



DUAL INDUCTION LOG

Company	John O. Farmer, Inc.	Company	John O. Farmer, Inc.
Well	McNinch Unit #1	Well	McNinch Unit #1
Field	Wildcat	Field	Wildcat
County	Ness	County	Ness
State	KS	State	KS
Location:	API # : 15 135 25610	Other Services	
	1130' FSL & 2580' FWL	ML CDNL	
Permanent Datum	SEC 2 TWP 17S RGE 25W	Elevation	
Log Measured From	Ground Level	Elevation	2457'
Drilling Measured From	KB 8' AGL	K.B. 2465'	
	KB	D.F. 2464'	
		G.L. 2457'	
Date	6-12-13		
Run Number	One		
Depth Driller	4500'		
Depth Logger	4501'		
Bottom Logged Interval	4499'		
Top Log Interval	200'		
Casing Driller	221'		
Casing Logger	221'		
Bit Size	7 7/8"		
Type Fluid in Hole	Chemical Mud		
Density / Viscosity	9.4/56		
pH / Fluid Loss	9.5/8.8		
Source of Sample	Pit		
Rm @ Meas. Temp	.8@74degf		
Rmf @ Meas. Temp	.6@74degf		
Rmc @ Meas. Temp	.96@74degf		
Source of Rmf / Rmc	Calculated		
Rm @ BHT	.51@116degf		
Time Circulation Stopped	10:30 a.m.		
Time Logger on Bottom	12:15 a.m.		
Maximum Recorded Temperature	116 degf		
Equipment Number	T127		
Location	Hays, KS.		
Recorded By	Gus Pfannenstiel		
Witnessed By	Mr. 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

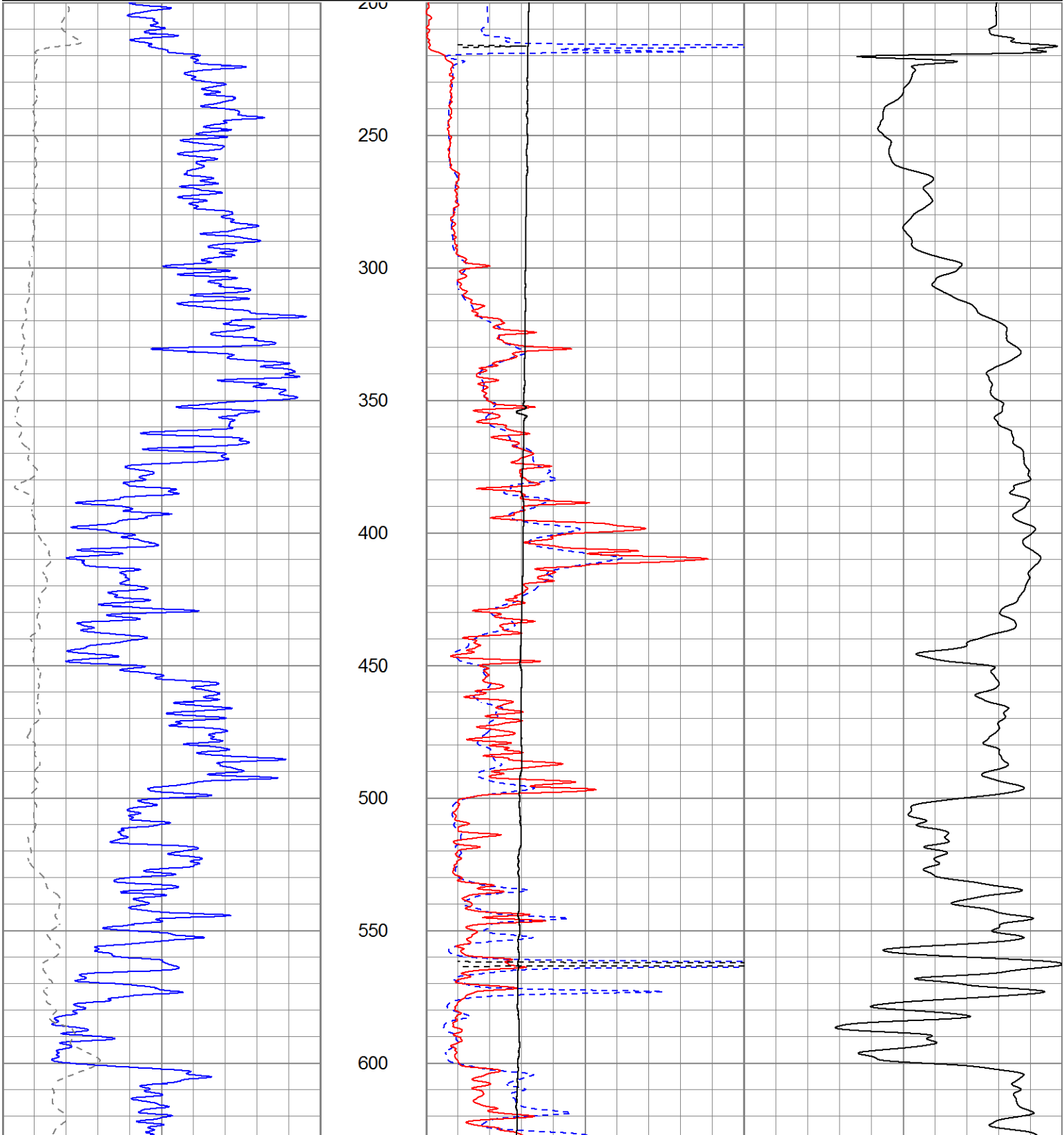
Thank you for using Gemini Wireline
785-625-1182

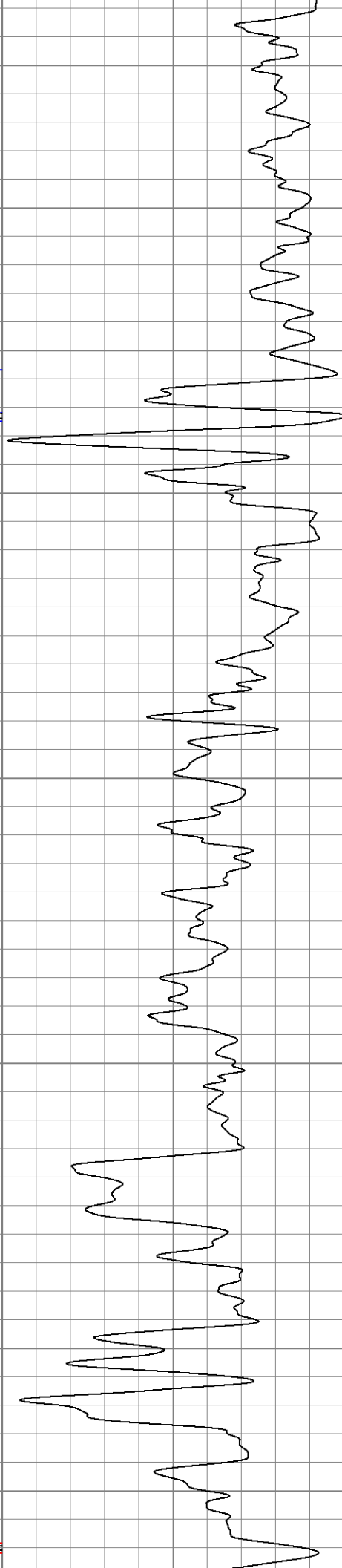
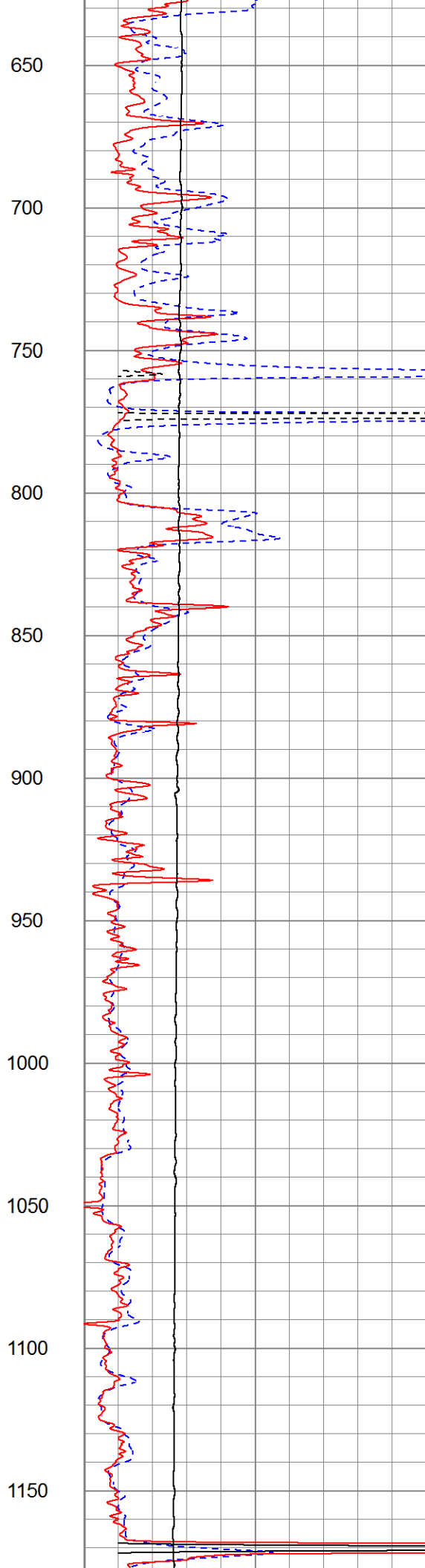
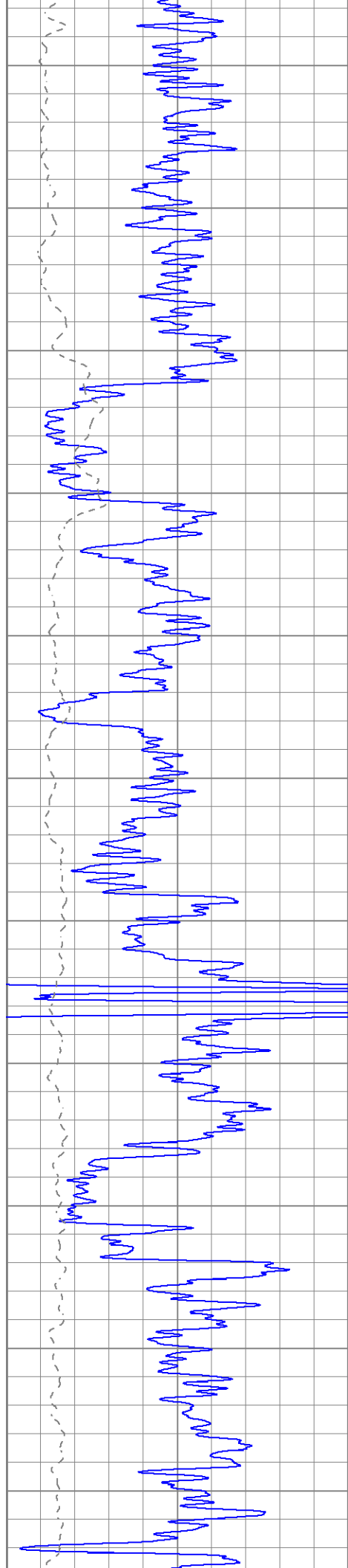


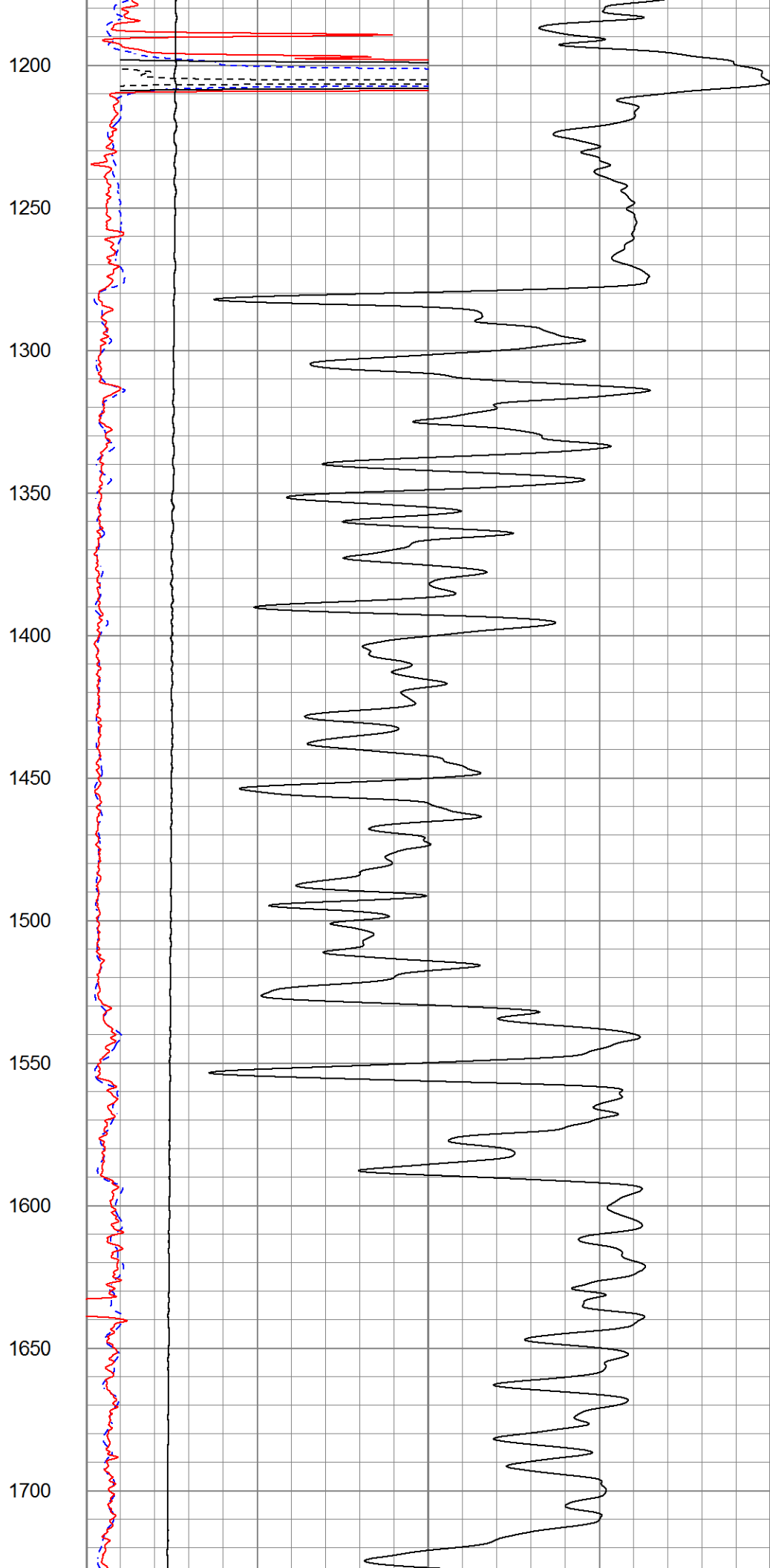
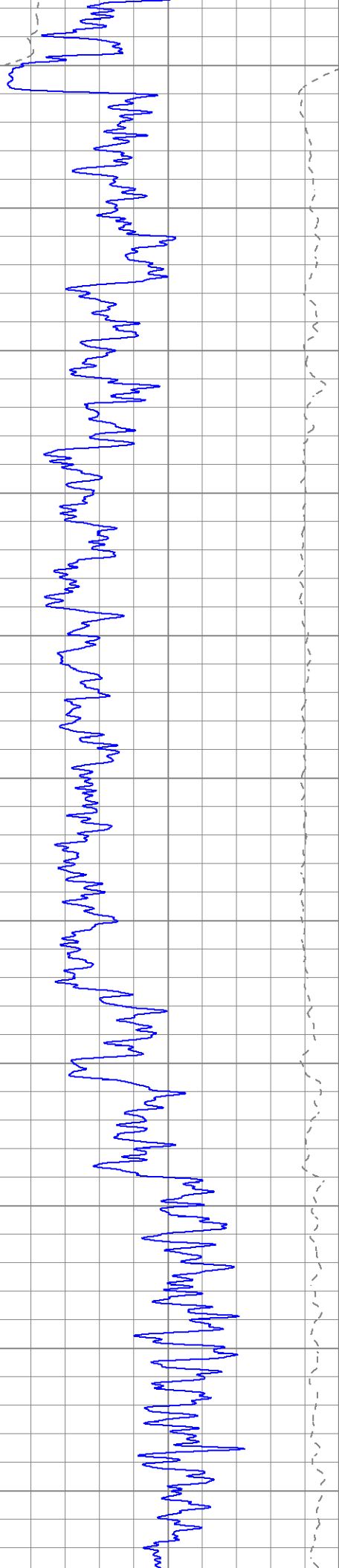
Main Pass

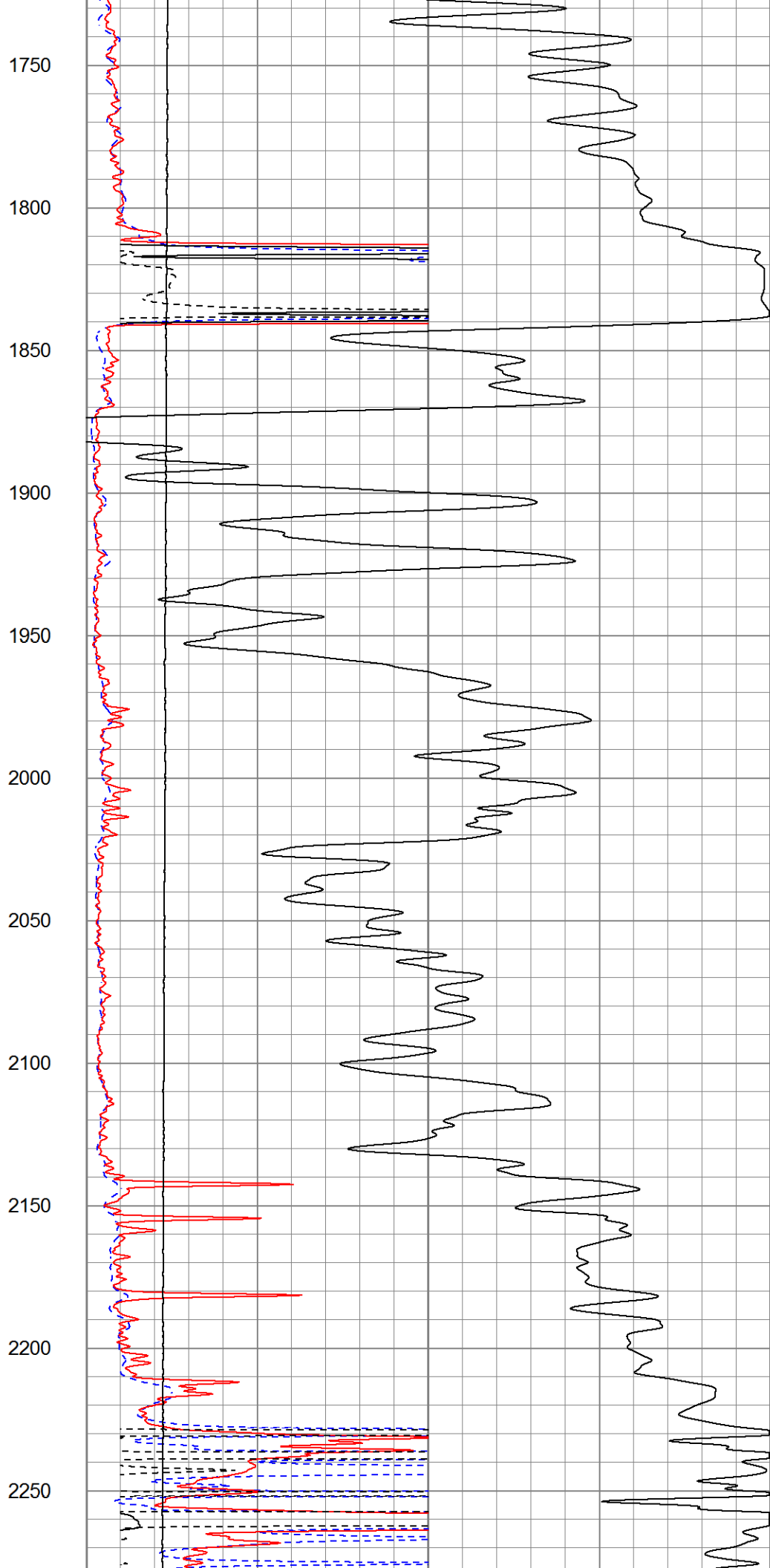
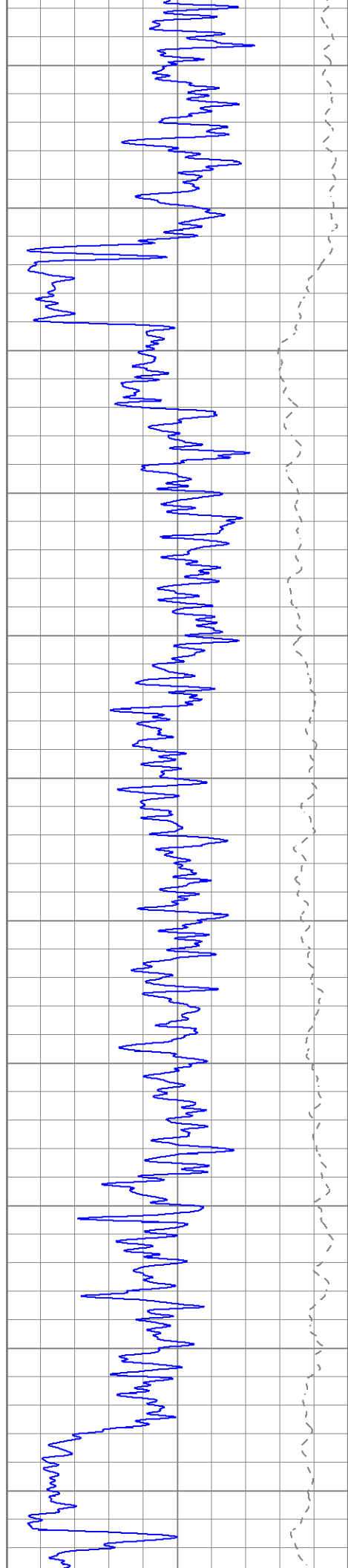
Database File	jofmcninchunit#1oh.db
Dataset Pathname	pass2
Presentation Format	kdillin2
Dataset Creation	Wed Jun 12 12:34:42 2013
Charted by	Depth in Feet scaled 1:600

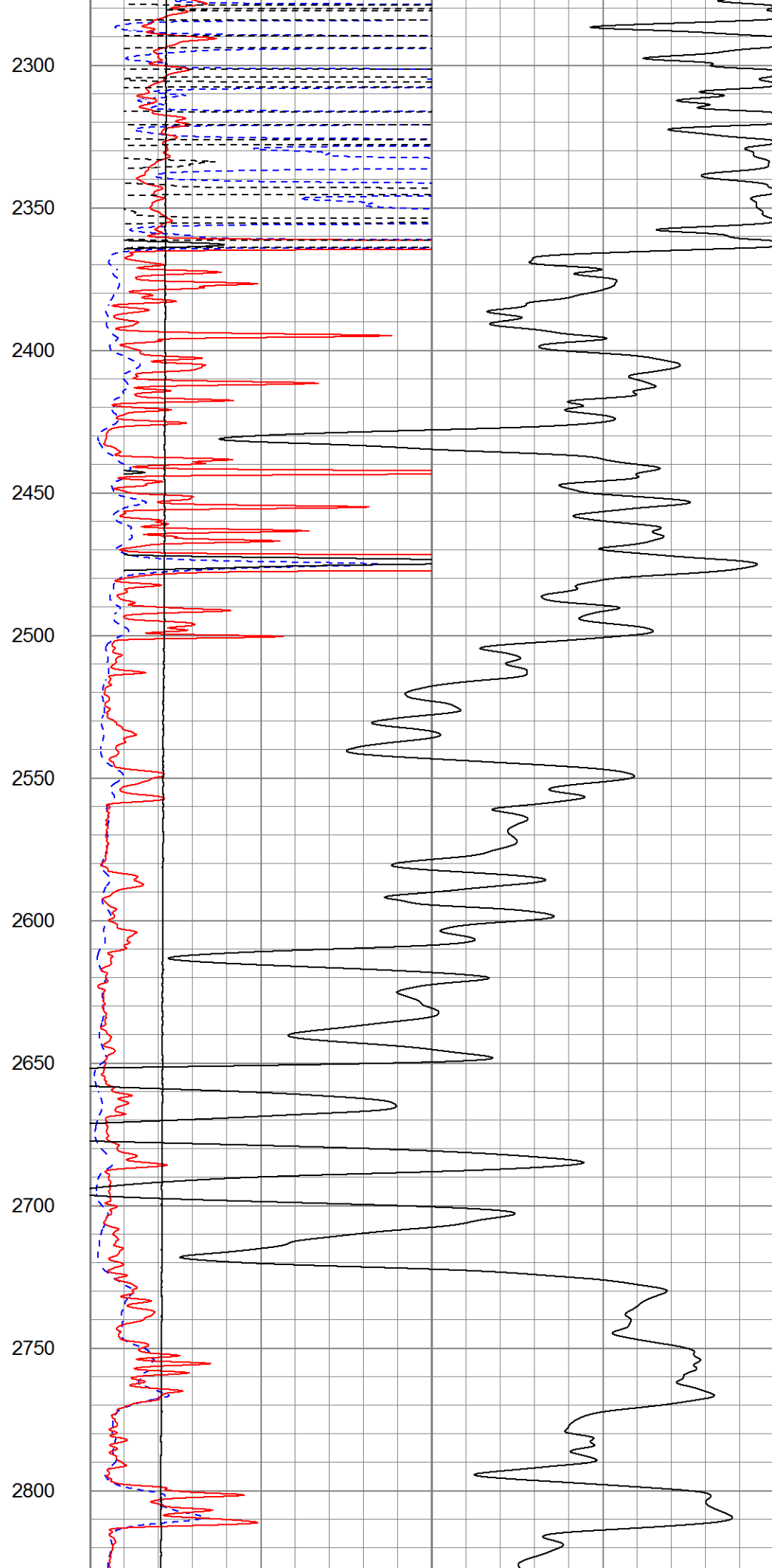
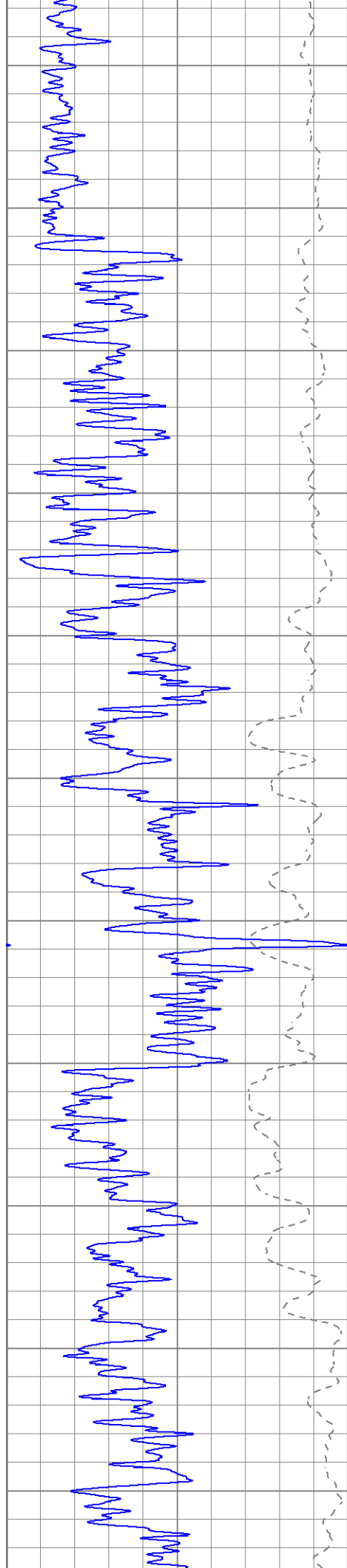
0	GR (GAPI)	150	0	RILD (Ohm-m)	50
-200	SP (mV)	0	0	RLL3 (Ohm-m)	50
			1000	CILD (mmho/m)	0
			10000	LTEN (lb)	0
			50	RILD x 10 (Ohm-m)	500
			50	RLL3 x 10 (Ohm-m)	500

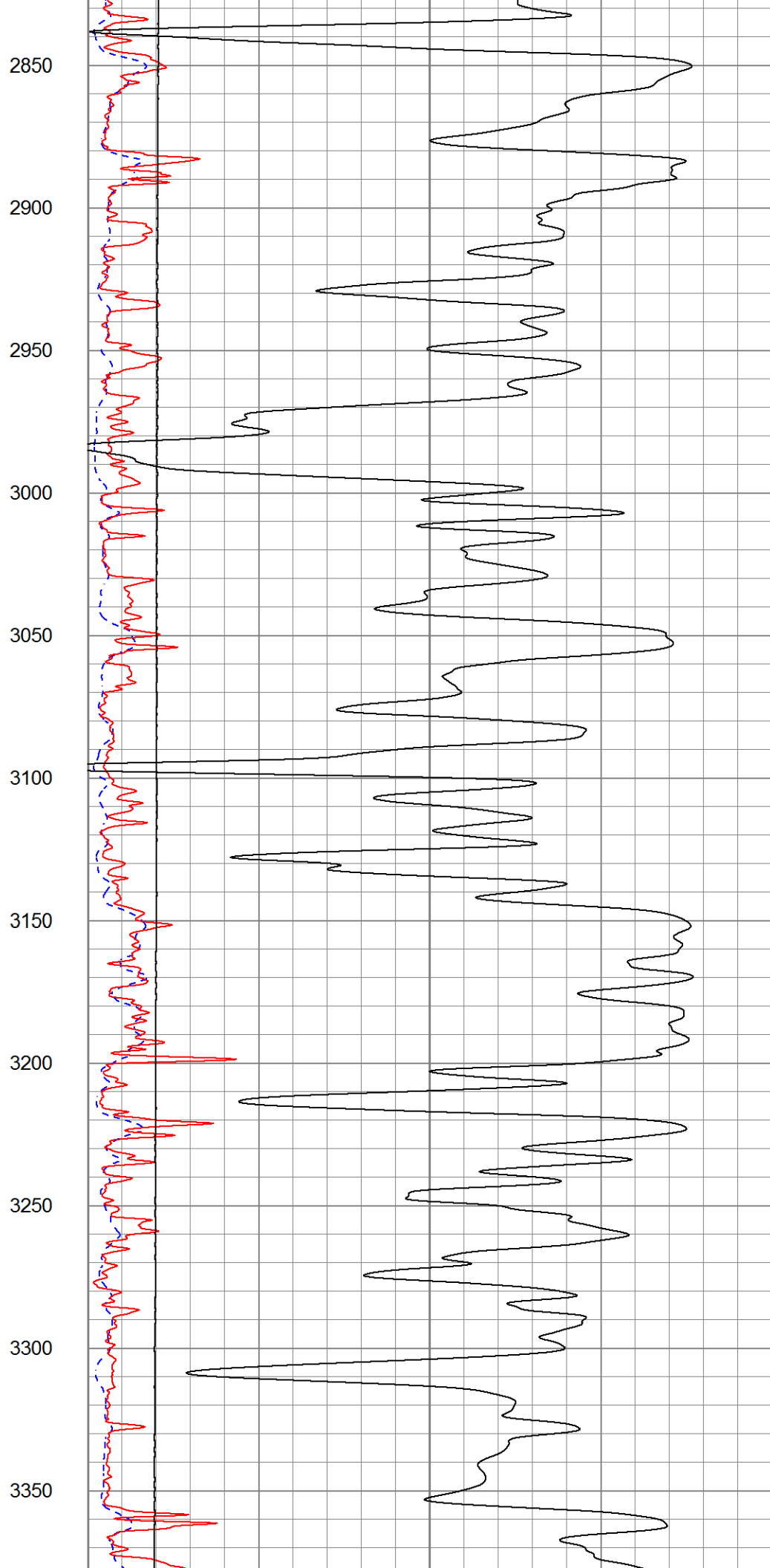
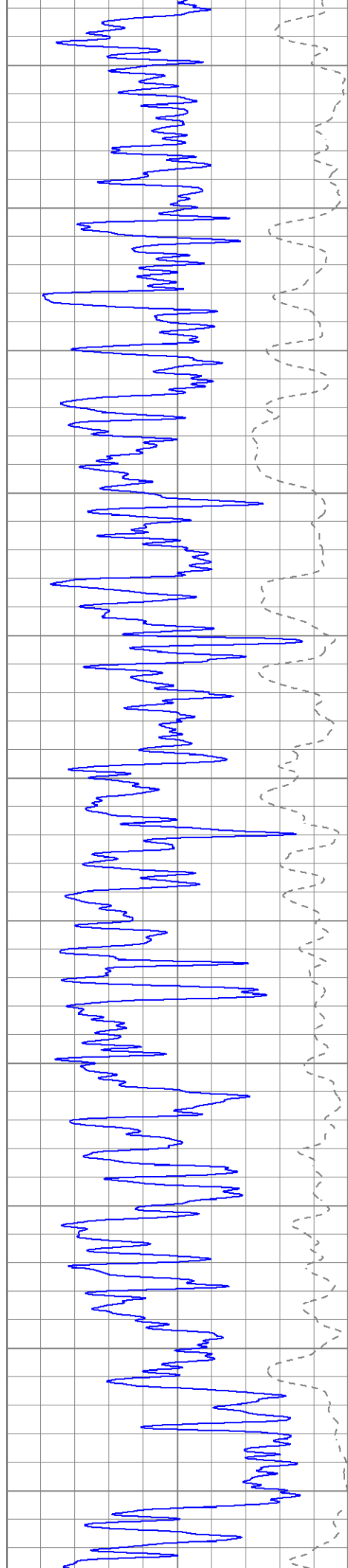


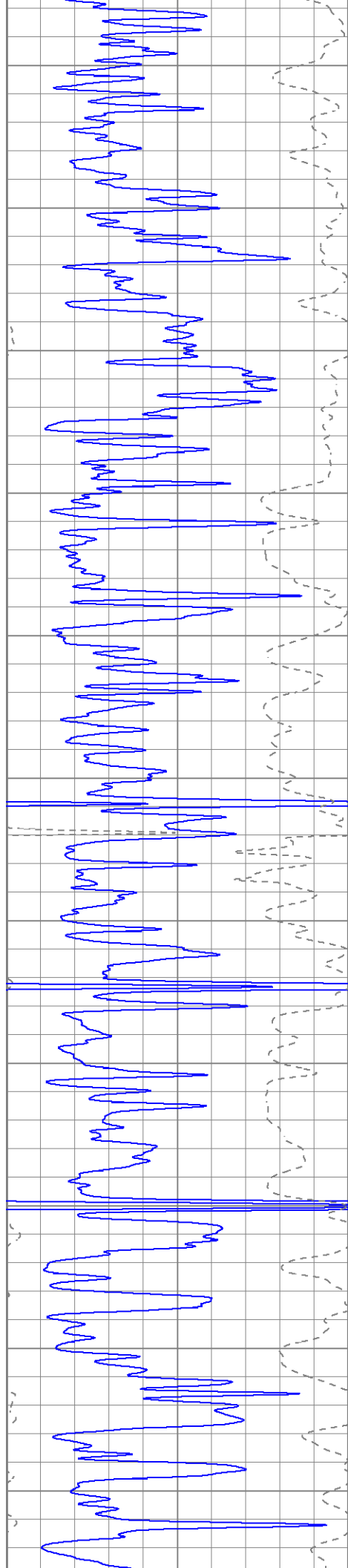












3400

3450

3500

3550

3600

3650

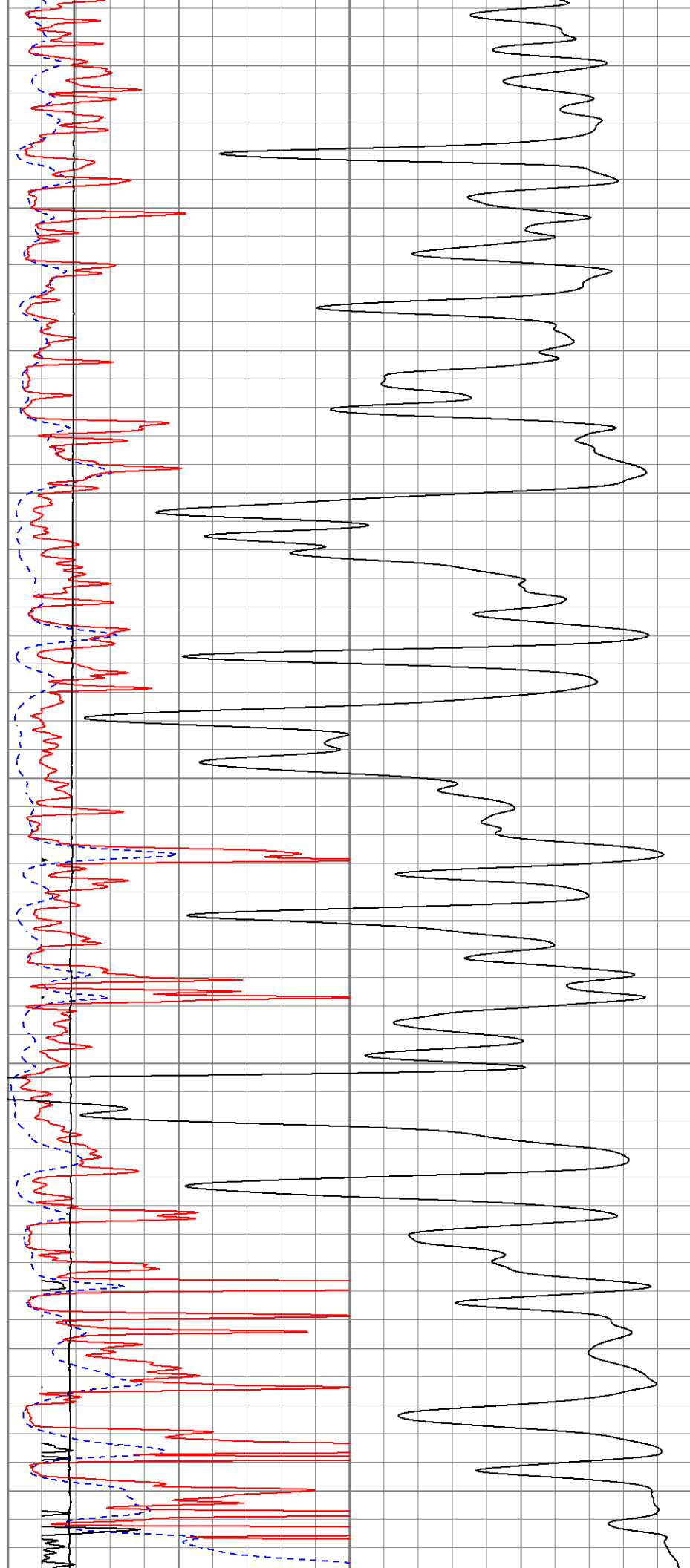
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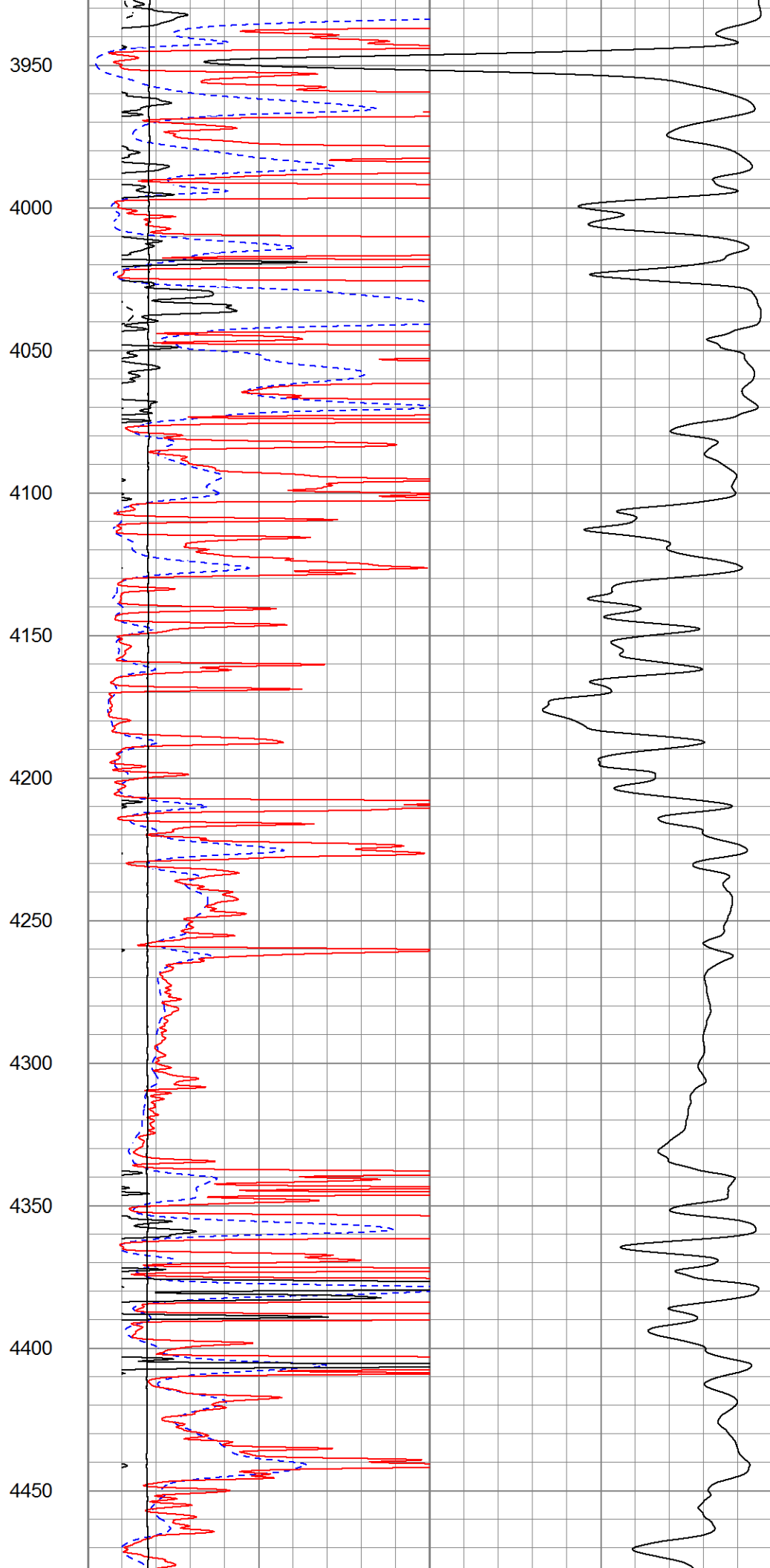
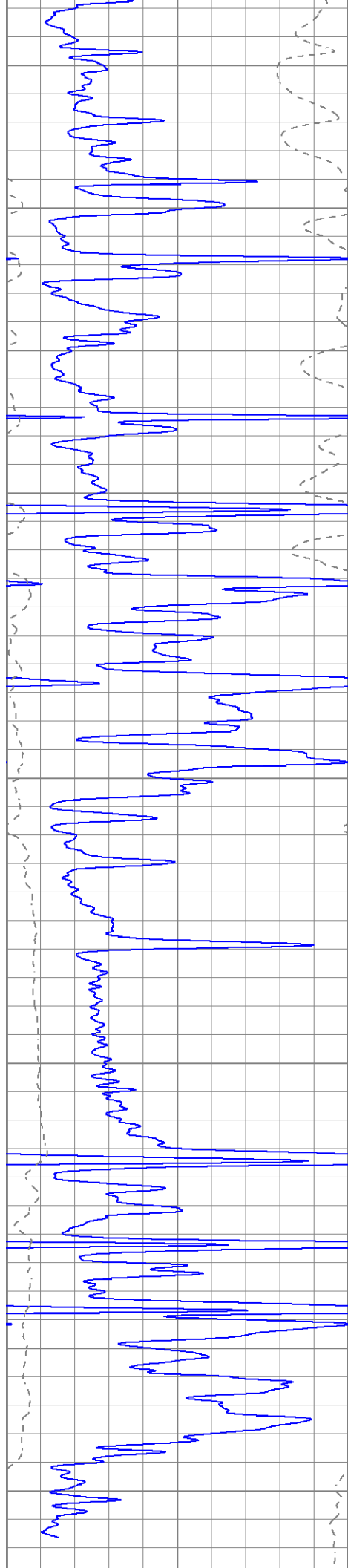
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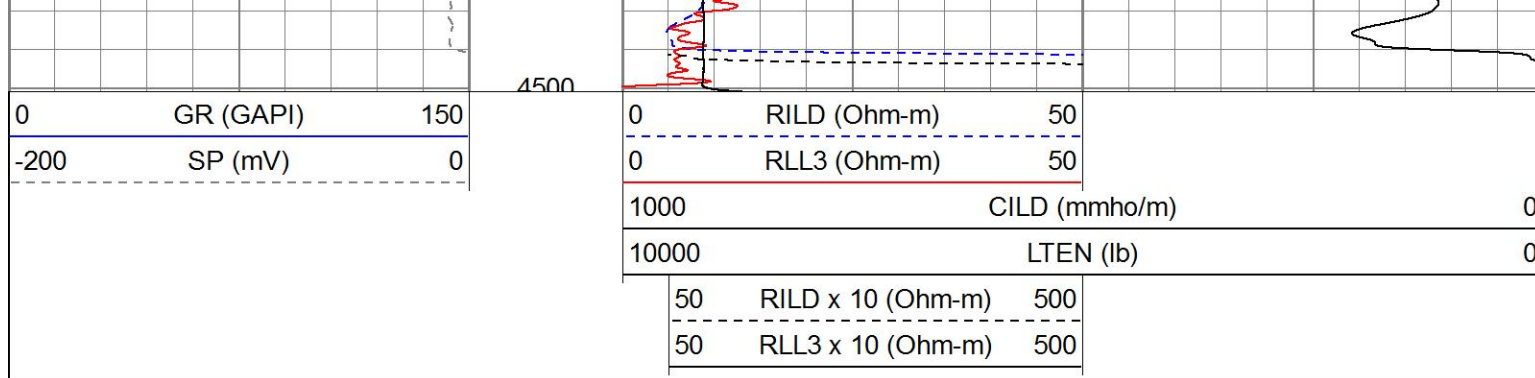
3800

3850

3900



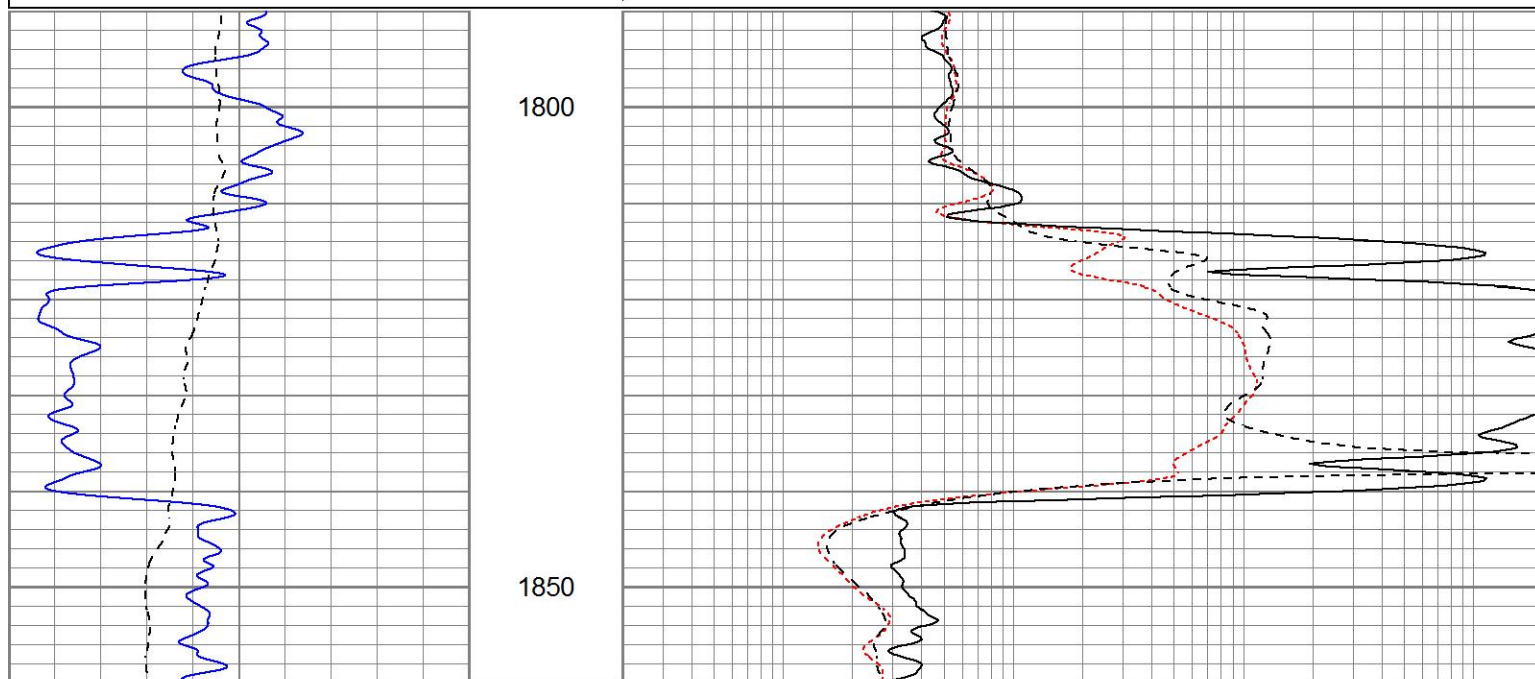




Main Pass

Database File jofmcninchunit#1oh.db
 Dataset Pathname pass2
 Presentation Format kdil
 Dataset Creation Wed Jun 12 12:34:42 2013
 Charted by Depth in Feet scaled 1:240

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



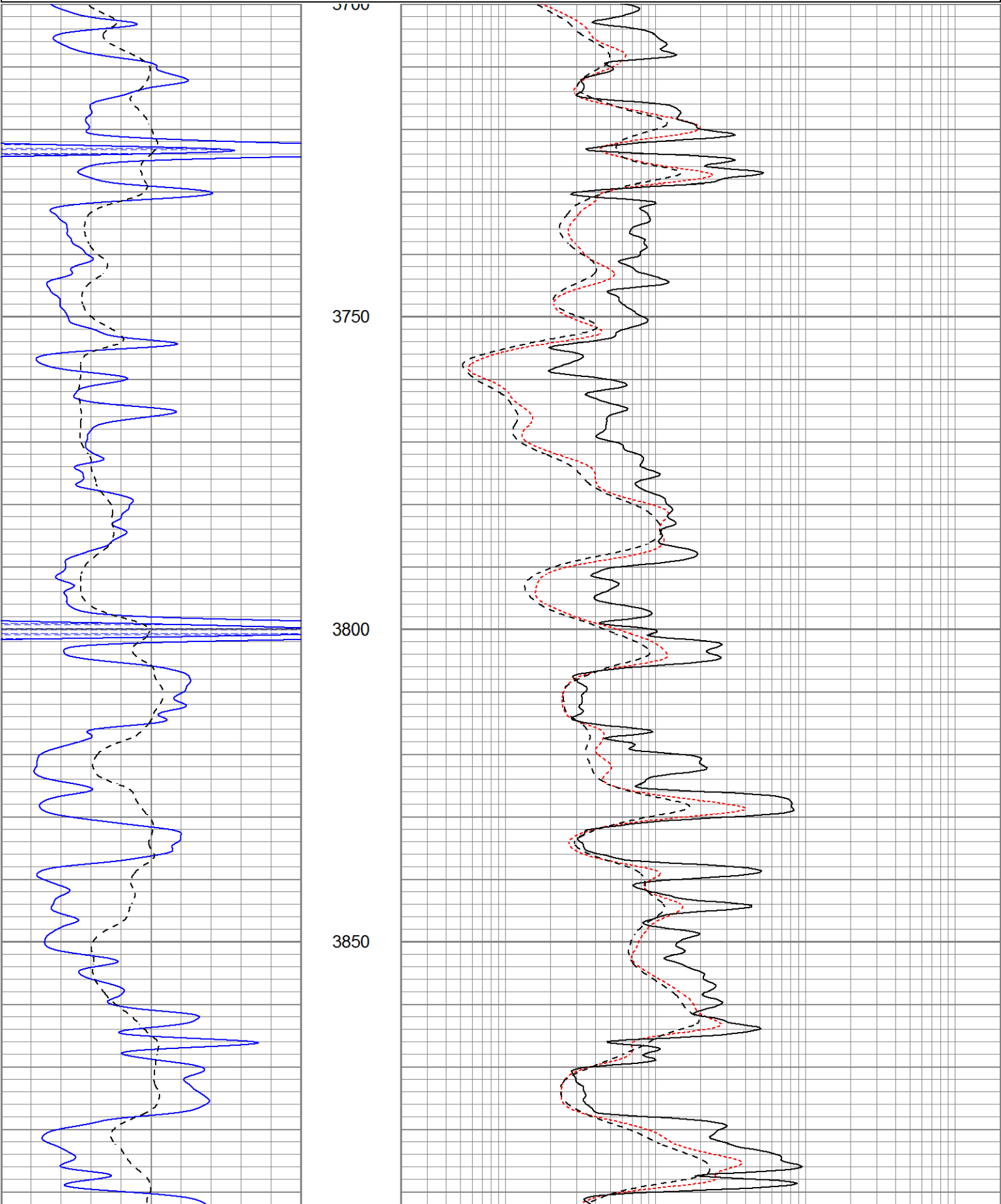
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-100	SP (mV)	100	0.2	RILD (Ohm-m)	2000
			0.2	RLL3 (Ohm-m)	2000

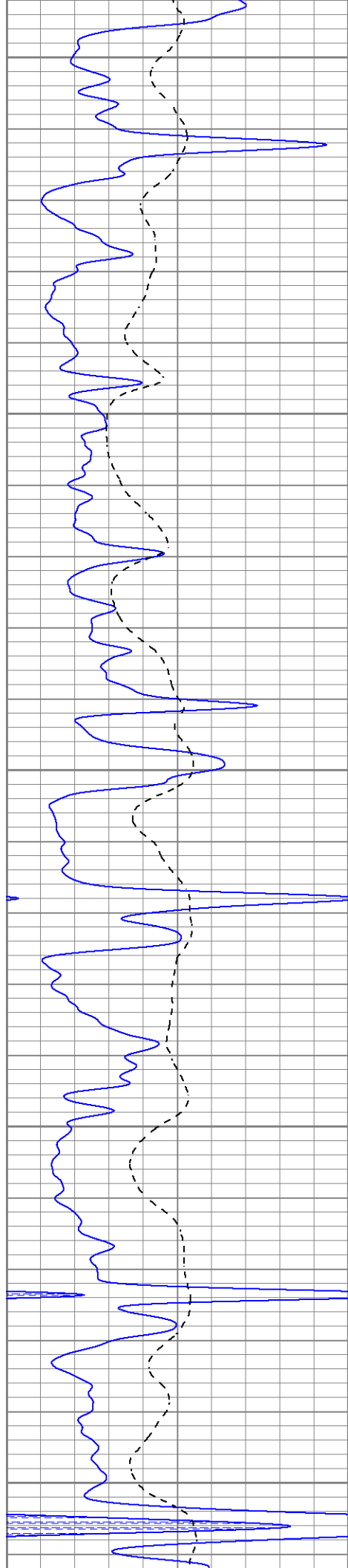


Main Pass

Database File jofmcninchunit#1oh.db
 Dataset Pathname pass2

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





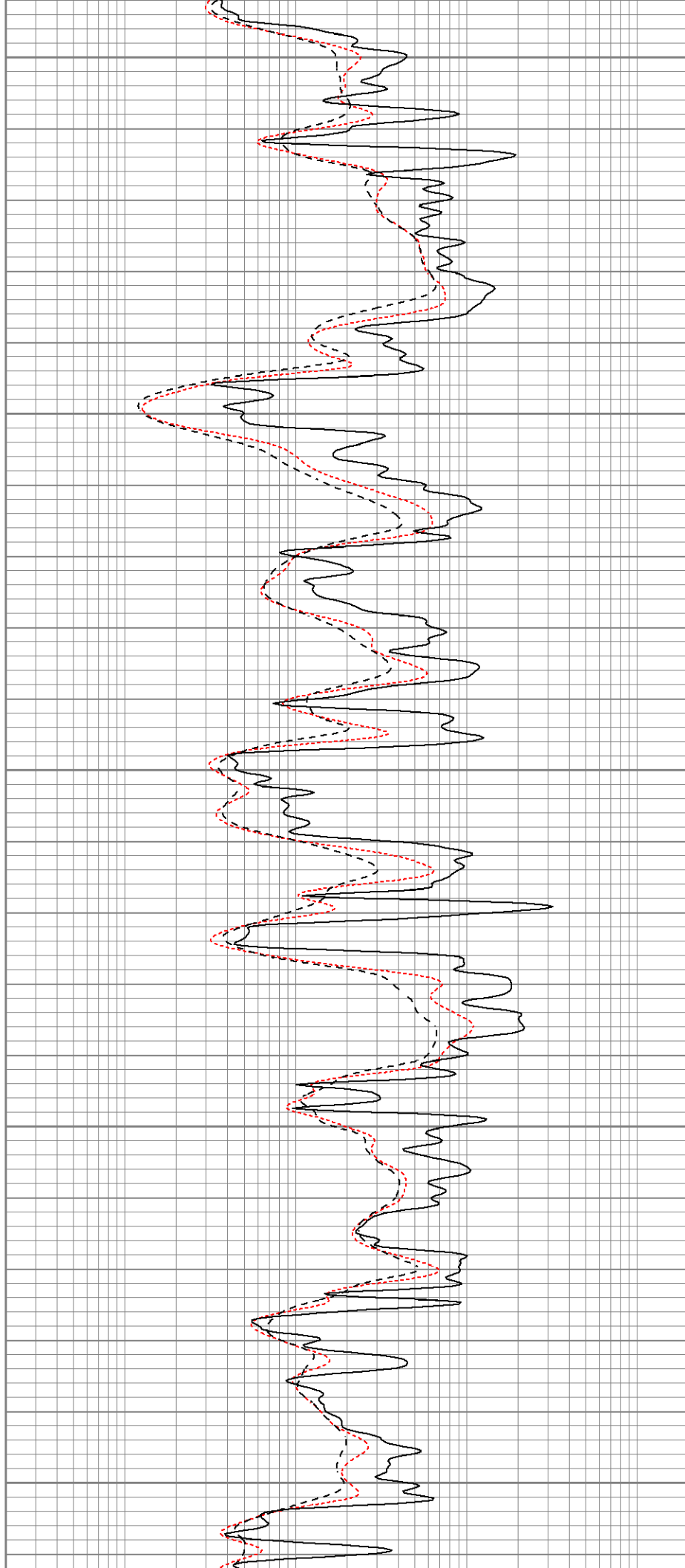
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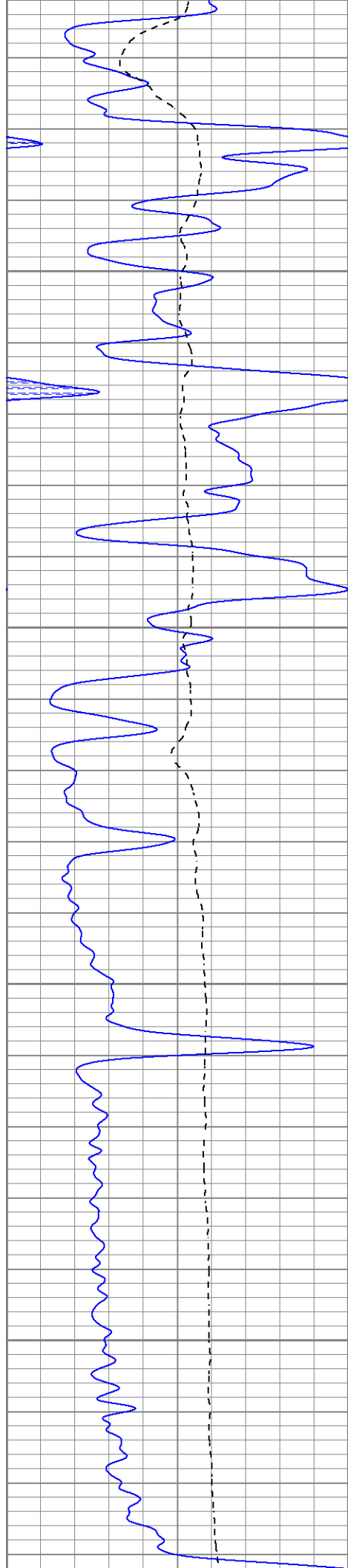
3950

4000

4050

4100



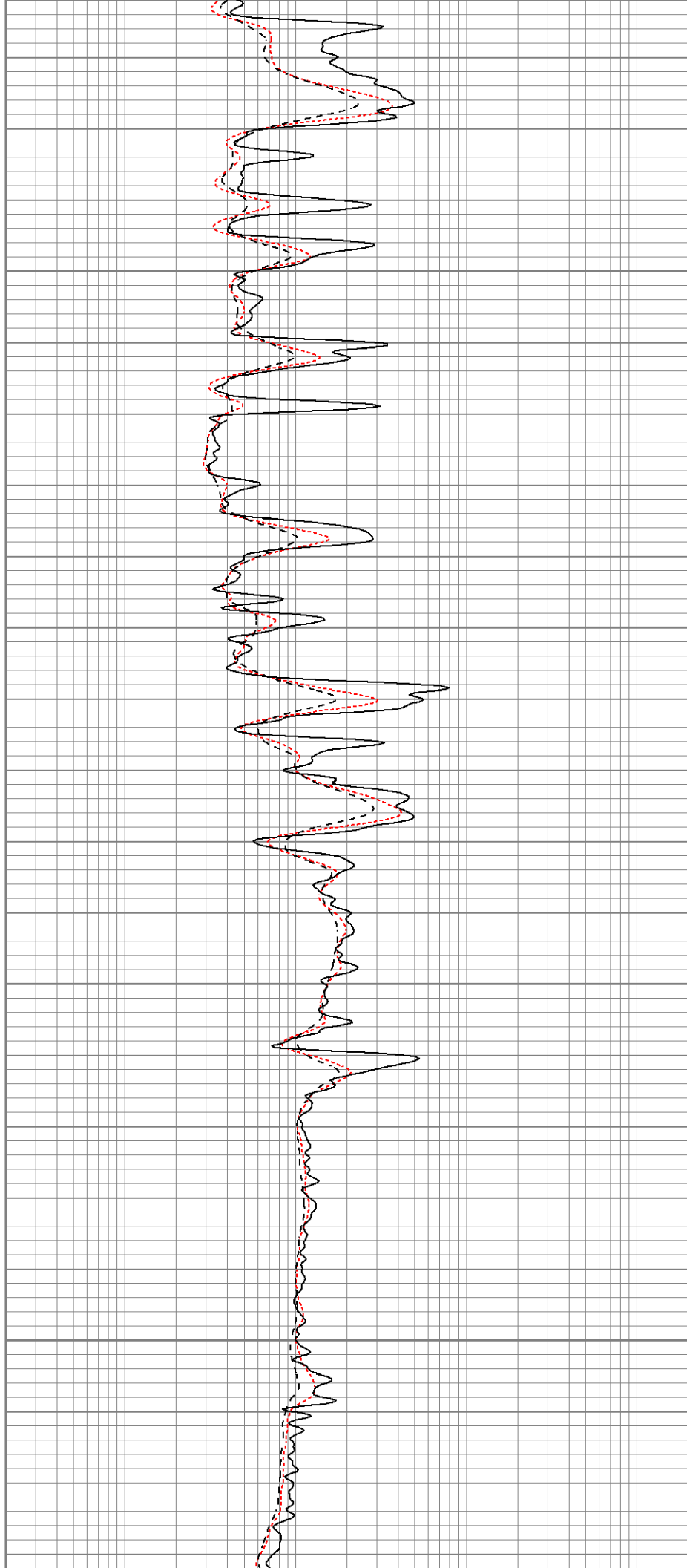


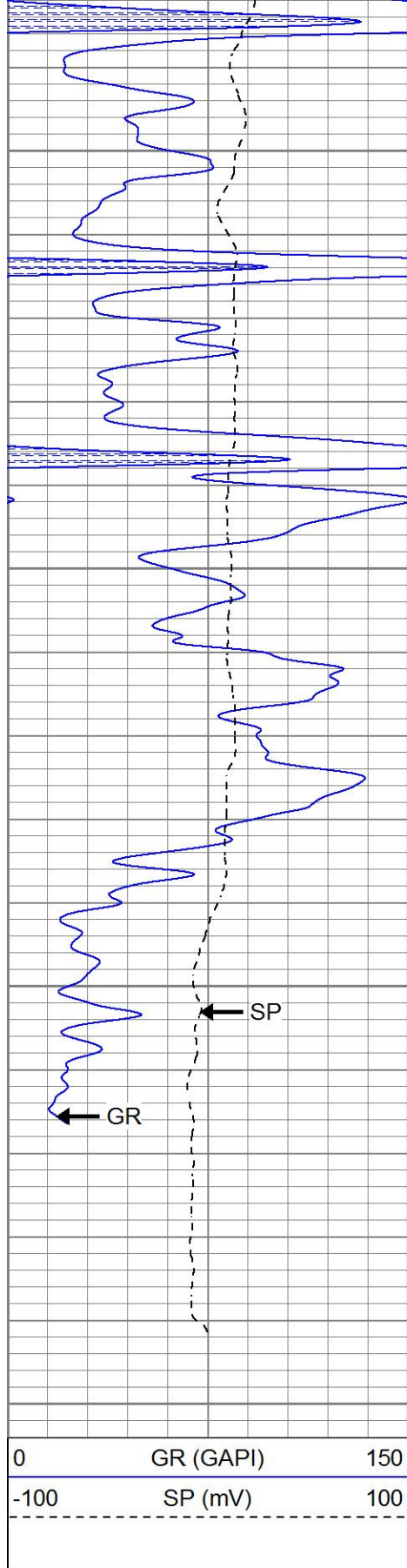
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4200

4250

4300



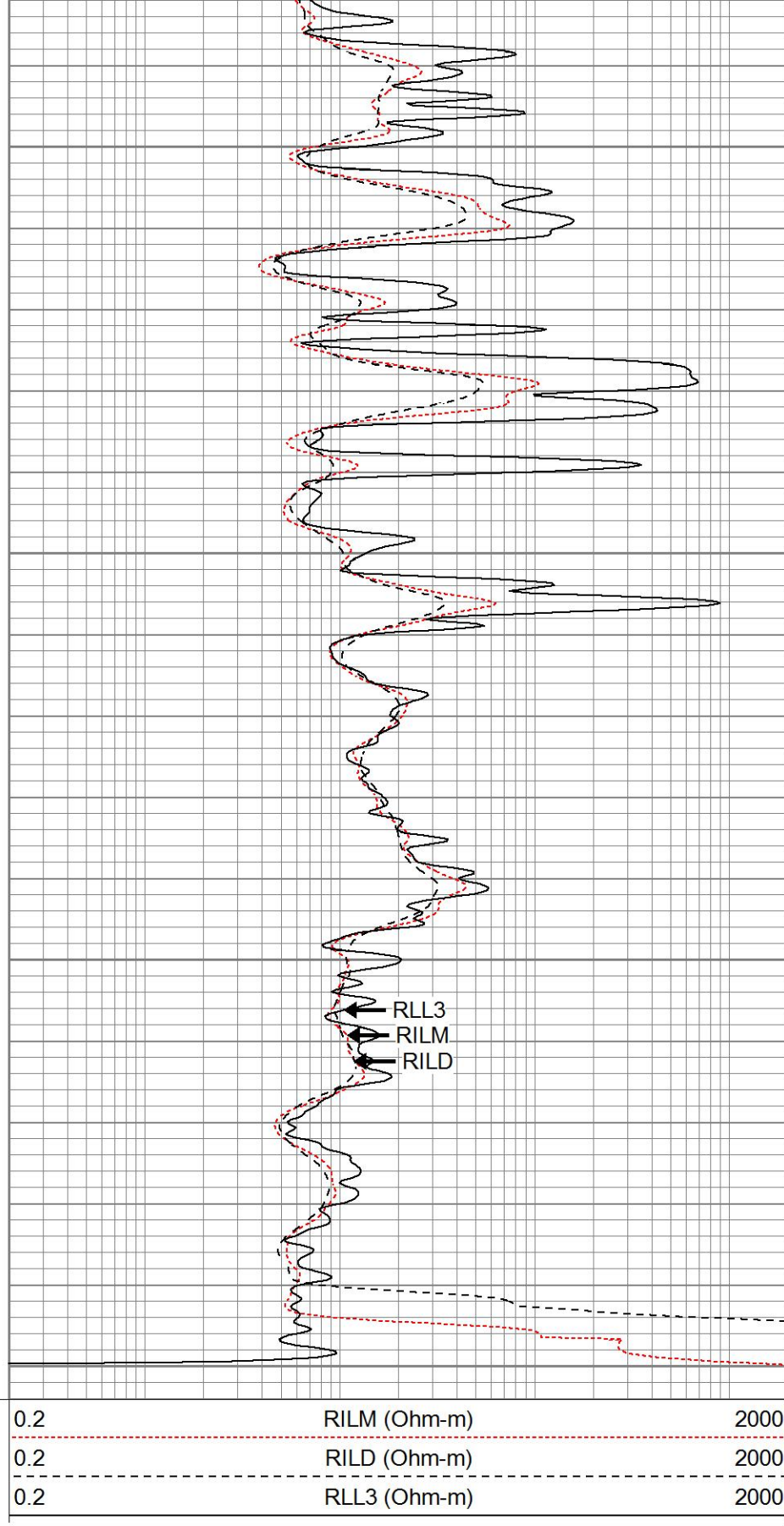


4350

4400

4450

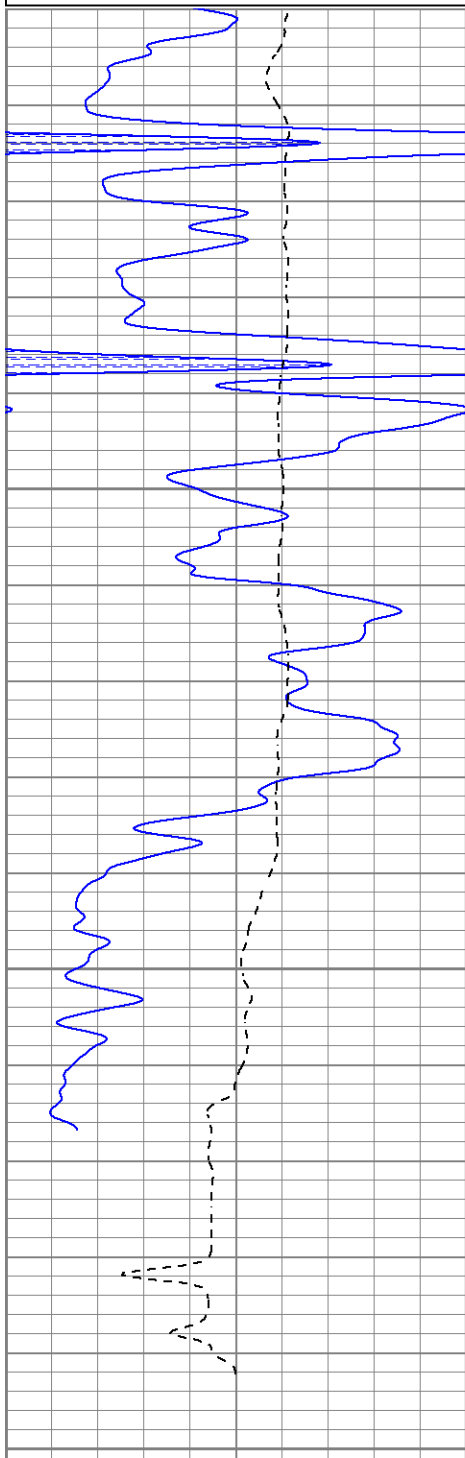
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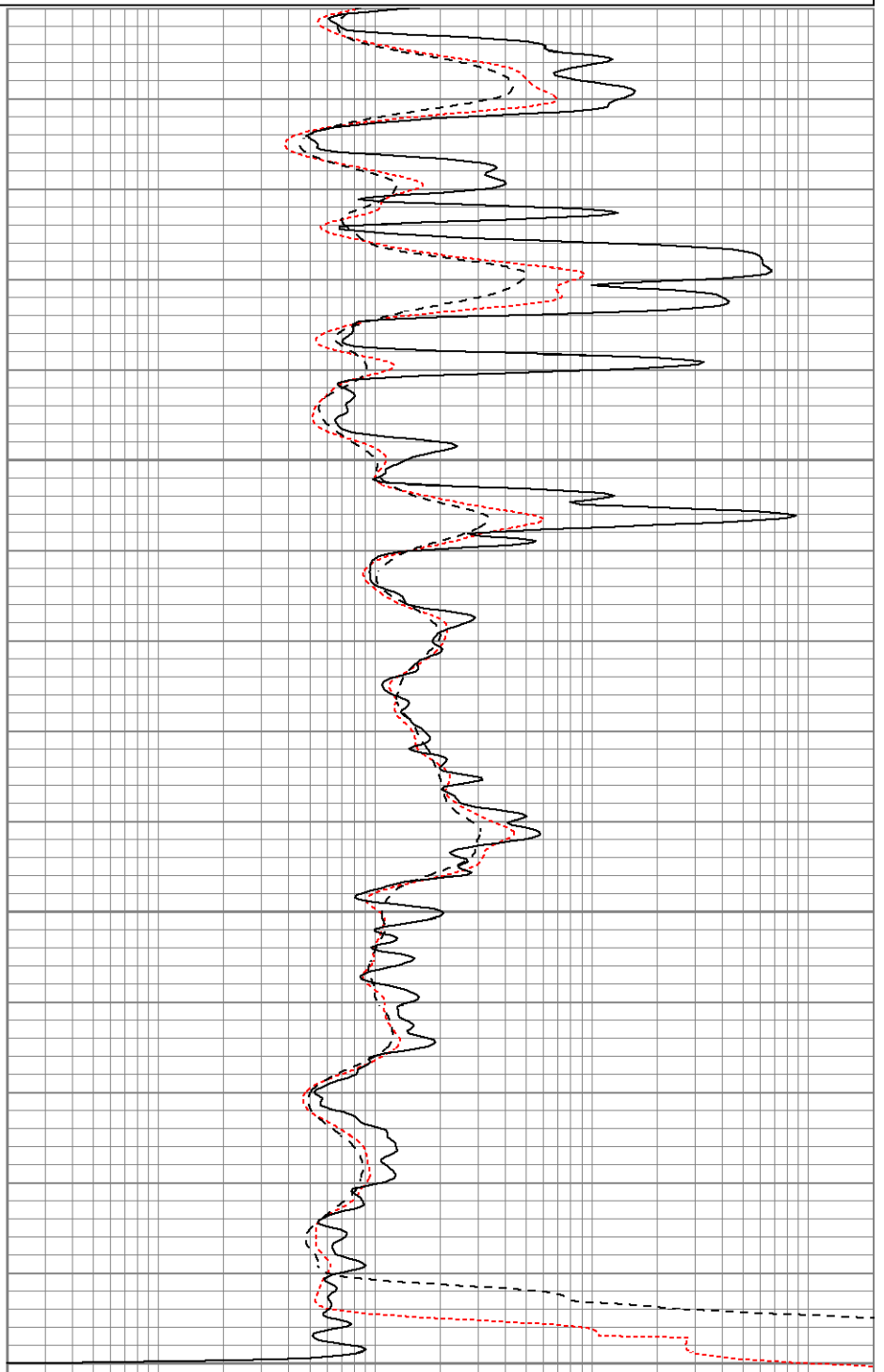
Repeat Pass

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

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



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



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

Calibration Report

Database File jofmcninchunit#1oh.db
Dataset Pathname pass1.1
Dataset Creation Wed Jun 12 12:32:30 2013

Dual Induction Calibration Report

Serial-Model: 5375-G
 Surface Cal Performed: Wed Apr 24 10:24:39 2013
 Downhole Cal Performed: Wed Apr 24 10:24:44 2013
 After Survey Verification Performed: Wed Apr 24 10:24:46 2013

Surface Calibration

Readings				References			Results	
Loop:	Air	Loop		Air	Loop		m	b
Deep	0.004	0.642	V	0.000	350.000	mmho/m	548.978	-2.319
Medium	0.008	0.744	V	0.000	400.000	mmho/m	543.196	-4.293
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.005	0.642	V	0.000	350.000	mmho/m	548.752	-2.529
Medium	0.008	0.744	V	0.000	550.000	mmho/m	746.807	-5.812

Downhole Calibration

Readings				References			Results	
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.271	350.533	mmho/m	0.211	350.355	mmho/m	1.000	-0.060
Medium	-0.023	400.162	mmho/m	-0.066	399.980	mmho/m	1.000	-0.043
Shallow	2.479	0.015	V	500.000	2.000	Ohm-m	202.133	-1.103

After Survey Verification

Readings				Targets			Results	
Internal:	Zero	Cal		Zero	Cal		m'	b'
Deep	0.000	0.000	mmho/m	0.271	350.533	mmho/m	1.000	-0.060
Medium	0.000	0.000	mmho/m	-0.023	400.162	mmho/m	1.000	-0.043
Shallow	0.000	0.000	Ohm-m	500.000	2.000	Ohm-m	1.000	0.000

Compensated Density Calibration Report

Serial-Model: 2388DHT-DHT
 Source / Verifier: /
 Master Calibration Performed: Tue Jun 11 15:41:50 2013
 Before Survey Verification Performed:
 After Survey Verification Performed:

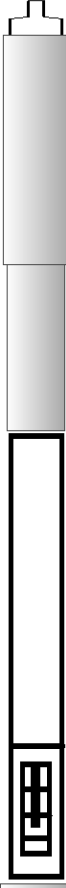
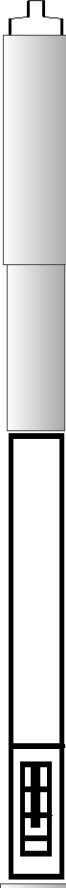
Master Calibration

	Density			Far Detector	Near Detector	
Magnesium	1.750	g/cc		677.63	298.90	cps
Aluminum	2.650	g/cc		127.62	185.00	cps
Spine Angle = 73.97				Density/Spine Ratio = 0.518		
	Size			Reading		
Small Ring	8.35	in		5771.32		
Large Ring	14.00	in		10165.20		

Before Survey Verification

Target	Measured
g/cc	g/cc
g/cc	g/cc

g/cc				g/cc			
After Survey Verification							
Target				Measured			
g/cc				g/cc			
g/cc				g/cc			
g/cc				g/cc			
Gamma Ray Calibration Report							
Serial Number:		2001					
Tool Model:		OH					
Performed:		Tue Jun 11 15:41:32 2013					
Calibrator Value:		1.0		GAPI			
Background Reading:		0.0		cps			
Calibrator Reading:		1.0		cps			
Sensitivity:		0.2300		GAPI/cps			
Neutron Calibration Report							
Serial Number:		5108					
Tool Model:		PROBE					
Performed:		Tue Jun 11 15:41:41 2013					
Calibrator Value:		1		NAPI			
Calibrator Reading:		1		cps			
Sensitivity:		1		NAPI/cps			

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
NEU	38.26		None	0.75	1.50	5.00
			NEU-PROBE (5108) Probe	4.92	3.63	85.00
GR	32.32		GR-OH (2001) 2001	3.56	3.25	40.00
			DHT (2388DHT) Digital High Temp CDL Tool	9.69	4.00	201.00
LSD	23.78					
DCAL	23.49					
SSD	23.24					
HEADVOLT	21.47					

