

Company: ENCANA OIL & GAS (USA) INC

Well: ALP FEE 24-6A (J24NW)

Field: GRASS MESA

County: GARFIELD

State: COLORADO

TEMPERATURE LOG
CCL

County: GARFIELD

Field: GRASS MESA

Location: SHL: 2485 FSL & 1865 FEL

Well: ALP FEE 24-6A (J24NW)

Company: ENCANA OIL & GAS (USA) INC

LOCATION

SHL: 2485 FSL & 1865 FEL
BHL: 1551 FNL & 2484 FWL

Elev.: K.B. 5702.00 ft
G.L. 5680.00 ft
D.F. 5701.00 ft

Permanent Datum: _____
Log Measured From: KELLY BUSHING
Drilling Measured From: KELLY BUSHING

Elev.: 5680.00 ft
22.00 ft above Perm. Datum

API Serial No.
05-045-21805-00

Section
24

Township
6S

Range
93W

PVT DATA				Run 1	Run 2	Run 3
Oil Density						
Water Salinity						
Gas Gravity						
Bo						
Bw						
1/Bg						
Bubble Point Pressure						
Bubble Point Temperature						
Solution GOR						
Maximum Deviation						
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 Date14-Jun-2013

Run Number1

Depth Driller8068 ft

Schlumberger Depth7997 ft

Bottom Log Interval7996 ft

Top Log Interval0 ft

Casing Fluid TypeFRESH WATER

Salinity

Density8.4 lbm/gal

Fluid Level0 ft

BIT/CASING/TUBING STRING

Bit Size8.750 in

From22 ft

To8068 ft

Casing/Tubing Size4.500 in

Weight11.6 lbm/ft

Grade

From22 ft

To8047 ft

Maximum Recorded Temperatures211 degF

Logger On Bottom14-Jun-2013

Unit Number391

Recorded ByKIRSTIE BUNTING

Witnessed ByKIRBY

Time8:45

LocationGRAND JUNCTION

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: 3-JUN-2013 9:46:48

Depth System Equipment

Depth Measuring Device		Tension Device		Logging Cable	
Type:	IDW-B	Type:	CMTD-B/A	Type:	1-25ZT
Serial Number:	6214	Serial Number:	3421	Serial Number:	112136
Calibration Date:	4-24-2012	Calibration Date:	6-3-2013	Length:	19500 FT
Calibrator Serial Number:		Calibrator Serial Number:	174878	Conveyance Method: Wireline Rig Type: LAND	
Calibration Cable Type:	1-25P	Number of Calibration Points:	10		
Wheel Correction 1:	-3	Calibration RMS:	2		
Wheel Correction 2:	-4	Calibration Peak Error:	6		

Depth Control Parameters

Log Sequence:	First Log In the Well
Rig Up Length At Surface:	
Rig Up Length At Bottom:	
Rig Up Length Correction:	
Stretch Correction:	
Tool Zero Check At Surface:	

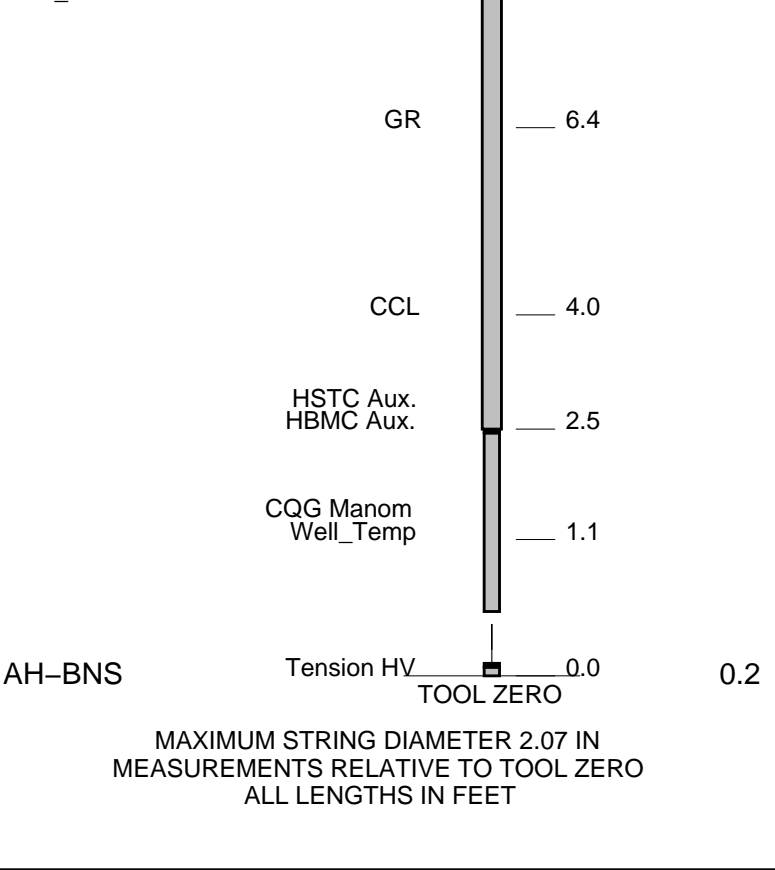
Depth Control Remarks

1. ALL SCHLUMBERGER DEPTH CONTROL PROCEDURES USED
2. IDW USED AS PRIMARY DEPTH CONTROL
3. SWPT DRUM COUNTER 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: NONE OS2: OS3: OS4: OS5:	OTHER SERVICES2 OS1: OS2: OS3: OS4: OS5:
REMARKS: RUN NUMBER 1	REMARKS: RUN NUMBER 2
TOOL RAN AS PER TOOL SKETCH	
ENTRANCE TIME: 08:15	
TIME ON BOTTOM: 08:45	
EXIT TIME: 09:30	
MAXIMUM RECORDED TEMPERATURE: 211 DEGE	

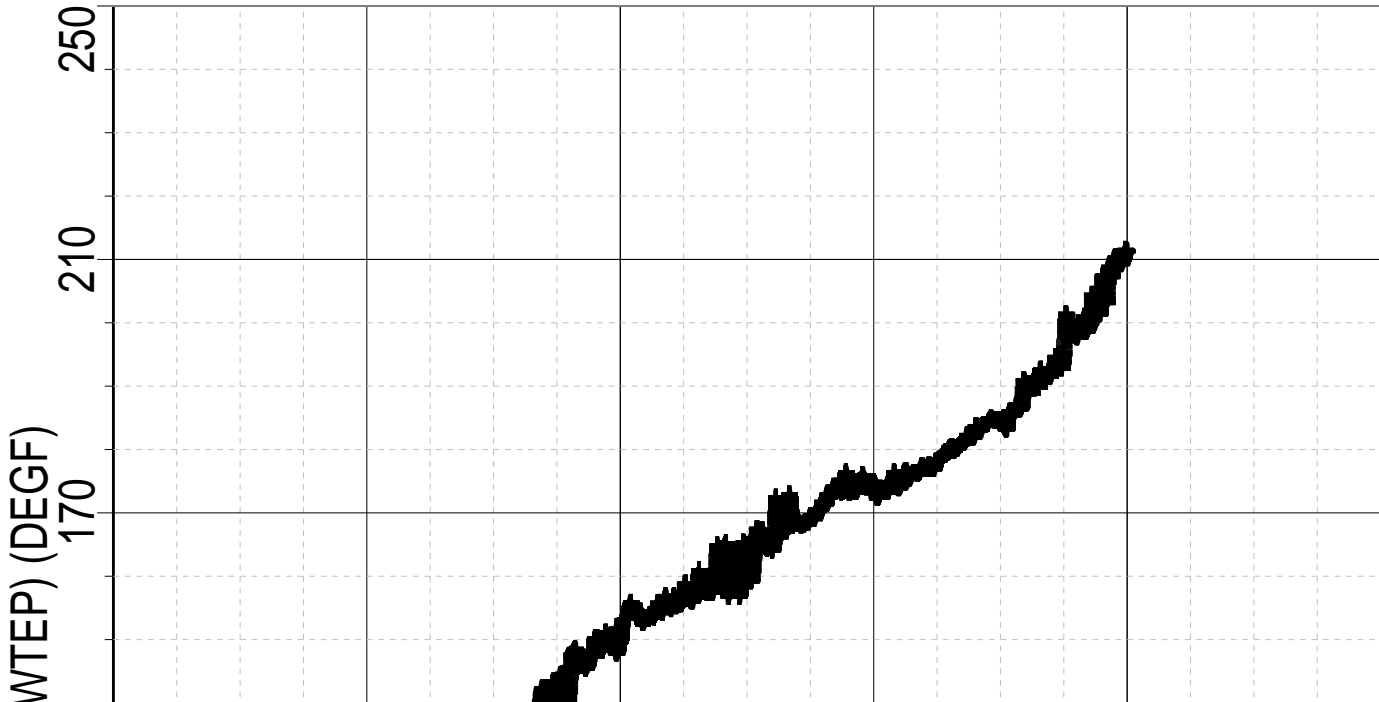


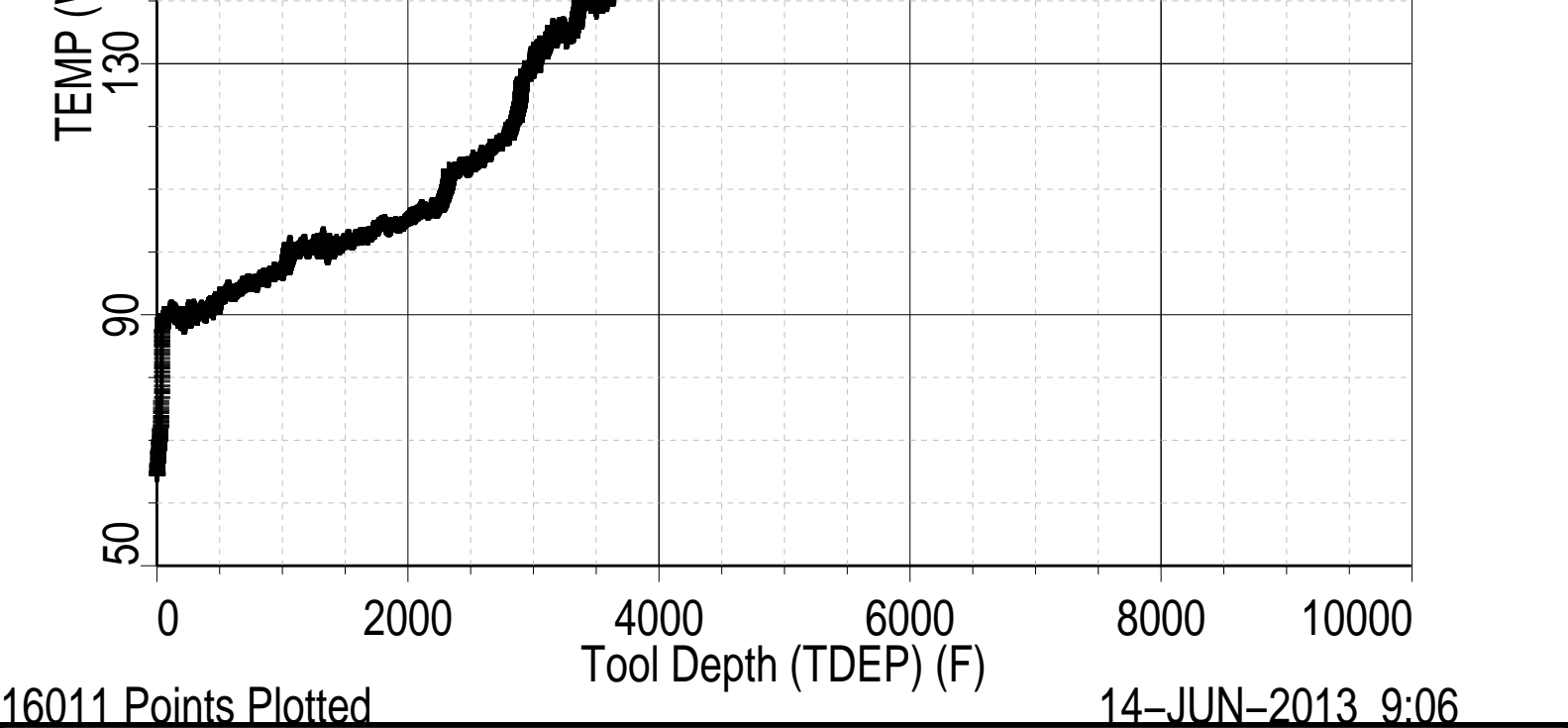
Schlumberger

TEMPERATURE PLOT

MAXIS Field Log

Index: 8005.0 – -13.0 FT





Schlumberger

TEMPERATURE LOG

MAXIS Field Log

Company: ENCANA OIL & GAS (USA) INC

Well: ALP FEE 24-6A (J24NW)

Input DLIS Files

DEFAULT	Flip_HBMS_005LUP	PRODUCER	14-Jun-2013 09:01	8003.0 FT	-15.0 FT
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Output DLIS Files

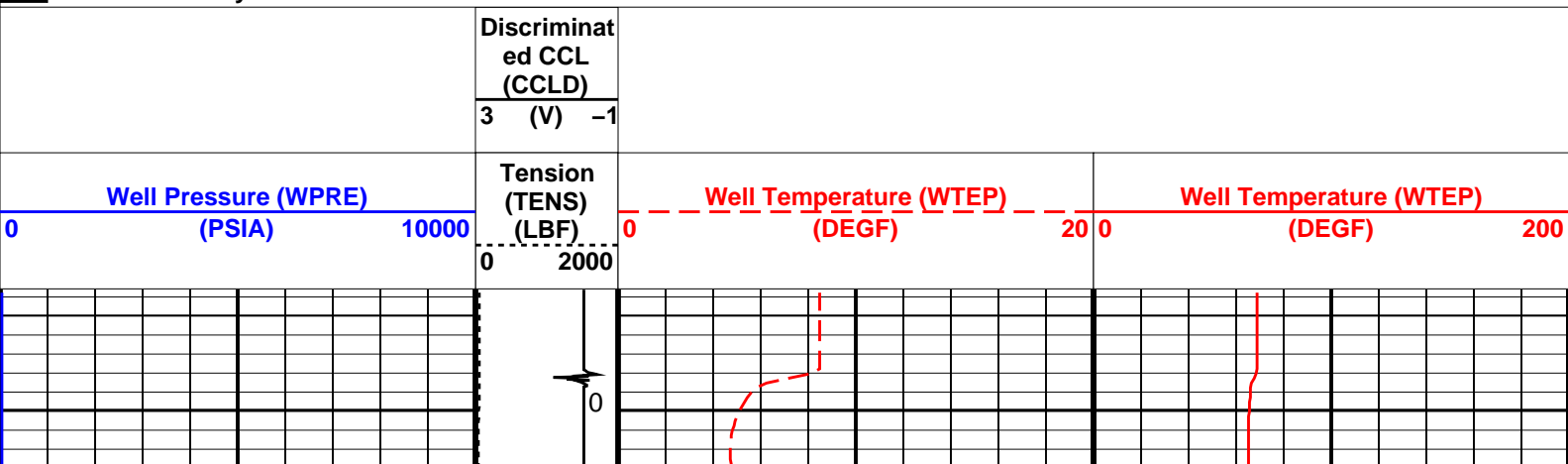
DEFAULT	HBMS_007PUP	FN:4	PRODUCER	14-Jun-2013 09:02	8005.0 FT	-13.0 FT
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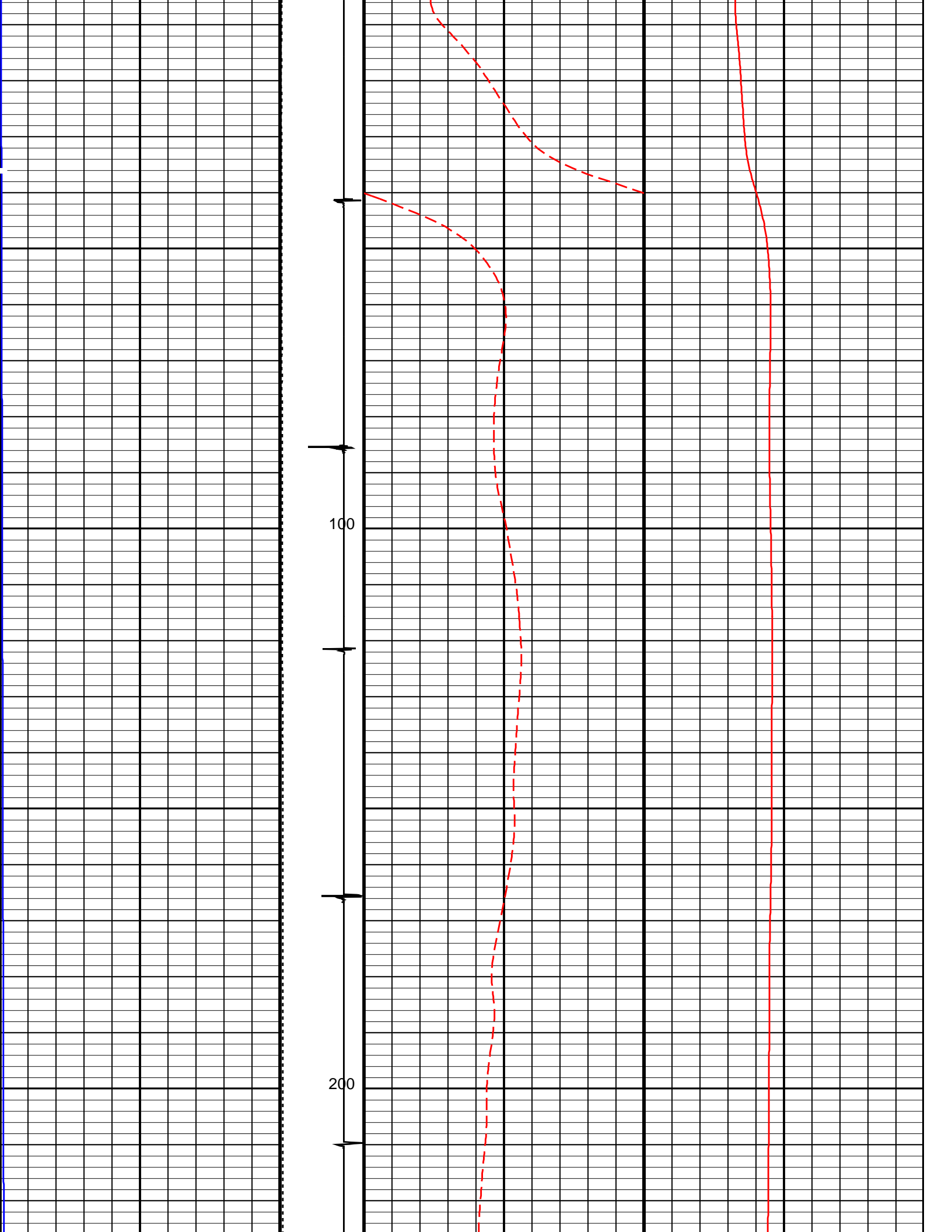
OP System Version: 19C0-187

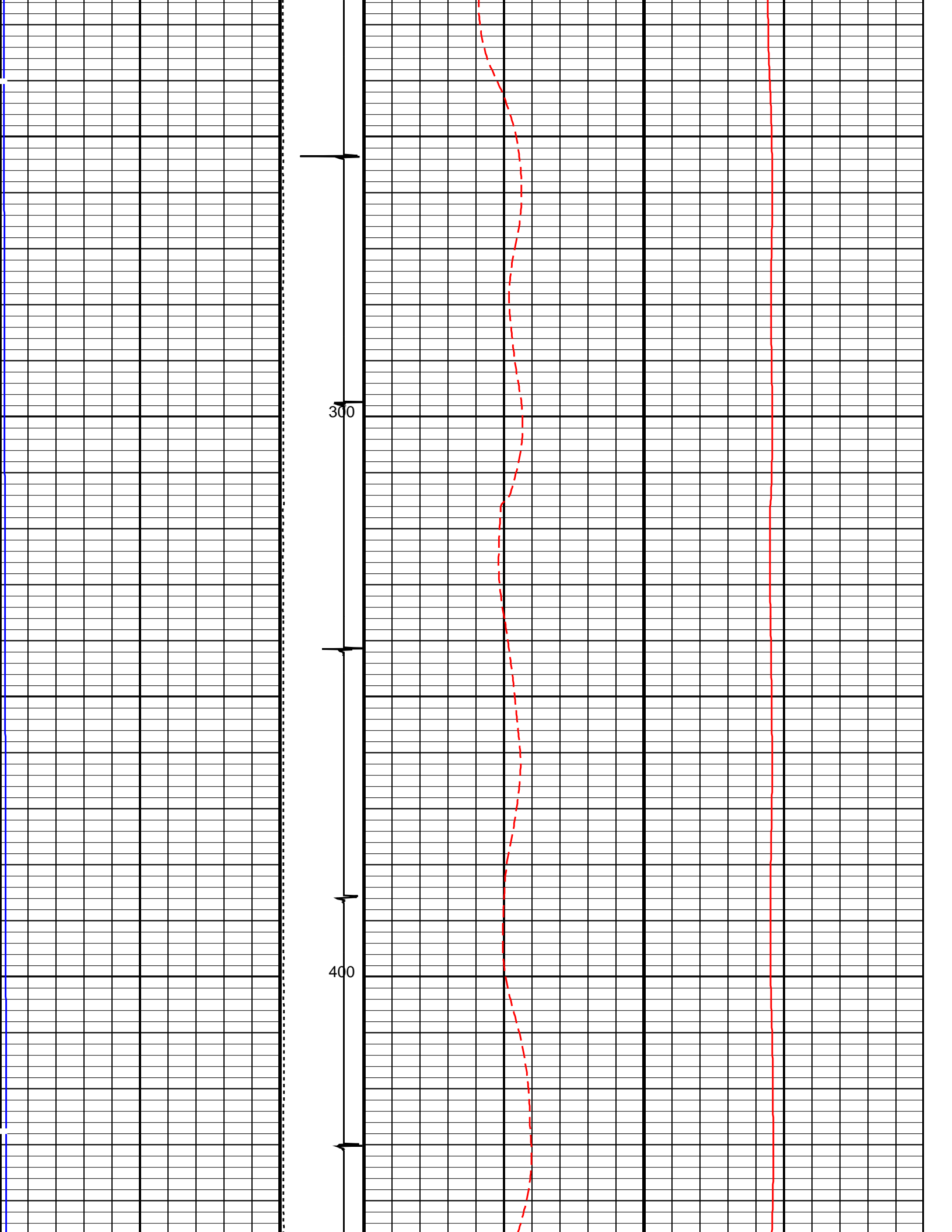
HBMS-B SRPC-5214-H2-2012-OP19

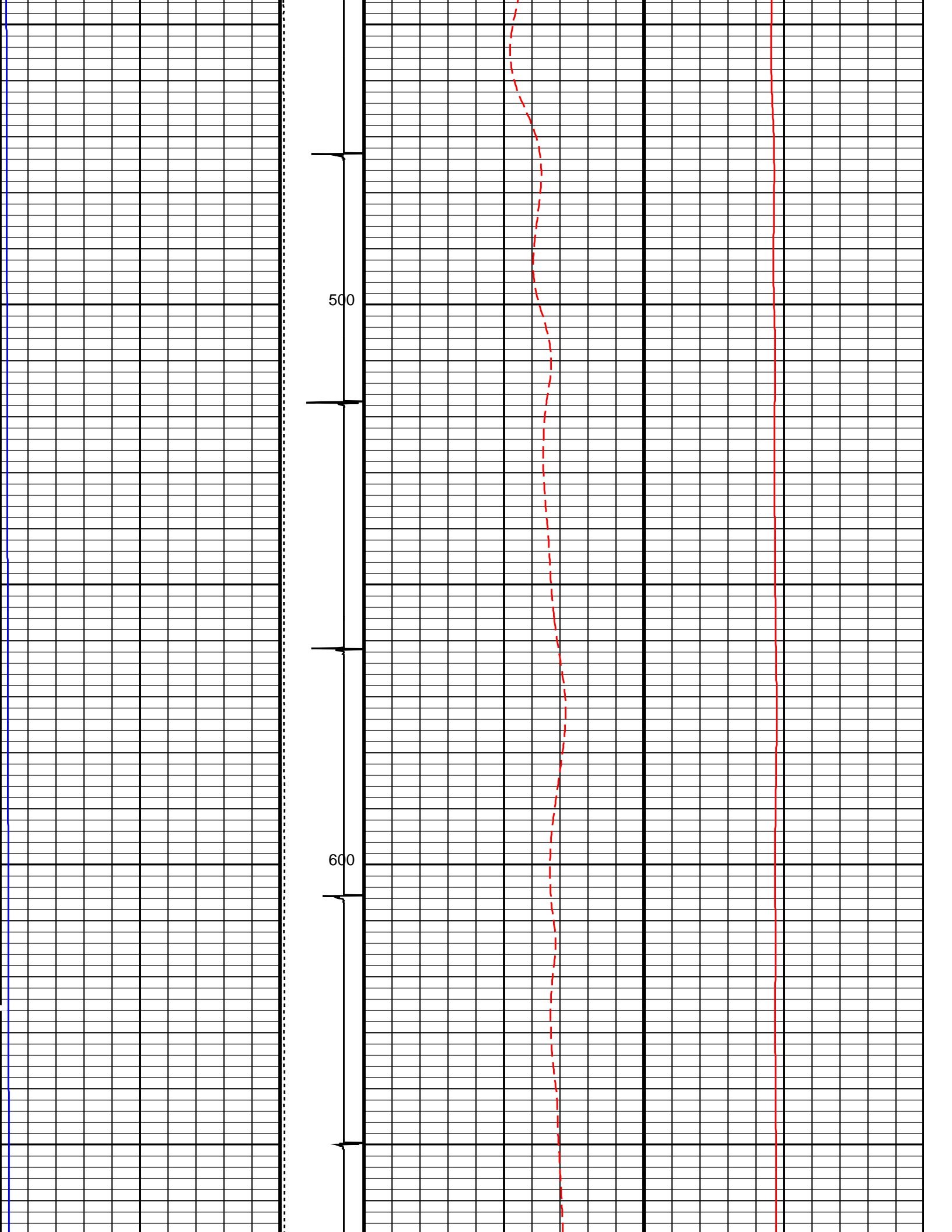
PIP SUMMARY

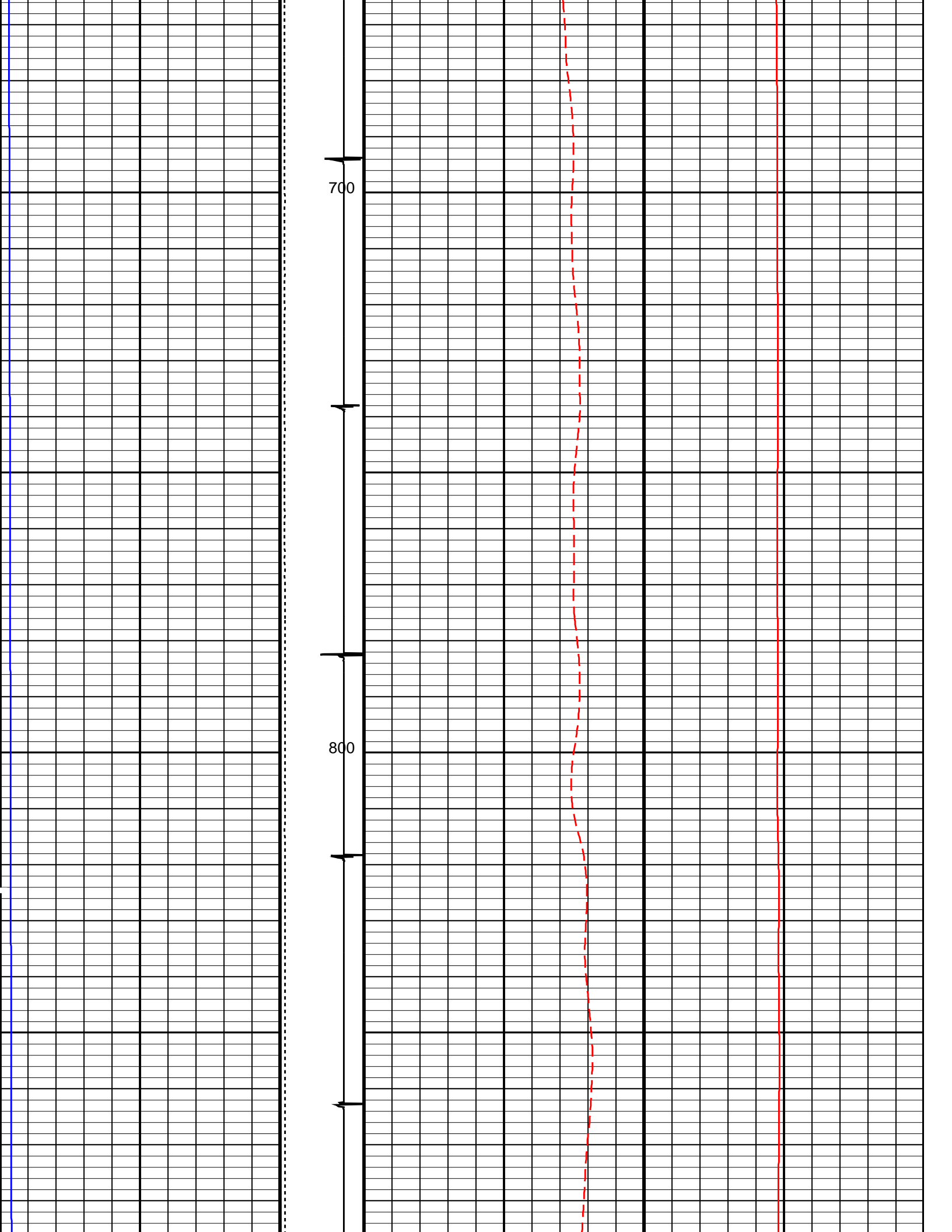
Time Mark Every 60 S

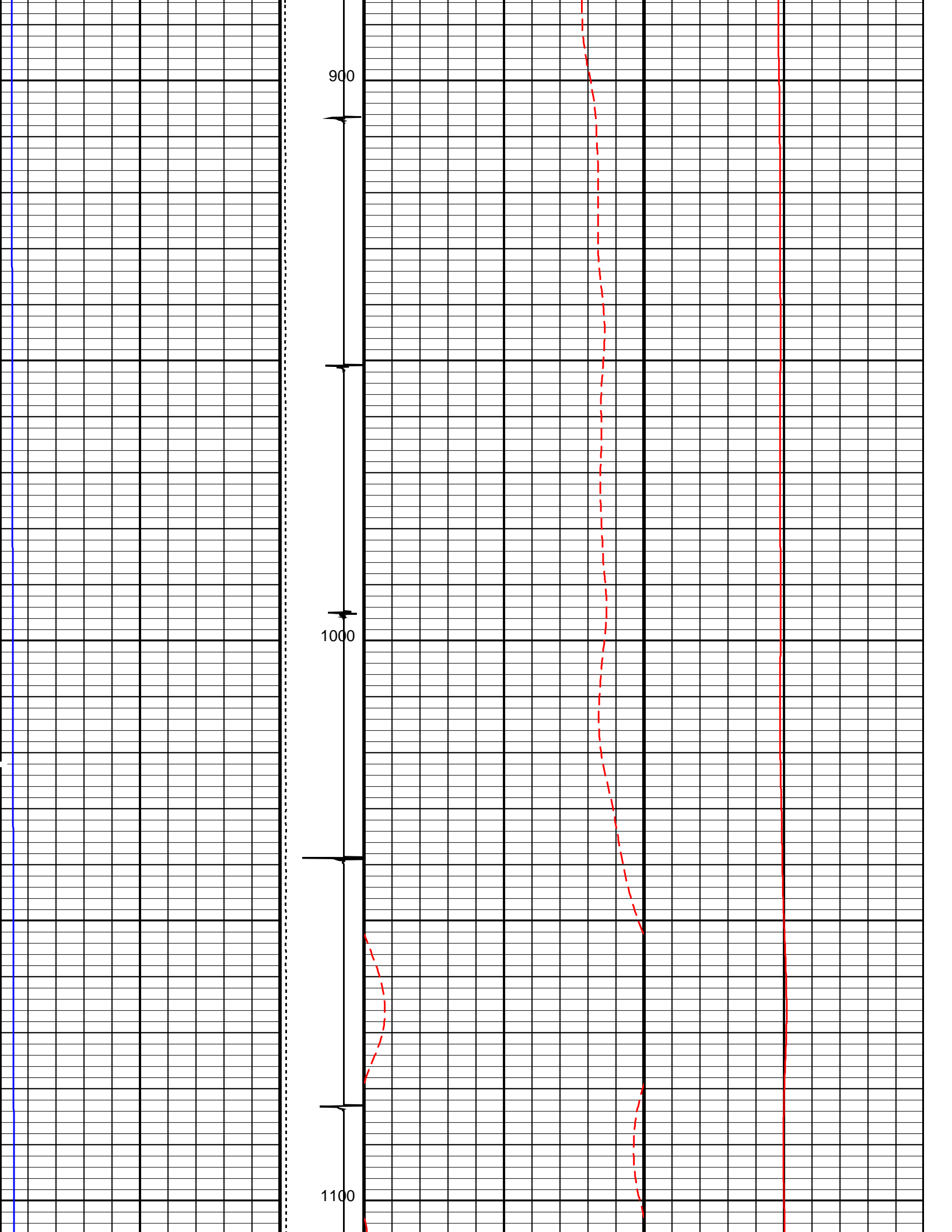


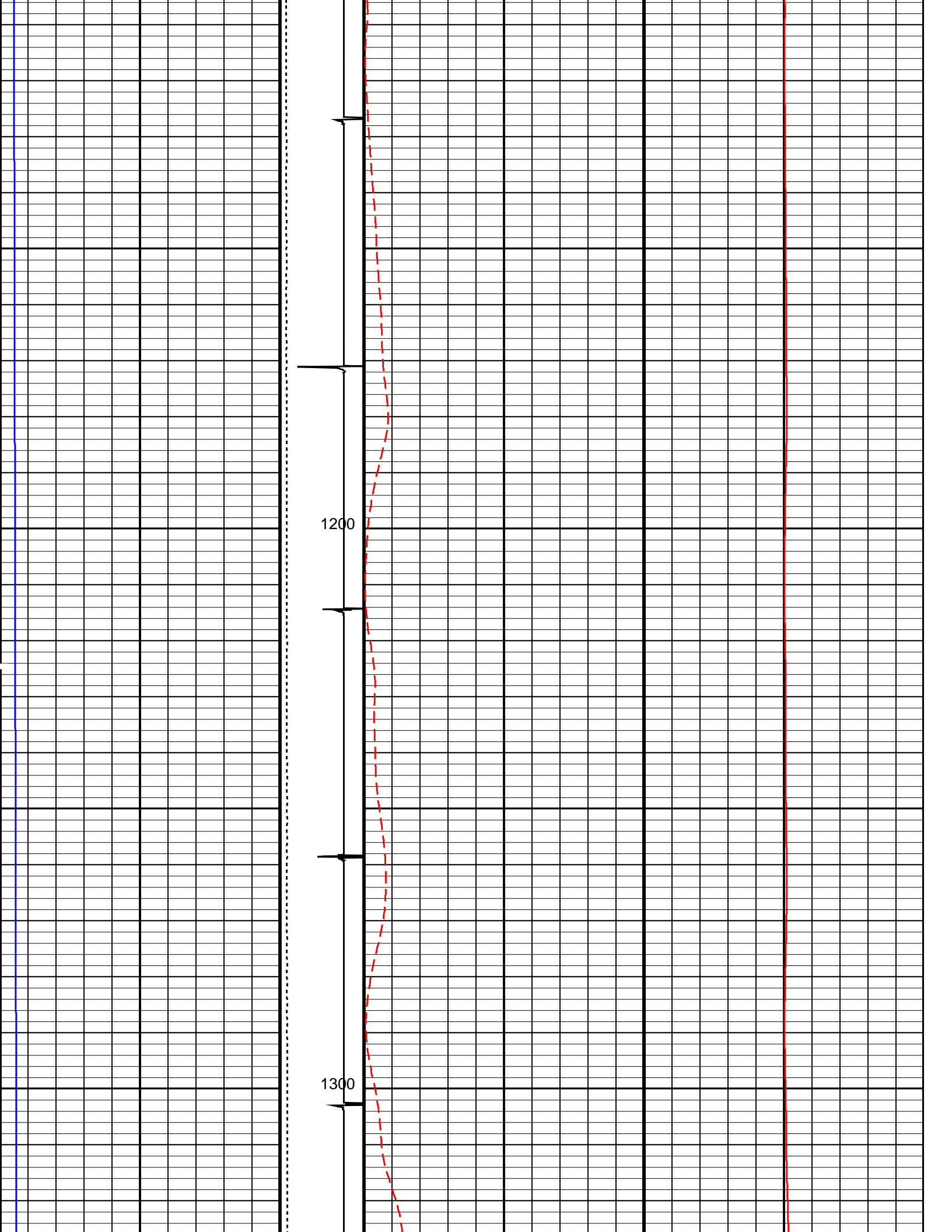


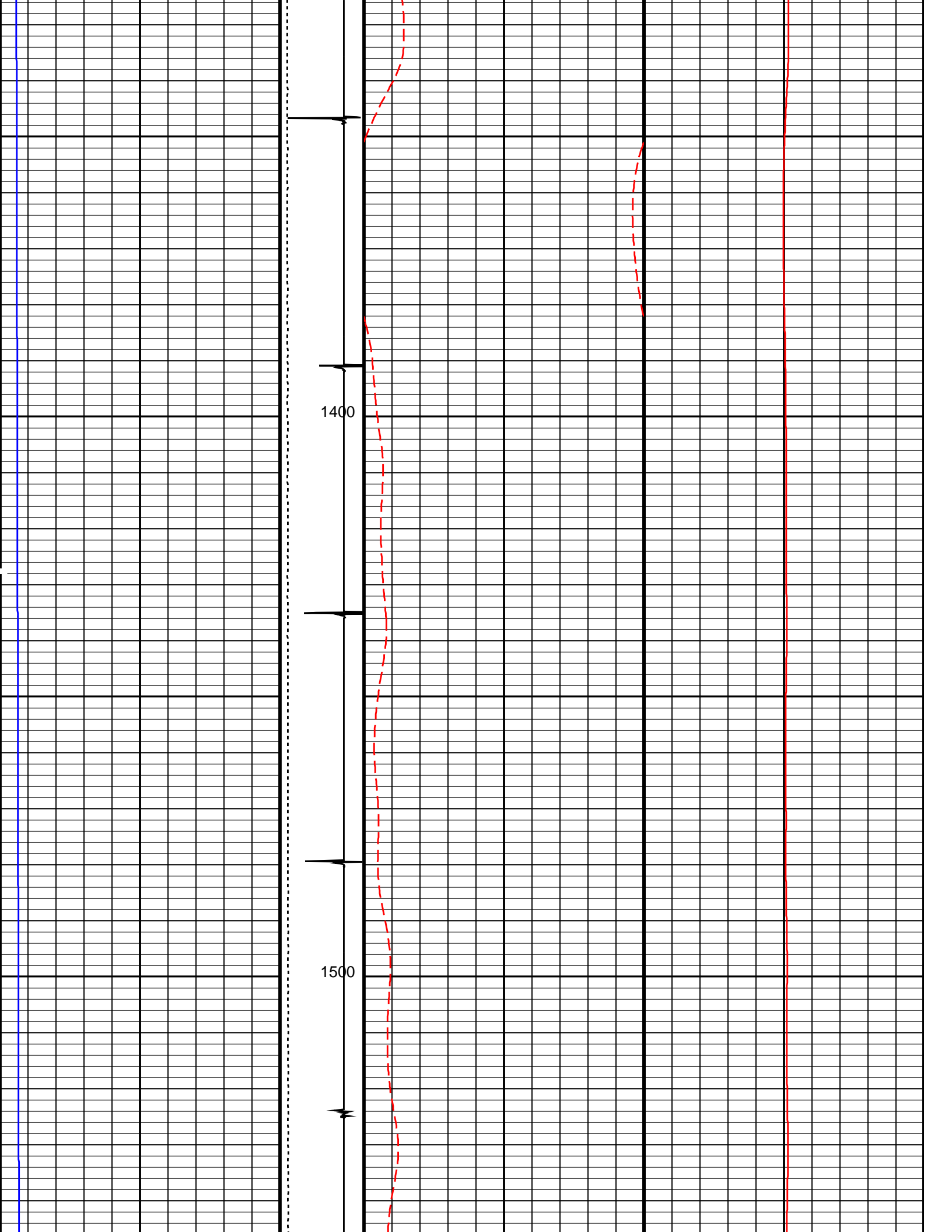


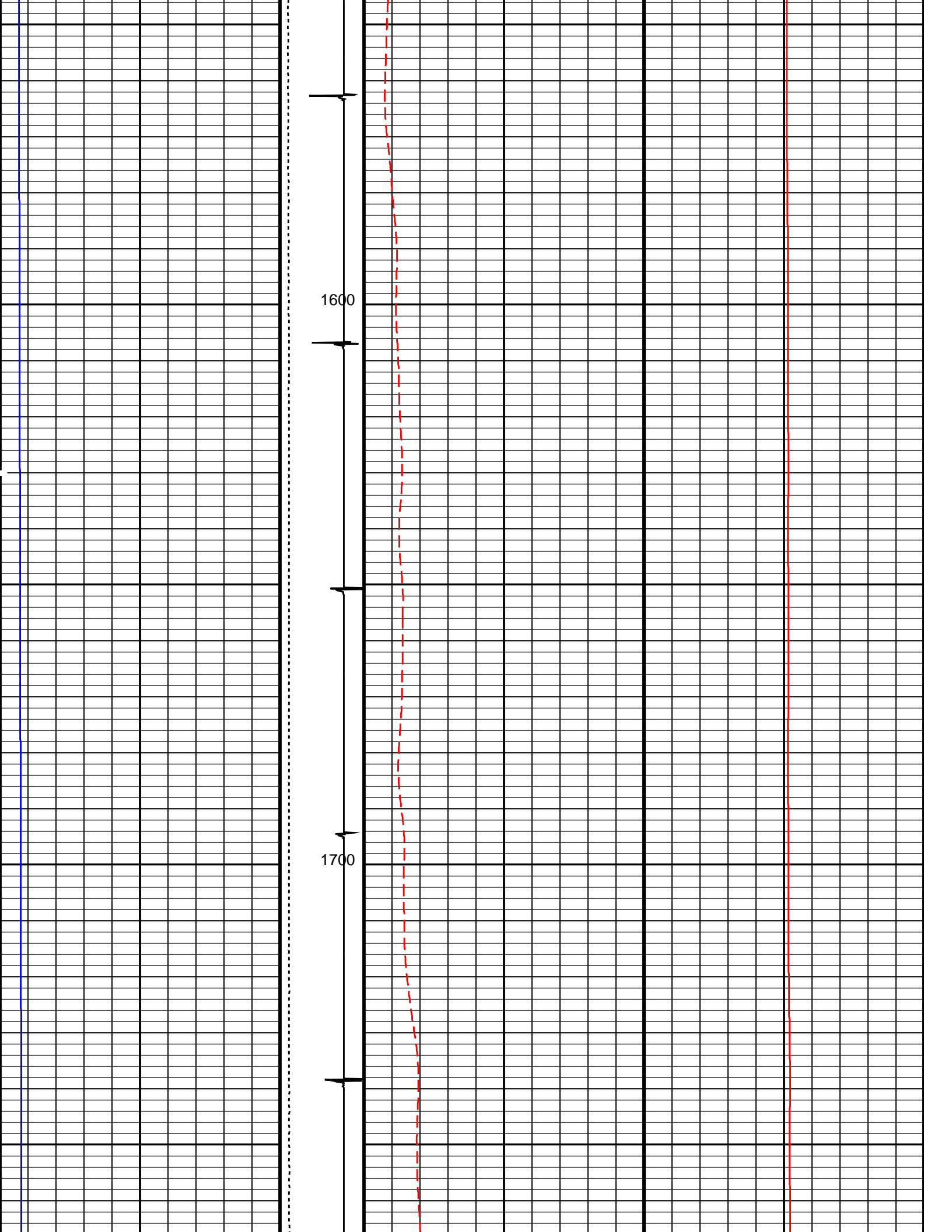


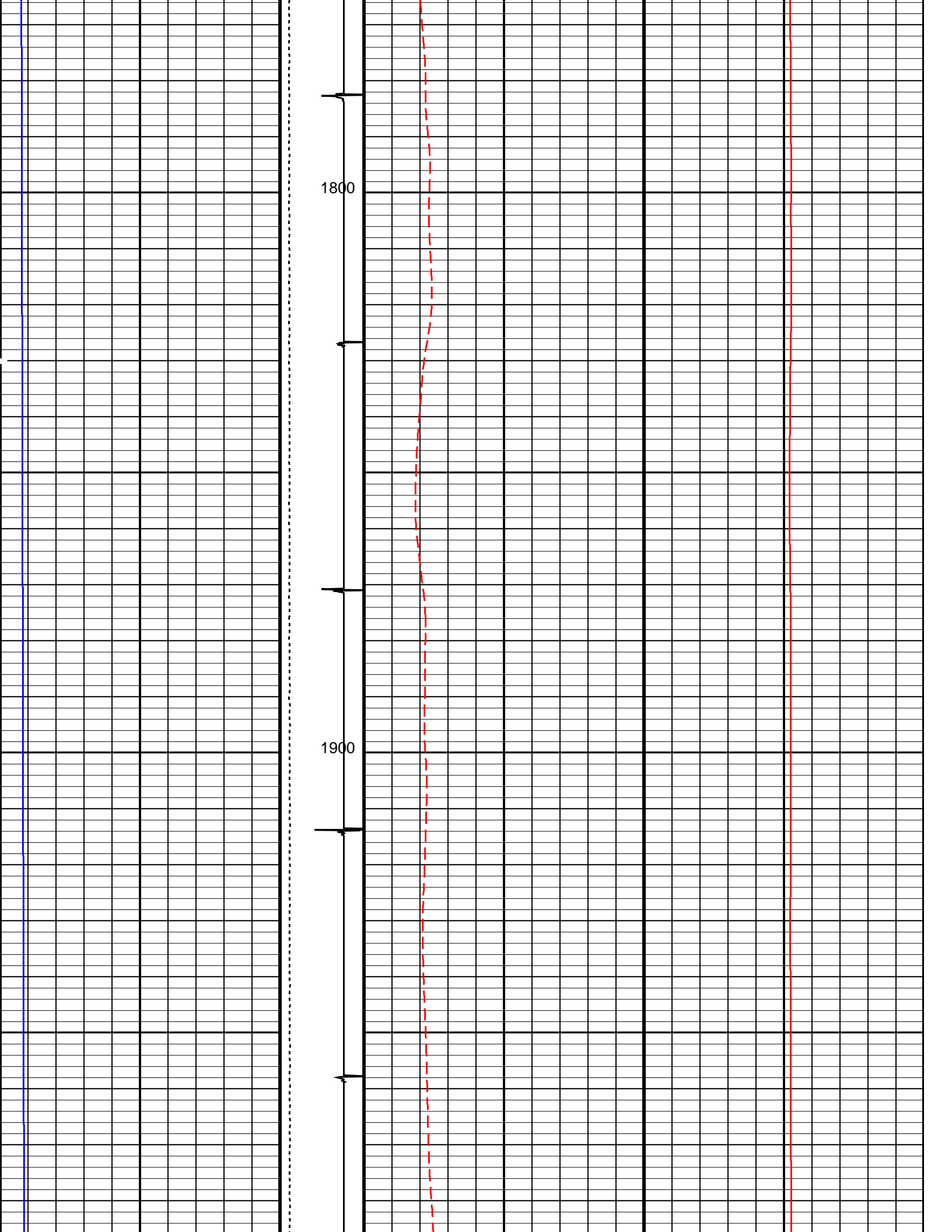


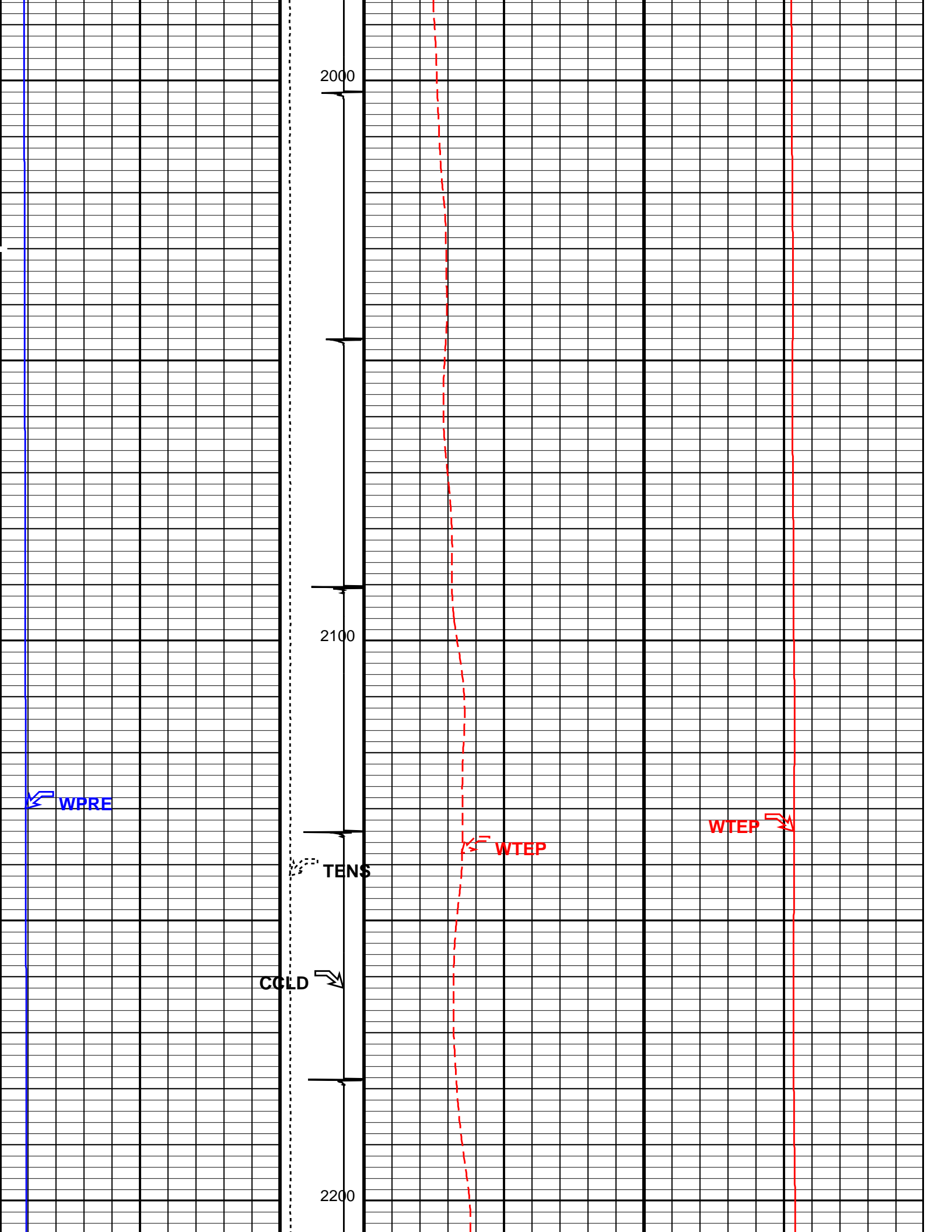


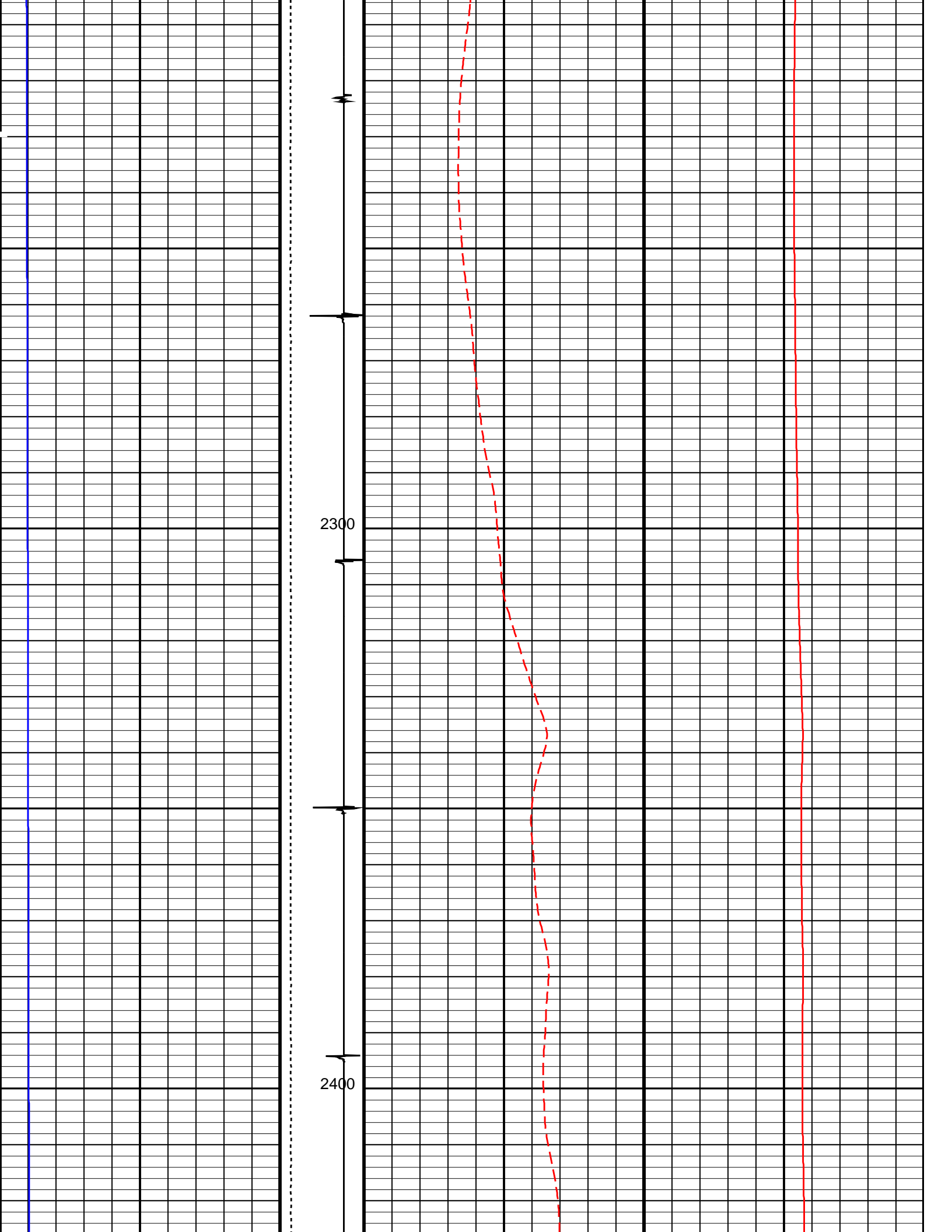


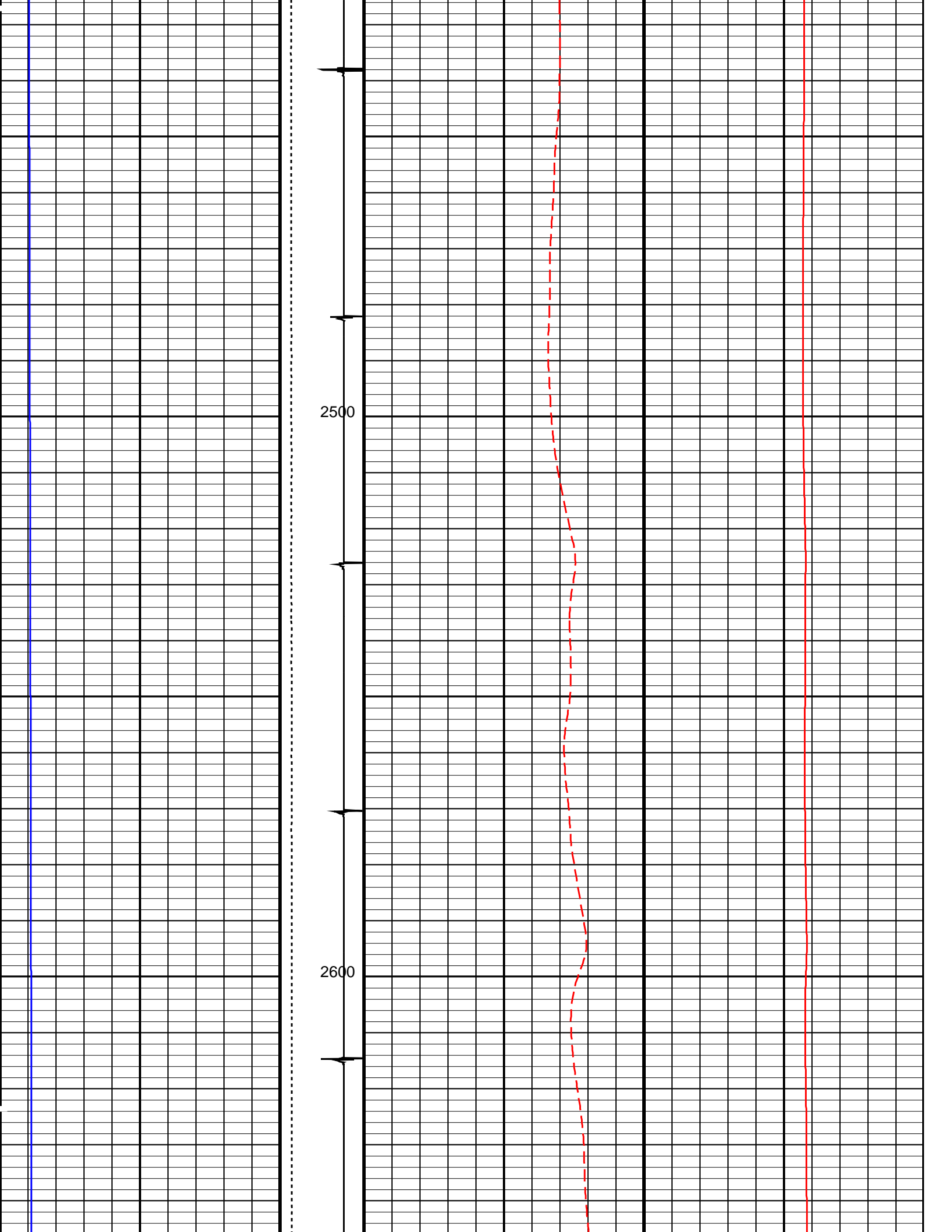


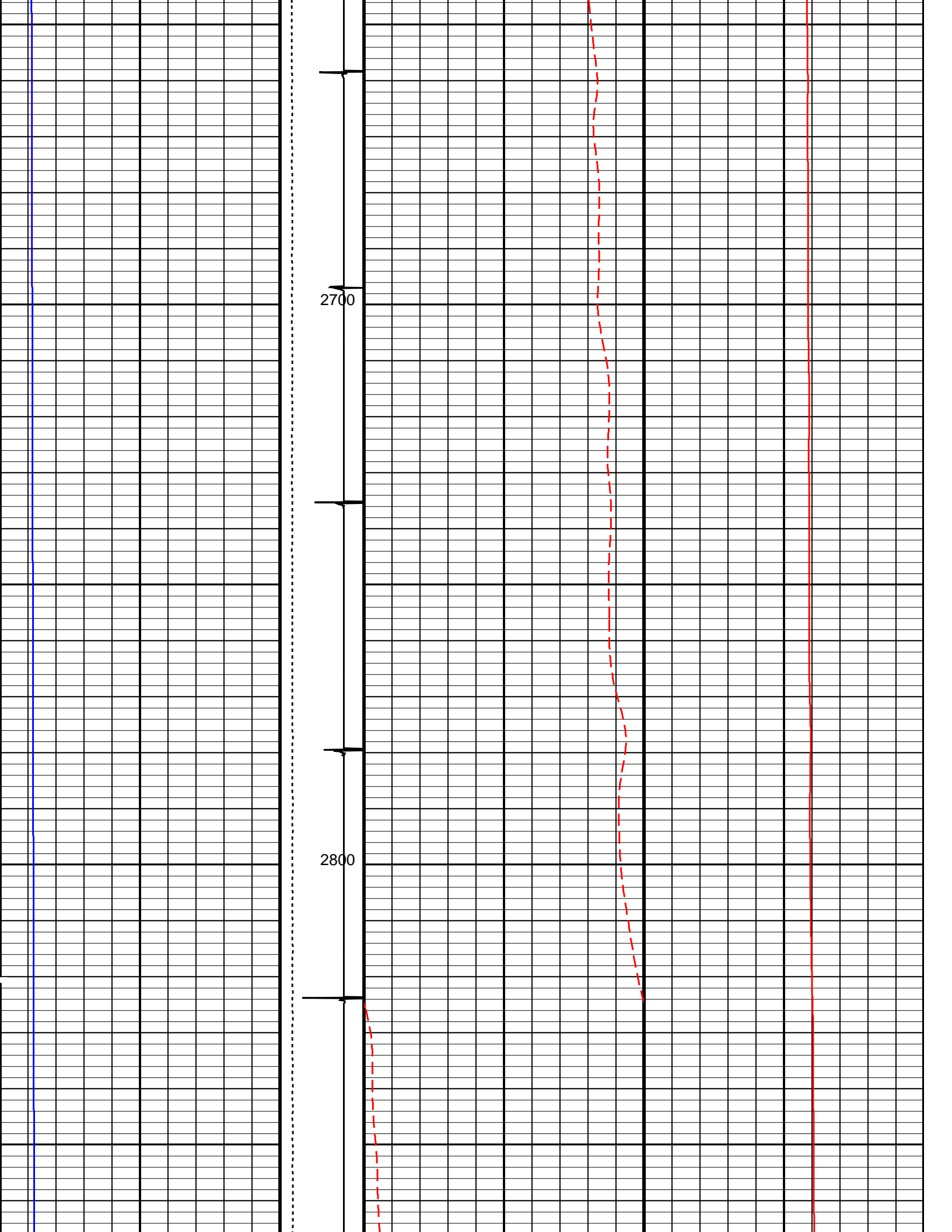


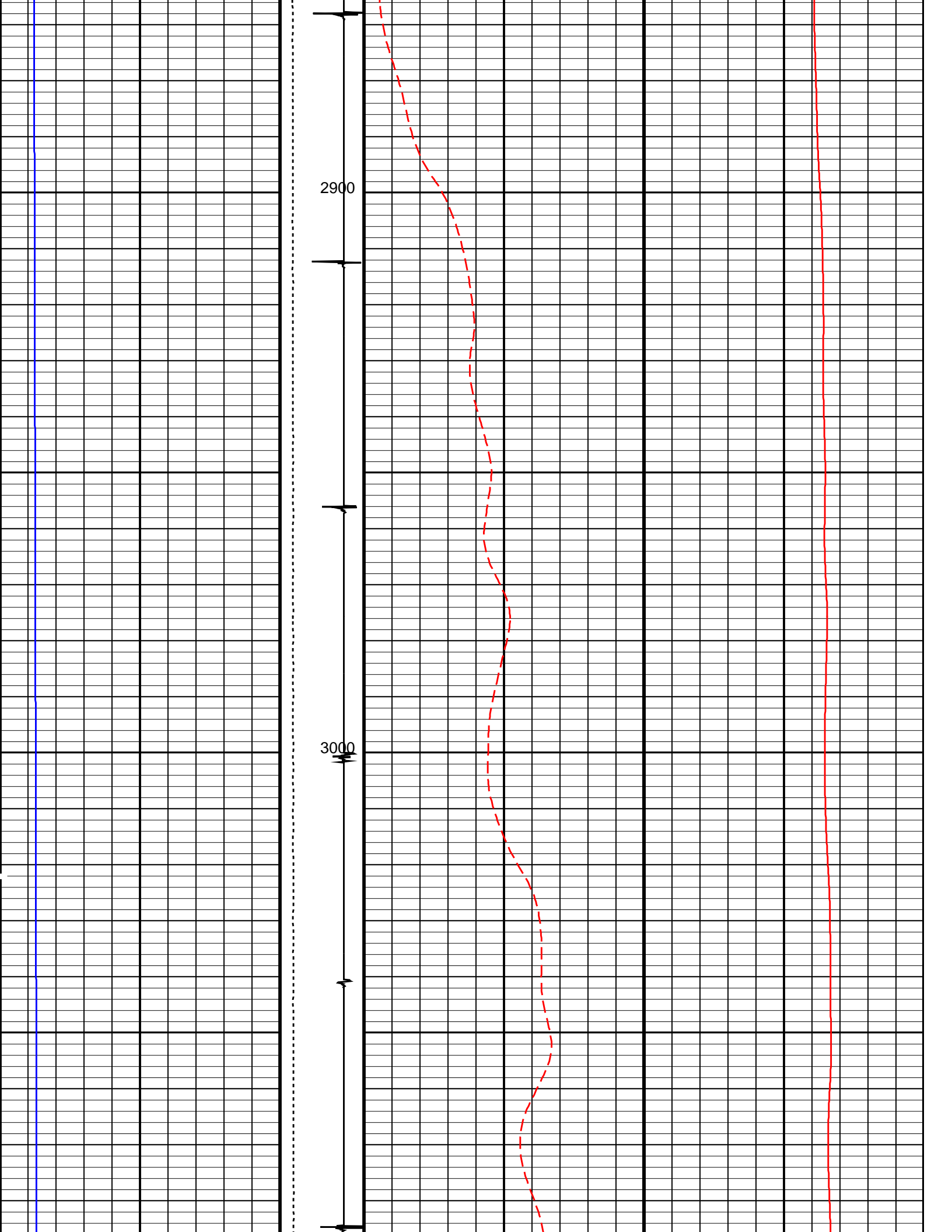


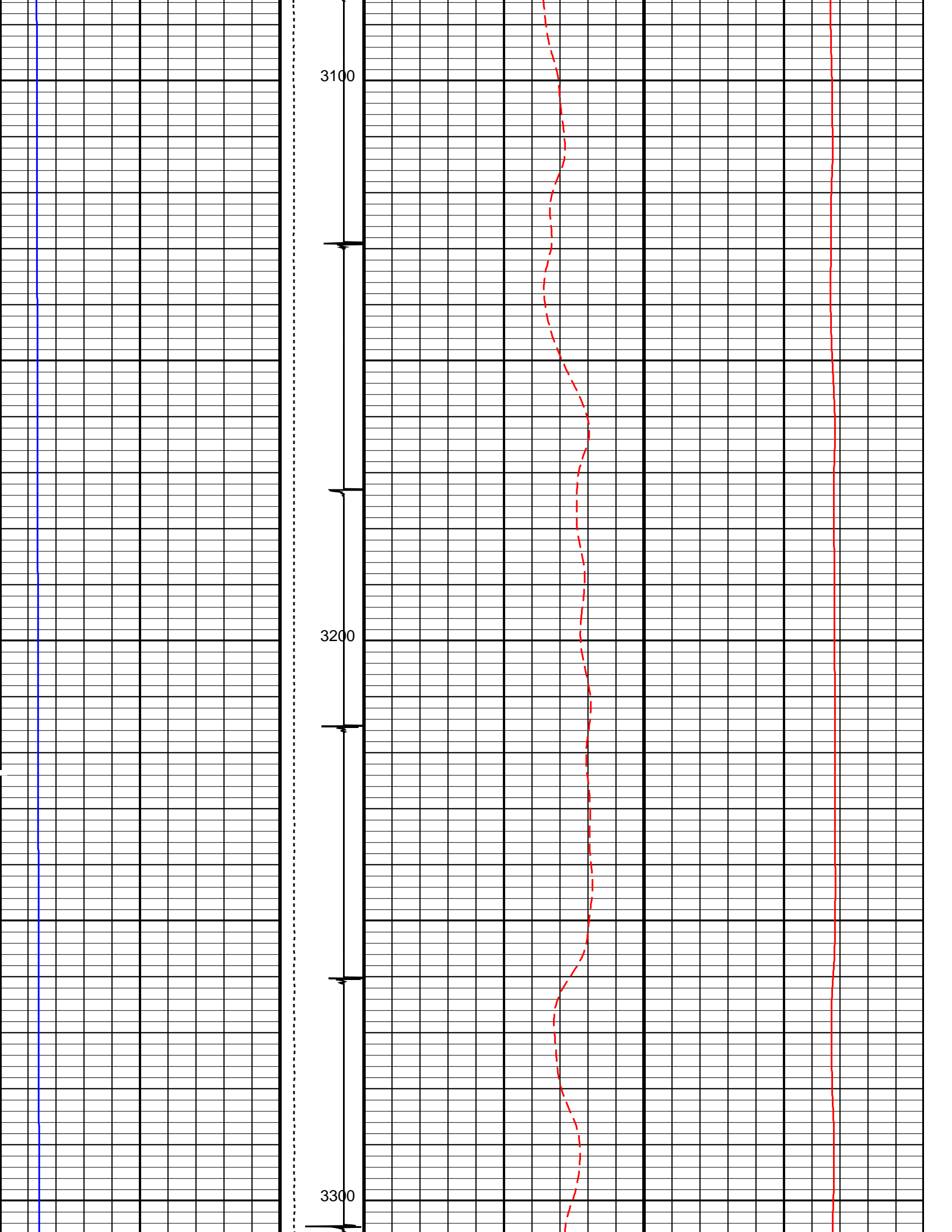


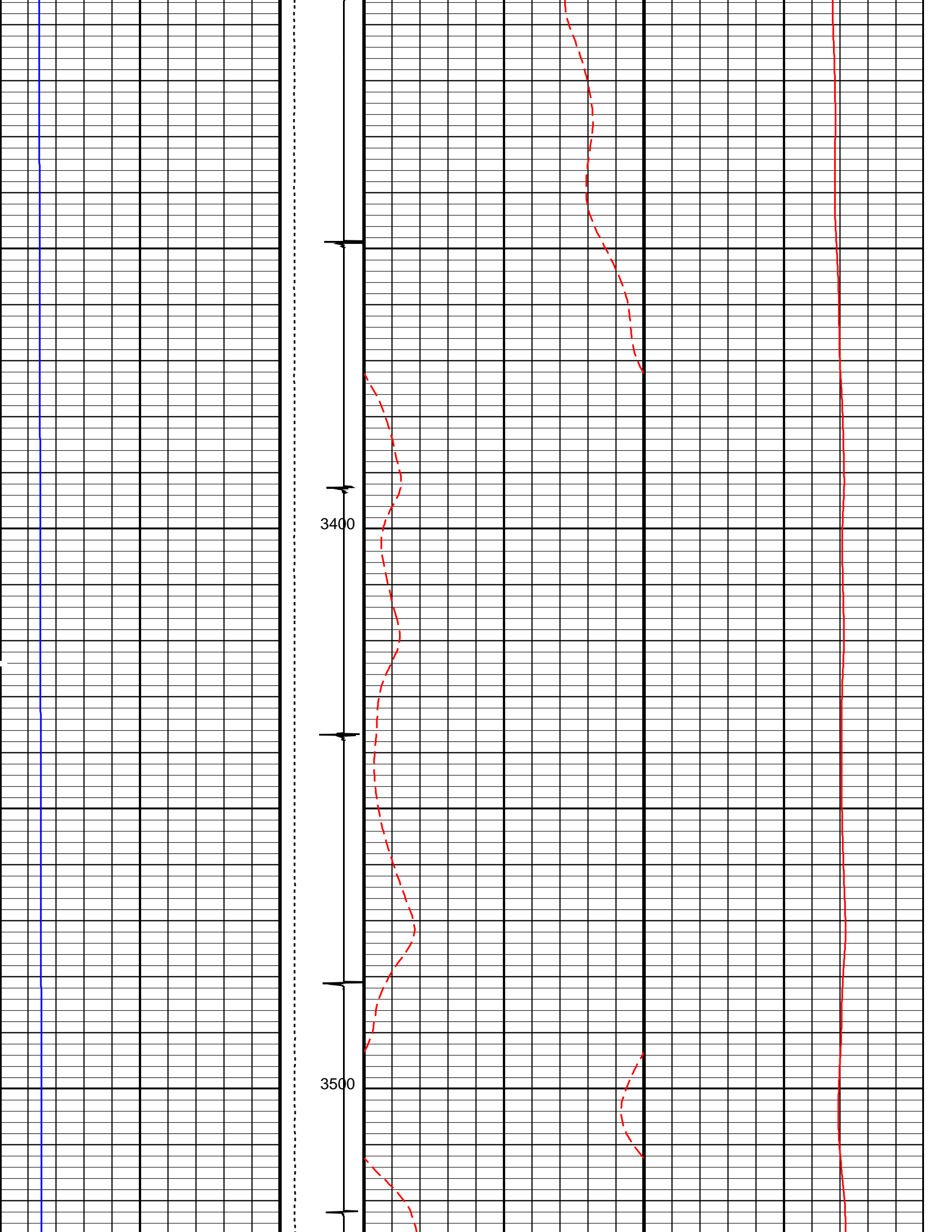


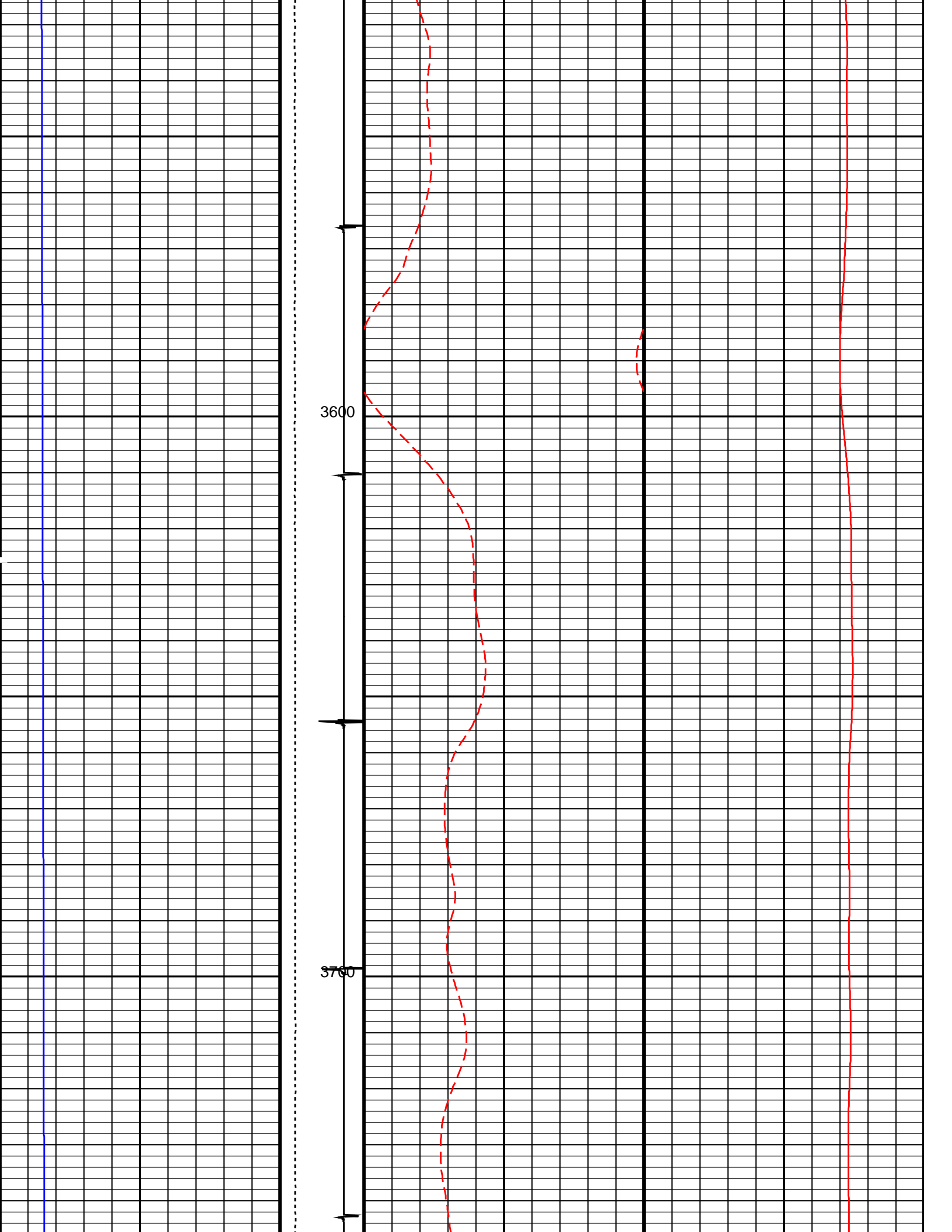


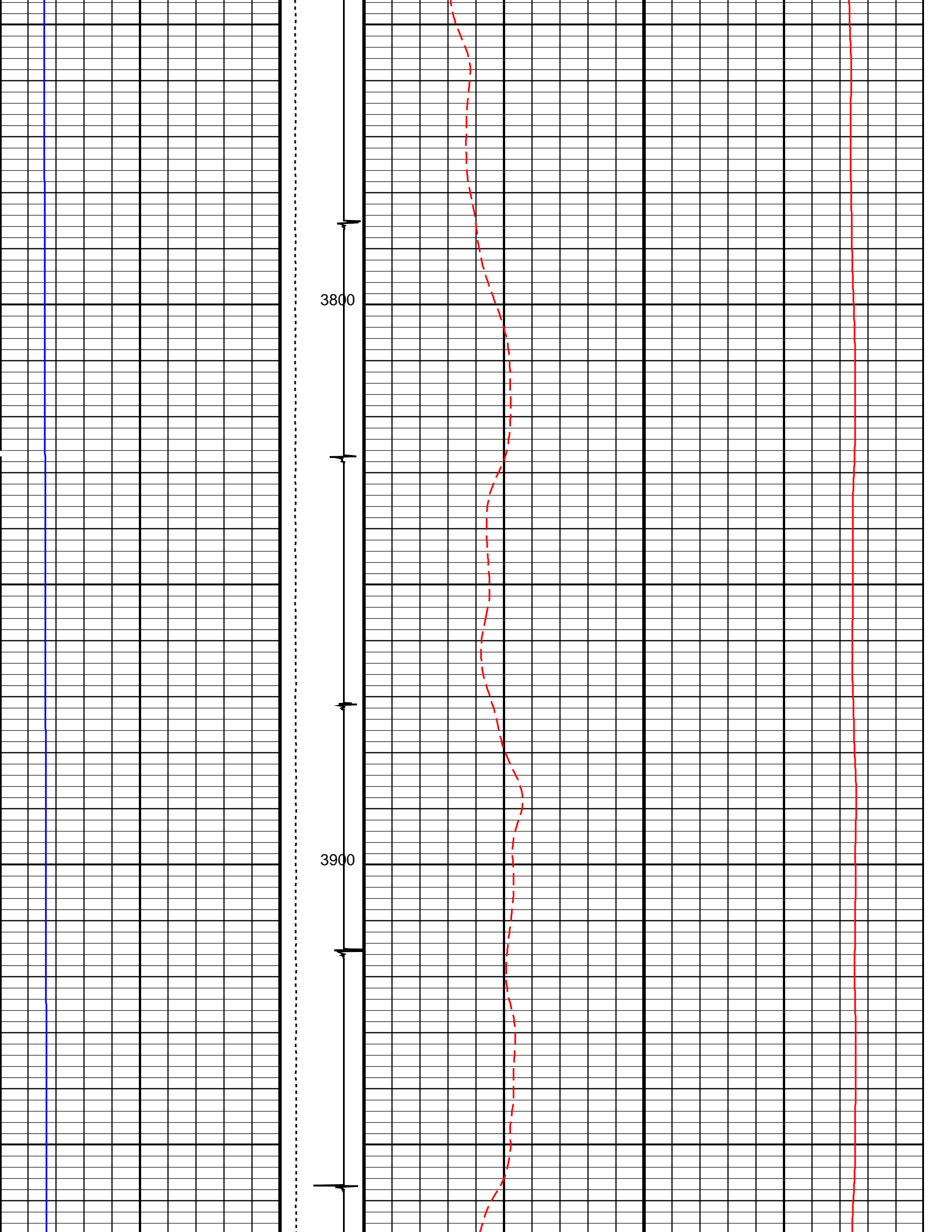


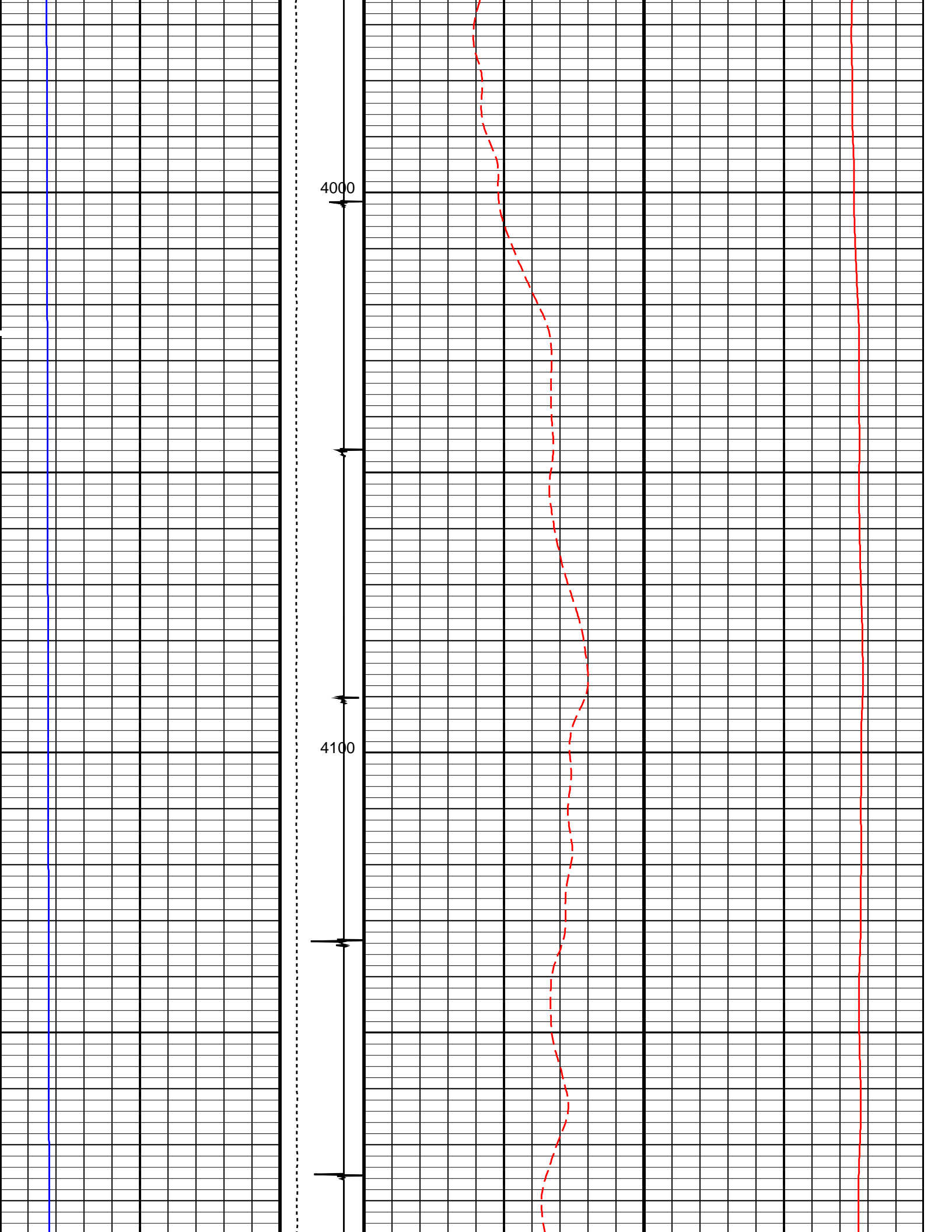


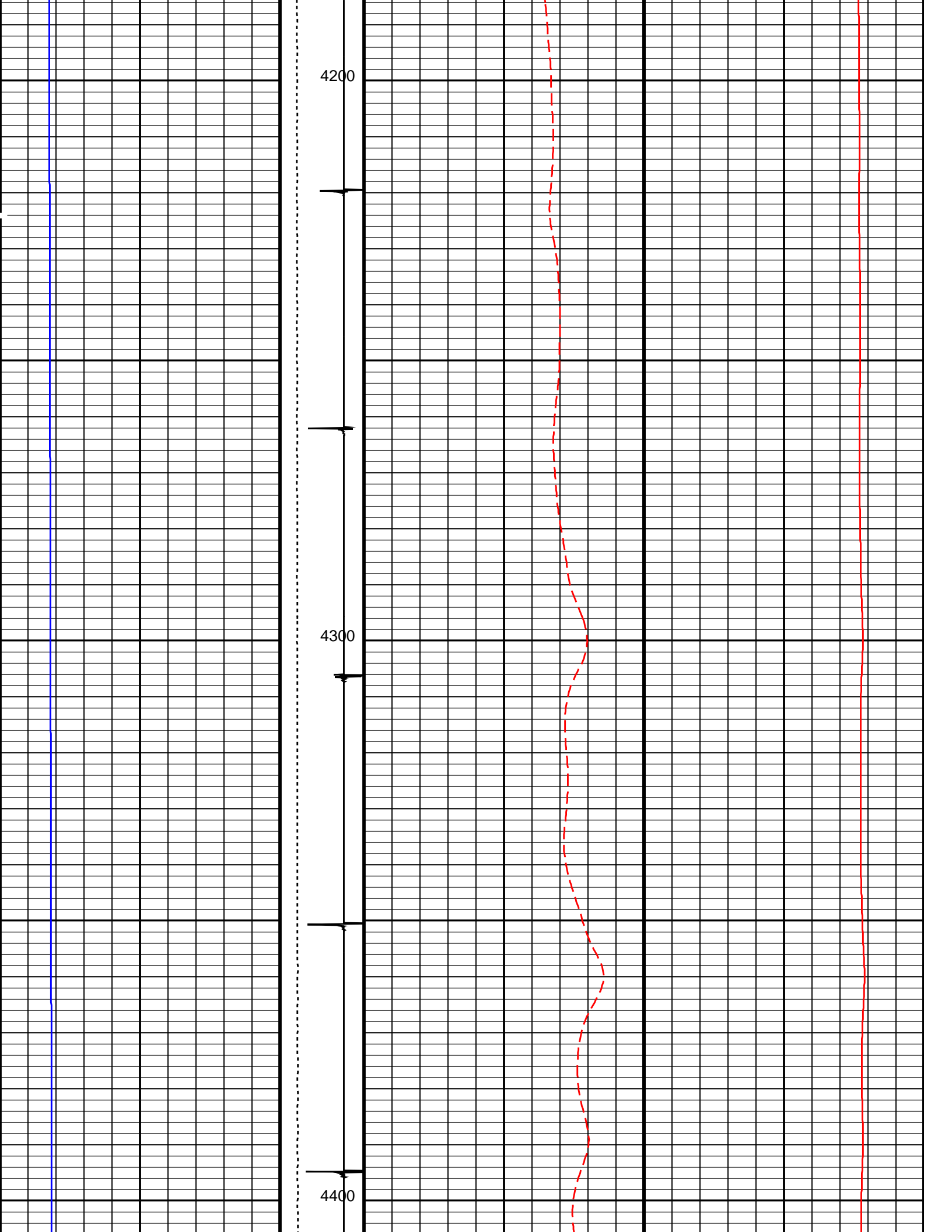


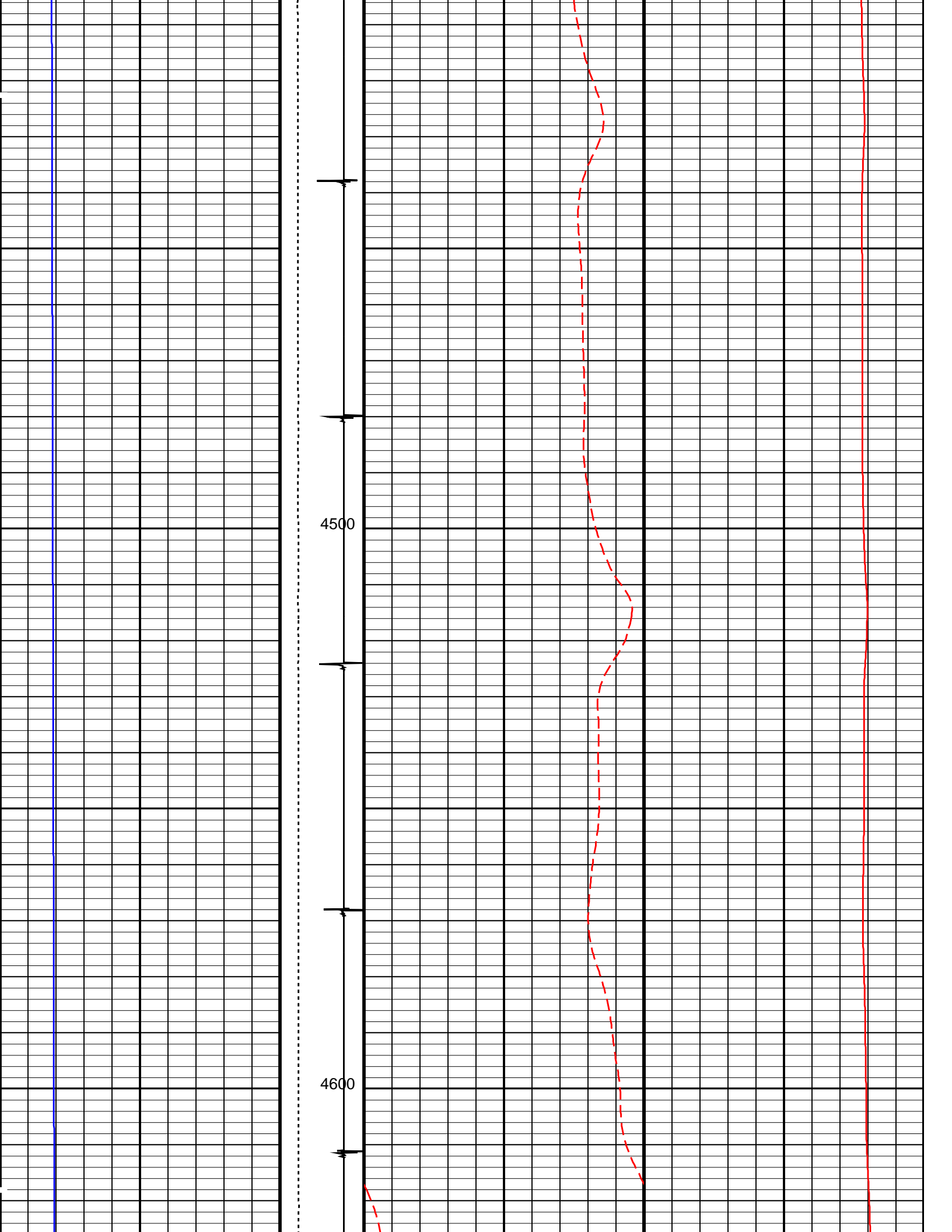


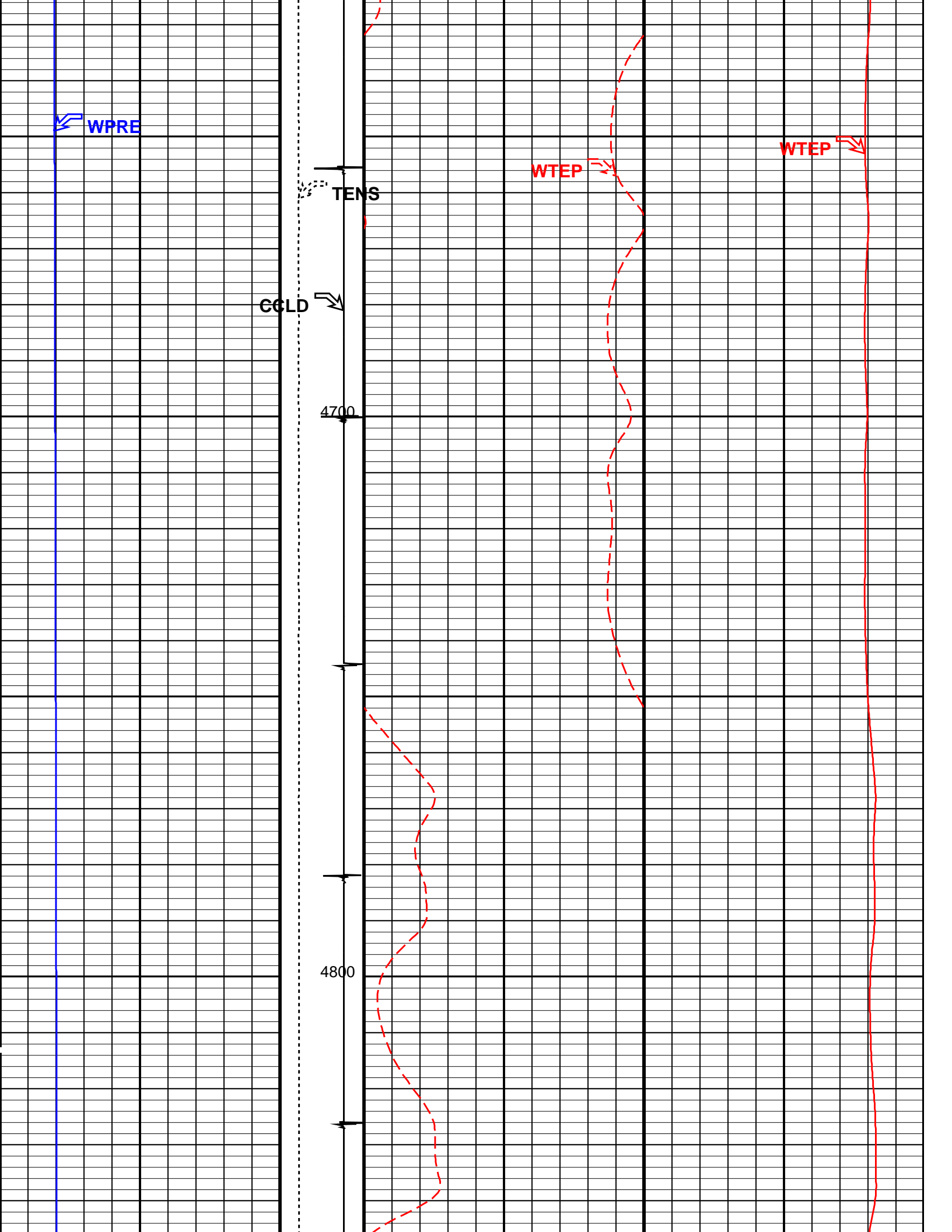


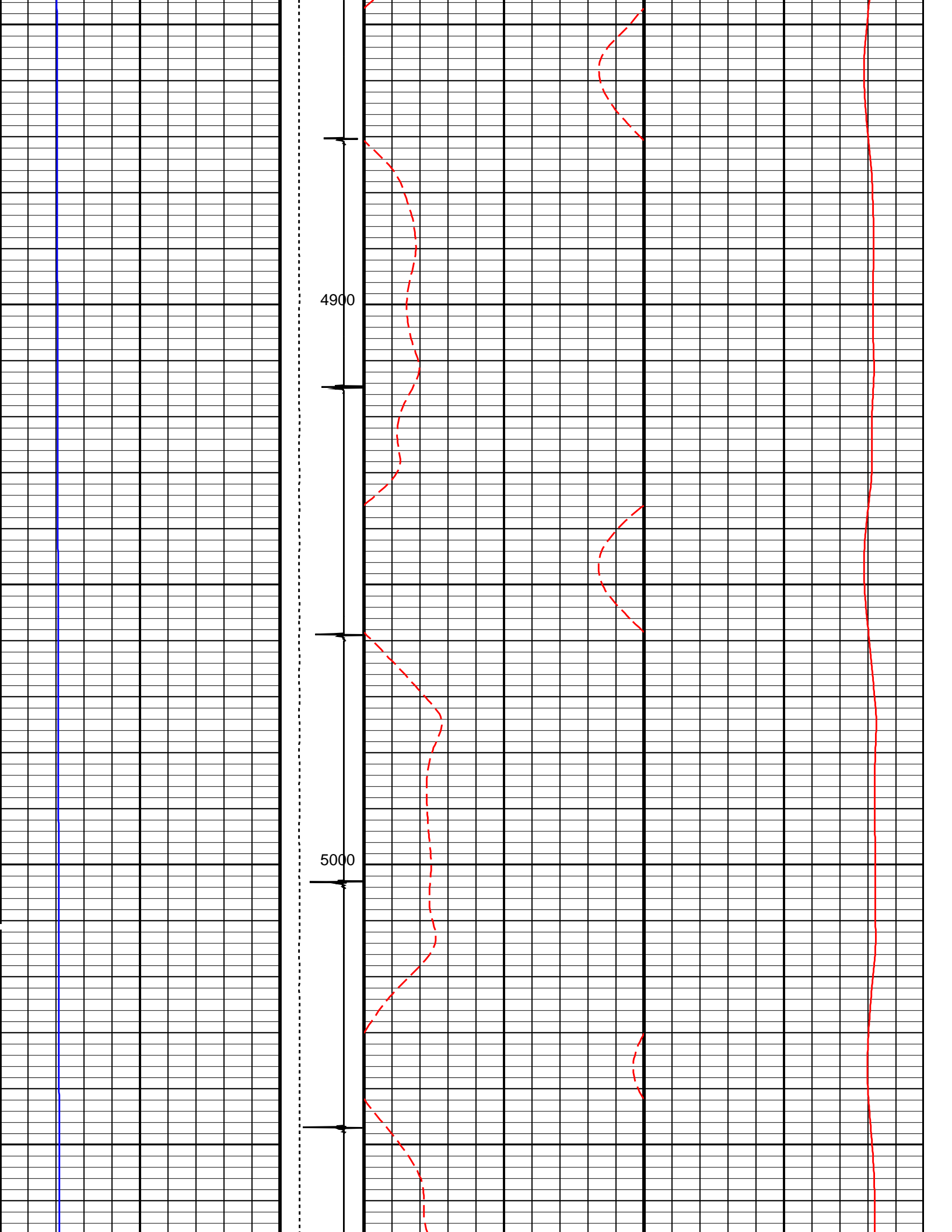


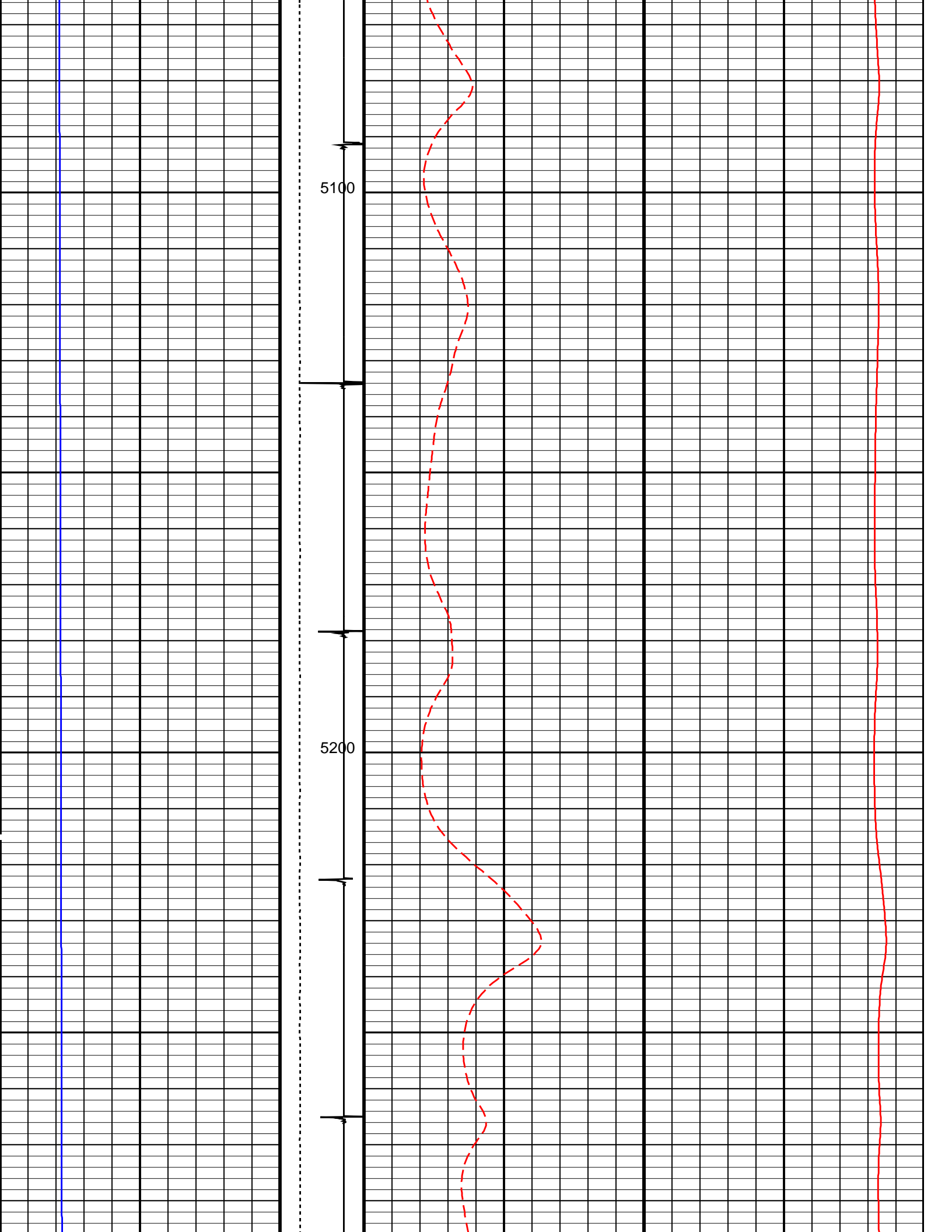


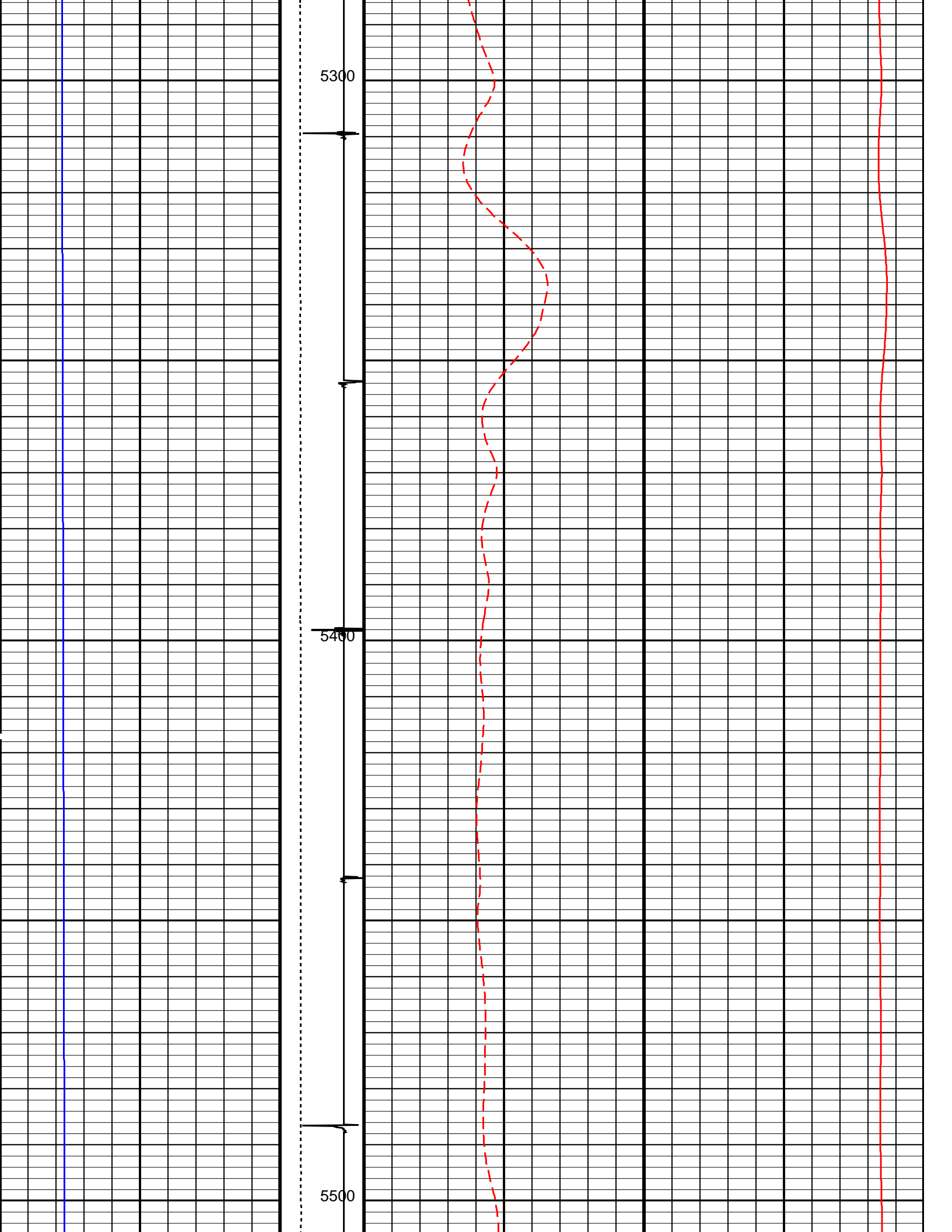


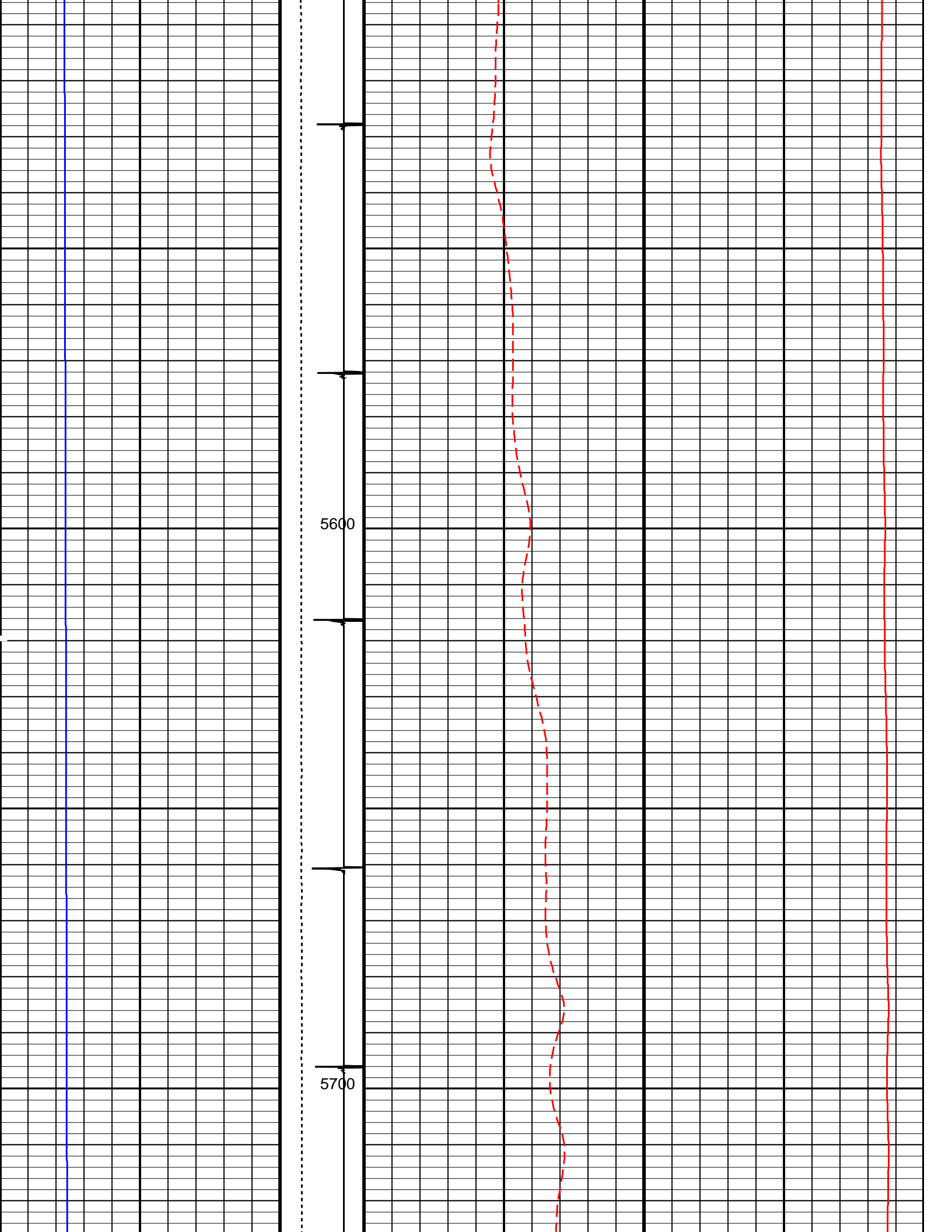


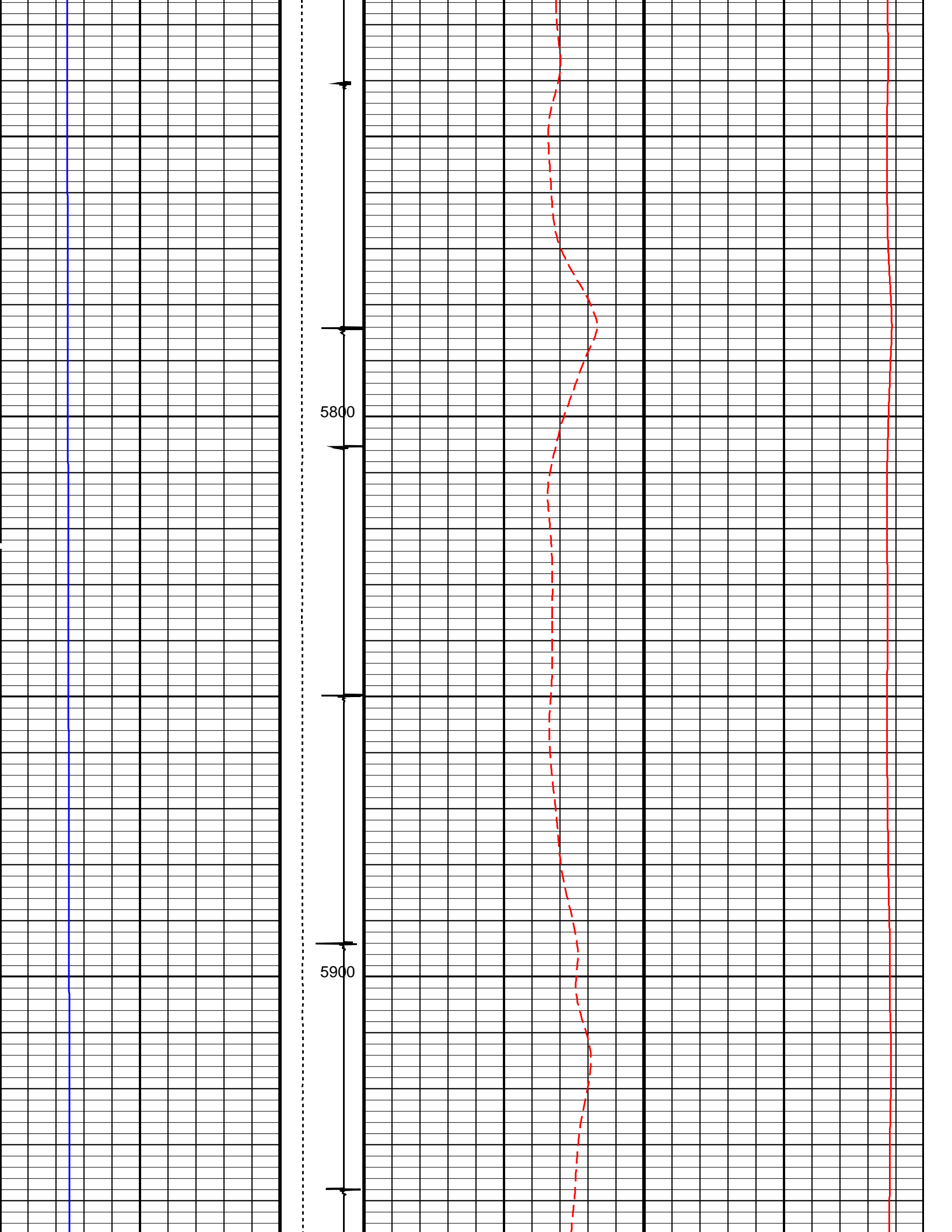


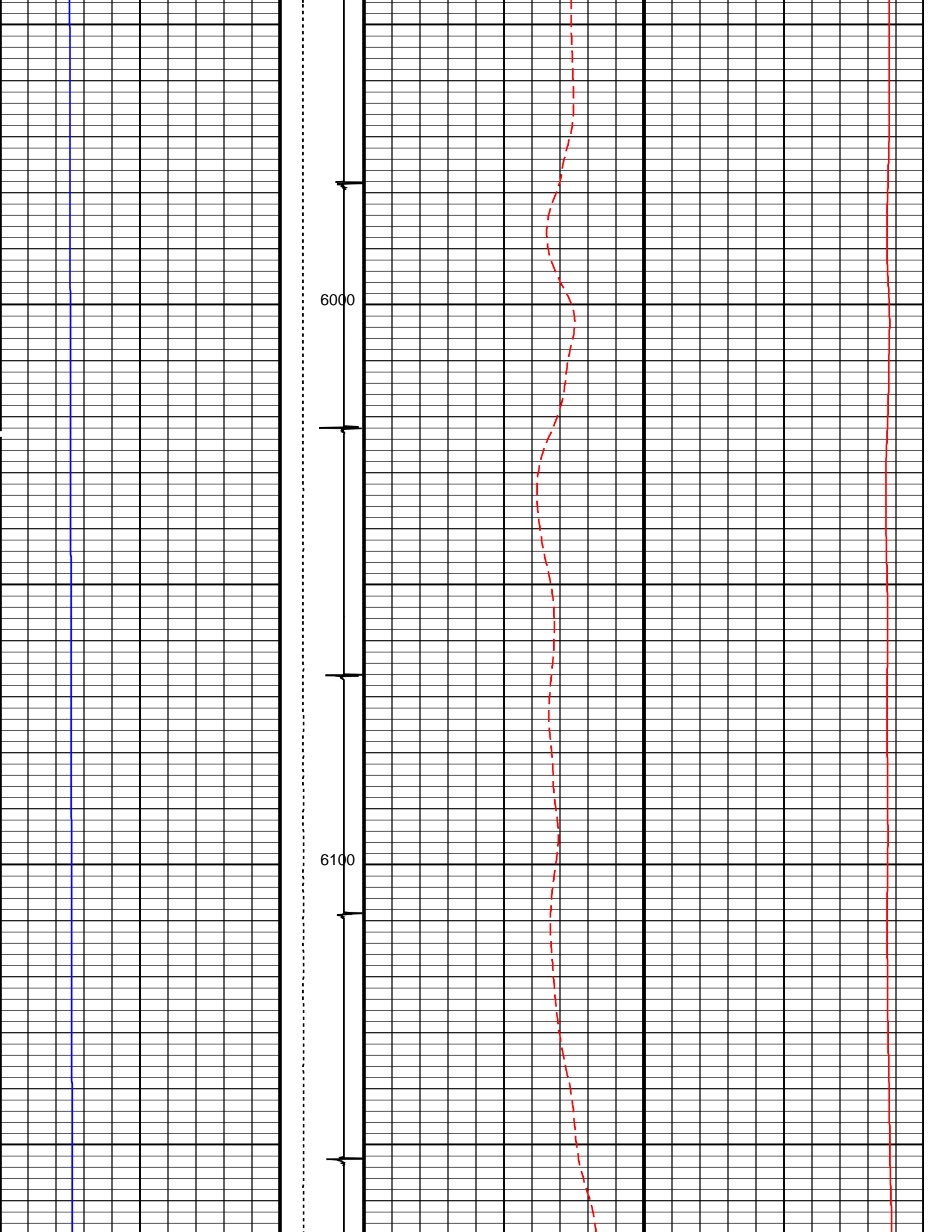


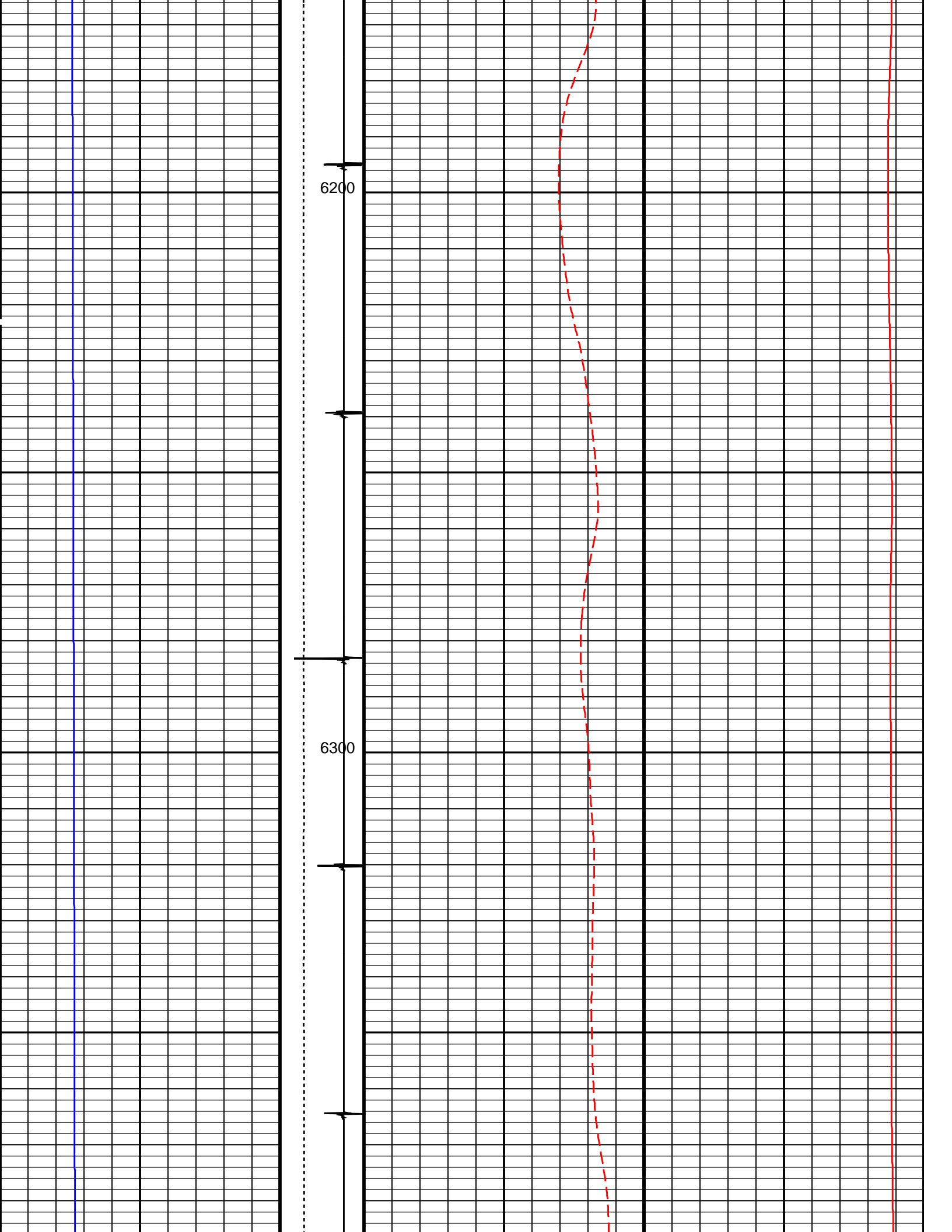


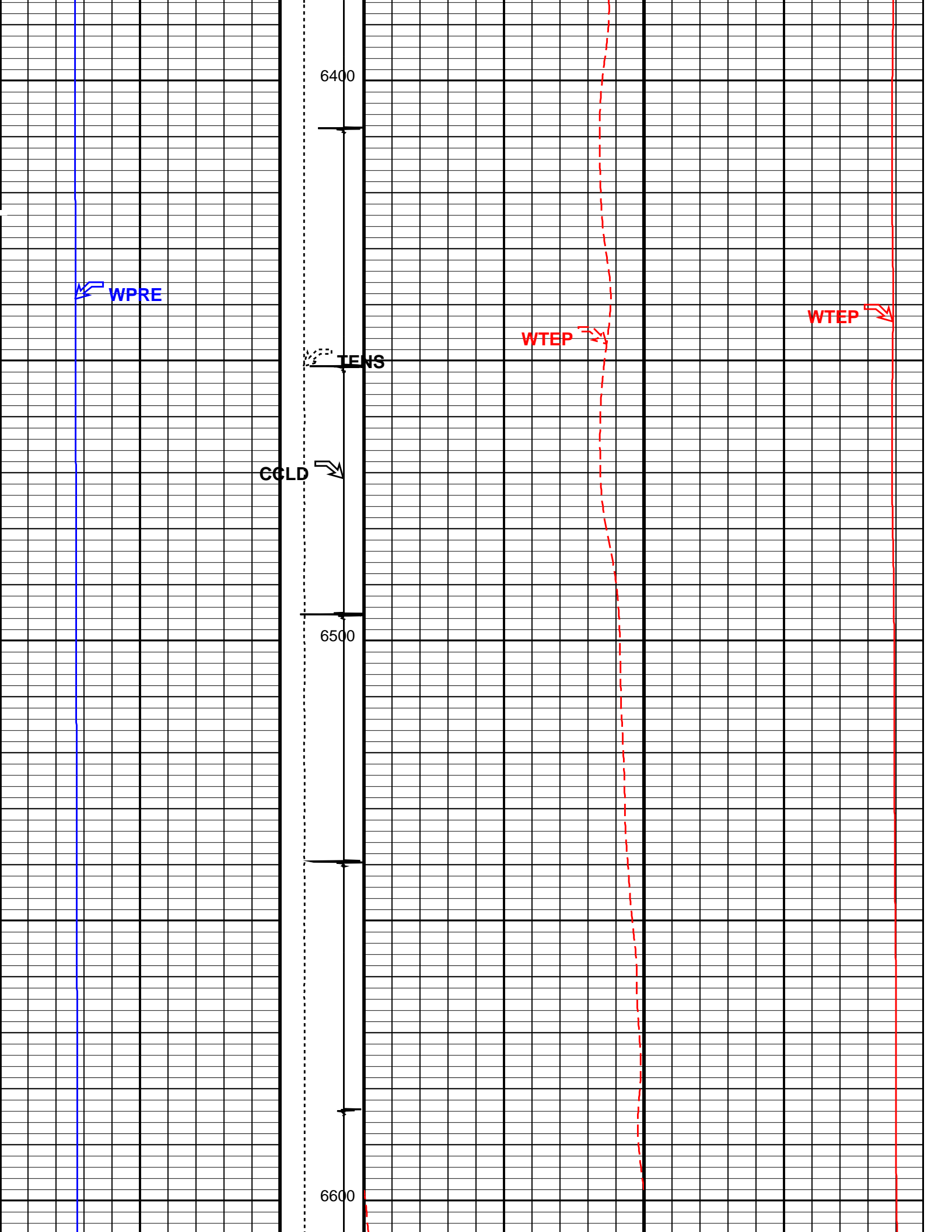


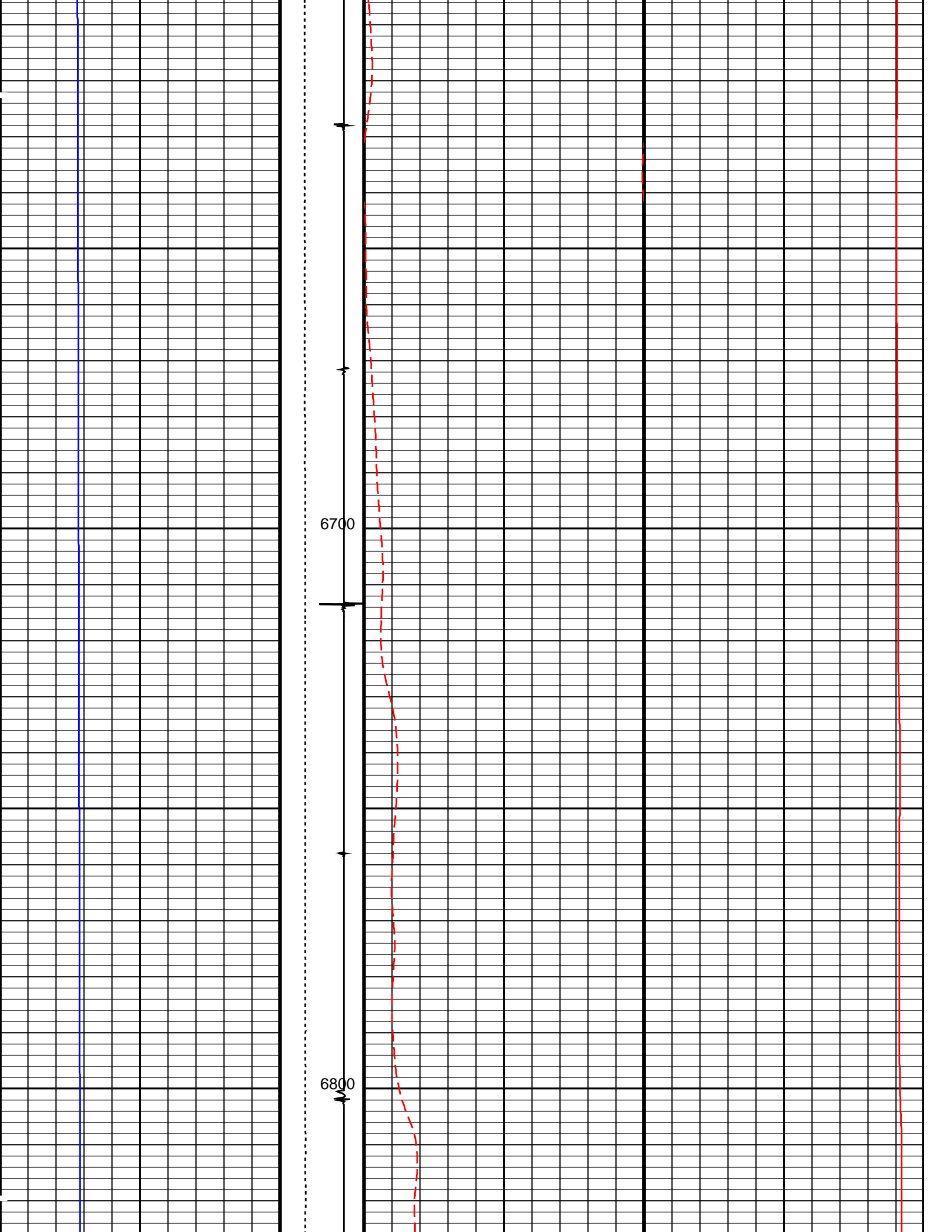


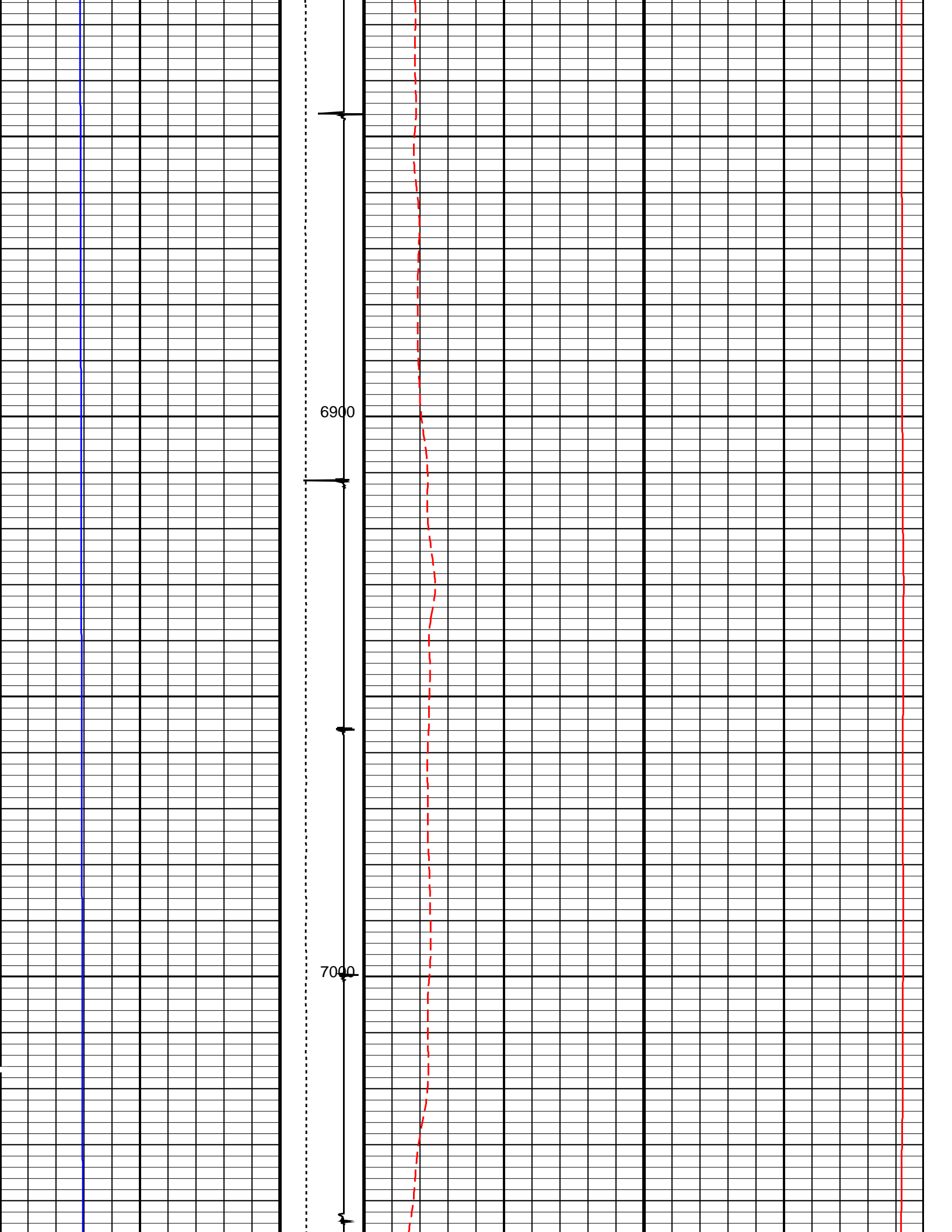


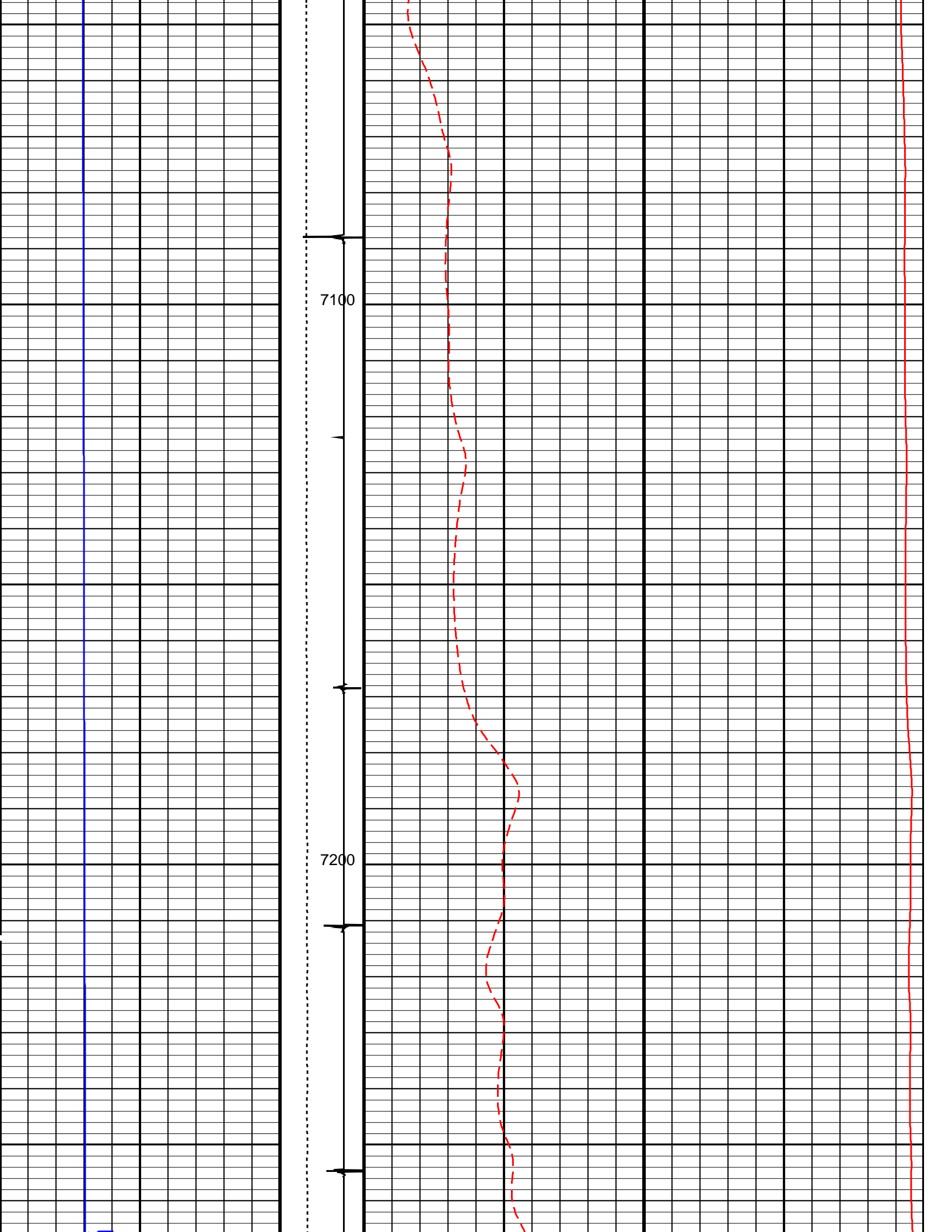


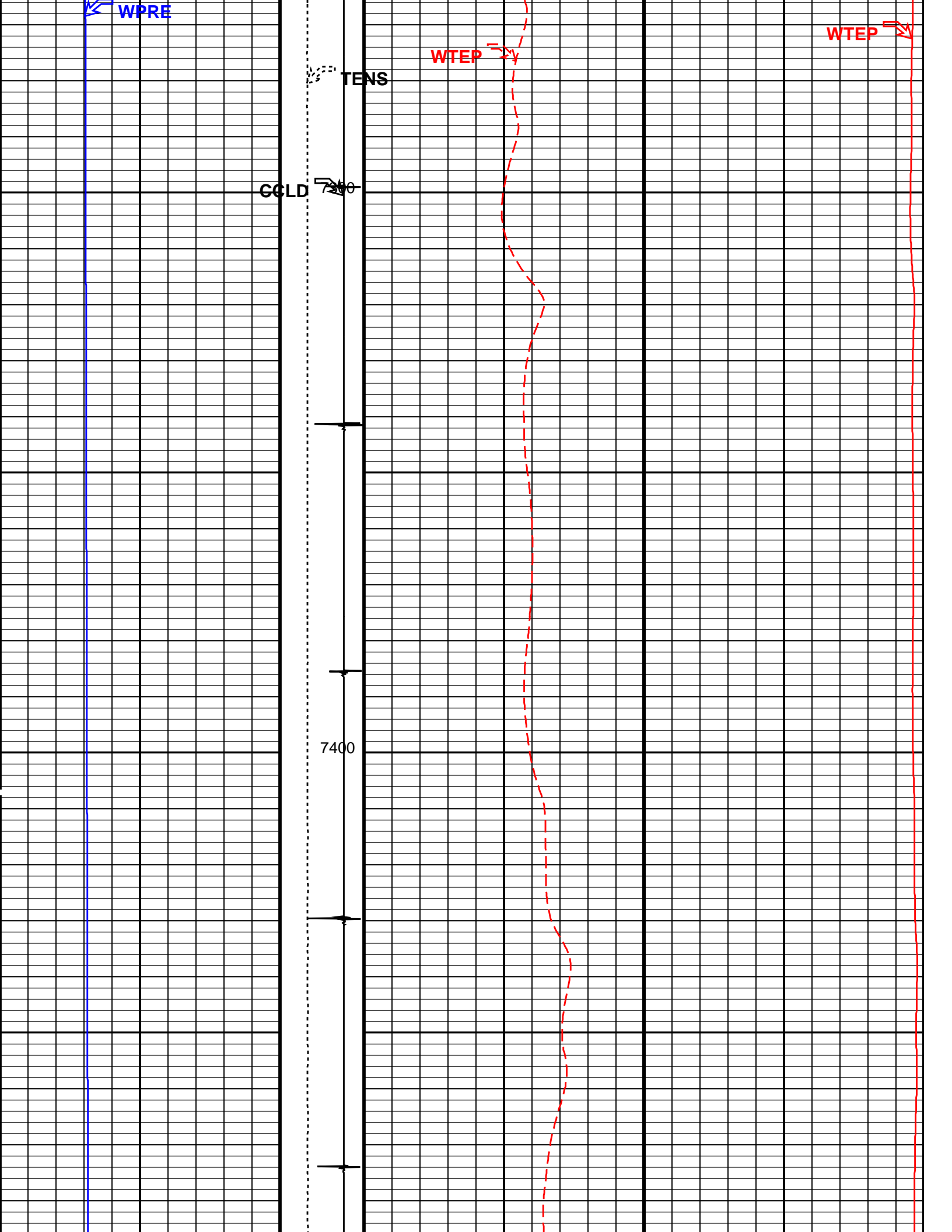


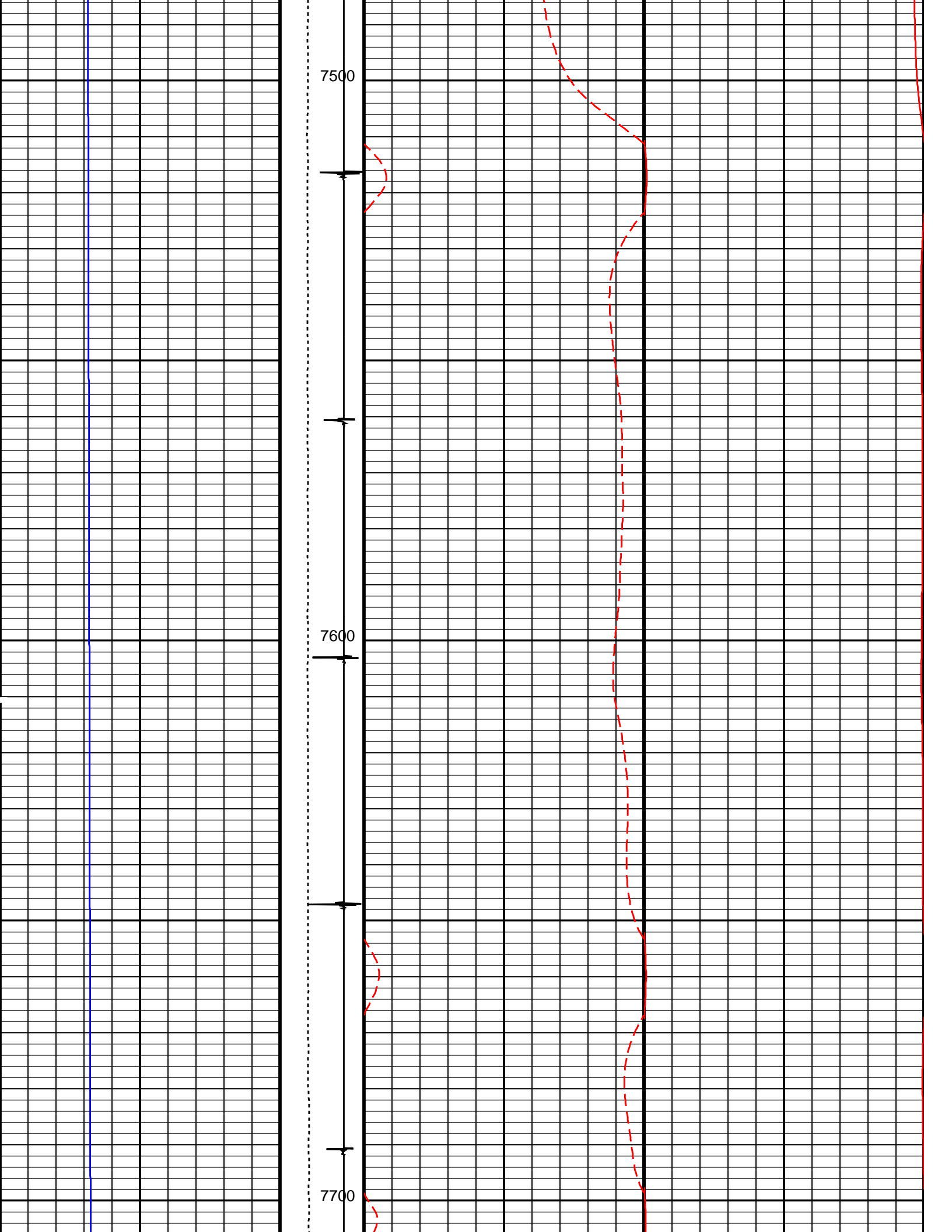


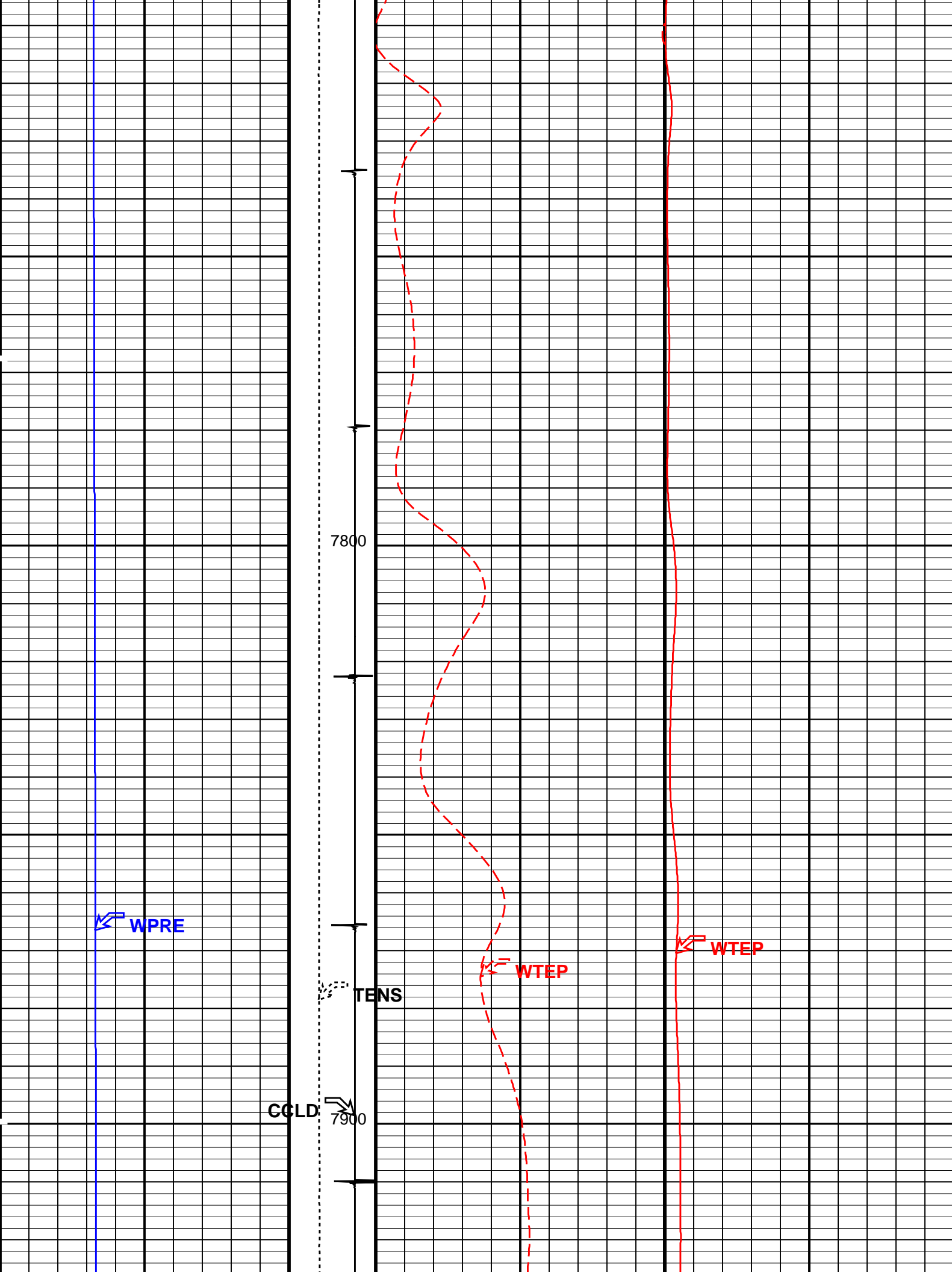


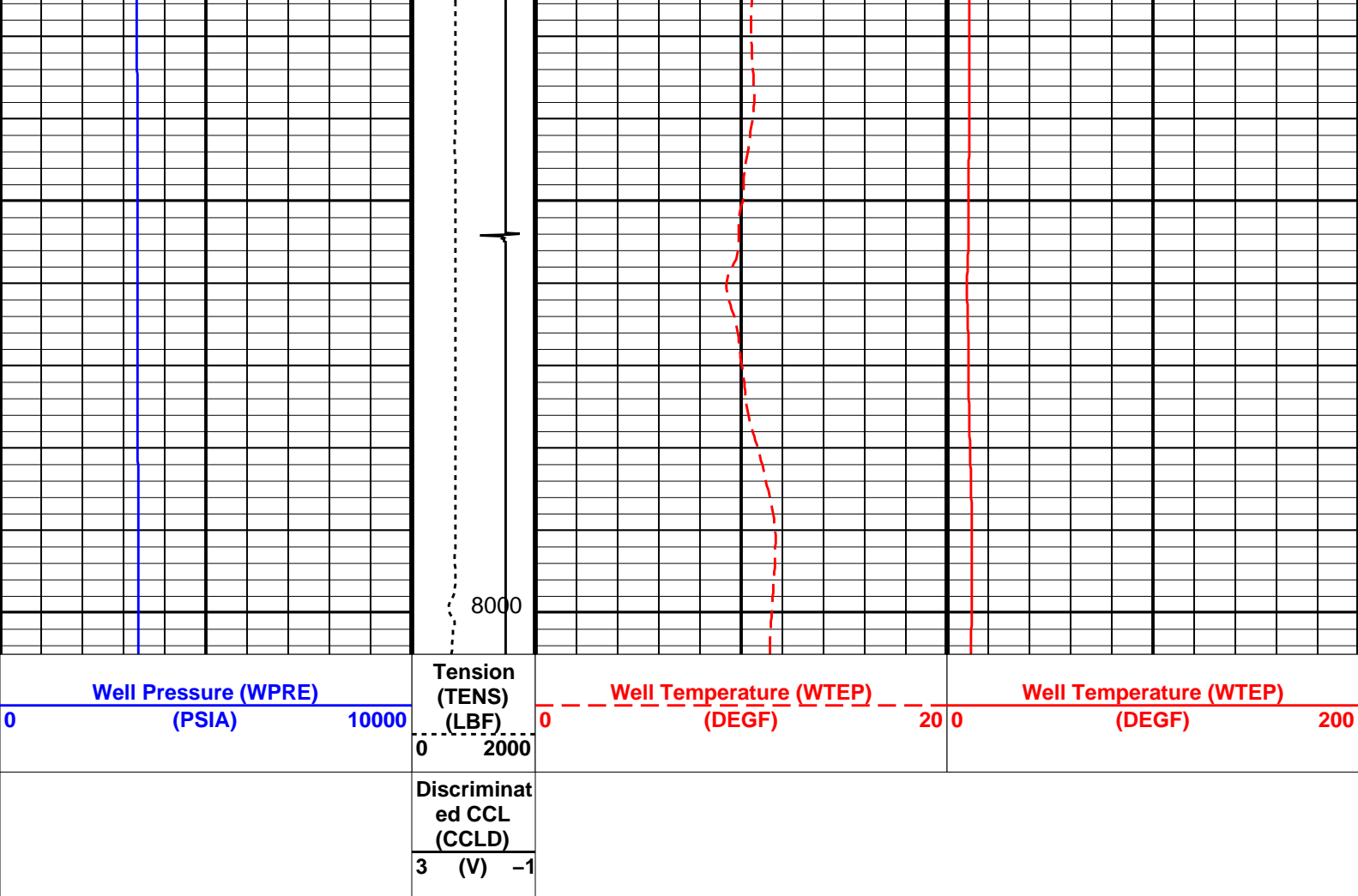












PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
DO	System and Miscellaneous	
PP	Depth Offset for Playback	2.0 FT
	Playback Processing	RECOMPUTE

Format: TEMP LOG Vertical Scale: 5" per 100' Graphics File Created: 14-Jun-2013 09:02

OP System Version: 19C0-187

HBMS-B SRPC-5214-H2-2012-OP19

Input DLIS Files

DEFAULT Flip_HBMS_005LUP PRODUCER 14-Jun-2013 09:01 8003.0 FT -15.0 FT

Output DLIS Files

DEFAULT HBMS_007PUP FN:4 PRODUCER 14-Jun-2013 09:02

Schlumberger

REPEAT ANALYSIS

Input DLIS Files

DEFAULT HBMS_007PUP FN:4 PRODUCER 14-Jun-2013 09:02 8005.0 FT -13.0 FT

Output DLIS Files

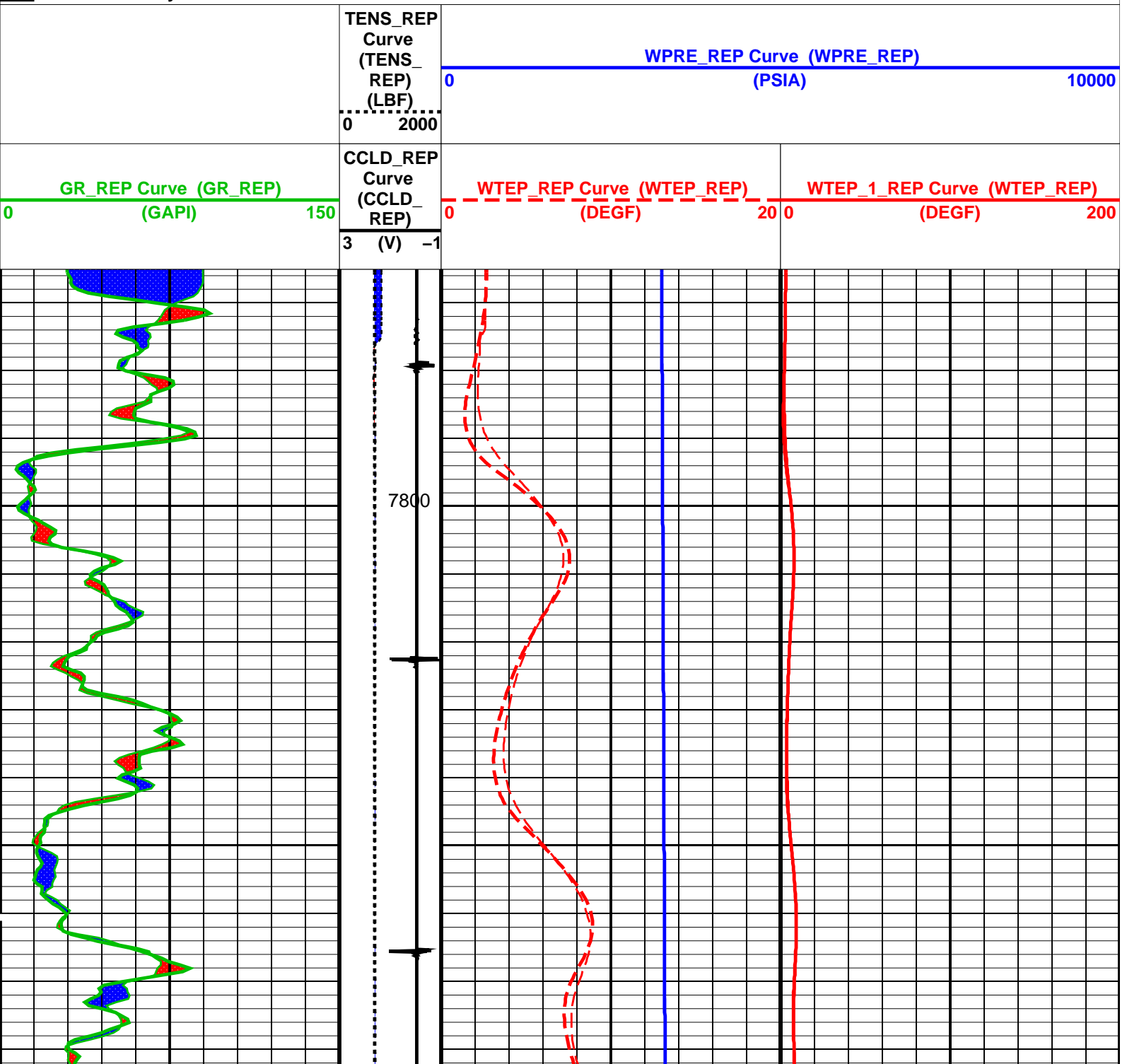
DEFAULT HBMS_008PUP FN:5 PRODUCER 14-Jun-2013 09:07 8003.0 FT 7764.5 FT

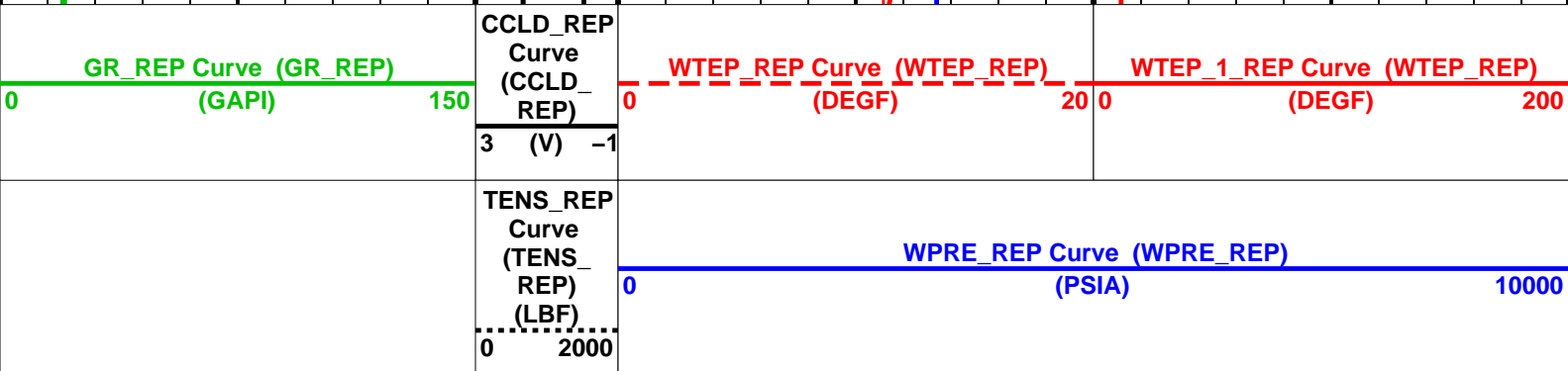
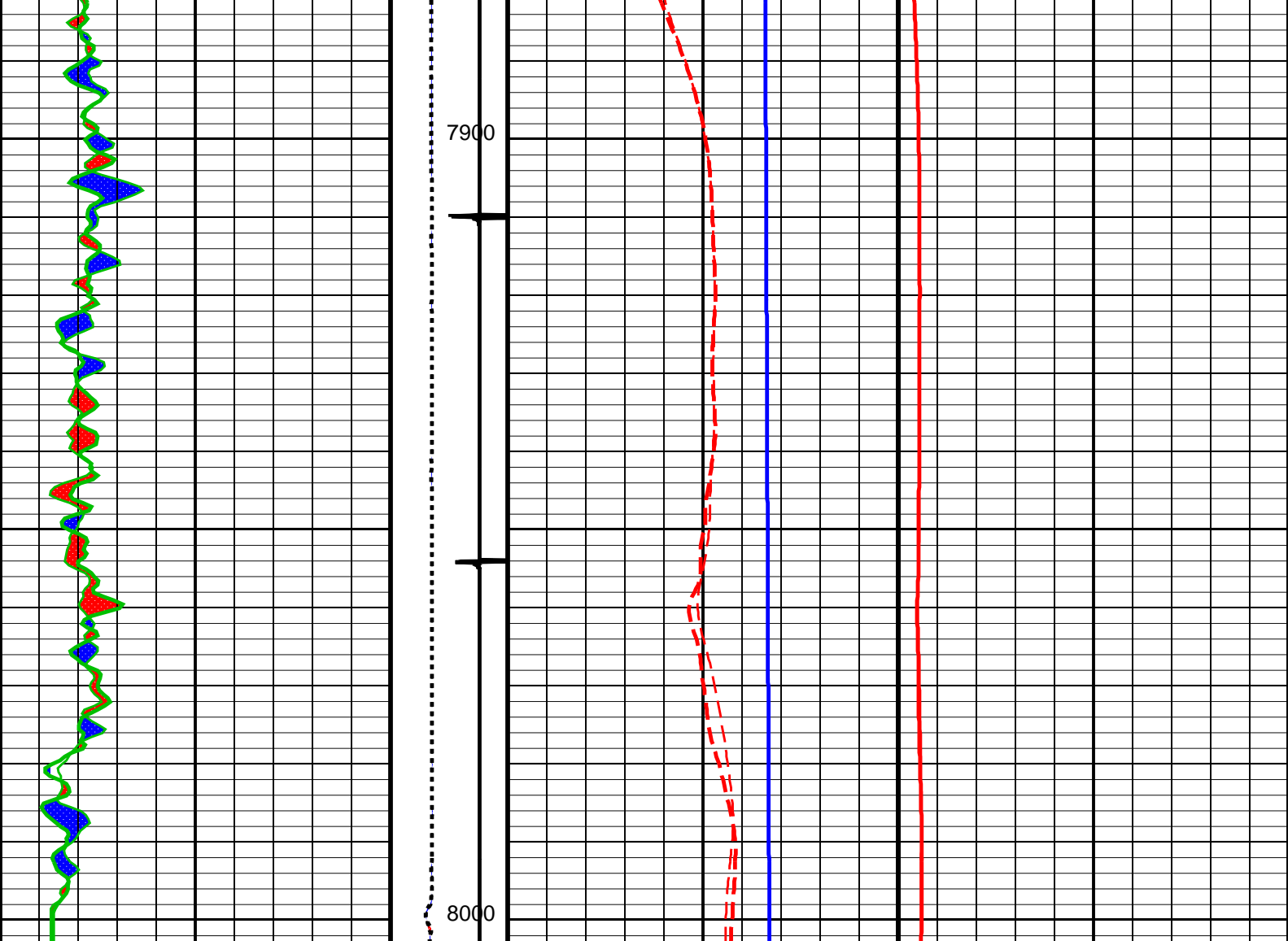
OP System Version: 19C0-187

HBMS-B SRPC-5214-H2-2012-OP19

PIP SUMMARY

Time Mark Every 60 S





PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
System and Miscellaneous		
DO	Depth Offset for Playback	2.0 FT
DORL	Depth Offset for Repeat Analysis	0.0 FT
PP	Playback Processing	RECOMPUTE

Format: TEMP LOG_REP Vertical Scale: 5" per 100' Graphics File Created: 14-Jun-2013 09:07

OP System Version: 19C0-187

HBMS-B SRPC-5214-H2-2012-OP19

Input DLIS Files

Output DLIS Files



HBMS COEFFICIENTS

MAXIS Field Log

Client:

ENCANA OIL & GAS (USA) INC

Field:

GRASS MESA

Well:

ALP FEE 24-6A (J24NW)

Run date:

31-May-2013

Tool:

PSP

Sub Type:

PBMS

Sensor:

GR

PBMS Gamma Ray

Sonde Serial NB

RESISTORS FOR GR SENSOR N.34384,TOOL HBMS-BA2880. SENSOR S/N:

Sensor Serial NB

34384

Calib Date ddmmyy

160206

Matrix Size

12

Coeff CRC

D8B5

GR HV Rt		
	Rt**0	Rt**1
Rt**0	+.200000000000e+04	+.173000000000e+04

PBMS RTD Well Thermometer

Sonde Serial NB

Sensor Serial NB

Calib Date ddmmyy

Matrix Size

Coeff CRC

2880

260408

16

A3AF

COEFFICIENTS FOR RTD THERMOMETER PBMS–B.2880 S/N:

WTemp Coeff

	Tt**0	Tt**1	Tt**2
Tt**0	–.104337336008E+04	+.798824971753E+03	–.251944021281E+03
	Tt**3	Tt**4	Tt**5
Tt**0	+.406192777109E+02	–.240958437264E+01	0.0

Client: ENCANA OIL & GAS (USA) INC

Field: GRASS MESA

Well: ALP FEE 24–6A (J24NW)

Run date: 31–May–2013

Tool: PSP

Sub Type: PBMS

Sensor: CQG

PBMS Quartz Gauge type F

Sonde Serial NB

Sensor Serial NB

Calib Date ddmmyy

Matrix Size

Coeff CRC

2880

260408

66

66B8

COEFFICIENTS FOR CQG PBMS–B.2880 S/N:

Pres Coeff

	Fb**0	Fb**1	Fb**2
Fc**0	+.694668499013E+04	+.138137467574E–01	–.206148488488E–06
Fc**1	–.104285125976E+01	–.125721589078E–04	–.971577899959E–10
Fc**2	+.101045175546E–05	+.480801816357E–10	+.889110474366E–15
Fc**3	+.127326781620E–11	+.130693902354E–15	0.0
Fc**4	0.0	0.0	0.0
Fc**5	0.0	0.0	0.0

	Fb**3	Fb**4	Fb**5
Fc**0	882205256000E–10	148222222270E–14	162252476404E–10

Fc**0	-.802395356069E-10	-.148392899370E-14	-.162952476494E-19
Fc**1	+.114970383999E-15	+.186330526680E-19	0.0
Fc**2	0.0	0.0	0.0
Fc**3	0.0	0.0	0.0
Fc**4	0.0	0.0	0.0
Fc**5	0.0	0.0	0.0

PBMS Quartz Gauge type F

Sonde Serial NB :
 Sensor Serial NB 2880
 Calib Date ddmmyy 260408
 Matrix Size 66
 Coeff CRC 3690

Temp Coeff

	Fc**0	Fc**1	Fc**2
Fb**0	+.114978632240E+03	-.318843725686E-03	+.651766172344E-08
Fb**1	-.590205352250E-02	+.168686572404E-07	+.162345150354E-12
Fb**2	-.362996279263E-07	+.407654559315E-12	+.452411391342E-17
Fb**3	-.276281361281E-12	+.871817059405E-17	0.0
Fb**4	0.0	0.0	0.0
Fb**5	0.0	0.0	0.0

	Fc**3	Fc**4	Fc**5
Fb**0	+.199118144093E-13	-.260997933236E-18	+.618908211390E-21
Fb**1	+.250084591851E-17	+.455070709200E-21	0.0
Fb**2	0.0	0.0	0.0
Fb**3	0.0	0.0	0.0
Fb**4	0.0	0.0	0.0
Fb**5	0.0	0.0	0.0

PBMS Quartz Gauge type F

Sonde Serial NB :
 Sensor Serial NB 2880
 Calib Date ddmmyy 260408
 Matrix Size 16
 Coeff CRC 71B5

Clock Freq Coeff

	(Fb'-Fc')**0	(Fb'-Fc')**1	(Fb'-Fc')**2
(Fb'-Fc')**0	+.310736316923E+05	+.273670214709E-02	+.731815197856E-06

	(Fb'–Fc')**3	(Fb'–Fc')**4	(Fb'–Fc')**5
(Fb'–Fc')**0	–.654219198492E–10	–.150585137208E–15	–.117697151708E–19

PBMS Quartz Gauge type F

Sonde Serial NB :
 Sensor Serial NB 2880
 Calib Date ddmmyy 260408
 Matrix Size 16
 Coeff CRC ECB5

Clock Temp Coeff

	(Fb'–Fc')**0	(Fb'–Fc')**1	(Fb'–Fc')**2
(Fb'–Fc')**0	+.116053417872E+03	–.554118045908E–02	–.348241454518E–07
	(Fb'–Fc')**3	(Fb'–Fc')**4	(Fb'–Fc')**5
(Fb'–Fc')**0	+.207992675474E–12	–.353168788938E–17	–.345142848607E–21

Company: ENCANA OIL & GAS (USA) INC

Schlumberger

Well: ALP FEE 24–6A (J24NW)
 Field: GRASS MESA
 County: GARFIELD
 State: COLORADO

TEMPERATURE LOG
 CCL