

<div><div>FMC Technologies</div><div>Pulse Decay Neutron Gamma Ray Casing Collar Log</div></div>									
API #: 05-123-38598 Company: Whiting Oil & Gas Well: Razor 11H-0215A Field: Wildcat County: WeldState: Colorado									
COMPANY: Whiting Oil & Gas WELL: Razor 11H-0215A FIELD: Wildcat COUNTY: WeldSTATE: Colorado									
Location: SHL:2180' FNL 368' FEL BHL:600' FNL 470' FEL Latitude:0 degLongitude:-103.824558° Section:11Township:10NRange:58W Permanent Datum: GLElevation:4954' Drill Measured From: KBBottom Logged Interval: 5270FT Log Measured From: KB = 21' above Permanent Datum									
Elevations KB: 4975' DF: 4974' GL: 4954' Other Services None									
Date: 2015 April 18									
Run Number: 1									
Depth Driller: 12751 FT									
Depth Logger: 5270 FT									
Bottom Logged Interval: 5270FT									
Top Logged Interval: Surface									
Fluid Type: Water									
Fluid Top: Surface									
Max. Rec. Temperature: ---									
Estimated Cement Top: ---									
Time on Bottom: 09:00									
Unit Number: HD 0264									
Location: Grand Junction									
Recorded By: D. Shannon									
Witnessed By: G. Chandler									
Borehole Record									
Tubing Record									
Run Number: 1									
Bit Size: 24 IN									
Top: Surface									
Bottom: 80 FT									
Size: 80 FT									
Weight: 1855 Ft									
Top: 80 FT									
Bottom: 6312 FT									
Size: 6312 FT									
Weight: 12751 FT									
Top: 12751 FT									
Bottom: 12751 FT									
Casing Record									
String: 16 IN									
Conductor: 9.625 IN									
Surface: 7 IN									
Intermediate: 4.5 IN									
Liner: 11.6 lbs/ft									
Weight: 5198.4 FT									
Top: 12747 FT									
Bottom: 12747 FT									

API #: 05-123-38598

Whiting Oil & Gas

Razor 11H-0215A

EQUIPMENT DATA				
Run	Trip	Instrument	Series No.	Serial No.
		PDN	029	1471A

REMARKS

Log recorded as per customer request.

Depth shifted 13' downhole to correlate to liner top.

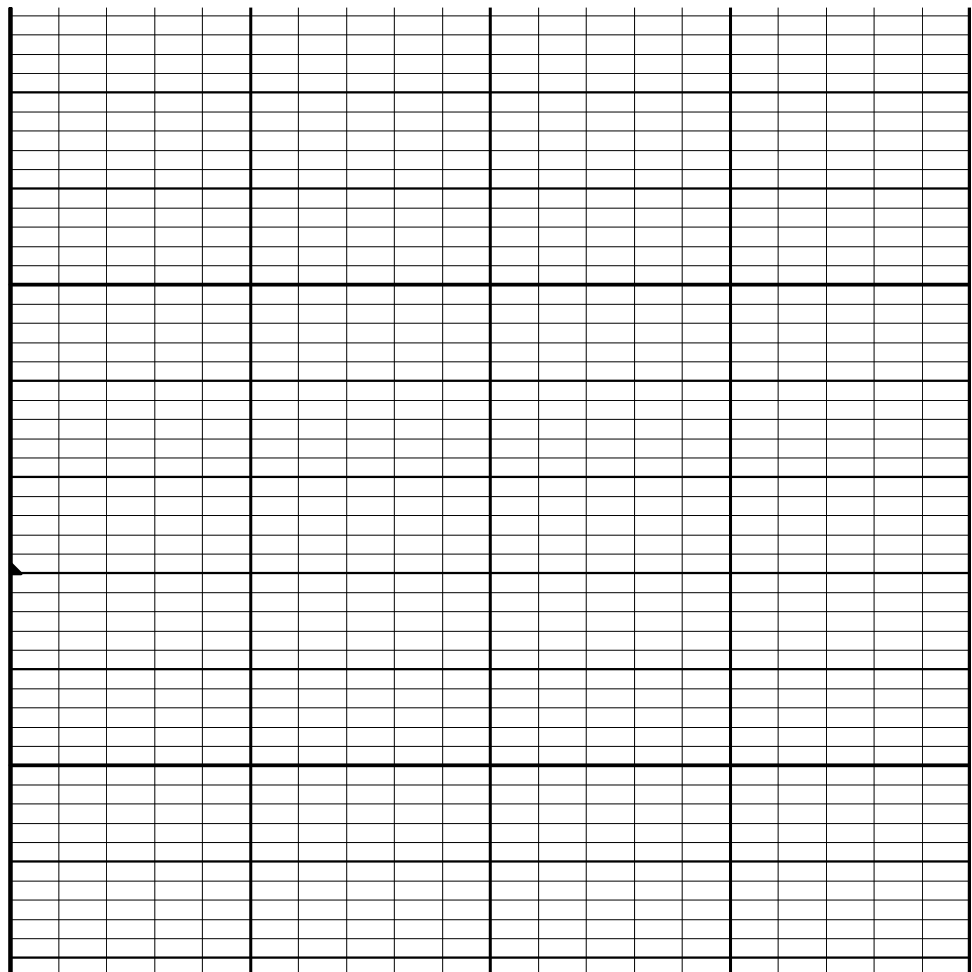
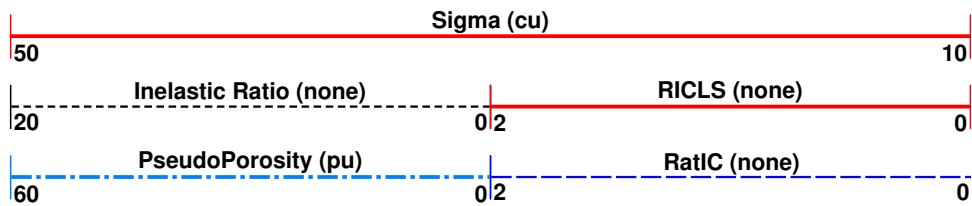
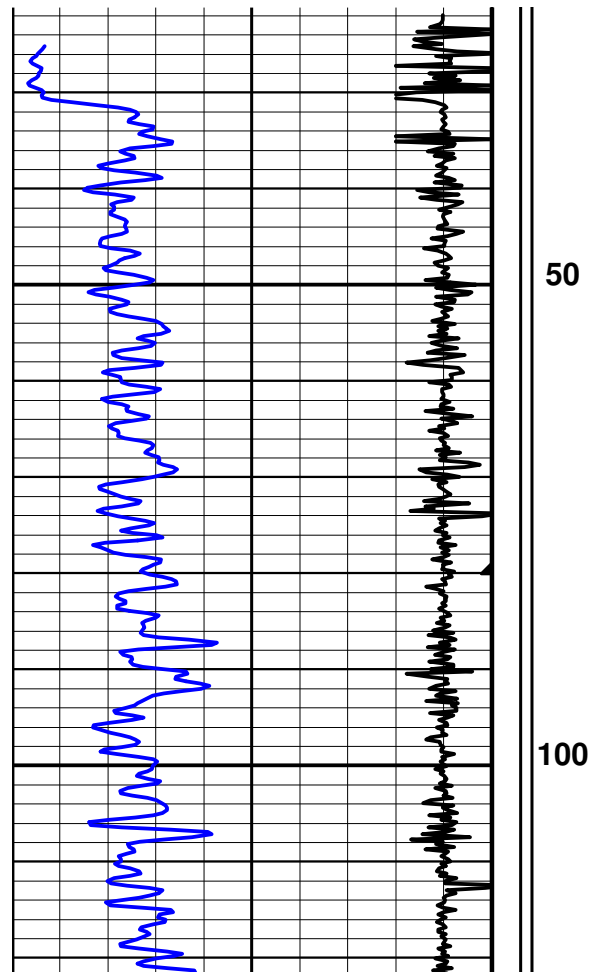
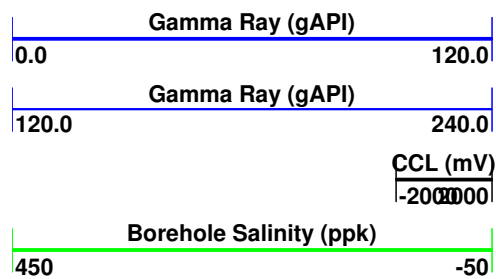
Thank you for choosing FMC Technologies

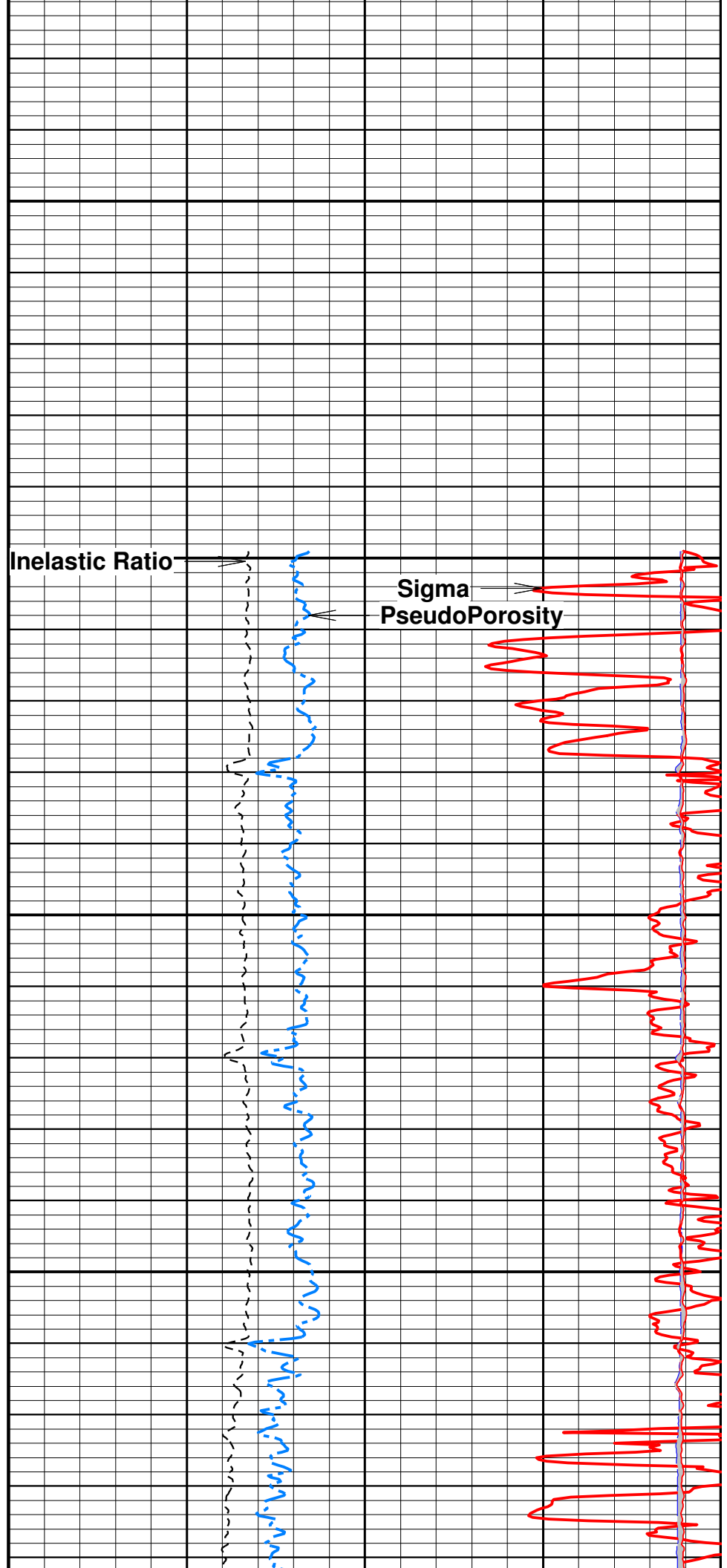
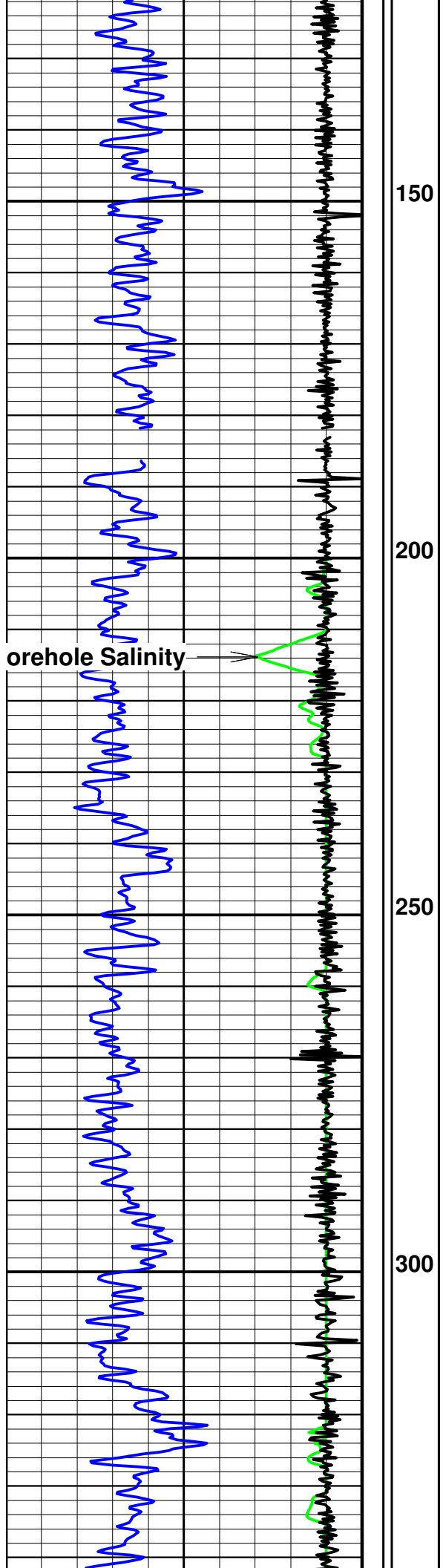
In making interpretations of logs, Contractor's employees will give the customer the benefit of their best judgement, but since all interpretations are opinions, based on inferences from electrical or other measurements, Contractor cannot, and does not, guarantee the accuracy or the correctness of any interpretation.

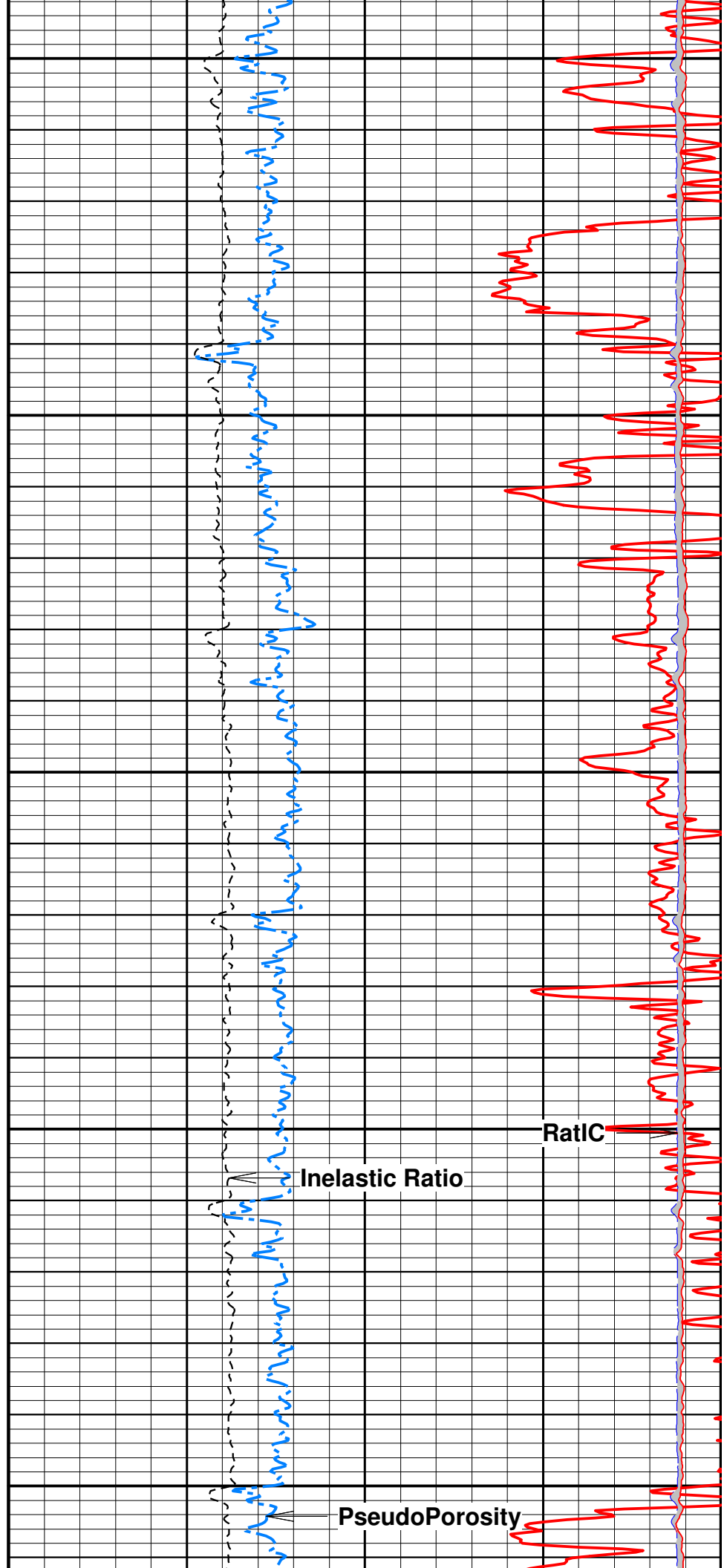
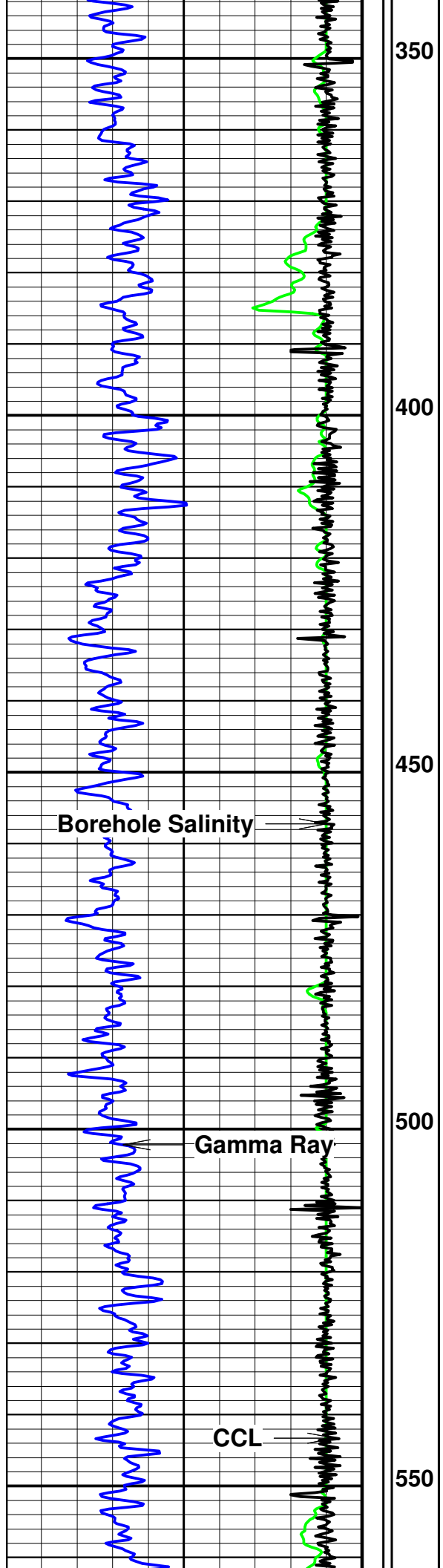
Main Pass Logged Under 0 PSI Well Head Pressure

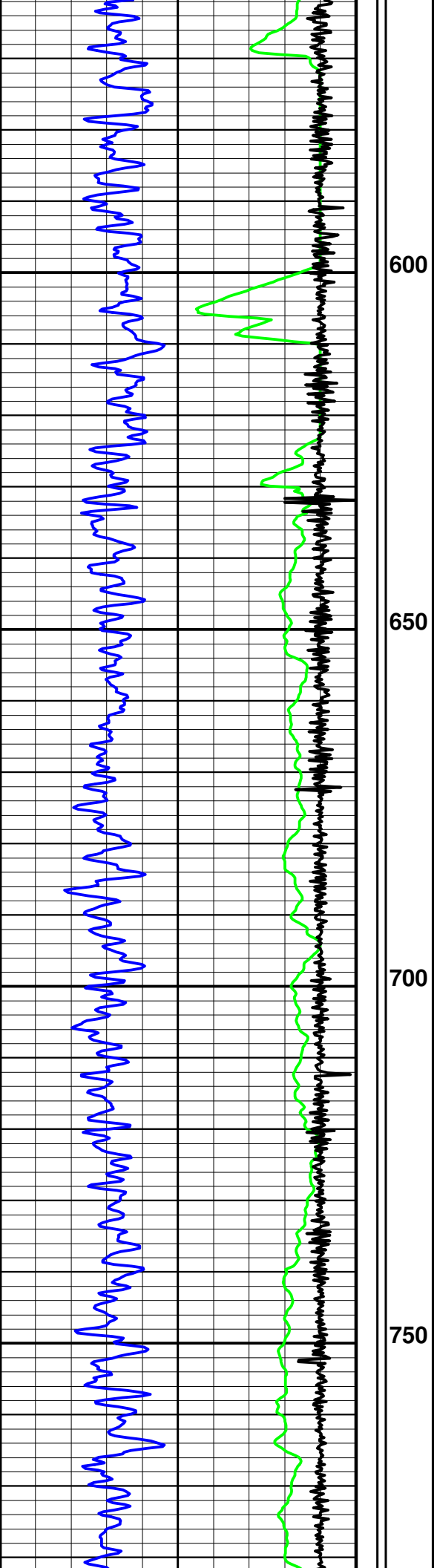
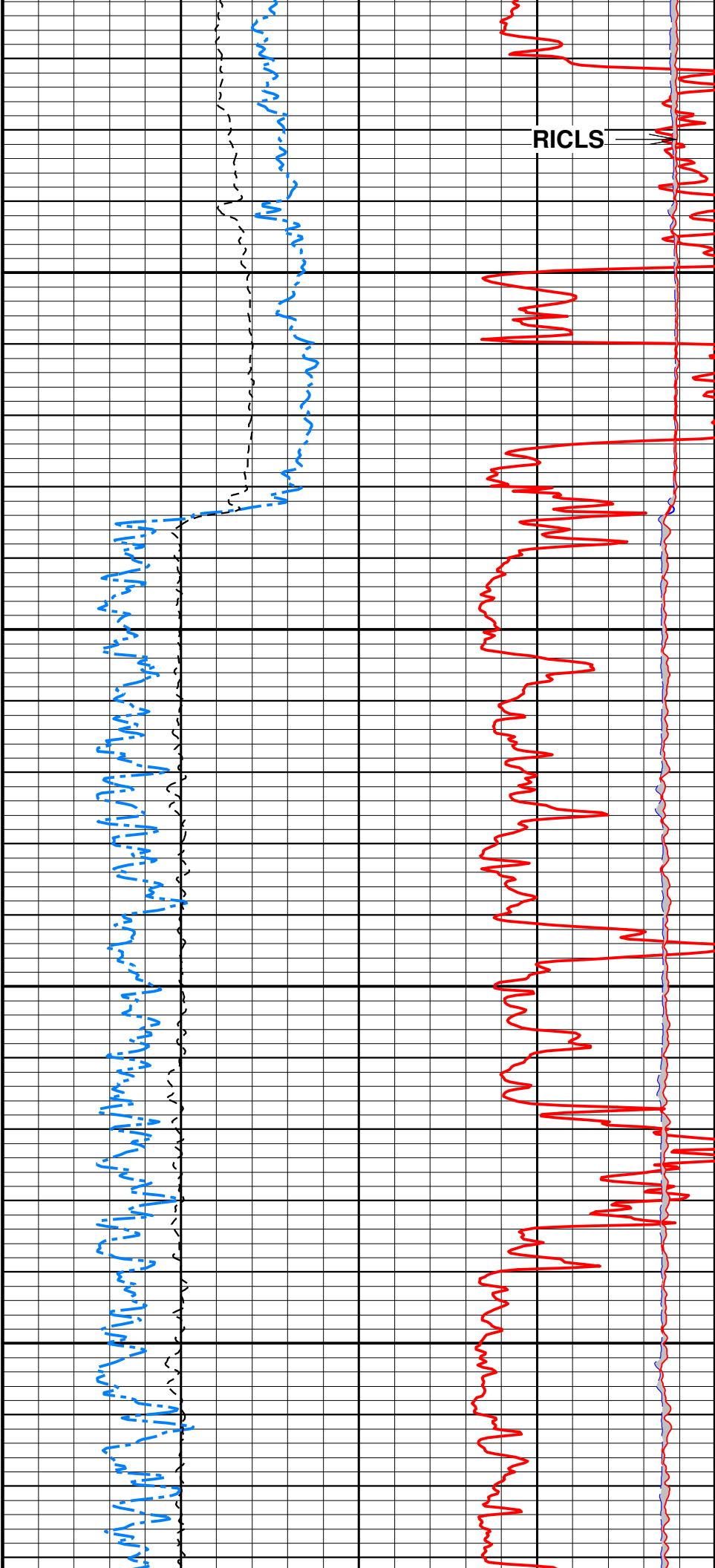
Company : Whiting Oil & Gas
Well : Razor 11H-0215A
Scale : 1 : 240
Depth in : Feet
Software : WinAPlot Ver. 5, 89, 20, 0

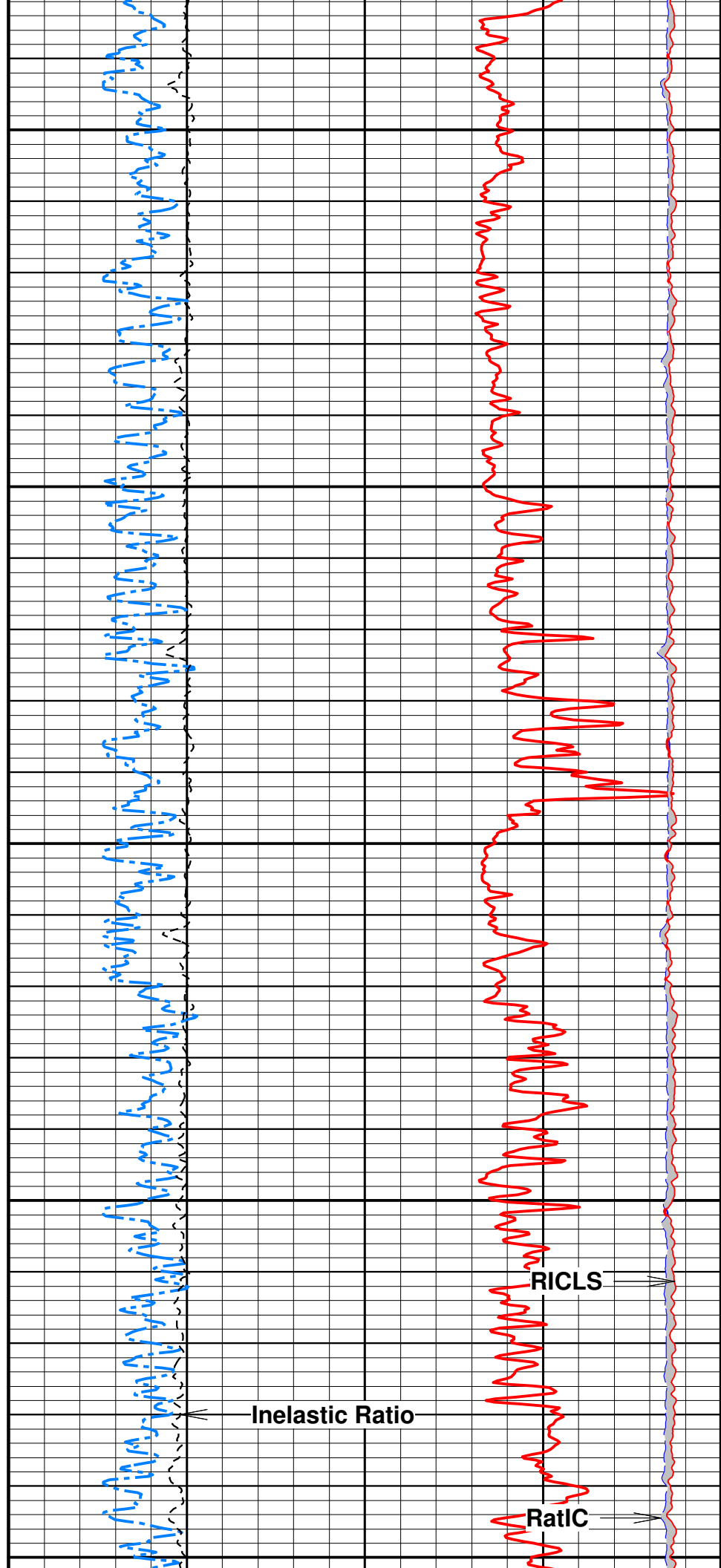
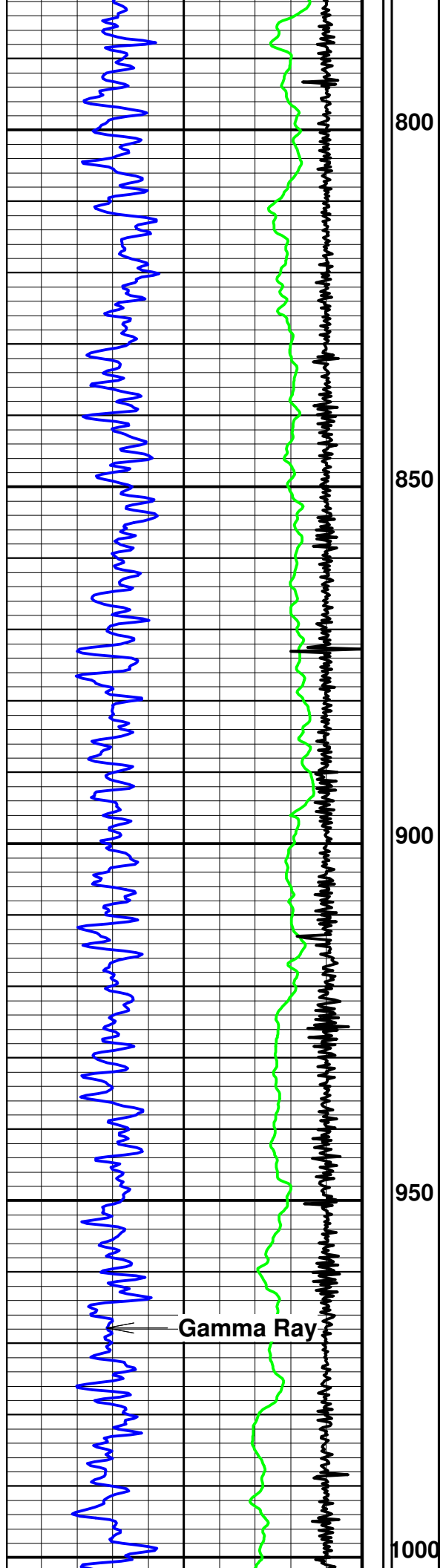
Date : 2015 April 18
Time : 09:25:31
Remarks :
File Name : Main Pass

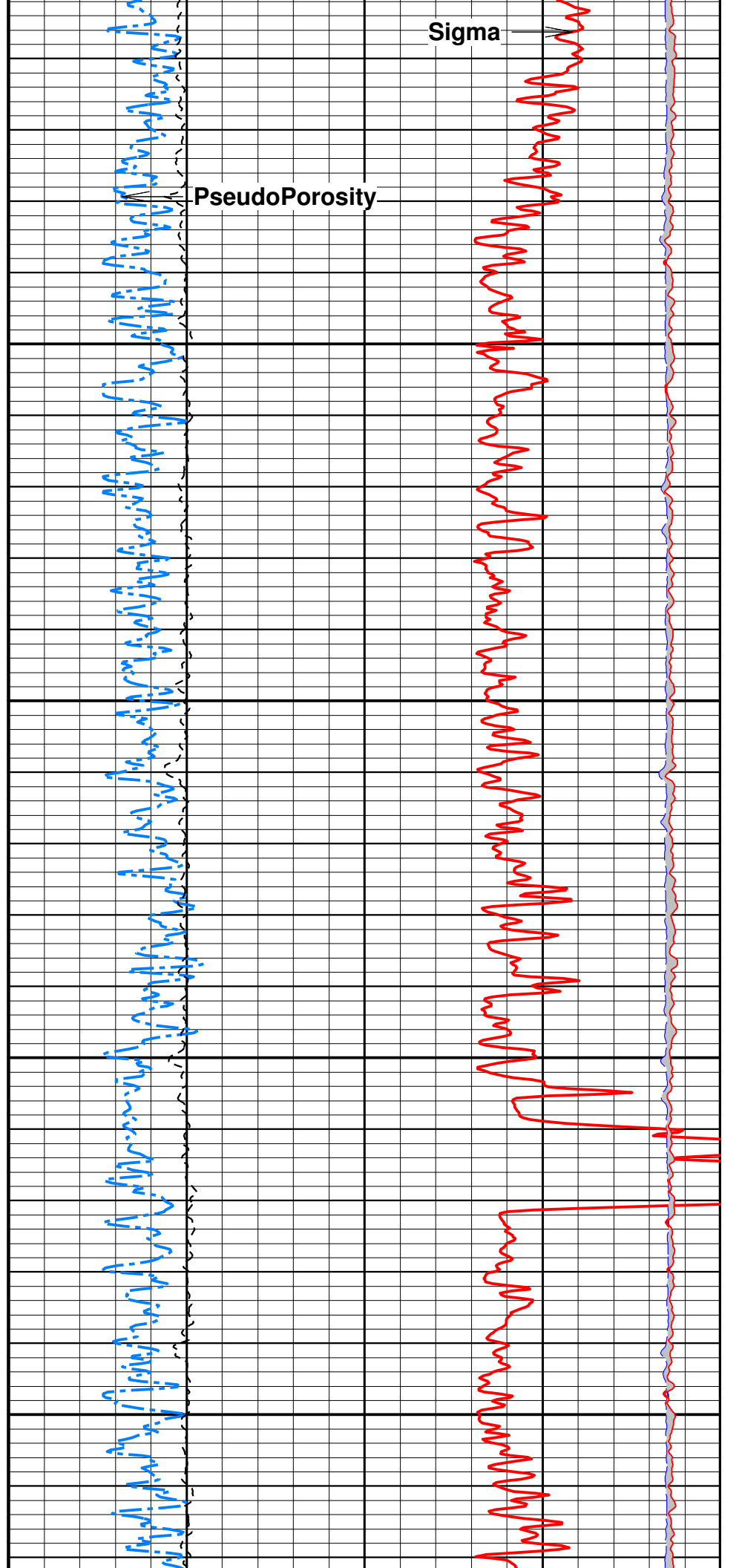
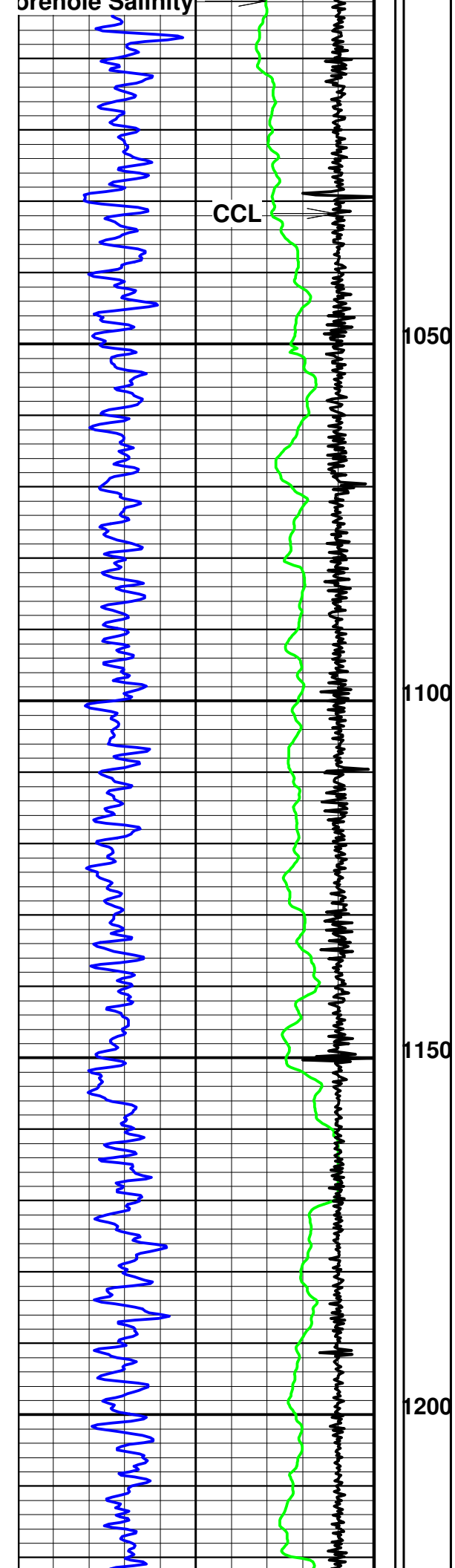


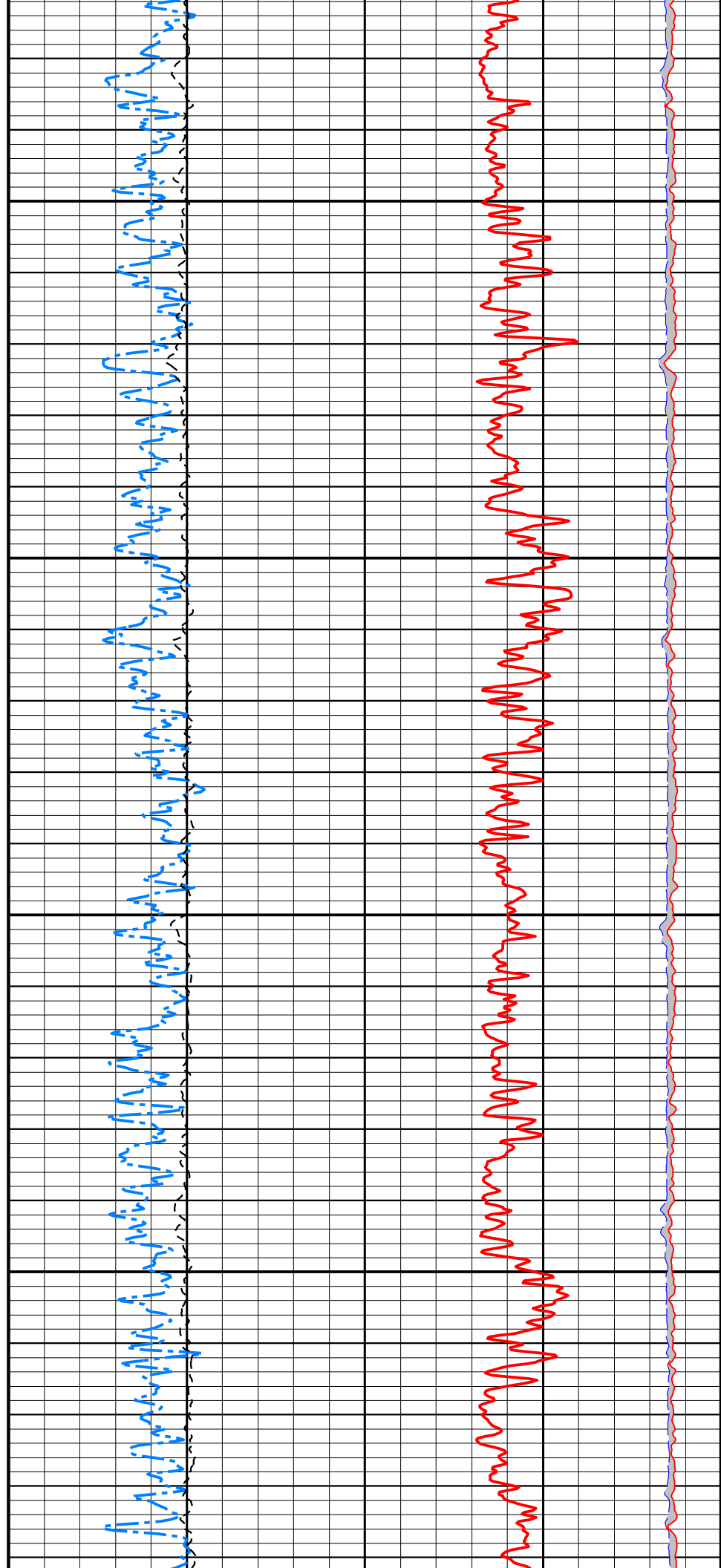
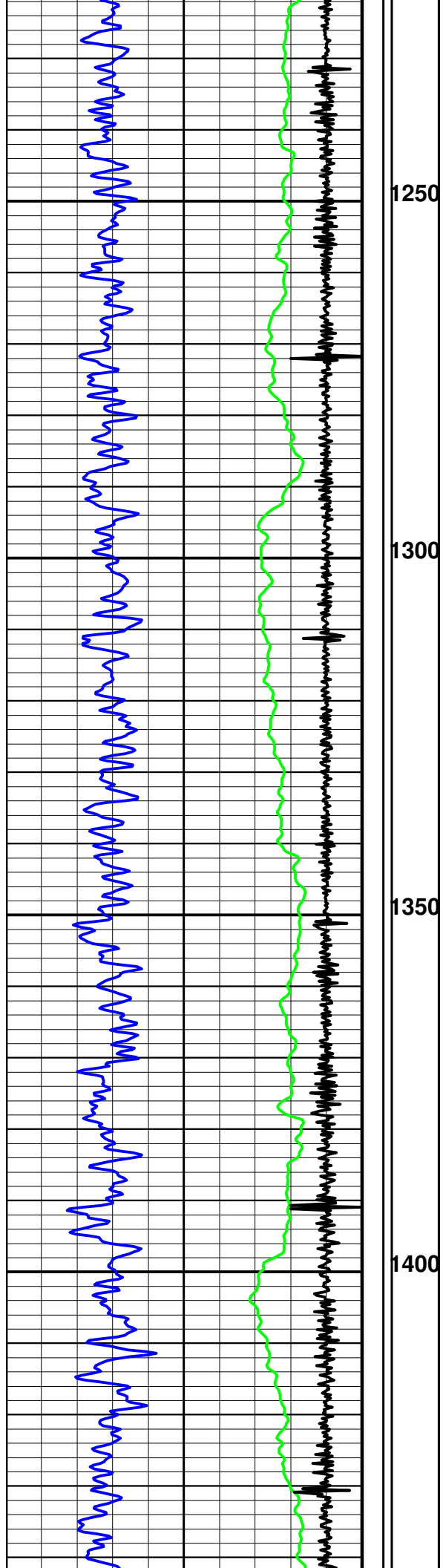


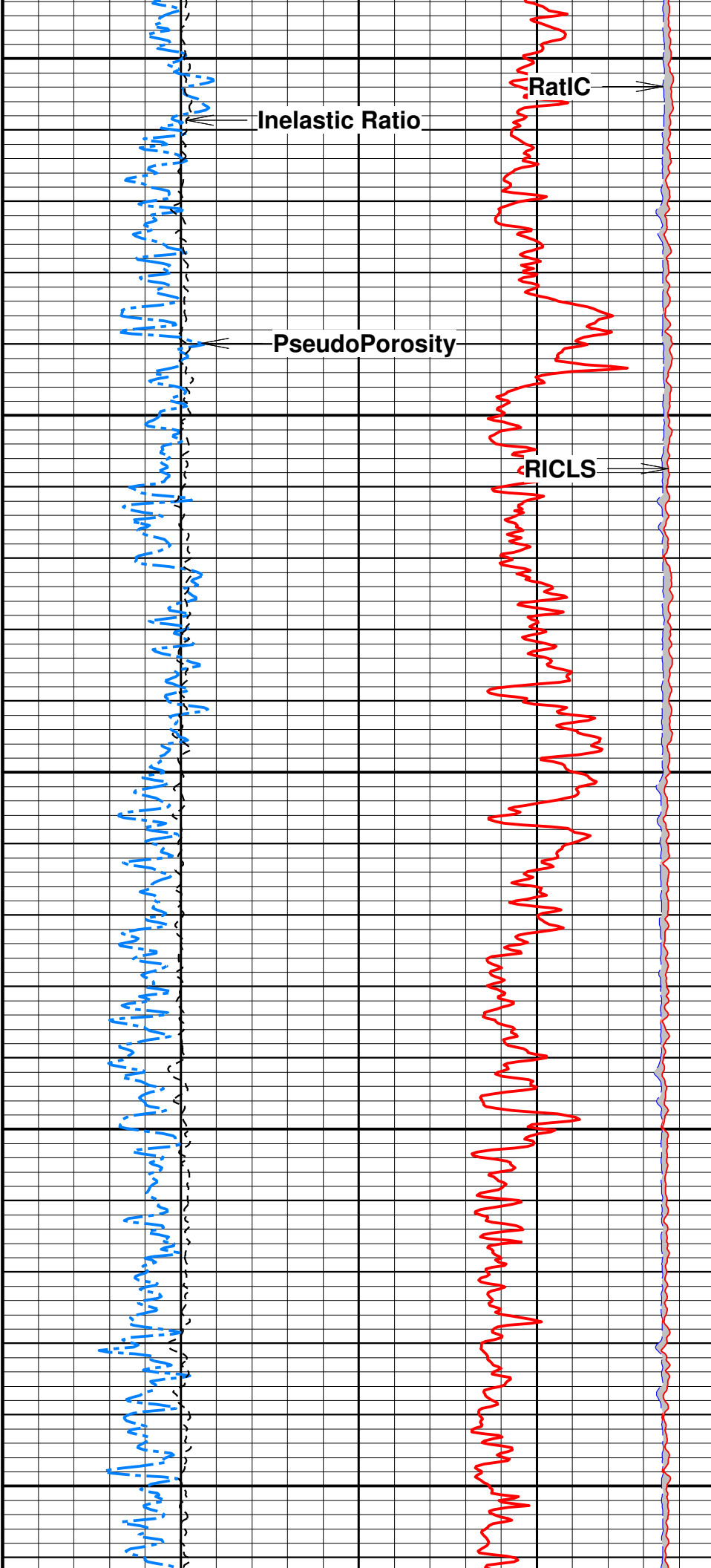
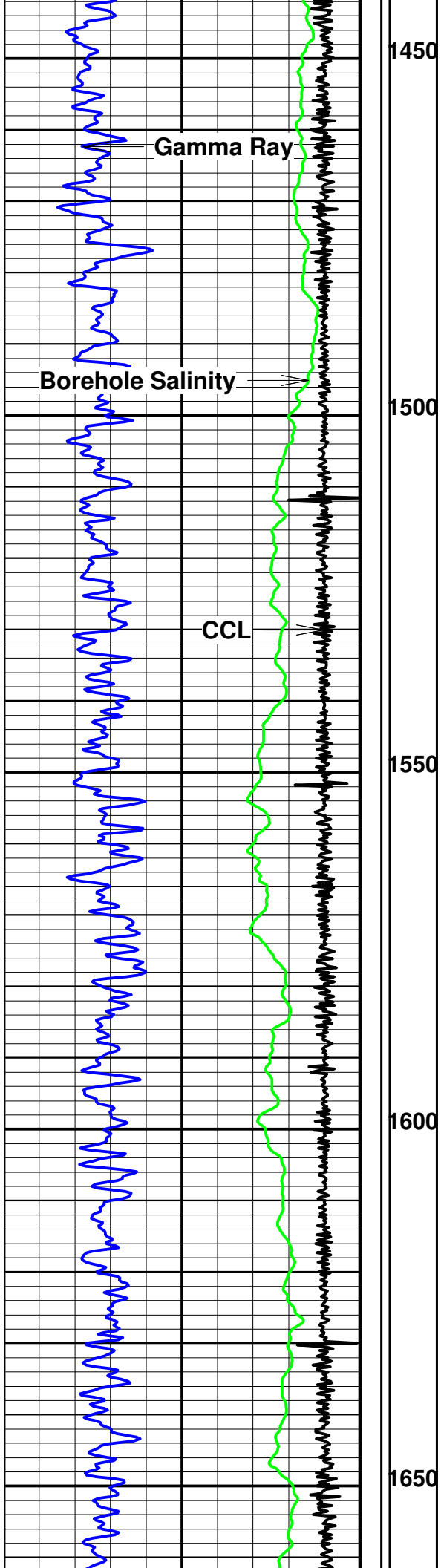


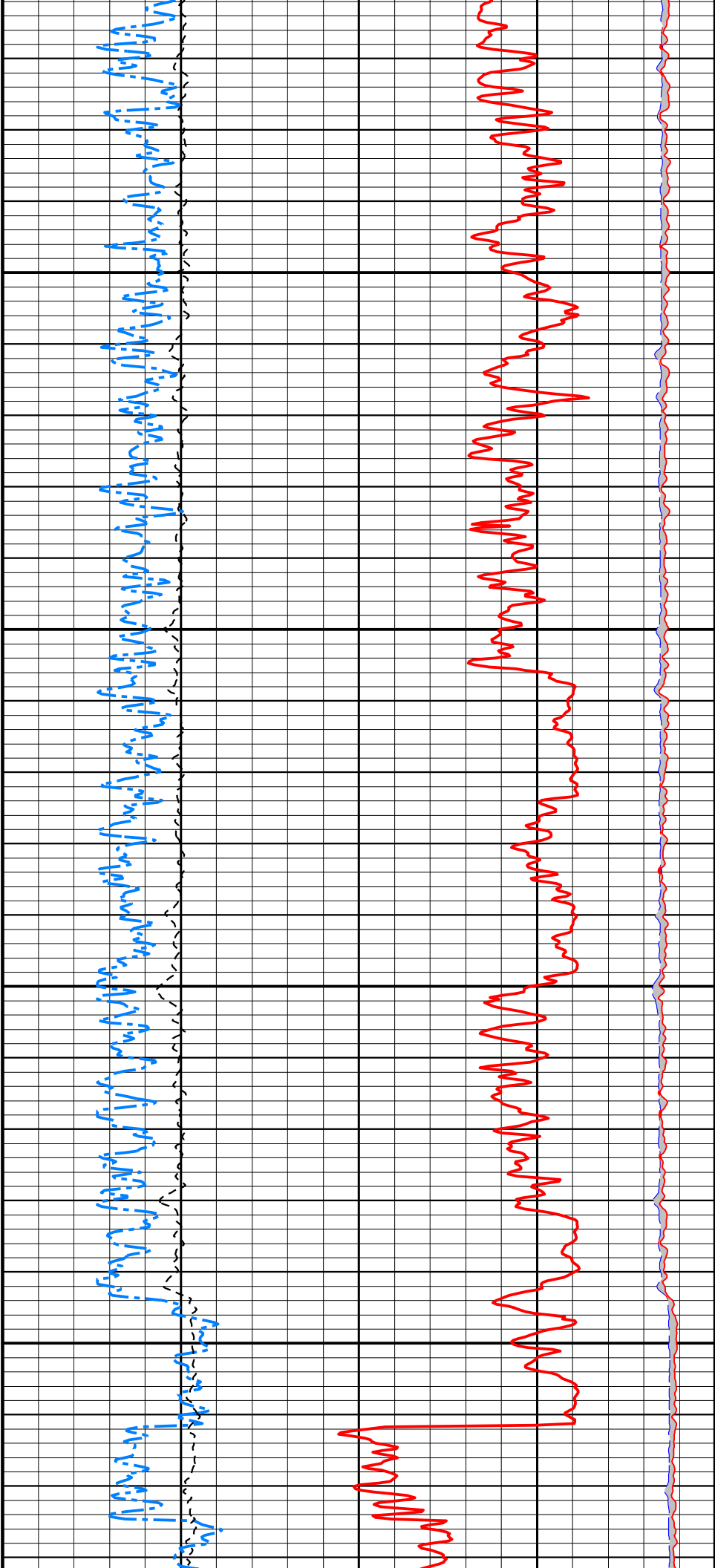
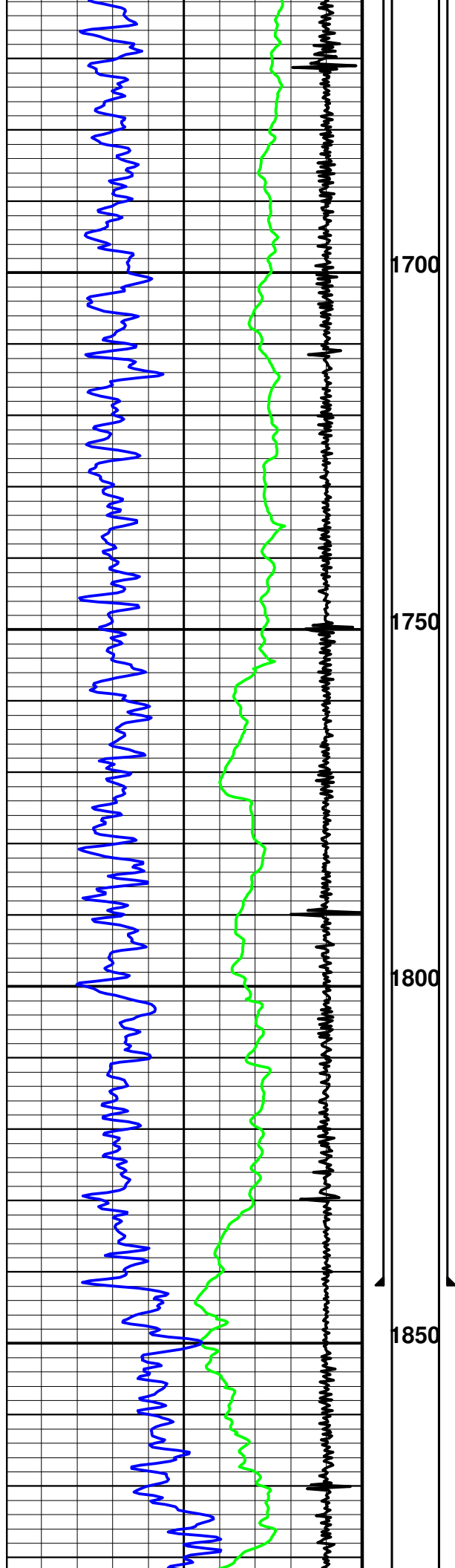


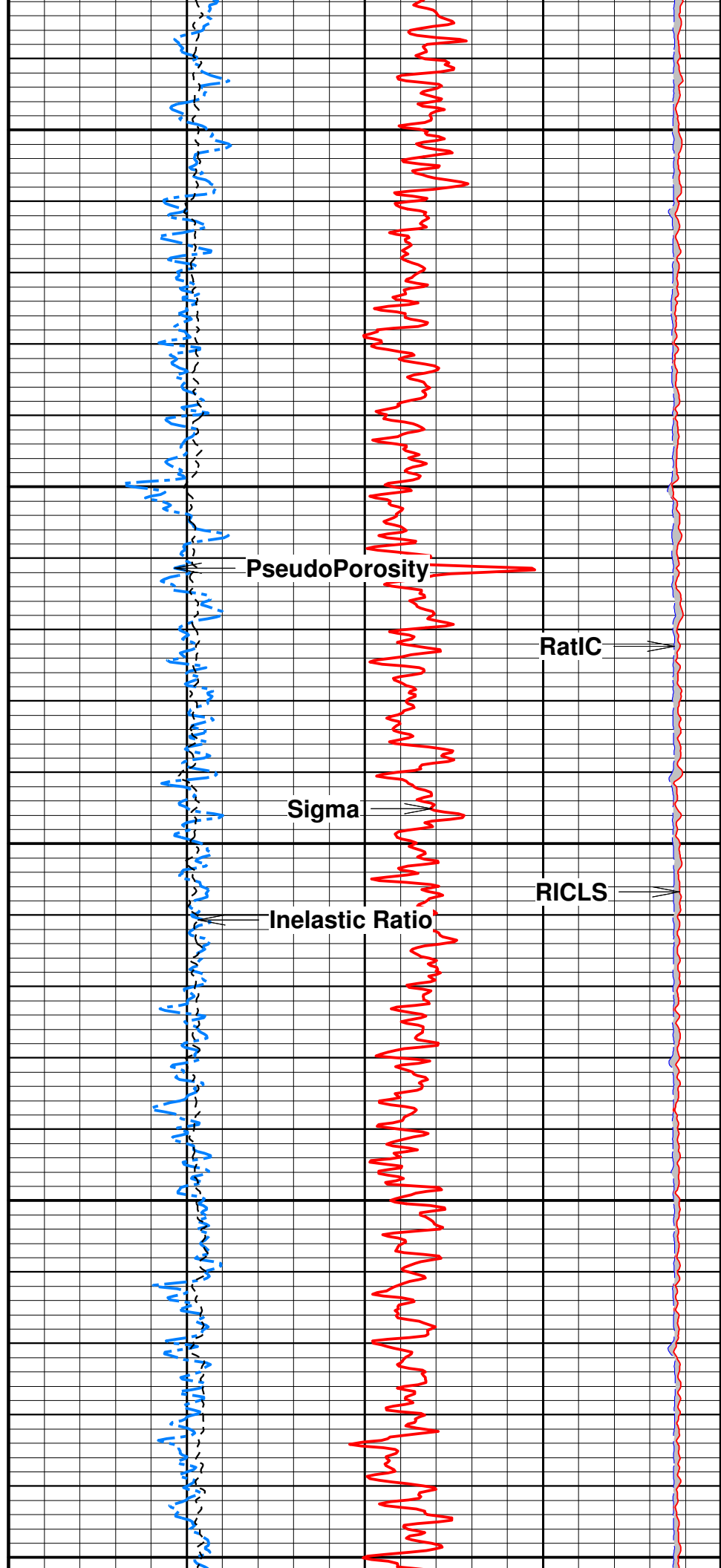
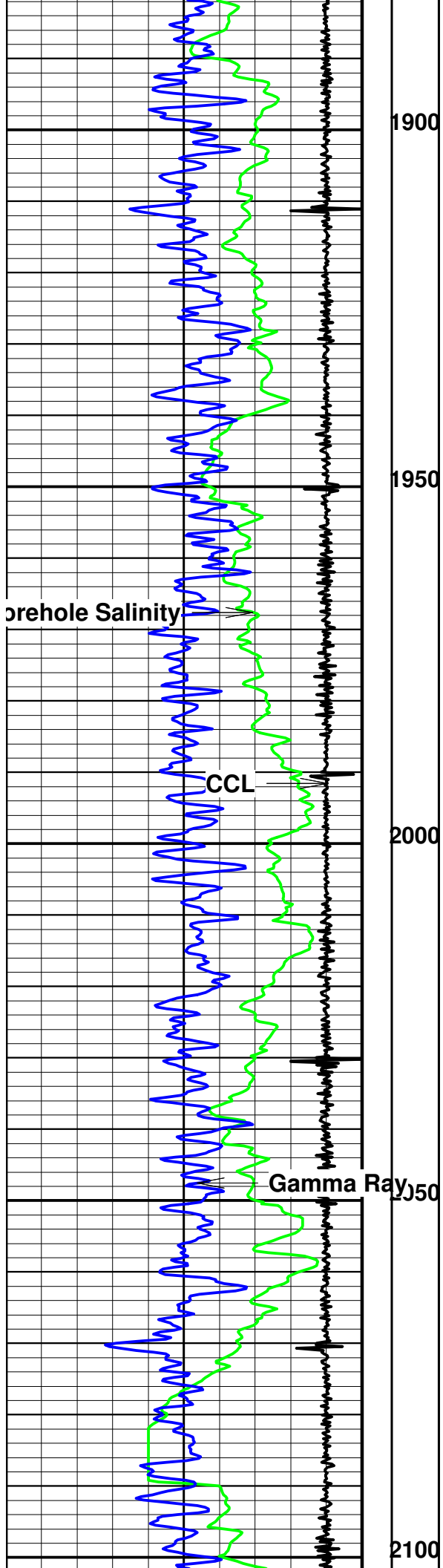


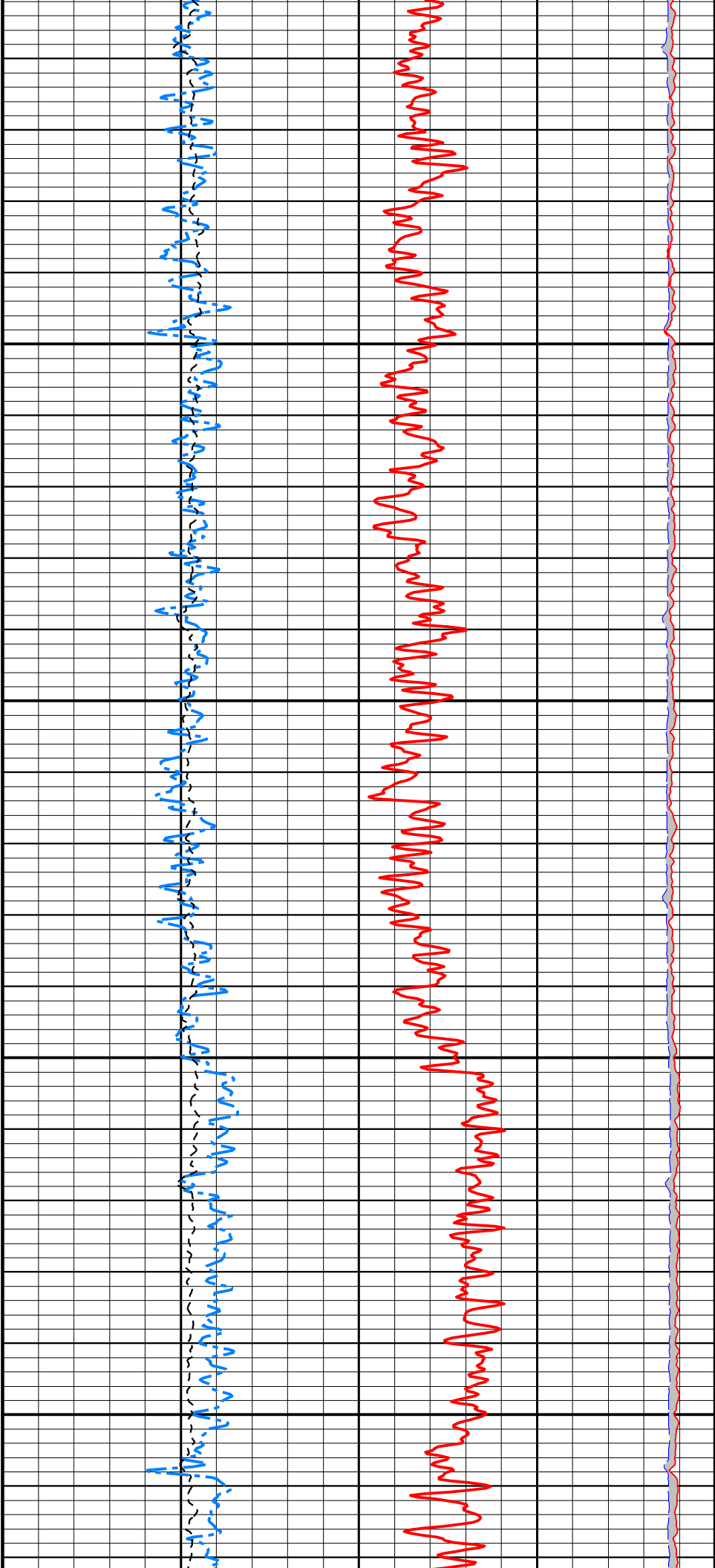
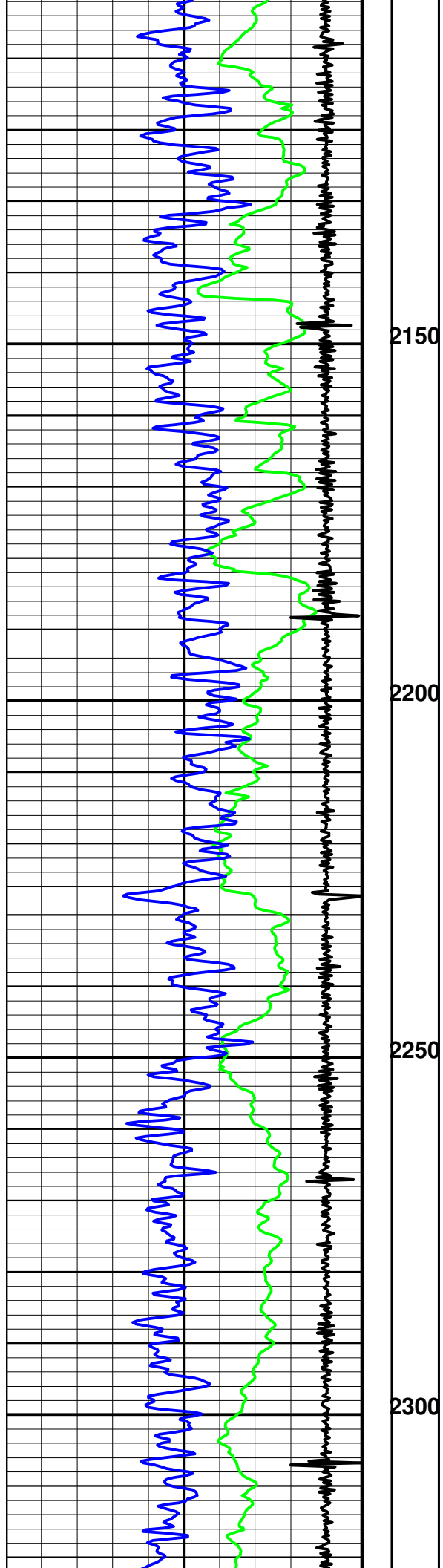


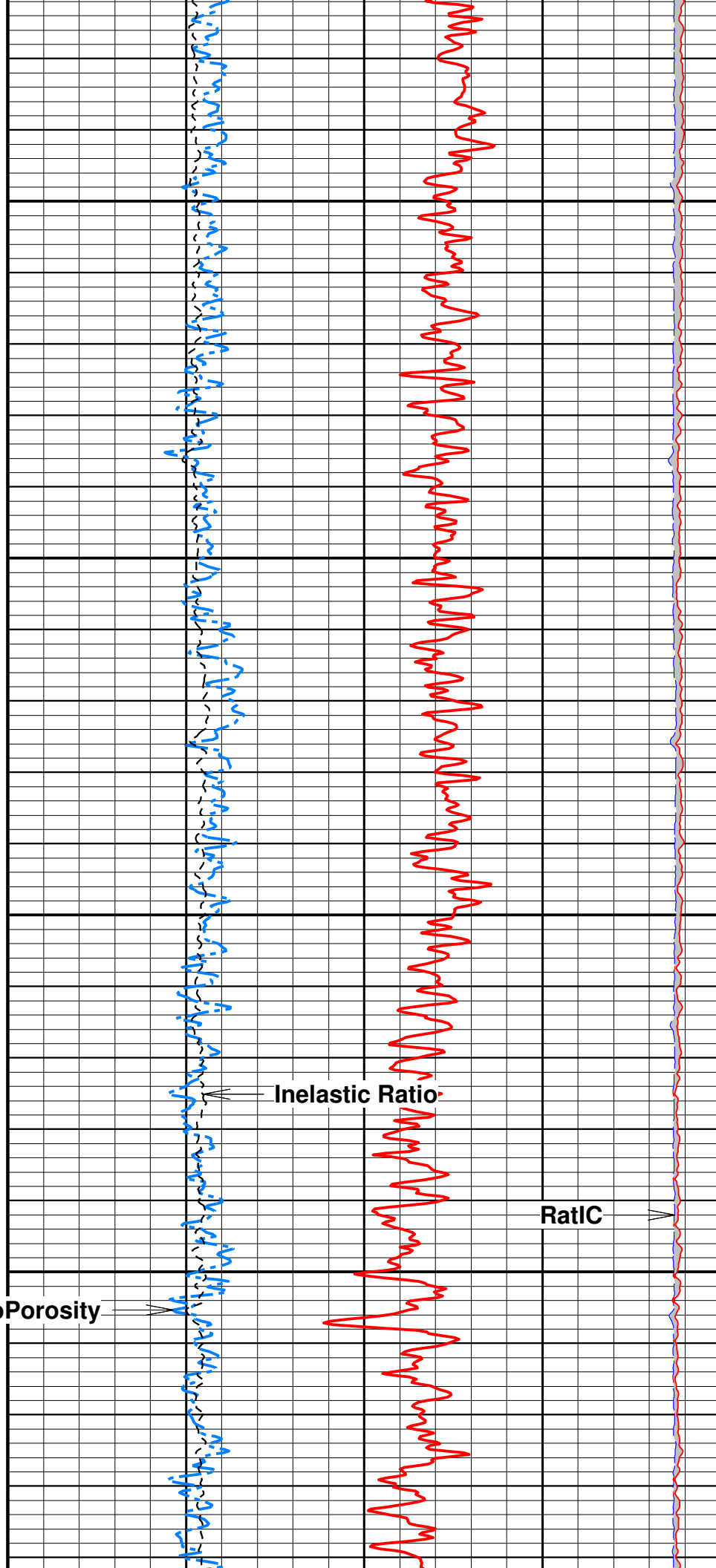
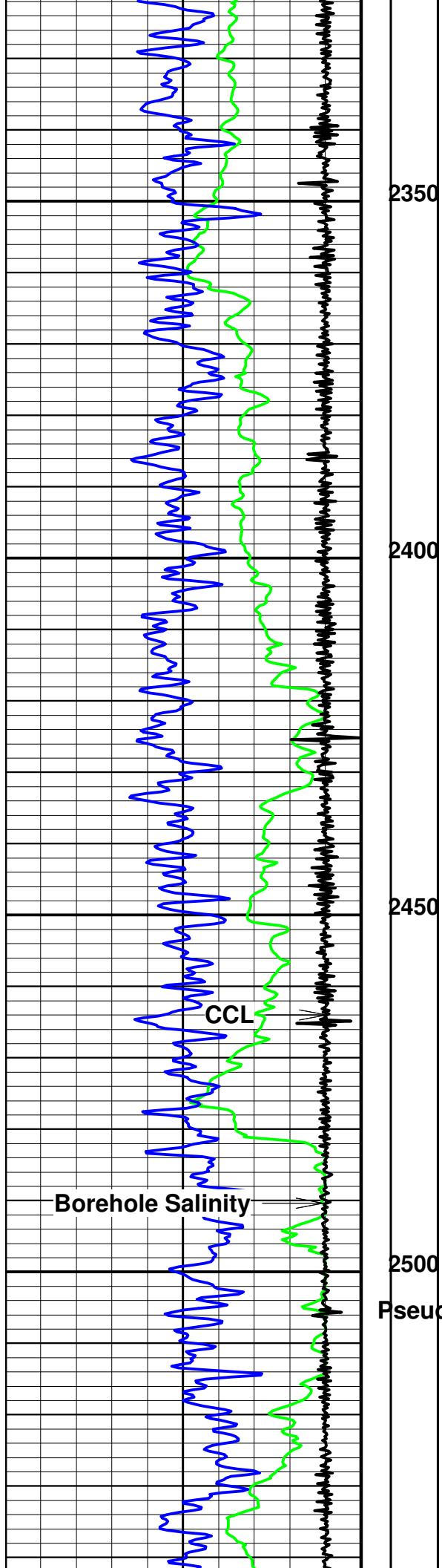


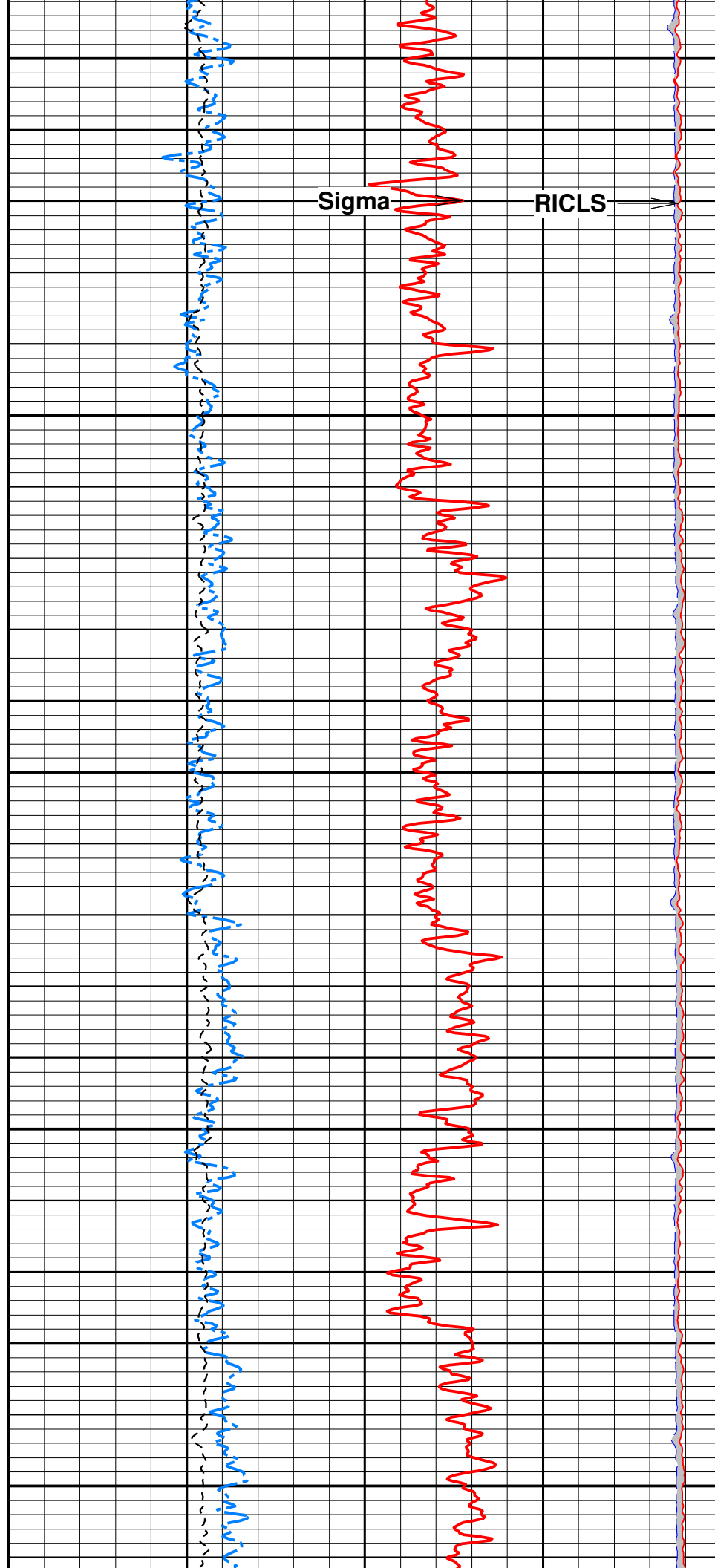
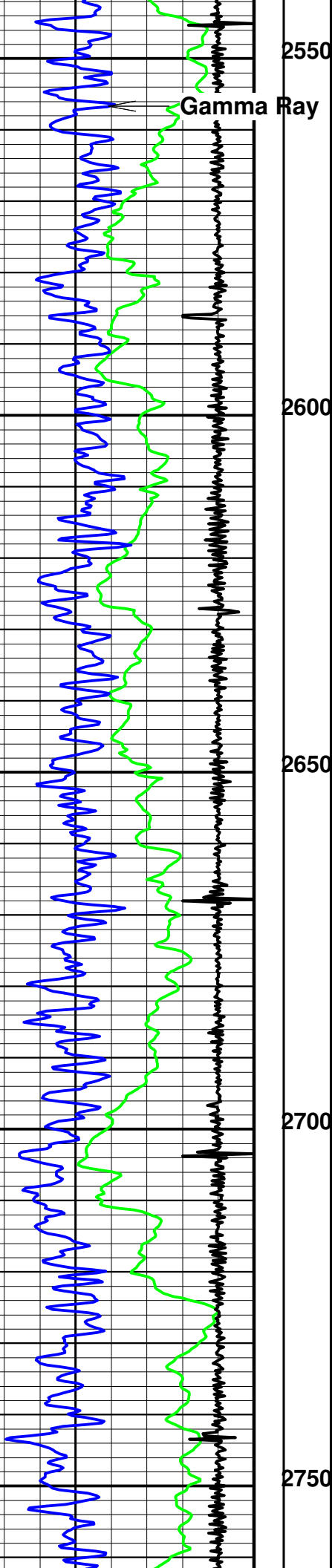


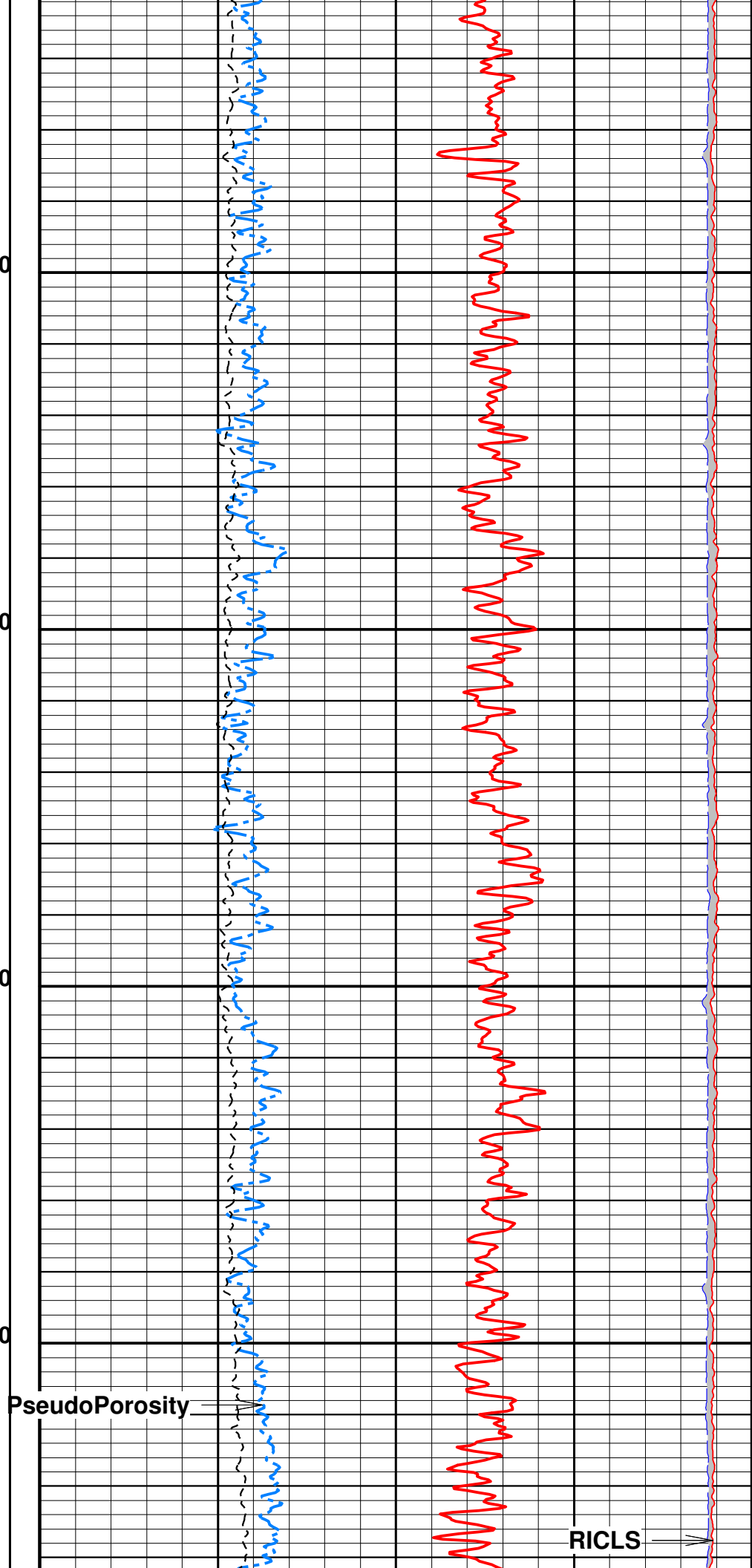
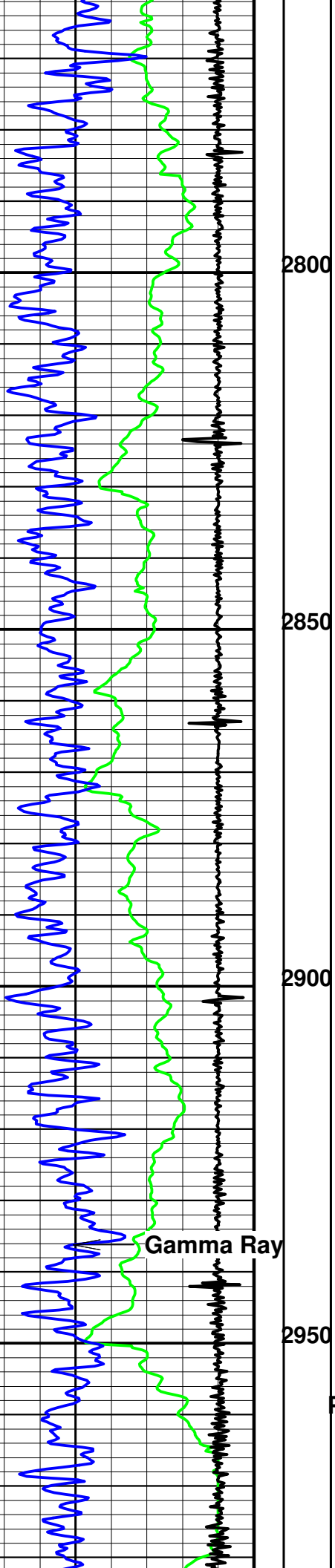


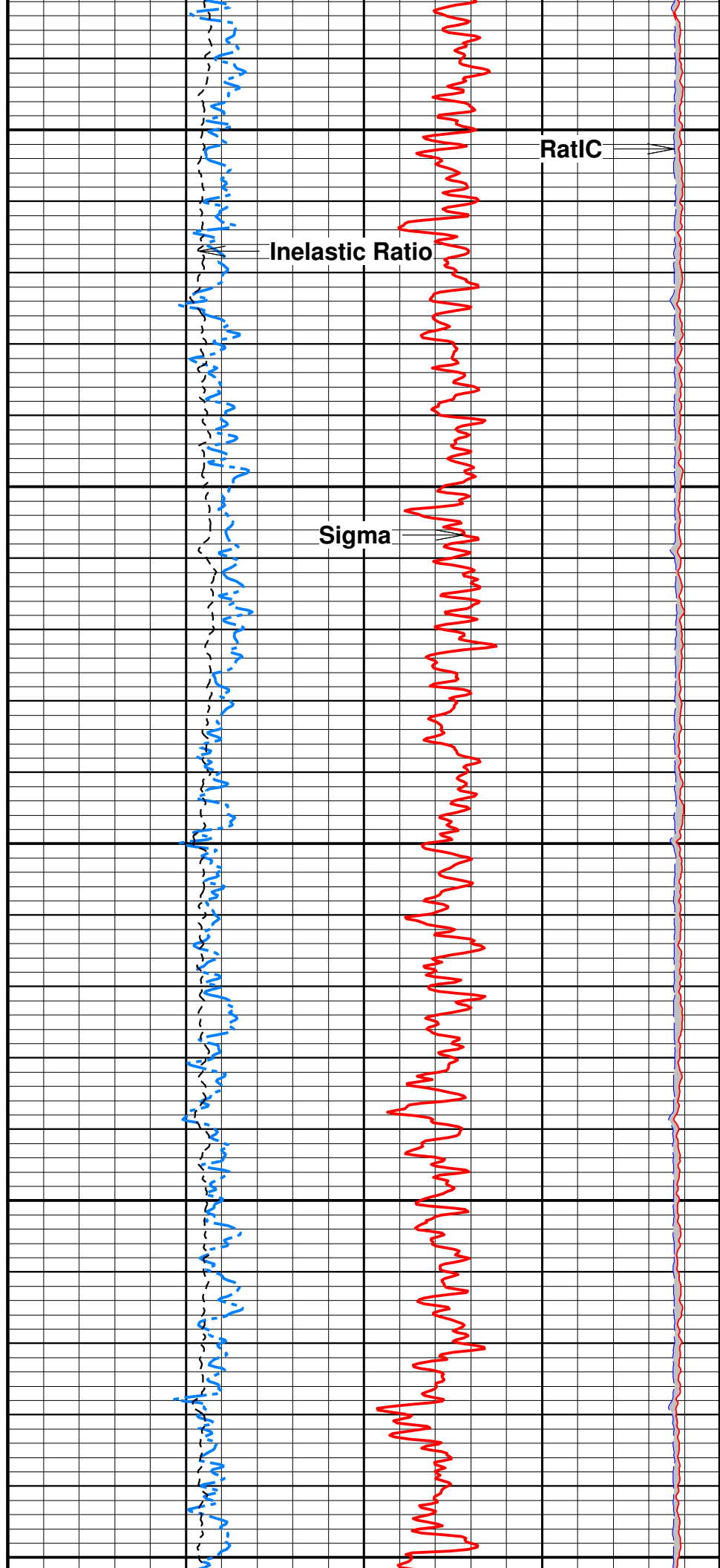
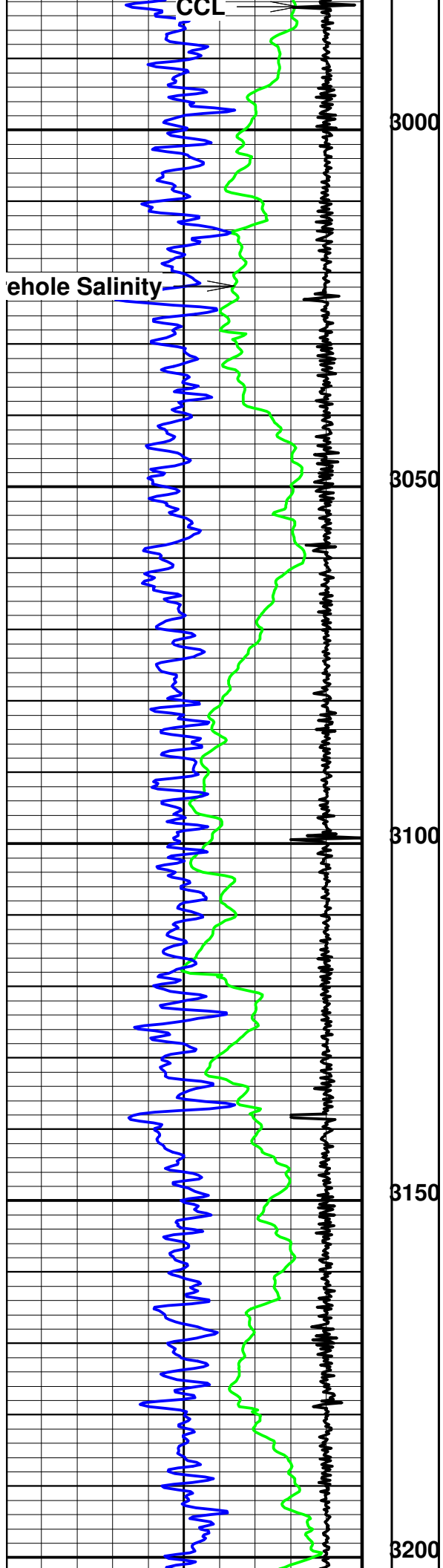


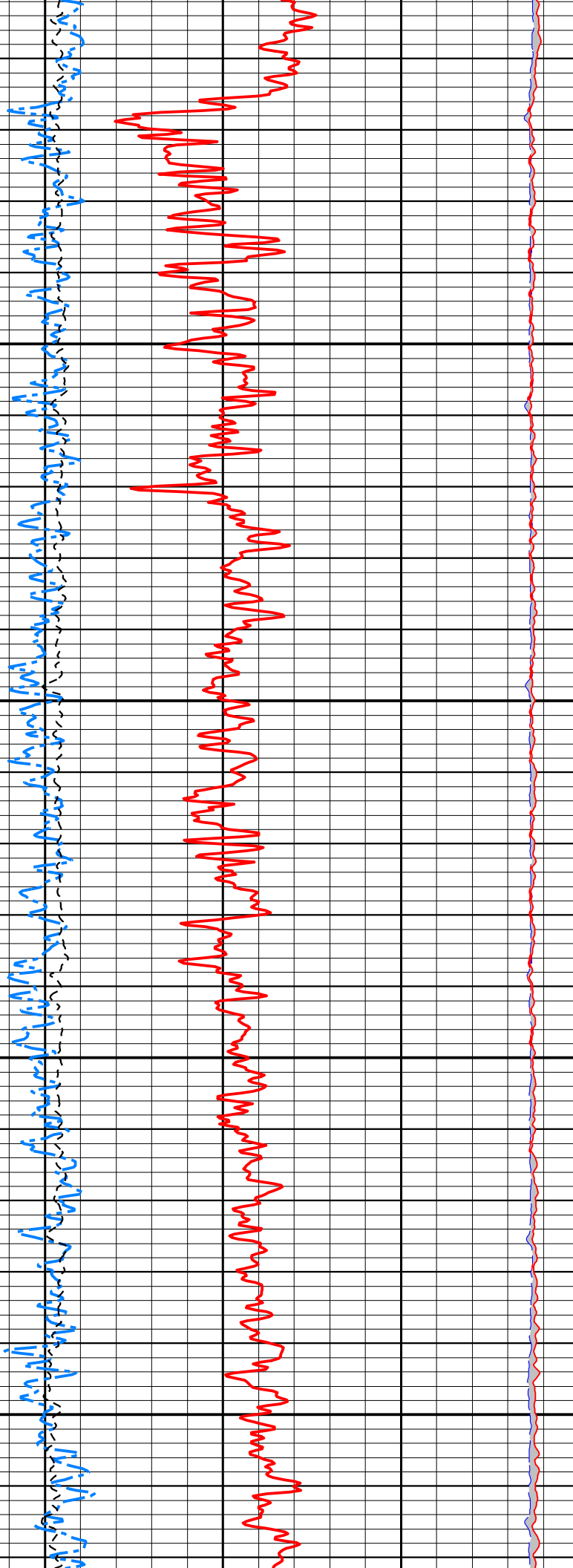
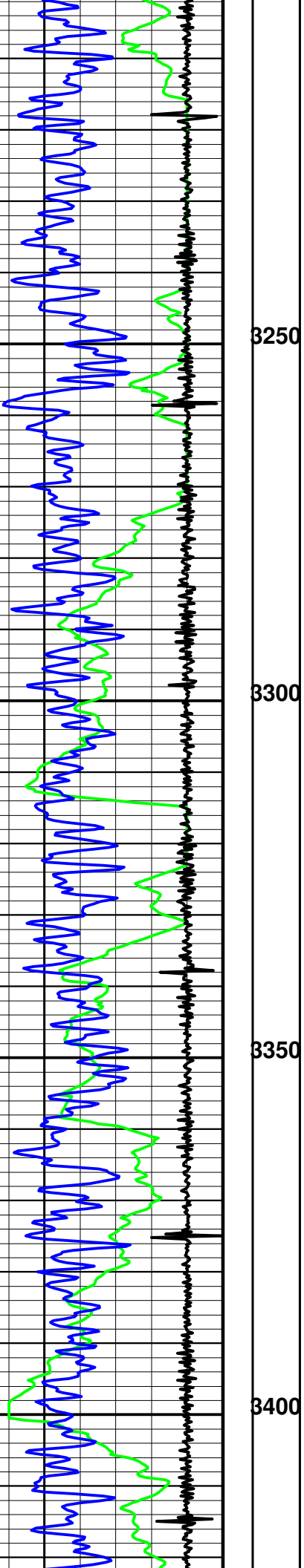


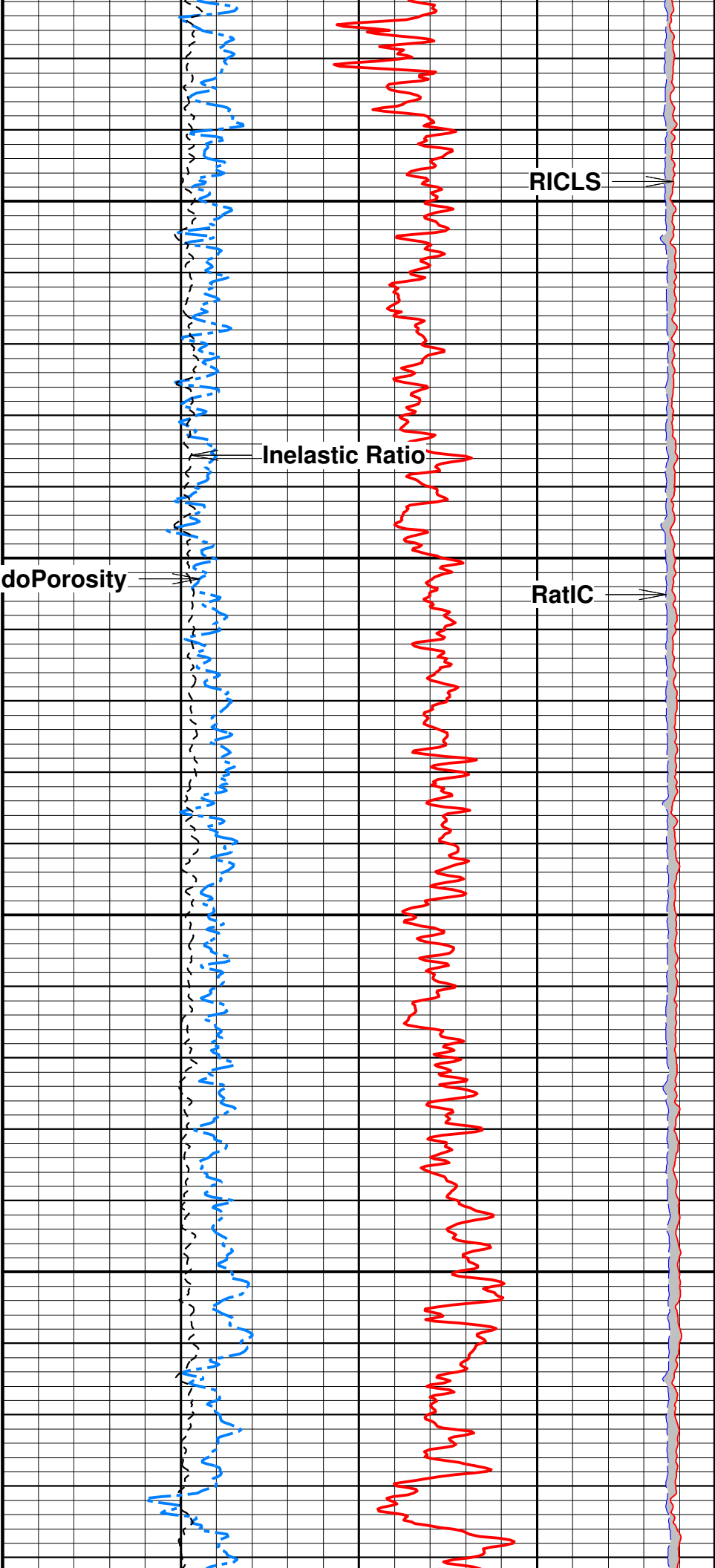
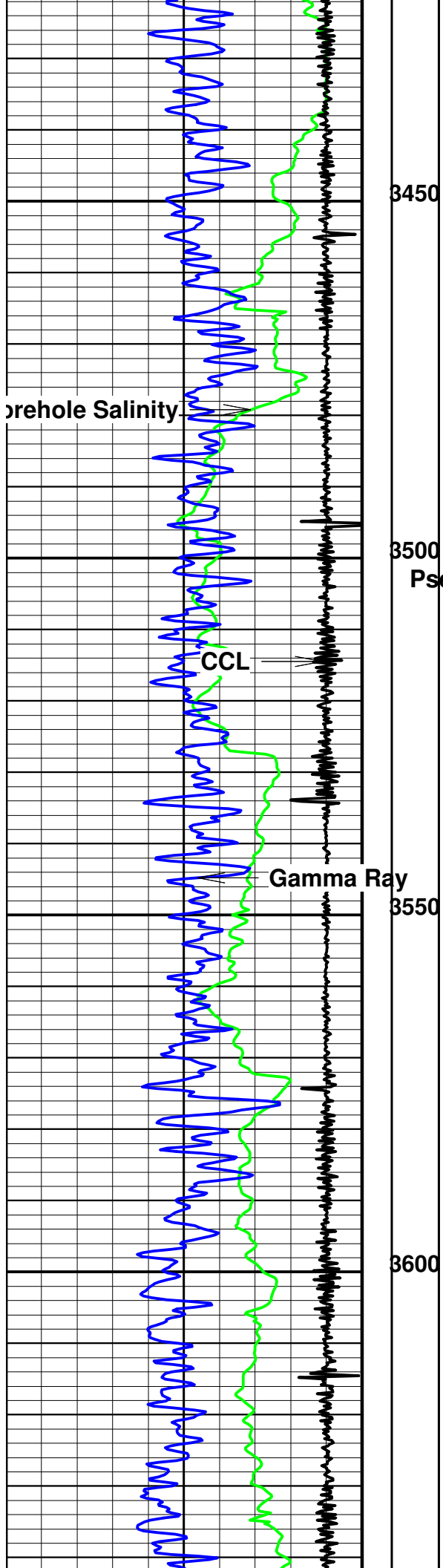


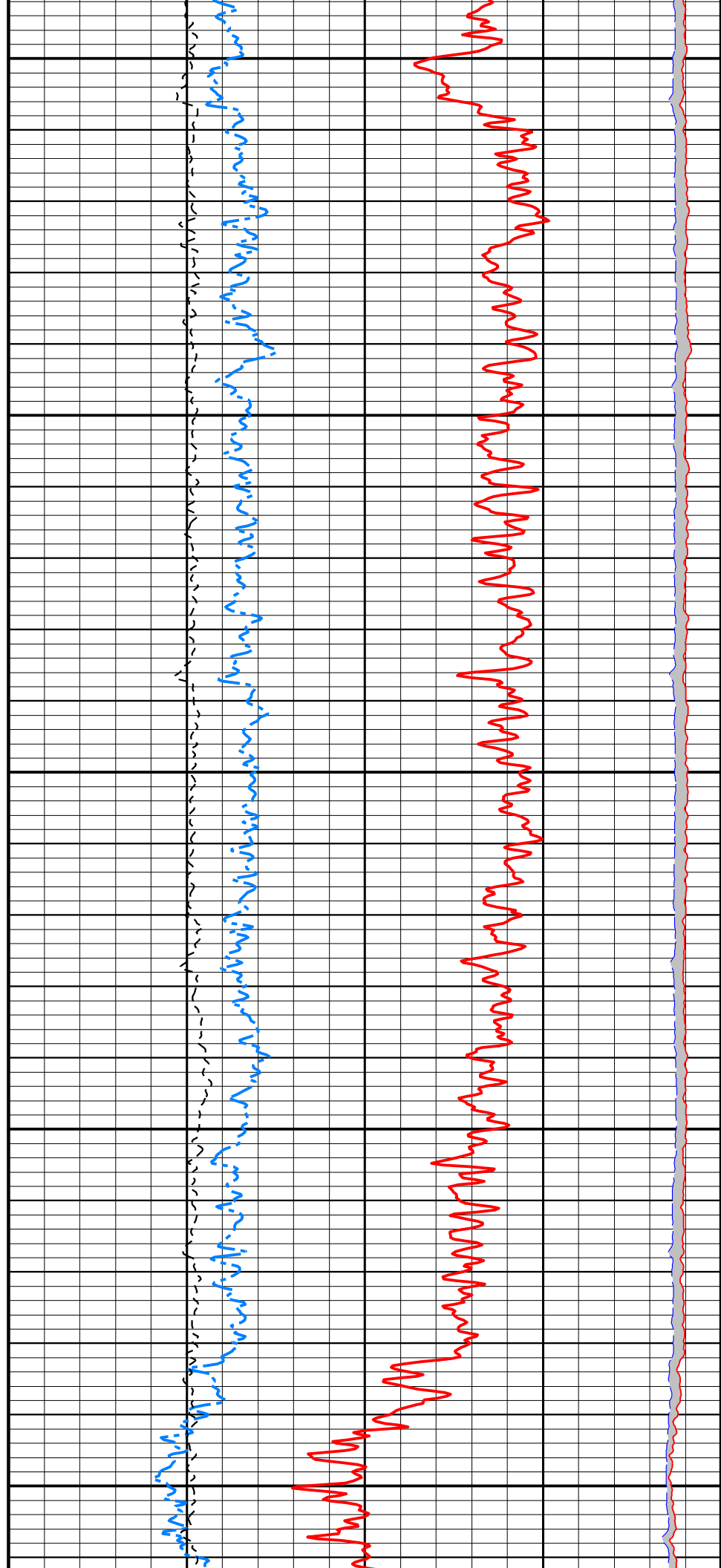
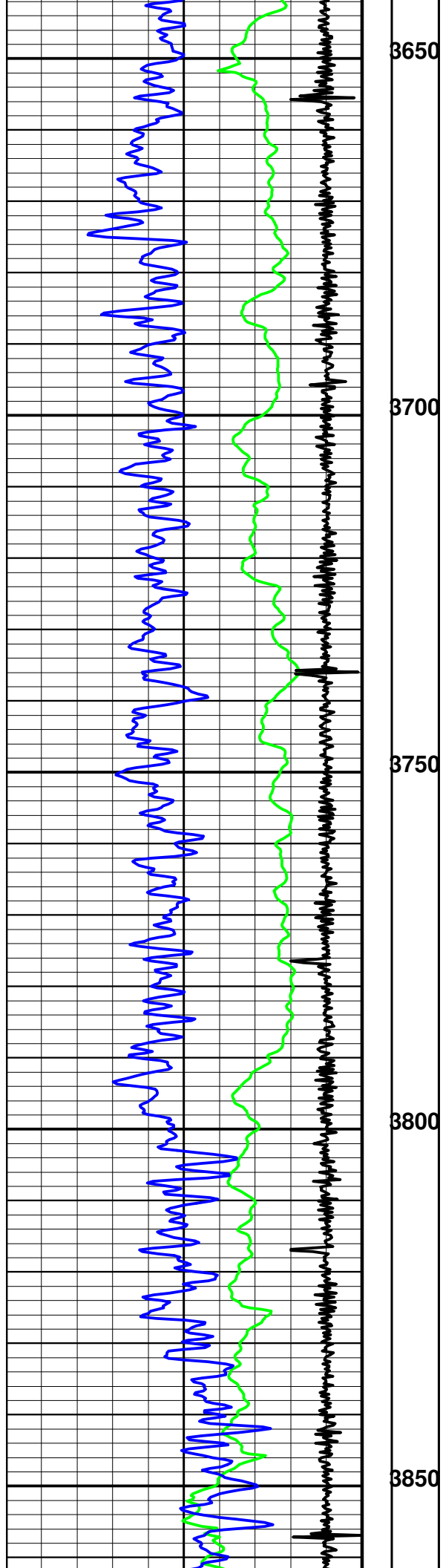


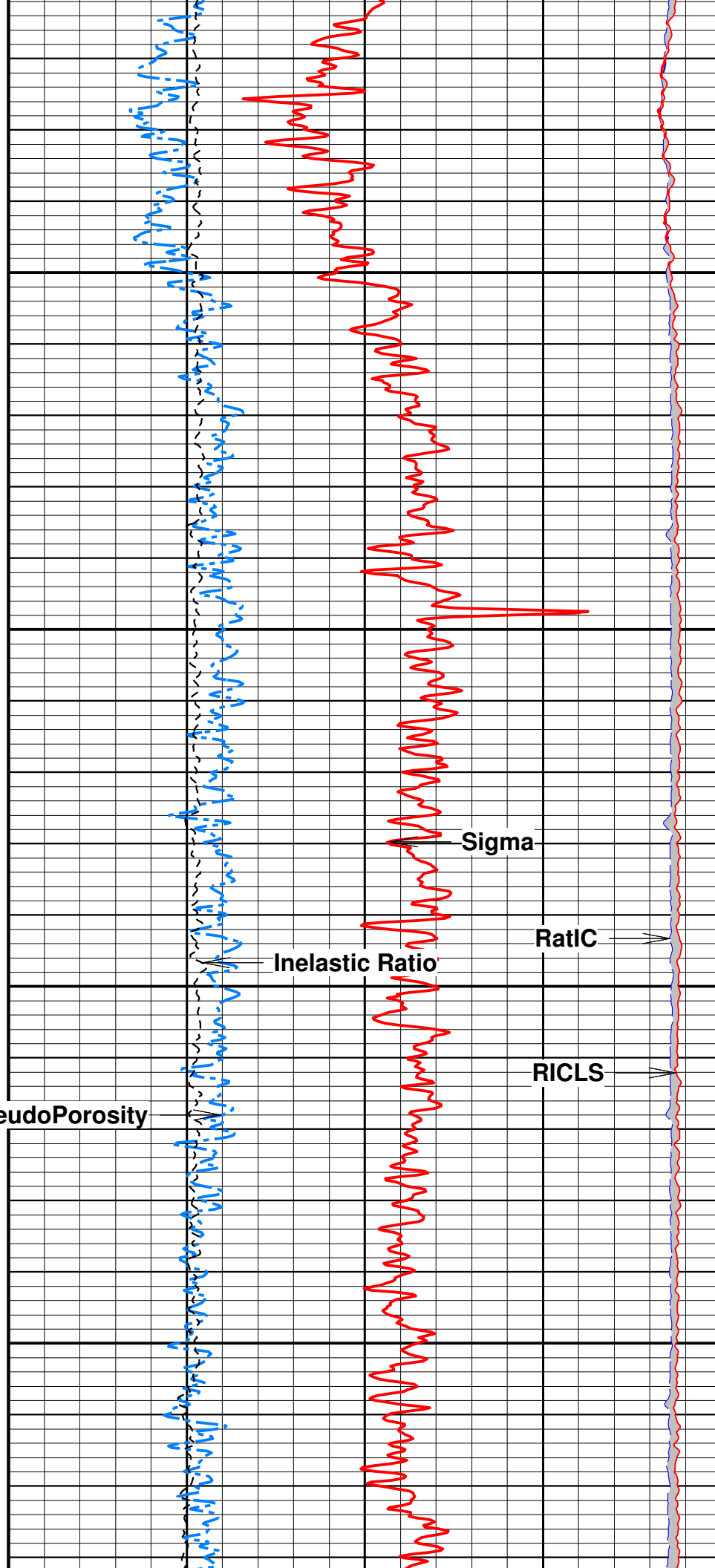
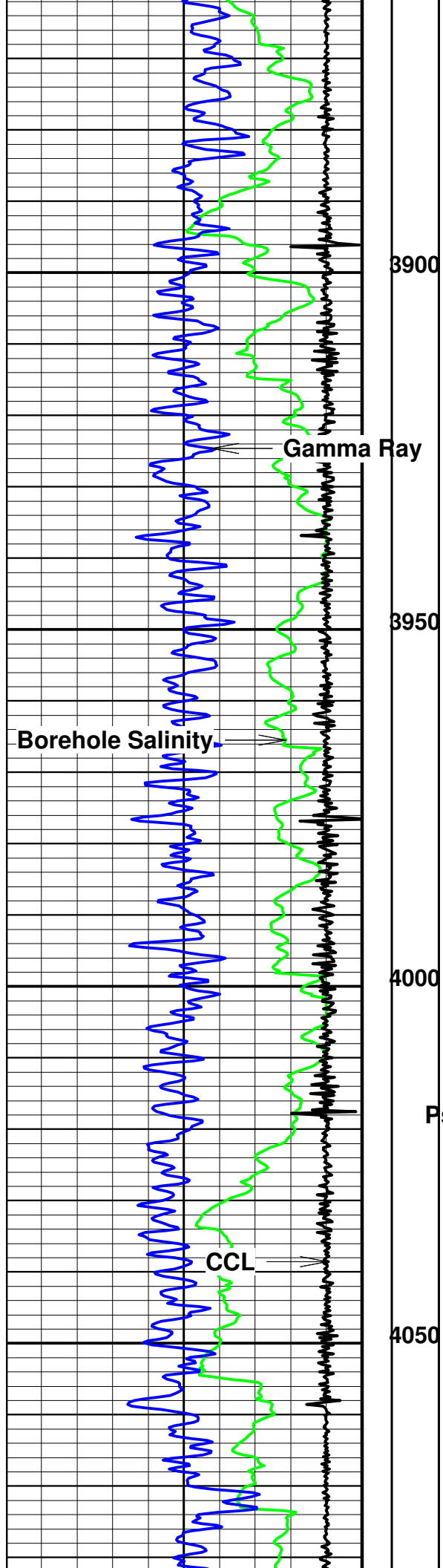


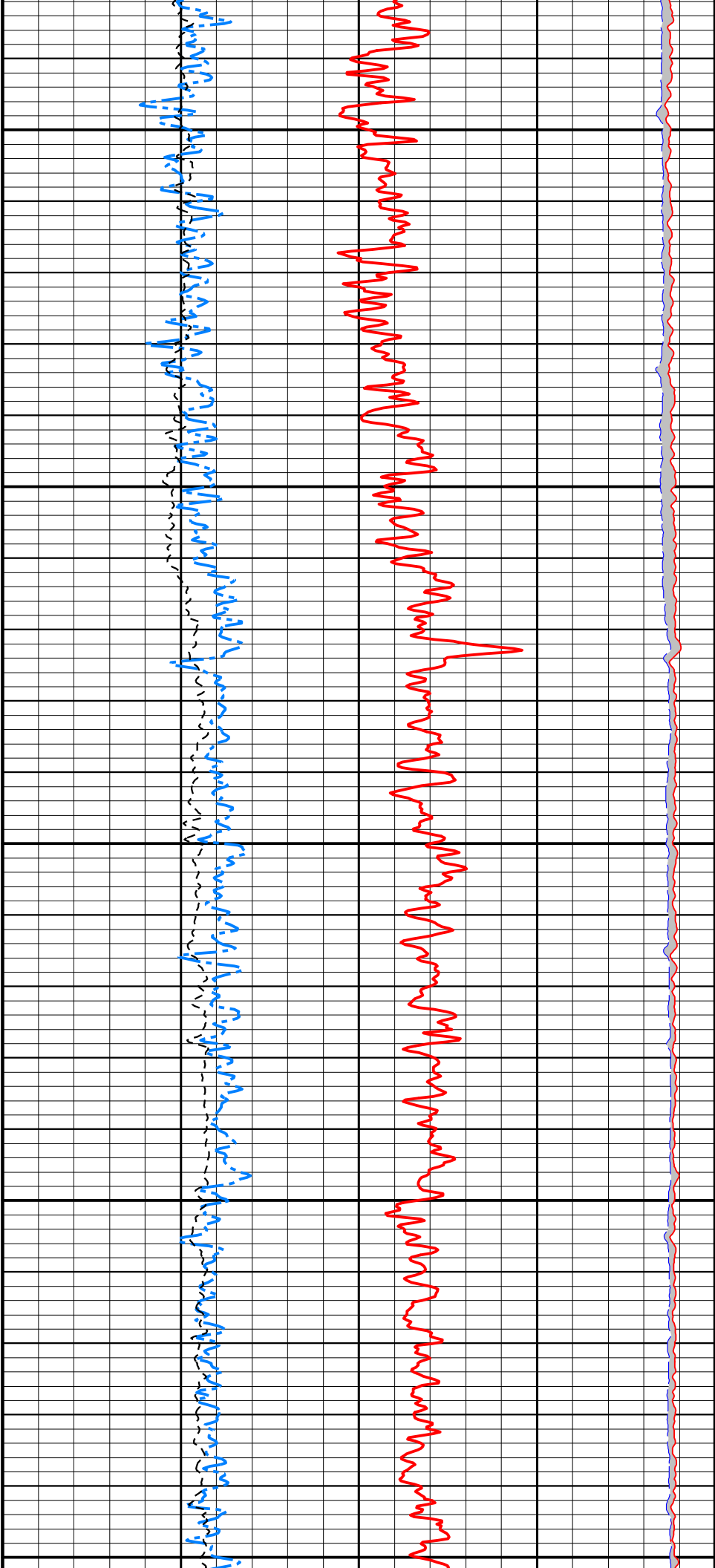
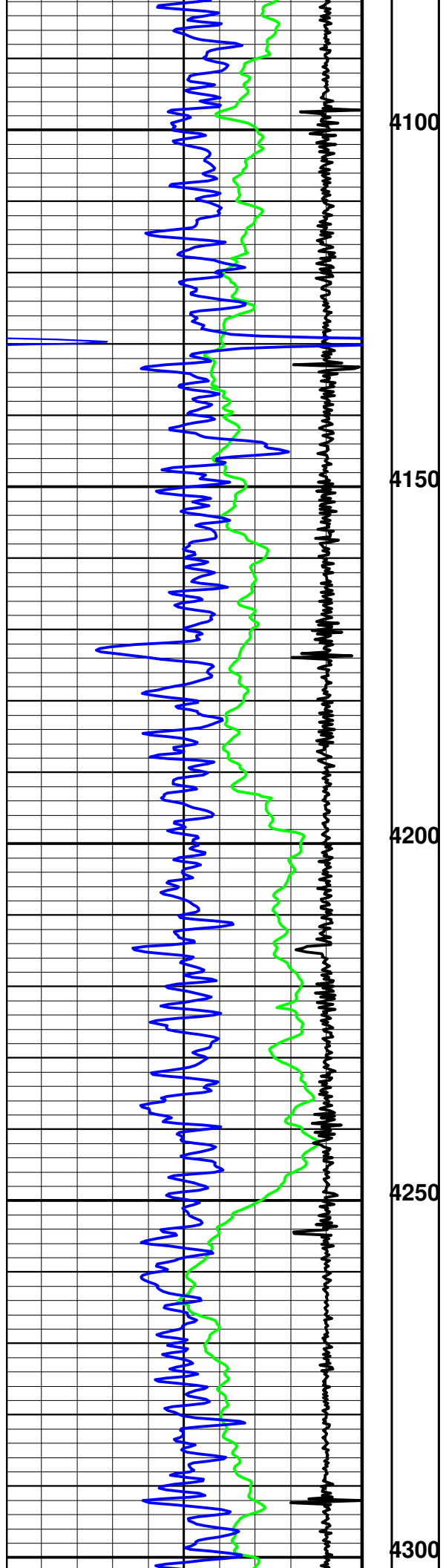


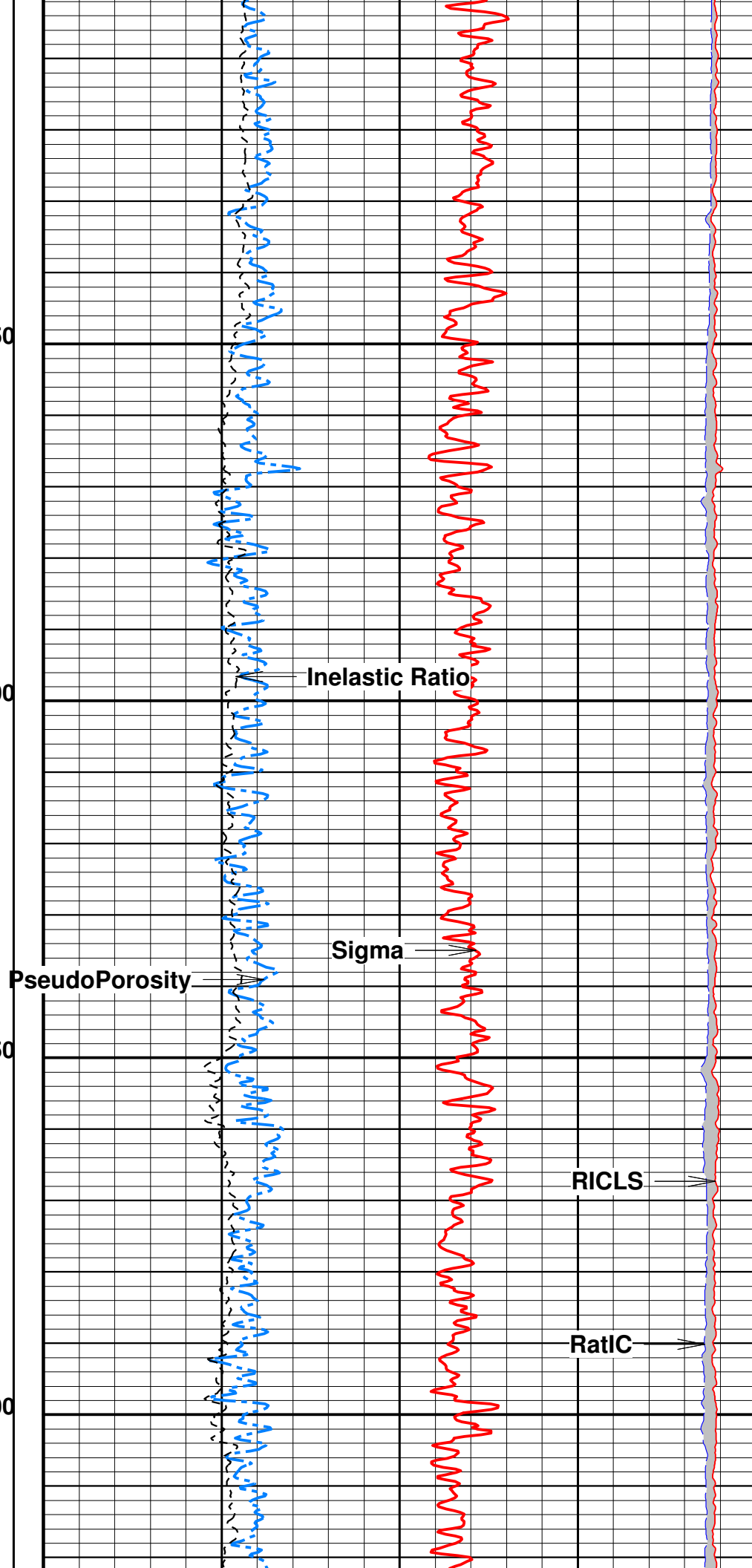
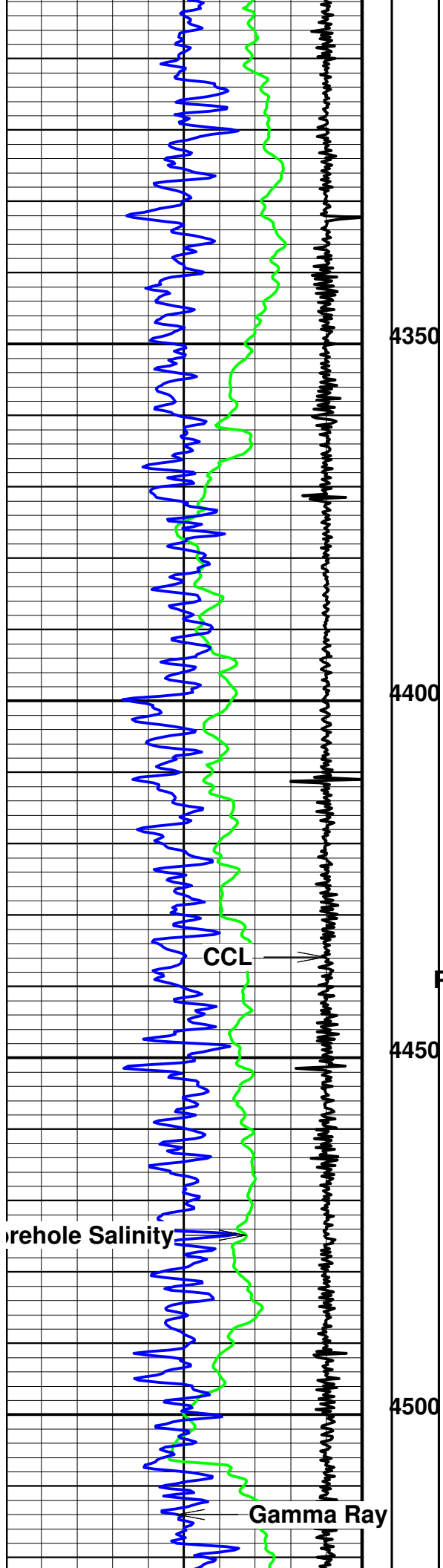


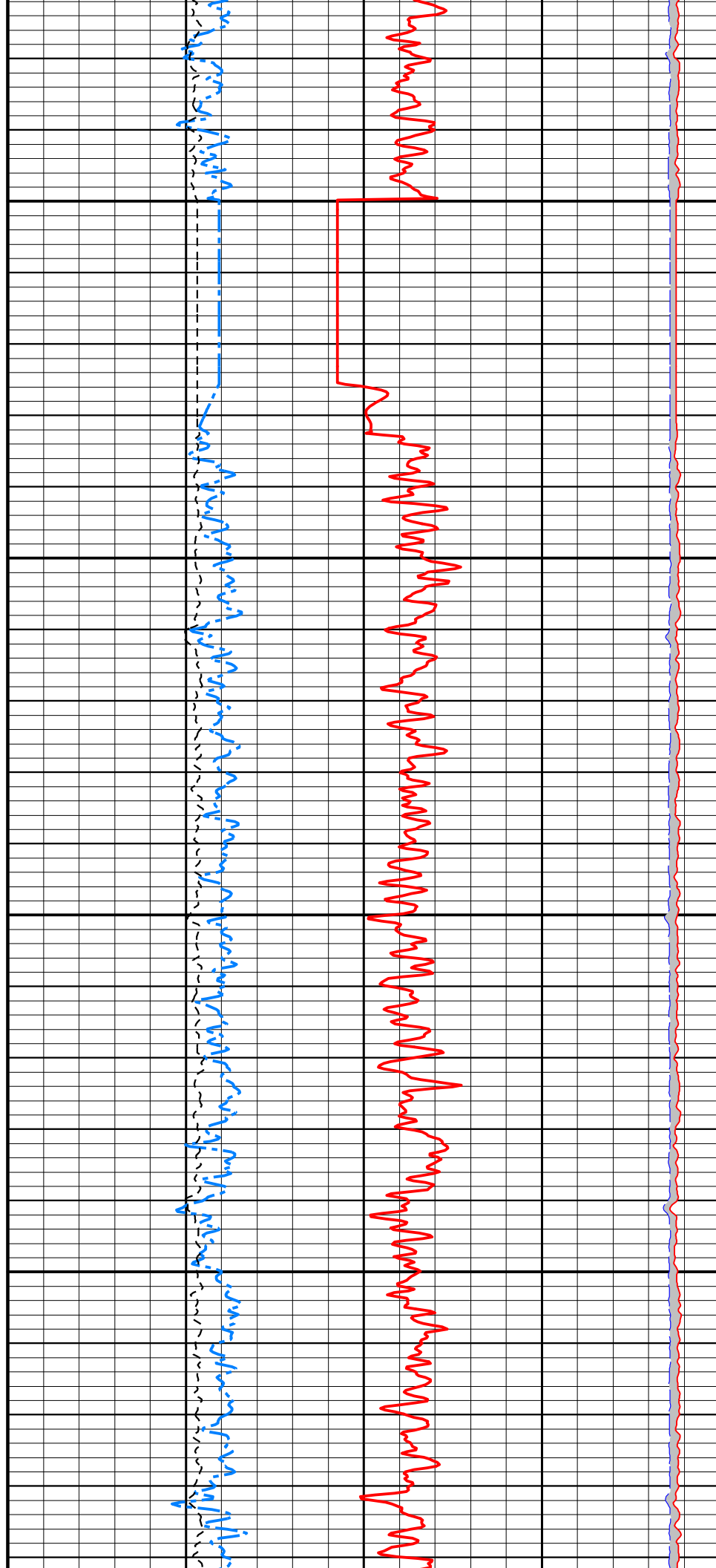
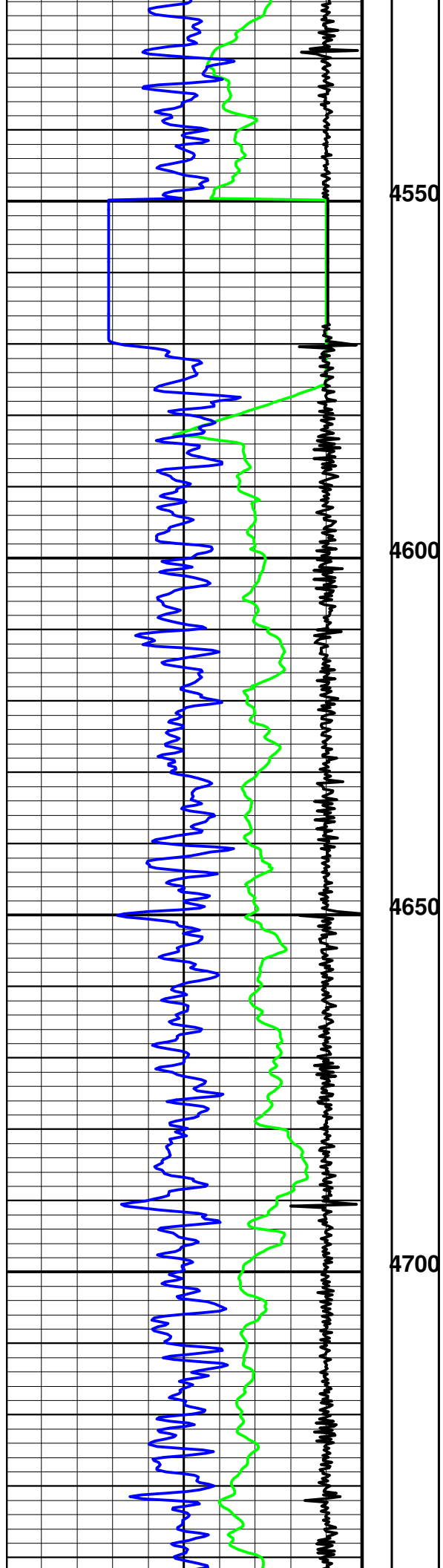


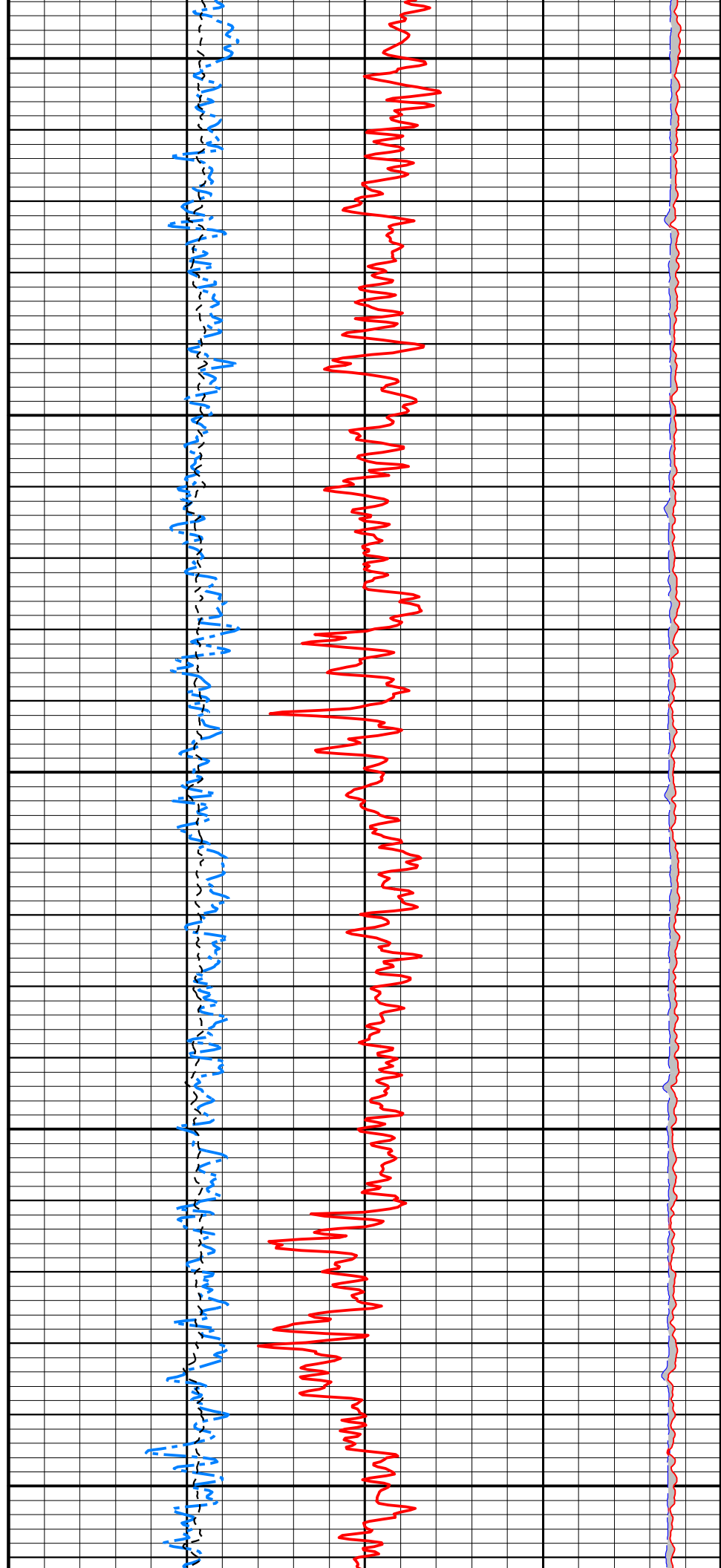
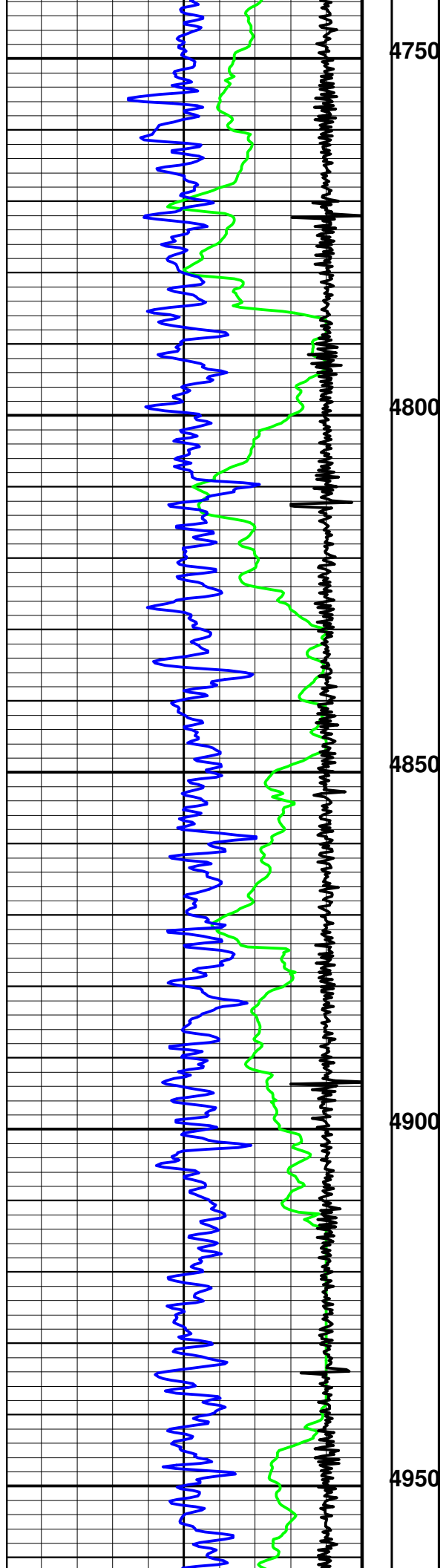


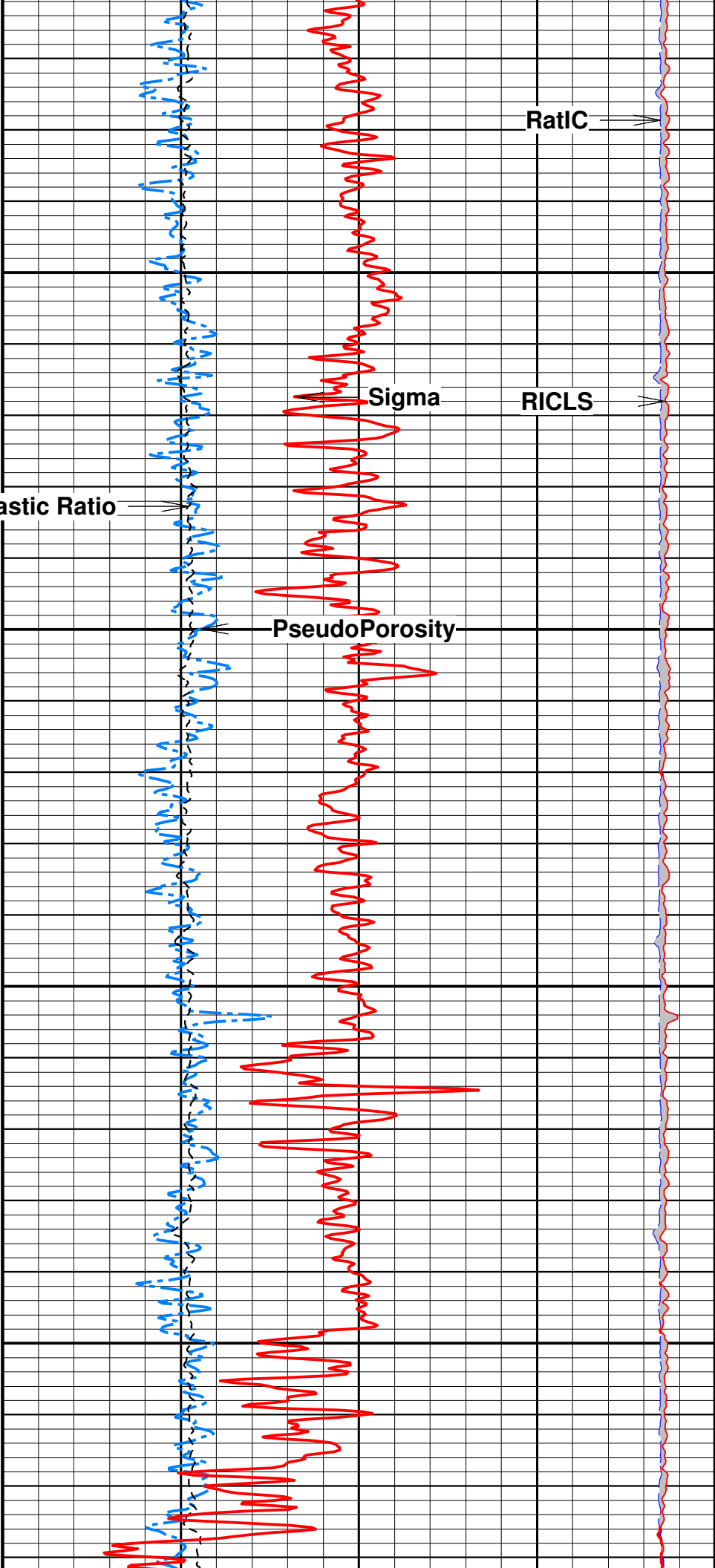
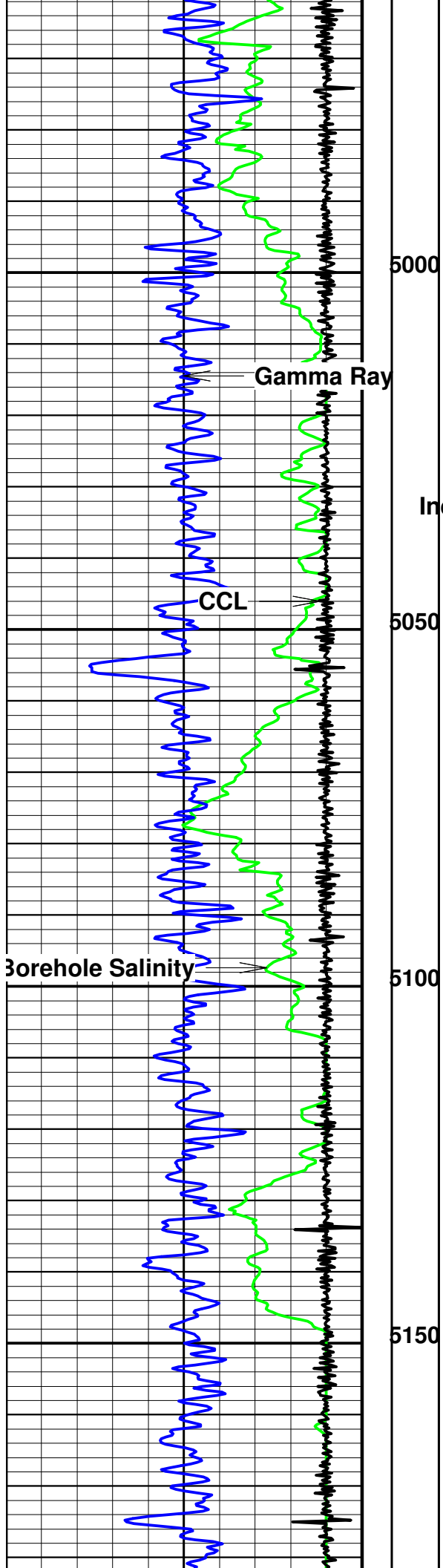


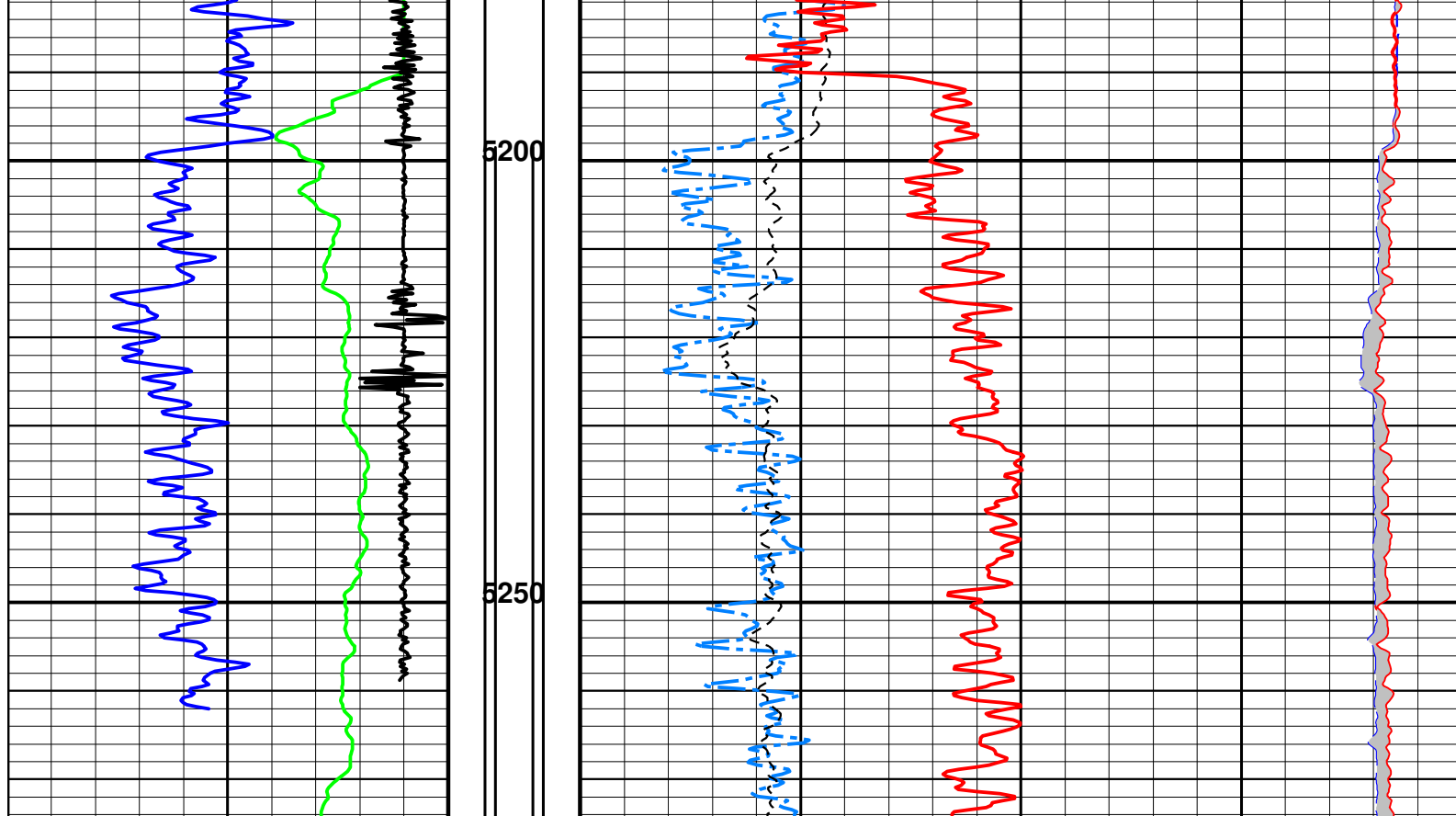












Borehole Salinity (ppk)

450 -50

CCL (mV)

-200000

Gamma Ray (gAPI)

0.0 120.0

Gamma Ray (gAPI)

120.0 240.0



RICLS<RatIC

PseudoPorosity (pu)

60 02

Inelastic Ratio (none)

20 02

Sigma (cu)

50 10

RatIC (none)

0

RICLS (none)

0

Repeat Pass

Logged Under 0 PSI Well Head Pressure

Company : Whiting Oil & Gas

Well : Razor 11H-0215A

Scale : 1 : 240

Depth in : ft

Software : WinAPIPlot Ver. 5, 89, 20, 0

Date : 18.04.2015

Time : 08:51:00

Remarks :

File Name : Repeat Pass

Borehole Salinity (ppk)

450 -50

Gamma Ray (gAPI)

0.0 120.0

Gamma Ray (gAPI)

120.0 240.0

CCL (mV)

Sigma (cu)

50 10

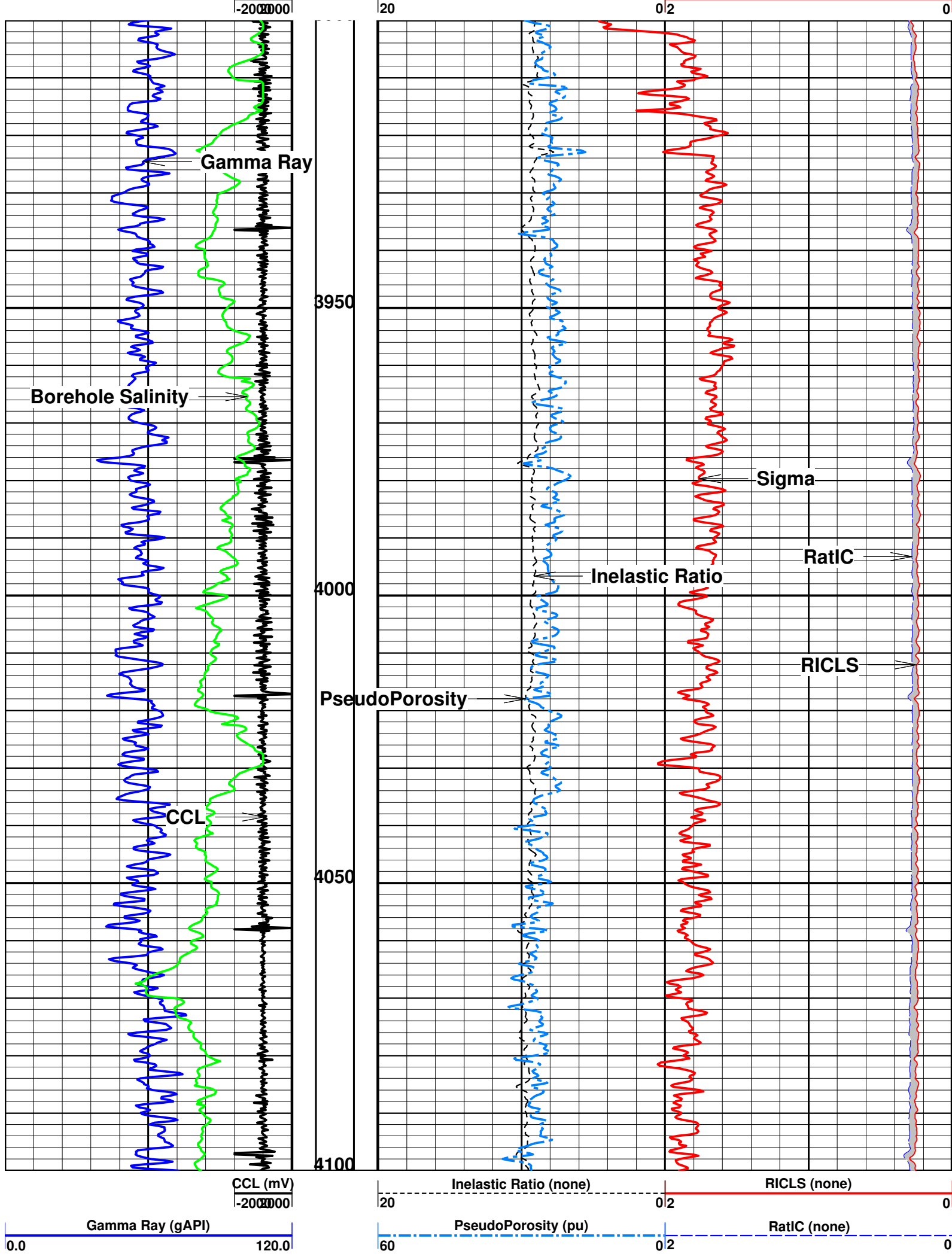
PseudoPorosity (pu)

60 02

Inelastic Ratio (none)

0

RICLS (none)



Gamma Ray (gAPI)	
120.0	240.0
Borehole Salinity (ppk)	
450	-50



RICLS<RatIC

Telemetry

Identifier : 0929A
Asset Number : 040
Length : 4.810 ft
Diameter : 1.7 inch
Weight : 17.6 lbs
Measure Point : 0.741 ft : Gamma
Measure Point : 3.976 ft : CCL

PDN

Identifier : 1471A
Asset Number : 029
Length : 19.337 ft
Diameter : 1.7 inch
Weight : 85.8 lbs
Measure Point : 7.575 ft : ShortSpace
Measure Point : 8.051 ft : LongSpace

Sigma (cu)	
50	10



CCL

24.15 ft

23.31 ft

Gamma

20.08 ft


LongSpace
ShortSpace

8.05 ft

7.58 ft

Total Length : 24.15 ft
Total Weight : 103.40 lbs
Max Diameter : 1.7 inch

0.00 ft

	<div>API #: 05-123-38598</div> <div>COMPANY: Whiting Oil & Gas</div> <div>WELL: Razor 11H-0215A</div> <div>FIELD: Wildcat</div> <div>COUNTY: Weld</div> <div>DATE : 2015 April 18</div> <div>STATE: Colorado</div>
<div>Pulse Decay Neutron</div> <div>Gamma Ray</div> <div>Casing Collar Log</div>	