



DUAL INDUCTION LOG

Company JOHN O. FARMER, INC.
Well ZEIGLER UNIT #1
Field CONGER
County ROOKS
State KS

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Field CONGER
County ROOKS State KS

Location: API #: 15 163 24478
1520' FNL & 270' FEL
SEC 9 TWP 10S RGE 16W
Permanent Datum Ground Level Elevation 1897'
Log Measured From KB 8' AGL
Drilling Measured From KB
Other Services
ML
CDNL
Elevation
K.B. 1905'
D.F. 1903'
G.L. 1897'

Date	4/10/2023
Run Number	One
Depth Driller	3460'
Depth Logger	3460'
Bottom Logged Interval	3458'
Top Log Interval	00'
Casing Driller	8 5/8" @ 223'
Casing Logger	223'
Bit Size	7 7/8"
Type Fluid in Hole	Chemical Mud
Density / Viscosity	8.9/50
pH / Fluid Loss	9.5/8.4
Source of Sample	Calculated
Rm @ Meas. Temp	1.8@60degf
Rmf @ Meas. Temp	1.35@60degf
Rmc @ Meas. Temp	2.16@60degf
Source of Rmf / Rmc	Calculated
Rm @ BHT	0.93@115degf
Time Circulation Stopped	9:30 pm
Time Logger on Bottom	12:15 am
Maximum Recorded Temperature	115degf
Equipment Number	T-605
Location	HAYS, KS
Recorded By	COLBY DREILING
Witnessed By	AUSTIN KLAUS

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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

EAST ON HW 18 OUT OF PLAINVILLE FOR 11 MILES, TURN NORTH ON 28 RD FOR 1/4 MILES, WEST INTO.

Thank you for using Gemini Wireline
785-625-1182



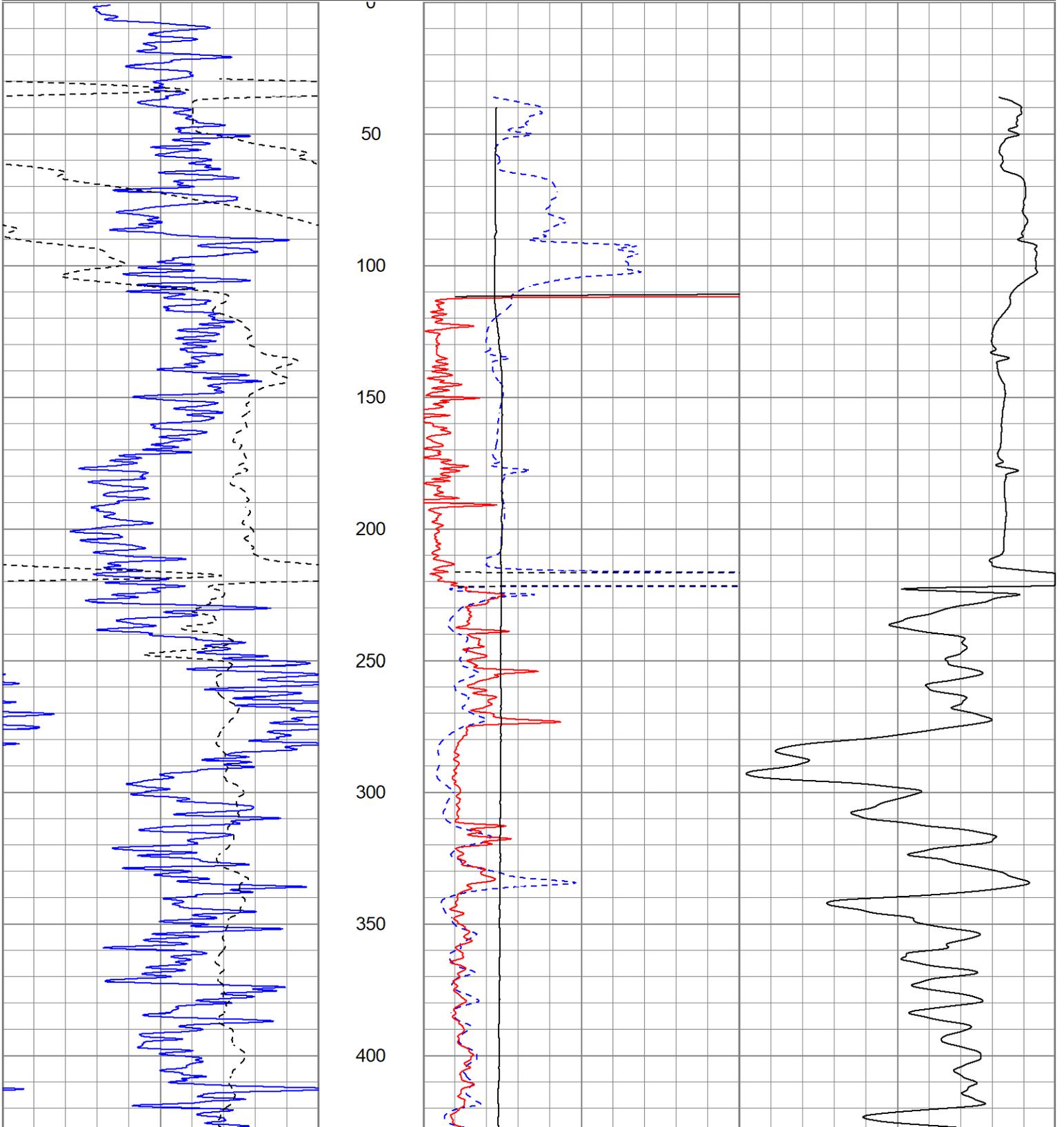
MAIN PASS

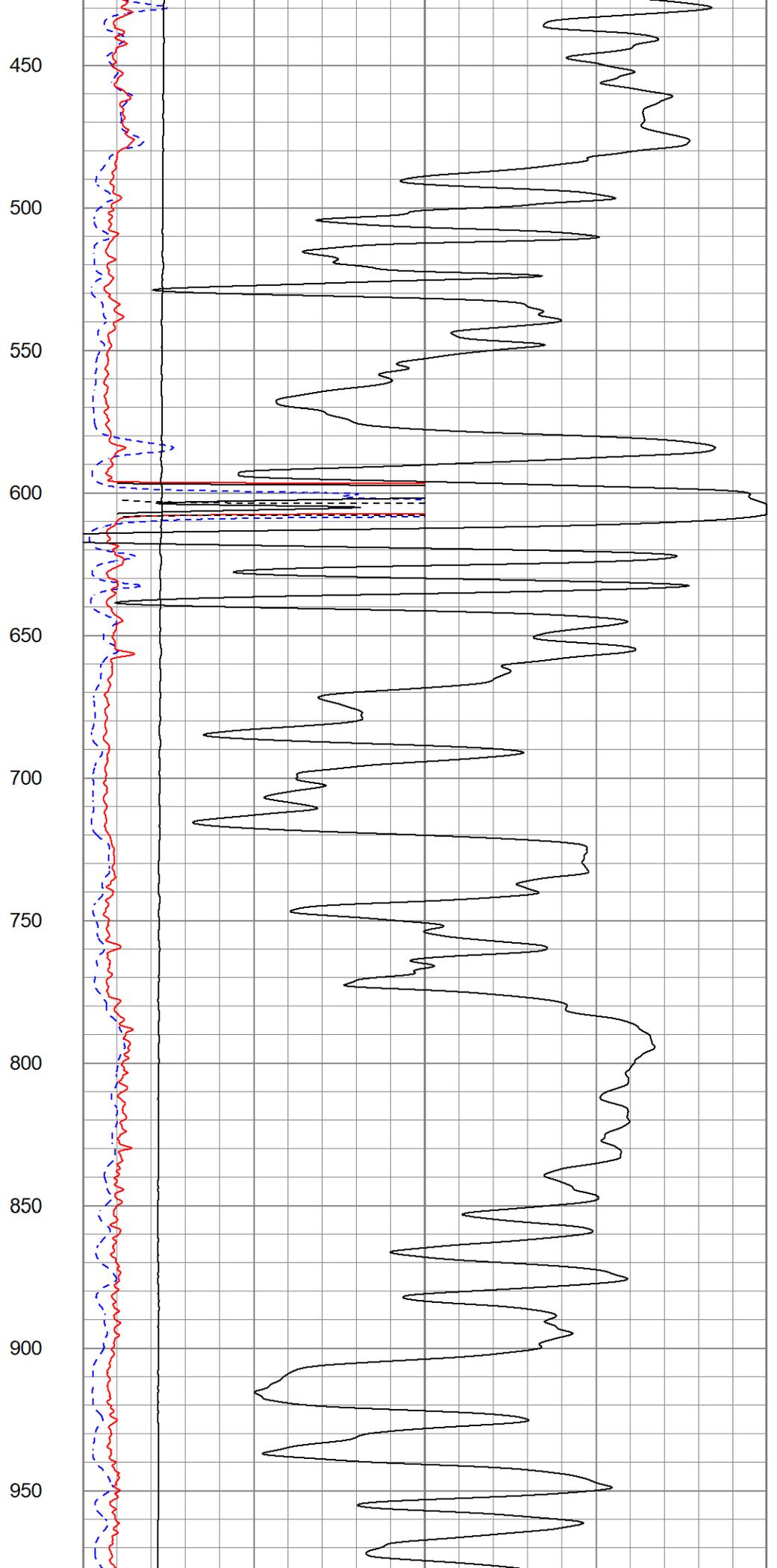
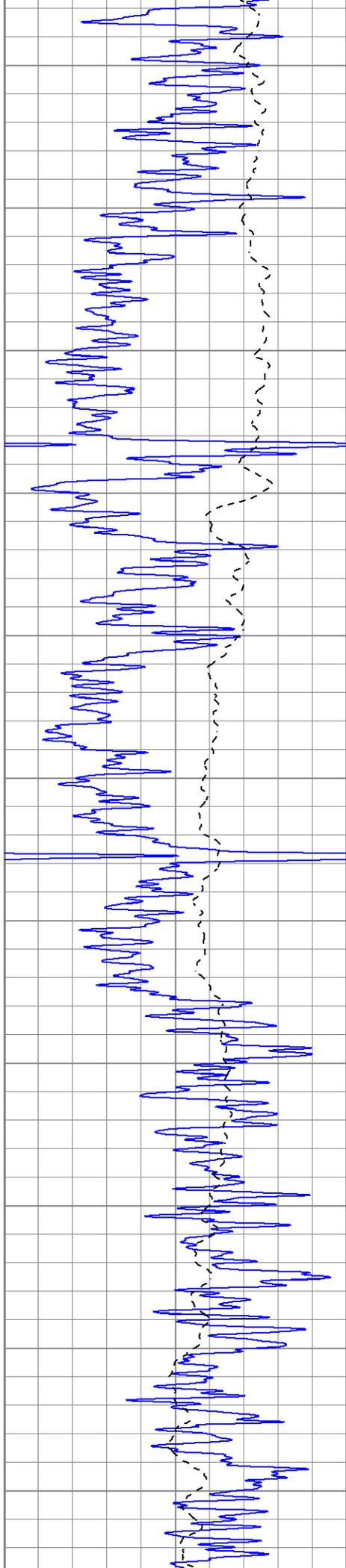
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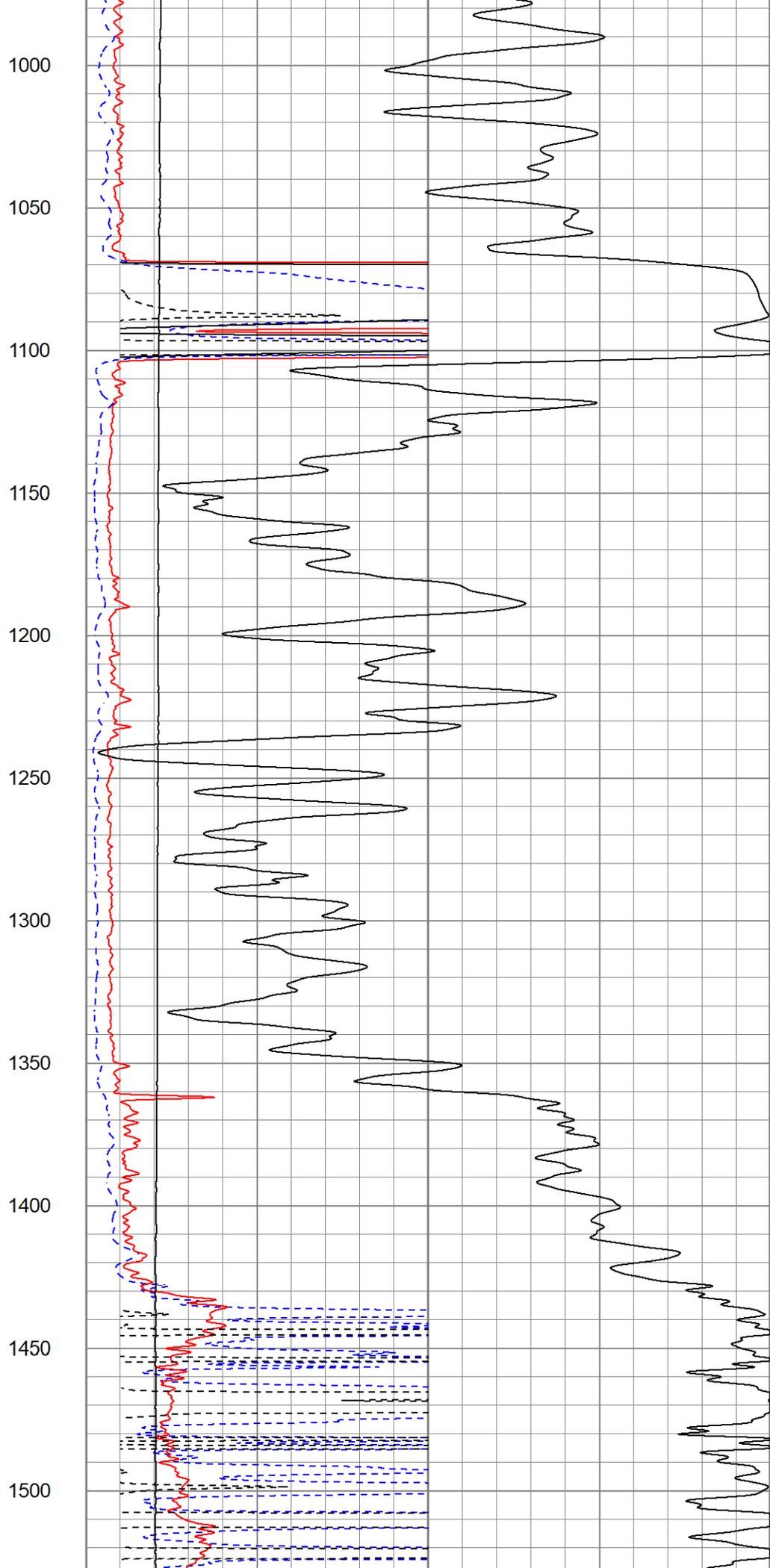
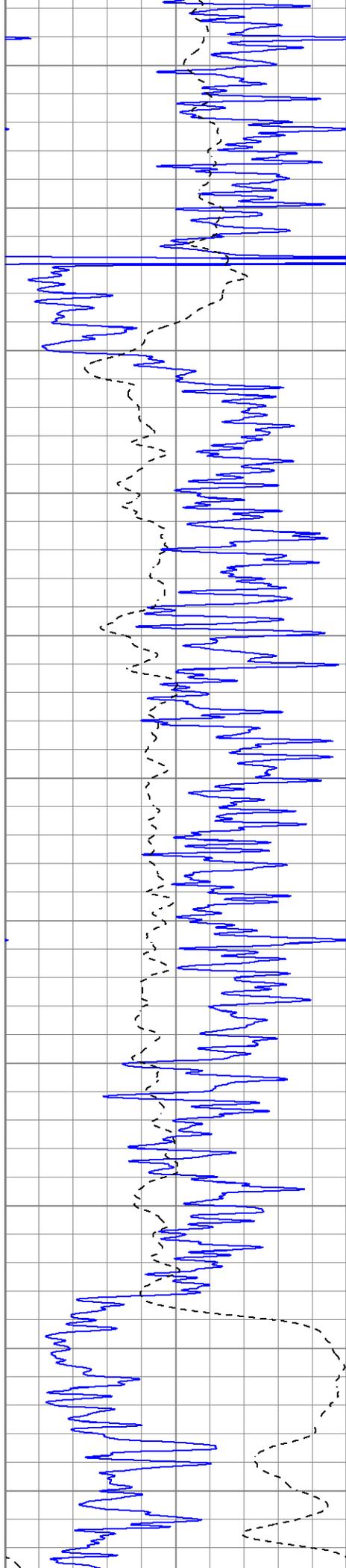
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-100	SP (mV)	100

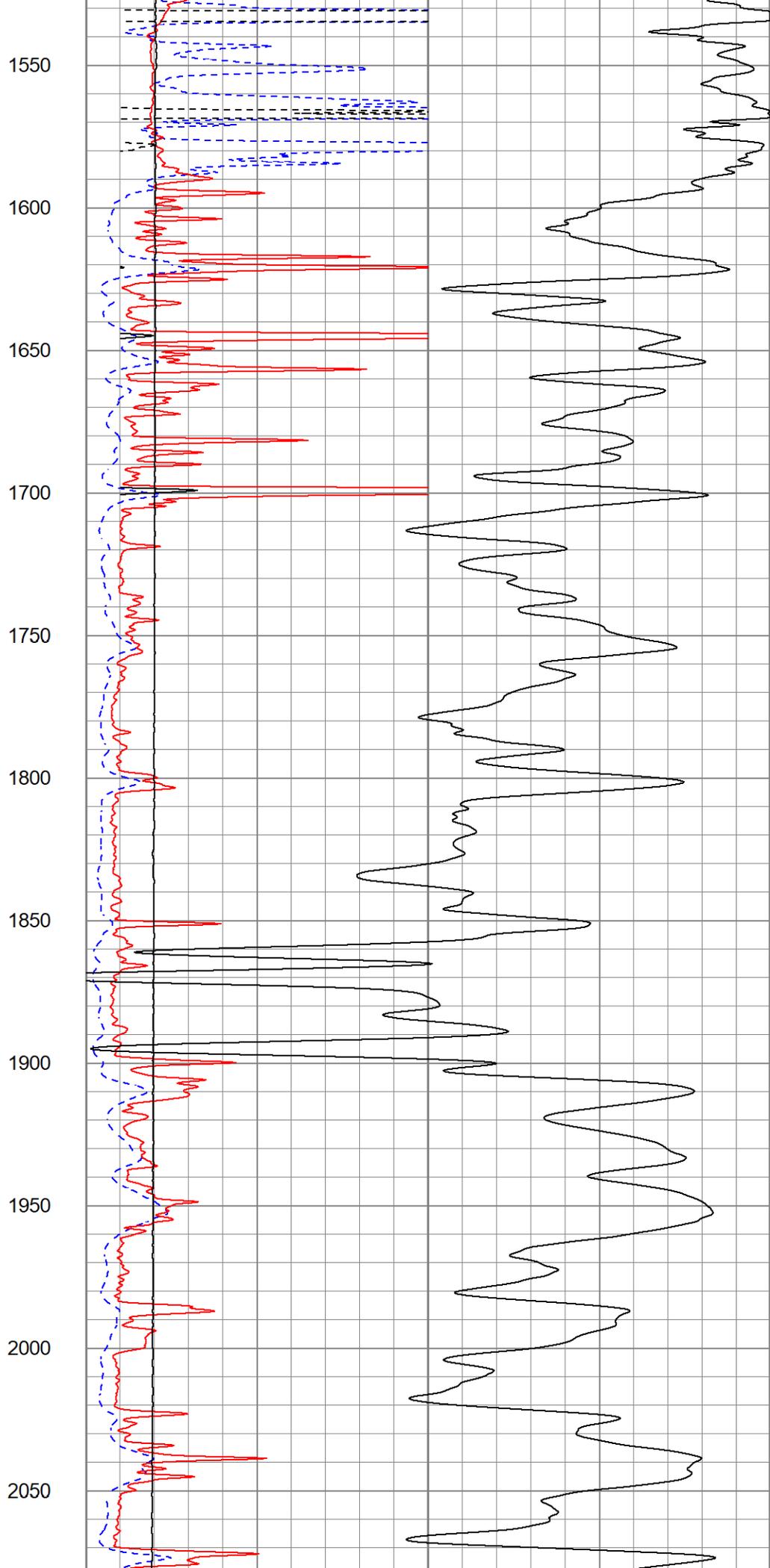
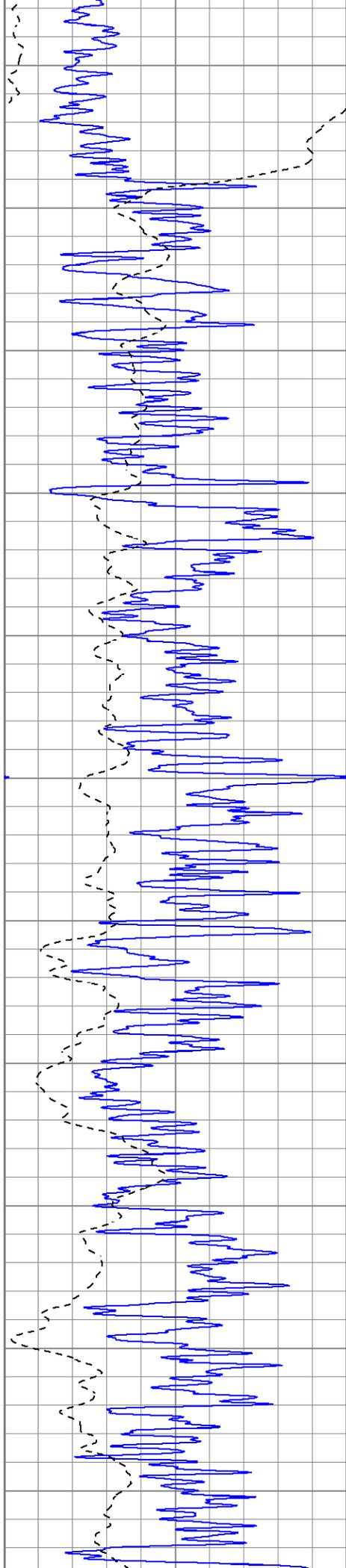
1000	CILD (mmho/m)	0
10000	LTEN (lb)	0

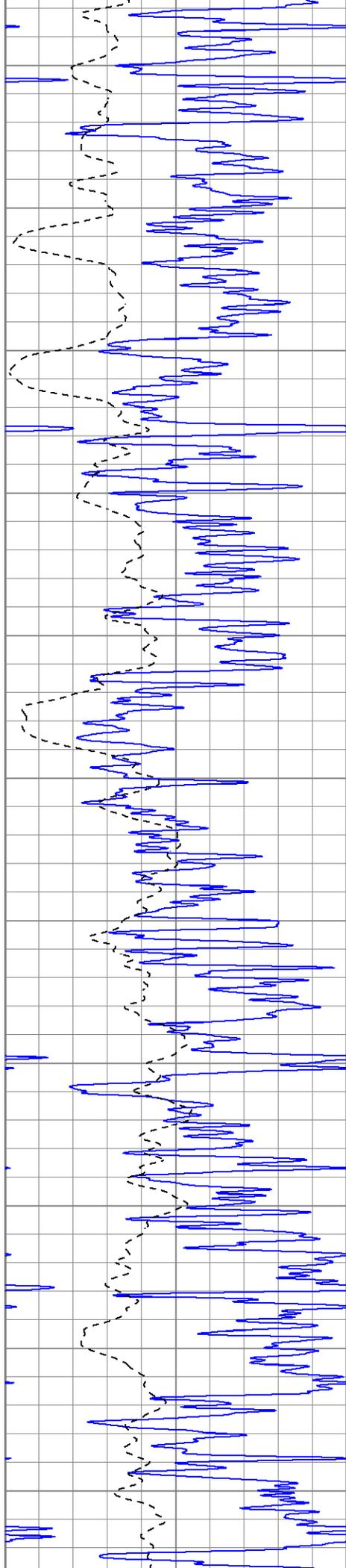
0	RILD (Ohm-m)	50
0	RLL3 (Ohm-m)	50
50	RILD x 10 (Ohm-m)	500
50	RLL3 x 10 (Ohm-m)	500



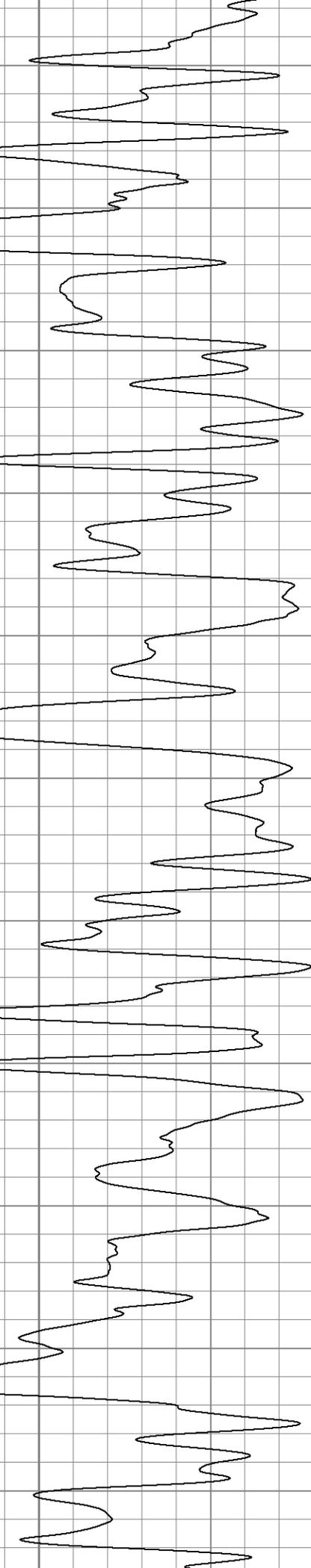
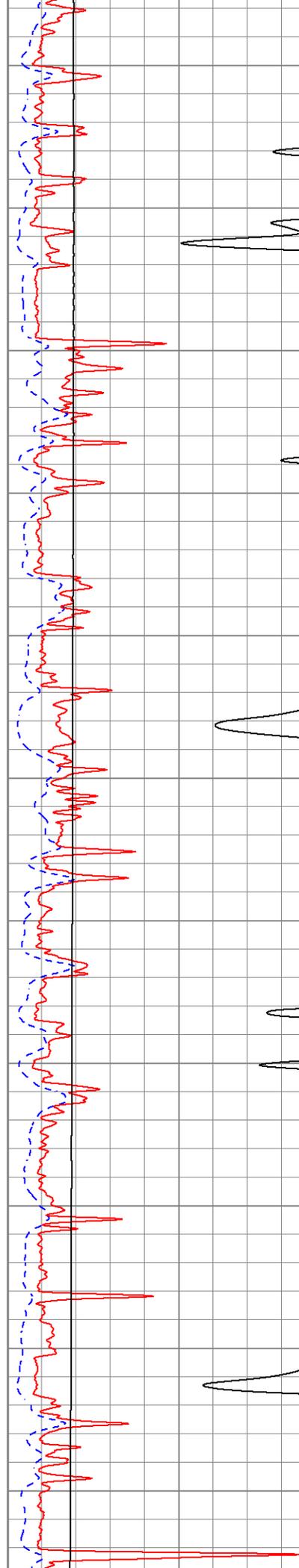


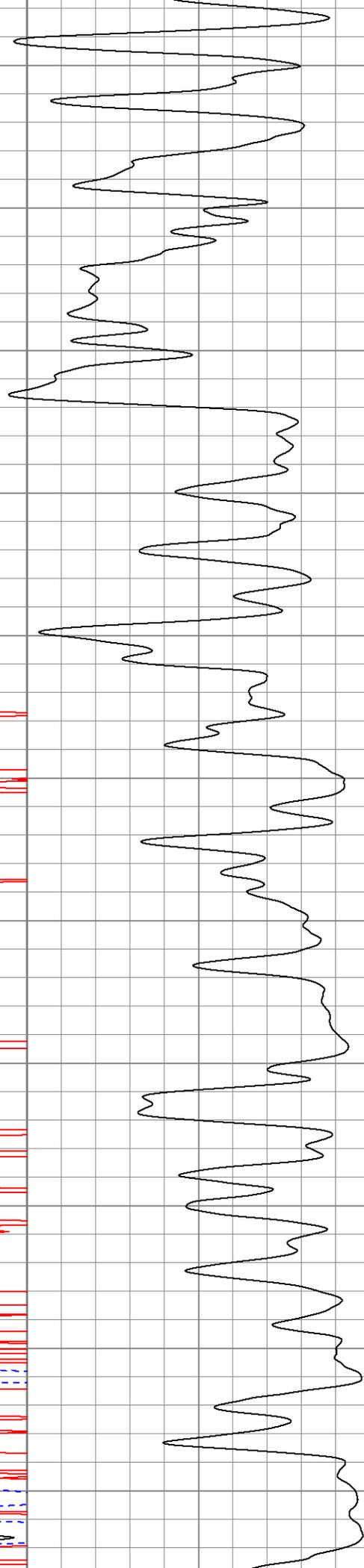
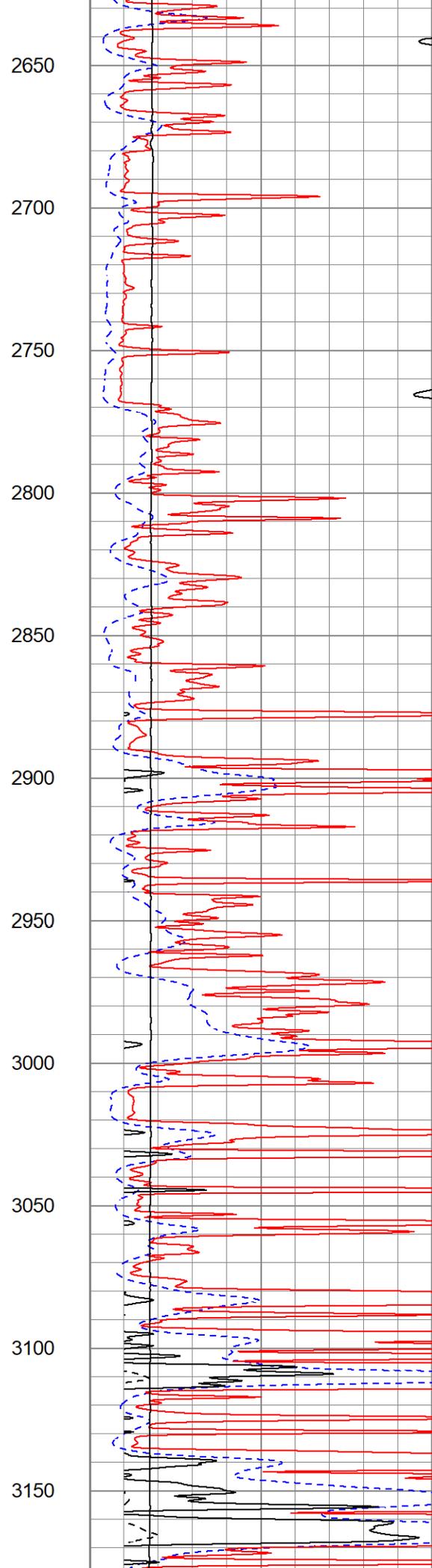
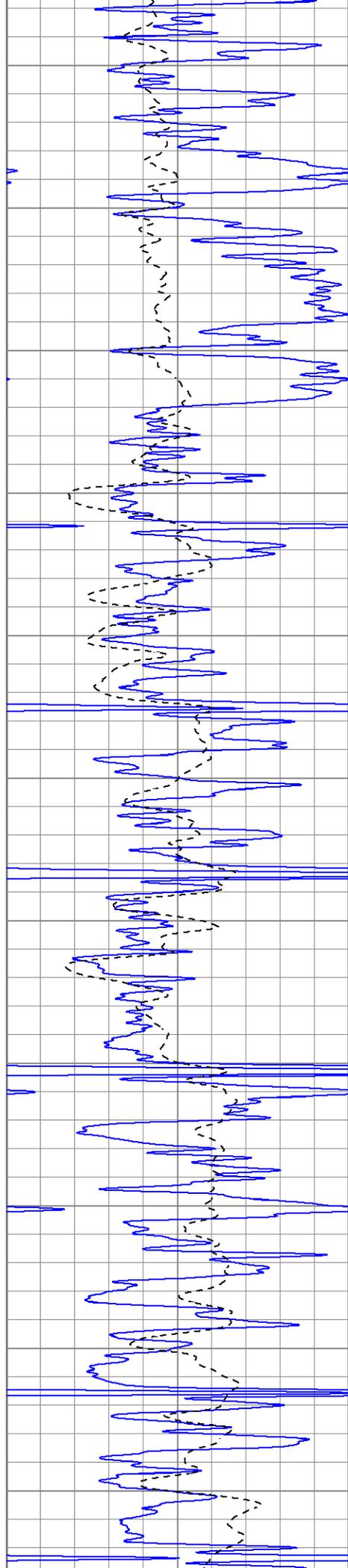


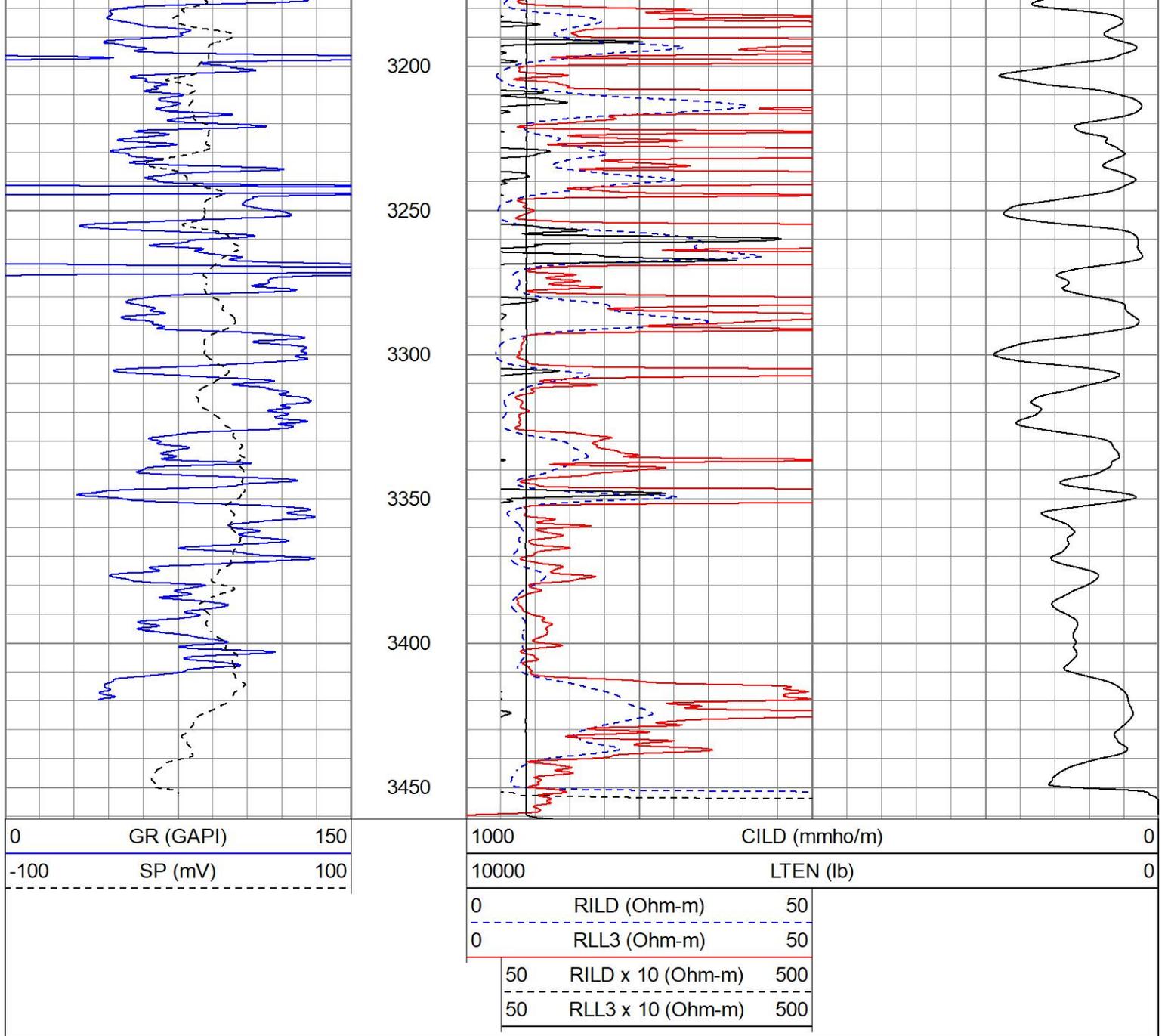




2100
2150
2200
2250
2300
2350
2400
2450
2500
2550
2600



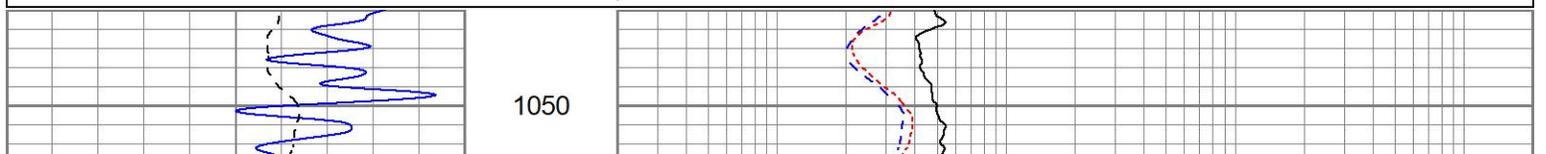


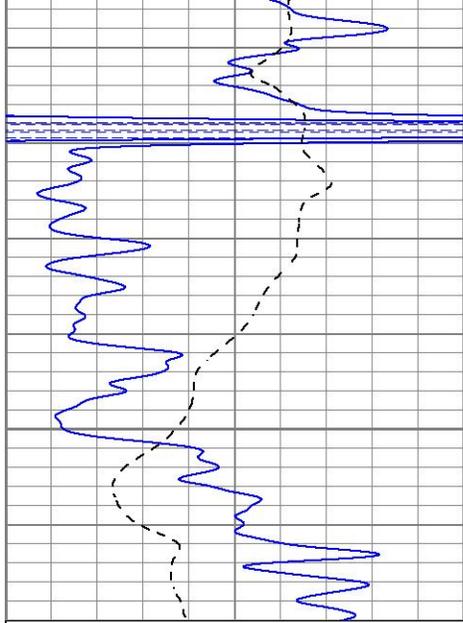


MAIN PASS

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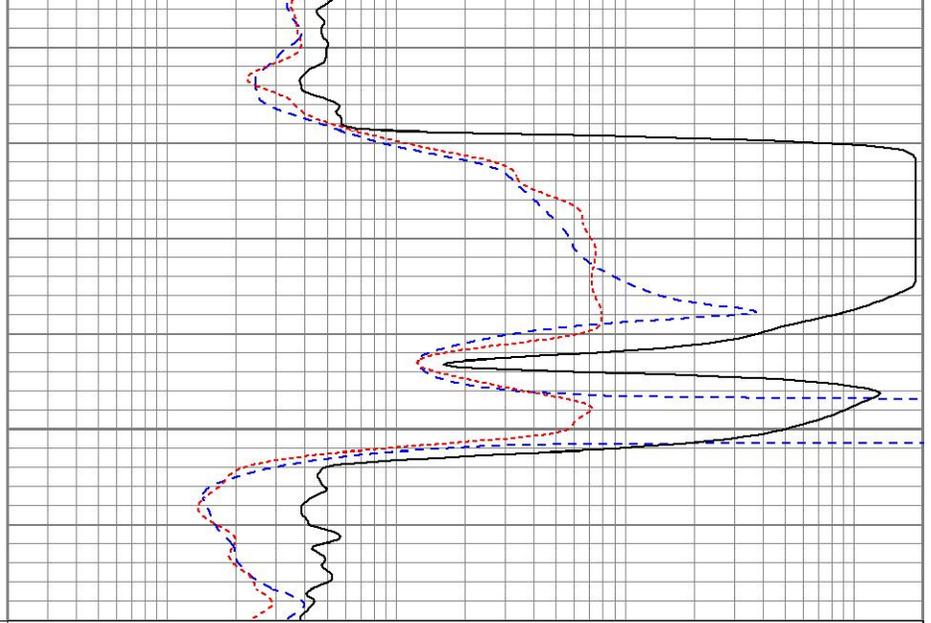
0	GR (GAPI)	150	0.2	RILD (Ohm-m)	2000
-100	SP (mV)	100	0.2	RLL3 (Ohm-m)	2000
			0.2	RILM (Ohm-m)	2000





1100

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



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

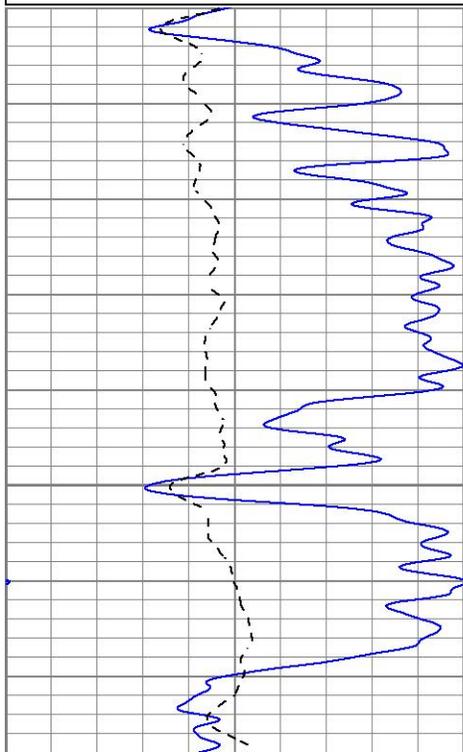


MAIN PASS

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 Dataset Pathname pass3.1
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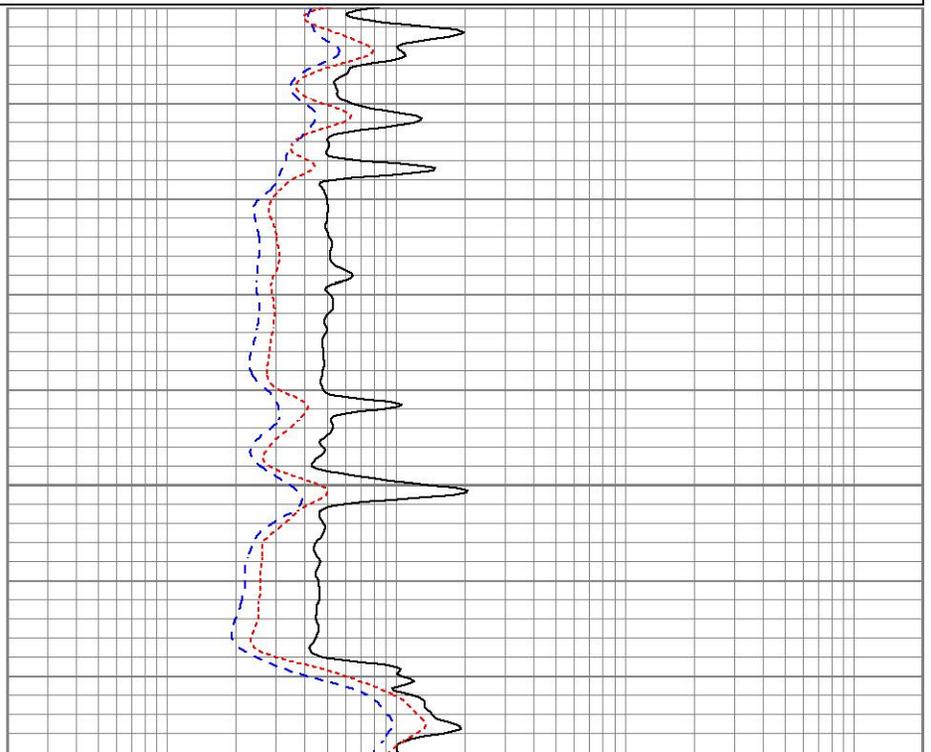
0	GR (GAPI)	150
-100	SP (mV)	100

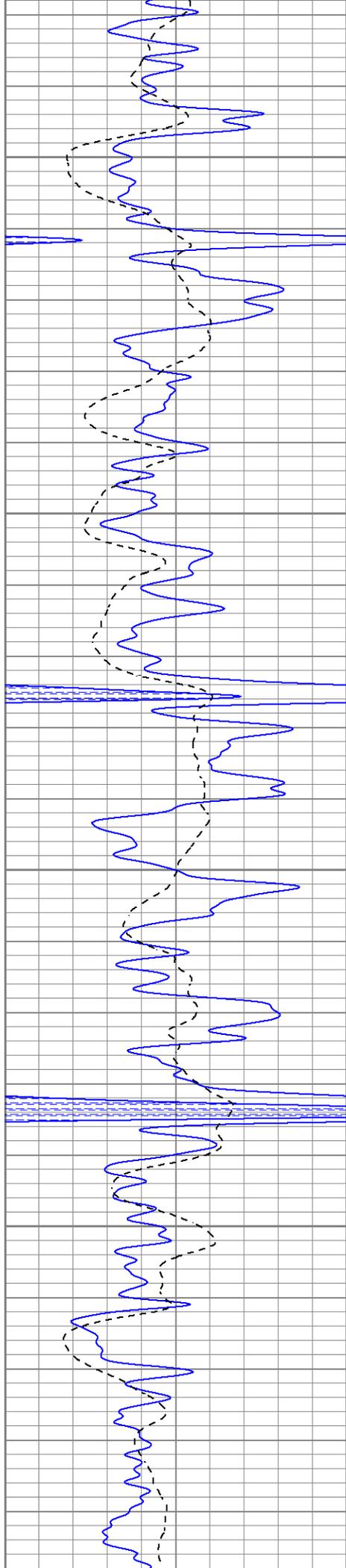
0.2	RILD (Ohm-m)	2000
0.2	RLL3 (Ohm-m)	2000
0.2	RILM (Ohm-m)	2000



2700

2750



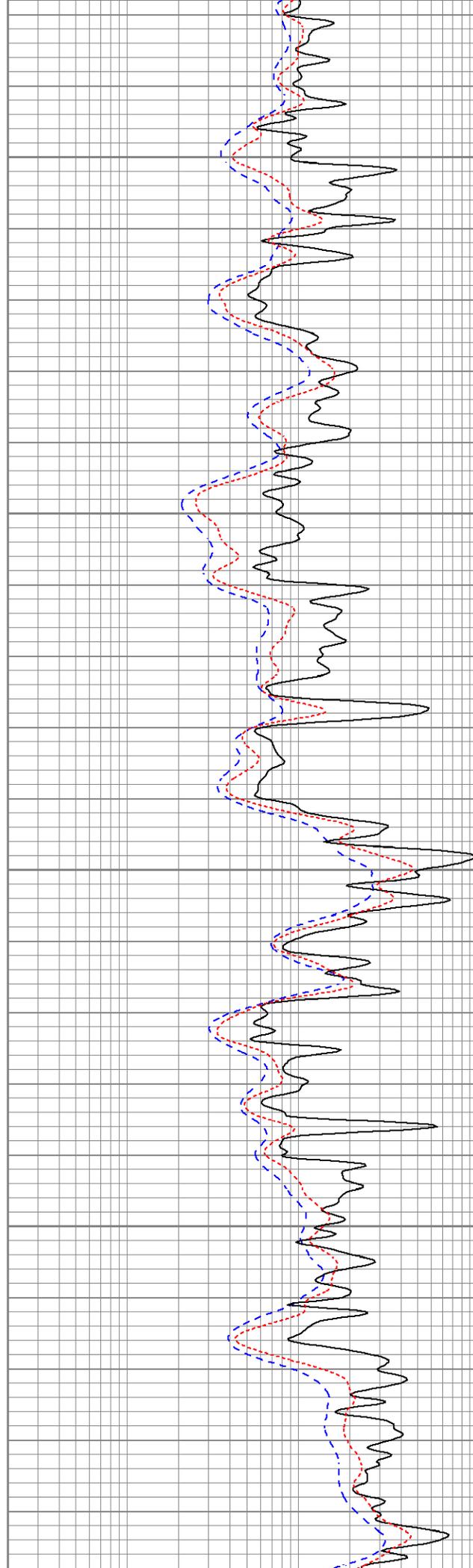


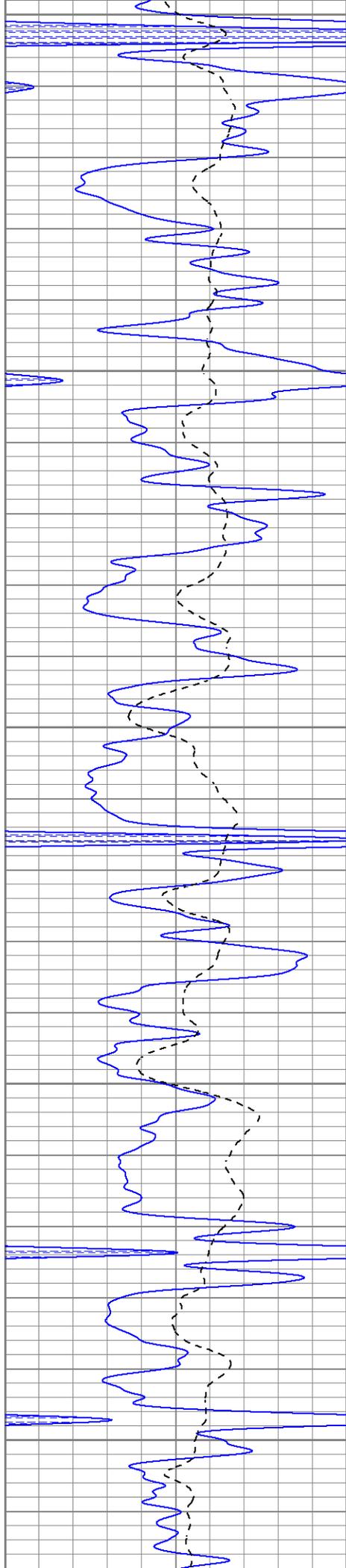
2800

2850

2900

2950





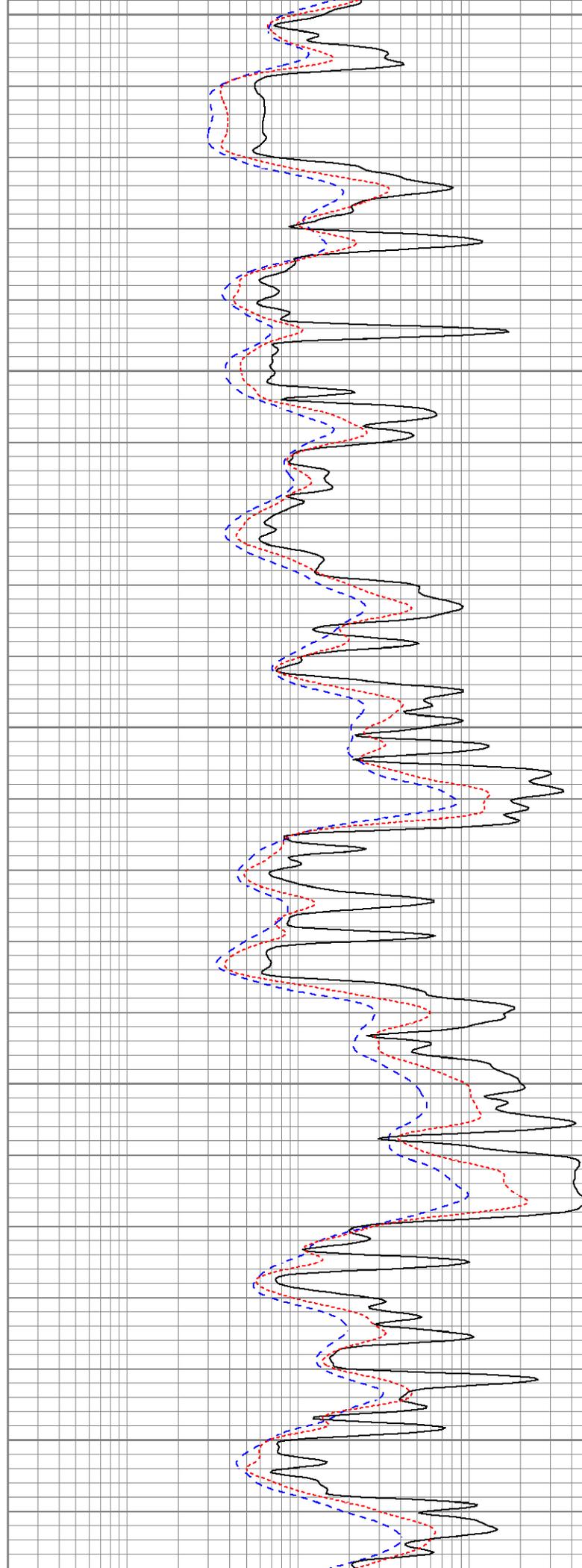
3000

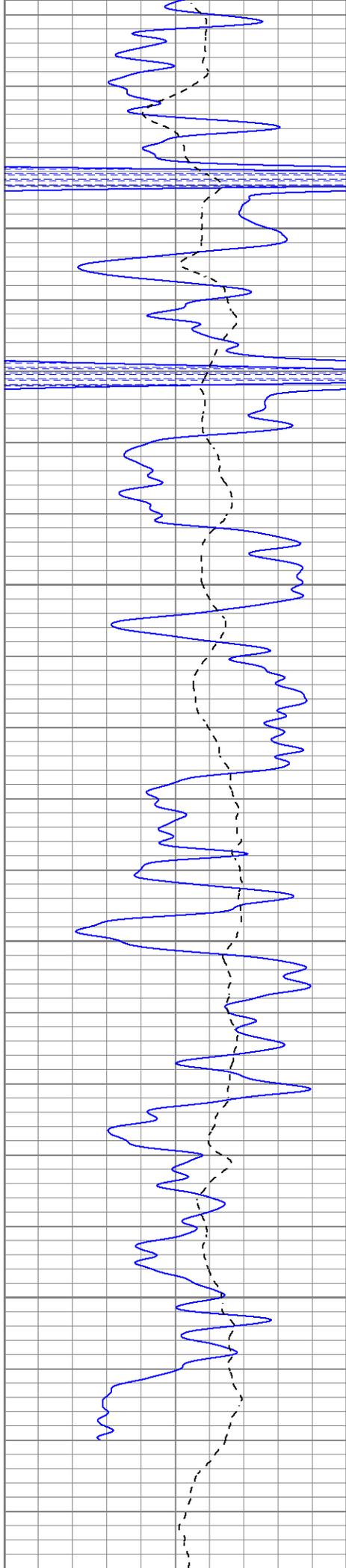
3050

3100

3150

3200



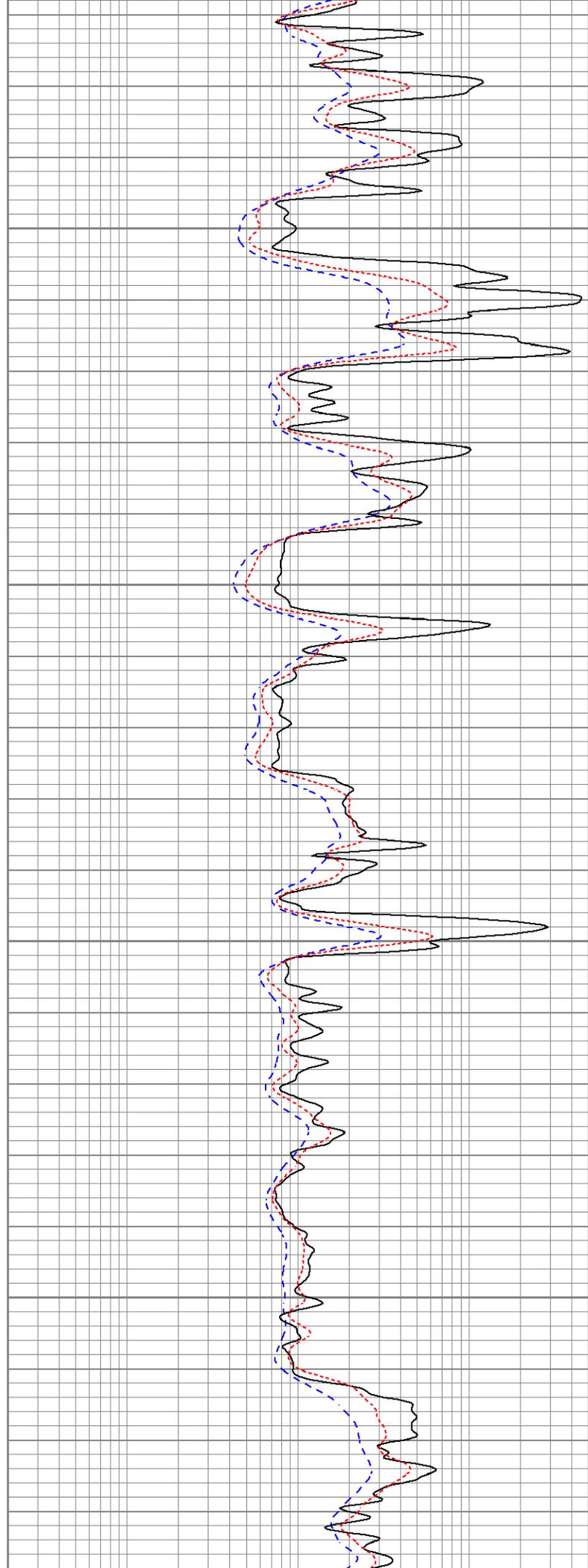


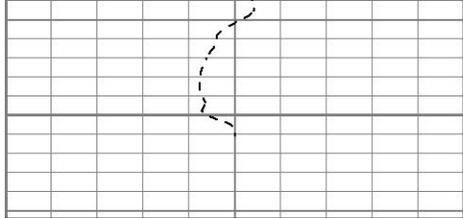
3250

3300

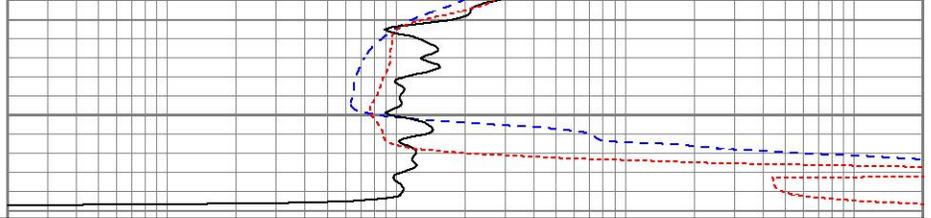
3350

3400





3450



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

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

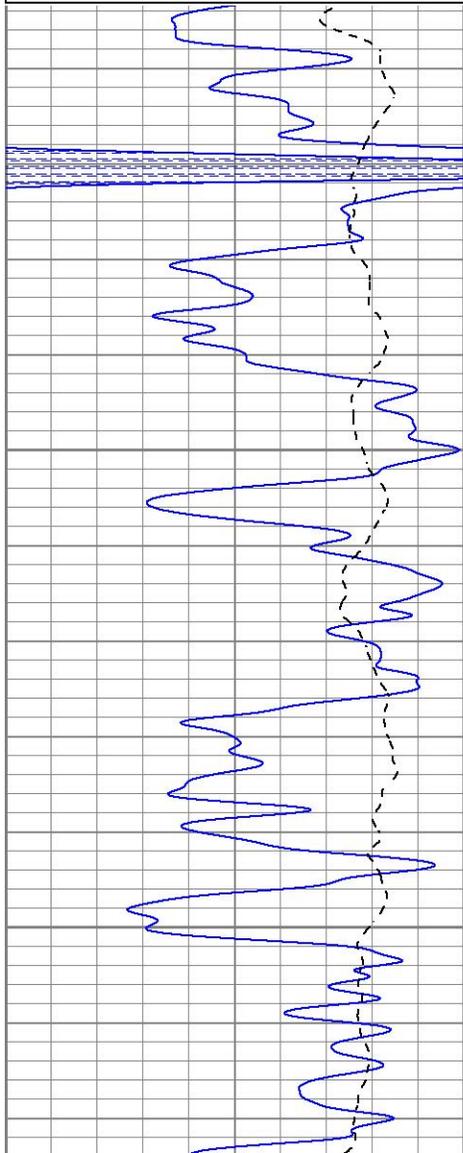


REPEAT SECTION

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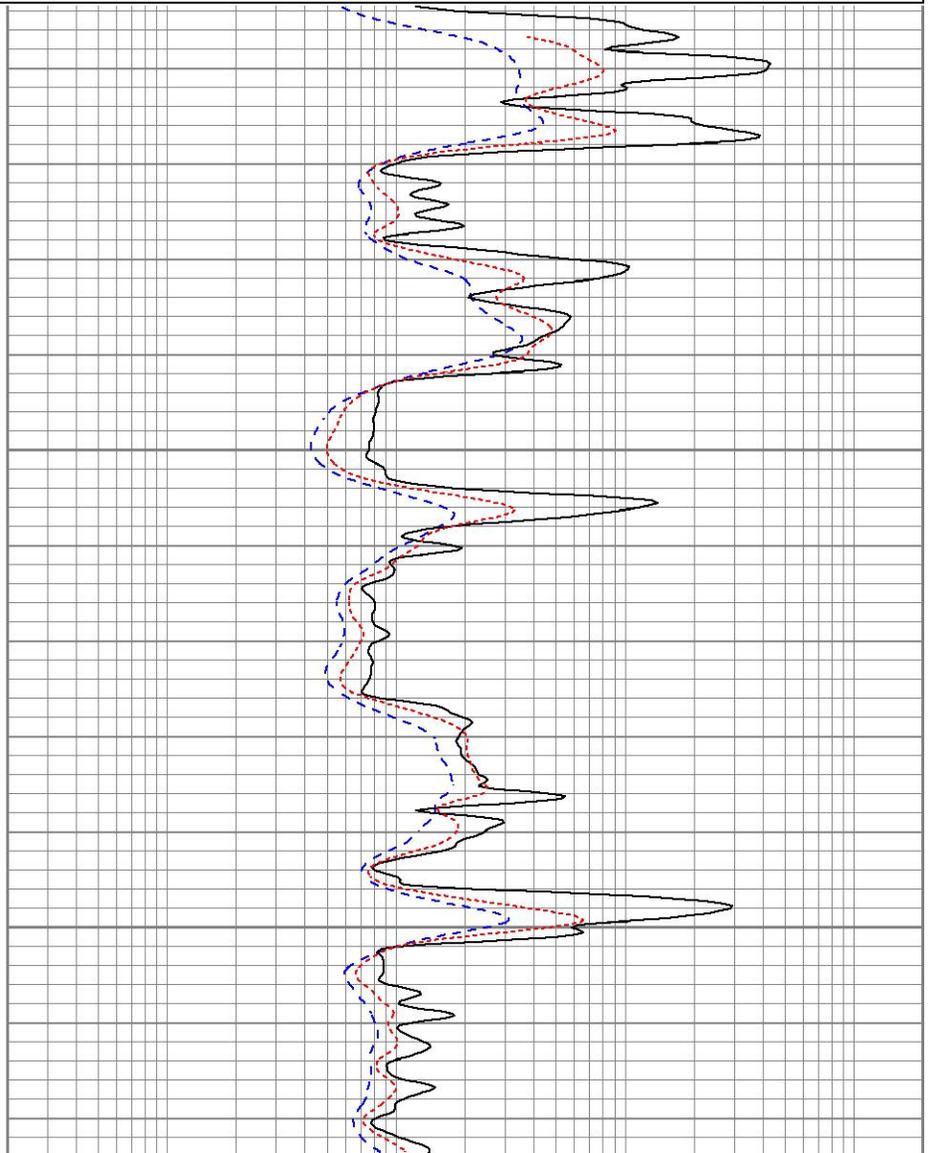
0	GR (GAPI)	150
-100	SP (mV)	100

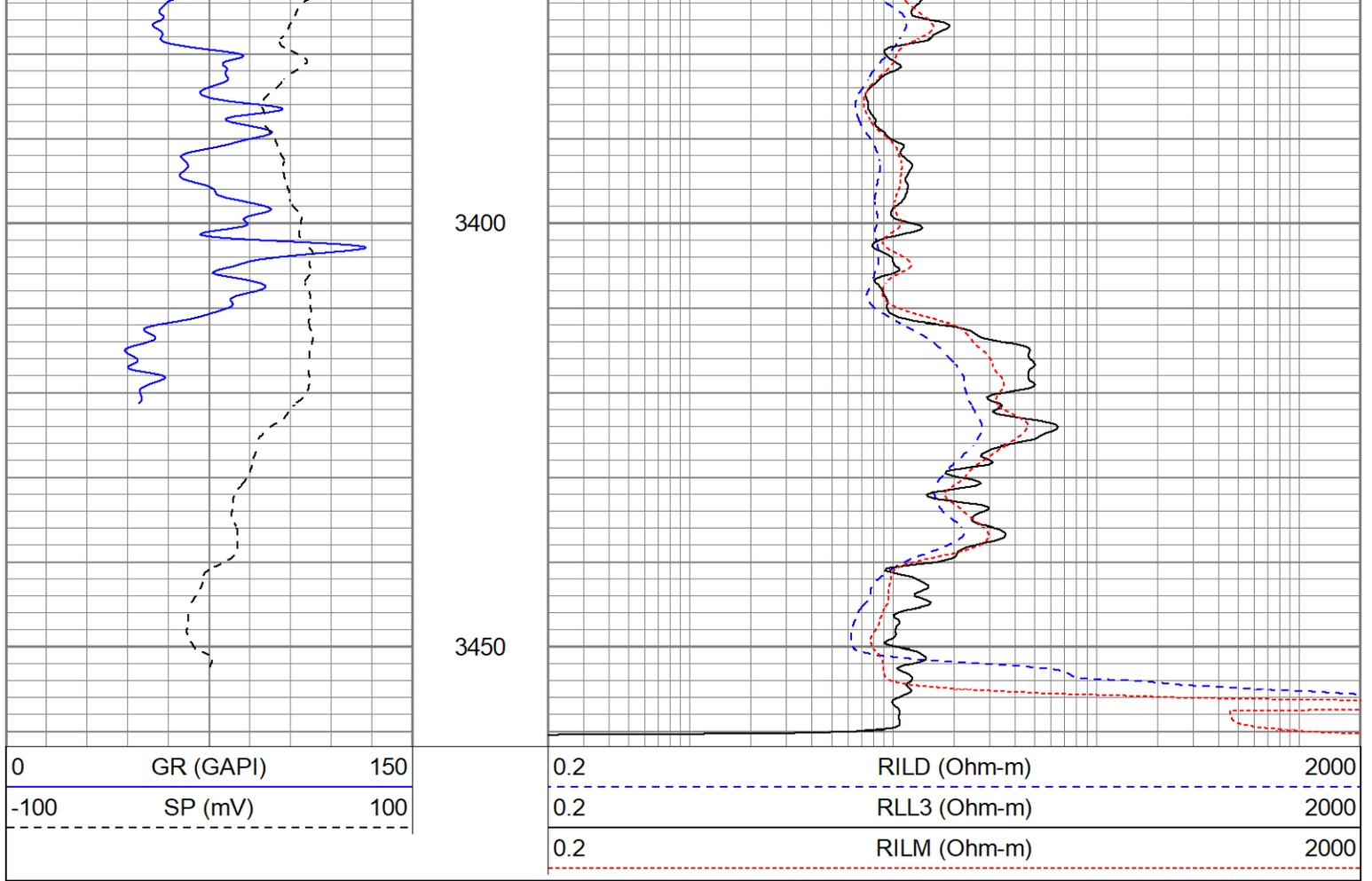
0.2	RILD (Ohm-m)	2000
0.2	RLL3 (Ohm-m)	2000
0.2	RILM (Ohm-m)	2000



3300

3350





Calibration Report

Database File jofzeiglerunit#1oh.db
 Dataset Pathname pass2.1
 Dataset Creation Tue Apr 11 01:50:50 2023

Dual Induction Calibration Report

Serial-Model: 1989-ADM
 Surface Cal Performed: Tue Feb 4 16:04:10 2020
 Downhole Cal Performed: Tue Nov 15 12:05:48 2022
 After Survey Verification Performed: Tue Nov 15 12:05:48 2022

Surface Calibration

Loop:	Readings			References			Results	
	Air	Loop	V	Air	Loop	mmho/m	m	b
Deep	-0.012	0.665	V	0.000	350.000	mmho/m	516.748	6.134
Medium	-0.013	0.752	V	0.000	400.000	mmho/m	522.482	6.987
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	-0.011	0.668	V	0.000	350.000	mmho/m	515.730	5.704
Medium	-0.015	0.752	V	0.000	550.000	mmho/m	716.653	10.787

Downhole Calibration

Internal:	Readings			References			Results	
	Zero	Cal	mmho/m	Zero	Cal	mmho/m	m	b
Deep	4.416	348.155	mmho/m	0.419	351.110	mmho/m	1.020	-4.085
Medium	9.704	400.497	mmho/m	-0.877	400.105	mmho/m	1.026	-10.834

After Survey Verification

Internal:	Readings			Targets			Results	
	Zero	Cal		Zero	Cal		m'	b'
Deep	0.000	0.000	mmho/m	4.416	348.155	mmho/m	1.020	-4.085
Medium	0.000	0.000	mmho/m	9.704	400.497	mmho/m	1.026	-10.834
Shallow	0.000	0.000	Ohm-m	500.000	2.000	Ohm-m	1.000	0.000

Admyr Lithodensity Calibration Report

Serial-Model: 1C-C
 Source: Blue2
 Master Calibration Performed: Tue Aug 30 10:20:37 2022

Master Calibration

	Density		Far Detector	Near Detector	
Magnesium	1.670	g/cc	6362.49	3546.71	cps
Aluminium	2.640	g/cc	1733.54	2362.69	cps
Aluminium+Sleeve	2.617	g/cc	1657.01	2197.69	cps
Spine Angle = 72.65			Density/Spine Ratio = 0.712		
	PE		NLITH	NHARD	
Magnesium	2.000	barn	2520.00	1620.00	cps
Aluminium	3.000	barn	1926.00	1699.00	cps
Aluminium+Sleeve	5.000	barn	915.00	1230.00	cps
M = 0.370			B = -0.079	R = 0.999	
	Size		Reading		
Small Ring	8.00	in	8.61	V	
Large Ring	14.30	in	12.40	V	

Neutron Calibration Report

Serial Number: AD5139
 Tool Model: ADMY5139
 Performed: (Not Performed)

Calibrator Value: 1 NAPI
 Calibrator Reading: 1 cps
 Sensitivity: 1 NAPI/cps

Temperature Calibration Report

Serial Number: WithMC
 Tool Model: WMC
 Performed: Fri Apr 19 12:15:04 2019

	Reference	Reading
Low Reference:	0.00 degF	0.00 degF
High Reference:	1.00 degF	1.00 degF
Gain:	1.00	
Offset:	0.00	
Delta Spacing	1	

Inclinometer Calibration Report

Performed:	Wed May 5 19:20:48 2021				
	Low Read.	High Read.	Low Ref.	High Ref.	
X Accelerometer	205.00	1843.00	-1.00	1.00	gee
Y Accelerometer	205.00	1843.00	-1.00	1.00	gee
Z Accelerometer					gee

Gamma Ray Calibration Report

Serial Number:	WithMC	
Tool Model:	WMC	
Performed:	Wed Jun 15 11:53:49 2022	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	1.1000	GAPI/cps