



RESERVOIR PERFORMANCE MONITOR

Baker Atlas

File No: CH089402

Company Well Field County State

WPX ENERGY C&C ENERGY GM 311-13 GRAND VALLEY GARFIELD COL ORADO

API No: 05045223670000

Location 13 75 96W SHL: 285' FSL & 980' FWL (SEC 12) BHT: 603' FNL & 794' FWL (NWNW SEC 13)

GM 24-12 PAD H&P 318 SEC 13 TWP 7S RGE 96W

Other Services BOND LOG

Permanent Datum Log Measured From Drill Measured From GL KB Elevation 5141 ft 24 ft Above P. D. KELLY BUSHING

Elevations KB 5165 ft DF GL 5141 ft

Date	22/JUL/14	
Run	ONE	
Service Order	US088402J	
Depth Driller	6034 ft	
Depth Logger	5986 ft	
Bottom Logged Interval	5976 ft	
Top Logged Interval	2844 ft	
Time Started	1000	
Time Finished	1530	
Operator Rig Time	5.5 HRS	
Type of Fluid in Hole	WATER	
Fluid Density	NA	
Salinity	NA	
Fluid Level	58 ft	
Logged Cement Top	NA	
Wellhead Pressure	0 psi	
Maximum Hole Deviation	NA	
Nominal Logging Speed	10 fpm	
Maximum Recorded Temperature	204 degF	
Reference Log	BAKER HUGHES	
Reference Log Date	22/JUL/14	
Equipment No.	4271	GRAND UCT
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	1277 ft
8.75 in	1277 ft	6034 ft

Casing Record				
Size	Weight	Grade	From	To
9.625 in			24 ft	1277 ft
4.5 in	11.6 lbm/ft	1-80	24 ft	6034 ft

Remarks
All data on this log is shifted and depth matched using the Gamma Ray curve to the Baker Hughes bond log dated 7/22/2014 at the client's request.
The amount of linear shift is -2.5 feet.
Logged with zero PSI at wellhead.
BHT = 204°F
SJ = 2806'-2828'

Equipment Data					
Run	Trip	Tool	Series Number	Serial Number	Position
1	1	RPM	8281FA	10238007	FREE
1	1	RPM	8281PA	10160383	FREE
1	1	RPM	8281EA	10190984	FREE
1	1	GR	2812LA	10274385	FREE
1	1	TEL/CCL	8248ED	10264408	FREE
1	1	PCM	8250EA	10397894	FREE

MAIN SECTION
PNC 3-D MODE

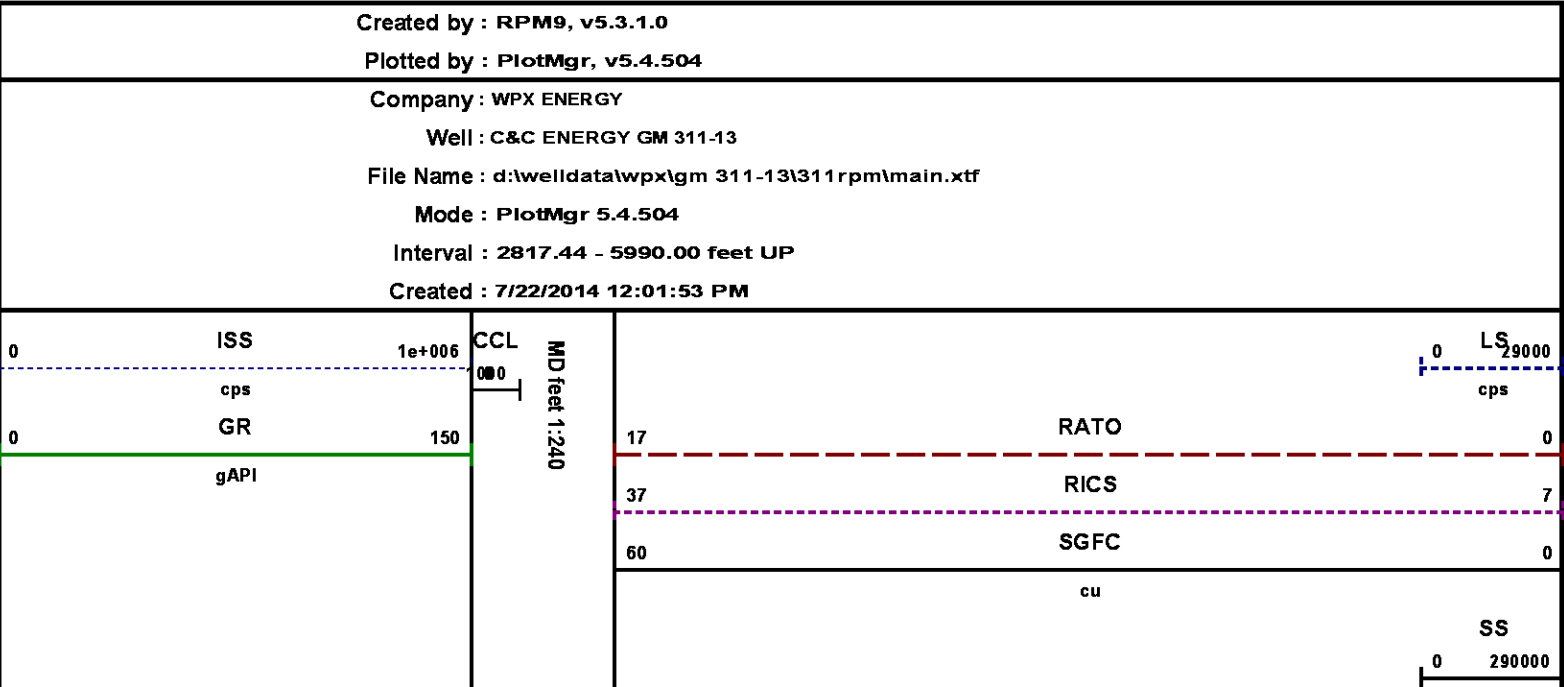
SPL PROCESSING

DEPTH OFFSETS

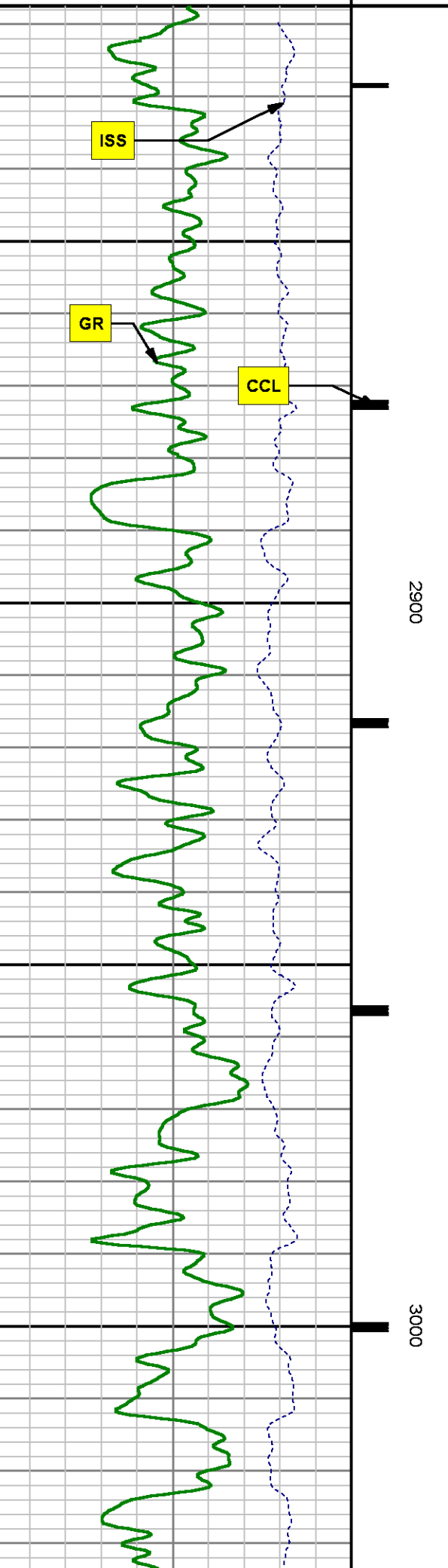
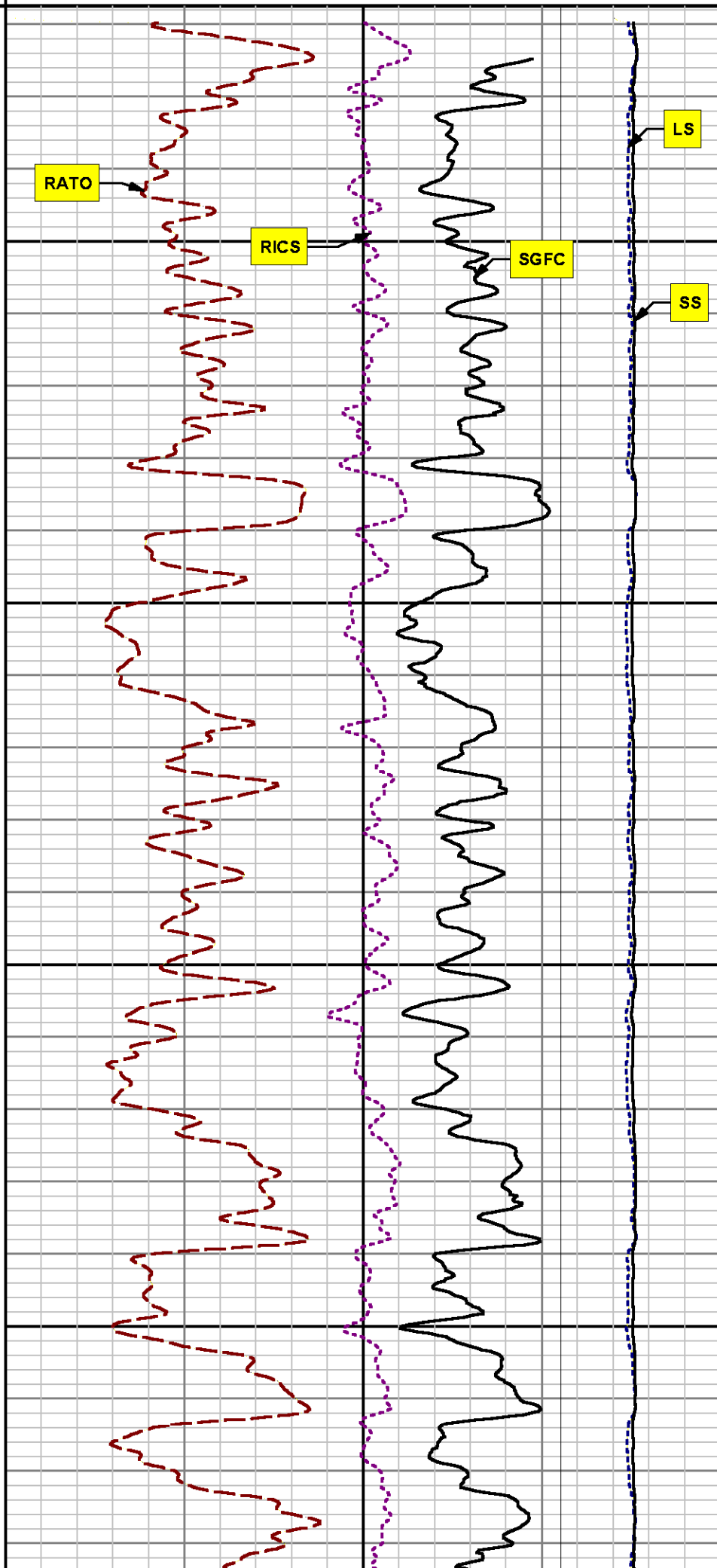
(for Acquired Curves)

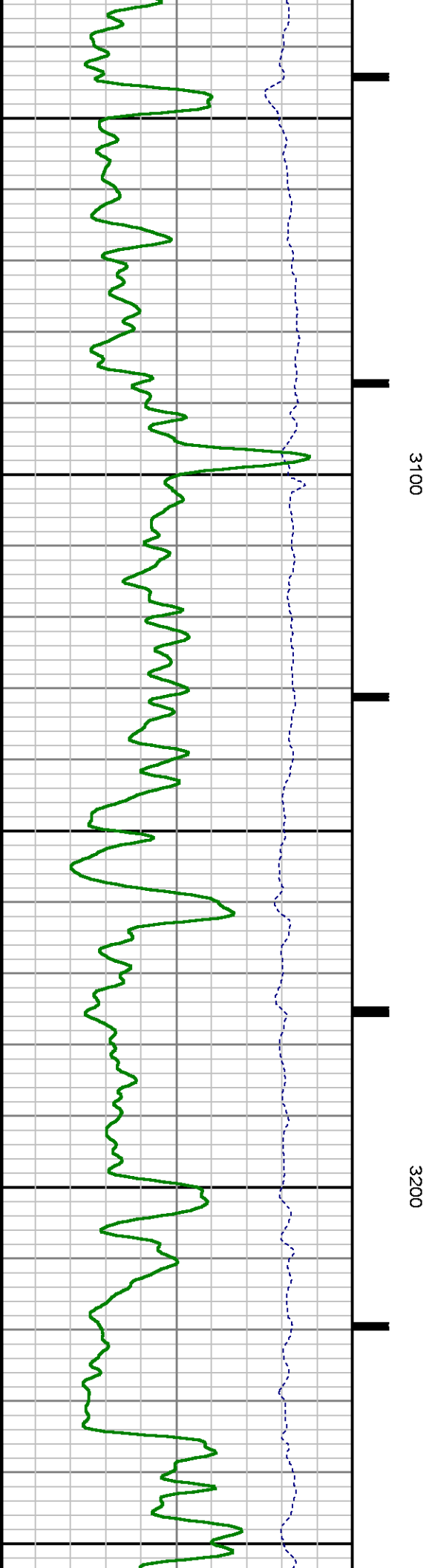
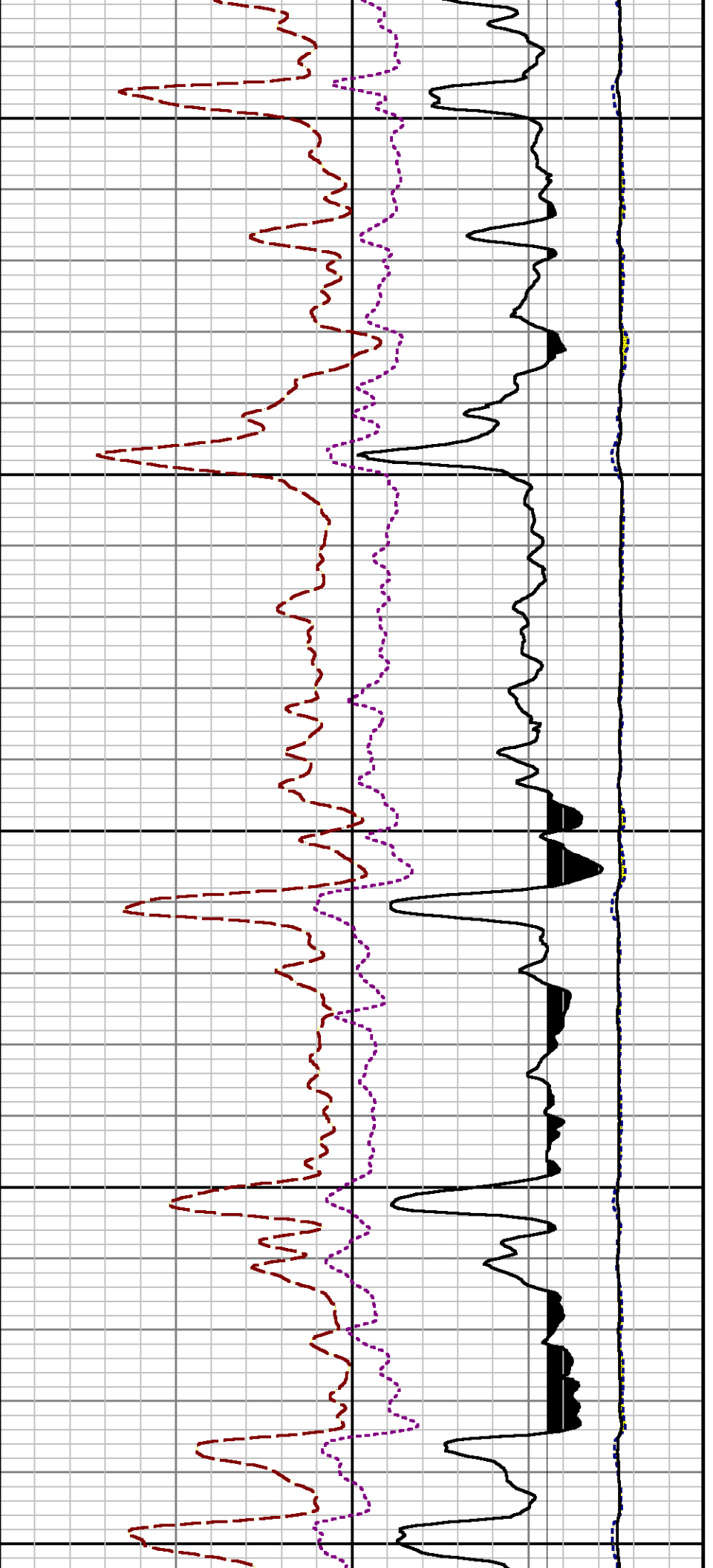
SERIES	DEPTH OFFSET	ACQUIRED CURVES					
8248ED	-14.478	FLTM					
8248ED	-12.478	CCL	CHV				
2812LA	-9.928	GR					
8281XA	-0.662	HVC3Q0	SEQ3	AMA3	AML3	BKX	CXS
		CPT3Q0	CPT3Q2	CPT3Q3	CPT3Q4	ET3	IXS
		MCS3	MCS3Q0	QCAL3	RGN3	RICX	SDA3
		SDL3	SGA3	SGL3	STA3	XS	ASPEC3
		AMB3	AMF3	CHF3	IXSC	IXSN	RATO23

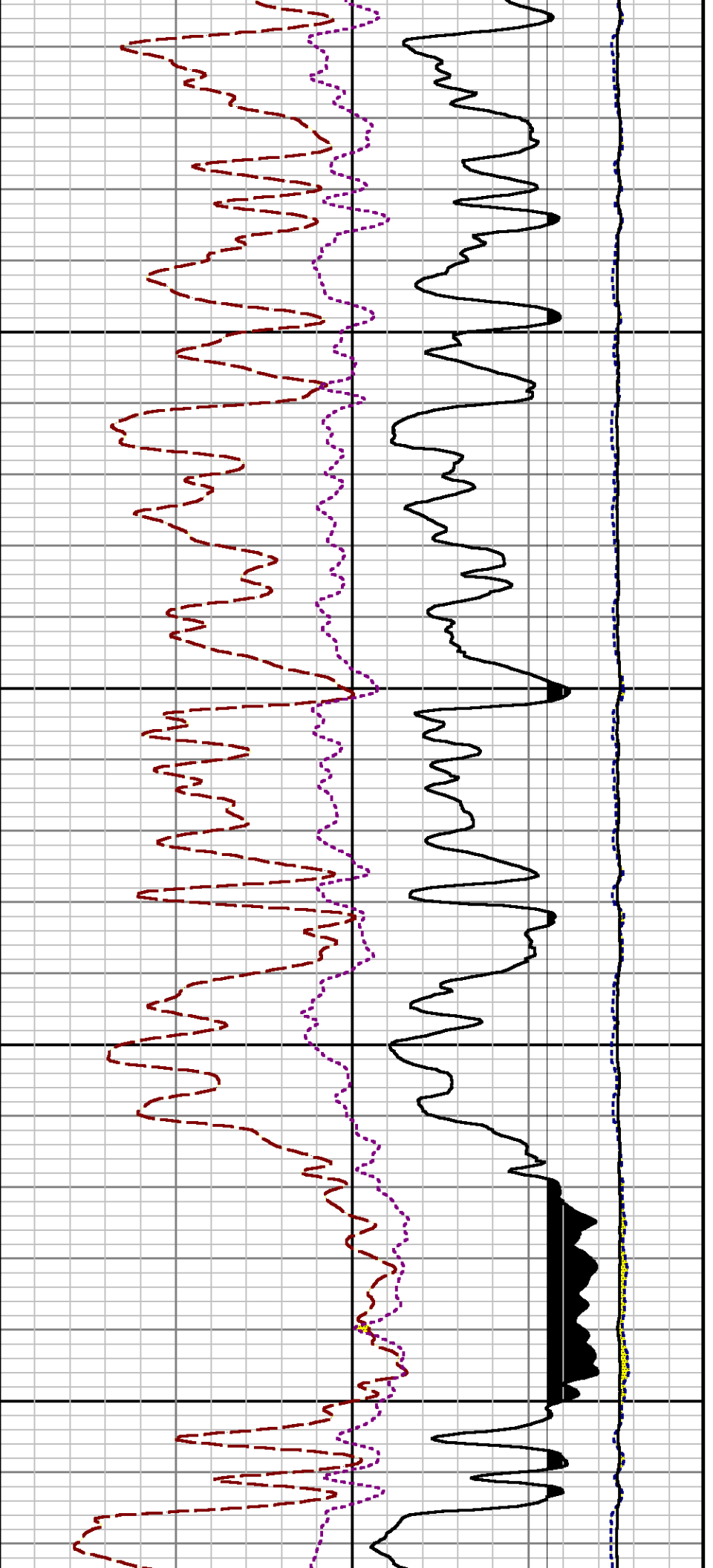
			RICXC	RIN13C	RIN23	RIN23C	SD3D	SG3D
			SGB3	SGF3	WDTH3	CXSR	IXSR	XSR
			RICXR					
8281XA	-0.250		HVC2Q0	SEQ2	AMA2	AMB2	AMF2	AML2
			BKL	CHF2	CLS	CPT2Q0	CPT2Q2	CPT2Q3
			CPT2Q4	ET2	ILS	LS	MCS2	MCS2Q0
			QCAL2	RGN2	RICL	RONE23	RTWO23	SDA2
			SDL2	SGA2	SGB2	SGF2	SGK2	SGL2
			STA2	ASPEC2	ILSC	ILSN	WDTH2	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				



cps

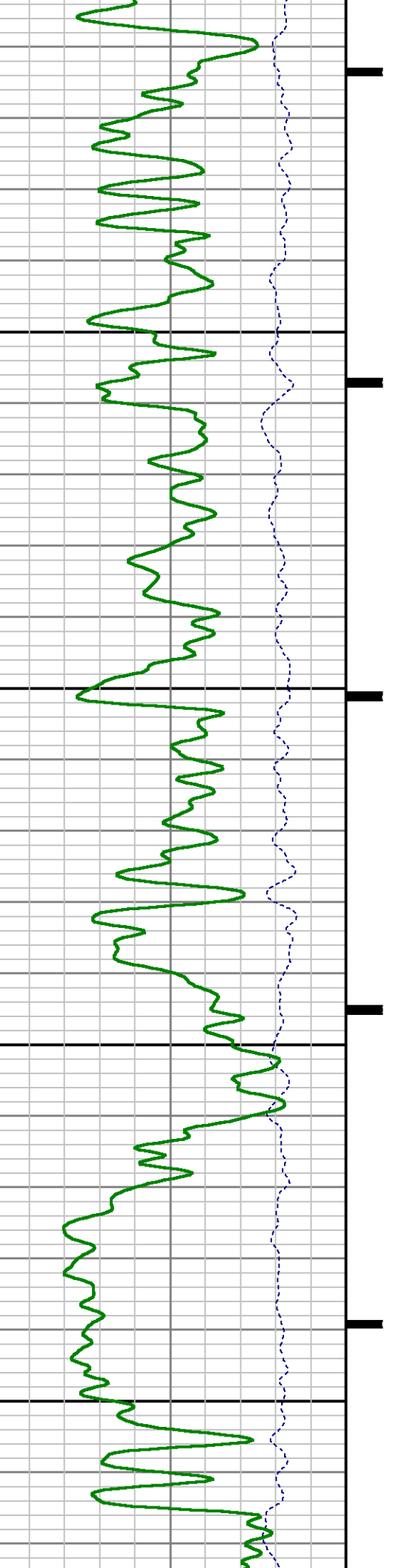


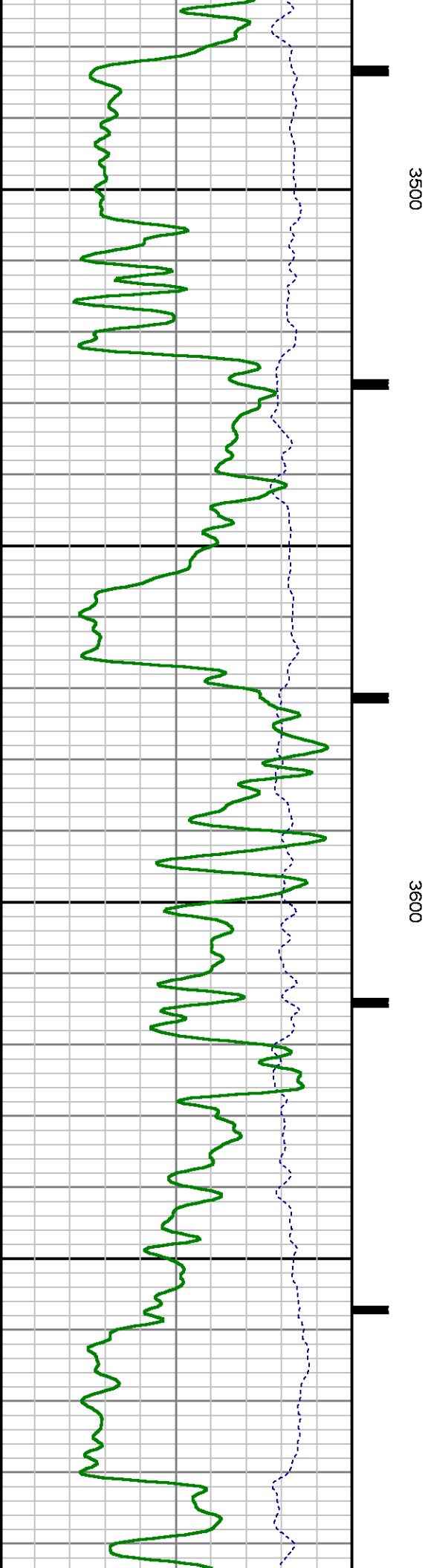
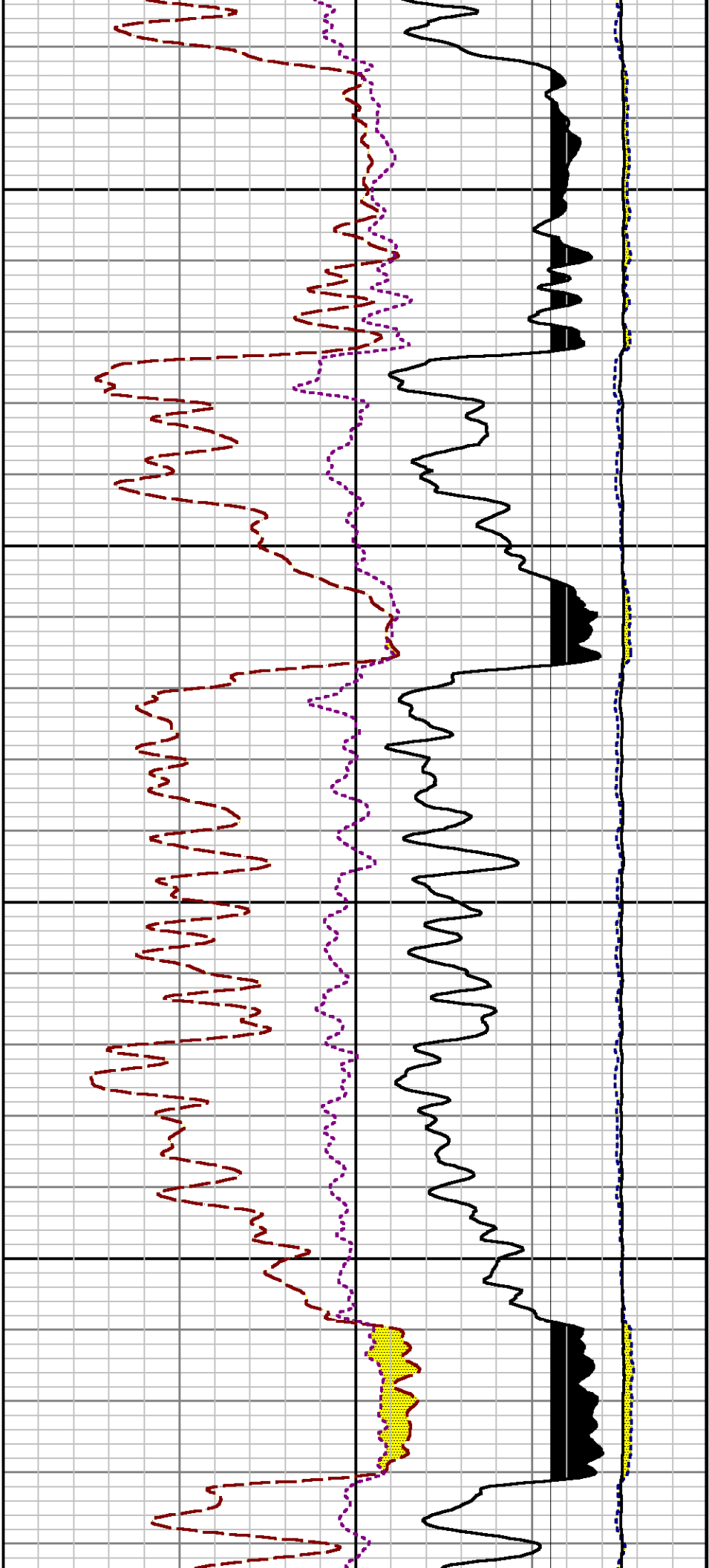


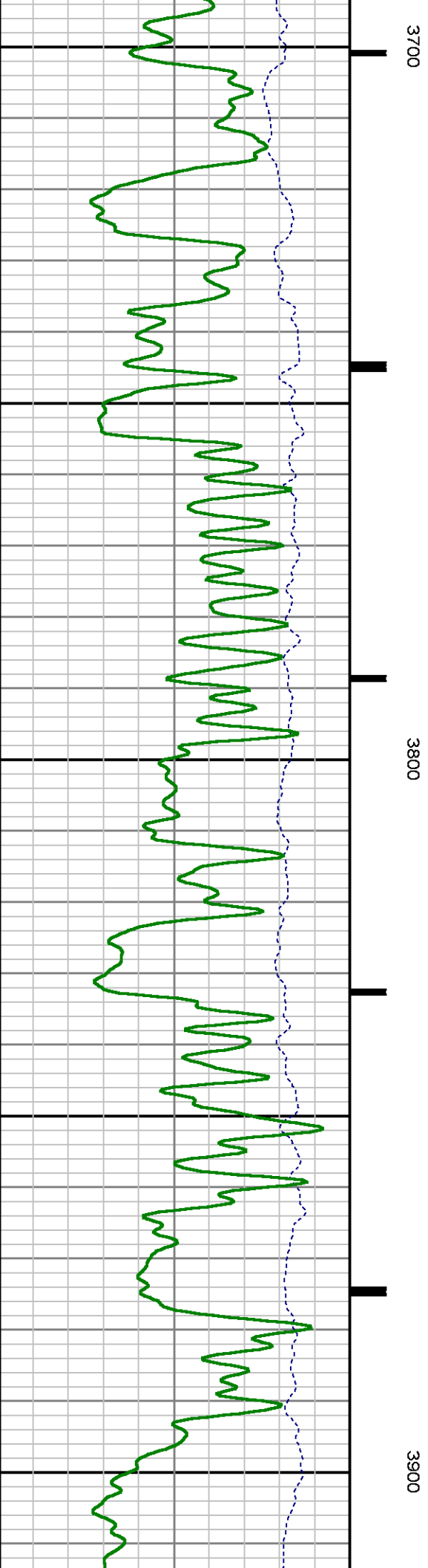
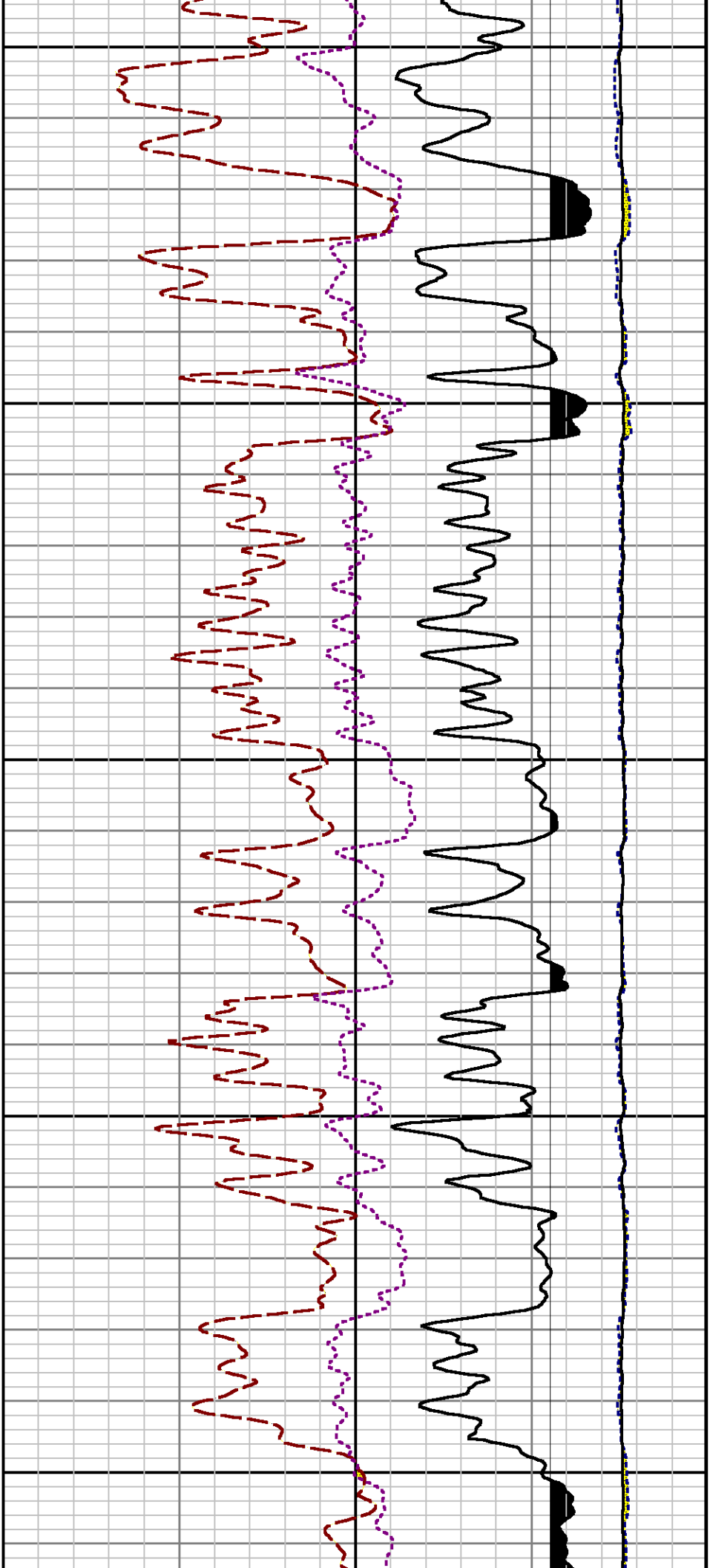


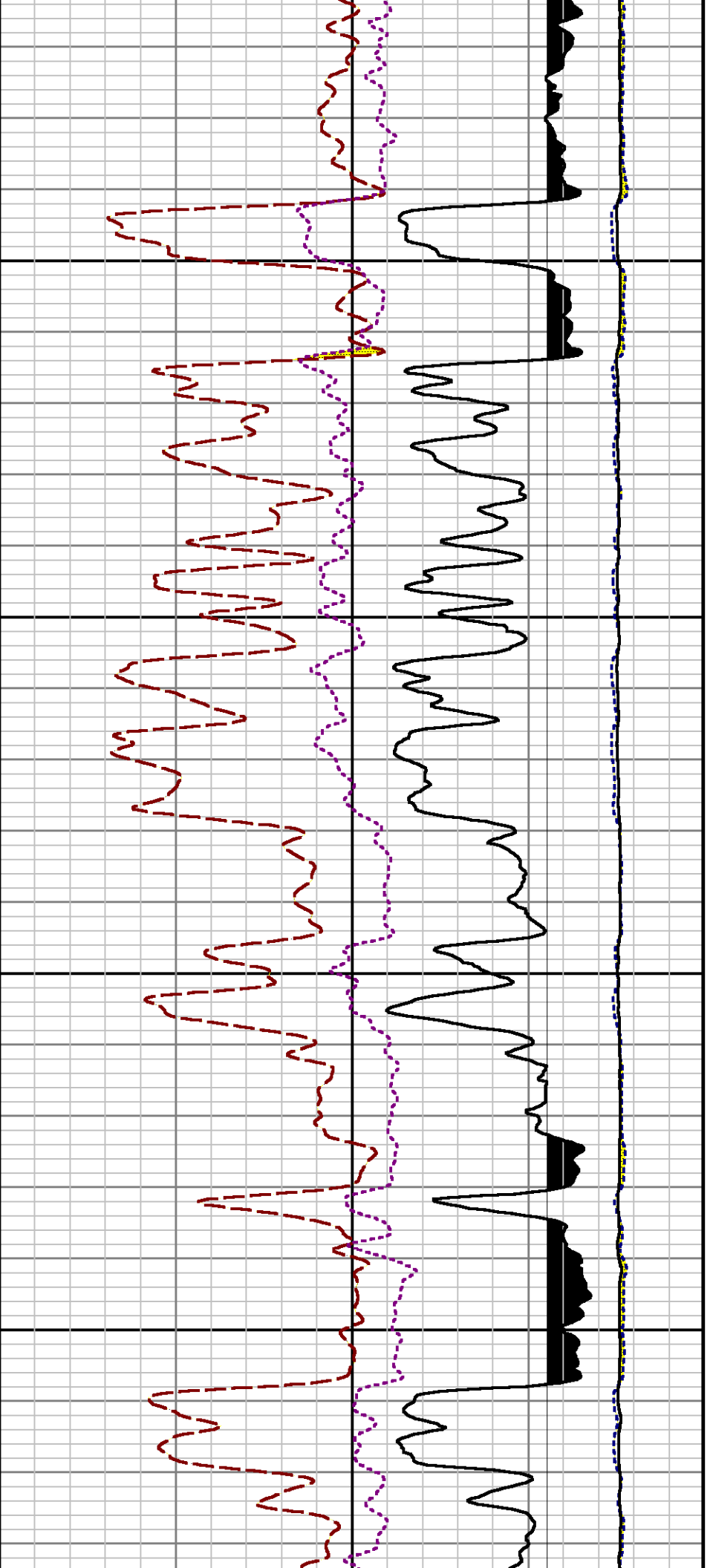
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3400



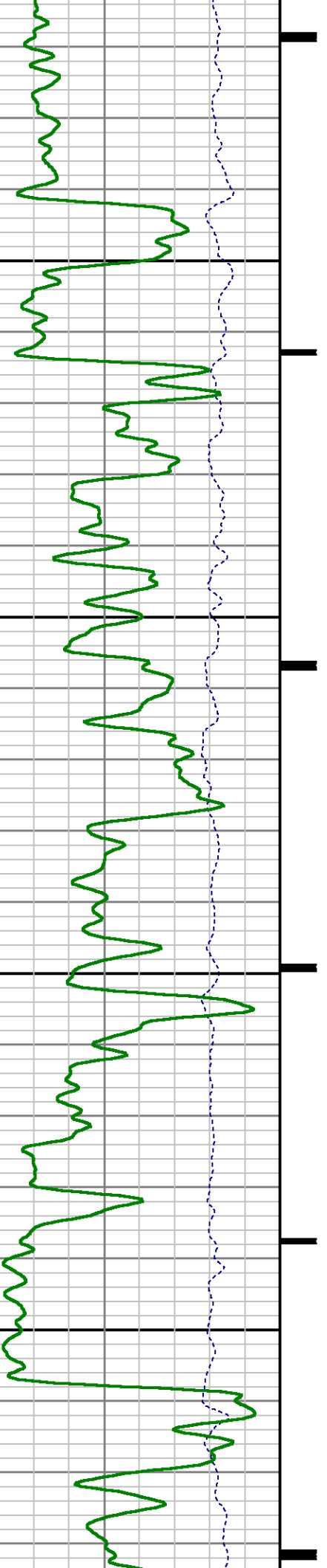


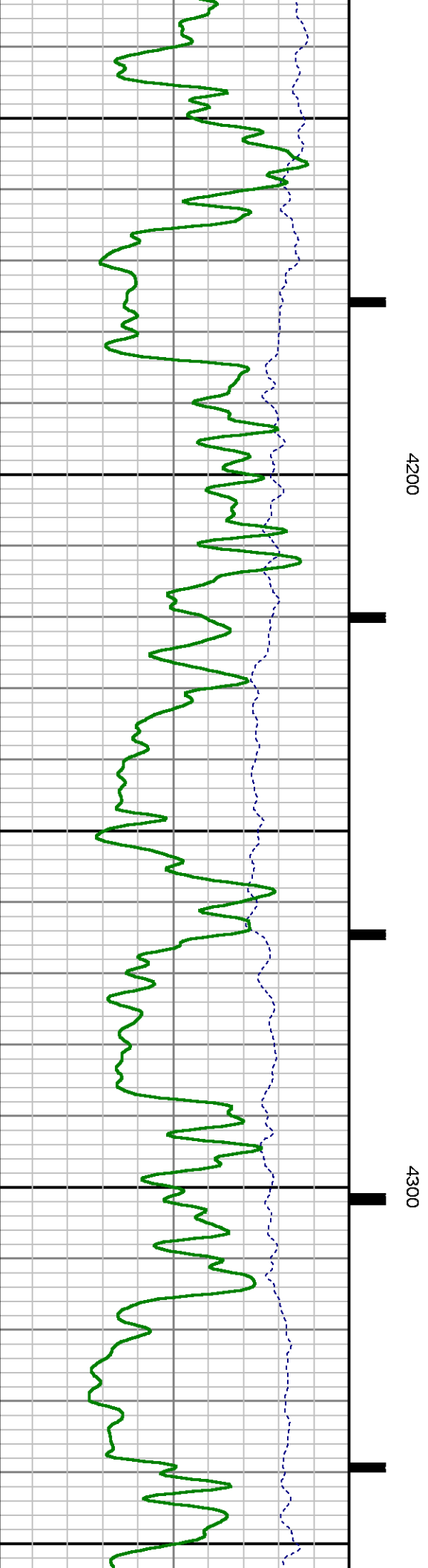
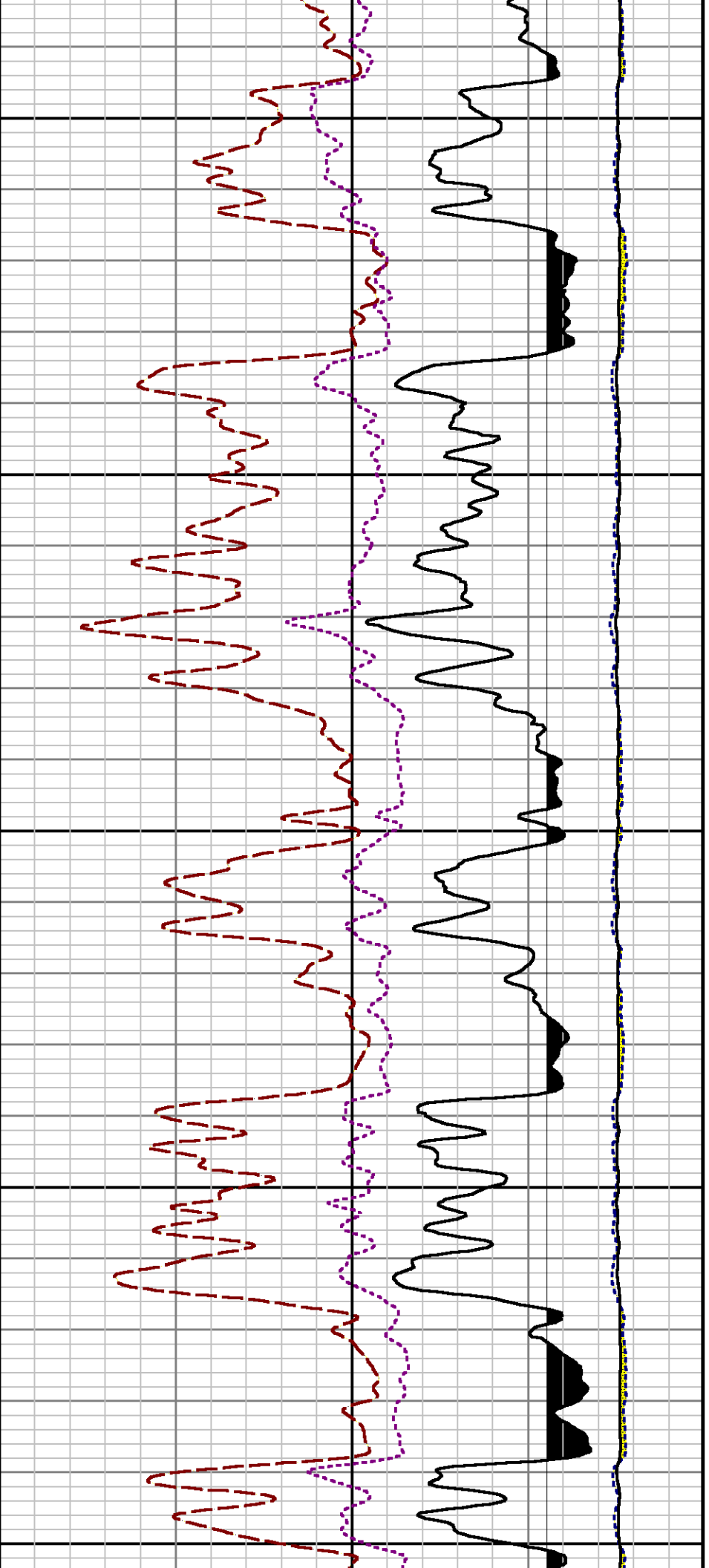


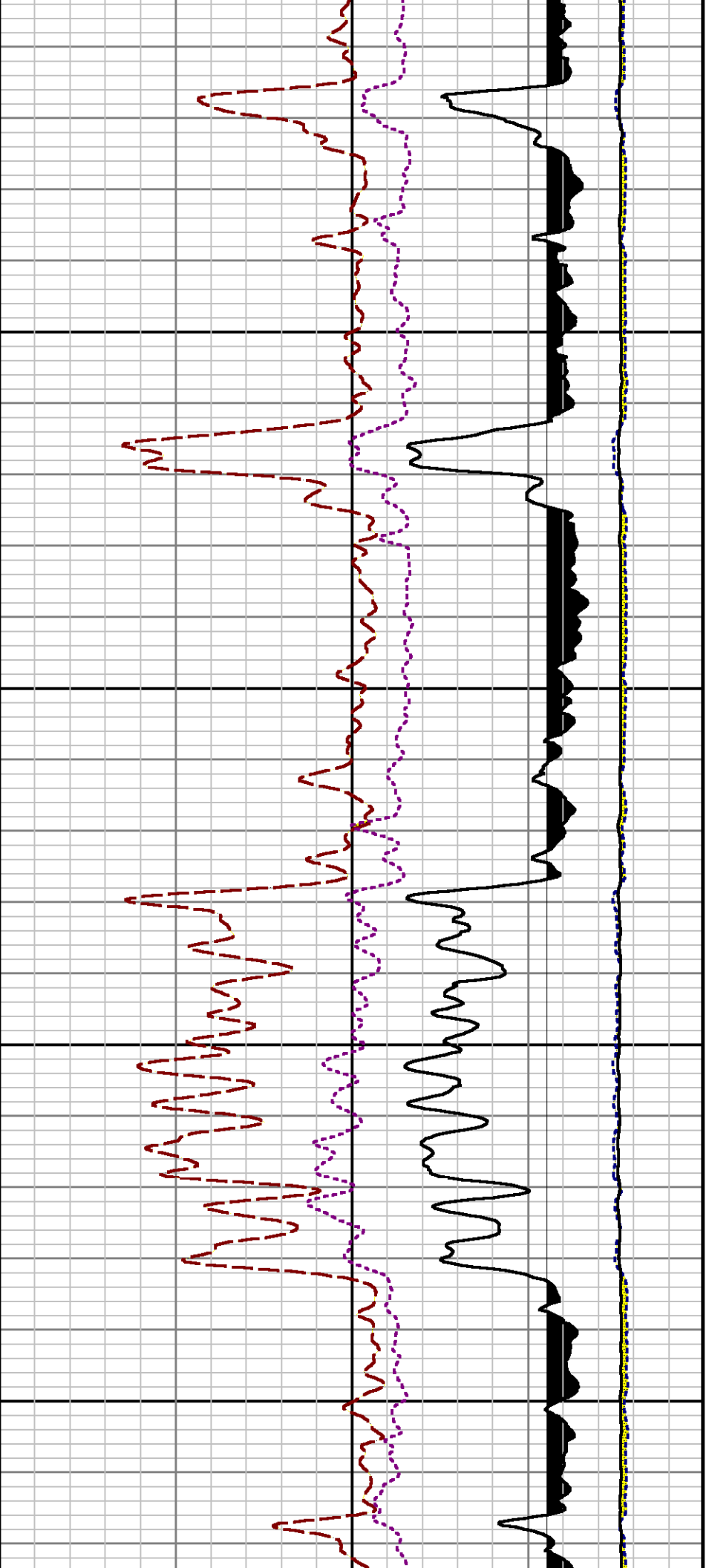


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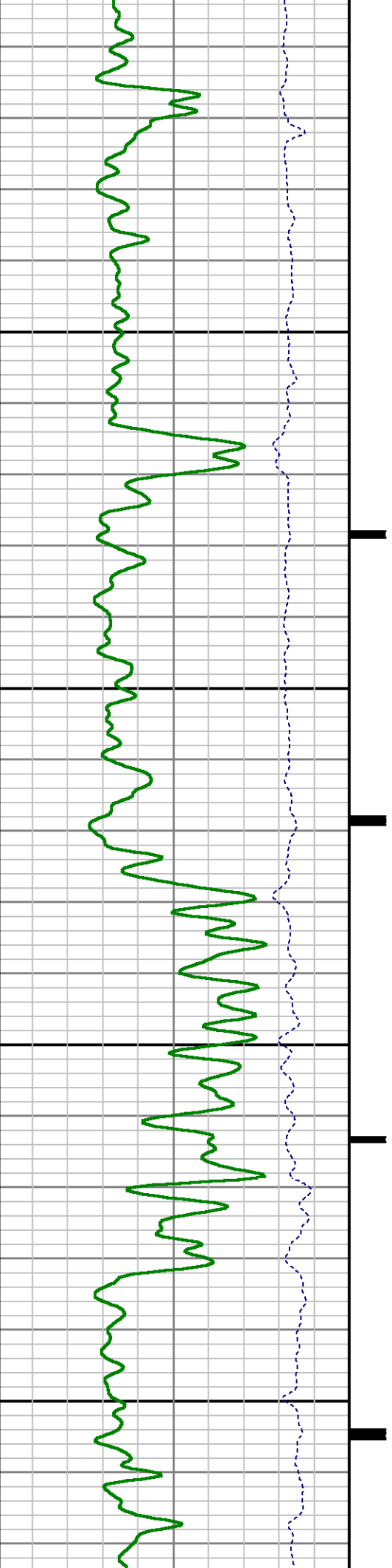


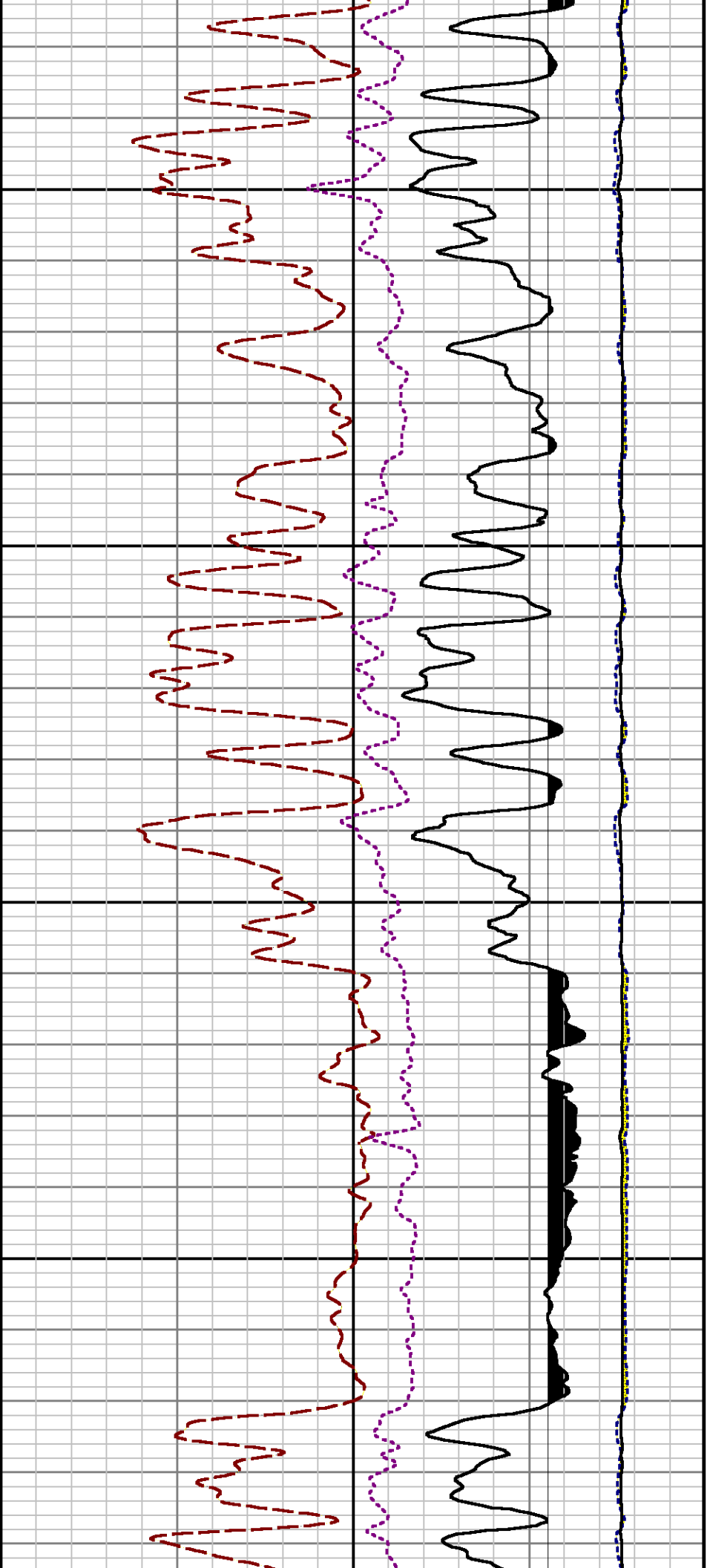




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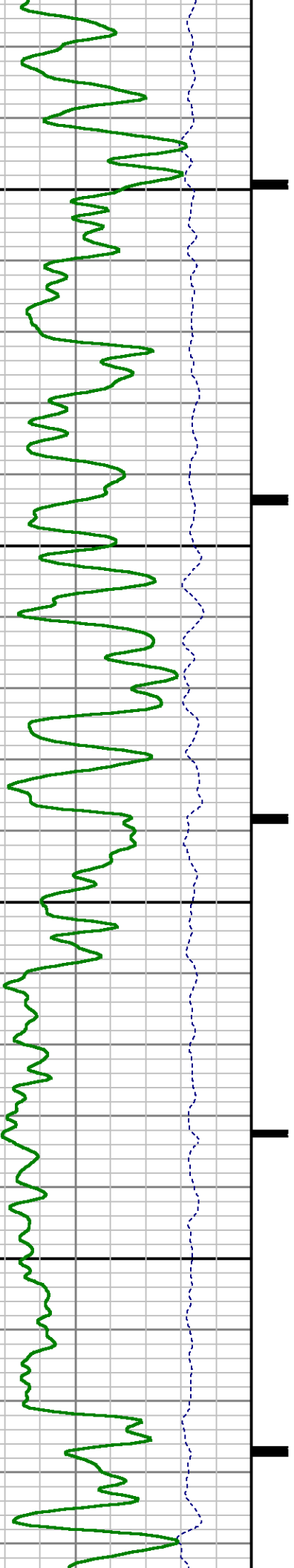
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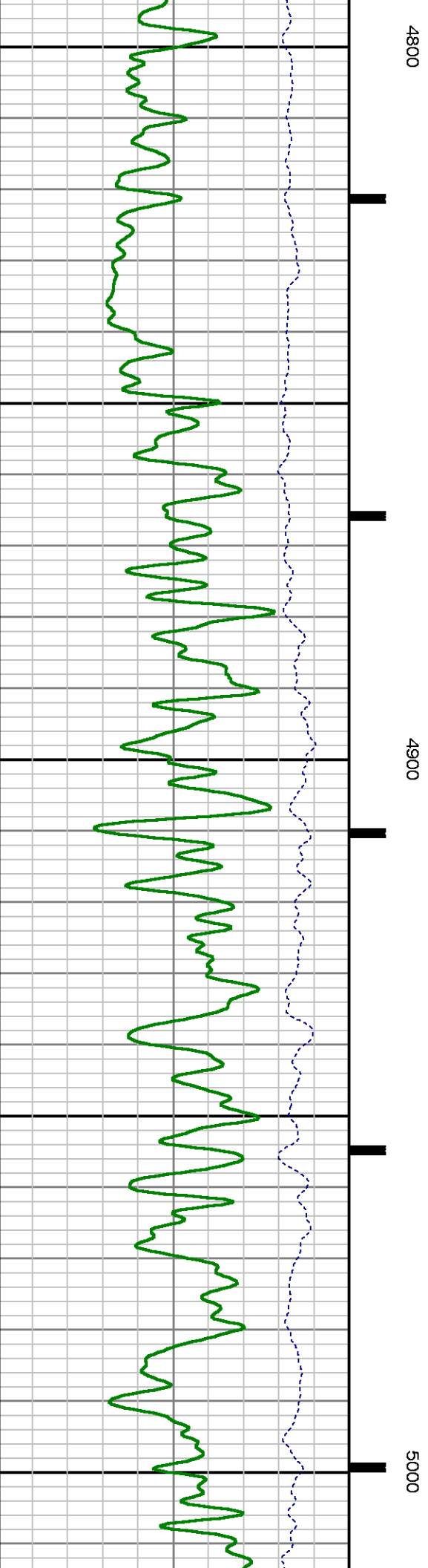
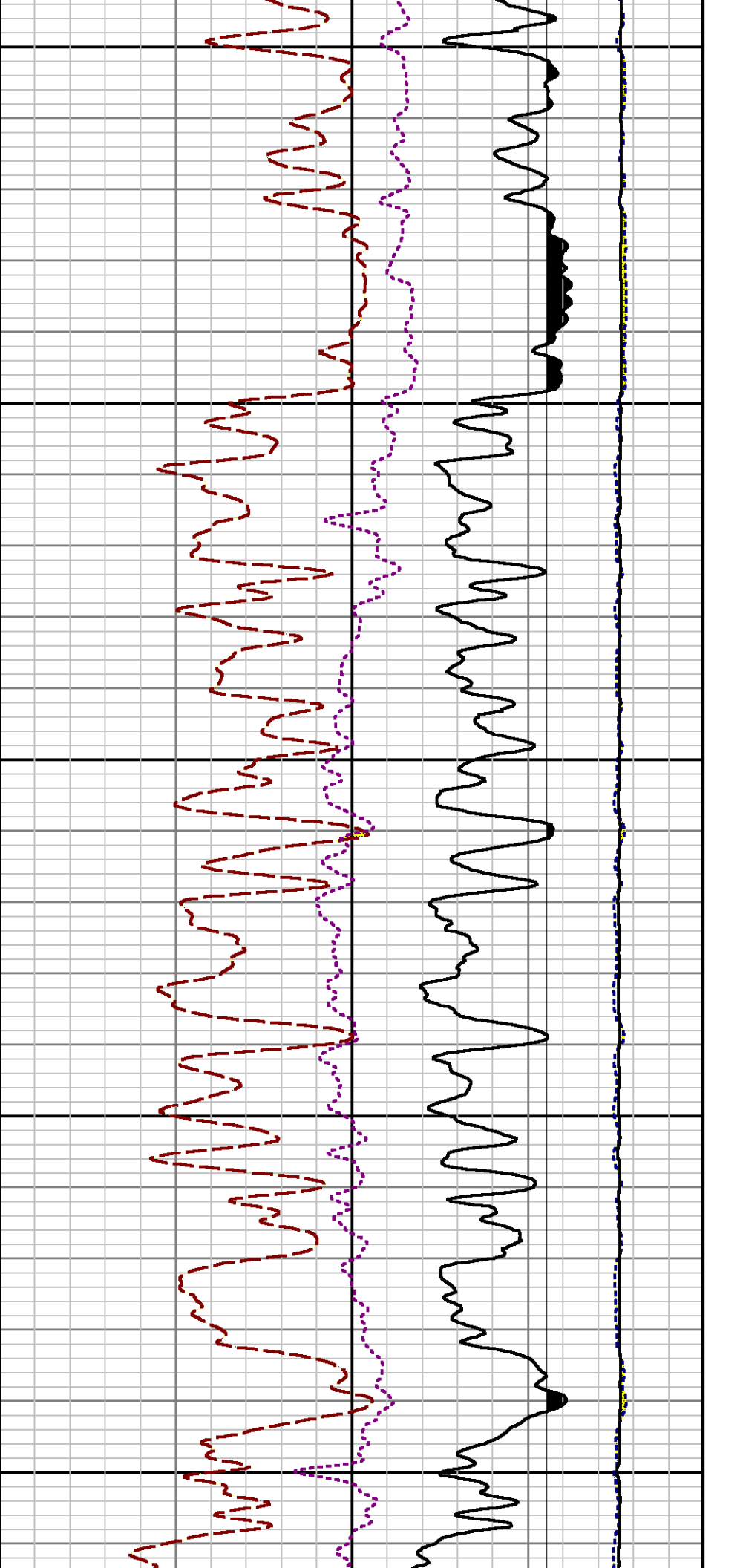


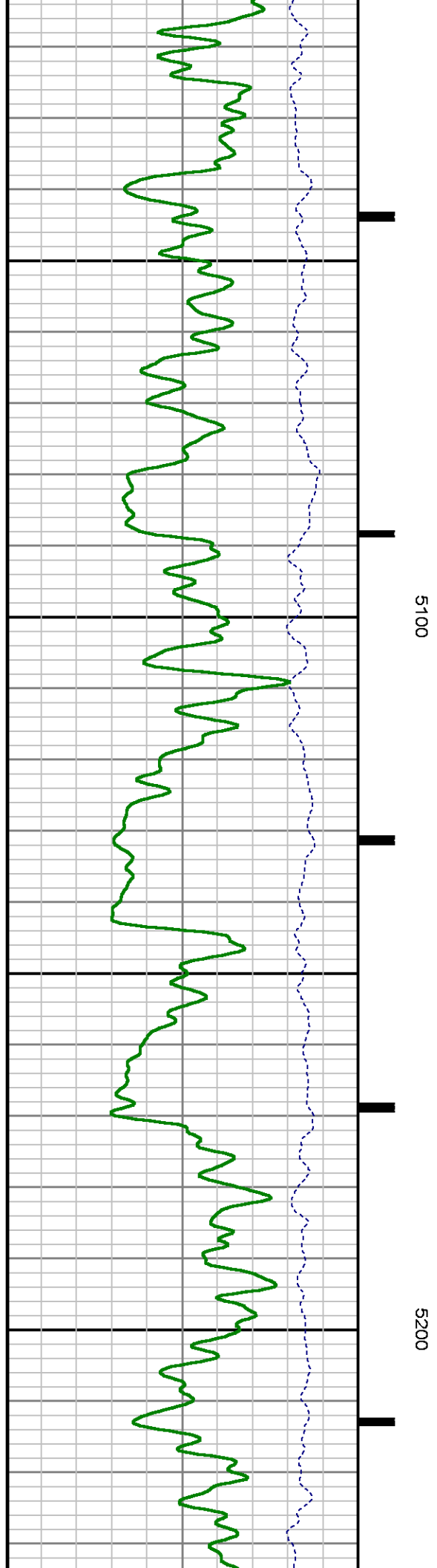
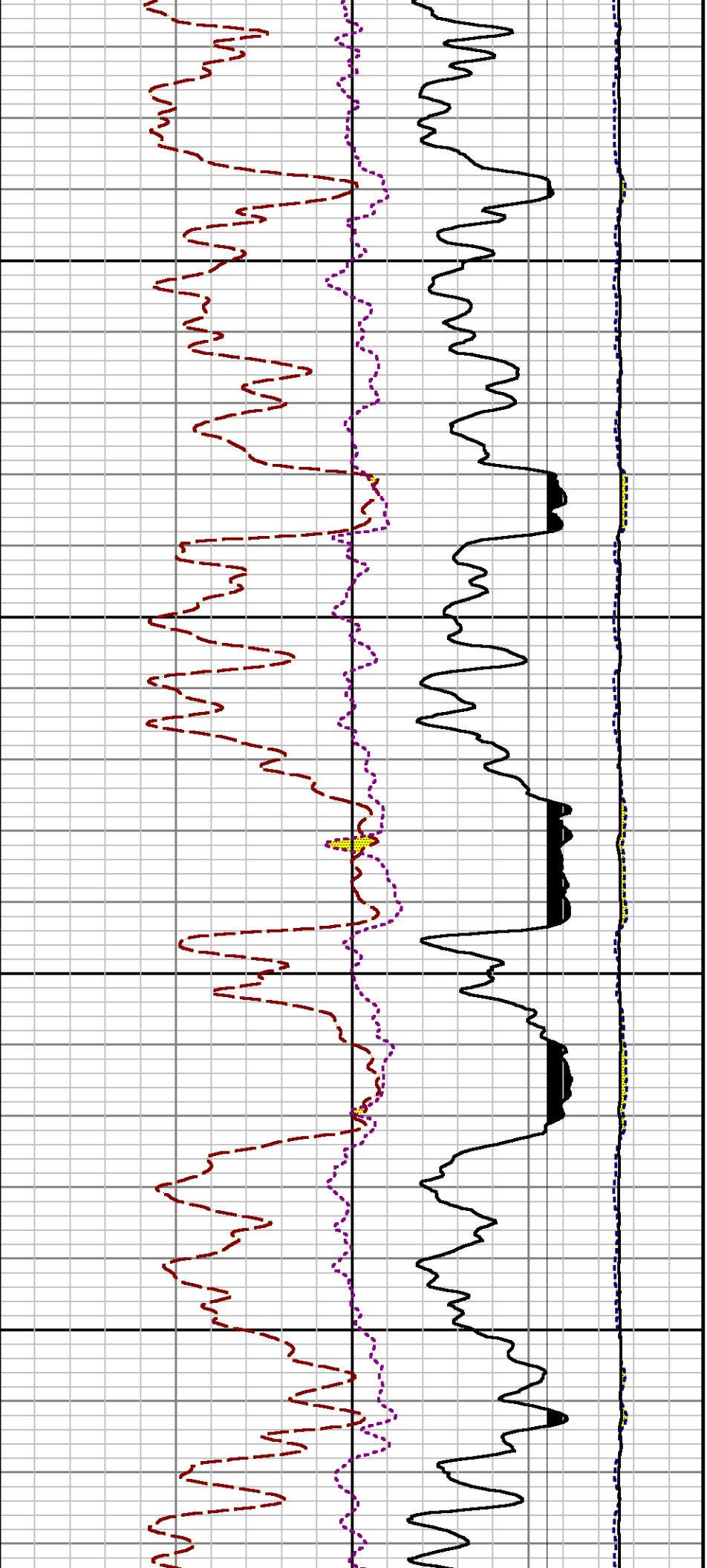


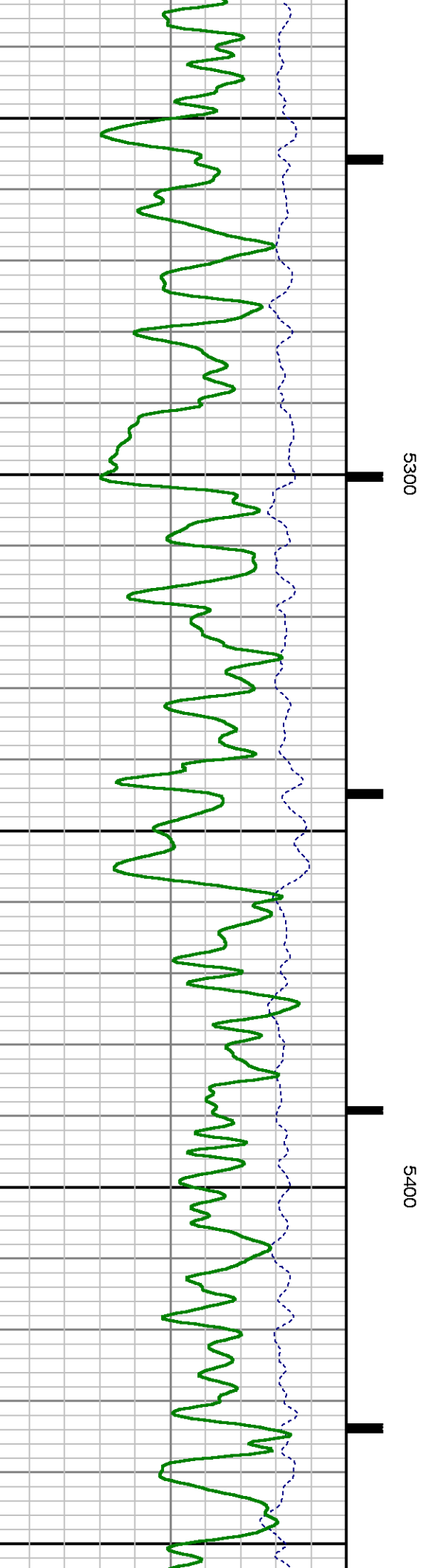
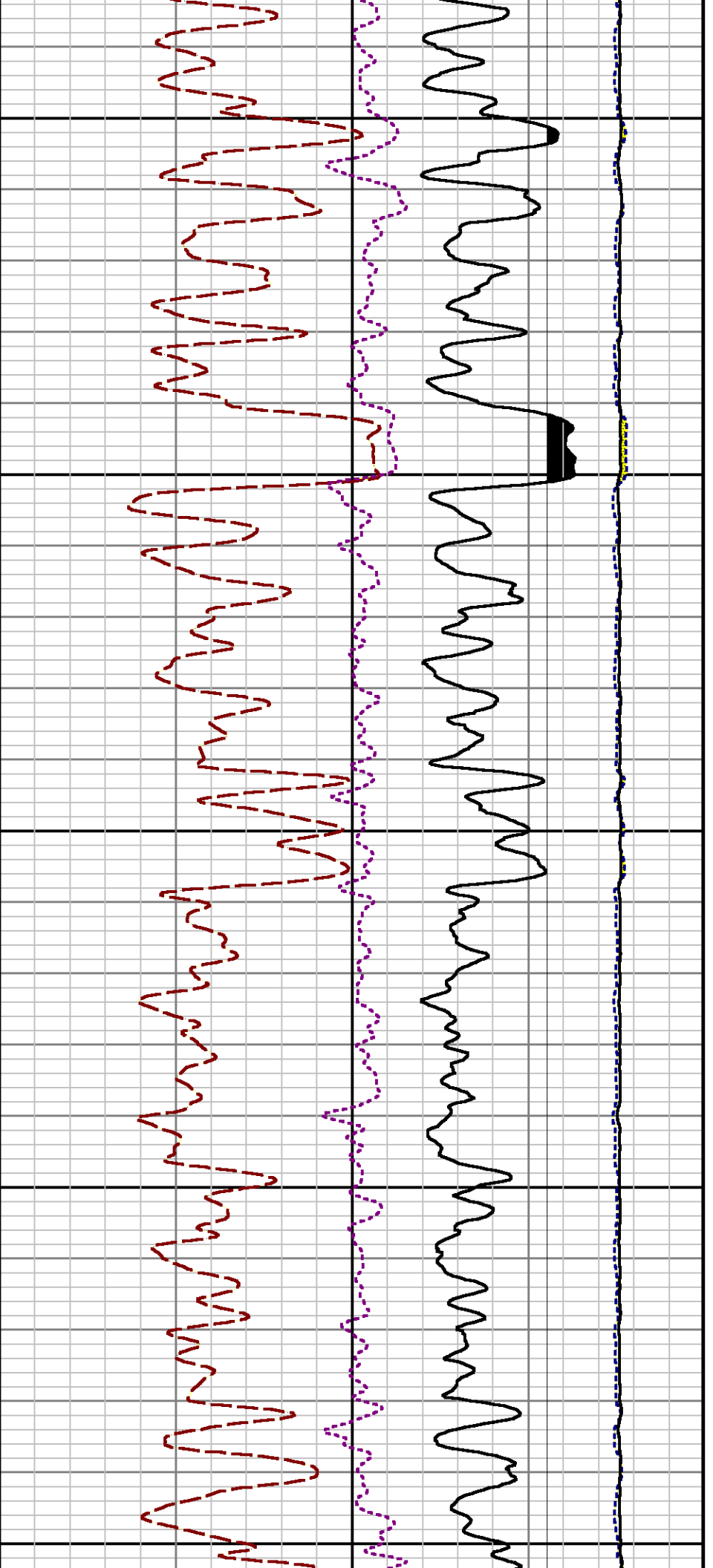
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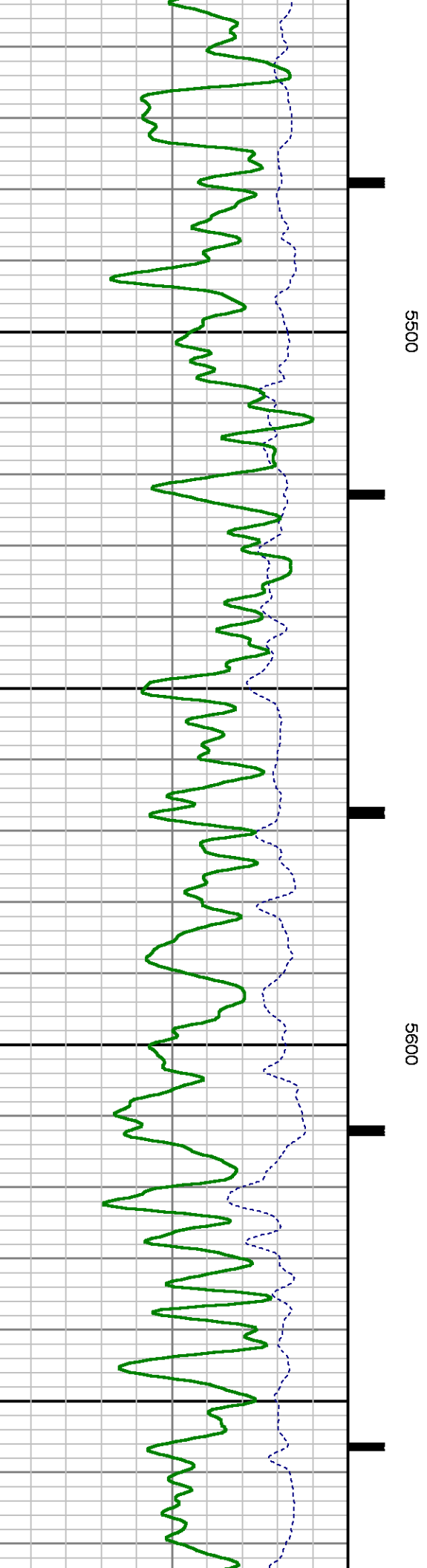
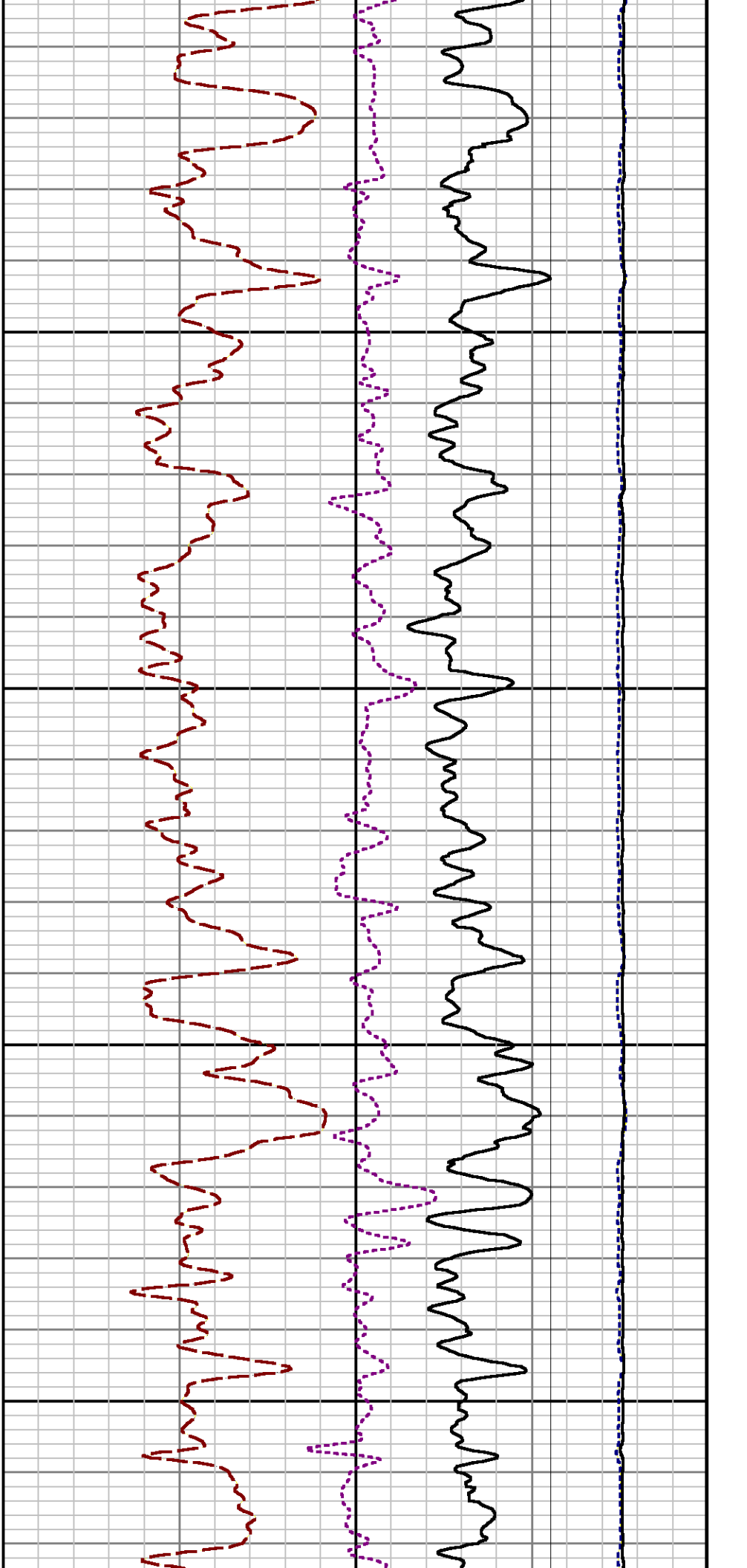
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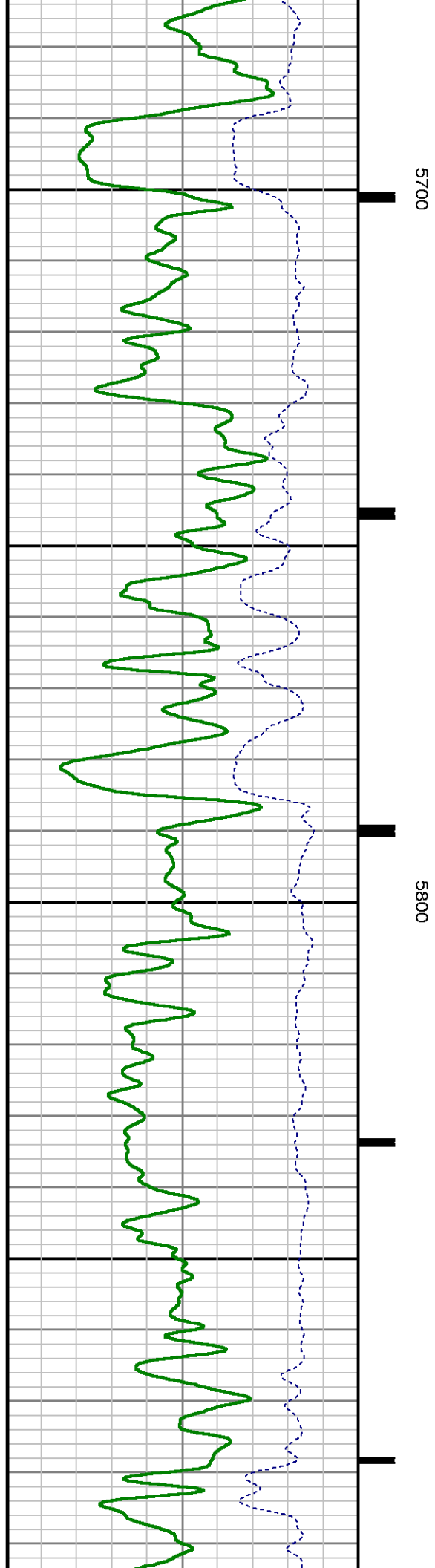
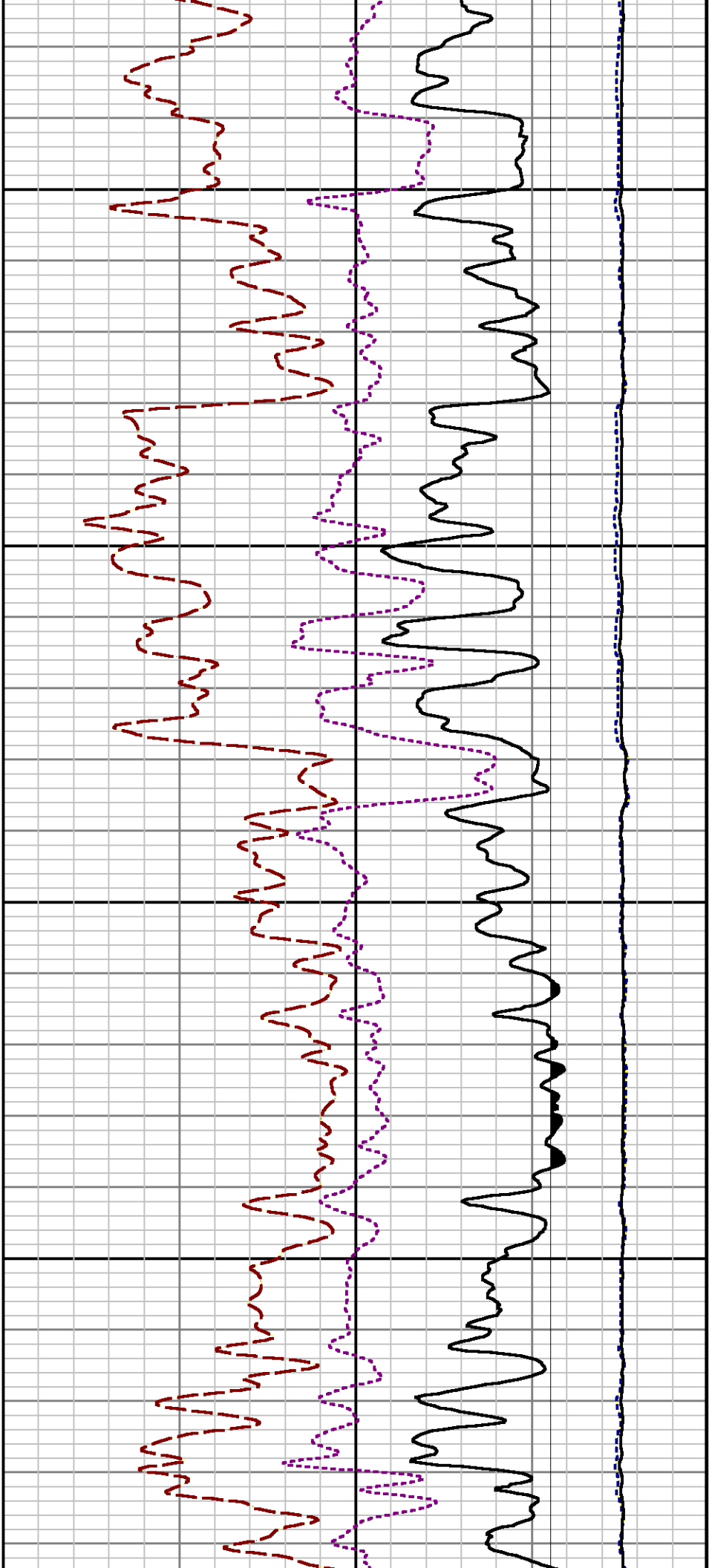


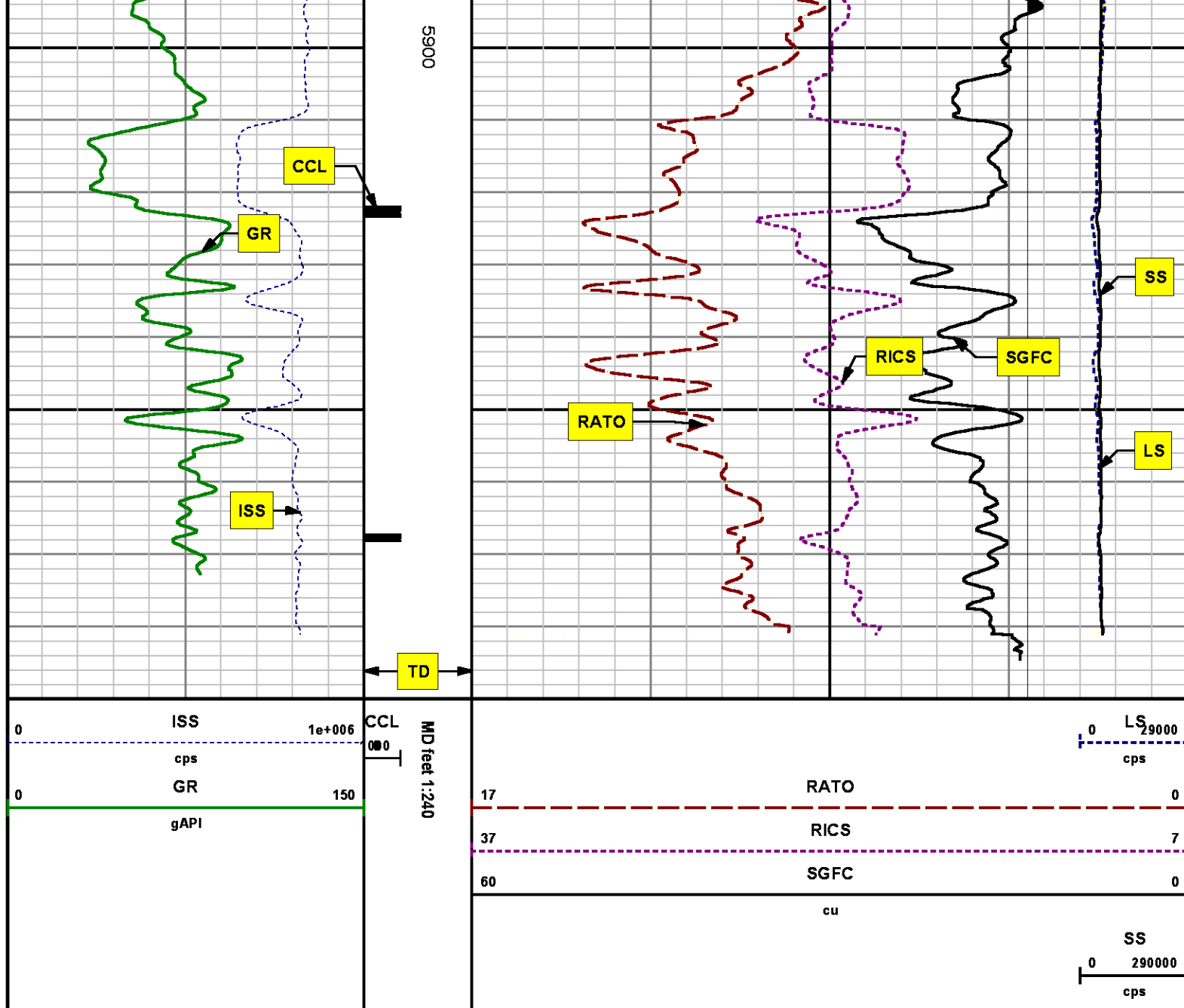












REPEAT SECTION
PNC 3-D MODE

SPL PROCESSING

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
PNC Porosity	Borehole	Cased		5196.597	5530.722

PNC Porosity	Borehole Size	8.750	inch	5196.597	5530.722
PNC Porosity	Casing Size	4.500	inch	5196.597	5530.722
PNC Porosity	Gas Filled	Non Gas Filled		5196.597	5530.722
PNC Porosity	Matrix	Sandstone		5196.597	5530.722

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 RATO23 RICXC RIN13C RIN23 RIN23C SD3D SG3D SGB3 SGF3 WDT3 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 WDT2 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 WDT1 RICSC CSSR G1R G2R ISSR SSR SS2R RATOR RATO13R RBORR RICSR RINR RIN13R RONE RPORR RTWOR

Created by : RPM9, v5.3.1.0

Plotted by : PlotMgr, v5.4.504

Company : WPX ENERGY

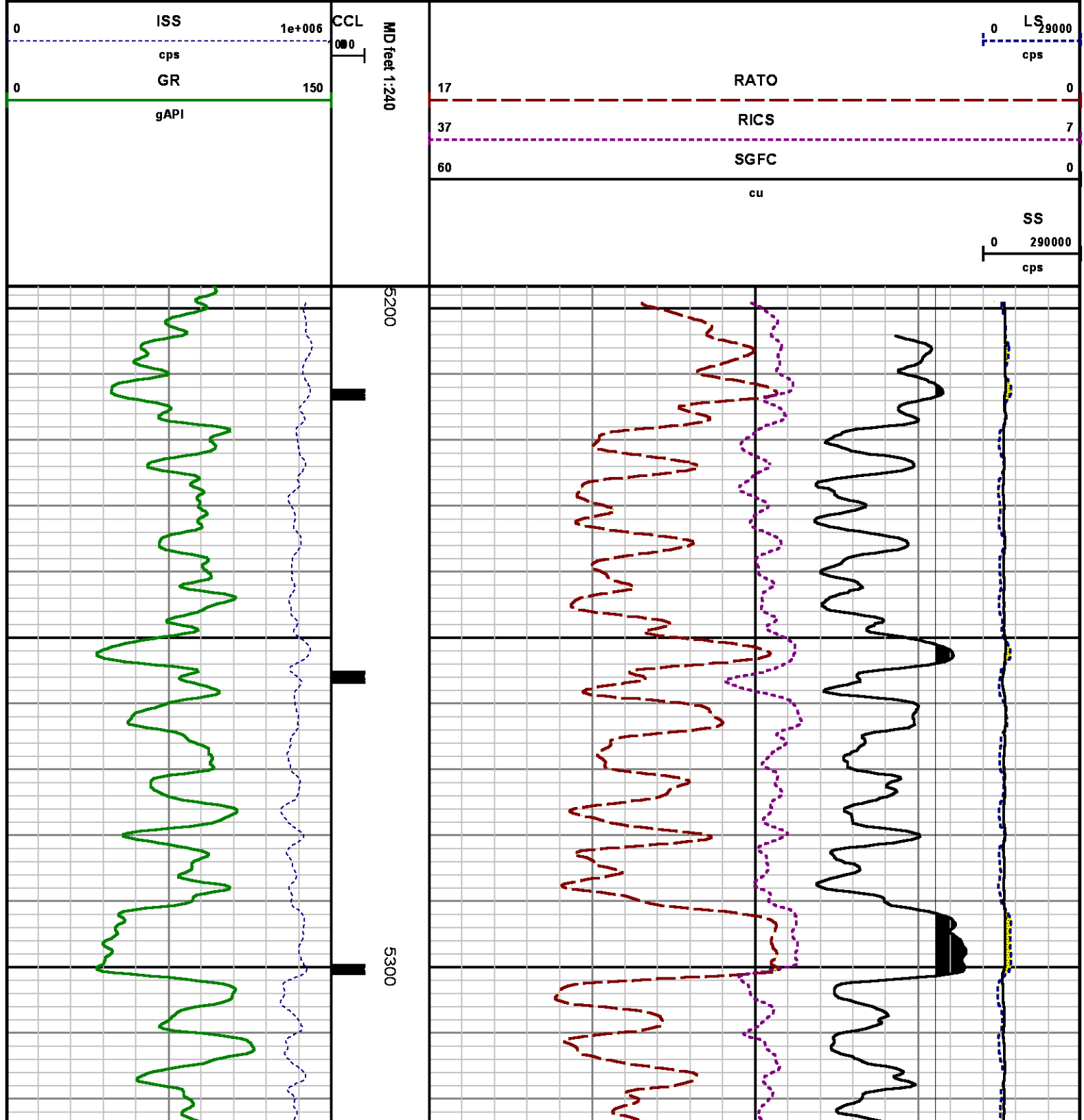
Well : C&C ENERGY GM 311-13

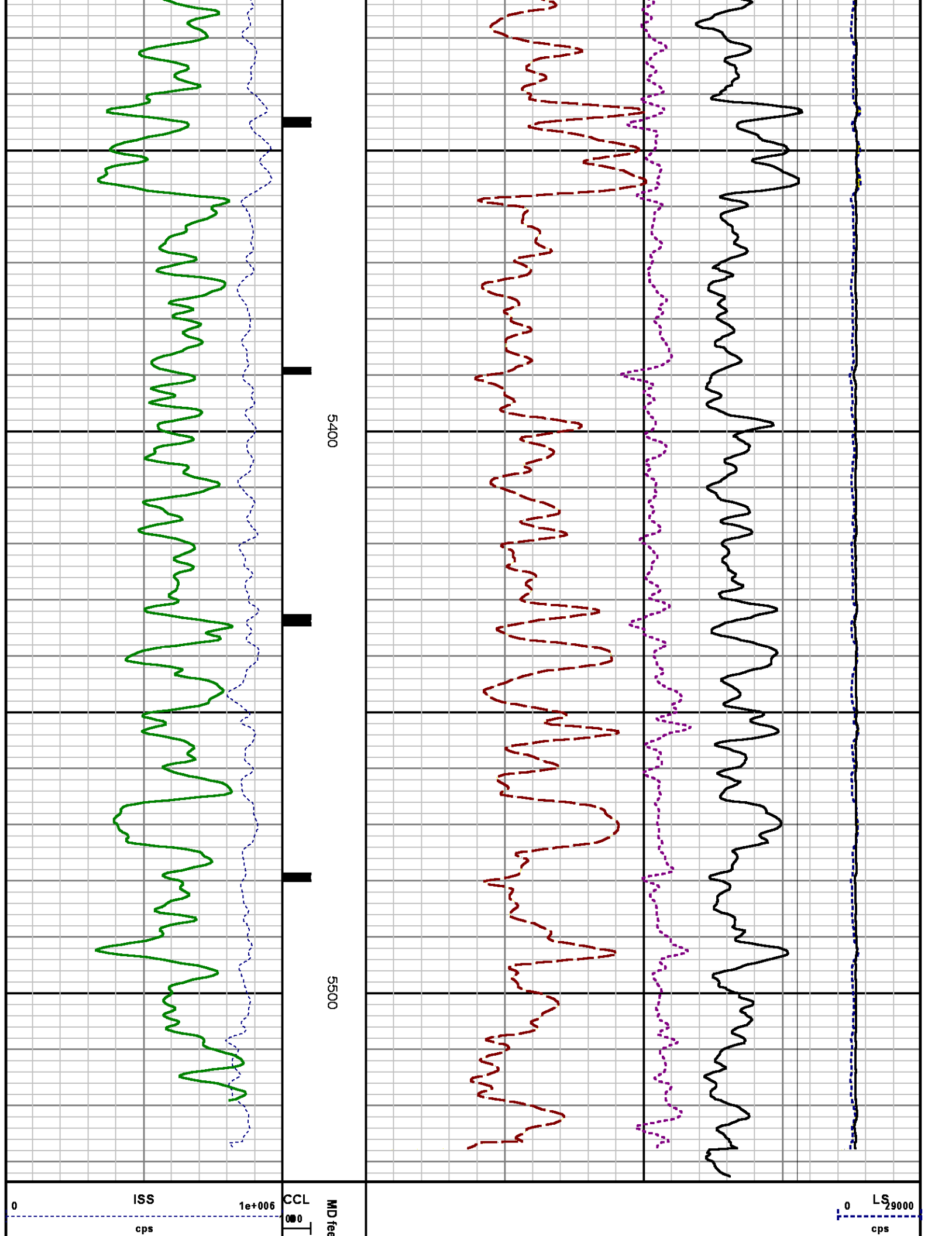
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Mode : PlotMgr 5.4.504

Interval : 5196.66 - 5533.66 feet UP

Created : 7/22/2014 11:31:23 AM





0	GR	150	17	RATO	0
	gAPI		37	RICS	7
			60	SGFC	0
				cu	
					SS
					0 290000
					cps

CALIBRATION SUMMARY

GAMMA RAY

Calibration File: C:\case\calver\GR\38530.cal

CALIBRATION SUMMARY

DATE/TIME PERFORMED: Mon Jun 30 08:38:51 2014 TOOL SERIES: 2812LA ASSET: 385 SEQ: 30

Calibrator #	Background [cps]	Calibrator On [cps]	Multiplicative	Background [api]	Calibrator On [api]	Differential [api]
S2K WA-612	42.56	269.00	0.927	39.47	249.47	210.00

Verification File: C:\case\calver\GR\38530.VP

PRIMARY VERIFICATION

DATE/TIME PERFORMED: Mon Jun 30 08:42:33 2014 TOOL SERIES: 2812LA ASSET: 385 SEQ: 30

Calibrator #	Background [cps]	Calibrator On [cps]	Multiplicative	Background [api]	Calibrator On [api]	Differential [api]
S2K WA-612	41.56	270.56	0.927	38.54	250.91	212.37

PNC

Calibration File: C:\case\calver\PNC\383_02.cal

PNC 3D CALIBRATION SUMMARY

DATE/TIME PERFORMED: Wed Jul 02 11:12:40 2014 TOOL SERIES: 8281XA ASSET: 383 SEQ: 02

Calibrator #	Source #
shop shop	8281AA 11710723

ISS	Mtr Vlts	SS Gain	LS Gain	XLS Gain	EA Temp	Sync Delay	RCAL
	AA				(degF)	(secs)	

		(V)			(degF)		(usec)	
Raw Data	815642	124.00	2273.00	2248.00	2207.00	113.01	7.00	0.9759
Interpolated	1300000	144.24	2253.89	2241.02	2201.12			

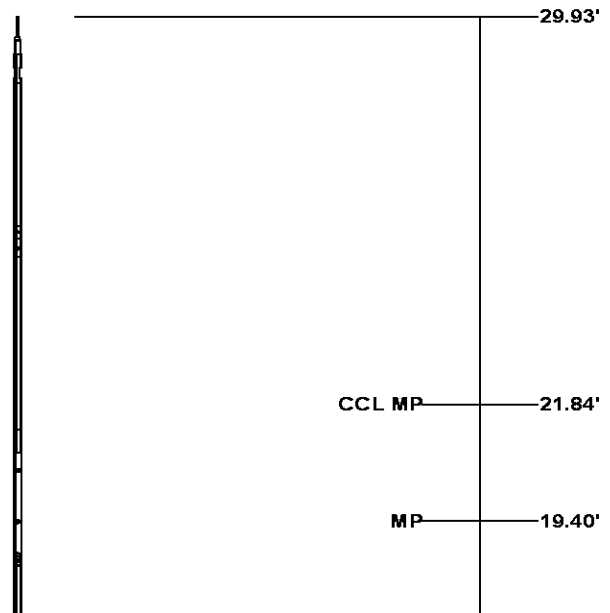
	ISS	BKS	BKL	BKX	SGA1	SDA1	SGA2	SDA2
Raw Data	815642	6112.95	967.26	132.35	25.67	0.14	24.23	0.28
					25.35 26.40	0.00 0.20	23.60 24.80	0.00 0.40

	ISS	ILS	IXS	SS	SS2	LS	CSS	CLS
Raw Data	815642	169475.86	25875.63	90426.93	32216.52	8369.17	54781.47	13381.45
Fit Quality %		1.33	1.32	0.94	0.94	1.26	0.85	1.23

	ISS	RBOR	RIN	RIN13	RICS	RATO	RTWO	RONE
			ISS/ILS	ISS/IXS	ISS/CSS	SS/LS	SS2/LS	CSS/CLS
Raw Data	815642	1.43	4.81	31.52	14.89	10.81	3.85	4.09
		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	0.19	0.13	0.07	0.26	0.22	0.23
Reduced	1383476	1.43	4.82	31.60	14.95	10.76	3.84	4.08
		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
SONDEX GAMMA RAY	
Series	2812LA
Mnemonic	SDX
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

XLS DETECTOR 12.78'

LS DETECTOR 9.80'
SS DETECTOR 9.58'

0.00'

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

**Baker Atlas***CASE***Company**

WPX ENERGY

Well

C&C ENERGY GM 311-13

Field

GRAND VALLEY

County

GARFIELD

State

COLORADO

Location

SHL: 285' FSL & 980' FWL (SEC 12)

BHT: 603' FNL & 794' FWL (NWNW SEC 13)

SEC 13

TWP 7S

RGE 96W

Elevations

KB 5165 ft

DF

GL 5141 ft

File No:

CH088402

API No:

05045222670000

13 7S 96W

GM 24-12 PAD

H&P 318