



Baker Atlas

RESERVOIR PERFORMANCE MONITOR

File No: CH083305	Company Well	WPX ENERGY SAVAGE RWF 511-25
API No: 05045219690000	Field County	RULISON GARFIELD State CO
25 GS 94W RWF 22-25 PAD CYCLONE 17	Location SHL: 2454' FNL & 1422' FWL BHL: 237' FNL & 941' FWL SEC 25 TWP 6S RGE 94W	Other Services BOND LOG
Permanent Datum Log Measured From Drill Measured From	GL KB KB Elevation 21 ft Above P. D.	Elevations KB 6058 ft DF GL 6057 ft

Date	07/MAR/14			
Run	ONE			
Service Order	US625354			
Depth Driller	9089 ft			
Depth Logger	9038 ft			
Bottom Logged Interval	9028 ft			
Top Logged Interval	4942 ft			
Time Started	11:30			
Time Finished	17:30			
Operator Rig Time	6 HOURS			
Type of Fluid in Hole	WATER			
Fluid Density	NA			
Salinity	NA			
Fluid Level	NA			
Logged Cement Top	NA			
Wellhead Pressure	0 psi			
Maximum Hole Deviation	NA			
Nominal Logging Speed	10 fpm			
Maximum Recorded Temperature	233 degF			
Reference Log	BAKER HUGHES BOND LOG			
Reference Log Date	07/MAR/14			
Equipment No.	Location			
Recorded By	NEWELL			
Witnessed By	COLE APPELEGATE			

- 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	0 ft	1158 ft
8.75 In	1158 ft	9151 ft

Casing Record				
Size	Weight	Grade	From	To
9.625 In			0 ft	1158 ft
4.5 In	11.6 lbm/ft	1-80	0 ft	9151 ft

Remarks

All data on this log is shifted and depth matched using the Gamma Ray curve to the Baker Hughes bond log dated 3/7/2014 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 2 feet.

Logged In PNC-3D mode.

BHT = 233 °F
SJ = 5549' - 5573'

Equipment Data					
Run	Trip	Tool	Series Number	Serial Number	Position
1	1	PCM	8250EA	10397894	FREE
1	1	TEL/CCL	8248ED	10296408	FREE
1	1	GR	2812LA	10274385	FREE
1	1	RPM	8281EA	10273848	FREE
1	1	RPM	8283PA	10585555	FREE
1	1	RPM	8281FA	10307727	FREE
1	1	TEMP	8255XA	11774568	FREE

MAIN SECTION
PNC 3-D MODE

SPL PROCESSING

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
PNC Porosity	Borehole	Cased		4909.750	9031.629
PNC Porosity	Borehole Size	8.750	inch	4909.750	9031.629
PNC Porosity	Casing Size	4.500	inch	4909.750	9031.629
PNC Porosity	Gas Filled	Non Gas Filled		4909.750	9031.629
PNC Porosity	Matrix	Sandstone		4909.750	9031.629

DEPTH OFFSETS
(for Acquired Curves)

SERIES	DEPTH OFFSET	ACQUIRED CURVES			
8248ED	-14.478	FLTM			
8248ED	-12.478	CCL	CHV		
2812LA	-9.928	GR			
8281XA	0.000	UNOZOO	SE03	AMAZ	AMLZ
			FLKY	QYS	

8281XA	-0.662	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	RAT023
		RICXC	RIN13C	RIN23	RIN23C	SD3D	SG3D
		SGB3	SGF3	WDTH3	CXSR	IXSR	XSR
		RICXR					
8281XA	-0.250	HVC2Q0	SEQ2	AMA2	AMB2	AMF2	AML2
		BKL	CHF2	CLS	CPT2Q0	CPT2Q2	CPT2Q3
		CPT2Q4	ET2	ILS	LS	MCS2	MCS2Q0
		QCAL2	RGN2	RICL	RONE23	RTW023	SDA2
		SDL2	SGA2	SGB2	SGF2	SGK2	SGL2
		STA2	ASPEC2	ILSC	ILSN	WDTH2	RICLC
		CLSR	ILSR	LSR	RICLR		
8281XA	0.000	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	RAT0	RAT013
		RBOR	RGN1	RICS	RIN	RONE	RPOR
		RTW0	RIN13	RONE13	RTW013	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	HOC	FE2XC	ISSC	RINC
		ISSN	RDEN	WDTH1	RICSC	CSSR	G1R
		G2R	ISSR	SSR	SS2R	RATOR	RAT013R
		RBORR	RICSR	RINR	RIN13R	RONER	RPORR
		RTWOR					
SYSTEM	0.000	TEN	TTEN				

Created by : MIXED

Plotted by : PlotMgr, v5.4.504

Company : WPX ENERGY

Well : SAVAGE RWF 511-25

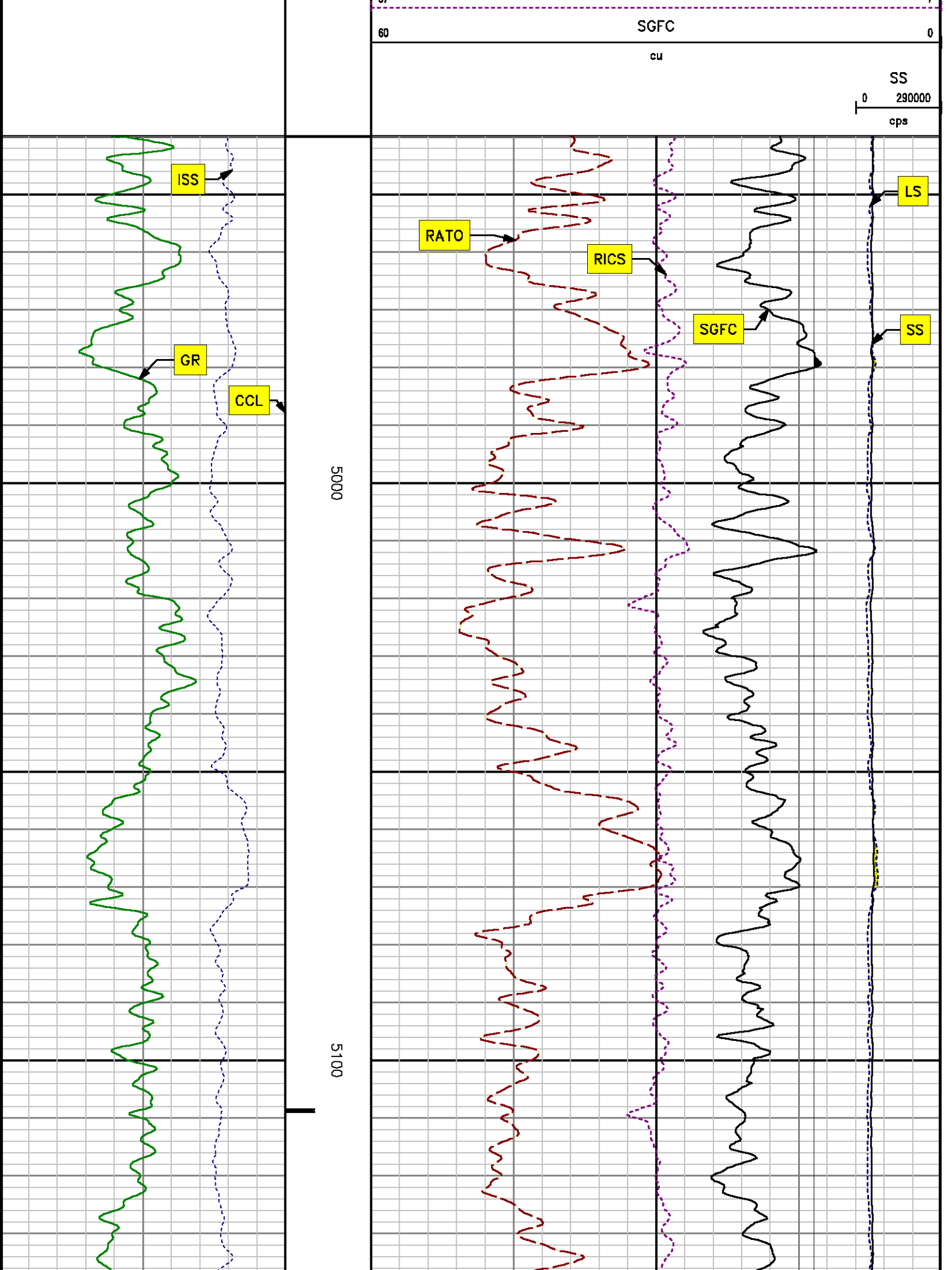
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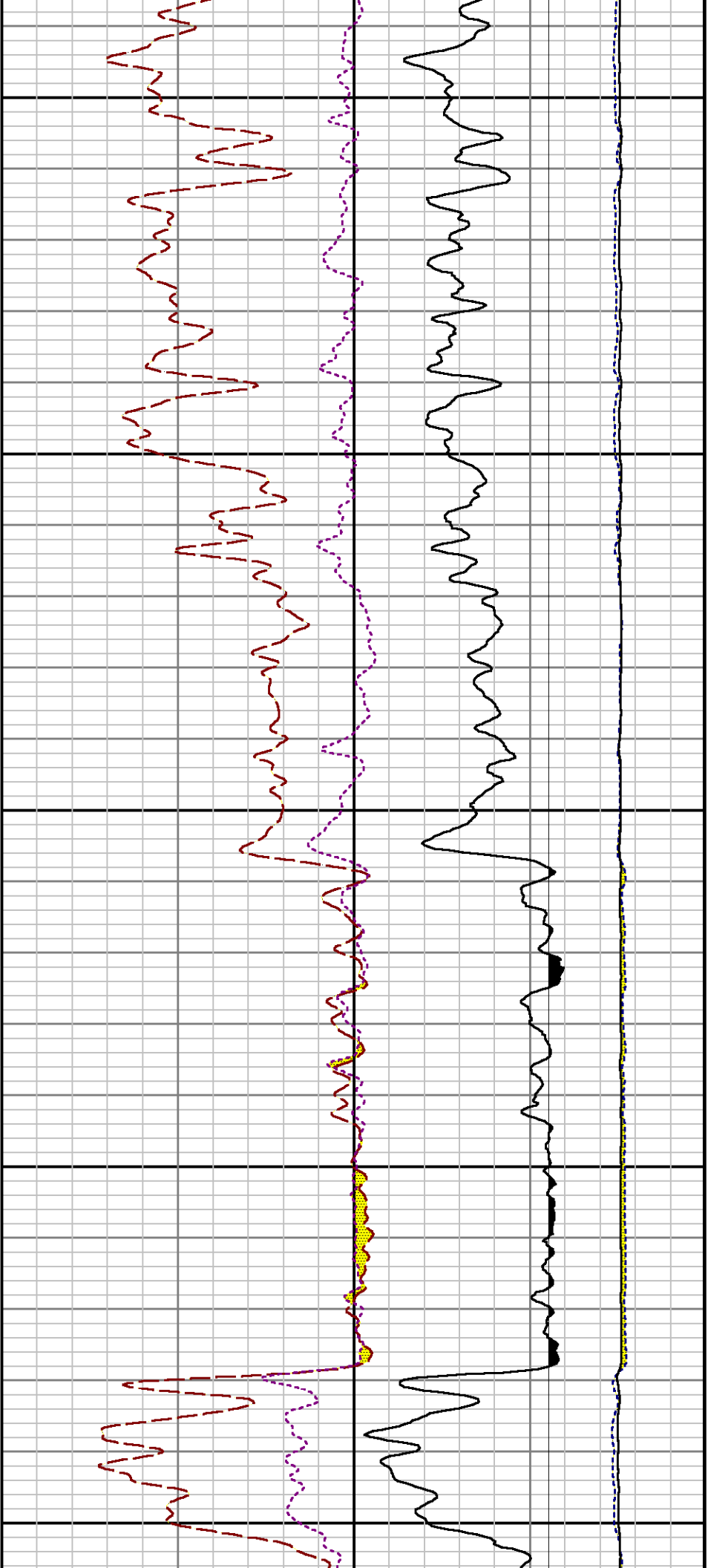
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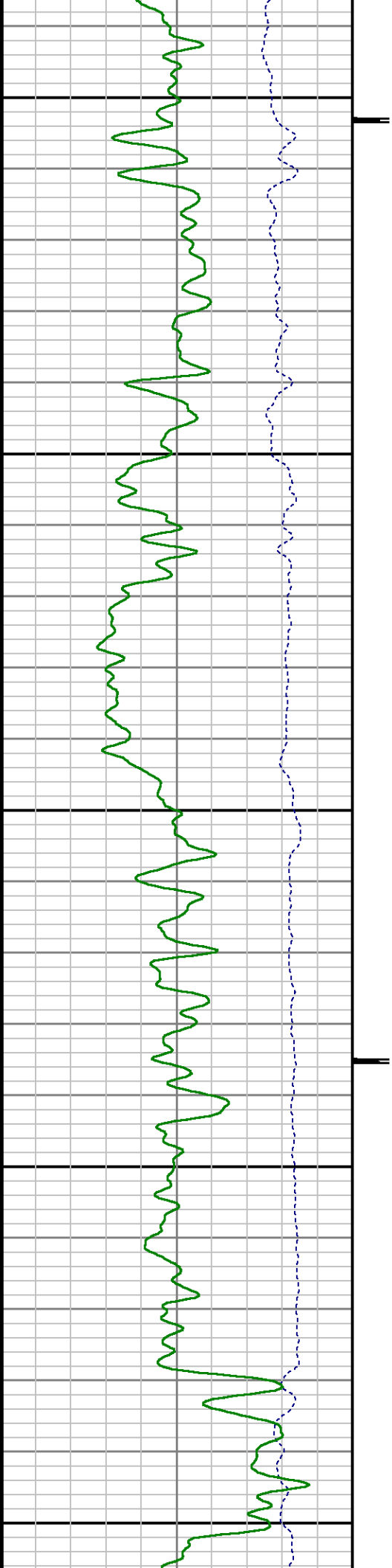


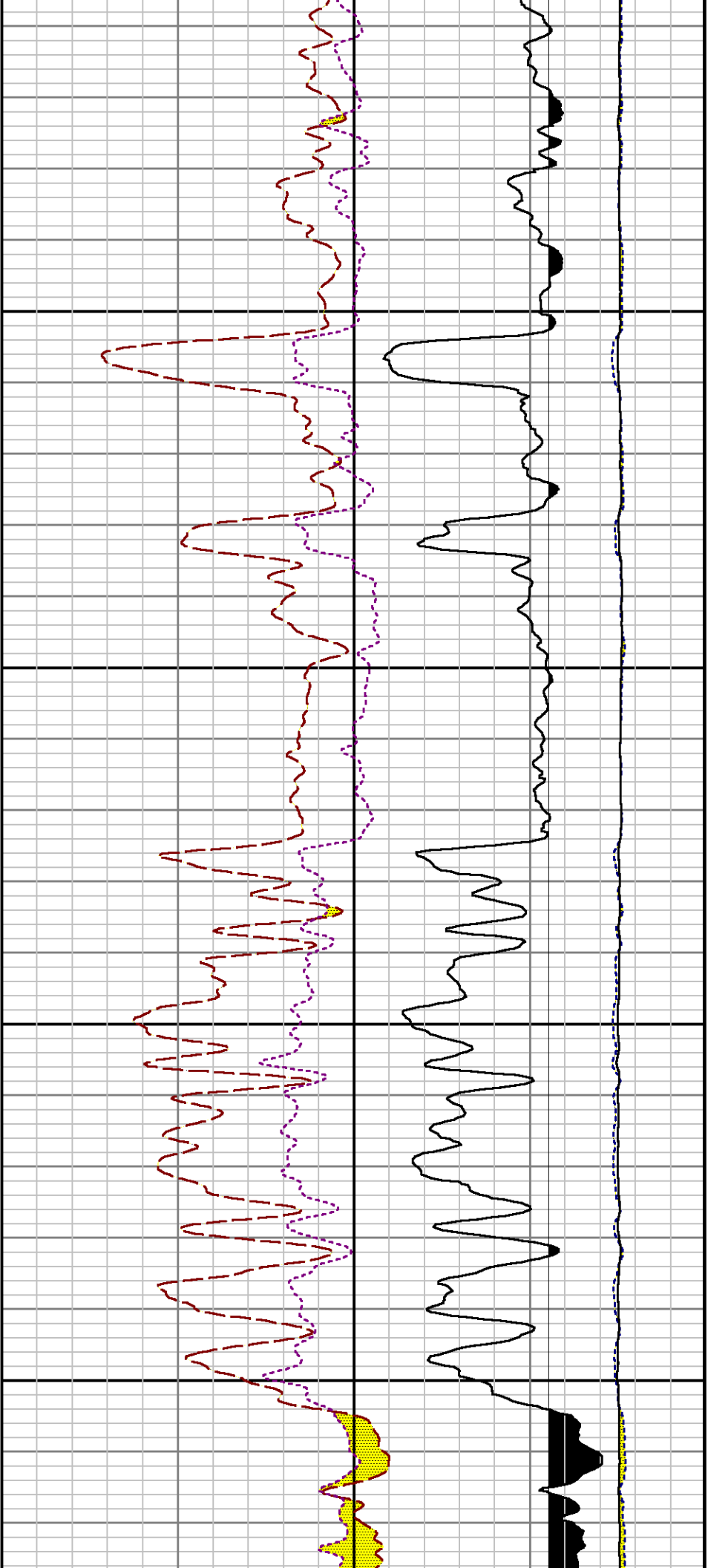




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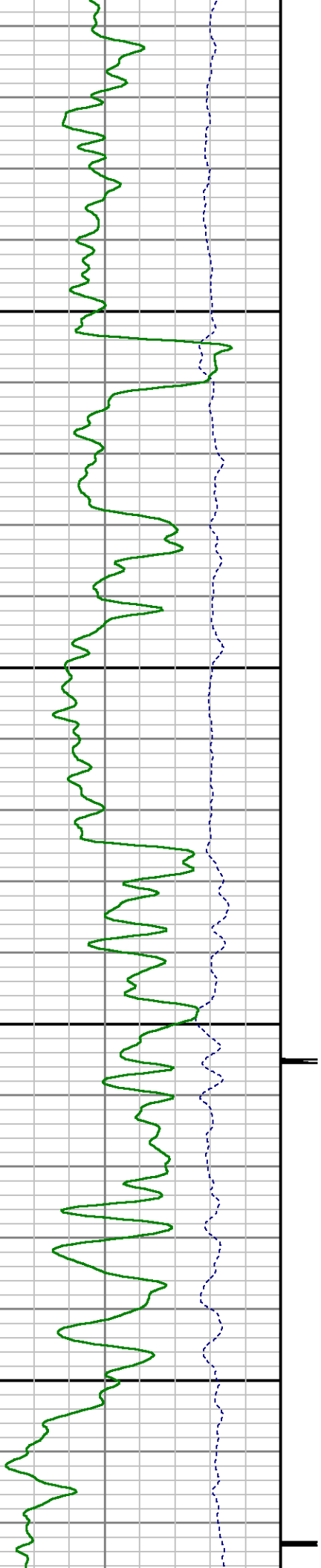
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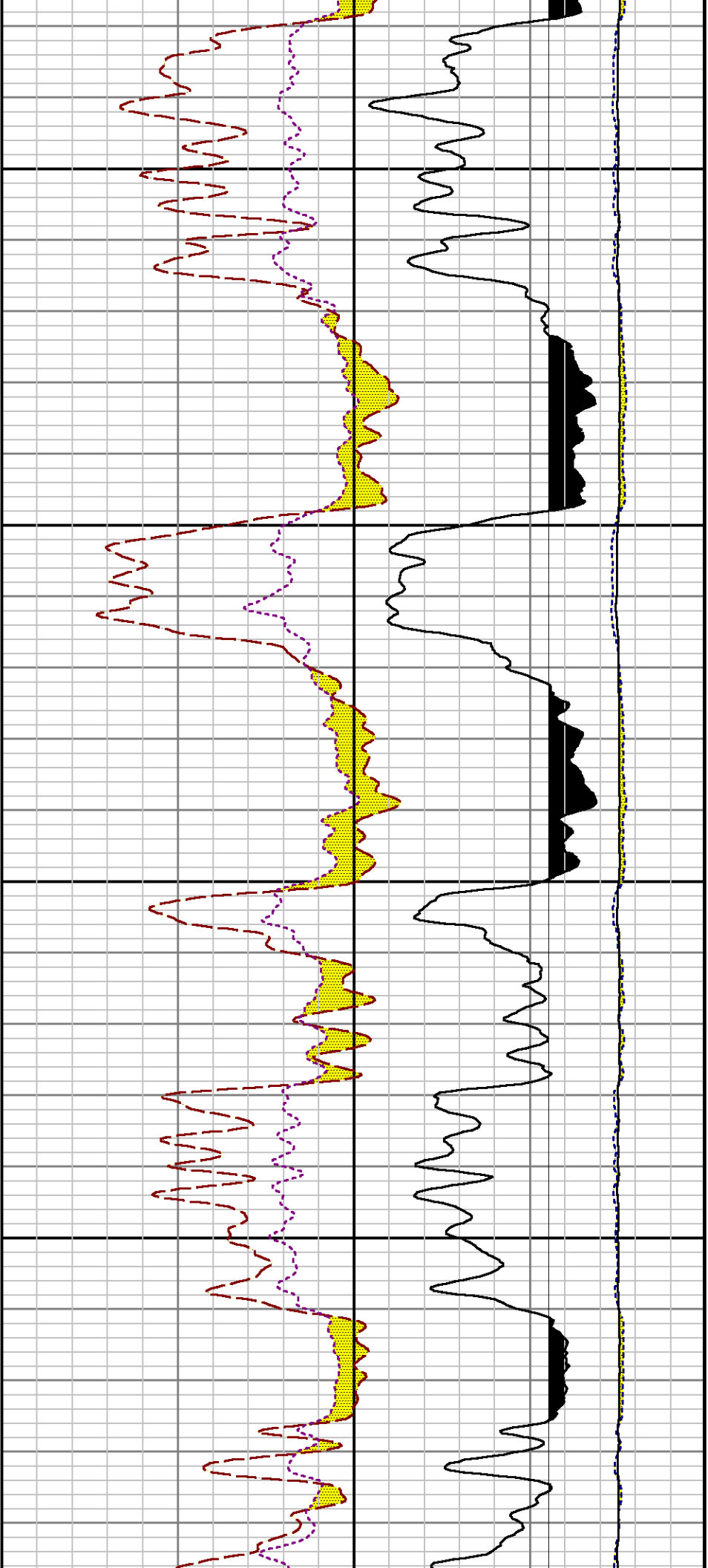




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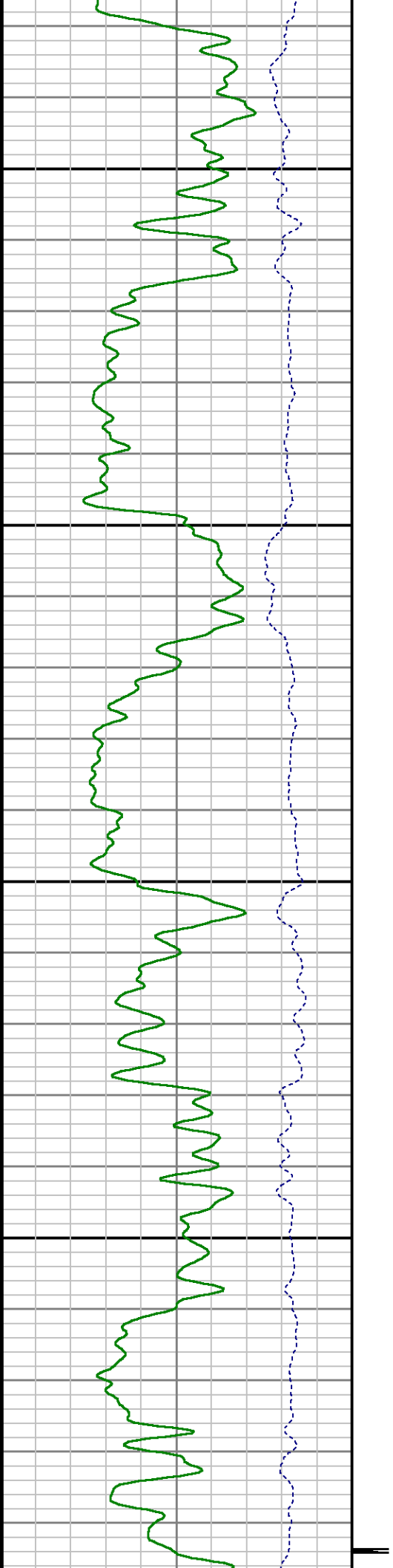
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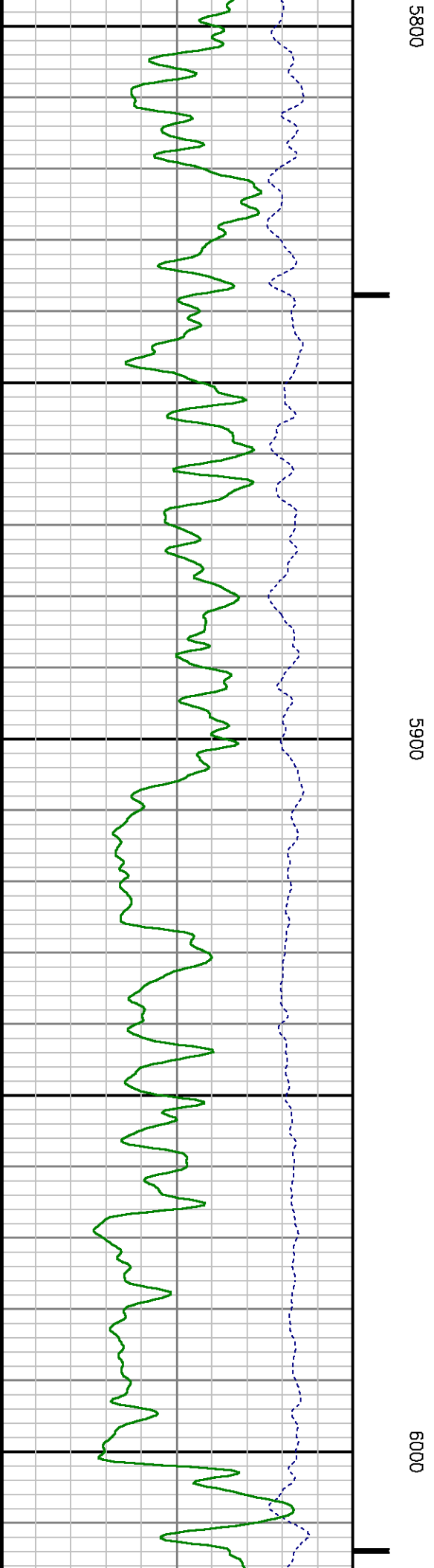
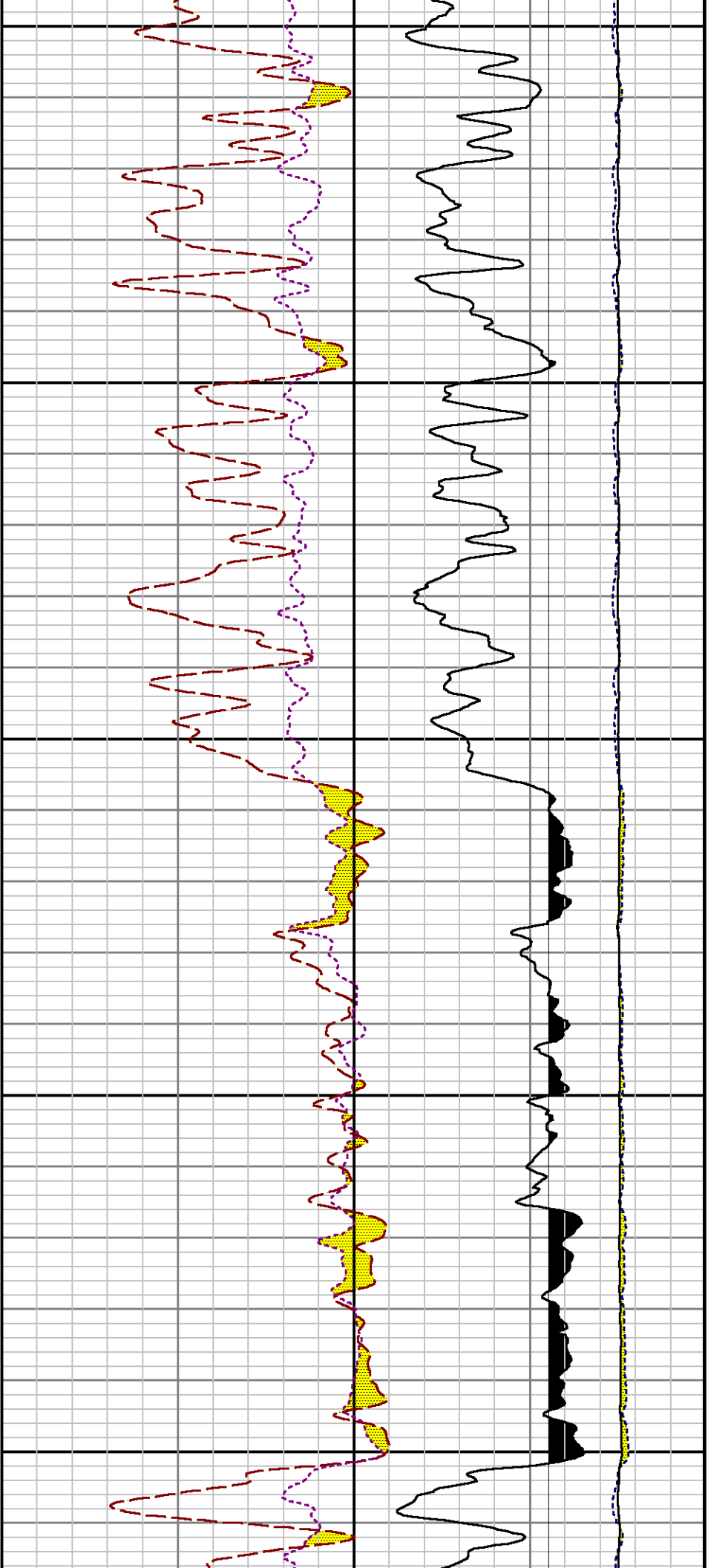


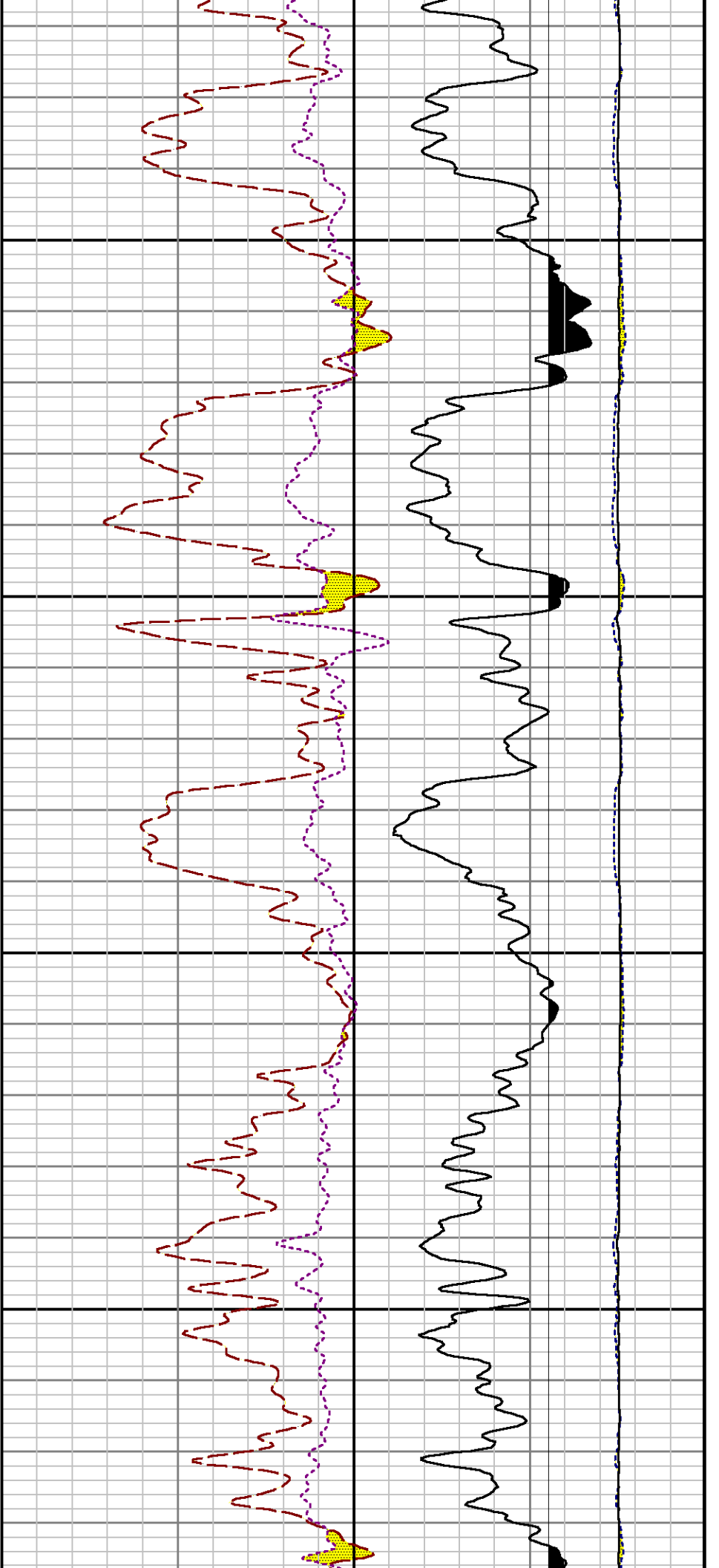


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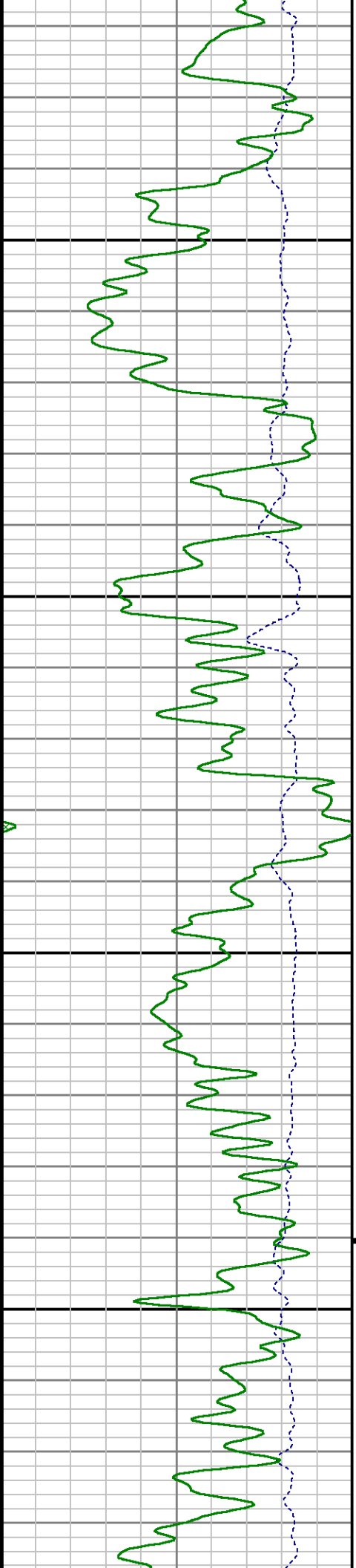


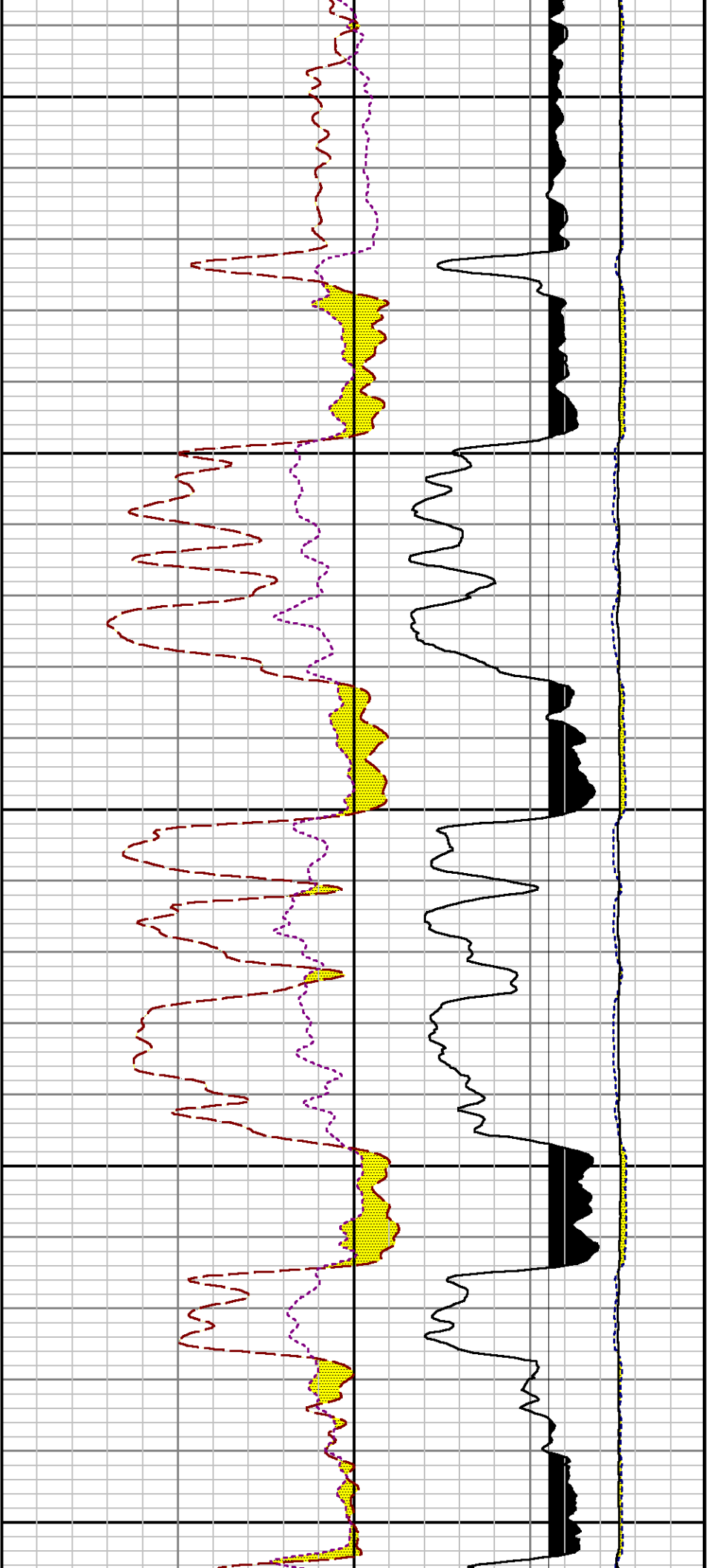




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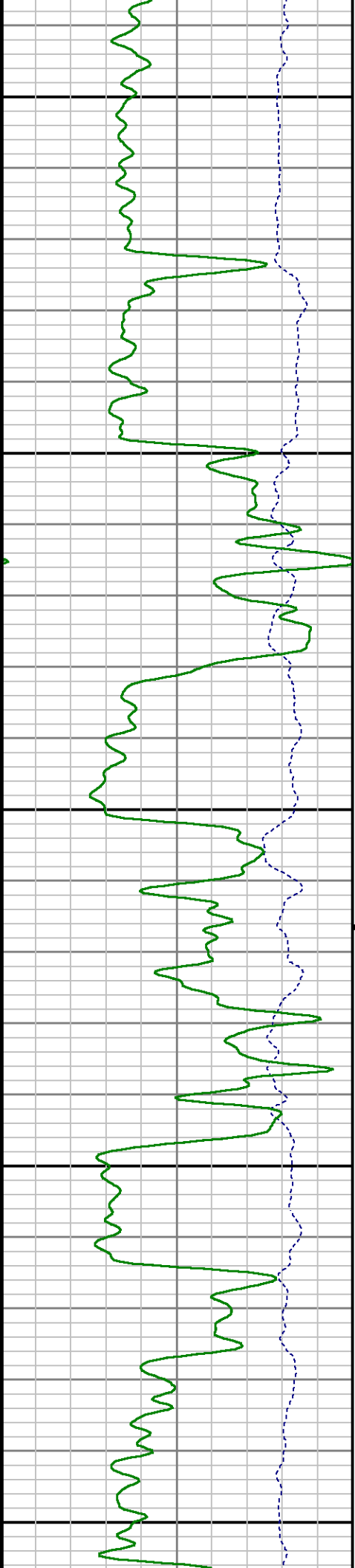
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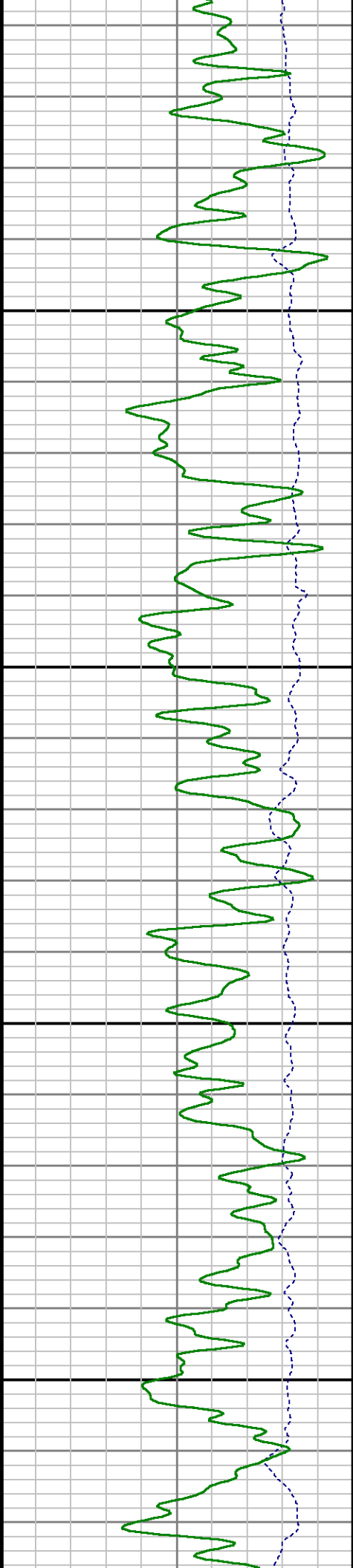




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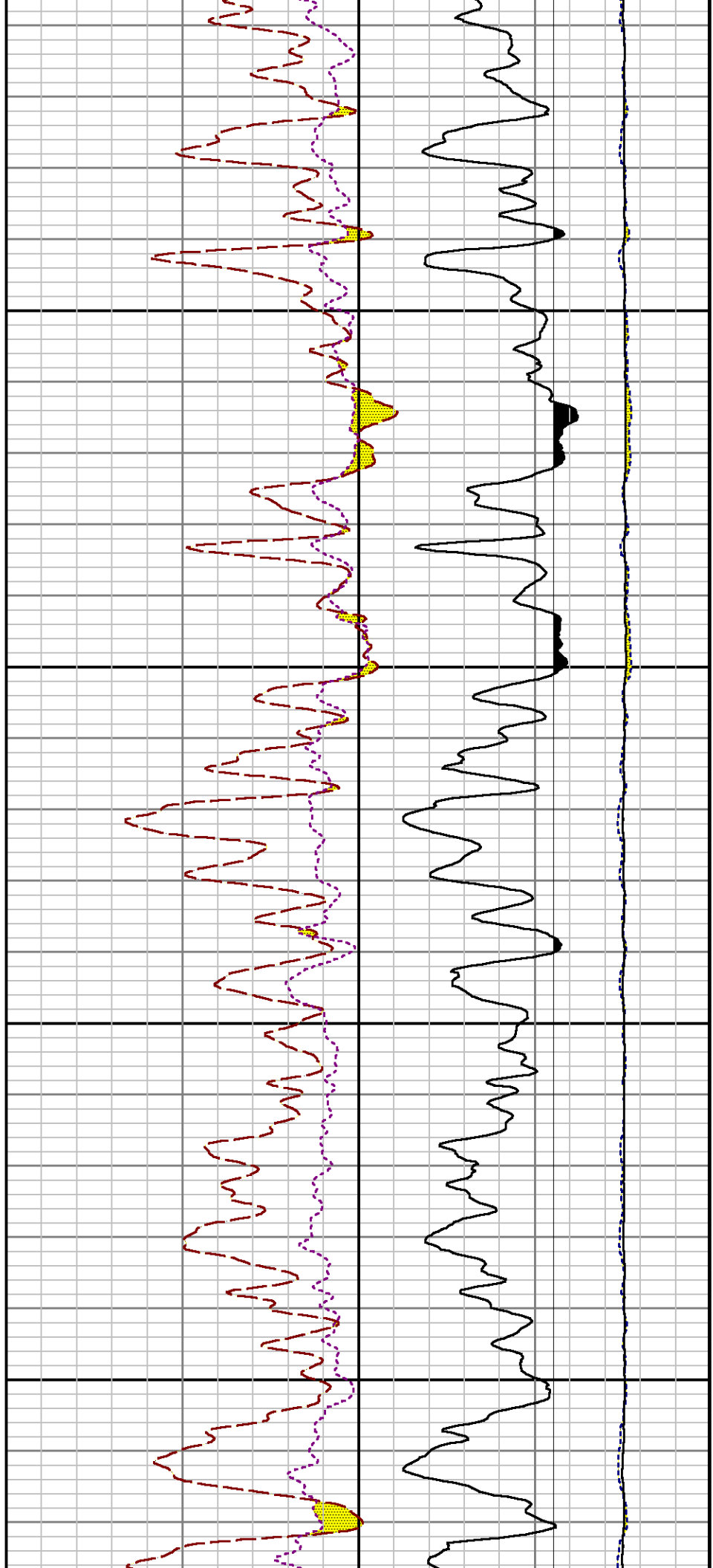
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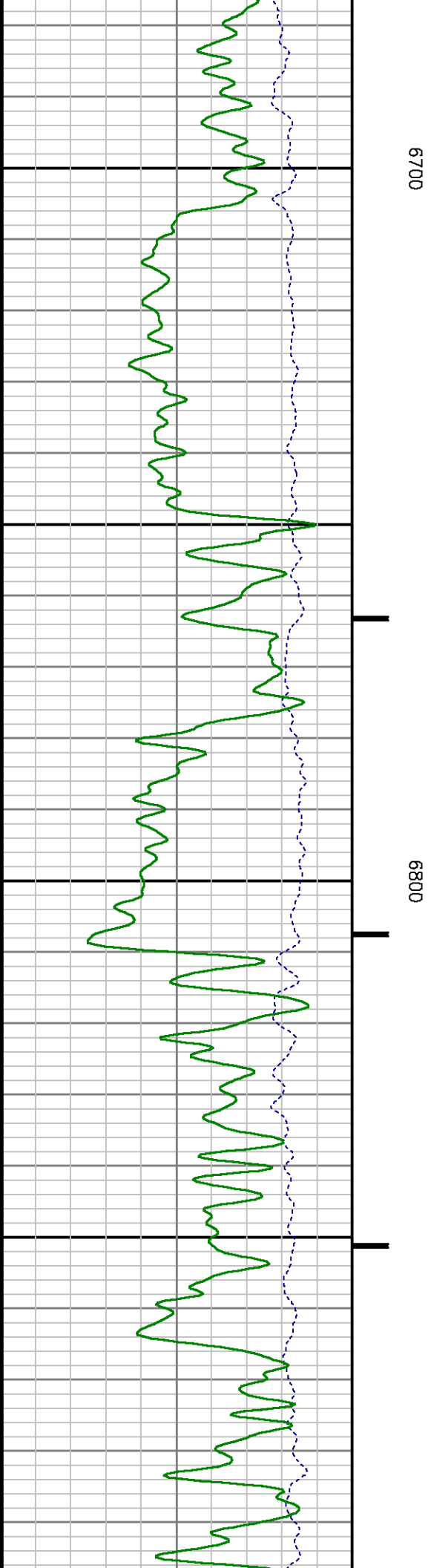
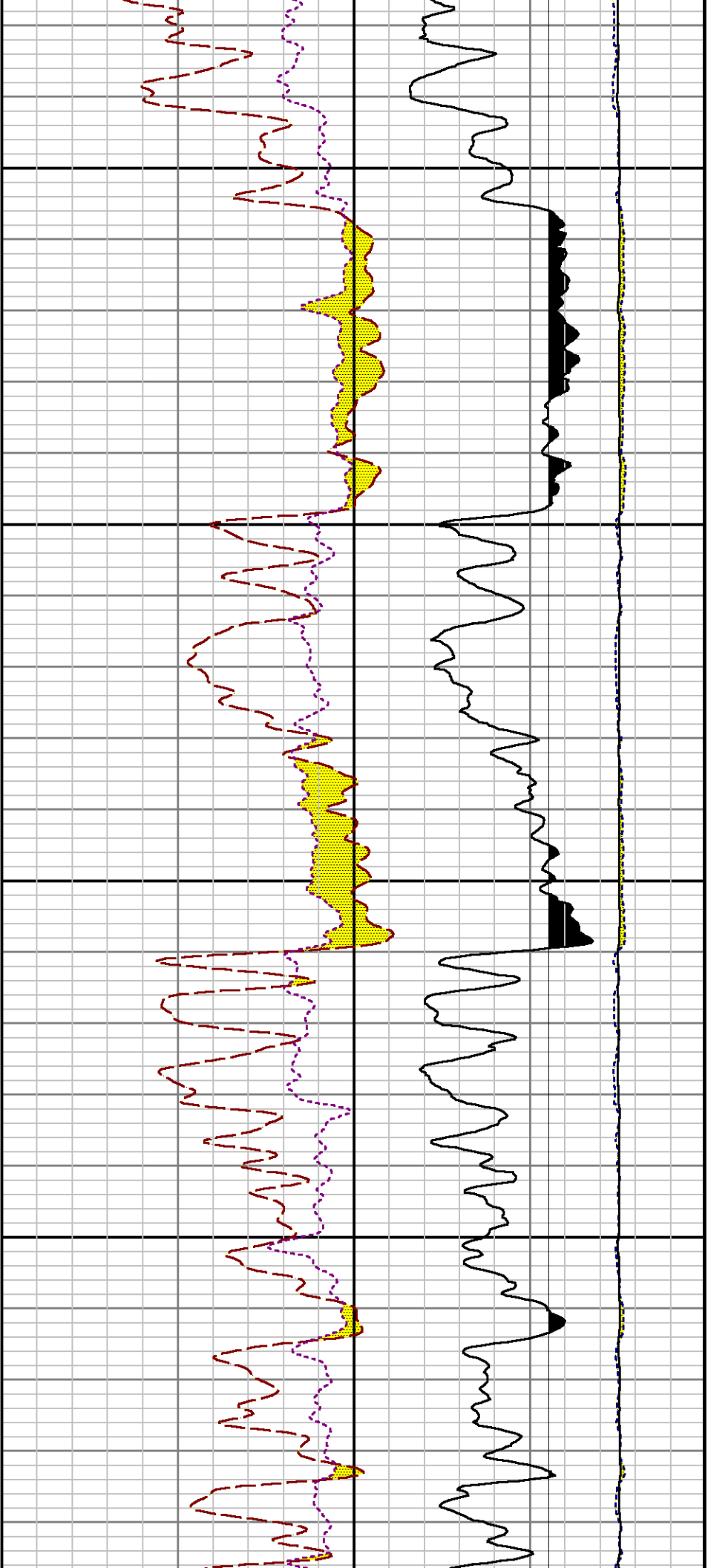


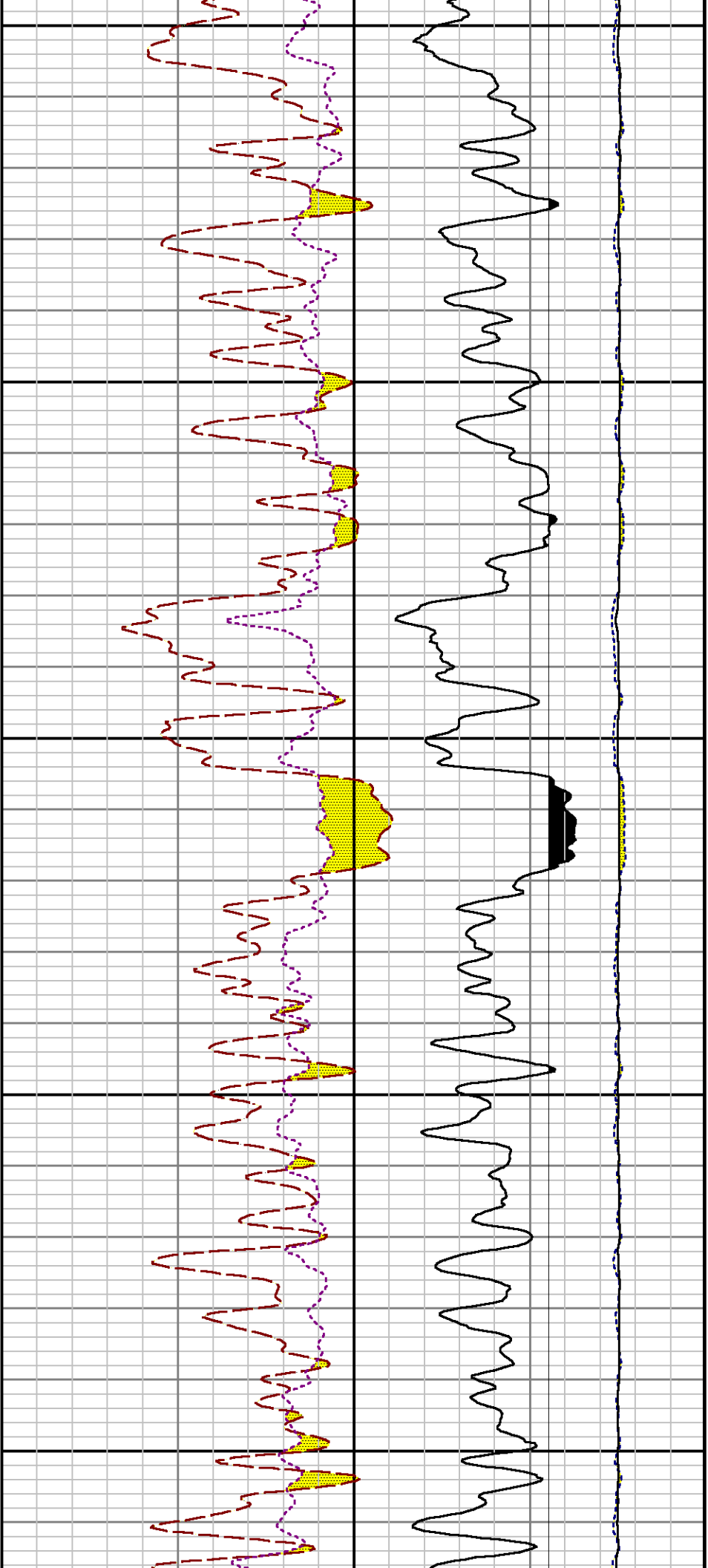


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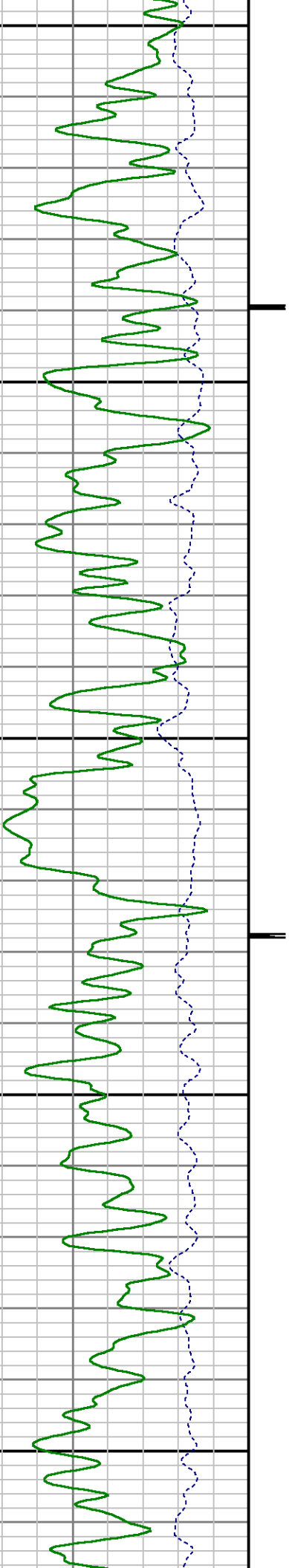


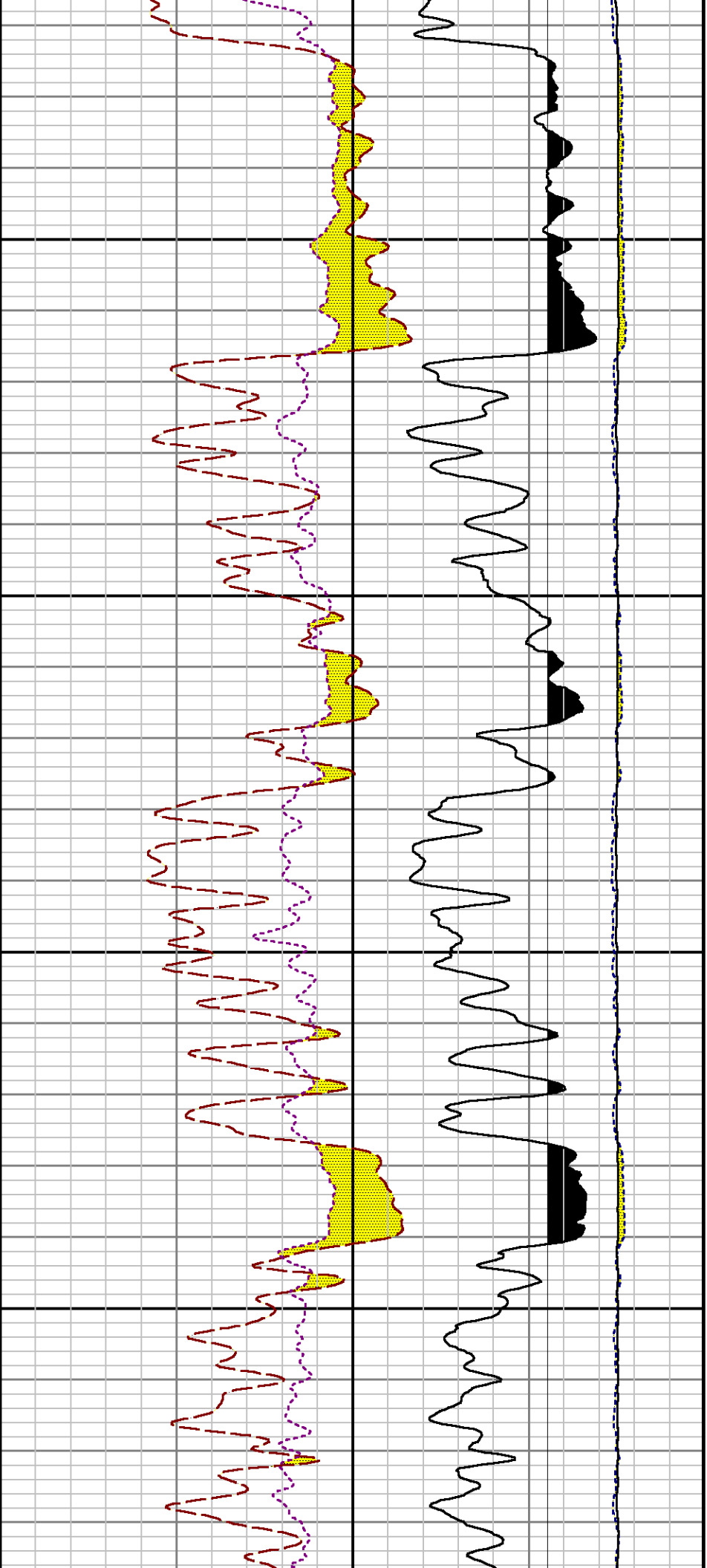


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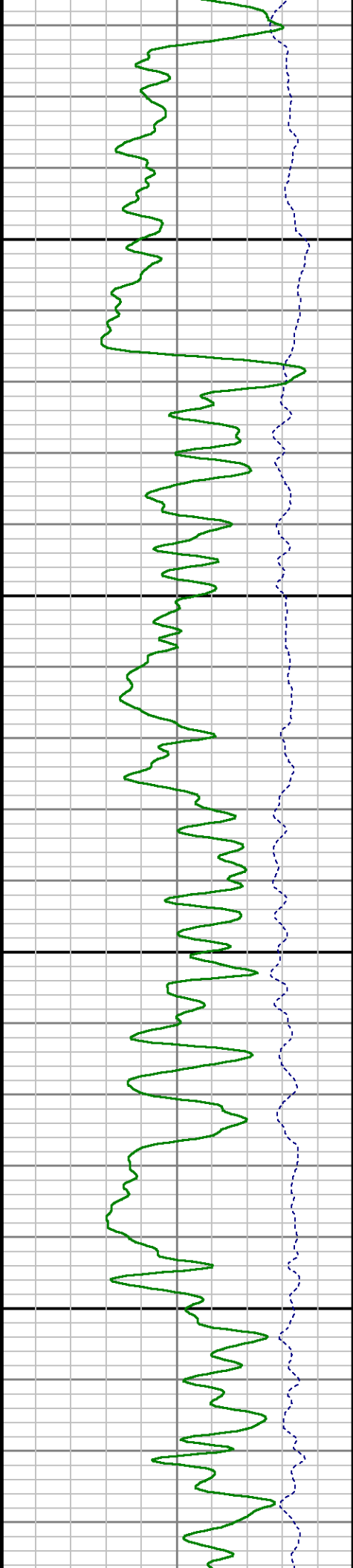
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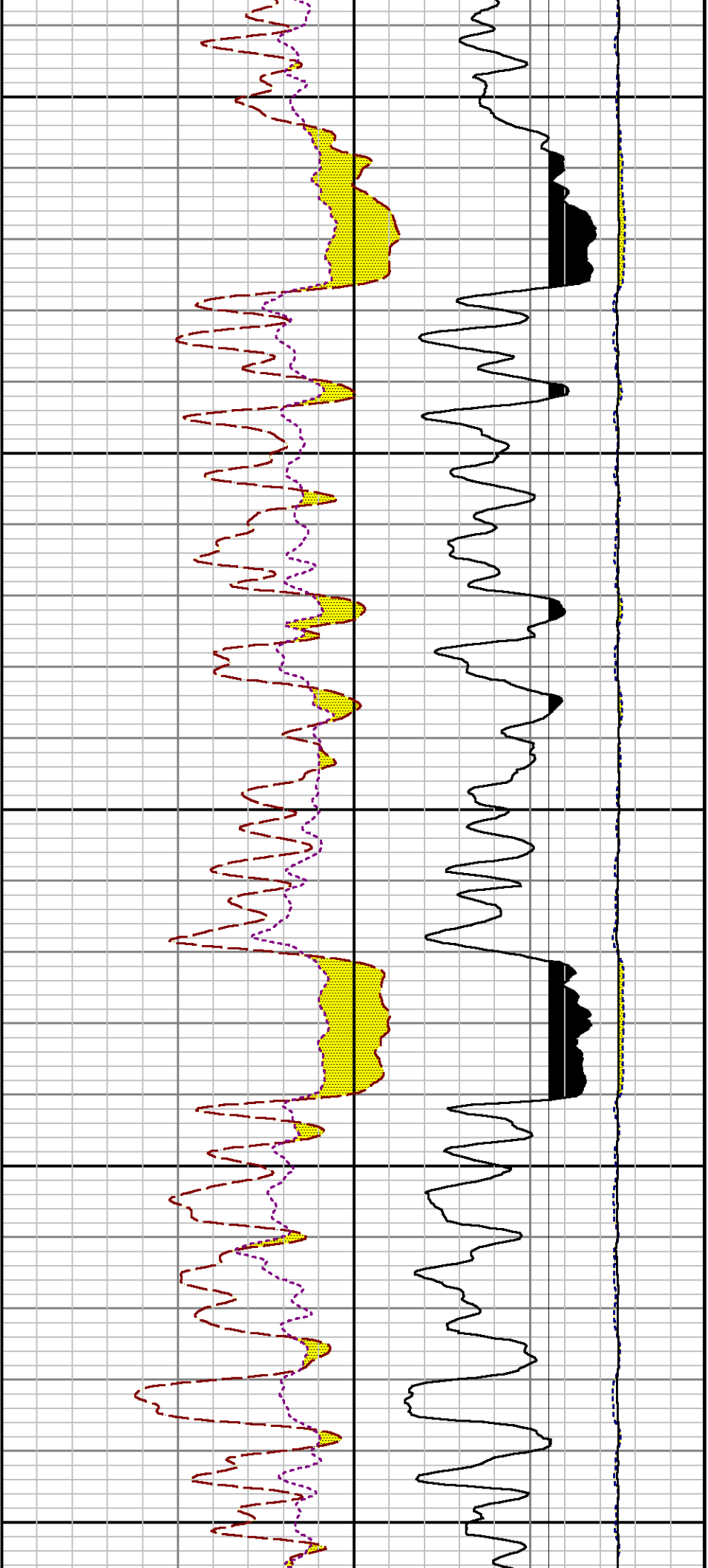




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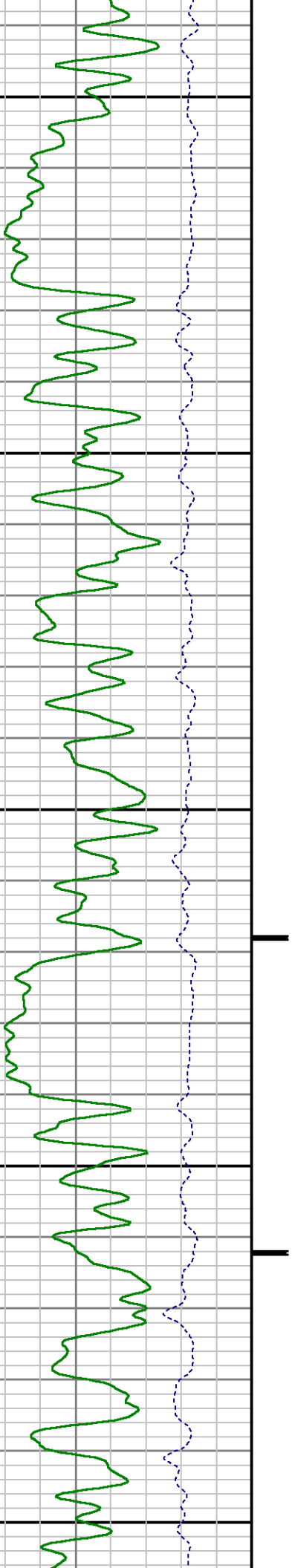
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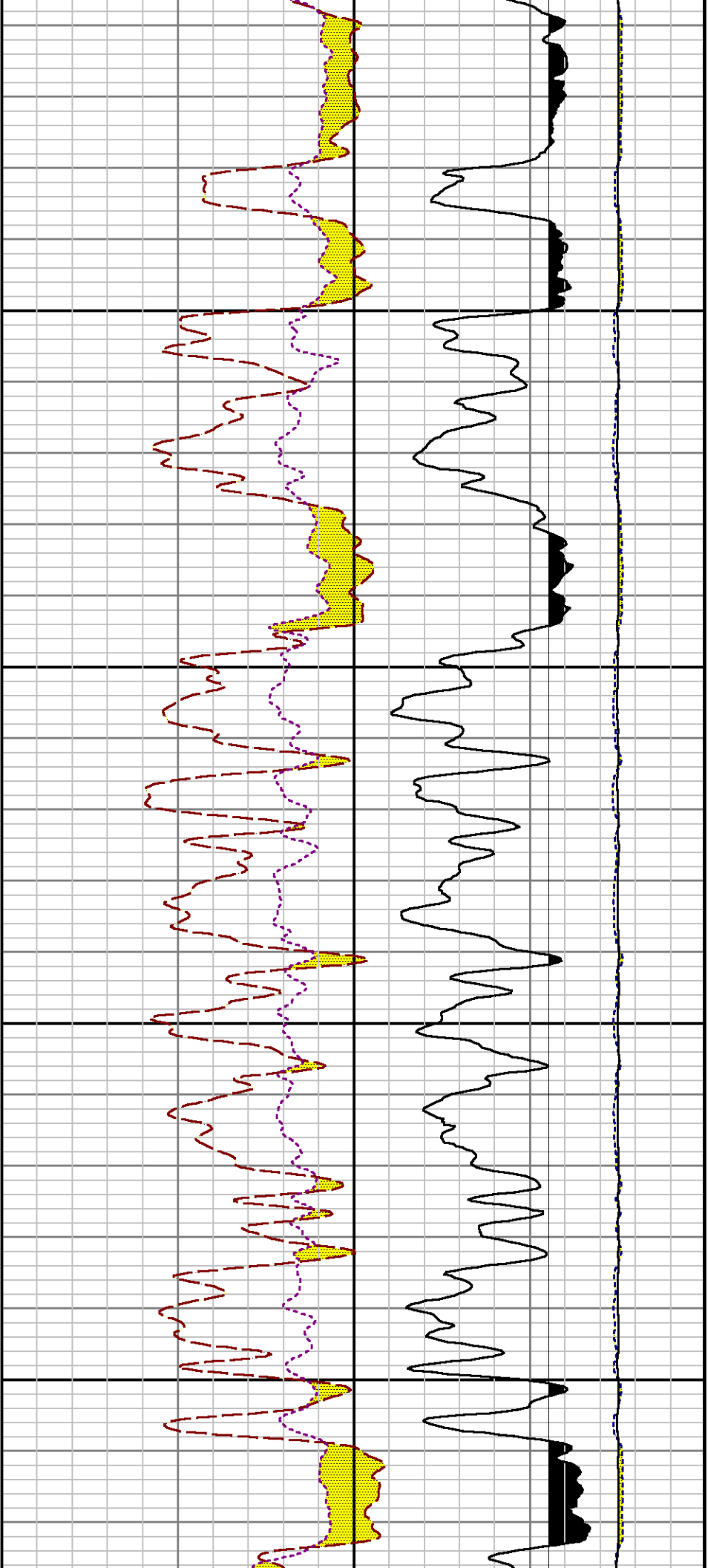




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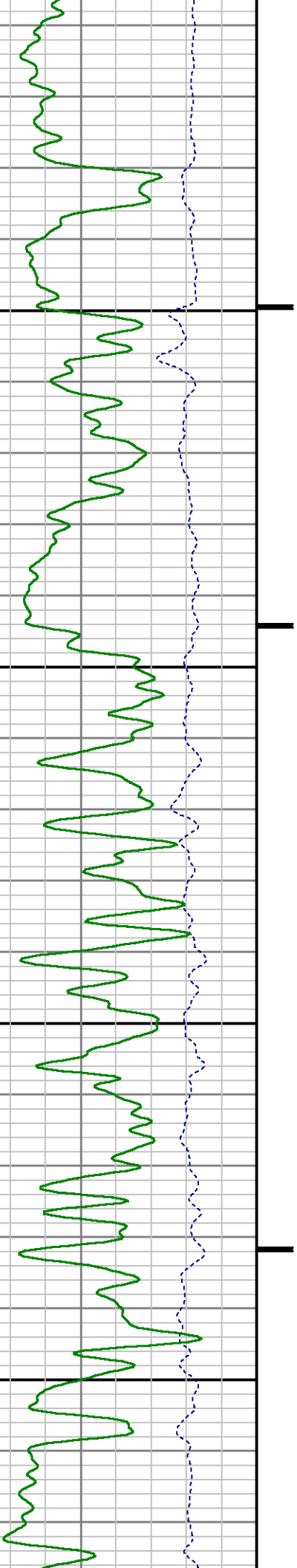
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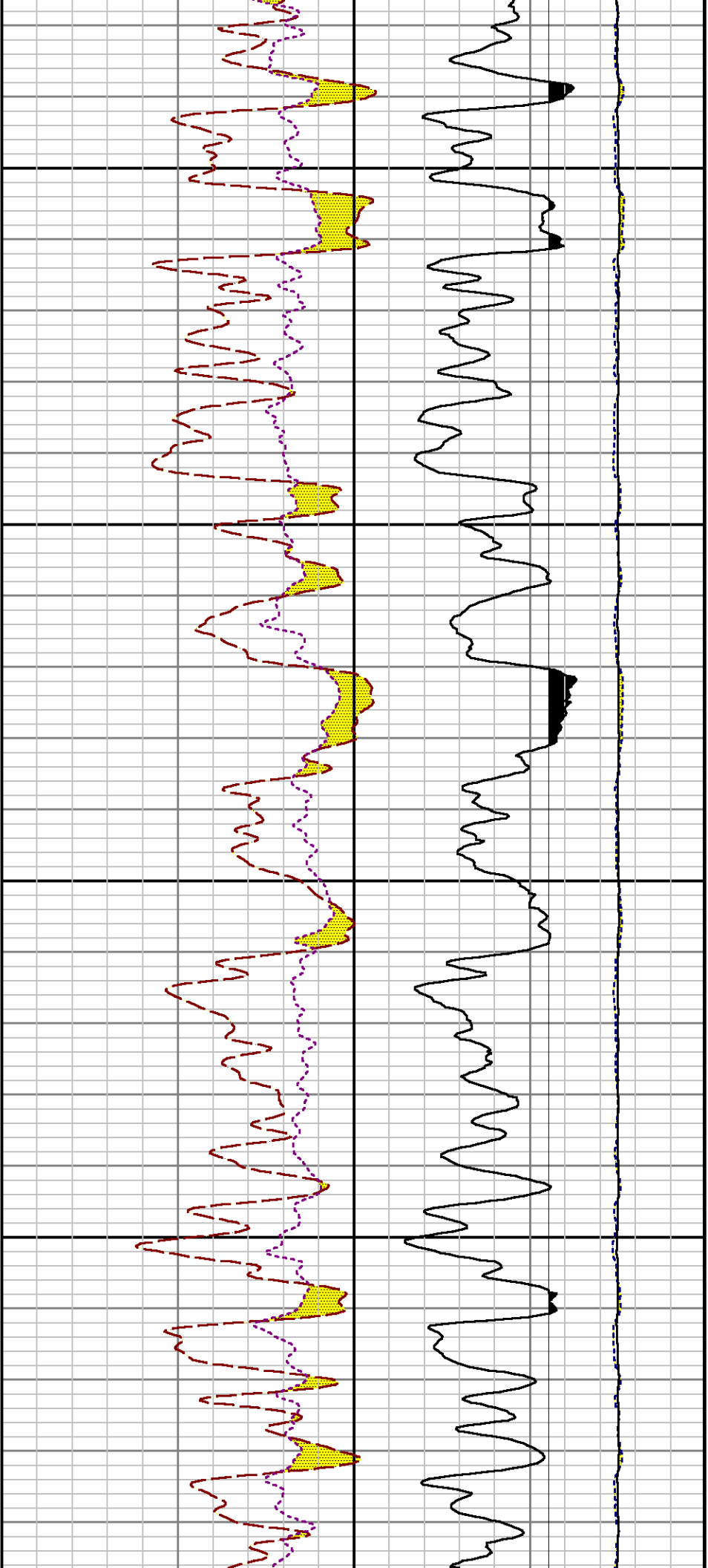




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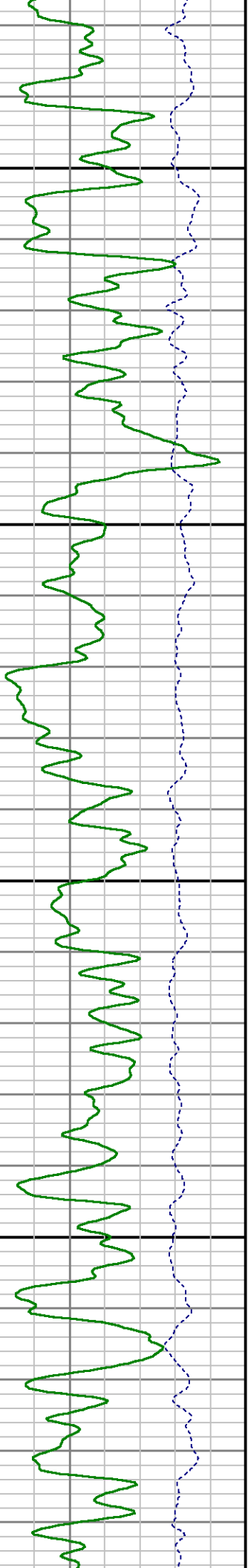
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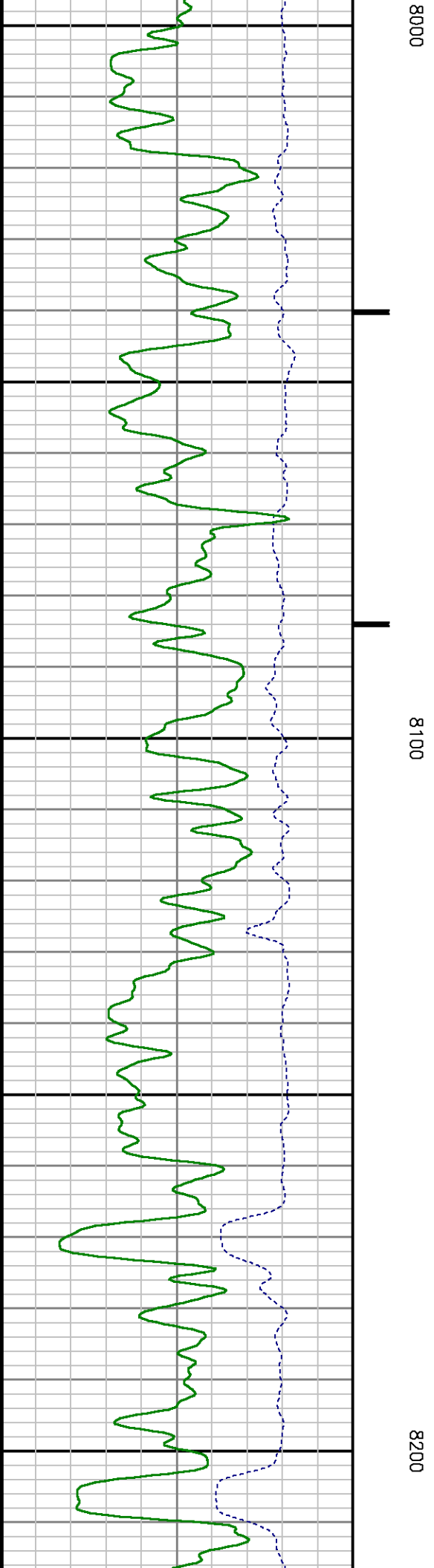
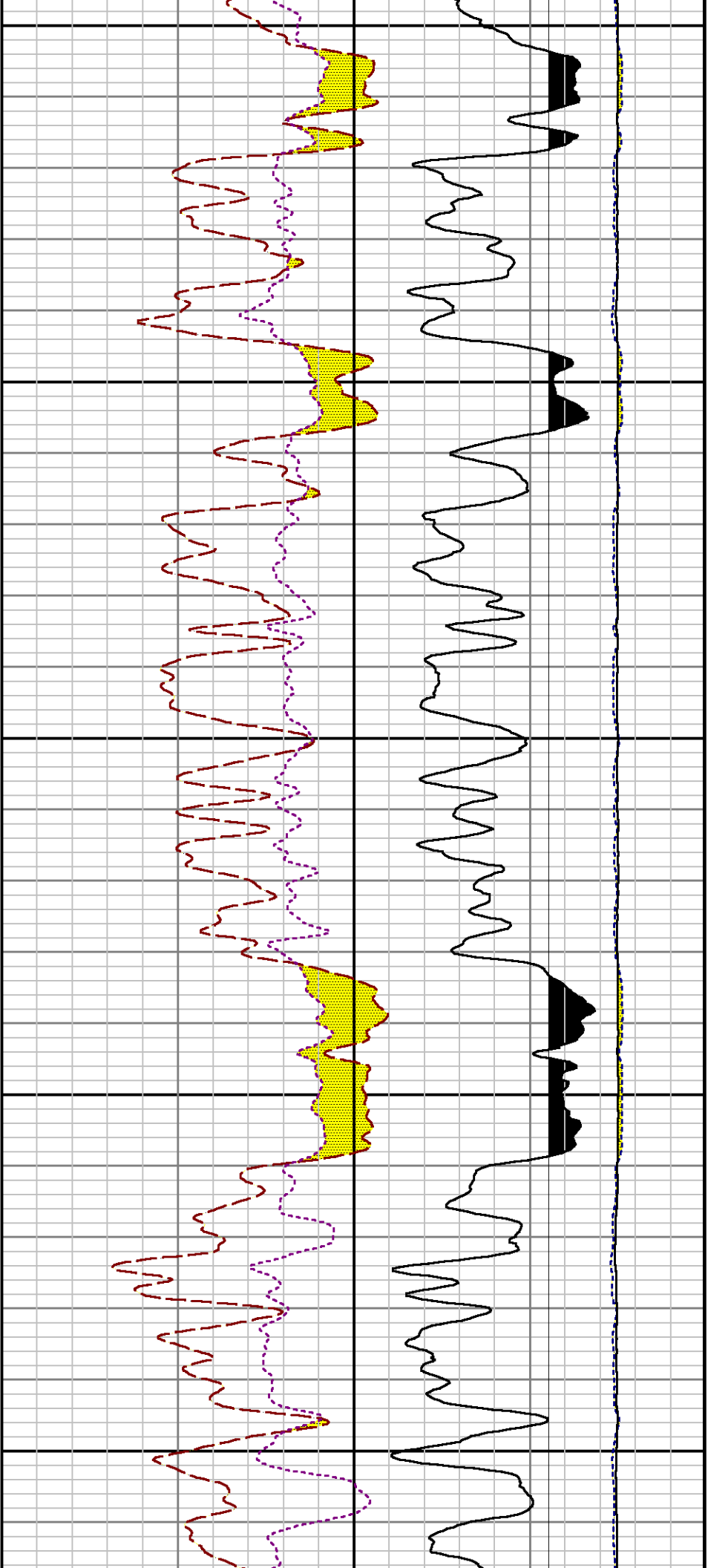


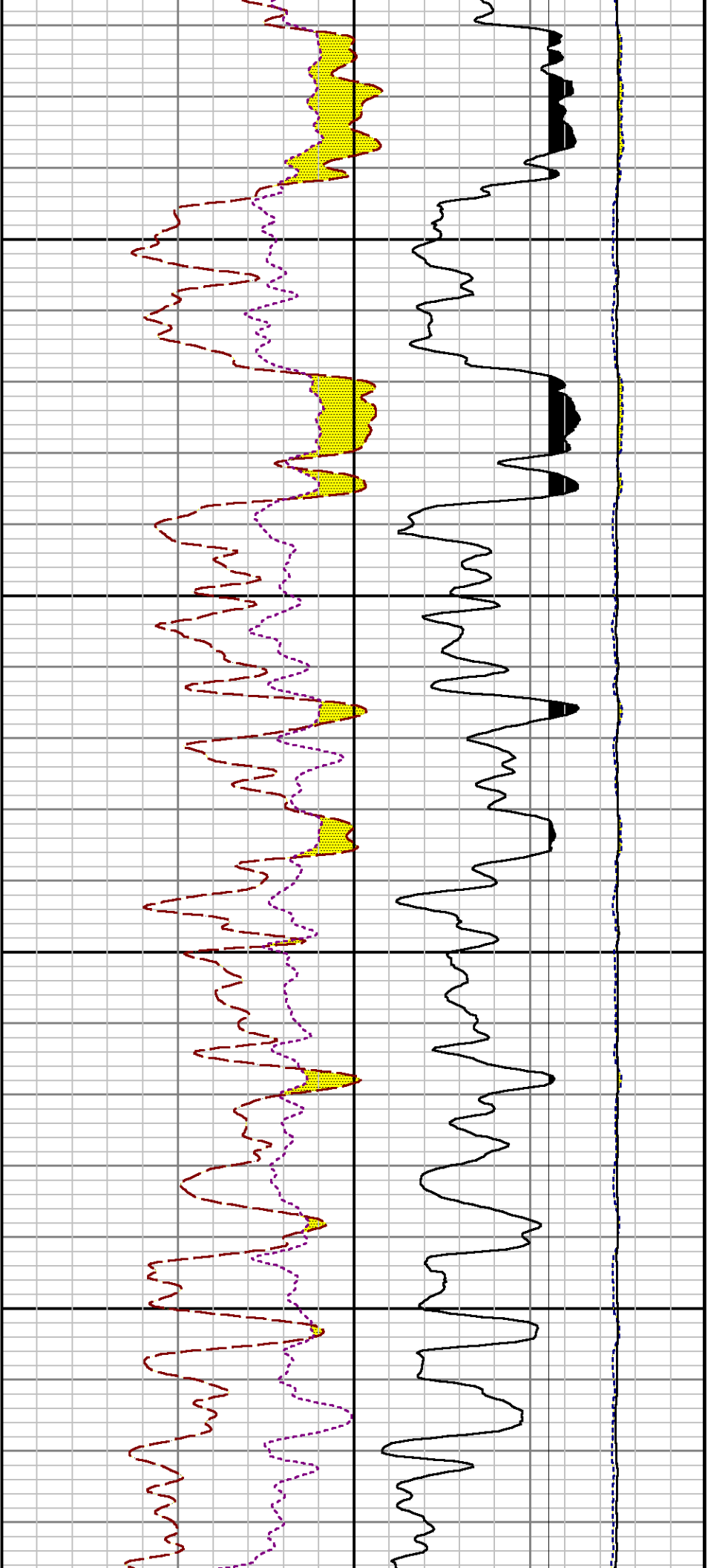


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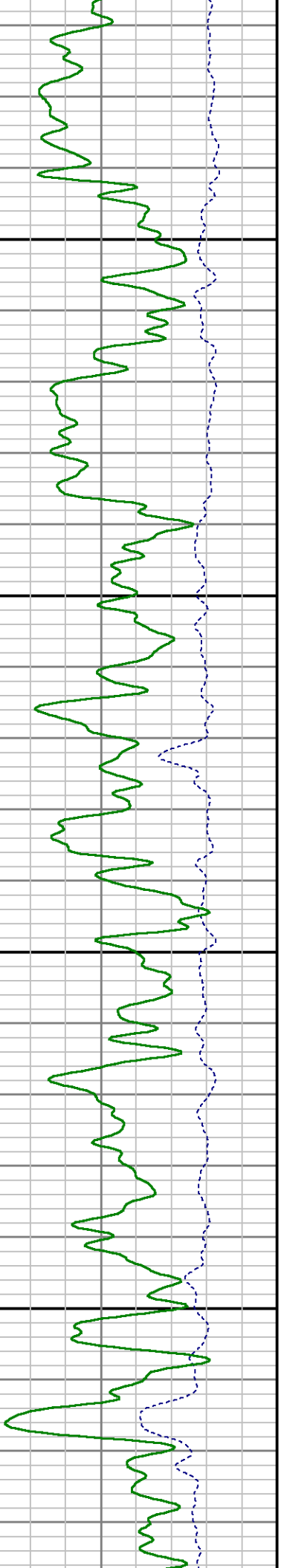


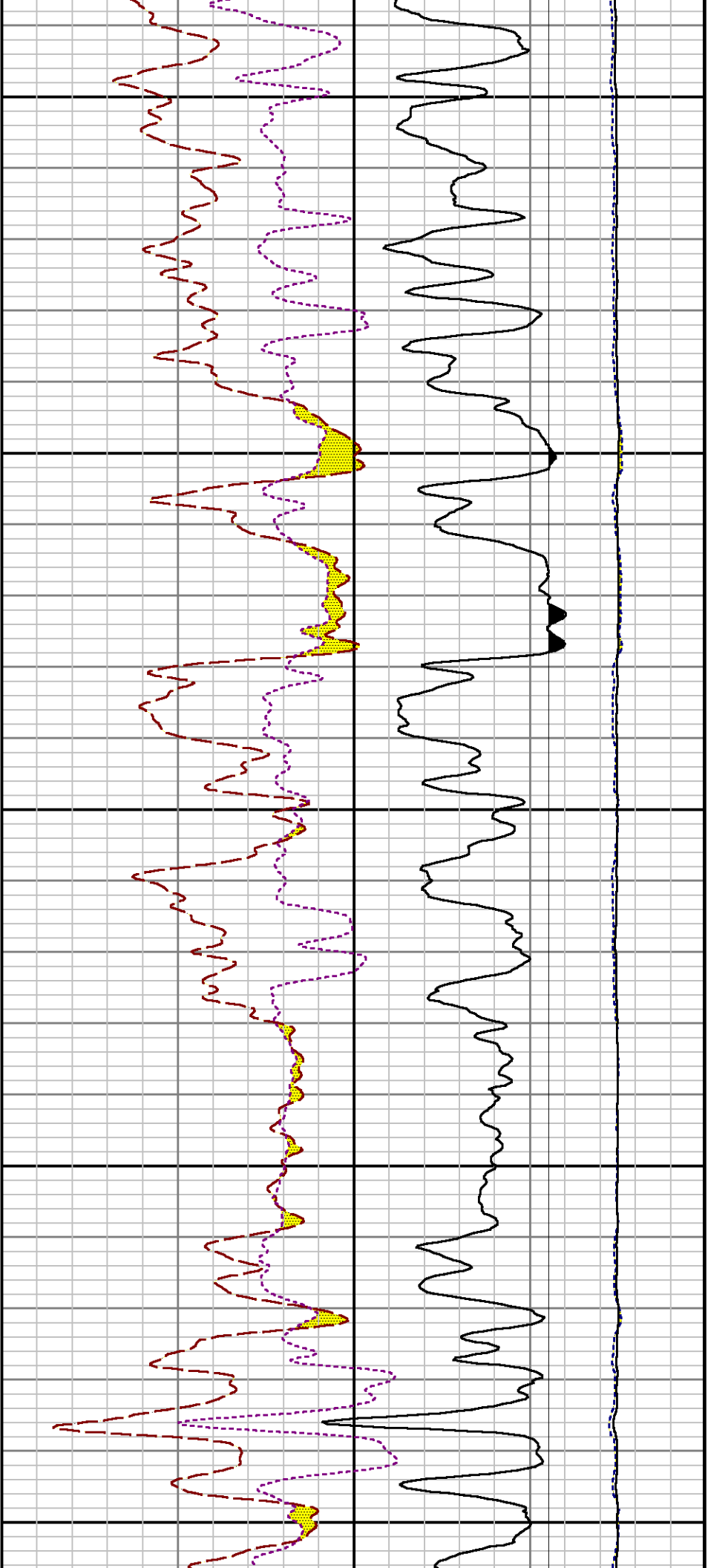




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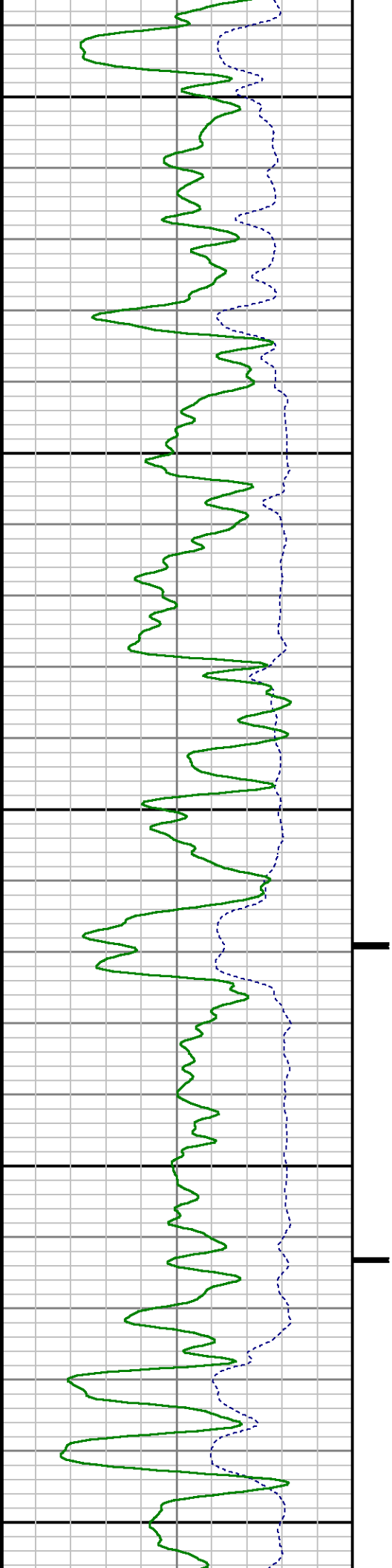
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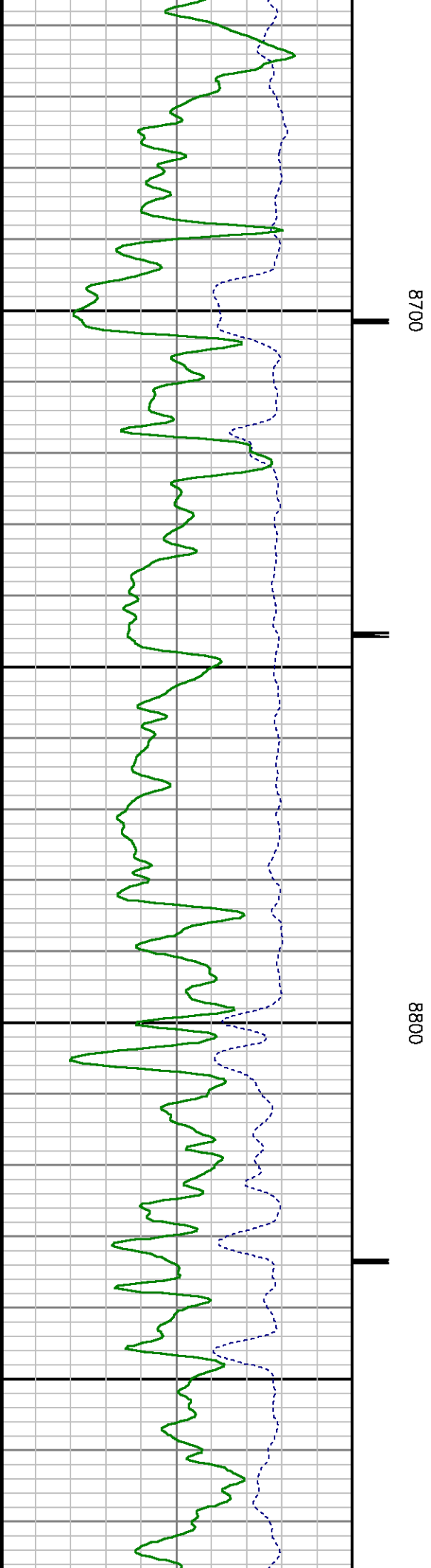
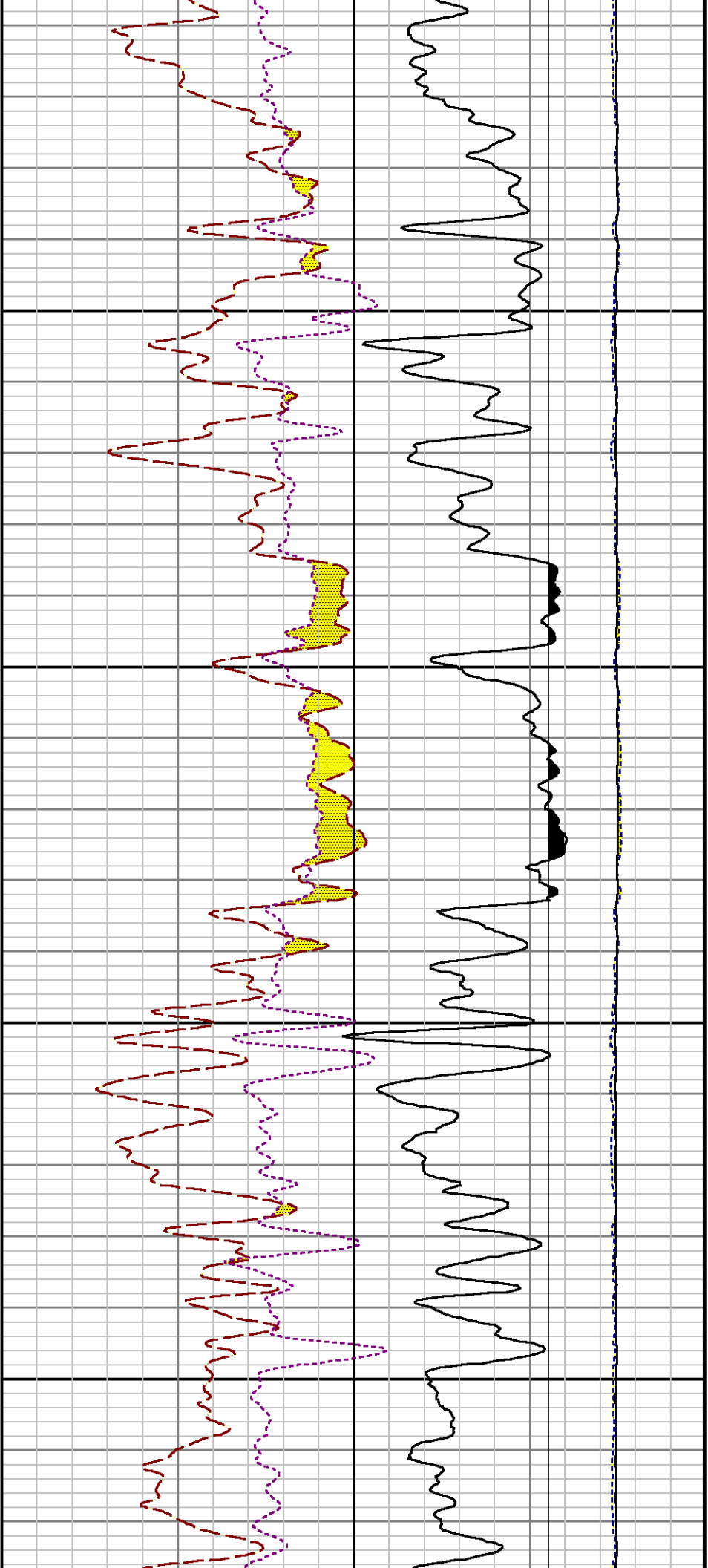


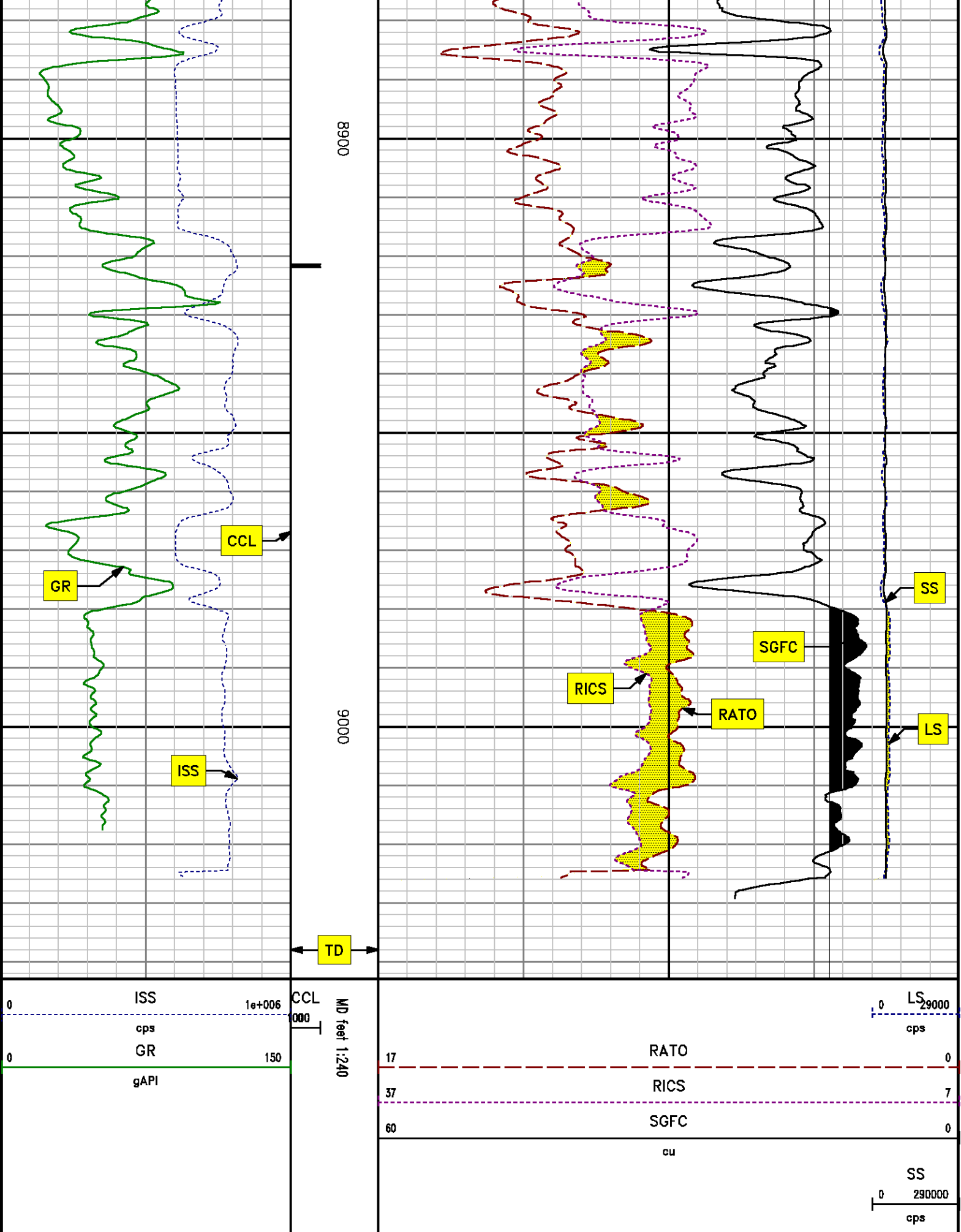


8500

8600







REPEAT SECTION

PNC 3-D MODE

SPL PROCESSING

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
PNC Porosity	Borehole	Cased		8206.790	8540.075
PNC Porosity	Borehole Size	8.750	inch	8206.790	8540.075
PNC Porosity	Casing Size	4.500	inch	8206.790	8540.075
PNC Porosity	Gas Filled	Non Gas Filled		8206.790	8540.075
PNC Porosity	Matrix	Sandstone		8206.790	8540.075
TPS Pressure	Temperature Corr. Source	Fixed (72.00)	degF	8206.790	8540.075

DEPTH OFFSETS

(for Acquired Curves)

SERIES	DEPTH OFFSET	ACQUIRED CURVES					
8248ED	-14.478	FLTM					
8248ED	-12.478	CCL CHV					
2812LA	-9.928	GR					
8281XA	-0.662	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	RAT023
		RICXC	RIN13C	RIN23	RIN23C	SD3D	SG3D
		SGB3	SGF3	WDTH3	CXSR	IXSR	XSR
		RICXR					
		HVC2Q0	SEQ2	AMA2	AMB2	AMF2	AML2
		BKL	CHF2	CLS	CPT2Q0	CPT2Q2	CPT2Q3
8281XA	-0.250	CPT2Q4	ET2	ILS	LS	MCS2	MCS2Q0
		QCAL2	RGN2	RICL	RONE23	RTW023	SDA2
		SDL2	SGA2	SGB2	SGF2	SGK2	SGL2
		STA2	ASPEC2	ILSC	ILSN	WDTH2	RICLC
		CLSR	ILSR	LSR	RICLR		
		SPF1	SPFQ	TSCP	TSDP		
		PTFS	PTMS				
		DTEM	TEMP	TNF			
		CPRS	HVC1Q0	MV	SEQ	SEQ1	AMA1
		AMB1	AMF1	AME1	AMI 1	BKS	CHF1

CSS	CORB	CORF	CPT1Q0	CPT1Q2	CPT1Q2A
CPT1Q2B	CPT1Q2C	CPT1Q3	CPT1Q4	CPT1Q5	ET1
G1	G2	GE1S	GE2S	ISS	MCS1
MCS1Q0	QA1	QCAL1	QM1	RAT0	RAT013
RBOR	RGN1	RICS	RIN	RONE	RPOR
RTW0	RIN13	RONE13	RTW013	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	HOC	FE2XC	ISSC	RINC
ISSN	RDEN	WDTH1	RICSC	CSSR	G1R
G2R	ISSR	SSR	SS2R	RAT0R	RAT013R
RBORR	RICSR	RINR	RIN13R	RONER	RPORR
RTWOR					
SYSTEM	0.000	TEN	TTEN		

Created by : RPM9, v5.3.1.0

Plotted by : PlotMgr, v5.4.504

Company : WPX ENERGY

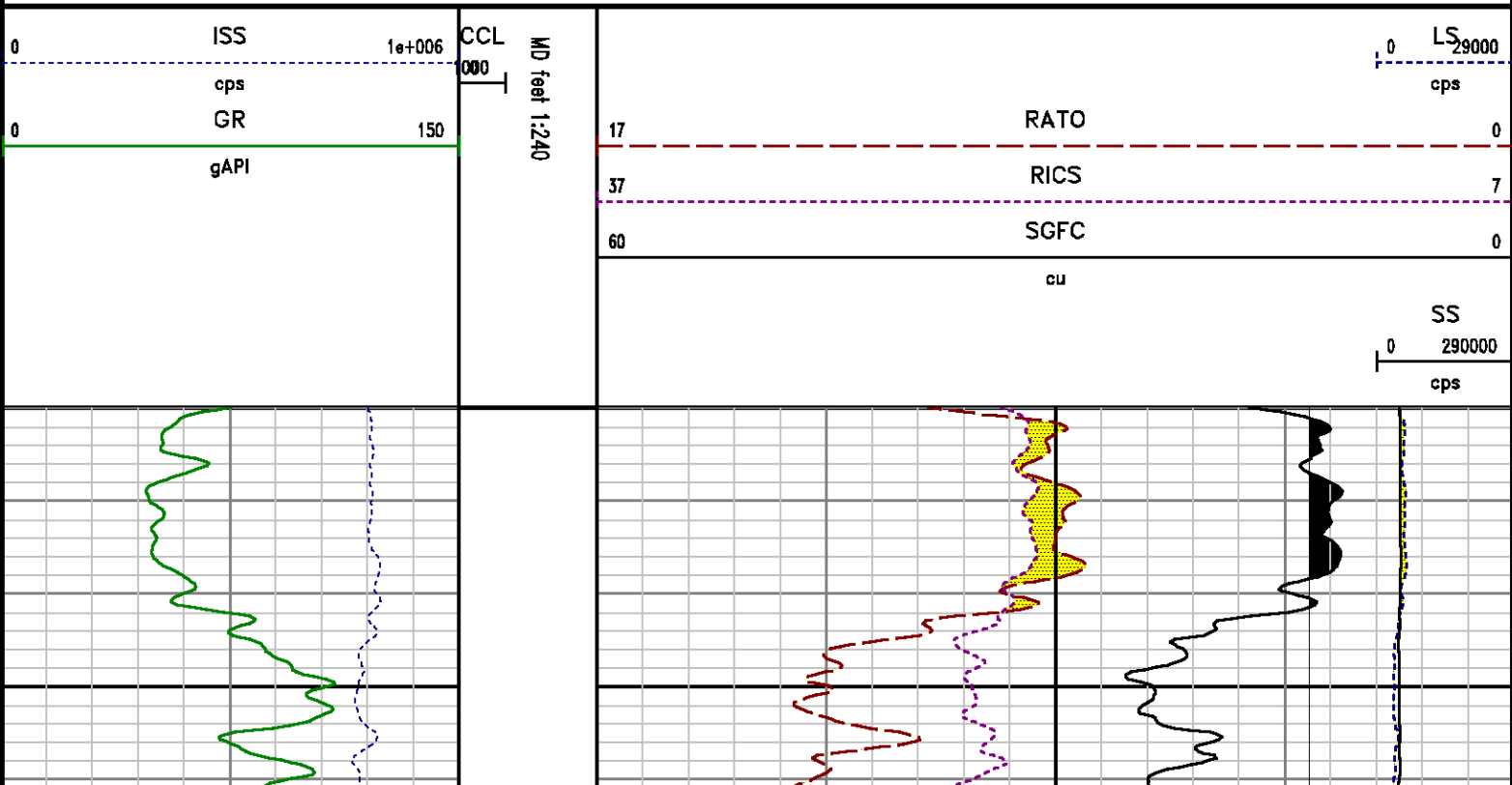
Well : SAVAGE RWF 511-25

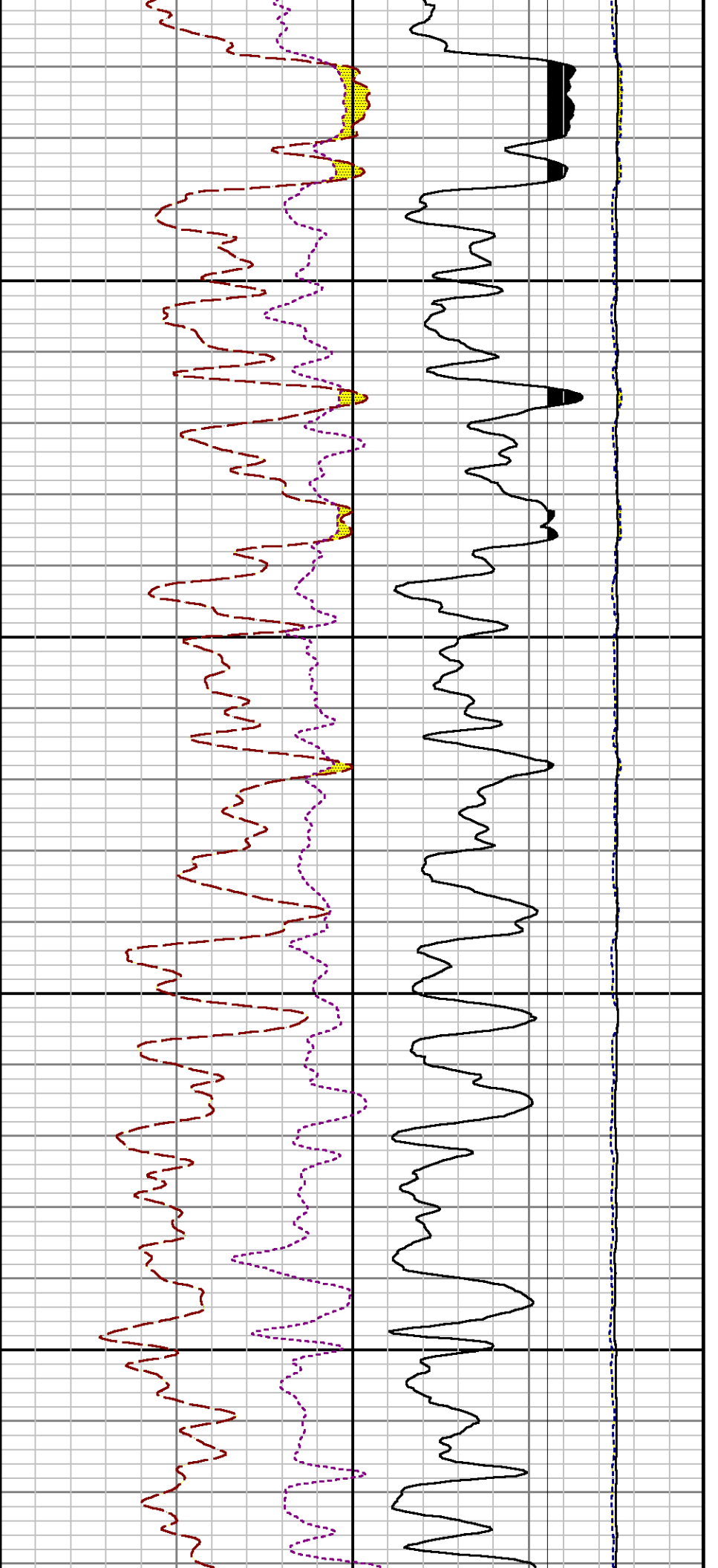
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Mode : PlotMgr 5.4.504

Interval : 8220.00 - 8520.00 feet UP

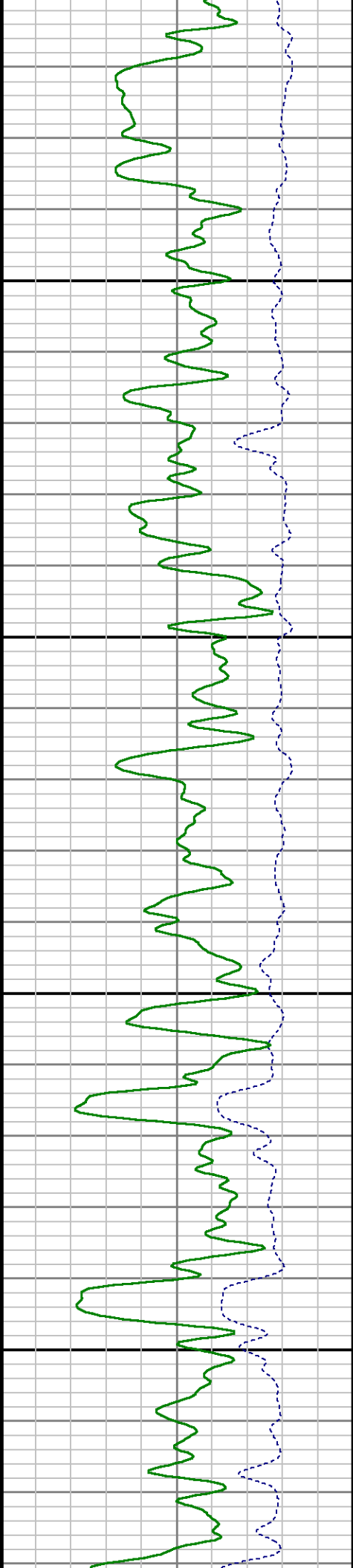
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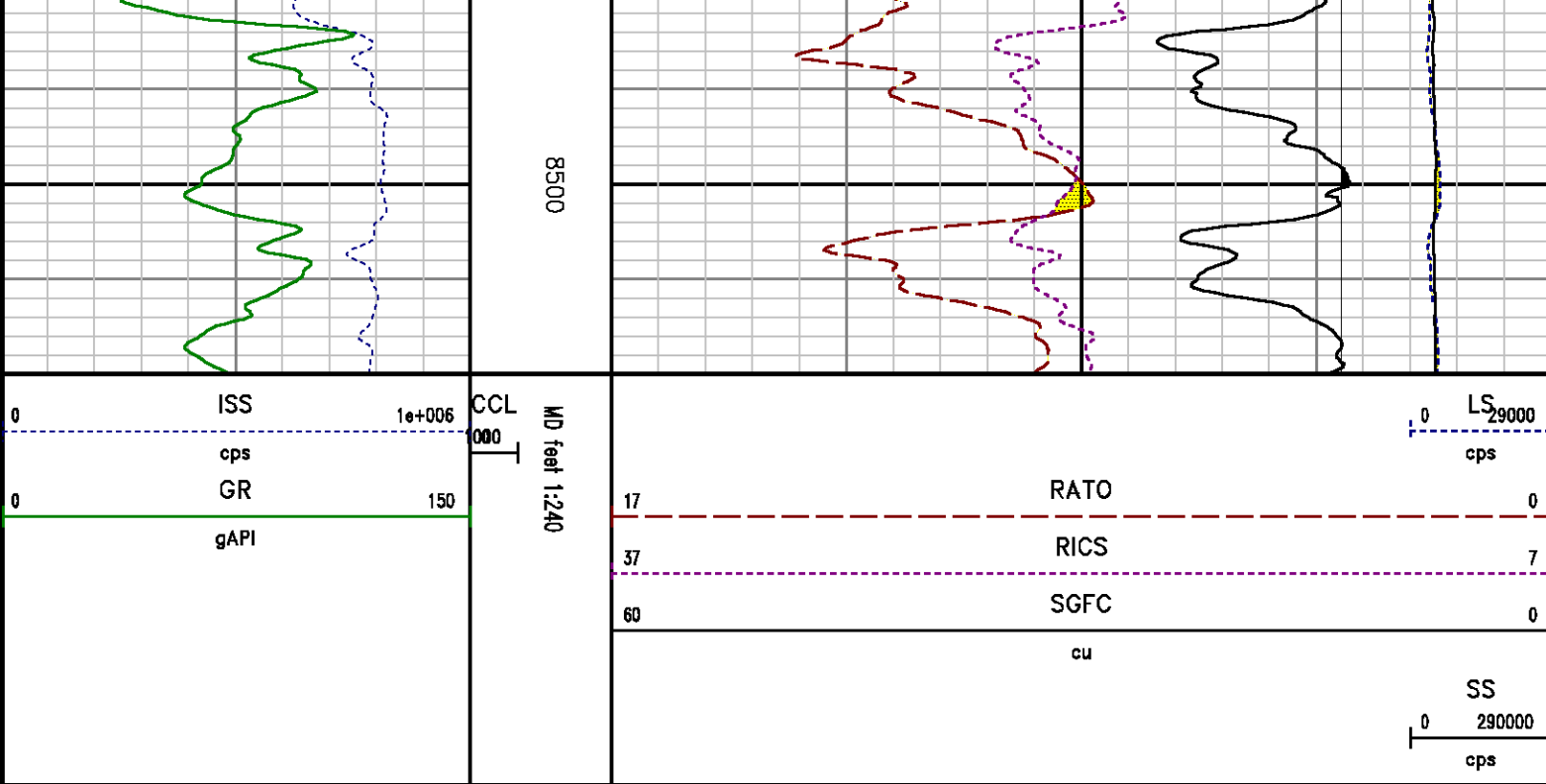




8300

8400





CALIBRATION SUMMARY

GAMMA RAY

Calibration File: C:\case\calver\GR\385TN.cal

CALIBRATION SUMMARY

DATE/TIME PERFORMED: Wed Feb 12 17:24:19 2014

TOOL SERIES: 2812LA ASSET: 385 SEQ: TN

Calibrator #	Background [cps]	Calibrator On [cps]
S2K WA-612	27.64	256.80

Multiplicative	Background [api]	Calibrator On [api]	Differential [api]
0.916	25.33	235.33	210.00

Verification File: C:\case\calver\GR\385TN.VP

PRIMARY VERIFICATION

DATE/TIME PERFORMED: Wed Feb 12 17:29:20 2014

TOOL SERIES: 2812LA ASSET: 385 SEQ: TN

Calibrator #	Background [cps]	Calibrator On [cps]
S2K WA-612	28.29	252.82

Multiplicative	Background [api]	Calibrator On [api]	Differential [api]
0.916	25.92	231.69	205.76

Calibration File: C:\case\calver\PNC\55501.cal

PNC 3D CALIBRATION SUMMARY

DATE/TIME PERFORMED: Fri Feb 14 10:06:45 2014 TOOL SERIES: 8281XA ASSET: 555 SEQ: 01

Calibrator #

GJSHOP GJSHOP

Source #

8281AA 11765054

	ISS	Mtr Vlt (V)	SS Gain	LS Gain	XLS Gain	EA Temp (degF)	Sync Delay (usec)	RCAL
Raw Data	829720	122.00	2327.00	2273.00	2234.00	128.01	7.00	0.9689
Interpolated	1300000	142.76	2304.01	2271.75	2233.84			

	ISS	BKS	BKL	BKX	SGA1	SDA1	SGA2	SDA2
Raw Data	829720	8254.34	1264.54	181.94	25.76	0.14	24.38	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	829720	176096.14	27490.53	92898.02	33075.26	8527.33	56237.73	13651.16
Fit Quality %		0.89	0.87	0.81	0.82	0.79	0.73	0.84

	ISS	RBOR	RIN ISS/ILS	RIN13 ISS/IXS	RICS ISS/CSS	RATO SS/LS	RTWO SS2/LS	RONE CSS/CLS
Raw Data	829720	1.43	4.71	30.18	14.75	10.90	3.88	4.12
		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 %		0.09	0.22	0.26	0.22	0.03	0.06	0.03
Reduced	1412637	1.43	4.75	30.38	14.89	10.89	3.88	4.12
		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\TFMP\7745684.cal

CALIBRATION SUMMARY

DATE/TIME PERFORMED: FEB 03 2014 TOOL SERIES: 8255XA ASSET: 774568 SEQ: 4

	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
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

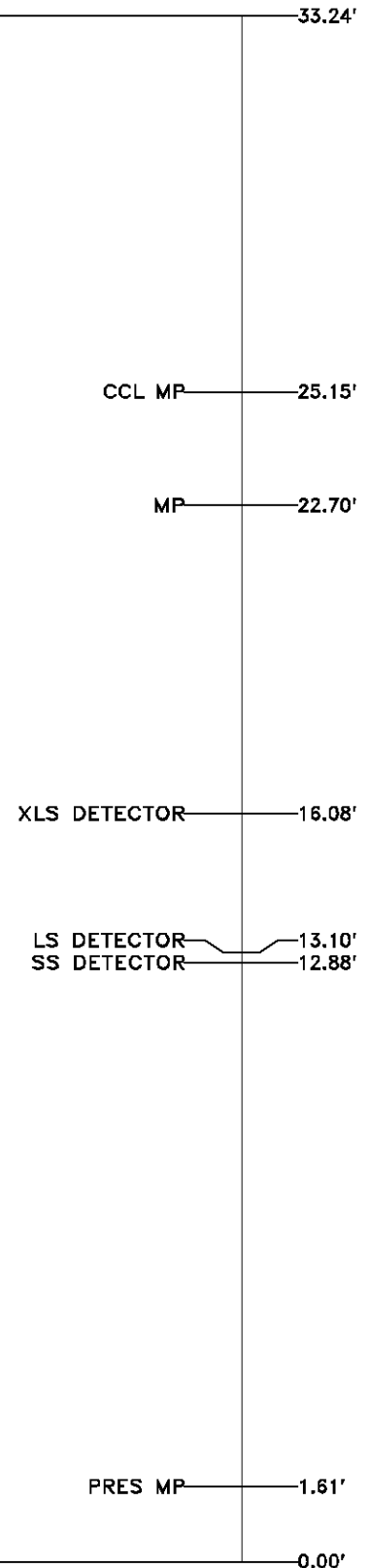
Series 2812LA
Mnemonic SNDX
Diameter 1.69"

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

TEMPERATURE / PRESSURE

Series 8255XA
Mnemonic SRPL
Diameter 1.70"
Weight 13.00 lb
Length 3.30'



Total Length: 33.24'
Total Weight: Not Available

Total Weight: Not Available
Max Diameter: 0' 1.70"



Company

WPX ENERGY

Well

SAVAGE RWF 511-25

Field

RULISON

County

GARFIELD

State

CO

File No:

CH083305

API No:

05045219690000

Location

SHL: 2454' FNL & 1422' FWL

BHL: 237' FNL & 941' FWL

Elevations

KB 6058 ft

DF

GL 6037 ft

25 6S 94W

RWF 22-25 PAD

CYCLONE 17

SEC 25 TWP 6S RGE 94W