

Company: ANADARKO

Well: TROUDT 34C-33HZ

Field: WATTENBERG

County: WELD

State: COLORADO

SLIM CEMENT MAPPING LOG
CBL – VDL
GR – CCL

County: WELD
Field: WATTENBERG
Location: 304'/FSL, 1650/FWL
Well: TROUDT 34C-33HZ
Company: ANADARKO

LOCATION

304'/FSL, 1650/FWL
SESW SEC 33 T2N R67W
Elev.: K.B. 5063.00 ft
G.L. 5038.00 ft
D.F. 5061.00 ft
Permanent Datum: GROUND LEVEL
Log Measured From: KELLY BUSHING
Drilling Measured From: KELLY BUSHING
Elev.: 25.00 ft above Perm. Datum

API Serial No.
0512339284

Section
33

Township
2N

Range
67W

Logging Date

10-Jul-2015

Run Number

1

Depth Driller

12835 ft

Schlumberger Depth

7500 ft

Bottom Log Interval

7500 ft

Top Log Interval

25 ft

Casing Fluid Type

Salinity

Density

Fluid Level

BIT/CASING/TUBING STRING

Bit Size

From

To

Casing/Tubing Size

Weight

Grade

From

To

Maximum Recorded Temperatures

Logger On Bottom

Unit Number

Recorded By

Witnessed By

PVT DATA

Oil Density
Water Salinity
Gas Gravity
Bo

Bw

1/Bg

Bubble Point Pressure

Bubble Point Temperature

Solution GOR

Maximum Deviation

CEMENTING DATA

Primary/Squeeze

Casing String No

Lead Cement Type

Volume

Density

Water Loss

Additives

Tail Cement Type

Volume

Density

Water Loss

Additives

Expected Cement Top

Logging Date

Run Number

Depth Driller

Schlumberger Depth

Bottom Log Interval

Top Log Interval

Casing Fluid Type

Salinity

Density

Fluid Level

BIT/CASING/TUBING STRING

Bit Size

From

To

Casing/Tubing Size

Weight

Grade

From

To

Maximum Recorded Temperatures

Logger On Bottom

Unit Number

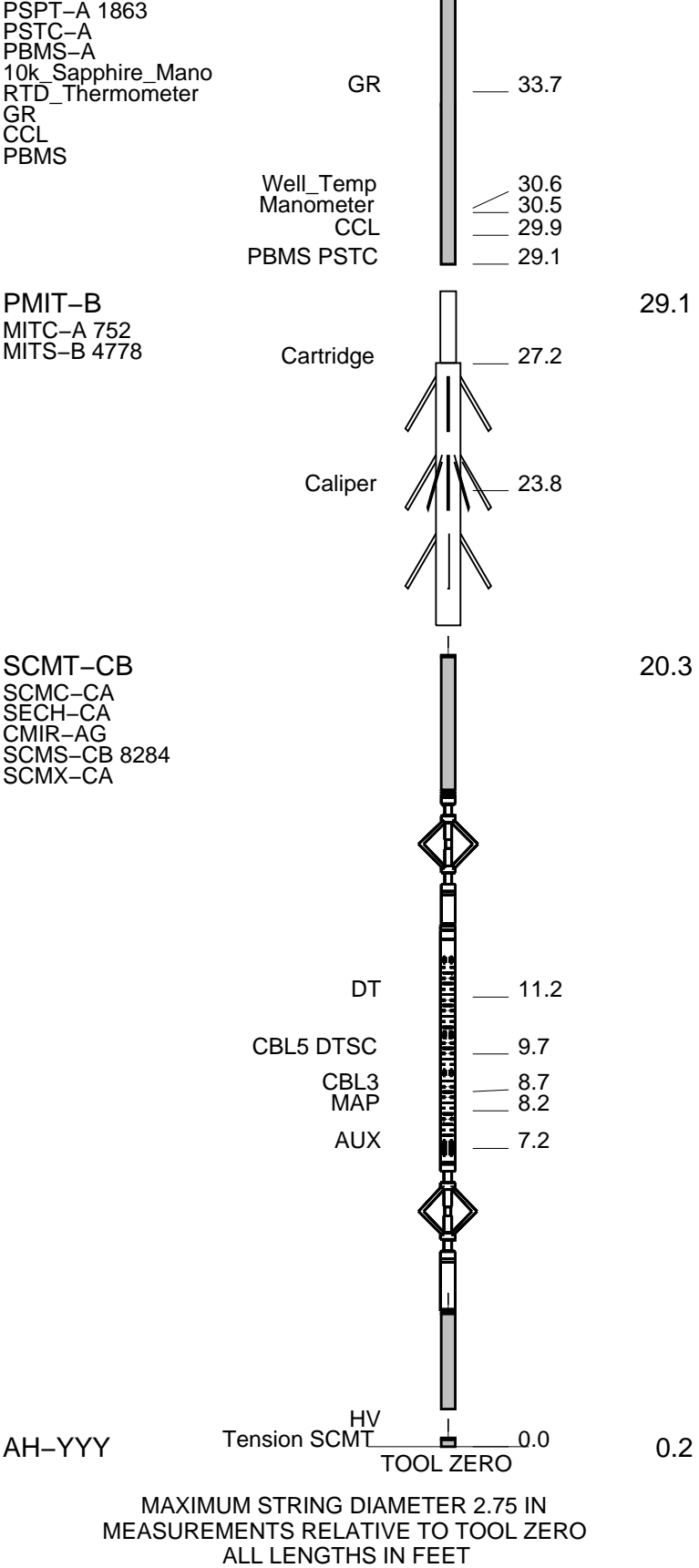
Recorded By

Witnessed By

Run 1

Run 2

Run



Schlumberger

MAIN PASS (2800PSI) CBL-VDL

MAXIS Field Log

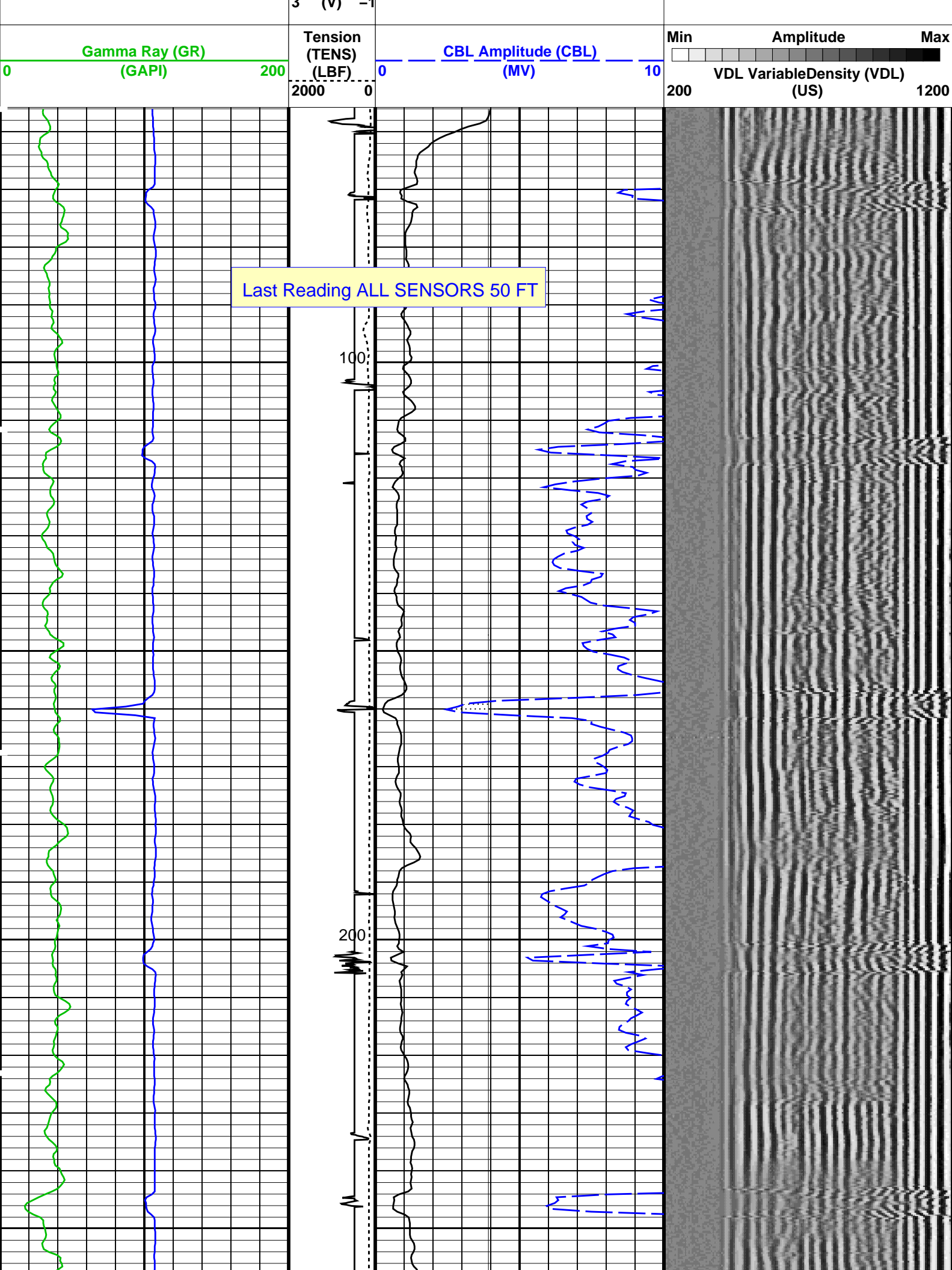
Company: ANADARKO Well: TROUDT 34C-33HZ

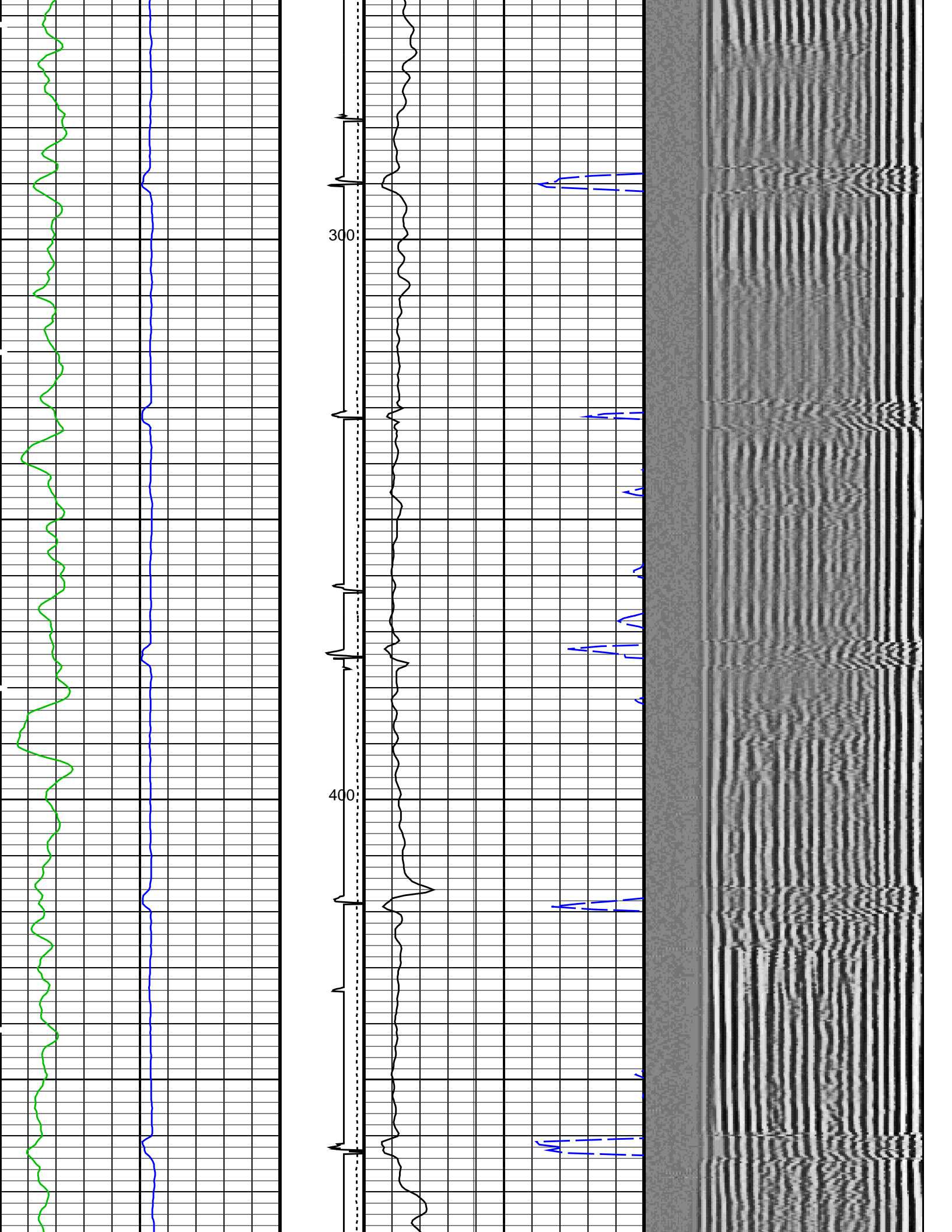
Input DLIS Files						
DEFAULT	SCMT_MIT_PSP_012LUP	FN:11	PRODUCER	10-Jul-2015 15:05	7502.5 FT	20.5 FT
Output DLIS Files						
DEFAULT	SCMT_MIT_PSP_018PUP	FN:17	PRODUCER	10-Jul-2015 18:16		

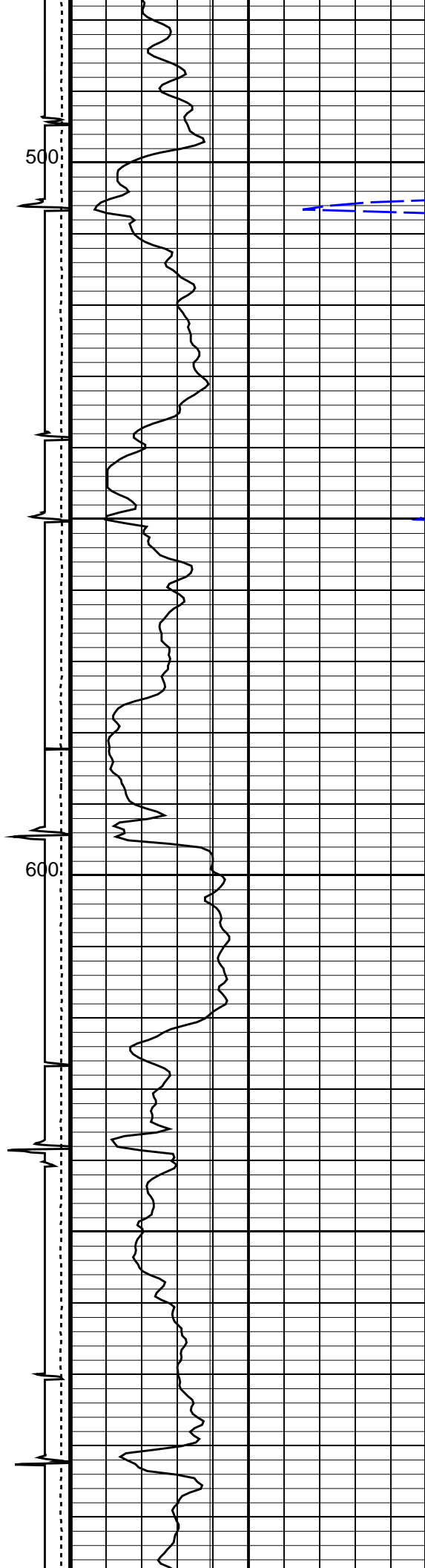
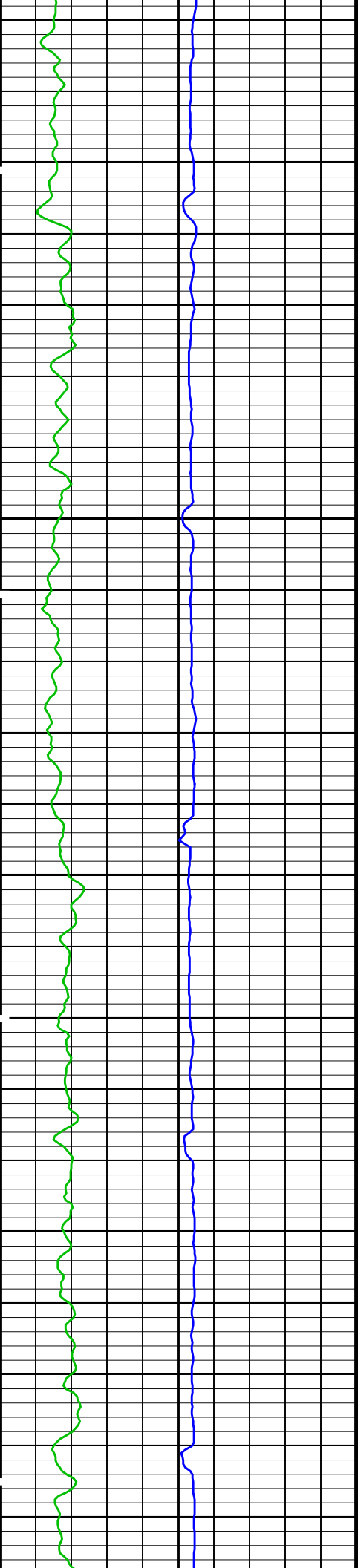
OP System Version: 19C0-187			
SCMT-CB	19C0-187	PMIT-B	19C0-187
PSPT	19C0-187		

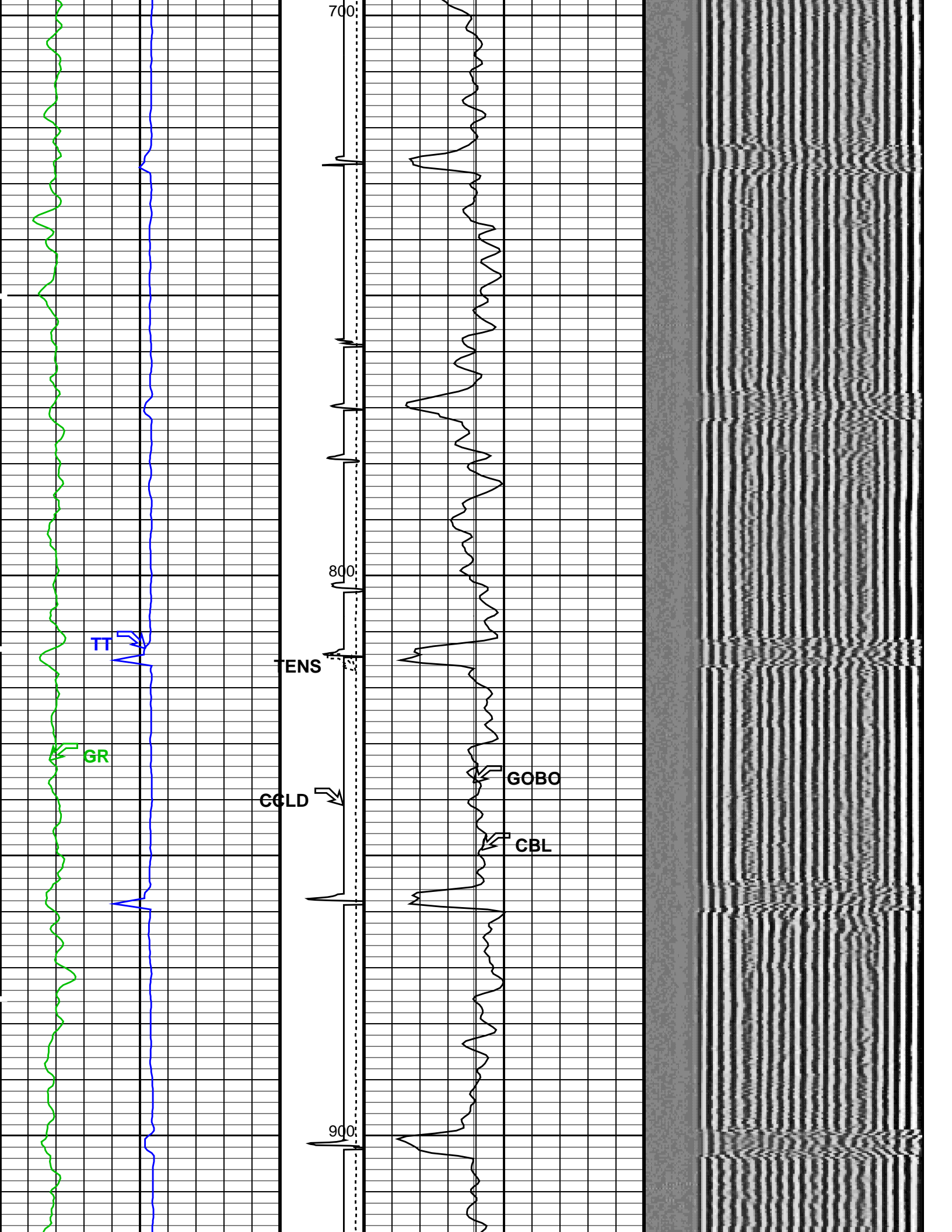
PIP SUMMARY			
<input checked="" type="checkbox"/> Time Mark Every 60 S			

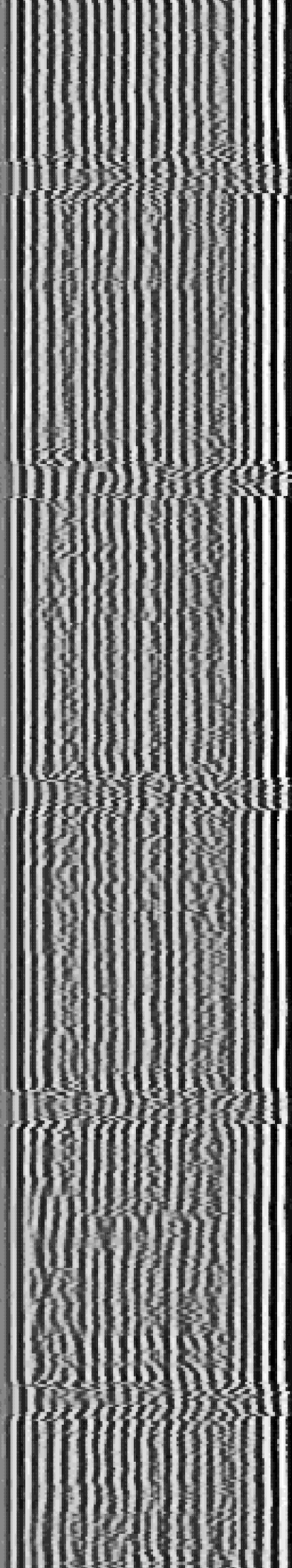
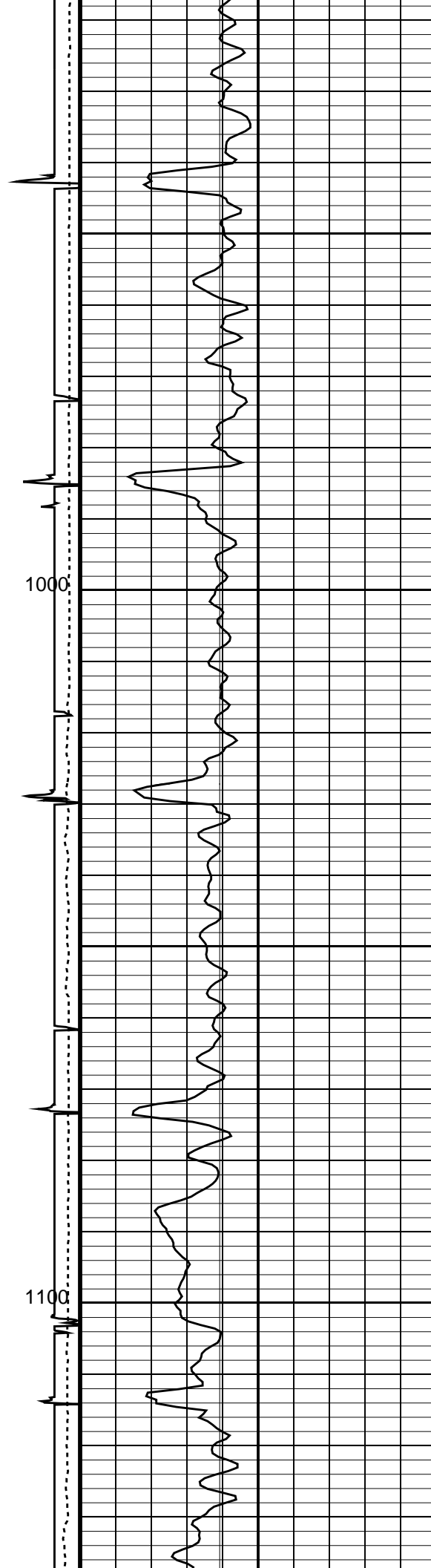
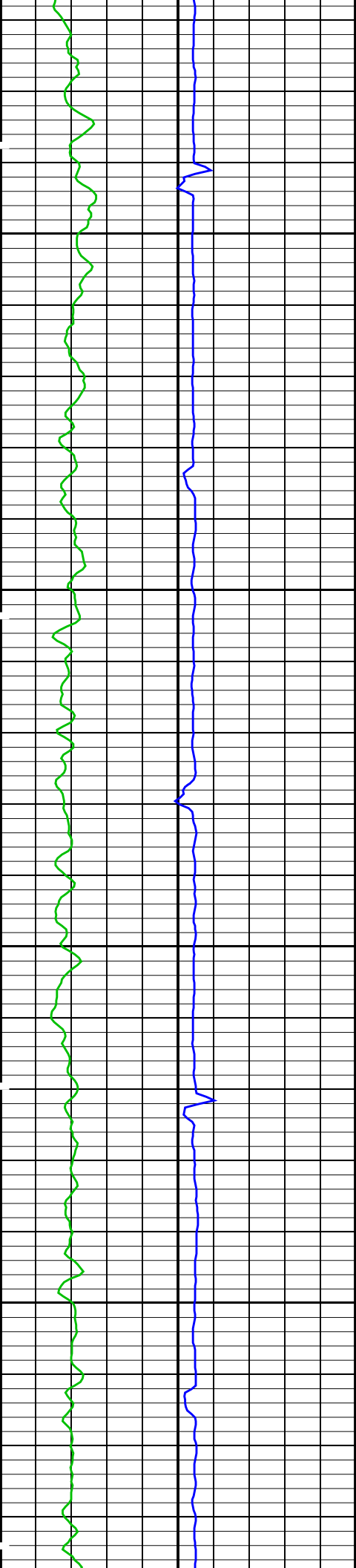
		GoodBond From ACBL to GOBO	
		Good Bond (GOBO)	
		0	10
Transit Time (TT)		CBL Amplitude (CBL)	
400	(US)	200	100
Discriminat		CBL Amplitude (CBL)	
ed CCL		0	100
(CCLD)			
2			
(MV)			
4			

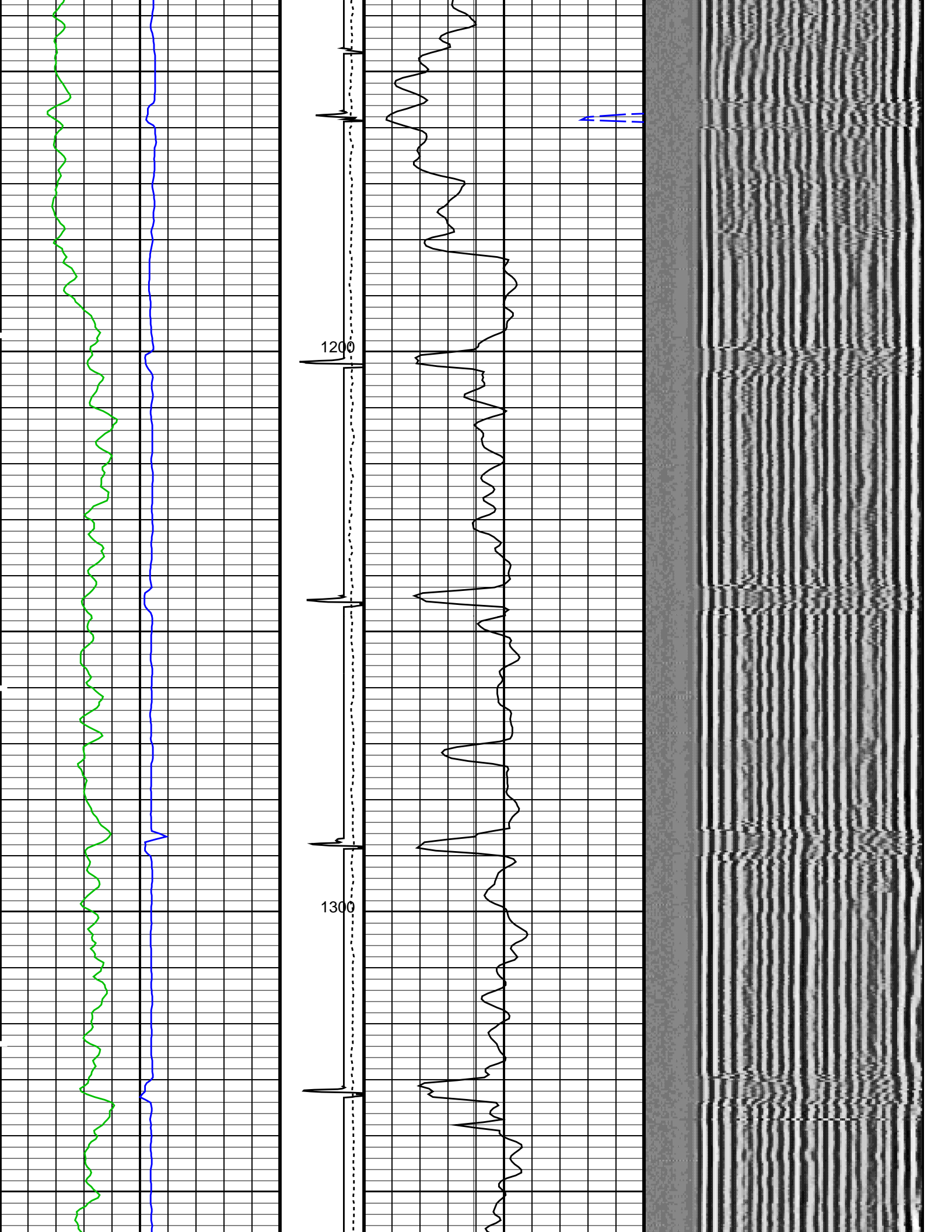


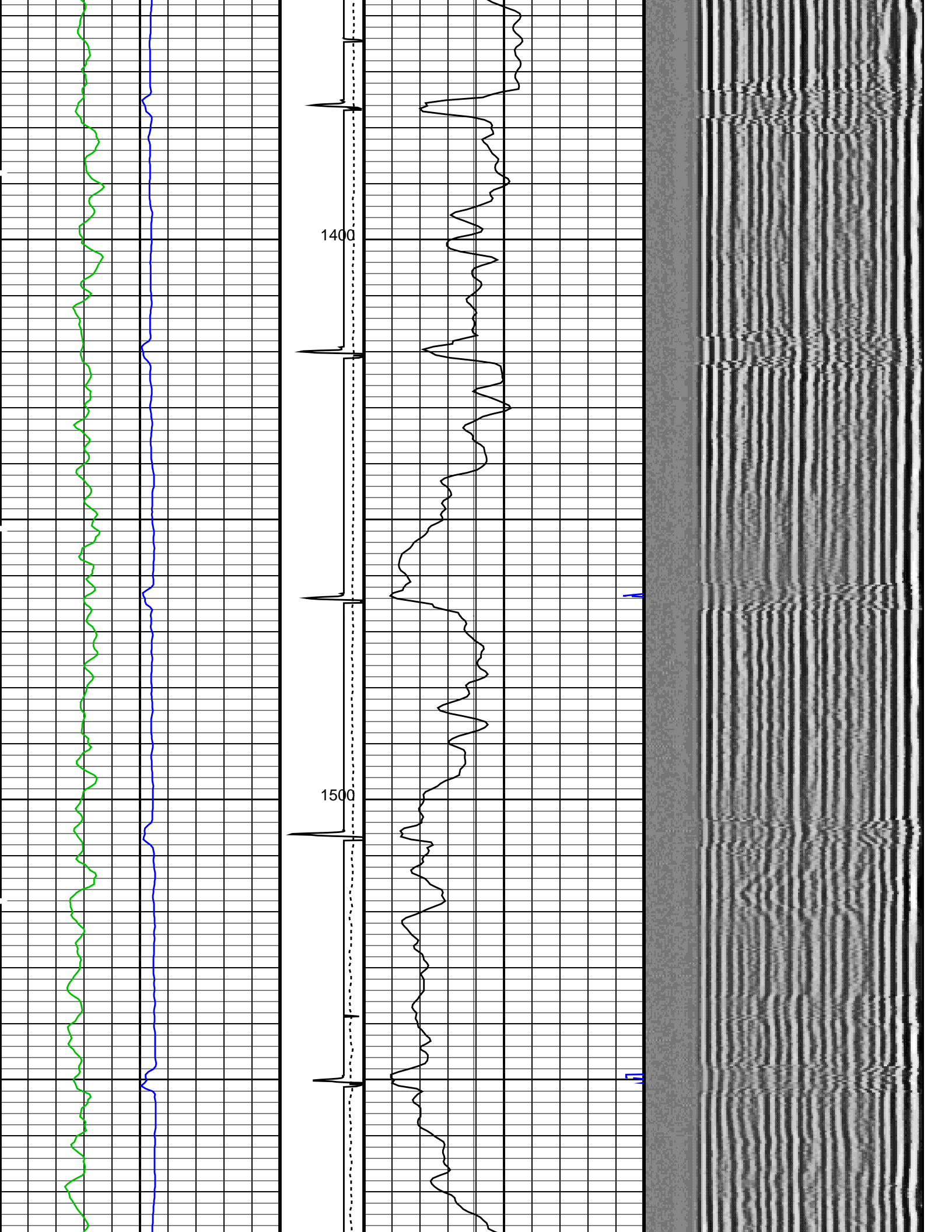


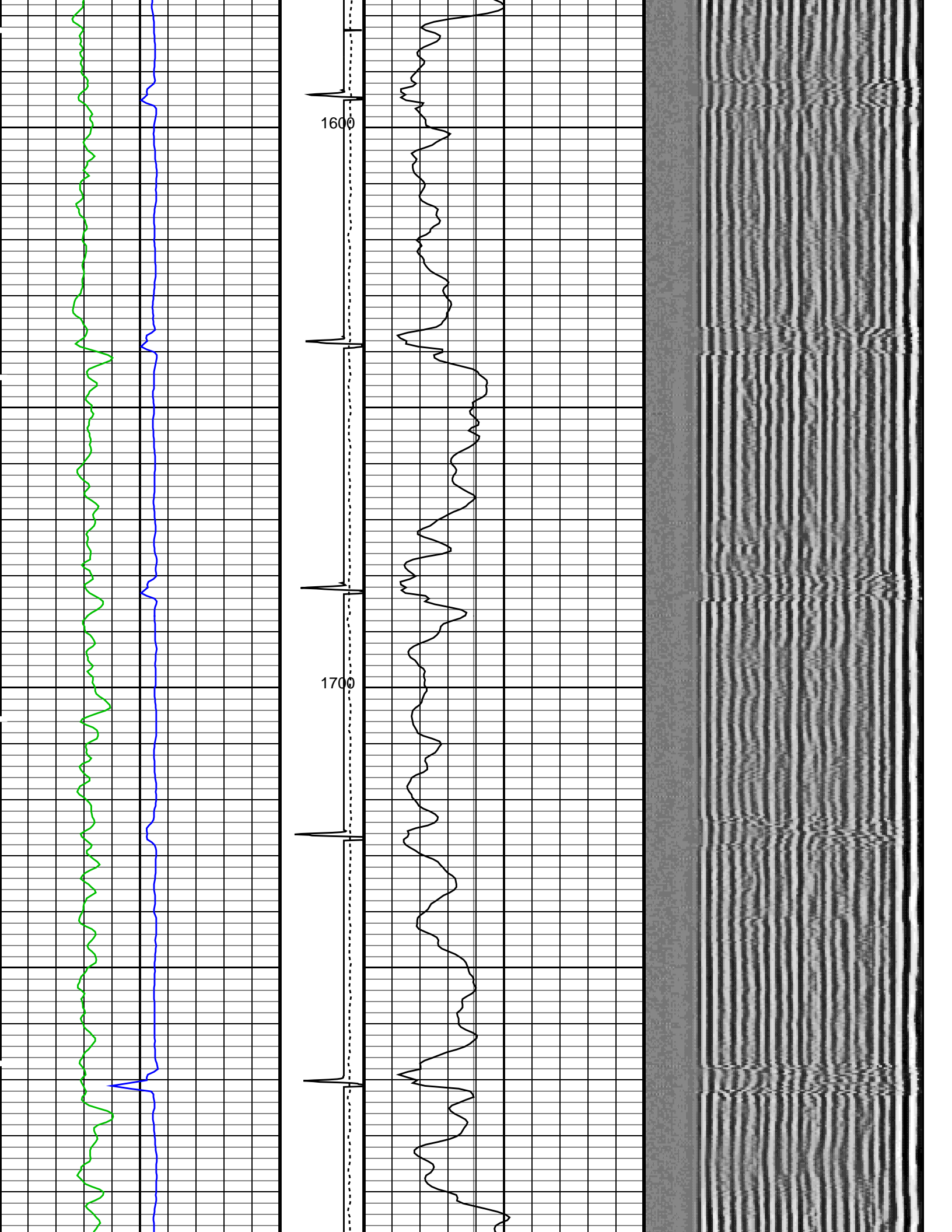


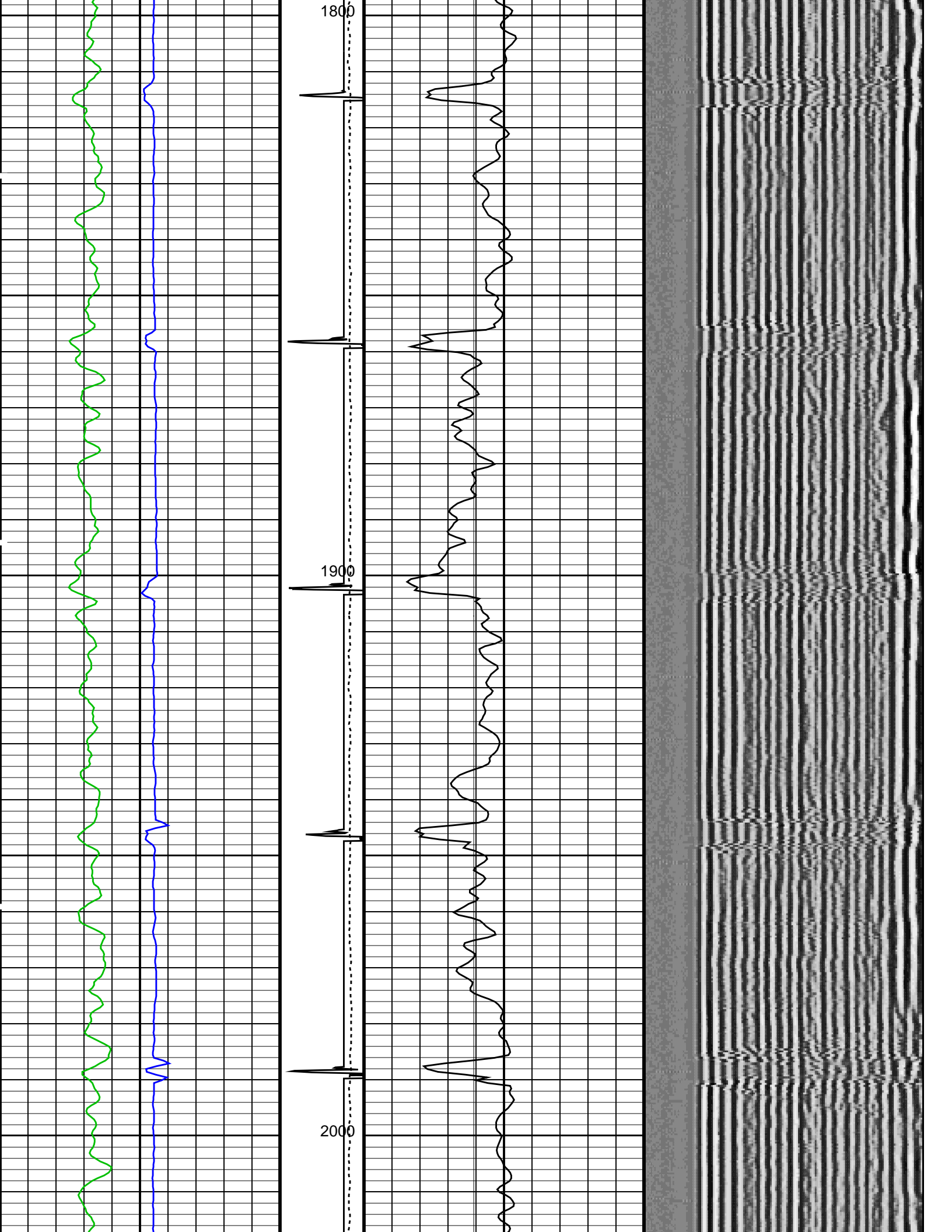


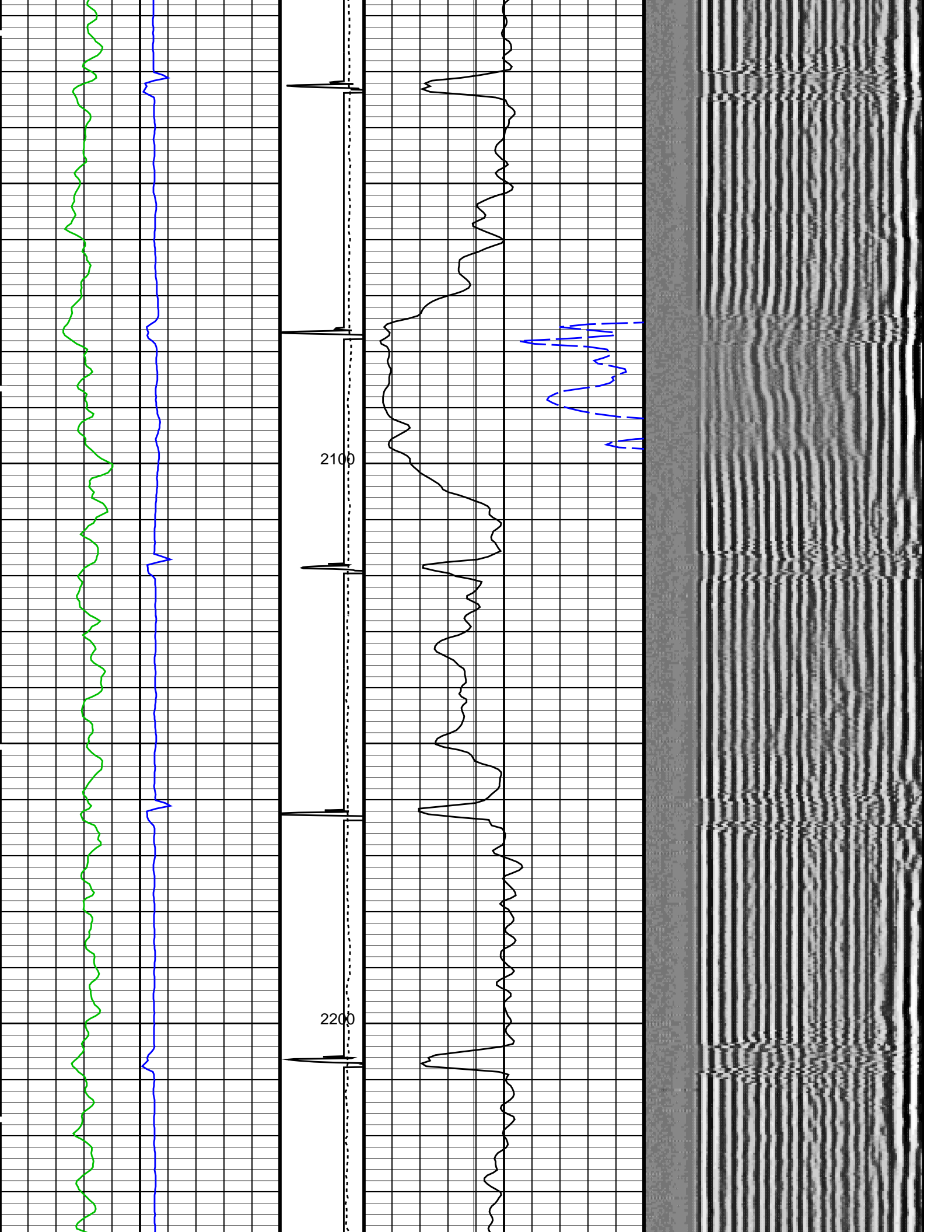


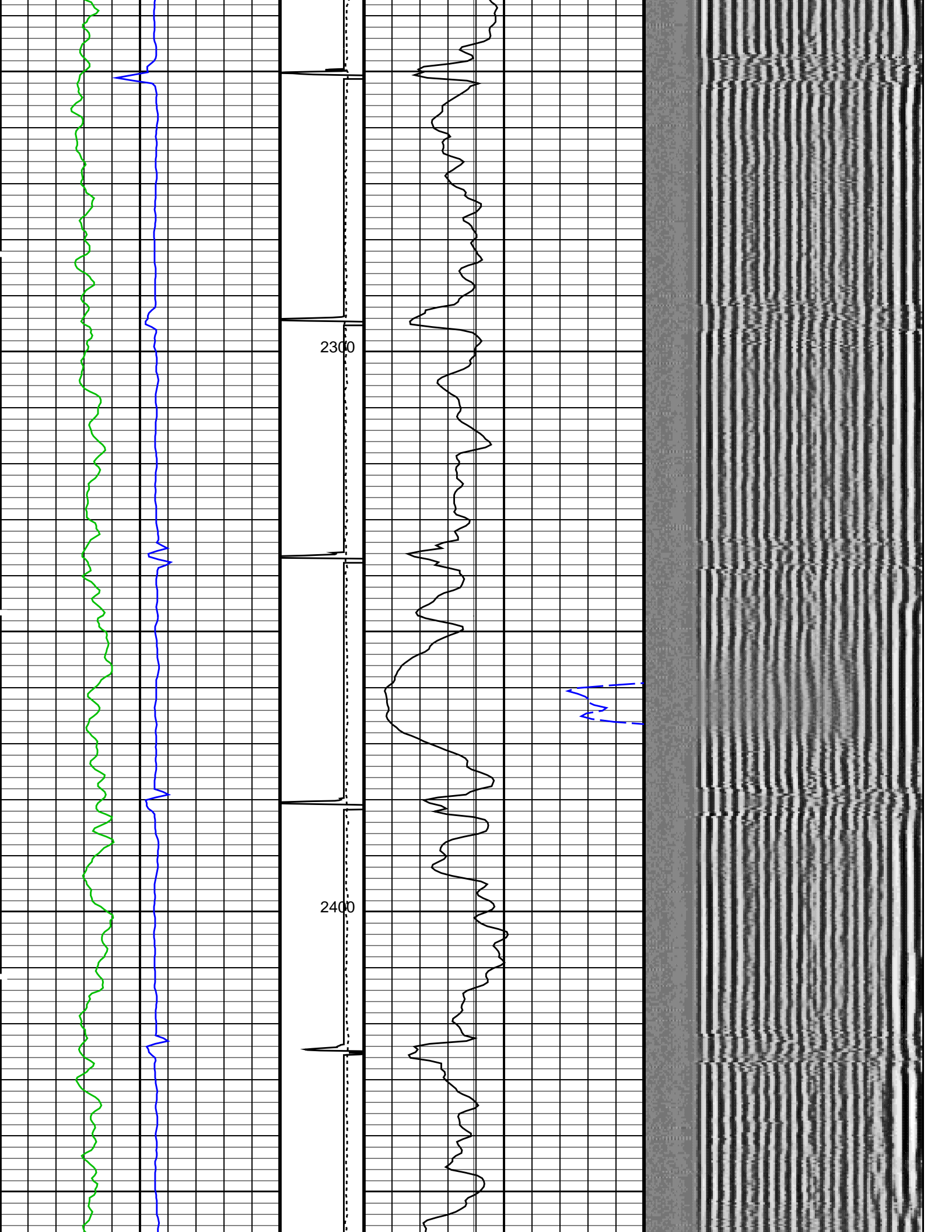


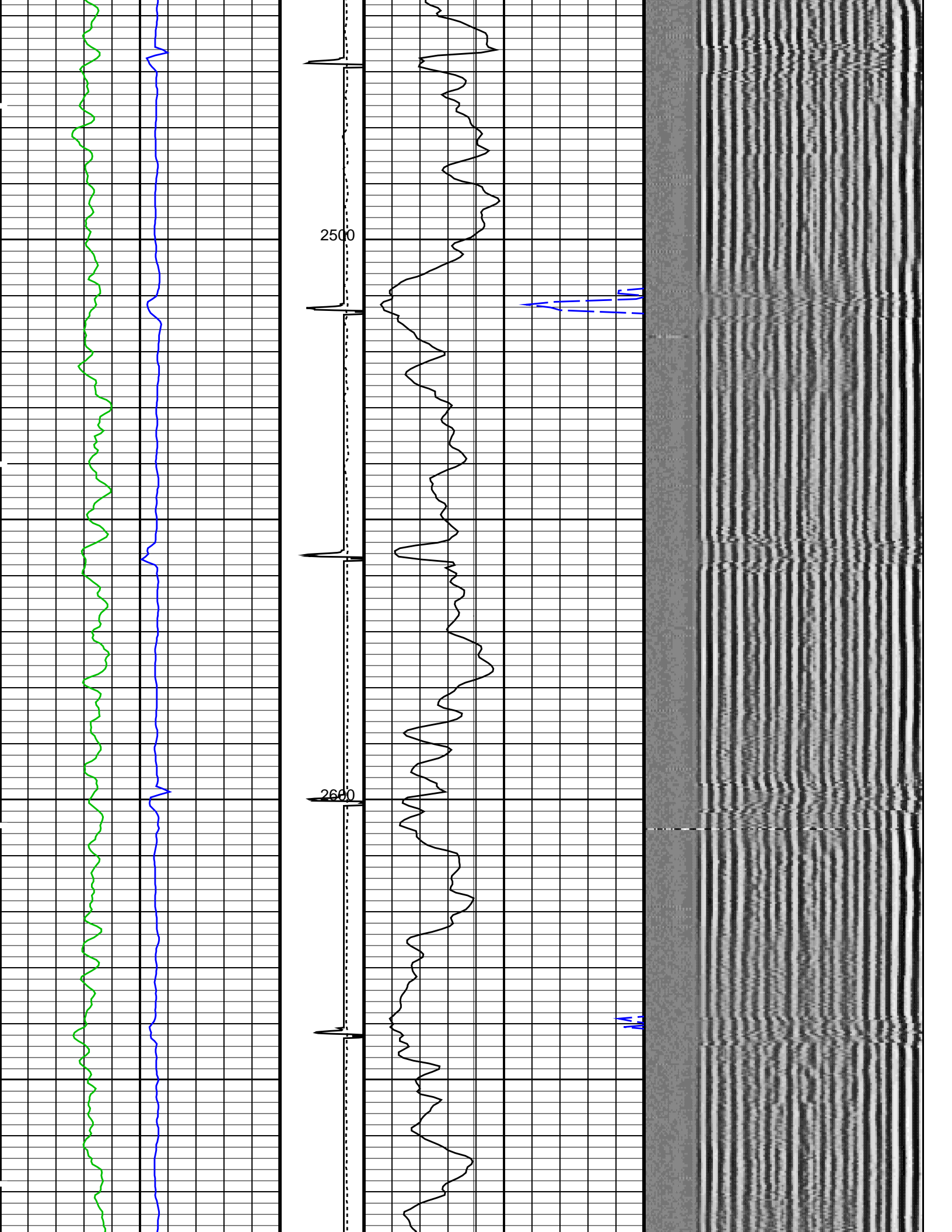


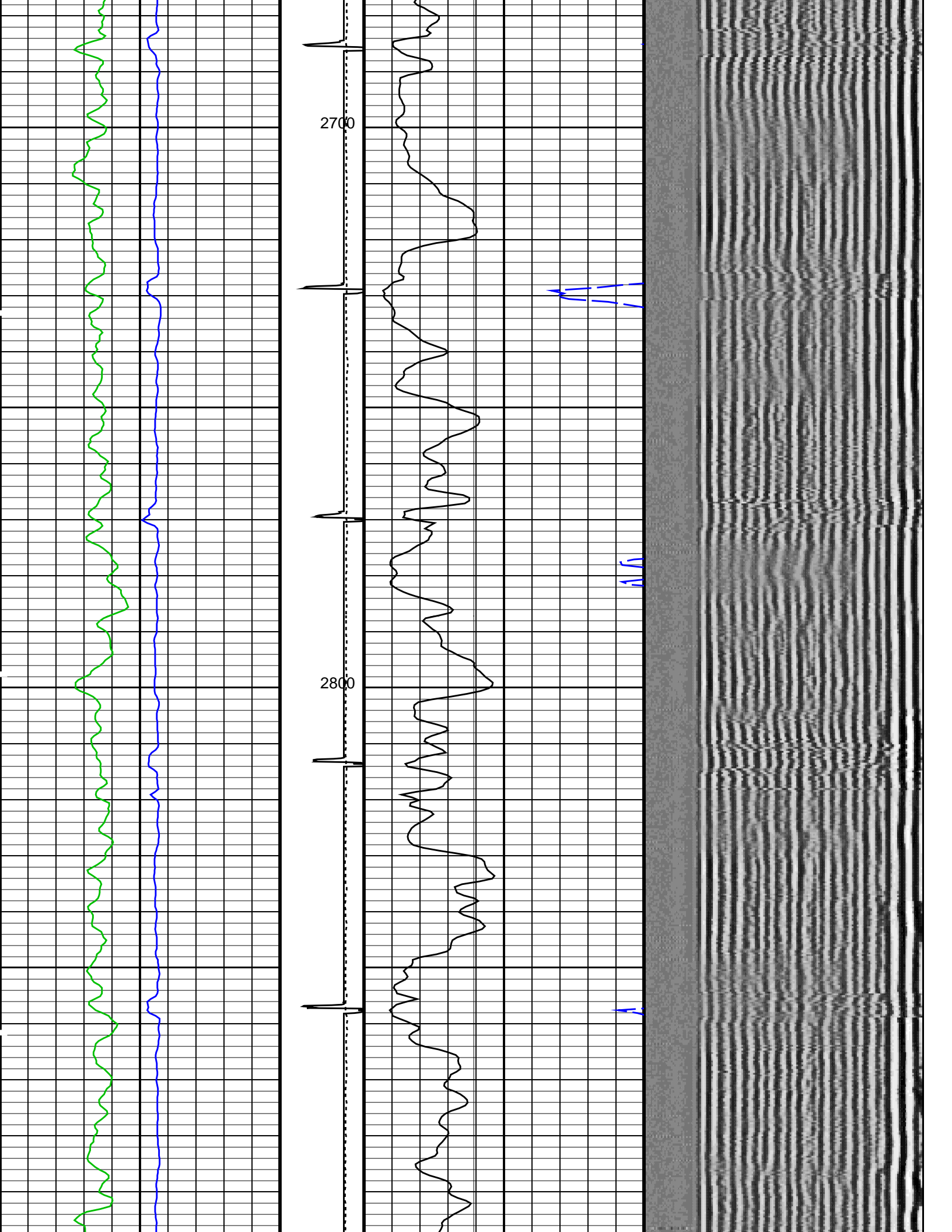


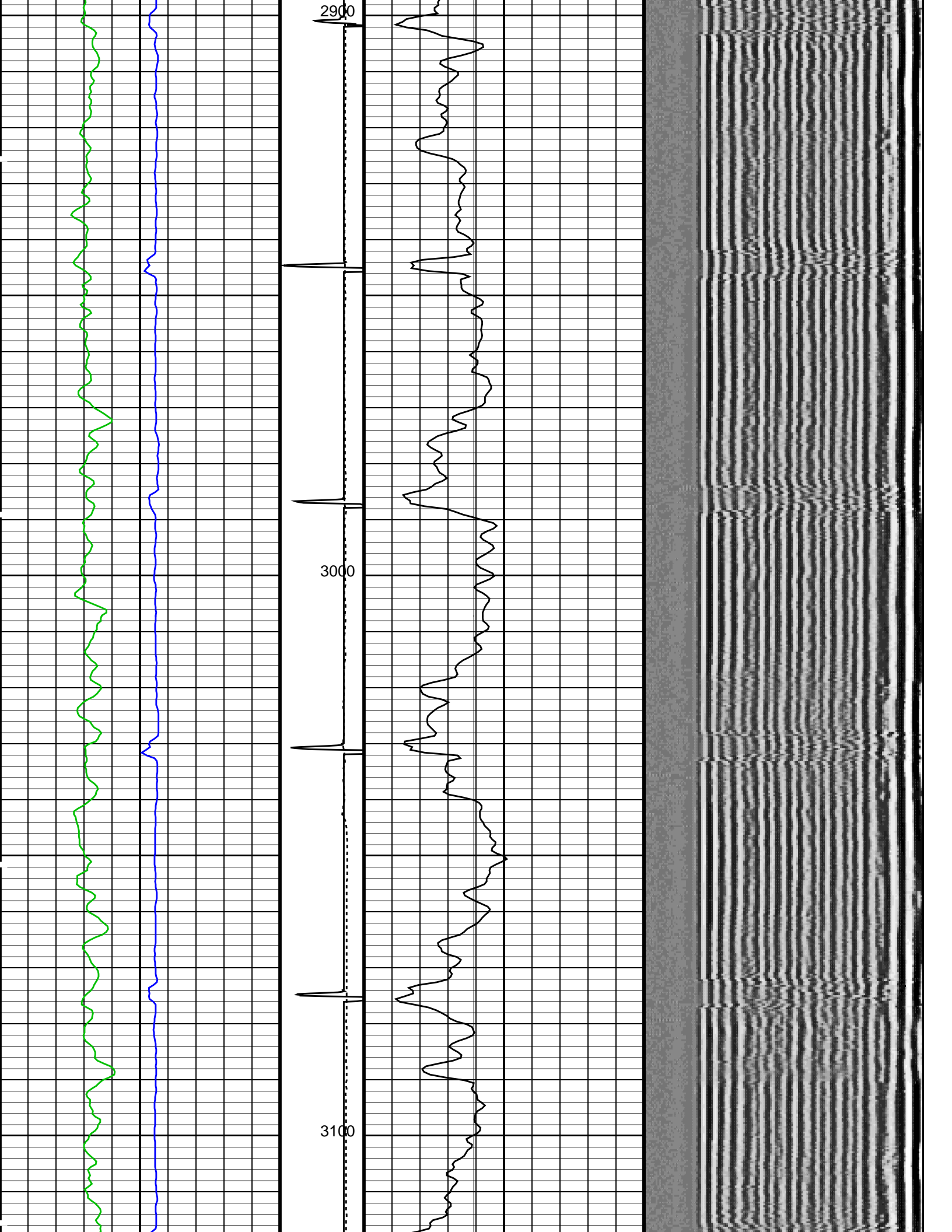


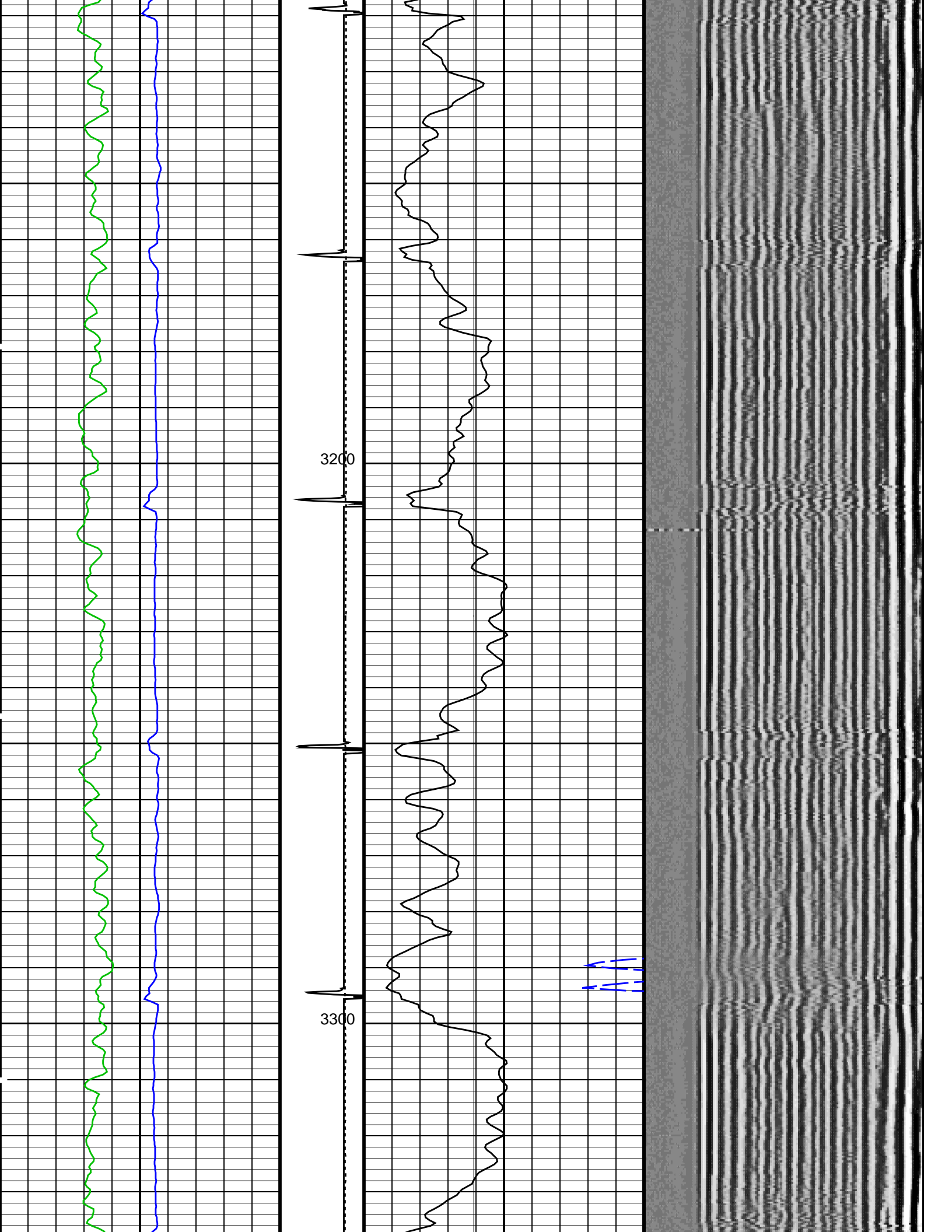


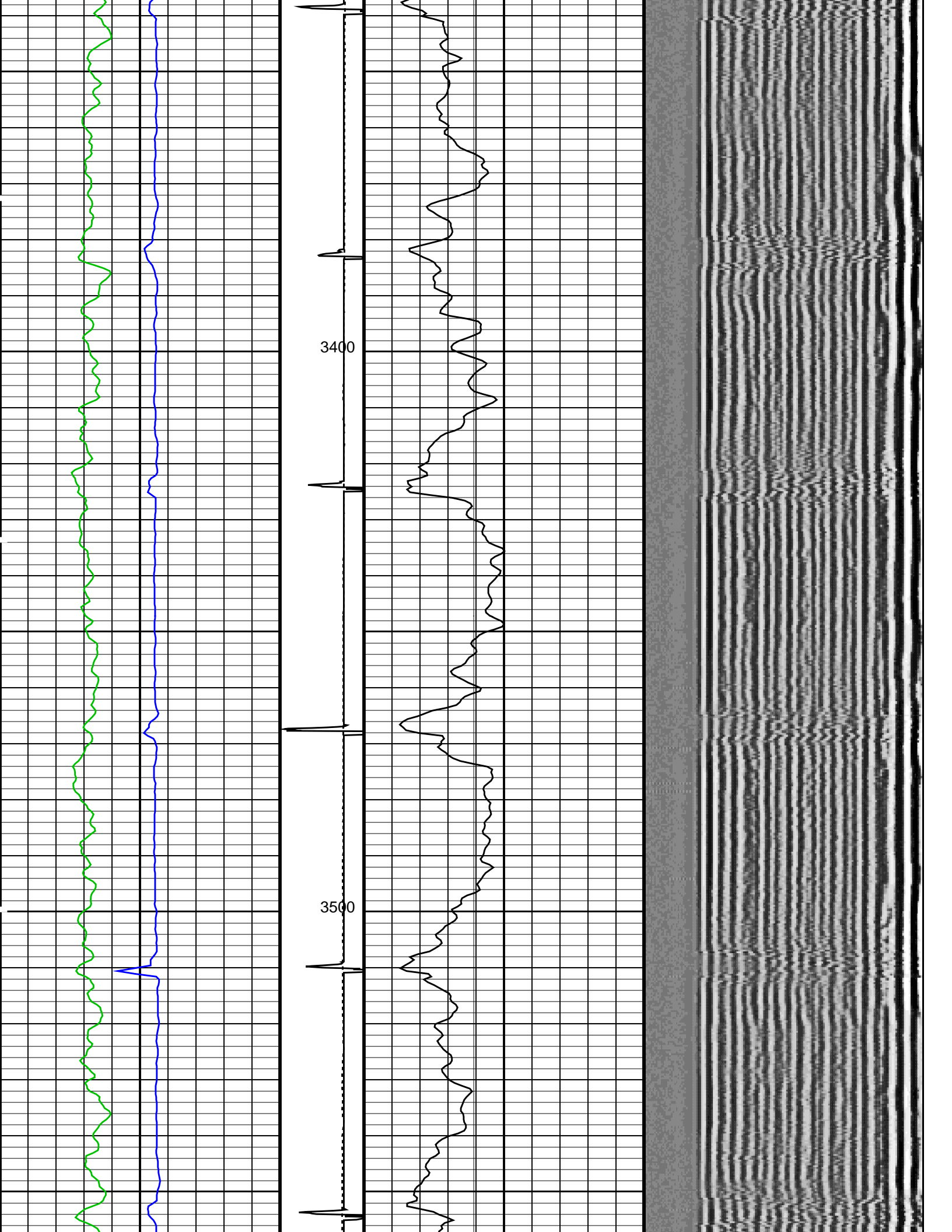


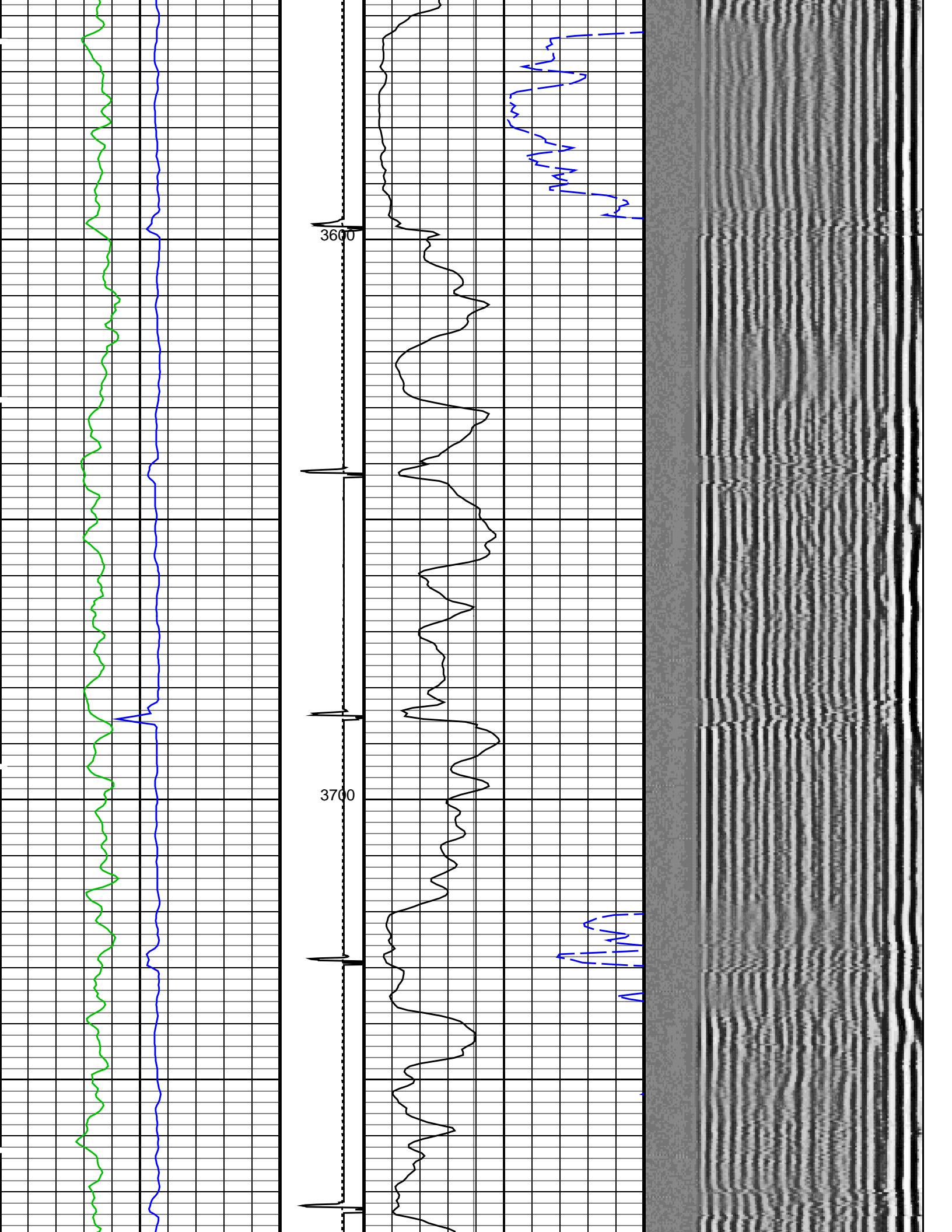


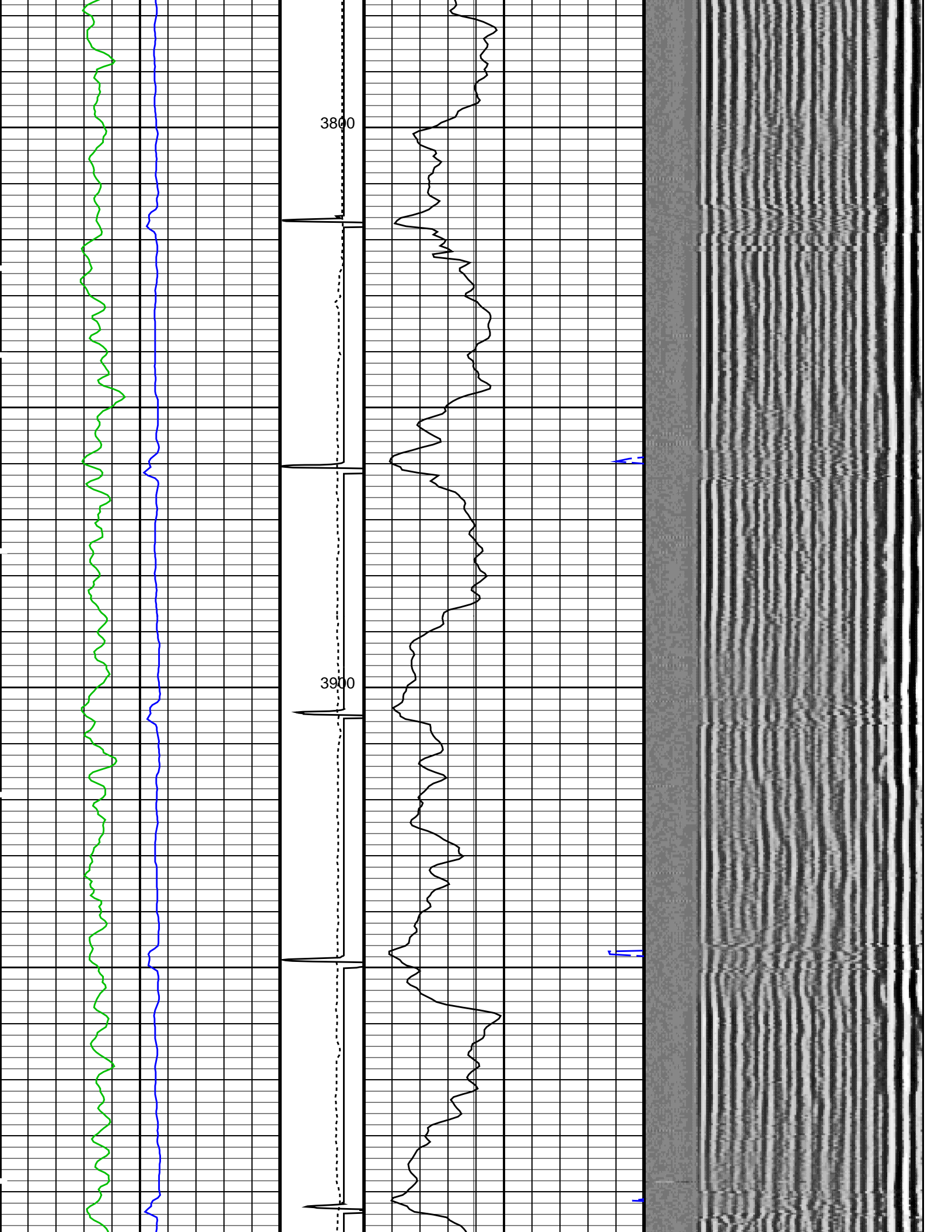


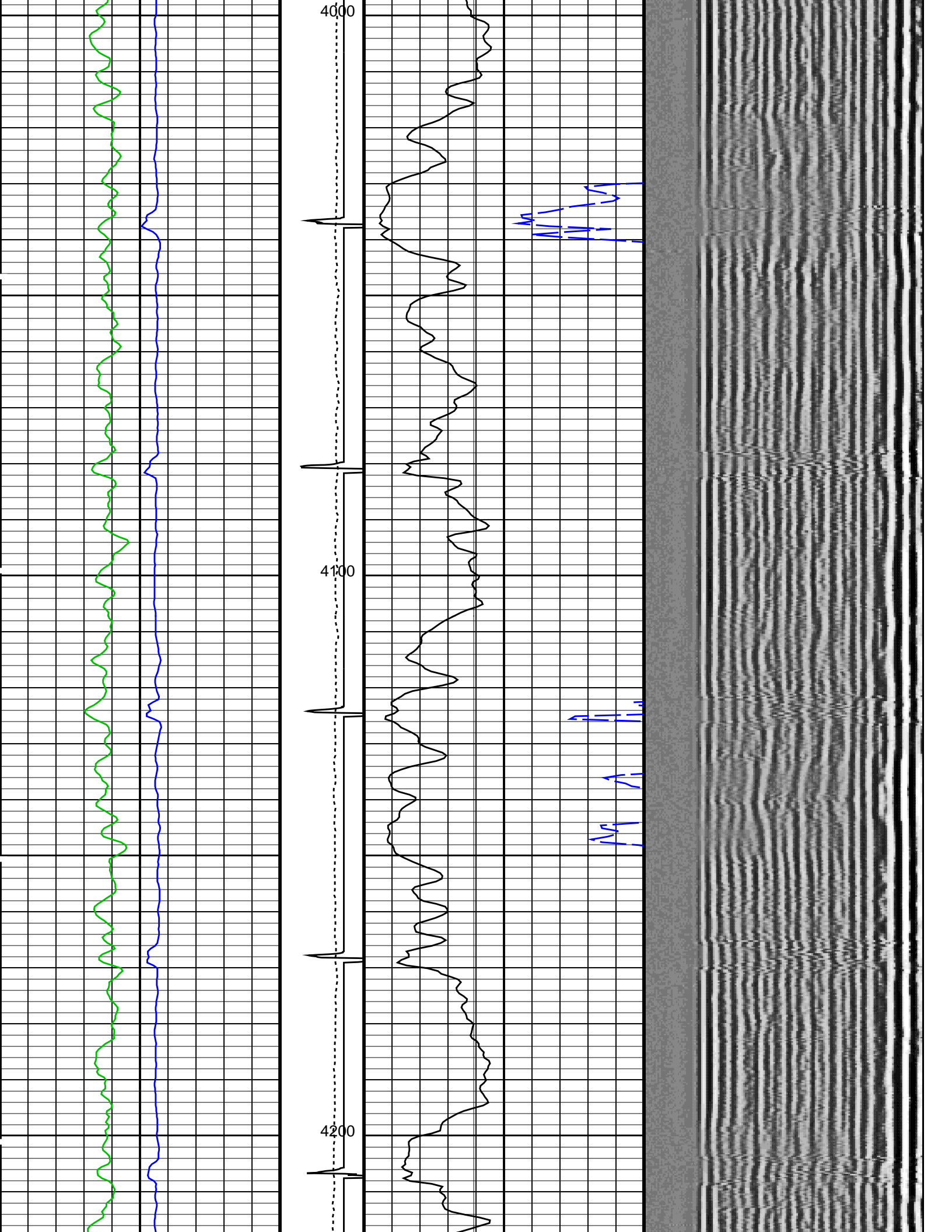


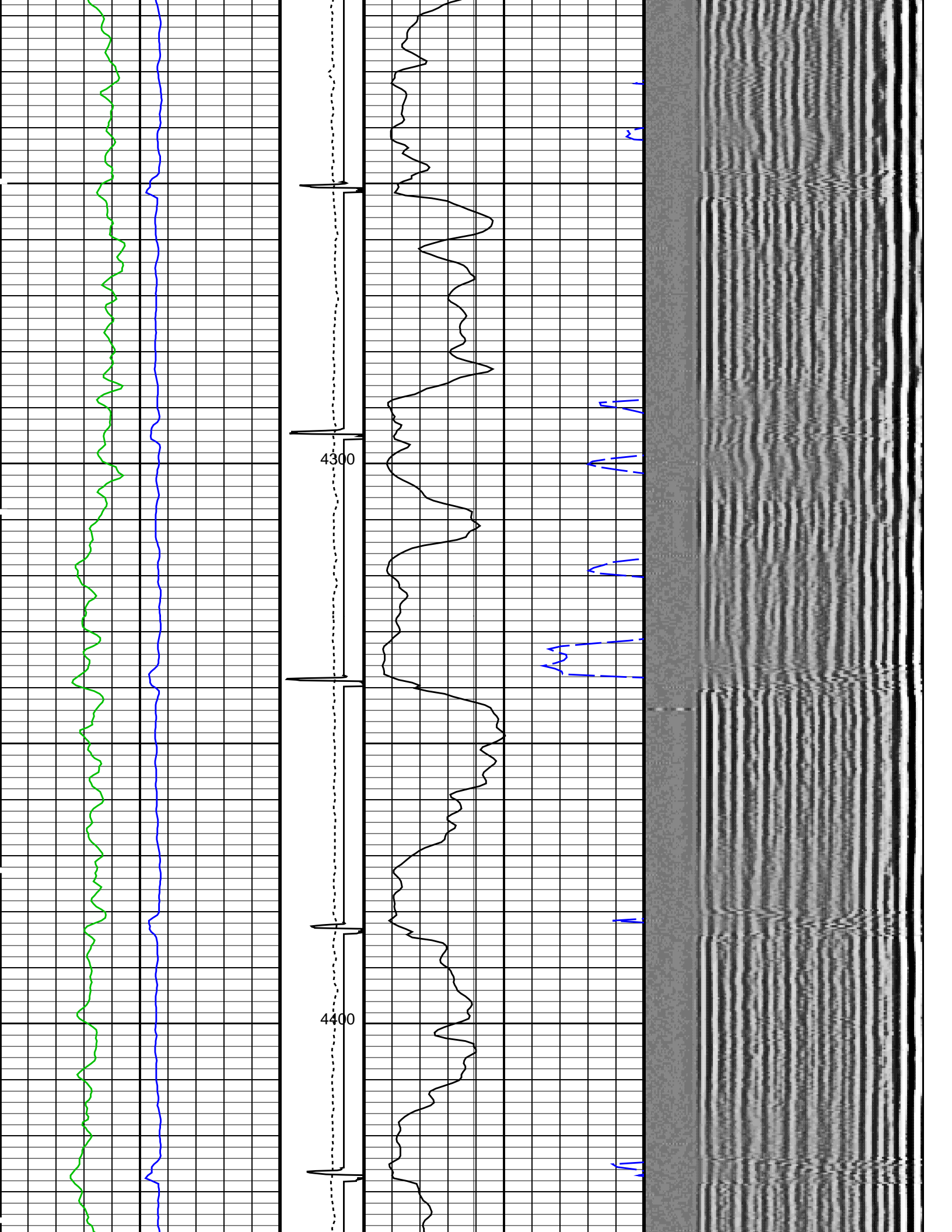


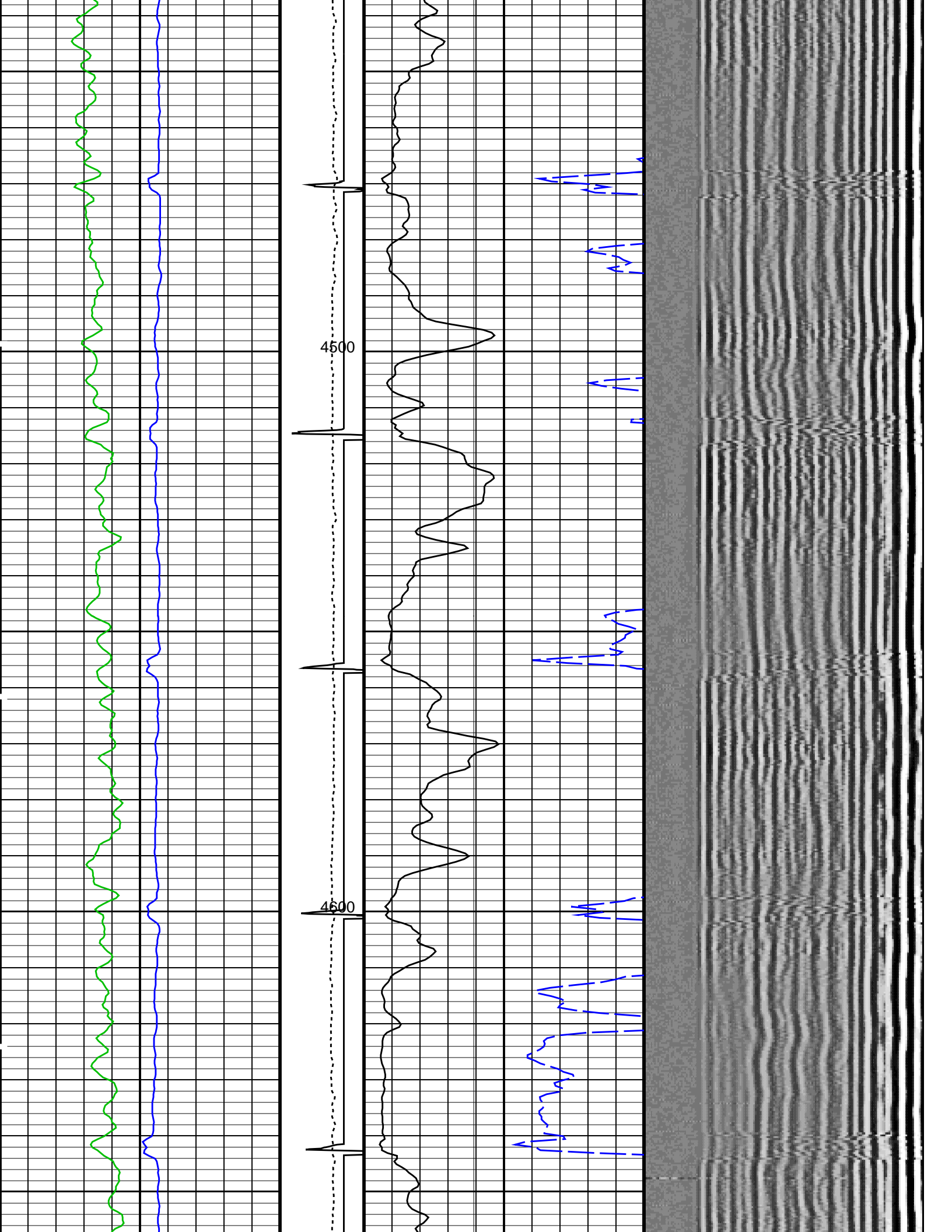


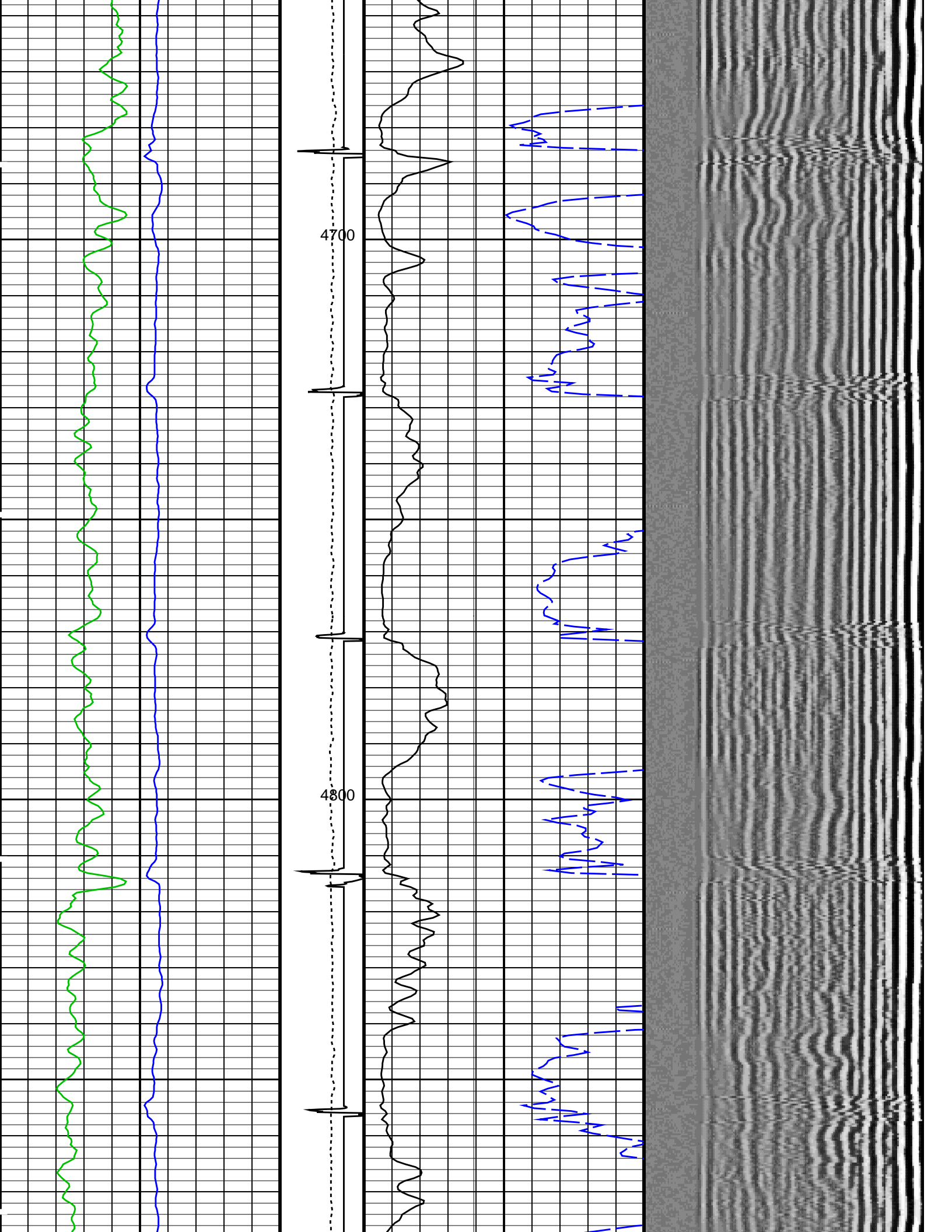


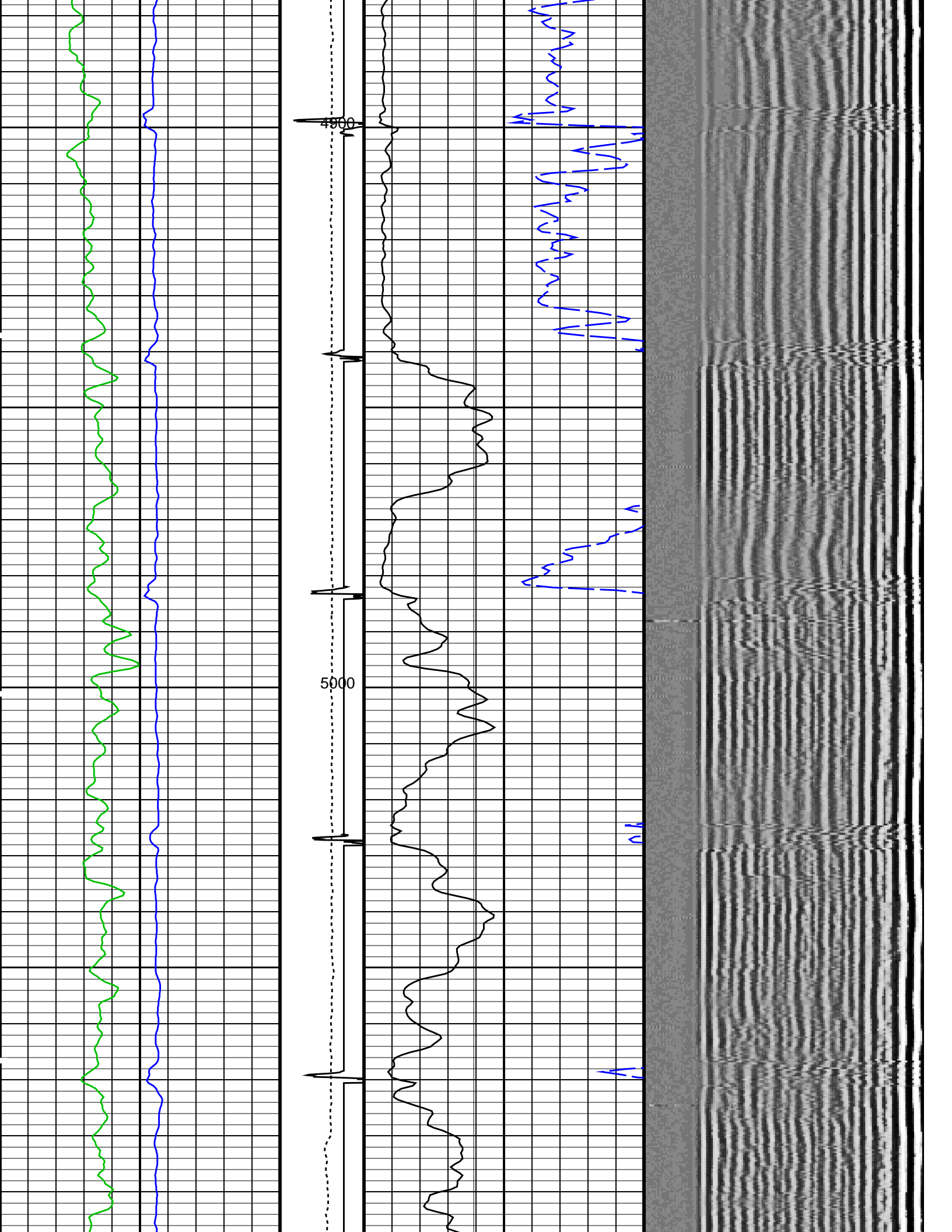


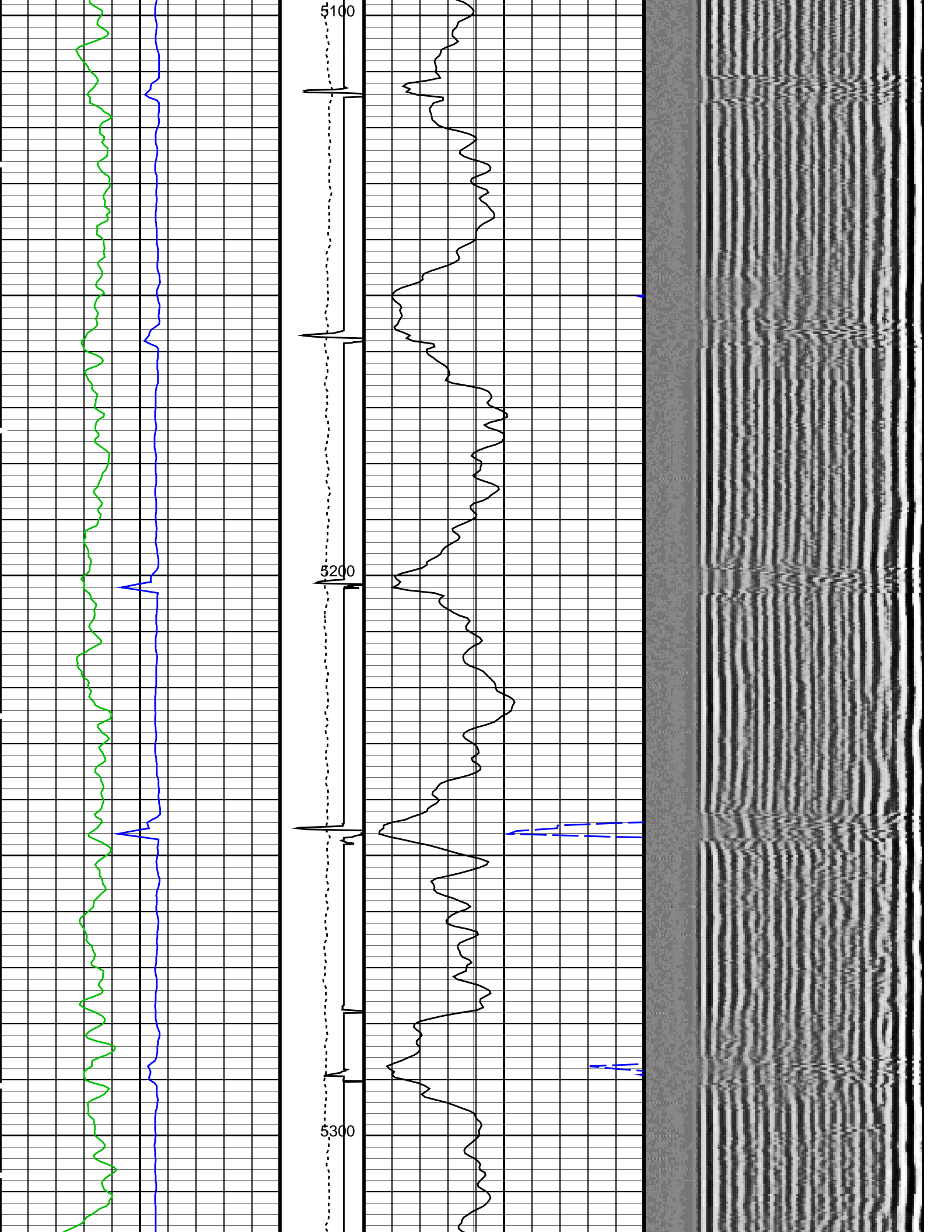


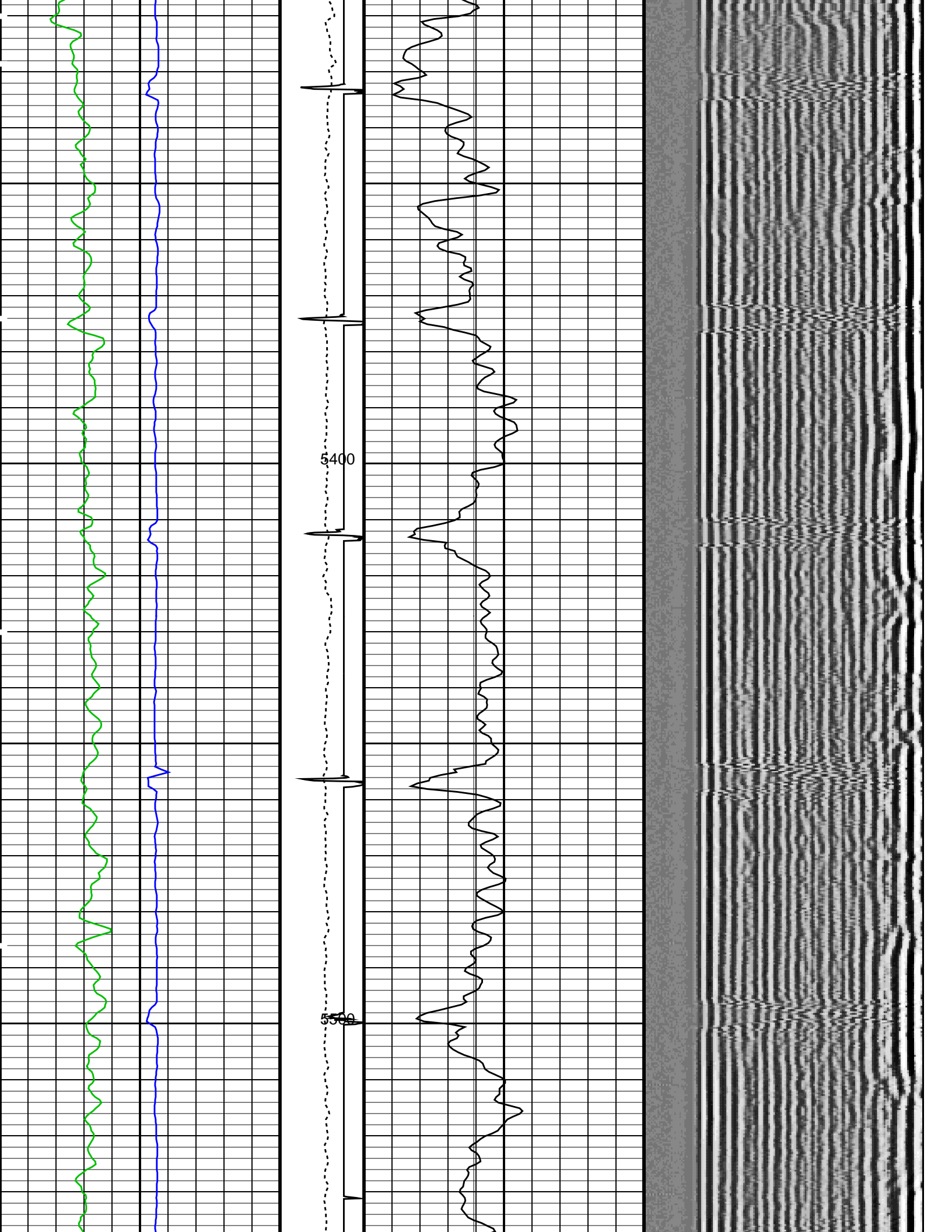


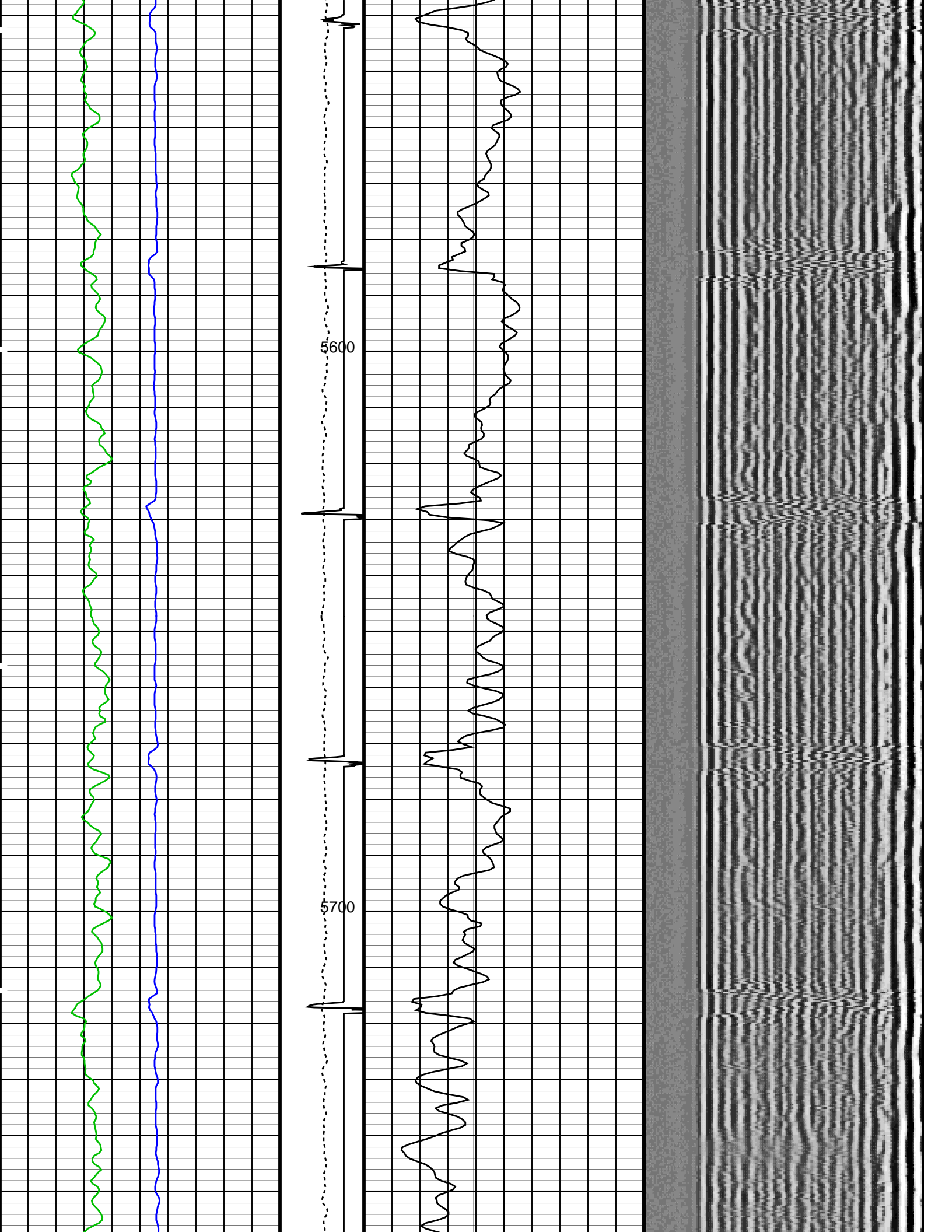


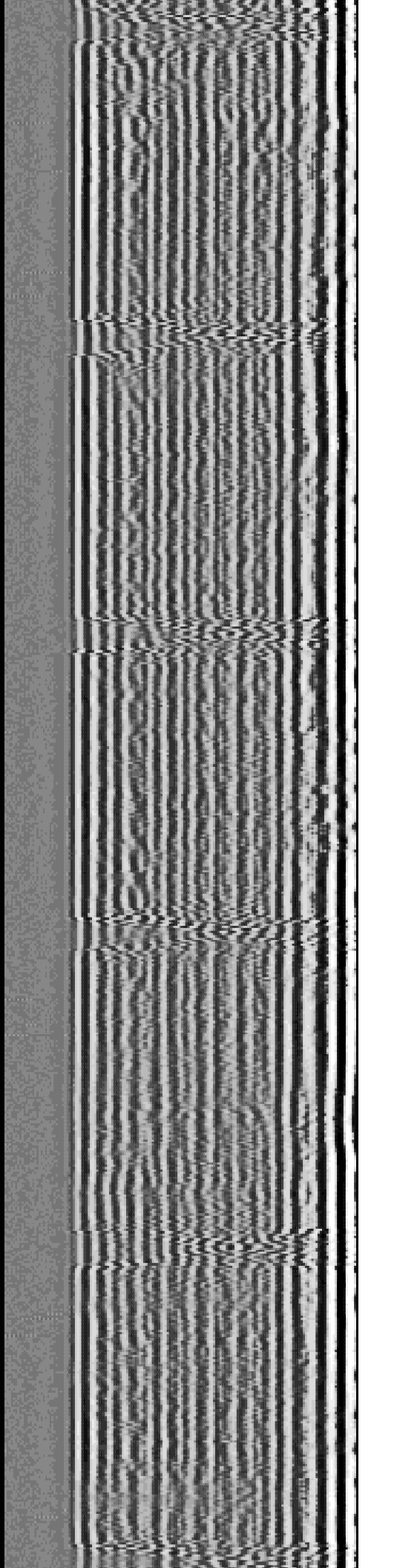
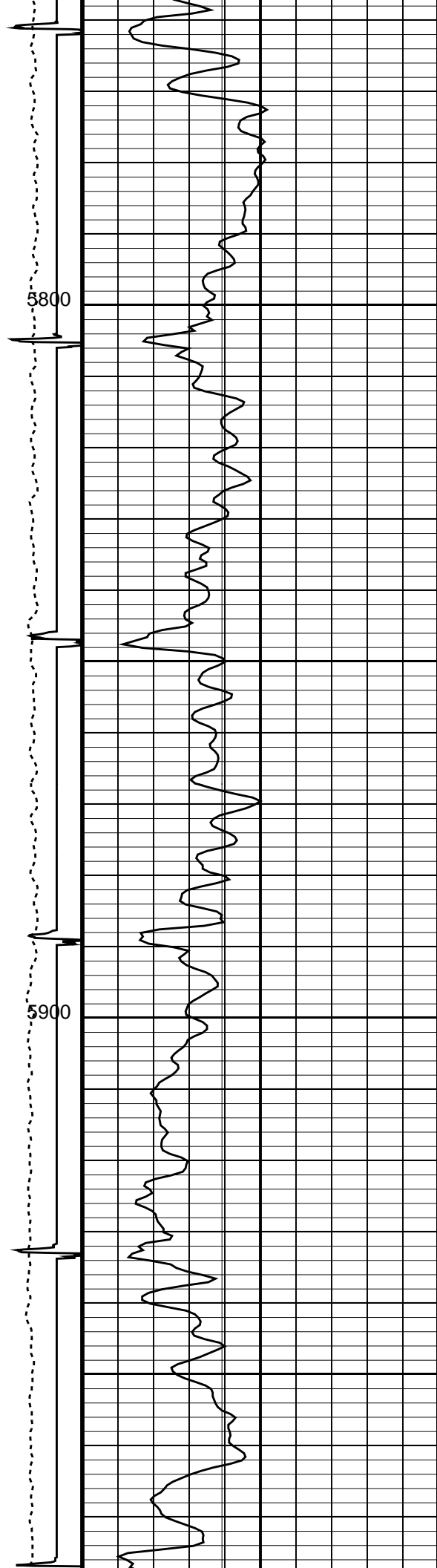
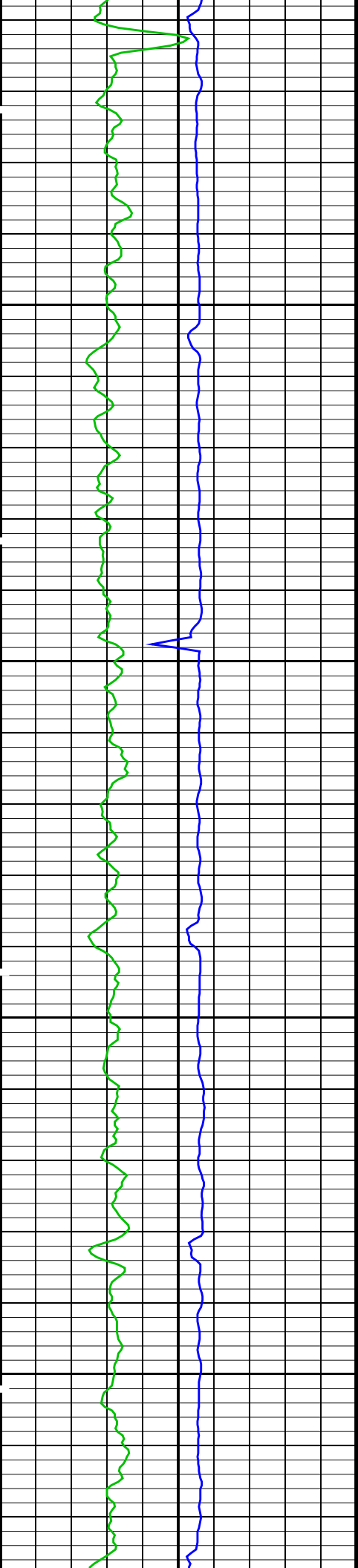


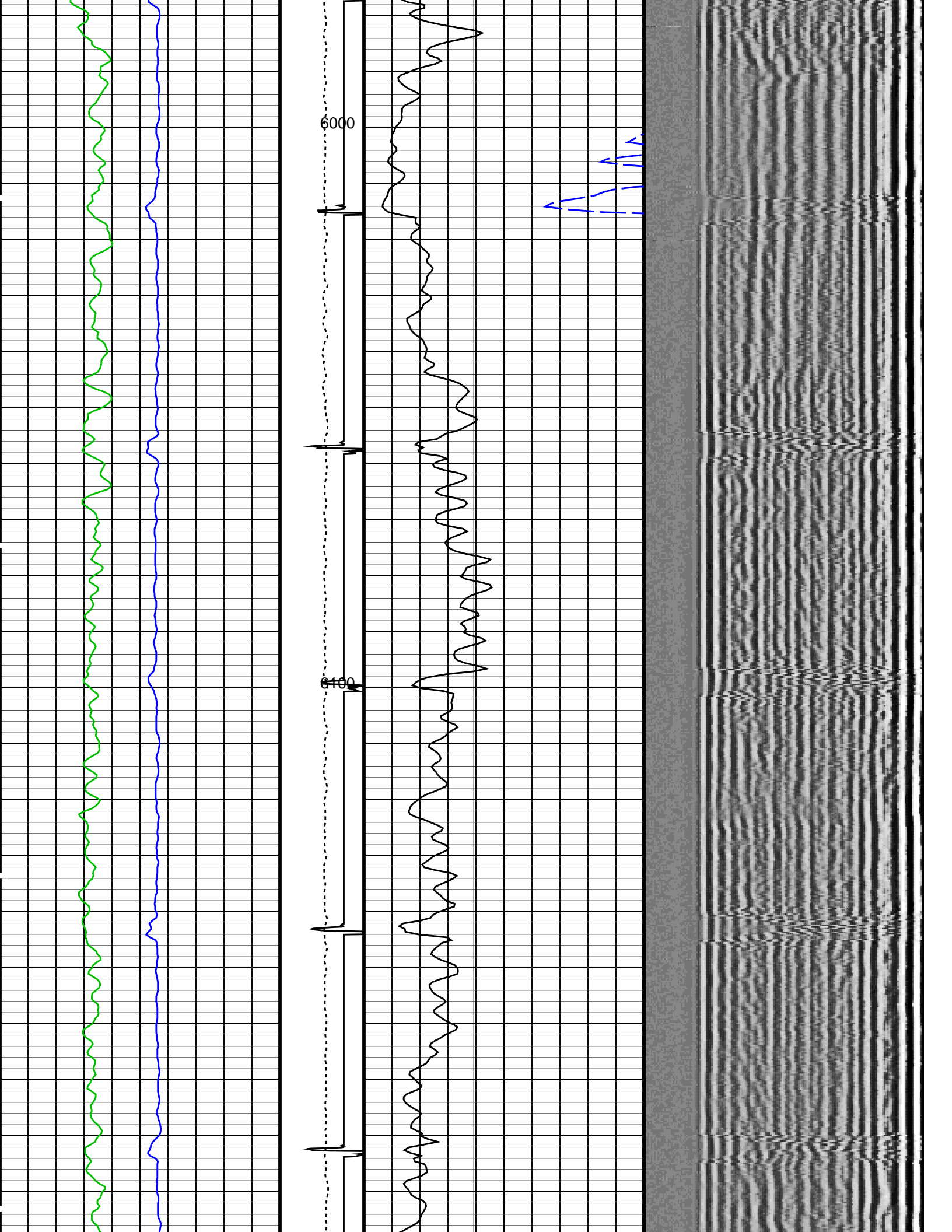


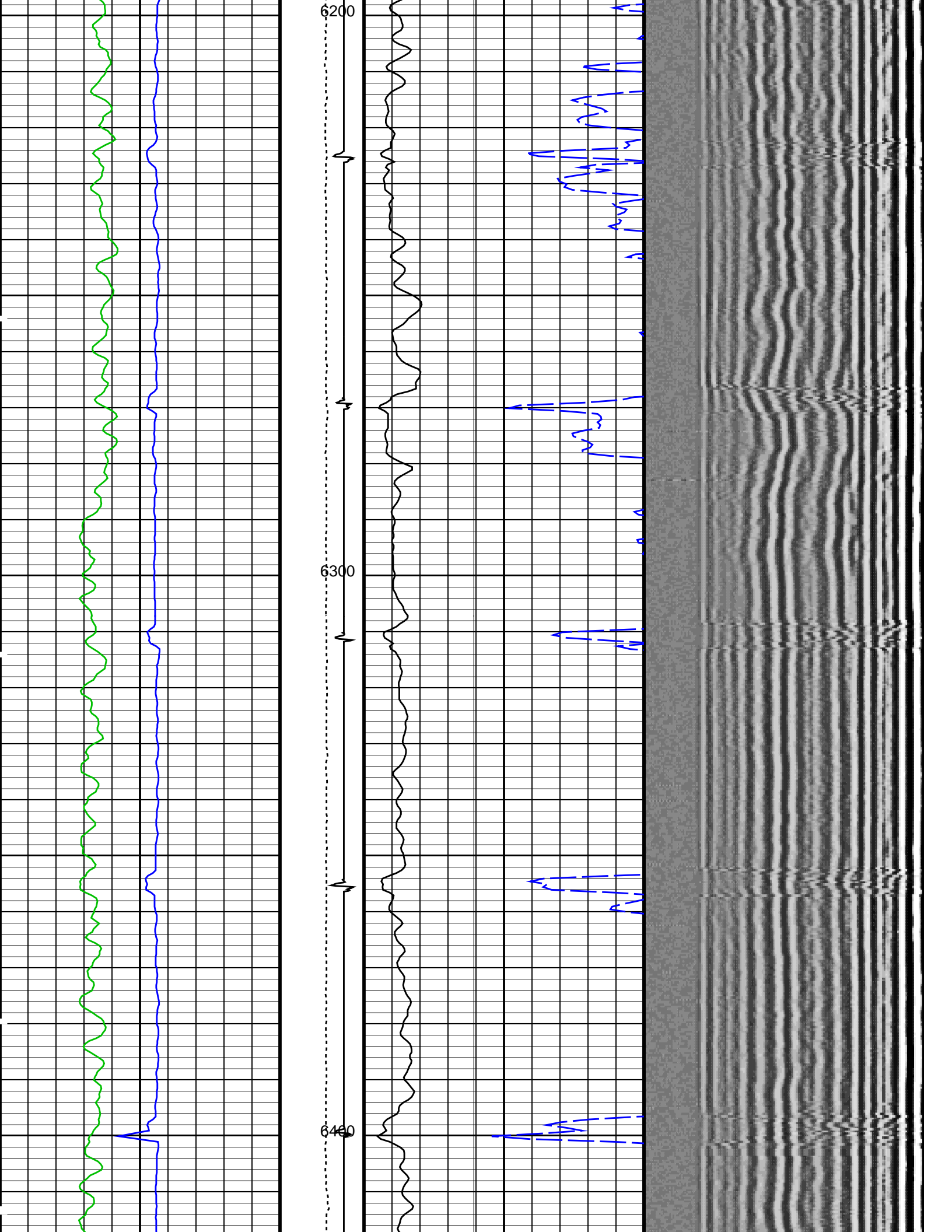


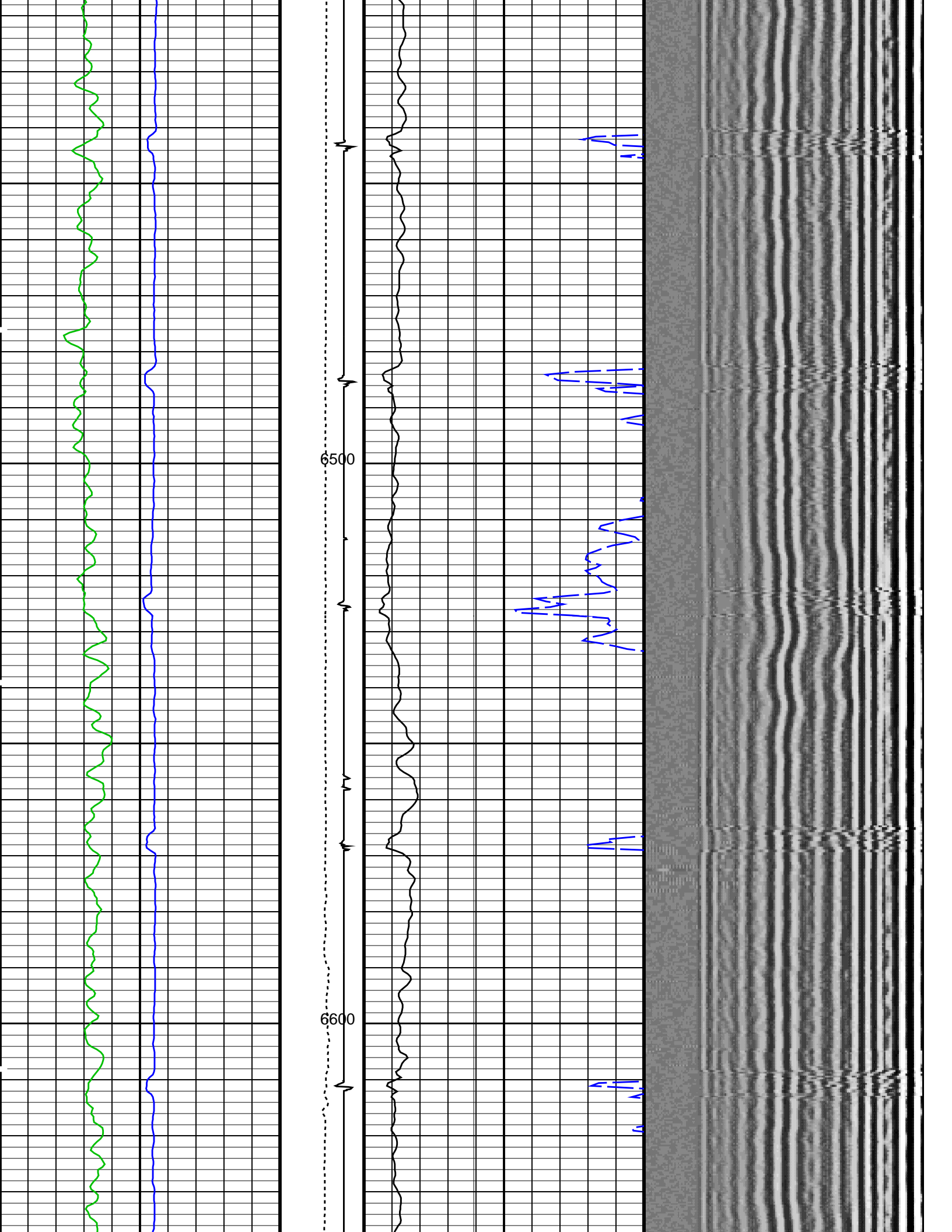


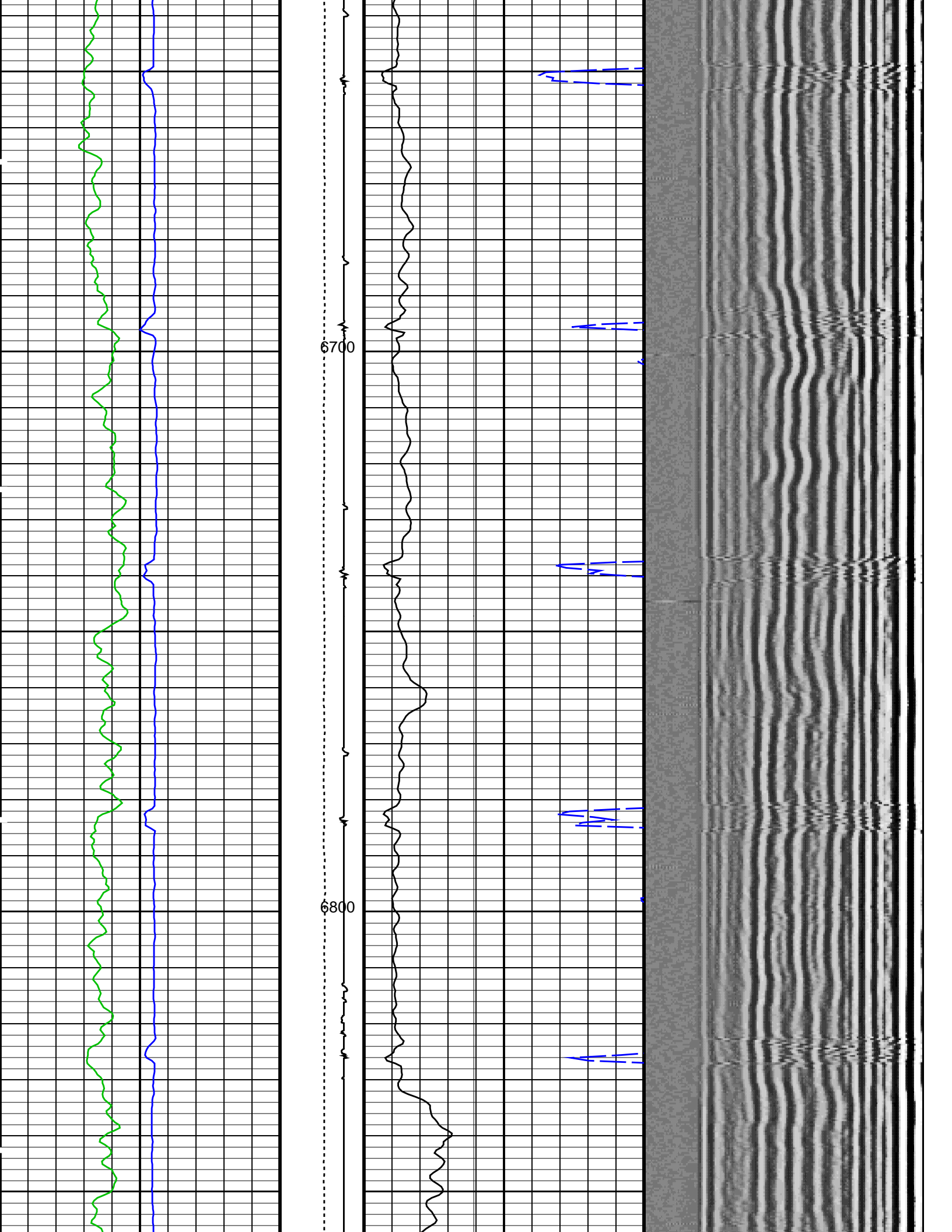


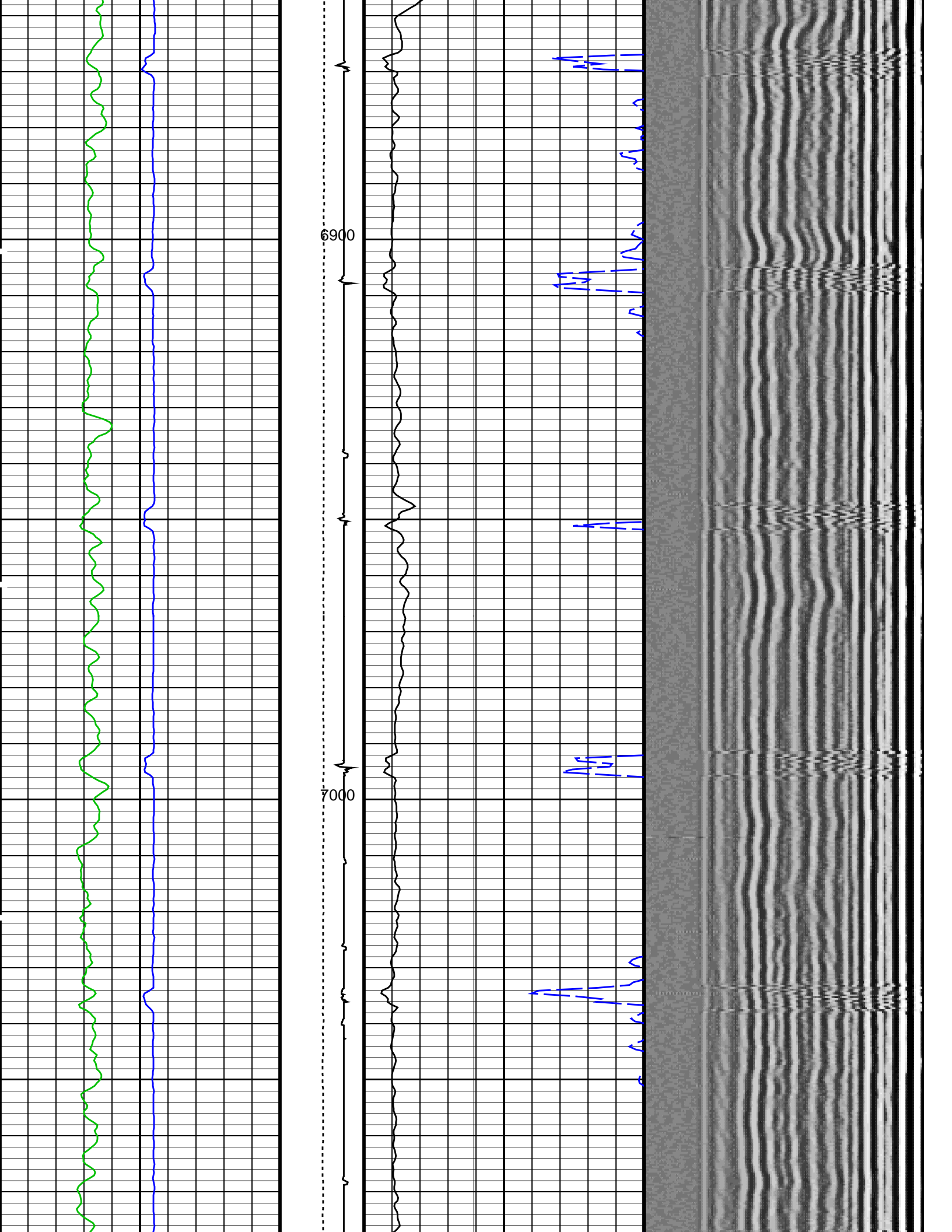


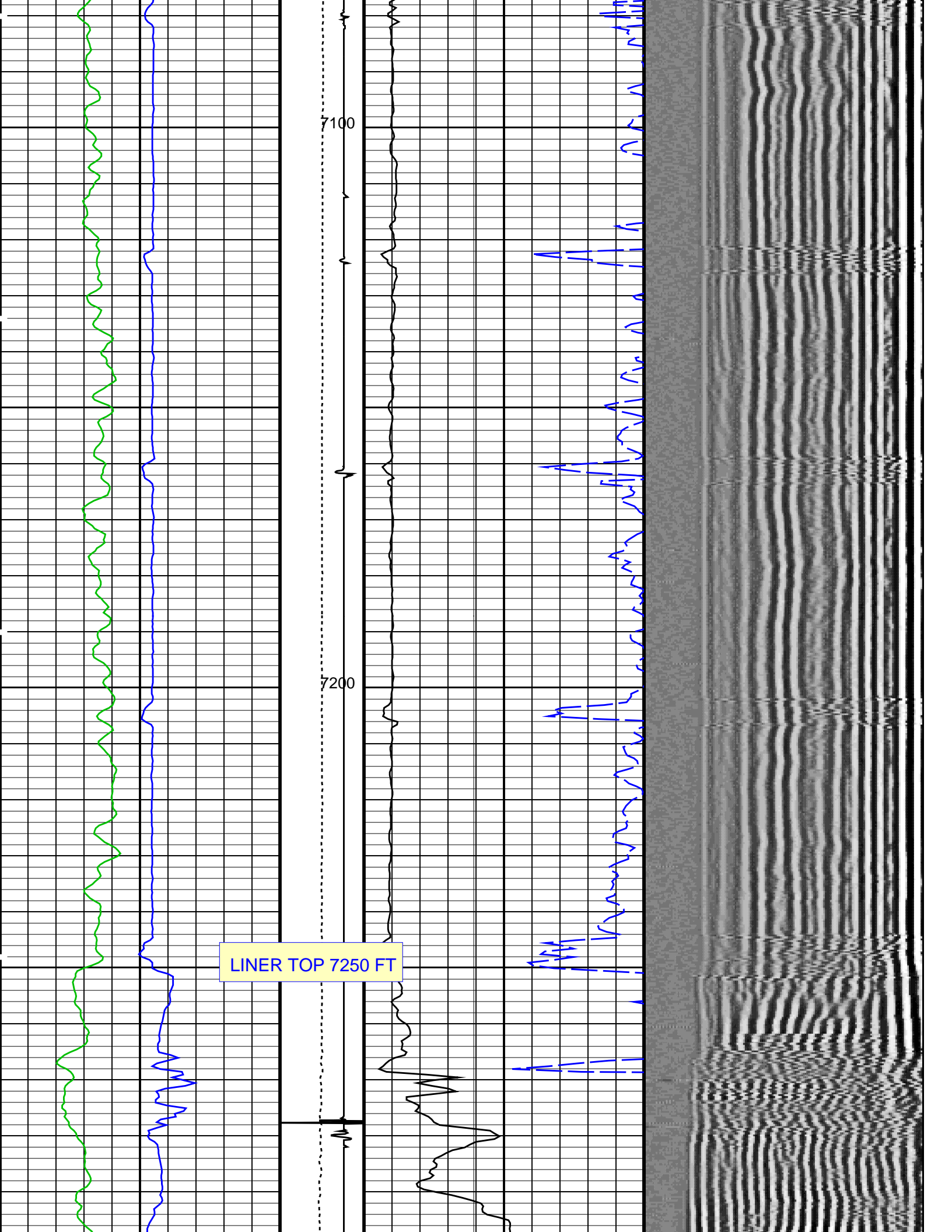


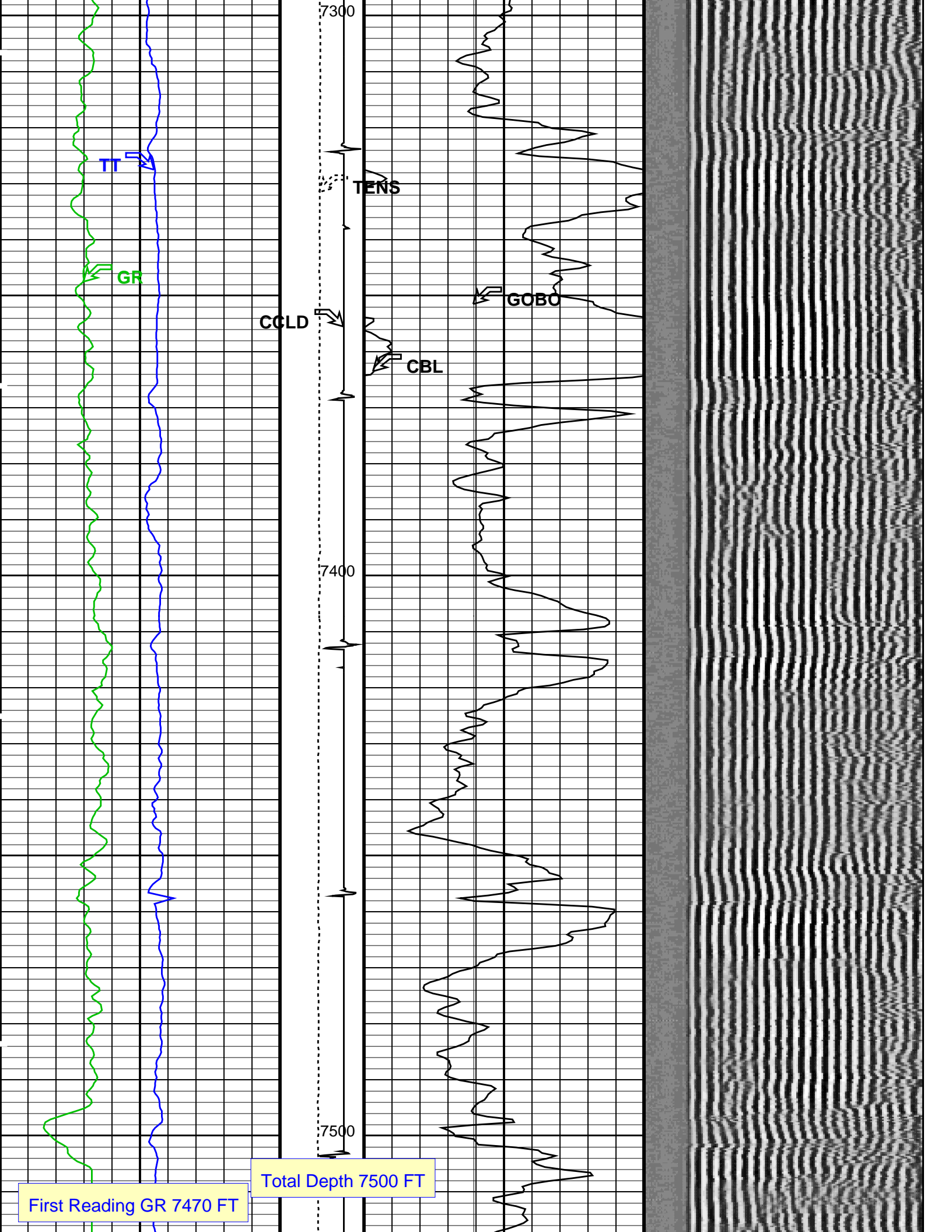




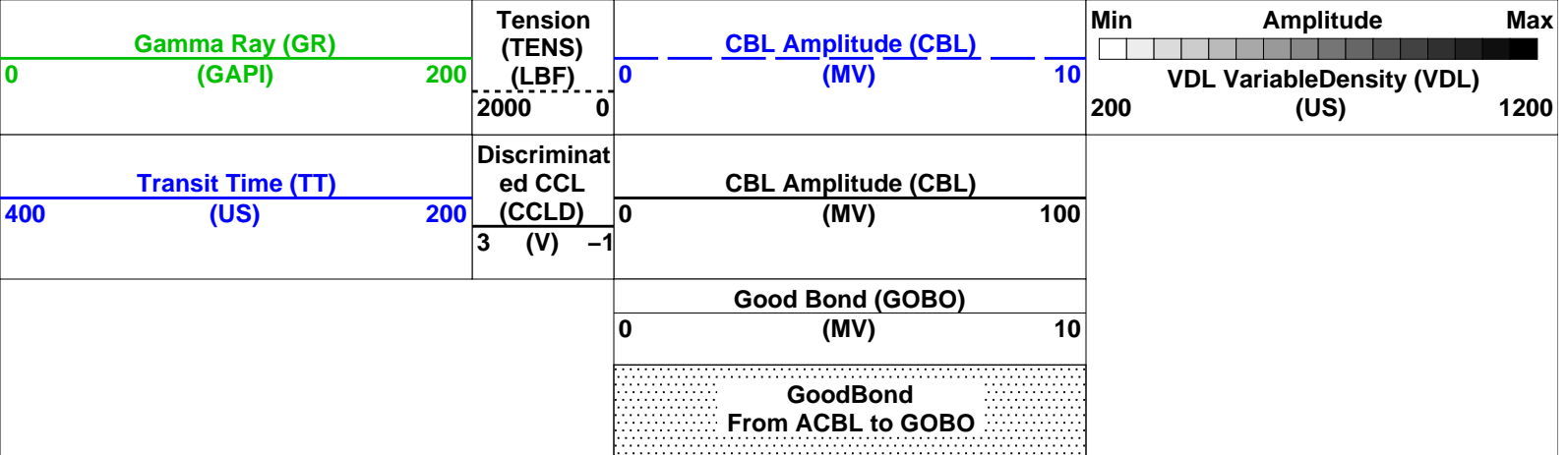








First Reading CBL 7491 FT



PIP SUMMARY

Time Mark Every 60 S

Format: CBL_VDL Vertical Scale: 5" per 100'

Graphics File Created: 10-Jul-2015 18:16

OP System Version: 19C0-187

SCMT-CB 19C0-187 PMIT-B 19C0-187
PSPT 19C0-187

<<<SCMT Cement Evaluation Information Summary>>>

Sonde Serial Number	SCMS-CB 8284		
Current Casing Size	7.0 IN		
Casing Weight	26.0 LB/F		
Expected CBL Amplitude in Free Pipe Section	62 MV	Minimum Sonic Amplitude	1.94803 MV (100% Cement) 3.89184 MV (80% Cement)
		MAP Minimum Sonic Amplitude	11.3304 MV (100% Cement) 17.5144 MV (80% Cement)
Master Calibration (Normalization)		Before Calibration (Adjustment)	
Date of Master Calibration	21-JUN-2013		
CBL Correction Factor	0.0743795	CBL Adjustment Factor (CBAF)	1.0
MAP 1 Correction Factor	0.105721	MAP Adjustment Factor (MPAF)	1.0
MAP 2 Correction Factor	0.132315		
MAP 3 Correction Factor	0.146735		
MAP 4 Correction Factor	0.109791		
MAP 5 Correction Factor	0.114089		
MAP 6 Correction Factor	0.110732		
MAP 7 Correction Factor	0.116601		
MAP 8 Correction Factor	0.0804110		

Parameters

DLIS Name	Description	Value
	SCMT-CB: Slim Cement Mapping Tool, 1-11/16 OD	
BILI	Bond Index Level for Zone Isolation	0.8
CB3D	SCMT CBL 3 ft Peak Detection Mode	PEAK
CB3G	SCMT CBL 3 ft Peak Detection T0_Delay and Noise Gate	258.768 US
CB3T	SCMT CBL 3 ft Fixed Threshold Level	20 MV
CB5D	SCMT CBL 5 ft Peak Detection Mode	PEAK
CB5G	SCMT CBL 5 ft Peak Detection T0_Delay and Noise Gate	372.768 US

CB5T	SCMT CBL 5 ft Fixed Threshold Level	20	MV
CBLG	CBL Gate Width	55	US
CBRA	CBL LQC Reference Amplitude in Free Pipe	62	MV
CMCF	CBL Cement Type Compensation Factor	1	
CMTC	SCMT Slow Channel Multiplexer Mode	SCAN	
CMTM	SCMT Operating Mode	LOG	
CSCS	SCMT Slow Channel Index	VCC	
CTHI	Casing Thickness	0.366591	IN
DTF	Delta-T Fluid	189	US/F
FATT	Acoustic Attenuation due to Fluid	0	DB/F
FCF	CBL Fluid Compensation Factor	0.924277	
GOBO	Good Bond	3.89184	MV
MAPD	SCMT MAP Peak Detection Mode	PEAK	
MAPG	SCMT MAP Peak Detection T0 Delay and Noise Gate	201.768	US
MAPT	SCMT MAP Fixed Threshold Level	30	MV
MATT	Maximum Attenuation	11.6819	DB/F
MCCF	MAP Cement Type Compensation Factor	1	
MCI	Minimum Cemented Interval for Isolation	10	FT
MMSA	MAP Minimum Sonic Amplitude	11.3304	MV
MSA	Minimum Sonic Amplitude	1.94803	MV
PEDE	Peak Detection On/Off Switch in Playback	OFF	
VDLG	VDL Manual Gain	5	
ZCMT	Acoustic Impedance of Cement	6.8	MRAY
PMIT-B: Multifinger Imaging Tool - B			
ACQ_MODE	Data Acquisition Mode	RealTime	
BF	Bad finger List	None	
FFCO	Fully-opened fingers Correction	Disallowed	
FOCO	Finger Offset Correction	Disallowed	
FWCO	Finger Wear Correction	Disallowed	
HIST	Histogram Accumulation Flag	Allowed	
MIT_CAL_MODE	Finger Calibration Mode	BestFit	
OVCO	Ovalization Correction	Disallowed	
VRES	Vertical Resolution	0.1in	
WLI	Logged Interval (for wear correction)	0	FT
System and Miscellaneous			
CSIZ	Current Casing Size	7.000	IN
CWEI	Casing Weight	26.00	LB/F
DFD	Drilling Fluid Density	8.40	LB/G
DO	Depth Offset for Playback	35.0	FT
PP	Playback Processing	RECOMPUTE	
TD	Total Depth	-50000	FT

Input DLIS Files

DEFAULT SCMT_MIT_PSP_012LUP FN:11 PRODUCER 10-Jul-2015 15:05 7502.5 FT 20.5 FT

Output DLIS Files

DEFAULT SCMT_MIT_PSP_018PUP FN:17 PRODUCER 10-Jul-2015 18:16

Schlumberger

REPEAT PASS (0PSI) CBL-VDL

MAXIS Field Log

Company: ANADARKO

Well: TROUDT 34C-33HZ

Input DLIS Files

DEFAULT SCMT_MIT_PSP_017LUP FN:16 PRODUCER 10-Jul-2015 17:51 553.0 FT 18.0 FT

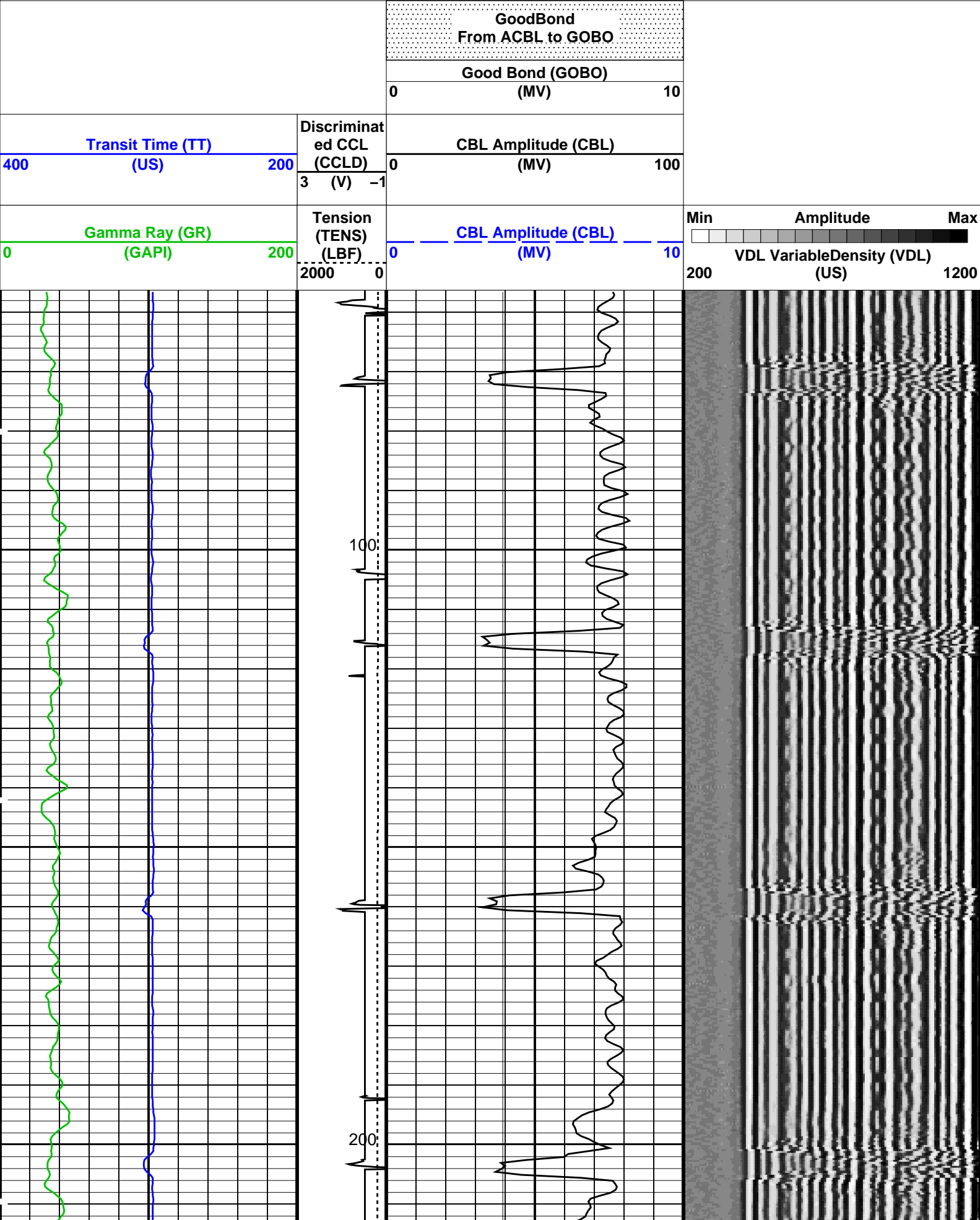
Output DLIS Files

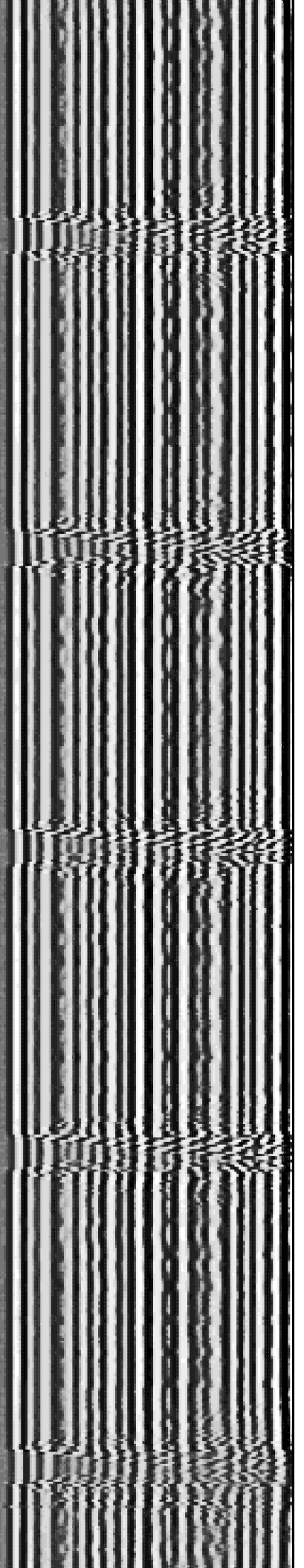
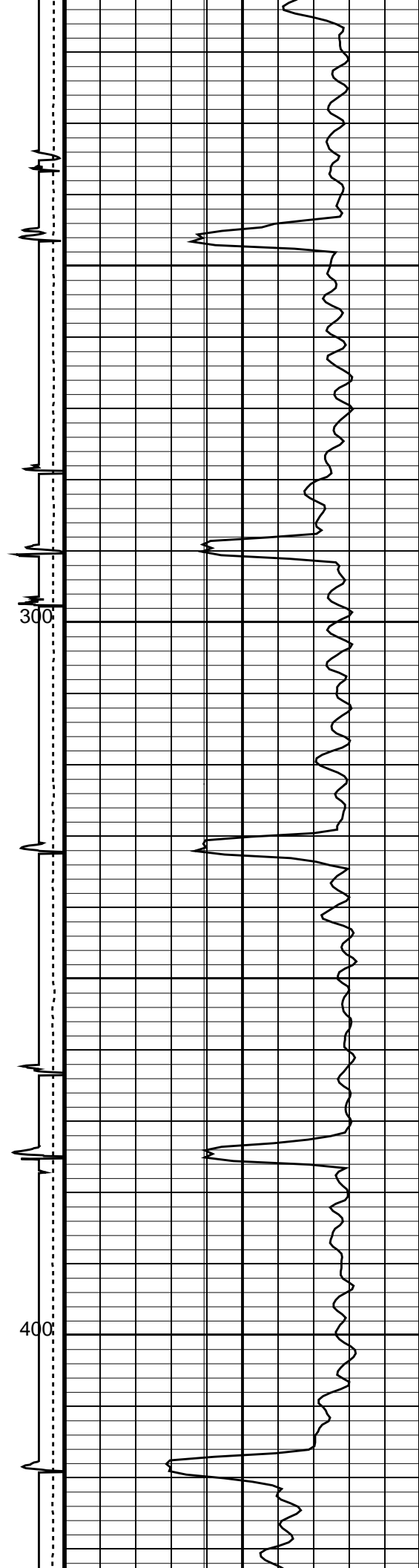
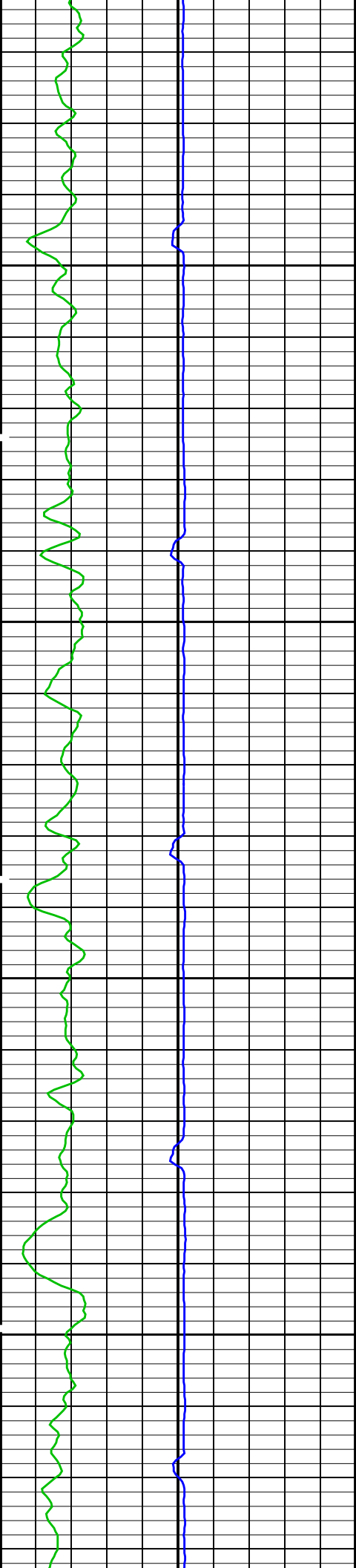
DEFAULT SCMT_MIT_PSP_019PUP FN:18 PRODUCER 10-Jul-2015 18:23 591.0 FT 56.0 FT

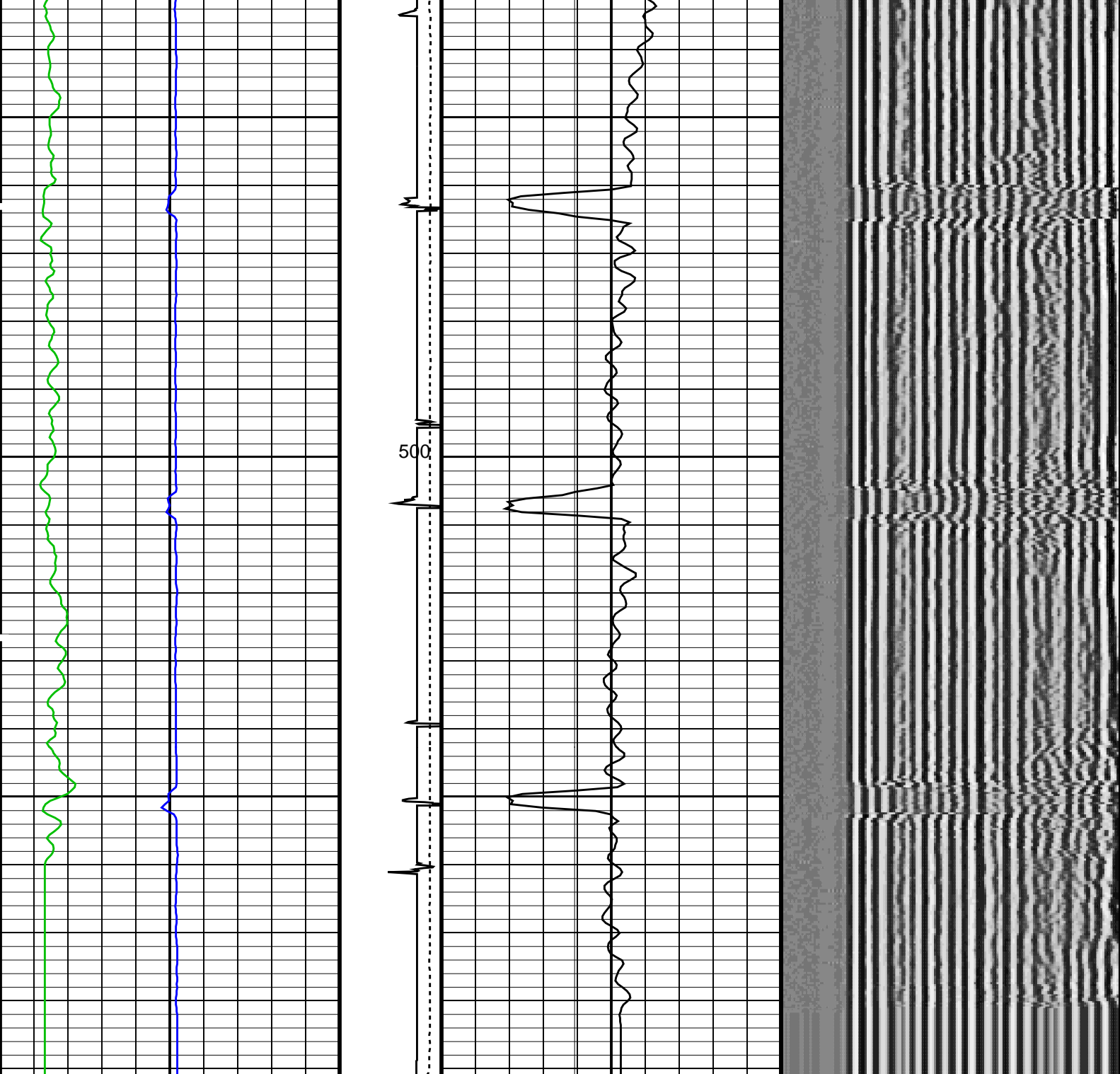
OP System Version: 19C0-187

PIP SUMMARY

Time Mark Every 60 S







<div>Gamma Ray (GR)</div> <div>(GAPI)</div> <div>0200</div>		<div>Tension</div> <div>(TENS)</div> <div>(LBF)</div> <div>20000</div>	<div>CBL Amplitude (CBL)</div> <div>(MV)</div> <div>010</div>		<div>Min</div> <div>200</div> <div>Amplitude</div> <div>Max</div> <div>VDL VariableDensity (VDL)</div> <div>(US)</div> <div>1200</div>
<div>Transit Time (TT)</div> <div>(US)</div> <div>400200</div>		<div>Discriminat</div> <div>ed CCL</div> <div>(CCLD)</div> <div>3(V) -1</div>	<div>CBL Amplitude (CBL)</div> <div>(MV)</div> <div>0100</div>		
			<div>Good Bond (GOBO)</div> <div>(MV)</div> <div>010</div>		
			<div>GoodBond</div> <div>From ACBL to GOBO</div>		

OP System Version: 19C0-187

SCMT-CB	19C0-187	PMIT-B	19C0-187
PSPT	19C0-187		

<<<SCMT Cement Evaluation Information Summary>>>

Sonde Serial Number	SCMS-CB 8284		
Current Casing Size	7.0 IN		
Casing Weight	26.0 LB/F		
Expected CBL Amplitude in Free Pipe Section	62 MV	Minimum Sonic Amplitude	1.94803 MV (100% Cement)
			3.89184 MV (80% Cement)
		MAP Minimum Sonic Amplitude	11.3304 MV (100% Cement)
			17.5144 MV (80% Cement)
Master Calibration (Normalization)	Before Calibration (Adjustment)		
Date of Master Calibration	21-JUN-2013		
CBL Correction Factor	0.0743795	CBL Adjustment Factor (CBAF)	1.0
MAP 1 Correction Factor	0.105721	MAP Adjustment Factor (MPAF)	1.0
MAP 2 Correction Factor	0.132315		
MAP 3 Correction Factor	0.146735		
MAP 4 Correction Factor	0.109791		
MAP 5 Correction Factor	0.114089		
MAP 6 Correction Factor	0.110732		
MAP 7 Correction Factor	0.116601		
MAP 8 Correction Factor	0.0804110		

Parameters

DLIS Name	Description	Value	
SCMT-CB: Slim Cement Mapping Tool, 1-11/16 OD			
BILI	Bond Index Level for Zone Isolation	0.8	
CB3D	SCMT CBL 3 ft Peak Detection Mode	PEAK	
CB3G	SCMT CBL 3 ft Peak Detection T0_Delay and Noise Gate	258.768	US
CB3T	SCMT CBL 3 ft Fixed Threshold Level	20	MV
CB5D	SCMT CBL 5 ft Peak Detection Mode	PEAK	
CB5G	SCMT CBL 5 ft Peak Detection T0_Delay and Noise Gate	372.768	US
CB5T	SCMT CBL 5 ft Fixed Threshold Level	20	MV
CBLG	CBL Gate Width	55	US
CBRA	CBL LQC Reference Amplitude in Free Pipe	62	MV
CMCF	CBL Cement Type Compensation Factor	1	
CMTC	SCMT Slow Channel Multiplexer Mode	SCAN	
CMTM	SCMT Operating Mode	LOG	
CSCS	SCMT Slow Channel Index	VCC	
CTHI	Casing Thickness	0.366591	IN
DTF	Delta-T Fluid	189	US/F
FATT	Acoustic Attenuation due to Fluid	0	DB/F
FCF	CBL Fluid Compensation Factor	0.924277	
GOBO	Good Bond	3.89184	MV
MAPD	SCMT MAP Peak Detection Mode	PEAK	
MAPG	SCMT MAP Peak Detection T0_Delay and Noise Gate	201.768	US
MAPT	SCMT MAP Fixed Threshold Level	30	MV
MATT	Maximum Attenuation	11.6819	DB/F
MCCF	MAP Cement Type Compensation Factor	1	
MCI	Minimum Cemented Interval for Isolation	10	FT
MMSA	MAP Minimum Sonic Amplitude	11.3304	MV
MSA	Minimum Sonic Amplitude	1.94803	MV
PEDE	Peak Detection On/Off Switch in Playback	OFF	
VDLG	VDL Manual Gain	5	
ZCMT	Acoustic Impedance of Cement	6.8	MRAY
PMIT-B: Multifinger Imaging Tool - B			
ACQ_MODE	Data Acquisition Mode	RealTime	
BF	Bad finger List	None	
FFCO	Fully-opened fingers Correction	Disallowed	
FOCO	Finger Offset Correction	Allowed	
FWCO	Finger Wear Correction	Disallowed	
HIST	Histogram Accumulation Flag	Allowed	
MIT_CAL_MODE	Finger Calibration Mode	BestFit	
QVCO	Q-V Correction	Disallowed	

OVCO	Ovalization Correction	Disallowed	
VRES	Vertical Resolution	0.1in	
WLI	Logged Interval (for wear correction)	0	FT
System and Miscellaneous			
CSIZ	Current Casing Size	7.000	IN
CWEI	Casing Weight	26.00	LB/F
DFD	Drilling Fluid Density	8.40	LB/G
DO	Depth Offset for Playback	38.0	FT
PP	Playback Processing	RECOMPUTE	
TD	Total Depth	-50000	FT

Input DLIS Files

DEFAULT SCMT_MIT_PSP_017LUP FN:16 PRODUCER 10-Jul-2015 17:51 553.0 FT 18.0 FT

Output DLIS Files

DEFAULT SCMT_MIT_PSP_019PUP FN:18 PRODUCER 10-Jul-2015 18:23



PBMS COEFFICIENTS

MAXIS Field Log

Client: ANADARKO

Field: WATTENBERG

Well: TROUDT 34C-33HZ

Run date: 10-Jul-2015

Tool: PSP

Sub Type: PBMS

Sensor: Clock Model

PBMS Digitalization Clock

Sonde Serial NB0000A-00001

Sensor Serial NB1863

Calib Date ddmmyy261007

Matrix Size16

Coeff CRC3AB0

Clock Coeff

	Temp**0	Temp**1	Temp**2
Temp**0	-.151788334201E+03	-.102873785445E+01	-.167225792957E+00
	Temp**3	Temp**4	Temp**5
Temp**0	+.136689035753E-02	+.538068013029E-06	0.0

Client:ANADARKO

Field:WATTENBERG

Well:TROUDT 34C–33HZ

Run date:10–Jul–2015

Tool:

Sub Type:

Sensor:

PSP

PBMS

Sapphire

PBMS Sapphire 10kPsi Gauge

Sonde Serial NB

Sensor Serial NB

Calib Date ddmmyy

Matrix Size

Coeff CRC

COEFFICIENTS FOR SAPPHIRE PBMS–A.1863 S/N:

1863

261007

66

F756

Pres Coeff

	Tt**0	Tt**1	Tt**2
Tp**0	–.359590231743E+05	+.299188234803E+05	–.107446687531E+05
Tp**1	+.237648969480E+05	–.186021128720E+05	+.671109848596E+04
Tp**2	–.149422117989E+03	+.596502883584E+02	–.652553761493E+01
Tp**3	+.143644323931E+01	–.305754161348E+00	0.0
Tp**4	0.0	0.0	0.0
Tp**5	0.0	0.0	0.0

	Tt**3	Tt**4	Tt**5
Tp**0	+.180759727775E+04	–.117082497700E+03	0.0
Tp**1	–.113521285304E+04	+.740106734909E+02	0.0
Tp**2	0.0	0.0	0.0
Tp**3	0.0	0.0	0.0
Tp**4	0.0	0.0	0.0
Tp**5	0.0	0.0	0.0

PBMS Sapphire 10kPsi Gauge

Sonde Serial NB

Sensor Serial NB

Calib Date ddmmyy

Matrix Size

Coeff CRC

:

1863

261007

66

89EB

Temp Coeff

	Tp**0	Tp**1	Tp**2
Tt**0	+.196657284828E+04	+.100051500932E+02	–.971524337955E+01
Tt**1	–.124071500899E+04	–.116824853877E+00	+.270298401768E+01

Tt**2	+.276001008305E+03	-.113239508435E+01	-.340525434373E-01
Tt**3	-.216436996942E+02	+.118632399044E+00	0.0
Tt**4	0.0	0.0	0.0
Tt**5	0.0	0.0	0.0
	Tp**3	Tp**4	Tp**5
Tt**0	+.255739855736E+01	-.250107203346E+00	0.0
Tt**1	-.674177192949E+00	+.655237399131E-01	0.0
Tt**2	0.0	0.0	0.0
Tt**3	0.0	0.0	0.0
Tt**4	0.0	0.0	0.0
Tt**5	0.0	0.0	0.0

Client:	ANADARKO	Tool:	PSP
Field:	WATTENBERG	Sub Type:	PBMS
Well:	TROUDT 34C-33HZ	Sensor:	GR
Run date:	10-Jul-2015		

PBMS Gamma Ray	RESISTORS FOR GR SENSOR N.33499,TOOL PBMS-AA1863. SENSOR S/N:		
Sonde Serial NB	33499		
Sensor Serial NB	100402		
Calib Date ddmmyy	12		
Matrix Size	DFA9		
Coeff CRC			
GR HV Rt			
	Rt**0	Rt**1	
Rt**0	+.150000000000e+04	+.241000000000e+04	

Client:	ANADARKO	Tool:	PSP
---------	----------	-------	-----

PBMS RTD Well Thermometer

Sonde Serial NB

Sensor Serial NB

Calib Date ddmmyy

Matrix Size

Coeff CRC

COEFFICIENTS FOR RTD THERMOMETER PBMS–A.1863 S/N:

1863

261007

16

3DE3

WTemp Coeff

	Tt**0	Tt**1	Tt**2
Tt**0	–.445369658202E+03	+.231013910229E+03	–.562860354452E+02
	Tt**3	Tt**4	Tt**5
Tt**0	+.107489365785E+02	–.720697242025E+00	0.0

Company:

ANADARKO

Schlumberger

Well:

TROUDT 34C–33HZ

Field:

WATTENBERG

County:

WELD

State:

COLORADO

SLIM CEMENT MAPPING LOG

CBL – VDL

GR – CCL