

DUAL INDUCTION LOG

Company	PHILLIPS EXPLORATION COMPANY L.C.	Company	PHILLIPS EXPLORATION COMPANY L.C.
Well	GEYER #3-3	Well	GEYER #3-3
Field	WC	Field	WC
County	TREGO	County	TREGO
State	KANSAS	State	KANSAS
Location:	API # : 15-195-23105-0000 850' FNL & 330' FWL	Other Services CDL/CNL/ML	
Permanent Datum	SEC 3 TWP 11S RGE 24W	Elevation	
Log Measured From	GROUND LEVEL Elevation 2358 KELLY BUSHING 5' A.G.L.	K.B. 2363 D.F. 2361 G.L. 2358	
Drilling Measured From	KELLY BUSHING		
Date	07/12/20		
Run Number	ONE		
Depth Driller	4000		
Depth Logger	3997		
Bottom Logged Interval	3996		
Top Log Interval	00		
Casing Driller	8 5/8" @ 207		
Casing Logger	207		
Bit Size	7 7/8"		
Type Fluid in Hole	CHEMICAL MUD		
Density / Viscosity	9.3/48		
pH / Fluid Loss	10.0/7.2		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	.9@ 82F		
Rmf @ Meas. Temp	.68@ 82F		
Rmc @ Meas. Temp	1.08 @ 82F		
Source of Rmf / Rmc	MEASURED		
Rm @ BHT	.70@ 116F		
Time Circulation Stopped	2 HOURS		
Time Logger on Bottom	////		
Maximum Recorded Temperature	116F		
Equipment Number	1523		
Location	HAYS, KANSAS		
Recorded By	GUS PFANENSTIEL		
Witnessed By	PAT DEENIHAN		

<<< 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, HAYS, KS. (785) 628-6395

DIRECTIONS: WAKEENEY NORTH TO B RD.
6 WEST TO 200 RD., N 3/4 MILE, EAST INTO.



MAIN PASS

450

500

550

600

650

700

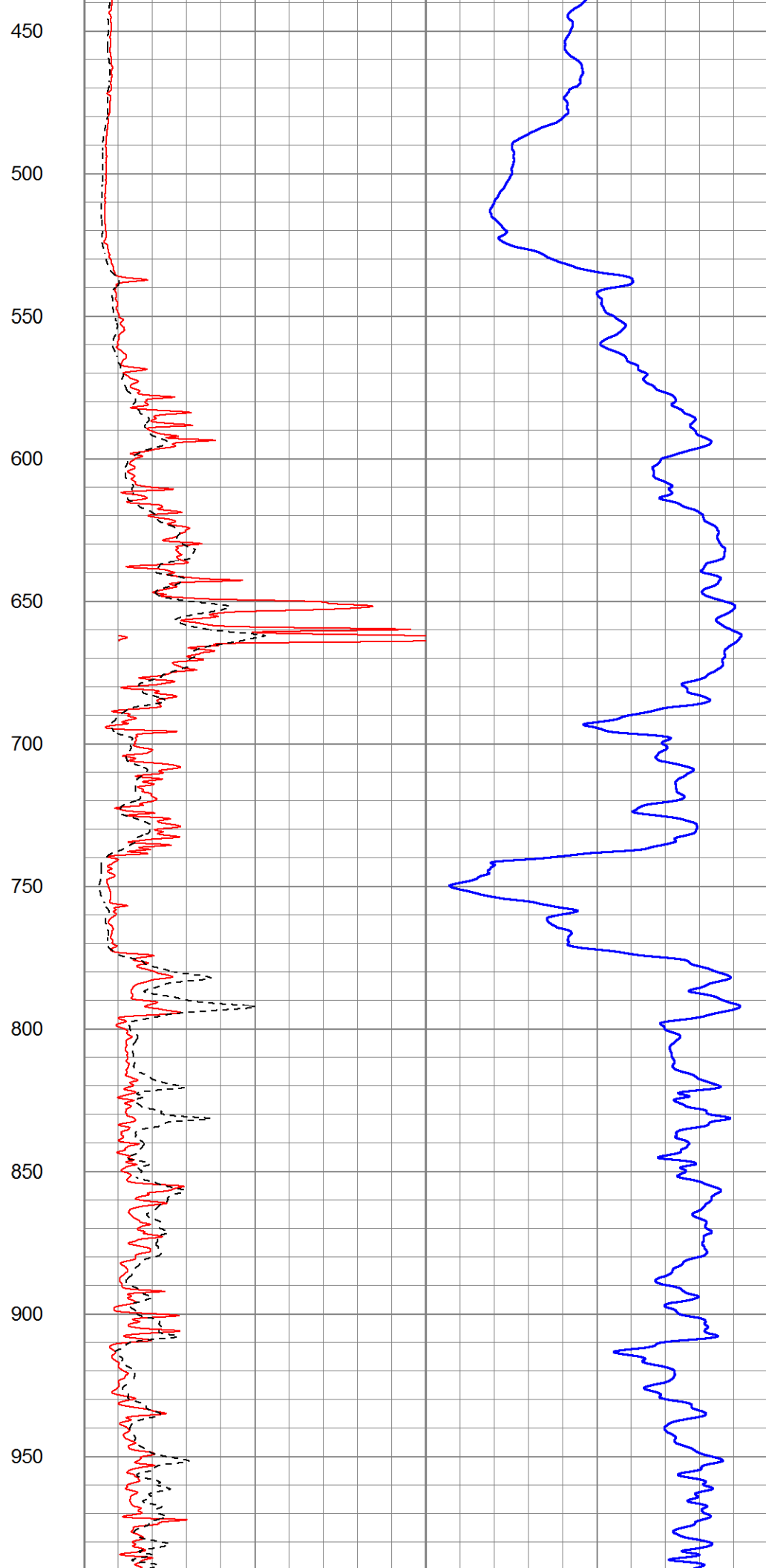
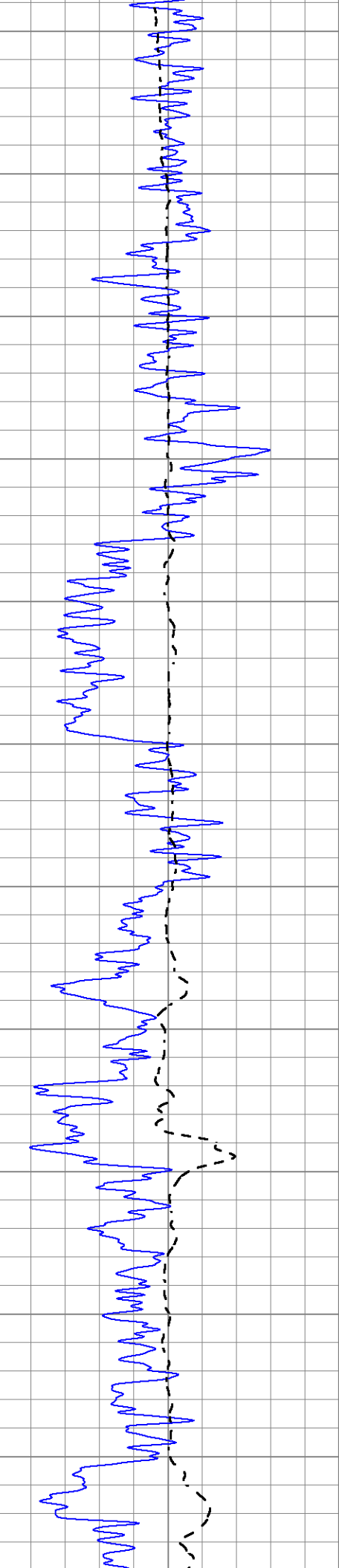
750

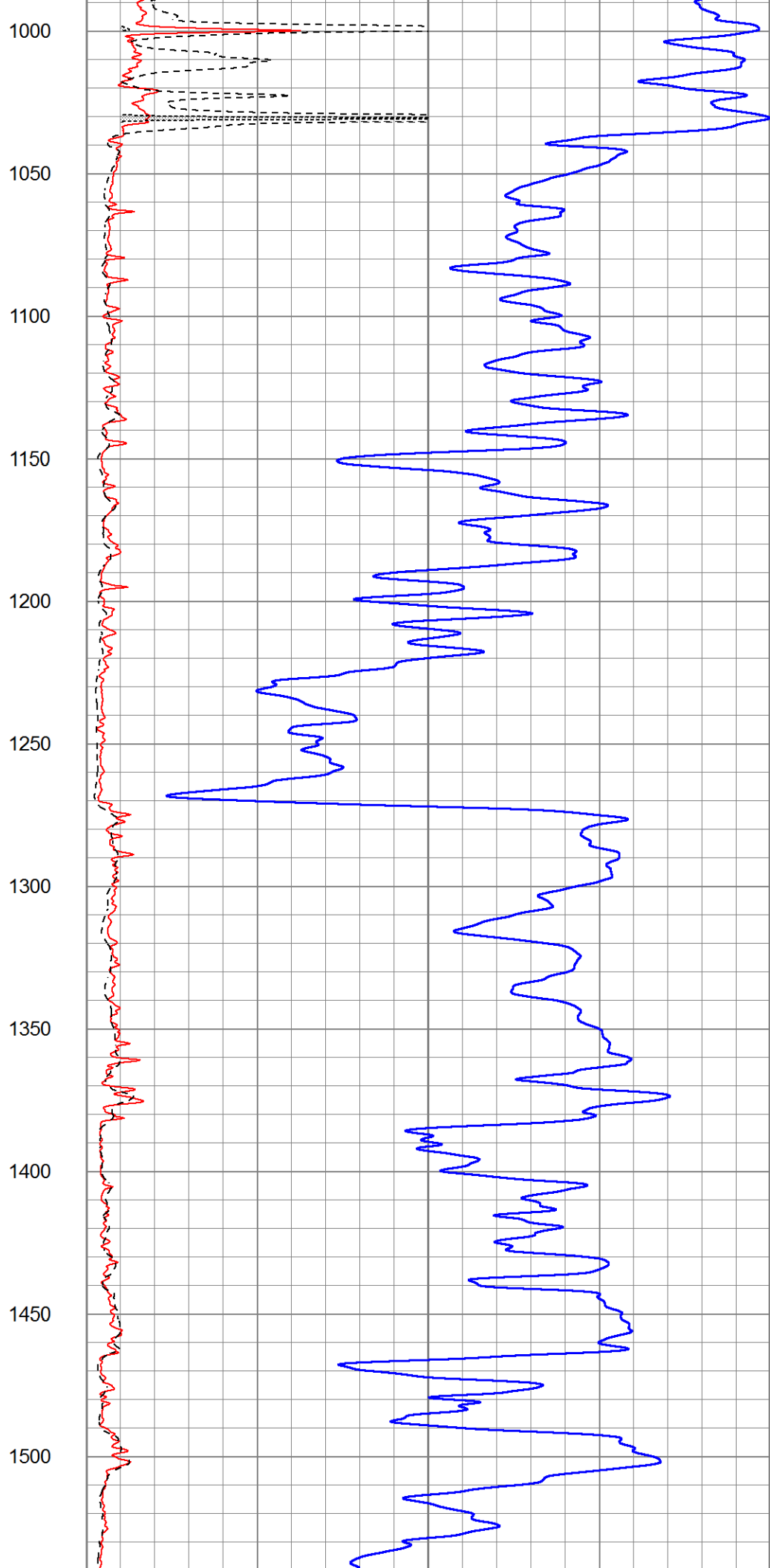
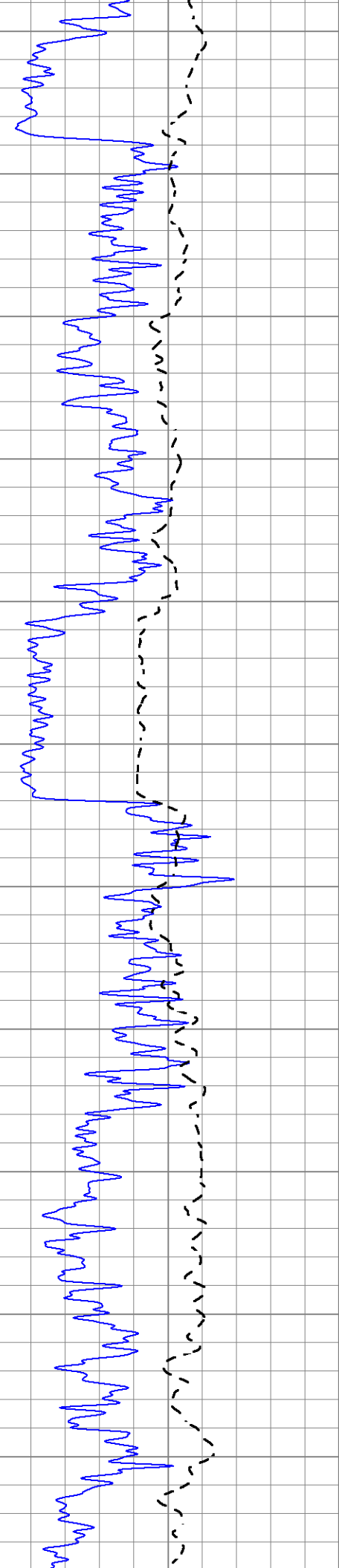
800

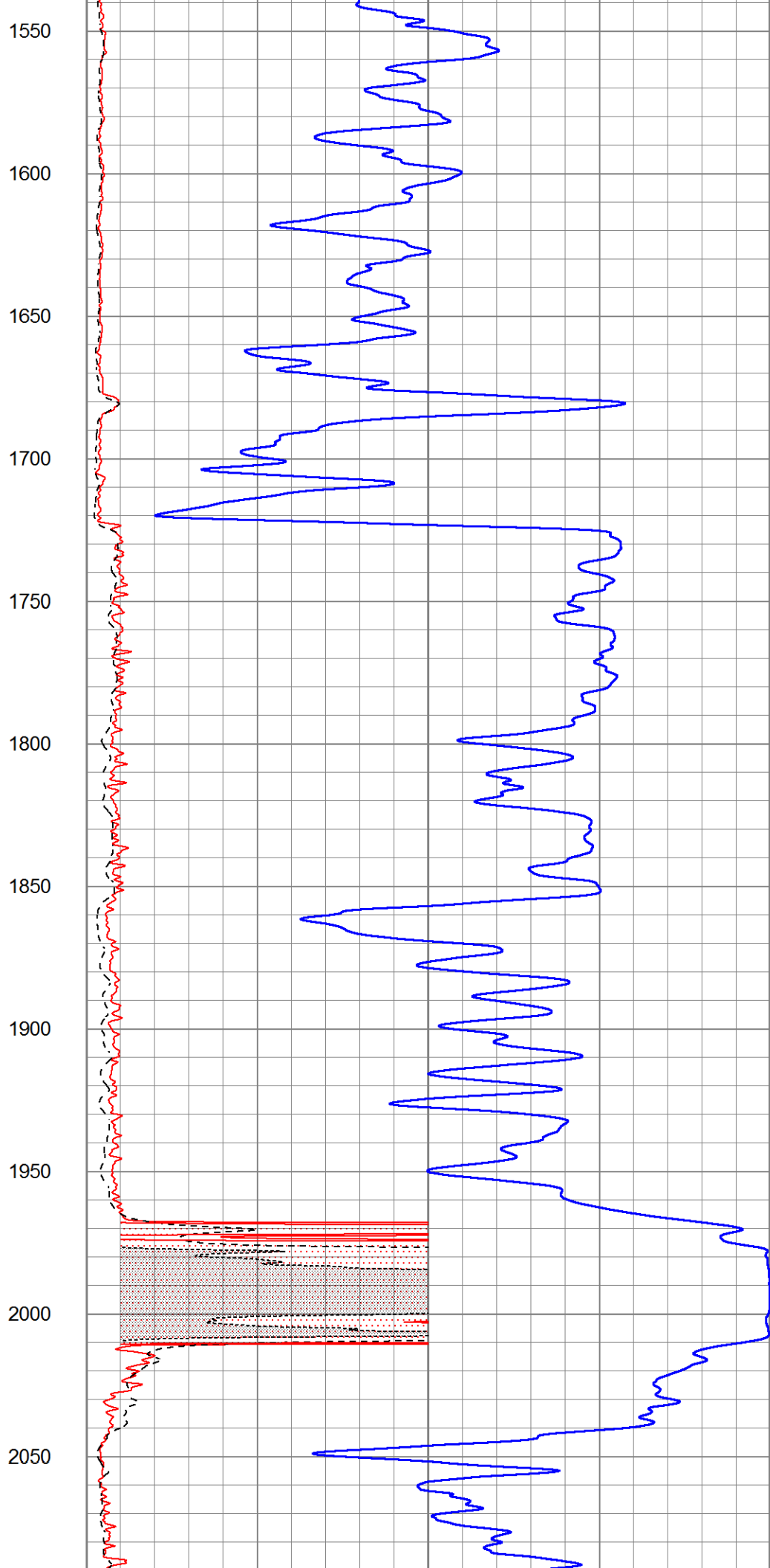
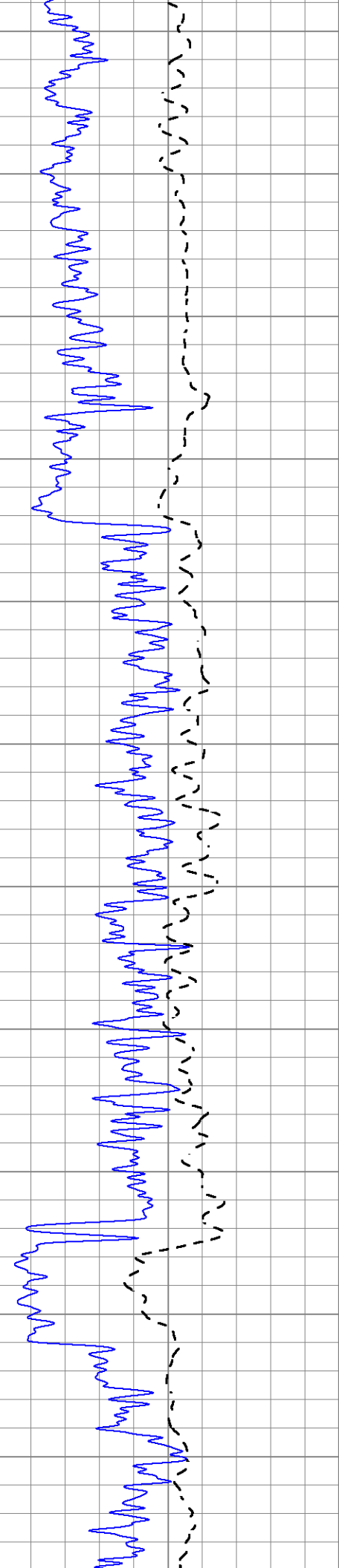
850

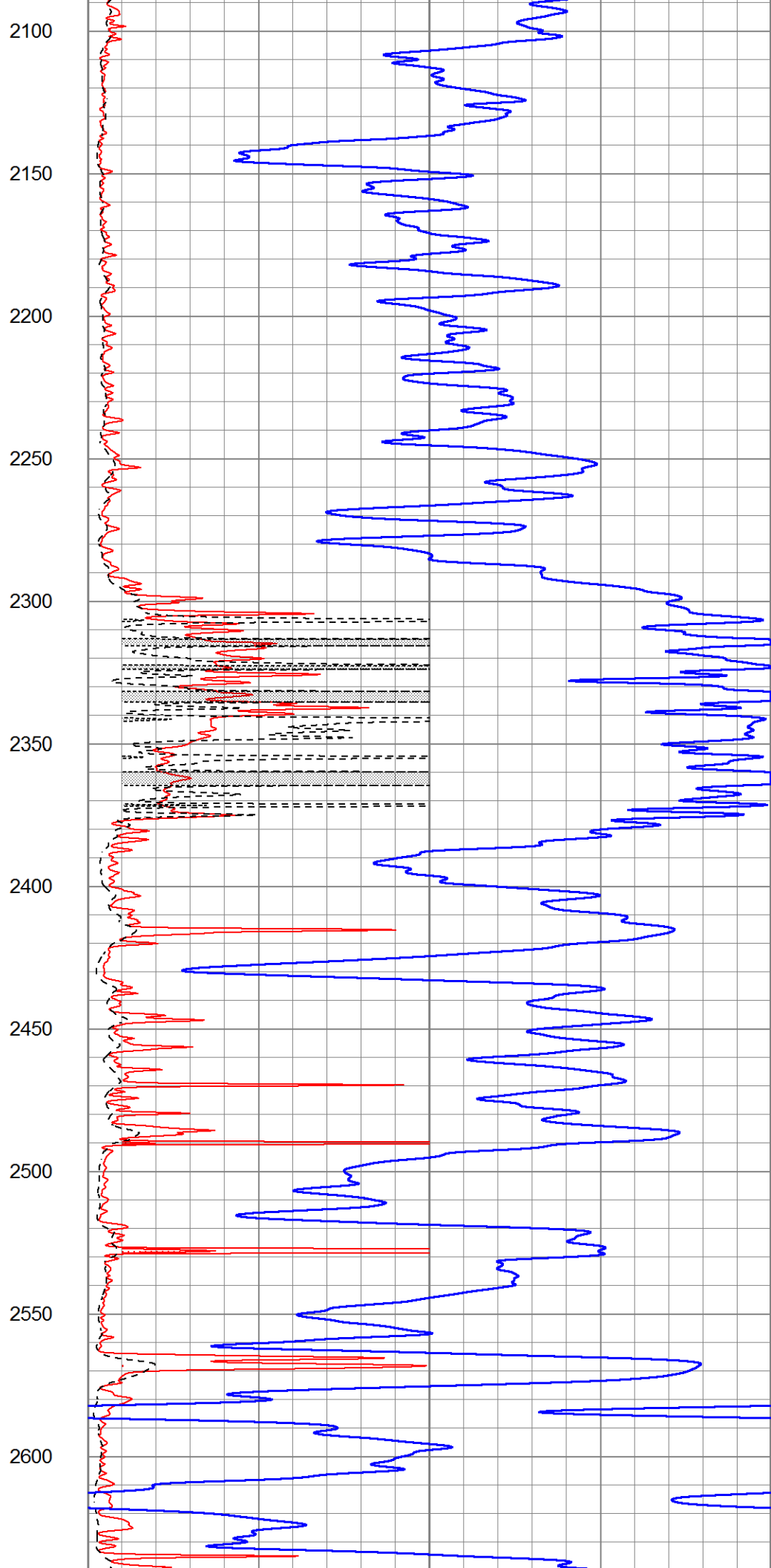
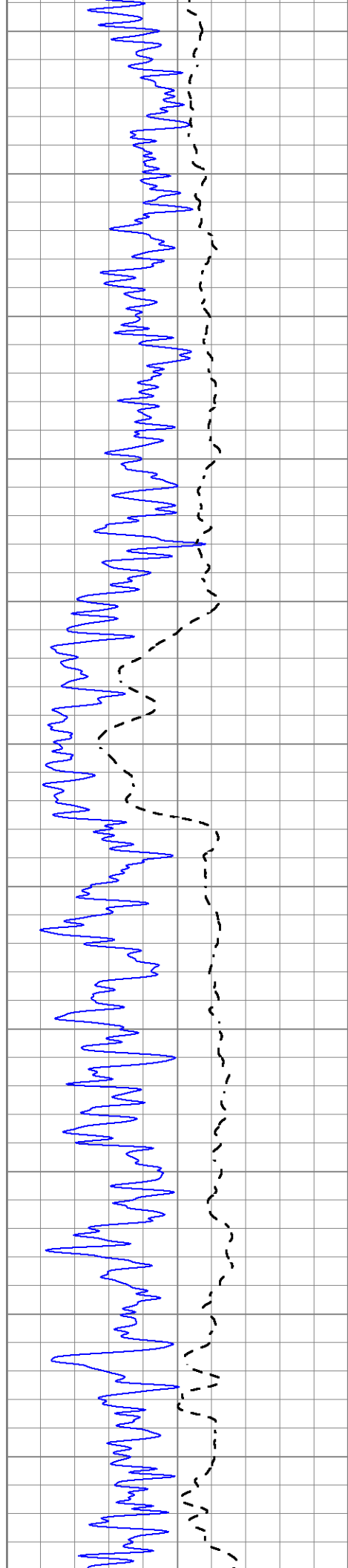
900

950

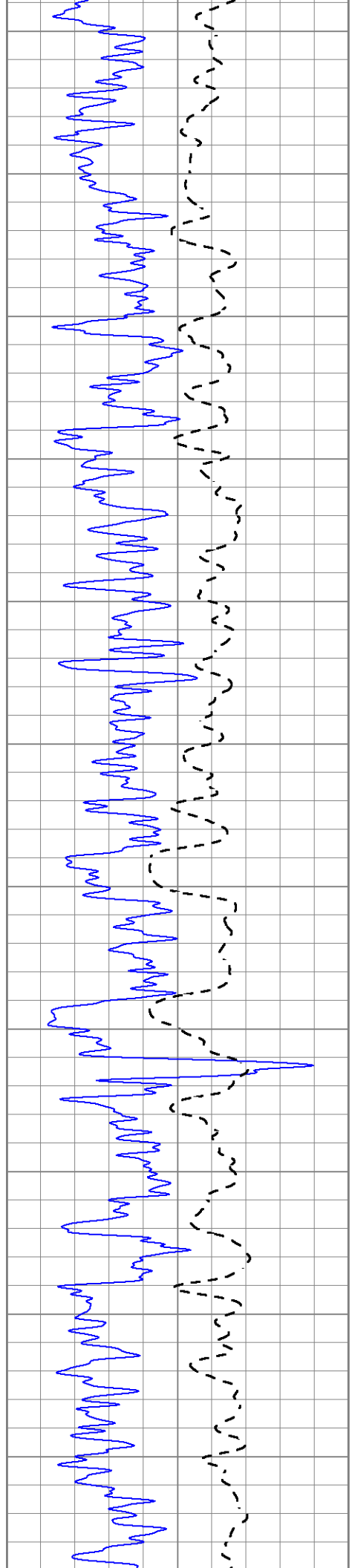
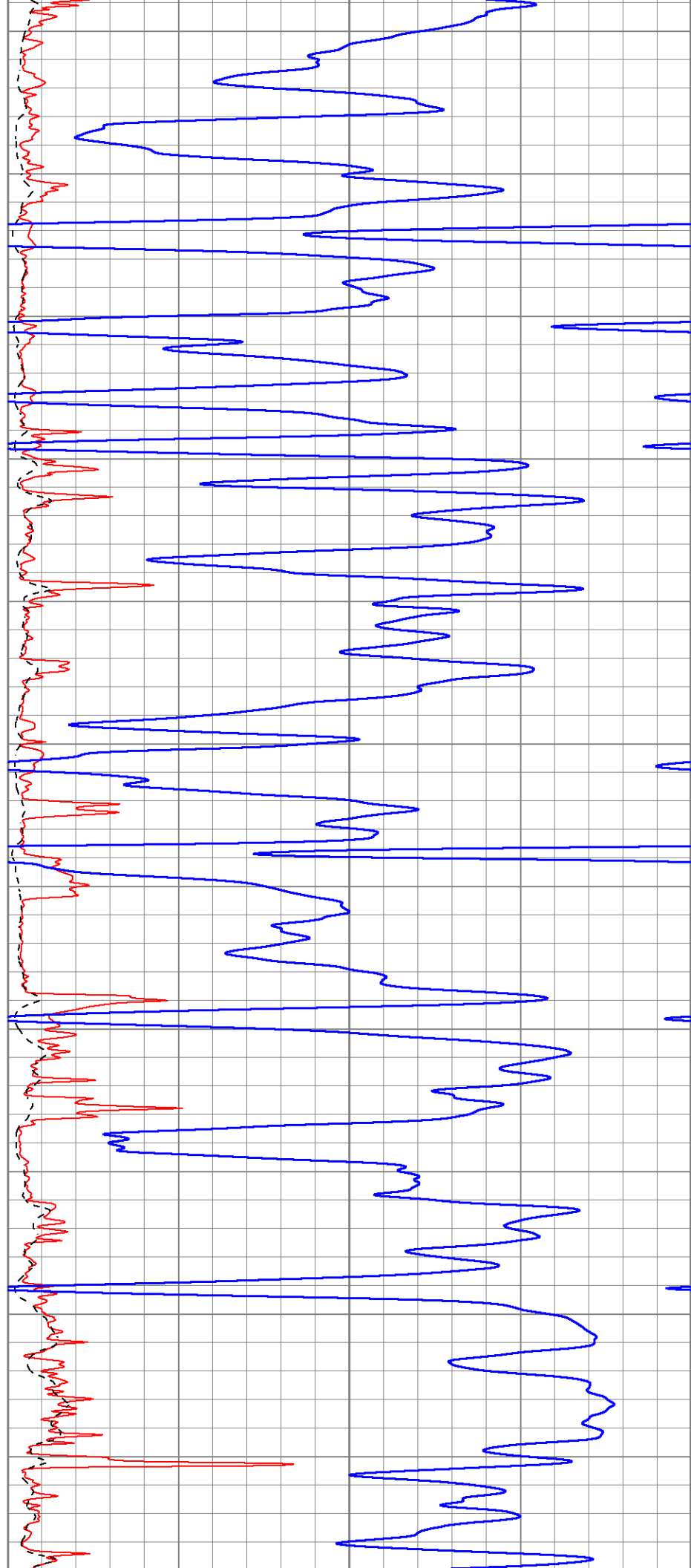


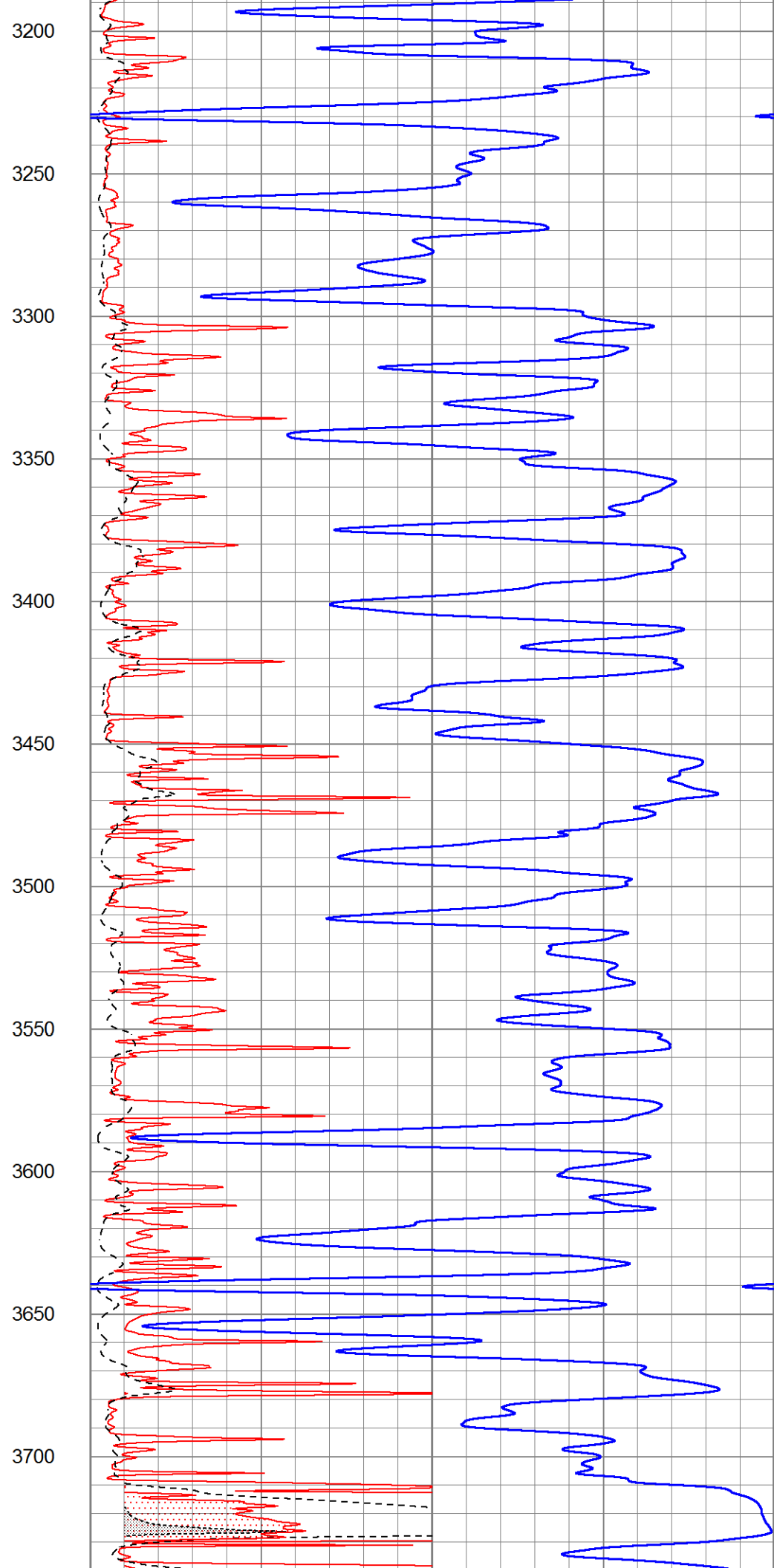
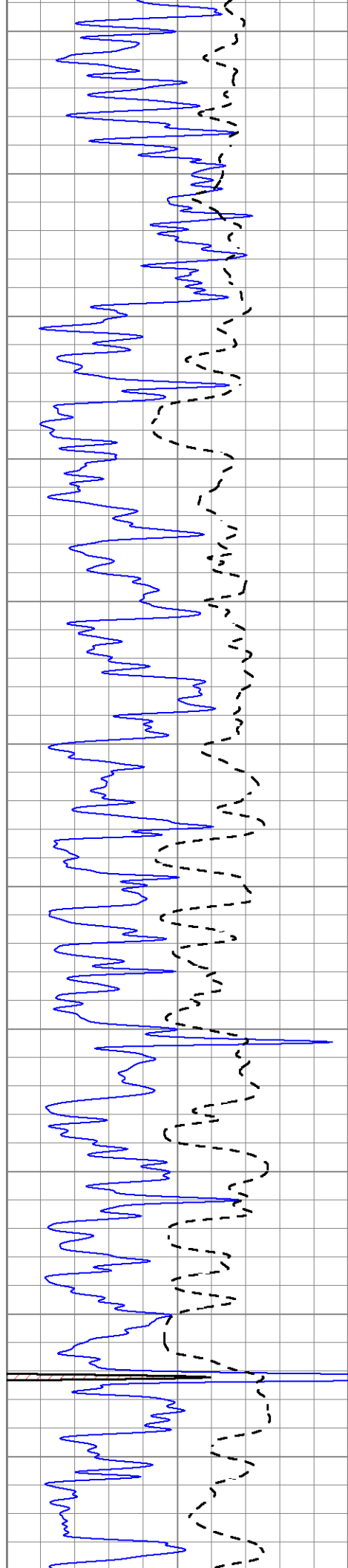


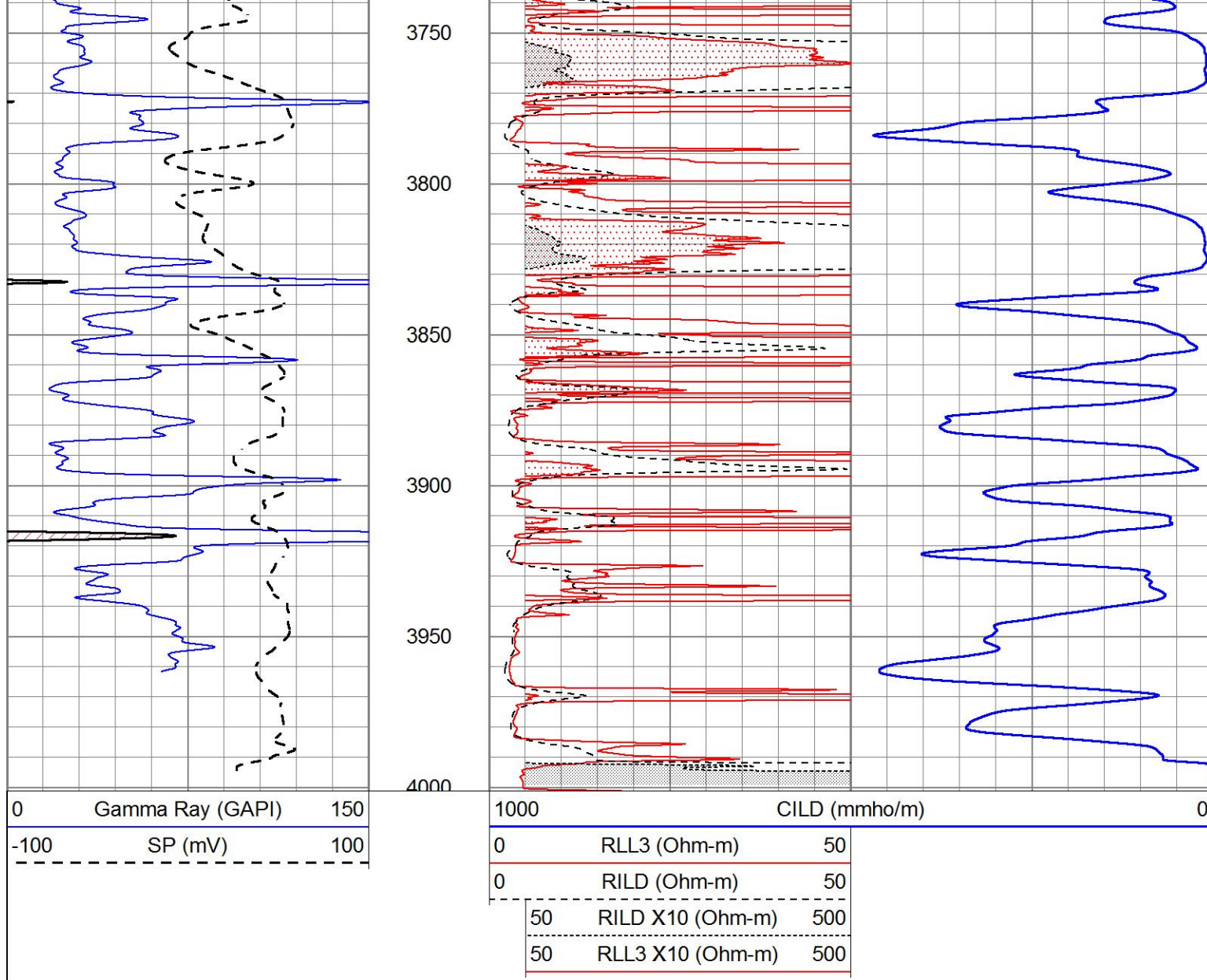




2650
2700
2750
2800
2850
2900
2950
3000
3050
3100
3150





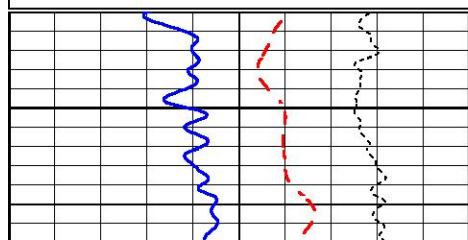


MAIN PASS

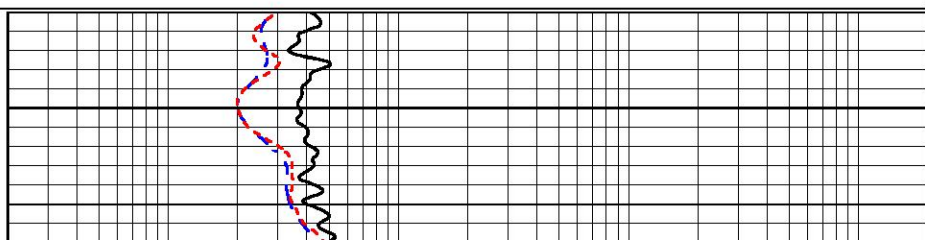
Database File 4693ddn.db
 Dataset Pathname pass4.1
 Presentation Format _dil
 Dataset Creation Sun Jul 12 19:45:21 2020
 Charted by Depth in Feet scaled 1:240

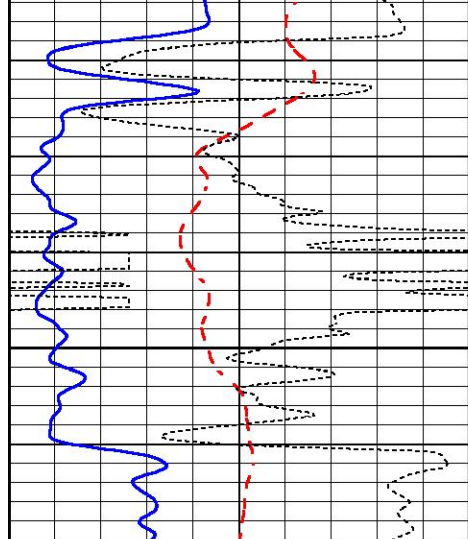
0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50
0	MINMK	20

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



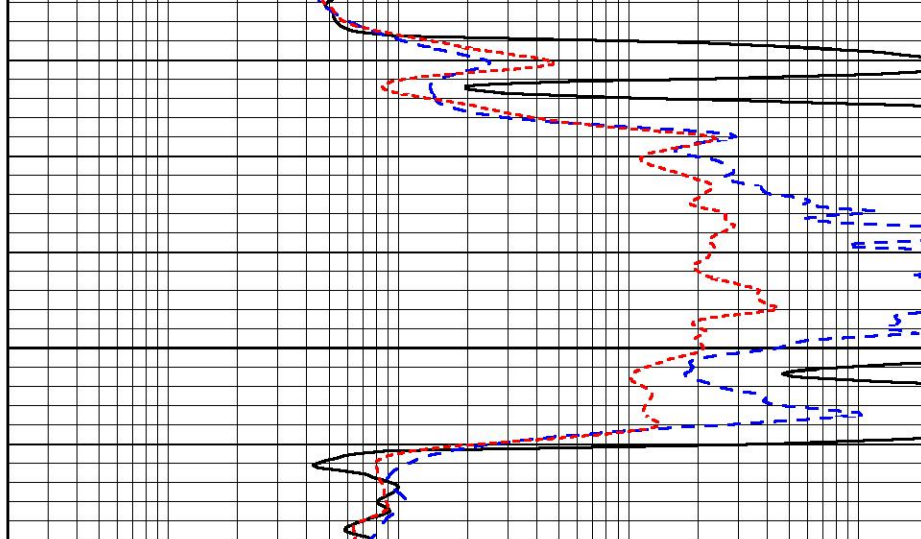
1950





0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50
0	MINMK	20

2000



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

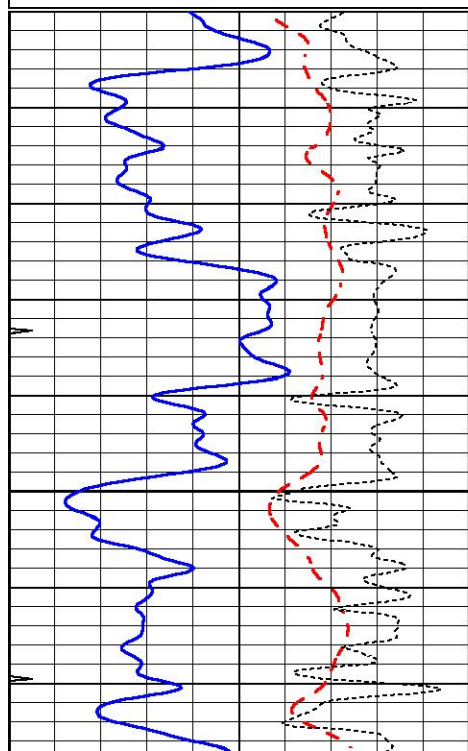


MAIN PASS

Database File 4693ddn.db
 Dataset Pathname pass4.1
 Presentation Format _dil
 Dataset Creation Sun Jul 12 19:45:21 2020
 Charted by Depth in Feet scaled 1:240

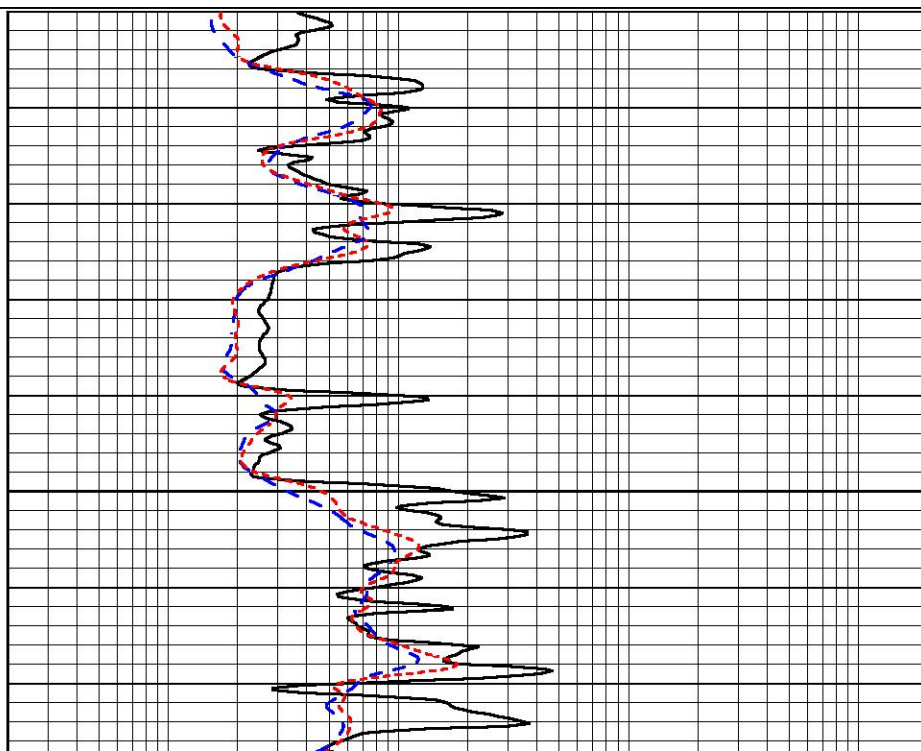
0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50
0	MINMK	20

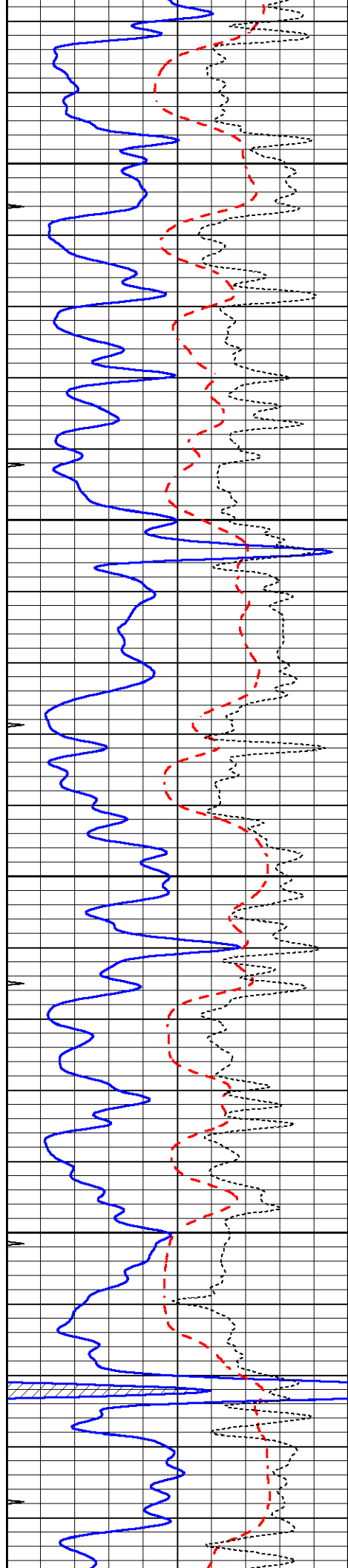
0.2	SHALLOW GUARD (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000



3400

3450



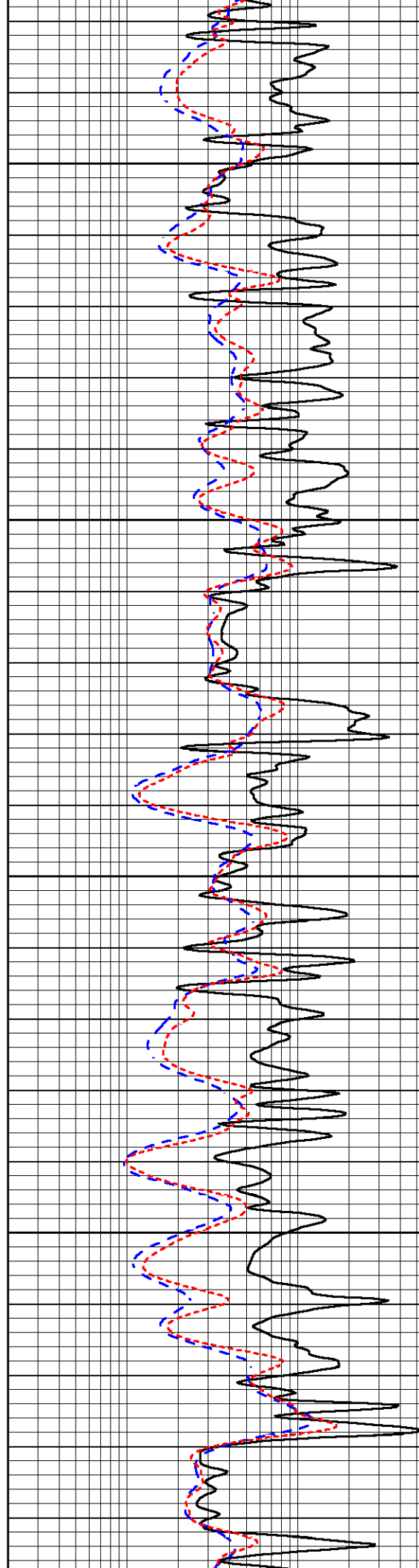


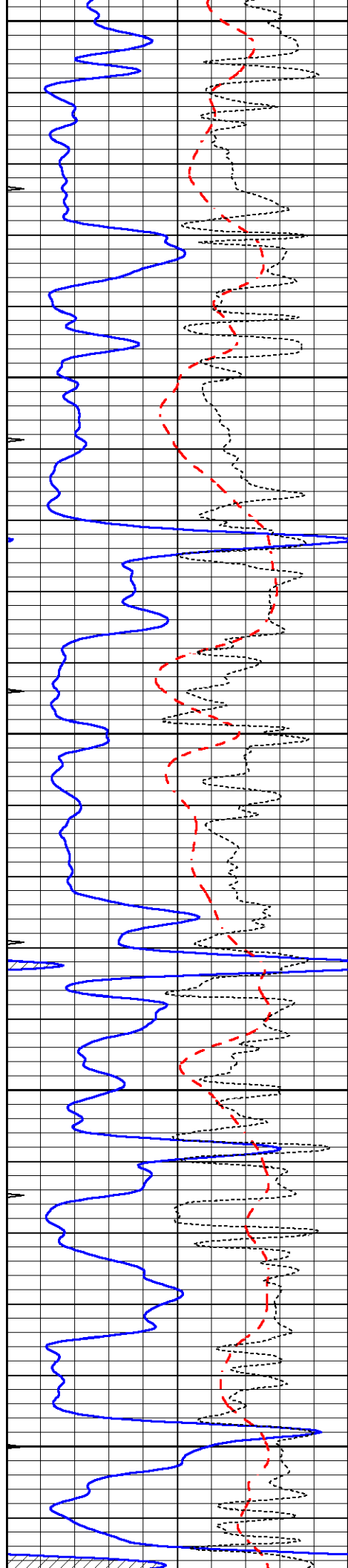
3500

3550

3600

3650





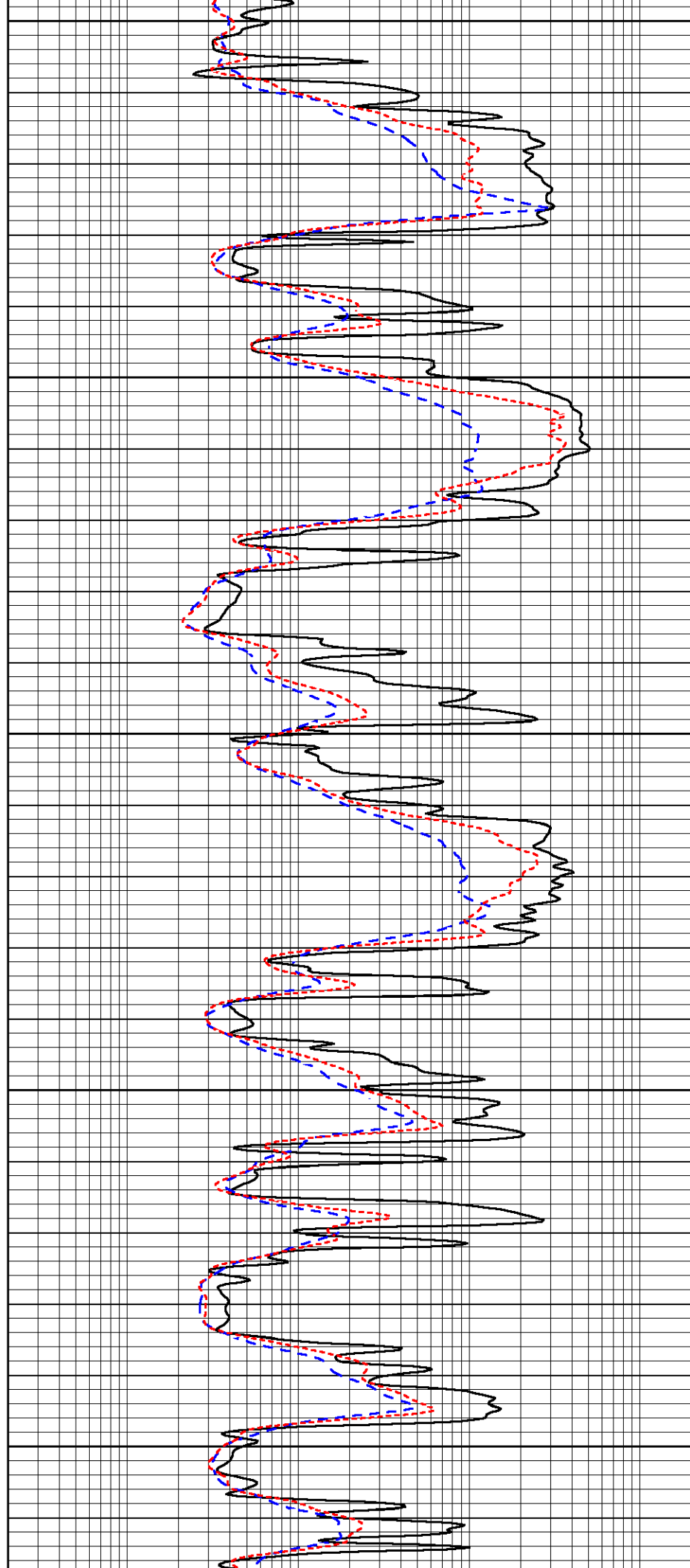
3700

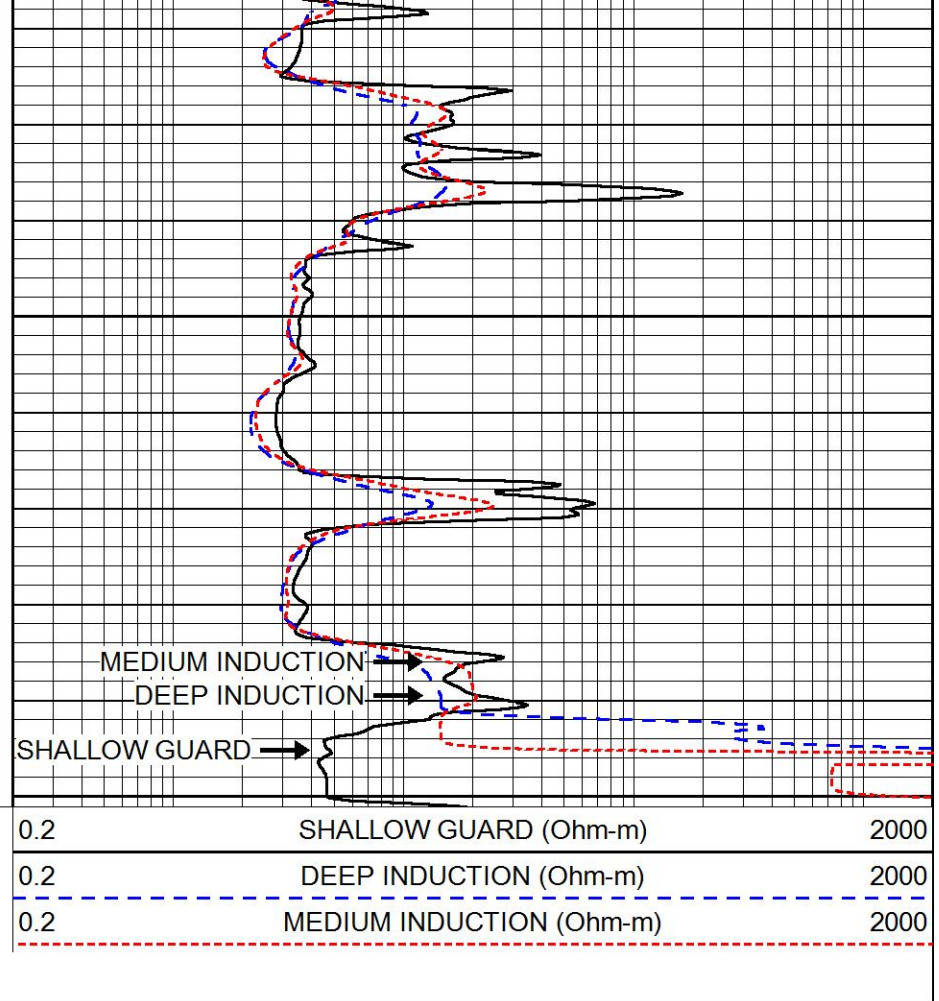
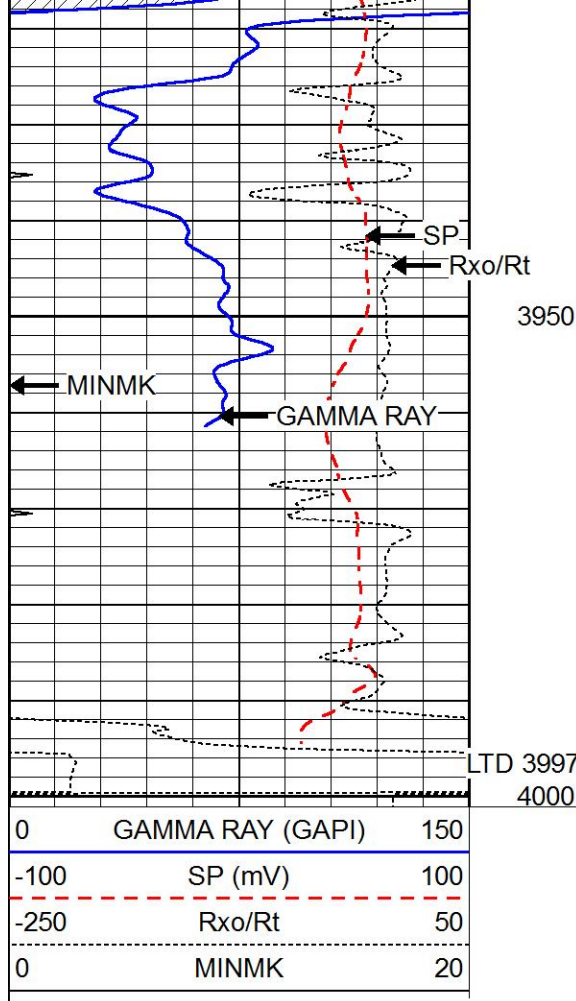
3750

3800

3850

3900



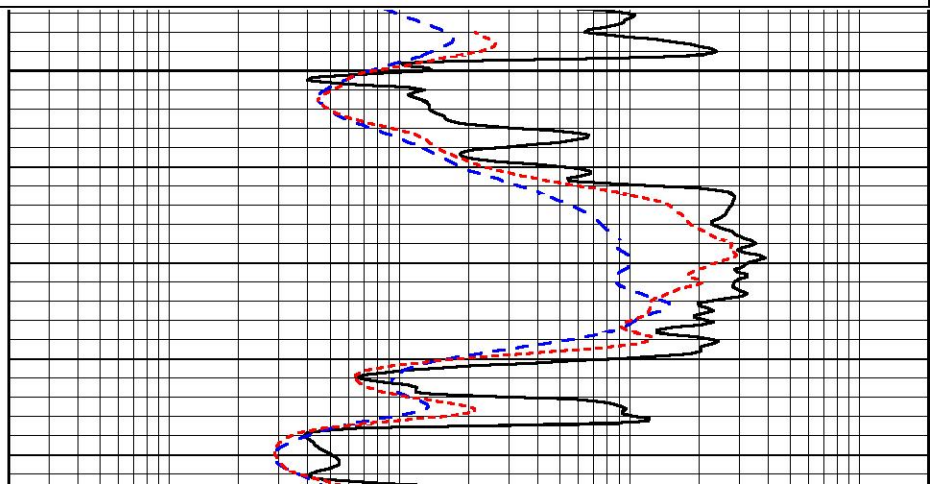
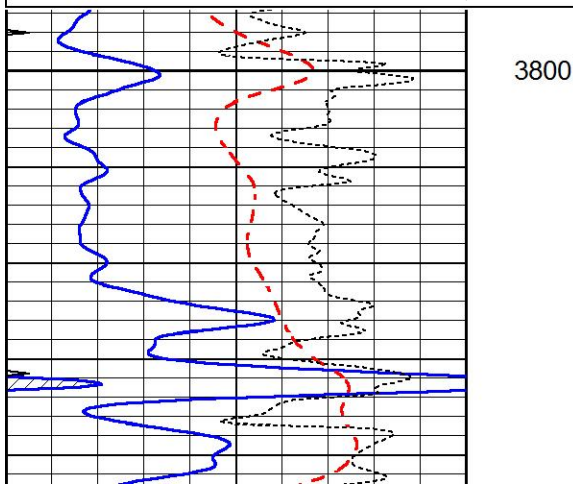


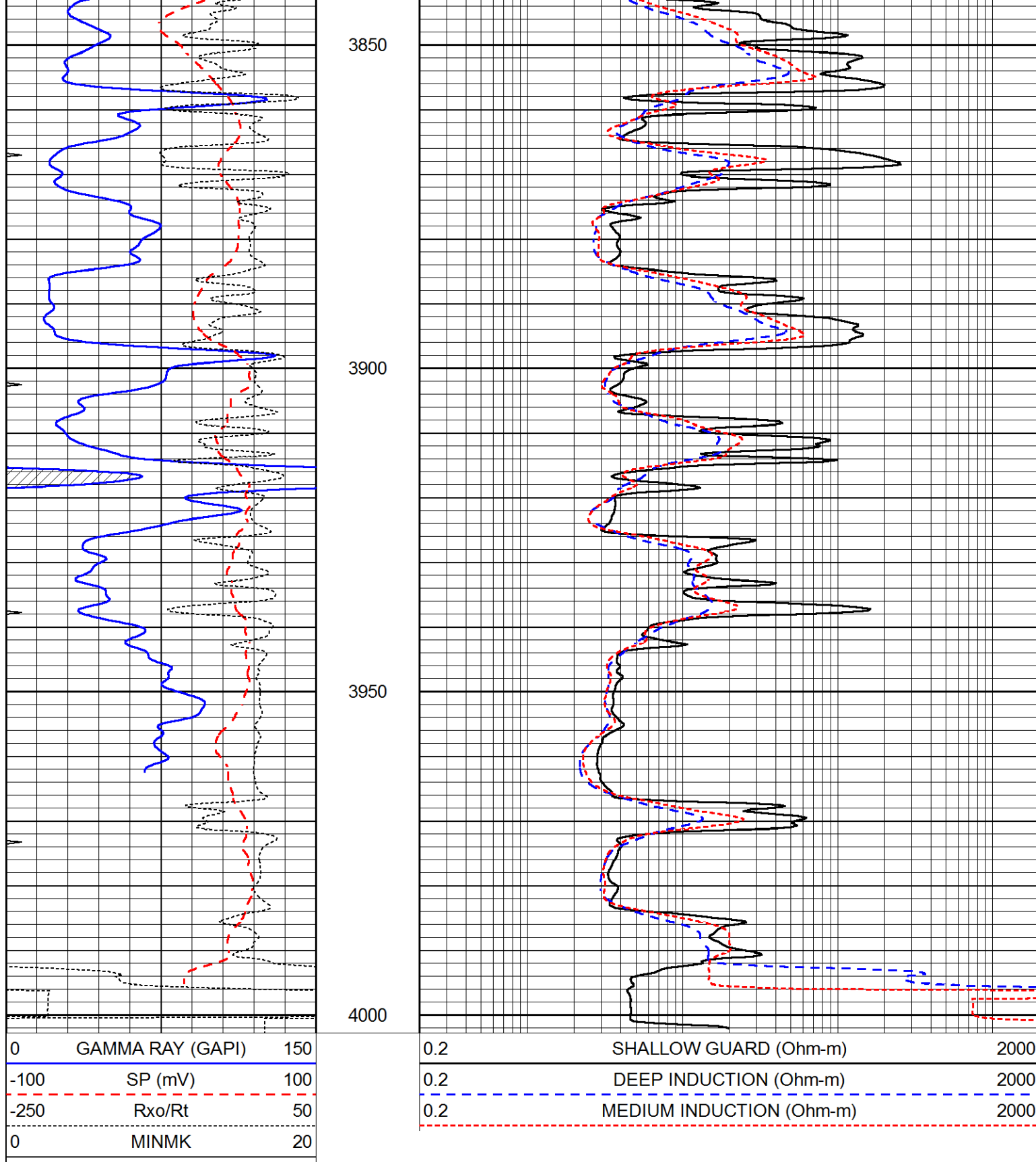
REPEAT SECTION

Database File 4693ddn.db
 Dataset Pathname pass3.1
 Presentation Format _dil
 Dataset Creation Sun Jul 12 19:17:52 2020
 Charted by Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50
0	MINMK	20

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





Calibration Report

Database File 4693ddn.db
 Dataset Pathname pass3.1
 Dataset Creation Sun Jul 12 19:17:52 2020

Dual Induction Calibration Report

Serial-Model:	PROBE8-DILG
Surface Cal Performed:	Mon Sep 10 14:28:35 2018
Downhole Cal Performed:	Mon Sep 10 14:28:38 2018

Surface Calibration								
Readings				References			Results	
Loop:	Air	Loop		Air	Loop		m	b
Deep	0.015	0.648	V	0.000	400.000	mmho/m	620.000	0.000
Medium	0.029	0.796	V	0.000	464.000	mmho/m	590.000	-12.000
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.017	0.657	V	0.000	400.000	mmho/m	625.153	-10.619
Medium	0.016	0.757	V	0.000	464.000	mmho/m	625.992	-9.739

Downhole Calibration								
Readings				References			Results	
	Zero	Cal		Zero	Cal		m'	b'
Deep	0.000	0.000	mmho/m	2.011	405.777	mmho/m	1.000	0.000
Medium	0.000	0.000	mmho/m	7.590	503.393	mmho/m	1.000	0.000
LL3		7.500	V		1500.000	Ohm-m		
		0.000	V		20.000	Ohm-m		
		-7.200	V		3800.000	mmho-m		

After Survey Verification								
Readings				Targets			Results	
	Zero	Cal		Zero	Cal		m'	b'
Deep	0.000	0.000	mmho/m	0.000	0.000	mmho/m	0.000	0.000
Medium	0.000	0.000	mmho/m	0.000	0.000	mmho/m	0.000	0.000
LL3		1.000	Ohm-m		1.000	Ohm-m		
		0.000	Ohm-m		0.000	Ohm-m		
		1.000	mmho-m		1.000	mmho-m		

Litho Density Calibration Report
Serial: 002N Model: PRB

Master Calibration					Performed Tue Mar 10 15:08:00 2020			
	Background	Magnesium	Aluminum	Aluminum+Fe				
Window 1	780.1	6981.9	2088.6	1871.2				cps
Window 2	718.6	5898.2	1813.8	1664.1				cps
Window 3	580.0	2989.5	1088.0	1039.1				cps
Window 4	172.8	175.7	175.3	173.5				cps
Long Space	0.0	5179.6	1095.2	945.5				cps
Short Space	1.1	1228.6	821.2	690.4				cps
Rho		1.7100	2.5900	0.0000				g/cc
Pe		2.0000	2.7500	5.7900				
Rib Angle	: 45.5	Rib Slope	: 1.016	Density/Spine Ratio			: 0.548	
Spine Angle	: 75.5	Spine Slope	: 3.857	Spine Intercept			: -18.9	

Before Survey Verification					Performed Wed Dec 31 18:00:00 1969			
Window 1	0.0	0.0	0.0	0.0				cps
Window 2	0.0	0.0	0.0	0.0				cps
Window 3	0.0	0.0	0.0	0.0				cps
Window 4	0.0	0.0	0.0	0.0				cps
Long Space	0.0	0.0	0.0	0.0				cps
Short Space	0.0	0.0	0.0	0.0				cps
Measured Rho		0.0000	0.0000	0.0000				g/cc
Measured Correction		0.0000	0.0000	0.0000				g/cc

Measured Correction:	0.0000	0.0000	g/cc
Measured Pe	0.0000	0.0000	g/cc
After Survey Verification			
Performed Wed Dec 31 18:00:00 1969			
Window 1	0.0	0.0	0.0 cps
Window 2	0.0	0.0	0.0 cps
Window 3	0.0	0.0	0.0 cps
Window 4	0.0	0.0	0.0 cps
Long Space	0.0	0.0	0.0 cps
Short Space	0.0	0.0	0.0 cps
Measured Rho	0.0000	0.0000	0.0000 g/cc
Measured Correction	0.0000	0.0000	0.0000 g/cc
Measured Pe	0.0000	0.0000	0.0000 g/cc

Compensated Neutron Calibration Report

Serial Number:	6I
Tool Model:	G

CALIBRATION						
Detector		Readings		Target		Normalization
Short Space		1.00	cps	1.00	cps	1.0000
Long Space		1.00	cps	1.00	cps	1.0000

PRE-SURVEY VERIFICATION						
Detector		Readings		Measured	Target	
1)	Short Space		cps			
	Long Space		cps	pu		pu
2)	Short Space		cps			
	Long Space		cps	pu		
3)	Short Space		cps			
	Long Space		cps	pu		

POST-SURVEY VERIFICATION						
Detector		Readings		Measured	Target	
1)	Short Space		cps			
	Long Space		cps	pu		pu
2)	Short Space		cps			
	Long Space		cps	pu		pu
3)	Short Space		cps			
	Long Space		cps	pu		pu

Gamma Ray Calibration Report

Serial Number:	GR6
Tool Model:	OPEN
Performed:	Wed Jul 03 12:57:34 2019
Calibrator Value:	150.0
	GAPI
Background Reading:	0.0
Calibrator Reading:	276.0
	cps
	cps

Sensitivity:

0.5/00

GAP/cps