
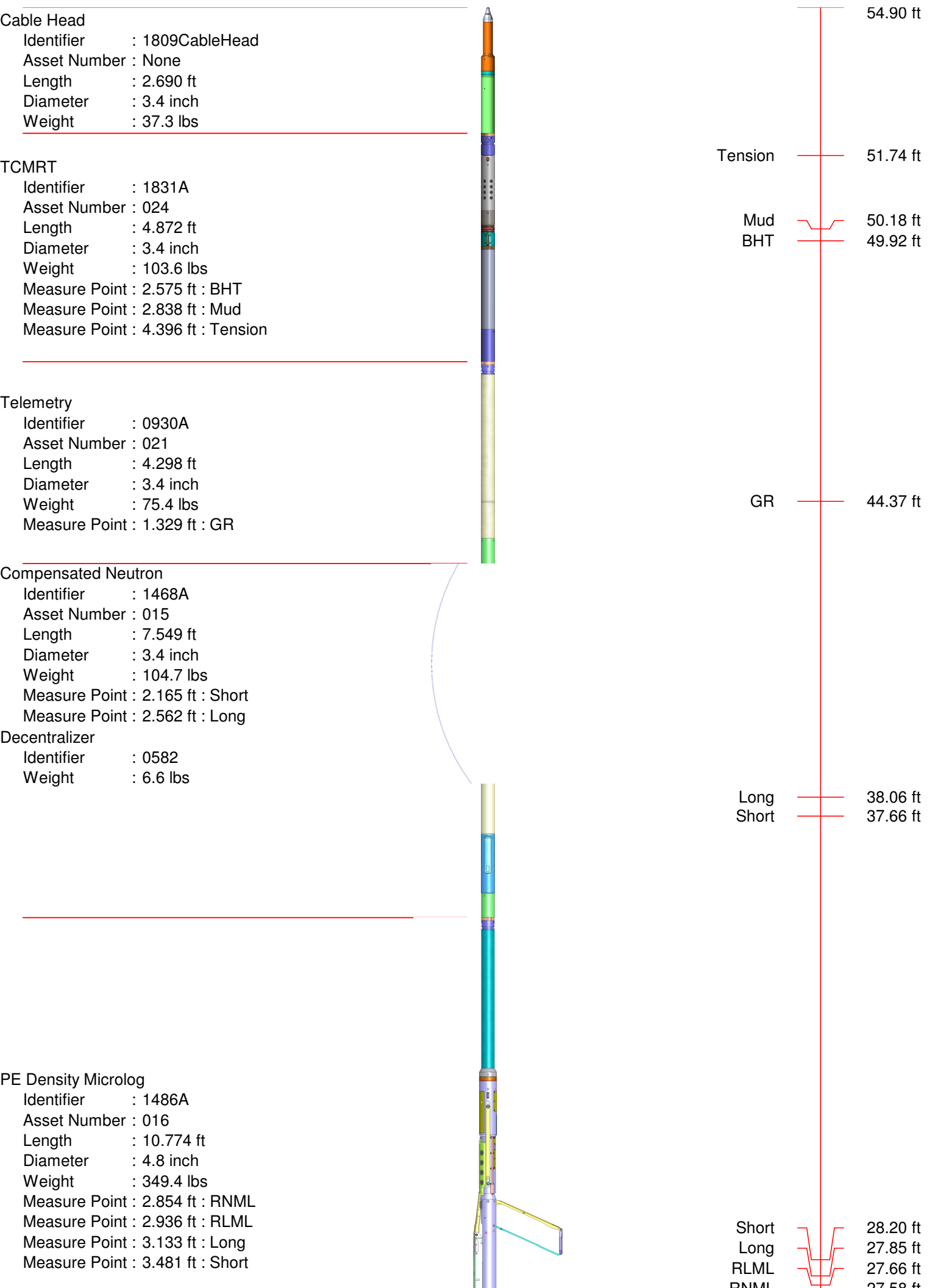
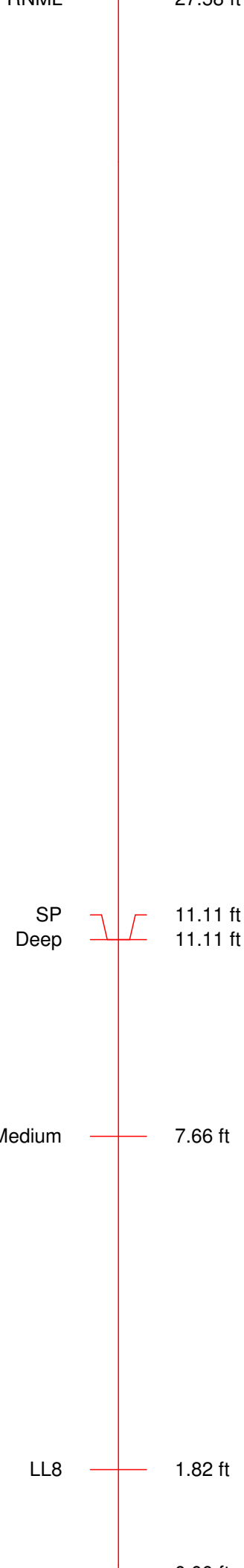


<div><div><div>PIONEER</div><div></div></div><div><div>DUAL INDUCTION</div><div>Pe DENSITY</div><div>COMPENSATED NEUTRON</div><div>GAMMA RAY</div></div></div>													
<div>Company:EXTRACTION OIL & GAS,LLC</div> <div>Well: SILVERBACK No.1</div> <div>Field: WILDCAT</div> <div>County: WELD</div> <div>State: CO.</div>		<div>COMPANY: EXTRACTION OIL & GAS,LLC</div> <div>WELL: SILVERBACK No.1</div> <div>FIELD: WILDCAT</div> <div>COUNTY: WELD</div> <div>STATE: CO.</div>											
		<div>Location</div> <div>300' FNL & 1407' FWL NENW</div> <div>SEC 36 T12N R 62W</div> <div>API# 05-123-42283</div>					<div>Other Services</div> <div>NONE</div>						
		<div>Permanent Datum: GL</div> <div>Elevation: 5282 FT</div>					<div>Elevations</div> <div>K.B.: 5301 FT</div> <div>D.F.: 5300 FT</div> <div>G.L.: 5282 FT</div>						
		<div>Log Meas. From: KB</div> <div>, 19 FT ABOVE PERM. DATUM</div>											
		<div>Drill. Meas. From: KB</div>											
Date	6 NOV 2015												
Run Number	1												
Depth Driller	8090 FT												
Depth Logger	7290 FT												
Bottom Logged Interval	7282 FT												
Top Logged Interval	1541 FT												
Casing Driller	9.625 IN. @ 1538 FT												
Casing Logger	1541 FT												
Bitsize	8.75 IN.												
Type Fluid in Hole	OIL BASE												
Density / Viscosity	8.9 #/GAL	44 S											
pH / Water Loss	N/A	N/A CC											
Source of Sample	FLOWLINE												
Rm @ Meas. Temp.	N/A Ohm-m @ N/A F												
Rmtf @ Meas. Temp.	N/A Ohm-m @ N/A F												
Rmc @ Meas. Temp.	N/A Ohm-m @ N/A F												
Source Rmtf/Rmc	N/A	N/A											
Rm at BHT	N/A Ohm-m @ 204 F												
End Circulation	0200												
Logger on Bottom	0830												
Max. Recorded Temp.	204 F												
Equip. No / Location	110	FORT MORGAN											
Recorded by	D TRAVIS		C CHRISTENSEN										
Witnessed by	SEAN MCINTYRE												
----Fold Here----													
<div>All interpretations are opinions based on inferences from electrical or other measurements and Pioneer Wireline Services cannot and do not guarantee the accuracy or correctness of any interpretation, and Pioneer Wireline Services will 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 the Pioneer Wireline Services general terms and conditions as set out in our current Price Schedule.</div>													
<div>REMARKS</div> <div>SO No. 2-014081</div> <div>NO FOCUSED OR SP LOG DUE TO OIL BASE MUD</div> <div>DIRECTIONAL WELL SAT DOWN AT 7290', LOGGED OUT FROM THAT DEPTH</div> <div>DENSITY POROSITY CALCULATED FOR 2.68 G/CC MATRIX</div> <div>CEMENT VOL CALCULATED FOR 5.5" CASING</div> <div>THANK YOU FOR USING PIONEER WIRELINE SERVICES.</div>													
<div>EQUIPMENT DATA</div>													
Run	Trip	Instrument	Instrument Type No.		Serial No.			Distance to Reference					
		Cable Head	None		1809CableHead			0.000 ft					
		TCMRT	024		1831A			2.690 ft					
		Telemetry	021		0930A			7.562 ft					
		Compensated Neutro	015		1468A			11.860 ft					
		Decentralizer			0582			19.409 ft					
		PE Density Microlog	016		1486A			19.409 ft					
		DIL	013		1141A			30.184 ft					
		Bull Plug	None		BP			54.757 ft					



DIL

Identifier : 1141A
Asset Number : 013
Length : 24.573 ft
Diameter : 3.6 inch
Weight : 295.4 lbs
Measure Point : 1.673 ft : LL8
Measure Point : 7.513 ft : Medium
Measure Point : 10.958 ft : Deep
Measure Point : 10.958 ft : SP



Bull Plug

Identifier : BP
 Asset Number : None
 Length : 0.148 ft
 Diameter : 3.4 inch
 Weight : 6.6 lbs

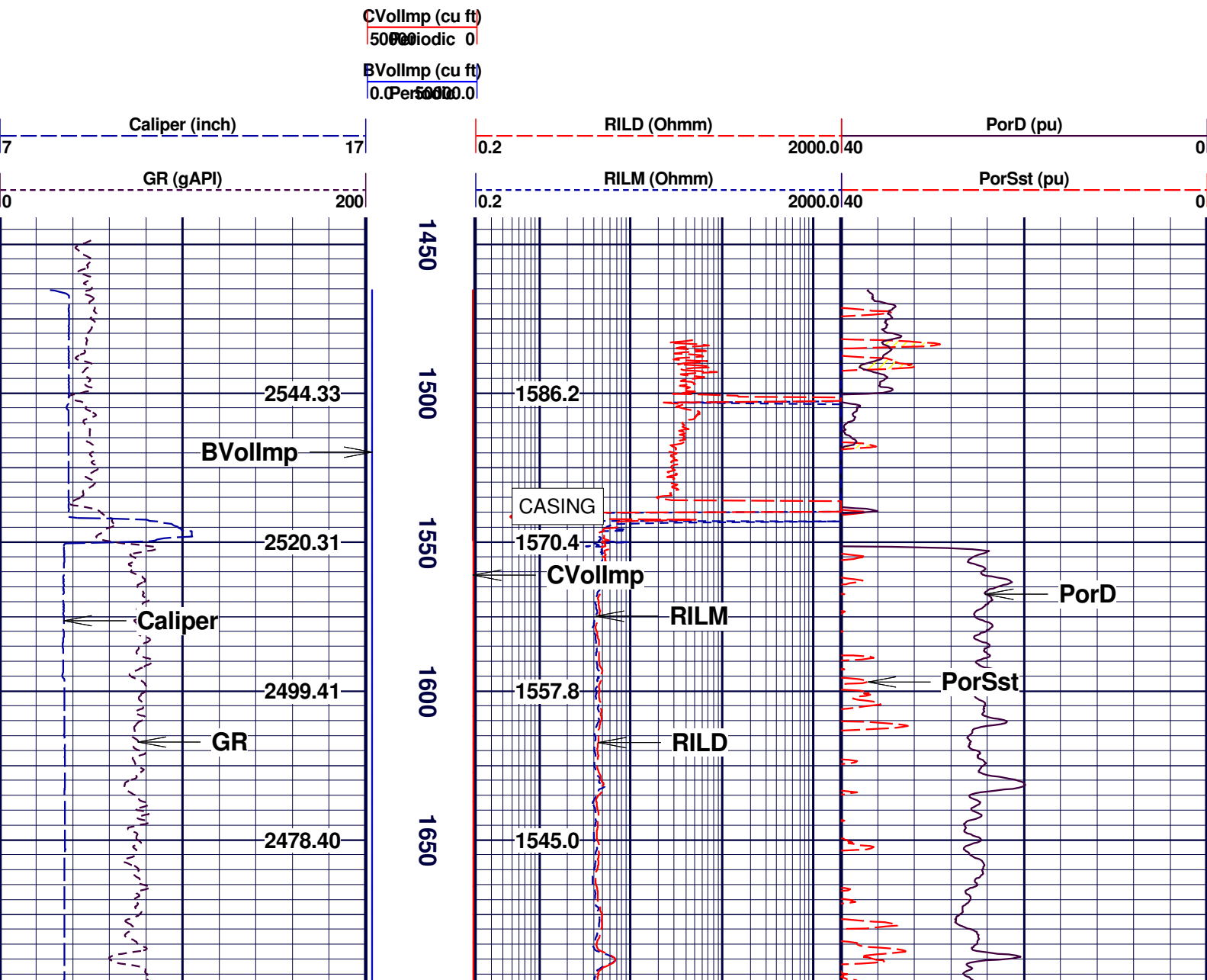
Total Length : 54.90 ft
 Total Weight : 979.06 lbs
 Max Diameter : 4.8 inch

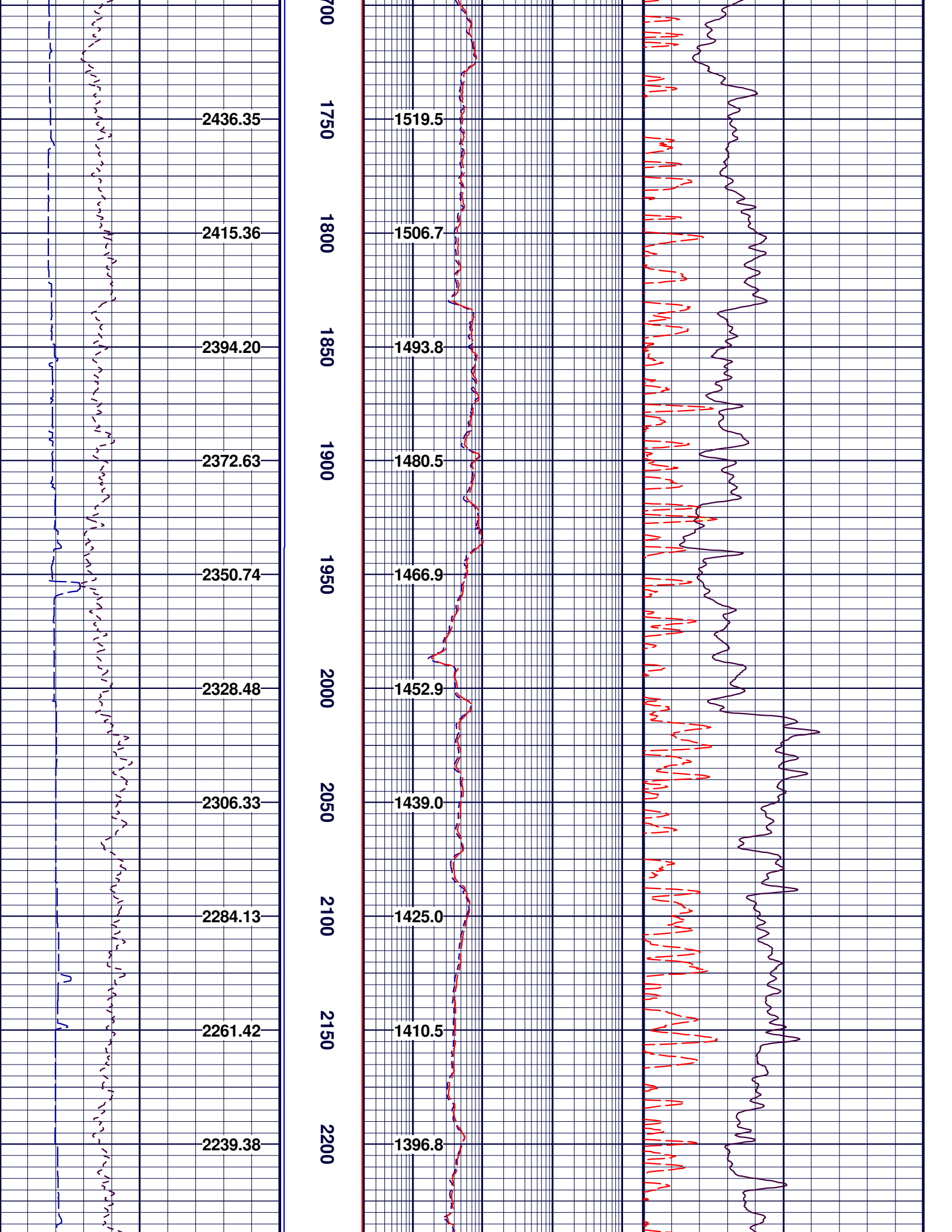
2" / 100' MAIN PASS

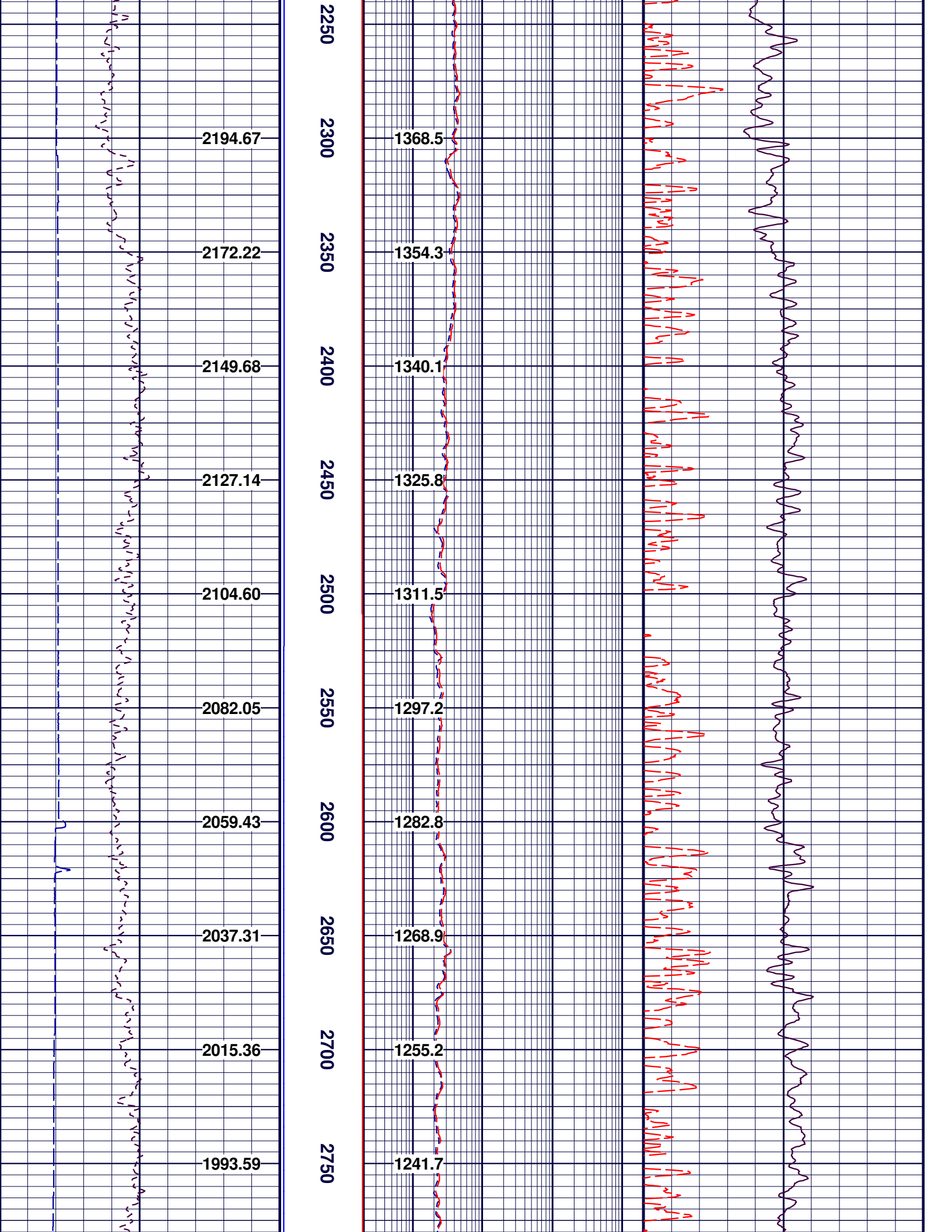
Company : EXTRACTION OIL & GAS,LLC
 Well : SILVERBACK No.1
 Scale : 1 : 600
 Depth in : ft
 Software : WinAPIot Ver. 5, 91, 4, 0

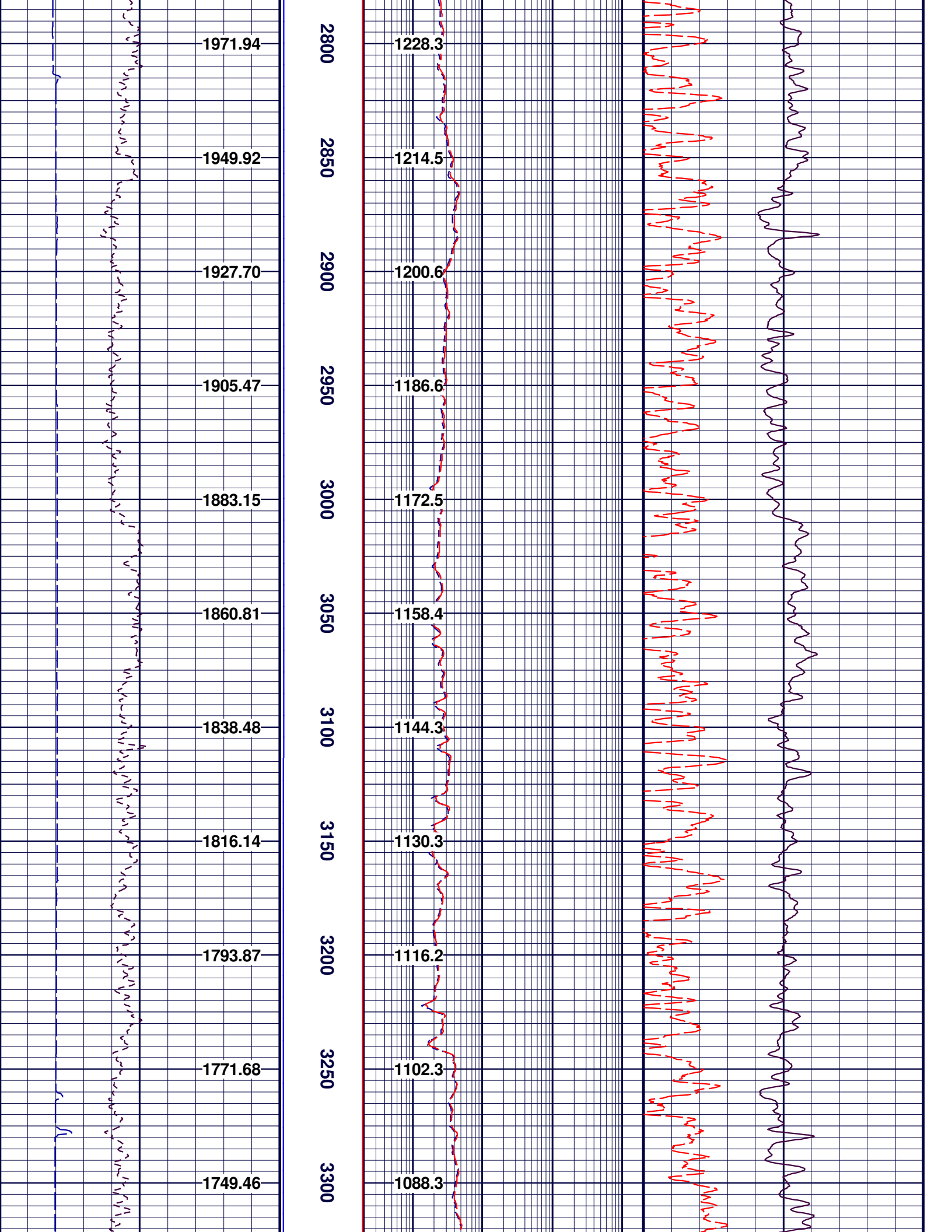
Date : 06.11.2015
 Time : 10:50:08
 Remarks : SO No. 2-014081

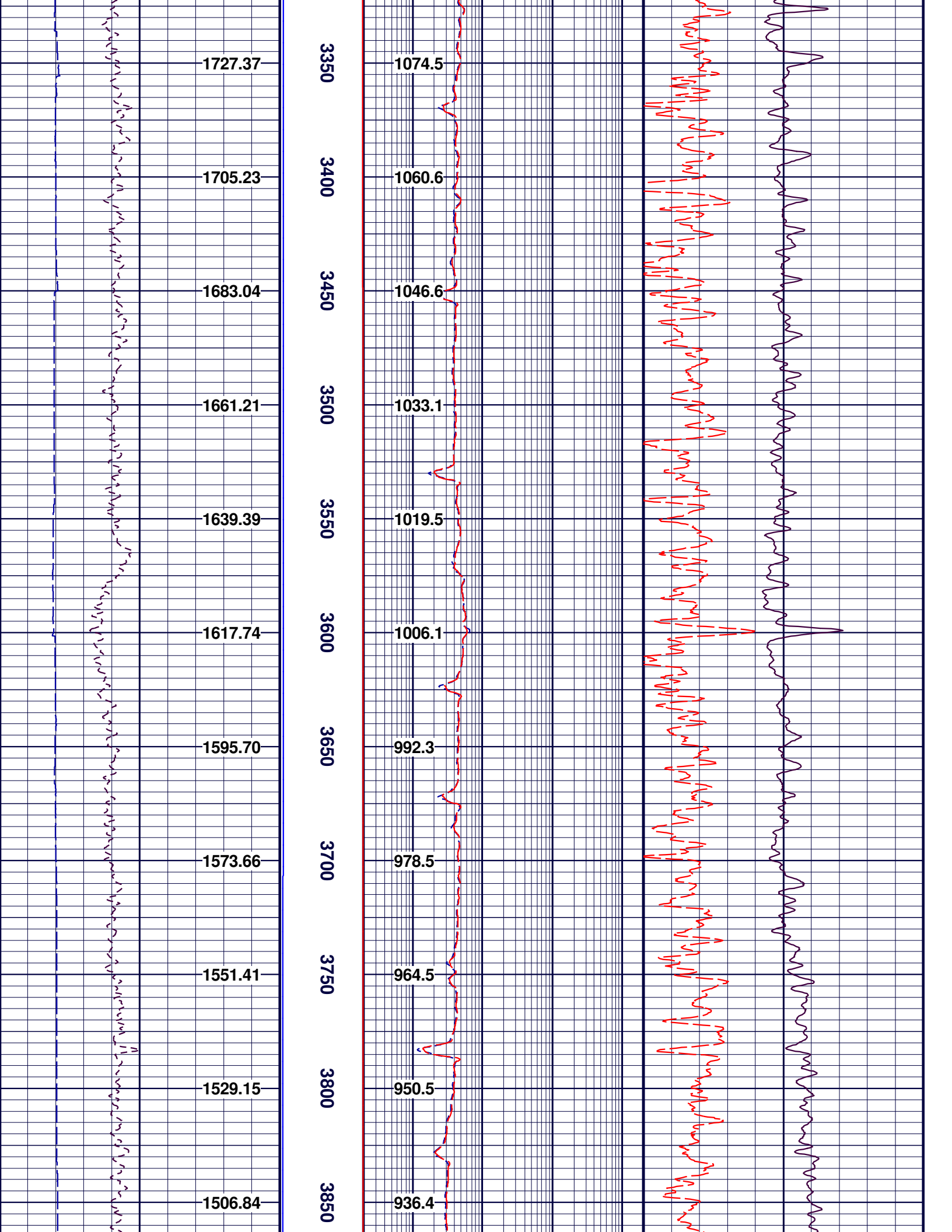
File Name : MAIN PASS WITH VOL

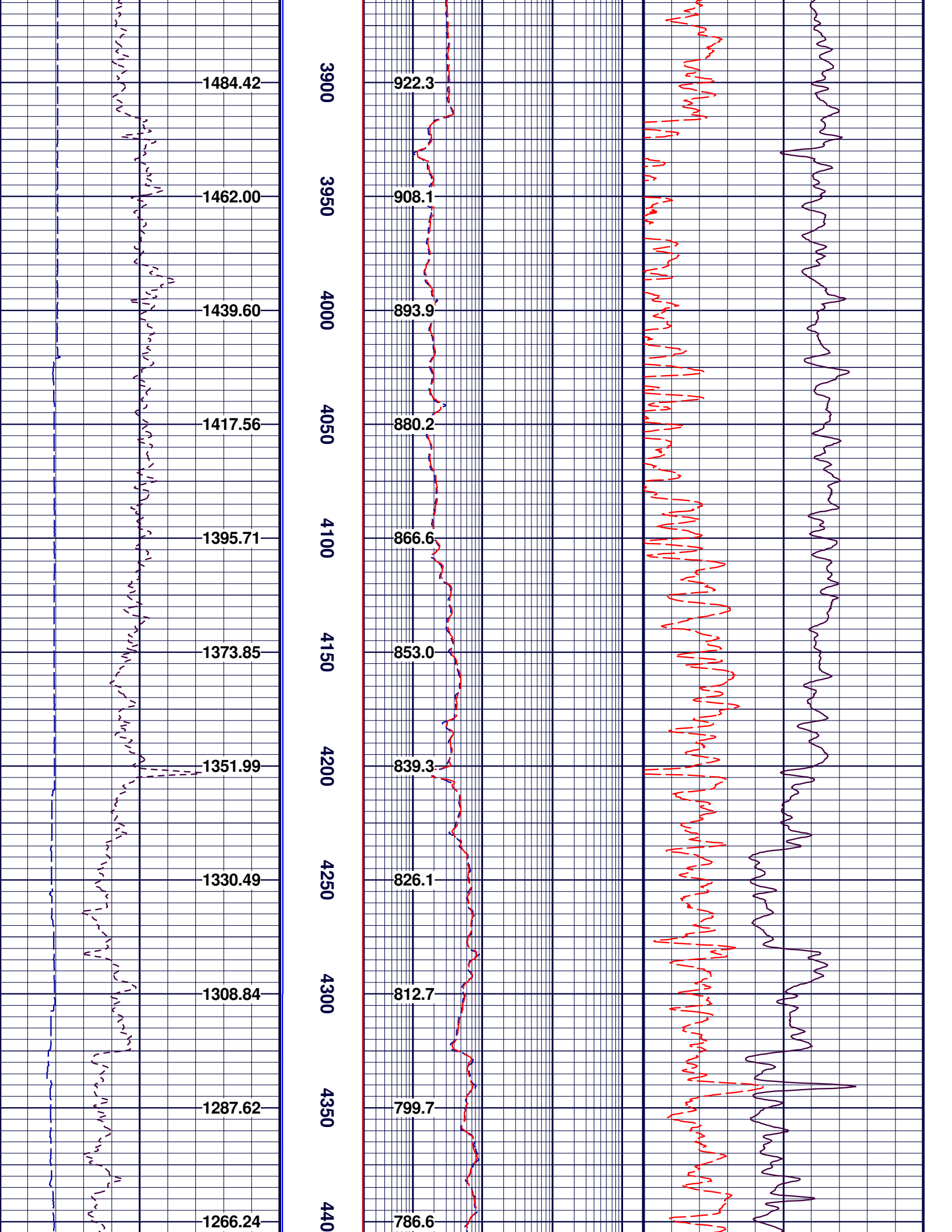


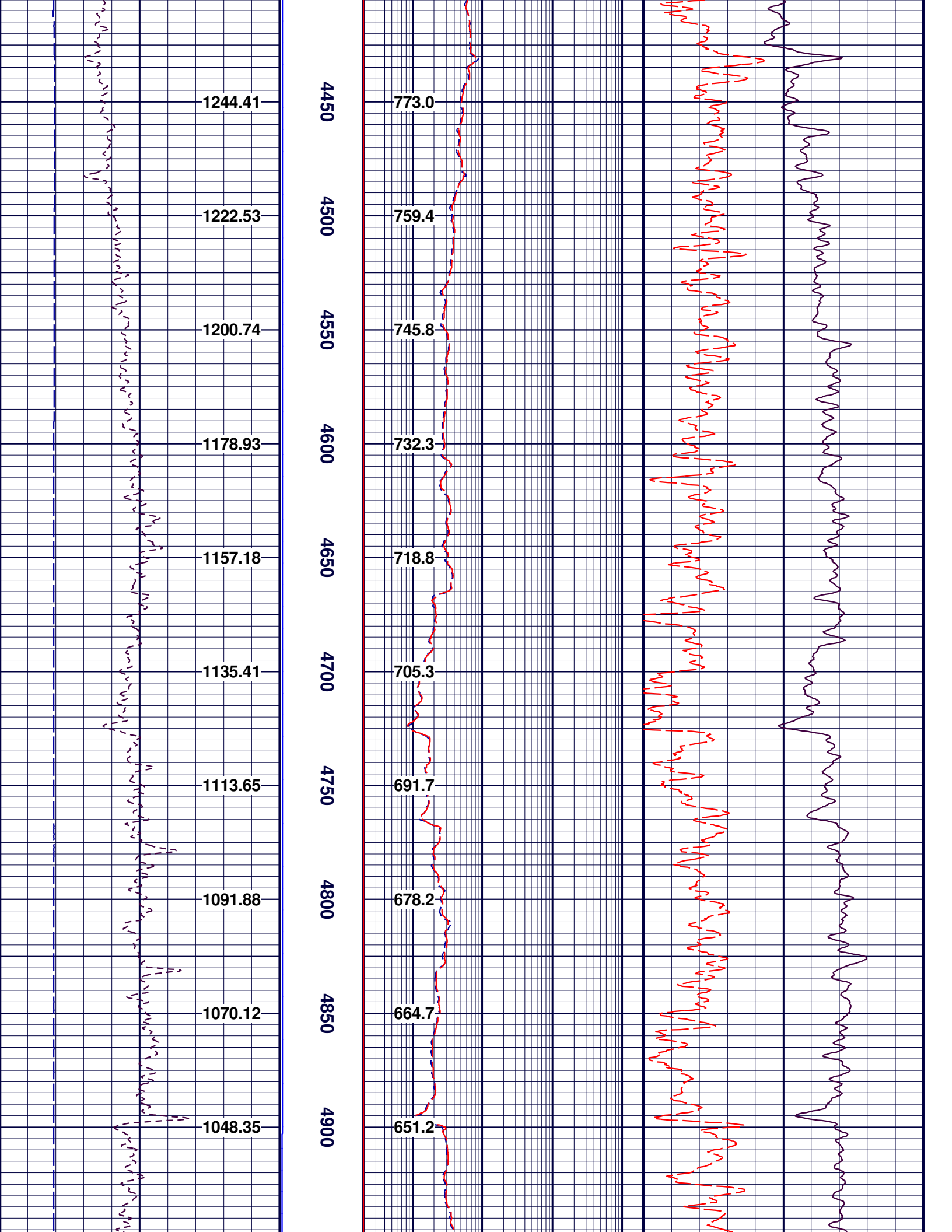


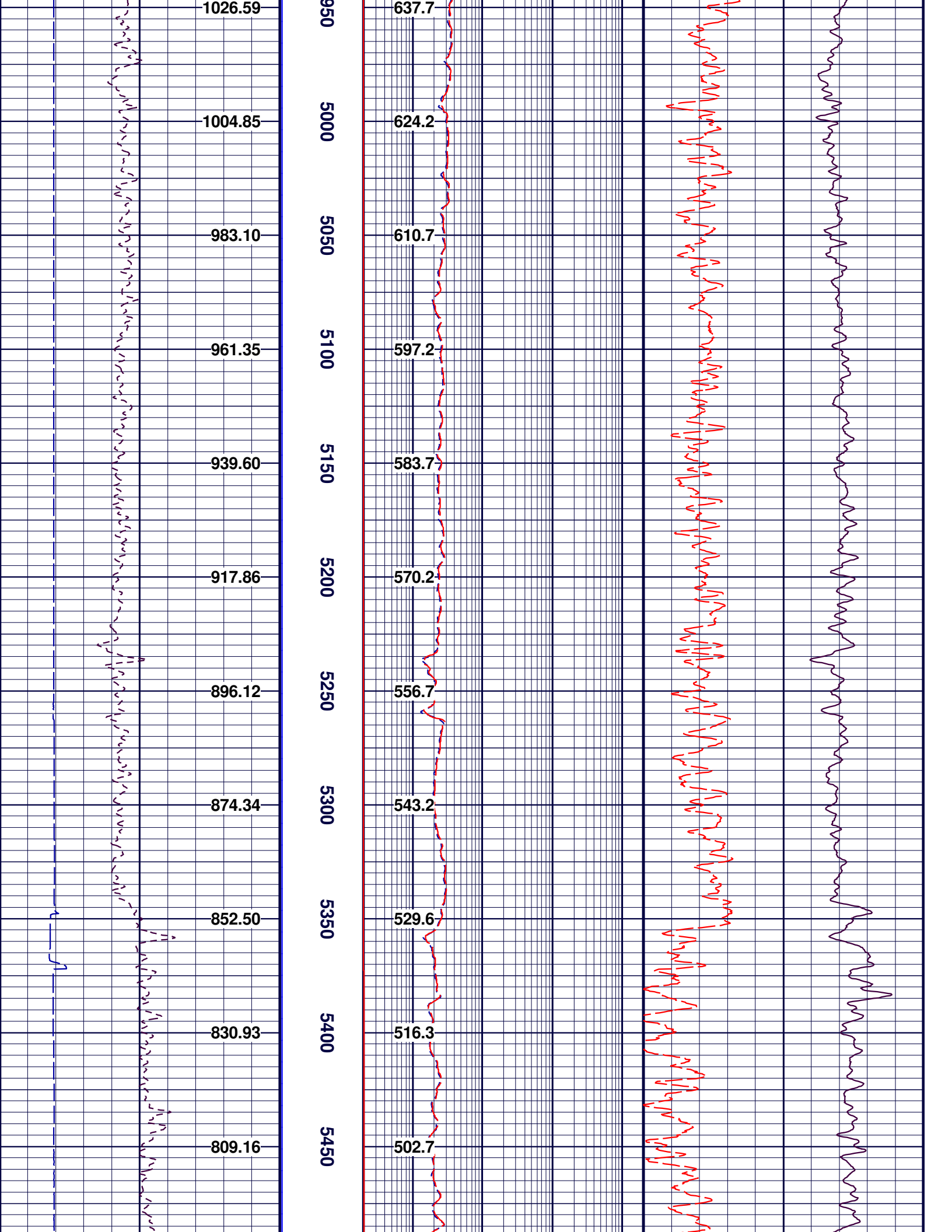


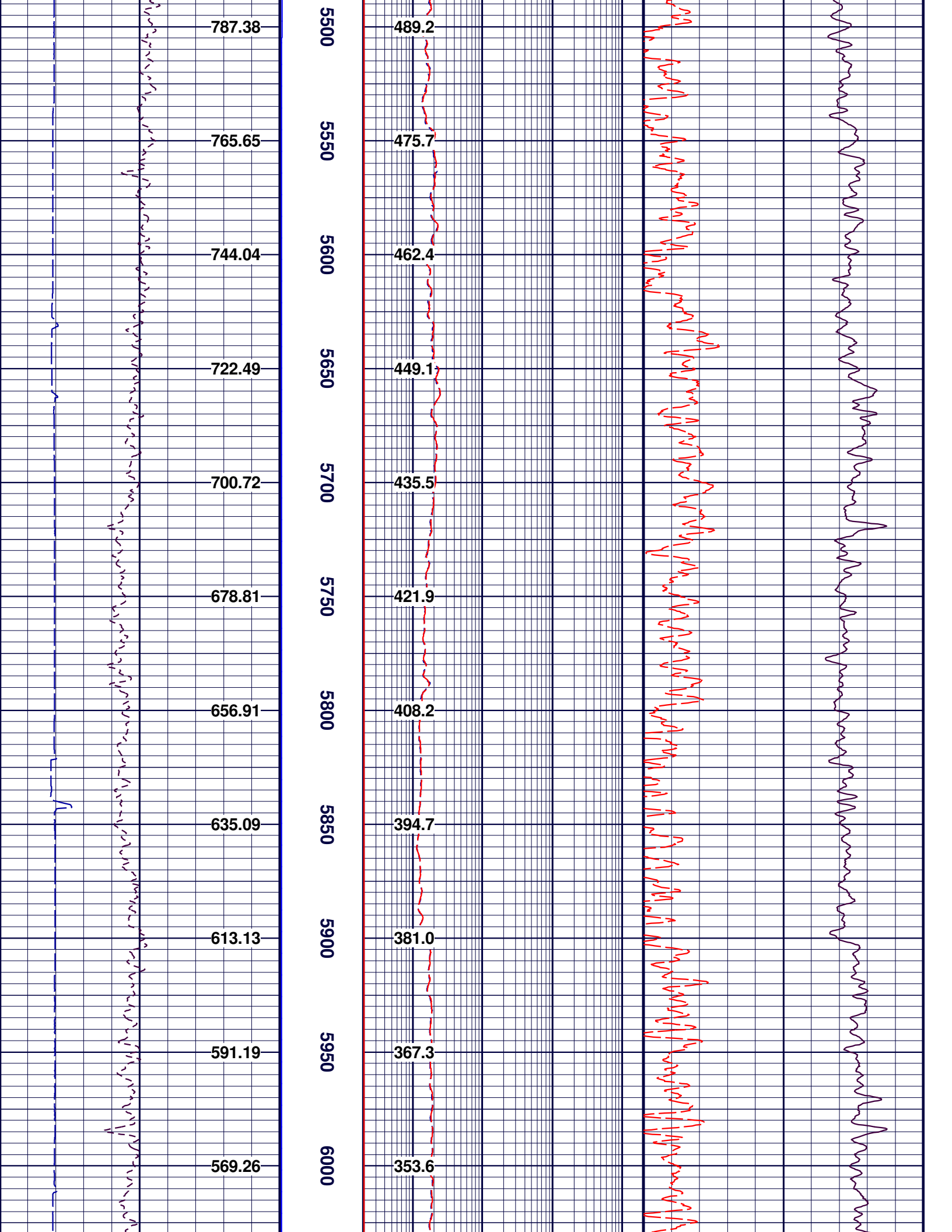


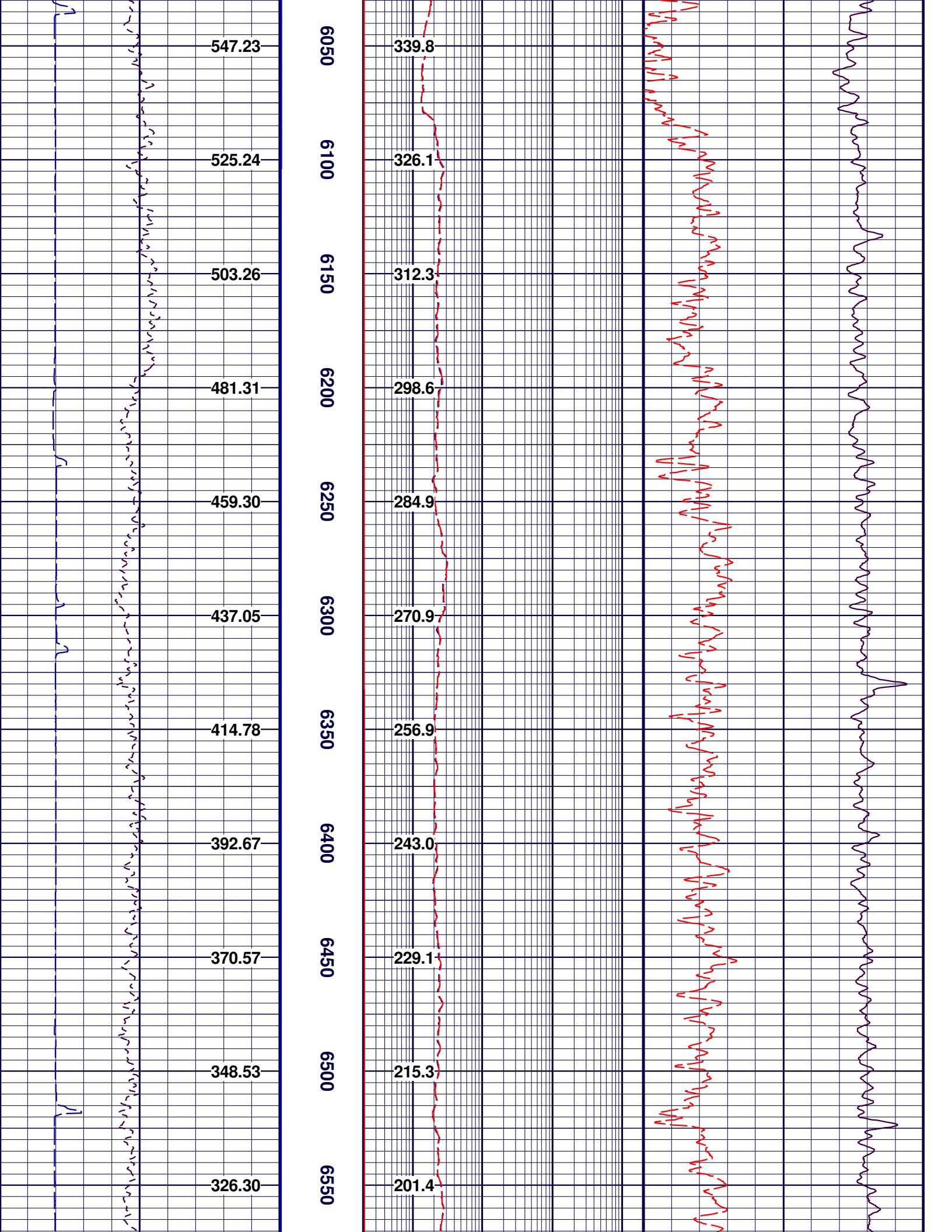


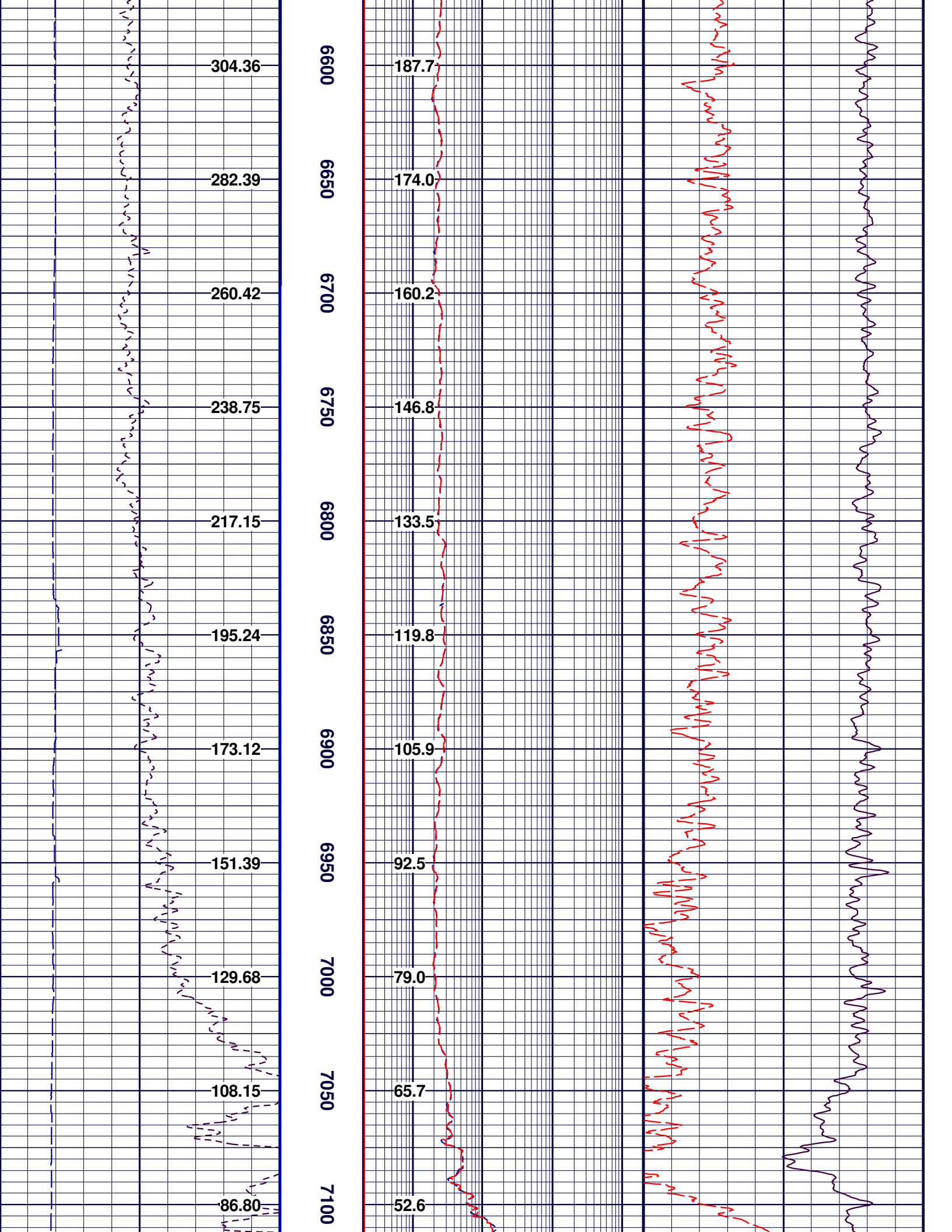


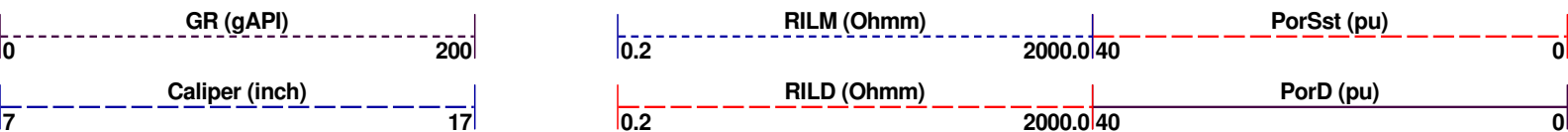
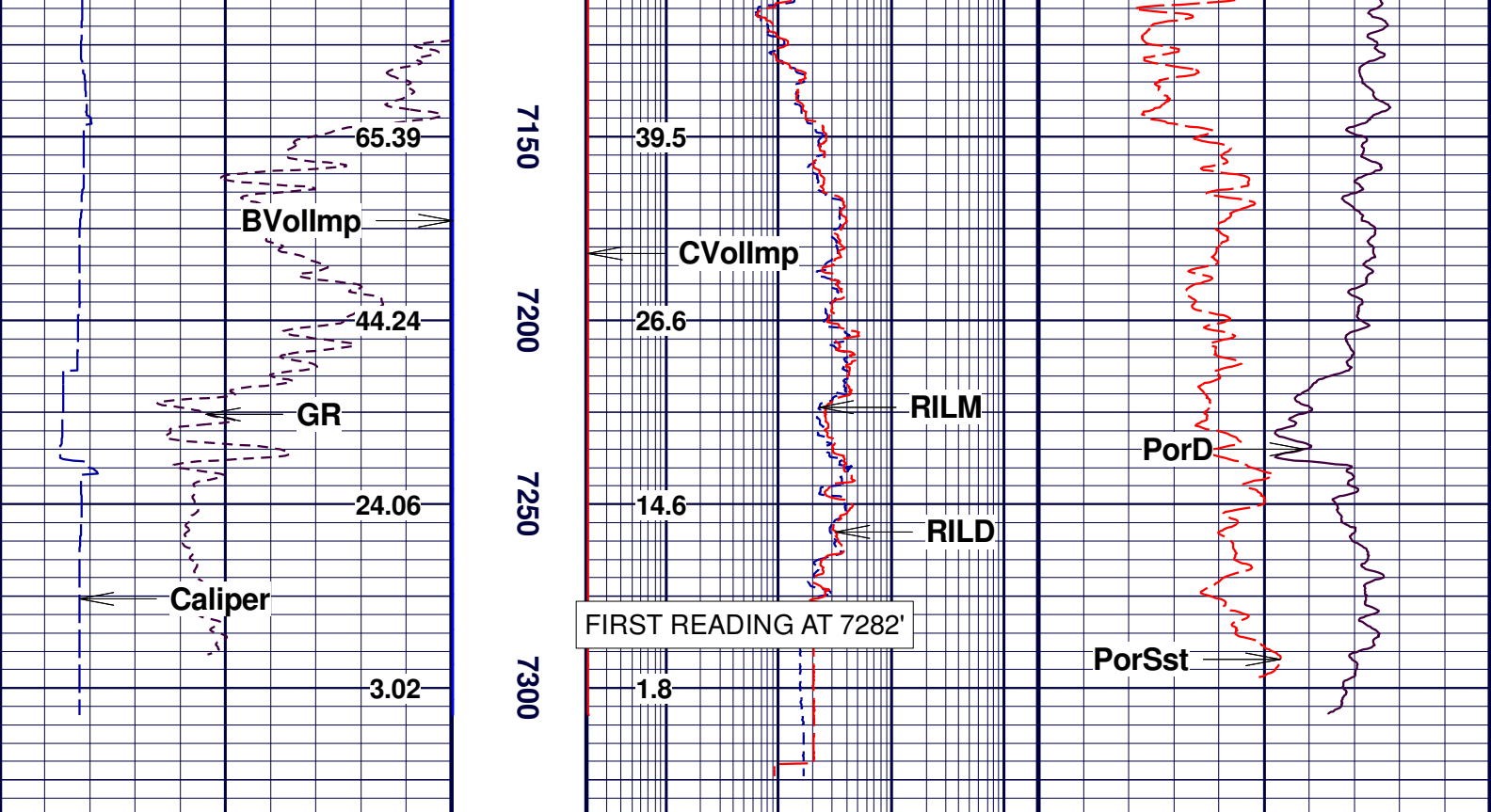












BVollmp (cu ft)
0.0 Periodic 0

CVollmp (cu ft)
500.0 Periodic 0



5" / 100' MAIN PASS

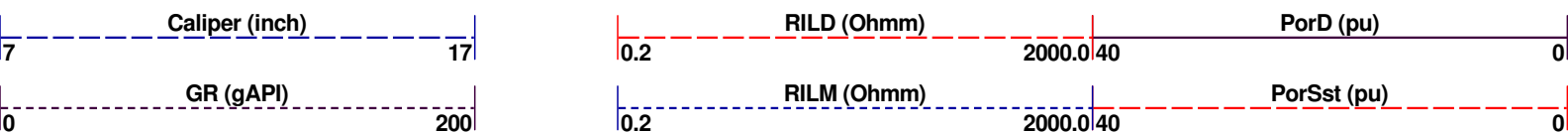
Company : EXTRACTION OIL & GAS,LLC
Well : SILVERBACK No.1
Scale : 1 : 240
Depth in : ft
Software : WinAPIPlot Ver. 5, 91, 4, 0

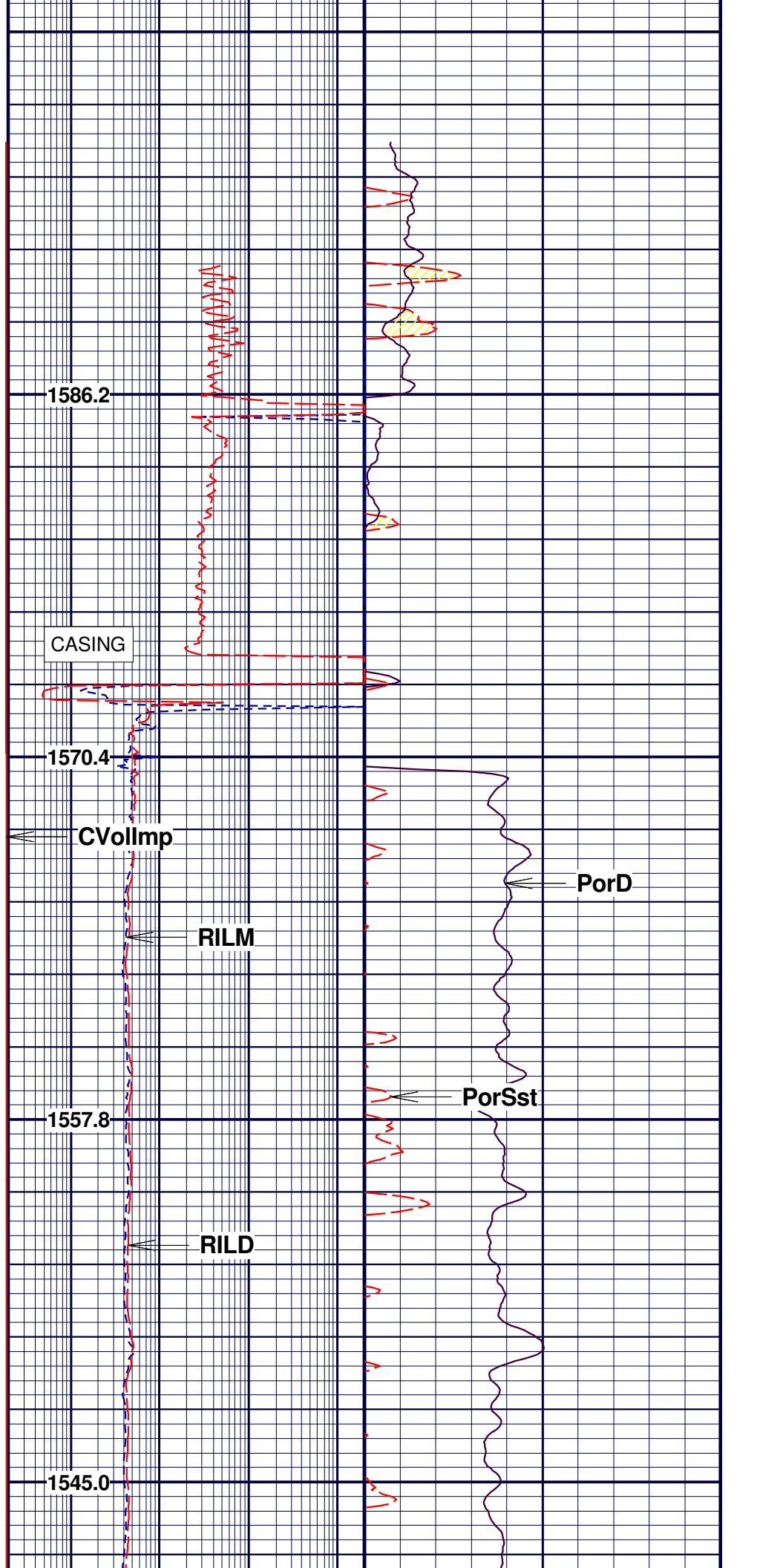
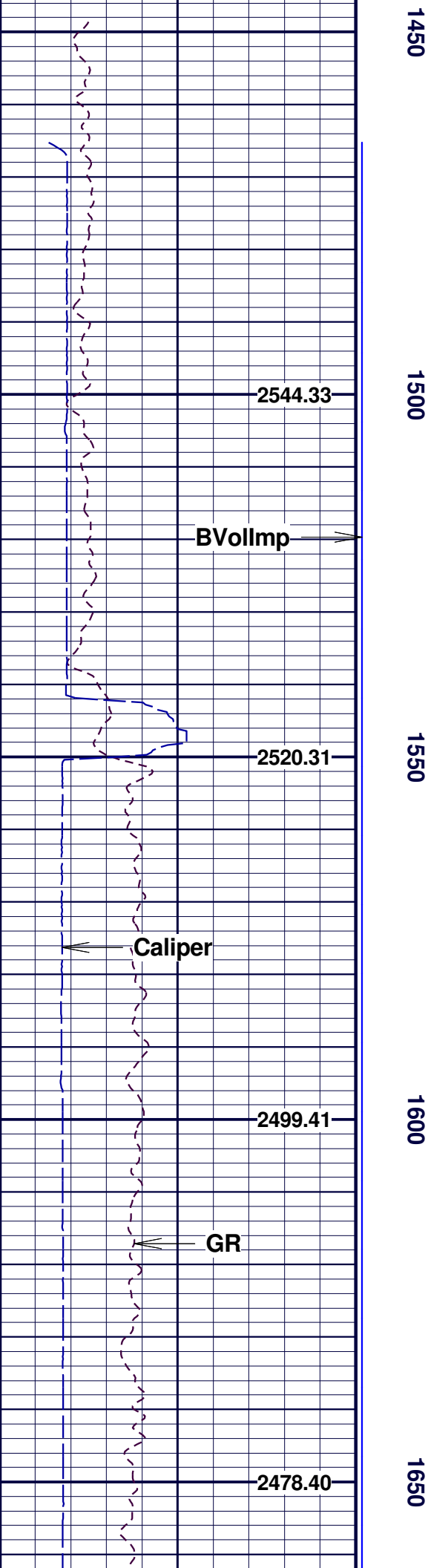
Date : 06.11.2015
Time : 10:50:08
Remarks : SO No. 2-014081

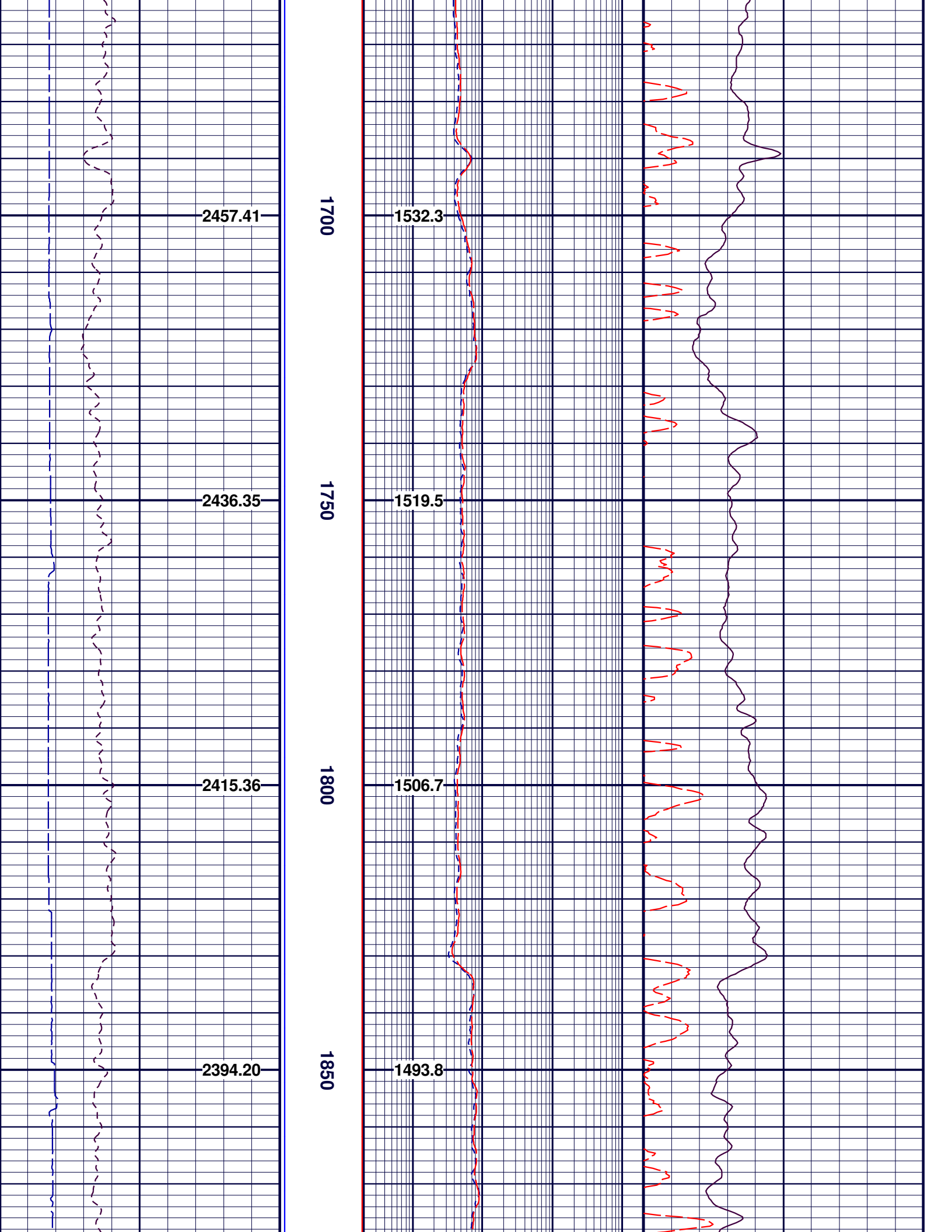
File Name : MAIN PASS WITH VOL

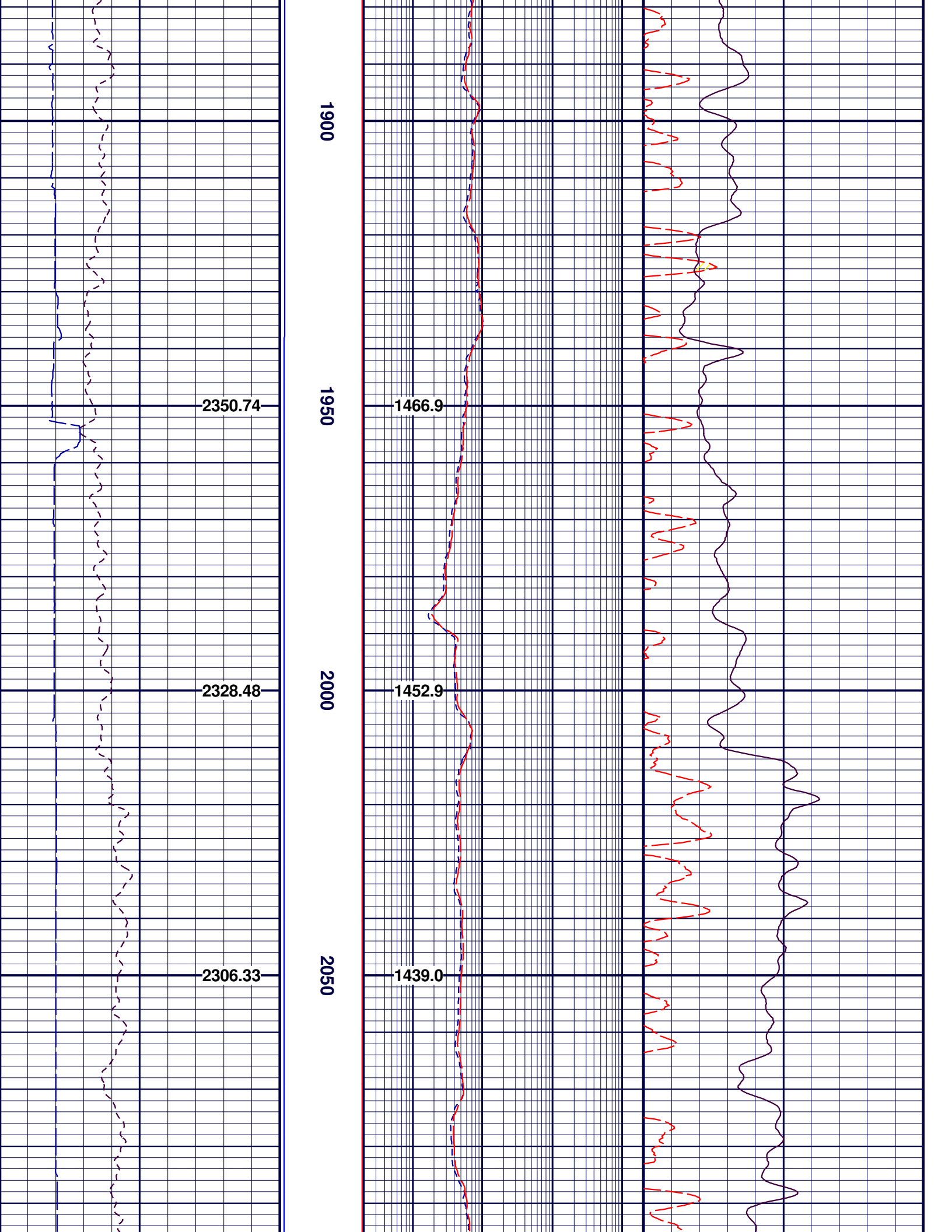
CVollmp (cu ft)
500.0 Periodic 0

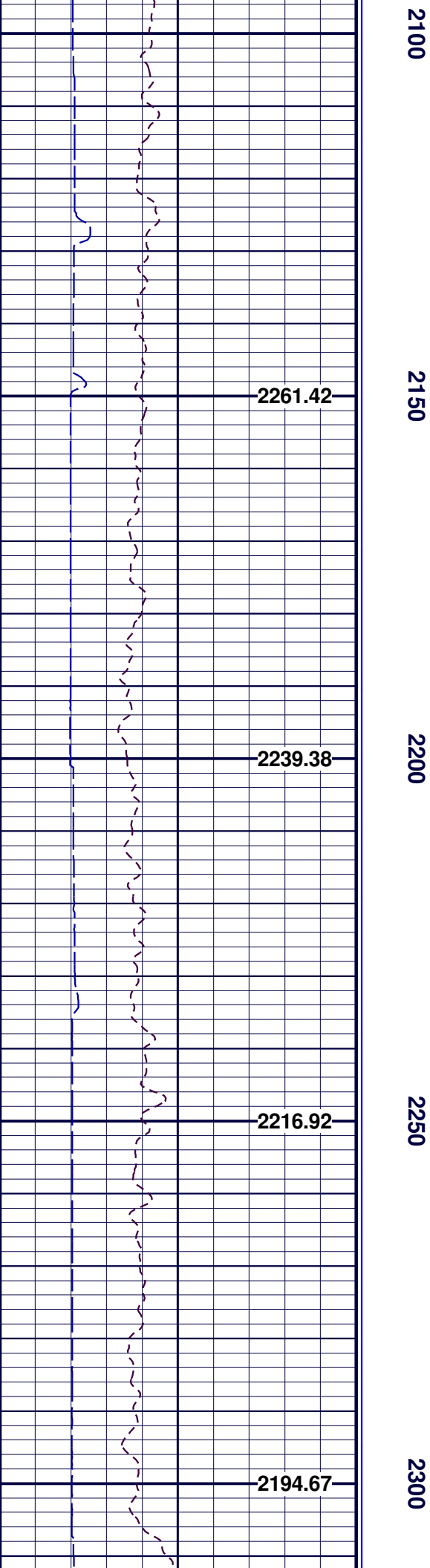
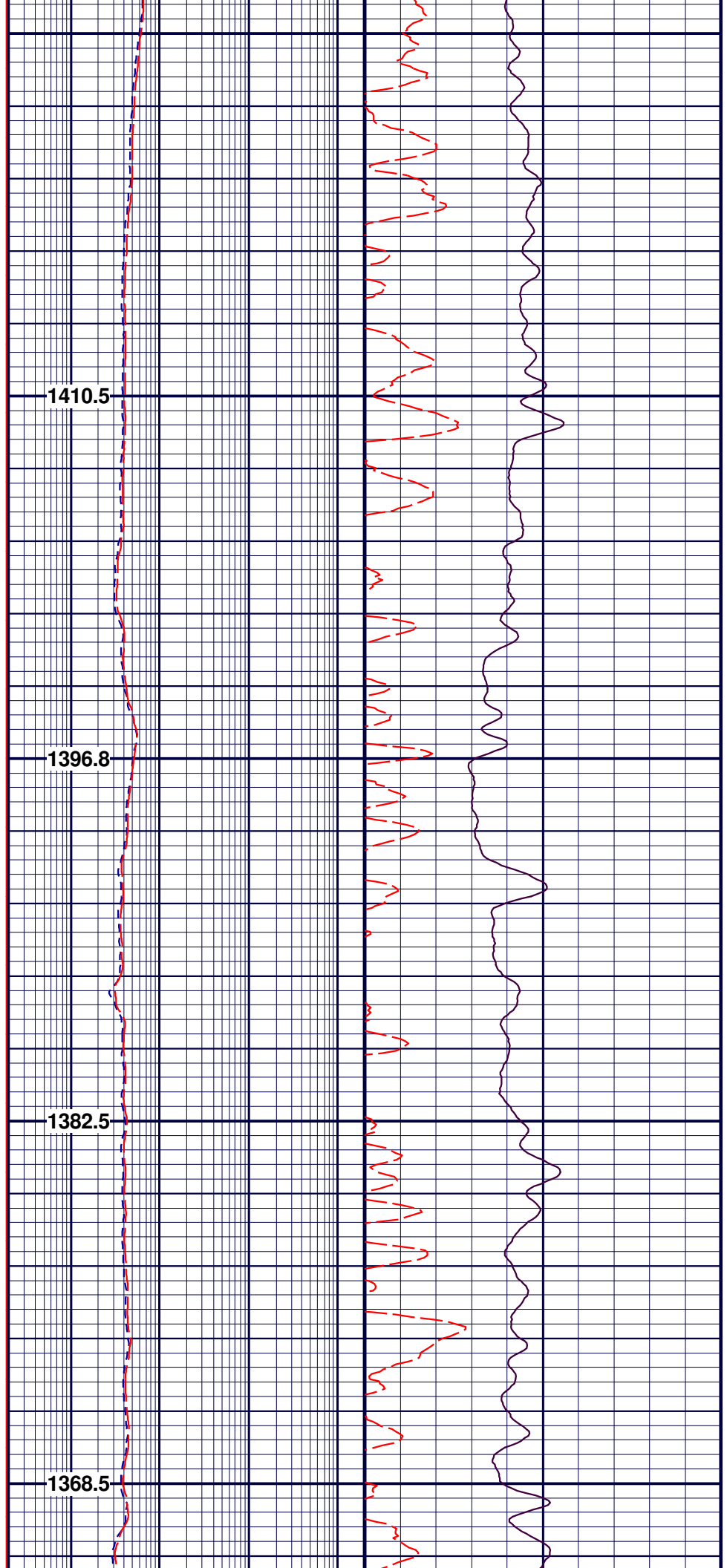
BVollmp (cu ft)
0.0 Periodic 0

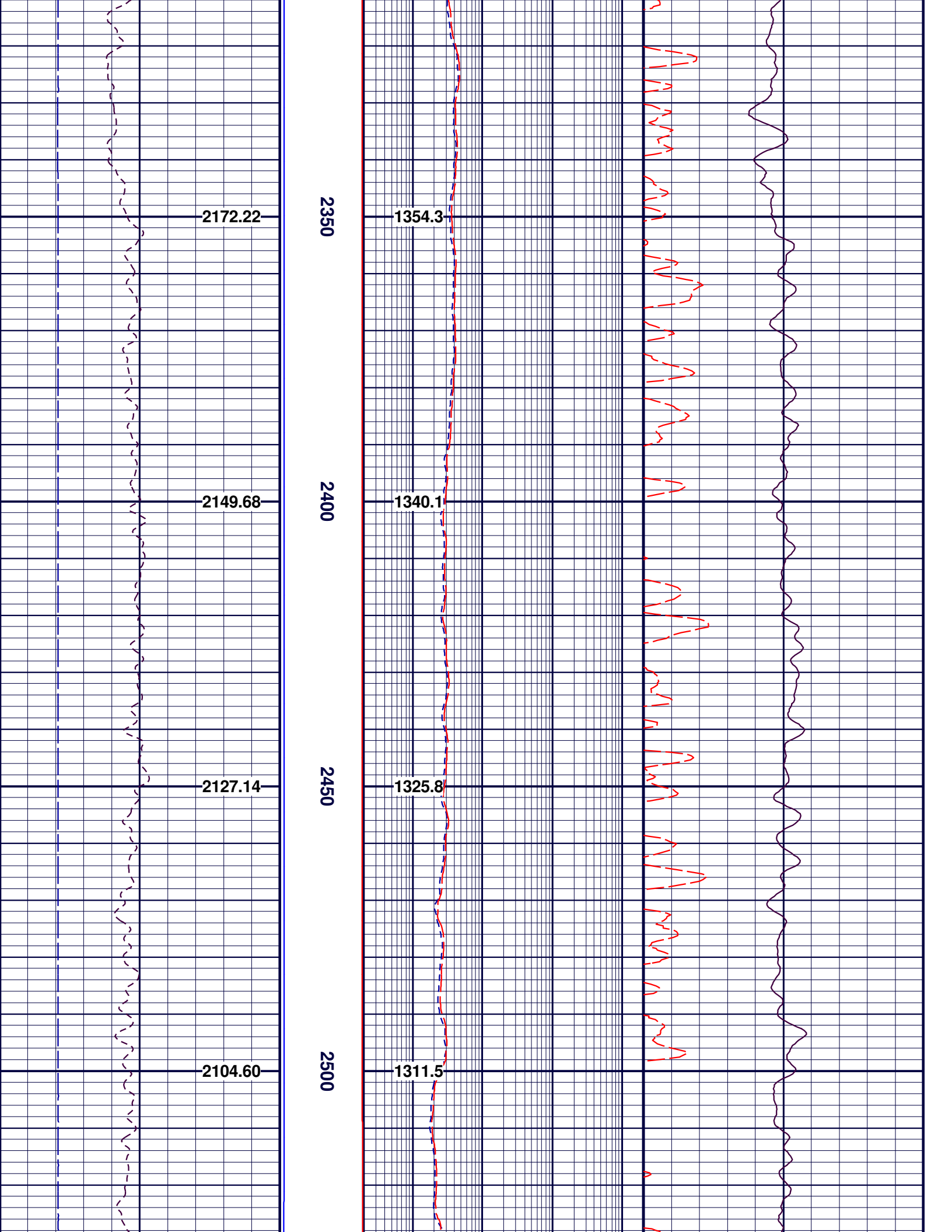


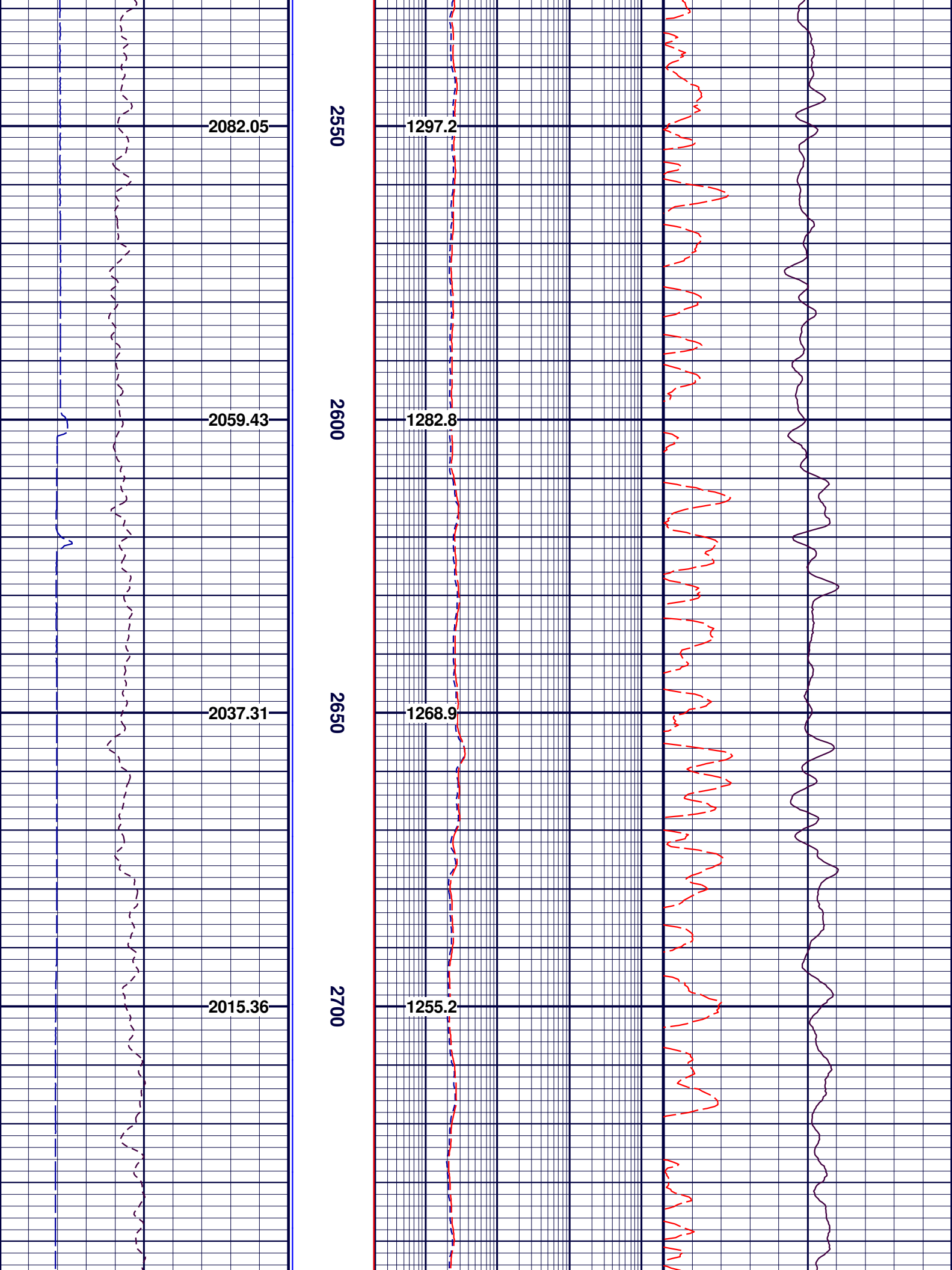


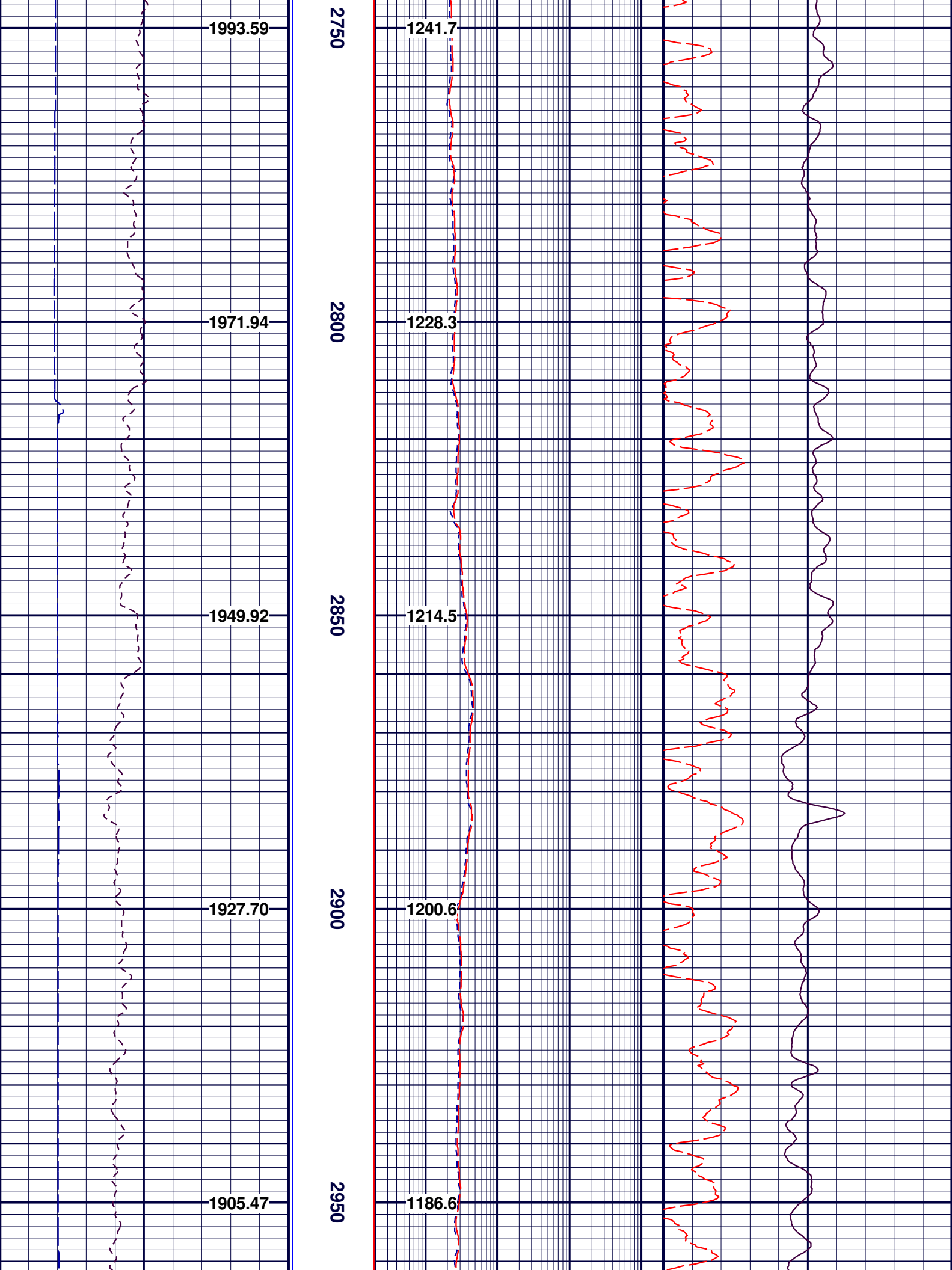


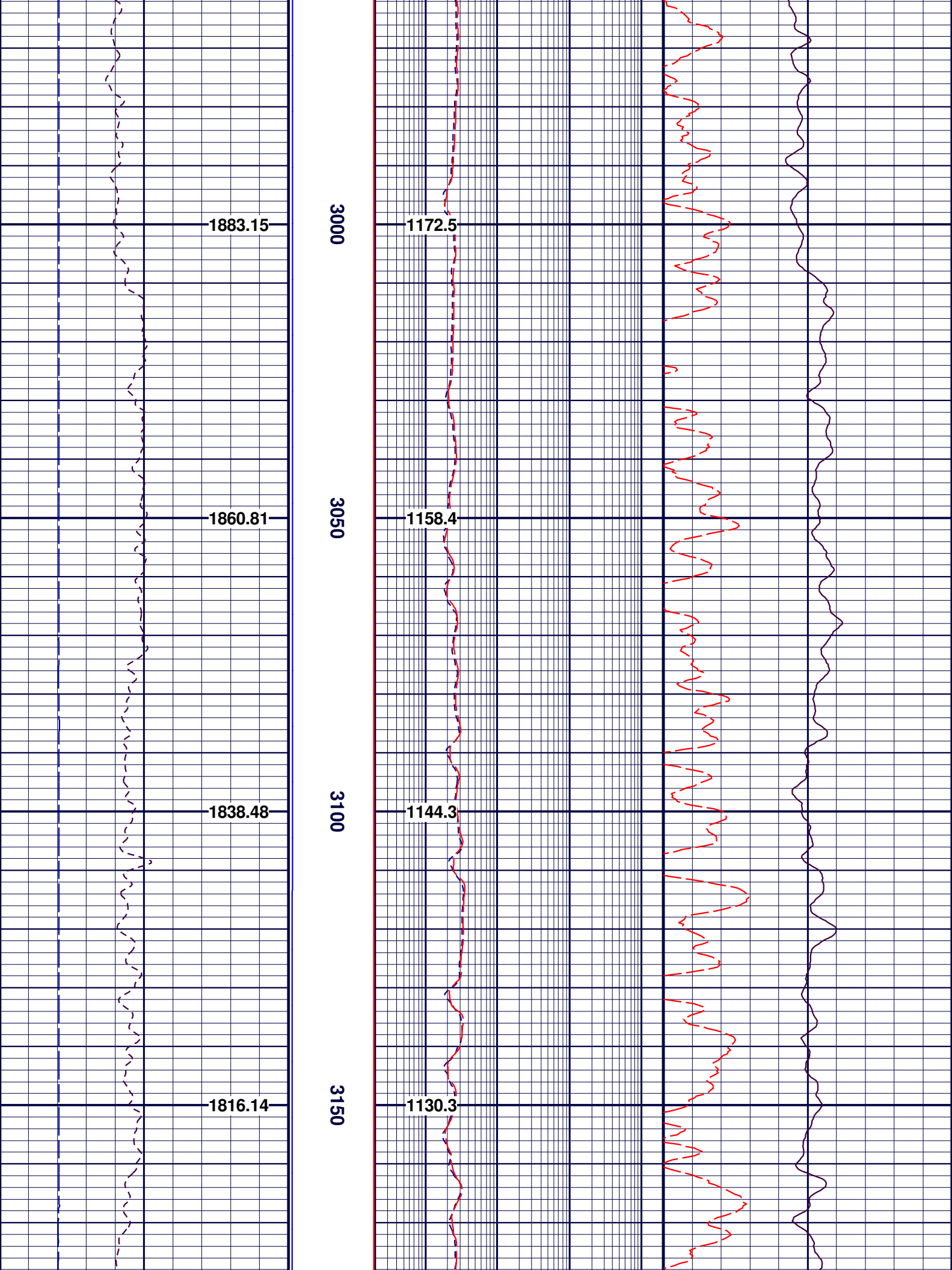


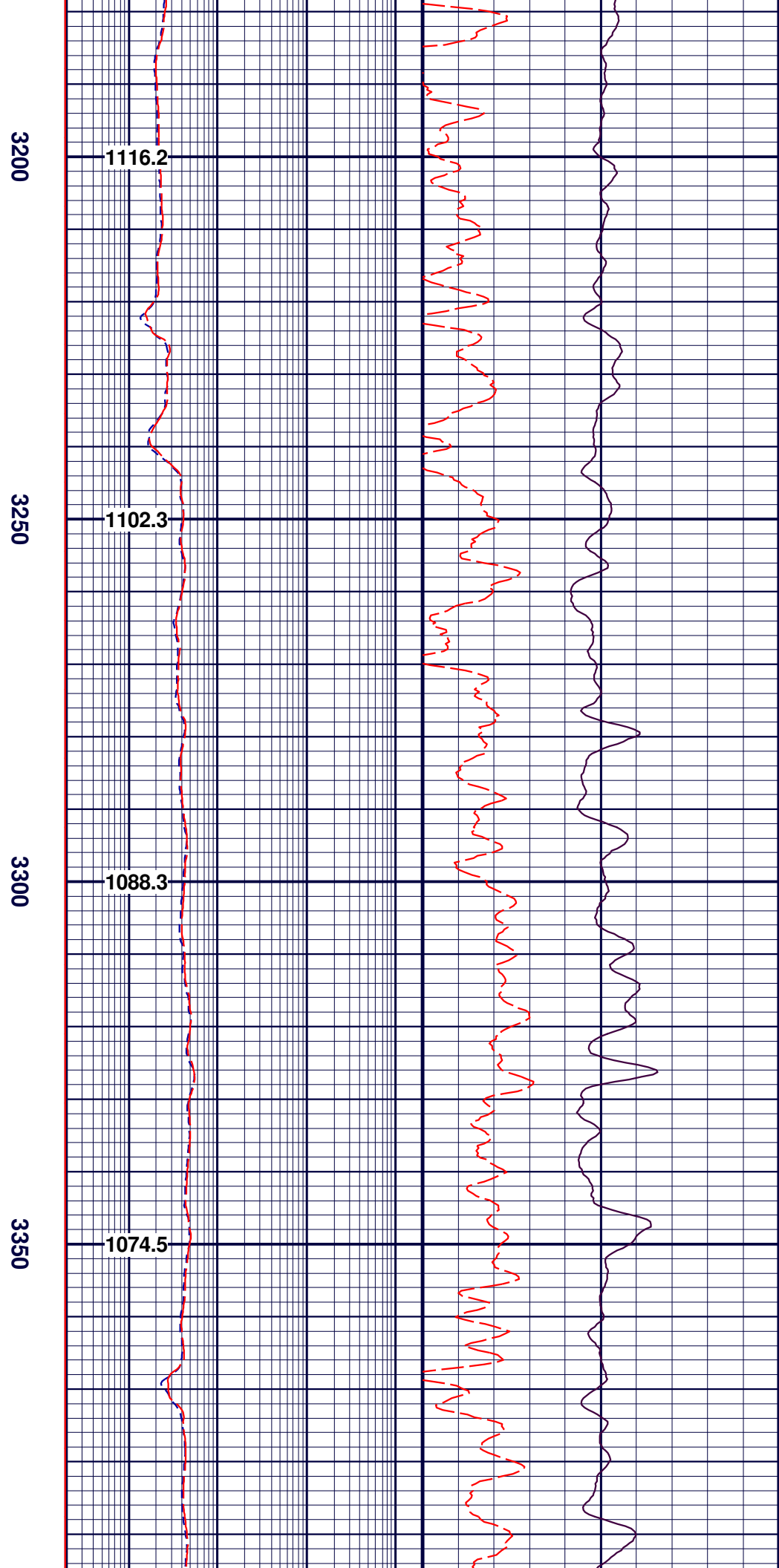
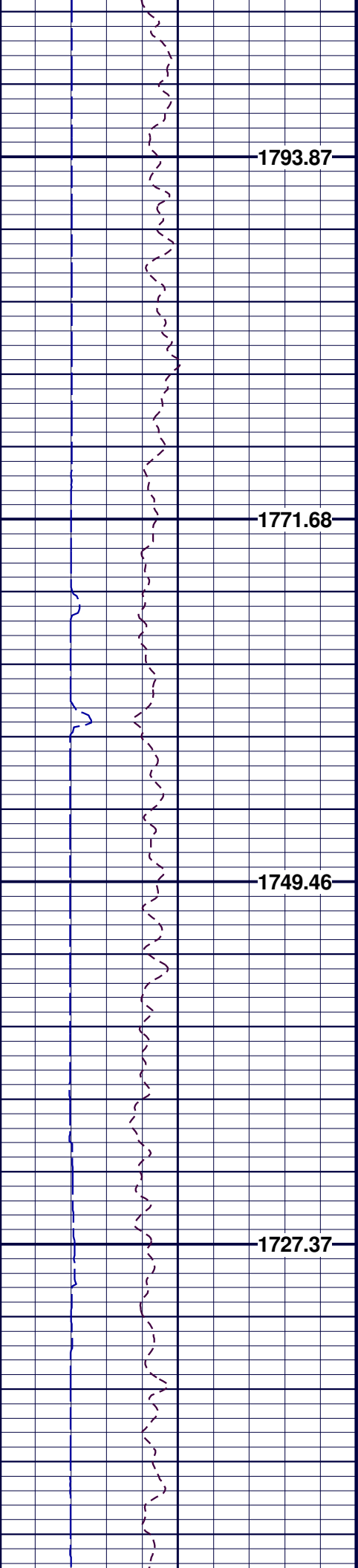


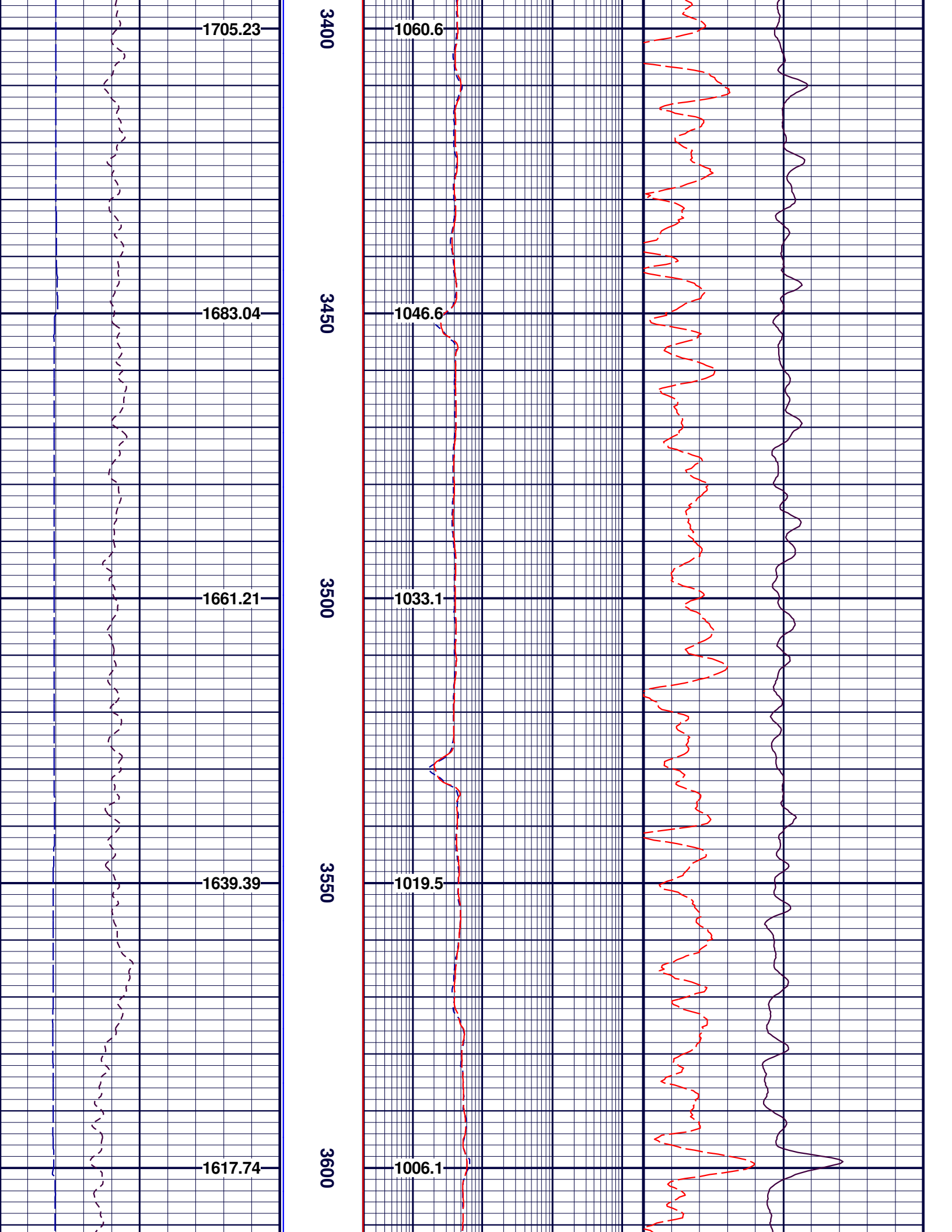


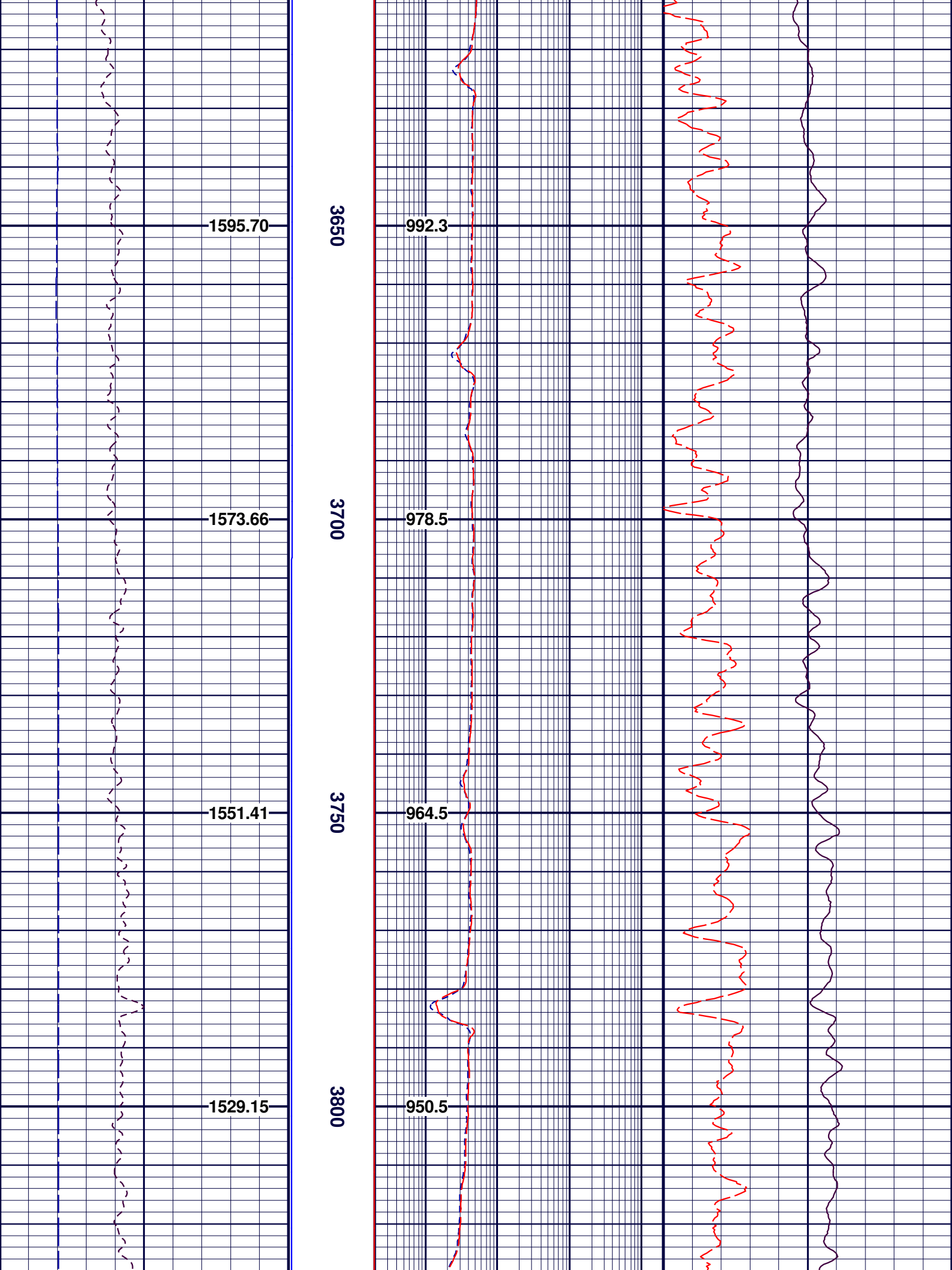


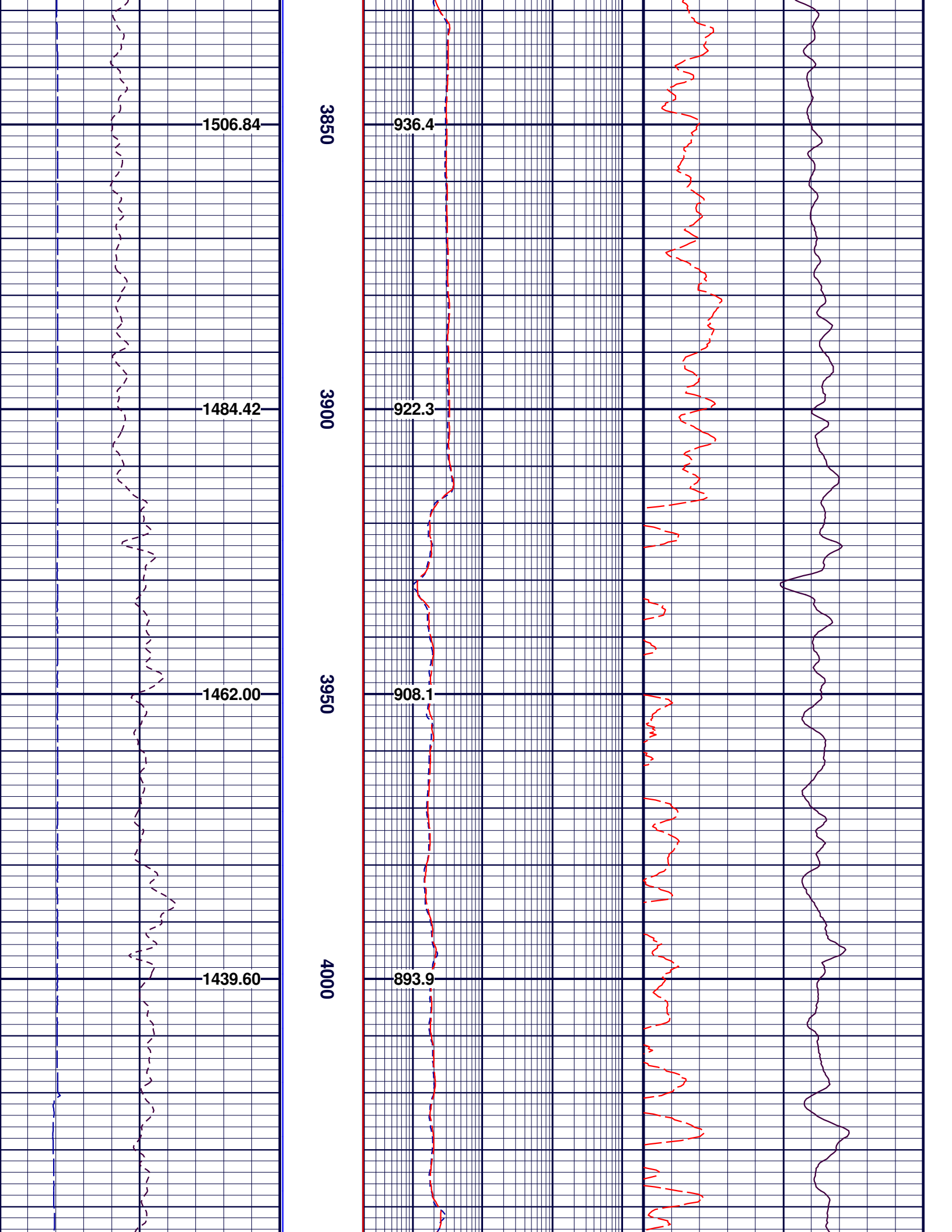


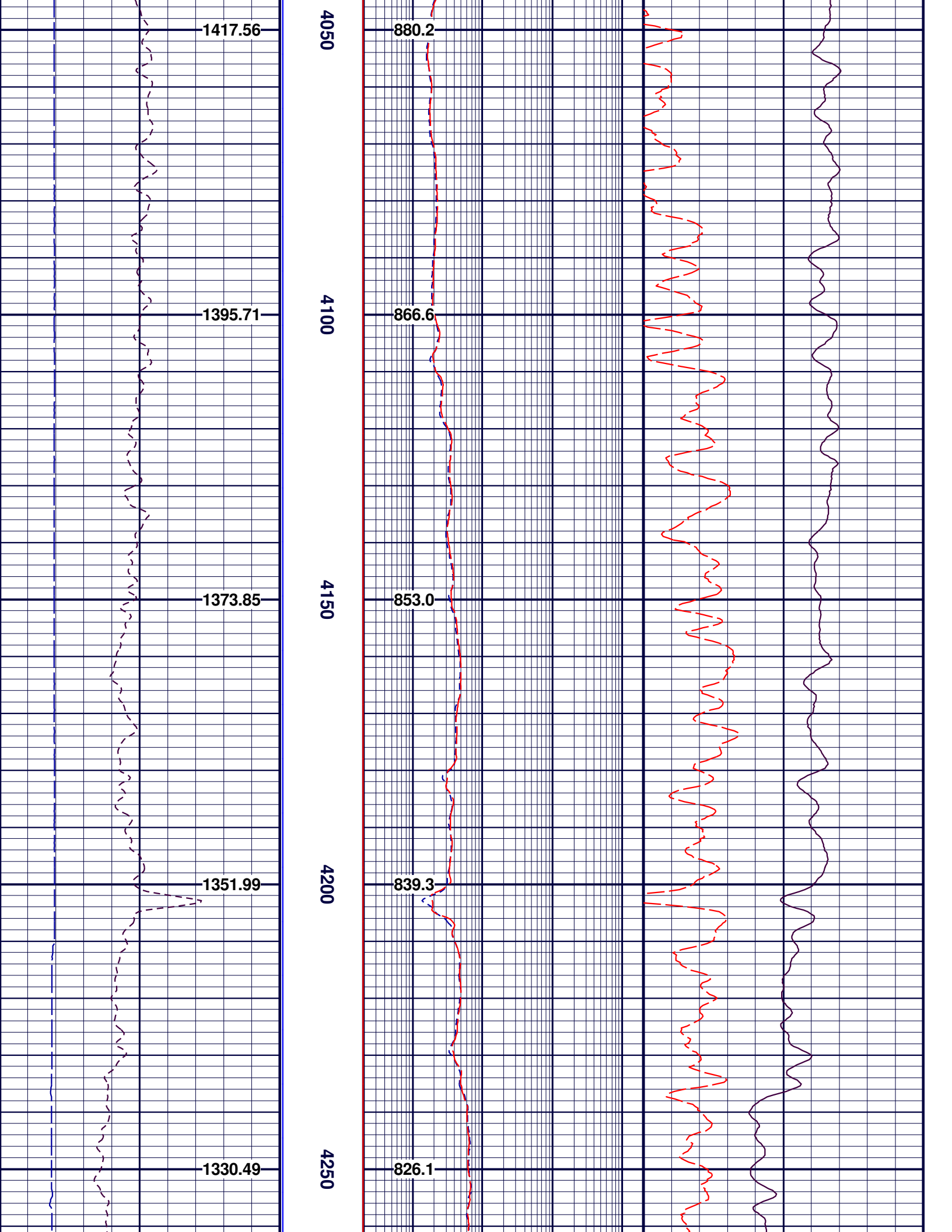


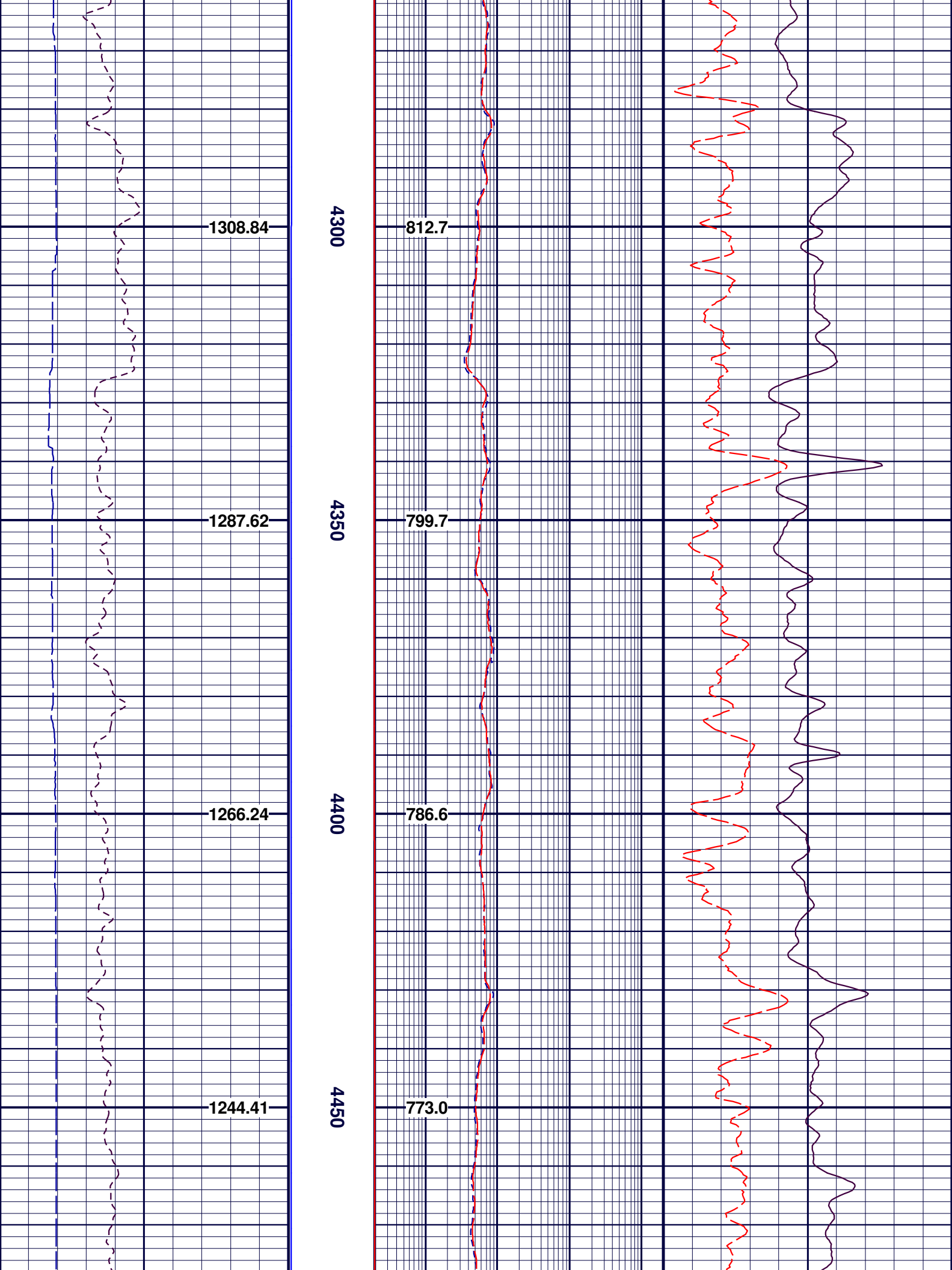


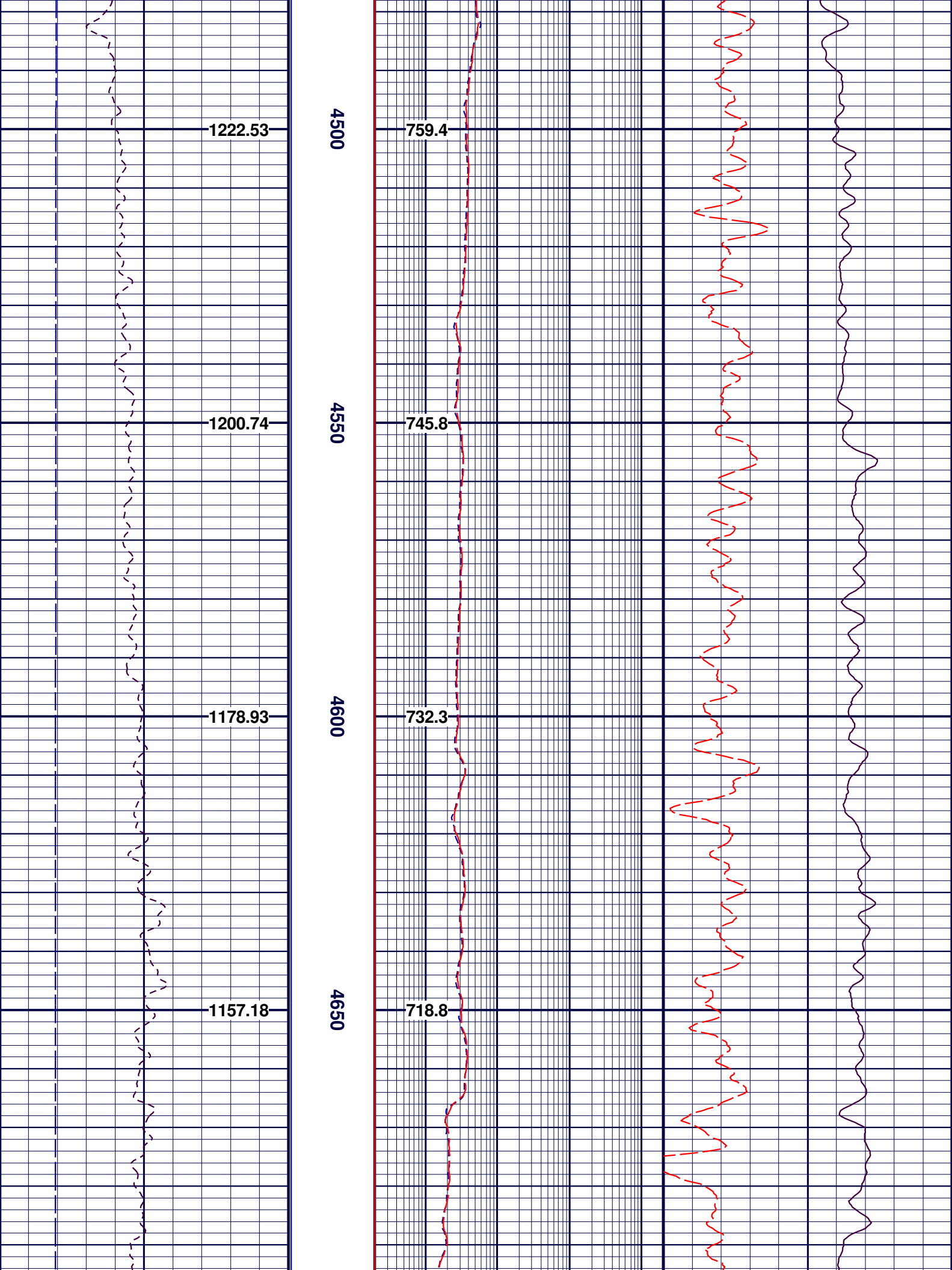


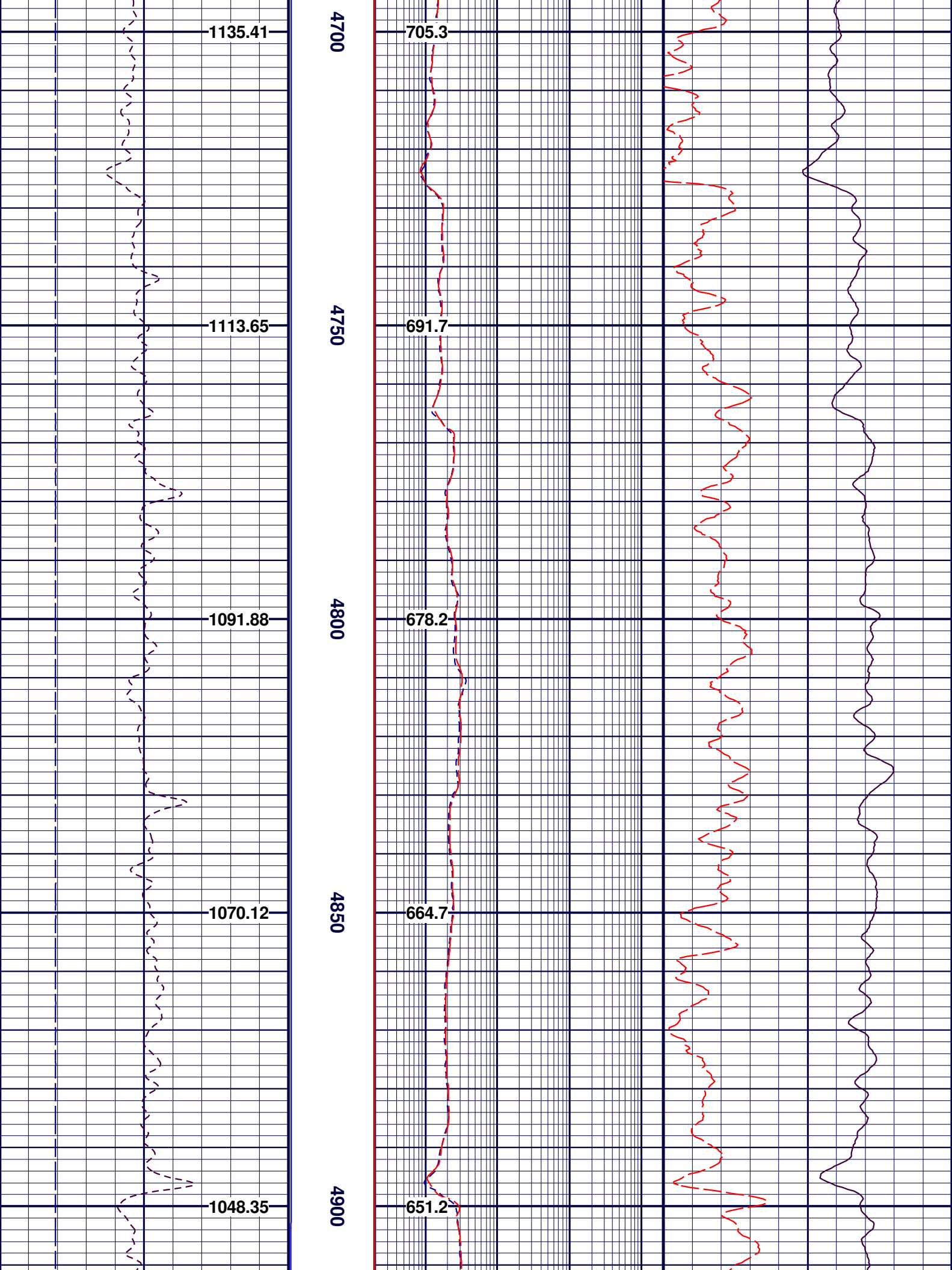


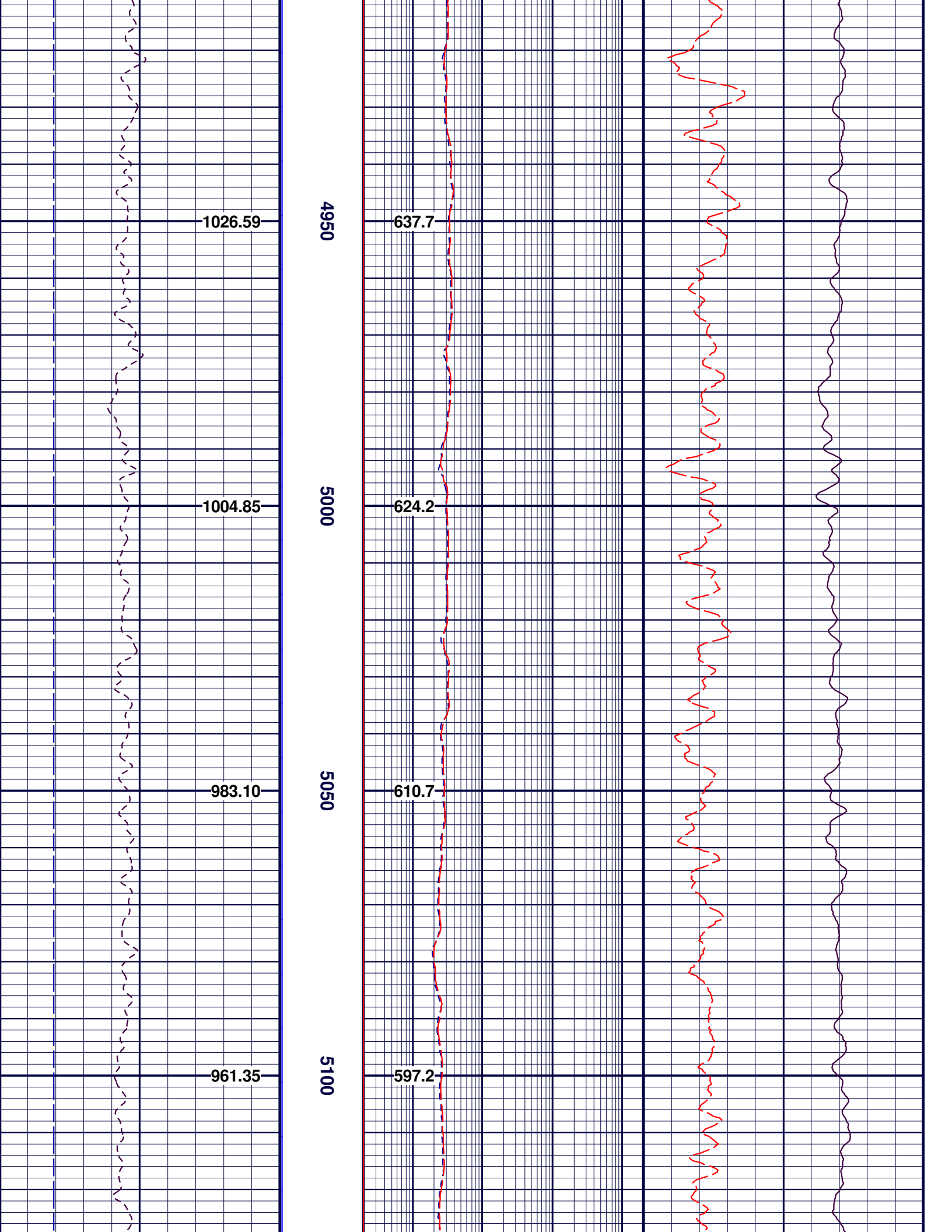


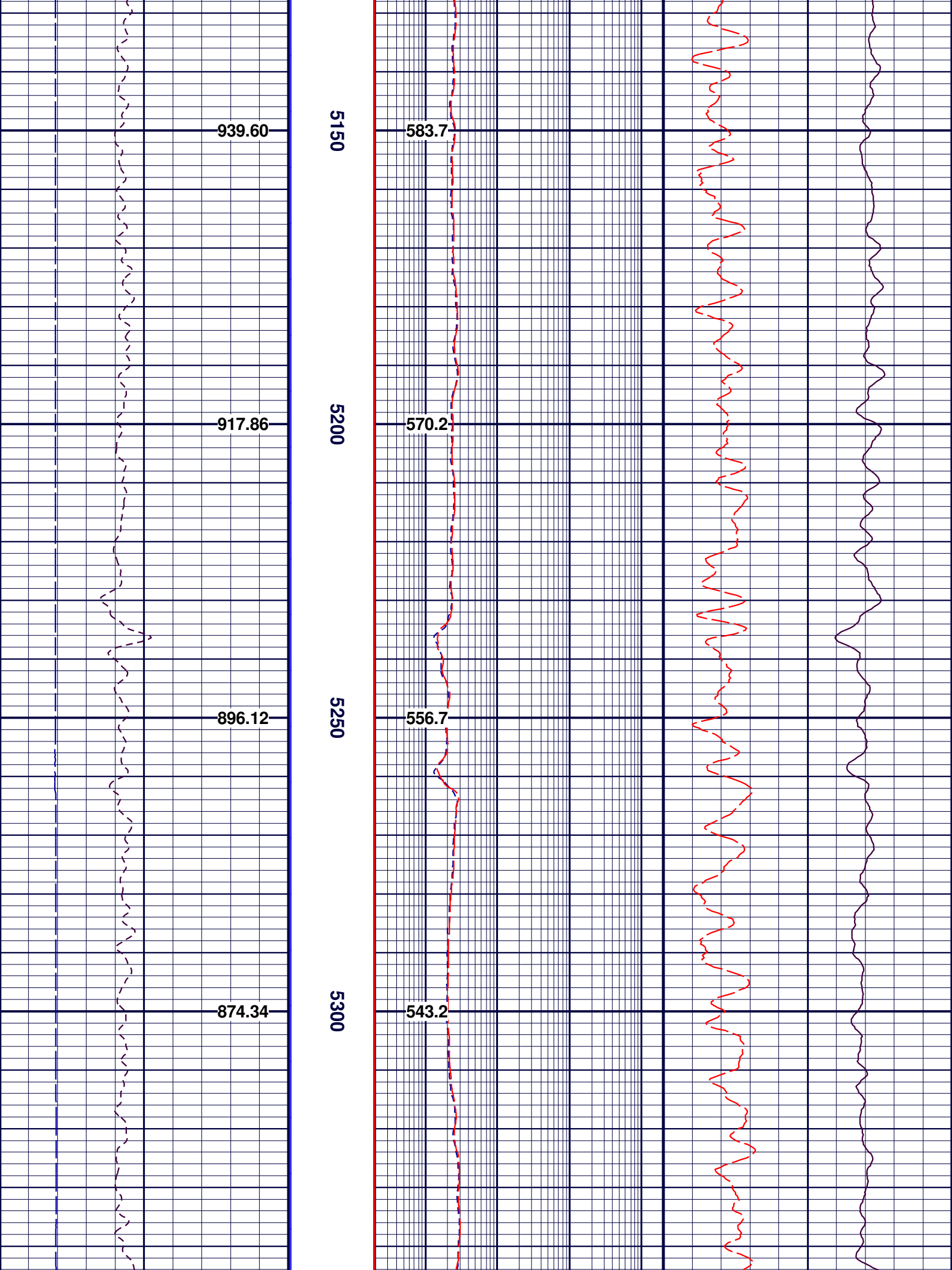


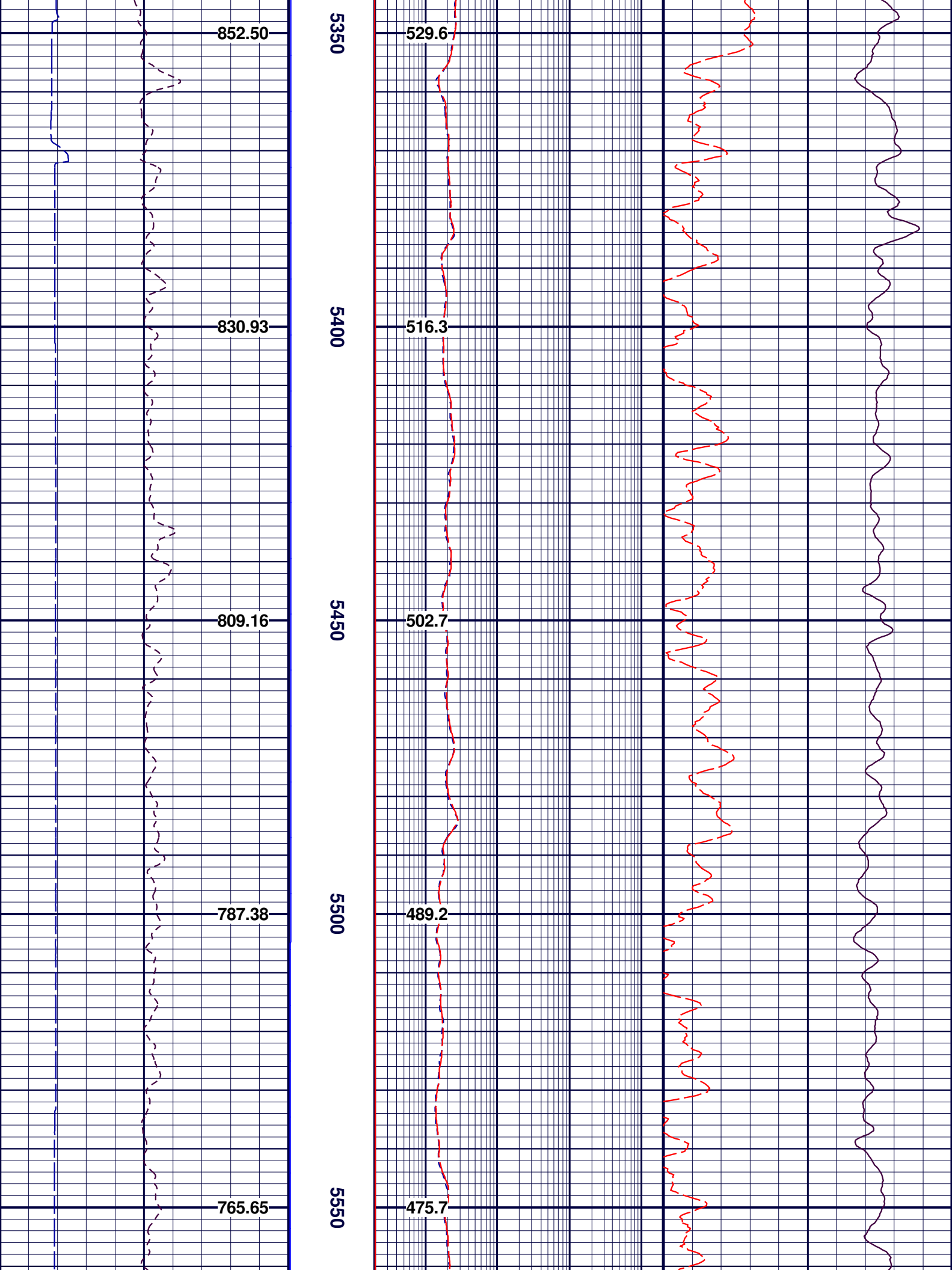


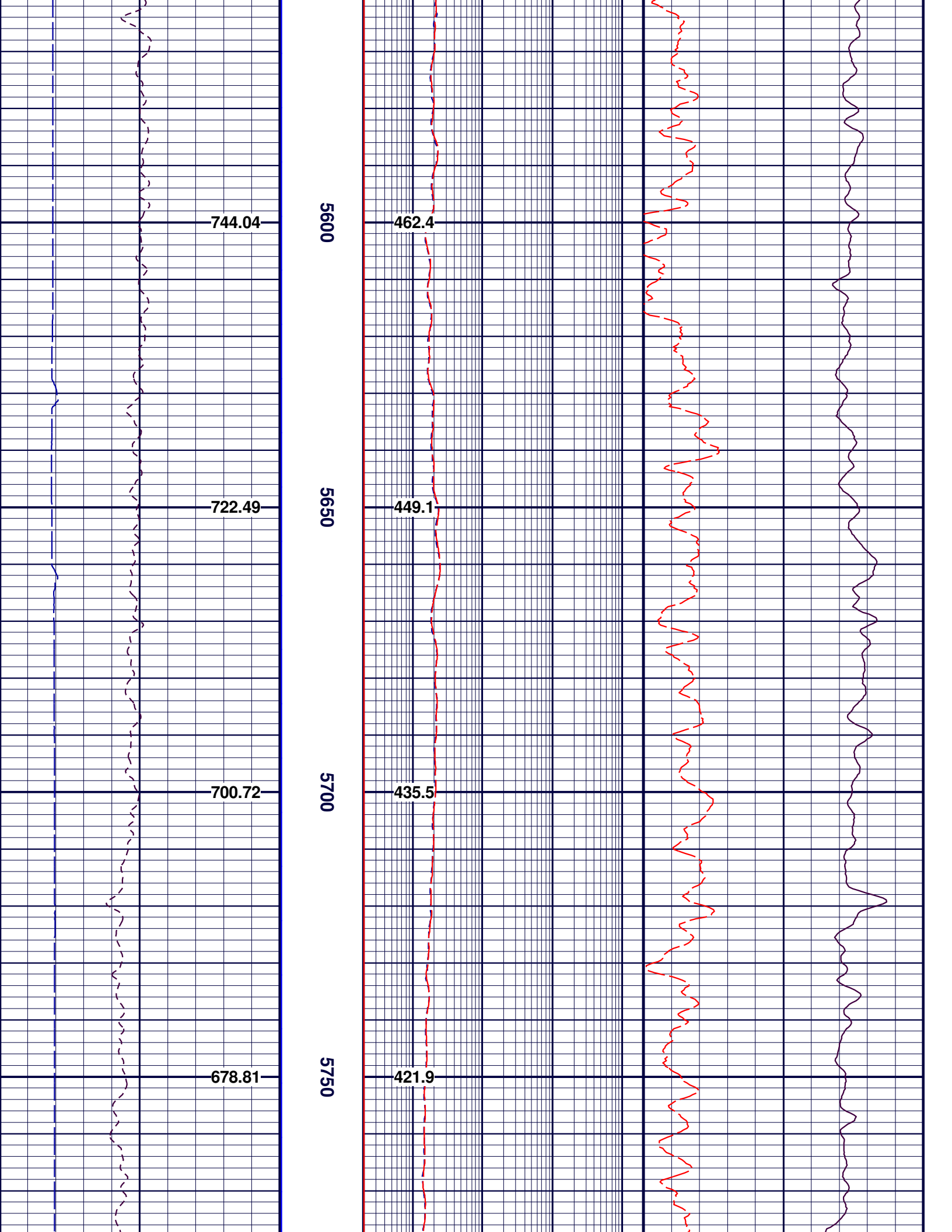


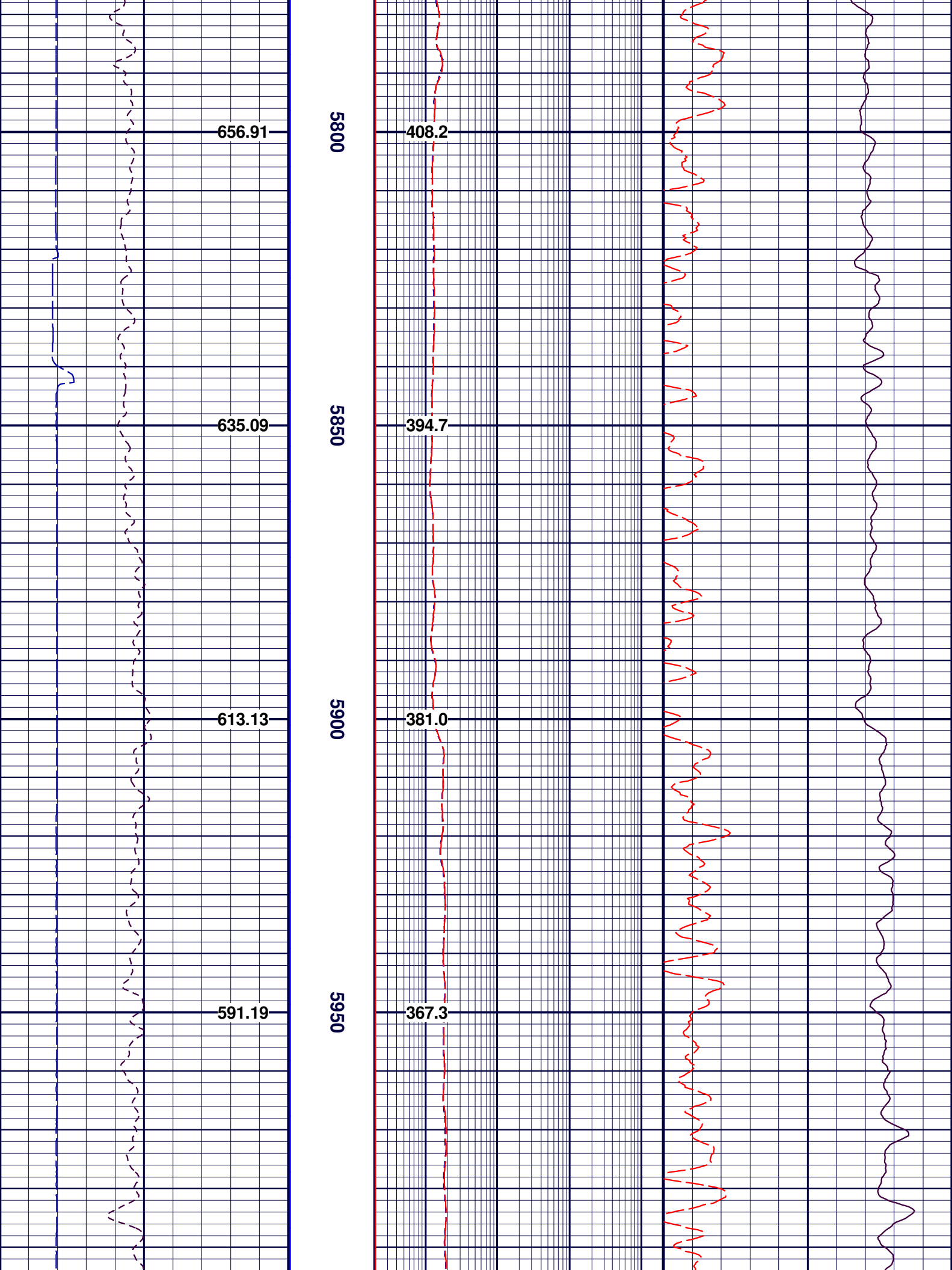


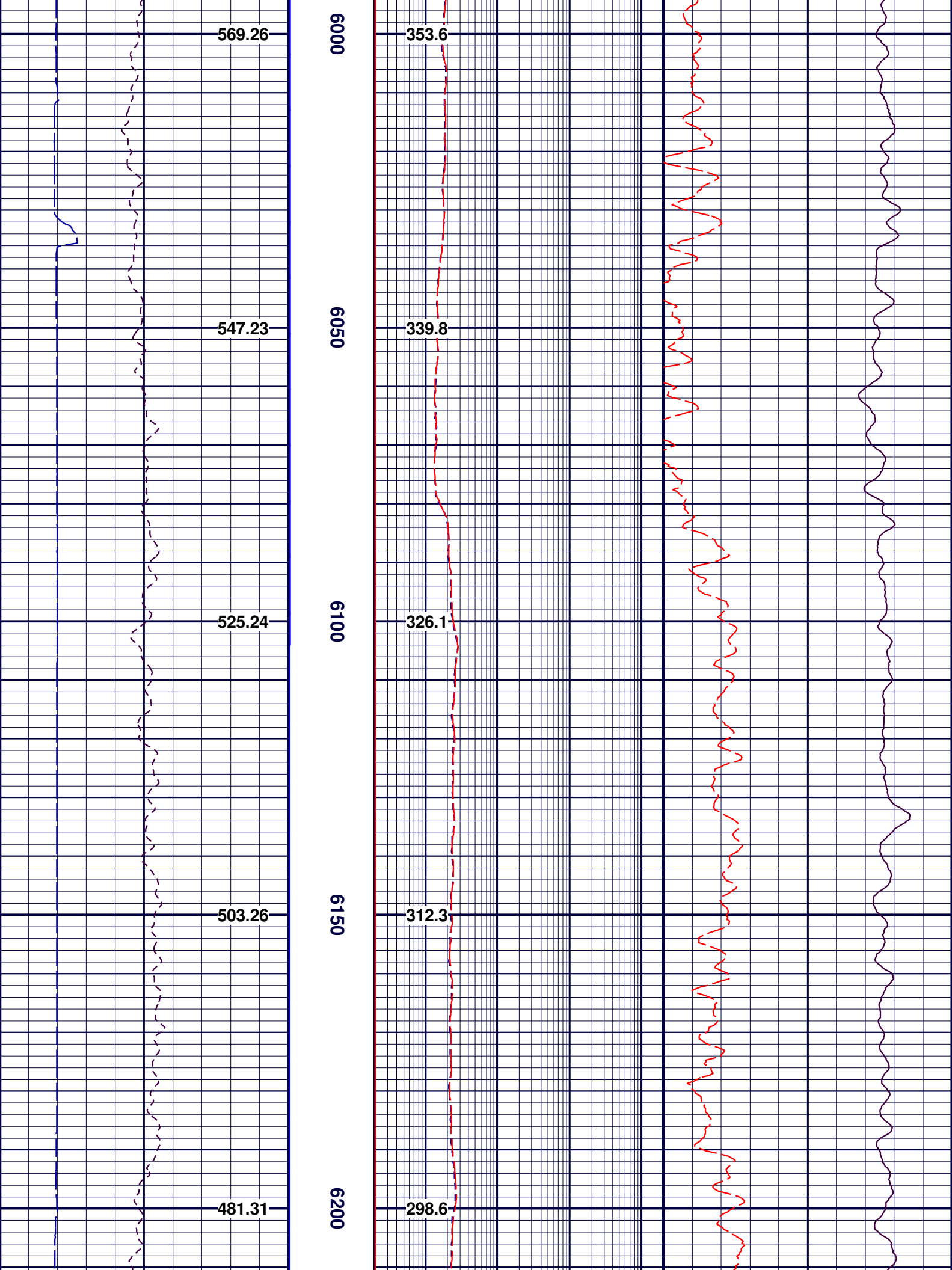


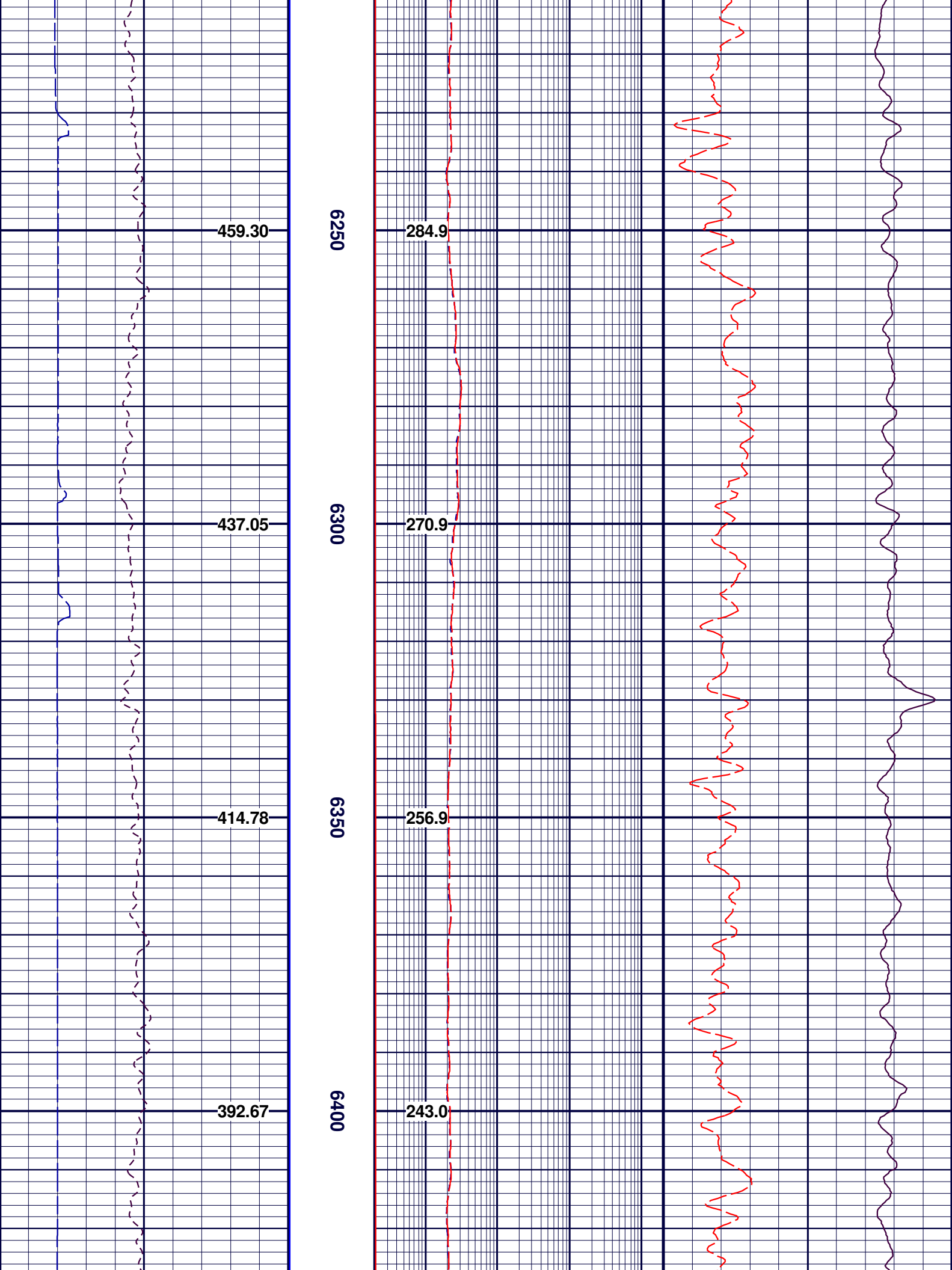


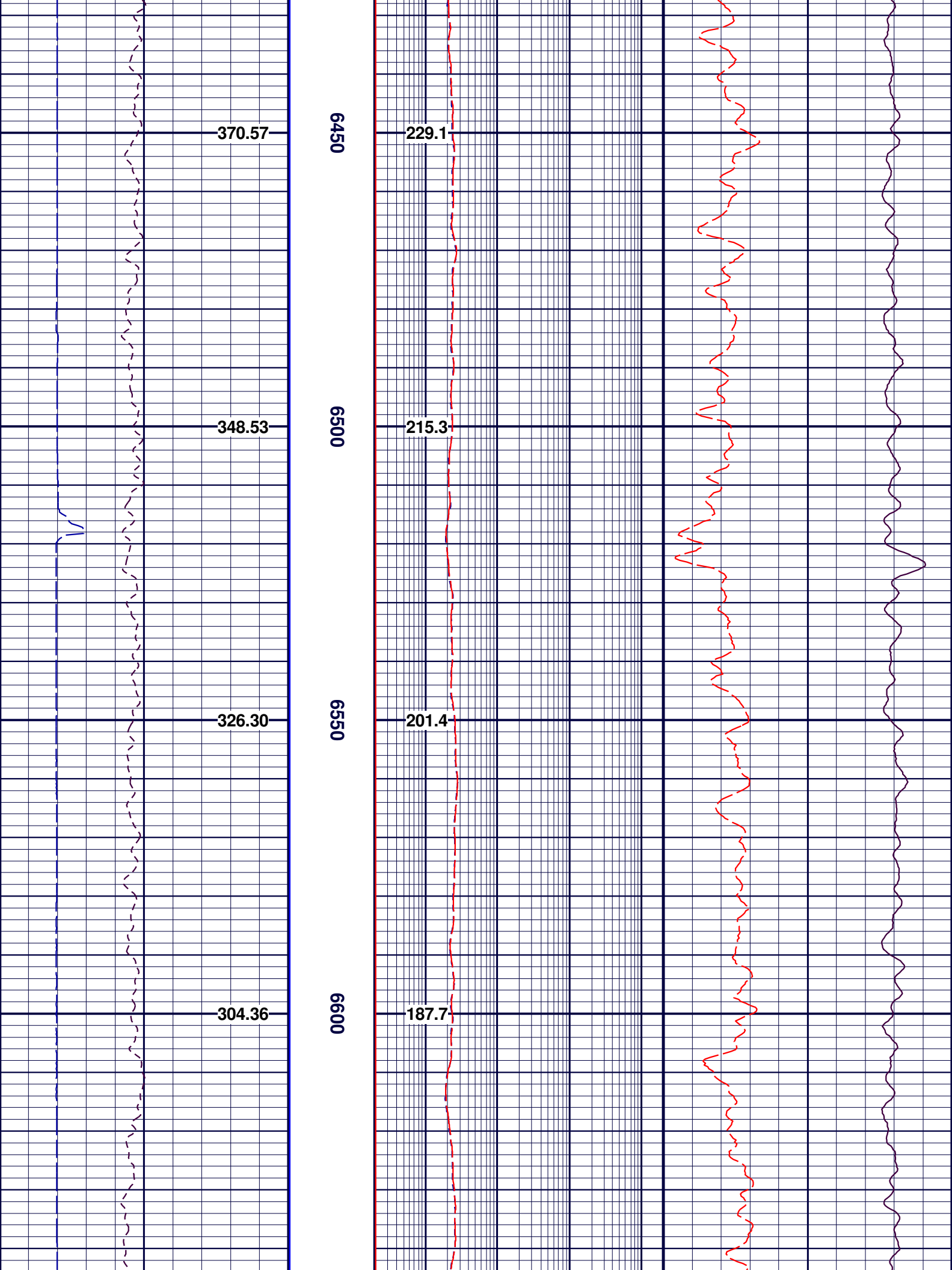


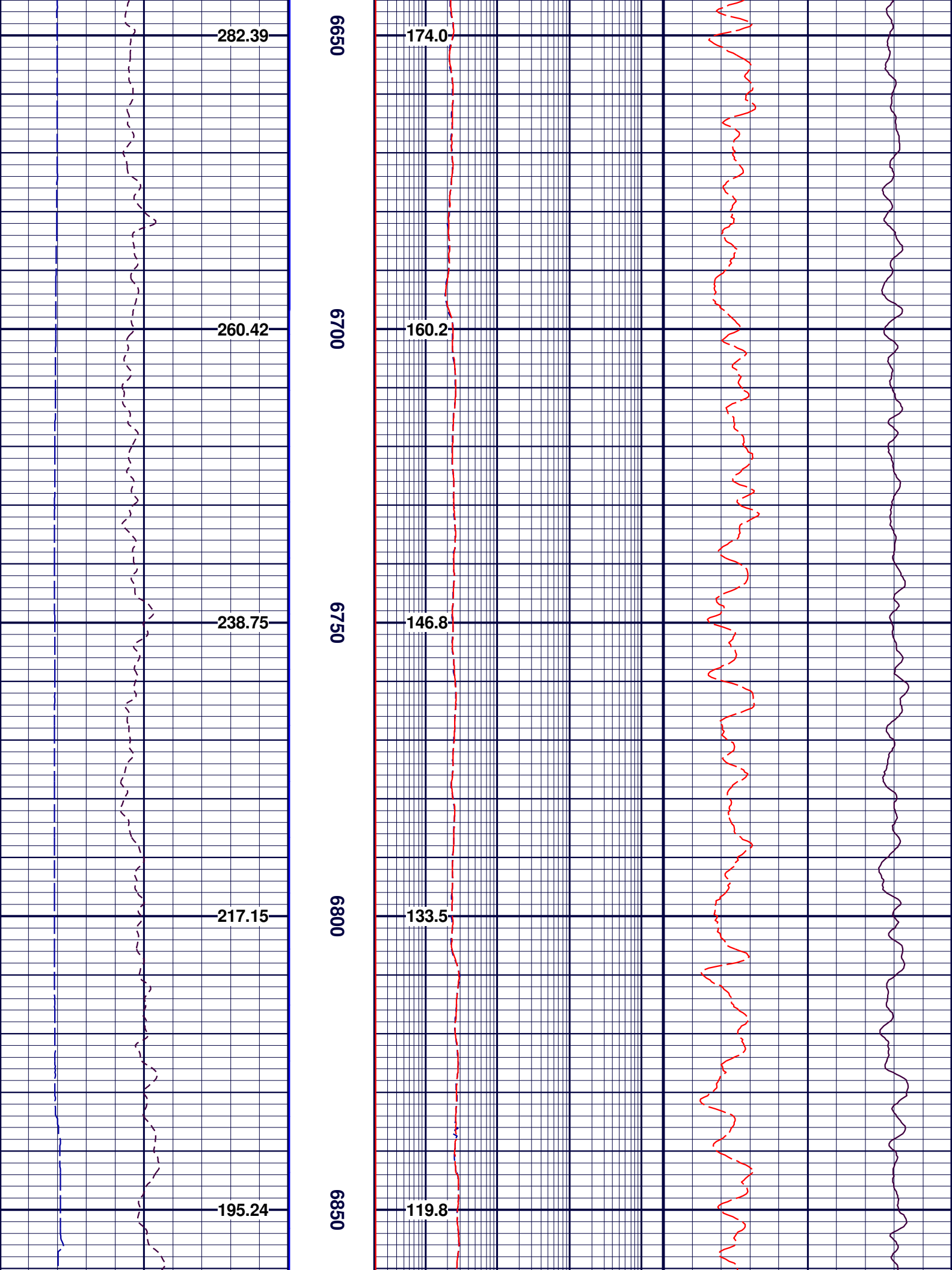


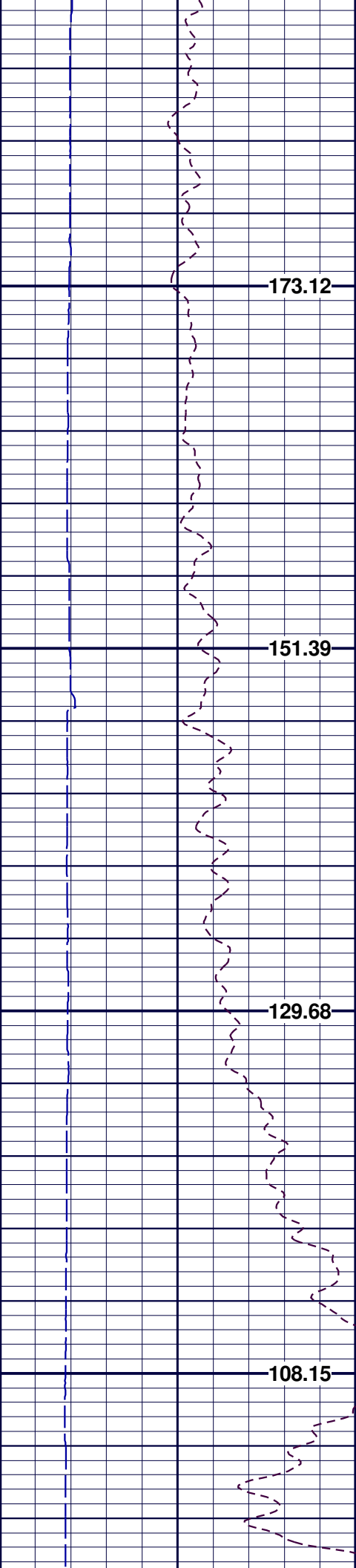










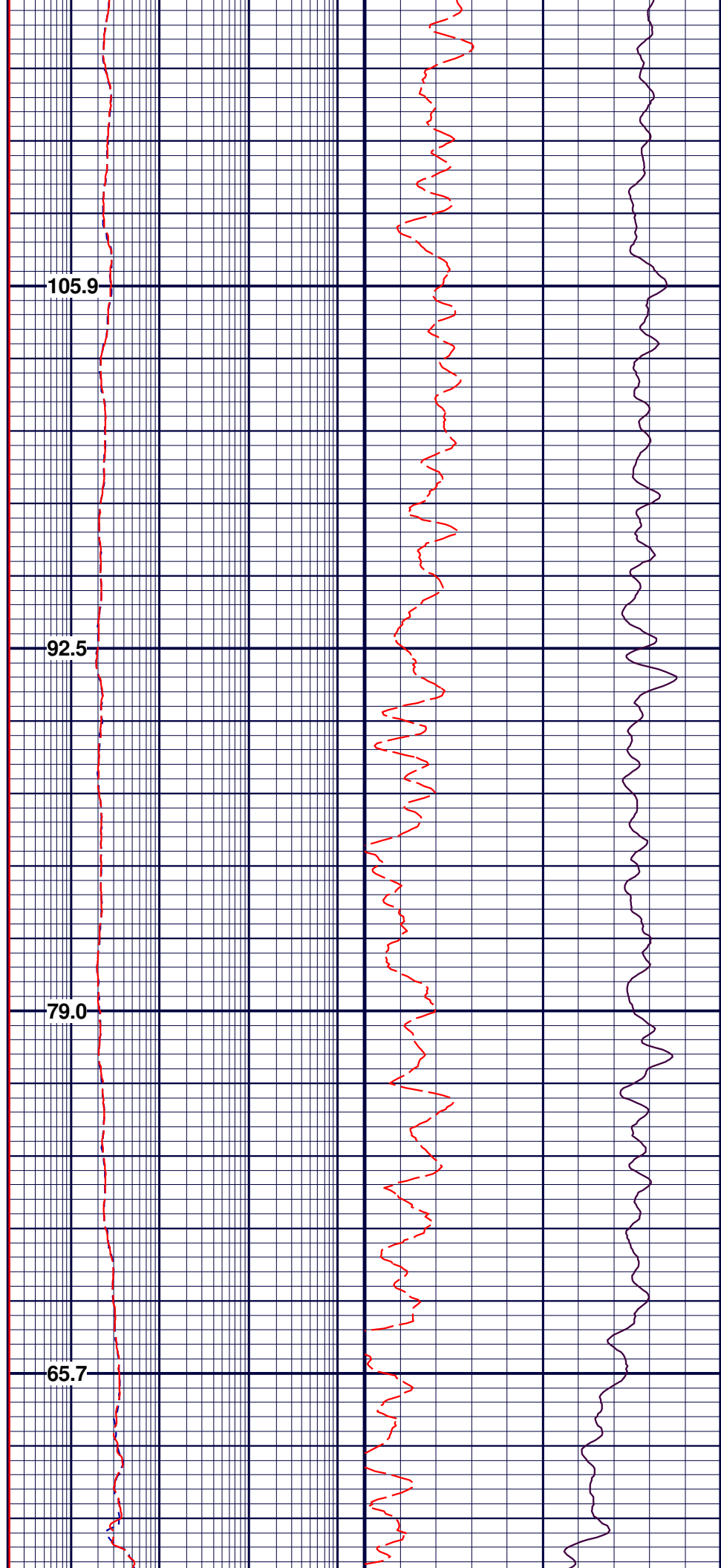


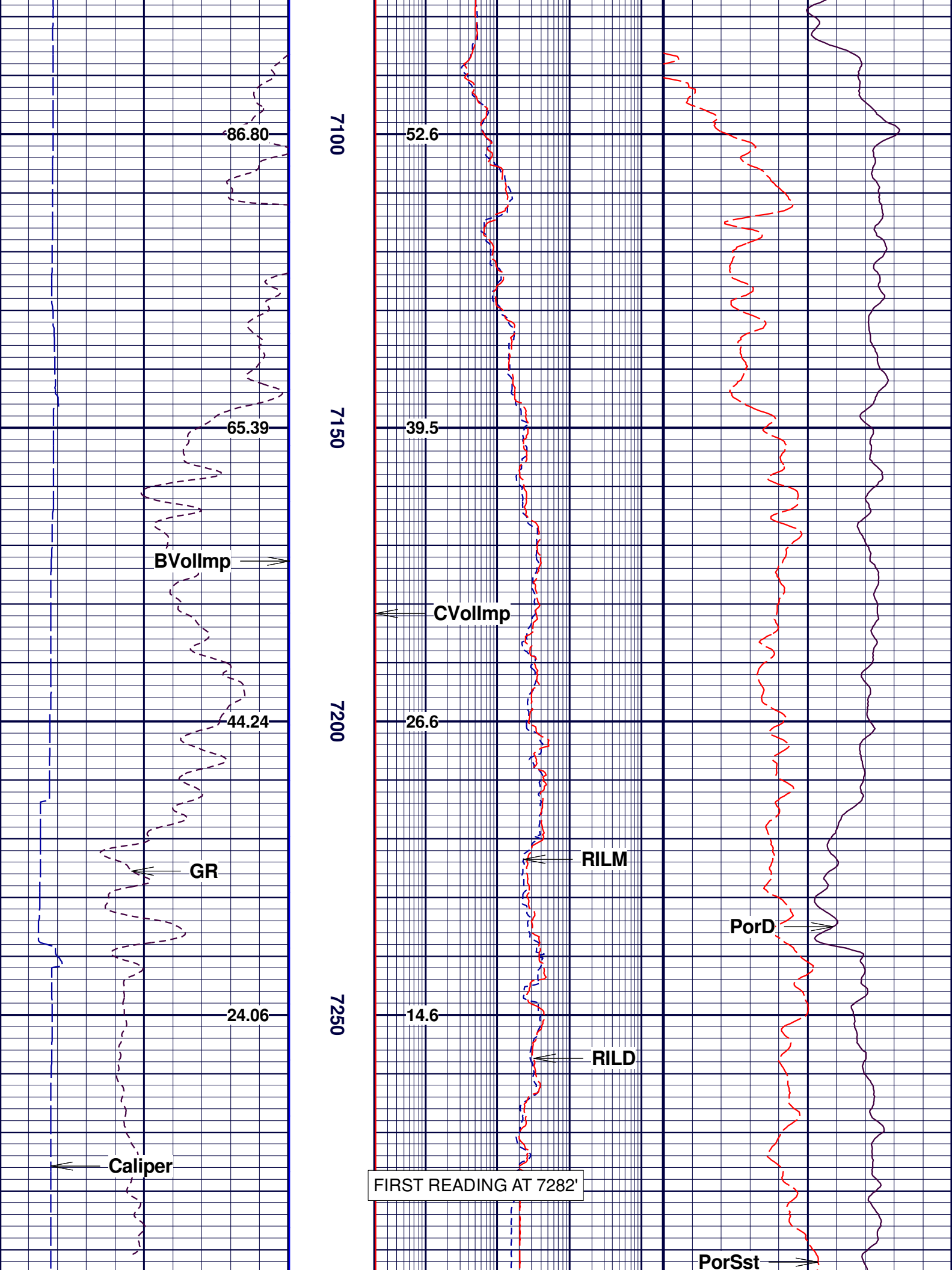
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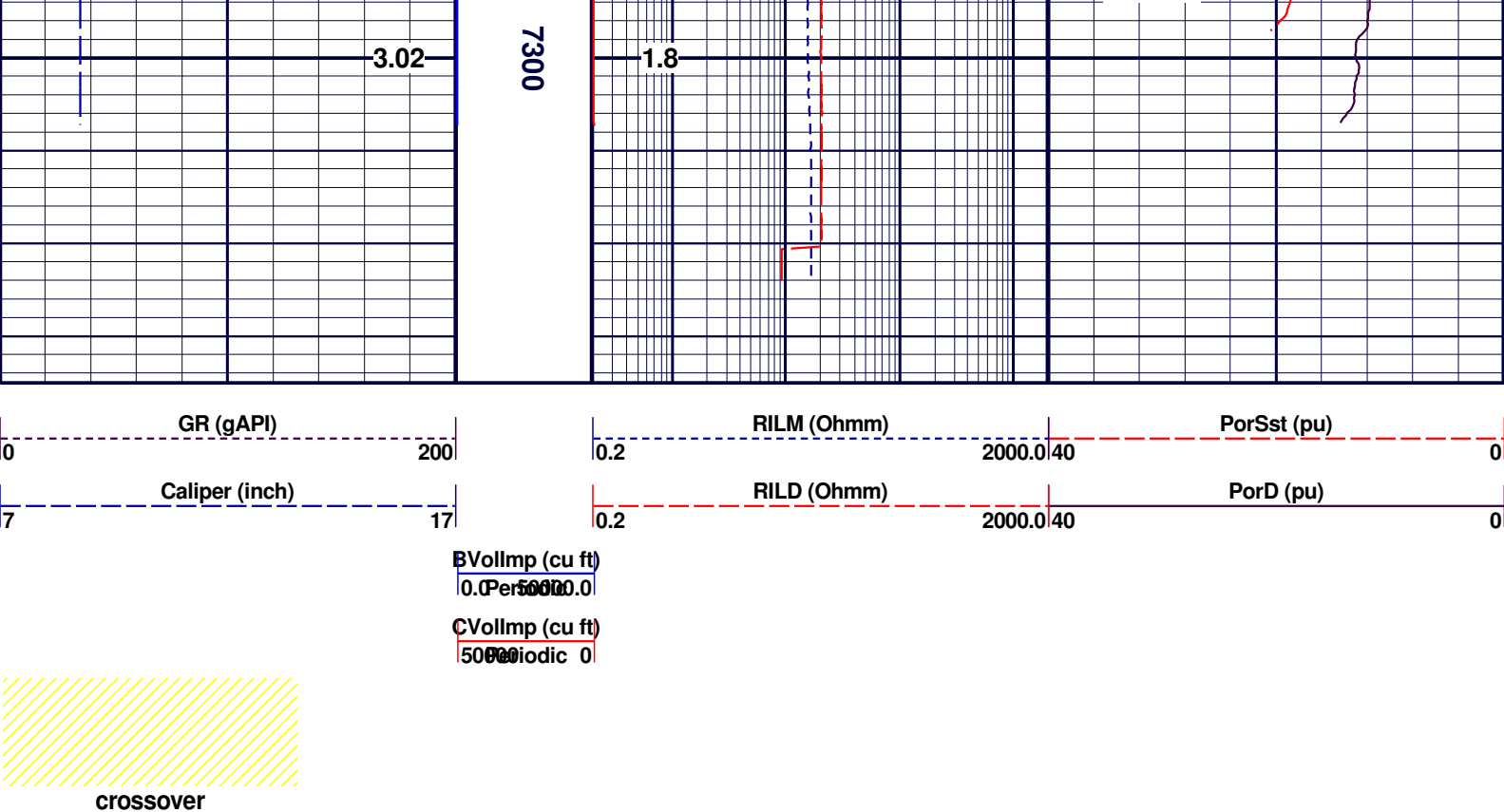
6950

7000

7050







CALIBRATION SUMMARY

File : C:\Welldata\2-014081_EXTRACTION\2015183.cvf

Tool name : **Tension**

Asset : **2015183**

Series : **Tension**

Source ID :

Tension

Two Point Calibration

Time Oct / 01 / 2015 15:06:00

Setup

Description

Setup Version 00000

Curve Name	pt	Raw Value	User Value	Device
Tension	1	800	0 N	
Tension	2	24375.3	44482 N	

Mult.

Add.

1.886805

-1509.444

File : C:\Welldata\2-014081_EXTRACTION\AFC_1831A_024.cvf

Tool name : **TCMRT**

Asset : **024**

Series : **1831A**

Source ID :

Tension

Tension Calibration

Time

Setup

Description

Setup Version 00000

Curve Name	pt	Raw Value	User Value	Device
------------	----	-----------	------------	--------

Mult.

Add.

CHT	1	0 N	0 N		1.000000	0.000
	2	1 N	1 N			

File : C:\Welldata\2-014081_EXTRACTION\AFC_0930A_021.cvf

Tool name : **Telemetry**

Asset : **021**

Series : **0930A**

Source ID :

GR

Gamma Calibration

Time

Oct / 22 / 2015 09:30:04

Setup

Description

Oct 22

Setup Version

00001

Block

Raw Value

User Value

Device

Device SN

Mult.

Background

244.289

Jig ON

795.21

Gamma

550.921

150.0003 gAPI

0.2722719

File : C:\Welldata\2-014081_EXTRACTION\AFC_1468A_015.cvf

Tool name : **Compensated Neutron**

Asset : **015**

Series : **1468A**

Source ID :

CN

Compensated Neutron Calibration

Time

Sep / 30 / 2015 14:44:18

Setup

Description

v5_91 Sep 30

Setup Version

00001

Curve Name

pt

Raw Value

User Value

Device

Mult.

Ratio

1

4.3927

4.94 none

1.124593

File : C:\Welldata\2-014081_EXTRACTION\AFC_1486A_016.cvf

Tool name : **PE Density Microlog**

Asset : **016**

Series : **1486A**

Source ID :

Peak

ZDL Peak Calibration

Time

Oct / 19 / 2015 11:17:22

Setup

Description

Oct 19

Setup Version

00001

Block

Channel

Energy (keV)

Device

Am241

20.218

59.5

Cs137

191.45

661.6

60-100 keV

100-140 keV

140-200 keV

200-540 keV

Background

177 306

217 987

430 291

1309 79

Tool name : **PE Density Microlog**Asset : **016**Series : **1486A**

Source ID :

PeDen**PeDen Calibration**

Time Oct / 19 / 2015 11:00:30

Setup

Description Oct 19

Setup Version 00001

Raw Values

Device Values

	SSD	LSD	SHR	DEN	CORR	PE
MG	17947.6 cps	12670.0 cps	0.801 0.700 0.900	1.649 g/ccm	0.000 g/ccm	2.14 b/e
AL	9493.2 cps	1636.3 cps		2.550 g/ccm	0.000 g/ccm	
AL + Mg Shim	12788.6 cps	2625.7 cps		2.488 g/ccm	0.120 g/ccm	
MG + St Shim		5642.8 cps	0.310 0.250 0.320			10.31 b/e
Ratio MG/AL	1.89 none 1.50 2.00	7.74 none 6.80 8.50				
Spine Angle	72.7 deg 72.0 75.0	Rib Angle	52.6 deg 52.0 55.0			

Tool name : **PE Density Microlog**Asset : **016**Series : **1486A**

Source ID :

RNML**Resistivity Calibration**

Time Oct / 01 / 2015 09:41:24

Setup

Description Fort Morgan

Setup Version 00001

Curve Name	pt	Raw Value	User Value	Device	Mult.	Add.
RNML	1	-0.0577092	0 Ohmm		5.988882	0.346
	2	24.9887	150 Ohmm			

Tool name : **PE Density Microlog**Asset : **016**Series : **1486A**

Source ID :

RLML**Resistivity Calibration**

Time Oct / 01 / 2015 09:41:38

Setup

Description Fort Morgan

Setup Version 00001

Curve Name	pt	Raw Value	User Value	Device	Mult.	Add.
RLML	1	-0.0162024	0 Ohmm		1.270483	0.021
	2	132.217	168 Ohmm			

Tool name : **PE Density Microlog**Asset : **016**Series : **1486A**

Source ID :

Caliper**Caliper Calibration**

Time Oct / 19 / 2015 11:24:33

Setup

Description Oct 19

Setup Version 00001

Curve Name	pt	Raw Value	User Value	Device	Mult.	Add.
Caliper	1	6.45196	6 inch		0.949330	-0.125
	2	16.9857	16 inch			

File : C:\Welldata\2-014081_EXTRACTION\AFC_1141A_013.cvf

Tool name : **DIL**Asset : **013**Series : **1141A**Source ID :

Deep

Conductivity Calibration

TimeJun / 18 / 2015 09:46:51

Setup

Descriptionshop_June17 13el_14man

Setup Version00001

Curve Name	pt	Raw Value	User Value	Device	Mult.	Add.
CILDRaw	1	-2.69737 mV	0 mS/m		0.839323	2.264
	2	474.592 mV	400.6 mS/m			

Tool name : **DIL**Asset : **013**Series : **1141A**Source ID :

GwD

Array Calibration

Time

Setup

Description

Setup Version00000

No01:Value0

NoValue

NoValue

NoValue

NoValue

NoValue

Tool name : **DIL**Asset : **013**Series : **1141A**Source ID :

CLL8

Conductivity Calibration

TimeJun / 18 / 2015 10:23:50

Setup

Description

Setup Version00001

Curve Name	pt	Raw Value	User Value	Device	Mult.	Add.
CLL8	1	518.032 mV	500 mmho		0.965664	-0.245
	2	1.28921 mV	1 mmho			

Tool name : **DIL**Asset : **013**Series : **1141A**Source ID :

Medium

Conductivity Calibration

TimeJun / 18 / 2015 09:54:03

Setup

Descriptionshop_Jun 9 14el_14mand

Setup Version00001

Curve Name	pt	Raw Value	User Value	Device	Mult.	Add.
------------	----	-----------	------------	--------	-------	------

CILMRaw	1	-1.24249 mV	0 mS/m	
	2	468.664 mV	461 mS/m	

0.981046	1.219
----------	-------

Tool name : **DIL** Asset : **013** Series : **1141A** Source ID :

GwM

Array Calibration

Time
Setup
Description
Setup Version 00000

No	Value	No	Value	No	Value	No	Value	No	Value
01:	0								



COMPANY: EXTRACTION OIL & GAS,LLC
WELL: SILVERBACK No.1
FIELD: WILDCAT
COUNTY: USA
STATE: CO.