

**BAKER  
HUGHES**

**RESERVOIR  
PERFORMANCE  
MONITOR**

Baker Atlas

File No: CH073169	Company Well	WPX ENERGY GOLDSBOROUGH PA 22-11
API No: 05045218180000	Field County	PARACHUTE GARFIELD
	State	COLORADO
PA 22-11 PAD 11 7S 9SW CYCLONE 17	Location SHL: 2403' FNL, 2075' FWL BHL: 1470' FNL, 2059' FWL SEC 11 TWP 7S RGE 9SW	Other Services BOND LOG
Permanent Datum Log Measured From Drill Measured From	GL KB KELLY BUSHING	Elevations KB 6296 ft DF GL 6274 ft

Date	14/JUN/13	
Run	ONE	
Service Order	575100	
Depth Driller	7808 ft	
Depth Logger	7780 ft	
Bottom Logged Interval	7770 ft	
Top Logged Interval	4265 ft	
Time Started	0900	
Time Finished	1430	
Operator Rig Time	5.5 HRS	
Type of Fluid in Hole	WATER	
Fluid Density	NA	
Salinity	NA	
Fluid Level	70 ft	
Logged Cement Top	NA	
Wellhead Pressure	0 psi	
Maximum Hole Deviation	NA	
Nominal Logging Speed	10 fpm	
Maximum Recorded Temperature	220 degF	
Reference Log	BAKER HUGHES BOND LOG	
Reference Log Date	13/JUN/13	
Equipment No.	4271	GRAND JCT
Recorded By	FLOYD RENEAU	
Witnessed By	DUSTIN WELSH	

- 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	892 ft
8.75 in	892 ft	7808 ft

Casing Record				
Size	Weight	Grade	From	To
9.625 in	32 lbm/ft		0 ft	892 ft
4.5 in	11.6 lbm/ft	I-80	0 ft	7808 ft

Remarks

All data on this log is shifted and depth matched using the Gamma Ray curve to the Baker Hughes bond log dated 6/13/2013 at the client's request.

The amount of linear shift is 13.5 feet.

Logged in PNC-3D mode.

BHT = 220°F

SJ = 4558'-4581'

Equipment Data					
Run	Trip	Tool	Series Number	Serial Number	Position
1	1	RPM	8281FA	10307727	FREE
1	1	RPM	8281PA	10585555	FREE
1	1	RPM	8281EA	10303640	FREE
1	1	GR	8262XA	10076055	FREE
1	1	TEL/CCL	8248ED	10387150	FREE
1	1	PCM	8250EA	Z166326	FREE

MAIN SECTION  
PNC 3-D MODE

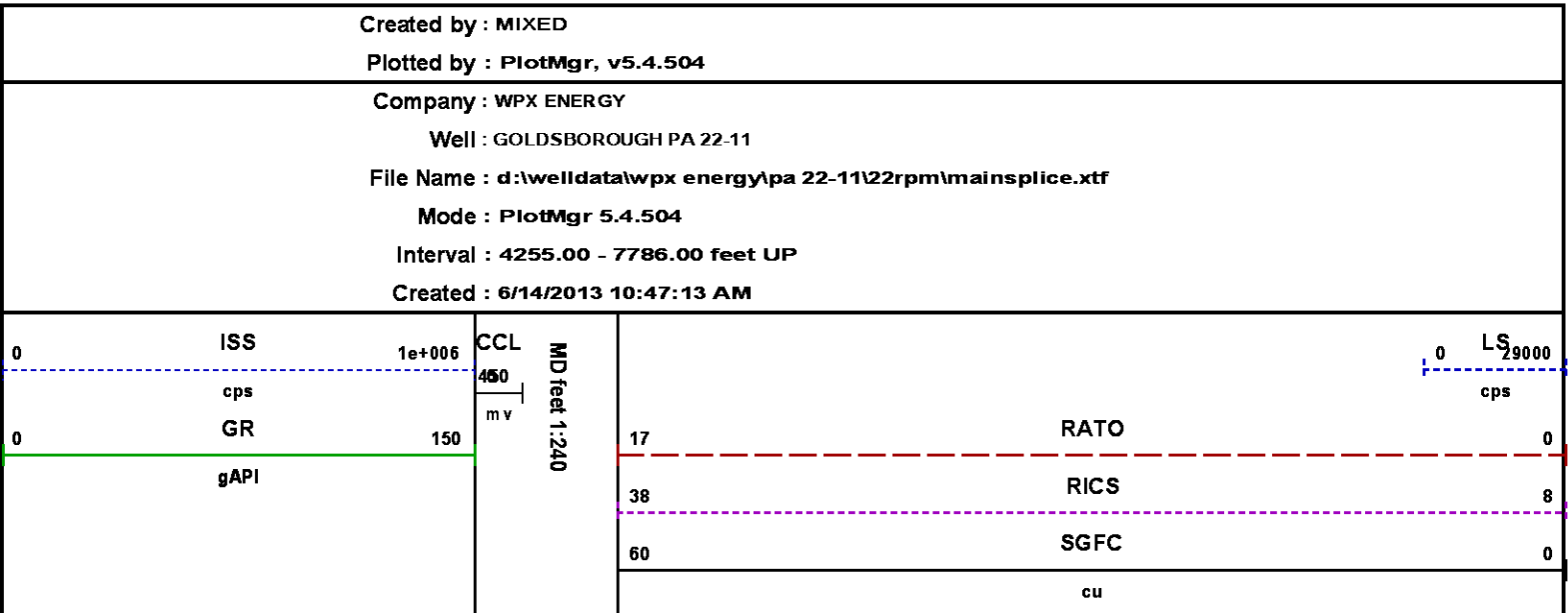
SPL PROCESSING

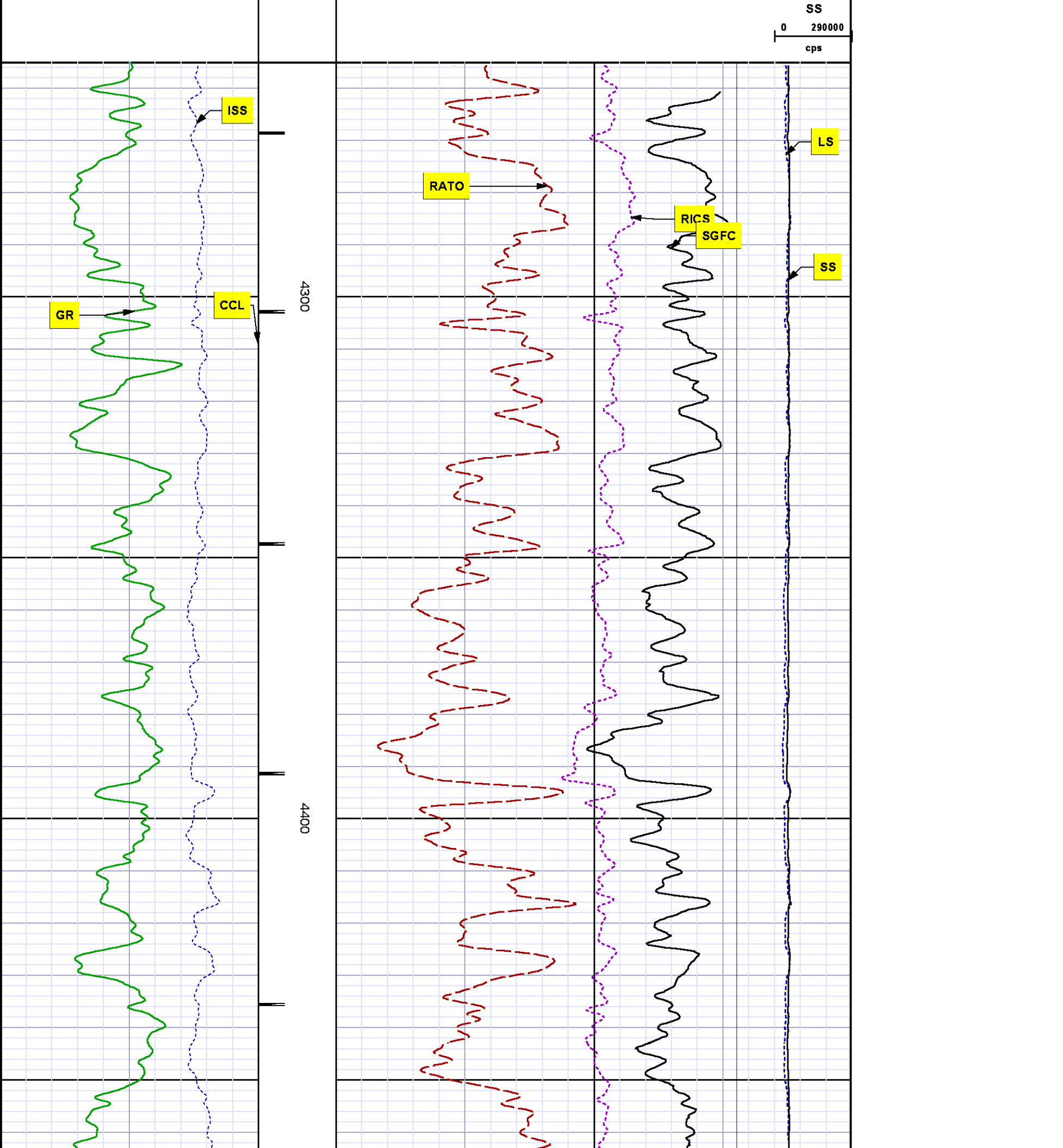
MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
PNC Porosity	Borehole	Cased		4239.750	7658.500
PNC Porosity	Borehole Size	8.750	inch	4239.750	7658.500
PNC Porosity	Casing Size	4.500	inch	4239.750	7658.500
PNC Porosity	Gas Filled	Non Gas Filled		4239.750	7658.500
PNC Porosity	Matrix	Sandstone		4239.750	7658.500

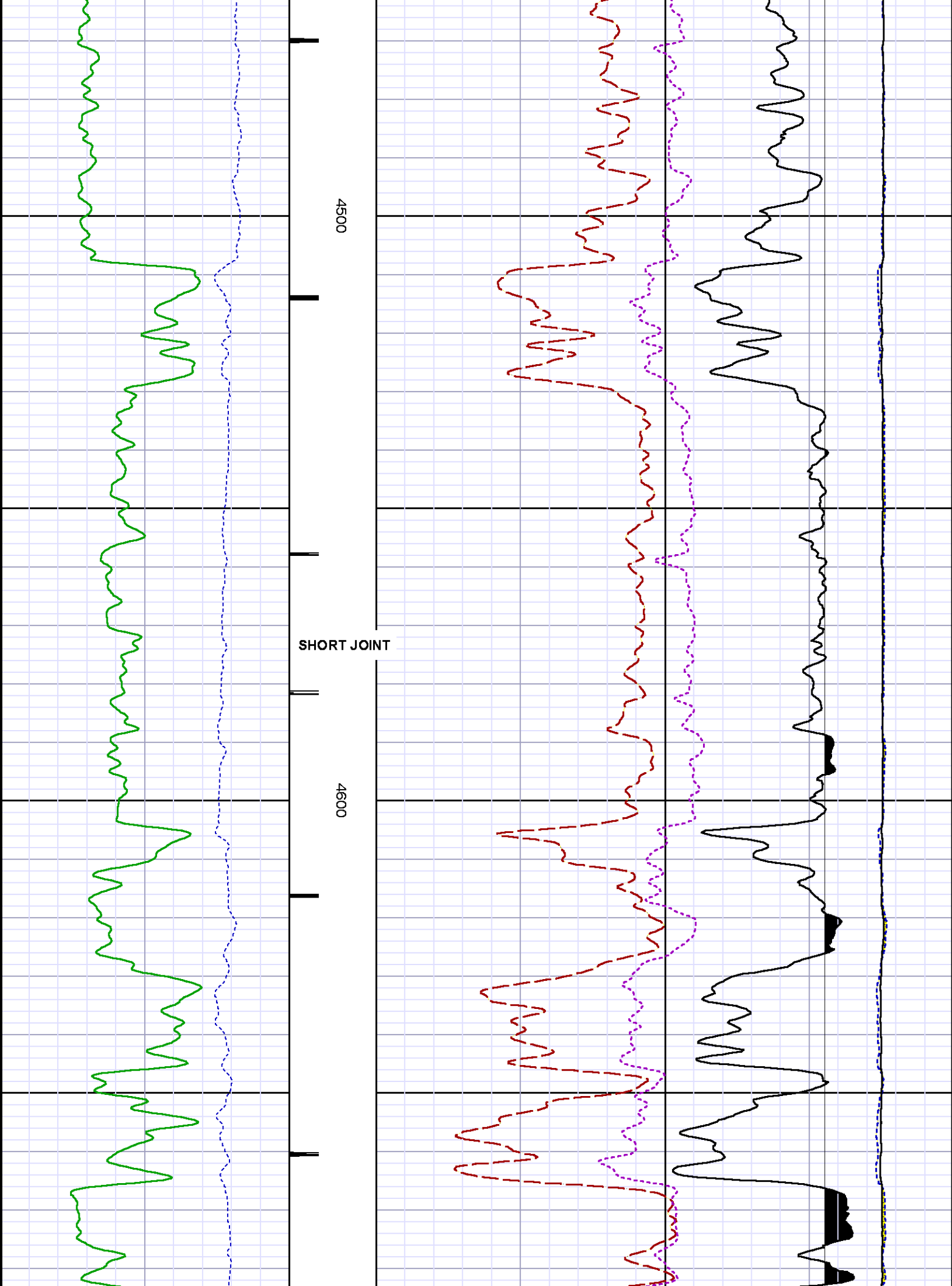
DEPTH OFFSETS  
(for Acquired Curves)

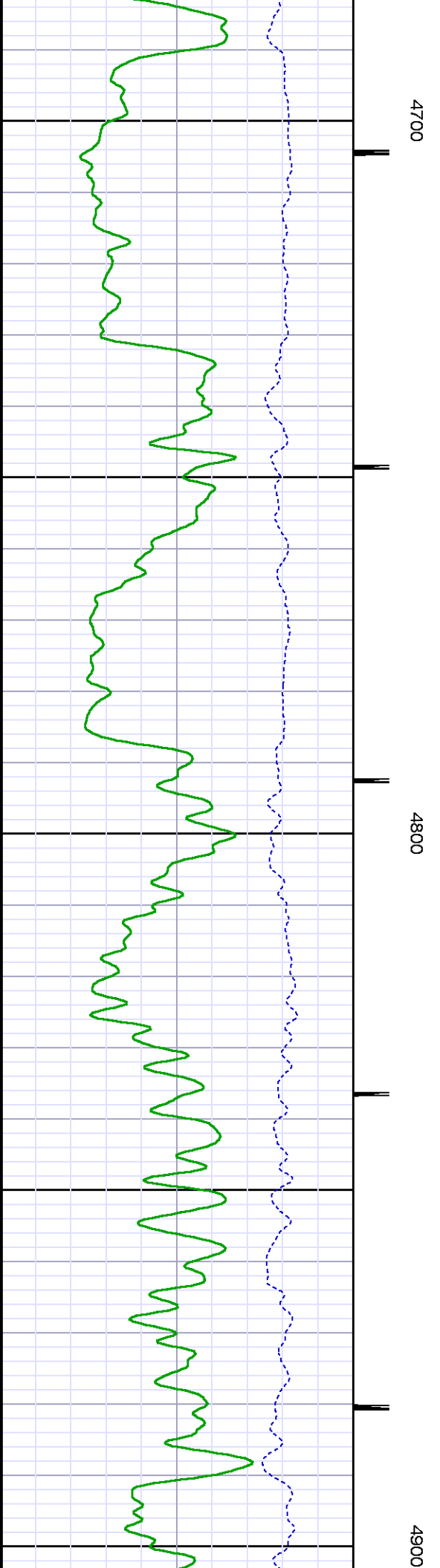
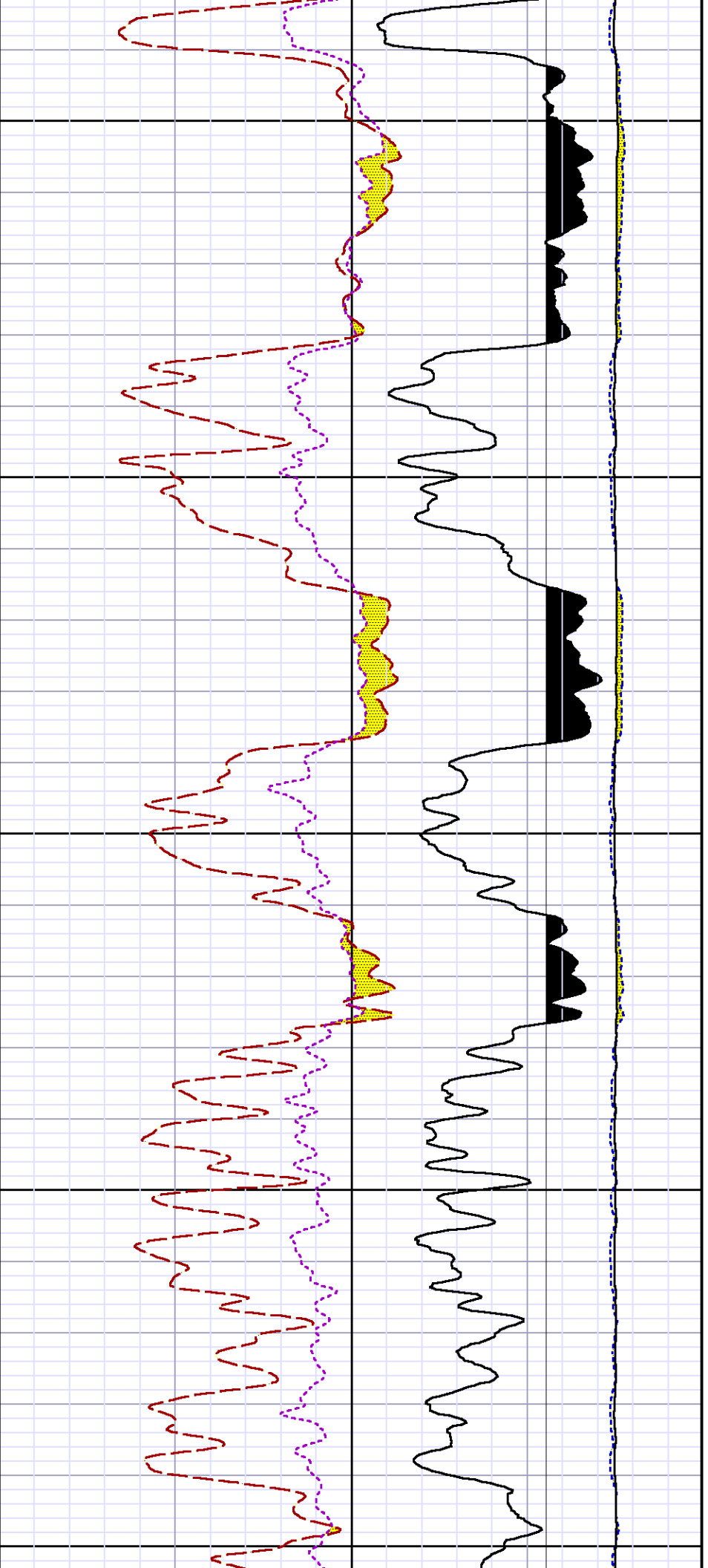
SERIES	DEPTH OFFSET	ACQUIRED CURVES					
8248ED	-15.320	FLTM					
8248ED	-13.320	CCL CHV					
8262XA	-10.189	GR					
8281XA	-0.662	HVC3Q0	SEQ3	AMA3	AML3	BKX	CXS
		CPT3Q0	CPT3Q2	CPT3Q3	CPT3Q4	ET3	IXS
		MCS3	MCS3Q0	QCAL3	RGN3	RICX	SDA3
		CDL3	CDL5	CDL6	CTD3	YS	1037500

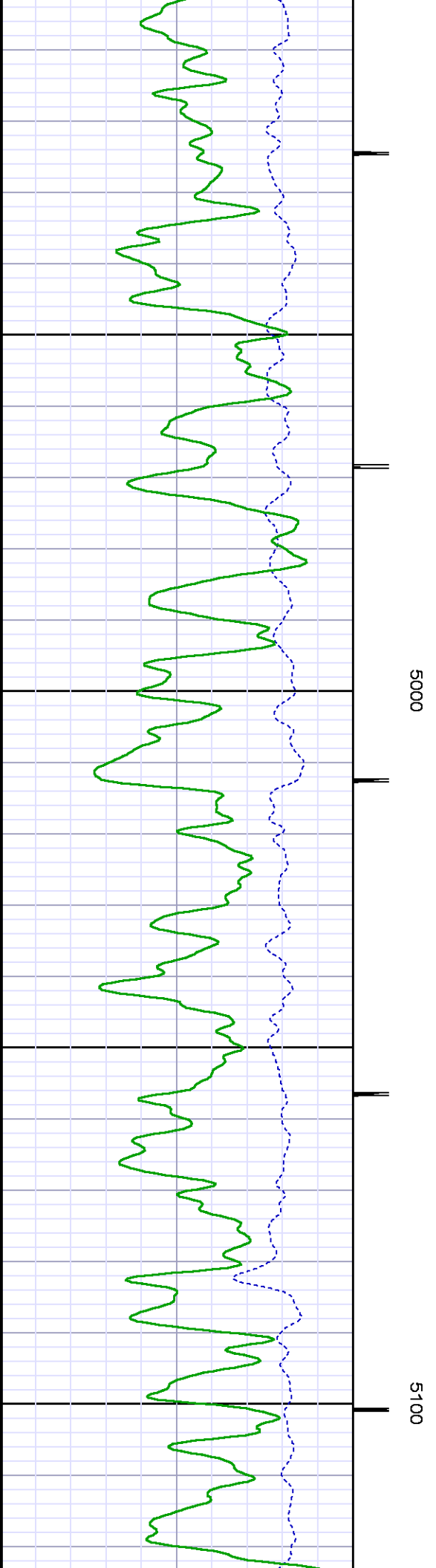
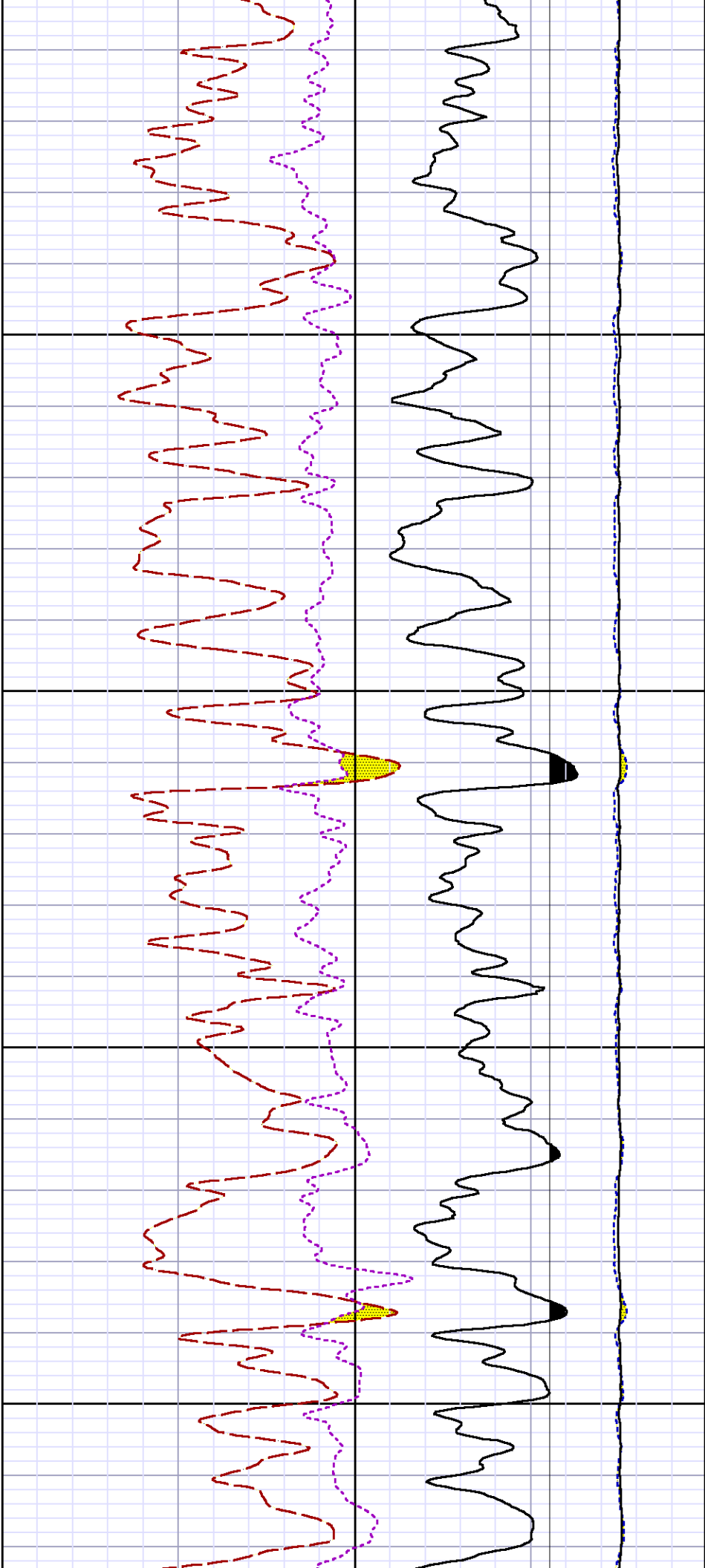
		SDL3	SGA3	SGL3	STA3	XS	ASPEC3
		AMB3	AMF3	CHF3	IXSC	IXSN	RATO23
		RICXC	RIN13C	RIN23	RIN23C	SD3D	SG3D
		SGB3	SGF3	WDTH3	CXSR	IXSR	XSR
		RICXR					
8281XA	-0.250	HVC2Q0	SEQ2	AMA2	AMB2	AMF2	AML2
		BKL	CHF2	CLS	CPT2Q0	CPT2Q2	CPT2Q3
		CPT2Q4	ET2	ILS	LS	MCS2	MCS2Q0
		QCAL2	RGN2	RICL	RONE23	RTWO23	SDA2
		SDL2	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	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	WDTH1	RICSC	CSSR	G1R
		G2R	ISSR	SSR	SS2R	RATOR	RATO13R
		RBORR	RICSR	RINR	RIN13R	RONER	RPORR
		RTWOR					
SYSTEM	0.000	TEN	TTEN				

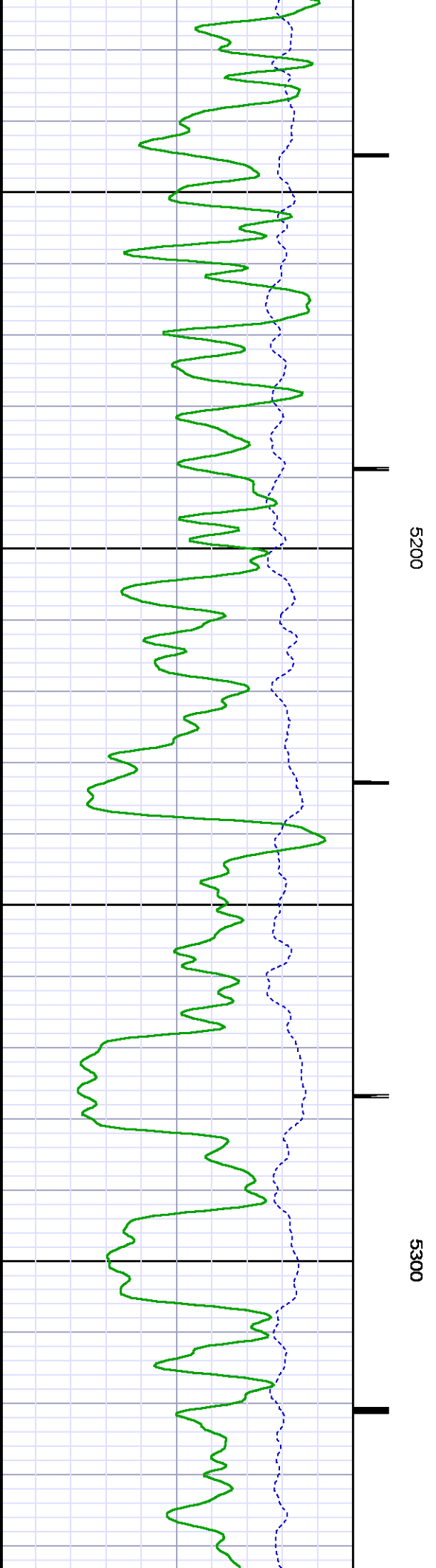
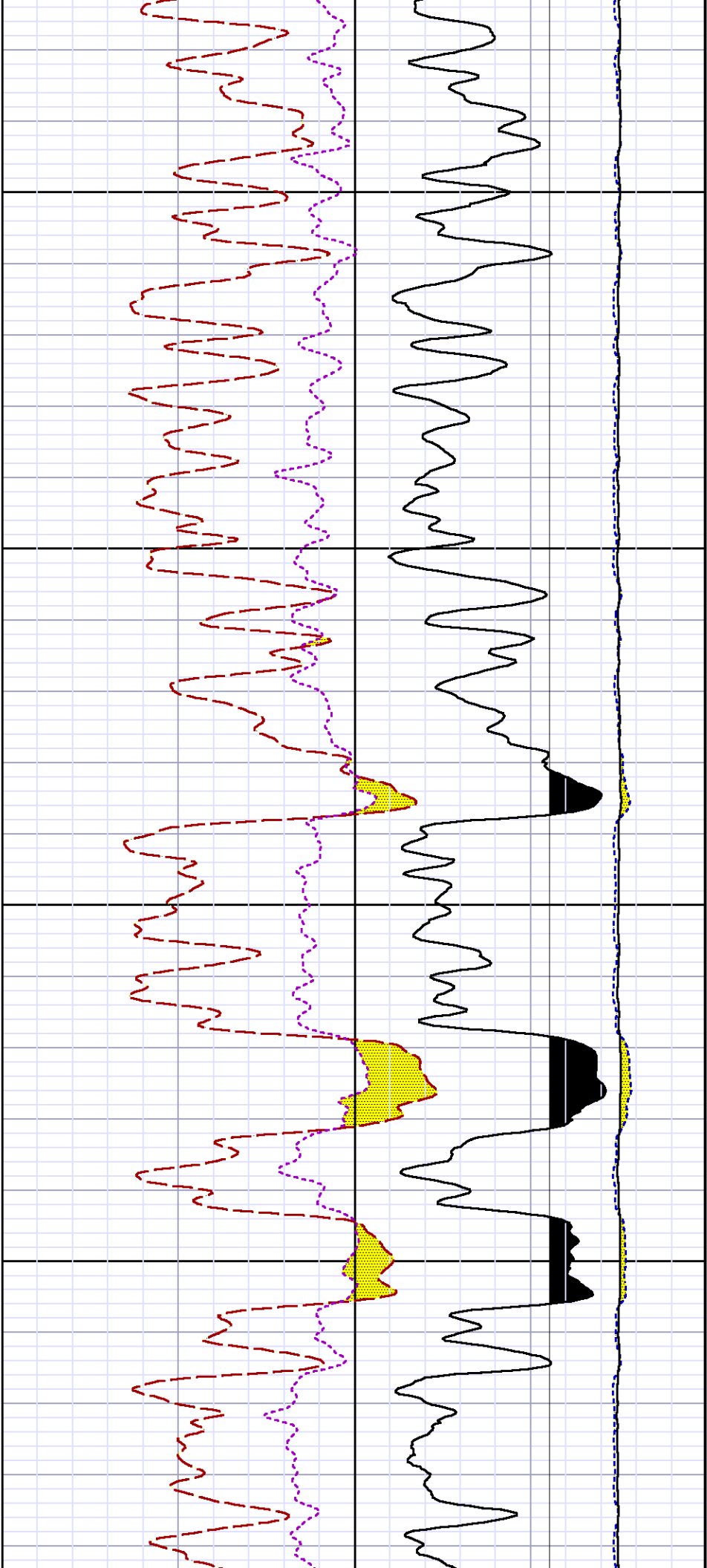




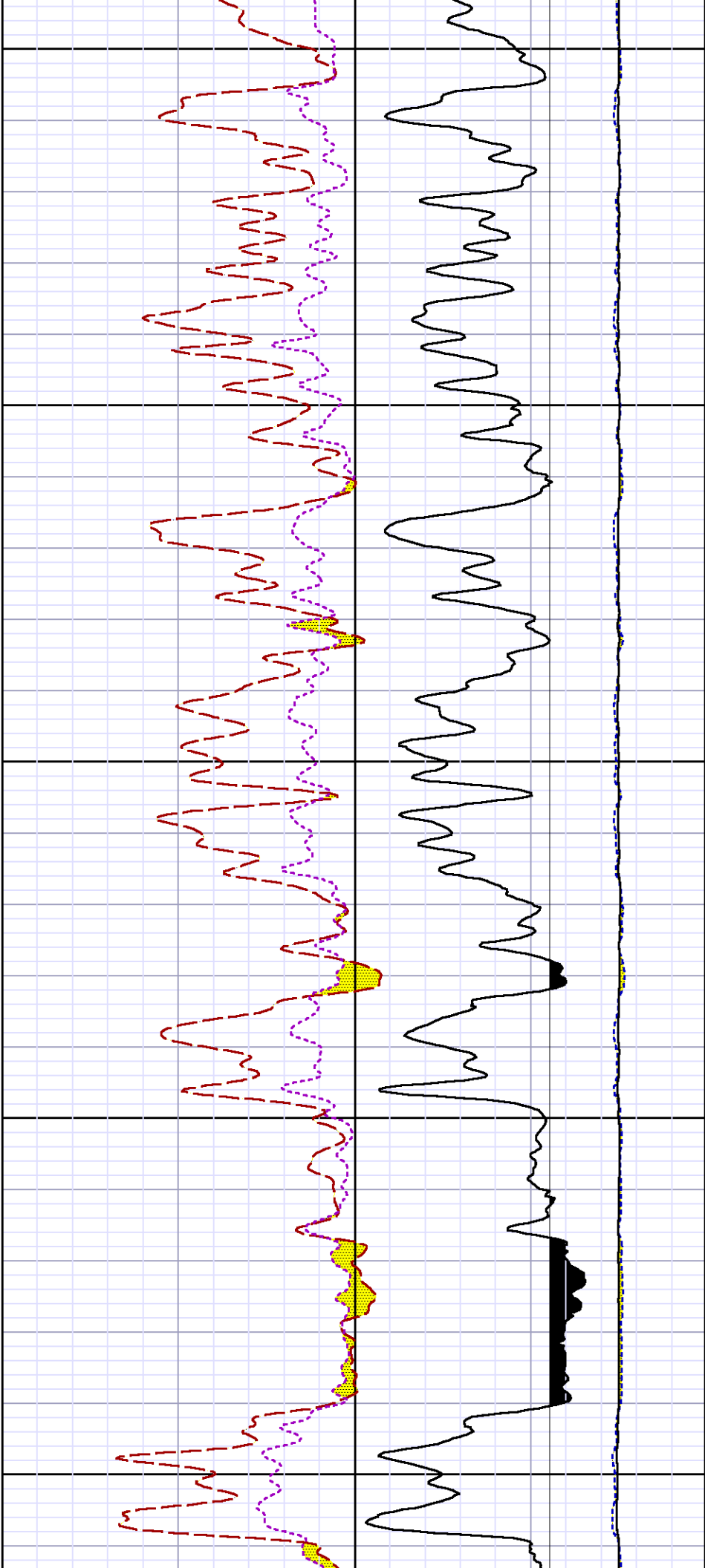






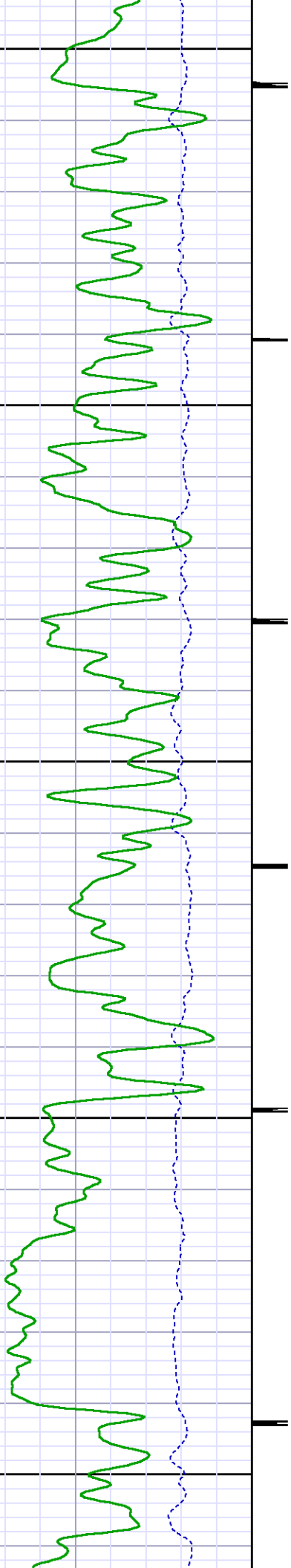


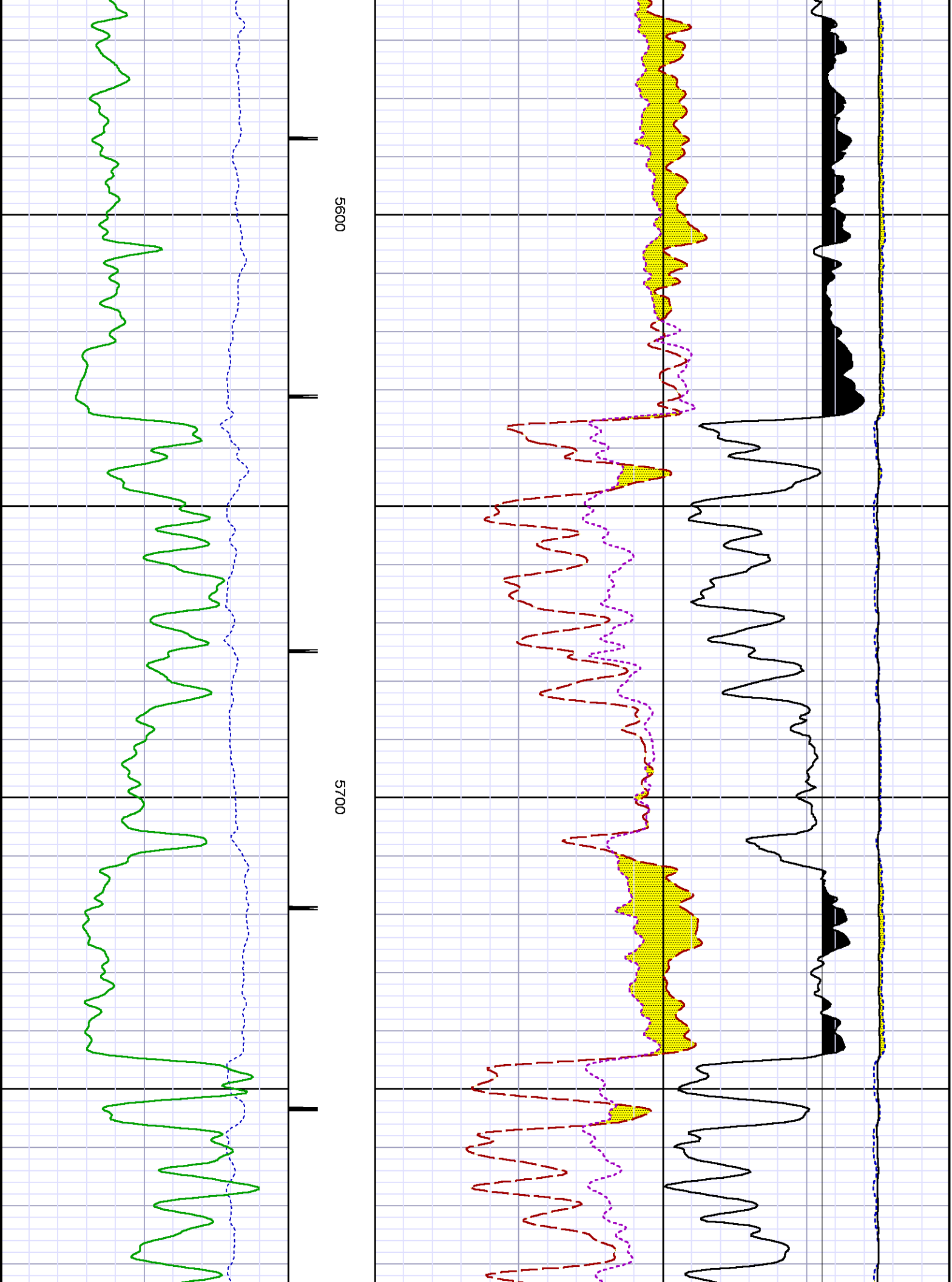


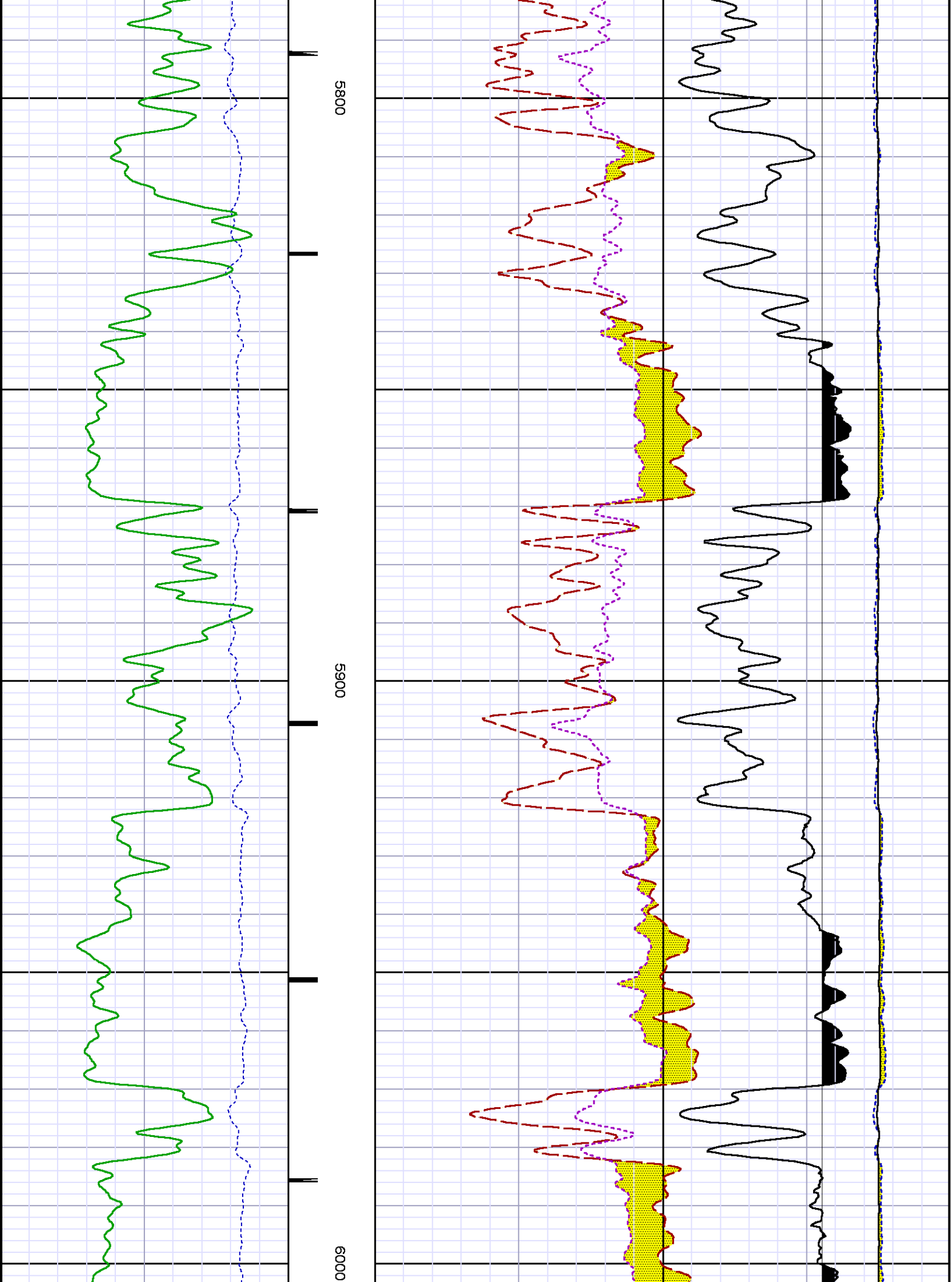


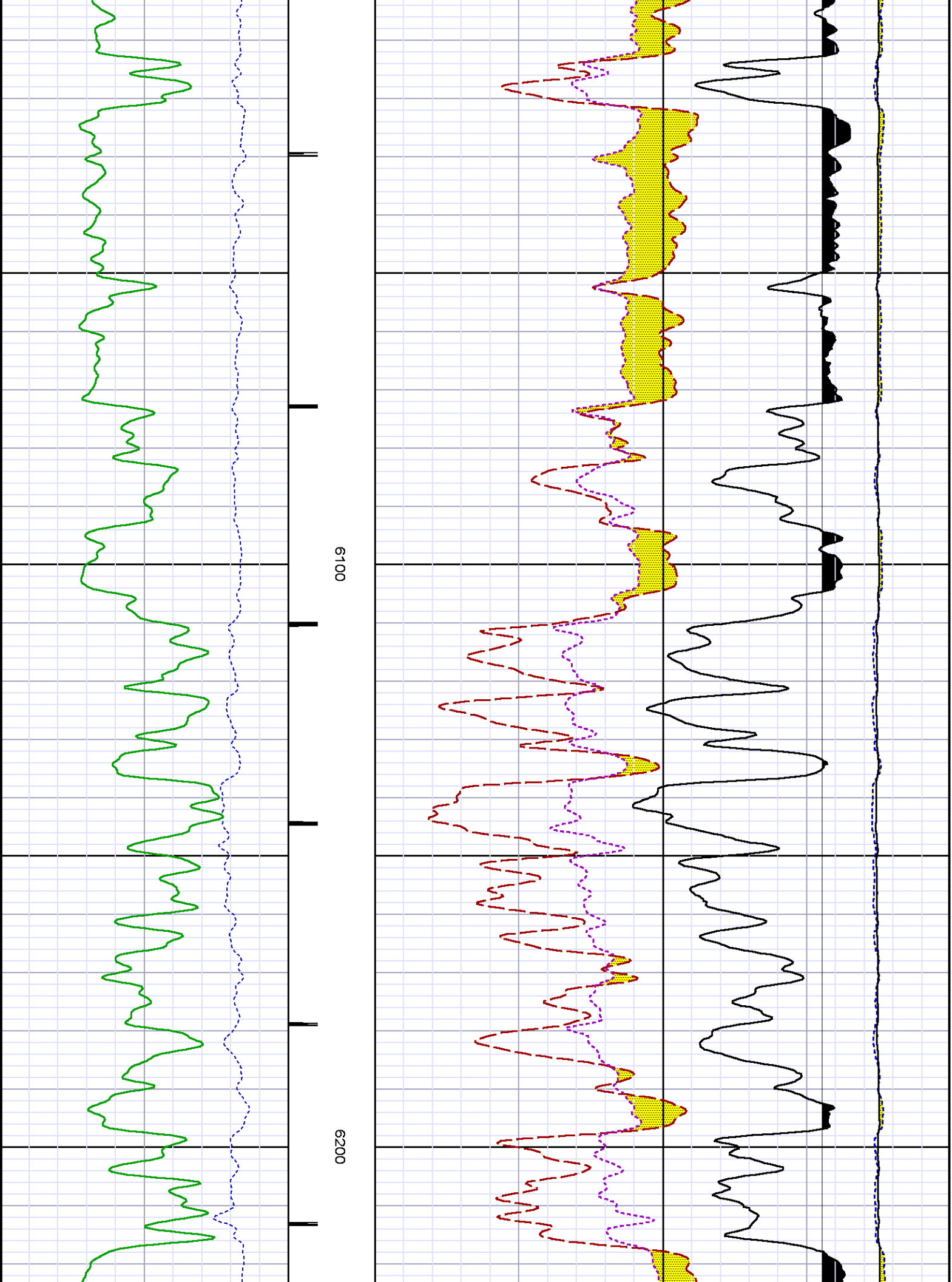
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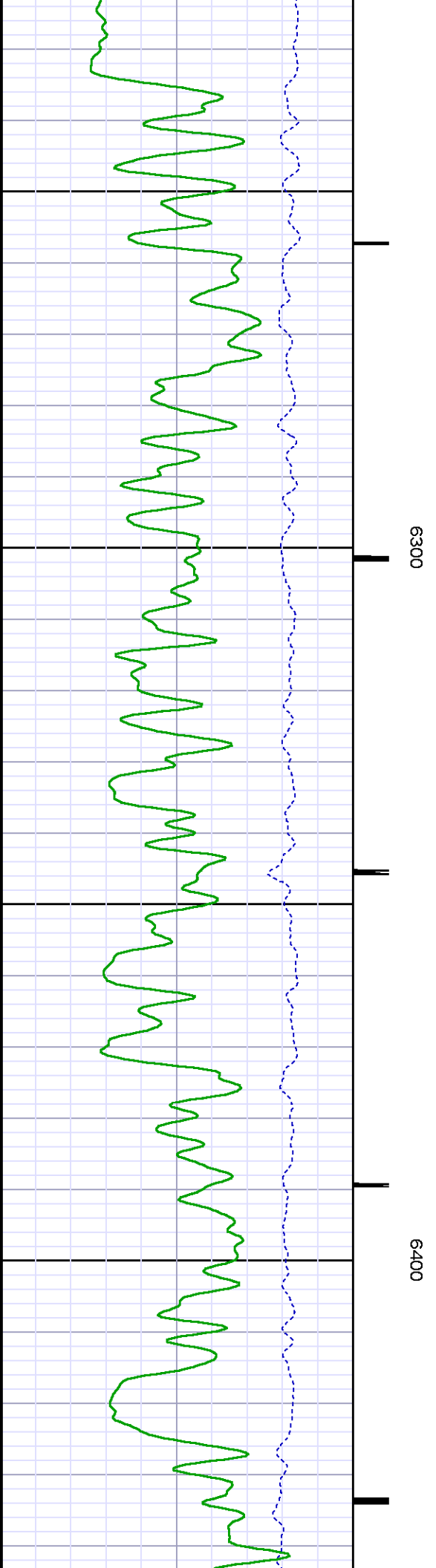
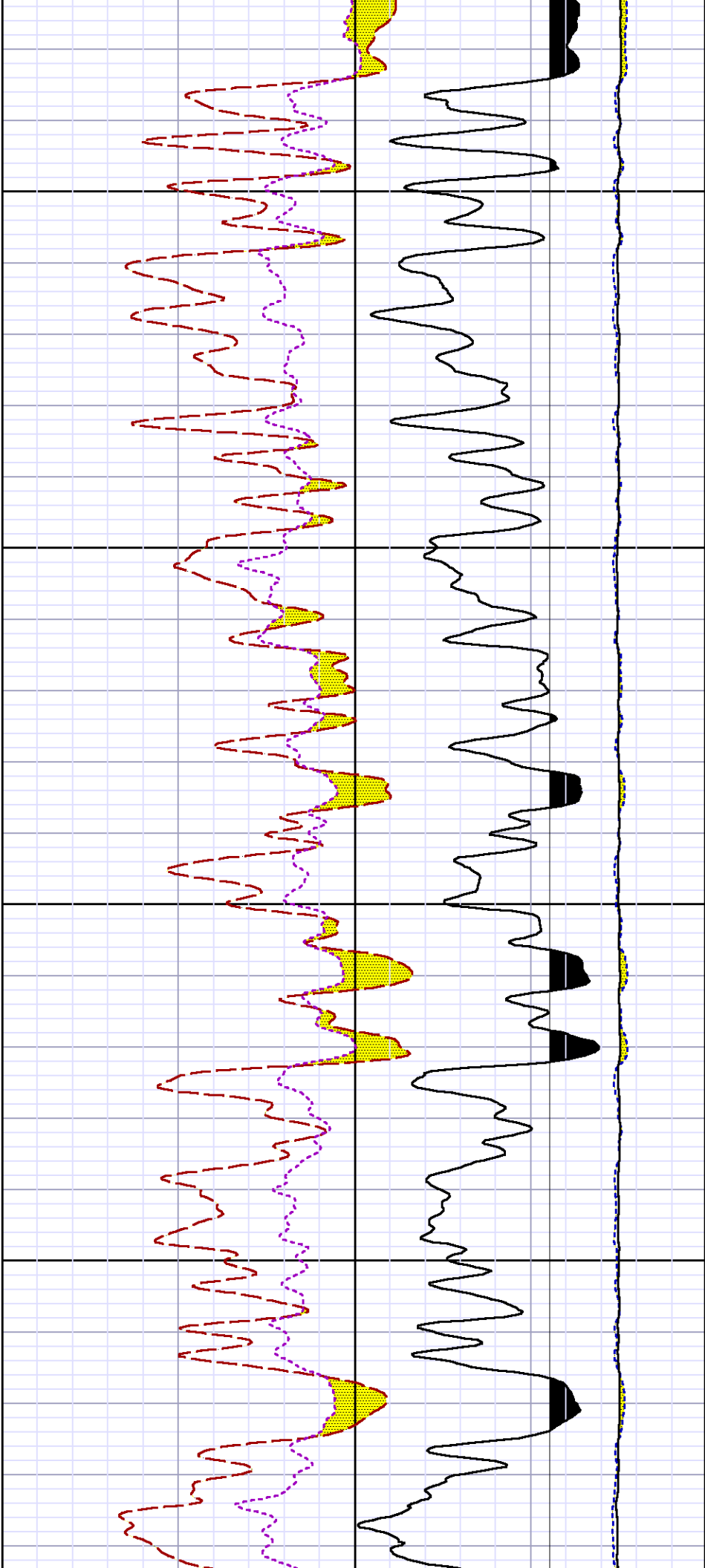
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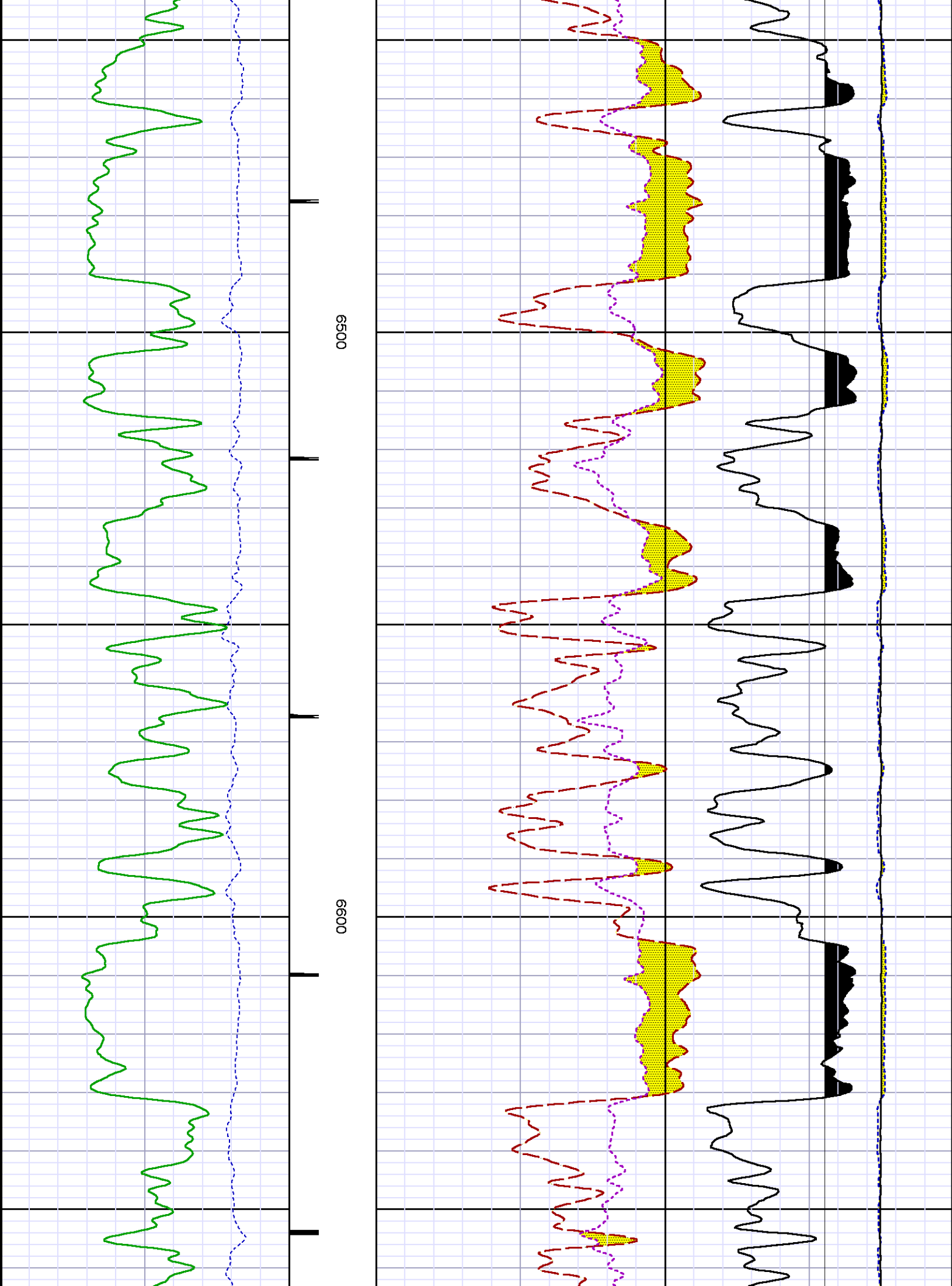


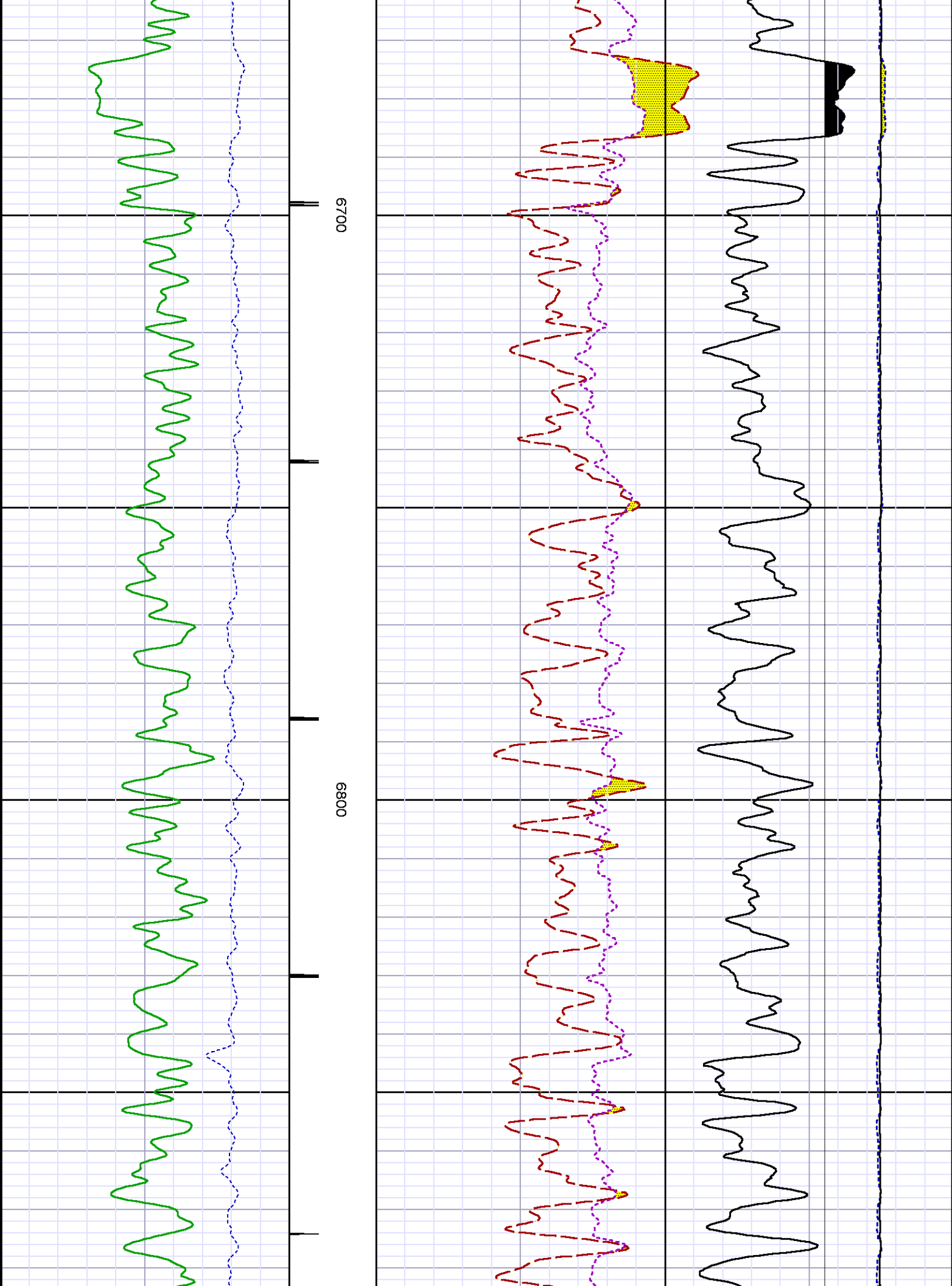


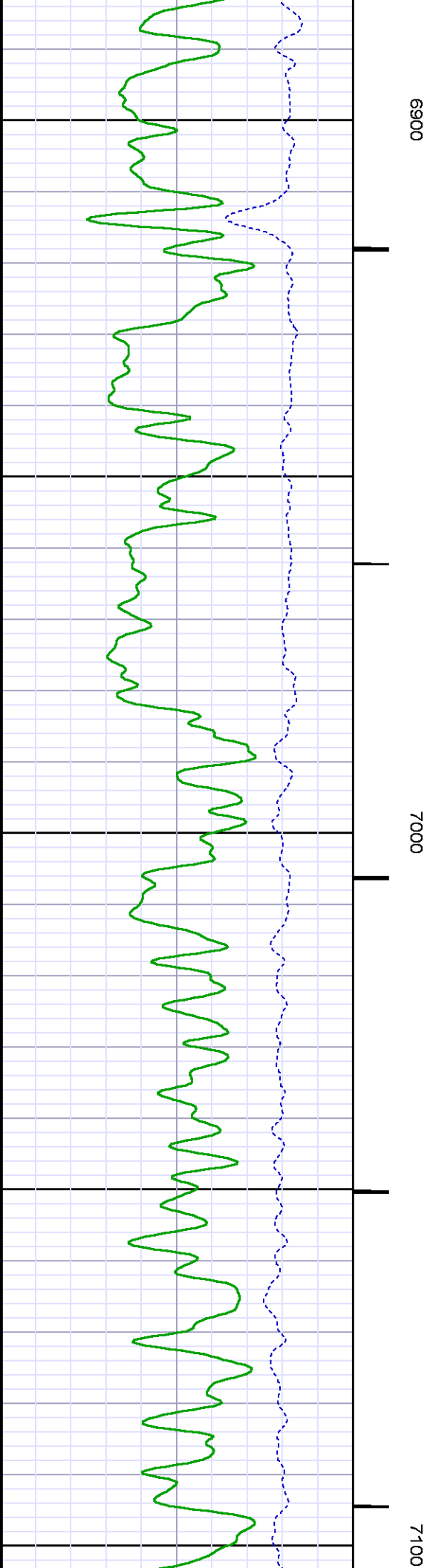
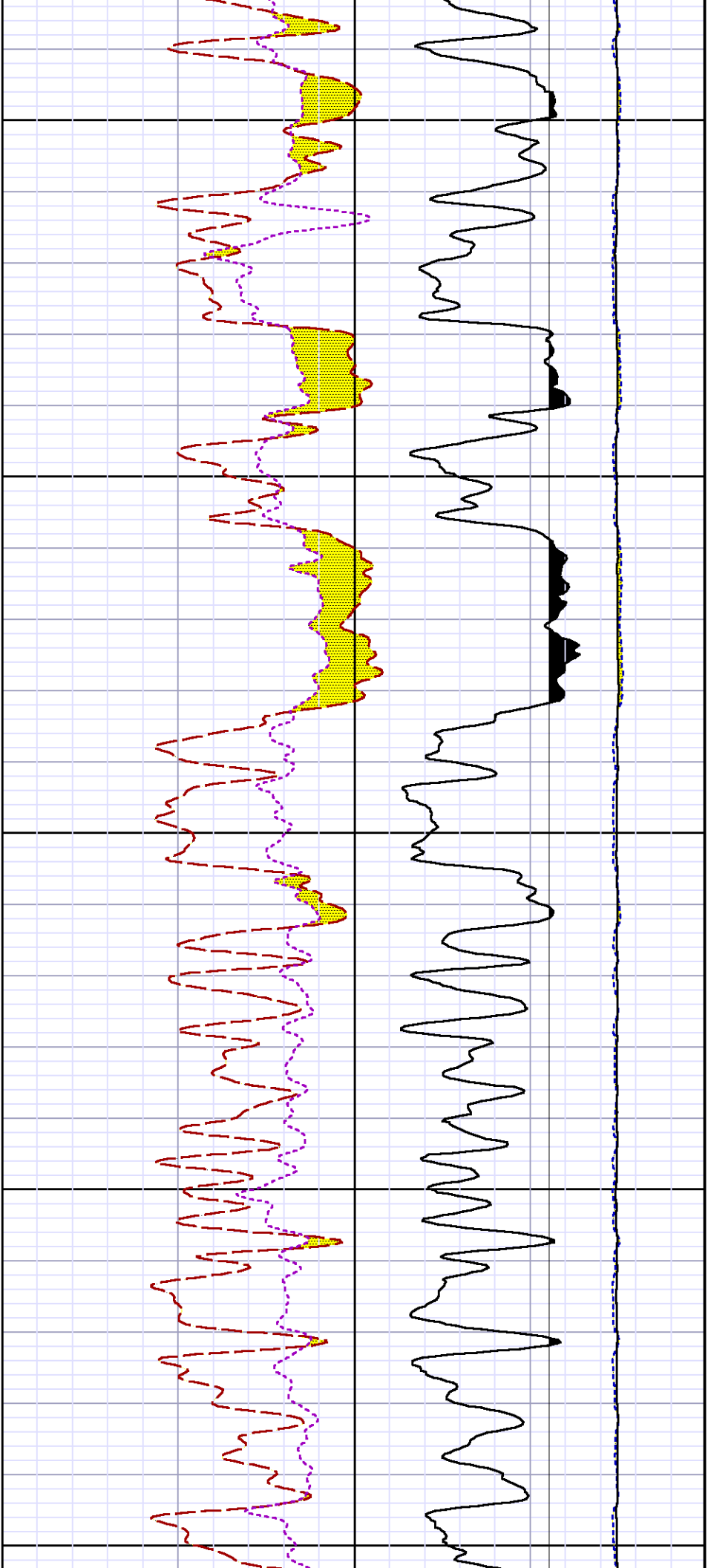




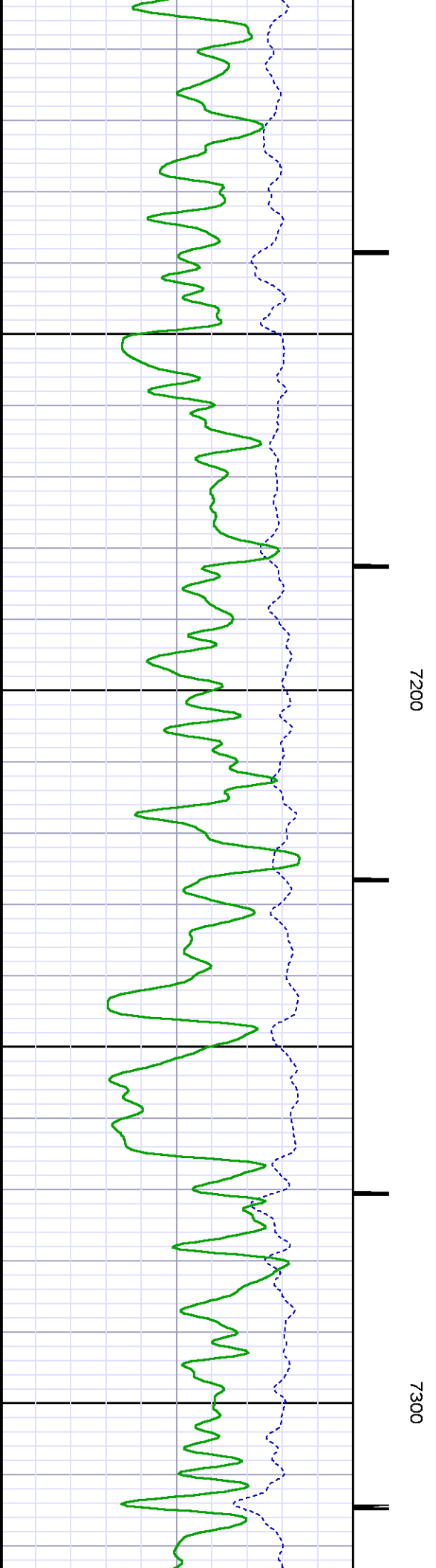
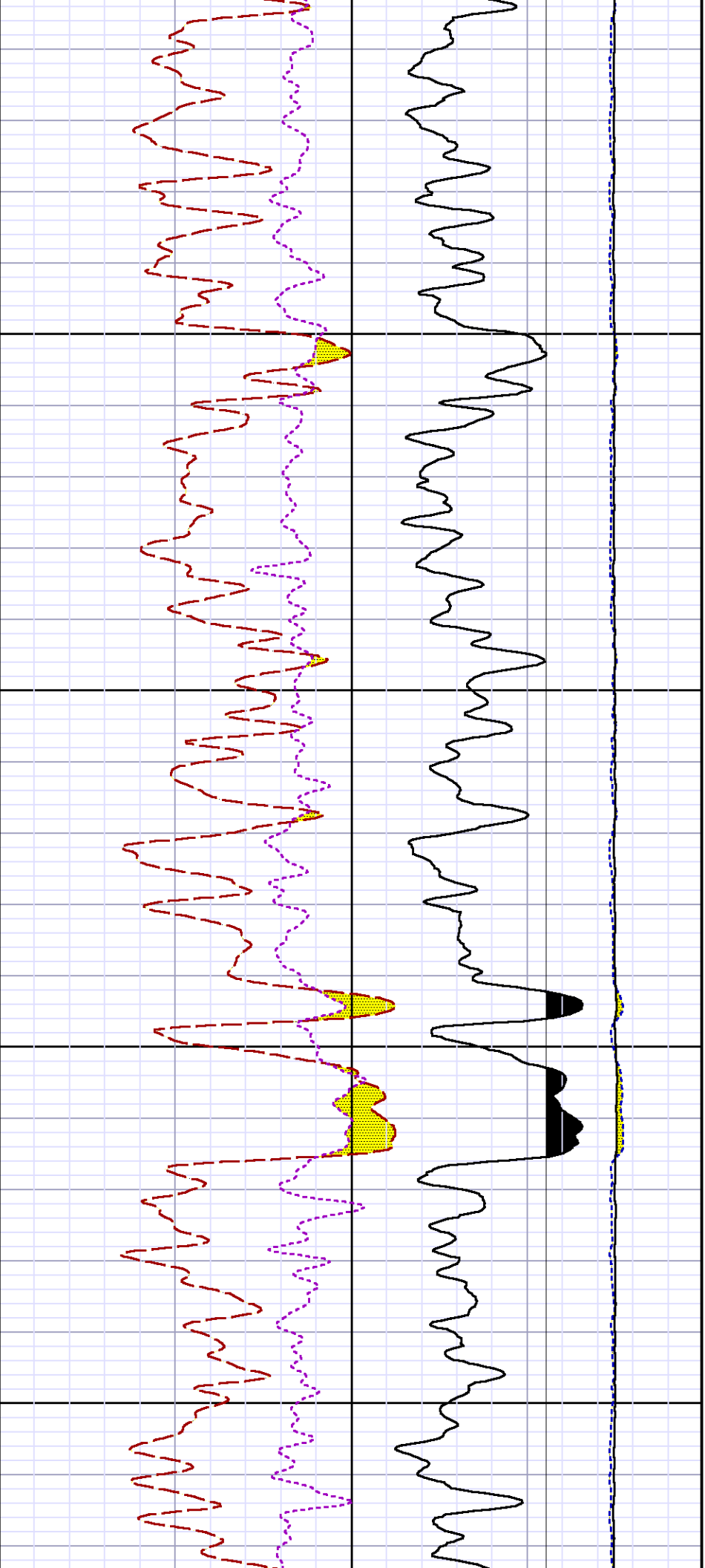


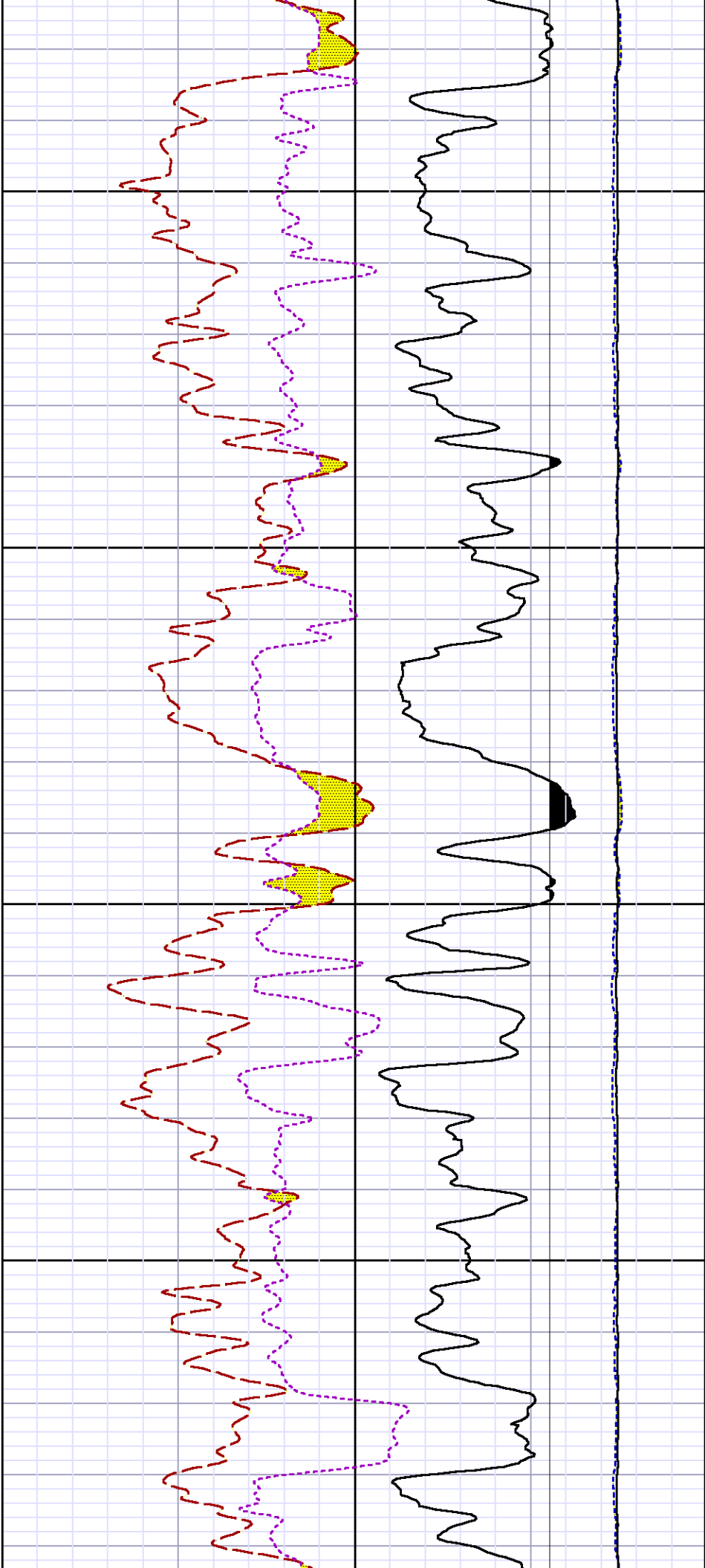






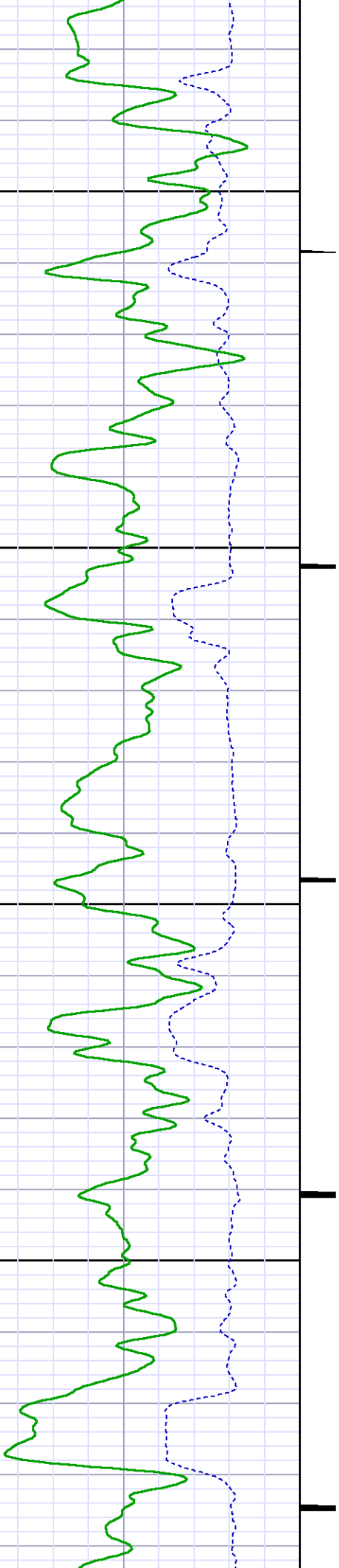


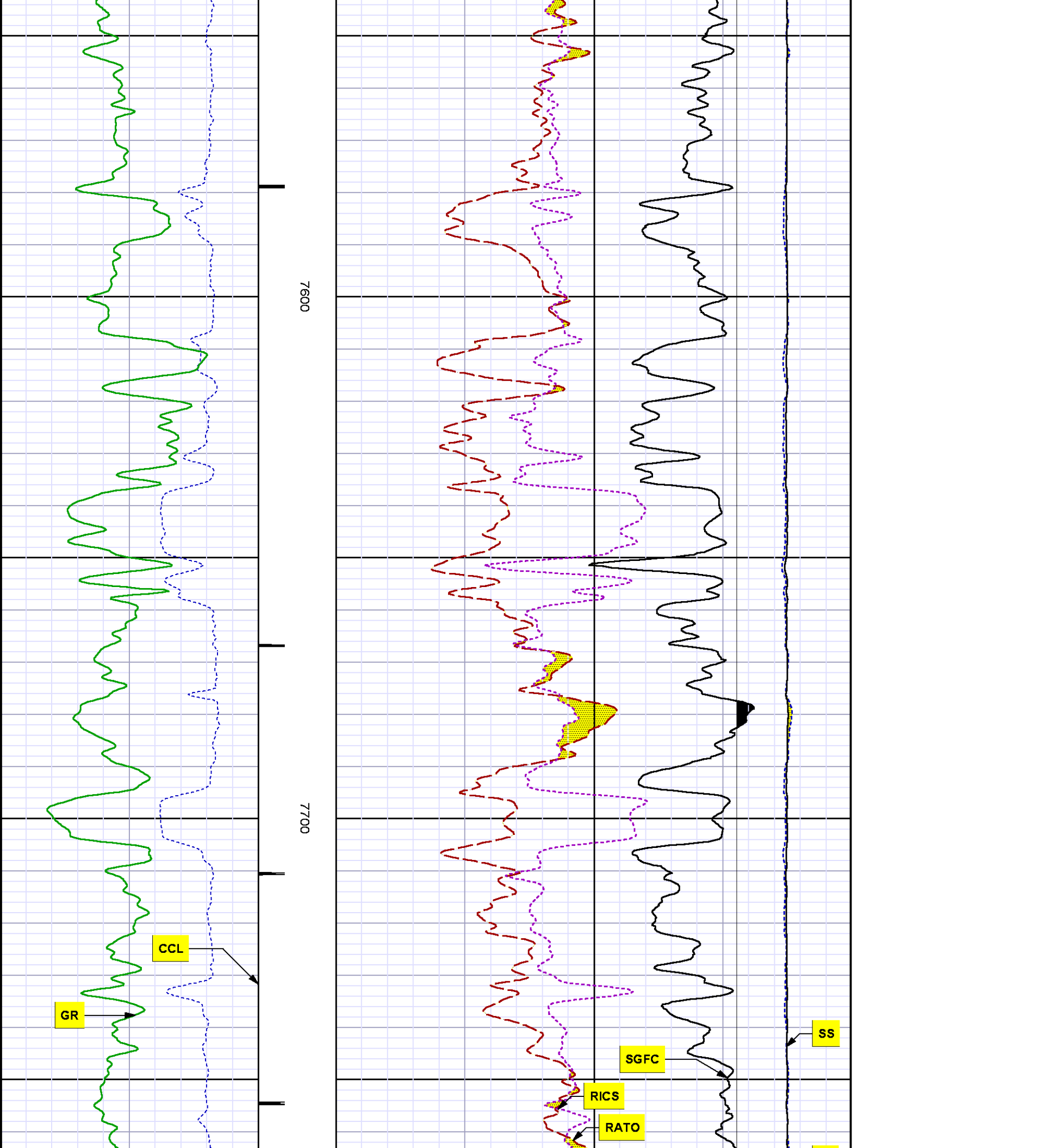


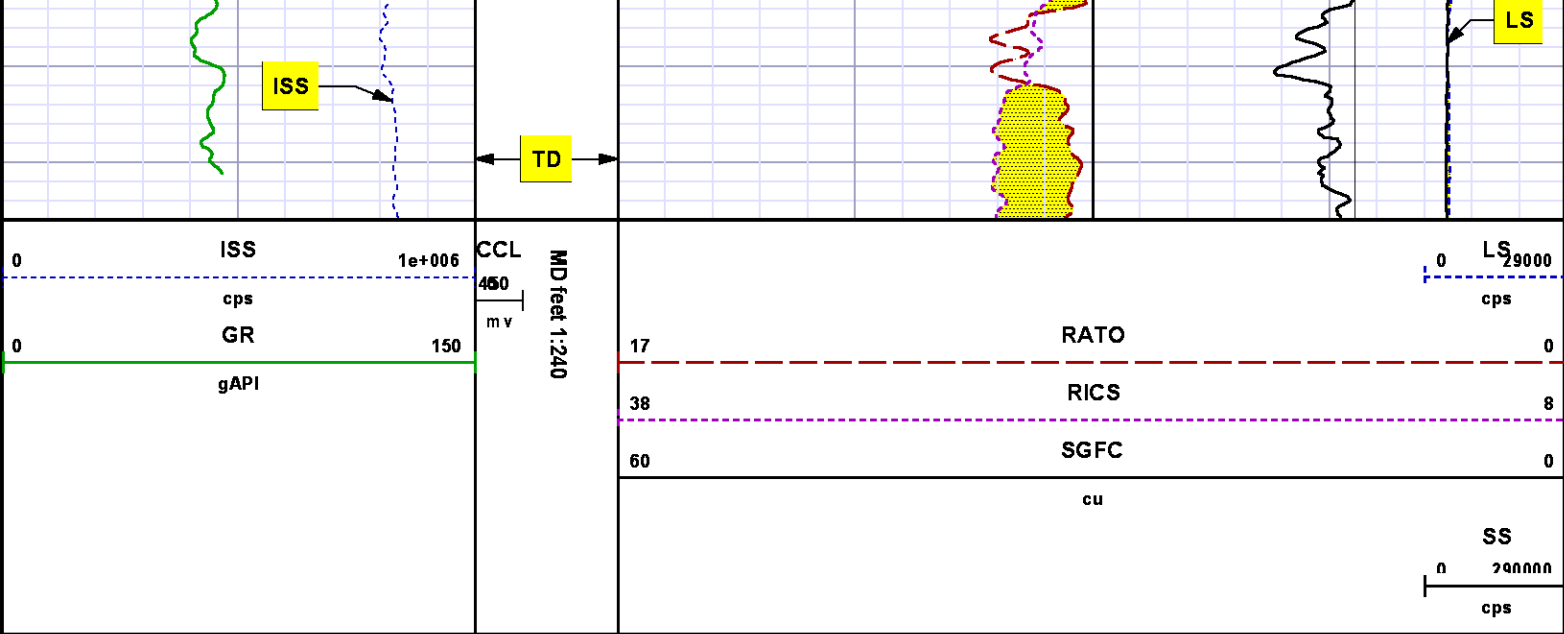


7400

7500







REPEAT SECTION  
PNC 3-D MODE

SPL PROCESSING

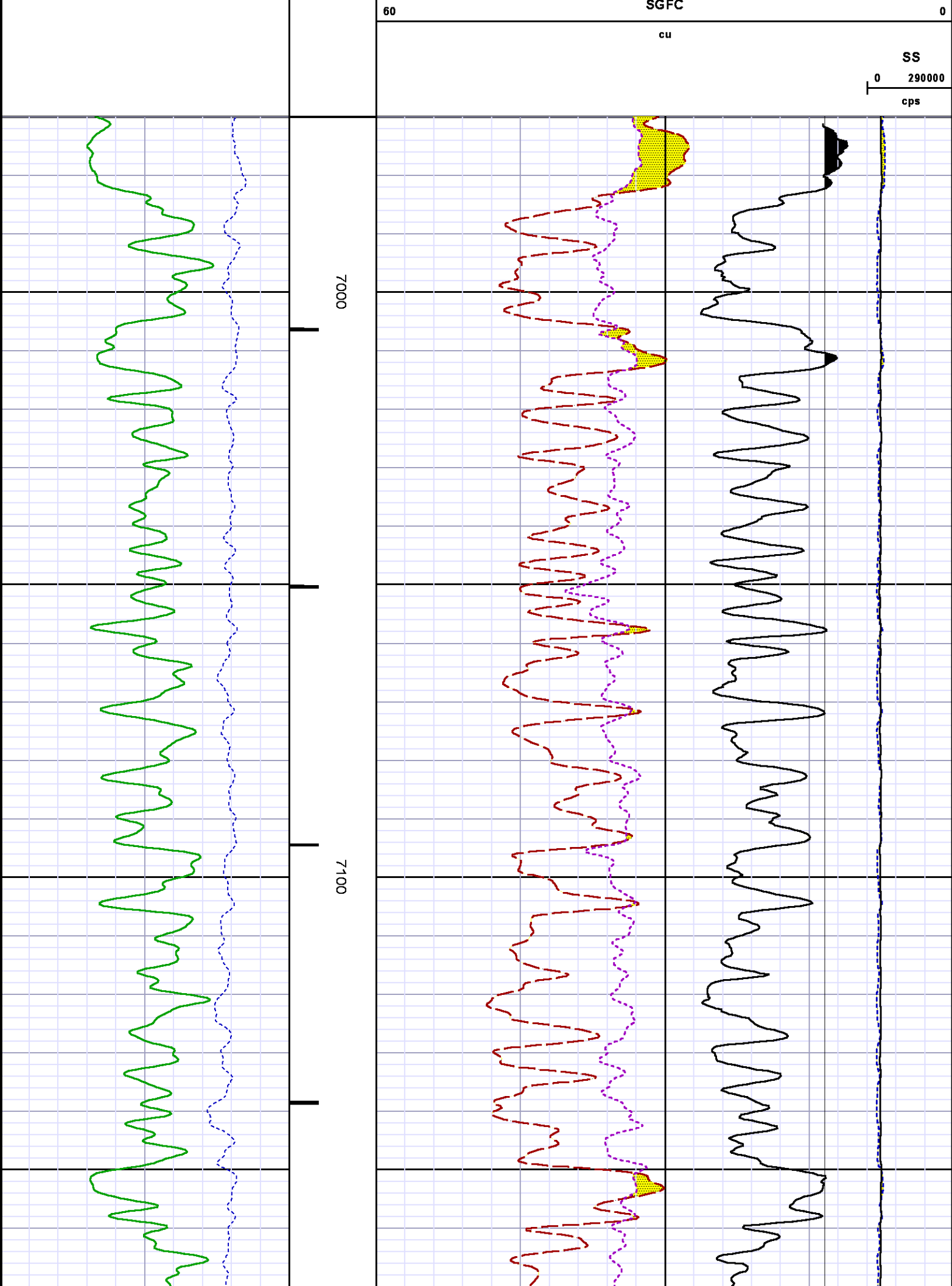
MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
PNC Porosity	Borehole	Cased		6963.520	7272.520
PNC Porosity	Borehole Size	8.750	inch	6963.520	7272.520
PNC Porosity	Casing Size	4.500	inch	6963.520	7272.520
PNC Porosity	Gas Filled	Non Gas Filled		6963.520	7272.520
PNC Porosity	Matrix	Sandstone		6963.520	7272.520

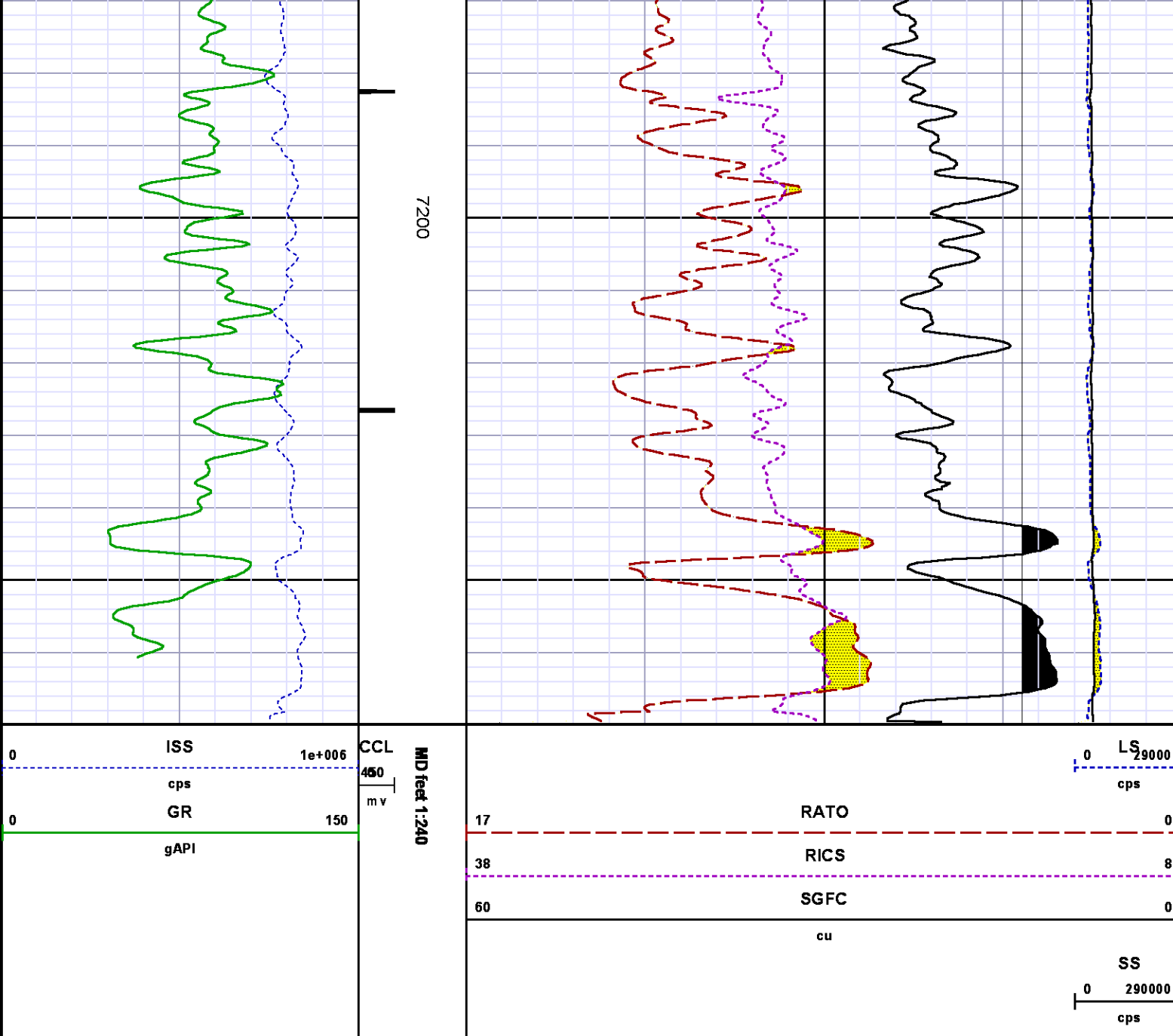
DEPTH OFFSETS  
(for Acquired Curves)

SERIES	DEPTH OFFSET	ACQUIRED CURVES
8248ED	-15.320	FLTM
8248ED	-13.320	CCL CHV
8262XA	-10.189	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	RATO23
		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	RTWO23	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	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	WDTH1	RICSC	CSSR	G1R
		G2R	ISSR	SSR	SS2R	RATOR	RATO13R
		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 : GOLDSBOROUGH PA 22-11			
File Name : d:\well\data\wpx energy\pa 22-11\22rpm\repeat.xtf			
Mode : PlotMgr 5.4.504			
Interval : 6970.00 - 7270.00 feet UP			
Created : 6/14/2013 10:02:25 AM			
0	ISS	1e+006	CCL
	cps		MD feet 1:240
0	GR	150	
	gAPI		
17	RATO		0
38	RICS		8





## CALIBRATION SUMMARY

## GAMMA RAY

Calibration File: C:\case\calver\GR\055M3.cal

### CALIBRATION SUMMARY

DATE/TIME PERFORMED: Thu May 23 15:50:01 2013 TOOL SERIES: 8262XA ASSET: 055 SEQ: M3

Calibrator #		Background	Calibrator On	Multiplicative		Background	Calibrator On	Differential
		[cps]	[cps]			[api]	[api]	[api]
JIG	WA612	81.82	380.87	0.602		49.25	229.25	180.00

Verification File:	C:\case\calver\GR1055M3.VP
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PRIMARY VERIFICATION								
DATE/TIME PERFORMED:			Thu May 23 15:52:39 2013		TOOL SERIES:		8262XA	ASSET: 055 SEQ: M3
Calibrator #		Background	Calibrator On	Multiplicative		Background	Calibrator On	Differential
		[cps]	[cps]			[api]	[api]	[api]
JIG	WA612	83.76	386.09	0.602		50.41	232.39	181.98

PNC #2

Calibration File:	C:\case\calver\PNC\555M2.cal
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PNC 3D CALIBRATION SUMMARY																
DATE/TIME PERFORMED:		Tue May 21 09:17:51 2013				TOOL SERIES:		8281XA		ASSET: 555 SEQ: M2						
Calibrator #						Source #										
SHOP BARREL						. 8281AA 11765054										
		ISS	Mtr VIts (V)		SS Gain	LS Gain	XLS Gain	EA Temp (degF)		Sync Delay (usec)	RCAL					
Raw Data		825801	124.00		2324.00	2263.00	2220.00	104.73		7.00	0.9870					
Interpolated		1300000	143.19		2300.31	2259.89	2213.63									
		ISS	BKS	BKL	BKX	SGA1		SDA1		SGA2	SDA2					
Raw Data		825801	6724.23	1067.27	150.65	25.75		0.14		24.34	0.27					
						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		825801	177545.13	27464.62	92527.89	32951.94	8637.92	55993.96		13816.16						
Fit Quality %			0.40	0.68	0.70	0.71	0.41	0.66		0.46						
		ISS	RBOR		RIN ISS/ILS		RIN13 ISS/IXS		RICS ISS/CSS		RATO SS/LS	RTWO SS2/LS	RONE CSS/CLS			
Raw Data		825801	1.43		4.65		30.07		14.75		10.71		3.81	4.05		
			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 %			0.04		0.39		0.32		0.19		0.15		0.16	0.15		
Reduced		1392815	1.43		4.68		30.20		14.84		10.70		3.81	4.05		
			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

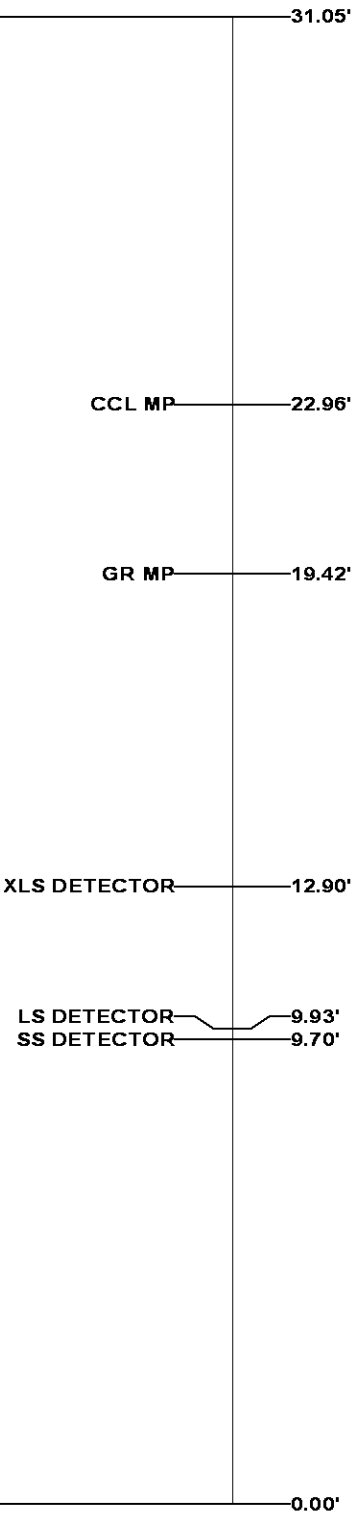
Series 8248EA  
Mnemonic PCM  
Diameter 1.70"  
Weight 20.00 lb  
Length 4.46'  
Measure Point 1.00' CCL MP  
Temp Rating 350.00 °F  
Press Rating 15000.00 PSI

### 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



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

<div> <b>BAKER HUGHES</b></div> <div><b>Baker Atlas</b></div> <div><i>CASE</i></div>	<b>Company</b>	WPX ENERGY		<b>File No:</b>	
	<b>Well</b>	GOLDSBOROUGH PA 22-11			CH073169
	<b>Field</b>	PARACHUTE		<b>API No:</b>	
	<b>County</b>	GARFIELD	<b>State</b>	COLORADO	05045218180000
<b>Location</b>		<b>Elevations</b>			
SHL: 2403' FNL, 2075' FWL		KB 6296 ft		PA 22-11 PAD	
BHL: 1470' FNL, 2059' FWL		DF		11 7S 95W	
SEC 11 TWP 7S RGE 95W		GL 6274 ft		CYCLONE 17	