

Company: Kerr McGee Oil & Gas Onshore LP

Well: Griswold 2N-11HZ

Field: Wattenberg

County: Weld State: Colorado

Ultrasonic Imager

CO State

Gamma Ray - CCL Log

Weld
Wattenberg
SWSE Sec. 11, T1N, R66W
Griswold 2N-11HZ
Kerr McGee Oil & Gas Onshore LP

Location:		SWSE Sec. 11, T1N, R66W SHL: 560' FSL & 2028' FEL Lat/Long: 40.060069/-104.742145	Elev.: K.B. 5141.00 ft G.L. 5125.00 ft D.F. 5140.00 ft
Permanent Datum:	Ground Level	Kelly Bushing	Elev.: 5125.00 f
Log Measured From:	Kelly Bushing		16.00 ft above Perm.Datum
Drilling Measured From:	Kelly Bushing		
API Serial No.	Section:	Township:	Range:
05-123-40922-0000	11	1N	66W

Logging Date 01-Apr-2015

Run Number Run 1

Depth Driller 13059.00 ft

Schlumberger Depth 7750.00 ft

Bottom Log Interval 7750.00 ft

Top Log Interval

Casing Fluid Type Water

Salinity

Density 9.8 lbm/gal

Fluid Level 8.00 ft

BIT/CASING/TUBING STRING

Bit Size 8.50 in

From 0.00 ft

To 7750.00 ft

Casing/Tubing Size 5.5 in

Weight 17 lbm/ft

Grade P110

From 0.00 ft

To 13059.00 ft

Max Recorded Temperatures 236.71 degF

Logger on Bottom 01-Apr-2015 14:55:00

Unit Number 3022 Location: Fort Morgan, CO

Recorded By Kerl Ondrus

Witnessed By Josh Gustafson

Disclaimer

THE USE OF AND RELIANCE UPON THIS RECORDED-DATA BY THE HEREIN NAMED COMPANY (AND ANY OF ITS AFFILIATES, PARTNERS, REPRESENTATIVES, AGENTS, CONSULTANTS AND EMPLOYEES) IS SUBJECT TO THE TERMS AND CONDITIONS AGREED UPON BETWEEN SCHLUMBERGER AND THE COMPANY, INCLUDING: (a) RESTRICTIONS ON USE OF THE RECORDED-DATA; (b) DISCLAIMERS AND WAIVERS OF WARRANTIES AND REPRESENTATIONS REGARDING COMPANY'S USE AND RELIANCE UPON THE RECORDED-DATA; AND (c) CUSTOMER'S FULL AND SOLE RESPONSIBILITY FOR ANY INFERENCE DRAWN OR DECISION MADE IN CONNECTION WITH THE USE OF THIS RECORDED-DATA.

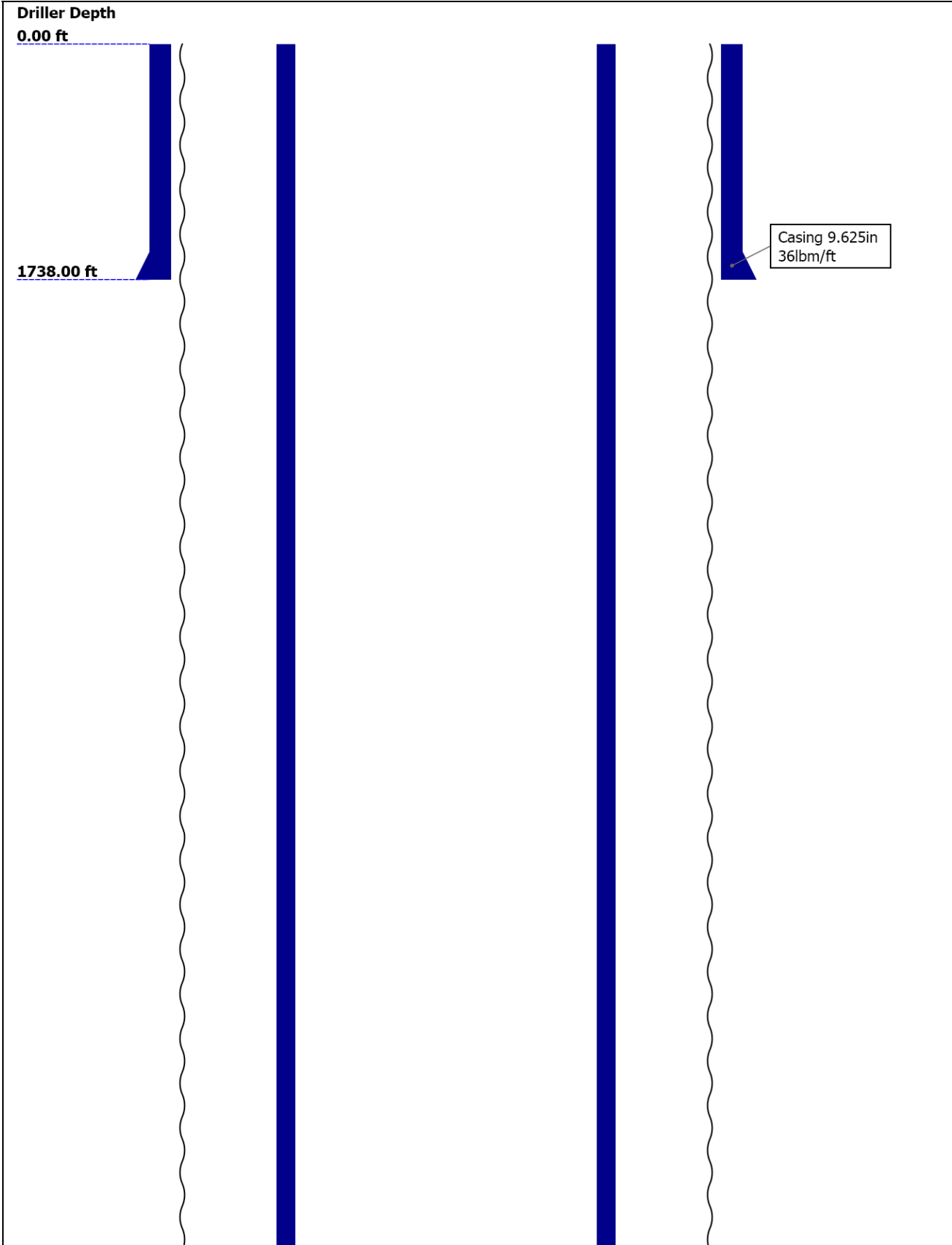
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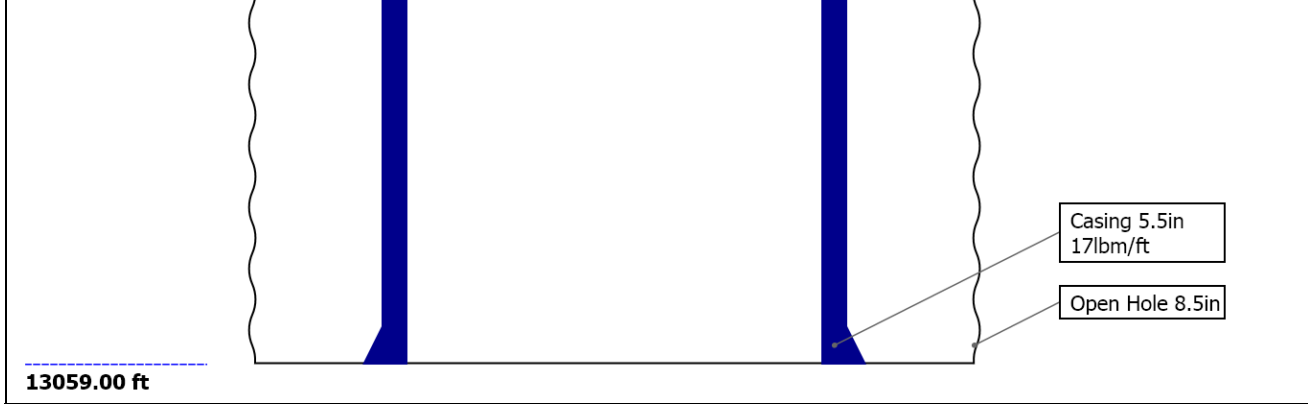
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Well Sketch





Borehole Size/Casing/Tubing Record

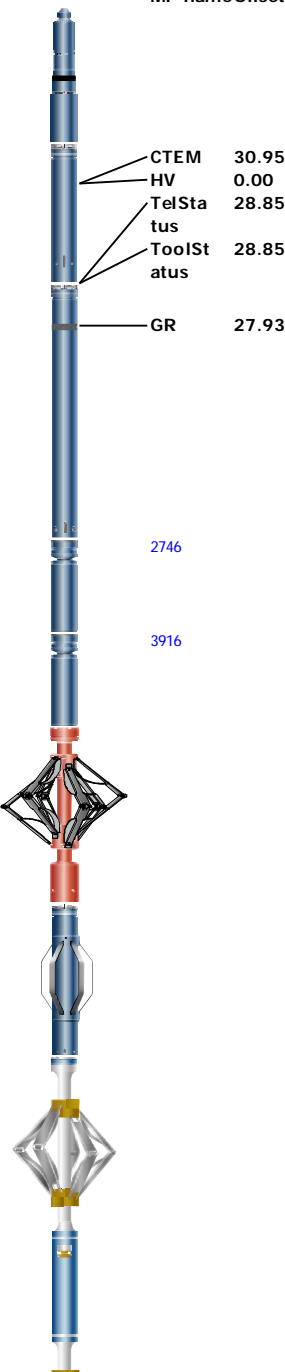
Bit						
Bit Size (in)	8.5					
Top Driller (ft)	0					
Top Logger (ft)	0					
Bottom Driller (ft)	13059					
Bottom Logger (ft)	7750					
Casing						
Size (in)	9.625	5.5				
Weight (lbm/ft)	36	17				
Inner Diameter (in)	8.921	4.892				
Grade	J55	P110				
Top Driller (ft)	0	0				
Top Logger (ft)	0	0				
Bottom Driller (ft)	1738	13059				
Bottom Logger (ft)	1738	13059				

Operational Run Summary

Parameter (unit)	Run 1					
Date Log Started	01-Apr-2015					
Time Log Started	12:57:38					
Date Log Finished	02-Apr-2015					
Time Log Finished	09:50:29					
Top Log Interval (ft)						
Bottom Log Interval (ft)	7750.00					
Total Depth (ft)	7750.00					
Max Hole Deviation (deg)	0.00					
Azimuth of Max Deviation (deg)	0.00					
Bit Size (in)	8.500					
Logging Unit Number	3022					
Logging Unit Location	Fort Morgan, CO					
Recorded By	Keri Ondrus					

Witnessed By	Josh Gustafson					
Service Order Number	BX19-00251					

Borehole Fluids						
Parameter(unit)	Run 1					
Fluid Type	Water					
Max Recorded Temperatures (degF)	236.71					
Salinity (ppm)	0					
Density (lbm/gal)	9.8					
Date Logger on Bottom	01-Apr-2015					
Time Logger on Bottom	14:55:00					
Total Solid (%)						
High Gravity Solids (%)						

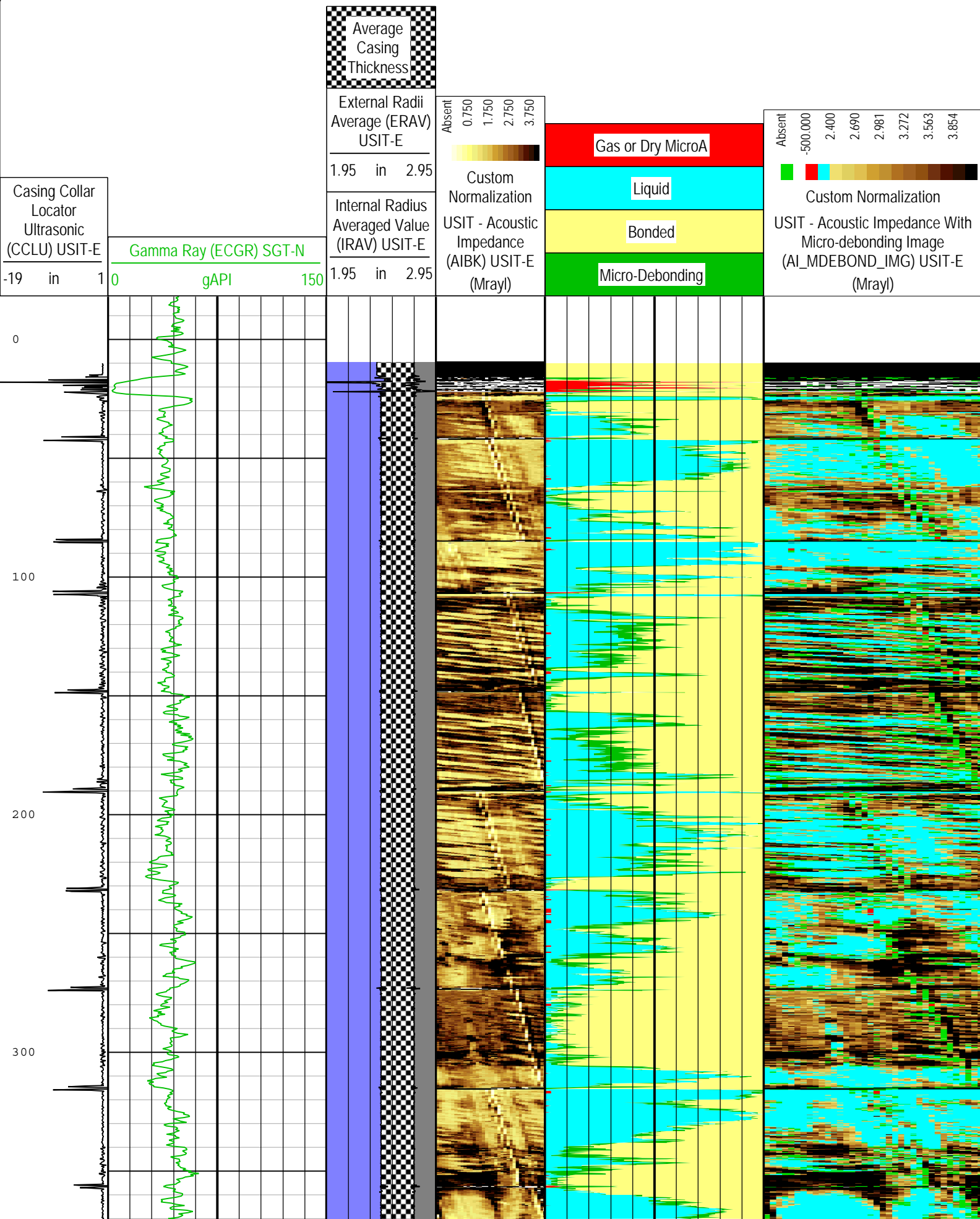
Remarks and Equipment Summary			
Run 1: Toolstring		Run 1: Remarks	
<div>Equip nameLength</div> <div>LEH-QT 34.77</div> <div>LEH-QT</div>		This is the first run in hole.	
		Toolstring run as per toolsketch.	
		Log objective: Cement evaluation	
<div>DTC-H:8 31.85</div> <div>980</div> <div>ECH-KC: 10053</div> <div>DTC-H:8 980</div> <div>SGT-N 28.85</div> <div>SGH-K:30 39</div> <div>SGD-TAA</div> <div>SGC-TB</div>		0 PSI main and repeat passes. Station log performed at 3990'. Second main pass run with 3600 PSI.	
		Cemented by Schlumberger on 12 March 2015. Casing pressure tested to 3000 PSI immediately following cement job.	
		11.2 PPG Mudpush Express OBM, 12.0 PPG conventional lead cement, and 13.5 PPG conventional tail cement.	
		Estimated TOC @ 0'.Expected TOC at 0 feet. Expected lead/tail interface at 6000'.	
		Bottom log interval at 7750' due to loss of tension in deviation.	
<div>AH-184 23.35</div> <div>[2]</div>		Thank you for choosing Schlumberger Wireline!	
<div>AH-184 21.35</div> <div>[1]</div>		SLB crew: I. Derry, G. Lapp, J Jump, and K. Ondrus	
<div>CME-AF 19.35</div>			
<div>USIT-E:1 15.56</div> <div>722</div> <div>ECH-MFA :1992</div> <div>USAC-A: 1722</div> <div>USIS-A:2 797</div> <div>USSC-B: 1730</div> <div>USRS-A</div> <div>USI-SEN</div> <div>SOR</div>			

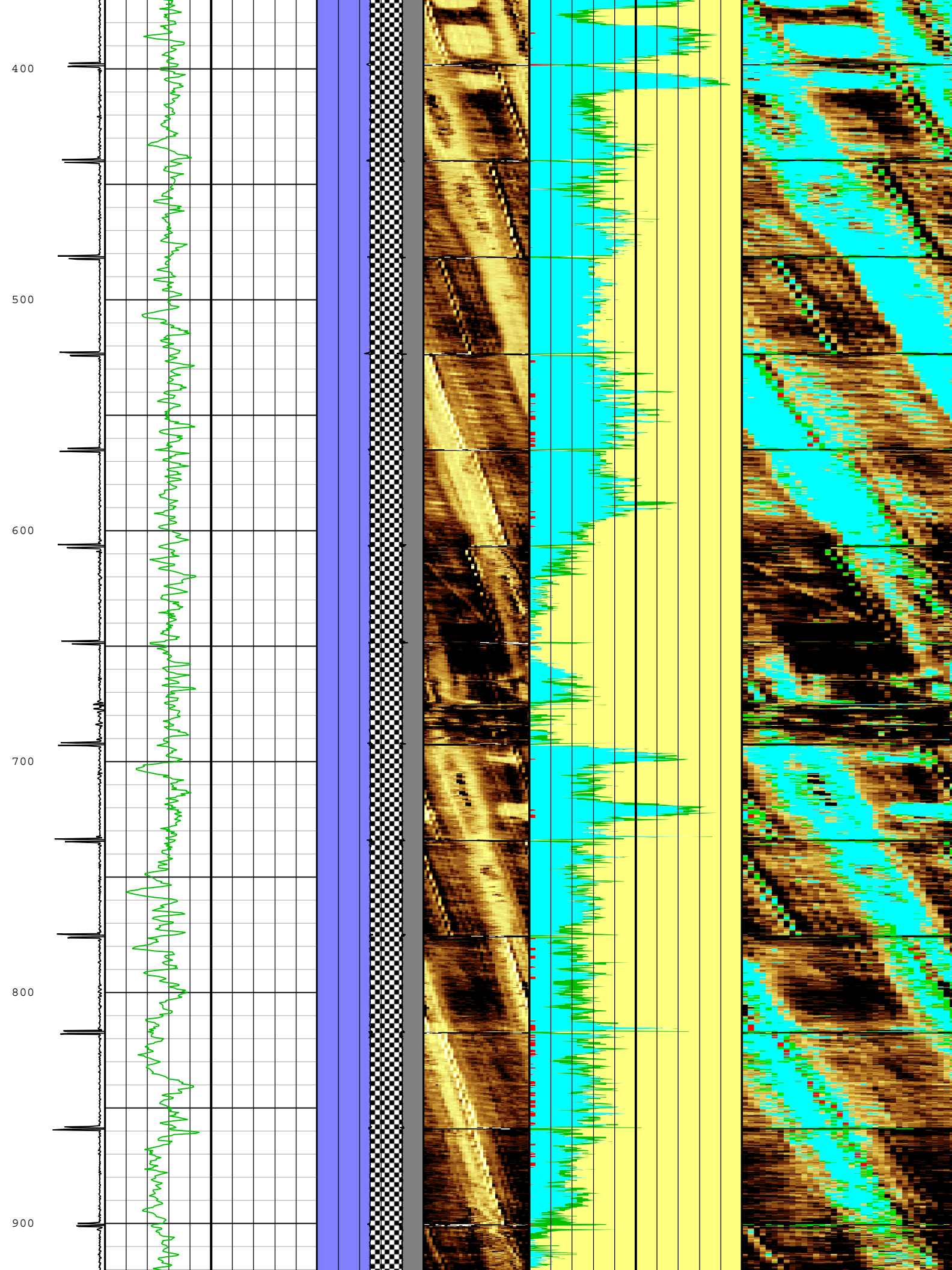
 <p>USI Se 0.37 Sensor Head TOOL_ZERO Lengths are in ft Maximum Outer Diameter = 5.125 in Line: Sensor Location, Value: Gating Offset All measurements are relative to TOOL_ZERO</p>		
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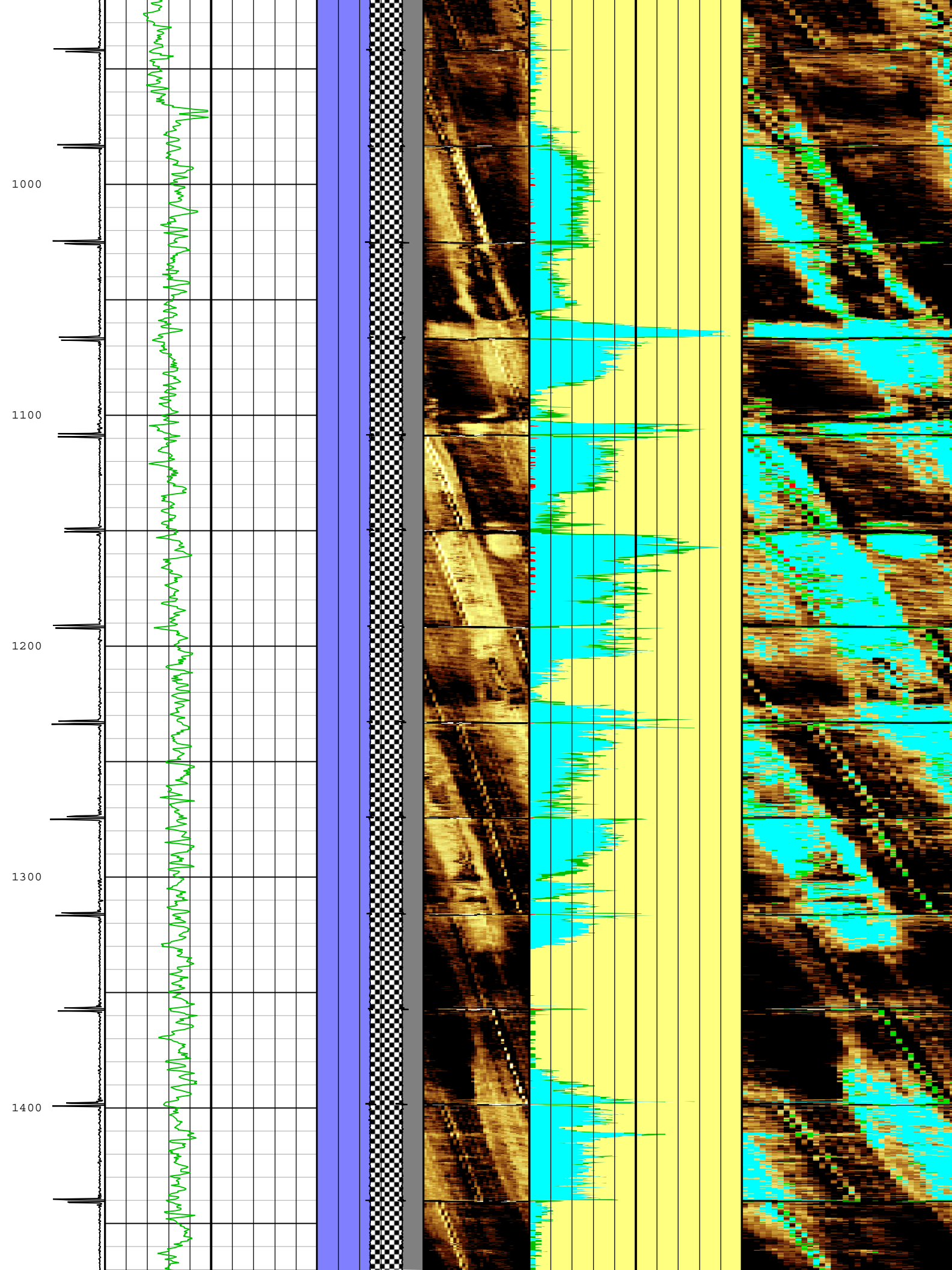
Depth Summary										
		Run 1								
Depth Measuring Device										
Type		IDW-B								
Serial Number		7234								
Calibration Date		13-Feb-2015								
Calibrator Serial Number										
Calibration Cable Type		7-39 PLXS								
Wheel Correction 1		-4								
Wheel Correction 2		-2								
Tension Device										
Type		CMTD-B/A								
Serial Number		1109								
Calibration Date		19-Mar-2015								
Calibrator Serial Number		78135A								
Number of Calibration Points		10								
Calibration Root Mean Square Error		11								
Calibration Peak Error		19								
Logging Cable										
Type		7-39P-LXS								
Serial Number		U711136								
Length		17200.00 ft								
Conveyance Type		Wireline								
Rig Type		Crane								
Run 1:Depth Control Parameters					Depth Control Remarks					
Log Sequence		First Log In the Well			All Schlumberger depth control procedures followed. IDW used as primary depth control device. Z-chart used as secondary depth control device.					
Rig Up Length At Surface										
Rig Up Length At Bottom										
Rig Up Length Correction										
Stretch Correction		9.53 ft								
Tool Zero Check At Surface										
Run 1										
CO State Log										
Software Version										
Acquisition System						Version				
Maxwell						5.2.40401.3100				
Pass Summary										
Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	DSC Mode	Depth Shift	Include Parallel Data	
Run 1	Log[7]:Up	Up	9.60 ft	7700.02 ft	02-Apr-2015 8:04:05 AM	02-Apr-2015 9:36:21 AM	ON	9.53 ft	Yes	
All depths are referenced to toolstring zero										

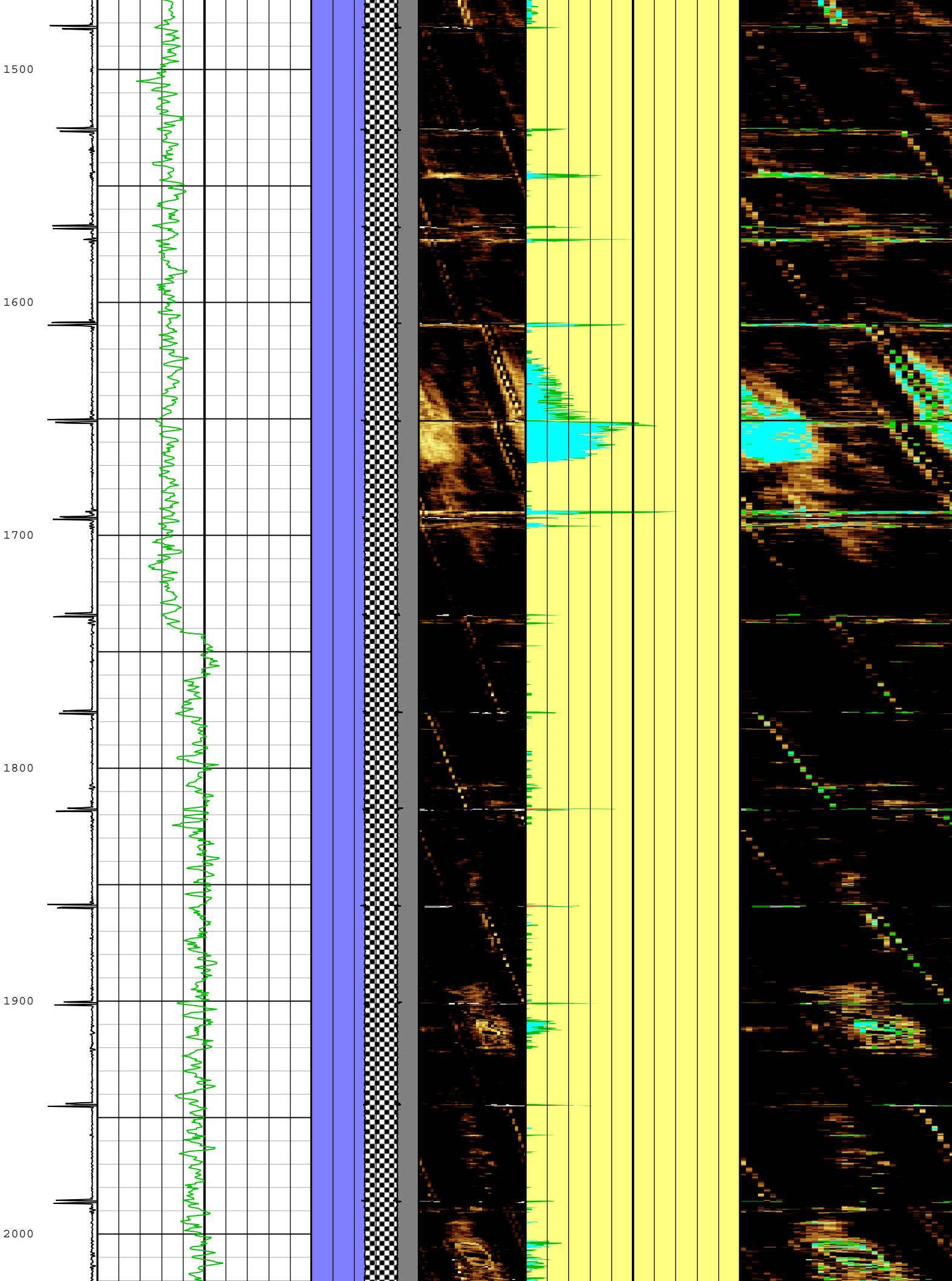
Log	Company:Kerr McGee Oil & Gas Onshore LP	Well:Griswold 2N-11HZ
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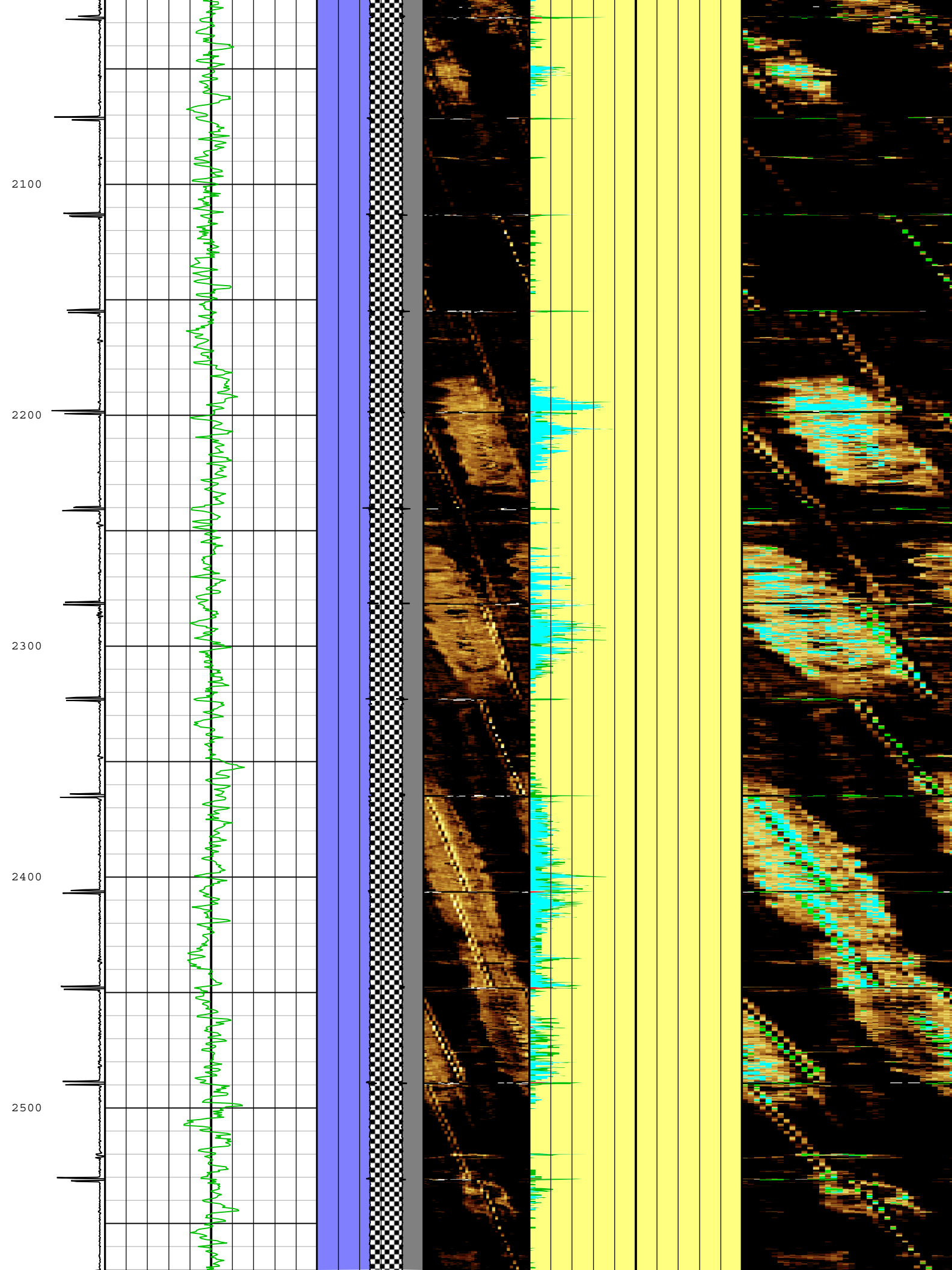
TIME_1900 - Time Marked every 60.00 (s)

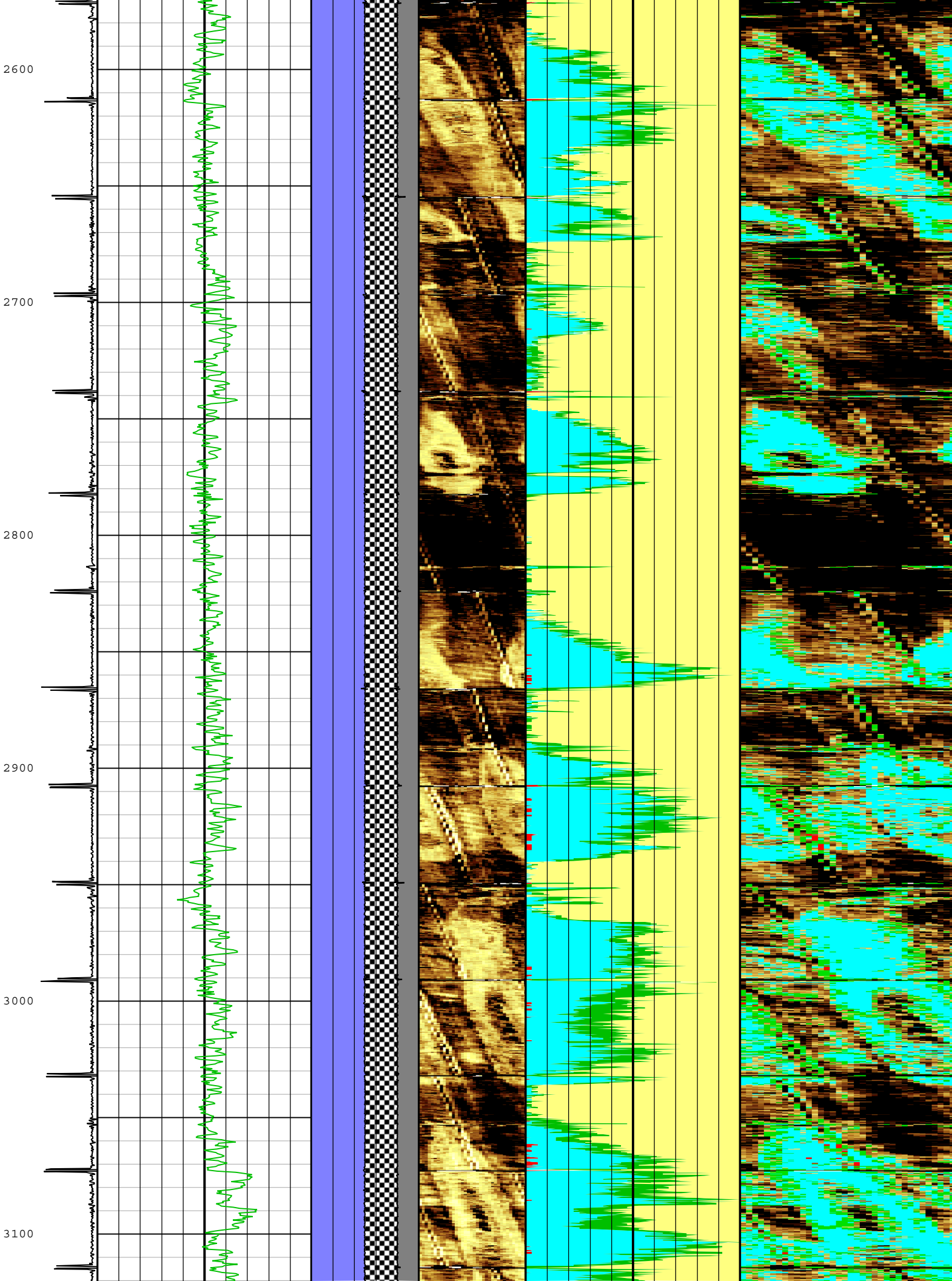


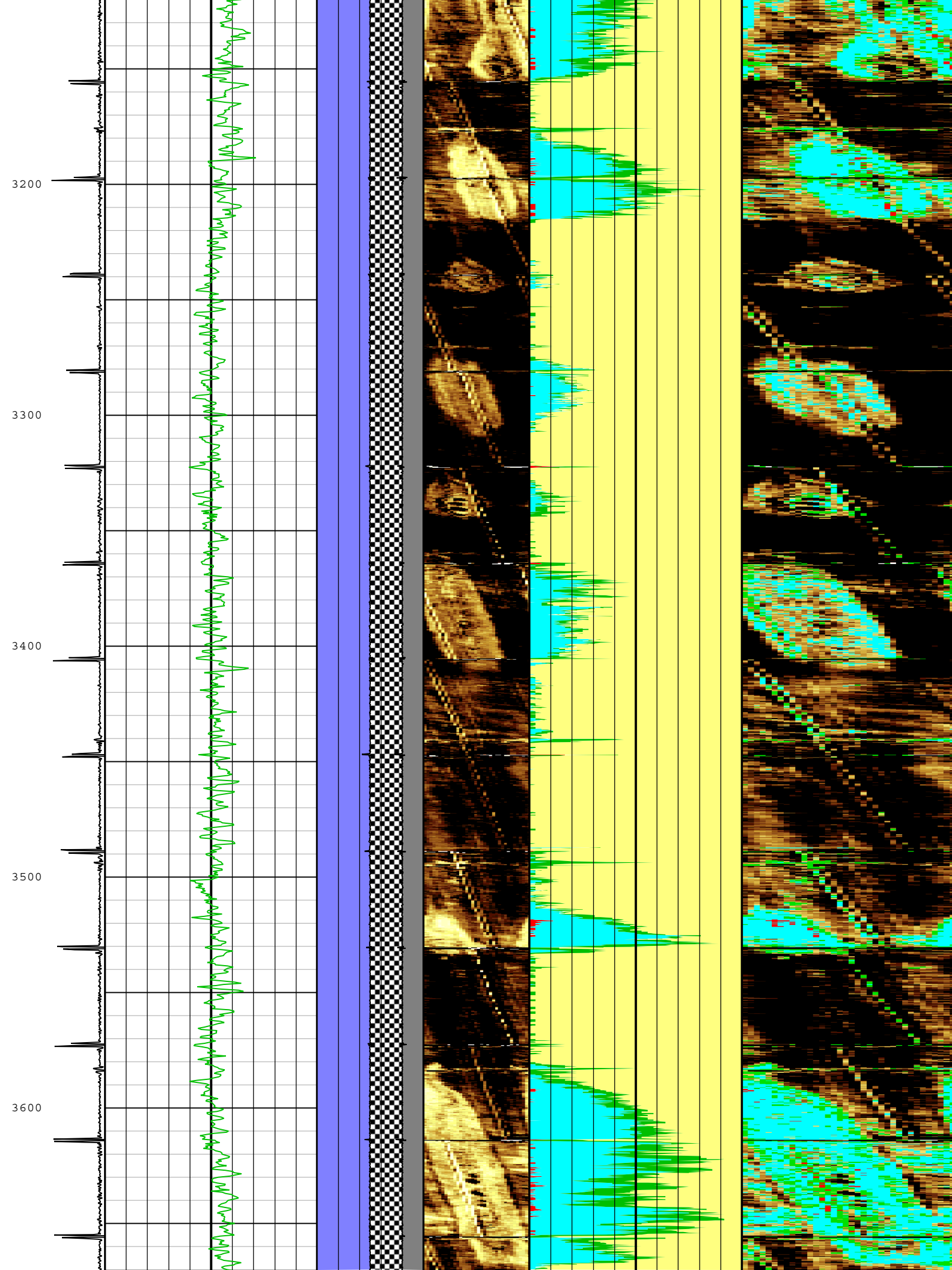


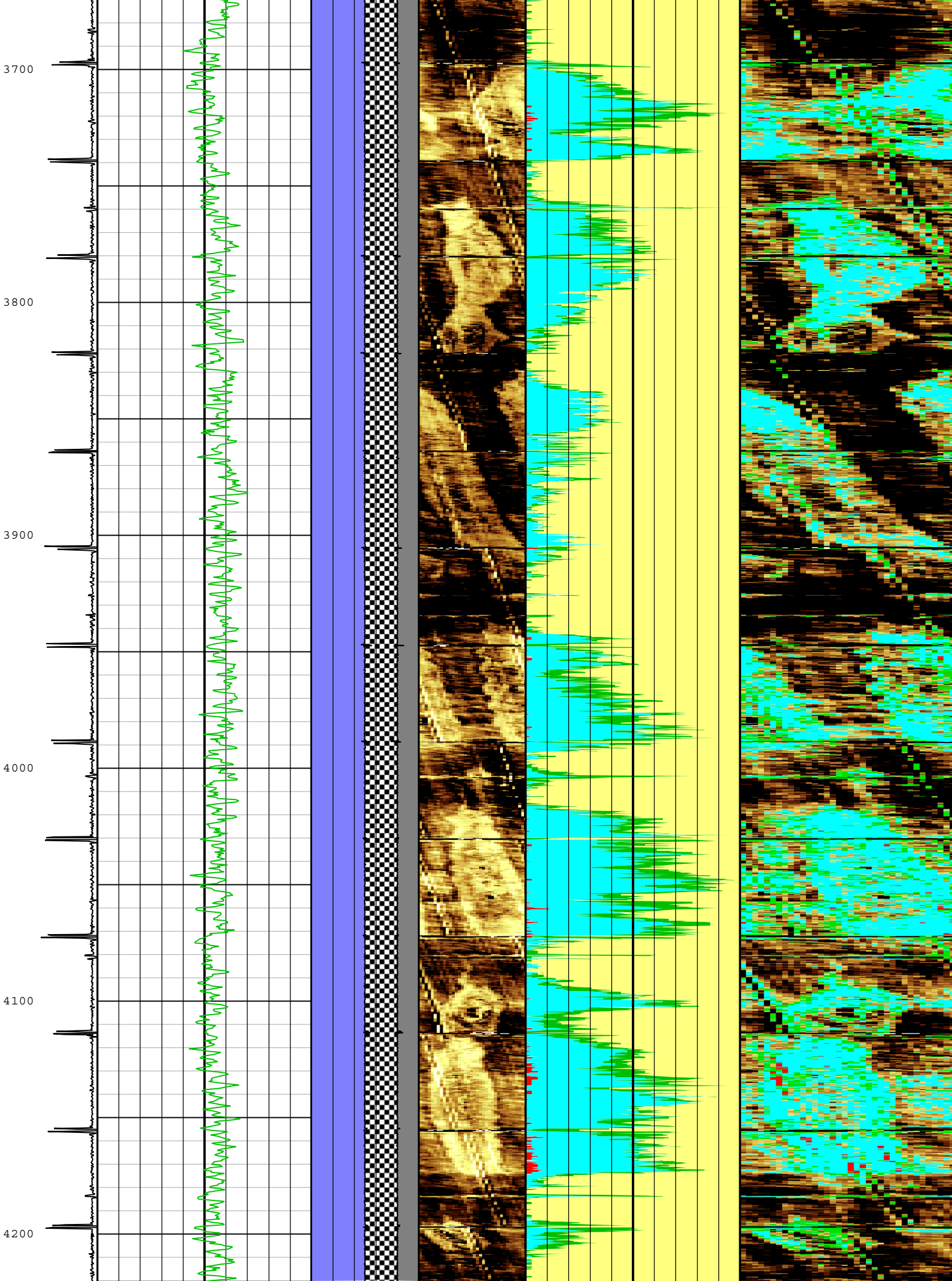


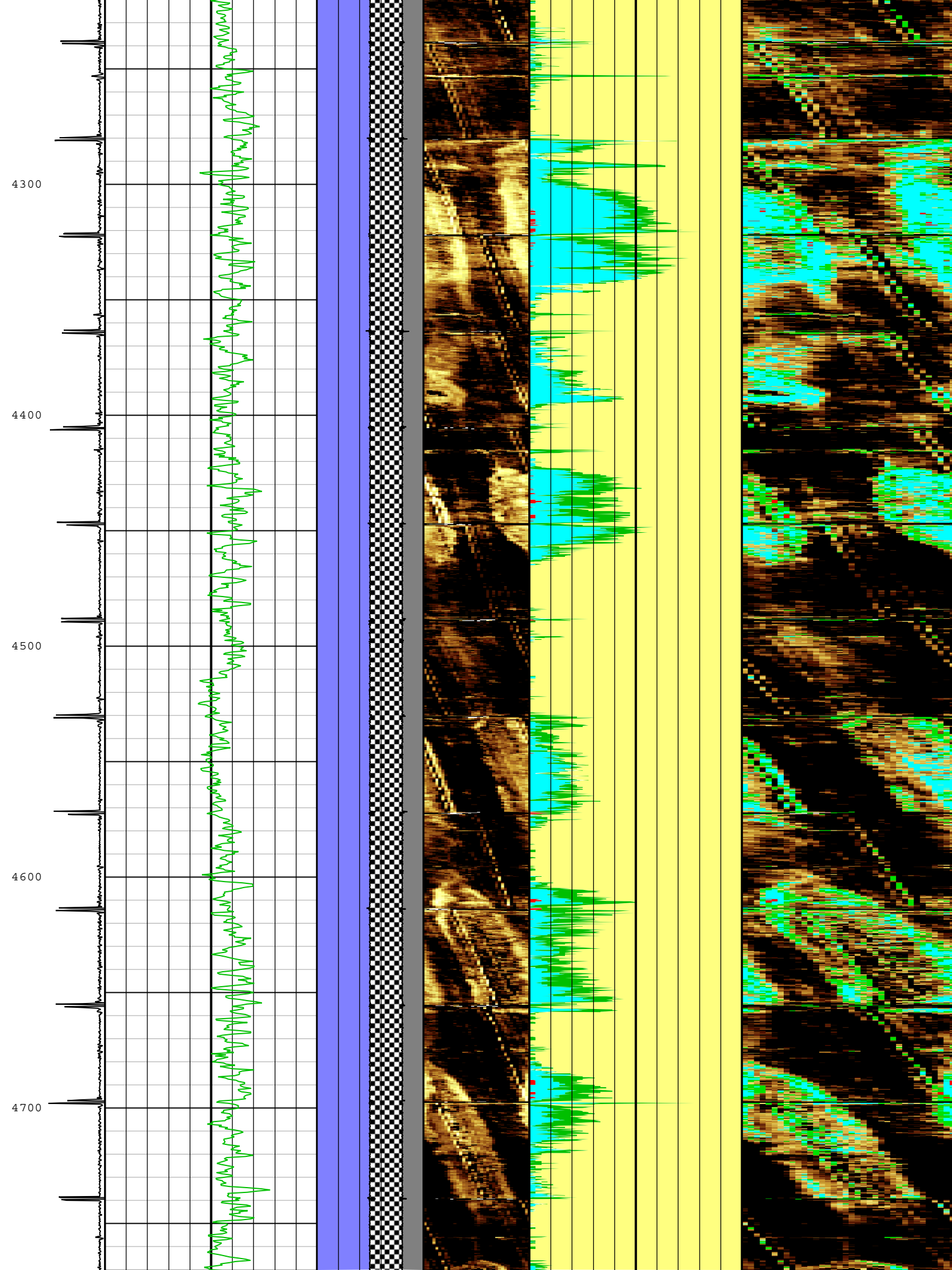


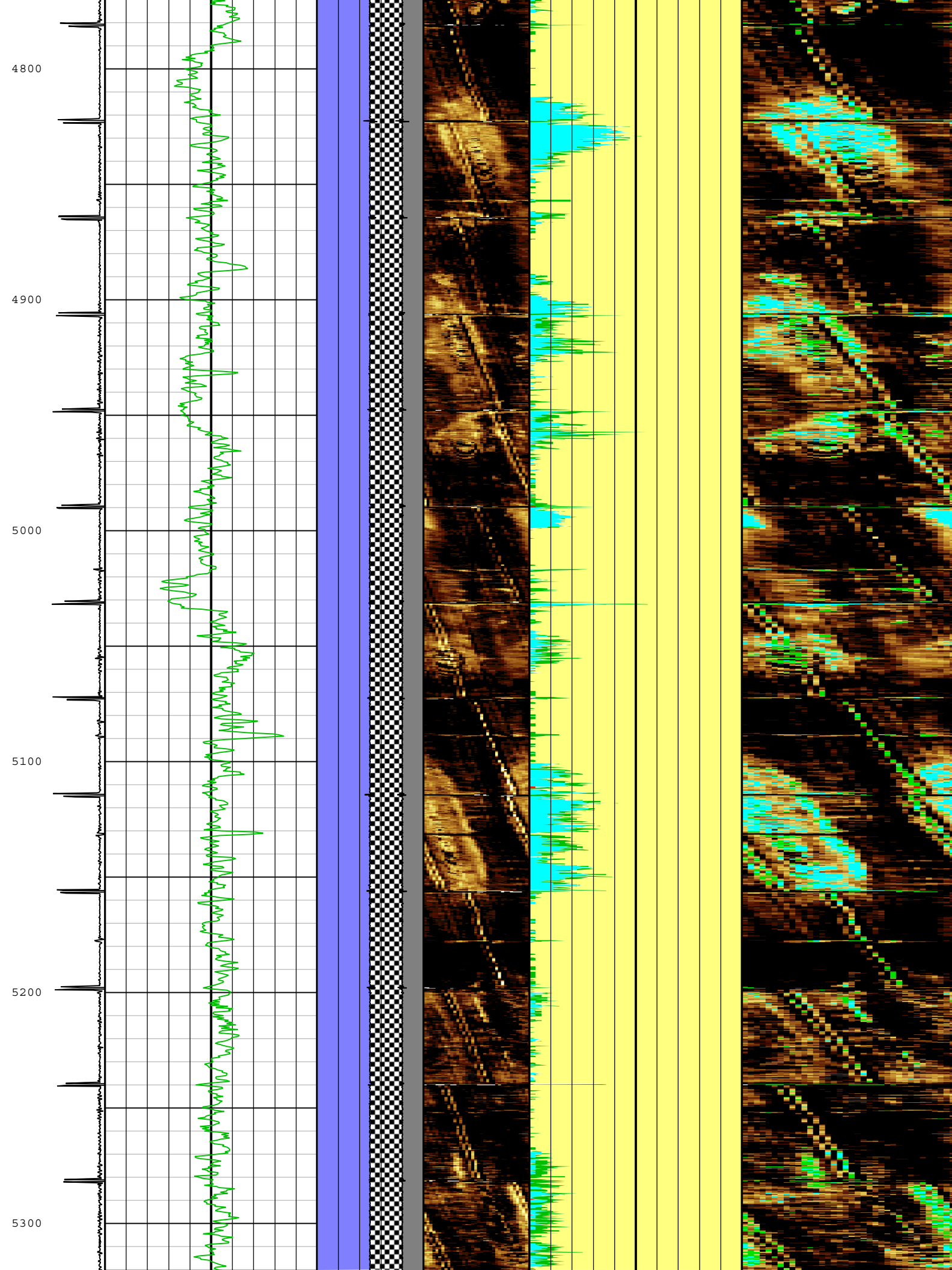


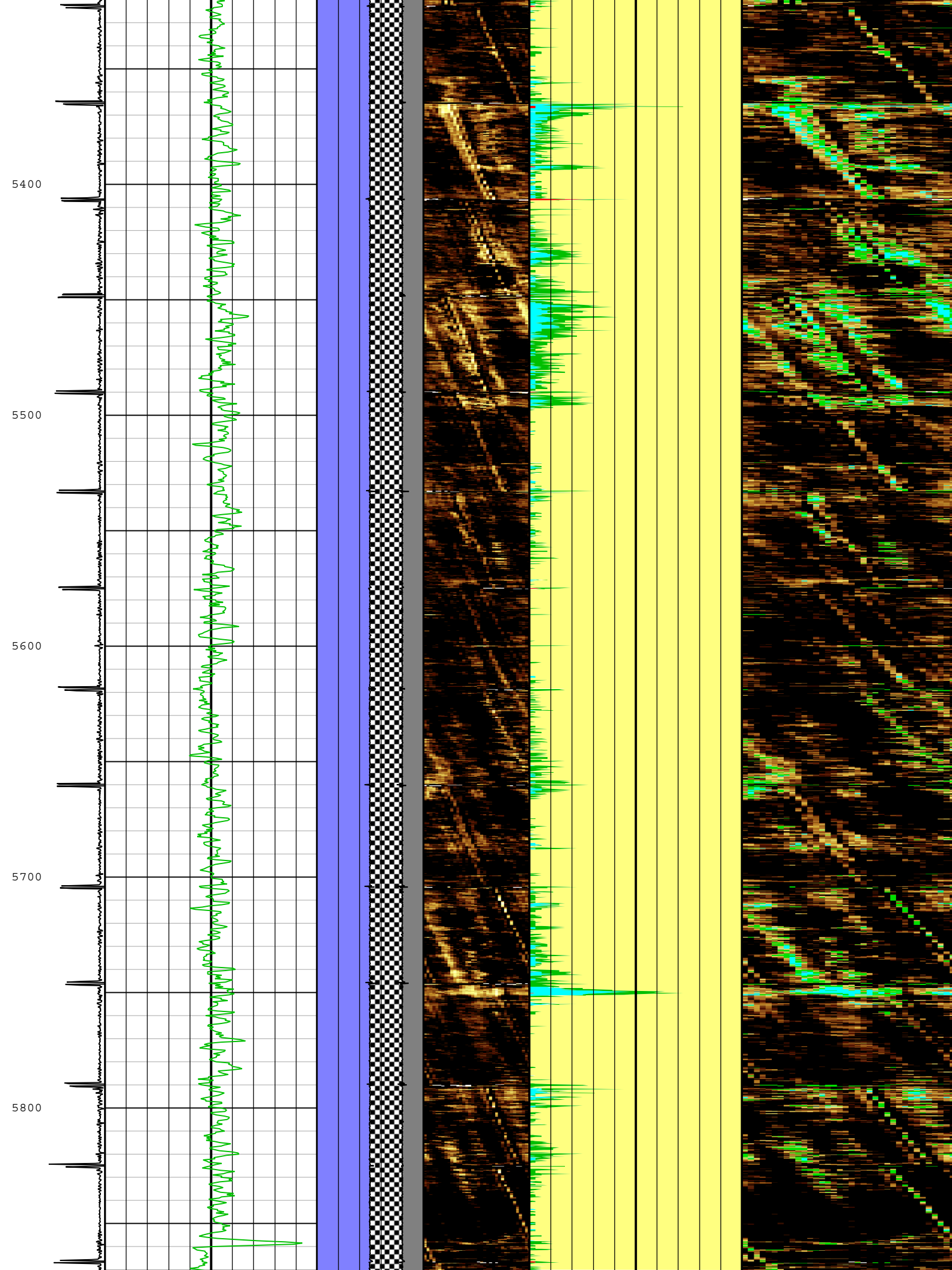


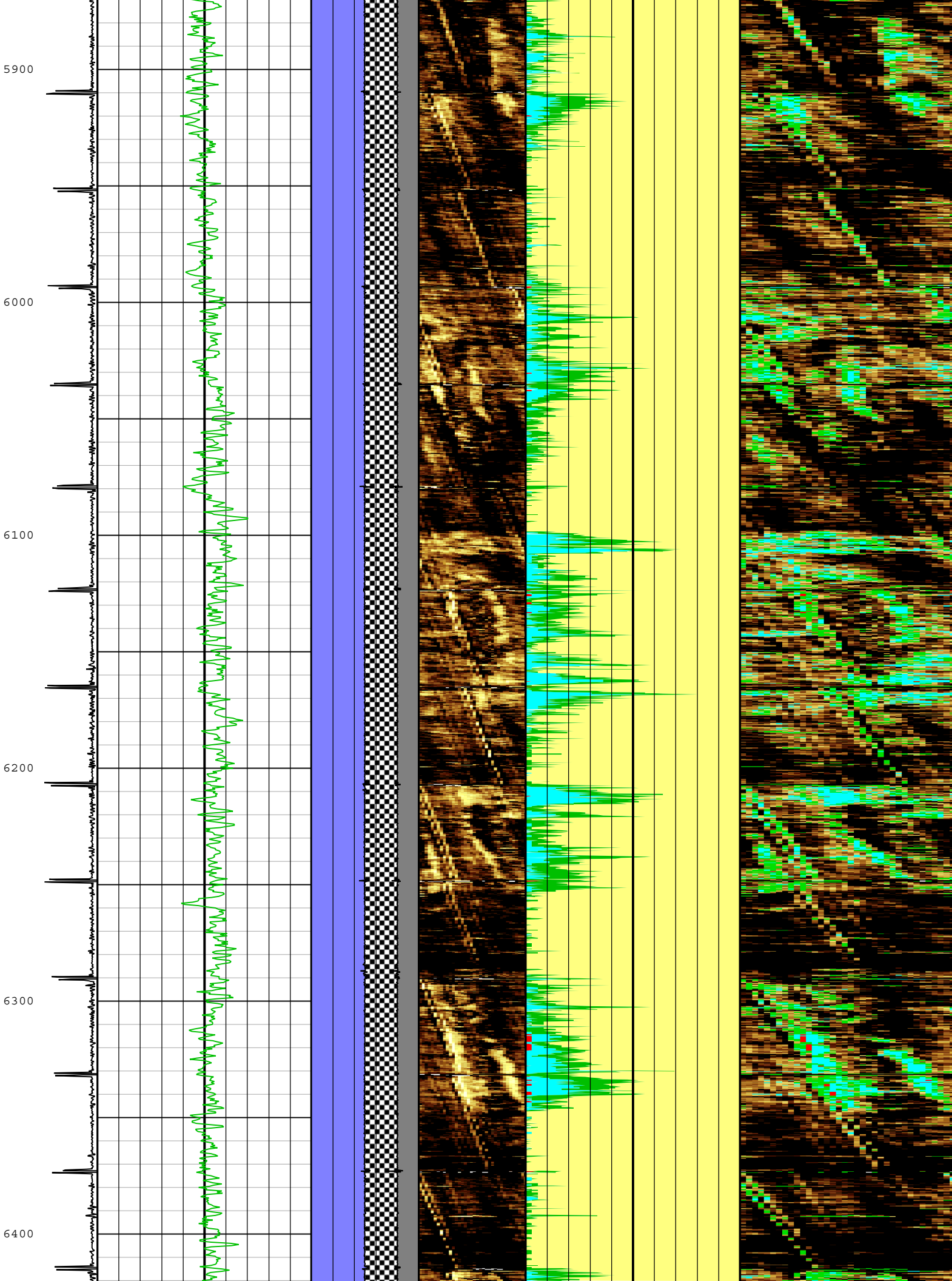


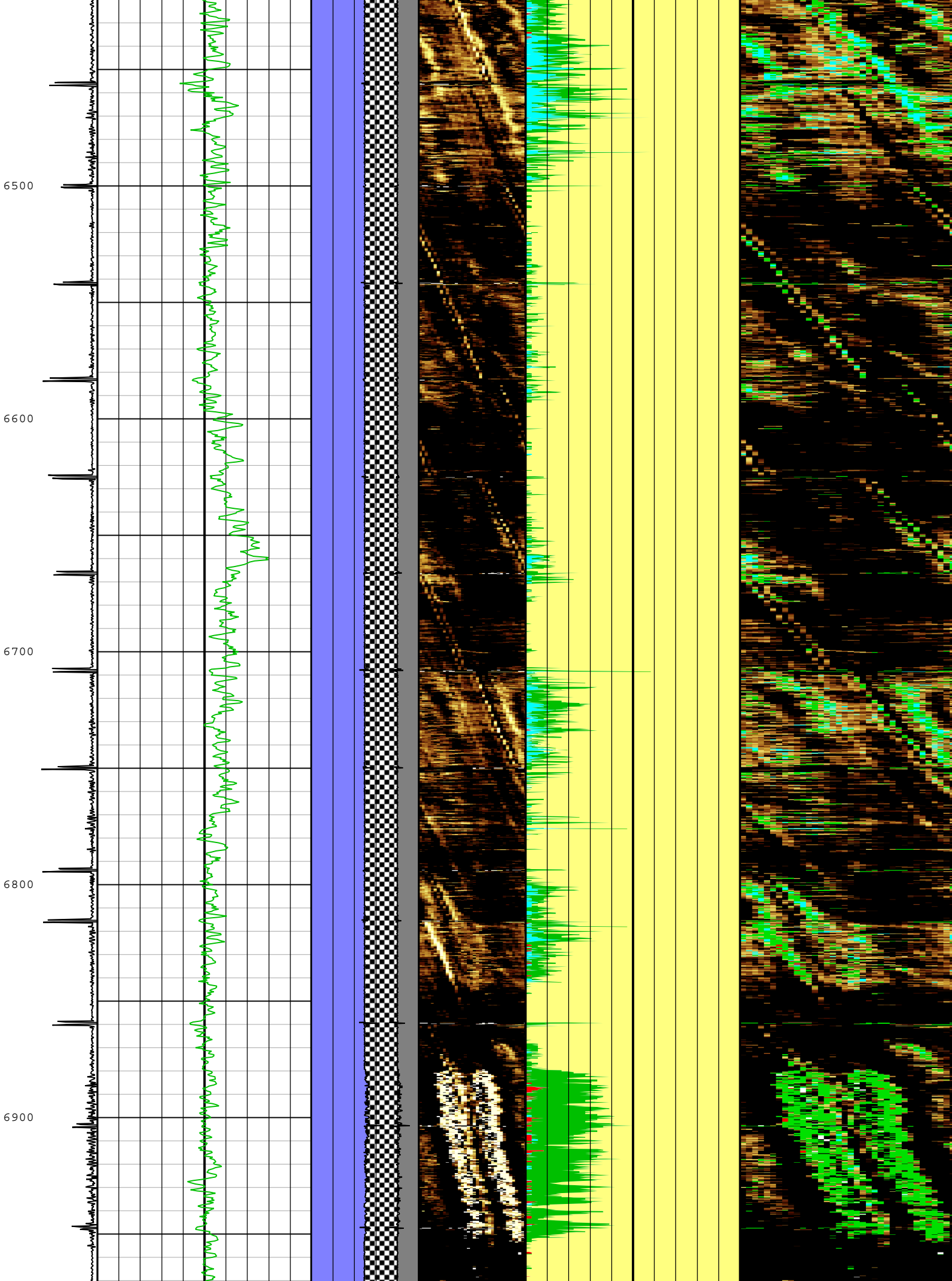


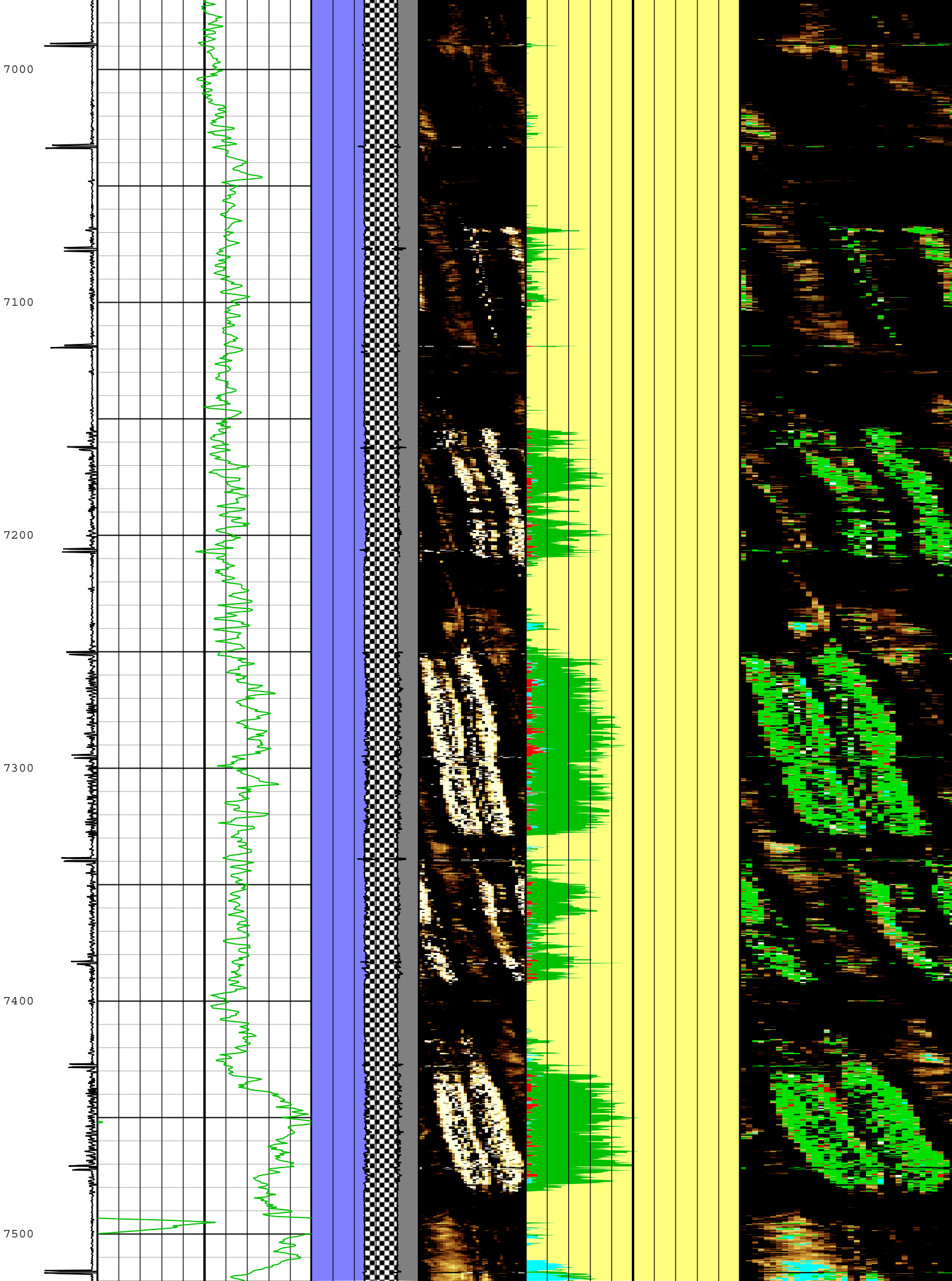


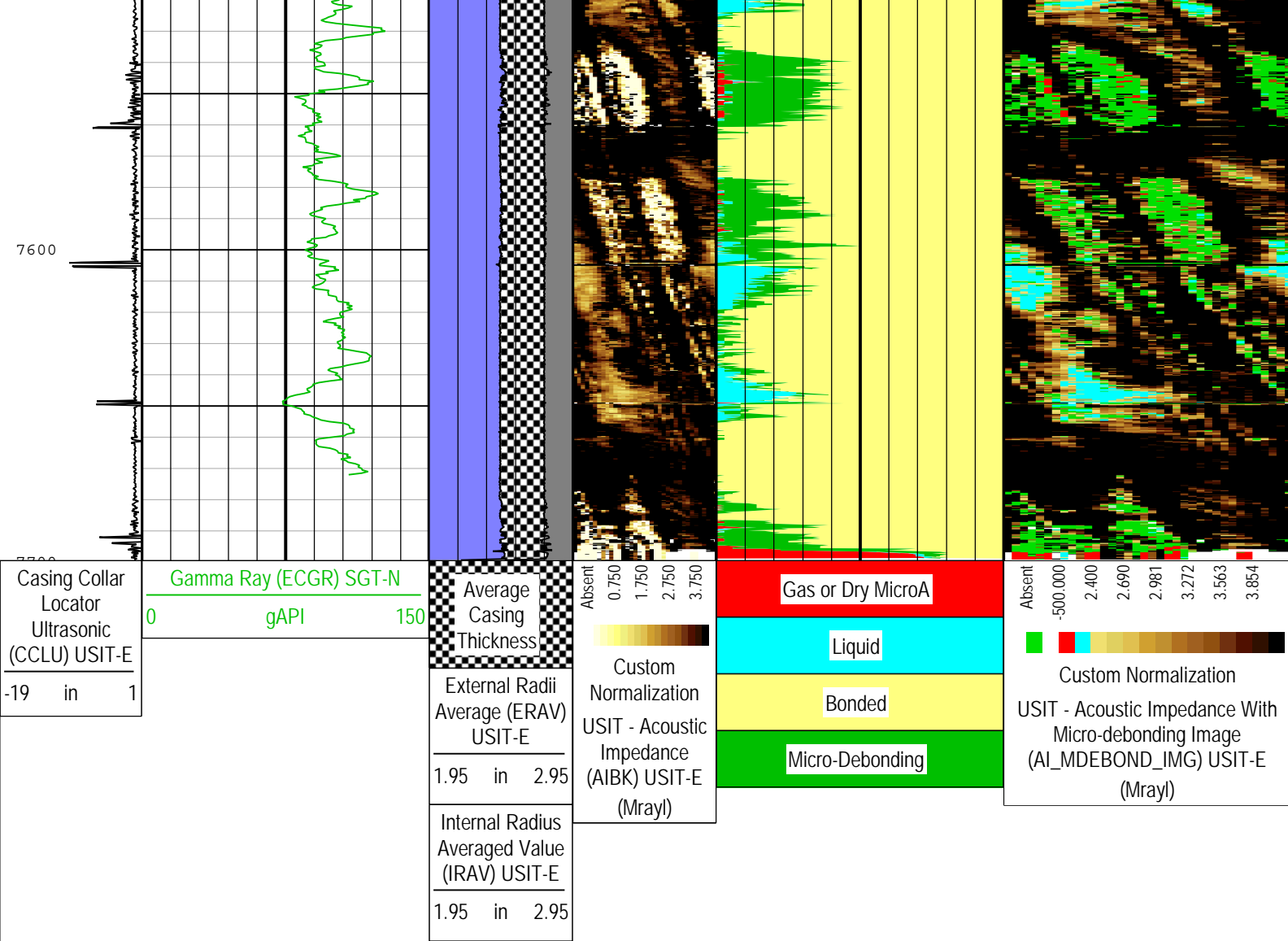












TIME_1900 - Time Marked every 60.00 (s)

Description: USI Corrosion Format: Log (ND State Only) Index Scale: 2 in per 100 ft Index Unit: ft Index Type: Measured Depth Creation Date: 02-Apr-2015 18:04:41

Channel Processing Parameters				
Run 1: Parameters				
Parameter	Description	Tool	Value	Unit
ISSBAR	Barite Mud Presence Flag	Borehole	No	
BHS	Borehole Status (Open or Cased Hole)	Borehole	Open	
BS	Bit Size	WLSESSION	8.5	in
CBLO	Casing Bottom (Logger)	WLSESSION	13059	ft
CDEN	Cement Density	SGT-N	16.69	lbm/gal
CMTY(U-USIT_CEMT)	Cement Type	USIT-E	Light Cement	
THNO	Nominal Casing Thickness - Zoned along logger depths	WLSESSION	0.304	in
DFD	Drilling Fluid Density	Borehole	9.8	lbm/gal
DFT	Drilling Fluid Type	Borehole	Water	
DTMD	Borehole Fluid Slowness	Borehole	206	us/ft
FD	Fluid Density	USIT-E	10	lbm/gal
FDII	FPM Data Interpolation Interval	USIT-E	0	ft
GCSE_DOWN_PASS	Generalized Caliper Selection for WL Log Down Passes	Borehole	BS	
GCSE_UP_PASS	Generalized Caliper Selection for WL Log Up Passes	Borehole	BS	
HEMA	Hematite Presence Flag	Borehole	No	
ICE_PROCESS	ICE Processing	USIT-E	Yes	

IMAR	Image Rotation	USIT-E	Off	
MEAS_WLEN	Tcube Processing Window Length in Measurement Mode	USIT-E	18.79	us
U-USIT_DFSZ	Drilling Fluid Specific Acoustic Impedance	USIT-E	0	Mrayl
UFGDE	Fiberglass Density	USIT-E	16.27	lbm/gal
UFGPS	Fiberglass Processing Selection	USIT-E	No	
UFGVL	Fiberglass Velocity	USIT-E	9678.48	ft/s
USI_FSOD	USIT USI Fluid Slowness Fits Casing Outer Diameter	USIT-E	0_OFF	
USI_FVEL_SEL	USI Fluid Velocity Selection	USIT-E	Automatic	
USI_ZMUD_SEL	USI Mud Impedance Selection	USIT-E	Manual	
ZMUD	Acoustic Impedance of Mud	Borehole	Depth Zoned	Mrayl
ZTCM	Acoustic Impedance Threshold for Cement	USIT-E	2.4	Mrayl

Depth Zone Parameters			
Parameter	Value	Start (ft)	Stop (ft)
ZMUD	2	0	155
ZMUD	1.99	155	165
ZMUD	1.98	165	220
ZMUD	1.97	220	1050
ZMUD	1.99	1050	1250
ZMUD	2	1250	1450
ZMUD	2.01	1450	1830
ZMUD	2.03	1830	3375
ZMUD	2.04	3375	3475
ZMUD	2.05	3475	3750
ZMUD	2.07	3750	3760
ZMUD	2.1	3760	3770
ZMUD	2.15	3770	3780
ZMUD	2.2	3780	3795
ZMUD	2.25	3795	3810
ZMUD	2.3	3810	3825
ZMUD	2.35	3825	3840
ZMUD	2.4	3840	3855
ZMUD	2.45	3855	3870
ZMUD	2.5	3870	3885
ZMUD	2.54	3885	3900
ZMUD	2.57	3900	3970
ZMUD	2.59	3970	4750
ZMUD	2.58	4750	6300
ZMUD	2.57	6300	7699.5

Tool Control Parameters

Run 1: Parameters				
Parameter	Description	Tool	Value	Unit
AGMN	Minimum Gain of Cartridge	USIT-E	-12	dB
AGMX	Maximum Gain of Cartridge	USIT-E	48	dB
U-USIT_DDT5	USIC Downhole Decimation for T5 only	USIT-E	0_NONE	
EMXV	EMEX Voltage	USIT-E	Time Zoned	V
HRES	Horizontal Resolution	USIT-E	10 deg	
TMUC	Type of Mud	USIT-E	BRI	
ULOG	Logging Objective	USIT-E	MEASUREMENT	

UMFR	Modulation Frequency	USIT-E	333333	Hz
USFR	Ultrasonic Sampling Frequency	USIT-E	500000	Hz
UPAT	USIT Emission Pattern	USIT-E	Pattern 500 KHz	
UWKM	USIT Working Mode	USIT-E	Uncompressed 10 deg at 3.0 in LF	
USIT_DEPTHLOG	Starting Depth Log for Ultrasonics	USIT-E	7780	ft
VRES	Vertical Resolution	USIT-E	3.0 in	
WINB	Window Begin Time	USIT-E	Time Zoned	us
WINE	Window End Time	USIT-E	73.83	us

Time Zone Parameters

Parameter	Value	Start Time	Stop Time	Start Depth (ft)	Stop Depth (ft)
EMXV	60	02-Apr-2015 08:04:05	02-Apr-2015 08:09:59	7700.02	7694.22
EMXV	65	02-Apr-2015 08:09:59	02-Apr-2015 08:10:24	7694.22	7685.42
EMXV	70	02-Apr-2015 08:10:24	02-Apr-2015 08:10:31	7685.42	7683.08
EMXV	75	02-Apr-2015 08:10:31	02-Apr-2015 08:10:42	7683.08	7679.04
EMXV	80	02-Apr-2015 08:10:42	02-Apr-2015 08:10:51	7679.04	7675.95
EMXV	85	02-Apr-2015 08:10:51	02-Apr-2015 08:12:09	7675.95	7649.13
EMXV	80	02-Apr-2015 08:12:09	02-Apr-2015 08:13:35	7649.13	7611.61
EMXV	77	02-Apr-2015 08:13:35	02-Apr-2015 08:13:44	7611.61	7606.34
EMXV	72	02-Apr-2015 08:13:44	02-Apr-2015 08:13:52	7606.34	7601.84
EMXV	68	02-Apr-2015 08:13:52	02-Apr-2015 08:14:23	7601.84	7585
EMXV	66	02-Apr-2015 08:14:23	02-Apr-2015 08:15:15	7585	7556.17
EMXV	72	02-Apr-2015 08:15:15	02-Apr-2015 08:15:39	7556.17	7542.86
EMXV	80	02-Apr-2015 08:15:39	02-Apr-2015 08:15:50	7542.86	7536.87
EMXV	85	02-Apr-2015 08:15:50	02-Apr-2015 08:15:56	7536.87	7533.31
EMXV	80	02-Apr-2015 08:15:56	02-Apr-2015 08:16:18	7533.31	7519.62
EMXV	76	02-Apr-2015 08:16:18	02-Apr-2015 08:17:18	7519.62	7467.52
EMXV	80	02-Apr-2015 08:17:18	02-Apr-2015 08:17:43	7467.52	7445.54
EMXV	75	02-Apr-2015 08:17:43	02-Apr-2015 08:17:51	7445.54	7439.3
EMXV	70	02-Apr-2015 08:17:51	02-Apr-2015 08:19:17	7439.3	7365.04
EMXV	75	02-Apr-2015 08:19:17	02-Apr-2015 08:19:22	7365.04	7360.53
EMXV	80	02-Apr-2015 08:19:22	02-Apr-2015 08:19:29	7360.53	7355.28
EMXV	85	02-Apr-2015 08:19:29	02-Apr-2015 08:19:37	7355.28	7348.41
EMXV	90	02-Apr-2015 08:19:37	02-Apr-2015 08:19:39	7348.41	7345.89
EMXV	95	02-Apr-2015 08:19:39	02-Apr-2015 08:19:51	7345.89	7333.59
EMXV	100	02-Apr-2015 08:19:51	02-Apr-2015 08:20:02	7333.59	7315.18
EMXV	95	02-Apr-2015 08:20:02	02-Apr-2015 08:20:24	7315.18	7277.46
EMXV	90	02-Apr-2015 08:20:24	02-Apr-2015 08:21:37	7277.46	7161.53
EMXV	85	02-Apr-2015 08:21:37	02-Apr-2015 08:21:44	7161.53	7156.18
EMXV	80	02-Apr-2015 08:21:44	02-Apr-2015 08:21:50	7156.18	7150.93
EMXV	75	02-Apr-2015 08:21:50	02-Apr-2015 08:22:00	7150.93	7142.21
EMXV	70	02-Apr-2015 08:22:00	02-Apr-2015 08:22:08	7142.21	7135.12
EMXV	65	02-Apr-2015 08:22:08	02-Apr-2015 08:22:16	7135.12	7128.11
EMXV	60	02-Apr-2015 08:22:16	02-Apr-2015 08:22:24	7128.11	7121.82
EMXV	55	02-Apr-2015 08:22:24	02-Apr-2015 08:23:02	7121.82	7089.21
EMXV	50	02-Apr-2015 08:23:02	02-Apr-2015 08:23:02	7089.21	7089.21

EMXV	60	02-Apr-2015 08:23:02	02-Apr-2015 08:23:09	7089.21	7083.09
EMXV	65	02-Apr-2015 08:23:09	02-Apr-2015 08:23:25	7083.09	7069.18
EMXV	60	02-Apr-2015 08:23:25	02-Apr-2015 08:23:42	7069.18	7054.97
EMXV	55	02-Apr-2015 08:23:42	02-Apr-2015 08:24:17	7054.97	7024.73
EMXV	53	02-Apr-2015 08:24:17	02-Apr-2015 08:25:07	7024.73	6981.18
EMXV	58	02-Apr-2015 08:25:07	02-Apr-2015 08:25:14	6981.18	6975.42
EMXV	60	02-Apr-2015 08:25:14	02-Apr-2015 08:25:17	6975.42	6972.62
EMXV	66	02-Apr-2015 08:25:17	02-Apr-2015 08:25:23	6972.62	6967.47
EMXV	70	02-Apr-2015 08:25:23	02-Apr-2015 08:25:41	6967.47	6951.78
EMXV	75	02-Apr-2015 08:25:41	02-Apr-2015 08:26:00	6951.78	6934.87
EMXV	78	02-Apr-2015 08:26:00	02-Apr-2015 08:26:22	6934.87	6915.38
EMXV	75	02-Apr-2015 08:26:22	02-Apr-2015 08:26:28	6915.38	6910.02
EMXV	72	02-Apr-2015 08:26:28	02-Apr-2015 08:26:41	6910.02	6899.32
EMXV	68	02-Apr-2015 08:26:41	02-Apr-2015 08:26:49	6899.32	6892.32
EMXV	64	02-Apr-2015 08:26:49	02-Apr-2015 08:26:56	6892.32	6885.42
EMXV	60	02-Apr-2015 08:26:56	02-Apr-2015 08:27:10	6885.42	6873.08
EMXV	62	02-Apr-2015 08:27:10	02-Apr-2015 08:27:35	6873.08	6851.94
EMXV	59	02-Apr-2015 08:27:35	02-Apr-2015 08:27:40	6851.94	6847.23
EMXV	55	02-Apr-2015 08:27:40	02-Apr-2015 08:27:52	6847.23	6836.32
EMXV	53	02-Apr-2015 08:27:52	02-Apr-2015 08:31:15	6836.32	6657.22
EMXV	51	02-Apr-2015 08:31:15	02-Apr-2015 08:44:40	6657.22	5365.32
EMXV	49	02-Apr-2015 08:44:40	02-Apr-2015 08:45:37	5365.32	5266.34
EMXV	47	02-Apr-2015 08:45:37	02-Apr-2015 09:03:25	5266.34	3374.97
EMXV	49	02-Apr-2015 09:03:25	02-Apr-2015 09:14:33	3374.97	2210.28
EMXV	51	02-Apr-2015 09:14:33	02-Apr-2015 09:22:31	2210.28	1383.94
EMXV	53	02-Apr-2015 09:22:31	02-Apr-2015 09:22:41	1383.94	1365.26
EMXV	55	02-Apr-2015 09:22:41	02-Apr-2015 09:23:54	1365.26	1237.66
EMXV	57	02-Apr-2015 09:23:54	02-Apr-2015 09:24:49	1237.66	1141.82
EMXV	59	02-Apr-2015 09:24:49	02-Apr-2015 09:24:55	1141.82	1130.92
EMXV	61	02-Apr-2015 09:24:55	02-Apr-2015 09:27:00	1130.92	911.45
EMXV	63	02-Apr-2015 09:27:00	02-Apr-2015 09:27:07	911.45	900.2
EMXV	65	02-Apr-2015 09:27:07	02-Apr-2015 09:27:14	900.2	888.03
EMXV	68	02-Apr-2015 09:27:14	02-Apr-2015 09:27:18	888.03	880.16
EMXV	70	02-Apr-2015 09:27:18	02-Apr-2015 09:36:21	880.16	9.6
WINB	33.83	02-Apr-2015 08:04:05	02-Apr-2015 08:09:50	7700.02	7696.88
WINB	27.71	02-Apr-2015 08:09:50	02-Apr-2015 08:09:53	7696.88	7696.01
WINB	23.15	02-Apr-2015 08:09:53	02-Apr-2015 08:15:21	7696.01	7552.85
WINB	20.3	02-Apr-2015 08:15:21	02-Apr-2015 08:17:23	7552.85	7463.02
WINB	18.58	02-Apr-2015 08:17:23	02-Apr-2015 09:36:21	7463.02	9.6

All depth are at tool zero.

USI Goodwin

USIT - Fluid Properties Measurement

Run Name	Pass Name	Start Depth(ft)	Stop Depth(ft)
Run 1	Log[7]:Up	7700.02	9.60

Fluid Properties Measurement

Fluid Velocity = "Automatic".
CFVL equals DFSL channel

Start Depth(ft)	Stop Depth(ft)	Start Value(us/ft)	End Value(us/ft)
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Mud Impedance = "Manual".
CZMD uses ZMUD parameter zoned table below

Start Depth(ft)	Stop Depth(ft)	Start Value(Mrayl)	End Value(Mrayl)
0	155	2	2
155	165	1.99	1.99
165	220	1.98	1.98
220	1050	1.97	1.97
1050	1250	1.99	1.99
1250	1450	2	2
1450	1830	2.01	2.01
1830	3375	2.03	2.03
3375	3475	2.04	2.04
3475	3750	2.05	2.05
3750	3760	2.07	2.07
3760	3770	2.1	2.1
3770	3780	2.15	2.15
3780	3795	2.2	2.2
3795	3810	2.25	2.25
3810	3825	2.3	2.3
3825	3840	2.35	2.35
3840	3855	2.4	2.4
3855	3870	2.45	2.45
3870	3885	2.5	2.5
3885	3900	2.54	2.54
3900	3970	2.57	2.57
3970	4600	2.59	2.59
4600	4750	2.59	2.59
4750	5100	2.58	2.58
5100	6050	2.58	2.58
6050	6300	2.58	2.58
6300	7500	2.57	2.57
7500		2.57	2.57

Run 1

USI Goodwin Compressed

Log

Company:Kerr McGee Oil & Gas Onshore LP

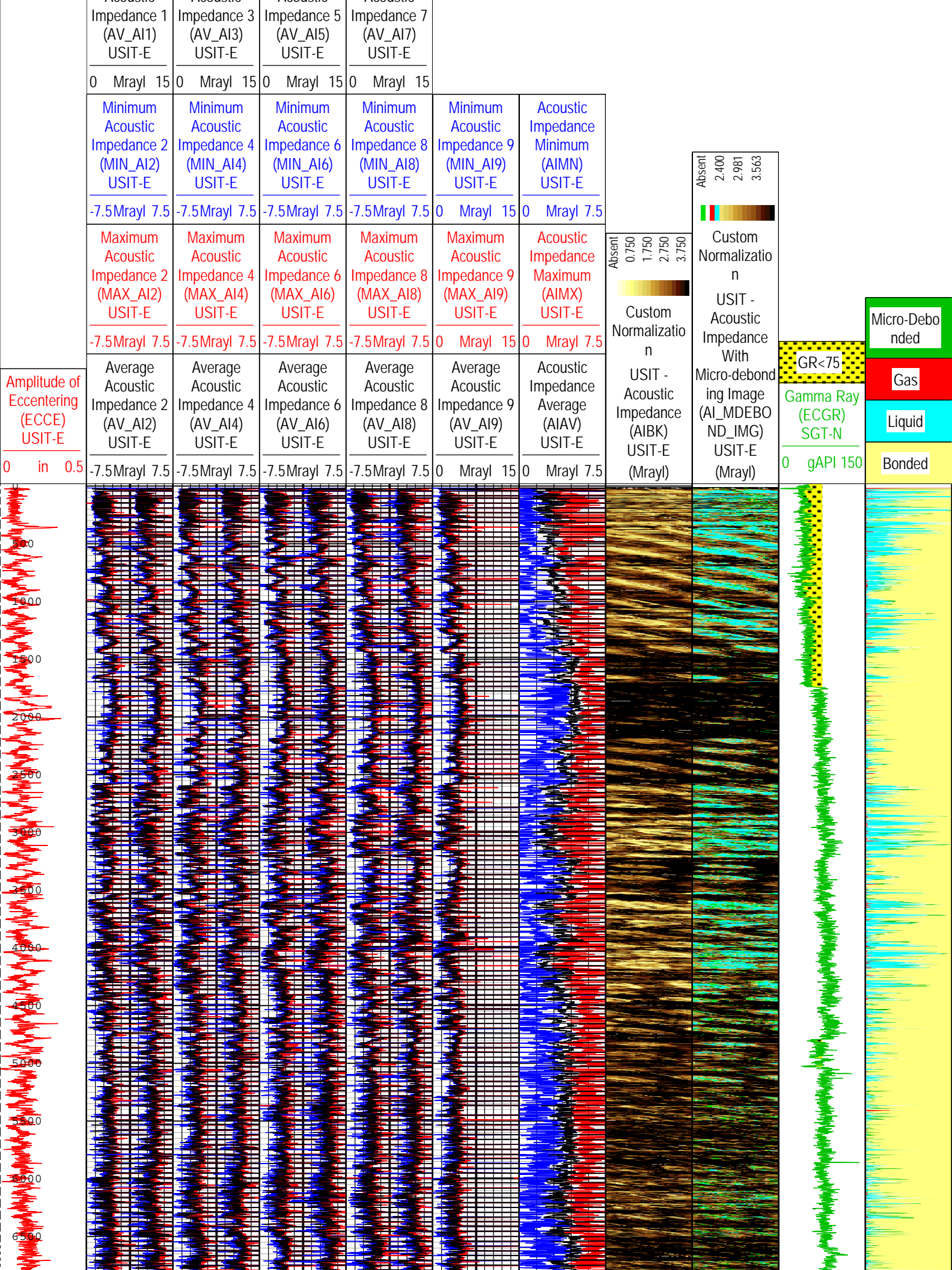
Well:Griswold 2N-11HZ

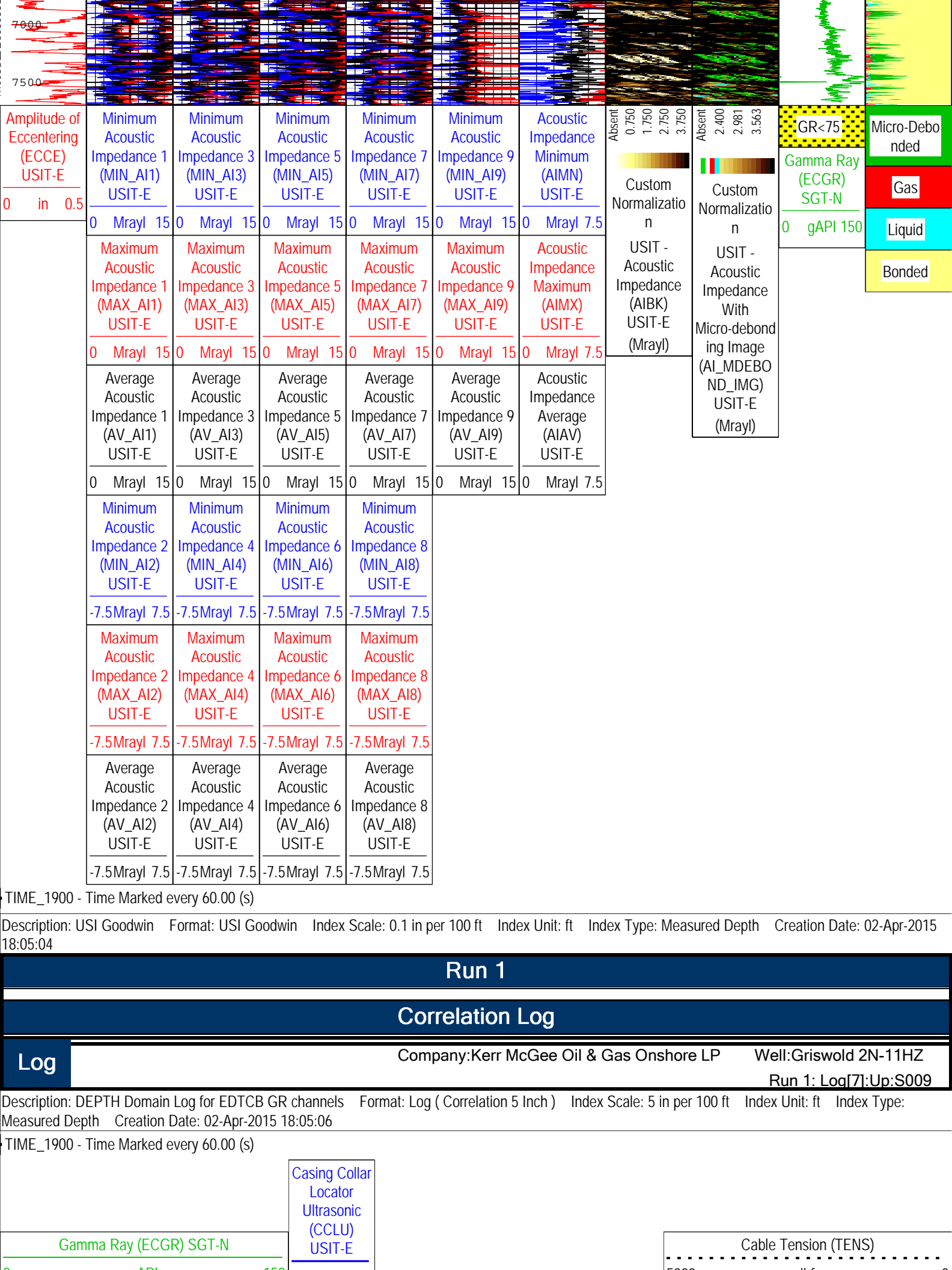
Run 1: Log[7]:Up:S009

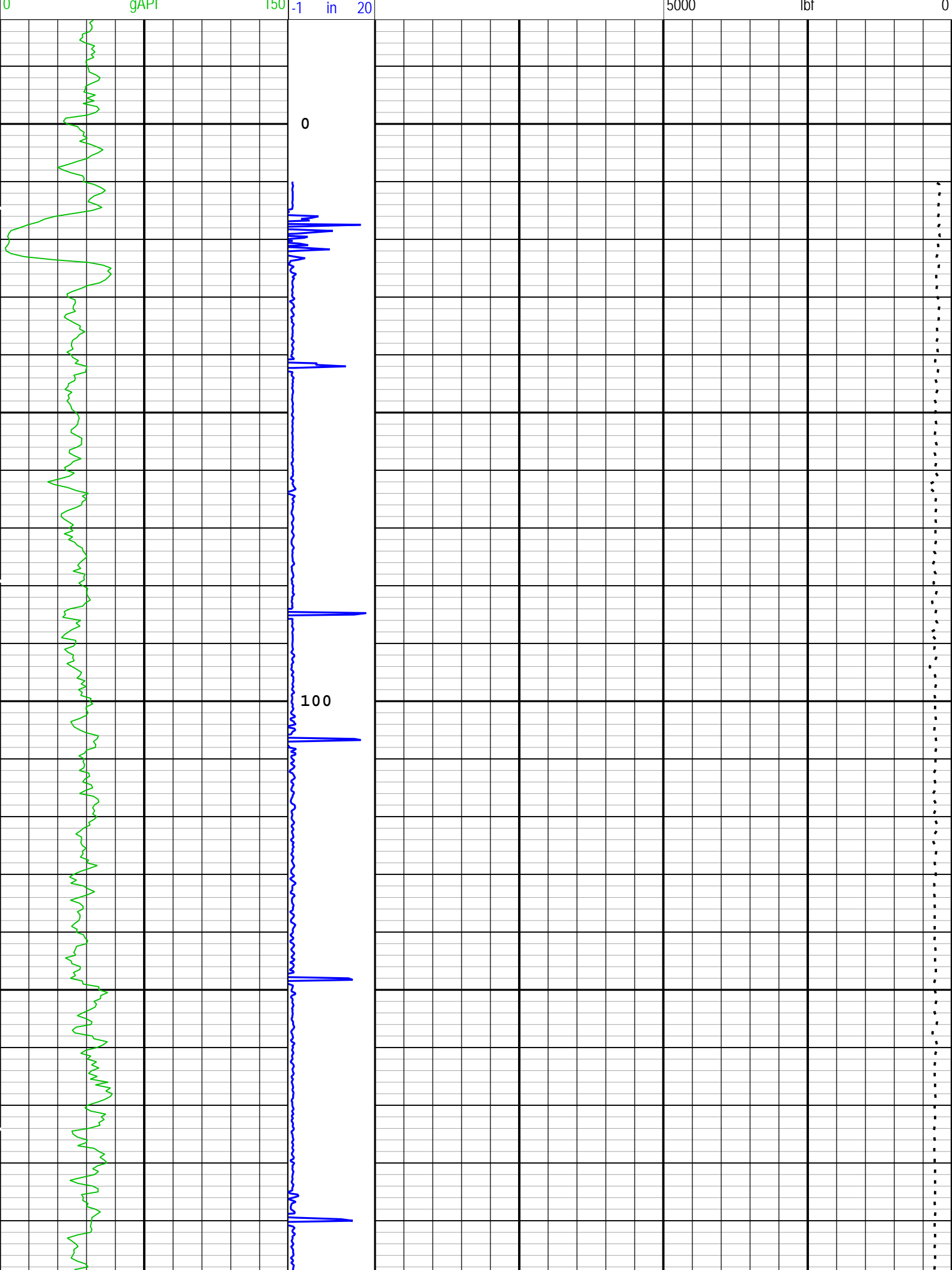
Description: USI Goodwin Format: USI Goodwin Index Scale: 0.1 in per 100 ft Index Unit: ft Index Type: Measured Depth Creation Date: 02-Apr-2015 18:05:04

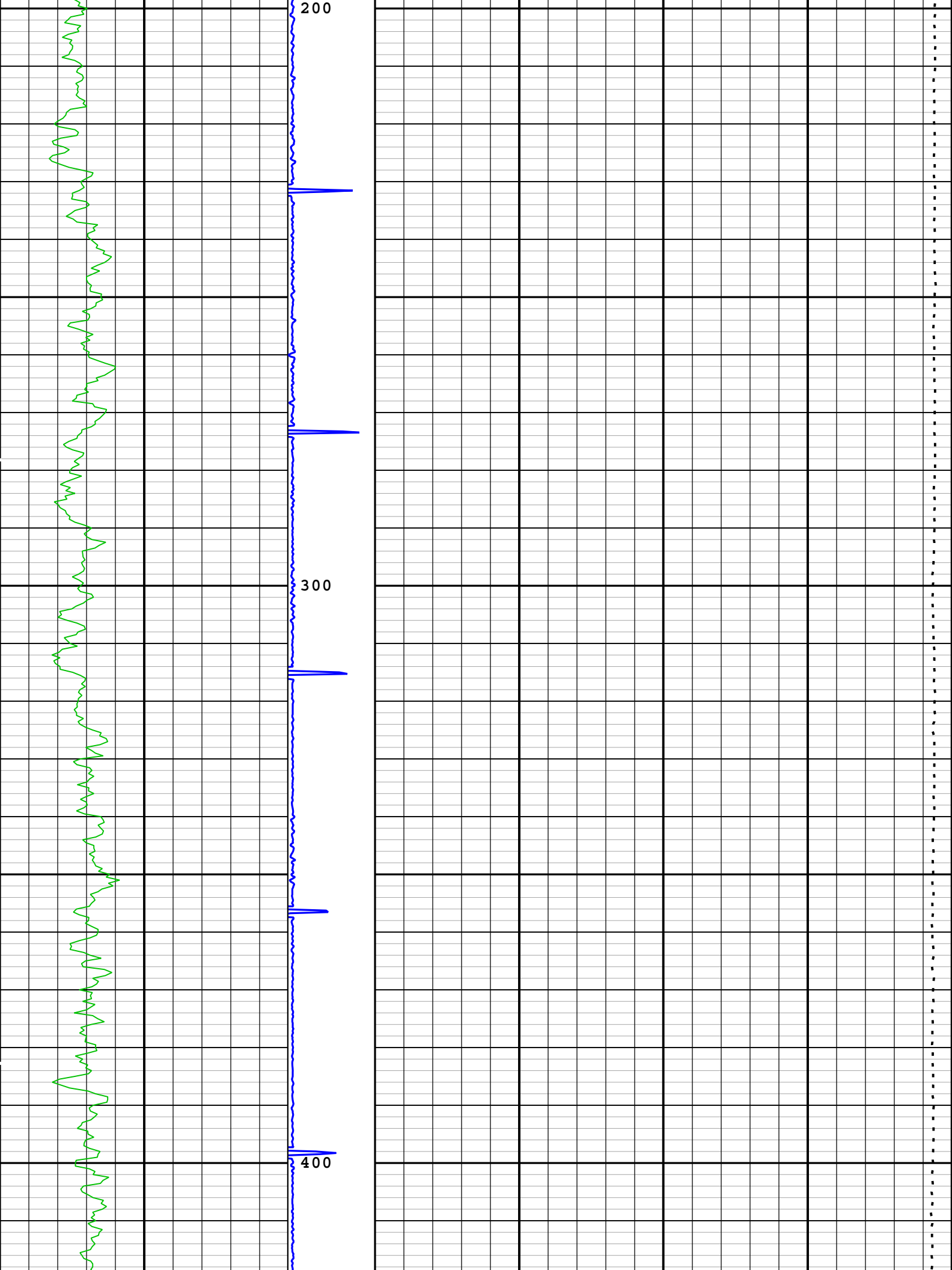
TIME_1900 - Time Marked every 60.00 (s)

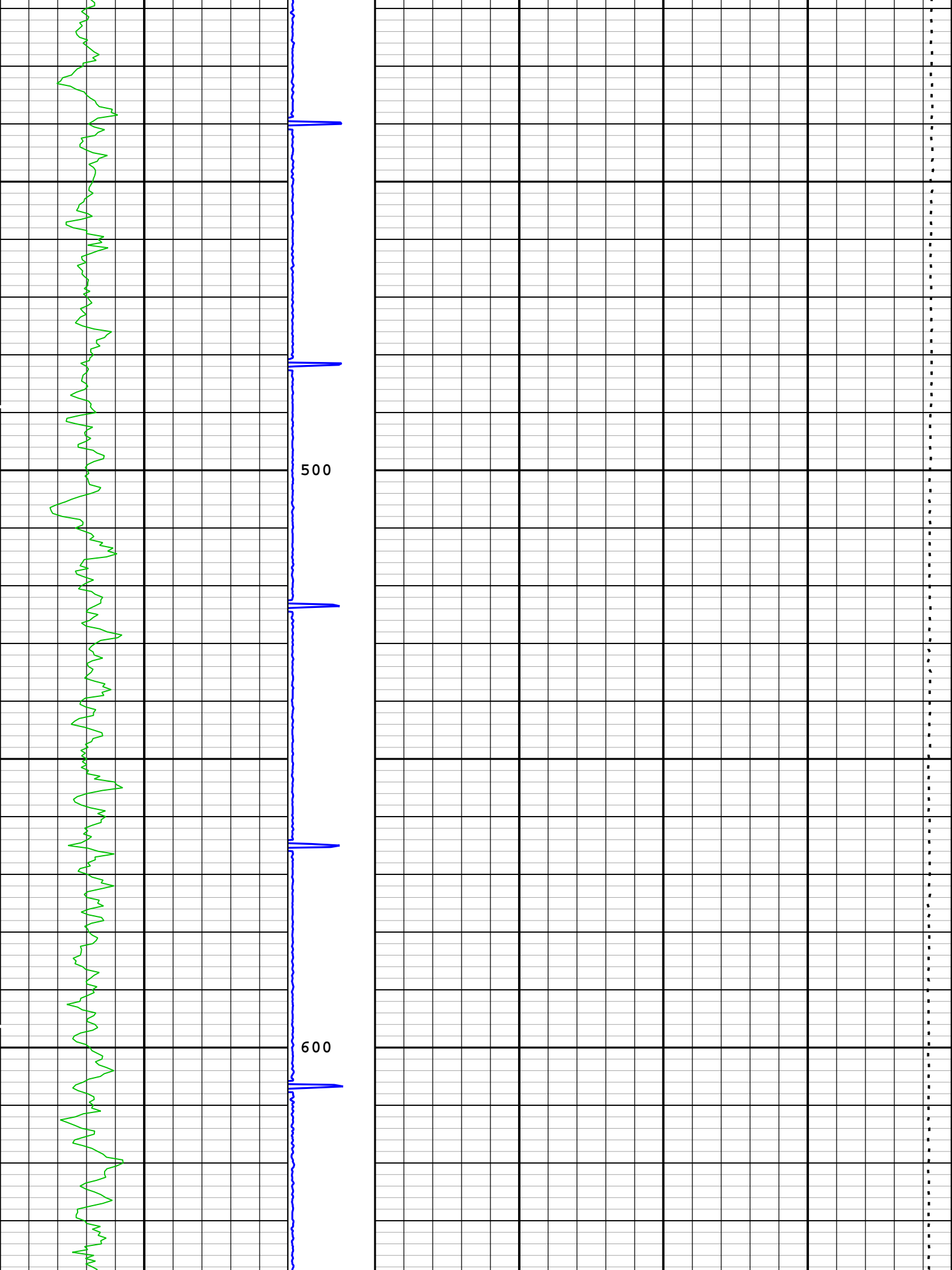
Minimum Acoustic Impedance 1 (MIN_AI1) USIT-E	Minimum Acoustic Impedance 3 (MIN_AI3) USIT-E	Minimum Acoustic Impedance 5 (MIN_AI5) USIT-E	Minimum Acoustic Impedance 7 (MIN_AI7) USIT-E
0 Mrayl 15	0 Mrayl 15	0 Mrayl 15	0 Mrayl 15
Maximum Acoustic Impedance 1 (MAX_AI1) USIT-E	Maximum Acoustic Impedance 3 (MAX_AI3) USIT-E	Maximum Acoustic Impedance 5 (MAX_AI5) USIT-E	Maximum Acoustic Impedance 7 (MAX_AI7) USIT-E
0 Mrayl 15	0 Mrayl 15	0 Mrayl 15	0 Mrayl 15
Average Acoustic	Average Acoustic	Average Acoustic	Average Acoustic

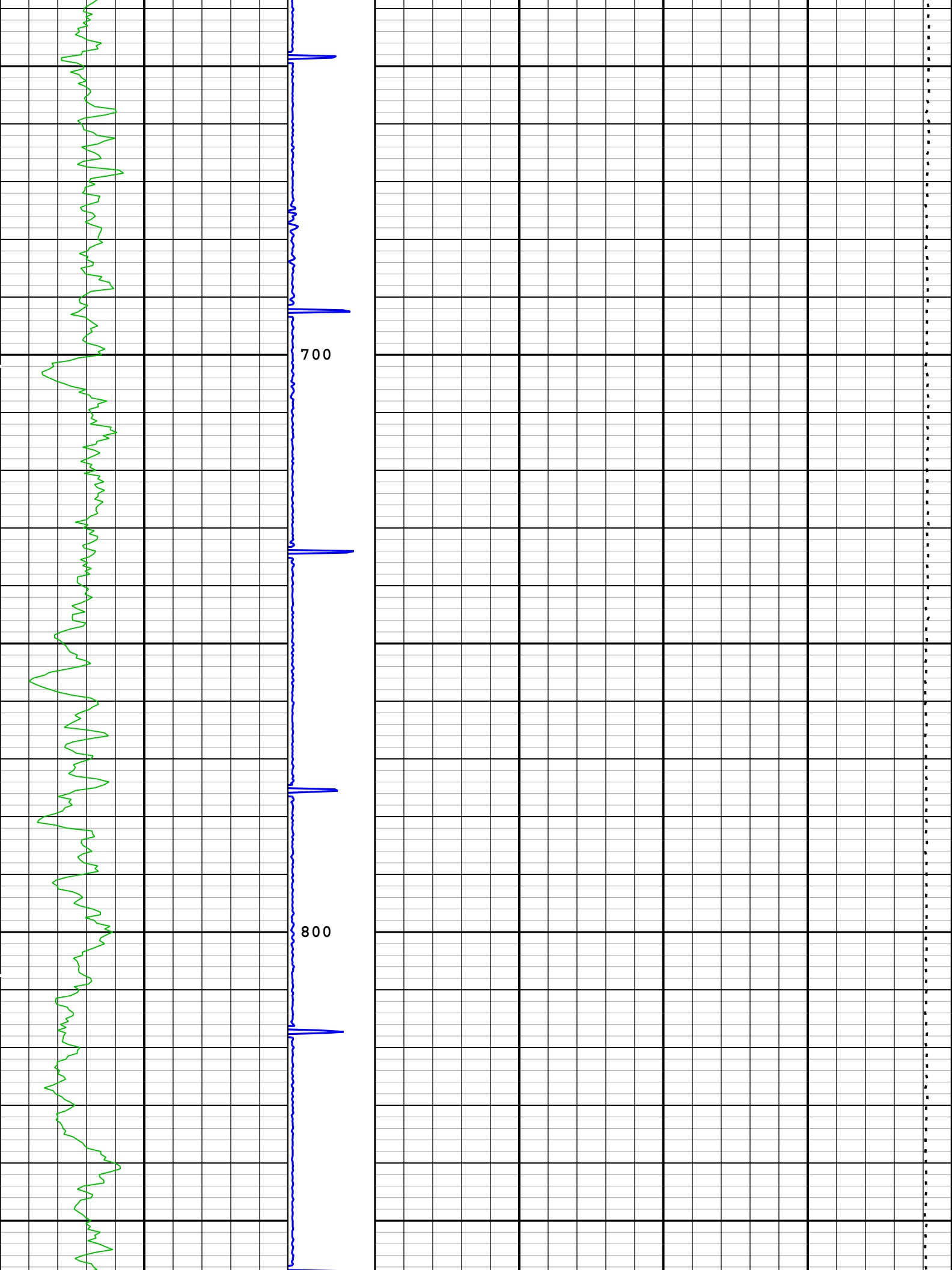


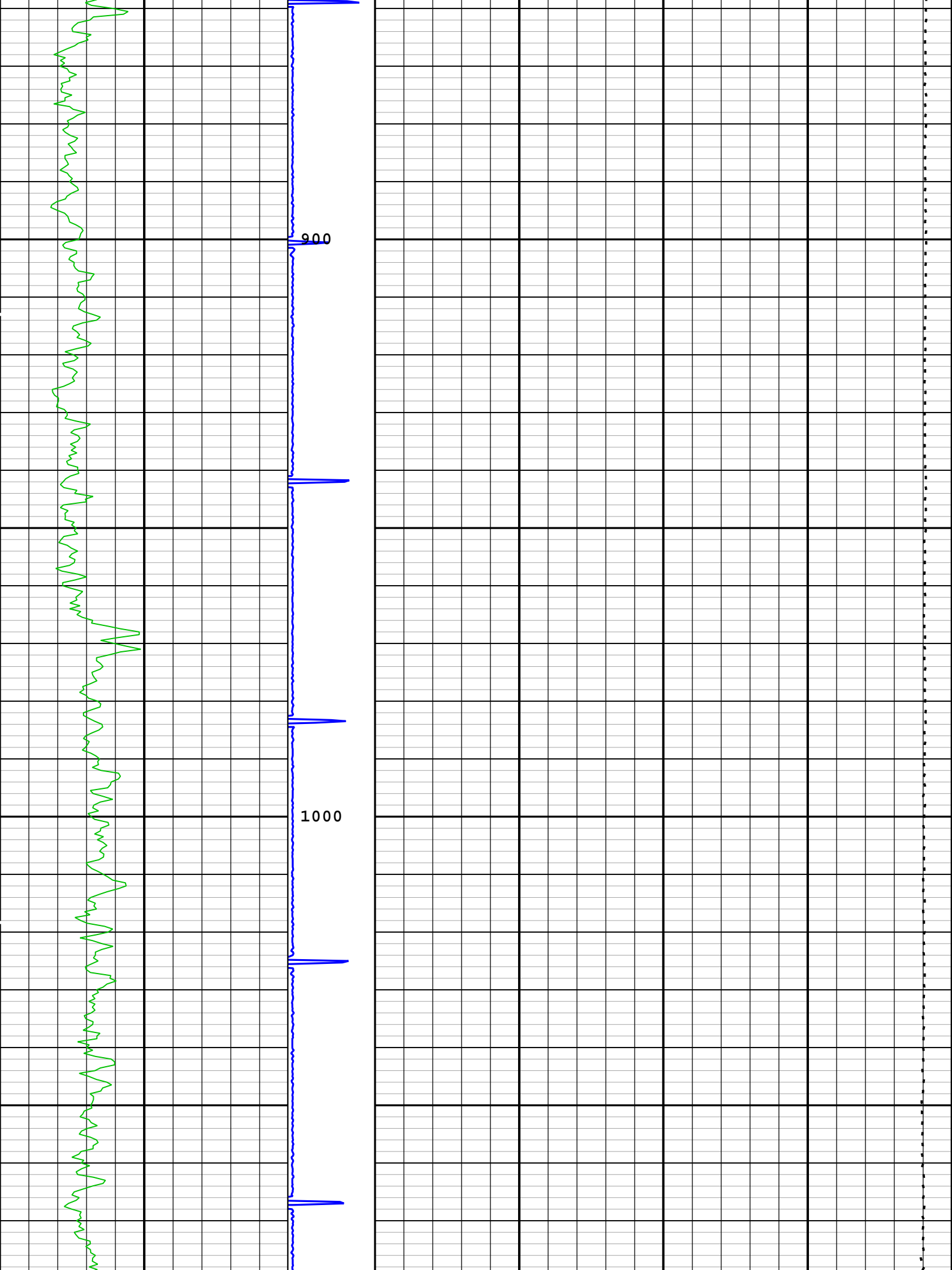


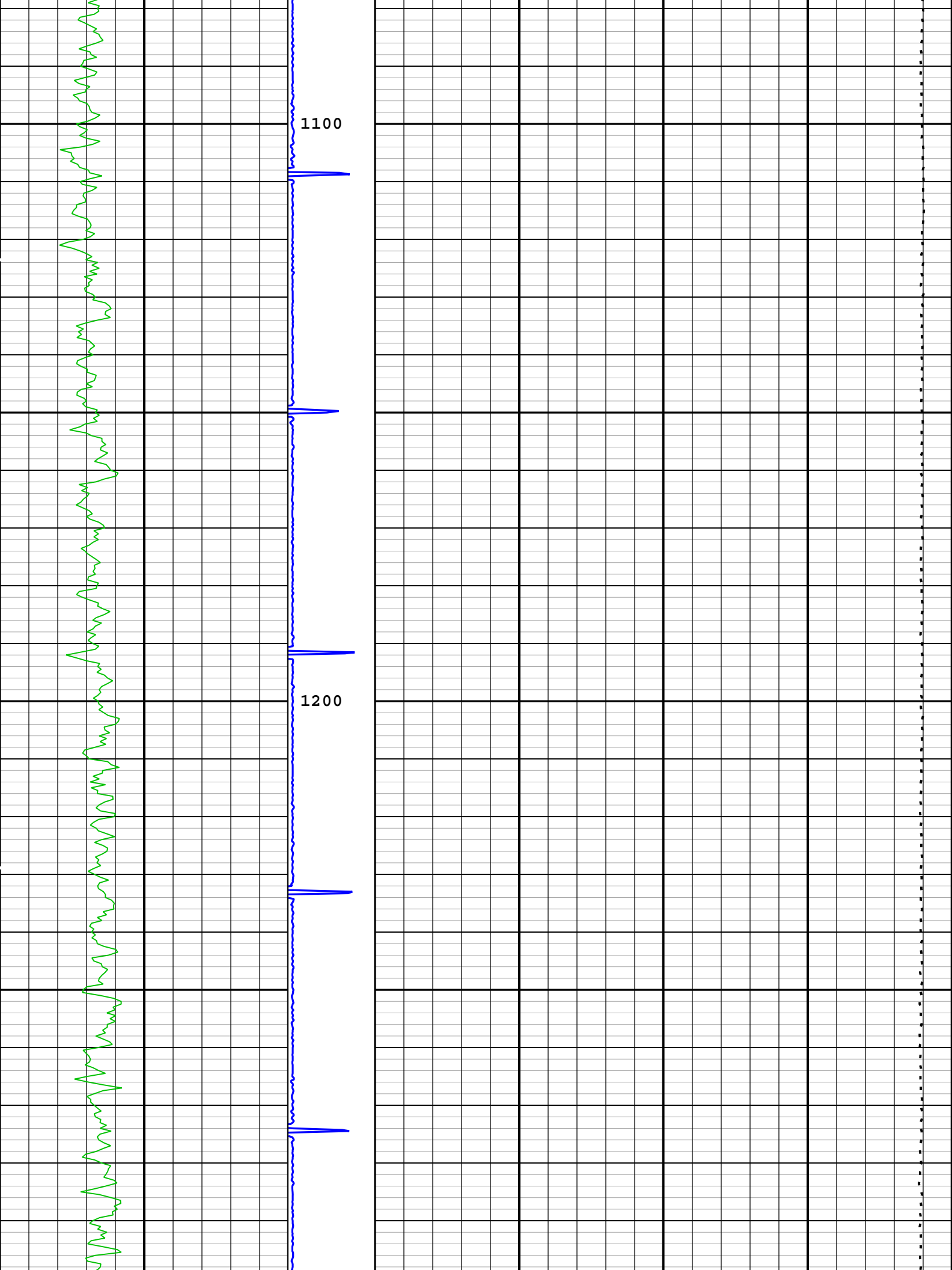


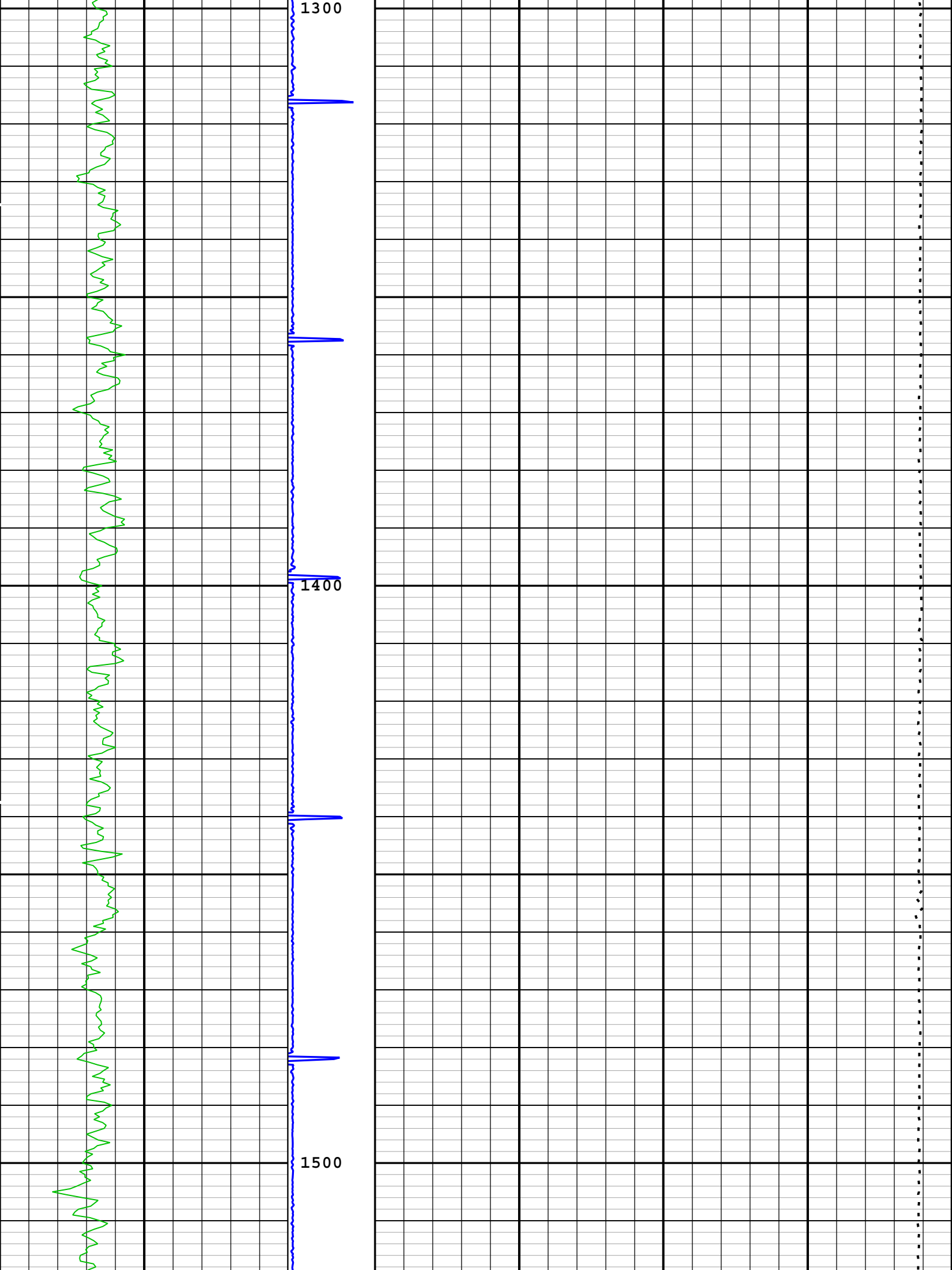


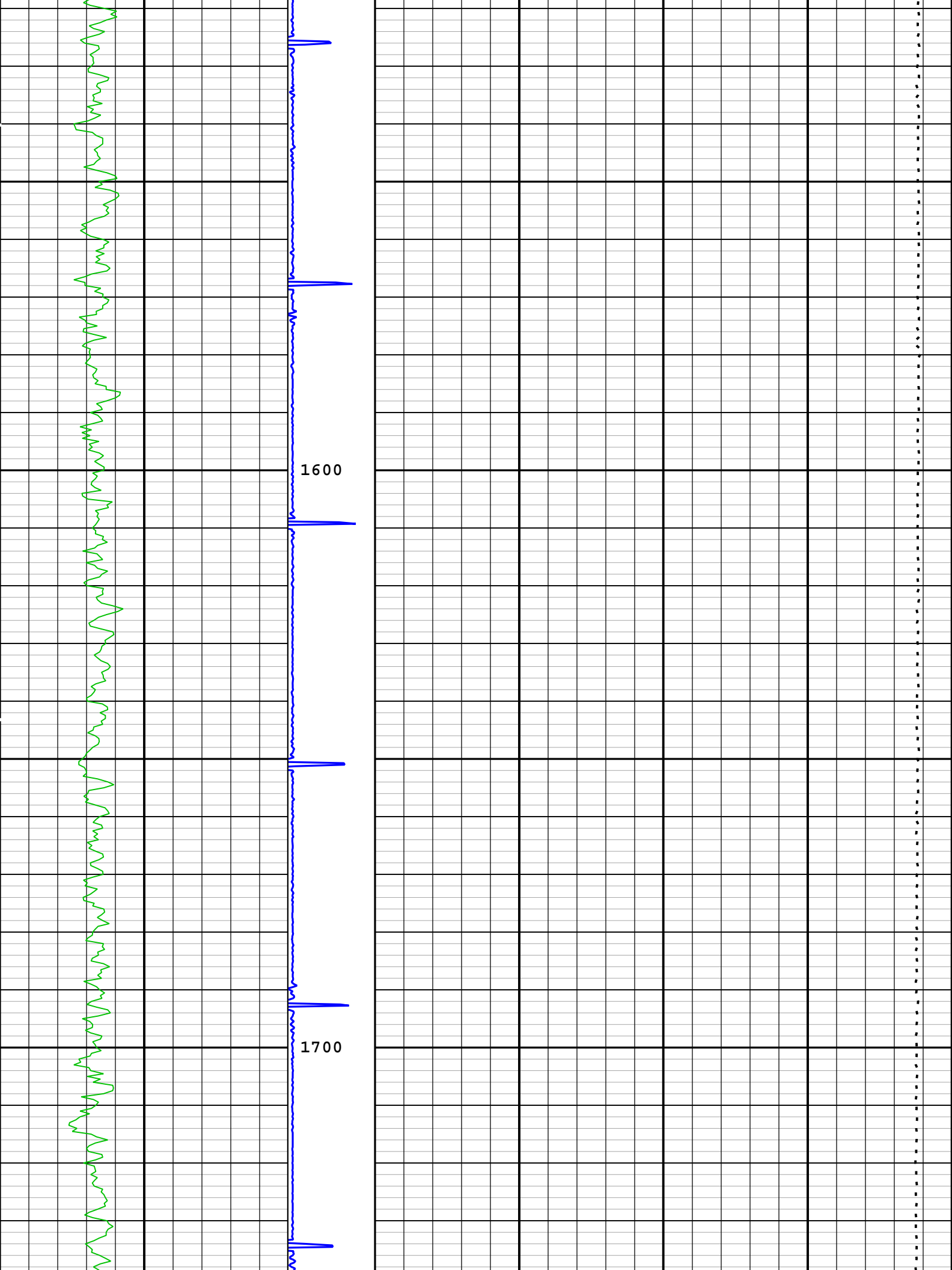


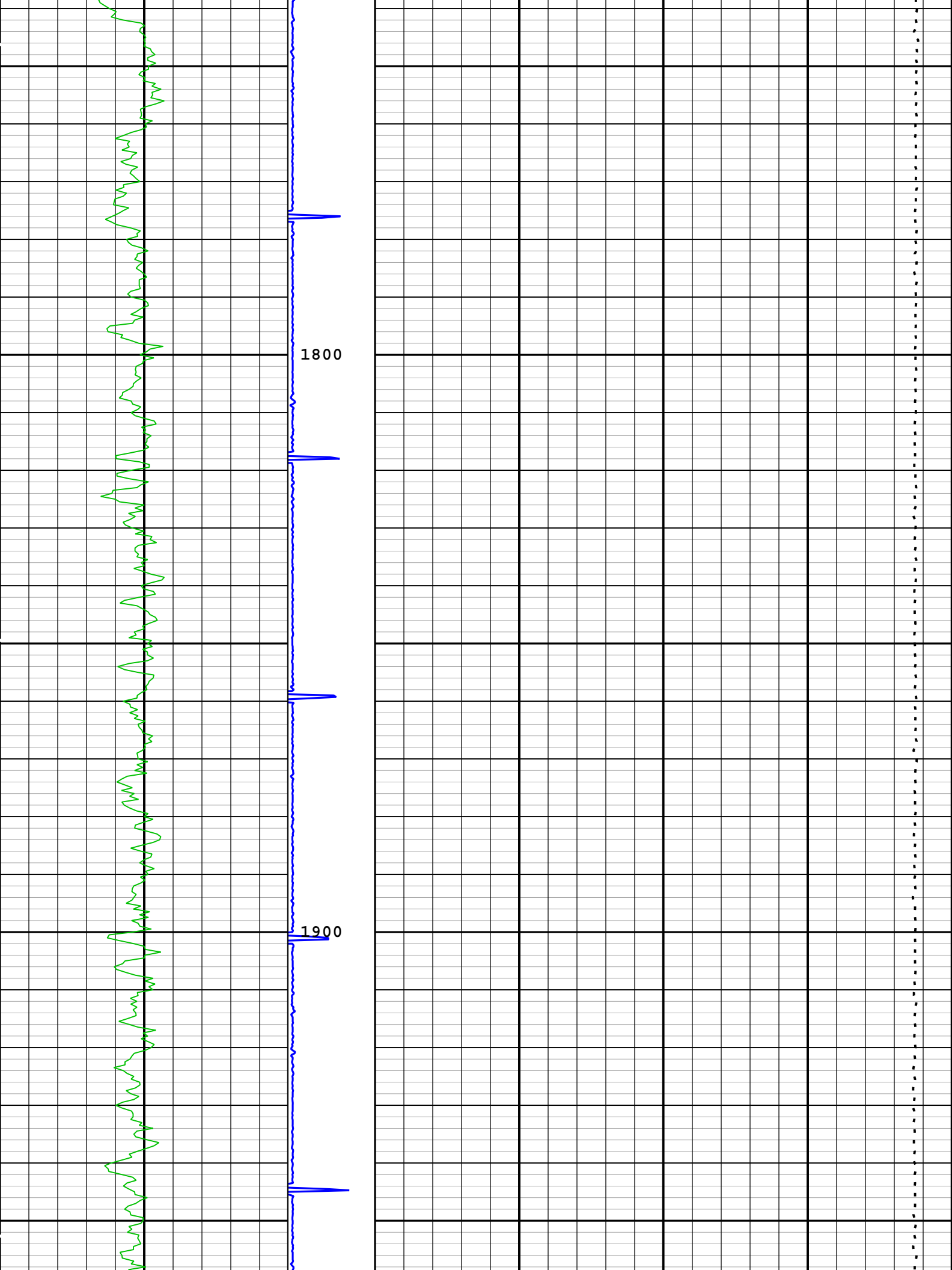


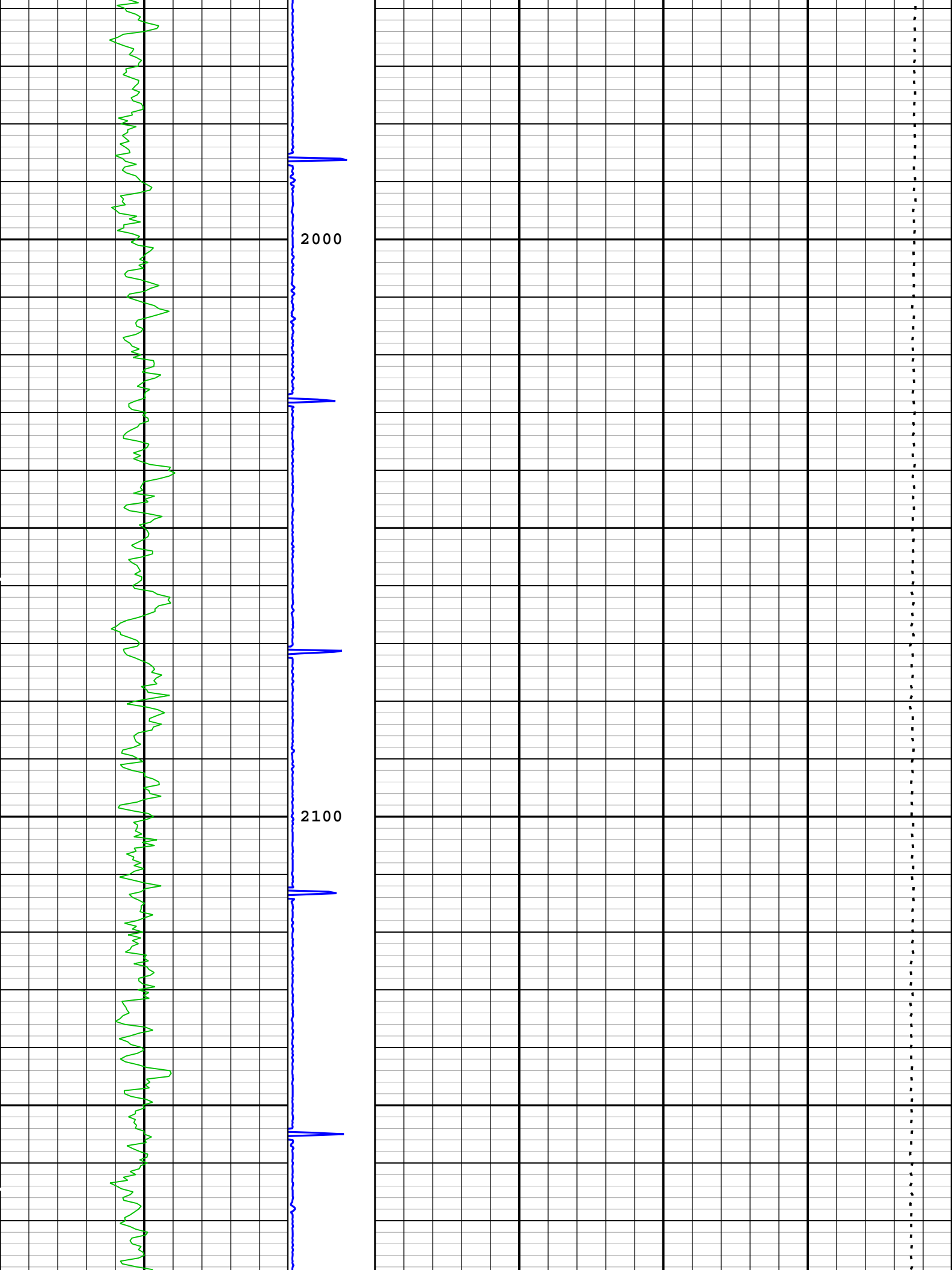


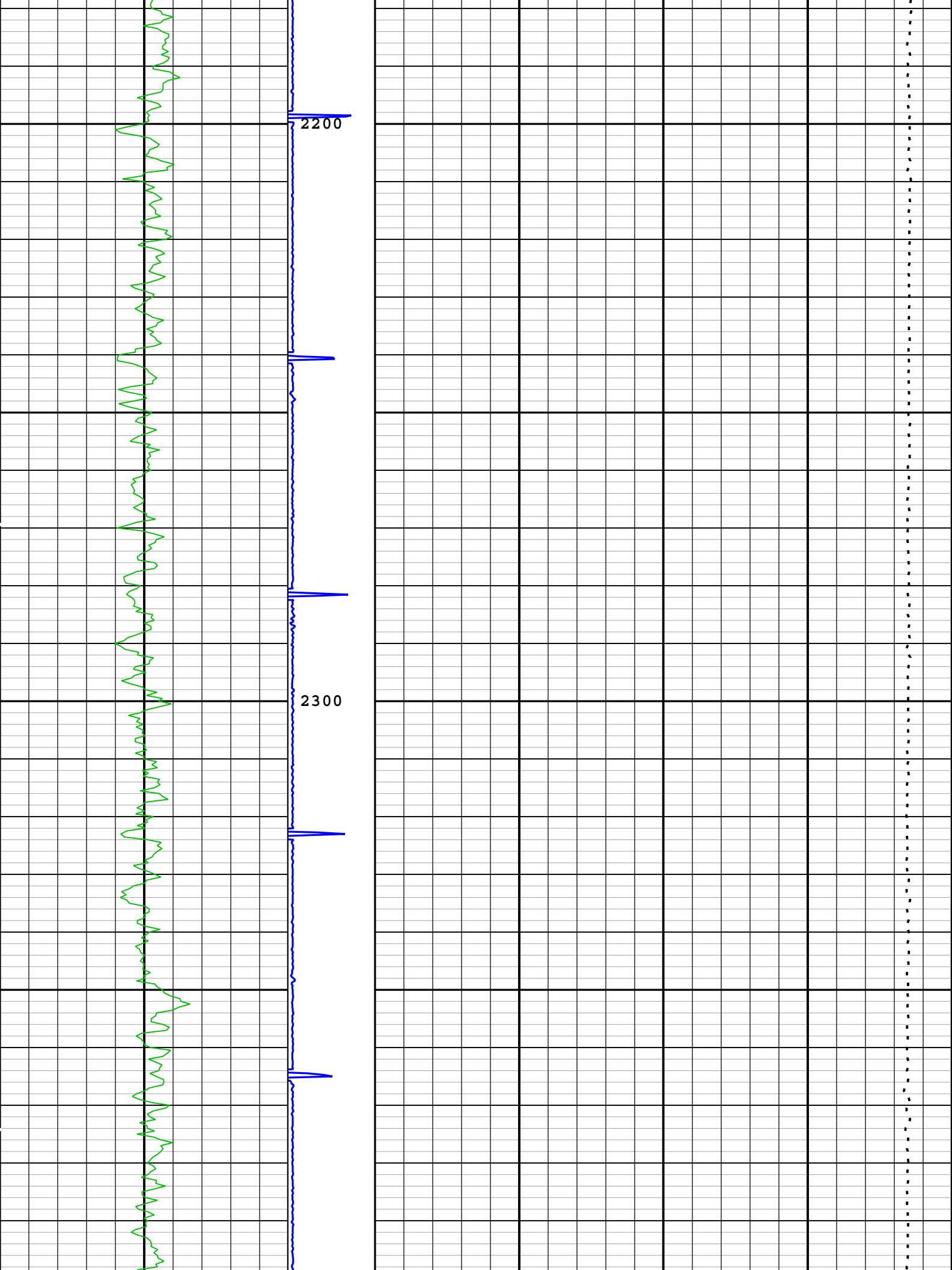


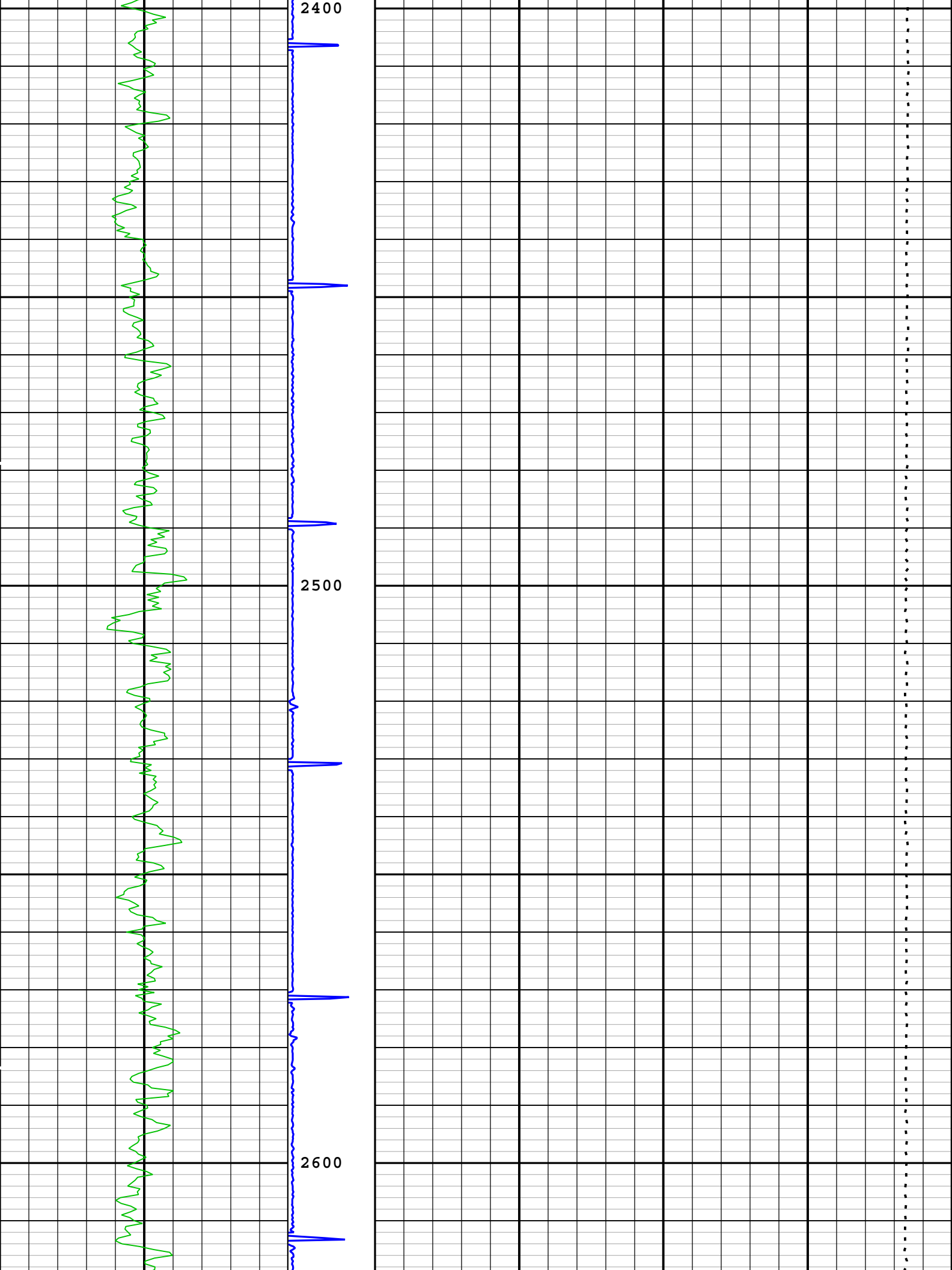


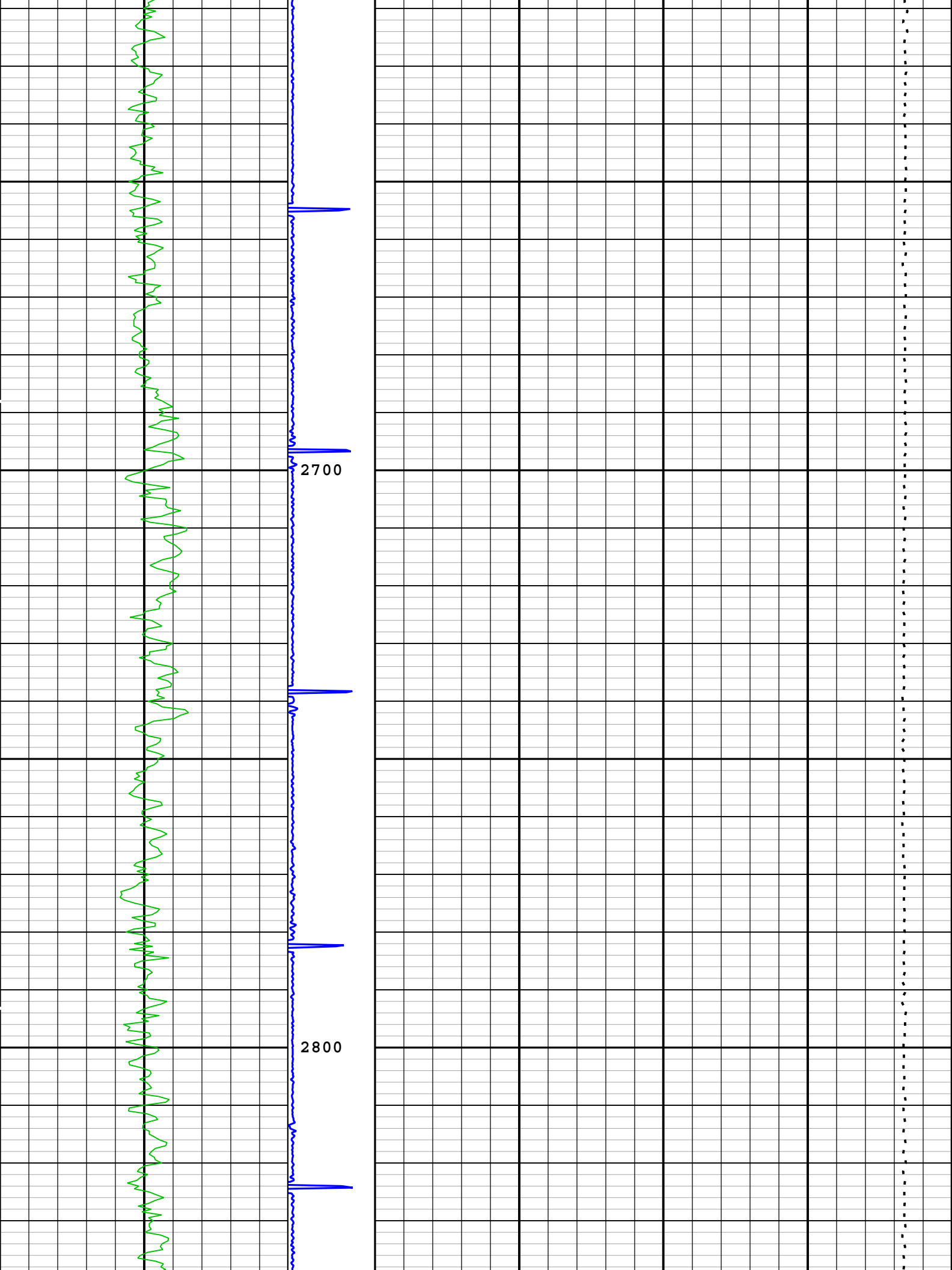


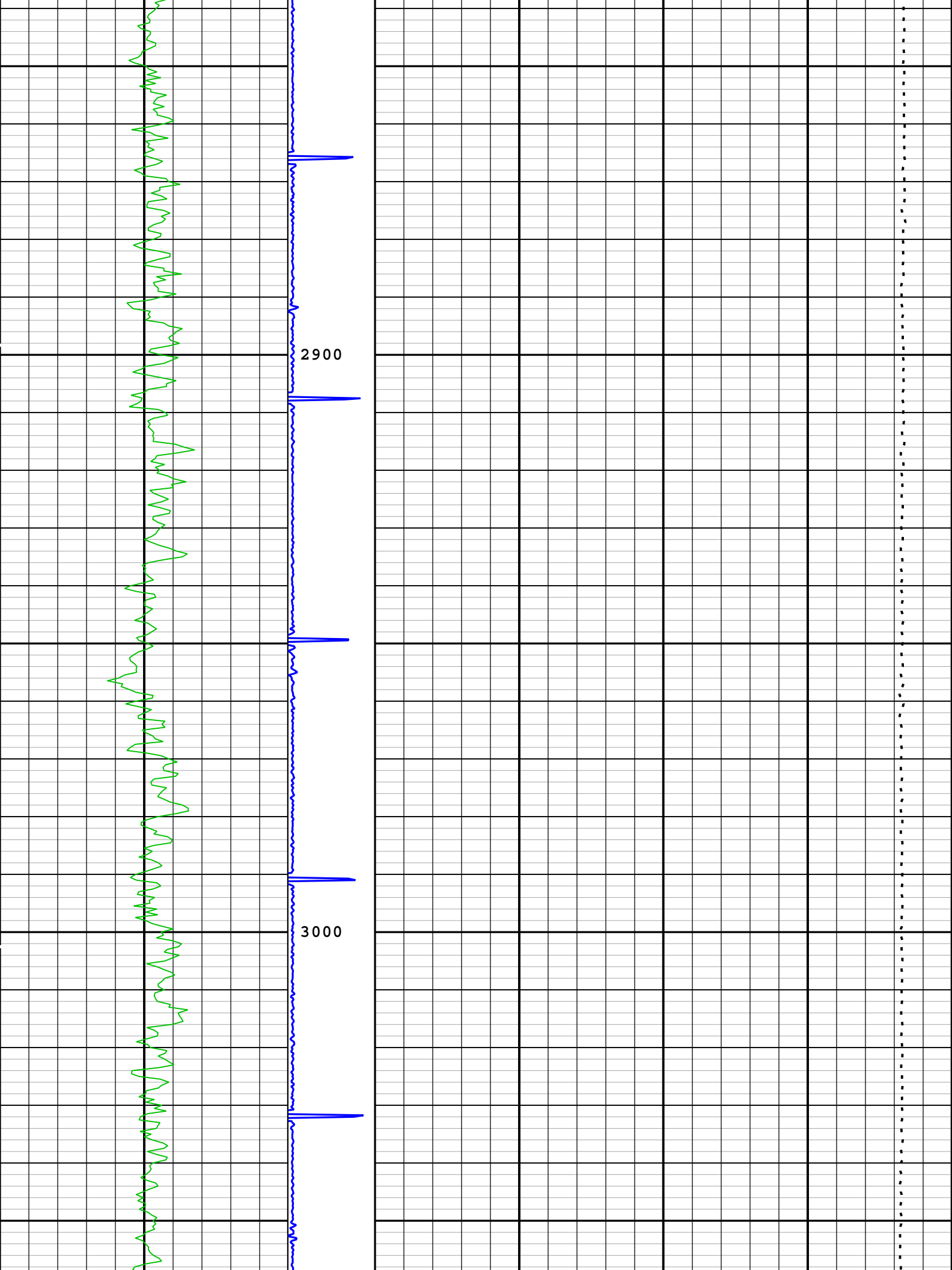


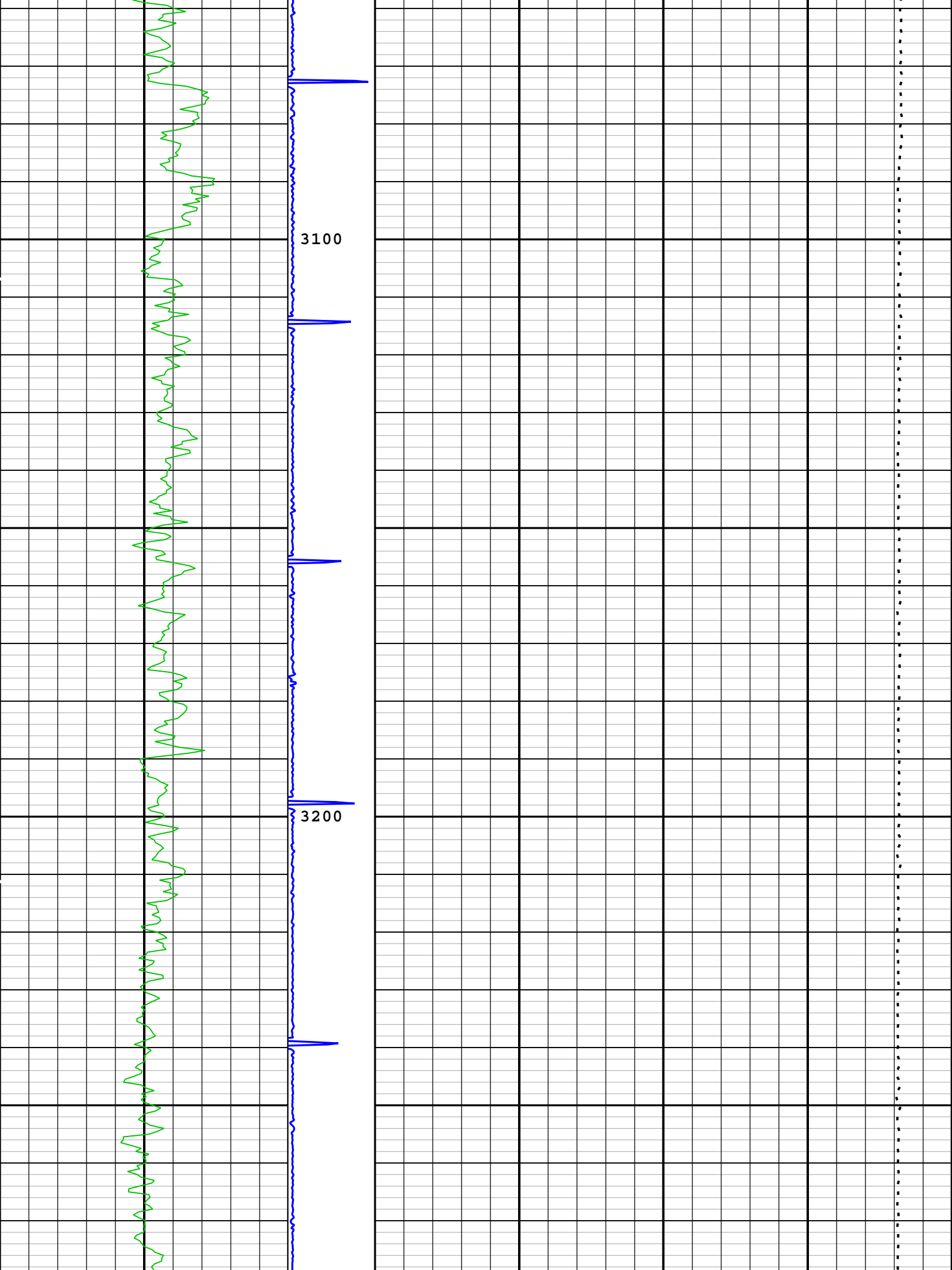


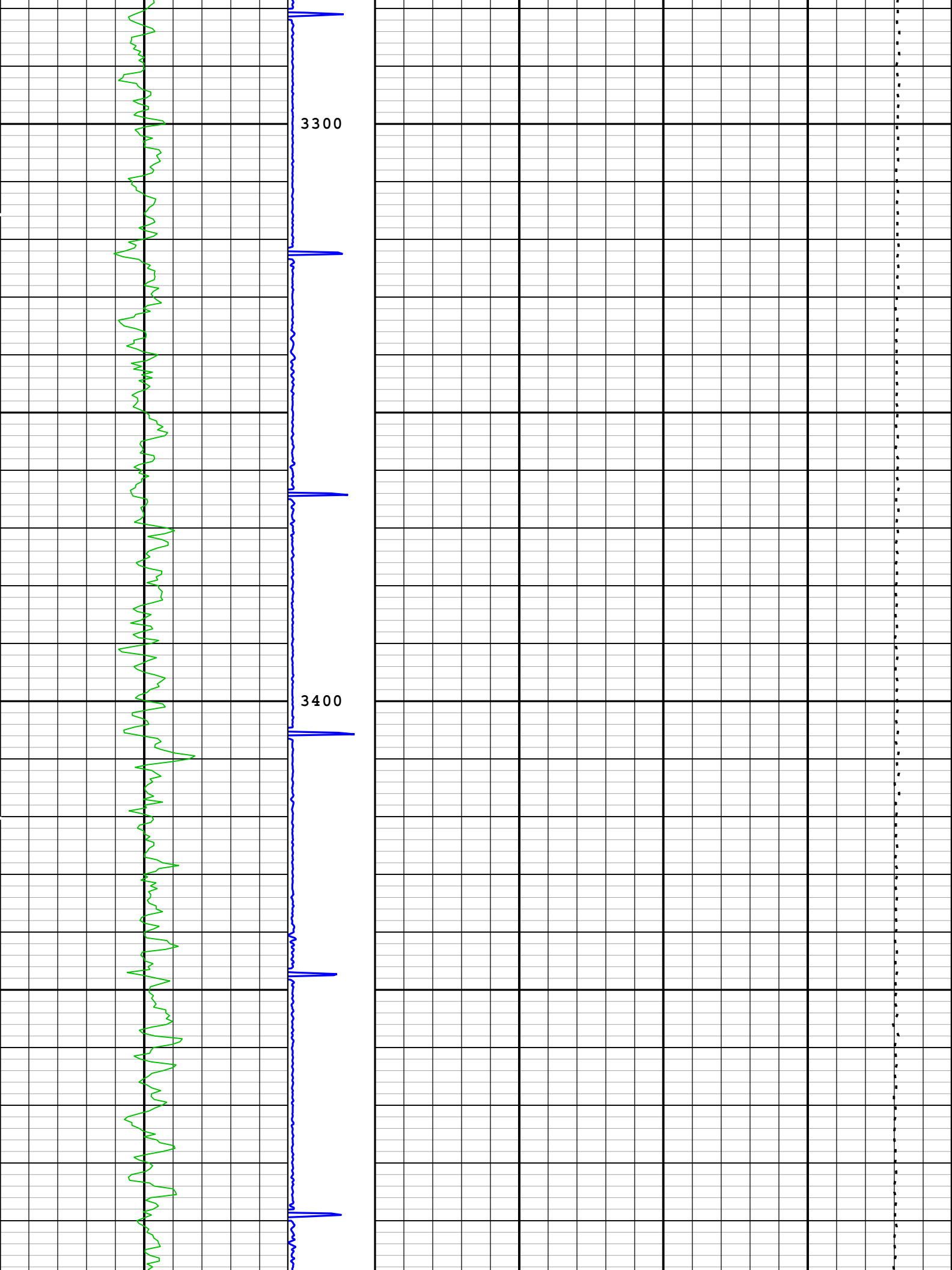


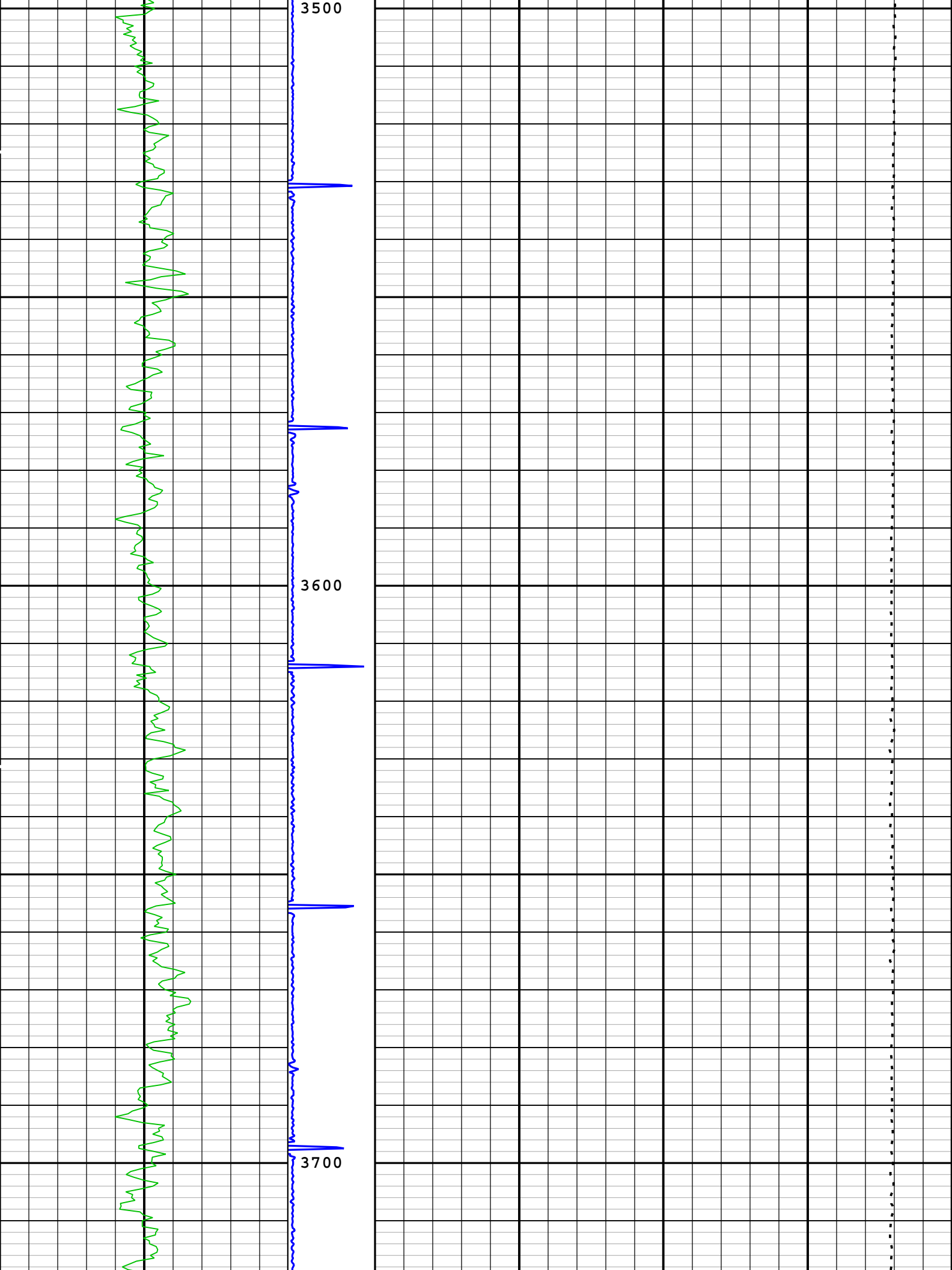


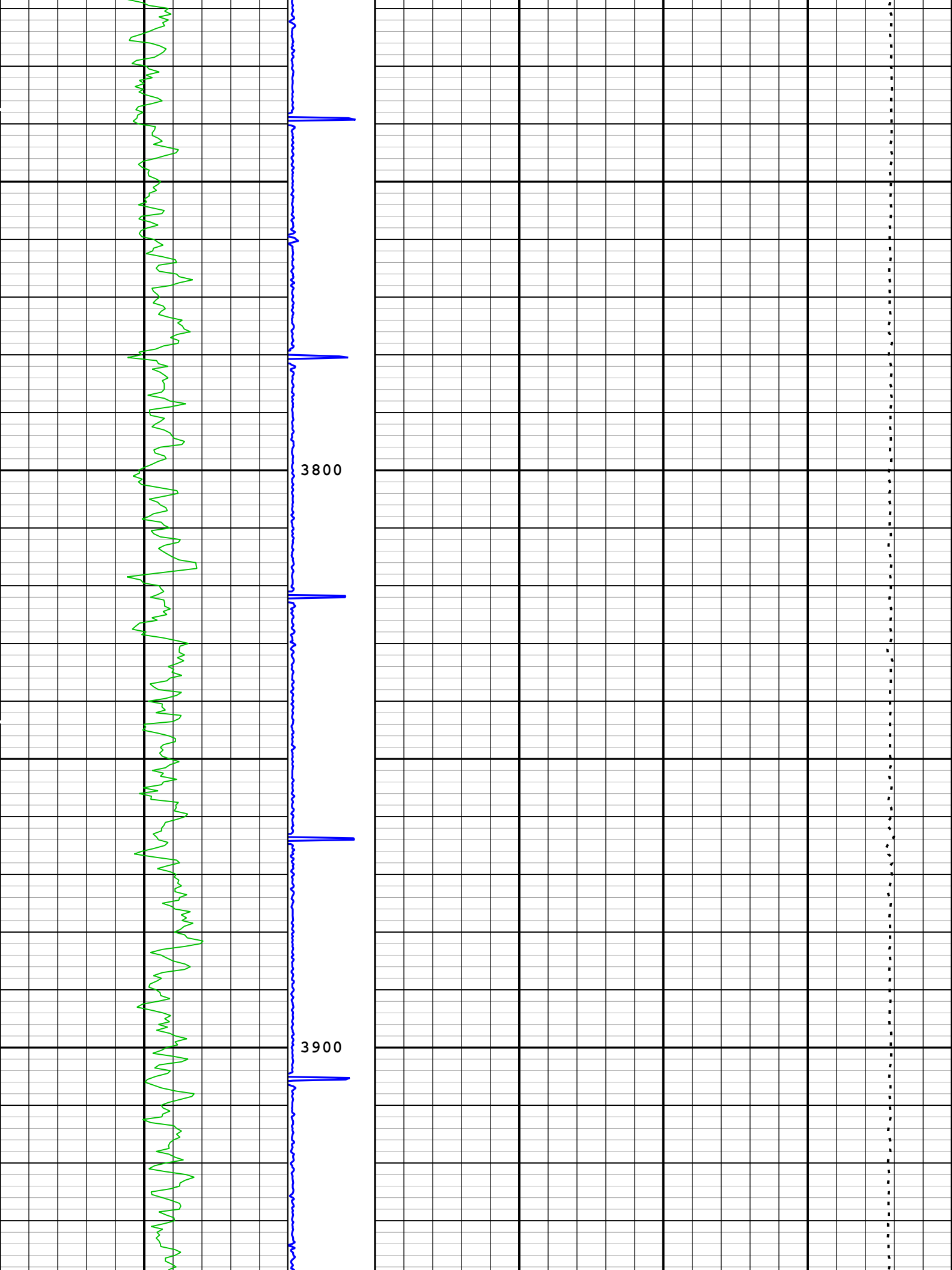


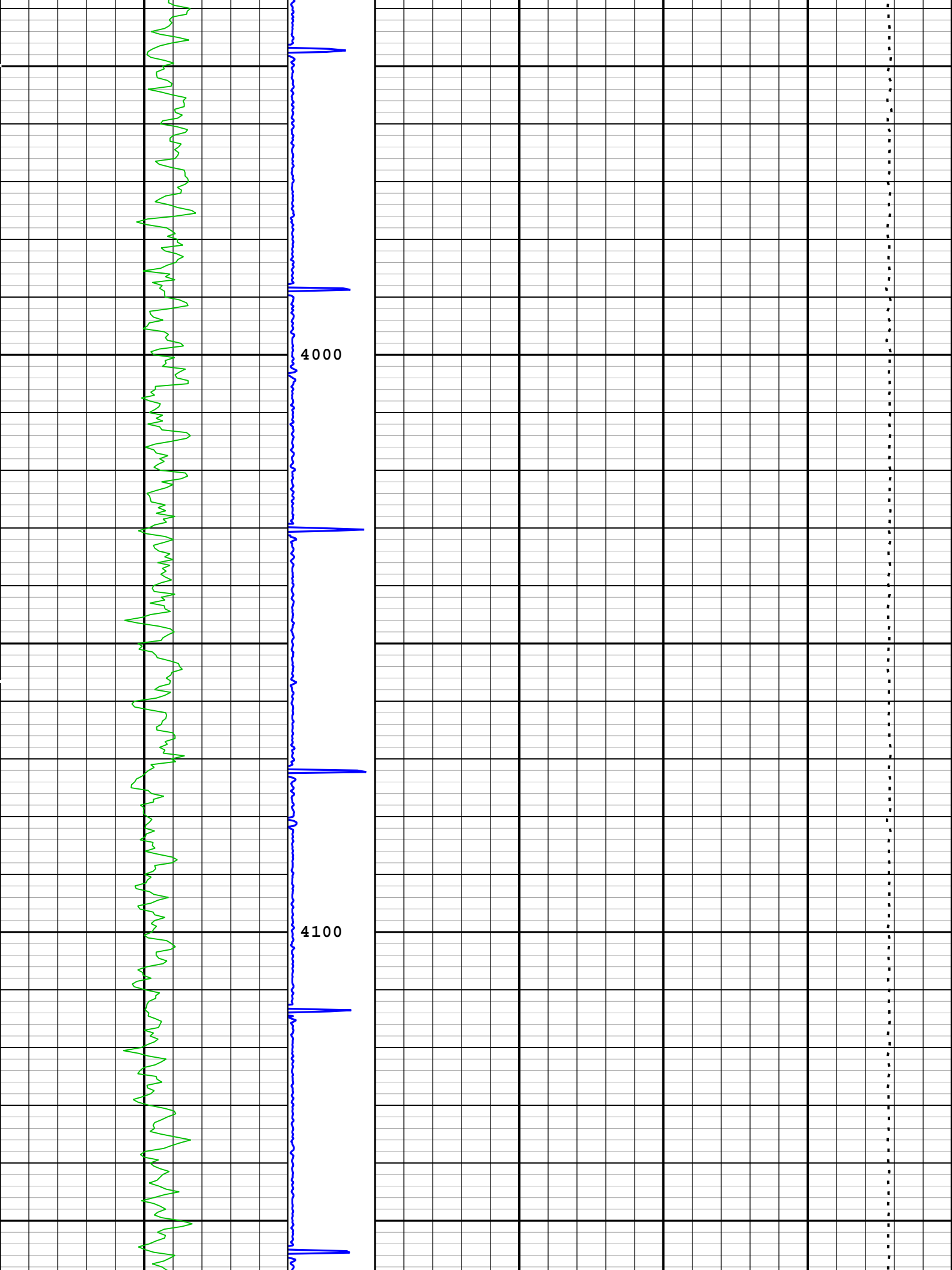


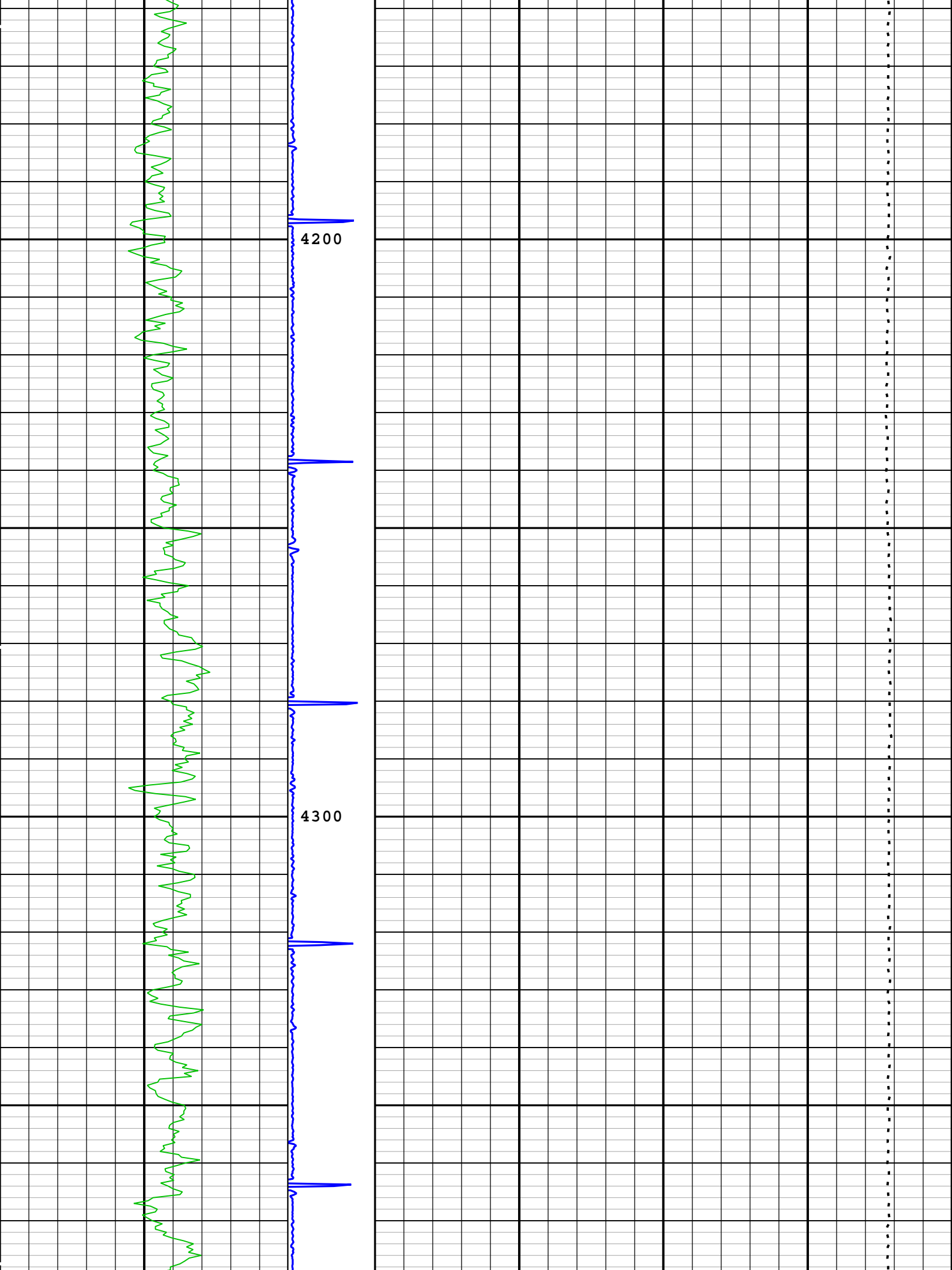


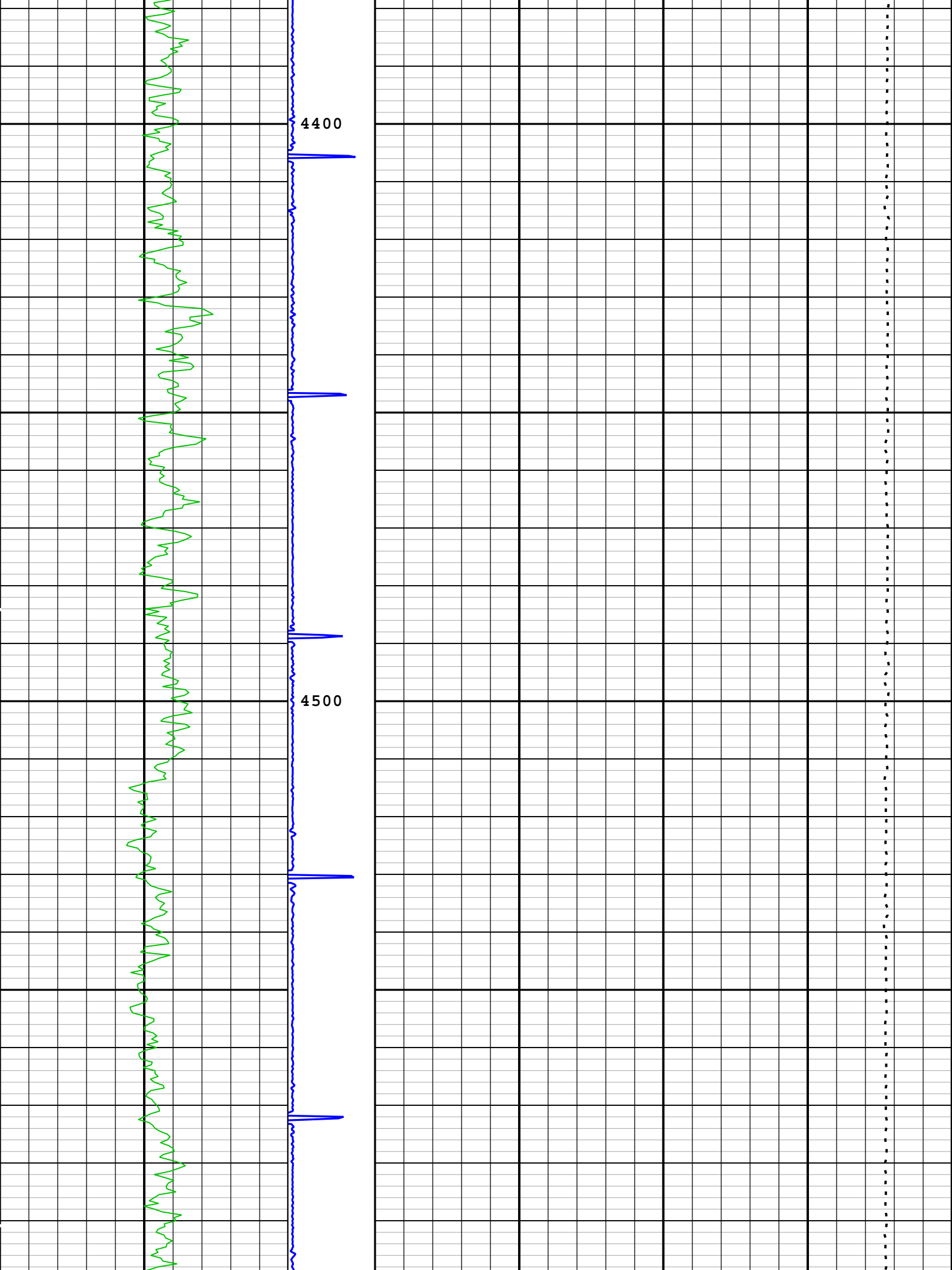


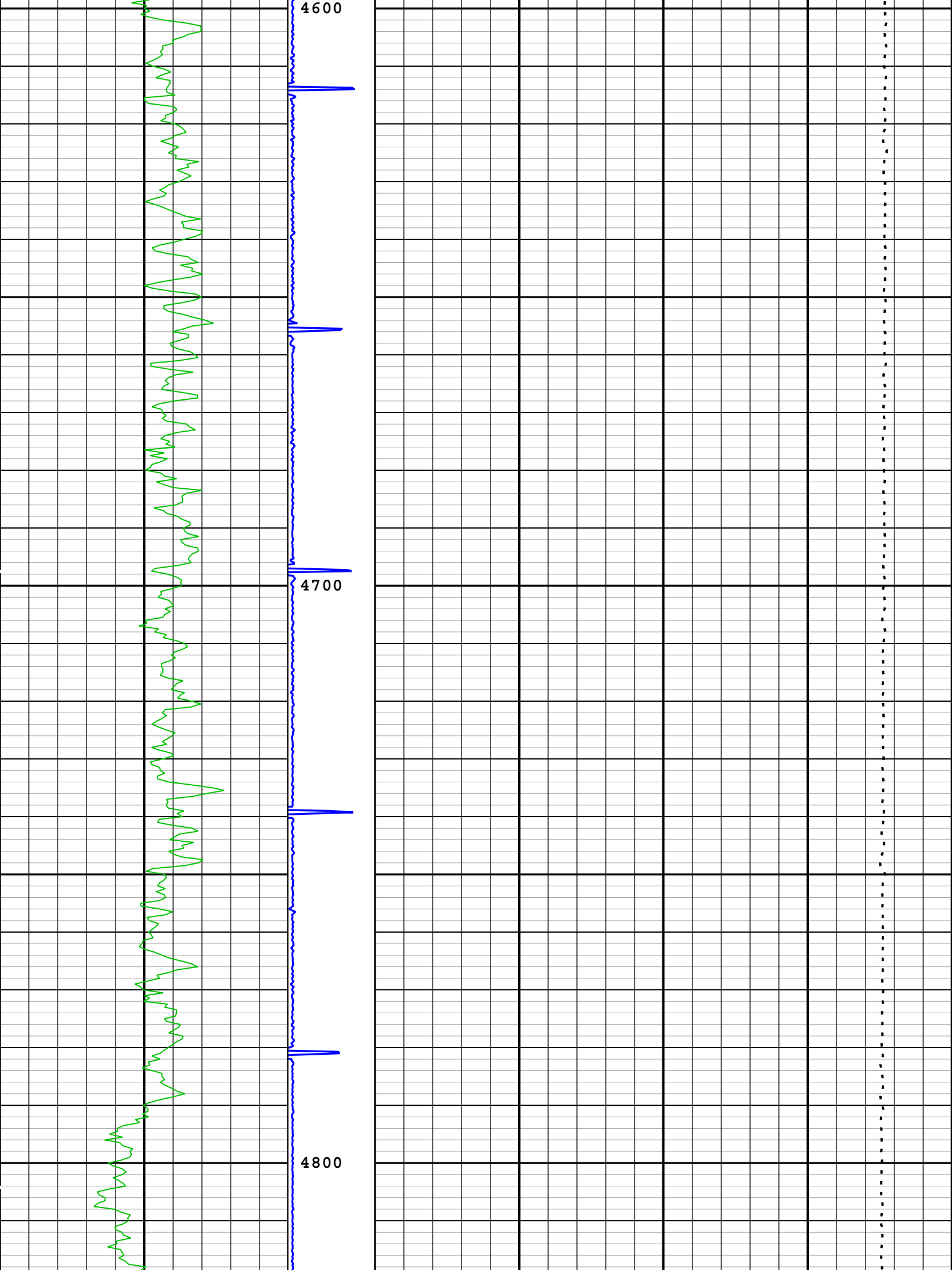


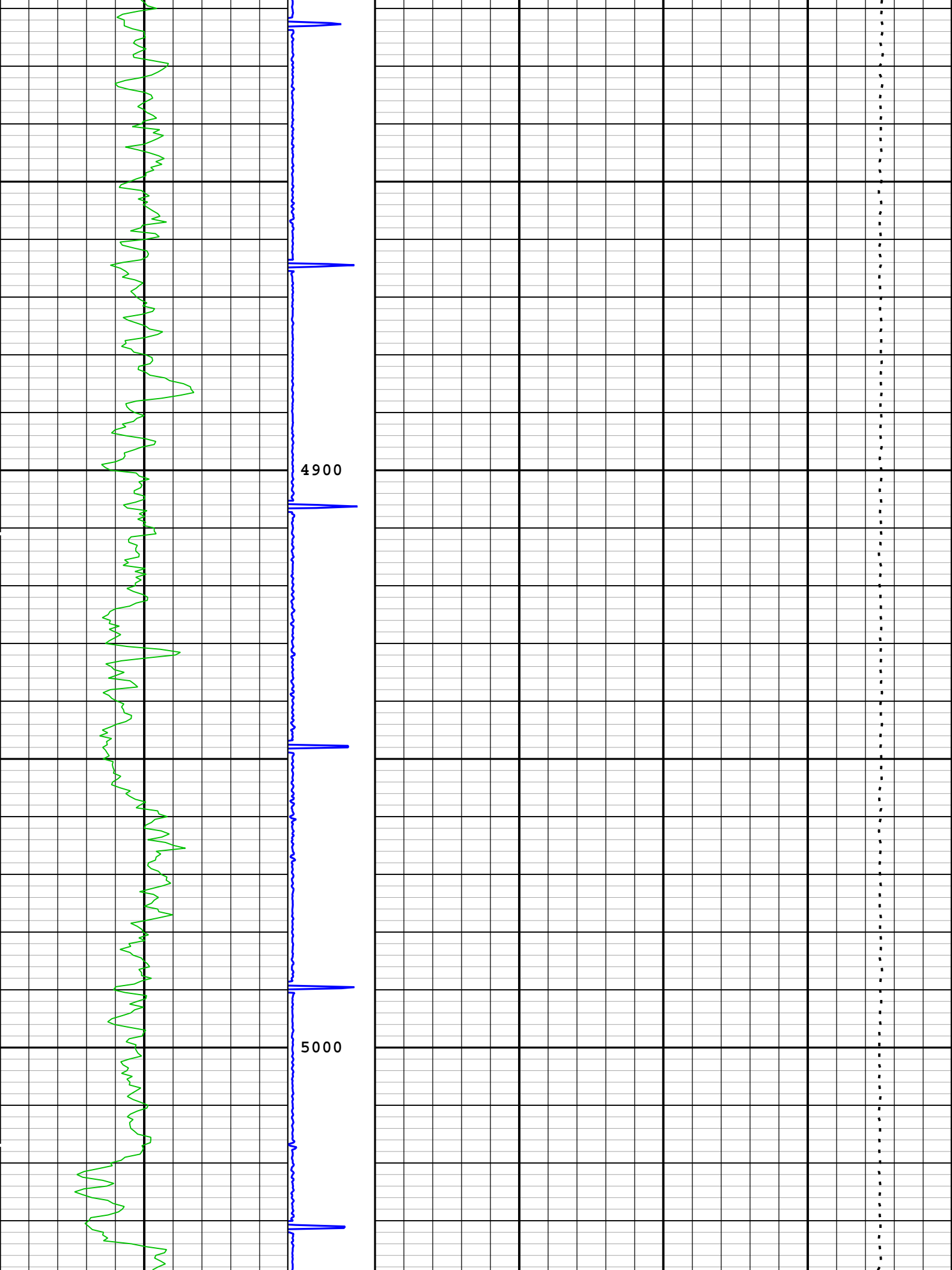


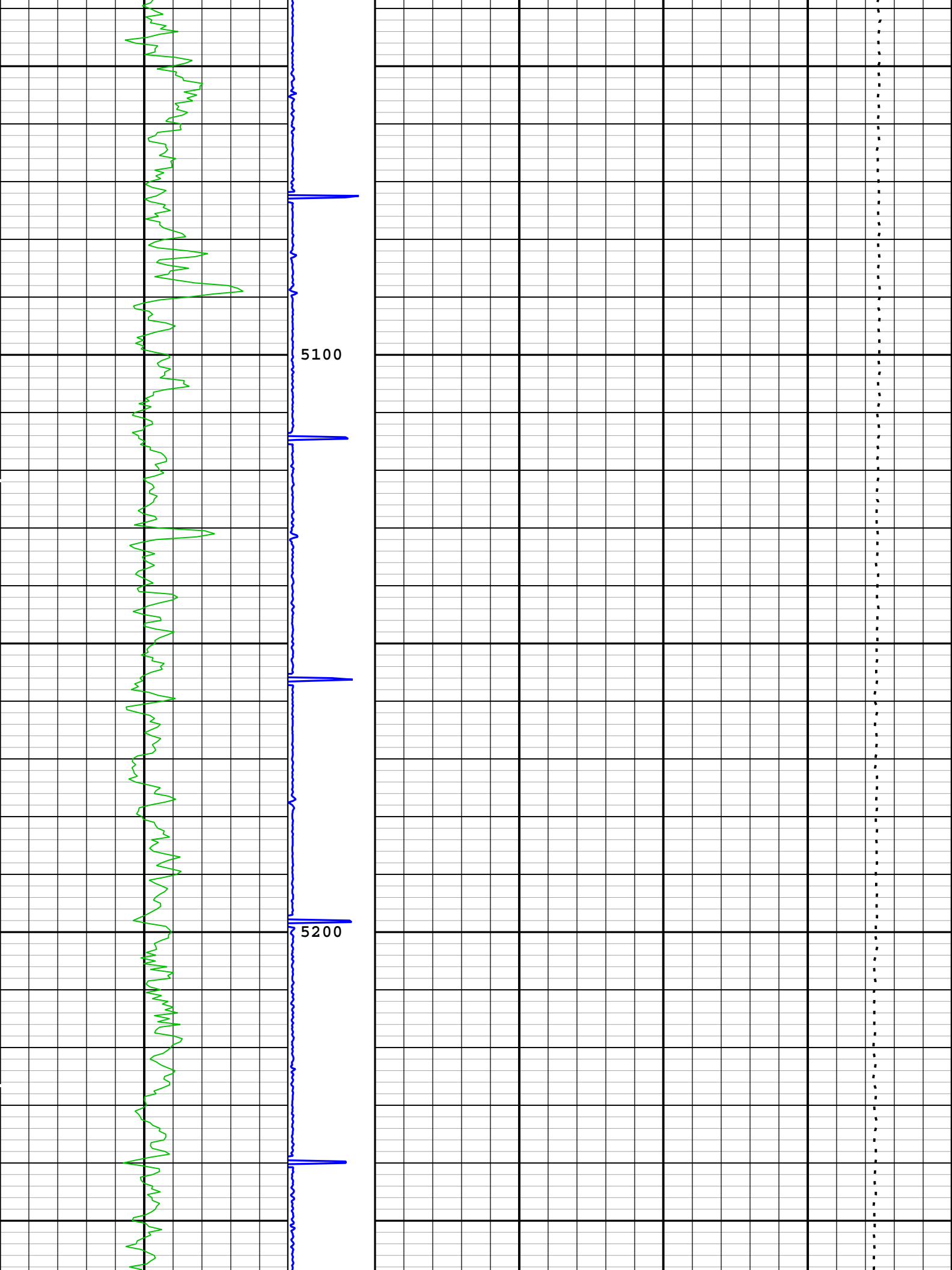


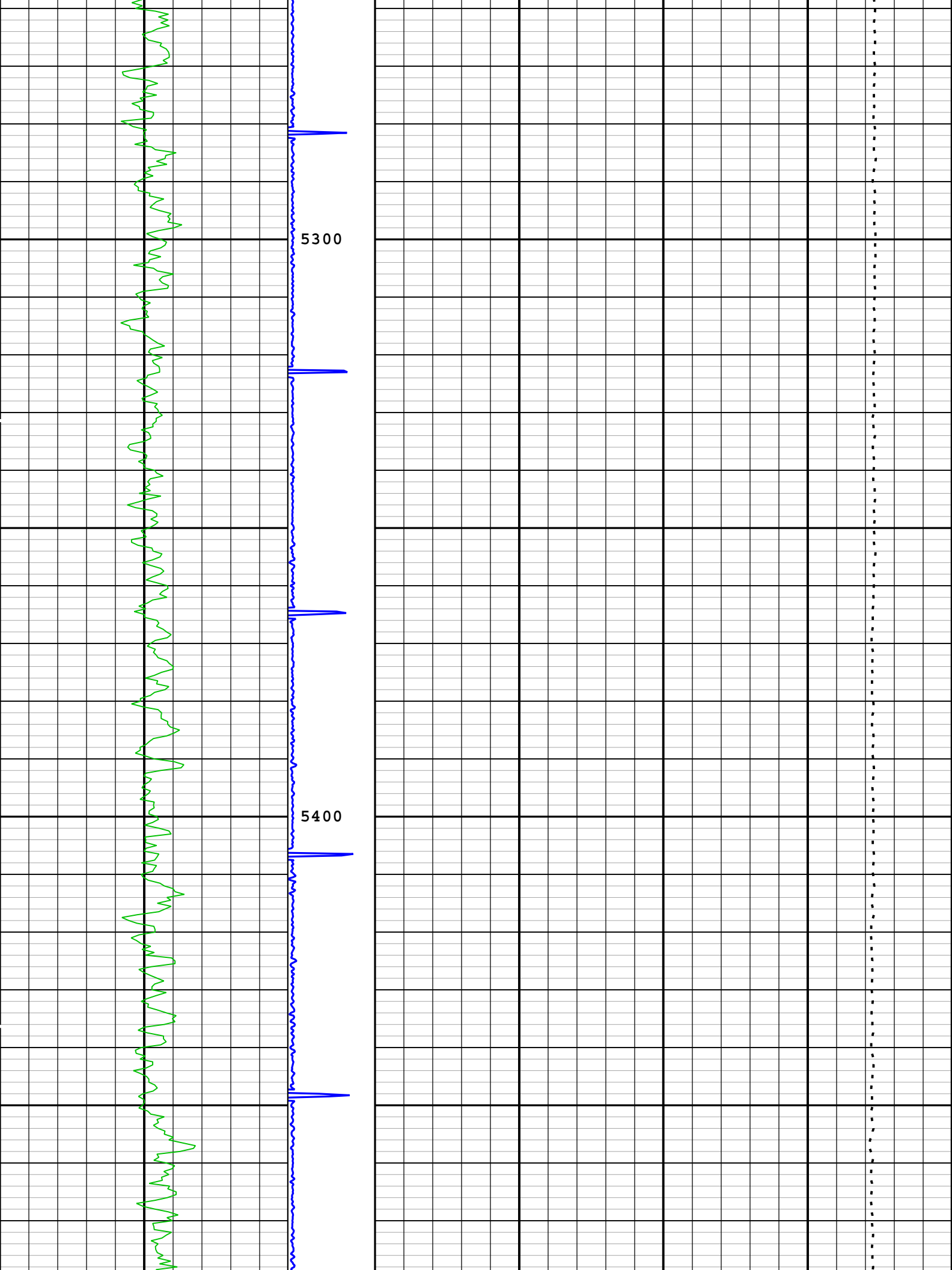


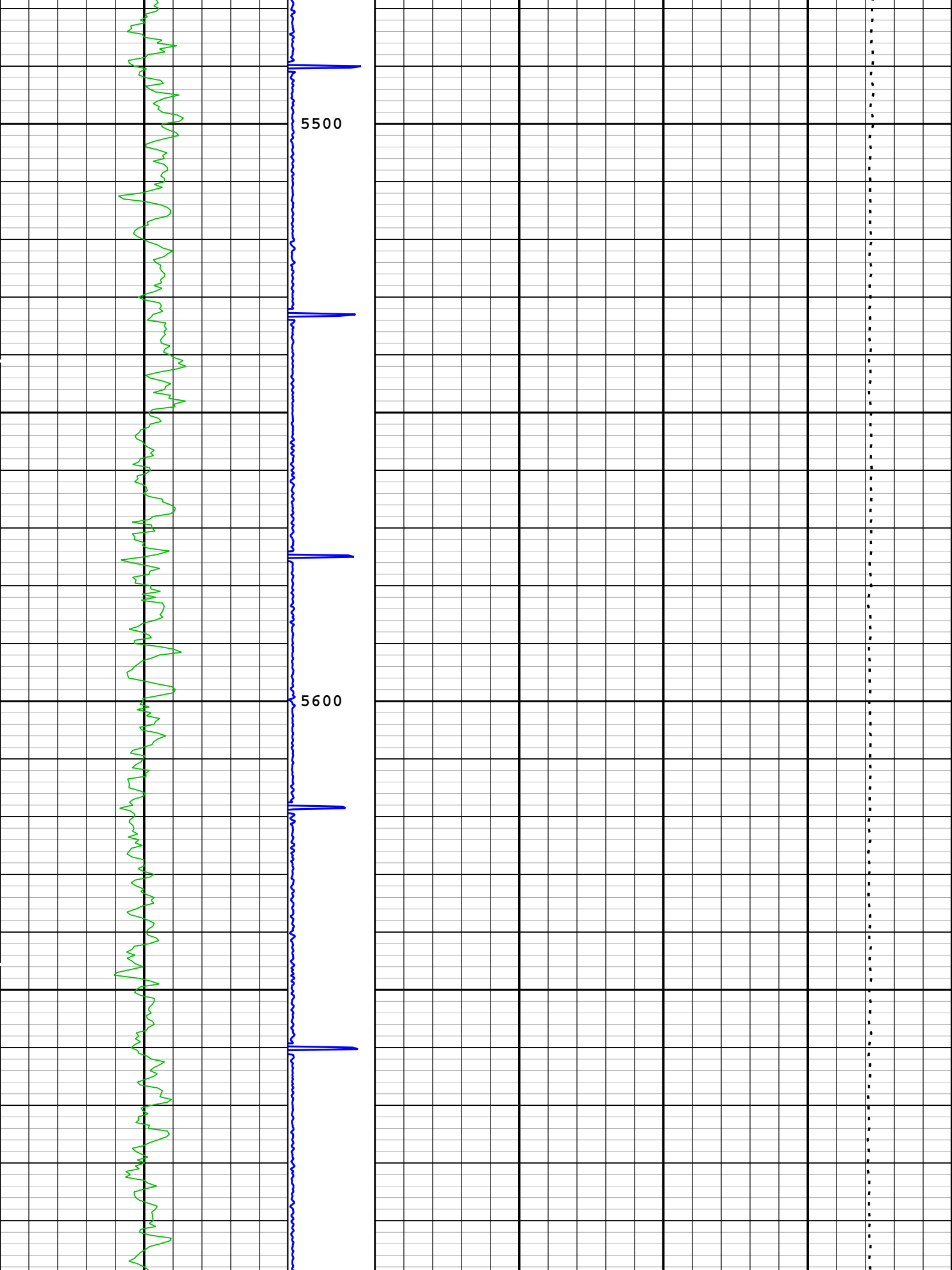


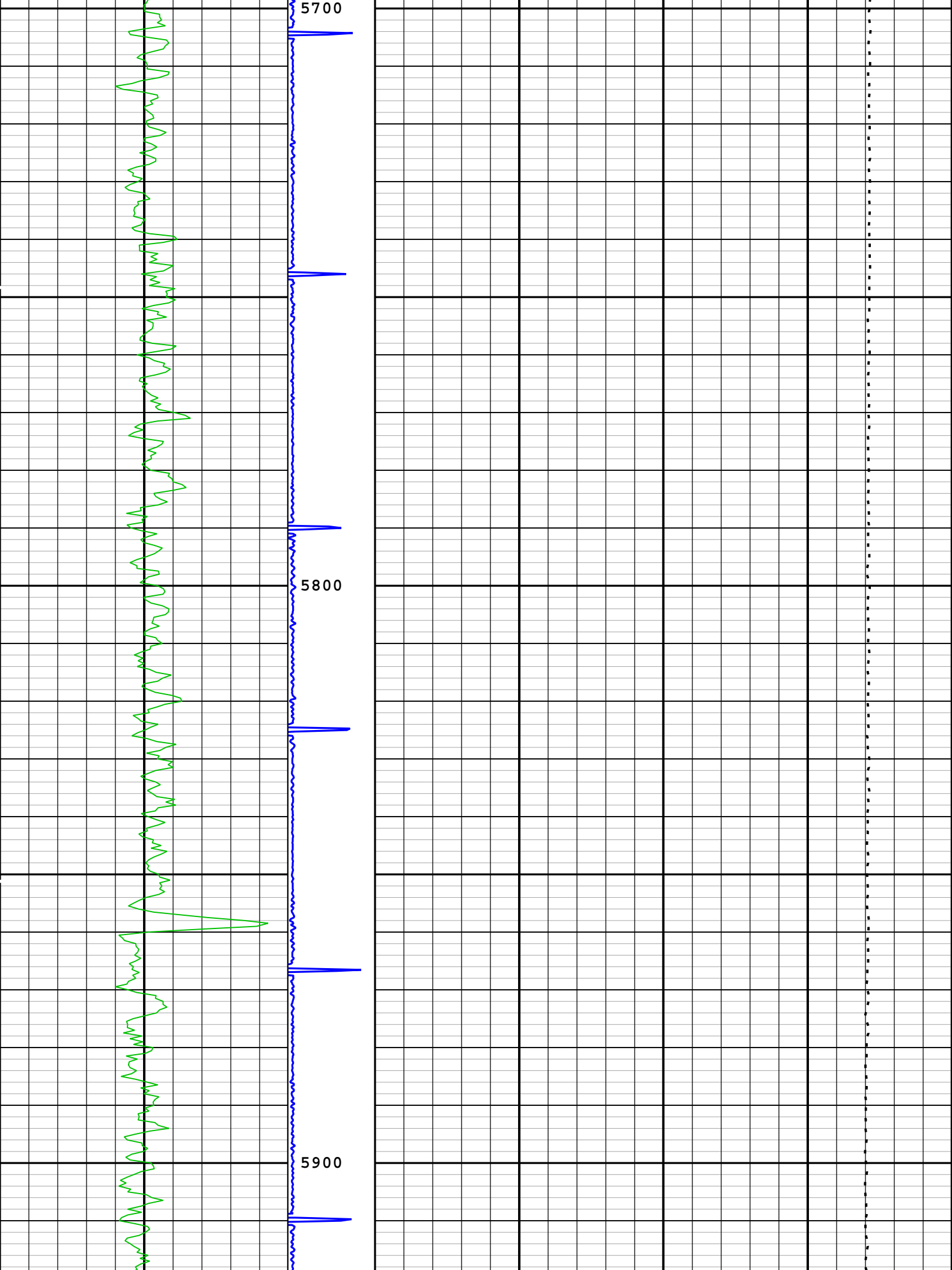


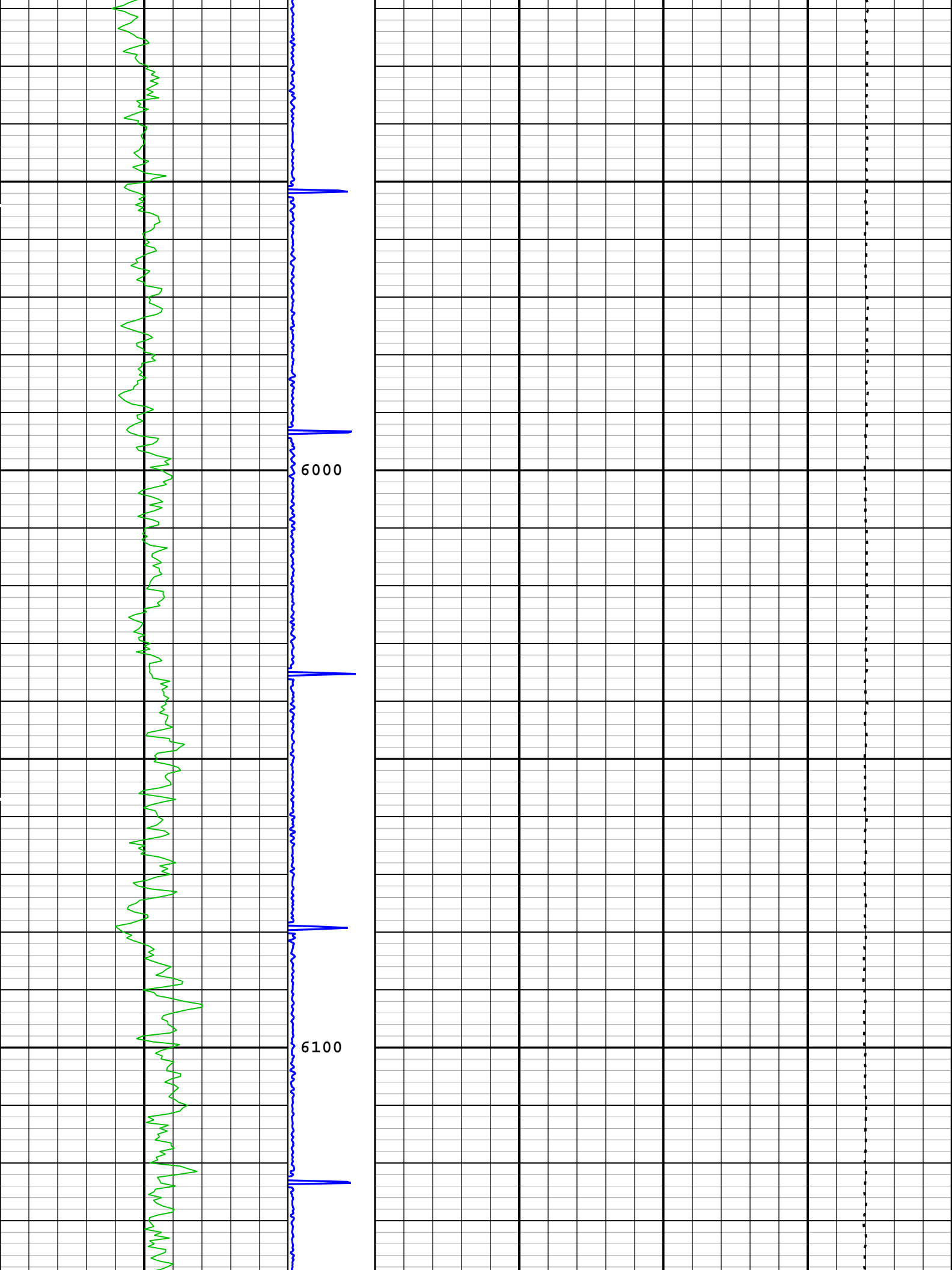


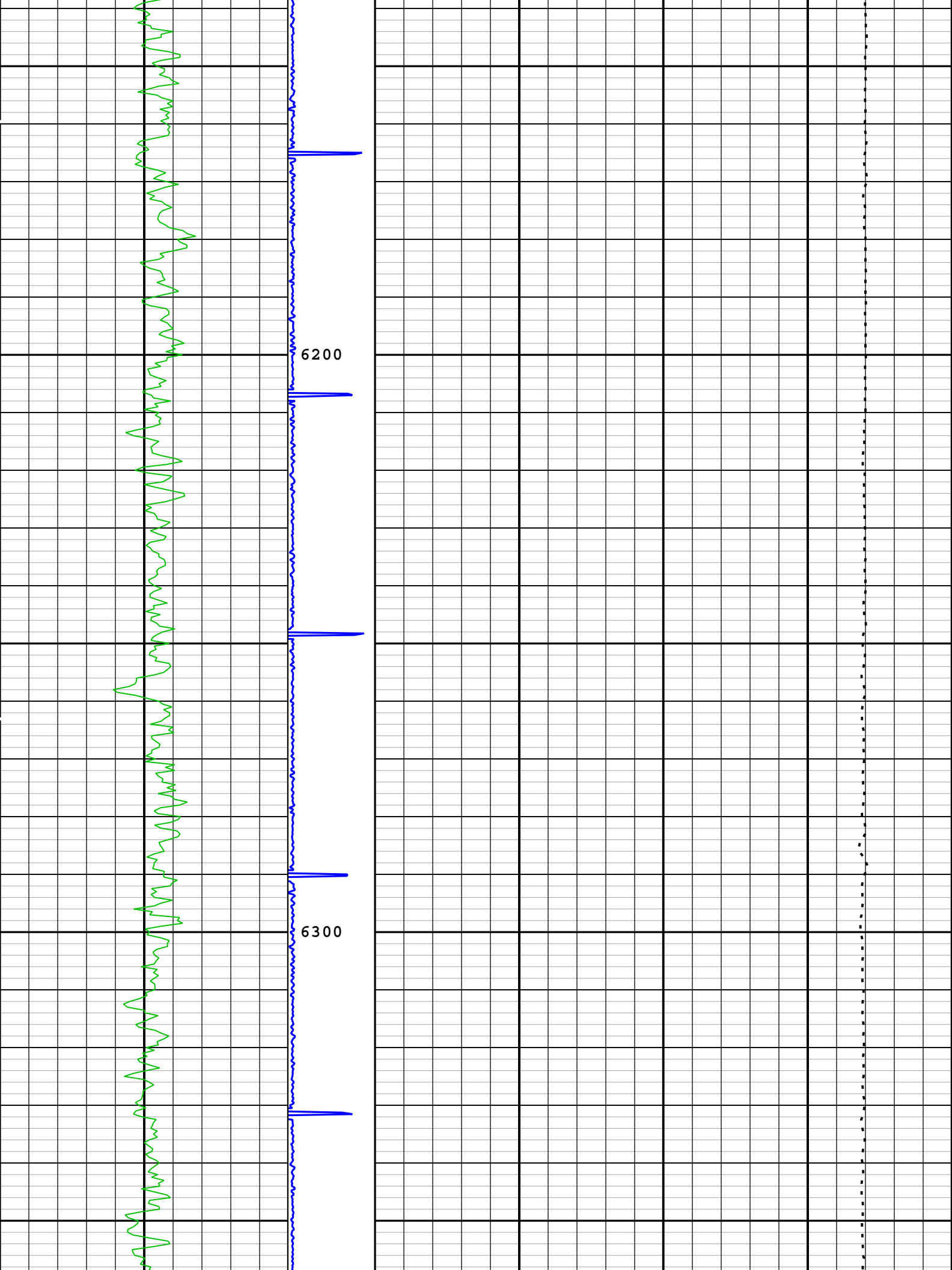


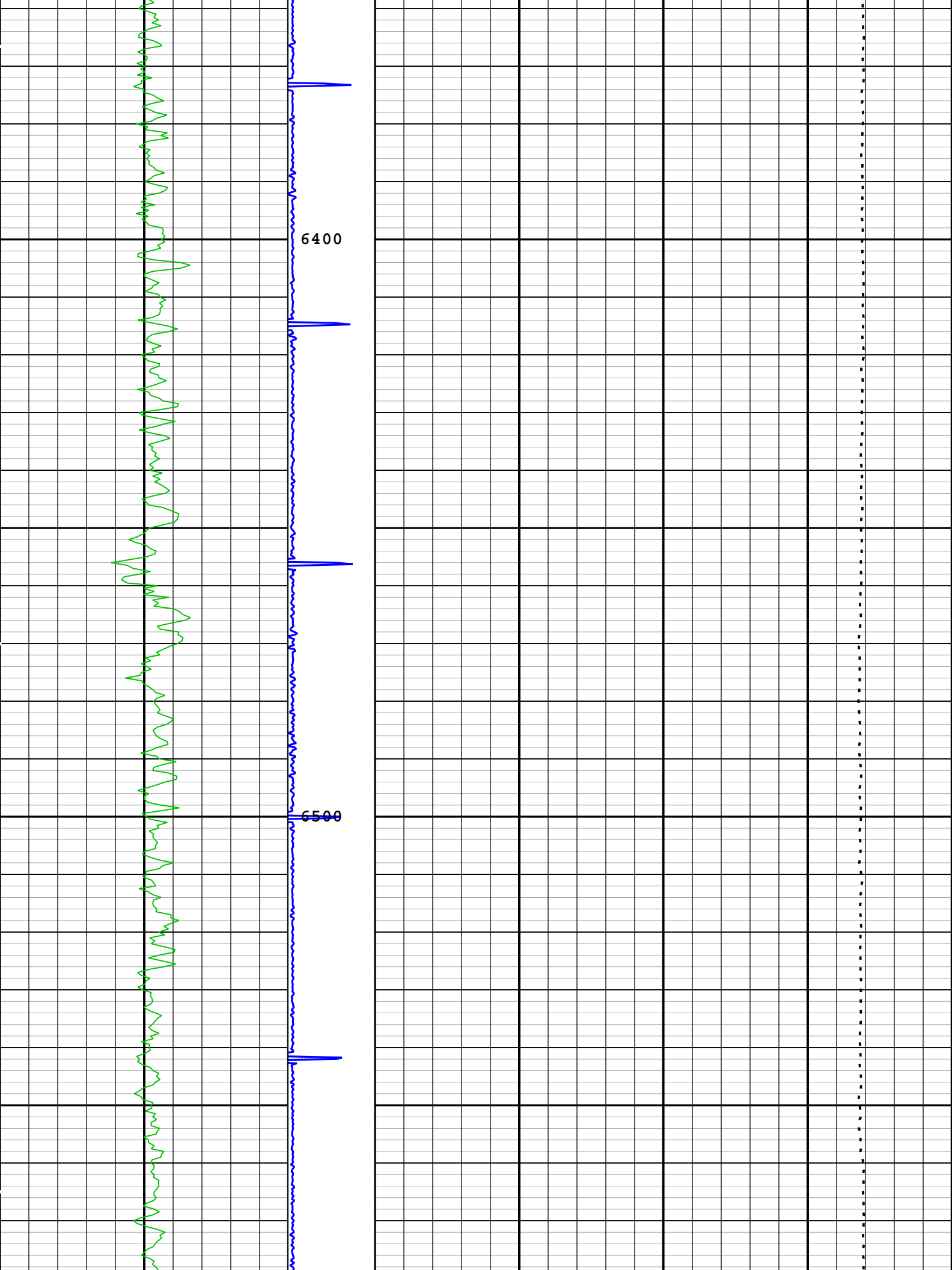


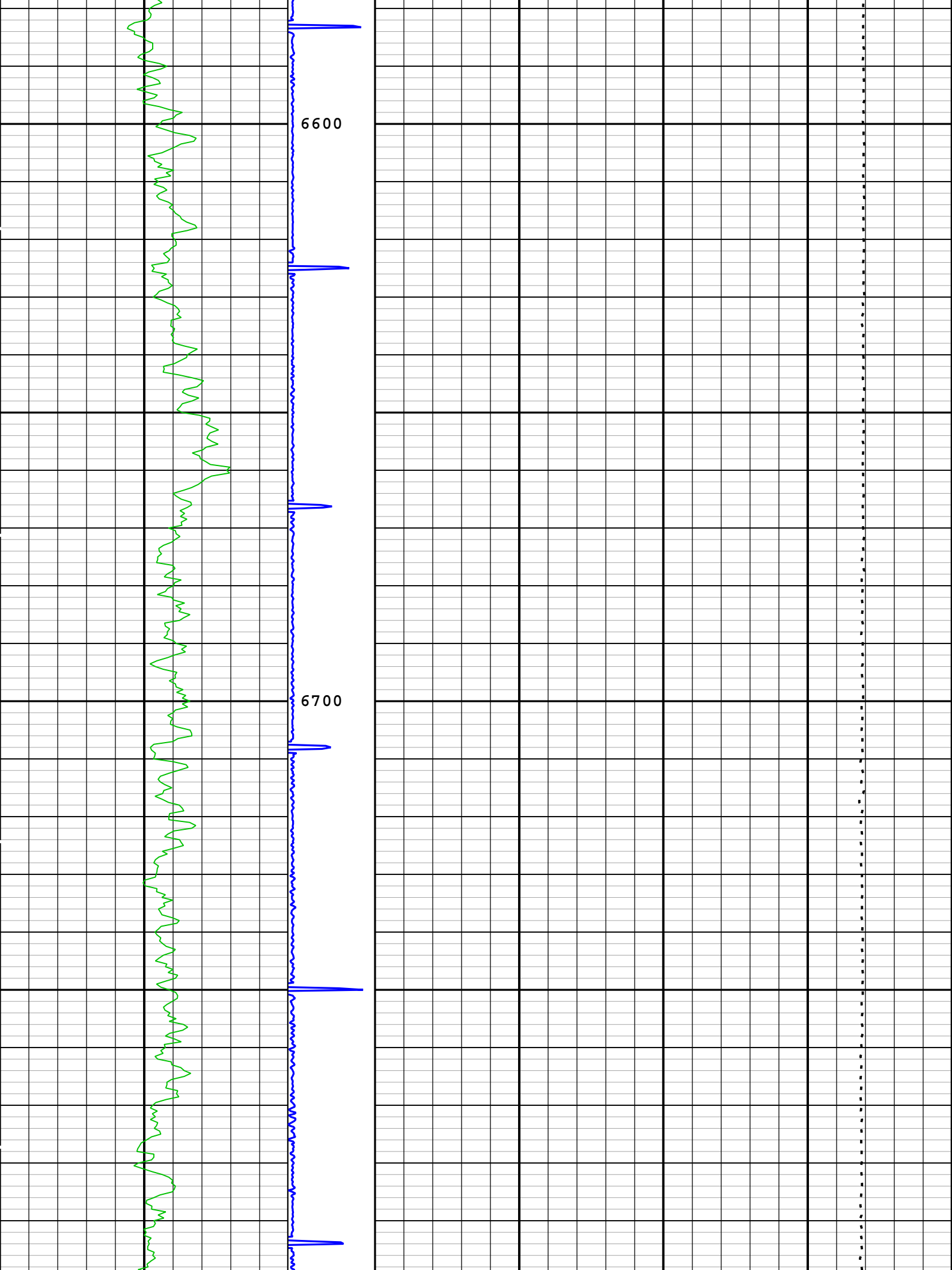


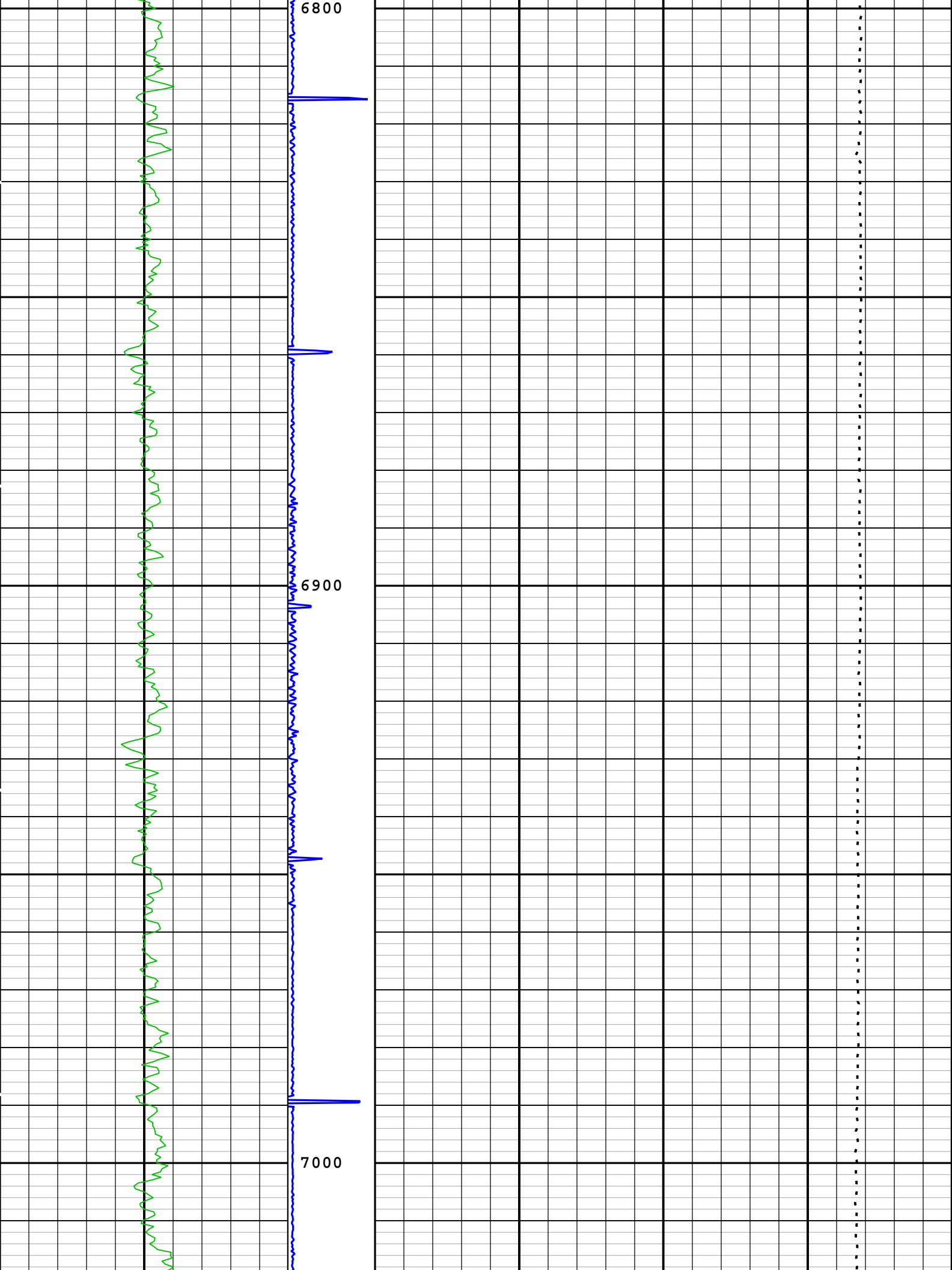


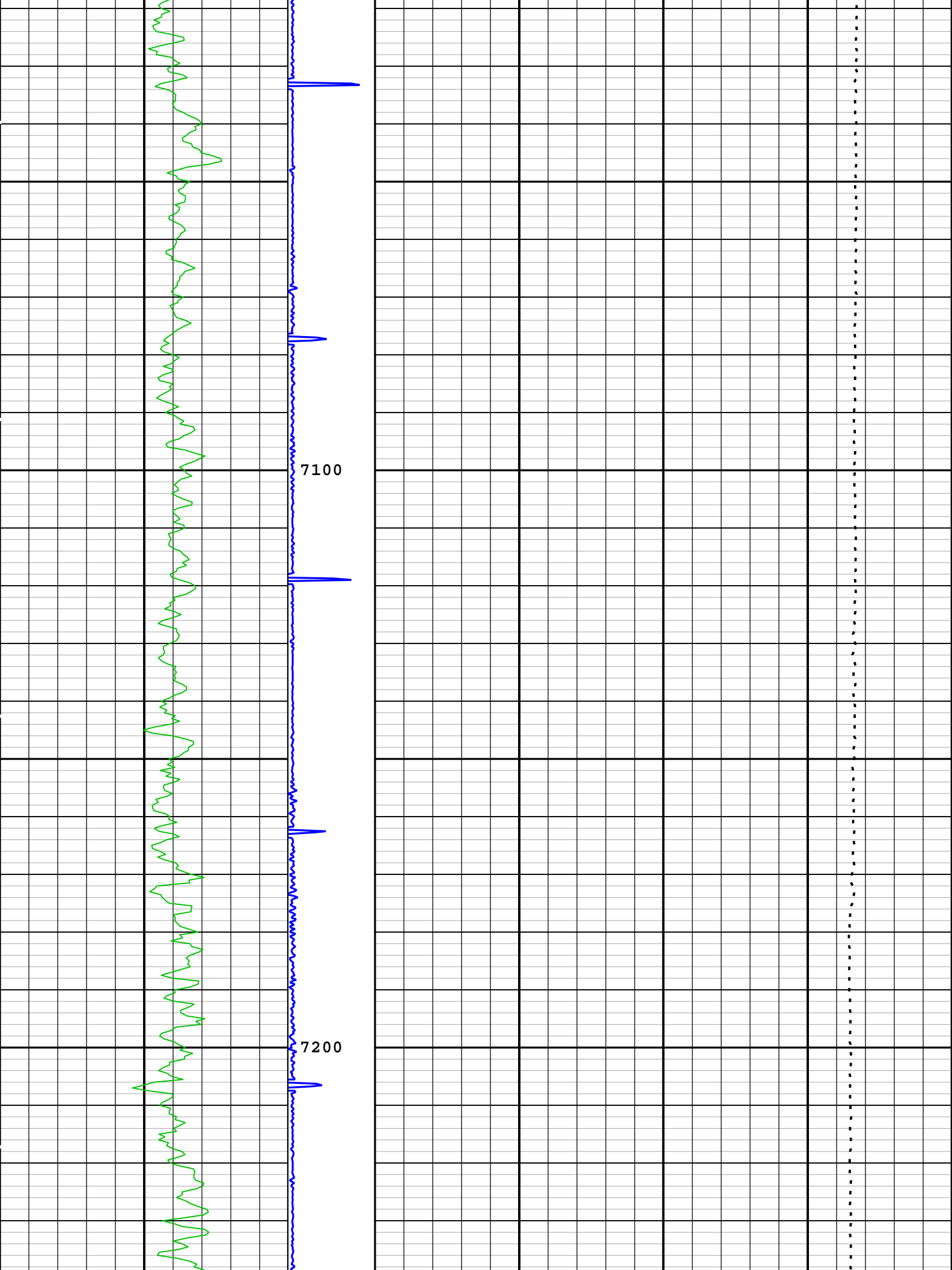


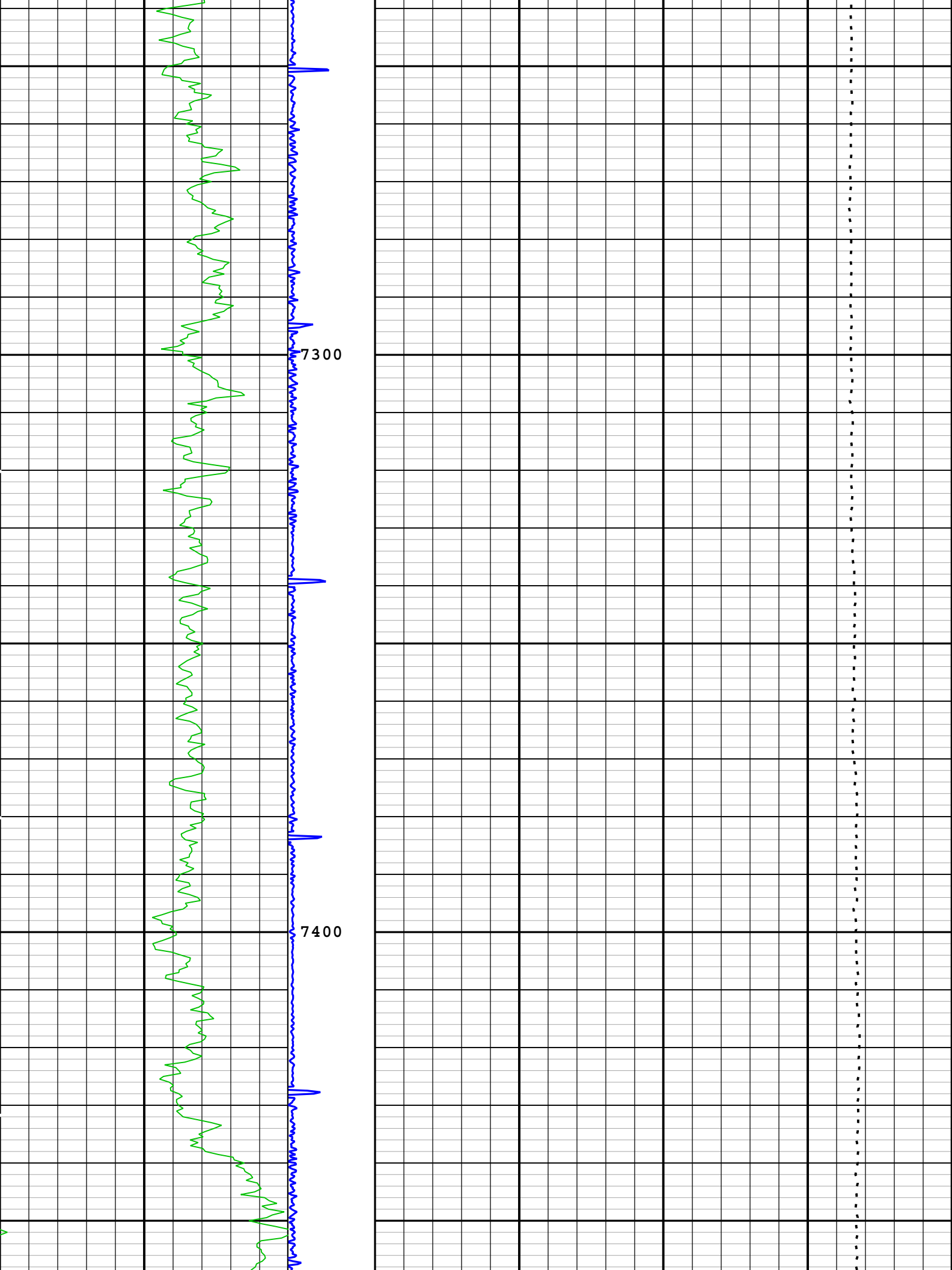


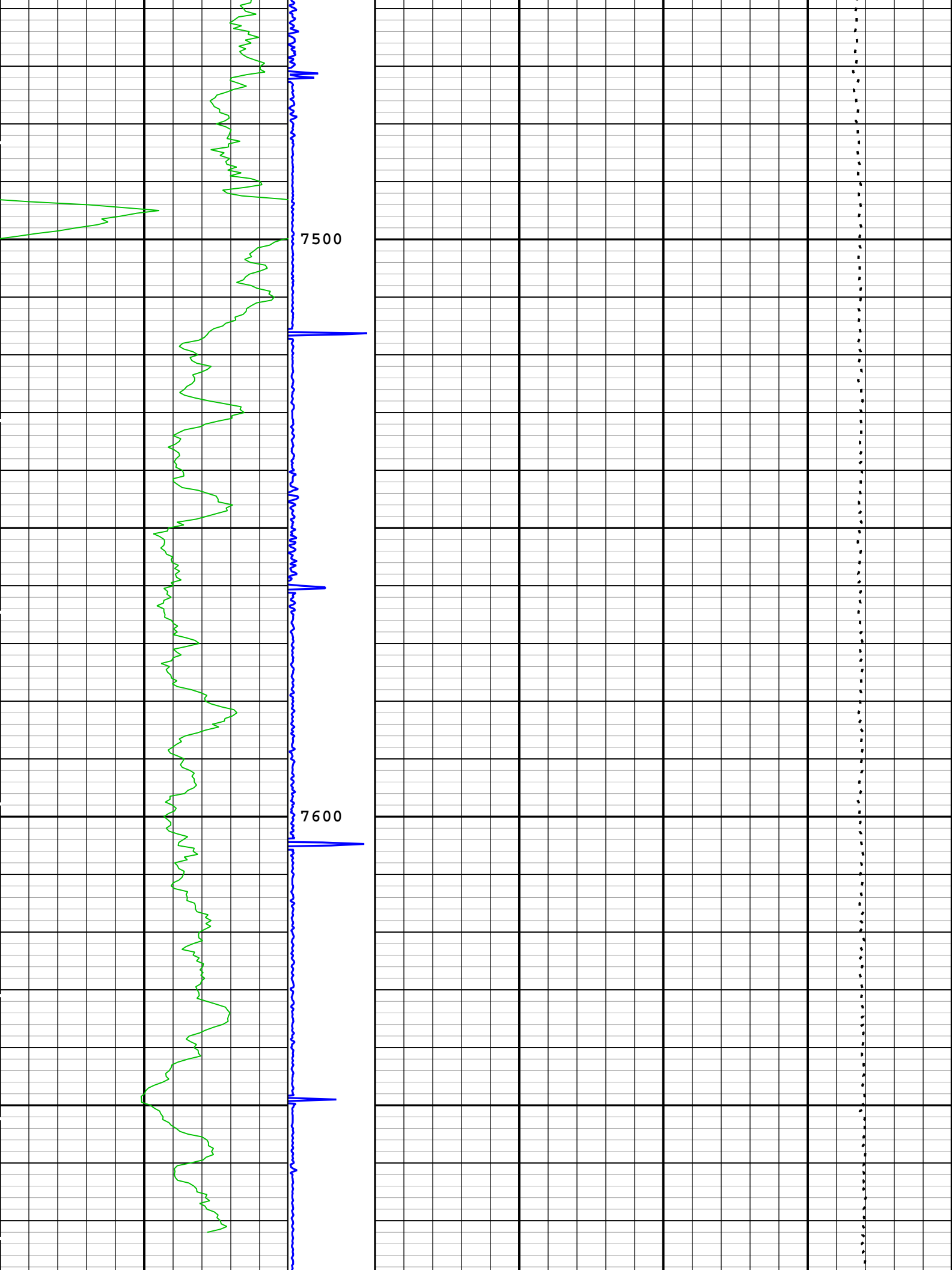


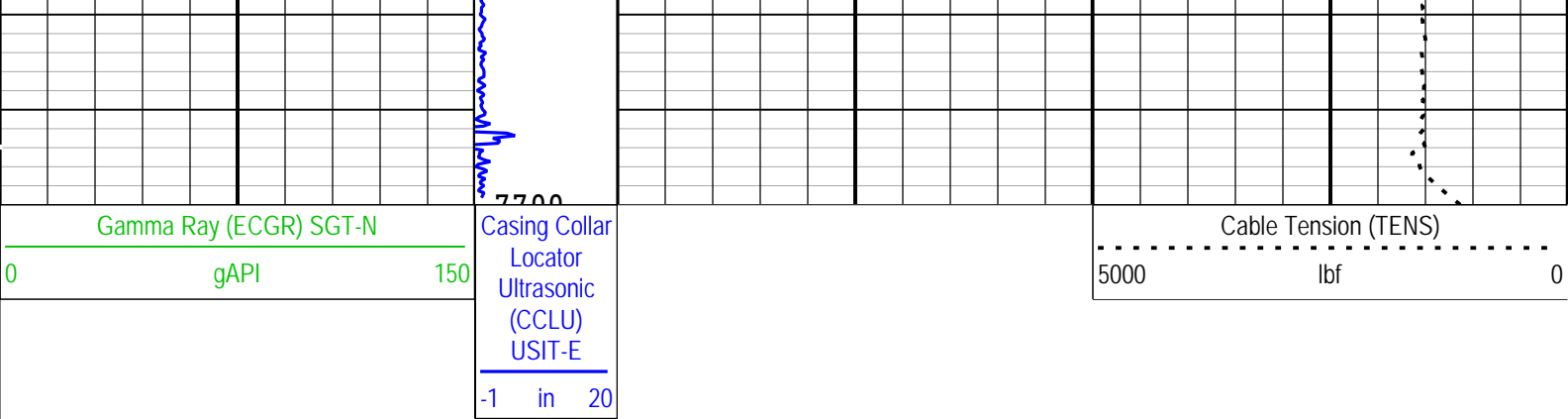












TIME_1900 - Time Marked every 60.00 (s)

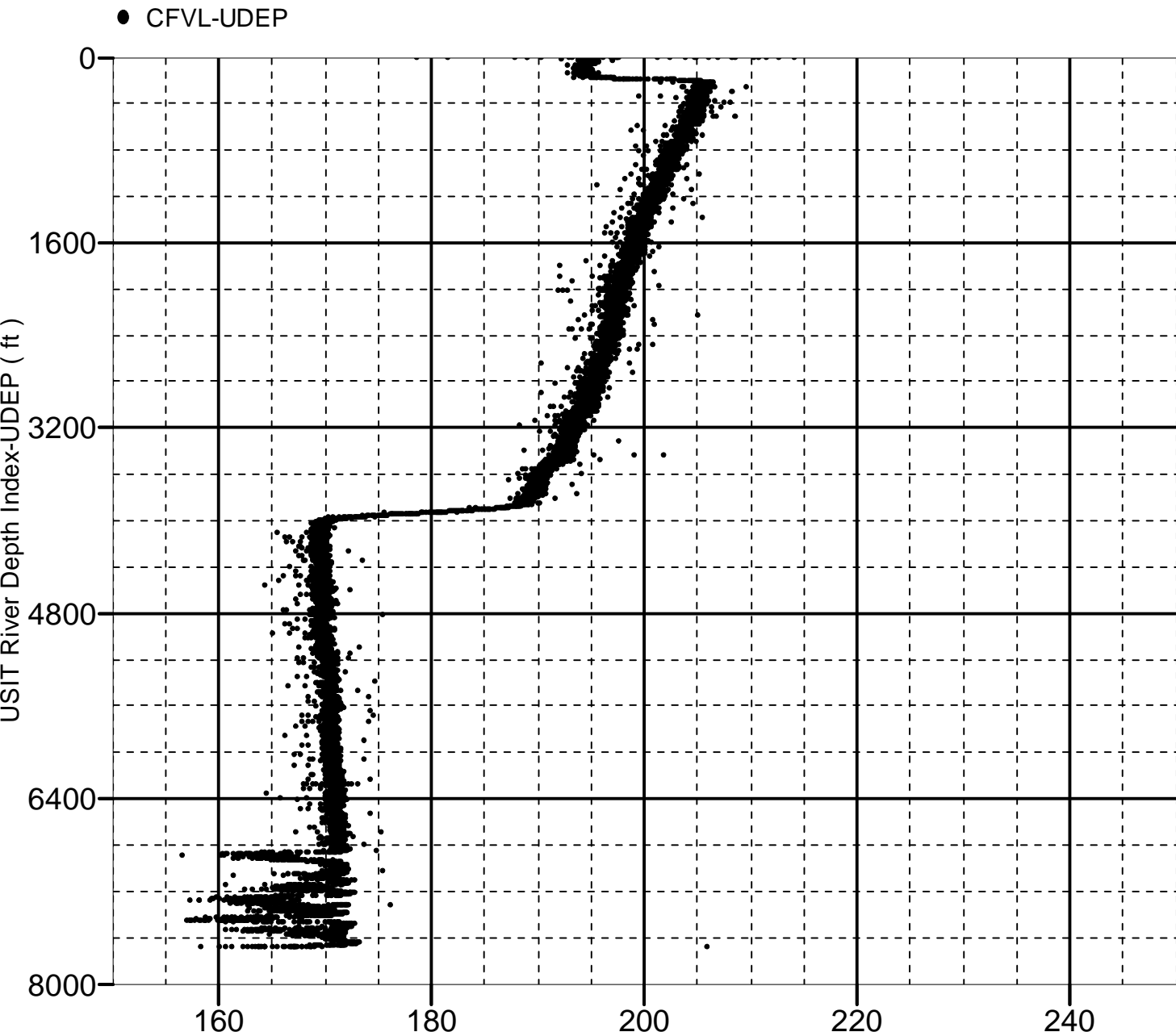
Description: DEPTH Domain Log for EDTCB GR channels Format: Log (Correlation 5 Inch) Index Scale: 5 in per 100 ft Index Unit: ft Index Type: Measured Depth Creation Date: 02-Apr-2015 18:05:06

XYZ Company:Kerr McGee Oil & Gas Onshore LP Well:Griswold 2N-11HZ Run 1: Log[7]:Up:S009

Fluid Acoustic Slowness vs Depth

2D Cross Plot

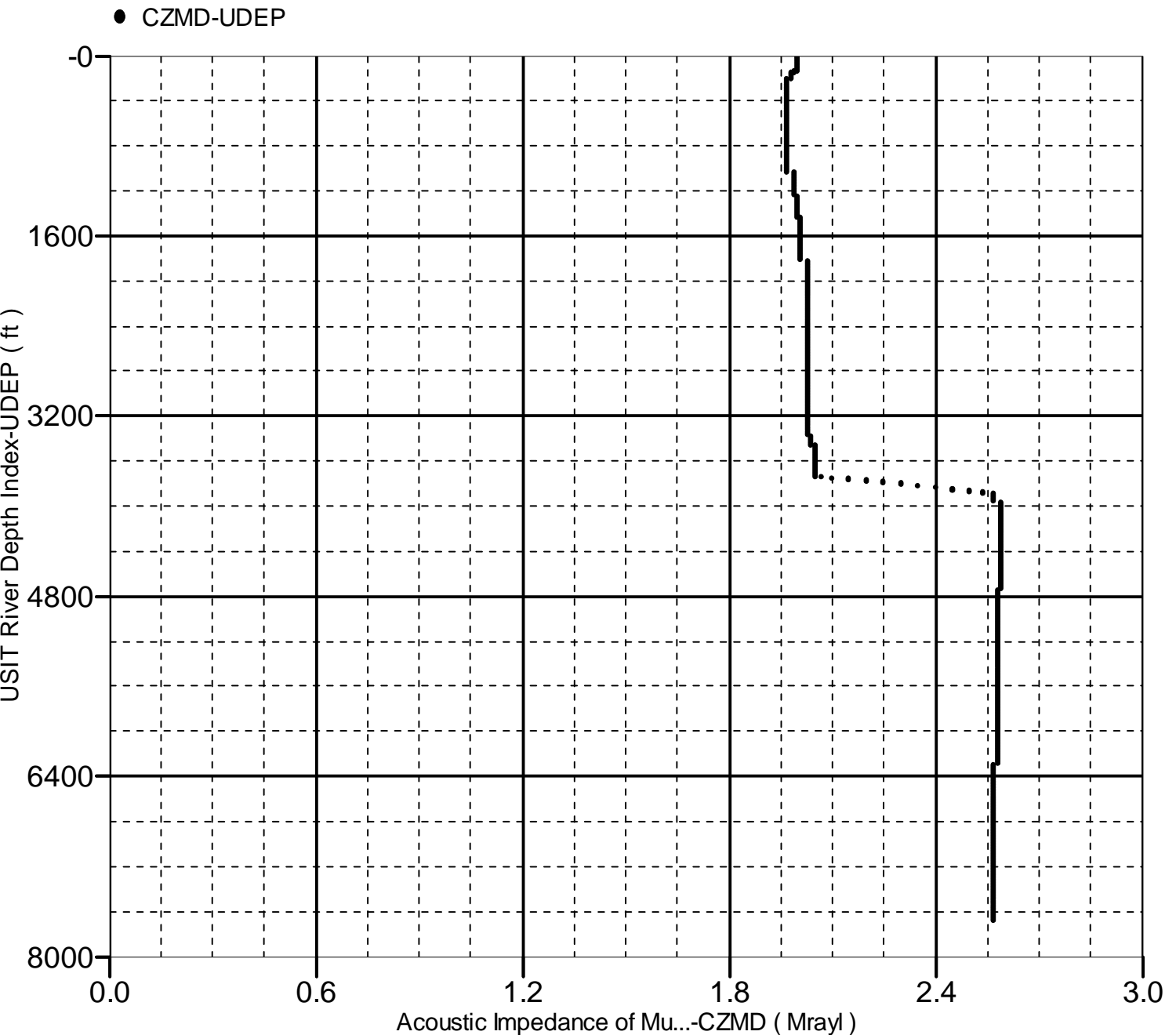
Index Range: From 7699.75 to 9.25 ft



Acoustic Impedance of Mud vs Depth

2D Cross Plot

Index Range: From 7699.75 to 9.25 ft



Company:	Kerr McGee Oil & Gas Onshore LP	Schlumberger
Well:	Griswold 2N-11HZ	
Field:	Wattenberg	
County:	Weld	
State:	Colorado	
Ultrasonic Imager		
CO State		
Gamma Ray - CCL Log		