



Baker Atlas

RESERVOIR PERFORMANCE MONITOR

File No: CH79532	Company Well	WPX ENERGY FEDERAL PA 513-12
API No: 0504520630000	Field County	PARACHUTE GARFIELD State CO
12 7S 9SW PA 23-12 PAD MABORS 577	Location SHL: 2598' FSL & 1730' FWL BHL: 1495' FSL & 688' FWL SEC 12 TWP 7S RGE 9SW	Other Services BOND LOG
Permanent Datum Log Measured From Drill Measured From	GL KB KB Elevation 26 ft Above P. D.	Elevations KB 6533 ft DF GL 6507 ft

Date	23/NOV/13	
Run	ONE	
Service Order	US625055	
Depth Driller	B255 ft	
Depth Logger	B230 ft	
Bottom Logged Interval	B220 ft	
Top Logged Interval	4655 ft	
Time Started	12:30	
Time Finished	6:00	
Operator Rig Time	5.5 HOURS	
Type of Fluid in Hole	WATER	
Fluid Density	NA	
Salinity	NA	
Fluid Level	88 ft	
Logged Cement Top	NA	
Wellhead Pressure	0 psi	
Maximum Hole Deviation	NA	
Nominal Logging Speed	10 fpm	
Maximum Recorded Temperature	232 degF	
Reference Log	BAKER HUGHES BOND LOG	
Reference Log Date	23/NOV/13	
Equipment No.	4271	GRAND JCT.
Recorded By	TIM NEWELL	
Witnessed By	BILL CADY	

- 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	920 ft
7.875 In	920 ft	8320 ft

Casing Record				
Size	Weight	Grade	From	To
9.625 In			0 ft	920 ft
4.5 In	11.6 lbm/ft	1-80	0 ft	8320 ft

Remarks
All data on this log is shifted and depth matched using the Gamma Ray curve to the Baker Hughes bond log dated 11/23/2013 at the client's request.
The amount of linear shift is 1'.
Logged in PNC-3D mode.
BHT = 232 °F

Equipment Data					
Run	Trip	Tool	Series Number	Serial Number	Position
1	1	PCM	8250EA	10408796	FREE
1	1	TEL/CCL	8248ED	10590814	FREE
1	1	GR	2812LA	11701636	FREE
1	1	RPM	8281EA	10169250	FREE
1	1	RPM	8283PA	10203151	FREE
1	1	RPM	8281FA	10191667	FREE

MAIN SECTION
PNC 3-D MODE

SPL PROCESSING

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
PNC Porosity	Borehole	Cased		4634.750	8236.843
PNC Porosity	Borehole Size	8.750	inch	4634.750	8236.843
PNC Porosity	Casing Size	4.500	inch	4634.750	8236.843
PNC Porosity	Gas Filled	Non Gas Filled		4634.750	8236.843
PNC Porosity	Matrix	Sandstone		4634.750	8236.843

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
		DLOYO	DUN3Q	DUN03	DUN03Q	GR3D	SO3D

8281XA

-0.250

RTXC	RTN13C	RTN23	RTN23C	SD3D	SG3D
SGB3	SGF3	WDTH3	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	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	MM	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

SYSTEM

0.000

RTWOR	TEN	TTEN
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Created by : RPM9, v5.3.1.0

Plotted by : PlotMgr, v5.4.504

Company : WPX ENERGY

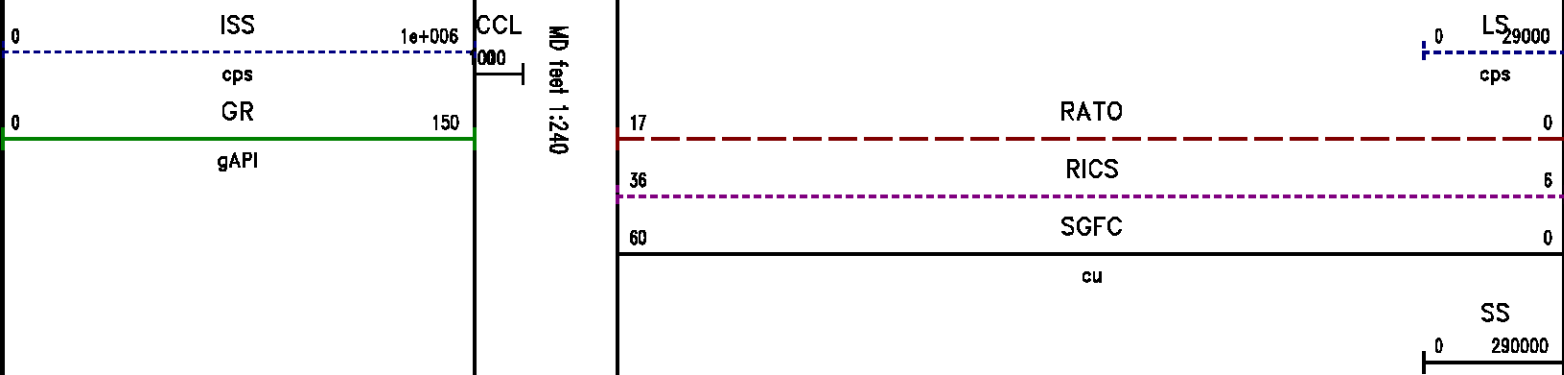
Well : FEDERAL PA 513-12

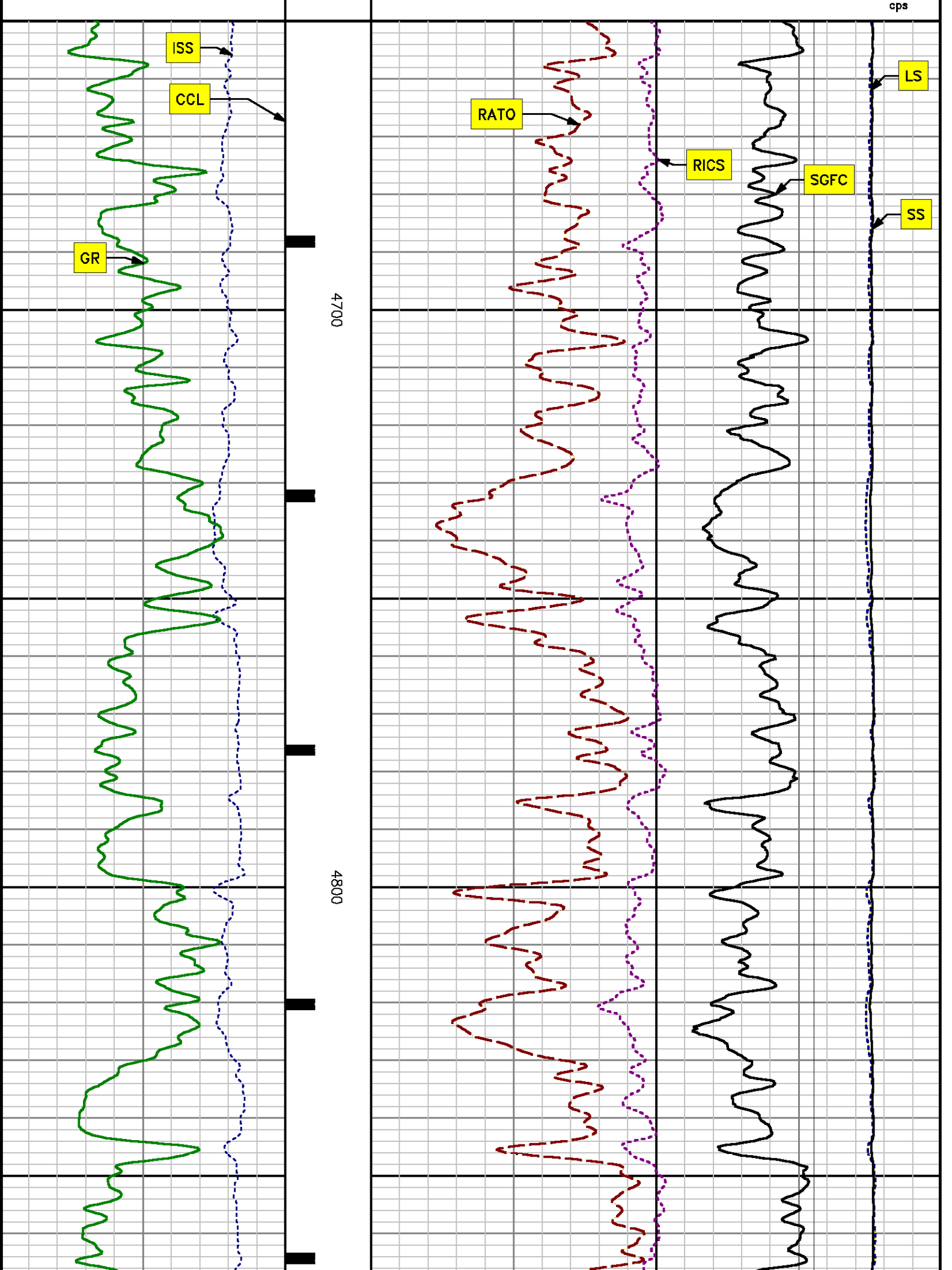
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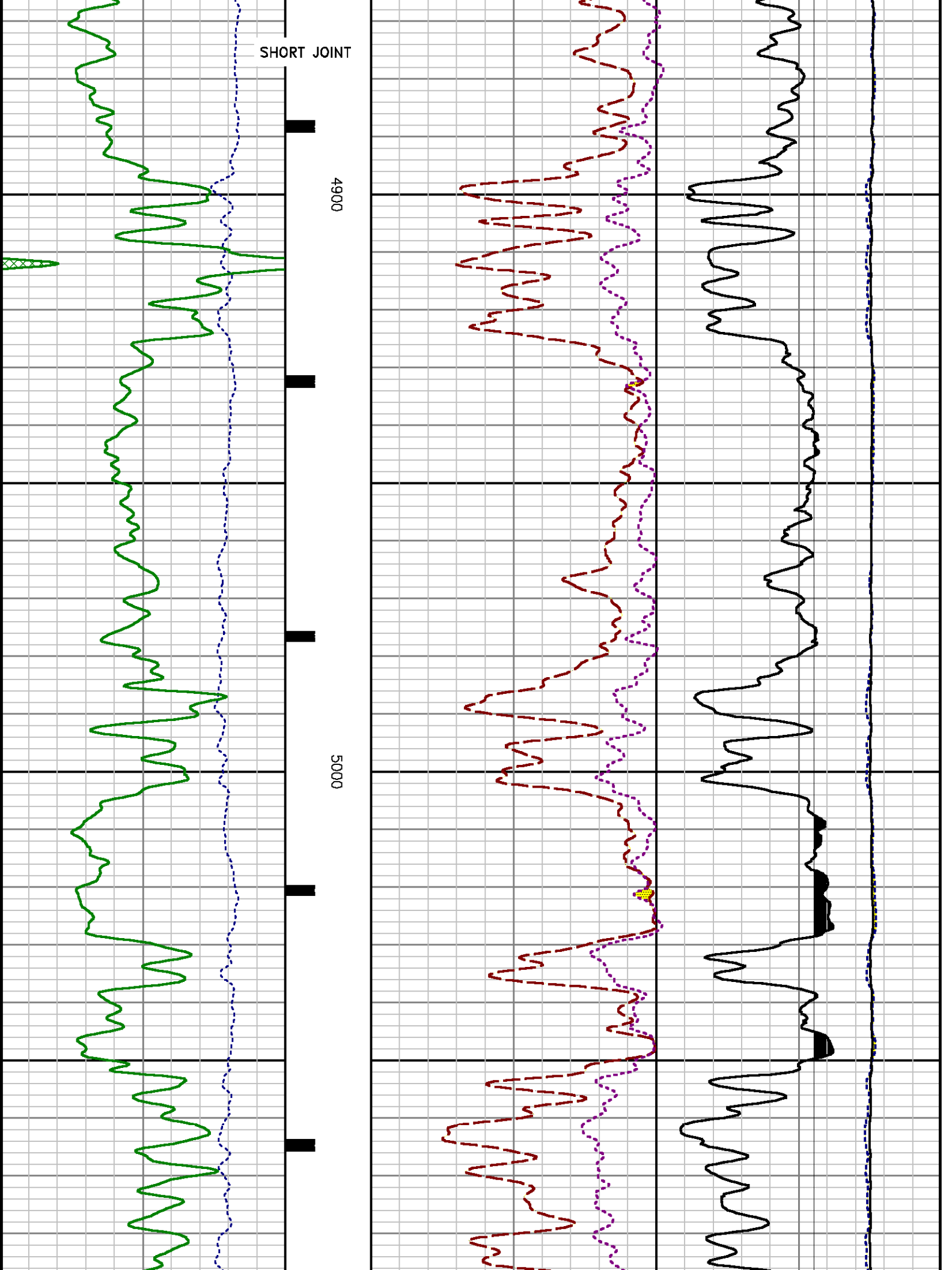
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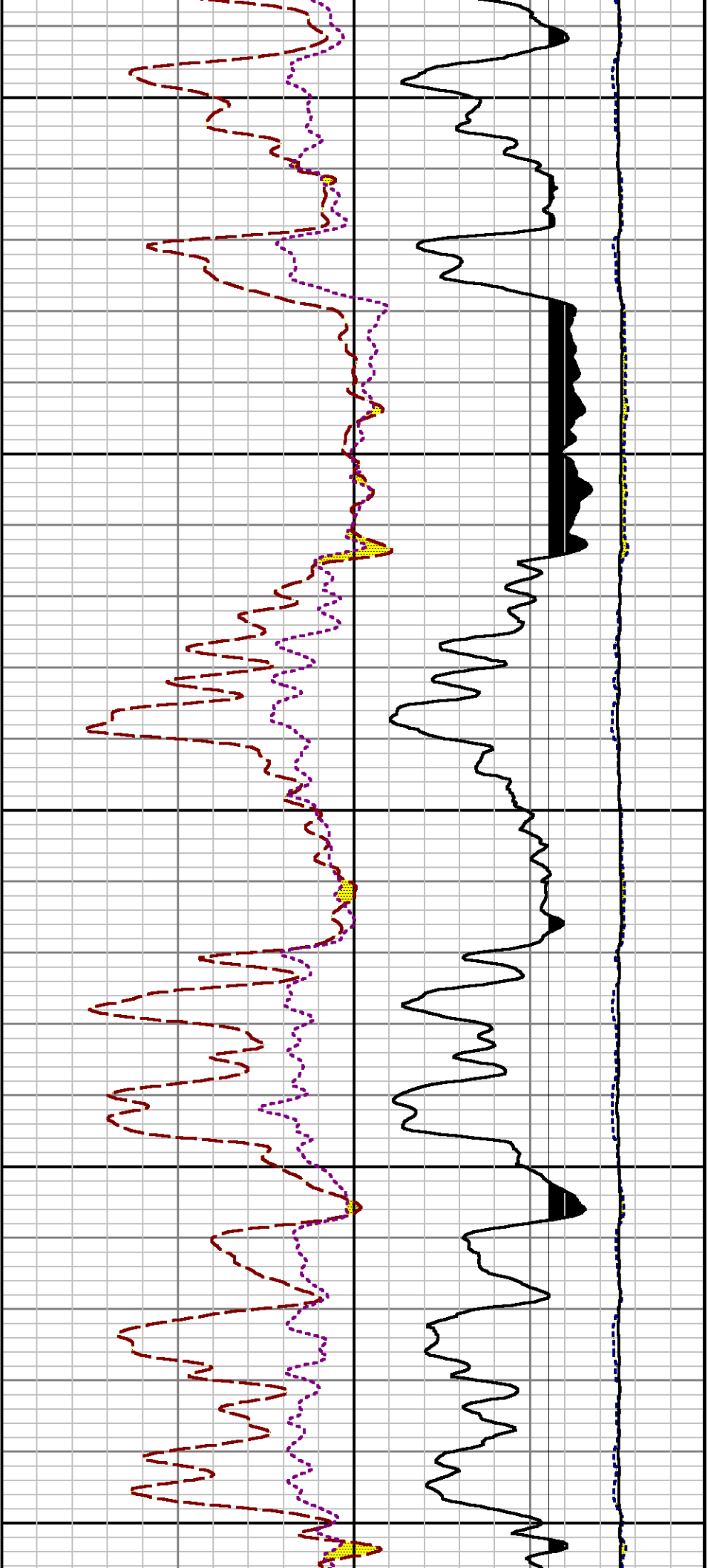
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Created : 11/23/2013 1:32:56 PM





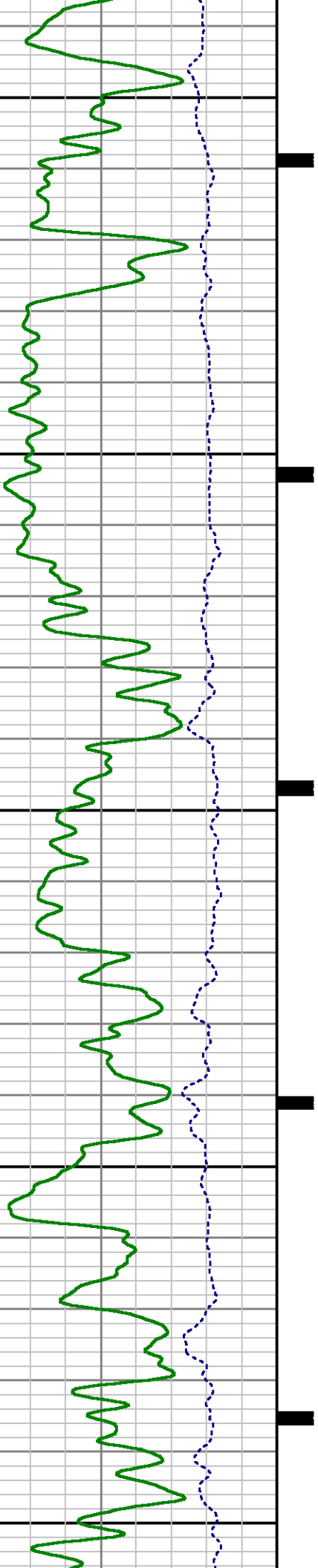


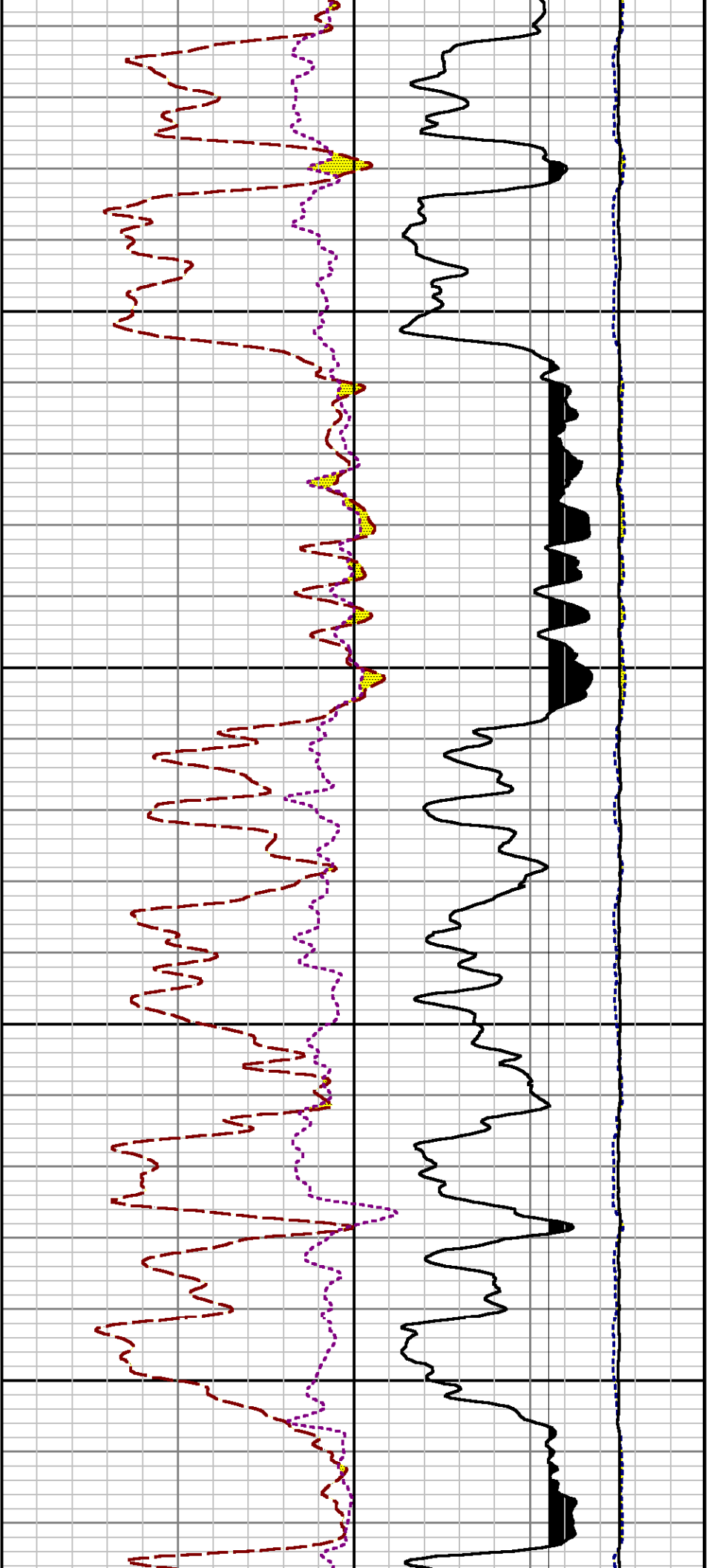


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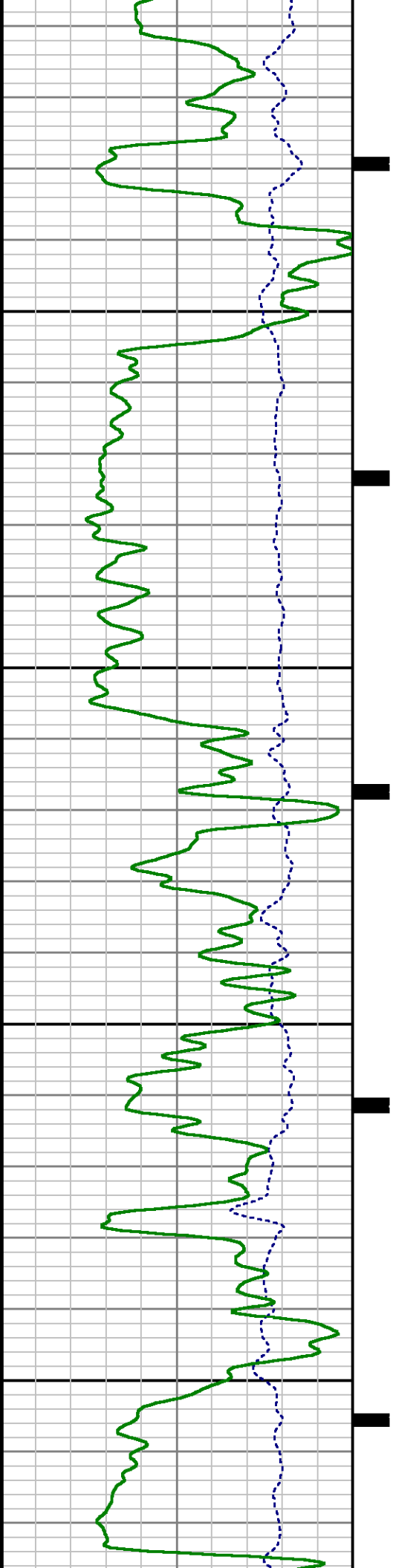
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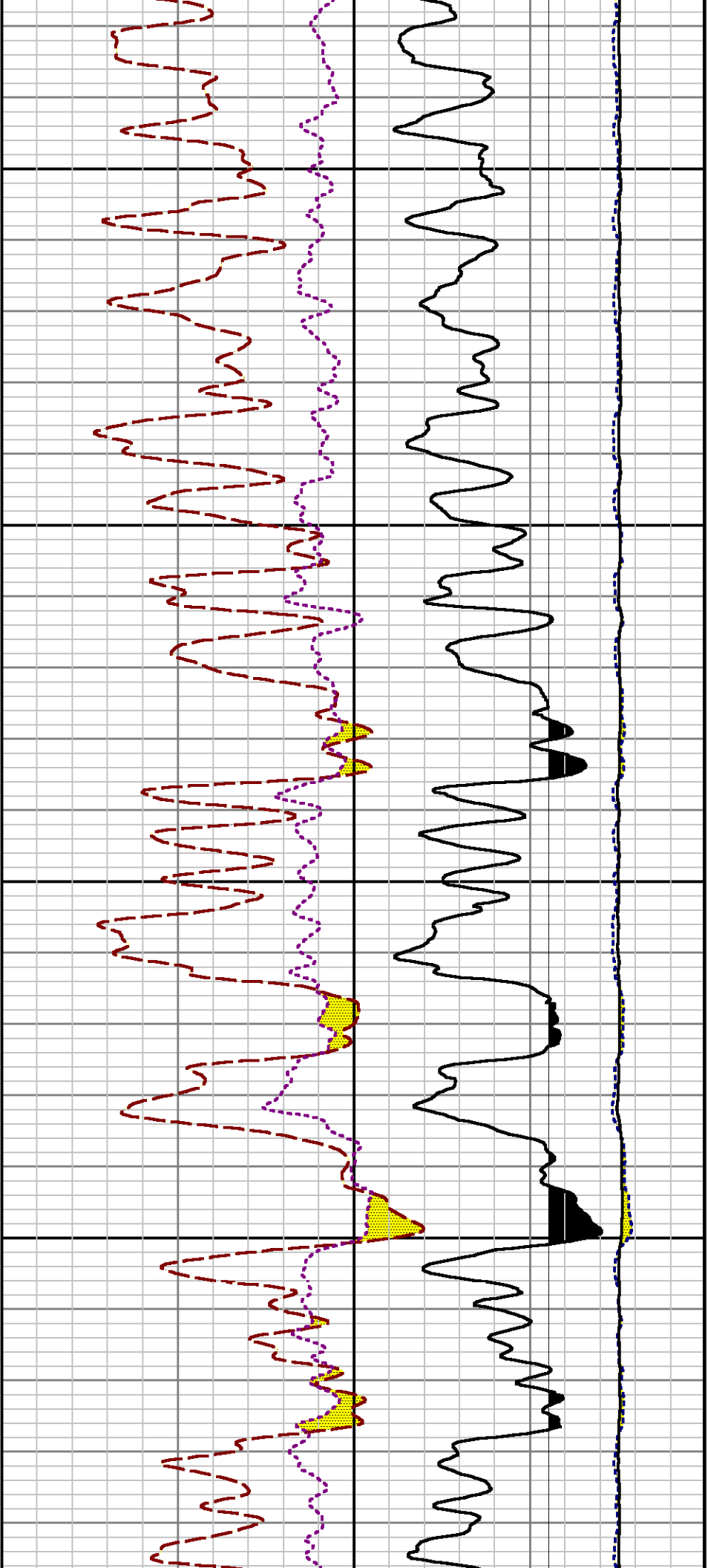




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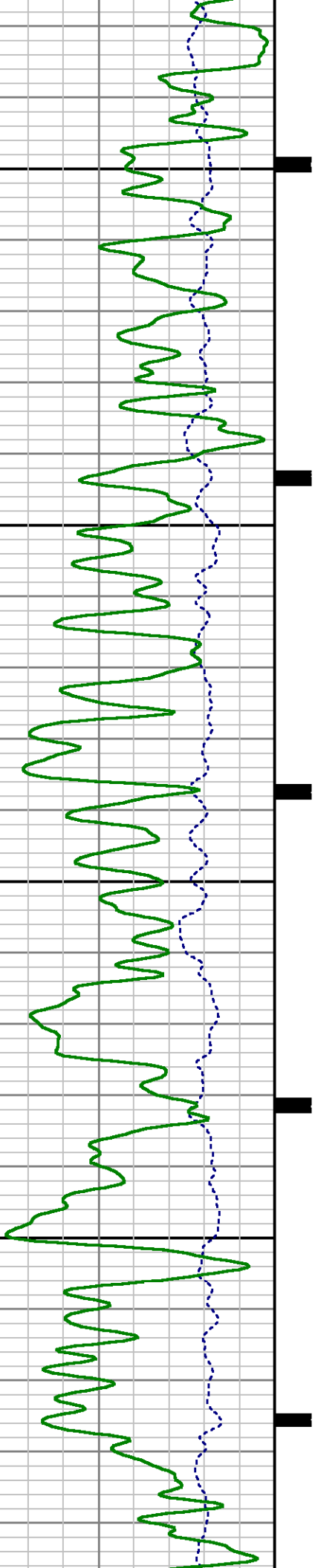
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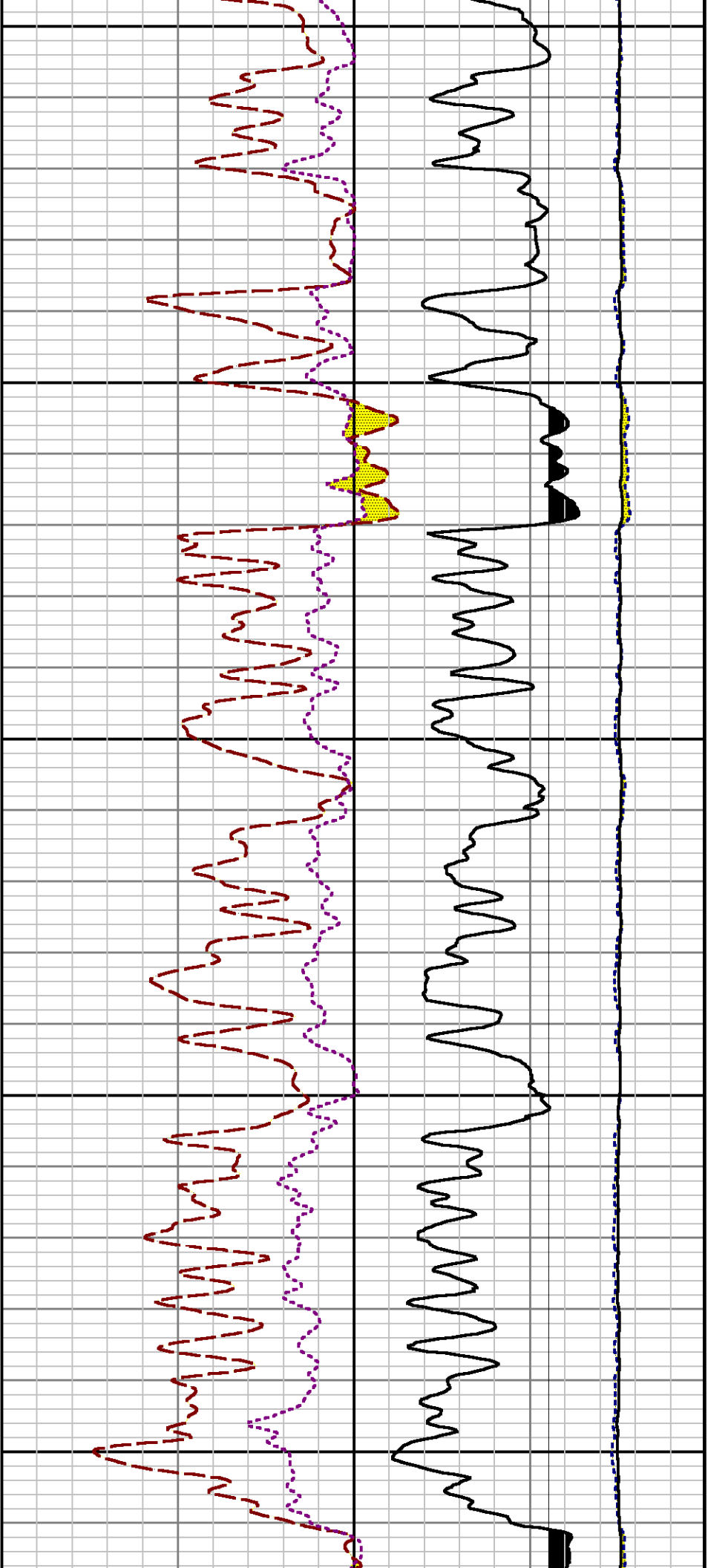




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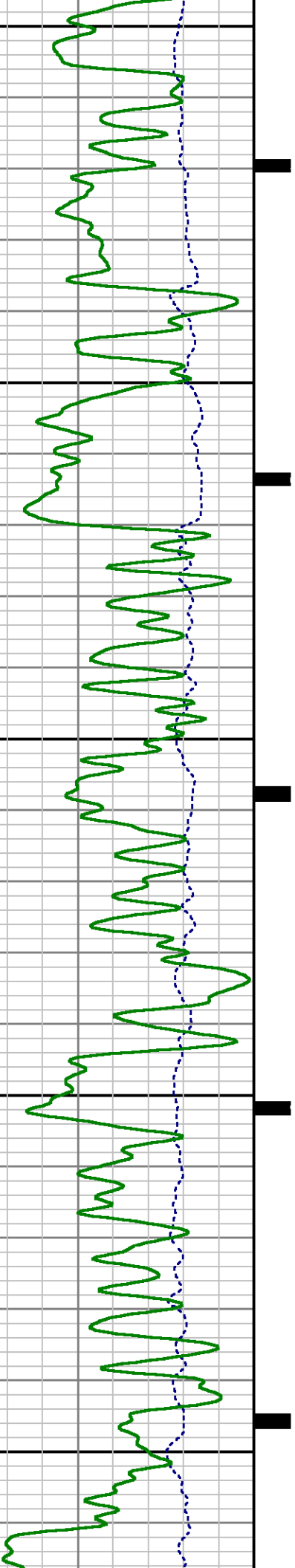
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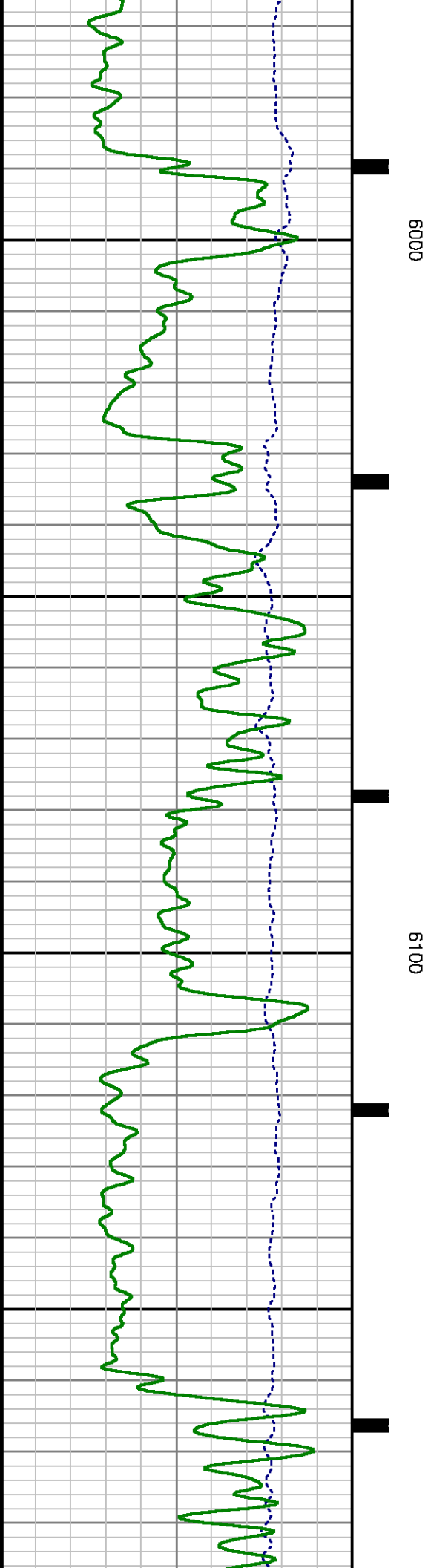
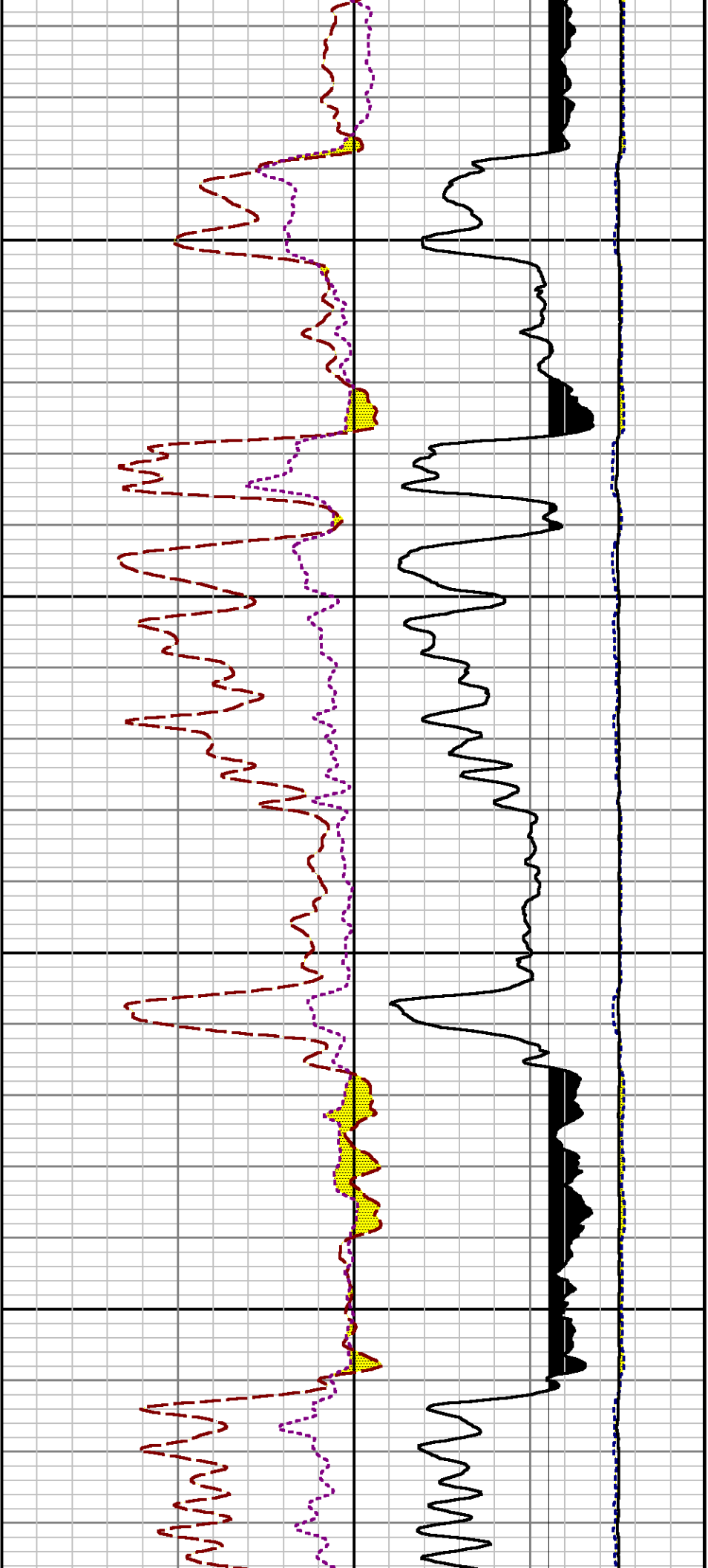


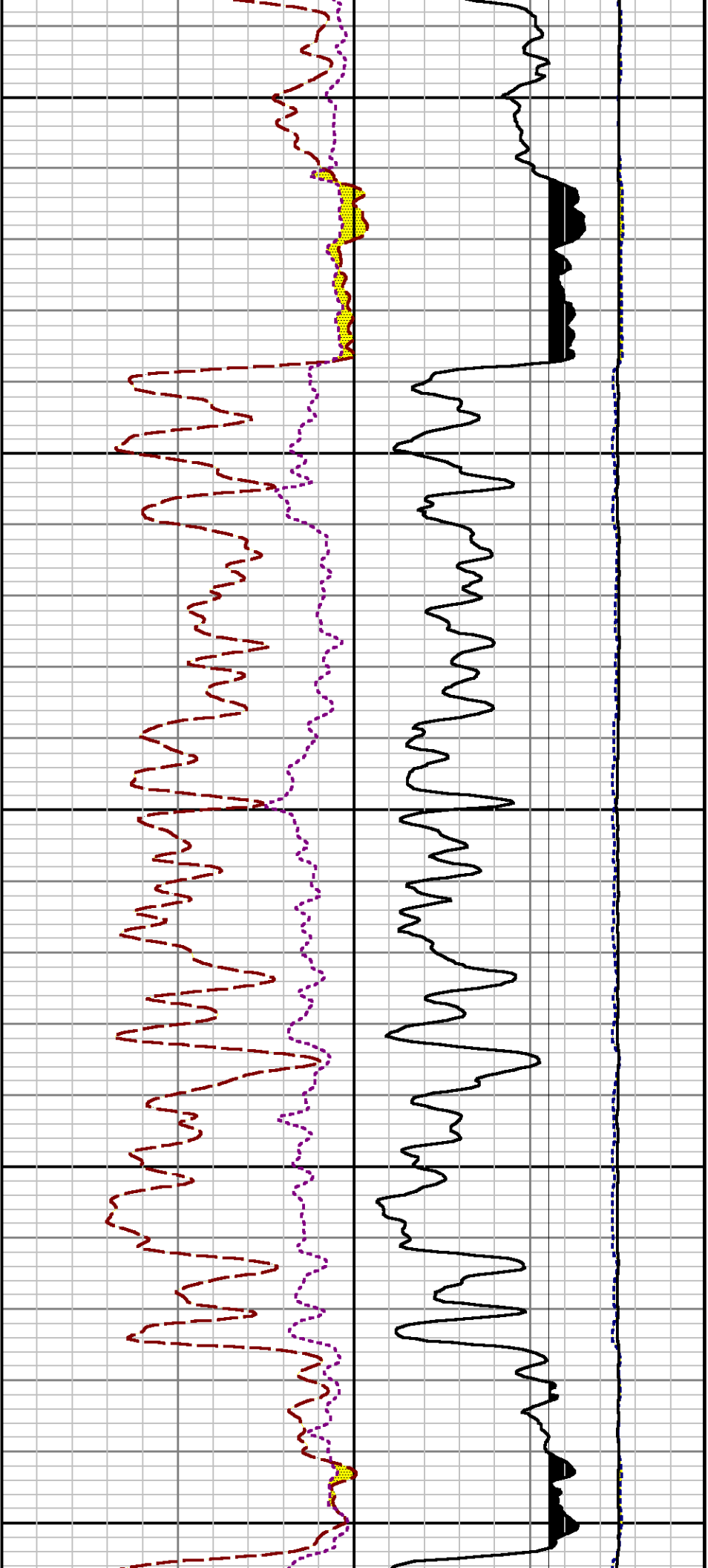


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5900



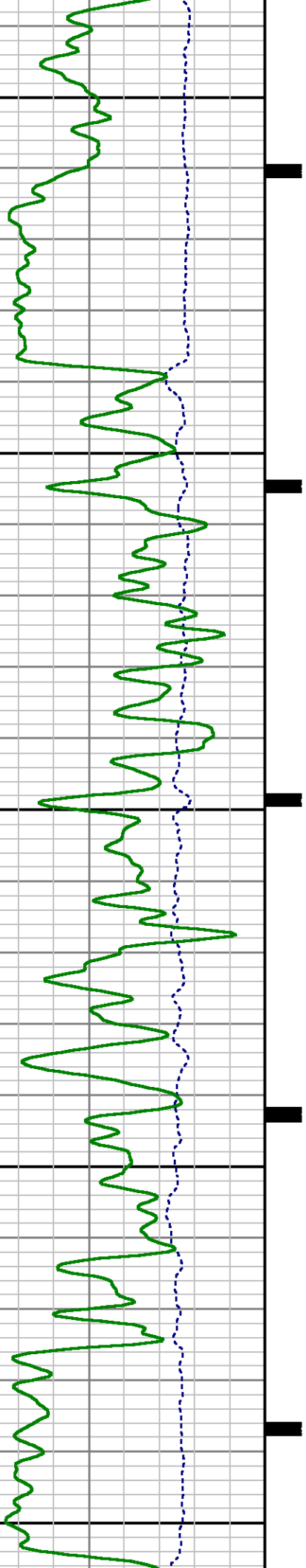


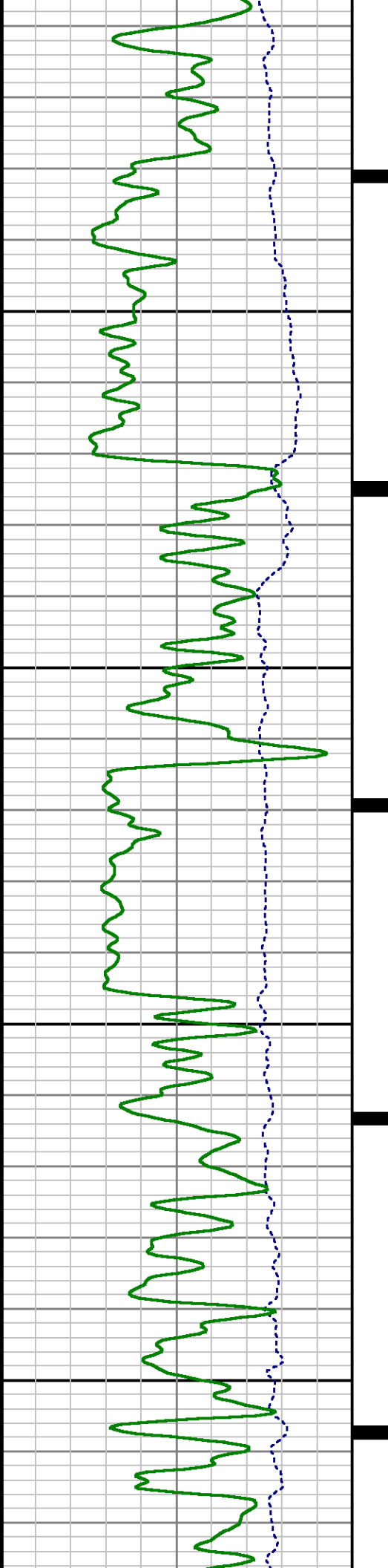


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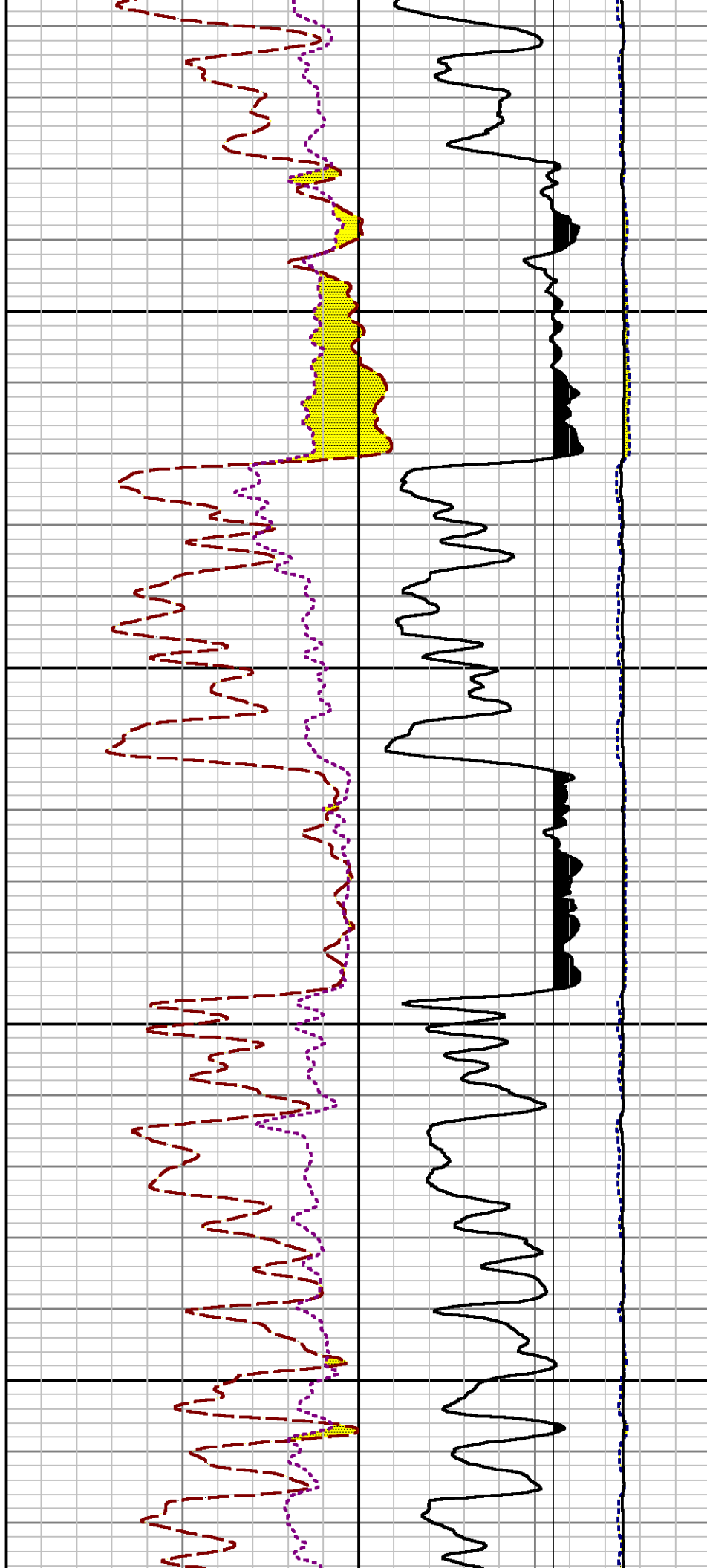
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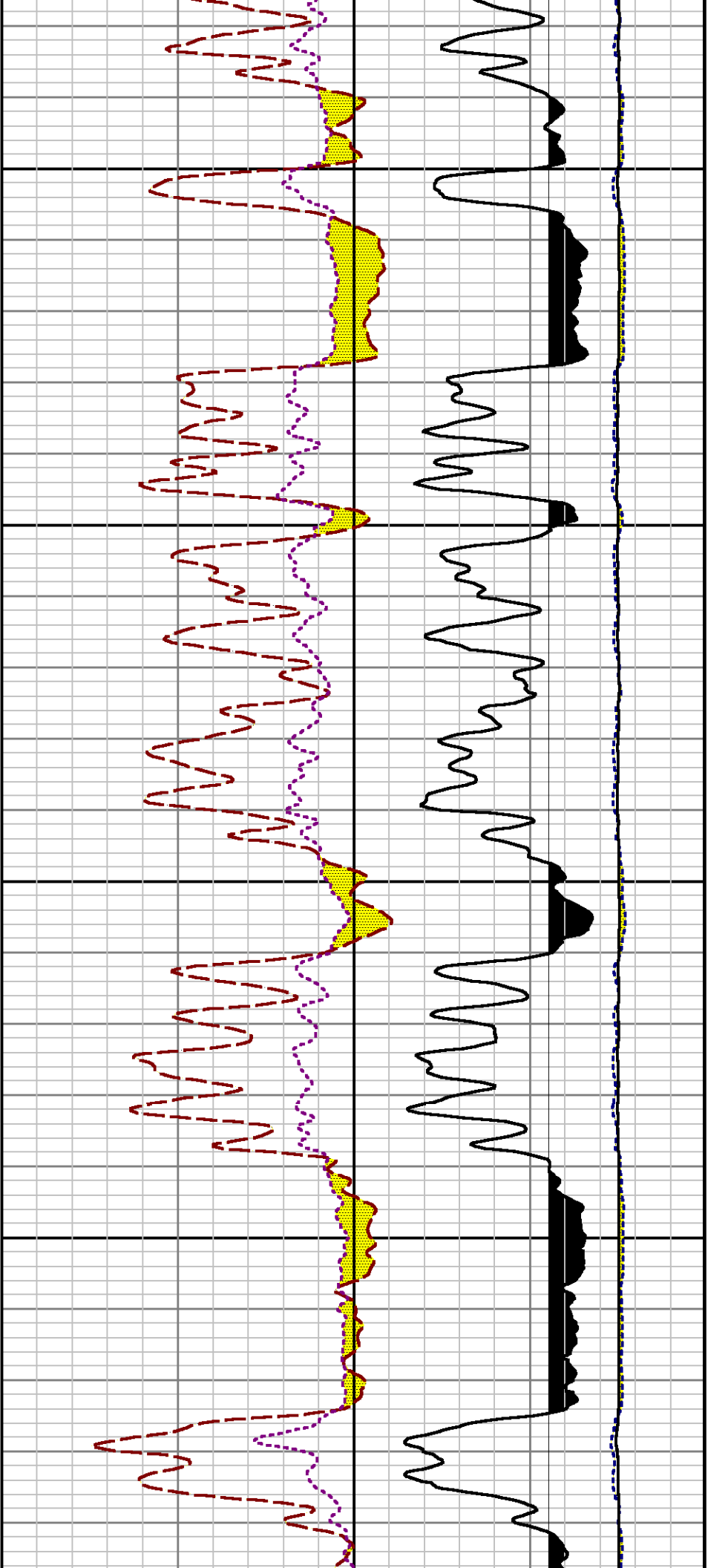




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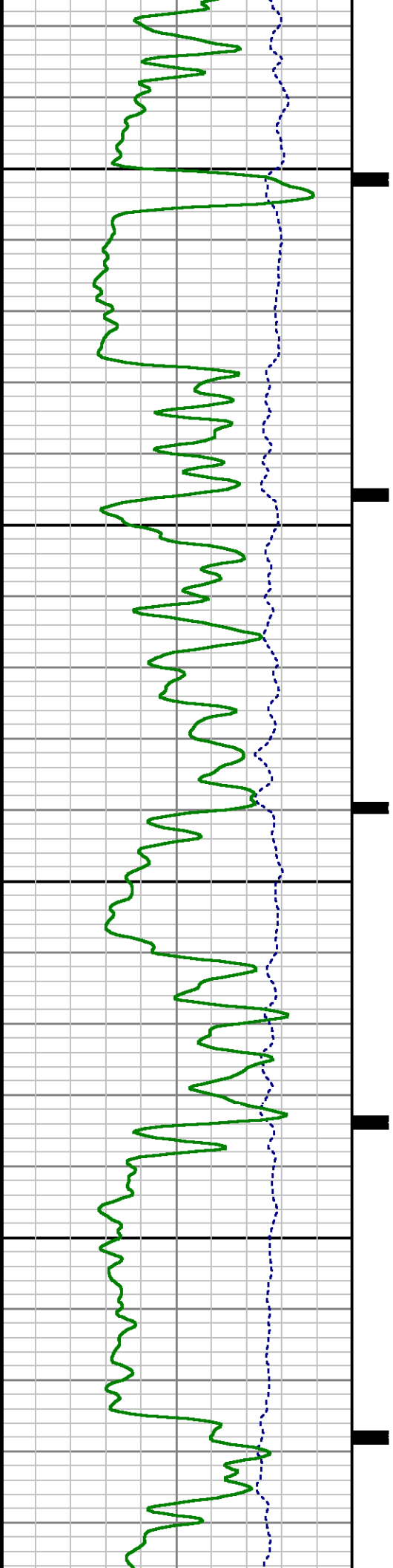
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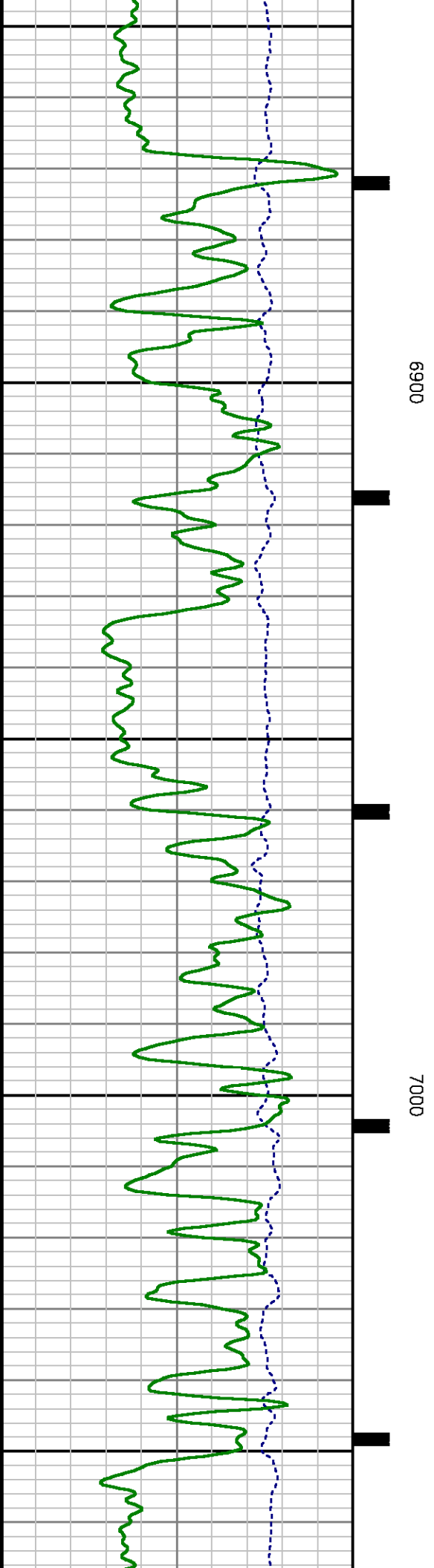
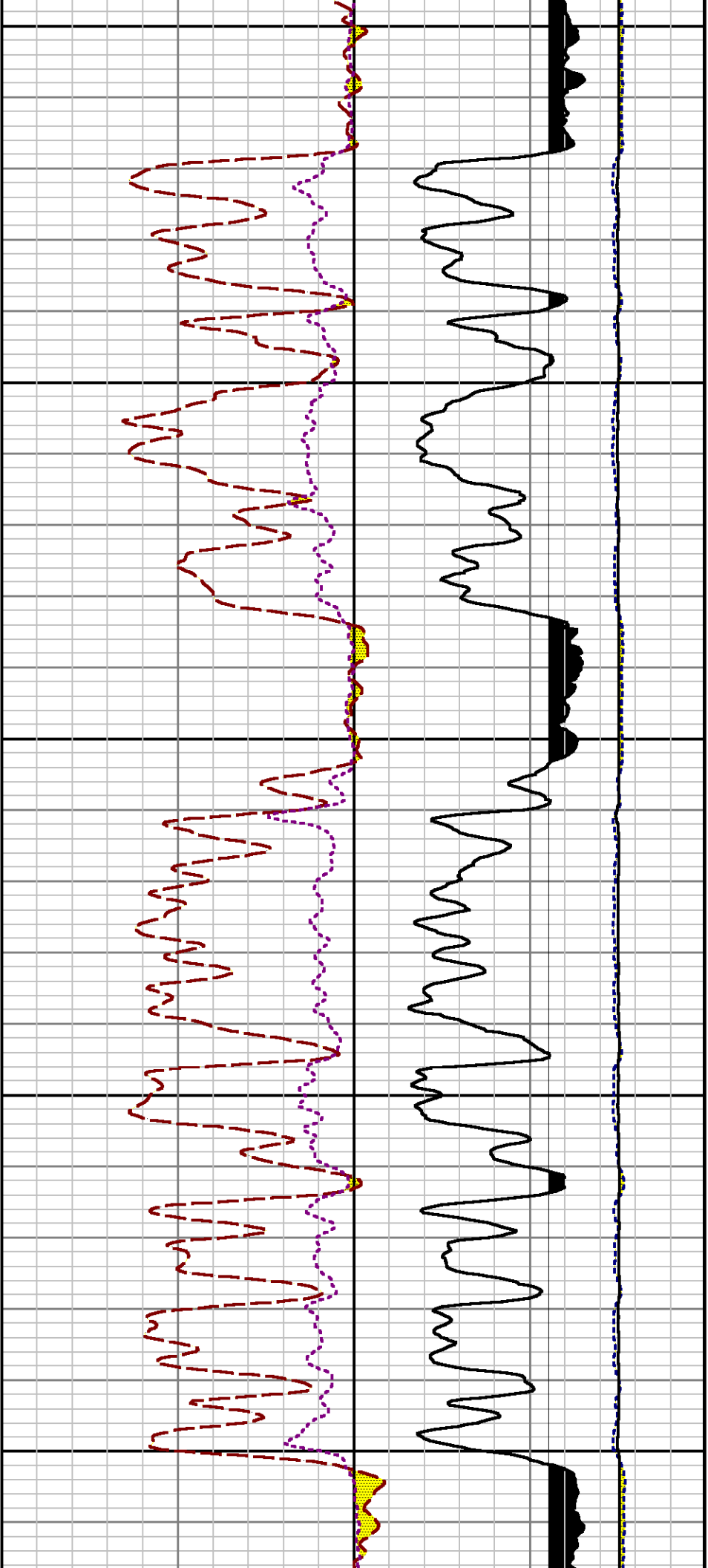


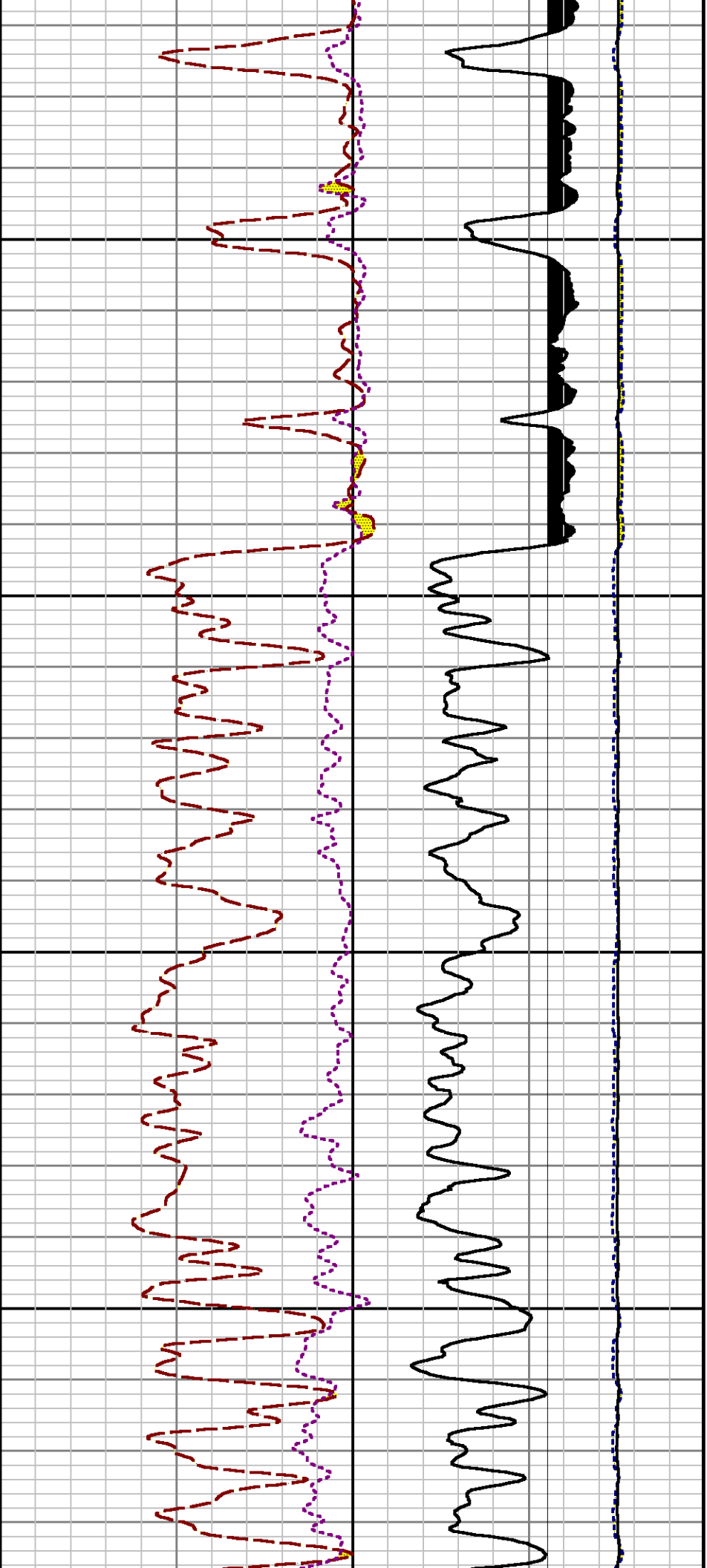


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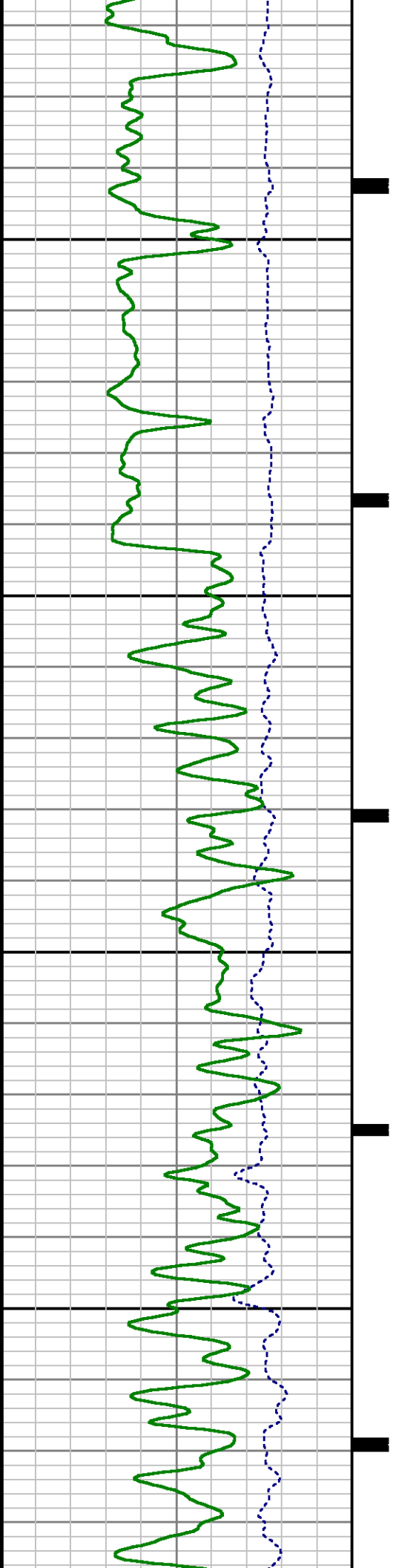


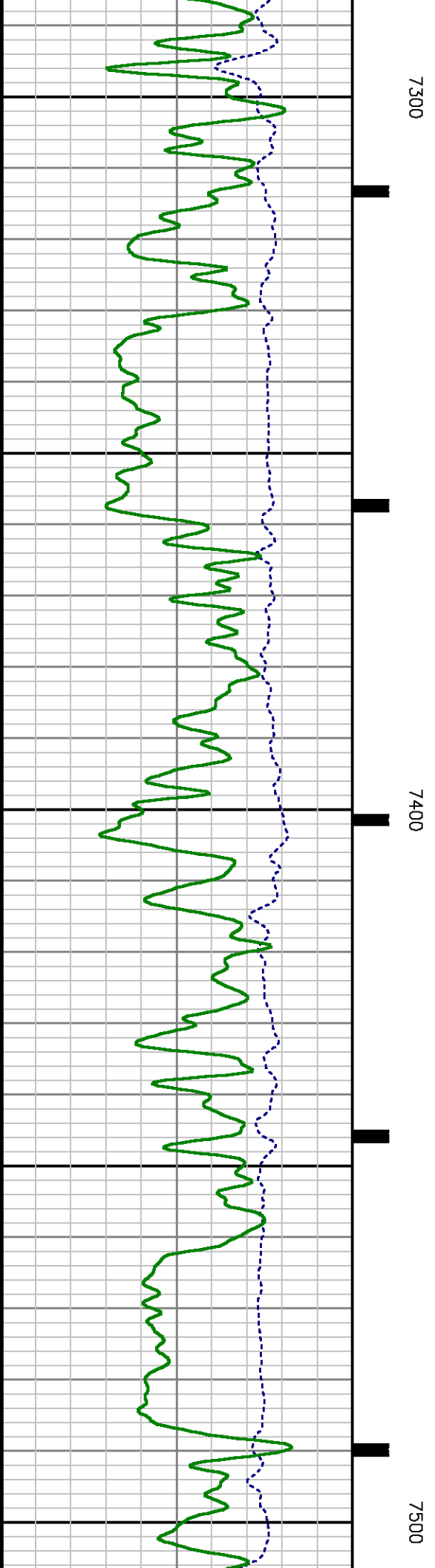
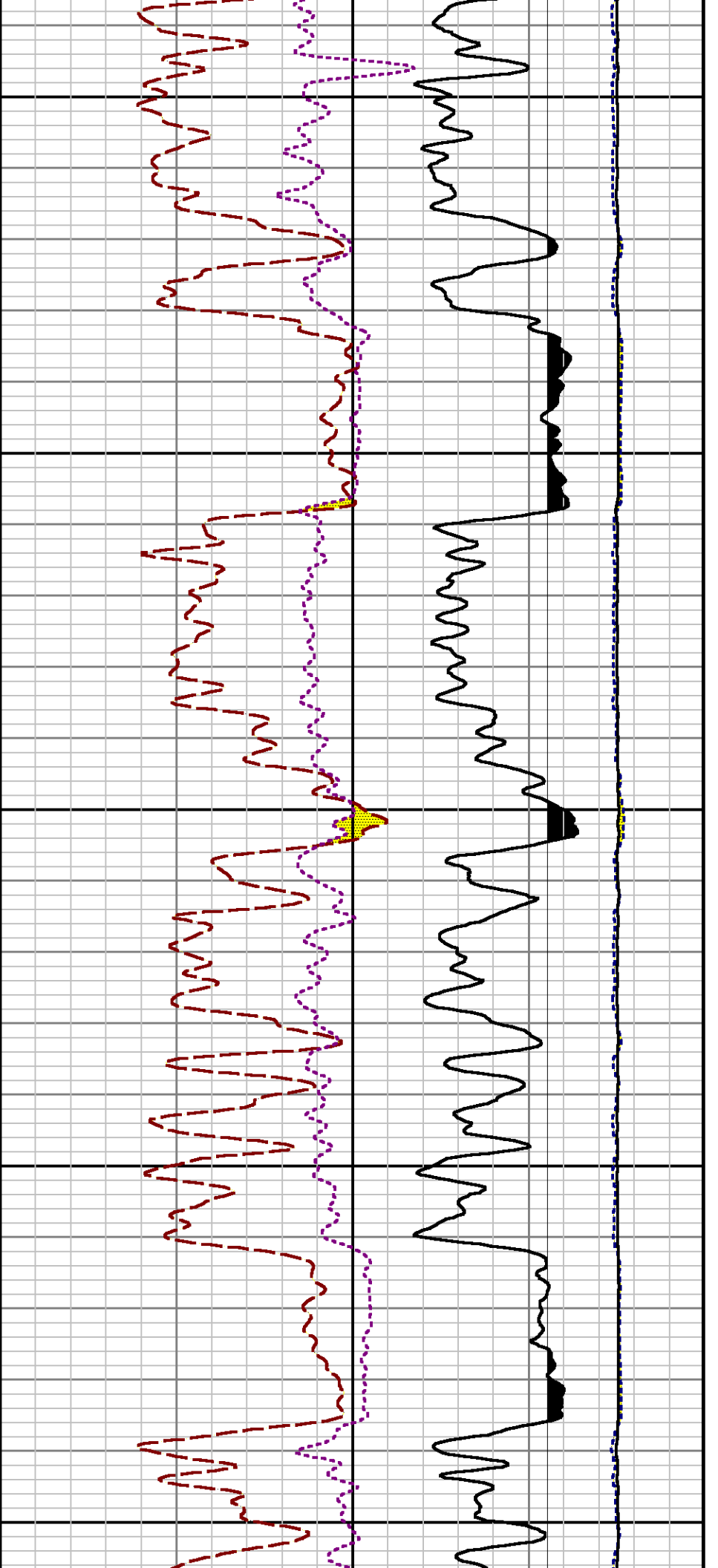


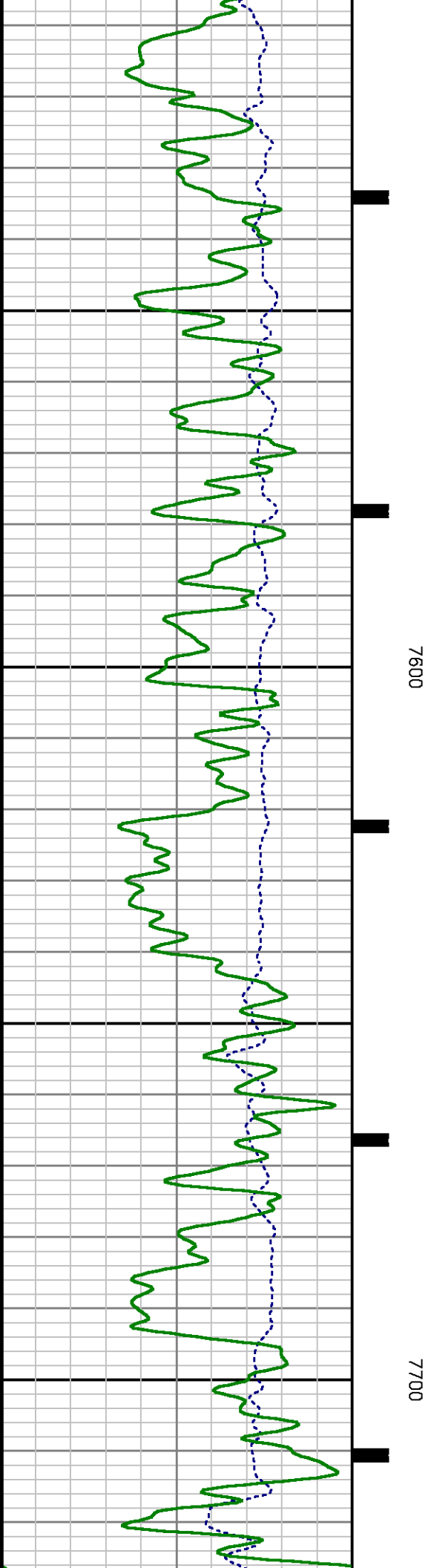
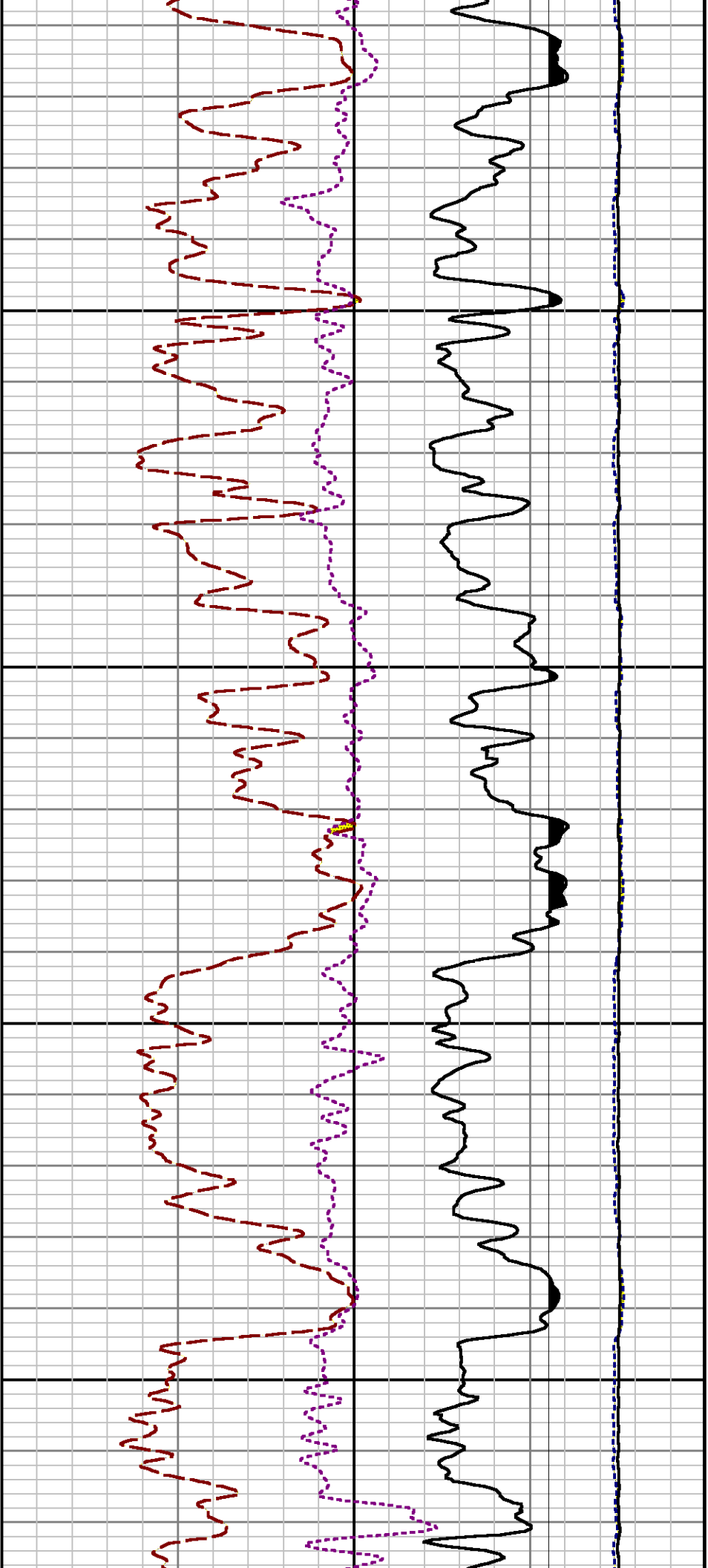


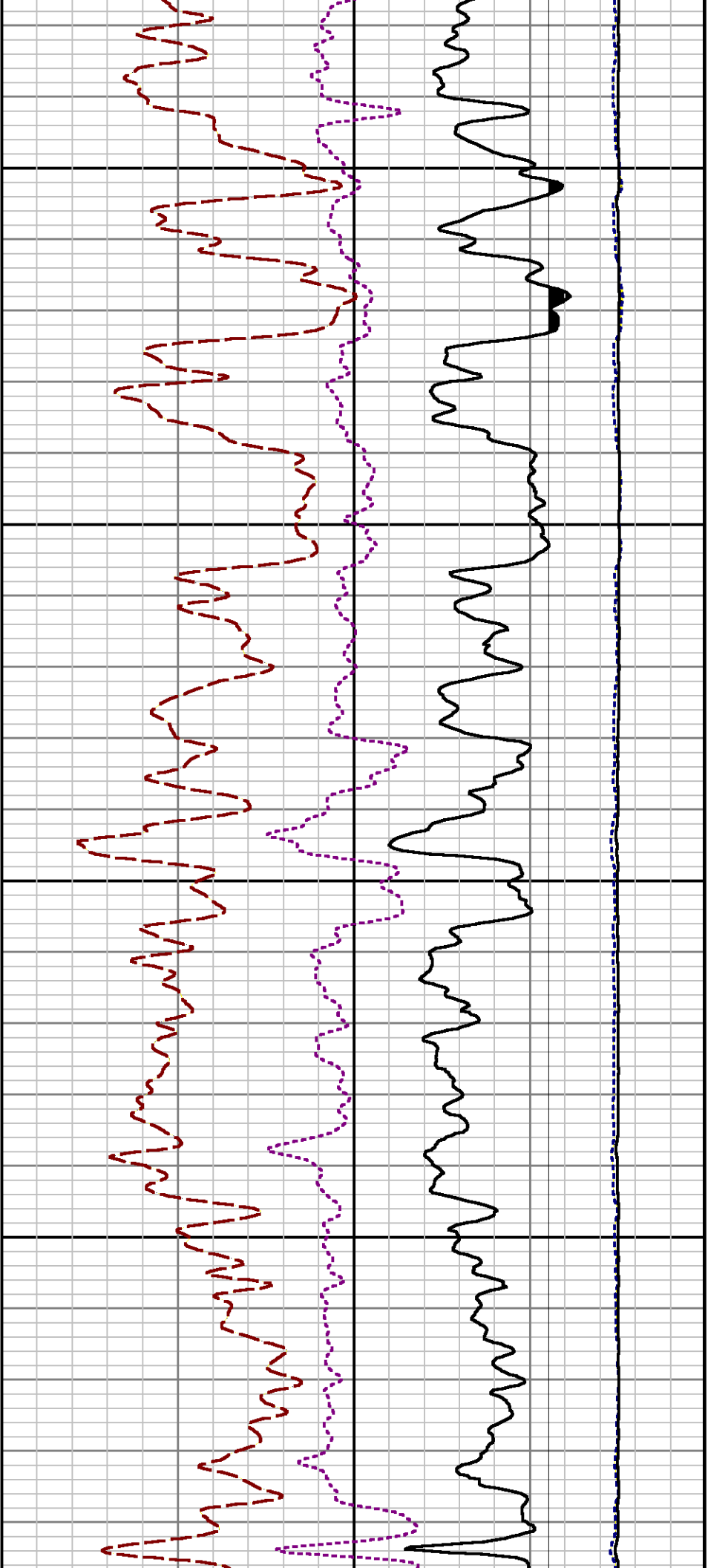
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7200



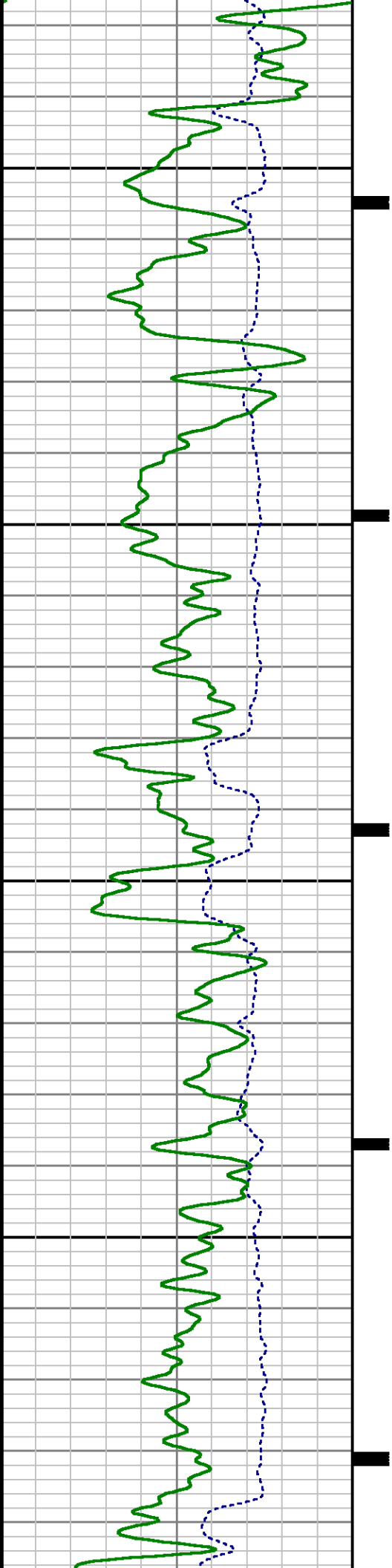


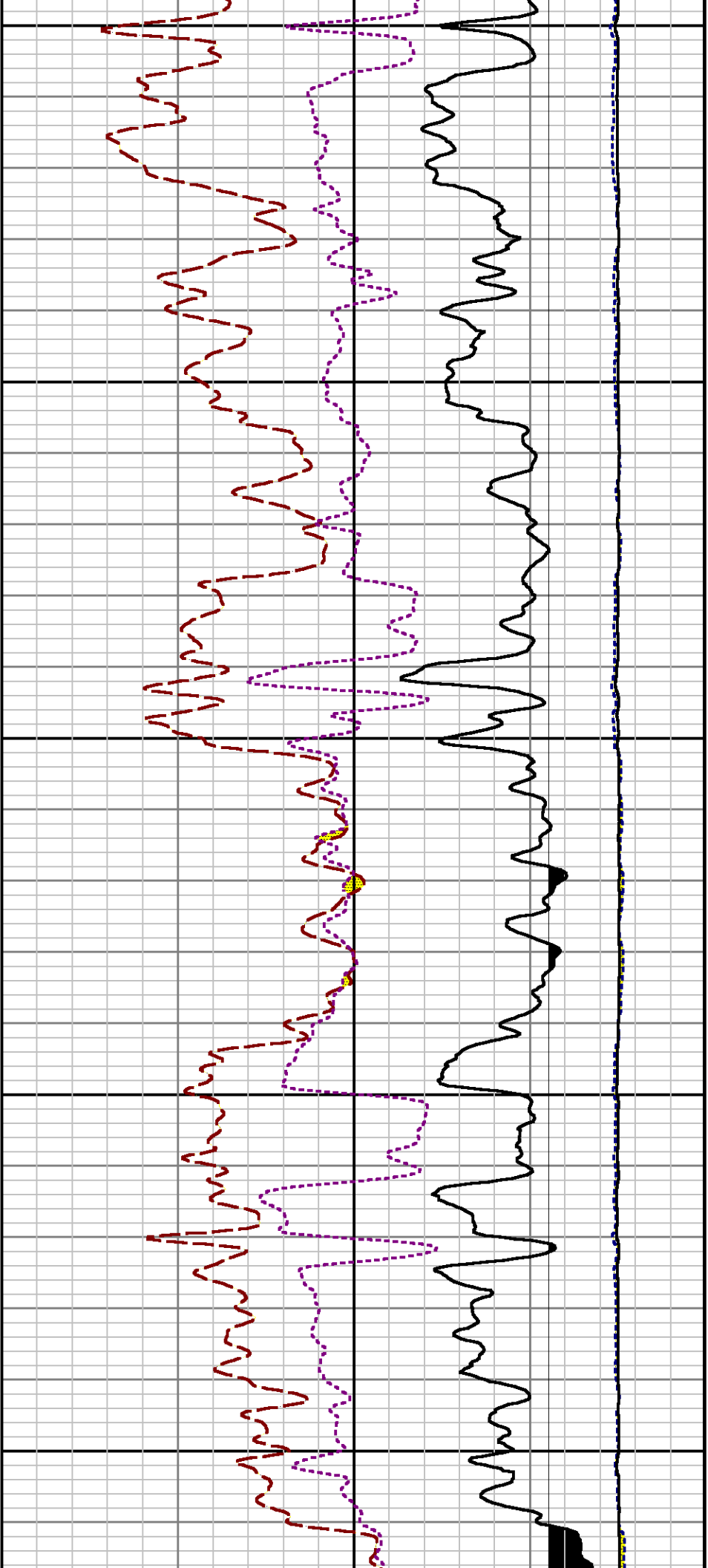




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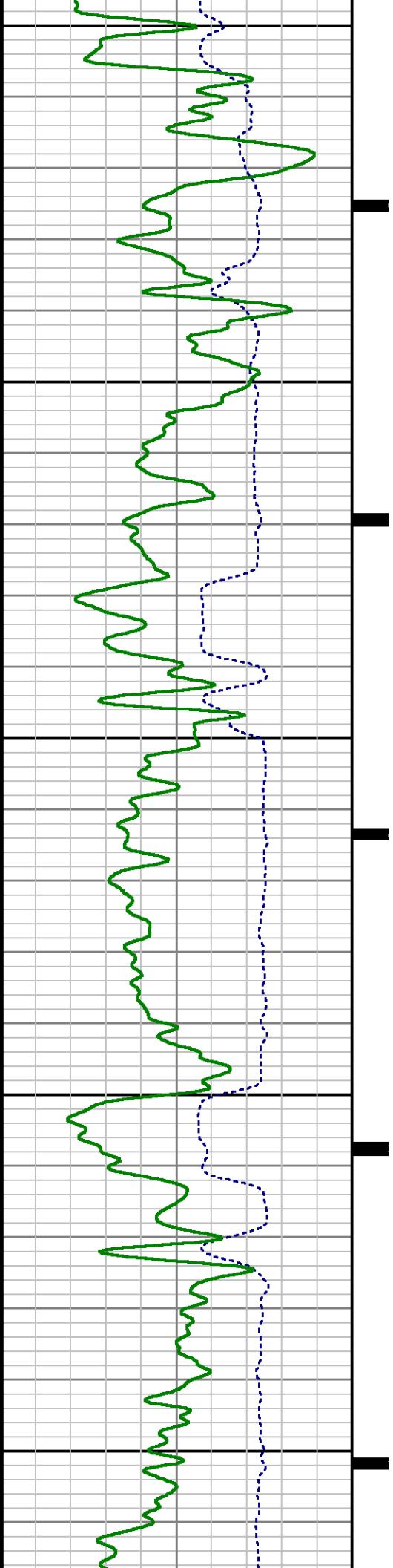
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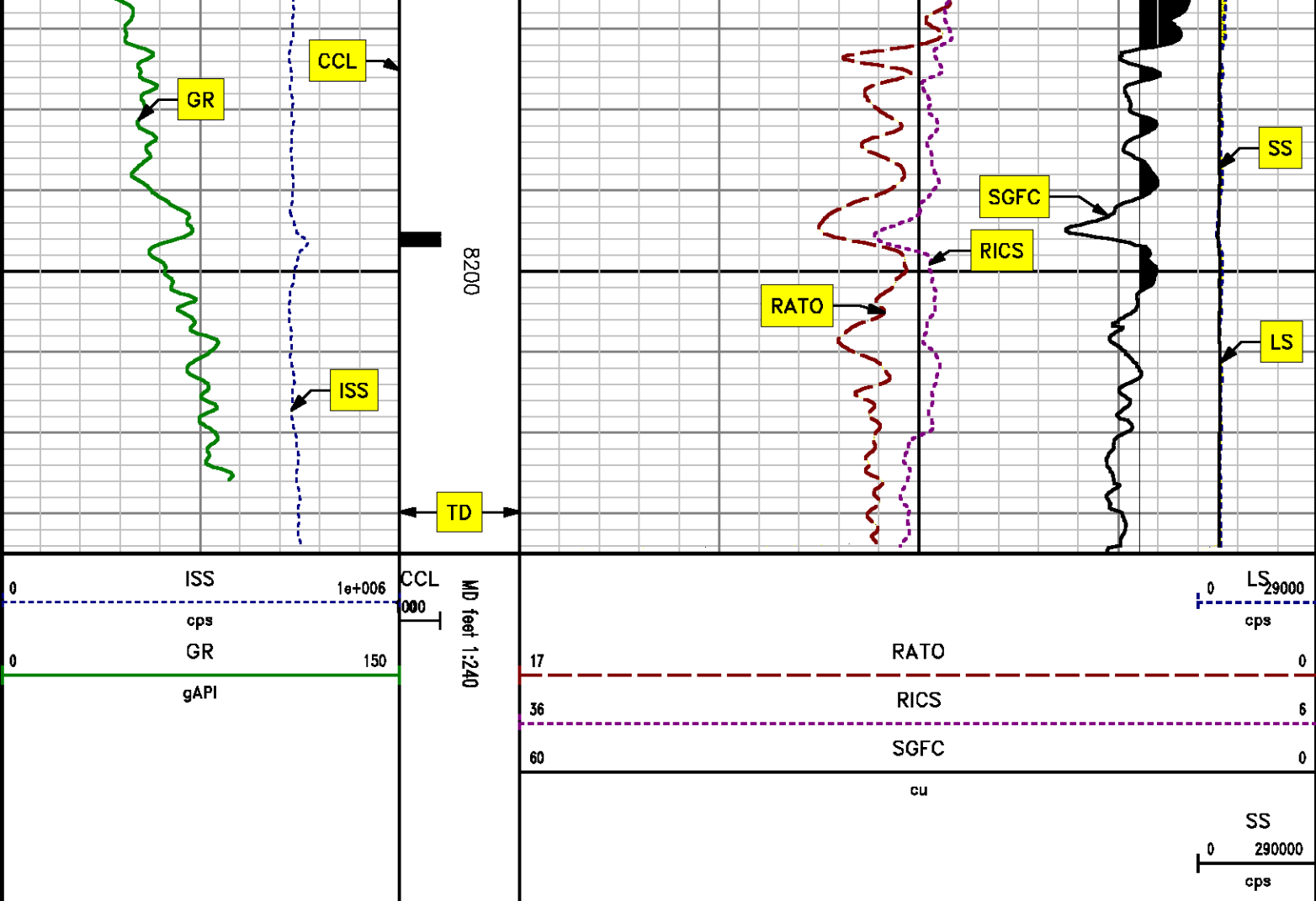




8000

8100





REPEAT SECTION PNC 3-D MODE

SPL PROCESSING

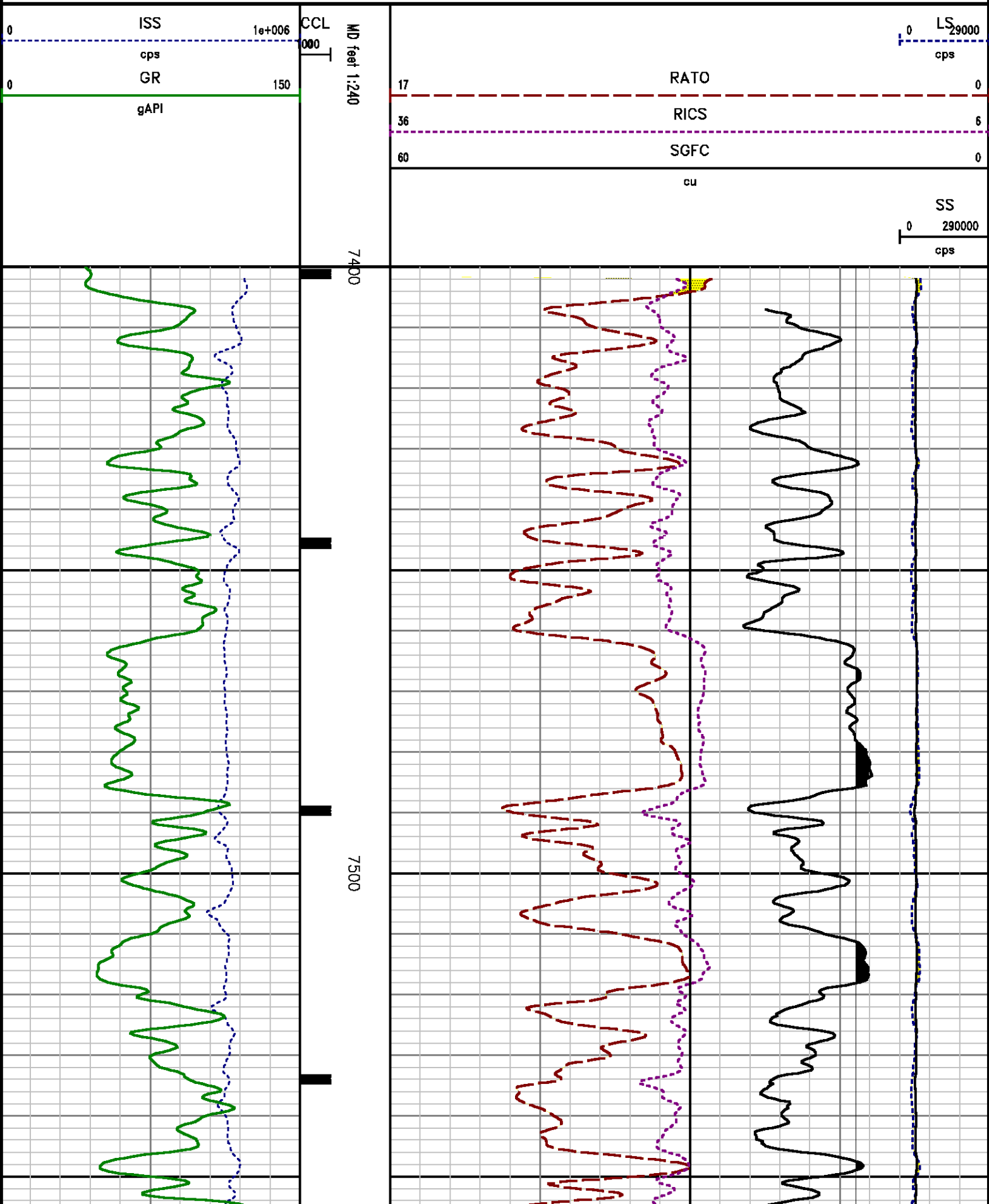
MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
PNC Porosity	Borehole	Cased		7392.120	7711.620
PNC Porosity	Borehole Size	8.750	inch	7392.120	7711.620
PNC Porosity	Casing Size	4.500	inch	7392.120	7711.620
PNC Porosity	Gas Filled	Non Gas Filled		7392.120	7711.620
PNC Porosity	Matrix	Sandstone		7392.120	7711.620

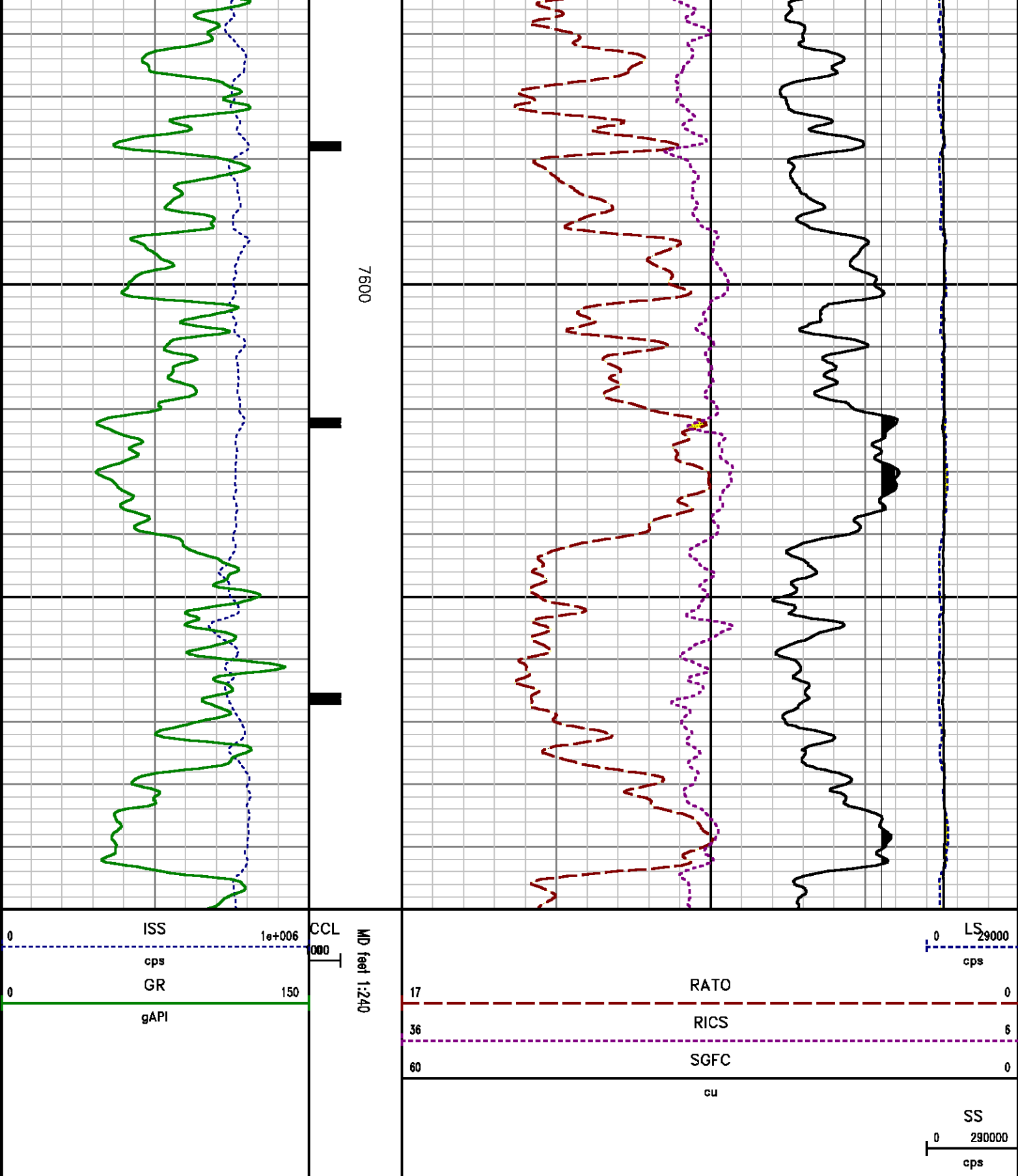
DEPTH OFFSETS

(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					
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	TEN				

Company : WPA ENERGY
 Well : FEDERAL PA 513-12
 File Name : d:\welldata\wpx\513-12\513rpm\repeat.xtf
 Mode : PlotMgr 5.4.504
 Interval : 7400.00 - 7700.00 feet UP
 Created : 11/23/2013 1:06:36 PM





CALIBRATION SUMMARY

GAMMA RAY

Calibration File: C:\case\calver\GR\163604.cal

CALIBRATION SUMMARY

DATE/TIME PERFORMED: Mon Nov 04 11:24:46 2013 TOOL SERIES: 2812LA ASSET: 1636 SEQ: 04

Calibrator #	Background [cps]	Calibrator On [cps]	Multiplicative	Background [api]	Calibrator On [api]	Differential [api]
S2K WA-612	63.78	278.58	0.978	62.35	272.35	210.00

Verification File: C:\case\calver\GR\163604.VP

PRIMARY VERIFICATION

DATE/TIME PERFORMED: Mon Nov 04 11:26:58 2013 TOOL SERIES: 2812LA ASSET: 1636 SEQ: 04

Calibrator #	Background [cps]	Calibrator On [cps]	Multiplicative	Background [api]	Calibrator On [api]	Differential [api]
S2K WA-612	64.11	280.20	0.978	62.68	273.94	211.26

PNC

Calibration File: C:\case\calver\PNC\15120.cal

PNC 3D CALIBRATION SUMMARY

DATE/TIME PERFORMED: Wed Nov 20 13:35:55 2013 TOOL SERIES: 8281XA ASSET: 151 SEQ: 20

Calibrator #

2437XB 112674

Source #

8281AA 11803641

	ISS	Mtr Vlt (V)	SS Gain	LS Gain	XLS Gain	EA Temp (degF)	Sync Delay (usec)	RCAL
Raw Data	803898	121.00	2268.00	2369.00	2456.00	102.22	7.00	0.9647
Interpolated	1300000	143.57	2249.93	2365.52	2438.67			

	ISS	BKS	BKL	BKX	SGA1	SDA1	SGA2	SDA2
Raw Data	803898	6755.55	1052.36	150.68	25.80	0.14	24.35	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	803898	168082.34	26594.72	89857.57	31999.20	8238.68	54362.27	13175.44
Fit Quality %		1.28	1.08	1.09	1.09	1.34	1.02	1.33

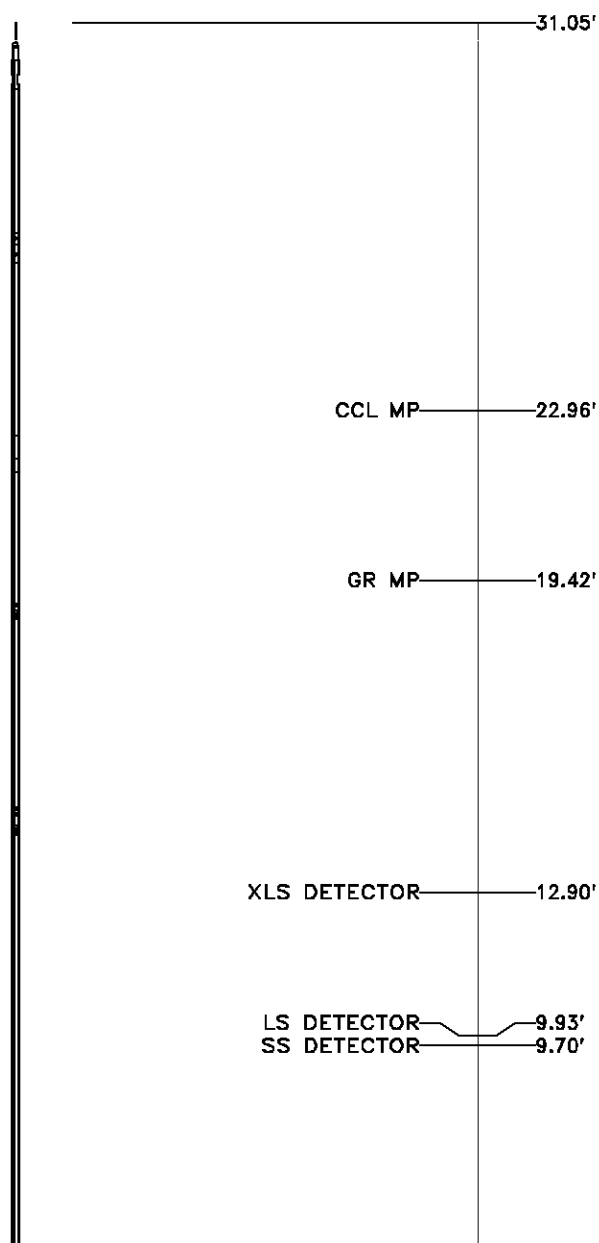
	ISS	RBOR		RIN ISS/ILS		RIN13 ISS/IXS		RICS ISS/CSS		RATO SS/LS		RTWO SS2/LS		RONE CSS/CLS	
Raw Data	803898	1.43		4.78		30.23		14.79		10.91		3.88		4.13	
		1.42	1.45	3.55	5.52	22.20	32.70	10.99	16.34	10.06	11.10	3.57	3.95	3.76	4.22
Fit Quality %		0.06		0.10		0.16		0.11		0.17		0.16		0.15	
Reduced	1390956	1.43		4.80		30.27		14.81		10.93		3.89		4.13	
		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

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
GAMMA RAY	
Series	8262XA
Mnemonic	GR
Diameter	1.70"
Weight	15.00 lb
Length	3.17'

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



0.00'

Total Length: 31.05'
Total Weight: Not Available
Max Diameter: 0' 1.70"



Baker Atlas

CASE

Company

WPX ENERGY

Well

FEDERAL PA 513-12

Field

PARACHUTE

County

GARFIELD

State

CO

File No:

CH79532

API No:

05045206630000

Location

SHL: 2588' FSL & 1730' FWL

BHL: 1495' FSL & 688' FWL

Elevations

KB 6533 ft

DF

GL 6507 ft

12 7S 95W

PA 23-12 PAD

NABORS 577

SEC 12

TWP 7S

RGE 95W