



FILE NO: CH105974	COMPANY CAERUS OPERATING LLC
API NO: 05045226140000	WELL PUCKETT 24D-1
	FIELD GRAND VALLEY
	COUNTY GARFIELD
	STATE COLORADO

Ver. 4.06 S 1 T7S R97W H&P 330	LOCATION: SHL: 1060' FSL & 321' FEL S2 T7S R97W BHL: 173' FSL & 2018' FEL, S1 T7S R97W SEC 1 TWP 7S RGE 97W	OTHER SERVICES BOND LOG
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PERMANENT DATUM LOG MEASURED FROM DRILL. MEAS. FROM	GL. ELEVATION 8423.8 FT K.B. 30 FT ABOVE P.D. K.B.	ELEVATIONS: KB 8453.8 FT DF GL 8423.8 FT
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DATE		23-FEB-2016			
RUN	TRIP	1	1		
SERVICE ORDER	US105974				
DEPTH DRILLER	9253 FT				
DEPTH LOGGER	9095 FT				
BOTTOM LOGGED INTERVAL	9085 FT				
TOP LOGGED INTERVAL	4550 FT				
TIME STARTED	13:00				
TIME FINISHED	19:00				
OPERATOR RIG TIME	6 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 F/MIN				
MAX. RECORDED TEMP.	224 DEGF				
REFERENCE LOG	BAKER HUGHES BOND LOG				
REFERENCE LOG DATE	22-FEB-2016				
EQUIP. NO.	LOCATION	HL-6685	GRAND JCT.		
RECORDED BY	P. EDWARDS				
WITNESSED BY	M. LEBOVITZ				

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

CASING RECORD				
SIZE	WEIGHT	GRADE	FROM	TO
4.5 IN	11.6 LB/F	P-110	30 FT	9290 FT

### REMARKS

RUN 1 TRIP 1: ALL DATA ON THIS LOG IS DEPTH SHIFTED TO THE GAMMA-RAY CURVE ON BAKER HUGHES BOND LOG DATED 22-FEB-2016

BHT = 224 degF

SJ =6746' - 6755'

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	8262XA	10485470	FREE
1	1	RPM	8281EA	10273848	FREE
1	1	RPM	8281PA	10169251	FREE
1	1	RPM	8281FA	10191667	FREE
1	1	TEMP	8255XA	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: 9

Plotted: Tue Feb 23 18:31:54 2016

PARAMETER AND FILTER SUMMARY REPORT

FILE: /dat1a/CH\_PUCKETT24D\_1/n353hx02.prm  
 LOGGING MODE: DEPTH DIRECTION: UP  
 TOP DEPTH: 4539.000 ft BOTTOM DEPTH: 9101.000 ft

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

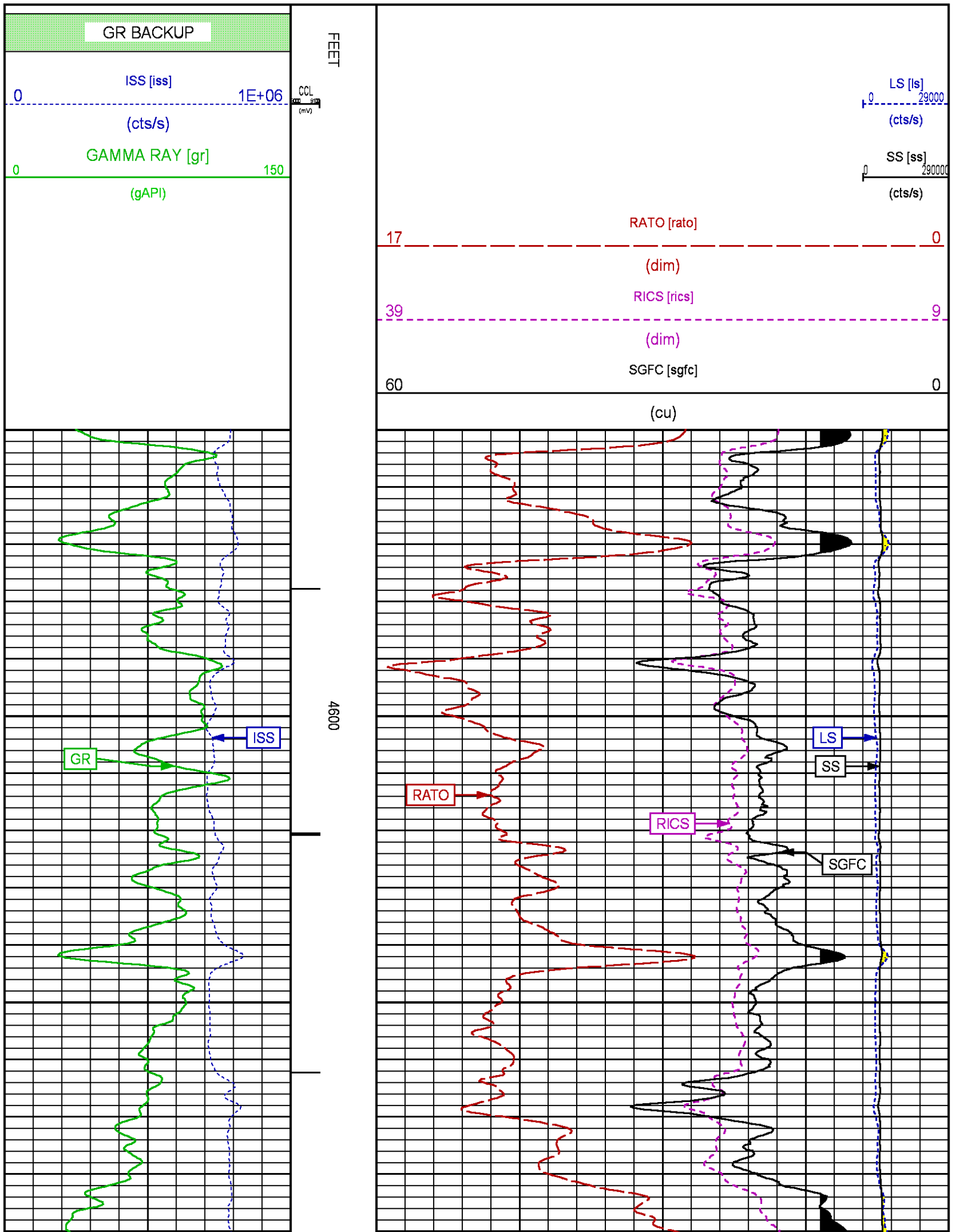
RPM PROCESSING				
MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)
PNC Parameters	BOREHOLE CONTENTS	FLUID		TOP BOTTOM
	OPEN/CASED HOLE	CASED HOLE		" "
	BOREHOLE SIZE	7.88	in	" "
	CASING SIZE	4.50	in	" "
	MATRIX	SANDSTONE		" "
	CORRECTION BUFFER	11		" "

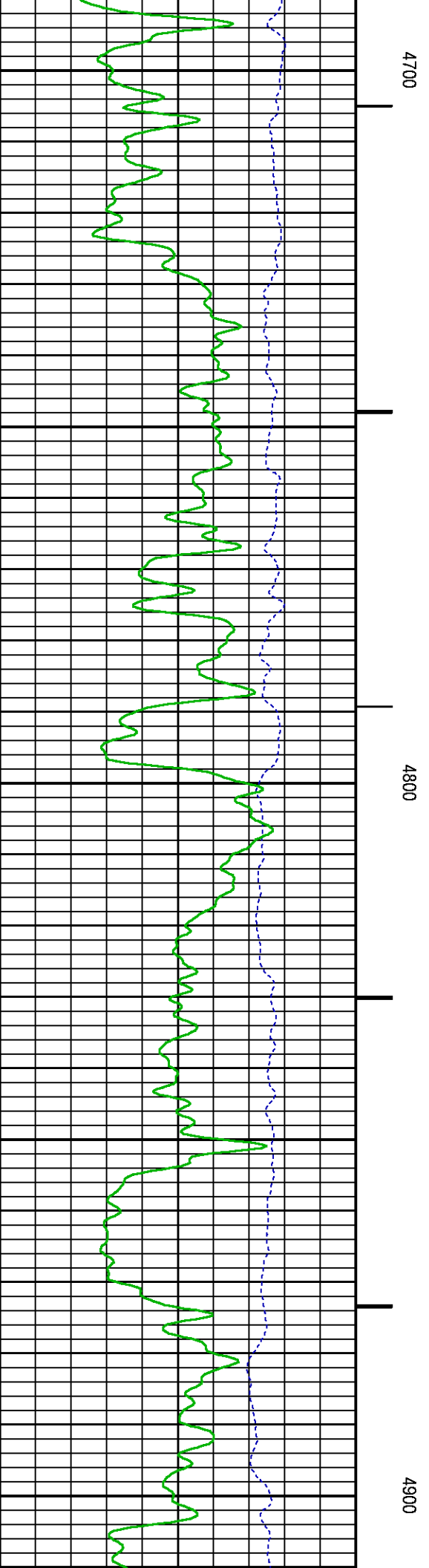
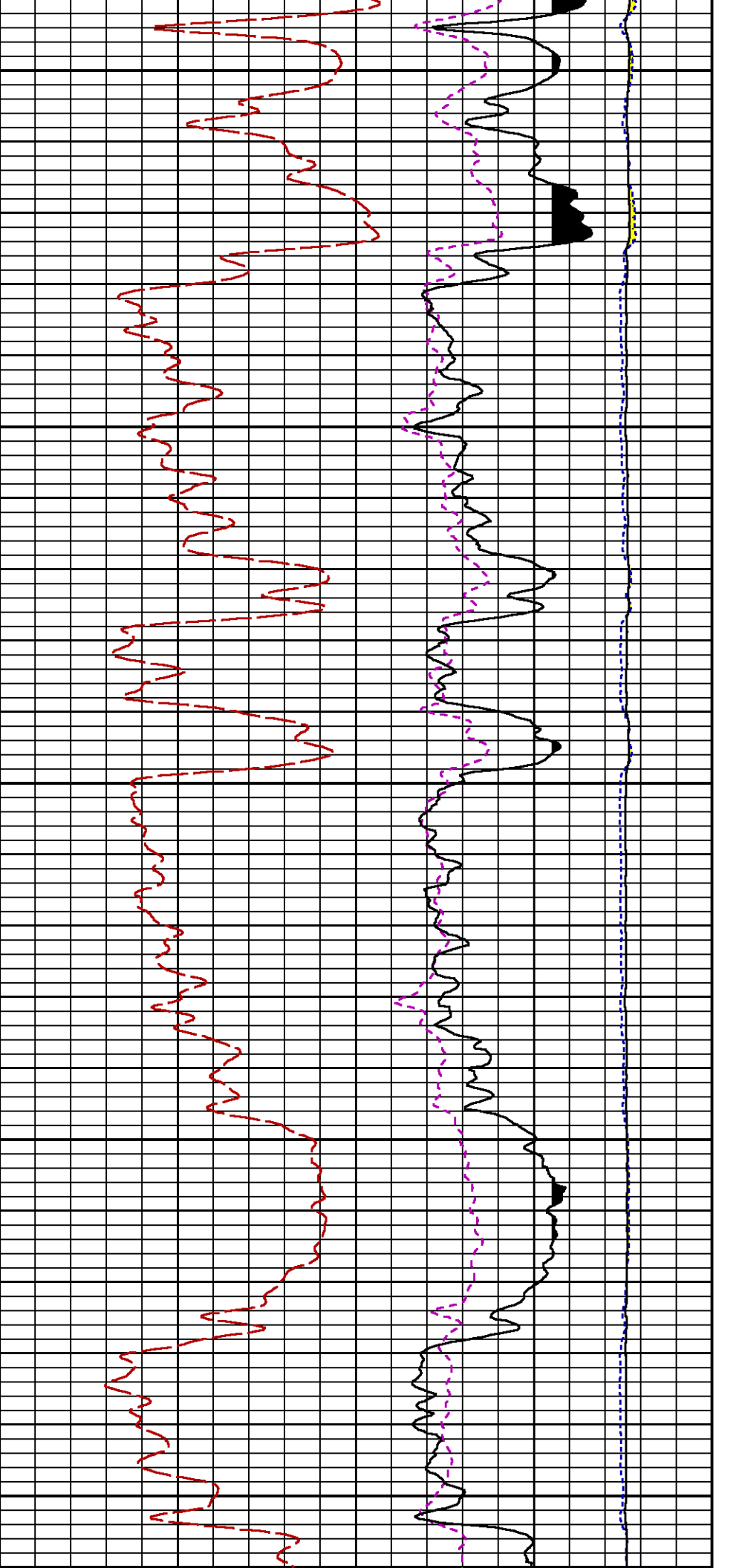
CURVE DESCRIPTION REPORT		
CURVE NAME	CREATION DATE	CURVE DESCRIPTION
F1:CCL	Feb 23 13:51:40 2016	CASING COLLAR LOCATOR
F1:GR	Feb 23 13:51:40 2016	GAMMA RAY
F1:ISS	Feb 23 13:51:40 2016	INELASTIC SHORT SPACE COUNT RATE
F1:LS	Feb 23 13:51:40 2016	LONG SPACE COUNT RATE
F1:RATO	Feb 23 13:51:40 2016	SHORT/LONG SPACE COUNT RATE RATIO
F1:RICS	Feb 23 13:51:40 2016	SHORT SPACE INELASTIC TO CAPTURE COUNT RATE RATIO (ISS/CSS)
F1:SGFC	Feb 23 13:51:40 2016	CORRECTED FORMATION SIGMA
F1:SS	Feb 23 13:51:40 2016	SHORT SPACE COUNT RATE

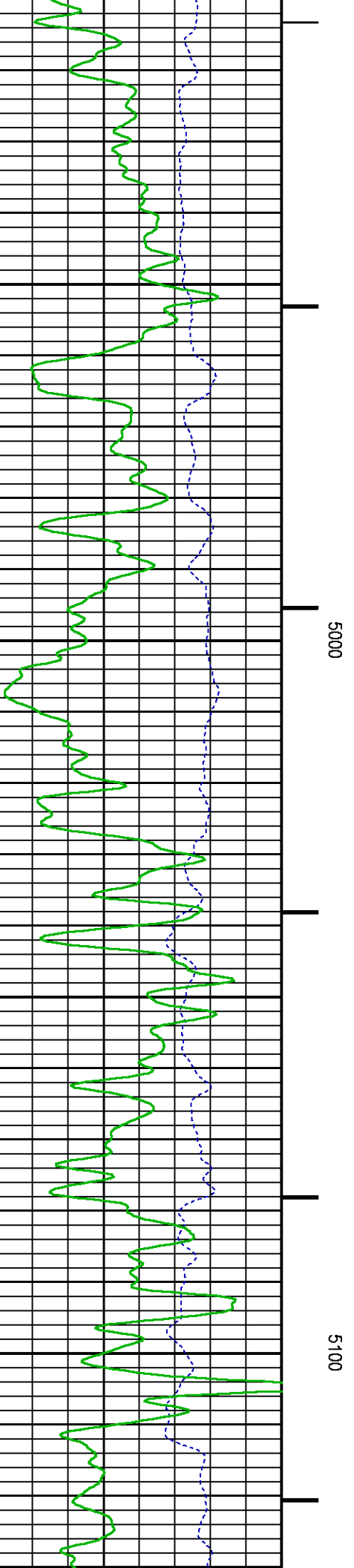
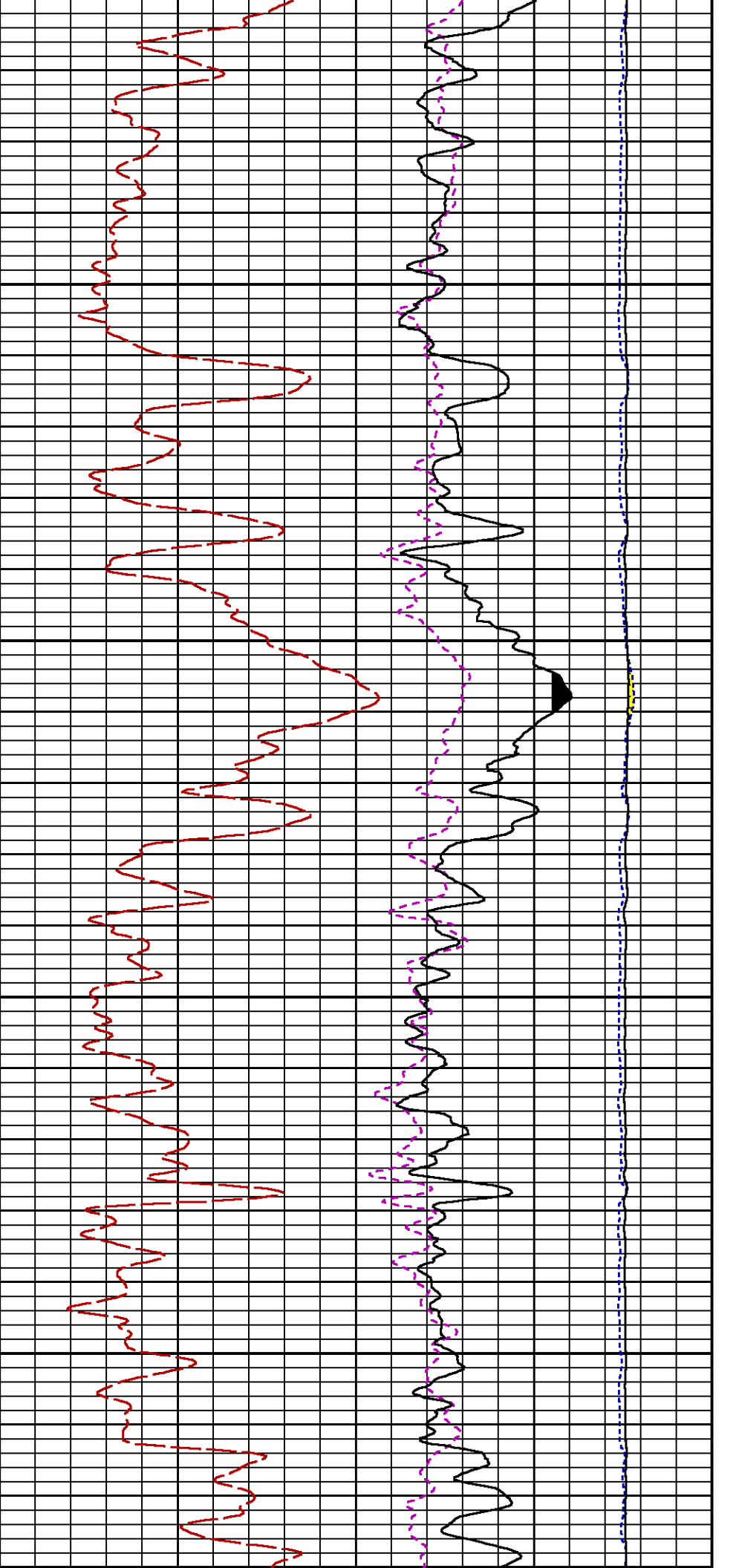
CURVE MEASURE POINT OFFSET							
CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
CCL	26.00	ISS	12.75	RATO	12.75	SGFC	12.75
GR	23.00	LS	12.75	RICS	12.75	SS	12.75

Presentation : cas6685:/dat1a/CH\_PUCKETT24D\_1/24D\_1RPM\_MAIN.fvpdf [5"/100' Scale]  
 Plot Interval : 4550 - 9100 Feet

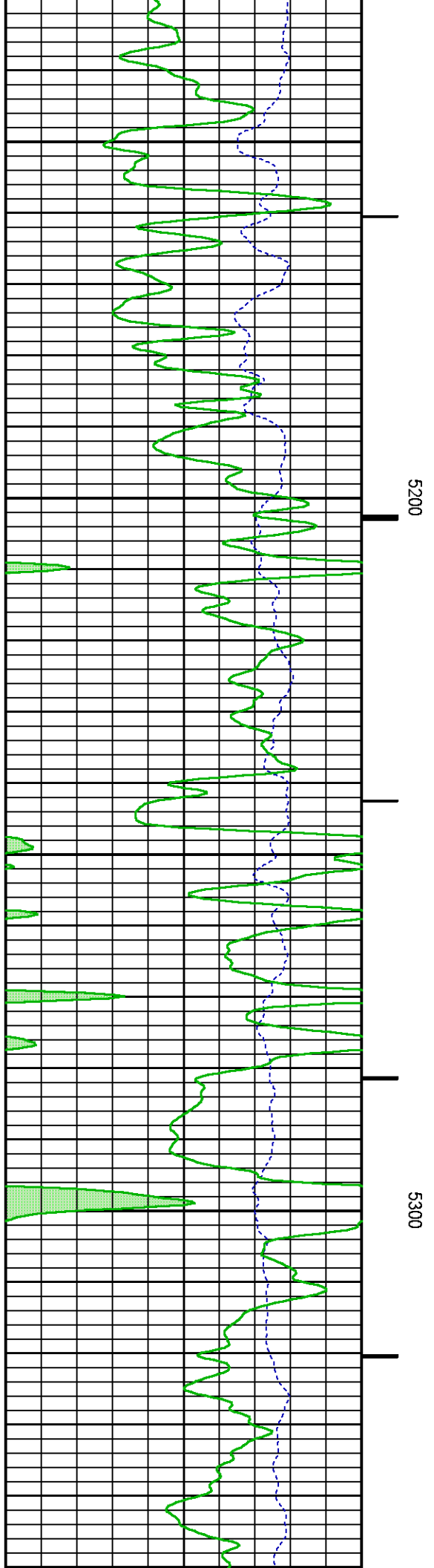
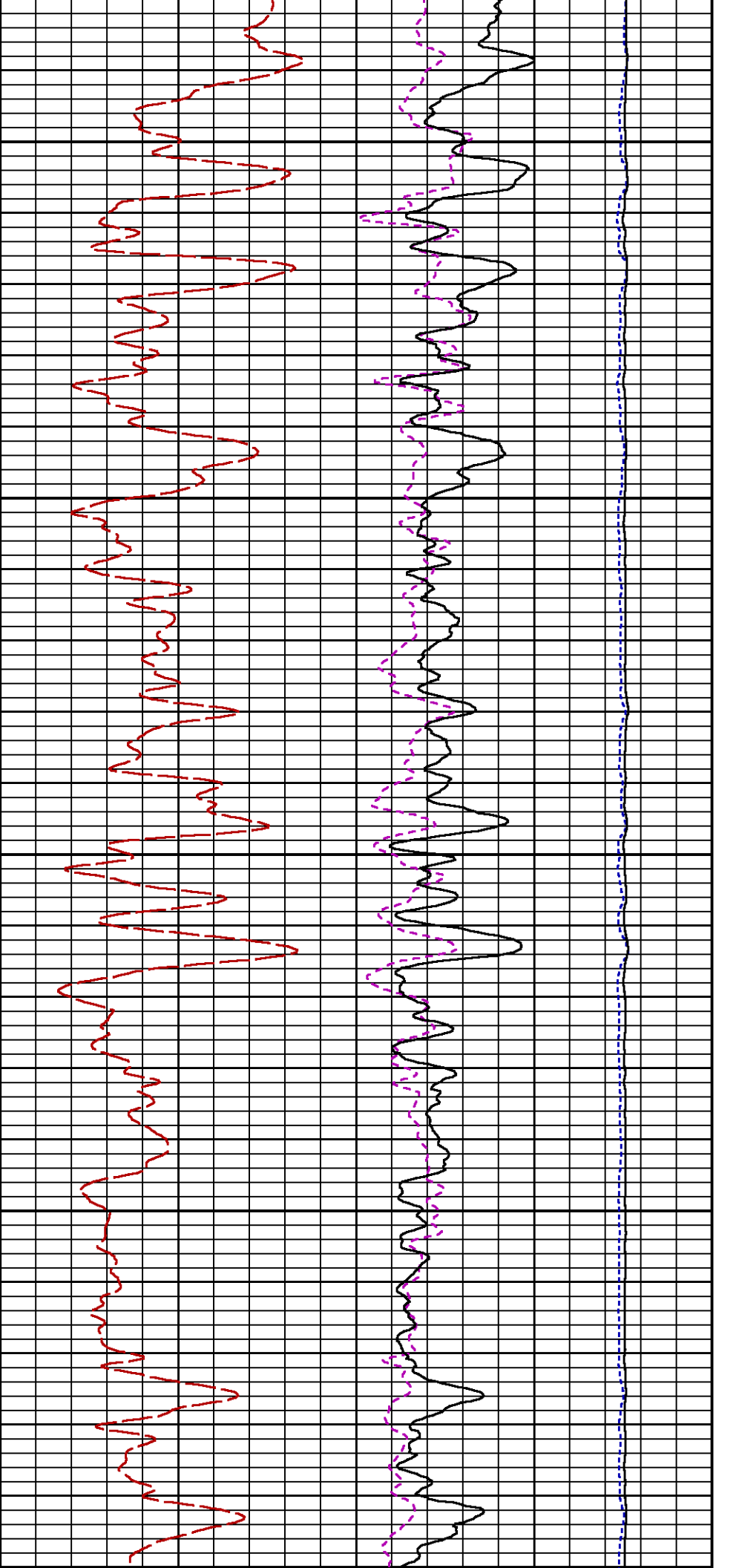
Data File 1 : F1 : cas6685:/dat1a/CH\_PUCKETT24D\_1/n353hx02MAIN24D.xtf  
 Created On : Feb 23 13:51:40 2016  
 Company : CAERUS OIL AND GAS  
 Well : PUCKETT\_24D\_1  
 Field : GRAND VALLEY  
 File Interval : 4513 - 9100.75 Feet  
 OCT : 2521

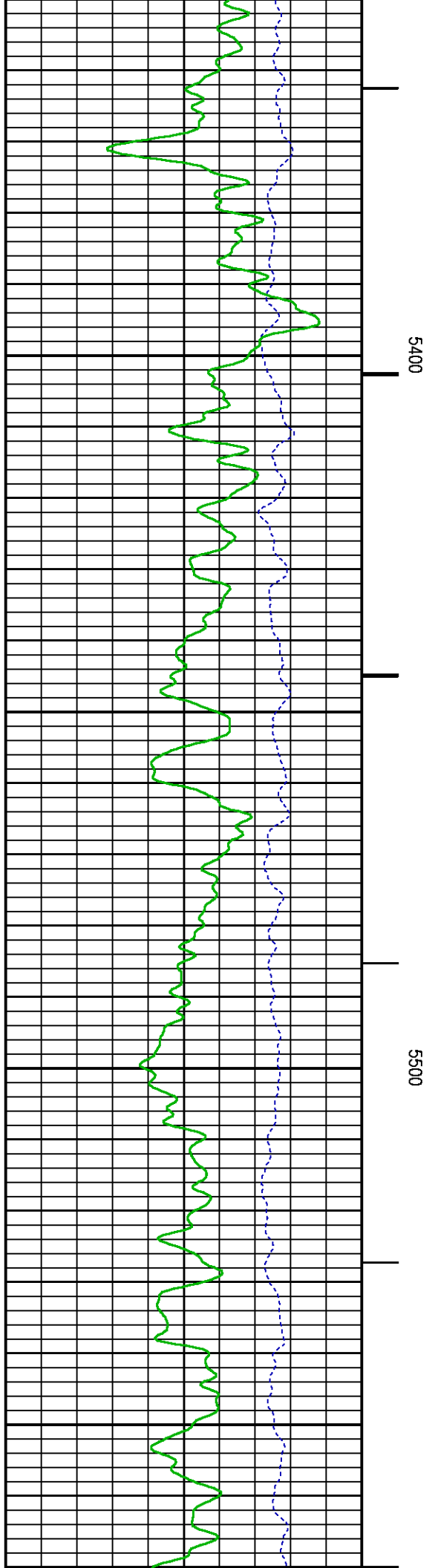
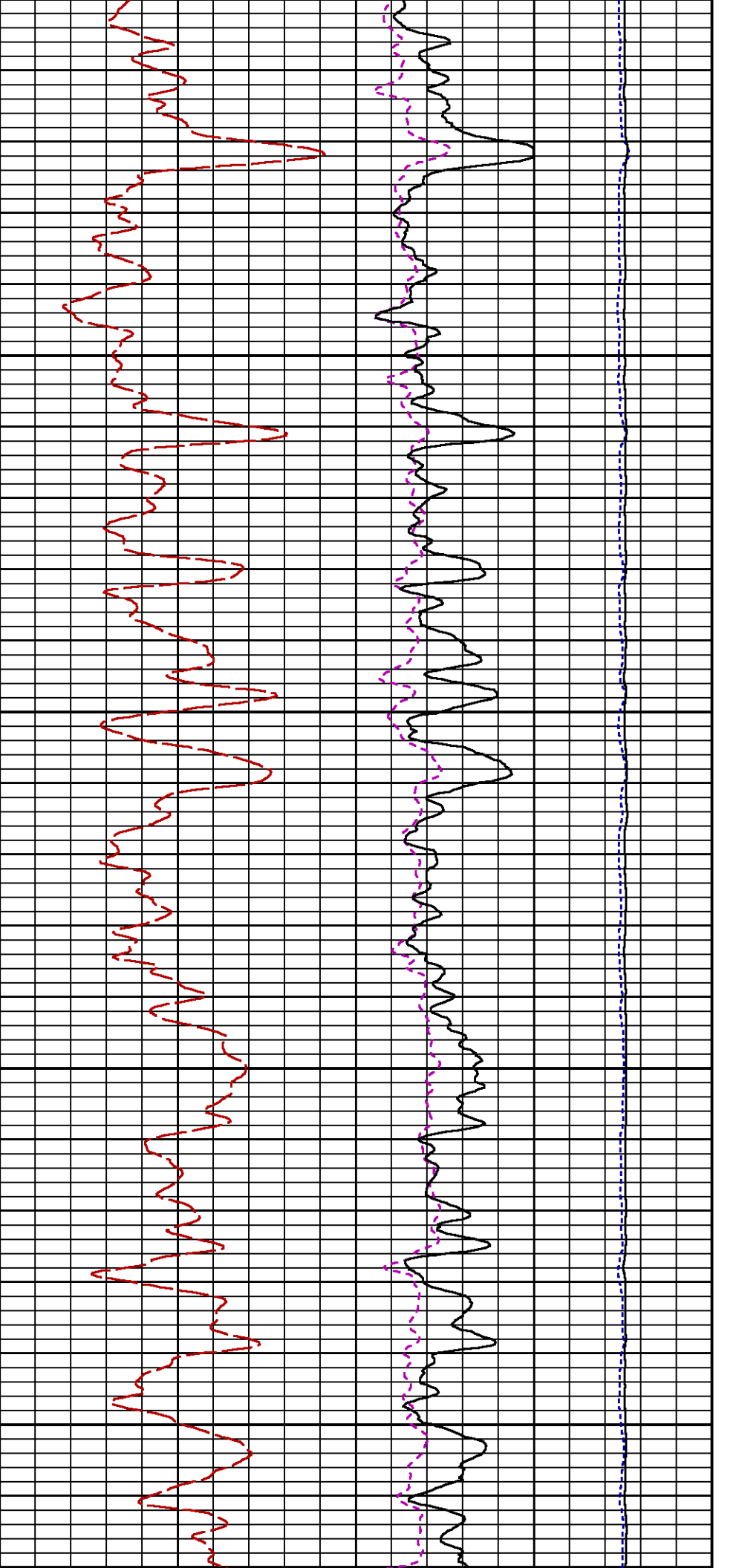


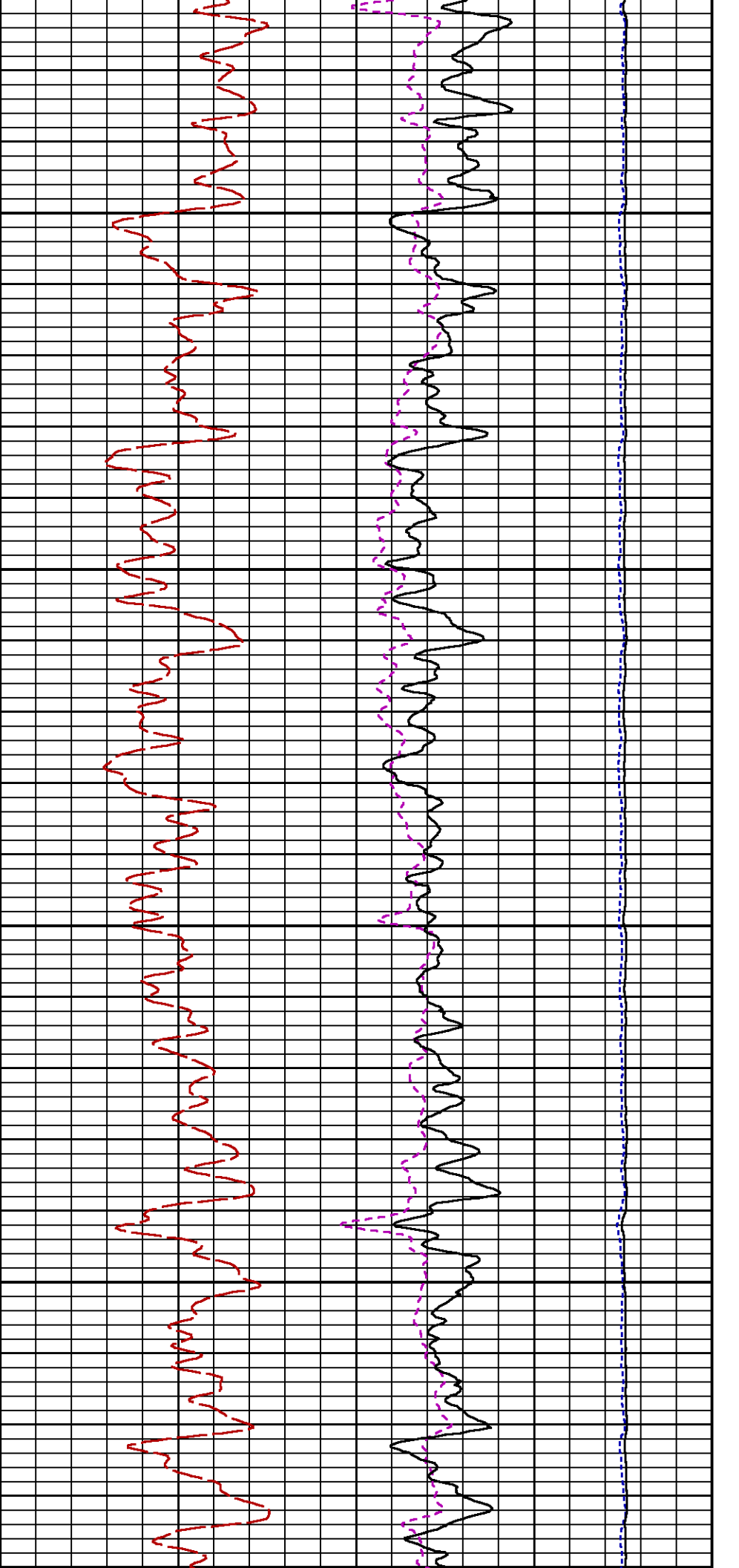




5000000000

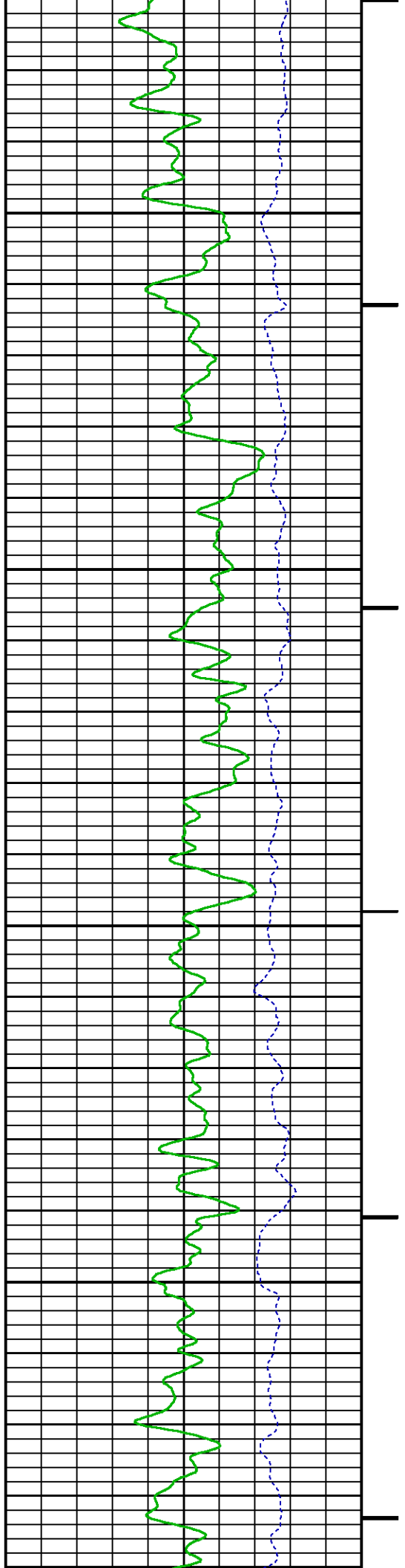




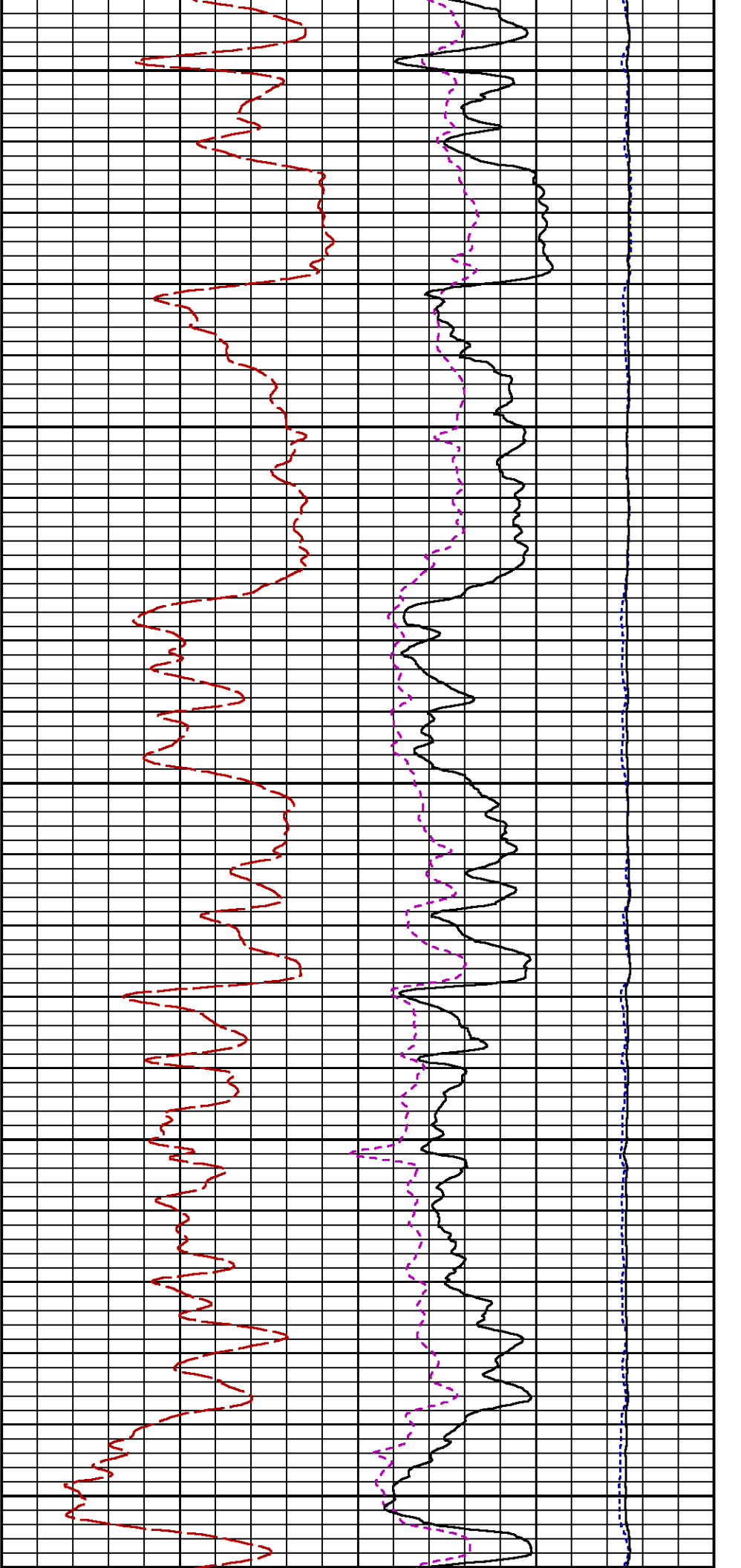


5600

5700



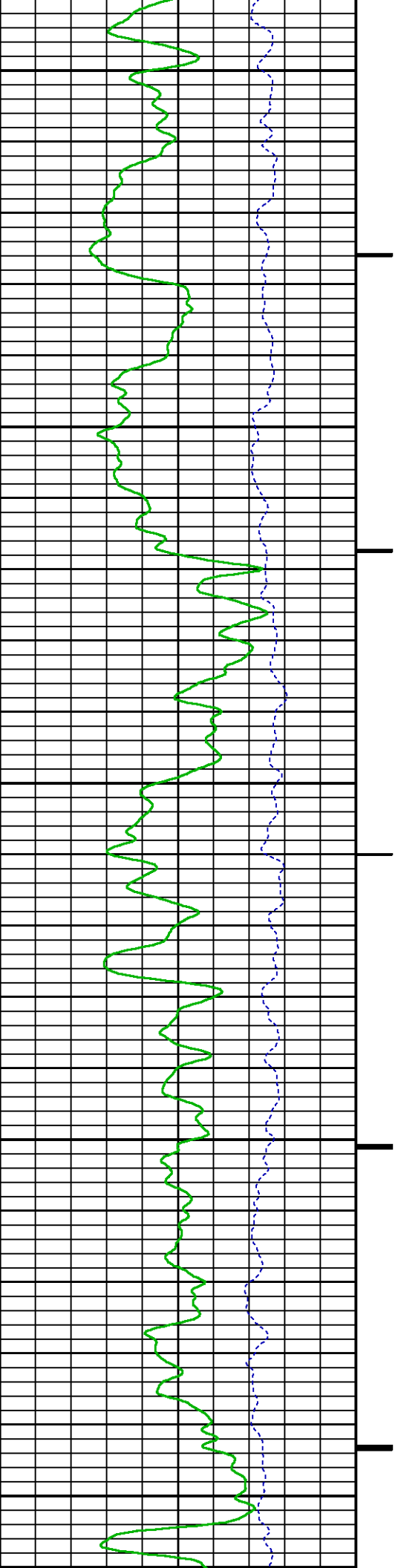


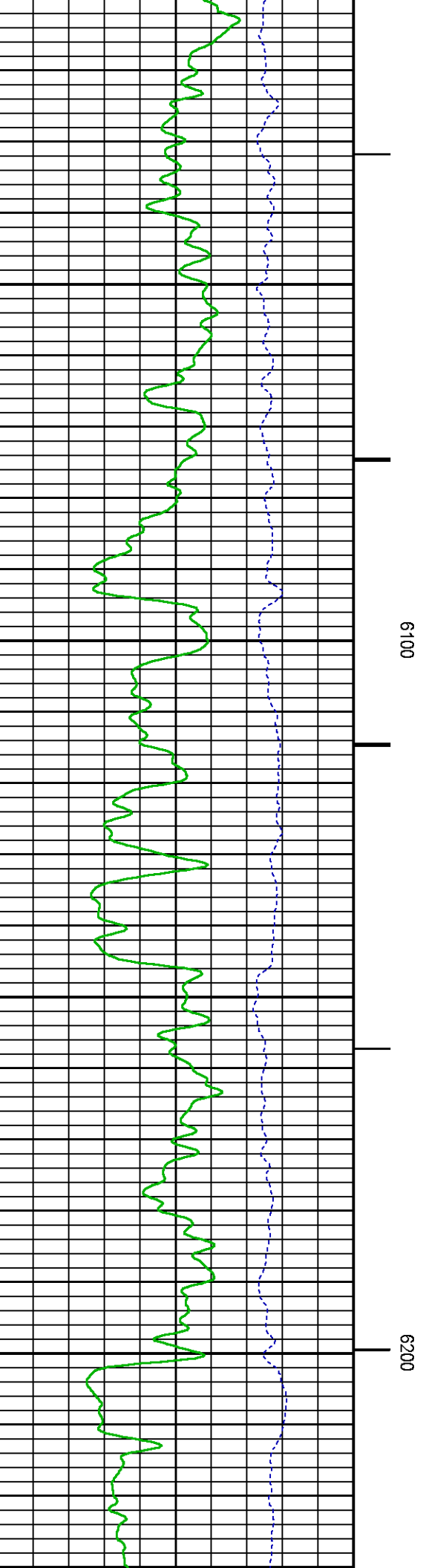
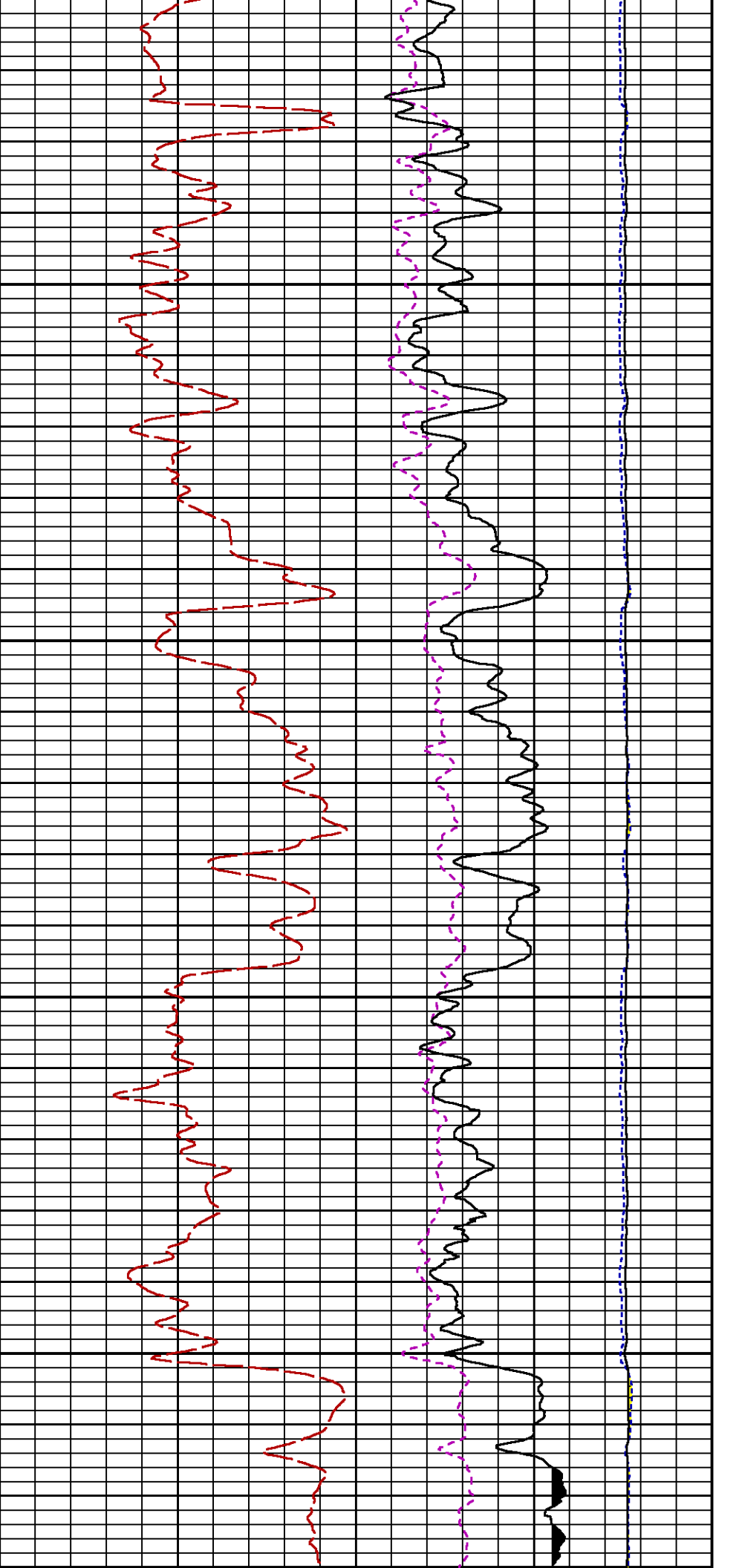


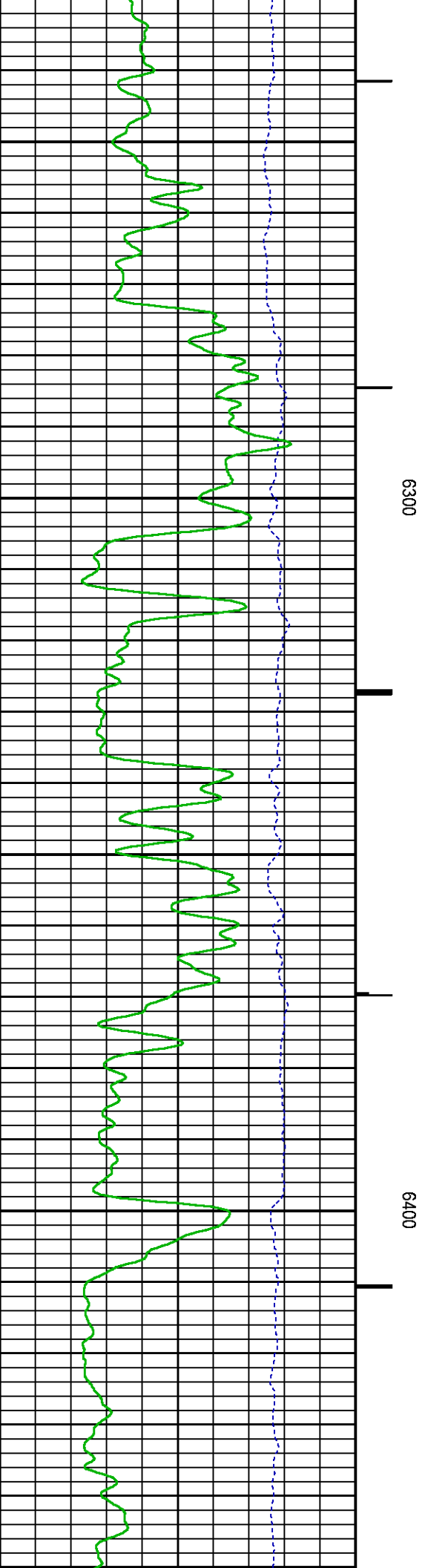
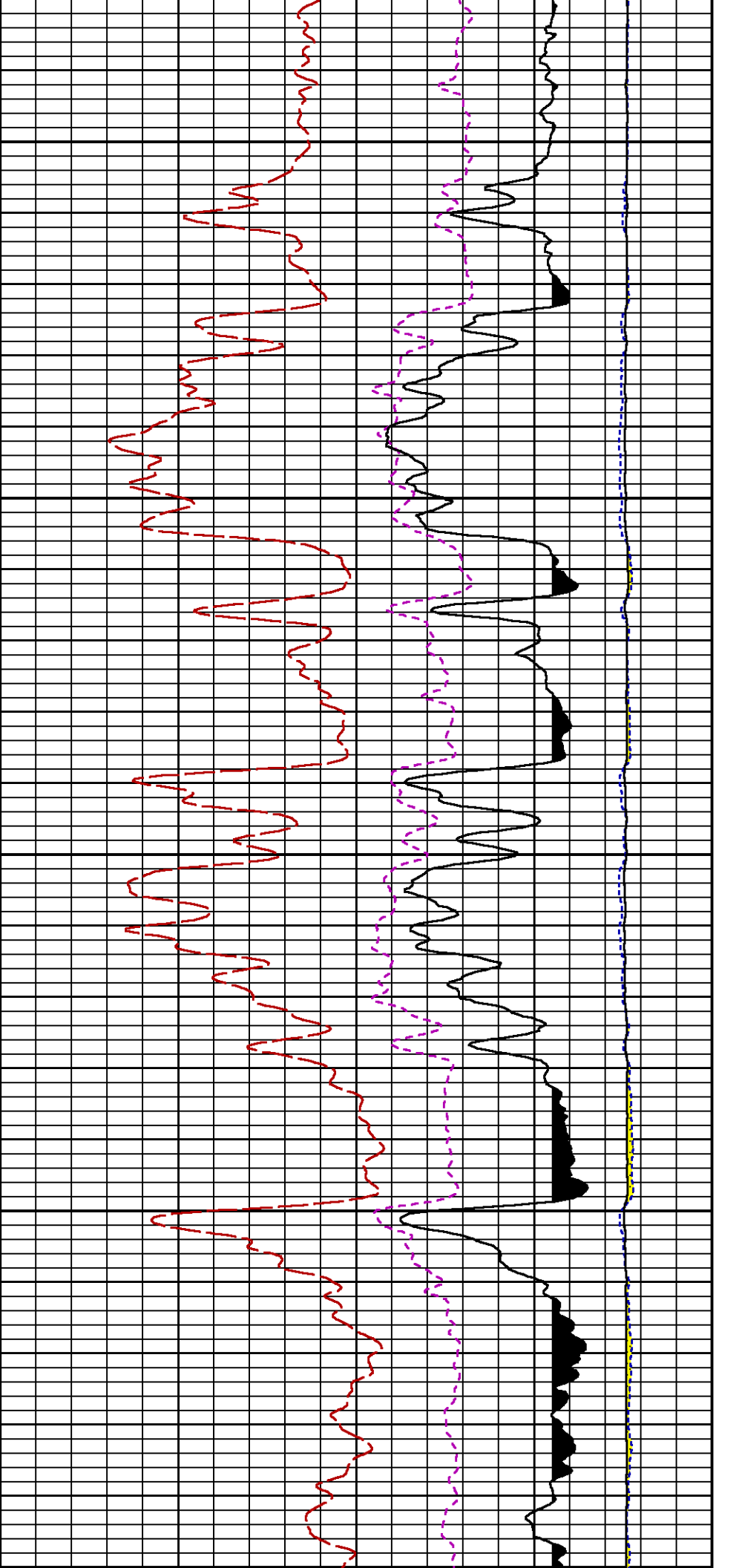
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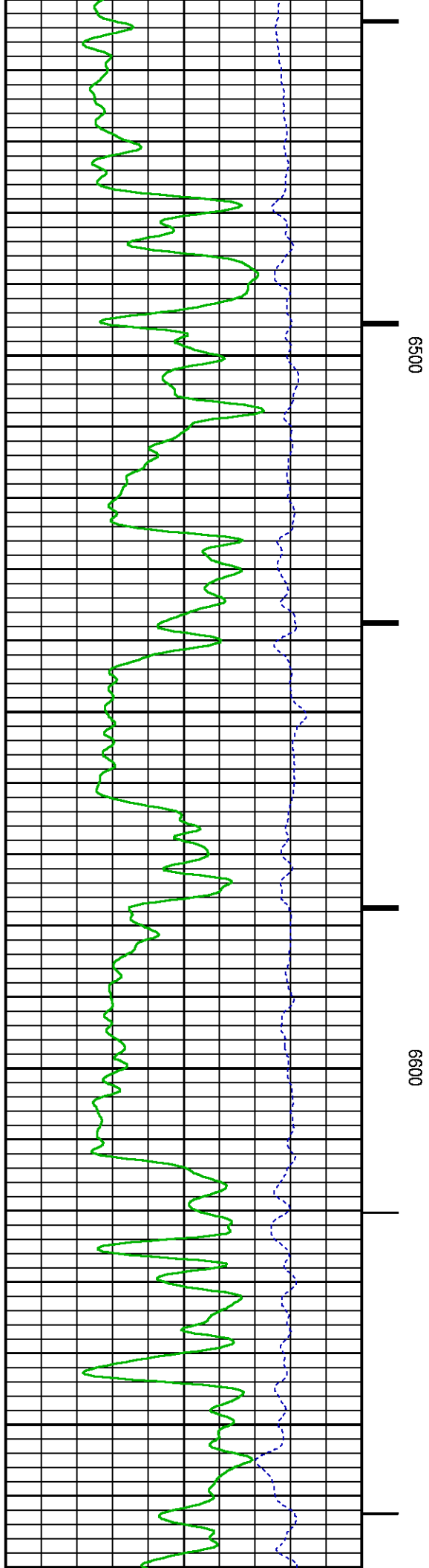
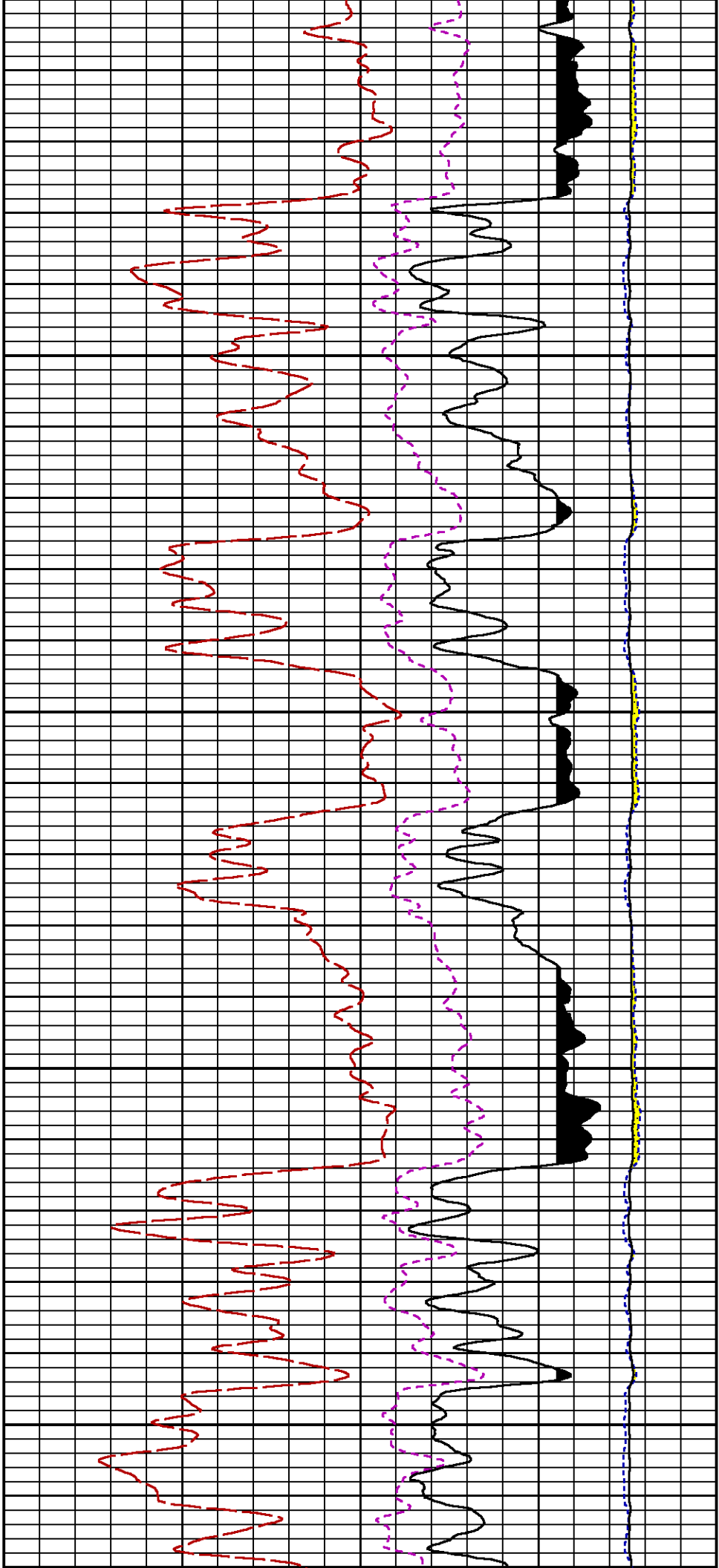
5900

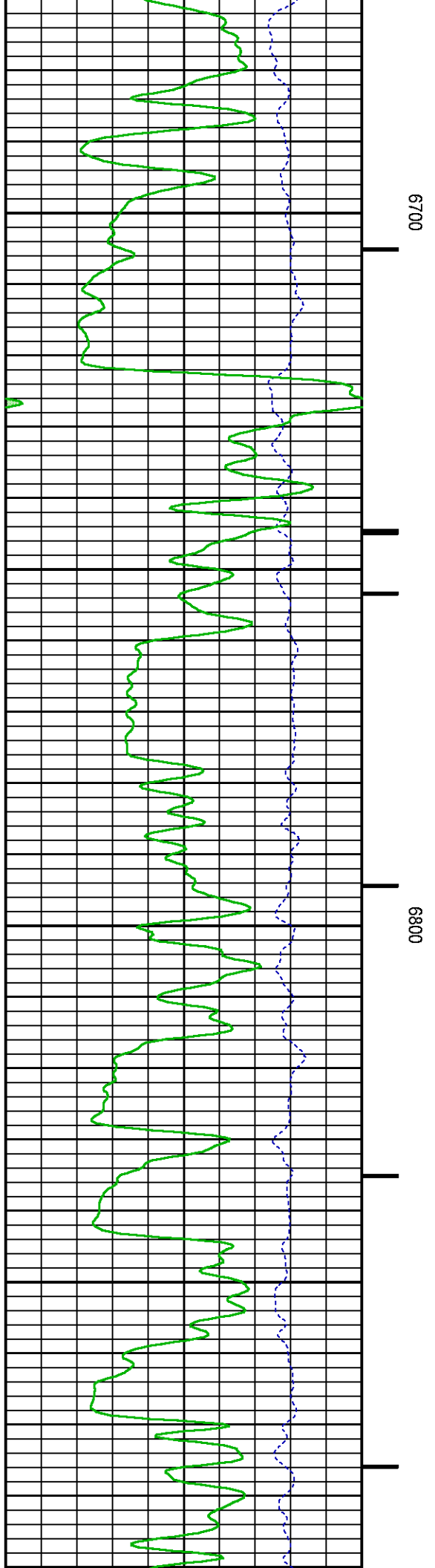
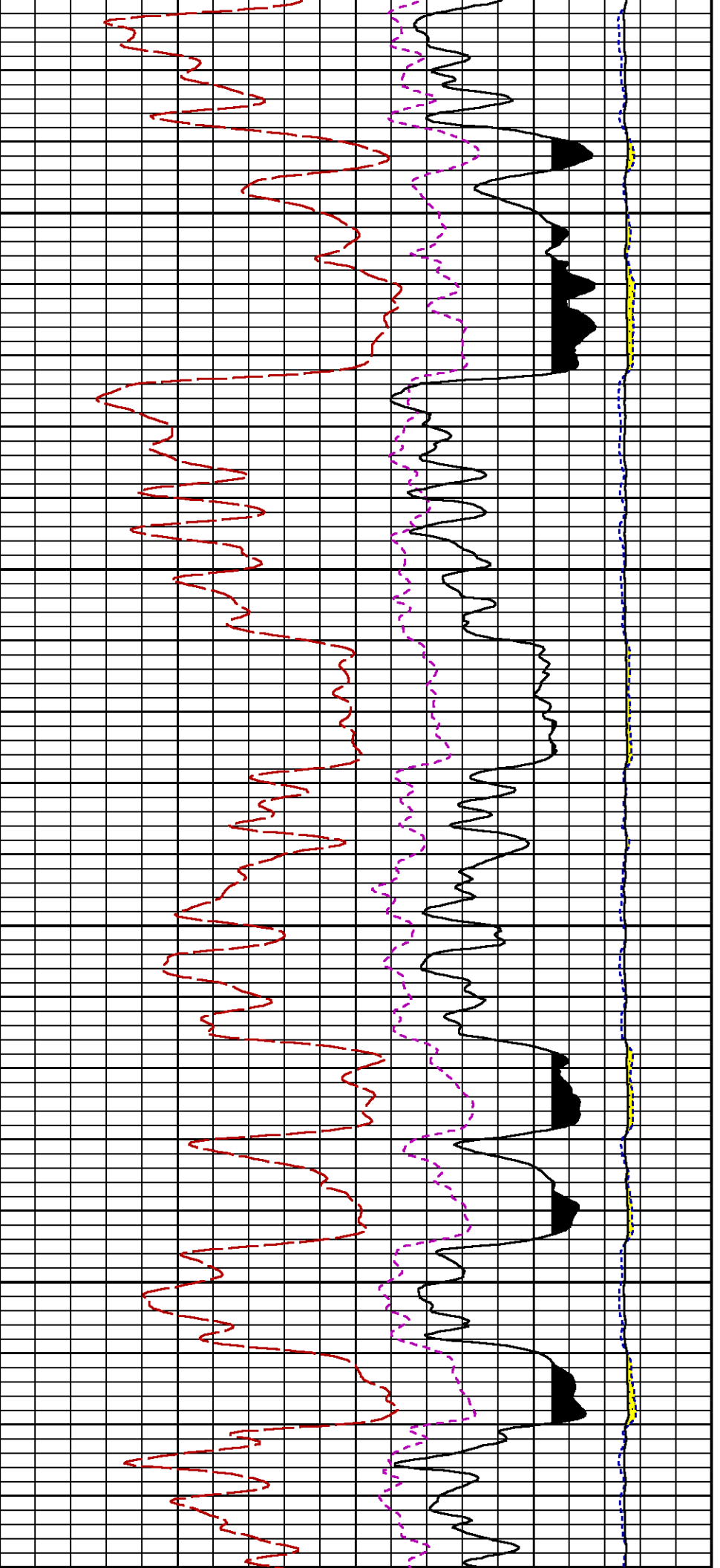
6000

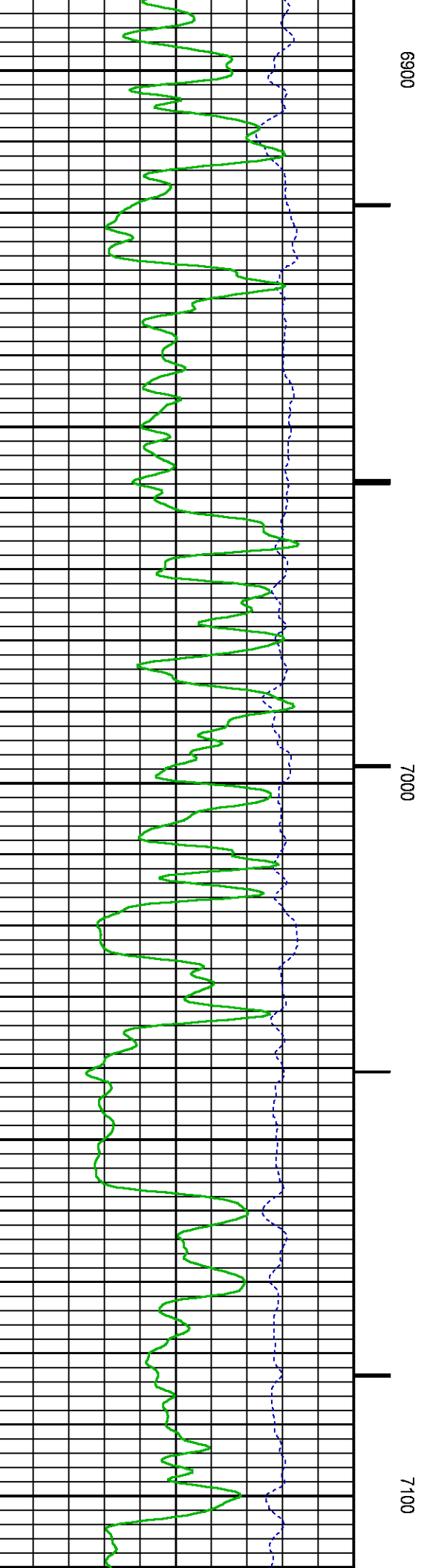
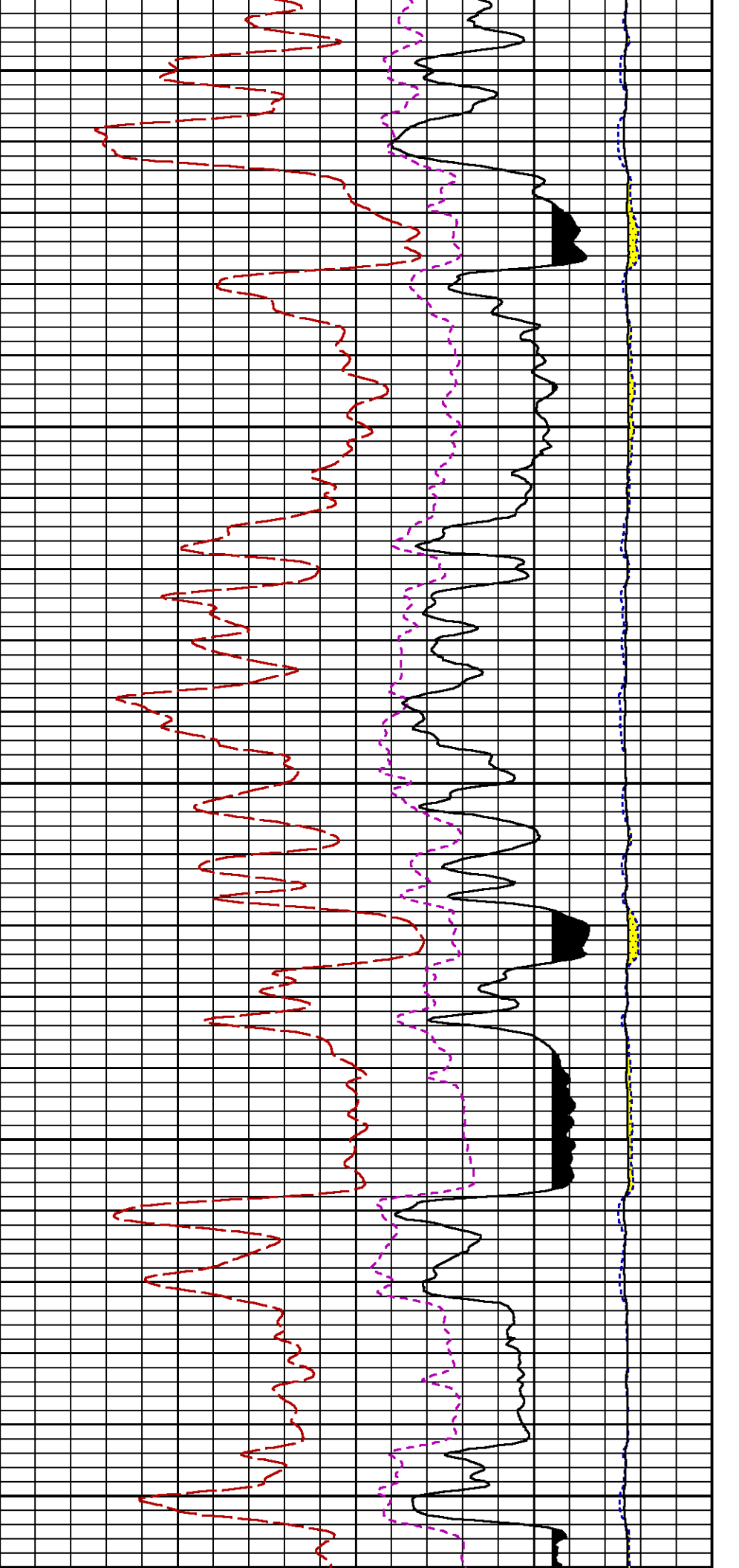


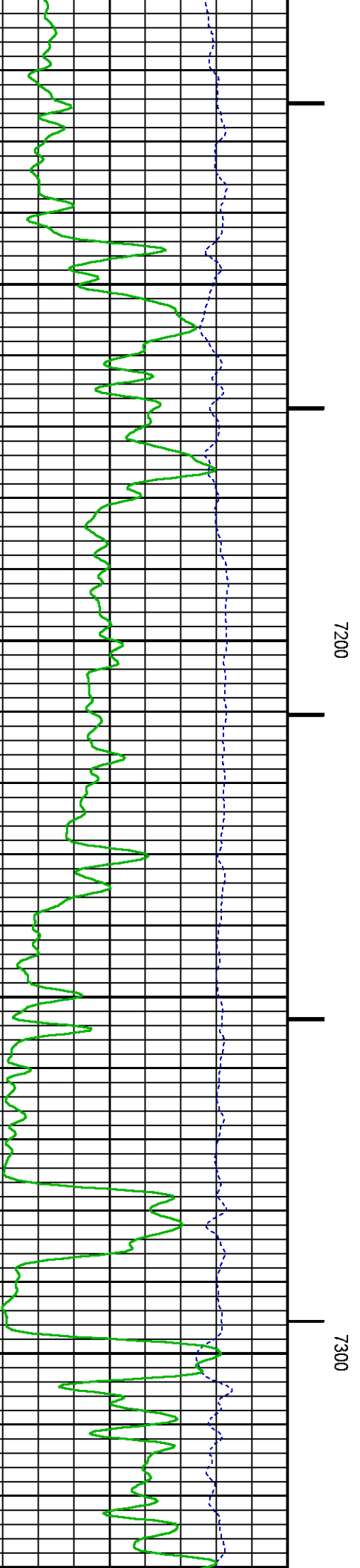
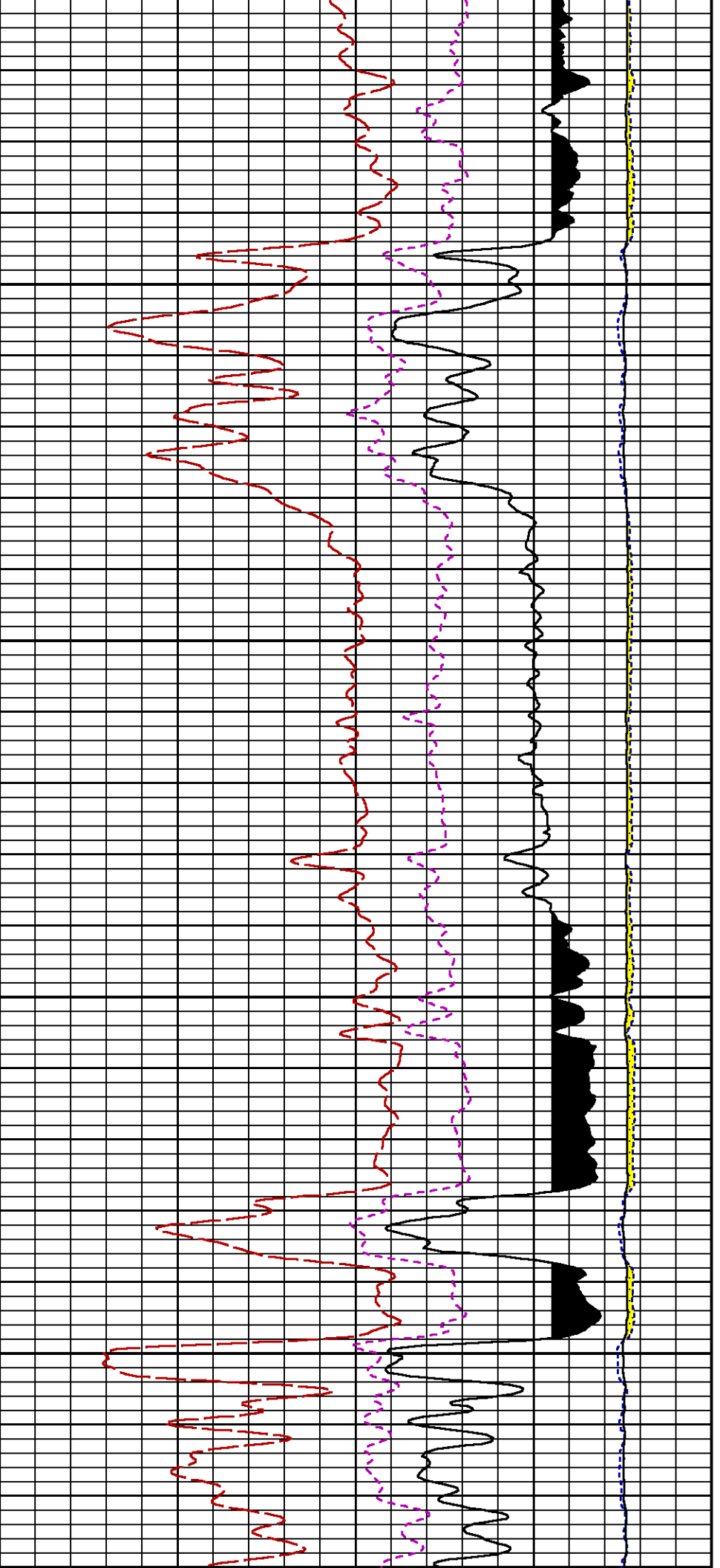


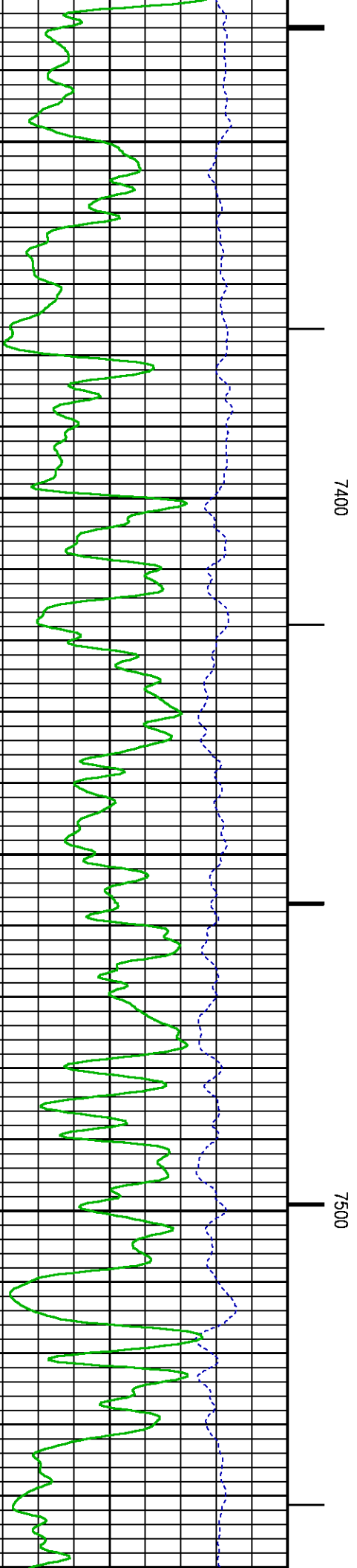
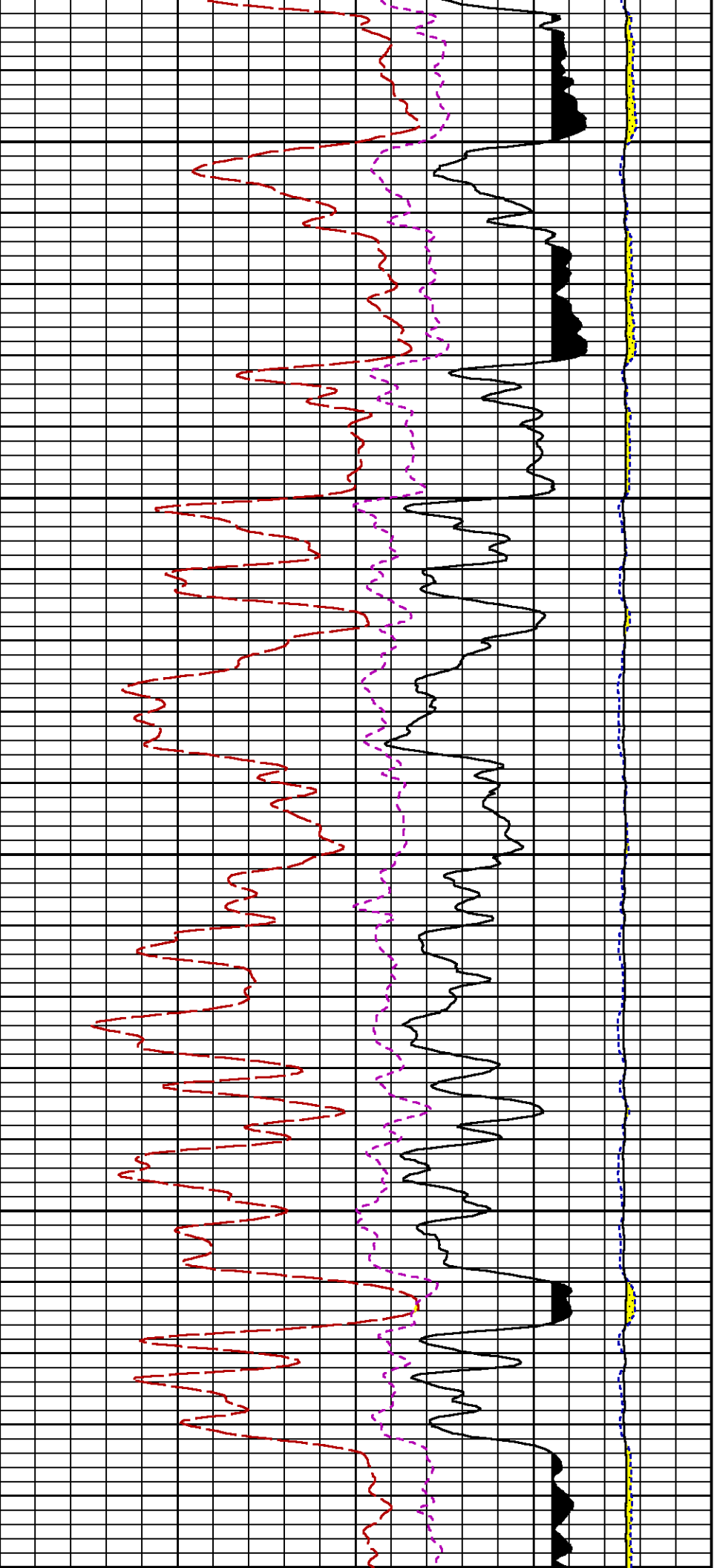




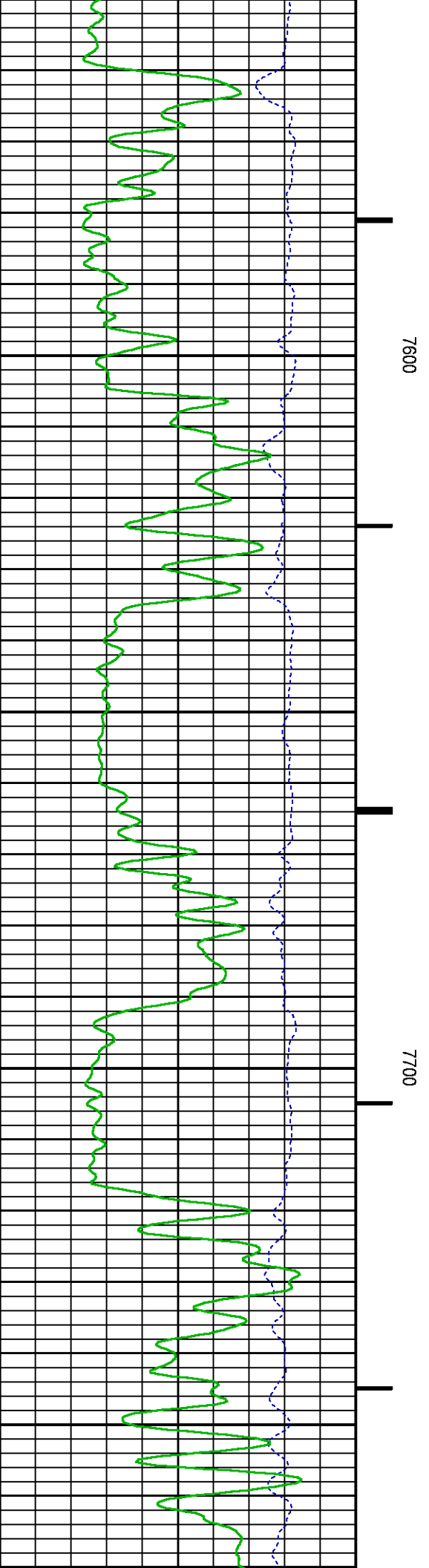
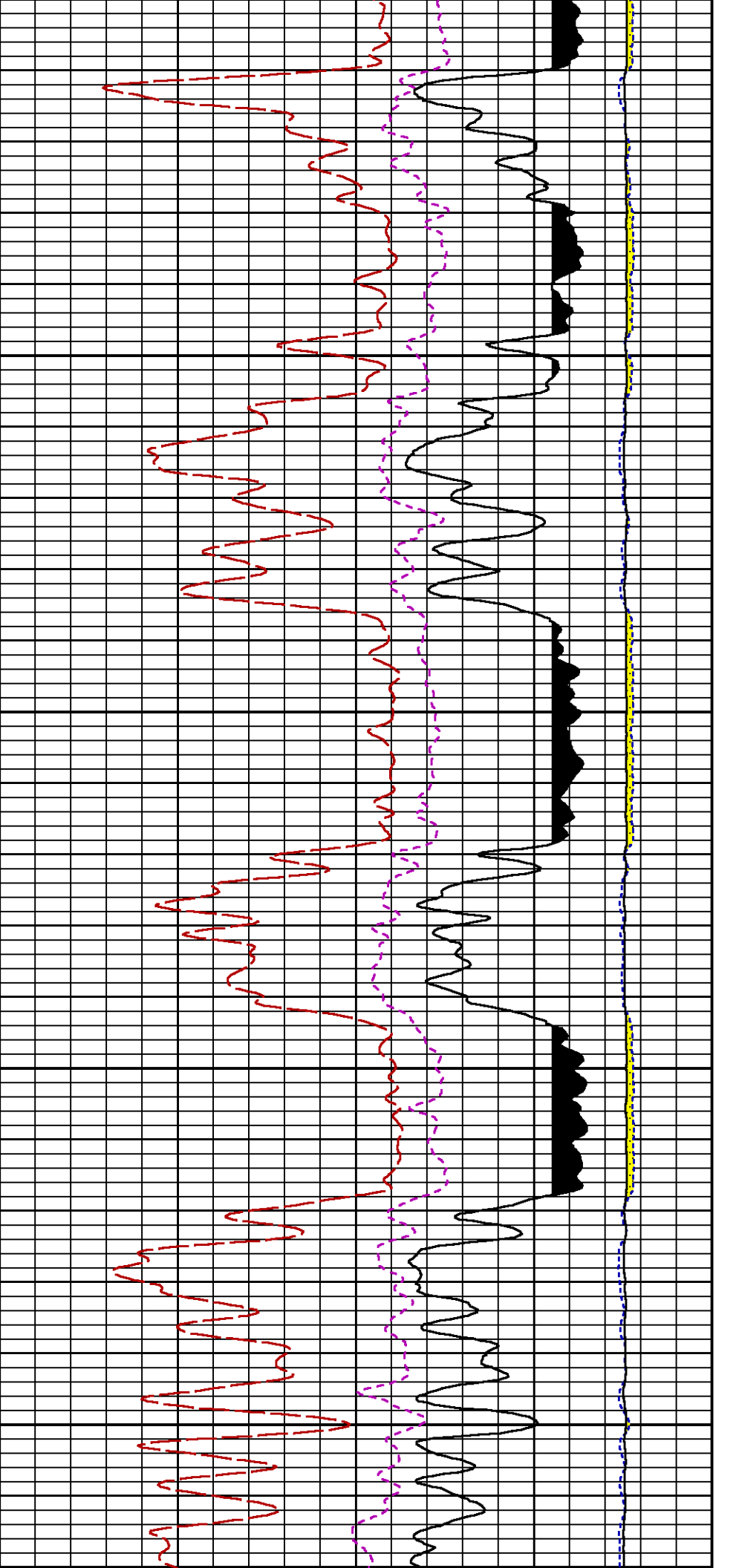


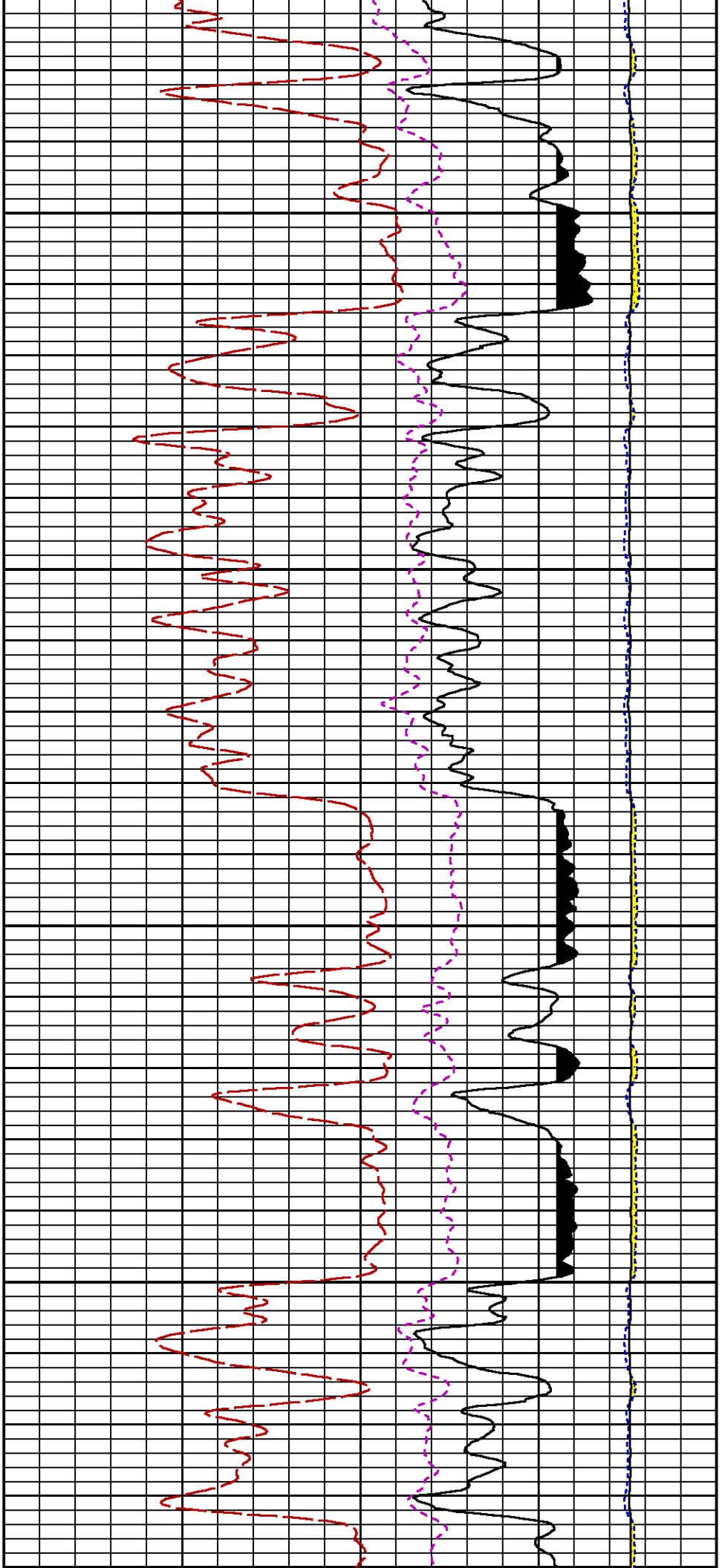






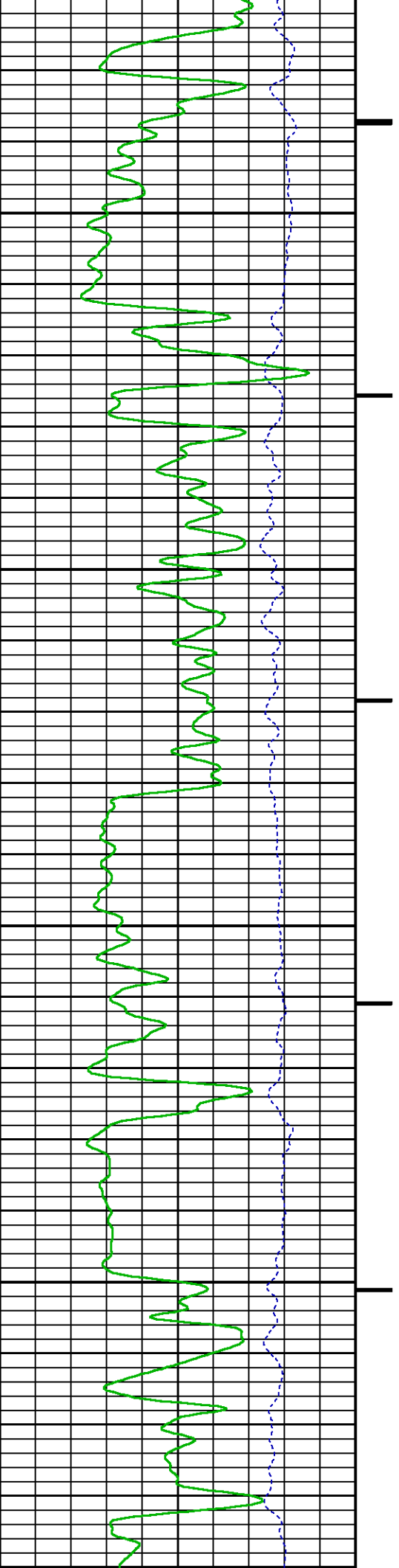


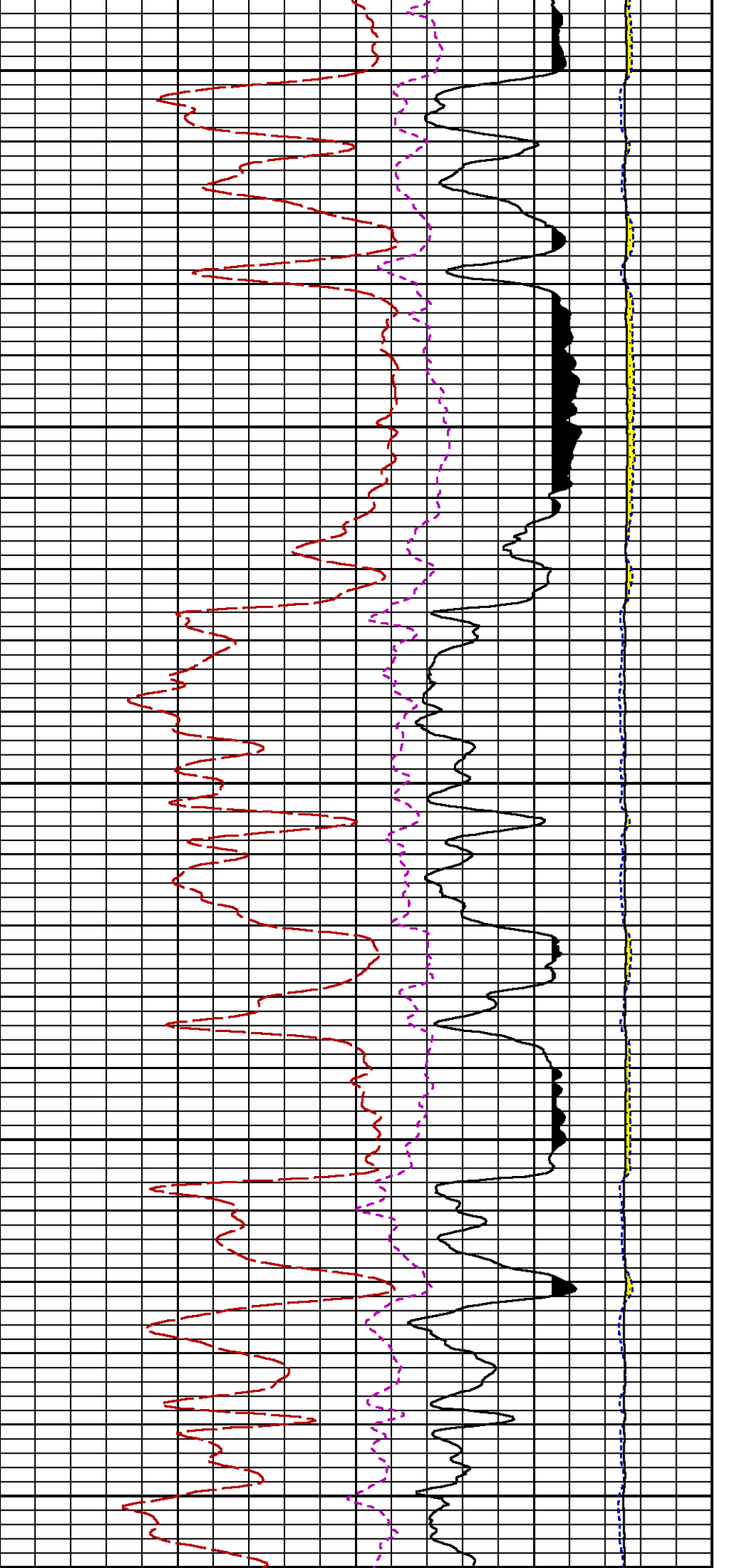




7800

7900

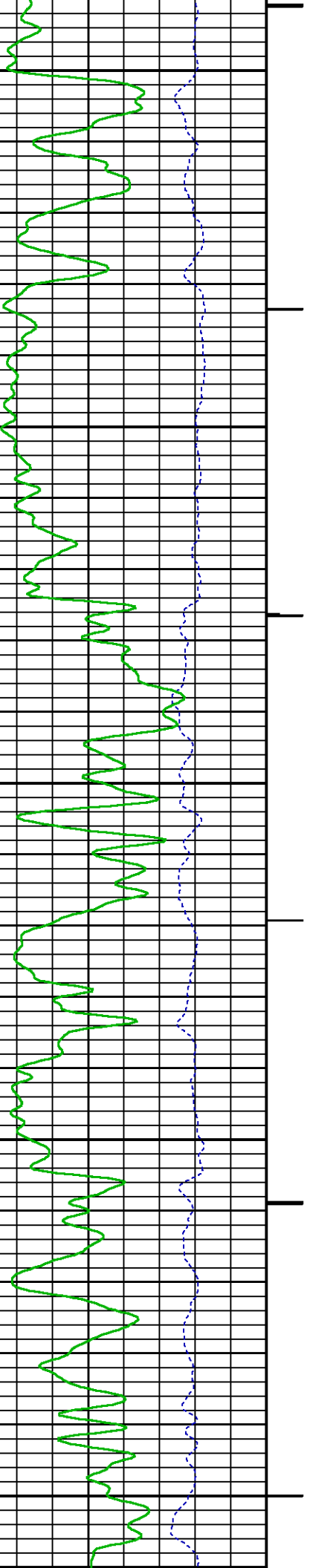


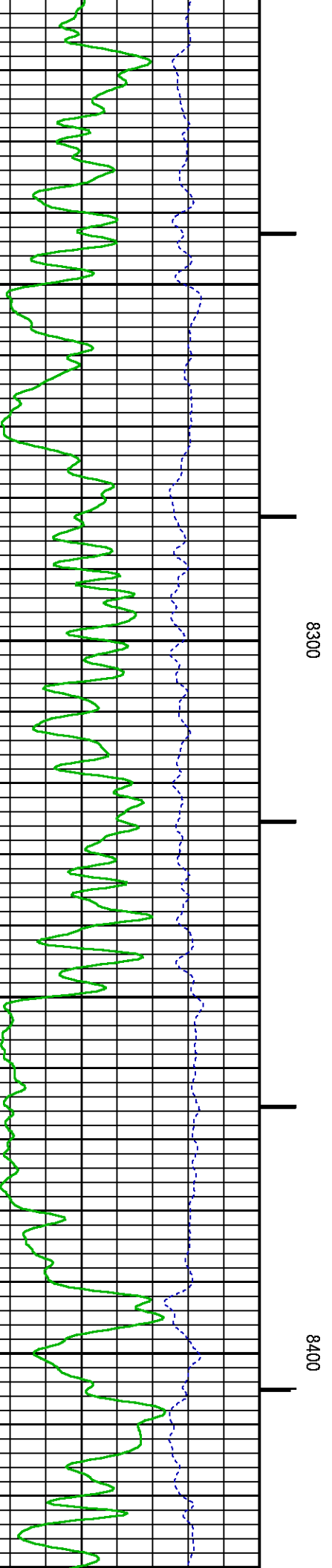
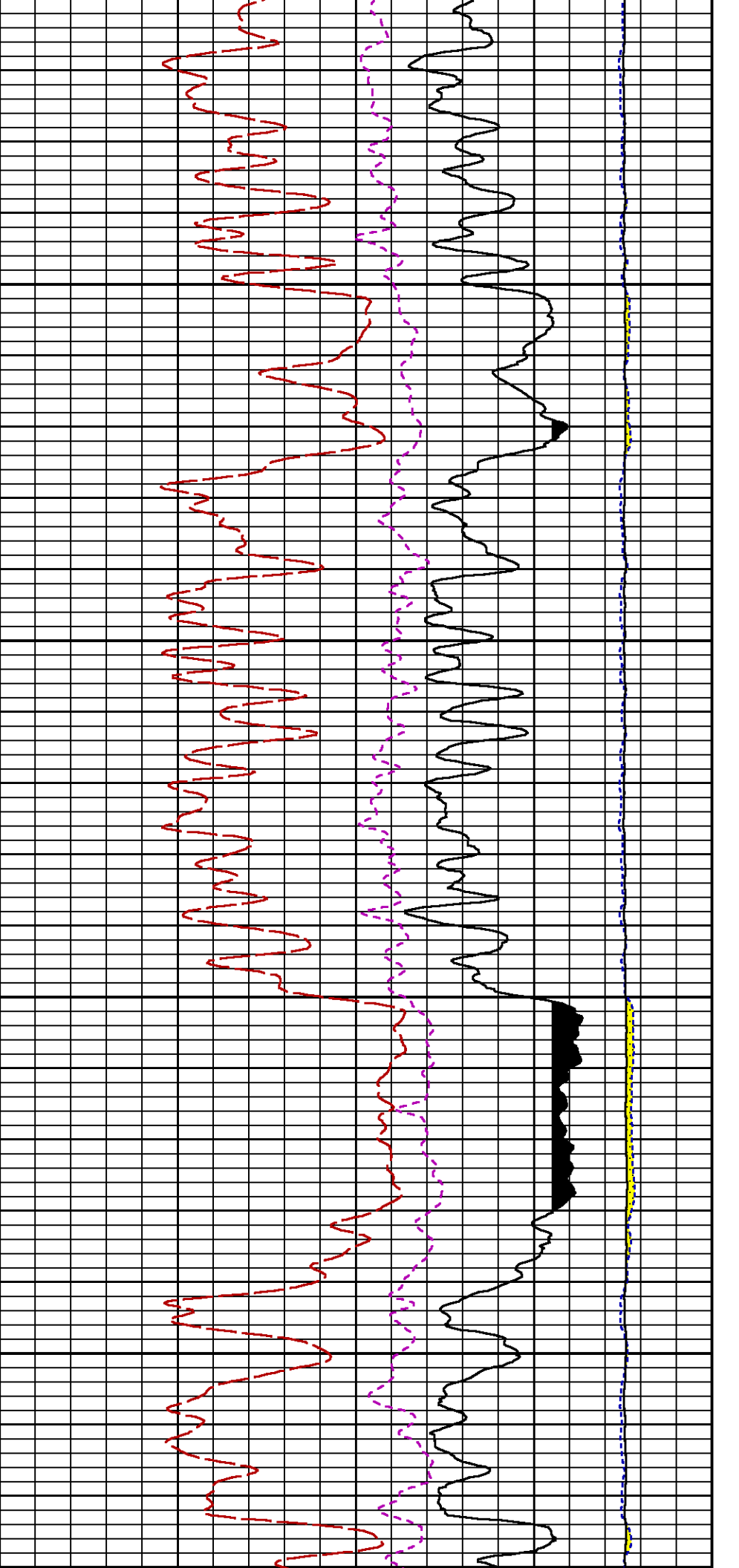


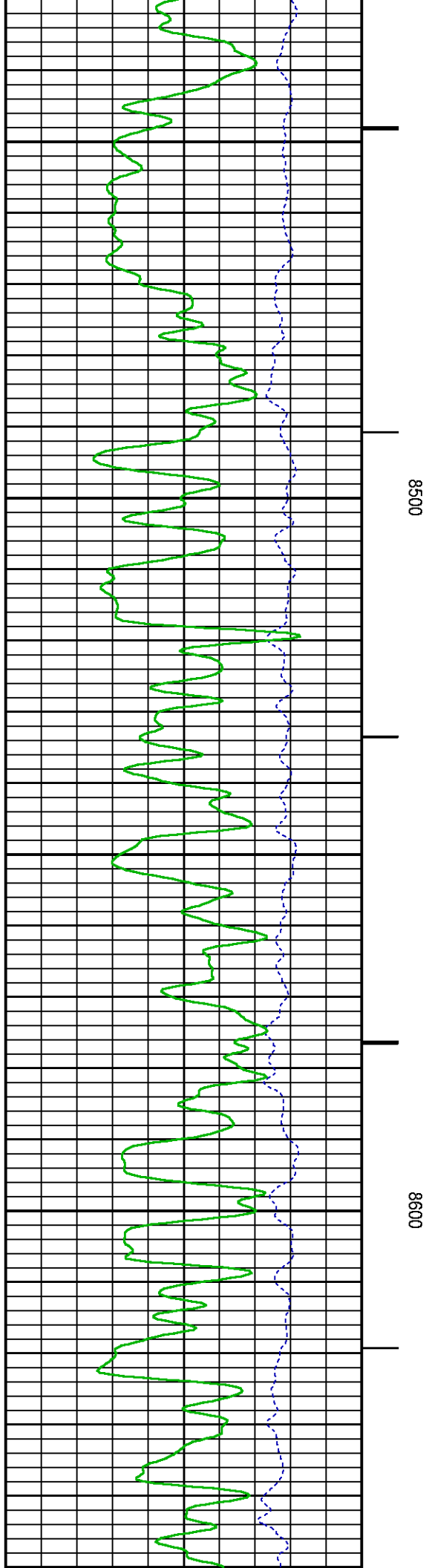
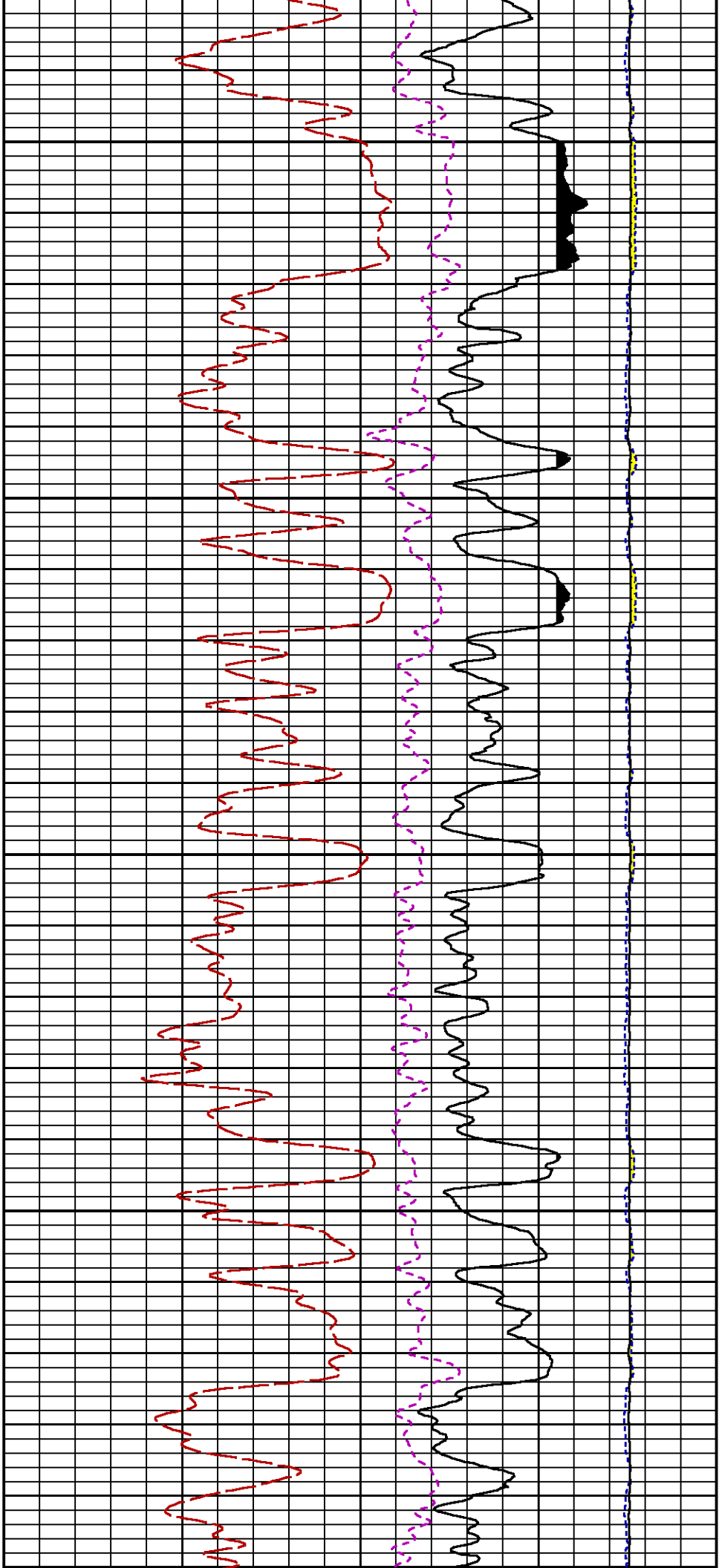
8000

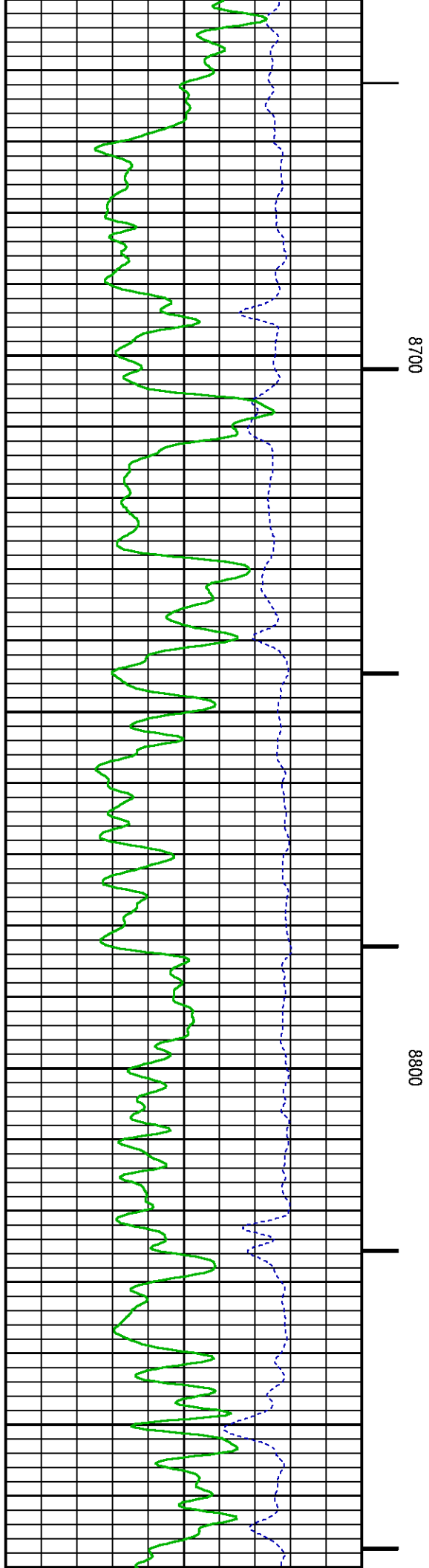
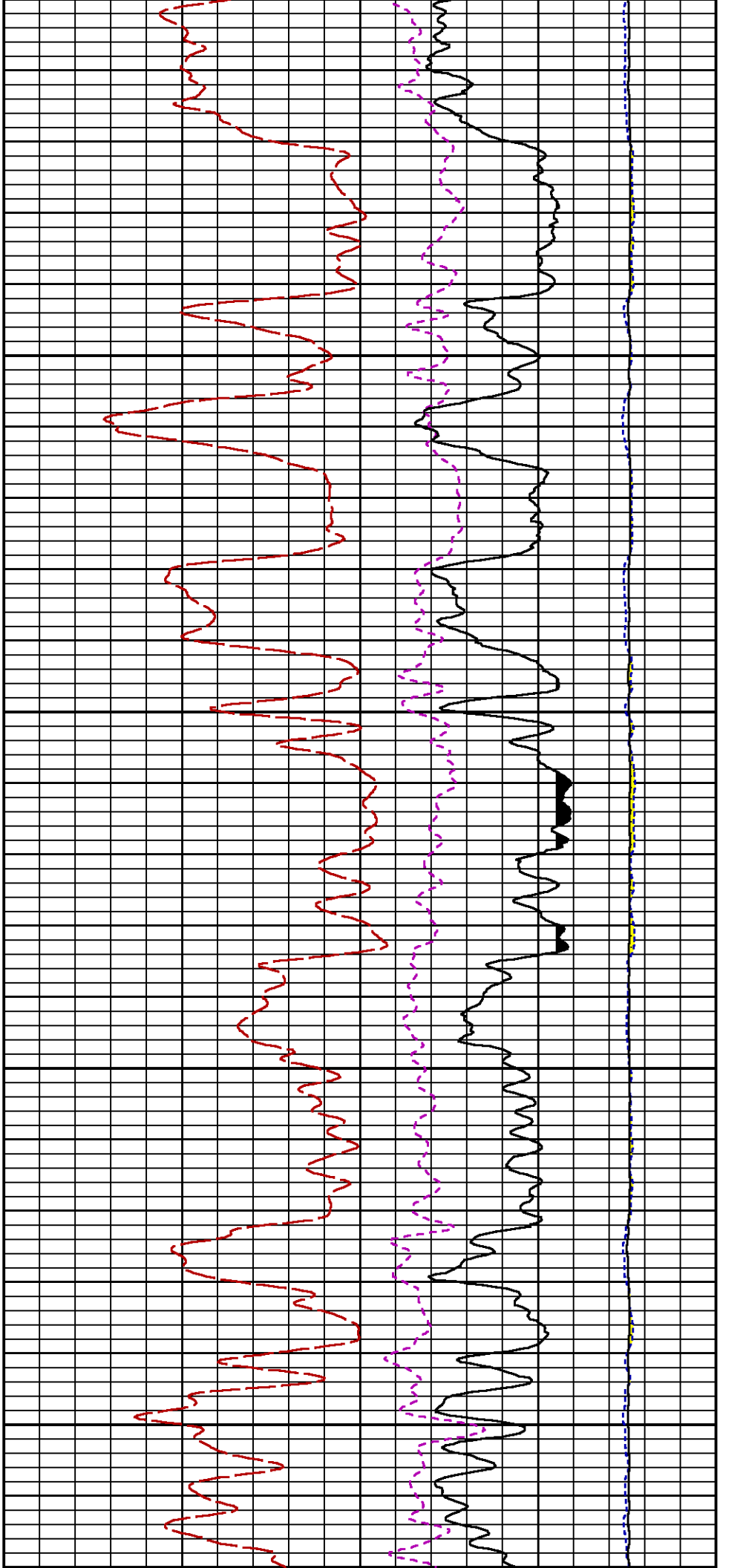
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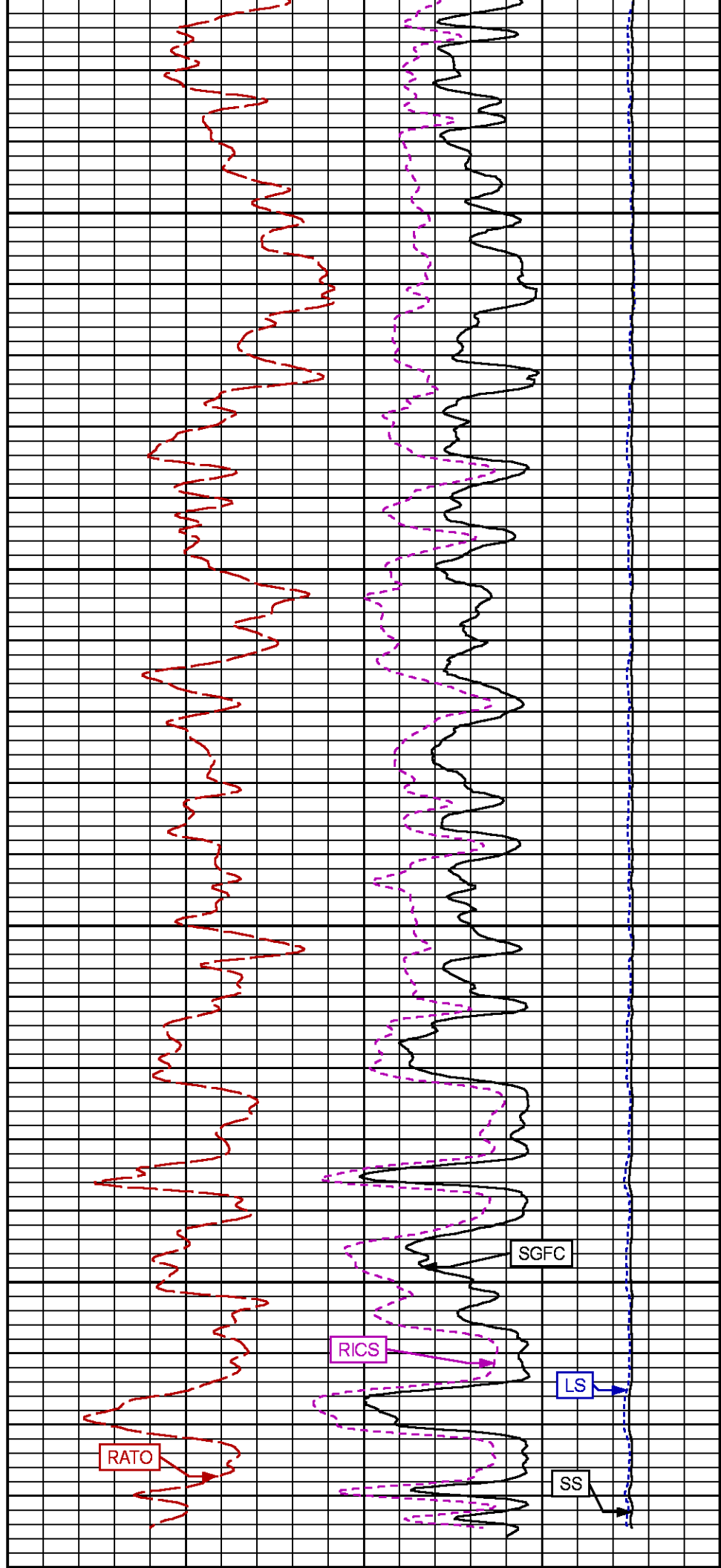
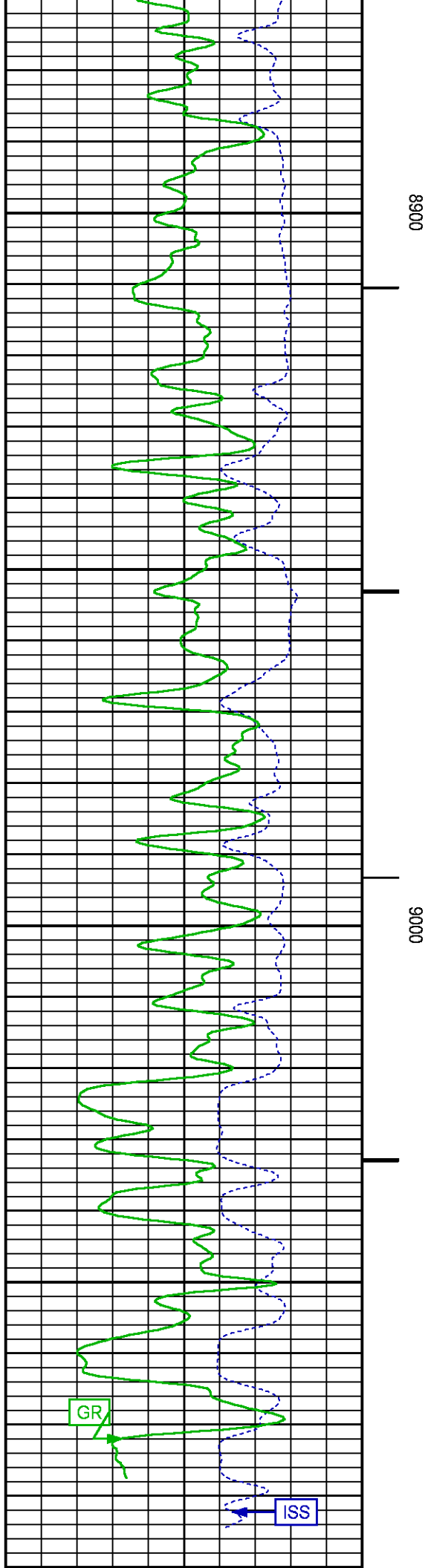
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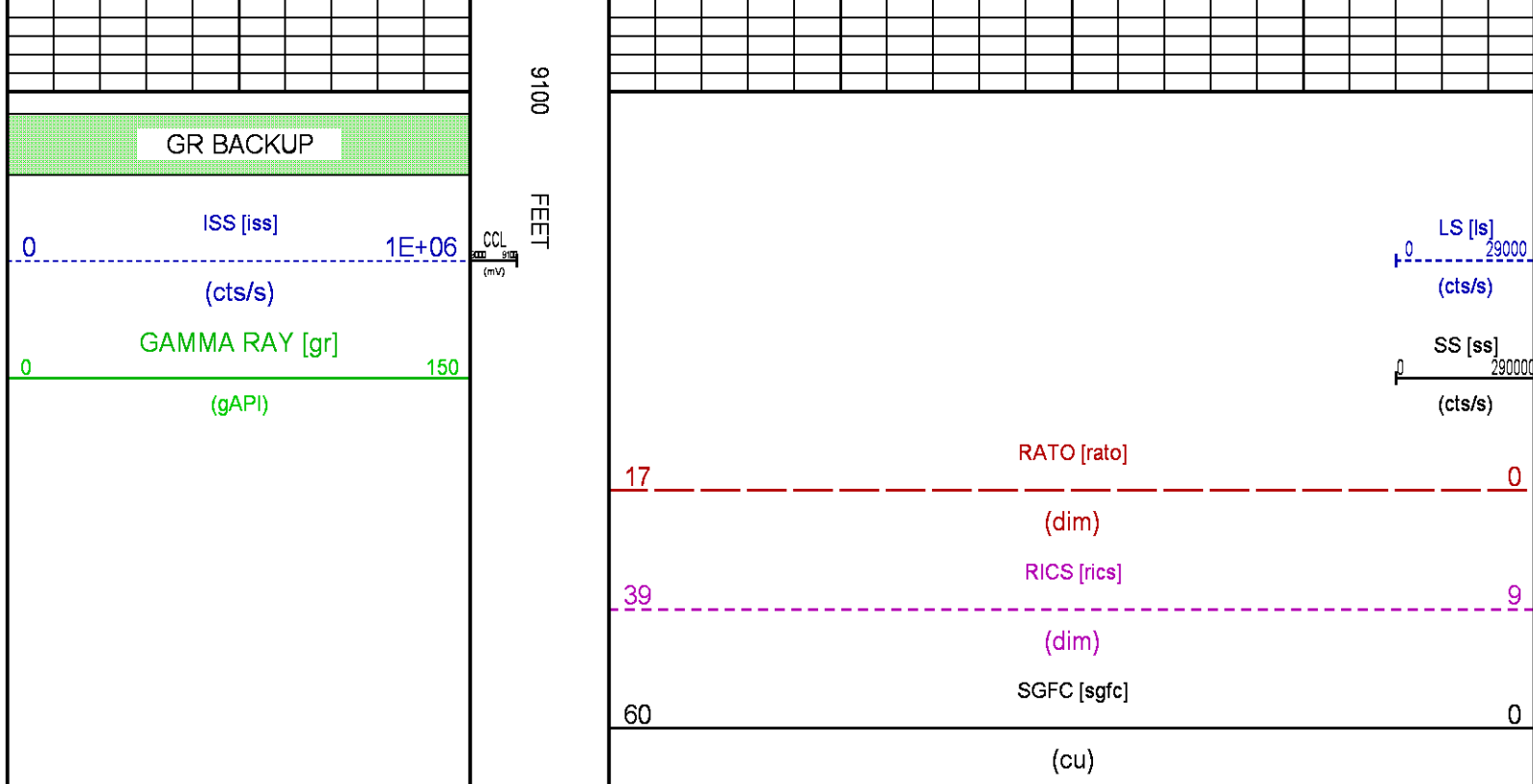












## REPEAT SECTION PNC-3D MODE

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

Updates: 1 Patches: 9

Plotted: Tue Feb 23 13:51:22 2016

### PARAMETER AND FILTER SUMMARY REPORT

FILE: /dat1a/CH\_PUCKETT24D\_1/n353hx01.prm  
LOGGING MODE: DEPTH DIRECTION: UP  
TOP DEPTH: 8868.250 ft BOTTOM DEPTH: 9101.000 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	7.88	in	" "
	CASING SIZE	4.50	in	" "
	MATRIX	SANDSTONE		" "
	CORRECTION BUFFER	11		" "

### CURVE DESCRIPTION REPORT

CURVE NAME	CREATION DATE	CURVE DESCRIPTION
F1:CCL	Feb 23 13:32:30 2016	CASING COLLAR LOCATOR
F1:GR	Feb 23 13:32:30 2016	GAMMA RAY

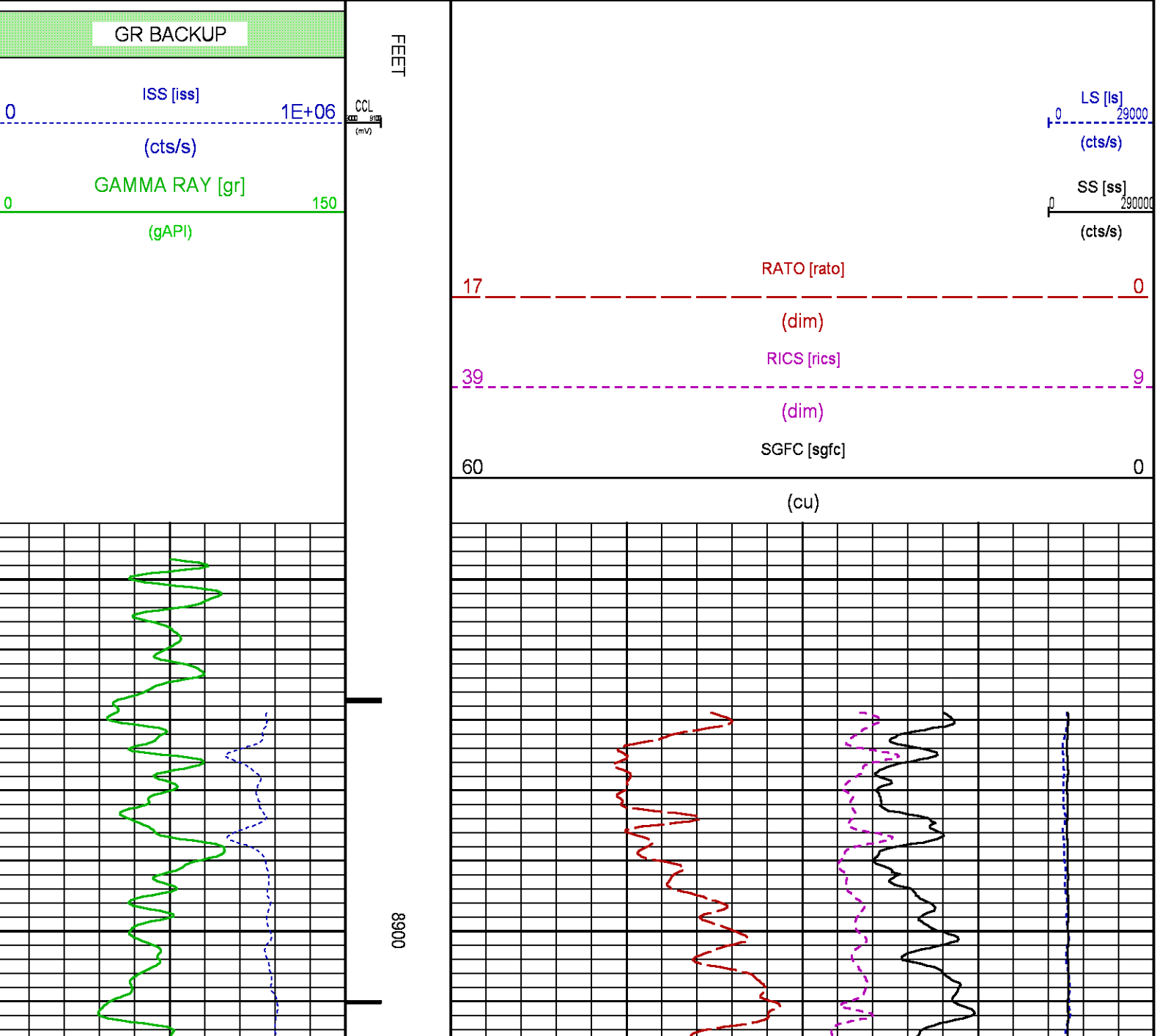


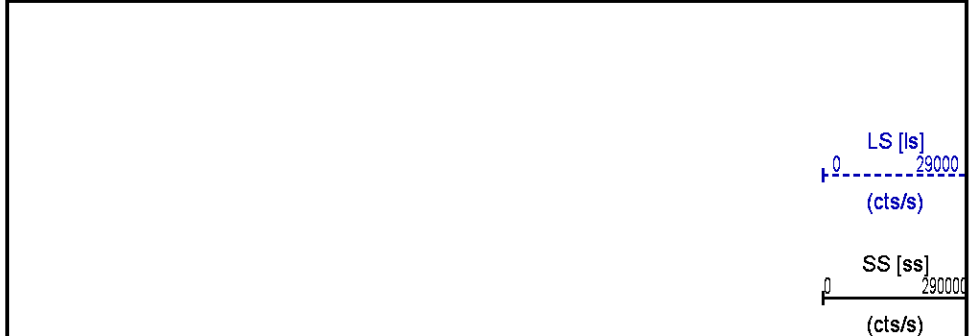
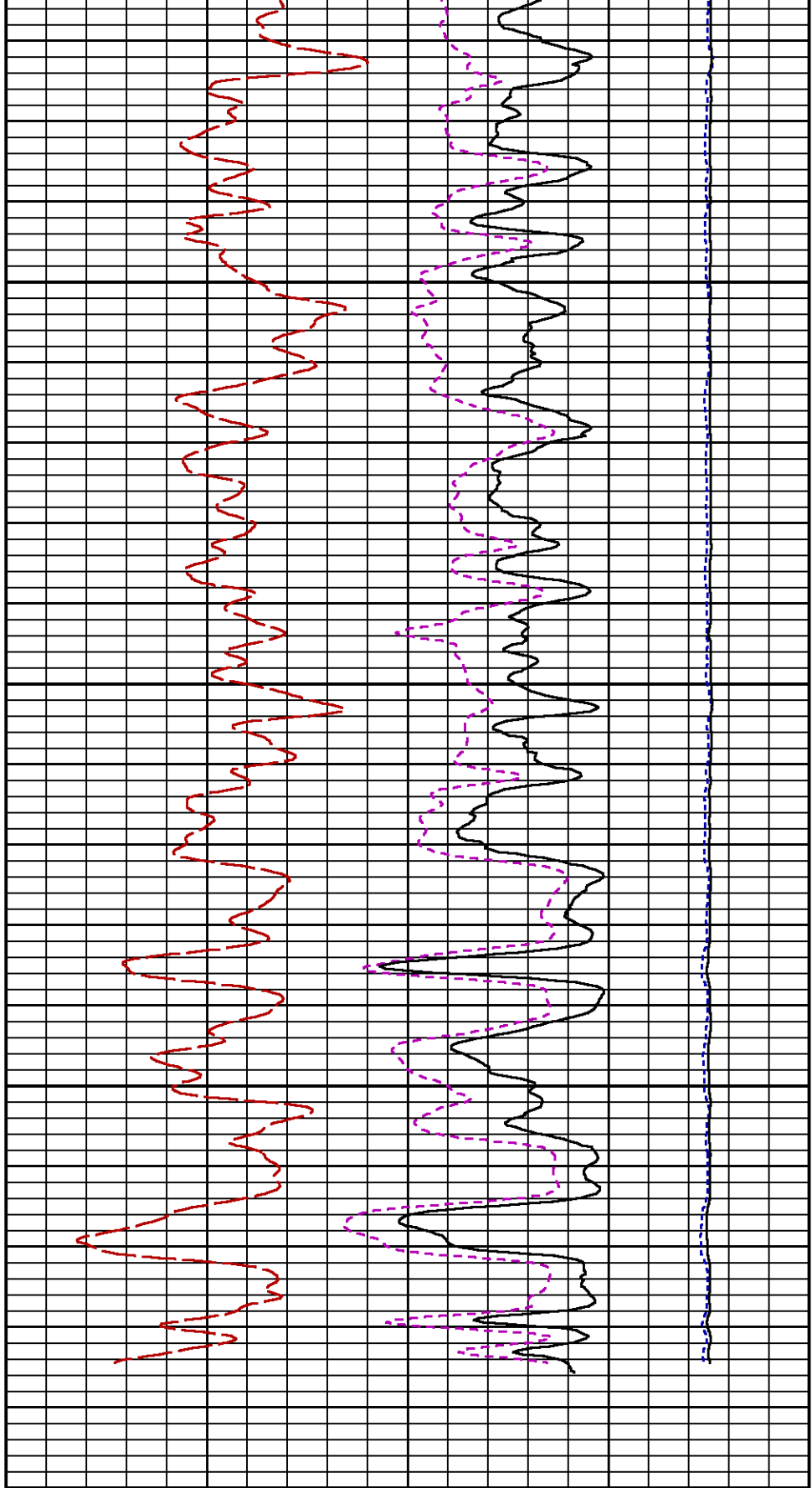
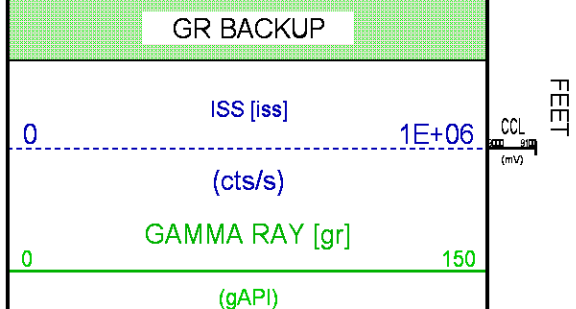
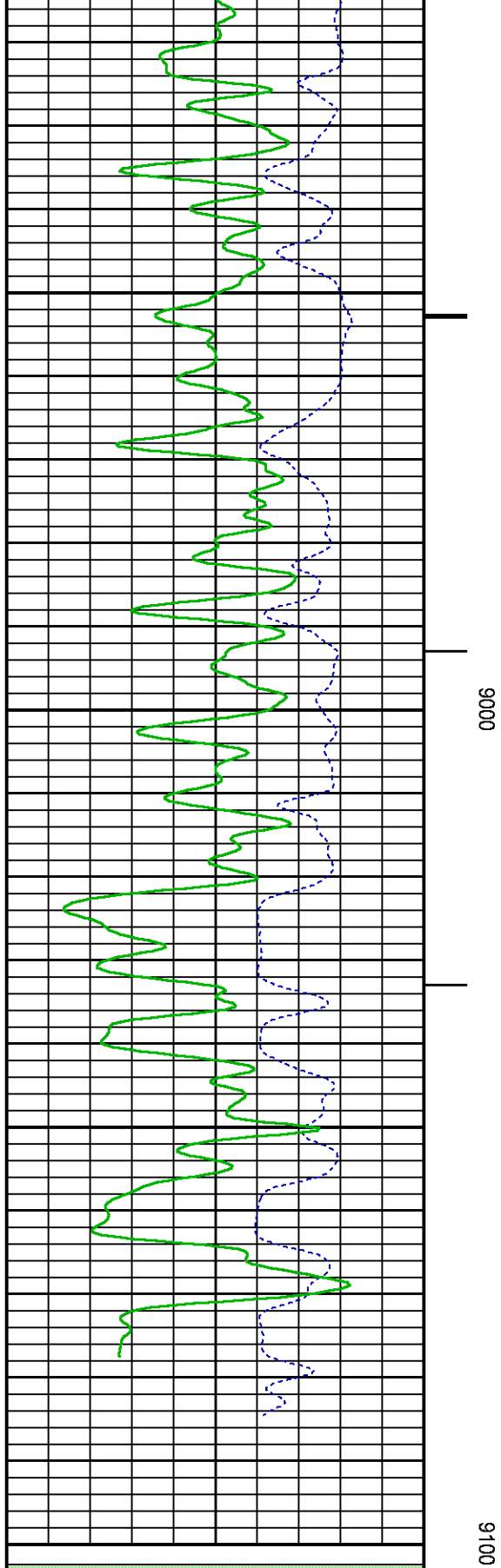
F1:ISS	Feb 23 13:32:30 2016	INELASTIC SHORT SPACE COUNT RATE
F1:LS	Feb 23 13:32:30 2016	LONG SPACE COUNT RATE
F1:RATO	Feb 23 13:32:30 2016	SHORT/LONG SPACE COUNT RATE RATIO
F1:RICS	Feb 23 13:32:30 2016	SHORT SPACE INELASTIC TO CAPTURE COUNT RATE RATIO (ISS/CSS)
F1:SGFC	Feb 23 13:32:30 2016	CORRECTED FORMATION SIGMA
F1:SS	Feb 23 13:32:30 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/CH_PUCKETT24D_1/24D_1RPM_RPT.fvpdf [5"/100' Scale]
Plot Interval	: 8842 - 9100 Feet
Data File 1	: F1 : cas6685:/dat1a/CH_PUCKETT24D_1/n353hx01REPEAT24D.xtf
Created On	: Feb 23 13:32:30 2016
Company	: CAERUS OIL AND GAS
Well	: PUCKETT 24D 1
Field	: GRAND VALLEY
File Interval	: 8841.25 - 9101 Feet
OCT	: n353hx





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

## CALIBRATION / VERIFICATION SUMMARY

Source File: /dat1a/CH\_PUCKETT24D\_1/n353hx.tp1

### GR PRIMARY CALIBRATION SUMMARY

TOOL #: 8262XA 10485470 DATE/TIME PERFORMED: Fri Feb 19 11:58:11 2016  
 UNIT #: 3885TD MI4230 CALB JIG #: 4702NK BA-856

	BACKGROUND (cts/s)	CALBRTR ON (cts/s)	CR DIFF (cts/s)	MULT	BACKGROUND (gAPI)	CALBRTR ON (gAPI)	CALBRTR (gAPI)
GR	106.20	451.82	345.6	0.521	55.31	235.31	180

### GR PRIMARY VERIFICATION SUMMARY

TOOL #: 8262XA 10485470 DATE/TIME PERFORMED: Fri Feb 19 12:01:19 2016  
 UNIT #: 3885TD MI4230 VERI JIG #: 4702NK BA-856

	BACKGROUND (cts/s)	CALBRTR ON (cts/s)	MULT	BACKGROUND (gAPI)	CALBRTR ON (gAPI)	DIFF. (gAPI)
GR	106.11	449.09	0.521	55.26	233.89	178.62
						170.00 190.00

### RPM\_PNC\_3D PRIMARY CALIBRATION SUMMARY

TOOL: 8283PA 10169251 DATE/TIME PERFORMED: Fri Feb 19 11:53:57 2016

UNIT: 3885TD MI4230 CALIBRATOR: 2437XB GJ\_SHOP SOURCE: 8281AA 11765055 HOURS: 8281AA 129

	ISS	Mtr Vits (V)	SS Gain	LS Gain	XLS Gain	EA Temp (degF)	Sync Delay (usec)	RCAL
Raw Data	808799	121	2323	2310	2316	122	7.0	0.9766
Interpolated	1300000	142	2301	2301	2311			
	ISS	BKS	BKL	BKX	SGA1	SDA1	SGA2	SDA2
Raw Data	808799	7929	1296	163	26.09	0.15	24.20	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	808799	169212	26330	89116	31701	8255	53960	13211
Fit Quality %		1.349	1.240	1.211	1.174	1.373	1.111	1.370

	ISS	RBOR	RIN	RIN13	RICS	RATO	RTWO	RONE
Raw Data	808799	1.43	4.78	30.73	14.99	10.80	3.84	4.09
	1.42	1.45	3.55	5.52	22.20	32.70	10.99	16.34
Fit Quality %	0.114	0.041	0.027	0.132	0.131	0.153	0.156	
Reduced	1400298	1.43	4.79	30.81	15.01	10.80	3.84	4.09
	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

TPSITEMP PRIMARY CALIBRATION SUMMARY

TOOL #: 8255XA 11774568      DATE/TIME PERFORMED: Thu May 7 07:52:05 2015

UNIT #: 3880TA HL6670

	T(0)	T(1)	T(2)	T(3)
Corr Coeff for Ptf's	-1.089847E+01	1.064572E-01	3.162229E-07	5.808012E-11

TPSPRES PRIMARY CALIBRATION SUMMARY

GAUGE #: 8255XA 11774568      DATE/TIME PERFORMED: Thu May 7 08:08:15 2015

UNIT #: 3880TA HL6670

	Temp	G	H	I	J
0		5.757116E+05	2.756916E+02	2.333345E-04	-6.169285E-09
1		-8.476257E+01	3.280890E-02	-2.151323E-06	8.959875E-11
2		6.895835E-01	-2.638656E-04	9.921076E-09	-4.102106E-13
3		-1.434187E-03	5.654808E-07	-1.414922E-11	5.870839E-16
4		1.408894E-16	7.548284E-20	2.001050E-24	-7.758373E-29
Coef Test	350.0	5.690279E+05	2.790962E+02	8.905545E-05	1.107021E-10

INSTRUMENT CONFIGURATION

### 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

#### TEMPERATURE / PRESSURE

Diameter : 1.70"  
Length : 3.30'  
Weight : 13 lbs  
Series : 8255XA  
Mnemonic : SRPL  
Measure Point: 1.52': TEMP MP

#### BULL PLUG 1 11/16

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


CCL MP 26.03'

GR MP 22.90'

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

TEMP MP 1.65'  
PRES MP

0.00'

	COMPANY	CAERUS OPERATING LLC		FILE NO:	CH105974
	WELL	PUCKETT 24D-1		API NO:	05045226140000
	FIELD	GRAND VALLEY			
	COUNTY	GARFIELD	STATE	COLORADO	
	LOCATION:		ELEVATIONS:	S 1 T7S R97W	
	SHL: 1060' FSL & 321' FEL S2 T7S R97W		KB 8453.8 FT	H&P 330	
	BHL: 173' FSL & 2018' FEL, S1 T7S R97W		DF		
	SEC 1 TWP 7S RGE 97W		GL 8423.8 FT		
			DATE	23-FEB-2016	