



DUAL INDUCTION LOG

Company	GREAT PLAINS ENERGY, INC.		
Well	OELKERS FAMILY TRUST #1-19		
Field			
County	RUSH	State	KANSAS
Location:	API # : 15-165-22172-0000		Other Services CDL/CNL MEL
	1980' FNL & 1980' FEL		
Permanent Datum	SEC 19 TWP 16S RGE 19W	Elevation	
Log Measured From	GROUND LEVEL	Elevation	K.B. 2108
Drilling Measured From	KELLY BUSHING 7' A.G.L		D.F. 2106
	KELLY BUSHING		G.L. 2101
Date	6/17/20		
Run Number	ONE		
Depth Driller	3900		
Depth Logger	3900		
Bottom Logged Interval	3898		
Top Log Interval	00		
Casing Driller	8 5/8" @ 1130'		
Casing Logger	1130		
Bit Size	7 7/8		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 6800 PPM	
Density / Viscosity	9.3/58		
pH / Fluid Loss	10.0/6.4		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	0.50 @ 87F		
Rmf @ Meas. Temp	0.37 @ 87F		
Rmc @ Meas. Temp	0.60 @ 87F		
Source of Rmf / Rmc	MEASUREMENT		
Rm @ BHT	0.40 @ 108F		
Time Circulation Stopped	2 HOURS		
Time Logger on Bottom	////		
Maximum Recorded Temperature	108F		
Equipment Number	3802		
Location	HAYS, KANSAS		
Recorded By	JASON CAPPELLUCCI		
Witnessed By	RICHARD BELL		

<<< Fold Here >>>

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

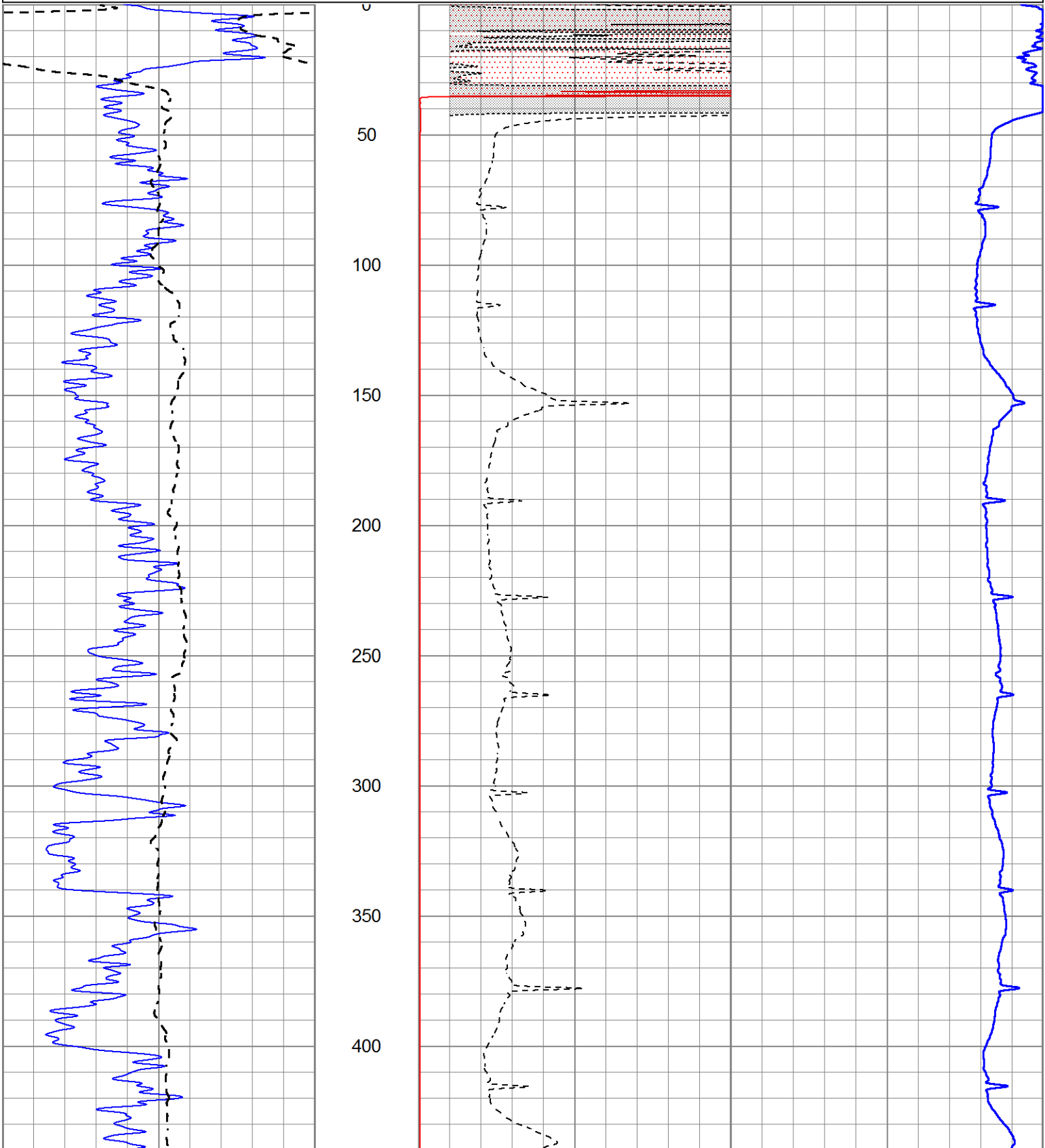
THANK YOU FOR USING ELI WIRELINE SERVICES, HAYS, KS. (785) 628-6395
DIRECTIONS
LIEBENTHAL, KS. - 1/2 SOUTH TO McCRACKEN BLKTOP - 7 1/2 WEST TO RD. 170
1 NORTH - 1/2 WEST - SOUTH INTO

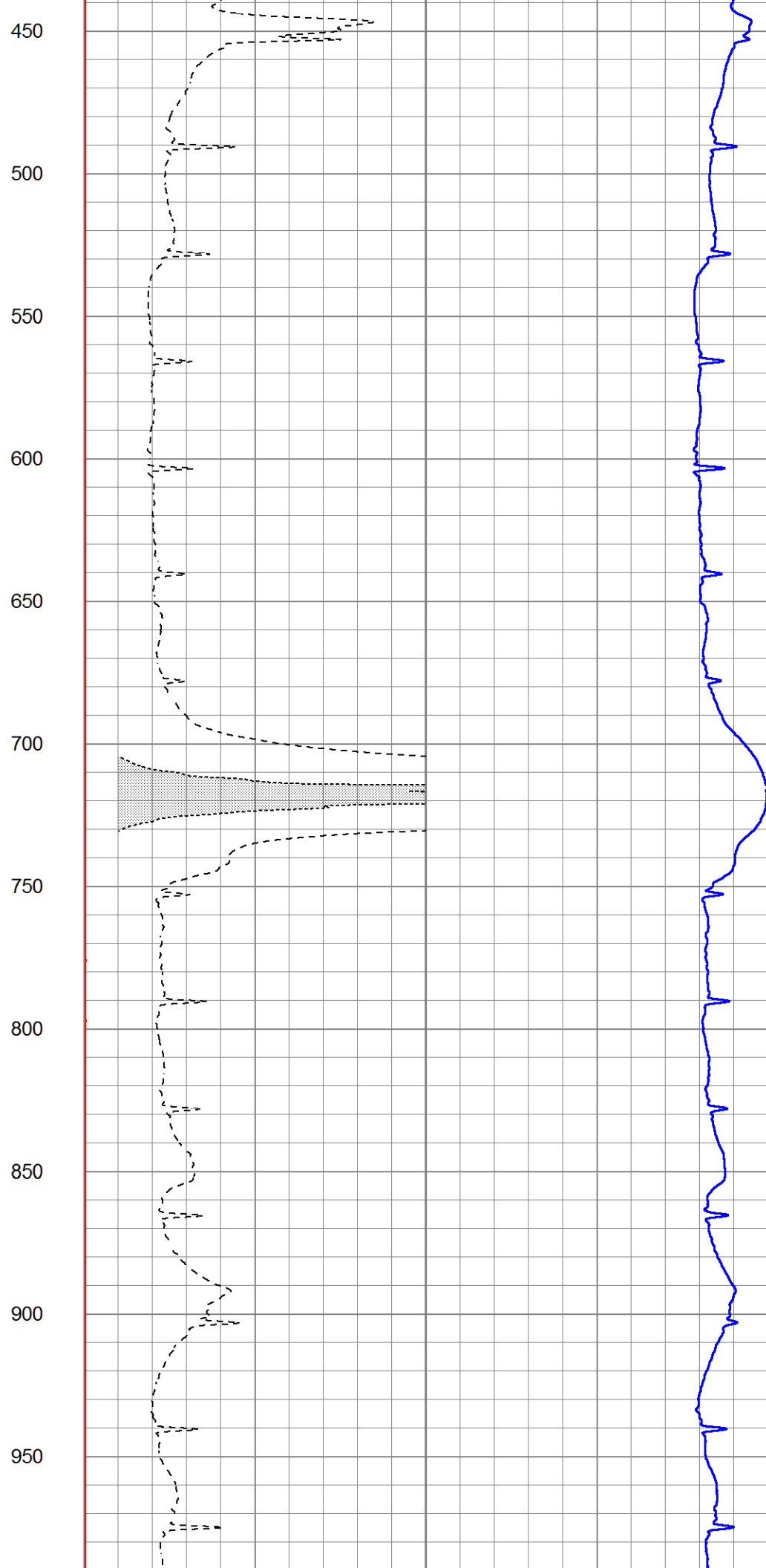
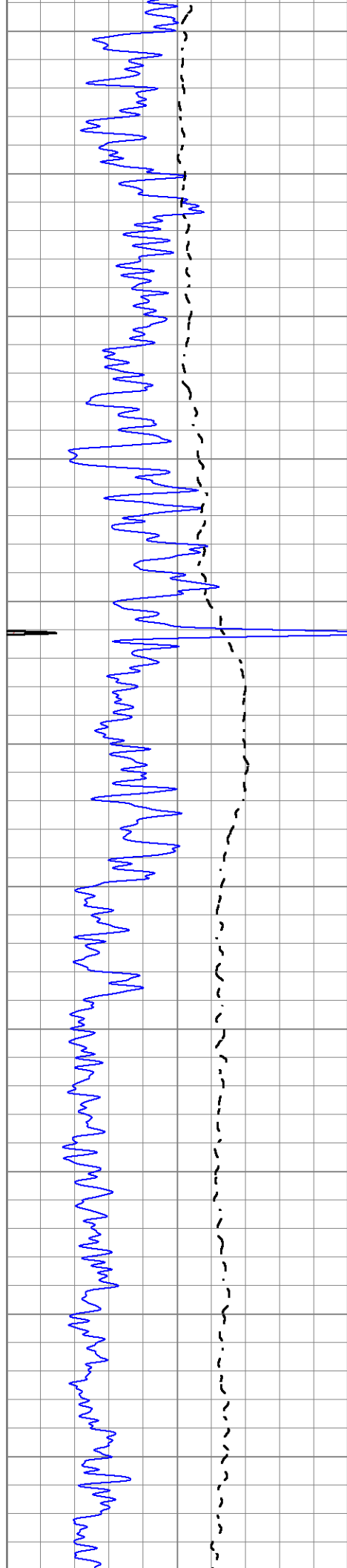


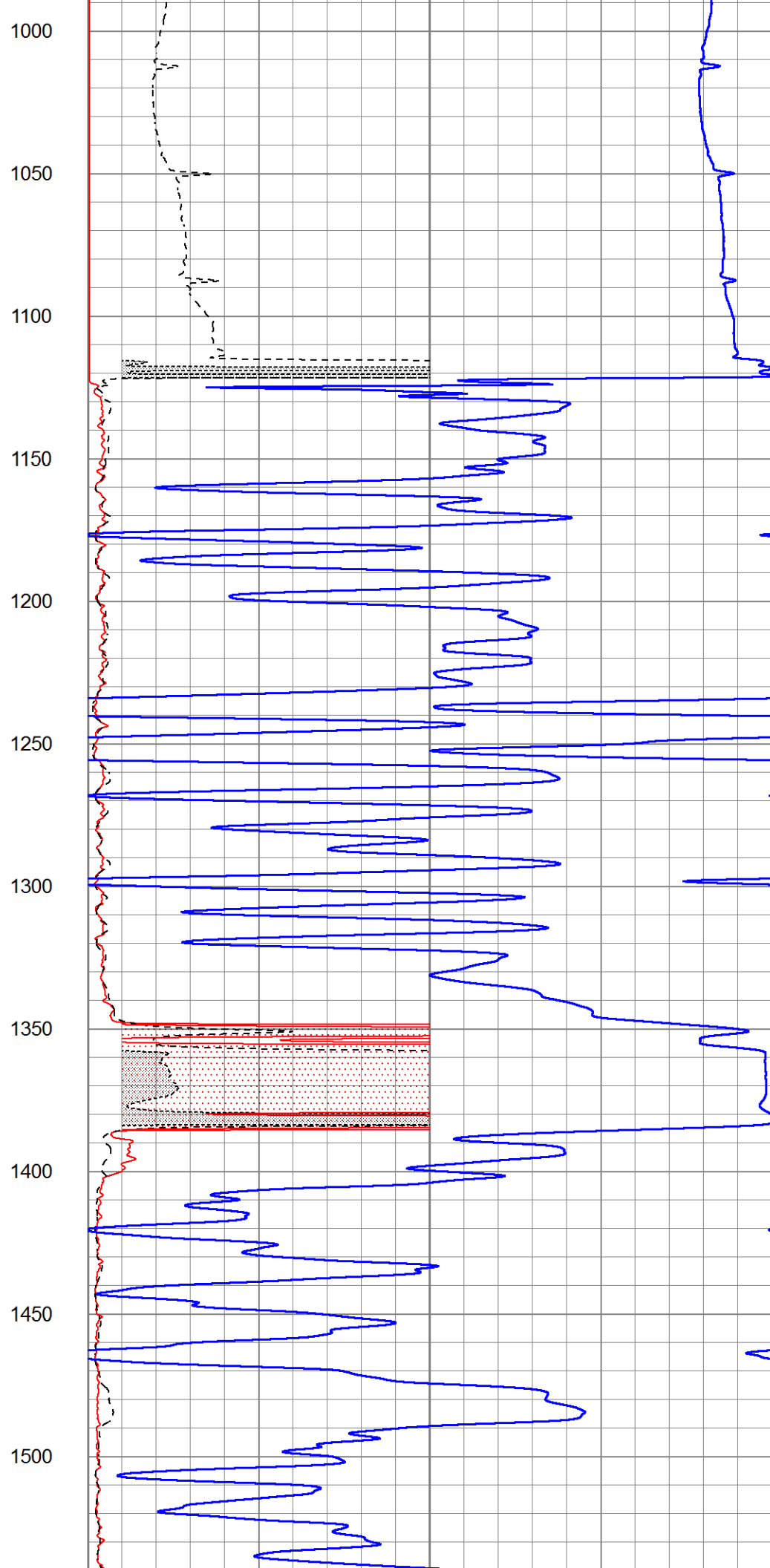
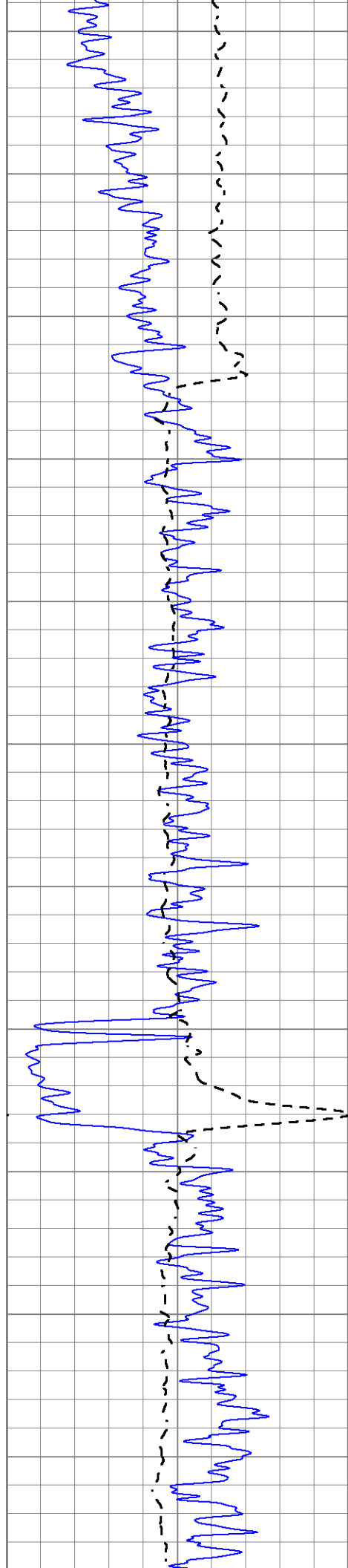
MAIN SECTION

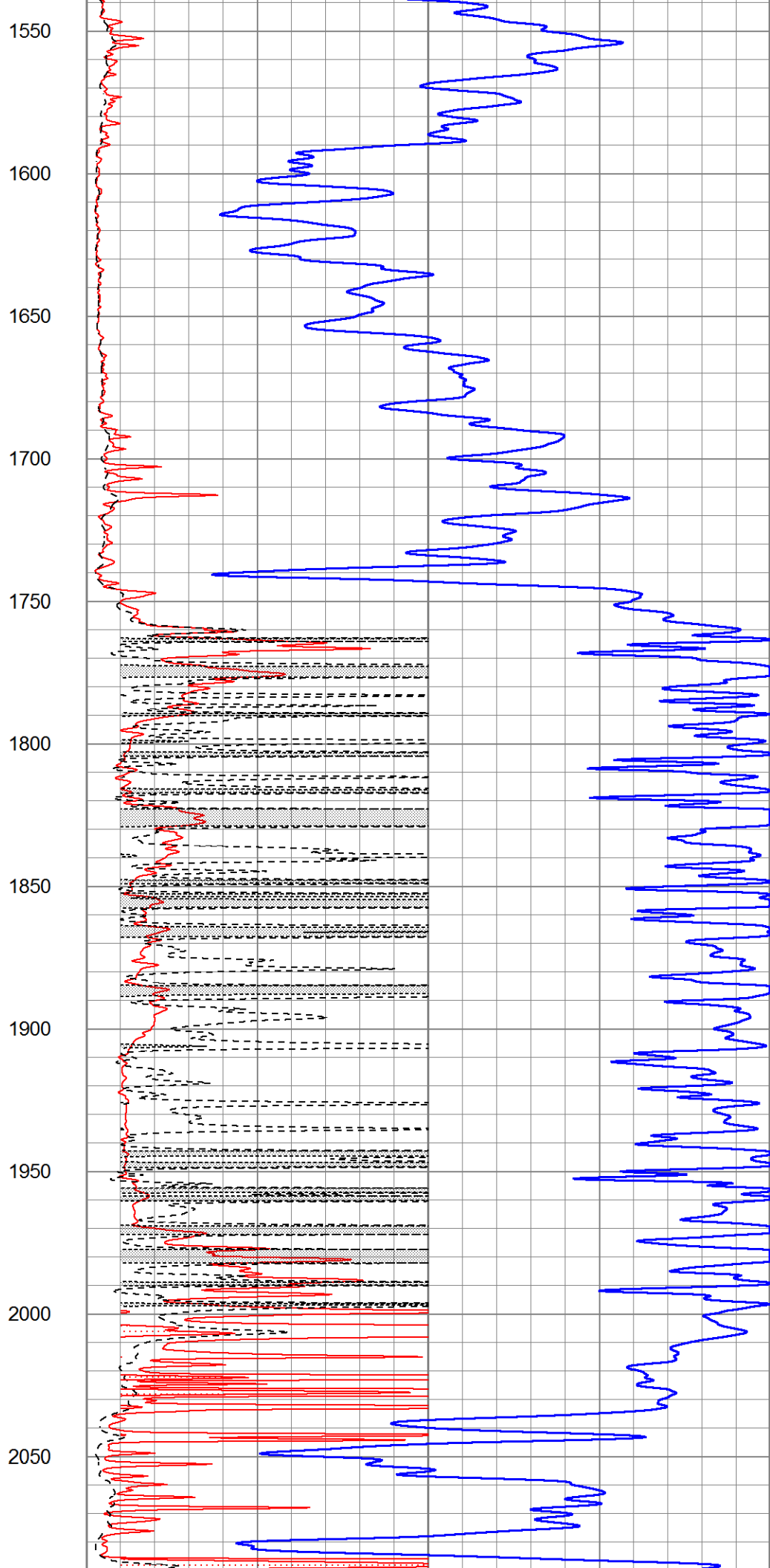
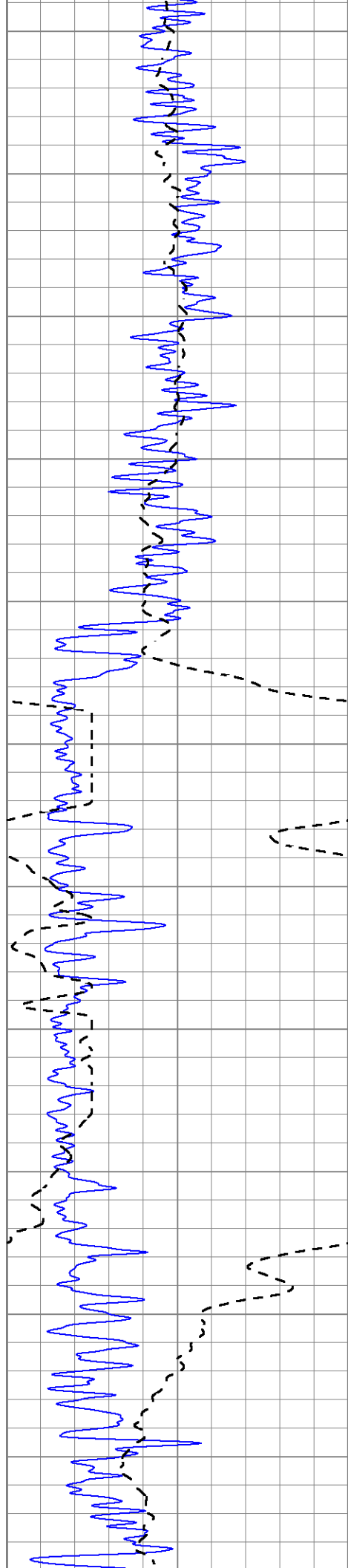
Database File	4740ddn.db
Dataset Pathname	pass3.3
Presentation Format	_dil2
Dataset Creation	Wed Jun 17 18:13:40 2020
Charted by	Depth in Feet scaled 1:600

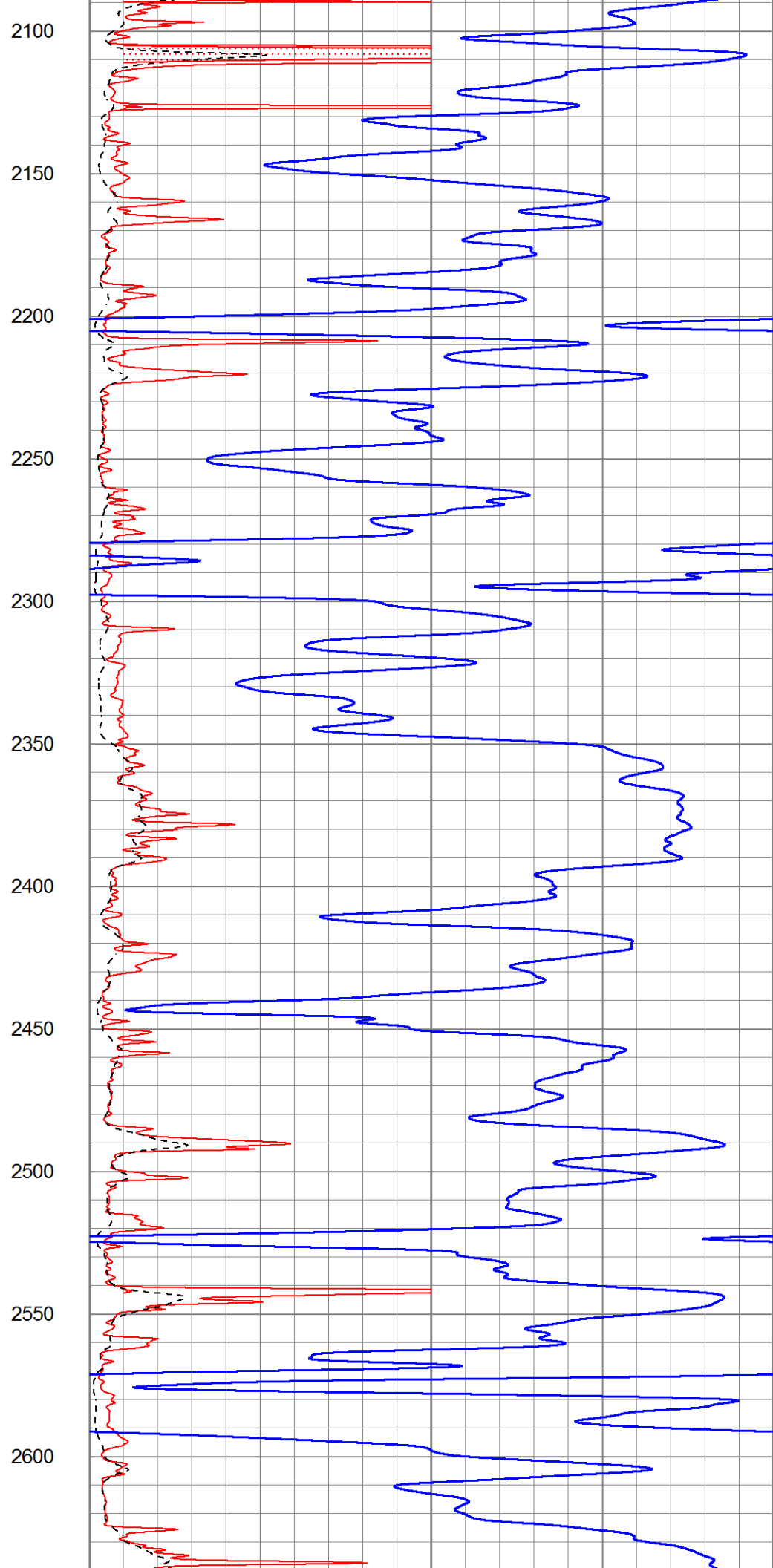
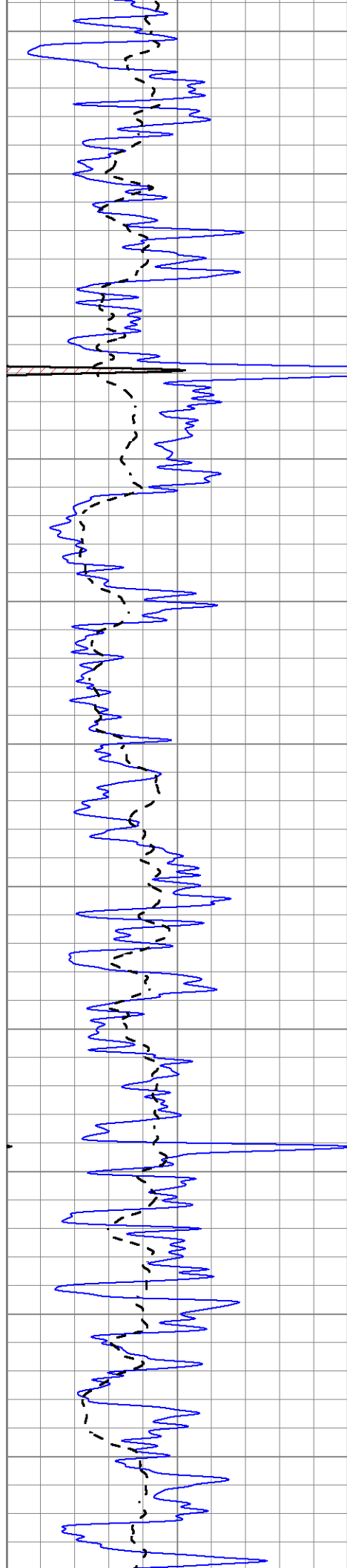
0	Gamma Ray (GAPI)	150	1000	CILD (mmho/m)	0
-100	SP (mV)	100	0	RLL3 (Ohm-m)	50
-----			0	Deep Induction (Ohm-m)	50
			50	RILD X10 (Ohm-m)	500
			50	RLL3 X10 (Ohm-m)	500

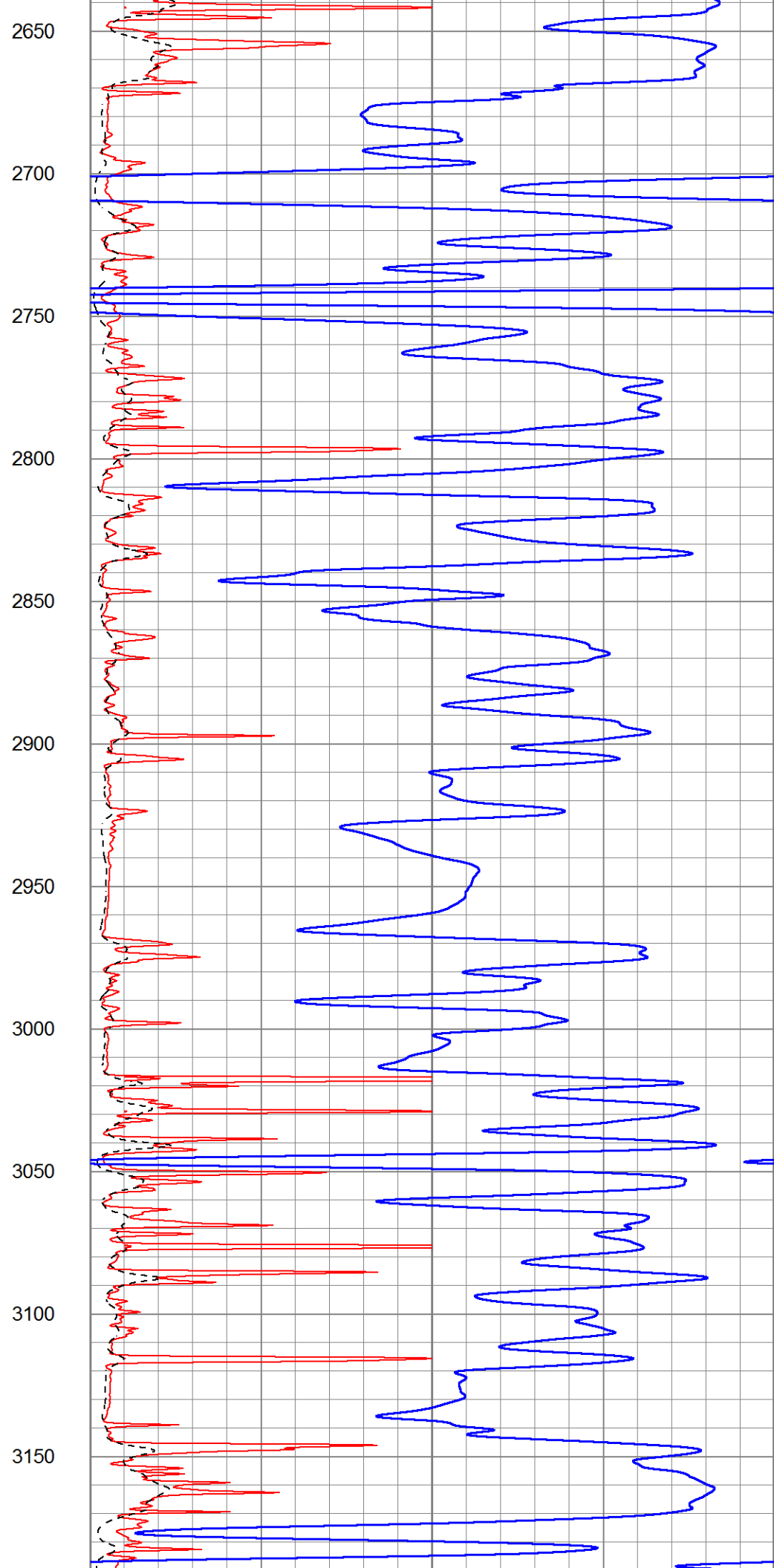
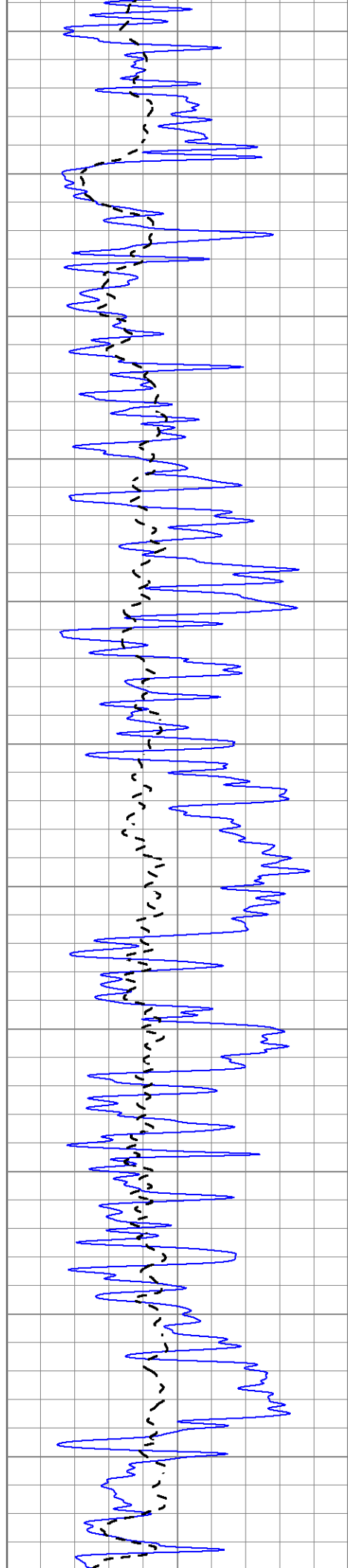


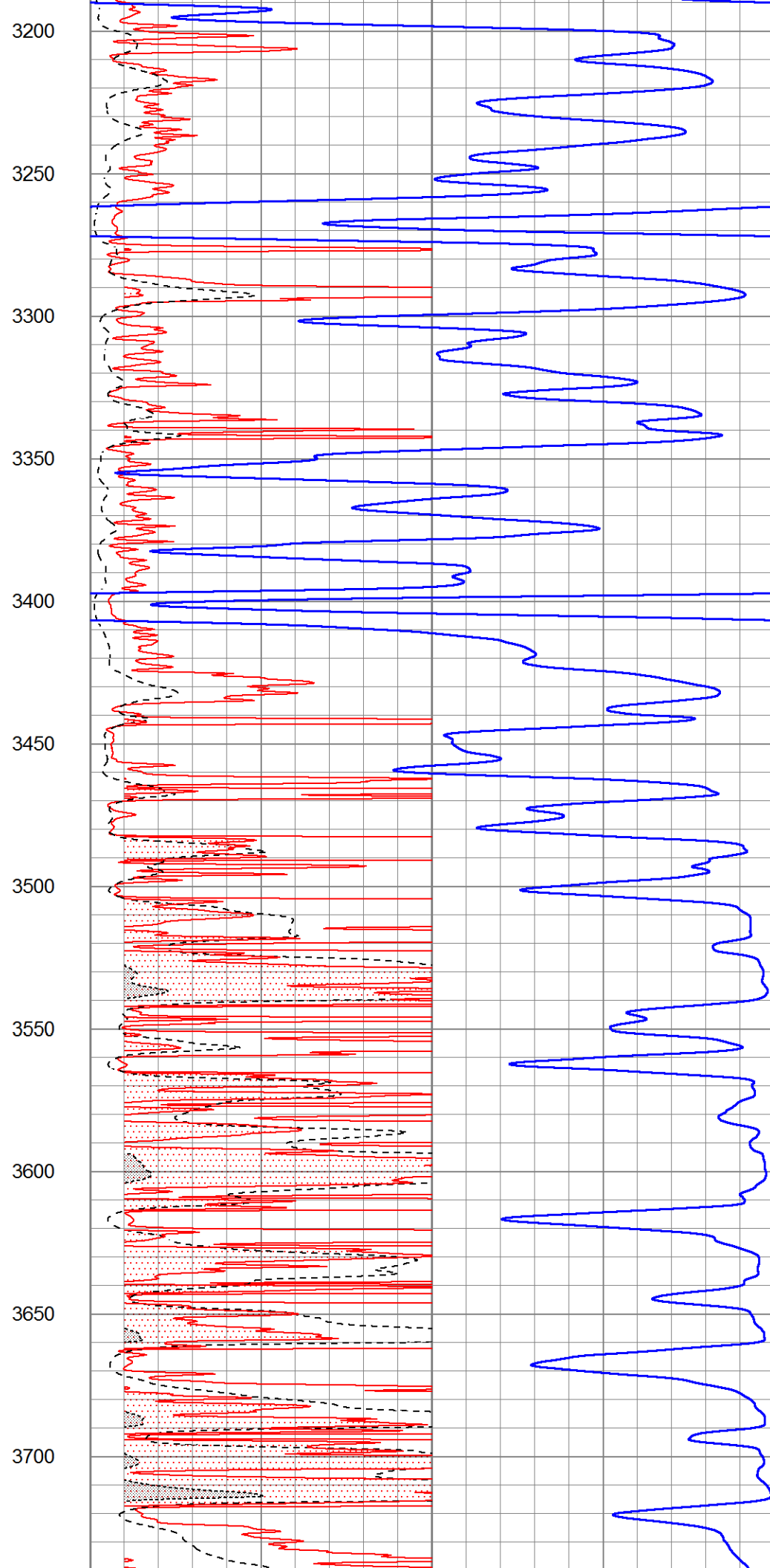
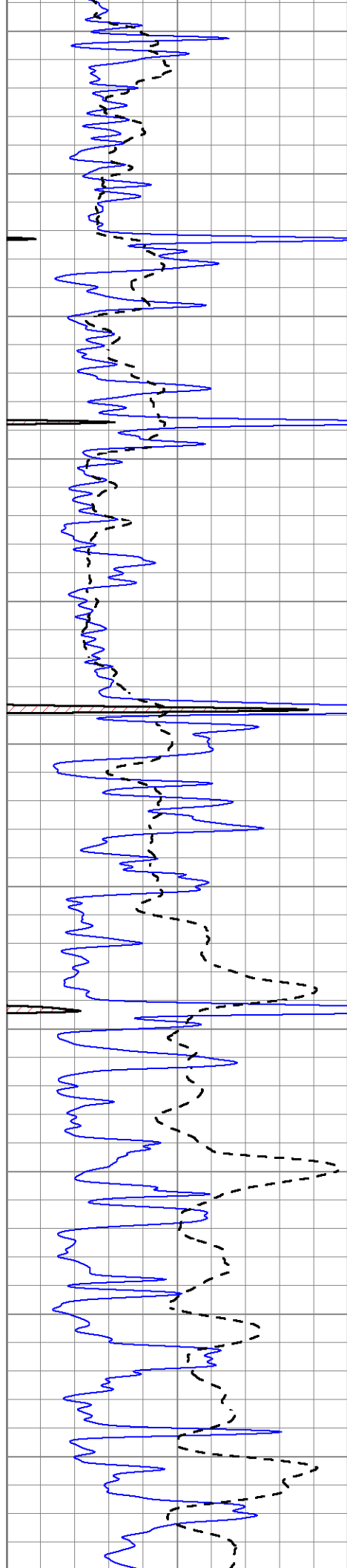


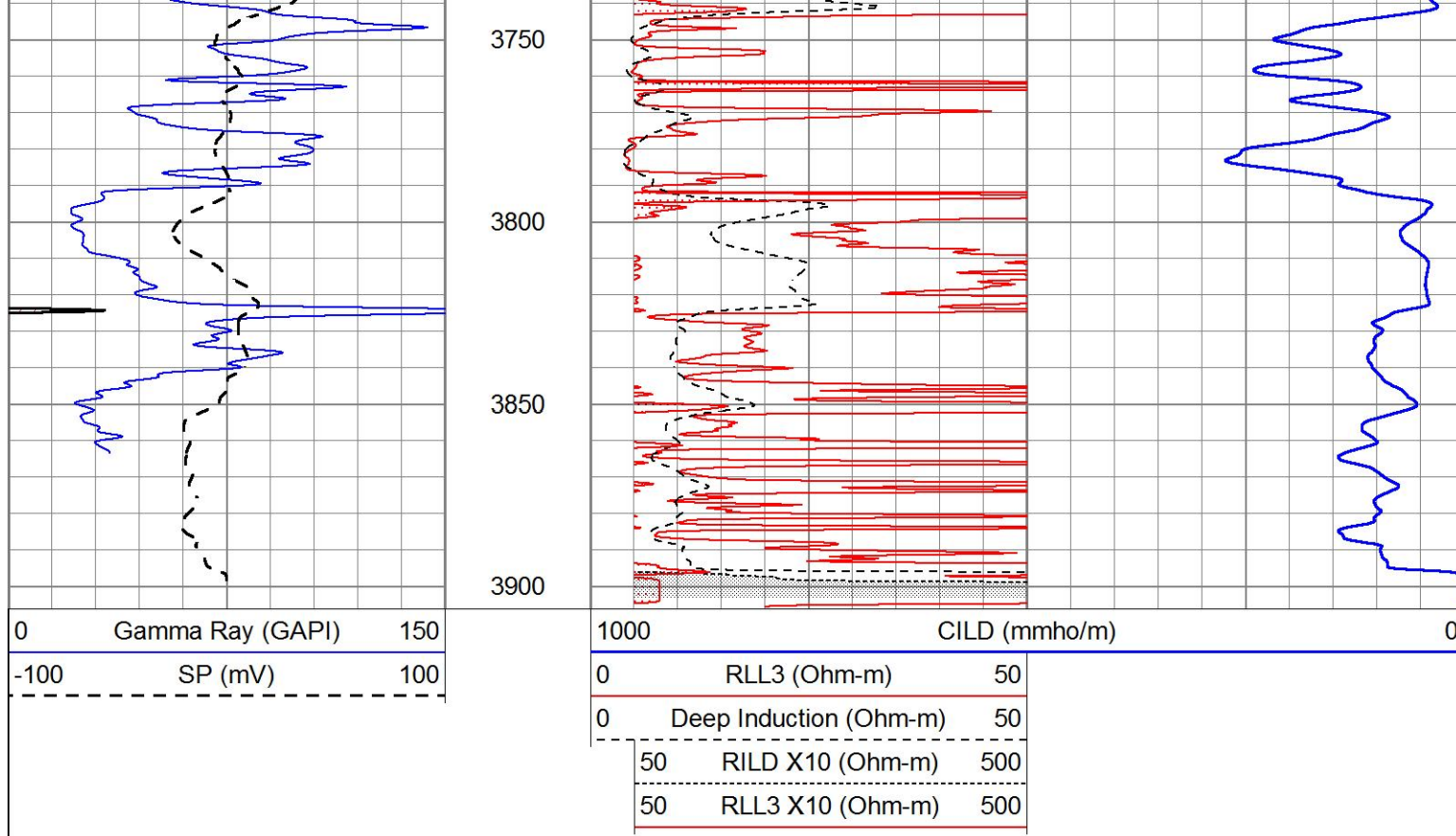








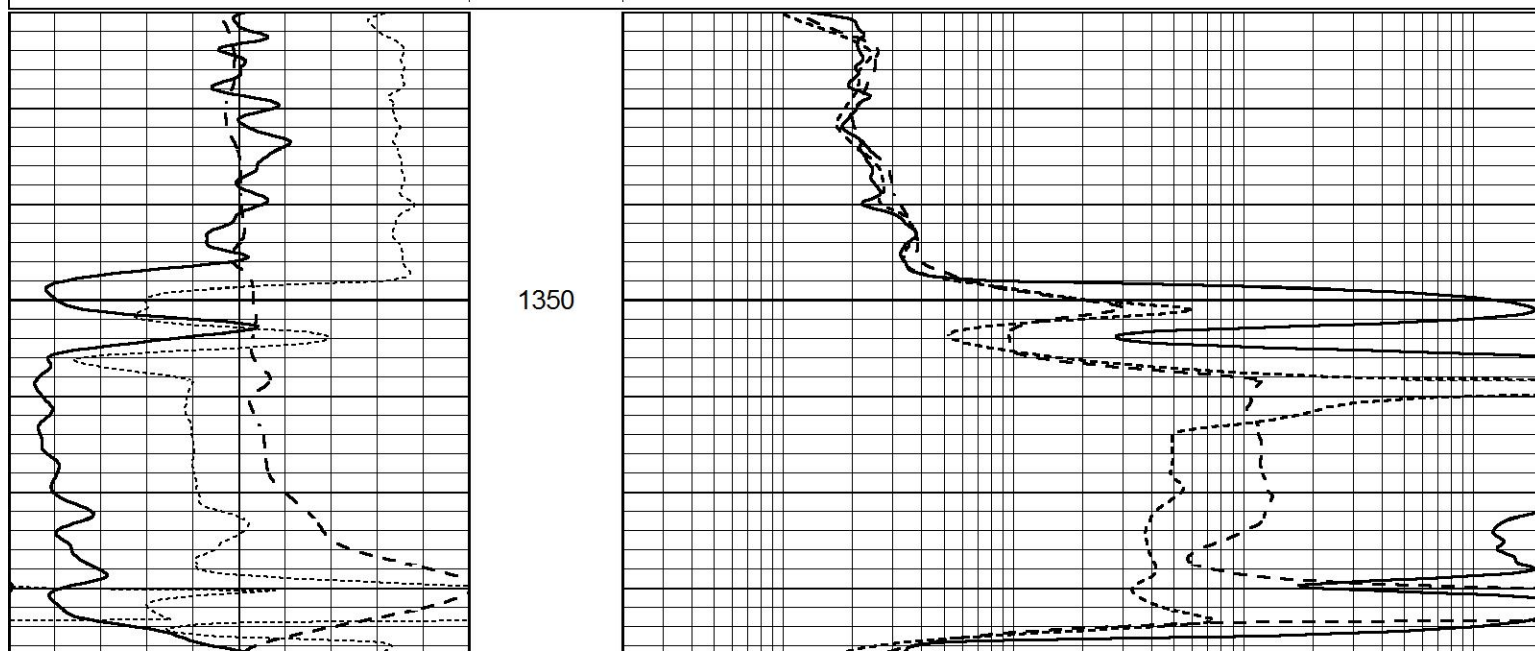


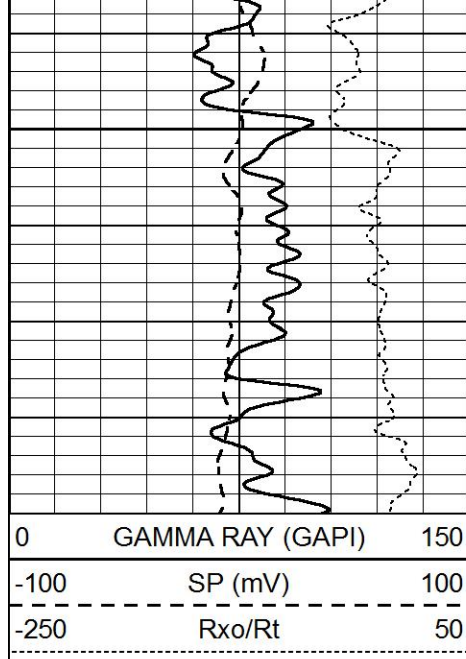


ANHYDRITE

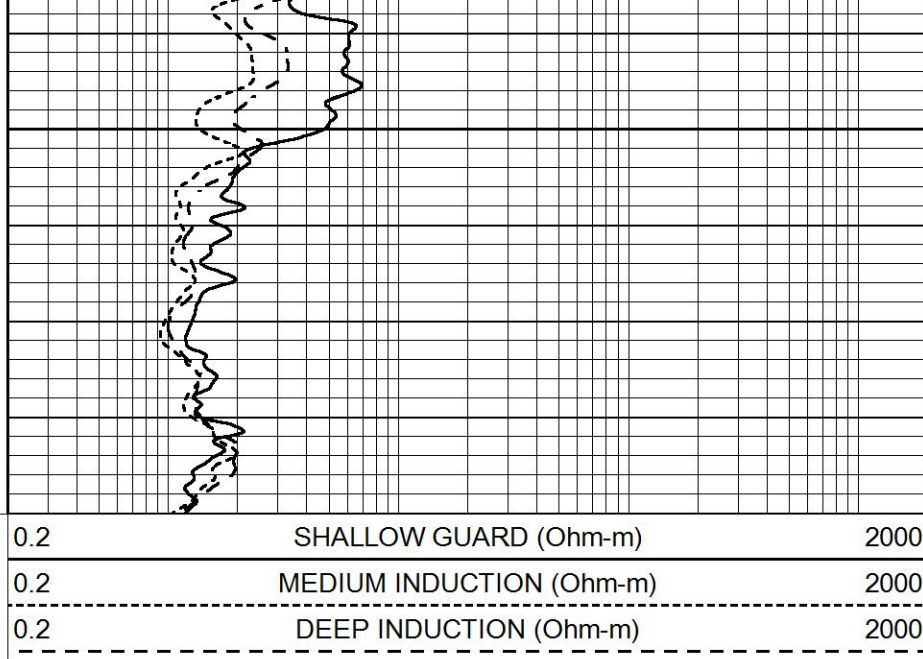
Database File 4740ddn.db
 Dataset Pathname pass3.2
 Presentation Format _dil
 Dataset Creation Wed Jun 17 17:53:29 2020
 Charted by Depth in Feet scaled 1:240

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



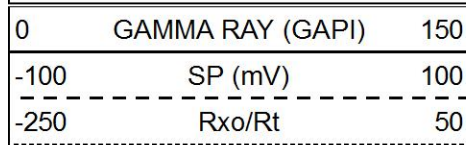


1400

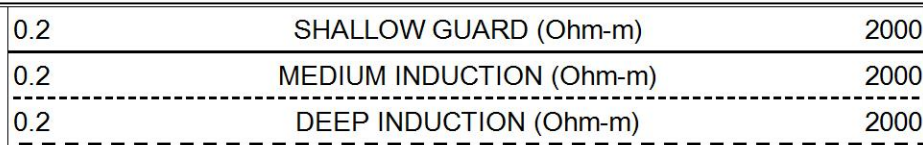


MAIN SECTION

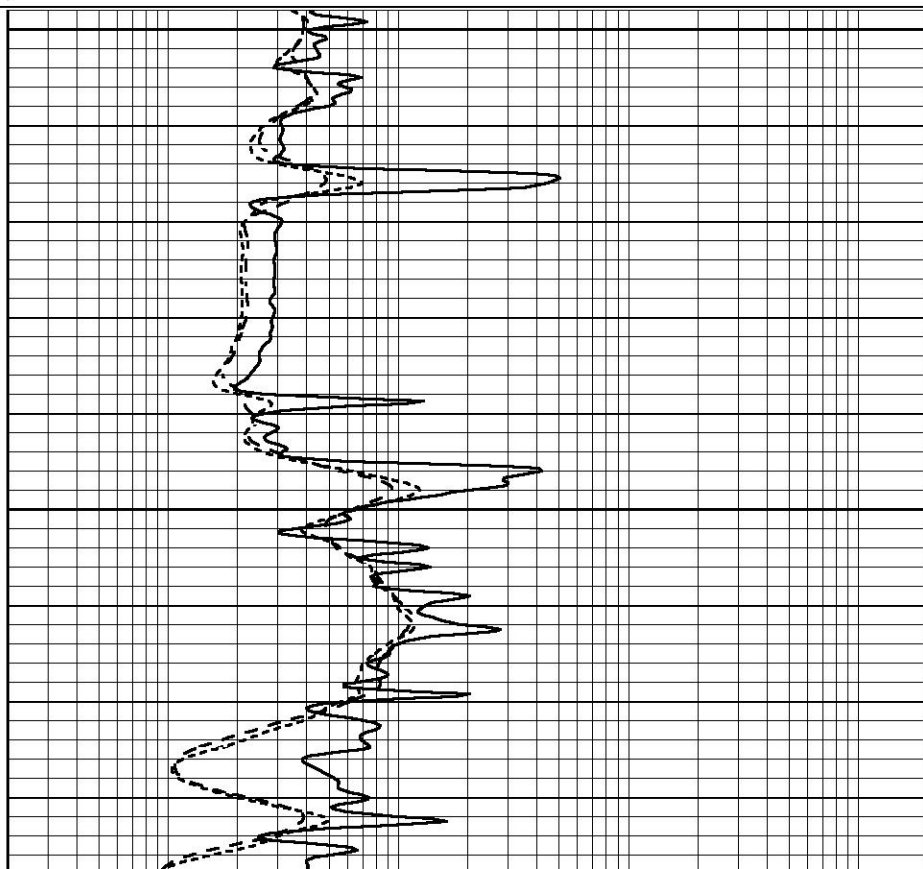
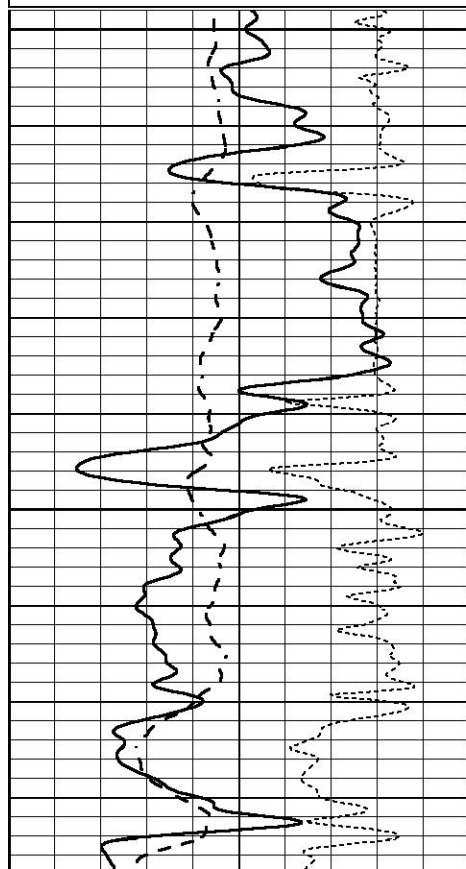
Database File 4740ddn.db
 Dataset Pathname pass3.1
 Presentation Format _dil
 Dataset Creation Wed Jun 17 17:32:48 2020
 Charted by Depth in Feet scaled 1:240

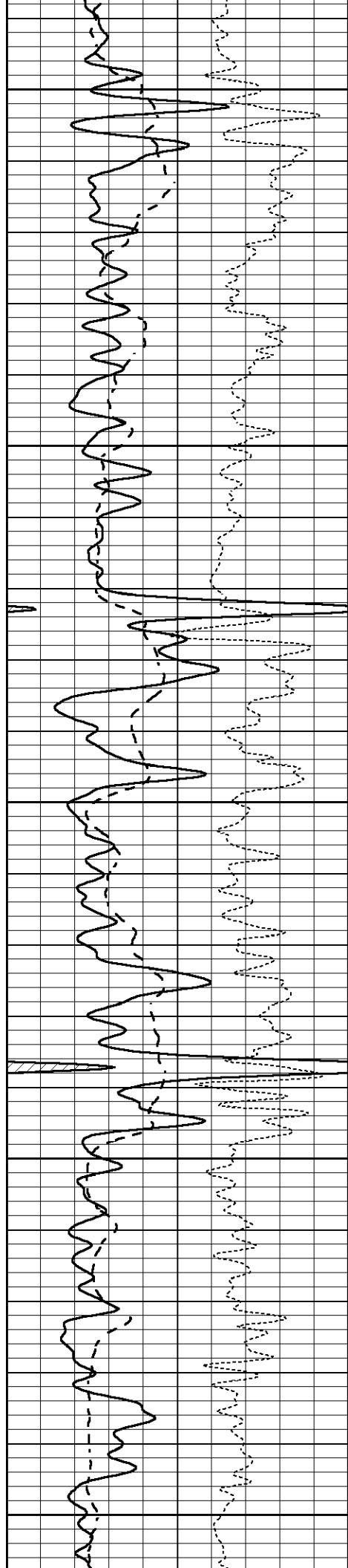


3100



3150





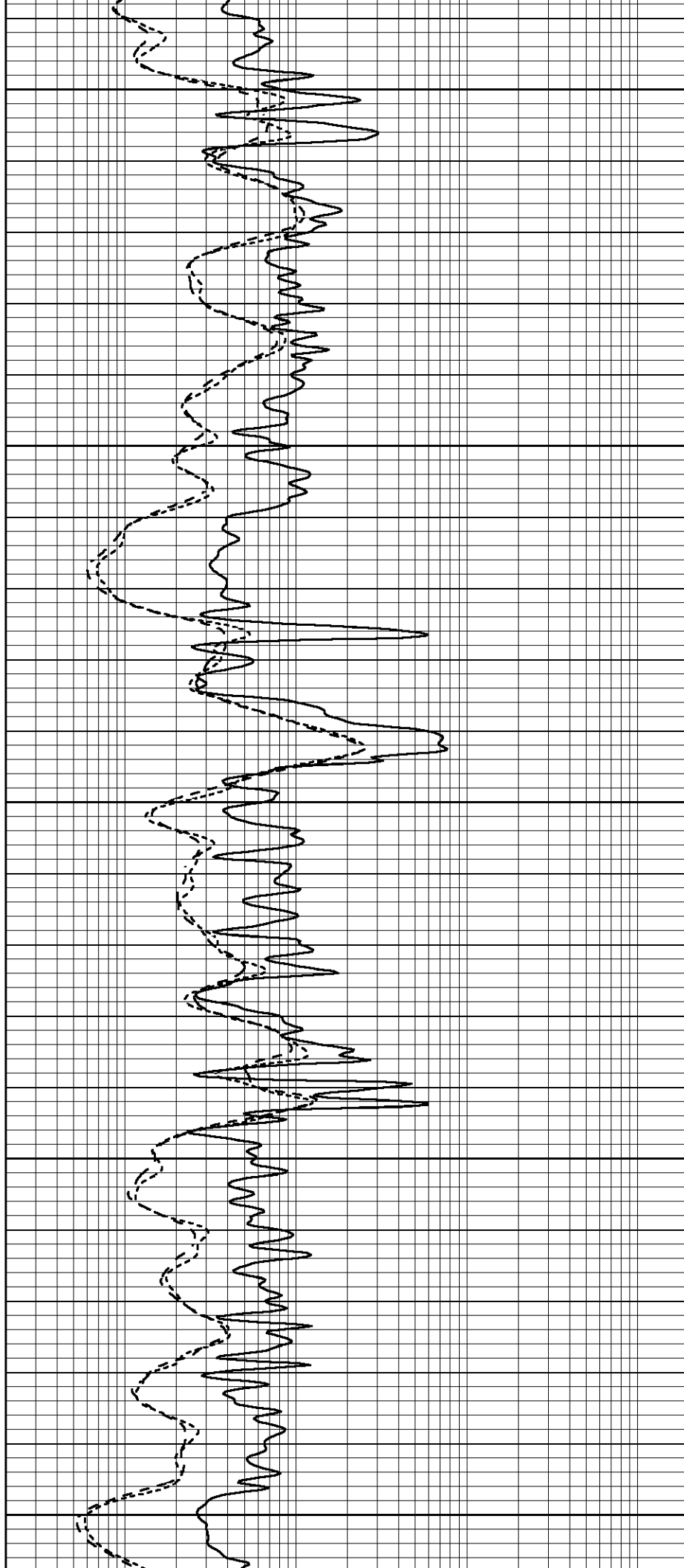
3200

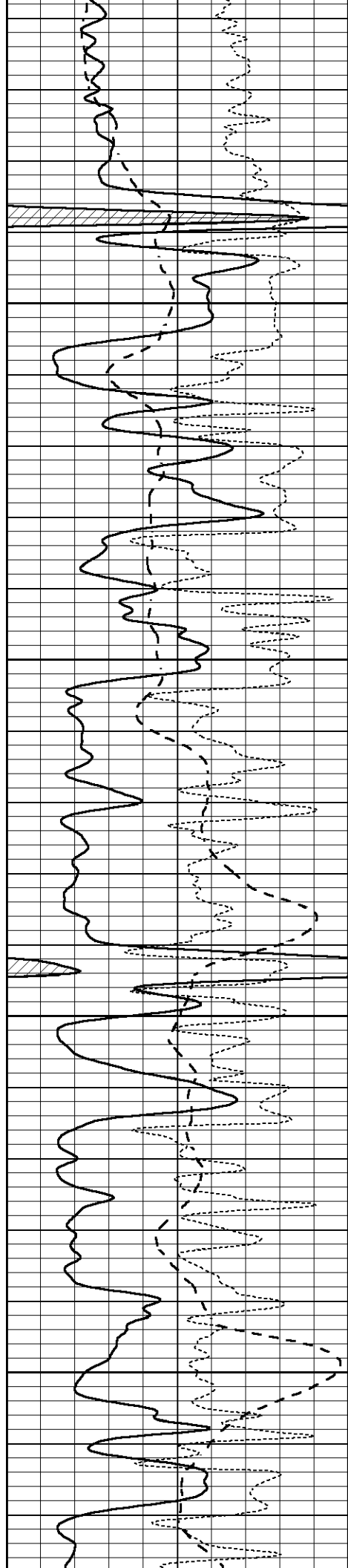
3250

3300

3350

3400



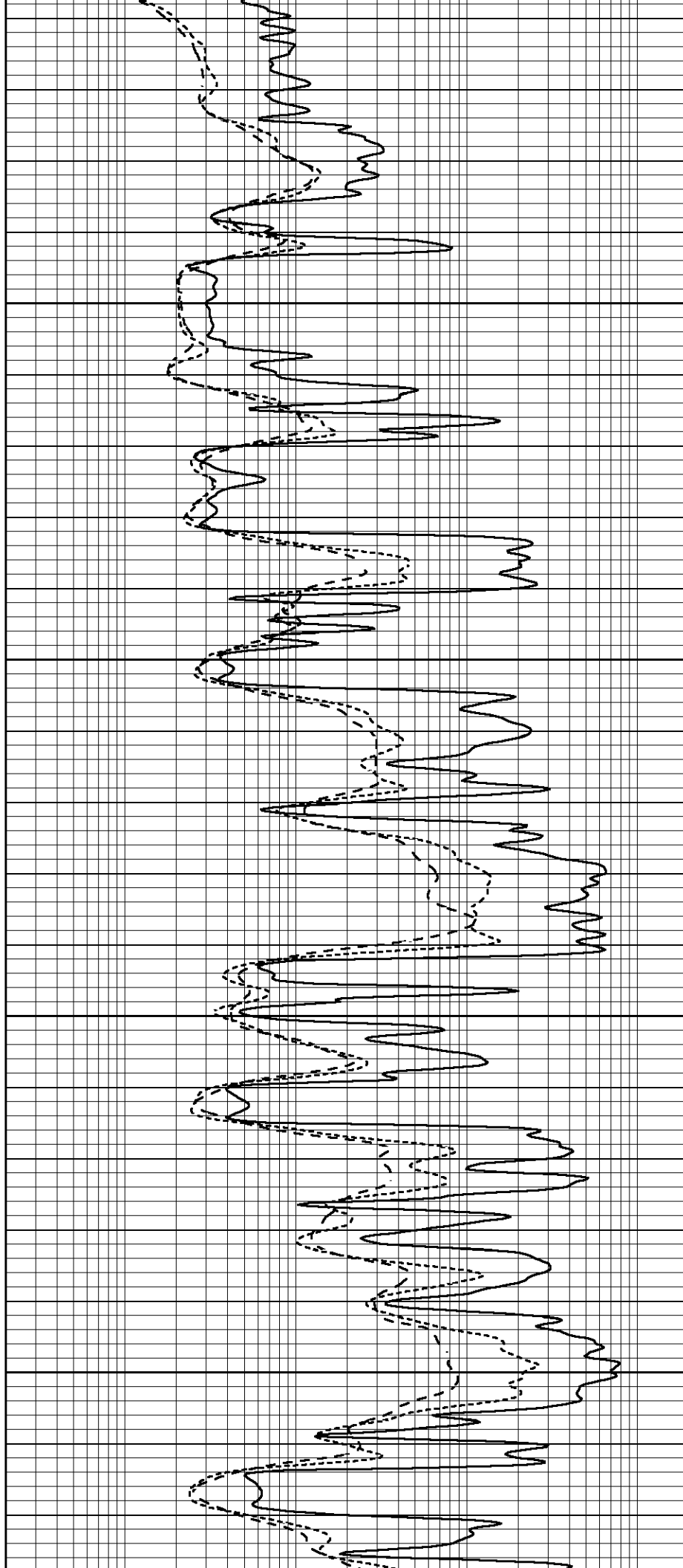


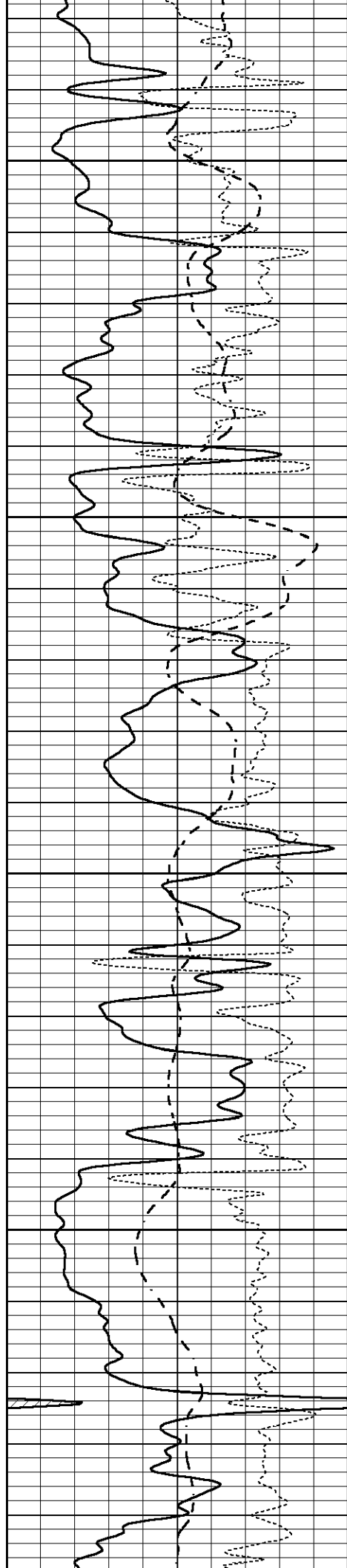
3450

3500

3550

3600



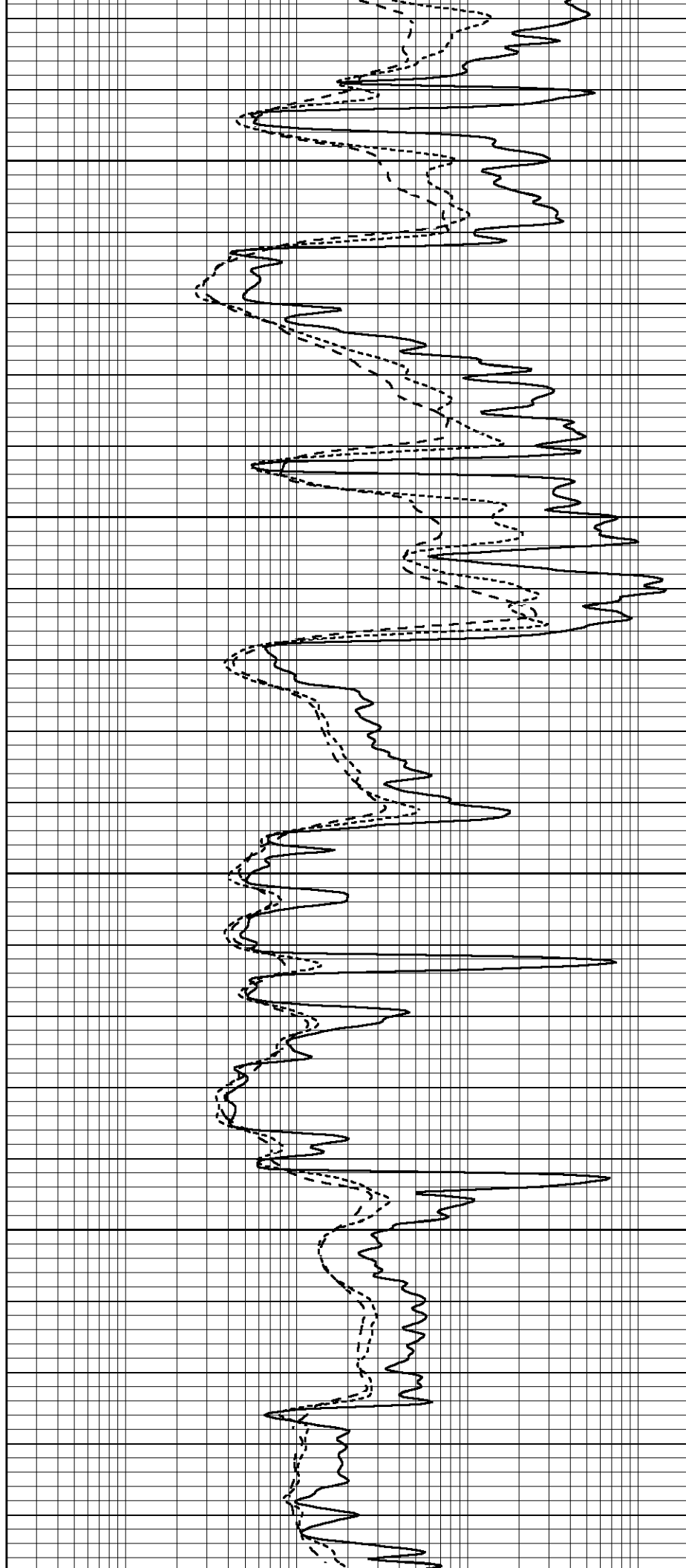


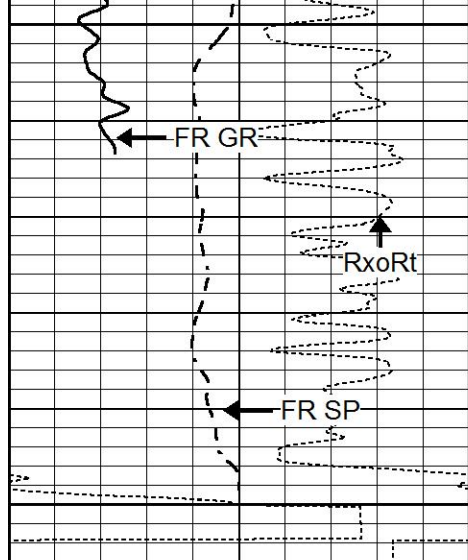
3650

3700

3750

3800

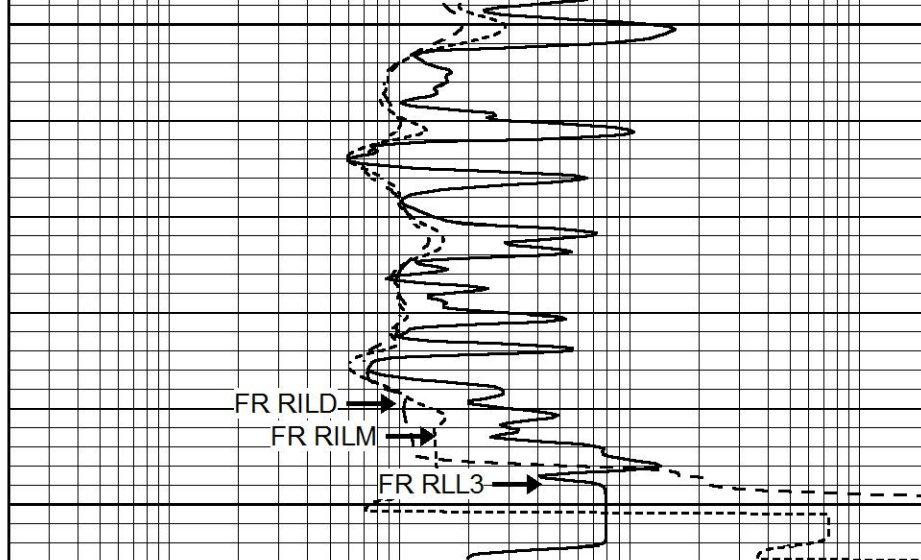




3850

LTD 3900

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

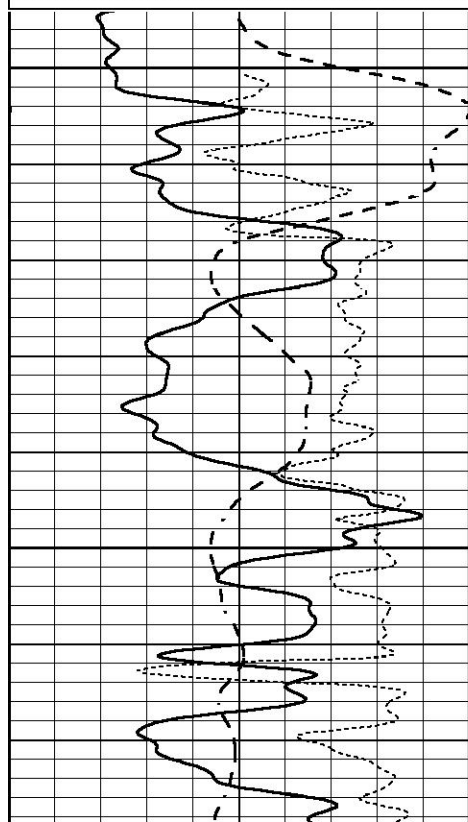


REPEAT SECTION

Database File 4740ddn.db
 Dataset Pathname pass2.1
 Presentation Format _dil
 Dataset Creation Wed Jun 17 17:07:26 2020
 Charted by Depth in Feet scaled 1:240

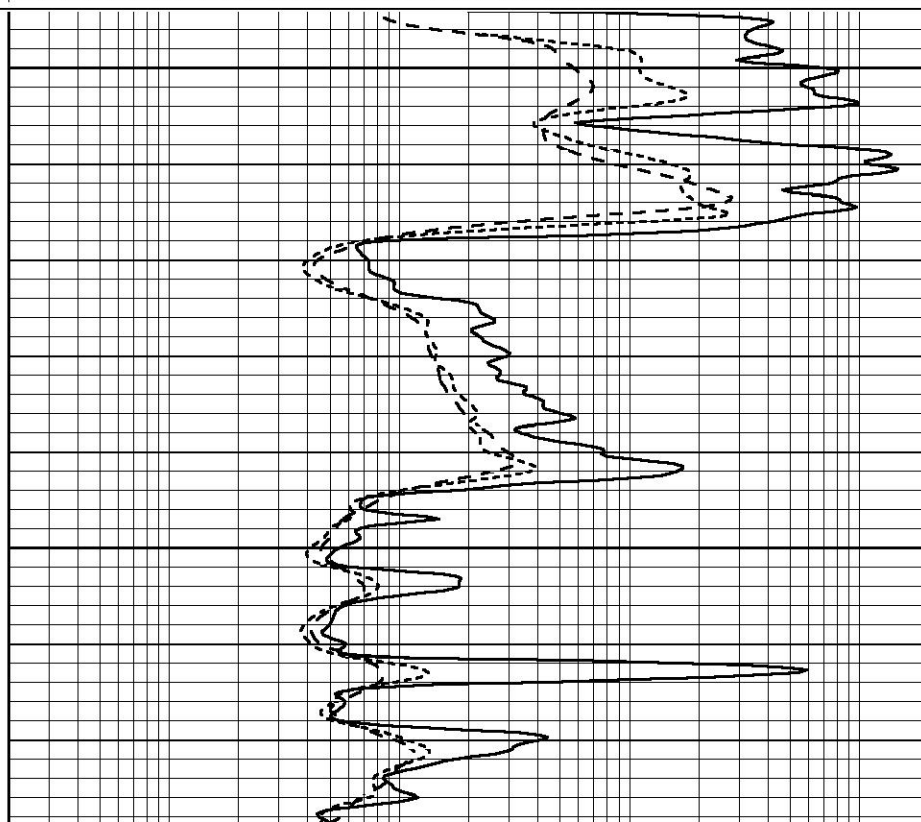
0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50

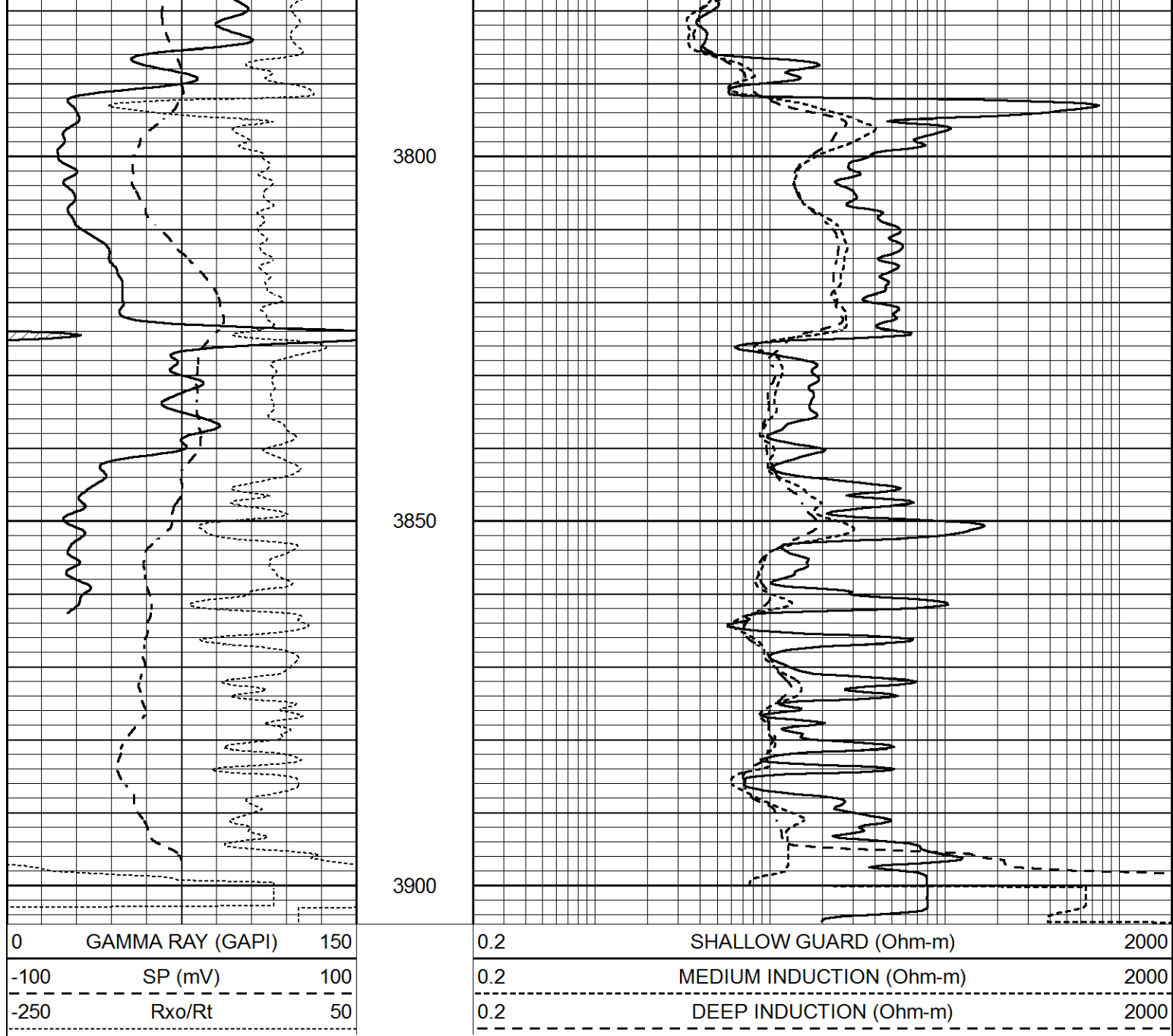
0.2	SHALLOW GUARD (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000



3700

3750





Calibration Report								
Database File	4740ddn.db							
Dataset Pathname	pass3.1							
Dataset Creation	Wed Jun 17 17:32:48 2020							
Dual Induction Calibration Report								
Serial-Model:			FW1410-56-Probe					
Surface Cal Performed:			Mon Jun 15 22:52:02 2020					
Downhole Cal Performed:			Tue Jul 25 12:15:37 2017					
After Survey Verification Performed:			Tue Jul 25 12:15:38 2017					
Surface Calibration								
		Readings		References			Results	
Loop:	Air	Loop		Air	Loop		m	b
Deep	0.008	0.765	V	1.000	400.000	mmho/m	400.061	-3.201
Medium	-0.056	0.761	V	1.000	464.000	mmho/m	425.187	32.510
Internal:	Zero	Cal		Zero	Cal		m	b

Deep	0.005	0.624	V	0.000	400.000	mmho/m	645.611	-3.034
Medium	0.012	0.721	V	0.000	464.000	mmho/m	653.591	-7.532
Downhole Calibration								
	Readings			References			Results	
	Zero	Cal		Zero	Cal		m'	b'
Deep	-0.647	301.329	mmho/m	-0.780	336.378	mmho/m	1.117	-0.058
Medium	38.256	411.013	mmho/m	39.046	441.706	mmho/m	1.080	-2.280
LL3		7.471	V		2500.000	Ohm-m		
		0.001	V		20.000	Ohm-m		
		-7.085	V		5000.000	mmho-m		
After Survey Verification								
	Readings			Targets			Results	
	Zero	Cal		Zero	Cal		m'	b'
Deep	0.000	0.000	mmho/m	-0.647	301.329	mmho/m	1.000	0.000
Medium	0.000	0.000	mmho/m	38.256	411.013	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: Thu May 21 10:43:15 2020					
	Background		Aluminum		Magnesium			
Window 1	531.08		5459.71		23833.72		cps	
Window 2	42.08		1230.06		5814.64		cps	
Window 4	232.81		1236.34		5296.40		cps	
Window 5	564.62		8687.43		16546.07		cps	
Window 6	44.20		1453.03		2846.27		cps	
Window 8	270.67		2786.28		5209.33		cps	
Bulk Density	-		2.6020		1.6830		g/cc	
Pe	-		3.0000		2.5070		b/e	
LS Alpha:	: -1.8459		SS Alpha: : -0.7701		LS CPE:		: 1.1427	
LS Beta:	: 125609.8082		SS Beta: : 19396.7594		SS CPE:		: 1.5007	
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					

Window 8

0.00

cps

Lithodensity Caliper Calibration

Performed: Thu May 21 10:43:15 2020

Results

Readings

References (in)

Low

High

Low

High

Gain

Offset

4564.4

7712.2

8.0

14.0

0.0

-0.9

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 Dec 10 10:02:55 2019

Calibrator Value:

1.0

GAPI

Background Reading:

0.0

cps

Calibrator Reading:

1.0

cps

Sensitivity:

0.4800

GAPI/cps