



DUAL INDUCTION LOG

Company Mid-Continent Energy Corp.

Well White B #3

Field Stoltzenberg

County Ellsworth State KS

Location: API #: 15 053 21349

SEC 8 TWP 16S RGE 10W

2115' FSL & 1460' FWL

CDNL
DIL

Permanent Datum Ground Level Elevation 1851'

Log Measured From KB 11' AGL

Drilling Measured From KB

Elevation
K.B. 1862'
D.F. 1861'
G.L. 1851'

Date 1-16-17

Run Number One

Depth Driller 3400'

Depth Logger 3397'

Bottom Logged Interval 3395'

Top Log Interval 300'

Casing Driller 336'

Casing Logger 336'

Bit Size 7 7/8"

Type Fluid in Hole Chemical Mud

Density / Viscosity 9.1/45

pH / Fluid Loss 10/8.4

Source of Sample Pit

Rm @ Meas. Temp 1.4@60degf

Rmf @ Meas. Temp 1.05@60degf

Rmc @ Meas. Temp 1.68@60degf

Source of Rmf / Rmc Calculated

Rm @ BHT .75@112degf

Time Circulation Stopped 1:30 p.m.

Time Logger on Bottom 4:00 p.m.

Maximum Recorded Temperature 112 degf

Equipment Number T127

Location Hays, KS.

Recorded By Gus Pfannenstiel

Witnessed By Mr. Eli Felts

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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

Thank you for using Gemini Wireline
785-625-1182

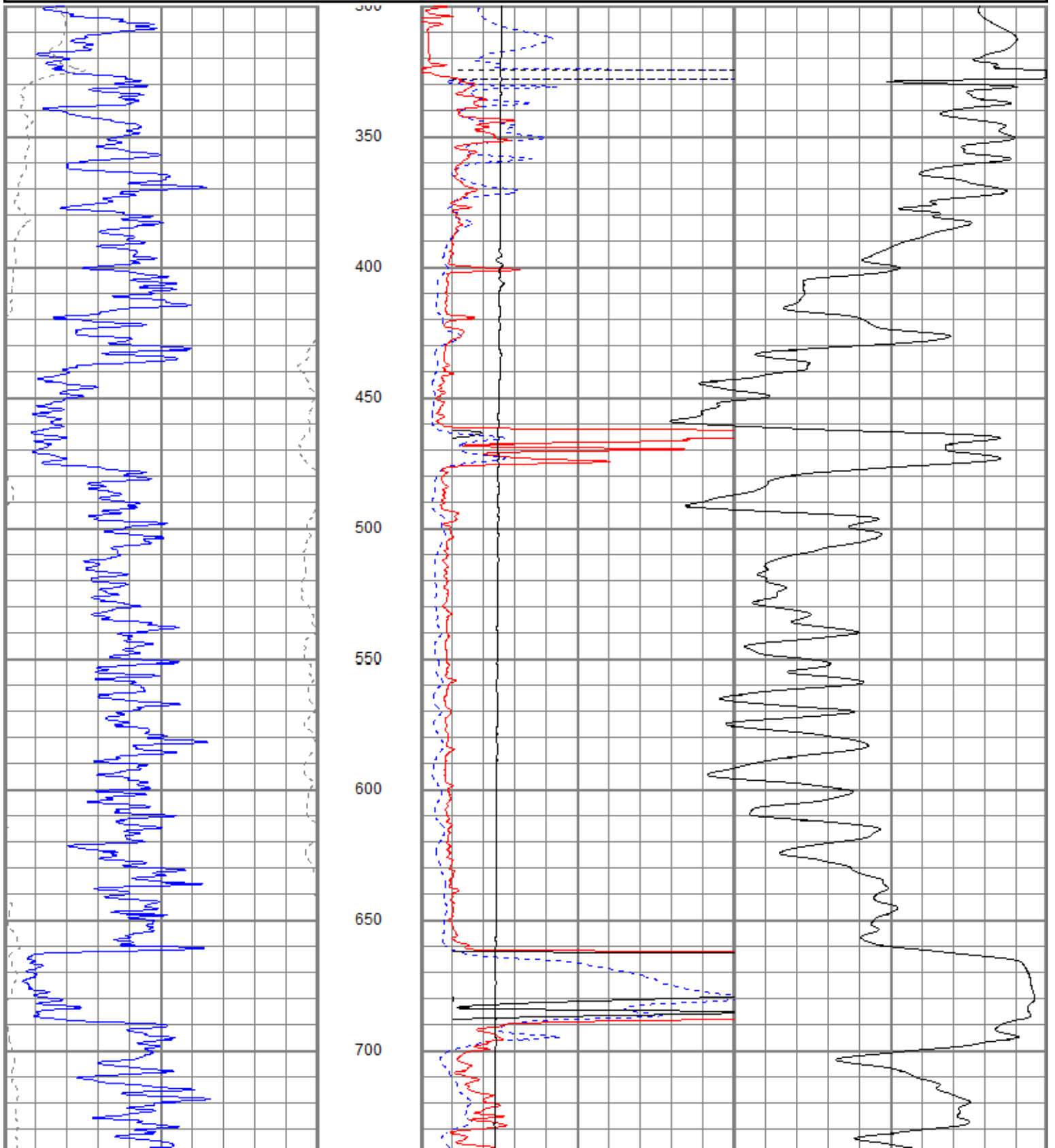


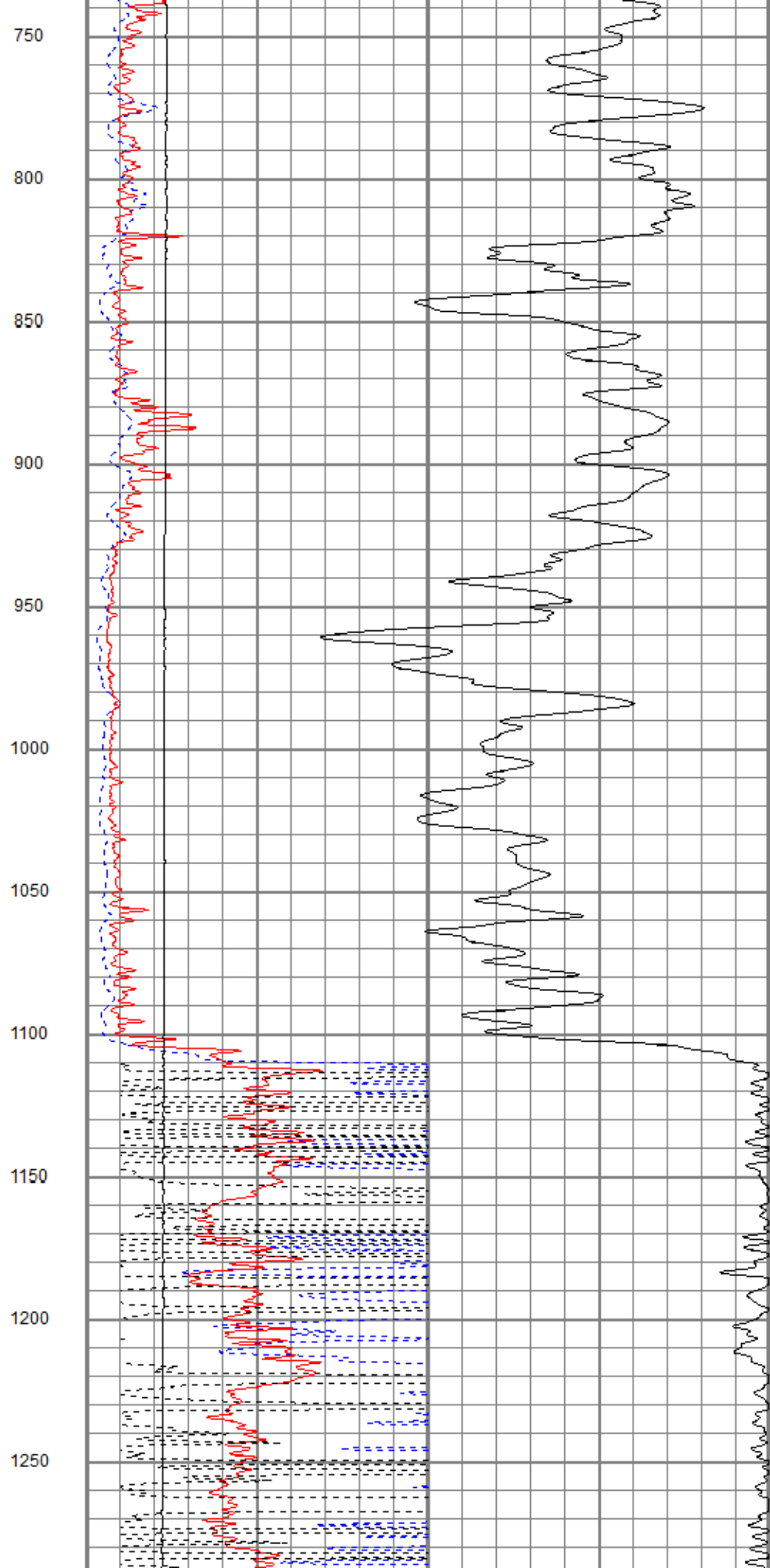
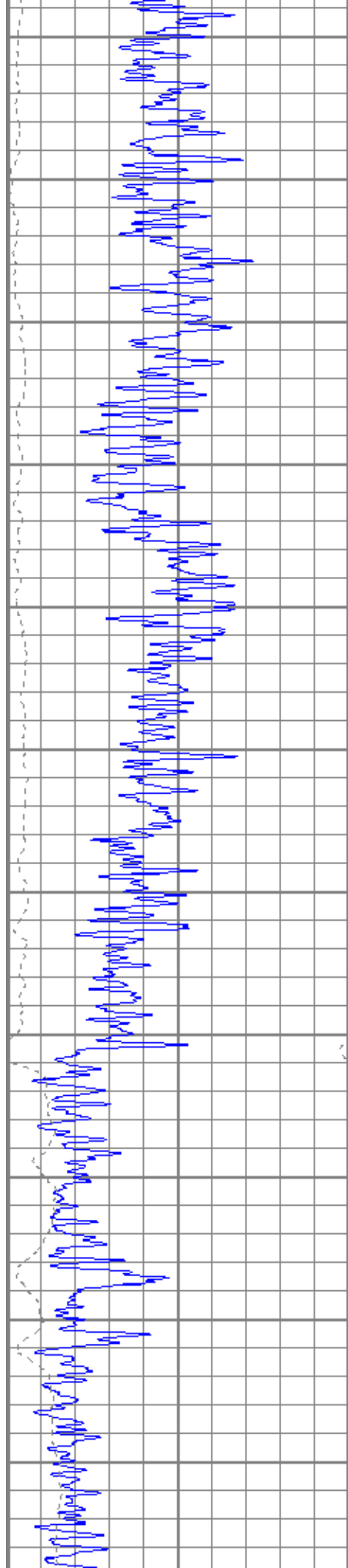
Main Pass

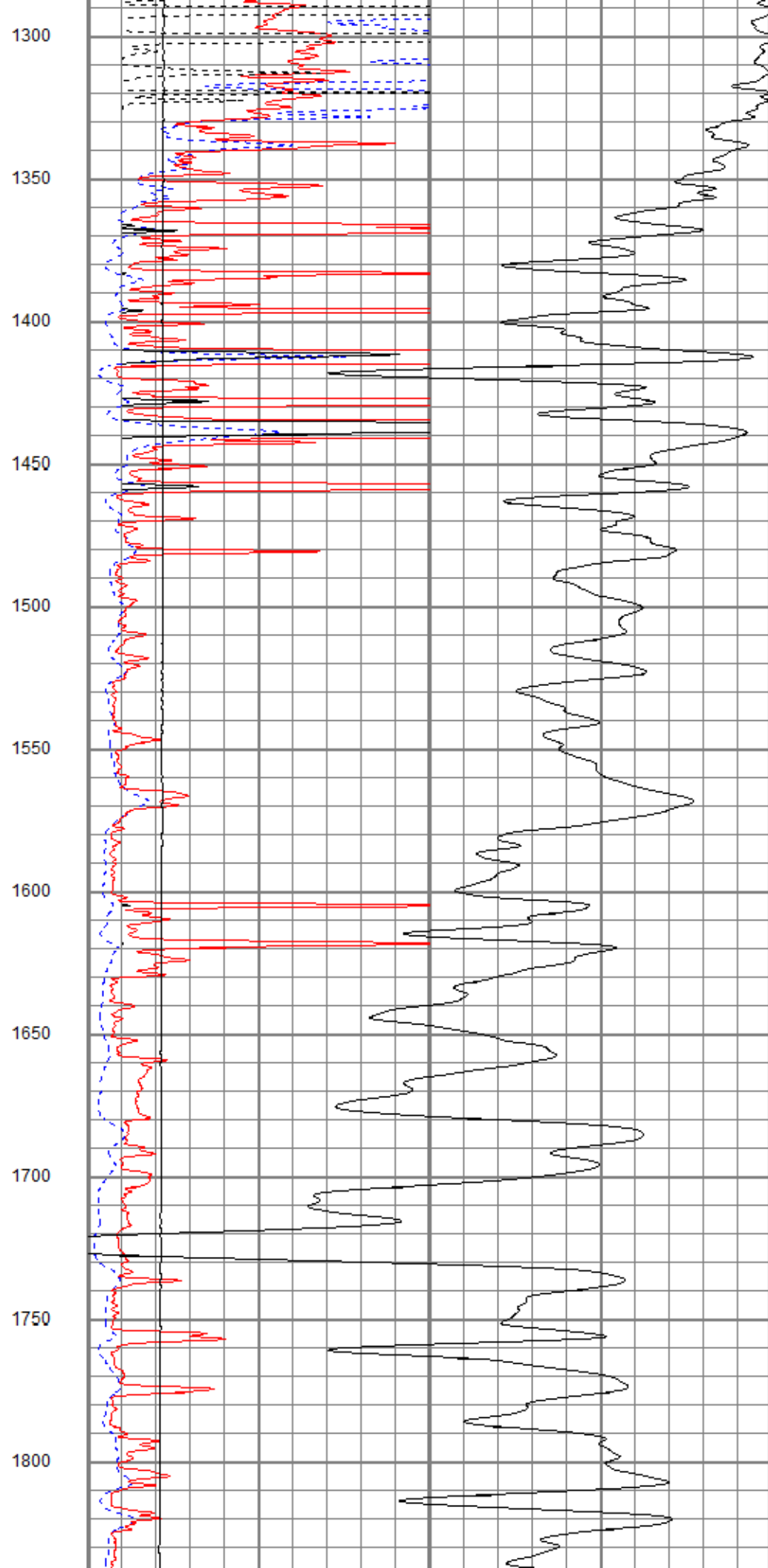
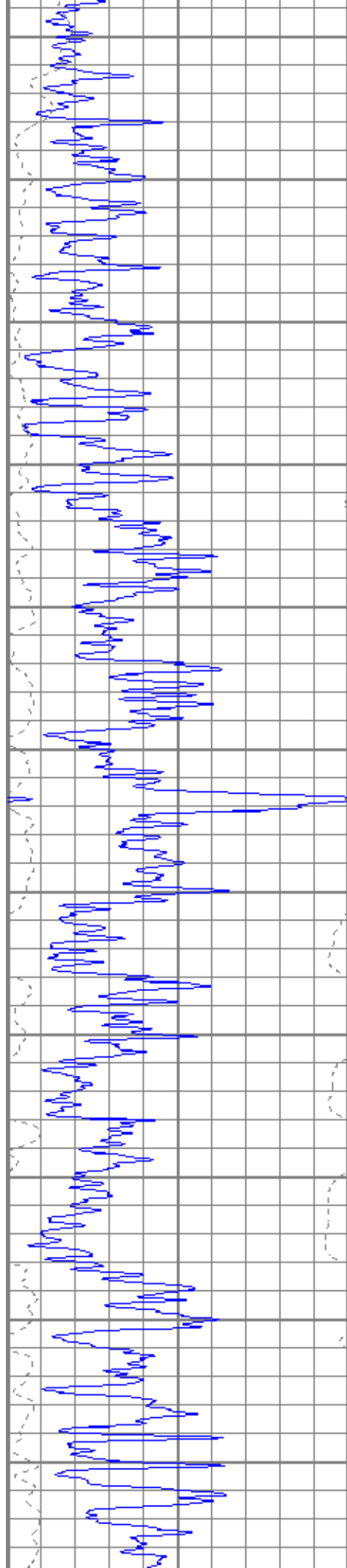
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 Dataset Pathname pass2.1
 Presentation Format kdillin2
 Dataset Creation Mon Jan 16 16:48:34 2017
 Charted by Depth in Feet scaled 1:600

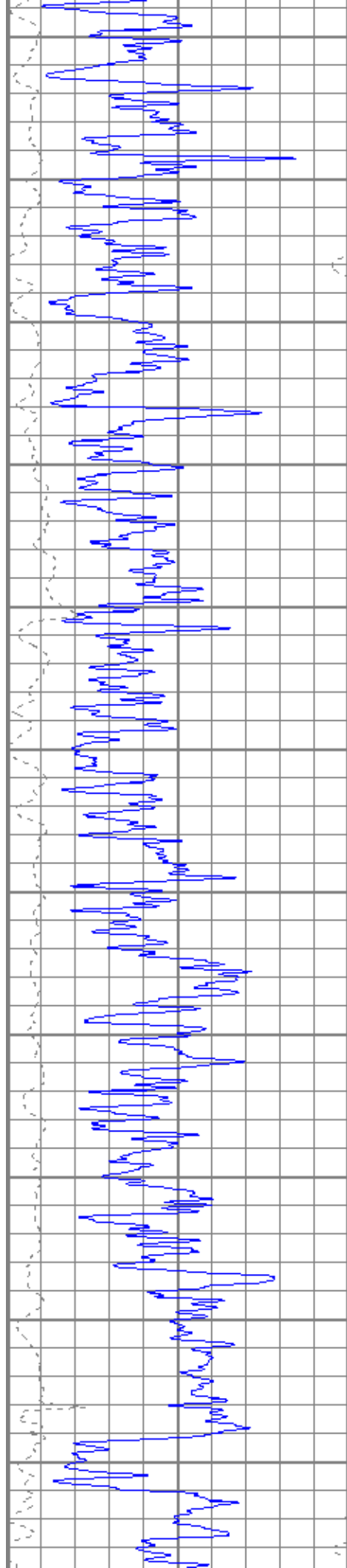
0	GR (GAPI)	150
-200	SP (mV)	0

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









1850

1900

1950

2000

2050

2100

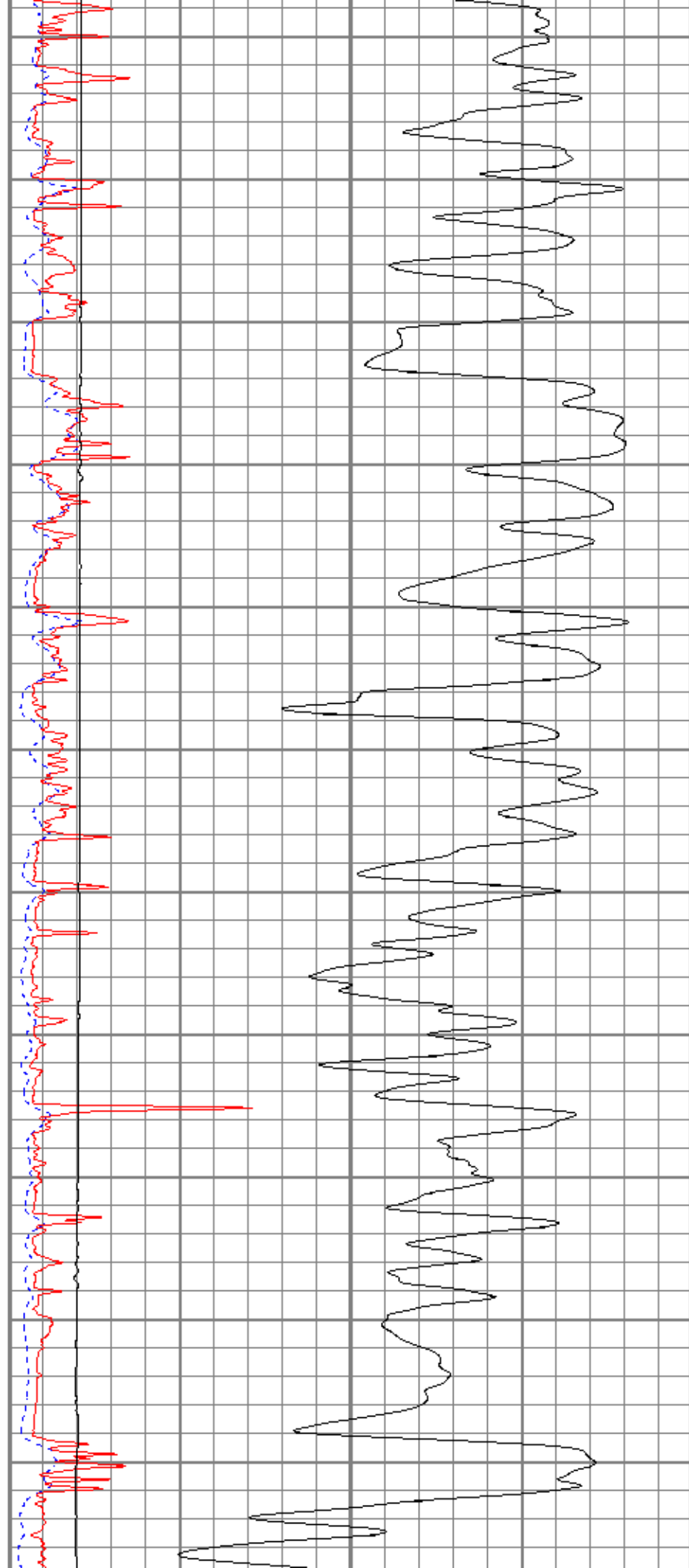
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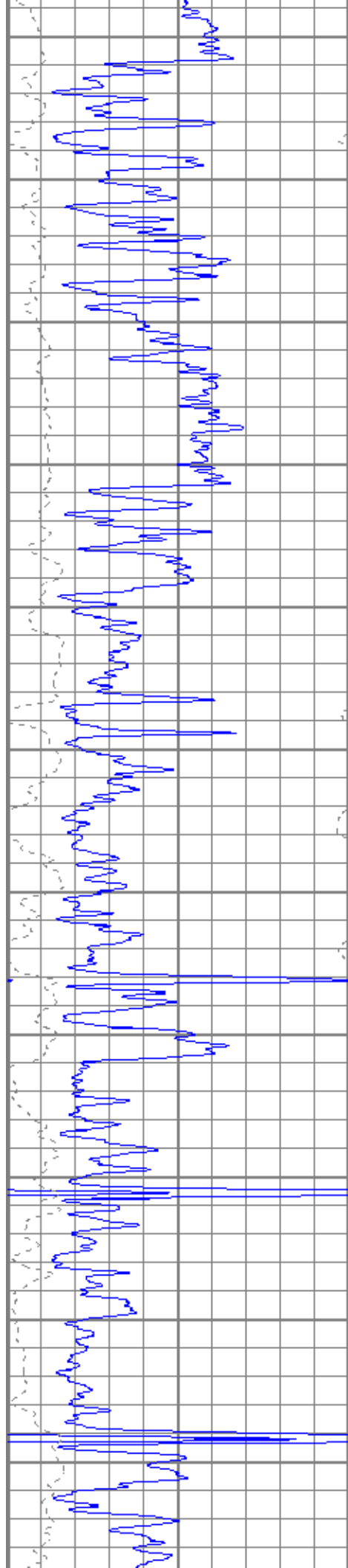
2200

2250

2300

2350





2400

2450

2500

2550

2600

2650

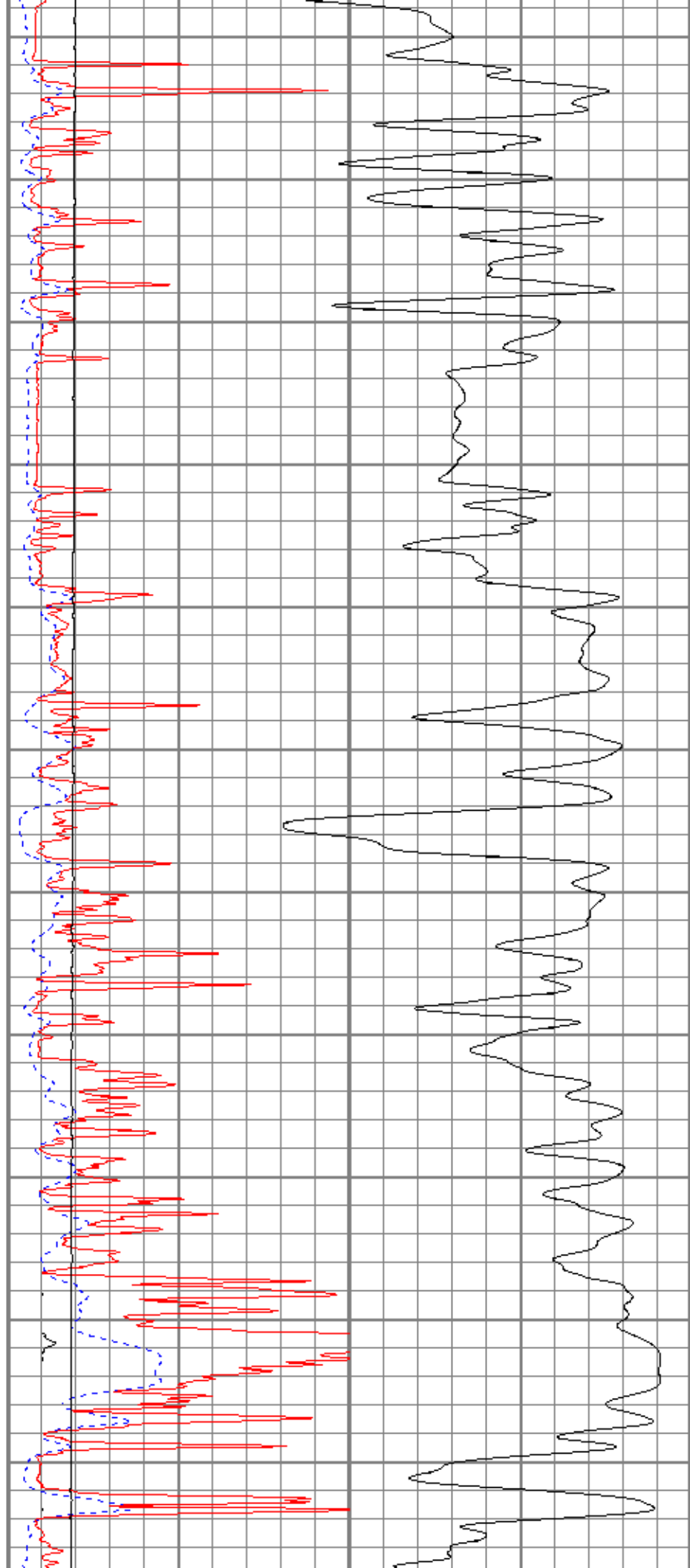
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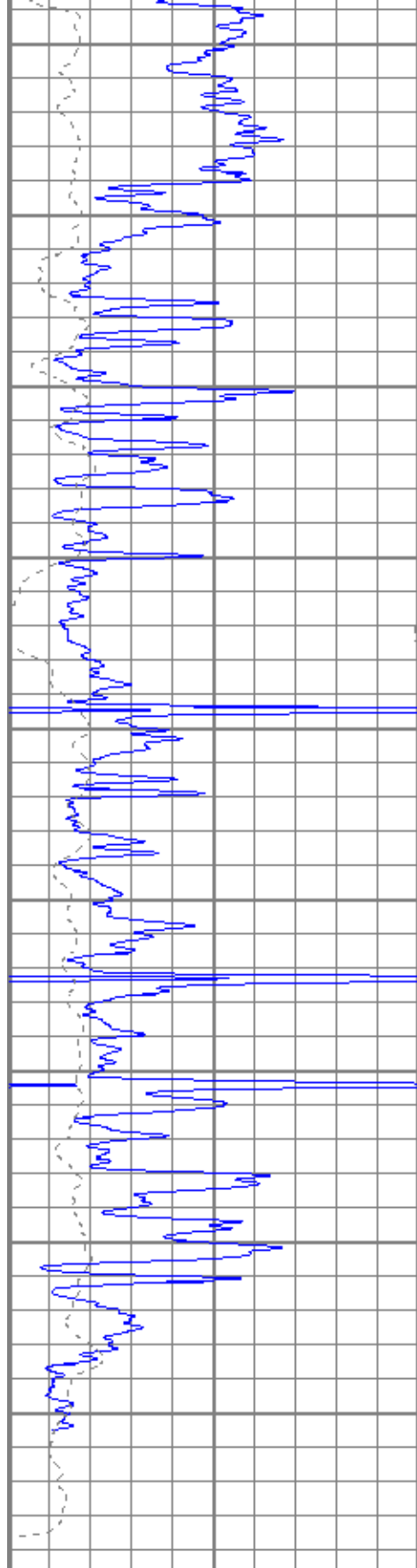
2750

2800

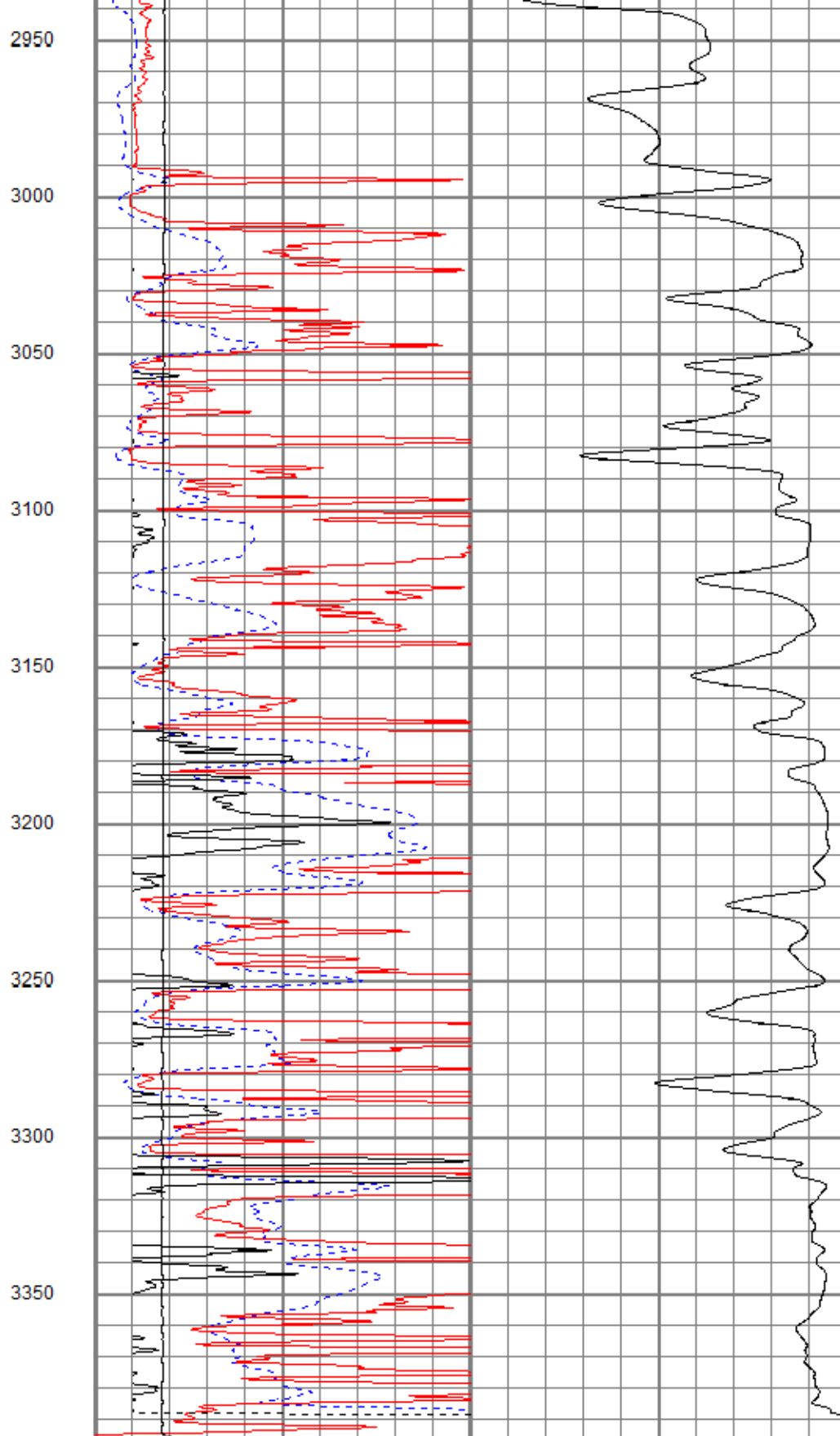
2850

2900





0	GR (GAPI)	150
-200	SP (mV)	0



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

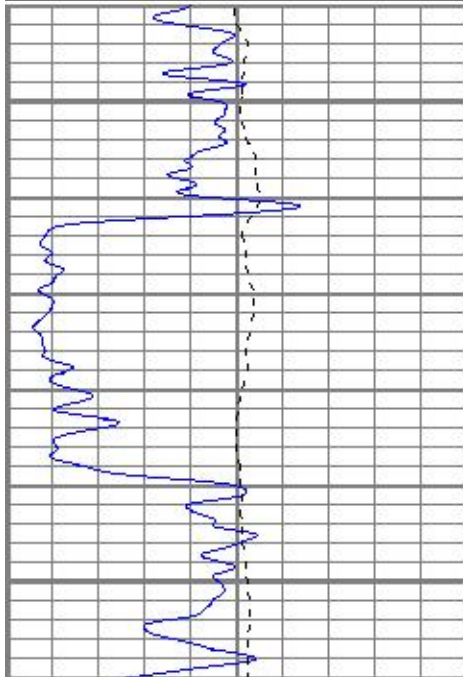


Main Pass

Database File mcewhiteb#3oh.db
Dataset Pathname pass2.1
Presentation Format kdil
Dataset Creation Mon Jan 16 16:48:34 2017
Charted by Depth in Feet scaled 1:240

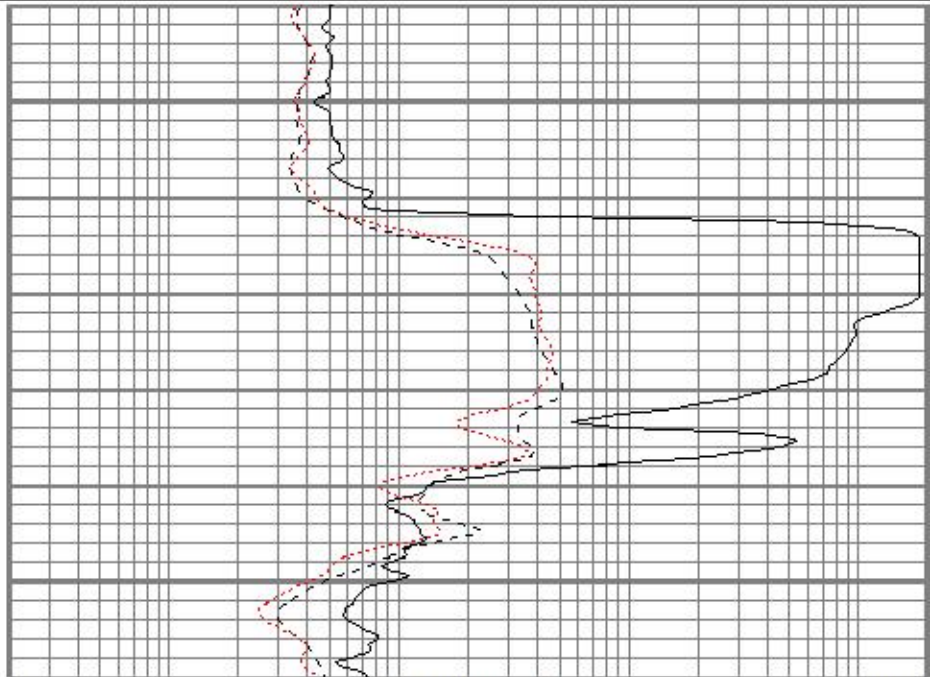
0	GR (GAPI)	150
-100	SP (mV)	100

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



650

700



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

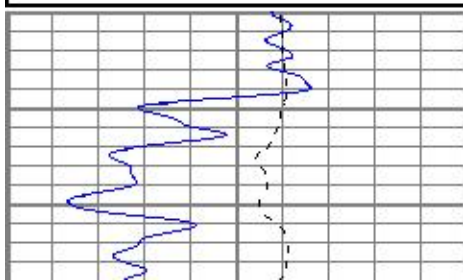


Main Pass

Database File mcewhiteb#3oh.db
Dataset Pathname pass2.1
Presentation Format kdil
Dataset Creation Mon Jan 16 16:48:34 2017
Charted by Depth in Feet scaled 1:240

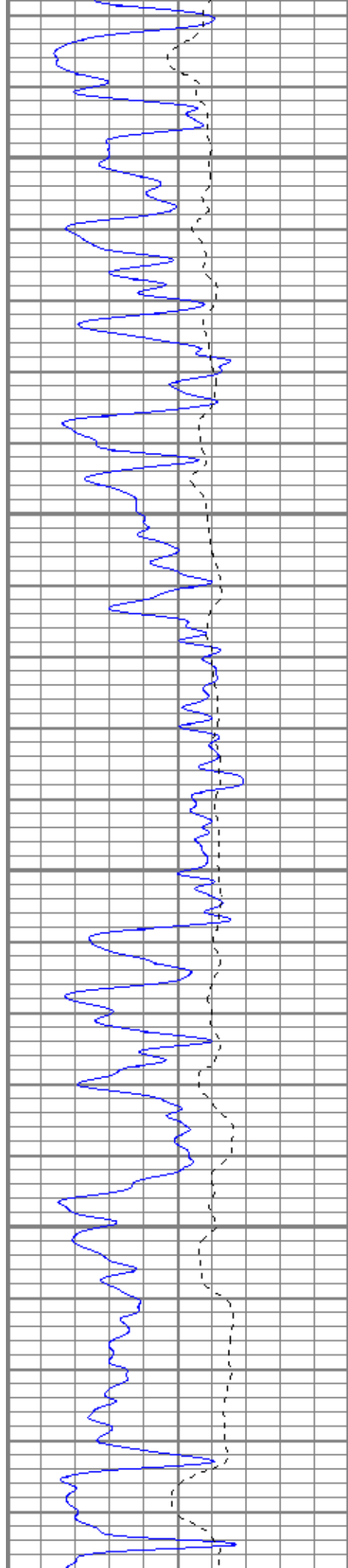
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-100	SP (mV)	100

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



2400



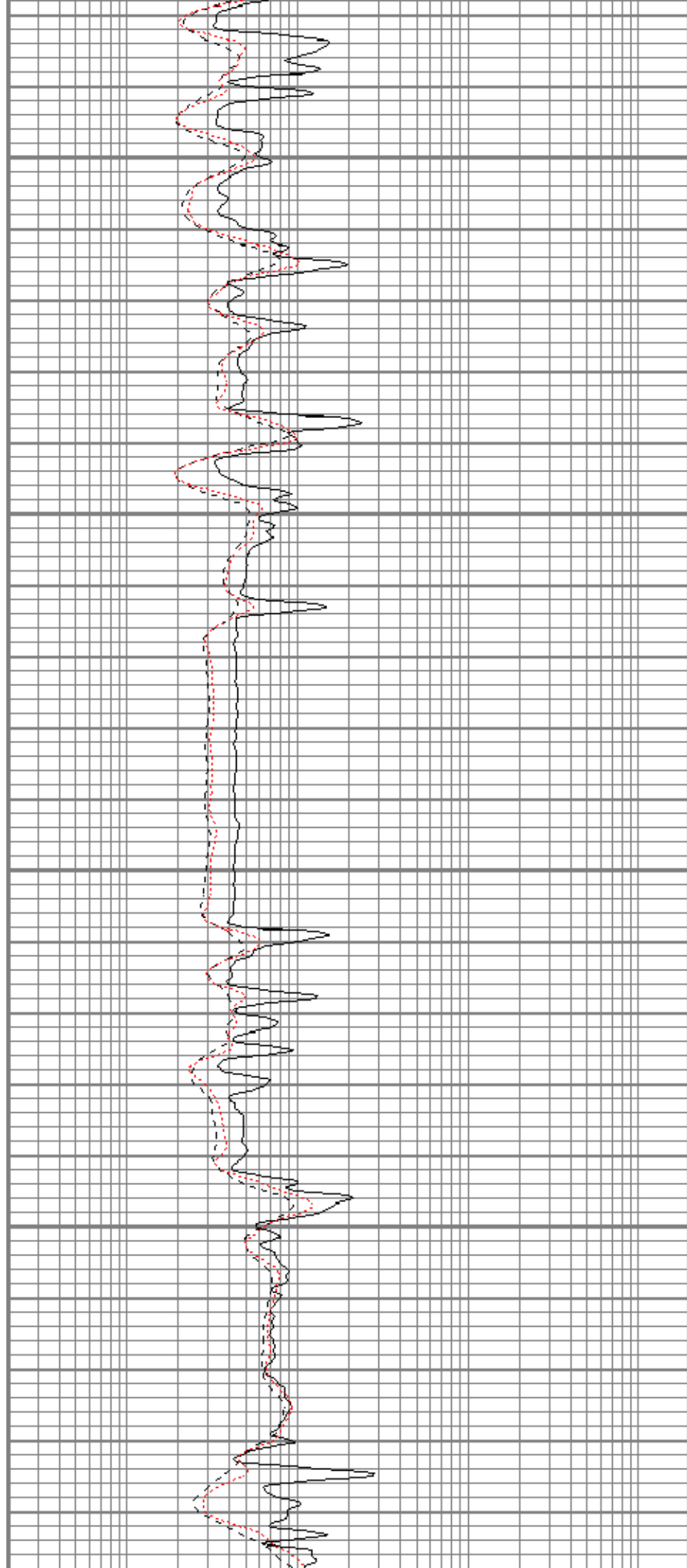


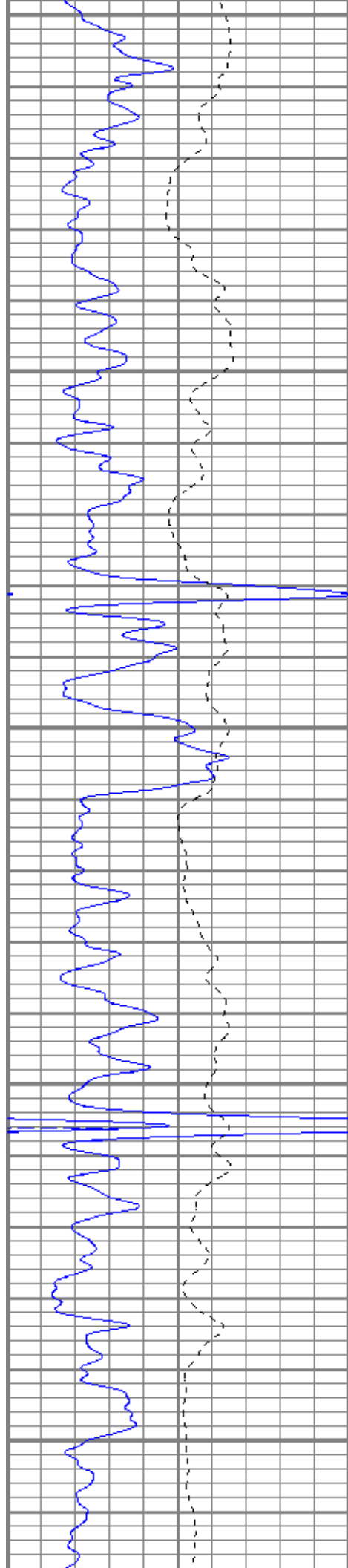
2450

2500

2550

2600





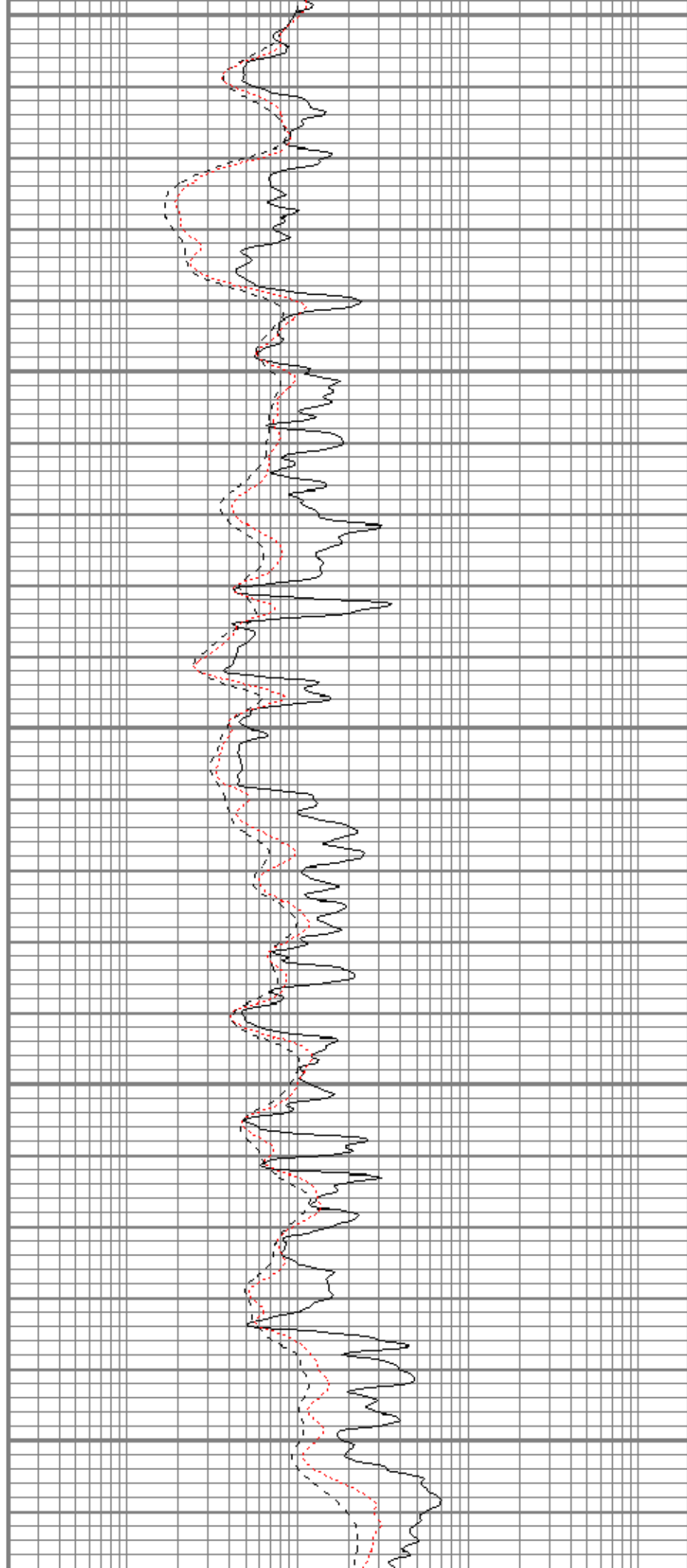
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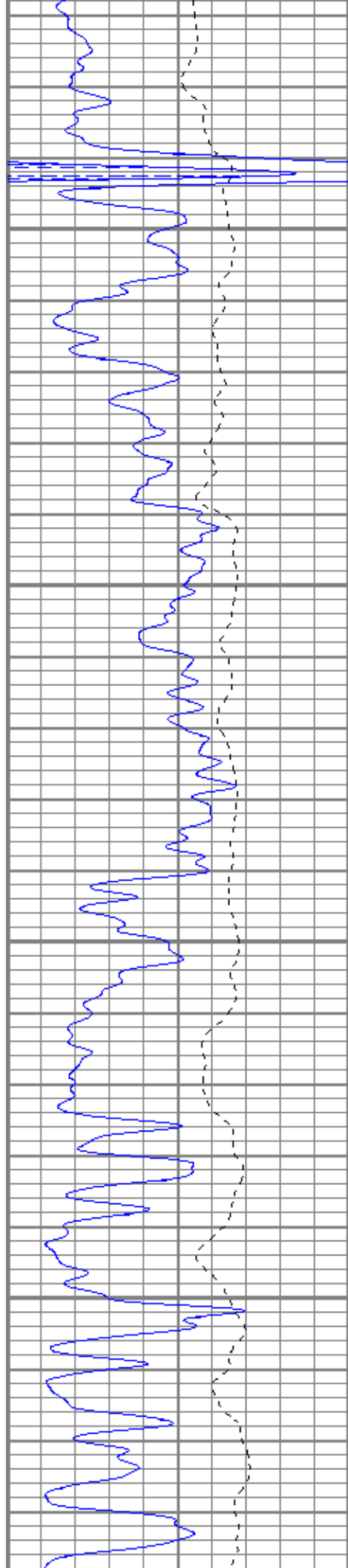
2700

2750

2800

2850



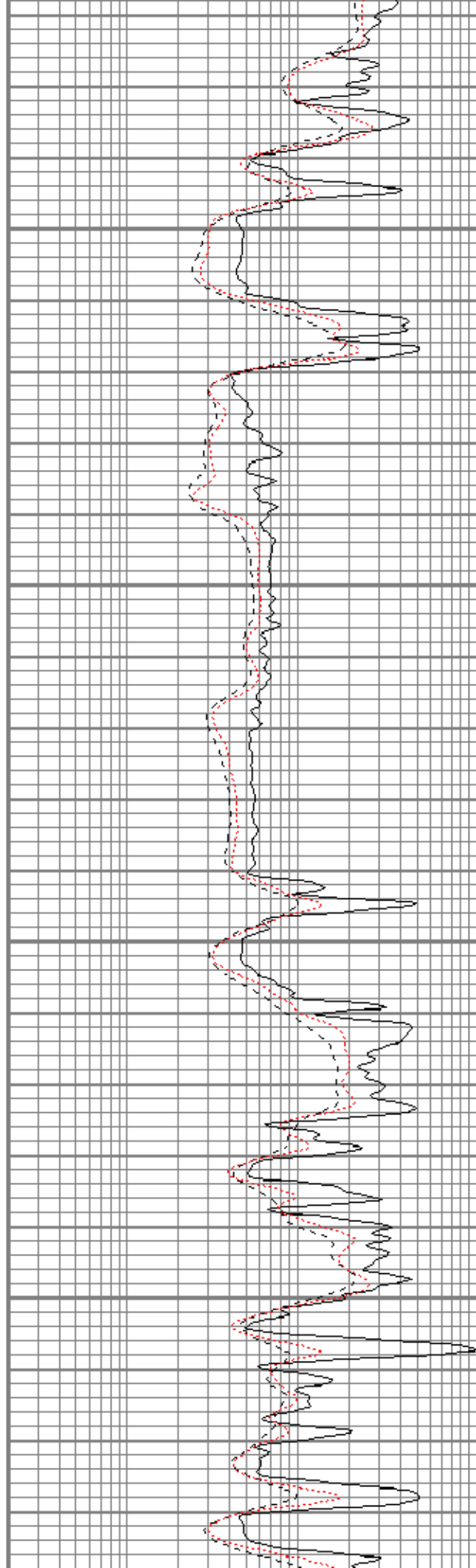


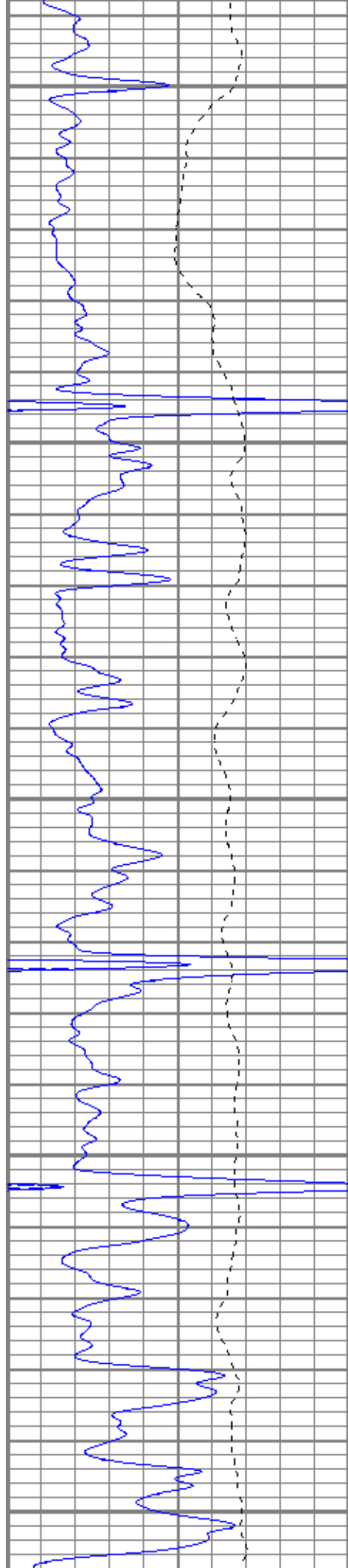
2900

2950

3000

3050





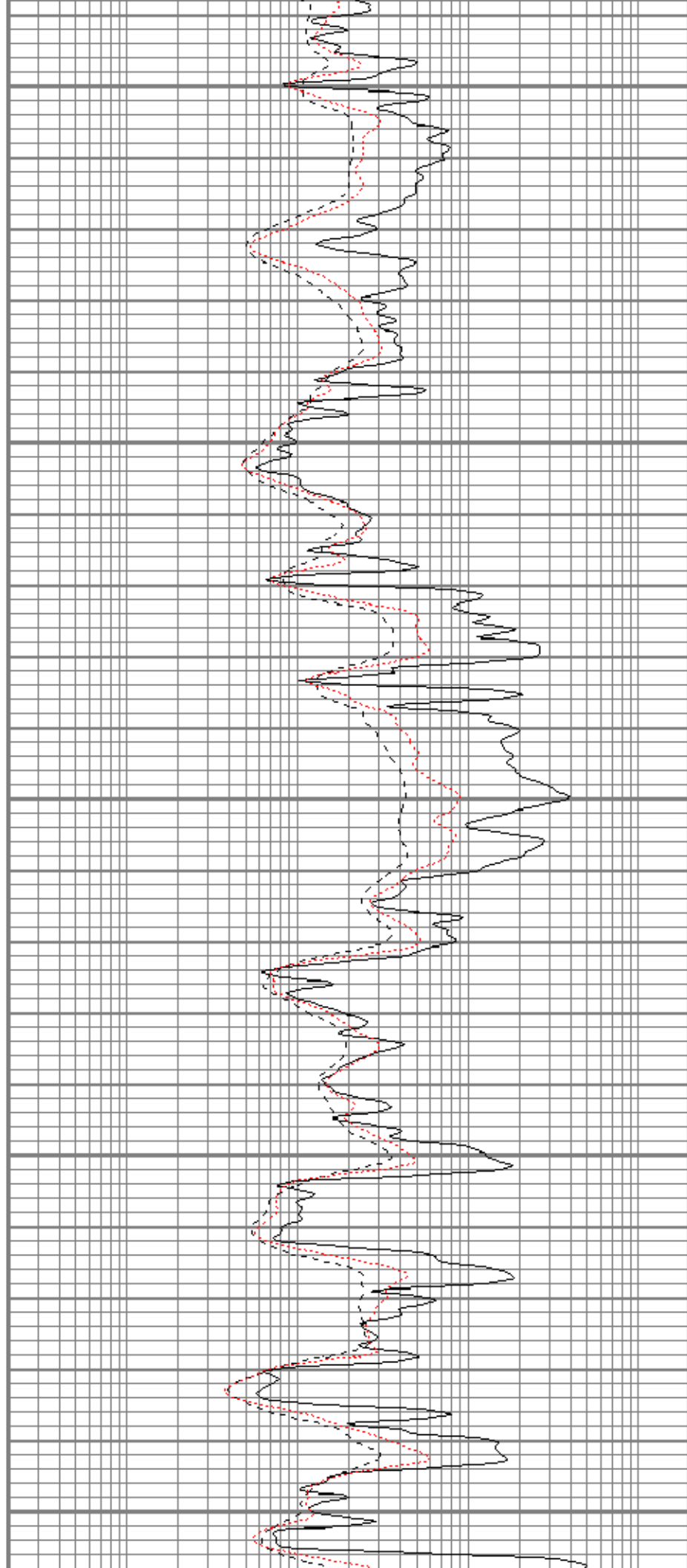
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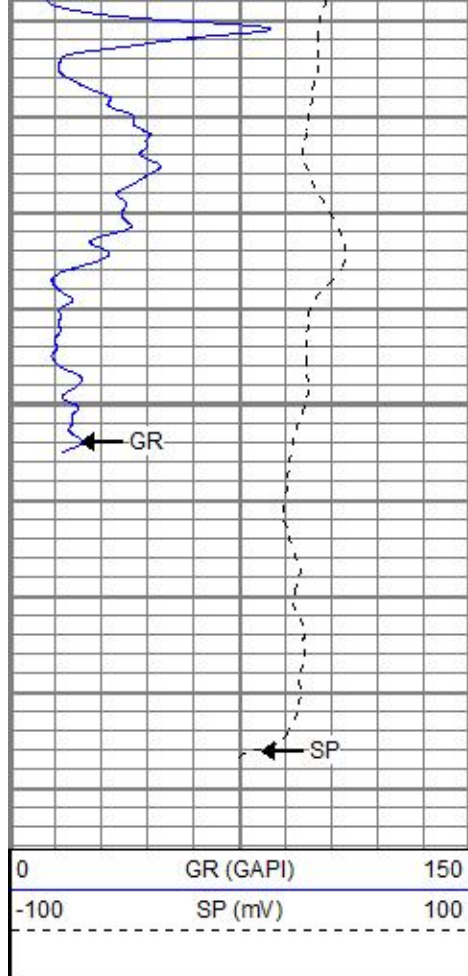
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3200

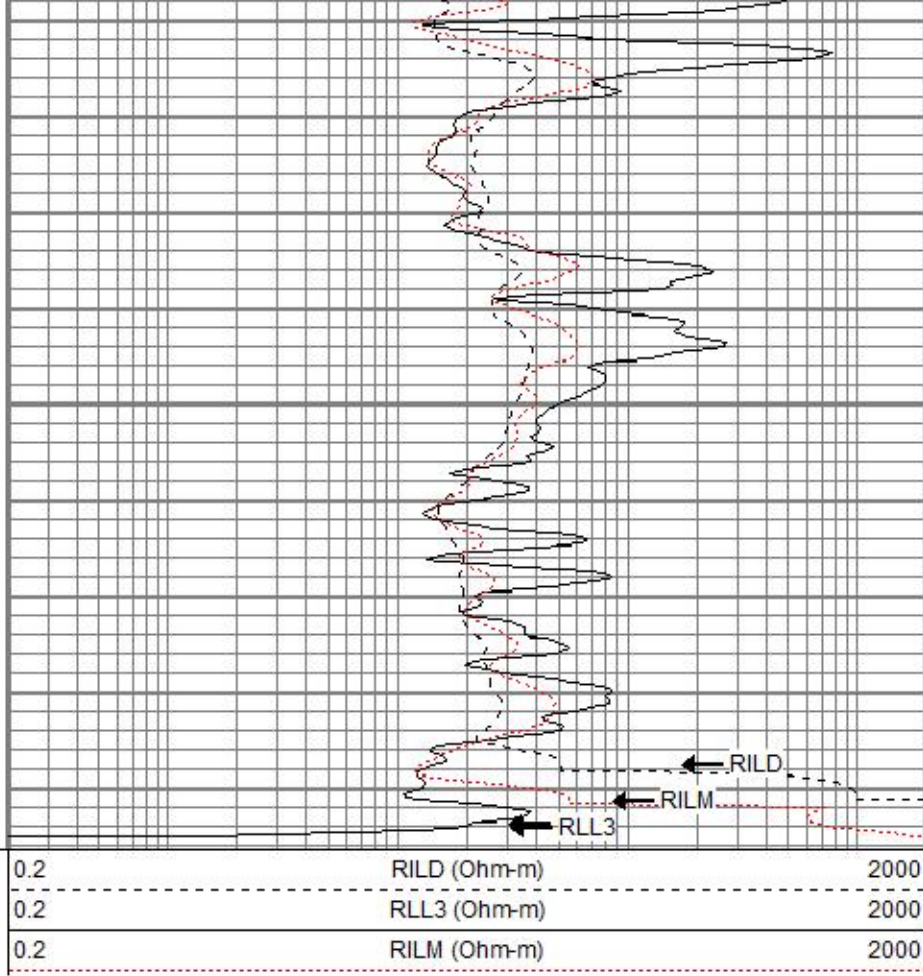
3250

3300



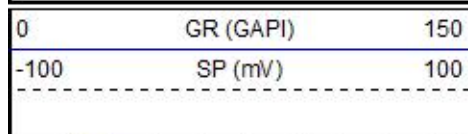


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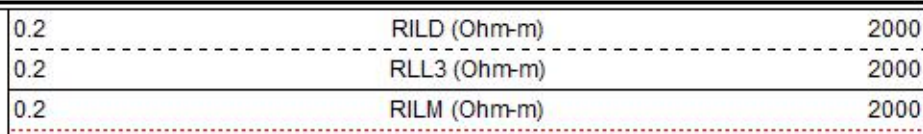


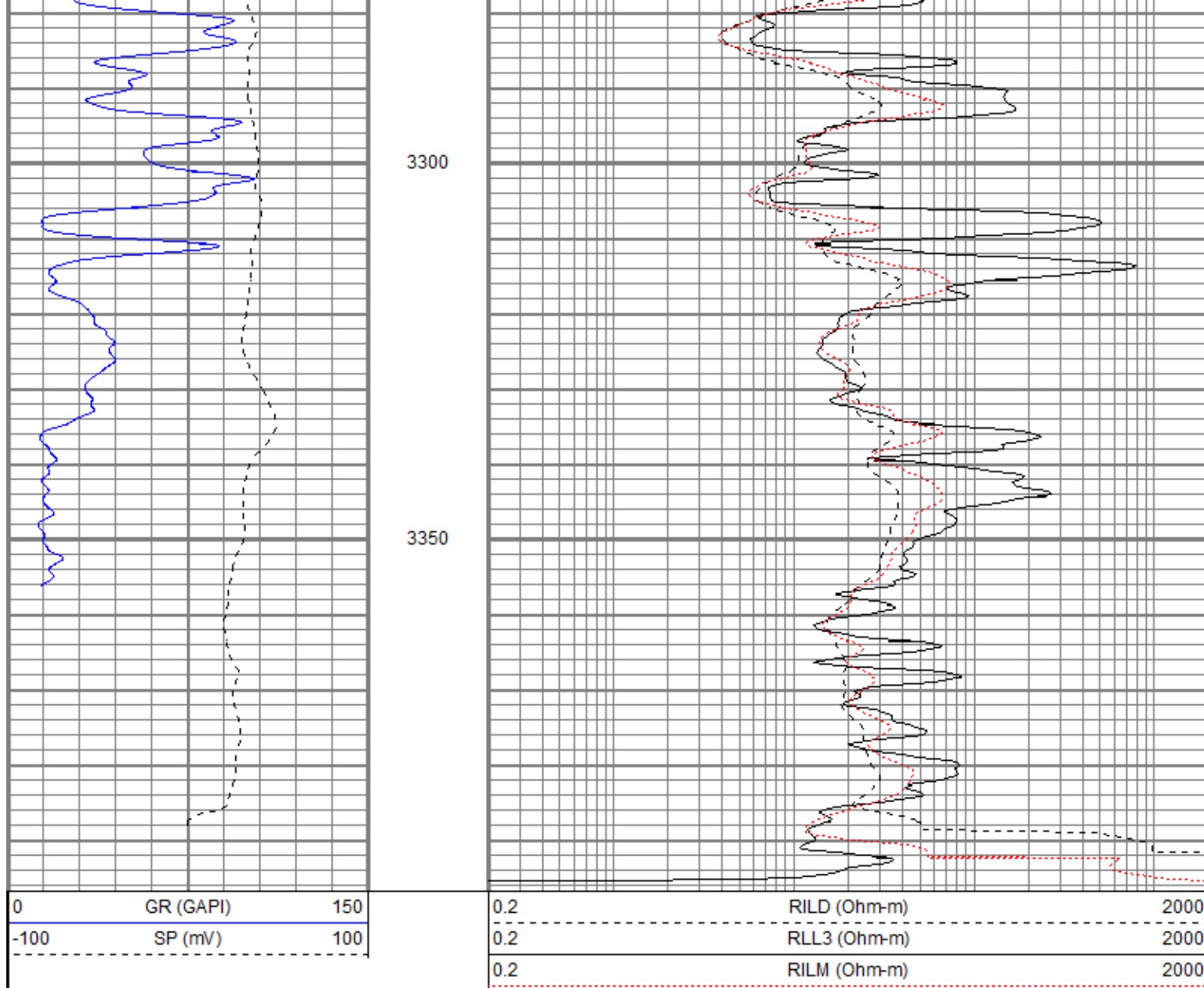
Repeat Pass

Database File mcewhiteb#3oh.db
 Dataset Pathname pass1.1
 Presentation Format kdil
 Dataset Creation Mon Jan 16 16:52:43 2017
 Charted by Depth in Feet scaled 1:240



3250





Calibration Report

Dual Induction Calibration Report

Surface Calibration

Downhole Calibration

Readings				References			Results	
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	-0.036	349.993	mmho/m	-0.114	350.108	mmho/m	1.001	-0.078
Medium	0.039	400.181	mmho/m	0.053	399.799	mmho/m	0.999	0.013
Shallow	2.503	0.015	V	500.000	2.000	Ohm-m	180.177	-2.046

After Survey Verification

Readings				Targets			Results	
Internal:	Zero	Cal		Zero	Cal		m'	b'
Deep	0.000	0.000	mmho/m	-0.036	349.993	mmho/m	1.001	-0.078
Medium	0.000	0.000	mmho/m	0.039	400.181	mmho/m	0.999	0.013
Shallow	0.000	0.000	Ohm-m	500.000	2.000	Ohm-m	1.000	0.000

Neutron Calibration Report

Serial Number: Admyr
 Tool Model: G
 Performed: Fri Dec 09 04:18:49 2016

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

Gamma Ray Calibration Report

Serial Number: 1
 Tool Model: A
 Performed: Sun Dec 11 17:01:48 2016

 Calibrator Value: 1.0 GAPI
 Background Reading: 0.0 cps
 Calibrator Reading: 1.0 cps
 Sensitivity: 0.7000 GAPI/cps

Temperature Calibration Report

Serial Number: 1
 Tool Model: A
 Performed: Sat Apr 09 21:14:20 2016

	Reference	Reading
Low Reference:	0.00 degF	0.00 degF
High Reference:	32.00 degF	32.00 degF

 Gain: 1.00
 Offset: 0.00
 Delta Spacing: 1

Inclinometer Calibration Report

Performed: Fri Dec 09 04:18:36 2016

	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					

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
PSTAT	39.60		CHD-STD	0.50	1.69	1.00
GR	38.32		ADT1PULSE-A (1) Pulsed Interface Tool #1	0.83	3.50	10.00
TEMP	35.35		ADT1ADC-A (1) Analog Interface #1	0.83	3.50	10.00
ASTAT	35.06		ADT1SENSORS-A (1)	4.54	3.50	10.00
GRD	34.81		NEU-G (Admyr) Gearhart Epithermal	5.65	3.50	85.00
ACCY	34.65					
ACCX	34.65					
SSTAT	34.65					
NEU	33.46					
LStat	22.54					
LS8	21.88		ADT1LITH-A (1) Admyr Litho Density Tool	9.29	3.50	240.00
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					
SS6	21.67		DIL-ADM (1989) Dual Induction	19.71	4.00	300.00
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	Dataset: mcewhiteb#3oh.db: field/well/run1/pass1.1 Total length: 39.69 ft Total weight: 656.00 lb O.D.: 4.00 in				
RLL3	1.70					
TR_Mon	0.00					