



DUAL INDUCTION LOG

Company Palomino Petroleum		Company Palomino Petroleum	
Well	Laird #1	Well	Laird #1
Field	Revilo	Field	Revilo
County	Trego	County	Trego
State	Kansas	State	Kansas
Location:		API #: 15 195 23008	
SEC 18 TWP 15S RGE 25W		1672' FNL & 465' FWL	
Permanent Datum	Ground Level	Elevation	2378'
Log Measured From	KB 11' AGL		
Drilling Measured From	KB		
Other Services		CDNL ML	
Elevation		K.B. 2389'	
		D.F. 2388'	
		G.L. 2378'	
Date	9-13-16		
Run Number	One		
Depth Driller	4430'		
Depth Logger	4430'		
Bottom Logged Interval	4428'		
Top Log Interval	200'		
Casing Driller	8 5/8" @ 222'		
Casing Logger	222'		
Bit Size	7 7/8"		
Type Fluid in Hole	Chemical		
Density / Viscosity	9.2/60		
pH / Fluid Loss	11.5/6.8		
Source of Sample	Pit		
Rm @ Meas. Temp	2.6@60degf		
Rmf @ Meas. Temp	1.95@60degf		
Rmc @ Meas. Temp	3.12@60degf		
Source of Rmf / Rmc	Calculated		
Rm @ BHT	1.36@114degf		
Time Circulation Stopped	10:45 p.m.		
Time Logger on Bottom	1:00 a.m.		
Maximum Recorded Temperature	114degf		
Equipment Number	T127		
Location	Hays, KS		
Recorded By	Gus Pfannenstiel		
Witnessed By	Mr. Andrew Stenzel		

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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

East of Utica to Rd. E, North 8 miles East into.

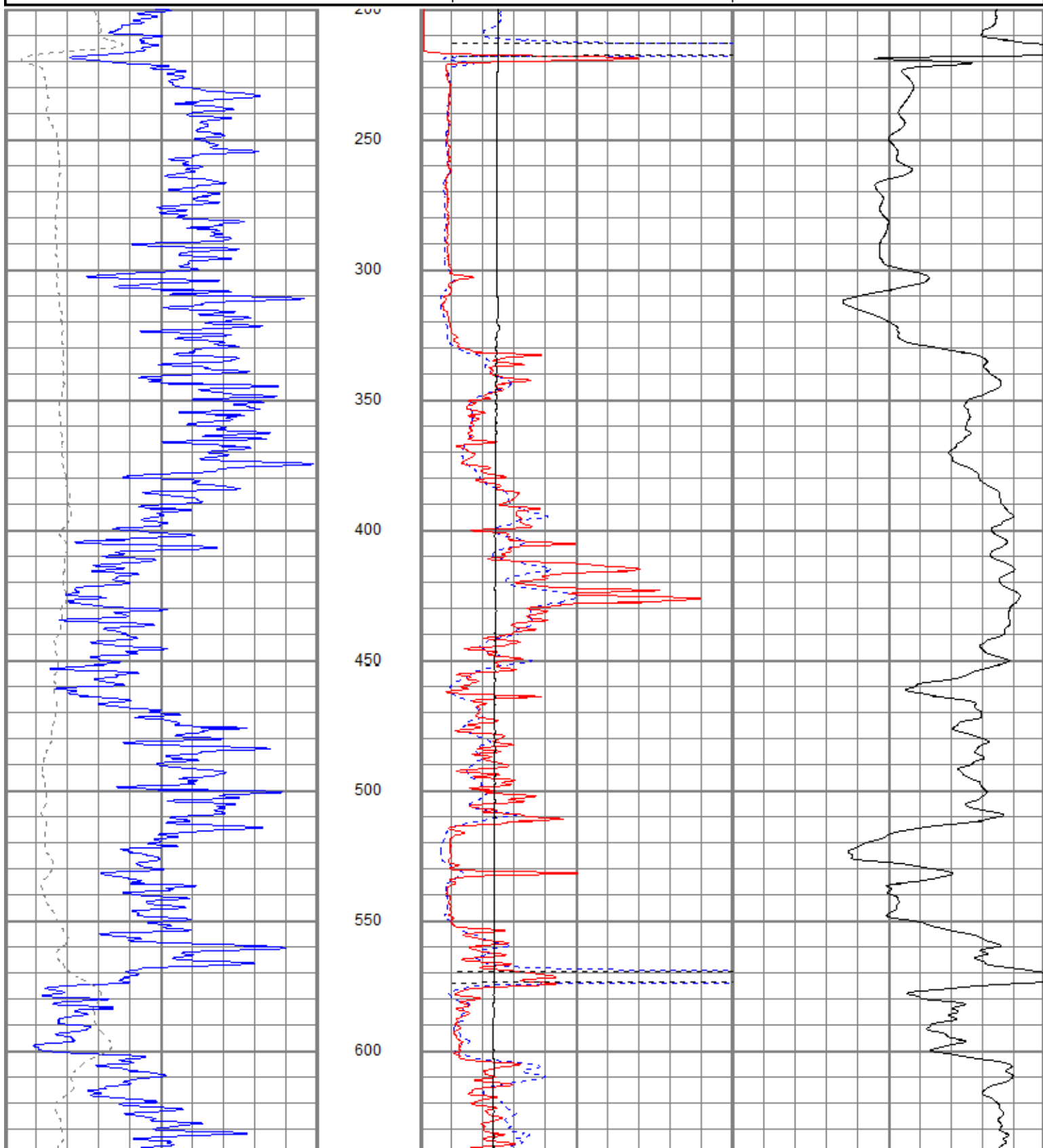


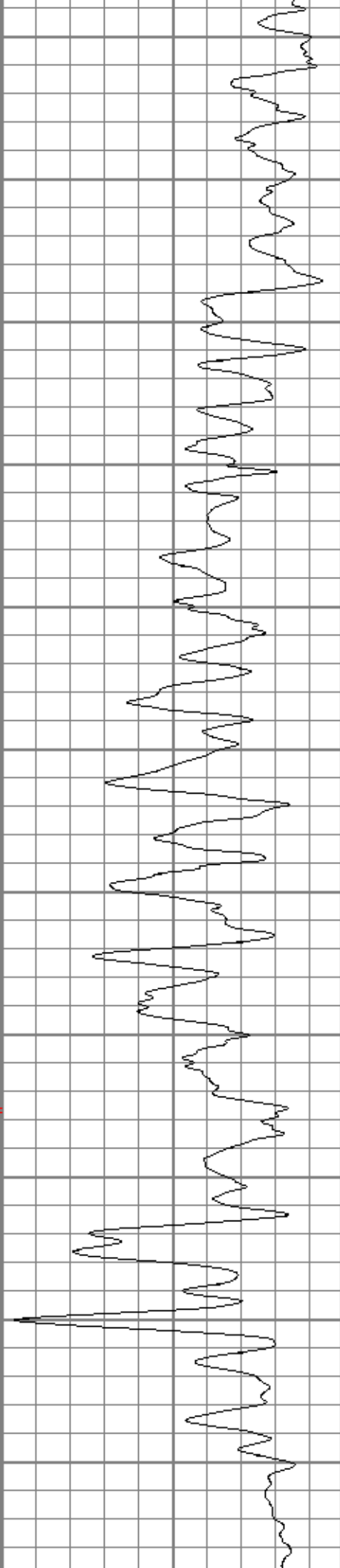
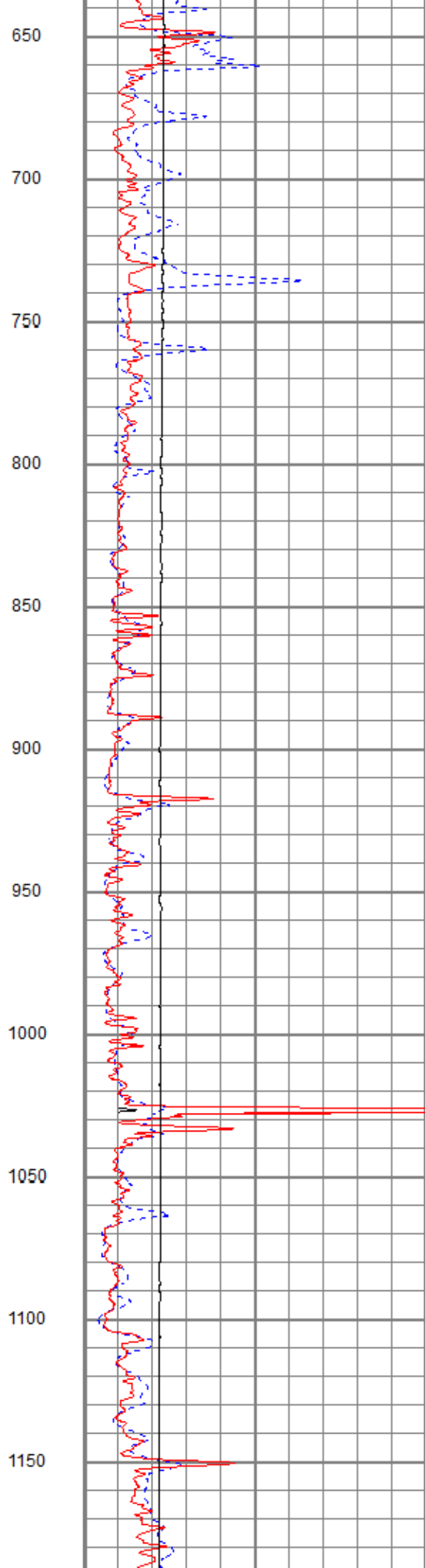
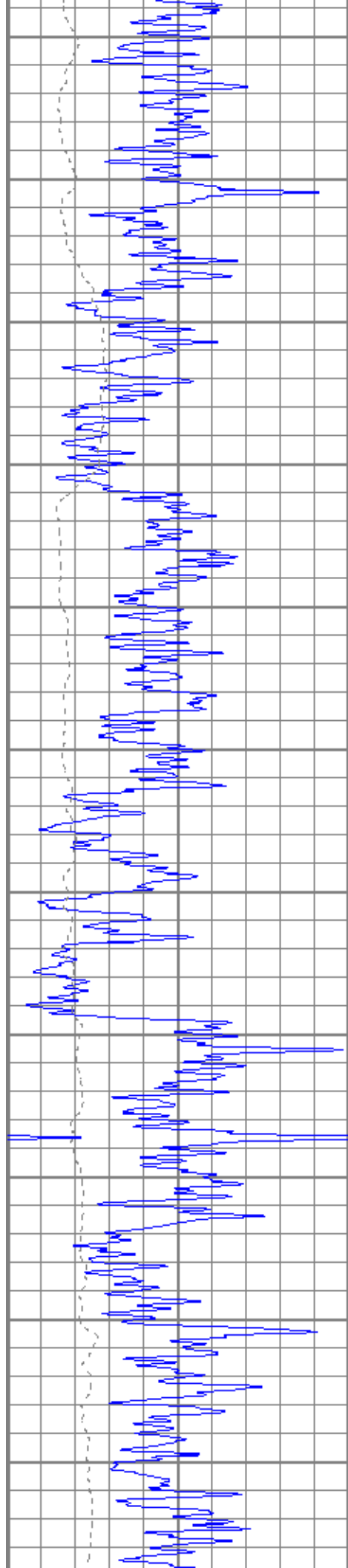
Main Pass

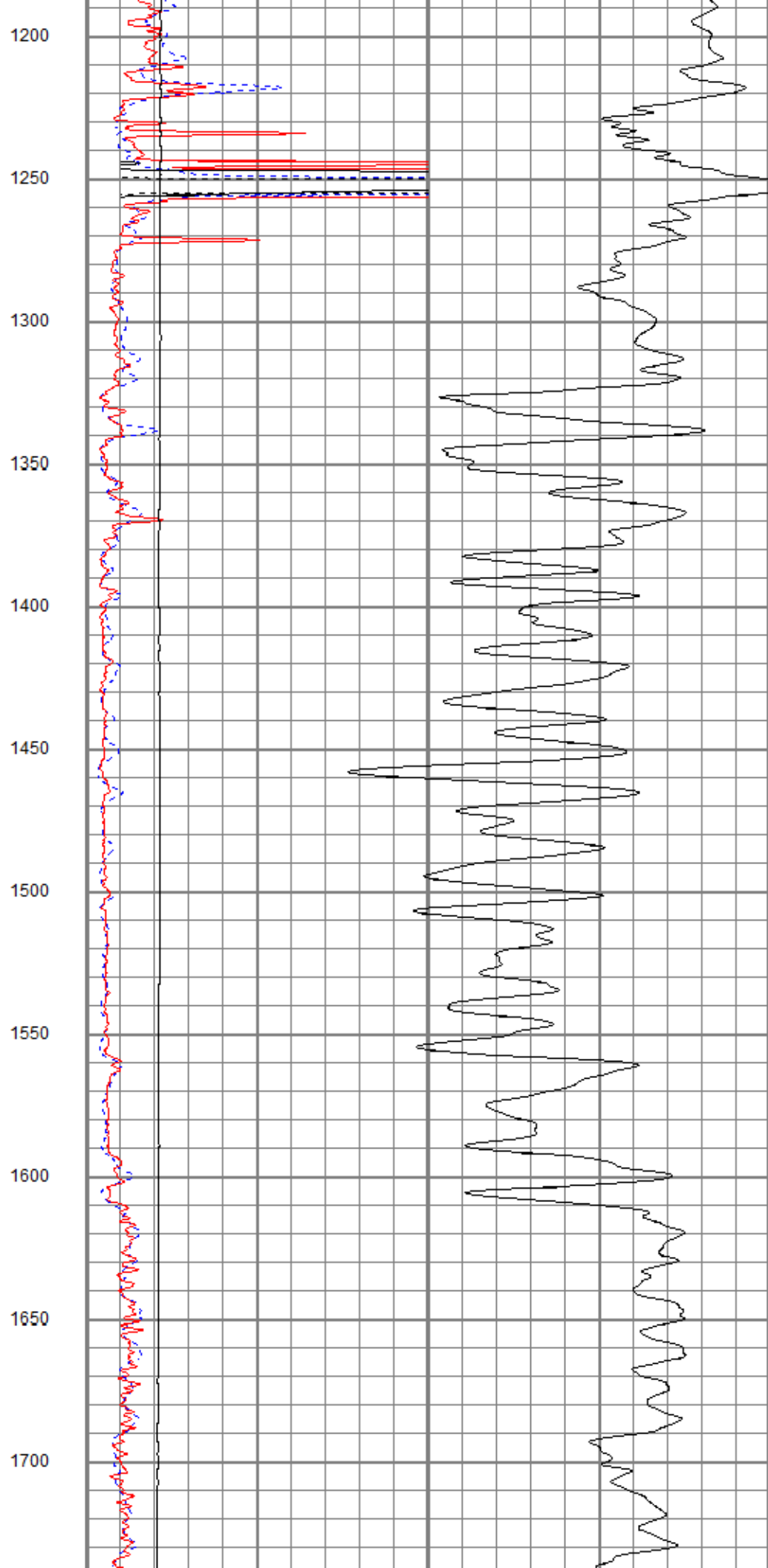
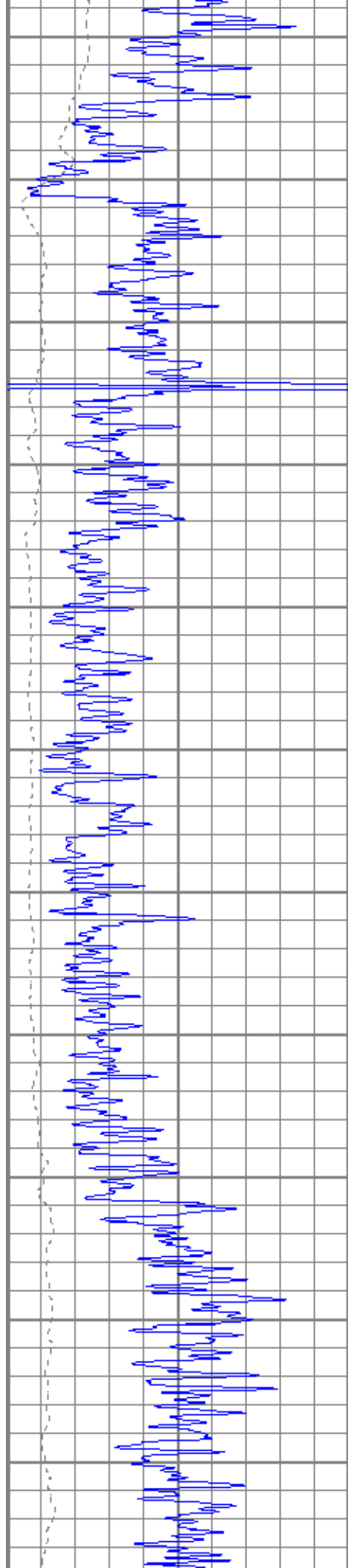
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 Presentation Format kdillin2
 Dataset Creation Tue Sep 13 01:05:05 2016
 Charted by Depth in Feet scaled 1:600

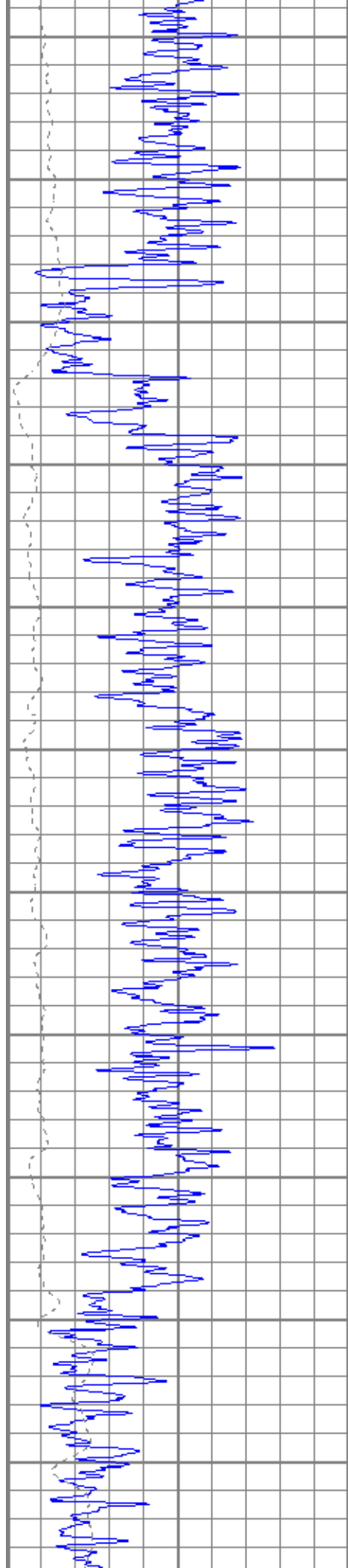
0	GR (GAPI)	150
-200	SP (mV)	0

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









1750

1800

1850

1900

1950

2000

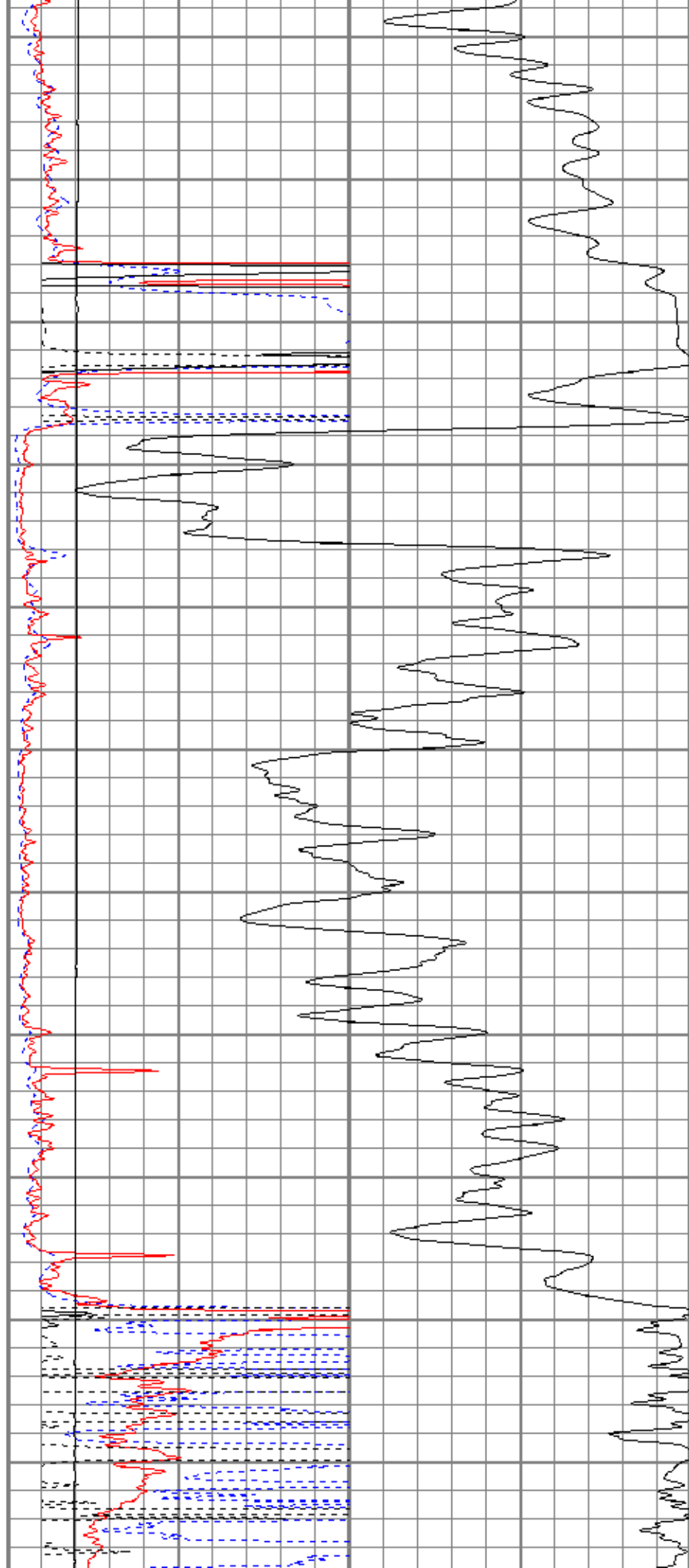
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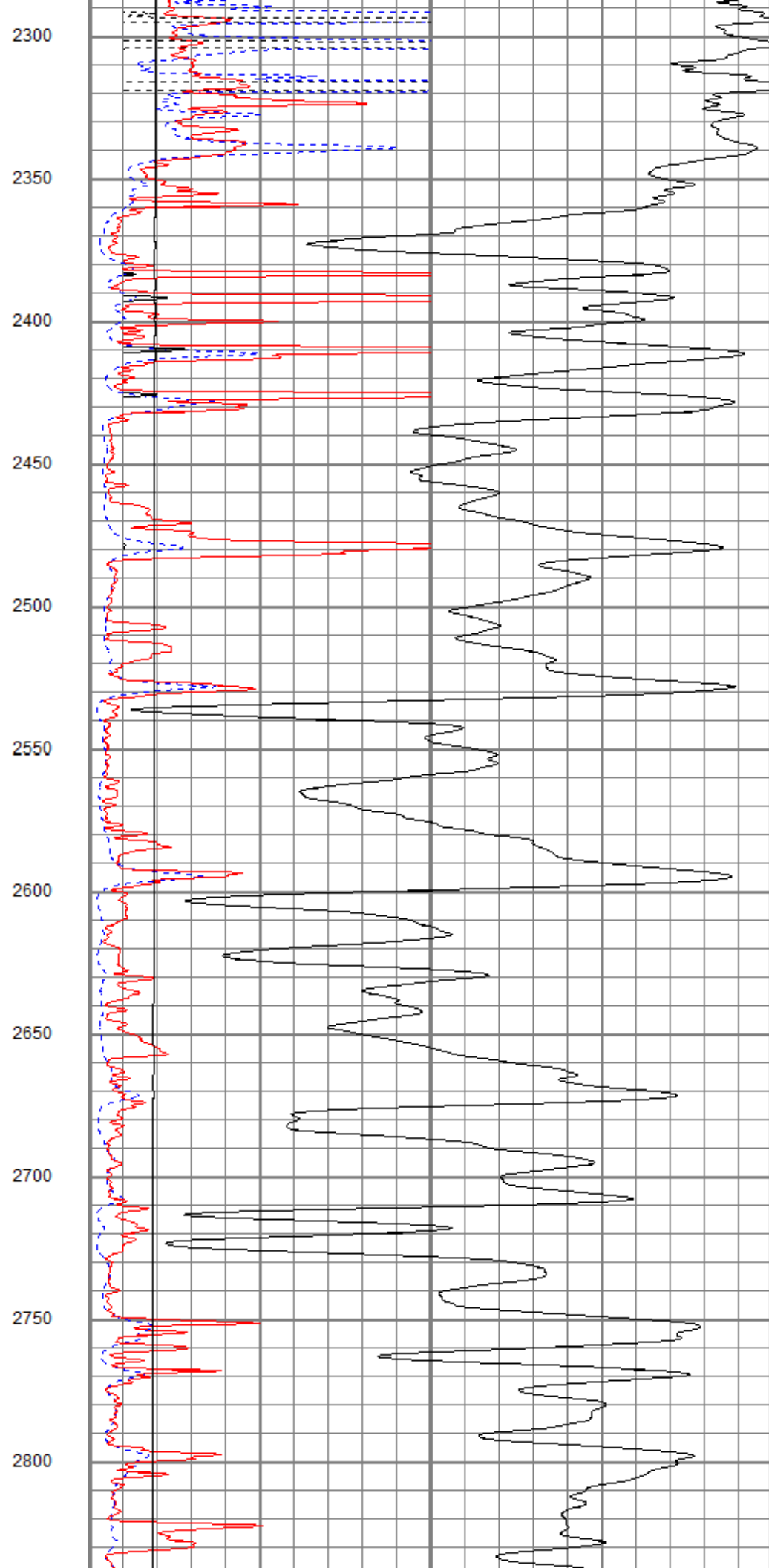
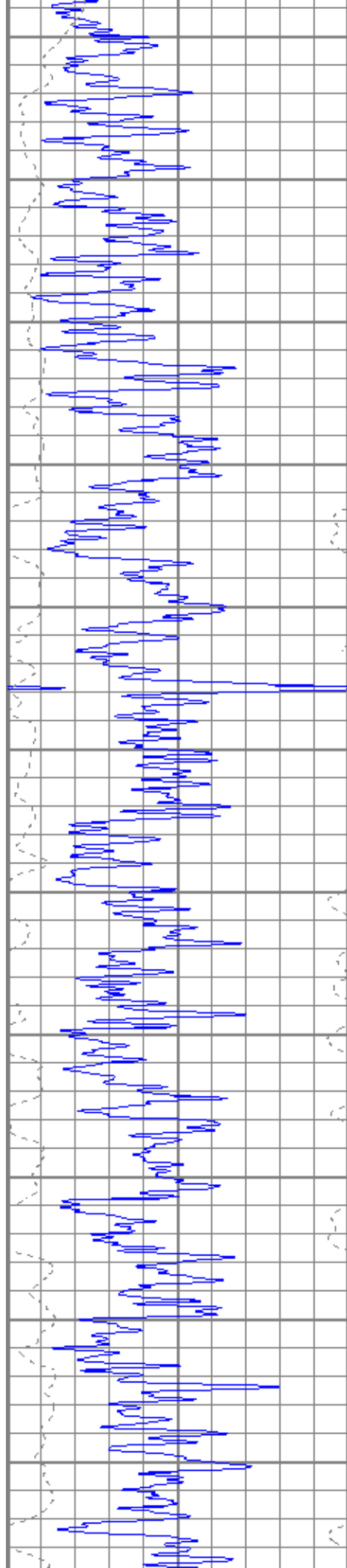
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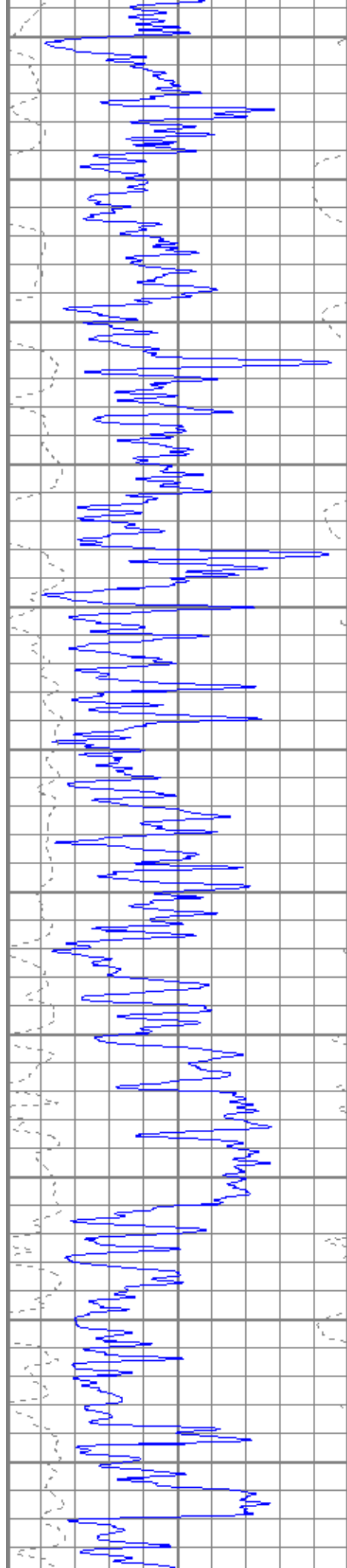
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2200

2250







2850

2900

2950

3000

3050

3100

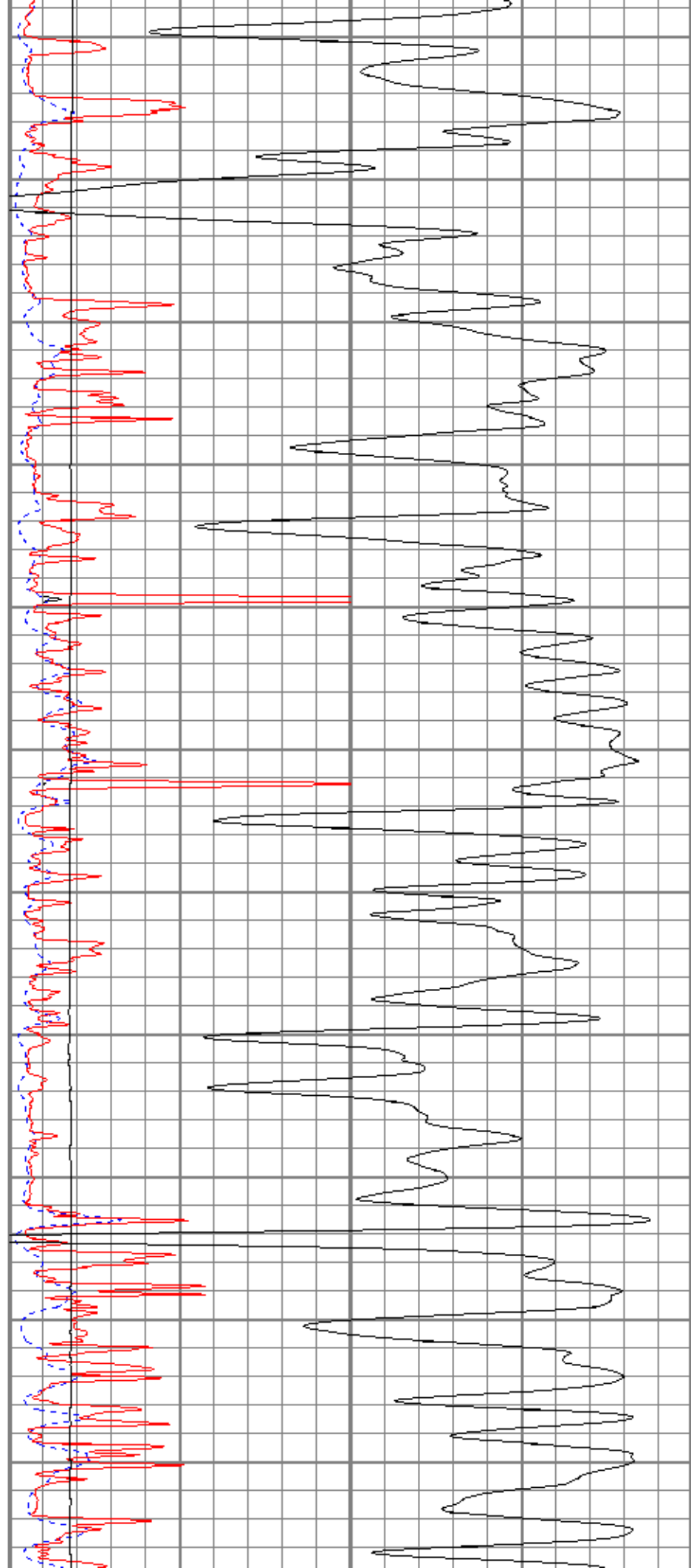
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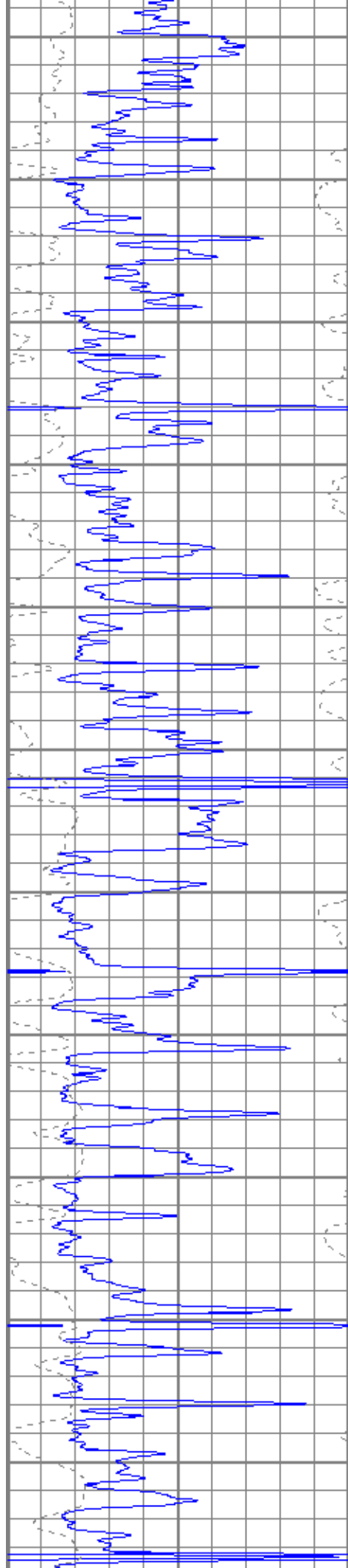
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3250

3300

3350





3400

3450

3500

3550

3600

3650

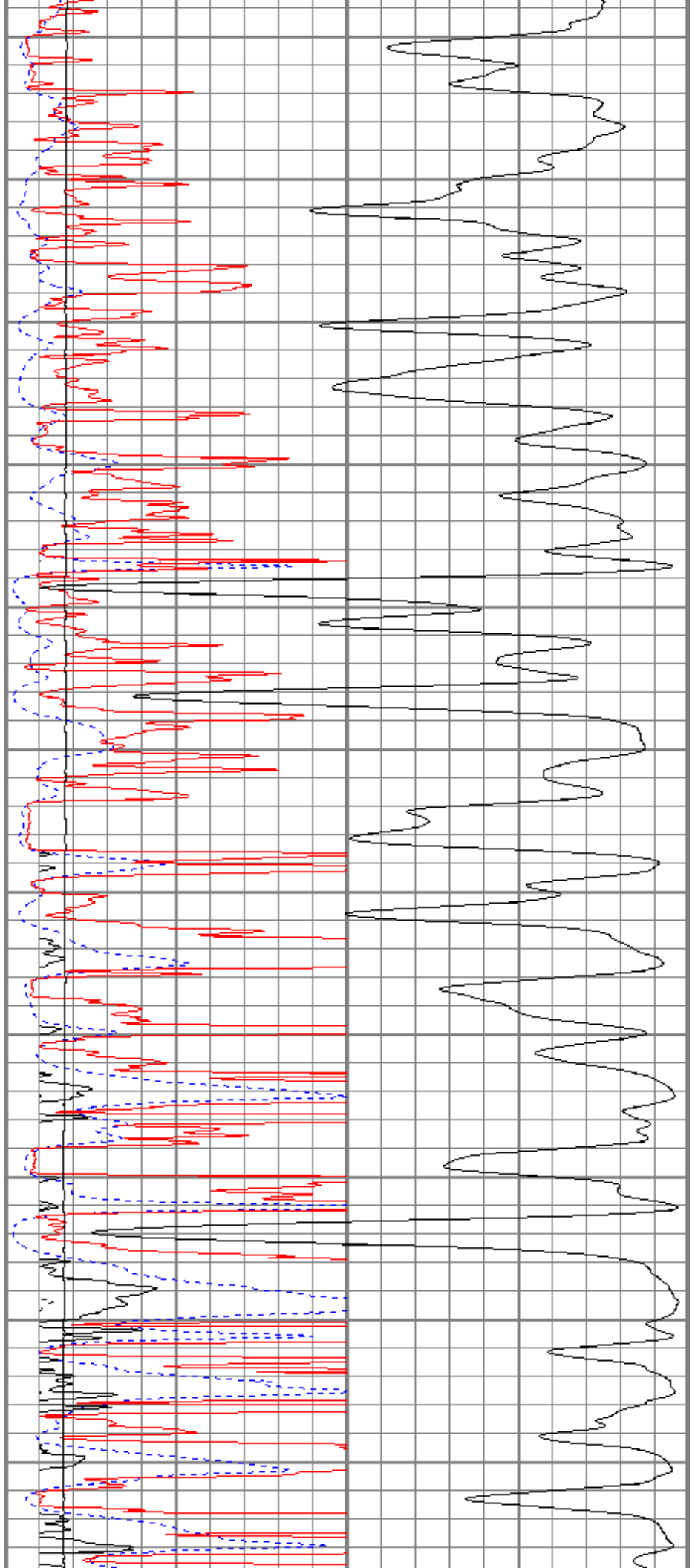
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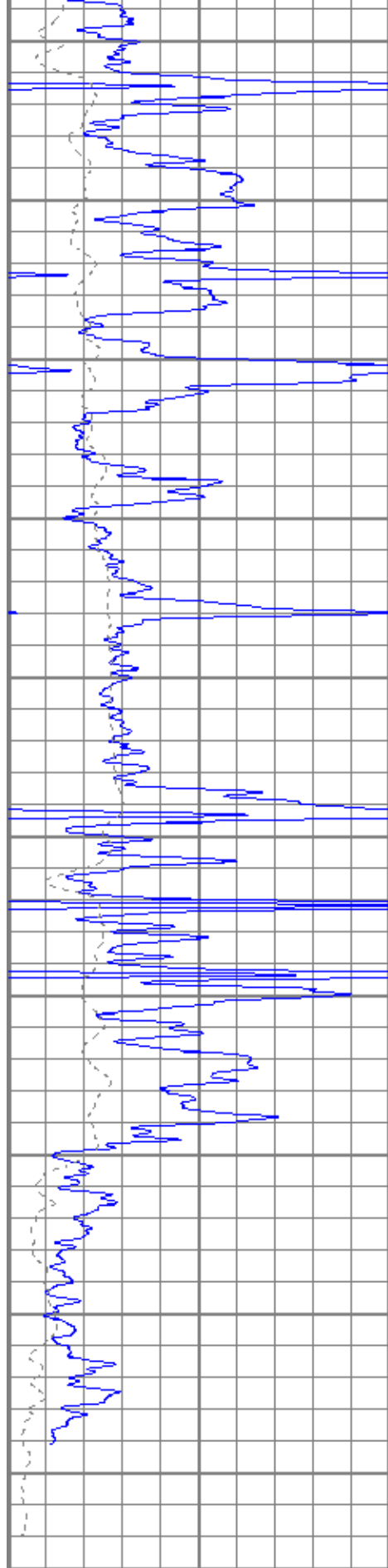
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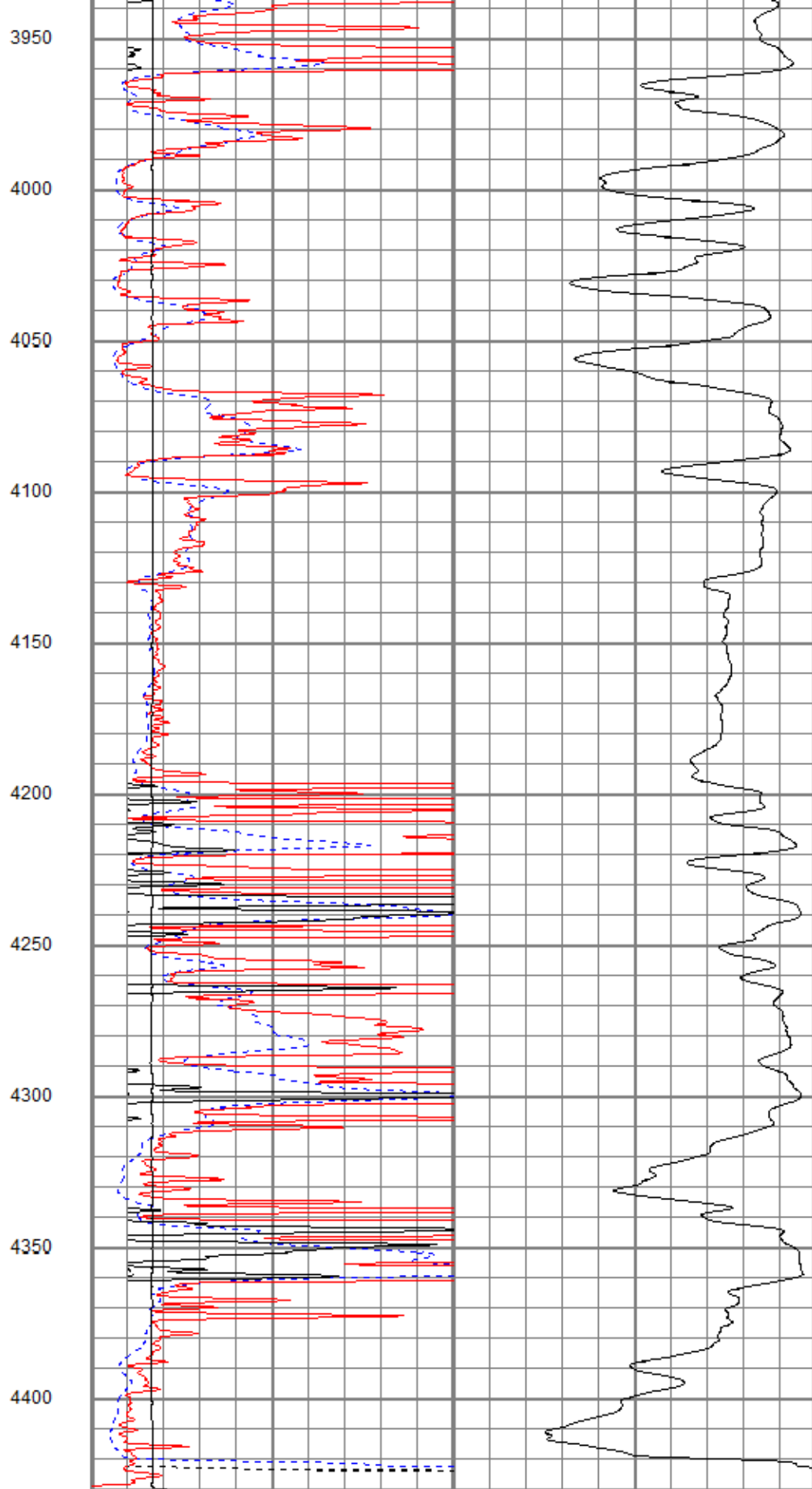
3850

3900





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

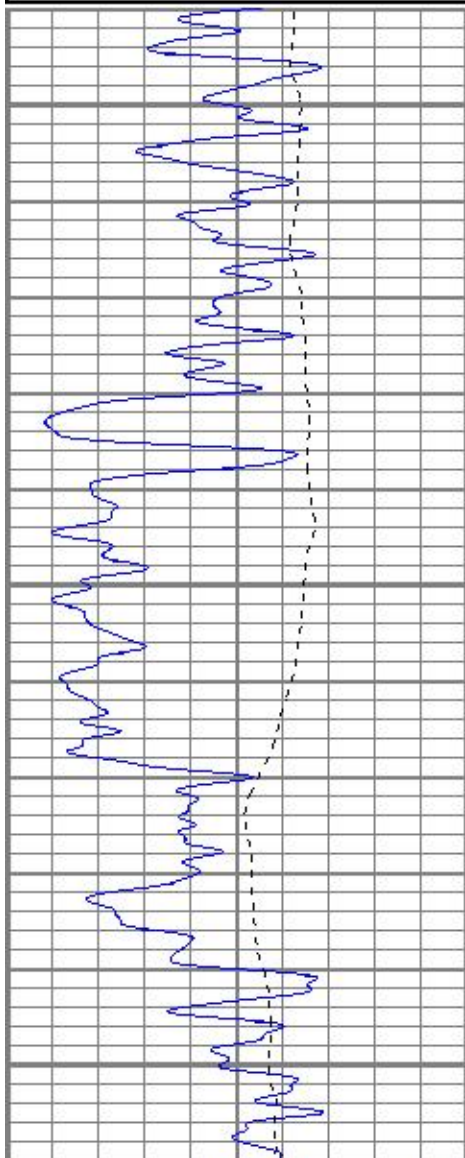


Main Pass

Database File pplaird#1oh.db
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 Presentation Format kdil
 Dataset Creation Tue Sep 13 01:05:05 2016
 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

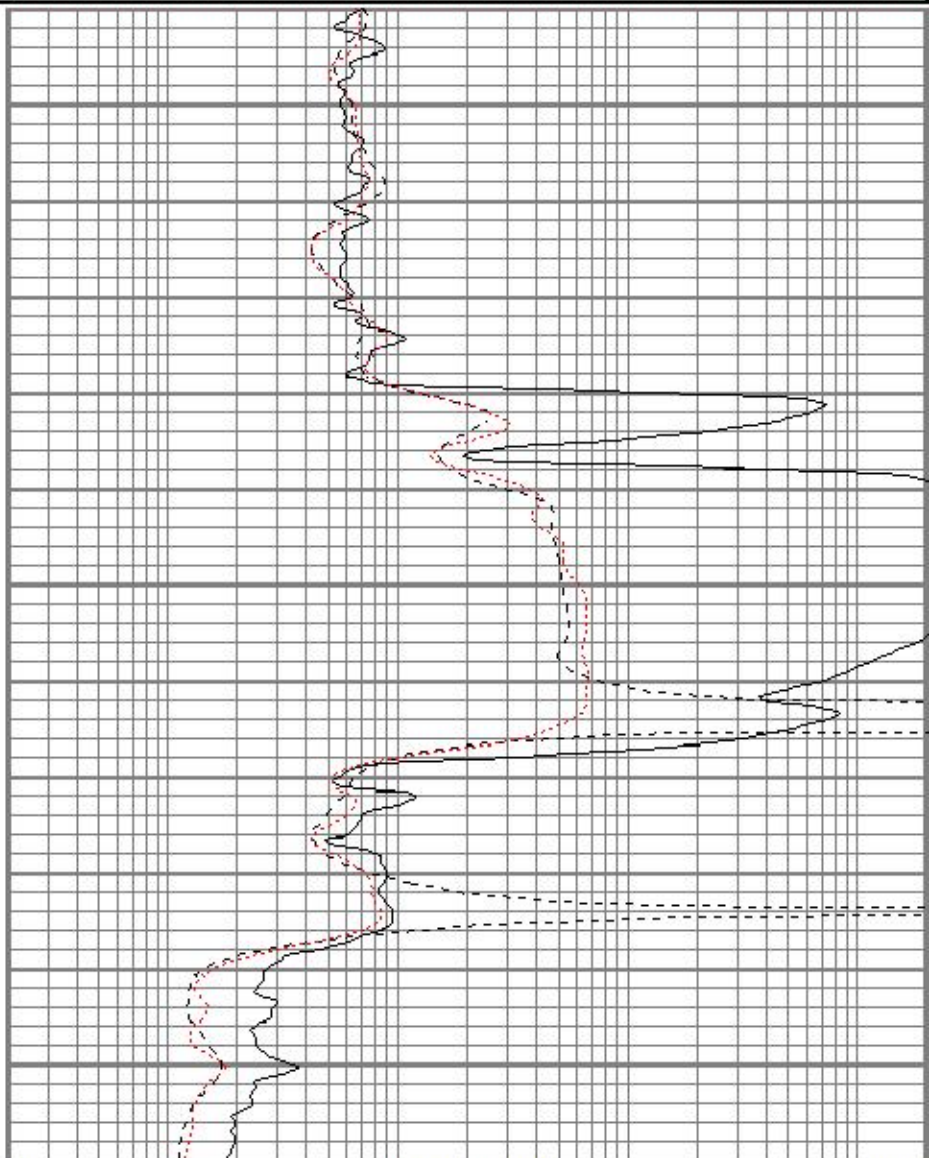


1800

1850

1900

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

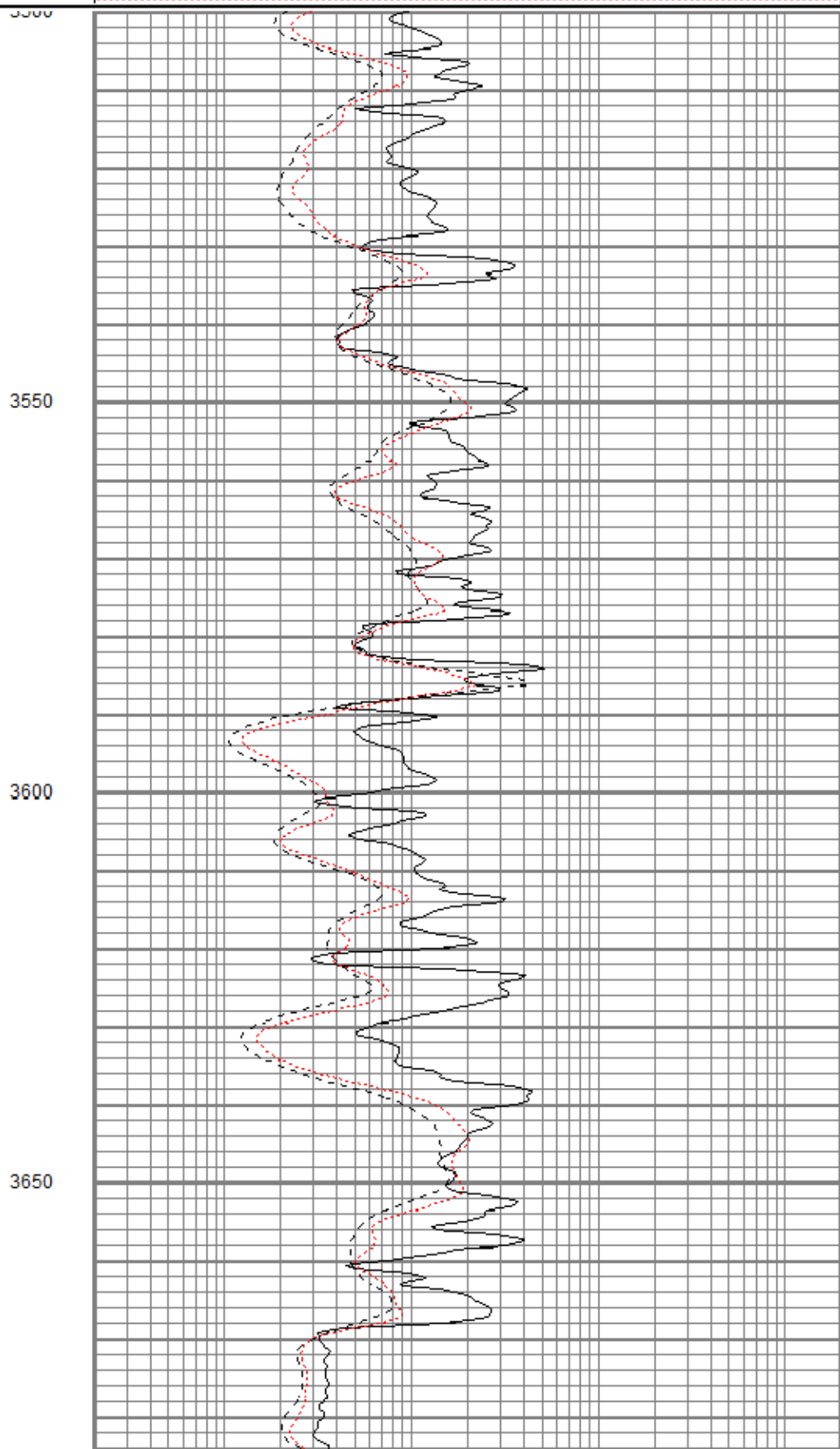
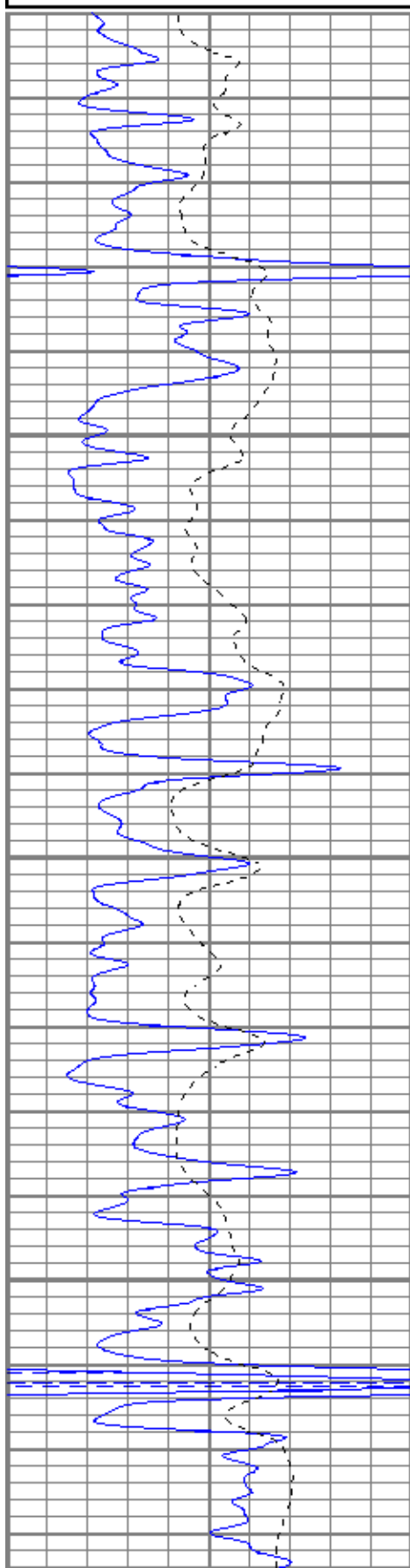


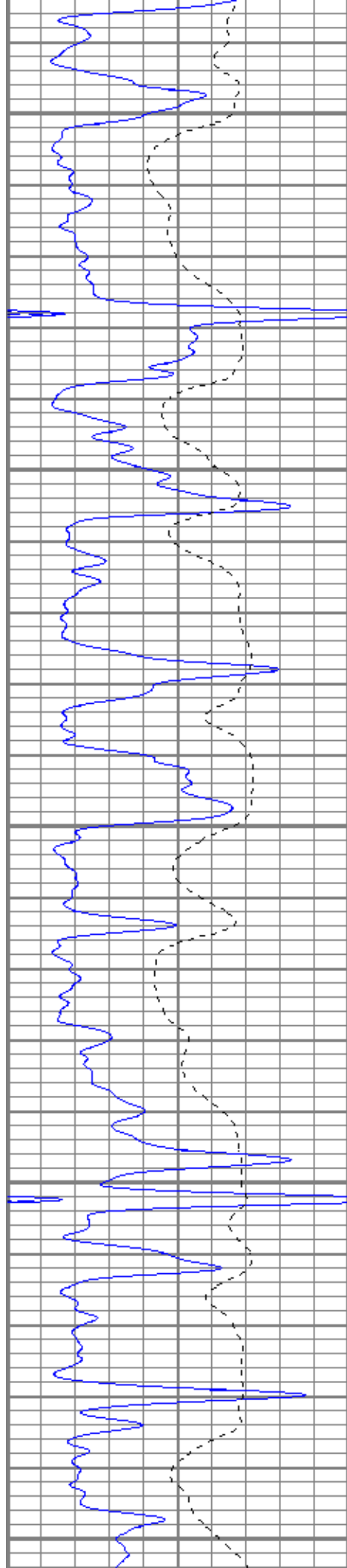
Main Pass

Database File pplaird#1oh.db
Dataset Pathname pass2
Presentation Format kdil
Dataset Creation Tue Sep 13 01:05:05 2016
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





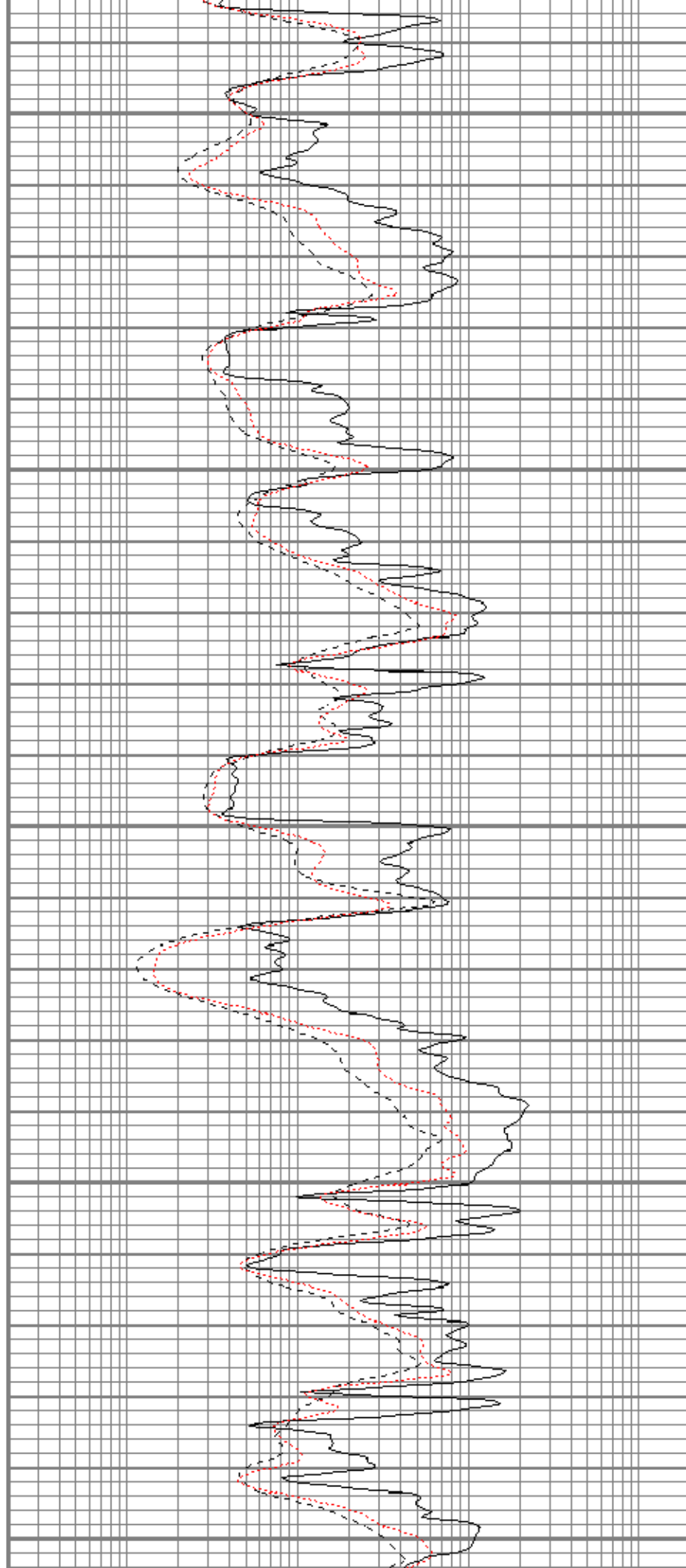
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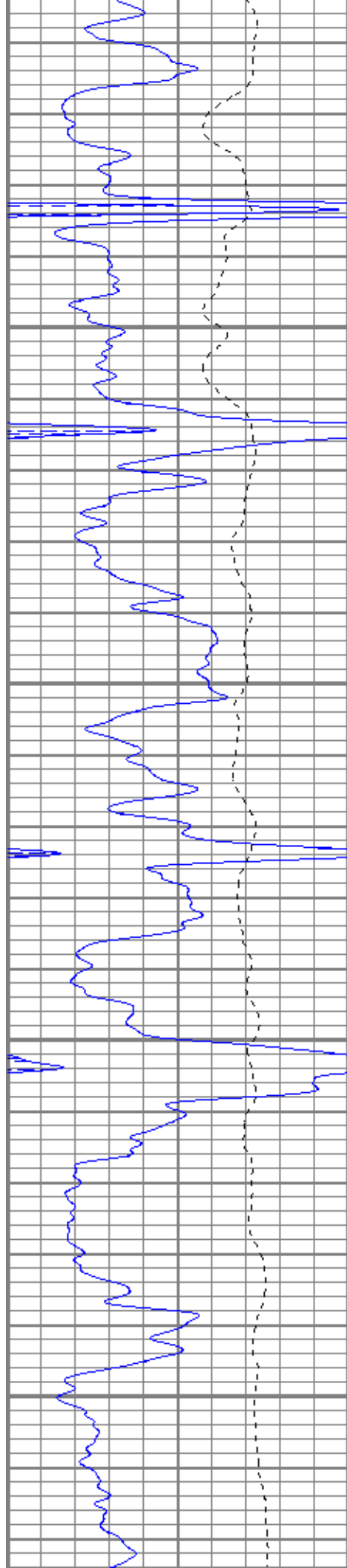
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3800

3850

3900



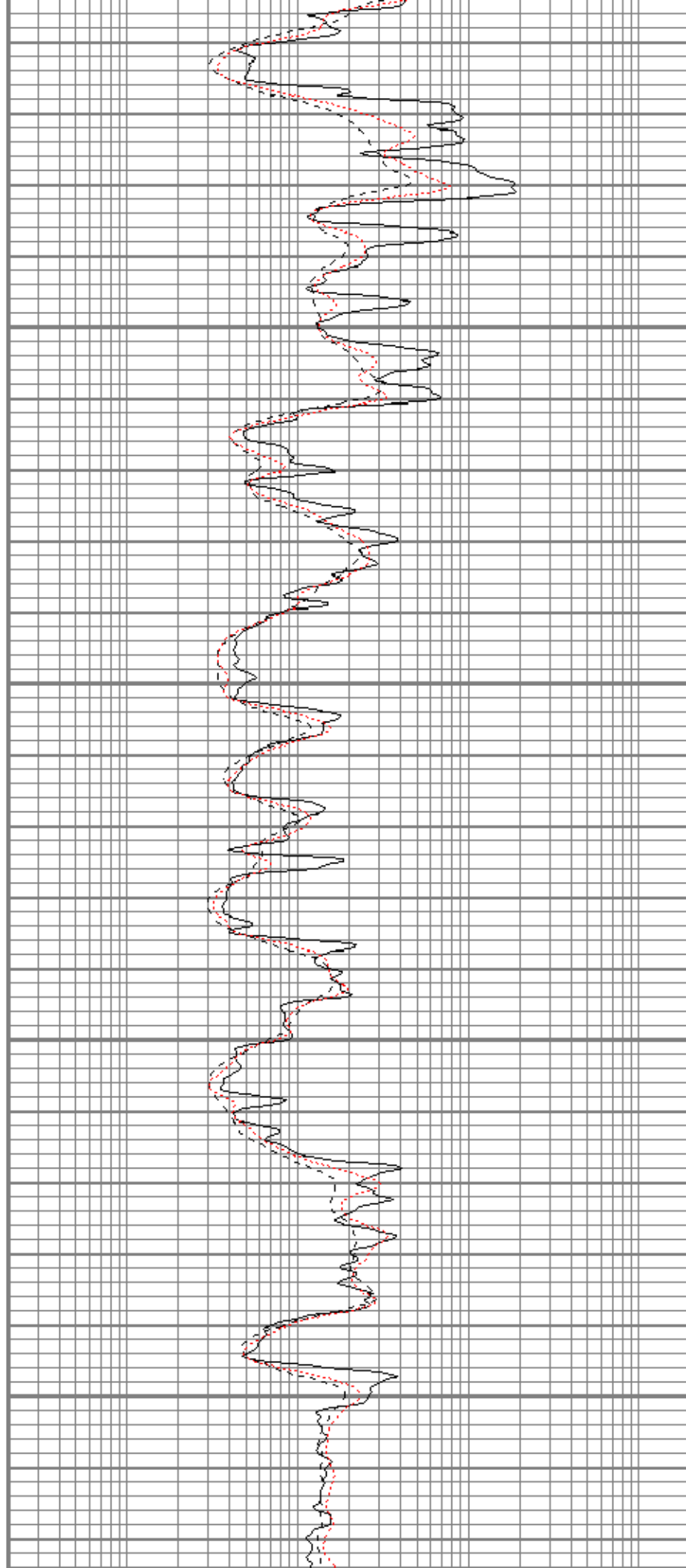


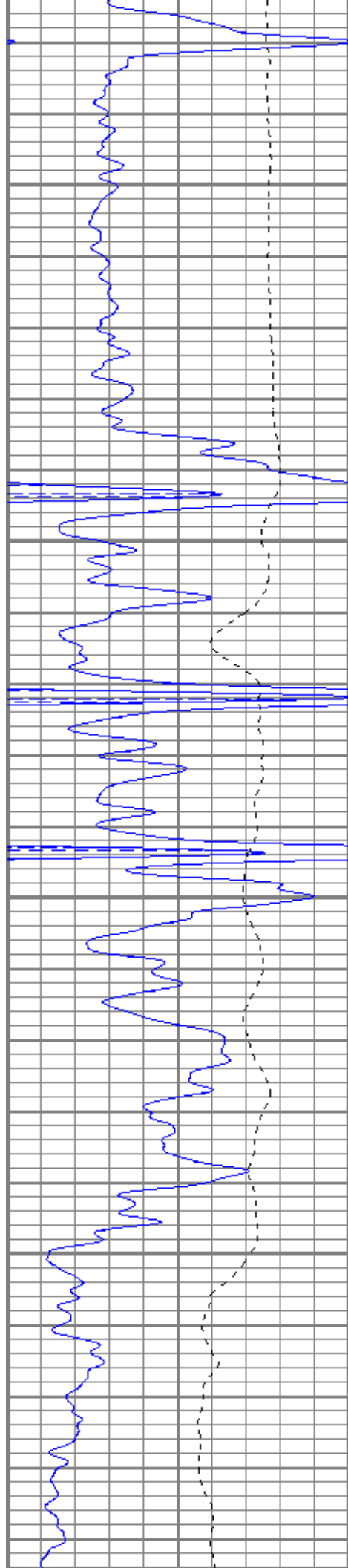
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4000

4050

4100



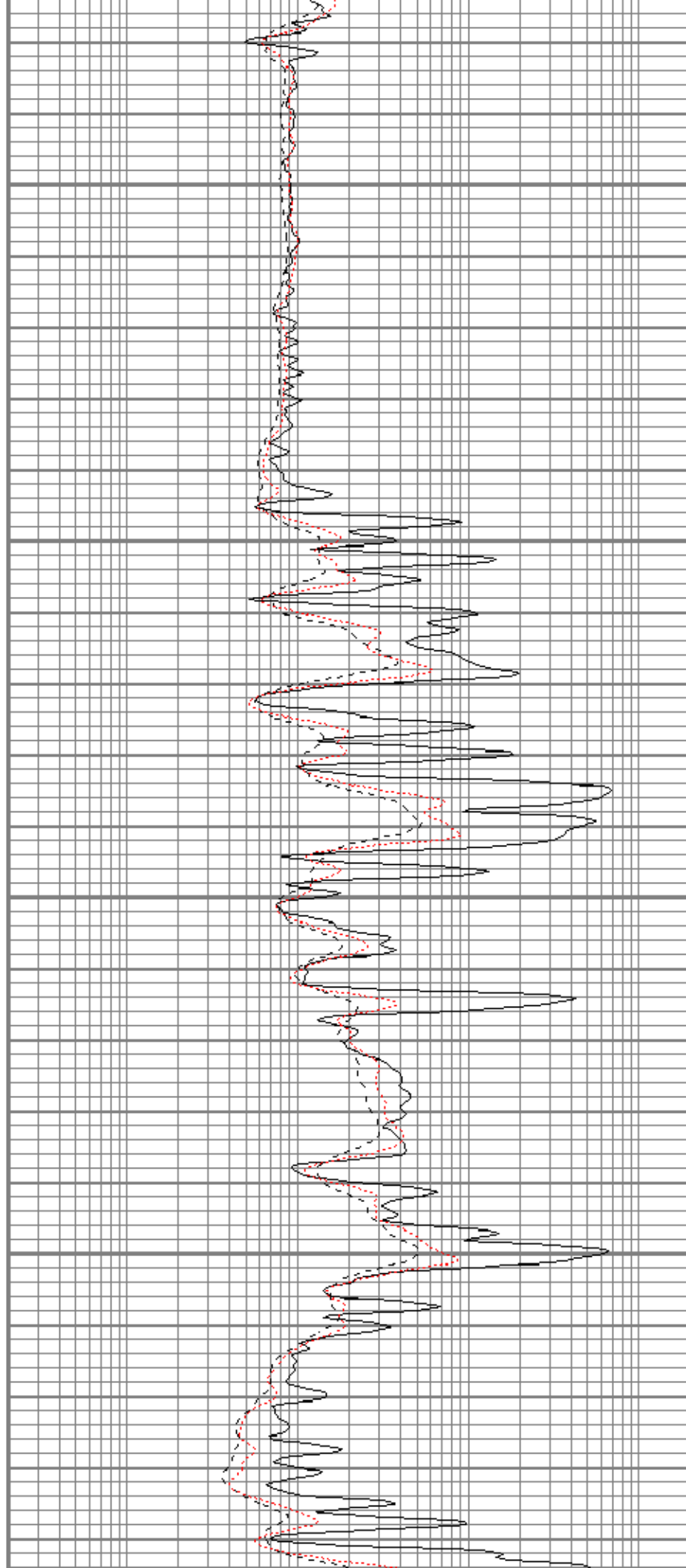


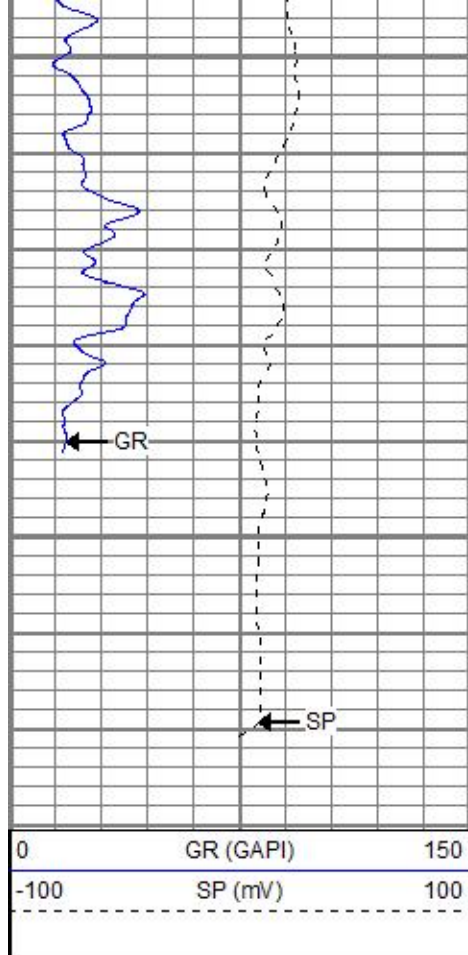
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4200

4250

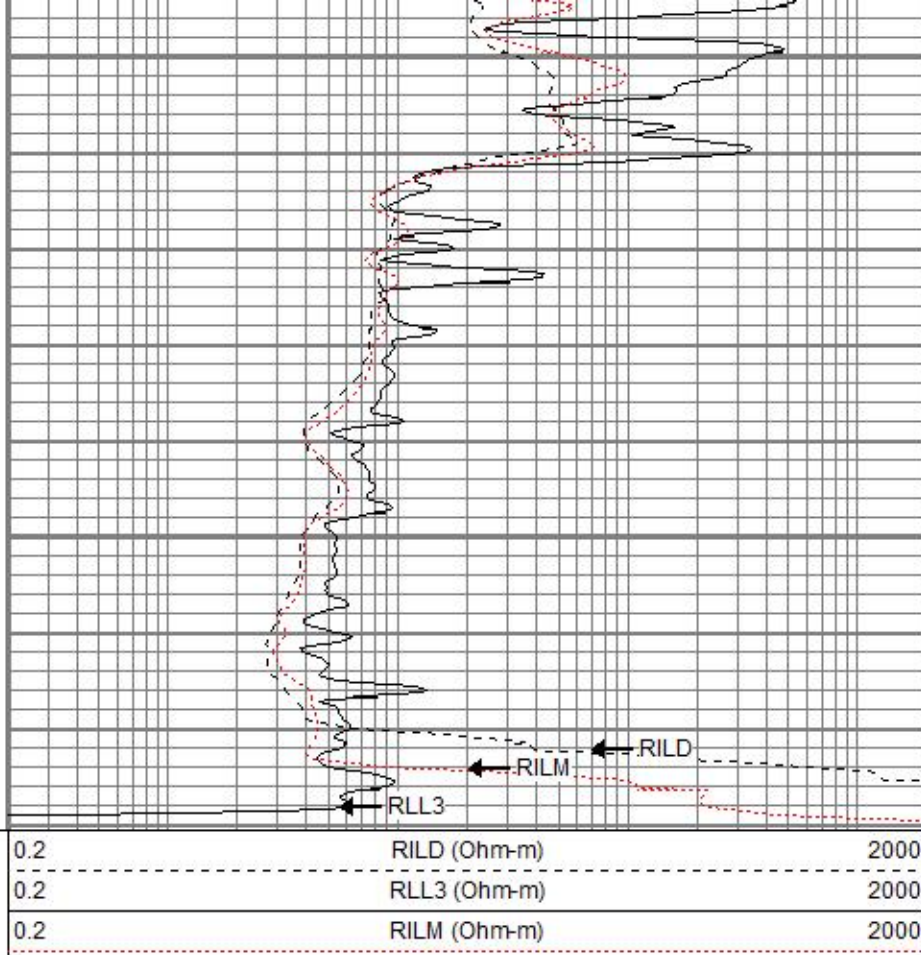
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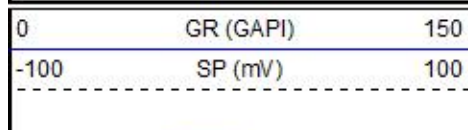
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4400



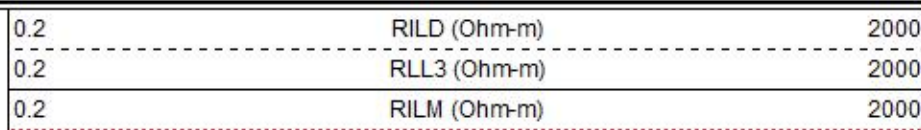
Repeat Pass

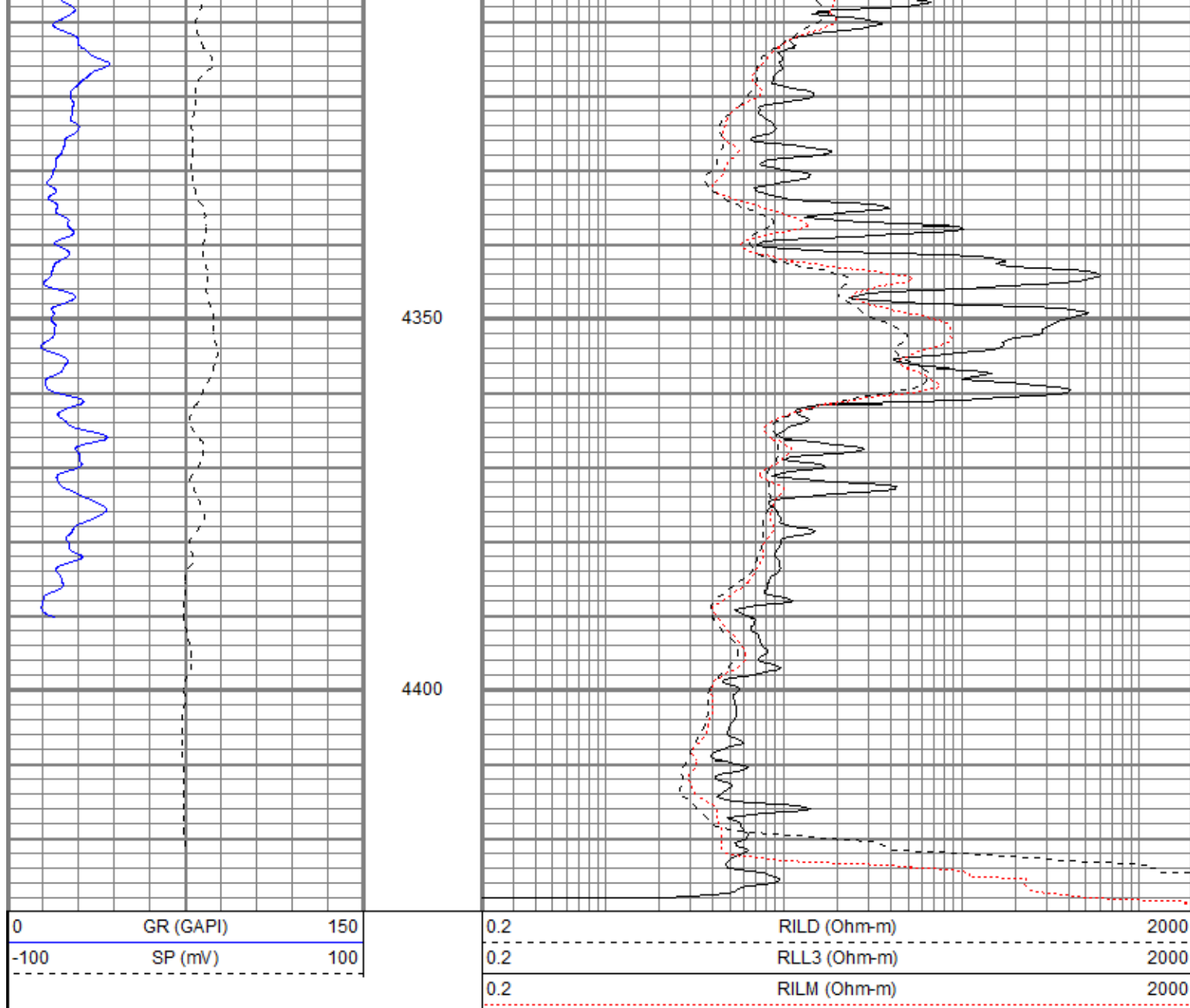
Database File pplaird#1oh.db
 Dataset Pathname pass1.1
 Presentation Format kdil
 Dataset Creation Tue Sep 13 01:57:36 2016
 Charted by Depth in Feet scaled 1:240



4250

4300





Calibration Report								
Database File	pplaird#1oh.db							
Dataset Pathname	pass1.1							
Dataset Creation	Tue Sep 13 01:57:36 2016							
Dual Induction Calibration Report								
Serial-Model:			1989-ADM					
Surface Cal Performed:			Mon Jul 11 21:35:42 2016					
Downhole Cal Performed:			Mon Jul 11 21:36:11 2016					
After Survey Verification Performed:			Mon Jul 11 21:36:11 2016					
Surface Calibration								
Readings				References			Results	
Loop:	Air	Loop		Air	Loop		m	b
Deep	0.002	0.656	V	0.000	350.000	mmho/m	535.560	-1.118
Medium	0.003	0.745	V	0.000	400.000	mmho/m	538.828	-1.427
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.002	0.656	V	0.000	350.000	mmho/m	535.220	-1.003
Medium	0.003	0.745	V	0.000	550.000	mmho/m	741.357	-2.036

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	200.177	-3.046

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

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Neutron Calibration Report								
Serial Number:			2301AN					
Tool Model:			Oilex					
Performed:			Tue Jun 28 11:51:54 2016					
Calibrator Value:			1	NAPI				
Calibrator Reading:			1	cps				
Sensitivity:			1	NAPI/cps				

Gamma Ray Calibration Report								
Serial Number:			1					
Tool Model:			A					
Performed:			Tue Jun 28 11:51:59 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 Nov 13 12:11:33 2015					
			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	

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
PSTAT	38.23		CHD-STD	0.50	1.69	1.00
GR	36.95		ADT1PULSE-A (1) Pulsed Interface Tool #1	0.83	3.50	10.00
TEMP	33.98		ADT1ADC-A (1) Analog Interface #1	0.83	3.50	10.00
ASTAT	33.69		ADT1SENSORS-A (1)	4.54	3.50	10.00
GRD	33.44		NEU-Oilex (2301AN) Oilex 100V NEU	4.27	3.50	80.00
ACCY	33.27					
ACCX	33.27					
SSTAT	33.27					
NEU	32.50					
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		DIL-ADM (1989) Dual Induction	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	Dataset:	pplaird#1oh.db: field/well/run1/pass1.1			
CILM	6.89	Total length:	38.31 ft			
RLL3	1.70	Total weight:	651.00 lb			
TR Mon	0.00	O.D.:	4.00 in			