



DUAL INDUCTION LOG

Company Russell Oil, Inc.

Well Edwards Trust 'E' No. 26-1

Field Wildcat

County Logan State Kansas

Location: API #: 15-109-21,497-00-00

SEC 26 TWP 15S RGE 35W

Permanent Datum Ground Level Elevation 3107'

Log Measured From KB 5' AGL

Drilling Measured From KB

Other Services
CDNL
MICRO

Elevation

K.B. 3112'

D.F.

G.L. 3107'

Date 5/9/2017

Run Number One

Depth Driller 4730'

Depth Logger 4736'

Bottom Logged Interval 4734'

Top Log Interval 300'

Casing Driller 338'

Casing Logger 338'

Bit Size 7 7/8"

Type Fluid in Hole Chemical

Density / Viscosity 9.4/64

pH / Fluid Loss 10.0/8.0

Source of Sample Pit

Rm @ Meas. Temp .62@75degf

Rmf @ Meas. Temp .47@75degf

Rmc @ Meas. Temp .84@75degf

Source of Rmf / Rmc Calculated

Rm @ BHT 0.41@degf123

Time Circulation Stopped 8:30 a.m.

Time Logger on Bottom 9:00 a.m.

Maximum Recorded Temperature 123degf

Equipment Number T-729

Location Hays, KS

Recorded By Chris Desaire

Witnessed By Kitt Noah

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All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall 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 our general terms and conditions set out in our current Price Schedule.

Comments

Pence KS,
5 W to 23 Rd, N to Bison Rd, 1/2 N, W Into

Database File roedwardstruste26-1oh.db
Dataset Pathname pass3.13
Presentation Format kdillinn
Dataset Creation Tue May 09 10:16:43 2017
Charted by Depth in Feet scaled 1:600

GR (GAPI) 150

1000 CILD (mmho/m)

0

10000 LTEN (lb)

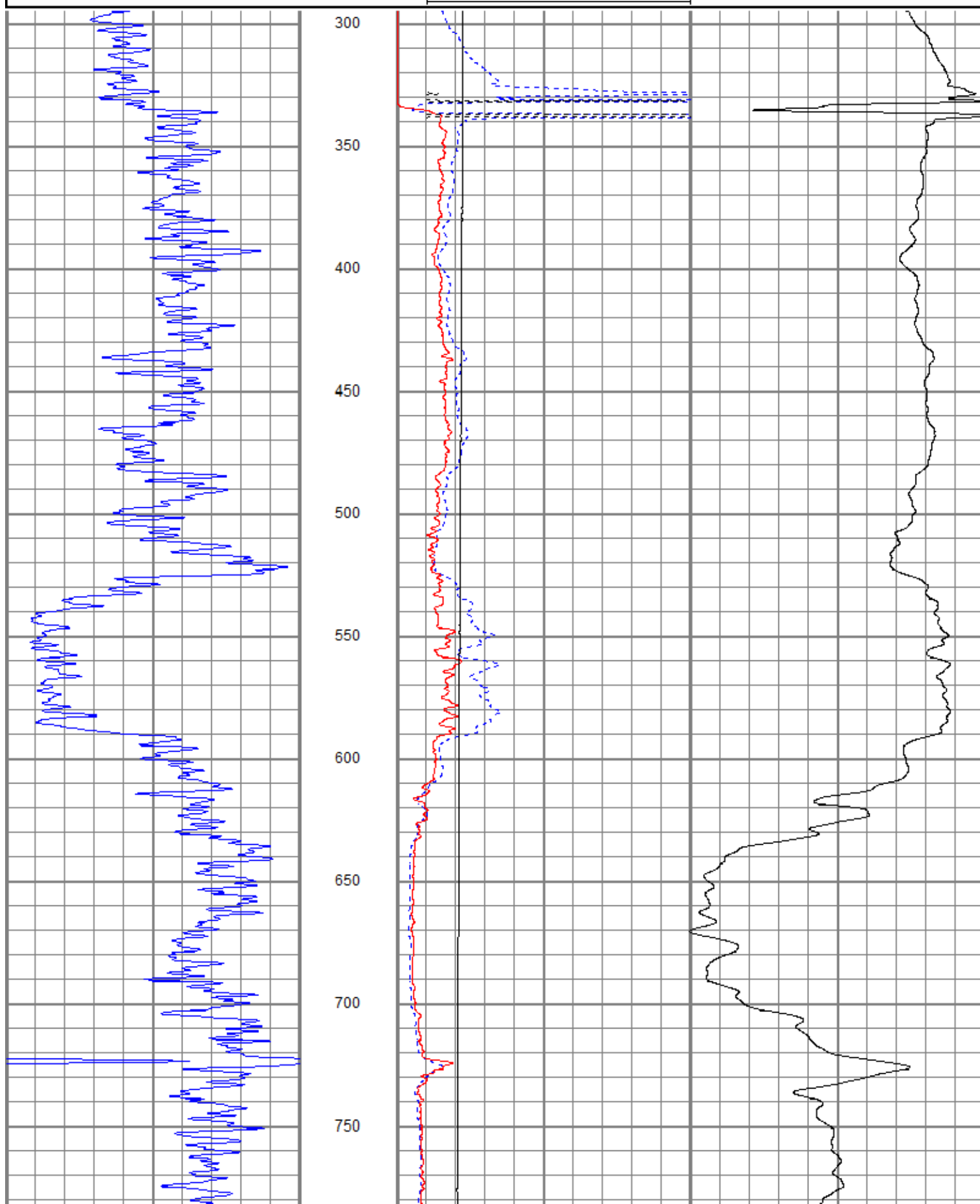
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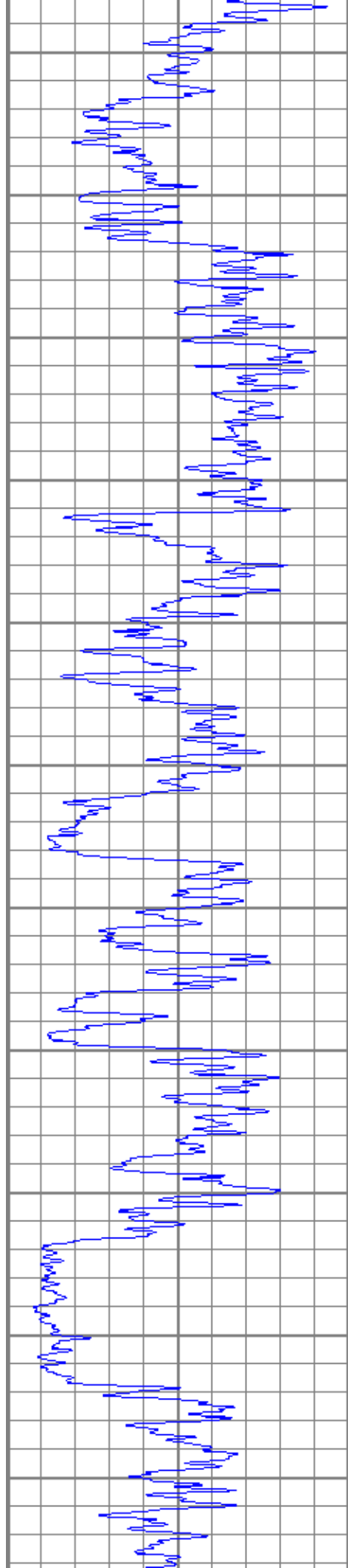
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0 RLL3 (Ohm-m) 50

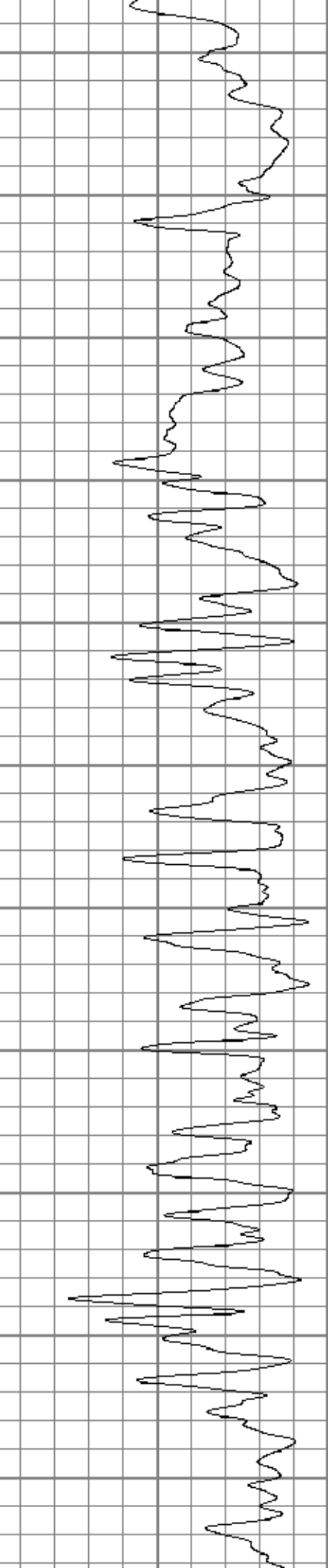
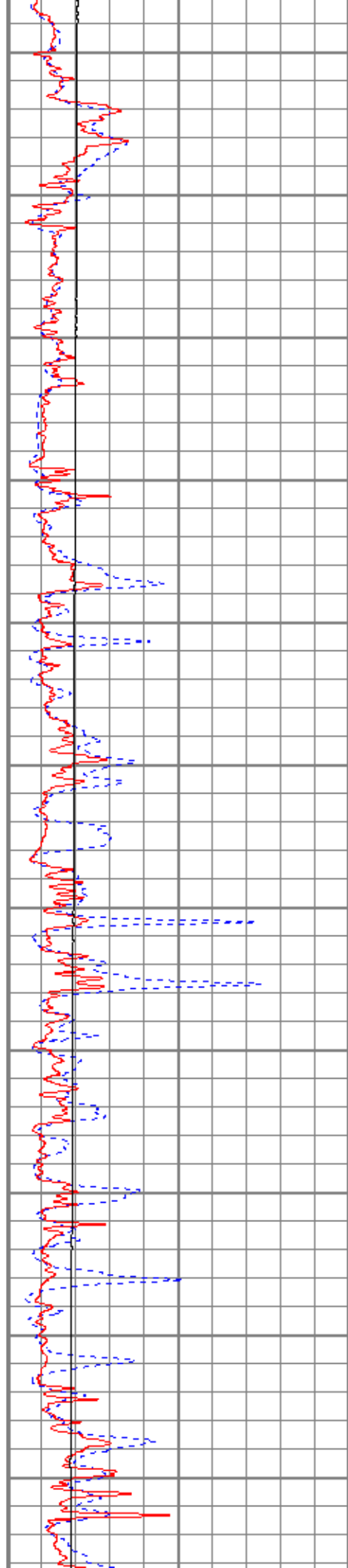
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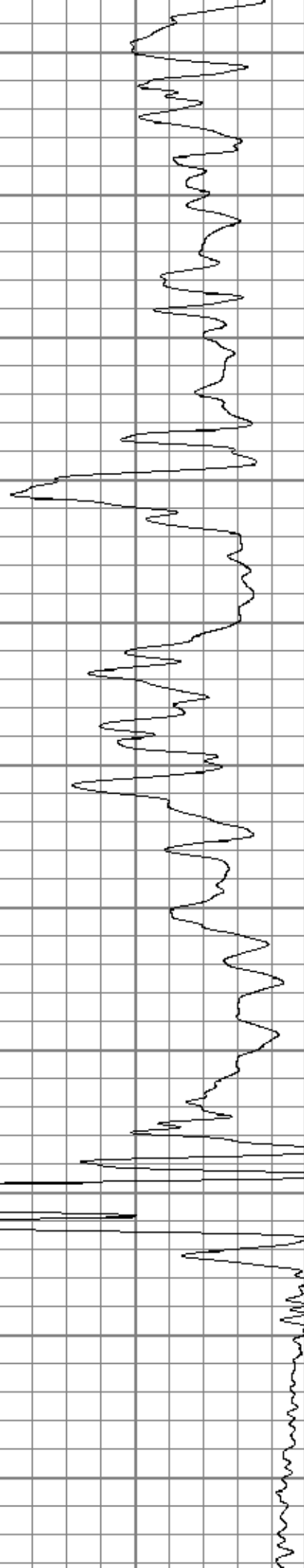
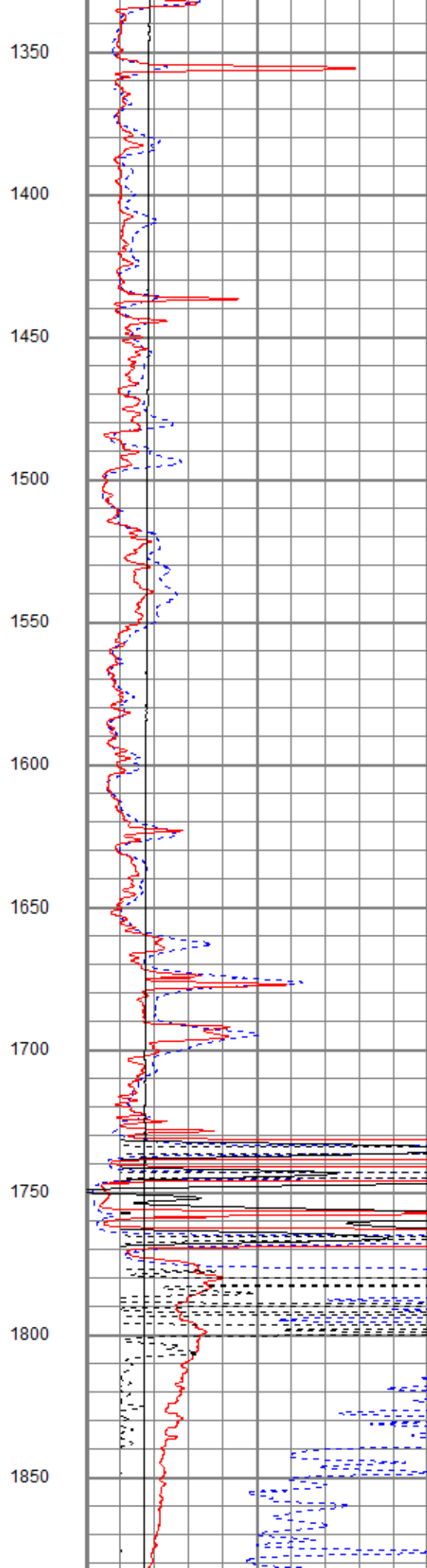
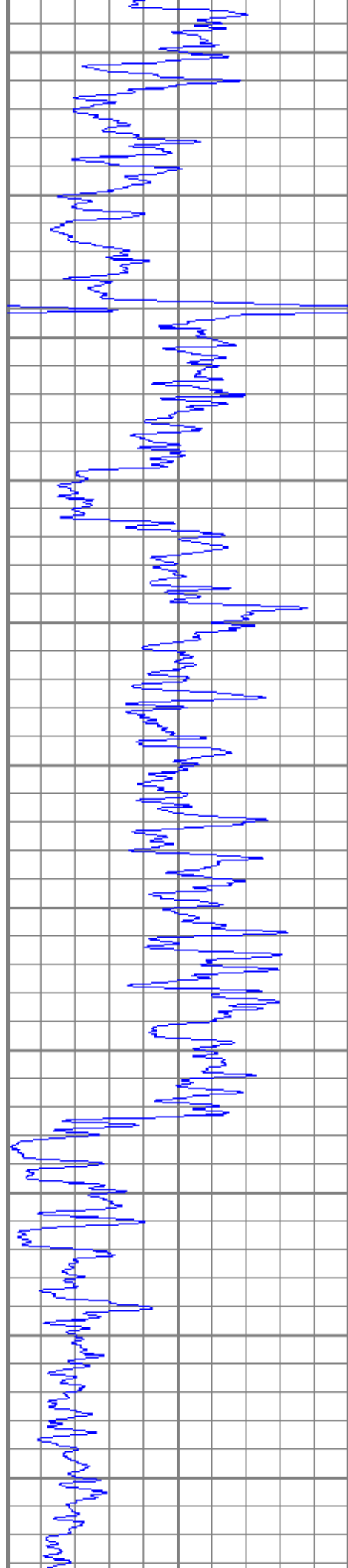
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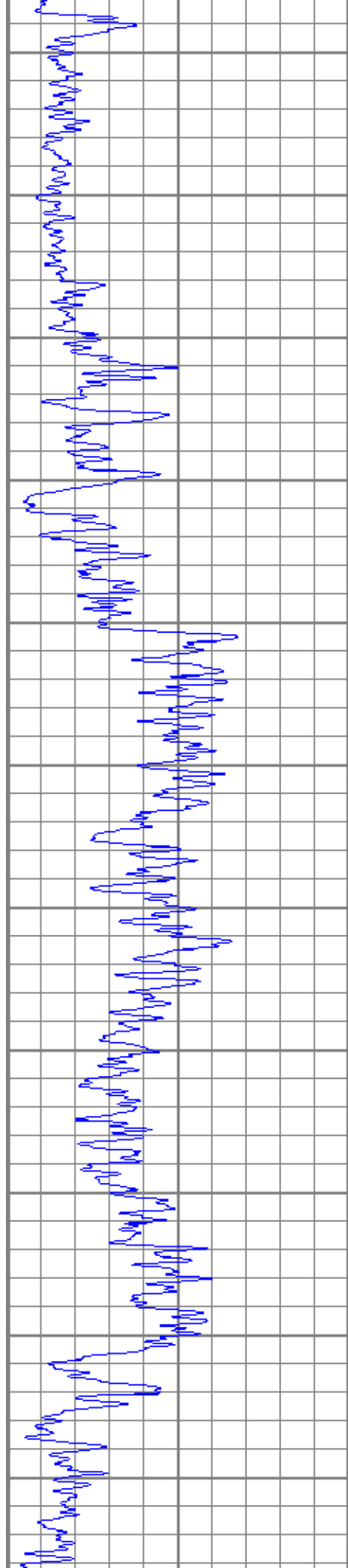




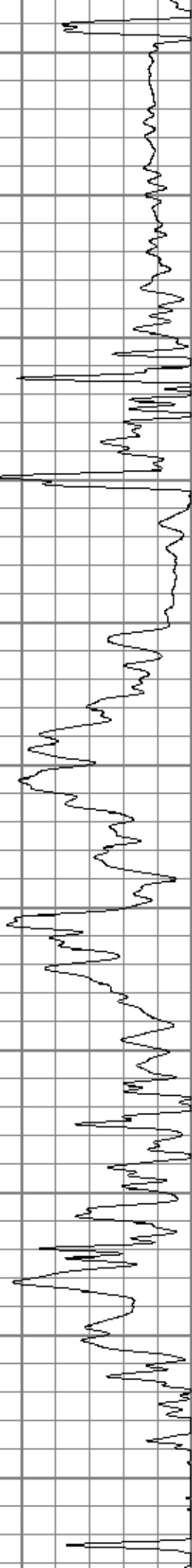
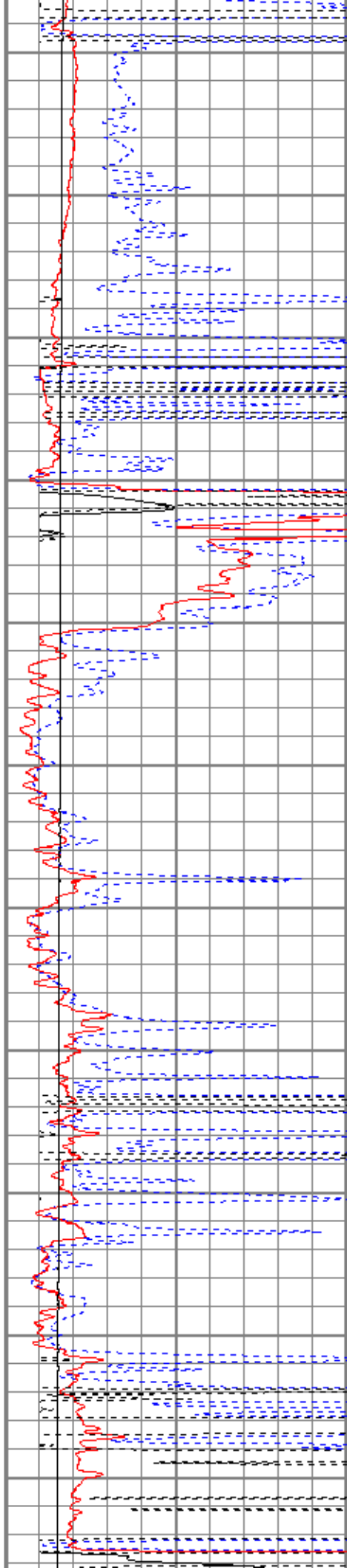
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850
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950
1000
1050
1100
1150
1200
1250
1300

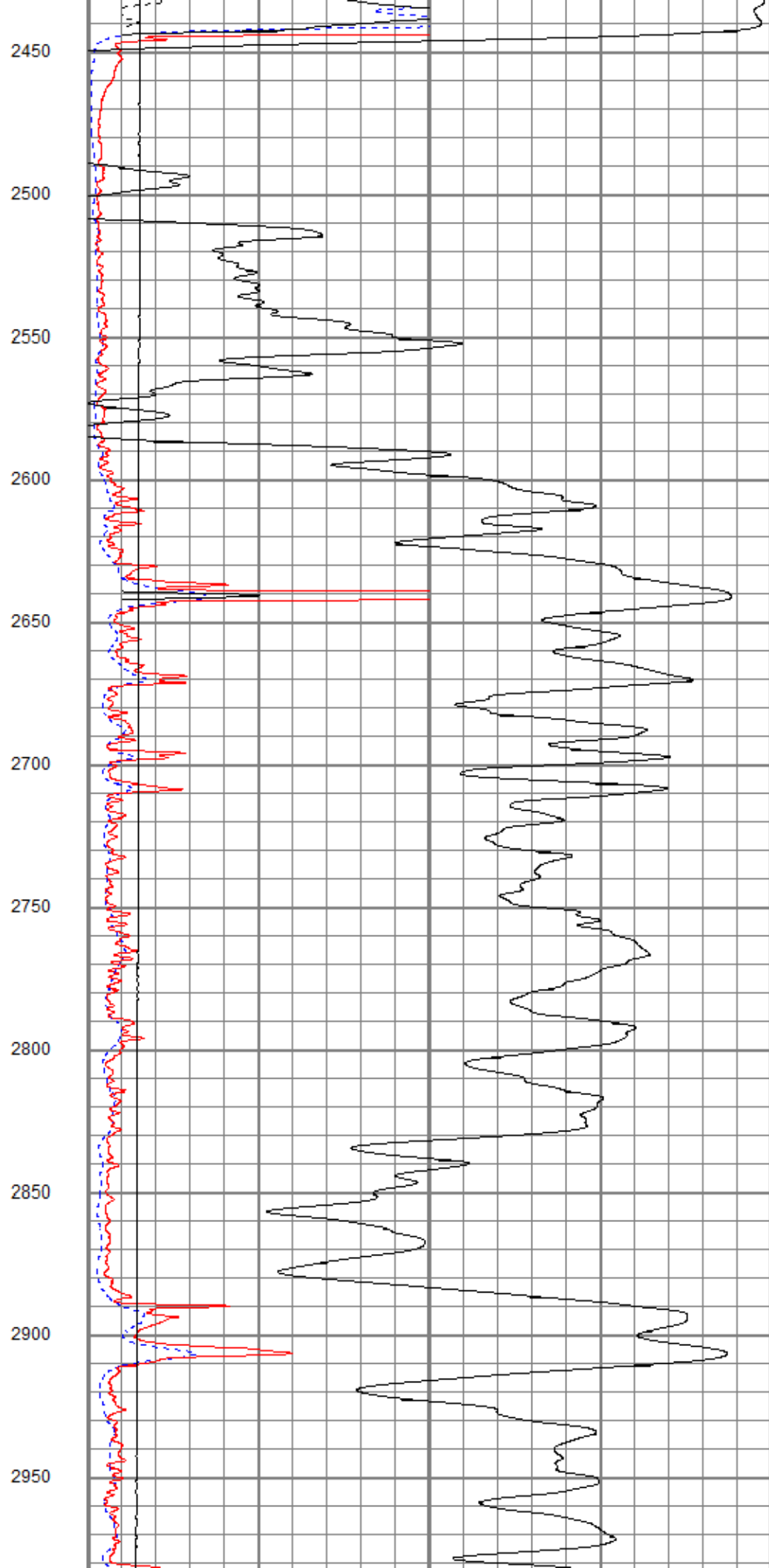
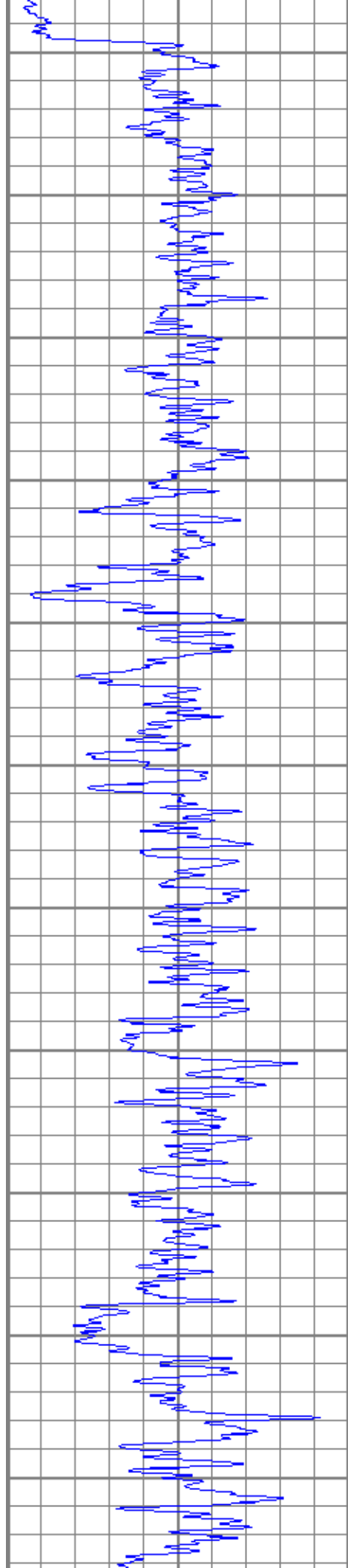


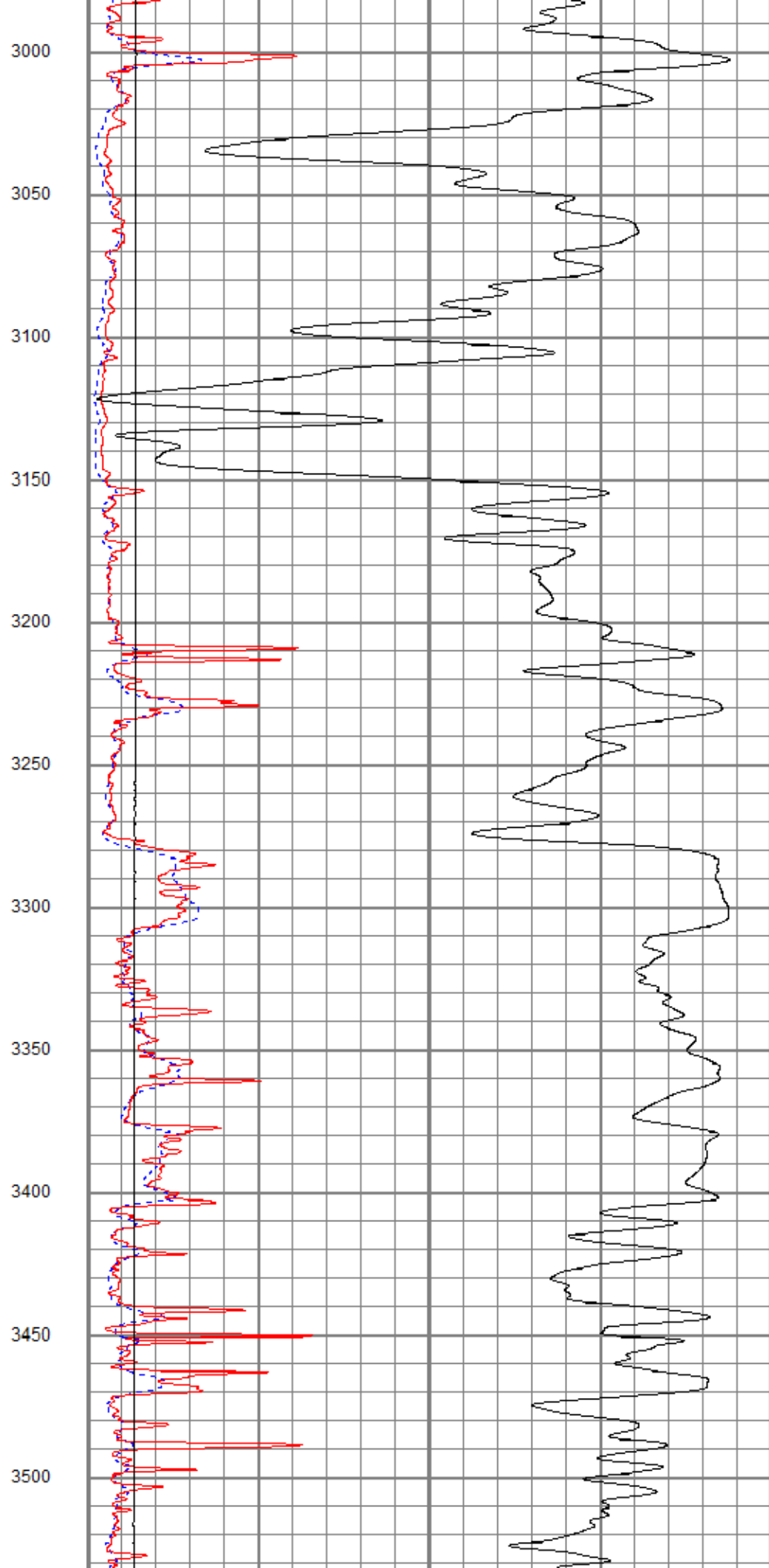
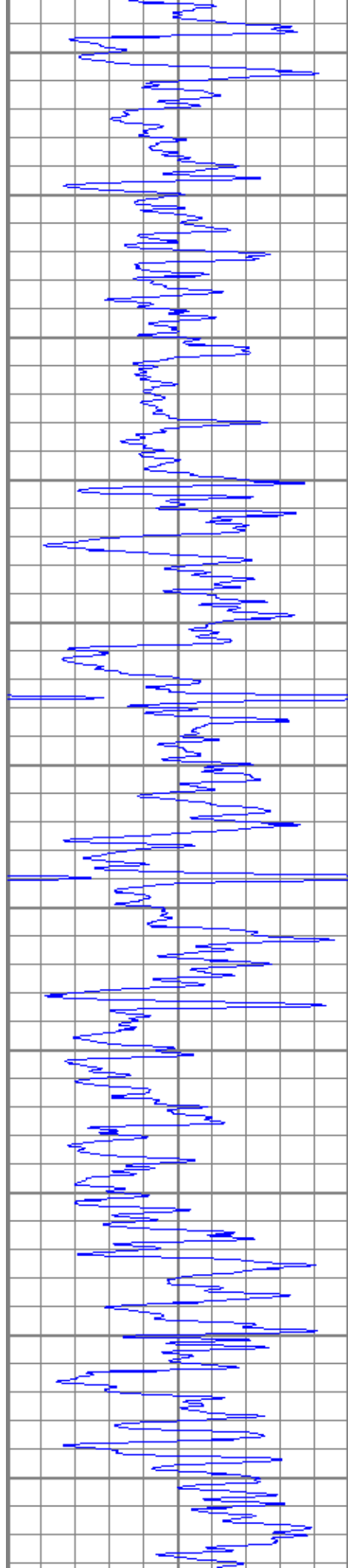


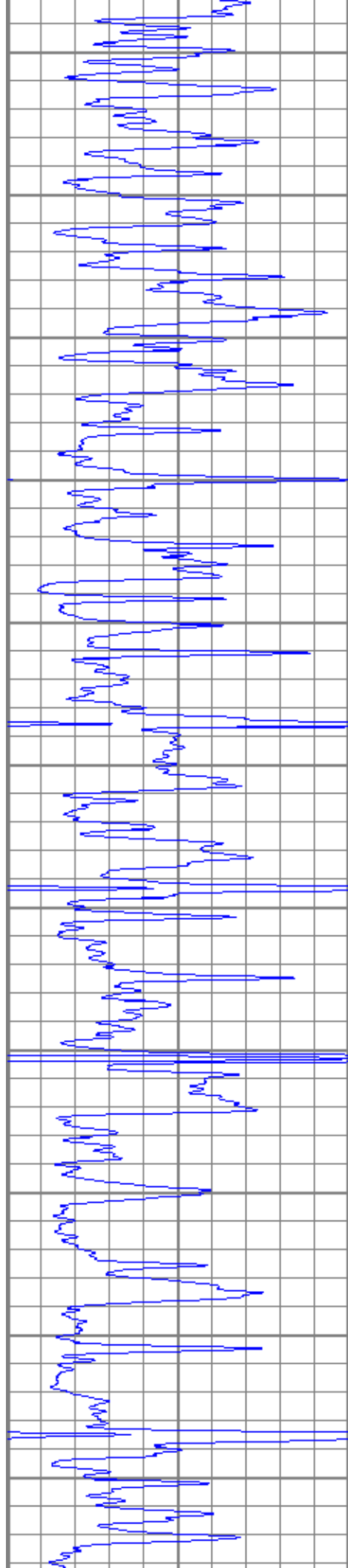


1900
1950
2000
2050
2100
2150
2200
2250
2300
2350
2400









3550

3600

3650

3700

3750

3800

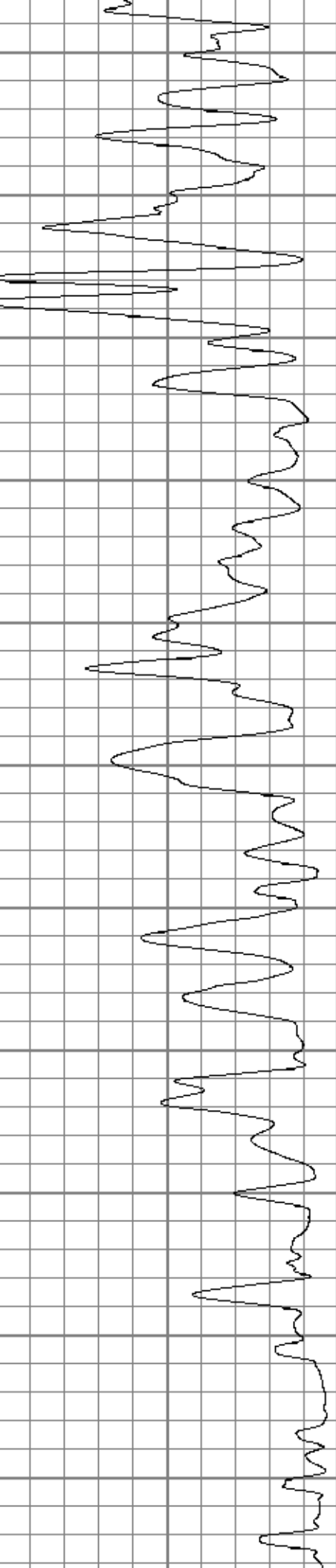
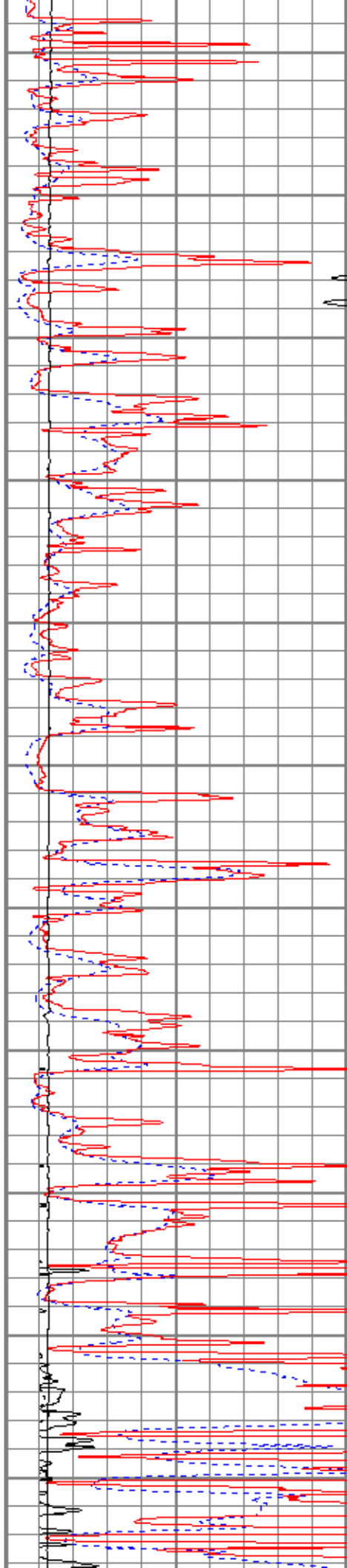
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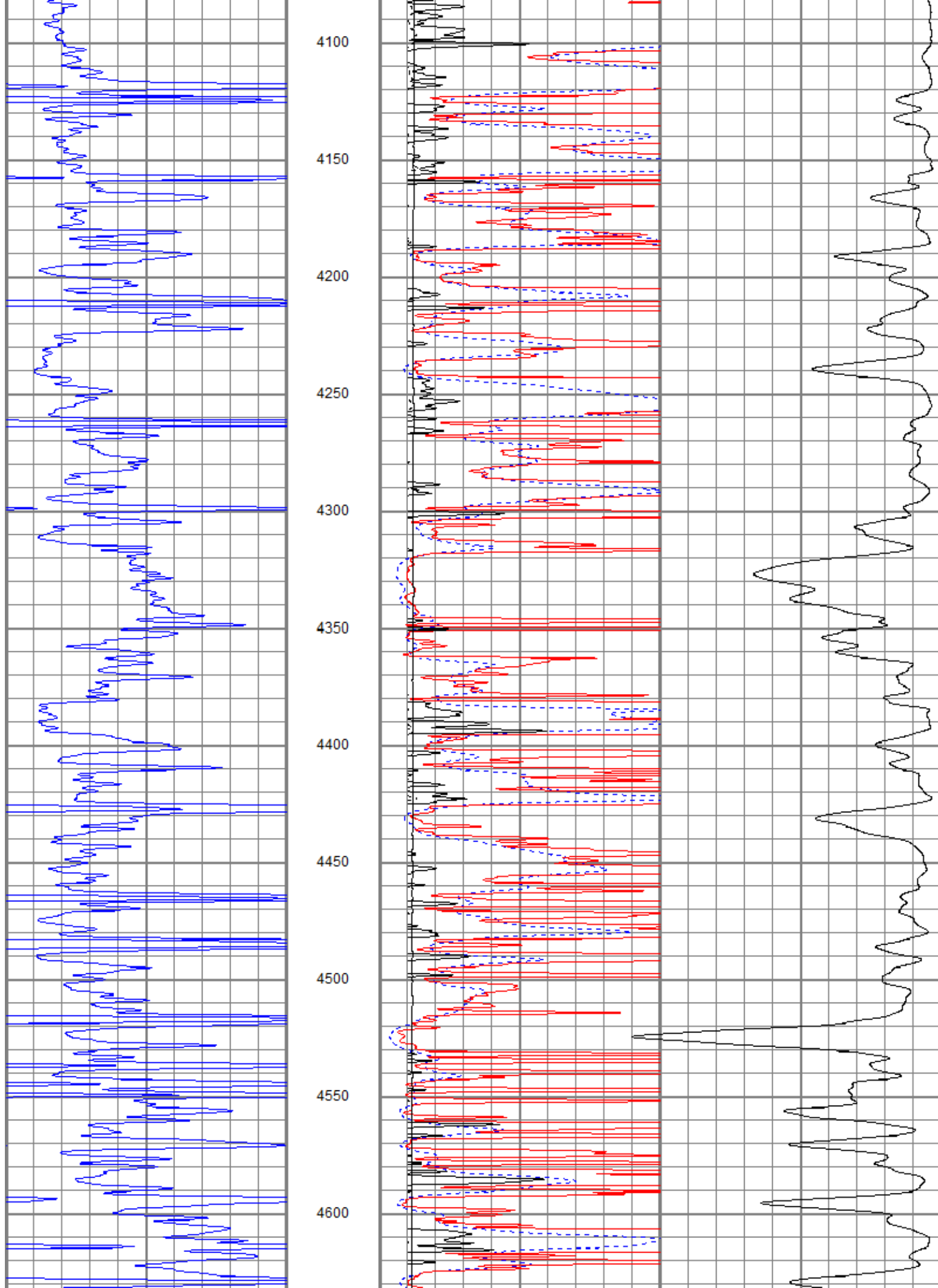
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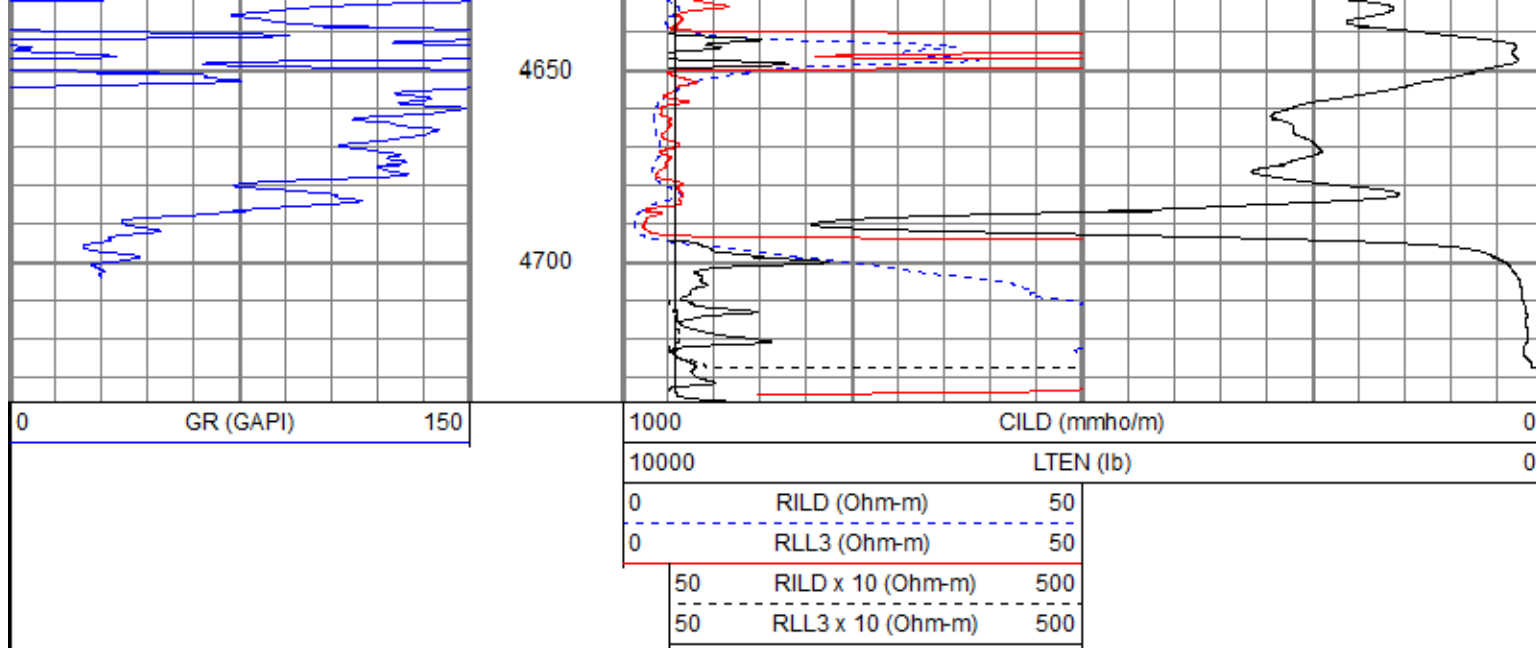
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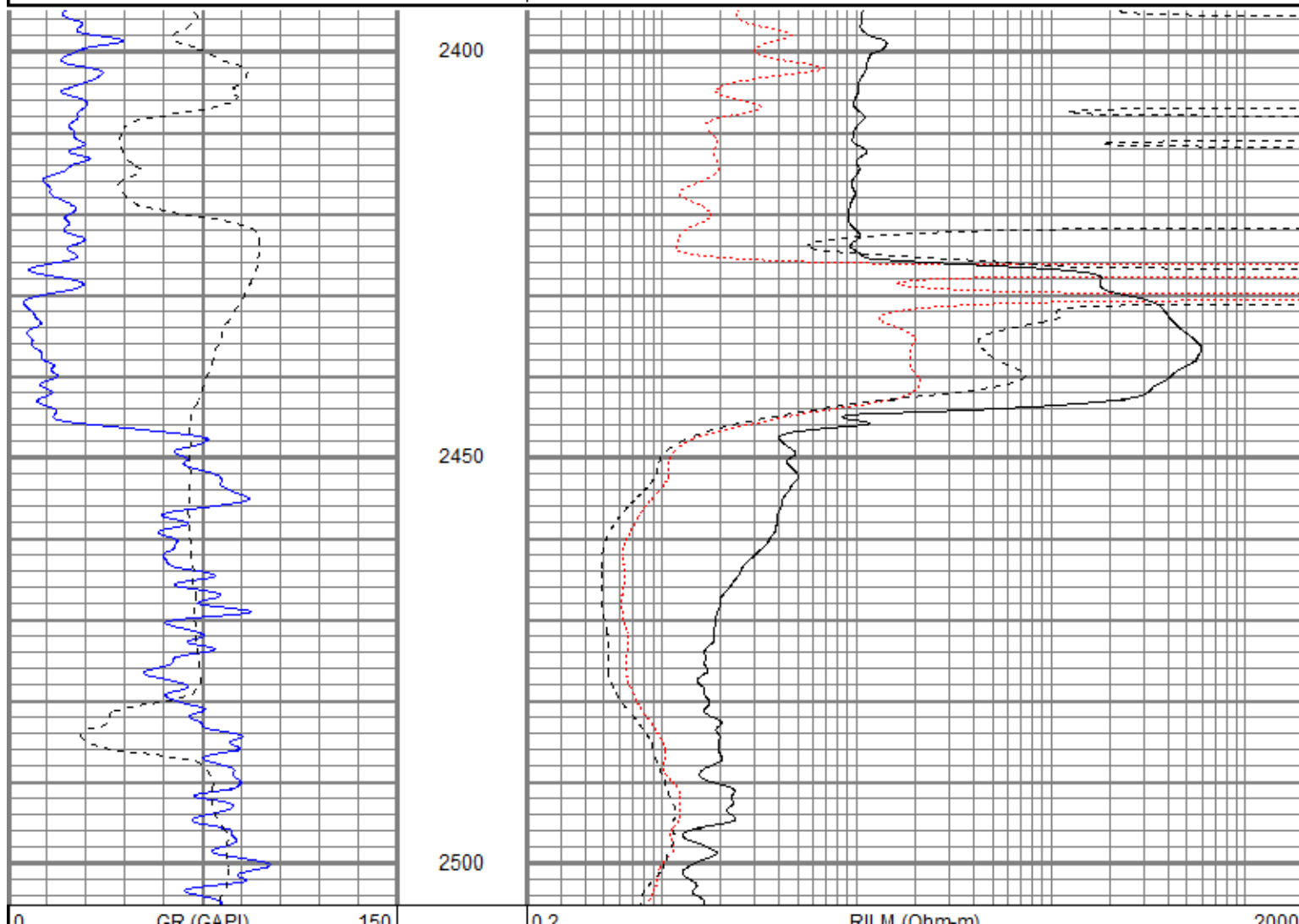
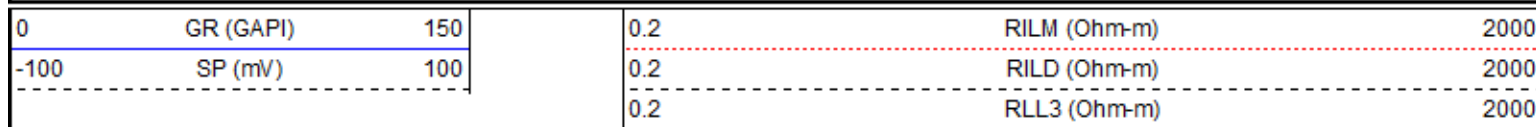
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Database File roedwardstruste26-1oh.db
 Dataset Pathname pass3.13
 Presentation Format kdil
 Dataset Creation Tue May 09 10:16:43 2017
 Charted by Depth in Feet scaled 1:240



0	GR (GAPI)	150
-100	SP (mV)	100

0.2	RILM (Ohm-m)	2000
0.2	RILD (Ohm-m)	2000
0.2	RLL3 (Ohm-m)	2000

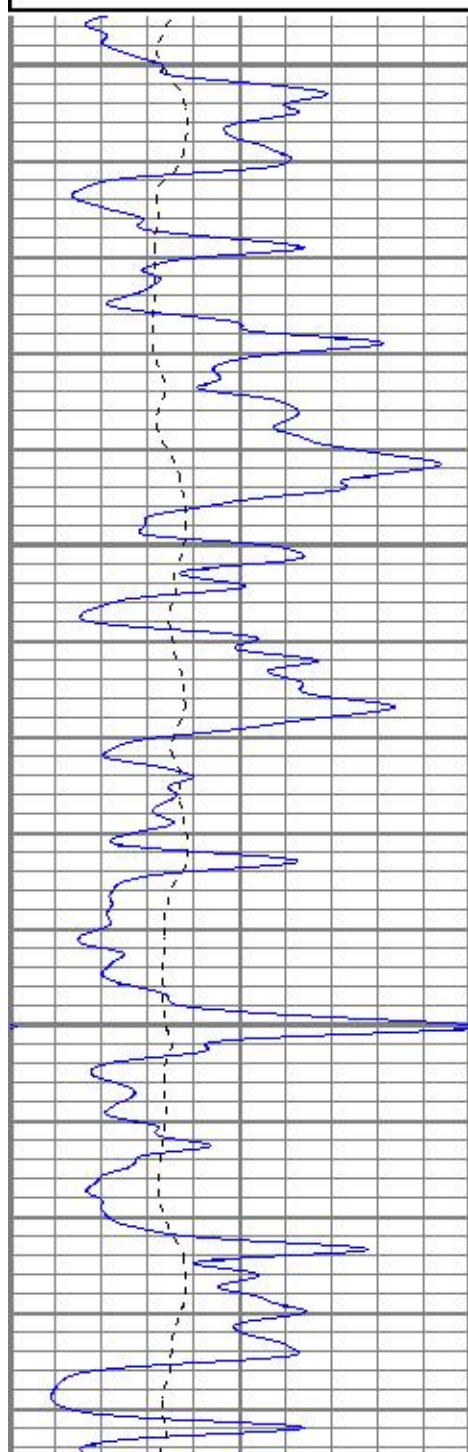


MAIN PASS

Database File: roedwardstruste26-1oh.db
 Dataset Pathname: pass3.12
 Presentation Format: kdil
 Dataset Creation: Tue May 09 09:36:58 2017
 Charted by: Depth in Feet scaled 1:240

0	GR (GAPI)	150
-100	SP (mV)	100

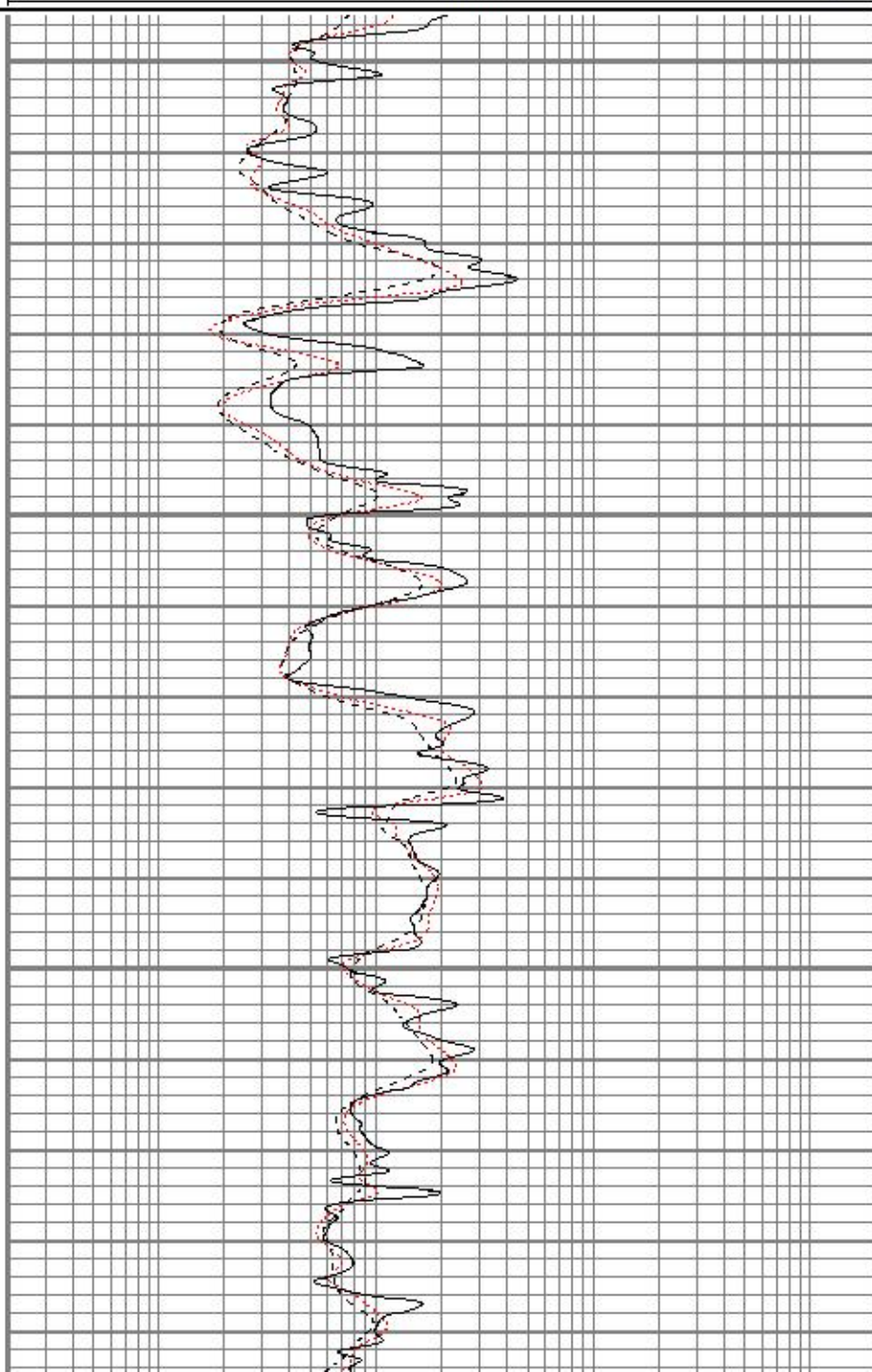
0.2	RILM (Ohm-m)	2000
0.2	RILD (Ohm-m)	2000
0.2	RLL3 (Ohm-m)	2000

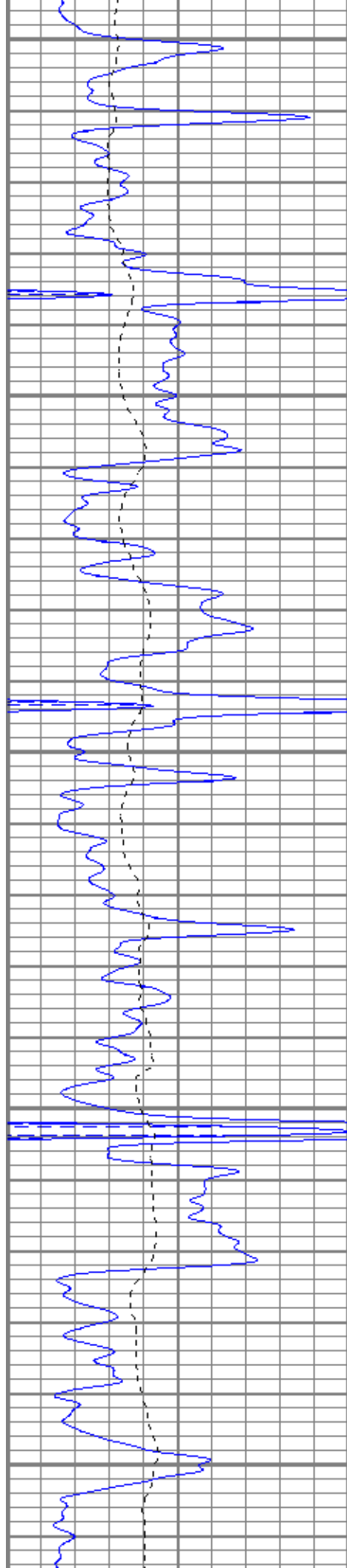


3600

3650

3700





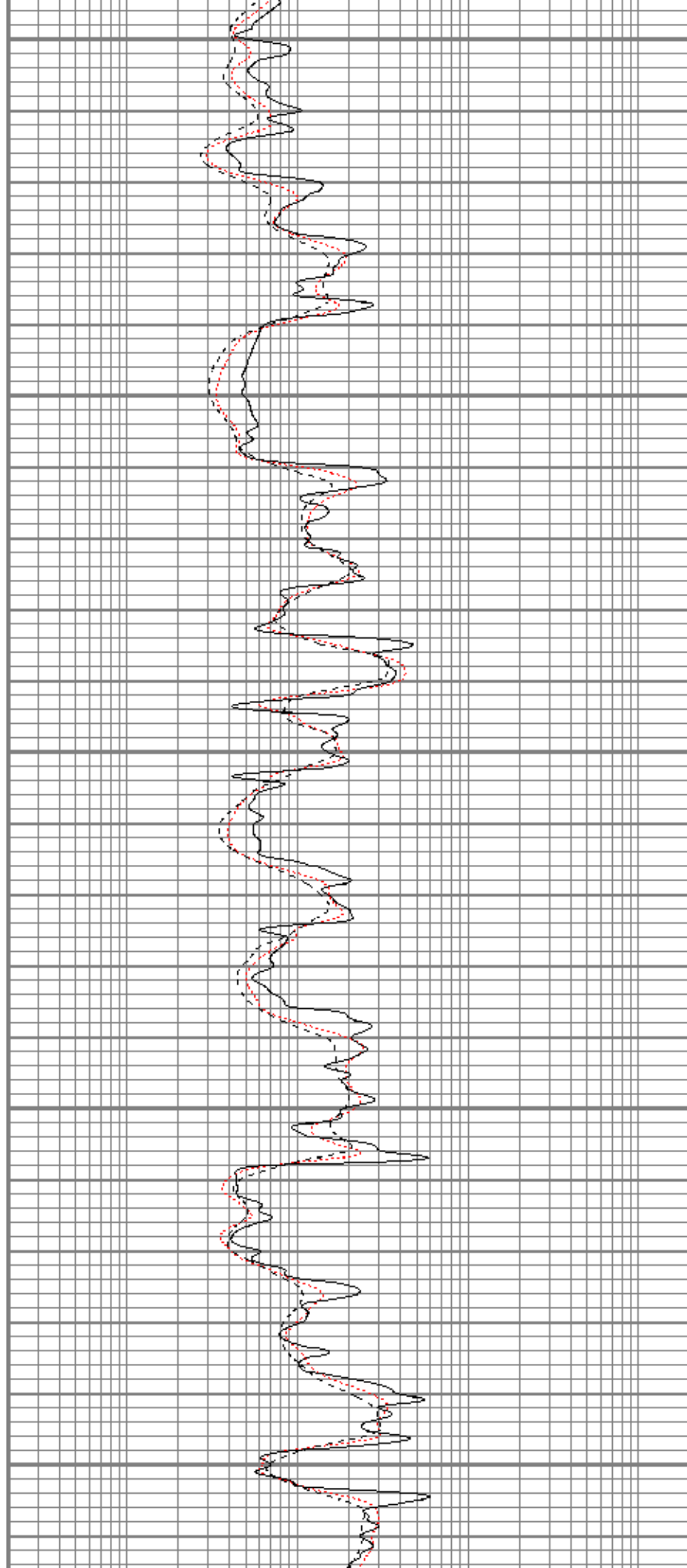
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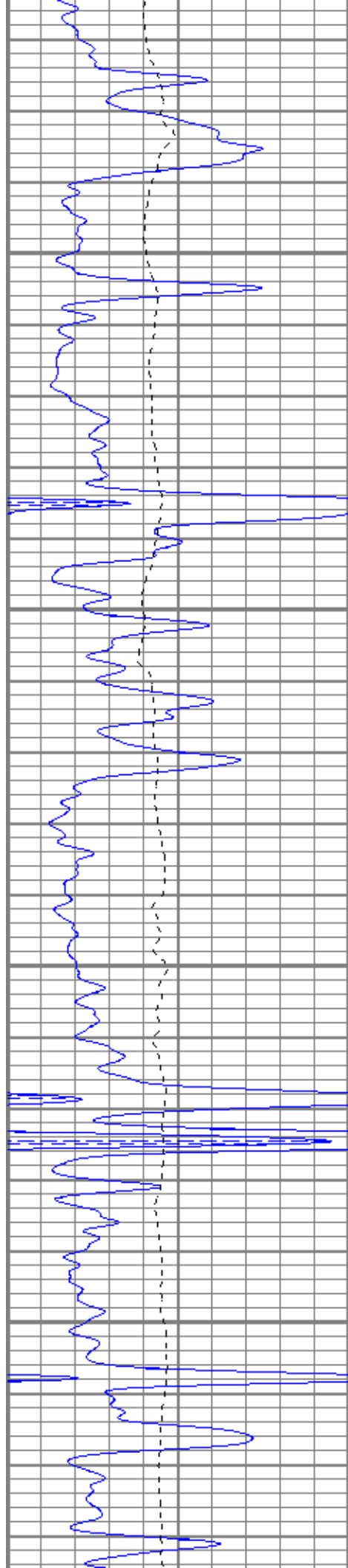
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3850

3900

3950



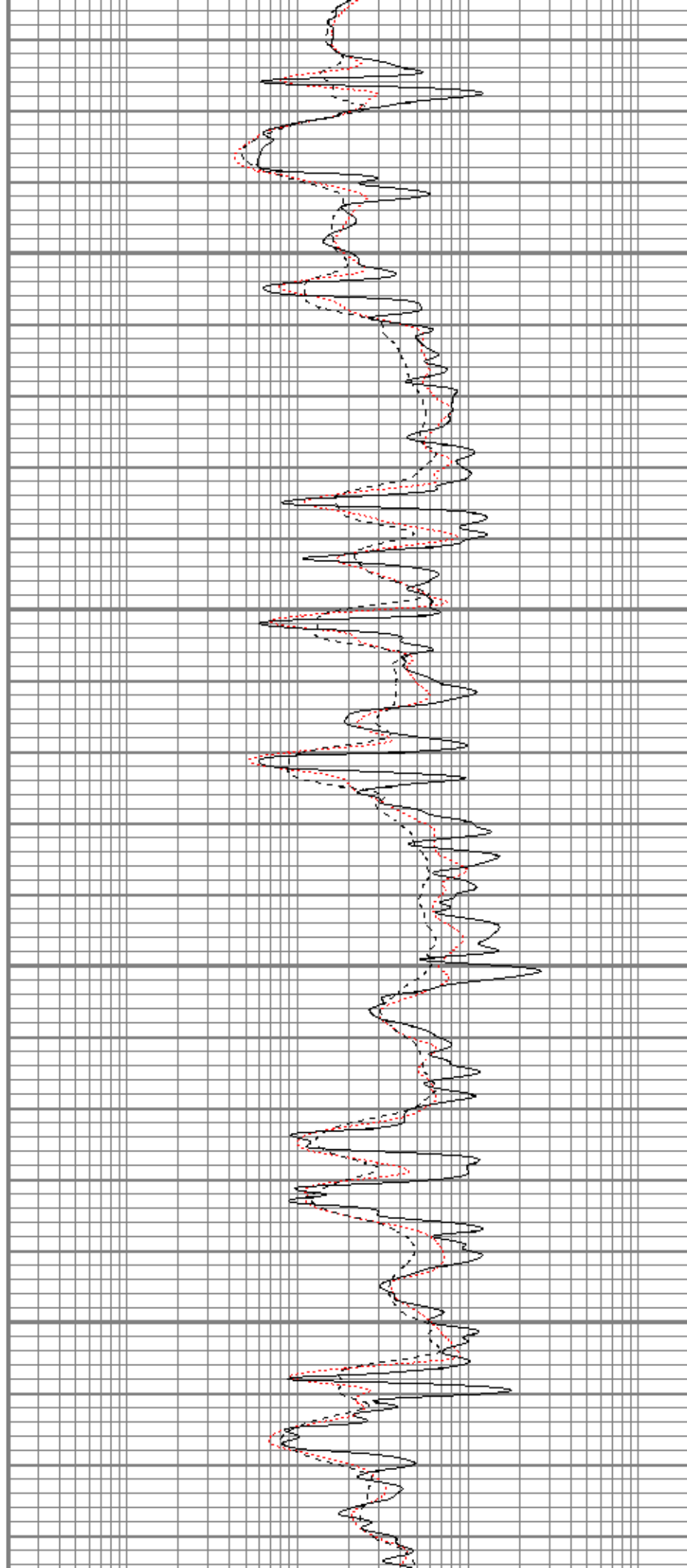


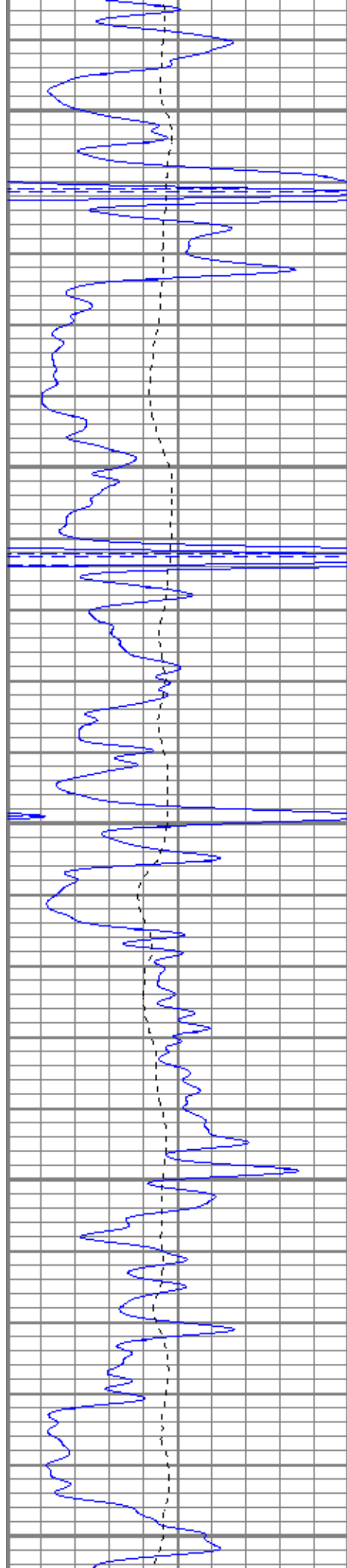
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4050

4100

4150





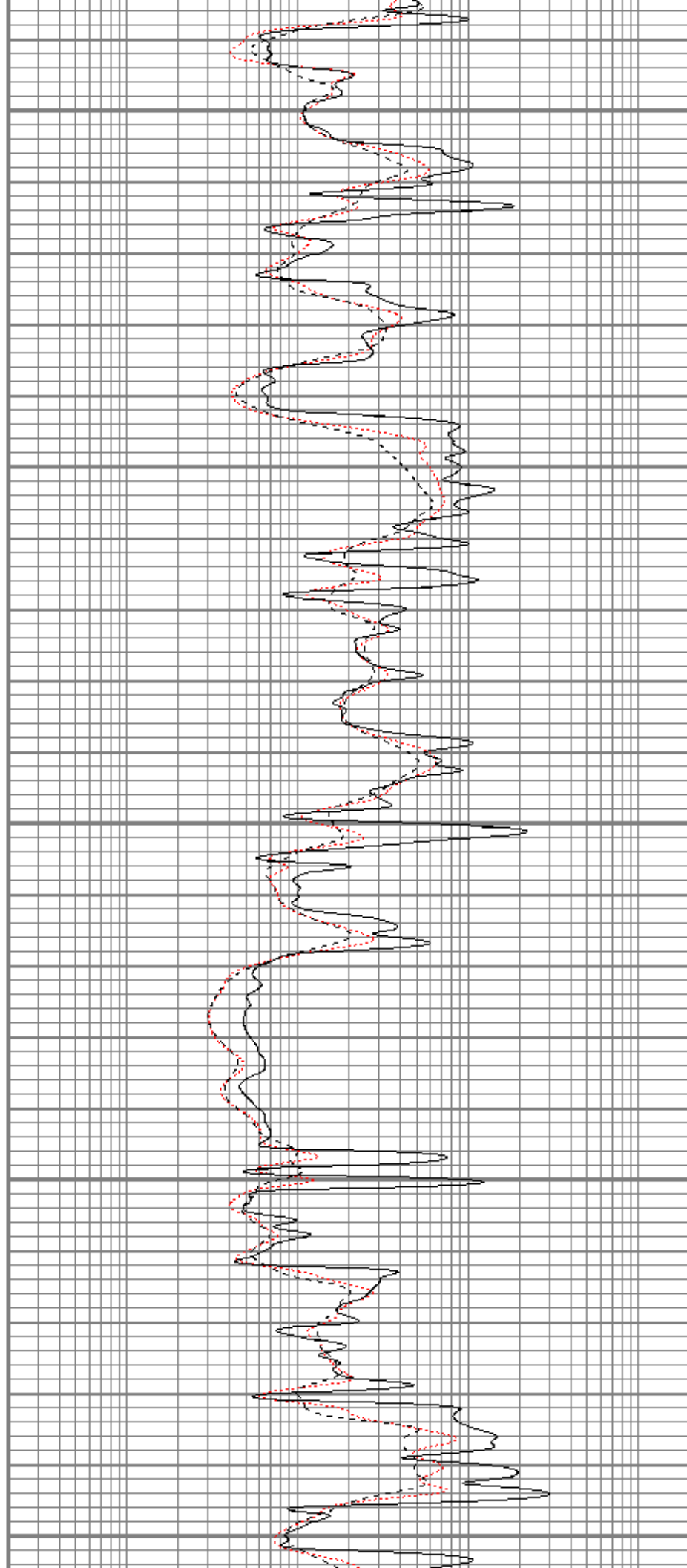
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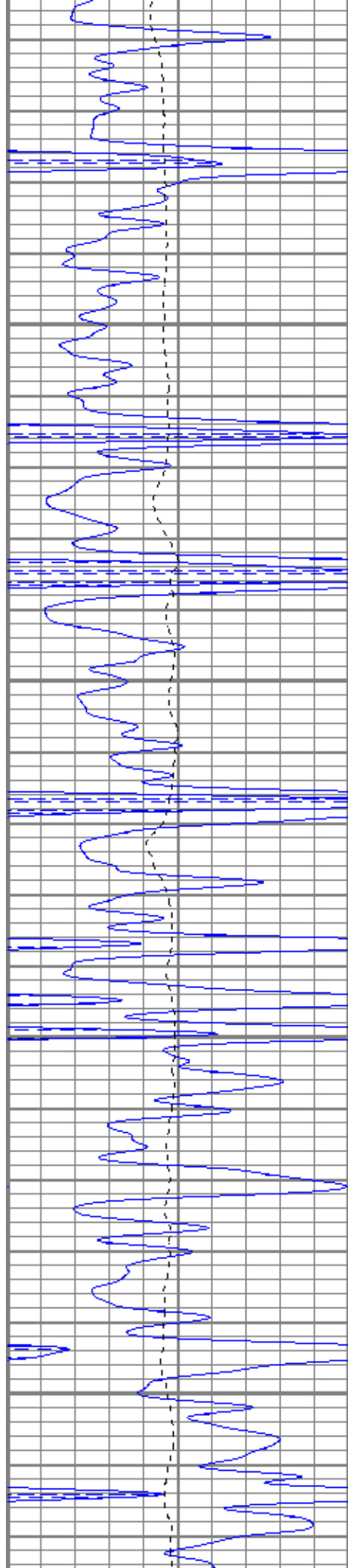
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4300

4350

4400



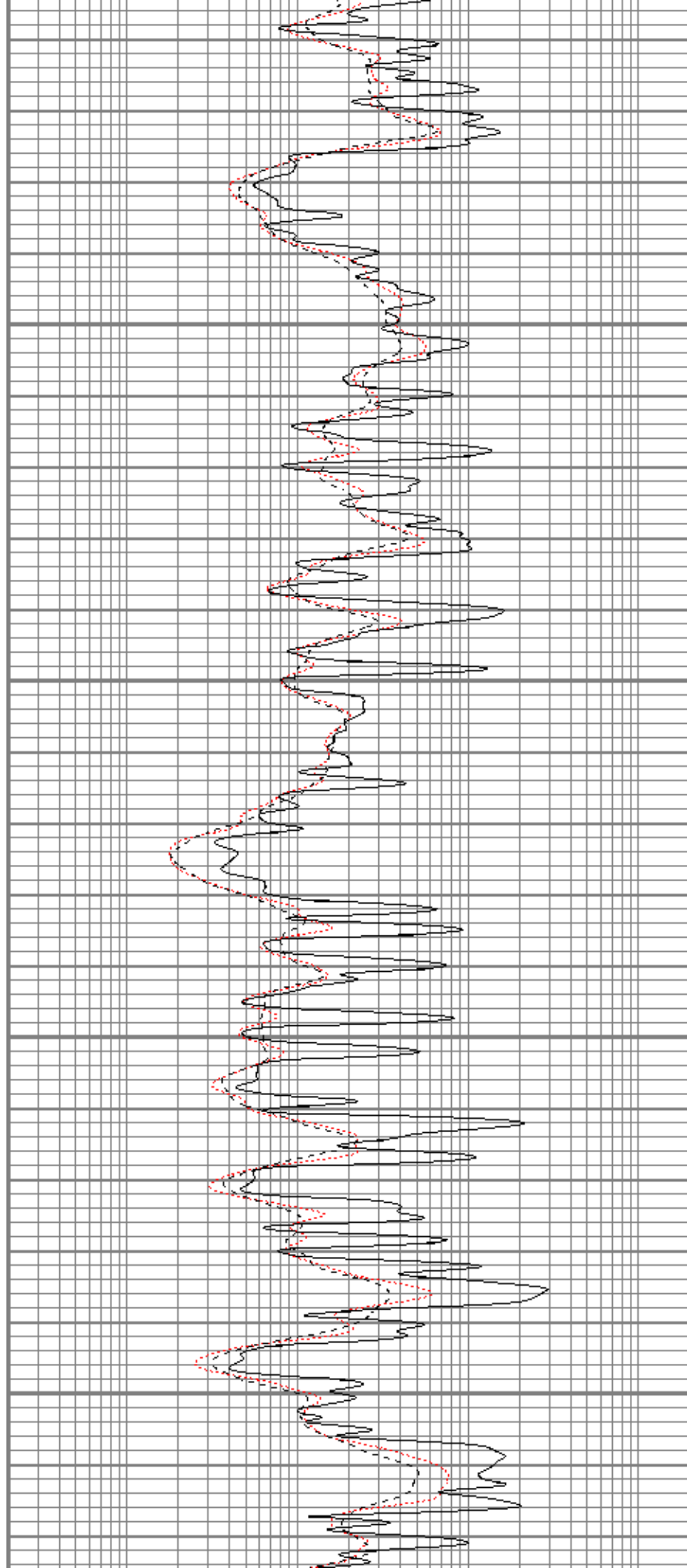


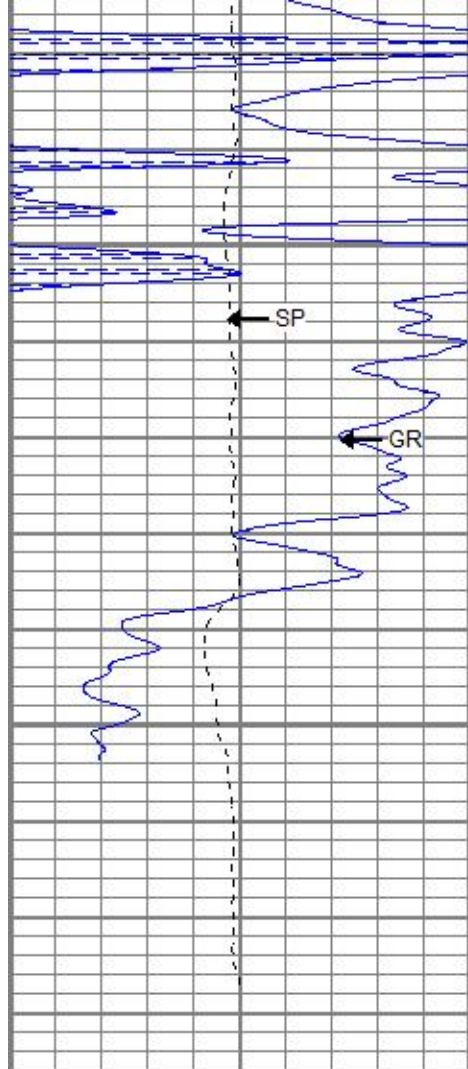
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4500

4550

4600

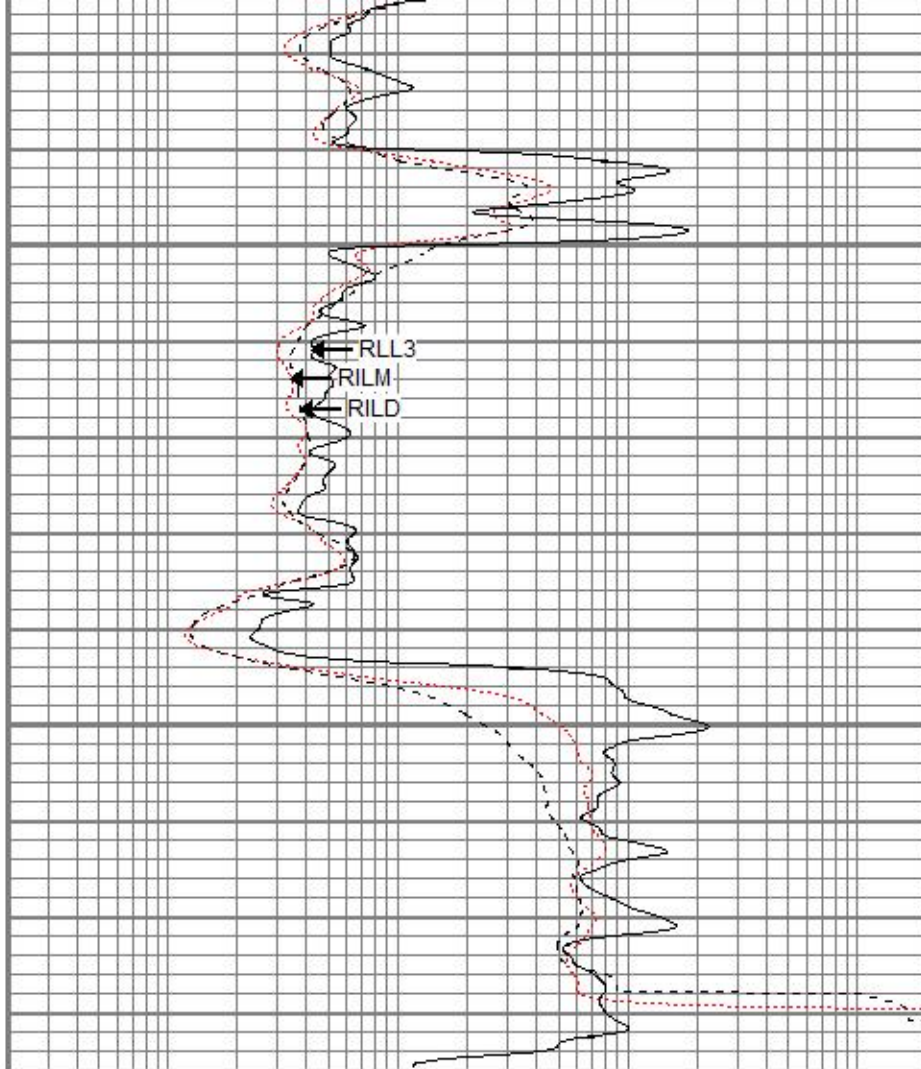




4650

4700

0	GR (GAPI)	150
-100	SP (mV)	100



0.2	RILM (Ohm-m)	2000
0.2	RILD (Ohm-m)	2000
0.2	RLL3 (Ohm-m)	2000

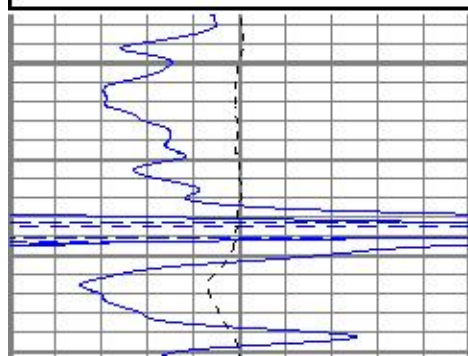


REPEAT PASS

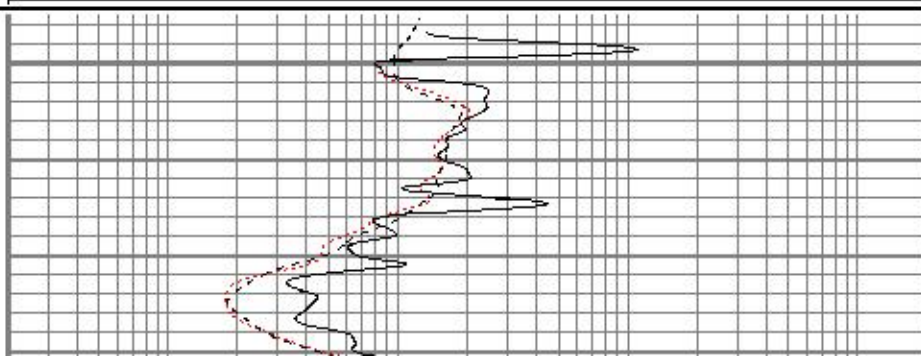
Database File roedwardstruste26-1oh.db
 Dataset Pathname pass2.11
 Presentation Format kdil
 Dataset Creation Tue May 09 09:50:14 2017
 Charted by Depth in Feet scaled 1:240

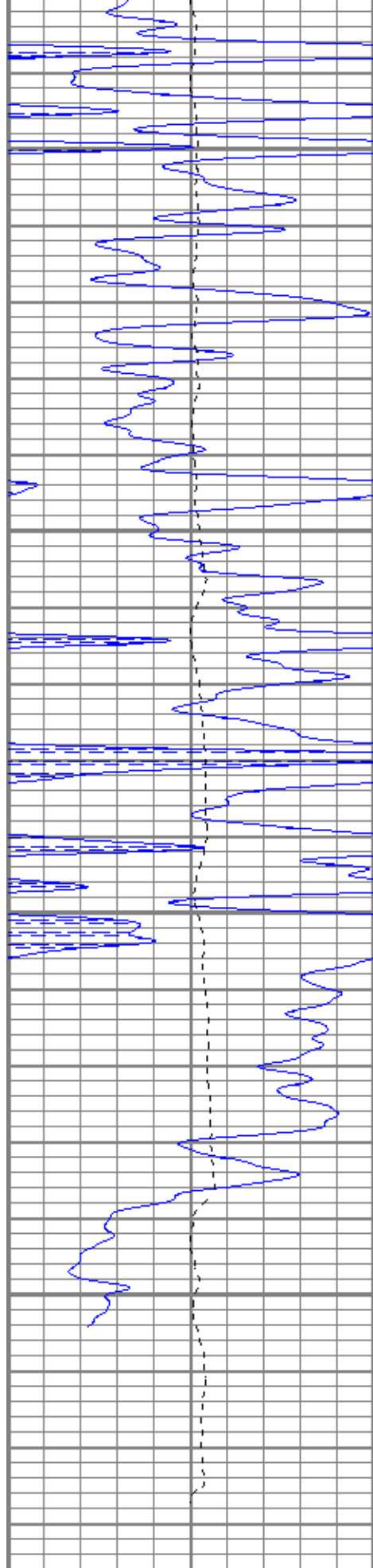
0	GR (GAPI)	150
-100	SP (mV)	100

0.2	RILM (Ohm-m)	2000
0.2	RILD (Ohm-m)	2000
0.2	RLL3 (Ohm-m)	2000



4500





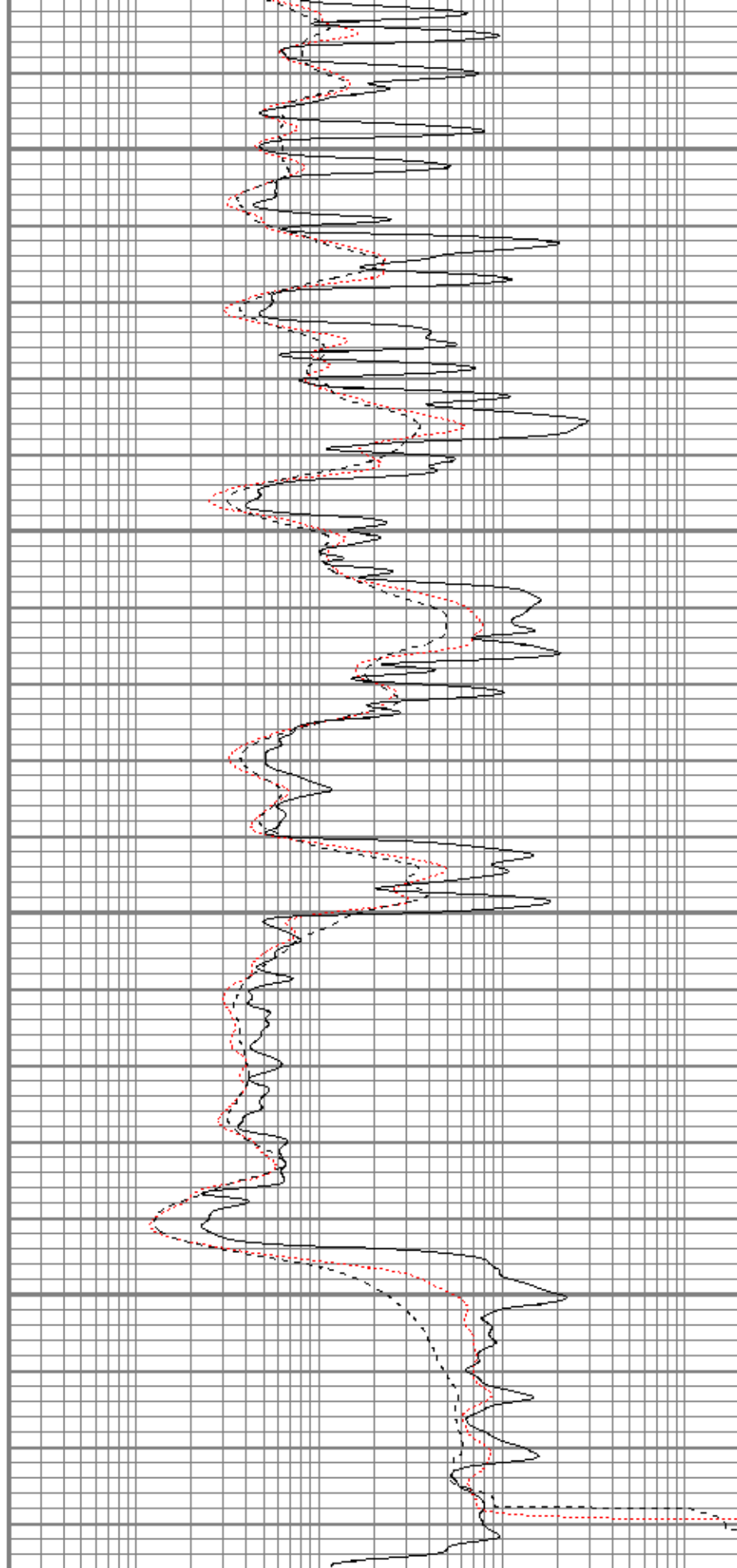
4550

4600

4650

4700

0	GR (GAPI)	150
-100	SP (mV)	100



0.2	RILM (Ohm-m)	2000
0.2	RILD (Ohm-m)	2000
0.2	RLL3 (Ohm-m)	2000

Database File		roedwardstruste26-1oh.db	Calibration Report
Dataset Pathname		pass3.12	
Dataset Creation		Tue May 09 09:36:58 2017	

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Database File      roedwardstruste26-1oh.db
Dataset Pathname  pass3.12
Dataset Creation   Tue May 09 09:36:58 2017
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Serial-Model:	080522-Probe
Surface Cal Performed:	Thu Oct 08 10:16:27 2015
Downhole Cal Performed:	Thu Oct 08 10:17:08 2015
After Survey Verification Performed:	Thu Oct 08 10:17:08 2015

Serial-Model:	080522-Probe
Surface Cal Performed:	Thu Oct 08 10:16:27 2015
Downhole Cal Performed:	Thu Oct 08 10:17:08 2015
After Survey Verification Performed:	Thu Oct 08 10:17:08 2015

Readings			References			Results		
Loop:	Air	Loop		Air	Loop	m	b	
Deep	0.001	0.641	V	0.000	400.000	mmho/m	624.950	-0.824
Medium	0.004	0.742	V	0.000	464.000	mmho/m	628.752	-2.706
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.001	0.641	V	0.000	400.000	mmho/m	625.200	-0.870
Medium	0.004	0.743	V	0.000	464.000	mmho/m	627.931	-2.579

Readings			References			Results		
Loop:	Air	Loop		Air	Loop		m	b
Deep	0.001	0.641	V	0.000	400.000	mmho/m	624.950	-0.824
Medium	0.004	0.742	V	0.000	464.000	mmho/m	628.752	-2.706
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.001	0.641	V	0.000	400.000	mmho/m	625.200	-0.870
Medium	0.004	0.743	V	0.000	464.000	mmho/m	627.931	-2.579

	Readings			References			Results	
	Zero	Cal		Zero	Cal		m'	b'
Deep	0.282	399.760	mmho/m	0.046	399.886	mmho/m	1.001	-0.237
Medium	-0.077	464.284	mmho/m	-0.123	464.484	mmho/m	1.001	-0.046
LL3		7.298	V		750.000	Ohm-m		
		0.004	V		12.000	Ohm-m		
		-7.329	V		3745.000	mmho-m		

	Readings			References			Results	
	Zero	Cal		Zero	Cal		m'	b'
Deep	0.282	399.760	mmho/m	0.046	399.886	mmho/m	1.001	-0.237
Medium	-0.077	464.284	mmho/m	-0.123	464.484	mmho/m	1.001	-0.046
LL3		7.298	V		750.000	Ohm-m		
		0.004	V		12.000	Ohm-m		
		-7.329	V		3745.000	mmho-m		

Readings			Targets			Results		
	Zero	Cal		Zero	Cal	m'	b'	
Deep	0.000	0.000	mmho/m	0.282	399.760	mmho/m	1.000	0.000
Medium	0.000	0.000	mmho/m	-0.077	464.284	mmho/m	1.000	0.000
LL3		0.000	Ohm-m		750.000	Ohm-m		
		0.000	Ohm-m		12.000	Ohm-m		
		0.000	mmho-m		3745.000	mmho-m		

	Readings			Targets			Results	
	Zero	Cal		Zero	Cal		m'	b'
Deep	0.000	0.000	mmho/m	0.282	399.760	mmho/m	1.000	0.000
Medium	0.000	0.000	mmho/m	-0.077	464.284	mmho/m	1.000	0.000
LL3		0.000	Ohm-m		750.000	Ohm-m		
		0.000	Ohm-m		12.000	Ohm-m		
		0.000	mmho-m		3745.000	mmho-m		

Serial-Model:	2113TN-Aoilex
Source / Verifier:	csv n-20 /
Master Calibration Performed:	Thu Jun 09 06:25:13 2016
Before Survey Verification Performed:	
After Survey Verification Performed:	

Serial-Model: 2113TN-Aoilex
Source / Verifier: csv n-20 /
Master Calibration Performed: Thu Jun 09 06:25:13 2016
Before Survey Verification Performed:
After Survey Verification Performed:

	Density			Far Detector	Near Detector	
Magnesium	1.750	g/cc		466.46	301.08	cps
Aluminum	2.690	g/cc		85.94	195.82	cps
Spine Angle = 75.73			Density/Spine Ratio = 0.539			
	Size			Reading		
Small Ring	9.38	in		1.49	V	
Large Ring	14.00	in		3.25	V	

	Density		Far Detector	Near Detector	
Magnesium	1.750	g/cc	466.46	301.08	cps
Aluminum	2.690	g/cc	85.94	195.82	cps
Spine Angle = 75.73			Density/Spine Ratio = 0.539		
	Size		Reading		
Small Ring	9.38	in	1.49	V	
Large Ring	14.00	in	3.25	V	

Target		Measured	
	g/cc g/cc g/cc		g/cc g/cc g/cc
After Survey Verification			
Target		Measured	
	g/cc g/cc g/cc		g/cc g/cc g/cc

Gamma Ray Calibration Report			
Serial Number:	2213TN		
Tool Model:	Aoilex		
Performed:	Mon Feb 20 13:34:10 2017		
Calibrator Value:	1.0	GAPI	
Background Reading:	0.0	cps	
Calibrator Reading:	1.0	cps	
Sensitivity:	1.0000	GAPI/cps	

Neutron Calibration Report			
Serial Number:	5138		
Tool Model:	G		
Performed:	Fri Feb 20 03:21:36 2015		
Calibrator Value:	1	NAPI	
Calibrator Reading:	1	cps	
Sensitivity:	1	NAPI/cps	

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
NEU	35.44		CHD-None	0.75	1.50	5.00
			NEU-G (5138) Gearhart Epithermal	5.65	3.50	85.00
GR	29.60		GR-Aoilex (2213TN) Admyr GR	2.84	4.00	50.00
LSD	24.57		CDL-Aoilex (2113TN) Admyr Oilex	6.80	4.00	250.00
DCAL	24.30					
SSD	24.05					
SP	10.60		DIL-Probe (080522) Probe Dual Induction	21.47	4.00	345.00
CILD	10.60					

CILM	6.89				
RLL3	1.70				
Dataset: roedwardstruste26-1oh.db: field/well/run1/pass3.12 Total length: 37.51 ft Total weight: 735.00 lb O.D.: 4.00 in					