

Schlumberger

Company: ENCANA OIL & GAS (USA) INC

Well: ROSE 22-11B (K22W)

Field: MAMM CREEK

County: GARFIELD State: COLORADO

TEMPERATURE LOG
CCL

County: GARFIELD
Field: MAMM CREEK
Location: SHL: 2328 FSL & 2218 FWL
Well: ROSE 22-11B (K22W)
Company: ENCANA OIL & GAS (USA) INC

LOCATION			
SHL: 2328 FSL & 2218 FWL BHL: 2513 FSL & 1544 FWL	Elev.: K.B. 6973.00 ft G.L. 6951.00 ft D.F. 6972.00 ft		
Permanent Datum: _____ Log Measured From: KELLY BUSHING Drilling Measured From: KELLY BUSHING	Elev.: 6951.00 ft 22.00 ft above Perm. Datum		
API Serial No. 05-045-22117	Section 22	Township 7S	Range 93W
Logging Date 1-Dec-2013			
Run Number 1			
Depth Driller 9143 ft			
Schlumberger Depth 9066 ft			
Bottom Log Interval 9065 ft			
Top Log Interval 0 ft			
Casing Fluid Type FRESH WATER			
Salinity			
Density 8.4 lbm/gal			
Fluid Level 22 ft			
BIT/CASING/TUBING STRING			
Bit Size 7.875 in			
From 22 ft			
To 9143 ft			
Casing/Tubing Size 4.500 in			
Weight 11.6 lbm/ft			
Grade S-80			
From 22 ft			
To 9114 ft			
Maximum Recorded Temperatures 223 degF			
Logger On Bottom 1-Dec-2013	Time 16:45		
Unit Number 409	Location GRAND JUNCTION		
Recorded By KURTIS IRWIN			
Witnessed By CHARLIE BROWN			

PVT DATA			
Oil Density	Run 1	Run 2	
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 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	Time		
Unit Number	Location		
Recorded By			
Witnessed By			

[illegible]

MAX RECORDED TEMPERATURE: 223 DEGF	
MAX RECORDED PRESSURE: 3875 PSIA	
CREW: KIRWIN, KBUNTING, WAZIZ, KJOHNS	
THANK YOU FOR CHOOSING E&P WIRELINE, A SCHLUMBERGER COMPANY	

RUN 1			RUN 2		
SERVICE ORDER #:			SERVICE ORDER #:		
PROGRAM VERSION:			PROGRAM VERSION:		
FLUID LEVEL:			FLUID LEVEL:		
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

AH-38

Detail MT
TelStatus
CTEM

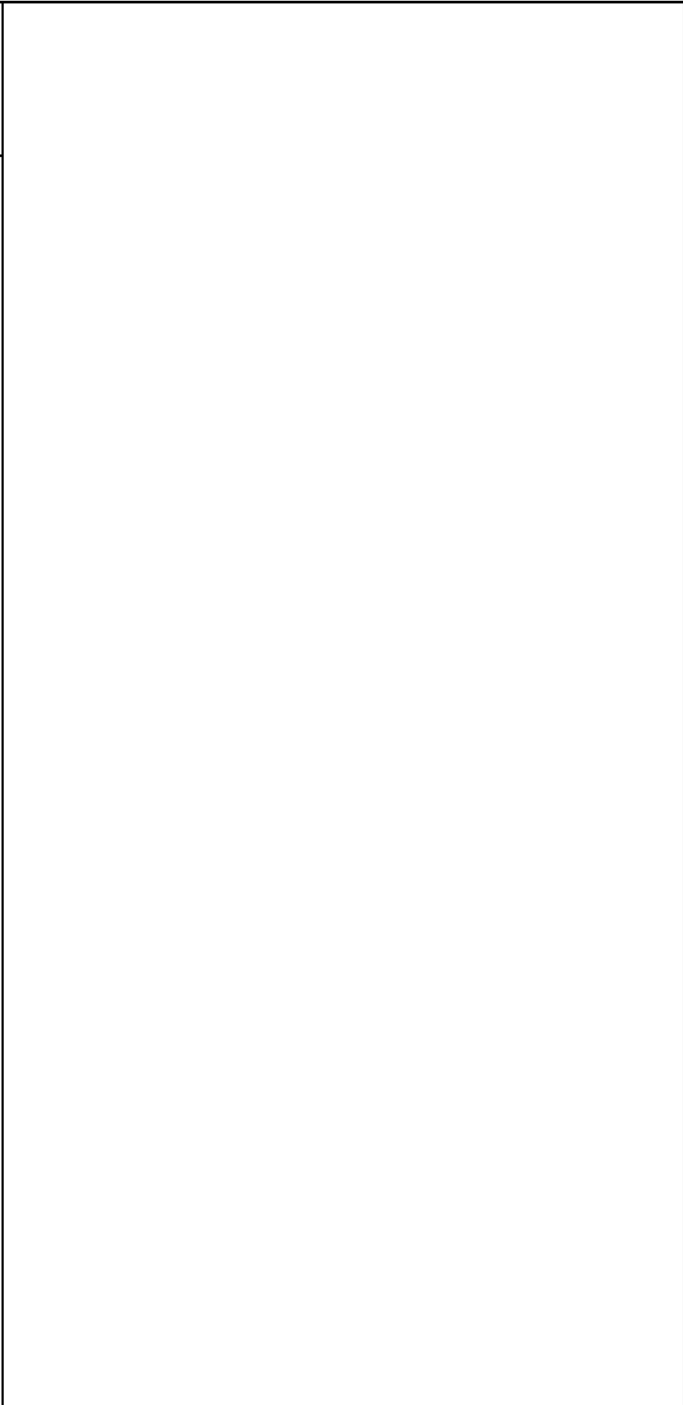
HBMS-B

PSC-A
 HUDH-A
 HSTC-A
 HBMC-A
 GR
 CCL
 HBMC 2884
 HTPS-A 2884
 HCOG E Mono

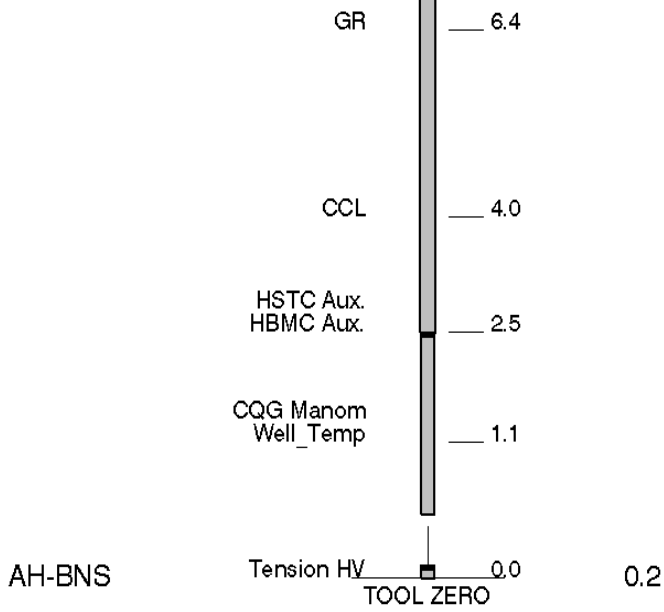
13.1

11.6

11.3



RTD_Thermometer

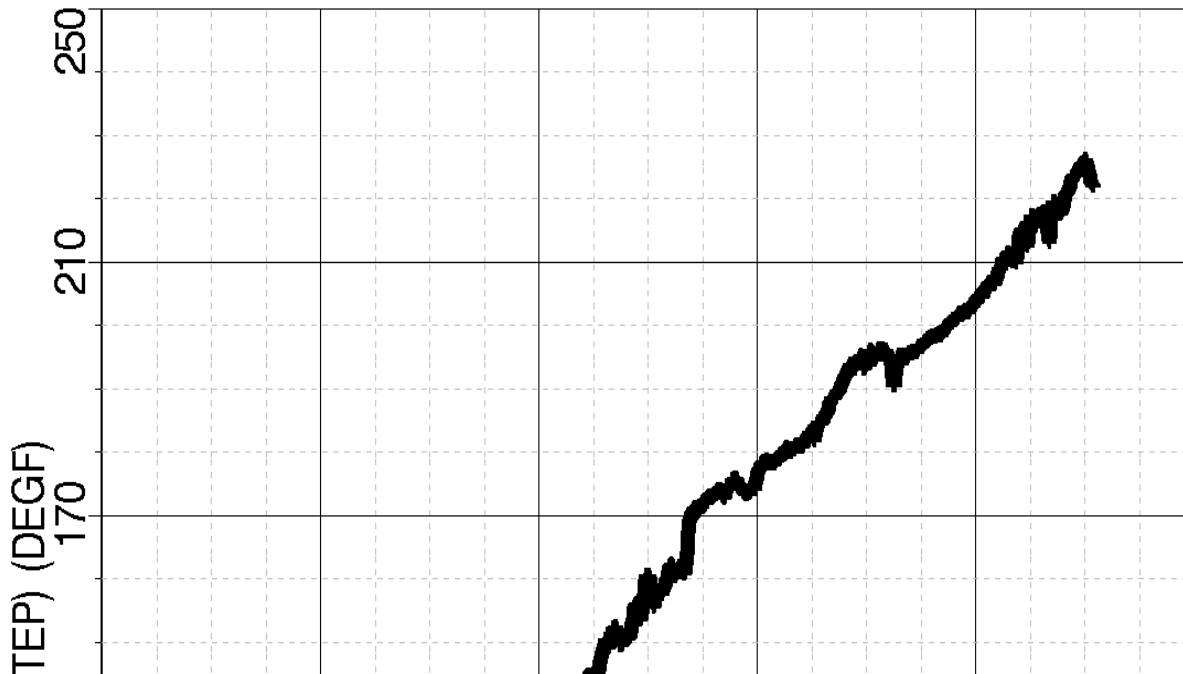


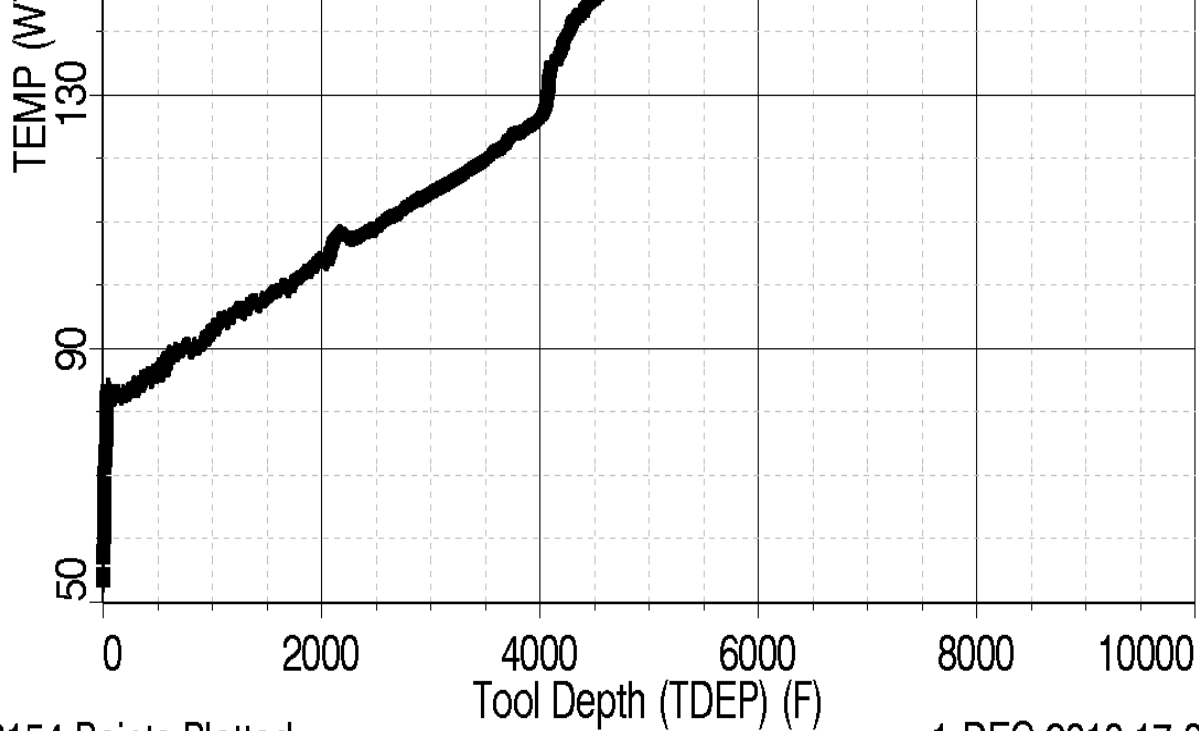
Schlumberger

TEMPERATURE PLOT

MAXIS Field Log

Index: 9076.5 - -15.5 FT





18154 Points Plotted

1-DEC-2013 17:05

Schlumberger

TEMPERATURE LOG

MAXIS Field Log

Company: ENCANA OIL & GAS (USA) INC

Well: ROSE 22-11B

Input DLIS Files

DEFAULT	Flip_HBMS_005LUP	PRODUCER	01-Dec-2013 16:55	9075.5 FT	-16.5 FT
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Output DLIS Files

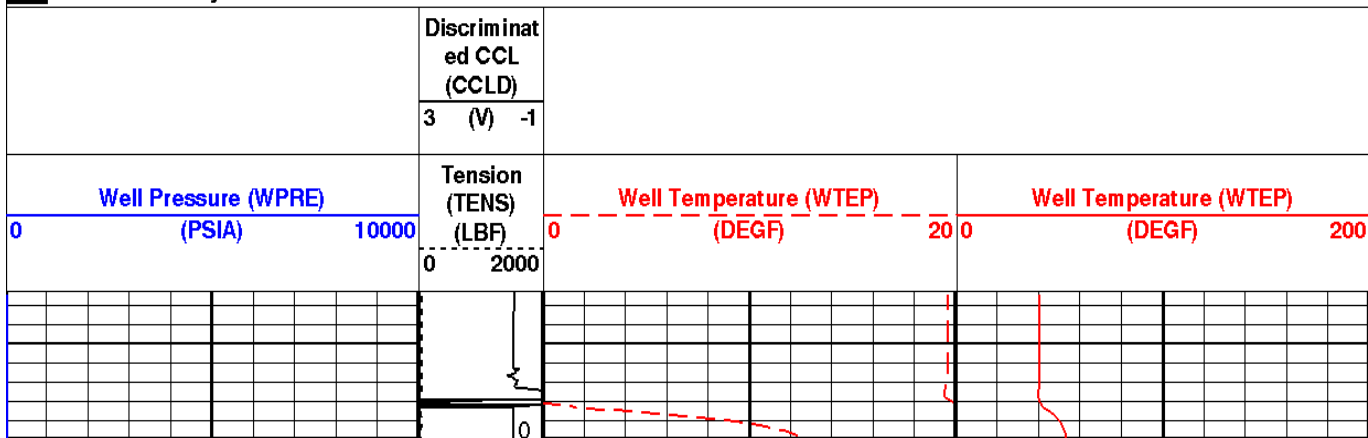
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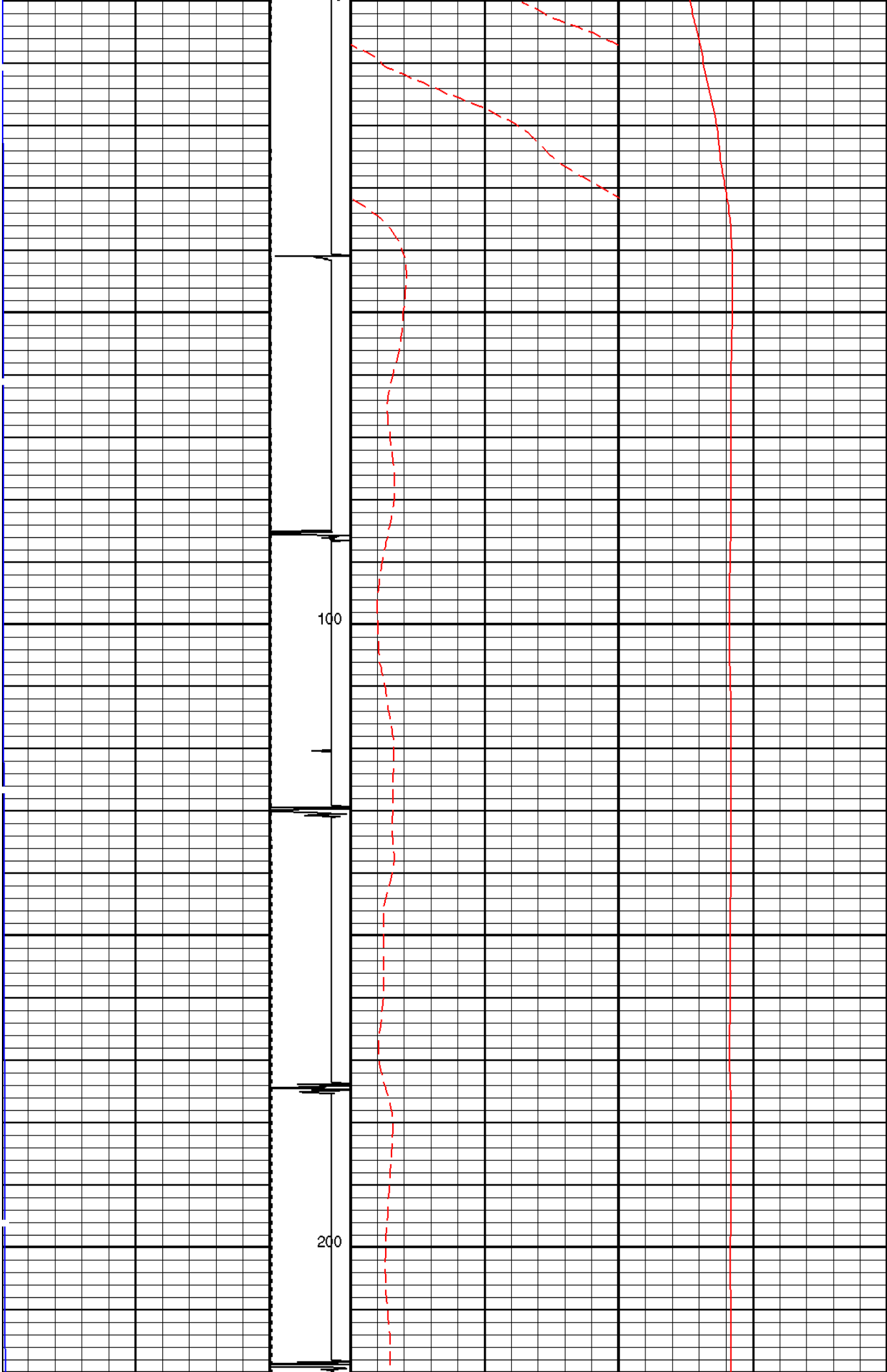
OP System Version: 19C0-187

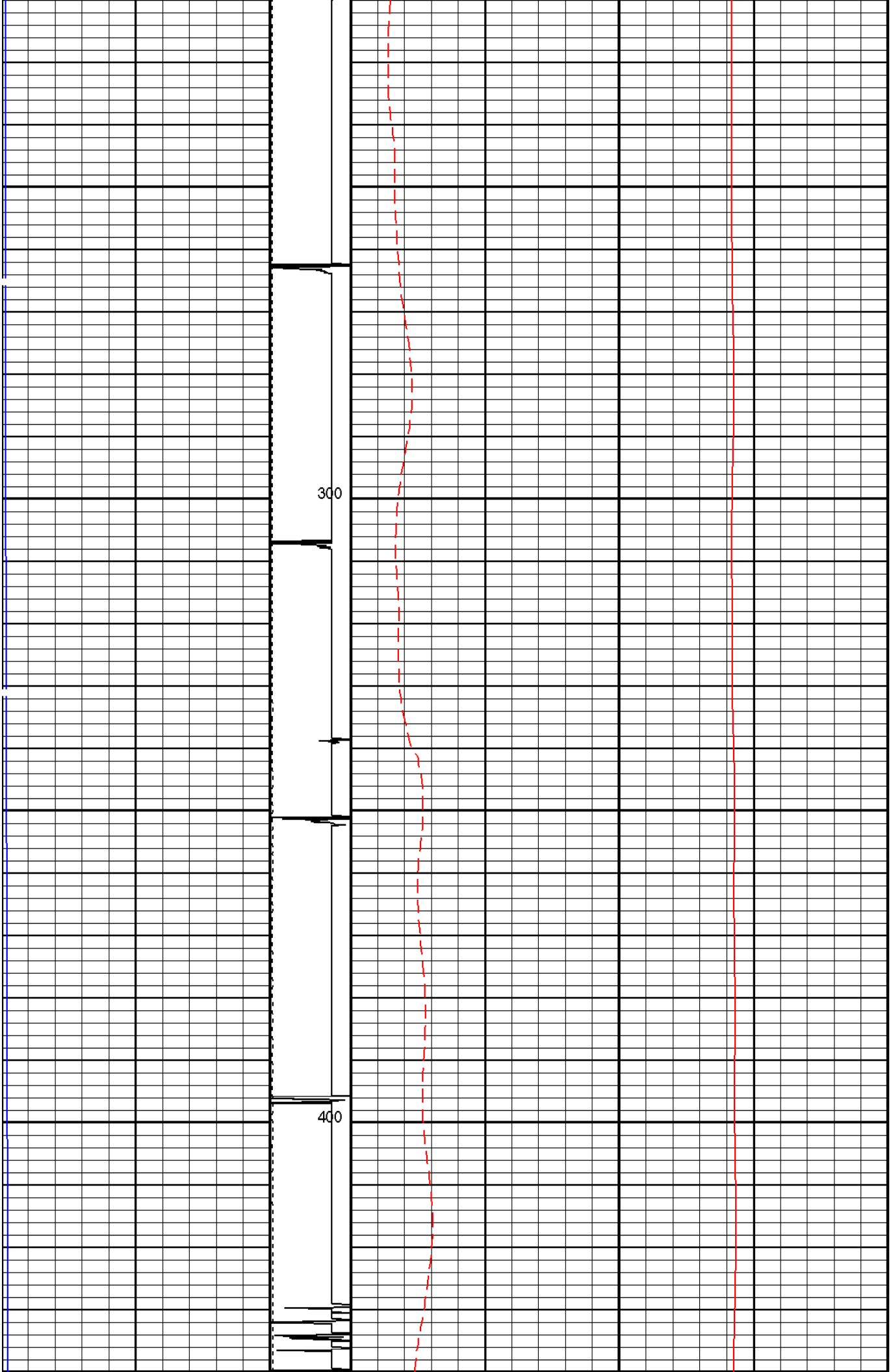
HBMS-B 19C0-187

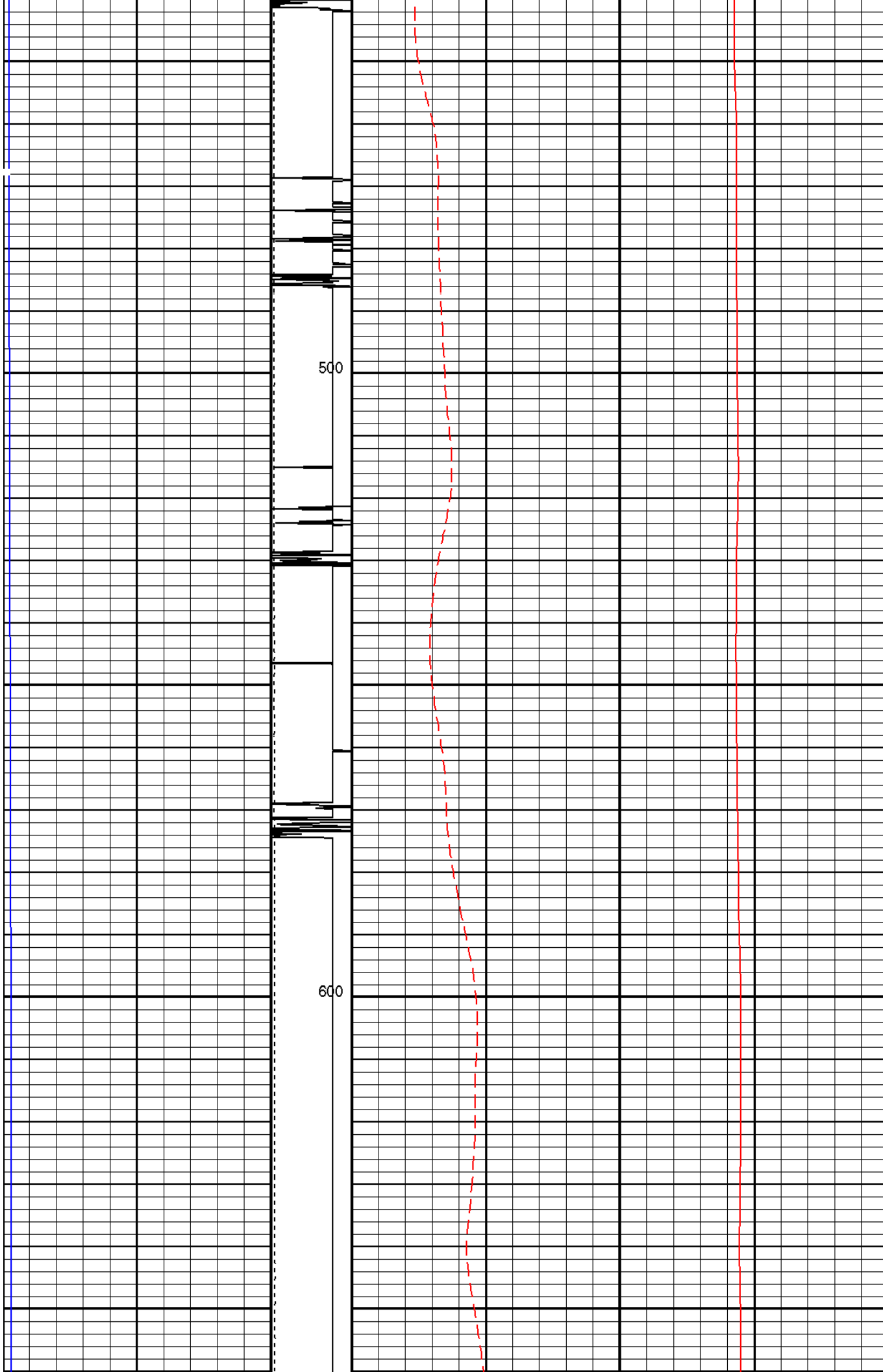
PIP SUMMARY

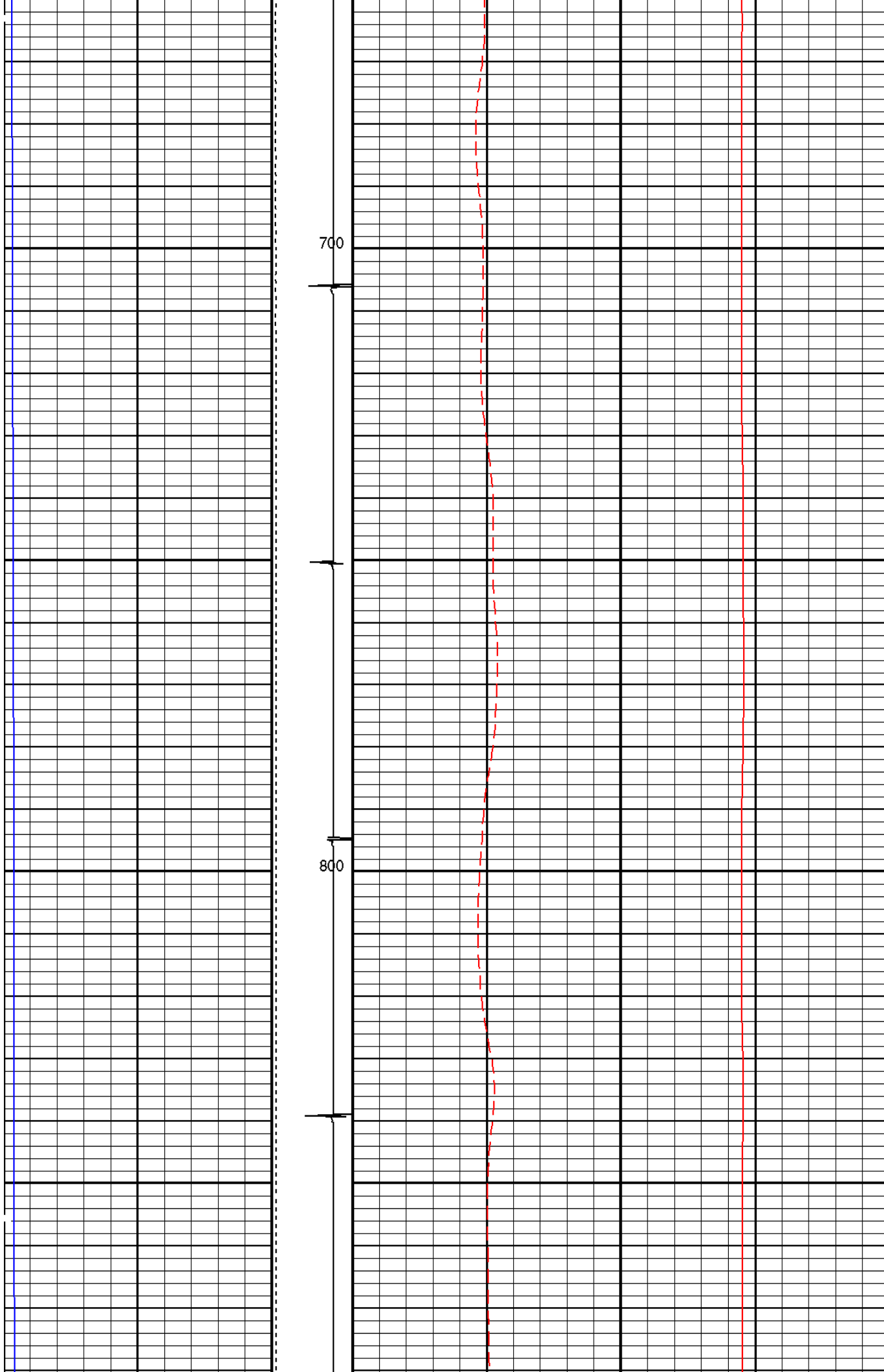
☒ Time Mark Every 60 S

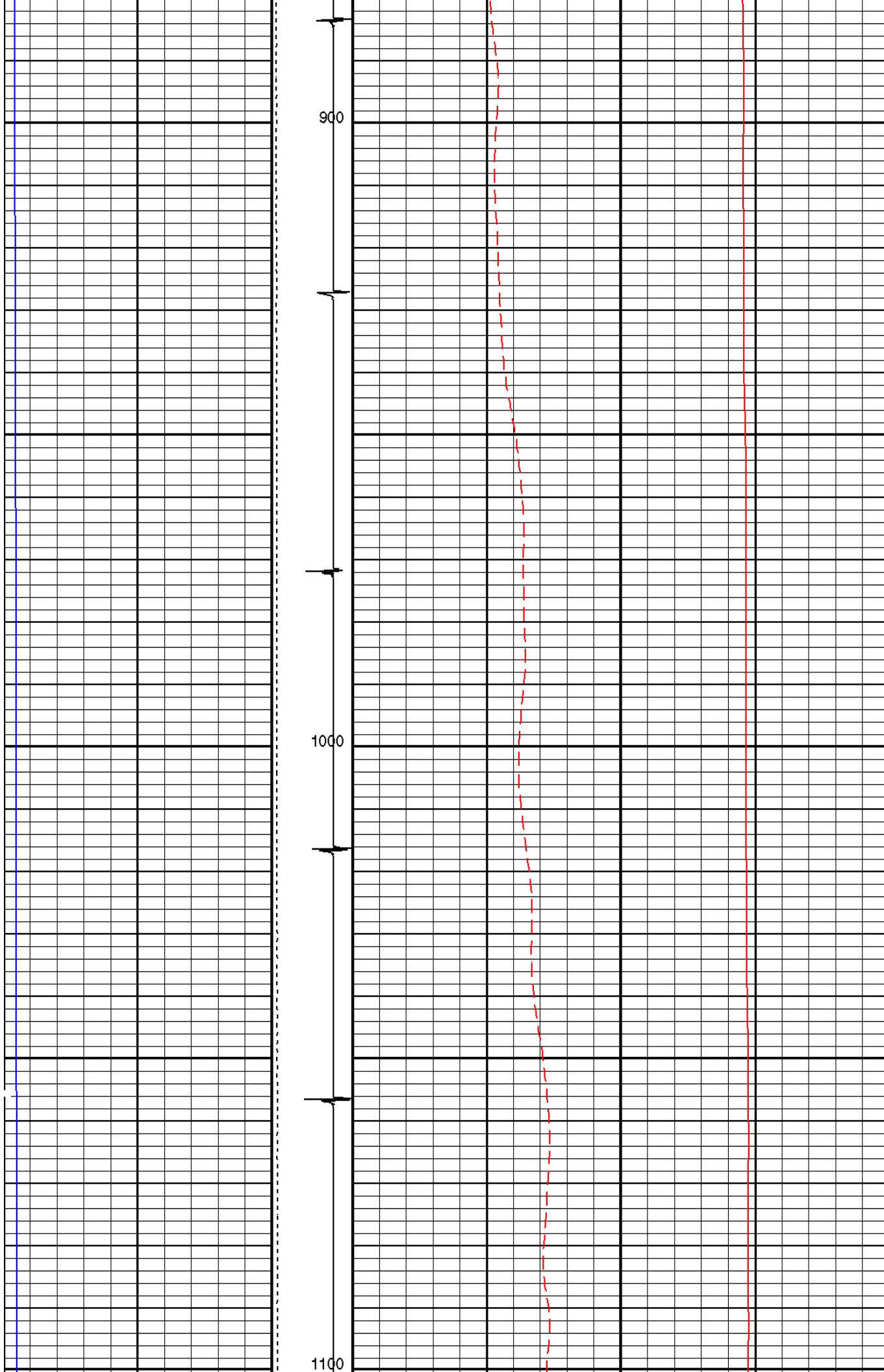


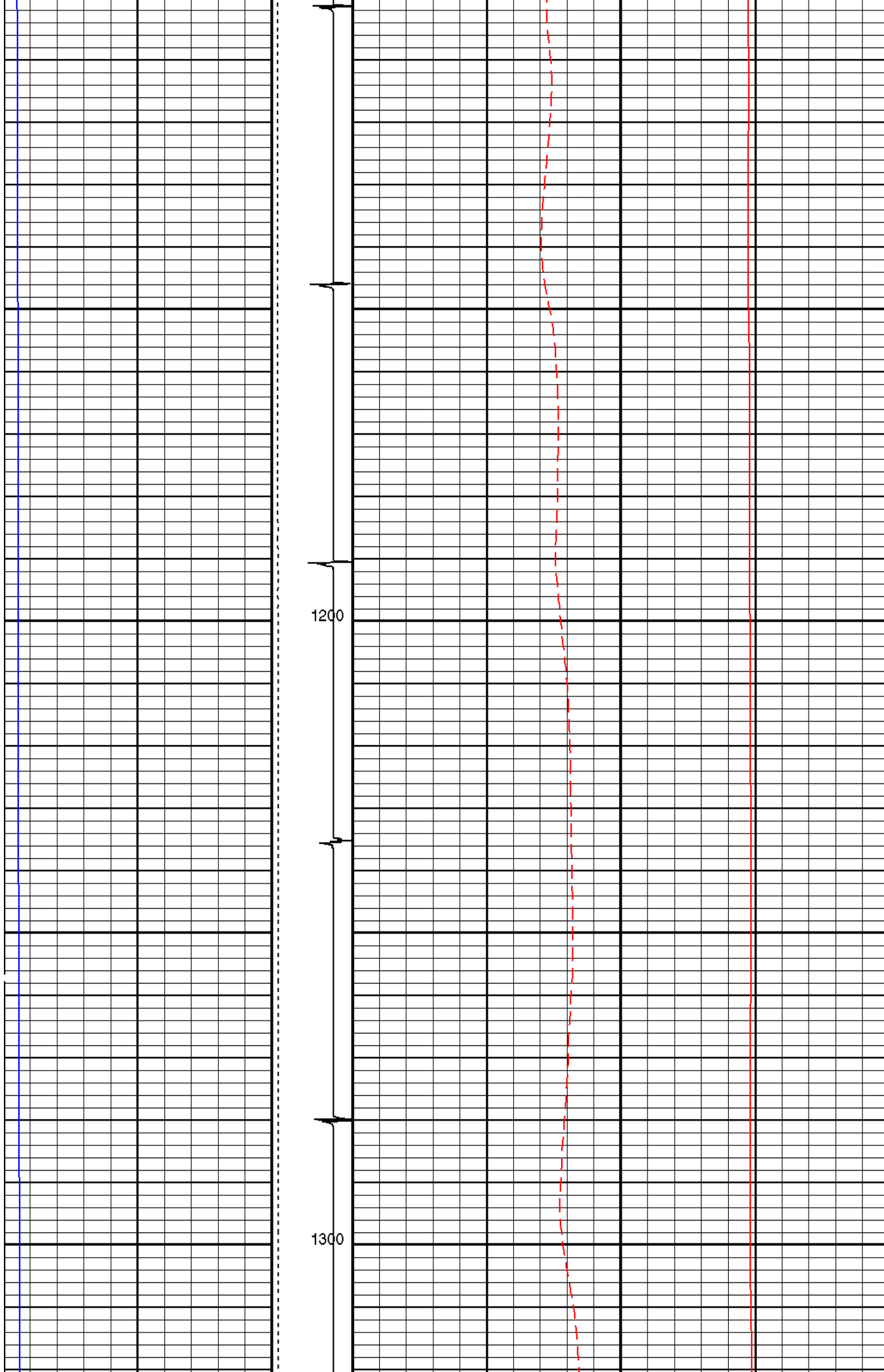


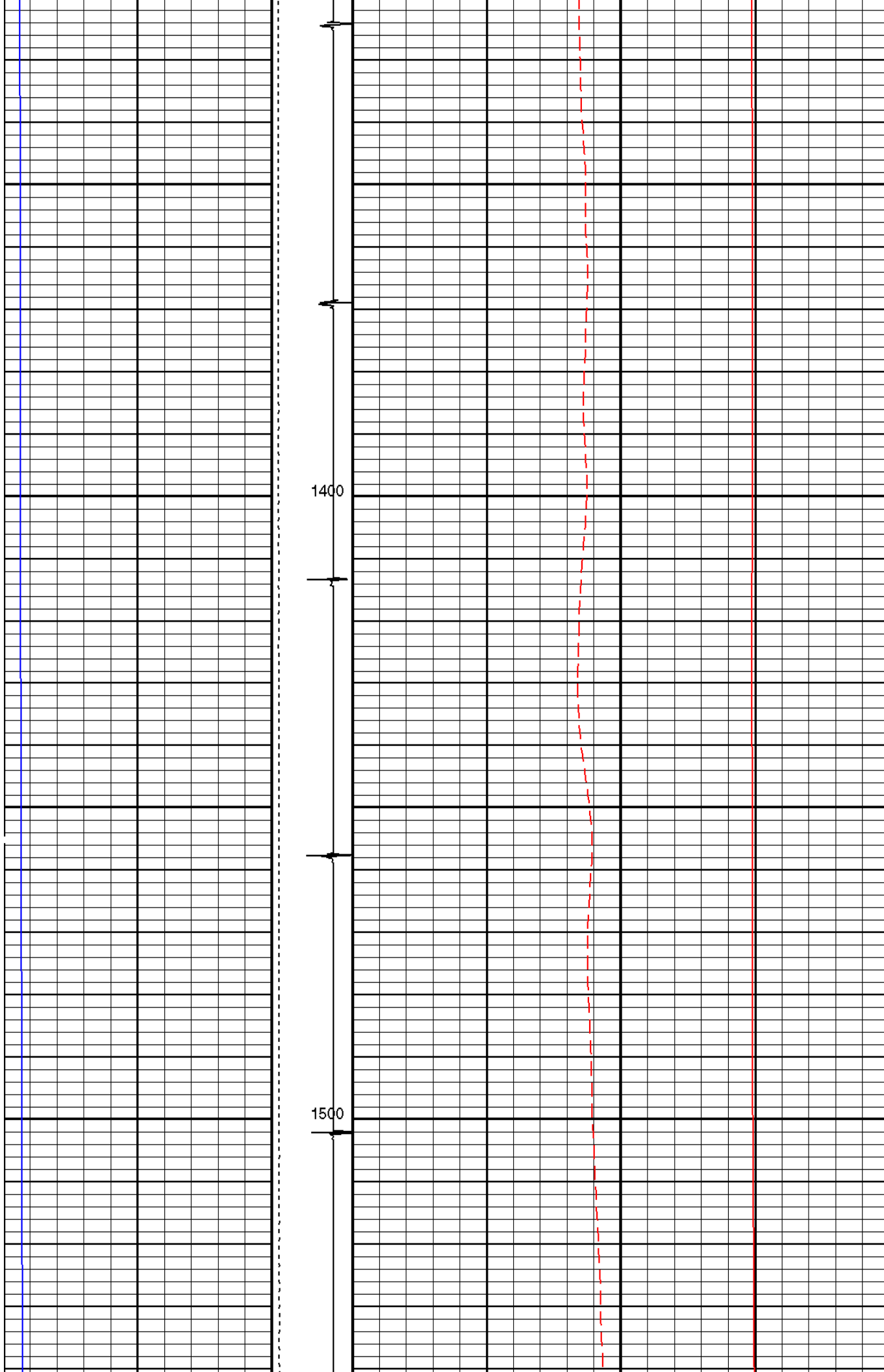


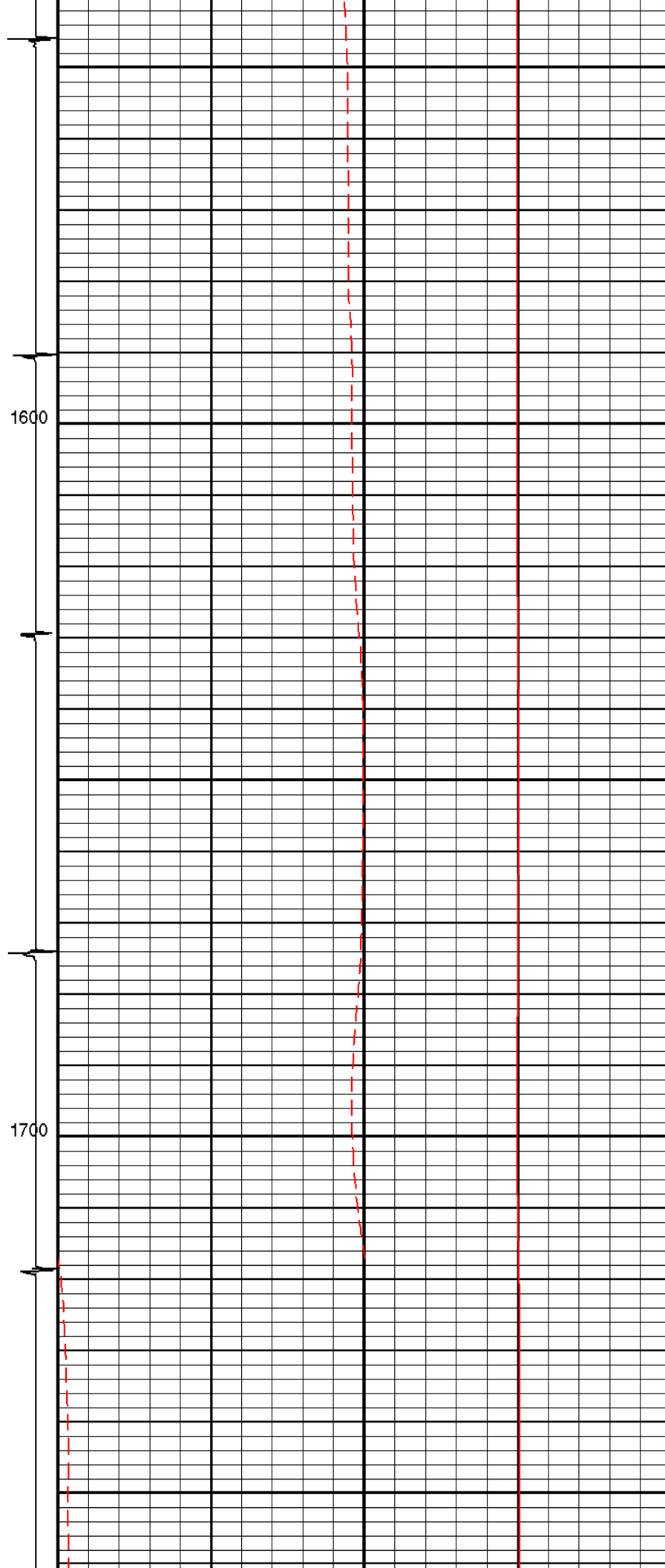
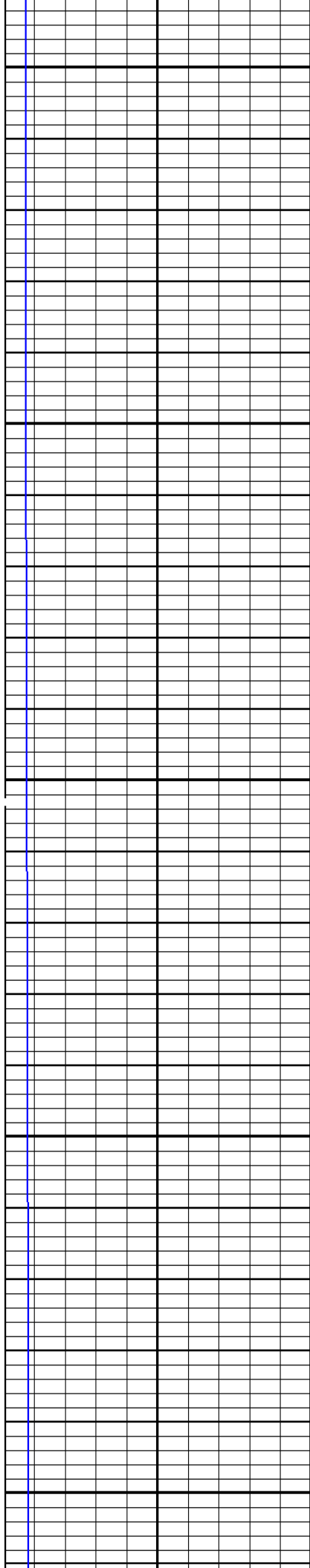


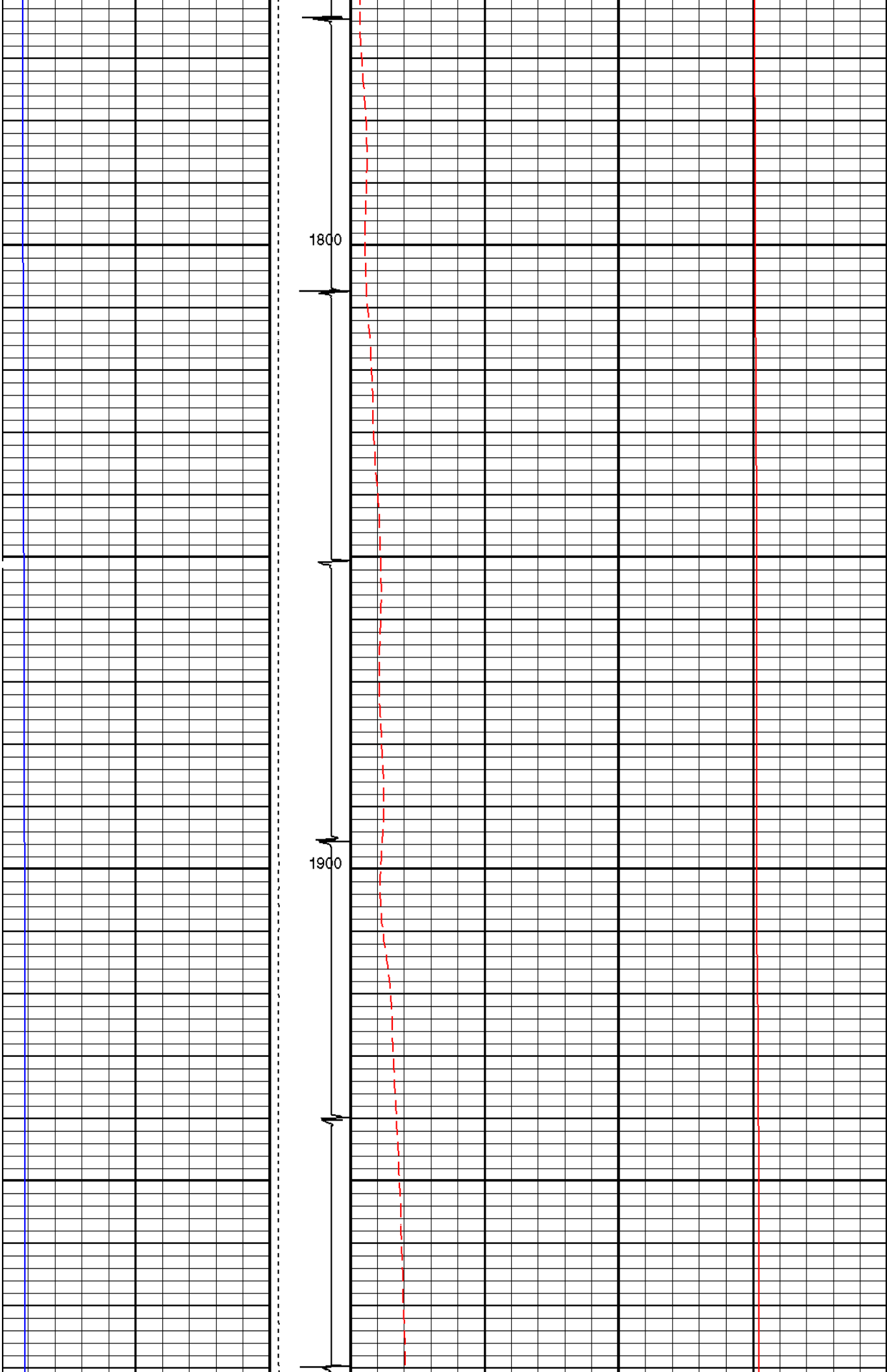


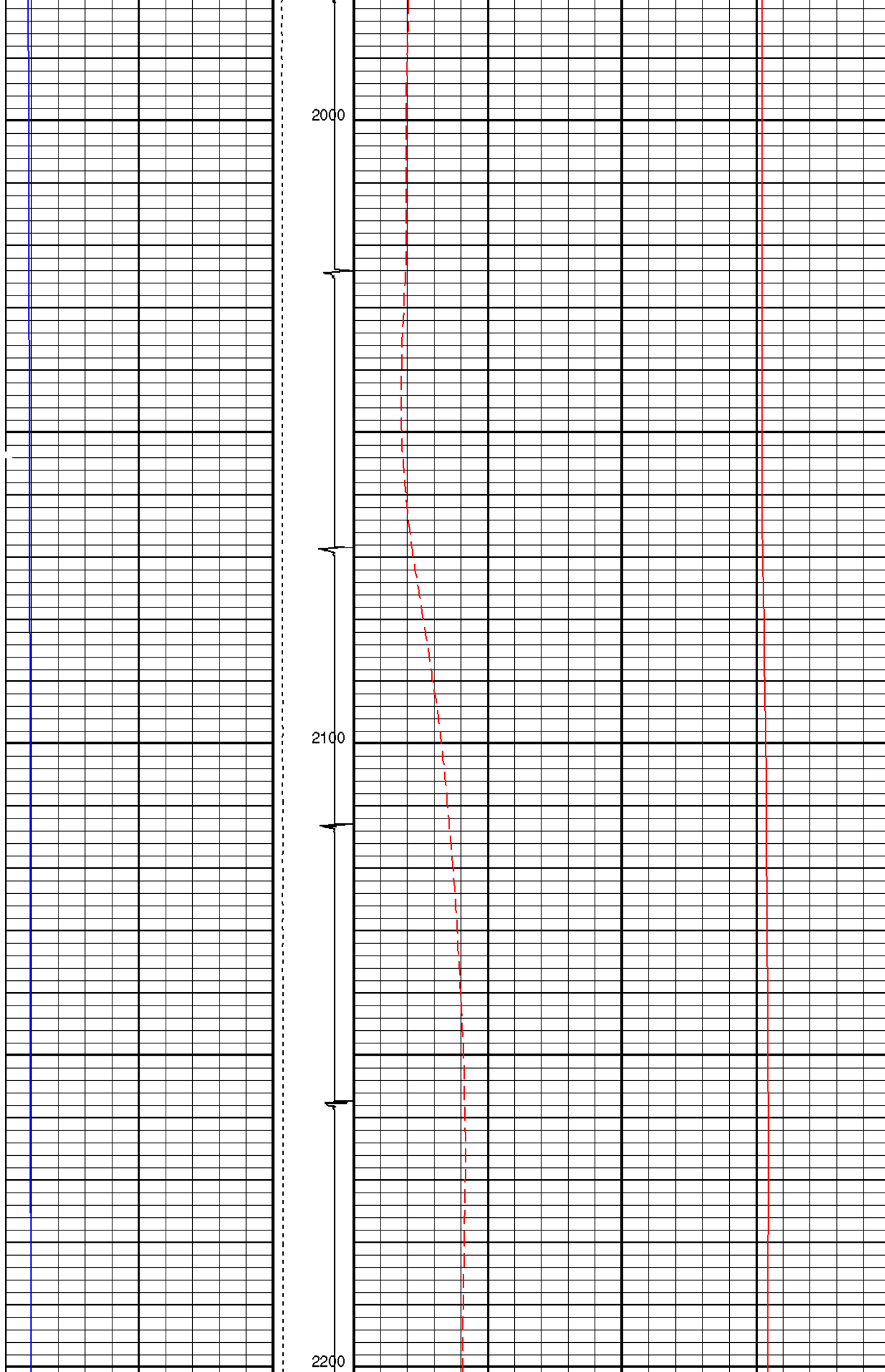


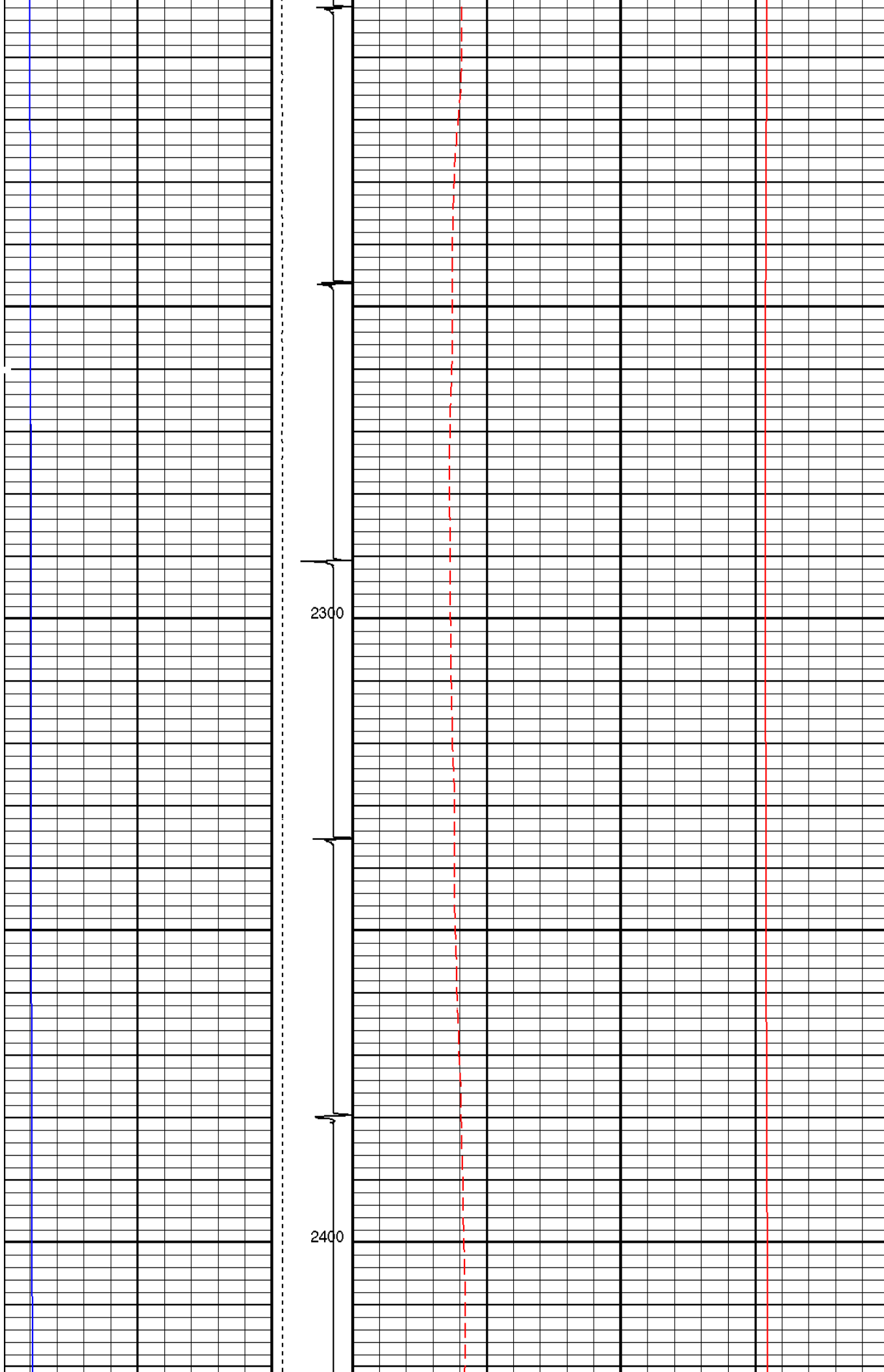


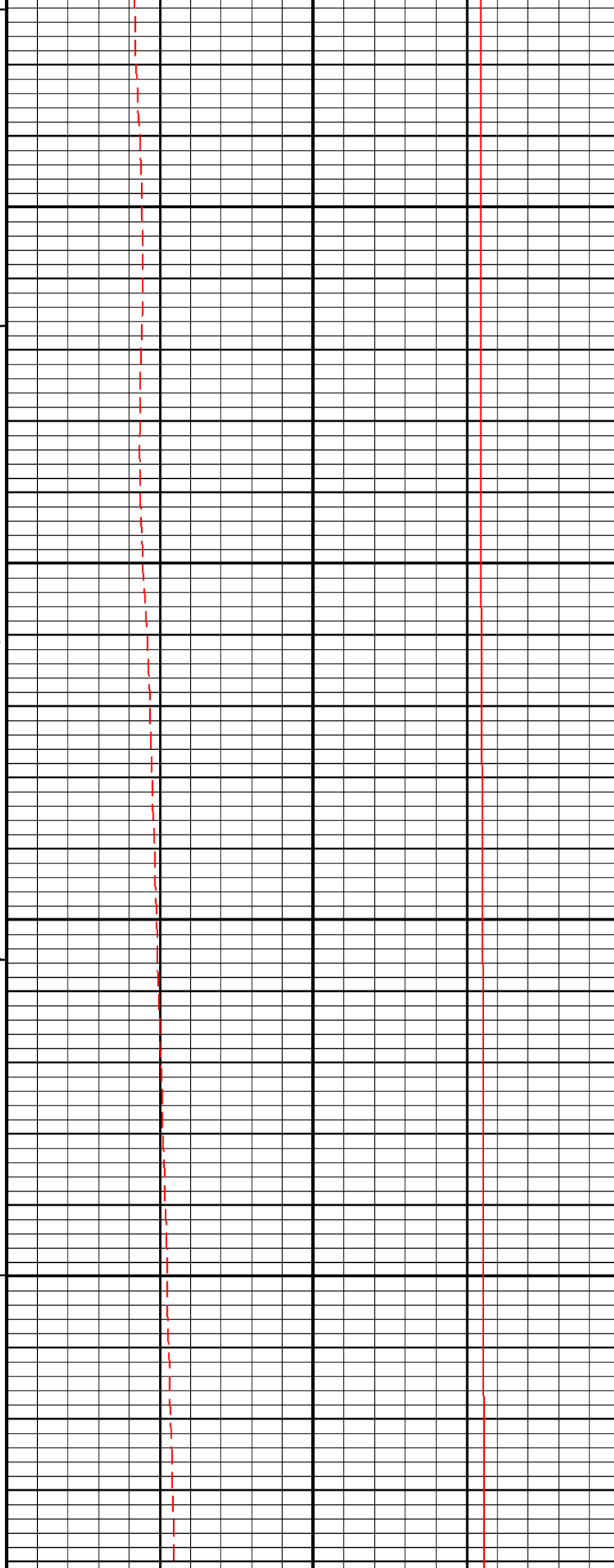
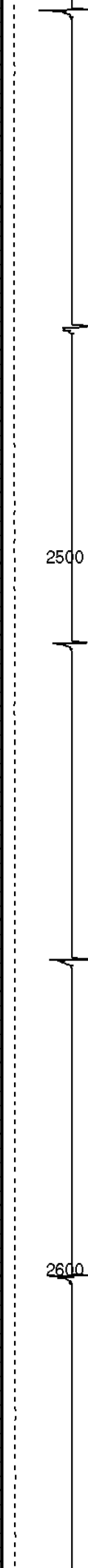
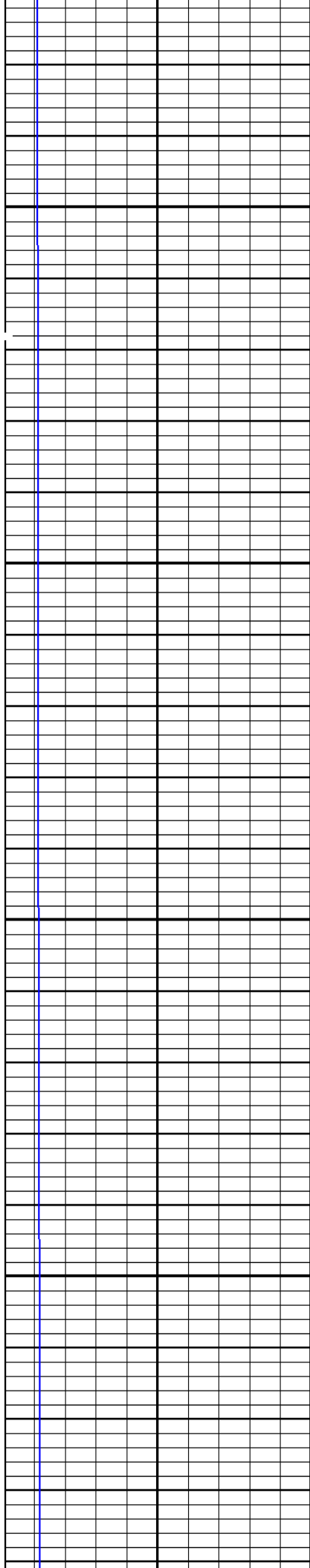


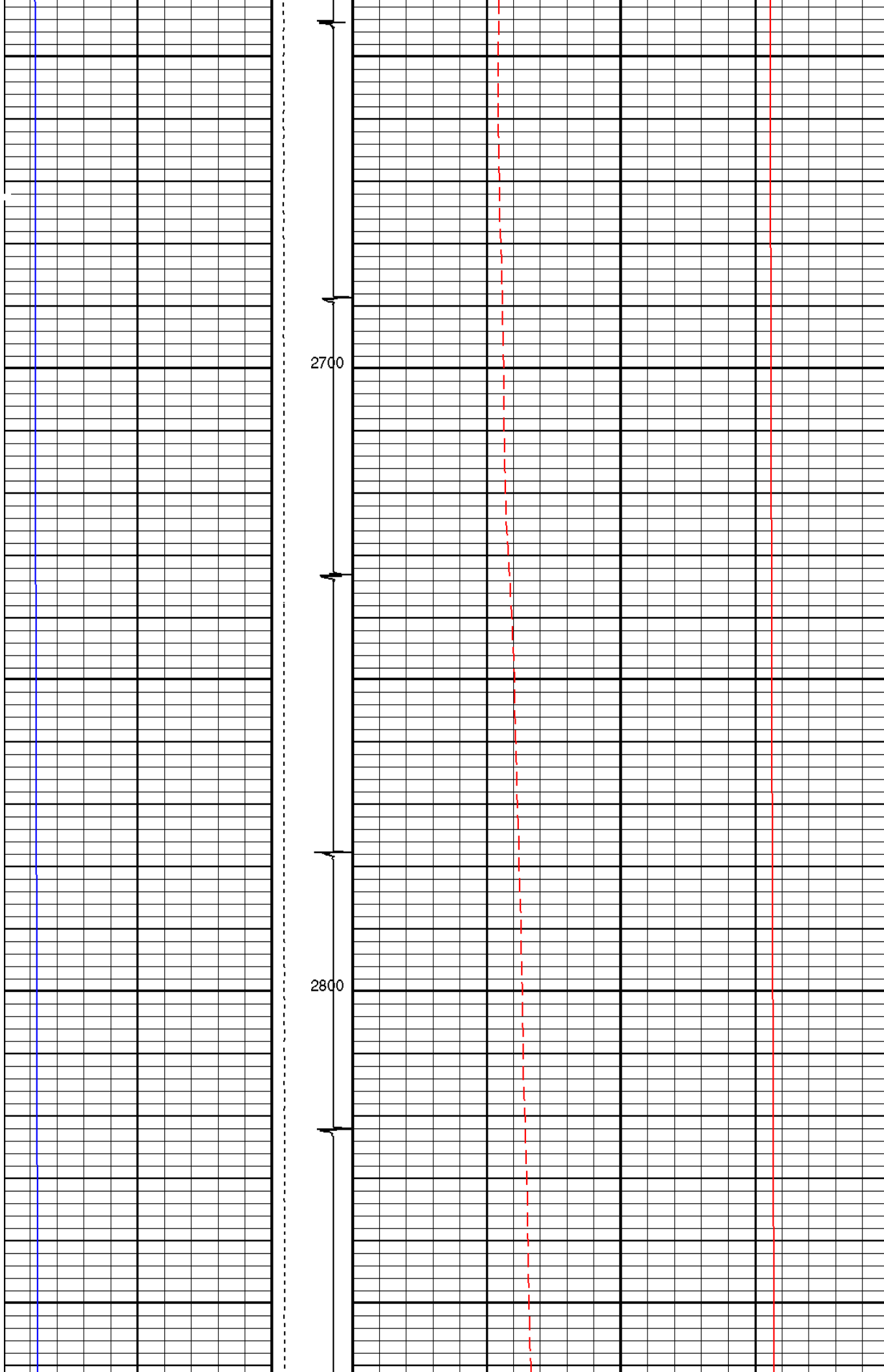


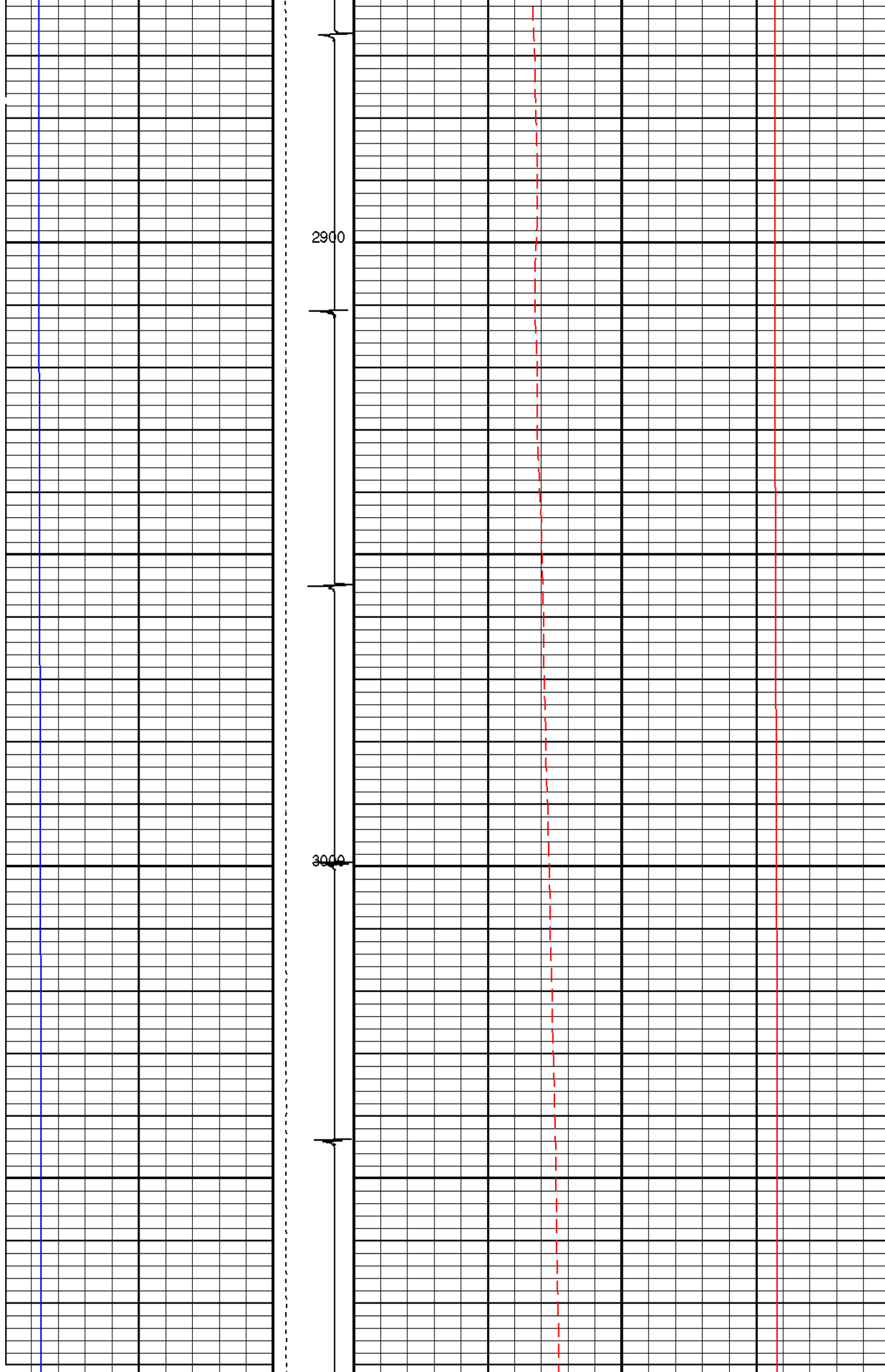


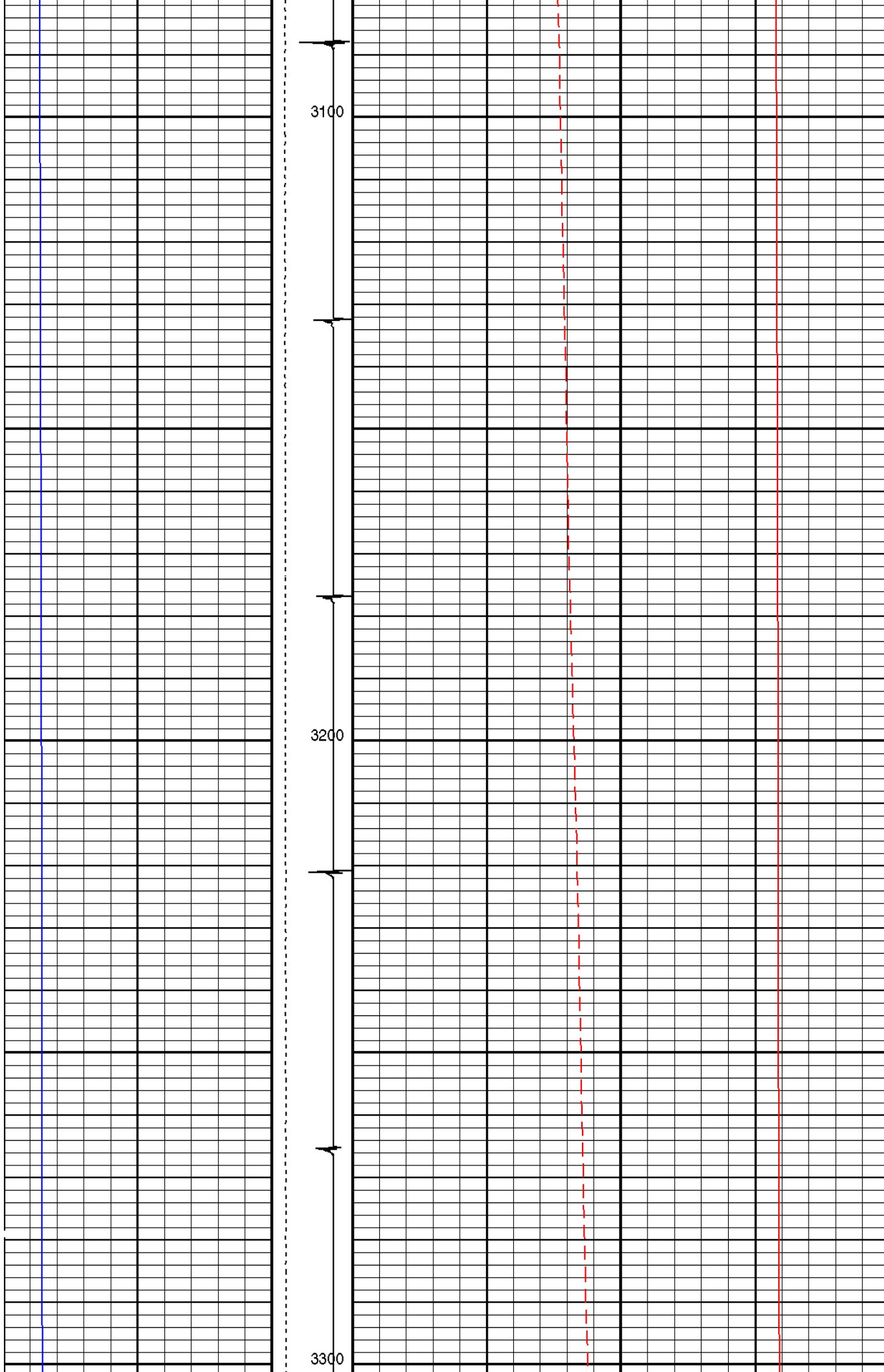


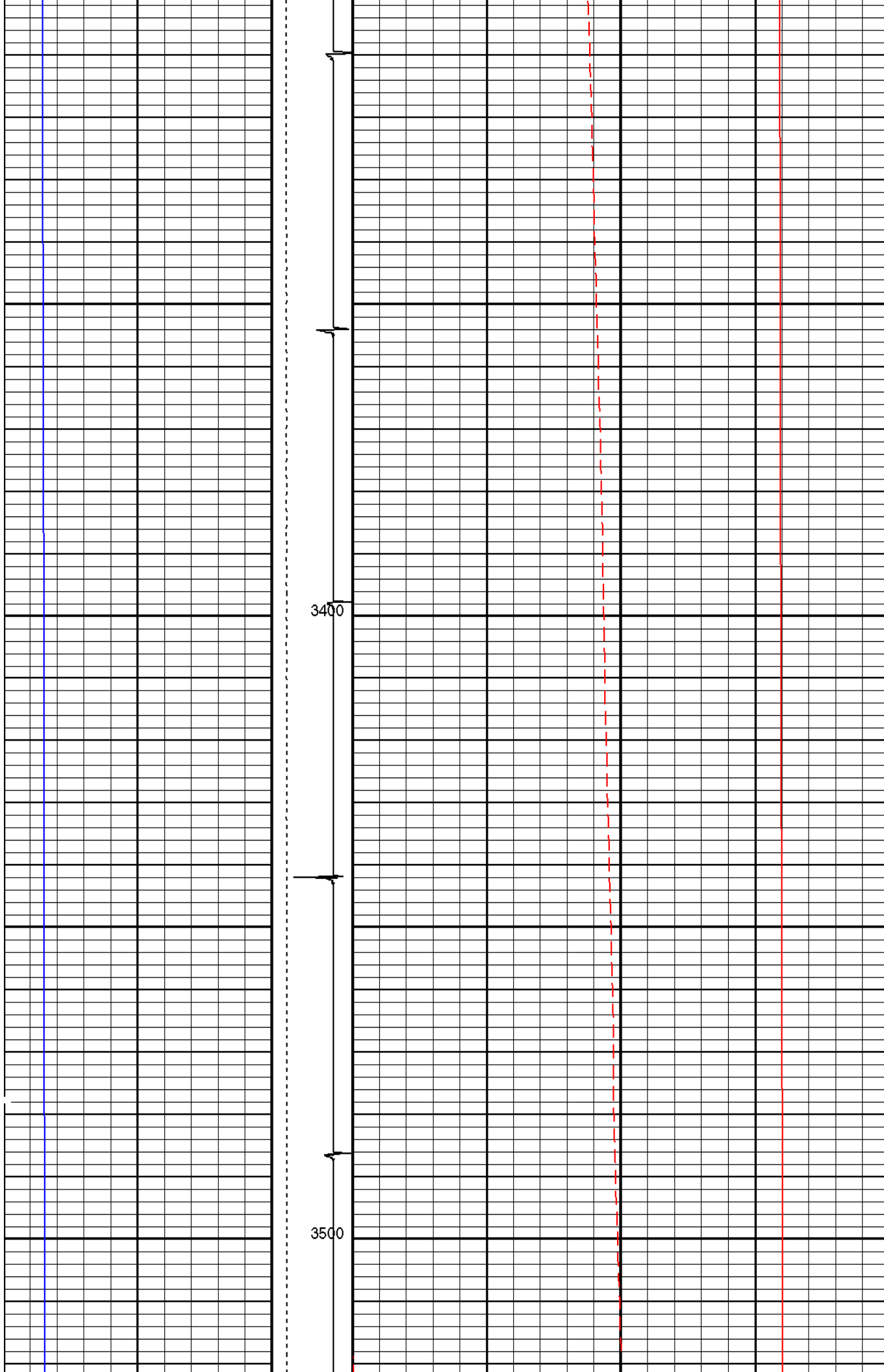


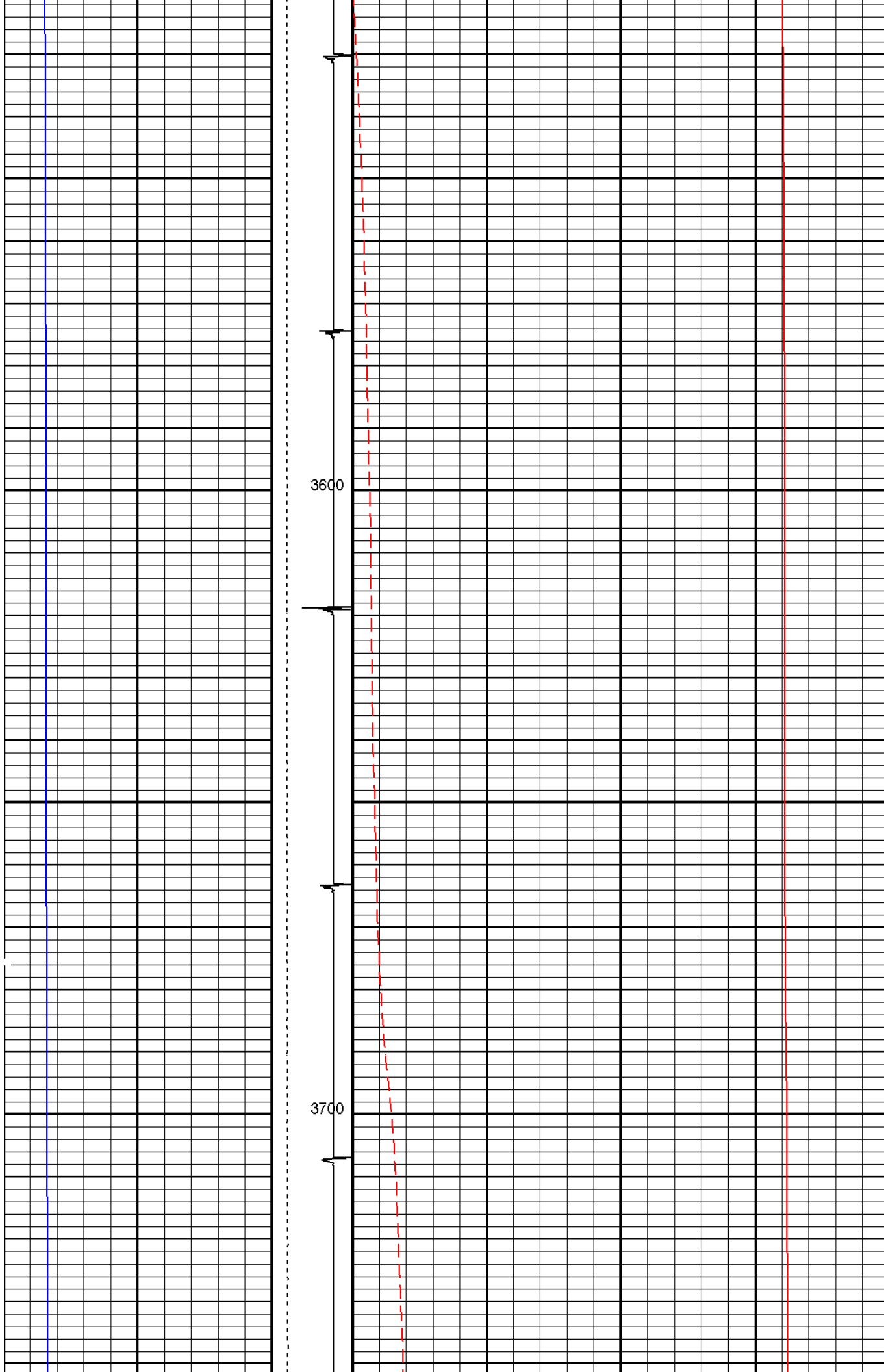


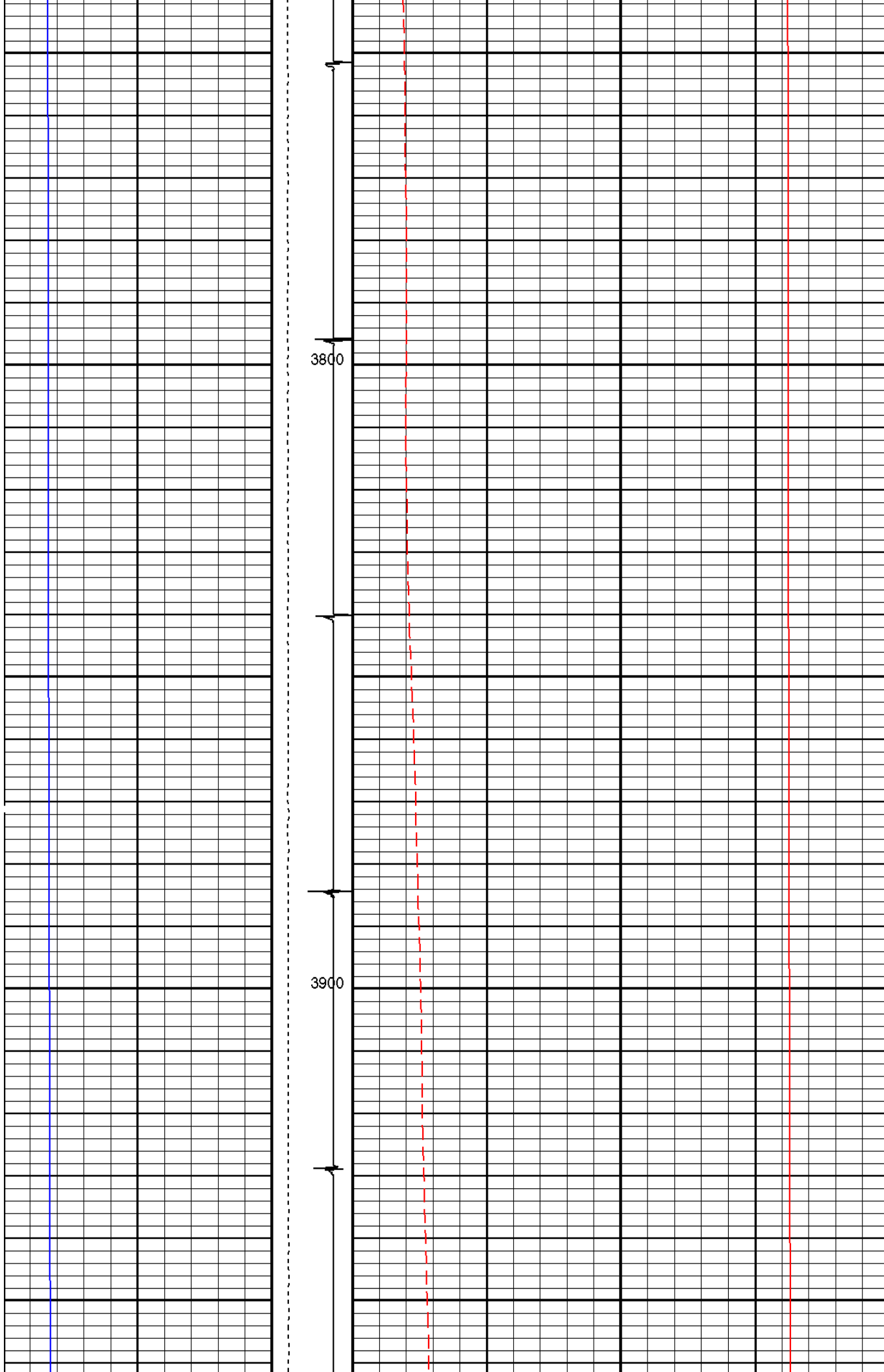


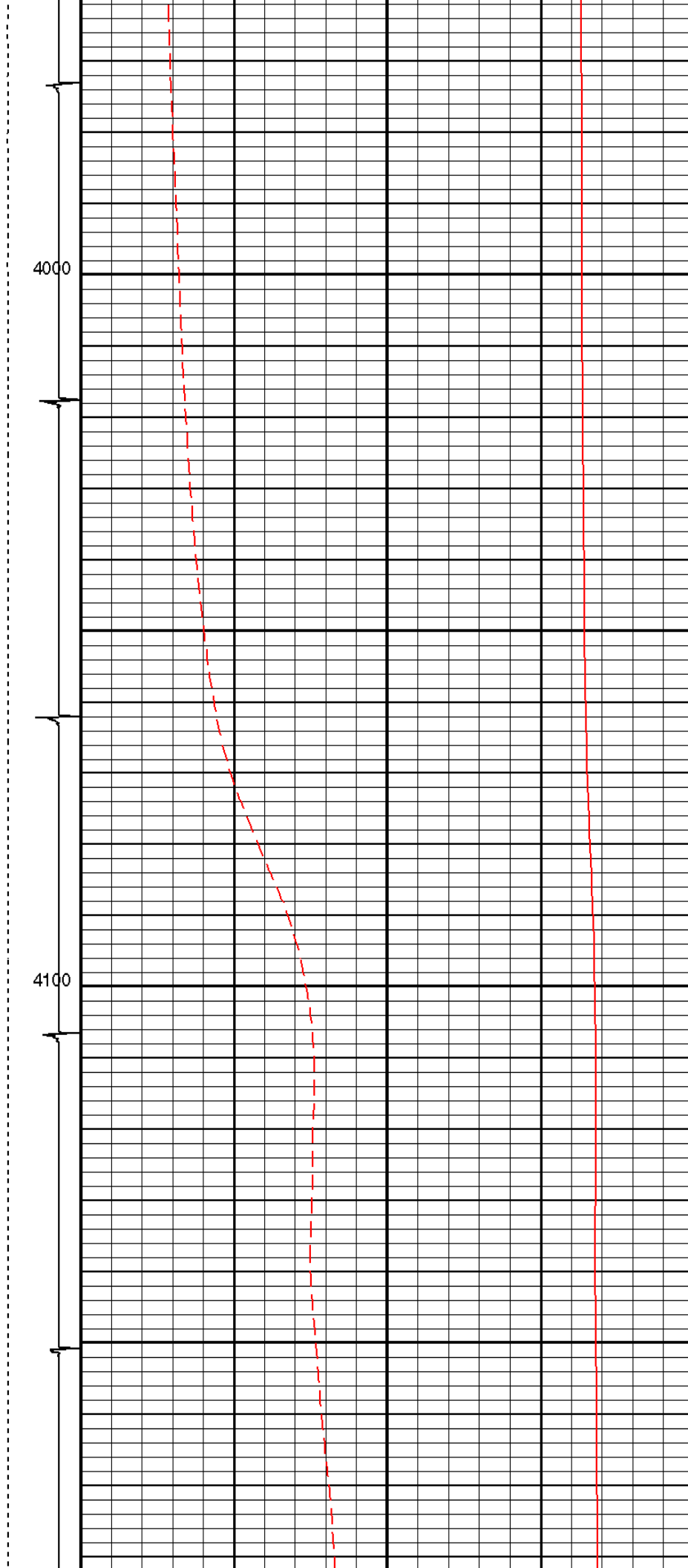
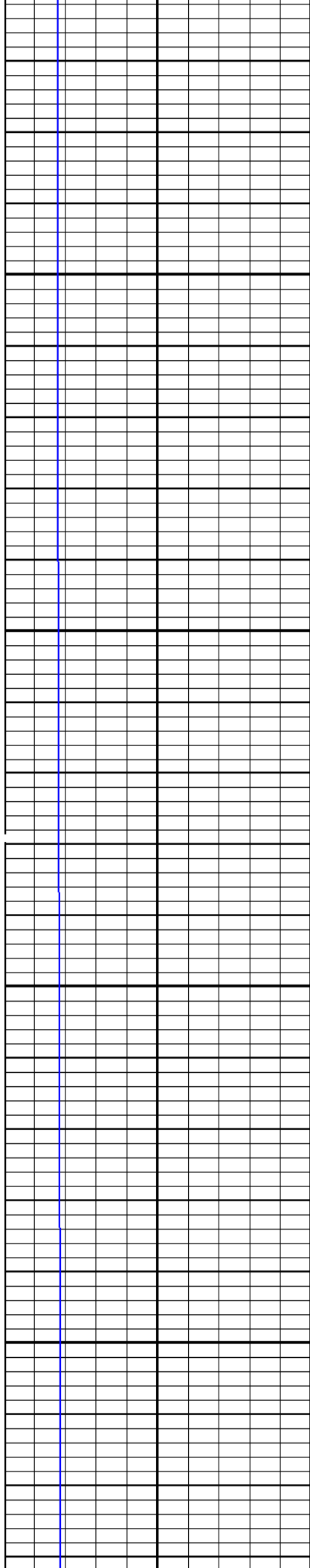


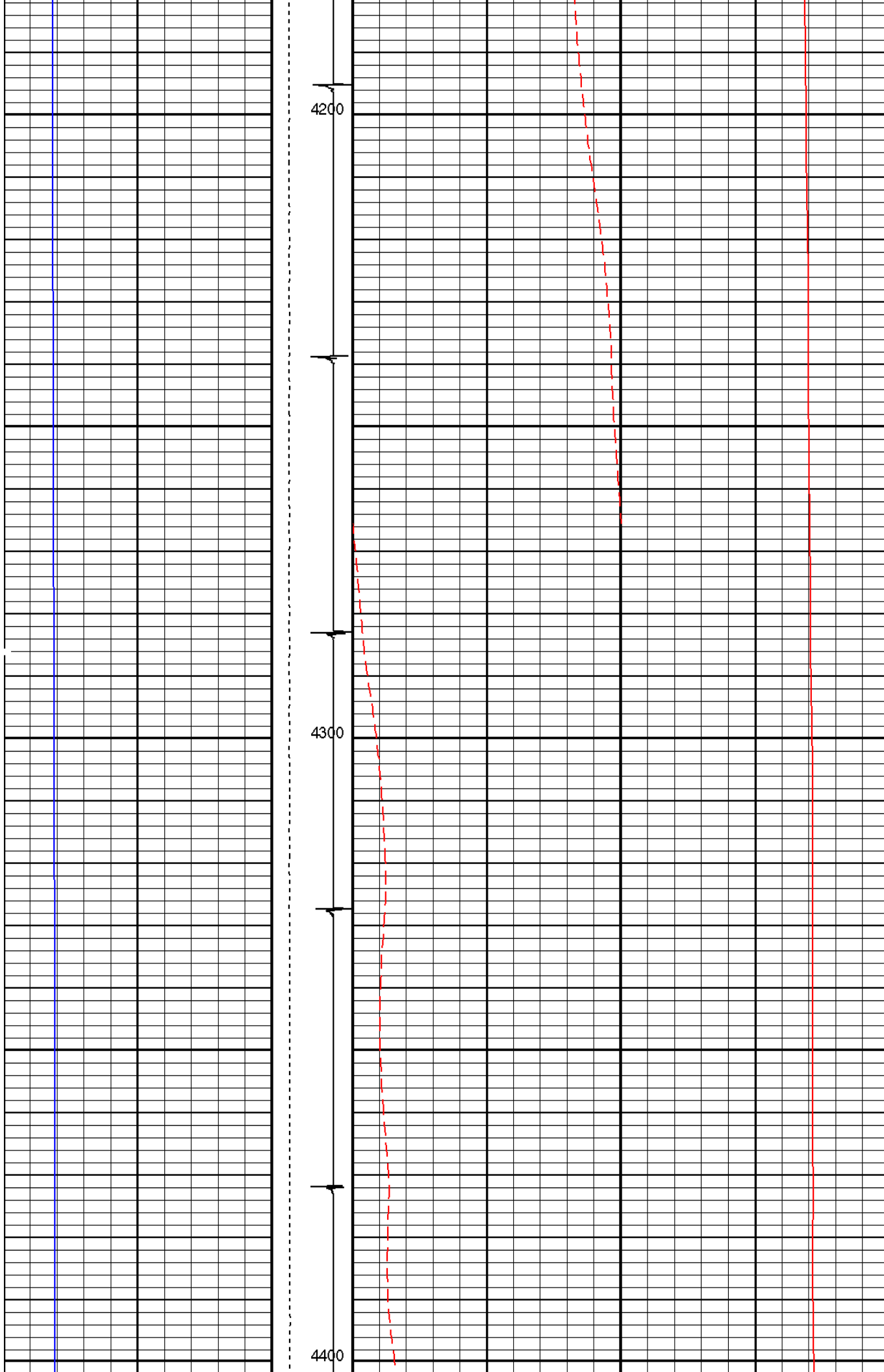


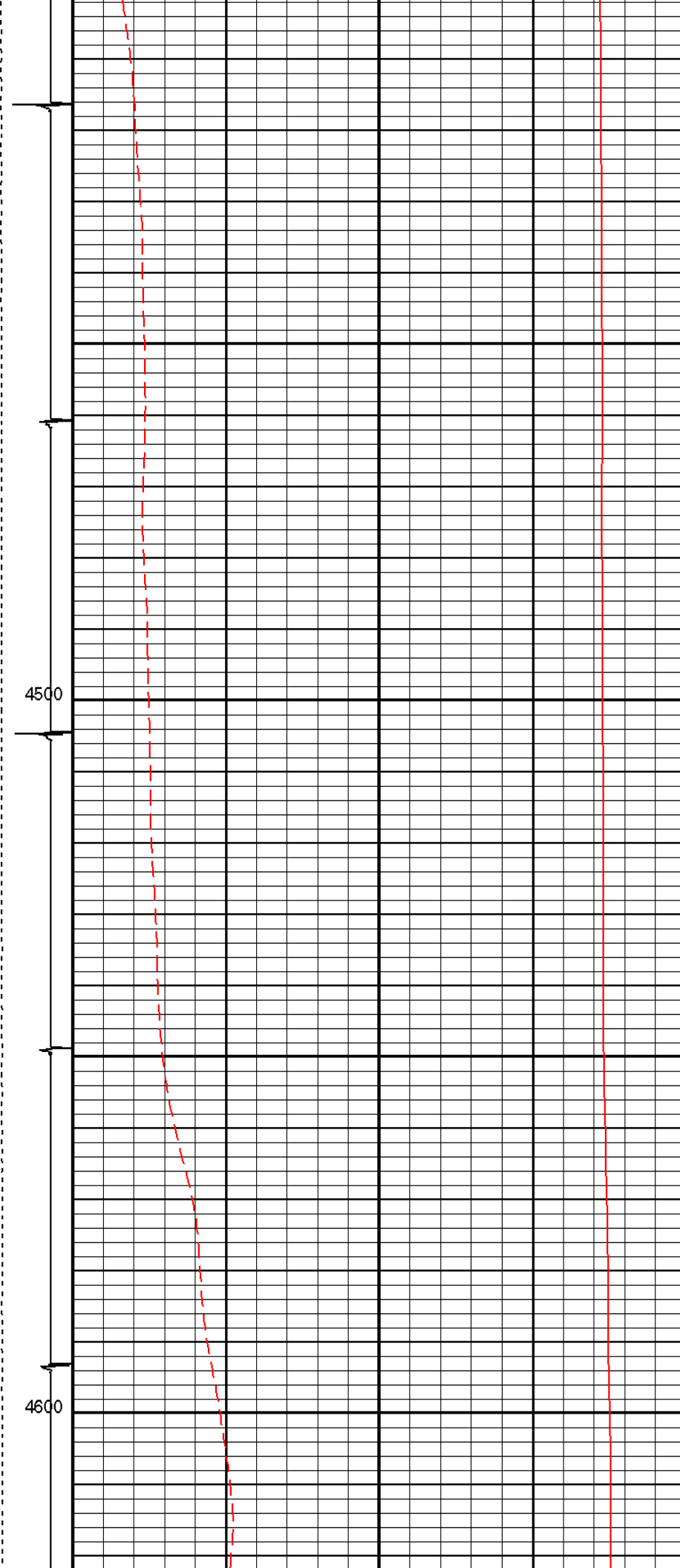
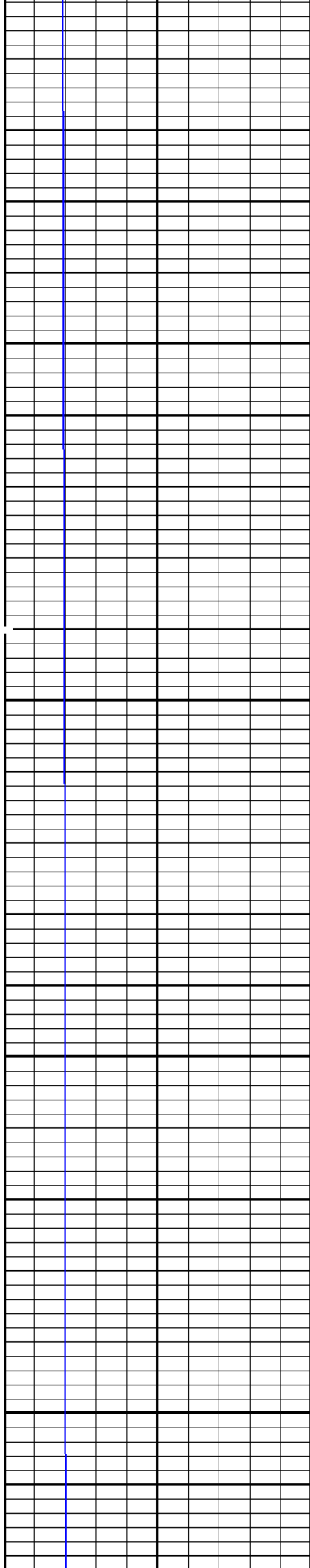






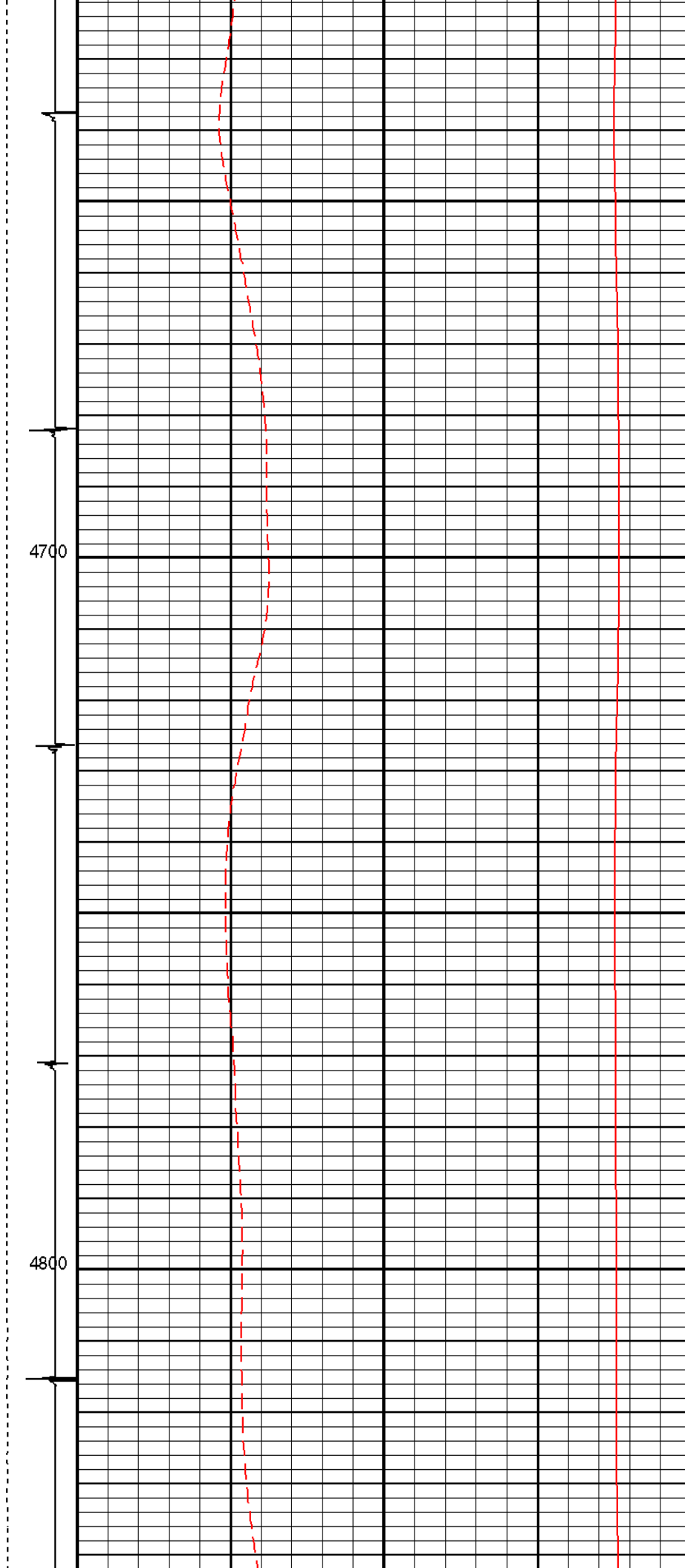
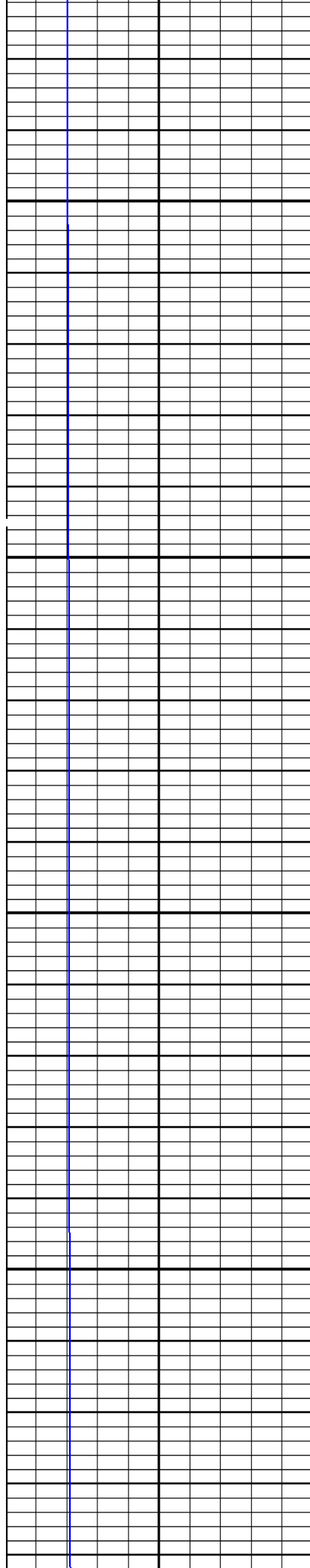


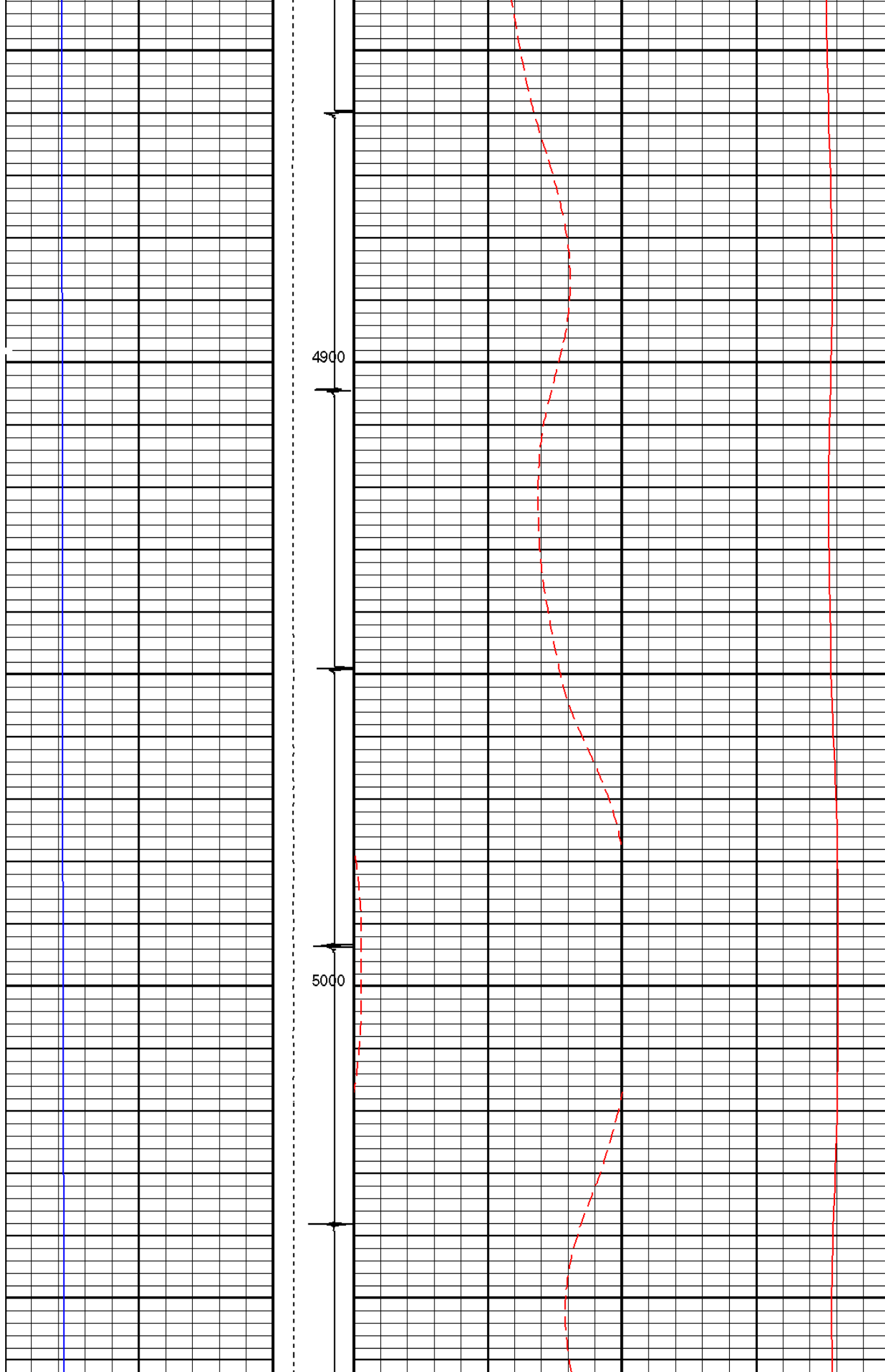


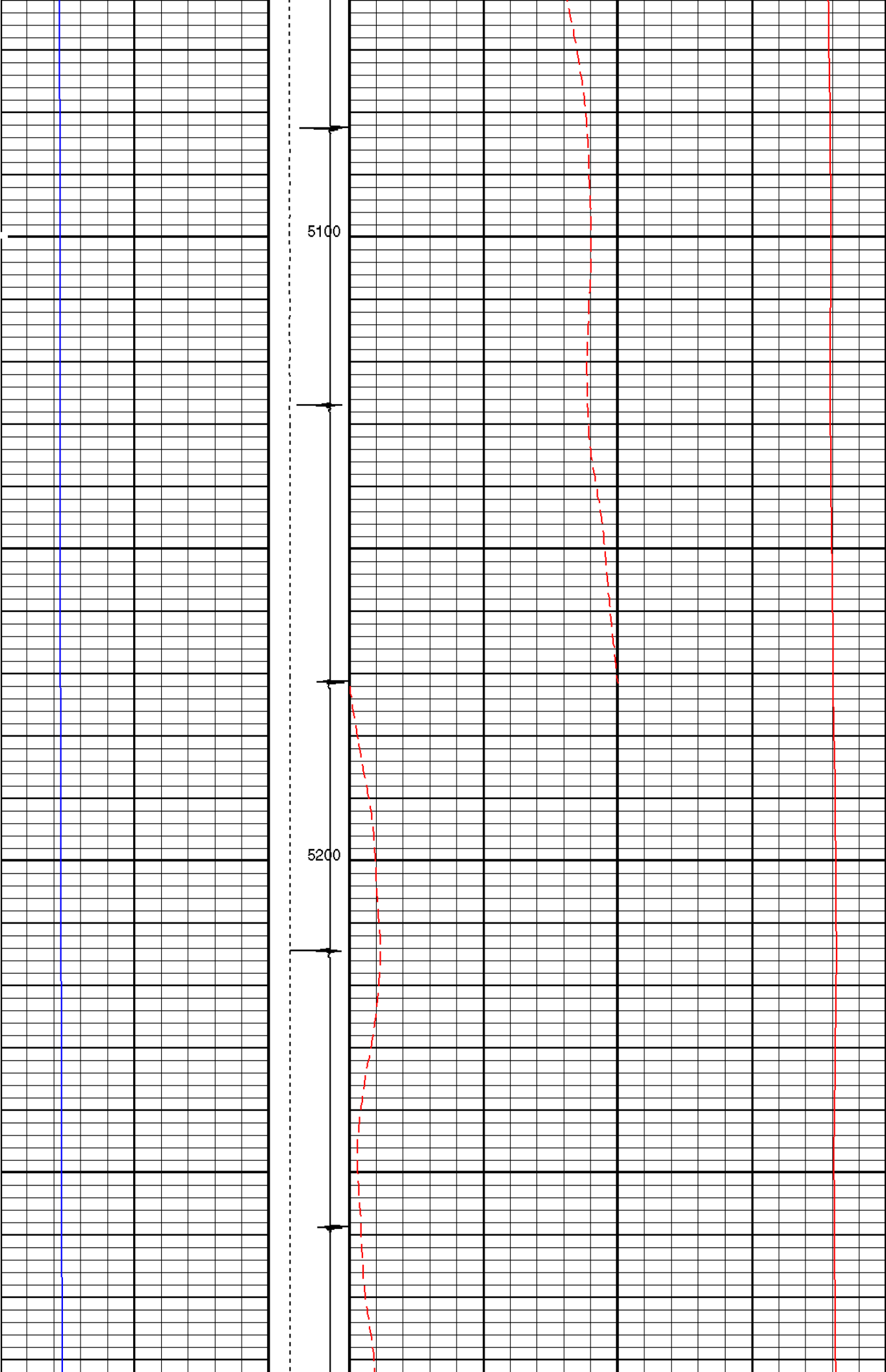


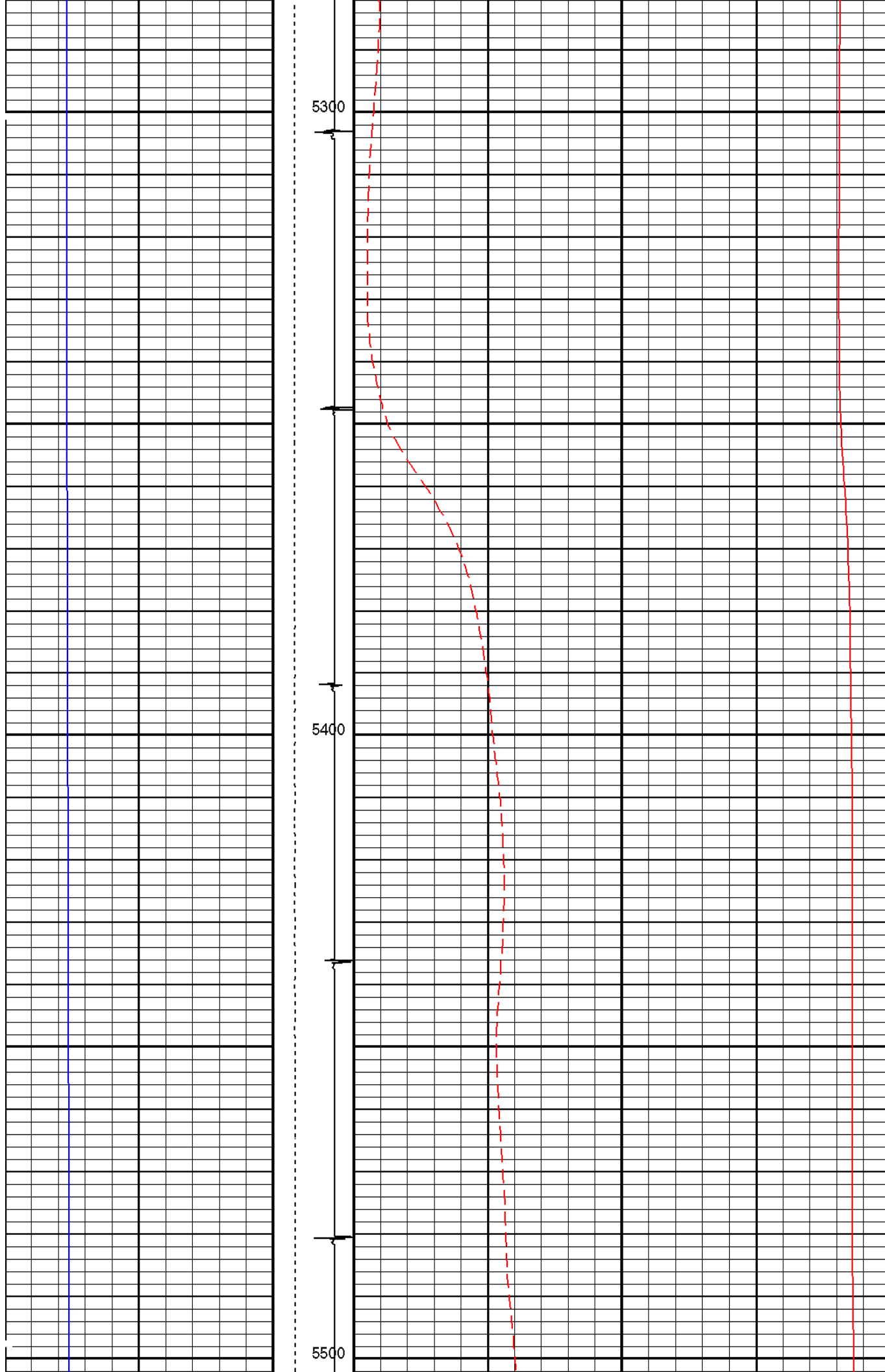
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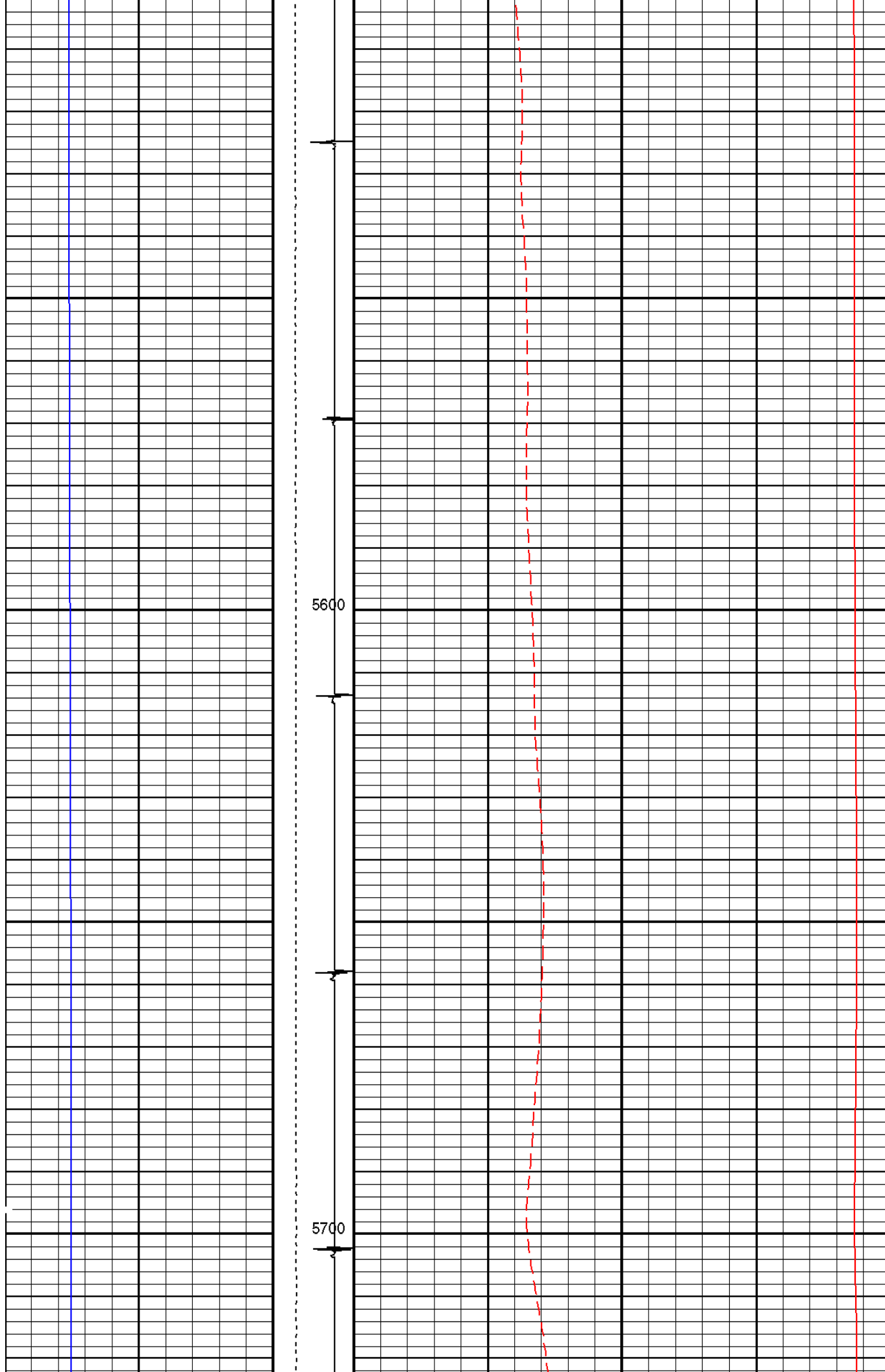
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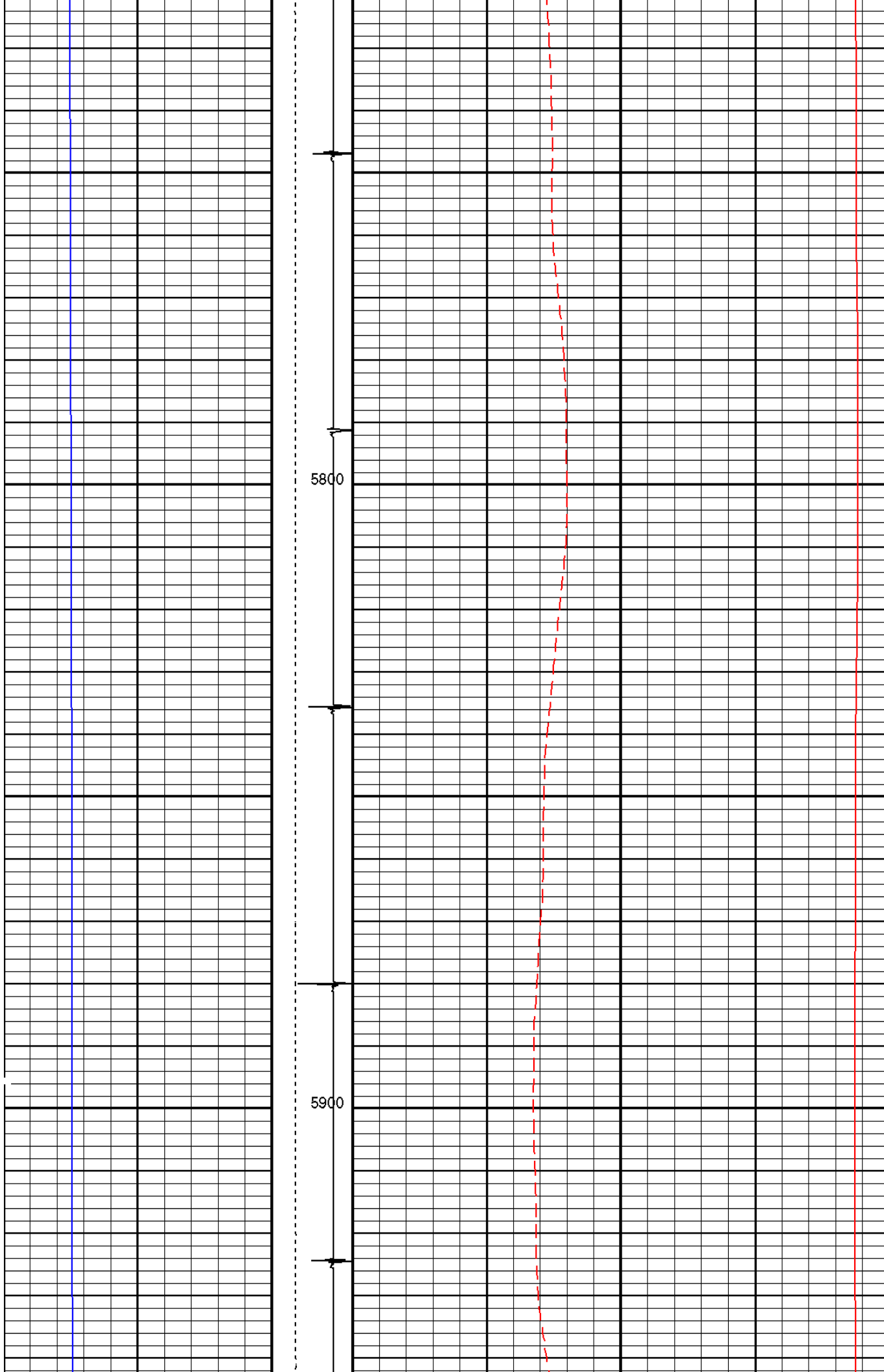


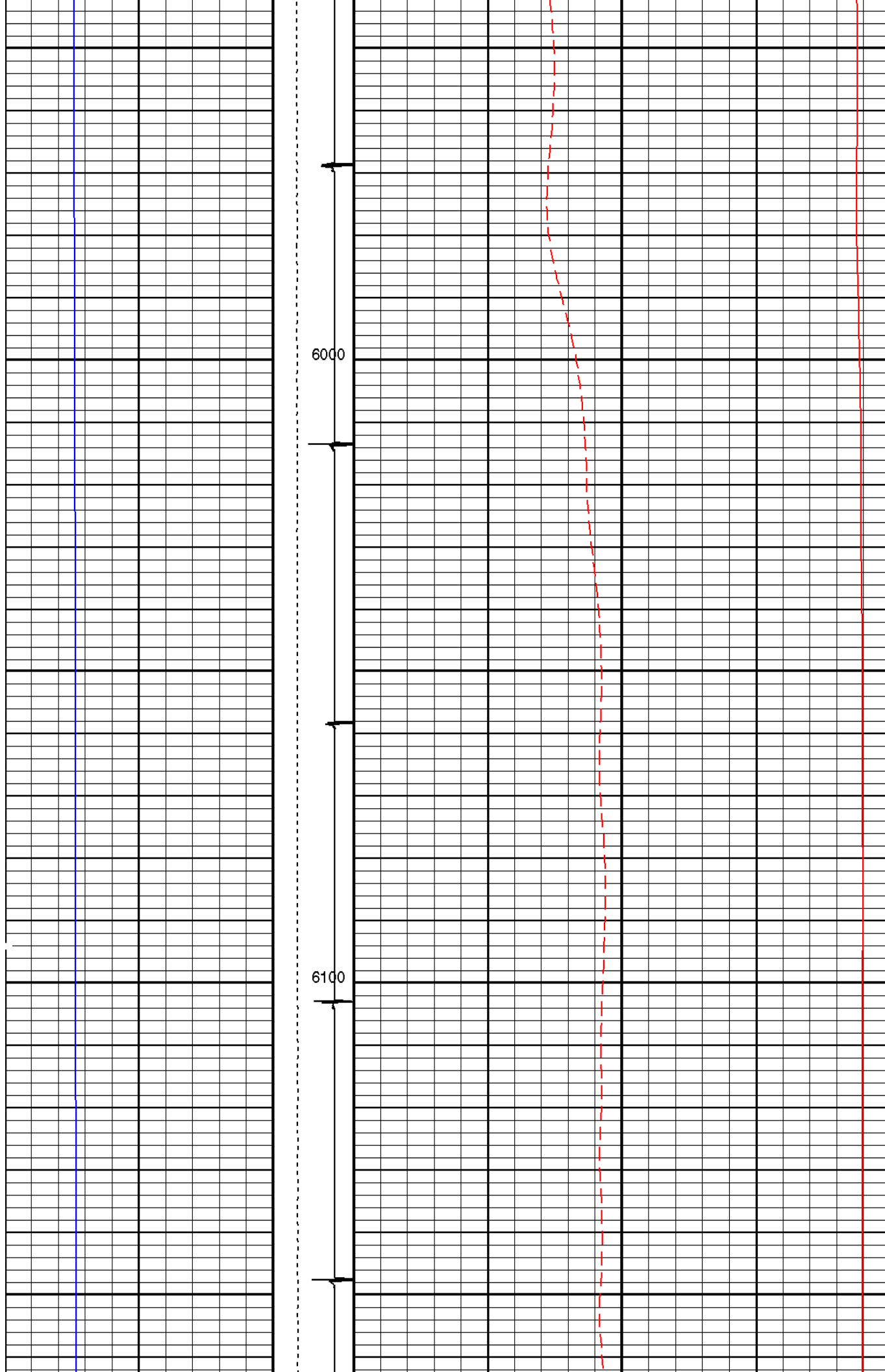


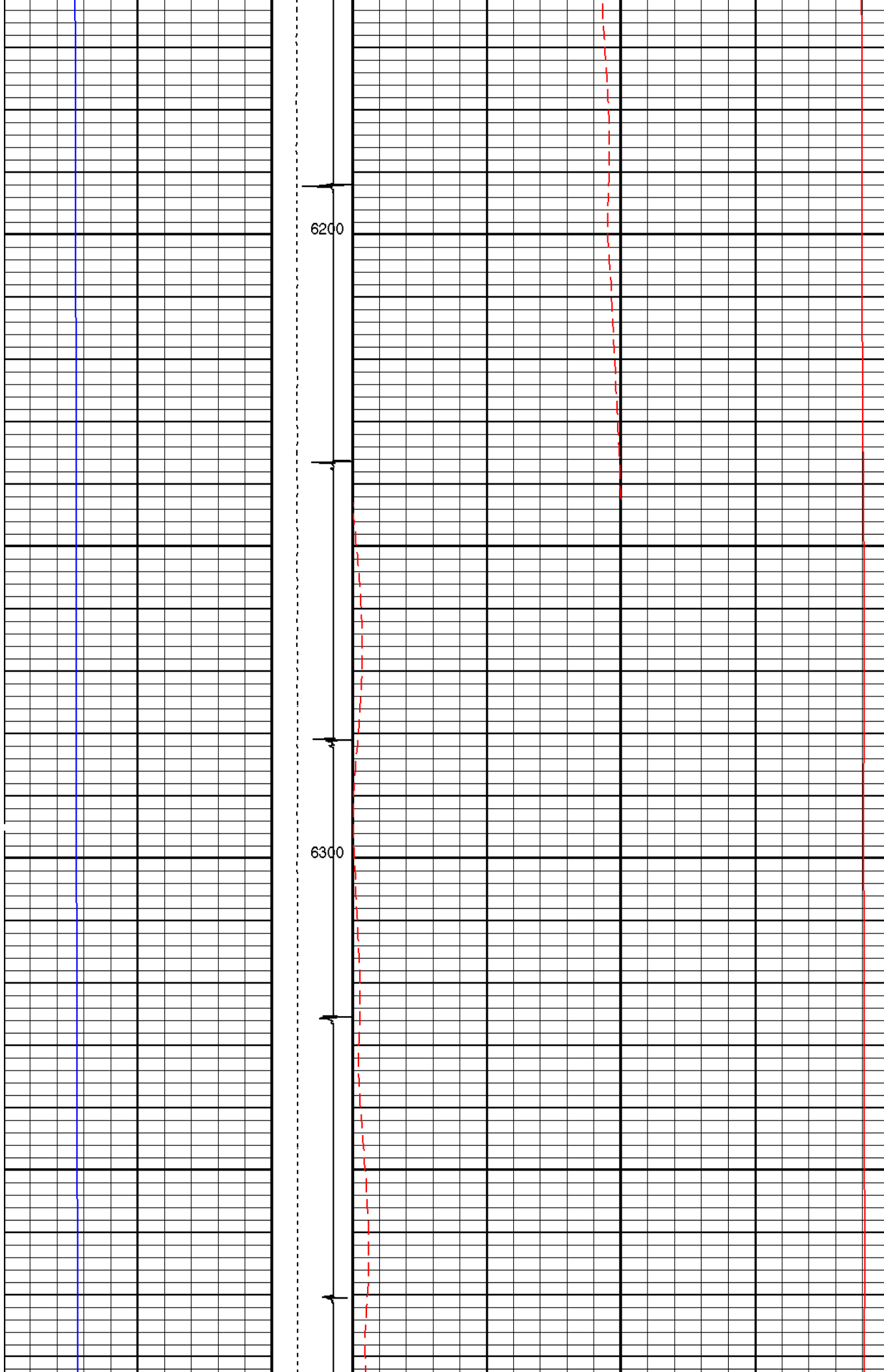


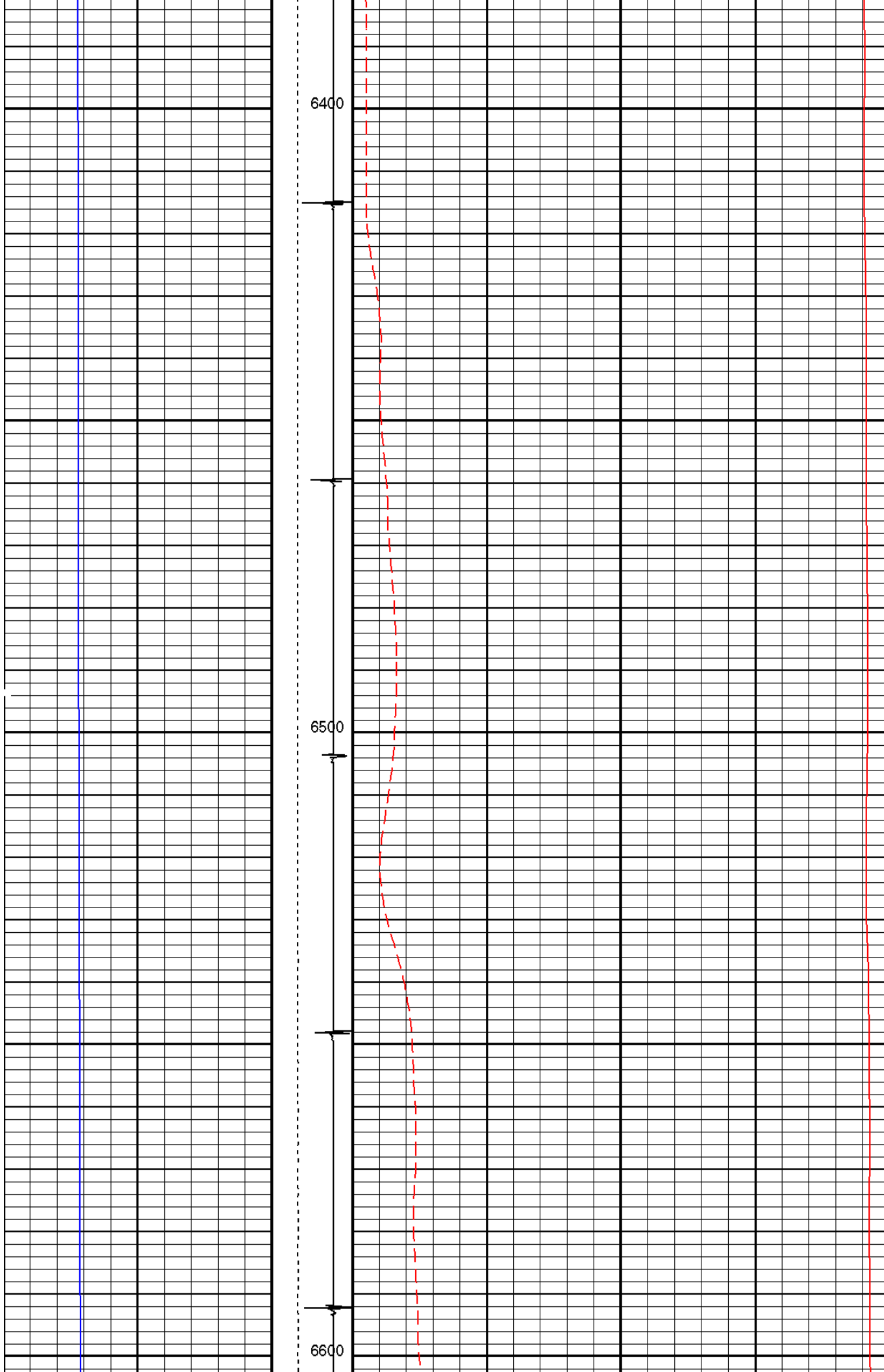


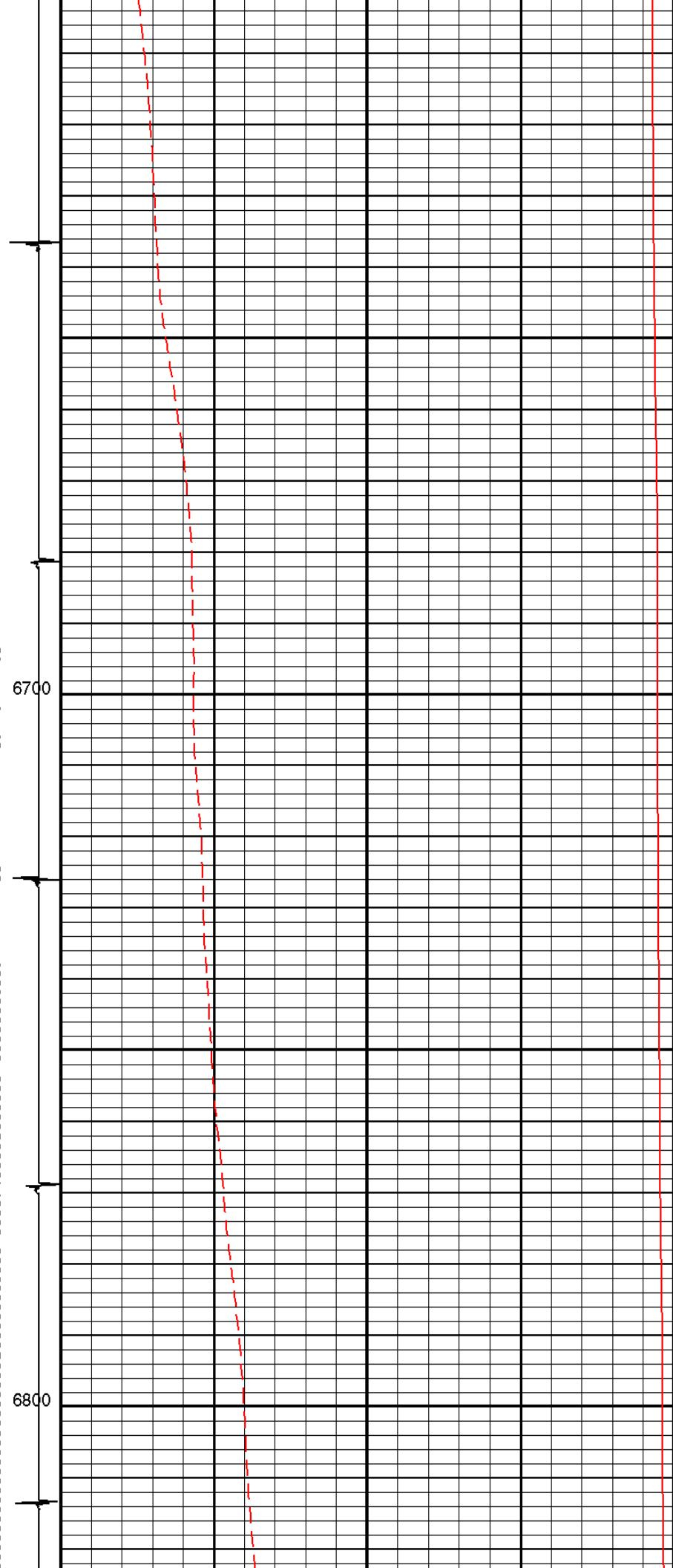
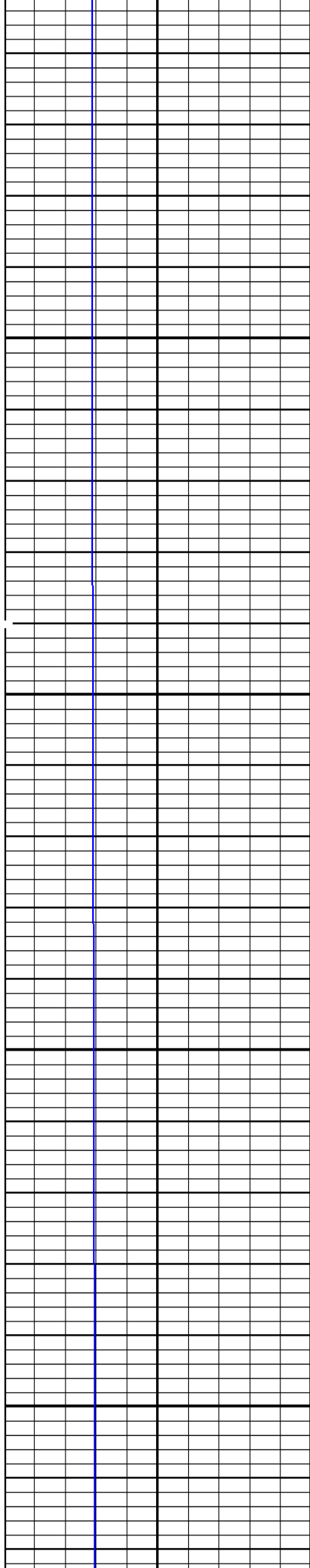






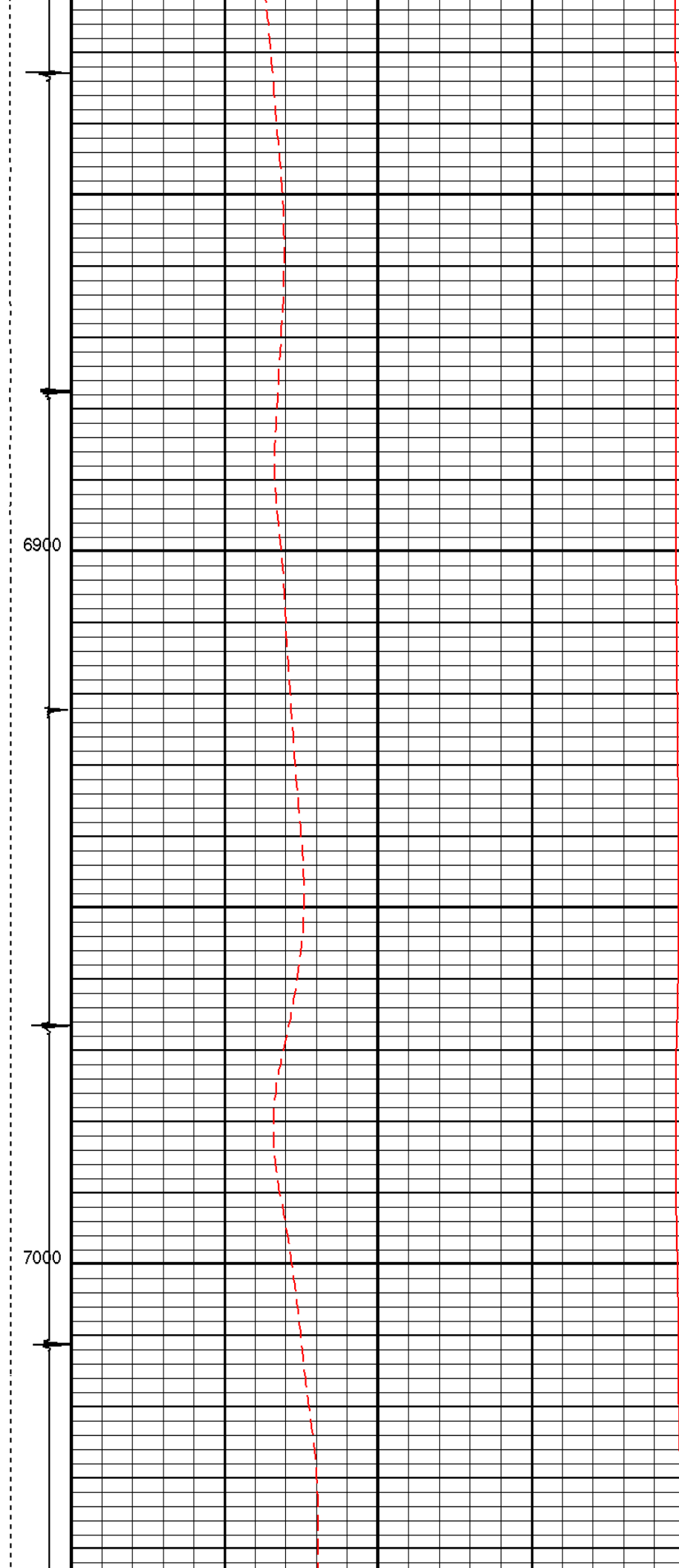
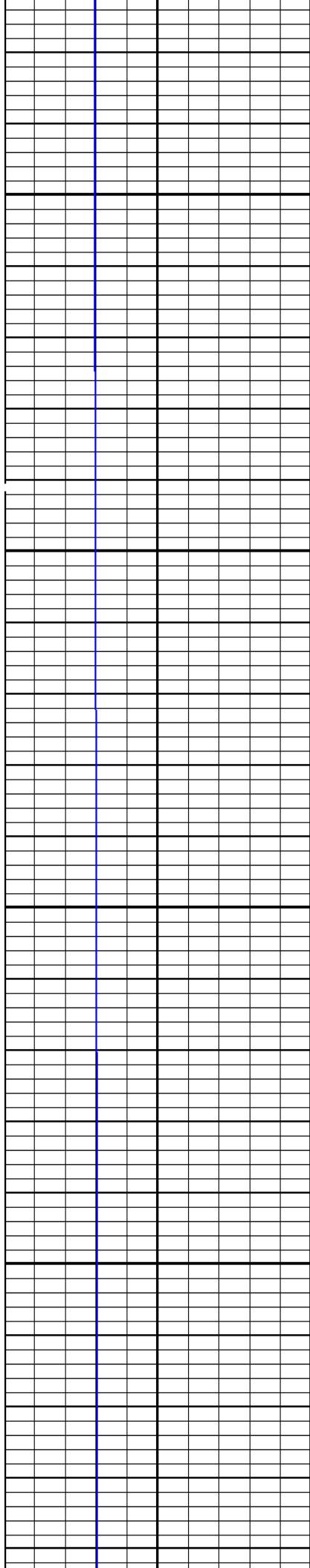


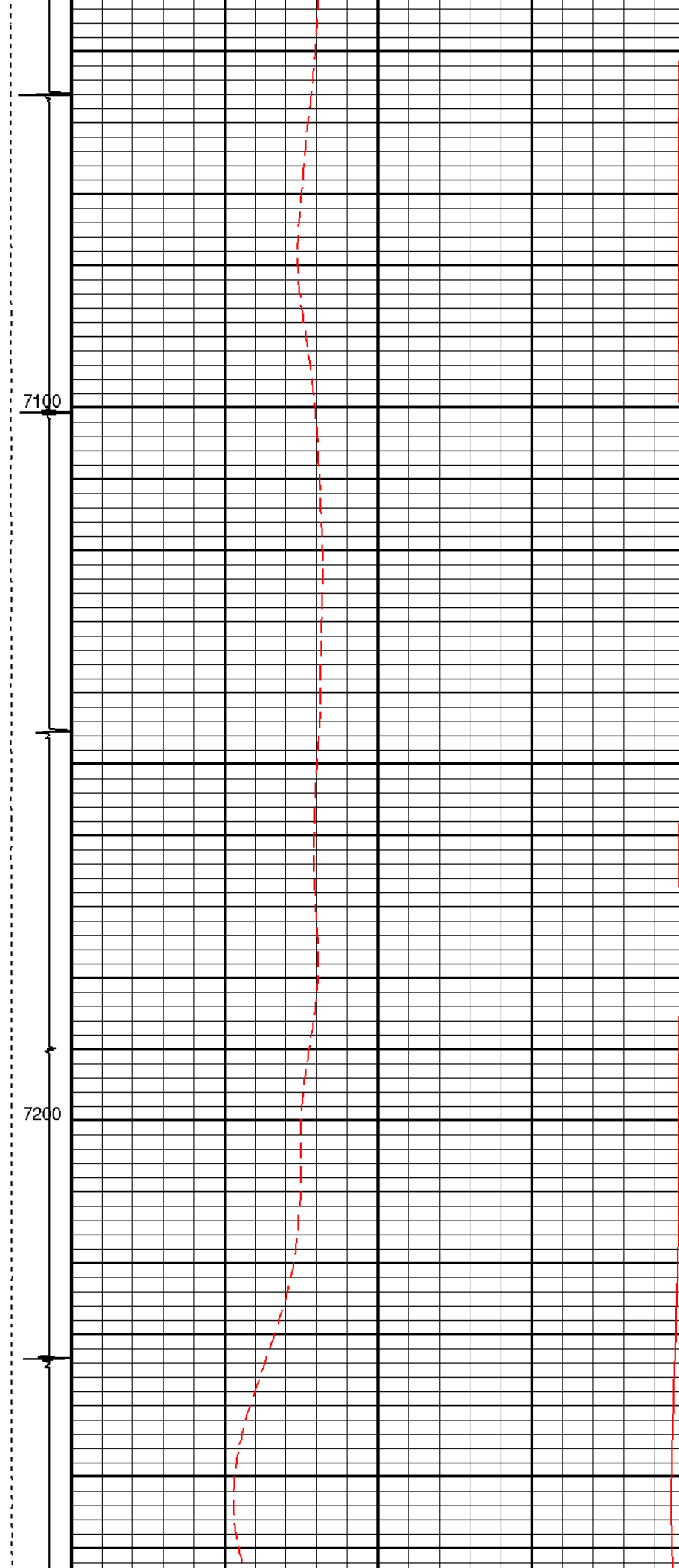
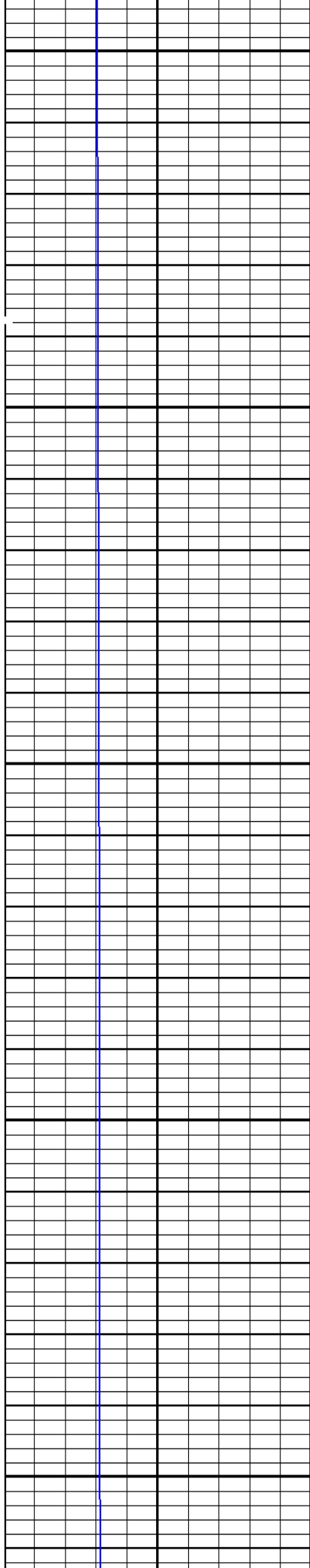


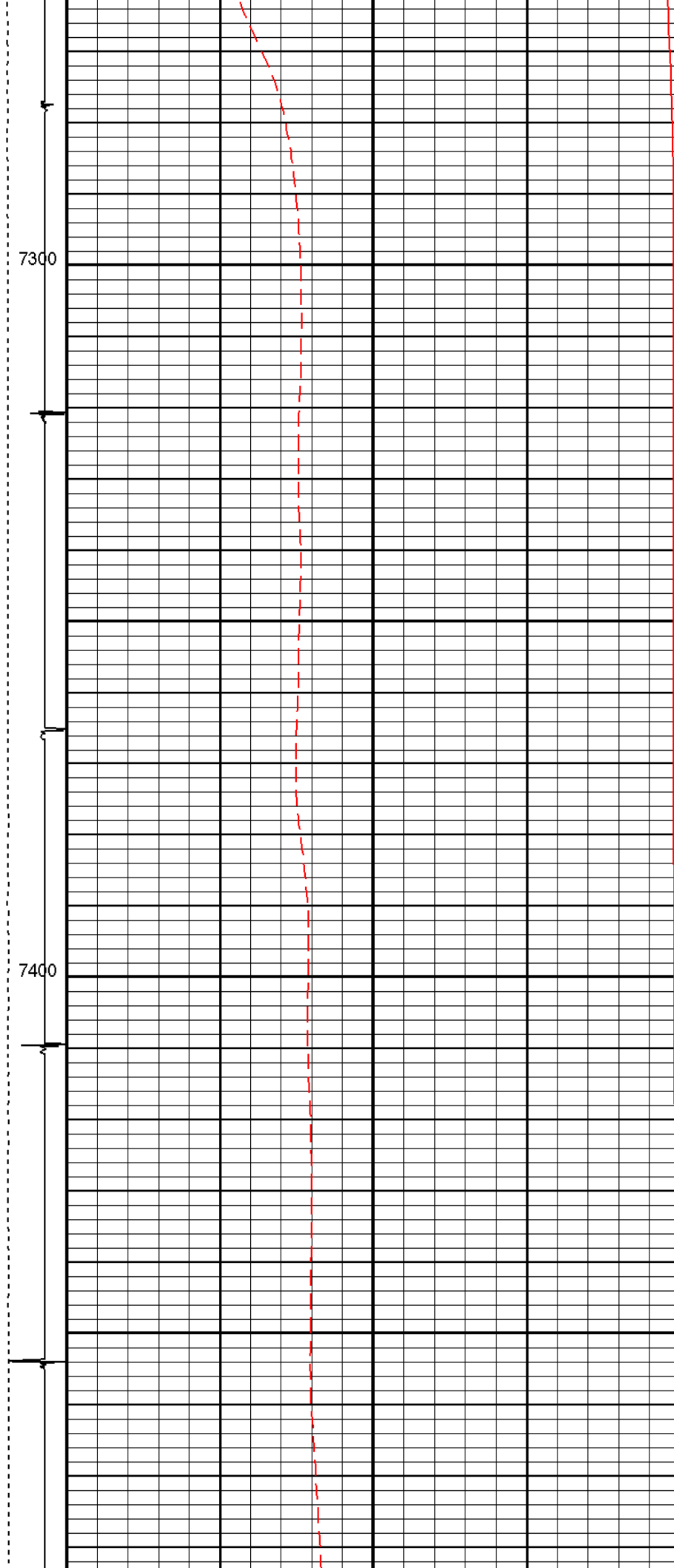
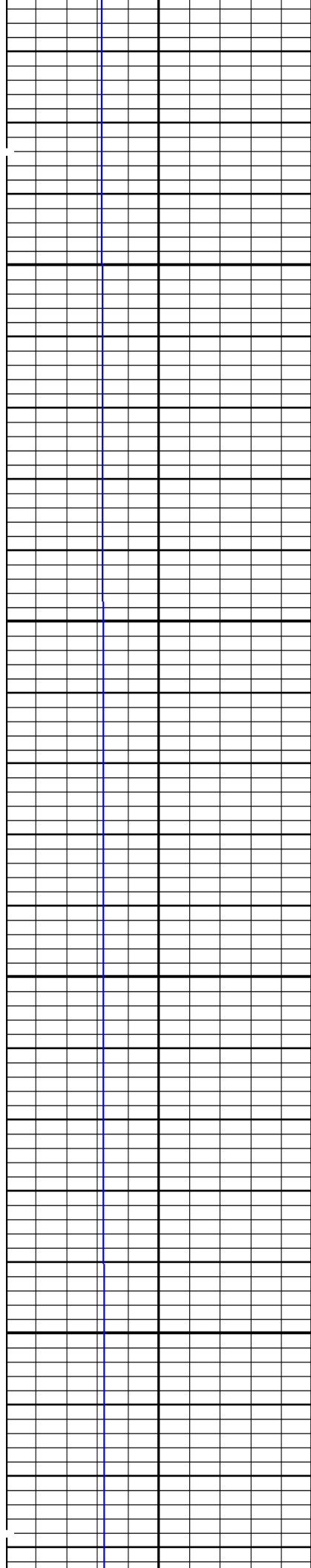


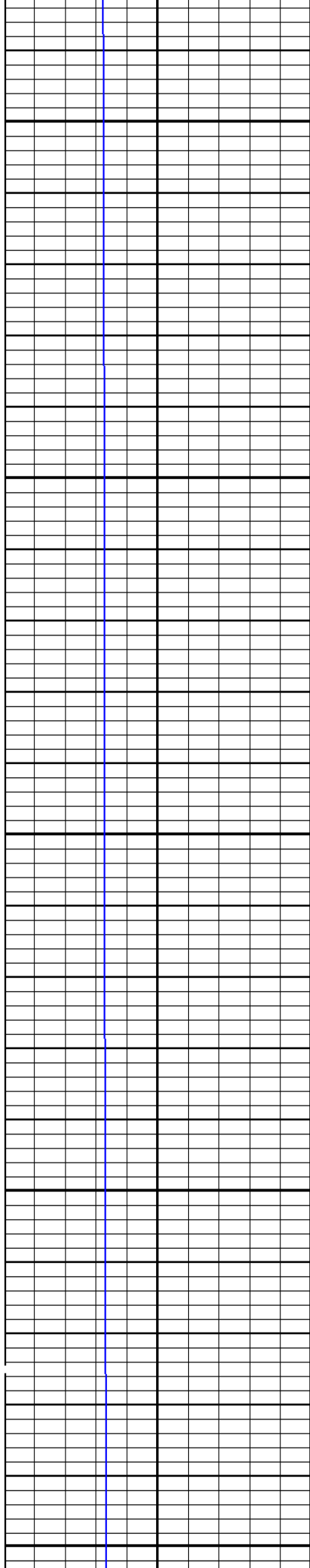
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6800





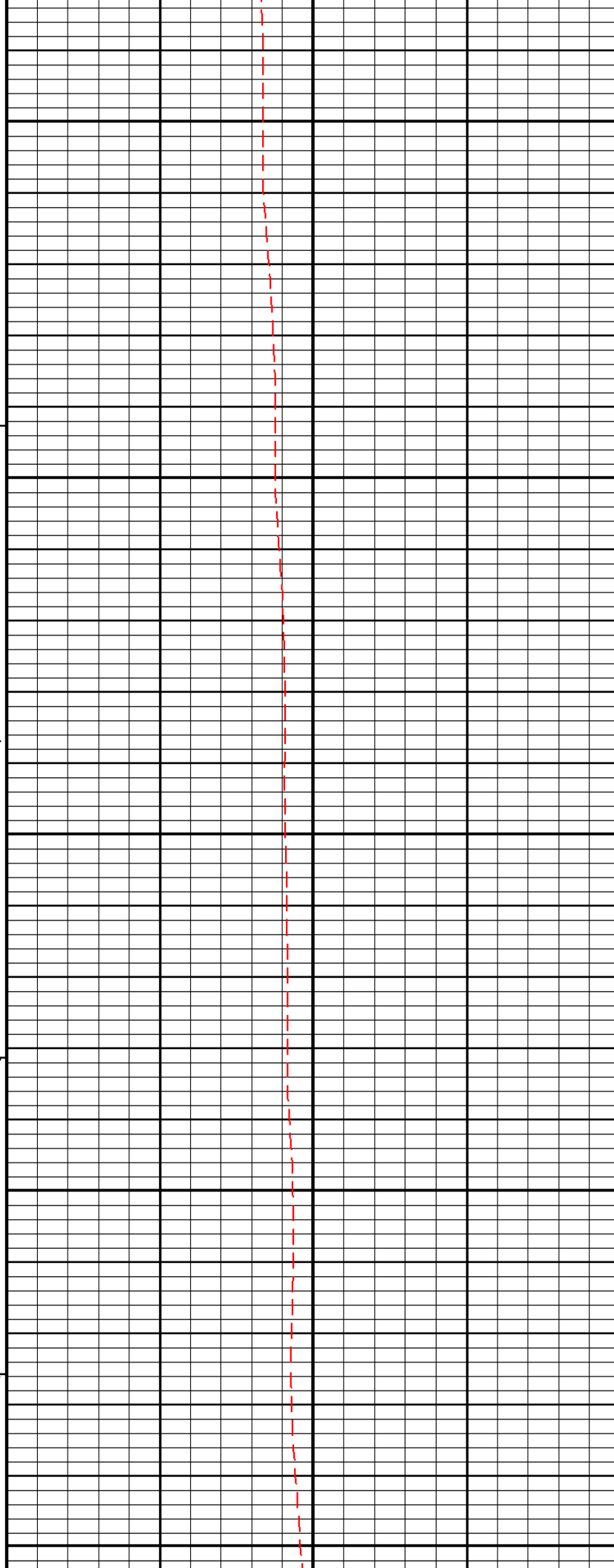


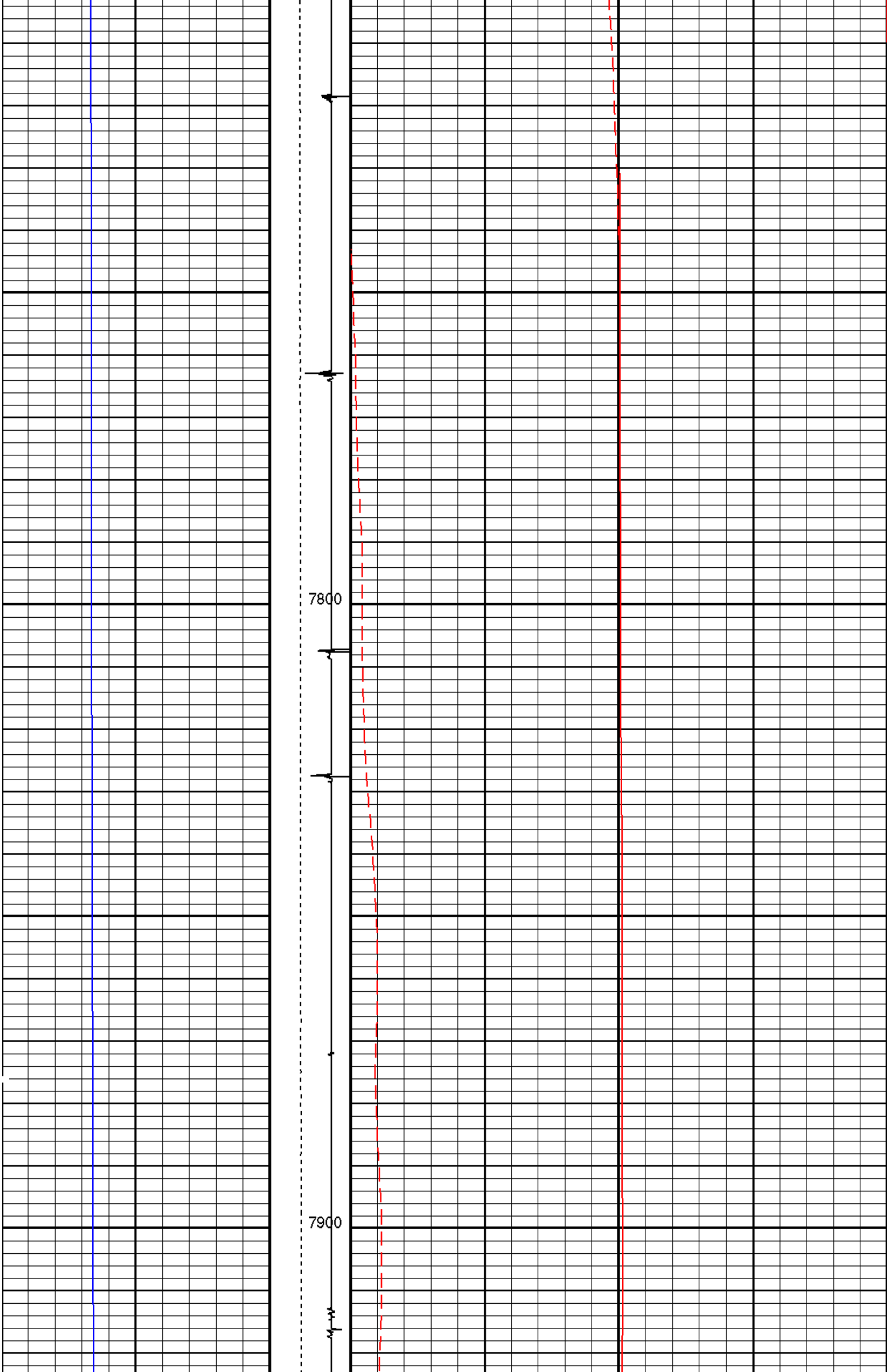


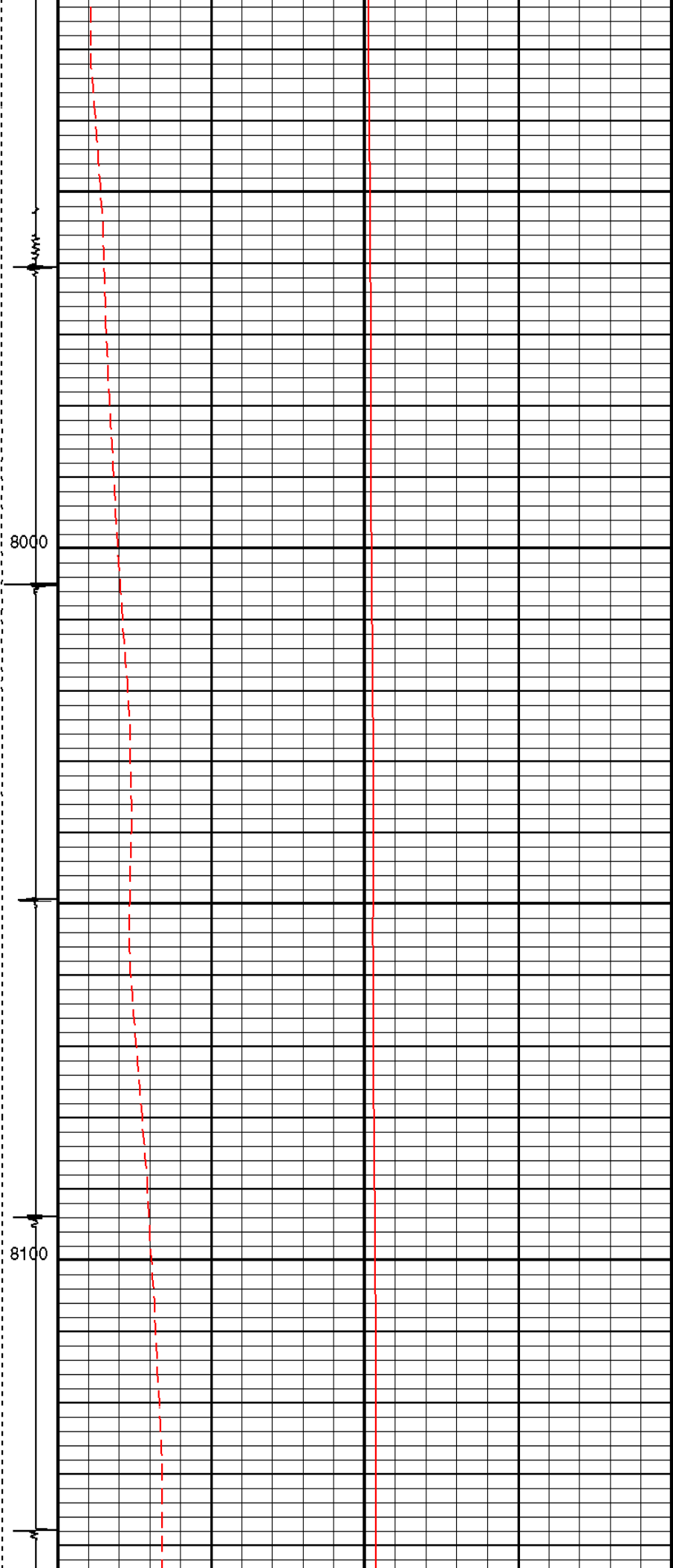
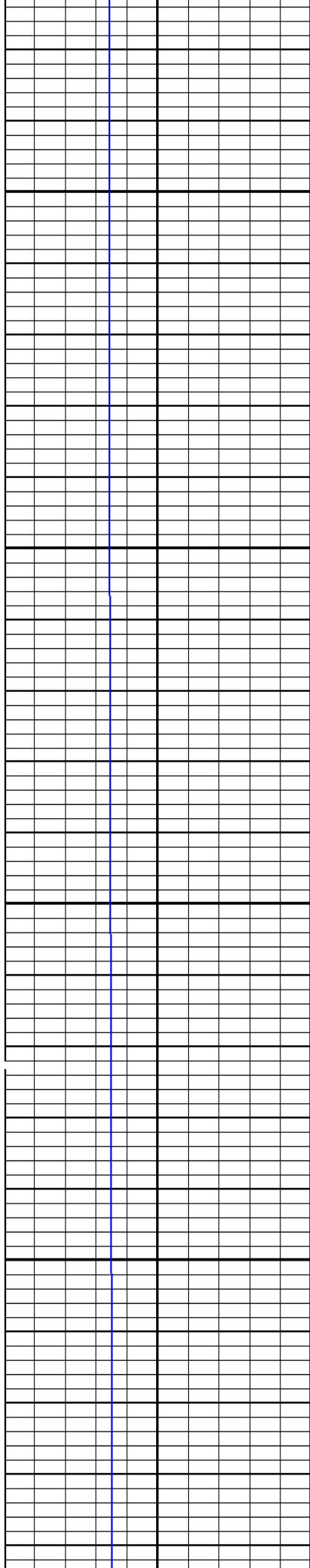
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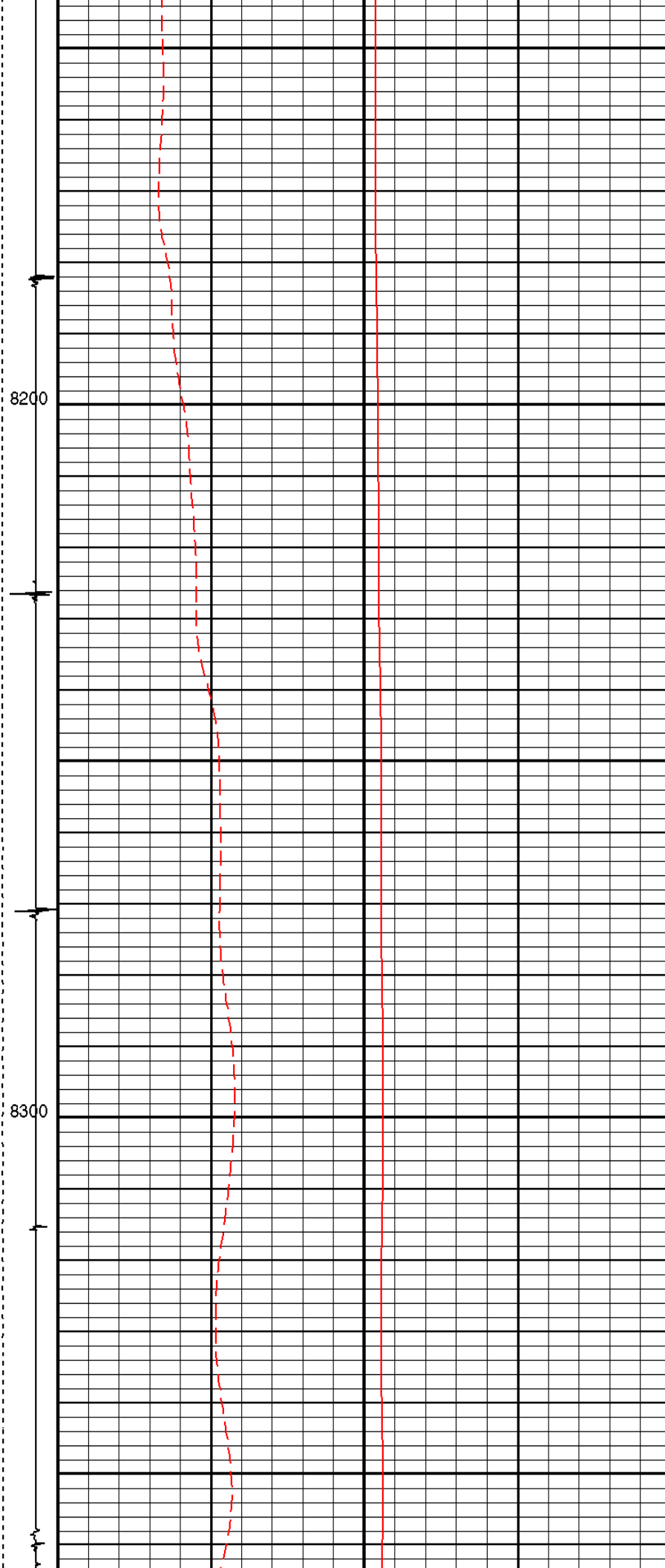
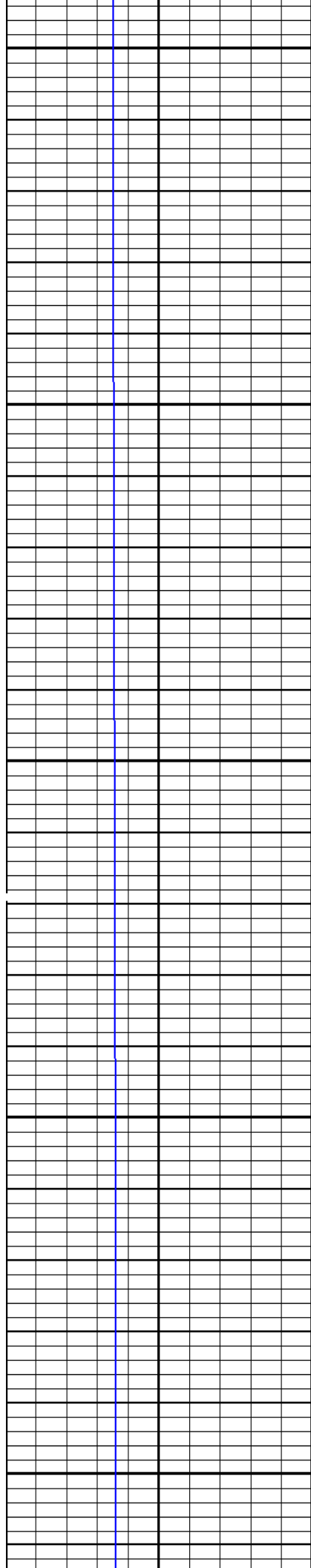
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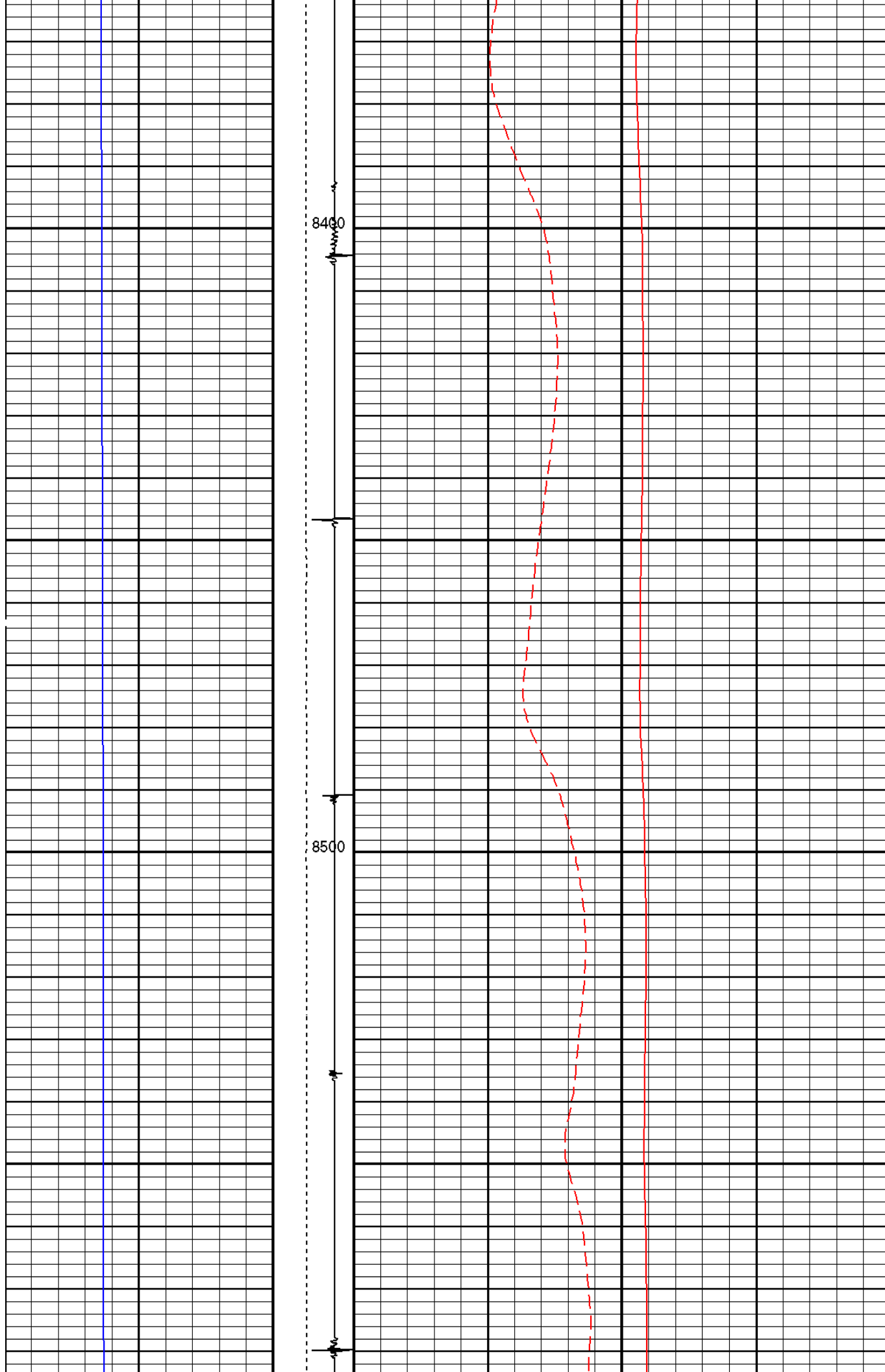
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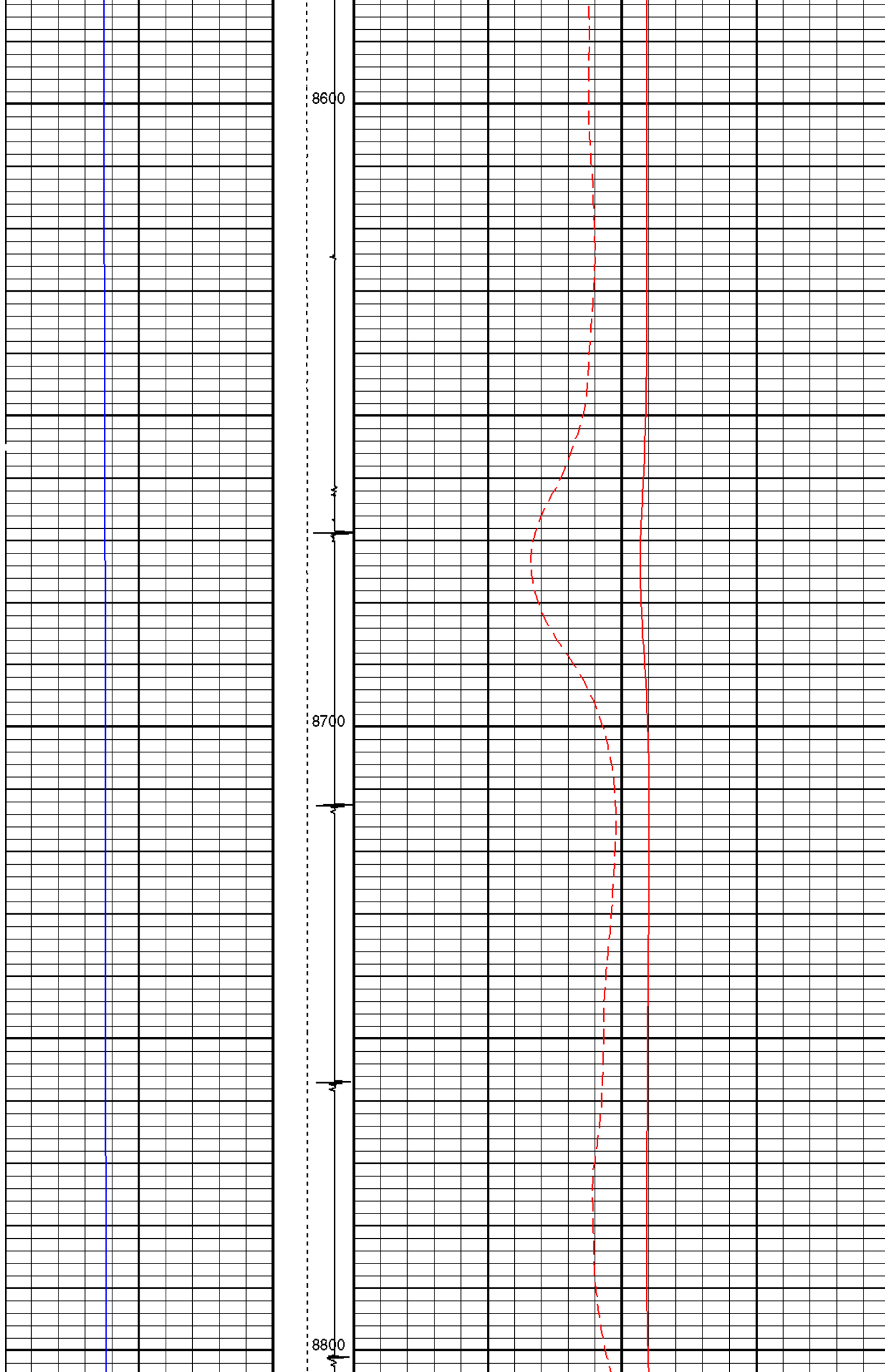


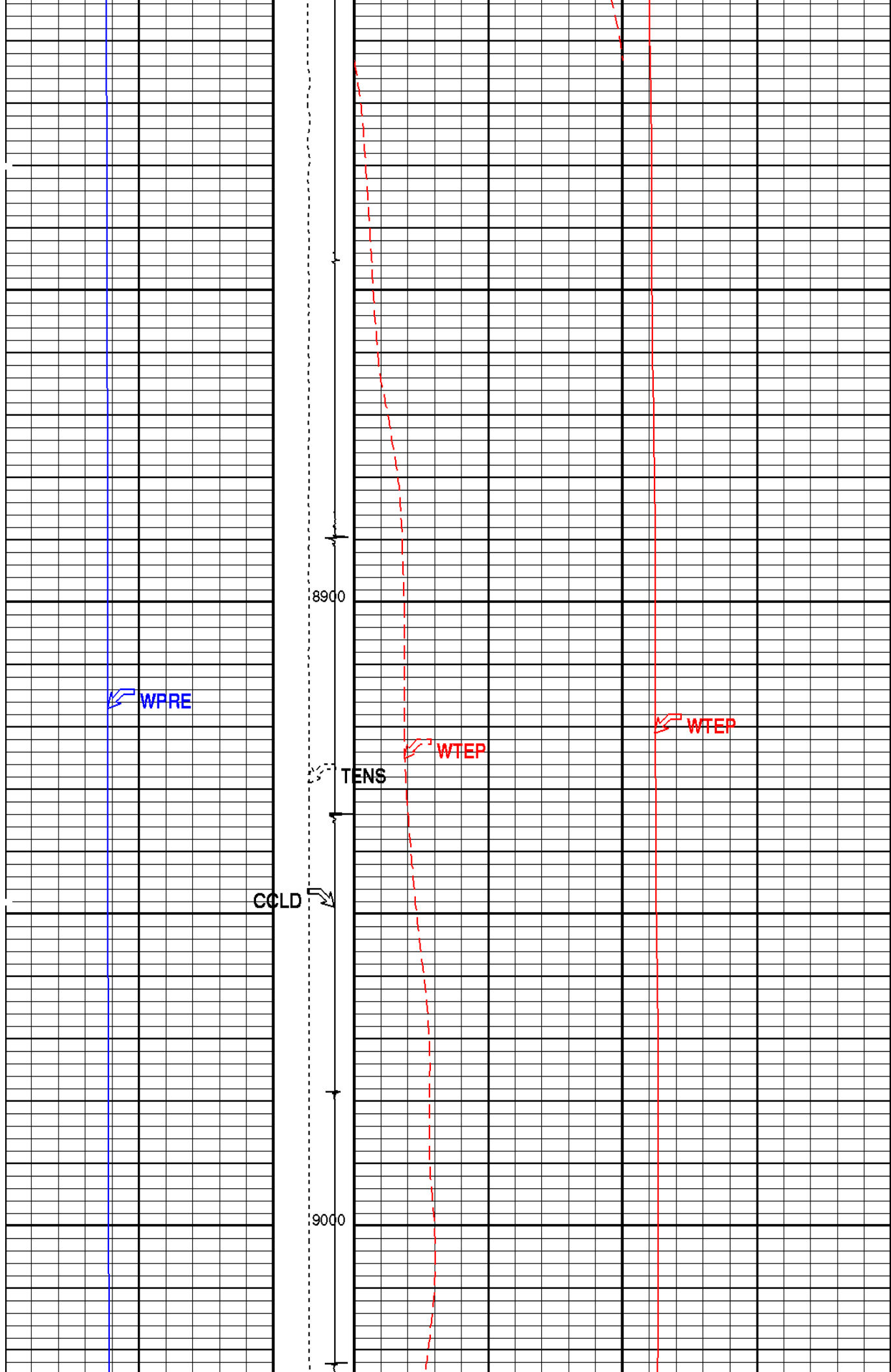


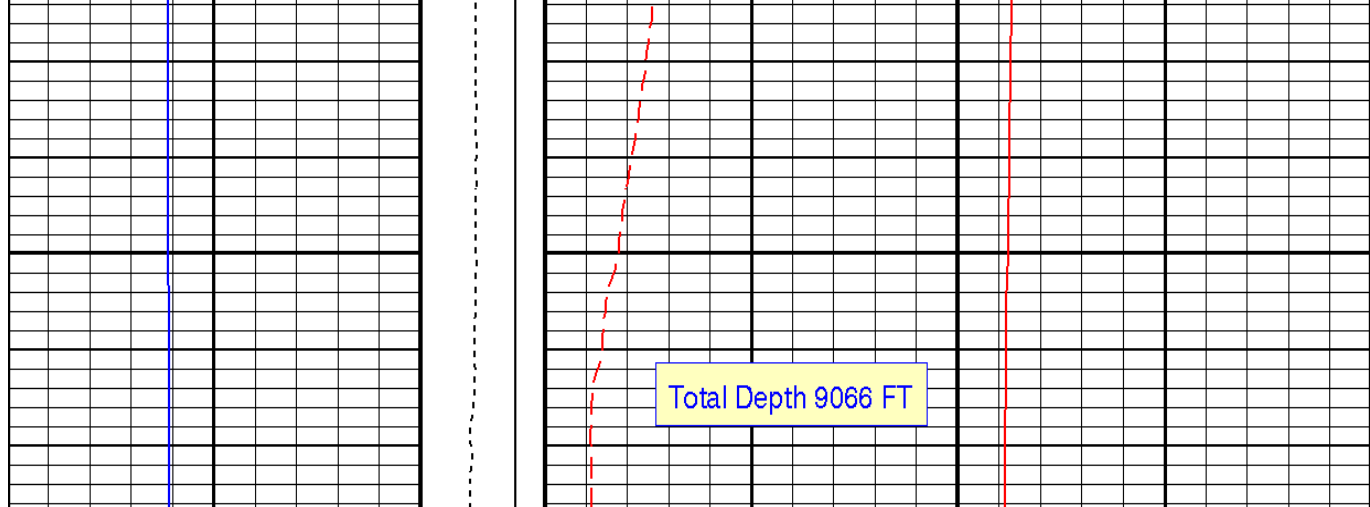












Well Pressure (WPRE) (PSIA)		Tension (TENS) (LBF)	Well Temperature (WTEP) (DEGF)		Well Temperature (WTEP) (DEGF)	
0	10000	0 2000	0	200	0	200
		Discriminat ed CCL (CCLD)				
		3 (V) -1				

PIP SUMMARY

☒ Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
DO PP	System and Miscellaneous Depth Offset for Playback Playback Processing	1.0 FT RECOMPUTE

Format: TEMP LOG Vertical Scale: 5" per 100' Graphics File Created: 01-Dec-2013 17:00

OP System Version: 19C0-187

HBMS-B 19C0-187

Input DLIS Files

DEFAULT Flip_HBMS_005LUP PRODUCER 01-Dec-2013 16:55 9075.5 FT -16.5 FT

Output DLIS Files

DEFAULT HBMS_007PUP FN:4 PRODUCER 01-Dec-2013 17:00

Schlumberger

REPEAT ANALYSIS

MAXIS Field Log

Company: ENCANA OIL & GAS (USA) INC

Well: ROSE 22-11B

Input DLIS Files

DEFAULT Flip_HBMS_006LUP PRODUCER 01-Dec-2013 16:57 9074.5 FT 8729.0 FT

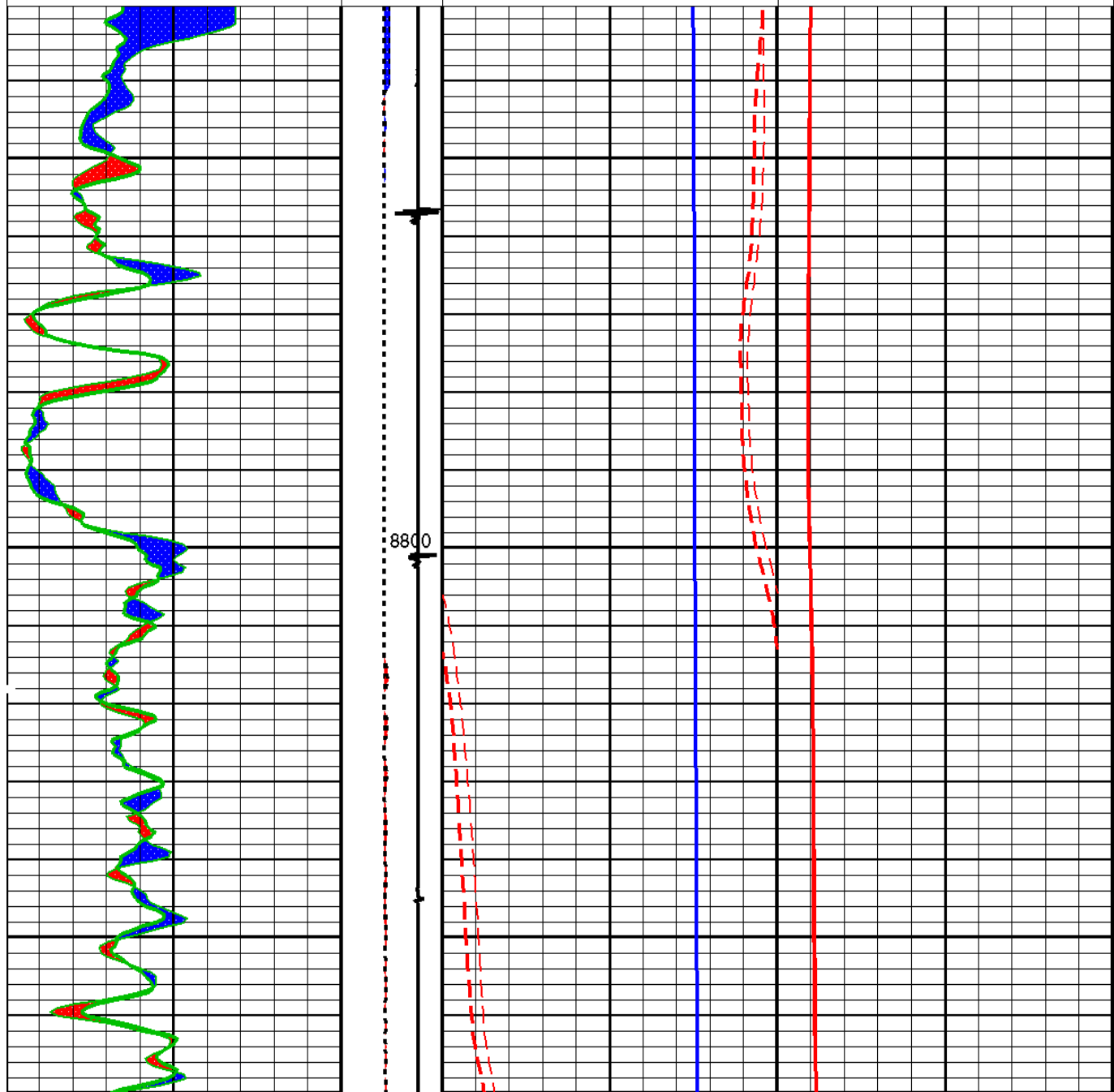
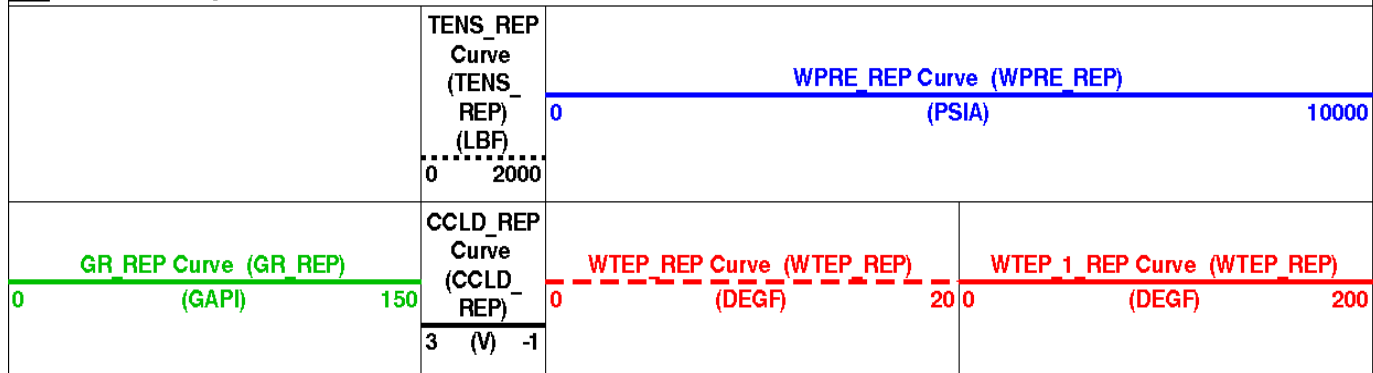
Output DLIS Files

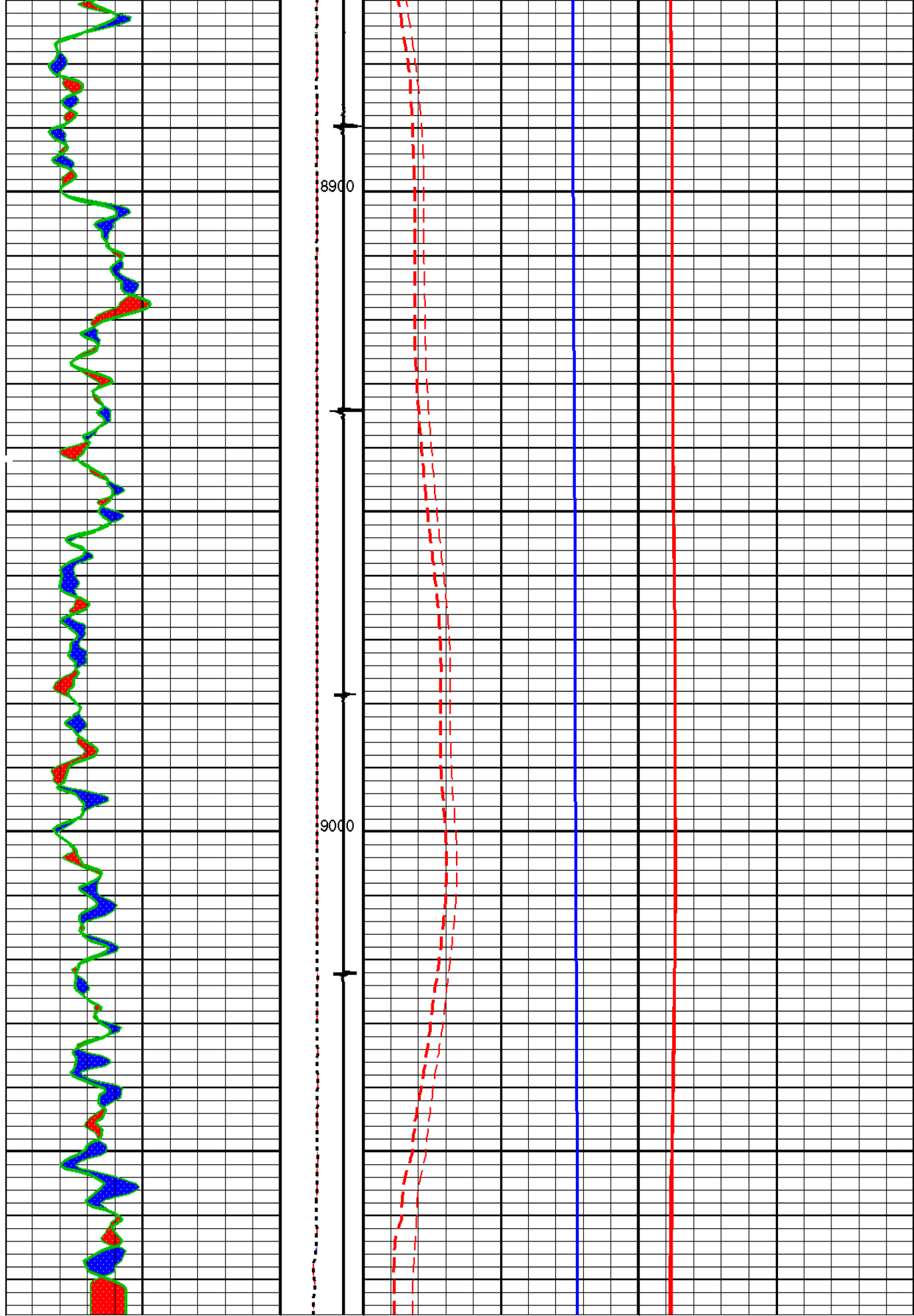
OP System Version: 19C0-187

HBMS-B 19C0-187

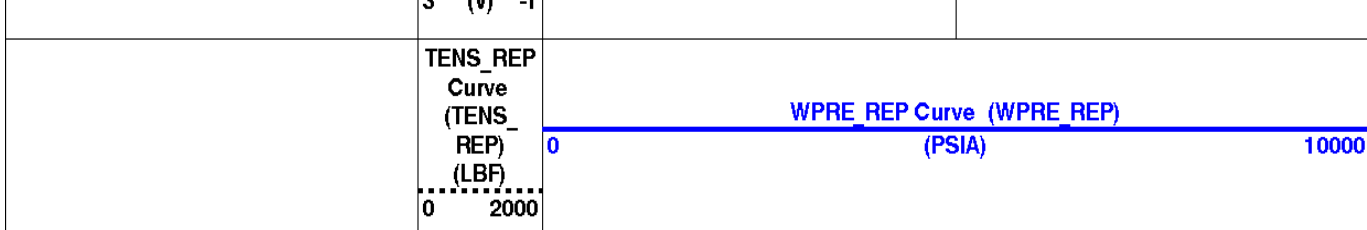
PIP SUMMARY

 Time Mark Every 60 S





GR_REP Curve (GR REP)		CCLD_REP Curve (CCLD REP)	WTEP_REP Curve (WTEP REP)	WTEP_1_REP Curve (WTEP REP)
(GAPI)			(DEGF)	(DEGF)
0	150	200	200	200



PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
System and Miscellaneous		
DO	Depth Offset for Playback	1.0 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: 01-Dec-2013 17:07

OP System Version: 19C0-187

HBMS-B 19C0-187

Input DLIS Files

DEFAULT	Flip_HBMS_006LUP	PRODUCER	01-Dec-2013 16:57	9074.5 FT	8729.0 FT
DEFAULT	HBMS_007PUP	FN:4 PRODUCER	01-Dec-2013 17:00	9076.5 FT	-15.5 FT

Output DLIS Files

DEFAULT	HBMS_008PUP	FN:5 PRODUCER	01-Dec-2013 17:07
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Schlumberger

HBMS COEFFICIENTS

MAXIS Field Log

Client: ENCANA OIL & GAS (USA) INC
Field: MAMM CREEK
Well: ROSE 22-11B
Run date: 1-Dec-2013

Tool: PSP
Sub Type: PBMS
Sensor: GR

PBMS Gamma Ray

Sonde Serial NB

Sensor Serial NB

Calib Date ddmmyy

Matrix Size

Coeff CRC

GR HV Rt

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

34384

160206

12

D8B5

Rt**0

Rt**1

Tt**0	+.200000000000e+04	+.173000000000e+04
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Client:	ENCANA OIL & GAS (USA) INC	Tool:	PSP
Field:	MAMM CREEK	Sub Type:	PBMS
Well:	ROSE 22-11B	Sensor:	WellTemp RTD
Run date:	1-Dec-2013		

PBMS RTD Well Thermometer

Sonde Serial NB	COEFFICIENTS FOR RTD THERMOMETER PBMS-B.2880 S/N:
Sensor Serial NB	2880
Calib Date ddmmyy	260408
Matrix Size	16
Coeff CRC	A3AF

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	Tool:	PSP
Field:	MAMM CREEK	Sub Type:	PBMS
Well:	ROSE 22-11B	Sensor:	CQG
Run date:	1-Dec-2013		

PBMS Quartz Gauge type F

Sonde Serial NB :
 Sensor Serial NB 2880
 Calib Date ddmmyy 260408
 Matrix Size 66
 Coeff CRC 66B8

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	-.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	+.250084591851 E-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: ROSE 22-11 B (K22W)
 Field: MAMM CREEK
 County: GARFIELD
 State: COLORADO

TEMPERATURE LOG
CCL