



TUBING COLLAR LOG TEMPERATURE LOG

File No:		Company CANADIAN NATURAL RESOURCES LTD									
LSD.	7	Well		CNUL32-04 CADOTTE 7-19-85-18W5							
SEC.	19	Field		CADOTTE							
TWP.	85	Province		ALBERTA		Country		CANADA			
RGE.	18	Surface Location				100/06-19-085-18W5		License		0330074	
WEST	5	UWI.				100/07-19-085-18W5/00		Other Services:			
		LSD.				7		SEC.		19	
		TWP.				85		RGE		18	
		W.				5					
Permanent Datum		GROUND LEVEL		Elevation		Elev K.B.		625.23			
Log Meas. From		KELLY BUSHING		M. Above Datum		Elev D.F.		N/A			
Drilling Meas. From		KELLY BUSHING				Elev G.L.		615.9			
Date		DECEMBER 31 2017				Perforations					
Run No		ONE				Density		Shots		From To	
Type Log		TEMPERATURE LOG									
Depth Driller (OH)		NONE									
Depth Driller (CH)		1143.0 mKB									
Depth Logged (PBDT)		1139.0 mKB									
Bottom Log Interval		1139.0 mKB									
Top Log Interval		SURFACE									
Fluid Type		H2O									
Fluid Level		SURFACE									
Wellhead Pressure (KPa)		VACUUM									
Max. Temp. (°C)		194.0 c *				Carrier Size		mm		Carrier Type	
Truck # / Location		#614 PEACE RIVER, AB				Charge Size		gr		Charge Type	
Recorded By		JAMIE KINNEY				Penetration		mm		Entry Hole	
Witnessed By						Phasing					
Casing Record		Size (mm)		Weight (Kg/m)		Top		Bottom			
Surface Casing		406.4				SURFACE		29.00 mKB			
INTERMEDIATE Casing		177.8		34.23		SURFACE		795.0 mKB			
LINER		114.3		17.63		662.01		1143.0 mKB			

	Size (mm)	Type	Model	Depth
Bridge Plug				
Cement Retainer				
Packer				
Invoice #	S-3606			
Reference Literature	WIRELINE DEPTH ONLY !!			
Remarks: GAMMA -RAY & CCL QUIT WORKING AROUND 980 mKB TO 780 mKB. TEMPERATURE REACH OVER TOOL LIMIT.				

All interpretations are opinions based on inferences from electrical or other measurements and we cannot, and do not guarantee the accuracy or correctness of any interpretations, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents, or employees. These interpretations are also subject to our general terms and conditions as set out in our current price schedule.

Tool String Configuration

Max. Length: 2.99 m

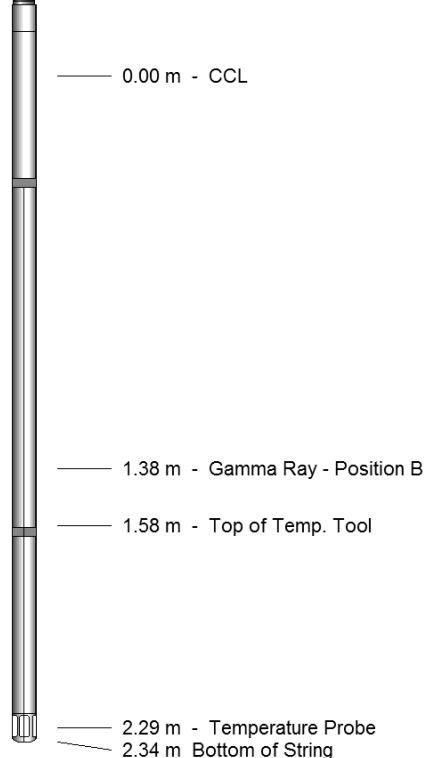
Cable Head

Length: 0.40 m Max Diameter: 36.51 mm

-0.65 m Top of String

CSS CCL-GR-TEMPERATURE

Length: 2.59 m Max Diameter: 41.28 mm



TEMPERATURE UP PASS WITH 4 HR BOTTOM STOP 1:1200

2016-12-31 04:35

Tension (lbF)

0.00 3000.00

CCL

0.00 100.00

GR

0.00 150.00

Pass No. 4

METERS

1:1200

-0.56

Temperature (°C)

50.00

250.00

Diff Temperature (°C/m)

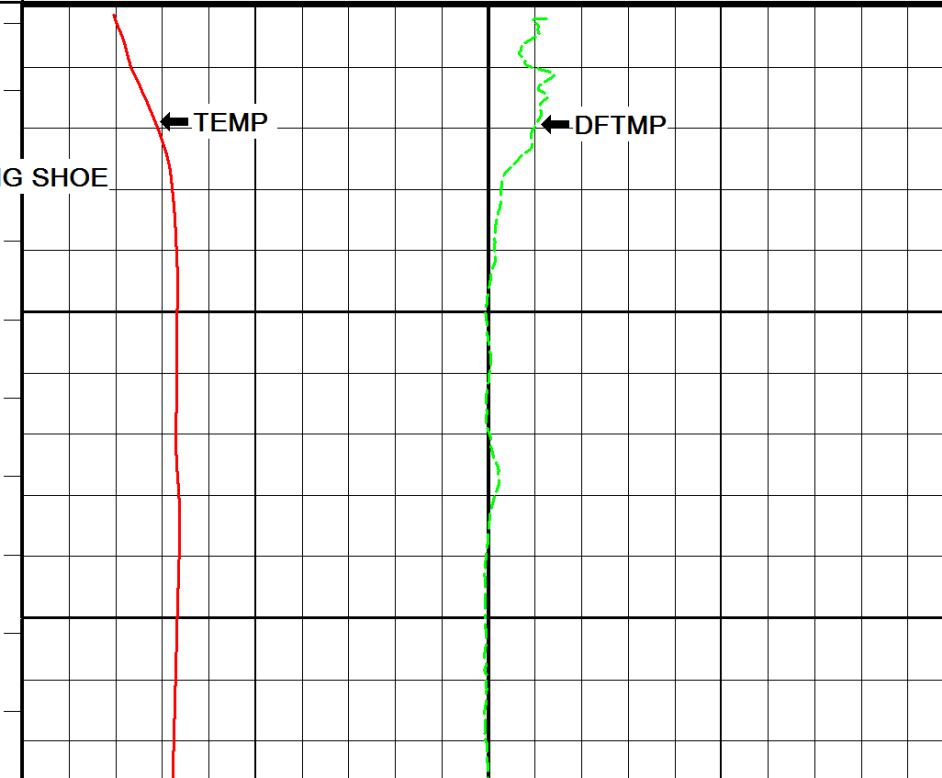
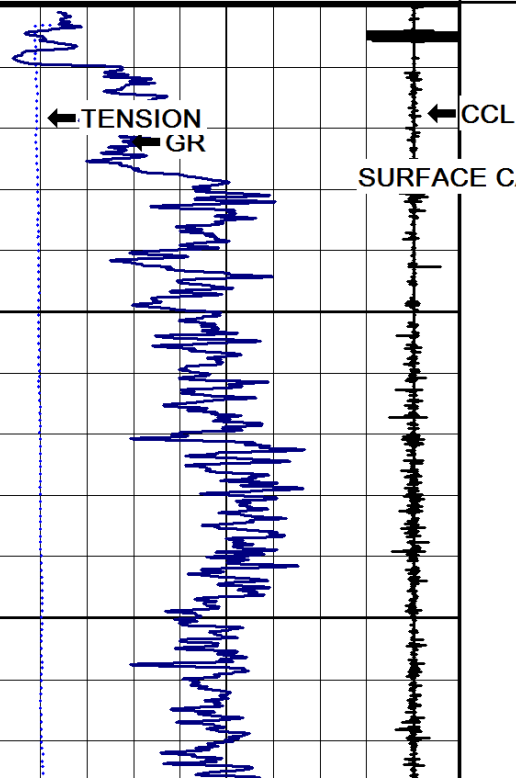
-5.00

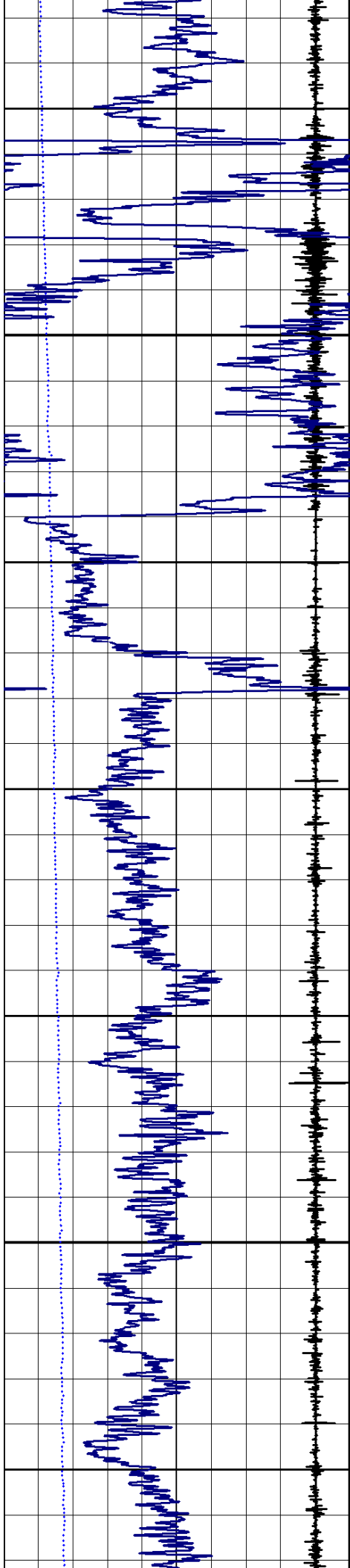
5.00

Logging Up
Shutin

File main pass temp 4 hr 1000.pre

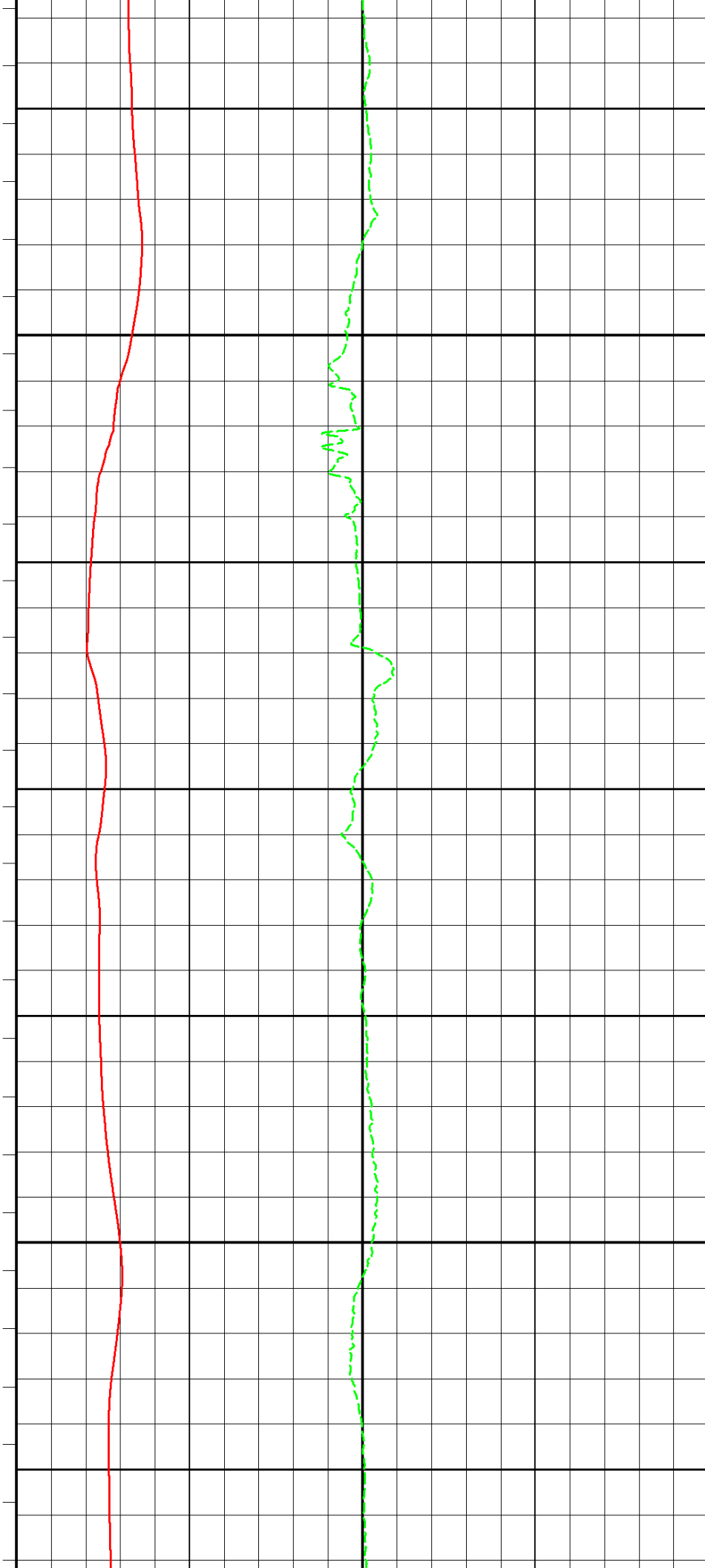
Rev. 2017.01.24

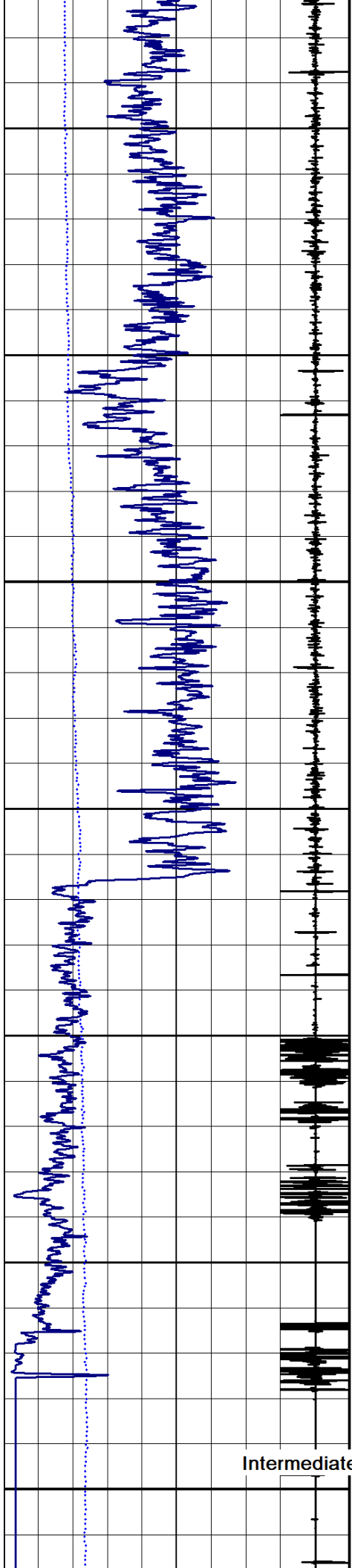




200

400

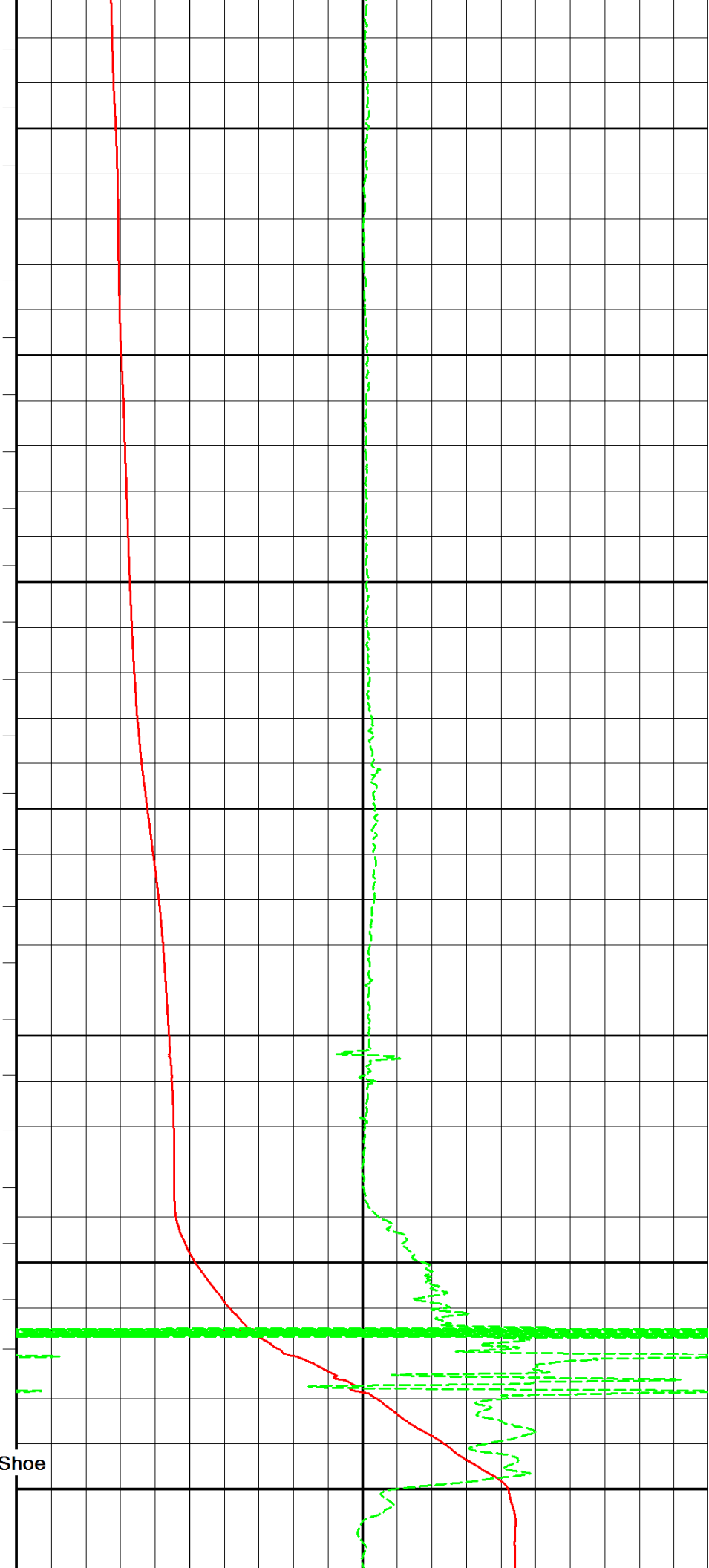


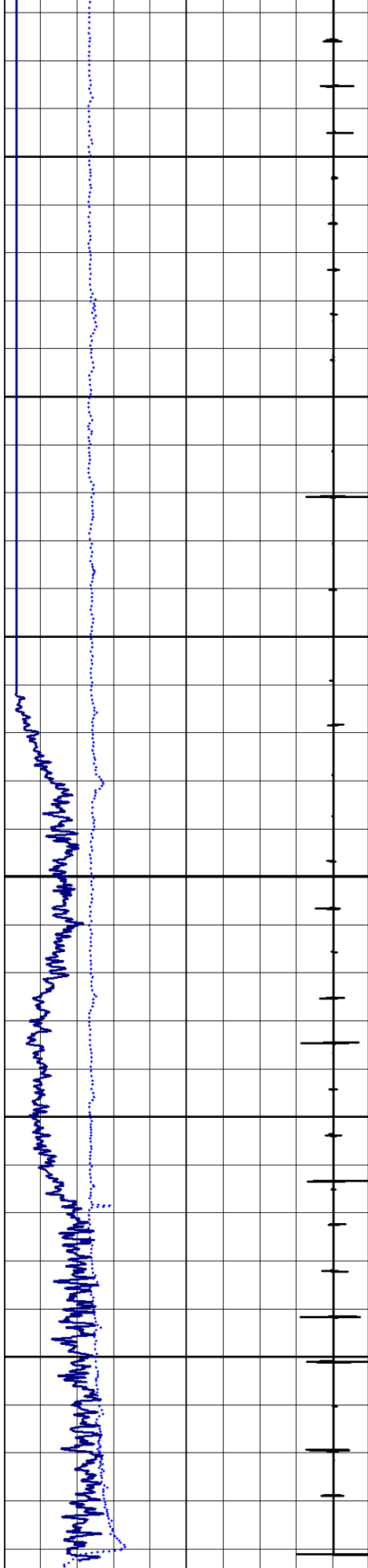


Intermediate Casing Shoe

800

600





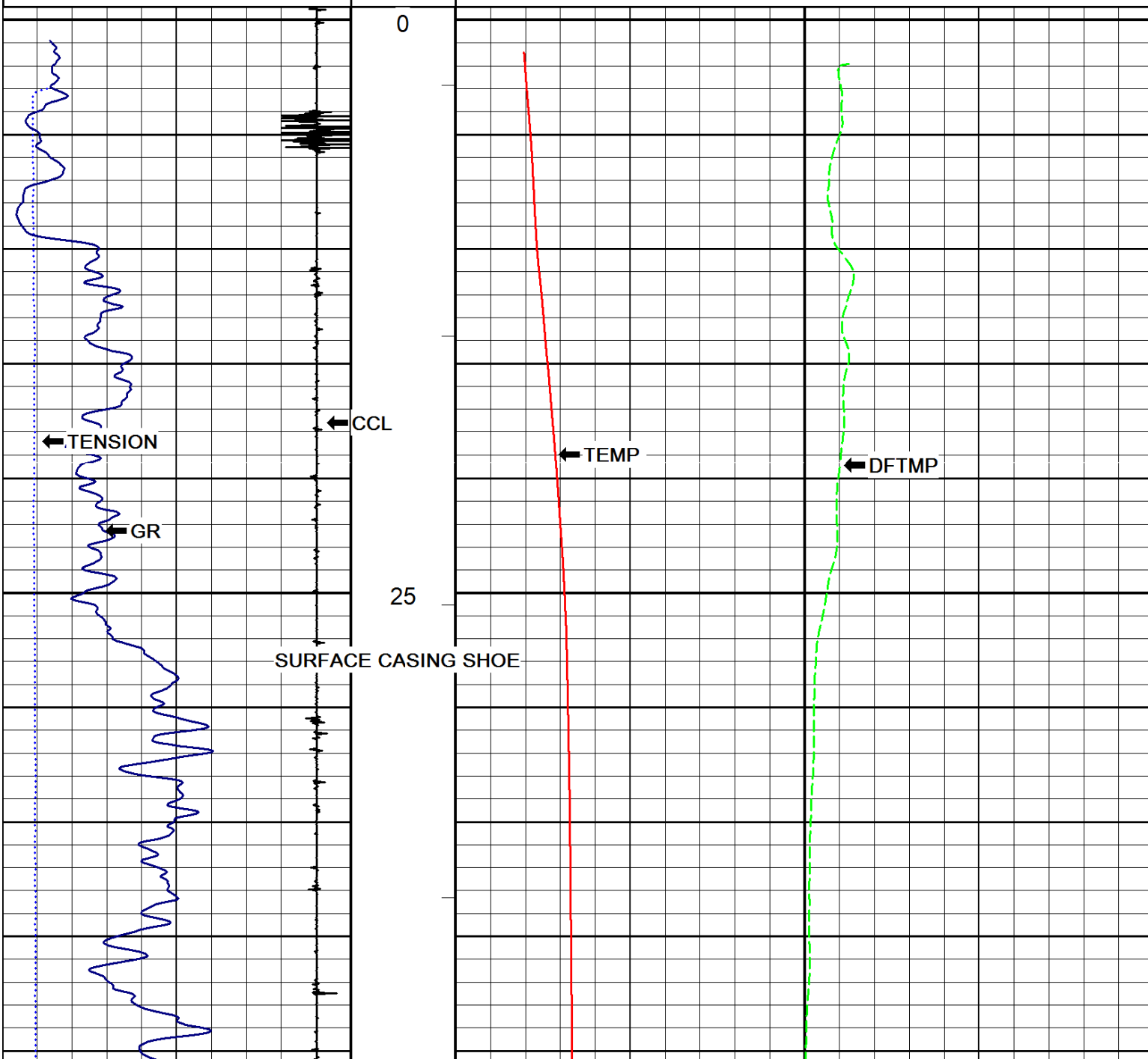
2016-12-31 04:35
Tension (lbF)
0.00 3000.00

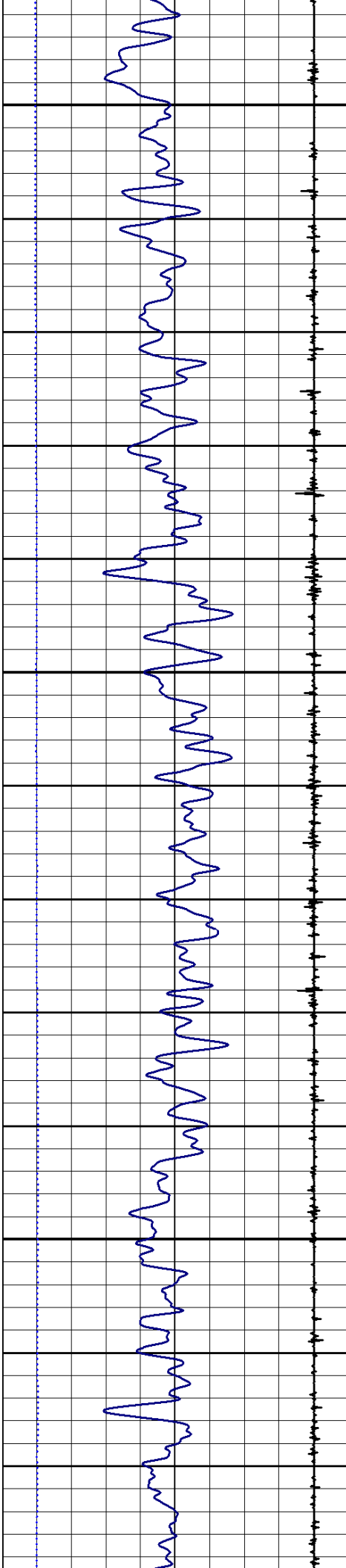


1144.58
Temperature (°C)
50.00 250.00
Diff Temperature (°C/m)

TEMPERATURE UP PASS WITH 4 HR BOTTOM STOP

A grid with a blue wavy line on the left and a red vertical line on the right.

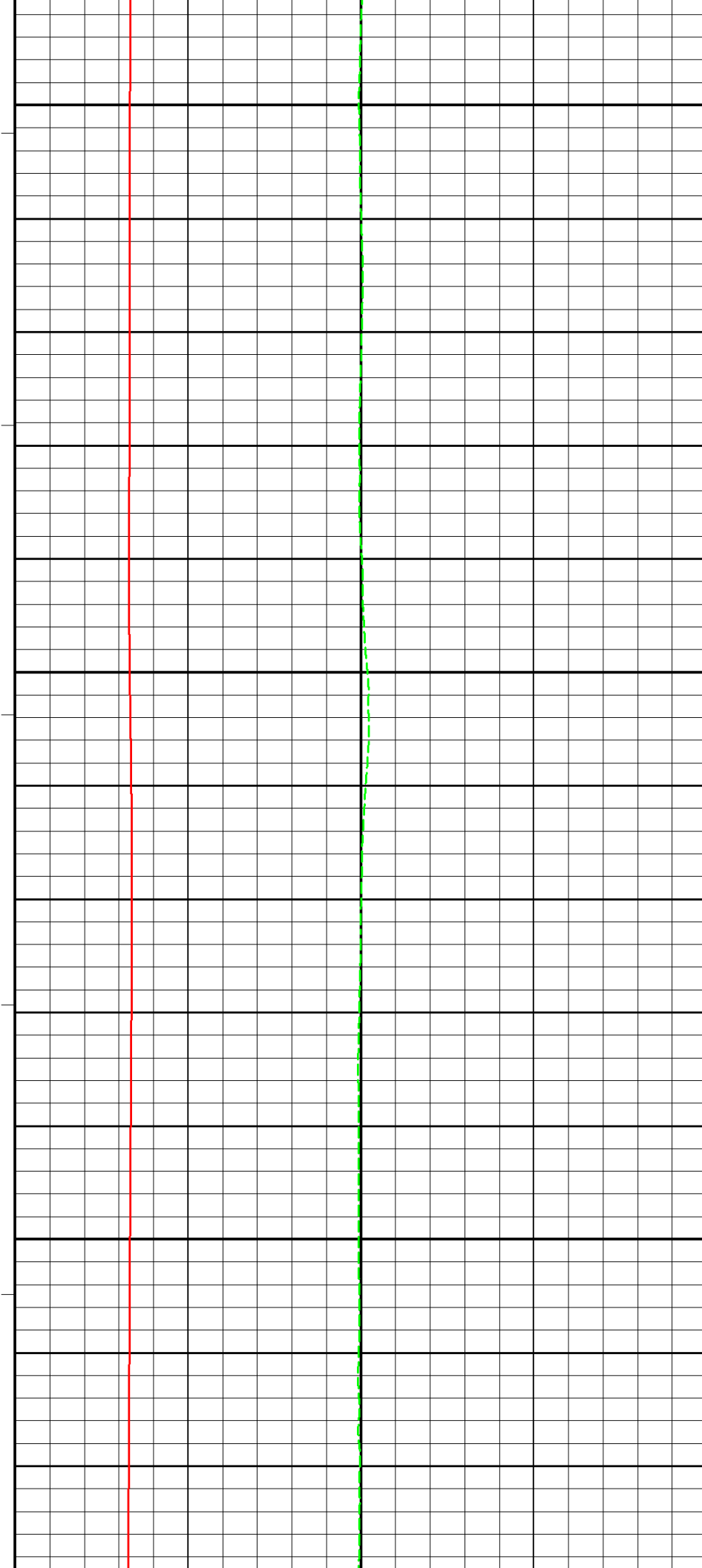


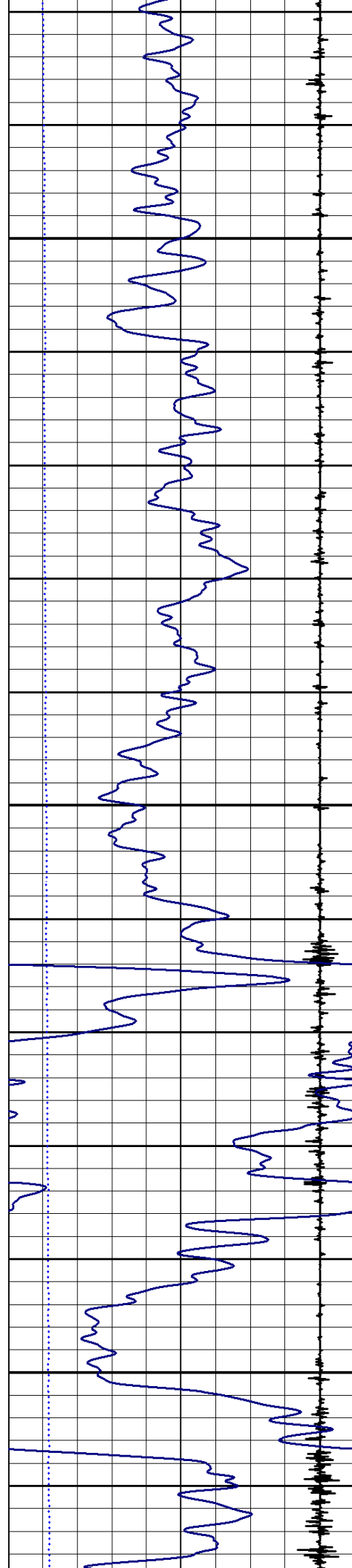


50

75

100

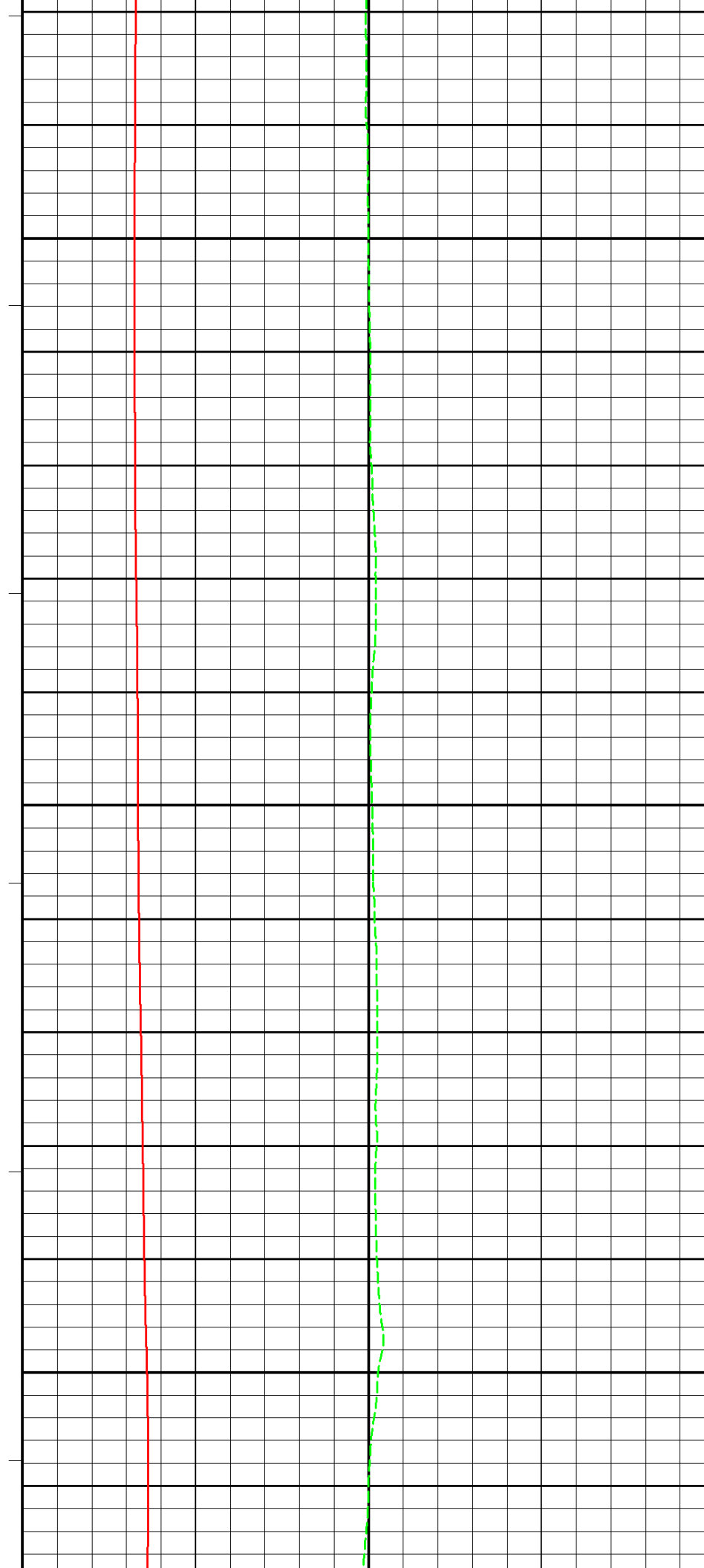


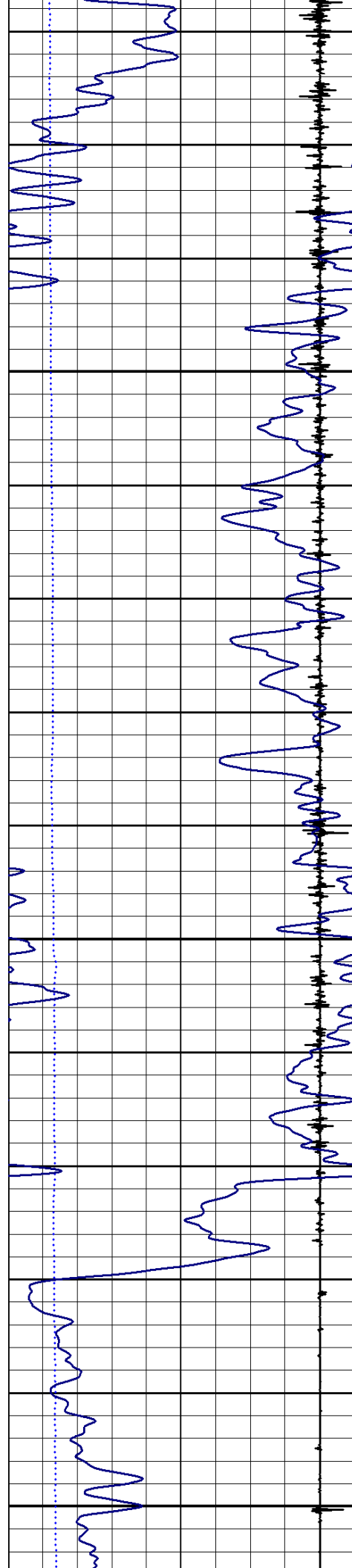


125

150

175

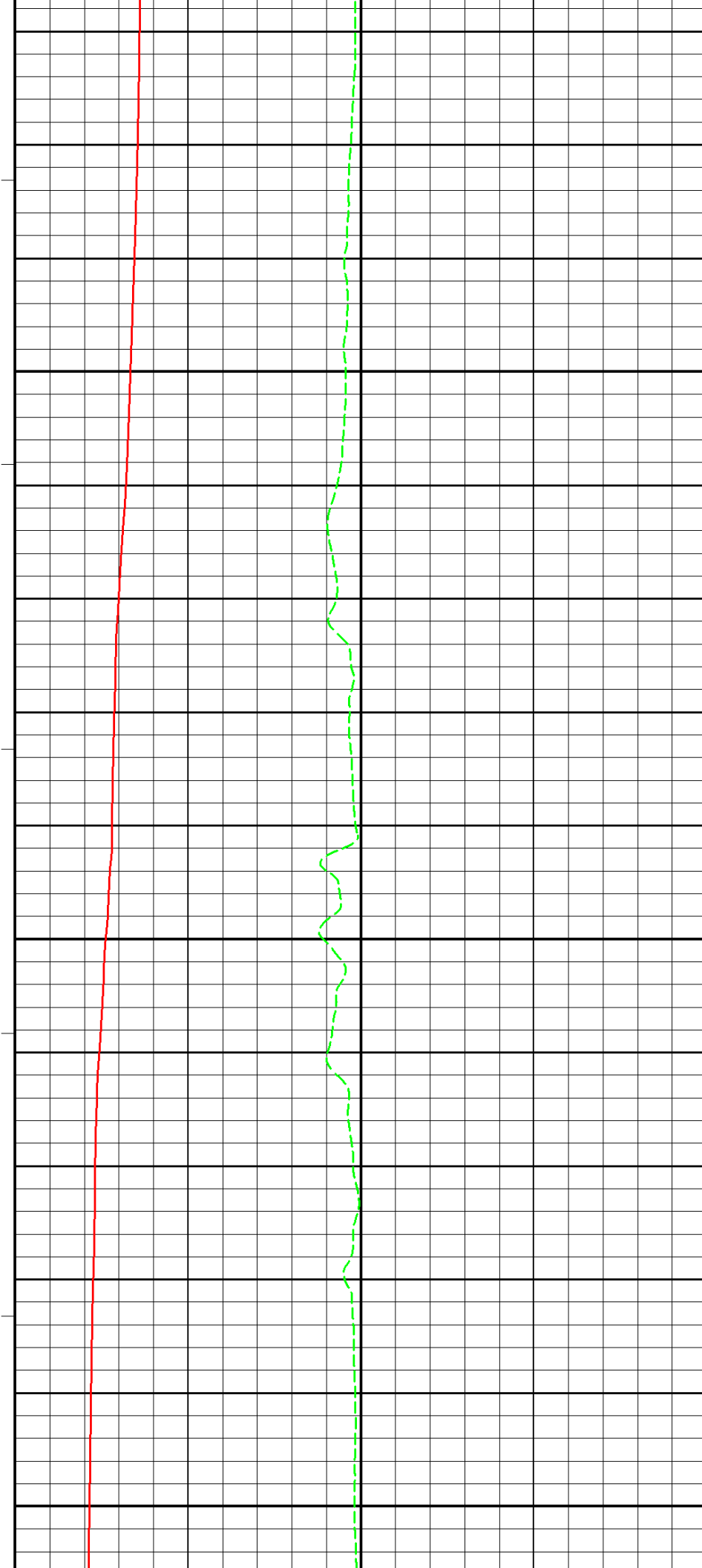


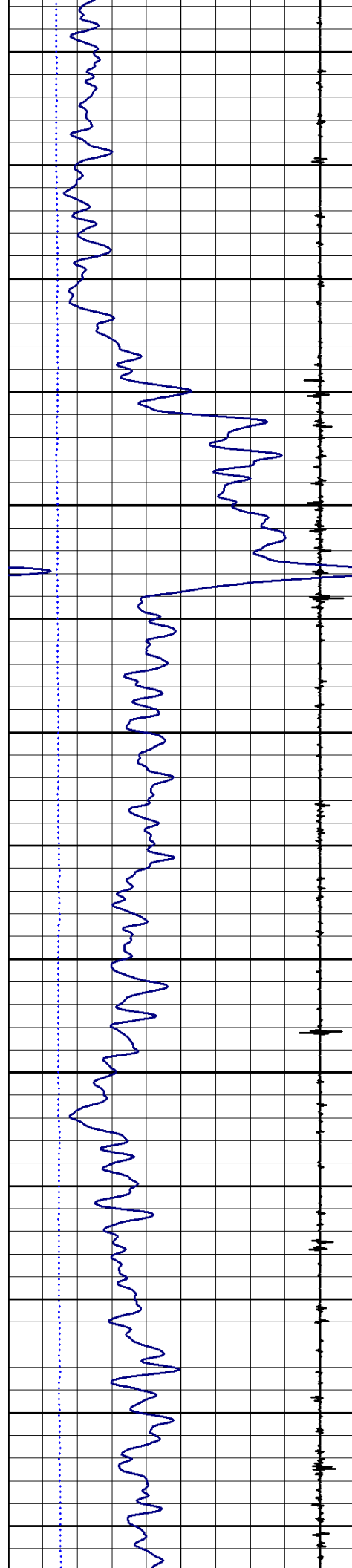


200

225

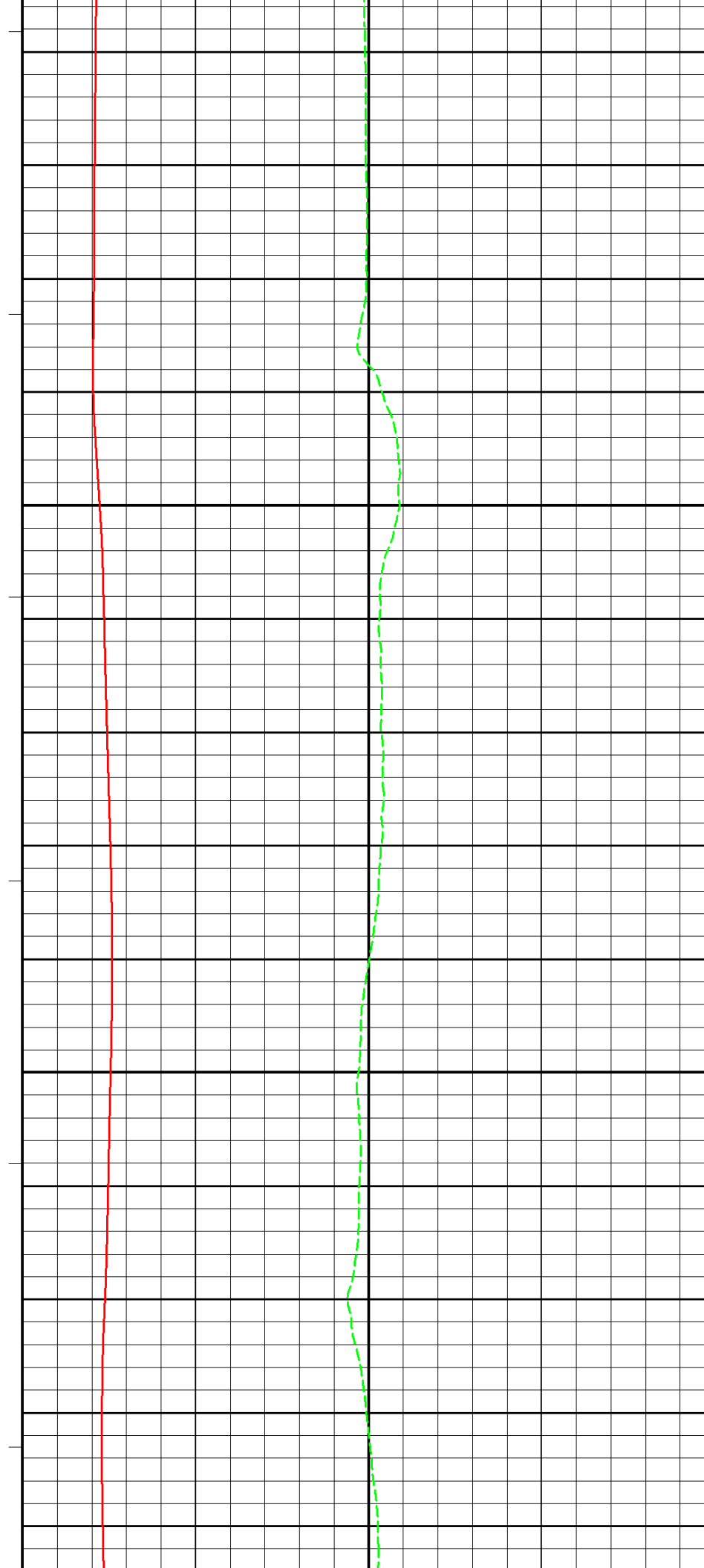
250

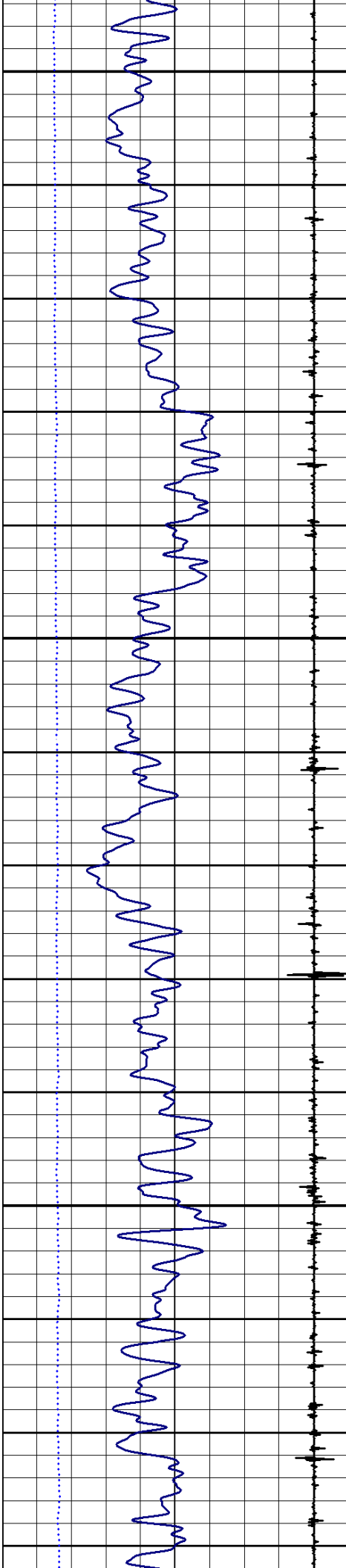




275

300

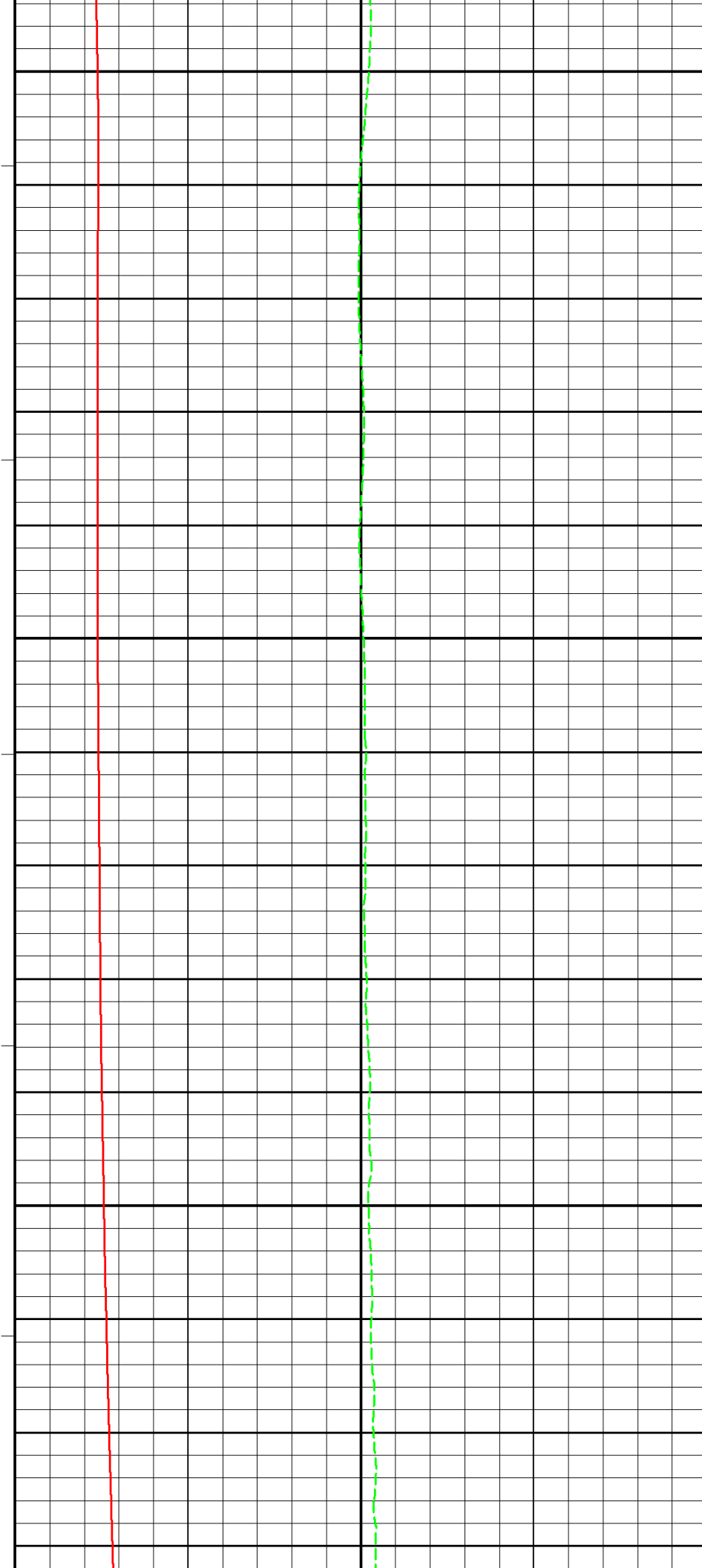


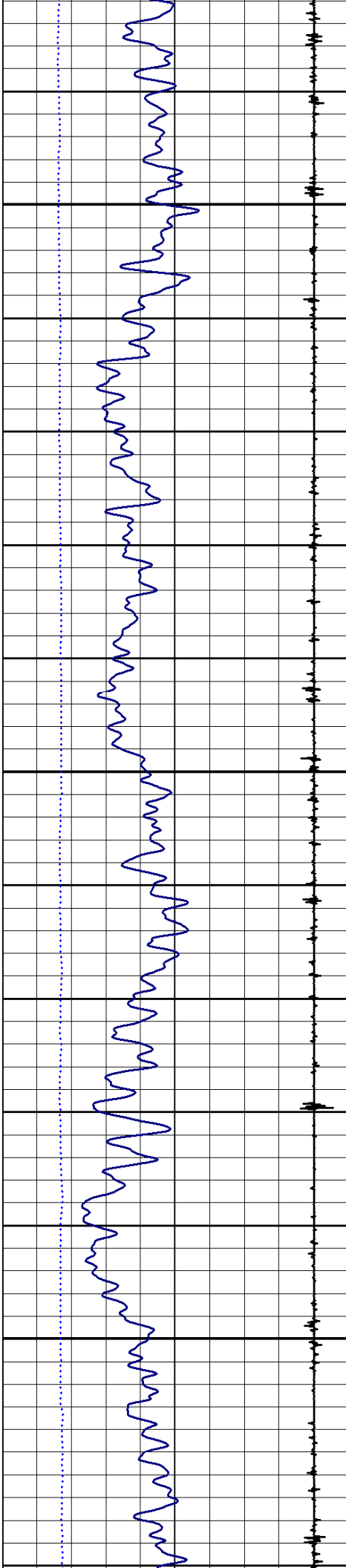


325

350

375

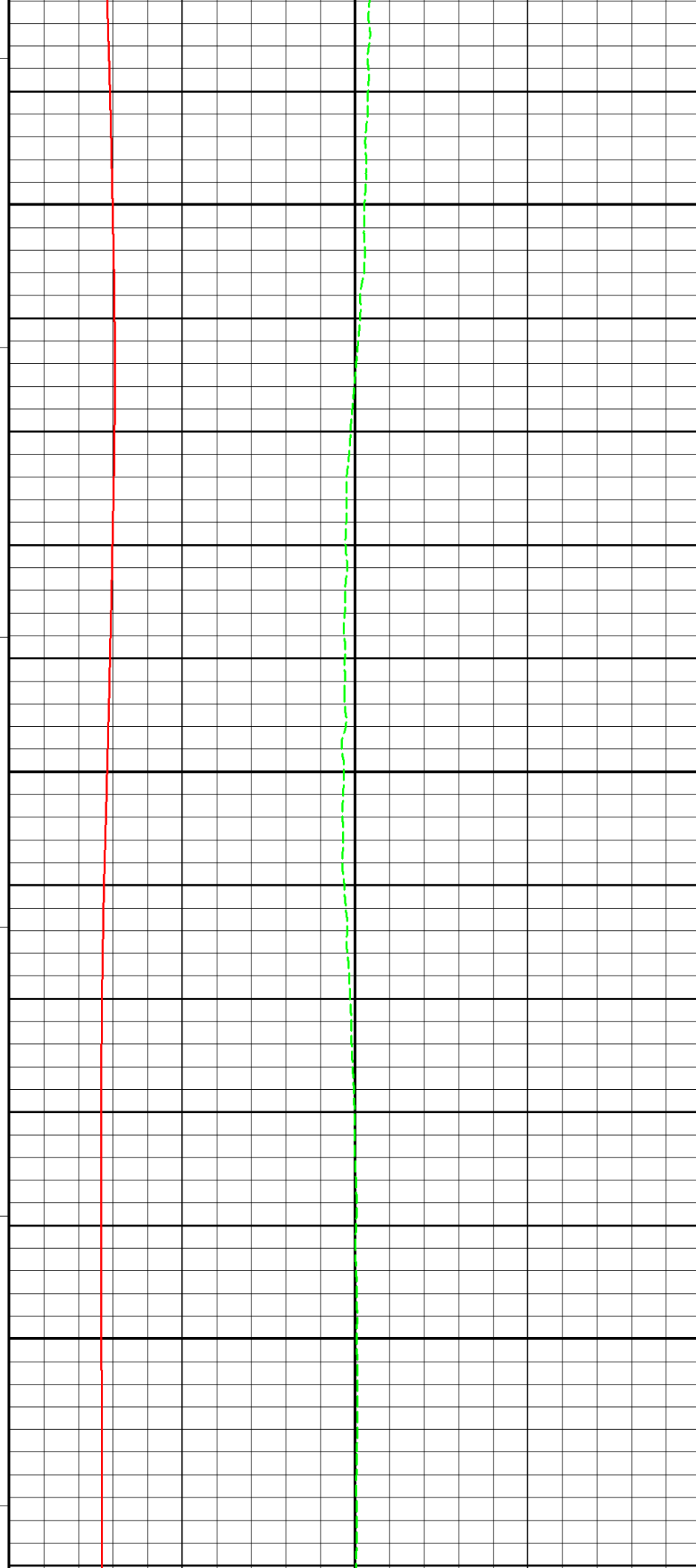


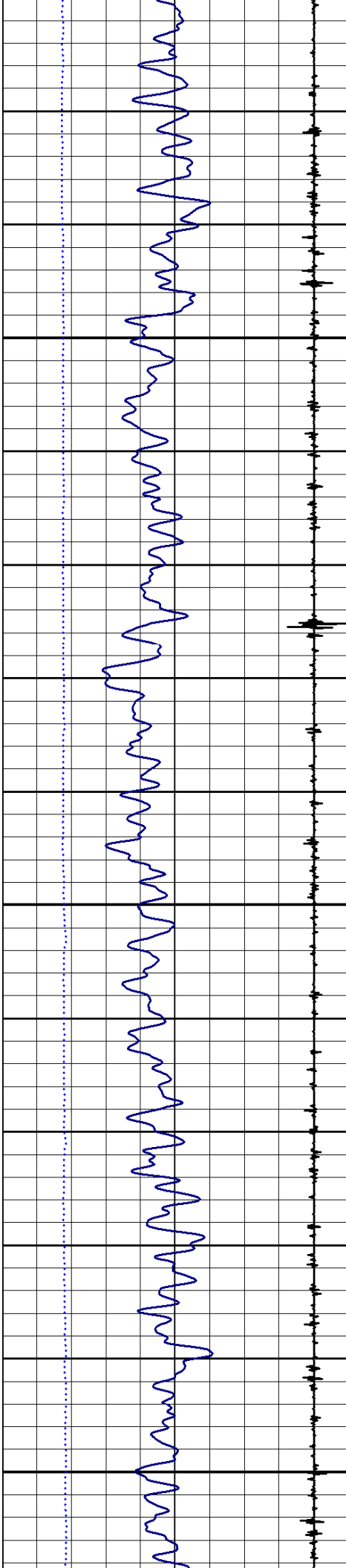


400

425

450

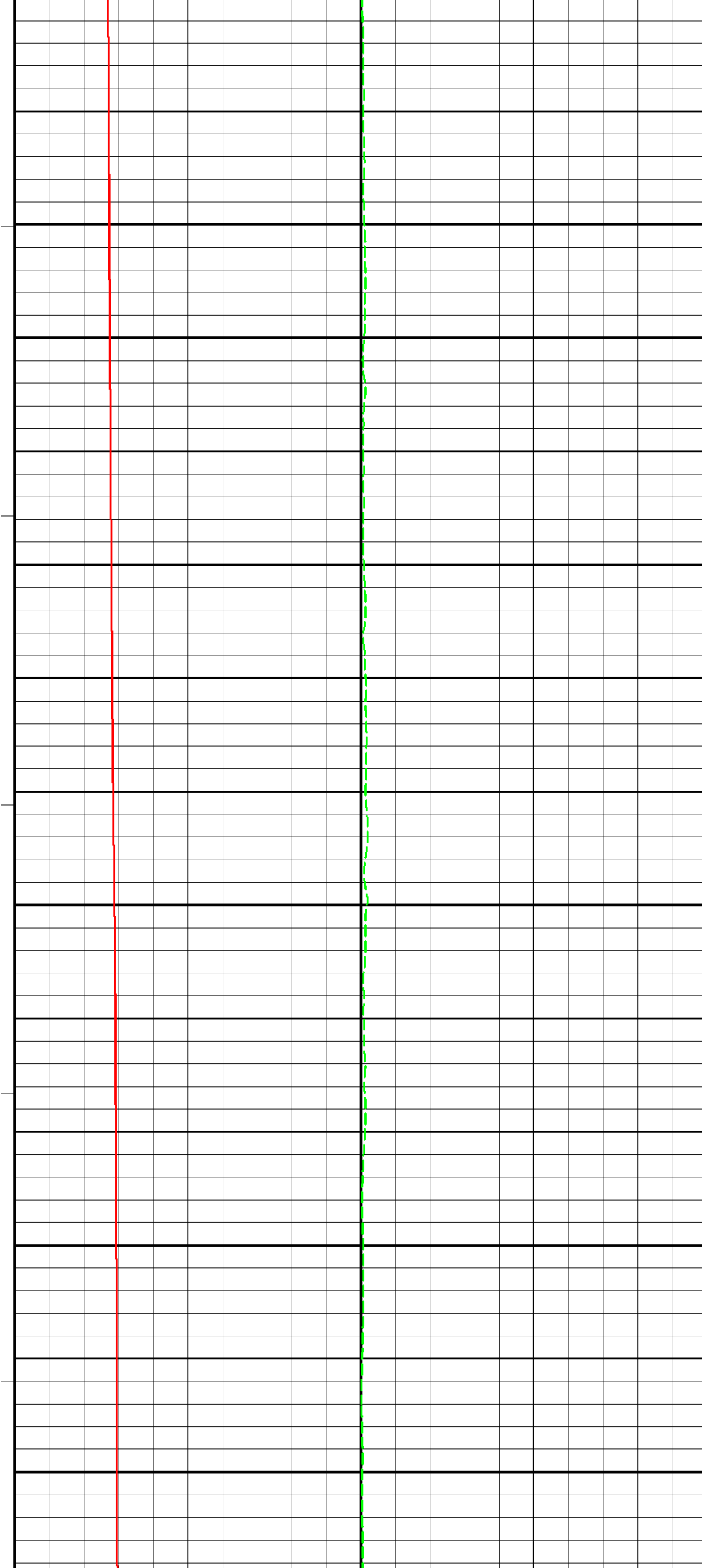


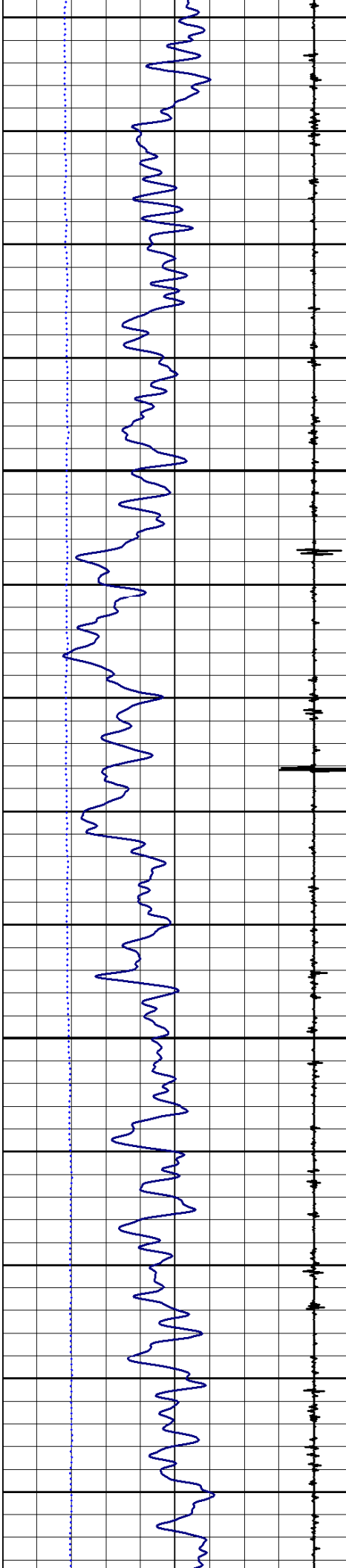


475

500

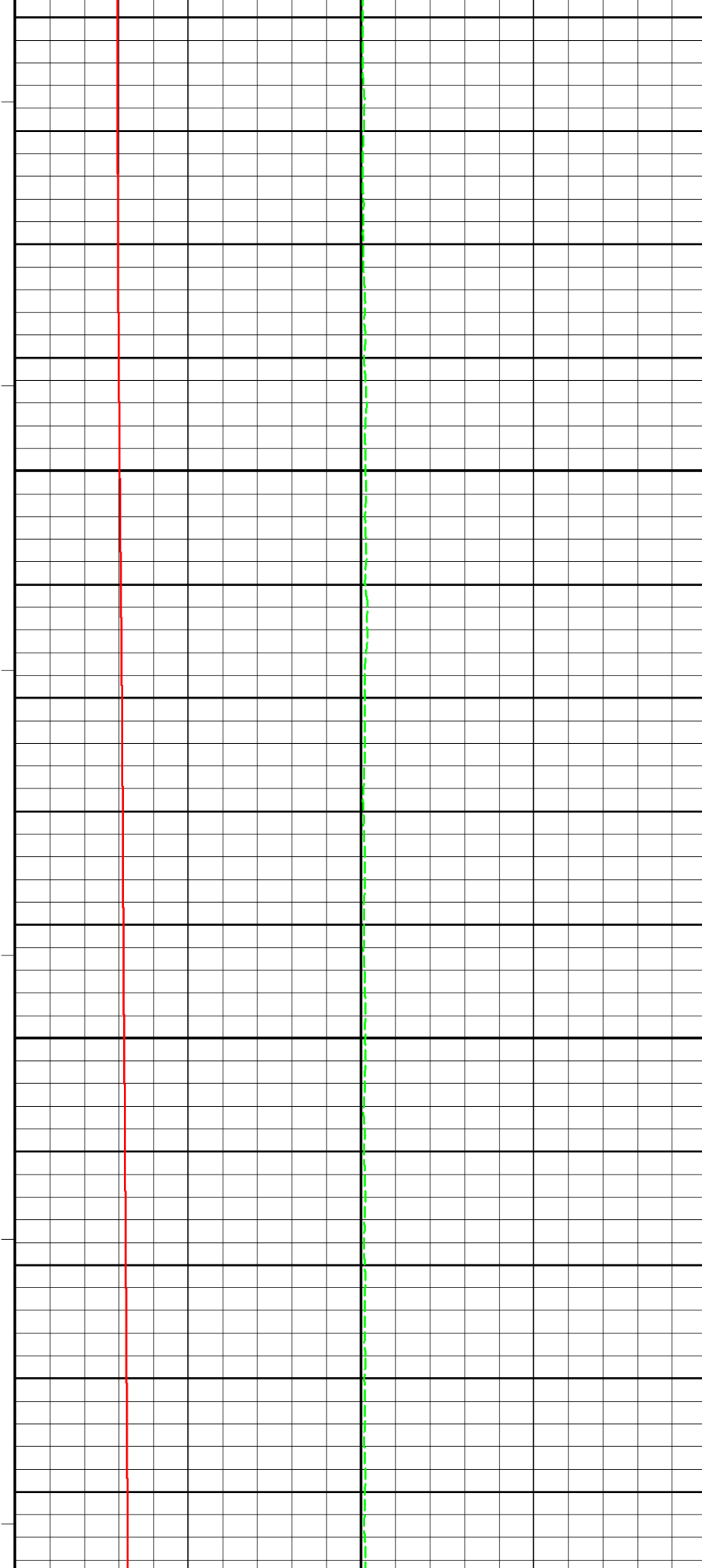
525

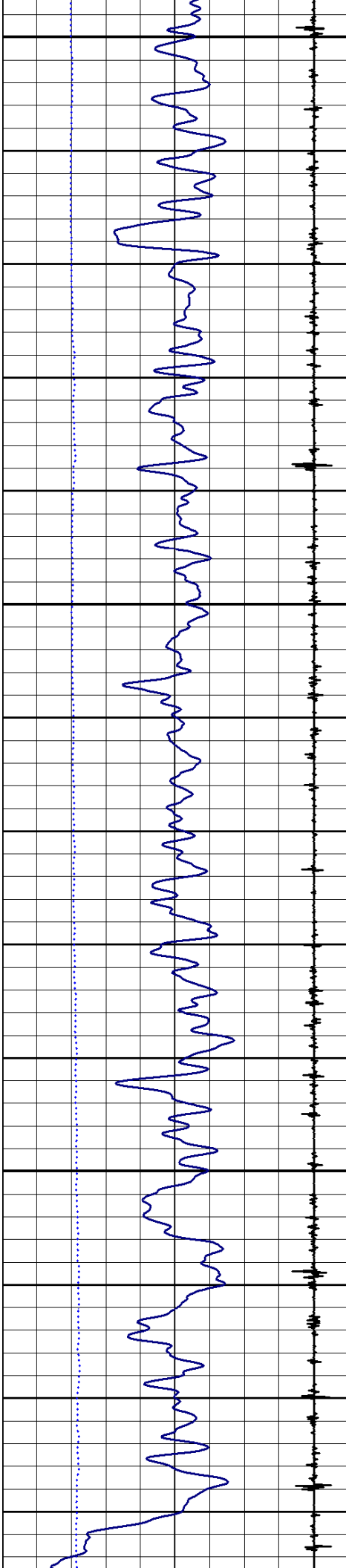




550

575

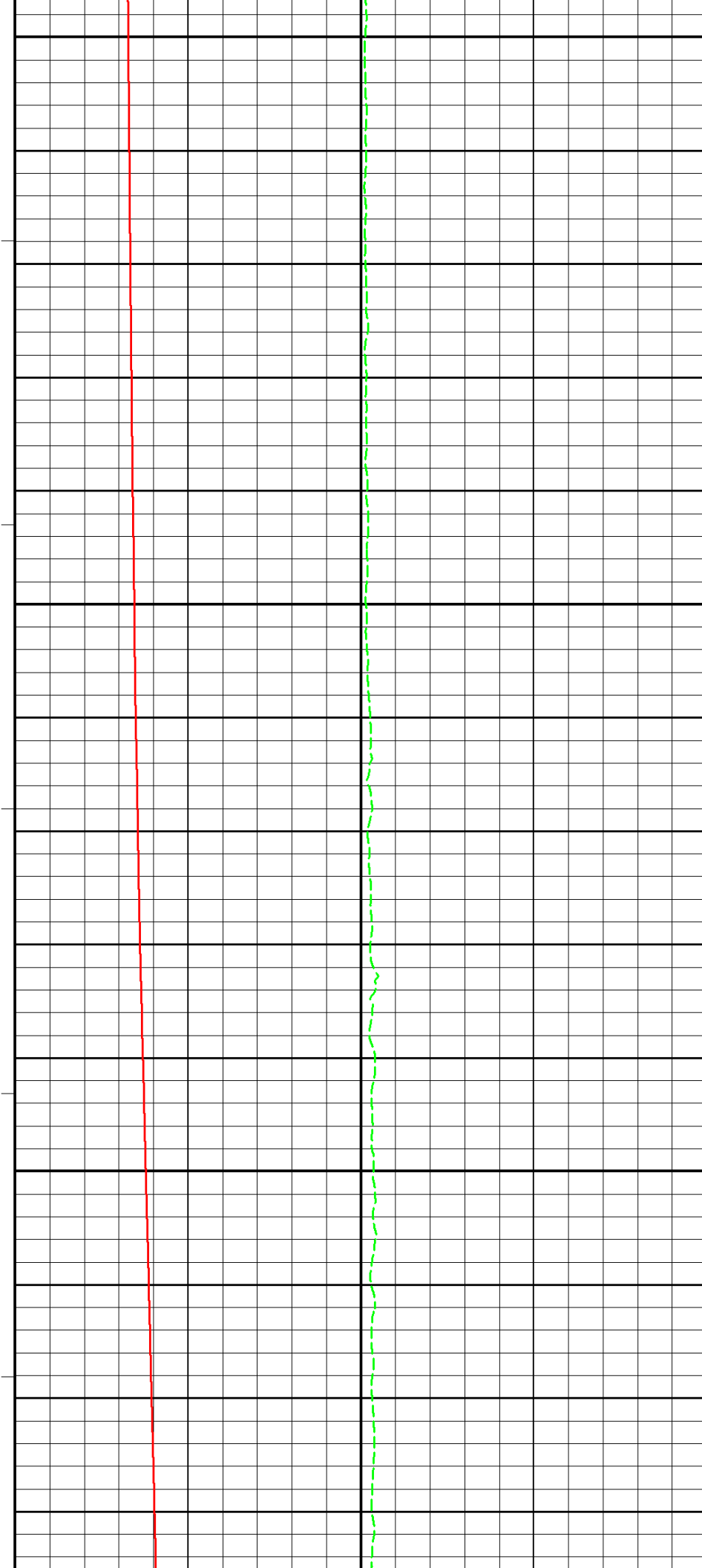


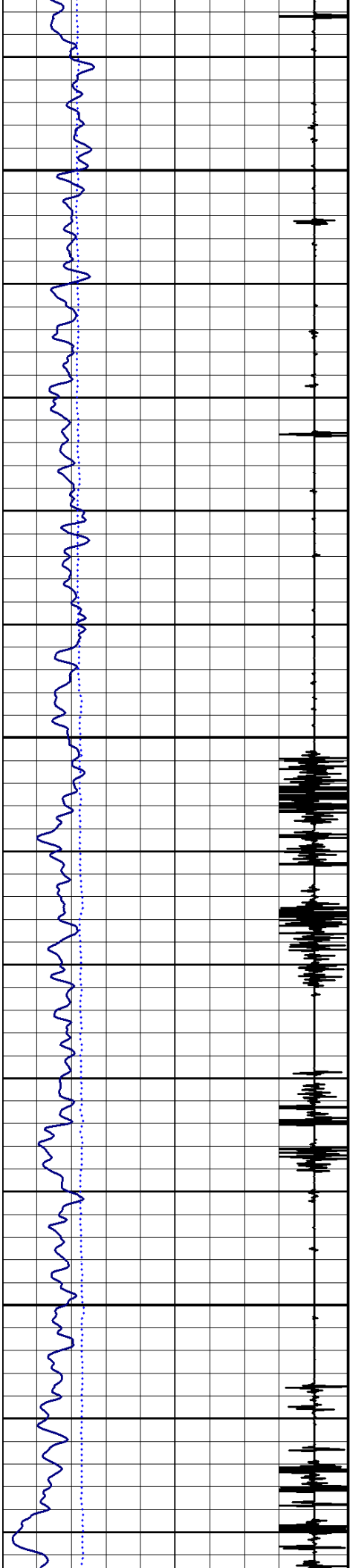


600

625

650

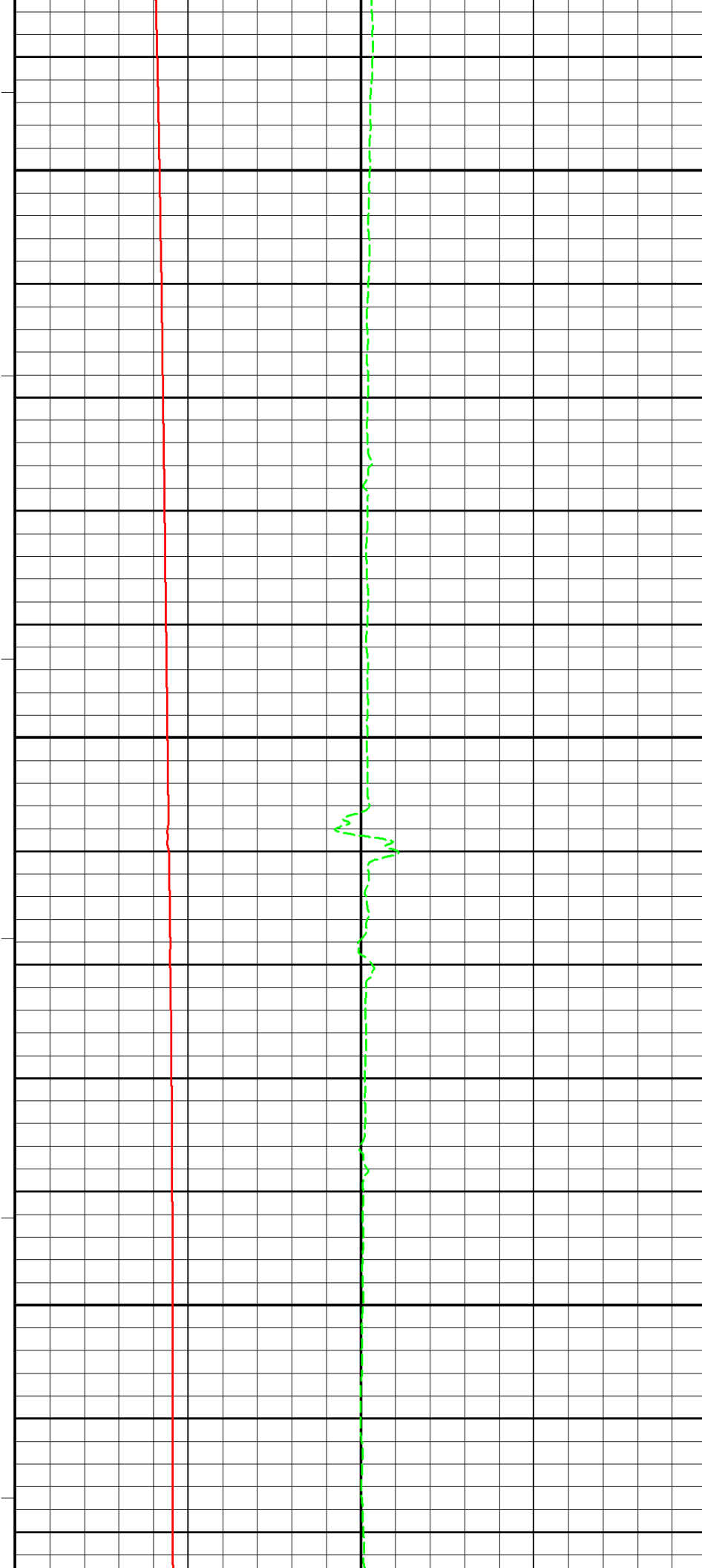


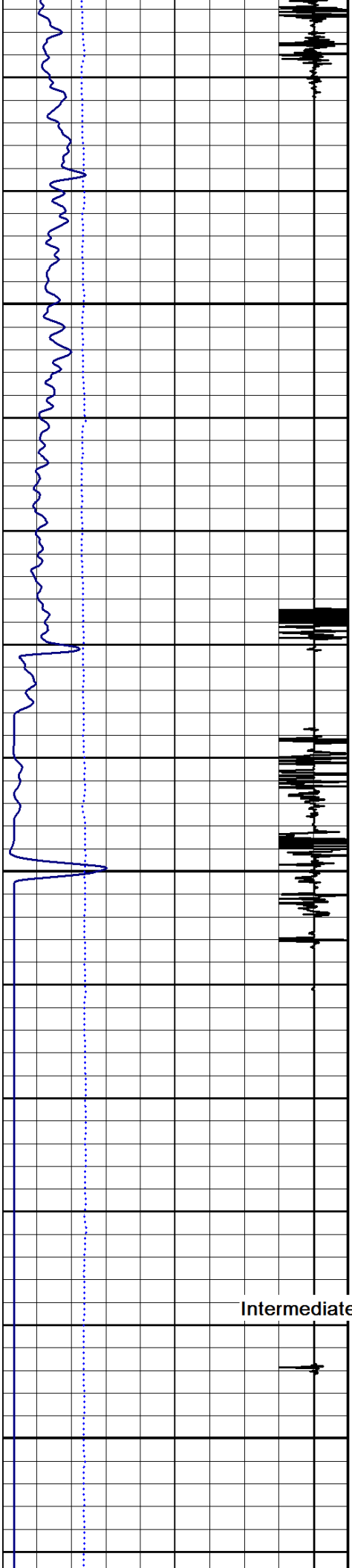


675

700

725



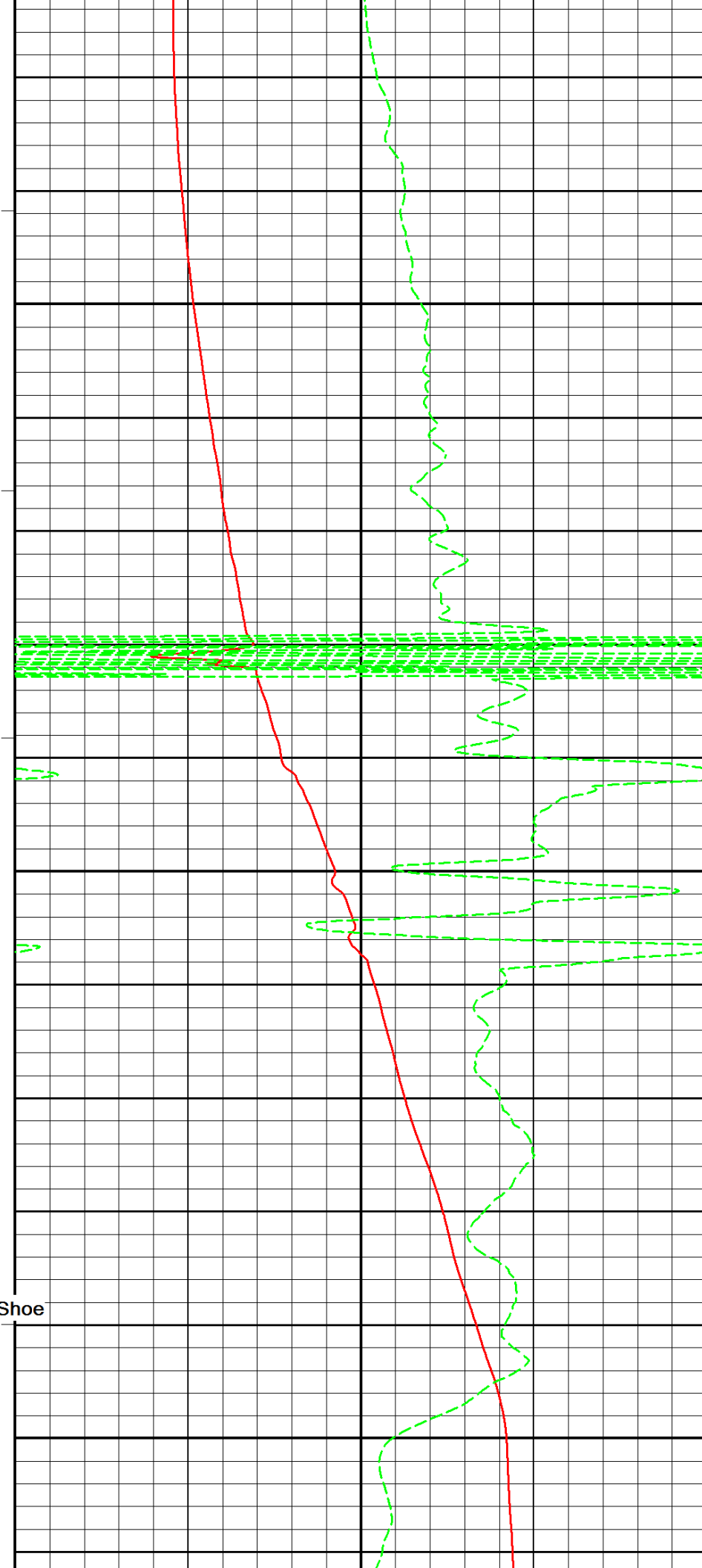


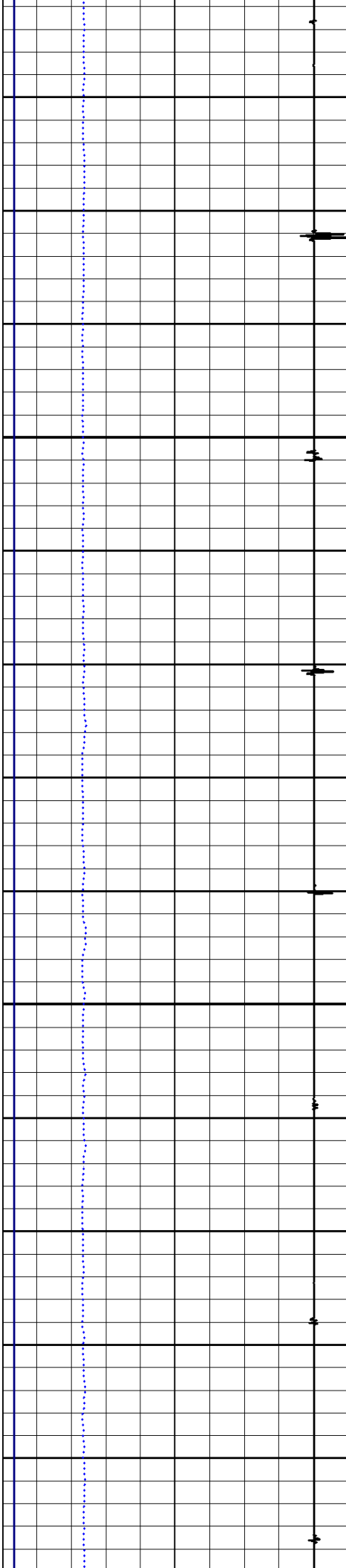
750

775

Intermediate Casing Shoe

800

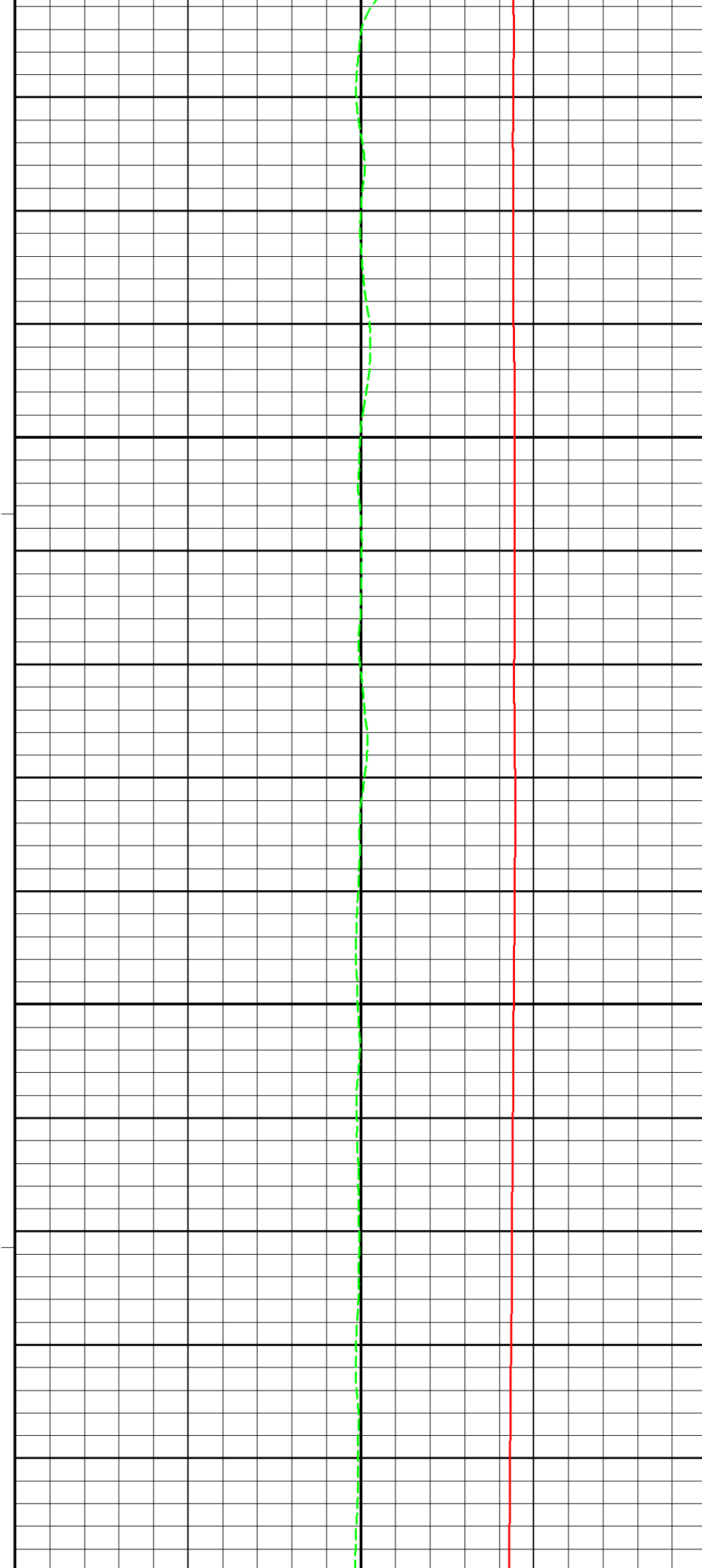


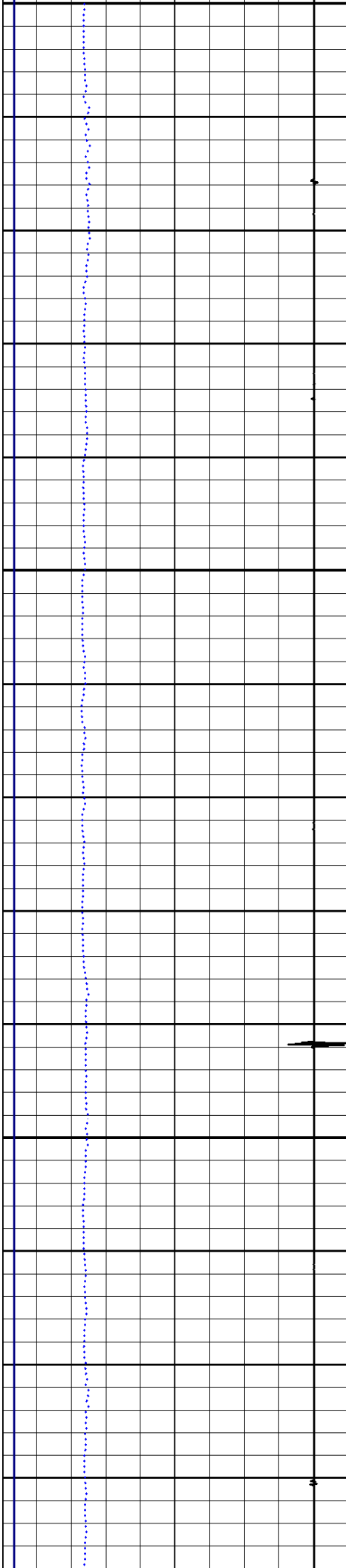


825

850

875



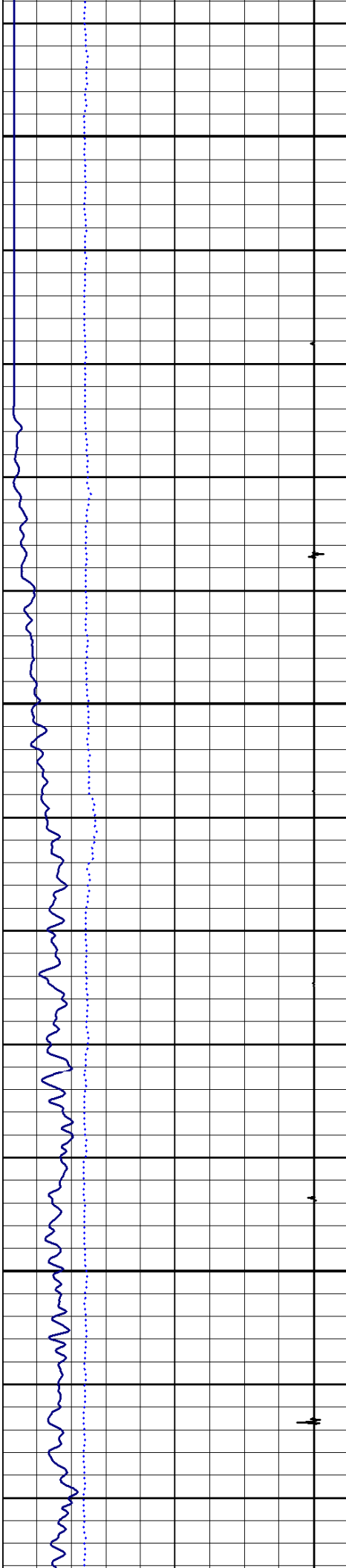


875

900

925

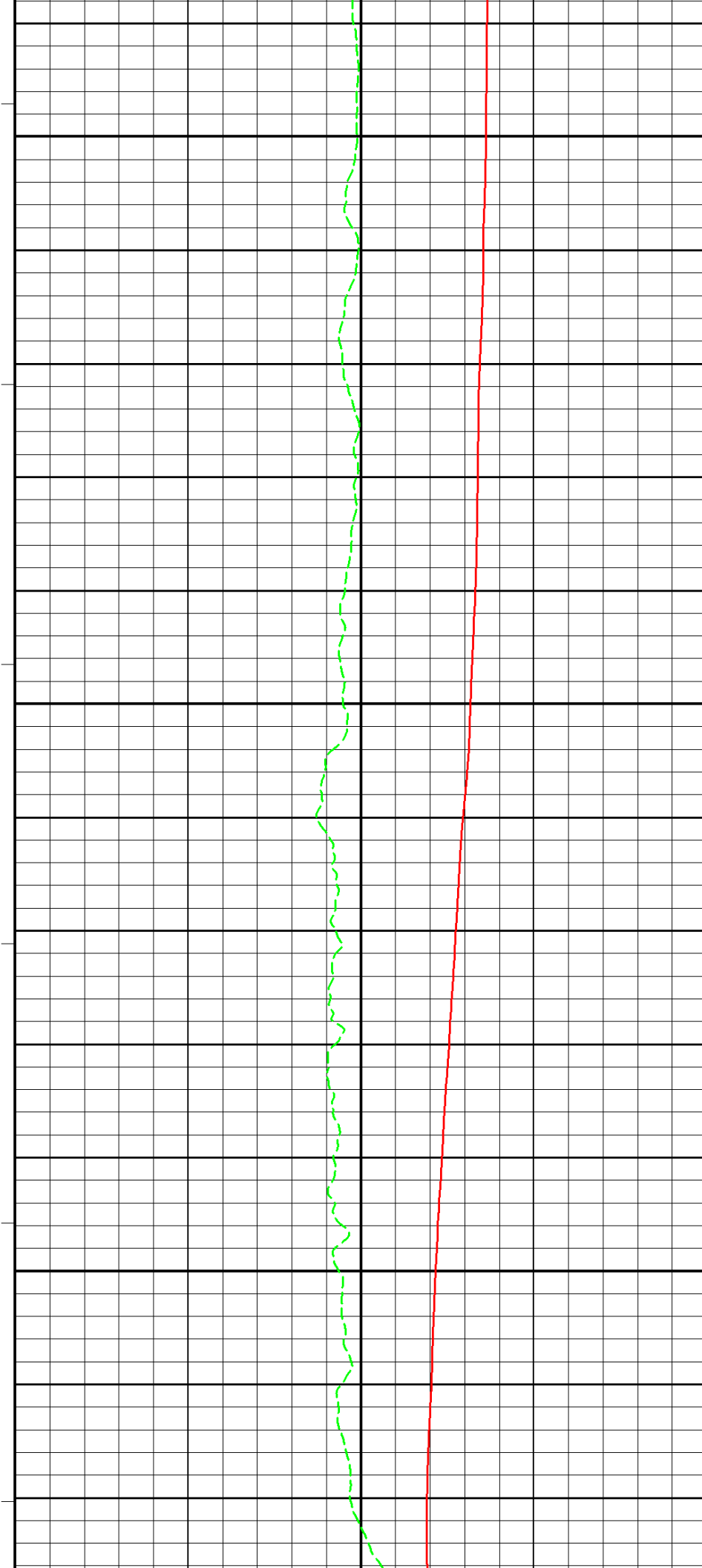


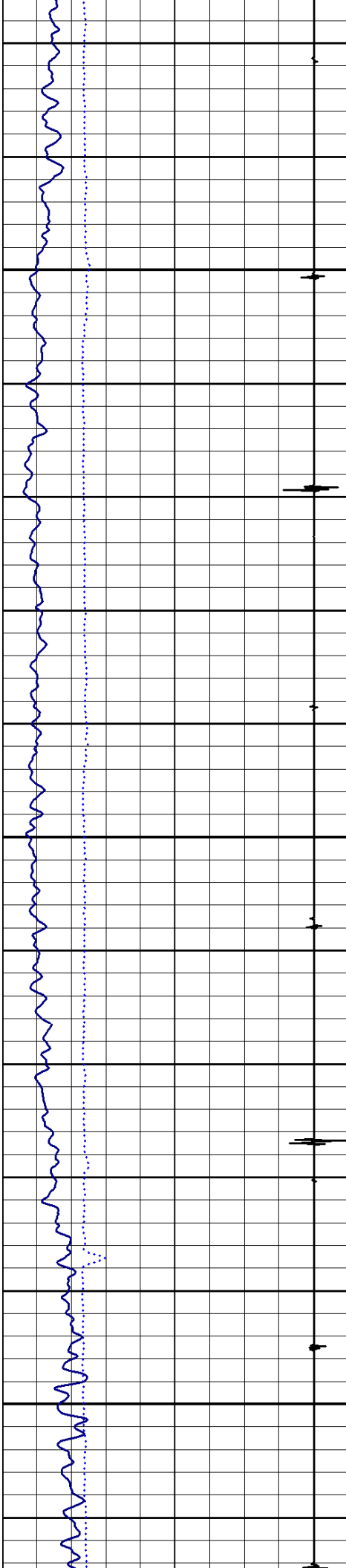


950

975

1000

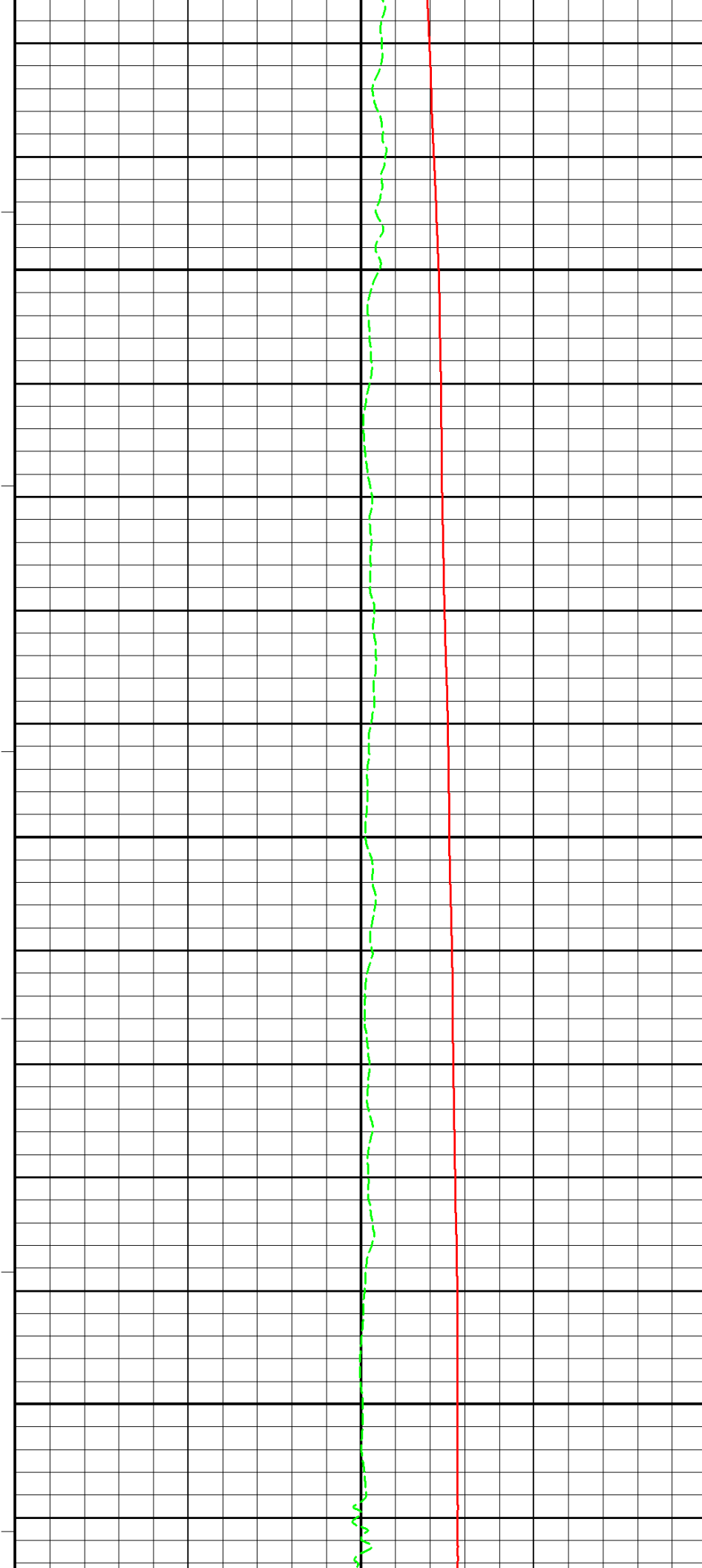


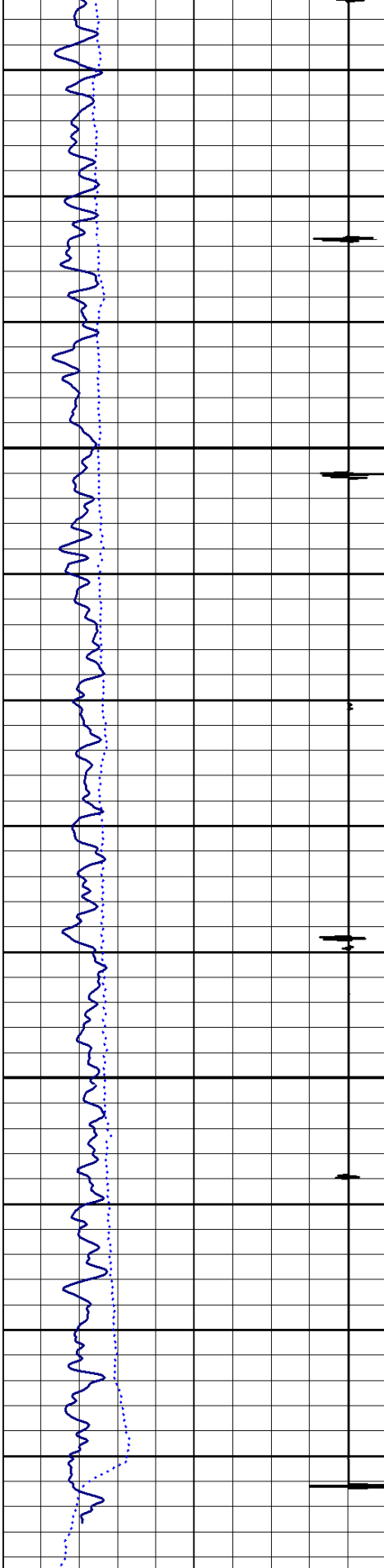


1025

1050

1075

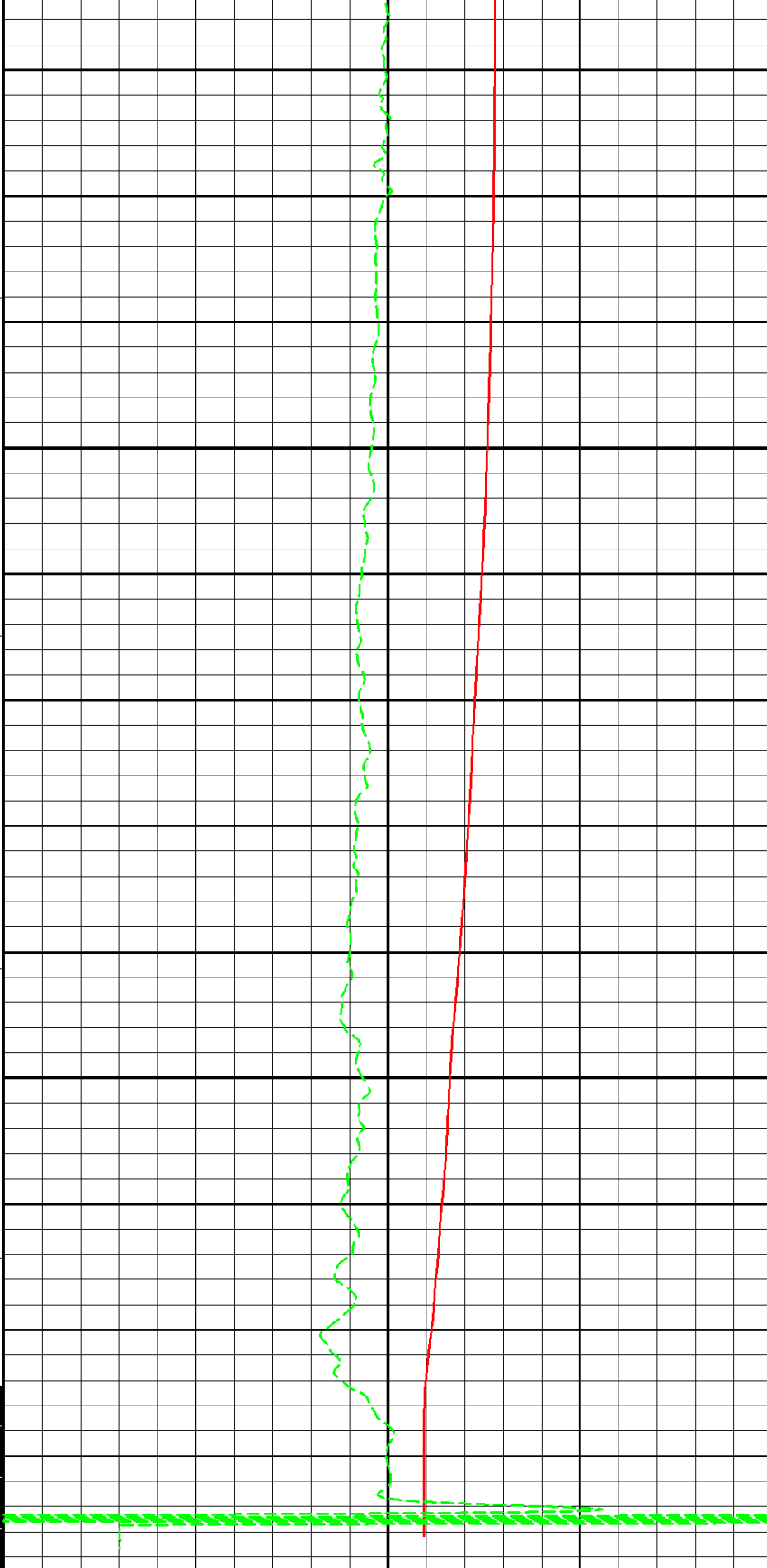




1100

1125

1144.58



2016-12-31 04:35
Tension (lbF)
0.00 3000.00
CCL
0.00 100.00
GR

Temperature (°C)
50.00 250.00
Diff Temperature (°C/m)
-5.00 5.00
Logging Up
Shutin
File main pass temp 4 hr.pre

0.00	Pass No. 4	150.00	METERS 1:240	Rev. 2017.01.24
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Trace Summary

Name	Units	Track	Chart Left	Chart Right	Channel	Gain	Shift	Filter	Coeff	Depth Offset(m)	Time Sample
Tension	lbF	1	0	3000		1	0	Butterworth	1.2	3.3	
CCL		1	0	100	1	200	90	LogReduction	0.1	0	
Temperature	°C	4	50	250	1	0.055556	-17.78	Butterworth	1.2	1.75	1
GR		1	0	150	2	1.3	5	Butterworth	1	1.18	1
Diff Temperature	°C/m	4	-5	5		0.055556	0	Butterworth	1.2	1.75	



Company CANADIAN NATURAL RESOURCES LTD
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Field CADOTTE
Province ALBERTA
LSD. 7 SEC. 19 TWP. 85 RGE. 18 W. 5