



# RESERVOIR PERFORMANCE MONITOR

**Baker Atlas**

File No: **CH0372025**  
 Company: **EXXONMOBIL PRODUCTION COMPANY**  
 Well: **POU 197-36A5**  
 Field: **PIGEANCE CREEK UNIT**  
 County: **RIO BLANCO** State: **COLORADO**  
 API No. **05103111840000**

Location: **1849' FSL & 2813' FTL**  
 SEC: **36** TWP: **19** RGE: **97W**  
 Other Services: **BOND**

Permanent Datum: **G.L. Elevation 7114 ft**  
 Log Measured From: **K.B. 30 ft Above P. O.**  
 Drill Measured From: **KELLY BISHING**  
 Elevations: **KB 7144 ft, DF 7143 ft, GL 7114 ft**

Date	22-JUNE-2011
Run	ONE
Service Order	575309
Depth Driller	13529 ft
Depth Logger	13488 ft
Bottom Logged Interval	13488 ft
Top Logged Interval	7808 ft
Time Started	23:30
Time Finished	09:00
Operator Rig Time	9.5 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	to fpm
Maximum Recorded Temperature	N/A
Reference Log	BAKER ATLAS/BOND
Reference Log Date	6-22-11
Equipment	4271
Recorded By	TIM KAUFF
Witnessed By	MR. CHUCK COOPER

- 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.

Bit Size	From	To
9.875 in		
8.125 in		

Size	Weight	Grade	From	To
7 in	28 lbm/ft	P-110	SURFACE	9308 ft
4.5 in	15.1 lbm/ft	P-110	SURFACE	13529 ft

**Remarks**  
 This log is correlated to the Baker Atlas BOND log dated 6-22-11  
 The crew of 4271 Thanks You.

Run	Trip	Tool	Series Number	Serial Number	Position

1	1	RPM	8281FA	11778242	FREE
1	1	RPM	8281PA	11790525	FREE
1	1	RPM	8281EA	11774369	FREE
1	1	GAMMA RAY	2812LA	11701636	FREE
1	1	OCL	8248EA	10590814	FREE
1	1	PCM	8250EA	0000	FREE

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

SPL PROCESSING

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
PNC Porosity	Borehole	Cased		7607.500	13487.000
PNC Porosity	Borehole Size	9.875	inch	7607.500	9208.000
PNC Porosity	Borehole Size	6.125	inch	9208.000	13487.000
PNC Porosity	Casing Size	7.000	inch	7607.500	9208.000
PNC Porosity	Casing Size	4.500	inch	9208.000	13487.000
PNC Porosity	Gas Filled	Non Gas Filled		7607.500	9208.000
PNC Porosity	Gas Filled	Non Gas Filled		9208.000	13487.000
PNC Porosity	Matrix	Sandstone		7607.500	13487.000

DEPTH OFFSETS  
(for Acquired Curves)

SERIES	DEPTH OFFSET	ACQUIRED CURVES
8248EA	-14.478	FLTM
8248EA	-12.478	OCL CHV
2812LA	-9.928	GR
8281XA	-0.662	HVC300 SEQ3 AMA3 AML3 BKX CXS
		CPT300 CPT302 CPT303 CPT304 ET3 IXS
		MCS3 MCS300 QCAL3 RGN3 RICK SDA3
		SDL3 SGA3 SGL3 STA3 XS ASPEC3
		AMB3 AMF3 CHF3 IXSC IXSN RAT023
		RICXC RIN13C RIN23 RIN23C SD3D SG3D
		SGB3 SGF3 WDT3 CKSR IXSR XSR
		RICXR

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		
CPRS	HVC100	WV	SEQ	SED1	AMA1
AMB1	AWE1	AMF1	AML1	BKS	CHF1
CSS	COORB	CORF	CPT100	CPT102	CPT102A
CPT102B	CPT102C	CPT103	CPT104	CPT105	ET1
G1	G2	GE1S	GE2S	ISS	MCS1
MCS100	QA1	QCAL1	QM1	RATO	RAT013
RBOR	RGN1	RICS	RIN	RONE	RPOR
RTWO	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		

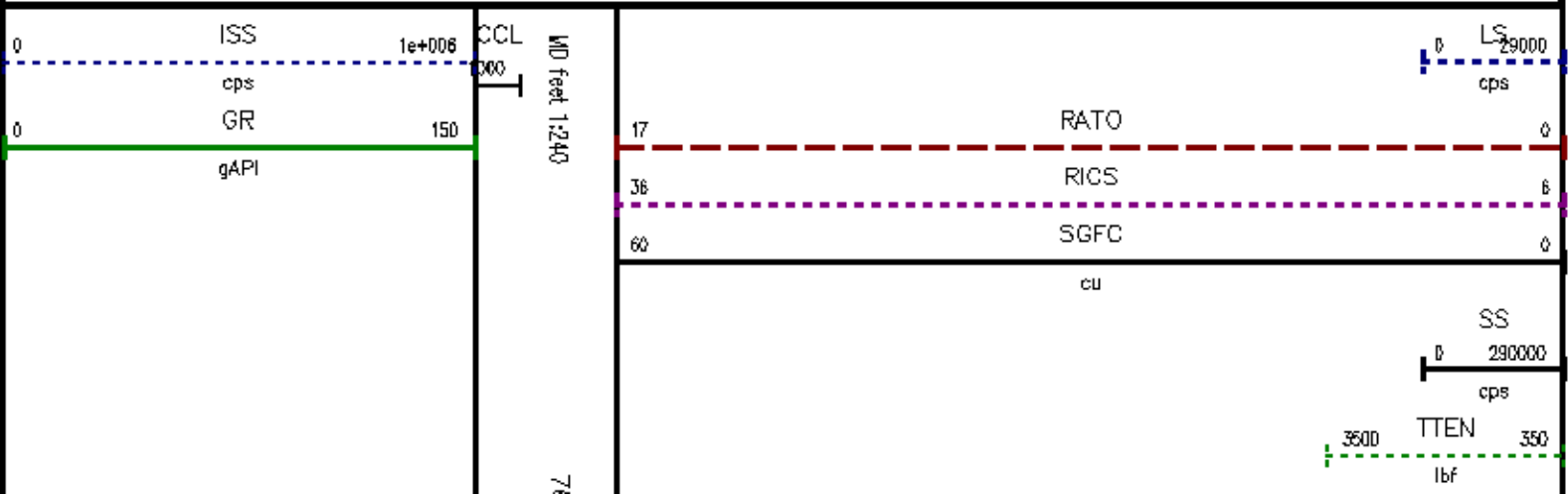
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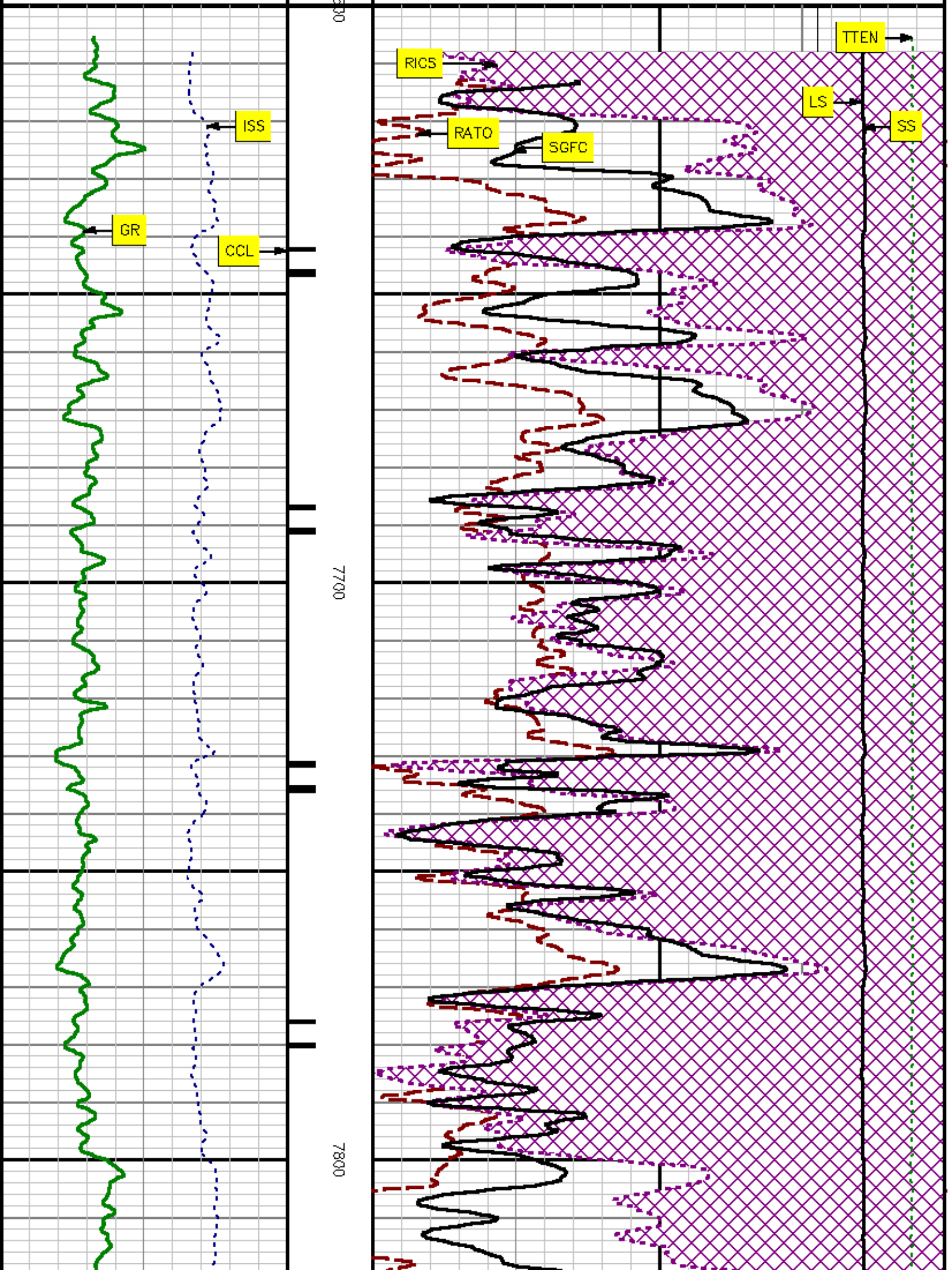
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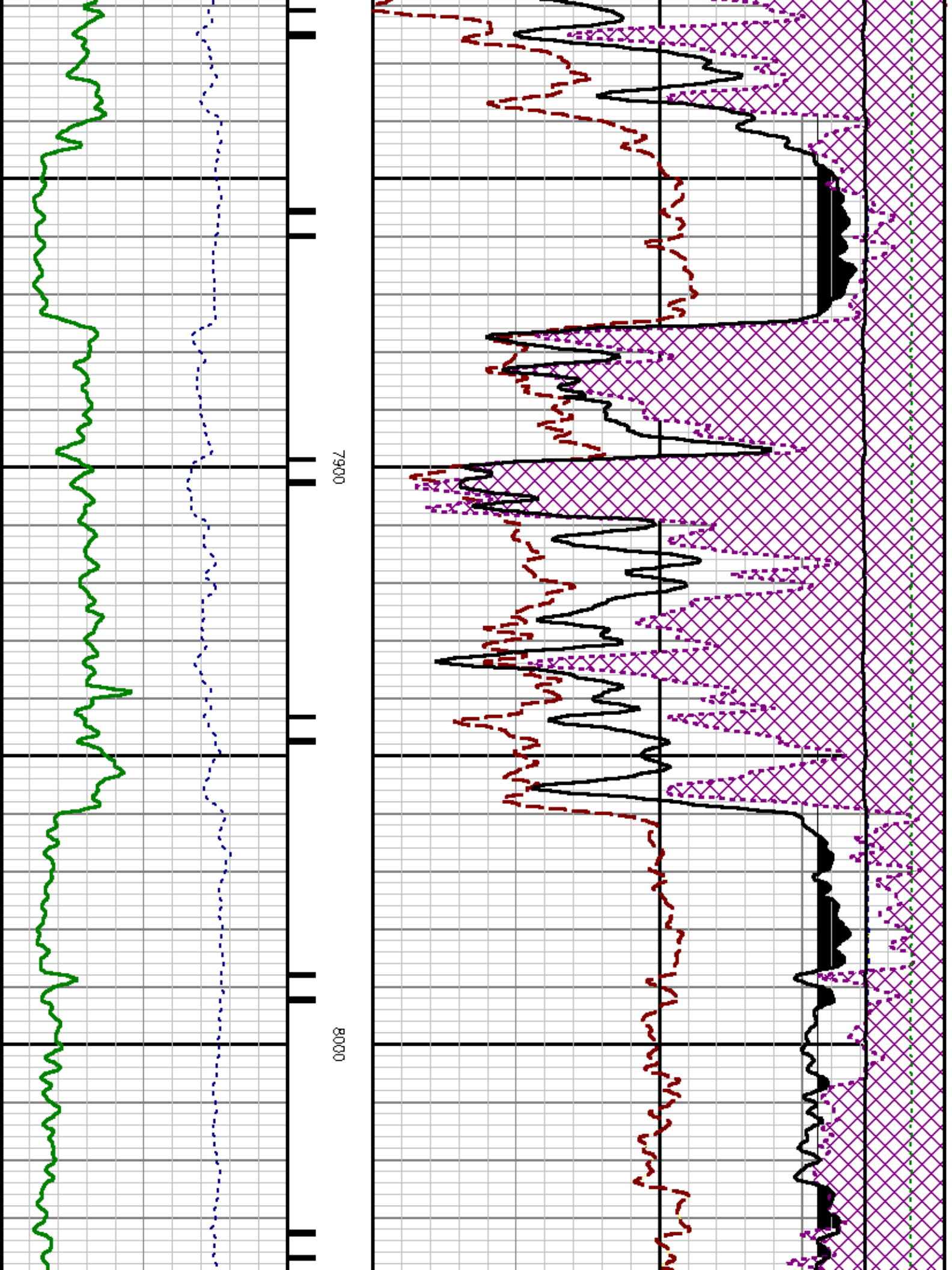
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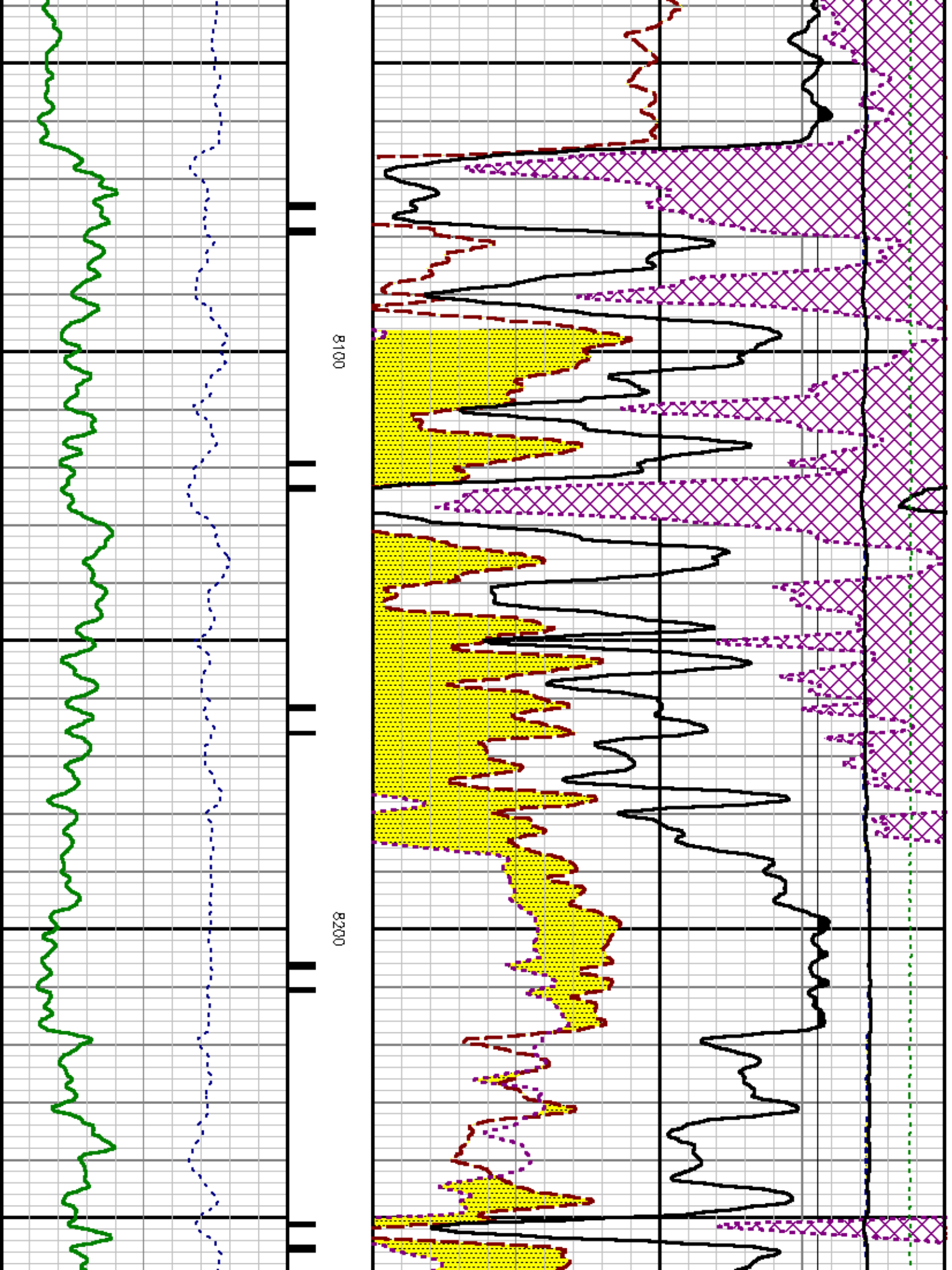
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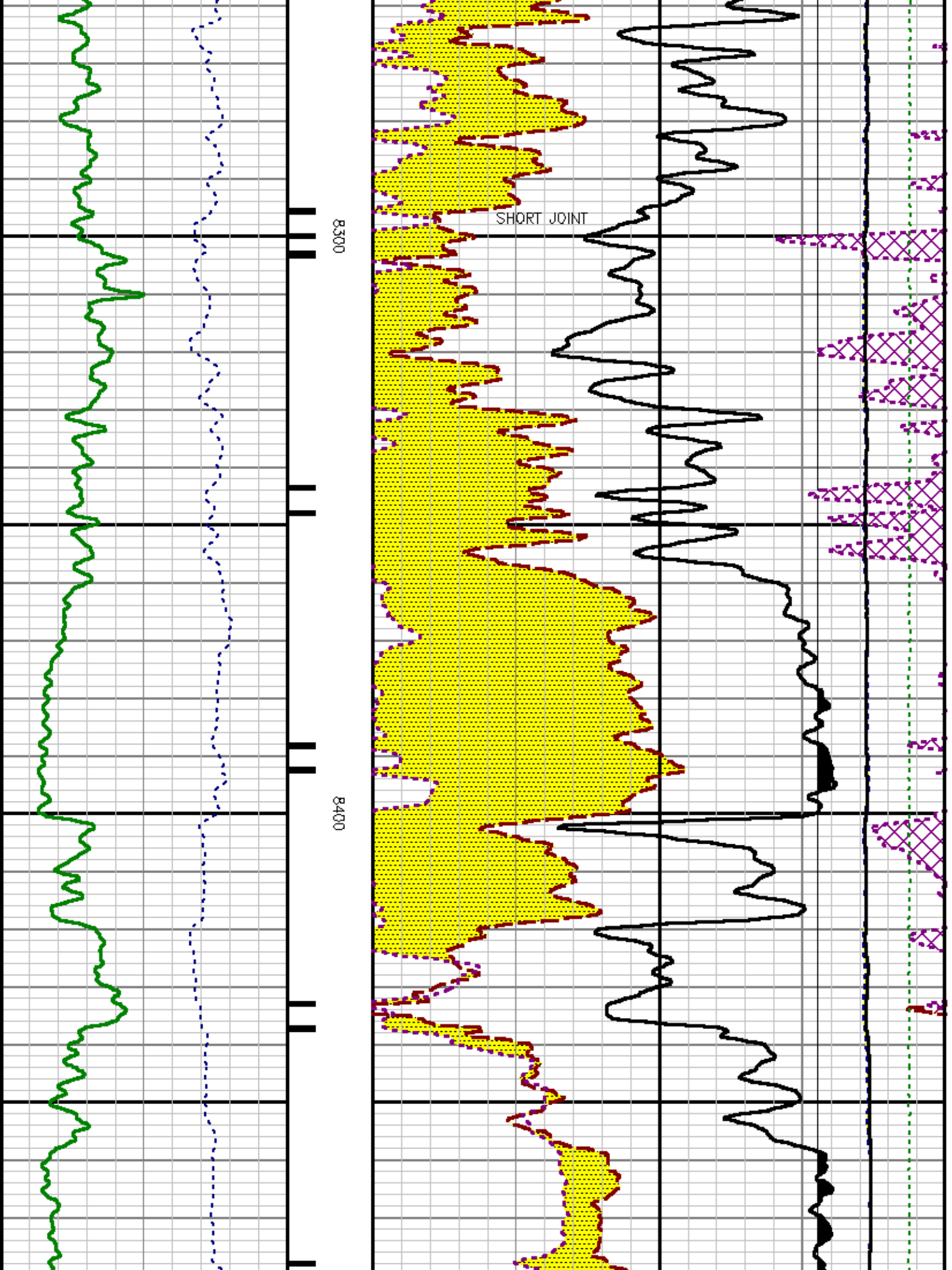
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 Plotted by : PlotMgr, v5.4.5D4  
 Company : EXXONMOBIL PRODUCTION COMPANY  
 Well : PCU 197-36A5  
 File Name : D:\WELLDATA\5RPM\MAIN.xtf  
 Mode : PlotMgr 5.4.5D4  
 Interval : 7600.00 - 13467.00 feet UP  
 Created : 6/23/2011 8:38:55 AM

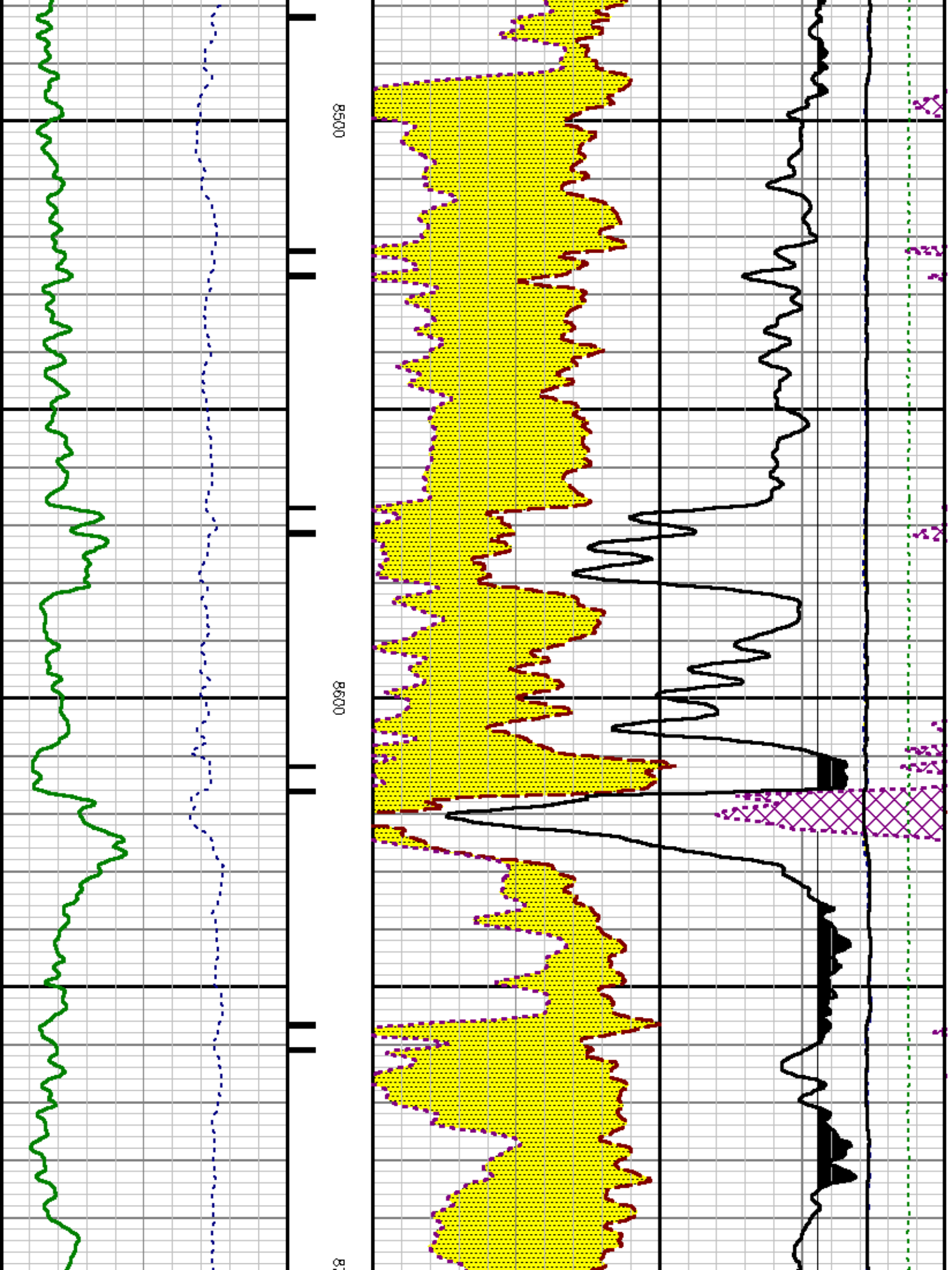


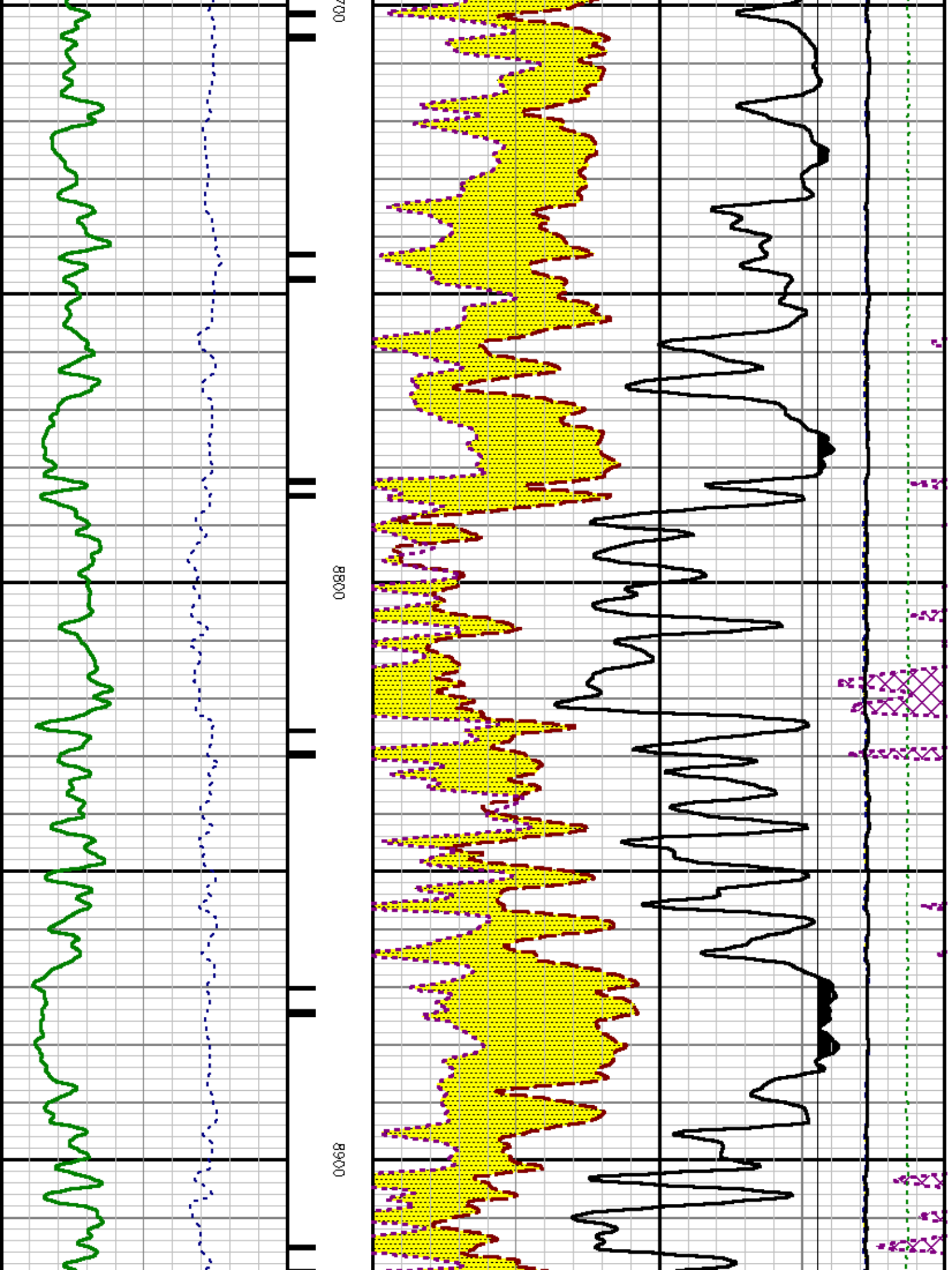


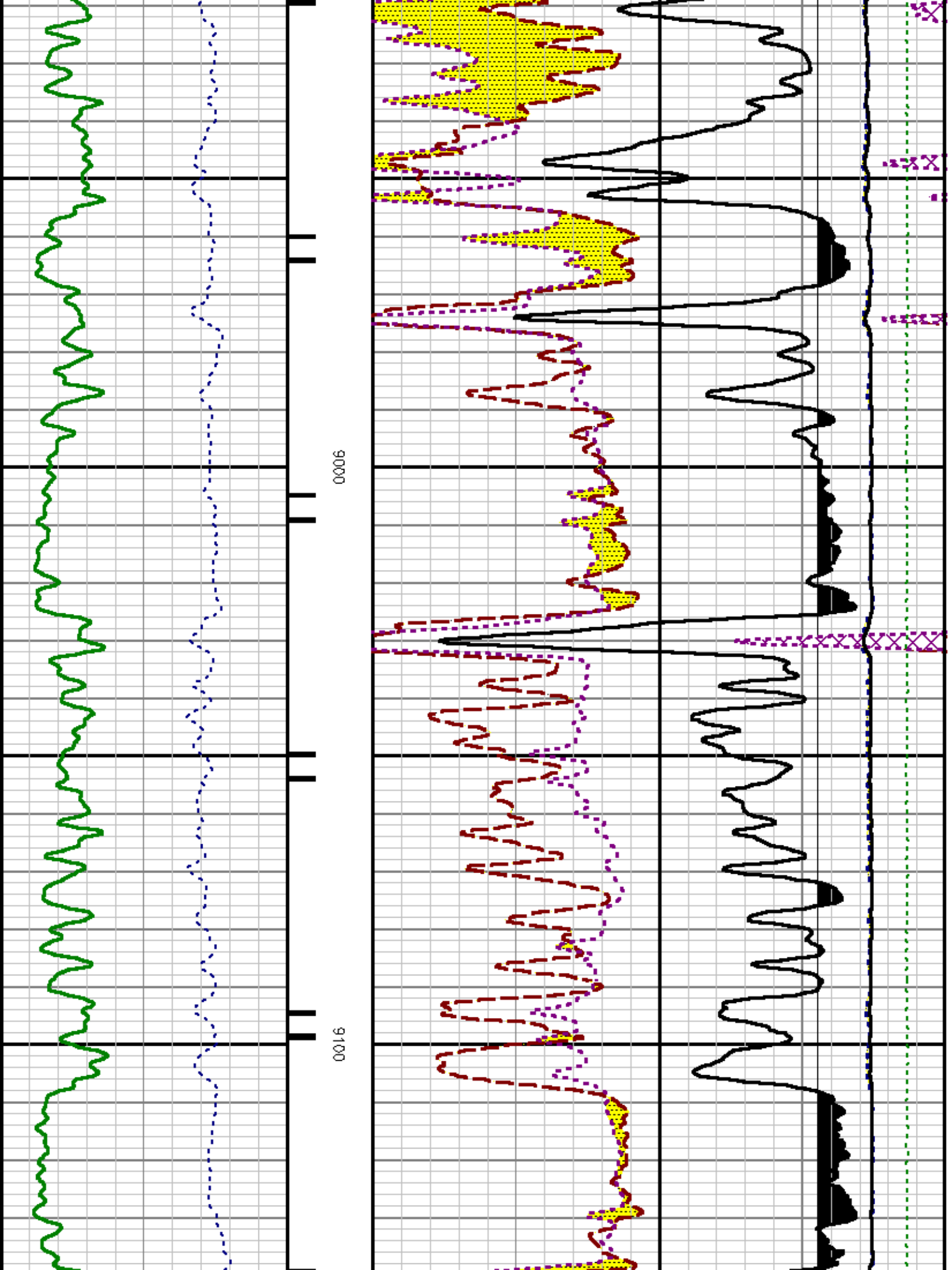


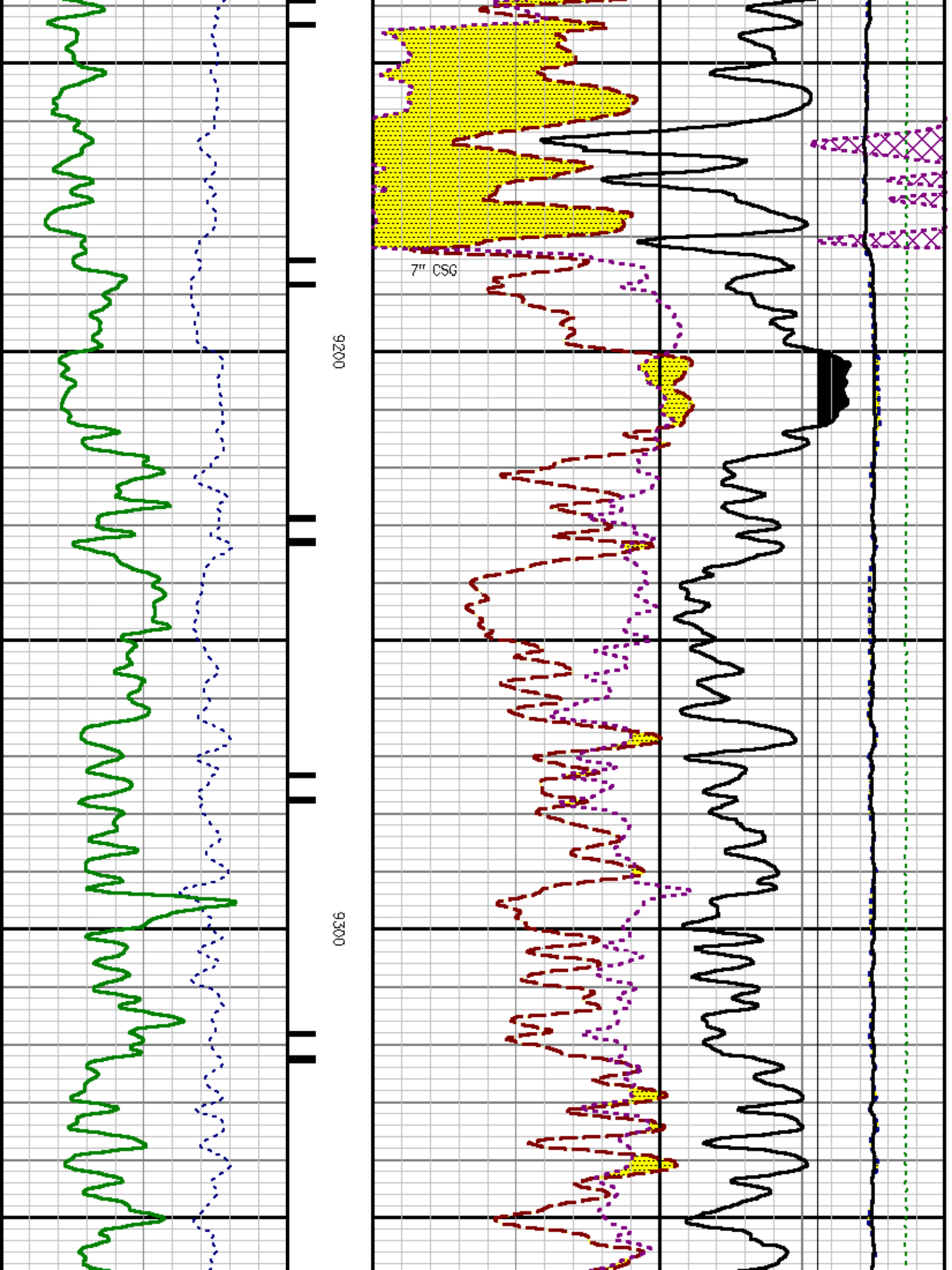








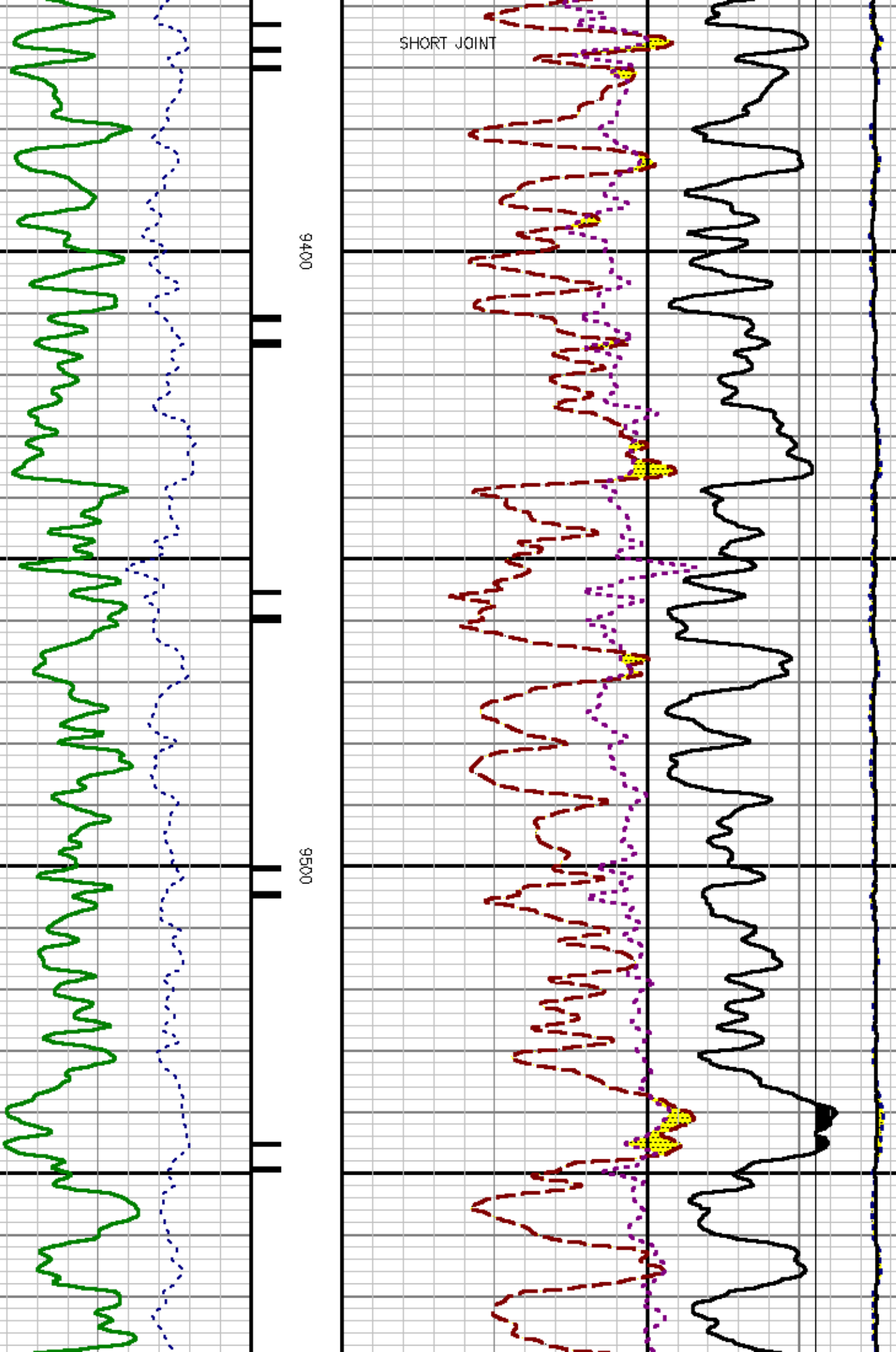


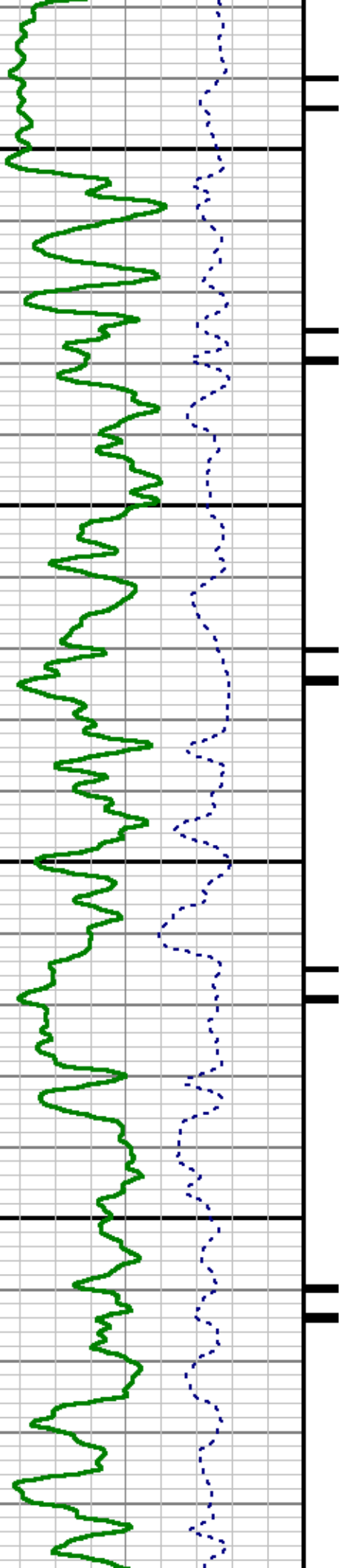


SHORT JOINT

9400

9500

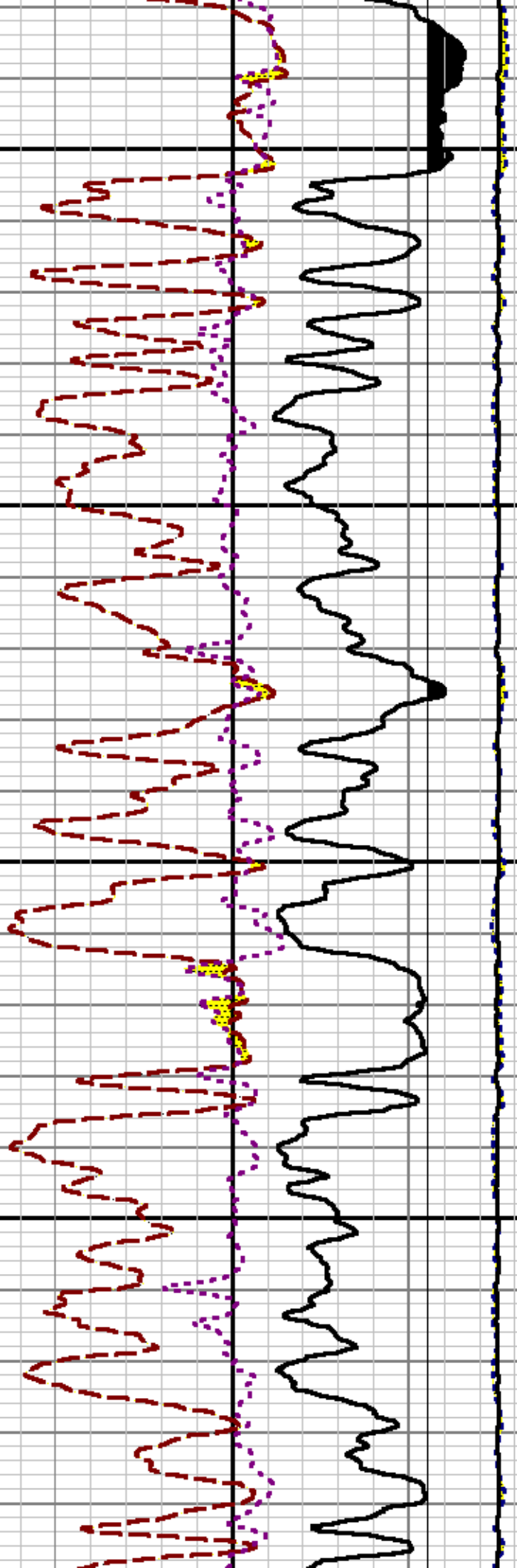




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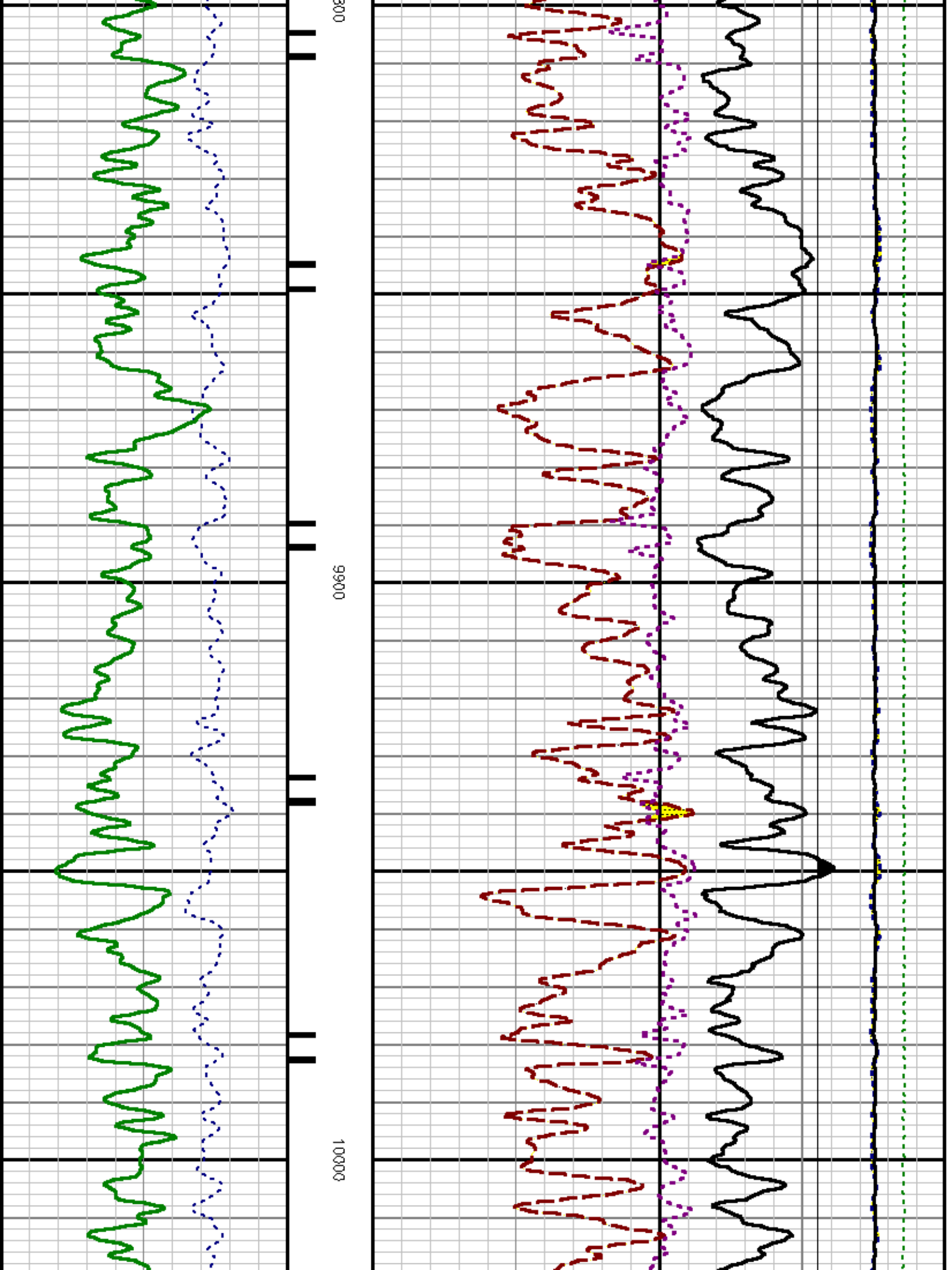
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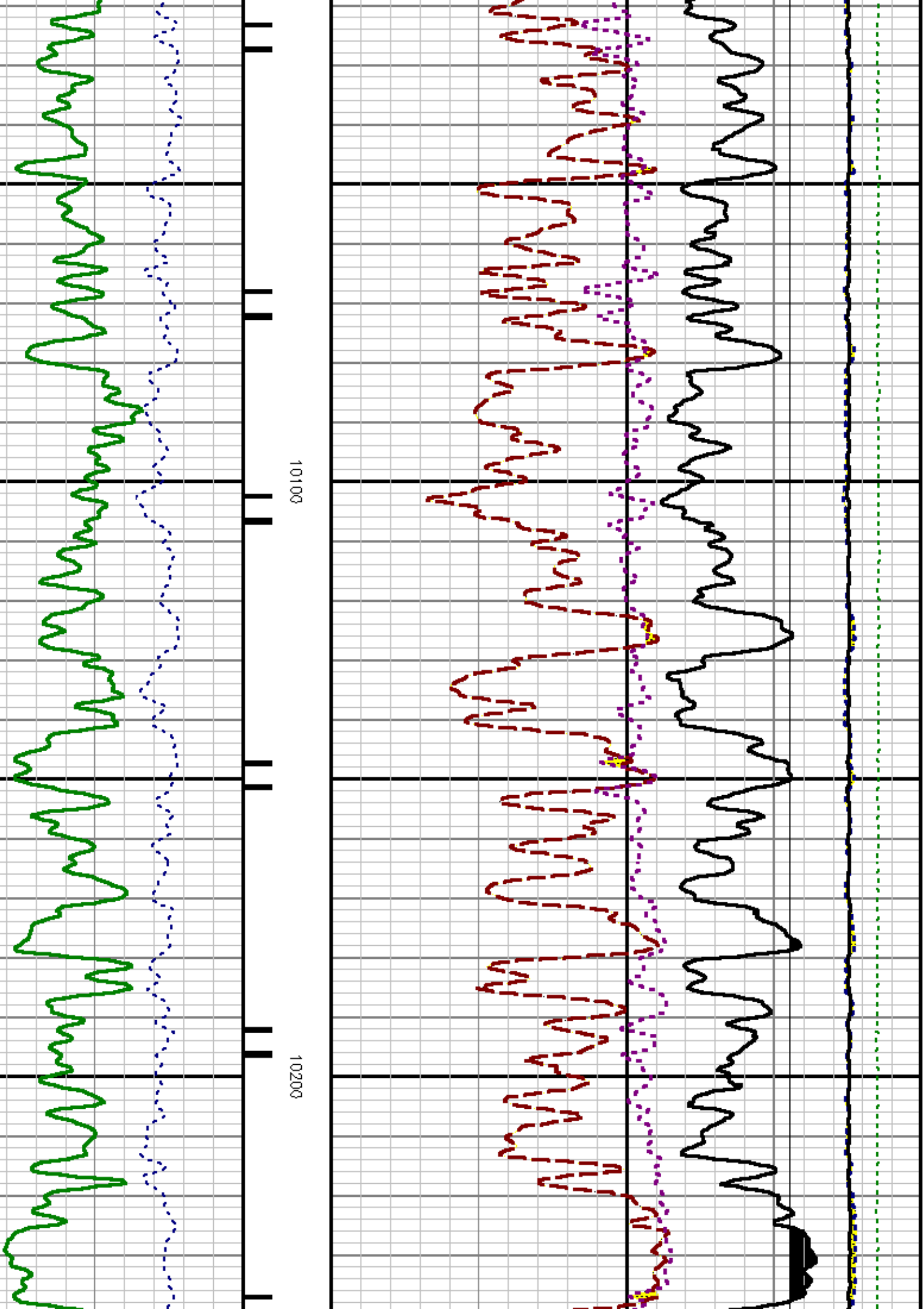


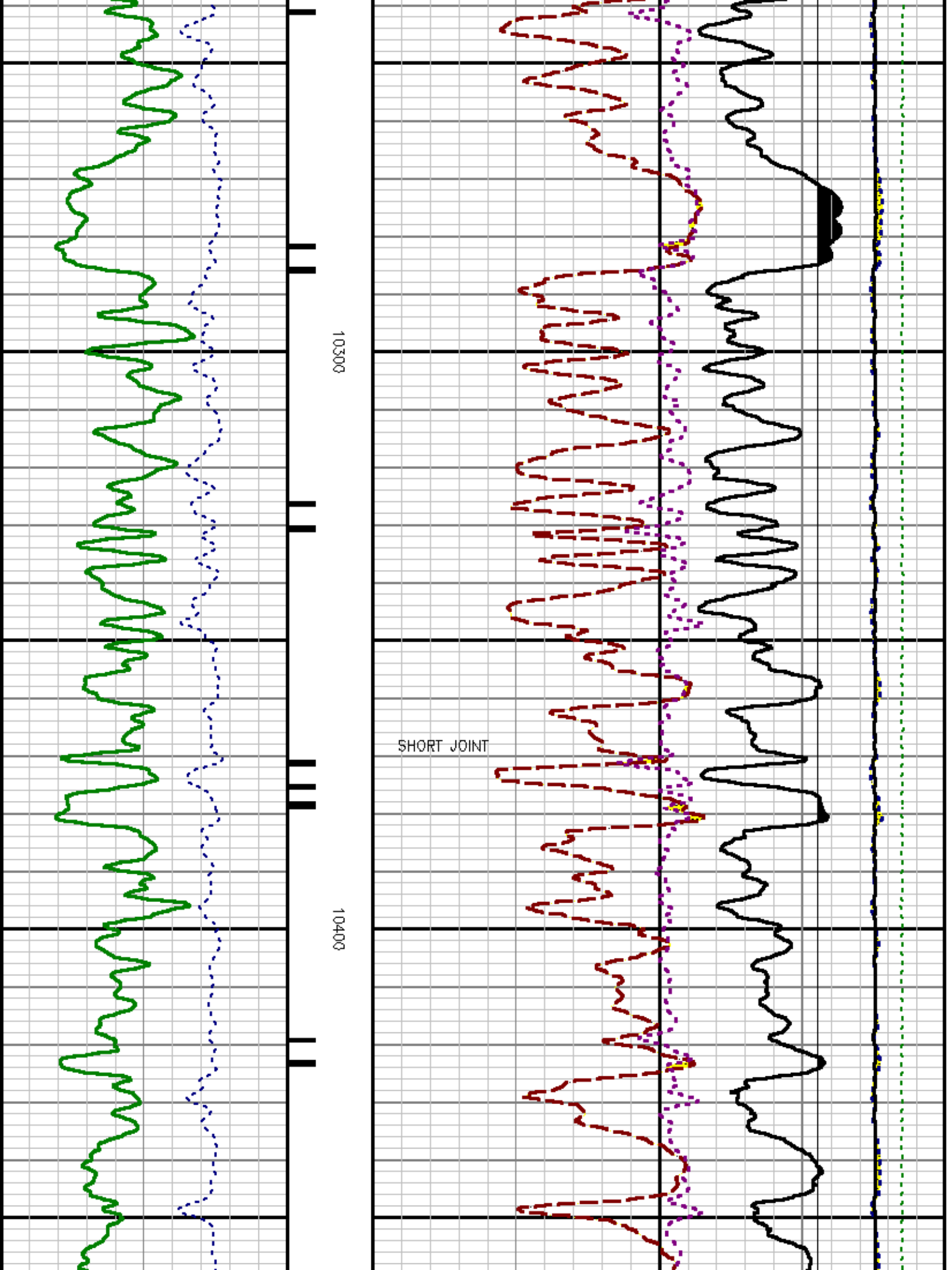
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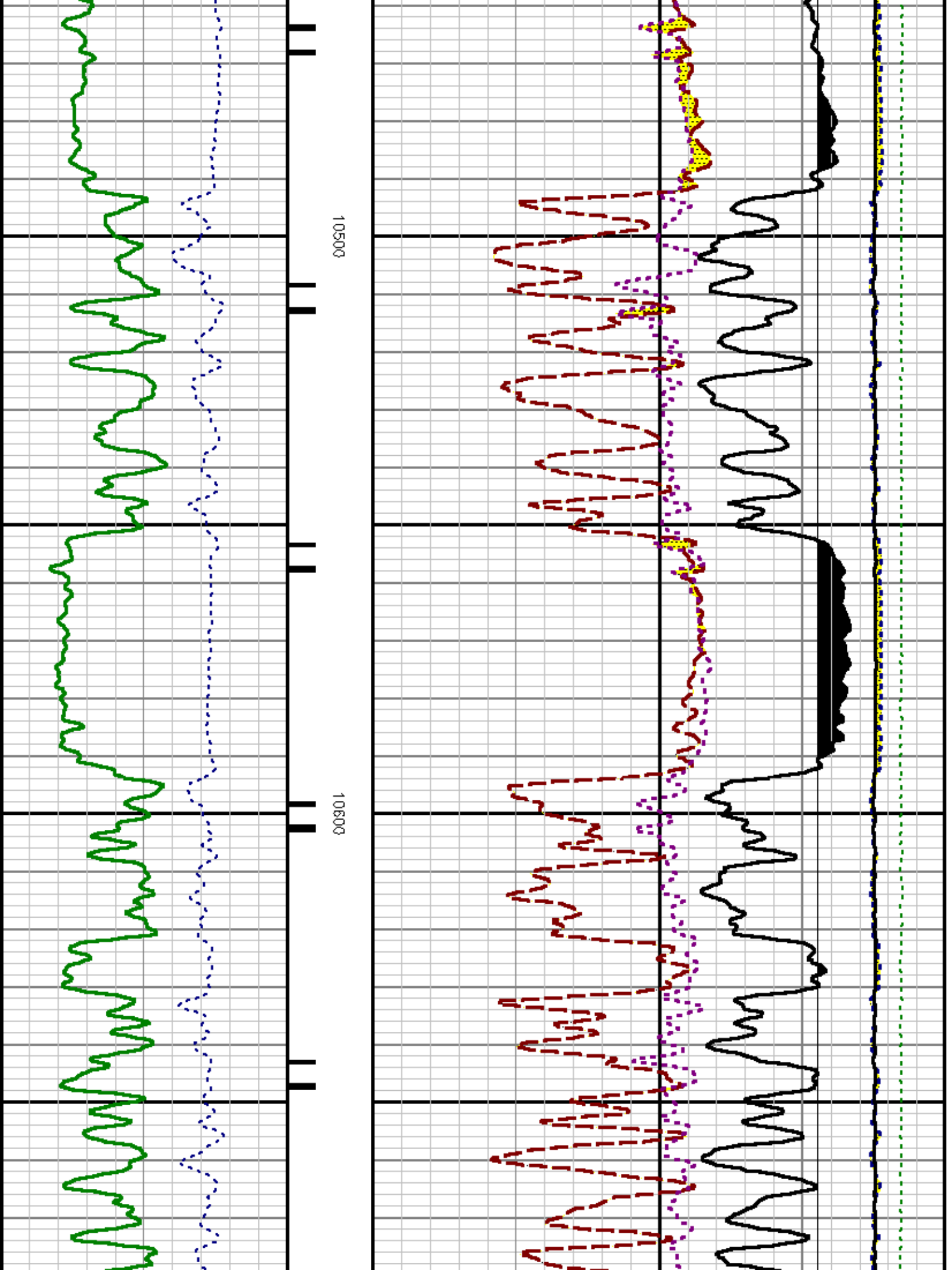
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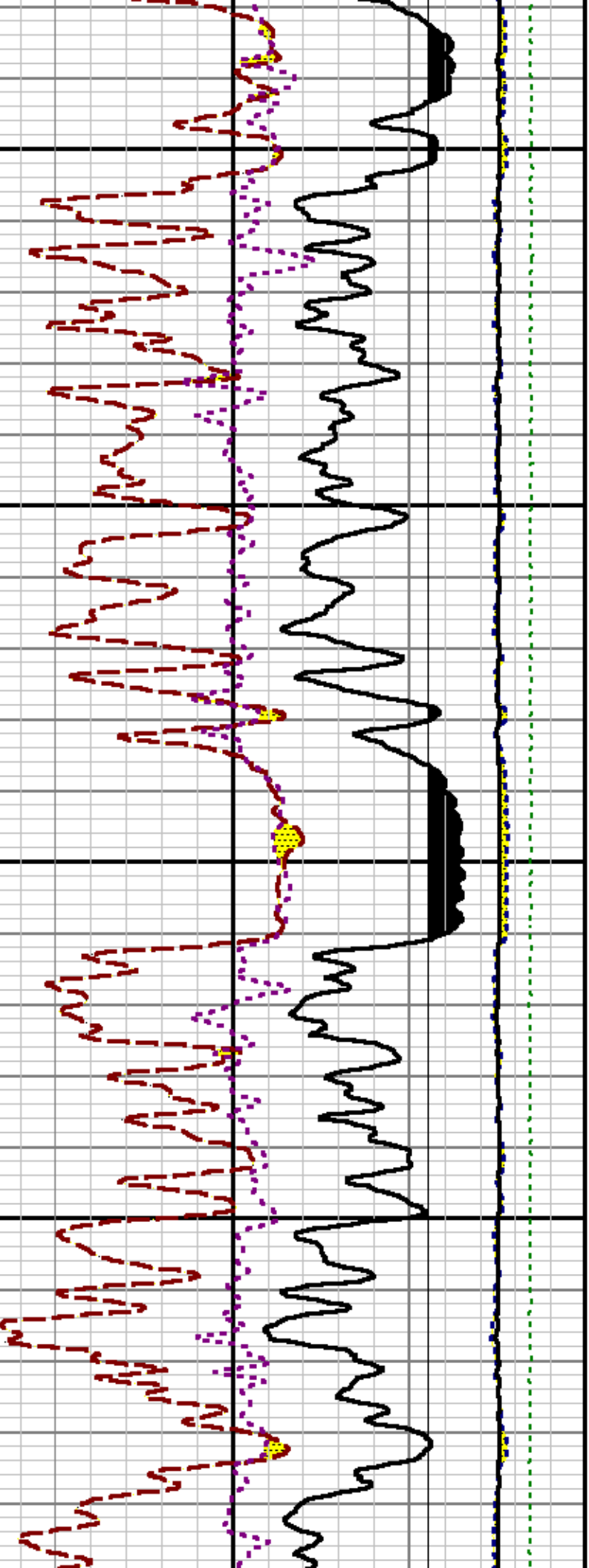
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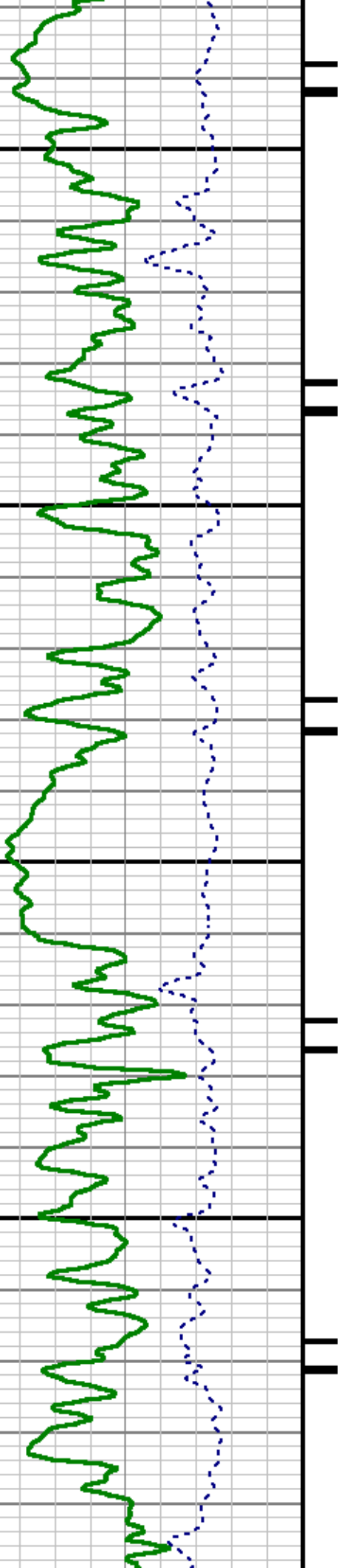




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10800

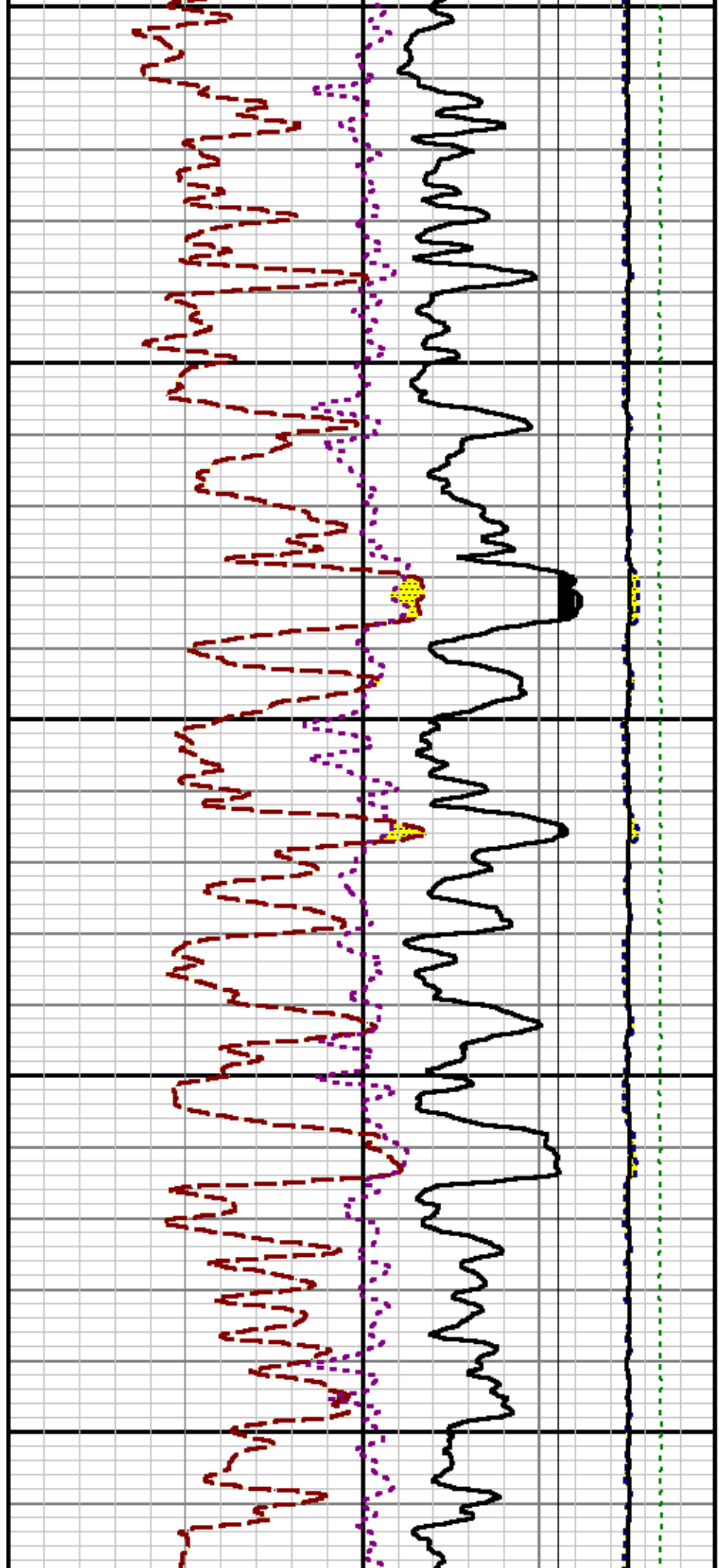
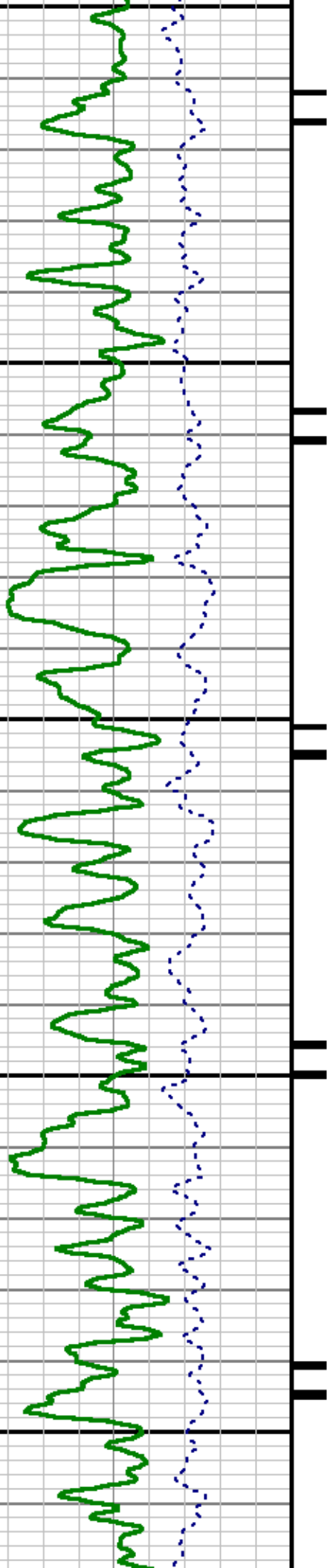
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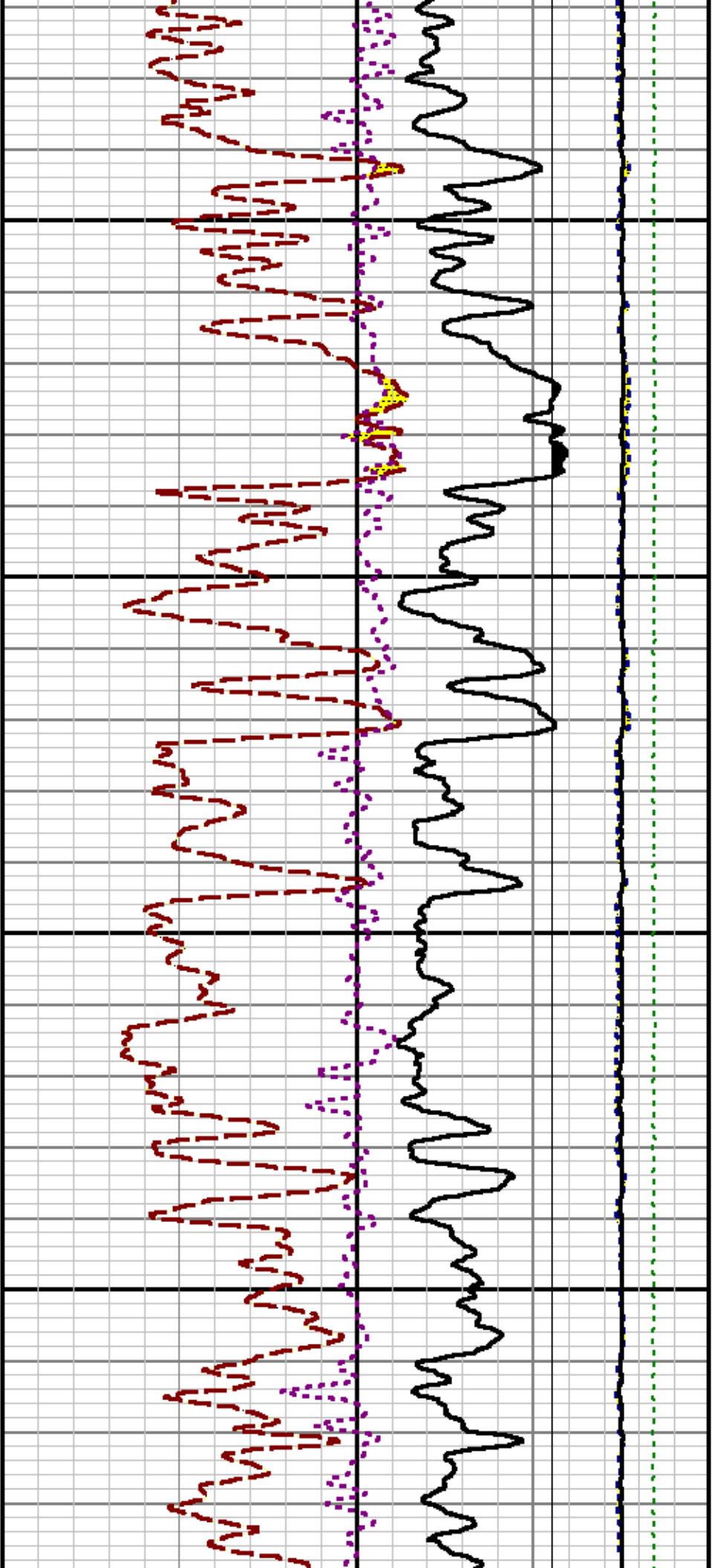


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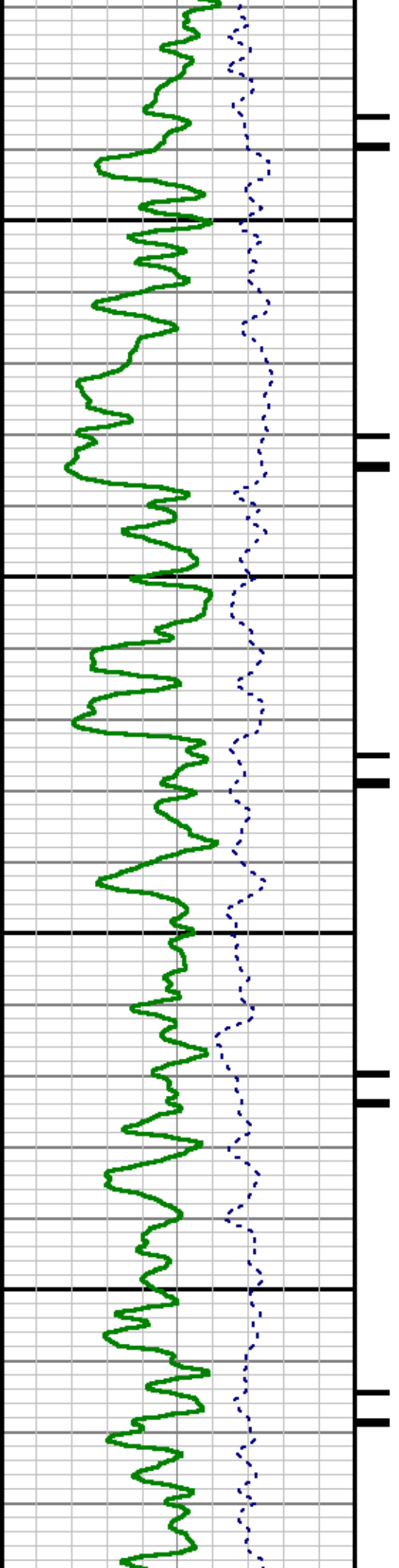
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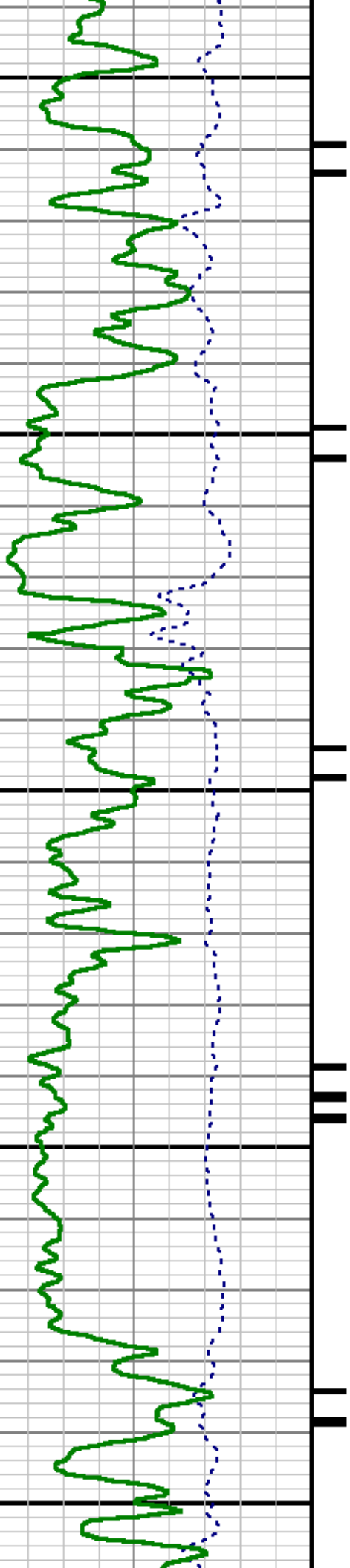




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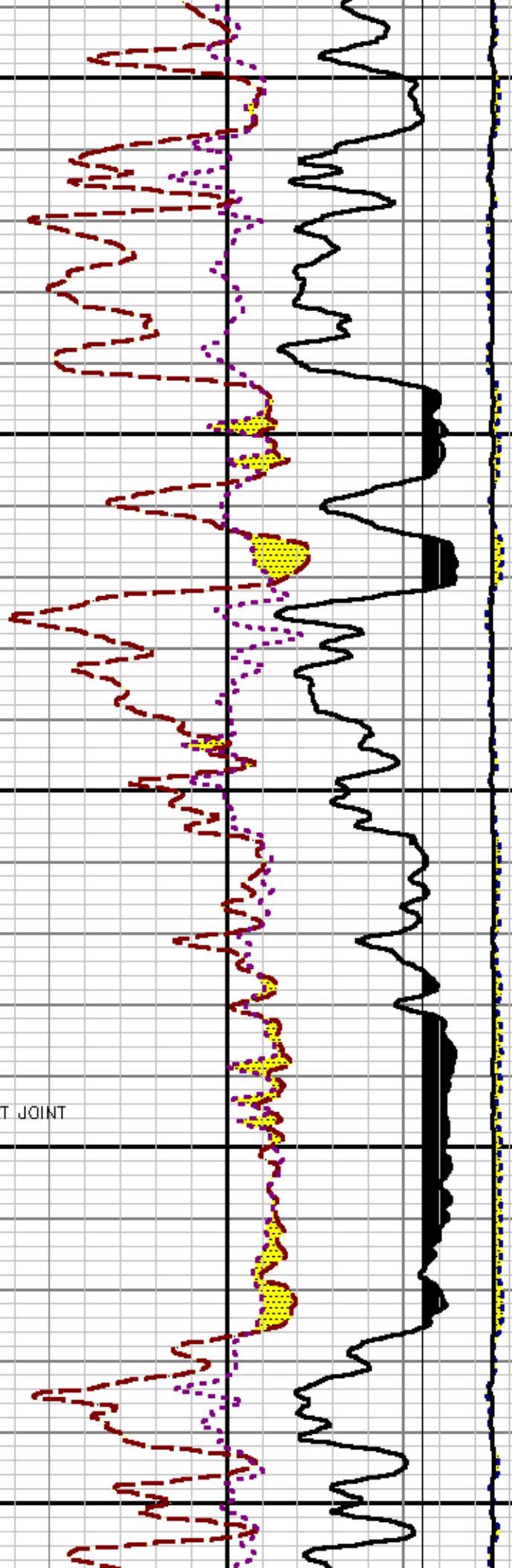


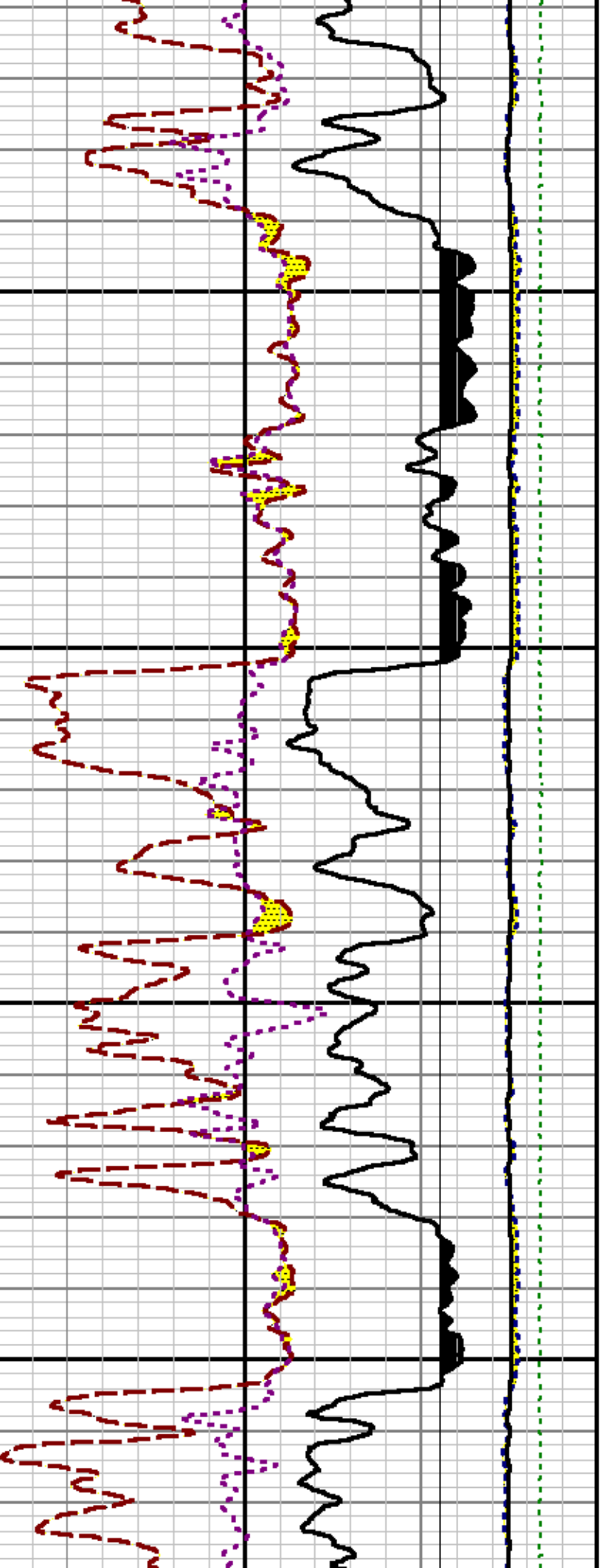


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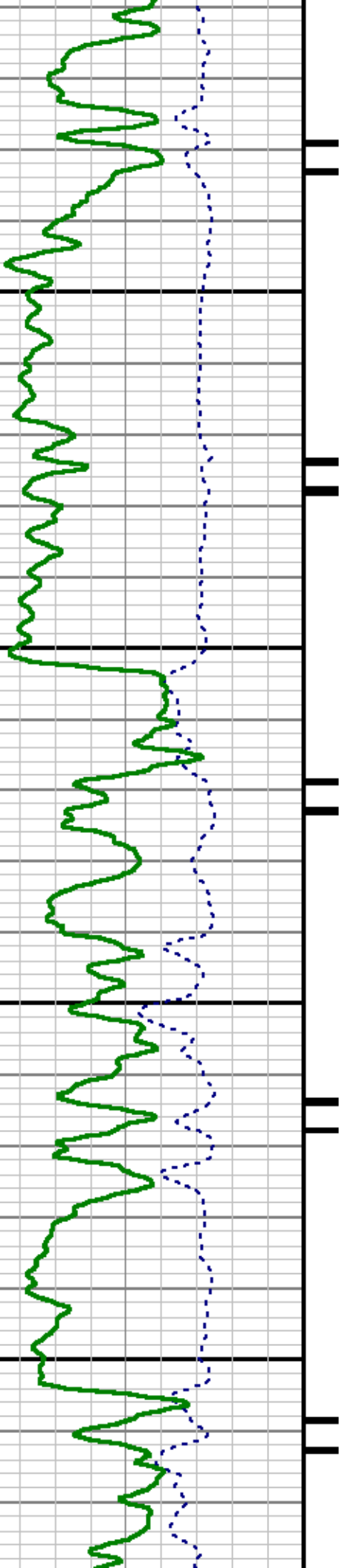
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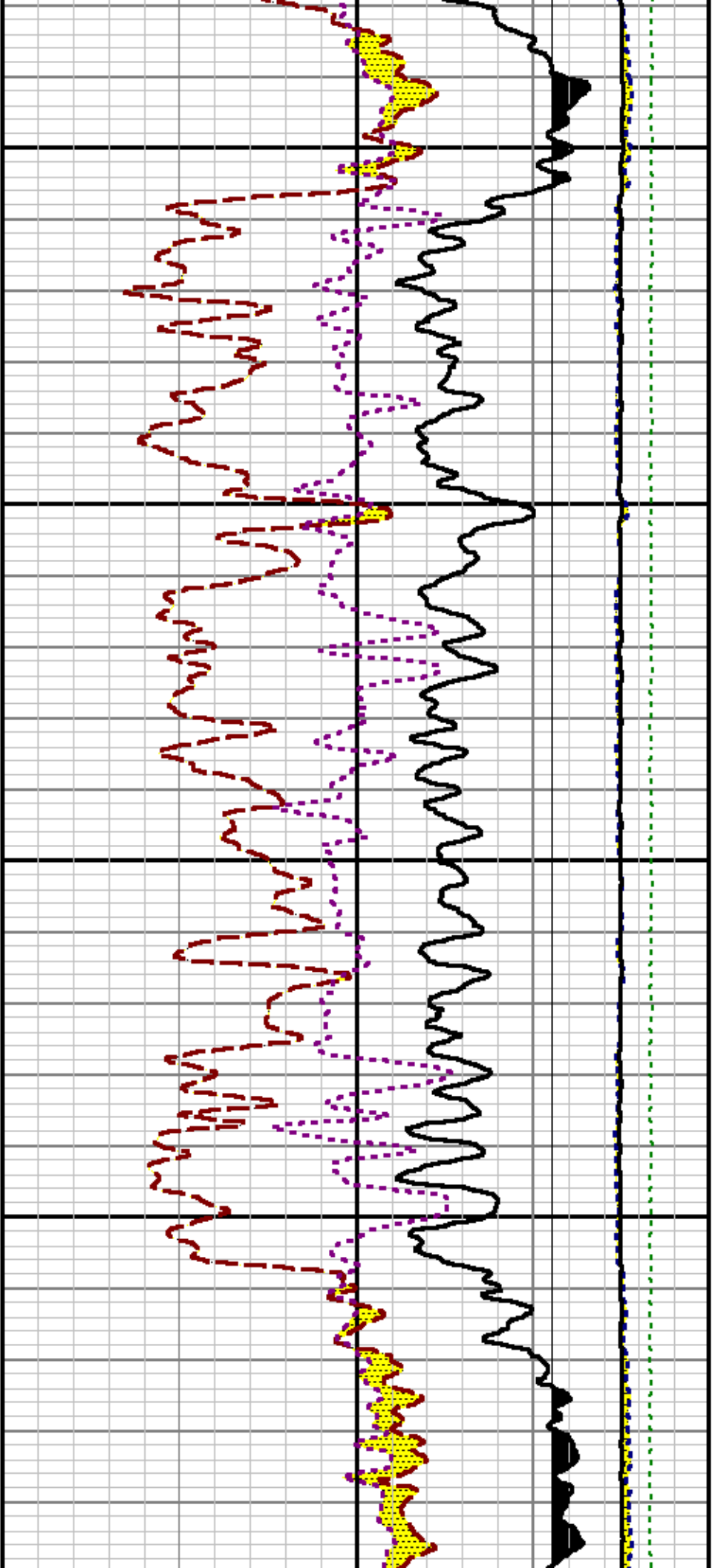




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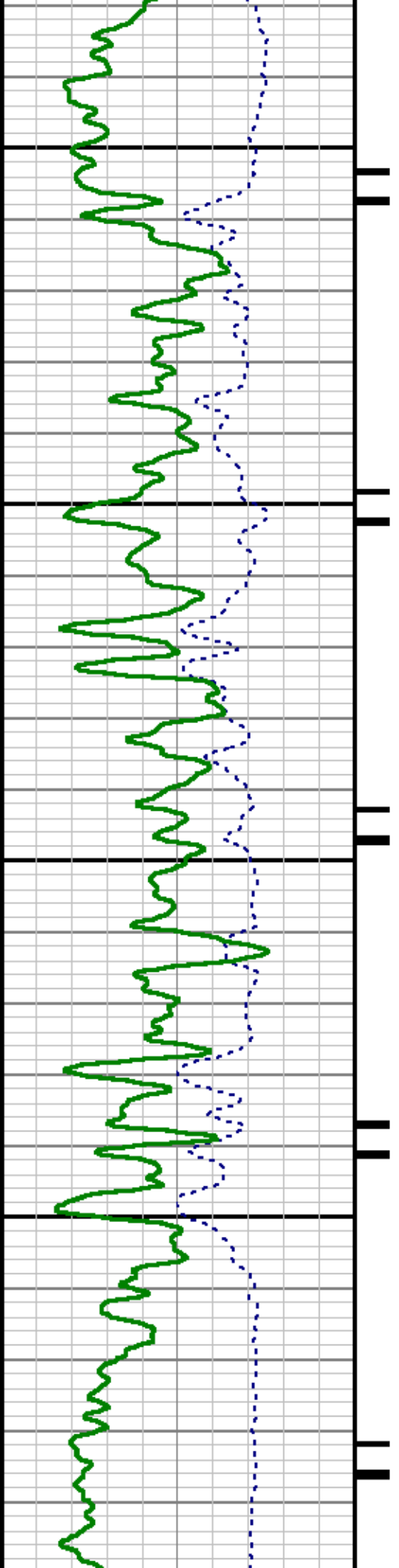


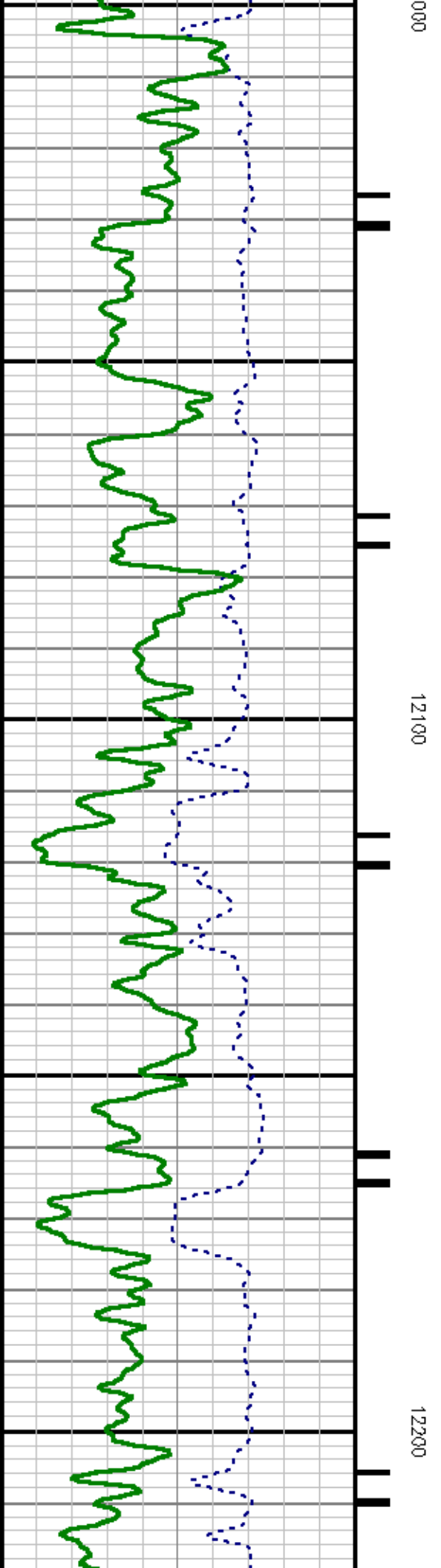
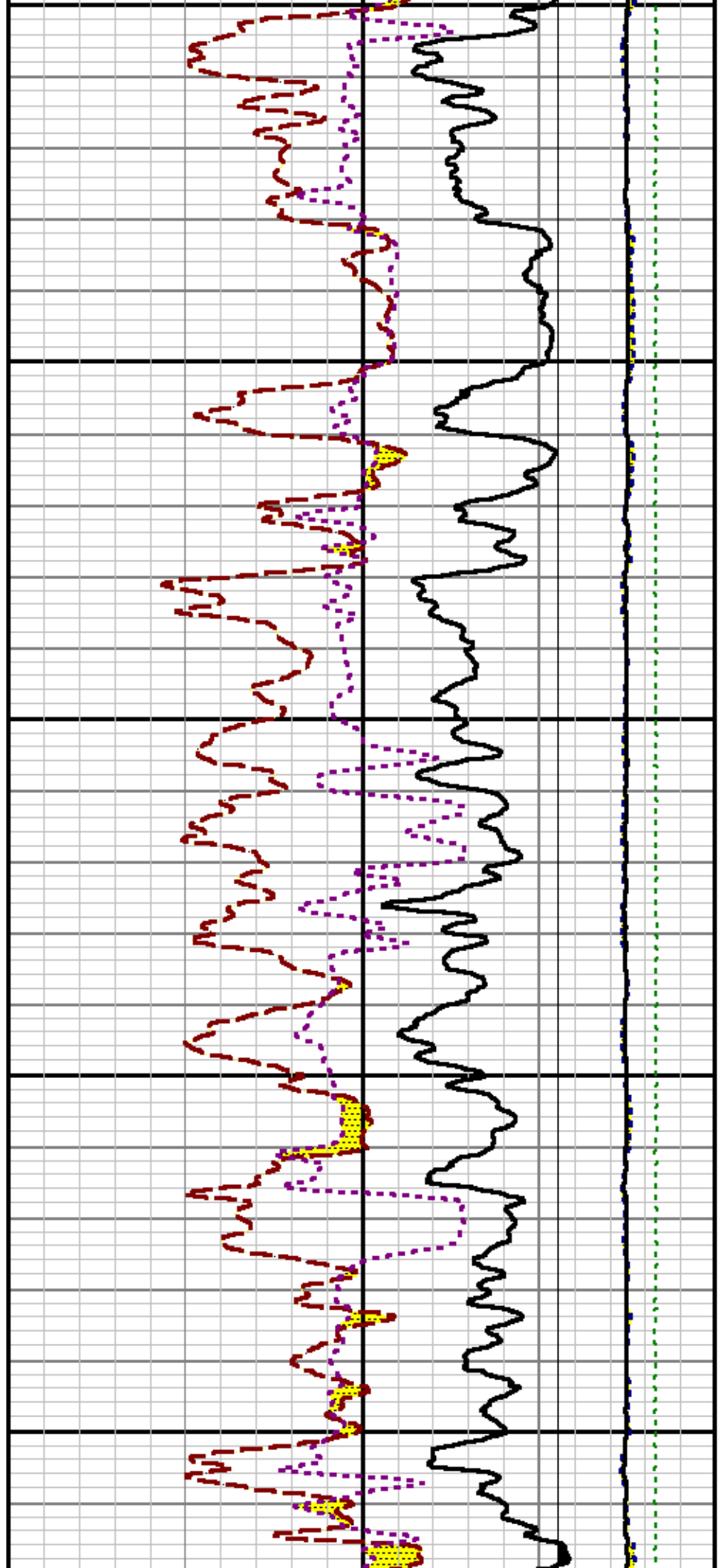


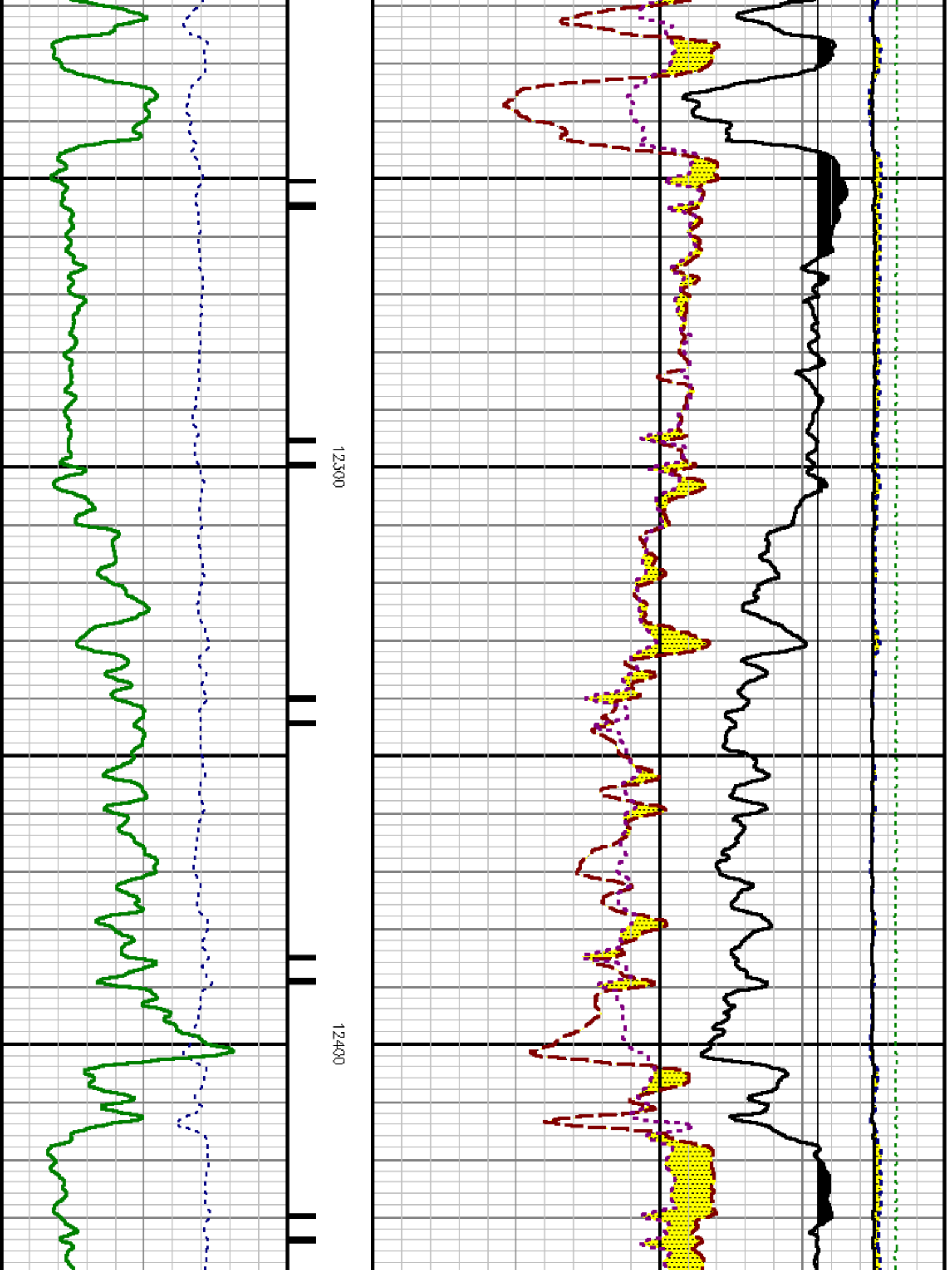
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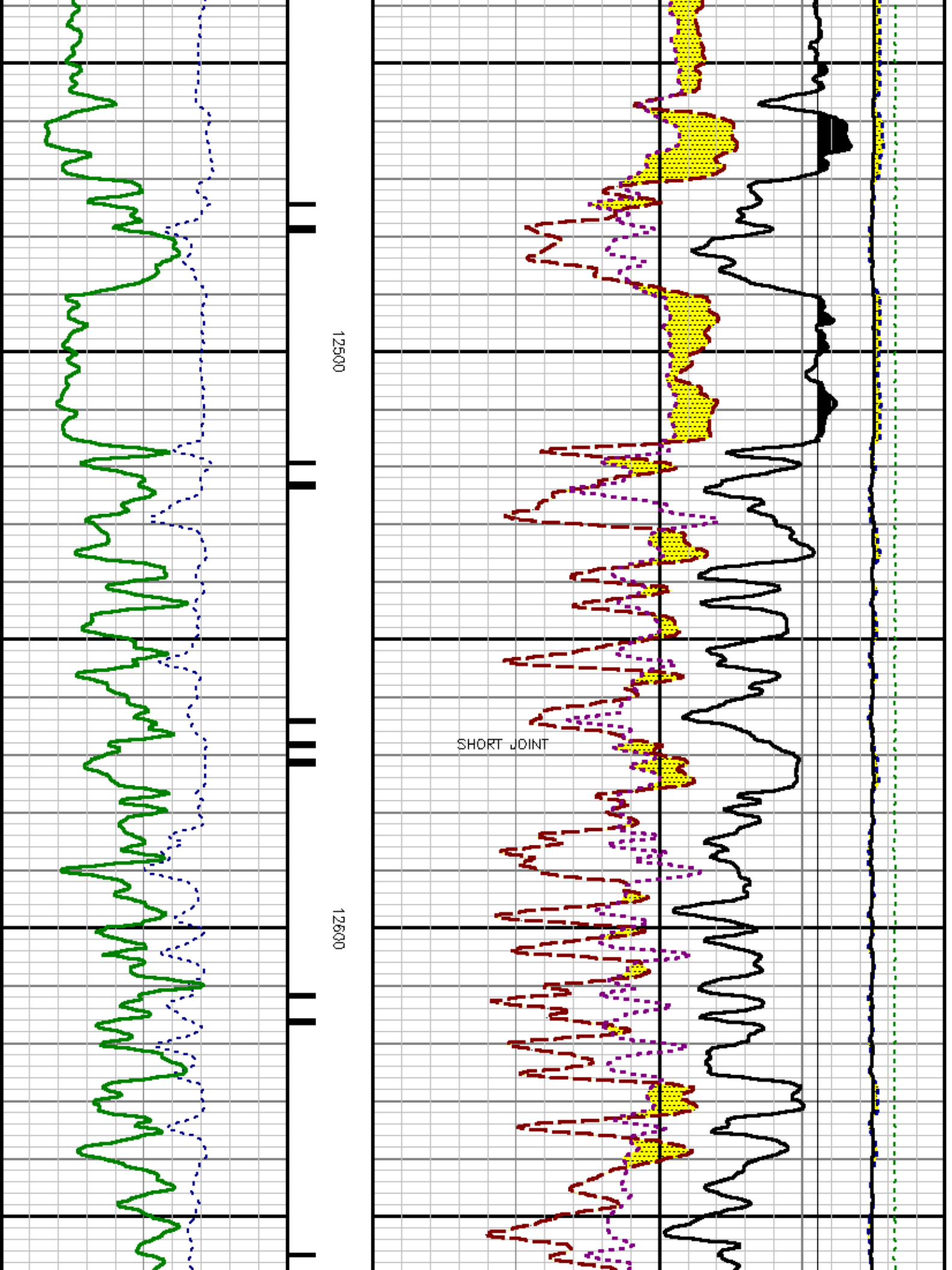
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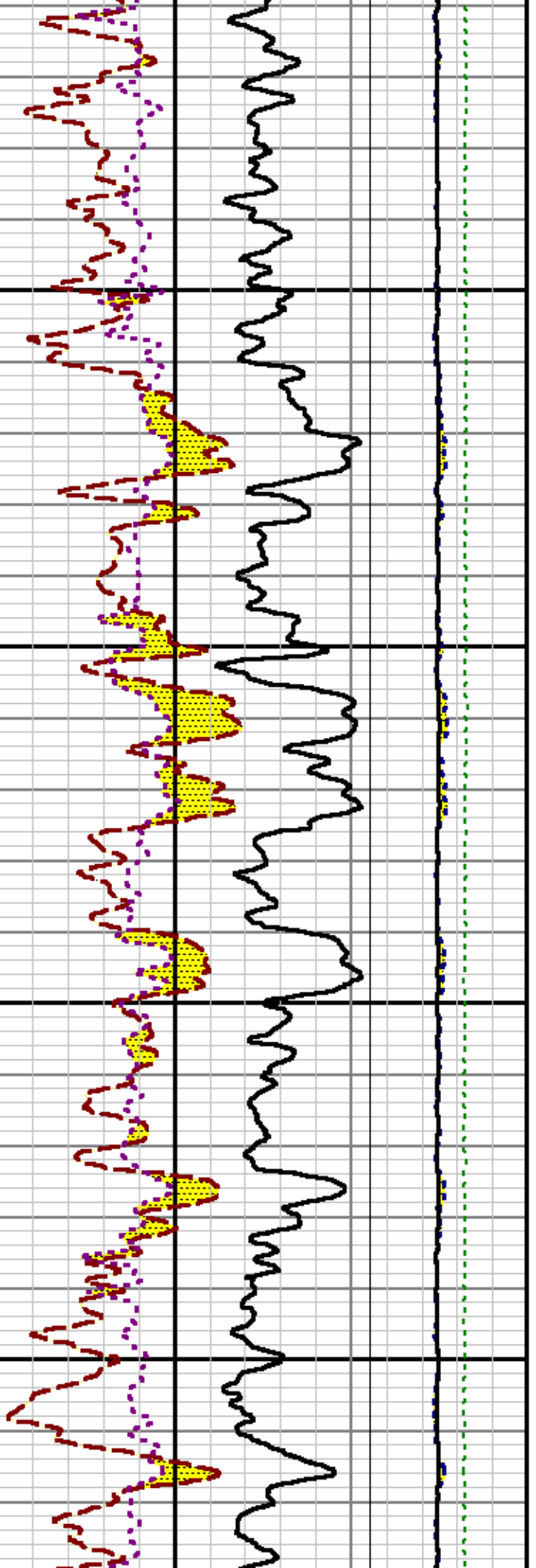
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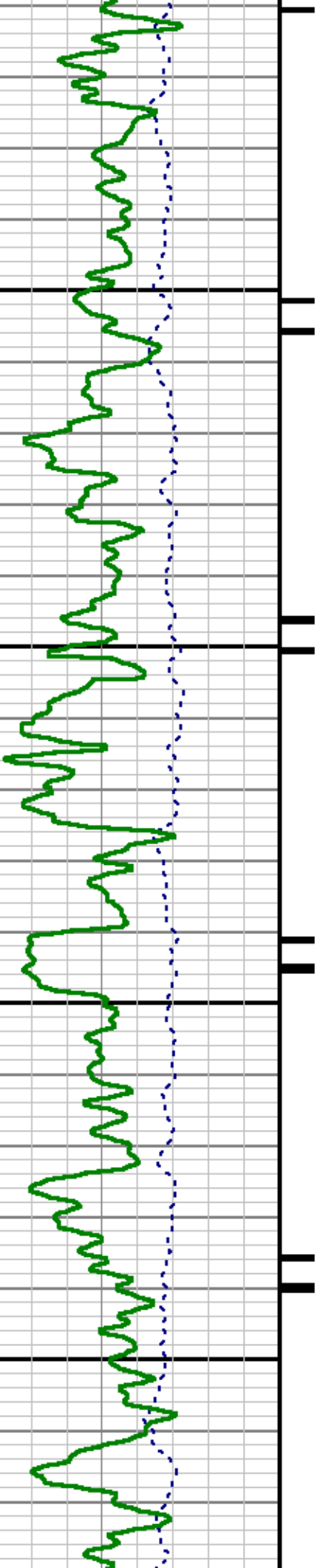


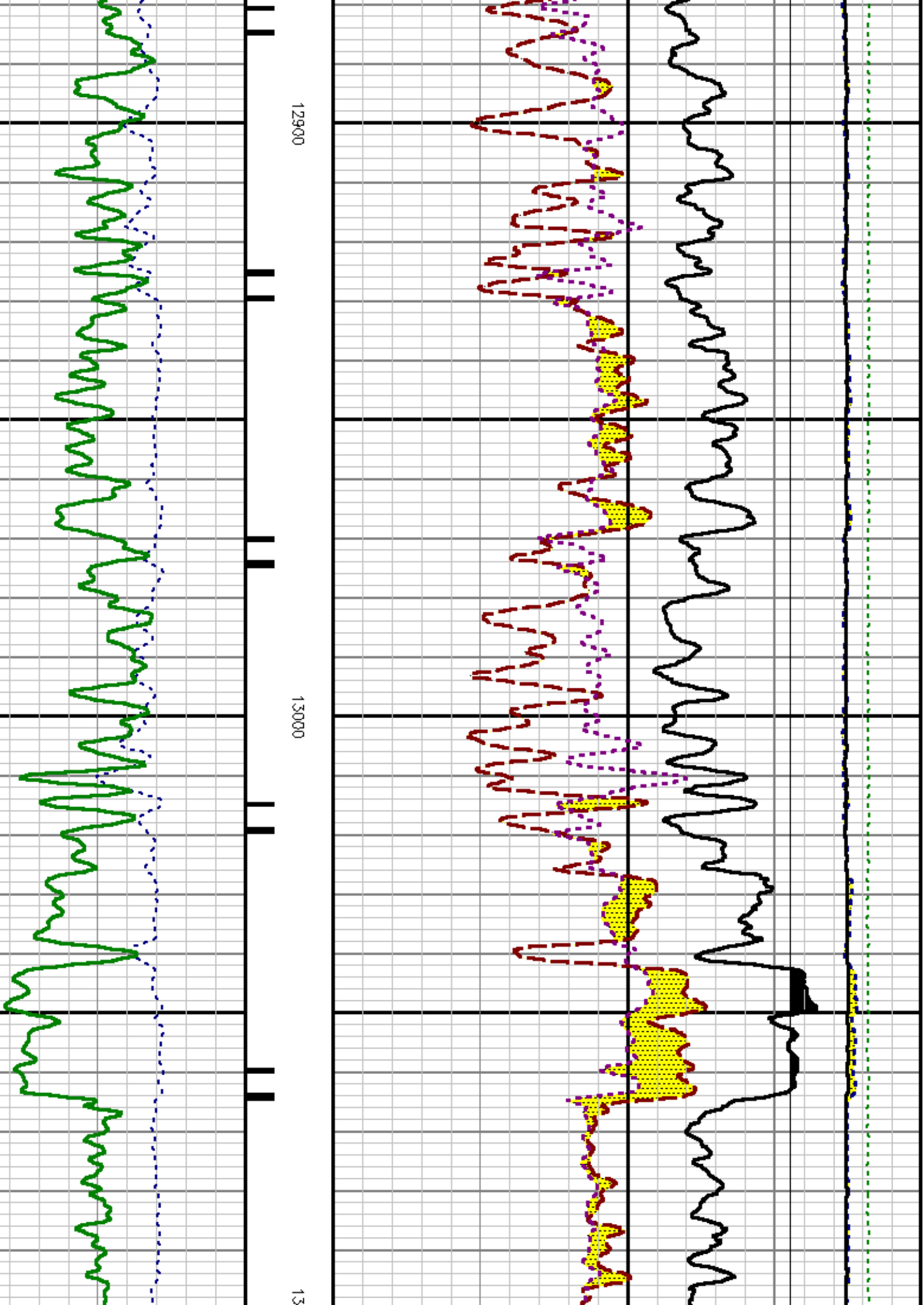




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12800

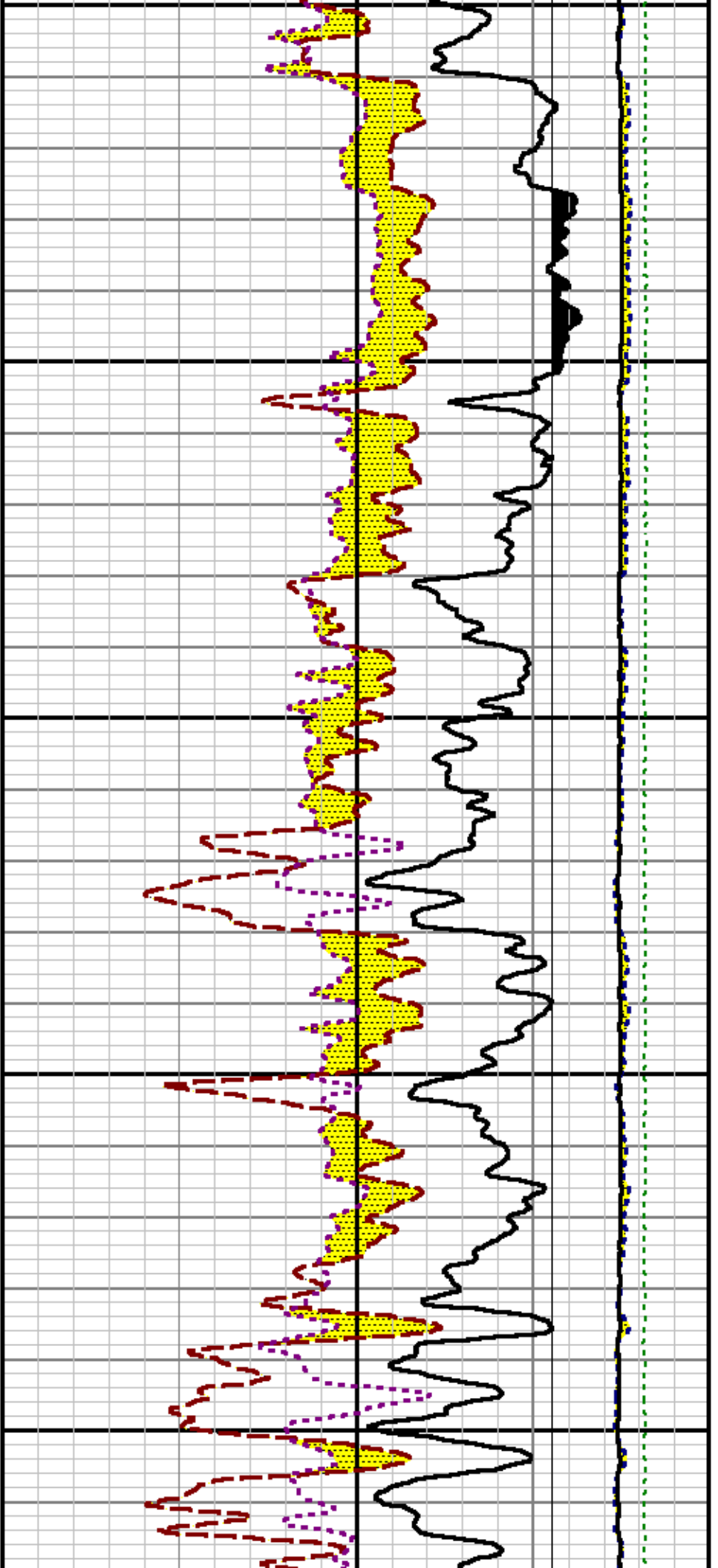




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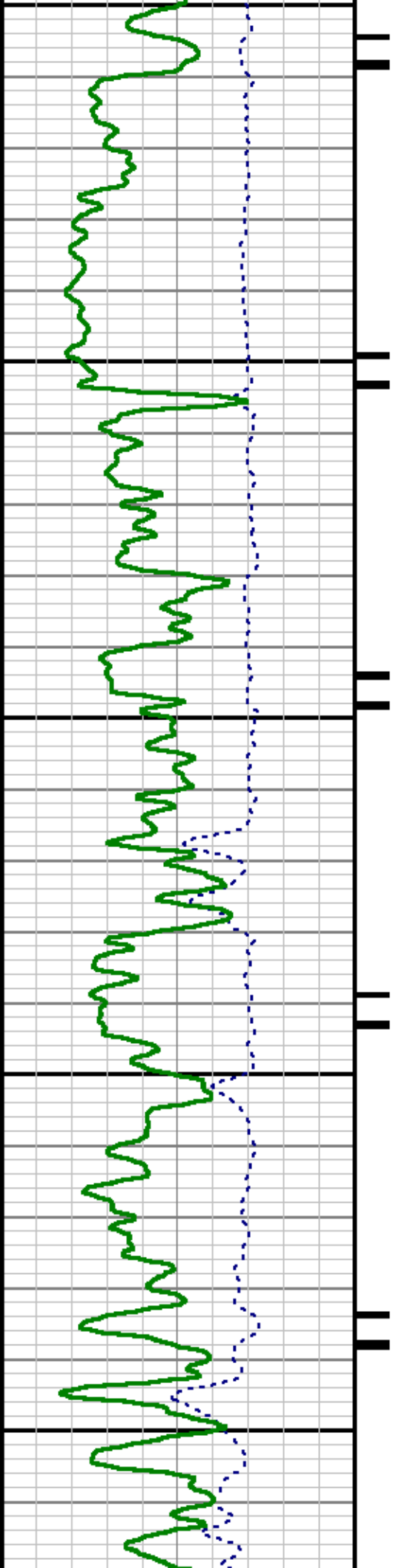
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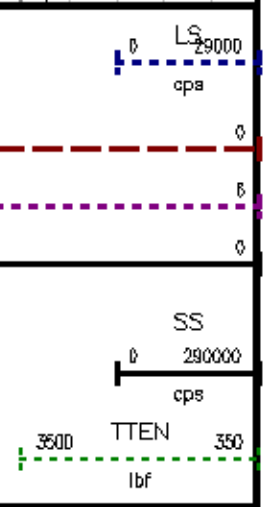
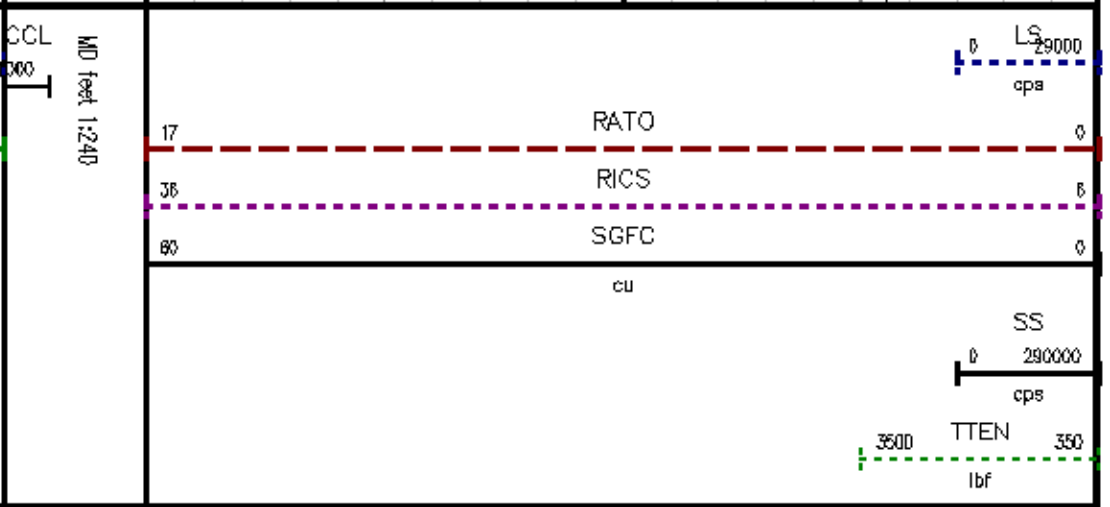
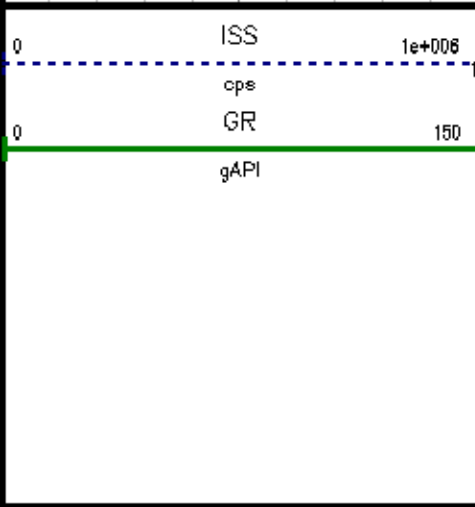
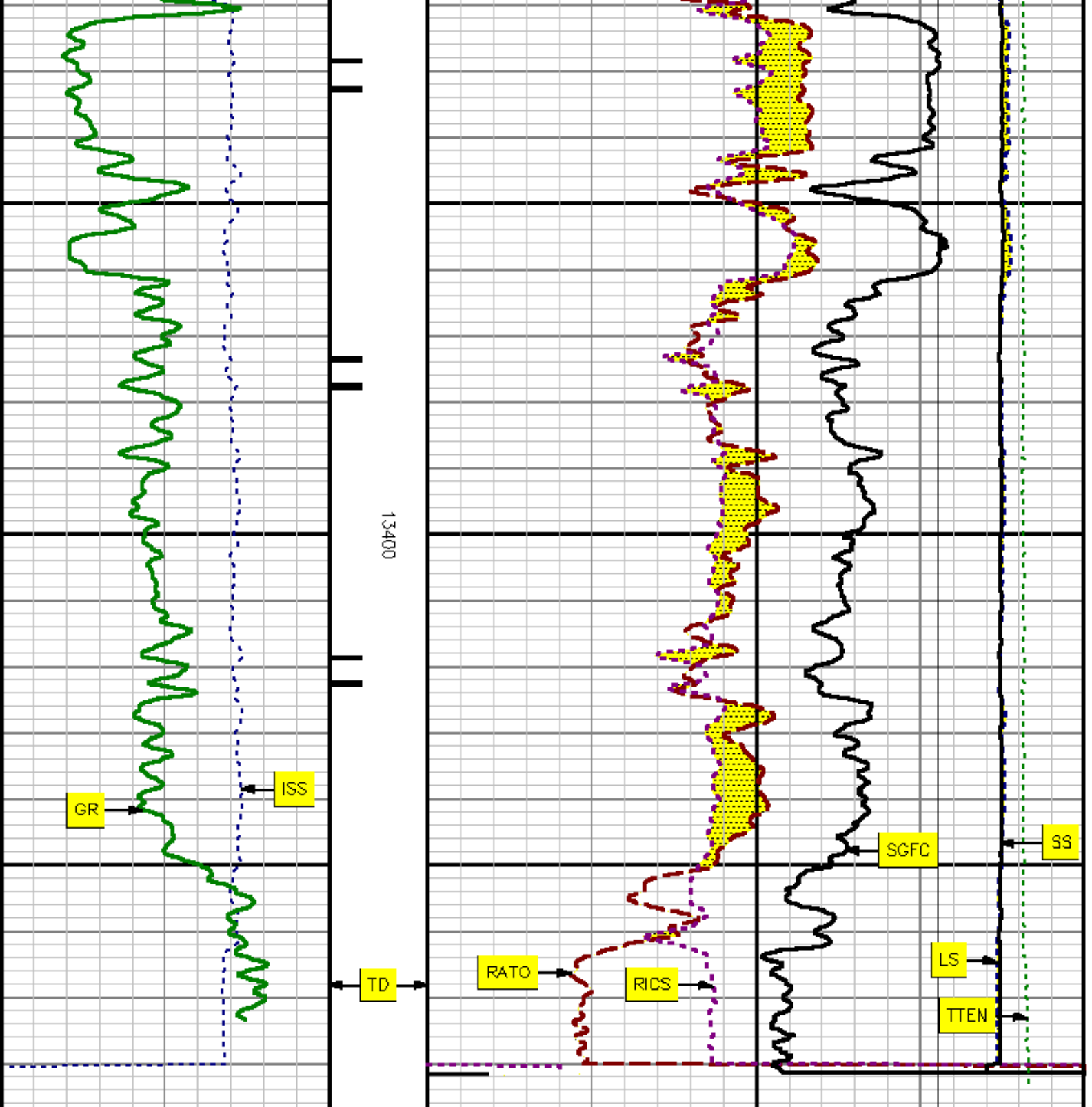


100

13200

13300





# REPEAT SECTION

## SPL PROCESSING

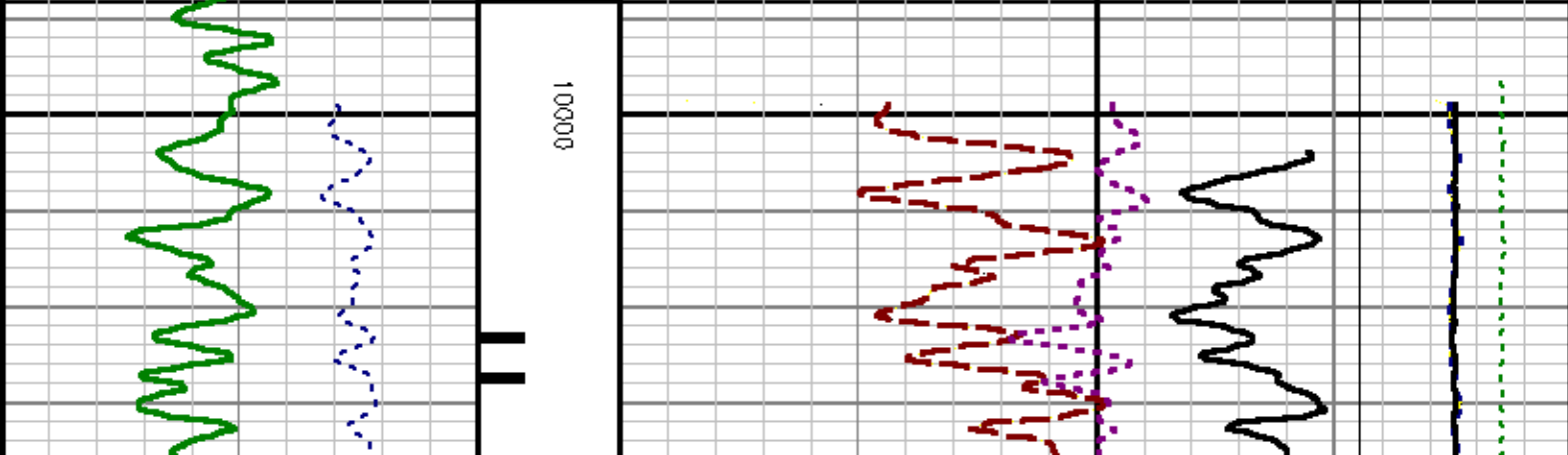
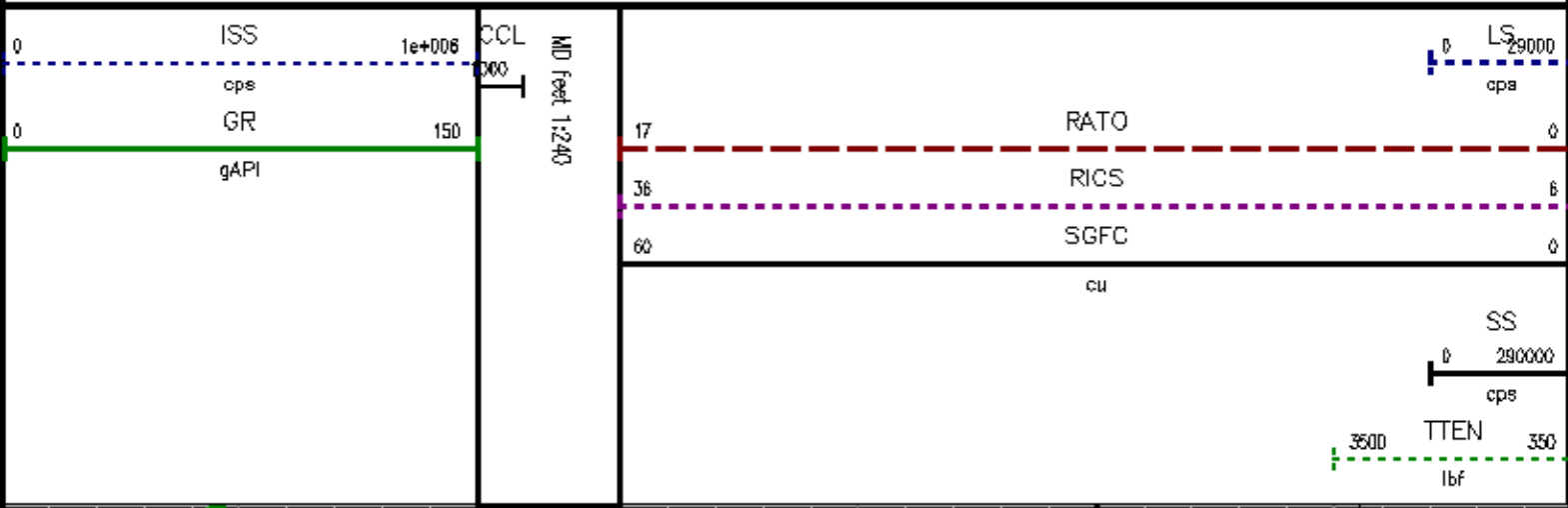
MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BDTOM
PNC Porosity	Borehole	Cased		9996.530	10499.000
PNC Porosity	Borehole Size	6.125	inch	9996.530	10499.000
PNC Porosity	Casing Size	4.500	inch	9996.530	10499.000
PNC Porosity	Gas Filled	Non Gas Filled		9996.530	10499.000
PNC Porosity	Matrix	Sandstone		9996.530	10499.000

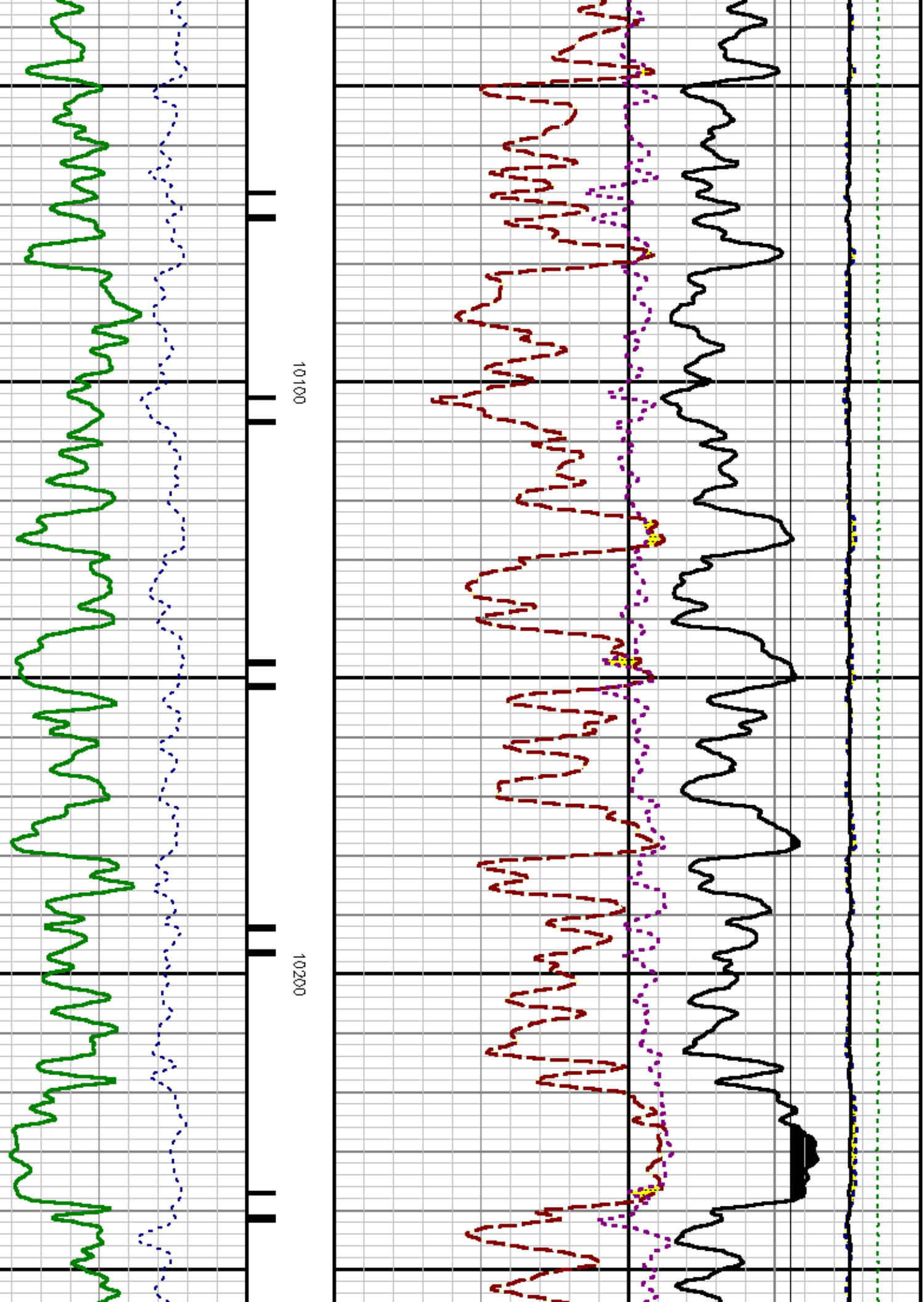
## DEPTH OFFSETS (for Acquired Curves)

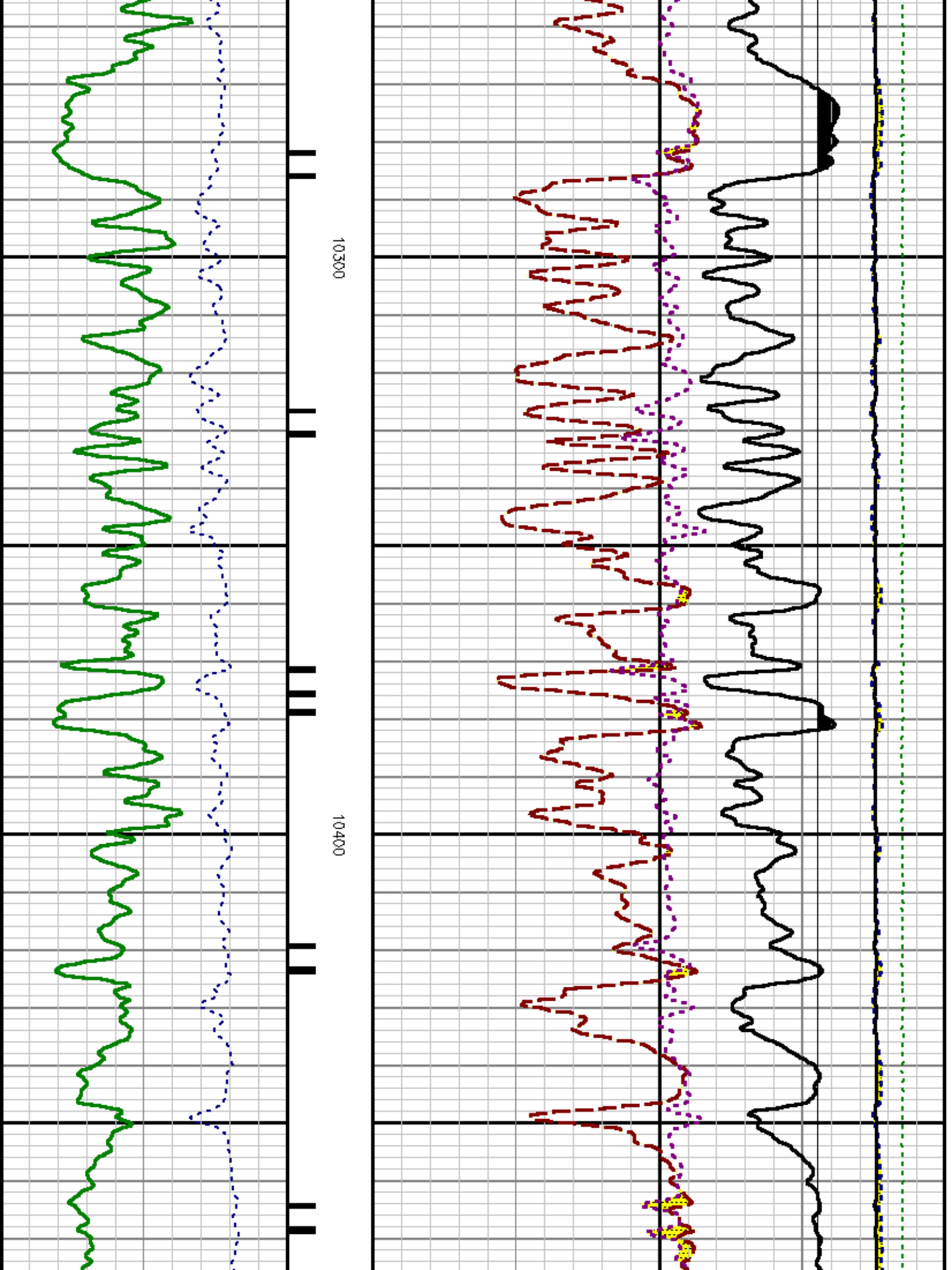
SERIES	DEPTH OFFSET	ACQUIRED CURVES					
8248EA	-14.478	FLTW					
8248EA	-12.478	CCL CHV					
2812LA	-9.928	GR					
8281XA	-0.662	HVC300	SEQ3	AMA3	AML3	BKX	CXS
		CPT300	CPT302	CPT303	CPT304	ET3	IXS
		MCS3	MCS300	QCAL3	RGN3	RICK	SDA3
		SDL3	SGA3	SGL3	STA3	XS	ASPEC3
		AMB3	AMF3	CHF3	IXSC	IXSN	RAT023
		RICXC	RIN13C	RIN23	RIN23C	SD3D	SG3D
		SGB3	SGF3	WDTH3	CKSR	IXSR	XSR
		RICXR					
8281XA	-0.250	HVC200	SEQ2	AMA2	AMB2	AMF2	AML2
		BKL	CHF2	CLS	CPT200	CPT202	CPT203
		CPT204	ET2	ILS	LS	MCS2	MCS200
		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	HVC100	WV	SEQ	SEQ1	AMA1
		AMB1	AME1	AMF1	AML1	BKS	CHF1
		CSS	CO RB	CO RF	CPT100	CPT102	CPT102A
		CPT102B	CPT102C	CPT103	CPT104	CPT105	ET1
		G1	G2	GE1S	GE2S	ISS	MCS1
		MCS100	QA1	QCAL1	QA1	RAT0	RAT013

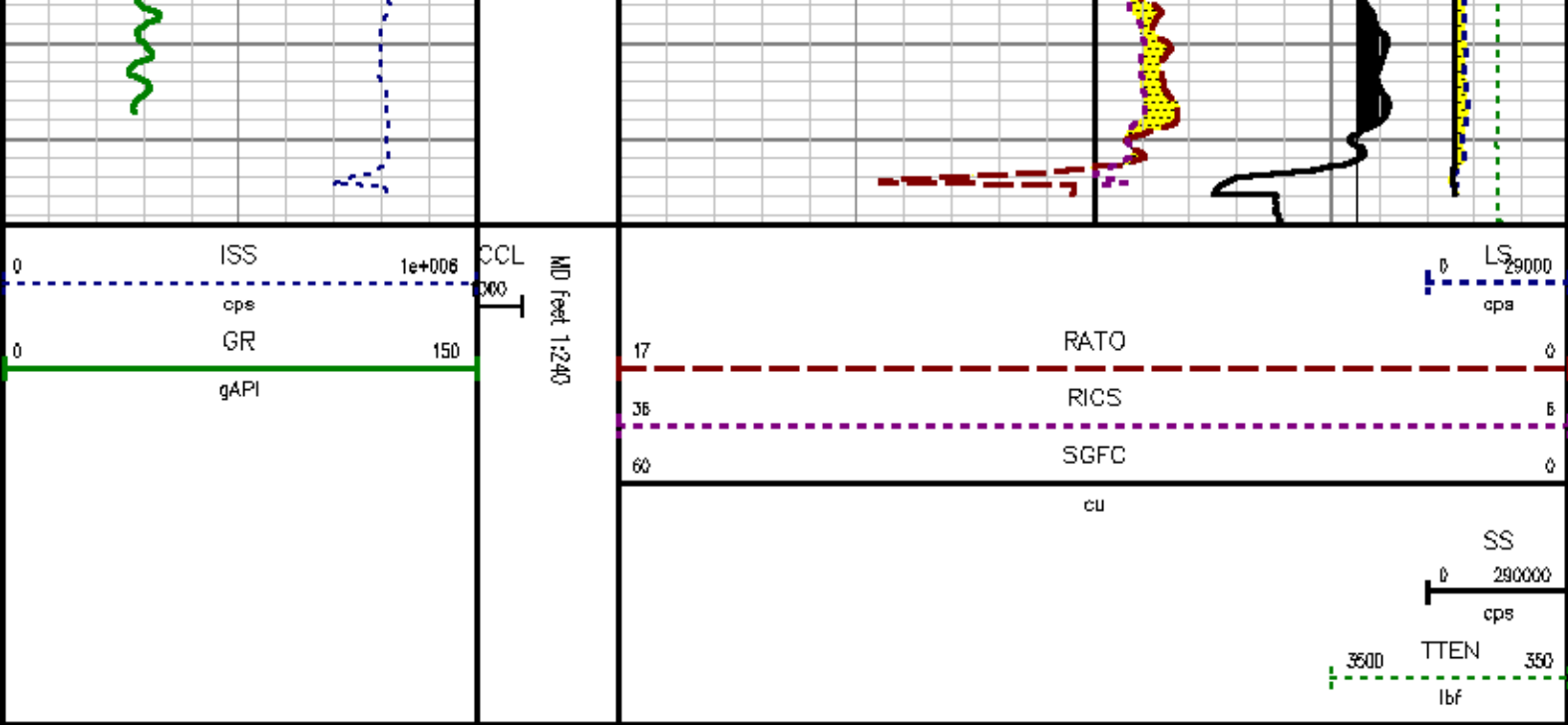
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RTWO	RIN13	RONE13	RTW013	SALB	SC1
SDA1	SDL1	SGA1	SGB1	SGBC	SGE1
SGF1	SGFC	SGK1	SGL1	SS	SS2
STA1	PD1S	PD2S	PD3S	MD1S	MD2S
MD3S	DG1S	DG2S	DG3S	PD1M	PD2M
PD3M	MD1M	MD2M	MD3M	DG1M	DG2M
DG3M	MVS	MA	MVM	FILV	IAM
TA	PVM	PVS	IAS	SSTAT	QPD1
QPD2	QPD3	QMD1	QMD2	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 : RPM9, v5.0.0.0  
 Plotted by : PlotMgr, v5.4.504  
 Company : EXXONMOBIL PRODUCTION COMPANY  
 Well : PCU 197-36A5  
 File Name : d:\welldata\5rpm\repeat.xtf  
 Mode : PlotMgr 5.4.504  
 Interval : 9988.00 - 10499.00 feet UP  
 Created : 6/23/2011 12:20:07 AM









## 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]	
S2K 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]	
S2K DA612	54.56	280.29	0.922	50.29	258.38	208.07	

PNC

PNC 3D CALIBRATION SUMMARY

DATE/TIME PERFORMED: Mon Jan 03 15:06:50 2011 TOOL SERIES: B281XA ASSET: 525 SEQ: J1

Calibrator #

SHOP SHOP

Source #

B281A4 11785054

	ISS	Mtr Vltz (V)	SS Gain	LS Gain	XLS Gain	EA Temp (degF)	Sync Delay (usec)	RCAL
Raw Data	818521	127.00	2162.00	2273.00	2282.00	84.00	10.00	0.9879
Interpolated	1300000	150.67	2140.60	2261.94	2279.62			

	ISS	BKS	BKL	BKX	SGA 1	SDA 1	SGA 2	SDA 2
Raw Data	818521	7620.29	1247.20	488.68	25.88	0.14	24.27	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	818521	175207.86	27125.40	93053.11	33115.76	8697.46	56309.09	13924.18
Fit Quality %		1.05	1.34	1.10	1.09	1.12	1.00	1.08

	ISS	RBOR	RIN ISS/ILS	RIN13 ISS/IXS	RICS ISS/CSS	RATO SS/LS	RTWO SS2/LS	RONE CSS/CLS
Raw Data	818521	1.43	4.67	30.18	14.54	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 %		0.09	0.14	0.28	0.14	0.16	0.16	0.15
Reduced	1411922	1.43	4.69	30.20	14.60	10.68	3.80	4.04
		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 (B250EA)

29.85'

TELEMETRY / CCL (8248EA)

SONDEX GAMMA RAY (2812LA)

RESERVOIR PERFORMANCE MONITOR (8281XA)

CCL MP — 21.78'

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"



Baker Atlas



Company	EXXONMOBIL PRODUCTION COMPANY		
Well	PCU 197-3645		
Field	PICEANCE CREEK UNIT		
County	RIO BLANCO	State	COLORADO

File No:	CH0372025
API No:	05103111840000

Location:

1848' FSL & 2813' FWL

Elevations

KB 7144 ft

DF 7143 ft

GL 7114 ft

SEC: 38 TWP: 1S RGE: 97W