



RESERVOIR PERFORMANCE MONITOR

Baker Atlas

File No: CH089913	Company Well Field County	WPX ENERGY C&C ENERGY GM 44-21 GRAND VALLEY GARFIELD	State COLORADO
API No: 05045224300000			
12 7S 96W GM 24-12 PAD H&P 318	Location SHL: 267' FSL & 1054' FWL BHT: 1157' FSL & 879' FEL (SESE) SEC 12 TWP 7S RGE 96W	Other Services BOND LOG	
Permanent Datum Log Measured From Drill Measured From	GL KB KELLY BUSHING	Elevation 24 ft Above P. D.	Elevations KB 5165 ft DF GL 5141 ft

Date	07/SEP/14	
Run	ONE	
Service Order	US089913J	
Depth Driller	7734 ft	
Depth Logger	7675 ft	
Bottom Logged Interval	7665 ft	
Top Logged Interval	4320 ft	
Time Started	1615	
Time Finished	2100	
Operator Rig Time	4.75 HRS	
Type of Fluid in Hole	WATER	
Fluid Density	NA	
Salinity	NA	
Fluid Level	67 ft	
Logged Cement Top	NA	
Wellhead Pressure	0 psi	
Maximum Hole Deviation	NA	
Nominal Logging Speed	10 fpm	
Maximum Recorded Temperature	209 degF	
Reference Log Date	06/SEP/14	
Equipment No.	44271	GRAND JCT
Recorded By	FLOYD RENEAU	
Witnessed By	JEFF BRADY	

- 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	24 ft	1855 ft
8.75 in	2855 ft	7734 ft

Casing Record				
Size	Weight	Grade	From	To
9.625 in			24 ft	1855 ft
4.5 in	11.6 lbm/ft	I-80	24 ft	7734 ft

Remarks
All data on this log is shifted and depth matched using the Gamma Ray curve to the Baker Hughes bond log dated 9/6/2014 at the client's request.
The amount of linear shift is 6.5 feet.
Logged in PNC-3D mode.
BHT = 209°F
SJ = 4105'-4127'

Equipment Data					
Run	Trip	Tool	Series Number	Serial Number	Position
1	1	TEMP	8255XA	Z120516	FREE
1	1	RPM	8281FA	10401926	FREE
1	1	RPM	8281PA	10414345	FREE
1	1	RPM	8281EA	10190984	FREE
1	1	GR	2812LA	10274382	FREE
1	1	TEL/CCL	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		4299.750	7671.000
PNC Porosity	Borehole Size	8.750	inch	4299.750	7671.000
PNC Porosity	Casing Size	4.500	inch	4299.750	7671.000
PNC Porosity	Gas Filled	Non Gas Filled		4299.750	7671.000
PNC Porosity	Matrix	Sandstone		4299.750	7671.000
TPS Pressure	Temperature Corr. Source	Fixed (72.00)	degF	4299.750	7671.000

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 WDT3 RICL
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 WDT3 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 : C&C ENERGY GM 44-21

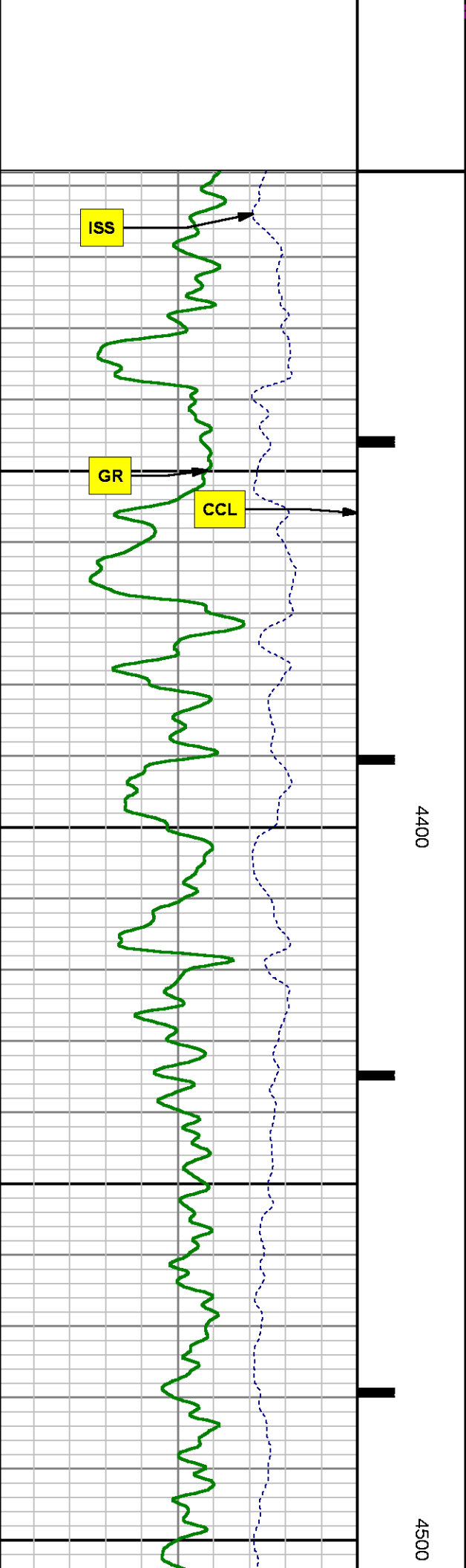
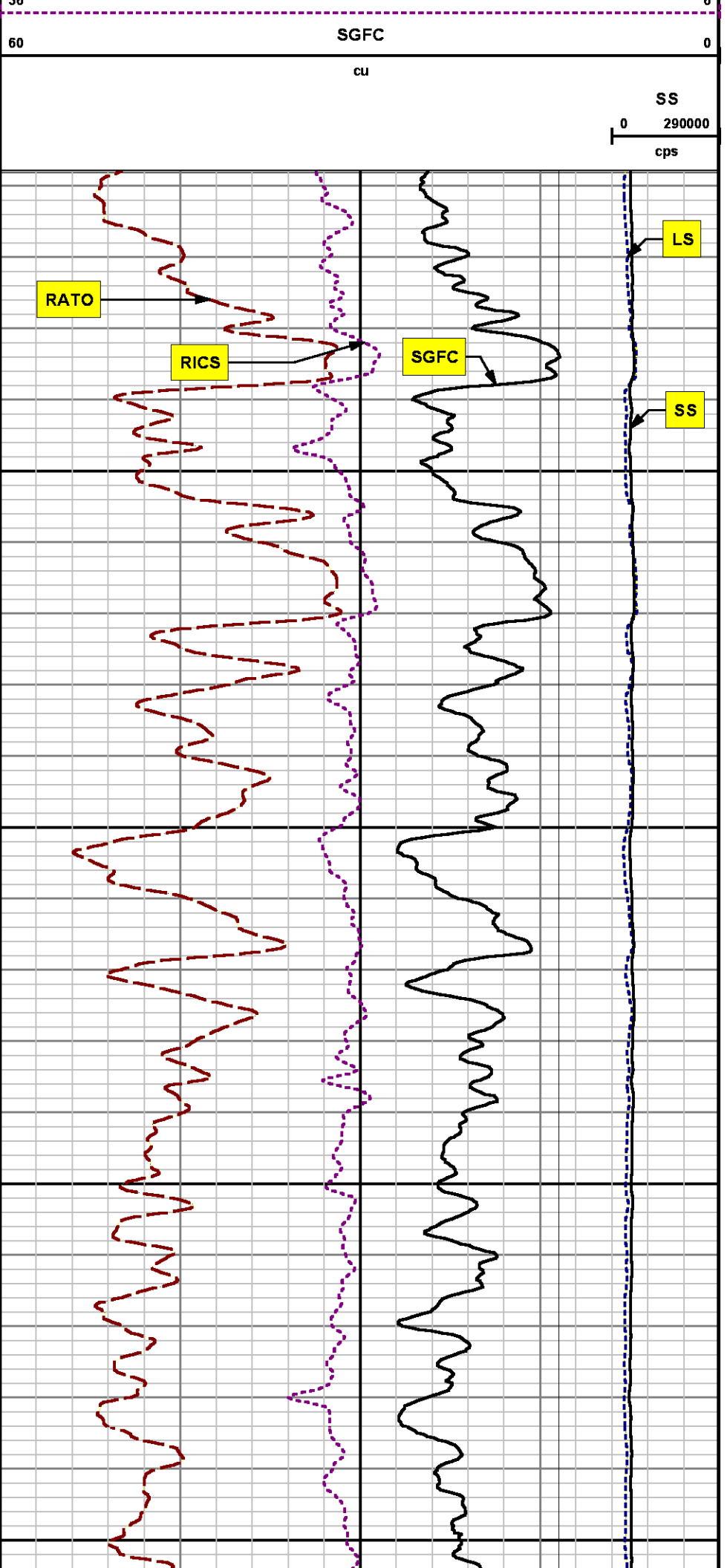
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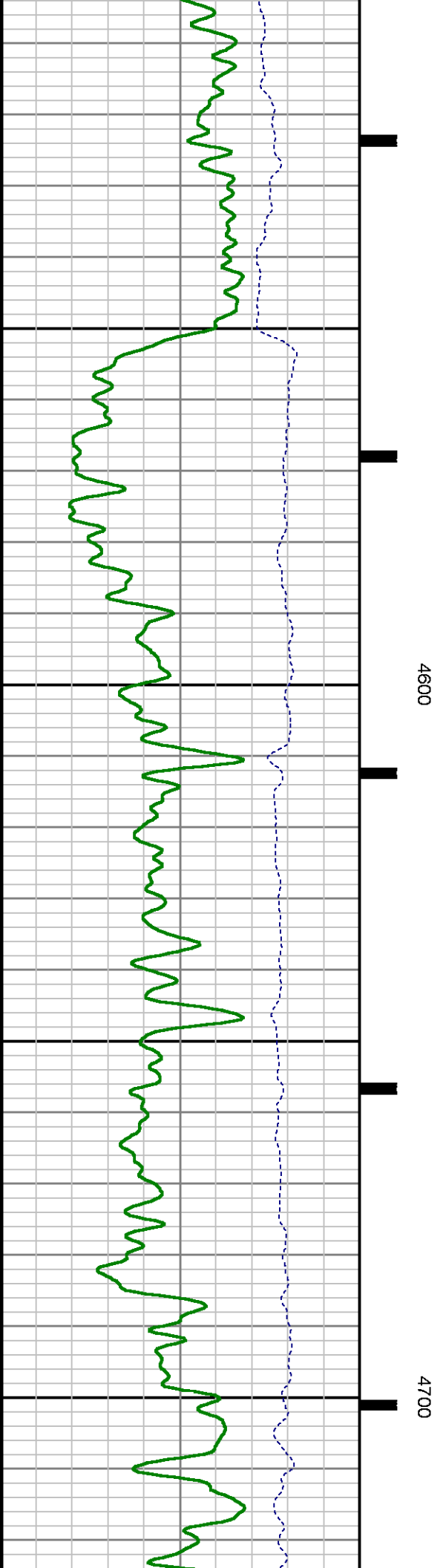
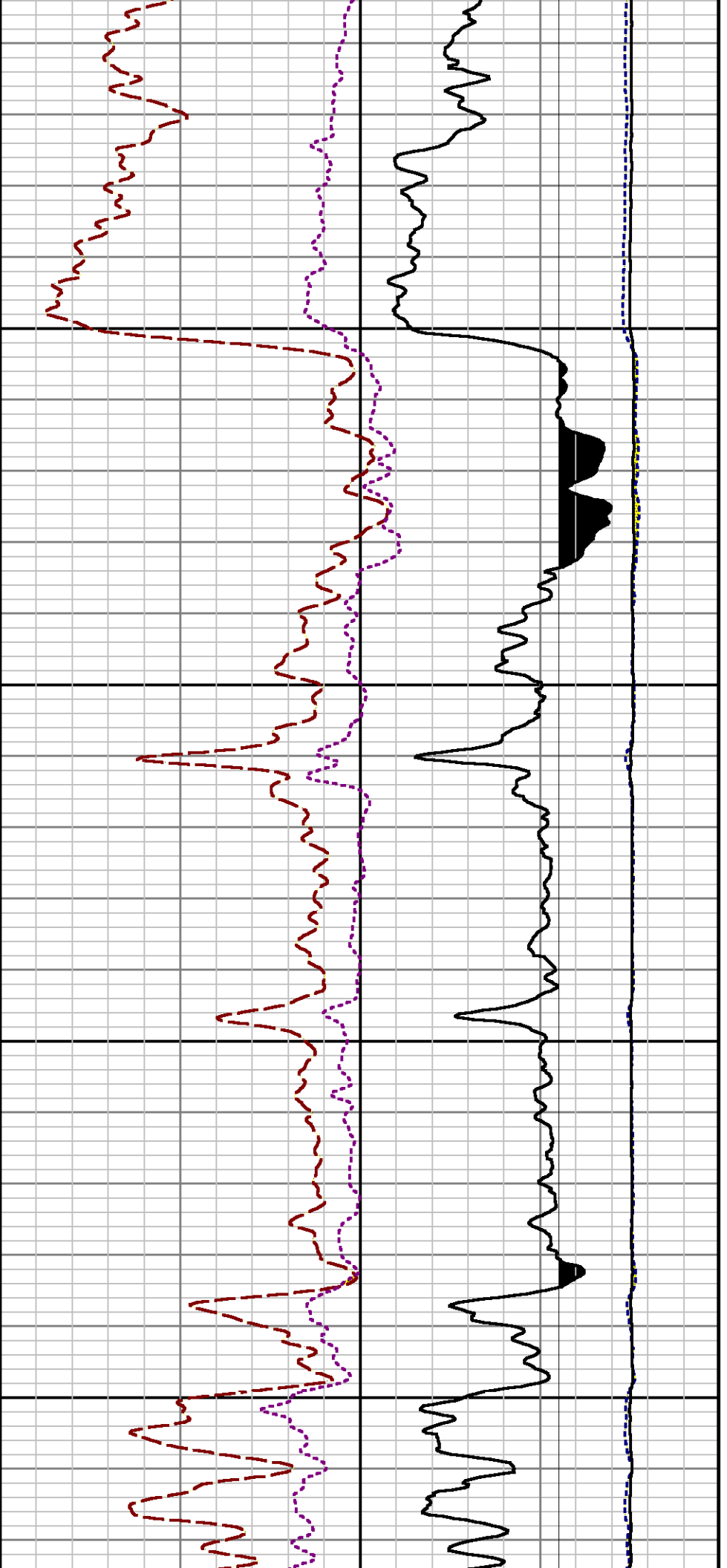
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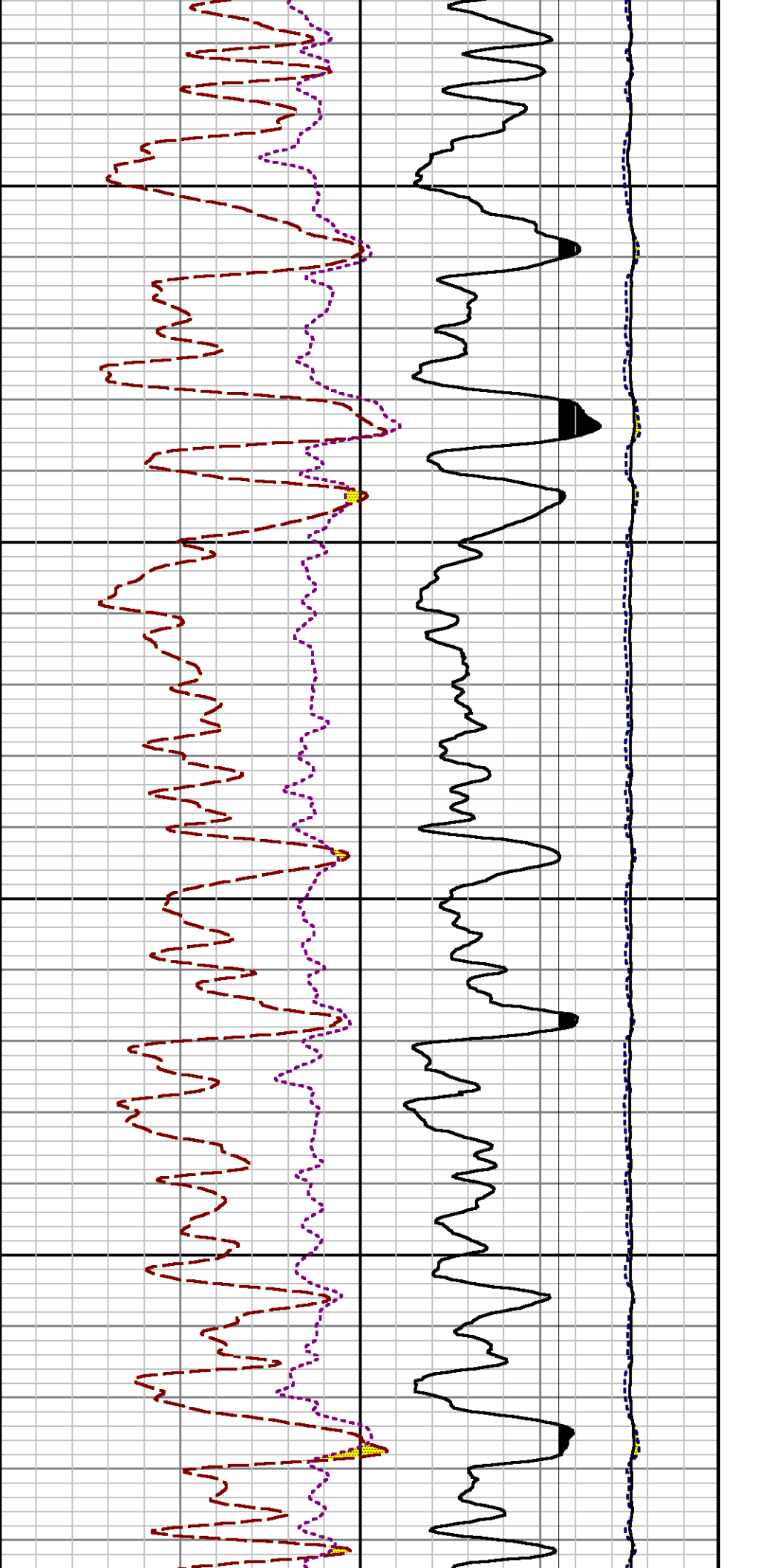
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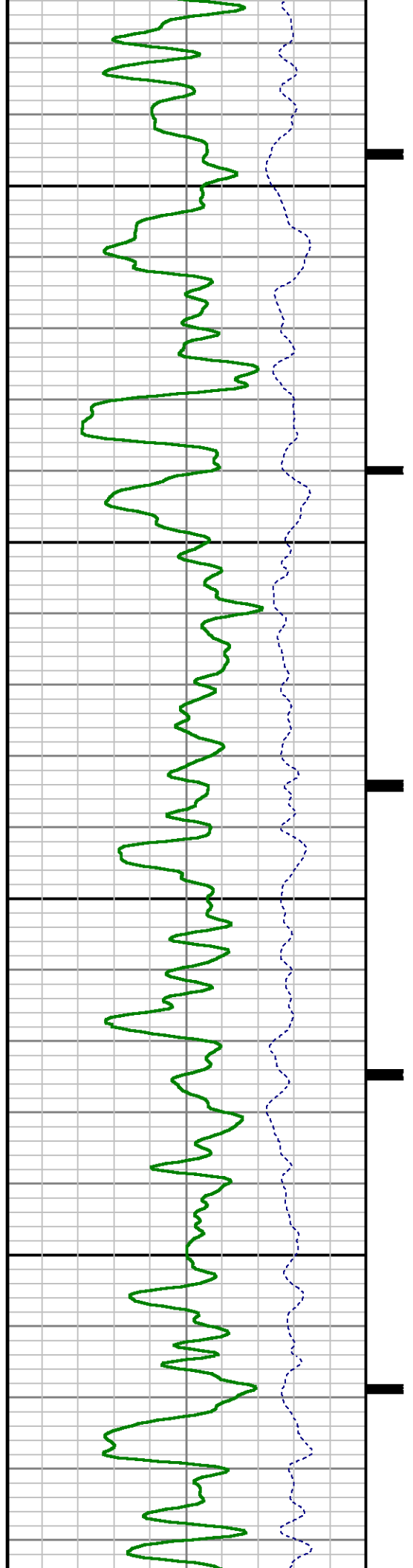


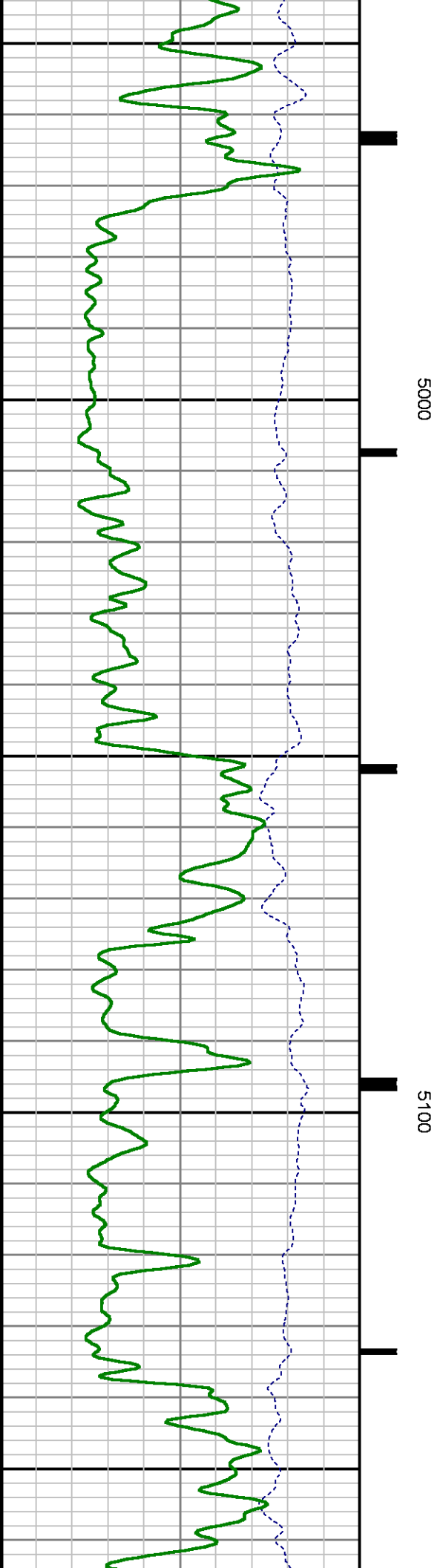
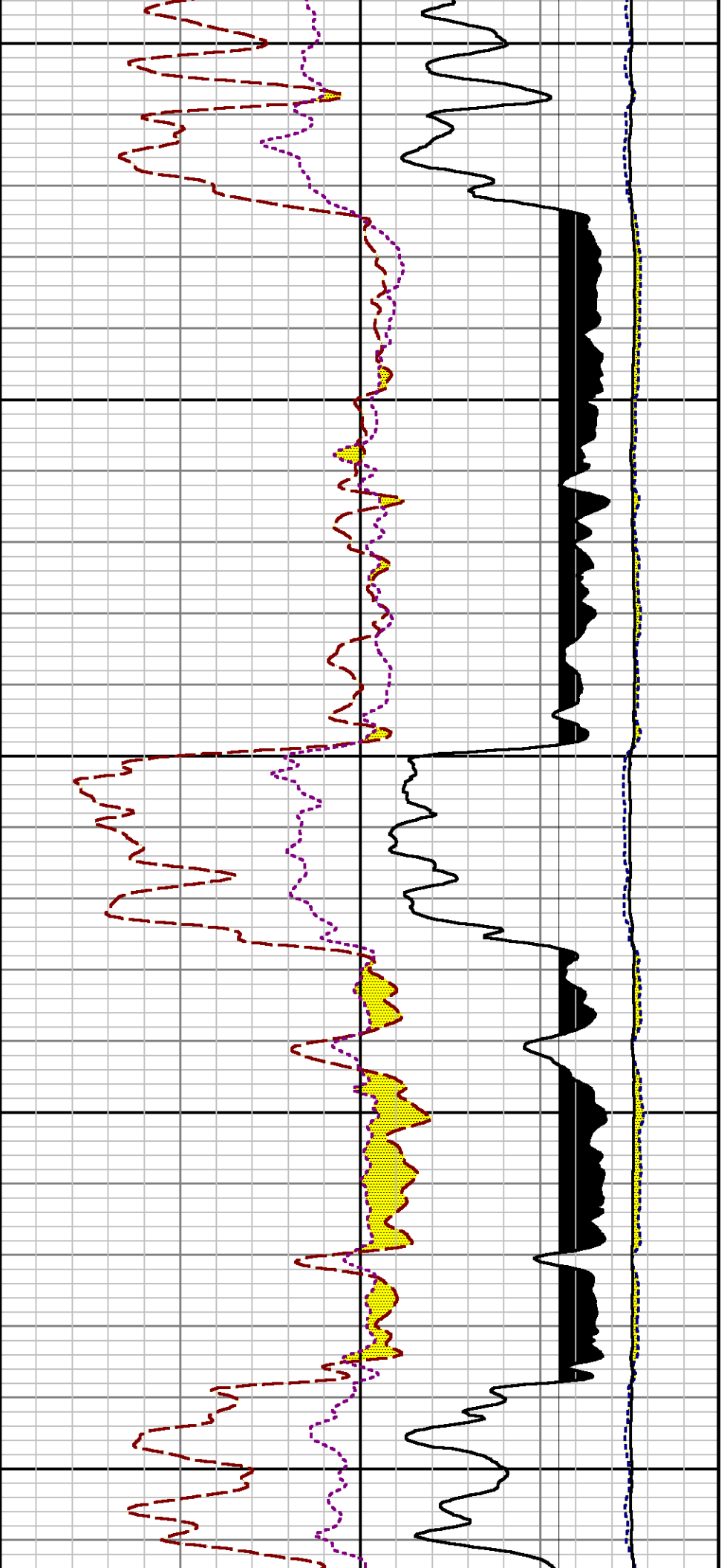


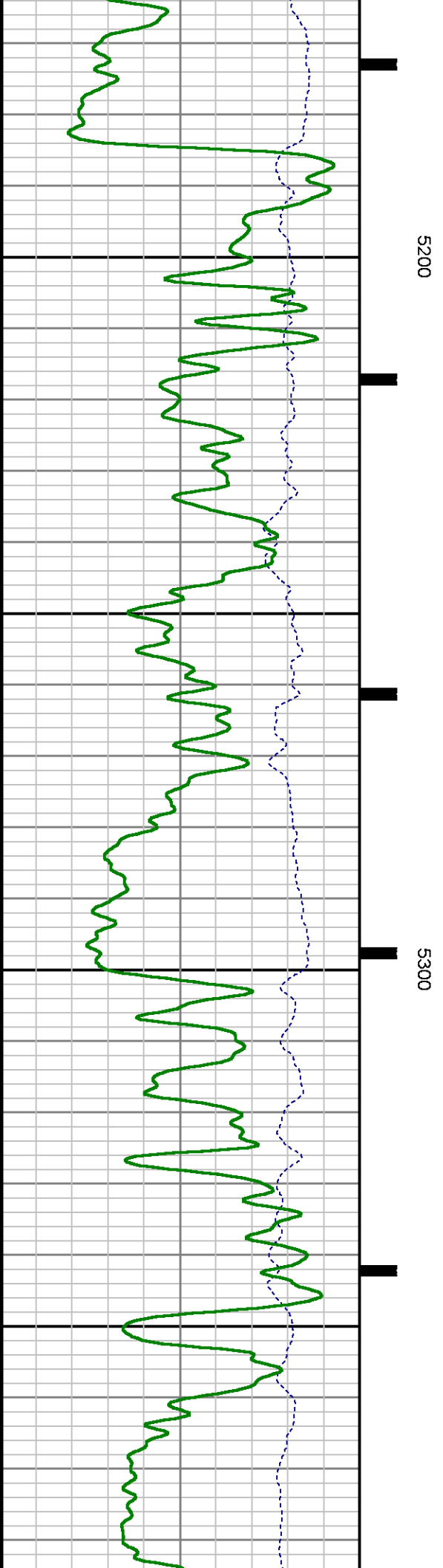
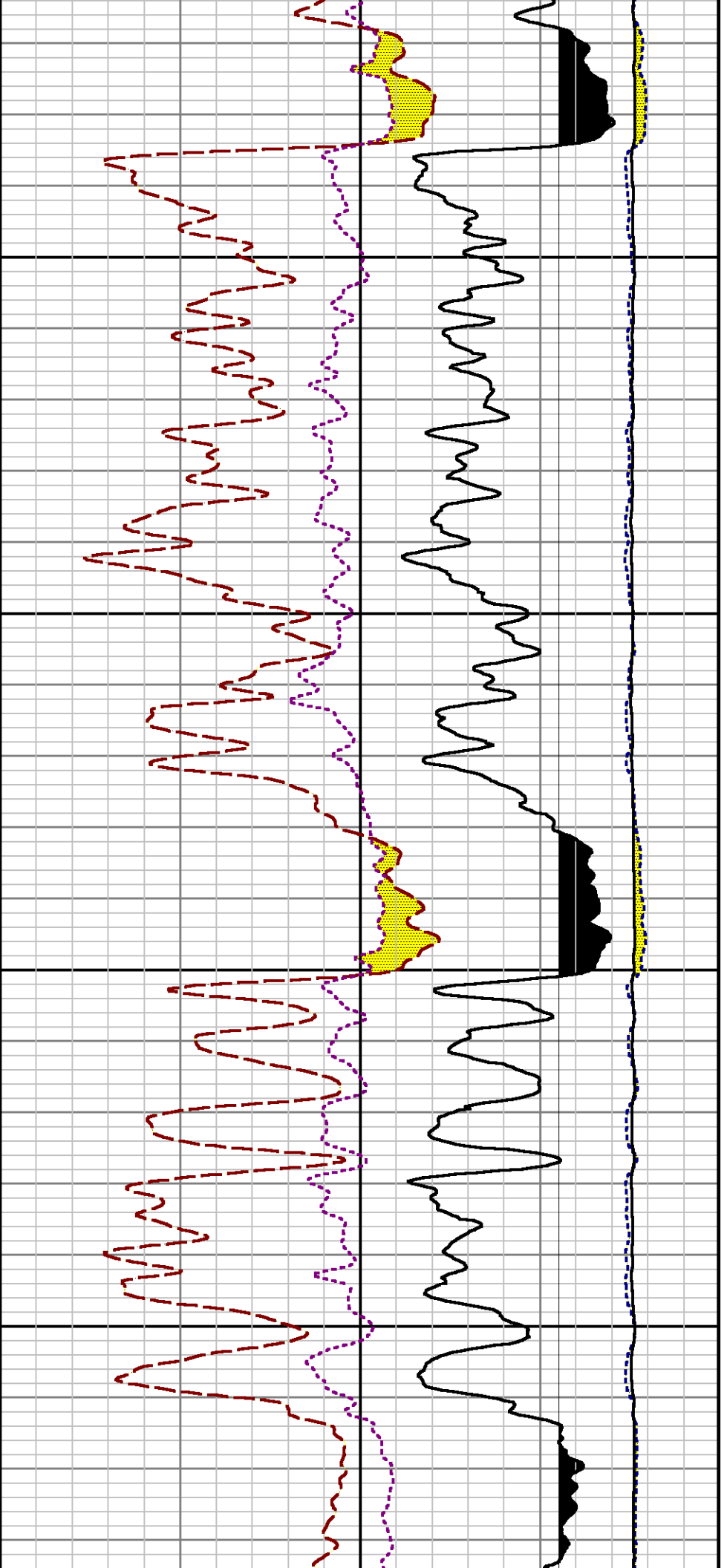


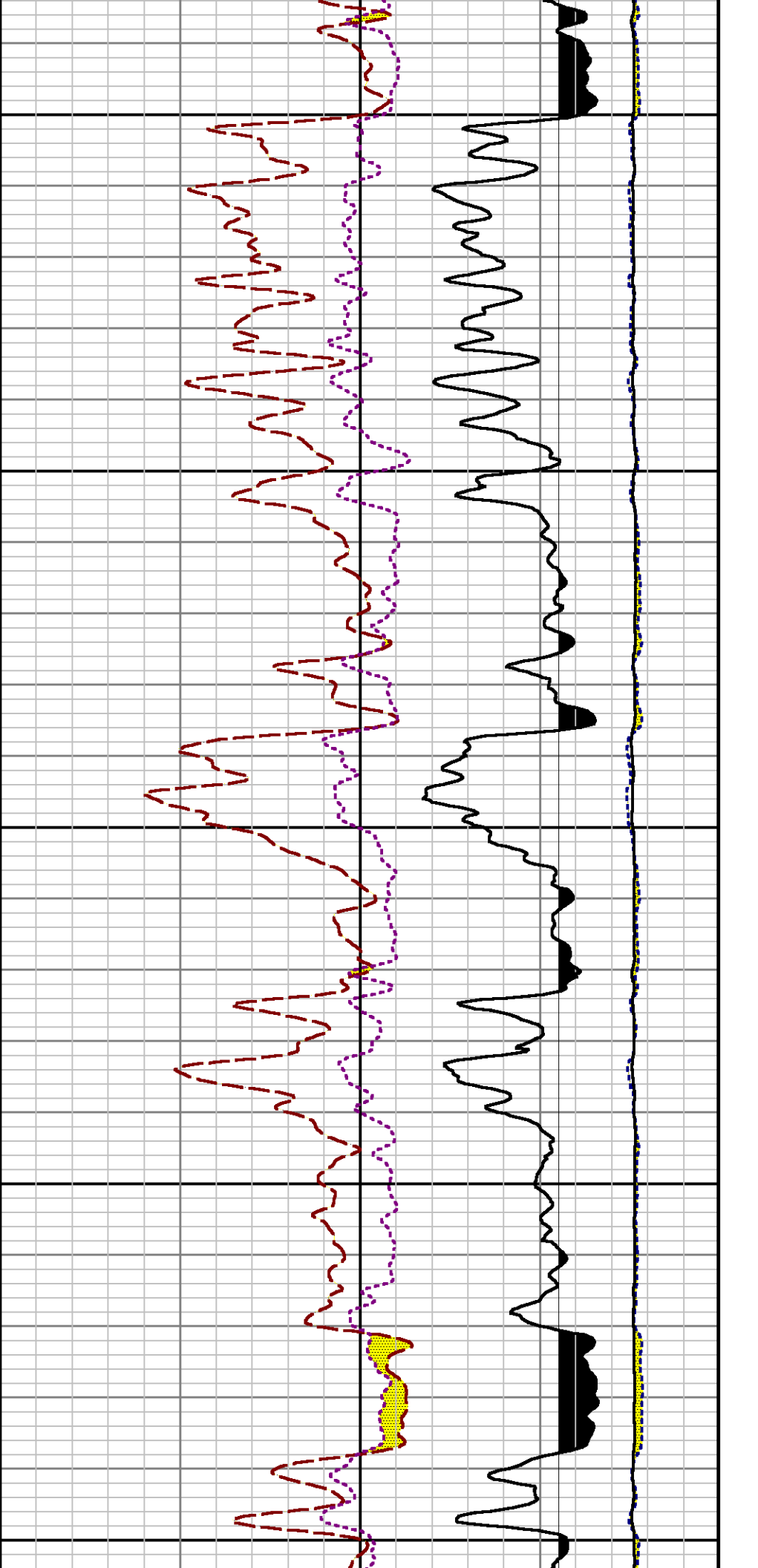
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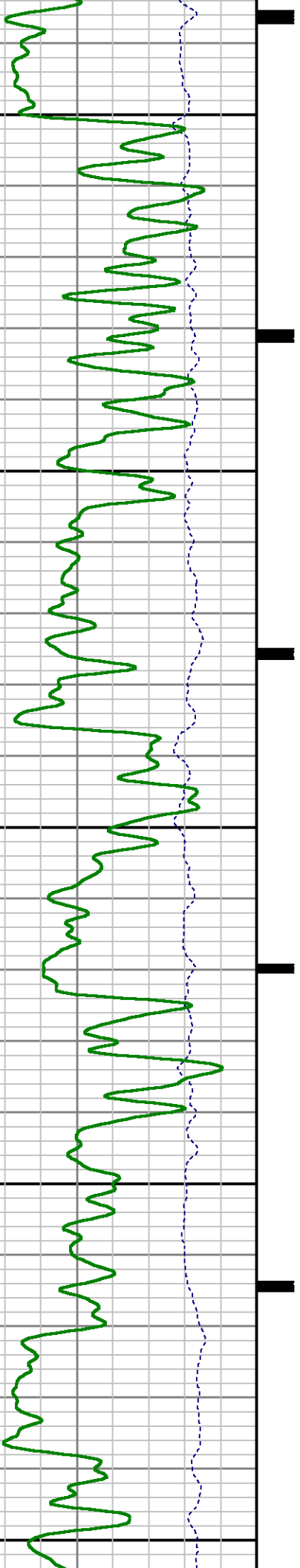


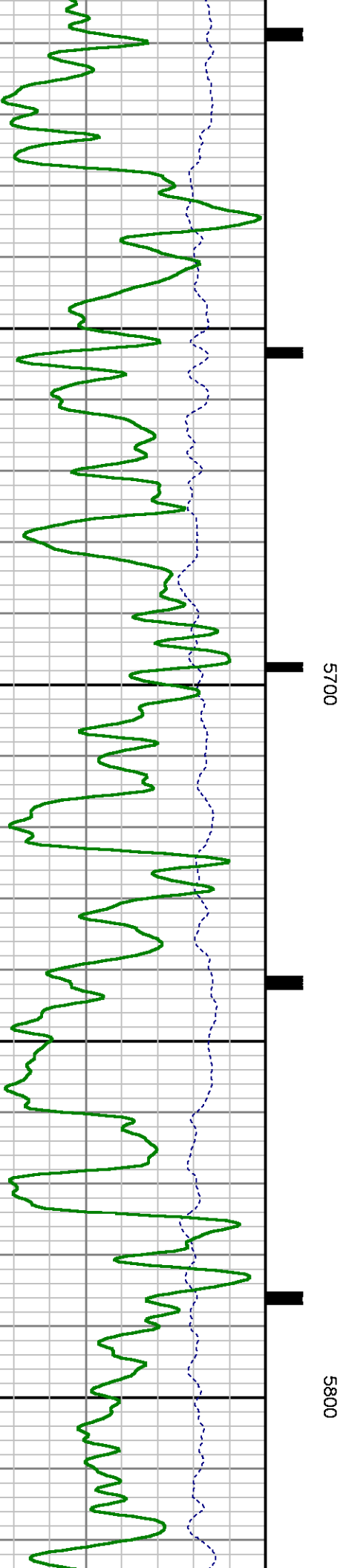
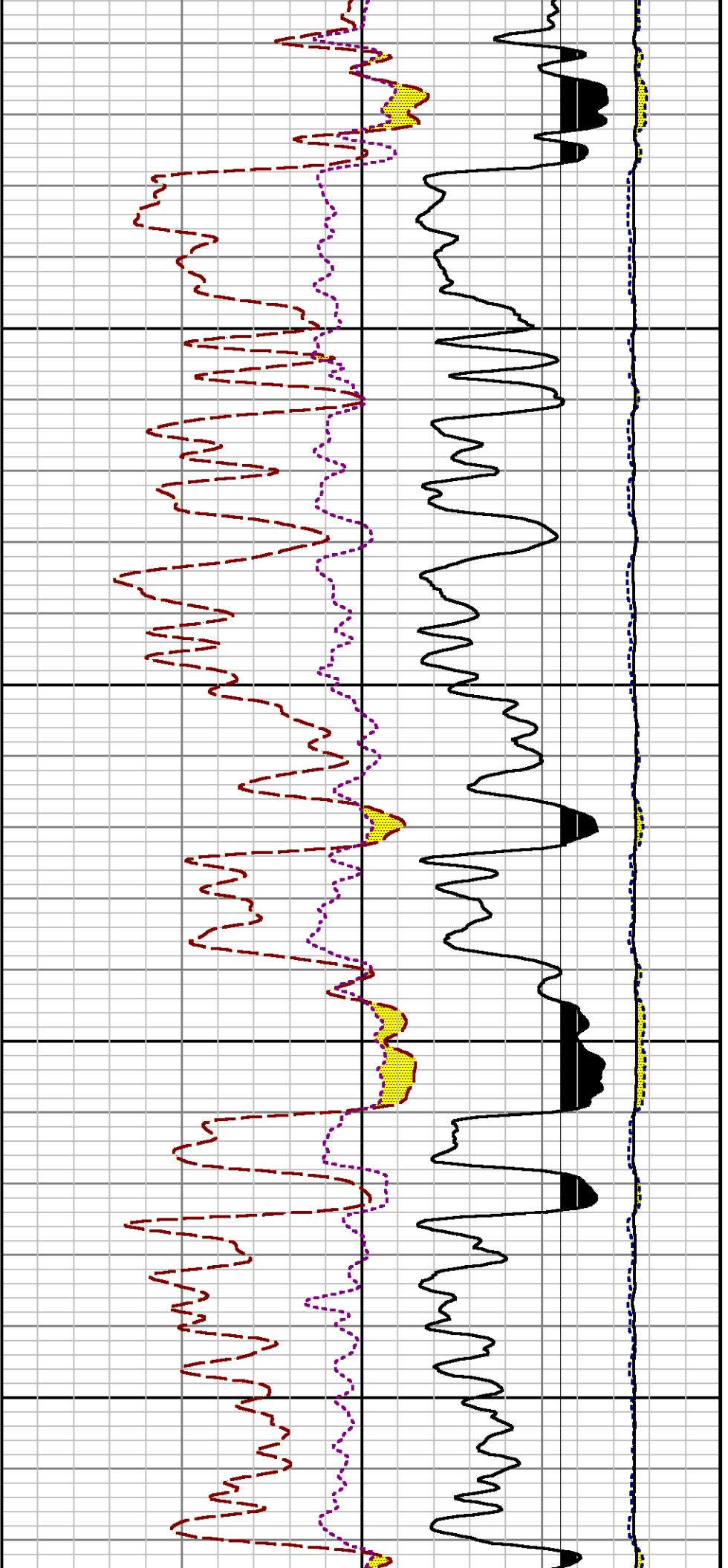


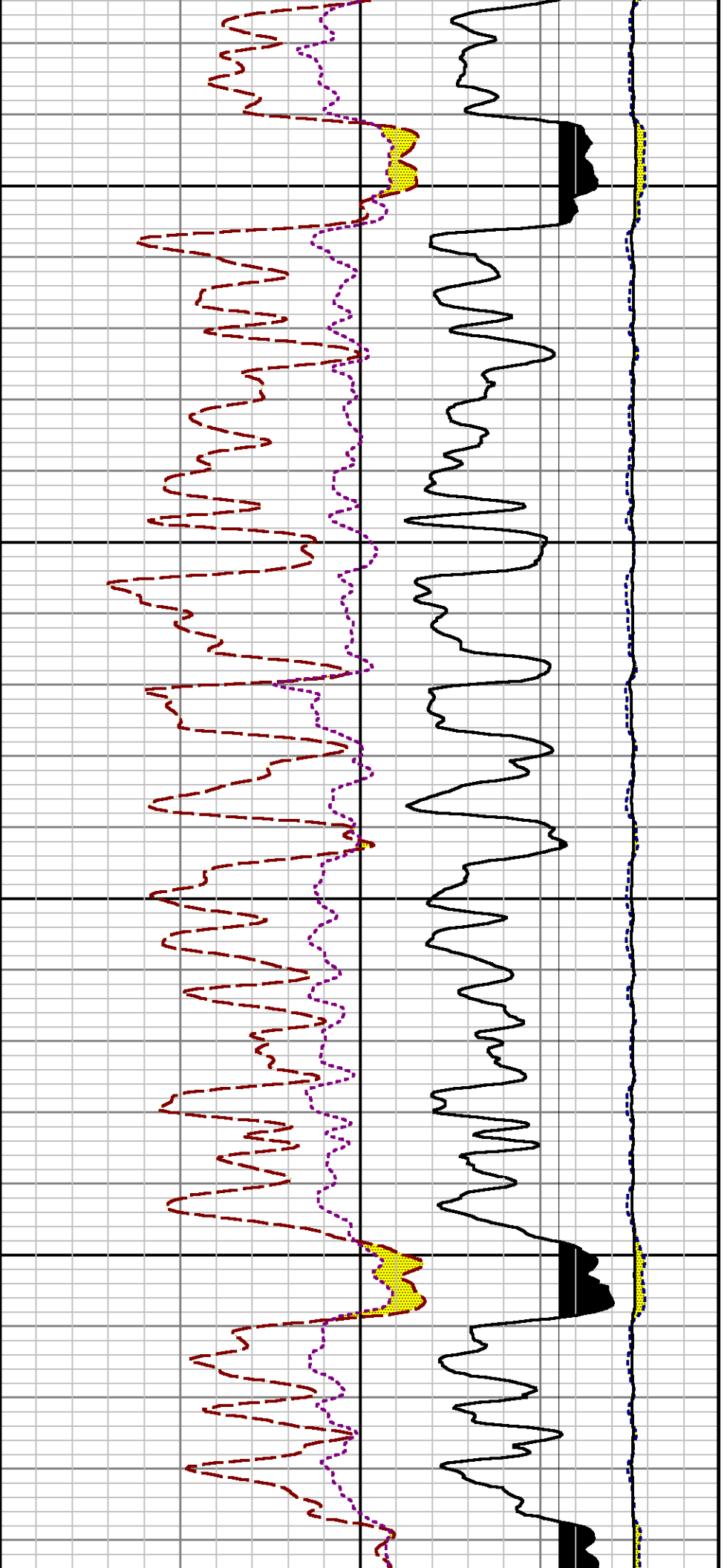
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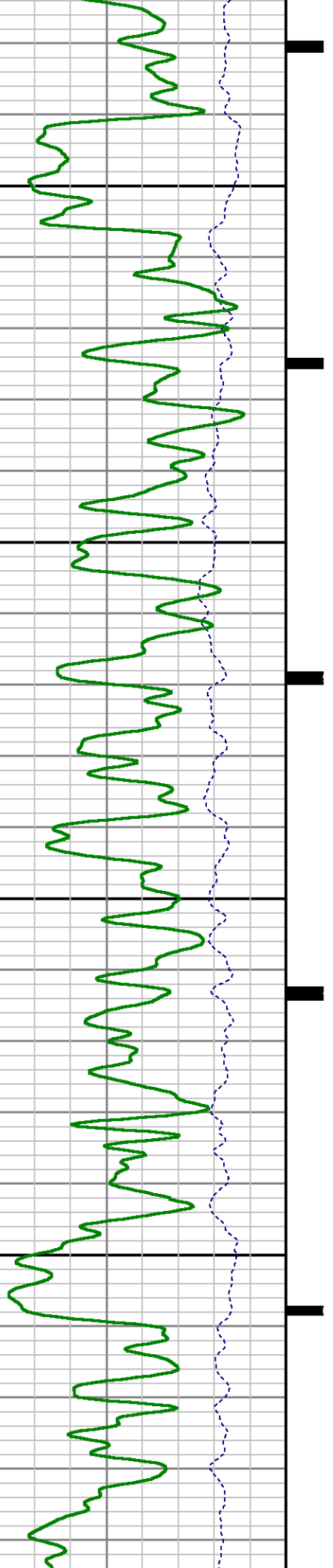


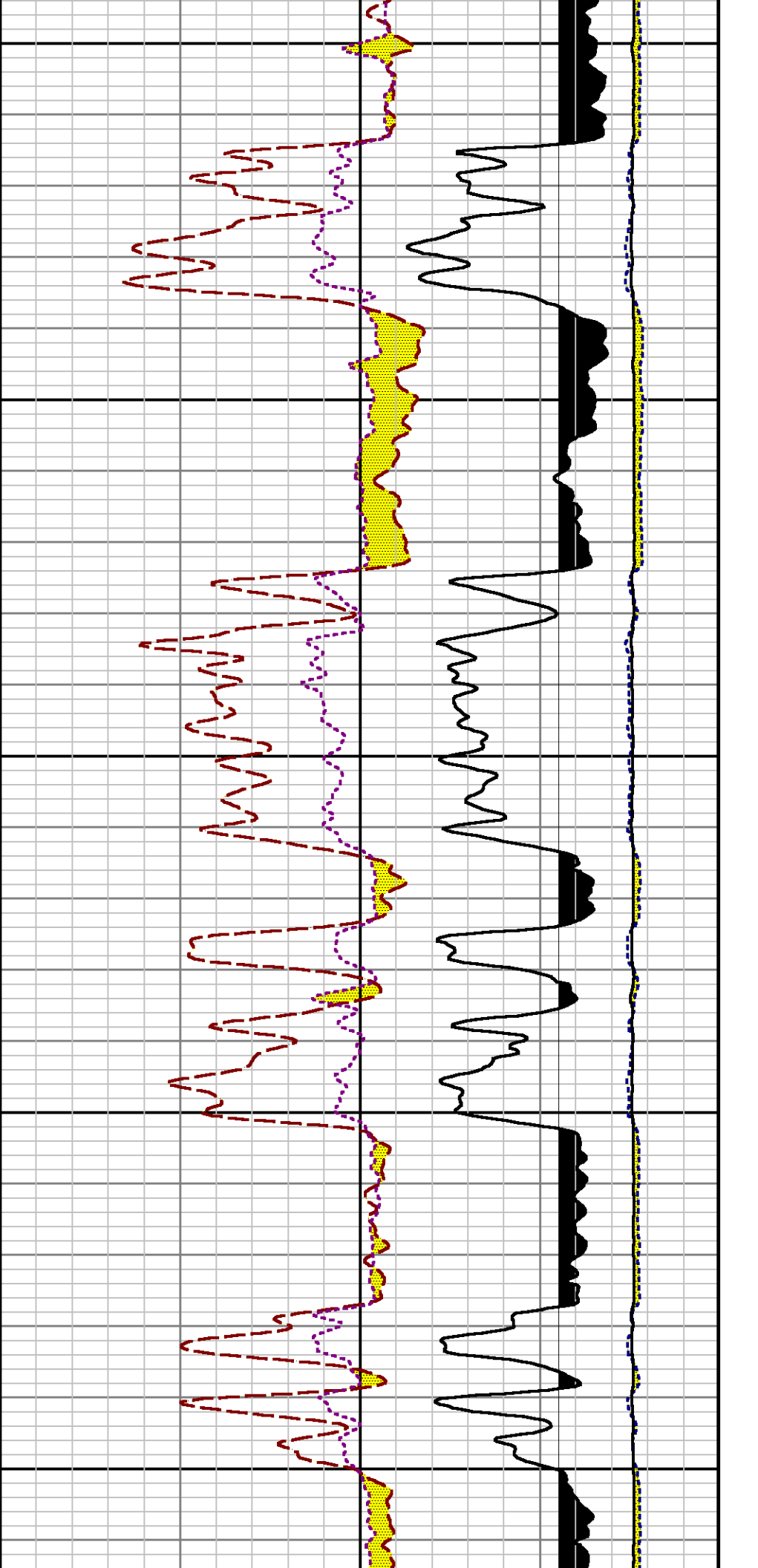




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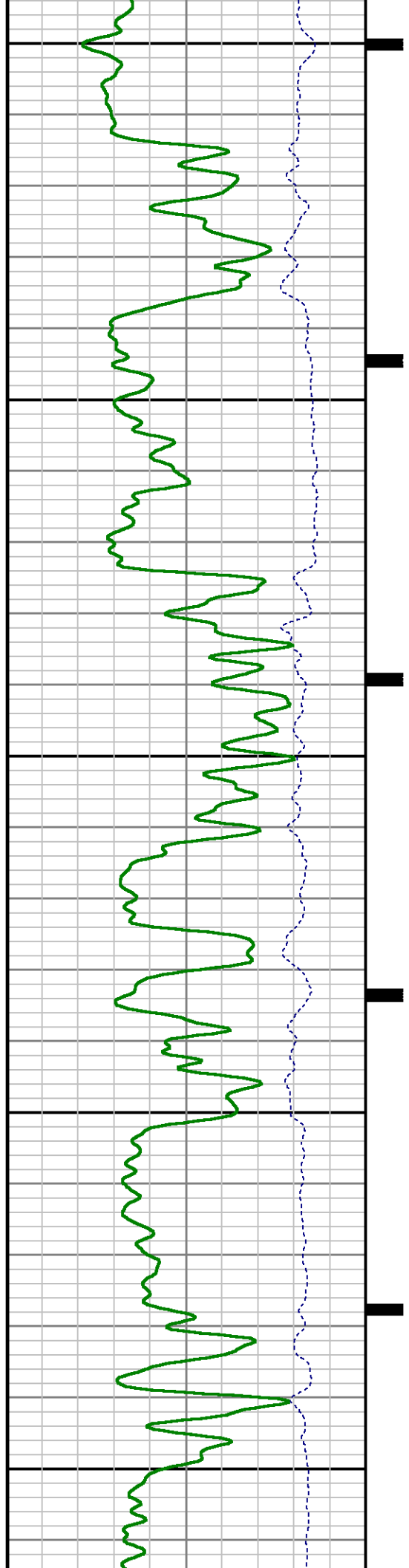
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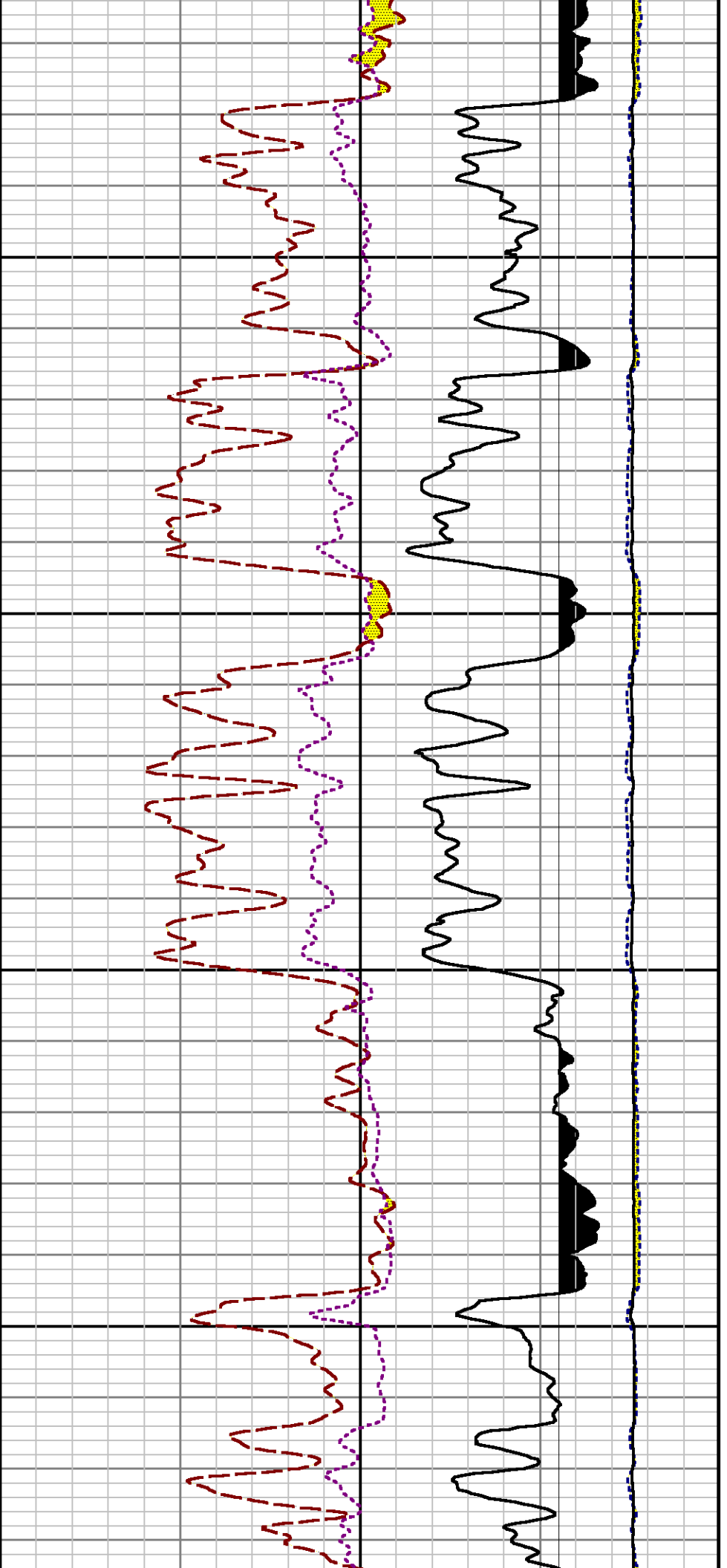




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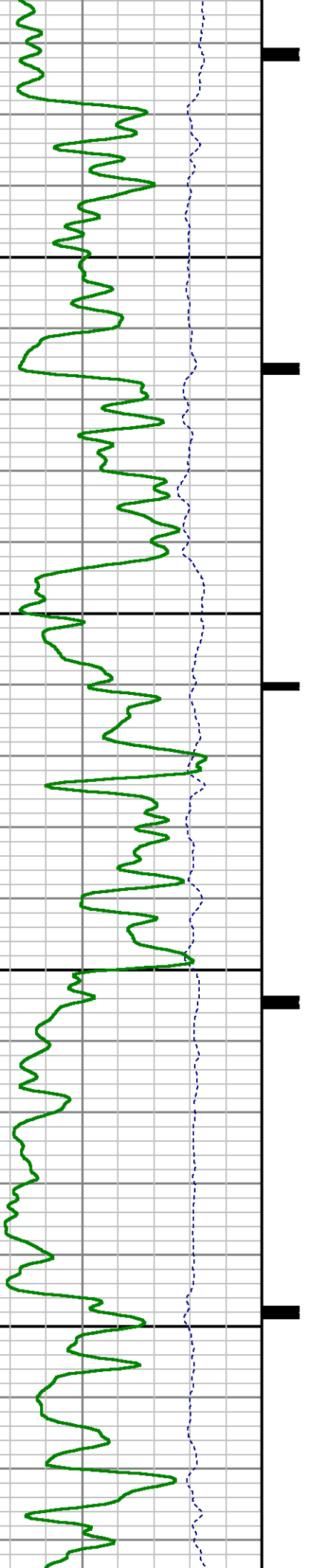
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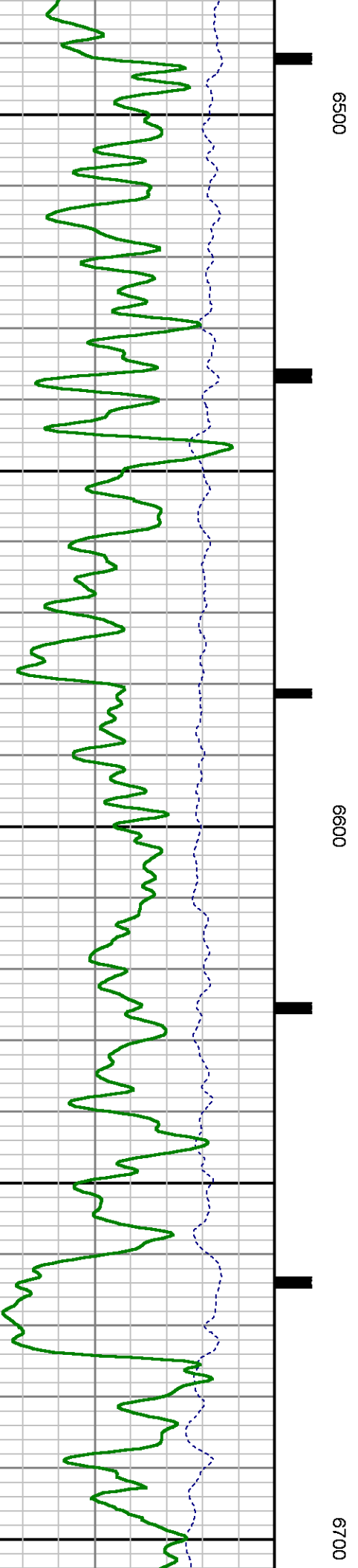
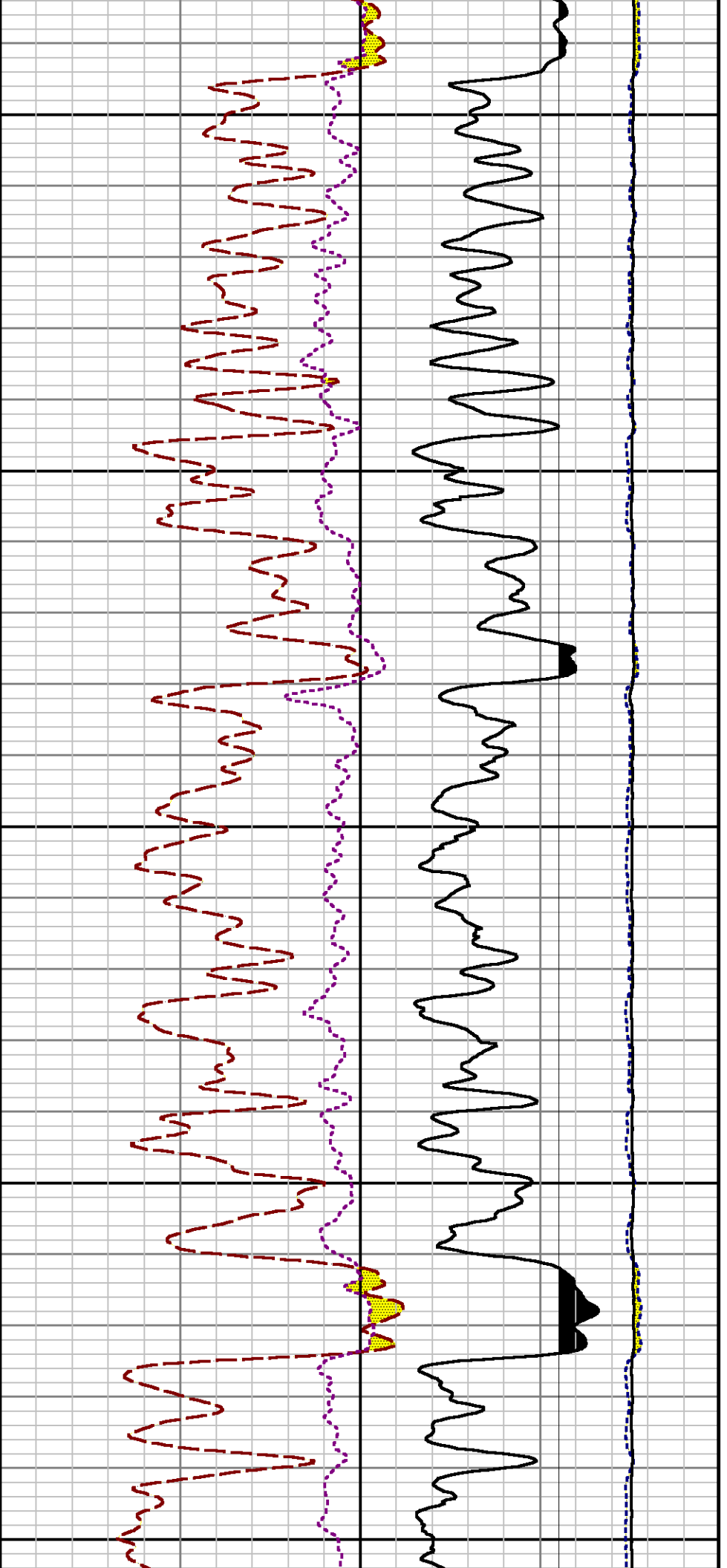


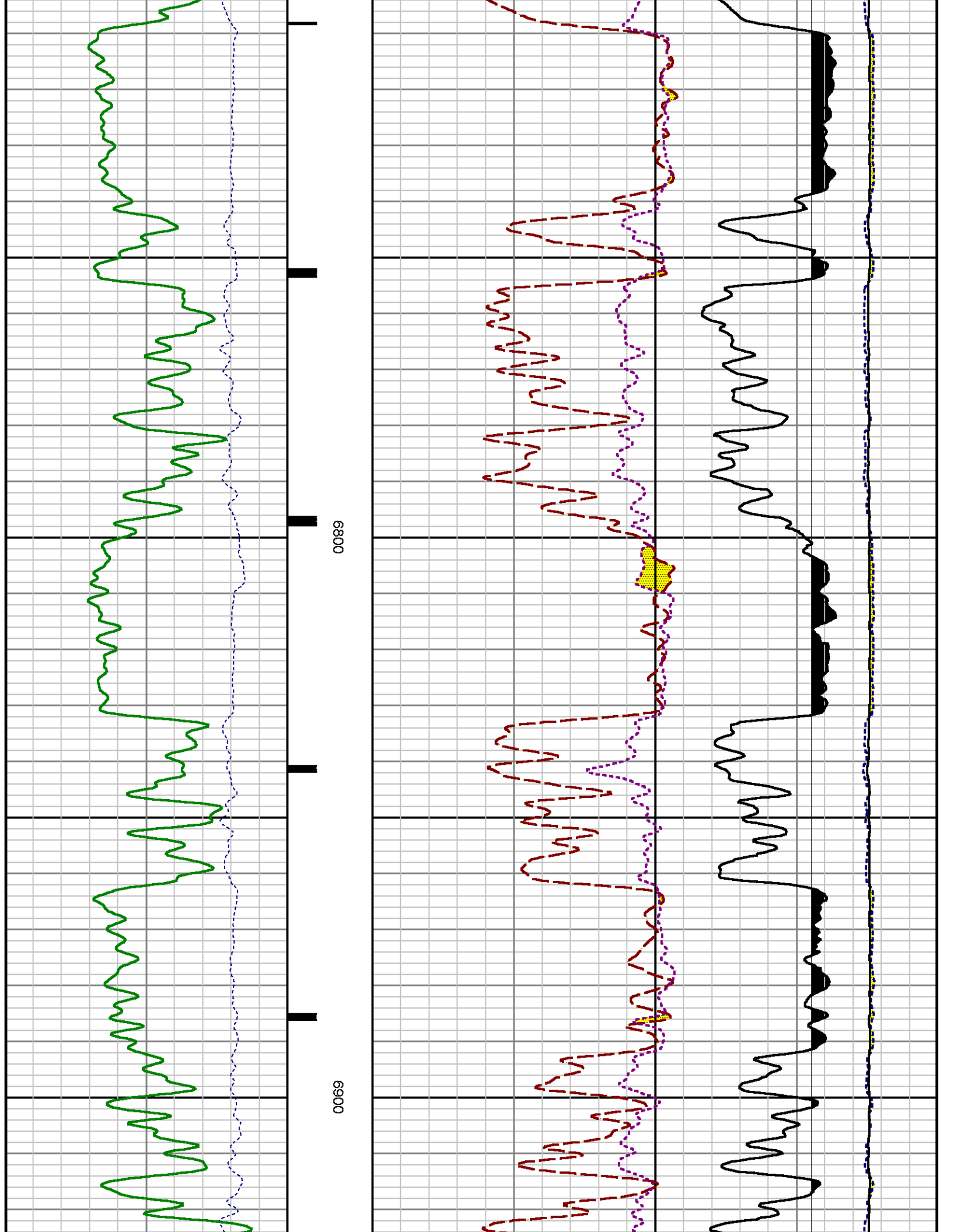


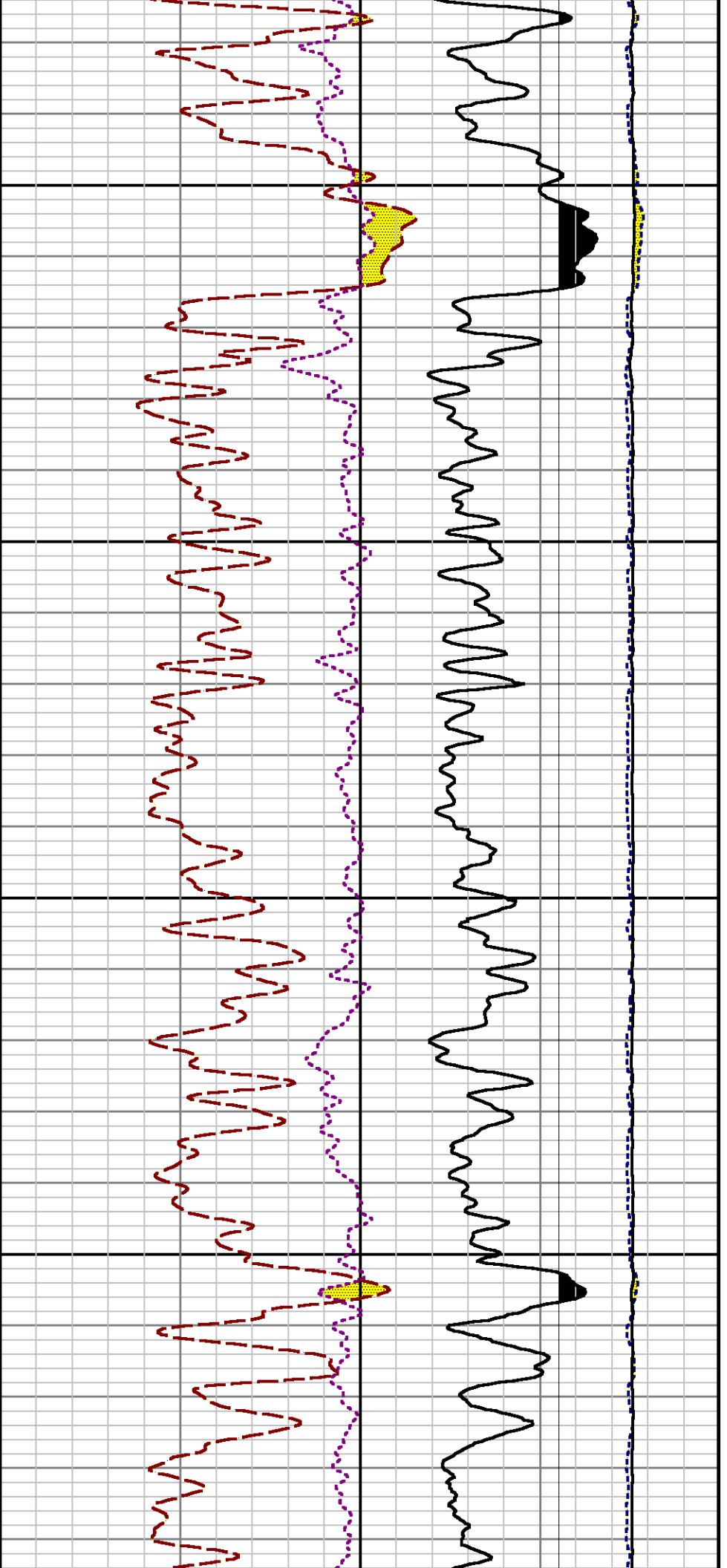
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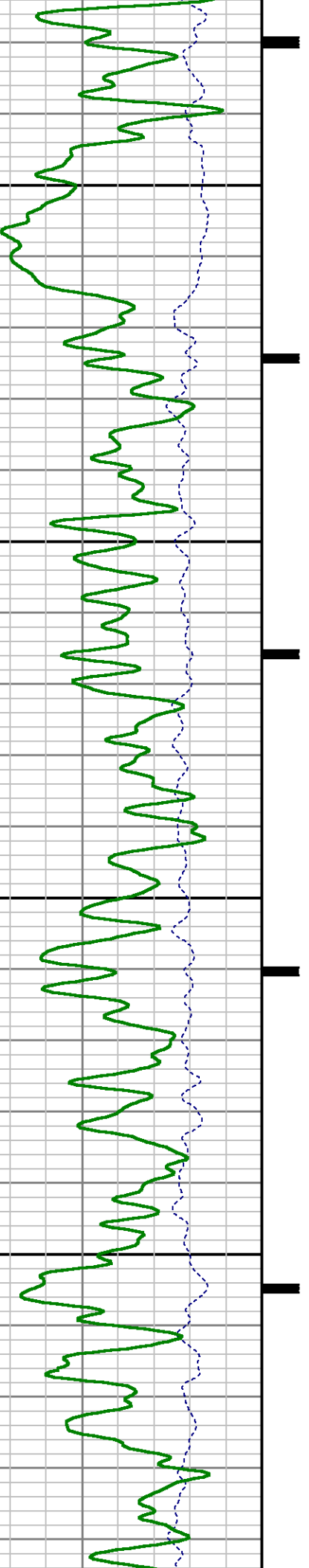


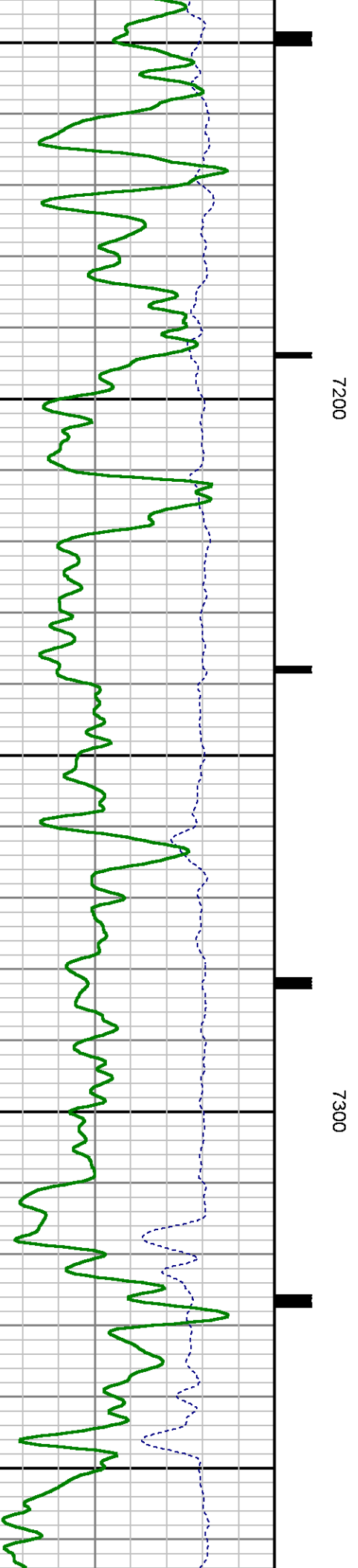
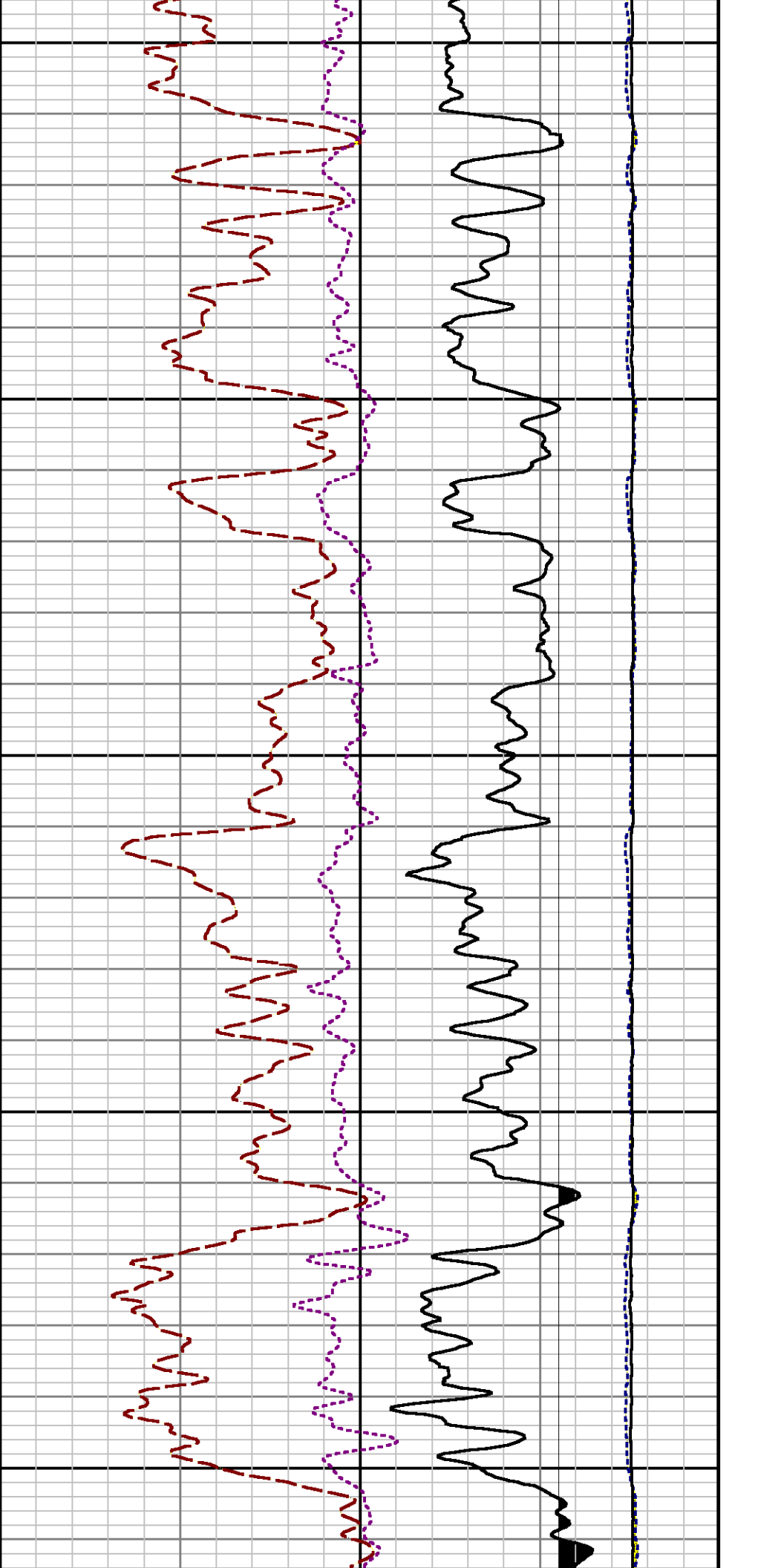


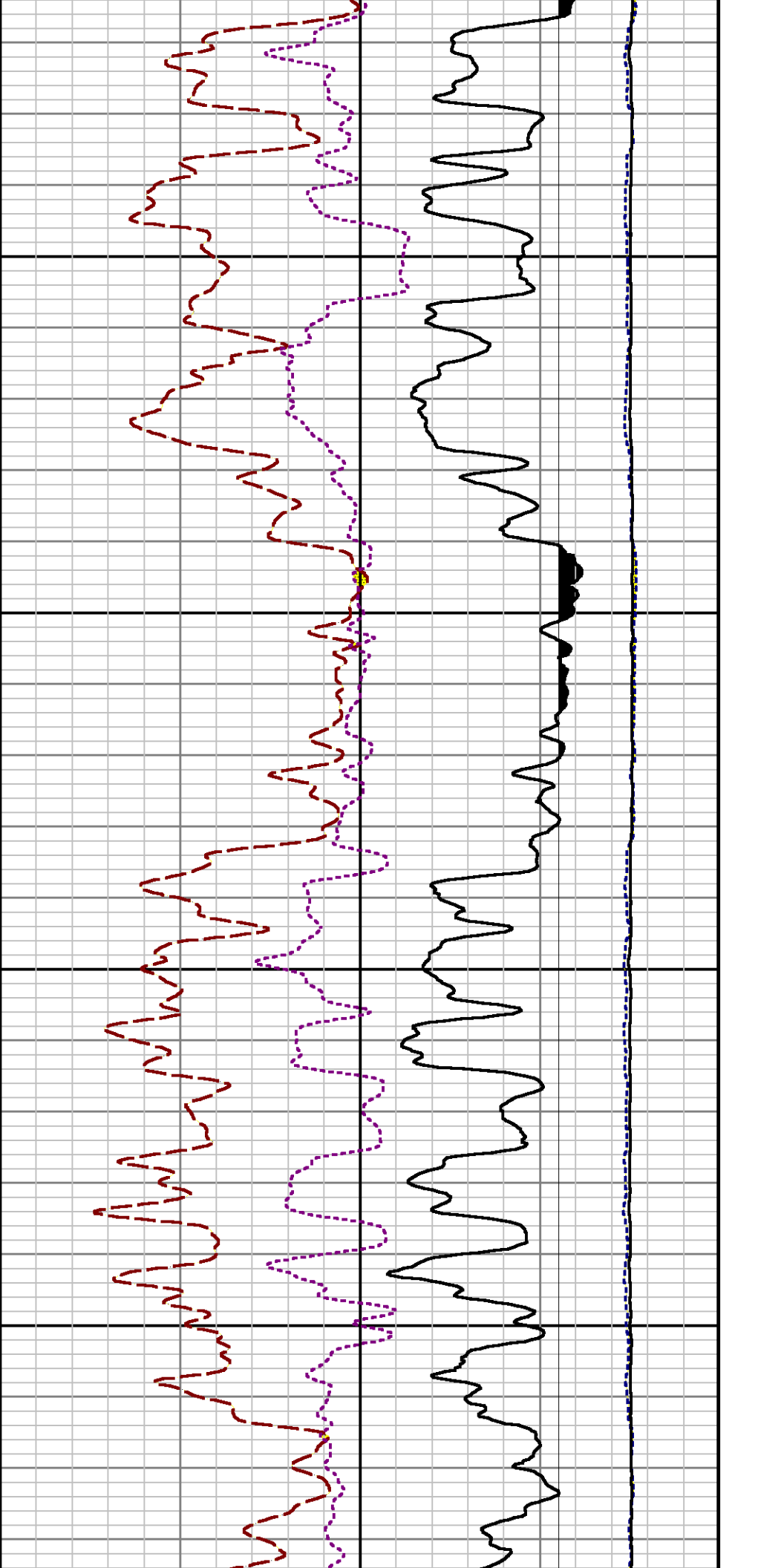


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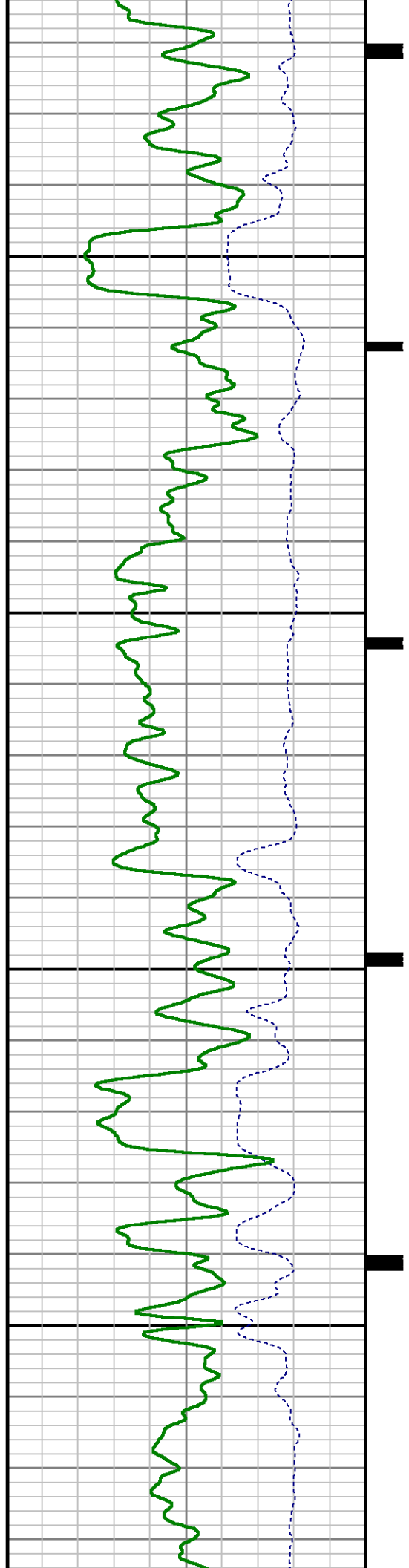


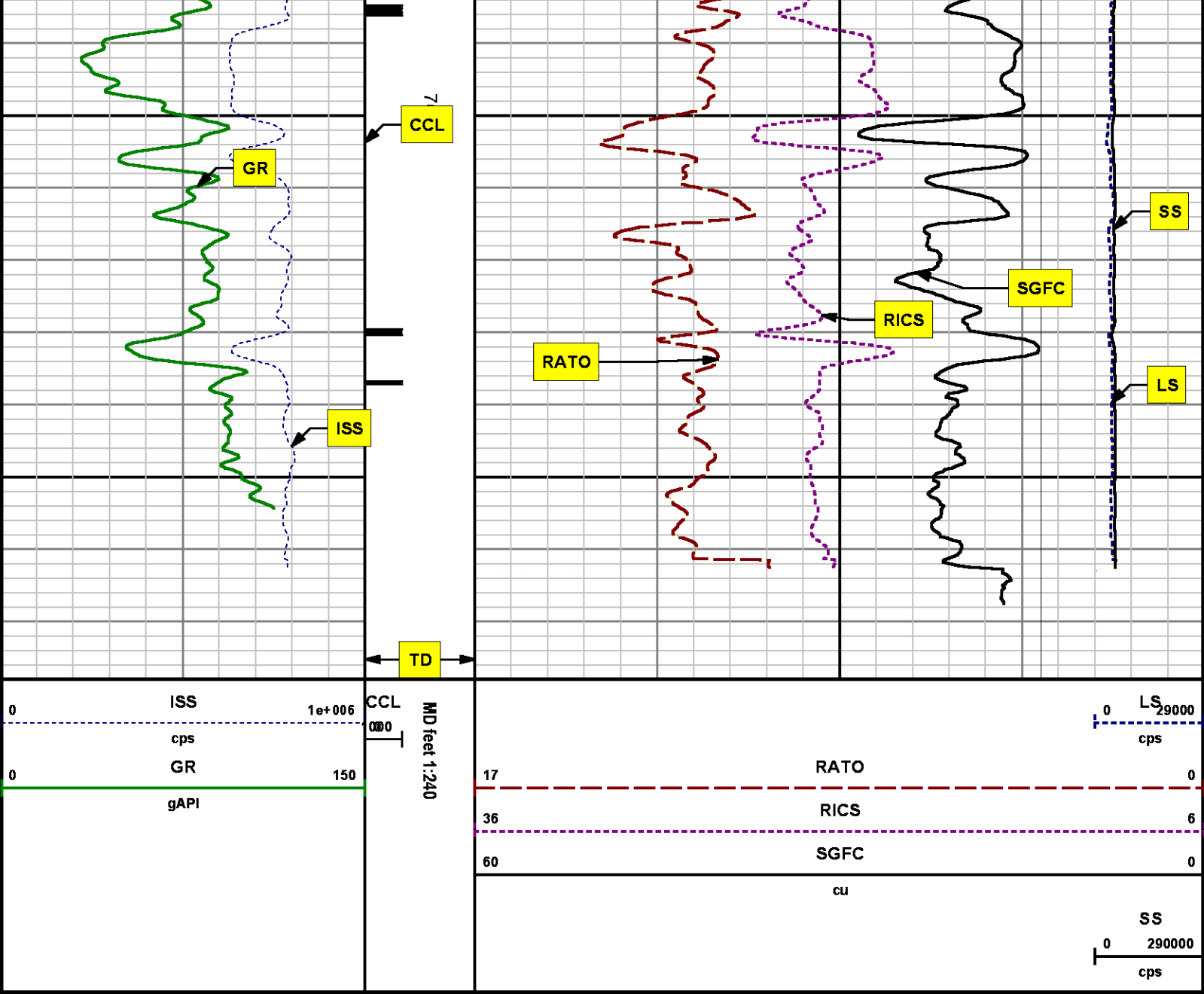




7400

7500





REPEAT SECTION
PNC 3-D MODE

SPL PROCESSING

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
PNC Porosity	Borehole	Cased		6875.300	7200.300
PNC Porosity	Borehole Size	8.750	inch	6875.300	7200.300

PNC Porosity	Casing Size	4.500	inch	6875.300	7200.300
PNC Porosity	Gas Filled	Non Gas Filled		6875.300	7200.300
PNC Porosity	Matrix	Sandstone		6875.300	7200.300
TPS Pressure	Temperature Corr. Source	Fixed (72.00)	degF	6875.300	7200.300

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 BKK 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 WDT3 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 WDT3 RICSC CSSR G1R G2R ISSR SSR SS2R RATOR RATO13R RBORR RICSR RINR RIN13R RONE RPOR 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

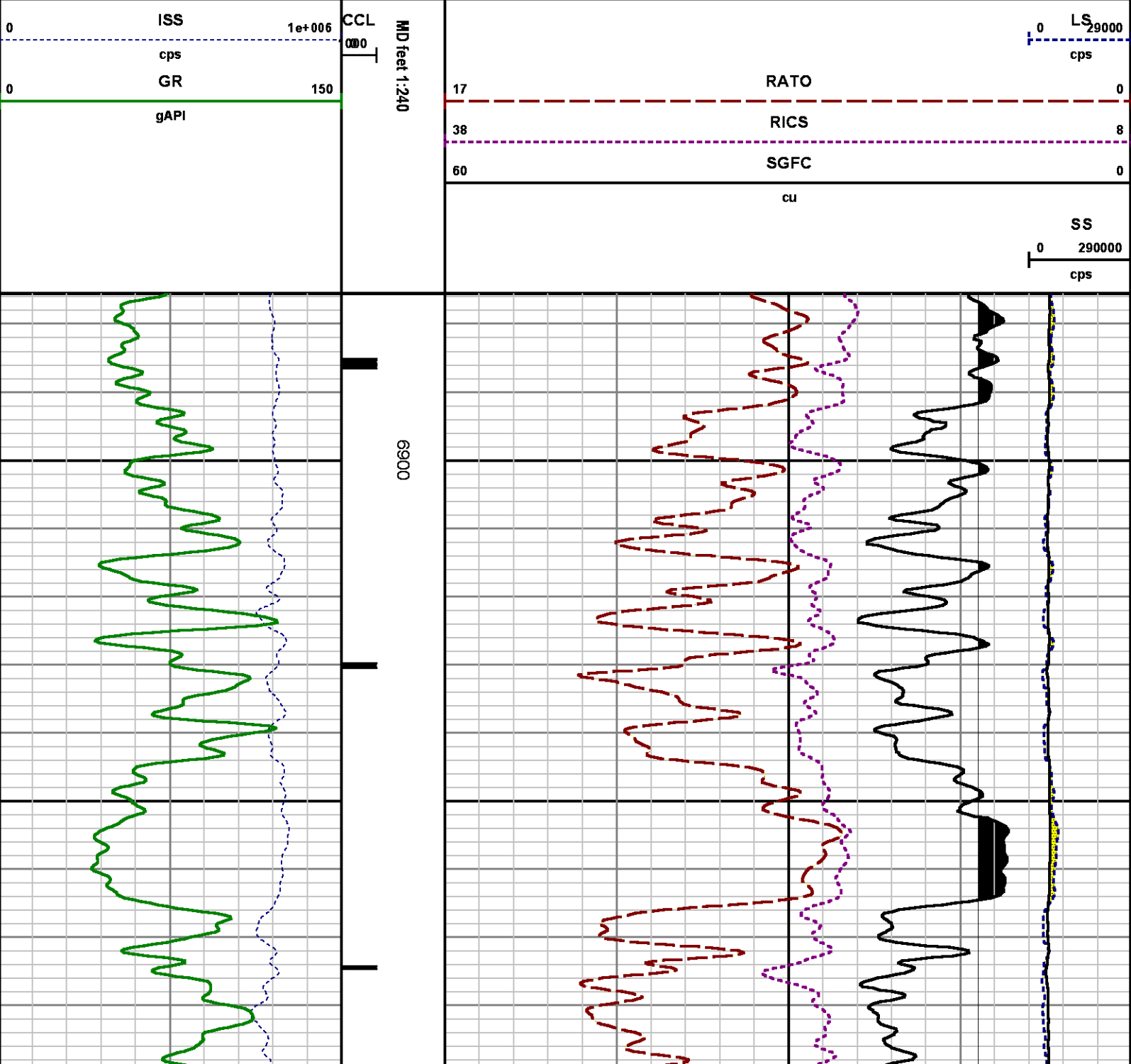
Well : C&C ENERGY GM 44-21

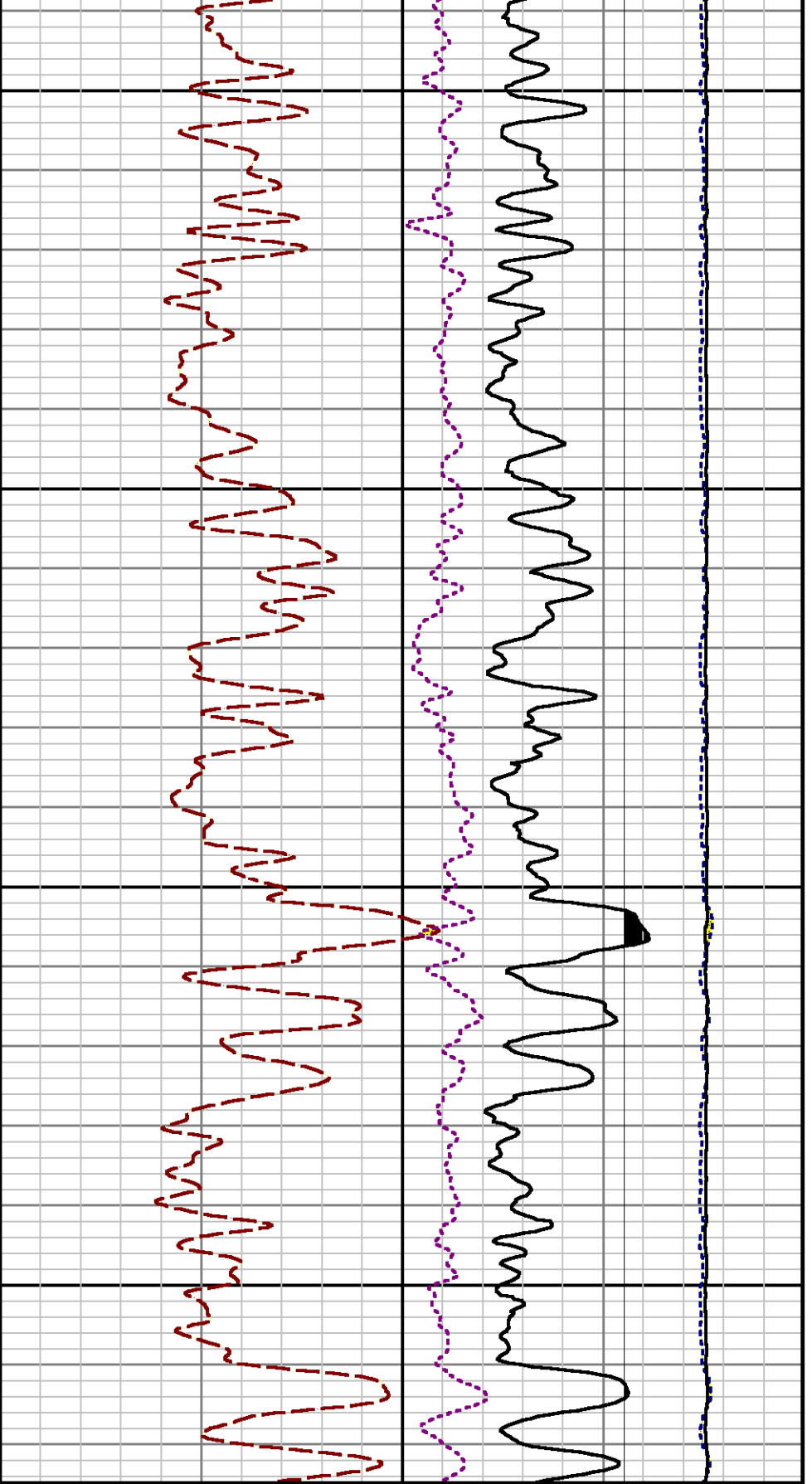
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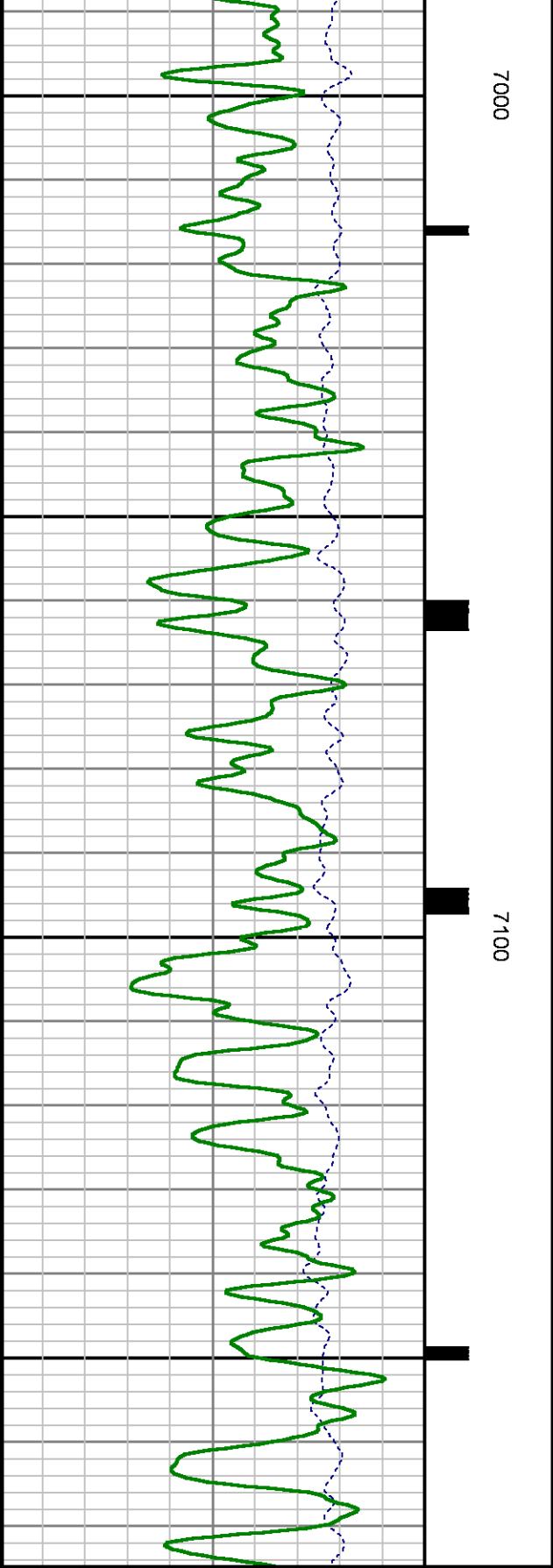




0	LS	29000
0	cps	
17	RATO	0
38	RICS	8
60	SGFC	0

cu

SS



0	ISS	1e+006
0	cps	
0	GR	150
0	gAPI	

MD feet 1:240

CCL
000

CALIBRATION SUMMARY

GAMMA RAY

Calibration File: C:\case\calver\GR\382A1.cal

CALIBRATION SUMMARY

DATE/TIME PERFORMED: Sun Aug 17 18:00:30 2014 TOOL SERIES: 2812LA ASSET: 382 SEQ: A1

Calibrator #	Background [cps]	Calibrator On [cps]	Multiplicative	Background [api]	Calibrator On [api]	Differential [api]
SK2 WA612	42.82	251.20	1.008	43.16	253.16	210.00

Verification File: C:\case\calver\GR\382A1.VP

PRIMARY VERIFICATION

DATE/TIME PERFORMED: Sun Aug 17 18:03:34 2014 TOOL SERIES: 2812LA ASSET: 382 SEQ: A1

Calibrator #	Background [cps]	Calibrator On [cps]	Multiplicative	Background [api]	Calibrator On [api]	Differential [api]
SK2 WA612	44.24	248.18	1.008	44.59	250.11	205.52

PNC

Calibration File: C:\case\calver\PNC\345A9.cal

PNC 3D CALIBRATION SUMMARY

DATE/TIME PERFORMED: Mon Aug 19 14:50:00 2013 TOOL SERIES: 8281XA ASSET: 345 SEQ: A9

Calibrator #	Source #
SHOP BARREL	8281AA 10148476

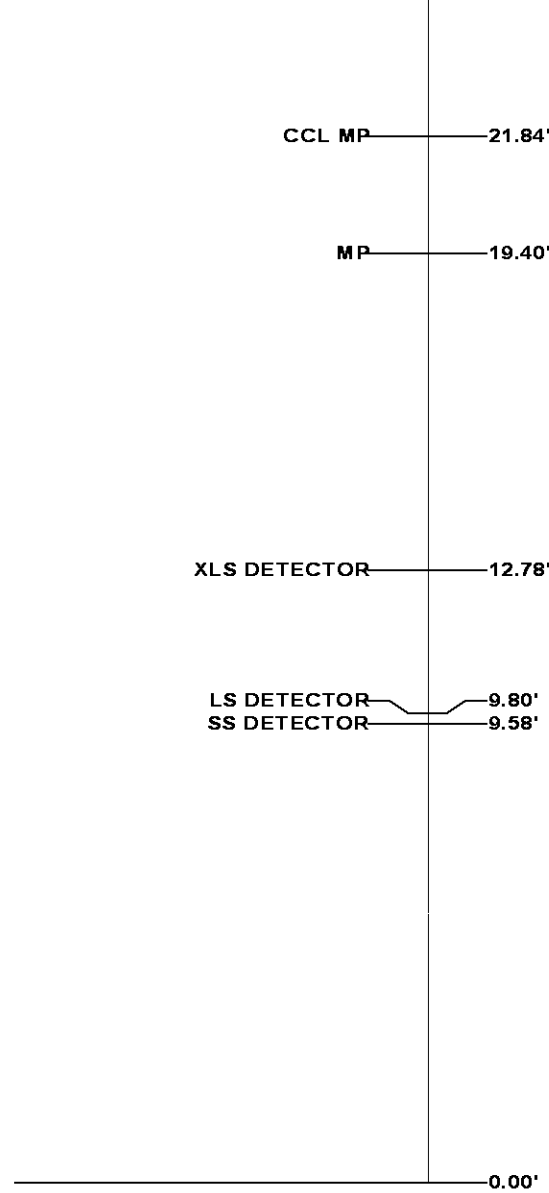
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Raw Data	819951	119.00	2270.00	2247.00	2245.00	113.75	7.00	0.9876
Interpolated	1300000	136.85	2257.82	2241.36	2241.25			

ISS	BKS	BKI	BKY	SGA1	SDA1	SGA2	SDA2
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29.93'

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



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

 Baker Atlas 	Company WPX ENERGY		File No: CH089913	
	Well C&C ENERGY GM 44-21		API No: 05045224300000	
	Field GRAND VALLEY			
	County GARFIELD	State COLORADO		
Location		Elevations		
SHL: 267' FSL & 1054' FWL		KB 5165 ft		12 7S 96W
BHT: 1157' FSL & 879' FEL (SESE)		DF		GM 24-12 PAD
		GL 5141 ft		H&P 318
SEC 12 TWP 7S RGE 96W				