



FILE NO: CH100235	COMPANY WELL FIELD COUNTY	LARAMIE ENERGY PICEANCE 28-06W VEGA MESA	STATE COLORADO
API NO: 05077097740000	LOCATION: SHL: LAT 39.251108, LONG -107.779603 BHL: LAT 39.251578, LONG -107.780708 SEC 28 TWP 9S RGE 93W		
Ver. 4.05 28-9S 93W 28-05 PAD PATTERSON 306	OTHER SERVICES RAL		ELEVATIONS: KB 7578 FT DF GL 7556 FT
PERMANENT DATUM LOG MEASURED FROM DRILL. MEAS. FROM	G.L. ELEVATION 7556 FT K.B. 22 FT ABOVE P.D. K.B.		

DATE	27-Oct-2015
RUN	TRIP
SERVICE ORDER	US100235J
DEPTH DRILLER	7818 FT
DEPTH LOGGER	7768 FT
BOTTOM LOGGED INTERVAL	7766 FT
TOP LOGGED INTERVAL	2693 FT
TIME STARTED	09:30
TIME FINISHED	15:00
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	10010 FMN
MAX. RECORDED TEMP.	241 DEGF
REFERENCE LOG	BAKER HUGHES BOND LOG
REFERENCE LOG DATE	27-OCT-2015
EQUIP. NO.	HL-6685
LOCATION	GRAND JCT.
RECORDED BY	SPENCER
WITNESSED BY	JOHN GRUBICH

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
7.875 IN	0 FT	7908 FT

CASING RECORD				
SIZE	WEIGHT	GRADE	FROM	TO
4.5 IN	11.6 LB/F		0 FT	7898 FT

REMARKS

RUN 1 TRIP 1: ALL DATA ON THIS LOG HAS BEEN SHIFTED AT TD TO BE ON DEPTH WITH THE BAKER HUGHES BOND LOG DATED 27-OCT-2015 AT THE CLIENT'S REQUEST.

THE AMOUNT OF LINEAR SHIFT IS -1.5 FEET.

LOGGED WITH 0 PSI AT SURFACE.

SJ = 6160' - 6182'
SJ = 7014' - 7035'

BHT = 241 DEGF

THANKS FOR CHOOSING BAKER HUGHES...THE BEST CHOICE!
CREW: COATE / OLSON

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	GAMMA RAY	8262XA	10485470	FREE
1	1	RPM ELEC.	8281EA	10294755	FREE
1	1	RPM SOURCE	8283PA	10414345	FREE
1	1	RPM FA	8281FA	10460082	FREE
1	1	TEMP	8255XA	Z176973	FREE

G - SAND SECTION PNC-3D MODE

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

Updates: 1 Patches: 8

Plotted: Tue Oct 27 14:35:47 2015

PARAMETER AND FILTER SUMMARY REPORT

FILE: /dat1a/CH100235/n353h03.prm
 LOGGING MODE: DEPTH DIRECTION: UP
 TOP DEPTH: 2636.500 ft BOTTOM DEPTH: 3244.750 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	7.87	in	" "
	CASING SIZE	4.50	in	" "
	MATRIX	SANDSTONE		" "
	CORRECTION BUFFER	11		" "

CURVE DESCRIPTION REPORT

CURVE NAME	CREATION DATE	CURVE DESCRIPTION
F1:CCL	Oct 27 13:55:52 2015	CASING COLLAR LOCATOR
F1:GR	Oct 27 13:55:52 2015	GAMMA RAY
F1:ISS	Oct 27 13:55:52 2015	INELASTIC SHORT SPACE COUNT RATE
F1:LS	Oct 27 13:55:52 2015	LONG SPACE COUNT RATE
F1:RATO	Oct 27 13:55:52 2015	SHORT/LONG SPACE COUNT RATE RATIO
F1:RICS	Oct 27 13:55:52 2015	SHORT SPACE INELASTIC TO CAPTURE COUNT RATE RATIO (ISS/CSS)
F1:SGFC	Oct 27 13:55:52 2015	CORRECTED FORMATION SIGMA
F1:SS	Oct 27 13:55:52 2015	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/CH100235/RPM_GSAND.fvpdf [5"/100' Scale]
 Plot Interval : 2610.25 - 3228.5 Feet

Data File 1 : F1 : cas6685:/dat1a/CH100235/n353h03.xtf
 Created On : Oct 27 13:55:52 2015
 Company : LARAMIE ENERGY

Company : LAKAMIE ENERGY
Well : PICEANCE 28-06W
Field : VEGA
File Interval : 2609.5 - 3244.75 Feet
OCT : n353h

GR BACKUP

FEET

ISS [iss]

1E+06

(cts/s)

GAMMA RAY [gr]

150

(gAPI)

CCL
(m)

2700

GR

ISS

LS [ls]

29000

(cts/s)

SS [ss]

290000

(cts/s)

RATO [rato]

17

0

(dim)

RICS [rics]

39

9

(dim)

SGFC [sgfc]

60

0

(cu)

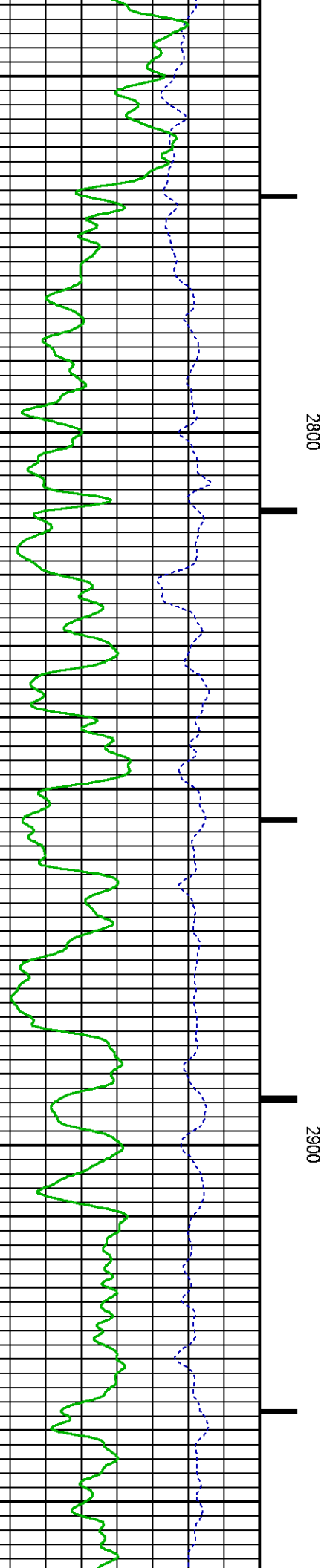
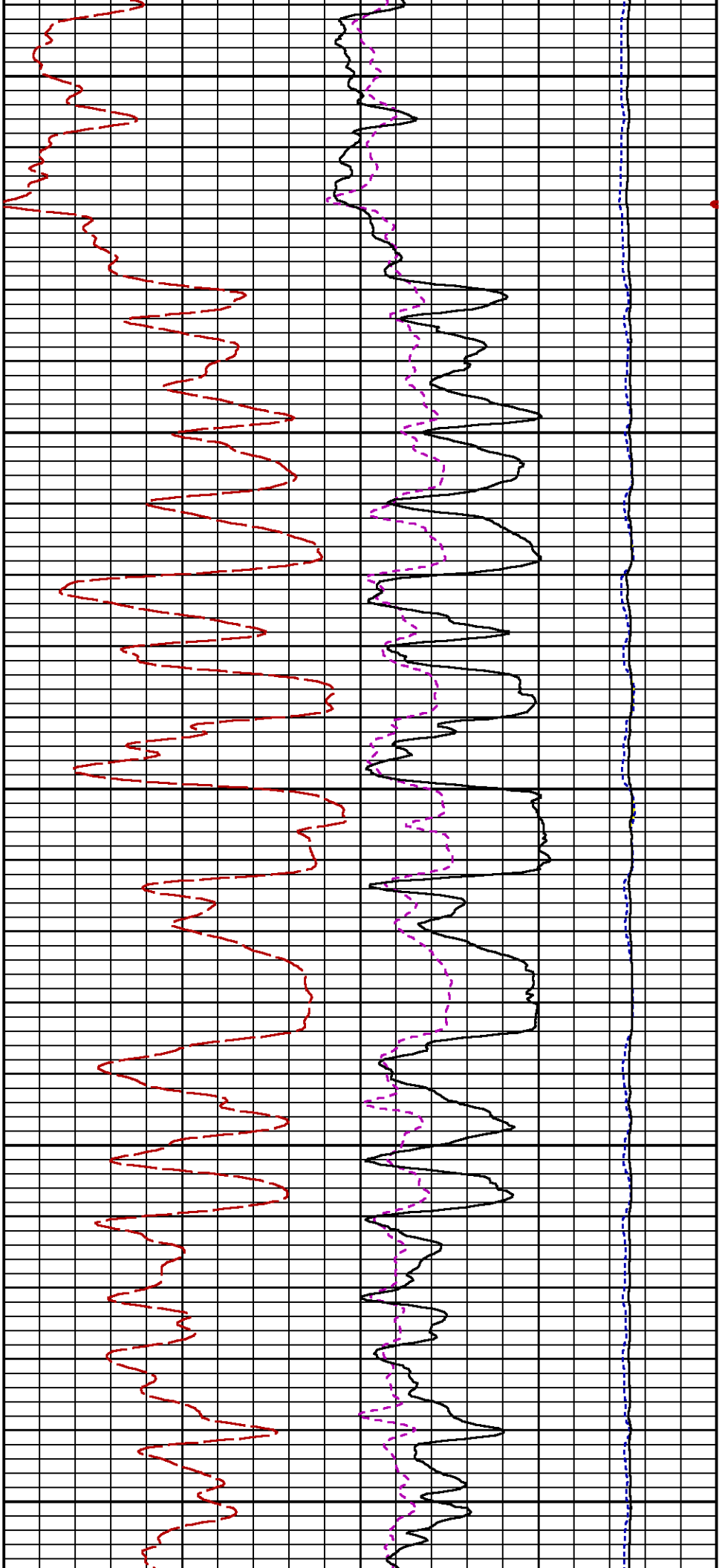
RATO

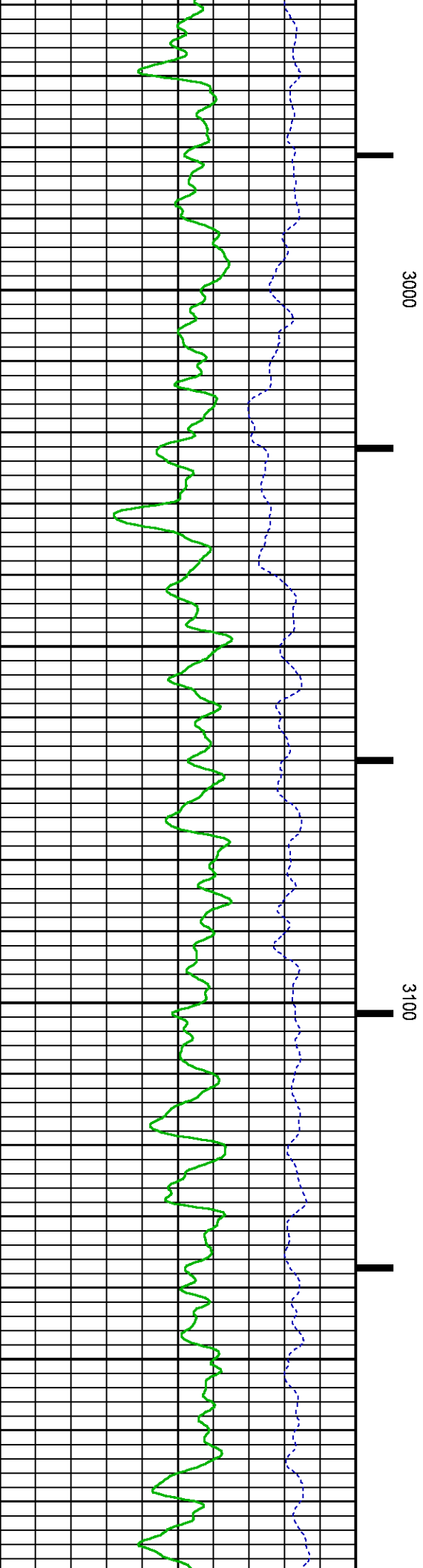
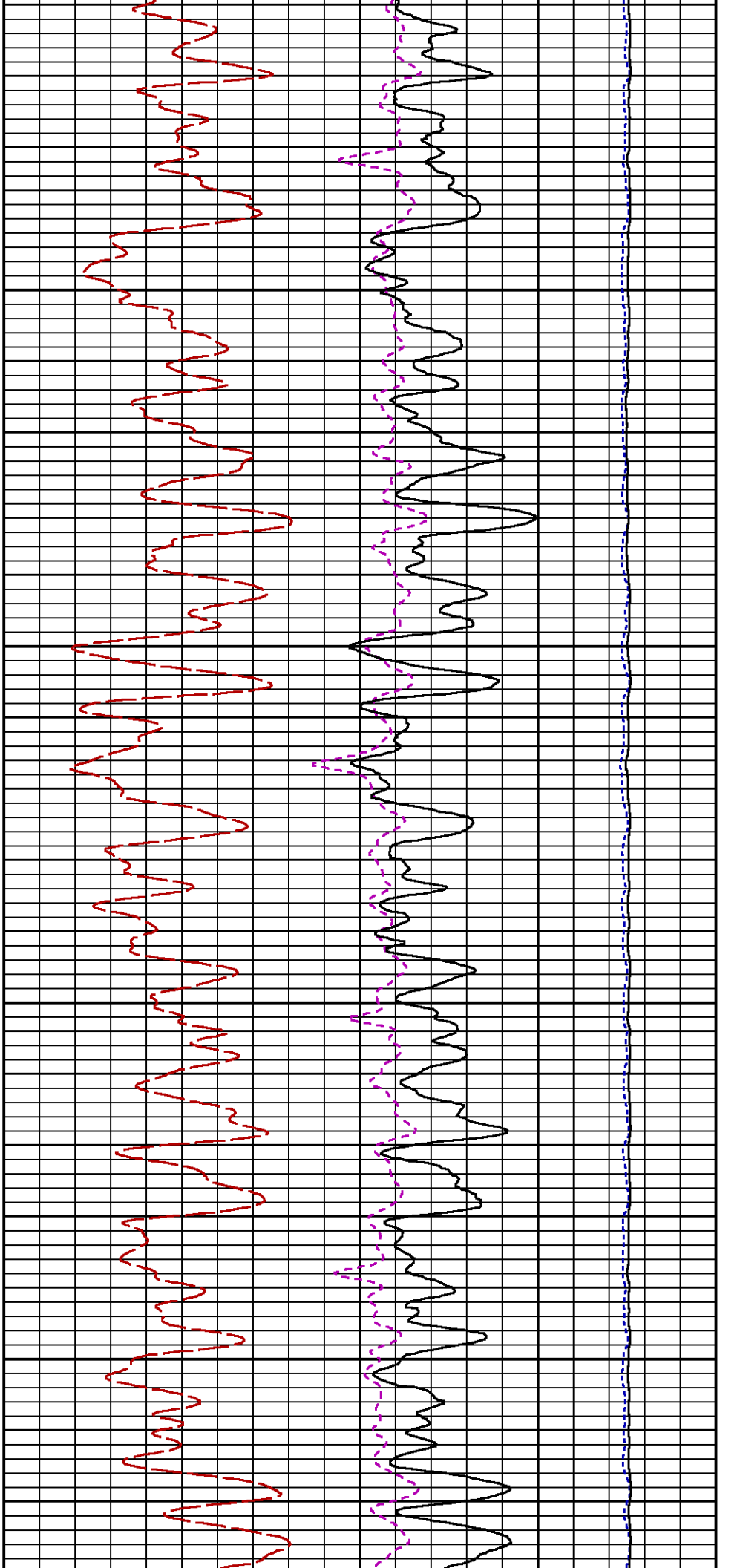
RICS

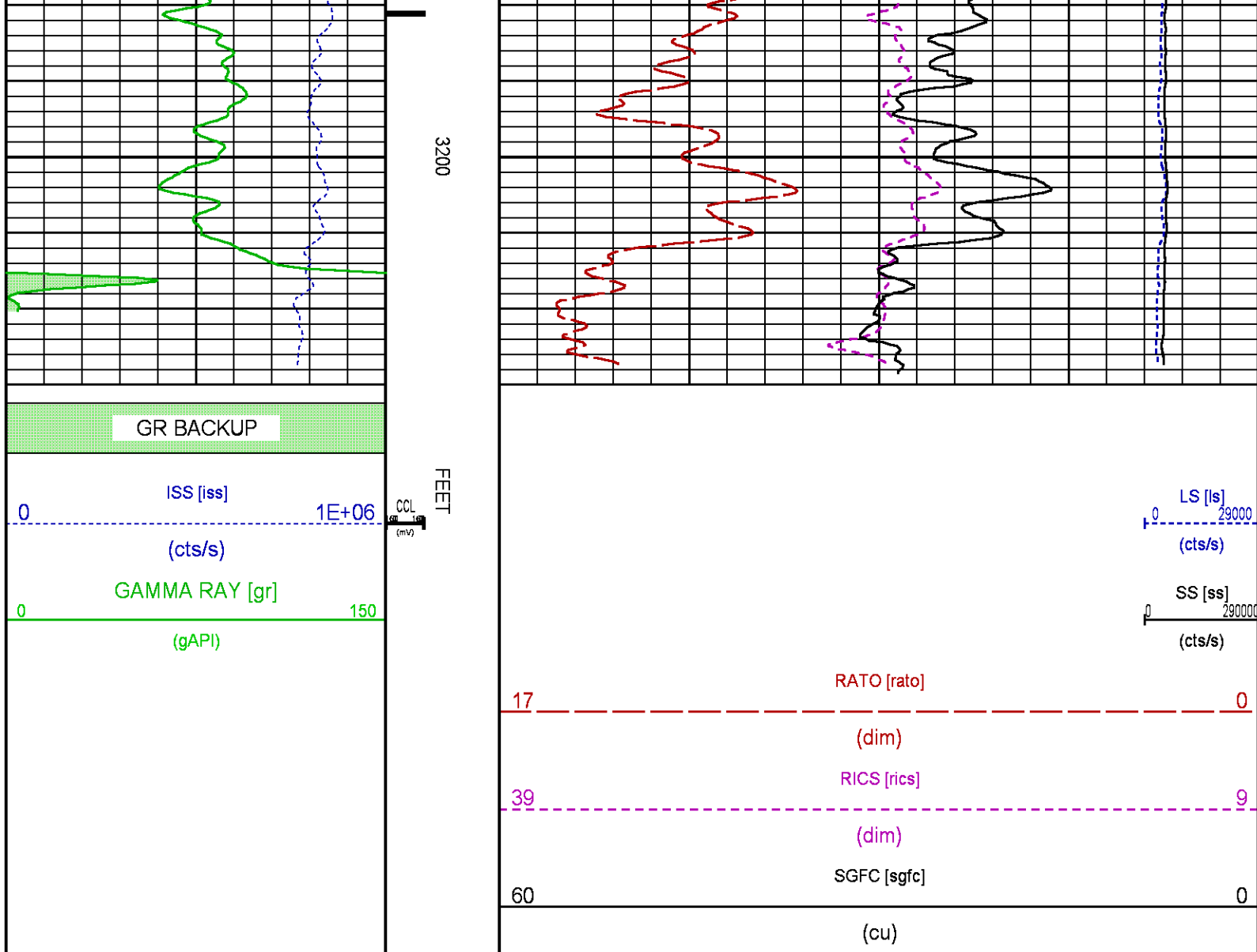
SGFC

LS

SS







MAIN LOG SECTION PNC-3D MODE

ECLIPS 6.2i ECLIPS General Release Rel 6.2i Wed Jun 12 12:21:40 CDT 2013
Updates: 1 Patches: 8

Plotted: Tue Oct 27 14:02:30 2015

PARAMETER AND FILTER SUMMARY REPORT

FILE: /dat1a/CH100235/n353h02.prm
LOGGING MODE: DEPTH DIRECTION: UP
TOP DEPTH: 4492.750 ft BOTTOM DEPTH: 7769.000 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)
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PNC Parameters	BOREHOLE CONTENTS	FLUID	TOP	BOTTOM
	OPEN/CASED HOLE	CASED HOLE	"	"
	BOREHOLE SIZE	7.87	"	"
	CASING SIZE	4.50	"	"
	MATRIX	SANDSTONE	"	"
	CORRECTION BUFFER	11	"	"

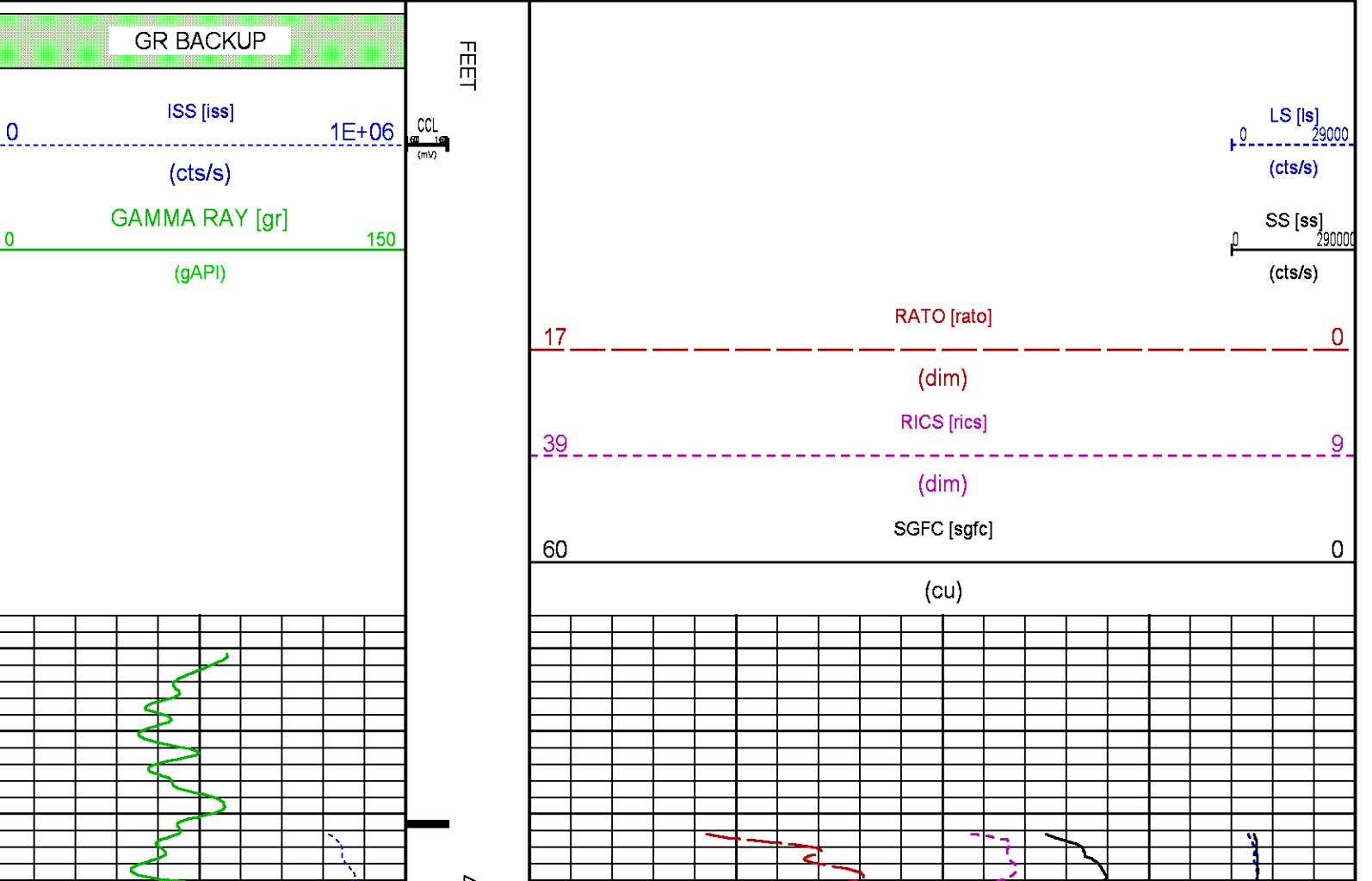
CURVE DESCRIPTION REPORT

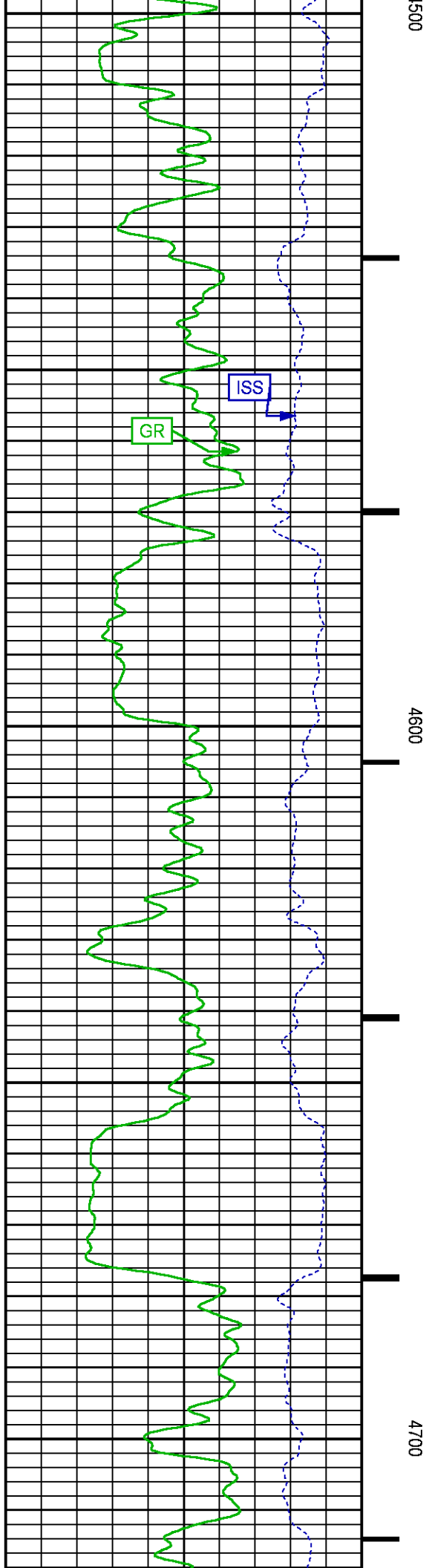
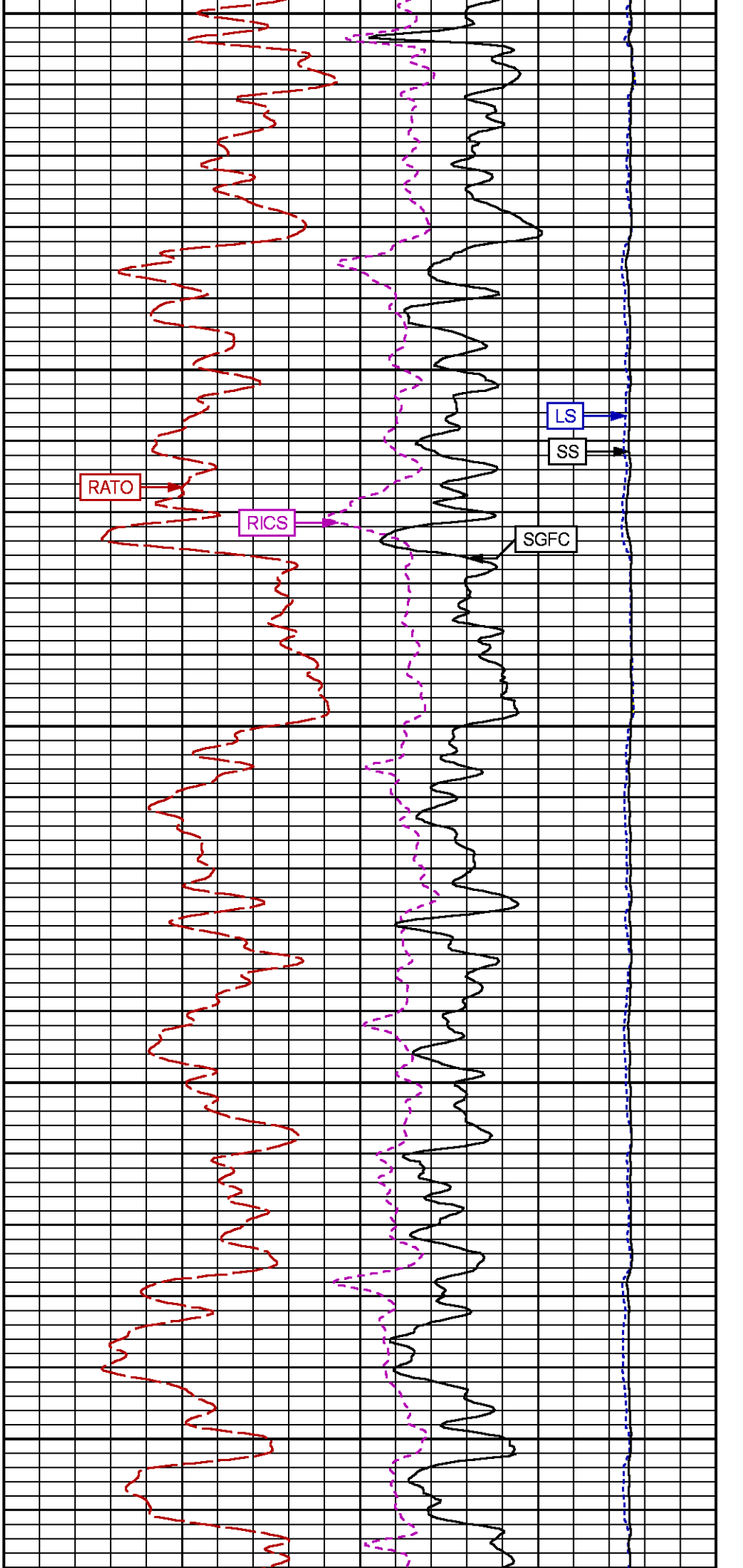
CURVE NAME	CREATION DATE	CURVE DESCRIPTION
F1:CCL	Oct 27 10:32:38 2015	CASING COLLAR LOCATOR
F1:GR	Oct 27 10:32:38 2015	GAMMA RAY
F1:ISS	Oct 27 10:32:38 2015	INELASTIC SHORT SPACE COUNT RATE
F1:LS	Oct 27 10:32:38 2015	LONG SPACE COUNT RATE
F1:RATO	Oct 27 10:32:38 2015	SHORT/LONG SPACE COUNT RATE RATIO
F1:RICS	Oct 27 10:32:38 2015	SHORT SPACE INELASTIC TO CAPTURE COUNT RATE RATIO (ISS/CSS)
F1:SGFC	Oct 27 10:32:38 2015	CORRECTED FORMATION SIGMA
F1:SS	Oct 27 10:32:38 2015	SHORT SPACE COUNT RATE

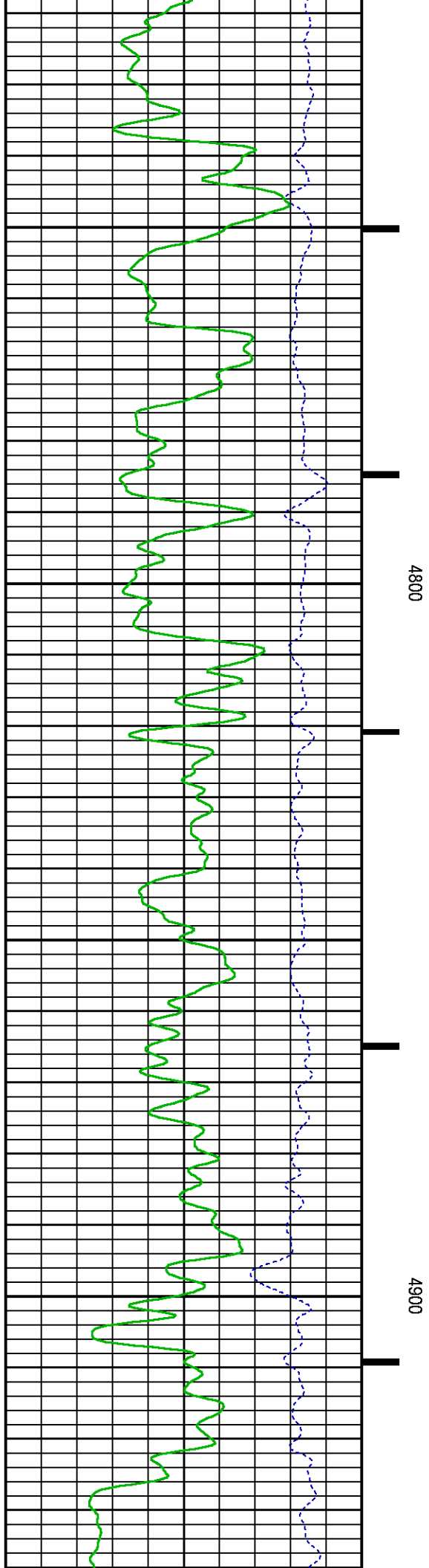
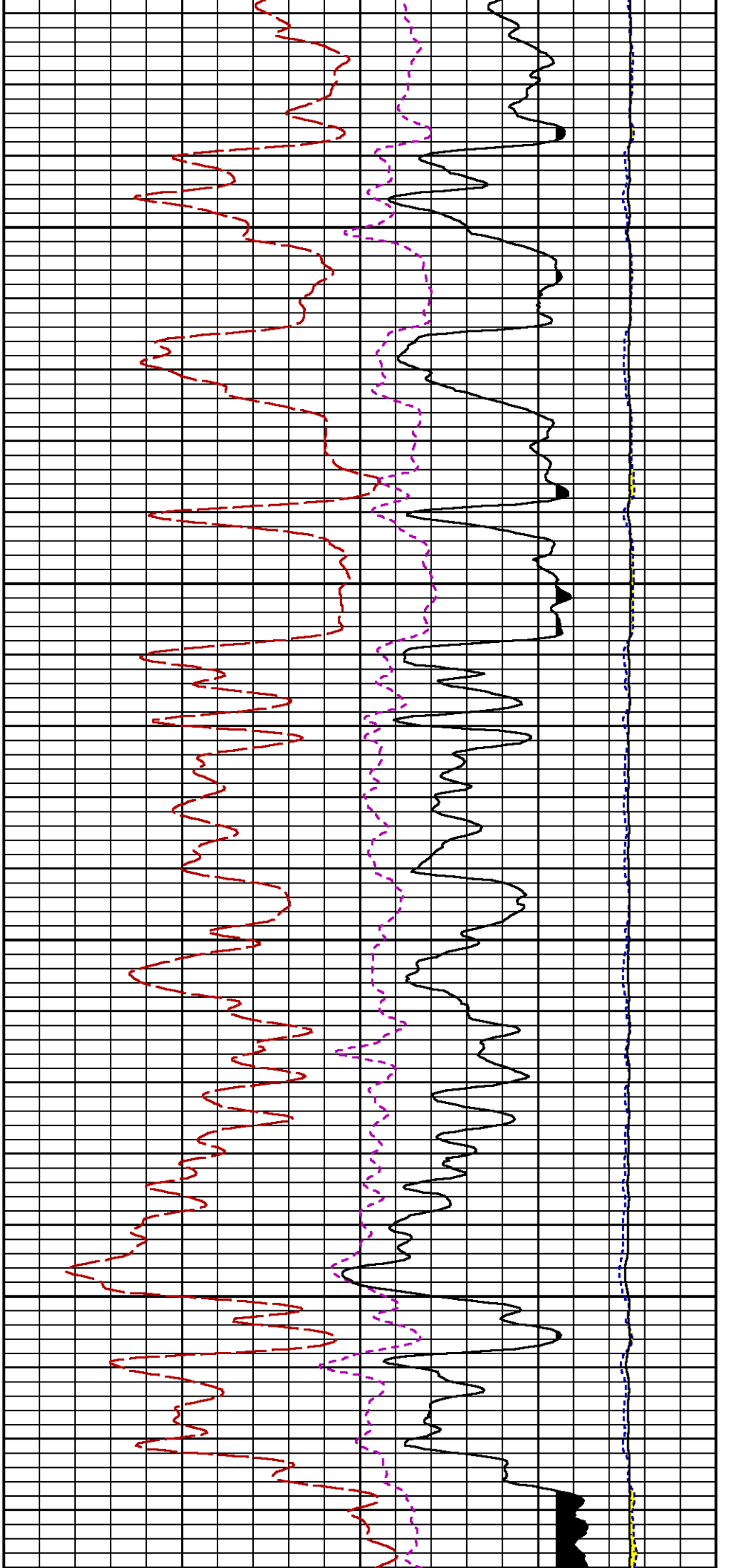
CURVE MEASURE POINT OFFSET

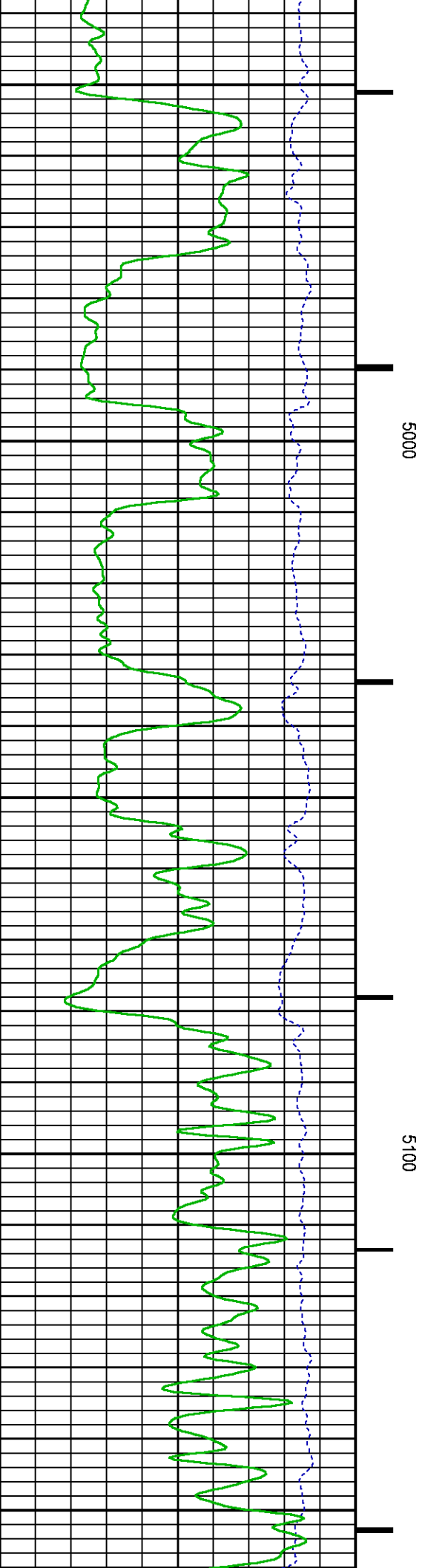
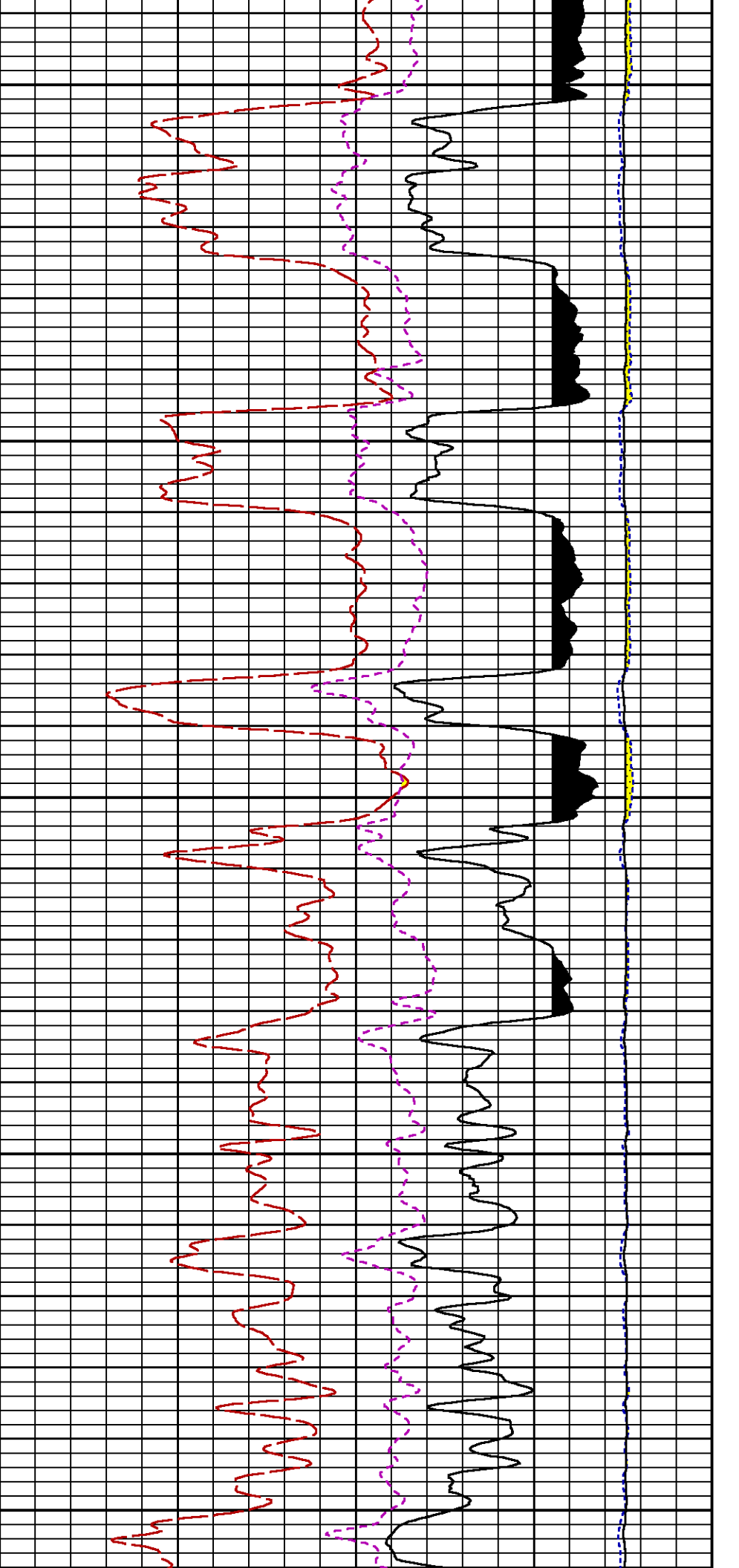
CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
CCL	26.00	ISS	12.75	RATO	12.75	SGFC	12.75
GR	23.00	LS	12.75	RICS	12.75	SS	12.75

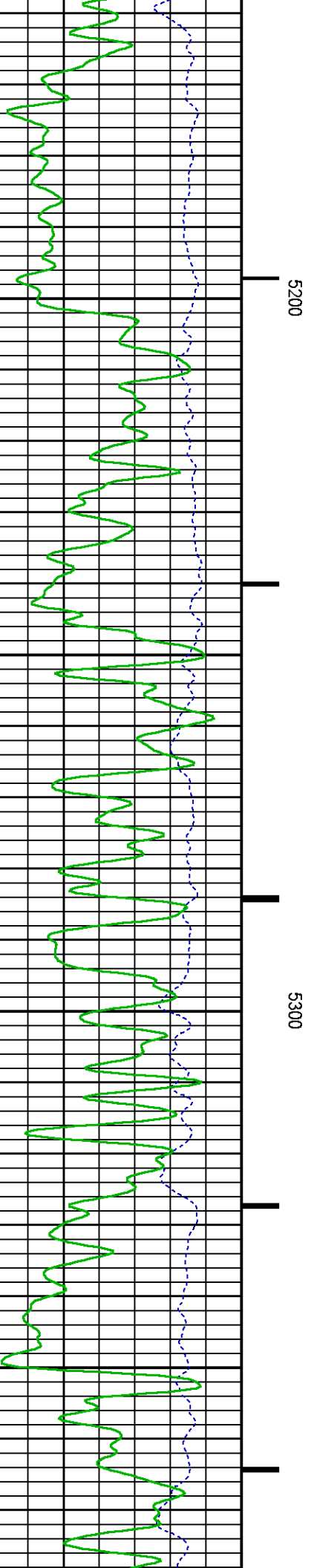
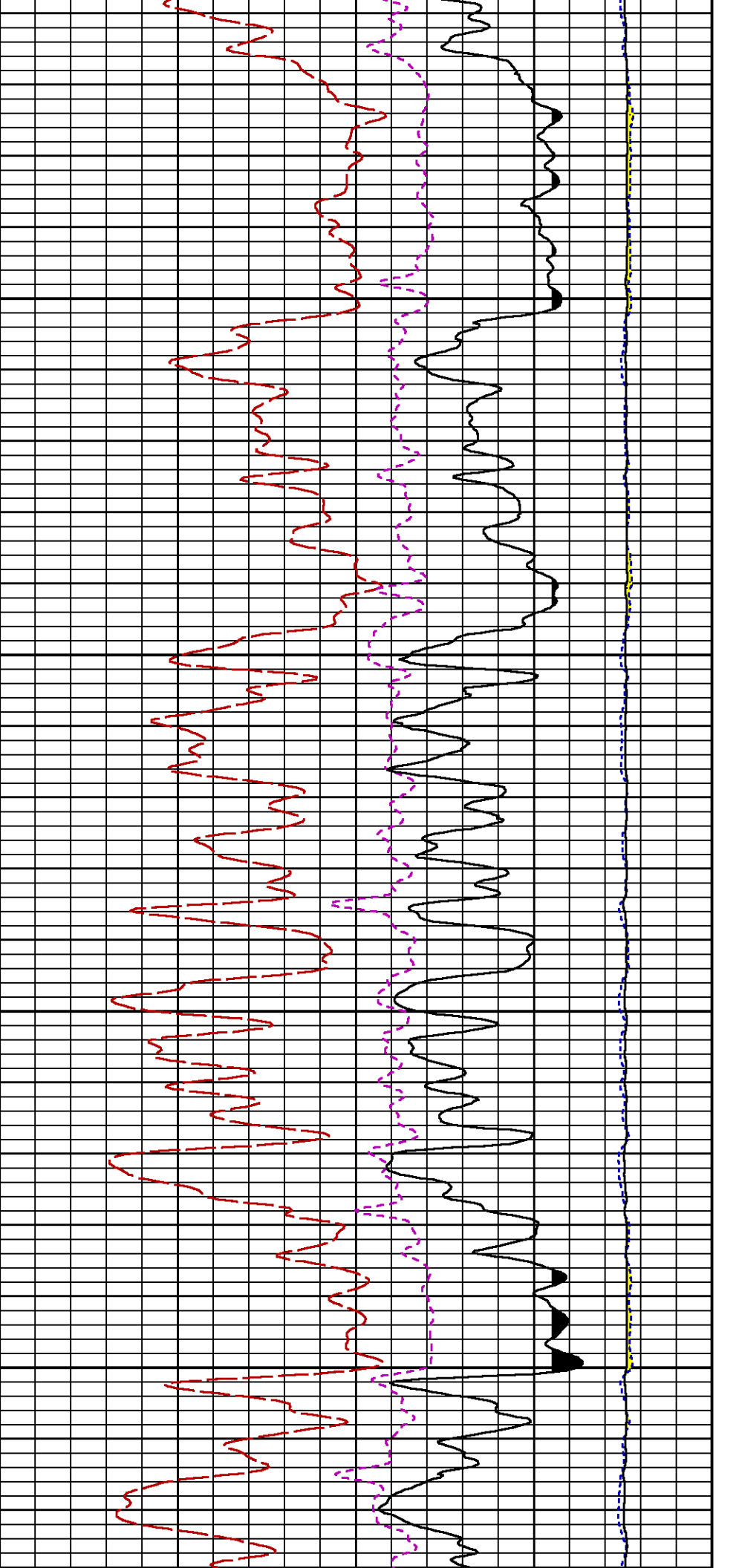
Presentation	: cas6685:/dat1a/CH100235/RPM_MAIN.fvpdf [5"/100' Scale]
Plot Interval	: 4466.5 - 7752.75 Feet
Data File 1	: F1 : cas6685:/dat1a/CH100235/n353h02.xtf
Created On	: Oct 27 10:32:38 2015
Company	: LARAMIE ENERGY
Well	: PICEANCE 28-06W
Field	: VEGA
File Interval	: 4465.75 - 7769 Feet
OCT	: n353h

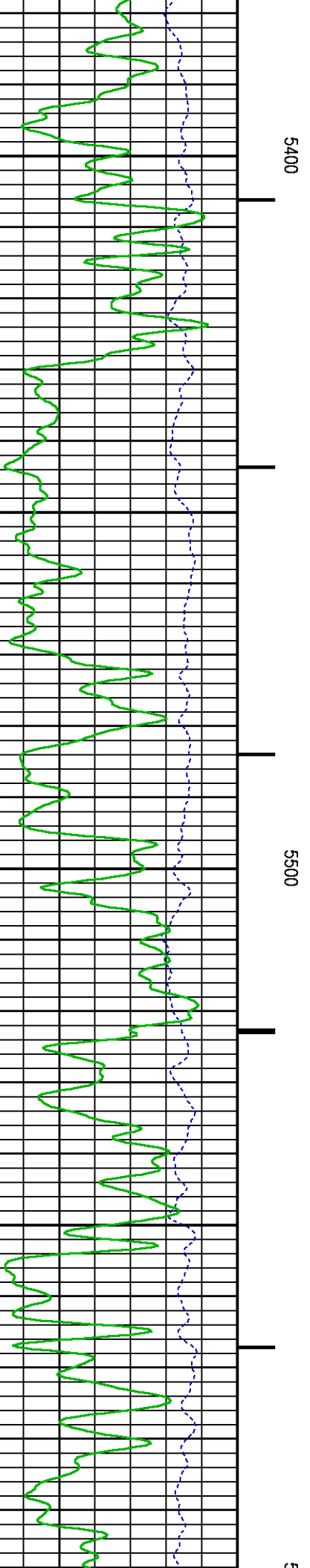
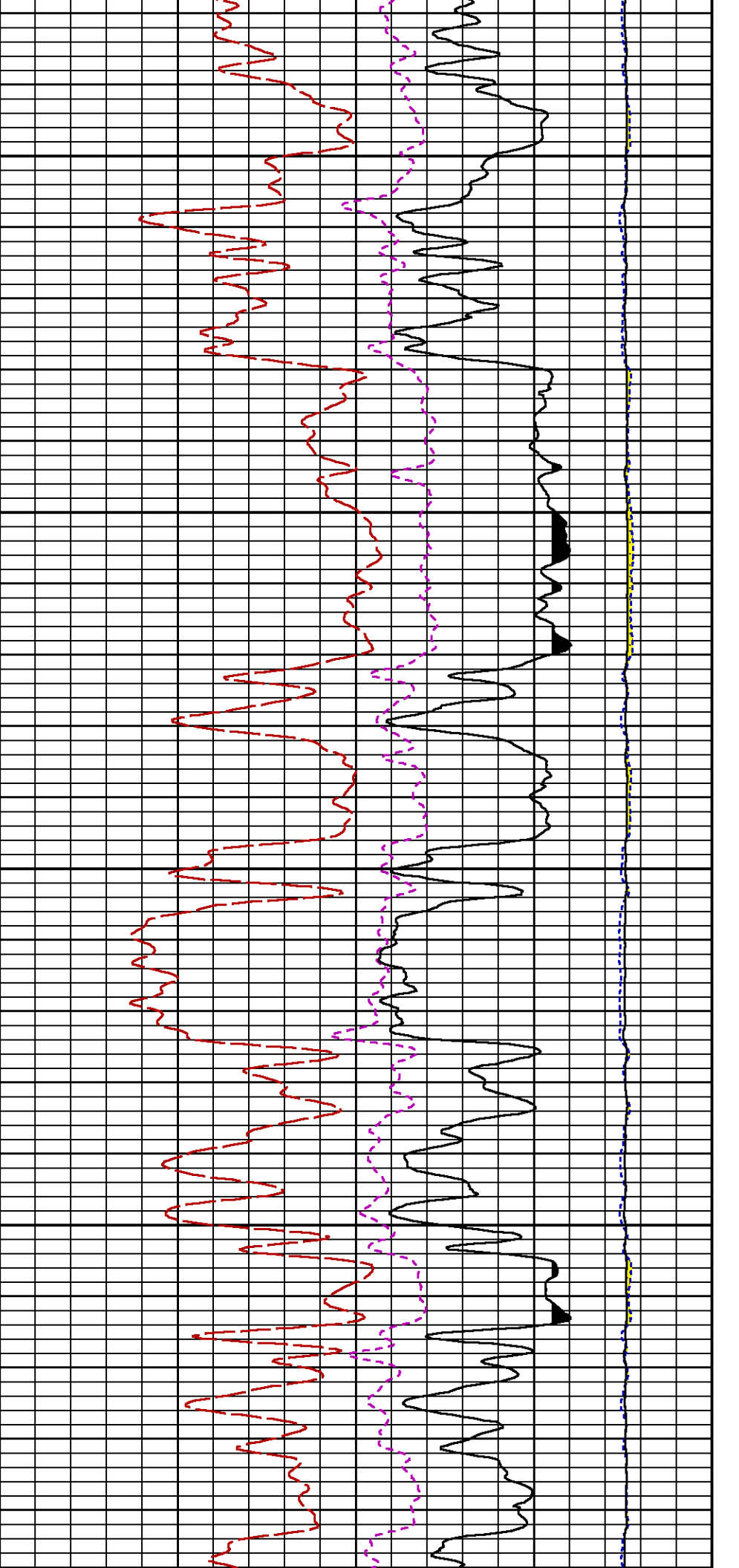


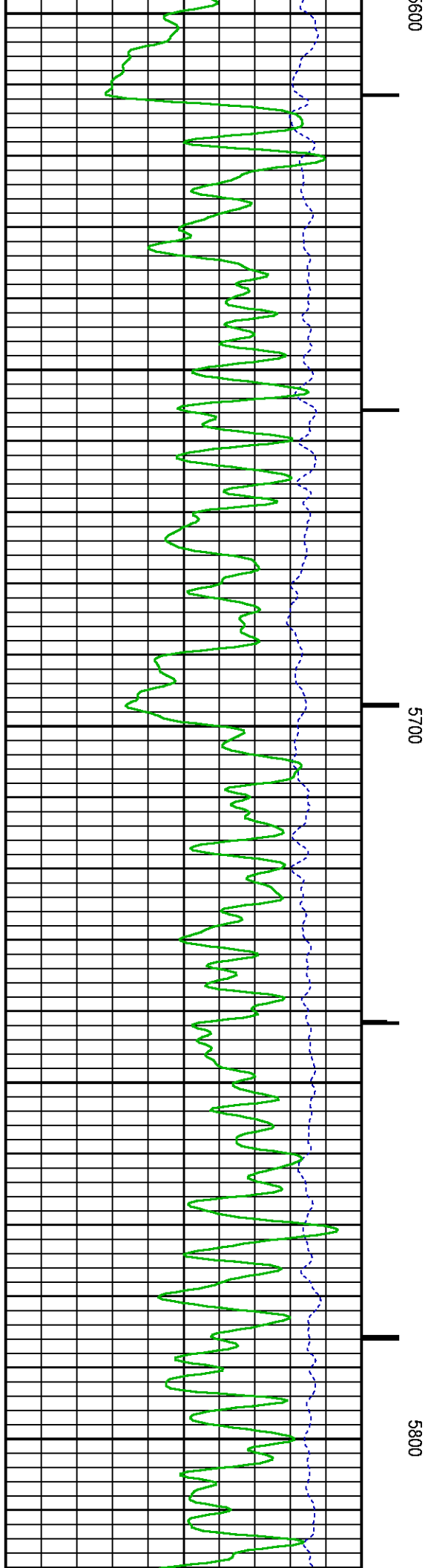
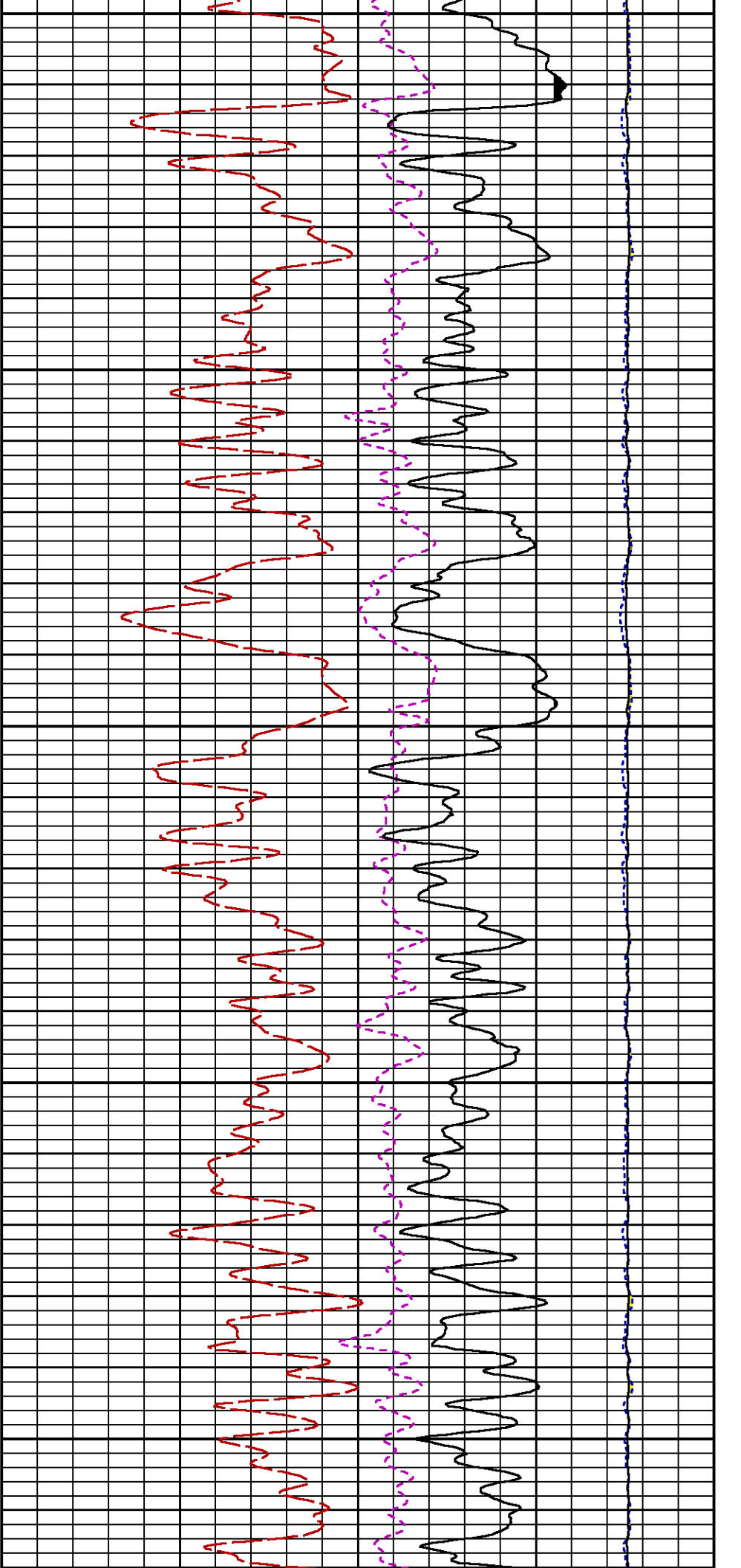


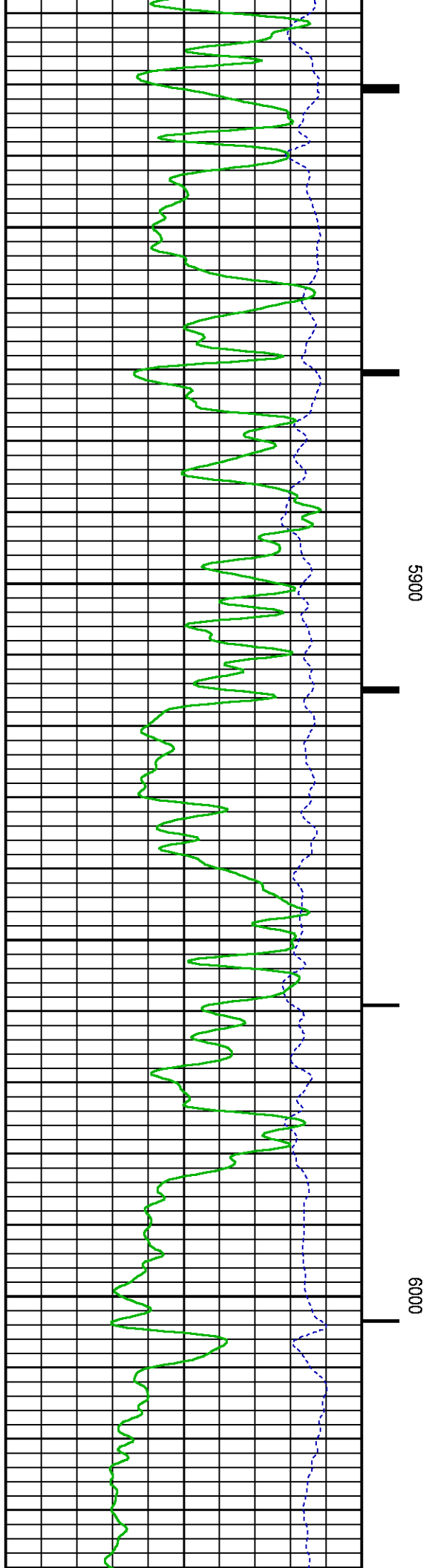
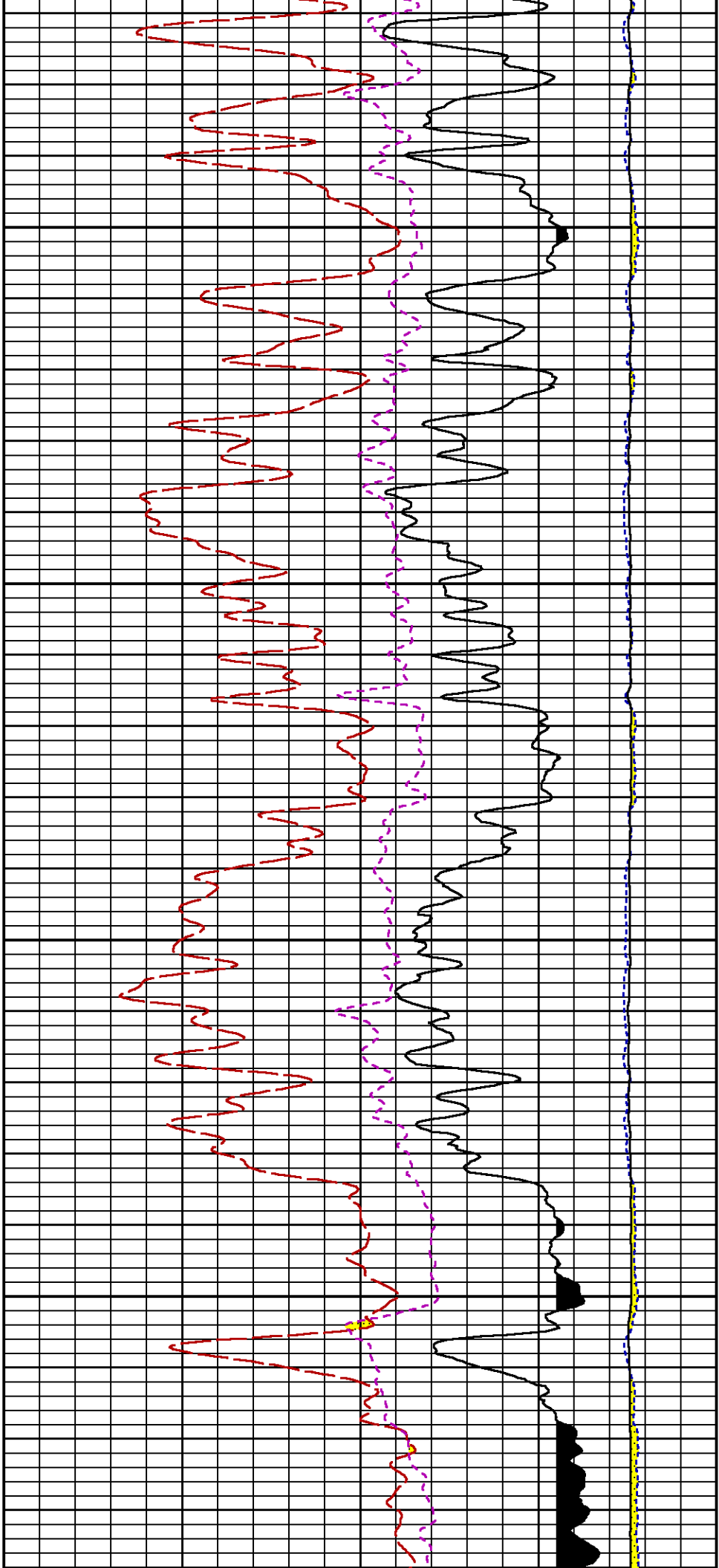


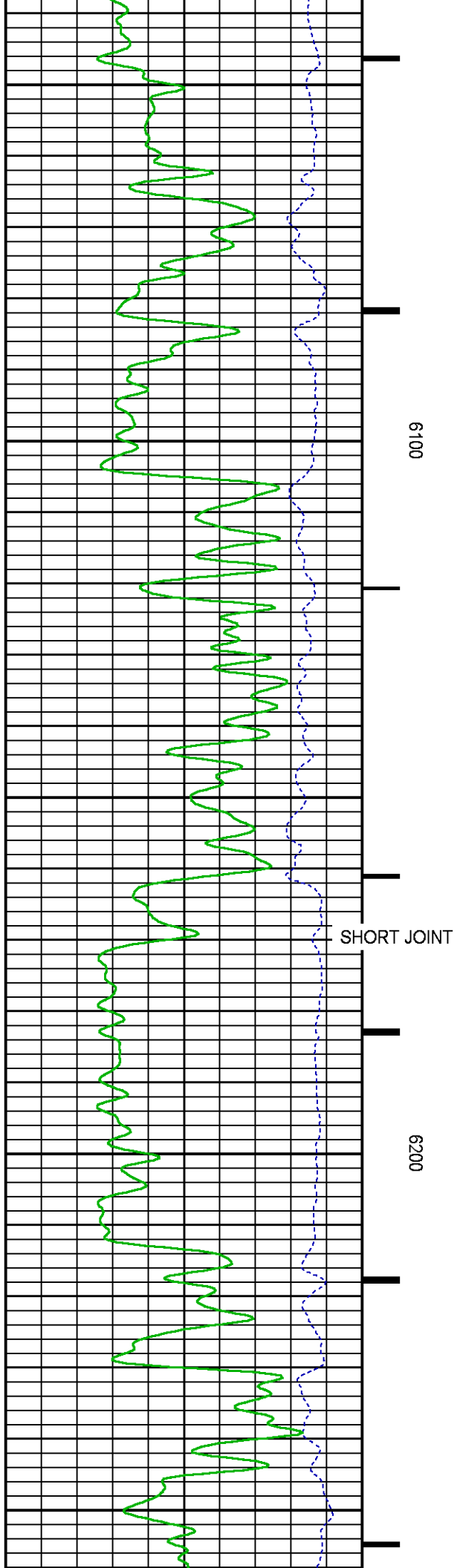
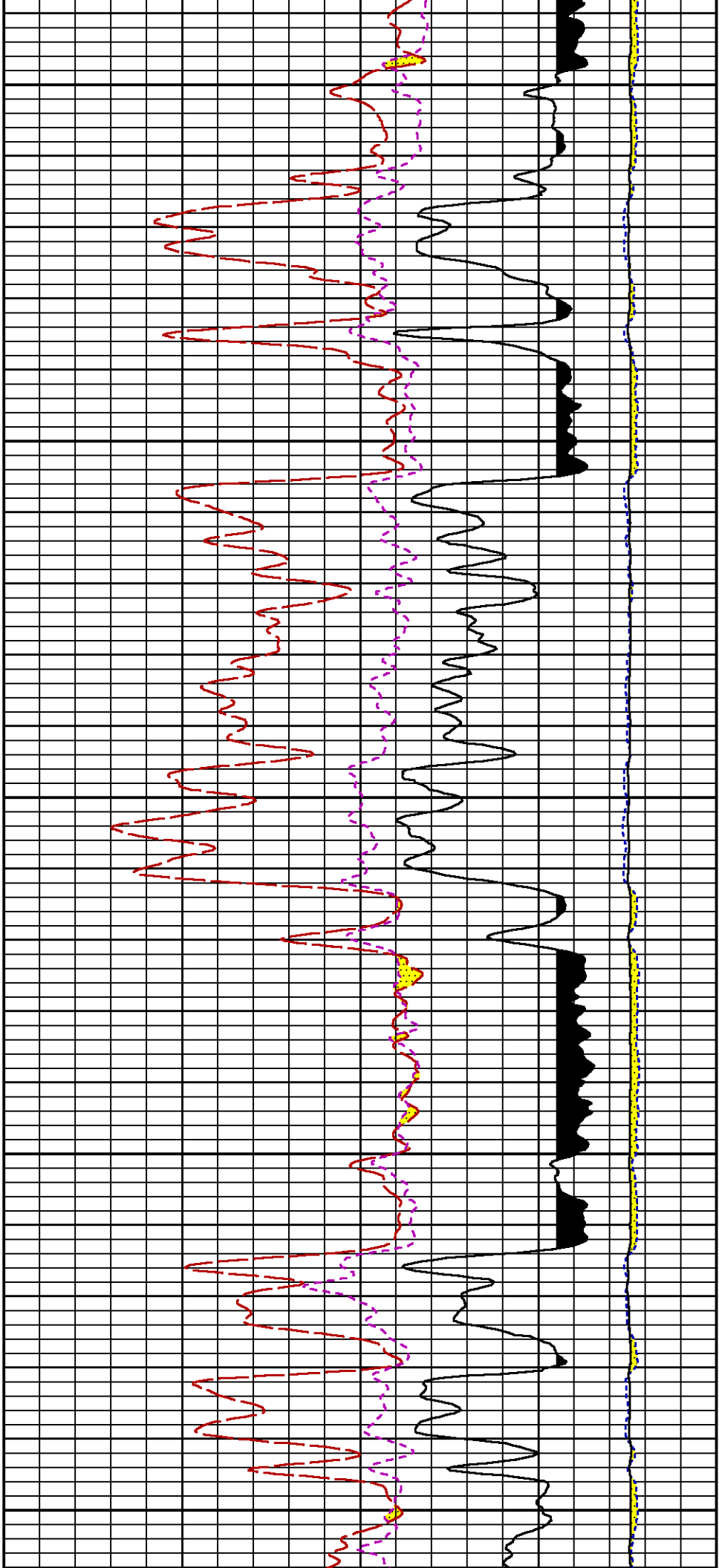


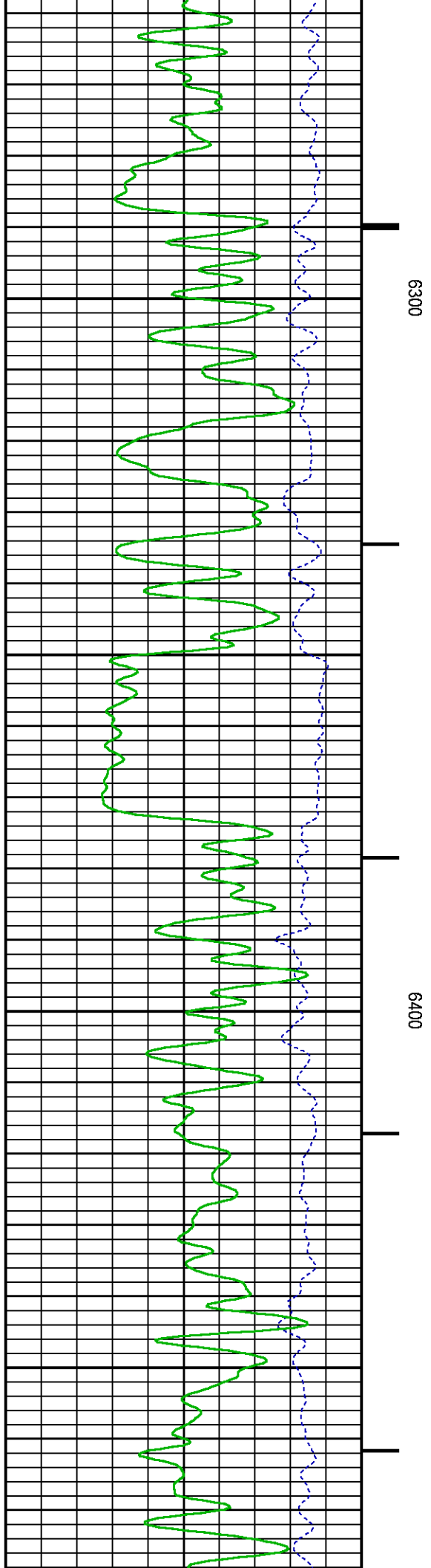
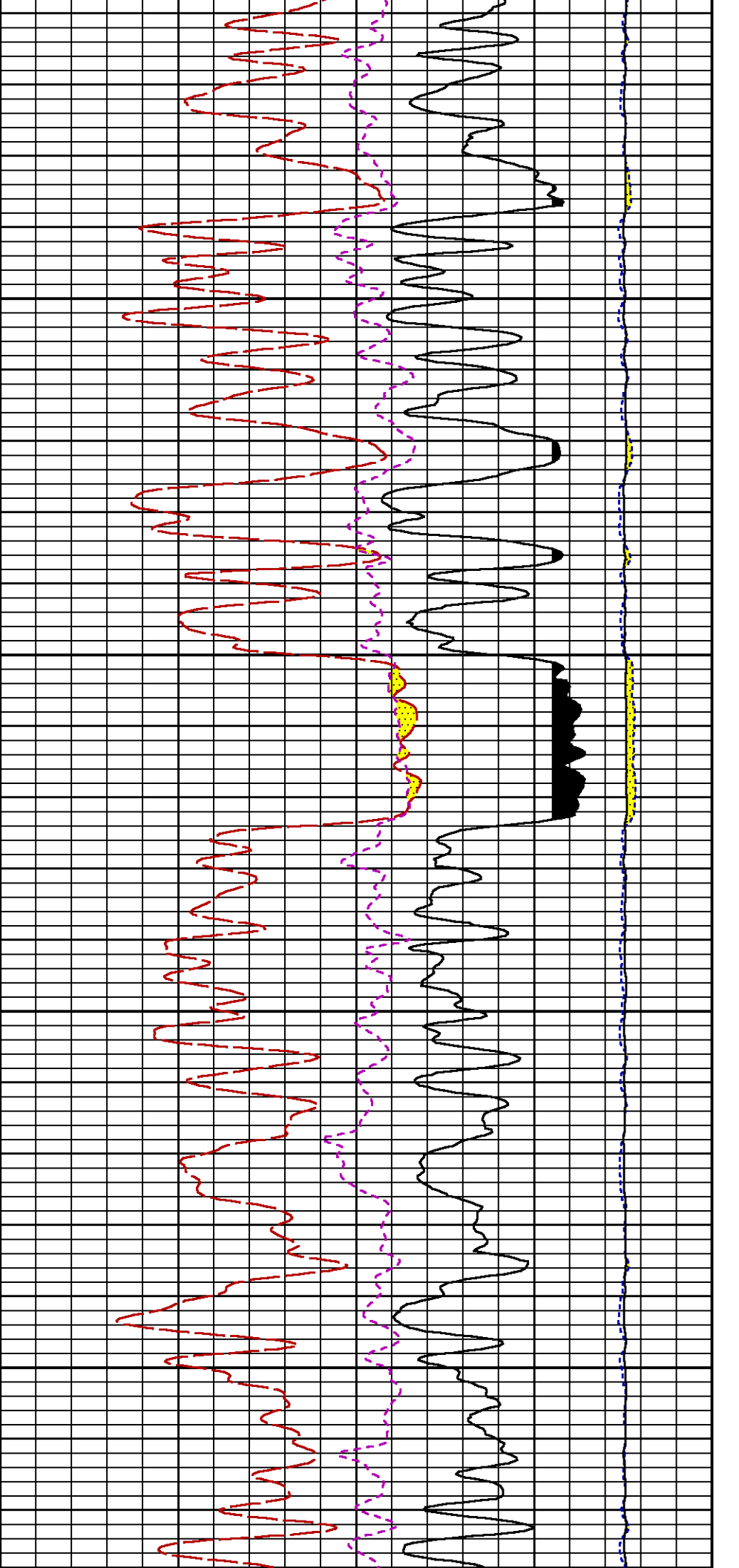


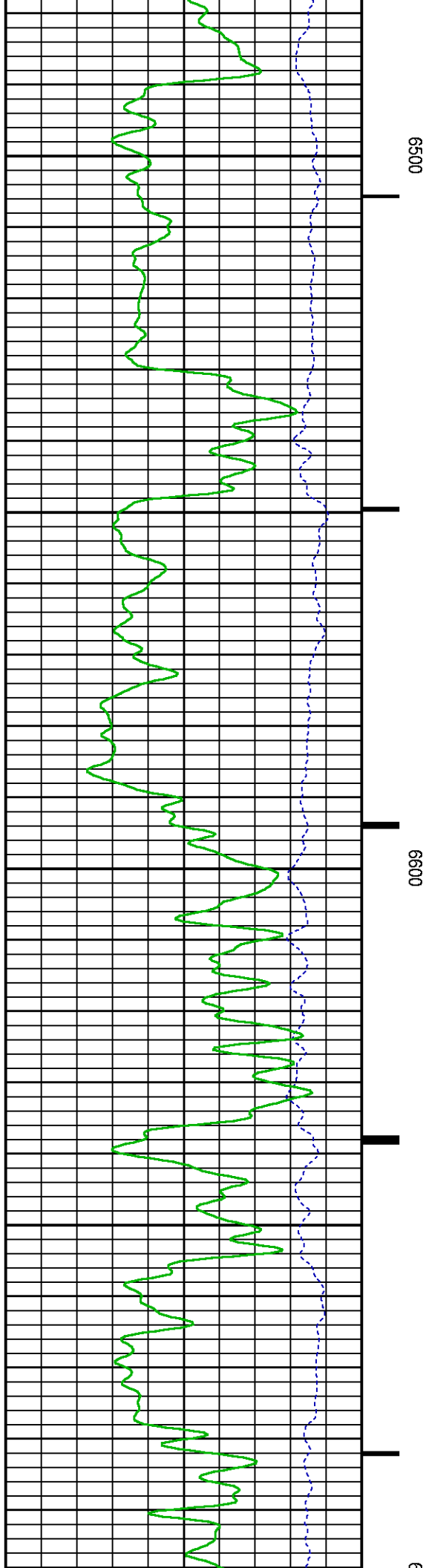
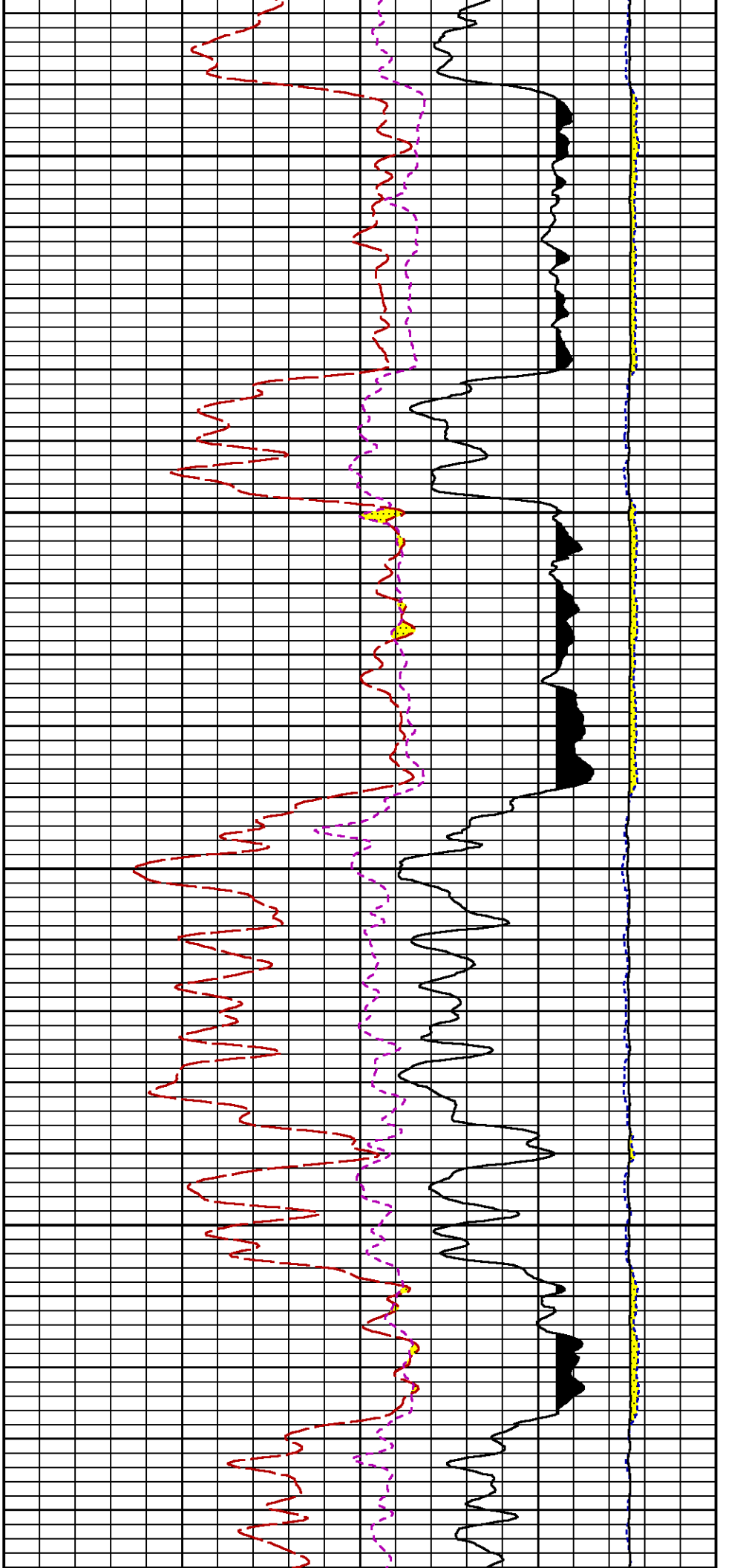


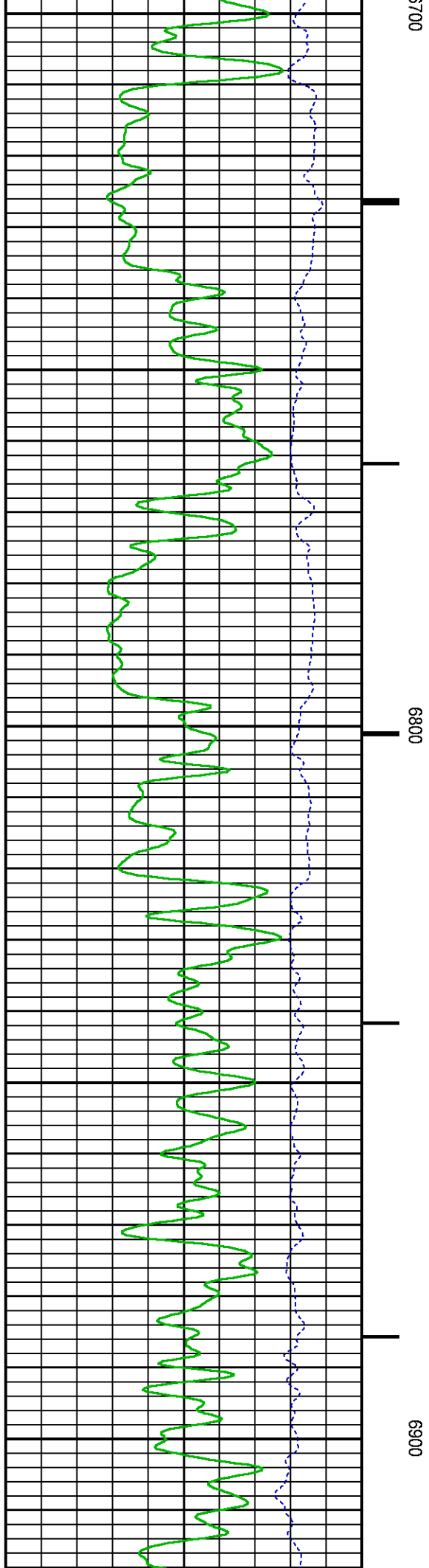
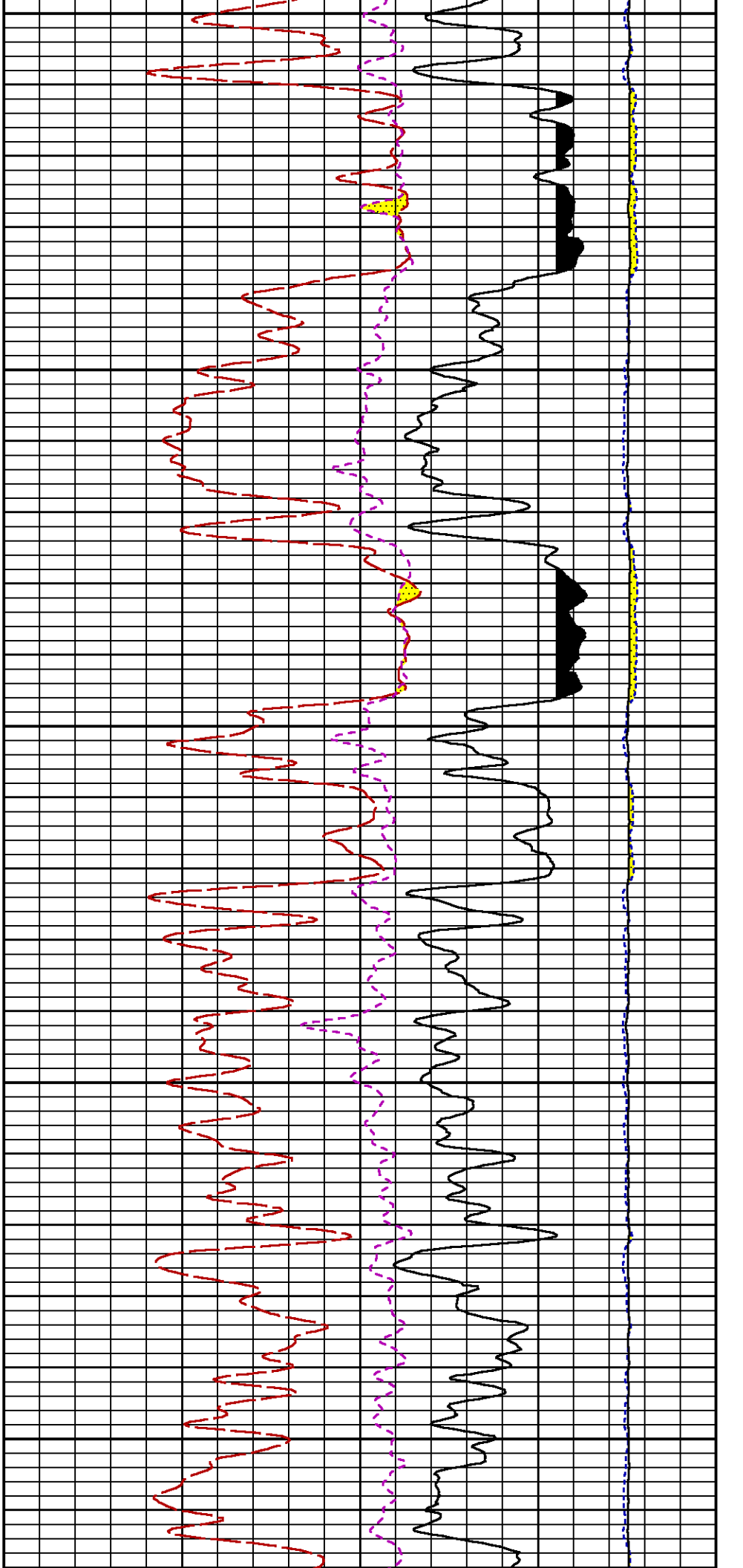


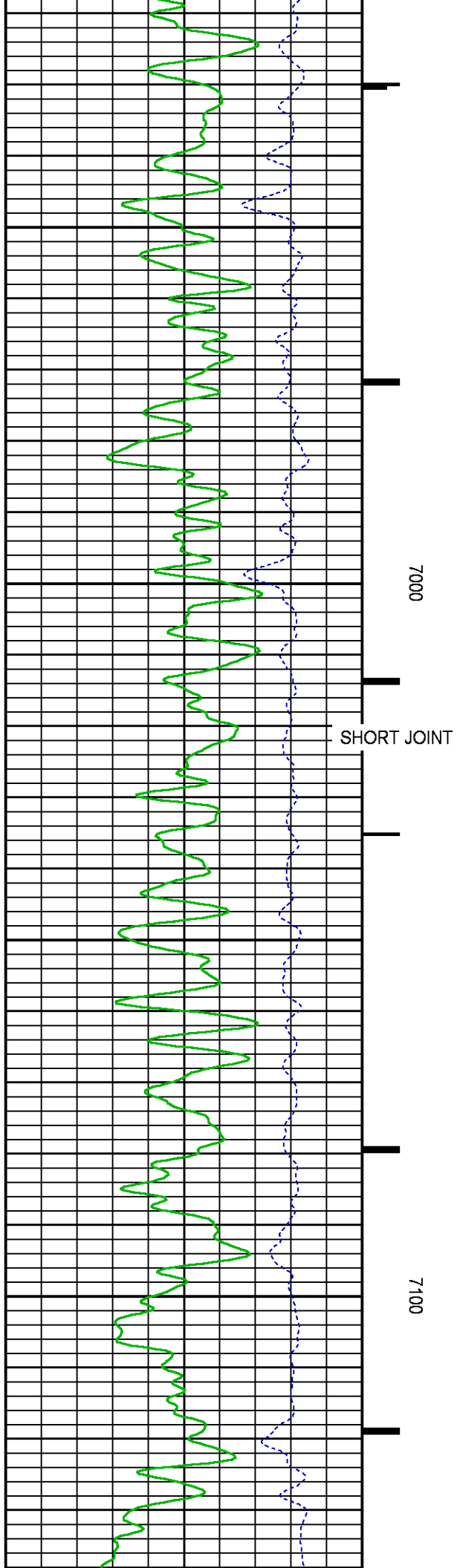
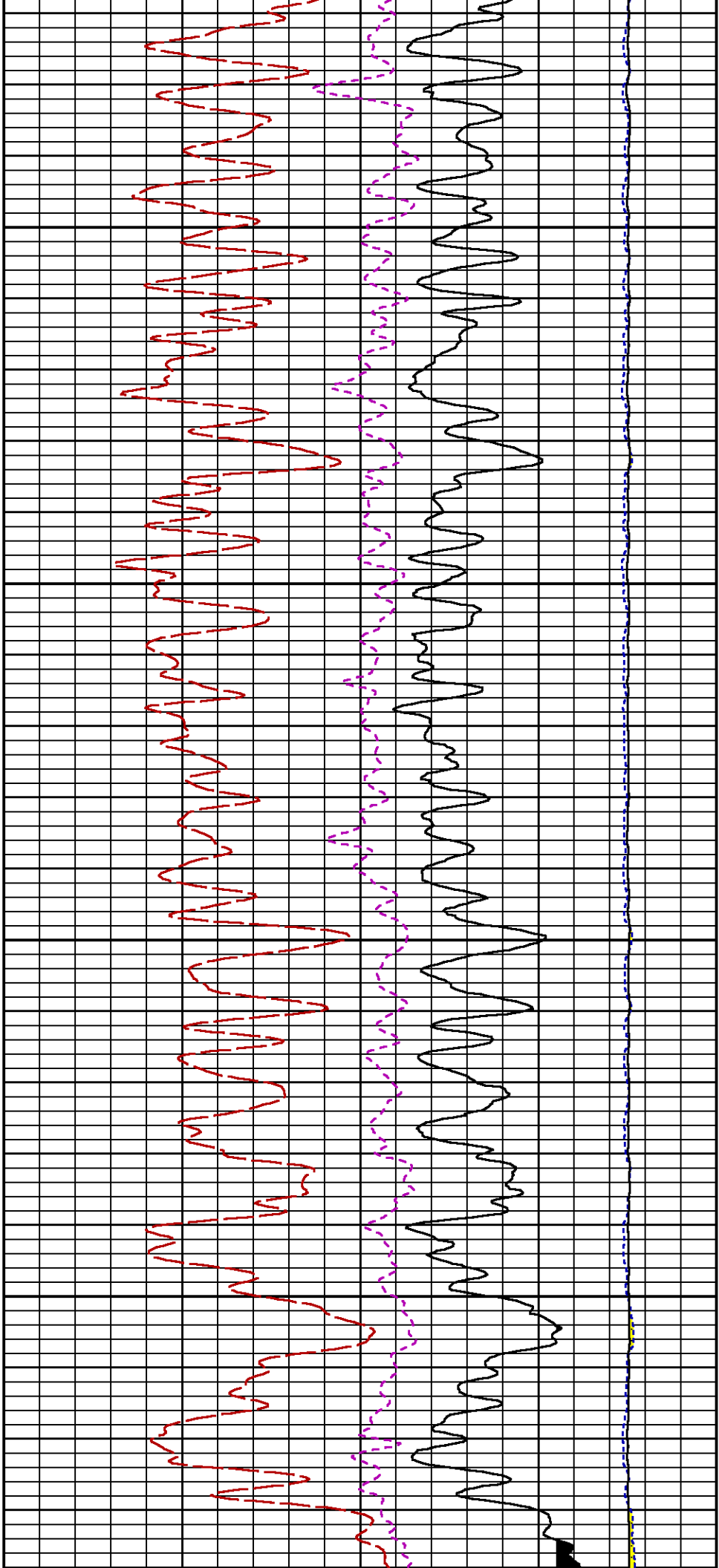


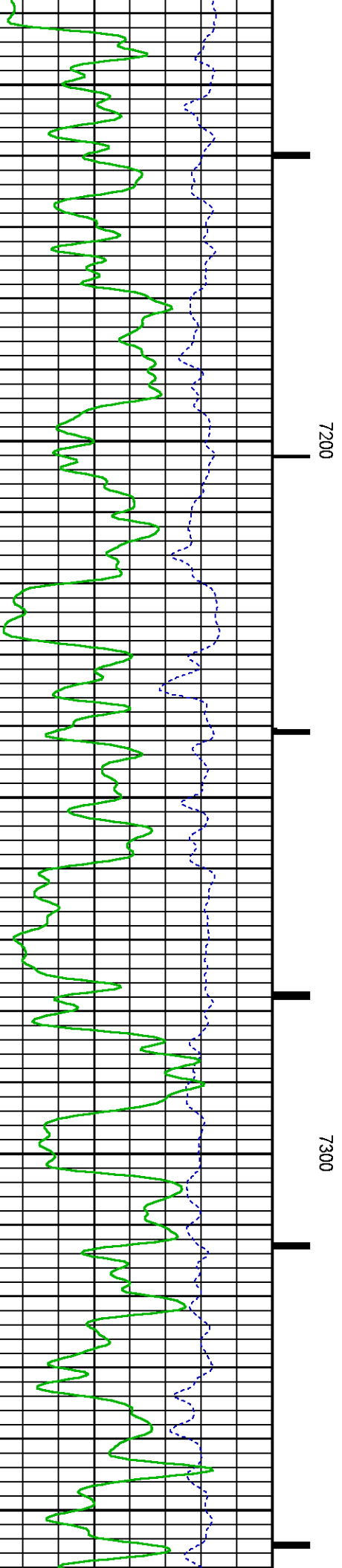
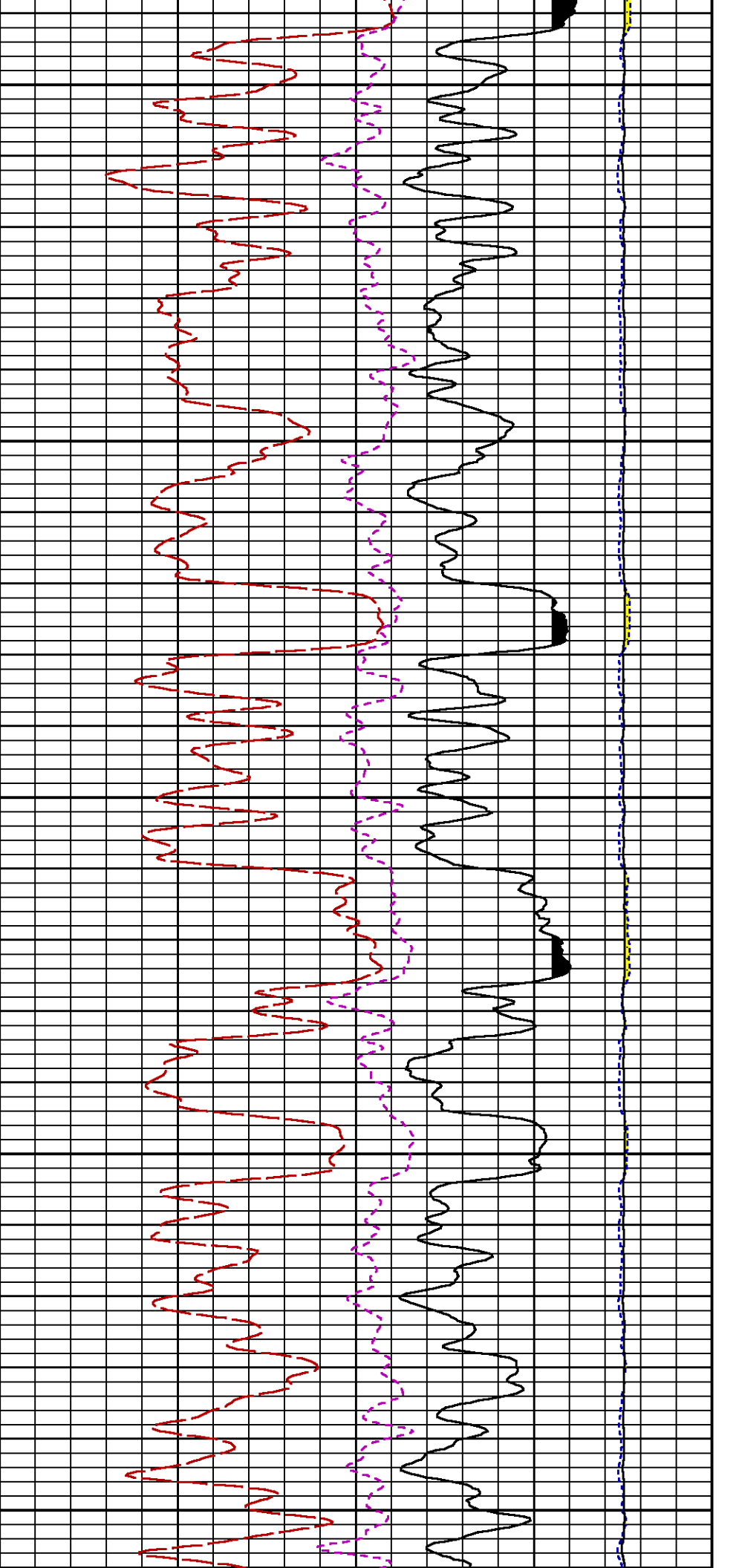


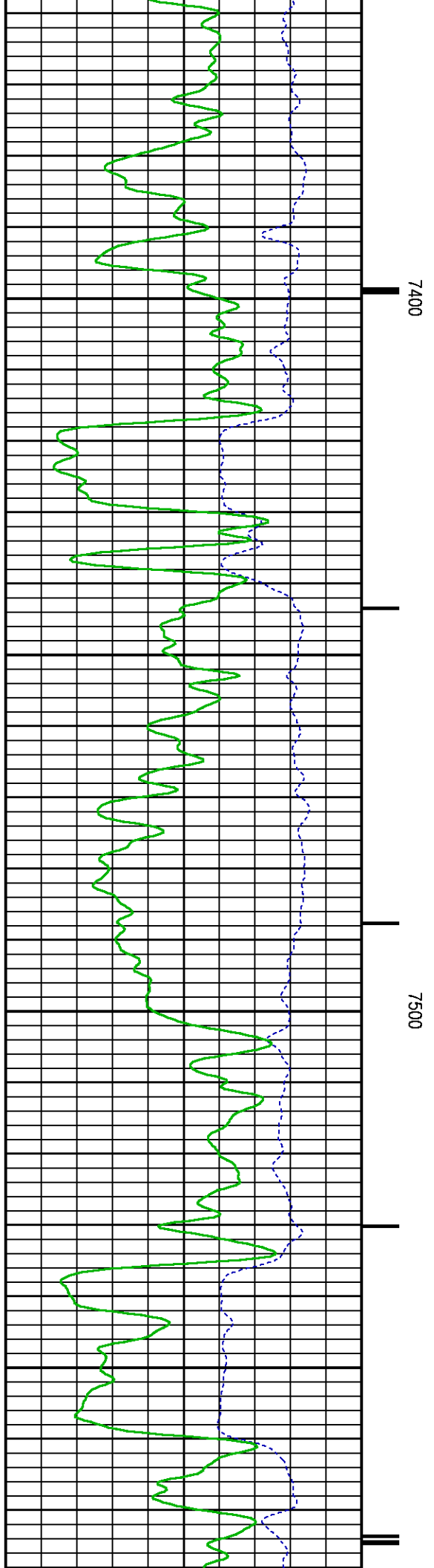
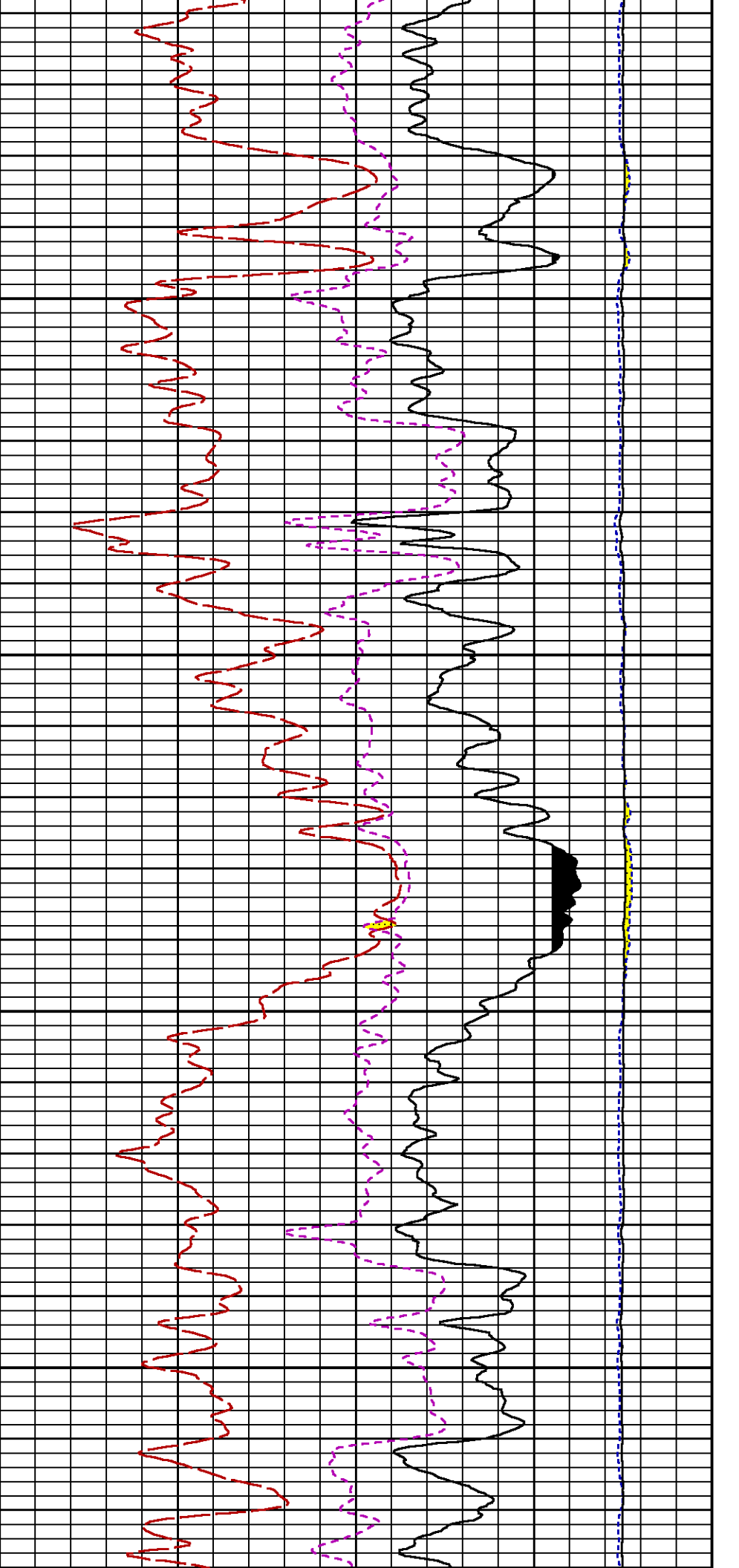


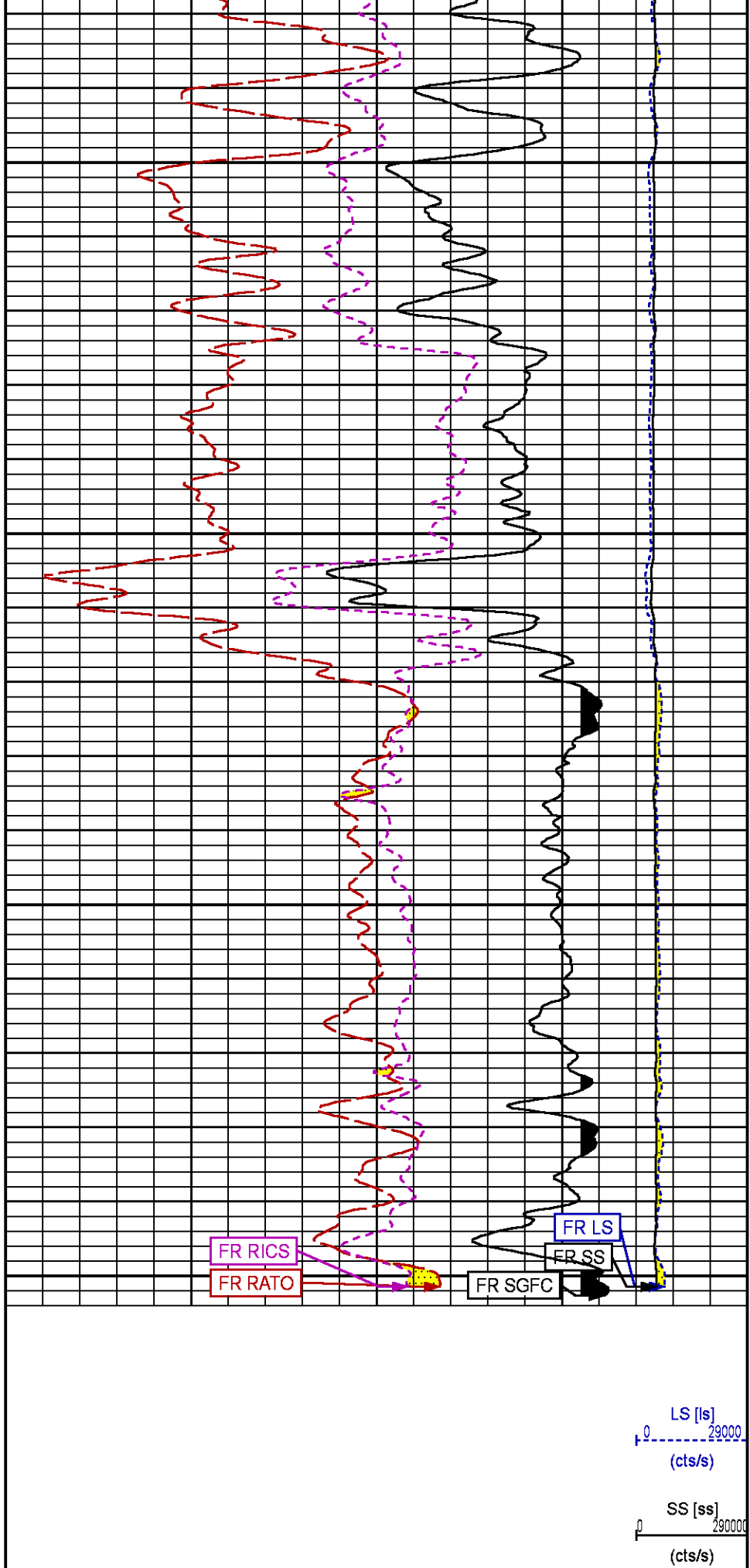
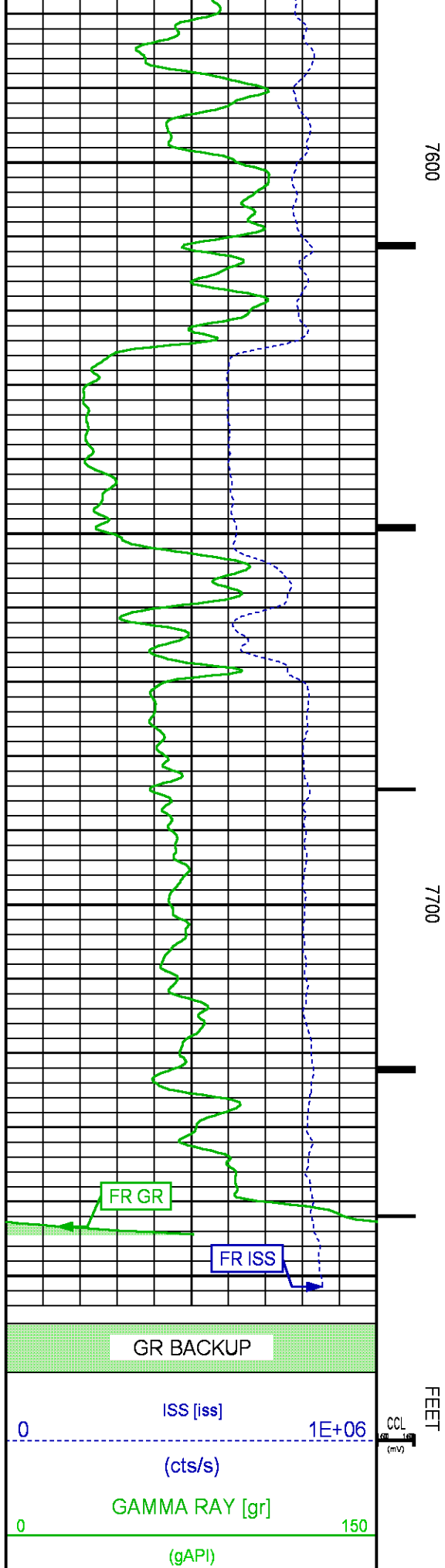












		(dim)
		RICS [rics]
	39	9
		(dim)
		SGFC [sgfc]
	60	0
		(cu)

REPEAT SECTION PNC-3D MODE

ECLIPS 6.2i ECLIPS General Release Rel 6.2i Wed Jun 12 12:21:40 CDT 2013
Updates: 1 Patches: 8

Plotted: Tue Oct 27 10:34:51 2015

PARAMETER AND FILTER SUMMARY REPORT

FILE: /dat1a/CH100235/n353h01.prm
LOGGING MODE: DEPTH DIRECTION: UP
TOP DEPTH: 7560.250 ft BOTTOM DEPTH: 7772.250 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	7.87	in	" "
	CASING SIZE	4.50	in	" "
	MATRIX	SANDSTONE		" "
	CORRECTION BUFFER	11		" "

CURVE DESCRIPTION REPORT

CURVE NAME	CREATION DATE	CURVE DESCRIPTION
F1:CCL	Oct 27 10:17:09 2015	CASING COLLAR LOCATOR
F1:GR	Oct 27 10:17:09 2015	GAMMA RAY
F1:ISS	Oct 27 10:17:09 2015	INELASTIC SHORT SPACE COUNT RATE
F1:LS	Oct 27 10:17:09 2015	LONG SPACE COUNT RATE
F1:RATO	Oct 27 10:17:09 2015	SHORT/LONG SPACE COUNT RATE RATIO
F1:RICS	Oct 27 10:17:09 2015	SHORT SPACE INELASTIC TO CAPTURE COUNT RATE RATIO (ISS/CSS)
F1:SGFC	Oct 27 10:17:09 2015	CORRECTED FORMATION SIGMA
F1:SS	Oct 27 10:17:09 2015	SHORT SPACE COUNT RATE

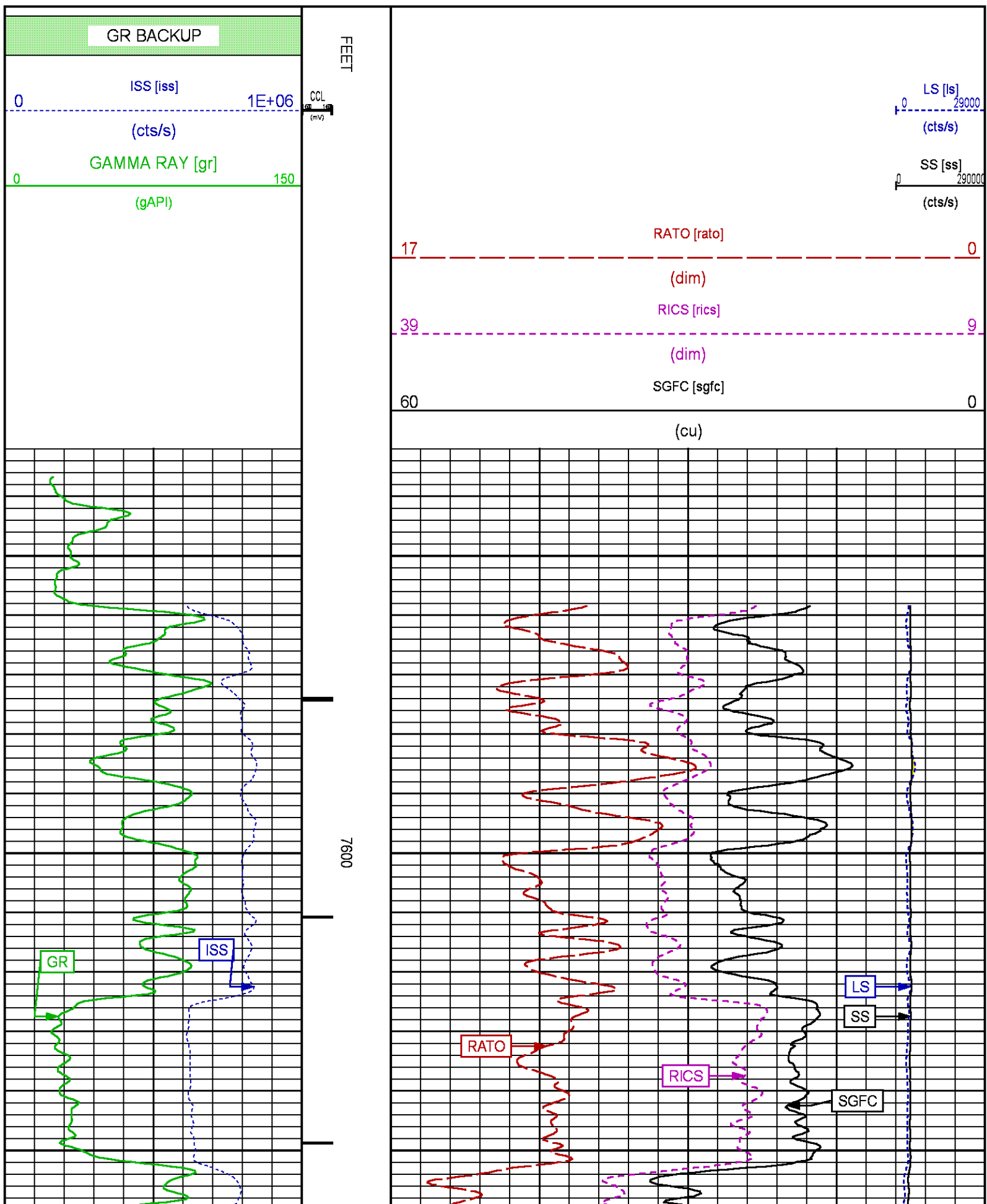
CURVE MEASURE POINT OFFSET

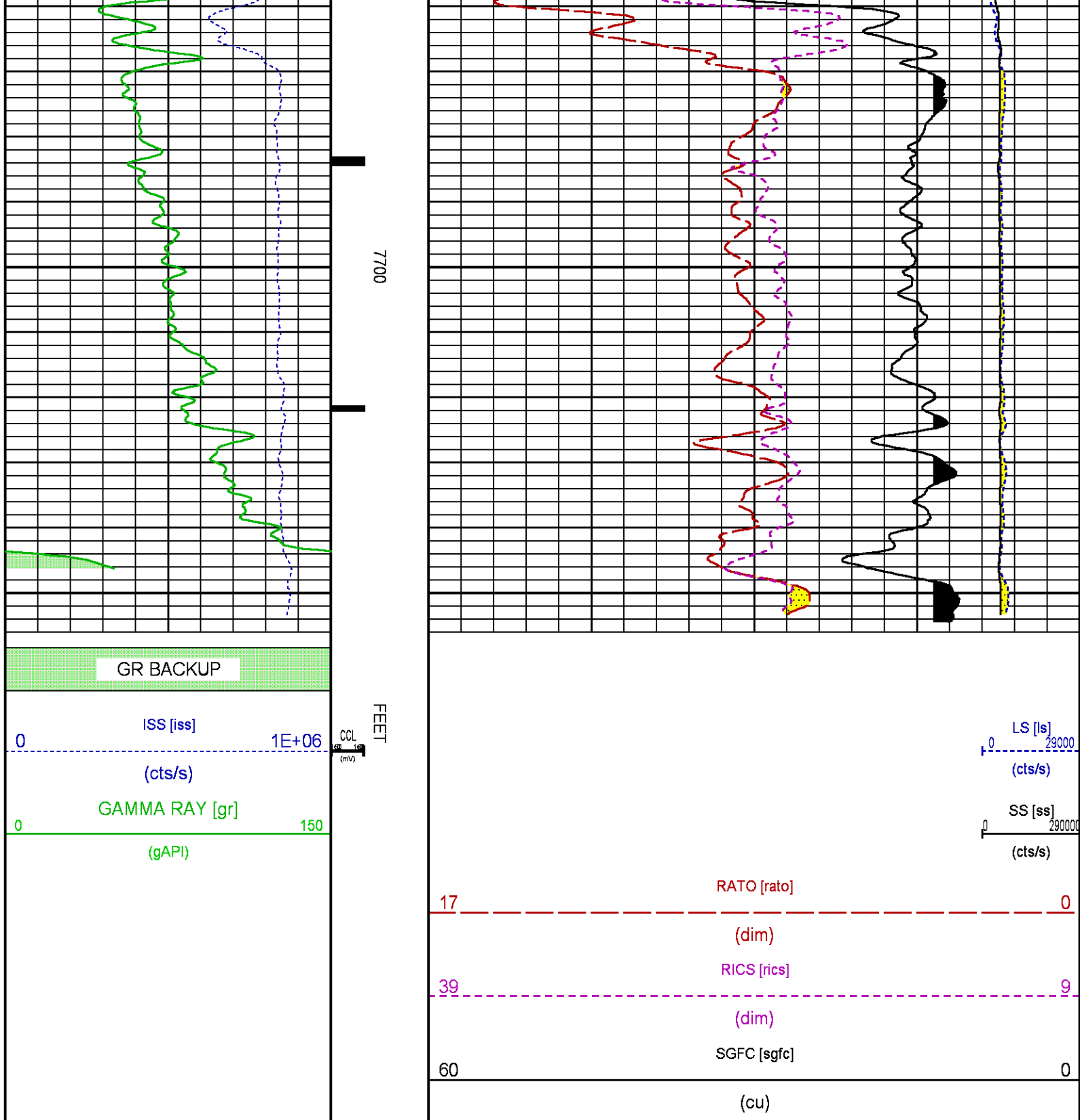
CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
CCL	26.00	ISS	12.75	RATO	12.75	SGFC	12.75
GR	23.00	LS	12.75	RICS	12.75	SS	12.75

Presentation : cas6685:/dat1a/CH100235/RPM_RPT.fvpdf [5"/100' Scale]
Plot Interval : 7532.5 - 7754.5 Feet

Data File 1 : F1 : cas6685:/dat1a/CH100235/n353h01.xtf
Created On : Oct 27 10:17:09 2015

Created On : Oct 21 10:11:00 2010
Company : LARAMIE ENERGY
Well : PICEANCE 28-06W
Field : VEGA
File Interval : 7531.75 - 7772.25 Feet
OCT : n353h





CALIBRATION / VERIFICATION SUMMARY

Source File: /dat1a/CH100235/n353h.tp1

GR PRIMARY CALIBRATION SUMMARY

TOOL #: 8262XA 10485470

DATE/TIME PERFORMED: Fri Oct 23 10:03:02 2015

UNIT #: 3885TC 6685 CALB JIG #: 4702NK VBA-905

	BACKGROUND (cts/s)	CALBRTR ON (cts/s)	CR DIFF (cts/s)	MULT	BACKGROUND (gAPI)	CALBRTR ON (gAPI)	CALBRTR (gAPI)
GR	106.22	450.31	344.1	0.523	55.57	235.57	180

GR PRIMARY VERIFICATION SUMMARY

TOOL #: 8262XA 10485470

DATE/TIME PERFORMED: Fri Oct 23 10:05:04 2015

UNIT #: 3885TC 6685

VERI JIG #: 4702NK VBA-905

	BACKGROUND (cts/s)	CALBRTR ON (cts/s)	MULT	BACKGROUND (gAPI)	CALBRTR ON (gAPI)	DIFF. (gAPI)
GR	107.36	458.00	0.523	56.16	239.59	183.43
						170.00 190.00

RPM_PNC_3D PRIMARY CALIBRATION SUMMARY

TOOL: 8283PA 10414345

DATE/TIME PERFORMED: Wed Oct 7 10:51:29 2015

UNIT: 3885TC 6685

CALIBRATOR: 2437XB 112674

SOURCE: 8281AA 10160601

HOURS: 8281AA 173

	ISS	Mtr Vlts (V)	SS Gain	LS Gain	XLS Gain	EA Temp (degF)	Sync Delay (usec)	RCAL
Raw Data	801603	121	2314	2275	2268	107	7.0	0.9797
Interpolated	1300000	142	2301	2270	2264			

	ISS	BKS	BKL	BKX	SGA1	SDA1	SGA2	SDA2
Raw Data	801603	7188	1125	148	25.95	0.15	24.16	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	801603	167903	25988	88575	31568	8240	53636	13173
Fit Quality %		0.898	1.042	0.778	0.769	0.808	0.724	0.842

	ISS	RBOR	RIN ISS/ILS	RIN13 ISS/IXS	RICS ISS/CSS	RATO SS/LS	RTWO SS2/LS	RONE CSS/CLS
Raw Data	801603	1.43	4.77	30.86	14.95	10.75	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 %		0.017	0.117	0.240	0.156	0.045	0.054	0.102
Reduced	1408581	1.43	4.78	30.98	14.95	10.76	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

TPSETEMP PRIMARY CALIBRATION SUMMARY

TOOL #: 8255XA Z176973

DATE/TIME PERFORMED: Wed Oct 21 14:27:55 2015

UNIT #: 3885TC 6685

	T(0)	T(1)	T(2)	T(3)
Corr Coeff for Temp	-1.889935E+01	1.004280E-01	1.215976E-06	-1.293045E-10

A3 CABLEHEADPCM 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

TEMPERATURE / PRESSURE

Diameter : 1.70"
Length : 3.30'
Weight : 13 lbs
Series : 8255XA

34.08'

CCL MP 26.03'

GR MP 22.90'


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

Mnemonic : SRPL
Measure Point: 1.52' TEMP MP

TEMP MP 1.65'
PRES MP 0.00'

BULL PLUG 1 11/16

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

	COMPANY	LARAMIE ENERGY		FILE NO:	CH100235
	WELL	PICEANCE 28-06W		API NO:	05077097740000
	FIELD	VEGA			
	COUNTY	MESA	STATE	COLORADO	
	LOCATION:	SHL: LAT 39.251108, LONG -107.779603 BHL: LAT 39.251578, LONG -107.780708		ELEVATIONS:	28 9S 93W 28-05 PAD PATTERSON 306
		SEC 28	TWP 9S	RGE 93W	DATE 27-Oct-2015