



**DUAL
INDUCTION
LOG**

Company Palomino Petroleum
Well #1 Maximum Attitude
Field Nancy
County Gove
State Kansas

Company Palomino Petroleum
Well #1 Maximum Attitude
Field Nancy
County Gove State Kansas

Location: 1245' FSL & 1897' FWL
API #: 15 063 22114
SEC 4 TWP 15S RGE 27W
Permanent Datum Ground Level Elevation 2468'
Log Measured From KB 5' AGL
Drilling Measured From KB
Other Services
CDNL
ML
BCS
Elevation
K.B. 2473'
D.F. 2472'
G.L. 2468'

Date	6-17-13
Run Number	One
Depth Driller	4390'
Depth Logger	4390'
Bottom Logged Interval	4388'
Top Log Interval	200'
Casing Driller	8 5/8" @ 217'
Casing Logger	217'
Bit Size	7 7/8"
Type Fluid in Hole	Chemical
Density / Viscosity	9.3/48
pH / Fluid Loss	11.0/7.2
Source of Sample	Pit
Rm @ Meas. Temp	.5@72degf
Rmf @ Meas. Temp	.38@72degf
Rmc @ Meas. Temp	.6@72degf
Source of Rmf / Rmc	Calculated
Rm @ BHT	.3@120degf
Time Circulation Stopped	5:00 p.m.
Time Logger on Bottom	6:20 p.m.
Maximum Recorded Temperature	120degf
Equipment Number	T127
Location	Hays, KS
Recorded By	Gus Pfrenstiel
Witnessed By	Mr. Ryan Seib

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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

Thanks for using Gemini Wireline LLC
785-625-1182

8 1/2 W of Utica to Red Chief Rd, 9 N, E Into.



Main Pass

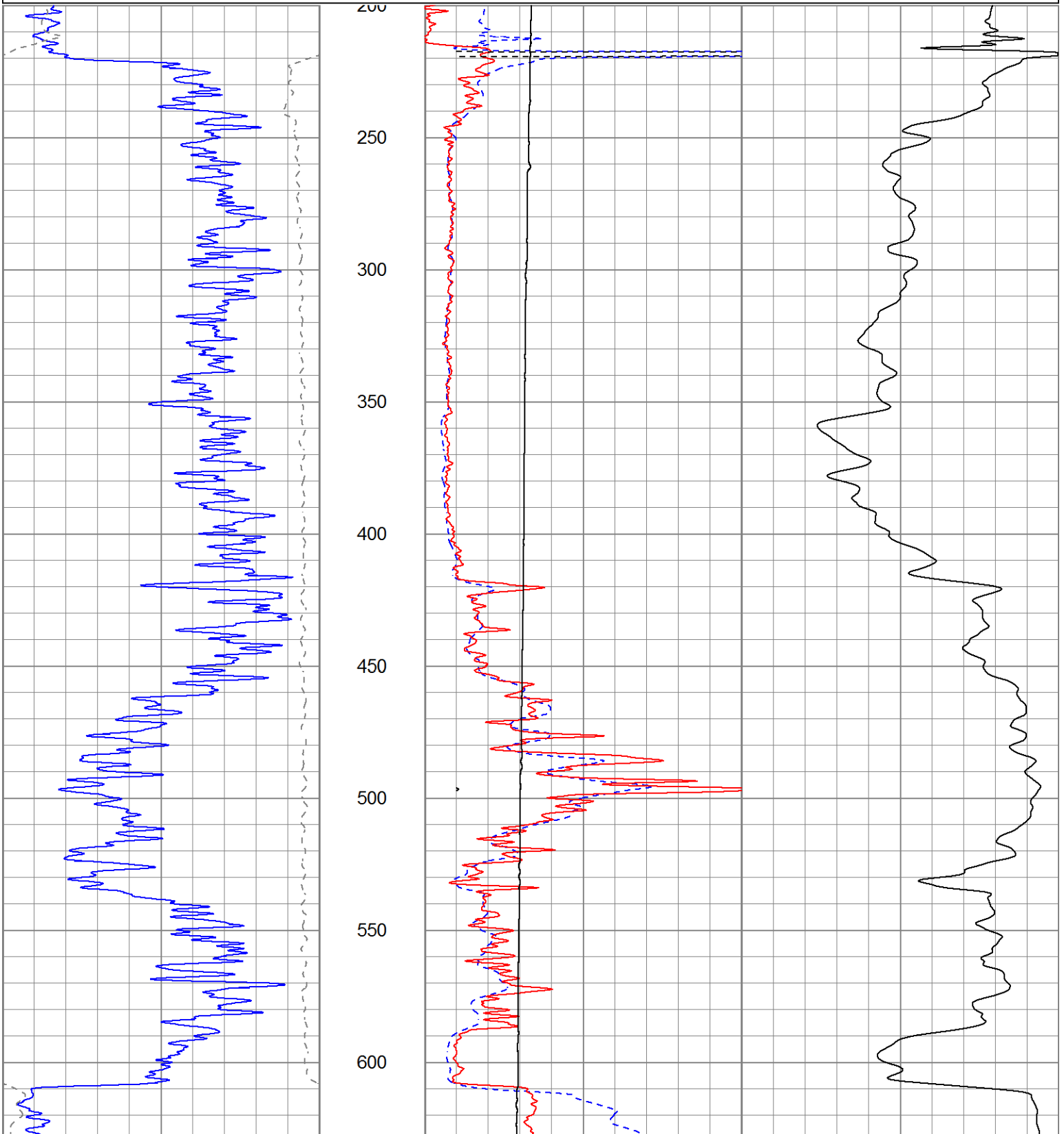
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 Dataset Pathname pass2
 Presentation Format kdillin2
 Dataset Creation Mon Jun 17 18:52:40 2013
 Charted by Depth in Feet scaled 1:600

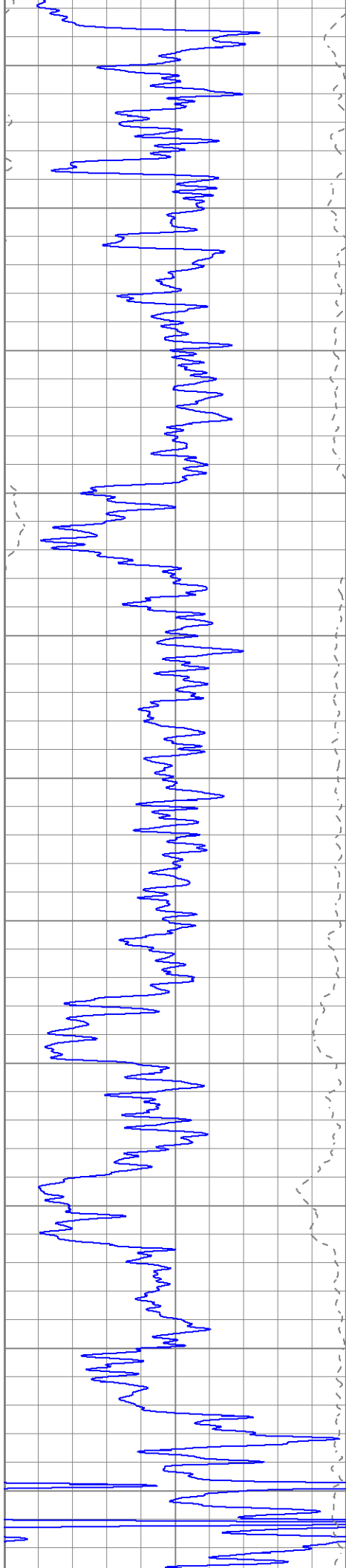
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-200	SP (mV)	0

0	RILD (Ohm-m)	50
0	RLL3 (Ohm-m)	50

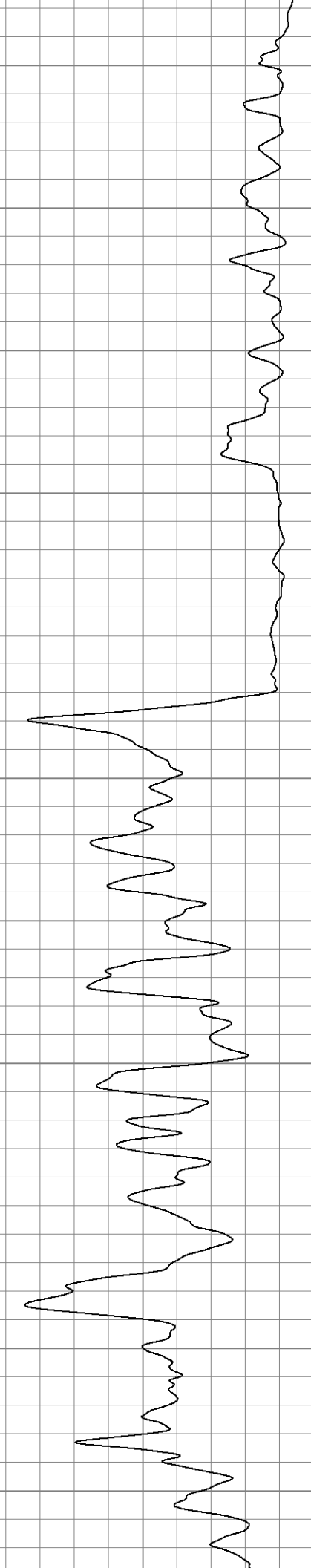
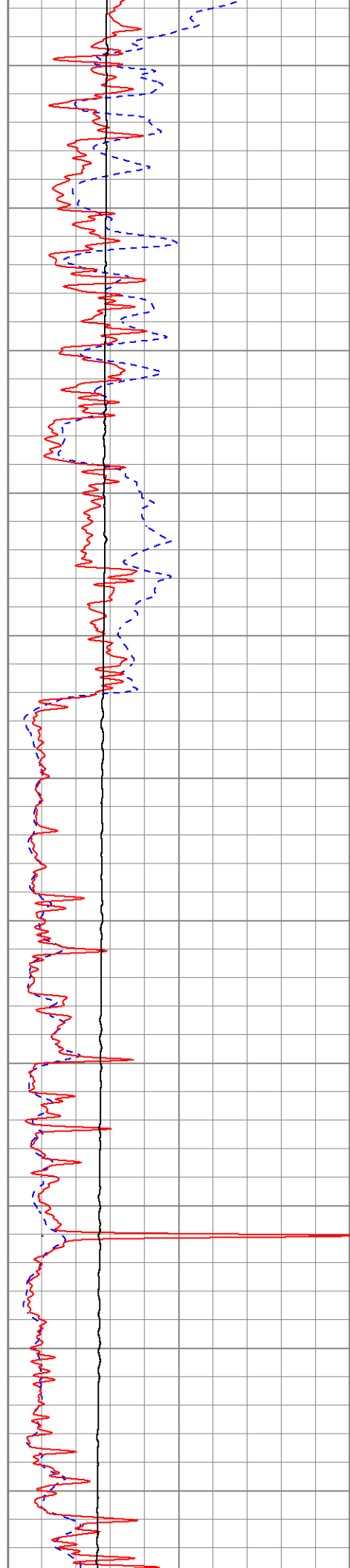
1000	CILD (mmho/m)	0
10000	LTEN (lb)	0

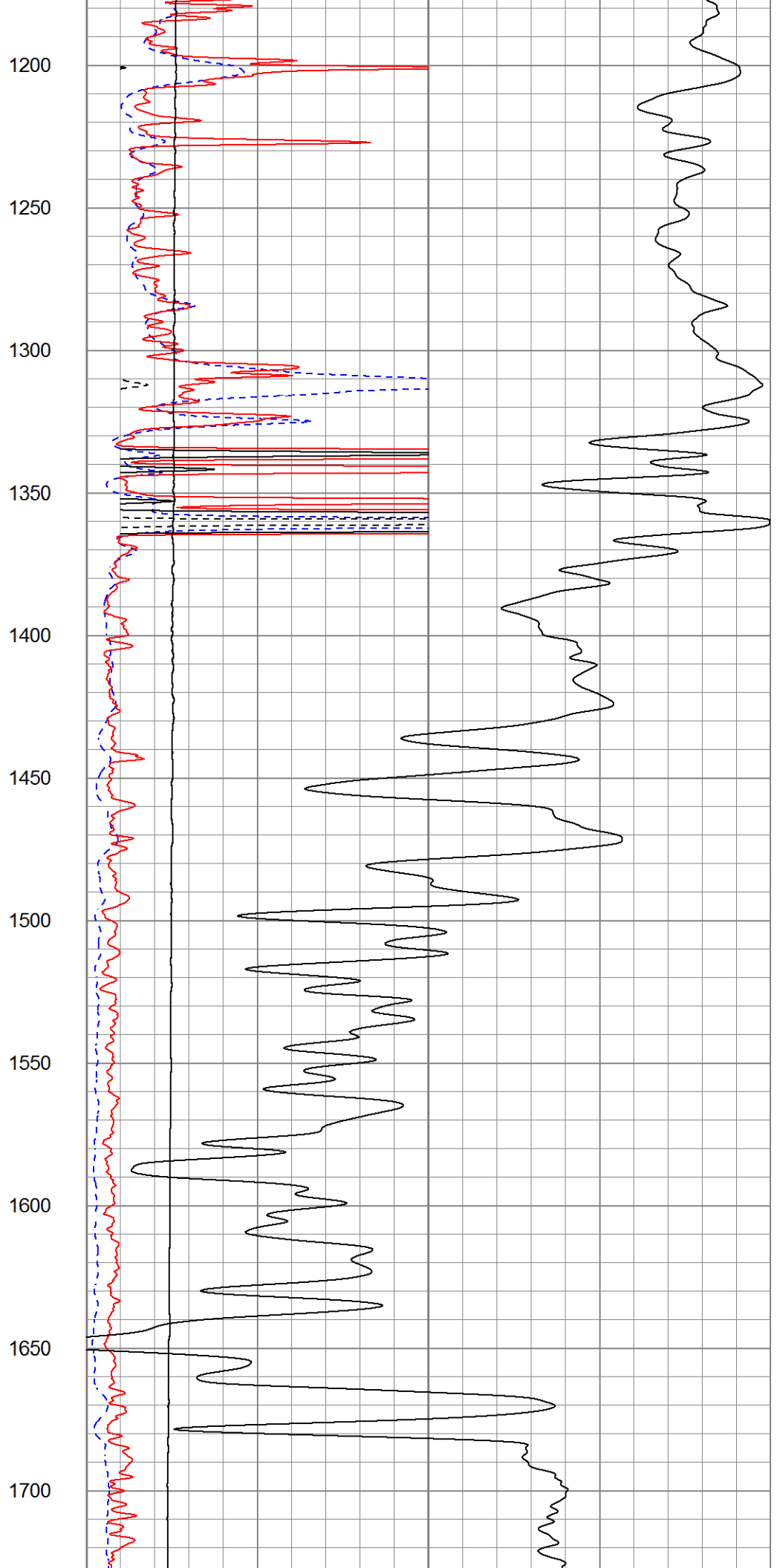
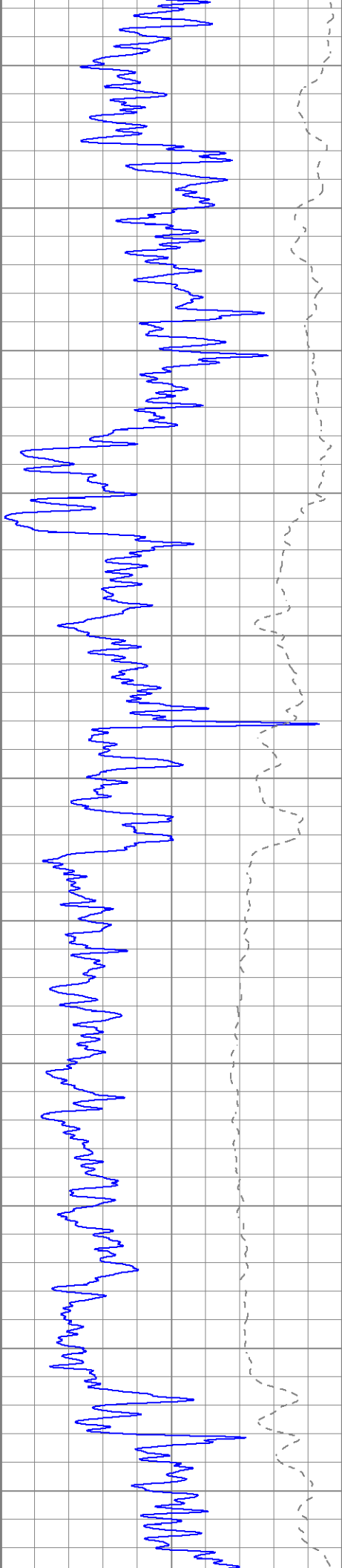
50	RILD x 10 (Ohm-m)	500
50	RLL3 x 10 (Ohm-m)	500

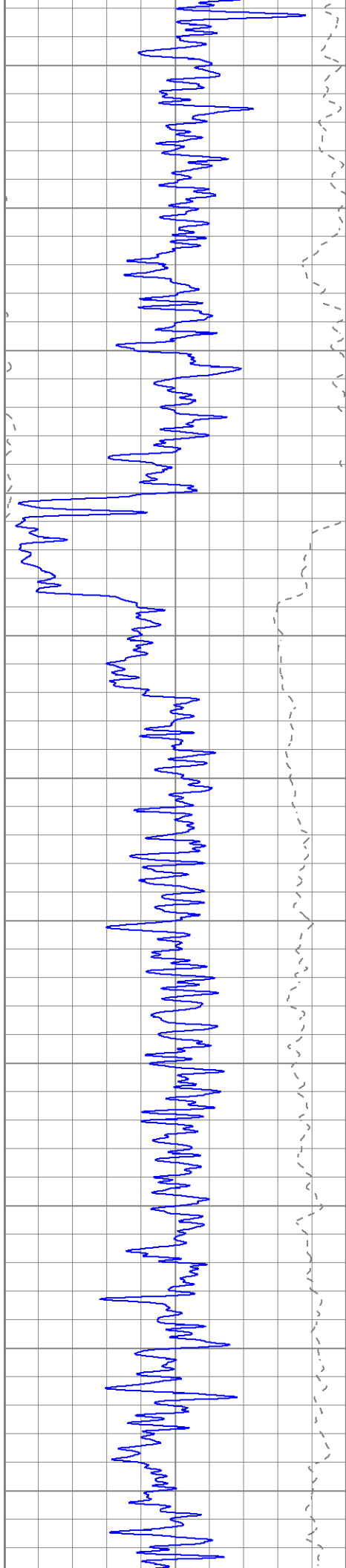




650
700
750
800
850
900
950
1000
1050
1100
1150







1750

1800

1850

1900

1950

2000

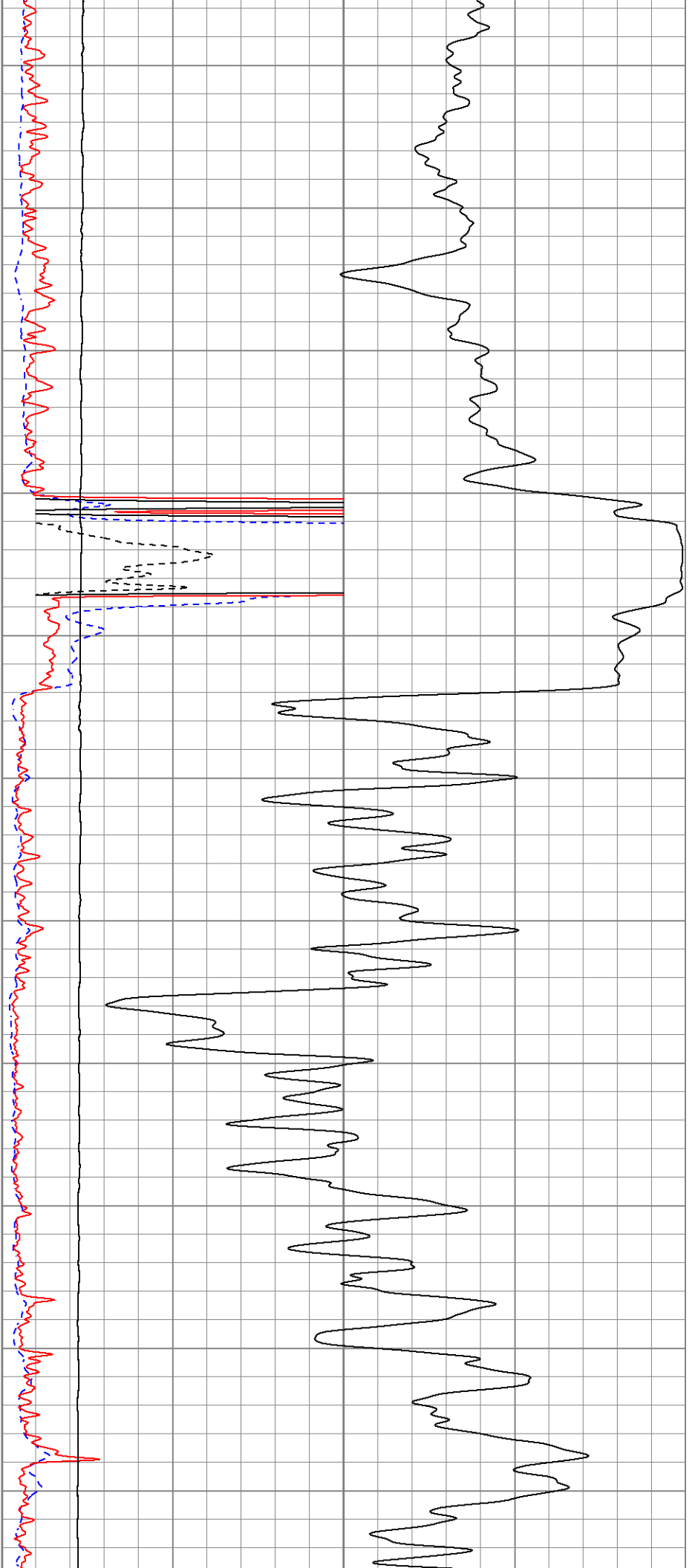
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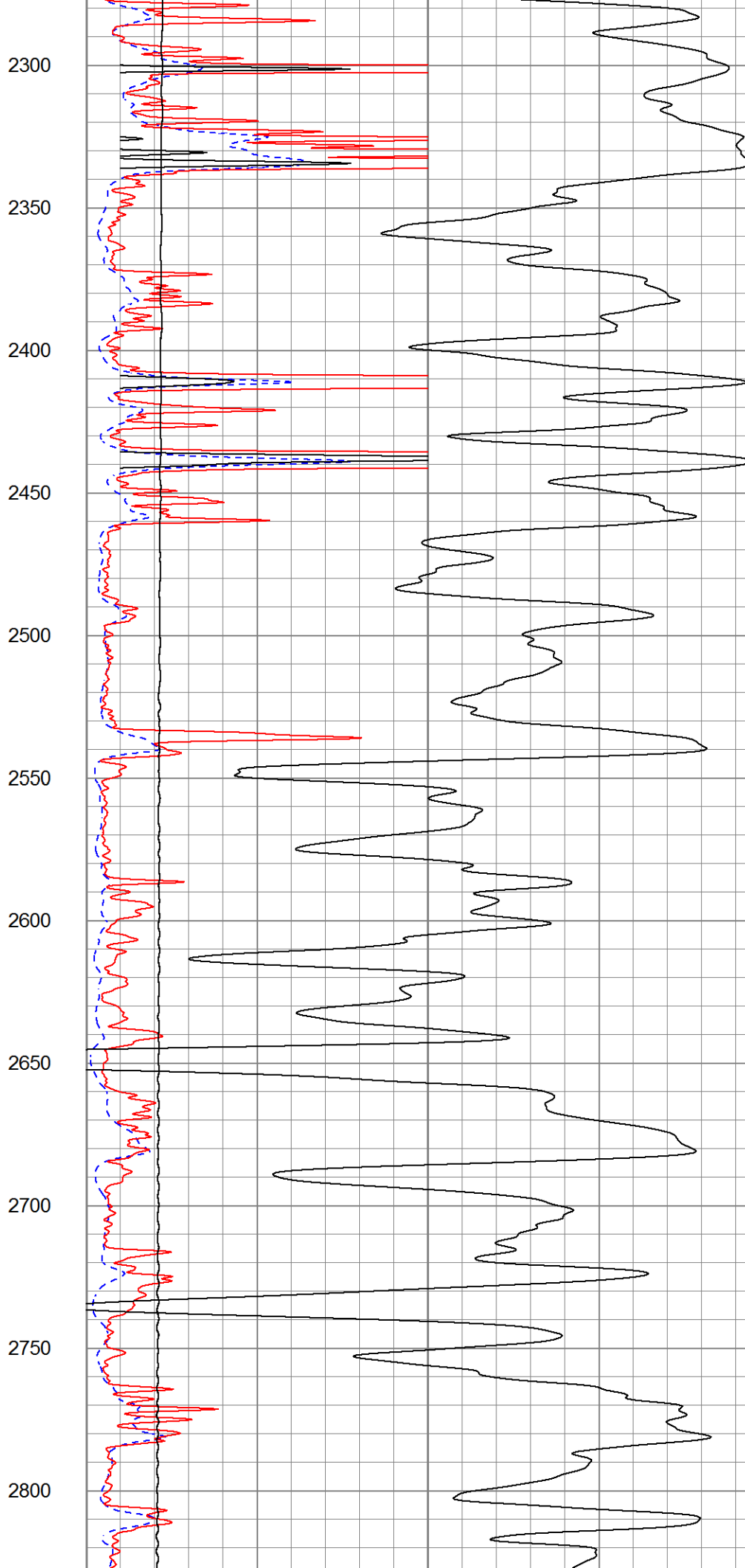
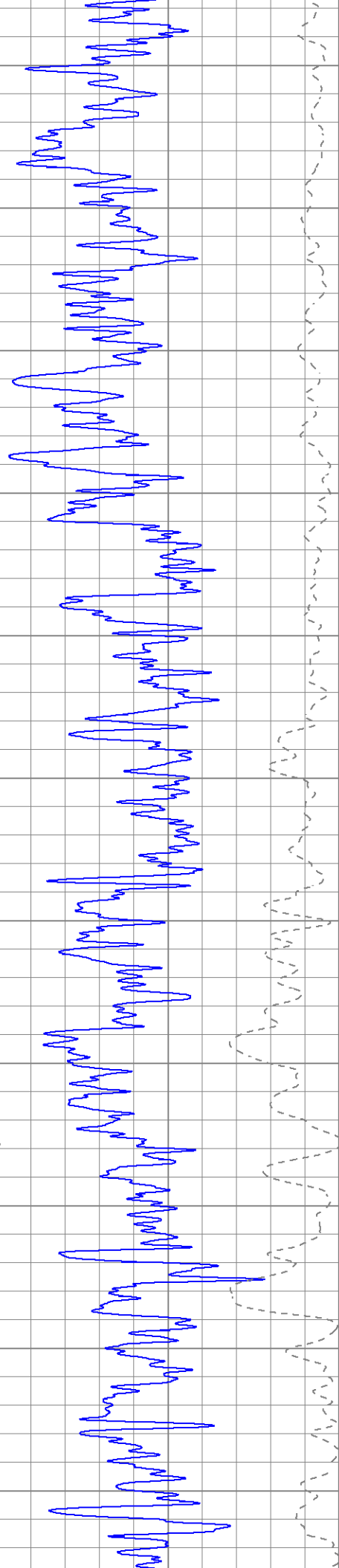
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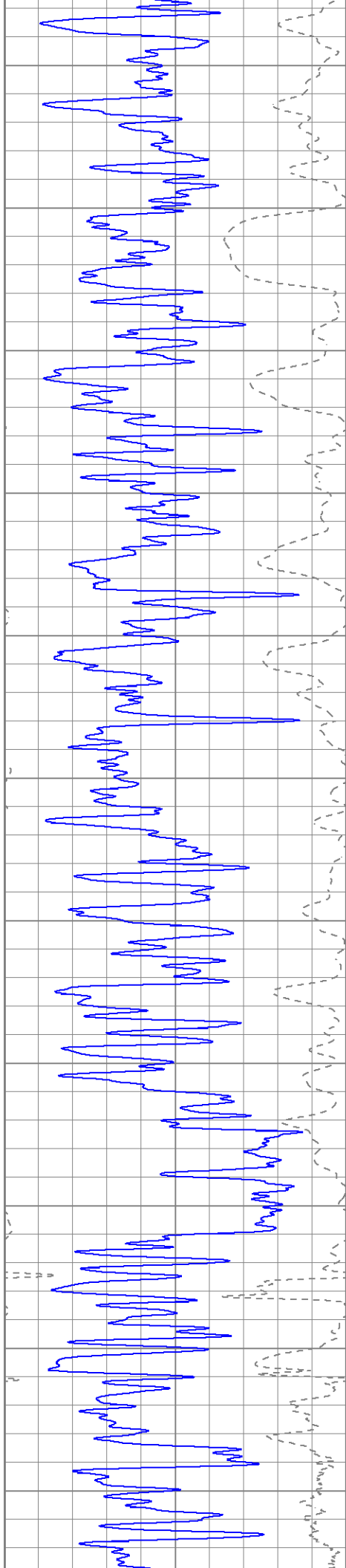
2150

2200

2250







2850

2900

2950

3000

3050

3100

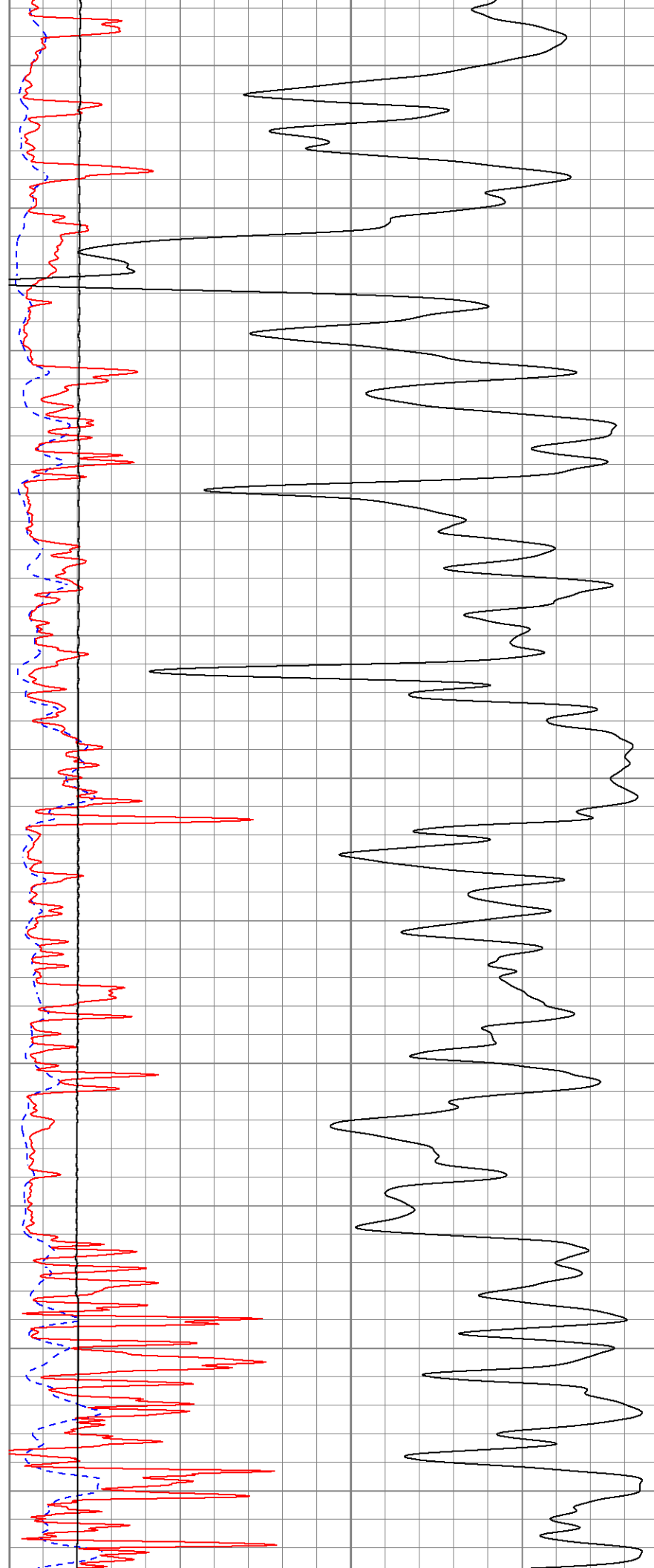
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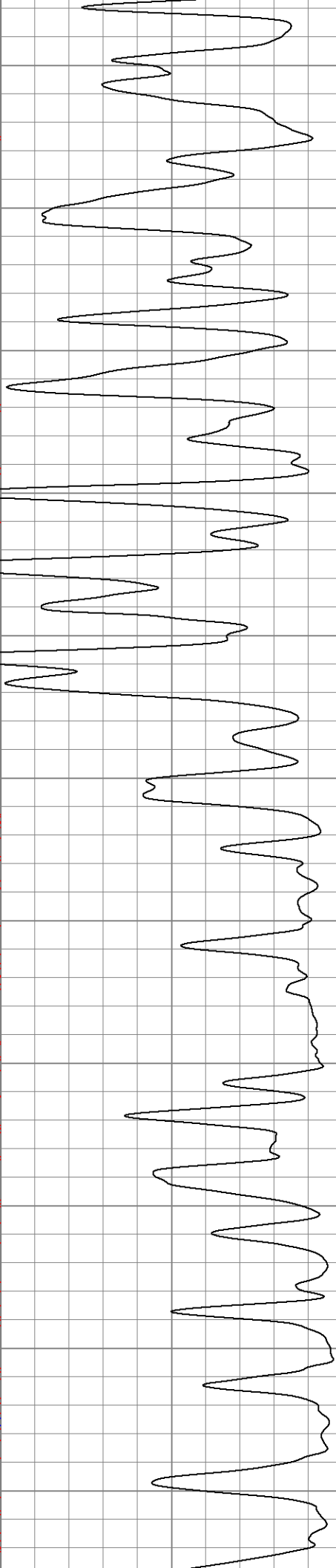
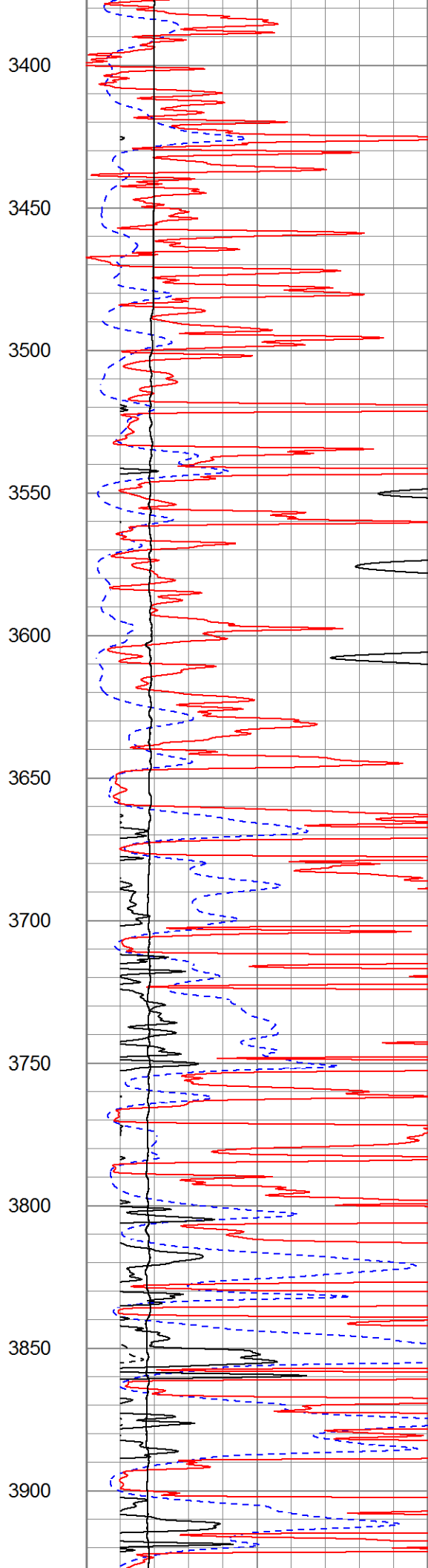
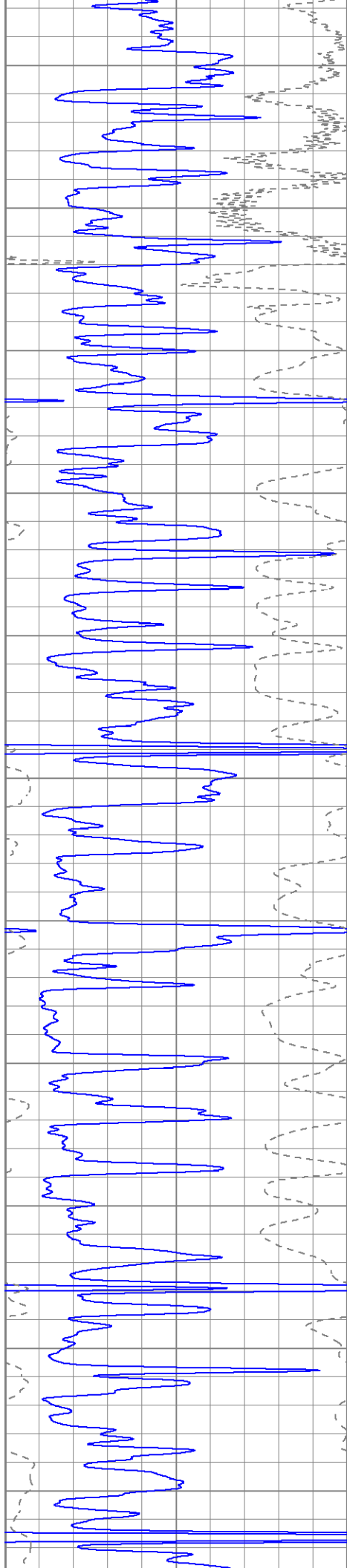
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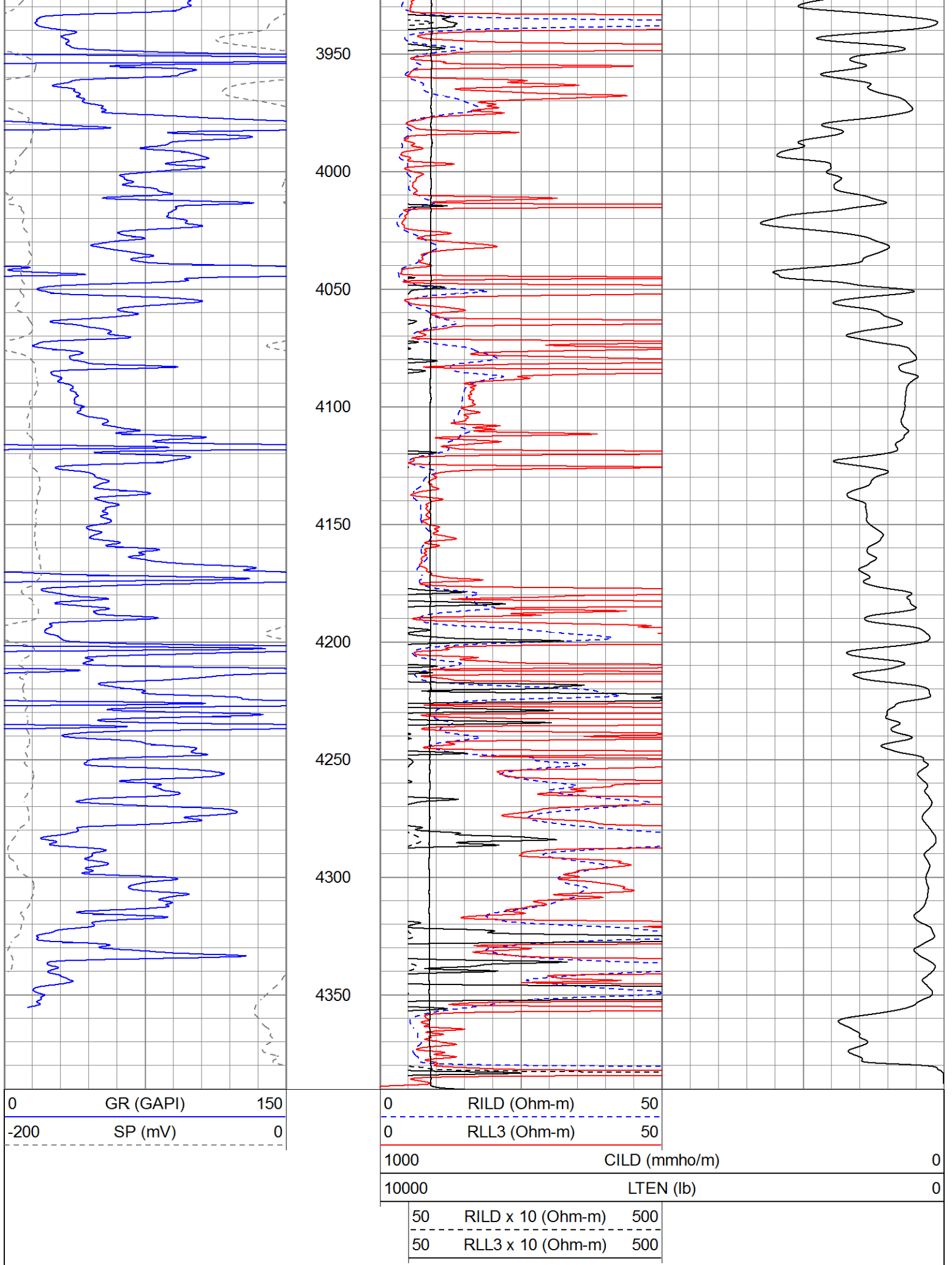
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3300

3350







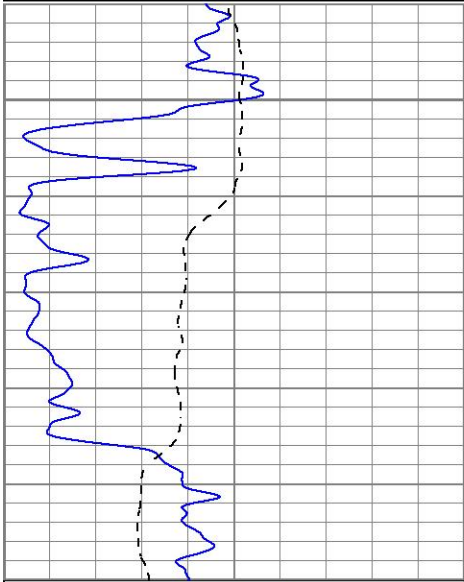


Main Pass

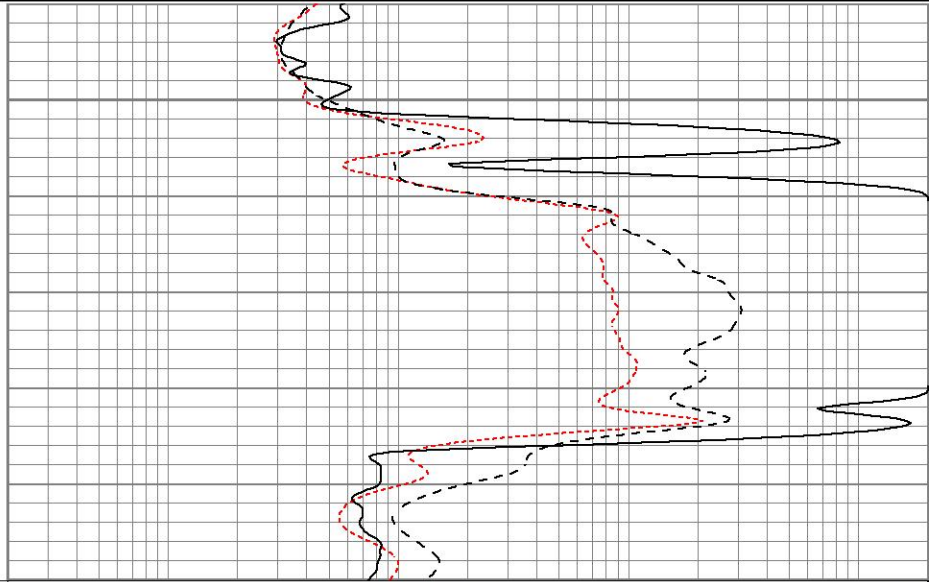
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 Dataset Pathname pass2
 Presentation Format kdil
 Dataset Creation Mon Jun 17 18:52:40 2013
 Charted by Depth in Feet scaled 1:240

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



1900



1950

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

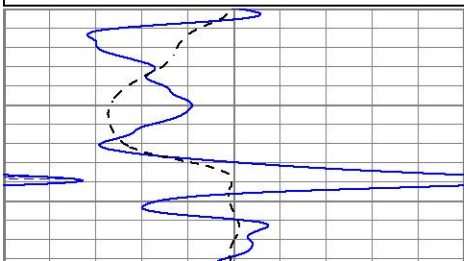


Main Pass

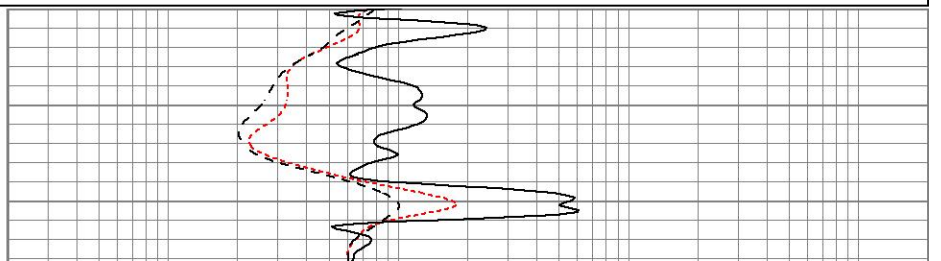
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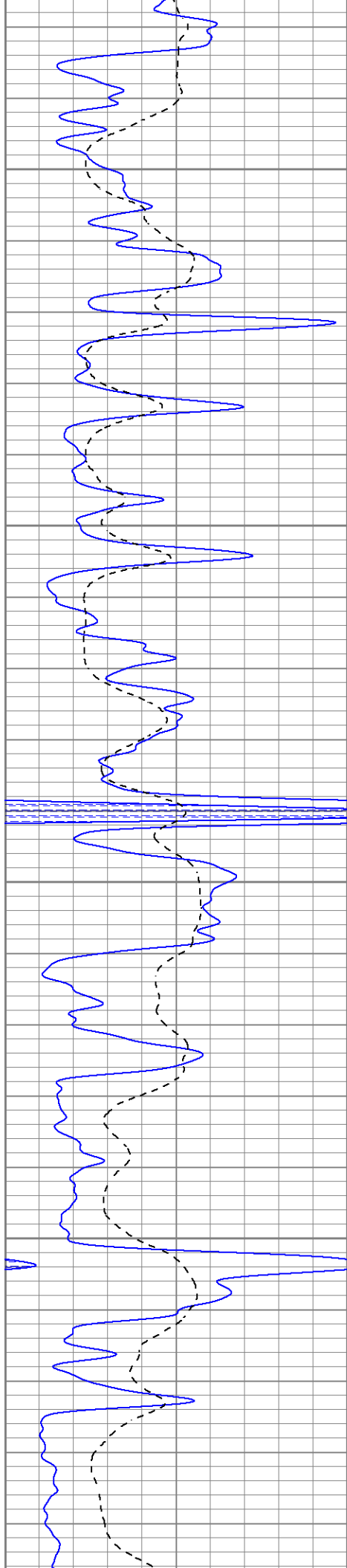
0	GR (GAPI)	150
-100	SP (mV)	100

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



3300



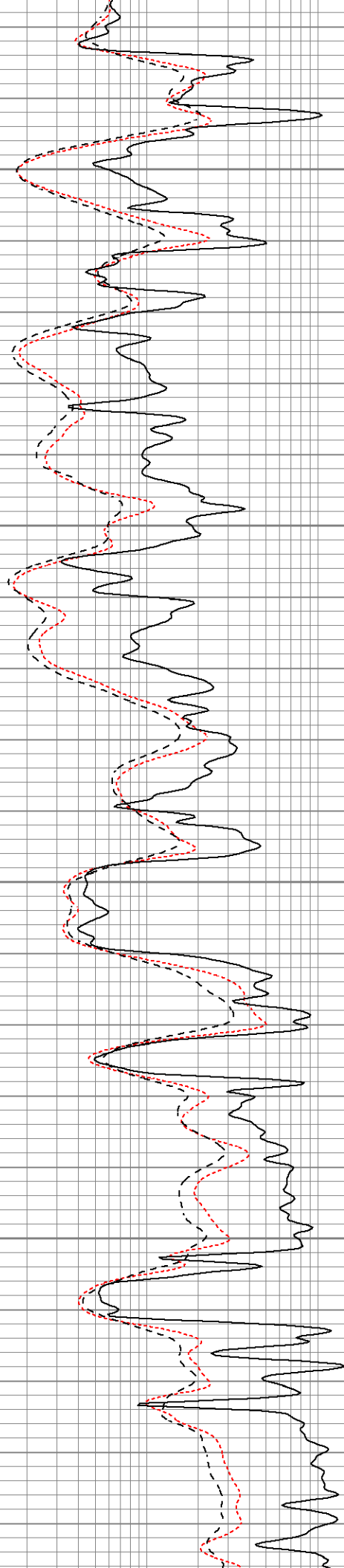


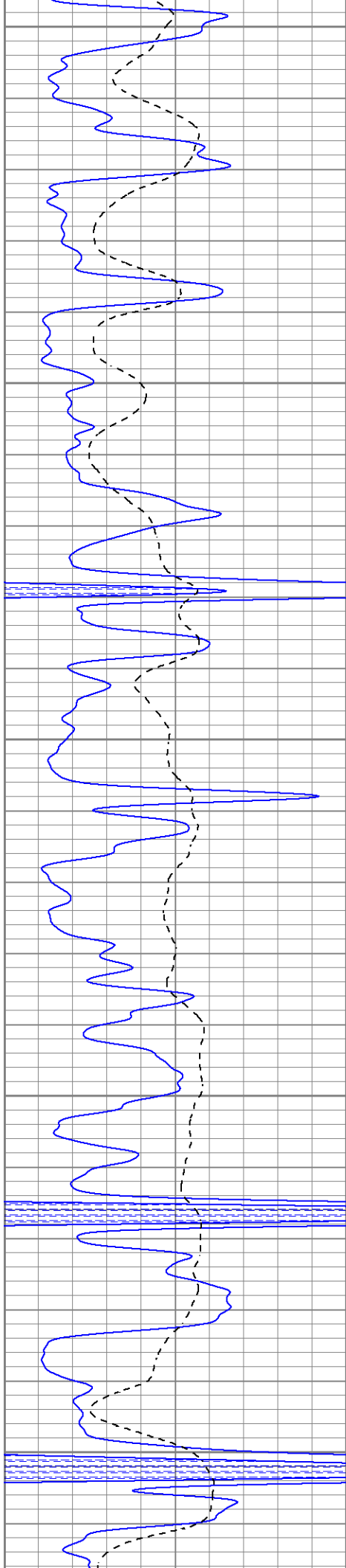
3550

3600

3650

3700





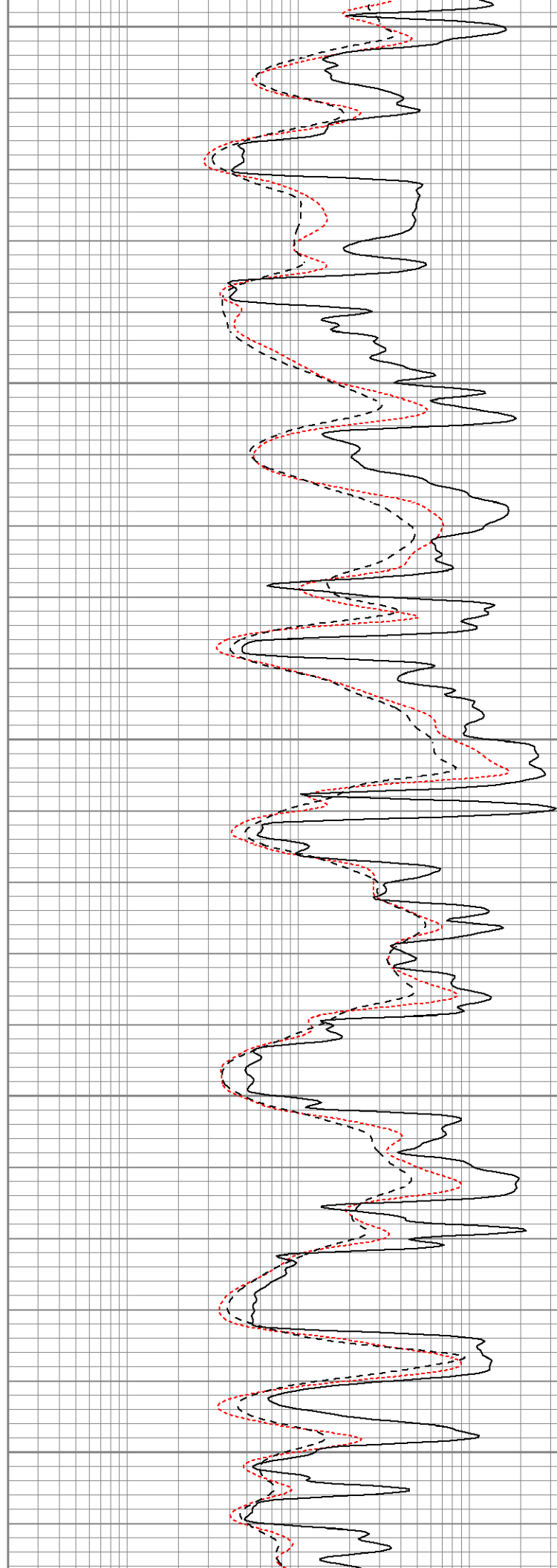
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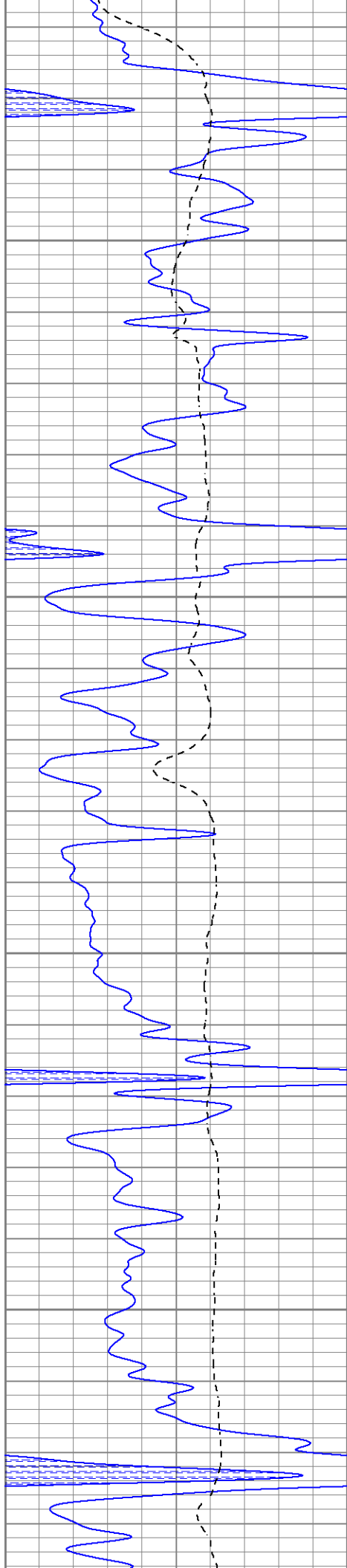
3800

3850

3900

3950



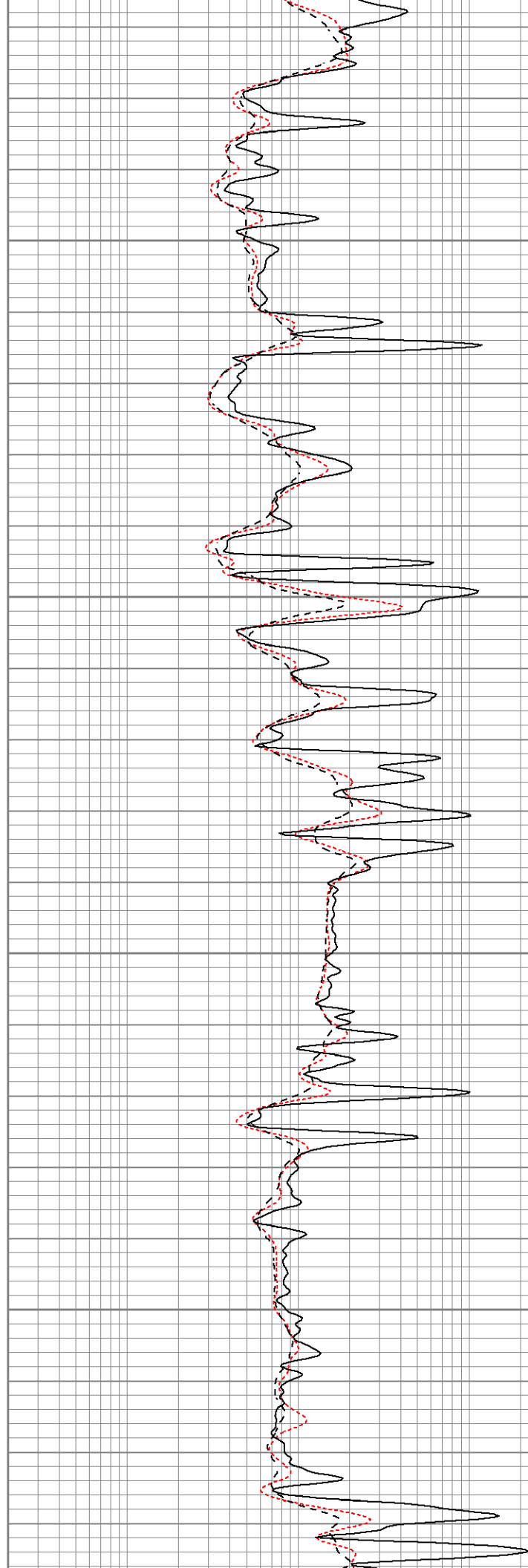


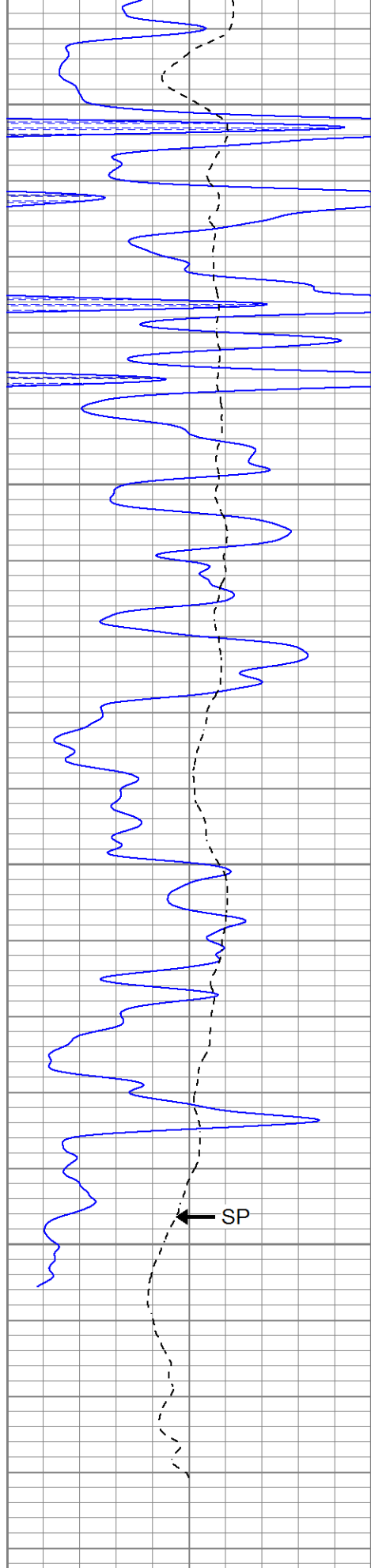
4000

4050

4100

4150





4200

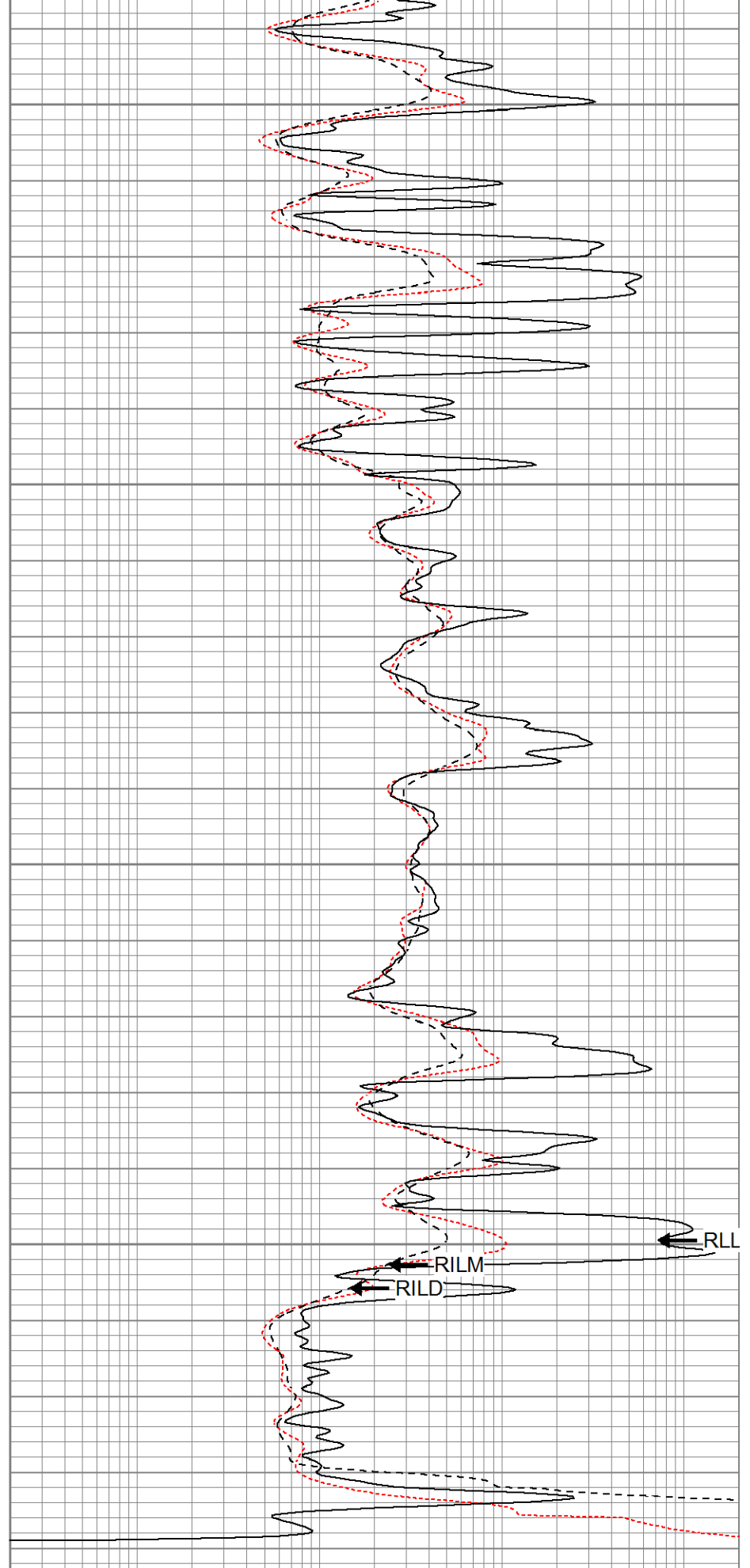
4250

4300

4350

SP

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



RILM

RILD

RLL

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

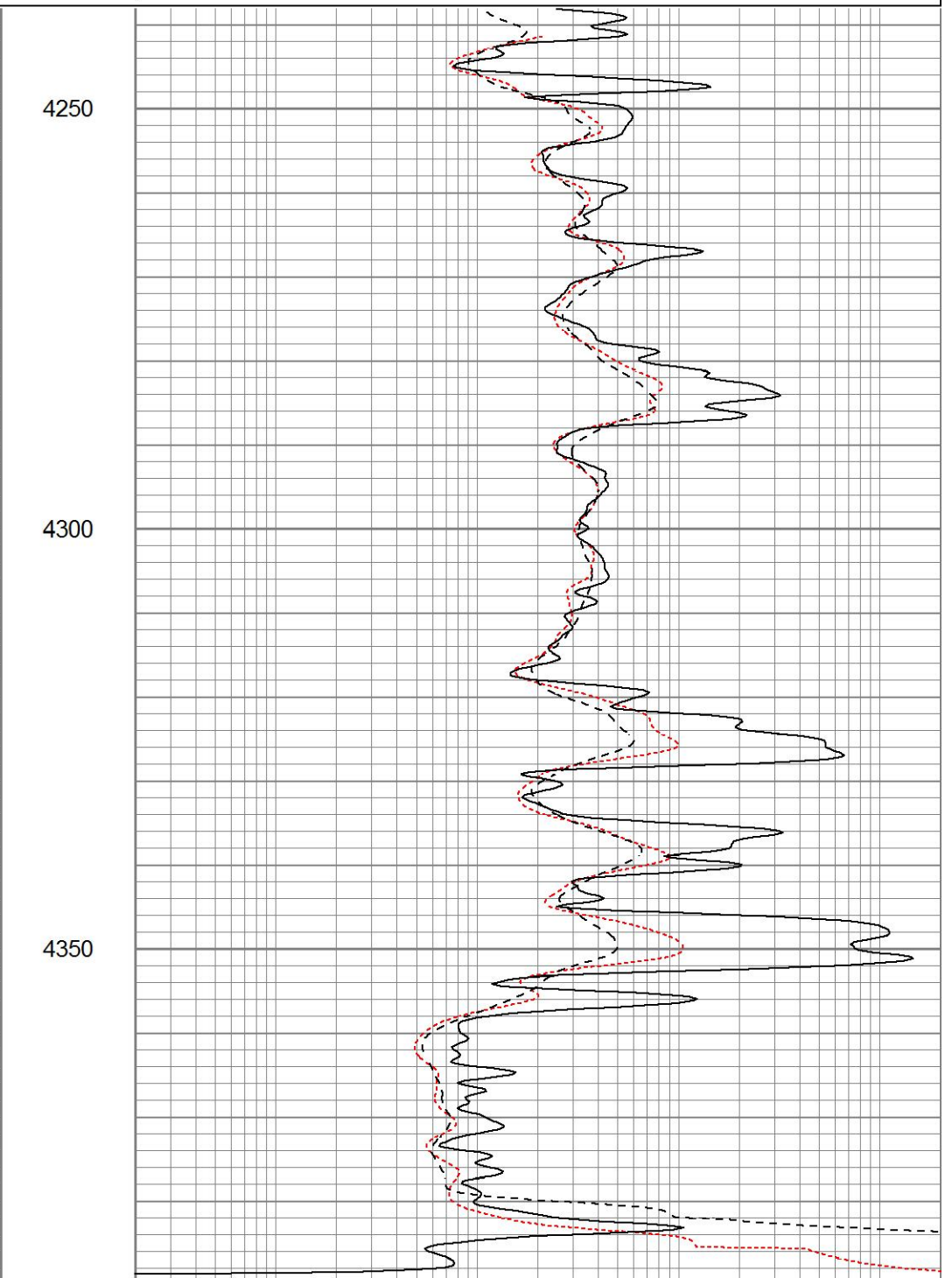
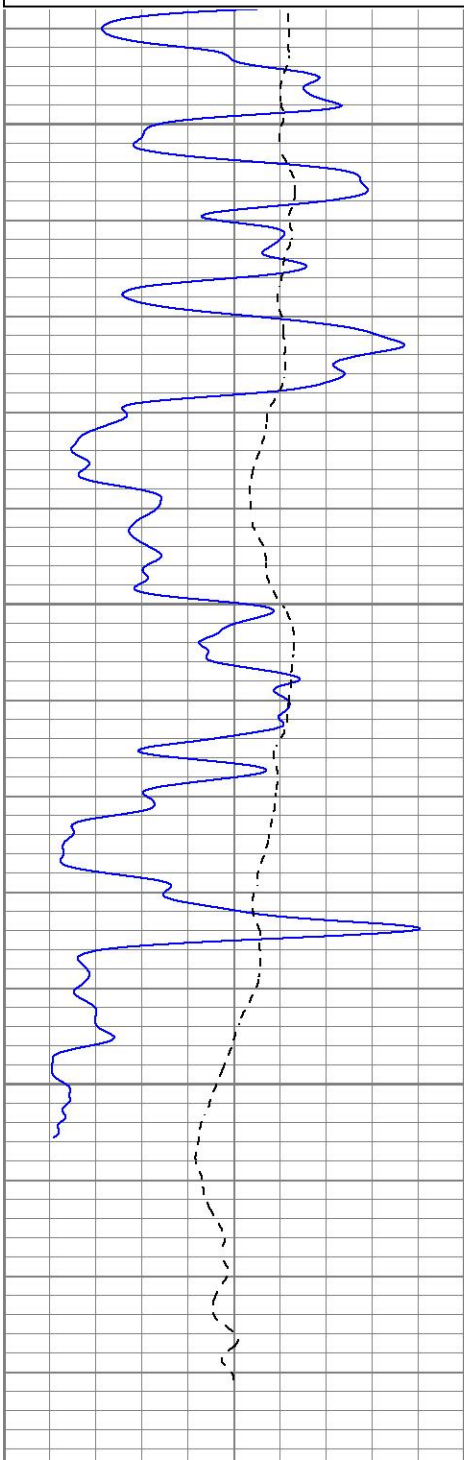


Repeat Pass

Database File ppmmaximumattitude#1oh.db
 Dataset Pathname pass1
 Presentation Format kdil
 Dataset Creation Mon Jun 17 18:45:06 2013
 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



0 GR (GAPI) 150

0.2 RILM (Ohm-m) 2000

-100	SP (mV)	100
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0.2	RILD (Ohm-m)	2000
0.2	RLL3 (Ohm-m)	2000

Calibration Report

Database File ppmaximumattitude#1oh.db
 Dataset Pathname pass1
 Dataset Creation Mon Jun 17 18:45:06 2013

Dual Induction Calibration Report

Serial-Model: 5375-G
 Surface Cal Performed: Wed Apr 24 10:24:39 2013
 Downhole Cal Performed: Wed Apr 24 10:24:44 2013
 After Survey Verification Performed: Wed Apr 24 10:24:46 2013

Surface Calibration

Loop:	Readings			References			Results	
	Air	Loop		Air	Loop		m	b
Deep	0.004	0.642	V	0.000	350.000	mmho/m	548.978	-2.319
Medium	0.008	0.744	V	0.000	400.000	mmho/m	543.196	-4.293
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.005	0.642	V	0.000	350.000	mmho/m	548.752	-2.529
Medium	0.008	0.744	V	0.000	550.000	mmho/m	746.807	-5.812

Downhole Calibration

Internal:	Readings			References			Results	
	Zero	Cal		Zero	Cal		m	b
Deep	0.271	350.533	mmho/m	0.211	350.355	mmho/m	1.000	-0.060
Medium	-0.023	400.162	mmho/m	-0.066	399.980	mmho/m	1.000	-0.043
Shallow	2.479	0.015	V	500.000	2.000	Ohm-m	202.133	-1.103

After Survey Verification

Internal:	Readings			Targets			Results	
	Zero	Cal		Zero	Cal		m'	b'
Deep	0.000	0.000	mmho/m	0.271	350.533	mmho/m	1.000	-0.060
Medium	0.000	0.000	mmho/m	-0.023	400.162	mmho/m	1.000	-0.043
Shallow	0.000	0.000	Ohm-m	500.000	2.000	Ohm-m	1.000	0.000

Compensated Density Calibration Report

Serial-Model: 2501DHT-DHT
 Source / Verifier: csv-j12 /
 Master Calibration Performed: Mon May 27 11:08:09 2013
 Before Survey Verification Performed:
 After Survey Verification Performed:

Master Calibration

	Density		Far Detector	Near Detector	
Magnesium	1.750	g/cc	721.95	287.97	cps
Aluminum	2.660	g/cc	136.17	188.42	cps

Spine Angle = 75.73

Density/Spine Ratio = 0.529

	Size		Reading
Small Ring	8.42	in	6273.19
Large Ring	14.00	in	10676.90

Before Survey Verification			
	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:	2001		
Tool Model:	OH		
Performed:	Tue Jun 11 15:41:32 2013		
Calibrator Value:	1.0	GAPI	
Background Reading:	0.0	cps	
Calibrator Reading:	1.0	cps	
Sensitivity:	0.2300	GAPI/cps	

Neutron Calibration Report

Serial Number:	5108		
Tool Model:	PROBE		
Performed:	Tue Jun 11 15:41:41 2013		
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	38.26		None	0.75	1.50	5.00	
			NEU-PROBE (5108) Probe	4.92	3.63	85.00	
GR	32.32		GR-OH (2001) 2001	3.56	3.25	40.00	
			DHT (2501DHT) Digital High Temp CDL Tool	9.69	4.00	201.00	
LSD	23.78						
DCAL	23.49						
SSD	23.24						
HEADVOLT	21.47						
SP	10.60			DIL-G (5375) Gearhart	21.47	4.00	345.00
CILD	10.60						
CILM	6.89						
RII 3	1.70						

Dataset:	ppmaximumattitude#1oh.db: field/well/run1/pass1
Total length:	40.39 ft
Total weight:	676.00 lb
O.D.:	4.00 in