



DUAL INDUCTION LOG

Company SHELBY RESOURCES, LLC.

Well SLATTERY #1-16

Field

County BARTON

State KANSAS

Location: API # : 15-009-26273-0000

902' FNL & 800' FWL

SEC 16 TWP 18S RGE 14W

Permanent Datum GROUND LEVEL Elevation 1959
Log Measured From KELLY BUSHING 5' A.G.L
Drilling Measured From KELLY BUSHING

Elevation

K.B. 1964
D.F. 1962
G.L. 1959

Date 10/3/19

Run Number ONE

Depth Driller 3550

Depth Logger 3545

Bottom Logged Interval 3543

Top Log Interval 00

Casing Driller 8 5/8" @ 938'

Casing Logger 938'

Bit Size 7 7/8

Type Fluid in Hole CHEMICAL MUD

Density / Viscosity 9.2/52

pH / Fluid Loss 9.5/9.6

Source of Sample FLOWLINE

Rm @ Meas. Temp .70 @ 80F

Rmf @ Meas. Temp .52 @ 80F

Rmc @ Meas. Temp .84 @ 80F

Source of Rmf / Rmc MEASUREMENT

Rm @ BHT .50 @ 112F

Time Circulation Stopped 2 HOURS

Time Logger on Bottom

Maximum Recorded Temperature 112F

Equipment Number 3802

Location HAYS, KANSAS

Recorded By JASON CAPPELLUCCI

Witnessed By JEREMY SCHWARTZ

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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.

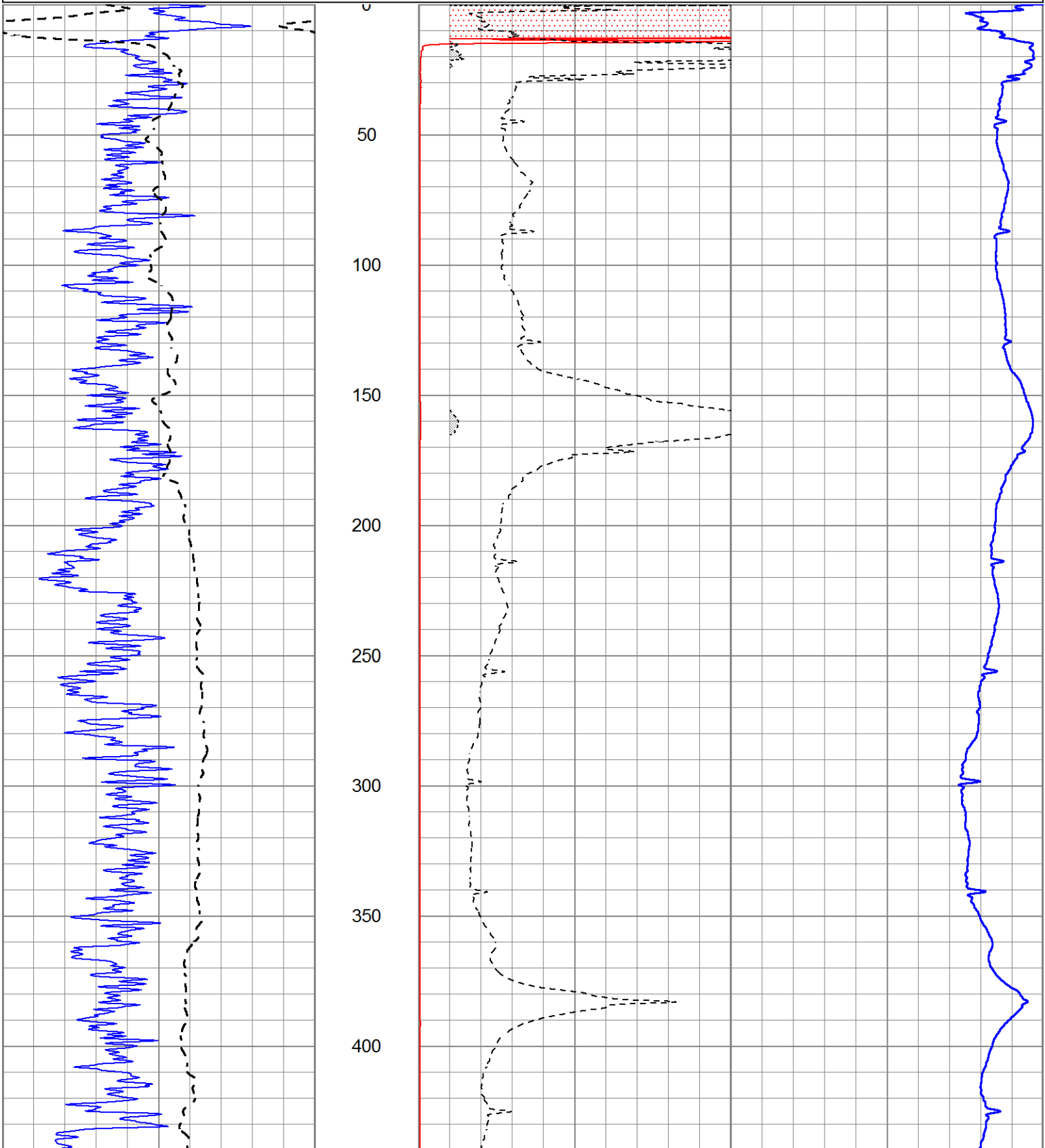
Comments

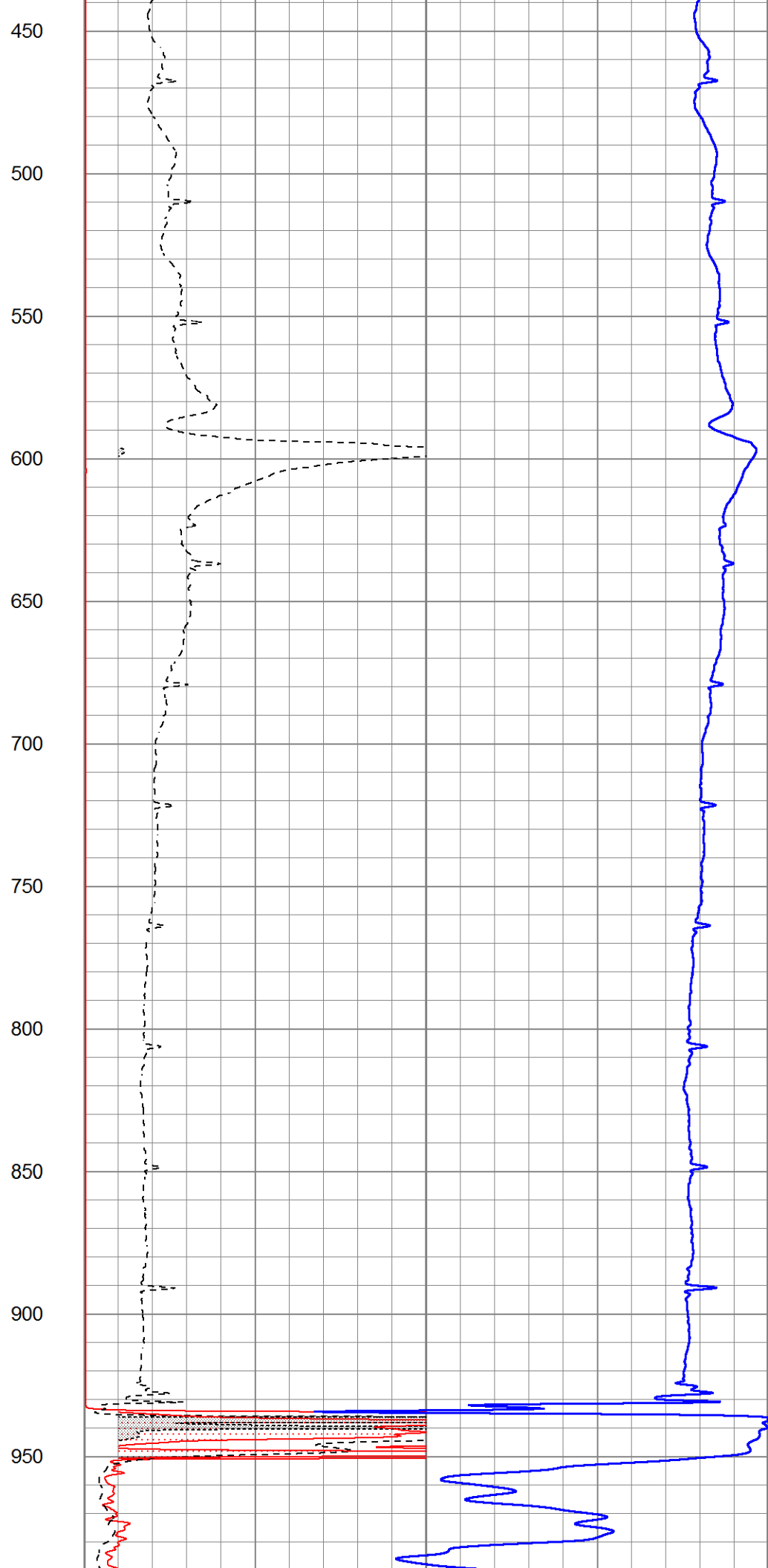
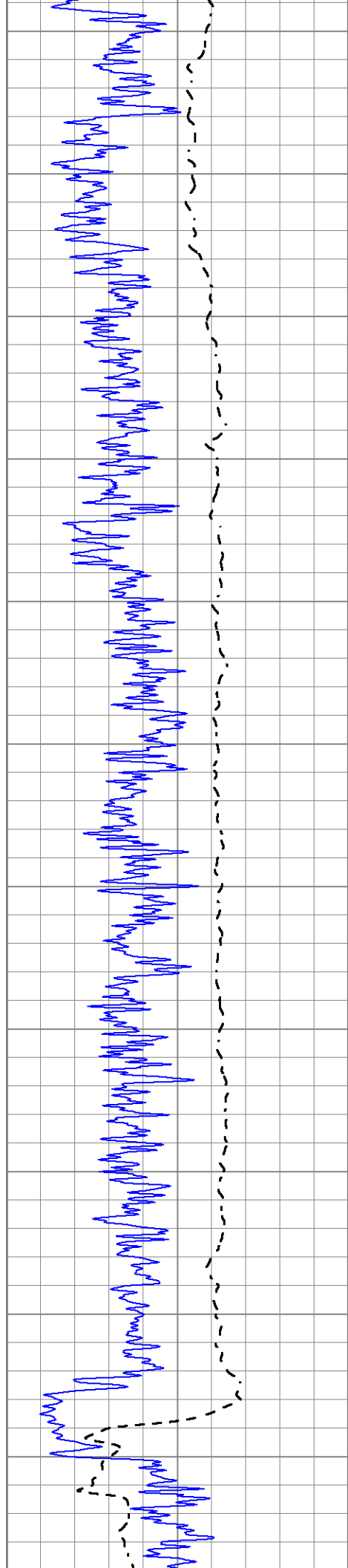
THANK YOU FOR USING ELI WIRELINE SERVICES, HAYS, KS. (785) 628-6395
DIRECTIONS
RUSSELL KS, SOUTH TO INTERSECTION OF HWY 281 & HWY 4 - 3 SOUTH ON BOYD
BLKTOP - 2 WEST - 1/4 SOUTH - EAST INTO

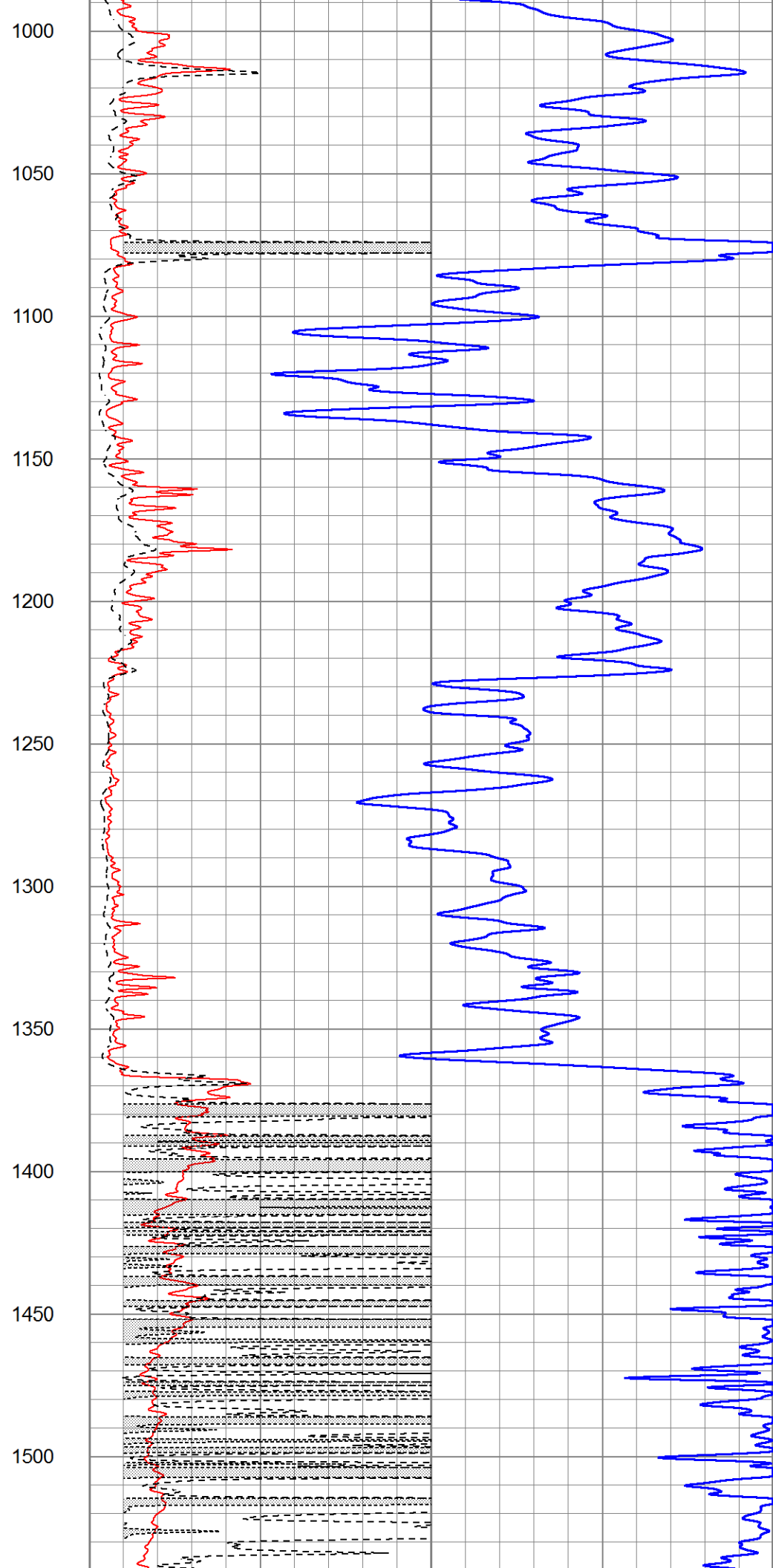
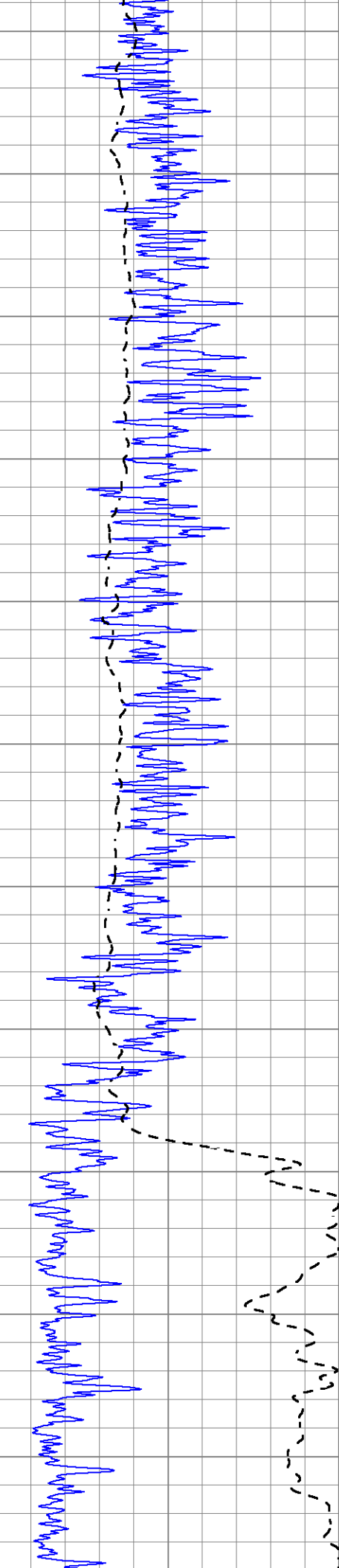


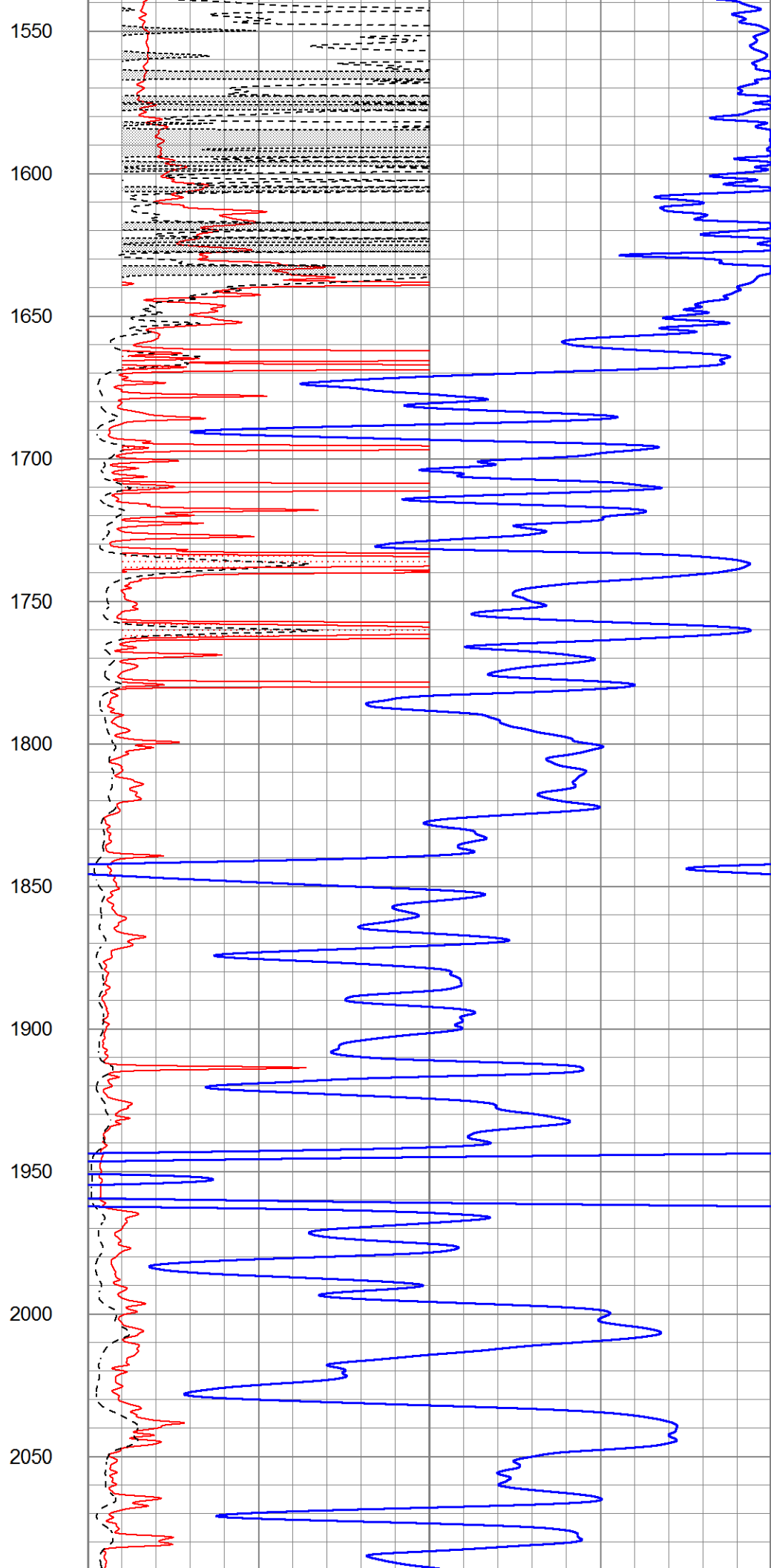
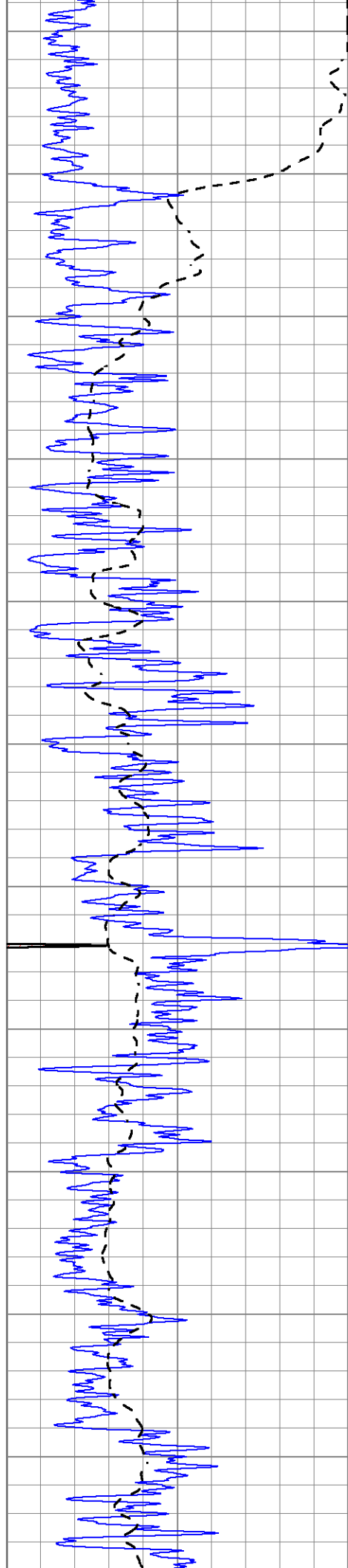
MAIN SECTION

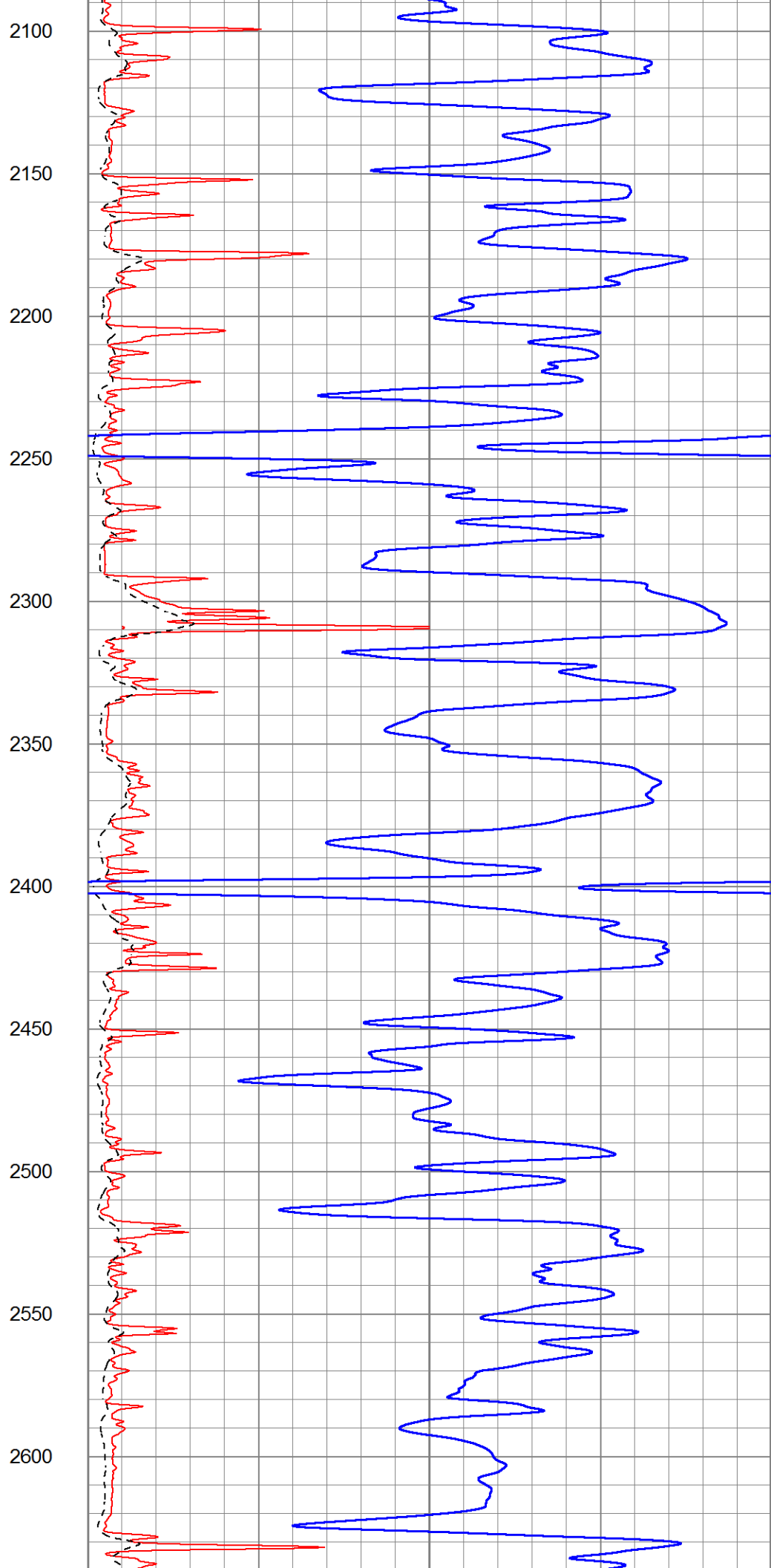
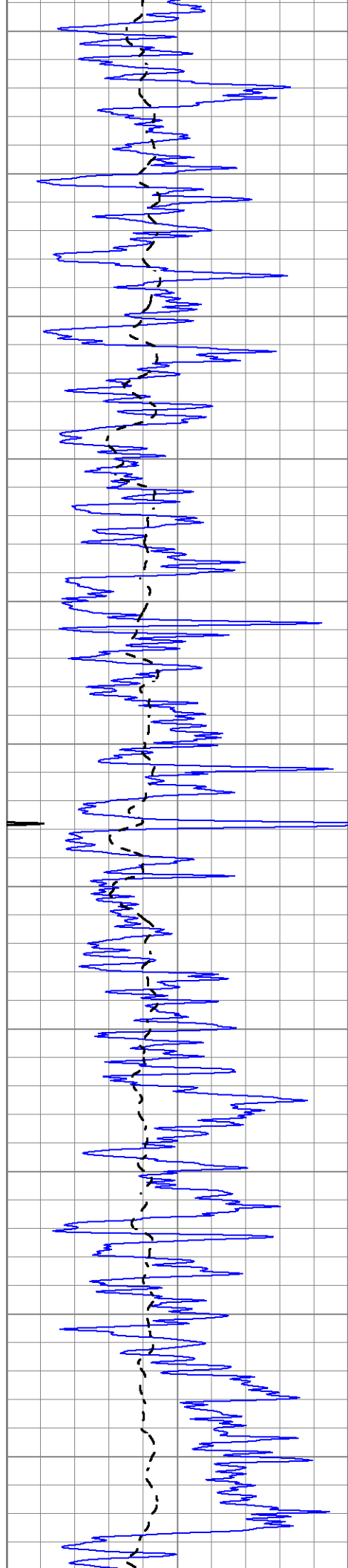
0	Gamma Ray (GAPI)	150	1000	CILD (mmho/m)	0
-100	SP (mV)	100	0	RLL3 (Ohm-m)	50
-----			0	Deep Induction (Ohm-m)	50
			50	RILD X10 (Ohm-m)	500
			50	RLL3 X10 (Ohm-m)	500

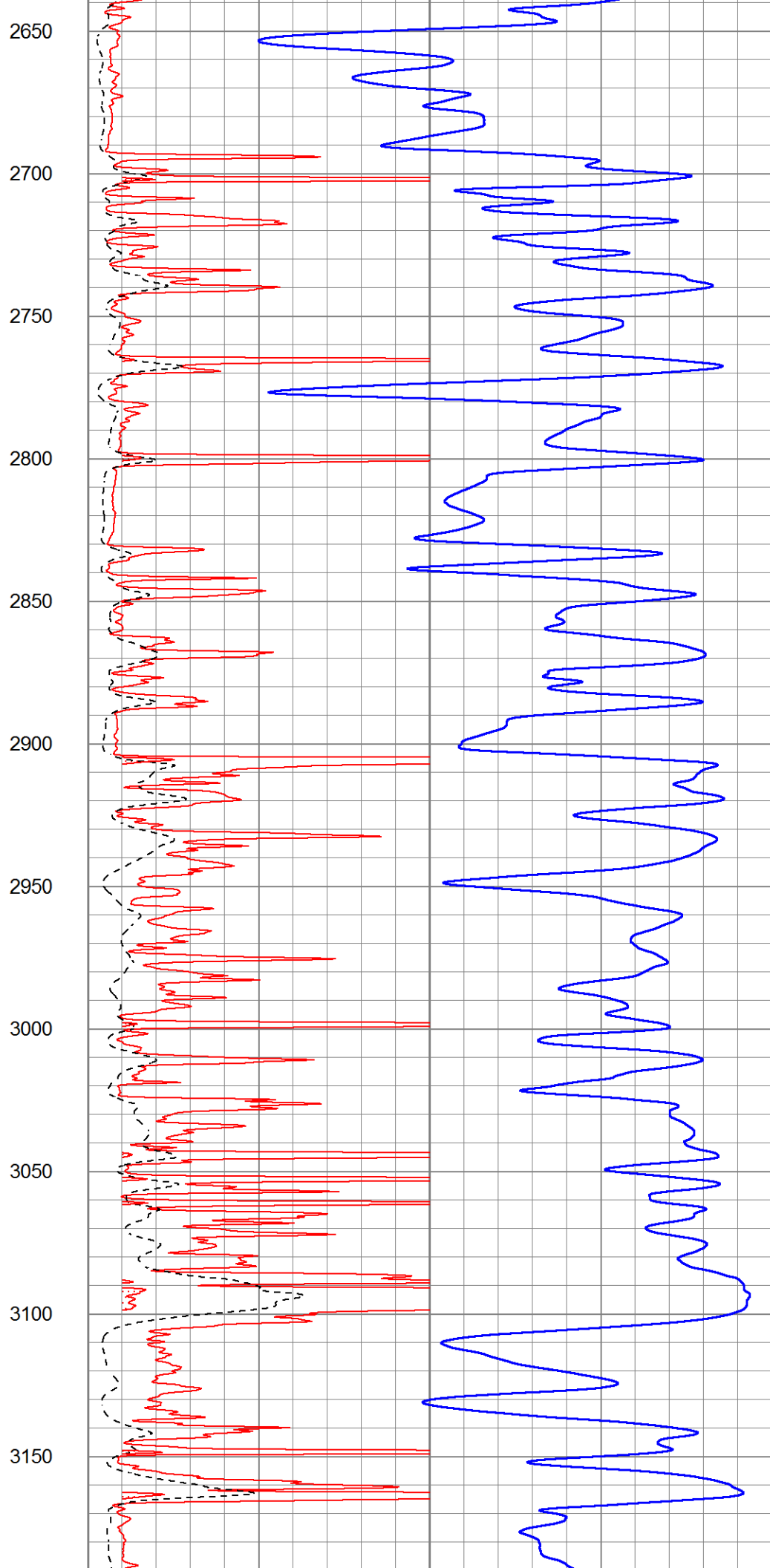
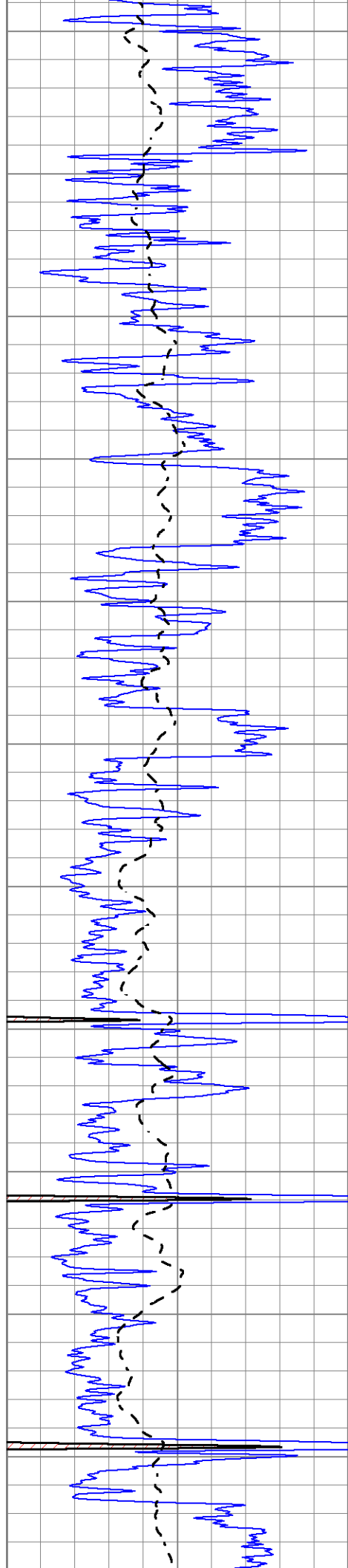


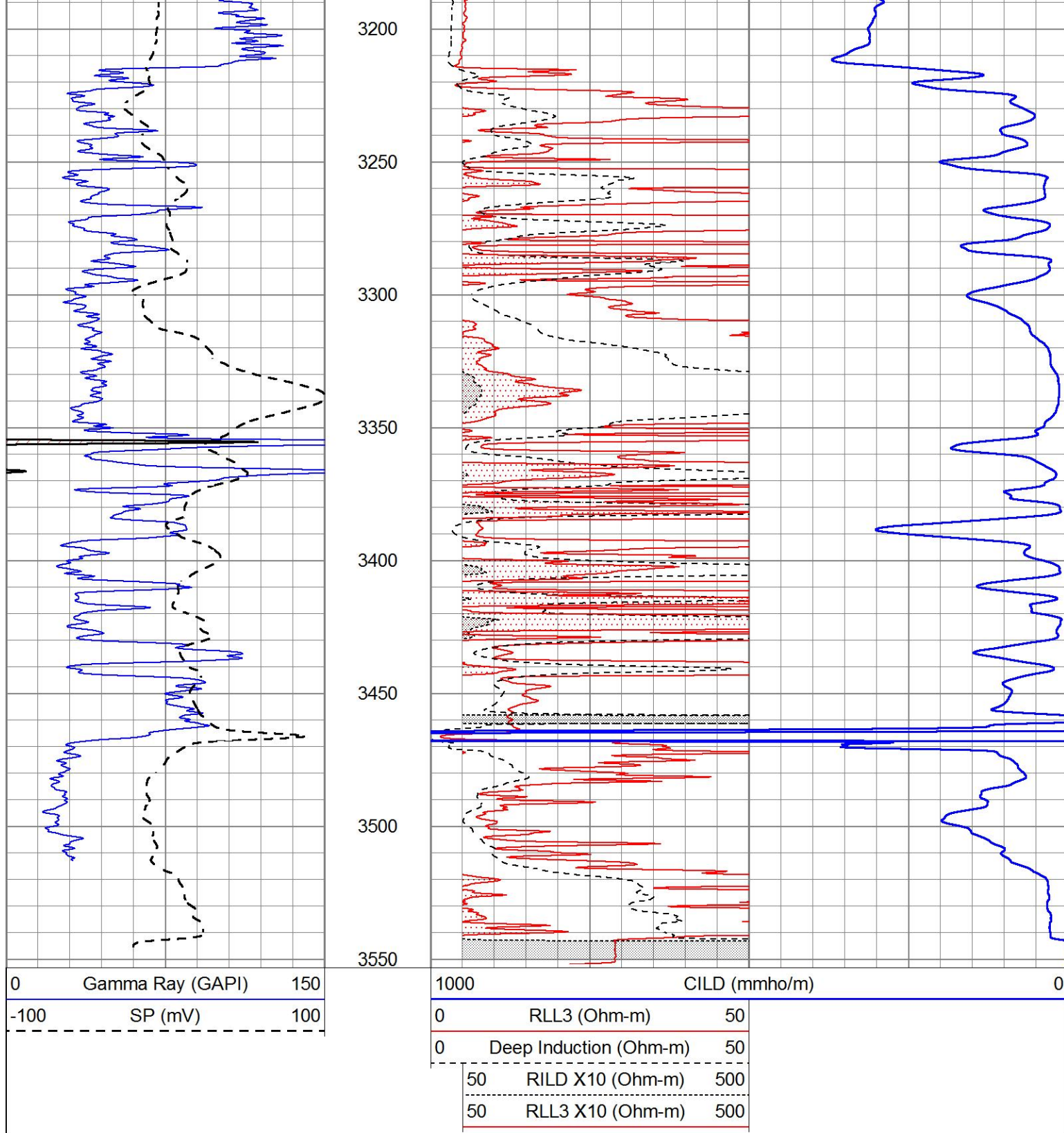










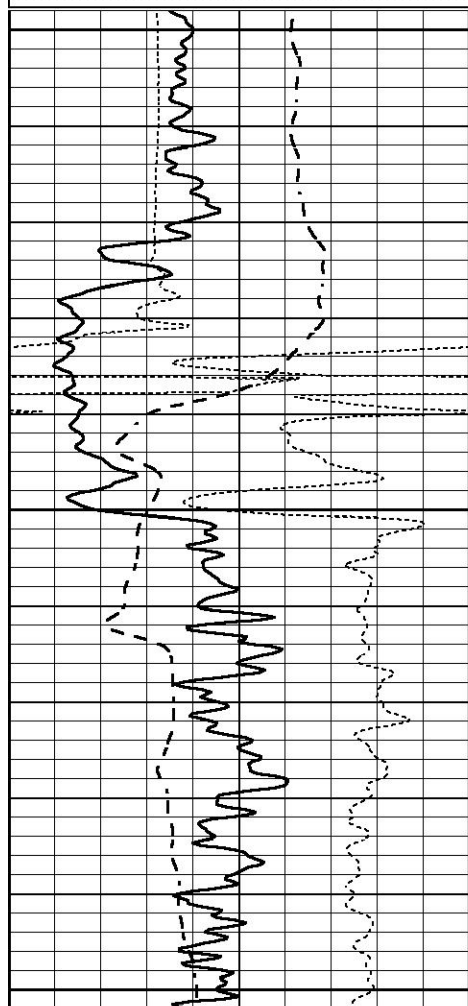


ANHYDRITE

Database File 3996ddn8.db
 Dataset Pathname pass3.2
 Presentation Format _dil
 Dataset Creation Thu Oct 03 22:32:39 2019
 Charted by Depth in Feet scaled 1:240

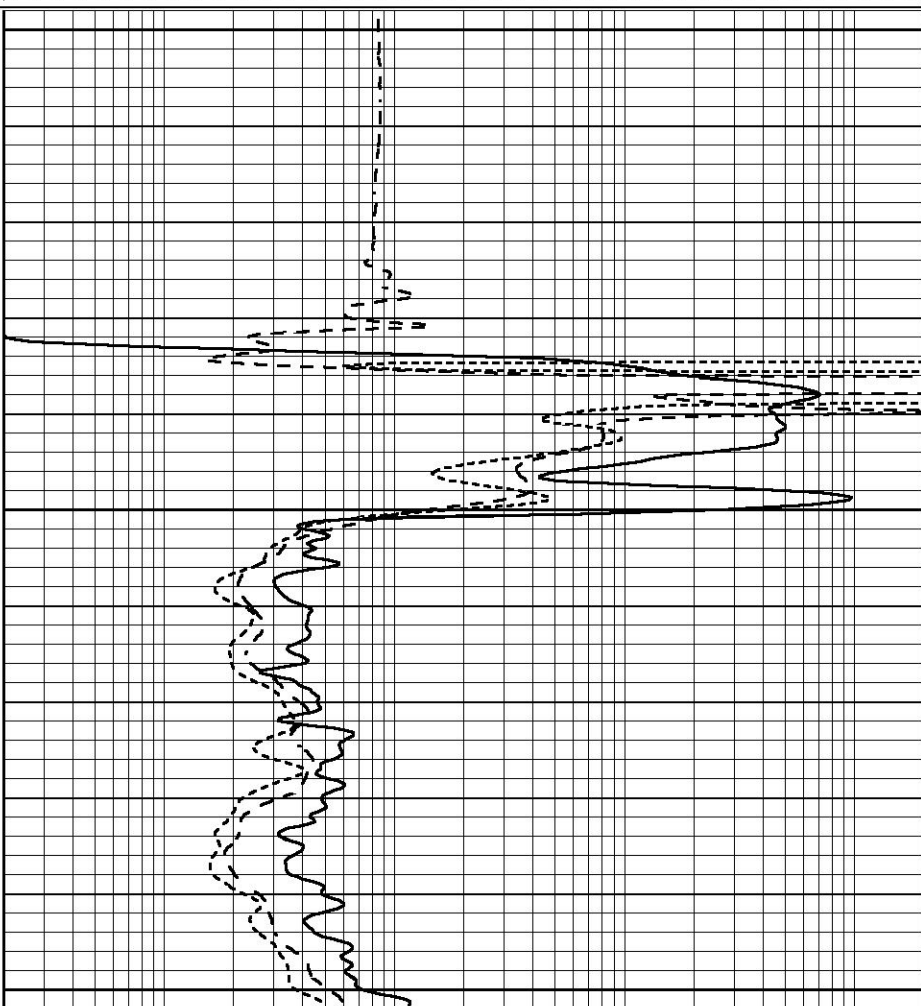


-100	SP (mV)	100
-250	Rxo/Rt	50



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

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



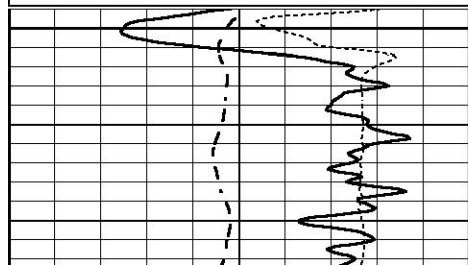
0.2	SHALLOW GUARD (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000



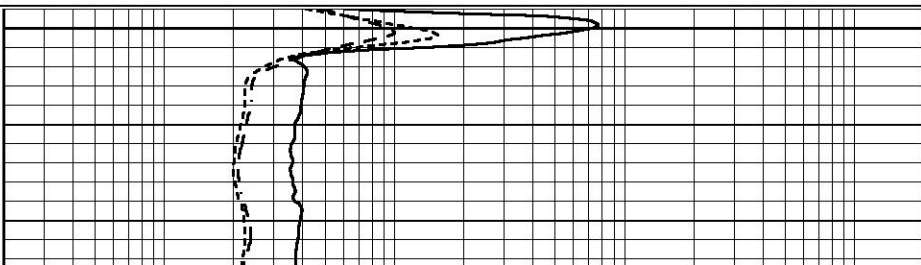
MAIN SECTION

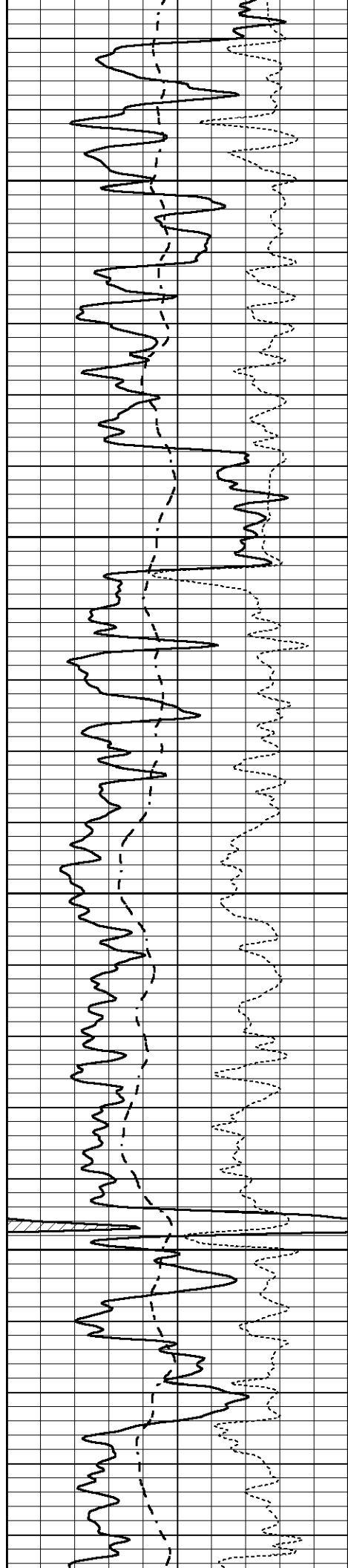
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 Dataset Pathname pass3.1
 Presentation Format _dil
 Dataset Creation Thu Oct 03 22:31:32 2019
 Charted by Depth in Feet scaled 1:240

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



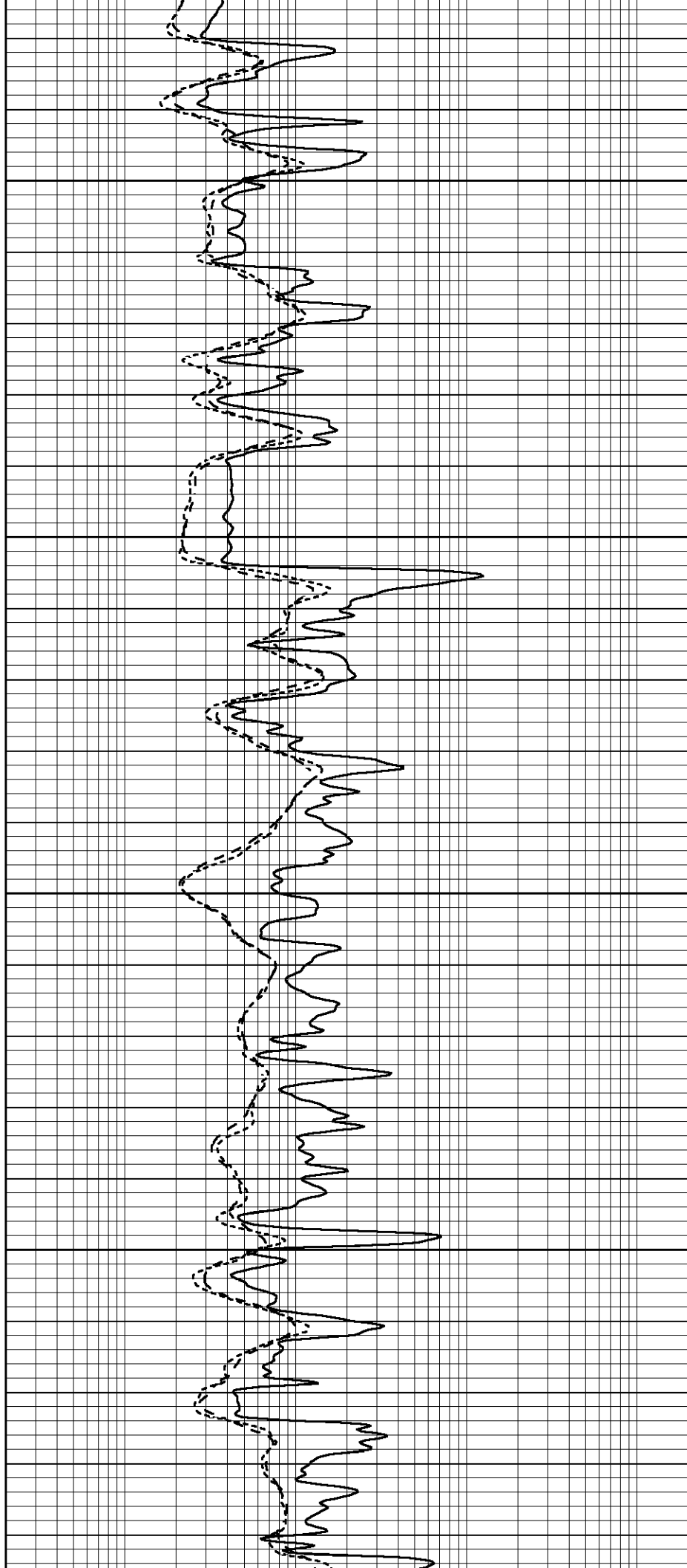


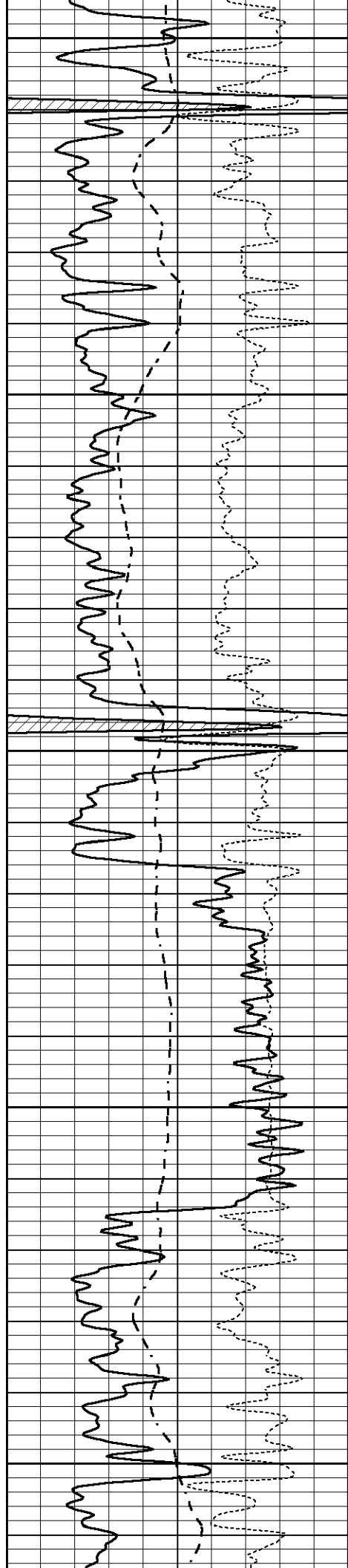
2850

2900

2950

3000





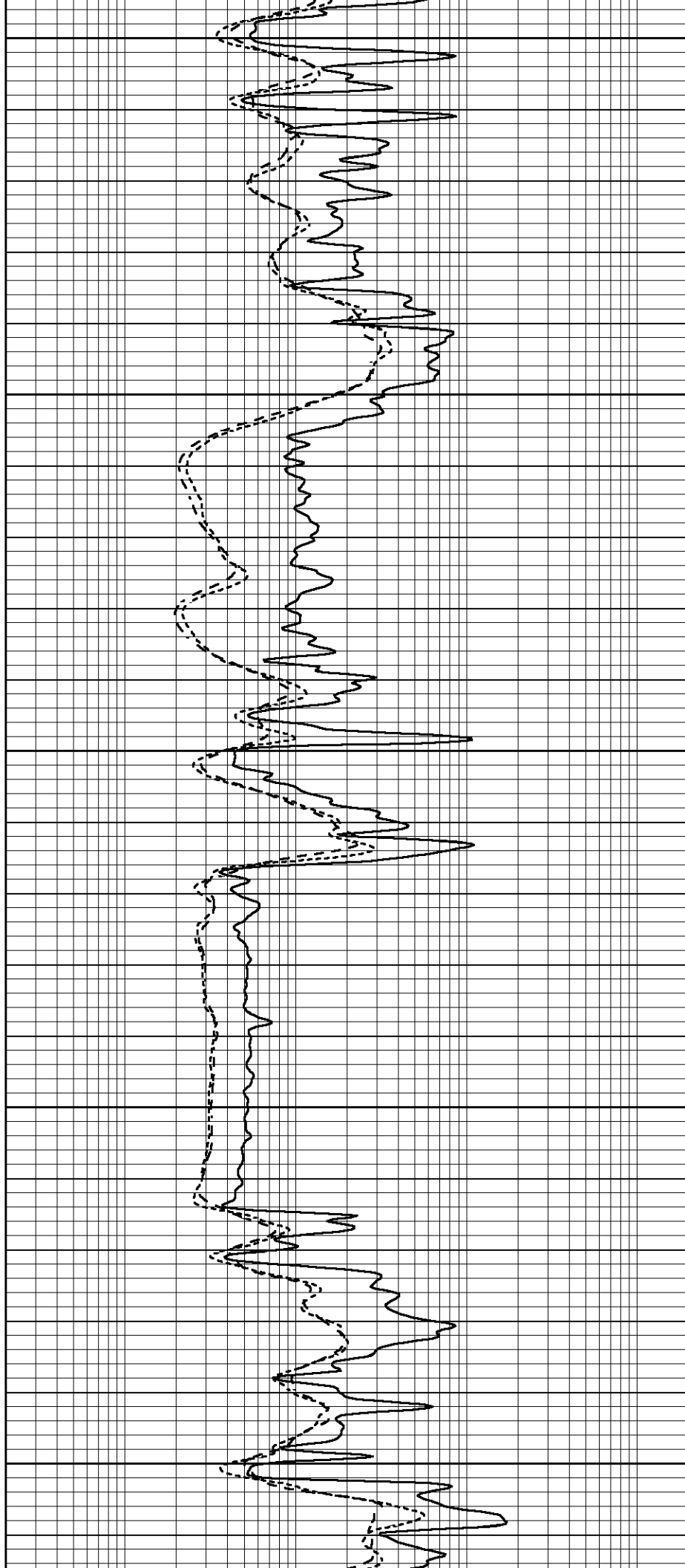
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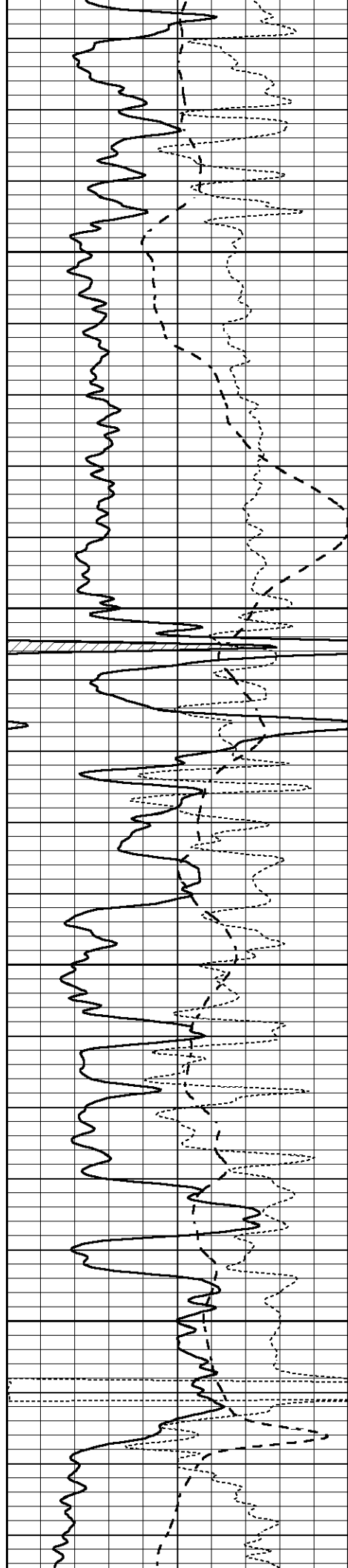
3100

3150

3200

3250



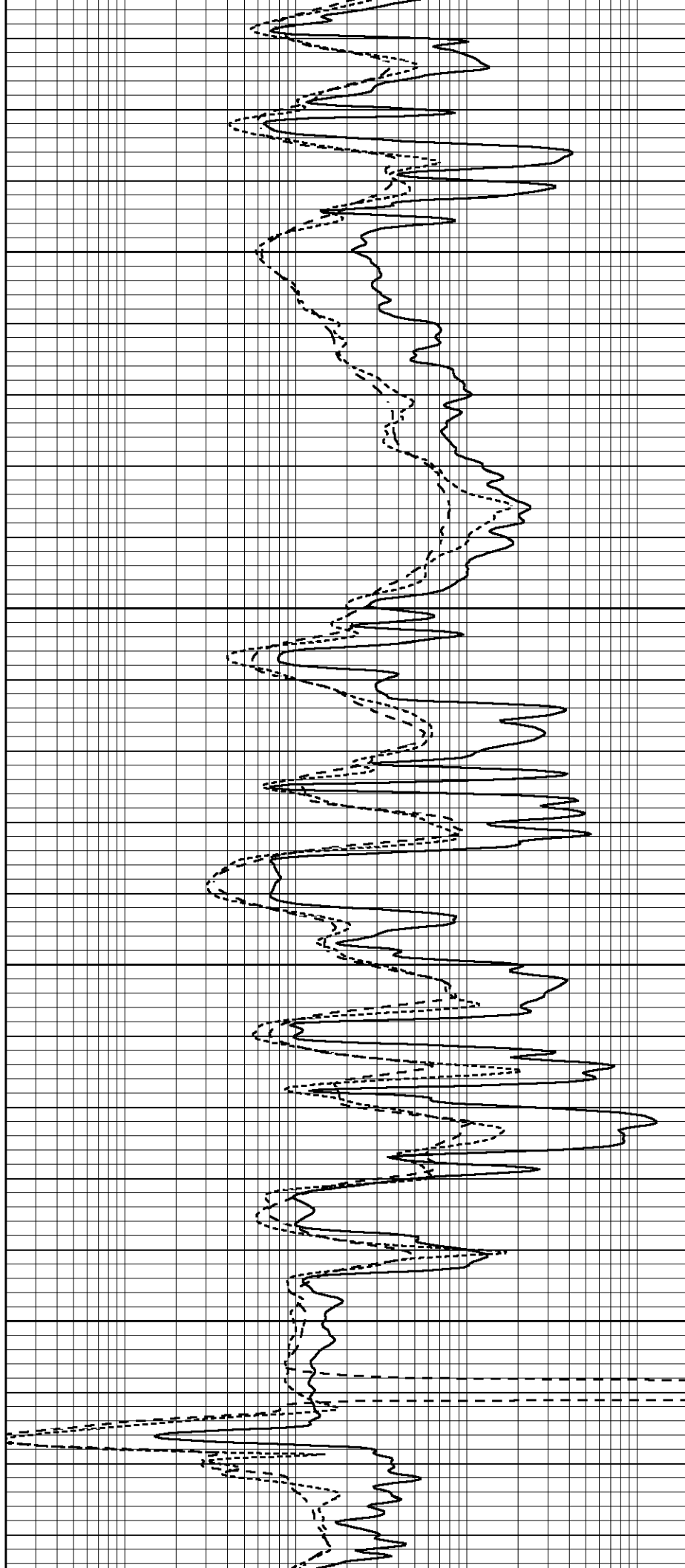


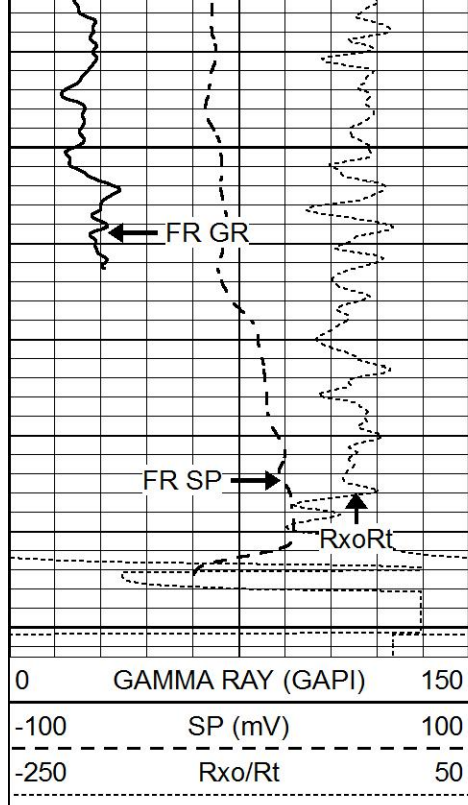
3300

3350

3400

3450

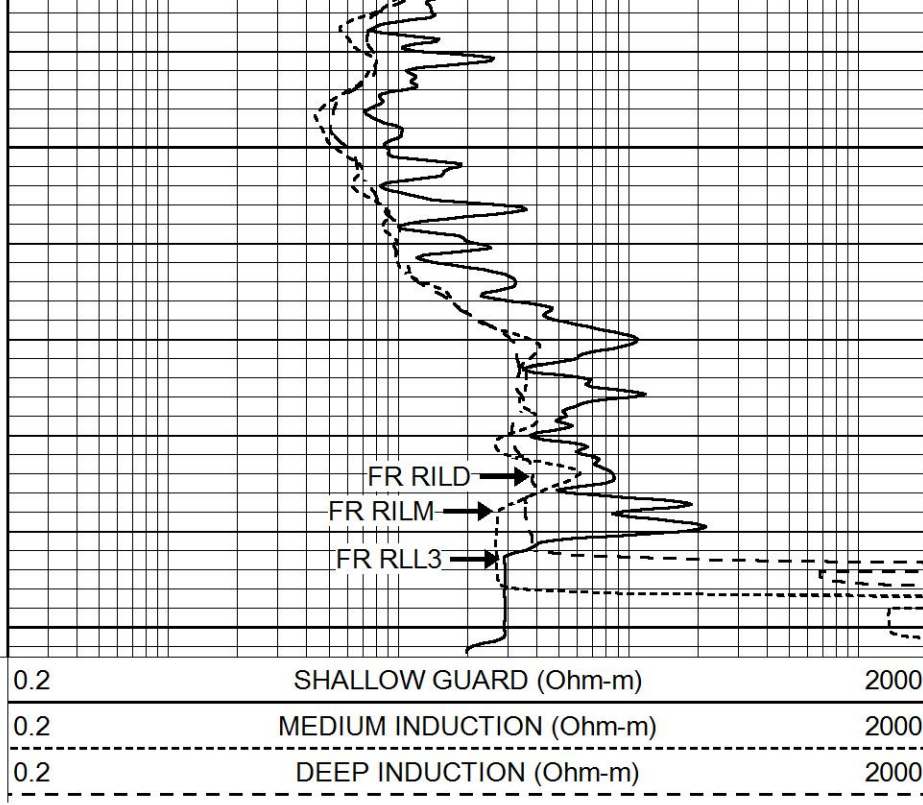




3500

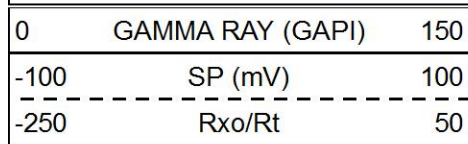
LTD 3545

3550



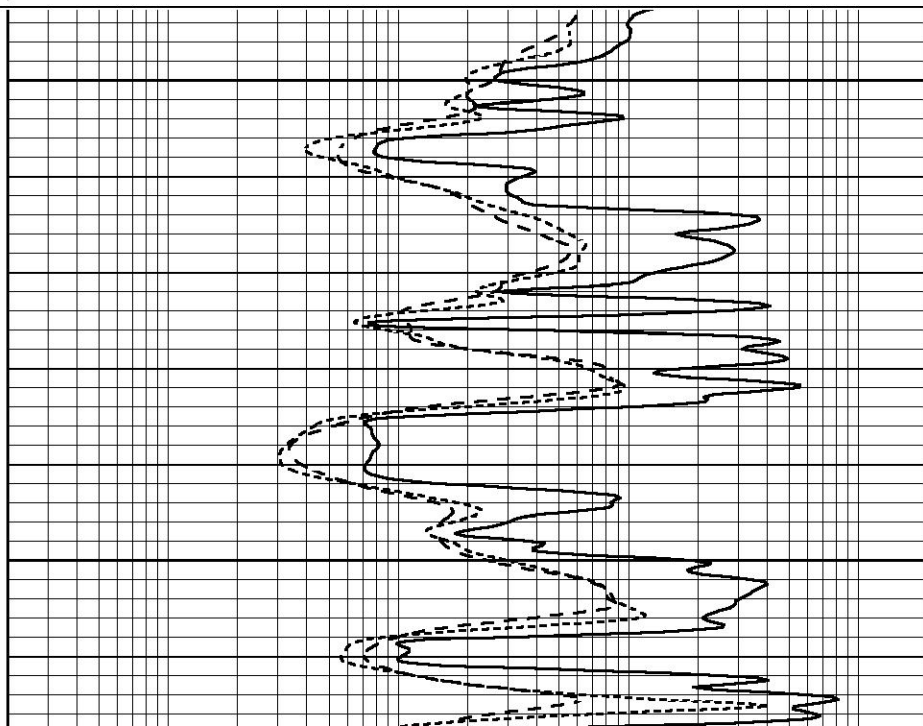
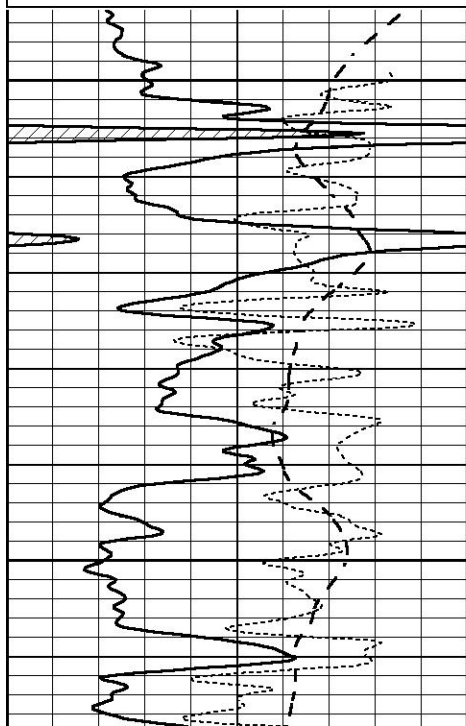
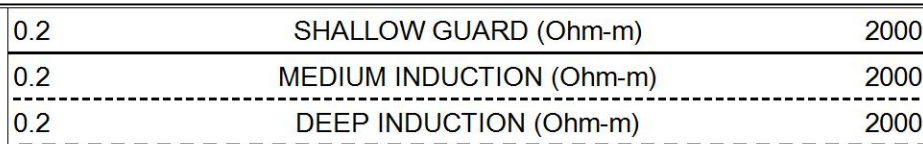
REPEAT SECTION

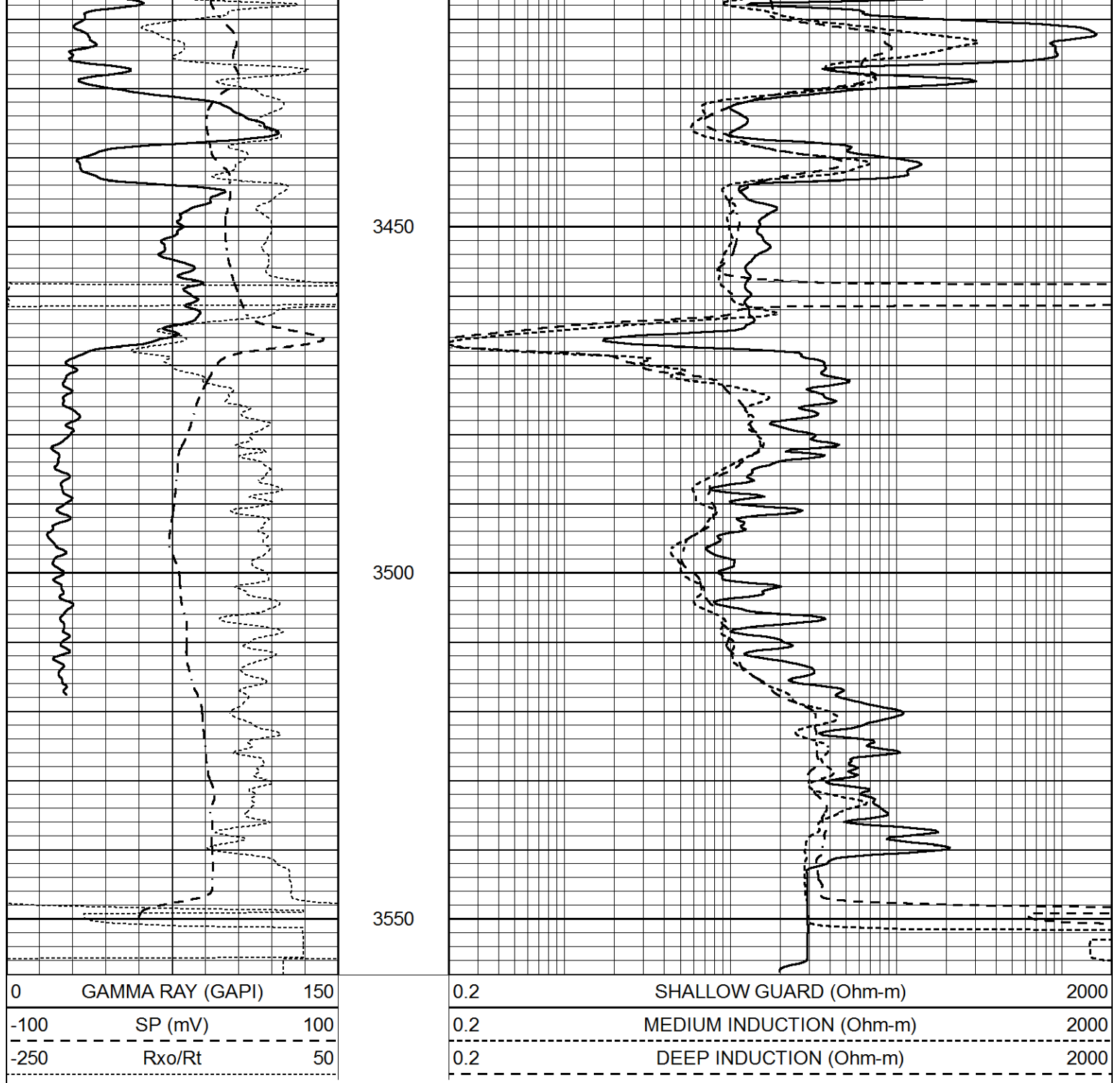
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 Dataset Pathname pass2.1
 Presentation Format _dil
 Dataset Creation Thu Oct 03 22:30:49 2019
 Charted by Depth in Feet scaled 1:240



3350

3400





Calibration Report							
Database File	3996ddn8.db						
Dataset Pathname	pass3.1						
Dataset Creation	Thu Oct 03 22:31:32 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

Deep	0.011	0.636	V	1.000	464.000	mmho/m	618.393	-3.324
Medium	-0.000	0.731	V				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: 140703								
Model: V4_10P								
Source Number: 74GBq-19								
Master Calibration			Performed: Sat Nov 03 12:02:59 2018					
	Background	Aluminum	Magnesium					
Window 1	549.22	5584.47	24081.50	cps				
Window 2	42.95	1258.19	5893.58	cps				
Window 4	240.87	1255.14	5351.53	cps				
Window 5	589.22	8957.42	17074.70	cps				
Window 6	44.63	1400.01	2758.67	cps				
Window 8	287.61	2989.14	5605.34	cps				
Bulk Density	-	2.6020	1.6830	g/cc				
Pe	-	3.0000	2.5070	b/e				
LS Alpha:	: -1.8450	SS Alpha:	: -0.7742	LS CPE:	: 1.1293			
LS Beta:	: 126735.8128	SS Beta:	: 21080.1431	SS CPE:	: 1.6752			
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 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: Sat Nov 03 12:02:59 2018

Results	Readings	References (in)			
Low	High	Low	High	Gain	Offset
3258.2	5551.2	8.0	16.0	0.0	-3.4

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