



# RESERVOIR PERFORMANCE MONITOR

Baker Atlas

File No: CH085272

Company Well WPX ENERGY PA 524-2

API No: Field PARACHUTE

05045221490000 County GARFIELD State COLORADO

Location Other Services

2 7S 95W SHL: 2001' FSL & 1575' FWL

GV 86-2 PAD BHL: 184' FSL & 2105' FWL (SESU)

AZTEC 1000 SEC 2 TWP 7S RGE 95W

Permanent Datum GL Elevation 5821 ft

Log Measured From KB 25 ft Above P. D.

Drill Measured From KELLY BUSHING KB 5846 ft  
DF  
GL 5821 ft

Date	29/APR/14	
Run	ONE	
Service Order	US085272J	
Depth Driller	7799 ft	
Depth Logger	7774 ft	
Bottom Logged Interval	7764 ft	
Top Logged Interval	4179 ft	
Time Started	1200	
Time Finished	1730	
Operator Rig Time	5.5 HRS	
Type of Fluid in Hole	WATER	
Fluid Density	NA	
Salinity	NA	
Fluid Level	69 ft	
Logged Cement Top	NA	
Wellhead Pressure	0 psi	
Maximum Hole Deviation	NA	
Nominal Logging Speed	10 fpm	
Maximum Recorded Temperature	226 degF	
Reference Log Date	29/APR/14	
Equipment No.	4271	GRAND JCT
Recorded By	FLYOD RENEAU	
Witnessed By	DUSTIN WELSH	

- FOLD HERE

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	25 ft	884 ft
8.75 in	884 ft	7799 ft

Casing Record				
Size	Weight	Grade	From	To
9.625 in			25 ft	884 ft
4.5 in	11.6 lbm/ft	I-80	25 ft	7799 ft

Remarks
All data on this log is shifted and depth matched using the Gamma Ray curve to the Baker Hughes bond log dated 4/29/2014 at the client's request.
The amount of linear shift is 11.5 feet.
Logged in PNC-3D mode.
BHT = 226 °F
SJ = 4273'-4297'

Equipment Data					
Run	Trip	Tool	Series Number	Serial Number	Position
1	1	TEMP	8255XA	11774568	FREE
1	1	RPM	8281FA	10401926	FREE
1	1	RPM	8281PA	10585555	FREE
1	1	RPM	8281EA	10303640	FREE
1	1	GR	2812LA	10274382	FREE
1	1	TEL	8248ED	10460262	FREE
1	1	PCM	8250EA	10586851	FREE

MAIN SECTION  
PNC 3-D MODE

SPL PROCESSING

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
PNC Porosity	Borehole	Cased		4160.000	7760.437
PNC Porosity	Borehole Size	8.750	inch	4160.000	7760.437
PNC Porosity	Casing Size	4.500	inch	4160.000	7760.437
PNC Porosity	Gas Filled	Non Gas Filled		4160.000	7760.437
PNC Porosity	Matrix	Sandstone		4160.000	7760.437
TPS Pressure	Temperature Corr. Source	Fixed (72.00)	degF	4160.000	7760.437

DEPTH OFFSETS  
(for Acquired Curves)

SERIES	DEPTH OFFSET	ACQUIRED CURVES					
8248ED	-26.519	FLTM					
8248ED	-24.519	CCL	CHV				
2812LA	-21.969	GR					
8281XA	-12.702	HVC3Q0	SEQ3	AMA3	AML3	BKX	CXS
		CPT3Q0	CPT3Q2	CPT3Q3	CPT3Q4	ET3	IXS
		MCS3	MCS3Q0	QCAL3	RGN3	RICX	SDA3

8281XA -12.291

SDL3 SGA3 SGL3 STA3 XS ASPEC3  
AMB3 AMF3 CHF3 IXSC IXSN RATO23  
RICXC RIN13C RIN23 RIN23C SD3D SG3D  
SGB3 SGF3 WDT3 CXSR IXSR XSR  
RICXR

HVC2Q0 SEQ2 AMA2 AMB2 AMF2 AML2  
BKL CHF2 CLS CPT2Q0 CPT2Q2 CPT2Q3  
CPT2Q4 ET2 ILS LS MCS2 MCS2Q0  
QCAL2 RGN2 RICL RONE23 RTWO23 SDA2  
SDL2 SGA2 SGB2 SGF2 SGK2 SGL2  
STA2 ASPEC2 ILSC ILSN WDT2 RICLC  
CLSR ILSR LSR RICLR

8281XA -12.041

CPRS HVC1Q0 MV SEQ SEQ1 AMA1  
AMB1 AME1 AMF1 AML1 BKS CHF1  
CSS CORB CORF CPT1Q0 CPT1Q2 CPT1Q2A  
CPT1Q2B CPT1Q2C CPT1Q3 CPT1Q4 CPT1Q5 ET1  
G1 G2 GE1S GE2S ISS MCS1  
MCS1Q0 QA1 QCAL1 QM1 RATO RATO13  
RBOR RGN1 RICS RIN RONE RPOR  
RTWO RIN13 RONE13 RTWO13 SALB SC1  
SDA1 SDL1 SGA1 SGB1 SGBC SGE1  
SGF1 SGFC SGK1 SGL1 SS SS2  
STA1 PD1S PD2S PD3S MD1S MD2S  
MD3S DG1S DG2S DG3S PD1M PD2M  
PD3M MD1M MD2M MD3M DG1M DG2M  
DG3M MVS MA MVM FILV IAM  
TA PVM PVS IAS SSTAT QPD1  
QPD2 QPD3 QMD1 QMD2 QMD3 QDG1  
QDG2 QDG3 QMA QTA QFILV QMV  
QPV QIA DERR DCNT QPK1 QSA1  
PKS1 ASPEC1 H0C FE2XC ISSC RINC  
ISSN RDEN WDT1 RICSC CSSR G1R  
G2R ISSR SSR SS2R RATOR RATO13R  
RBORR RICSR RINR RIN13R RONE RPORR  
RTWOR

8255XA -0.792

PTFS PTMS

8255XA -0.775

SPF1 SPFQ TSCP TSDP

8255XA 0.000

DTEM TEMP TNF

SYSTEM 0.000

TEN TTEN

Created by : RPM9, v5.3.1.0

Plotted by : PlotMgr, v5.4.504

Company : WPX ENERGY

Well : WPX ENERGY PA 524-2

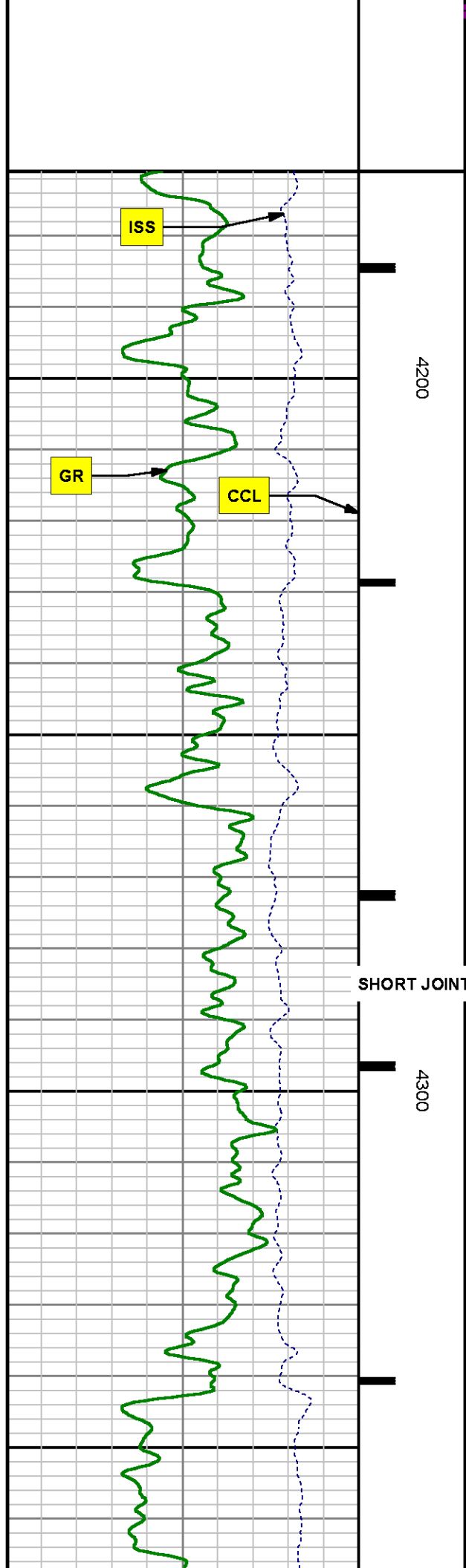
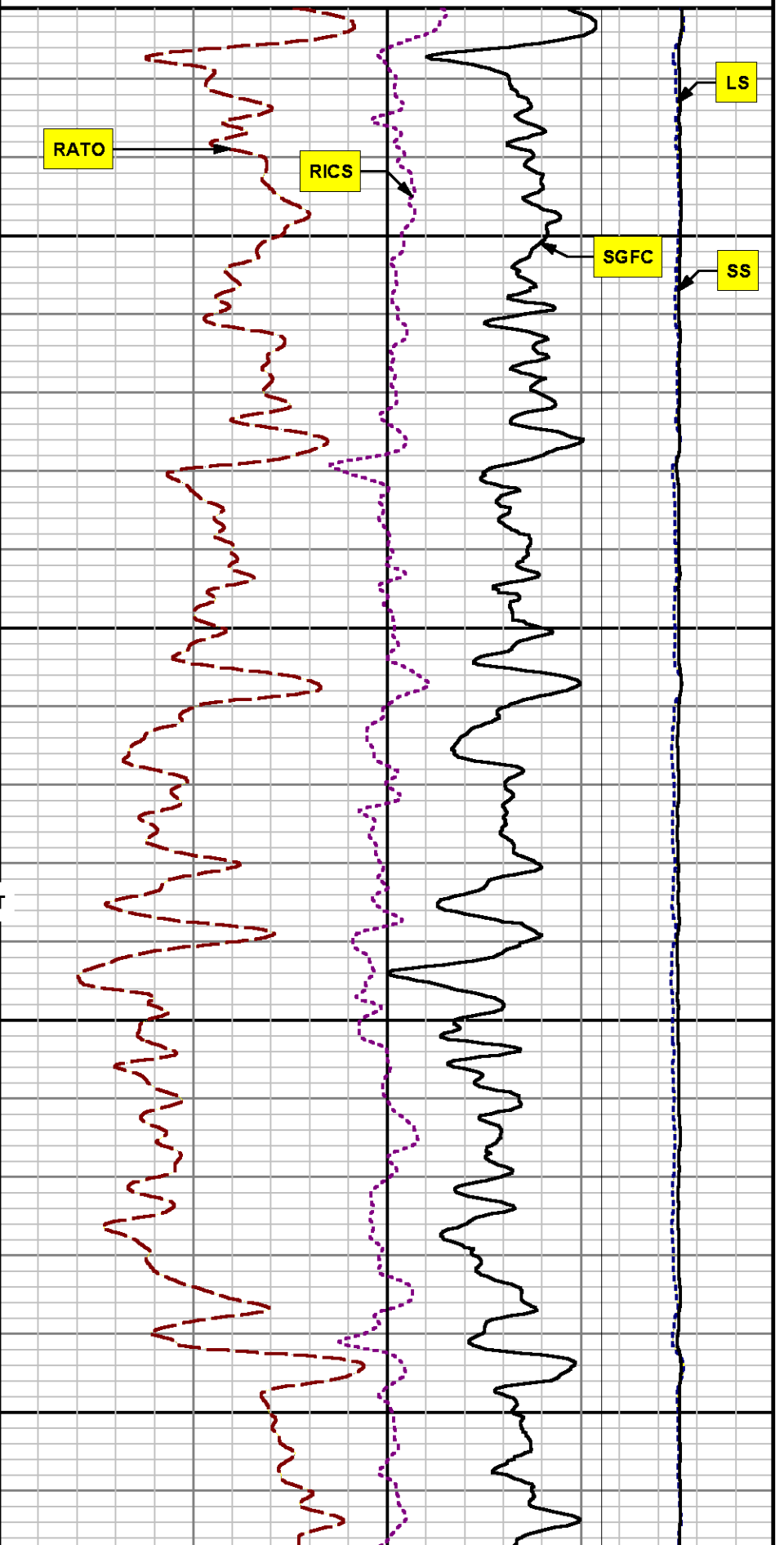
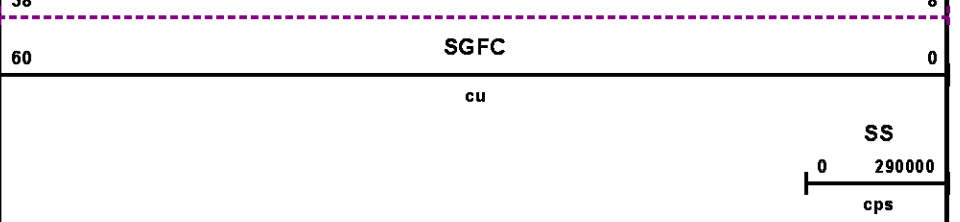
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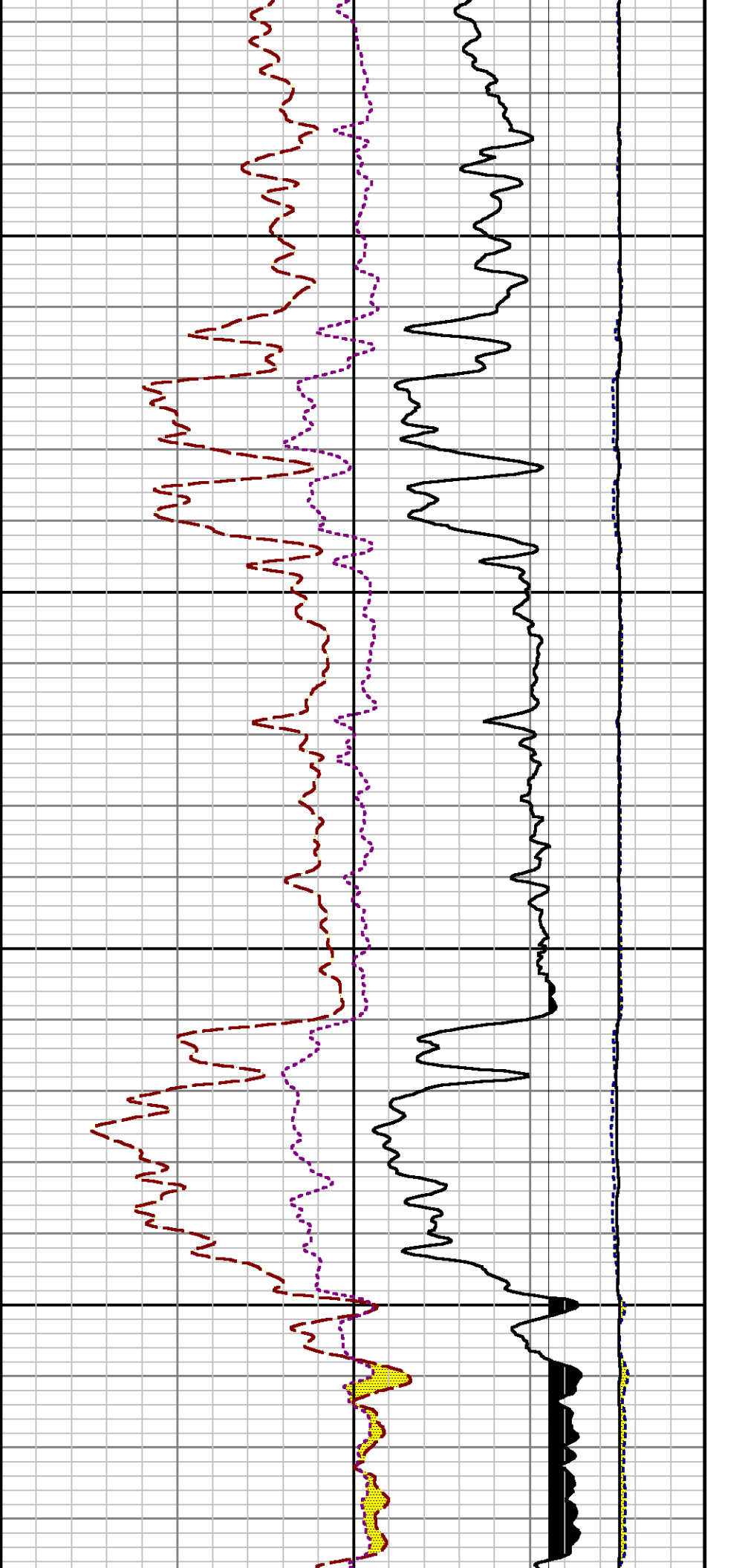
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Interval : 4171.00 - 7776.00 feet UP

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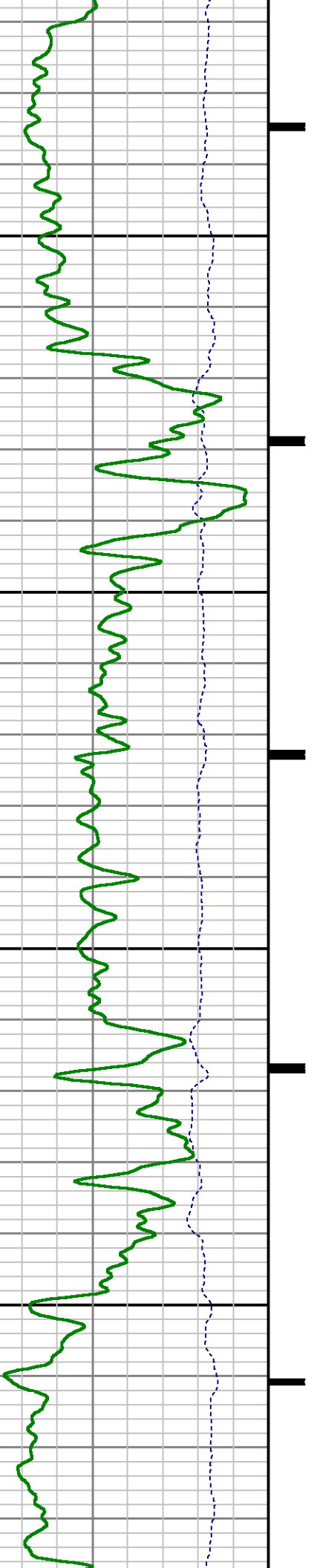


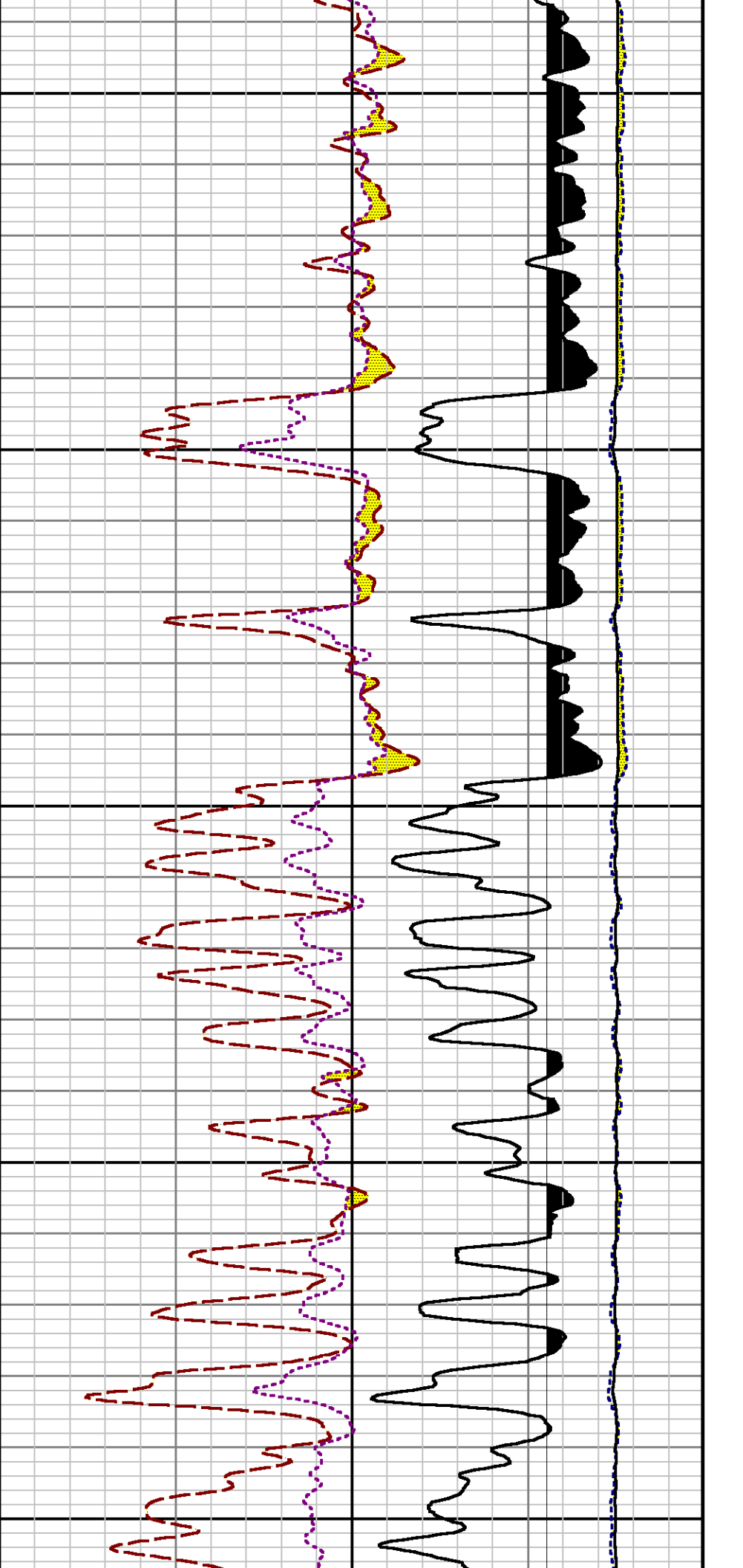




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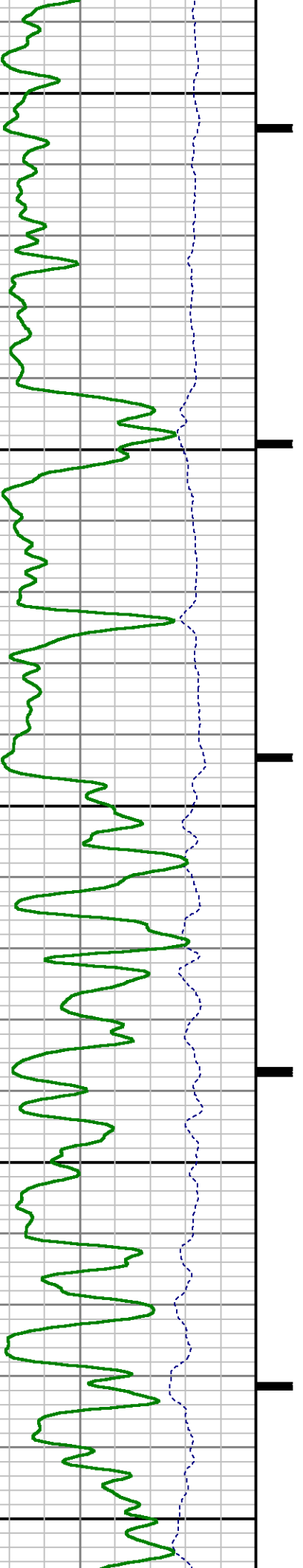


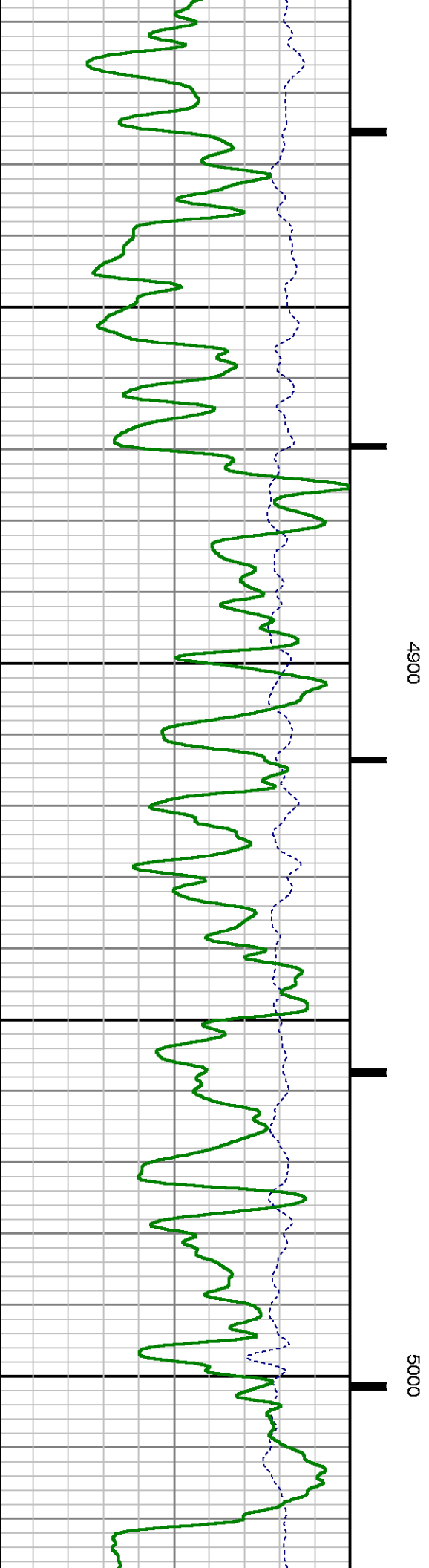
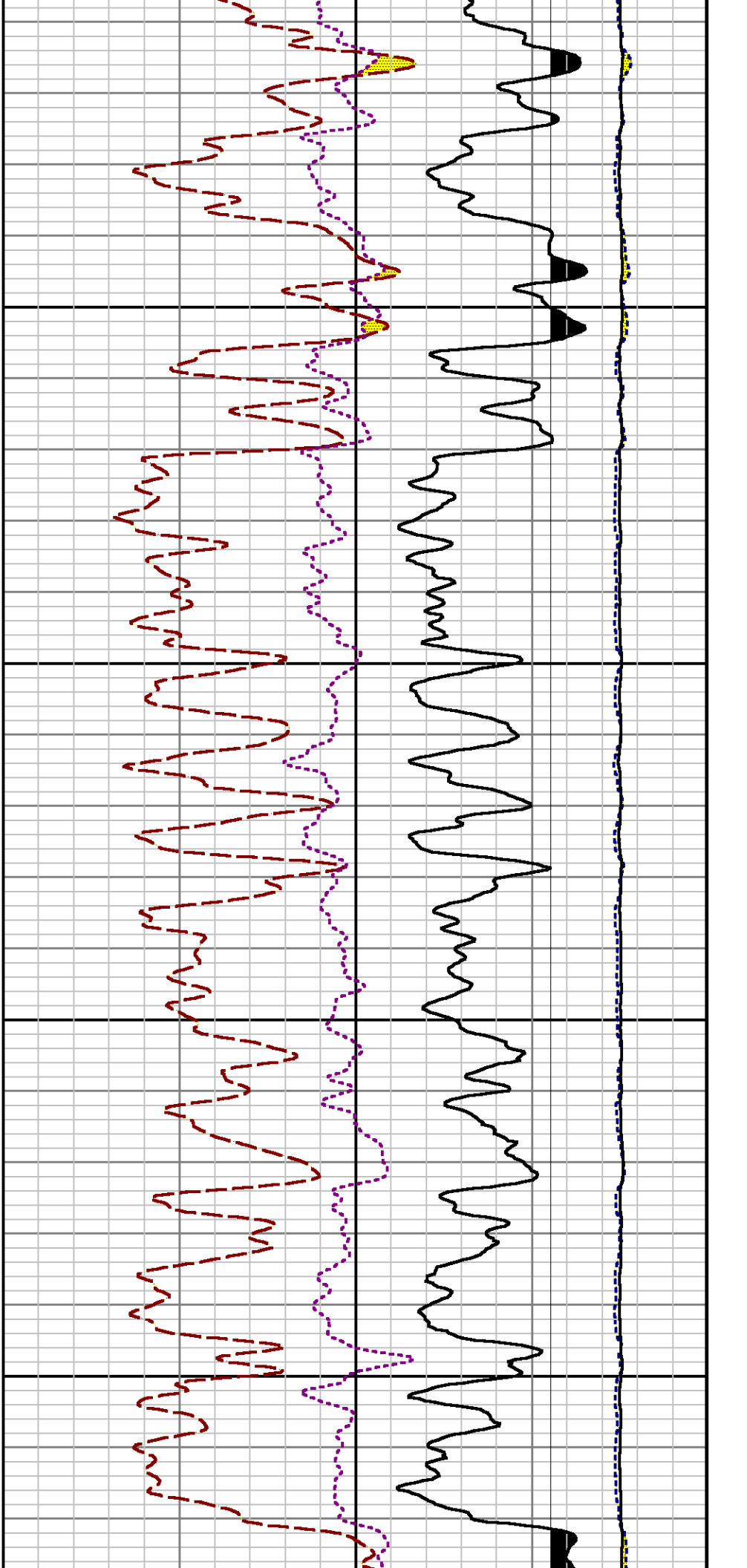


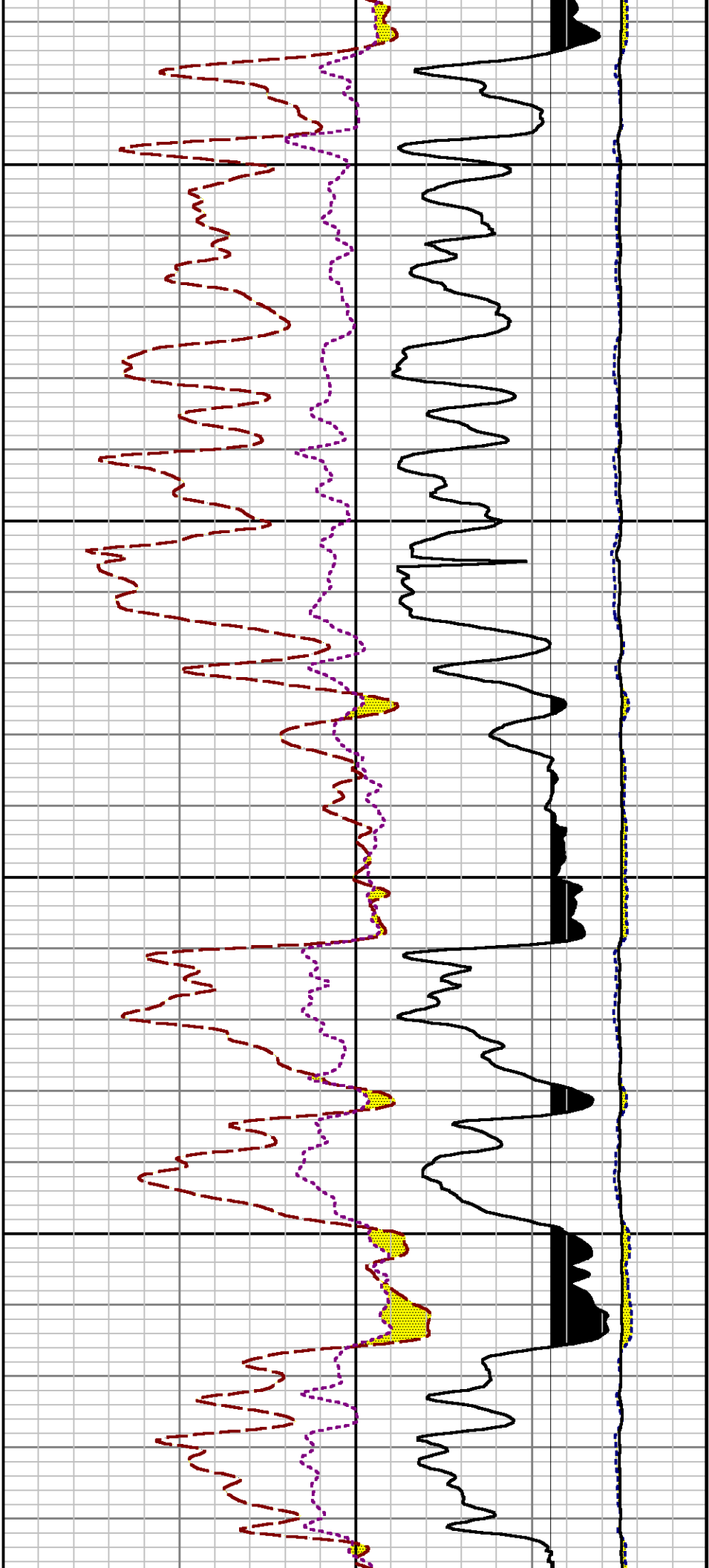
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4700

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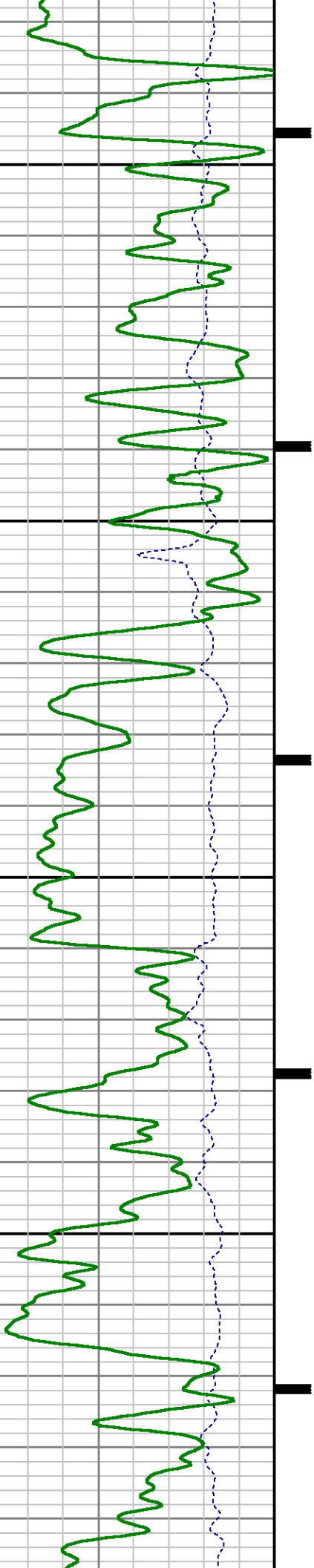




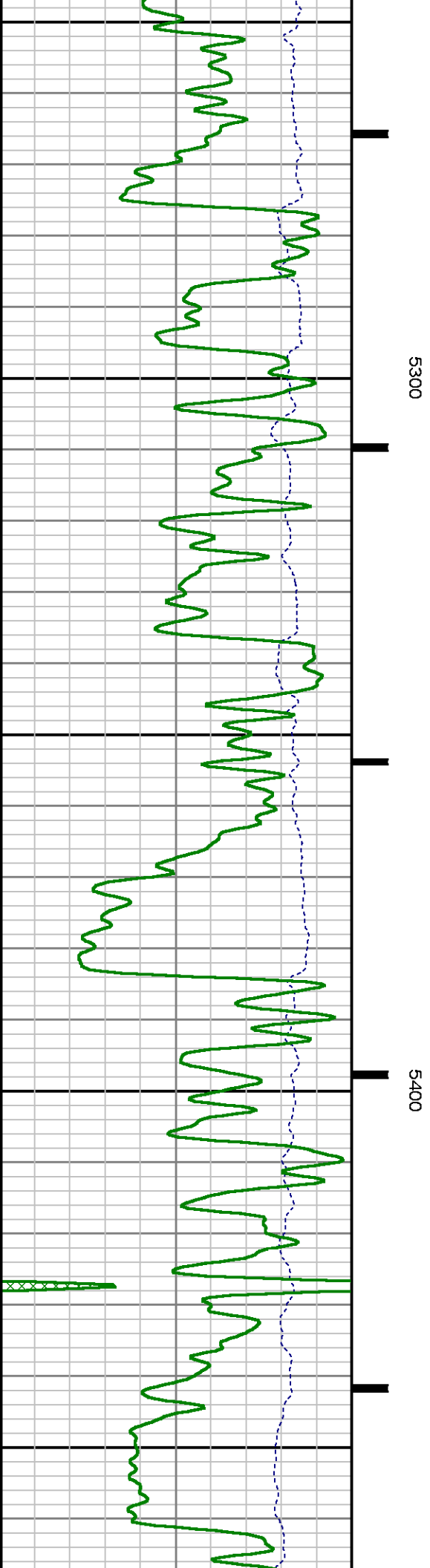
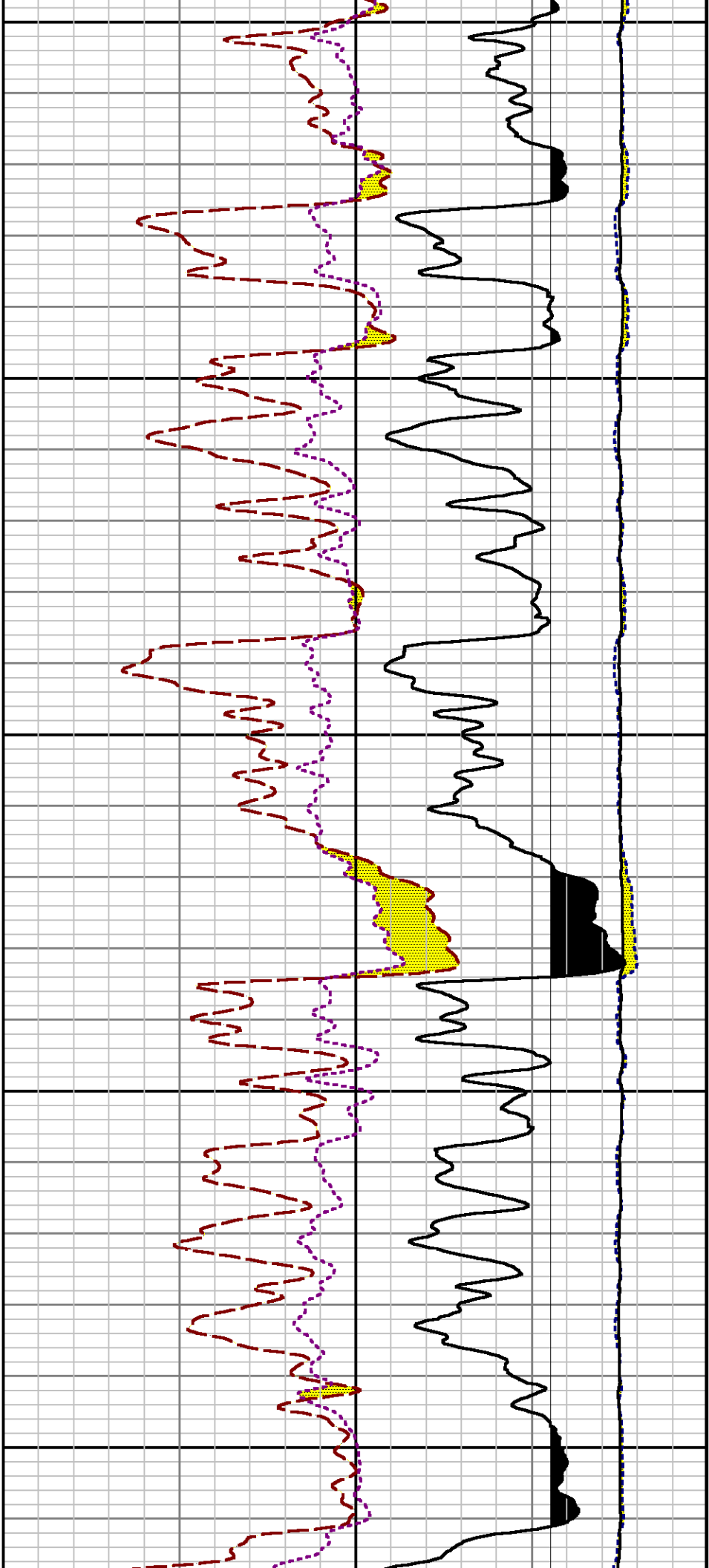


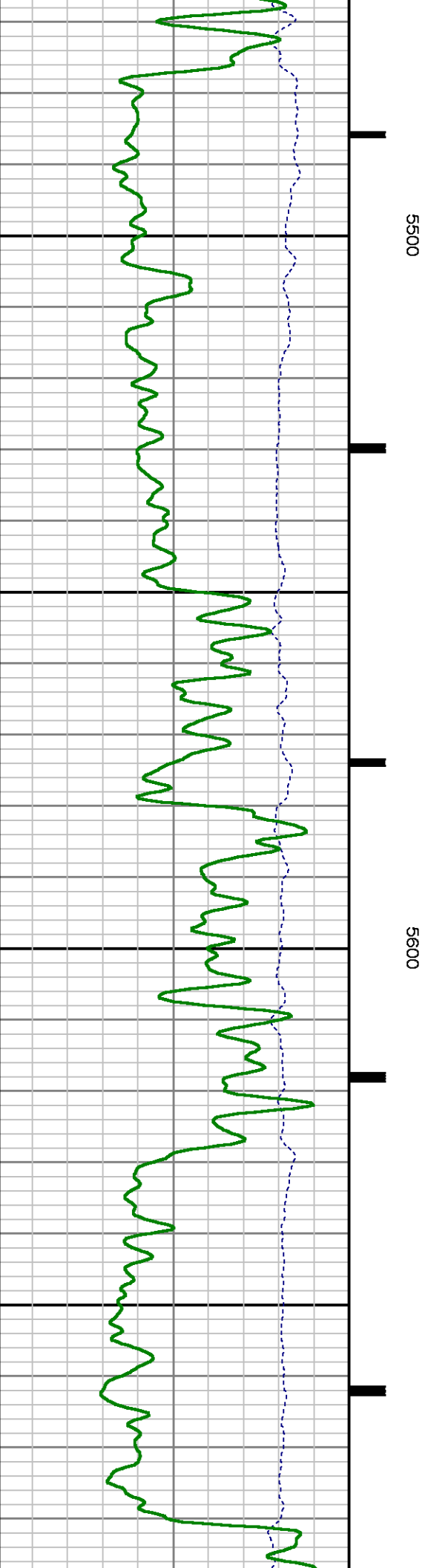
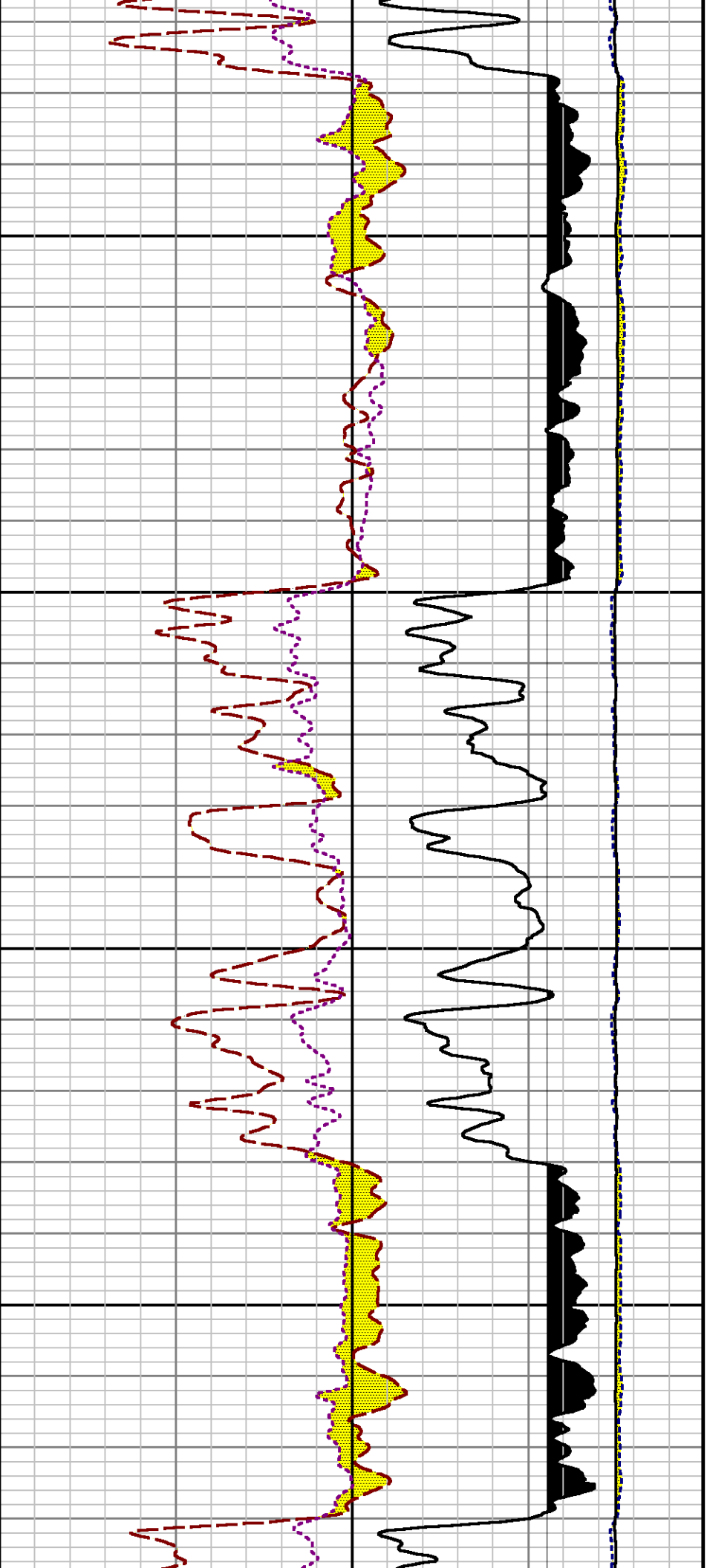
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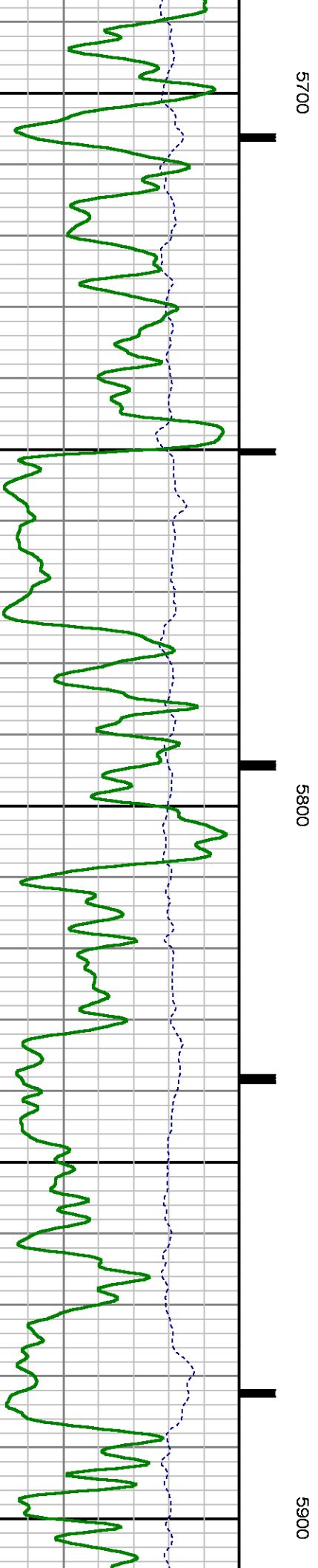
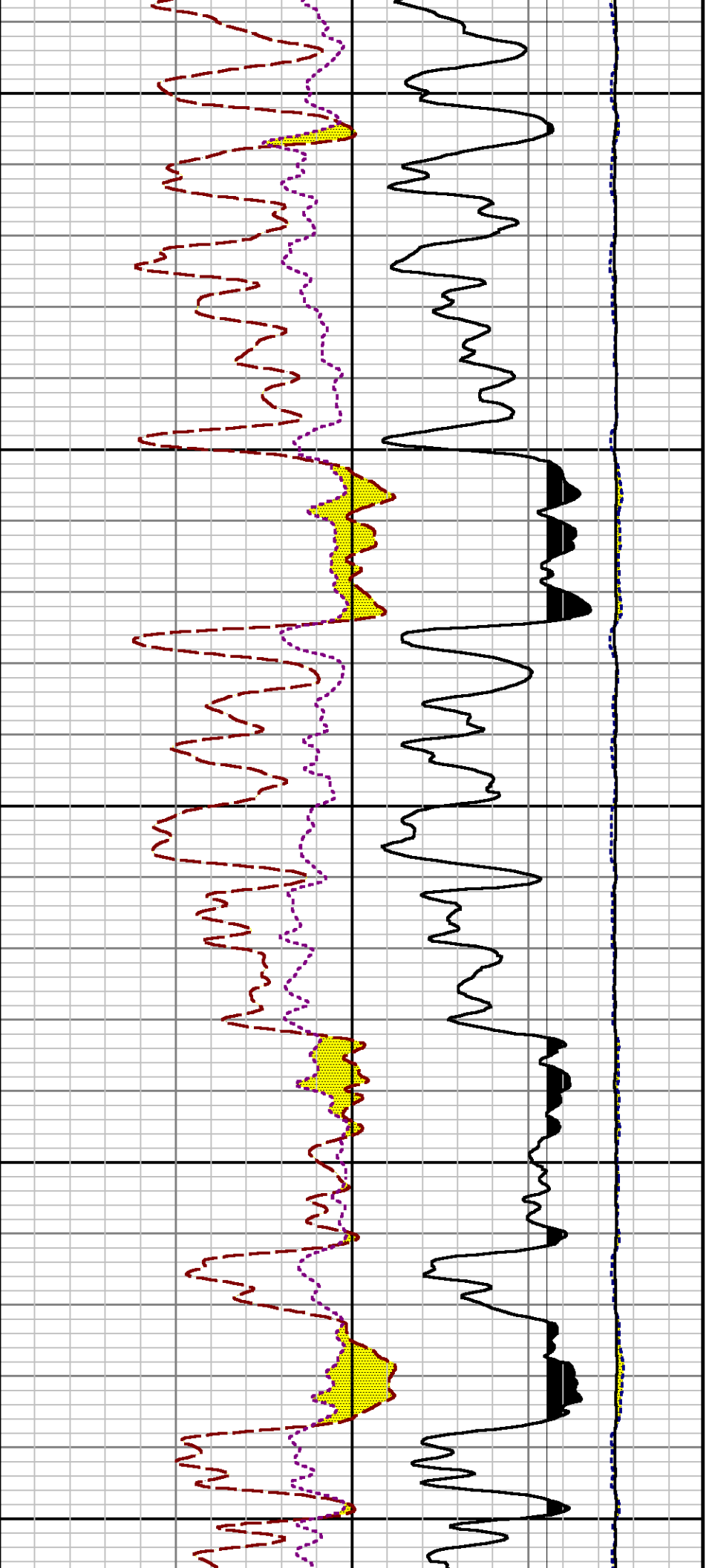
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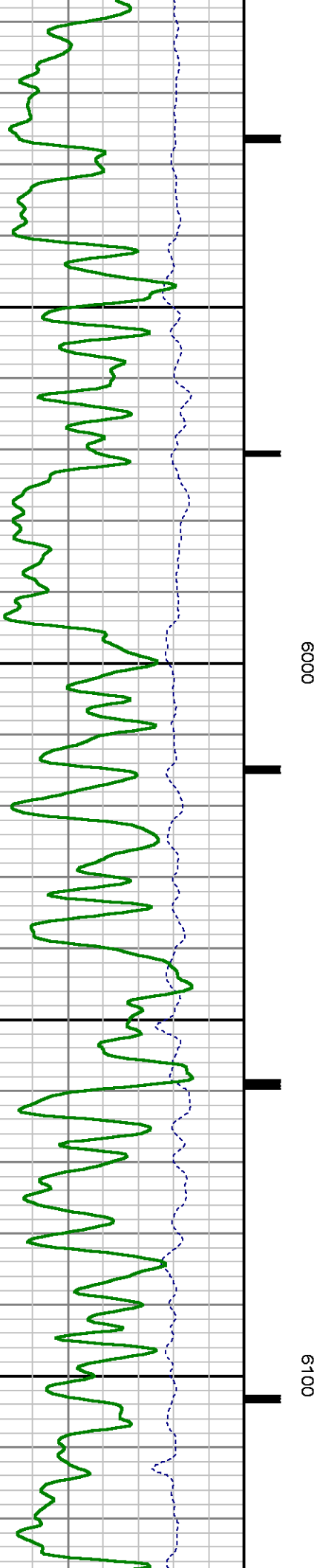
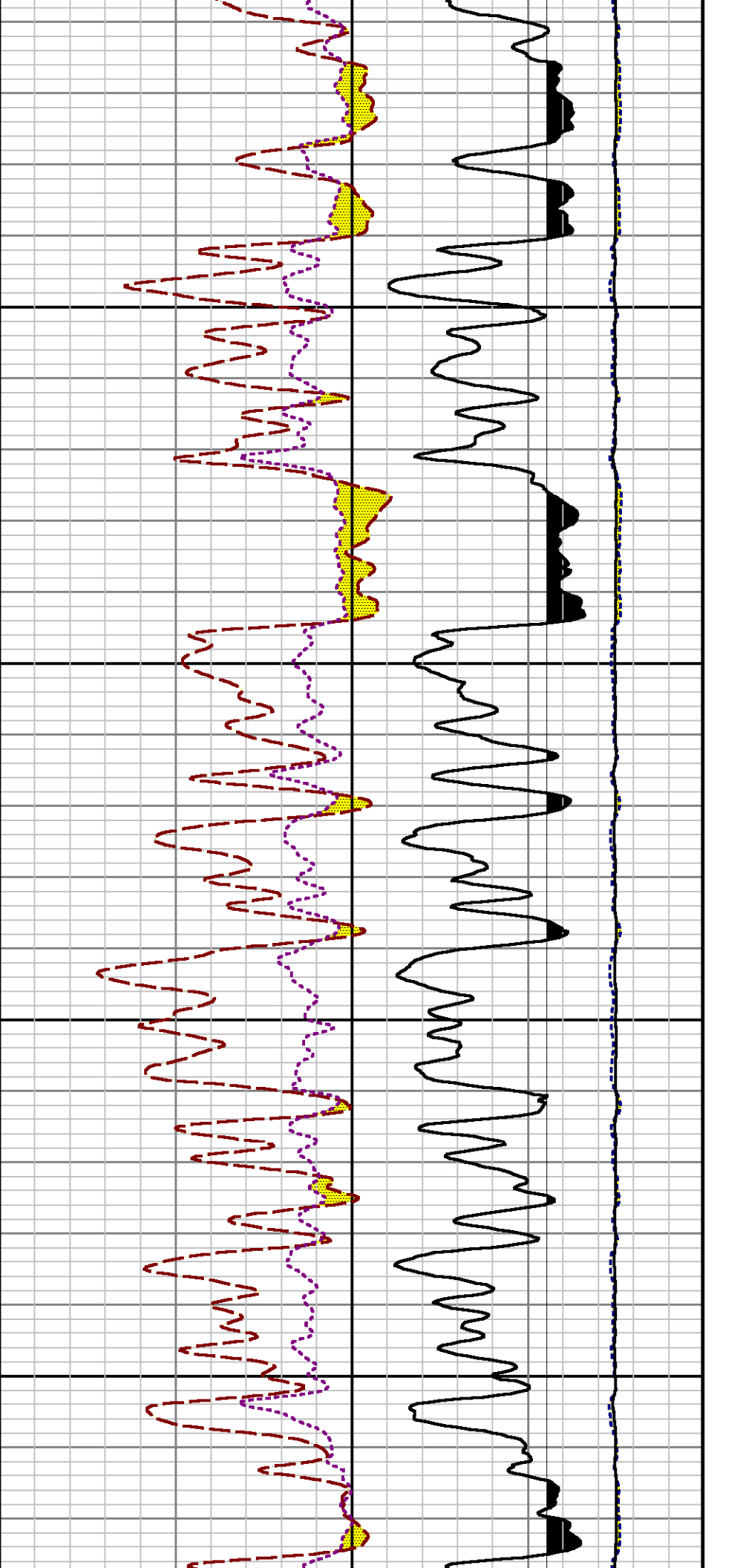


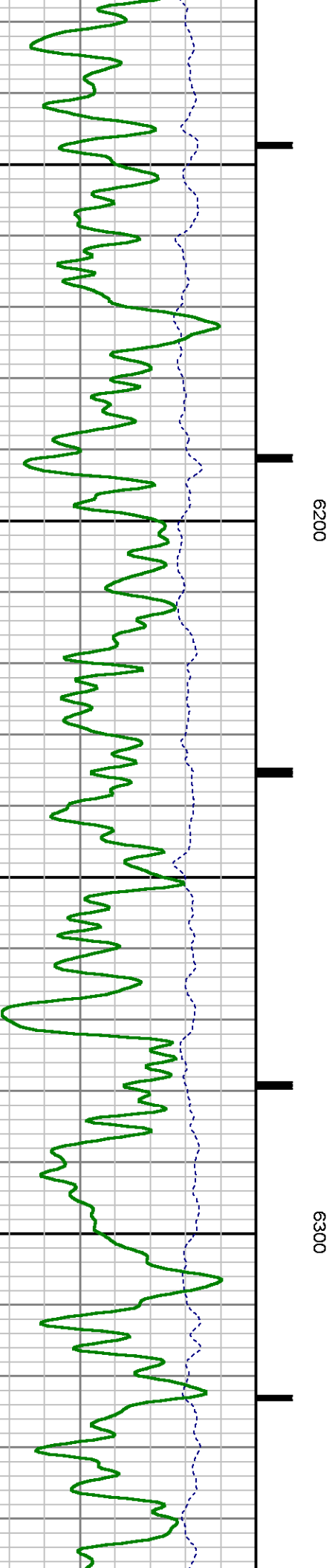
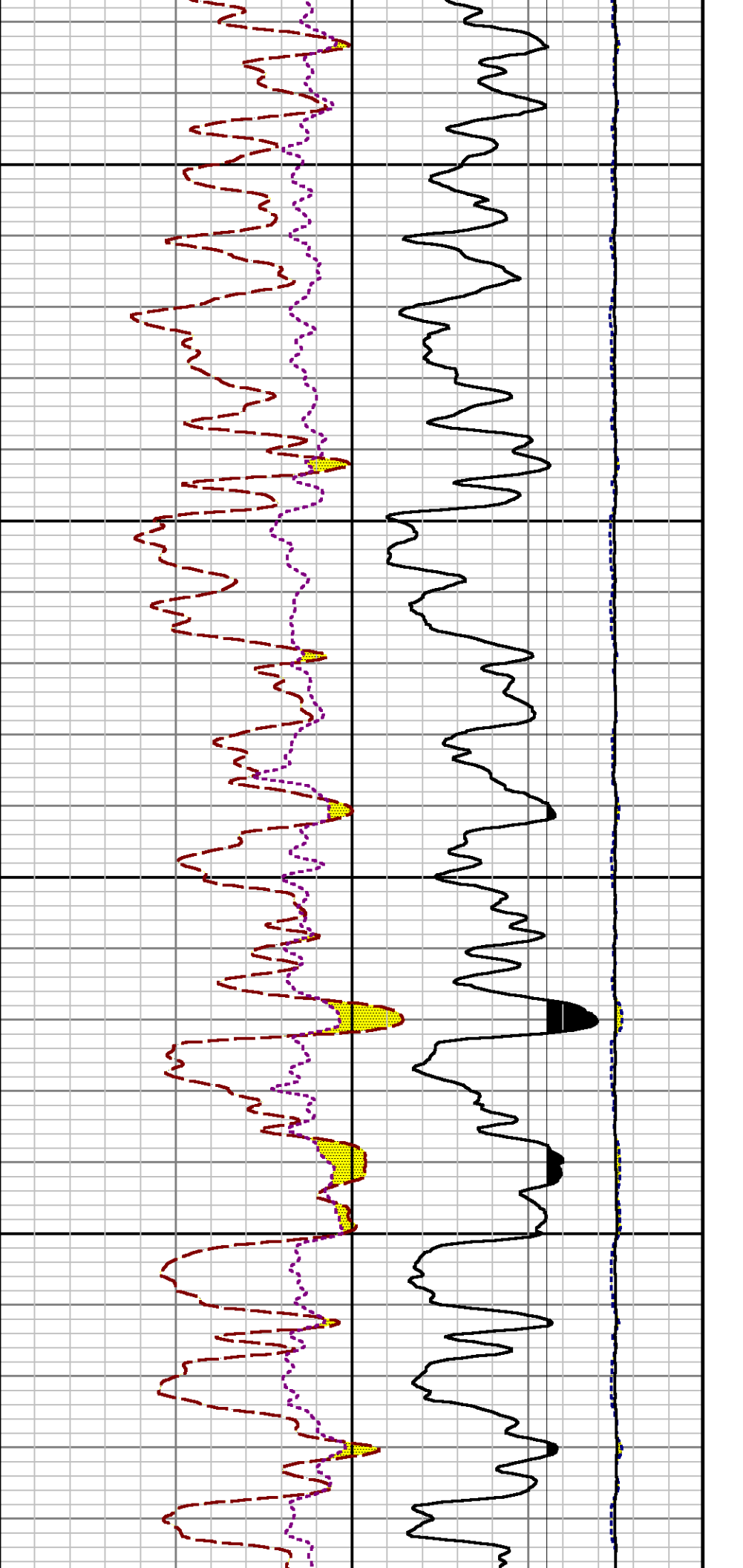


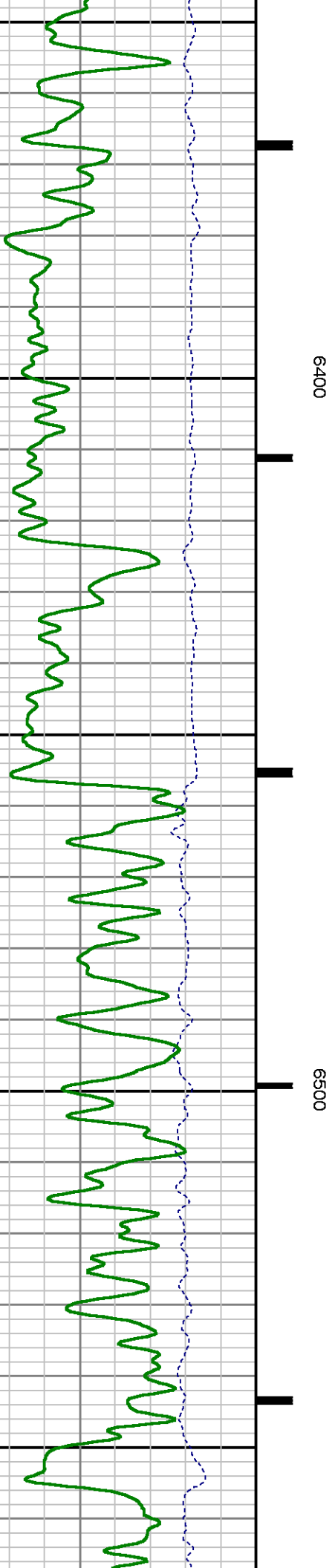
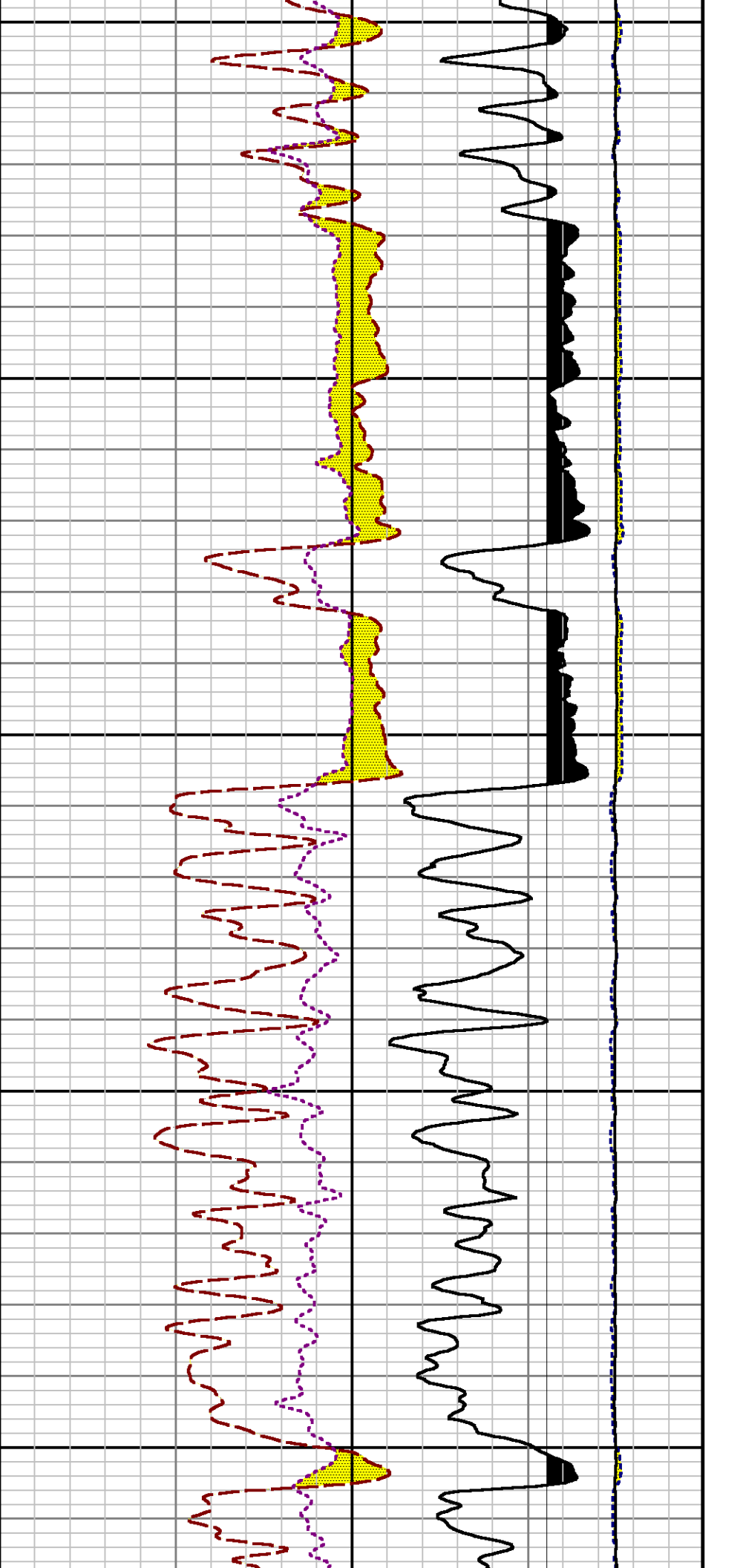


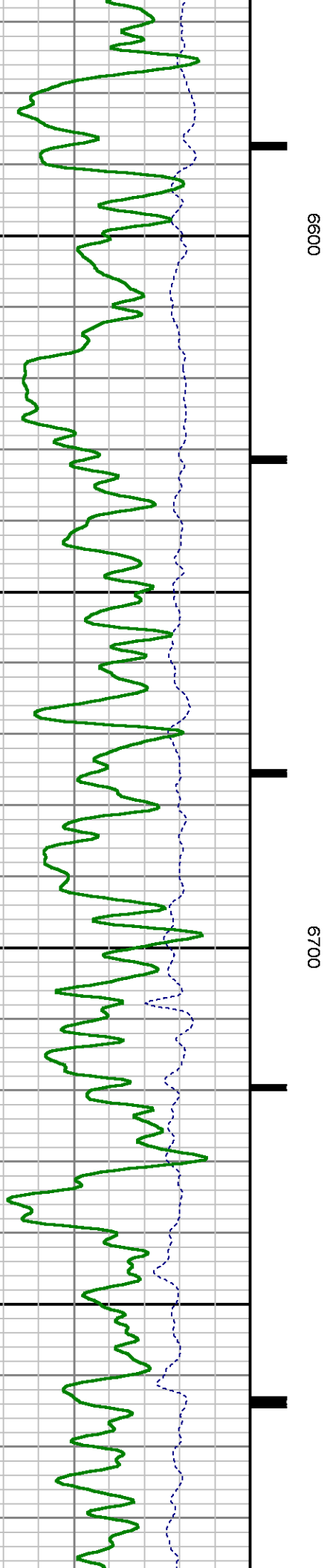
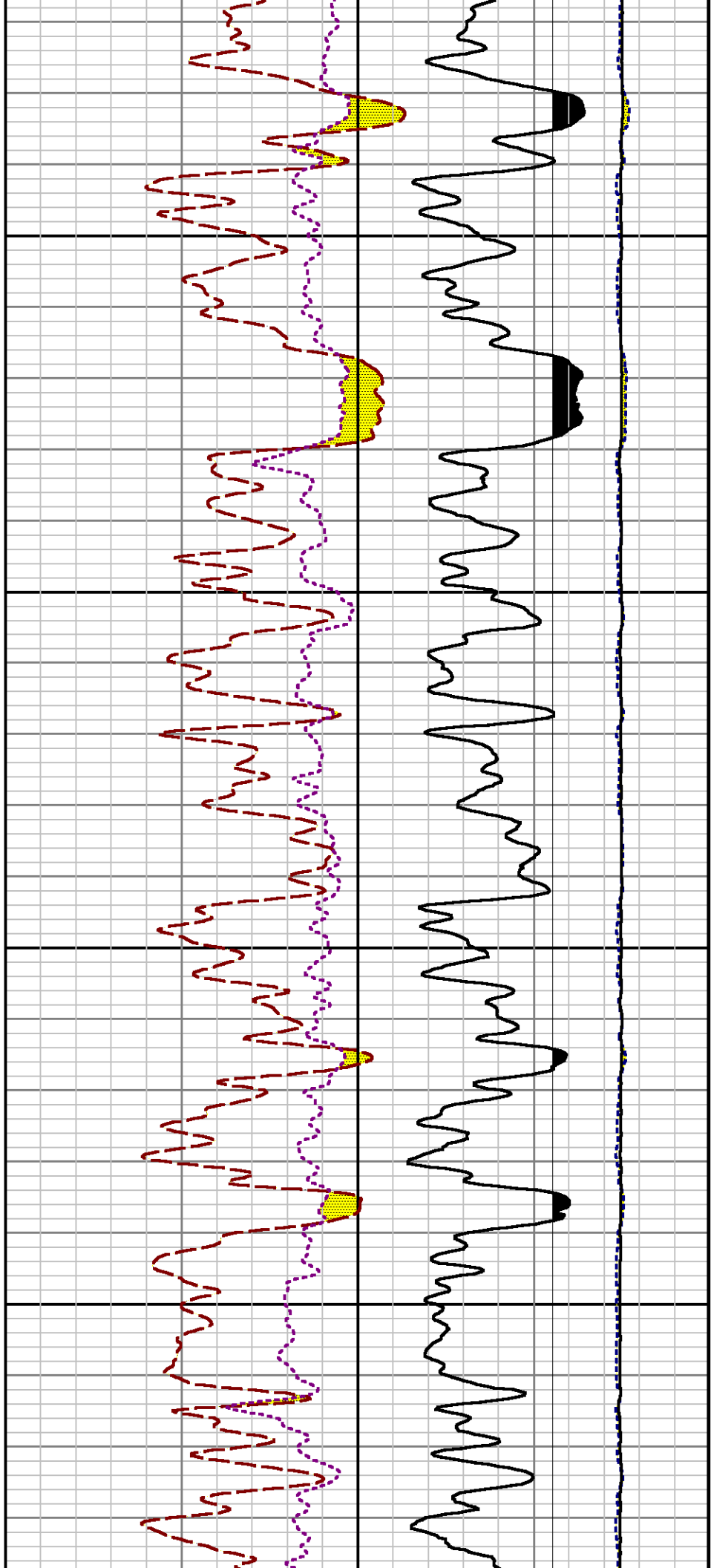


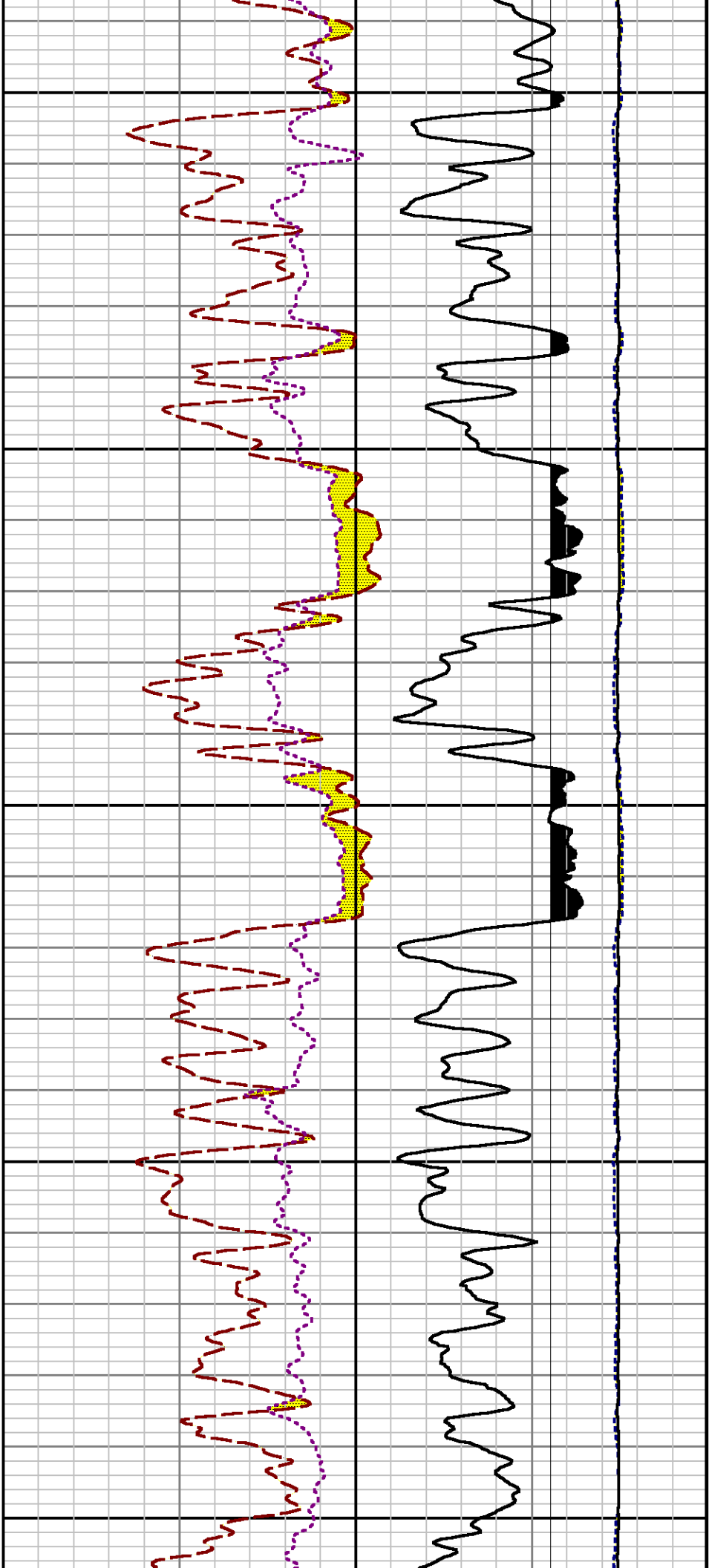








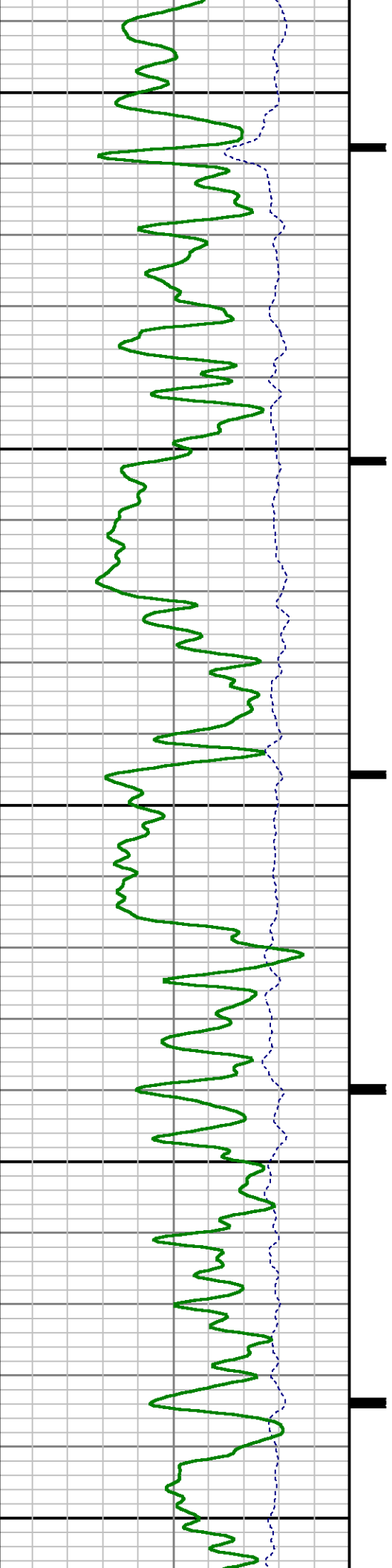




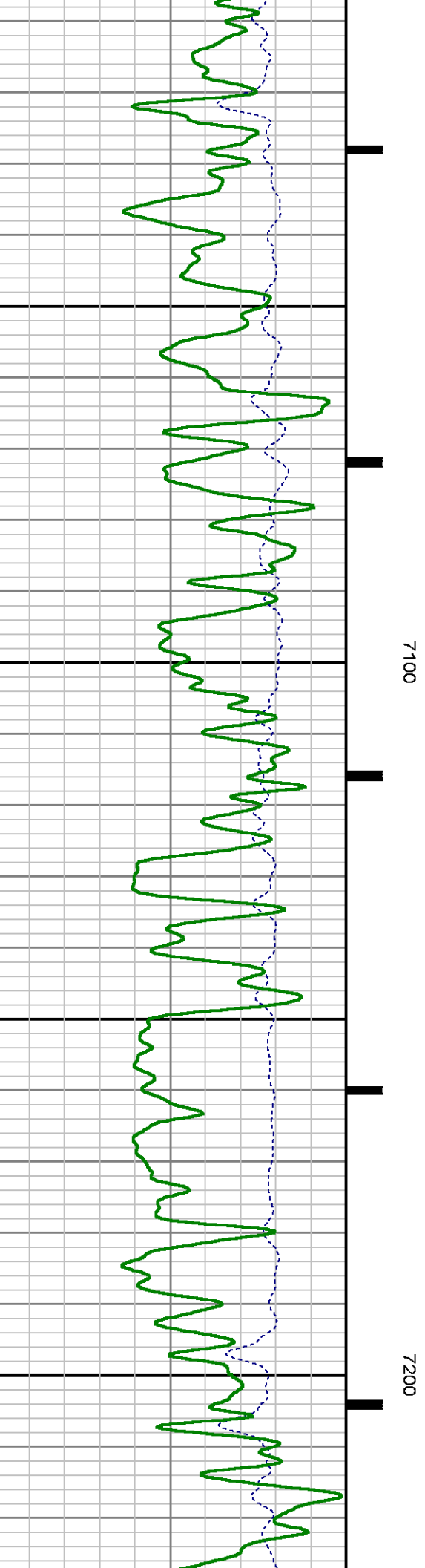
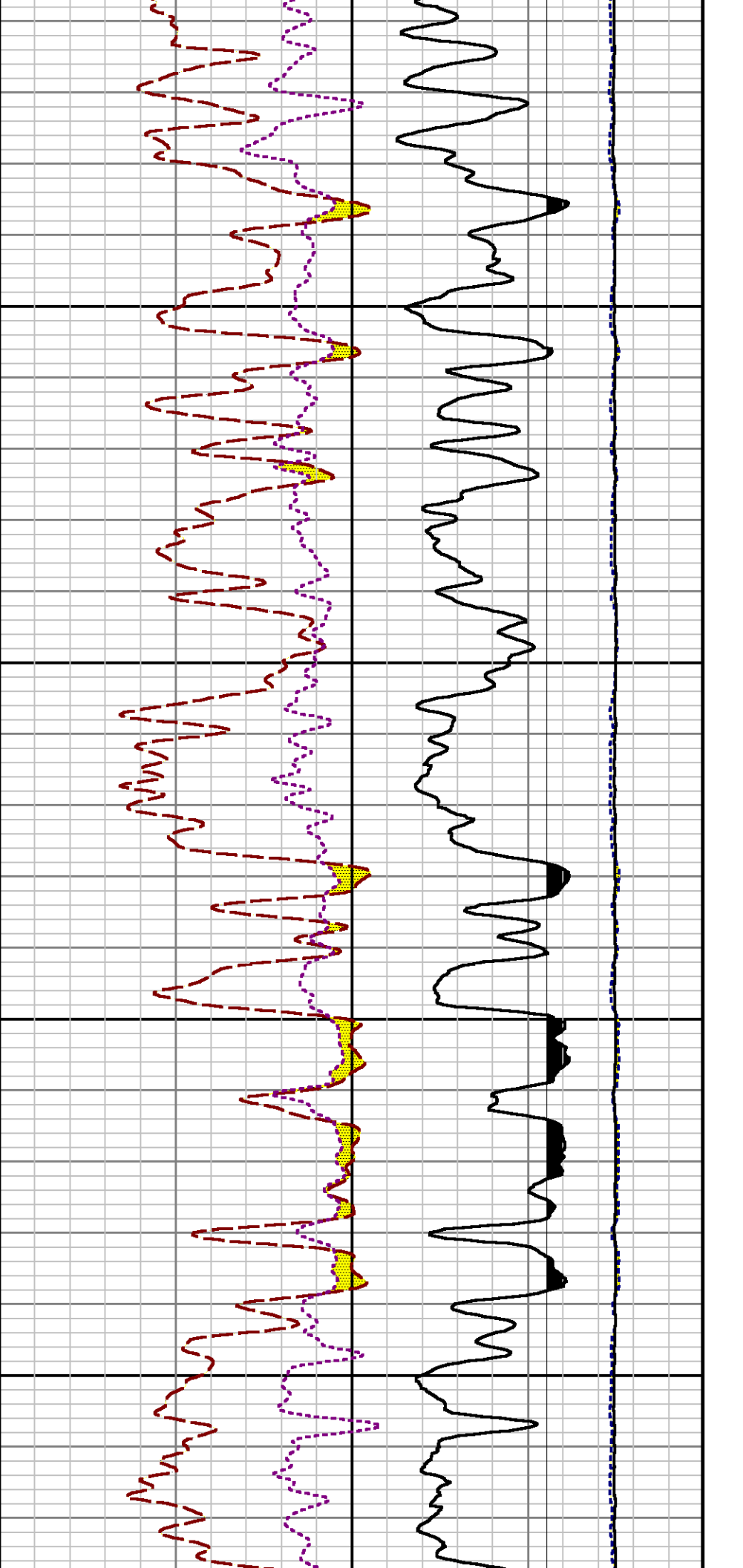
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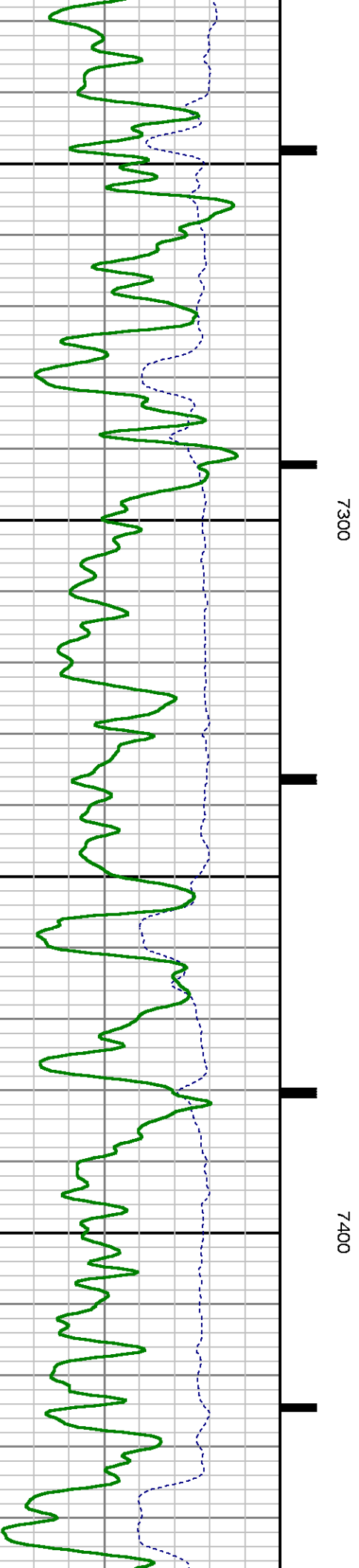
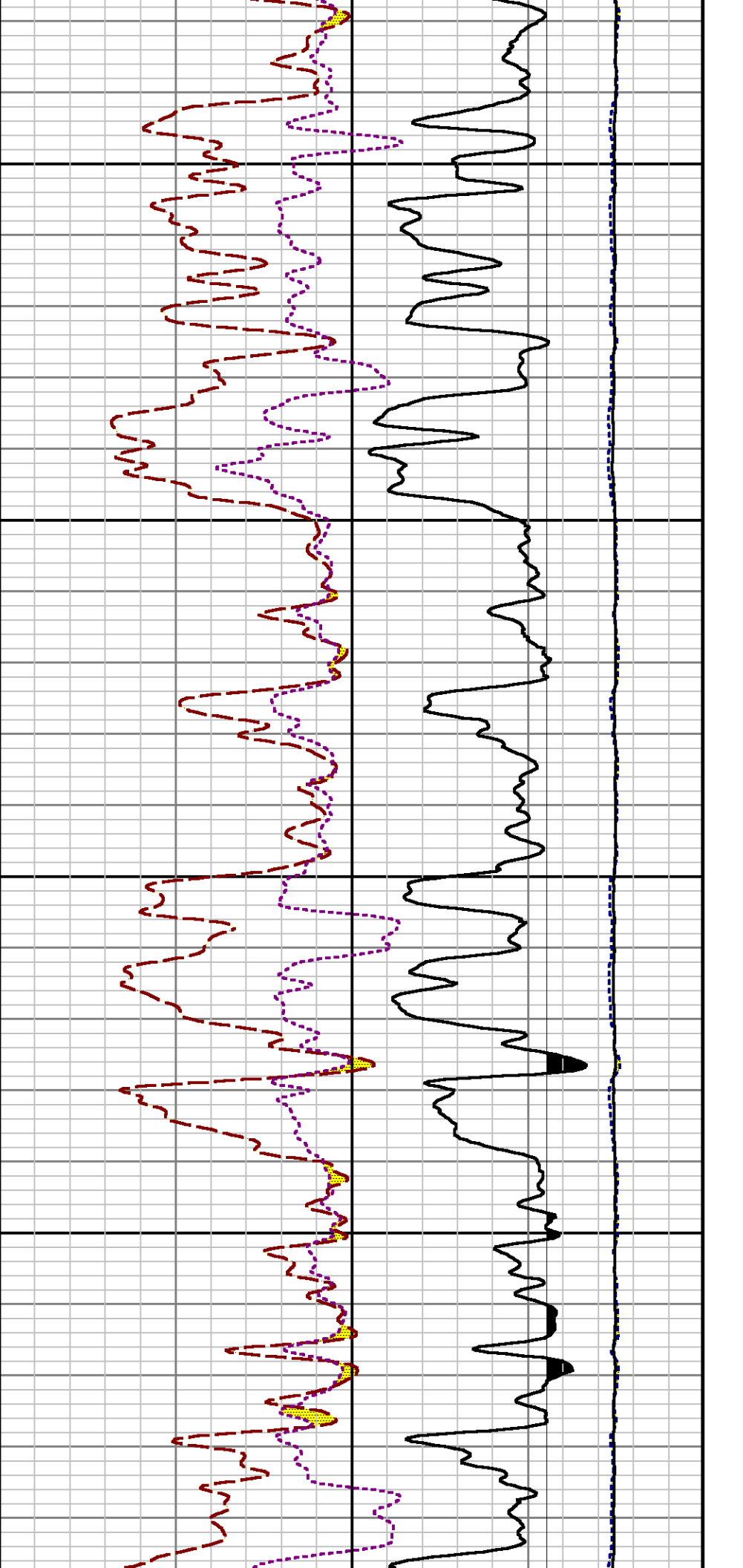
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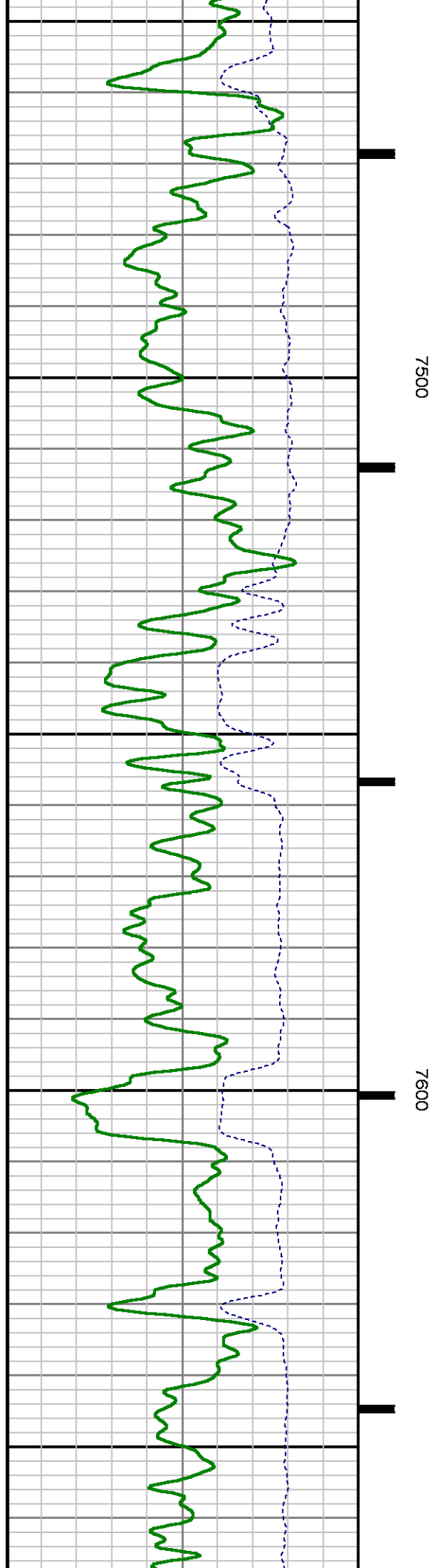
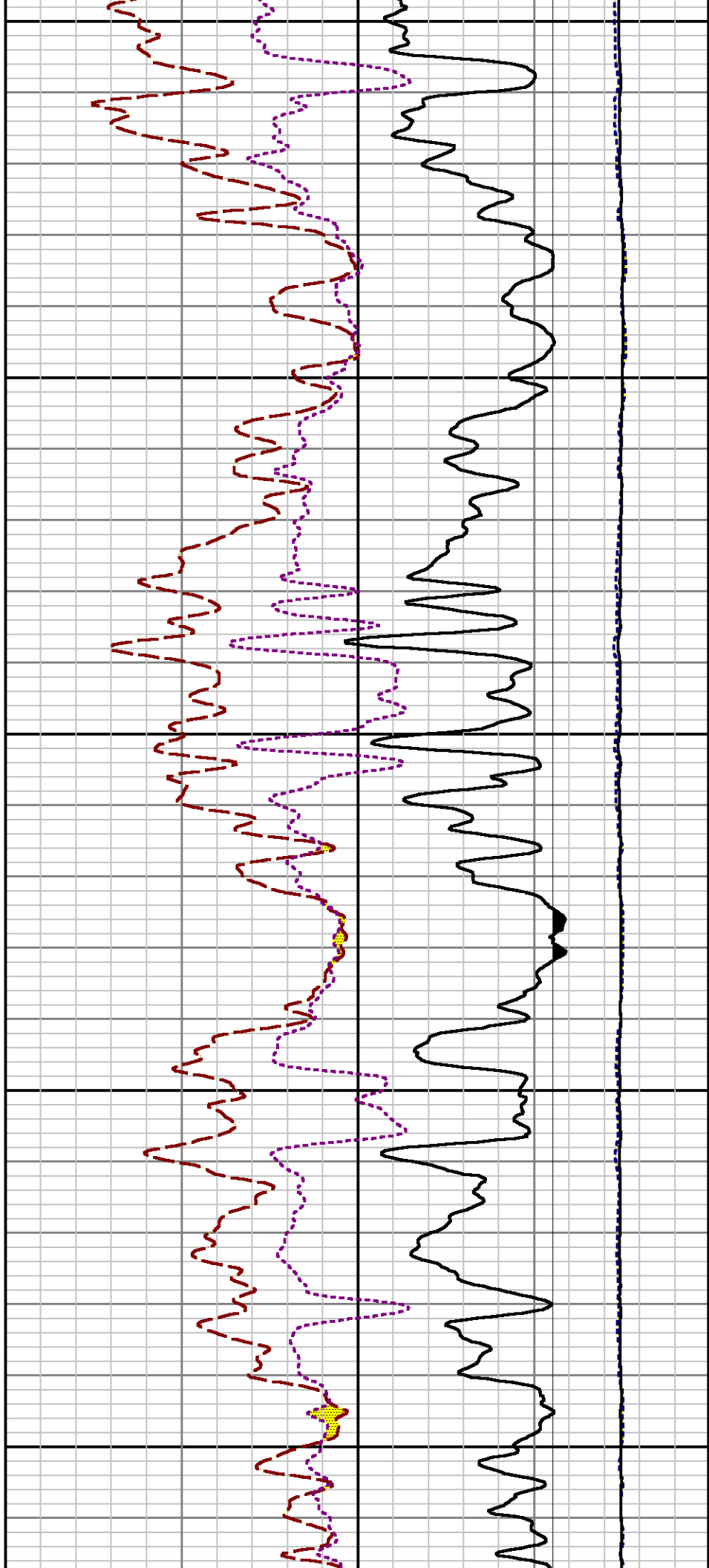
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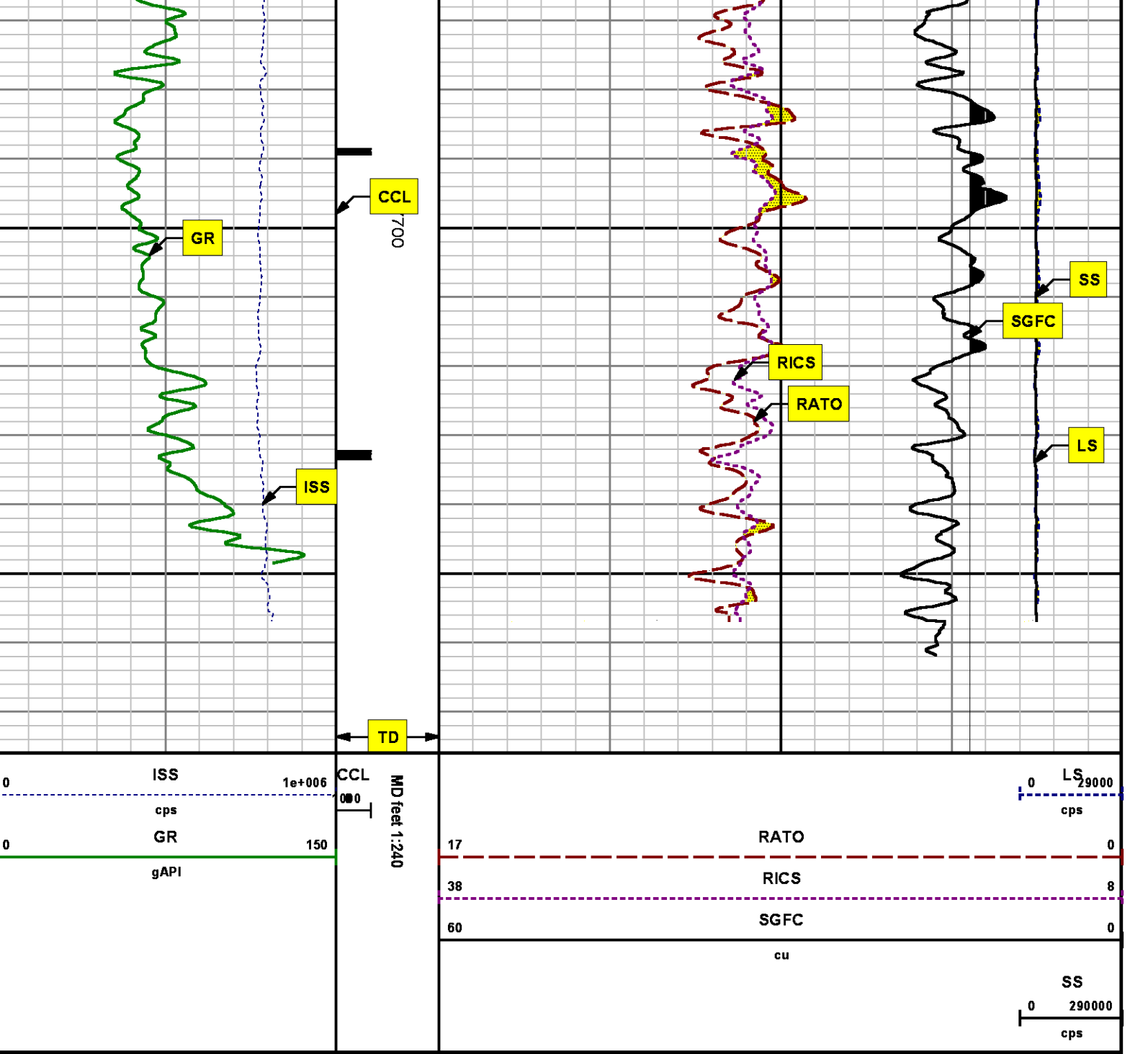












REPEAT SECTION  
PNC 3-D MODE

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
PNC Porosity	Borehole	Cased		6960.290	7284.790
PNC Porosity	Borehole Size	8.750	inch	6960.290	7284.790
PNC Porosity	Casing Size	4.500	inch	6960.290	7284.790
PNC Porosity	Gas Filled	Non Gas Filled		6960.290	7284.790
PNC Porosity	Matrix	Sandstone		6960.290	7284.790
TPS Pressure	Temperature Corr. Source	Fixed (72.00)	degF	6960.290	7284.790

## DEPTH OFFSETS

(for Acquired Curves)

SERIES	DEPTH OFFSET	ACQUIRED CURVES
8248ED	-26.519	FLTM
8248ED	-24.519	CCL CHV
2812LA	-21.969	GR
8281XA	-12.702	HVC3Q0 SEQ3 AMA3 AML3 BKX CXS CPT3Q0 CPT3Q2 CPT3Q3 CPT3Q4 ET3 IXS MCS3 MCS3Q0 QCAL3 RGN3 RICX SDA3 SDL3 SGA3 SGL3 STA3 XS ASPEC3 AMB3 AMF3 CHF3 IXSC IXSN RATO23 RICXC RIN13C RIN23 RIN23C SD3D SG3D SGB3 SGF3 WDT3 CXSR IXSR XSR RICXR
8281XA	-12.291	HVC2Q0 SEQ2 AMA2 AMB2 AMF2 AML2 BKL CHF2 CLS CPT2Q0 CPT2Q2 CPT2Q3 CPT2Q4 ET2 ILS LS MCS2 MCS2Q0 QCAL2 RGN2 RICL RONE23 RTWO23 SDA2 SDL2 SGA2 SGB2 SGF2 SGK2 SGL2 STA2 ASPEC2 ILSC ILSN WDT2 RICLC CLSR ILSR LSR RICLR
8281XA	-12.041	CPRS HVC1Q0 MV SEQ SEQ1 AMA1 AMB1 AME1 AMF1 AML1 BKS CHF1 CSS CORB CORF CPT1Q0 CPT1Q2 CPT1Q2A CPT1Q2B CPT1Q2C CPT1Q3 CPT1Q4 CPT1Q5 ET1 G1 G2 GE1S GE2S ISS MCS1 MCS1Q0 QA1 QCAL1 QM1 RATO RATO13 RBOR RGN1 RICS RIN RONE RPOR RTWO RIN13 RONE13 RTWO13 SALB SC1 SDA1 SDL1 SGA1 SGB1 SGBC SGE1 SGF1 SGFC SGK1 SGL1 SS SS2 STA1 PD1S PD2S PD3S MD1S MD2S MD3S DG1S DG2S DG3S PD1M PD2M PD3M MD1M MD2M MD3M DG1M DG2M DG3M MVS MA MVM FILV IAM TA PVM PVS IAS SSTAT QPD1 QPD2 QPD3 QMD1 QMD2 QMD3 QDG1 QDG2 QDG3 QMA QTA QFILV QMV QPV QIA DERR DCNT QPK1 QSA1 PKS1 ASPEC1 H0C FE2XC ISSC RINC

8255XA -0.792  
 8255XA -0.775  
 8255XA 0.000  
 SYSTEM 0.000

ISSN RDEN WDH1 RICSC CSSR G1R  
 G2R ISSR SSR SS2R RATOR RATO13R  
 RBORR RICSR RINR RIN13R RONER RPORR  
 RTWOR  
 PTFS PTMS  
 SPF1 SPFQ TSCP TSDP  
 DTEM TEMP TNF  
 TEN TTEN

Created by : RPM9, v5.3.1.0

Plotted by : PlotMgr, v5.4.504

Company : WPX ENERGY

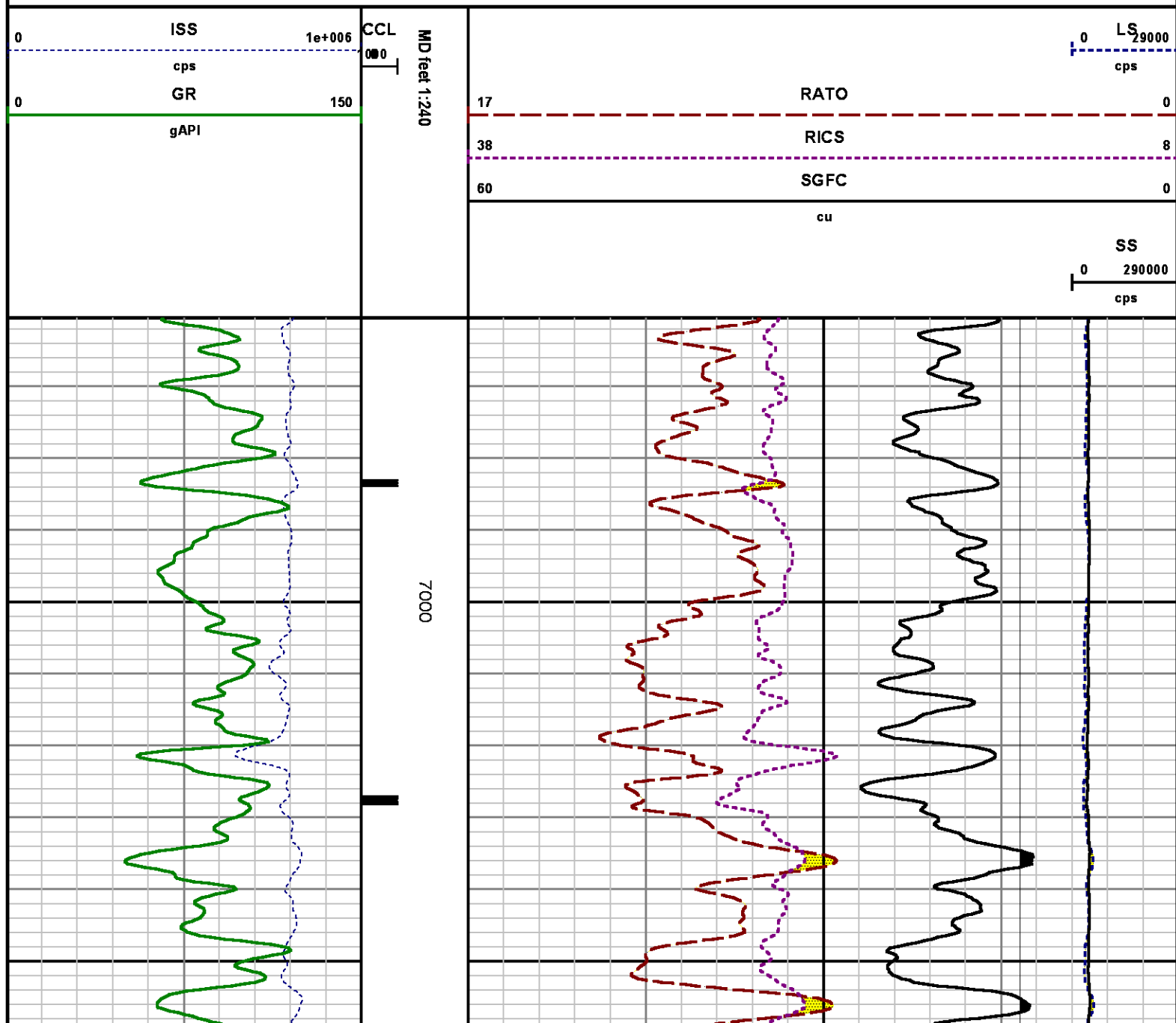
Well : WPX ENERGY PA 524-2

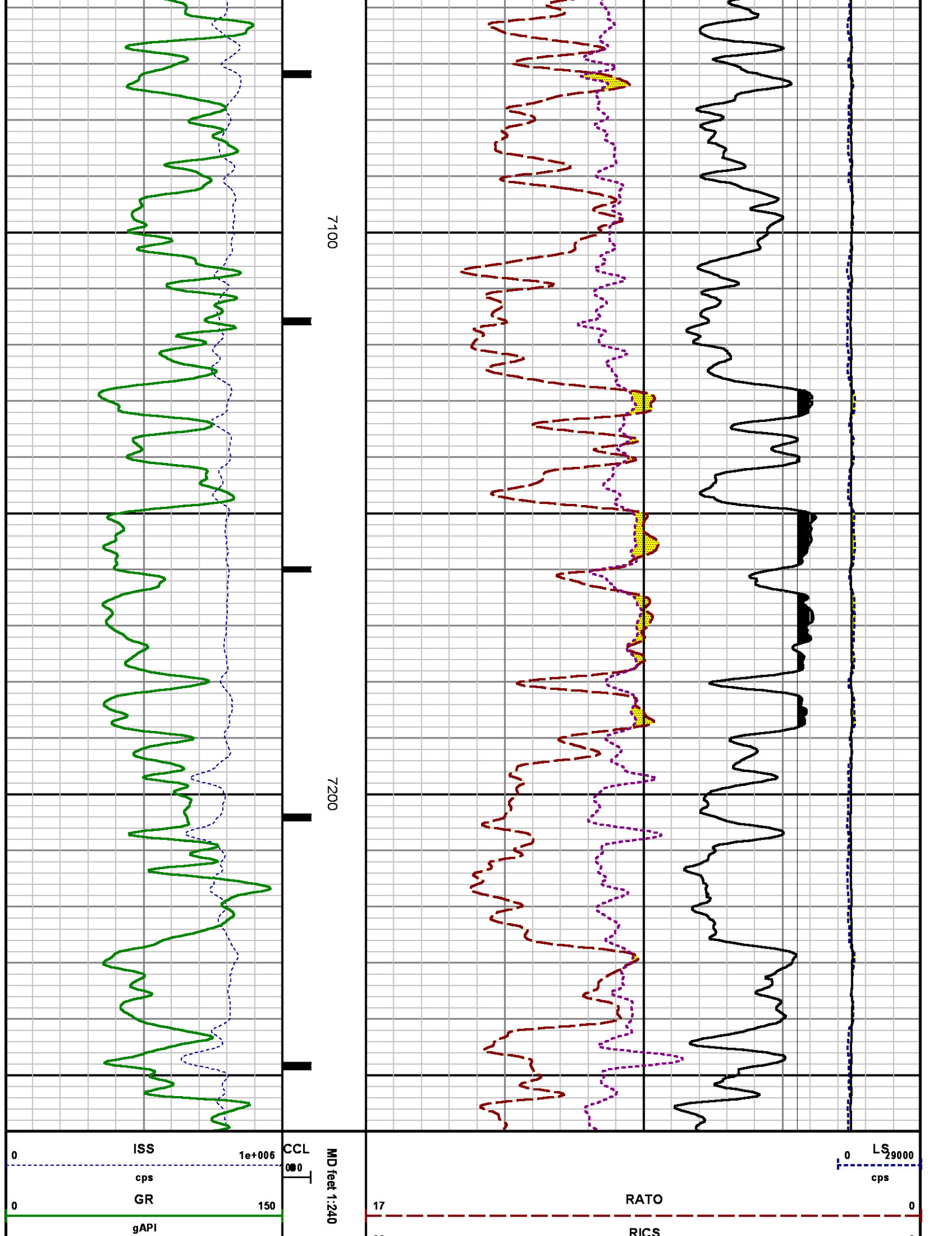
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Mode : PlotMgr 5.4.504

Interval : 6960.54 - 7260.00 feet UP

Created : 4/29/2014 12:52:55 PM





		38	60	SGFC	0
				cu	
					SS
					0 290000
					cps

CALIBRATION SUMMARY

GAMMA RAY

Calibration File: C:\case\calver\GR\38219.cal						
CALIBRATION SUMMARY						
DATE/TIME PERFORMED: Sat Apr 19 16:31:28 2014		TOOL SERIES: 2812LA		ASSET: 382		SEQ: 19
Calibrator #	Background [cps]	Calibrator On [cps]	Multiplicative	Background [api]	Calibrator On [api]	Differential [api]
S2K	51.88	260.02	1.009	52.34	262.34	210.00

Verification File: C:\case\calver\GR\38219.VP						
PRIMARY VERIFICATION						
DATE/TIME PERFORMED: Sat Apr 19 16:38:08 2014		TOOL SERIES: 2812LA		ASSET: 382		SEQ: 19
Calibrator #	Background [cps]	Calibrator On [cps]	Multiplicative	Background [api]	Calibrator On [api]	Differential [api]
S2K WA612	51.54	263.60	1.009	52.00	265.95	213.95

PNC

Calibration File: C:\case\calver\PNC\55525.cal						
PNC 3D CALIBRATION SUMMARY						
DATE/TIME PERFORMED:		Fri Apr 25 18:25:14 2014		TOOL SERIES:		8281XA
				ASSET:		555
				SEQ:		25
Calibrator #				Source #		
2437xb 12674				8281AA 11765054		

	ISS	Mtr VIts (V)	SS Gain	LS Gain	XLS Gain	EA Temp (degF)	Sync Delay (usec)	RCAL
Raw Data	805176	120.00	2331.00	2273.00	2234.00	108.55	7.00	0.9843



Interpolated

1300000

141.72

2308.02

2267.71

2229.00

	ISS	BKS	BKL	BKX	SGA1	SDA1	SGA2	SDA2
Raw Data	805176	6336.16	994.53	143.80	25.86	0.14	24.06	0.28
					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	805176	169525.92	26760.55	88448.11	31484.04	8267.11	53495.99	13229.94
Fit Quality %		1.32	1.41	1.18	1.17	1.39	1.11	1.43

	ISS	RBOR	RIN ISS/ILS	RIN13 ISS/IXS	RICS ISS/CSS	RATO SS/LS	RTWO SS2/LS	RONE CSS/CLS
Raw Data	805176	1.43	4.75	30.09	15.05	10.70	3.81	4.04
		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 %		0.06	0.06	0.16	0.02	0.12	0.13	0.17
Reduced	1388413	1.43	4.76	30.18	15.07	10.70	3.81	4.05
		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

## TEMPERATURE

Calibration File: C:\case\calver\TEMP\77456813.cal

### CALIBRATION SUMMARY

DATE/TIME PERFORMED: FEB 13 2014

TOOL SERIES: 8255XA ASSET: 774568 SEQ: 13

	T(0)	T(1)	T(2)	T(3)	T(4)	T(5)
Coefficients	-9.274653e+000	1.055639e-001	2.143764e-006	-2.782846e-010	0.000000e+000	0.000000e+000

## TOOL DIAGRAM

OTA SHORT CABLE HEAD

PCM POWER SUPPLY

Series 8250EA  
Mnemonic PCM

29.93'

Diameter	1.70"
Weight	18.00 lb
Length	3.86'
Temp Rating	350.00 °F

**TELEMETRY / CCL**

Series	8248EA
Mnemonic	PCM
Diameter	1.70"
Weight	20.00 lb
Length	4.46'
Measure Point	1.00' CCL MP
Temp Rating	350.00 °F
Press Rating	15000.00 PSI

**SONDEX GAMMA RAY**

Series	2812LA
Mnemonic	SNDX
Diameter	1.69"

**RESERVOIR PERFORMANCE MONITOR**

Series	8281XA
Mnemonic	RPM
Diameter	1.70"
Weight	75.00 lb
Length	18.58'
Measure Point	9.49' SS DETECTOR
Measure Point	9.72' LS DETECTOR
Measure Point	12.69' XLS DETECTOR
Temp Rating	350.00 °F
Press Rating	20000.00 PSI

CCL MP — 21.84'

MP — 19.40'

XLS DETECTOR — 12.78'

LS DETECTOR — 9.80'  
SS DETECTOR — 9.58'

0.00'

**Total Length: 29.93'**  
**Total Weight: Not Available**  
**Max Diameter: 0' 1.70"**

**Baker Atlas***CASE***Company**

WPX ENERGY

**Well**

WPX ENERGY PA 524-2

**Field**

PARACHUTE

**County**

GARFIELD

**State**

COLORADO

**Location**

SHL: 2001' FSL &amp; 1575' FWL

BHL: 184' FSL &amp; 2105' FWL (SESW)

**Elevations**

KB 5846 ft

DF

GL 5821 ft

**File No:**

CH085272

**API No:**

05045221490000

2 7S 95W

GV 86-2 PAD

AZTEC 1000

SEC 2

TWP 7S

RGE 95W