

Company: IMPERIAL OIL RESOURCES

Well: IMP 12 N03-09 COLD LK 12-25-66-3

Field: LEMING

Province: AB

\*\*\*MD\*\*\*

TEMPERATURE LOG  
TEMPERATURE / GAMMA RAY / CCL

Province: AB

Field: LEMING

Location: LSD: 12-25-066-03

Well: IMP 12 N03-09 COLD LK 12-25

Company: IMPERIAL OIL RESOURCES

LOCATION

LSD: 12-25-066-03

UWI: 10212250603W400

Elev.: K.B. 647.00 m

G.L. 641.80 m

D.F.

Permanent Datum: GROUND LEVEL

Log Measured From: KELLY BUSHING

Drilling Measured From: KELLY BUSHING

API Serial No. 446151

Section 12-25

Township 066

Range 3W4

Logging Date	29-Dec-2016		
Run Number	1		
Depth Driller	532 m		
Schlumberger Depth	528 m		
Bottom Log Interval	528 m		
Top Log Interval	4 m		
Casing Fluid Type	FLUID		
Salinity			
Density			
Fluid Level	50 m		
BIT/CASING/TUBING STRING			
Bit Size	222.000 mm		
From	4 m		
To	532 m		
Casing/Tubing Size	73.000 mm		
Weight	9.67 kg/m		
Grade	L-80		
From	4 m		
To	525.86 m		
Maximum Recorded Temperatures	95 degC		
Logger On Bottom	14-Dec-2014	Time 8:00	
Unit Number	222	LLOYDMINSTER	
Recorded By	TYRONE FERREIRA		
Witnessed By	DENNIS STRANG		

PVT DATA				Run 1	Run 2	Run
Oil Density						
Water Salinity						
Gas Gravity						
Bo						
Bw						
1/Bg						
Bubble Point Pressure						
Bubble Point Temperature						
Solution GOR						
Maximum Deviation				35 deg		
CEMENTING DATA						
Primary/Squeeze				Primary		
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						

## DEPTH SUMMARY LISTING

Date Created: 29-DEC-2016 12:08:20

## Depth System Equipment

Depth Measuring Device		Tension Device		Logging Cable	
Type:	IDW-B	Type:	CMTD-B/A	Type:	2-23ZT
Serial Number:	6365	Serial Number:	2812	Serial Number:	709113
Calibration Date:	19-MAR-2015	Calibration Date:	27-DEC-2016	Length:	2500 M
Calibrator Serial Number:	4	Calibrator Serial Number:	6195118		
Calibration Cable Type:	7-32P-XS	Number of Calibration Points:	10	Conveyance Method:	Wireline
Wheel Correction 1:	-5	Calibration RMS:	15	Rig Type:	LAND
Wheel Correction 2:	-4	Calibration Peak Error:	31		

## Depth Control Parameters

Log Sequence:	Subsequent Trip To the Well
Reference Log Name:	NO CORRELATION LOG PROVIDED
Reference Log Run Number:	1
Reference Log Date:	NO CORRELATION LOG PROVIDED
Subsequent Trip Down Log Correction:	





### Depth Control Remarks

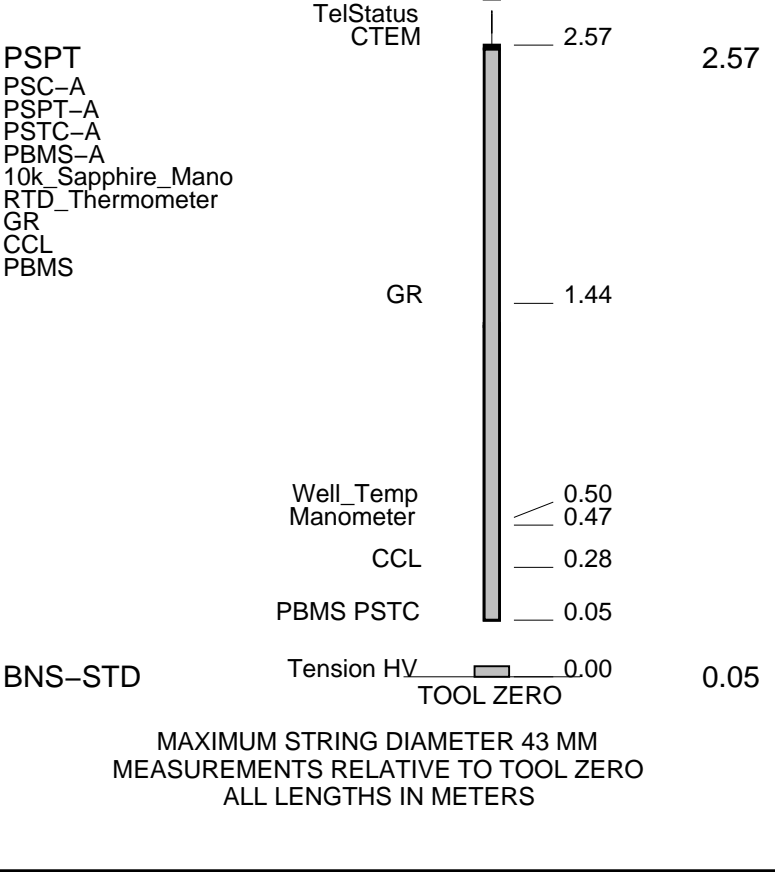
1. ALL OF SCHLUMBERGER DEPTH CONTROL PROCEDURES FOLLOWED
2. IDW USED AS PRIMARY DEPTH CONTROL
3. Z-CHART USED AS SECONDARY DEPTH CONTROL
- 4.
- 5.
- 6.

## 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 OF 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.

OTHER SERVICES1 OS1: OS2: OS3: OS4: OS5:	OTHER SERVICES2 OS1: OS2: OS3: OS4: OS5:
REMARKS: RUN NUMBER 1	REMARKS: RUN NUMBER 2
NO CORRELATION LOG PROVIDED	
FLUID LEVEL DERIVED FROM LOG AT 50 MKB	
LAST FLUID MOVEMENT: 26-DEC-2016	
MAX TEMP 95 DEGC AT 522 MKB	

CWT AT 506 MKB					
BURST NIPPLE TOP AT 498.97 MKB					
PSN TOP AT 518.34 MKB					
SITP:1750 KPA					
SICP: 1800 KPA					
YOUR CREW TODAY WAS: T.FERREIRA, C.LLANO					
THANK YOU FOR CHOOSING SCHLUMBERGER					
RUN 1			RUN 2		
SERVICE ORDER #: PROGRAM VERSION: FLUID LEVEL:			SERVICE ORDER #: PROGRAM VERSION: FLUID LEVEL:		
DKMS-00011 19C2-270 50 m					
LOGGED INTERVAL	START	STOP	LOGGED INTERVAL	START	STOP
EQUIPMENT DESCRIPTION					
RUN 1			RUN 2		
SURFACE EQUIPMENT					
WITM-A PSC_16MHZ					
DOWNHOLE EQUIPMENT					
MH-22 MH-22		6.79			
AH-38		6.31			
EQF-43 EQF-43		6.23			
EQF-43 EQF-43		4.40			
Detail MT					



**DOWN PASS**  
**10 M/MIN**

MAXIS Field Log

Company: IMPERIAL OIL RESOURCES Well: IMP 12 N03-09 COLD LK 12-25-66-

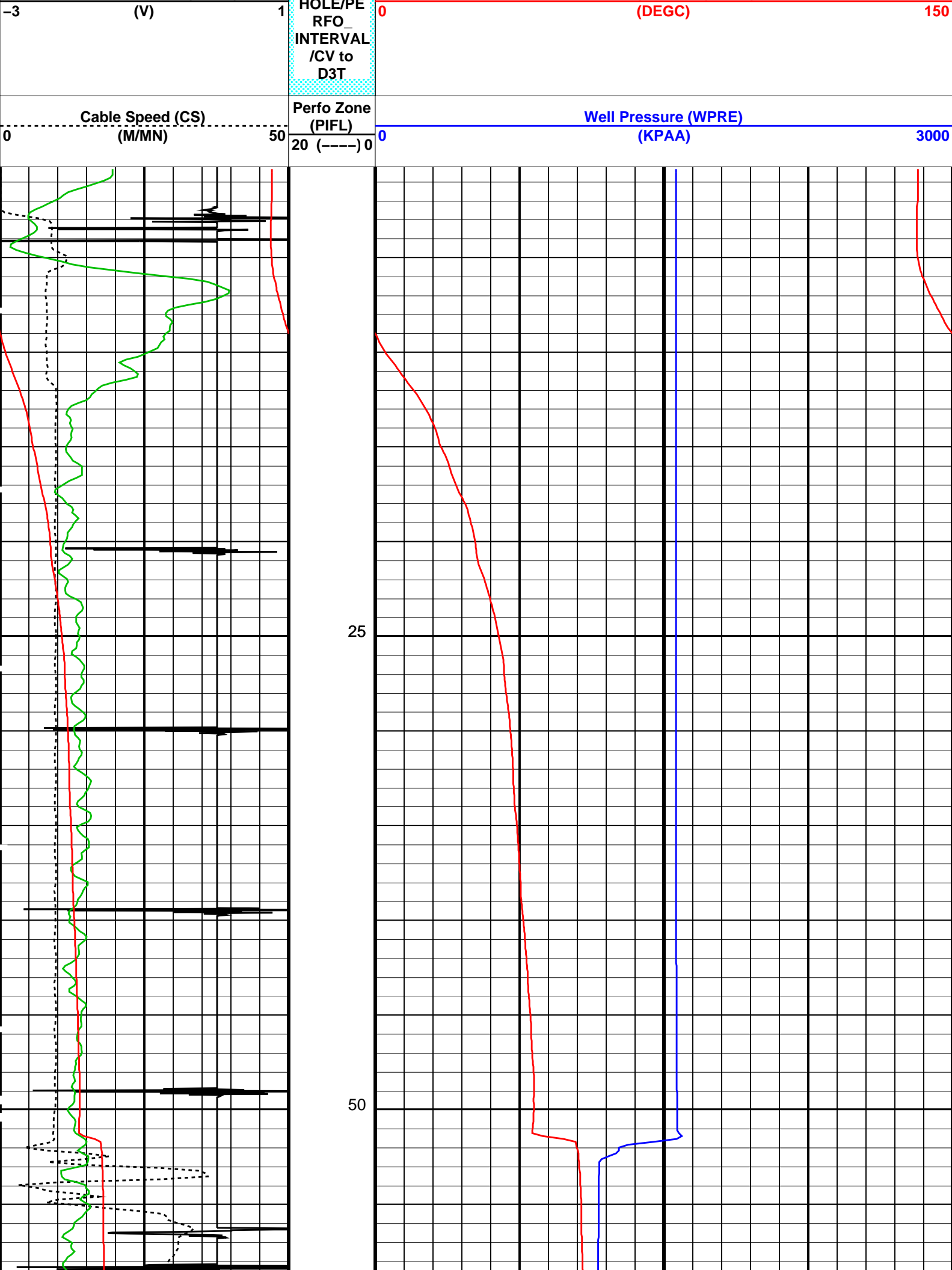
Input DLIS Files						
DEFAULT	Flip_PSP_005LUP	PRODUCER	29-Dec-2016 11:28	531.6 M	0.2 M	
Output DLIS Files						
DEFAULT	PSP_007PUP	FN:5	PRODUCER	29-Dec-2016 11:58	531.6 M	0.2 M

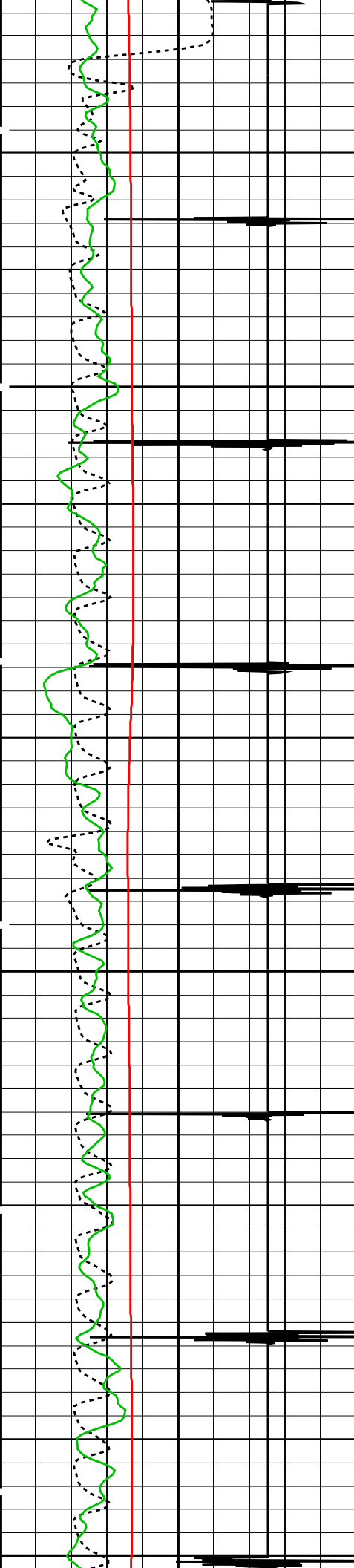
OP System Version: 19C2-270	
PSPT	19C2-270

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

Well Temperature (WTEP) (DEGC)	150
Gamma Ray (GR) (GAPI)	100

Discriminated CCL (CCLD)	Perfo Zone From Cased	Well Temperature (WTEP)
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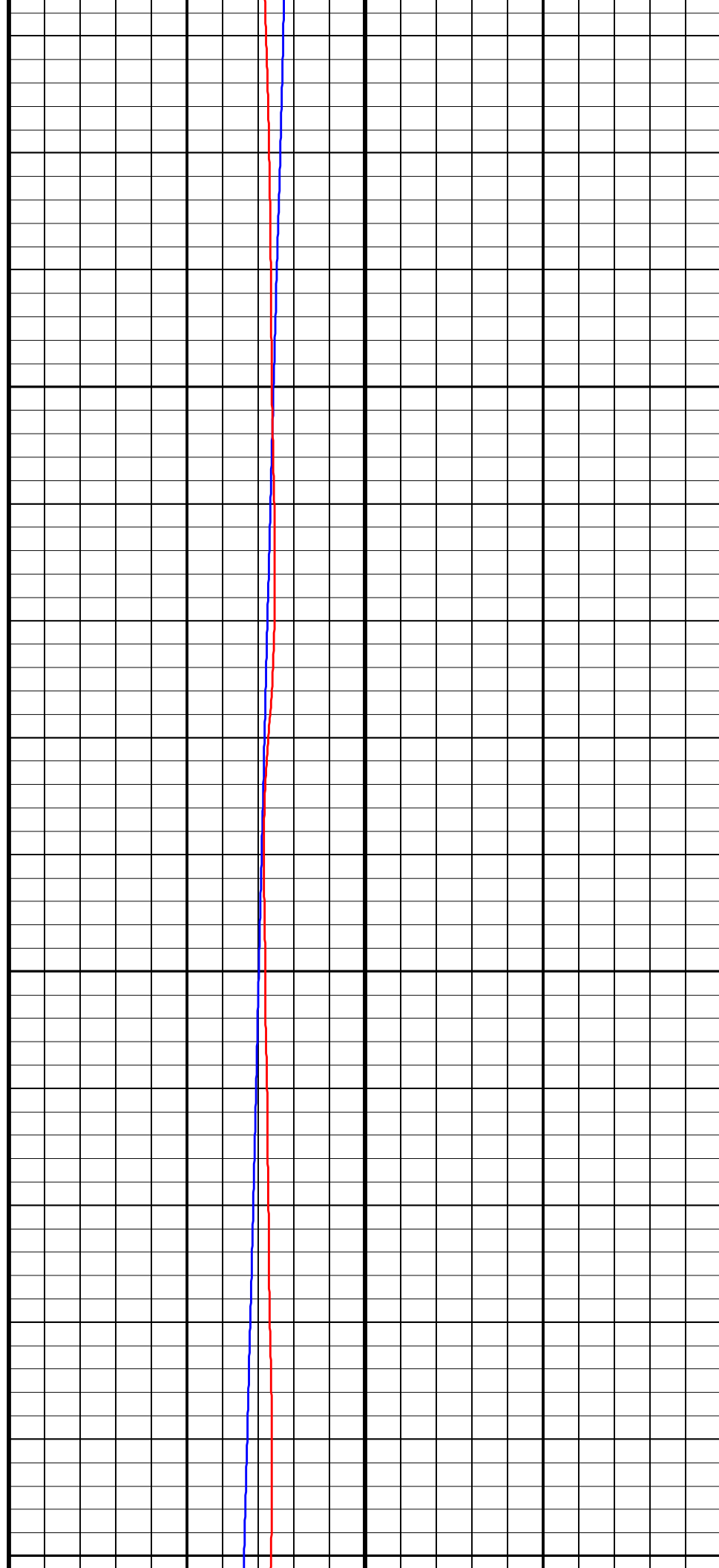


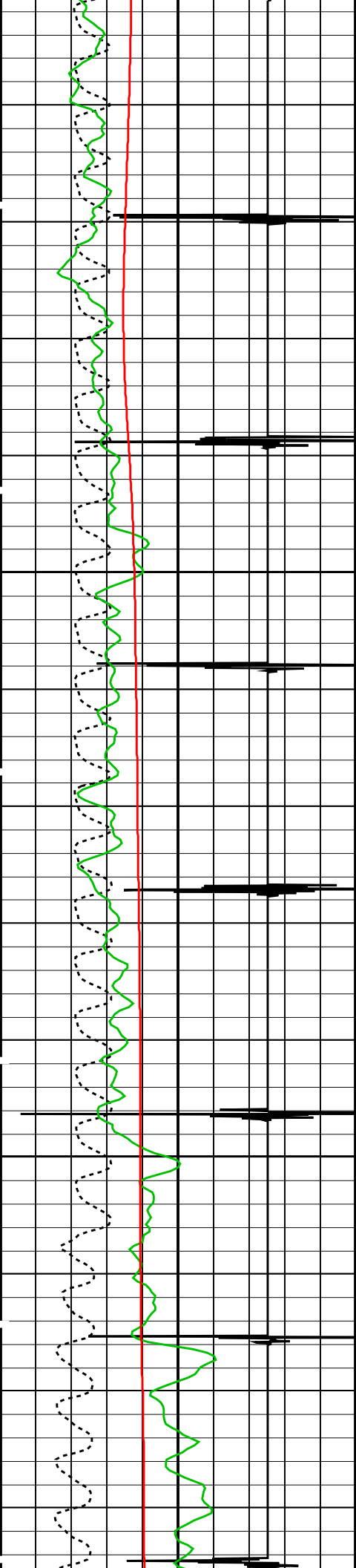


75

100

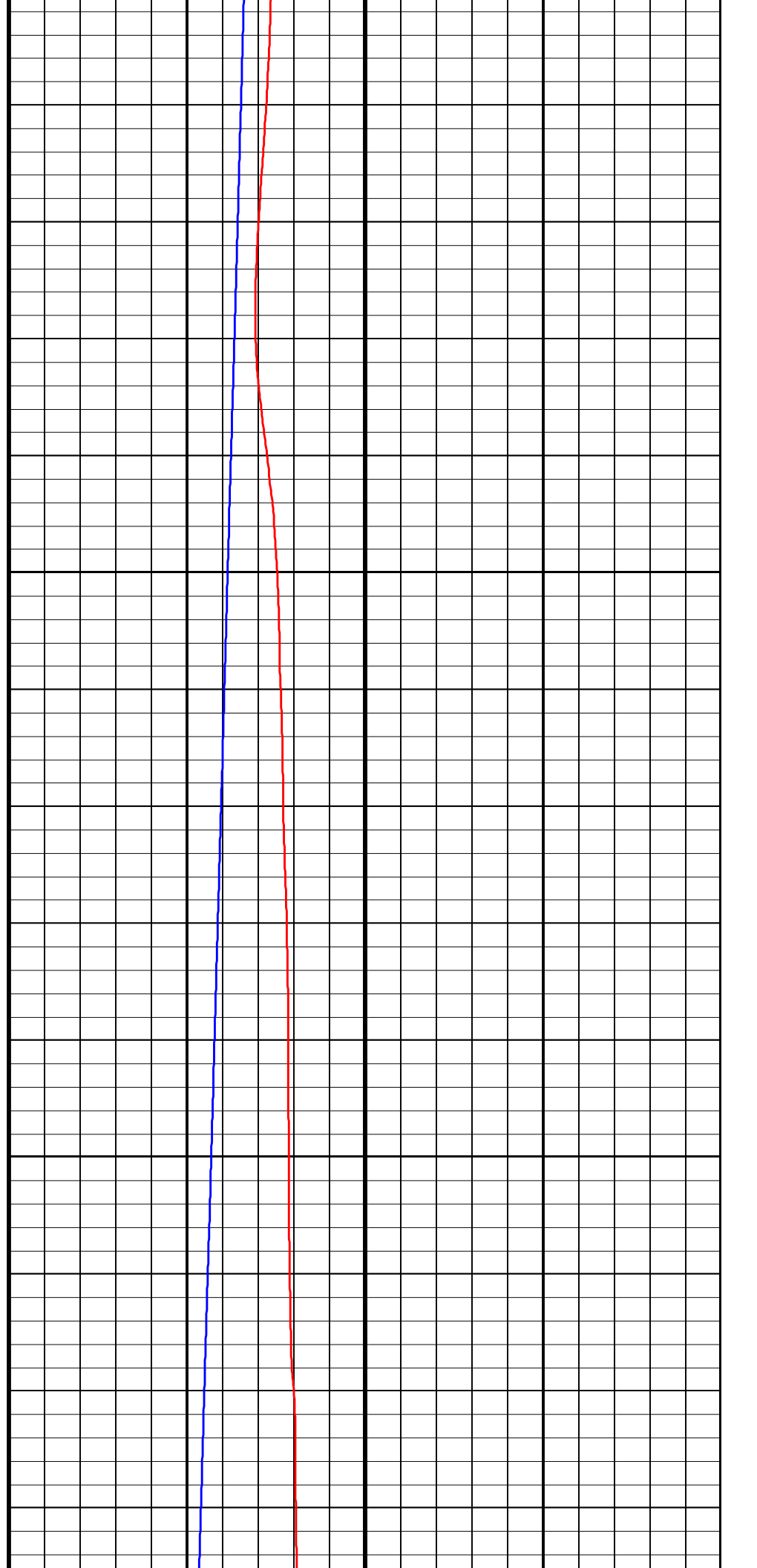
125

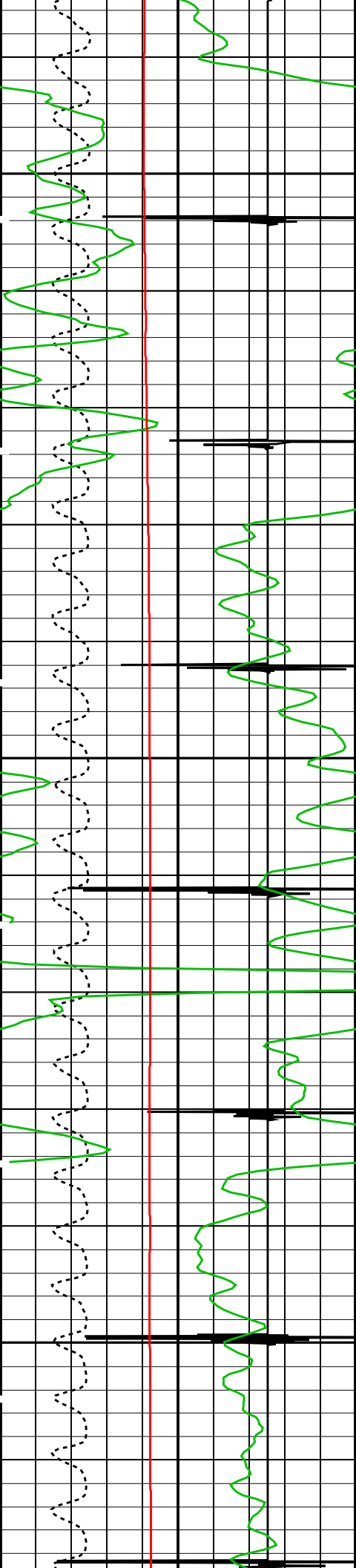




150

175

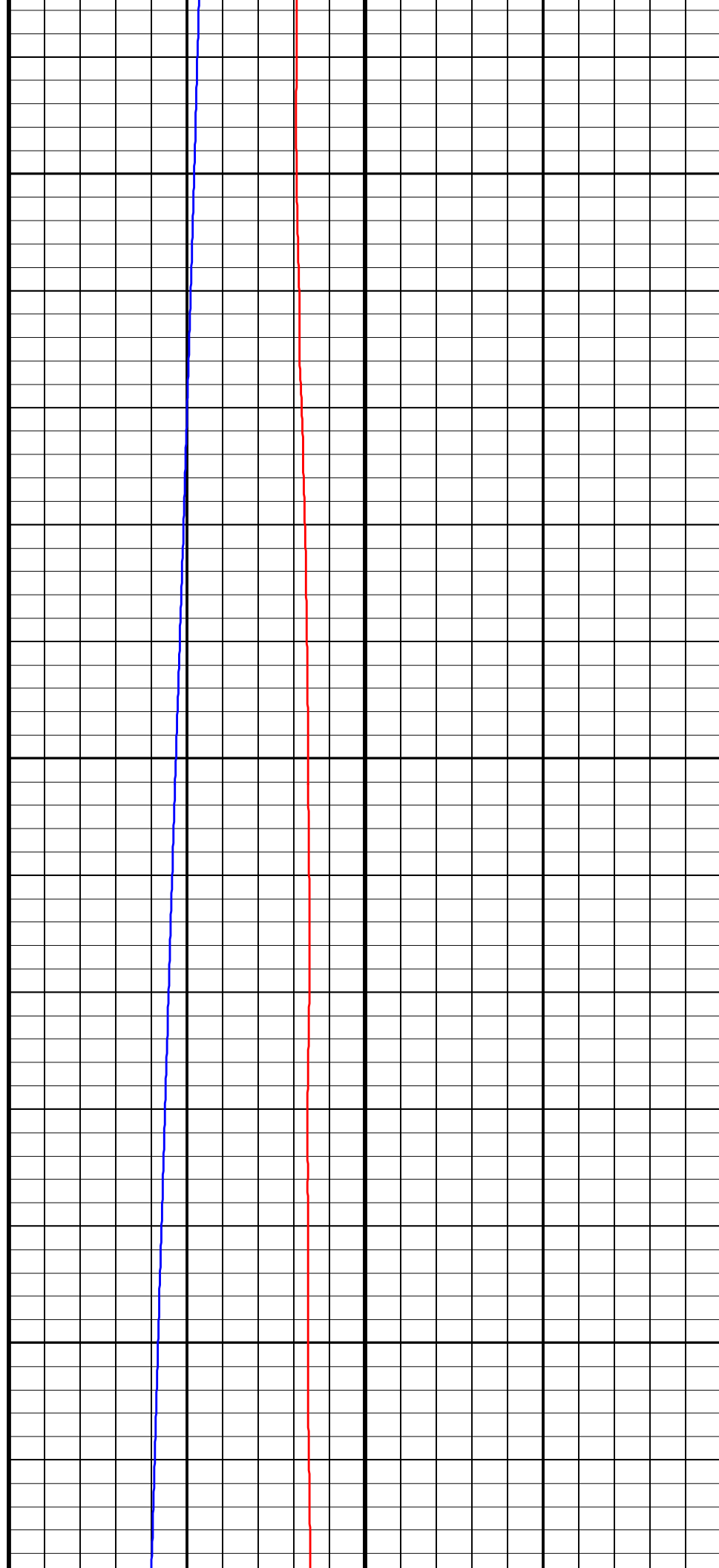




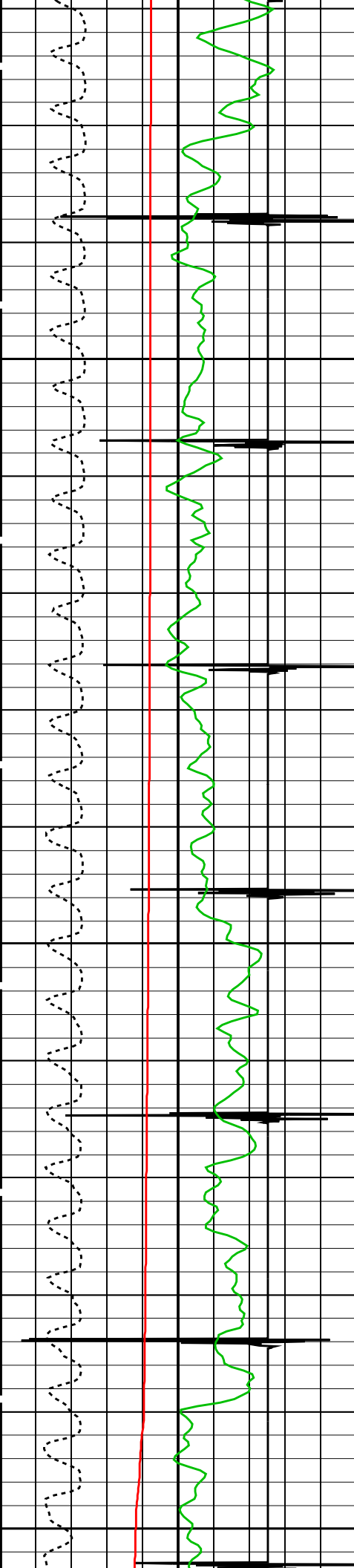
200

225

250



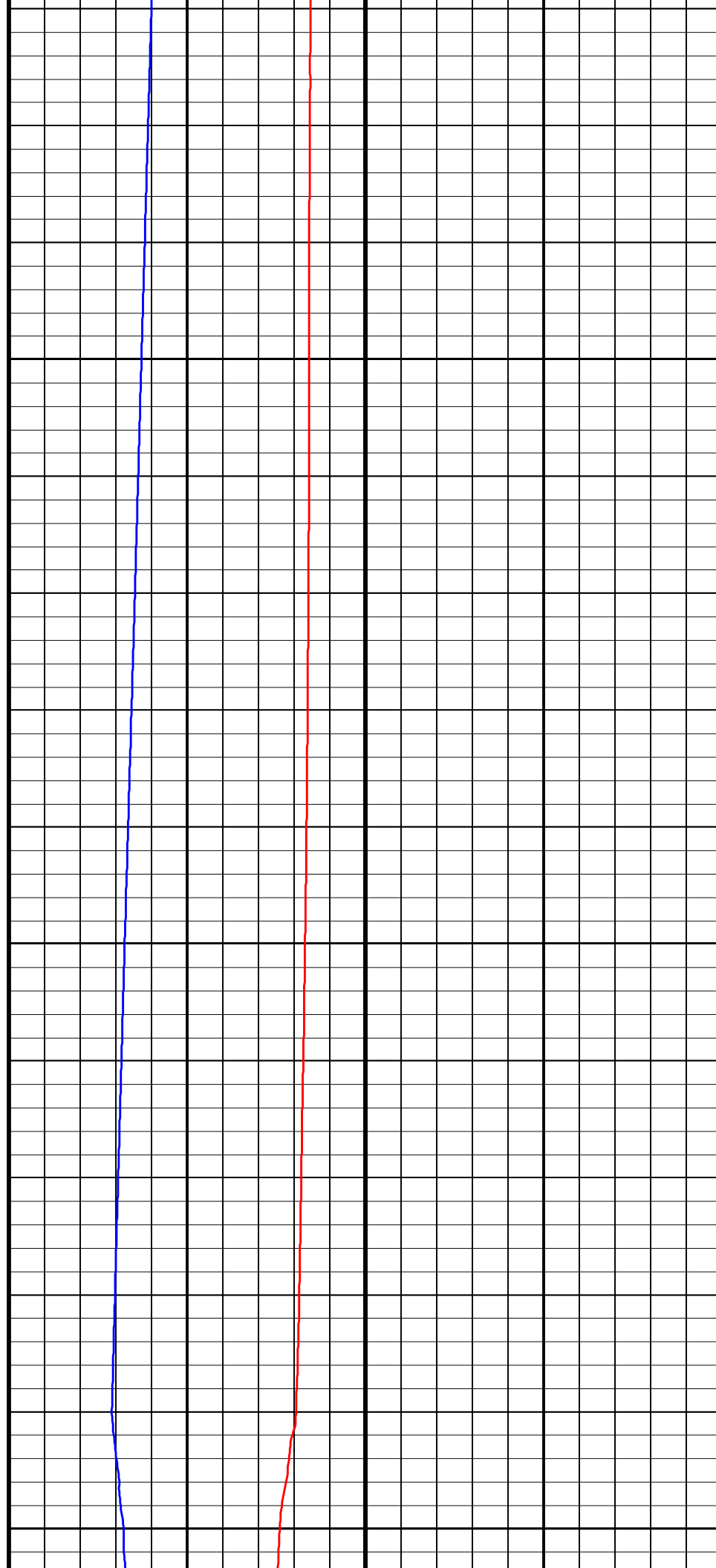


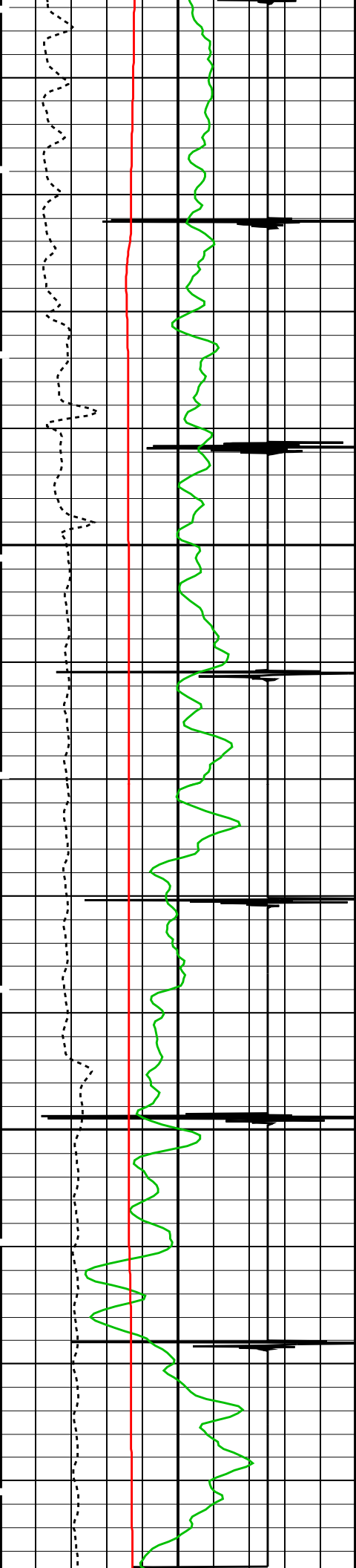


275

300

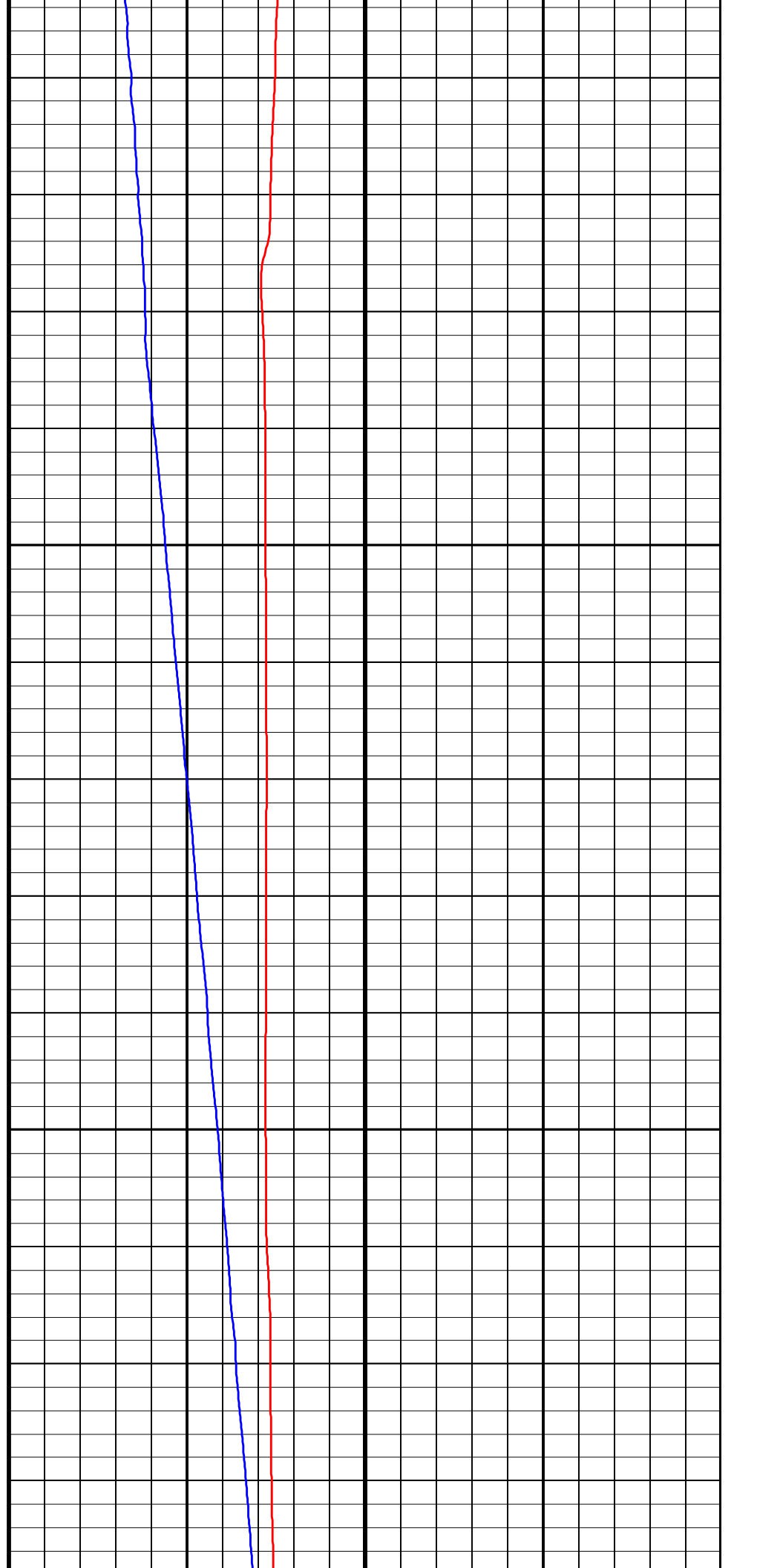
325

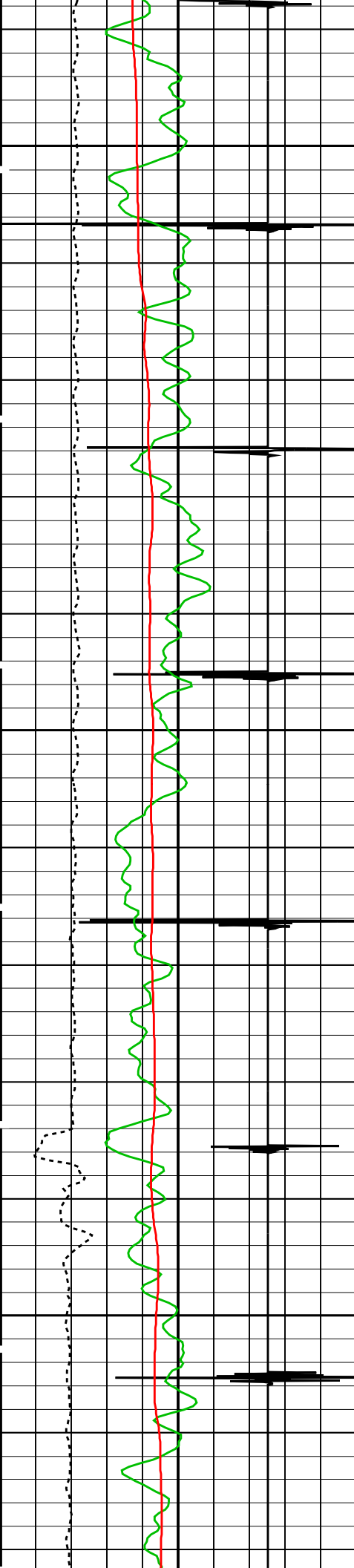




350

375

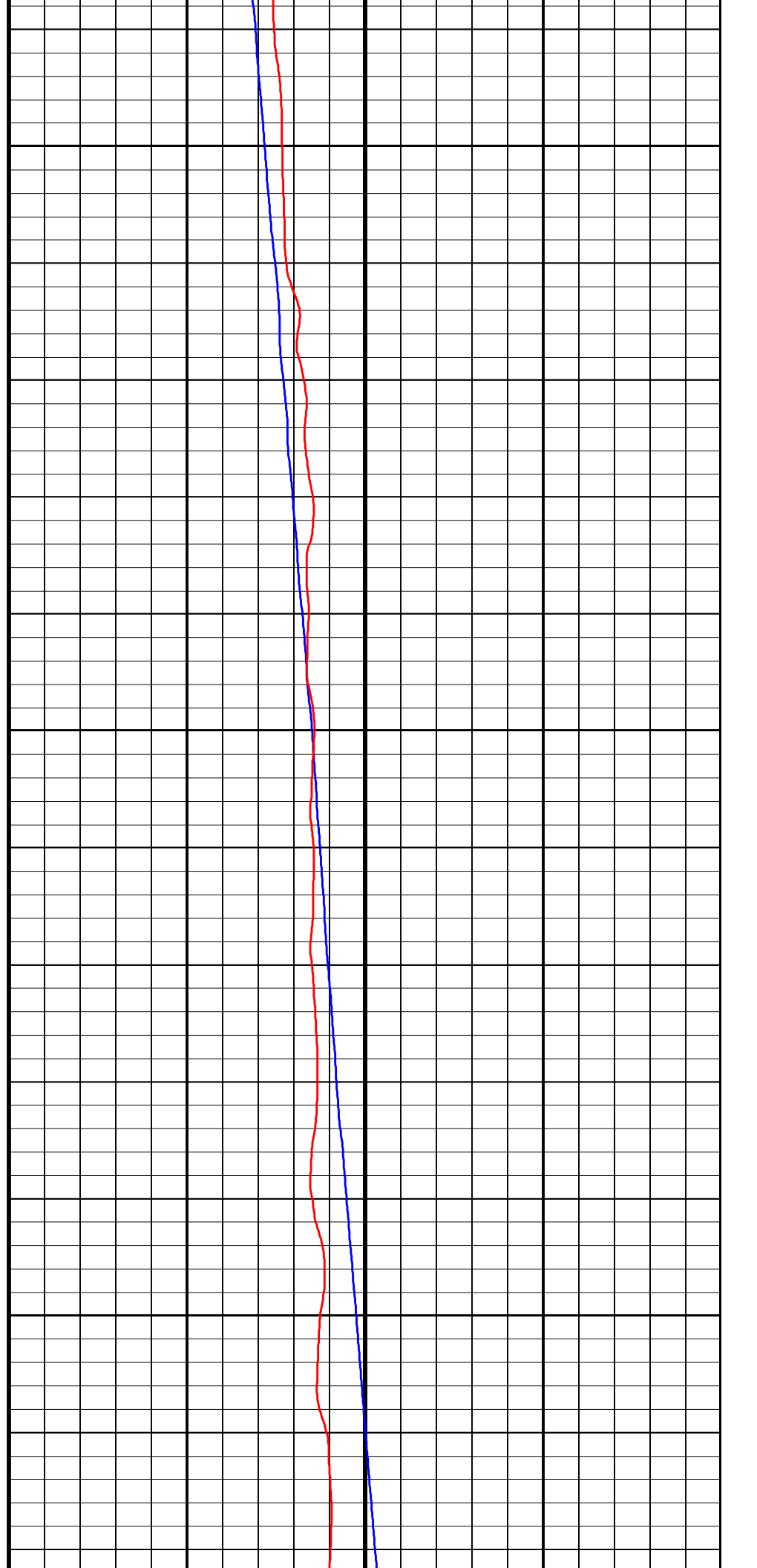


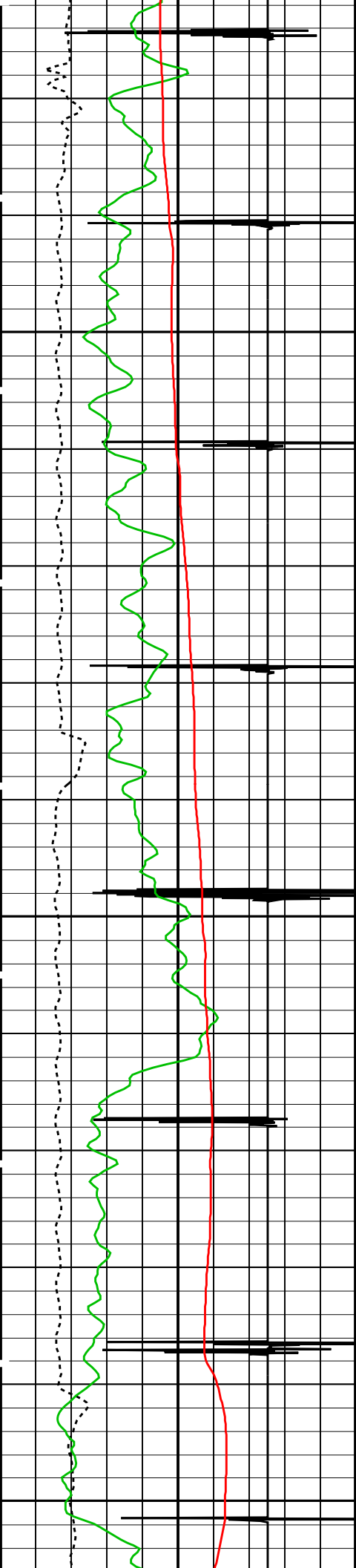


400

425

450

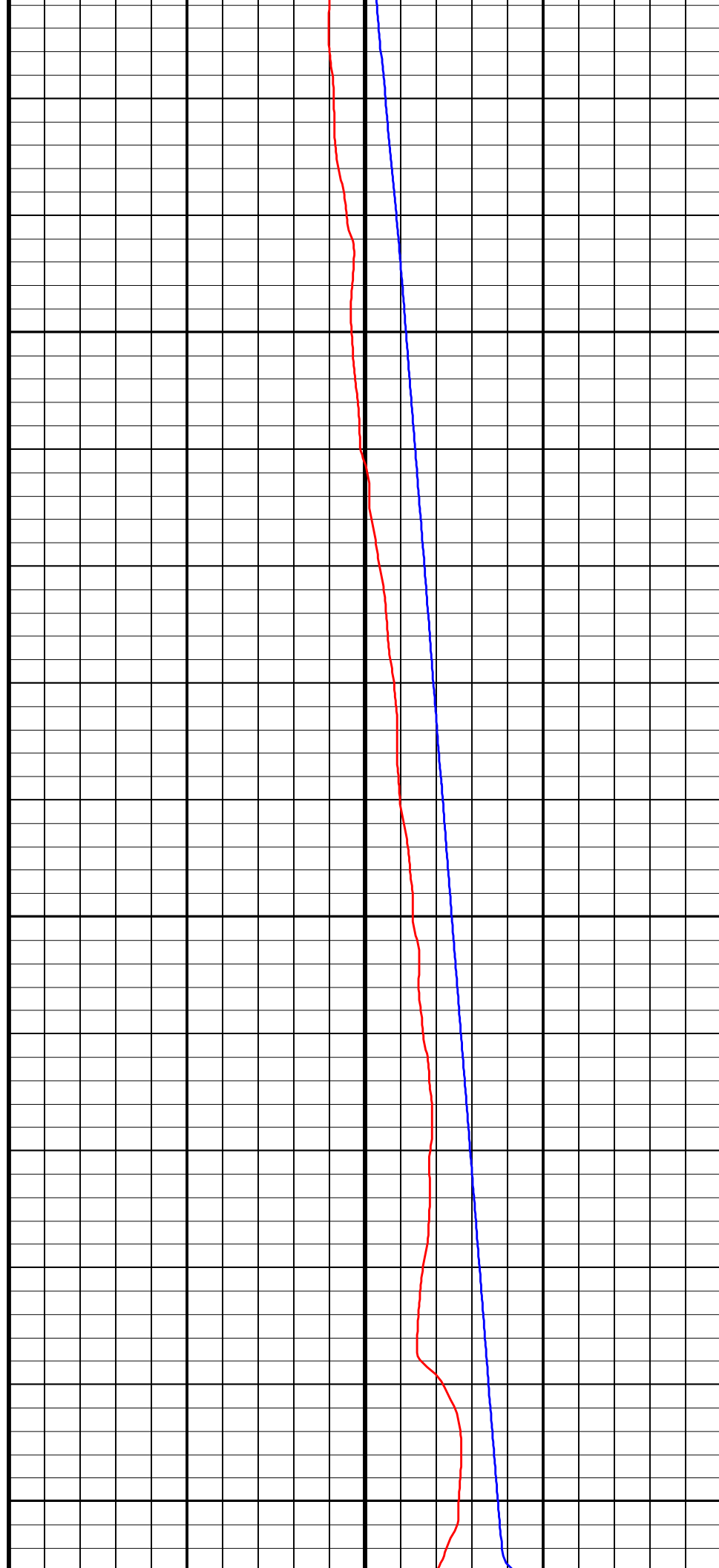


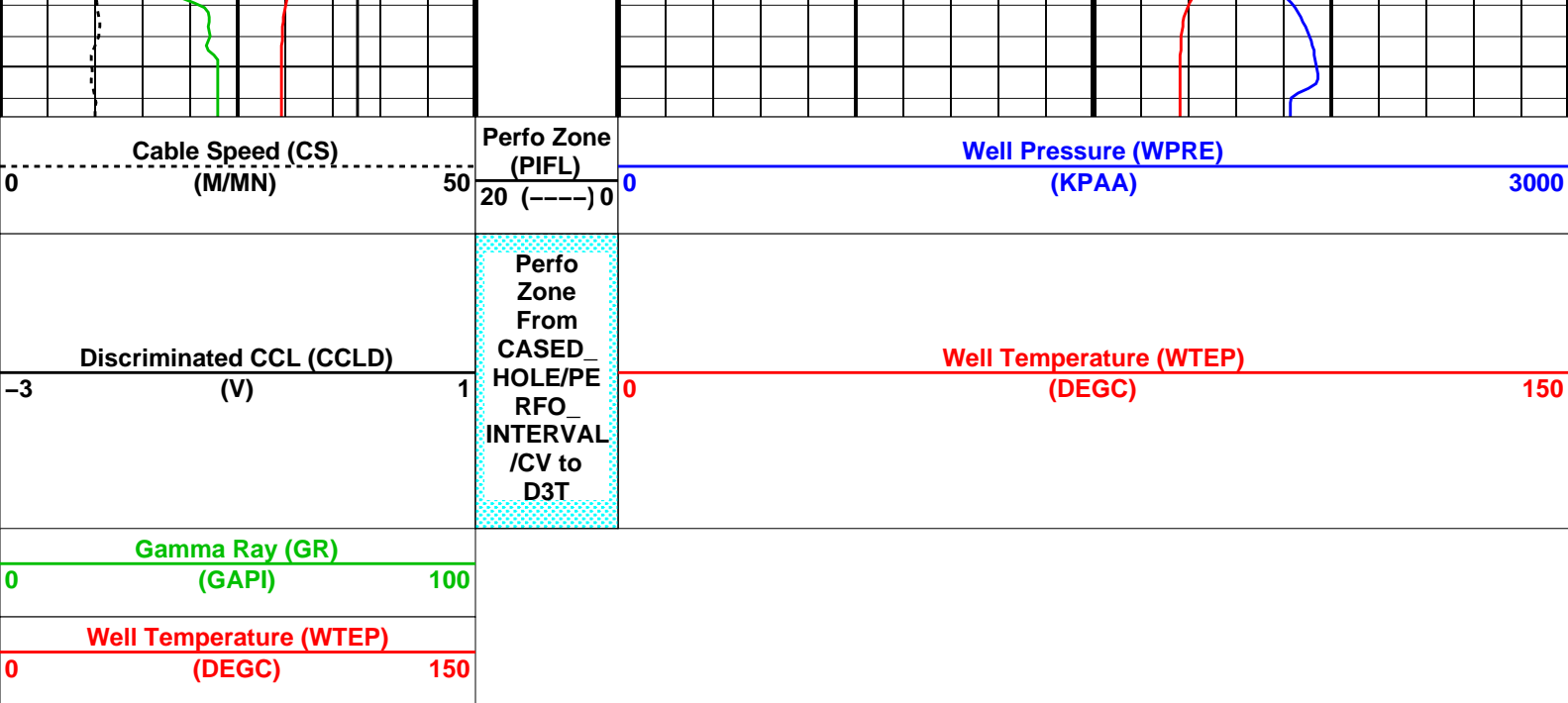


475

500

525





PIP SUMMARY

Time Mark Every 60 S

Parameters		
DLIS Name	Description	Value
DO	System and Miscellaneous	0.0 M
PP	Depth Offset for Playback Playback Processing	NORMAL

Format: PSP\_1 Vertical Scale: 1:240 Graphics File Created: 29-Dec-2016 11:58

**OP System Version: 19C2-270**

PSPT 19C2-270

Input DLIS Files					
DEFAULT	Flip_PSP_005LUP	PRODUCER	29-Dec-2016 11:28	531.6 M	0.2 M
Output DLIS Files					
DEFAULT	PSP_007PUP	FN:5	PRODUCER	29-Dec-2016 11:58	

Company: **IMPERIAL OIL RESOURCES**

Well: **IMP 12 N03-09 COLD LK 12-25-66-3**

Field: **LEMING**

Province: **AB**

**\*\*\*MD\*\*\***

**Schlumberger**

TEMPERATURE LOG  
TEMPERATURE / GAMMA RAY / CCL