



Baker Atlas

# RESERVOIR PERFORMANCE MONITOR

File No:	Company	EXXONMOBIL PRODUCTION COMPANY
CHC38001	Well	PCU 296-5A4
API No.	Field	PICEANCE CREEK
06103112450000	County	RIO BLANCO
	State	COLORADO

Permanent Datum Log Measured From Orill Measured From	Location: SRL: 734' PUL & 554' PUL		Other Services BOND
	SEC: 5	TWP: 25	
	RGE: 98W		
	G.L.	Elevation	7308 ft
	G.L.	30.2 ft	Above P. D.
	KELLY BUSHING		
			Elevations KB 7338.2 ft DF 7338.2 ft GL 7308 ft

Date	22-JULY-2011	
Run	CWE	
Service Order	575379	
Depth Driller	13635 ft	
Depth Logger	13568 ft	
Bottom Logged Interval	13568 ft	
Top Logged Interval	9807 ft	
Time Started	17:30	
Time Finished	0:00	
Operator Rig Time	8.5 HRS	
Type of Fluid in Hole	WATER	
Fluid Density	N/A	
Fluid Salinity	N/A	
Fluid Level	PULL	
Logged Cement Top	N/A	
Wellhead Pressure	0 psi	
Maximum Hole Deviation	N/A	
Nominal Logging Speed	10 rpm	
Maximum Recorded Temperature	290 degF	
Reference Log	BAKER ATLAS/BOND	
Reference Log Date	7-22-11	
Equipment	4271	CRWD JCT,00
Recorded By	TIM KAUFF	
Witnessed By	MR. JIM PETERSON	

- 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
9.875 in		
8.125 in		

Casing Record				
Size	Weight	Grade	From	To
7 in	28 lbm/ft	P-110	SURFACE	9975 ft
4.5 in	15.1 lbm/ft	P-110	SURFACE	13635 ft

Remarks
Log is correlated to The Baker Atlas Bond log dated 7-22-11
The crew of 4271 Thanks You.

Equipment Data				
Run	Trip	Tool	Series Number	Serial Number

1	1	RPM	B2B1FA	10191667	FREE
1	1	RPM	B2B1FA	11802753	FREE
1	1	RPM	B2B1EA	10273848	FREE
1	1	GAMMA RAY	2B12LA	11701636	FREE
1	1	CCL	B248EA	10387150	FREE
1	1	PCW	B250EA	11796988	FREE

## *MAIN SECTION* *IN PNC 3-D MODE*

### SPL PROCESSING

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
PNC Porosity	Borehole	Cased		9907.324	13349.824
PNC Porosity	Borehole Size	9.875	Inch	9907.324	9975.000
PNC Porosity	Borehole Size	6.125	Inch	9975.000	13349.824
PNC Porosity	Casing Size	7.000	Inch	9907.324	9975.000
PNC Porosity	Casing Size	4.500	inch	9975.000	13349.824
PNC Porosity	Gas Filled	Non Gas Filled		9907.324	9975.000
PNC Porosity	Gas Filled	Non Gas Filled		9975.000	13349.824
PNC Porosity	Matrix	Sandstone		9907.324	13349.824

### DEPTH OFFSETS (for Acquired Curves)

SERIES	DEPTH OFFSET	ACQUIRED CURVES					
8248EA	-14.478	FLTM					
8248EA	-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	RICK	SDA3
		SDL3	SGA3	SGL3	STA3	XS	ASPEC3
		AMB3	AMF3	CHF3	IXSC	IXSN	RAT023
		RICKC	RIN13C	RIN23	RIN23C	SD3D	SG3D
		SGB3	SGF3	WDTH3	CKSR	IXSR	XSR
		RICKR					

B281XA

-0.250

BKL	CHF2	CLS	CPT2Q0	CPT2Q2	CPT2Q3
CPT2Q4	ET2	ILS	LS	MCS2	MCS2Q0
QCAL2	RGN2	RICL	RONE23	RTWQ23	SDA2
SDL2	SGA2	SGB2	SGF2	SGK2	SGL2
STA2	ASPEC2	ILSC	ILSN	WDTH2	RICLC
CLSR	ILSR	LSR	RICLR		
GPRS	HVC100	WV	SEQ	SED1	AMA1
AMB1	AWE1	AMF1	AML1	BKS	CHF1
CSS	COORB	CORF	CPT1Q0	CPT1Q2	CPT1Q2A
CPT1Q2B	CPT1Q2C	CPT1Q3	CPT1Q4	CPT1Q5	ET1
G1	G2	GE1S	GE2S	ISS	MCS1
MCS1Q0	QA1	QCAL1	QM1	RATO	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	WA	WVM	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		TEN	TTEN		

B281XA

0.000

SYSTEM

0.000

TEN TTEN

Created by : MIXED

Plotted by : PlotMgr, v5.4.5D4

Company : EXXONMOBIL PRODUCTION COMPANY

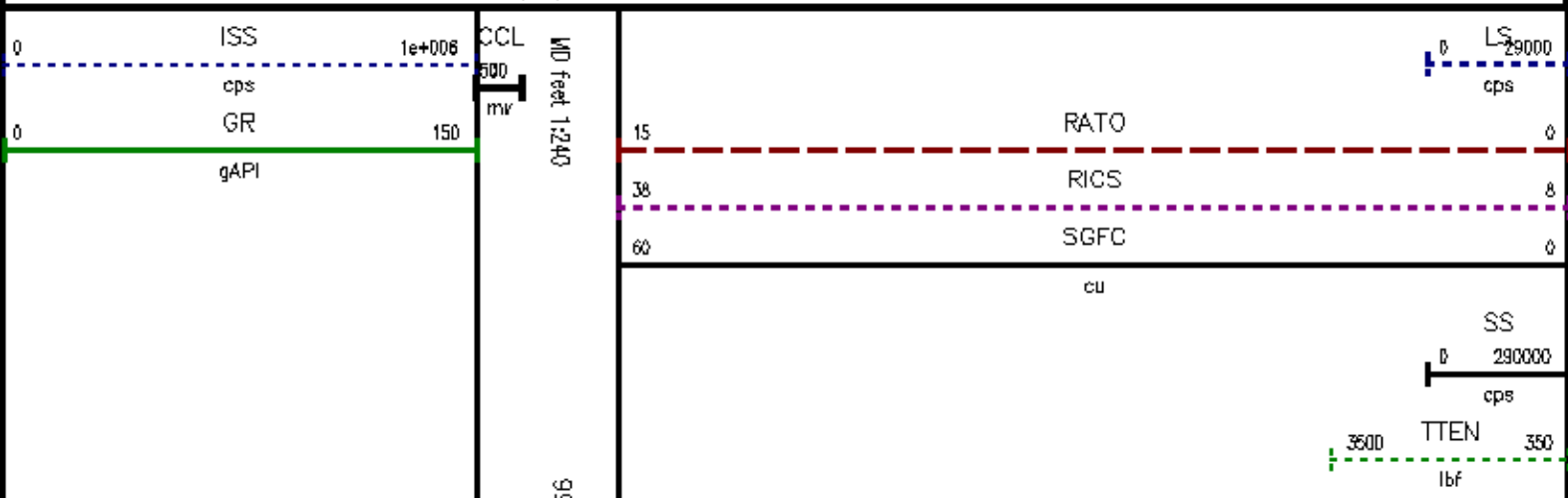
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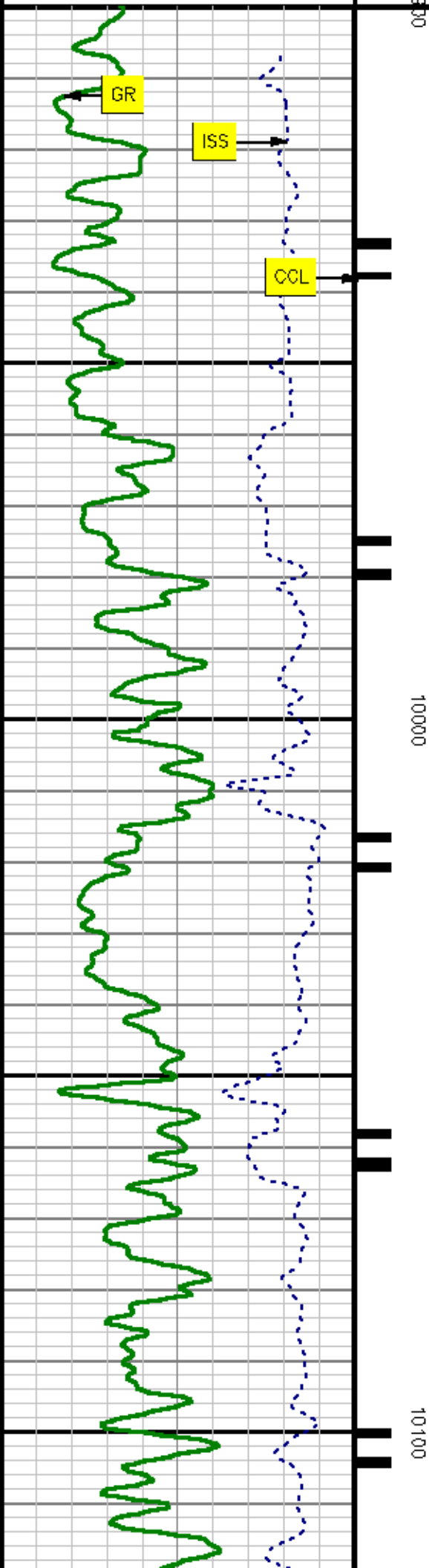
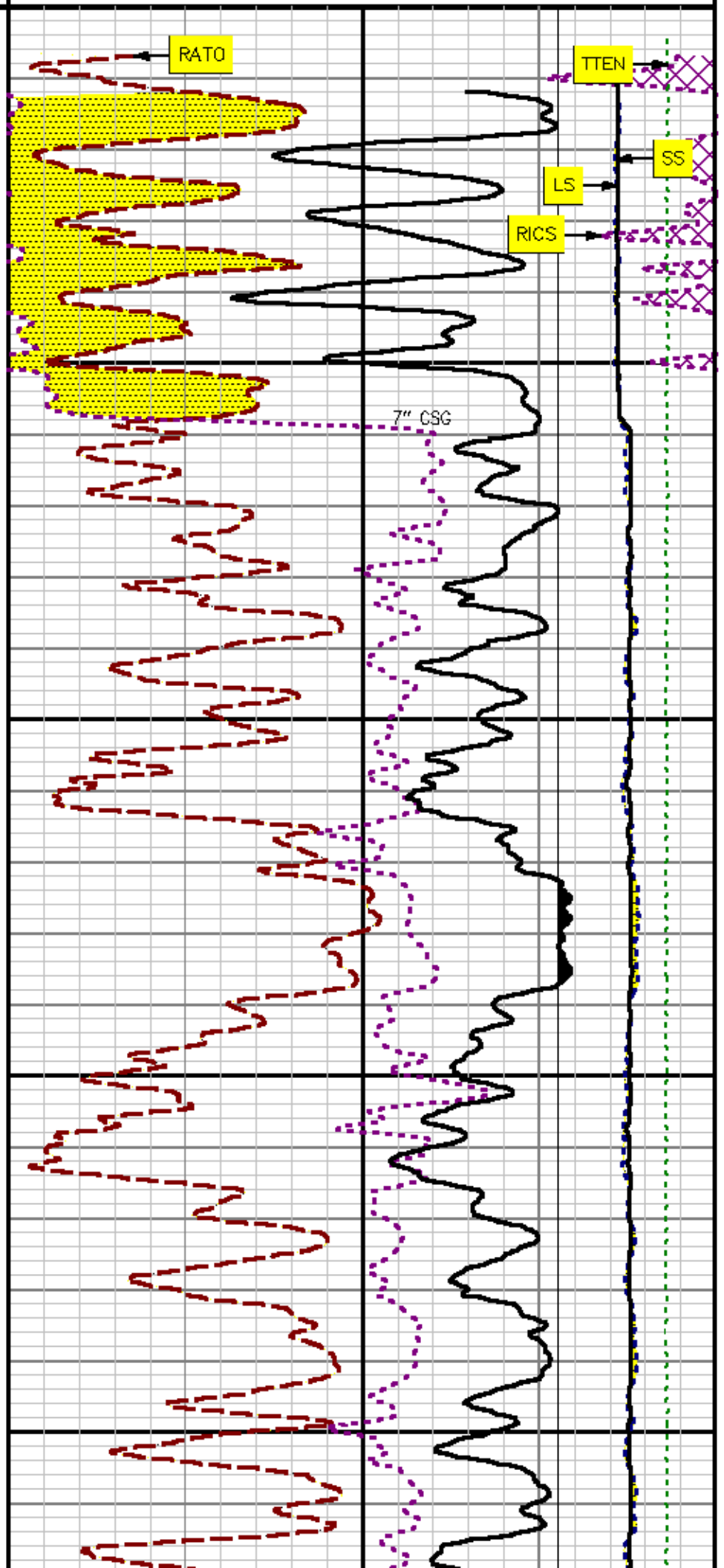
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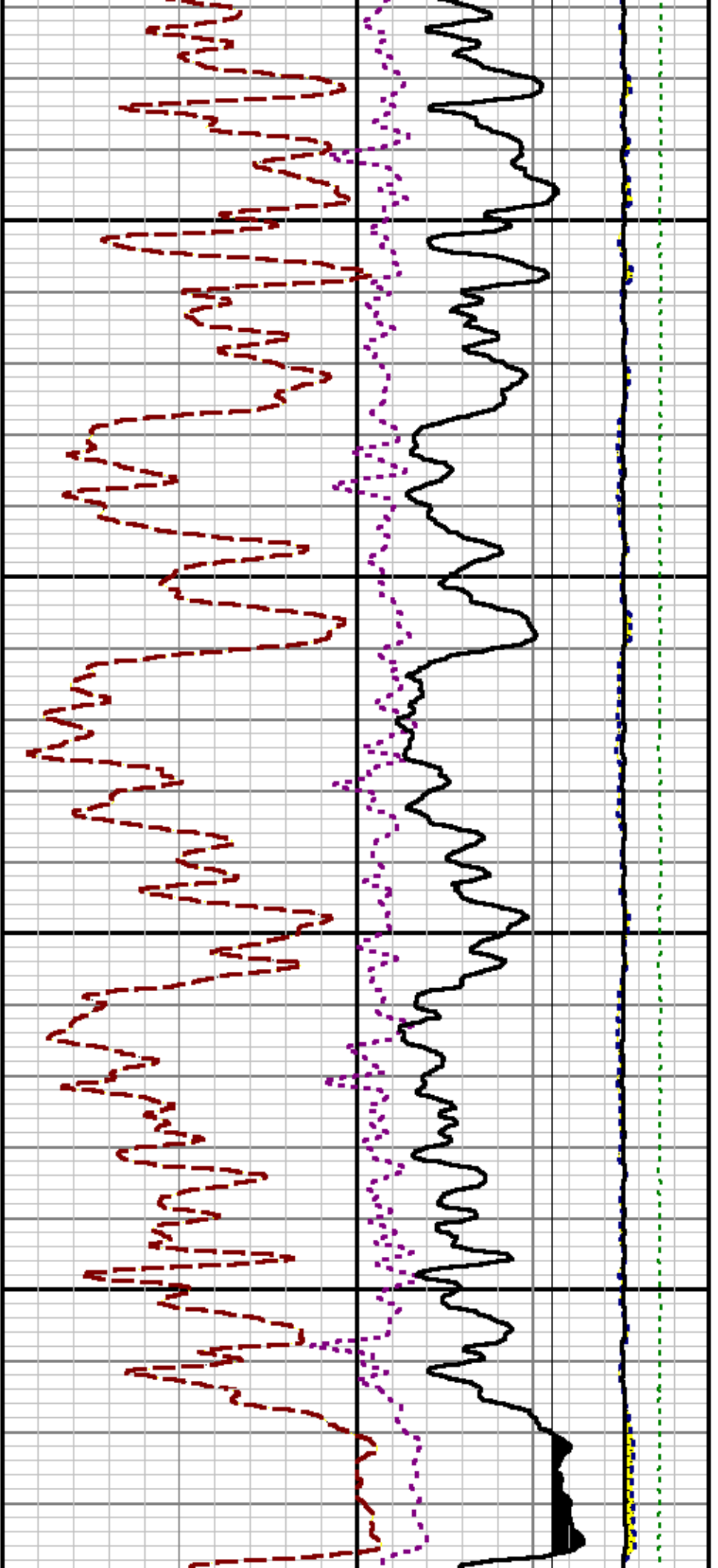
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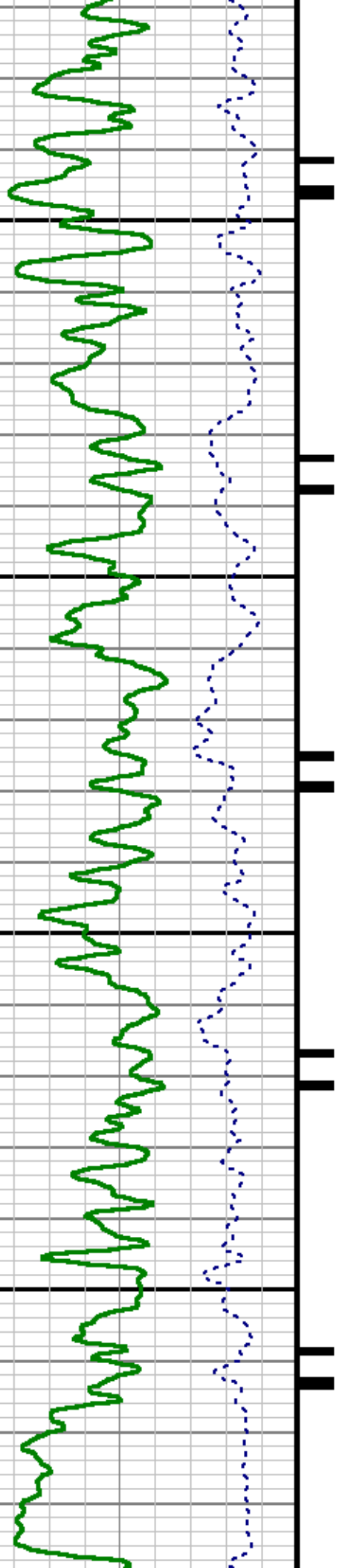


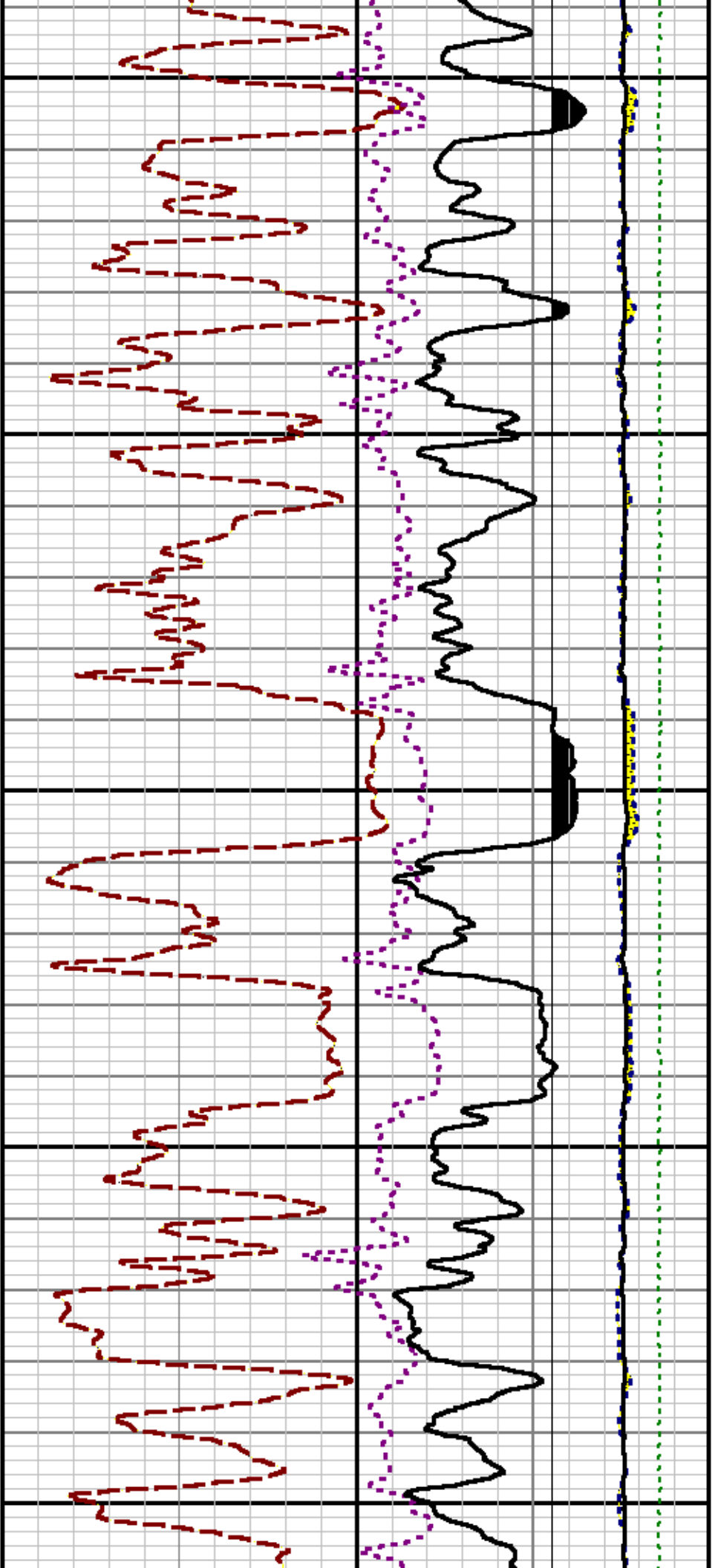




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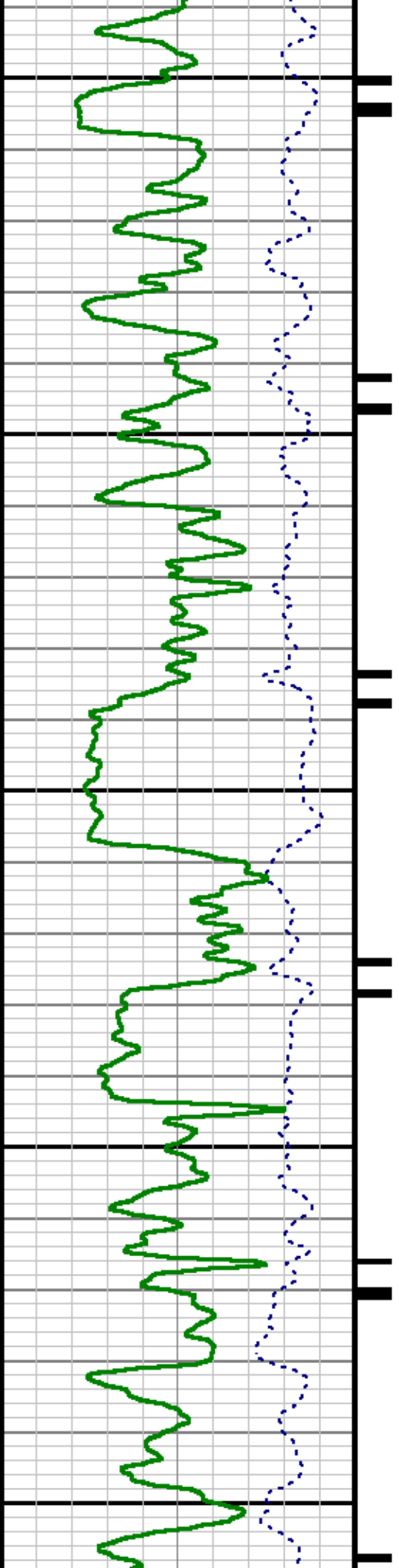
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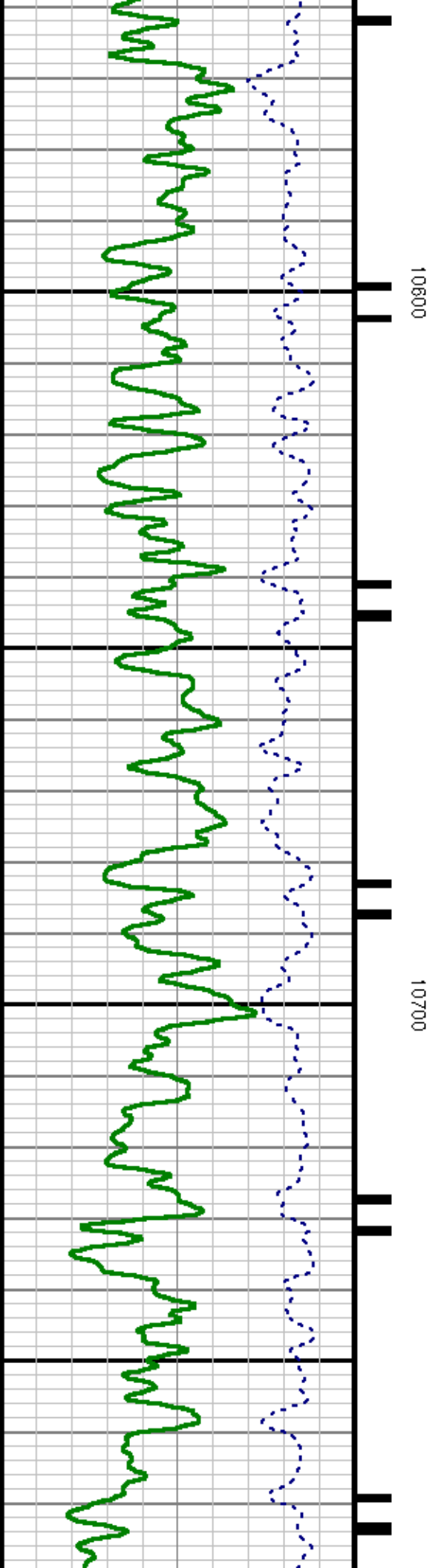
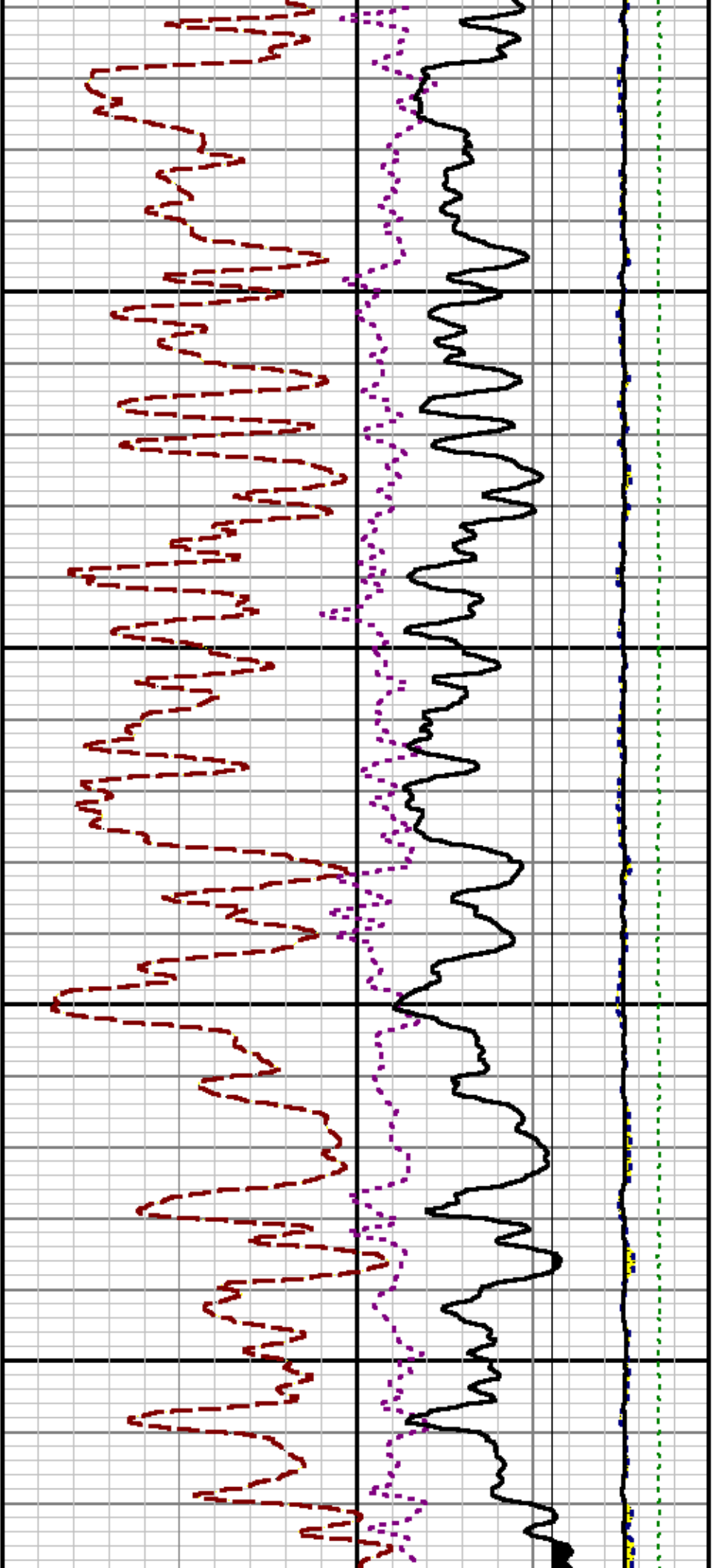


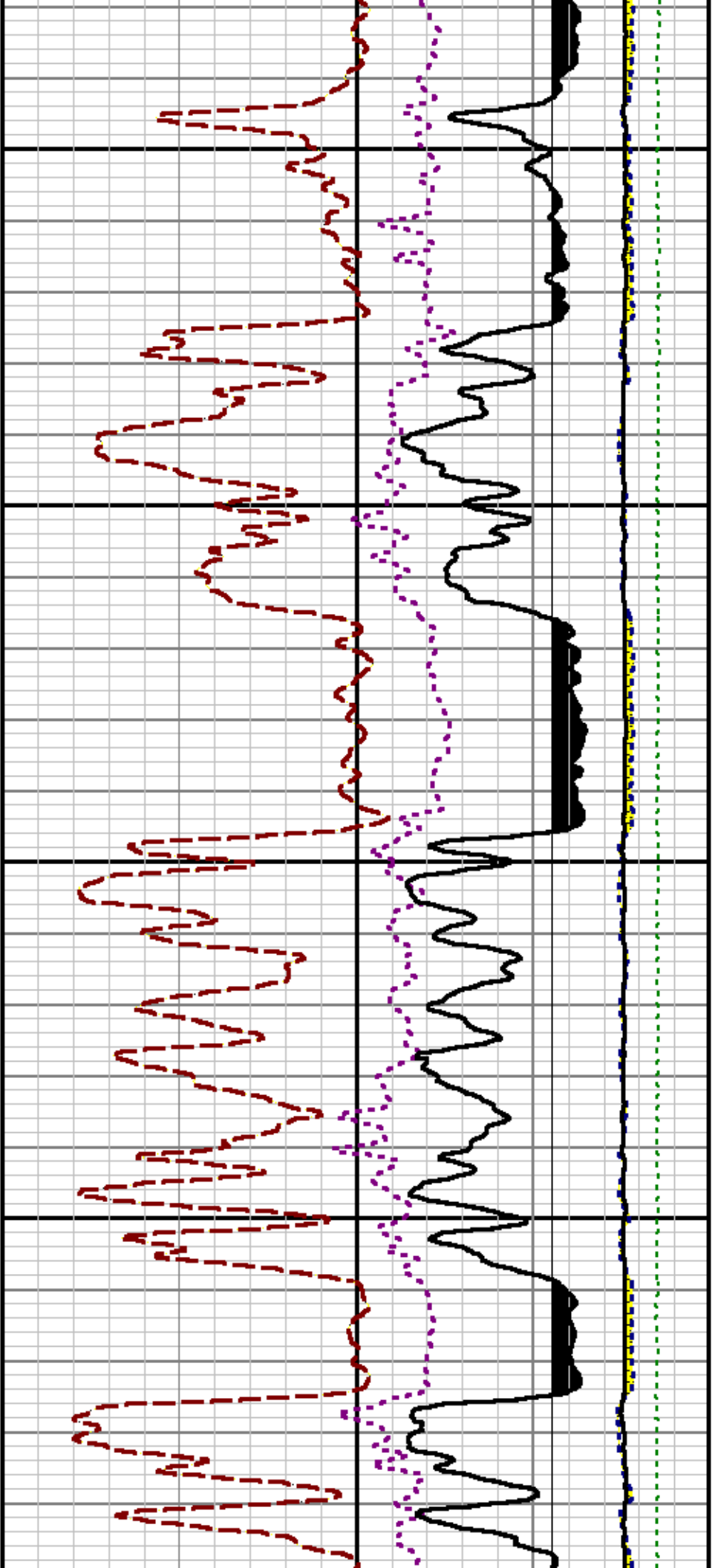


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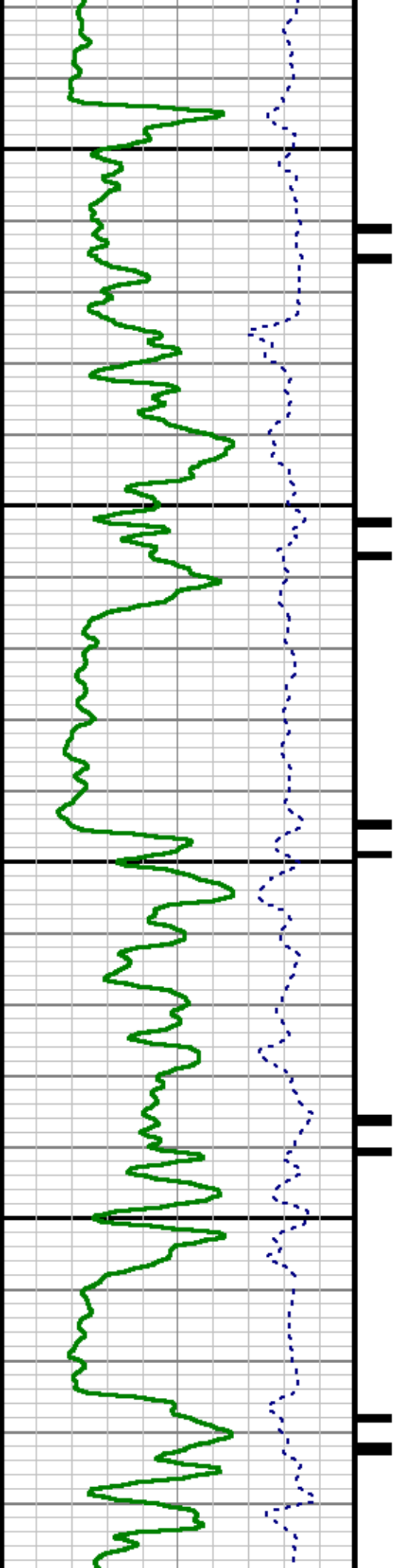




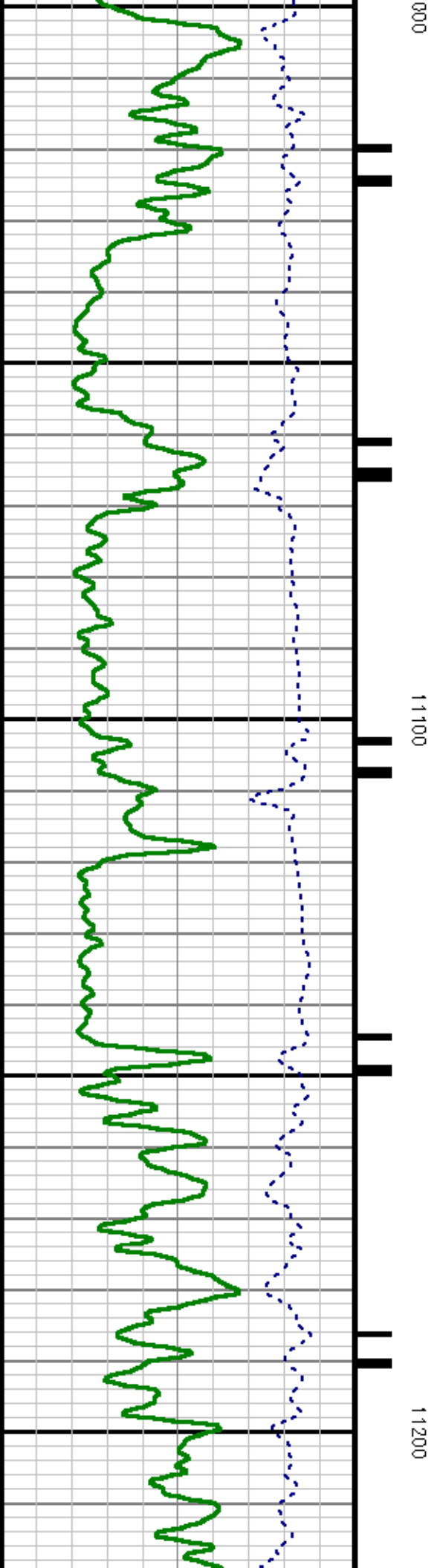
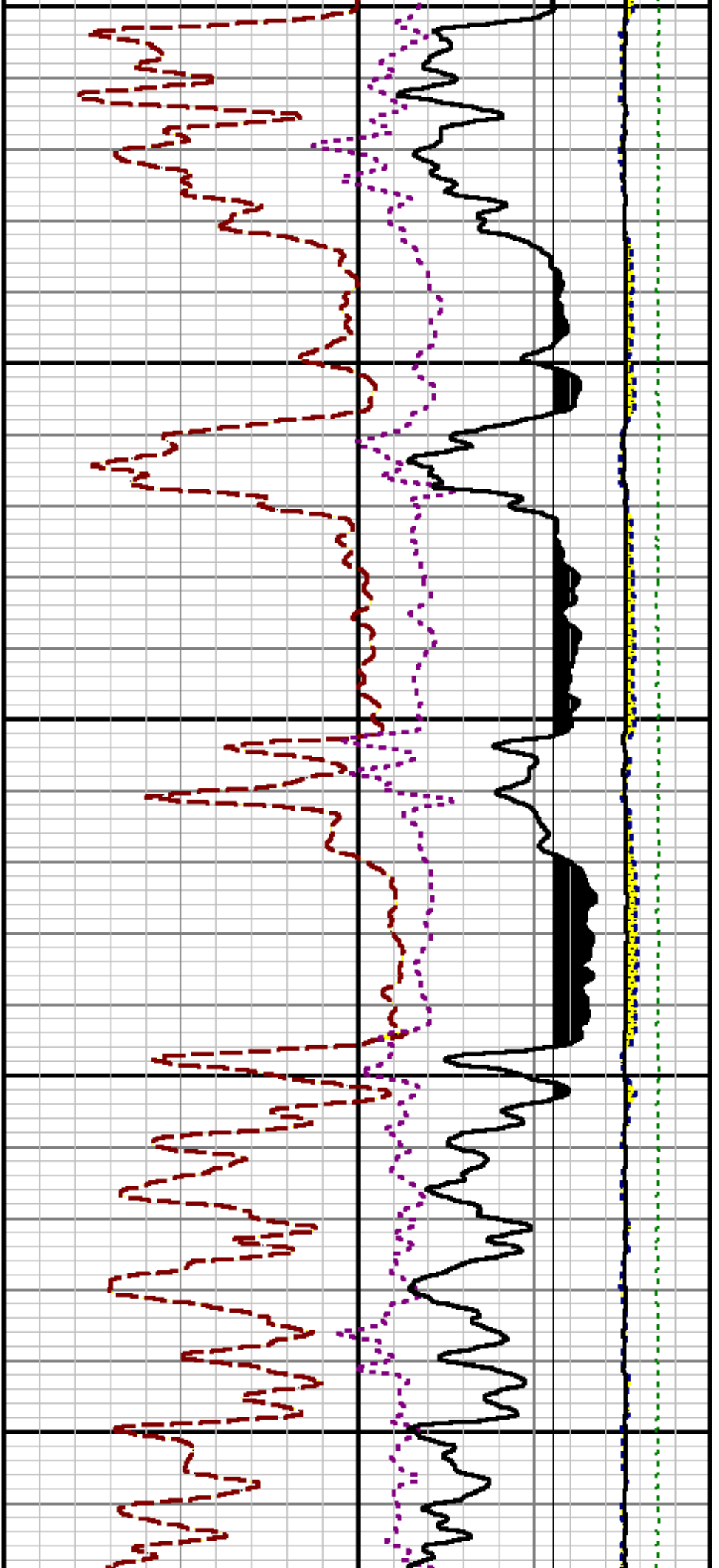
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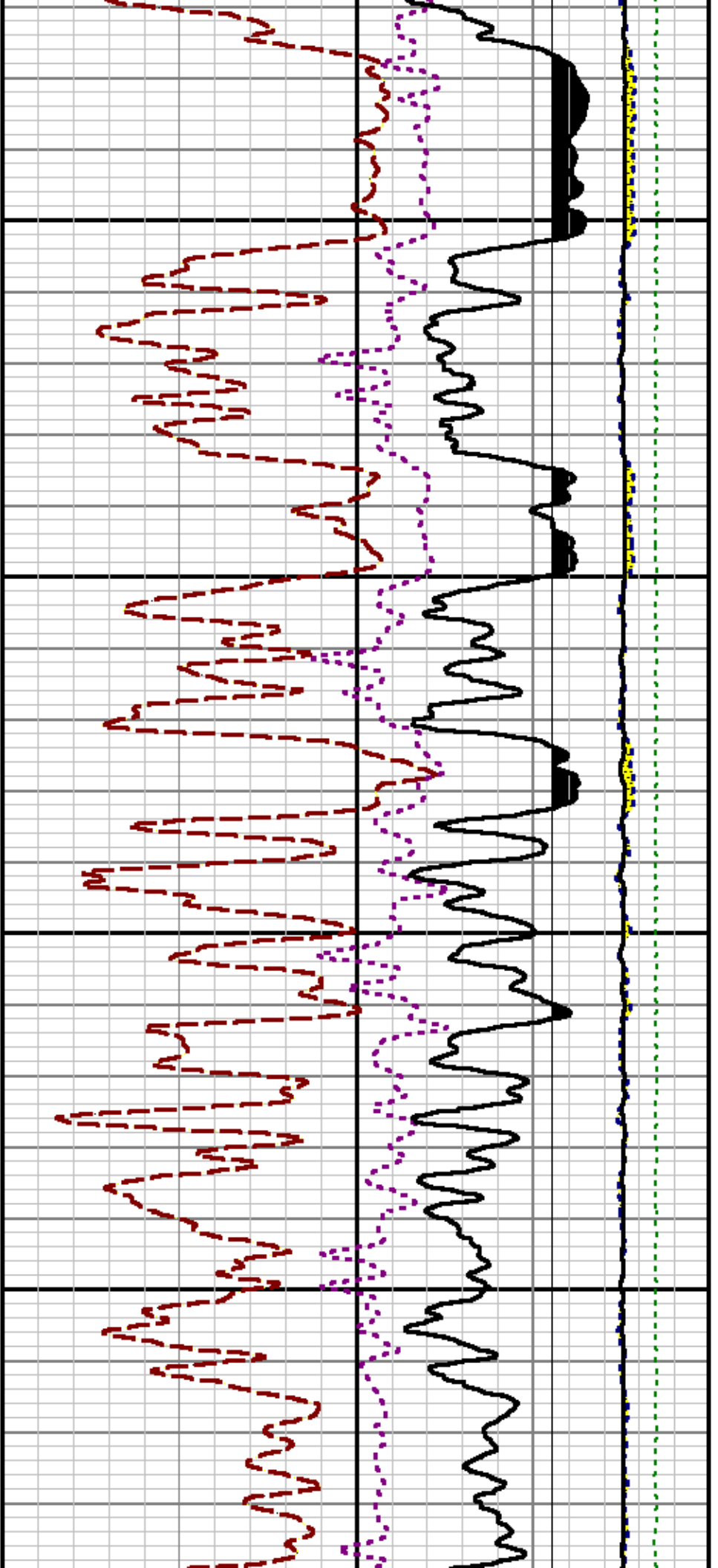
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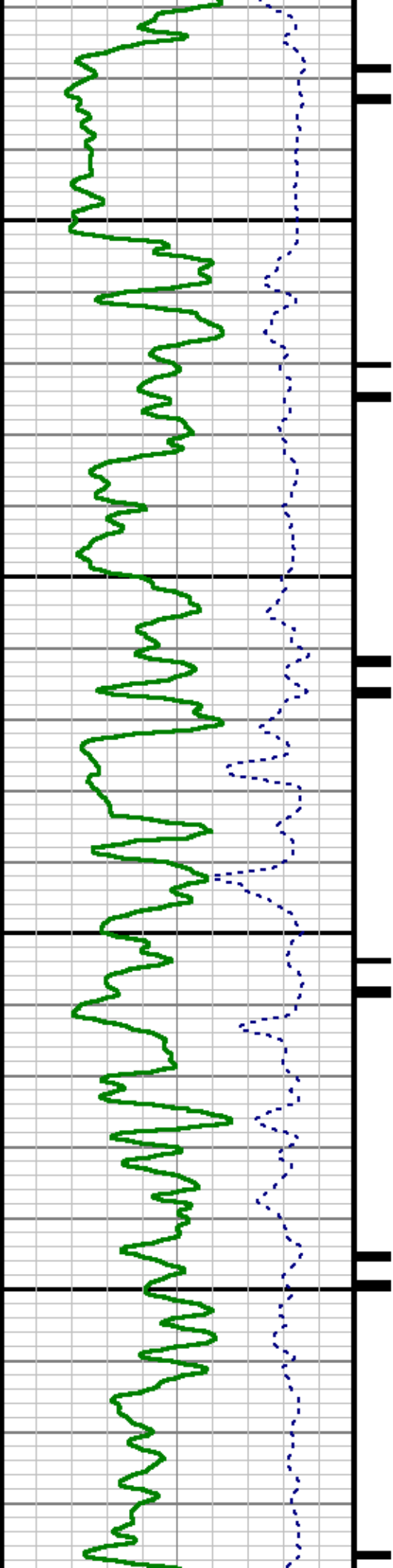


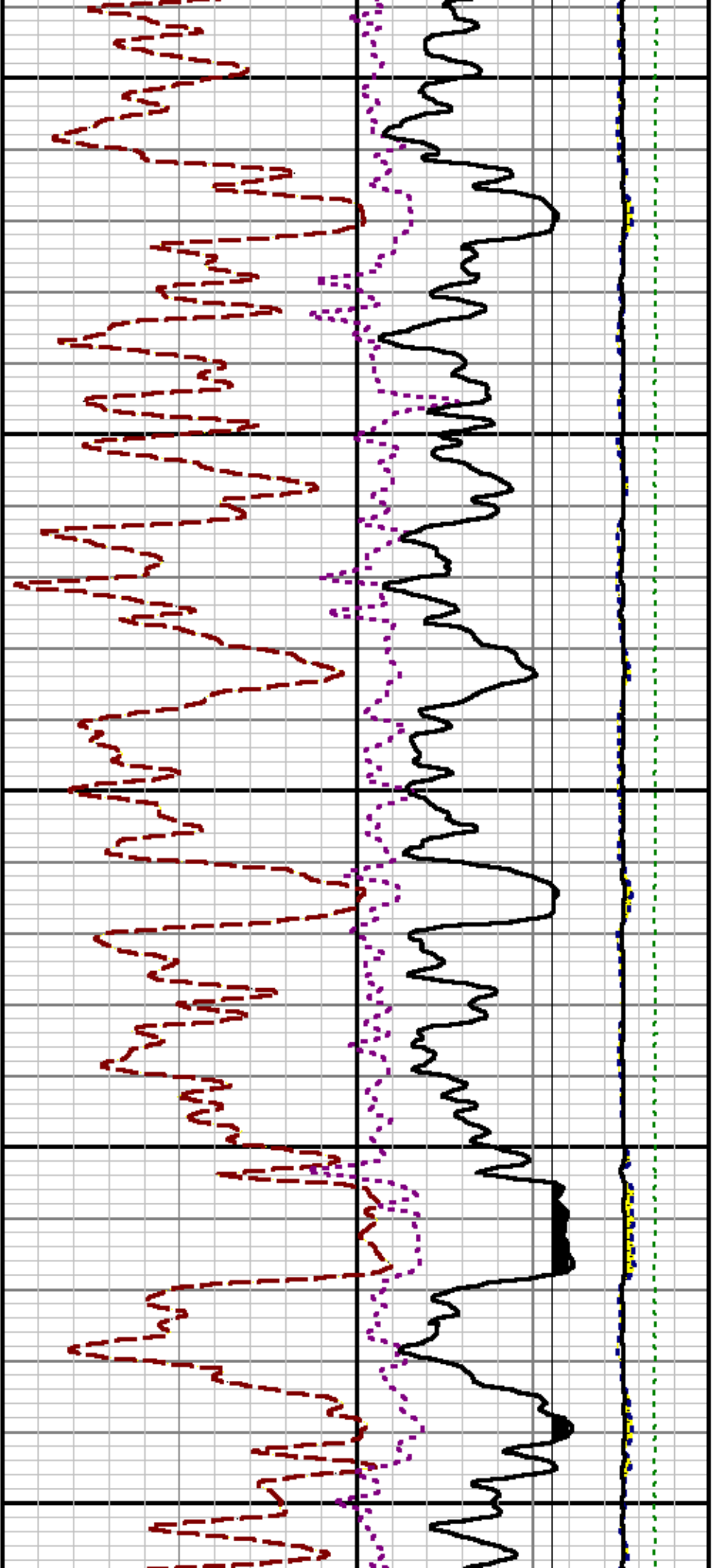




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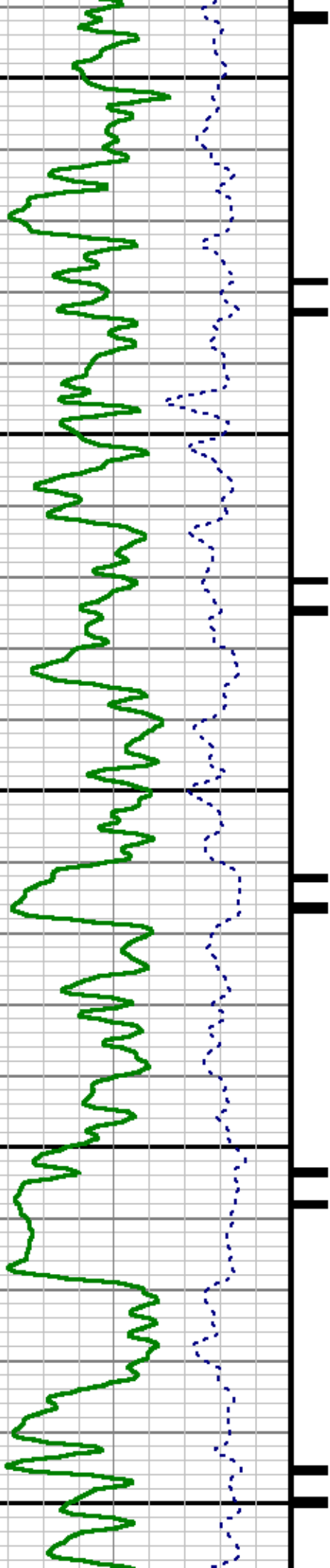
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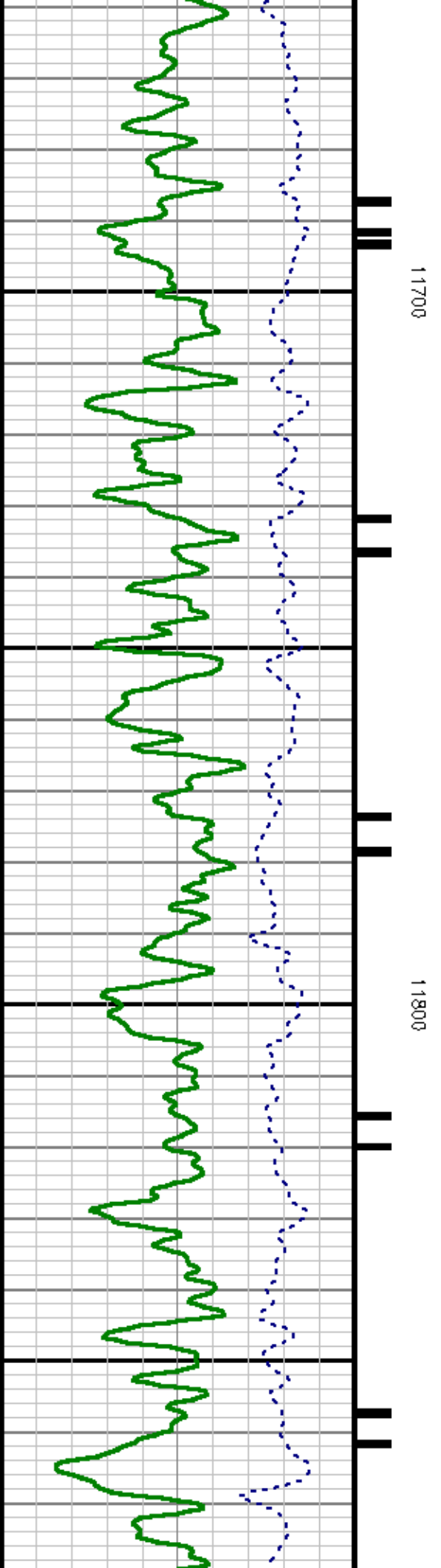
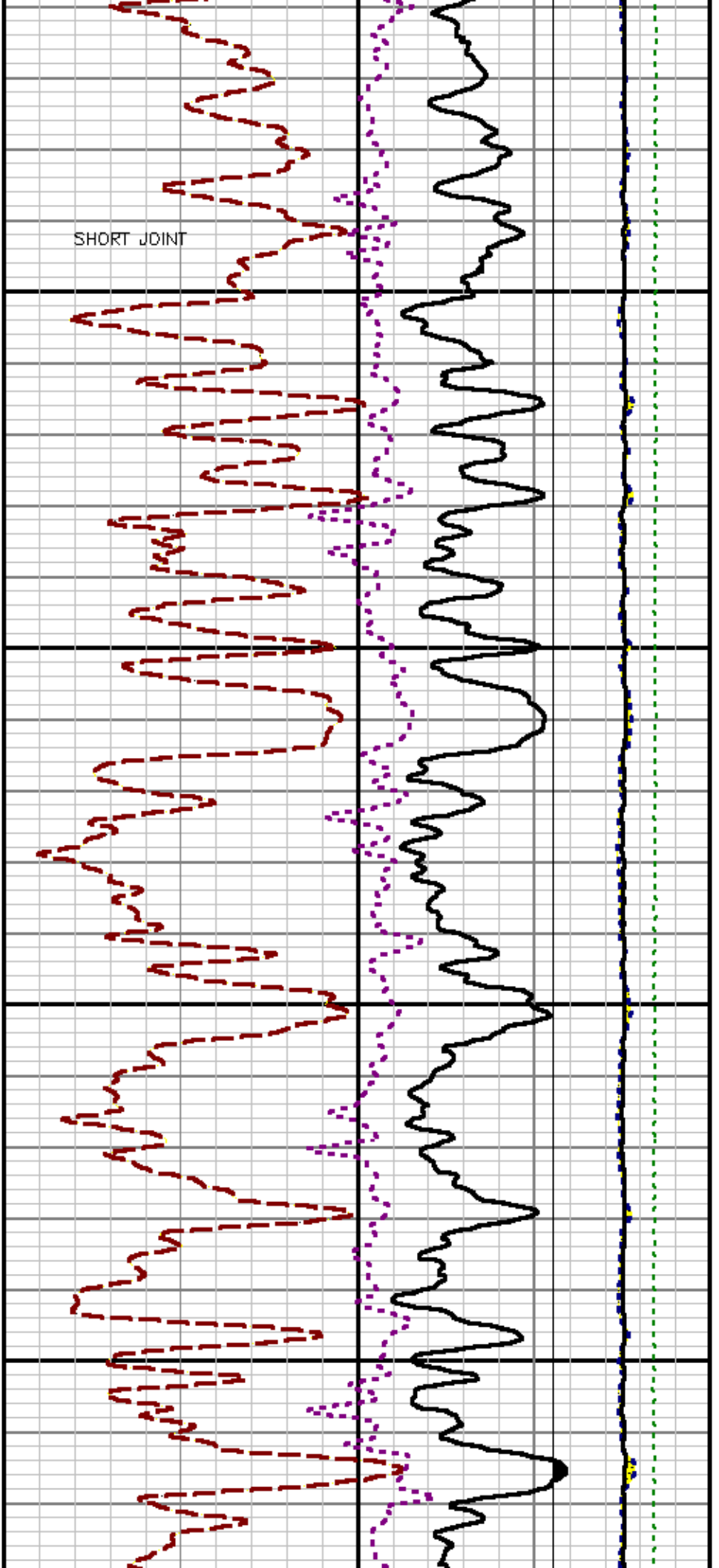


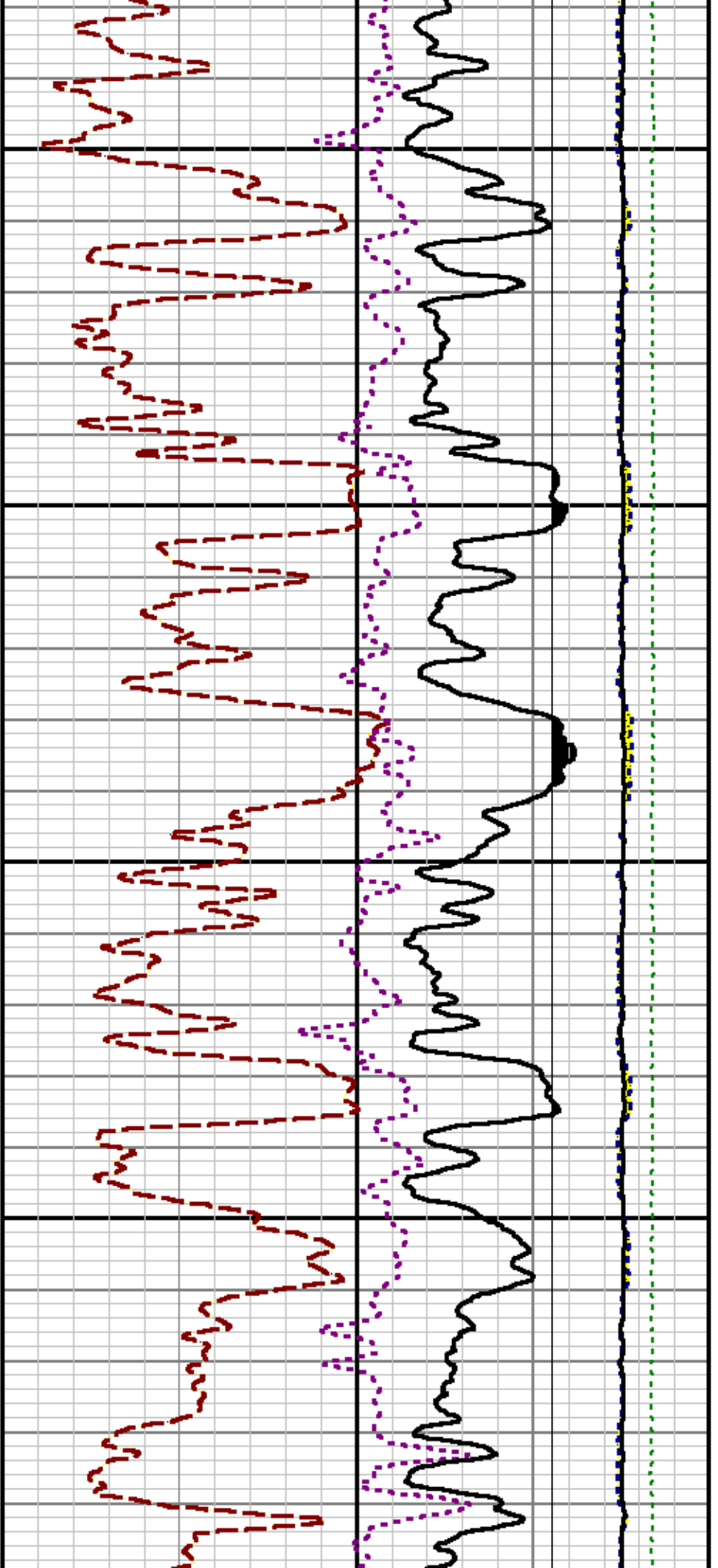


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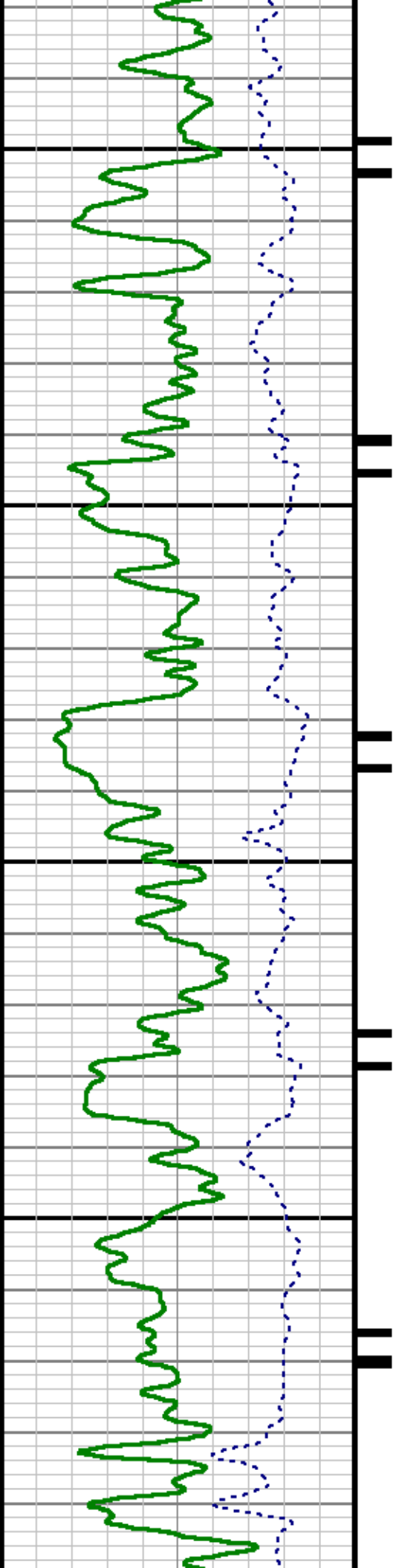


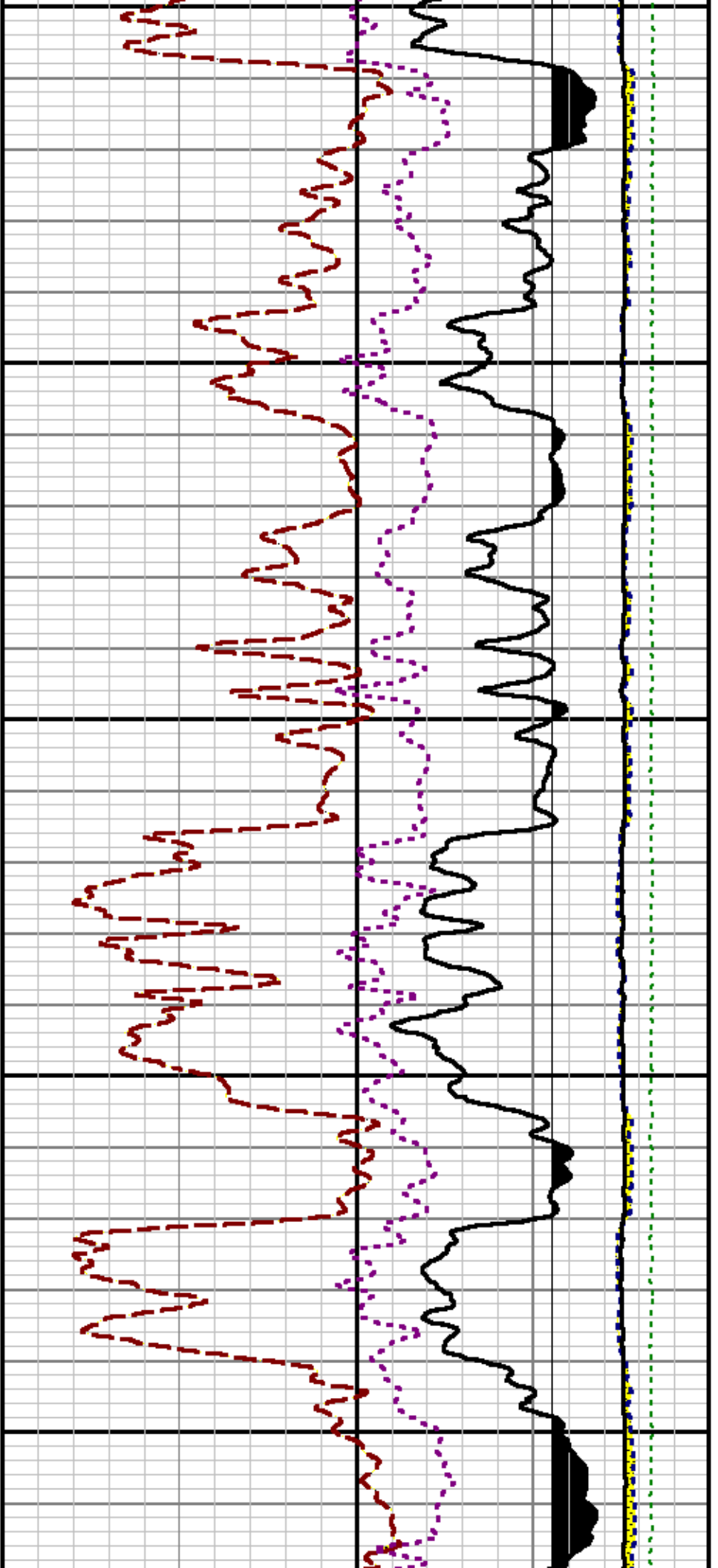


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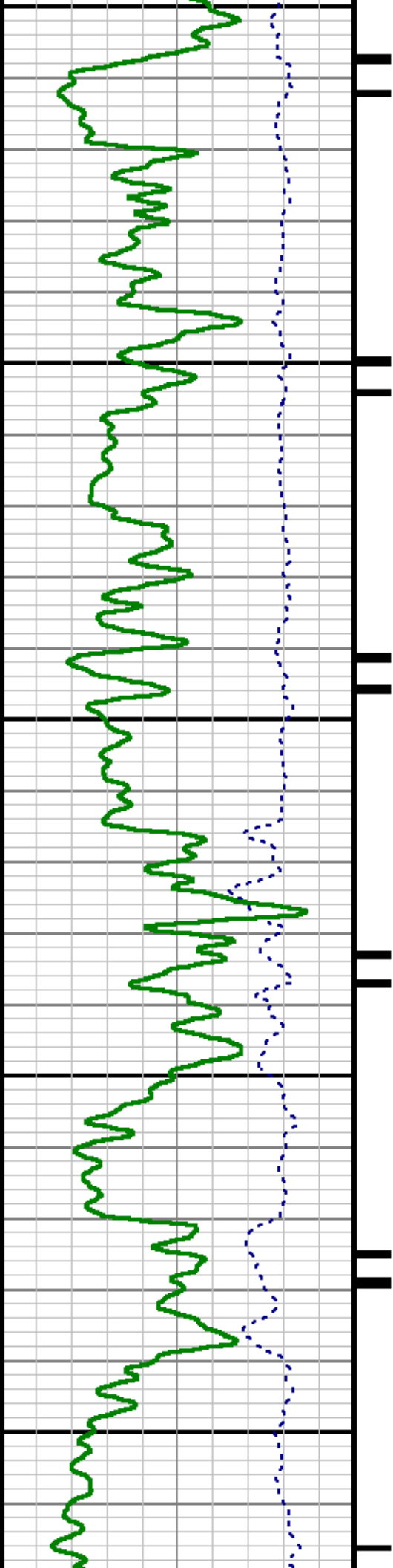


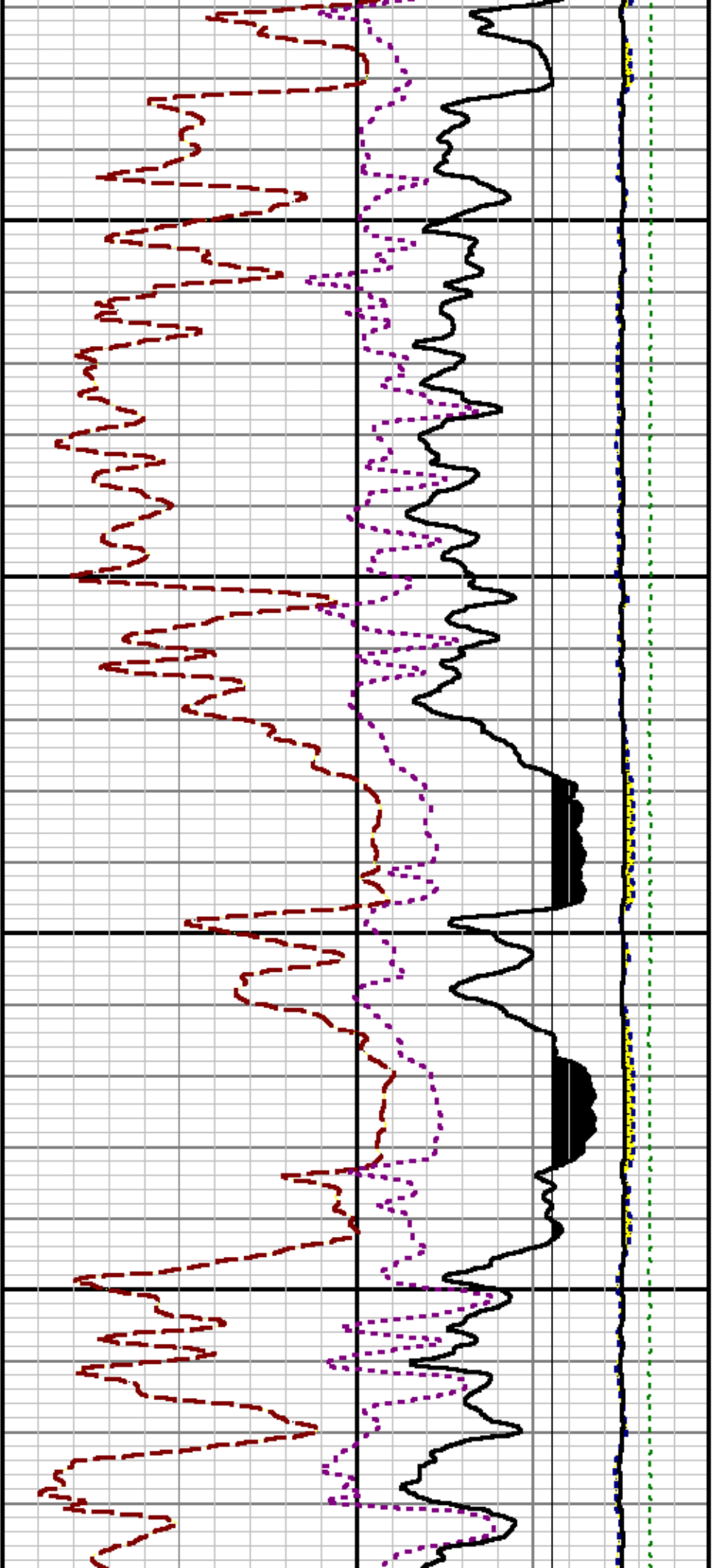


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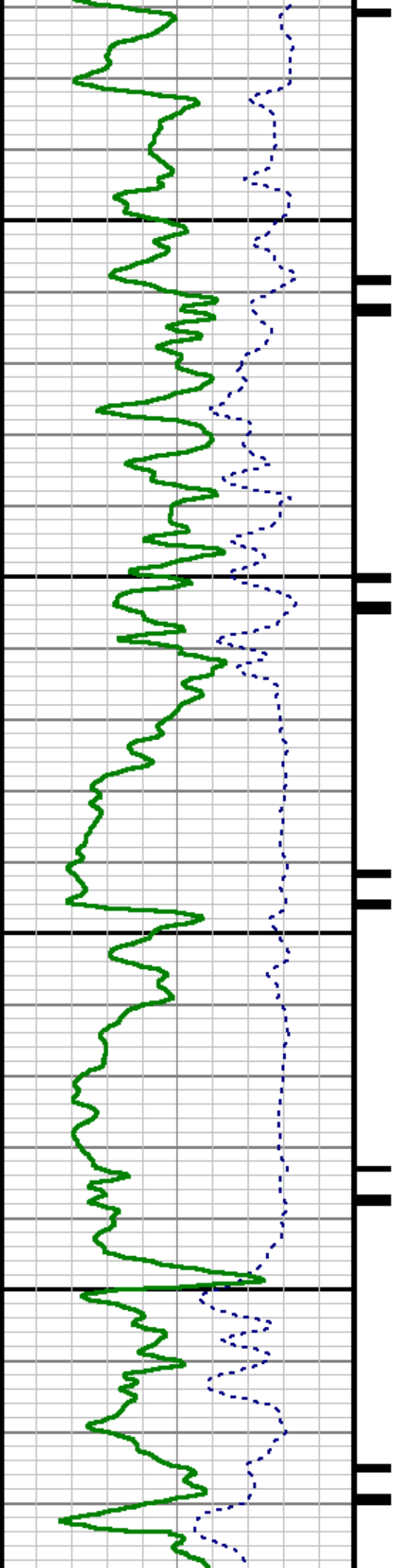
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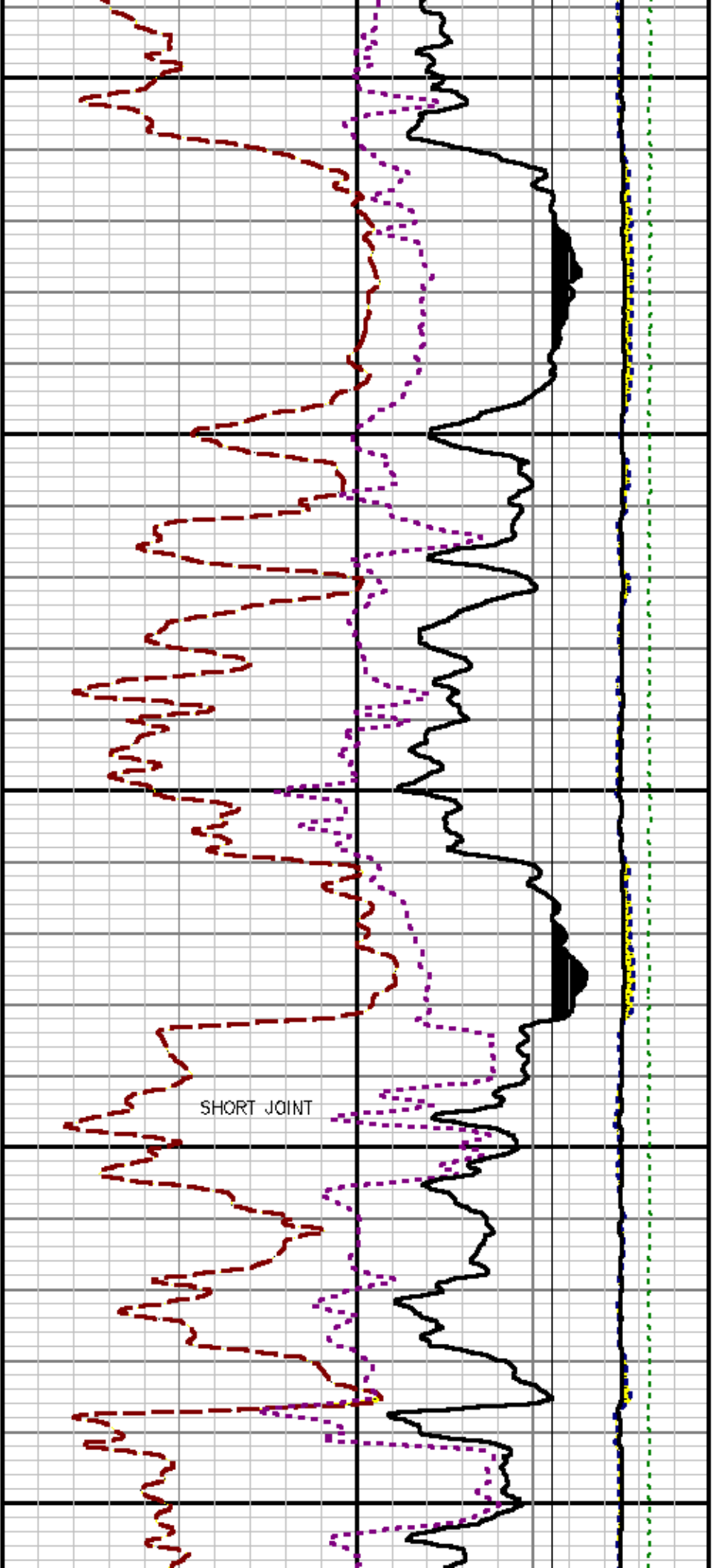


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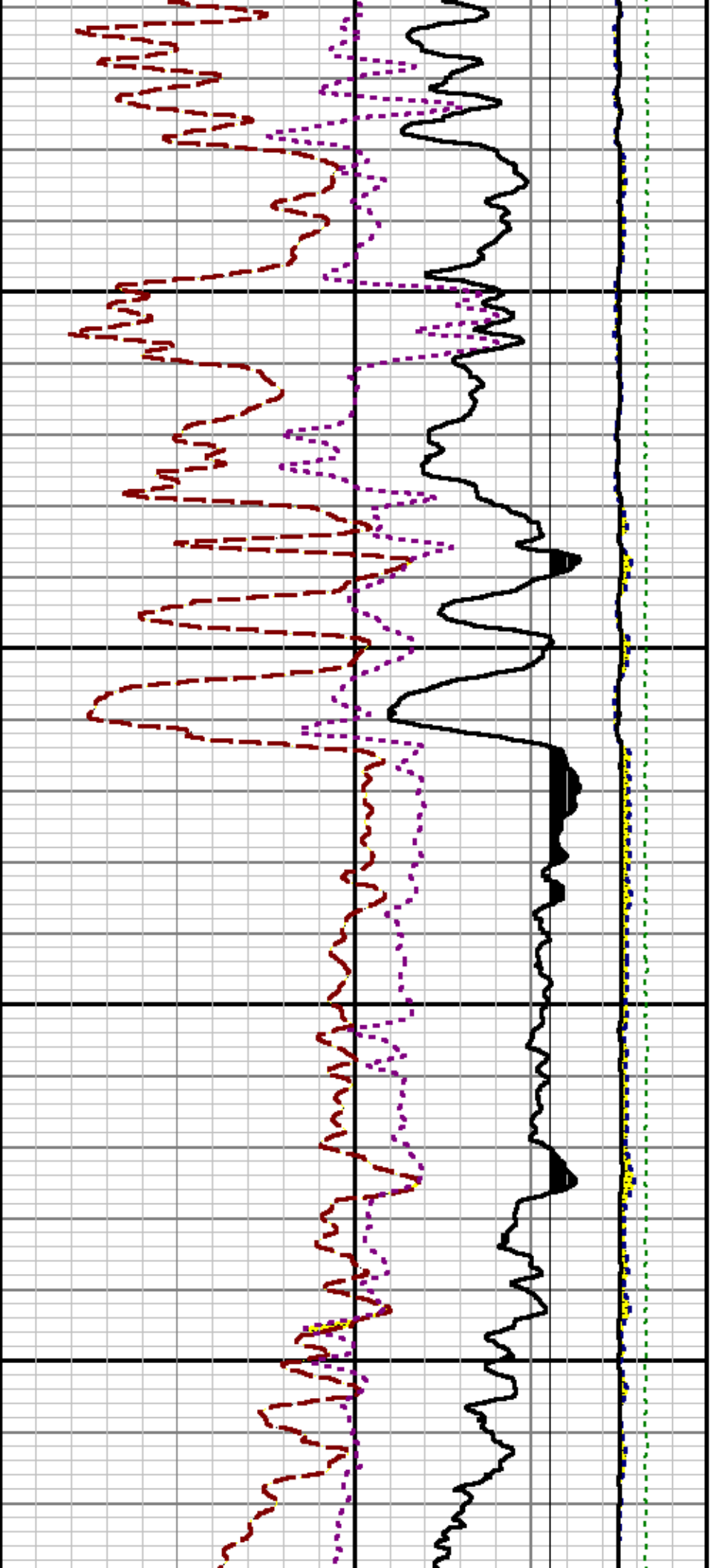


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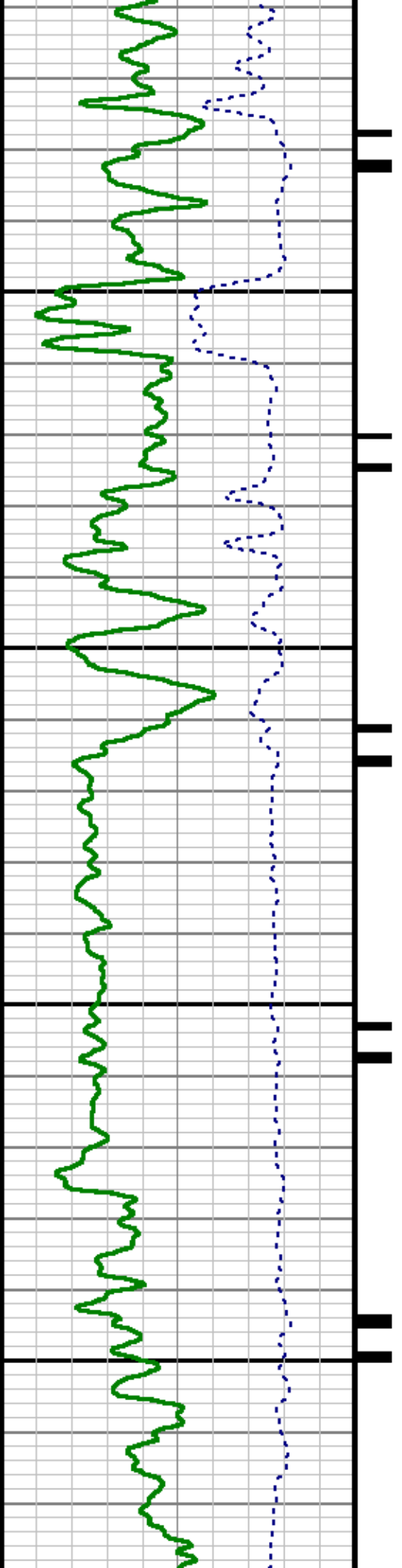
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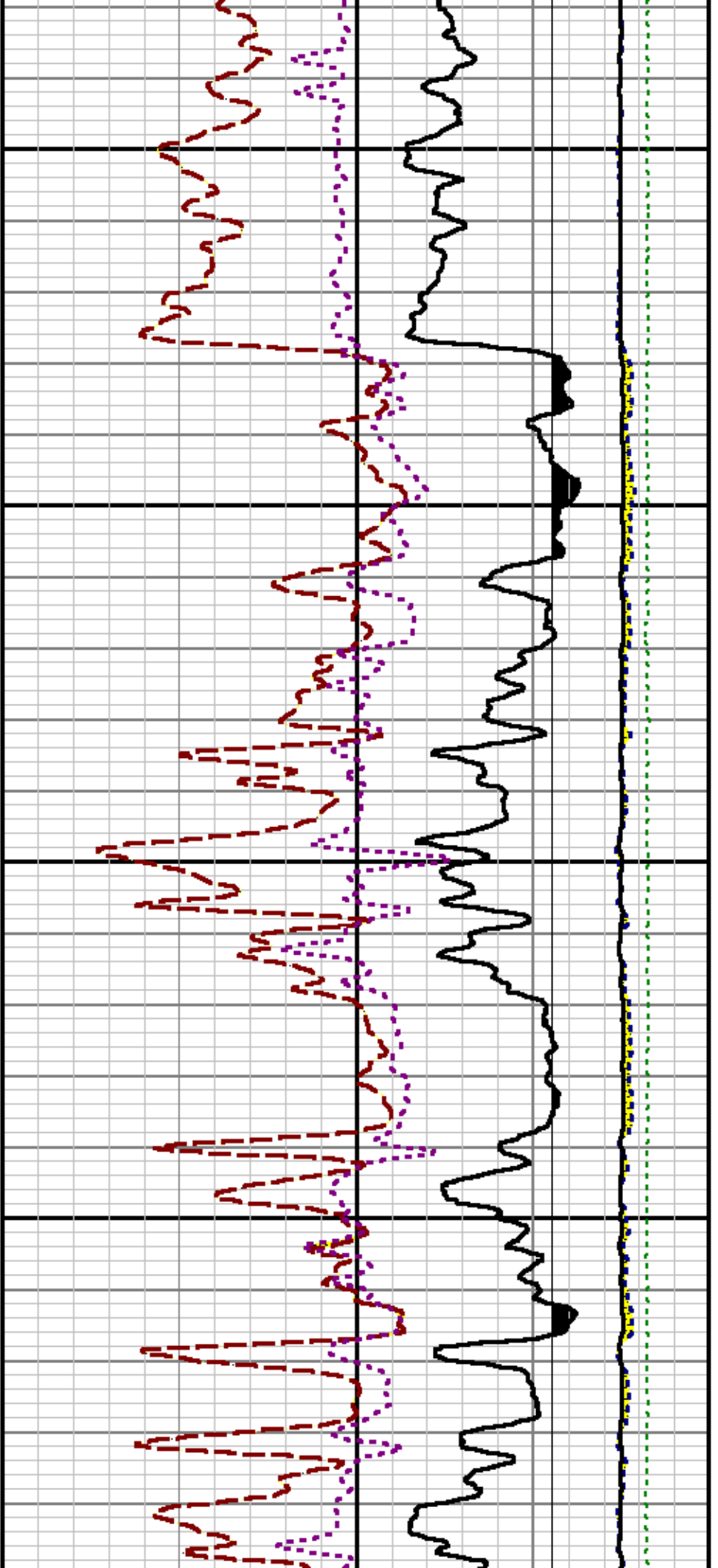




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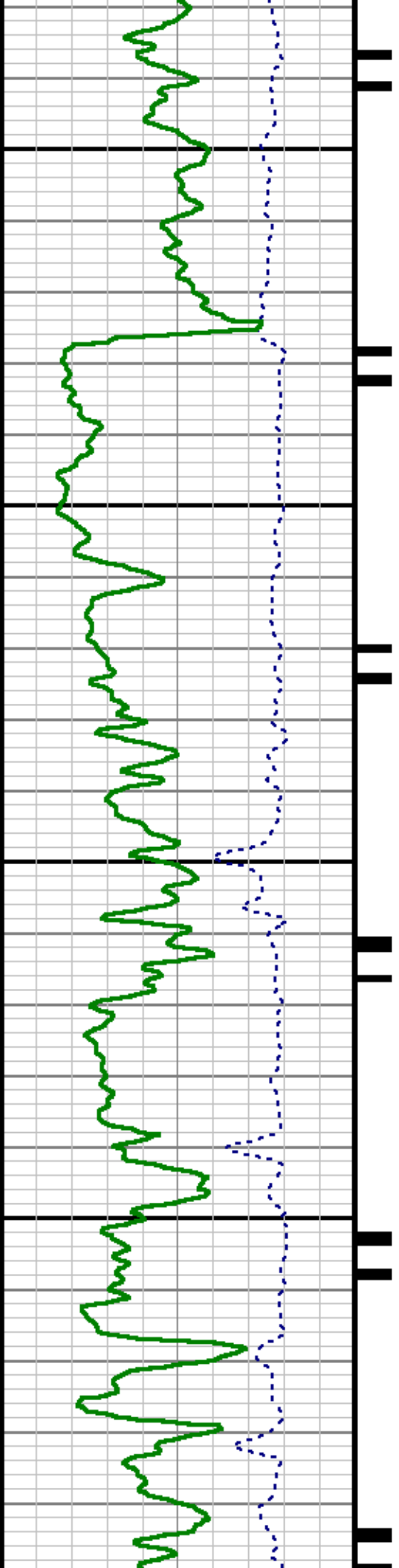


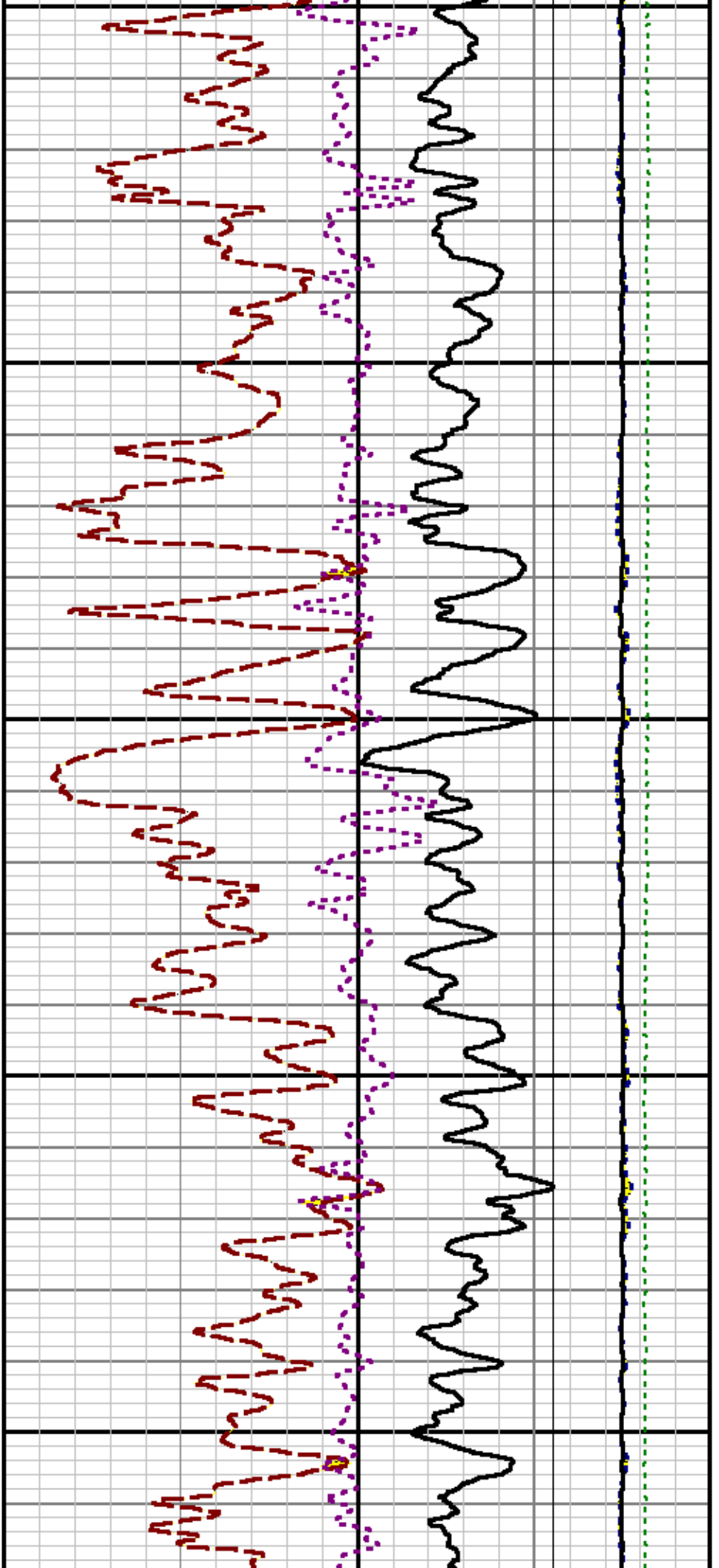


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13100

13

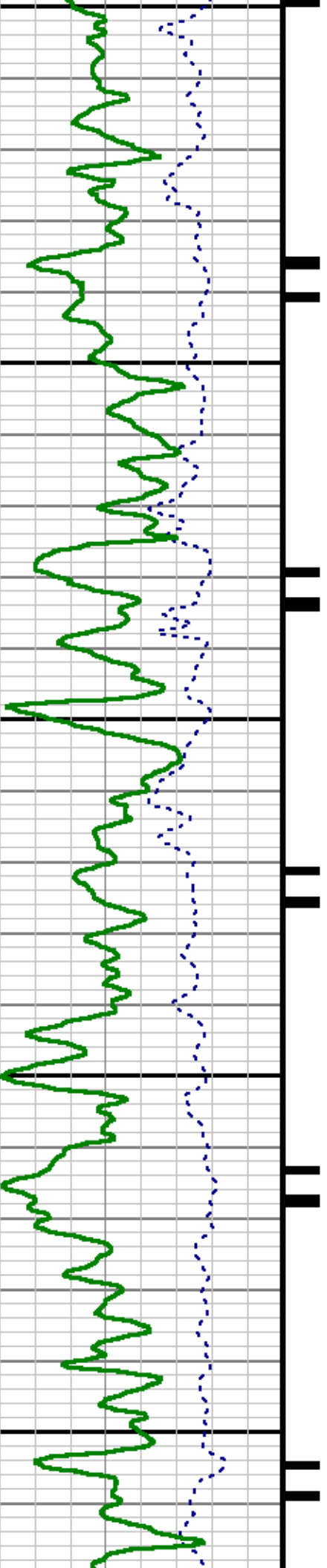


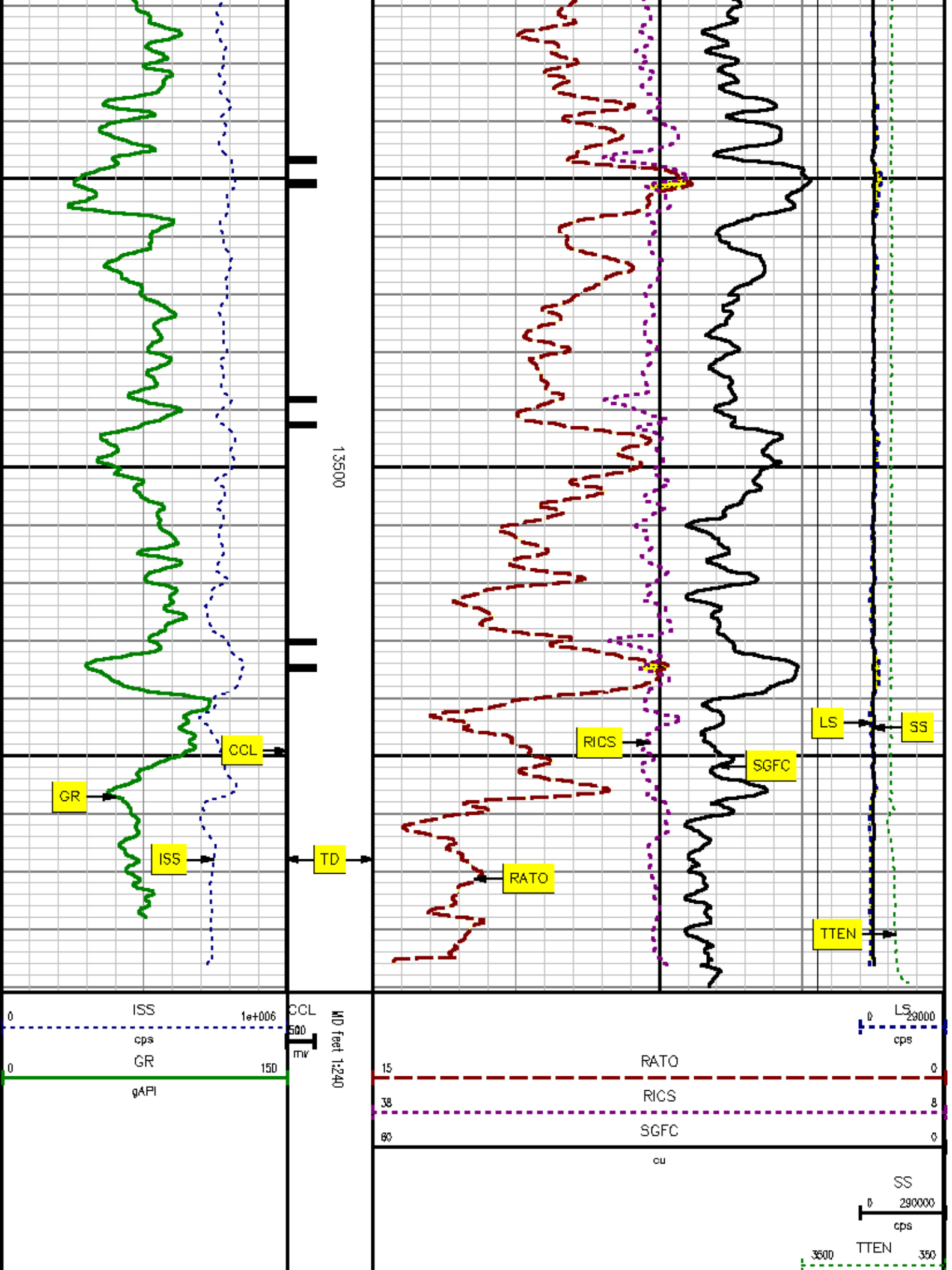


200

13300

13400





# *REPEAT SECTION*

## SPL PROCESSING

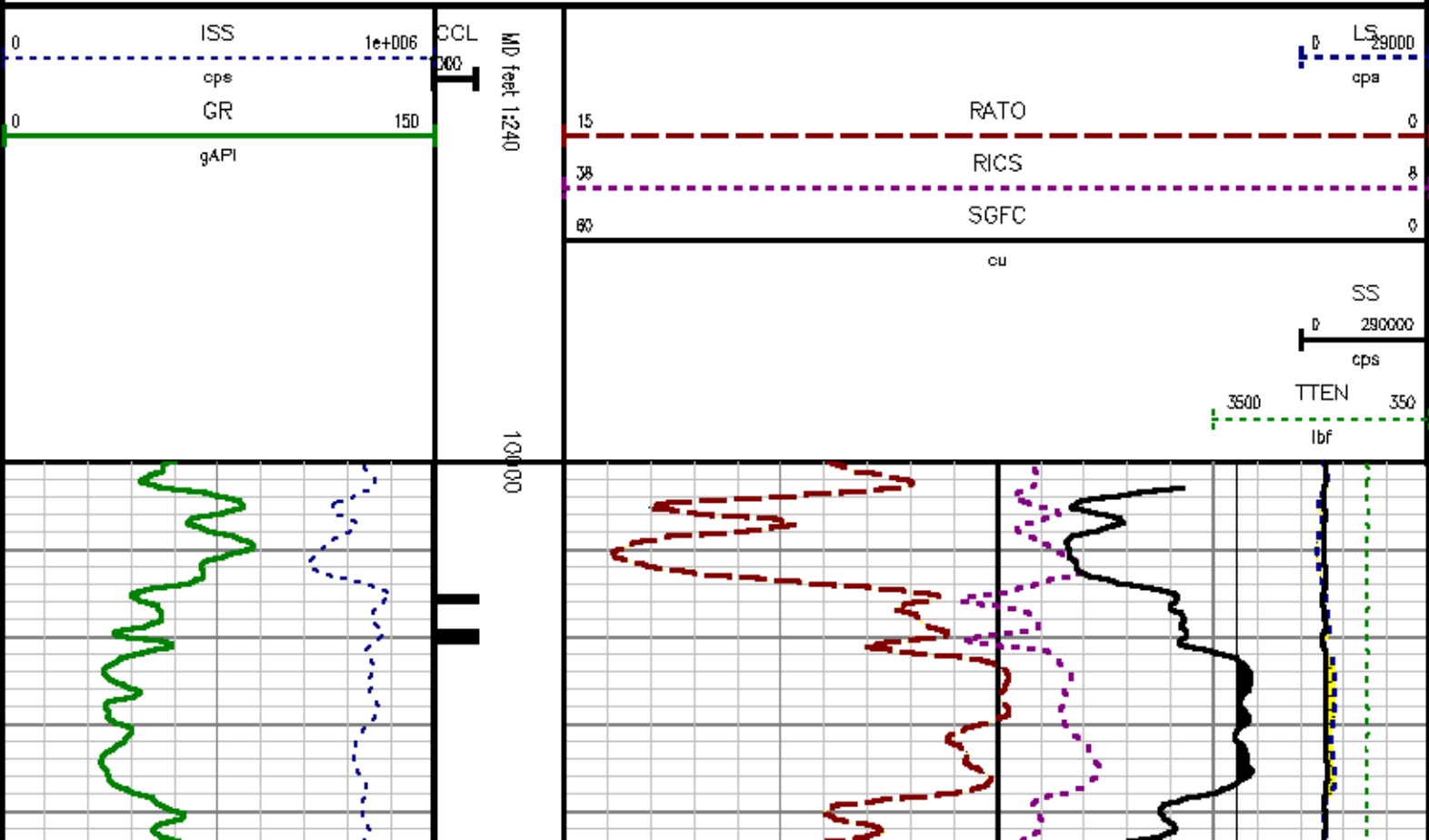
MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
PNC Porosity	Borehole	Cased		10000.562	10499.750
PNC Porosity	Borehole Size	6.125	inch	10000.562	10499.750
PNC Porosity	Casing Size	4.500	inch	10000.562	10499.750
PNC Porosity	Gas Filled	Non Gas Filled		10000.562	10499.750
PNC Porosity	Matrix	Sandstone		10000.562	10499.750

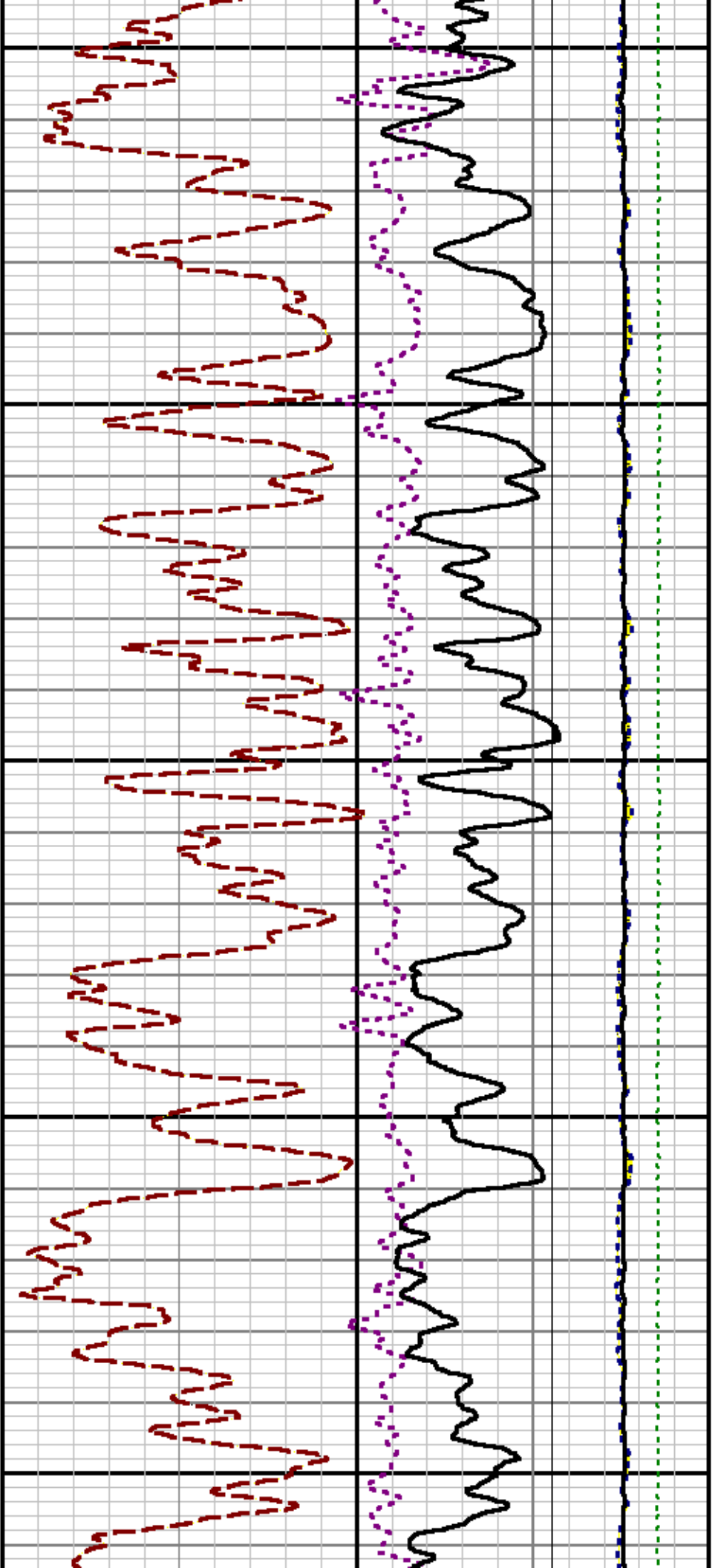
## DEPTH OFFSETS (for Acquired Curves)

SERIES	DEPTH OFFSET	ACQUIRED CURVES					
8248EA	-14.478	FLTM					
8248EA	-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	RICK	SDA3
		SDL3	SGA3	SGL3	STA3	XS	ASPEC3
		AMB3	AMF3	CHF3	IXSC	IXSN	RAT023
		RICKC	RIN13C	RIN23	RIN23C	SD3D	SG3D
		SGB3	SGF3	WDTH3	CXSR	IXSR	XSR
		RICKR					
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	RTWO23	SDA2
		SDL2	SGA2	SGB2	SGF2	SGK2	SGL2
		STA2	ASPEC2	ILSC	ILSN	WDTH2	RICLC
		CLSR	ILSR	LSR	RICLR		
8281XA	0.000	CPR5	HVC1Q0	WV	SEQ	SEQ1	AMA1
		AMB1	AME1	AMF1	AML1	BKS	CHF1
		GSS	COORB	COORF	CPT1Q0	CPT1Q2	CPT1Q2A
		CPT1Q2B	CPT1Q2C	CPT1Q3	CPT1Q4	CPT1Q5	ET1
		C1	C2	CF1S	CF2S	LS6	MCS1

G1	G2	GE13	GE23	ISS	MCS1
MCS1Q0	QA1	QCAL1	QM1	RATO	RAT013
RB0R	RGN1	RICS	RIN	RONE	RP0R
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	WA	WVM	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
RB0RR	RICSR	RINR	RIN13R	RONER	RP0RR
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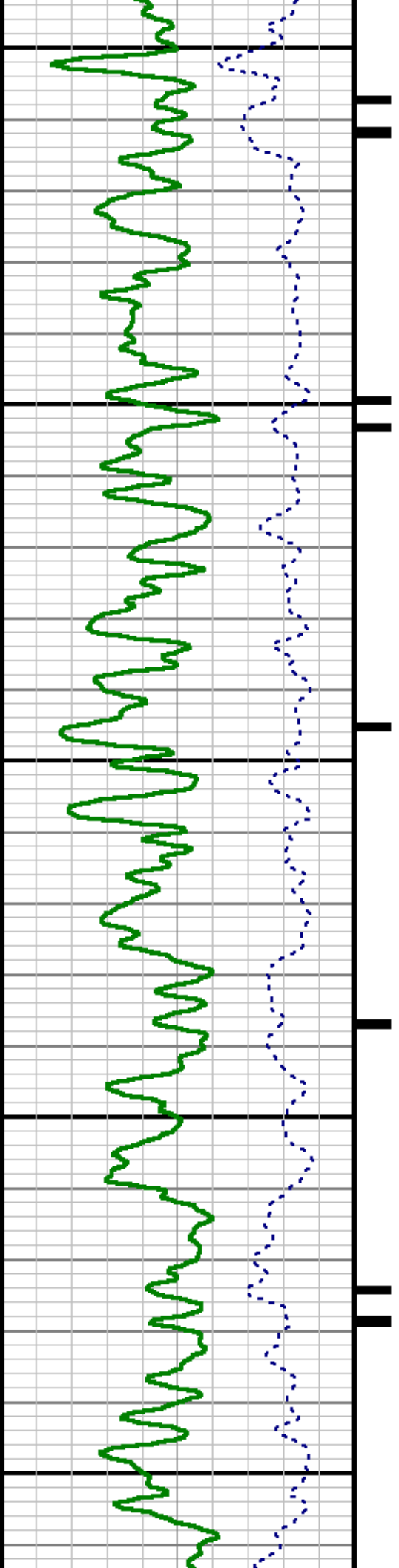
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 Plotted by : PlotMgr, v5.4.504  
 Company : EXXONMOBIL PRODUCTION COMPANY  
 Well : PCU 296-5A4  
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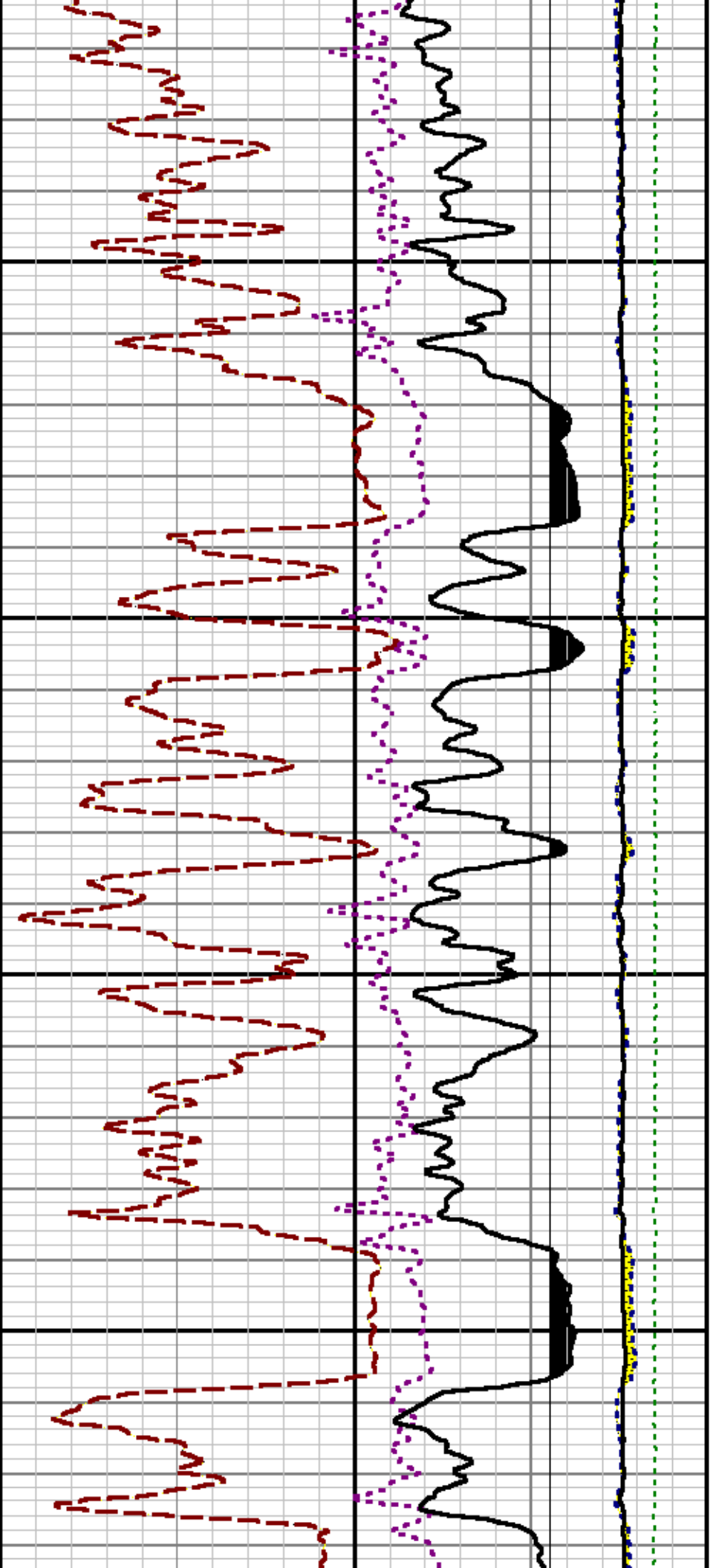




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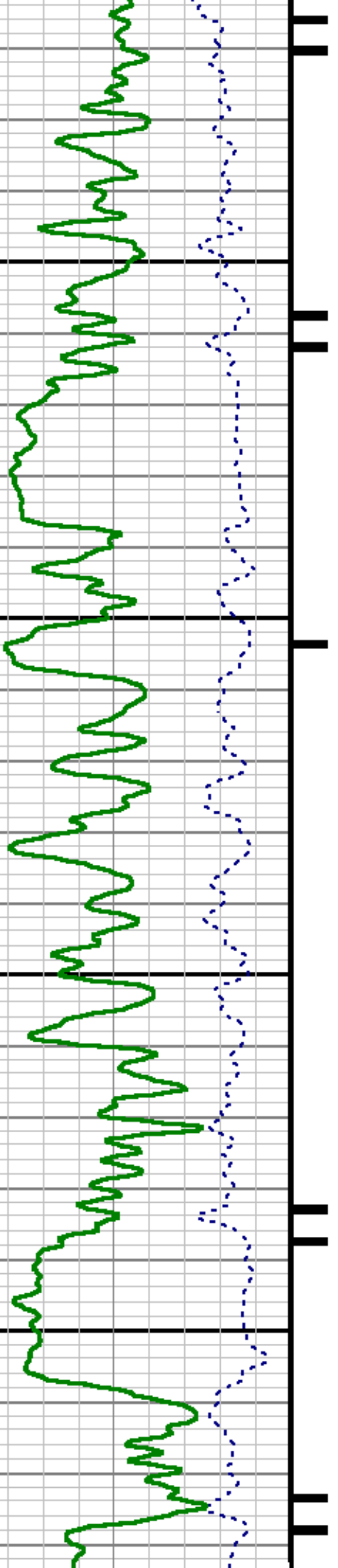
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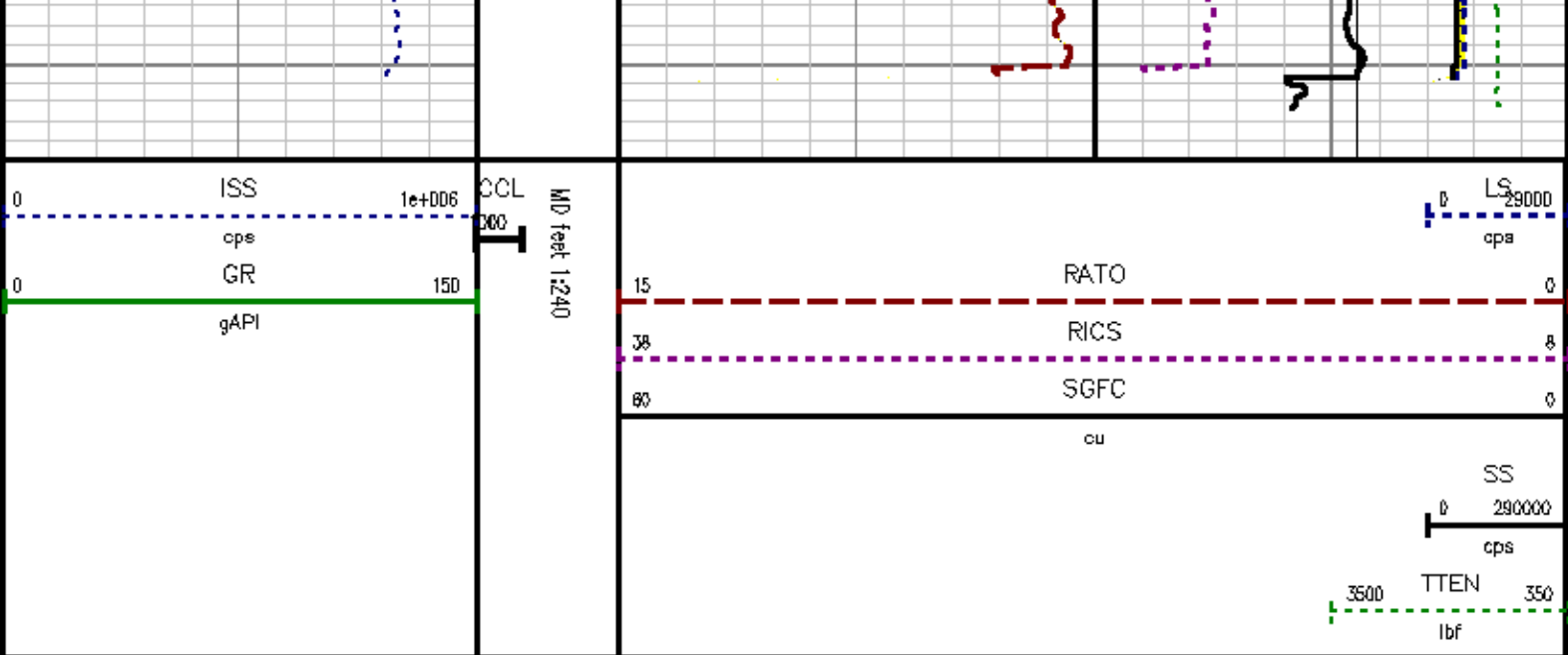


10300

10400







## CALIBRATION SUMMARY

## GAMMA RAY

Calibration File: C:\case\calver\GR\636J1.cal

### CALIBRATION SUMMARY

DATE/TIME PERFORMED:		Mon Jun 20 16:05:41 2011		TOOL SERIES:		2812LA		ASSET:		636		SEQ:		J1	
Calibrator #	Background [cps]	Calibrator On [cps]	Multiplicative	Background [api]	Calibrator On [api]	Differential [api]									
52K DA612	53.71	281.53	0.922	49.51	259.51	210.00									

Verification File: C:\case\calver\GR\636J1.VP

### PRIMARY VERIFICATION

DATE/TIME PERFORMED:		Mon Jun 20 16:10:11 2011		TOOL SERIES:		2812LA		ASSET:		636		SEQ:		J1	
Calibrator #	Background [cps]	Calibrator On [cps]	Multiplicative	Background [api]	Calibrator On [api]	Differential [api]									
52K DA612	54.56	280.29	0.922	50.29	258.36	208.07									

## PNC

Calibration File: C:\case\calver\PNC\753J11.cal

SEQ: JU

Source #

8281AA 11710723

	ISS	RBOR		RIN ISS/ILS		RIN13 ISS/IXS		RICS ISS/CSS		RATO SS/LS		RTWO SS2/LS		RONE CSS/CLS	
Raw Data	821620	1.44		4.46		29.62		13.94		10.26		3.65		3.87	
		1.42	1.45	3.55	5.21	22.20	32.10	10.99	16.34	10.06	11.10	3.57	3.95	3.76	4.22
Fit Quality %		0.07		1.23		1.24		0.21		0.93		0.93		0.95	
Reduced	1415152	1.44		4.39		29.17		13.96		10.10		3.59		3.81	
		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

—29.85'

TELEMETRY / CCL (8248EA)

SONDEX GAMMA RAY (2812LA)

RESERVOIR PERFORMANCE MONITOR (8281XA)

CCL MP 21.76'

MP 19.32'

XLS DETECTOR 12.69'

LS DETECTOR 9.72'  
SS DETECTOR 9.49'

0.00'

Total Length: 29.85'  
Total Weight: Not Available  
Max Diameter: 0' 1.70"



Company EXXONMOBIL PRODUCTION COMPANY

Well PCU 296-5A4

Field PICEANCE CREEK

County RIO BLANCO State COLORADO

File No:

CH039001

API No:

06103112450000

Location:

SHL: 734' FNL & 664' FNL

Elevations

KB 7339.2 ft

DF 7338.2 ft

GL 7309 ft

SEC: 5 TWP: 2S RGE: 96W

Baker Atlas

CASE