



DUAL INDUCTION LOG

Company		DIXON OPERATING COMPANY, LLC.	
Well	DSA #2-3		
Field	MIKES METEOR		
County	STAFFORD	State	KANSAS
Location:	API # : 15-185-24059-0000		Other Services CDL/CNL/PE MEL/SON
	2210' FSL & 2970' FEL		
	SEC 3 TWP 23S RGE 12W		
	Permanent Datum	GROUND LEVEL Elevation	
Log Measured From	KELLY BUSHING 11' A.G.L		Elevation K.B. 1845 D.F. 1843 G.L. 1834
Drilling Measured From	KELLY BUSHING		
Date	10/18/19		
Run Number	ONE		
Depth Driller	3850		
Depth Logger	3848		
Bottom Logged Interval	3846		
Top Log Interval	00		
Casing Driller	8 5/8" @ 306'		
Casing Logger	306'		
Bit Size	7 7/8		
Type Fluid in Hole	CHEMICAL MUD		
Density / Viscosity	9.2/46		
pH / Fluid Loss	10.5/9.2		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	0.65 @ 83F		
Rmf @ Meas. Temp	0.48 @ 83F		
Rmc @ Meas. Temp	0.78 @ 83F		
Source of Rmf / Rmc	MEASUREMENT		
Rm @ BHT	0.46 @ 115F		
Time Circulation Stopped	2 HOURS		
Time Logger on Bottom	////		
Maximum Recorded Temperature	115F		
Equipment Number	3802		
Location	HAYS, KANSAS		
Recorded By	JASON CAPPELLUCCI		
Witnessed By	BRUCE REED		

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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.

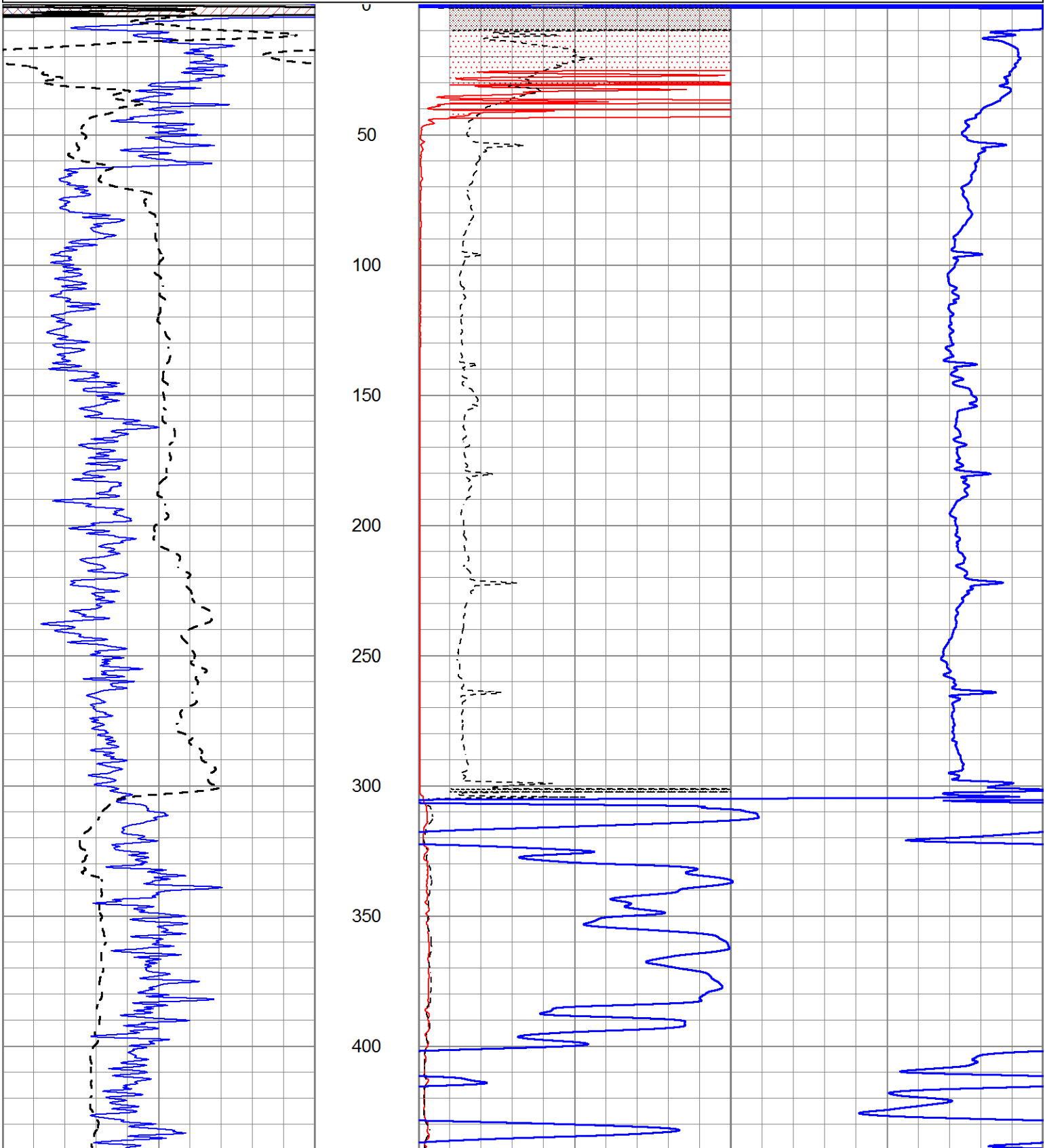
Comments

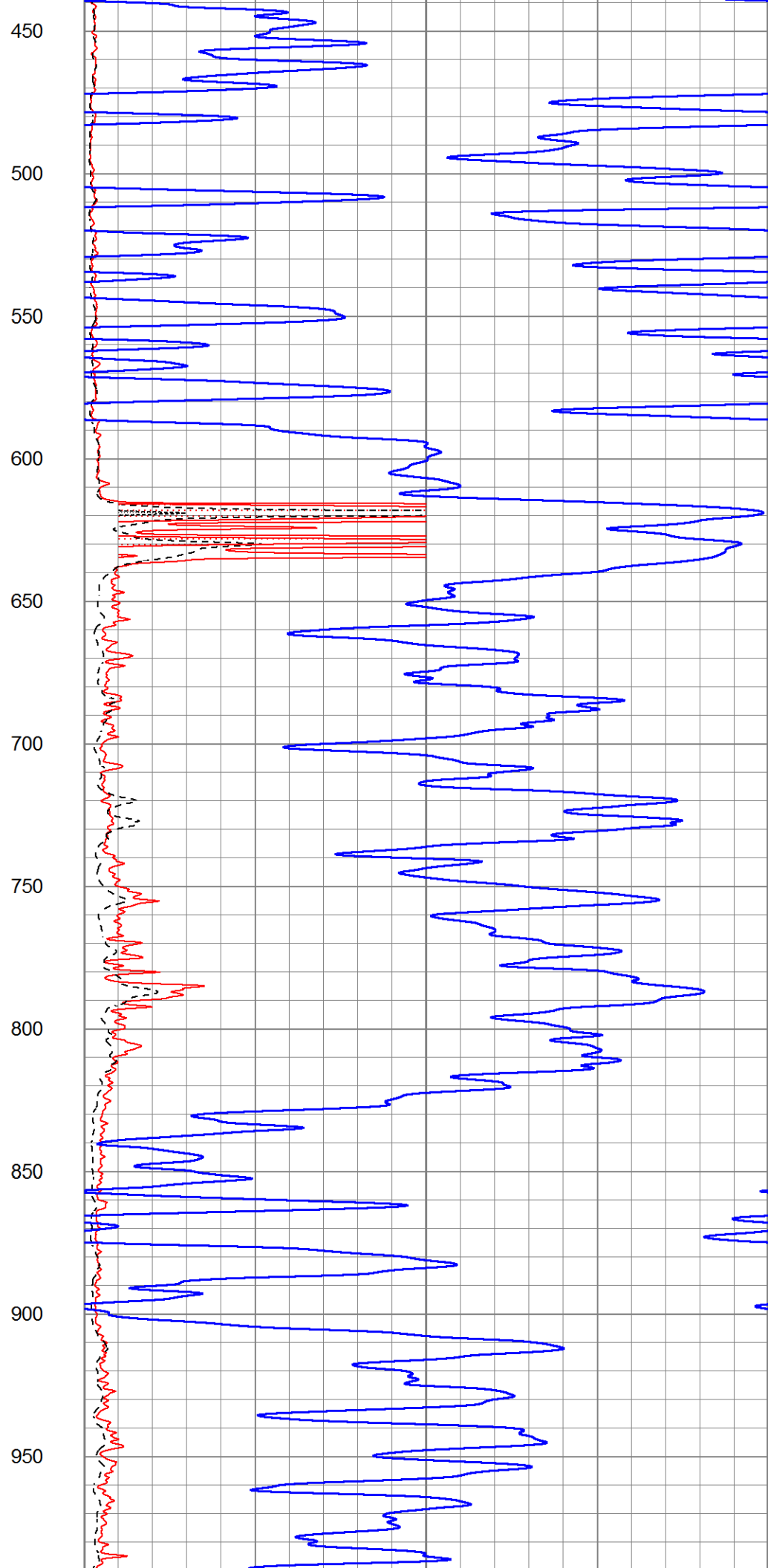
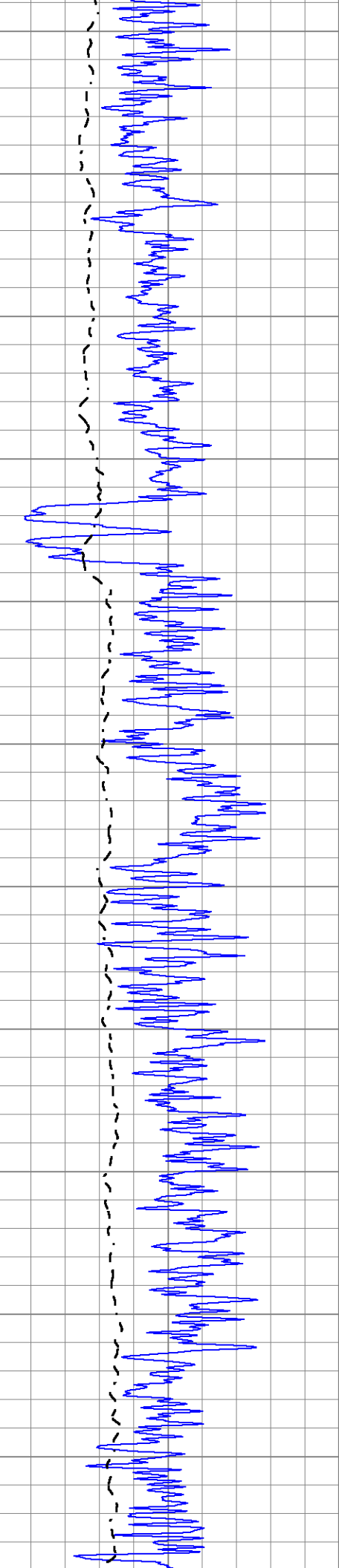
THANK YOU FOR USING ELI WIRELINE SERVICES, HAYS, KS. (785) 628-6395
DIRECTIONS
ST. JOHN, KS. - 4 NORTH TO NE 70TH RD. - 6 EAST TO 60TH - 1 1/4 NORTH
EAST INTO

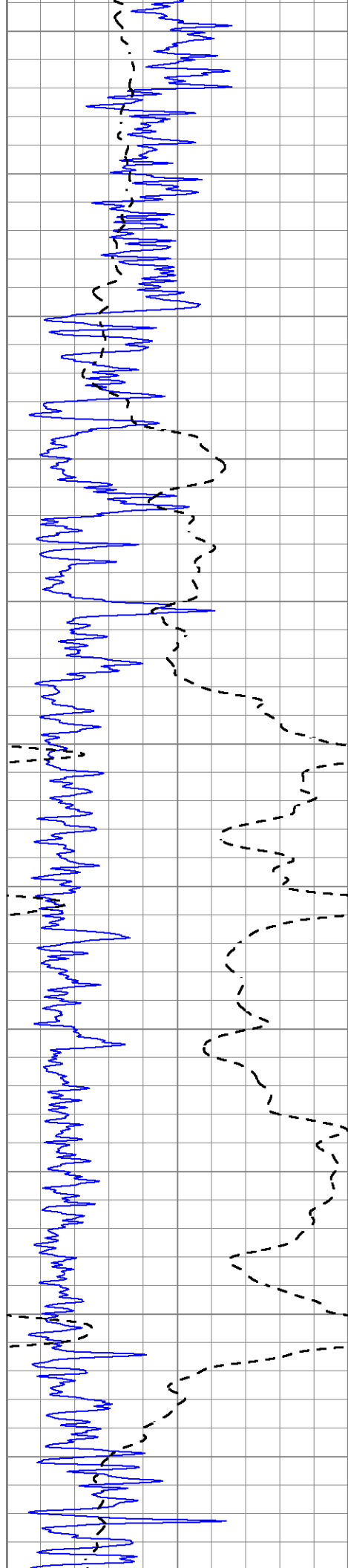


MAIN SECTION

0	Gamma Ray (GAPI)	150	1000	CILD (mmho/m)	0
-100	SP (mV)	100	0	RLL3 (Ohm-m)	50
-----			0	Deep Induction (Ohm-m)	50
			50	RILD X10 (Ohm-m)	500
			50	RLL3 X10 (Ohm-m)	500







1000

1050

1100

1150

1200

1250

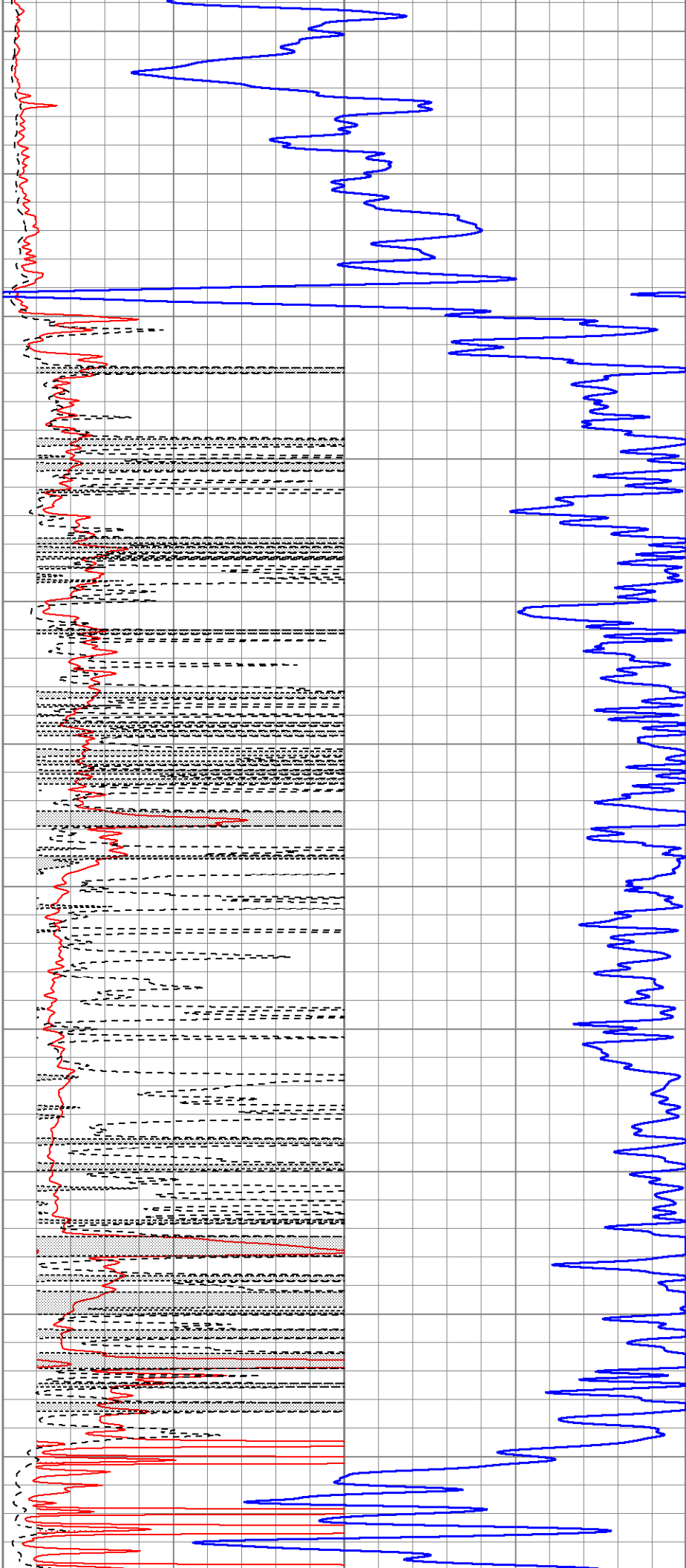
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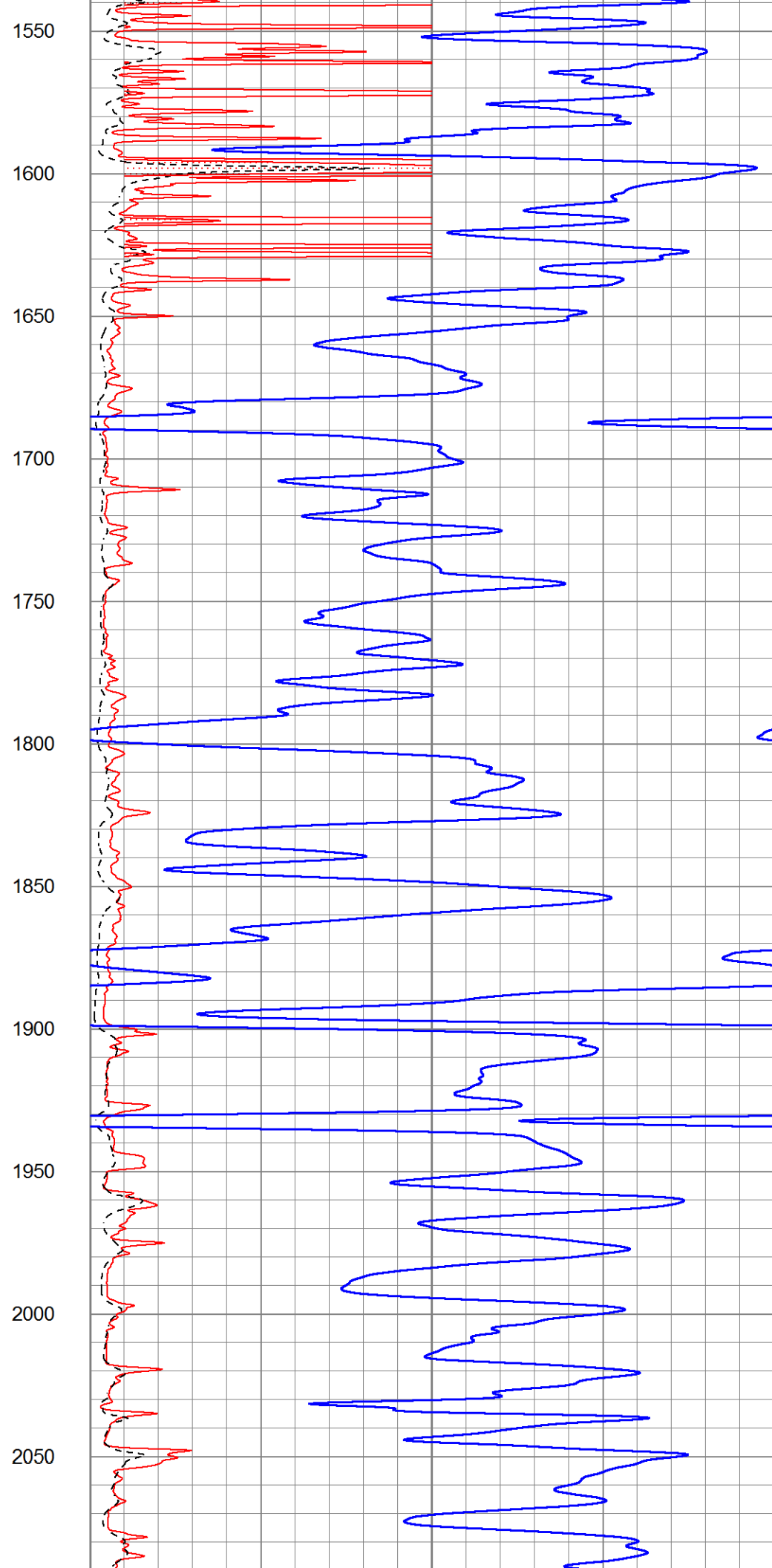
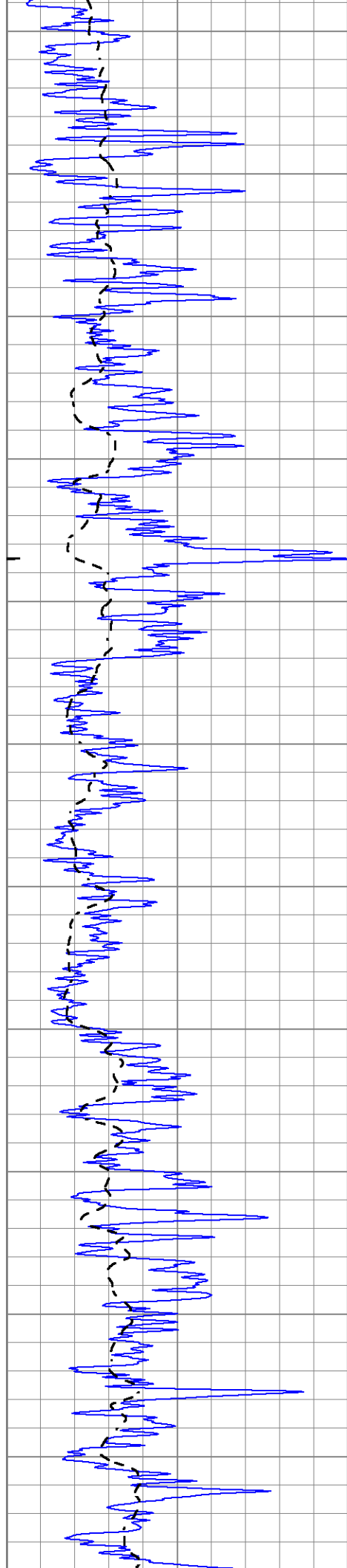
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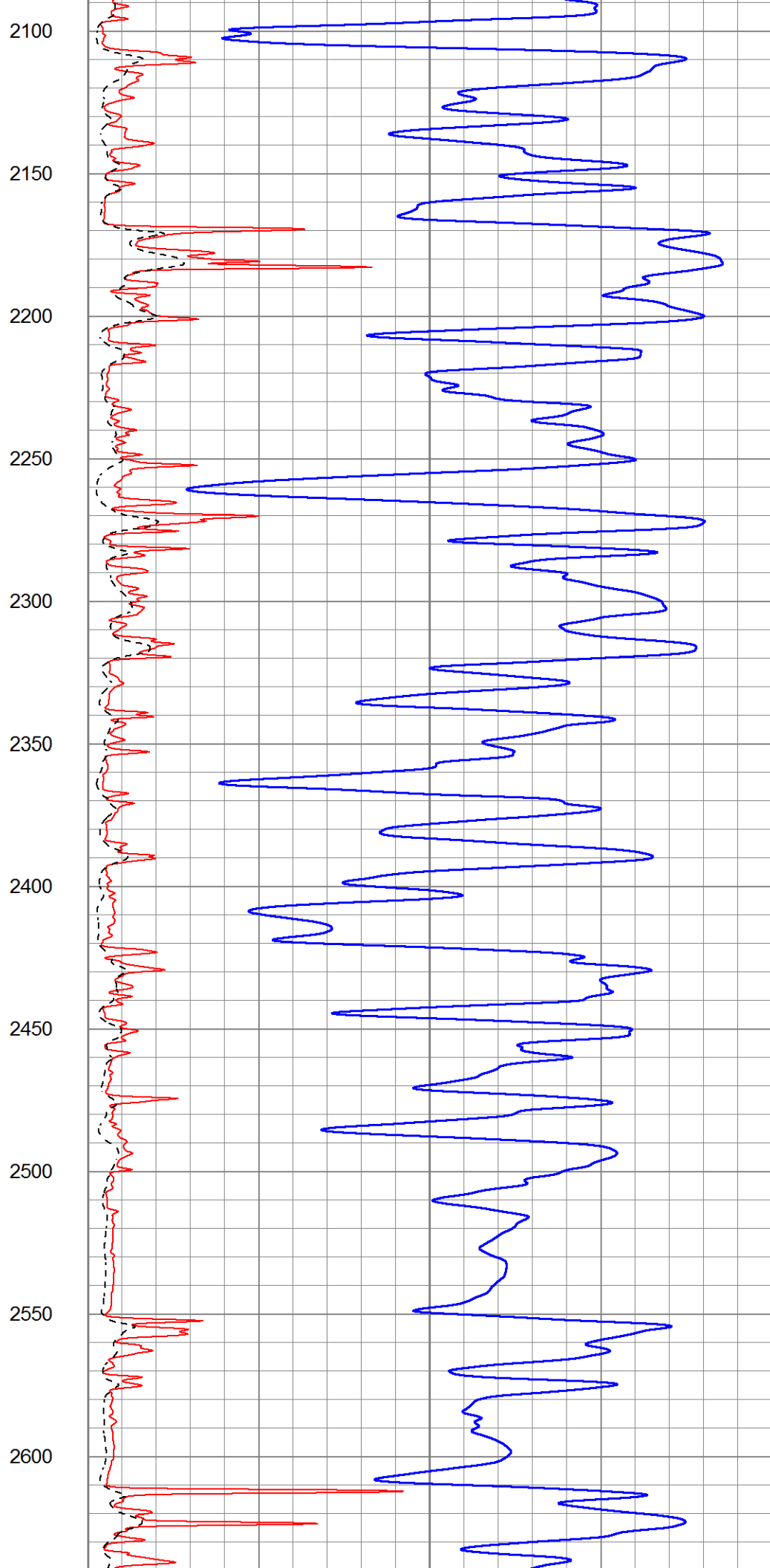
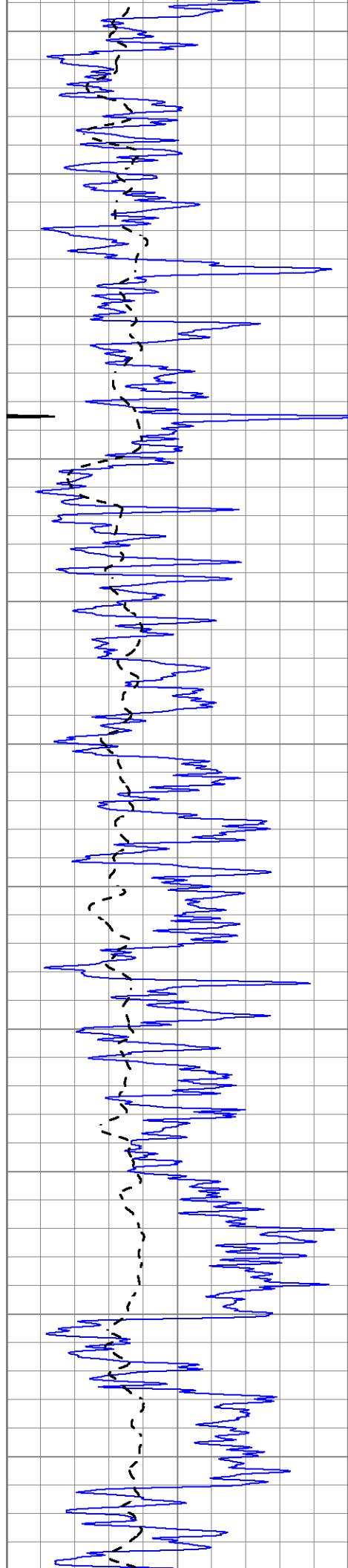
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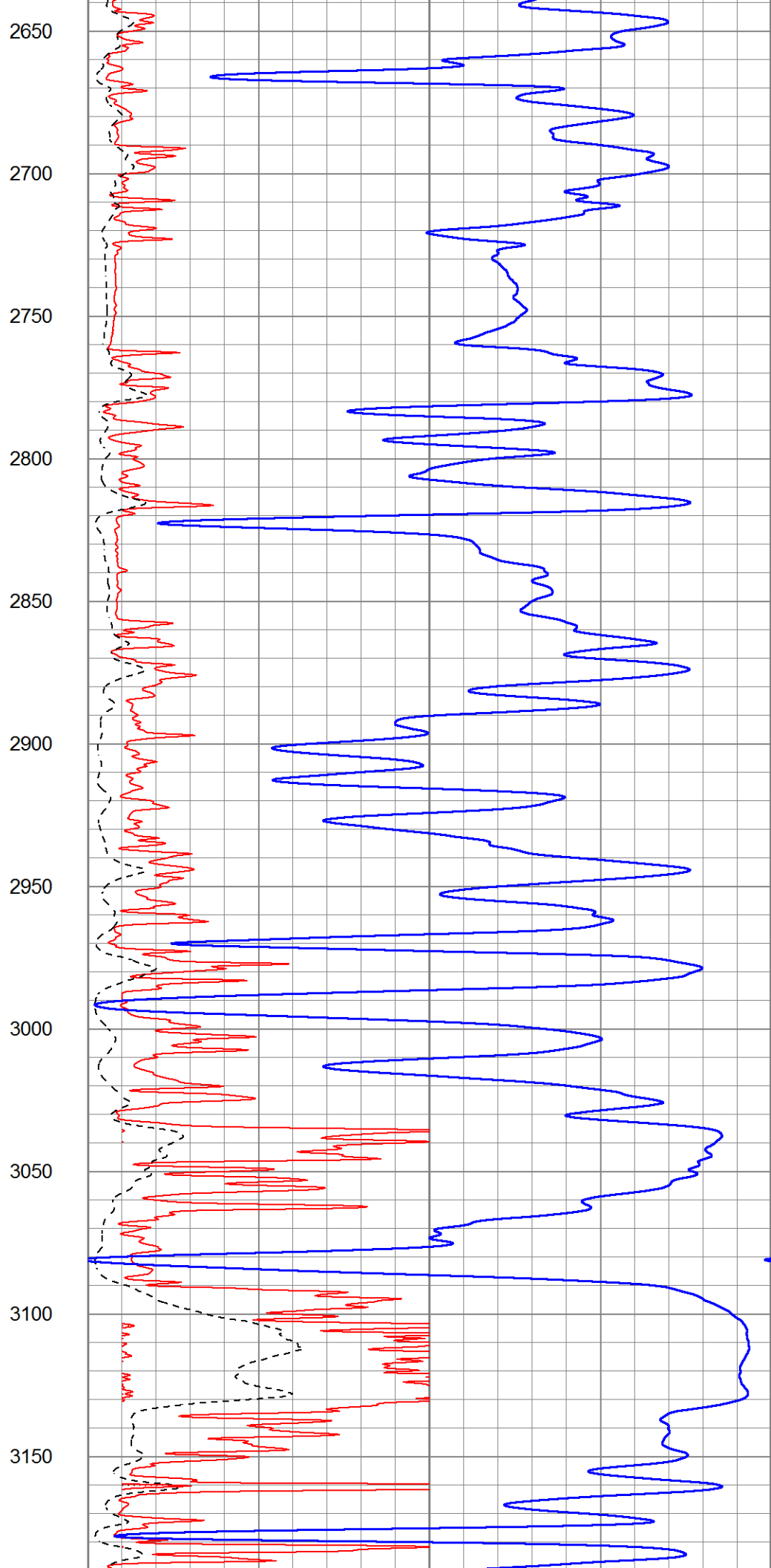
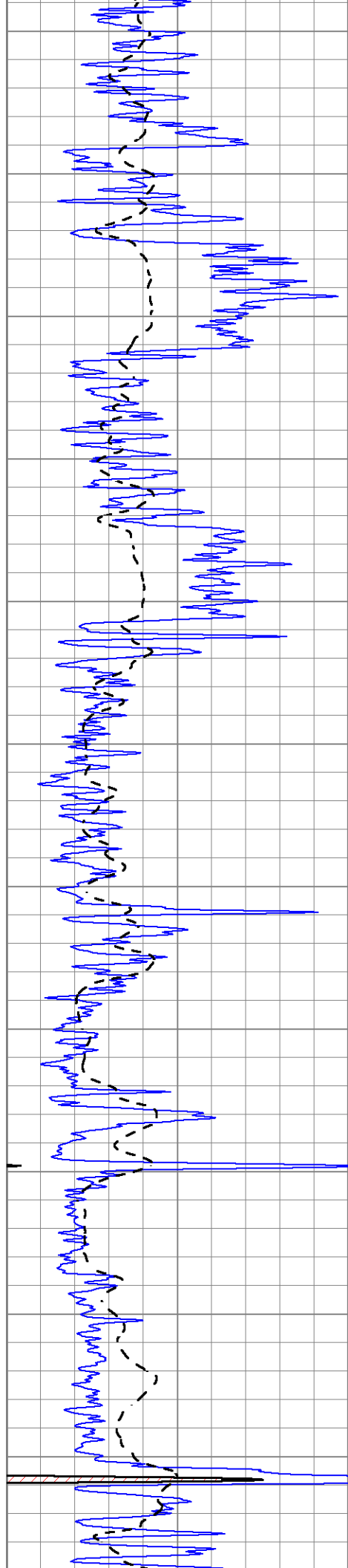
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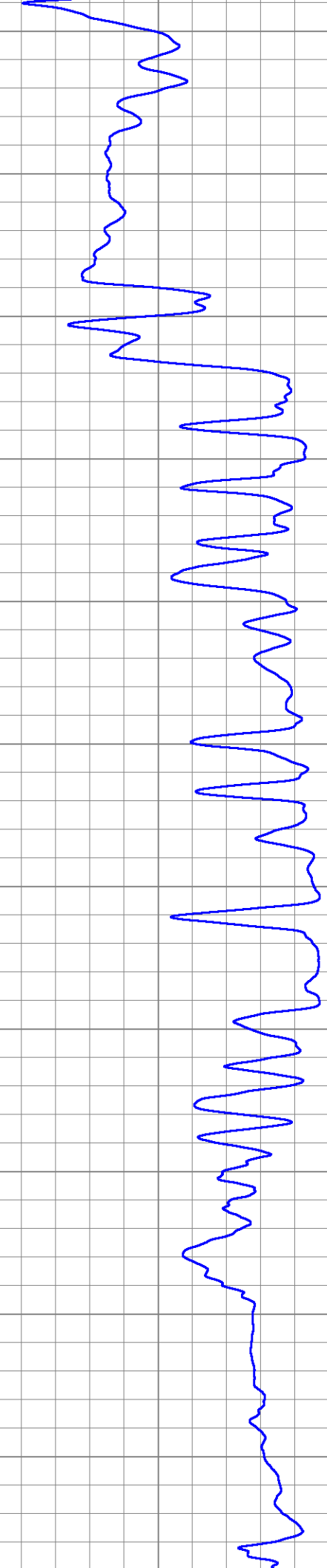
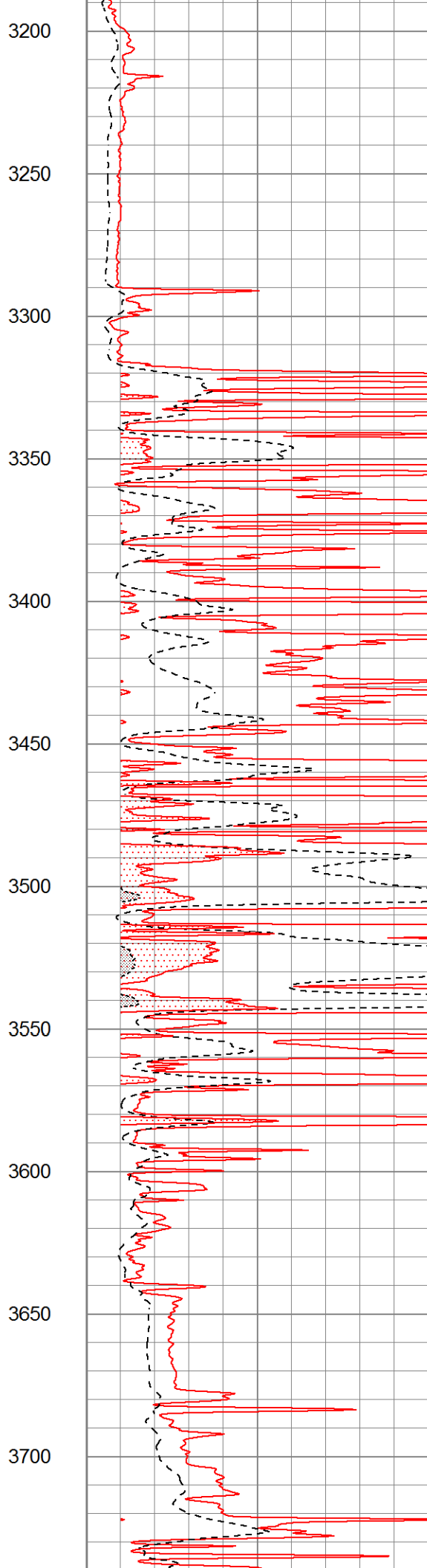
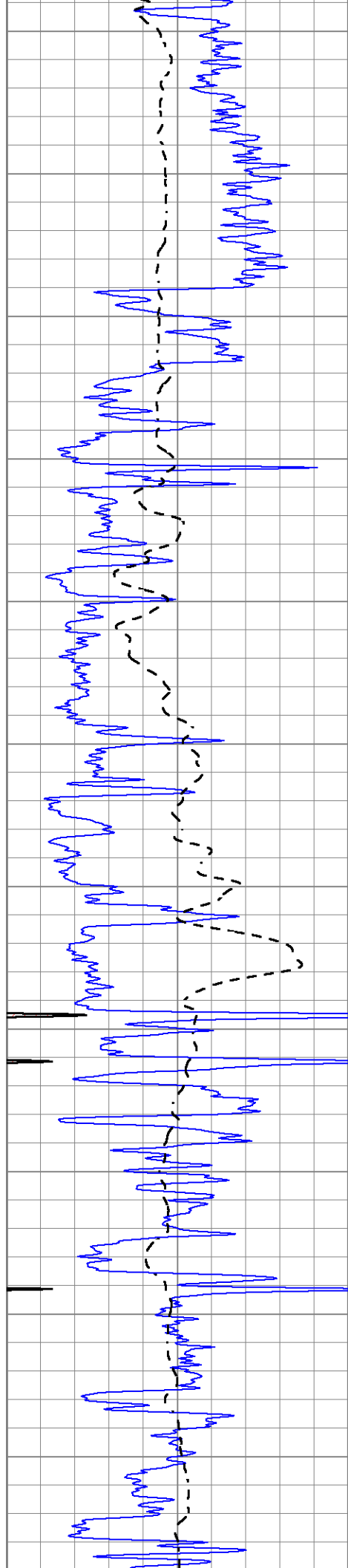
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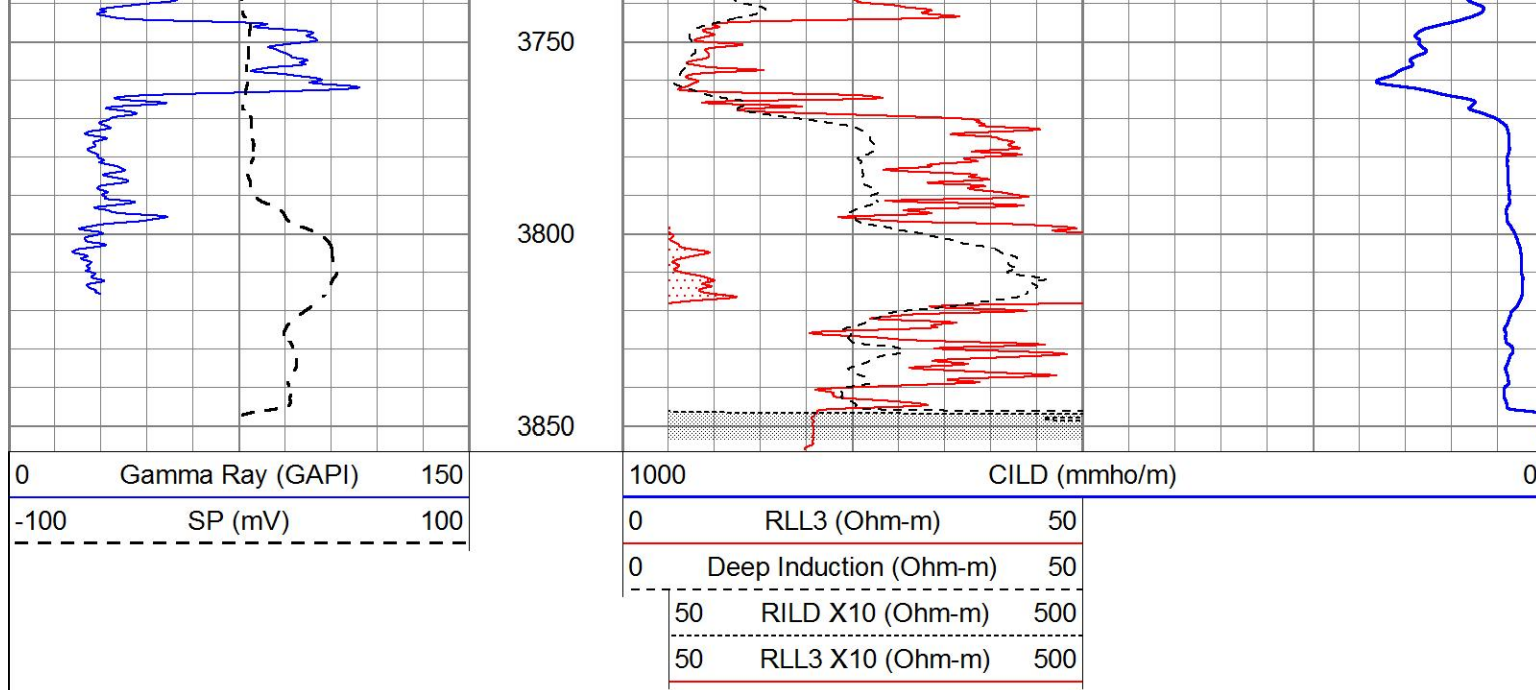








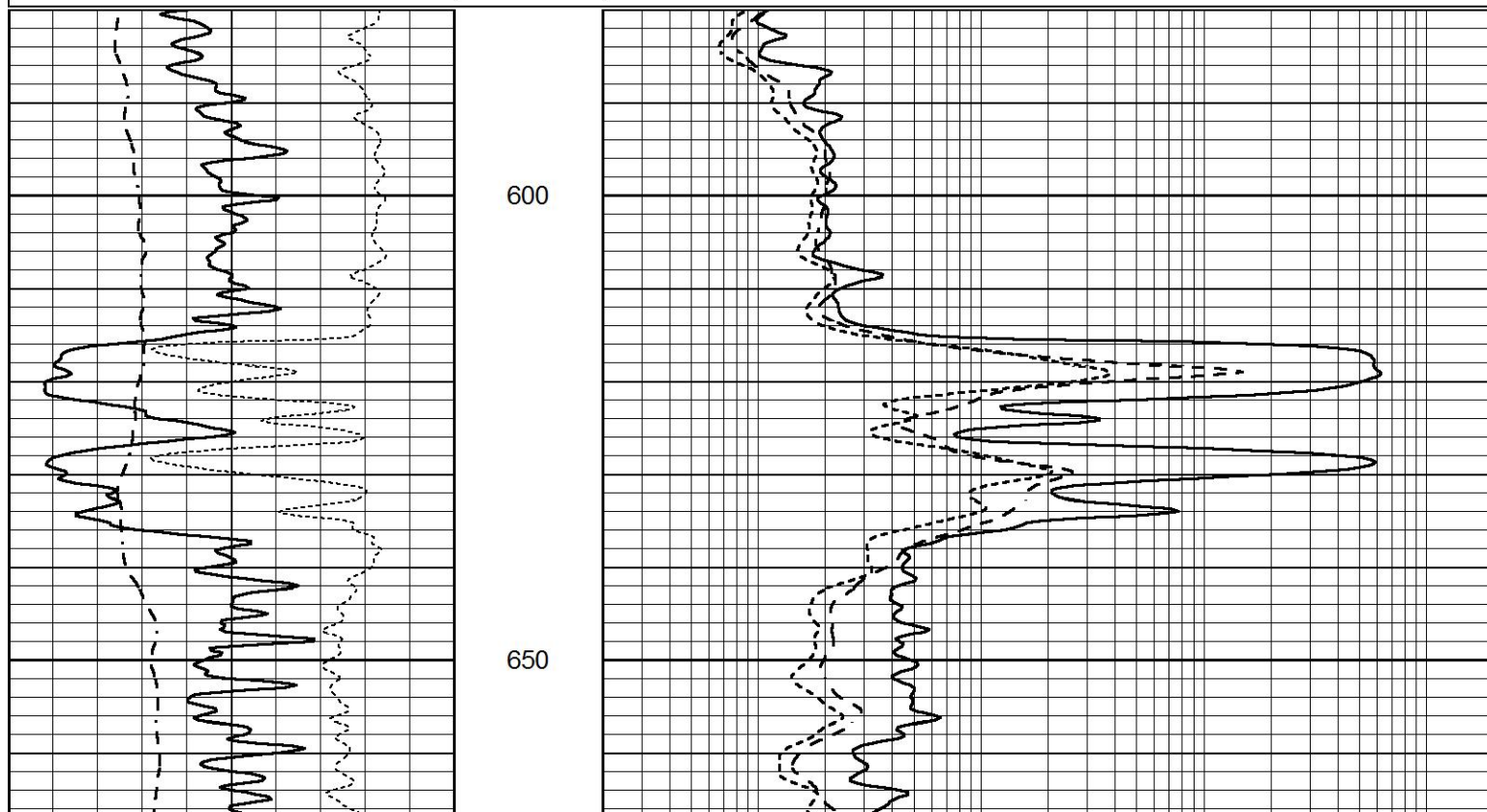




ANHYDRITE

Database File 4000pe8.db
 Dataset Pathname pass3.2
 Presentation Format _dil
 Dataset Creation Fri Oct 18 20:12:04 2019
 Charted by Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150	0.2	SHALLOW GUARD (Ohm-m)	2000
-100	SP (mV)	100	0.2	MEDIUM INDUCTION (Ohm-m)	2000
-250	Rxo/Rt	50	0.2	DEEP INDUCTION (Ohm-m)	2000



0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50

0.2	SHALLOW GUARD (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000

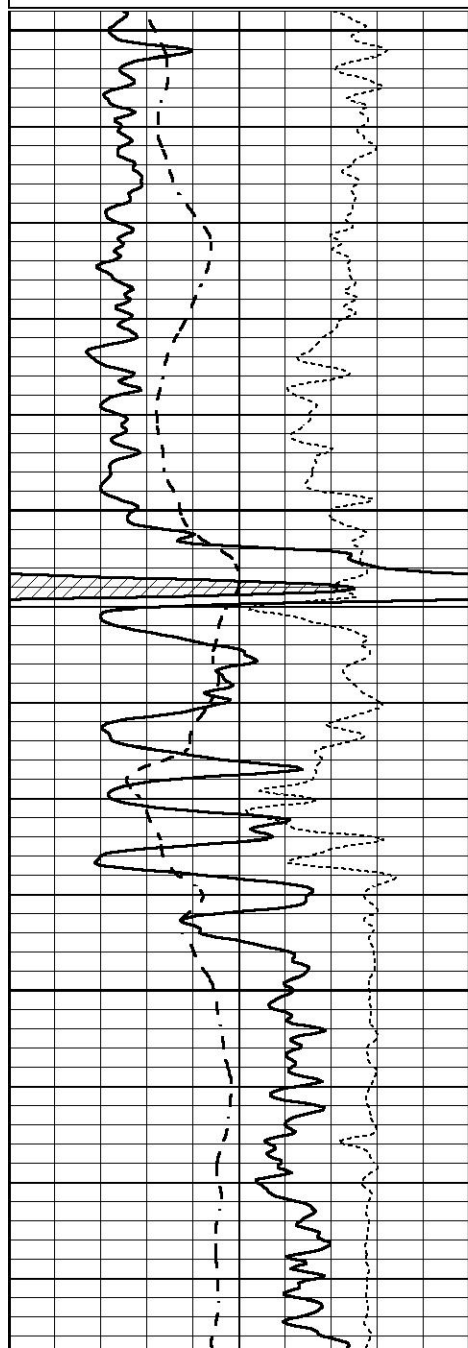


MAIN SECTION

Database File 4000pe8.db
 Dataset Pathname pass3.1
 Presentation Format _dil
 Dataset Creation Fri Oct 18 19:51:29 2019
 Charted by Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50

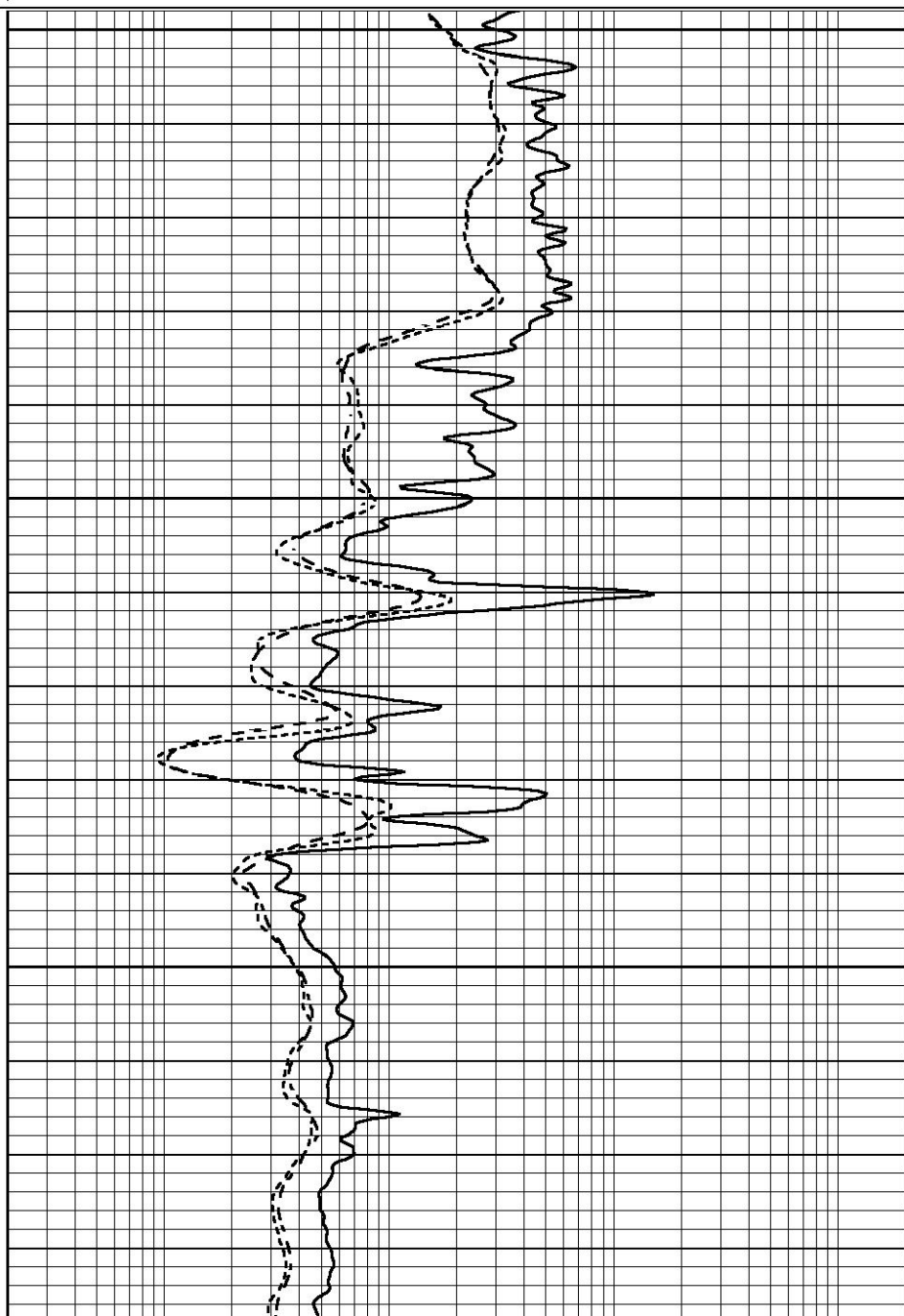
0.2	SHALLOW GUARD (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000

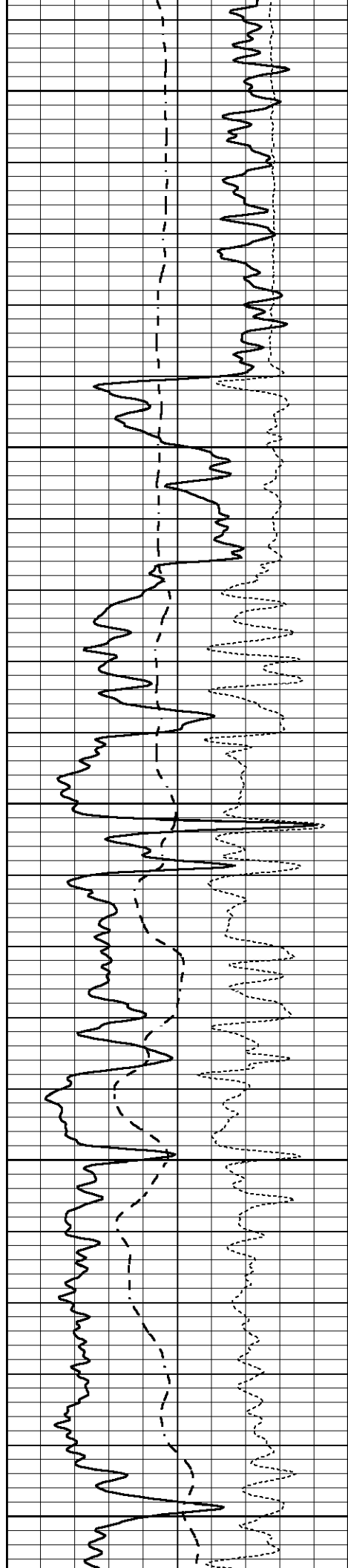


3100

3150

3200





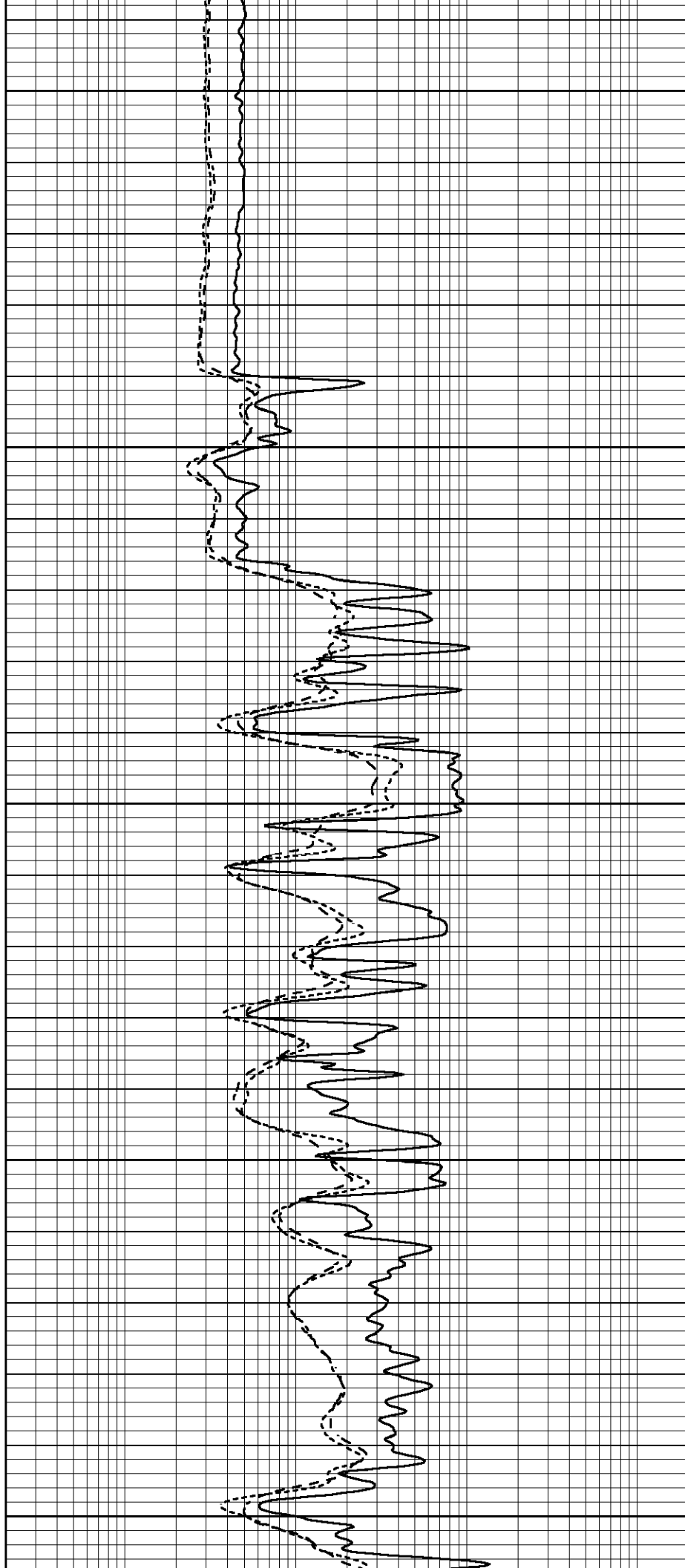
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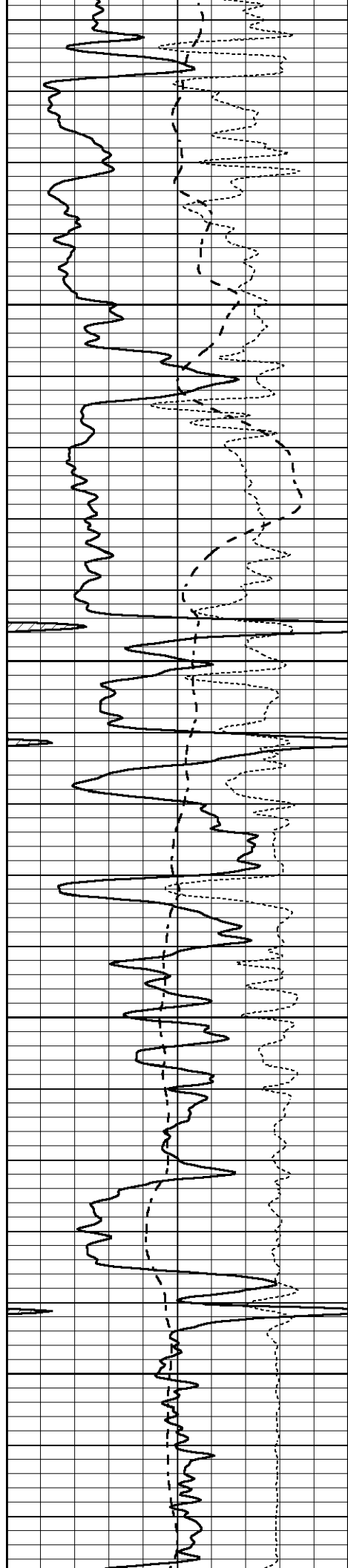
3300

3350

3400

3450



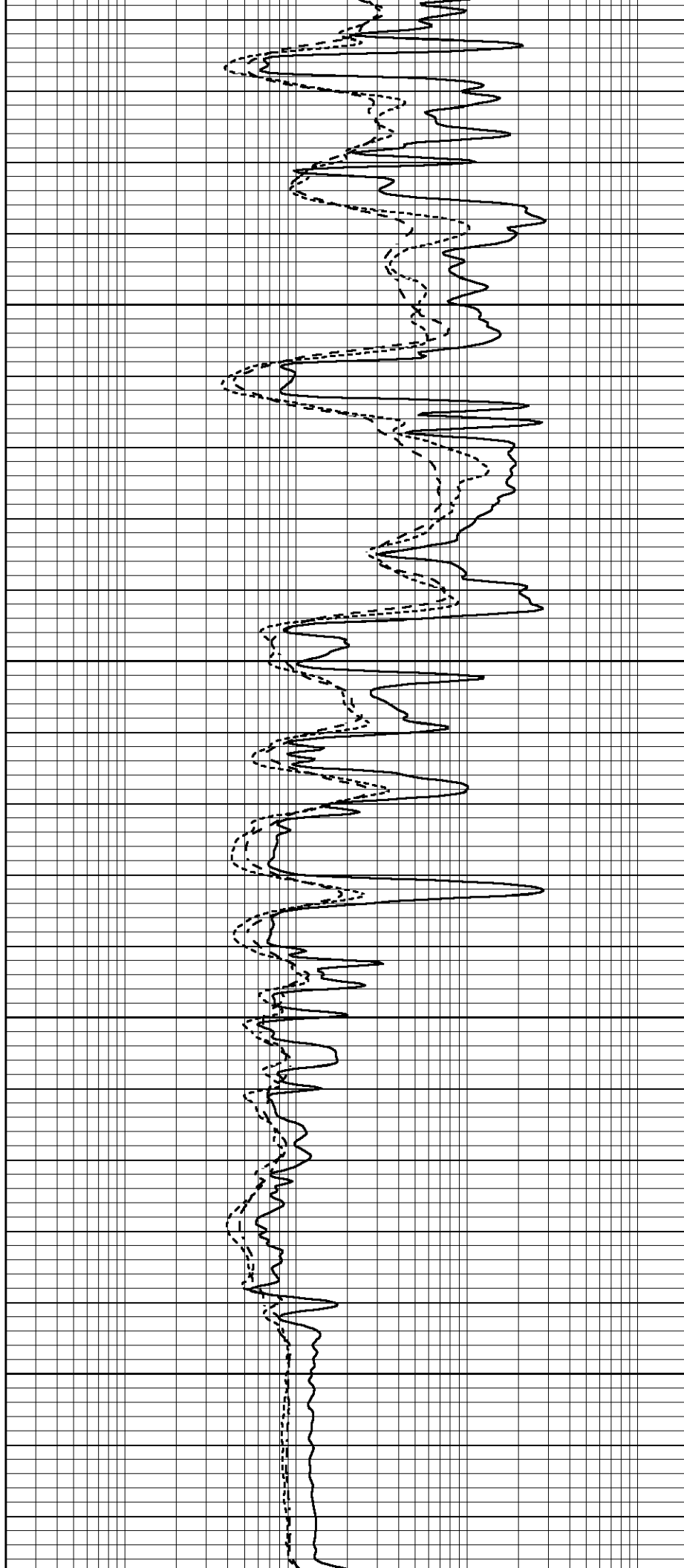


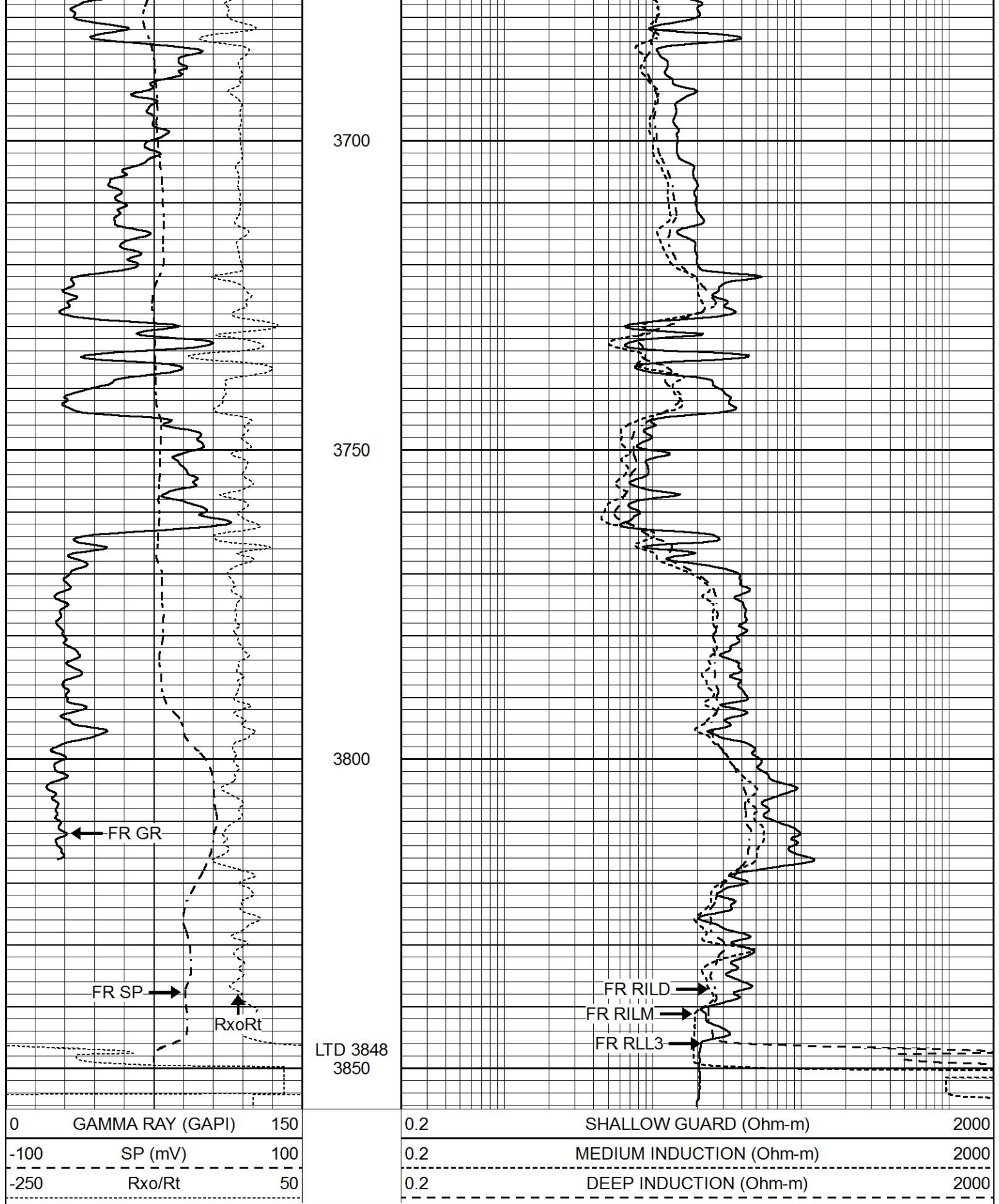
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3550

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3650



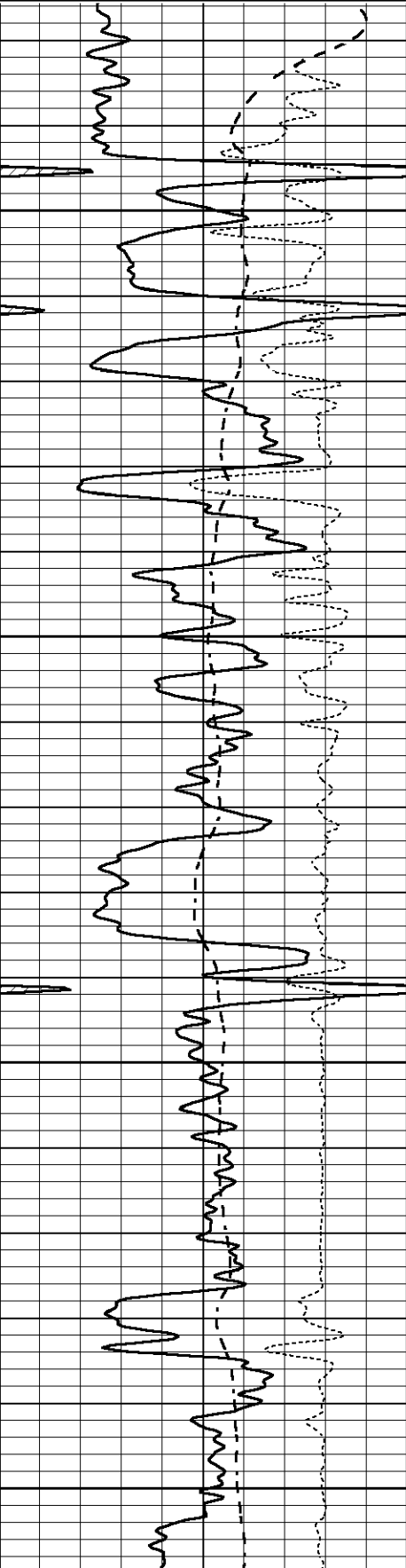


REPEAT SECTION

Database File 4000pe8.db
Dataset Pathname pass2.1
Presentation Format _dil
Dataset Creation Fri Oct 18 19:44:20 2019
Charted by Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50

0.2	SHALLOW GUARD (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000

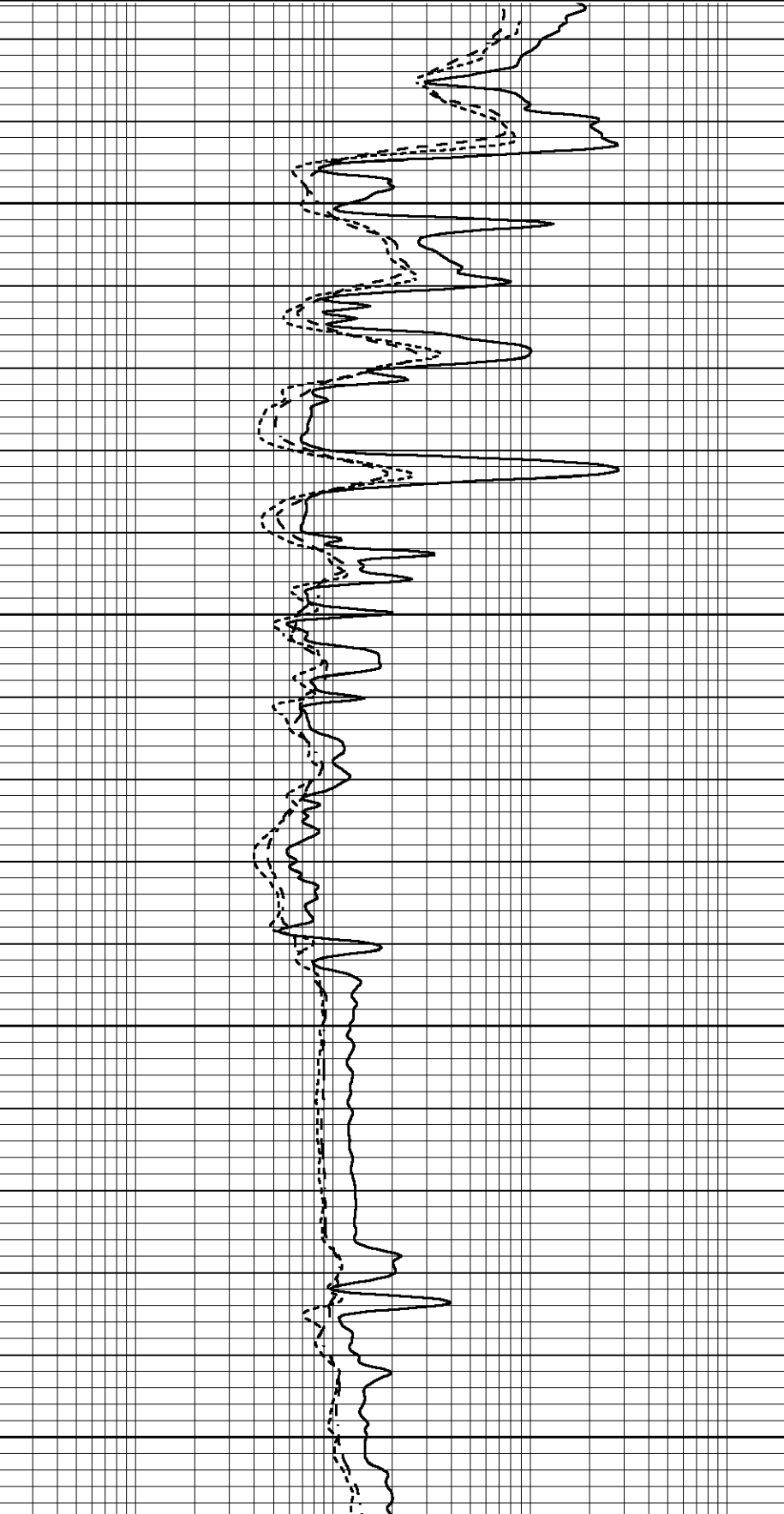


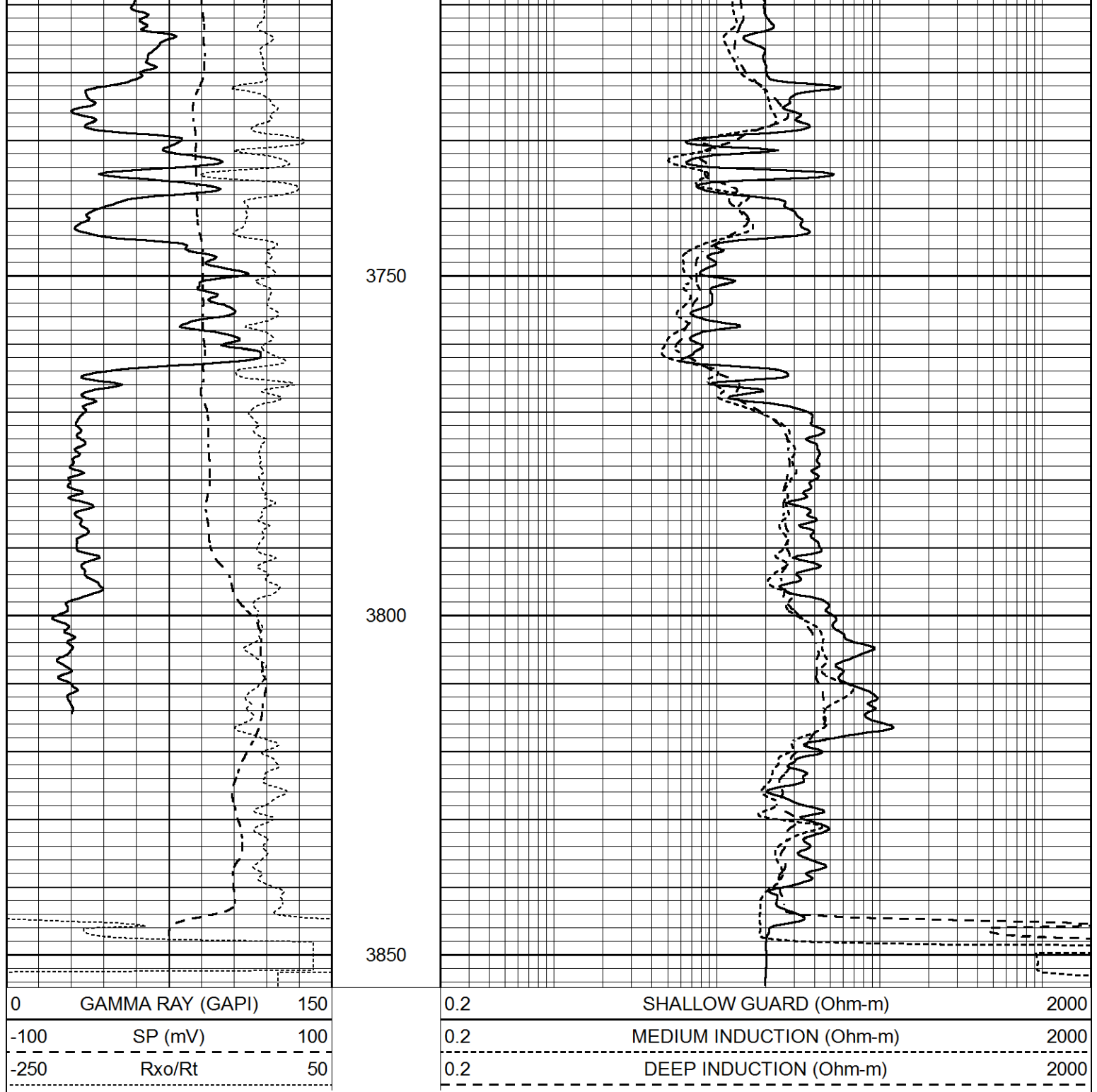
3550

3600

3650

3700





Calibration Report							
Database File		4000pe8.db					
Dataset Pathname		pass2.1					
Dataset Creation		Fri Oct 18 19:44:20 2019					
Dual Induction Calibration Report							
		Serial-Model:		FW1410-55-Probe			
		Surface Cal Performed:		Tue Feb 19 11:44:18 2019			
		Downhole Cal Performed:		Tue Feb 19 11:44:24 2019			
		After Survey Verification Performed:		Tue Feb 19 11:44:27 2019			
Surface Calibration							
		Readings		References		Results	
Loop:	Air	Loop	Air	Loop	m	b	

Deep	0.011	0.656	V	1.000	400.000	mmho/m	618.595	-5.524
Medium	-0.000	0.731	V	1.000	464.000	mmho/m	632.856	1.197
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.007	0.649	V	0.000	400.000	mmho/m	623.784	-4.595
Medium	0.004	0.743	V	0.000	464.000	mmho/m	627.284	-2.251

Downhole Calibration								
	Readings			References			Results	
	Zero	Cal		Zero	Cal		m'	b'
Deep	-0.824	395.917	mmho/m	-0.976	397.550	mmho/m	1.004	-0.149
Medium	3.565	471.327	mmho/m	3.468	471.590	mmho/m	1.001	-0.099
LL3		7.503	V		1500.000	Ohm-m		
		0.001	V		20.000	Ohm-m		
		-7.481	V		3745.000	mmho-m		

After Survey Verification								
	Readings			Targets			Results	
	Zero	Cal		Zero	Cal		m'	b'
Deep	0.000	0.000	mmho/m	-0.824	395.917	mmho/m	1.000	0.000
Medium	0.000	0.000	mmho/m	3.565	471.327	mmho/m	1.000	0.000
LL3		0.000	Ohm-m		1500.000	Ohm-m		
		0.000	Ohm-m		20.000	Ohm-m		
		0.000	mmho-m		3745.000	mmho-m		

Litho Density Calibration Report								
Serial: 140704								
Model: V4_10P								
Source Number: 74GBq-19								

Master Calibration					Performed: Fri Jan 18 10:53:52 2019			
	Background		Aluminum	Magnesium				
Window 1	563.20		5403.39	24190.50		cps		
Window 2	44.78		1243.51	6049.93		cps		
Window 4	247.62		1222.40	5239.60		cps		
Window 5	568.17		8975.27	17094.80		cps		
Window 6	44.48		1484.88	2922.28		cps		
Window 8	270.82		2877.34	5377.89		cps		
Bulk Density	-		2.6020	1.6830		g/cc		
Pe	-		3.0000	2.5070		b/e		
LS Alpha:	: -1.8641		SS Alpha:	: -0.7692		LS CPE:	: 1.1004	
LS Beta:	: 127931.7253		SS Beta:	: 20075.8142		SS CPE:	: 1.5209	

Before Survey Background Counts Verification			Performed: Wed Dec 31 18:00:00 1969		
Window 1	0.00	cps			
Window 2	0.00	cps			
Window 4	0.00	cps			
Window 5	0.00	cps			
Window 6	0.00	cps			
Window 8	0.00	cps			

After Survey Background Counts Verification			Performed: Wed Dec 31 18:00:00 1969		
Window 1	0.00	cps			

Window 1	0.00	cps
Window 2	0.00	cps
Window 4	0.00	cps
Window 5	0.00	cps
Window 6	0.00	cps
Window 8	0.00	cps
Lithodensity Caliper Calibration		
Performed: Fri Jan 18 10:53:52 2019		
Results	Readings	References (in)
Low	High	Low High Gain Offset
3586.3	5529.9	8.0 16.0 0.0 -6.8
Before Survey Caliper Verification		
Performed:		
	Reference	Reading
Caliper (in)		
After Survey Caliper Verification		
Performed:		
	Reference	Reading
Caliper (in)		
Compensated Neutron Calibration Report		
Serial Number:		080621PMC
Tool Model:		NABORS
PRE-SURVEY VERIFICATION		
Detector	Readings	Measured Target
Short Space	cps	
Long Space	cps	pu pu
POST-SURVEY VERIFICATION		
Detector	Readings	Measured Target
Short Space	cps	
Long Space	cps	pu pu
Gamma Ray Calibration Report		
Serial Number:	7	
Tool Model:	Probe1	
Performed:	Tue Feb 19 11:45:10 2019	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	0.4300	GAPI/cps