



**DUAL
INDUCTION
LOG**

Company James P. Williams, Inc.
Well Roll Williams #1
Field Williams
County Rooks
State Kansas

Company James P. Williams, Inc.
Well Roll Williams #1
Field Williams
County Rooks State Kansas

Location: 986' FNL & 911' FWL
API #: 15 163 24411
SEC 9 TWP 10S RGE 18W
Permanent Datum Ground Level Elevation 2185'
Log Measured From KB 8' AGL
Drilling Measured From KB
Other Services
ML
CDNL
Elevation
K.B. 2193'
D.F. 2192'
G.L. 2185'

Date	3/21/20
Run Number	One
Depth Driller	3850'
Depth Logger	3848'
Bottom Logged Interval	3846'
Top Log Interval	210'
Casing Driller	8 5/8" @ 221'
Casing Logger	221'
Bit Size	7 7/8"
Type Fluid in Hole	Chemical
Density / Viscosity	9.0/54
pH / Fluid Loss	10.0/7.2
Source of Sample	CALCULATED
Rm @ Meas. Temp	1.3@70degf
Rmt @ Meas. Temp	1.0@70degf
Rmc @ Meas. Temp	1.7@70degf
Source of Rmf / Rmc	Calculated
Rm @ BHT	0.95@96degf
Time Circulation Stopped	1:30 a.m
Time Logger on Bottom	3:45 a.m
Maximum Recorded Temperature	96degf
Equipment Number	T-605
Location	Hays, KS.
Recorded By	Casey Patterson
Witnessed By	Mr. Jason T Alm

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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

South of Plainville,KS to AA RD, Then west on AA RD. to 15 Rd.,
Then on 15 RD. North 3/4 mile
Then East into Location

Thanks for using Gemini Wireline LLC
785-625-1182



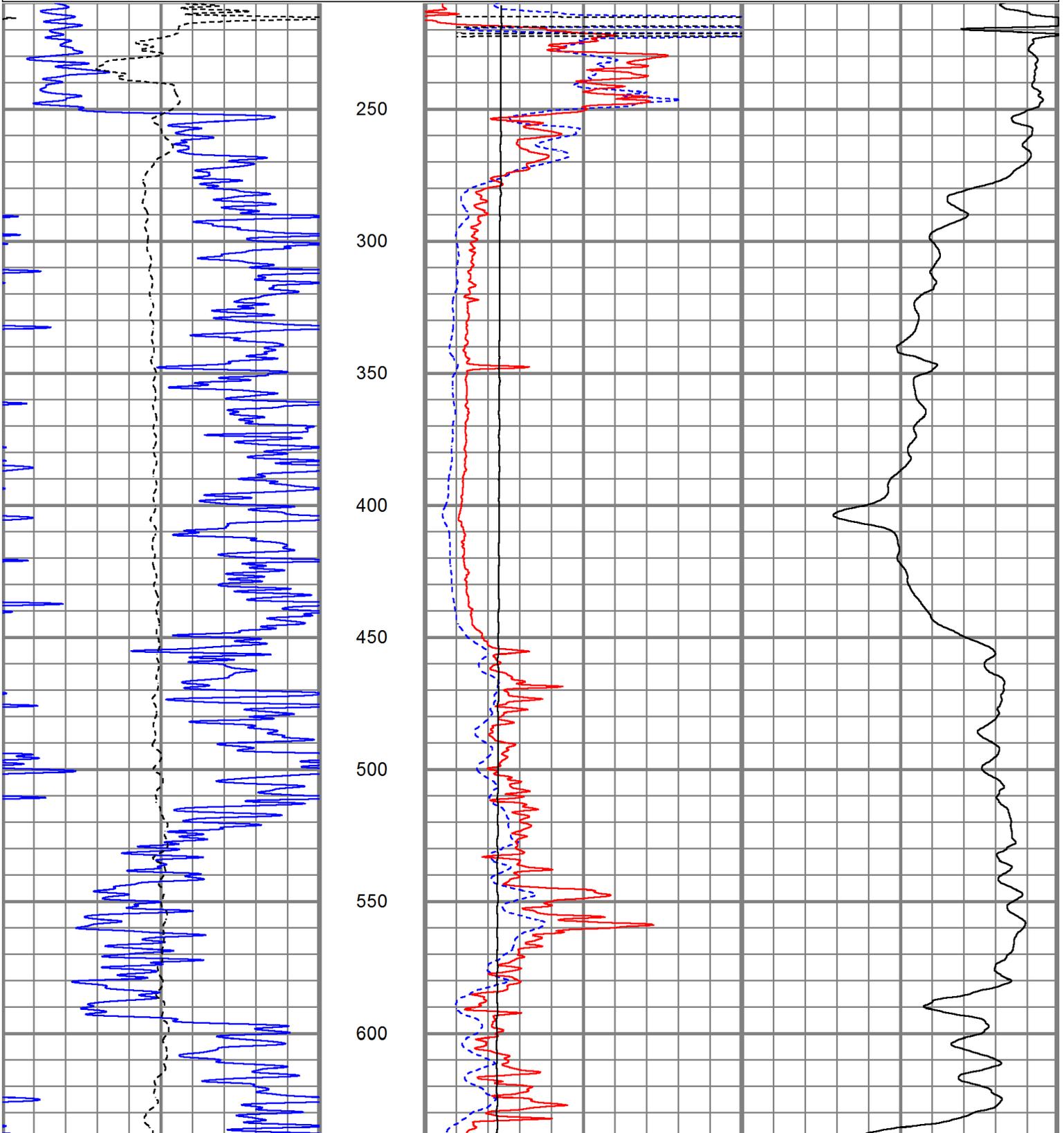
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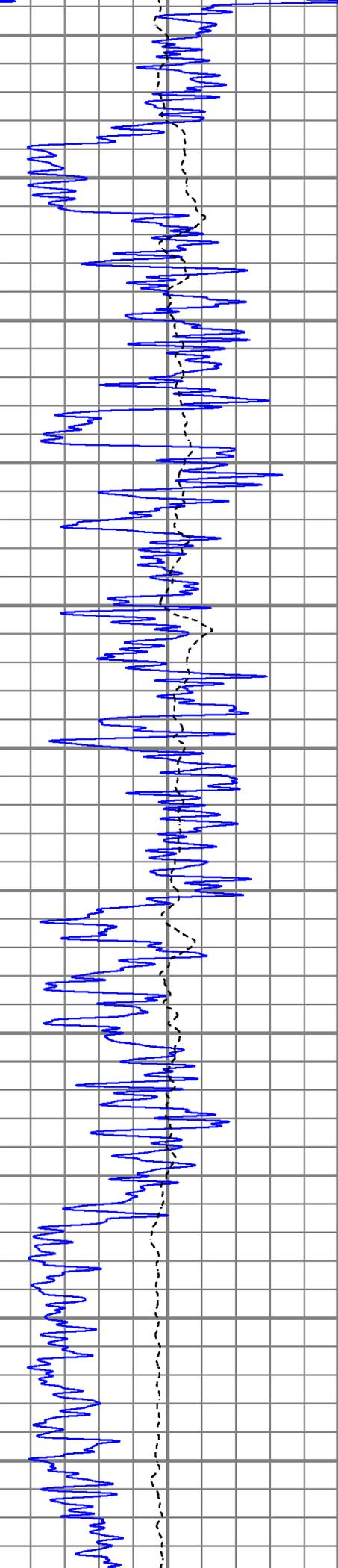
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 Dataset Pathname pass2
 Presentation Format kdrillinn
 Dataset Creation Sat Mar 21 04:02:32 2020
 Charted by Depth in Feet scaled 1:600

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

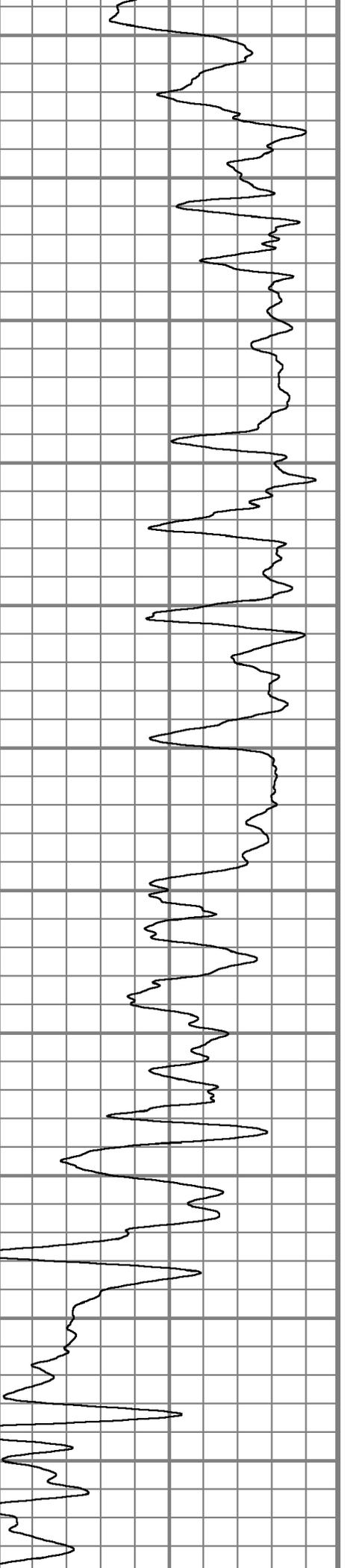
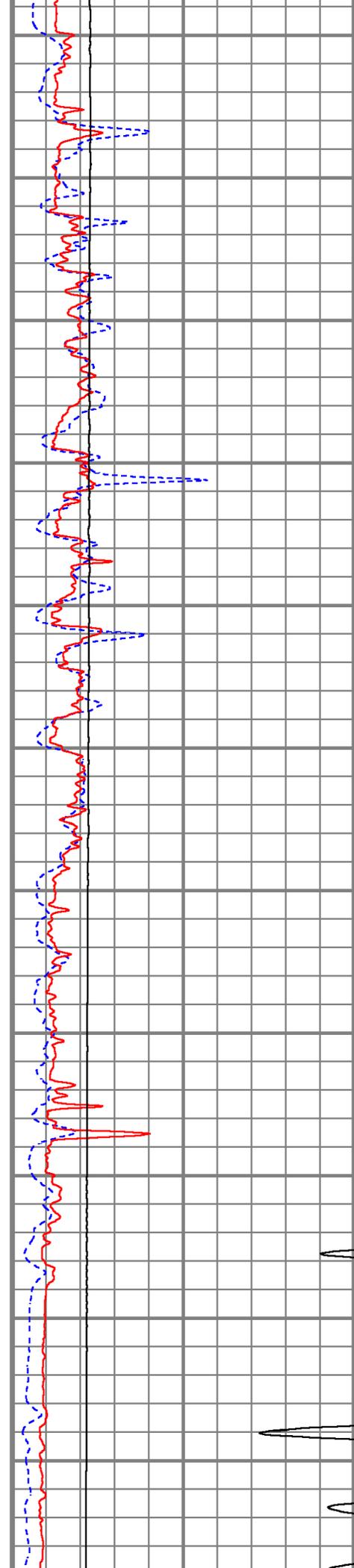
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10000	LTEN (lb)	0

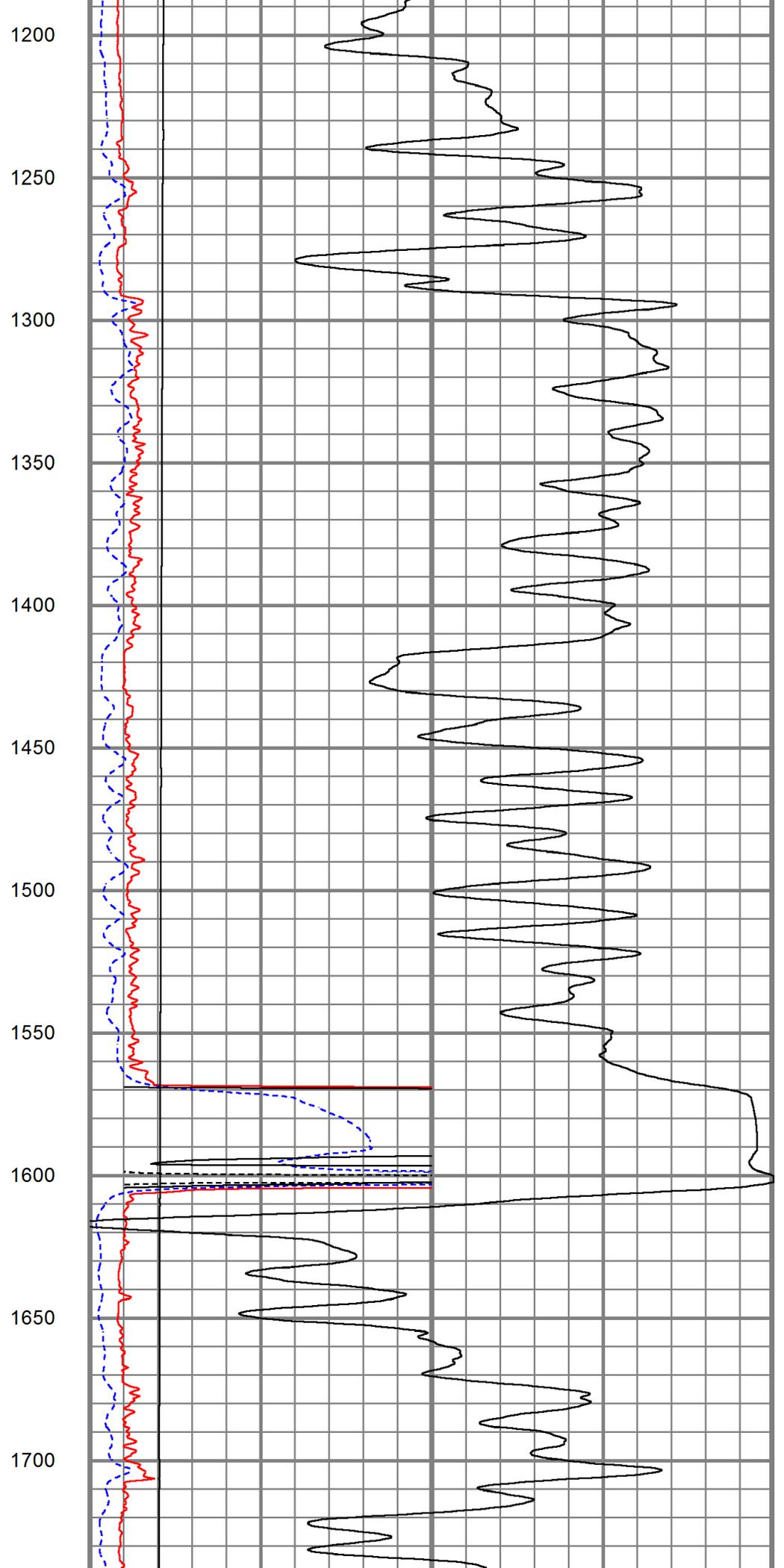
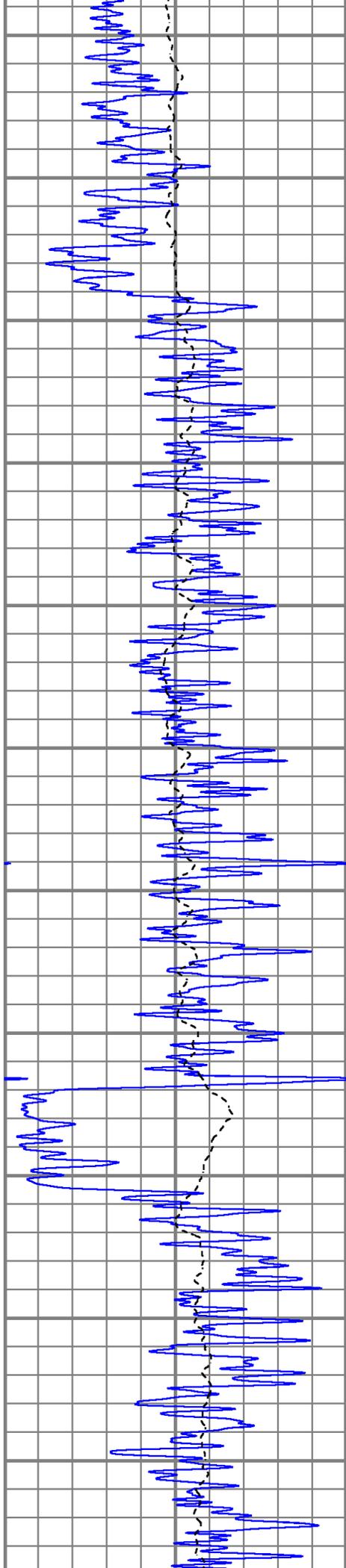
0	RILD (Ohm-m)	50
0	RLL3 (Ohm-m)	50
50	RILD x 10 (Ohm-m)	500
50	RLL3 x 10 (Ohm-m)	500

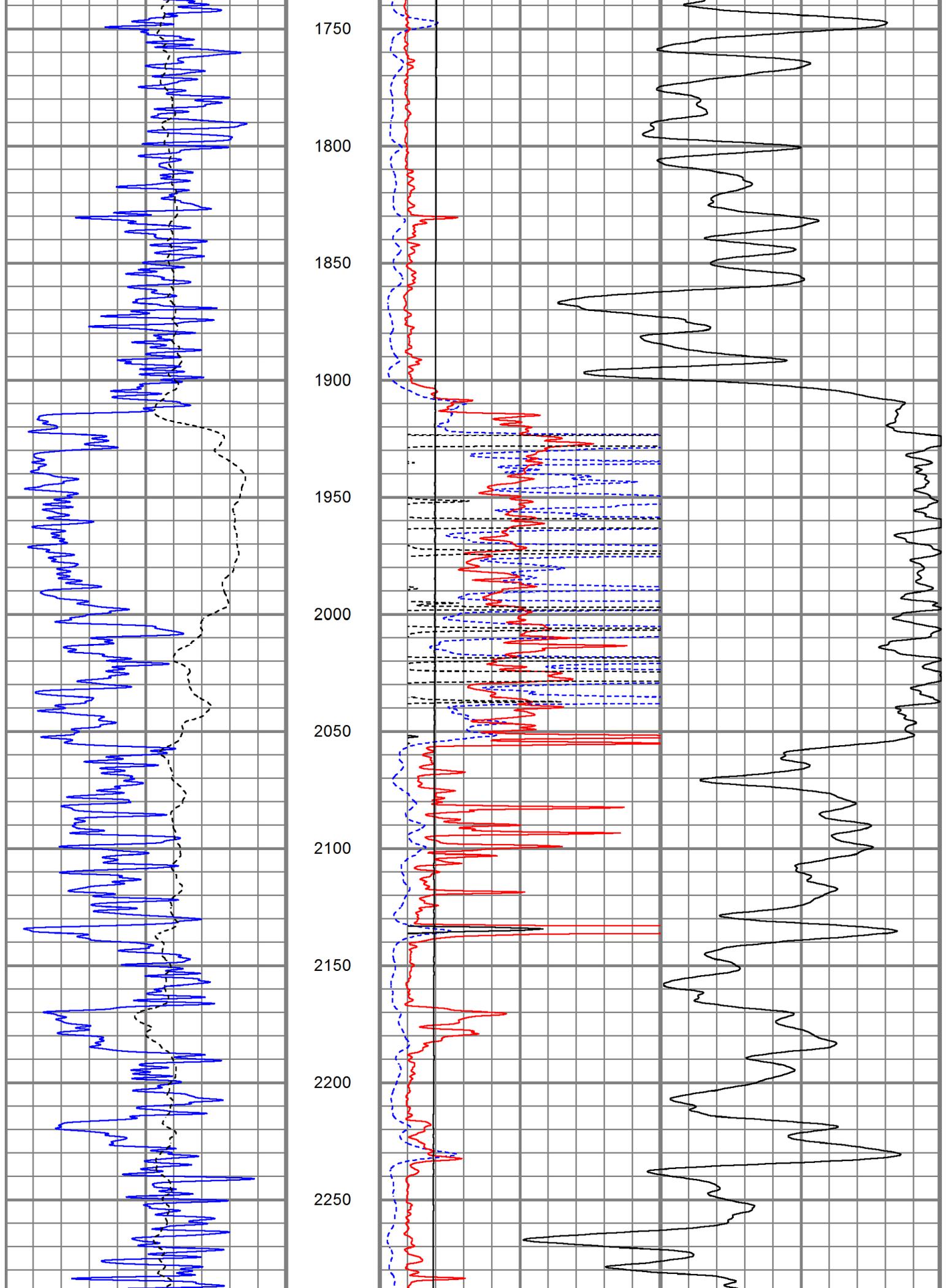


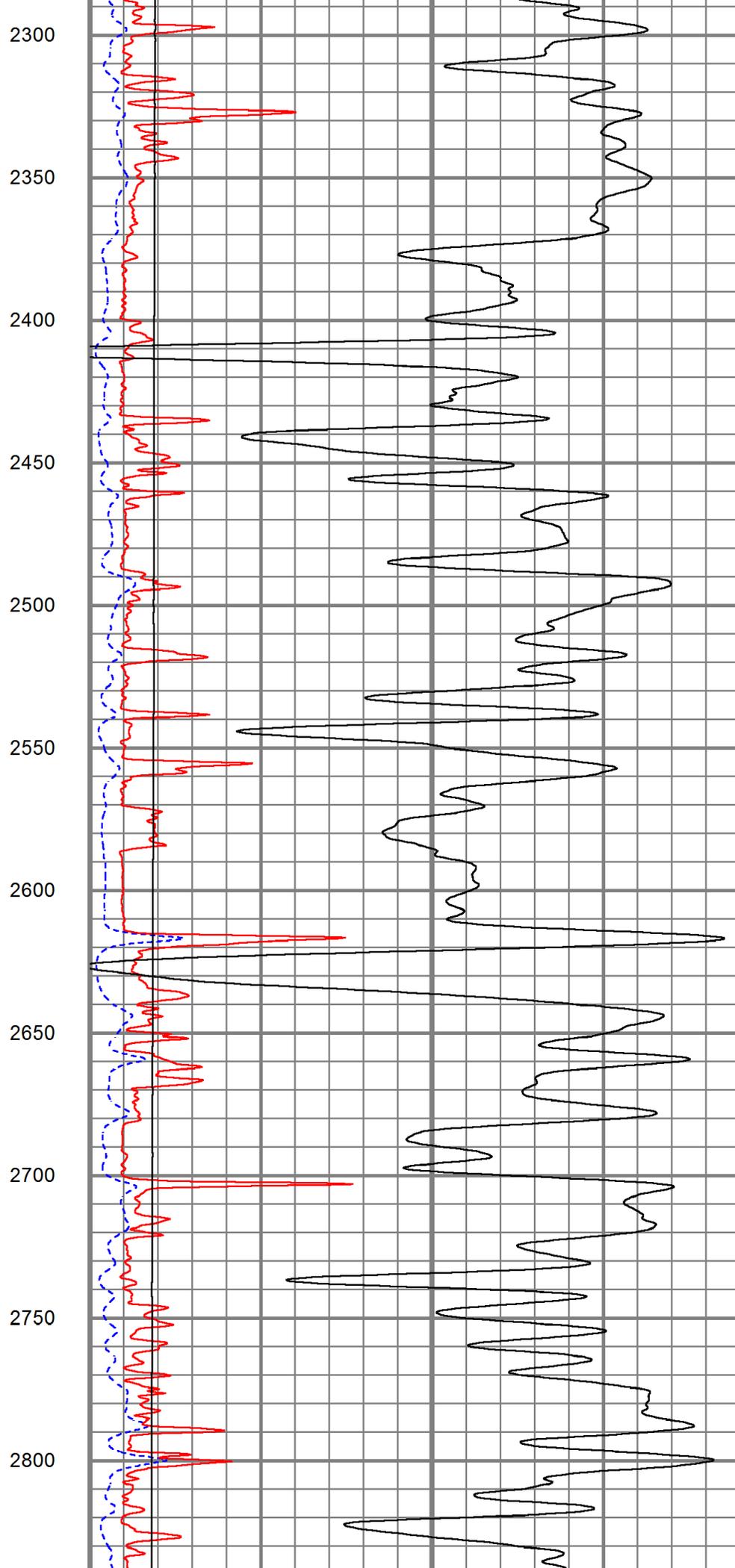
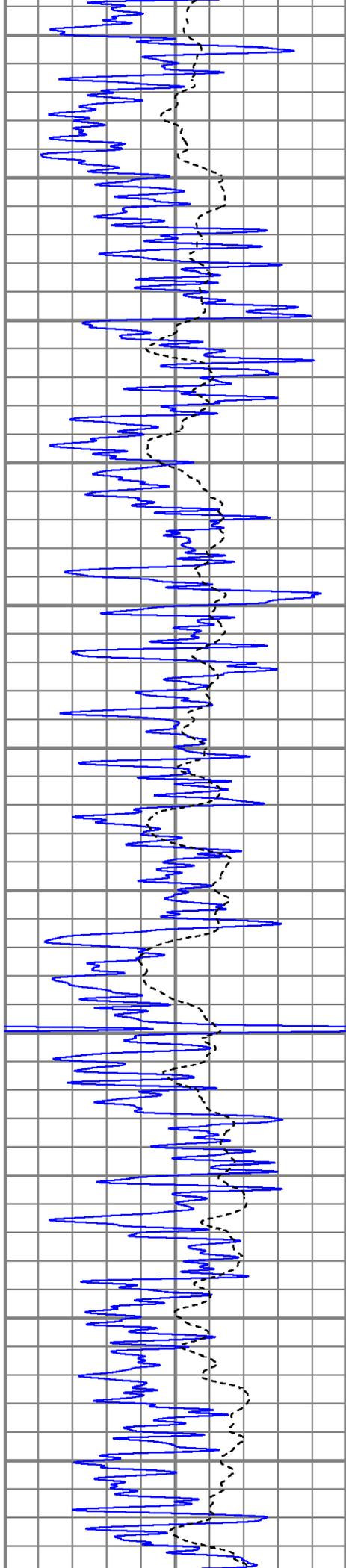


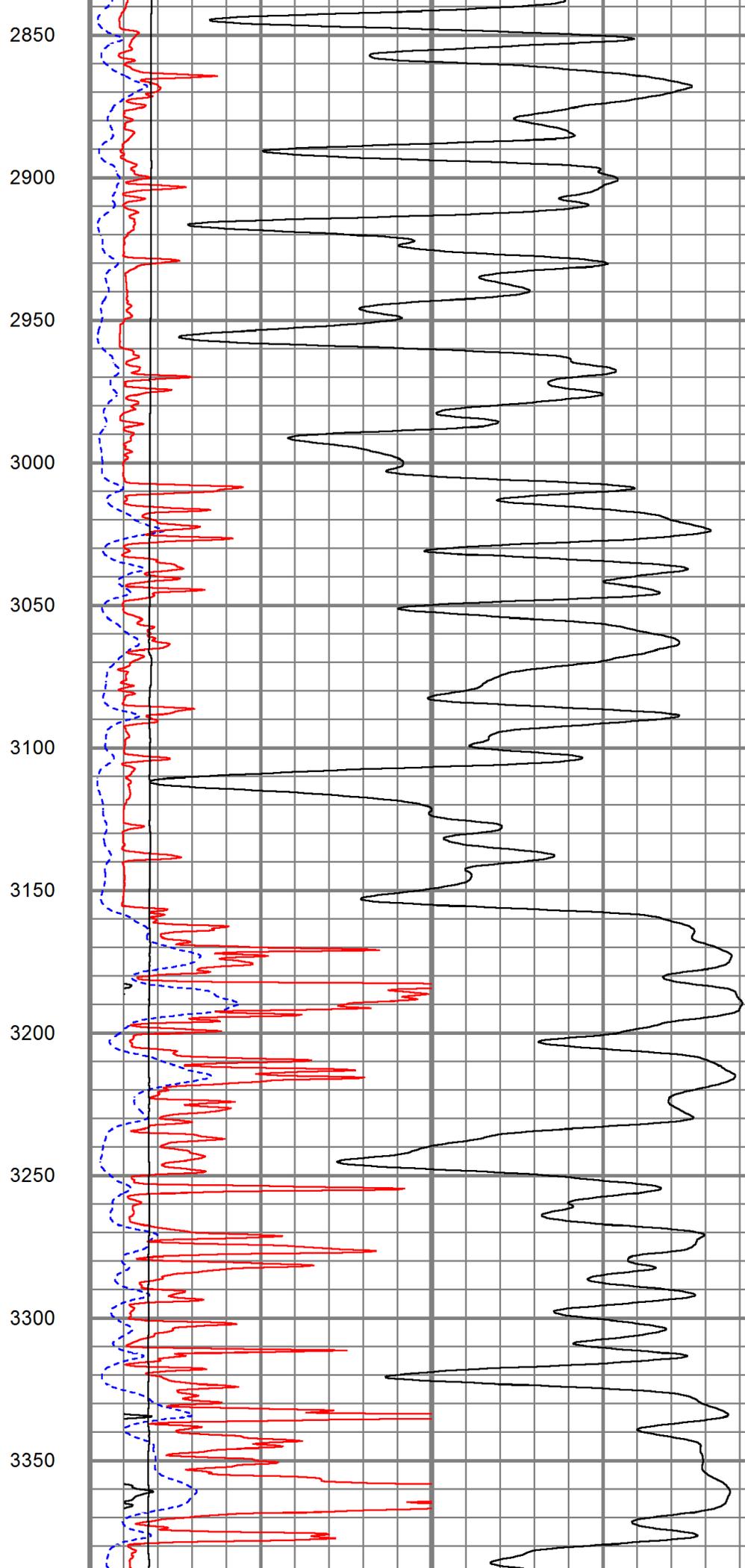
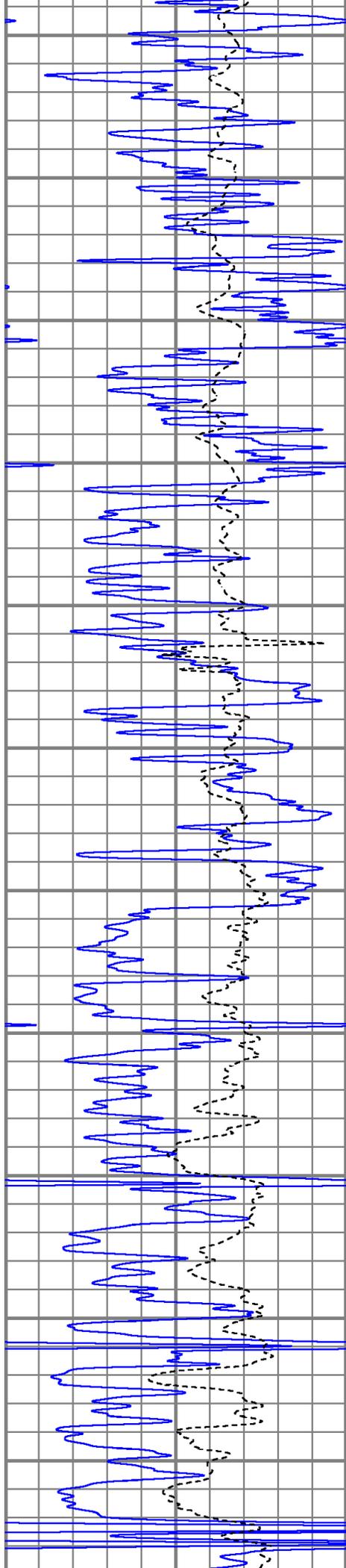
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750
800
850
900
950
1000
1050
1100
1150

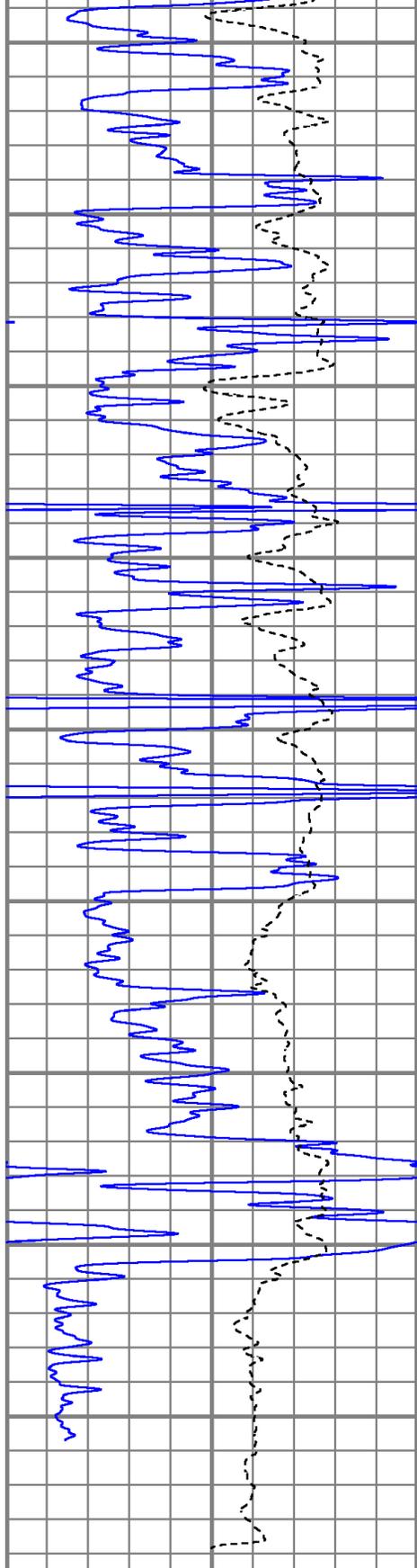




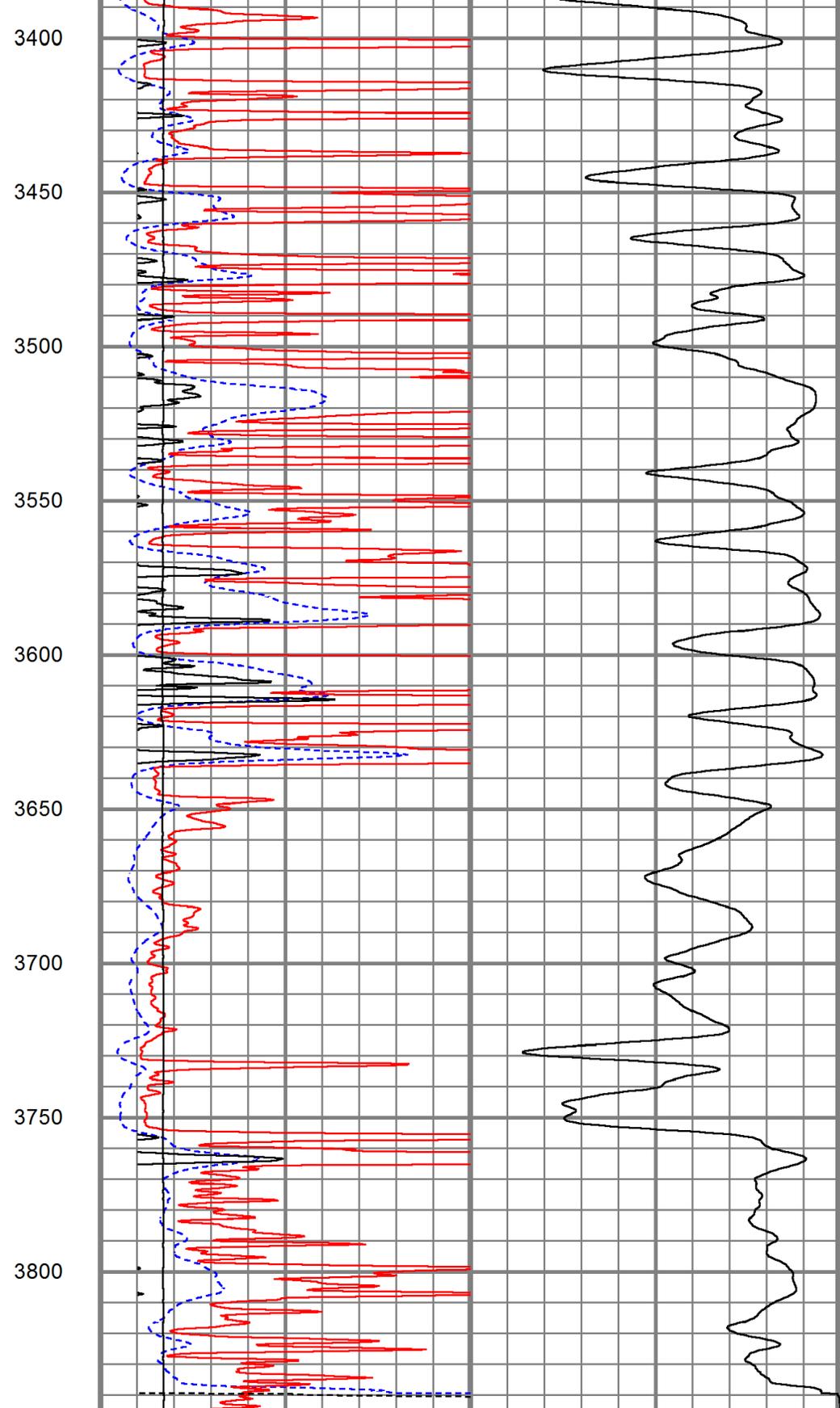








0	GR (GAPI)	150
-100	SP (mV)	100



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

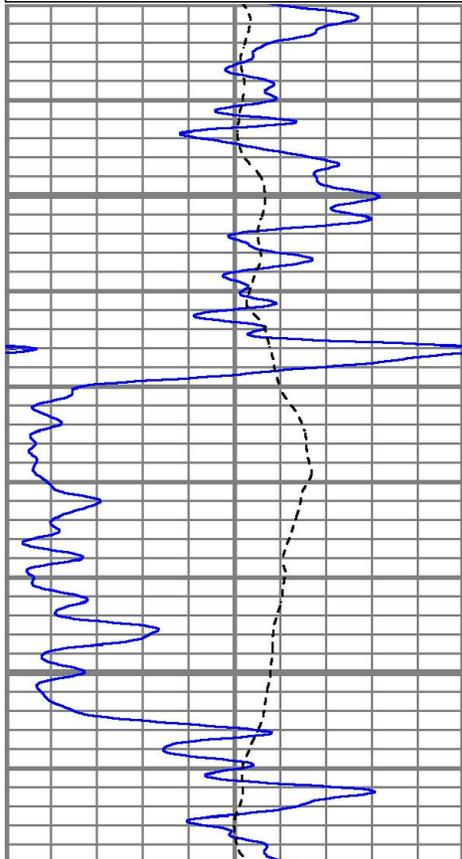


MAIN PASS

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 Dataset Creation Sat Mar 21 04:02:32 2020
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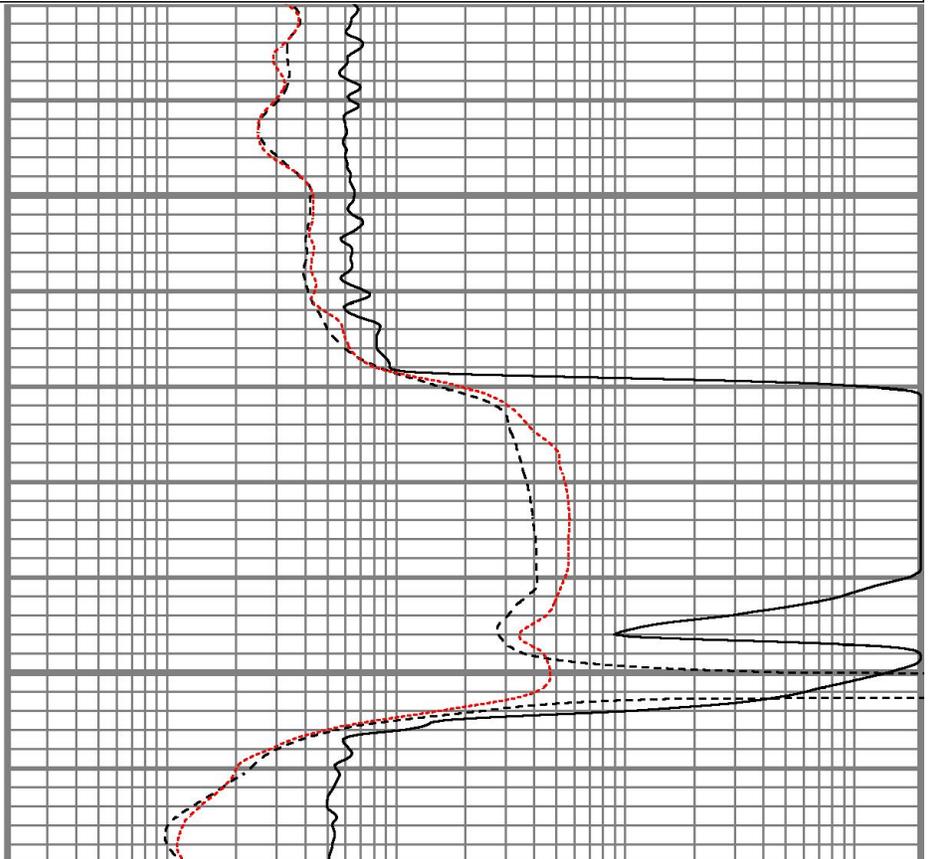
0	GR (GAPI)	150
-100	SP (mV)	100

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



1550

1600



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

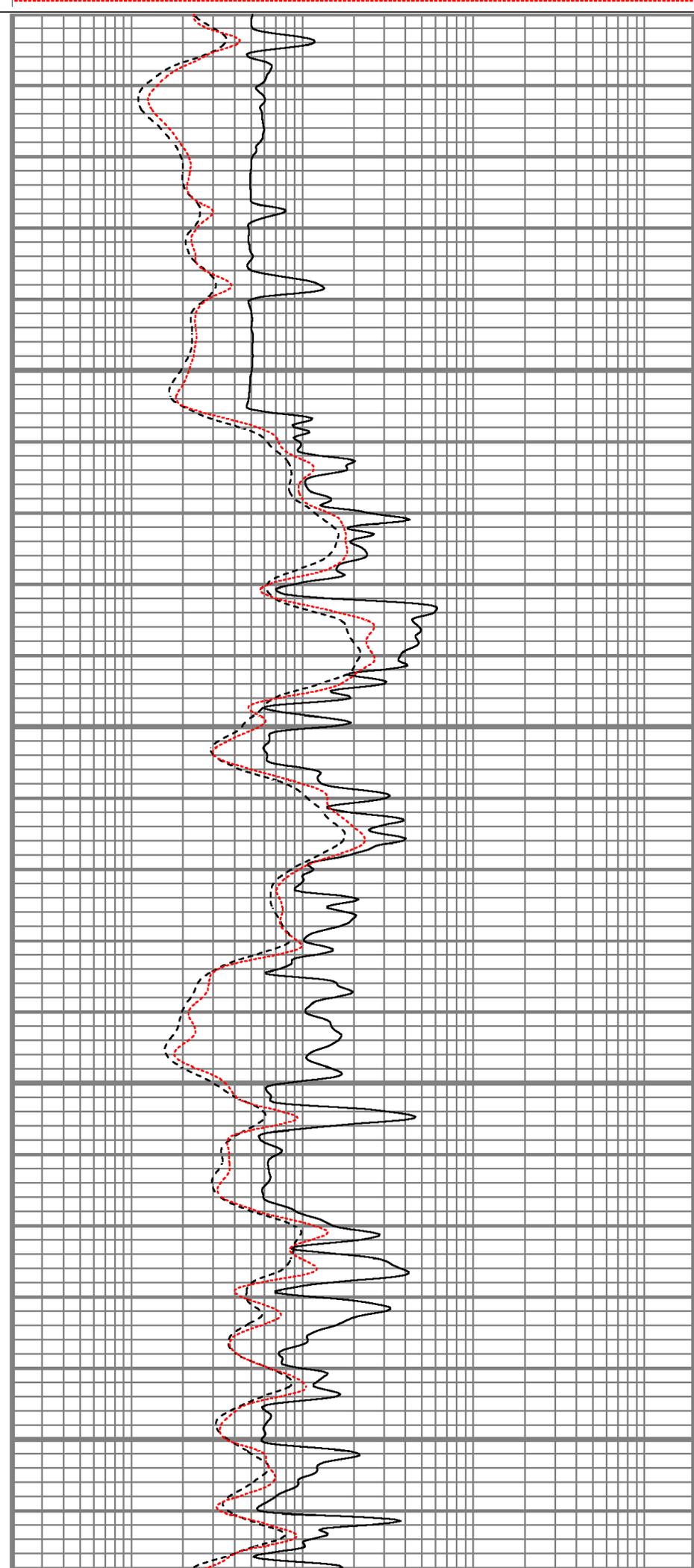
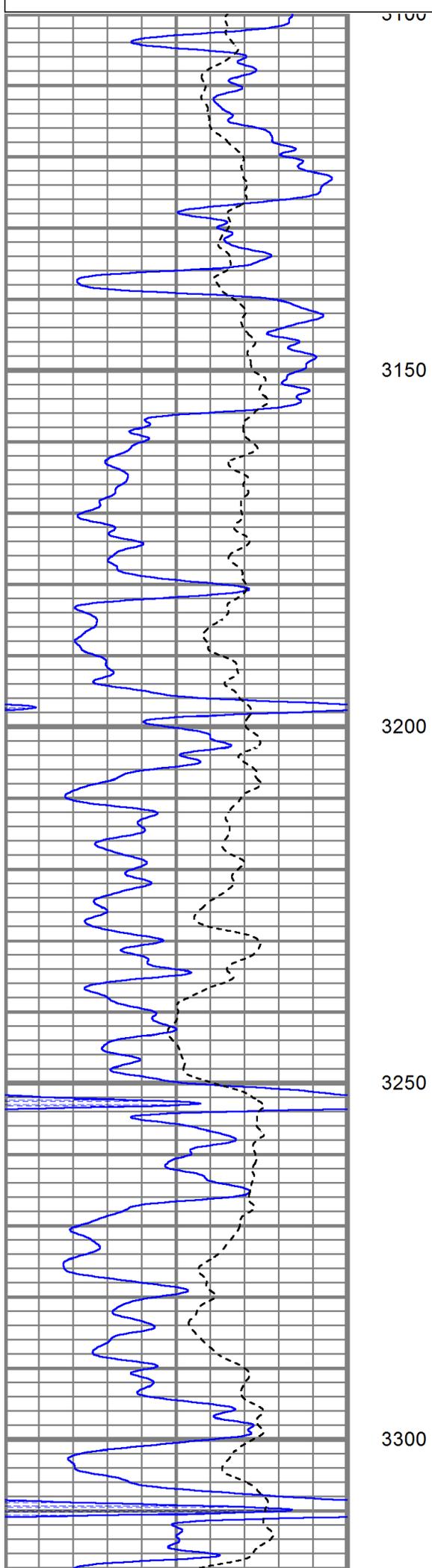


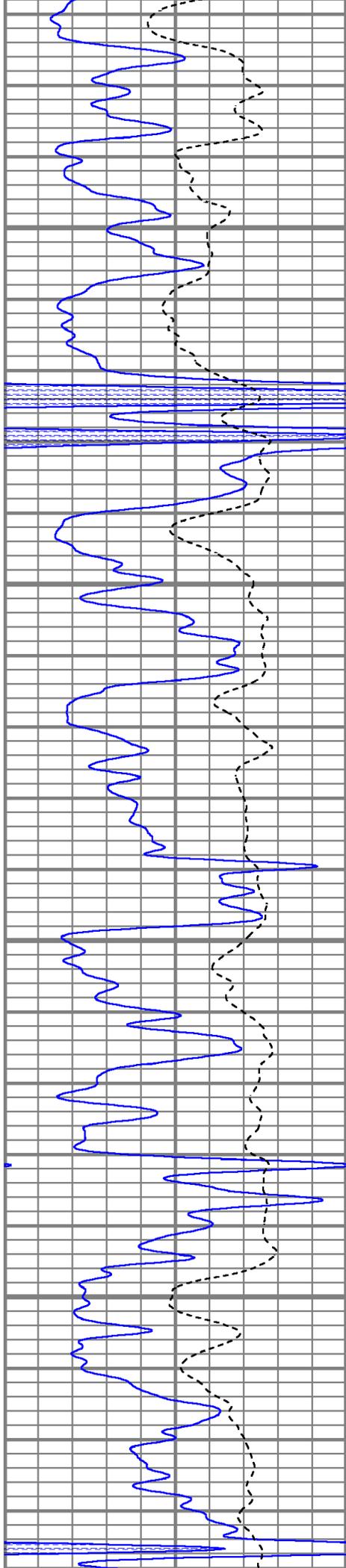
MAIN PASS

Database File jpwrollwilliams#1oh.db
 Dataset Pathname pass2
 Presentation Format kdil
 Dataset Creation Sat Mar 21 04:02:32 2020
 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



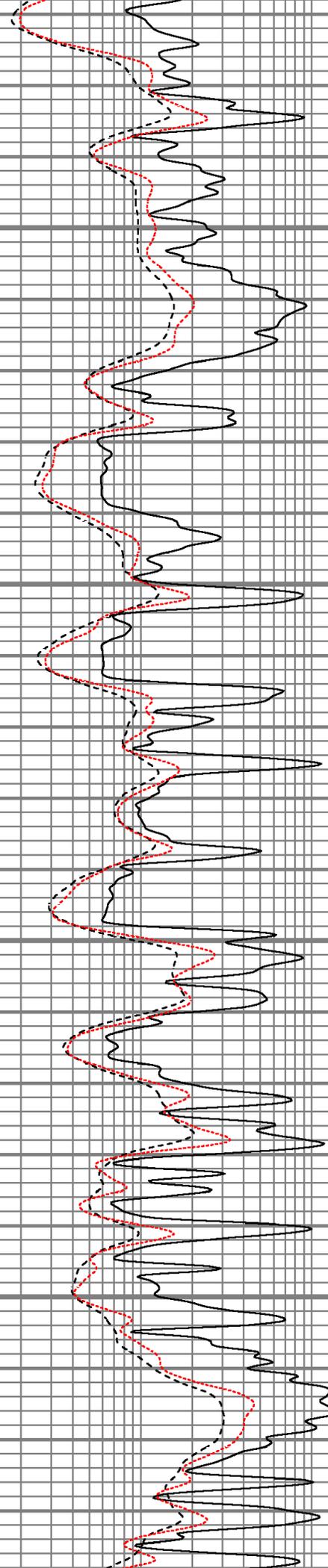


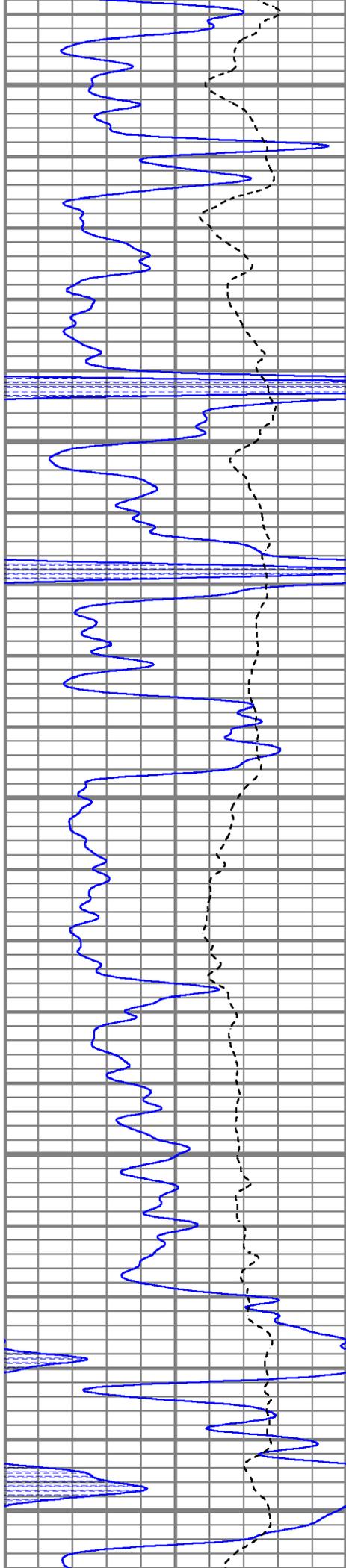
3350

3400

3450

3500





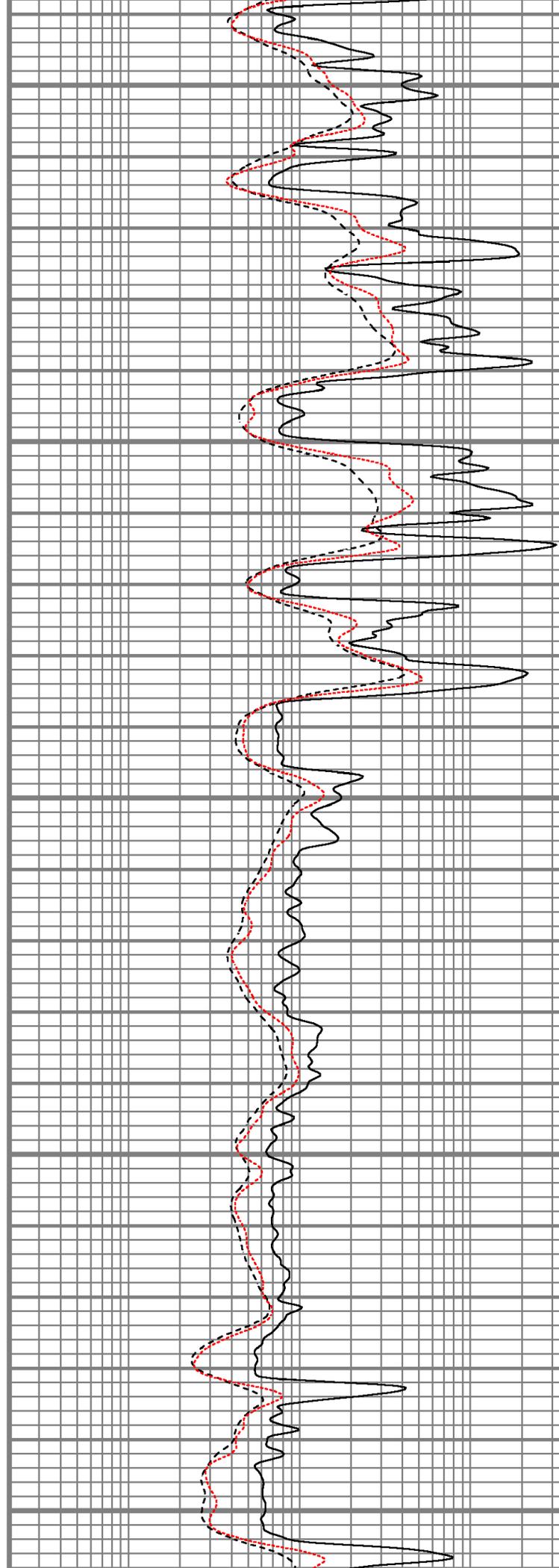
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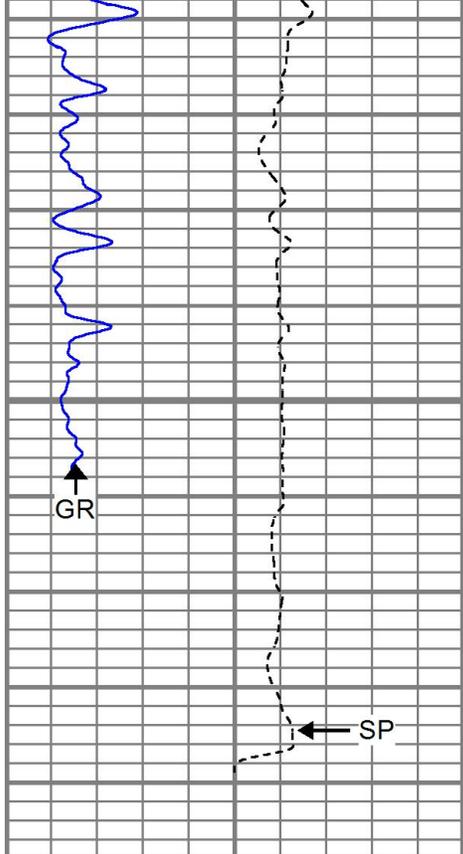
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3650

3700

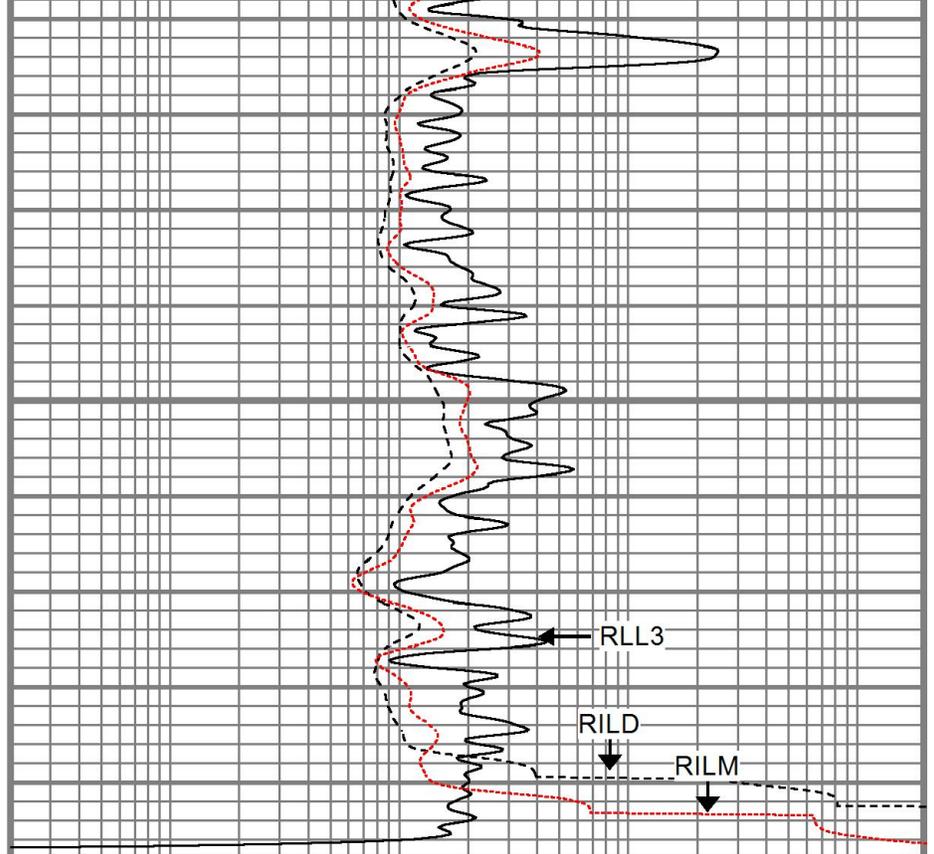
3750





3800

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

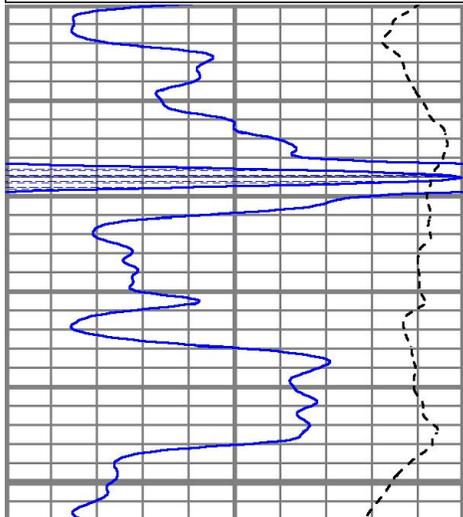


REPEAT SECTION

Database File jpwrollwilliams#1oh.db
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 Presentation Format kdil
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 Charted by Depth in Feet scaled 1:240

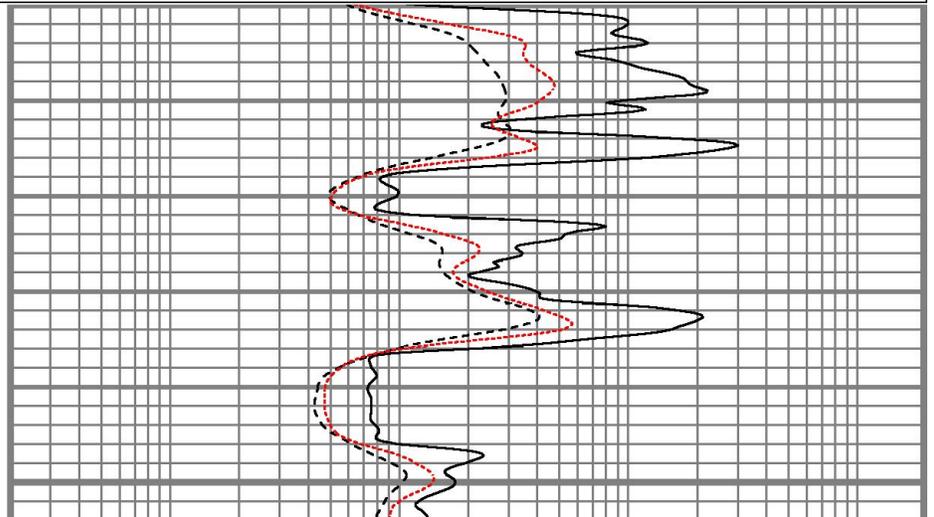
0	GR (GAPI)	150
-100	SP (mV)	100

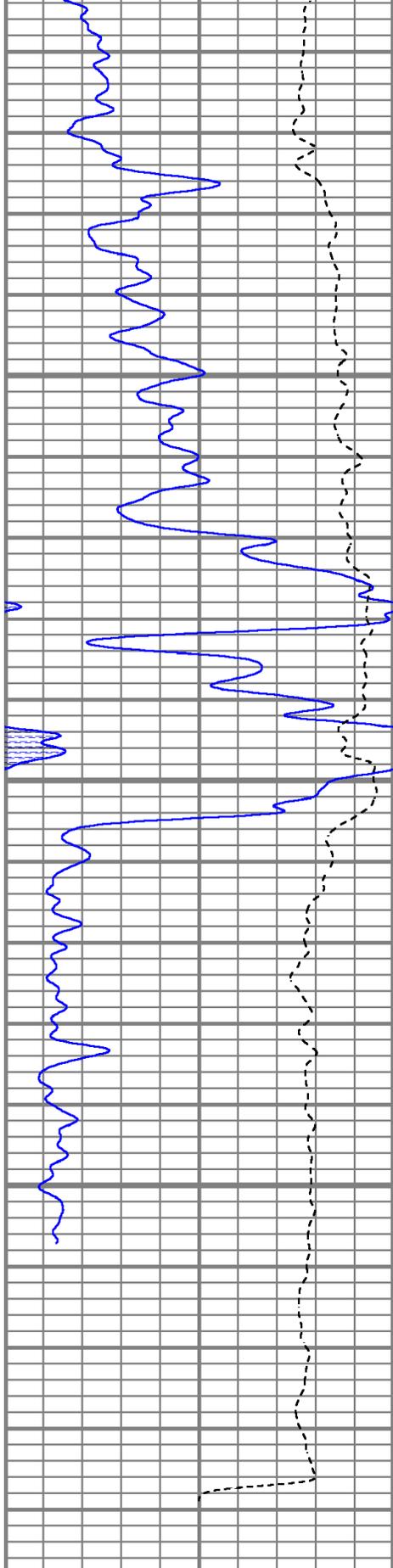
0.2	RILD (Ohm-m)	2000
0.2	RLL3 (Ohm-m)	2000
0.2	RILM (Ohm-m)	2000



3650

3650



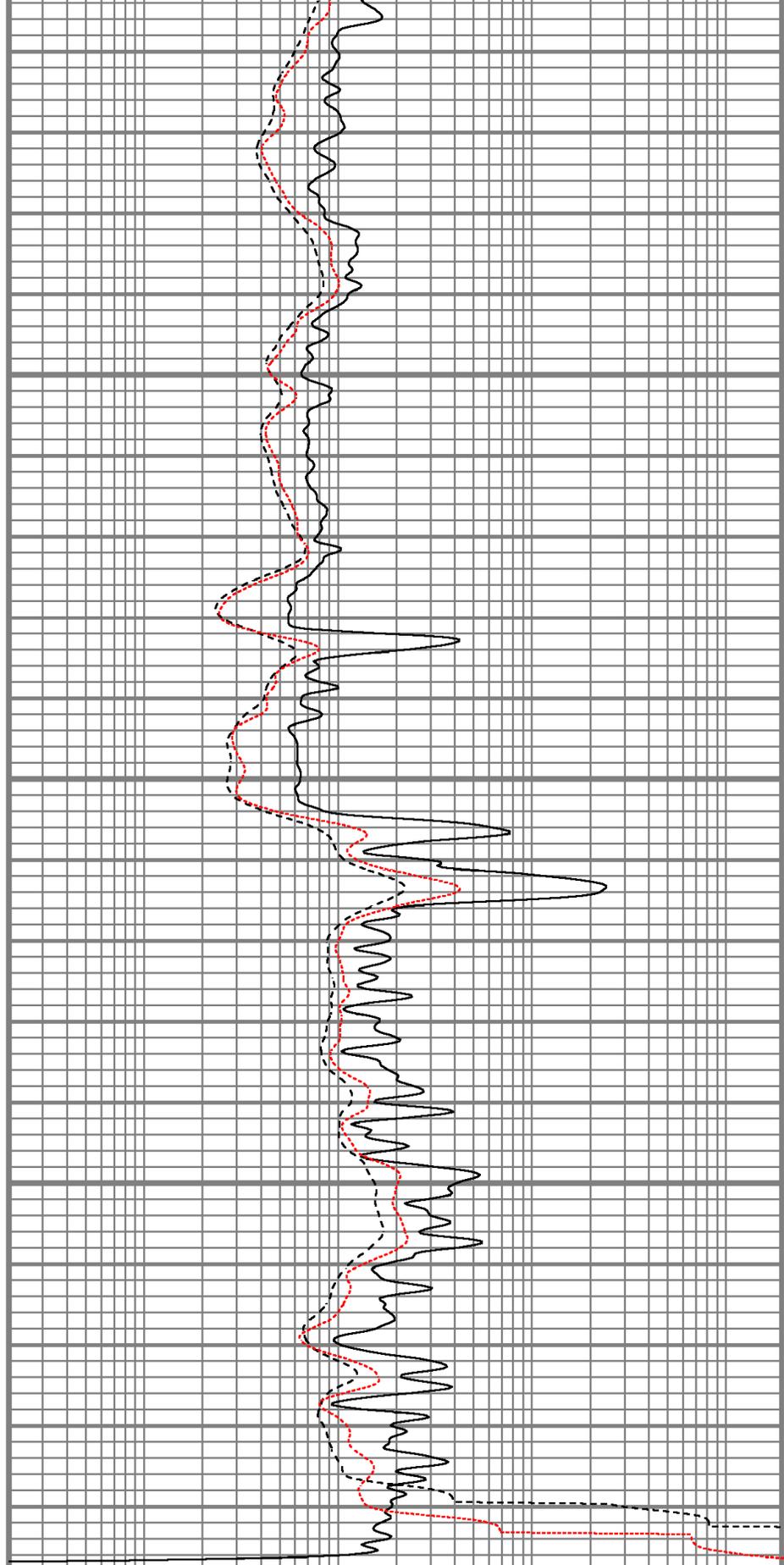


0	GR (GAPI)	150
-100	SP (mV)	100

3700

3750

3800



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

Database File jpwrollwilliams#1oh.db
 Dataset Pathname pass2
 Dataset Creation Sat Mar 21 04:02:32 2020

Dual Induction Calibration Report

Serial-Model: 1989-ADM
 Surface Cal Performed: Tue Feb 04 16:04:10 2020
 Downhole Cal Performed: Wed Jun 06 19:34:10 2018
 After Survey Verification Performed: Wed Jun 06 19:34:10 2018

Surface Calibration

Loop:	Readings			References			Results	
	Air	Loop		Air	Loop		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		Zero	Cal		m	b
Deep	0.000	0.000	mmho/m	0.419	351.110	mmho/m	1.000	0.000
Medium	0.000	0.000	mmho/m	-0.877	400.105	mmho/m	1.000	0.000
Shallow	2.502	0.040	V	500.000	2.000	Ohm-m	190.323	-0.126

After Survey Verification

Internal:	Readings			Targets			Results	
	Zero	Cal		Zero	Cal		m'	b'
Deep	0.000	0.000	mmho/m	0.000	0.000	mmho/m	1.000	0.000
Medium	0.000	0.000	mmho/m	0.000	0.000	mmho/m	1.000	0.000
Shallow	0.000	0.000	Ohm-m	500.000	2.000	Ohm-m	1.000	0.000

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: 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	

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 06 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	38.31		CHD-STD	0.50	1.69	1.00
ACCY	37.15		ADT-WOMC (WithOutMC) Telemetry Without Mud Cell	4.58	3.50	120.00
ACCX	37.15					
SSTAT	36.73					
PSTAT	35.90					
ASTAT	35.90					
GRD	35.06		NEU-ADMY5139 (AD5139) Admyer NEU DIGITAL	5.65	3.50	50.00
TEMP	35.06					
NEU	31.00					
LStat	22.54		ADT1LITH-A (1) Admyr Litho Density Tool	9.29	3.50	240.00
LS8	21.88					
LS7	21.88					
LS6	21.88					
LS5	21.88					
LS4	21.88					
LS3	21.88					
LS2	21.88					
LS1	21.88					
LSV	21.88					
LSD	21.86					
SSV	21.67					
SS8	21.67					
SS7	21.67					

SS7	21.67		19.71	4.00	300.00
SS6	21.67				
SS5	21.67				
SS4	21.67				
SS3	21.67				
SS2	21.67				
SS1	21.67				
DCAL	21.61				
SSD	21.27				
SP	10.60				
CILD	10.60				
CILM	6.89				
RLL3	1.70				
TR_Mon	0.00				

Dataset: jpwrollwilliams#1oh.db: field/well/run1/pass2
 Total length: 39.73 ft
 Total weight: 711.00 lb
 O.D.: 4.00 in