



FILE NO: CH090460	COMPANY LARAMIE ENERGY
API NO: 050770996920000	WELL SUP & SHEP FEDERAL 25-12M
	FIELD VEGA
	COUNTY MESA
	STATE COLORADO

Ver. 3.87	LOCATION:	OTHER SERVICES
SEC 25 T9S R93W	SHL: LONG -107.722732 LAT 39.245030	BOND LOG
SUP&SHEP 25-11M	BHL: LONG -107.721169 LAT 39.244051	
PATTERSON 306	SEC 25 TWP 9S RGE 93W	

PERMANENT DATUM	GL	ELEVATION	8074 FT	ELEVATIONS:
LOG MEASURED FROM	KB	22 FT	ABOVE P.D.	KB 8096 FT
DRILL. MEAS. FROM	KB			DF
				GL 8074 FT

DATE	26-Nov-2014
RUN	1
TRIP	1
SERVICE ORDER	US090460
DEPTH DRILLER	8557 FT
DEPTH LOGGER	8446 FT
BOTTOM LOGGED INTERVAL	8436 FT
TOP LOGGED INTERVAL	3370 FT
TIME STARTED	1:00
TIME FINISHED	6:30
OPERATOR RIG TIME	5.5 HOURS
TYPE OF FLUID IN HOLE	WATER
FLUID DENSITY	NA
FLUID SALINITY	NA
FLUID LEVEL	98 FT
LOGGED CEMENT TOP	NA
WELLHEAD PRESSURE	0 PSI
MAXIMUM HOLE DEVIATION	NA
NOMINAL LOGGING SPEED	10 FMIN
MAX. RECORDED TEMP.	258 DEGF
REFERENCE LOG	BAKER HUGHES BOND LOG
REFERENCE LOG DATE	25-Nov-2014
EQUIP. NO.	6670
LOCATION	NEWELL
RECORDED BY	KEITH
WITNESSED BY	

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		8557 FT

CASING RECORD				
SIZE	WEIGHT	GRADE	FROM	TO
4.5 IN	11.6 LB/F	I-80	0 FT	8557 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 25/NOV/2014 at the client's request.
The amount of linear shift is 9 feet.
Logged in PNC-3D mode.
BHT = 258 degF
SJ = 5287' - 5309'
SJ = 7601' - 7623'
THANK YOU FOR CHOOSING BAKER HUGHES WIRELINE SERVICES

EQUIPMENT DATA

RUN	TRIP	TOOL	SERIES NO.	SERIAL NO.	POSITION
1	1	PCM	8250EA	10408796	FREE
1	1	TEL/CCL	8248ED	10590814	FREE
1	1	GR	2812LA	11701636	FREE
1	1	RPM	8281EA	10190984	FREE
1	1	RPM	8283PA	10160383	FREE
1	1	RPM	8281FA	10307727	FREE
1	1	TEMP	8255XXA	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 Nov 26 05:49:24 2014

PARAMETER AND FILTER SUMMARY REPORT

FILE: /dat1a/CH090460/n354h02.prm
LOGGING MODE: DEPTH DIRECTION: UP
TOP DEPTH: 5069.250 ft BOTTOM DEPTH: 8449.854 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

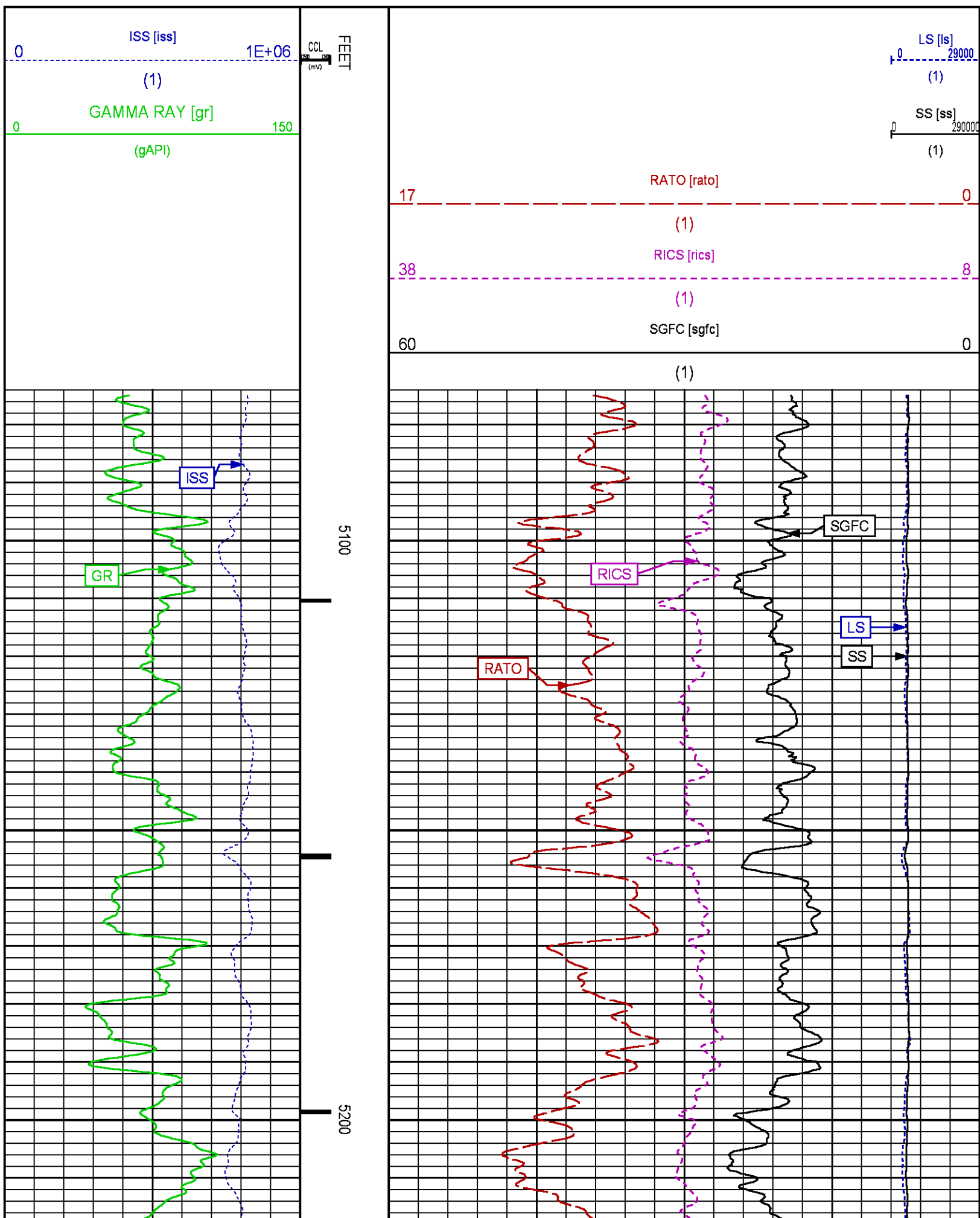
CURVE NAME	CREATION DATE	CURVE DESCRIPTION
F1:CCL	Nov 26 02:01:24 2014	CASING COLLAR LOCATOR
F1:GR	Nov 26 02:01:24 2014	GAMMA RAY
F1:ISS	Nov 26 02:01:24 2014	INELASTIC SHORT SPACE COUNT RATE
F1:LS	Nov 26 02:01:24 2014	LONG SPACE COUNT RATE
F1:RATO	Nov 26 02:01:24 2014	SHORT/LONG SPACE COUNT RATE RATIO
F1:RICS	Nov 26 02:01:24 2014	SHORT SPACE INELASTIC TO CAPTURE COUNT RATE RATIO (ISS/CSS)
F1:SGFC	Nov 26 02:01:24 2014	CORRECTED FORMATION SIGMA
F1:SS	Nov 26 02:01:24 2014	SHORT SPACE COUNT RATE

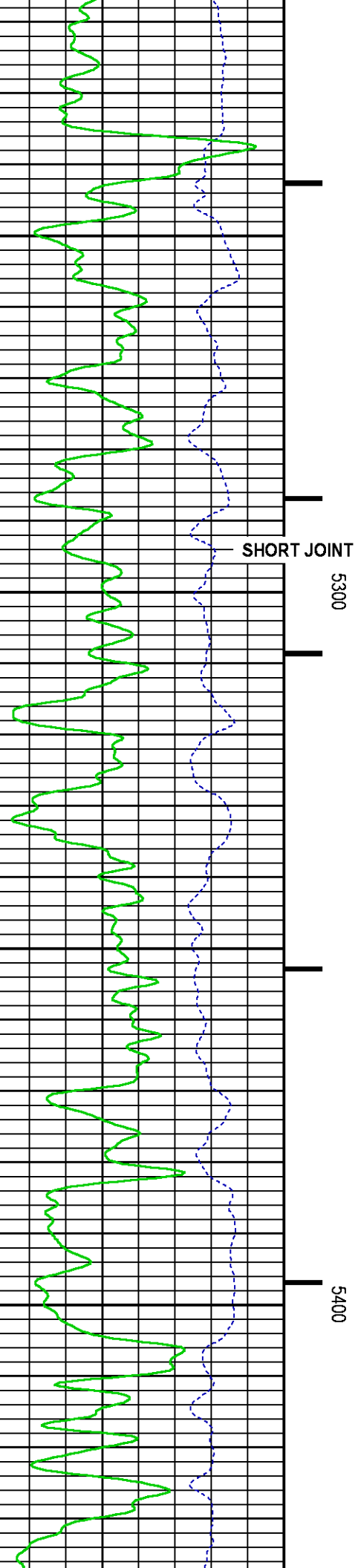
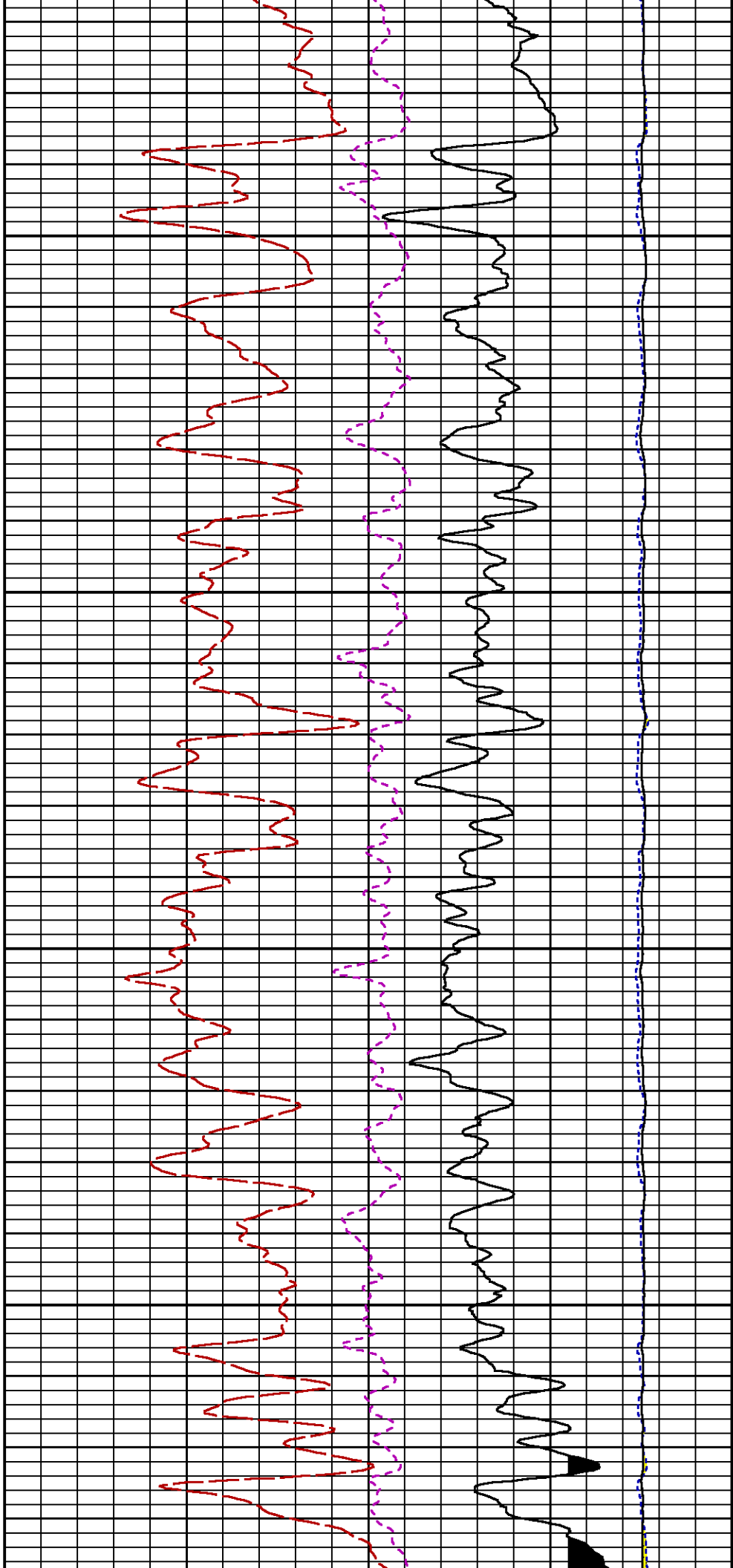
CURVE MEASURE POINT OFFSET

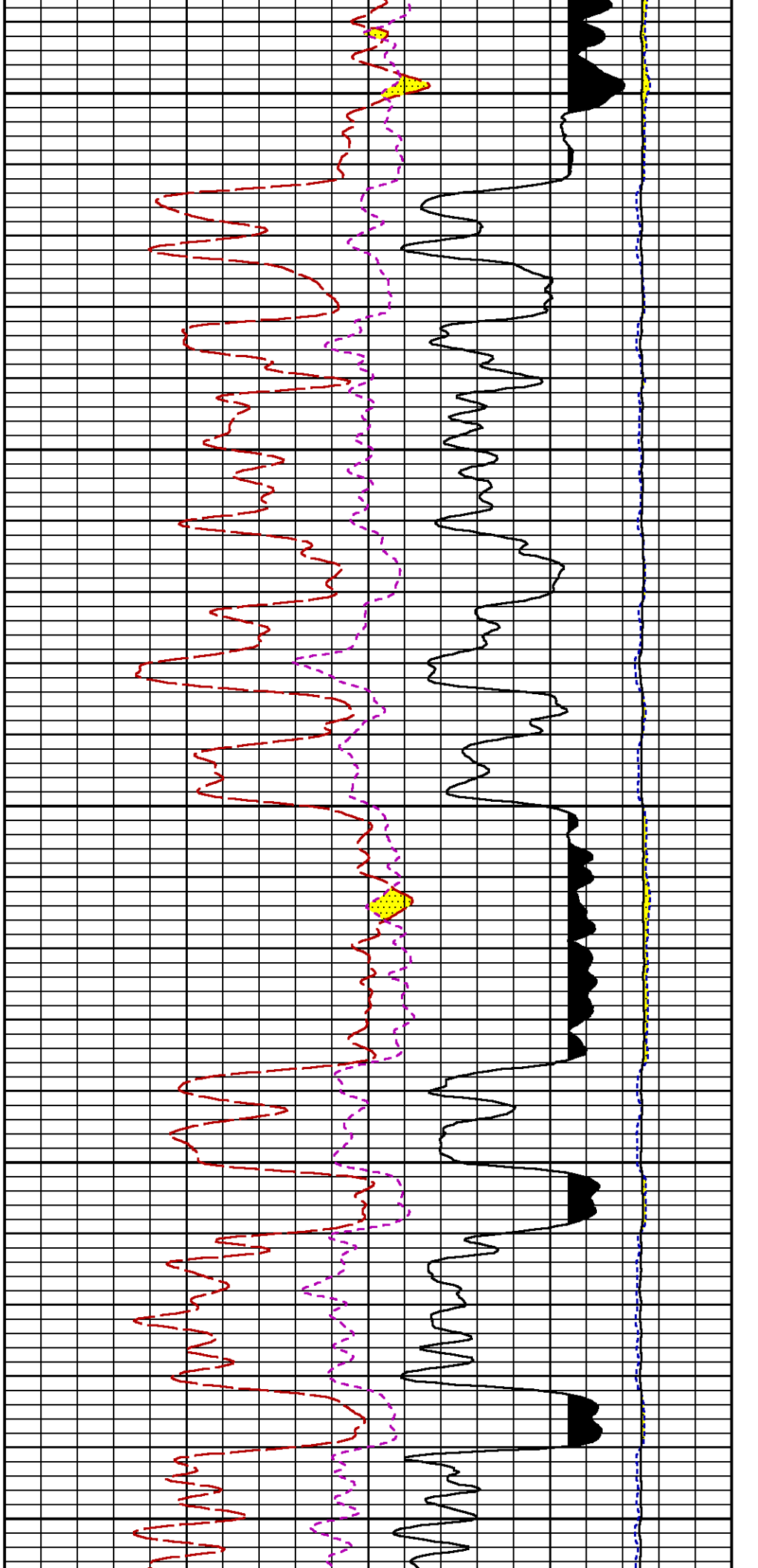
CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
CCL	25.00	ISS	12.75	RATO	12.75	SGFC	12.75
GR	22.75	LS	12.75	RICS	12.75	SS	12.75

Presentation : HL6670:/dat1a/CH090460/12M_RPM_MAIN.fvpdf [5"/100' Scale]
Plot Interval : 5075 - 8451 Feet

Data File 1 : F1 : HL6670:/dat1a/CH090460/12M_RPM_MAIN.xtf
Created On : Nov 26 02:01:24 2014
Company : LARAMIE ENERGY
Well : SUP & SHEP FEDERAL 25-12M
Field : VEGA

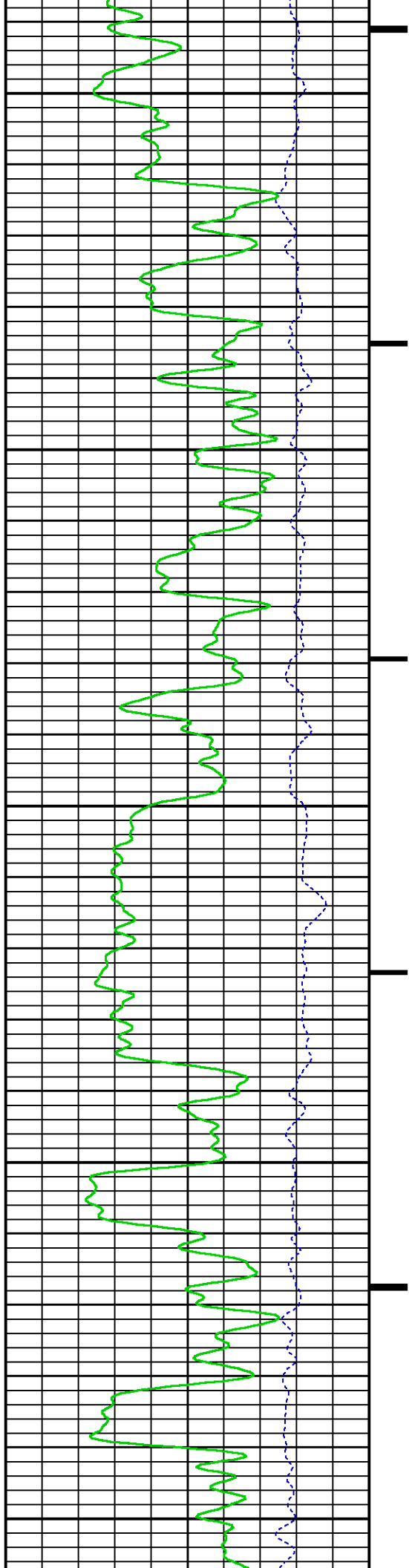


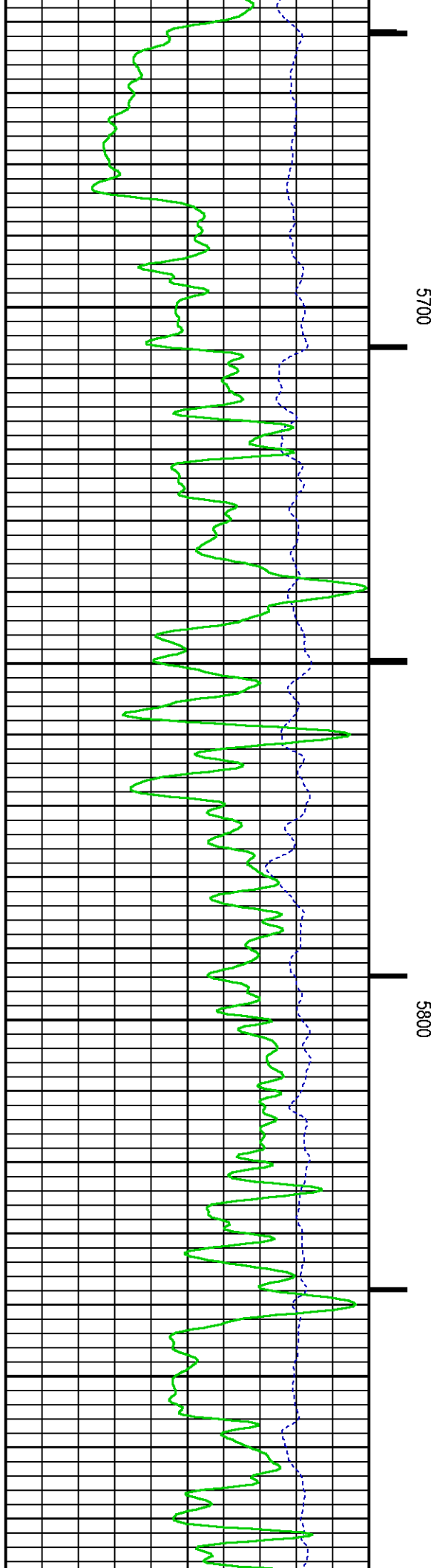
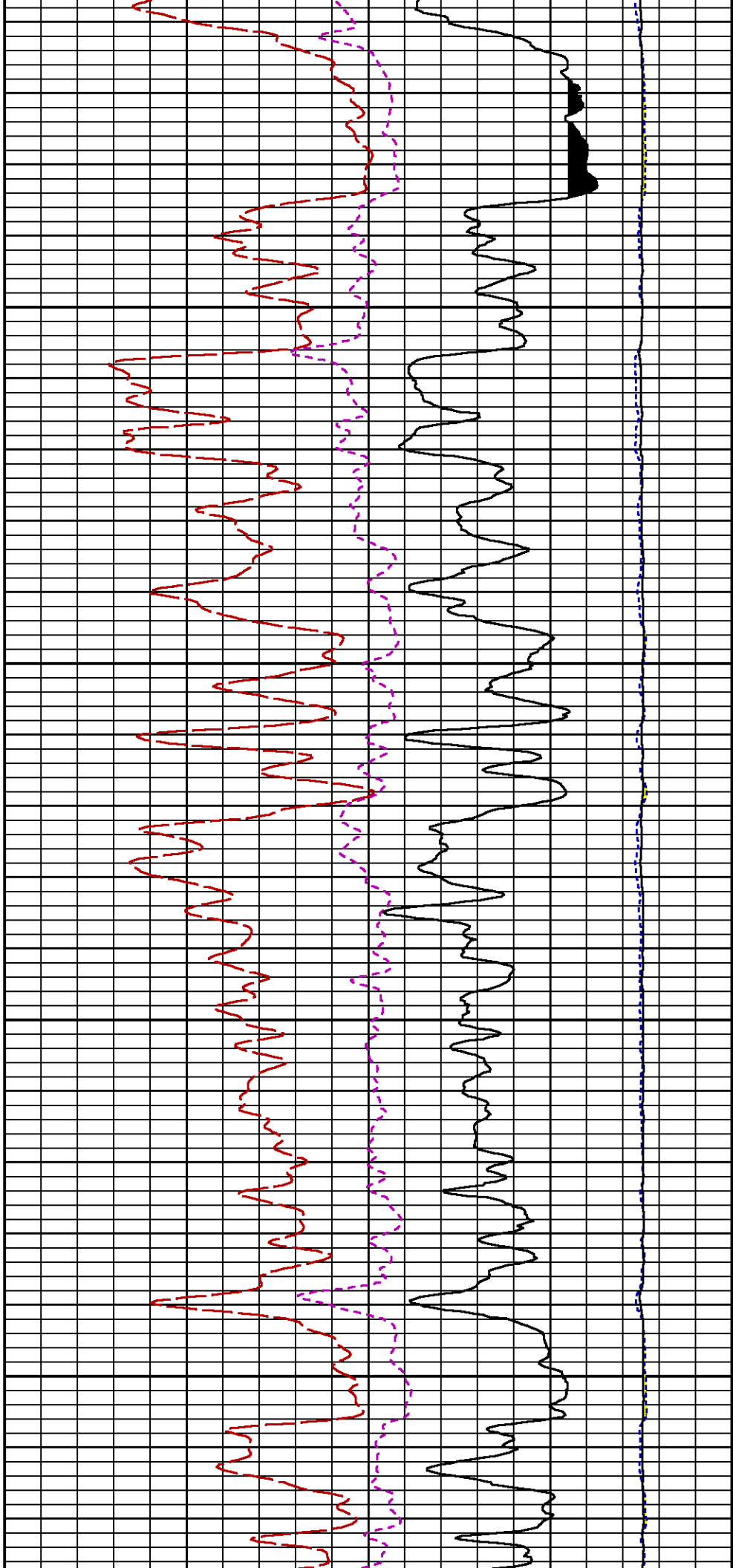


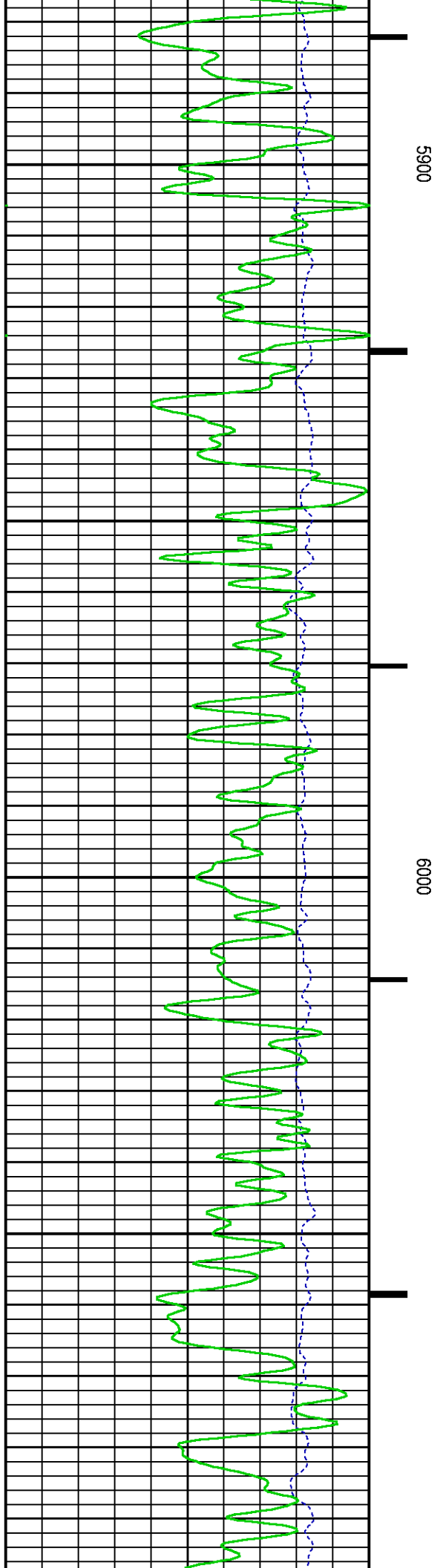
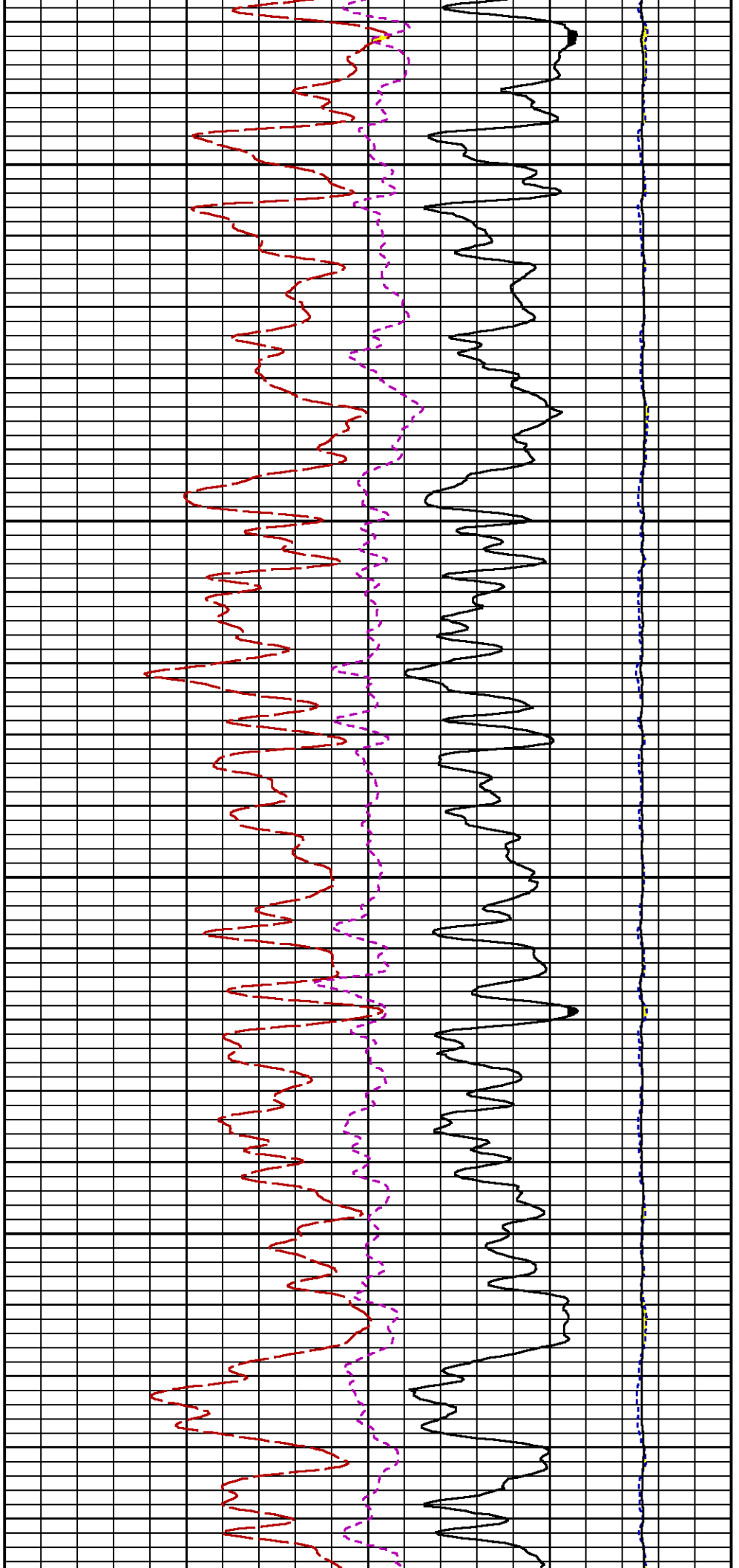


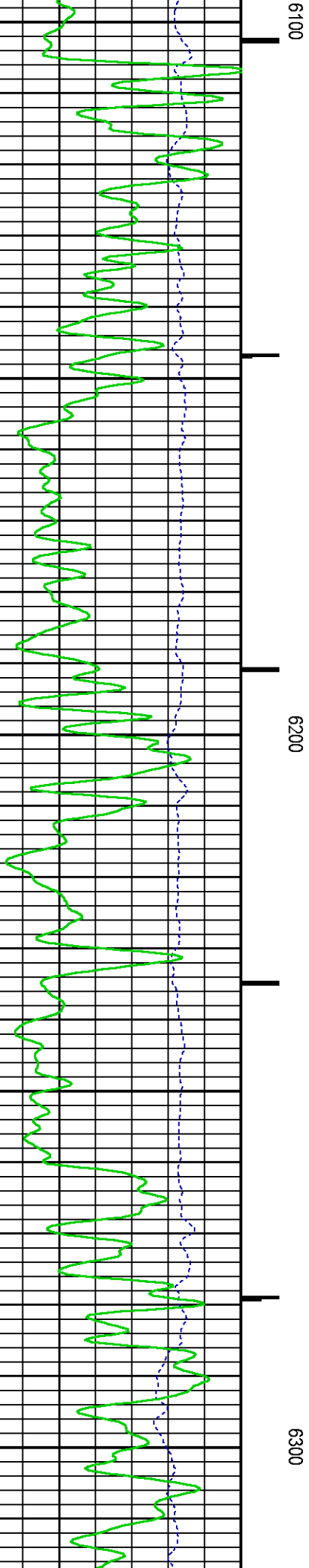
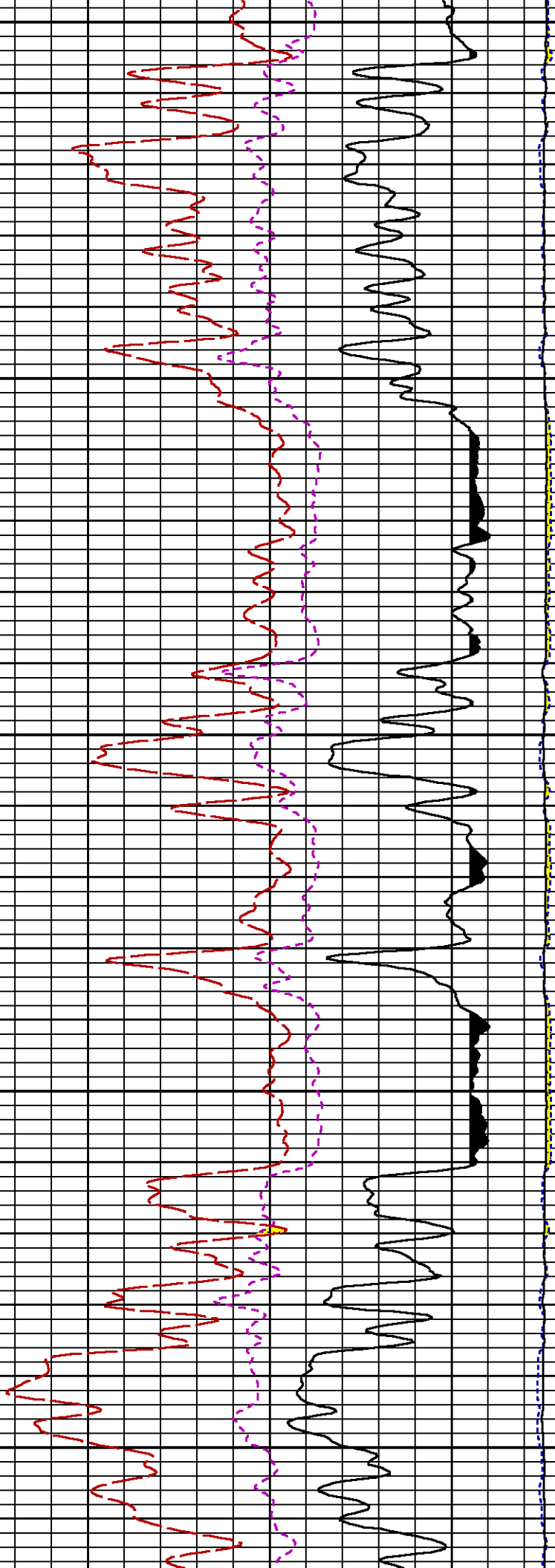
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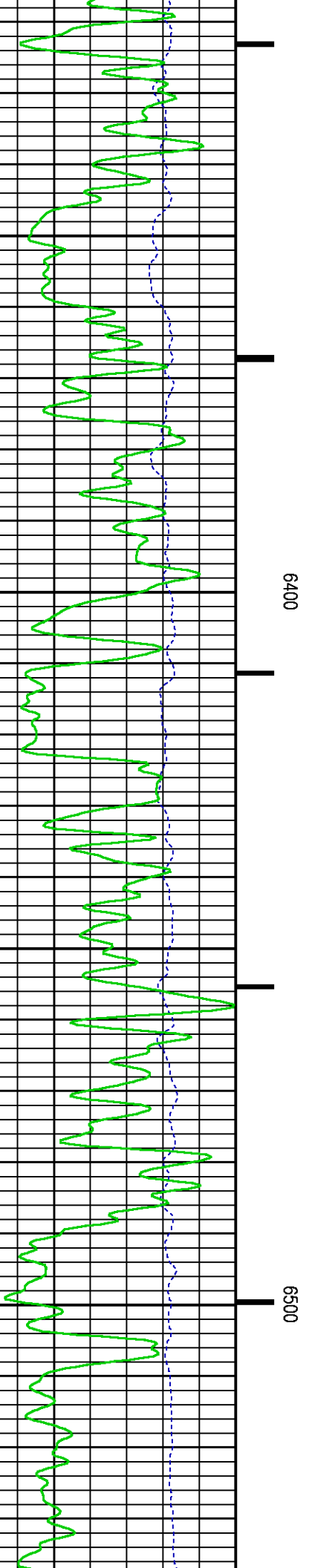
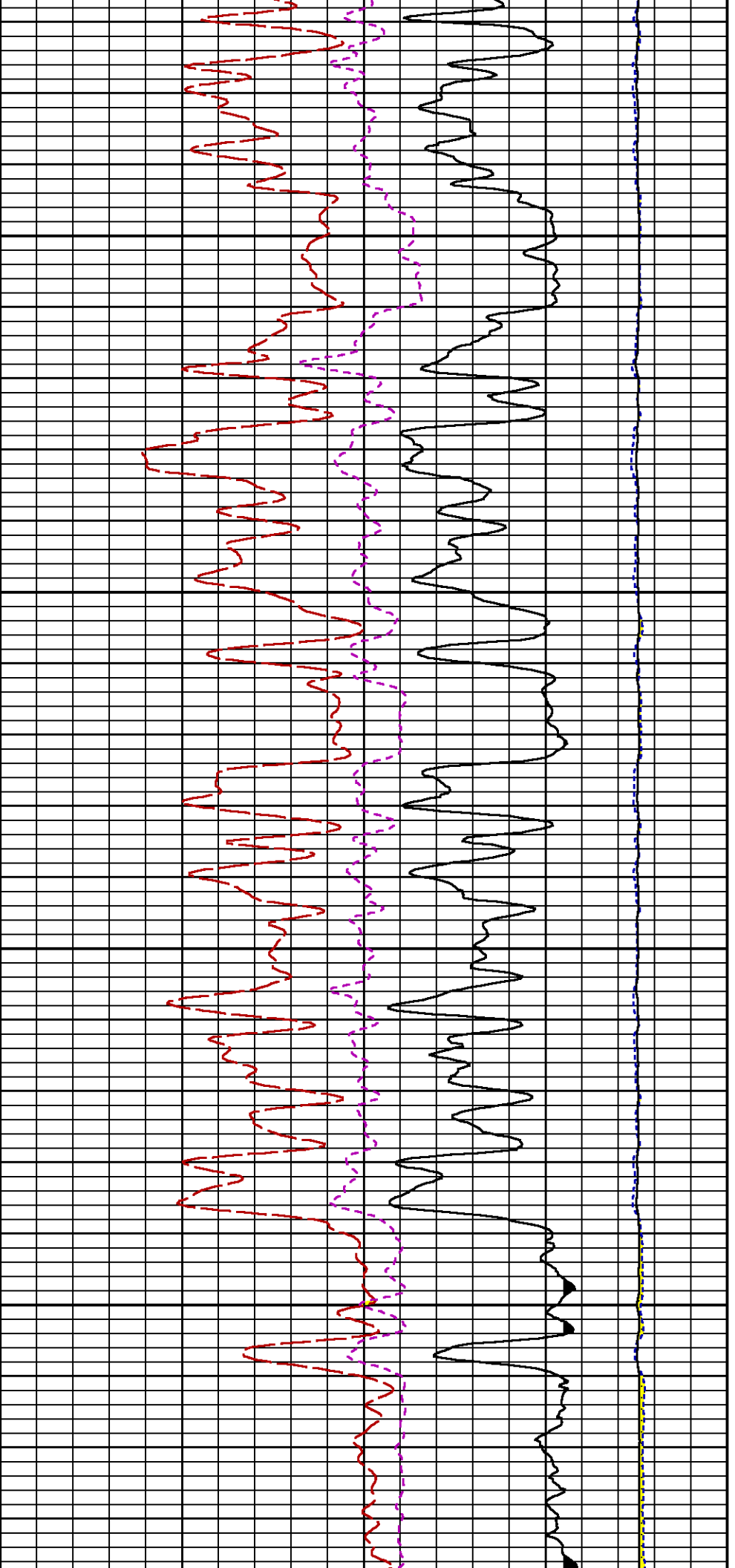
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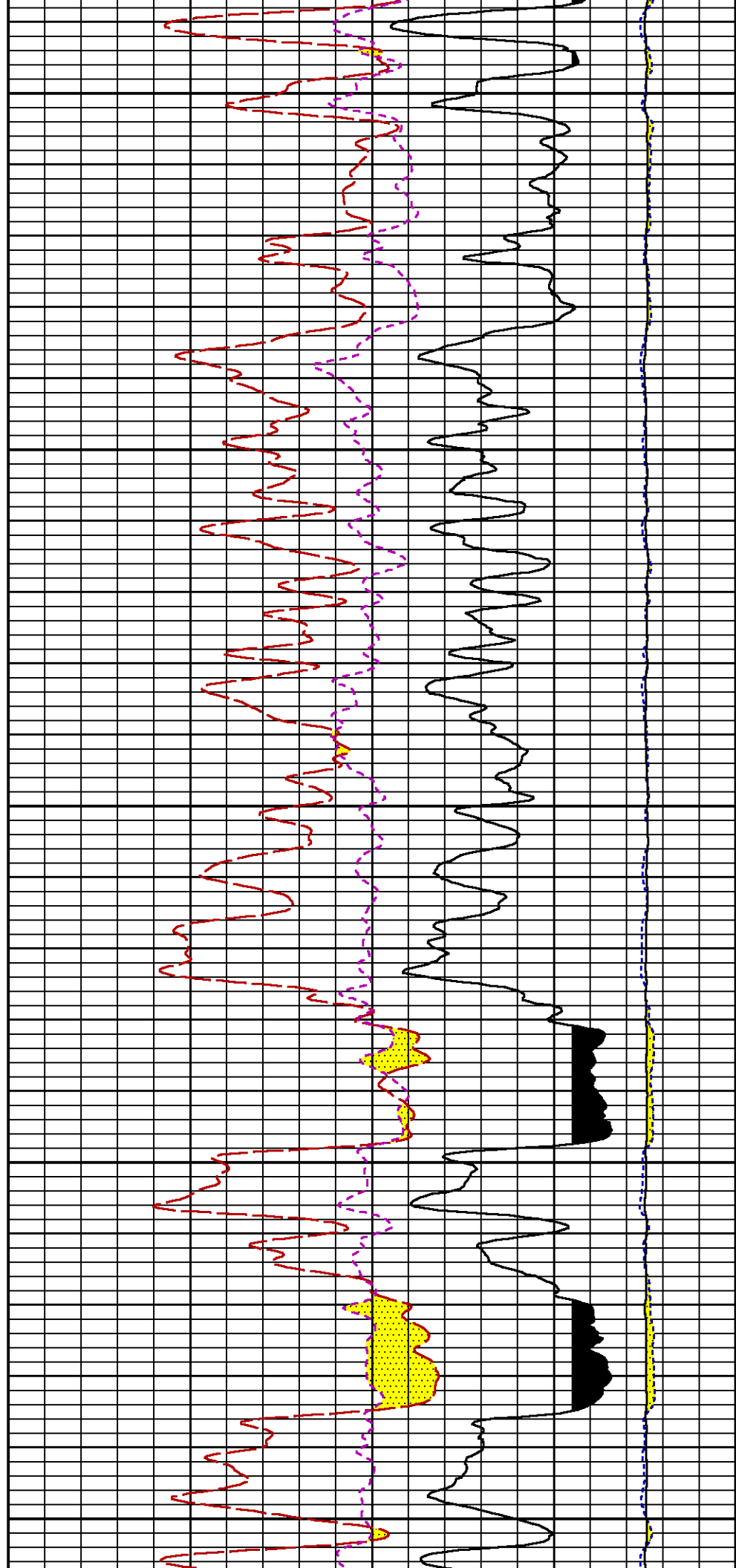
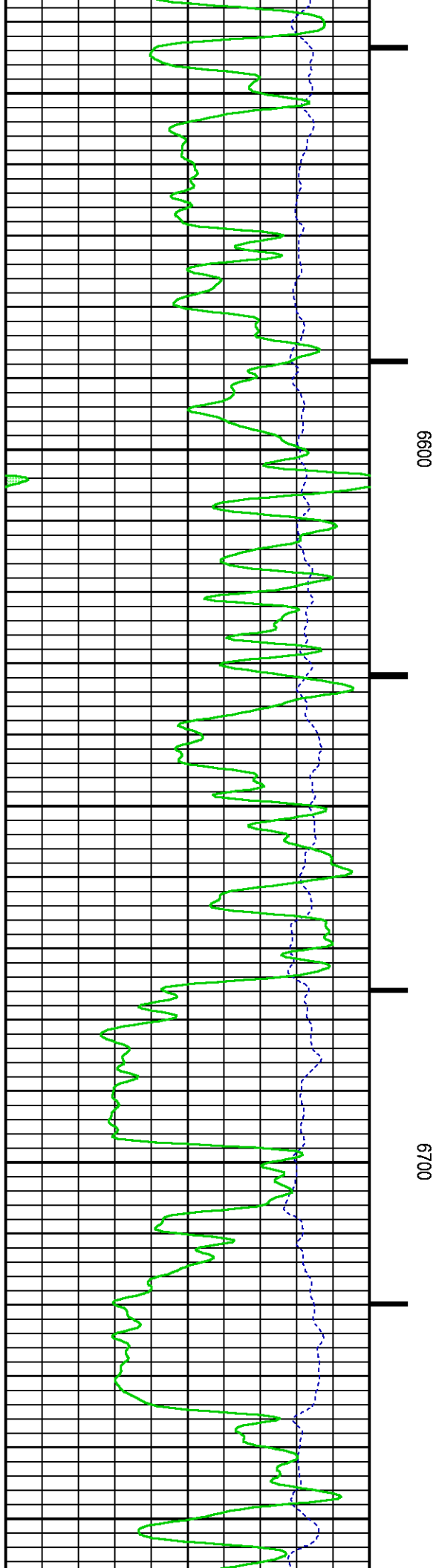


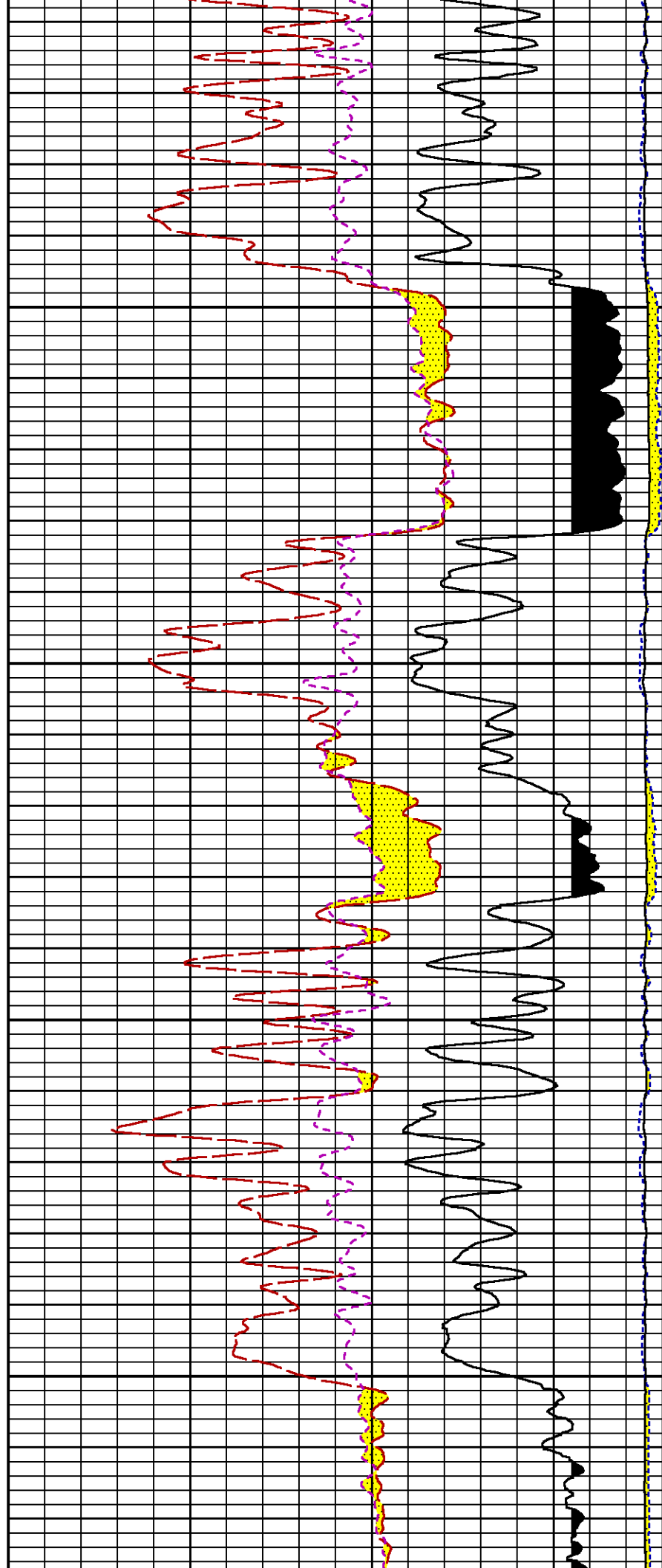
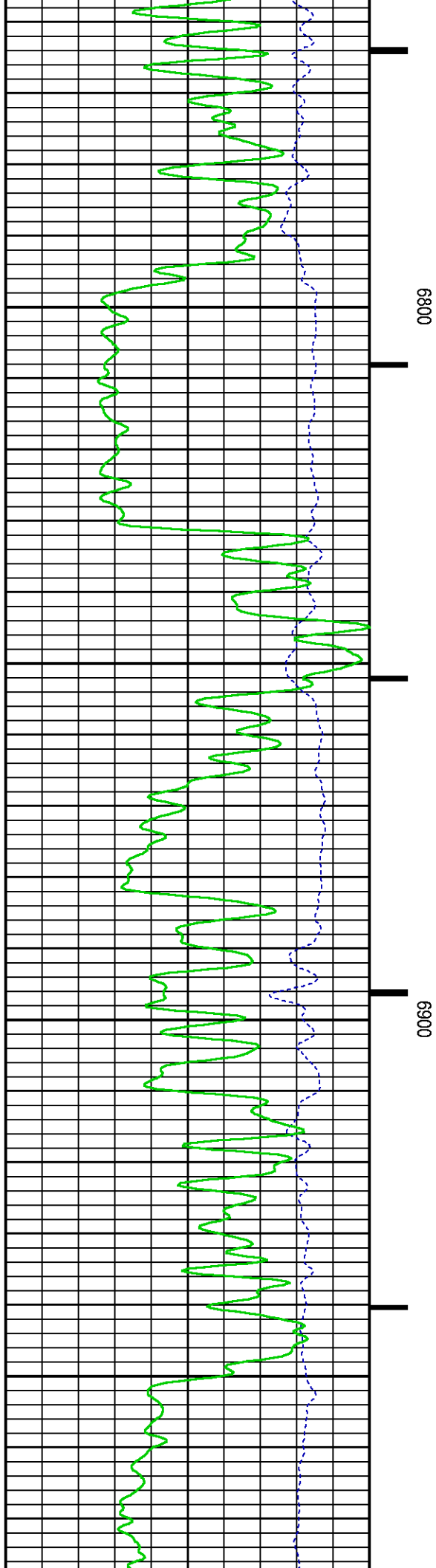


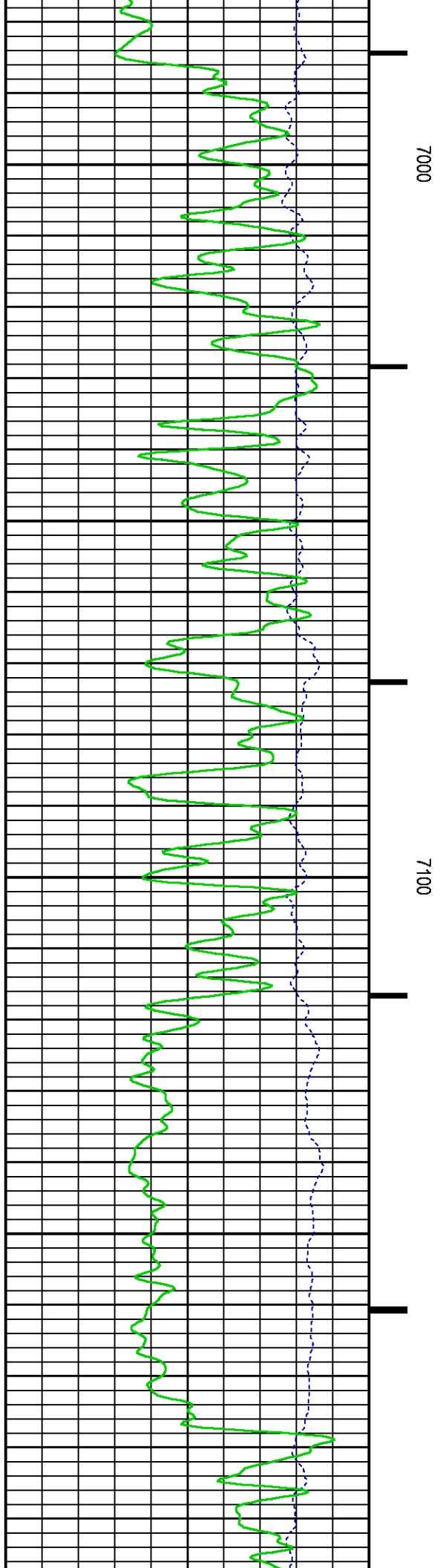
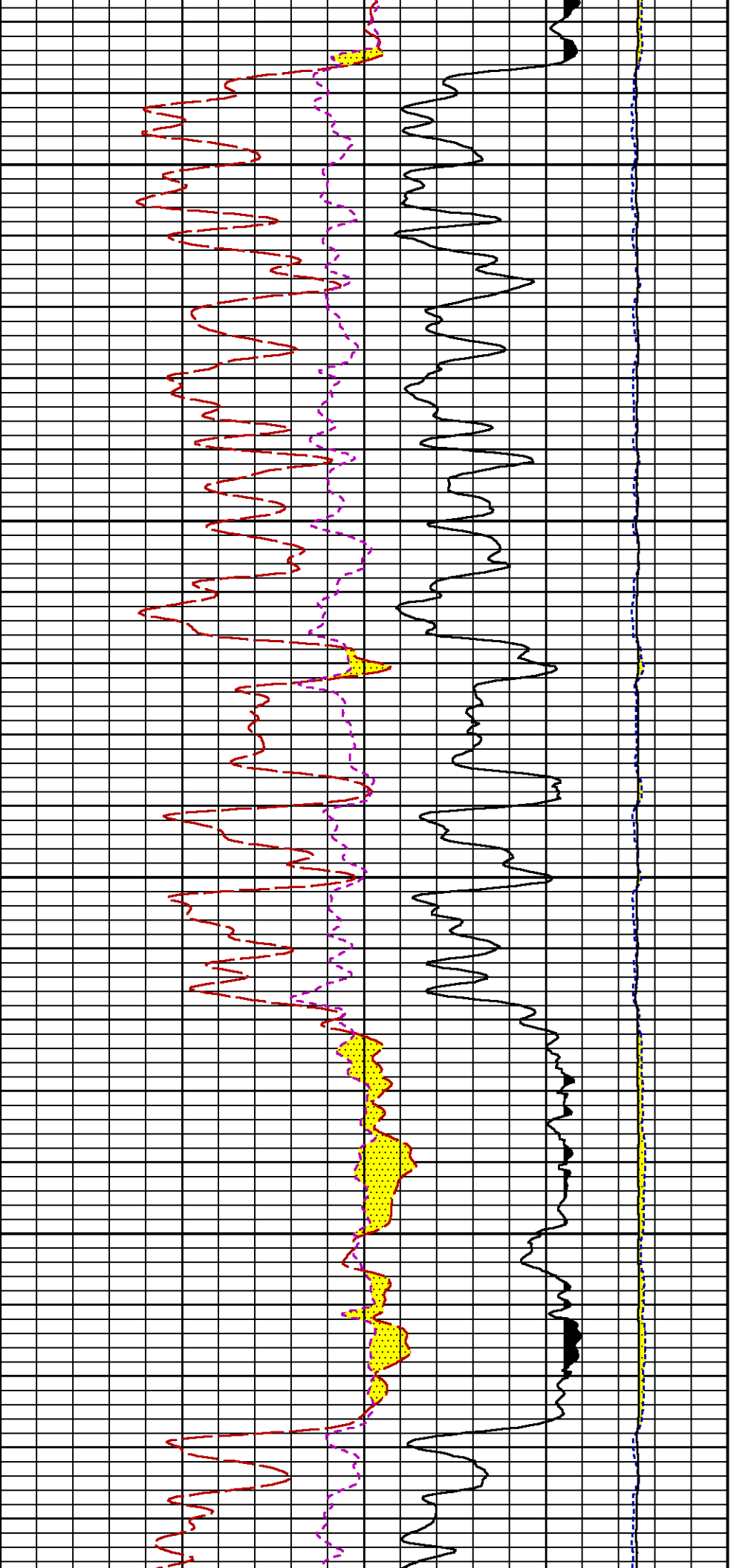


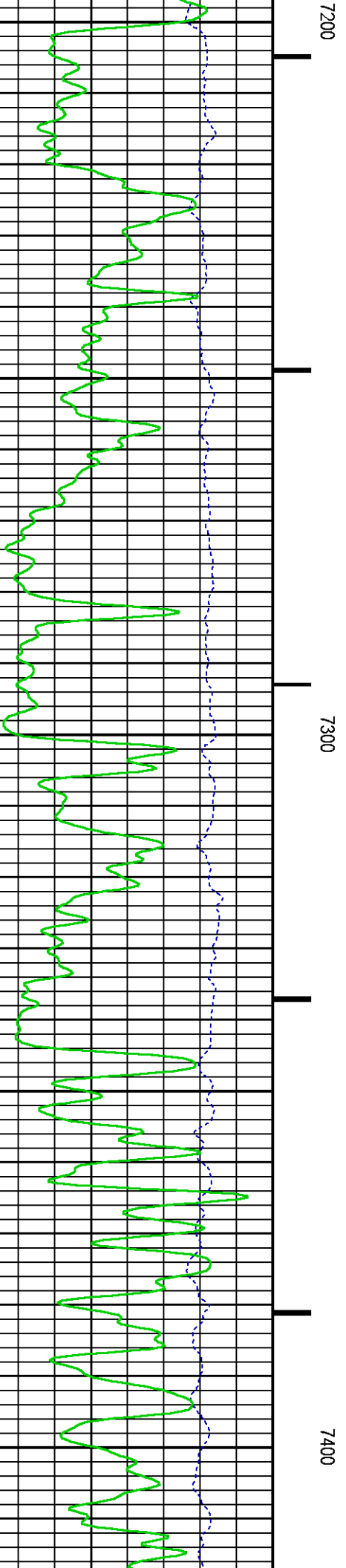
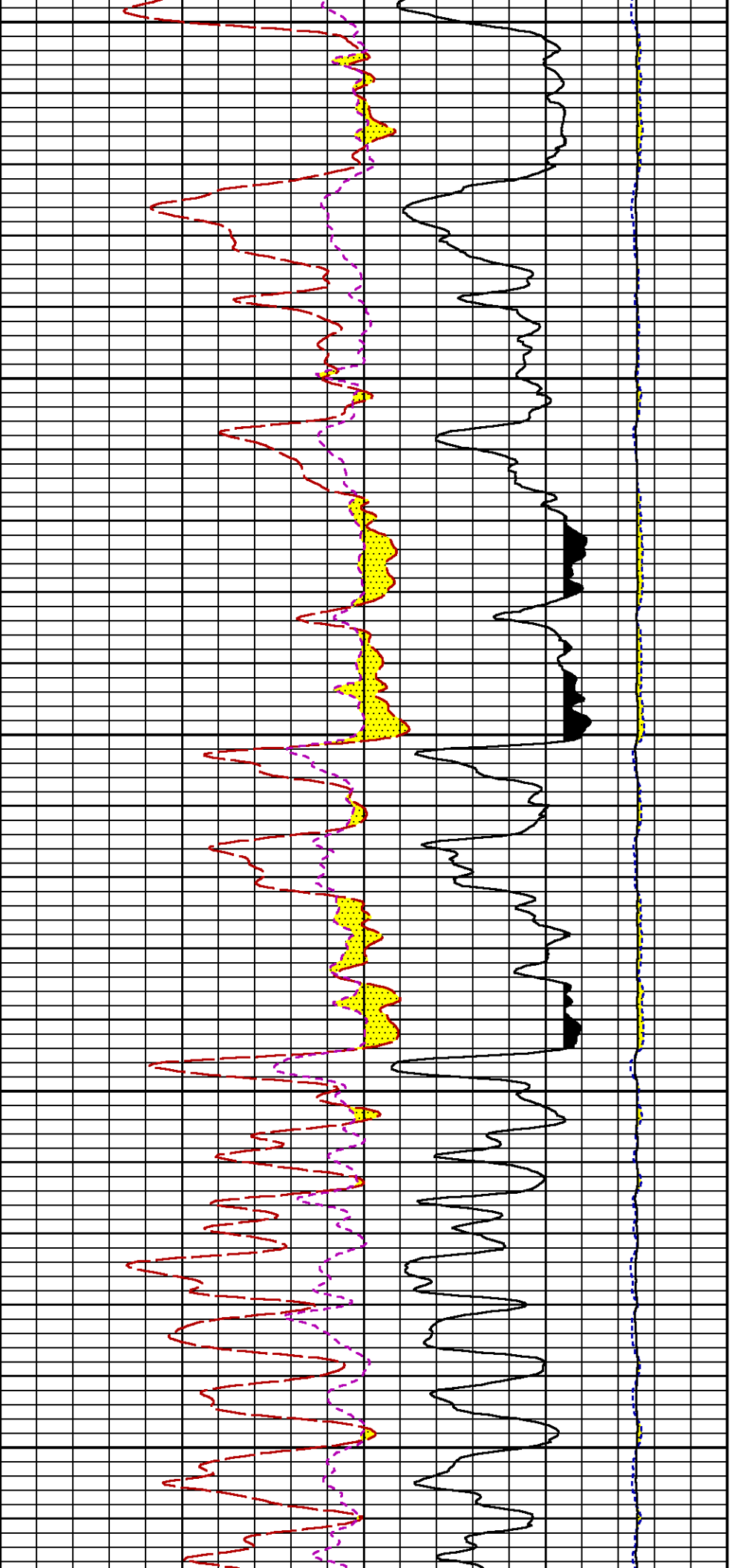


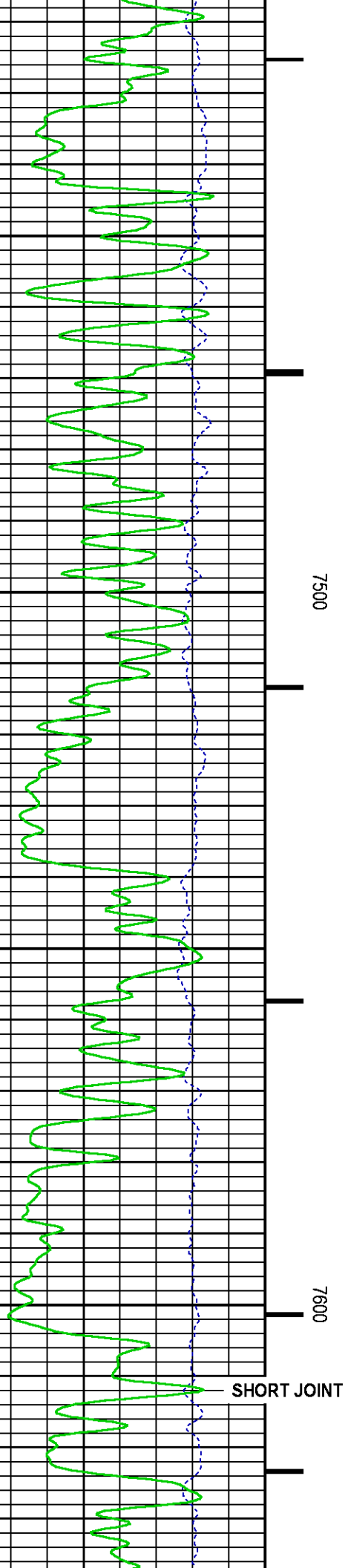
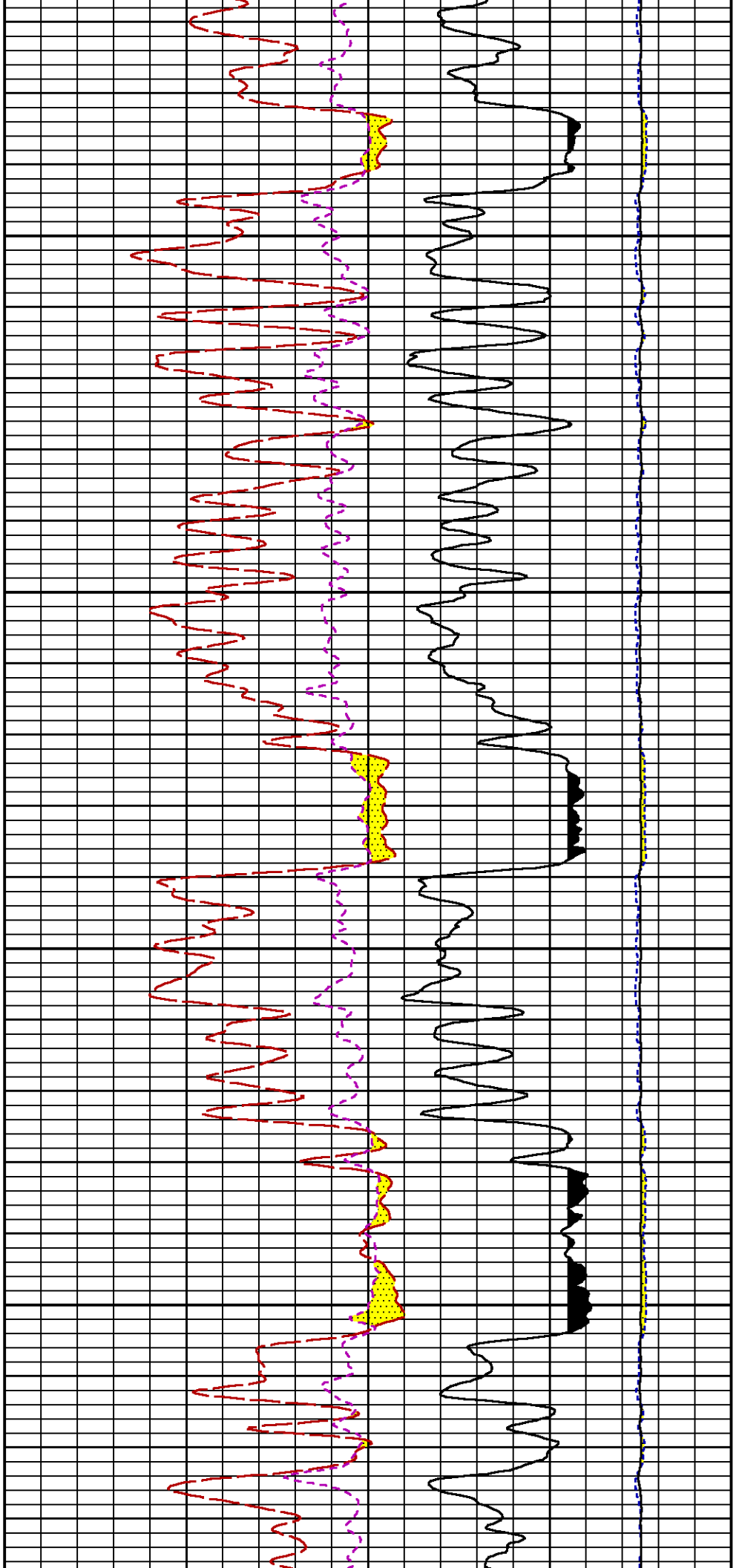


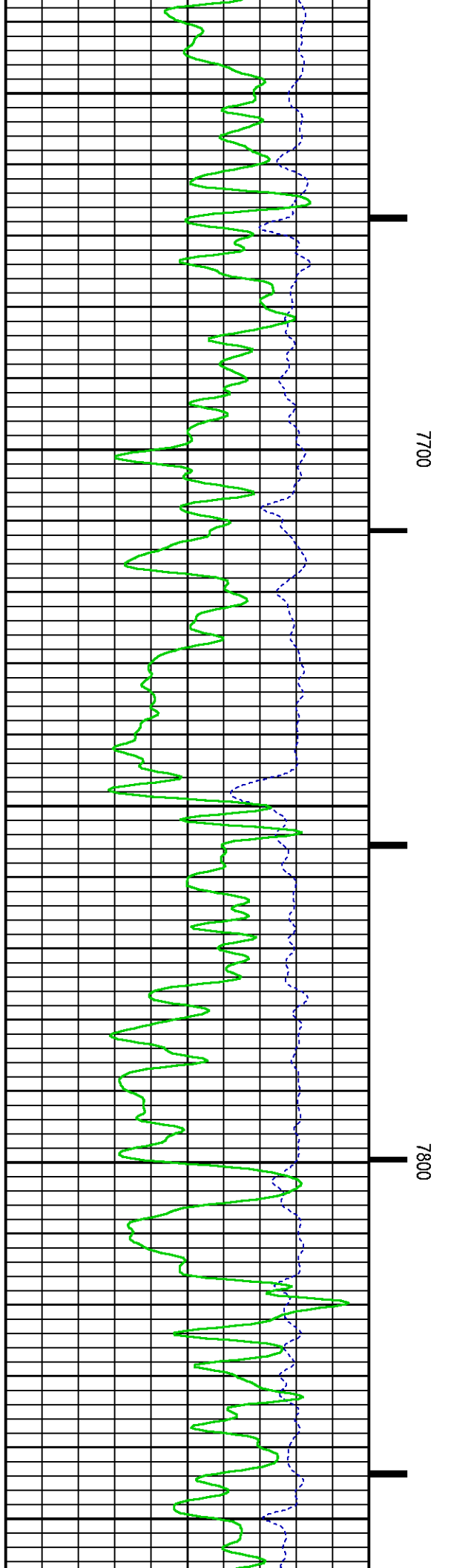
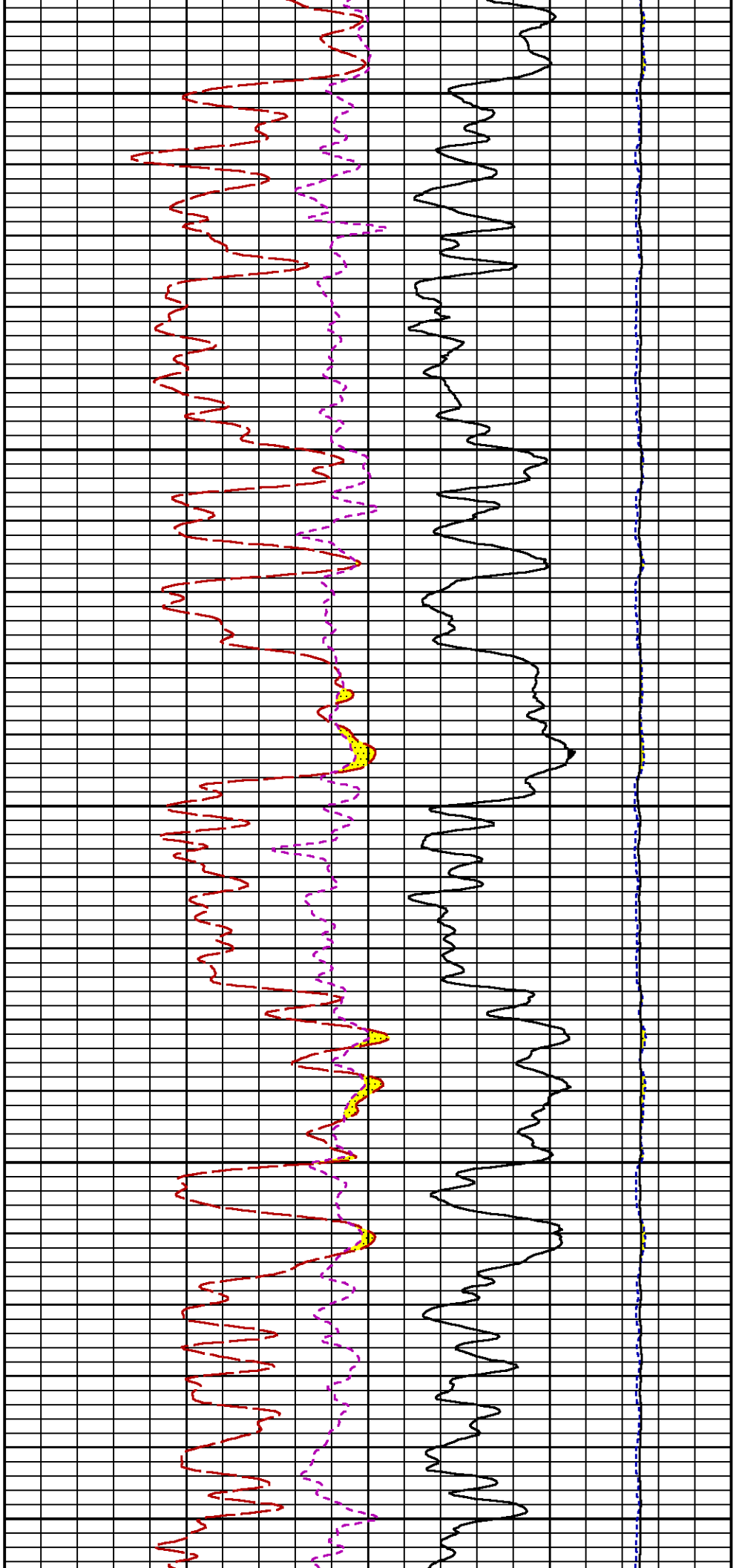


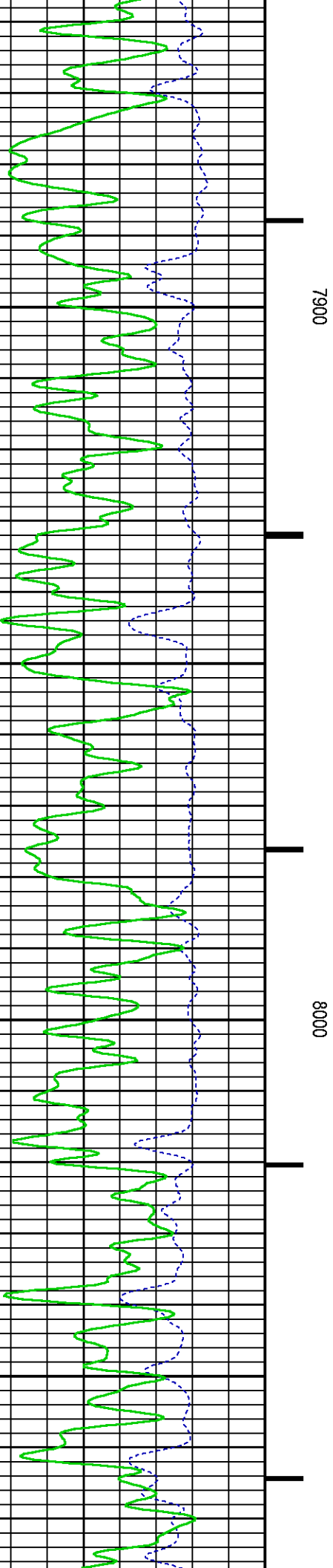
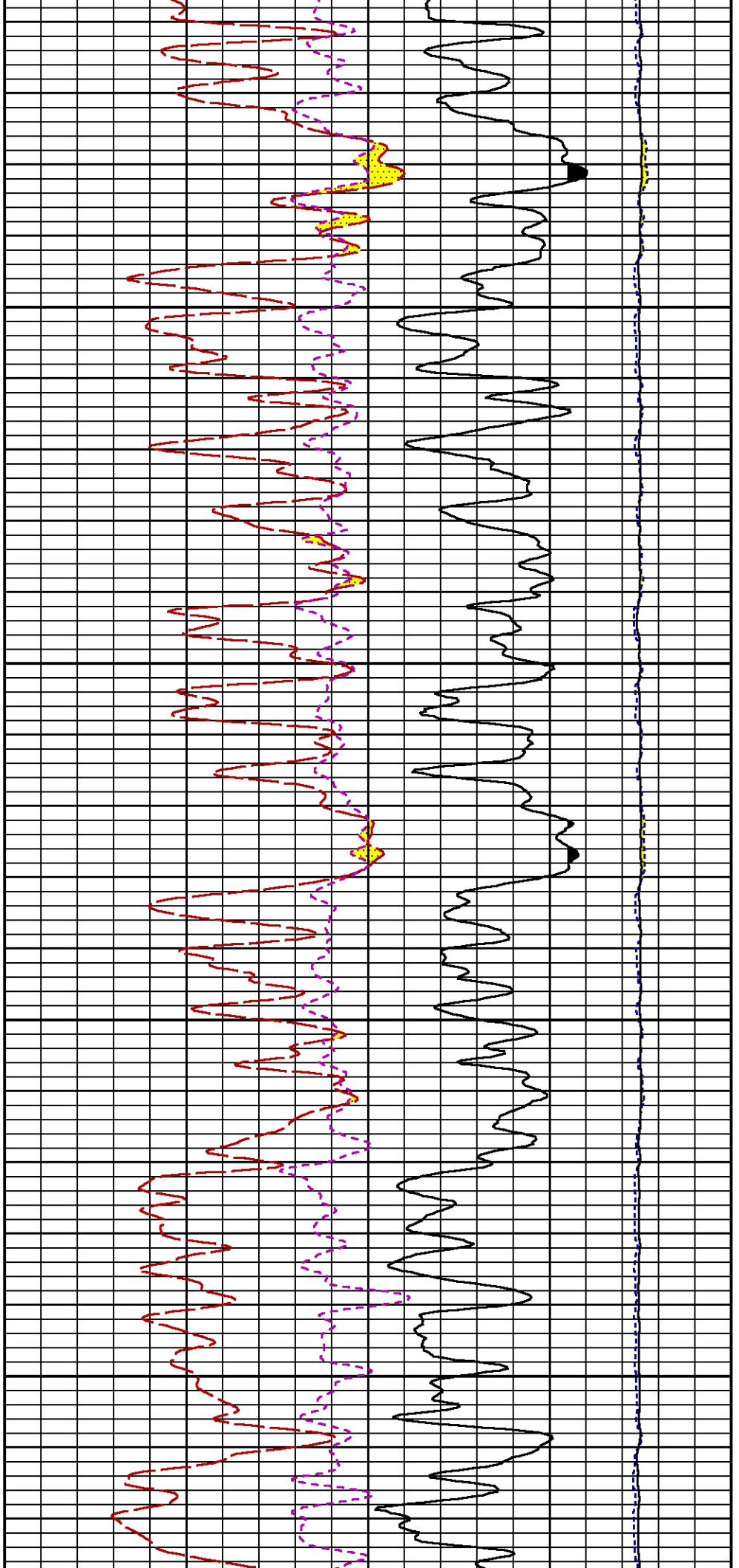


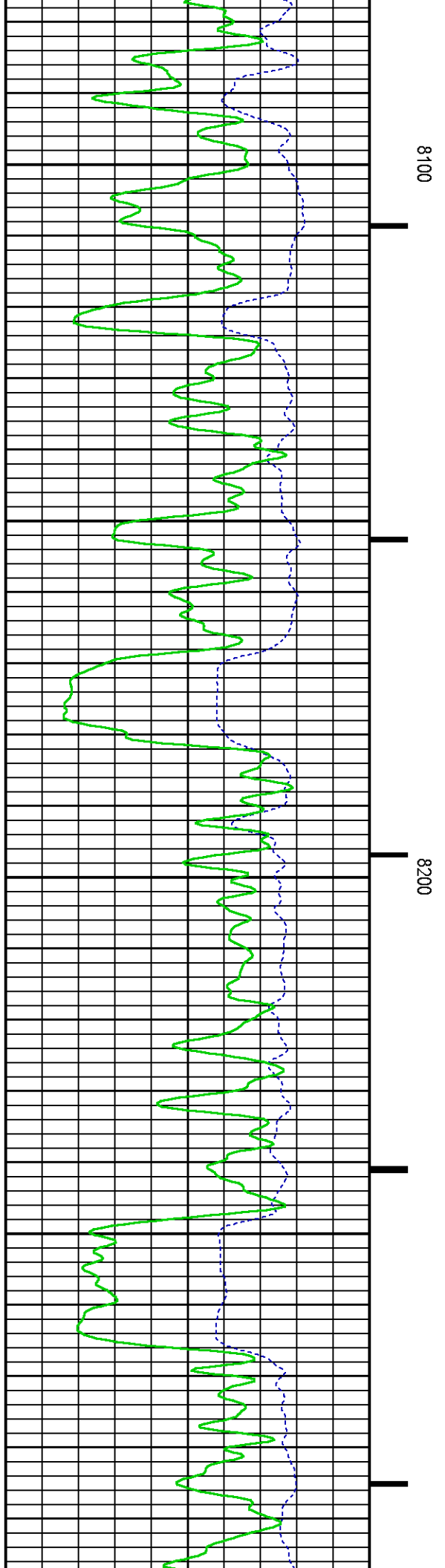
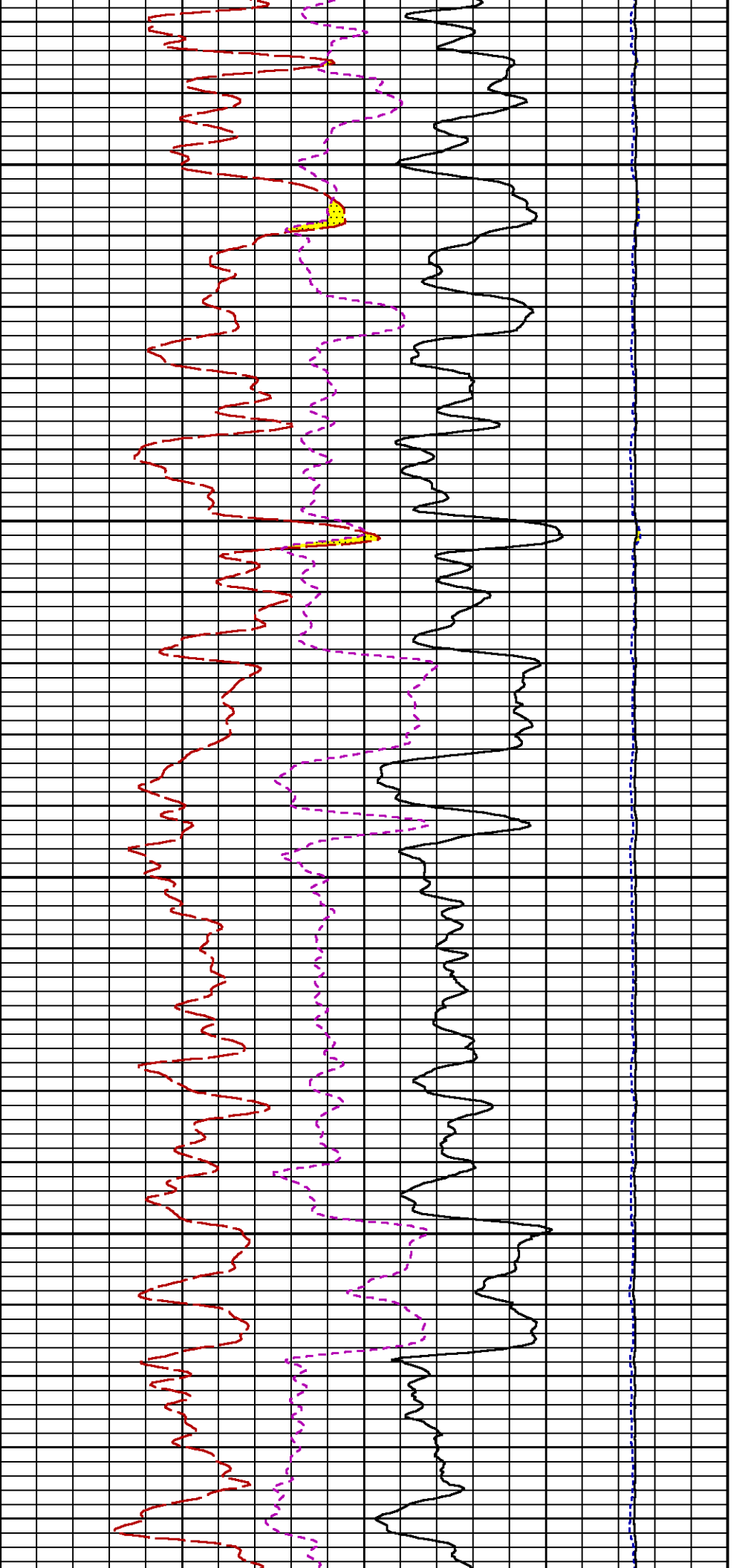


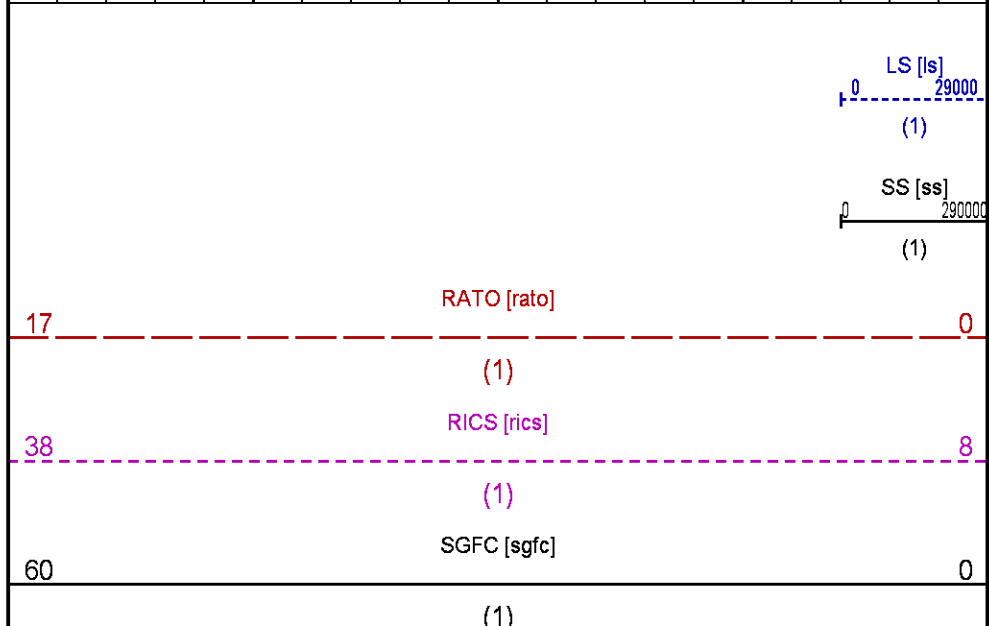
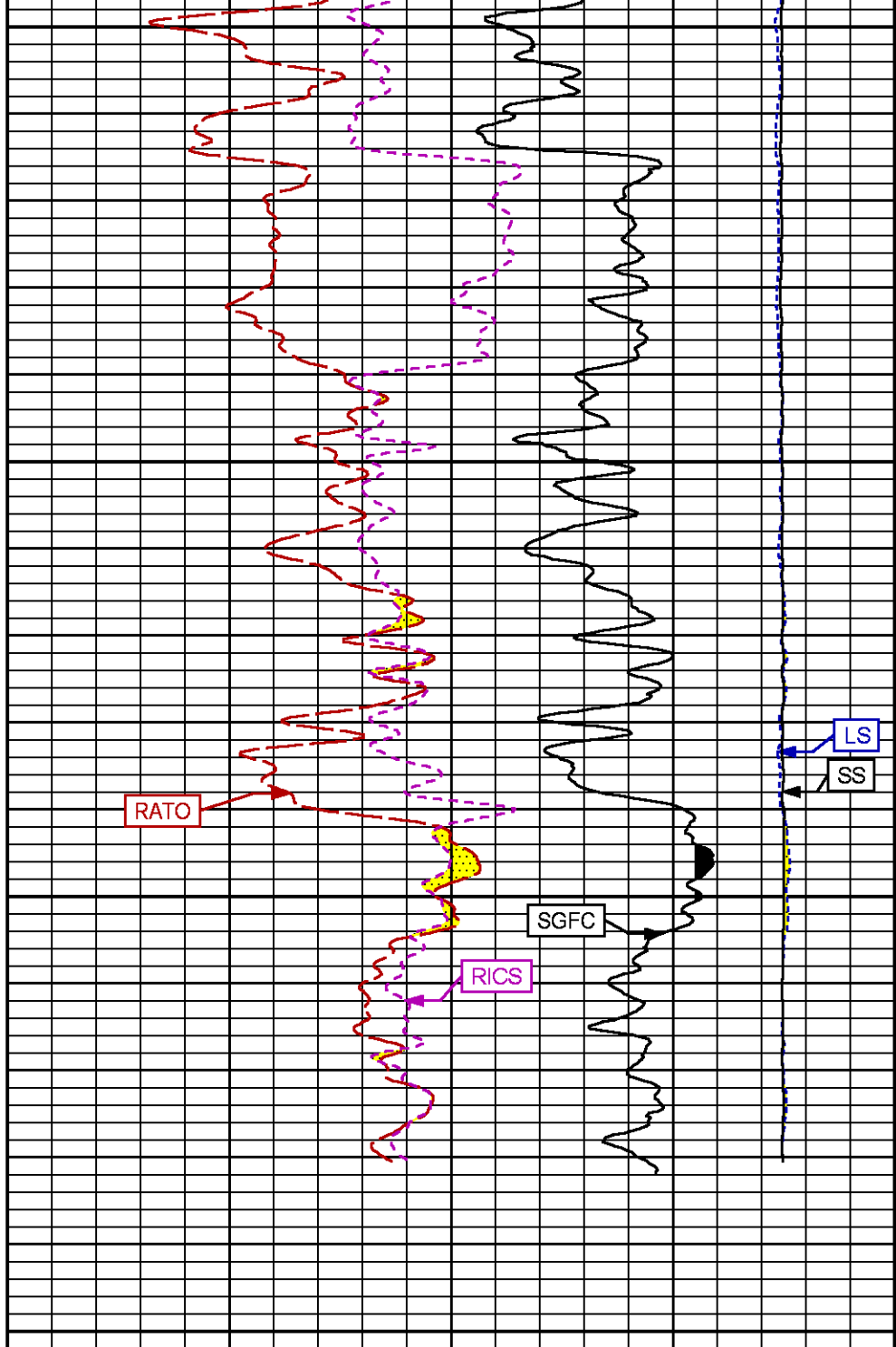
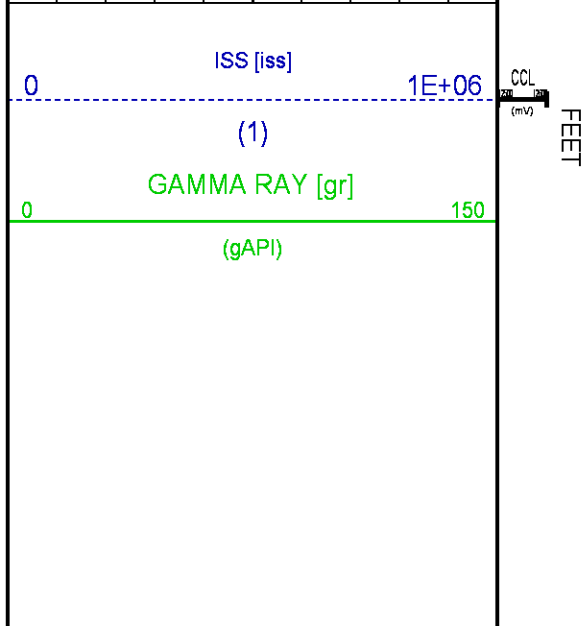
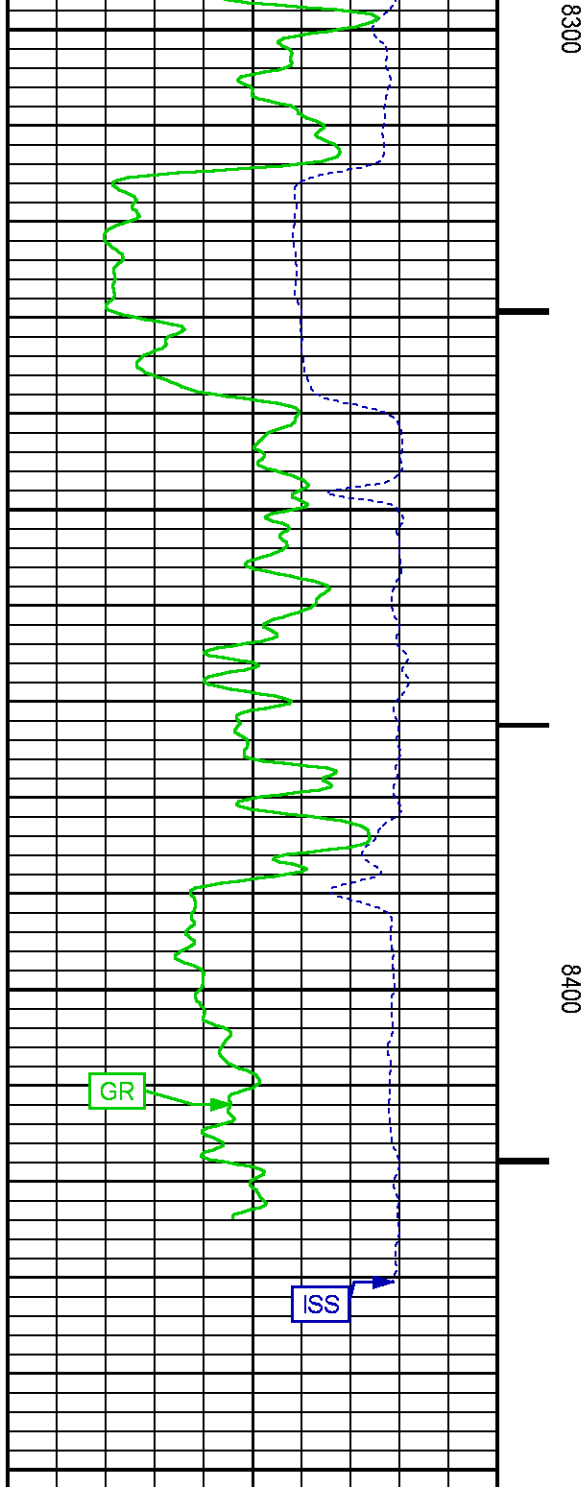












G-SAND SECTION PNC-3D MODE

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

Updates: 1 Patches: 4

Plotted: Wed Nov 26 05:59:15 2014

PARAMETER AND FILTER SUMMARY REPORT

FILE: /dat1a/CH090460/n354h03.prm
LOGGING MODE: DEPTH DIRECTION: UP
TOP DEPTH: 3368.250 ft BOTTOM DEPTH: 3713.750 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	Nov 26 05:34:47 2014	CASING COLLAR LOCATOR
F1:GR	Nov 26 05:34:47 2014	GAMMA RAY
F1:ISS	Nov 26 05:34:47 2014	INELASTIC SHORT SPACE COUNT RATE
F1:LS	Nov 26 05:34:47 2014	LONG SPACE COUNT RATE
F1:RATO	Nov 26 05:34:47 2014	SHORT/LONG SPACE COUNT RATE RATIO
F1:RICS	Nov 26 05:34:47 2014	SHORT SPACE INELASTIC TO CAPTURE COUNT RATE RATIO (ISS/CSS)
F1:SGFC	Nov 26 05:34:47 2014	CORRECTED FORMATION SIGMA
F1:SS	Nov 26 05:34:47 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/CH090460/12M_RPM_GSAND.fvpdf [5"/100' Scale]
Plot Interval : 3370 - 3680 Feet

Data File 1 : F1 : HL6670:/dat1a/CH090460/12M_RPM_GSAND.xtf
Created On : Nov 26 05:34:47 2014
Company : LARAMIE ENERGY
Well : SUP & SHEP FEDERAL 25-12M
Field : VEGA
File Interval : 3342.25 - 3713.75 Feet
OCT : n354h

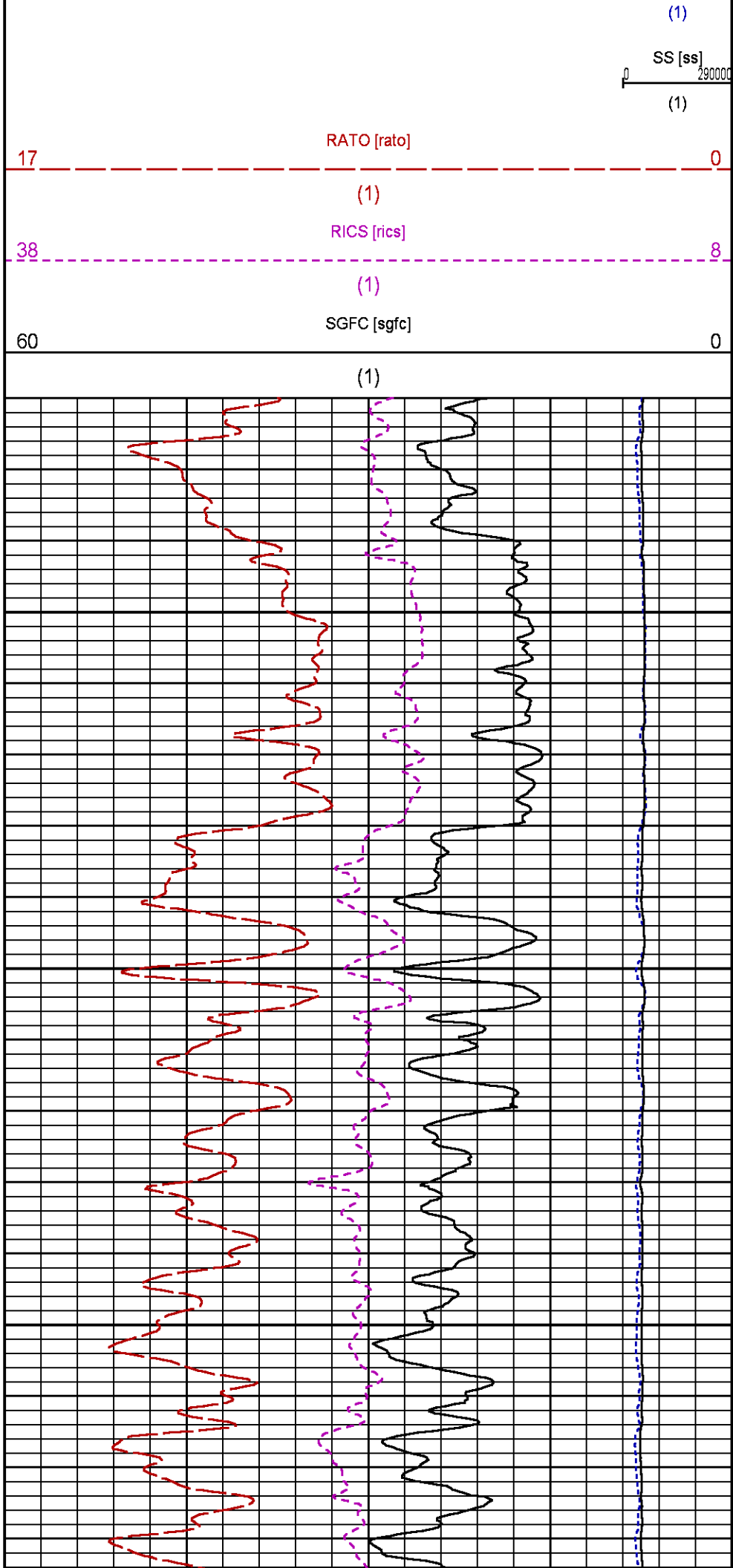
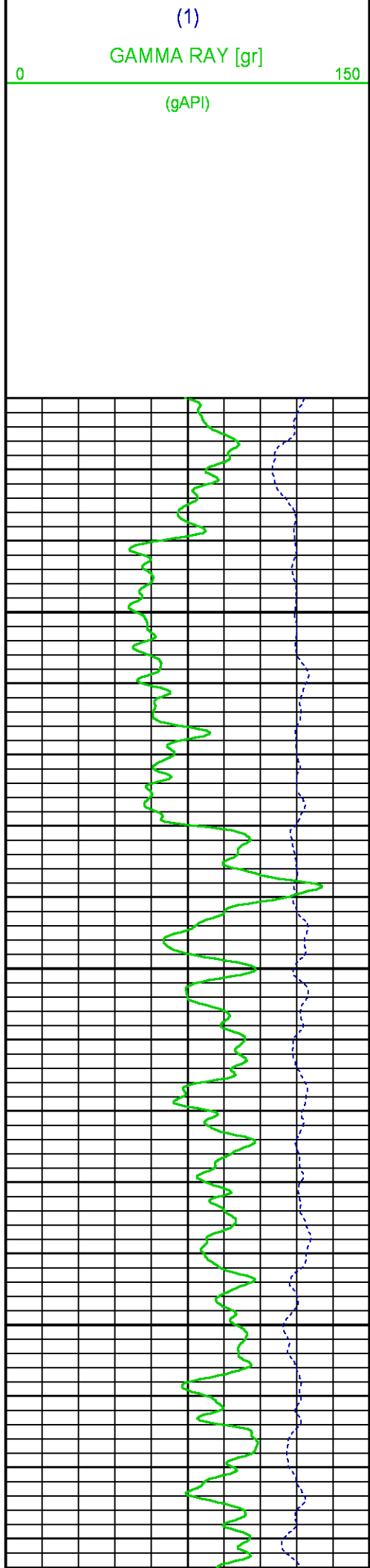
ISS [iss]

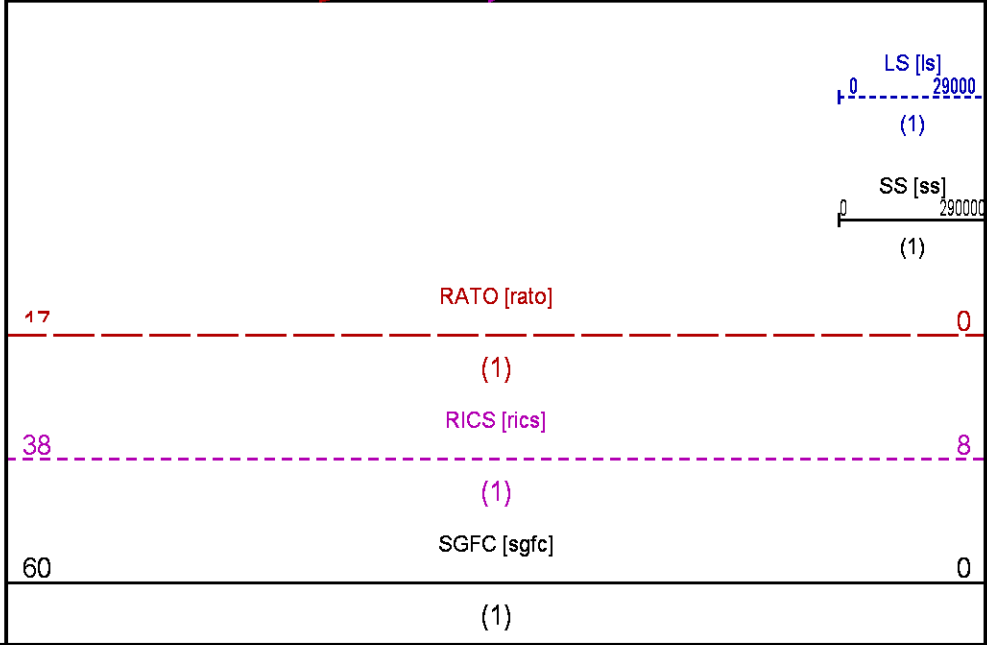
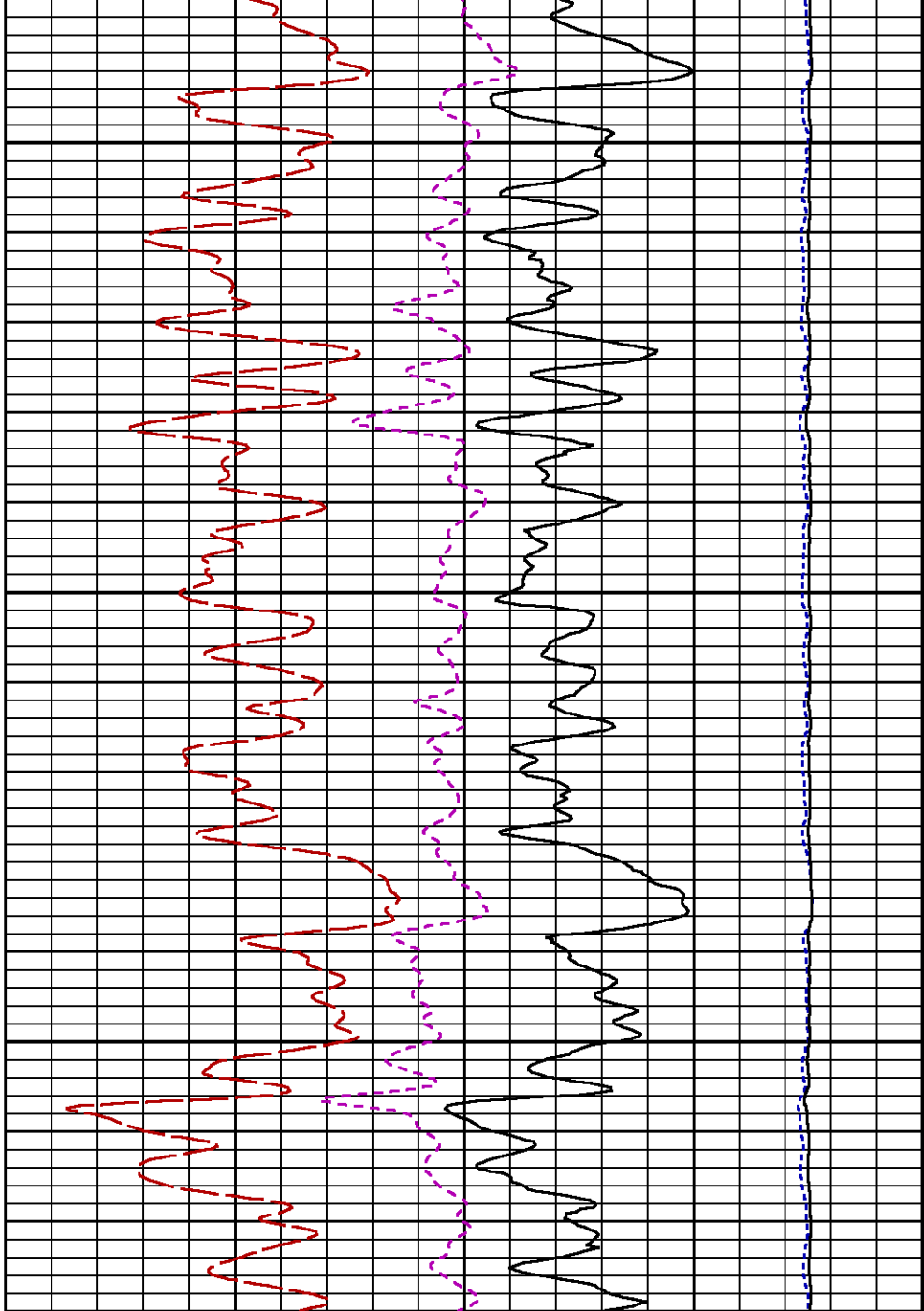
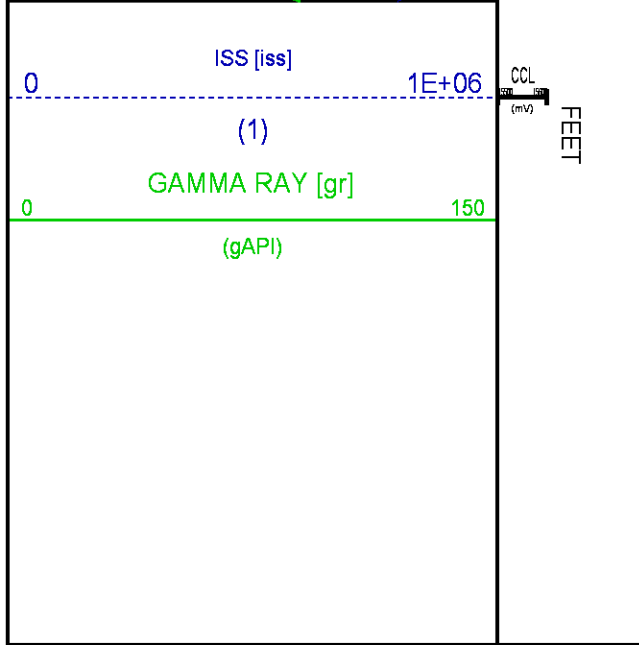
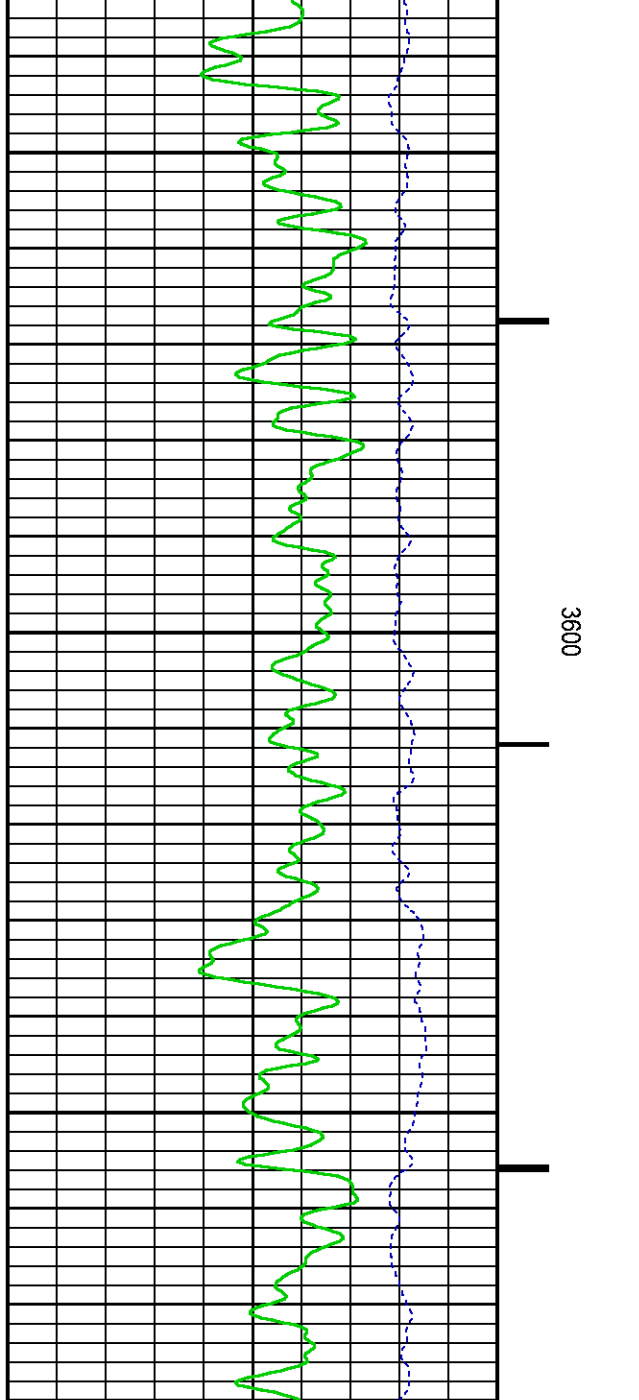
1E+06

CCL
F1
F1

LS [ls]

0 29000





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 Nov 26 05:50:35 2014

PARAMETER AND FILTER SUMMARY REPORT

FILE: /dat1a/CH090460/n354h01.prm
LOGGING MODE: DEPTH DIRECTION: UP
TOP DEPTH: 8209.750 ft BOTTOM DEPTH: 8451.600 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	Nov 26 01:41:22 2014	CASING COLLAR LOCATOR
F1:GR	Nov 26 01:41:22 2014	GAMMA RAY
F1:ISS	Nov 26 01:41:22 2014	INELASTIC SHORT SPACE COUNT RATE
F1:LS	Nov 26 01:41:22 2014	LONG SPACE COUNT RATE
F1:RATO	Nov 26 01:41:22 2014	SHORT/LONG SPACE COUNT RATE RATIO
F1:RICS	Nov 26 01:41:22 2014	SHORT SPACE INELASTIC TO CAPTURE COUNT RATE RATIO (ISS/CSS)
F1:SGFC	Nov 26 01:41:22 2014	CORRECTED FORMATION SIGMA
F1:SS	Nov 26 01:41:22 2014	SHORT SPACE COUNT RATE

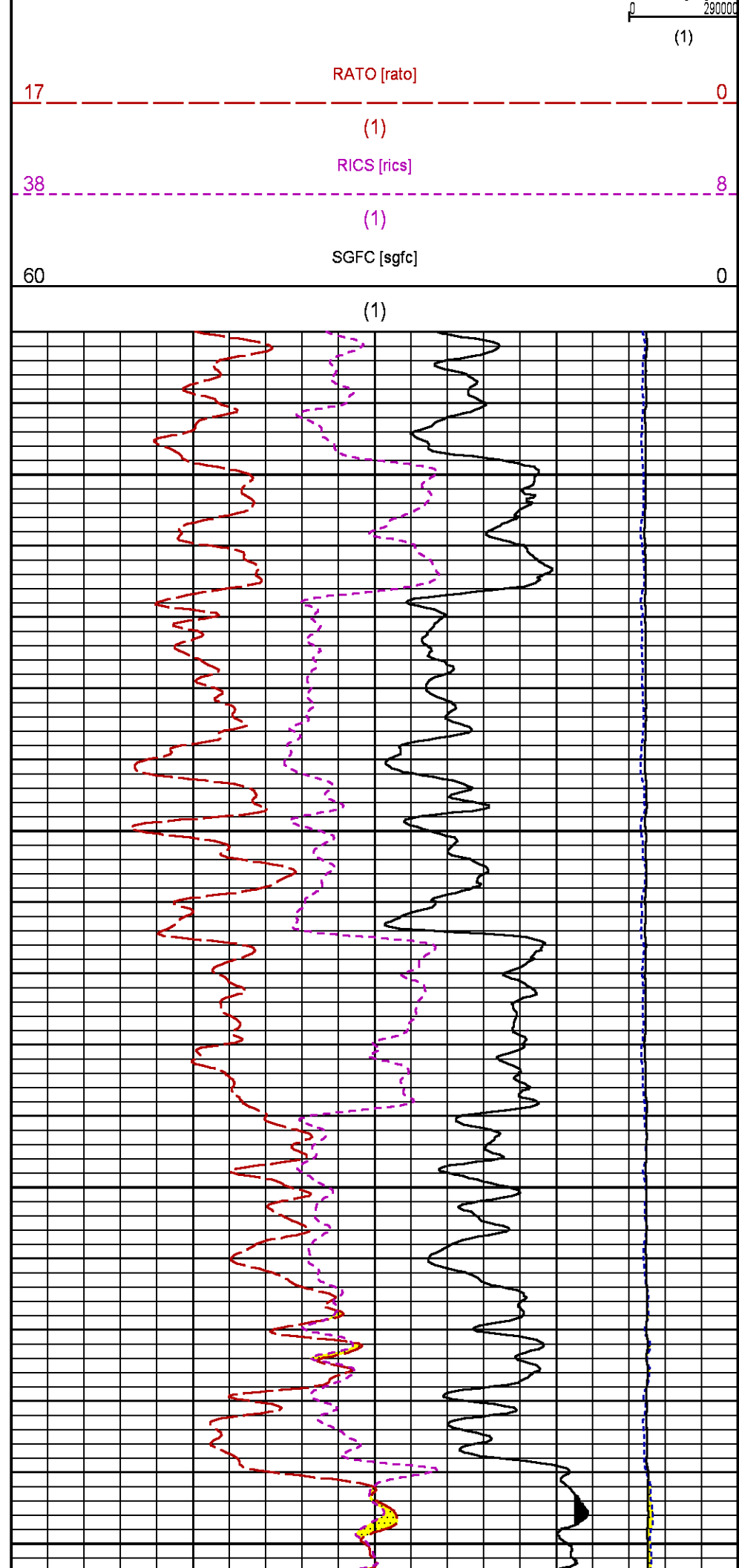
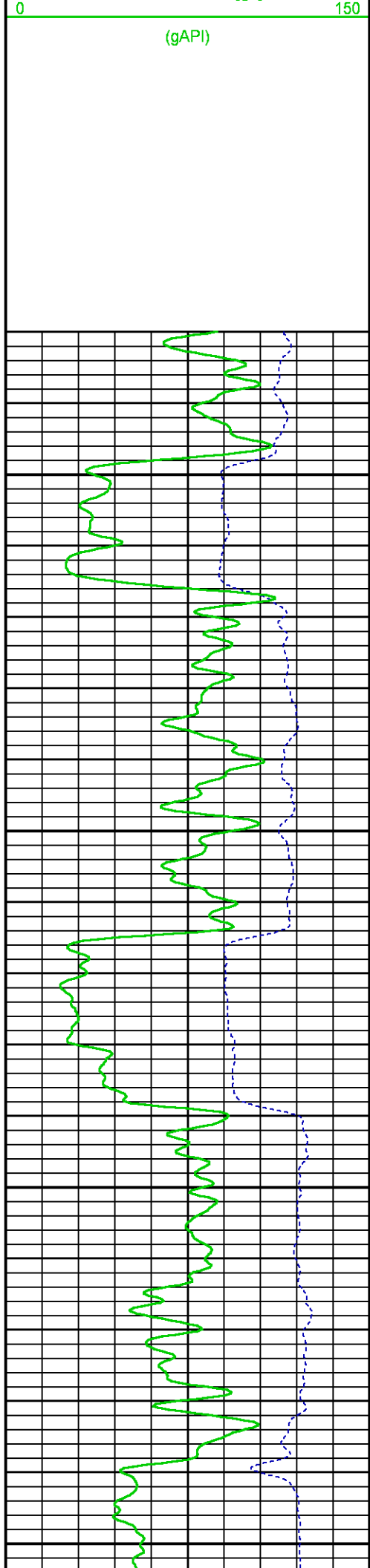
CURVE MEASURE POINT OFFSET

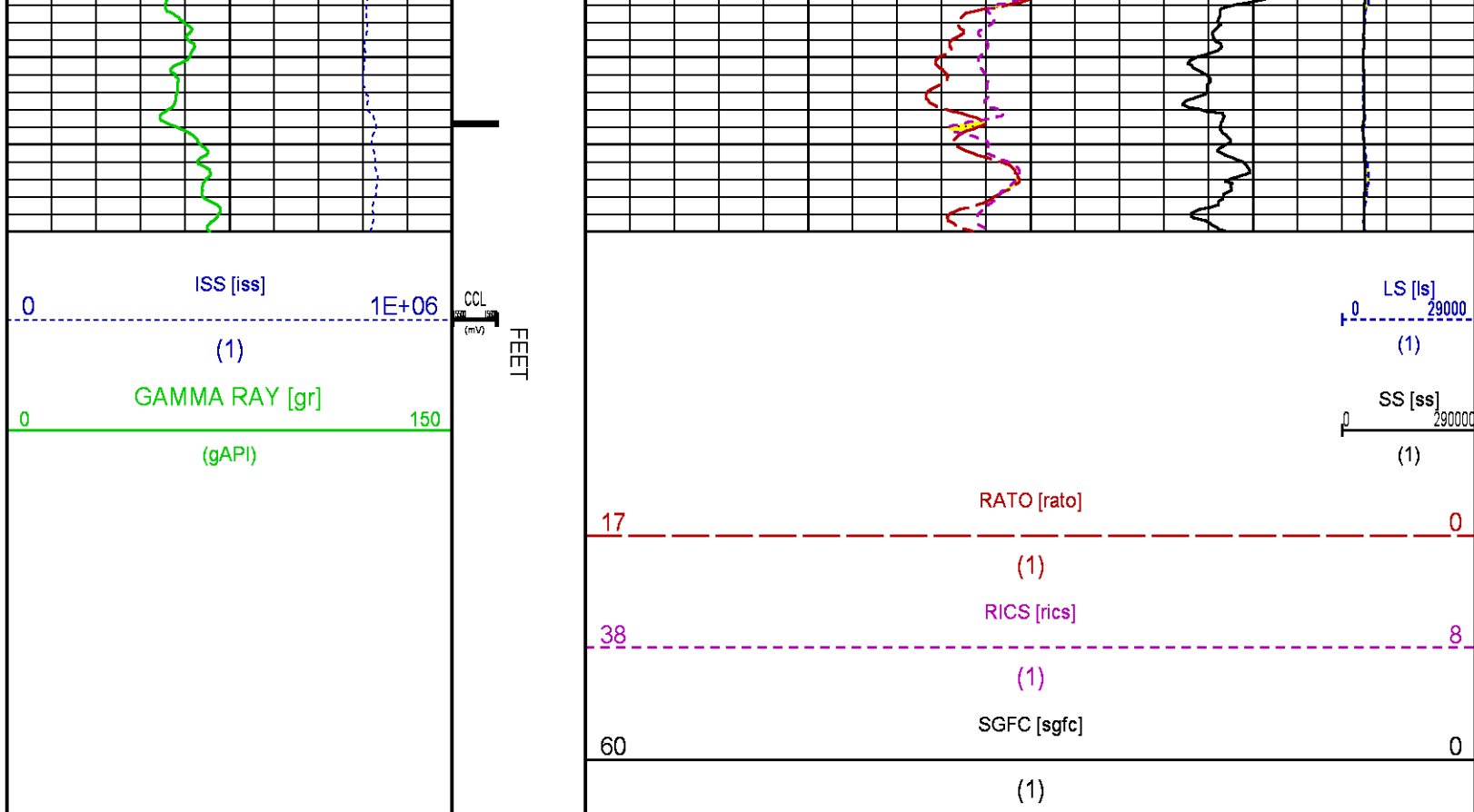
CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
CCL	25.00	ISS	12.75	RATO	12.75	SGFC	12.75
GR	22.75	LS	12.75	RICS	12.75	SS	12.75

Presentation : HL6670:/dat1a/CH090460/12M_RPM_REPEAT.fvpdf [5"/100' Scale]
Plot Interval : 8230 - 8430 Feet

Data File 1 : F1 : HL6670:/dat1a/CH090460/12M_RPM_REPEAT.xtf
Created On : Nov 26 01:41:22 2014
Company : LARAMIE ENERGY
Well : SUP & SHEP FEDERAL 25-12M
Field : VEGA
File Interval : 8195.25 - 8458.25 Feet
OCT : n354h







CALIBRATION / VERIFICATION SUMMARY

Source File: /dat1a/CH090460/n354h.tp1

GR PRIMARY CALIBRATION SUMMARY

TOOL #: 2812LA 11701636

DATE/TIME PERFORMED: Wed Nov 12 13:41:56 2014

UNIT #: 3880TA HL6670

CALB JIG #: 4702NK WA-612

	BACKGROUND (cts/s)	CALBRTR ON (cts/s)	CR DIFF (cts/s)	MULT	BACKGROUND (gAPI)	CALBRTR ON (gAPI)	CALBRTR (gAPI)
GR	59.84	276.27	216.4	0.970	58.07	268.07	210

GR PRIMARY VERIFICATION SUMMARY

TOOL #: 2812LA 11701636

DATE/TIME PERFORMED: Wed Nov 12 13:44:33 2014

UNIT #: 3880TA HL6670

VERI JIG #: 4702NK WA-612

	BACKGROUND (cts/s)	CALBRTR ON (cts/s)	MULT	BACKGROUND (gAPI)	CALBRTR ON (gAPI)	DIFF. (gAPI)
GR	56.98	275.16	0.970	55.29	266.99	211.70
						200.00 220.00

RPM_PNC_3D PRIMARY CALIBRATION SUMMARY

TOOL: 8283PA 10160383

DATE/TIME PERFORMED: Wed Nov 12 12:22:40 2014

UNIT: 3880TA HL6670

CALIBRATOR: 2437XB 112674

SOURCE: 8281AA 11765055

HOURS: 8281AA 36

	ISS	Mtr Vltz (V)	SS Gain	LS Gain	XLS Gain	EA Temp (degF)	Sync Delay (usec)	RCAL
Raw Data	799301	125	2276	2258	2216	100	7	0.9764
Interpolated	1300000	148	2255	2251	2211			

	ISS	BKS	BKL	BKX	SGA1	SDA1	SGA2	SDA2
Raw Data	799301	6536	1023	136	26.07	0.15	24.33	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	799301	171372	25970	89191	31734	8236	53881	13187
Fit Quality %		0.646	0.555	0.505	0.529	0.631	0.451	0.602

	ISS	RBOR	RIN ISS/ILS	RIN13 ISS/IXS	RICS ISS/CSS	RATO SS/LS	RTWO SS2/LS	RONE CSS/CLS
Raw Data	799301	1.43	4.66	30.79	14.84	10.83	3.85	4.09
		1.42 1.45	3.55 5.52	22.20 32.70	10.89 16.34	10.06 11.10	3.57 3.95	3.76 4.22
Fit Quality %		0.058	0.340	0.278	0.287	0.114	0.083	0.098
Reduced	1373098	1.43	4.65	30.73	14.80	10.82	3.85	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 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/CH092574/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

33.24'

Series : 8248ED
Mnemonic : PCM
Measure Point: 1.00': CCL MP

CCL MP 25.19'

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

	COMPANY	<u>LARAMIE ENERGY</u>		FILE NO:	<u>CH090460</u>
	WELL	<u>SUP & SHEP FEDERAL 25-12M</u>		API NO:	<u>050770996920000</u>
	FIELD	<u>VEGA</u>			
	COUNTY	<u>MESA</u>	STATE	<u>COLORADO</u>	
	LOCATION:	SHL: LONG -107.722732 LAT 39.245030 BHL: LONG -107.721169 LAT 39.244051		ELEVATIONS:	SEC 25 T9S R93W SUP&SHEP 25-11M PATTERSON 306
	SEC <u>25</u>	TWP <u>9S</u>	RGE <u>93W</u>	DATE	<u>26-Nov-2014</u>

