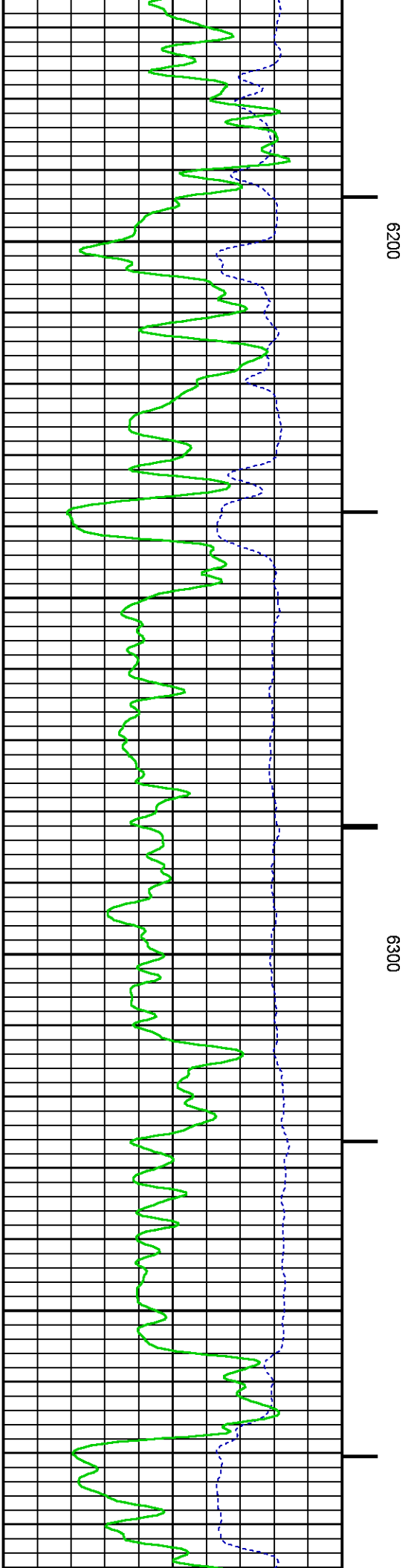
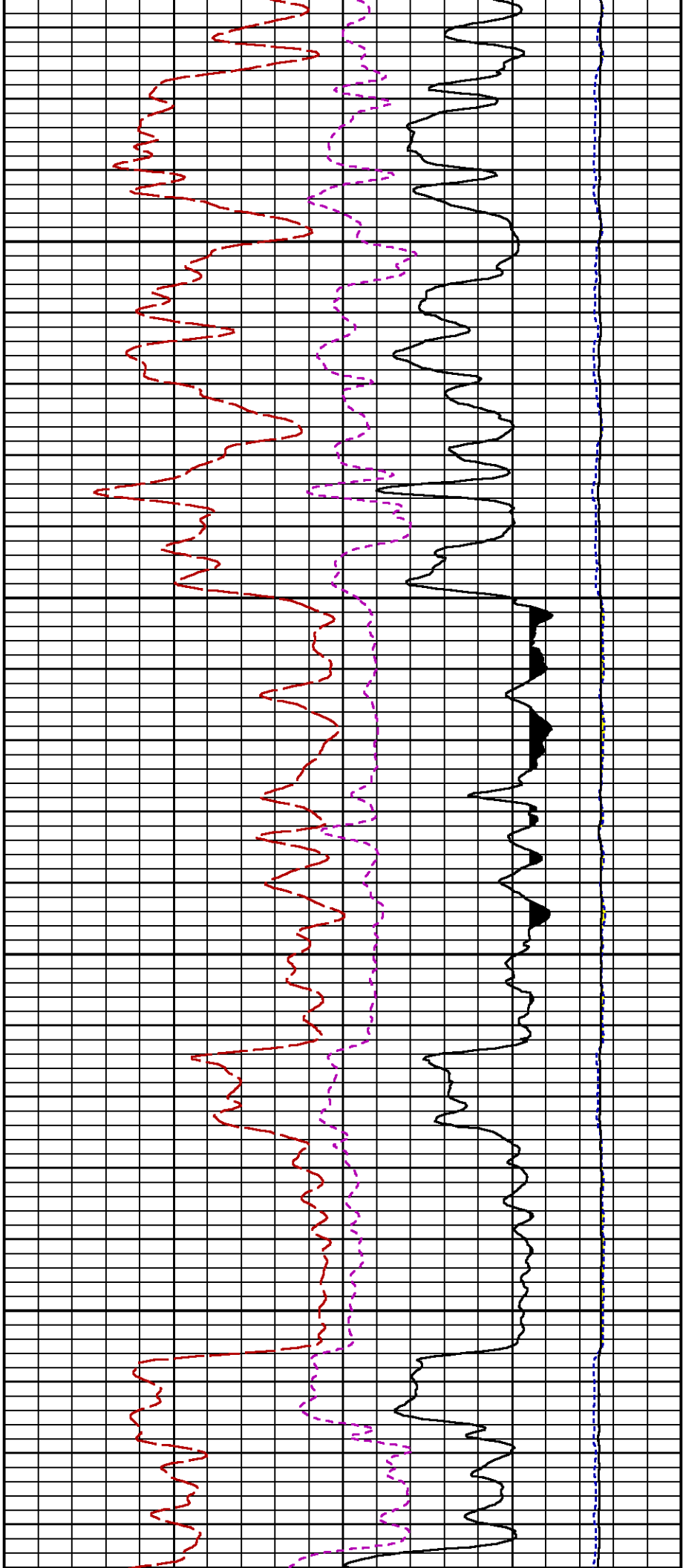


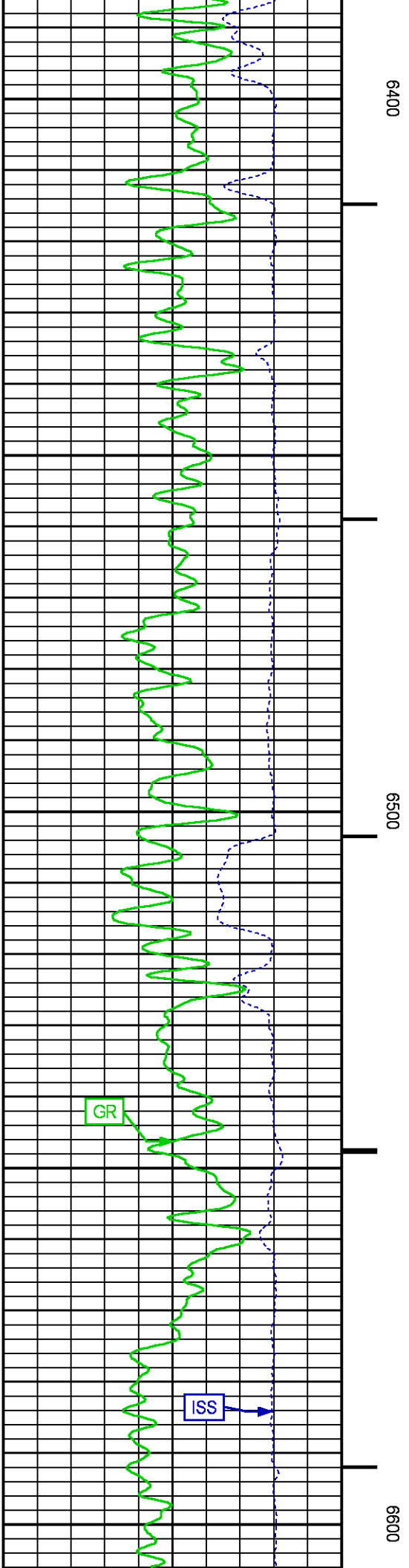
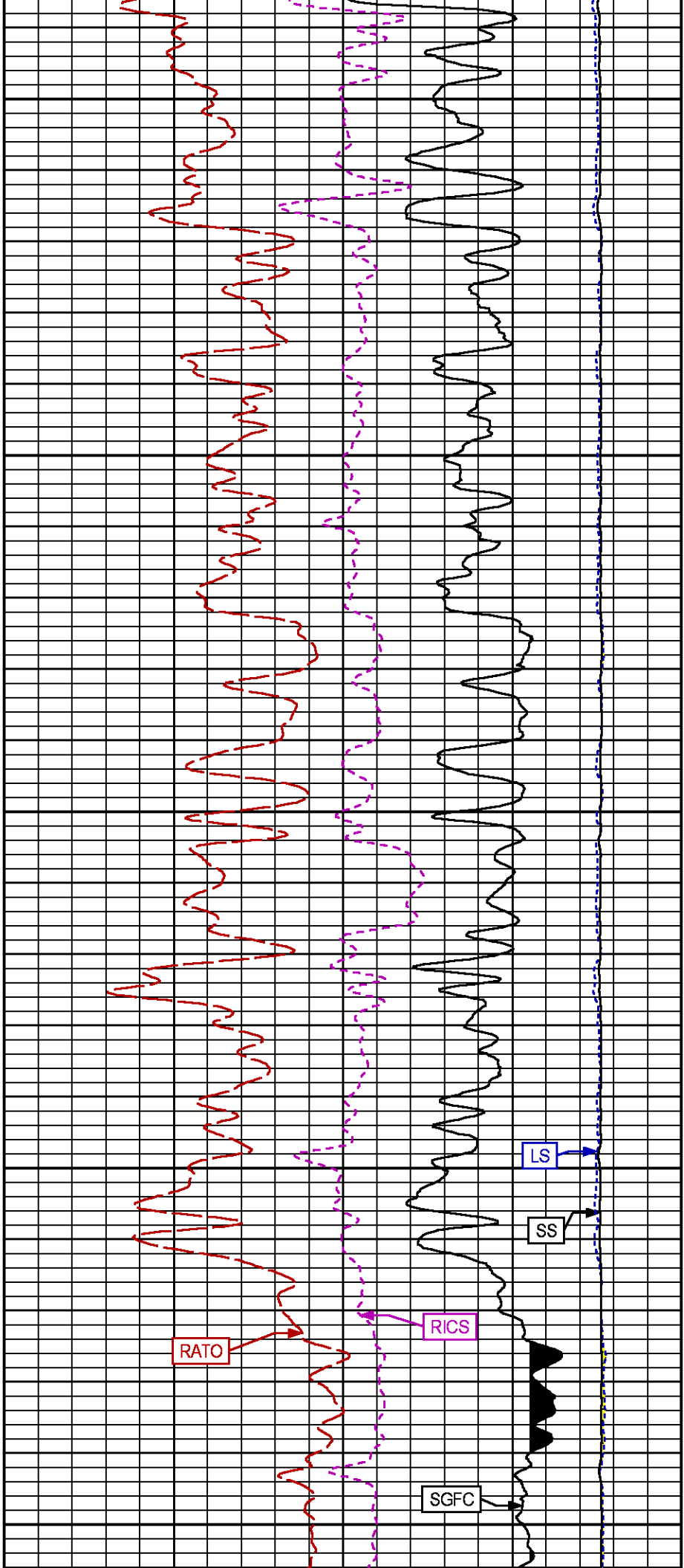


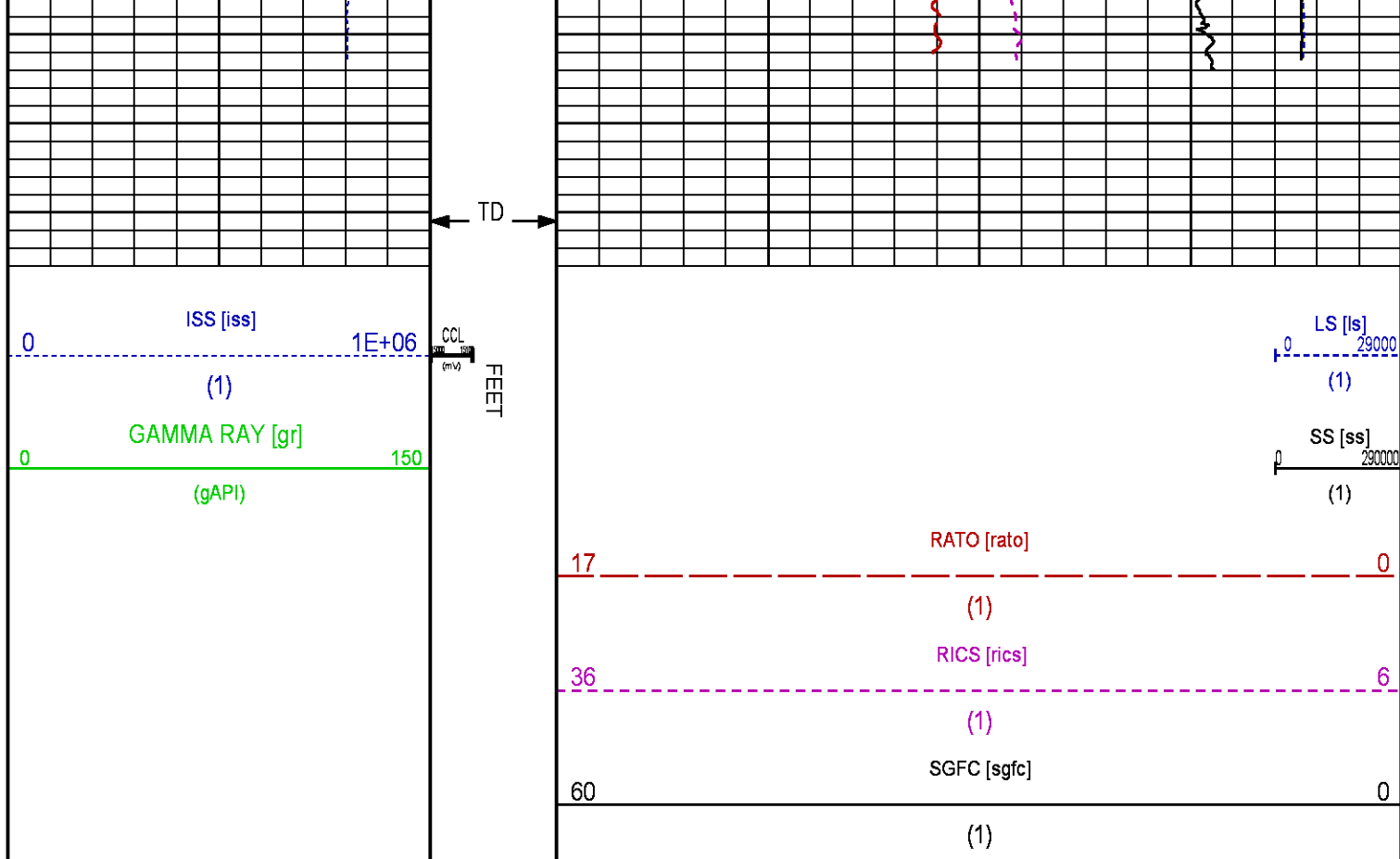












**REPEAT SECTION PNC 3-D MODE**

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

Plotted: Tue Jul 22 17:15:02 2014

PARAMETER AND FILTER SUMMARY REPORT				
FILE: /dat1a/88608/n354h01.prm				
LOGGING MODE: DEPTH DIRECTION: UP				
TOP DEPTH: 5780.000 ft BOTTOM DEPTH: 6138.500 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**

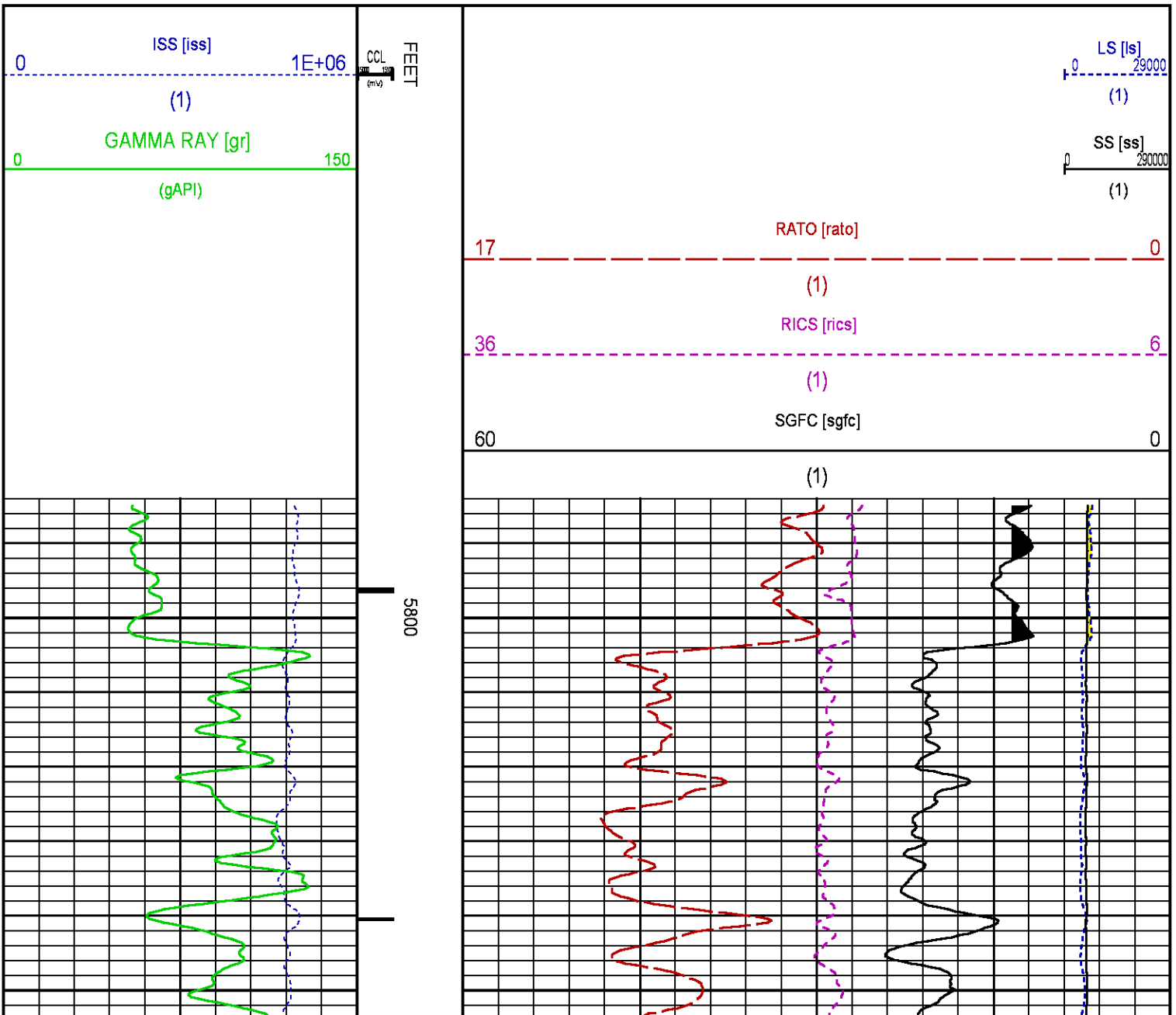
CURVE NAME	CREATION DATE	CURVE DESCRIPTION
F1:CCL	Jul 22 12:57:10 2014	CASING COLLAR LOCATOR
F1:GR	Jul 22 12:57:10 2014	GAMMA RAY
F1:ISS	Jul 22 12:57:10 2014	INELASTIC SHORT SPACE COUNT RATE
F1:LS	Jul 22 12:57:10 2014	LONG SPACE COUNT RATE
F1:RATO	Jul 22 12:57:10 2014	SHORT/LONG SPACE COUNT RATE RATIO
F1:RICS	Jul 22 12:57:10 2014	SHORT SPACE INELASTIC TO CAPTURE COUNT RATE RATIO (ISS/CSS)
F1:SGFC	Jul 22 12:57:10 2014	CORRECTED FORMATION SIGMA
F1:SS	Jul 22 12:57:10 2014	SHORT SPACE COUNT RATE

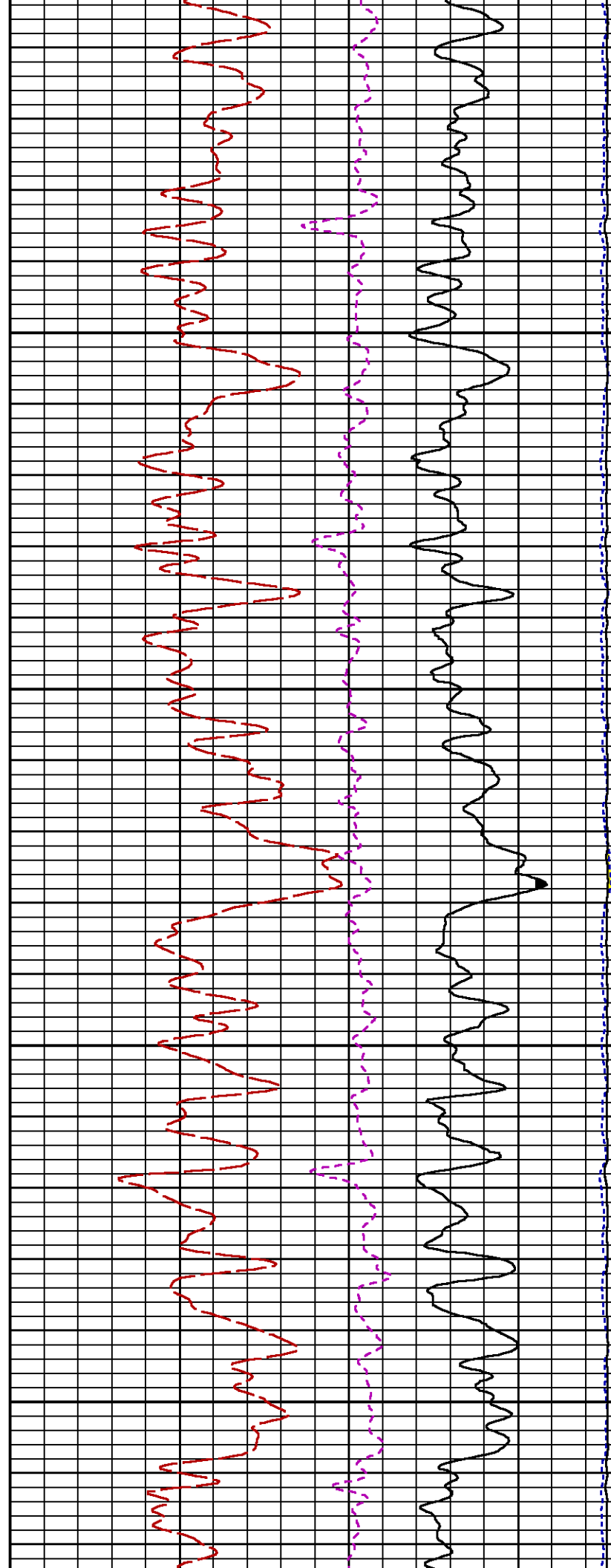
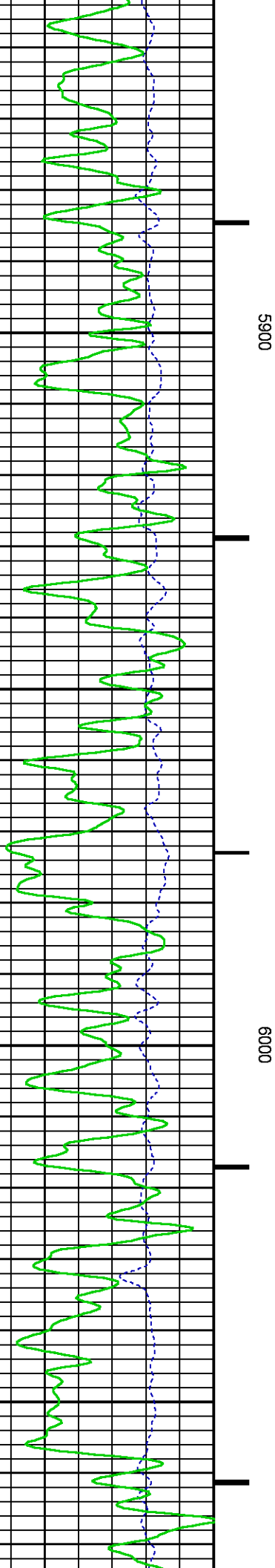
### CURVE MEASURE POINT OFFSET

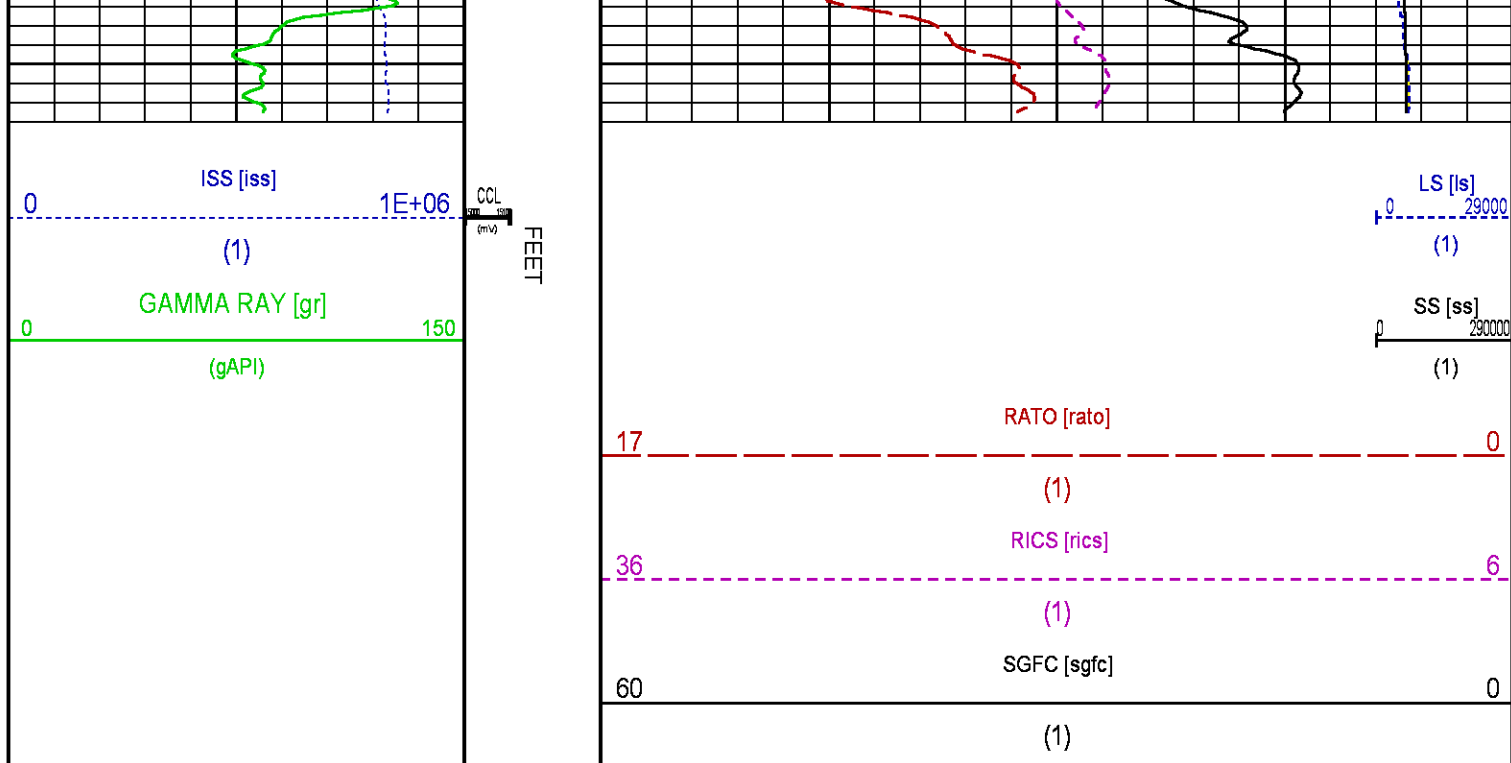
CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
CCL	25.00	ISS	12.75	RATO	12.75	SGFC	12.75
GR	22.75	LS	12.75	RICS	12.75	SS	12.75

Presentation : HL6670:/dat1a/88608/34\_RPM\_REPEAT.fvpdf [5"/100' Scale]  
Plot Interval : 5785 - 6085 Feet

Data File 1 : F1 : HL6670:/dat1a/88608/34\_RPM\_REPEAT.xtf  
Created On : Jul 22 12:57:10 2014  
Company : WPX ENERGY  
Well : HICKS PA 34-6  
Field : PARACHUTE  
File Interval : 5757.75 - 6142 Feet  
OCT : n354h







## CALIBRATION / VERIFICATION SUMMARY

Source File: /dat1a/88608/n354h.tp1

### GR PRIMARY CALIBRATION SUMMARY

TOOL #: 2812LA 11701636

DATE/TIME PERFORMED: Mon Jul 14 16:53:39 2014

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	66.00	272.02	206.0	1.019	67.27	277.27	210

### GR PRIMARY VERIFICATION SUMMARY

TOOL #: 2812LA 11701636

DATE/TIME PERFORMED: Mon Jul 14 16:55:39 2014

UNIT #: 3880TA HL6670

VERI JIG #: 4702NK DA-041

	BACKGROUND (cts/s)	CALBRTR ON (cts/s)	MULT	BACKGROUND (gAPI)	CALBRTR ON (gAPI)	DIFF. (gAPI)
GR	66.80	275.31	1.019	68.09	280.63	212.54
						200.00 220.00

### RPM\_PNC\_3D PRIMARY CALIBRATION SUMMARY

TOOL: 8283PA 10466231

DATE/TIME PERFORMED: Mon Jul 14 16:35:59 2014

UNIT: 3880TA HL6670

CALIBRATOR: 2437XB 112674

SOURCE: 8281AA 11724361

HOURS: 8281AA 176

	ISS	Mtr Vlt (V)	SS Gain	LS Gain	XLS Gain	EA Temp (degF)	Sync Delay (usec)	RCAL
Raw Data	795996	120	2309	2283	2258	144	7	0.9615
Interpolated	1300000	141	2294	2282	2260			

	ISS	BKS	BKL	BKX	SGA1	SDA1	SGA2	SDA2
Raw Data	795996	8134	1243	162	26.04	0.15	24.10	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	795996	160496	24649	88327	31432	8077	53627	12925
Fit Quality %		1.296	1.106	1.031	1.014	1.208	0.977	1.191
	ISS	RBOR	RIN	RIN13	RICS	RATO	RTWO	RONE
			ISS/LS	ISS/IXS	ISS/CSS	SS/LS	SS2/LS	CSS/CLS
Raw Data	795996	1.44	4.96	32.31	14.84	10.94	3.89	4.15
		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 %		0.030	0.174	0.085	0.052	0.130	0.134	0.112
Reduced	1395381	1.44	4.97	32.29	14.84	10.95	3.90	4.15
		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

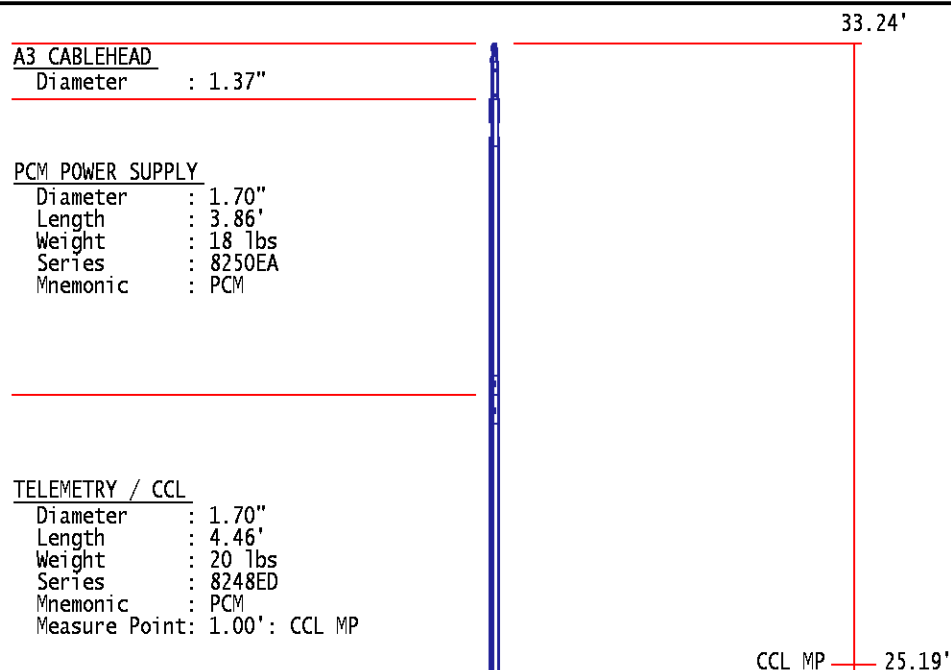
DATE/TIME PERFORMED: Wed May 14 12:39:45 2014

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/88404/RPM-tdg



SONDEX GAMMA RAY

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 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:	
	WELL	HICKS PA 34-6			CH088608
	FIELD	PARACHUTE		API NO:	
	COUNTY	GARFIELD	STATE	CO	05045224100000
LOCATION:		ELEVATIONS:		6 7S 95W	
SHL: 793' FSL & 2224' FWL		KB 5160 FT		PA 24-6 PAD	
BHL: 1138' FSL & 1890' FEL		DF		AZTEC 1000	
SEC 6 TWP 7S RGE 95W		GL 5135 FT			
		DATE		22-Jul-2014	

