



**DUAL
INDUCTION
LOG**

Company PATTERSON ENERGY, LLC.
Well Roesler C #10
Field BLOOMER
County RICE
State Kansas

Company PATTERSON ENERGY, LLC.
Well Roesler C #10
Field BLOOMER
County RICE State Kansas

Location: 2270' FSL & 1860' FWL
API #: 15 159 22881
SEC 5 TWP 18S RGE 10W
Permanent Datum Ground Level Elevation 1777'
Log Measured From KB 8' AGL
Drilling Measured From KB
Other Services
CDNL
ML
Elevation
K.B. 1785'
D.F. 1784'
G.L. 1777'

Date	6/19/22
Run Number	One
Depth Driller	3270'
Depth Logger	3272'
Bottom Logged Interval	3270'
Top Log Interval	350'
Casing Driller	8 5/8" @ 393'
Casing Logger	393'
Bit Size	7 7/8"
Type Fluid in Hole	Chemical
Density / Viscosity	9.1/50
pH / Fluid Loss	9.5/8.8
Source of Sample	Calculated
Rm @ Meas. Temp	.8@70degf
Rmf @ Meas. Temp	.6@70degf
Rmc @ Meas. Temp	.96@70degf
Source of Rmf / Rmc	Calculated
Rm @ BHT	.52@106degf
Time Circulation Stopped	8:30 p.m
Time Logger on Bottom	11:00 p.m
Maximum Recorded Temperature	106degf
Equipment Number	T-127
Location	Hays, KS
Recorded By	C.Patterson
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

Claffin,KS East4 mi to 2 Rd. South 1/2 mi , East Into.
Thanks for using Gemini Wireline LLC
785-625-1182



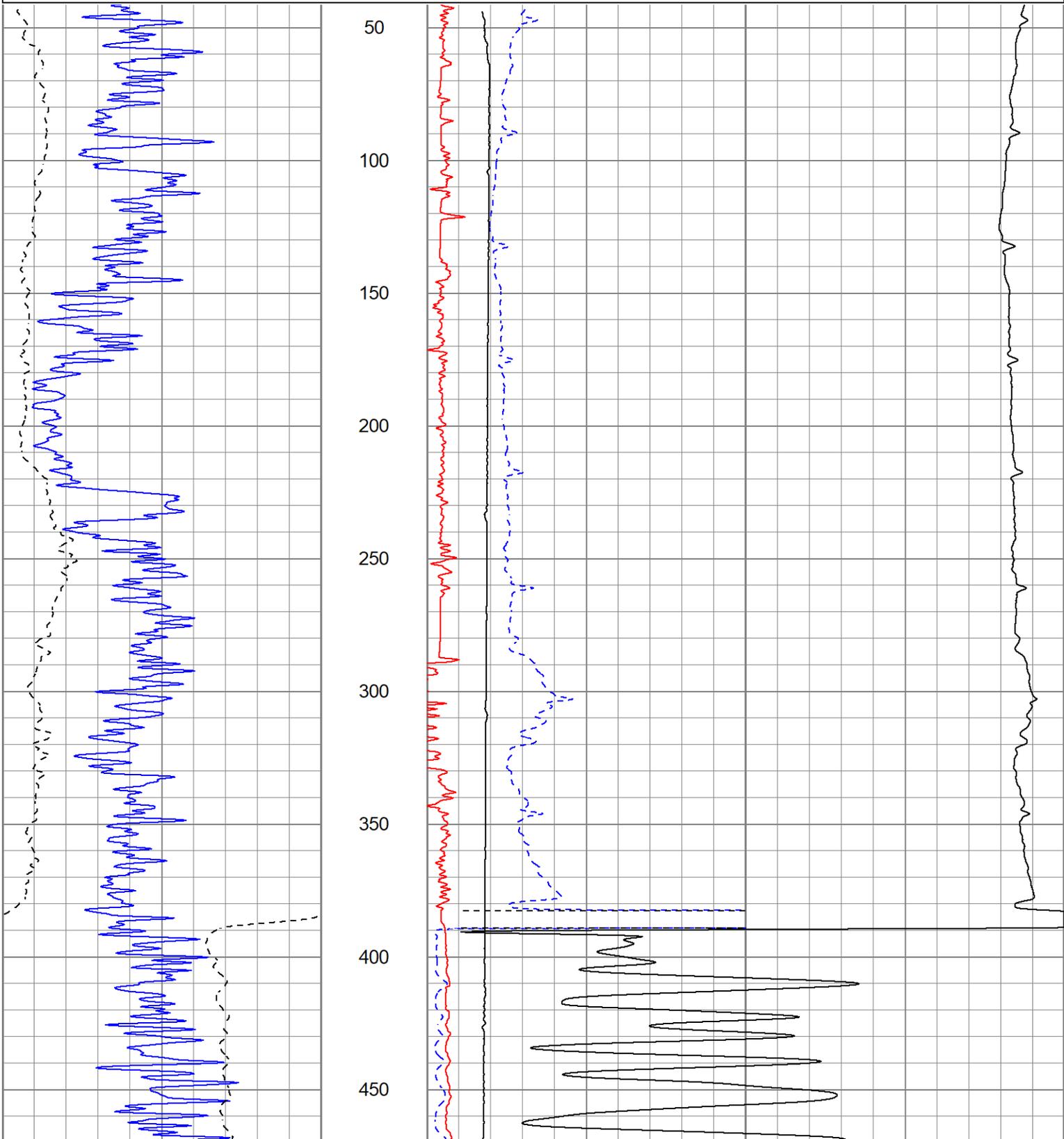
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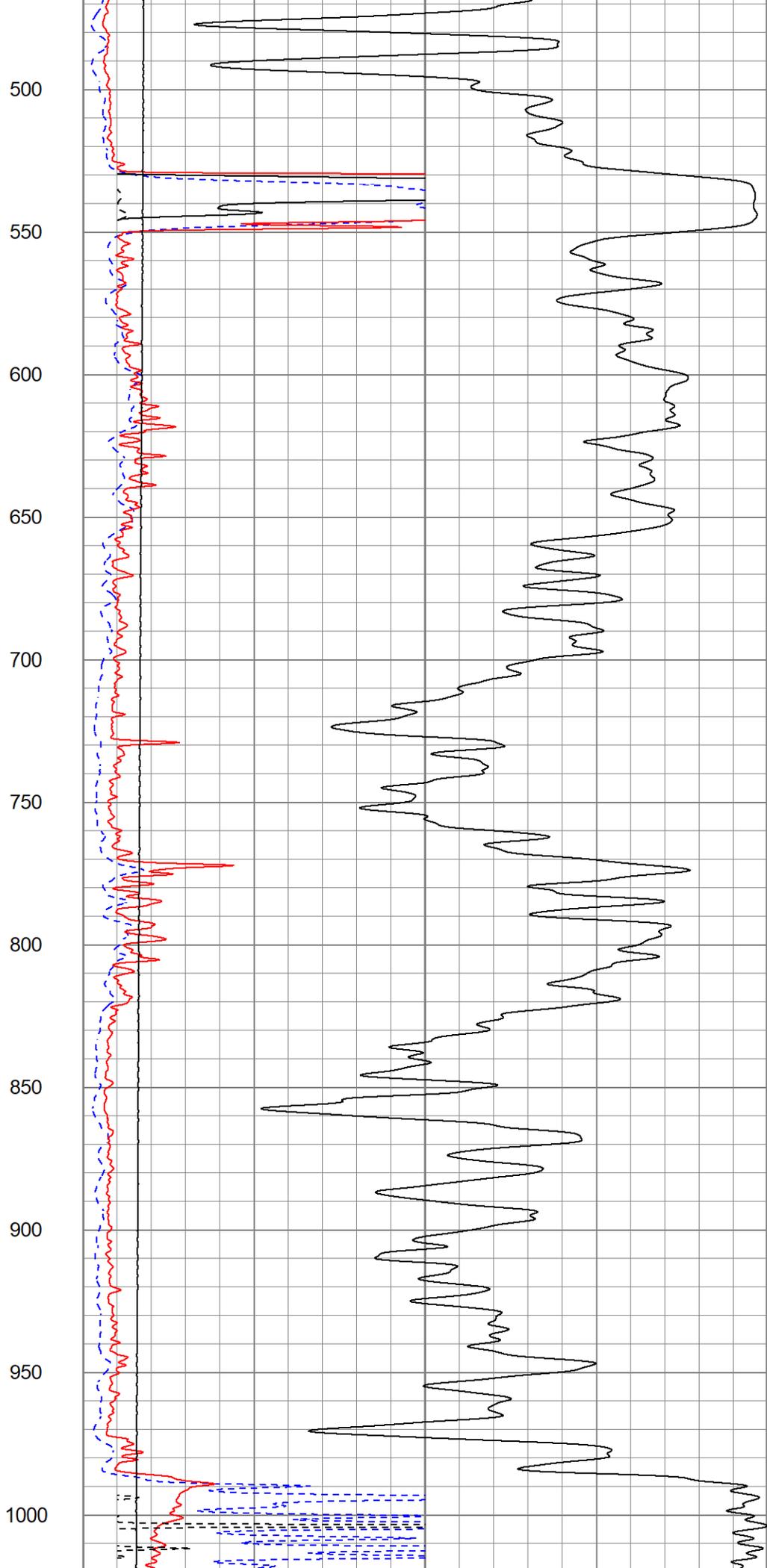
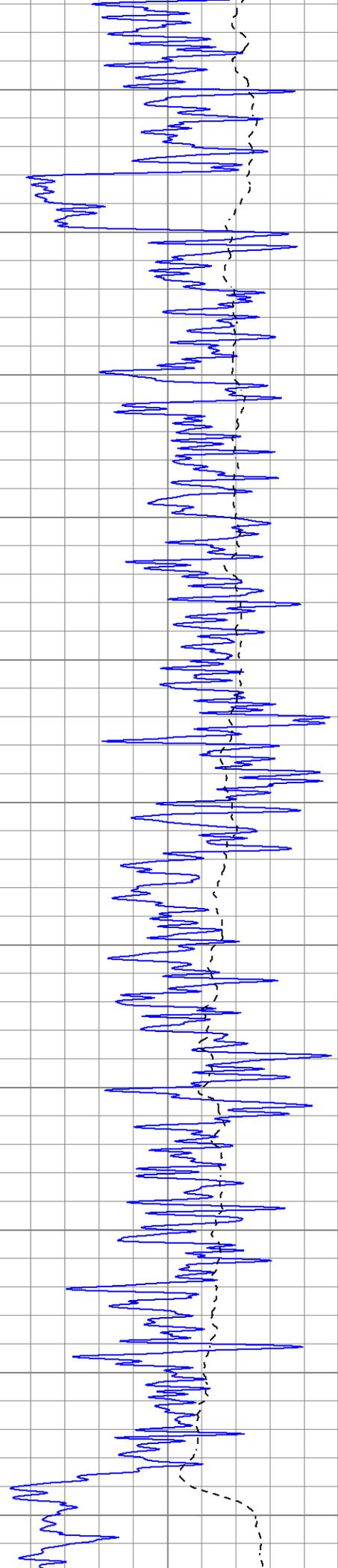
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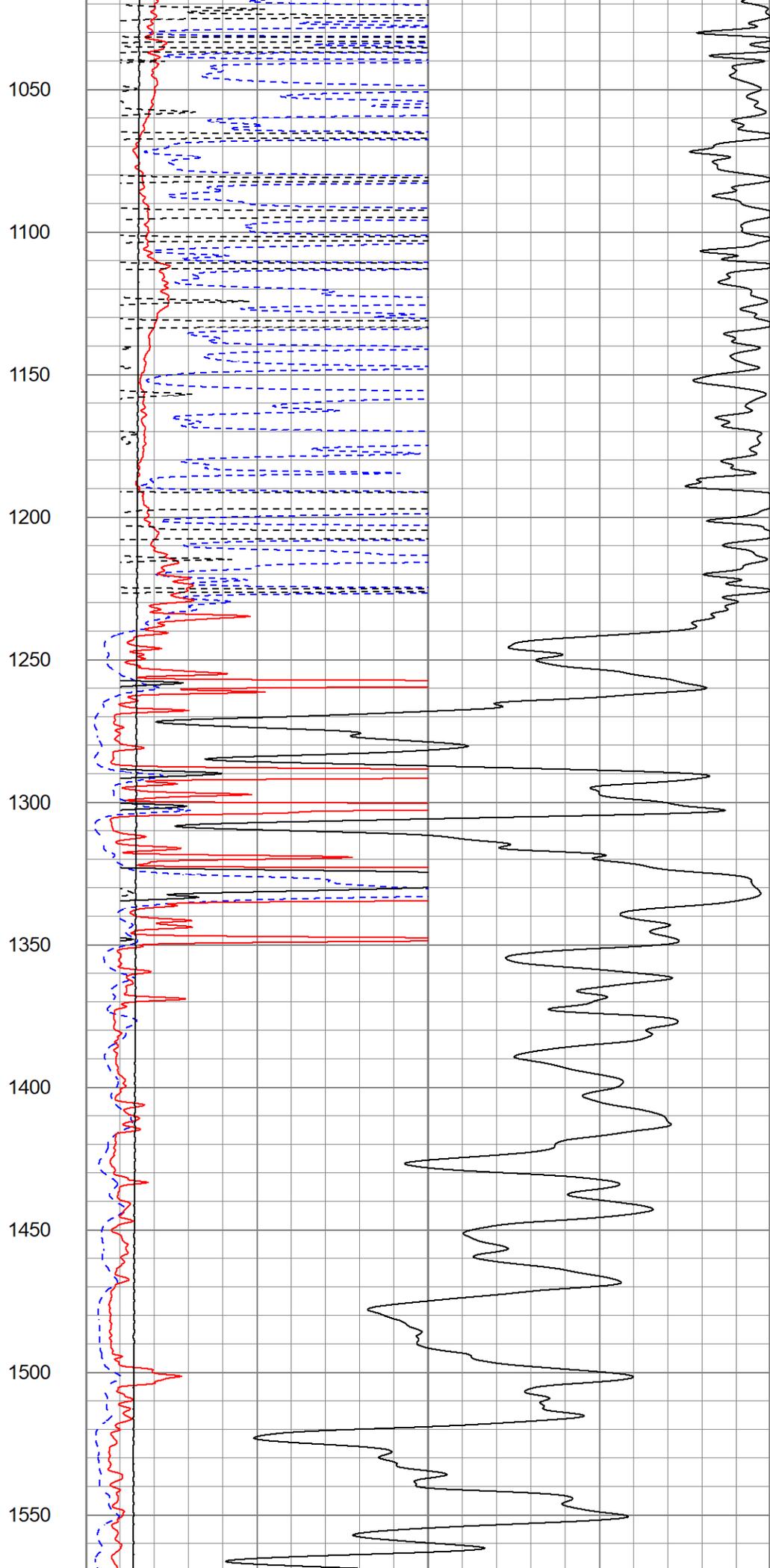
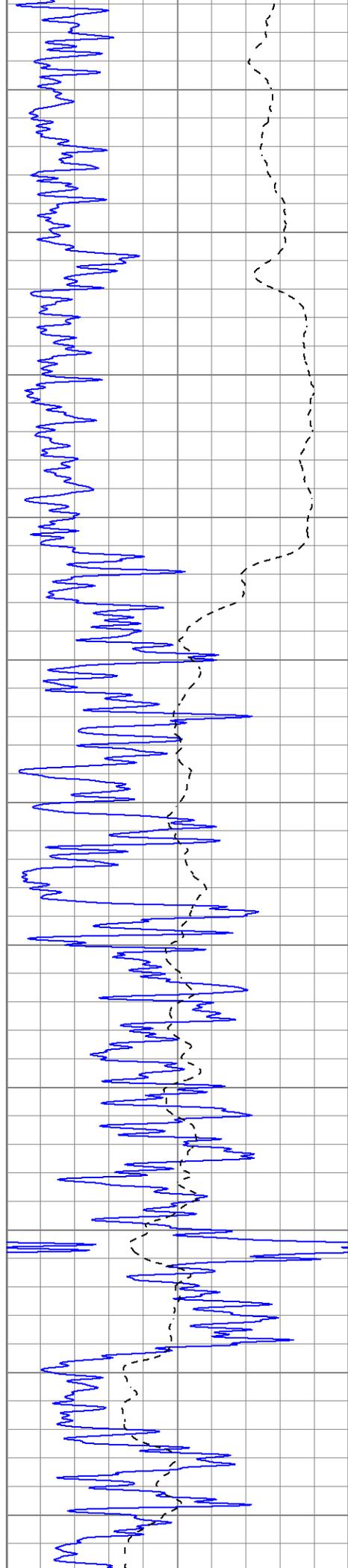
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-100	SP (mV)	100

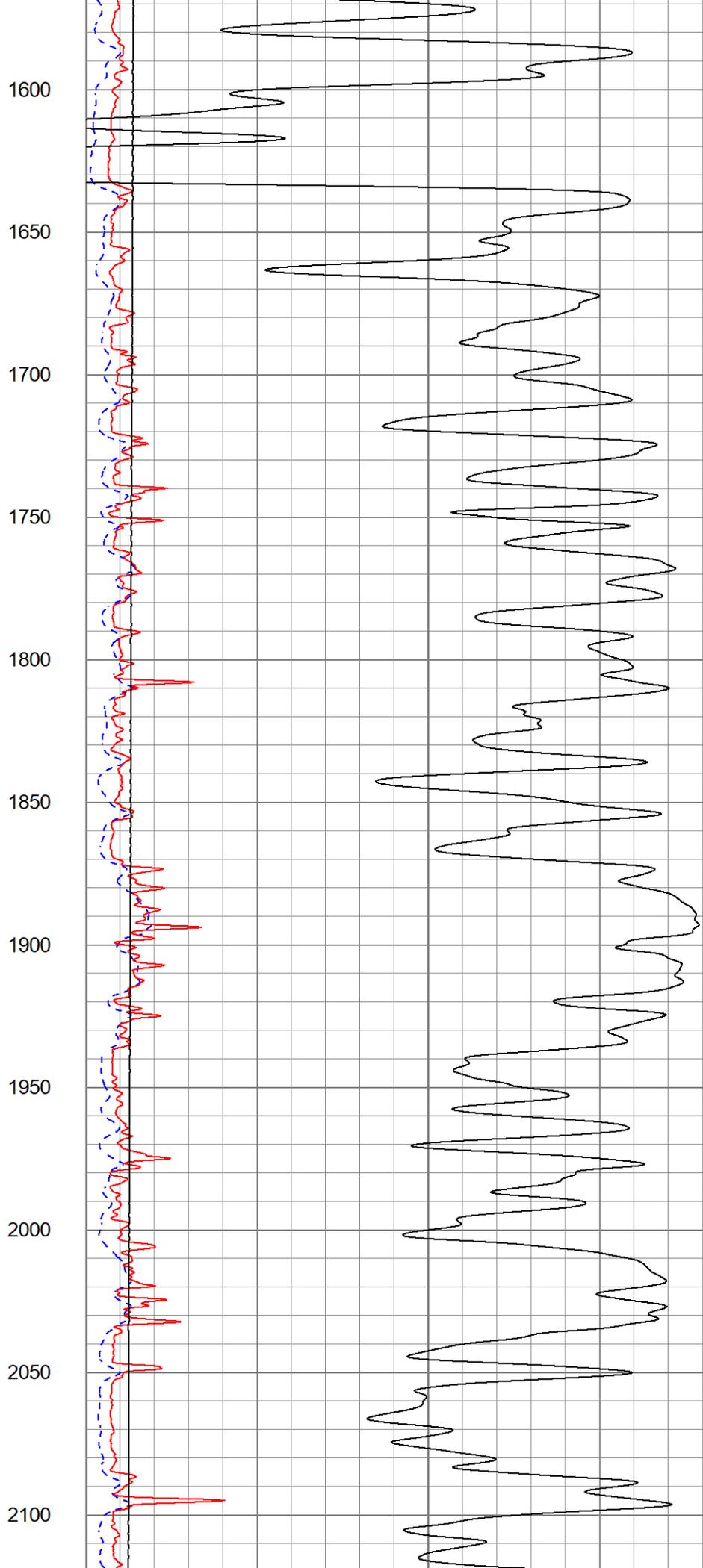
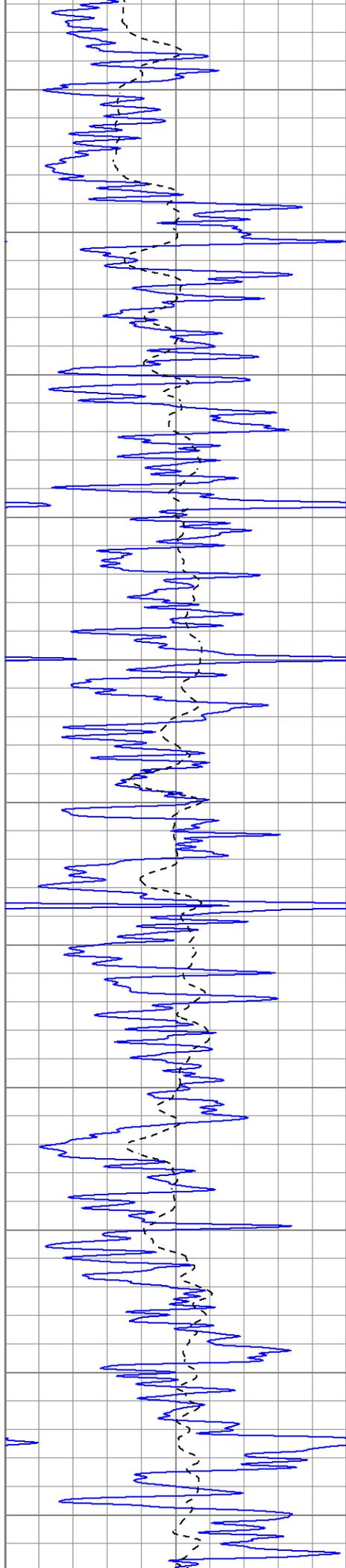
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10000	LTEN (lb)	0

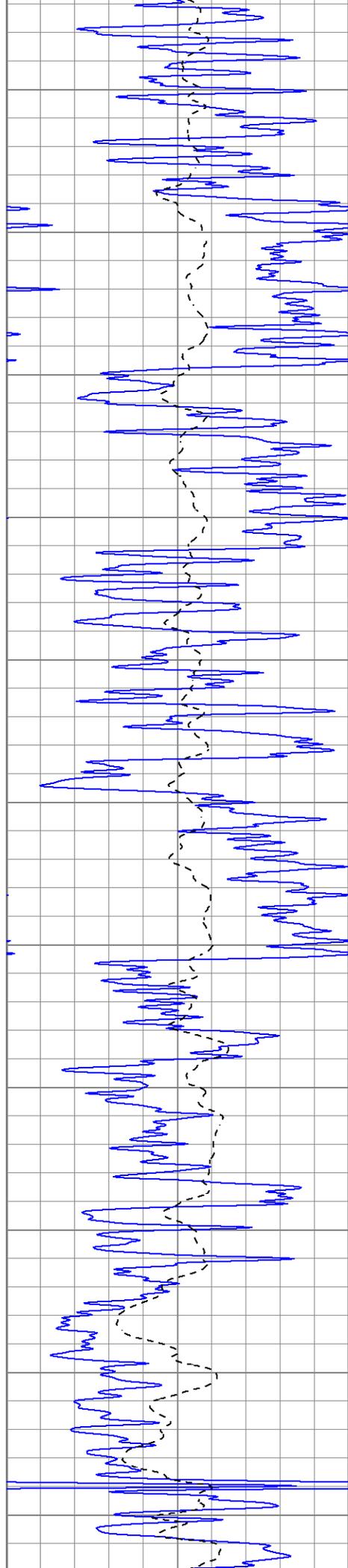
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0	RLL3 (Ohm-m)	50
50	RILD x 10 (Ohm-m)	500
50	RLL3 x 10 (Ohm-m)	500



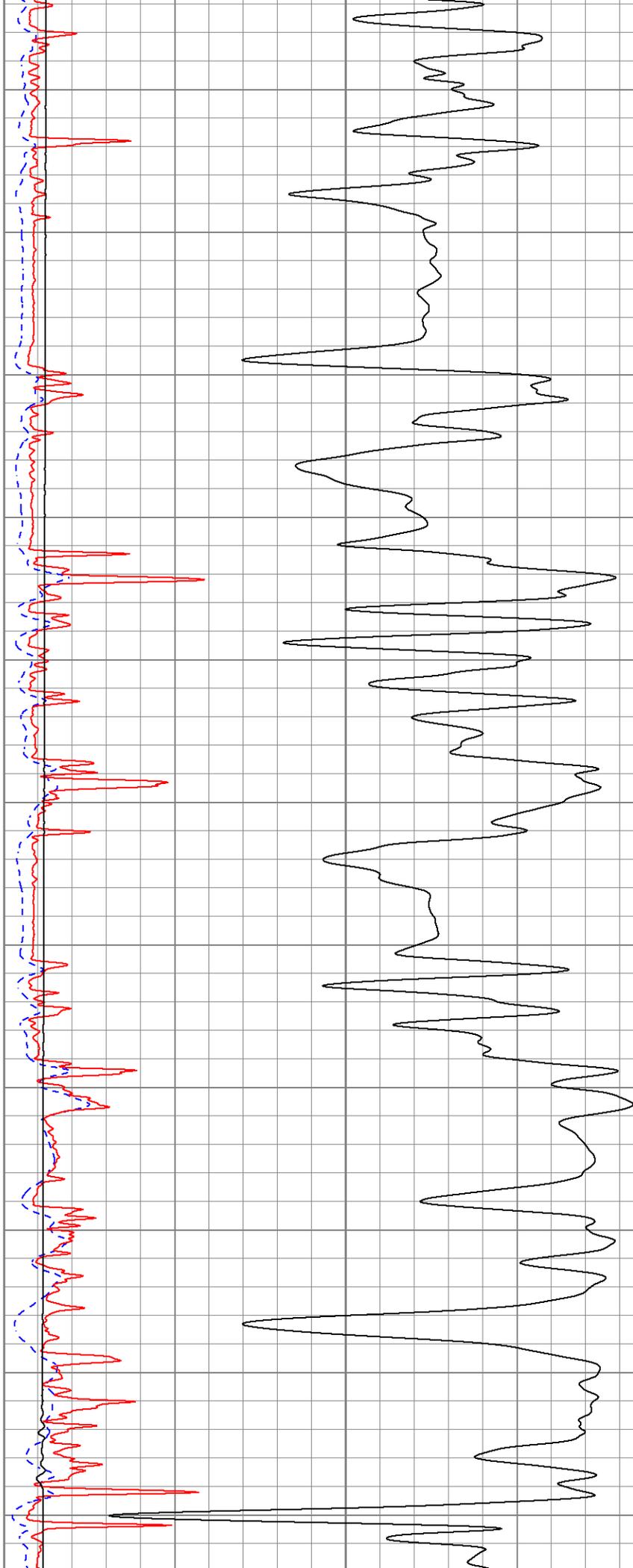


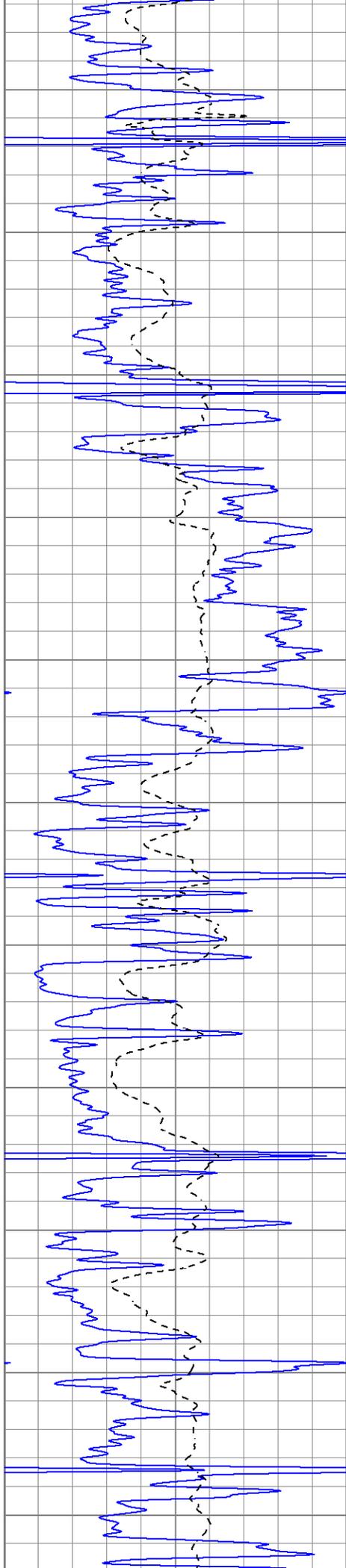






2150
2200
2250
2300
2350
2400
2450
2500
2550
2600
2650





2700

2750

2800

2850

2900

2950

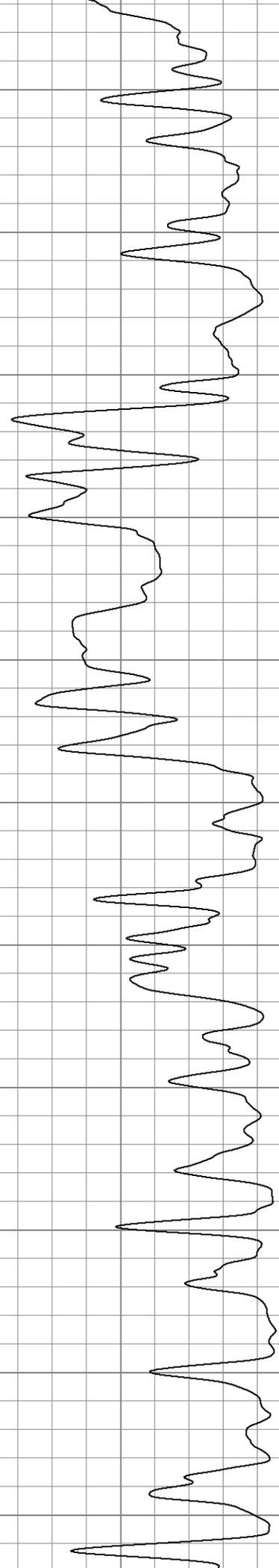
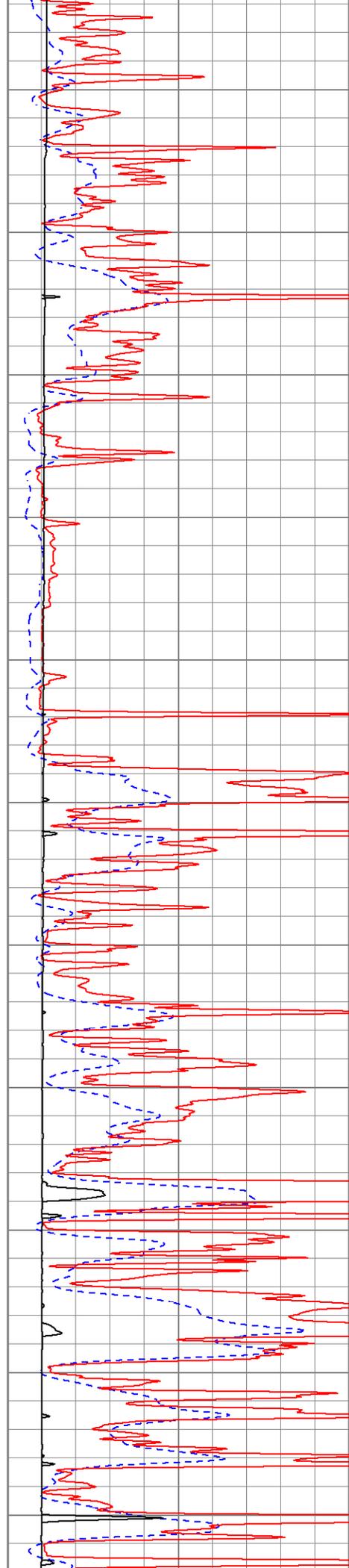
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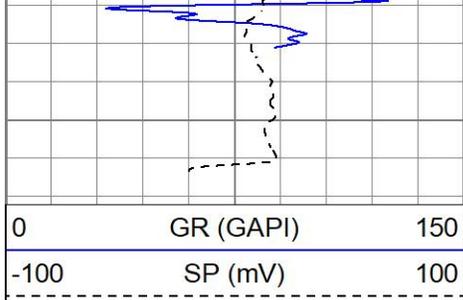
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3100

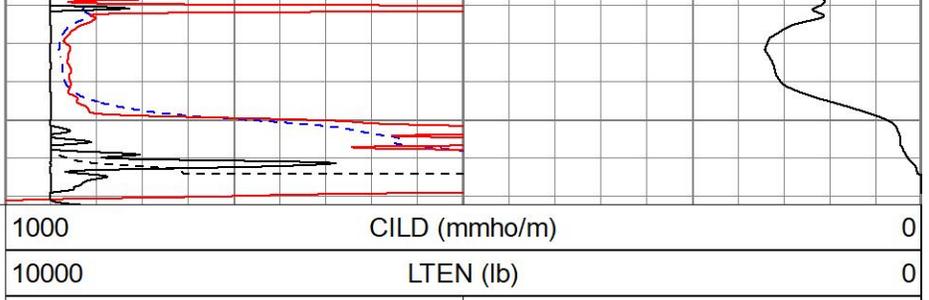
3150

3200





3250



0	GR (GAPI)	150
-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

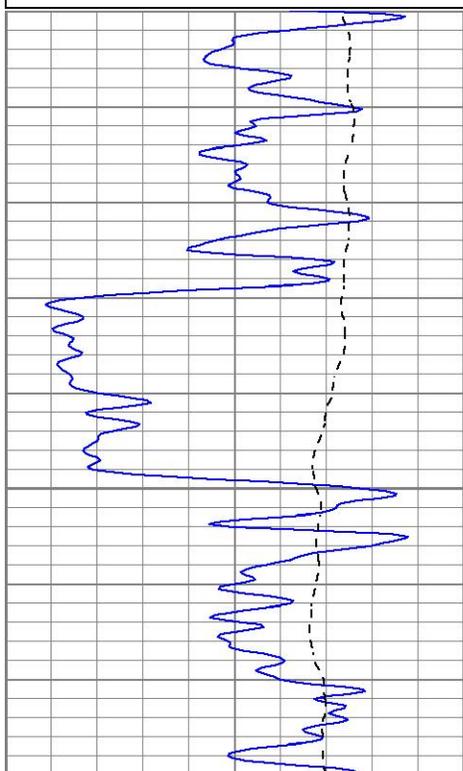


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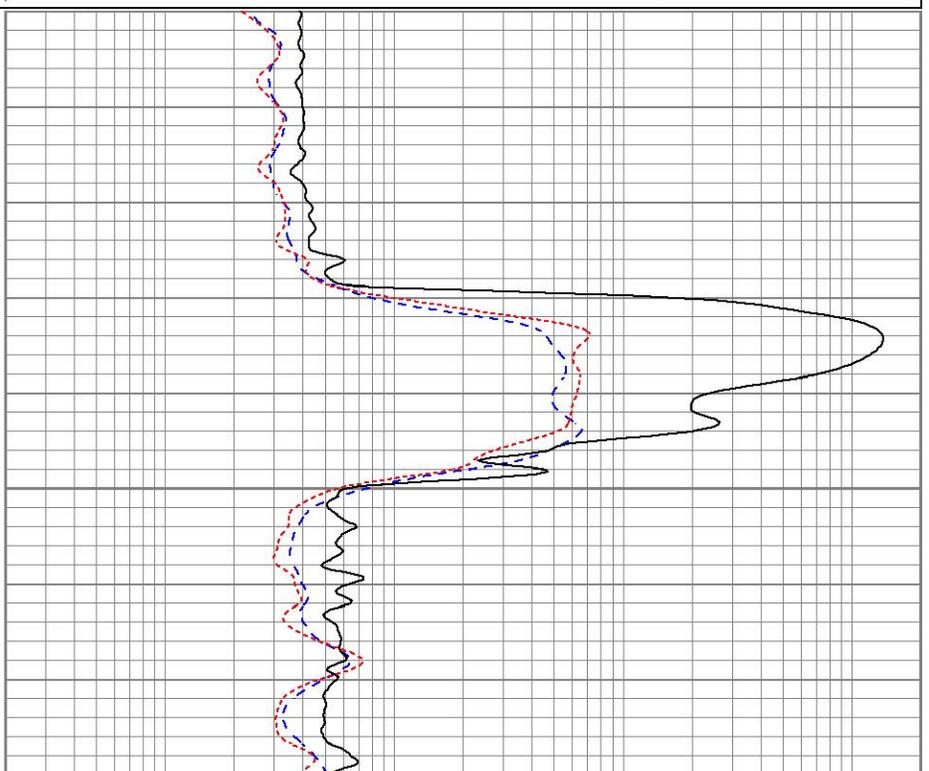
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 Dataset Creation Sun Jun 19 00:54:39 2022
 Charted by Depth in Feet scaled 1:240

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



300



550

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



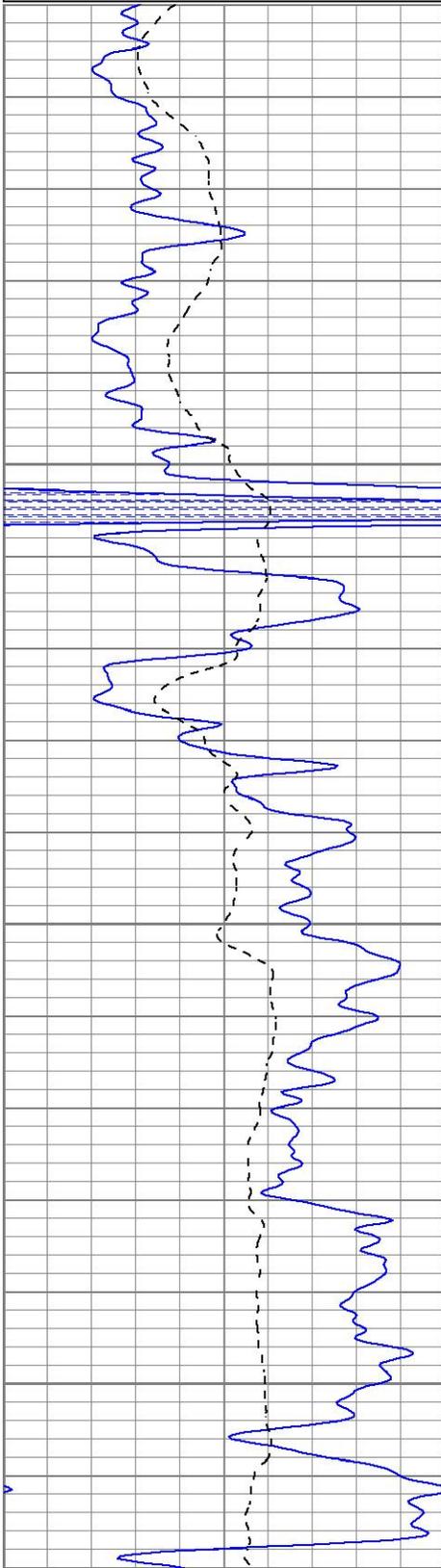


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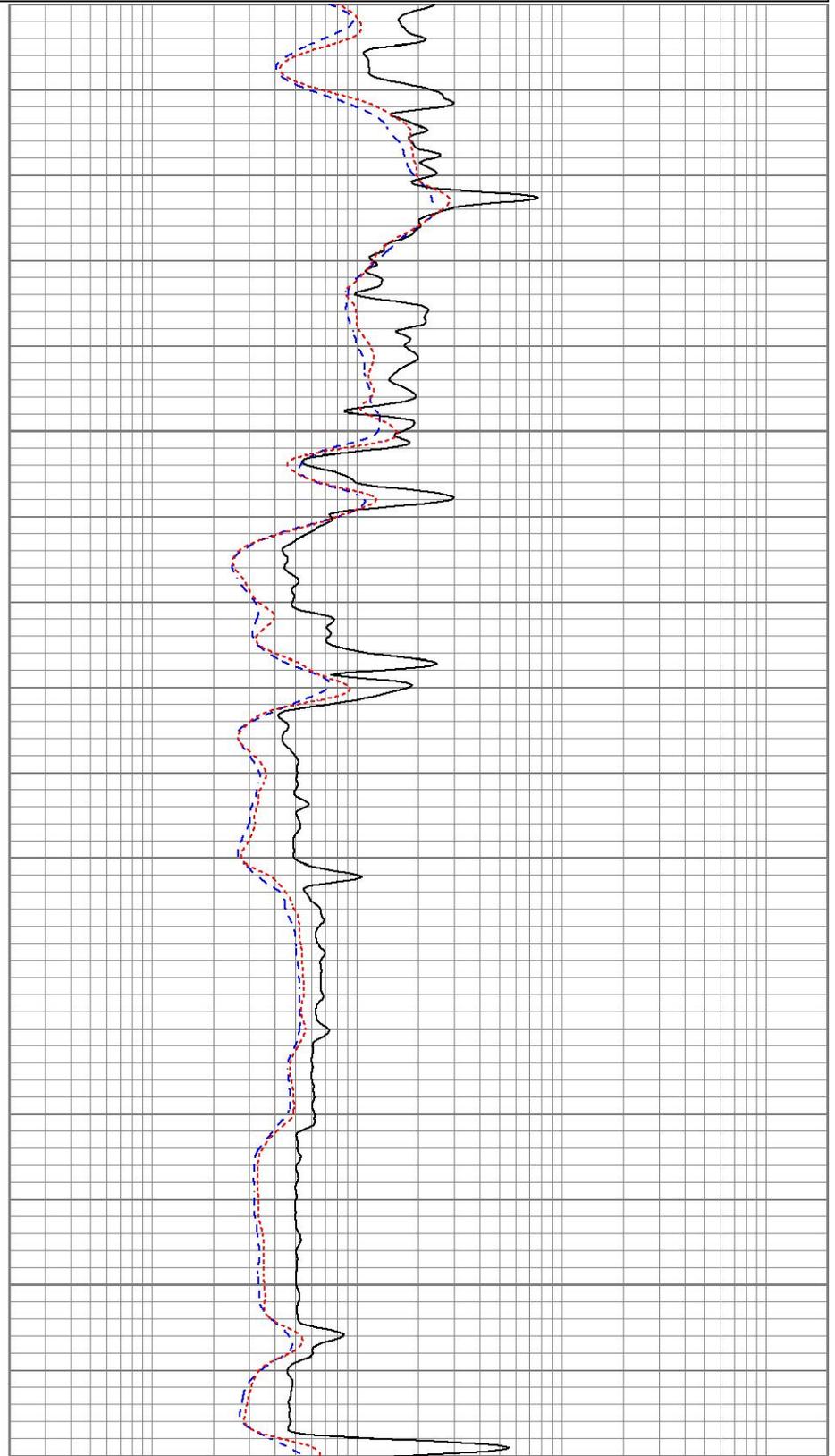
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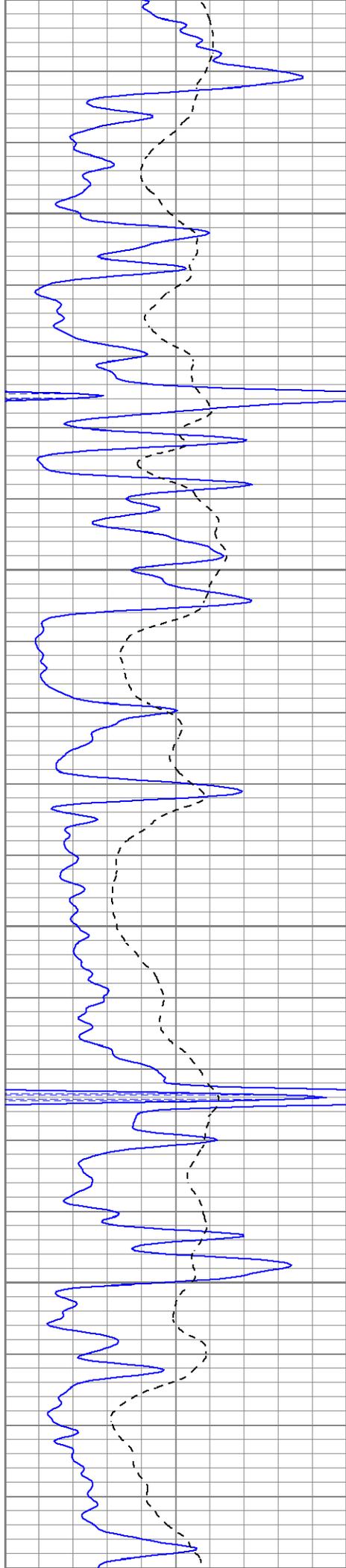
0	GR (GAPI)	150
-100	SP (mV)	100

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



2750
2800
2850
2900



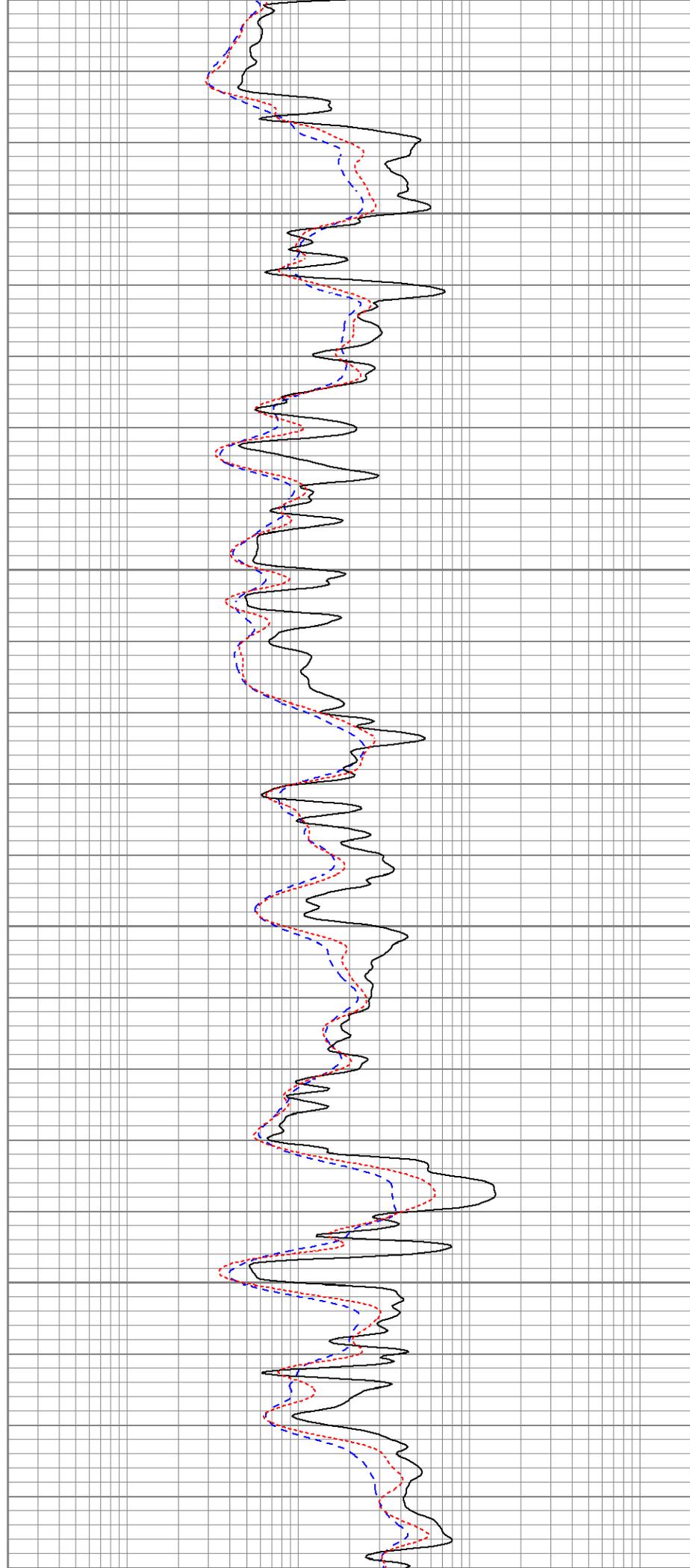


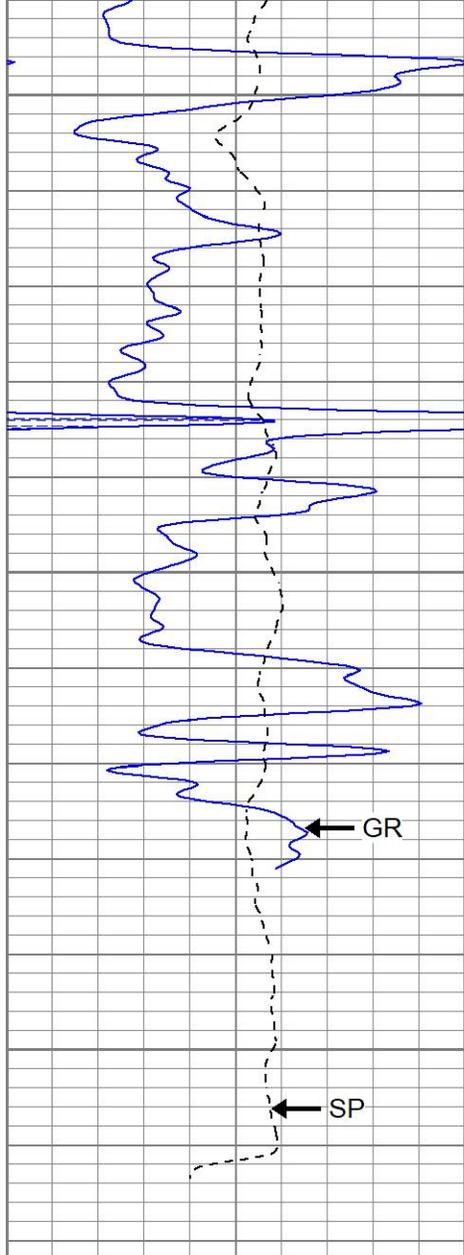
2950

3000

3050

3100

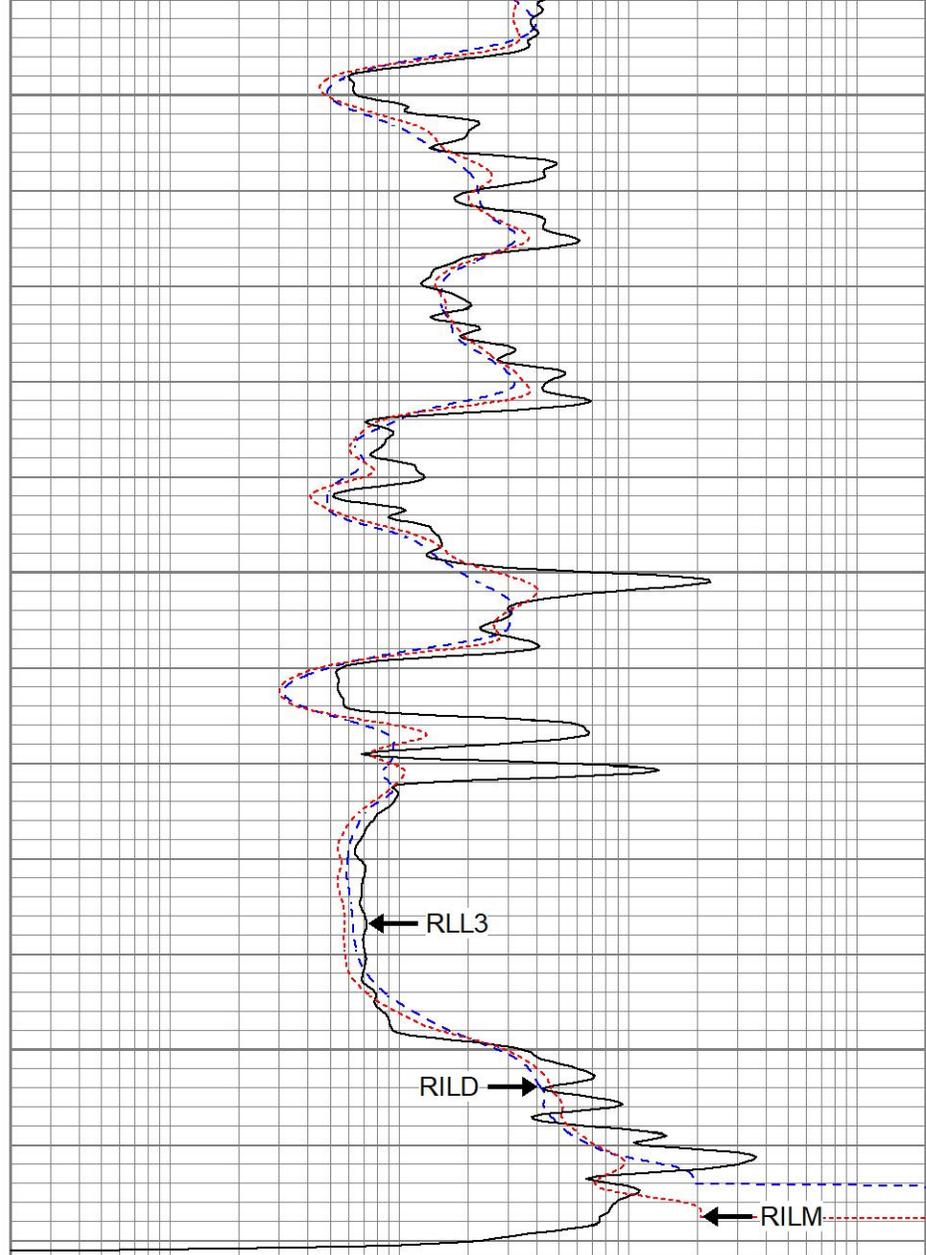




3150
3200
3250

← GR
← SP

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



← RLL3
RILD →
← RILM

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

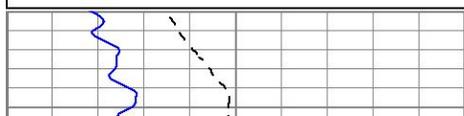


REPEAT SECTION

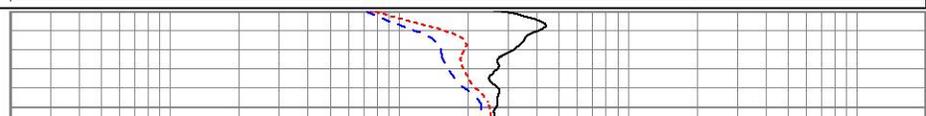
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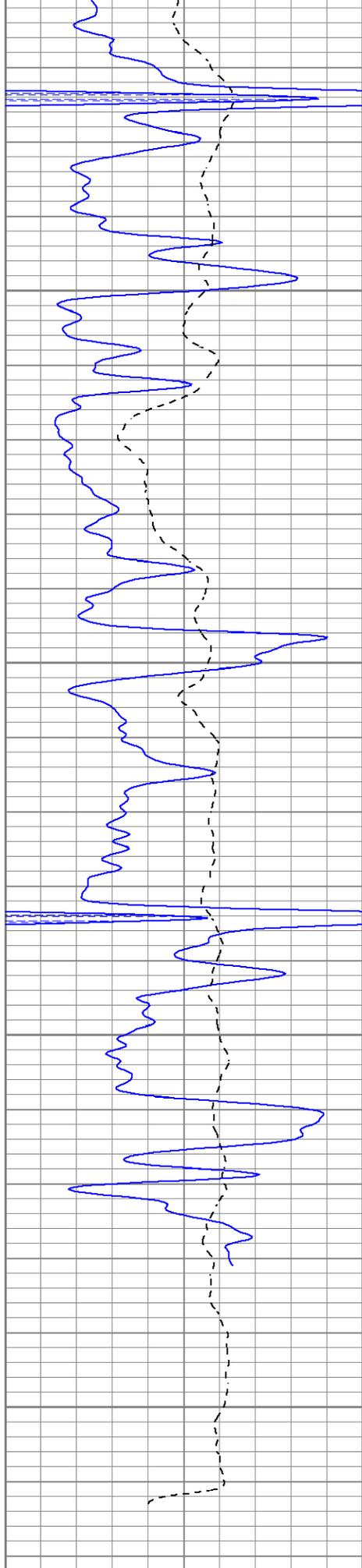
0	GR (GAPI)	150
-100	SP (mV)	100

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



3000





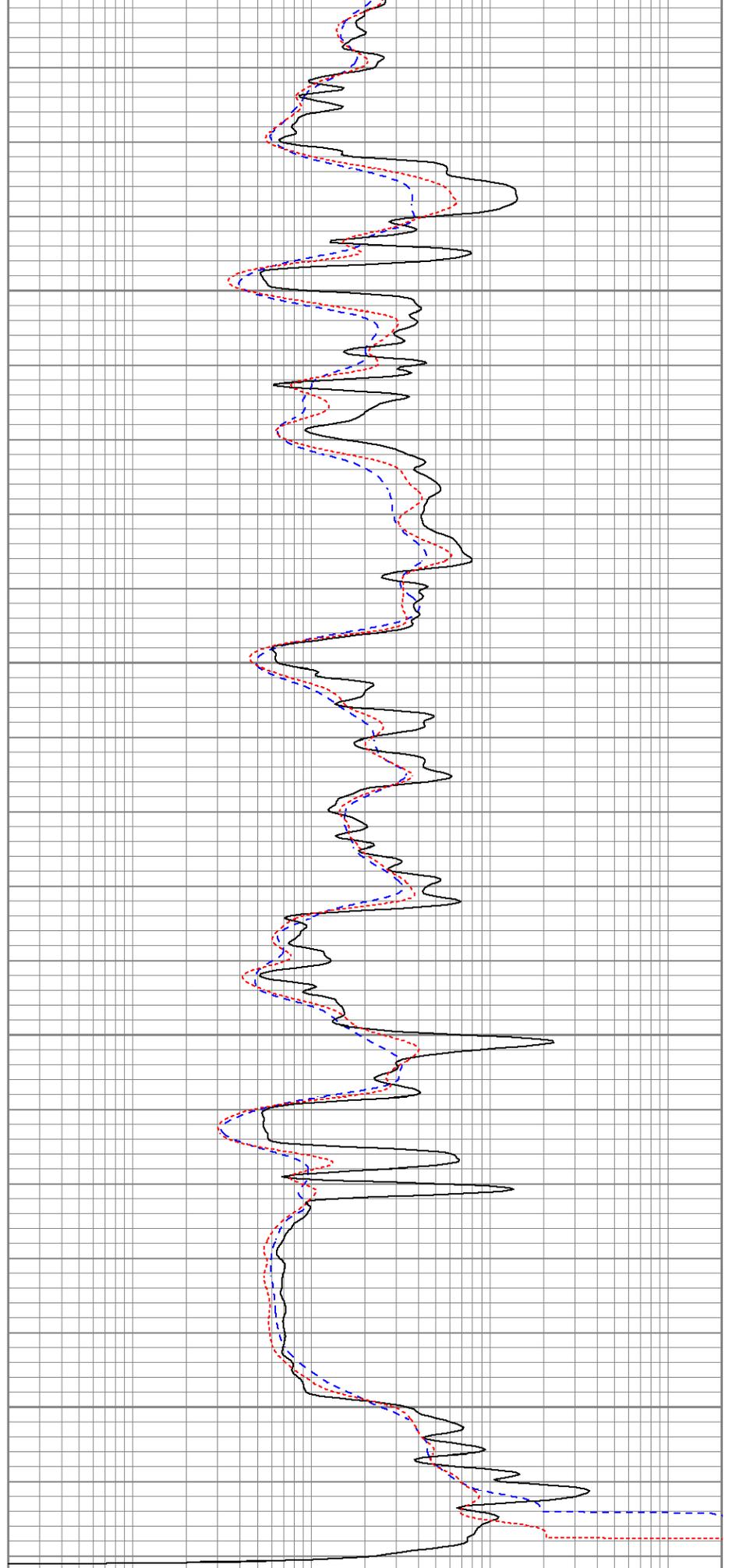
3100

3150

3200

3250

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



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

Calibration Report

Database File peroeslerc10oh.db
 Dataset Pathname pass2.1
 Dataset Creation Sun Jun 19 00:54:39 2022

Dual Induction Calibration Report

Serial-Model: 0352-ADM
 Surface Cal Performed: Mon Sep 20 22:00:42 2021
 Downhole Cal Performed: Wed Mar 30 09:59:17 2022
 After Survey Verification Performed: Wed Mar 30 09:59:17 2022

Surface Calibration

Loop:	Readings			References			Results	
	Air	Loop		Air	Loop		m	b
Deep	0.018	0.672	V	0.000	350.000	mmho/m	535.475	-9.896
Medium	0.003	0.769	V	0.000	400.000	mmho/m	522.607	-1.745
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.018	0.672	V	0.000	350.000	mmho/m	535.240	-9.549
Medium	0.003	0.768	V	0.000	550.000	mmho/m	718.637	-2.088

Downhole Calibration

Internal:	Readings			References			Results	
	Zero	Cal		Zero	Cal		m	b
Deep	-9.739	334.888	mmho/m	-0.343	349.810	mmho/m	1.016	9.552
Medium	-0.093	389.879	mmho/m	-0.226	399.745	mmho/m	1.026	-0.132
Shallow	2.545	0.014	V	500.000	2.000	Ohm-m	196.757	-0.781

After Survey Verification

Internal:	Readings			Targets			Results	
	Zero	Cal		Zero	Cal		m'	b'
Deep	0.000	0.000	mmho/m	-9.739	334.888	mmho/m	1.016	9.552
Medium	0.000	0.000	mmho/m	-0.093	389.879	mmho/m	1.026	-0.132
Shallow	0.000	0.000	Ohm-m	500.000	2.000	Ohm-m	1.000	0.000

Neutron Calibration Report

Serial Number: 2017
 Tool Model: lithogearhart
 Performed: (Not Performed)

Calibrator Value: 1 NAPI

Calibrator Reading: 1 cps

Sensitivity: 1 NAPI/cps

Temperature Calibration Report

Serial Number: WithOutMC
 Tool Model: WOMC
 Performed: (Not Performed)

	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:	Thu Oct 25 16:29:34 2018				
	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:	WithOutMC	
Tool Model:	WOMC	
Performed:	Wed Dec 6 22:30:58 2017	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	1.0000	GAPI/cps

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
GR	38.71		CHD-STD	0.50	1.69	1.00
ACCY	37.54		ADT-WOMC (WithOutMC) Telemetry Without Mud Cell	4.58	3.50	120.00
ACCX	37.54					
SSTAT	37.13					
PSTAT	36.29					
ASTAT	36.29		NEU-lithogearhart (2017)	5.65	3.50	85.00
GRD	35.46					
TEMP	35.46					
NEU	32.09		CDL-GEARHART (2501)	9.69	4.00	240.00
LSD	22.02					
DCAL	21.73					
SSD	21.48					

SP	10.60		DIL-ADM (0352) Dual Induction	19.71	4.00	300.00
CILD	10.60					
CILM	6.89					
RLL3	1.70					
Dataset: peroeslerc10oh.db: field/well/run1/pass2.1 Total length: 40.13 ft Total weight: 746.00 lb O.D.: 4.00 in						