



FILE NO: CH089276		COMPANY WPX ENERGY	
API NO: 05045217840000		WELL FEDERAL NER 34-32	
		FIELD RULISON	
		COUNTY GARFIELD	
		STATE CO	
Ver. 3.87 32 GS 93W RU 23-5 PAD NABORS 576		LOCATION: SHL: 132' FNL & 2587' FWL(5 7S 93W) BHL: 1116' FSL & 1971' FEL(32 GS 93W) SEC 32 TWP 6S RGE 93W	
PERMANENT DATUM LOG MEASURED FROM DRILL. MEAS. FROM		OTHER SERVICES BOND LOG ELEVATIONS: KB 7629 FT DF GL 7603 FT	
GL ELEVATION 7603 FT KB 26 FT ABOVE P.D. KB			
DATE 31-Aug-2014			
RUN TRIP 1 1			
SERVICE ORDER US089276			
DEPTH DRILLER 10199 FT			
DEPTH LOGGER 10163 FT			
BOTTOM LOGGED INTERVAL 10153 FT			
TOP LOGGED INTERVAL 6055 FT			
TIME STARTED 16:30			
TIME FINISHED 23:30			
OPERATOR RIG TIME 7 HOURS			
TYPE OF FLUID IN HOLE WATER			
FLUID DENSITY NA			
FLUID SALINITY NA			
FLUID LEVEL 117 FT			
LOGGED CEMENT TOP NA			
WELLHEAD PRESSURE 0 PSI			
MAXIMUM HOLE DEVIATION NA			
NOMINAL LOGGING SPEED 10 FMN			
MAX. RECORDED TEMP. 244 DEGF			
REFERENCE LOG BAKER HUGHES BOND LOG			
REFERENCE LOG DATE 30-Aug-2014			
EQUIP. NO. LOCATION 6670			
RECORDED BY NEWELL			
WITNESSED BY JEFF DUCY			

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	1101 FT
8.75 IN	1101 FT	10251 FT

CASING RECORD				
SIZE	WEIGHT	GRADE	FROM	TO
9.625 IN			0 FT	1101 FT
4.5 IN	11.6 LB/F	P-110	0 FT	10251 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 30/AUG/2014 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 7 feet.

Logged in PNC-3D mode

BHT = 244 degF
SJ = 6666' - 6688'

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	8262XA	10317216	FREE
1	1	RPM	8281EA	10273848	FREE
1	1	RPM	8283PA	10160383	FREE
1	1	RPM	8281FA	10307727	FREE
1	1	TEMP	8255XA	166341	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: 2

Plotted: Mon Sep 1 13:16:20 2014

PARAMETER AND FILTER SUMMARY REPORT

FILE: /dat1a/CH089276/n353h02.prm
 LOGGING MODE: DEPTH DIRECTION: UP
 TOP DEPTH: 6033.500 ft BOTTOM DEPTH: 10164.000 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

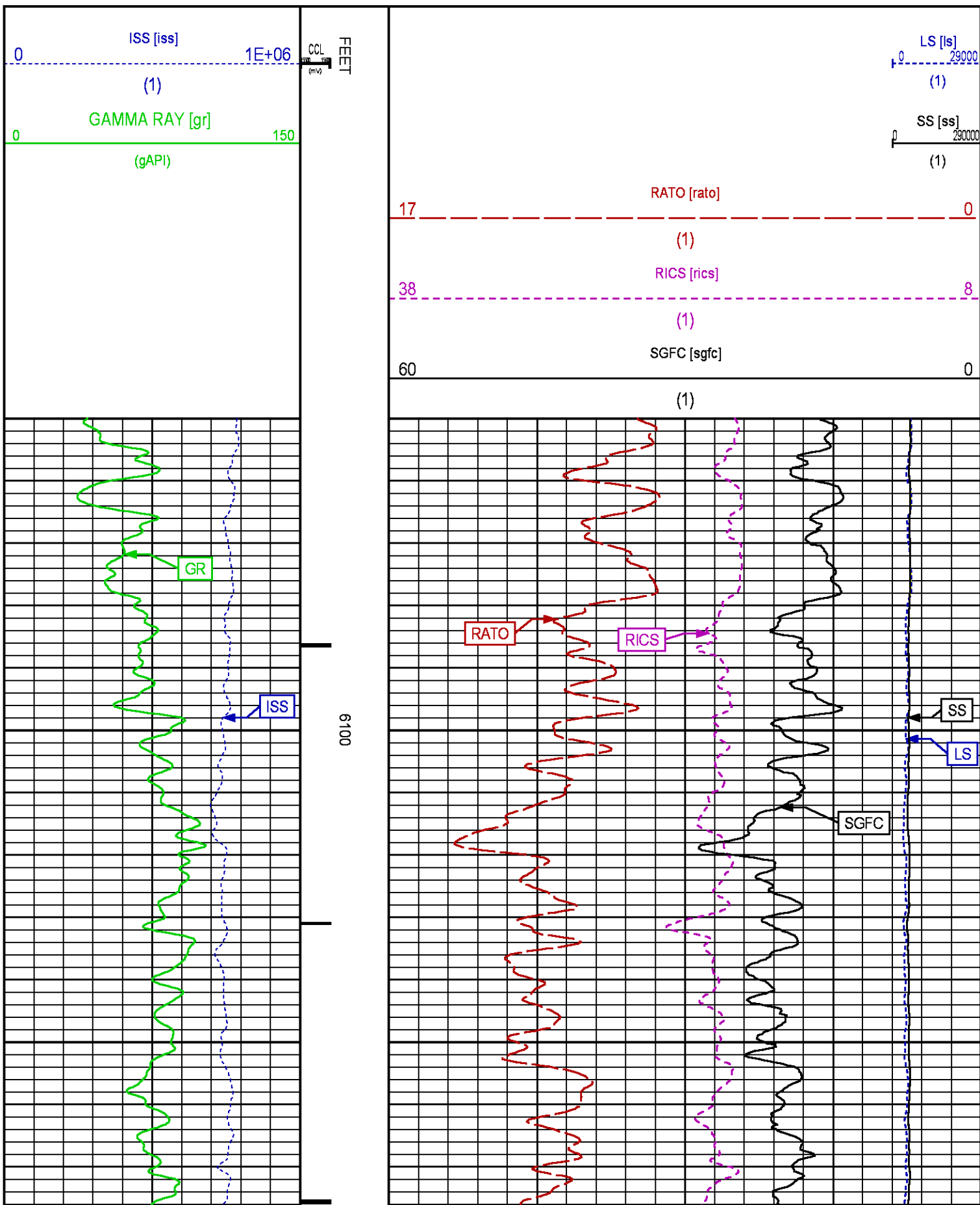
CURVE NAME	CREATION DATE	CURVE DESCRIPTION
F1:CCL	Aug 31 18:37:12 2014	CASING COLLAR LOCATOR
F1:GR	Aug 31 18:37:12 2014	GAMMA RAY
F1:ISS	Aug 31 18:37:12 2014	INELASTIC SHORT SPACE COUNT RATE
F1:LS	Aug 31 18:37:12 2014	LONG SPACE COUNT RATE
F1:RATO	Aug 31 18:37:12 2014	SHORT/LONG SPACE COUNT RATE RATIO
F1:RICS	Aug 31 18:37:12 2014	SHORT SPACE INELASTIC TO CAPTURE COUNT RATE RATIO (ISS/CSS)
F1:SGFC	Aug 31 18:37:12 2014	CORRECTED FORMATION SIGMA
F1:SS	Aug 31 18:37:12 2014	SHORT SPACE COUNT RATE

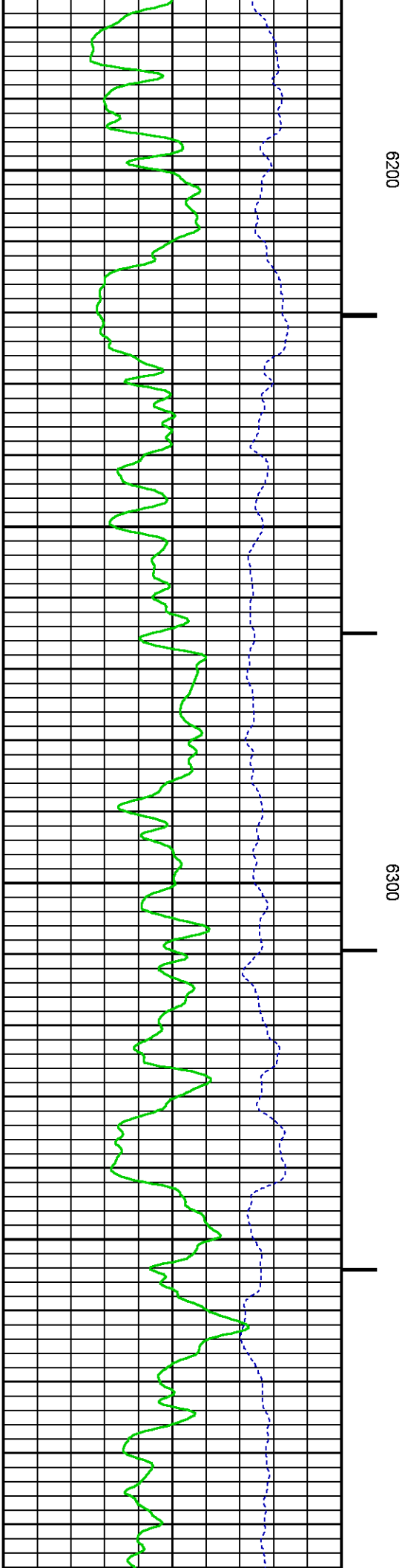
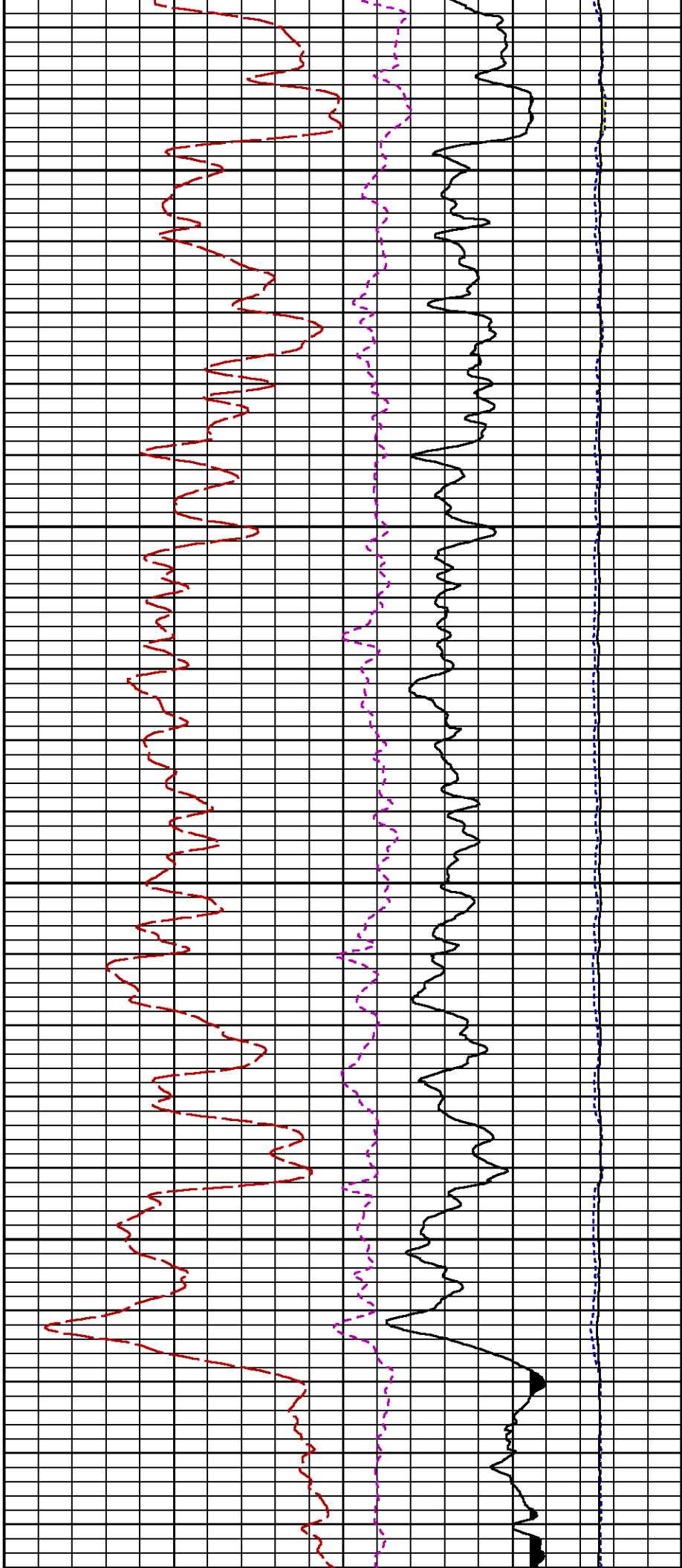
CURVE MEASURE POINT OFFSET

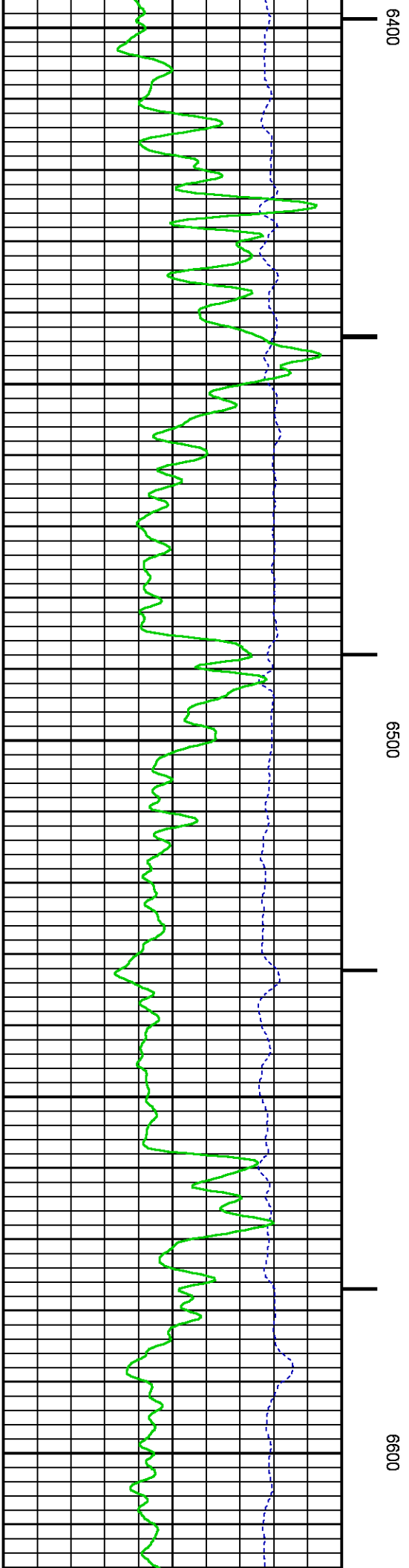
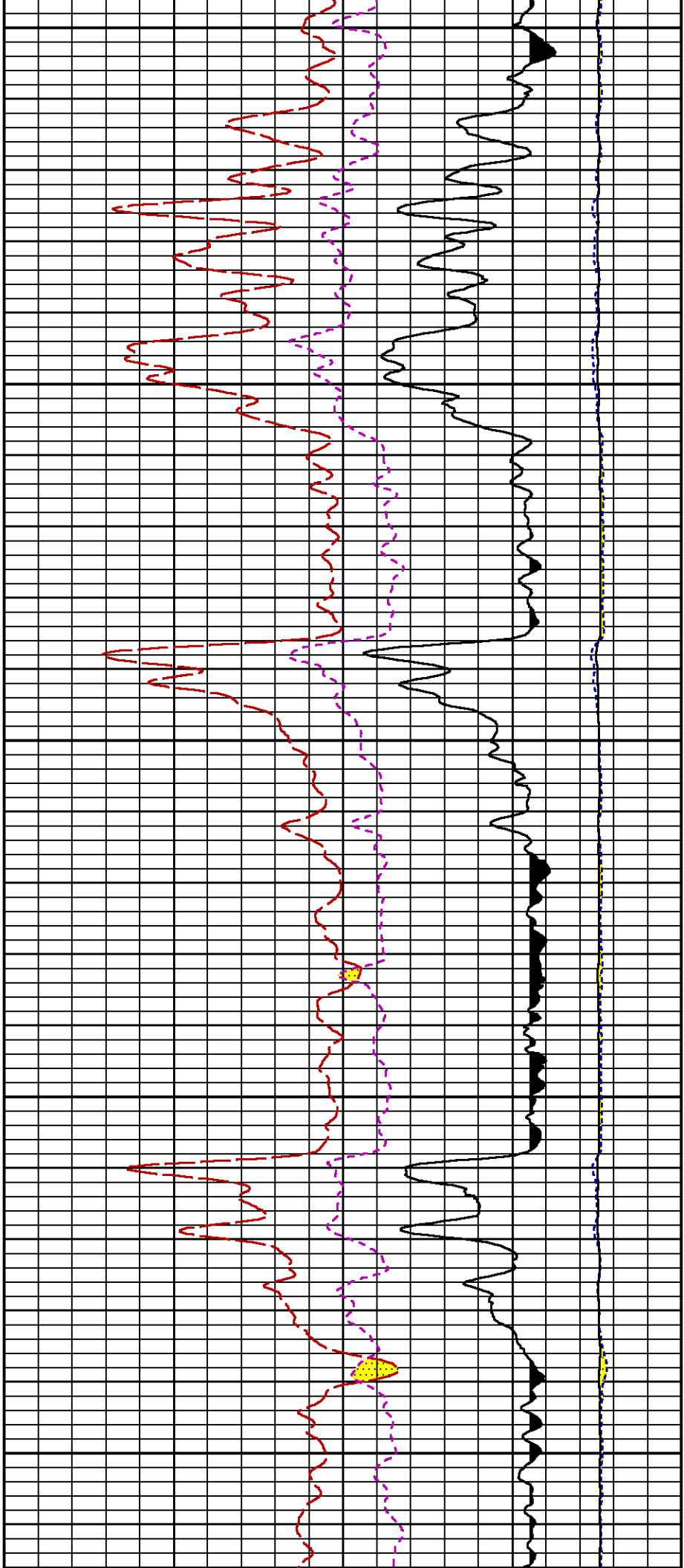
CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
CCL	26.00	ISS	12.75	RATO	12.75	SGFC	12.75
GR	23.00	LS	12.75	RICS	12.75	SS	12.75

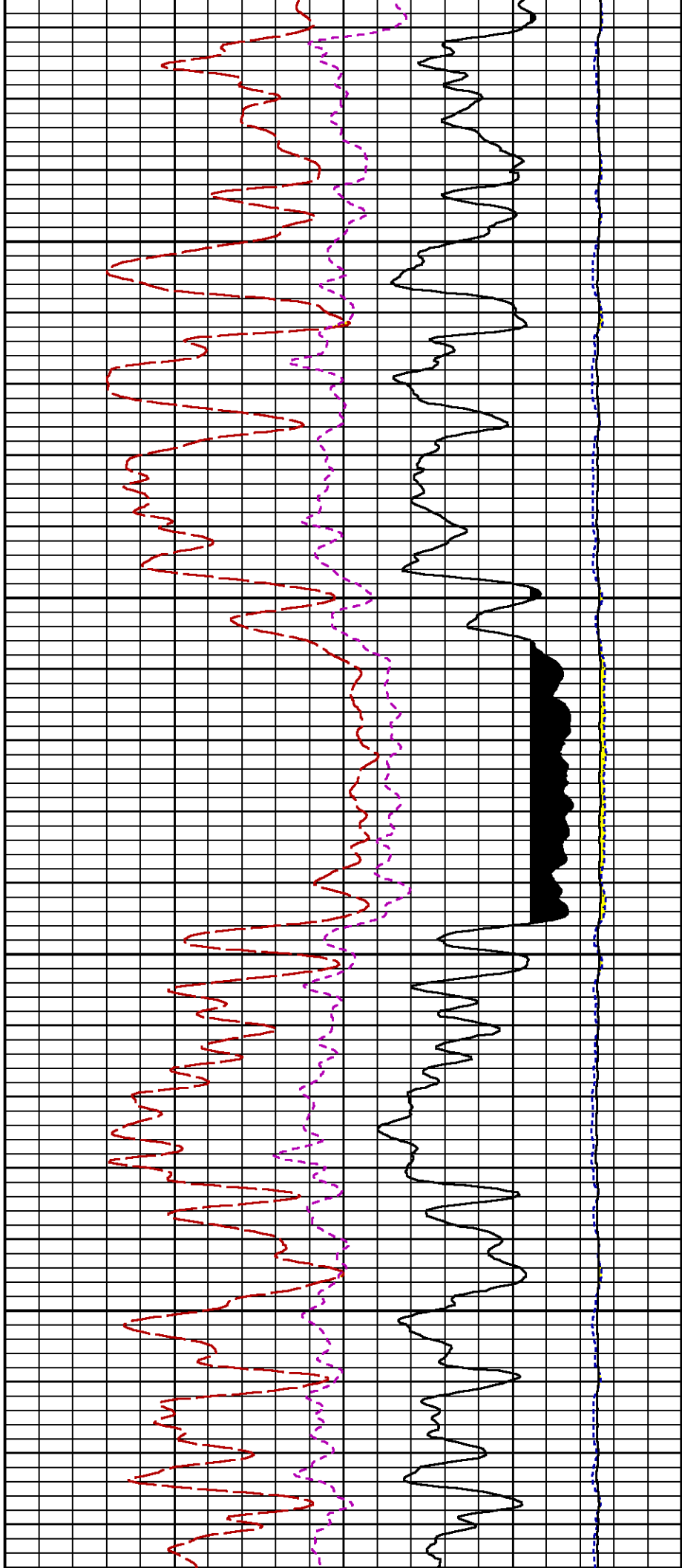
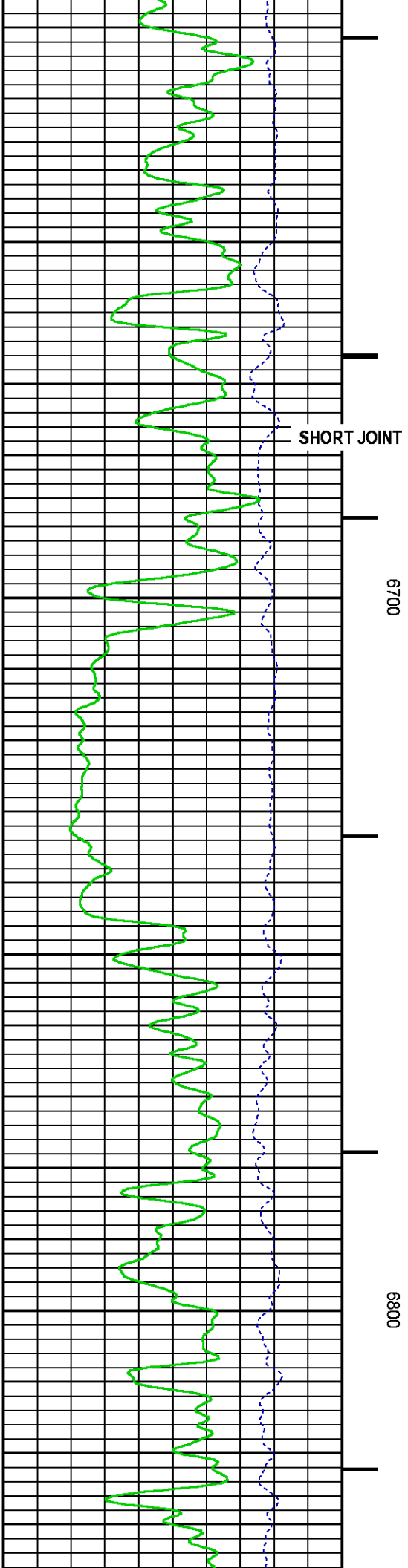
Plot Interval : 6050 - 10168 Feet

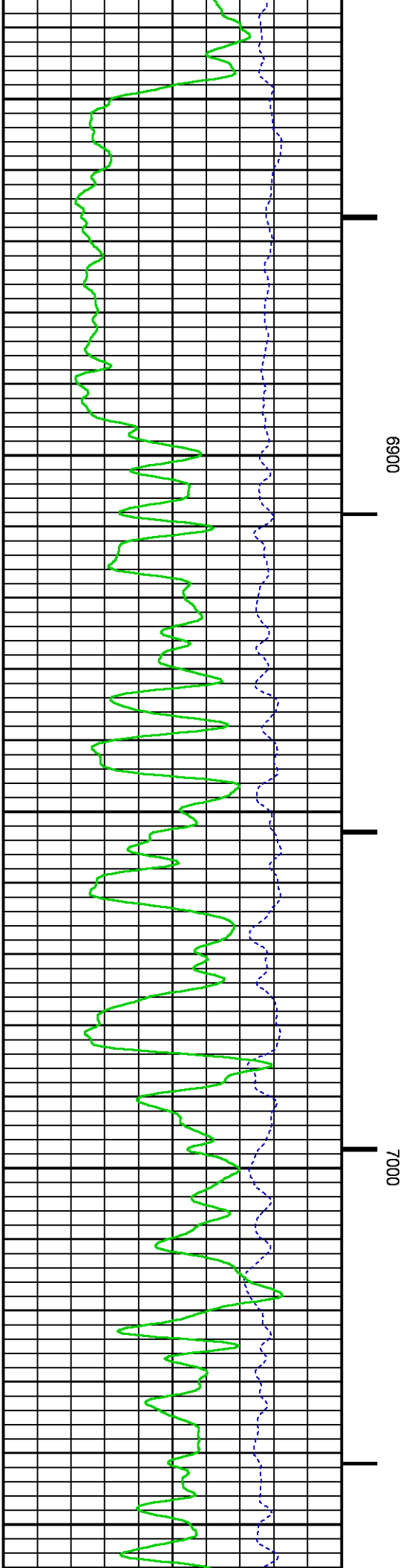
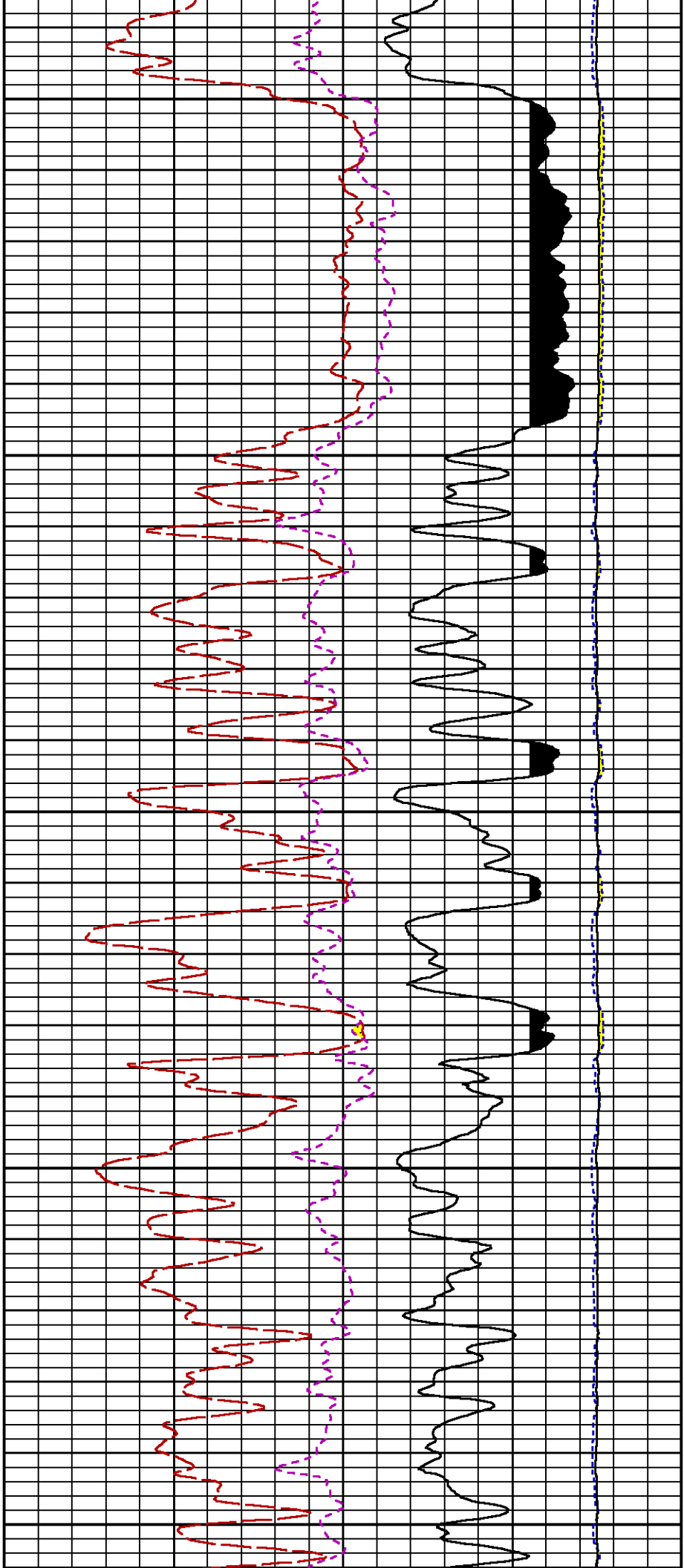
Data File 1 : F1 : HL6670:/dat1a/CH089276/34RPM_MAIN.xtf
Created On : Aug 31 18:37:12 2014
Company : WPX ENERGY
Well : FEDERAL NER 34-32
Field : RULISON
File Interval : 12.5 - 10164 Feet
OCT : n353h

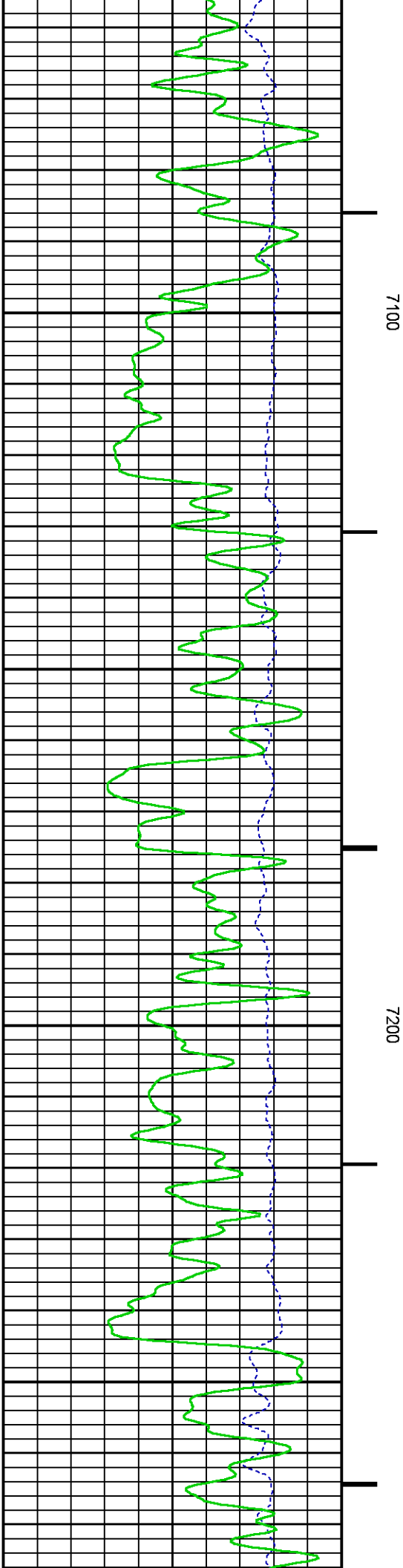
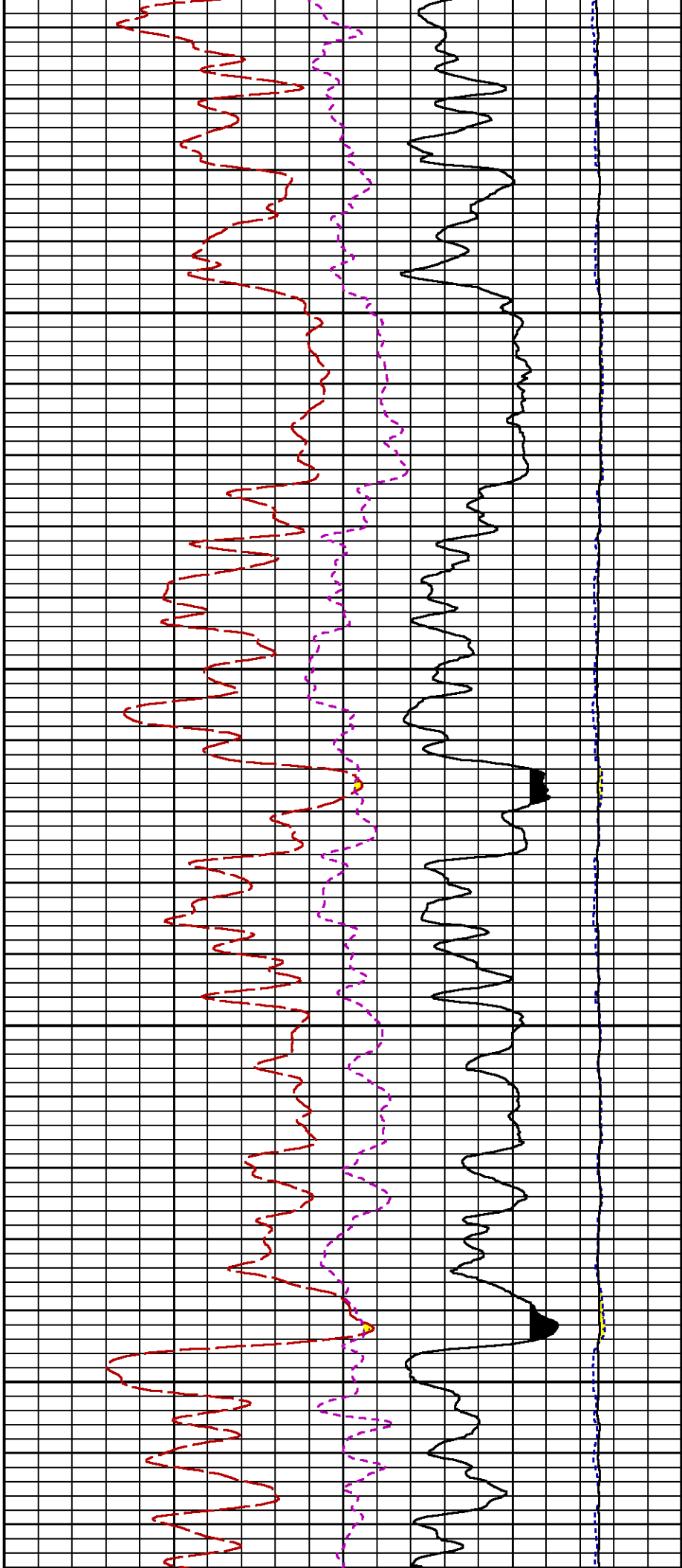


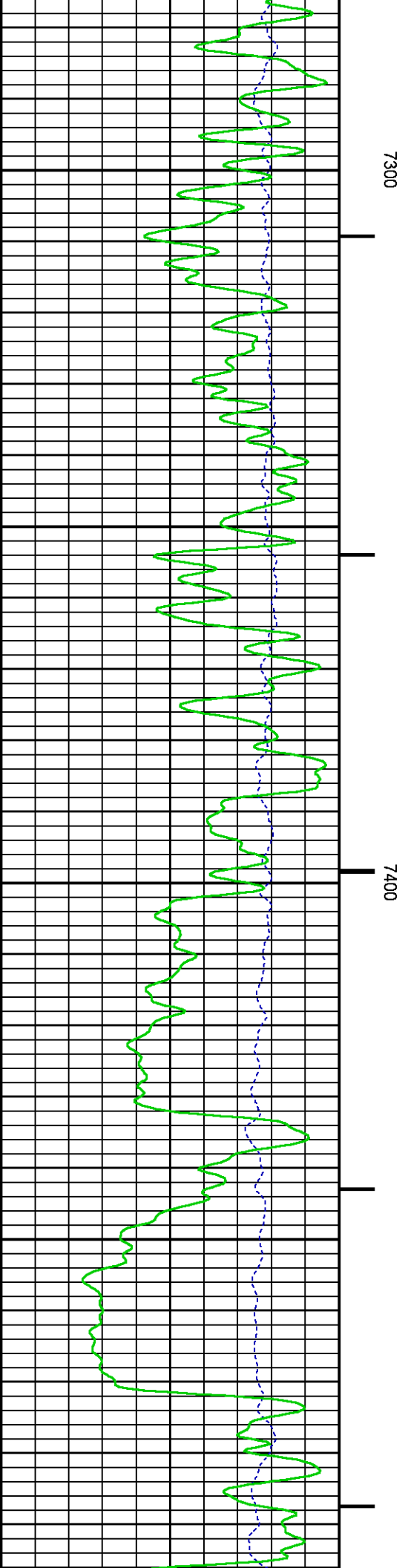
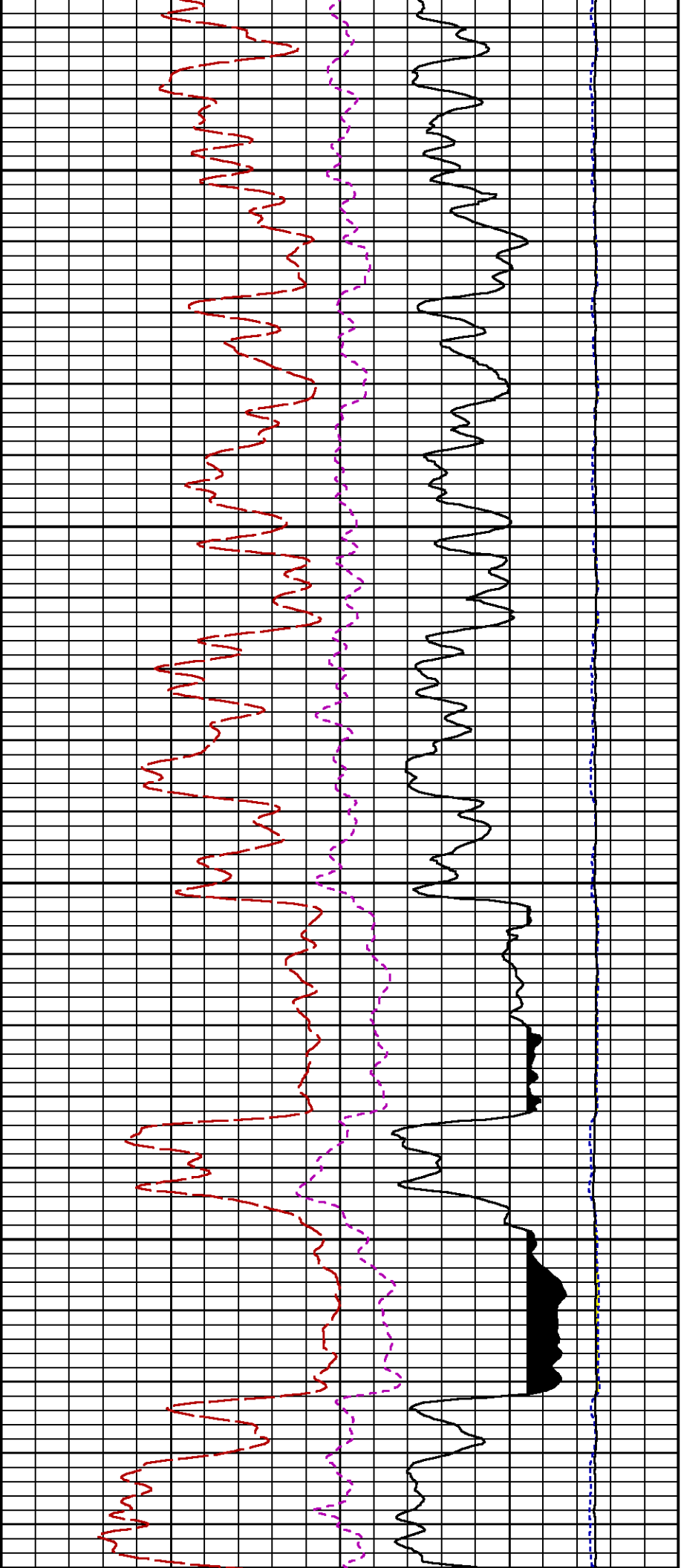


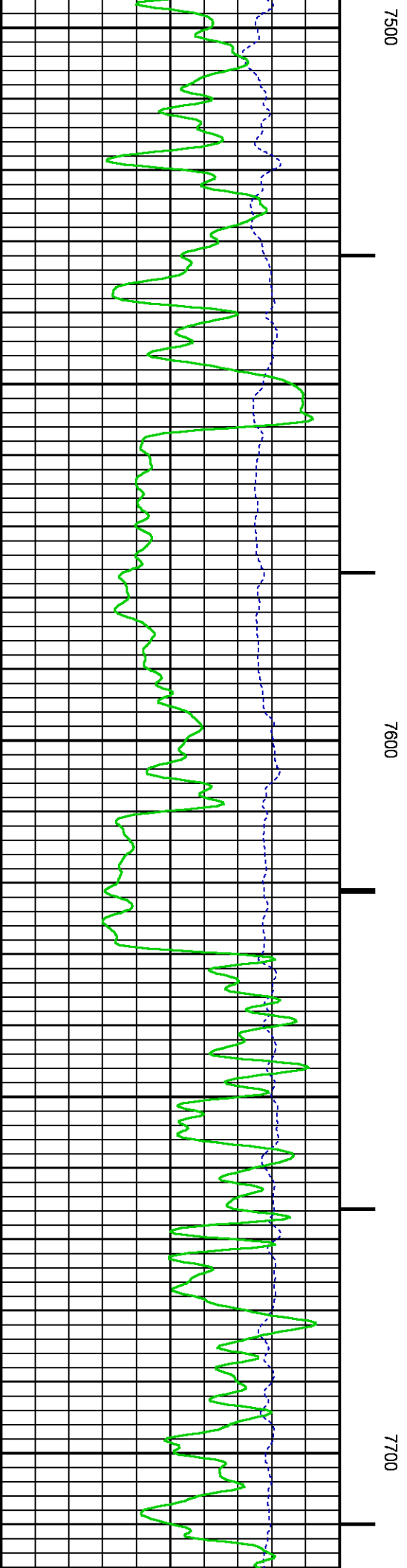
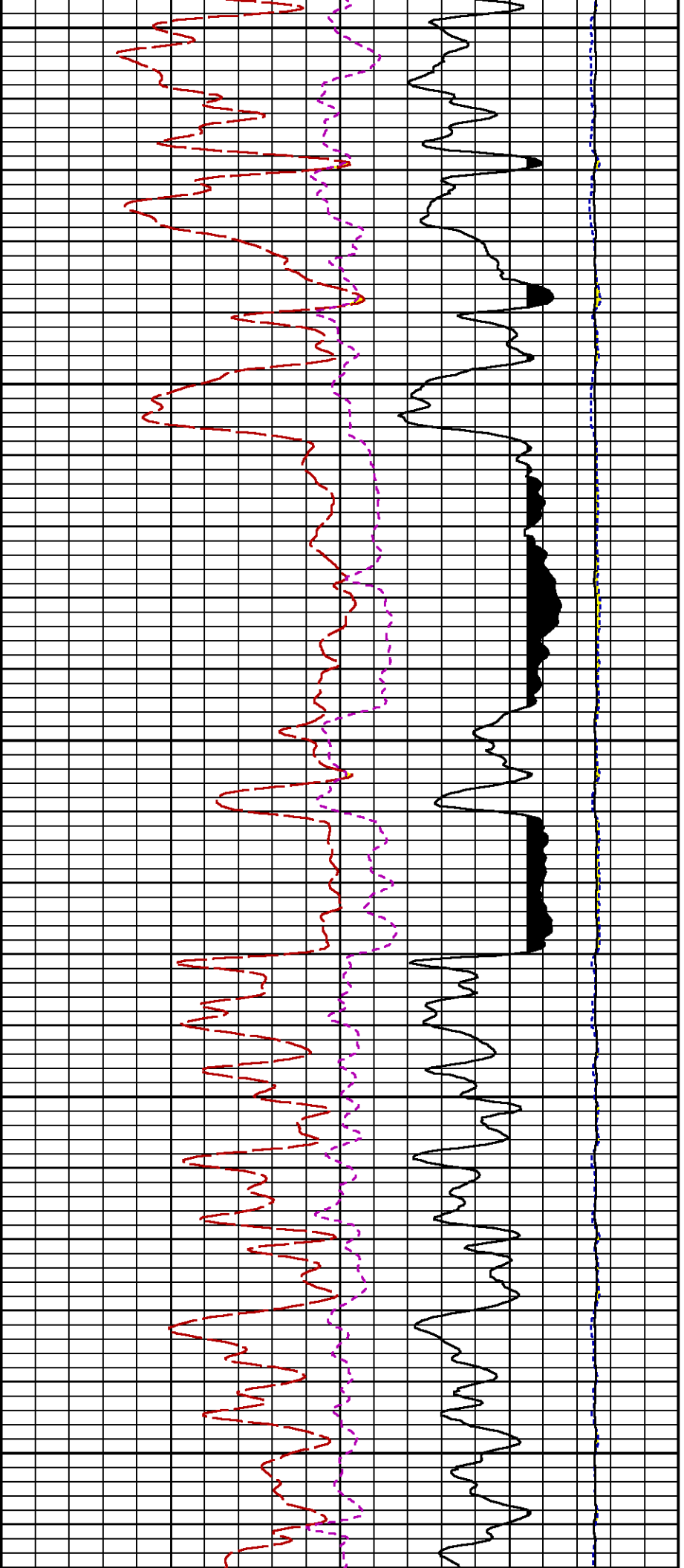


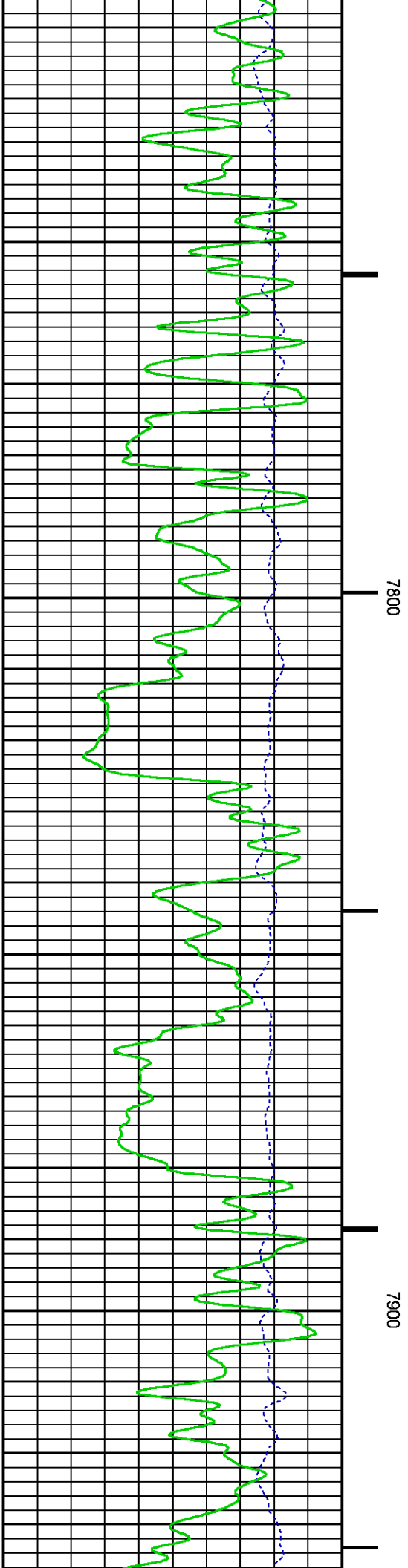
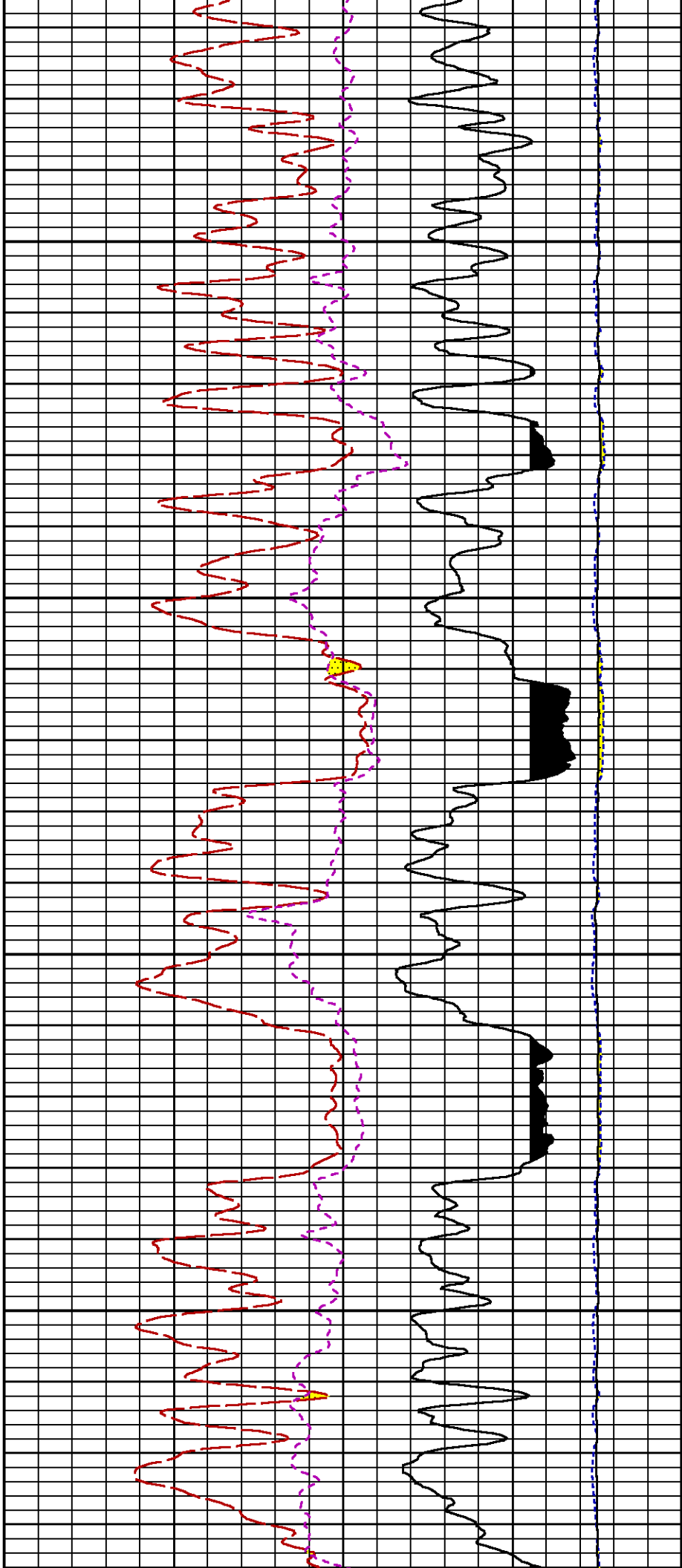






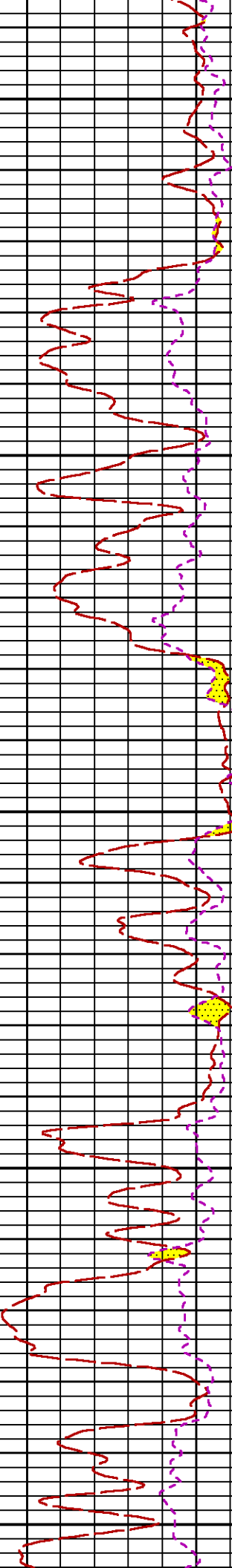
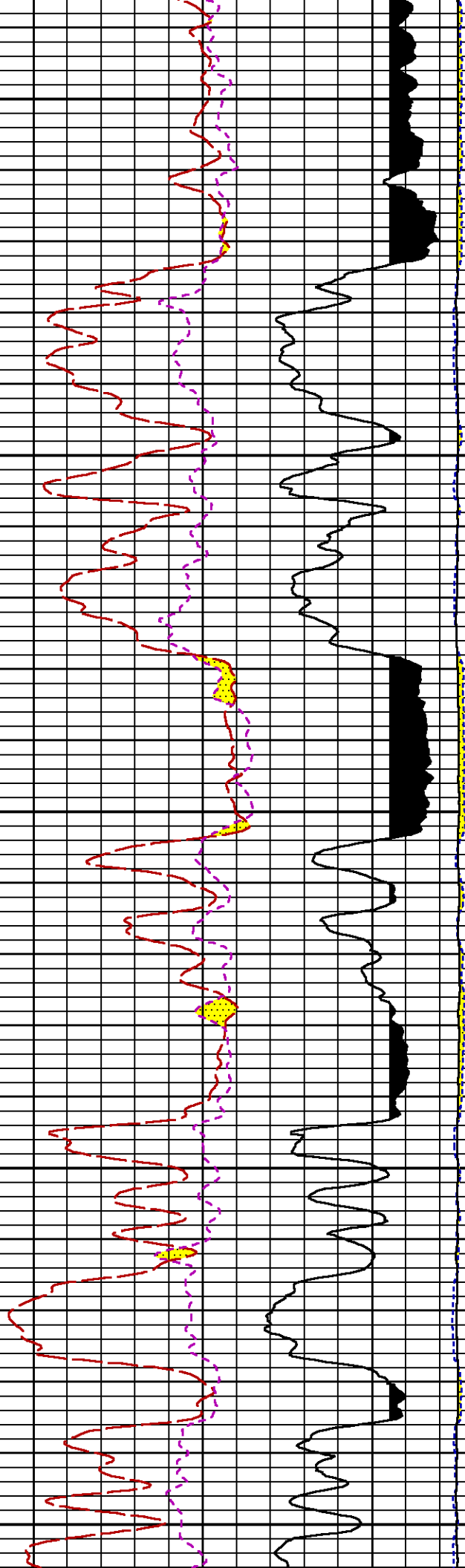
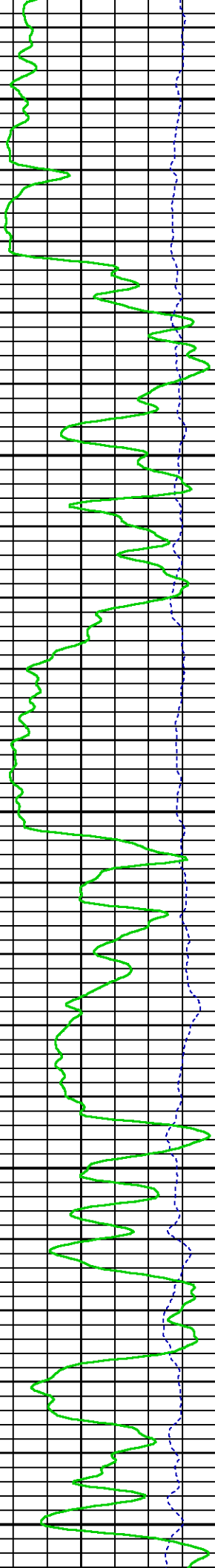


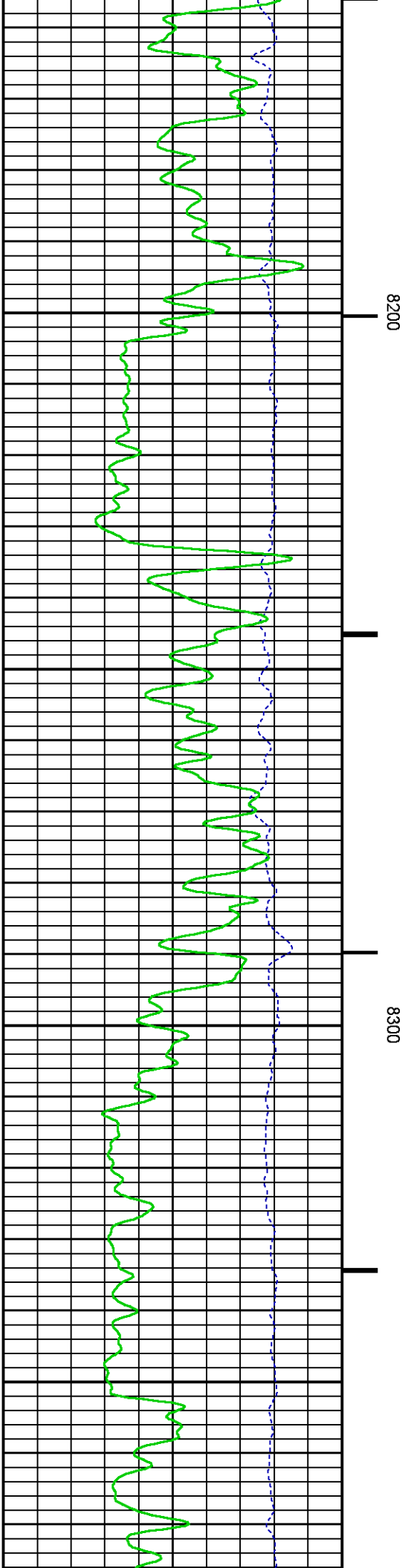
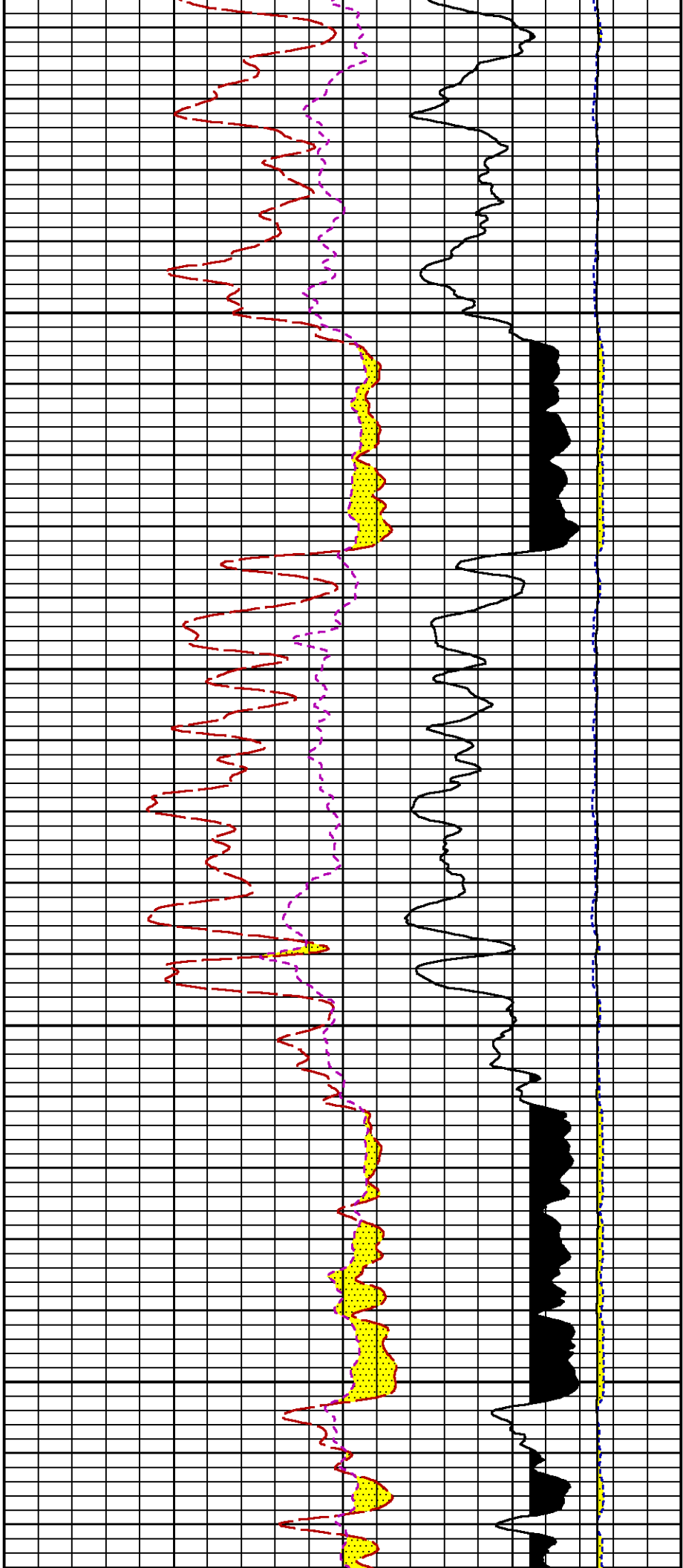


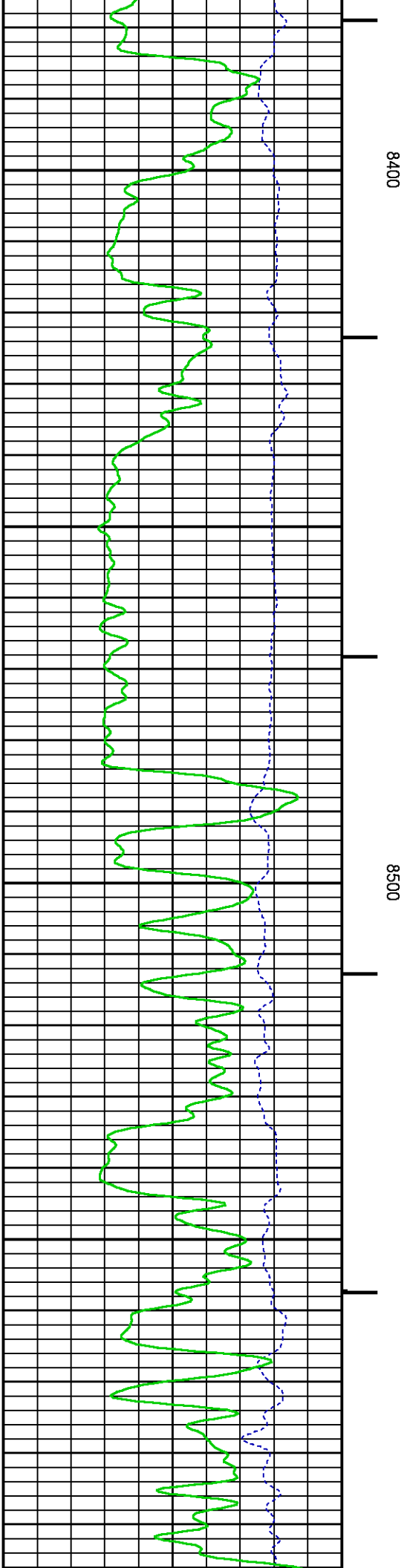
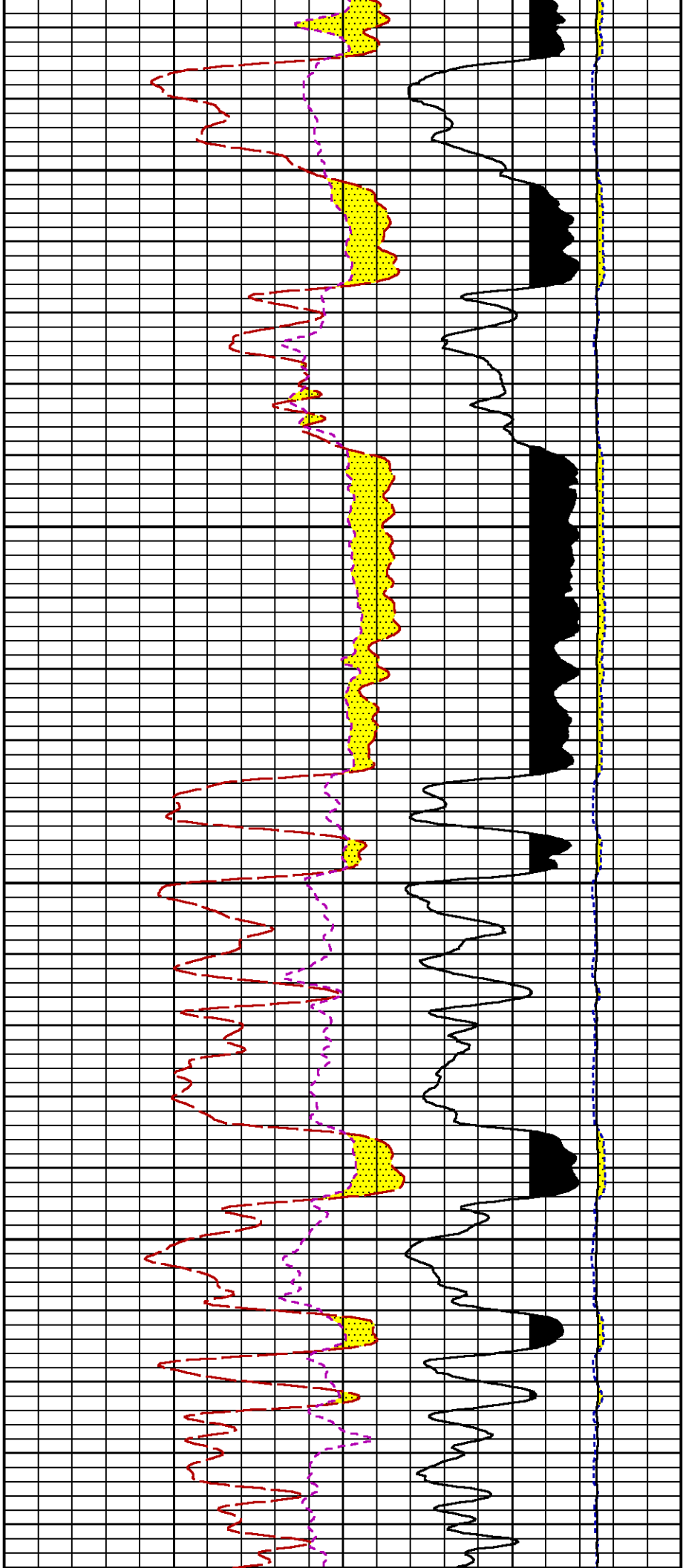


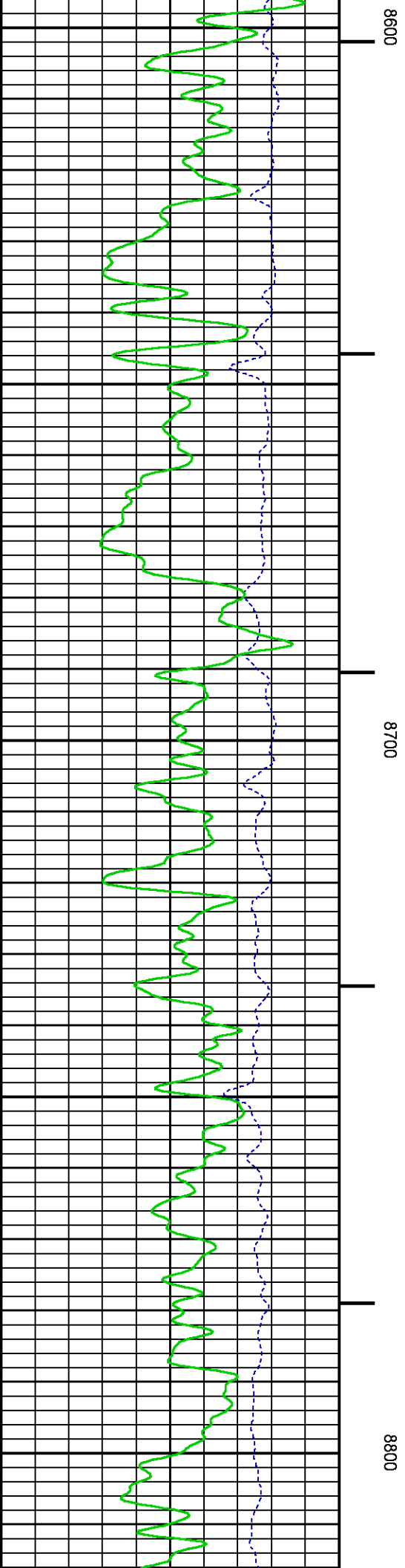
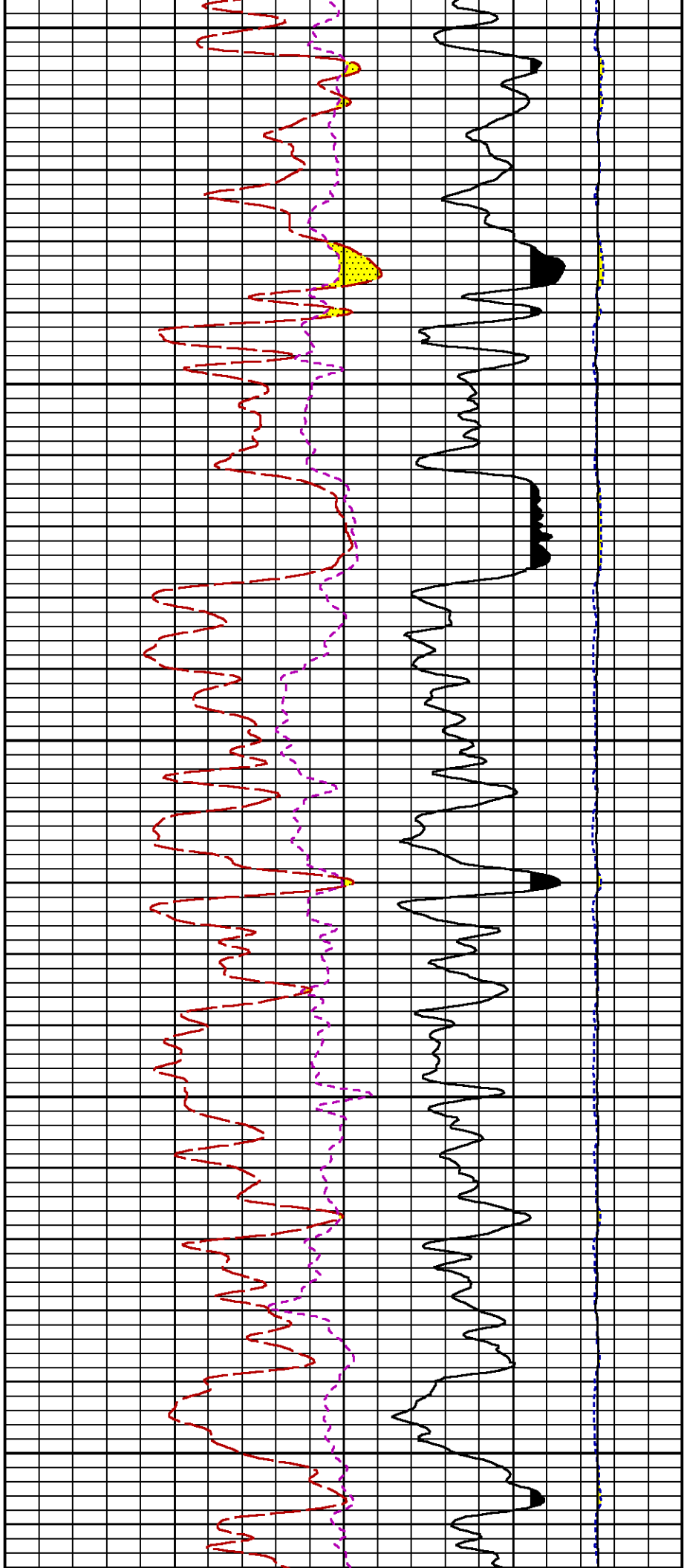
8000

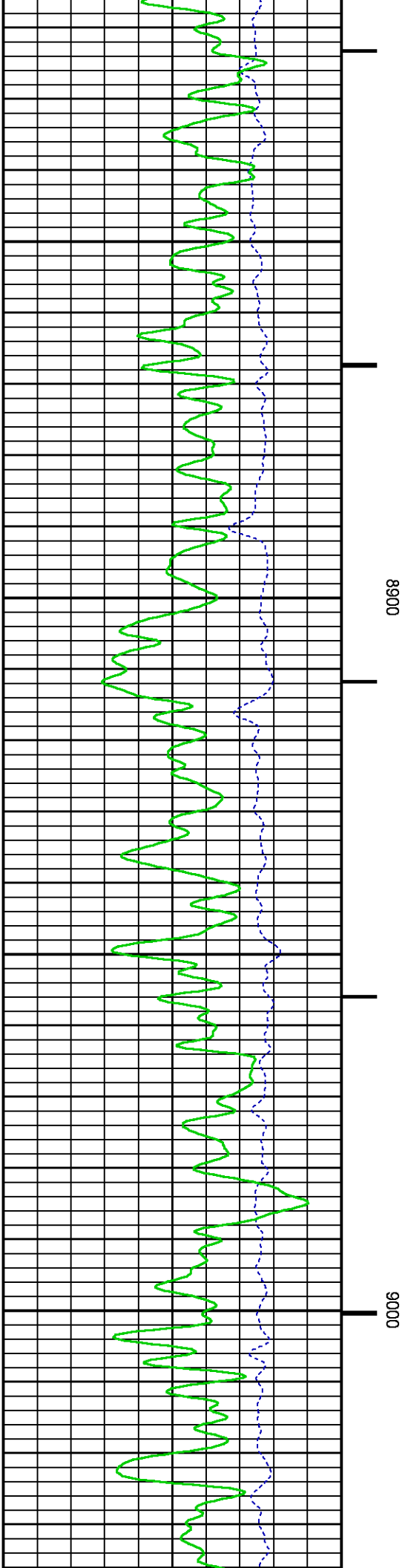
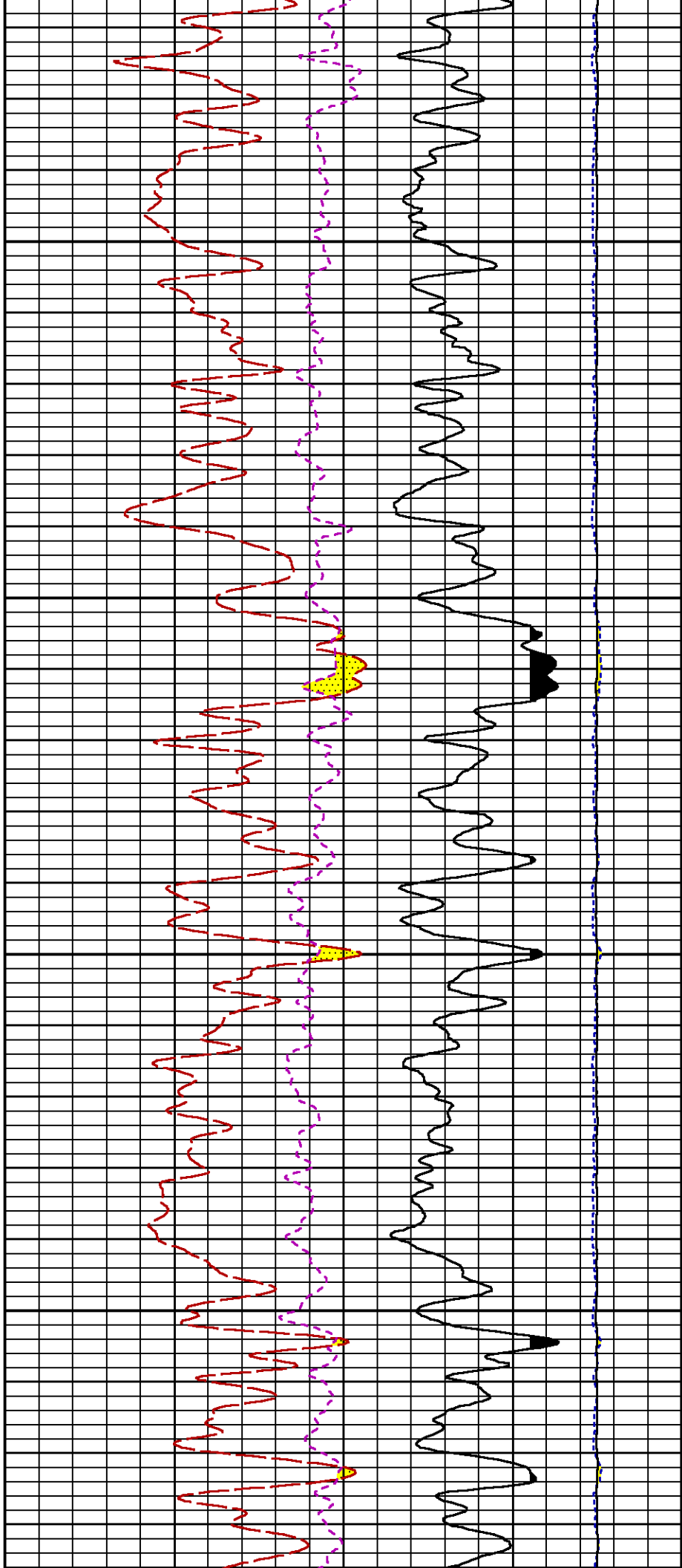
8100

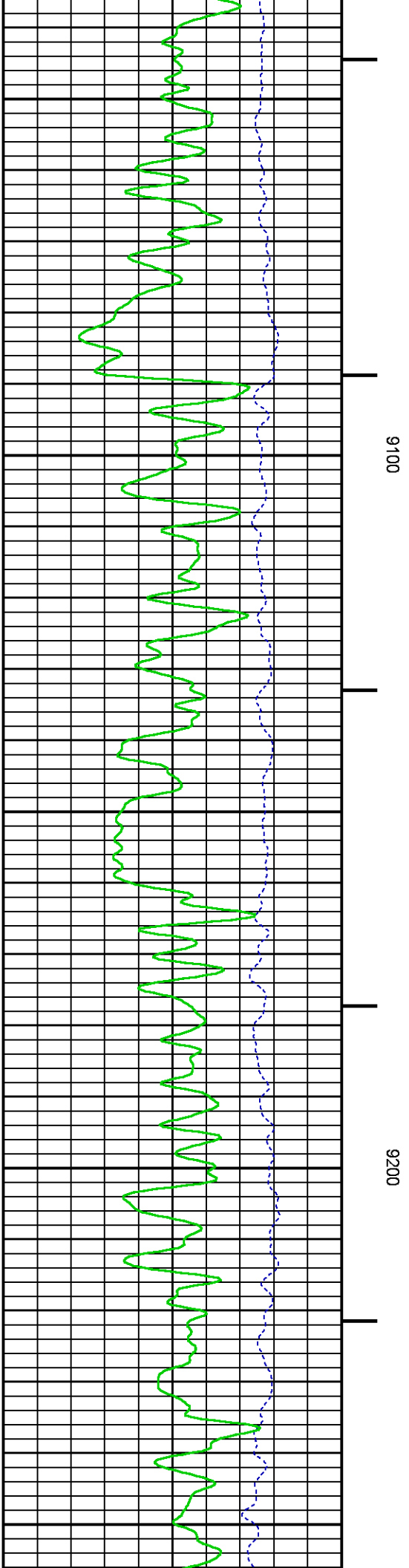
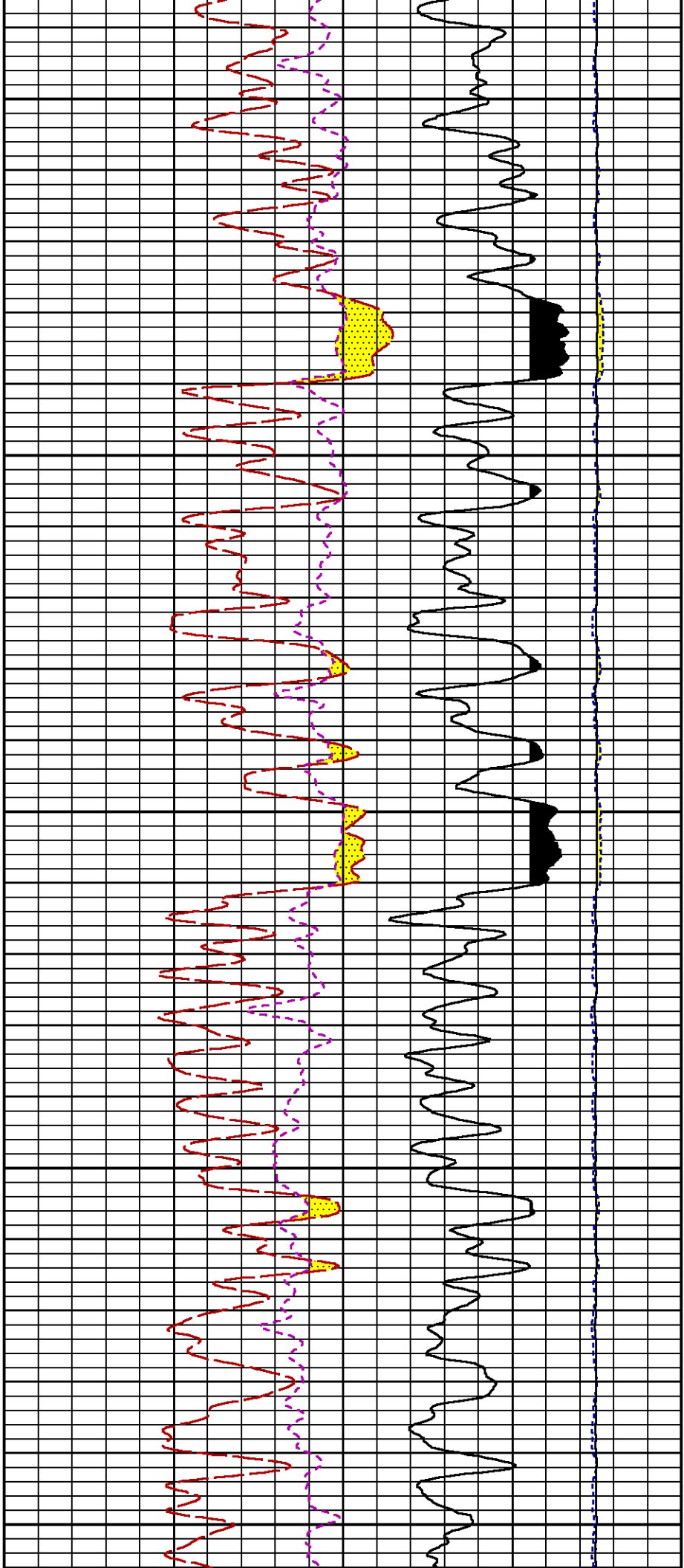


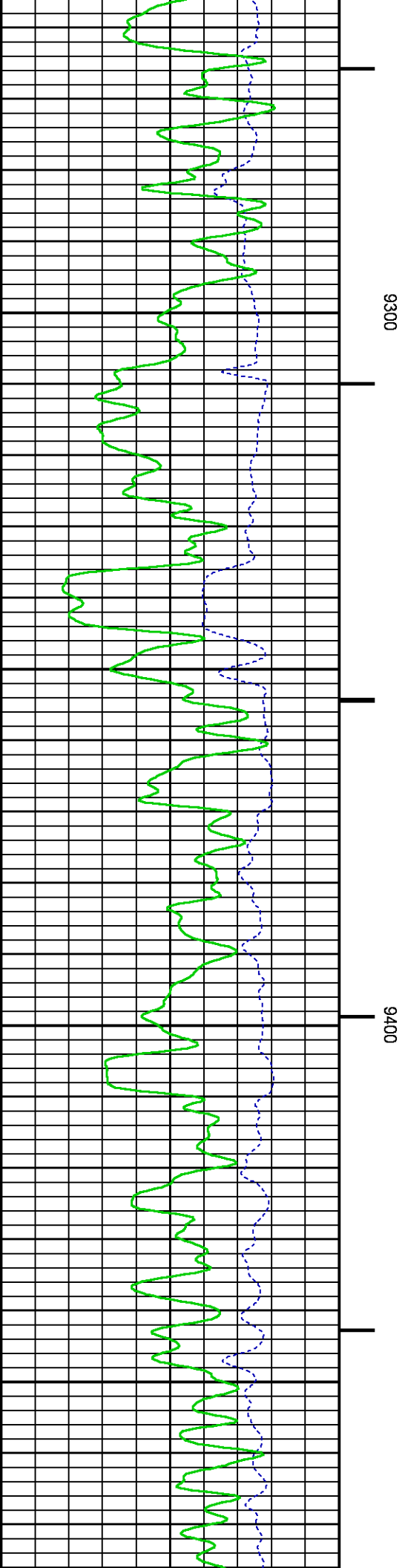
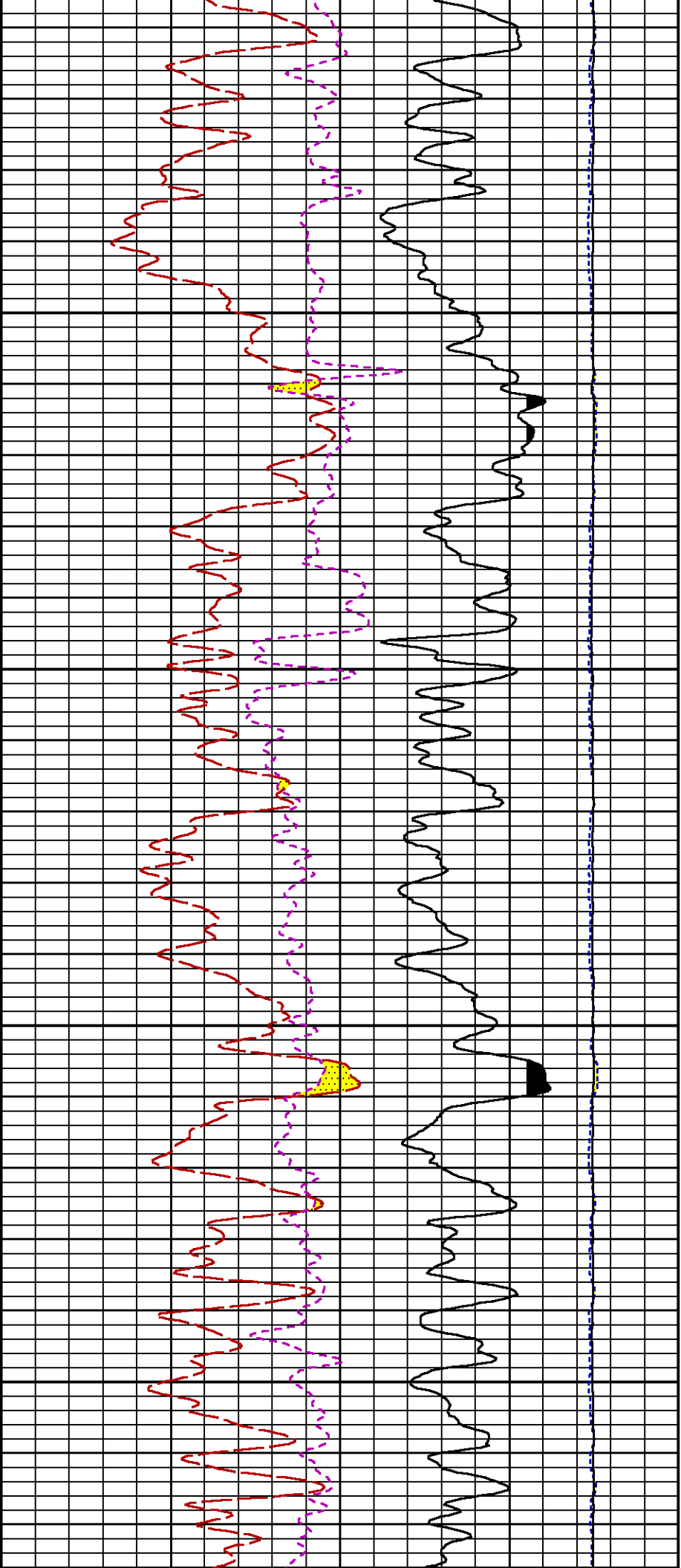


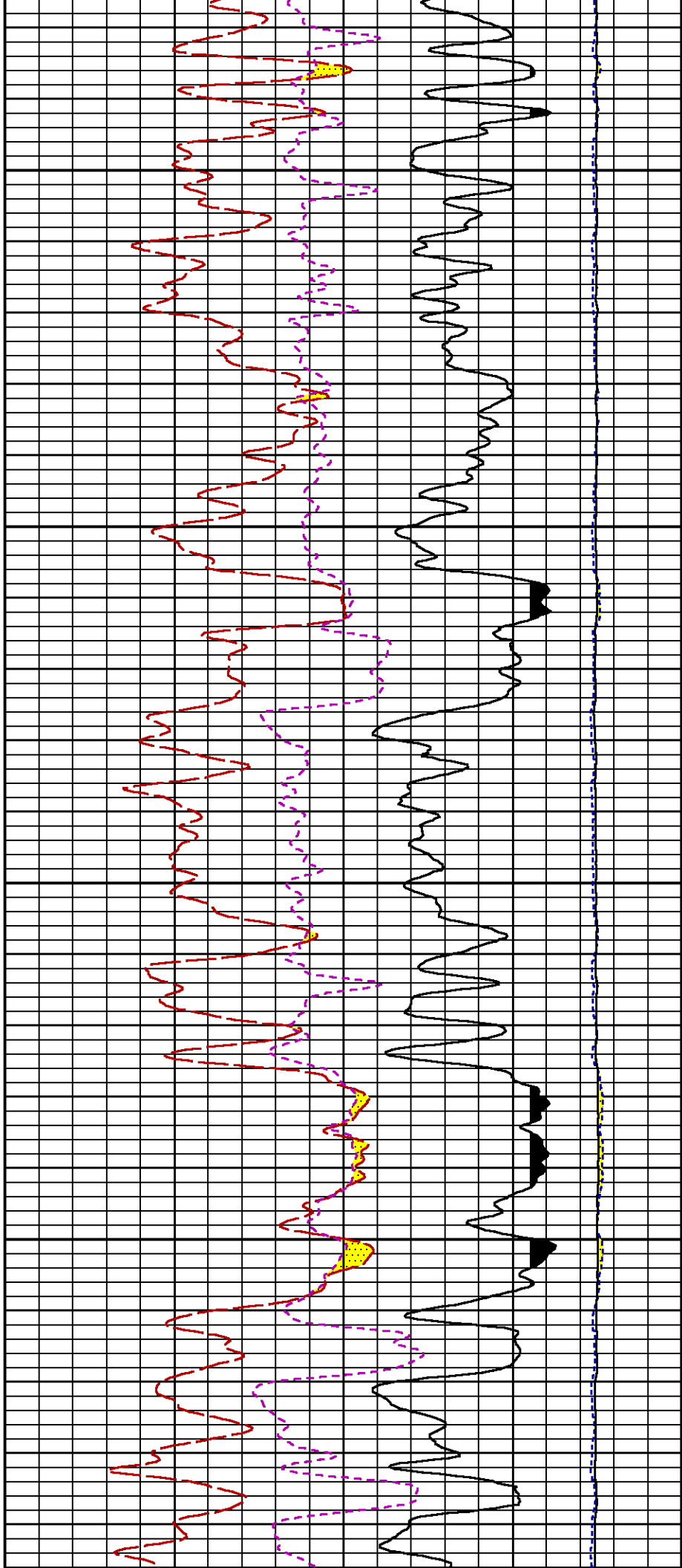
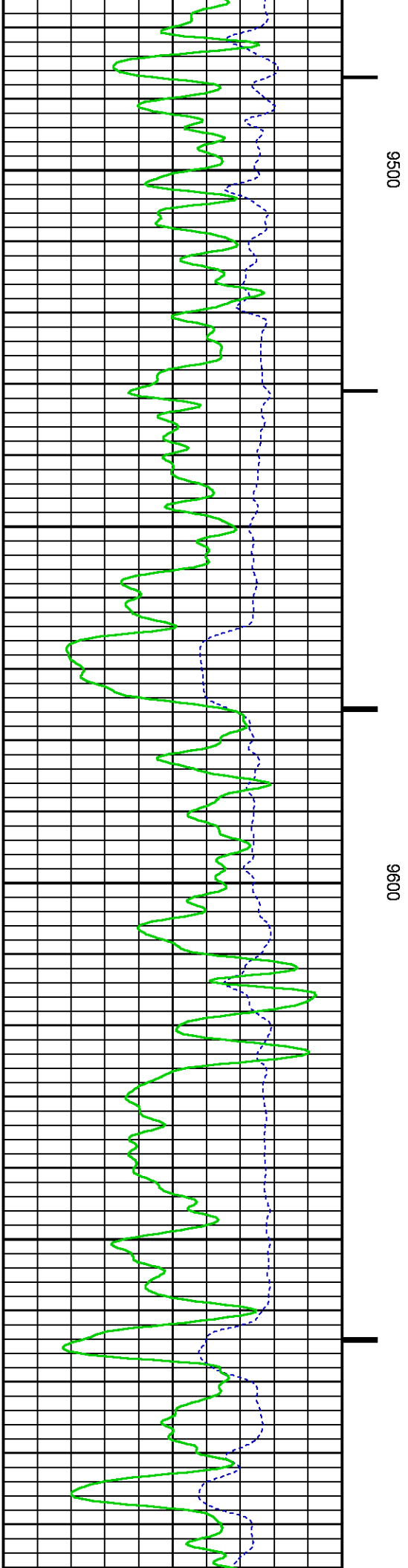


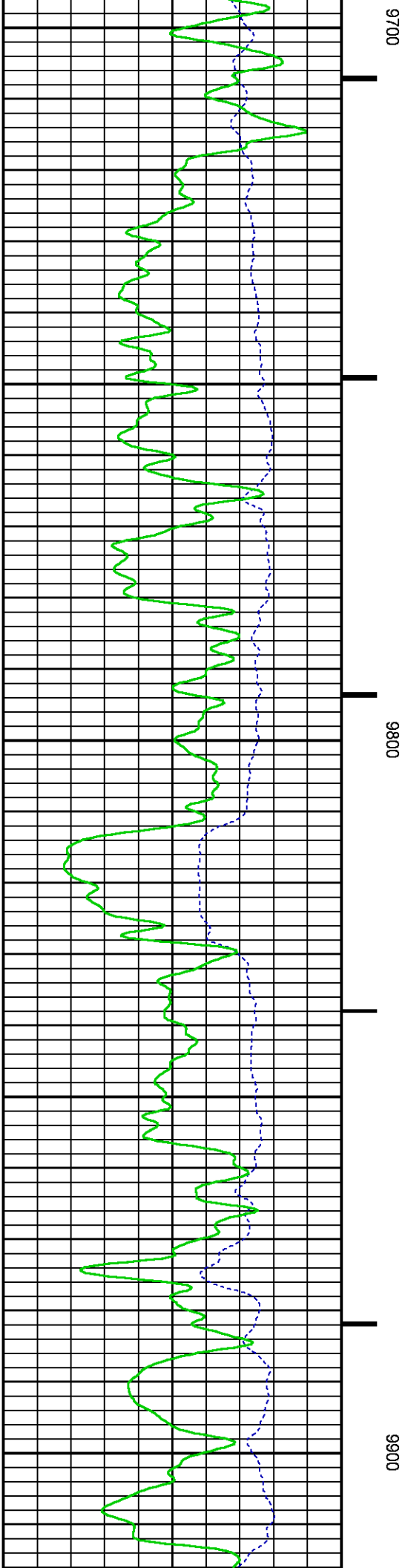
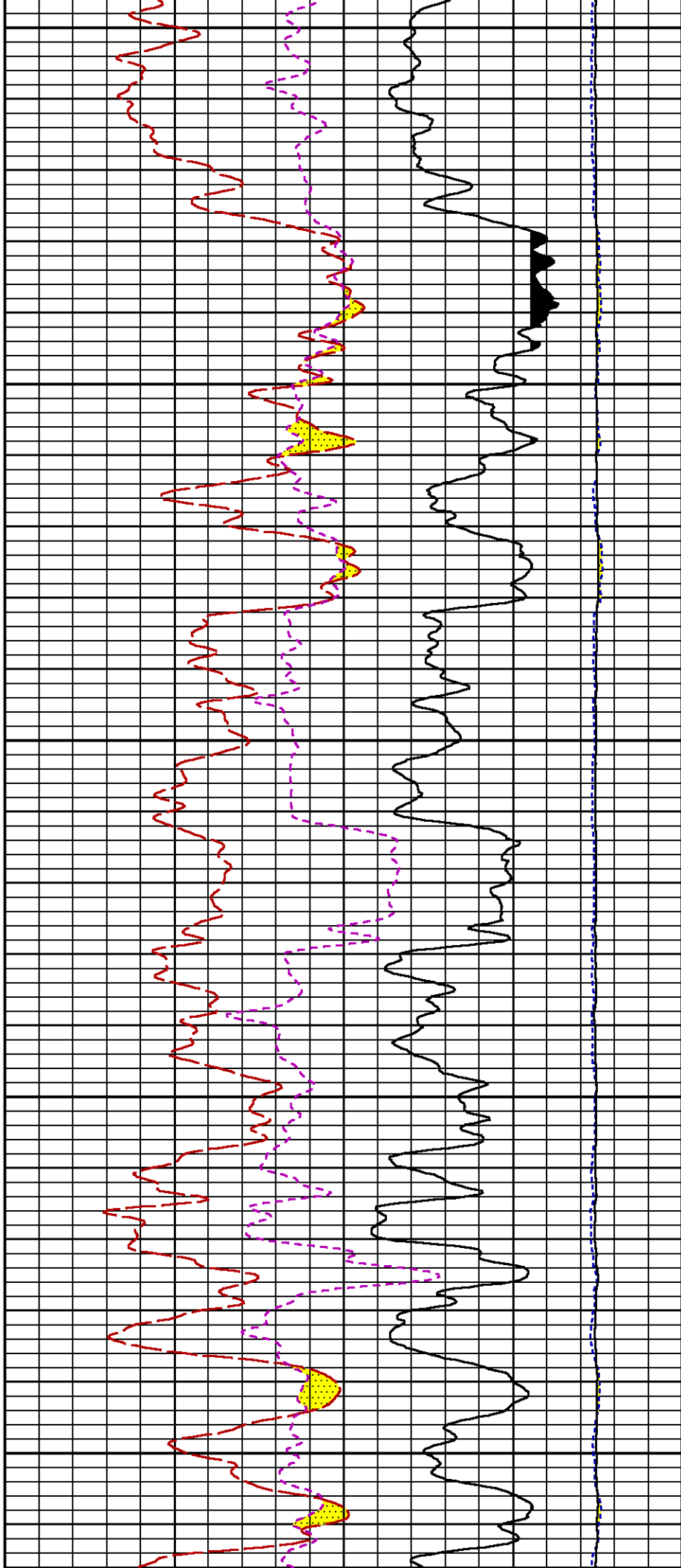


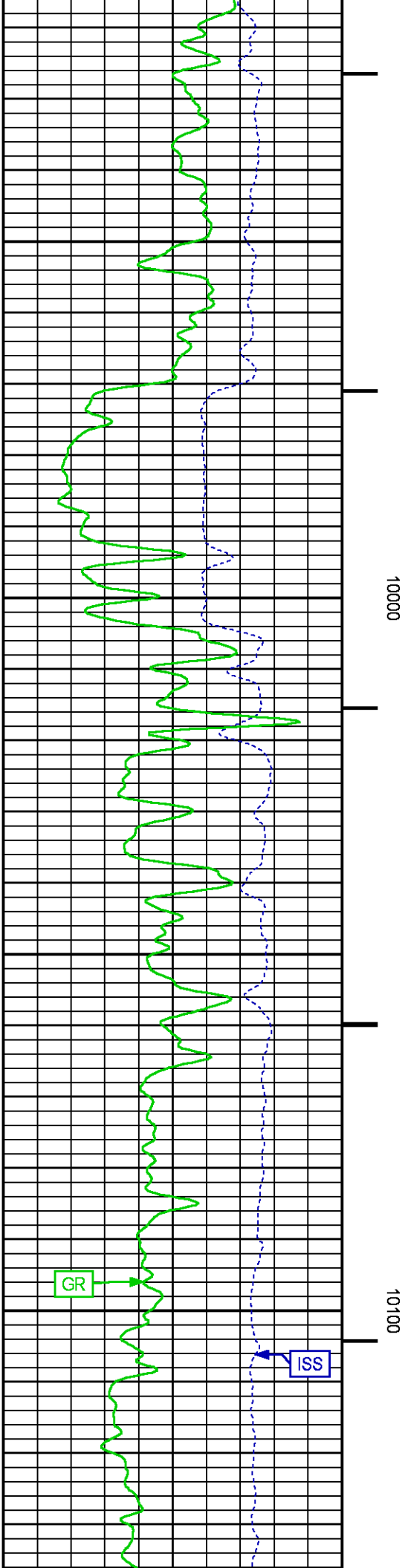
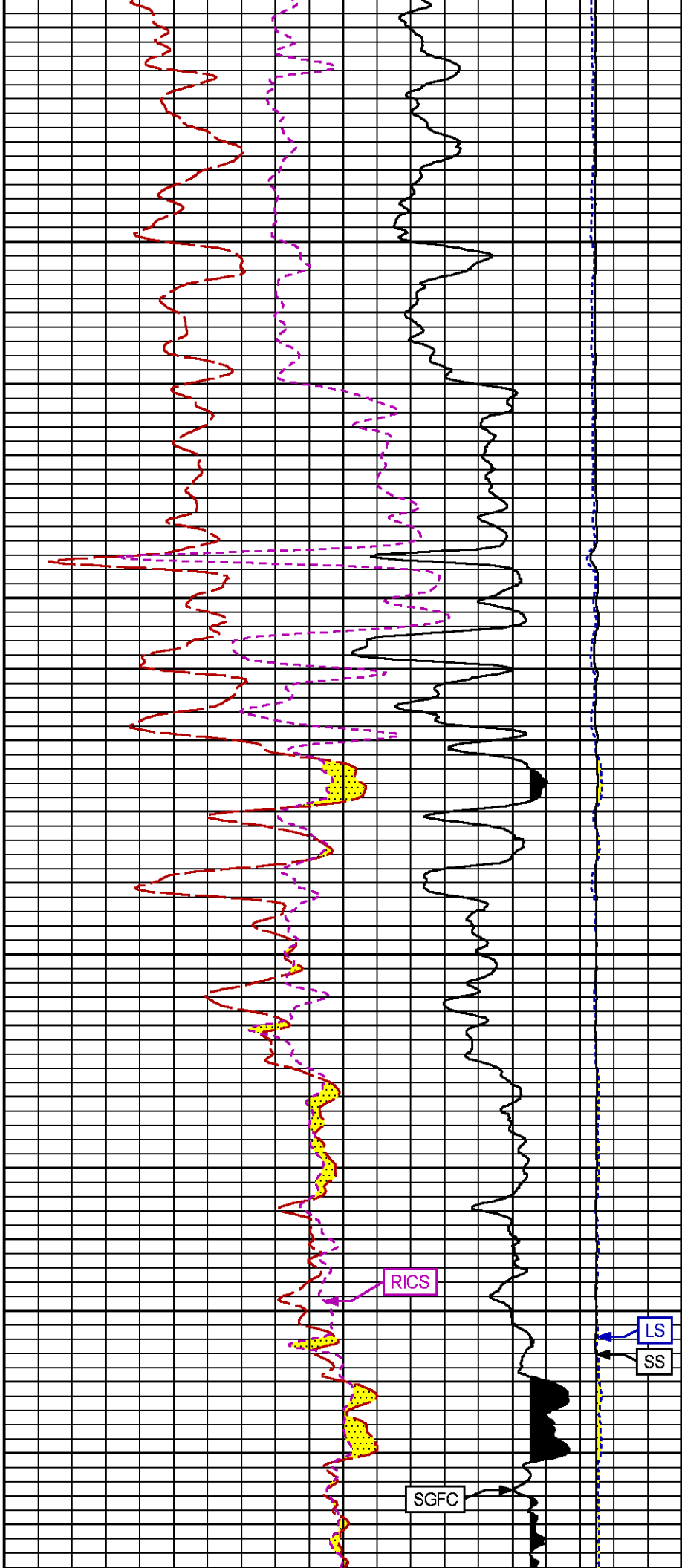


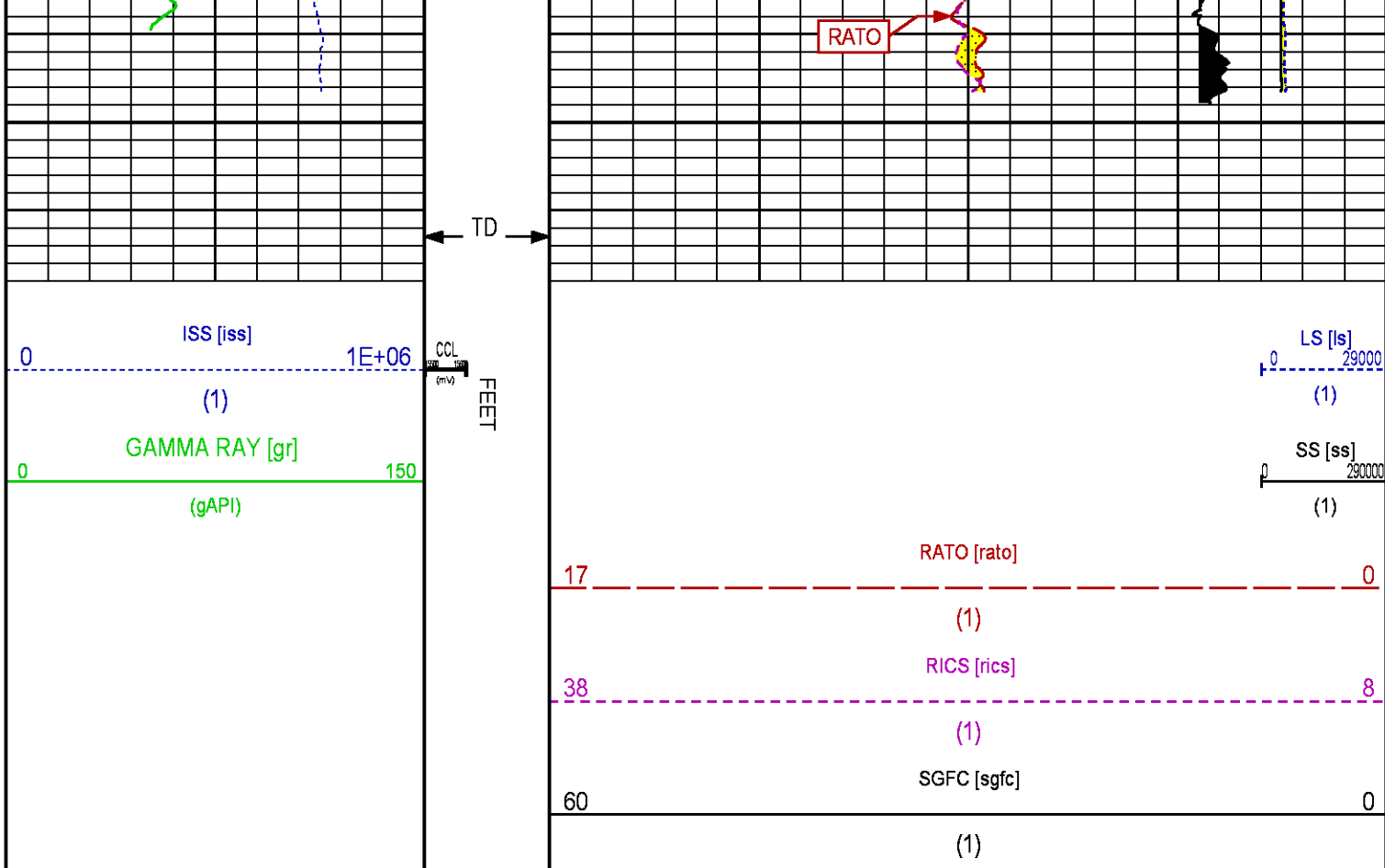












REPEAT SECTION PNC-3D MODE

ECLIPS 6.2i ECLIPS General Release Rel 6.2i Wed Jun 12 12:21:40 CDT 2013
Updates: 1 Patches: 2

Plotted: Mon Sep 1 13:16:55 2014

PARAMETER AND FILTER SUMMARY REPORT

FILE: /dat1a/CH089276/n353h01.prm
LOGGING MODE: DEPTH DIRECTION: UP
TOP DEPTH: 9343.750 ft BOTTOM DEPTH: 9706.749 ft

SYMMETRIC FILTER

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)
GR	FILTER ()	medium (1)		TOP BOTTOM

RPM PROCESSING

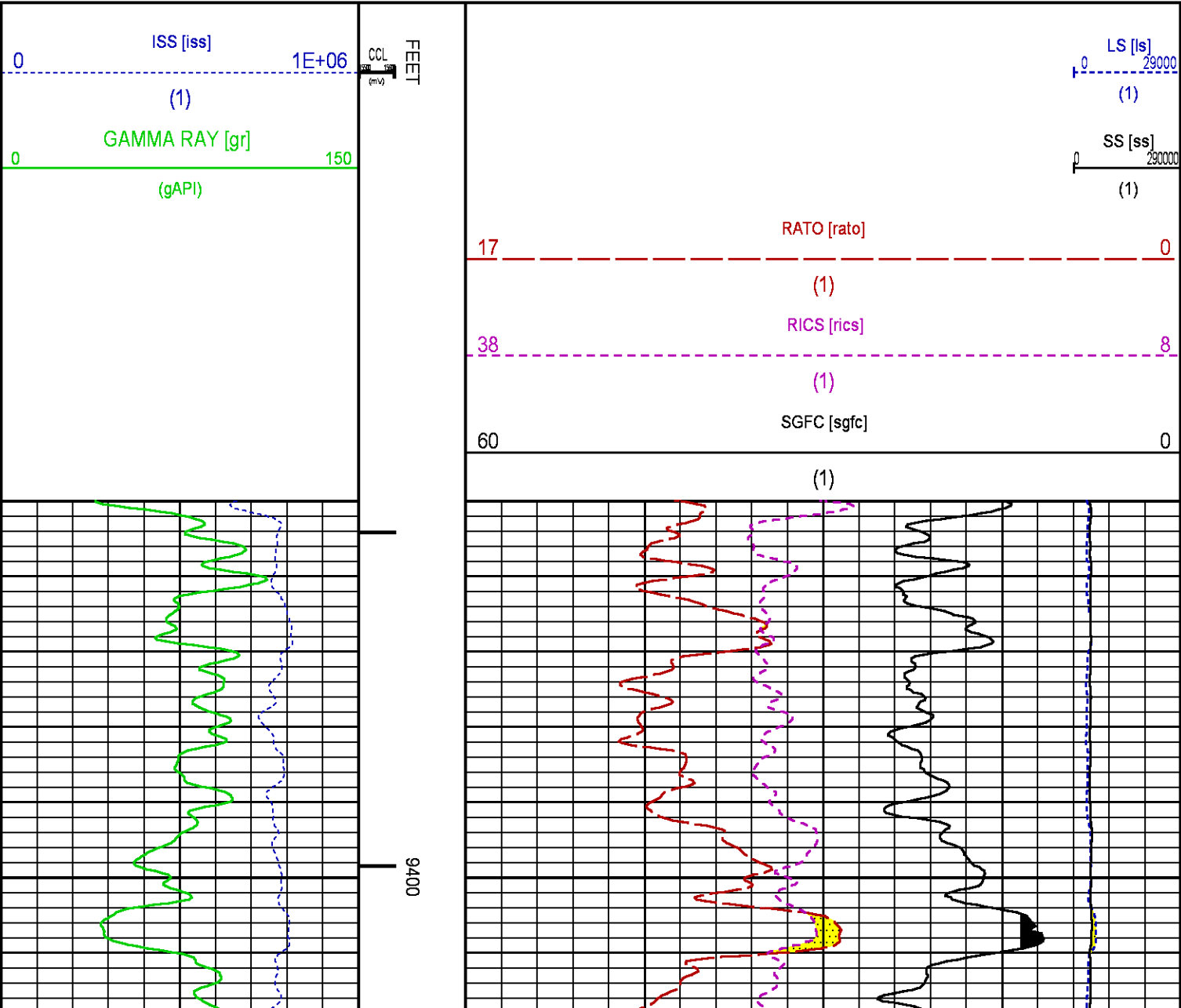
MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)
PNC Parameters	BOREHOLE CONTENTS	FLUID		TOP BOTTOM
	OPEN/CASED HOLE	CASED HOLE		" "
	BOREHOLE SIZE	8.75	in	" "
	CASING SIZE	4.50	in	" "
	MATRIX	SANDSTONE		" "
	CORRECTION BUFFER	11		" "

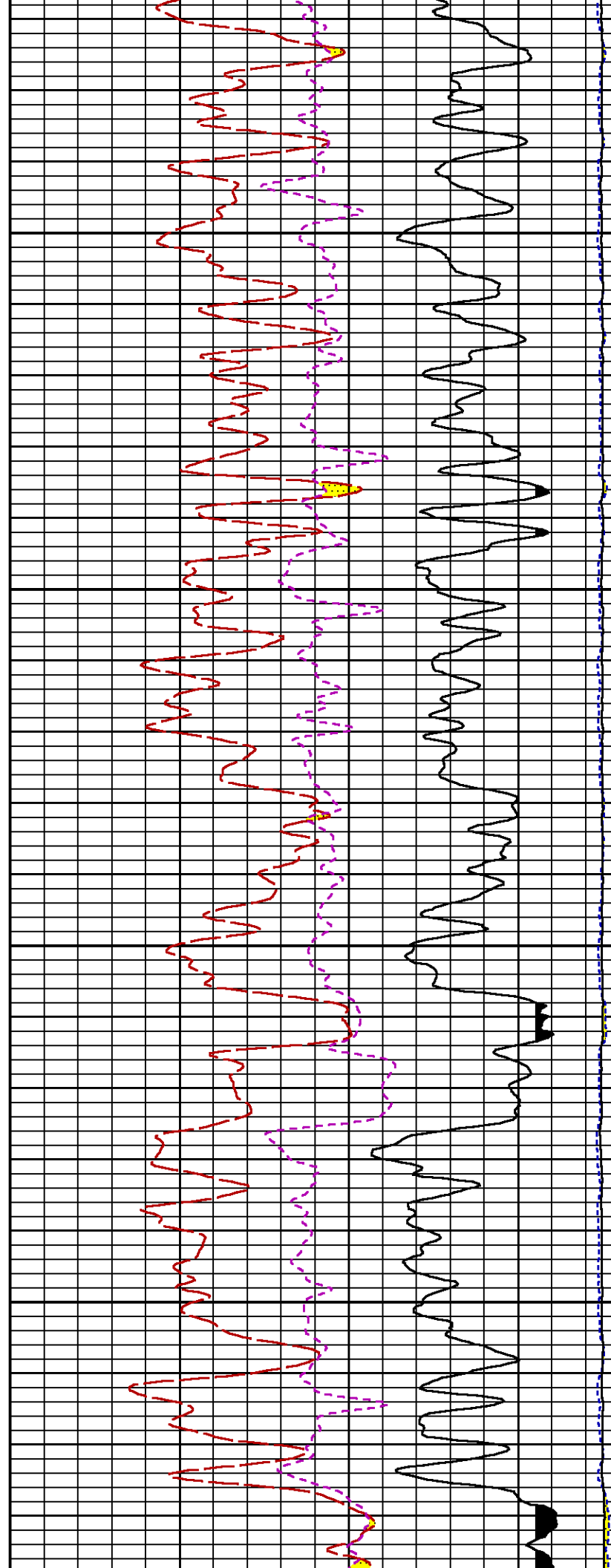
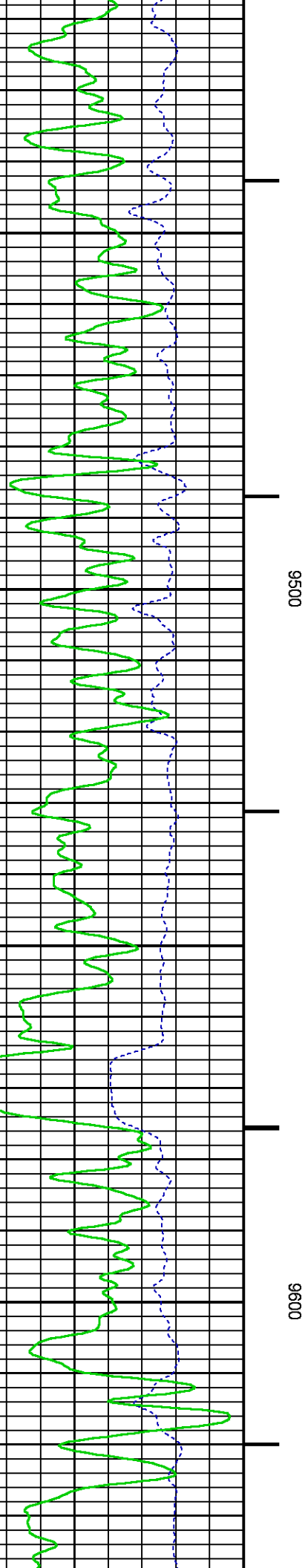
CURVE DESCRIPTION REPORT

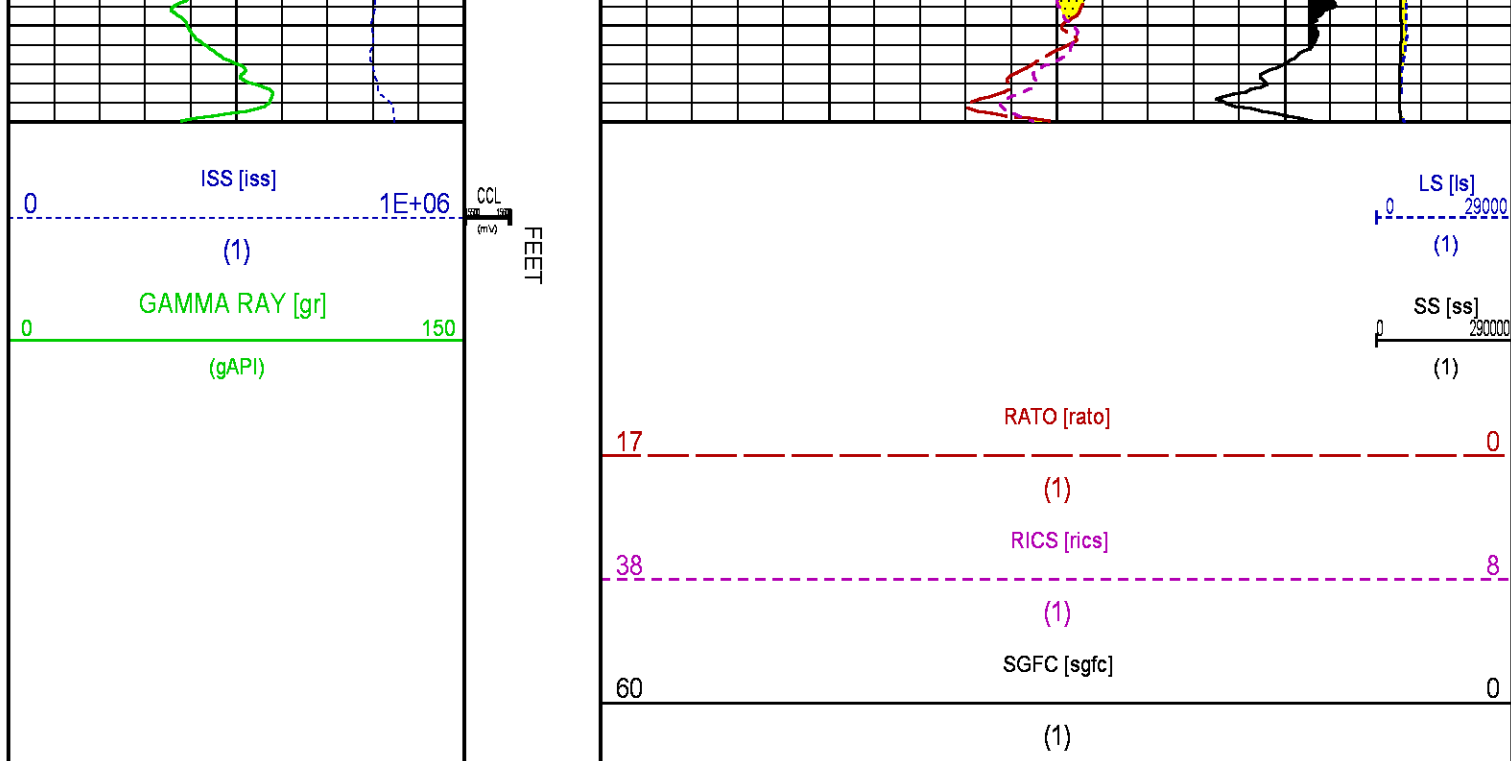
CURVE NAME	CREATION DATE	CURVE DESCRIPTION
F1:CCL	Aug 31 18:00:01 2014	CASING COLLAR LOCATOR
F1:GR	Aug 31 18:00:01 2014	GAMMA RAY
F1:ISS	Aug 31 18:00:01 2014	INELASTIC SHORT SPACE COUNT RATE
F1:LS	Aug 31 18:00:01 2014	LONG SPACE COUNT RATE
F1:RATO	Aug 31 18:00:01 2014	SHORT/LONG SPACE COUNT RATE RATIO
F1:RICS	Aug 31 18:00:01 2014	SHORT SPACE INELASTIC TO CAPTURE COUNT RATE RATIO (ISS/CSS)
F1:SGFC	Aug 31 18:00:01 2014	CORRECTED FORMATION SIGMA
F1:SS	Aug 31 18:00:01 2014	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	: HL6670:/dat1a/CH089276/34RPM_REPEAT.fvpdf [5"/100' Scale]
Plot Interval	: 9350 - 9650 Feet
Data File 1	: F1 : HL6670:/dat1a/CH089276/34RPM_REPEAT.xtf
Created On	: Aug 31 18:00:01 2014
Company	: WPX ENERGY
Well	: FEDERAL NER 34-32
Field	: RULISON
File Interval	: 9319.25 - 9707 Feet
OCT	: n353h







CALIBRATION / VERIFICATION SUMMARY

Source File: /dat1a/CH089276/n353h.tp1

GR PRIMARY CALIBRATION SUMMARY

TOOL #: 8262XA 10317216

DATE/TIME PERFORMED: Fri Aug 8 15:11:55 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	110.38	444.62	334.2	0.539	59.44	239.44	180

GR PRIMARY VERIFICATION SUMMARY

TOOL #: 8262XA 10317216

DATE/TIME PERFORMED: Sun Aug 31 16:46:21 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	167.36	492.29	0.539	90.13	265.11	174.99

RPM_PNC_3D PRIMARY CALIBRATION SUMMARY

TOOL: 8283PA 10160383

DATE/TIME PERFORMED: Thu Aug 28 16:50:55 2014

UNIT: 3880TA HL6670

CALIBRATOR: 2437XB 112674

SOURCE: 8281AA 11765055

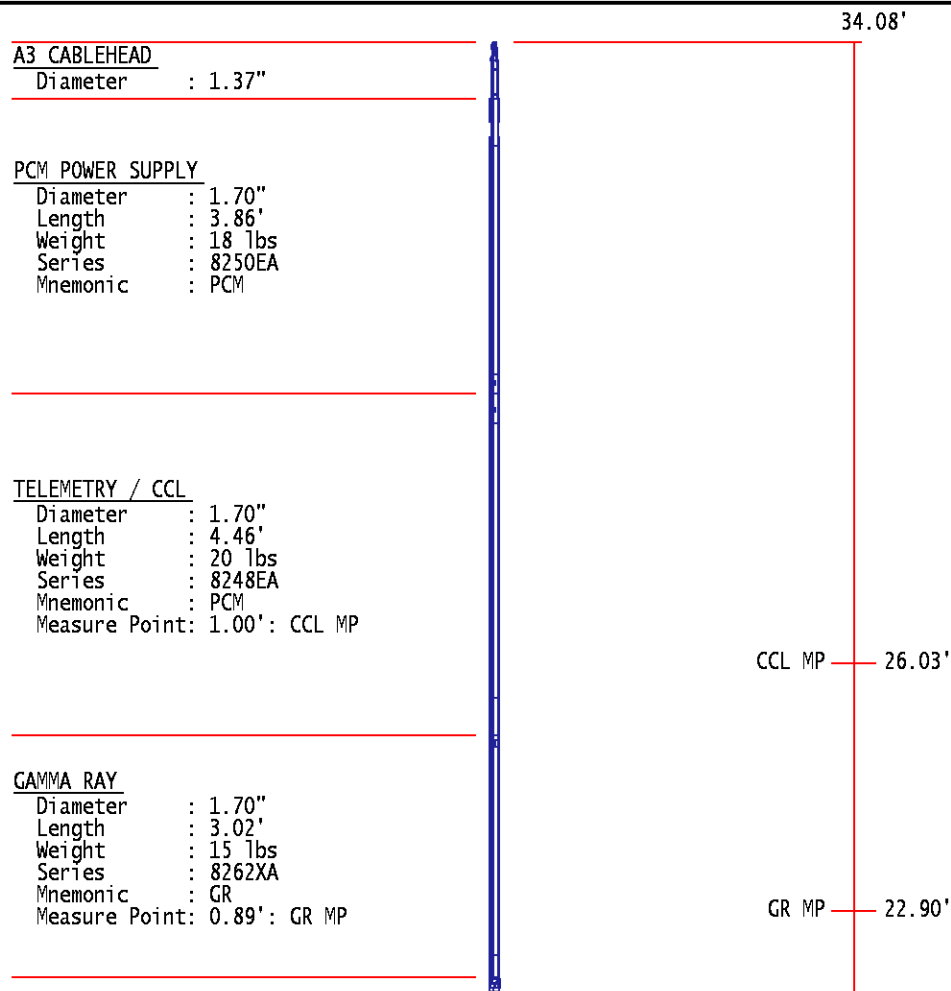
HOURS: 8281AA 14

	ISS	Mtr Vlt (V)	SS Gain	LS Gain	XLS Gain	EA Temp (degF)	Sync Delay (usec)	RCAL
Raw Data	805905	124	2273	2254	2210	110	7	0.9822
Interpolated	1300000	144	2259	2249	2208			

	ISS	BKS	BKL	BKX	SGA1	SDA1	SGA2	SDA2
Raw Data	805905	6606	1039	141	25.94	0.15	24.24	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	805905	167542	25750	86922	30995	8110	52660	12966
Fit Quality %		0.823	0.868	0.772	0.839	0.787	0.762	0.788
	ISS	RBOR	RIN	RIN13	RICS	RATO	RTWO	RONE
			ISS/LS	ISS/IXS	ISS/CSS	SS/LS	SS2/LS	CSS/CLS
Raw Data	805905	1.43	4.81	31.31	15.30	10.72	3.82	4.06
		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 %		0.123	0.084	0.140	0.078	0.026	0.041	0.009
Reduced	1388430	1.43	4.82	31.41	15.34	10.72	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

INSTRUMENT CONFIGURATION

Source File: /dat1a/CH089277/RPM-tdg



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

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

0.00'



COMPANY	WPX ENERGY		FILE NO:	
WELL	FEDERAL NER 34-32			CH089276
FIELD	RULISON		API NO:	
COUNTY	GARFIELD	STATE	CO	05045217840000
LOCATION:		ELEVATIONS:	32 6S 93W	
SHL: 132' FNL & 2587' FWL(5 7S 93W)		KB 7629 FT	RU 23-5 PAD	
BHL: 1116' FSL & 1971' FEL(32 6S 93W)		DF	NABORS 576	
GL 7603 FT				
SEC	32	TWP	6S	RGE 93W
DATE		31-Aug-2014		