



# DUAL INDUCTION LOG

Company PALOMINO PETROLEUM, INC.

Well BILLY BOB #2

Field KRW

County GOVE

State KANSAS

Location: API #: 15-063-22389-00-00  
1739' FNL & 1549' FWL  
SW - NW - SE - NW

Other Services  
CDL/CNL  
MEL

SEC 12 TWP 15S RGE 26W

Elevation

Permanent Datum GROUND LEVEL Elevation 2359  
Log Measured From KELLY BUSHING 7' A.G.L.  
Drilling Measured From KELLY BUSHING

K.B. 2366  
D.F. 2364  
G.L. 2359

Date 1/3/22

Run Number ONE

Depth Driller 4385

Depth Logger 4384

Bottom Logged Interval 4382

Top Log Interval 00

Casing Driller 8 5/8"@210'

Casing Logger 210

Bit Size 7 7/8"

Type Fluid in Hole CHEMICAL MUD

Density / Viscosity 9.0/58

pH / Fluid Loss 11.0/7.2

Source of Sample FLOWLINE

Rm @ Meas. Temp 1.30@60F

Rmf @ Meas. Temp .975@60F

Rmc @ Meas. Temp 1.56@60F

Source of Rmf / Rmc MEASUREMENT

Rm @ BHT .656@119F

Time Circulation Stopped 2.5 HOURS

Time Logger on Bottom 9:00 A.M.

Maximum Recorded Temperature 119F

Equipment Number 922339

Location HAYS, KANSAS

Recorded By JEFF LUEBBERS

Witnessed By ELI J. FELTS

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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.

15-063-22389-00-00

Comments

THANK YOU FOR USING ELI WIRELINE HAYS, KANSAS (785) 628-6395  
DIRECTIONS

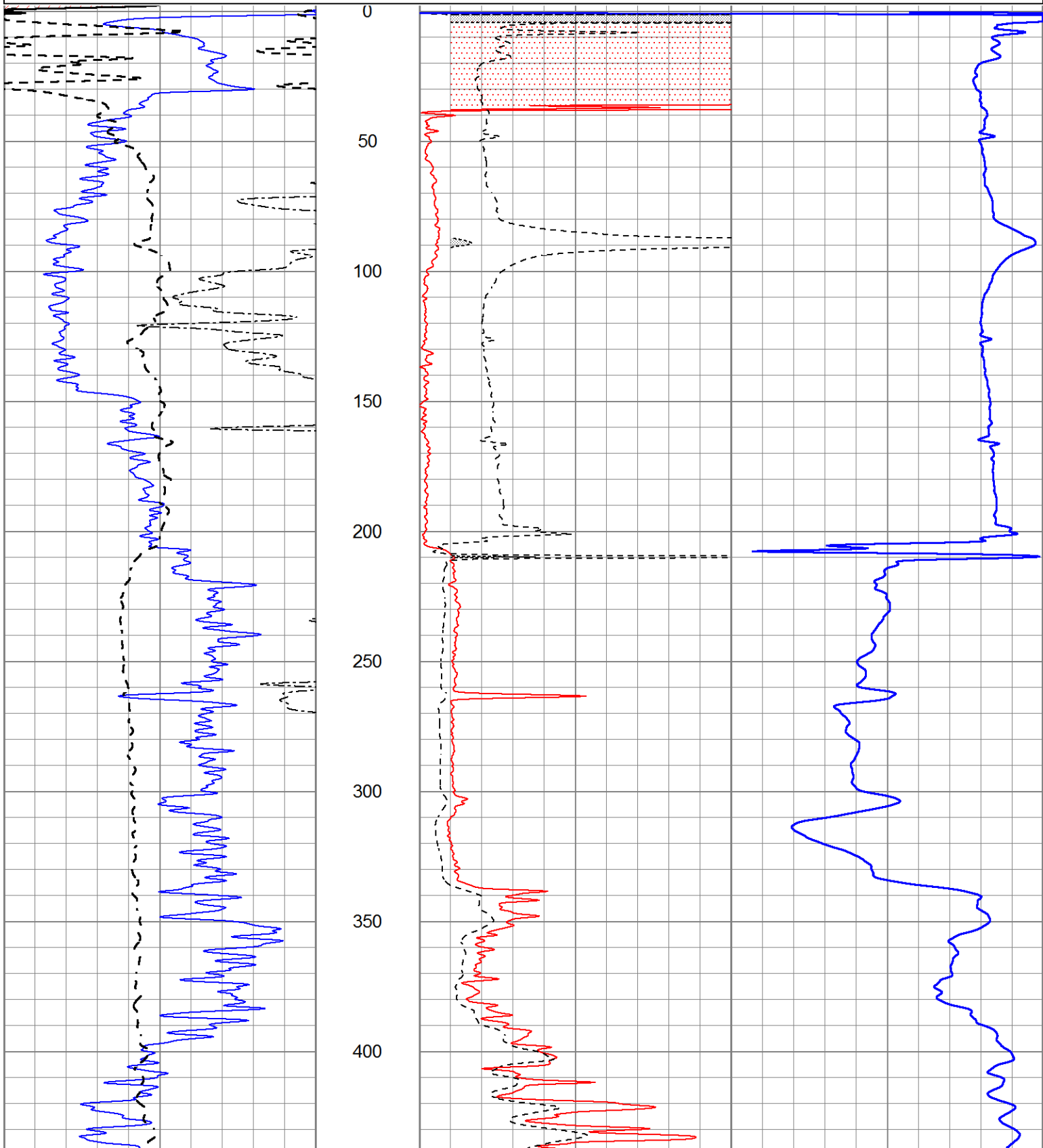
I-70 & COLLYER EXIT, 13S. ON "BANNER RD." TO "RD. U", 3W. TO "GOVE 80", 4S., CURVE E. & S.,  
GO BACK W. 1 MILE & S. INTO

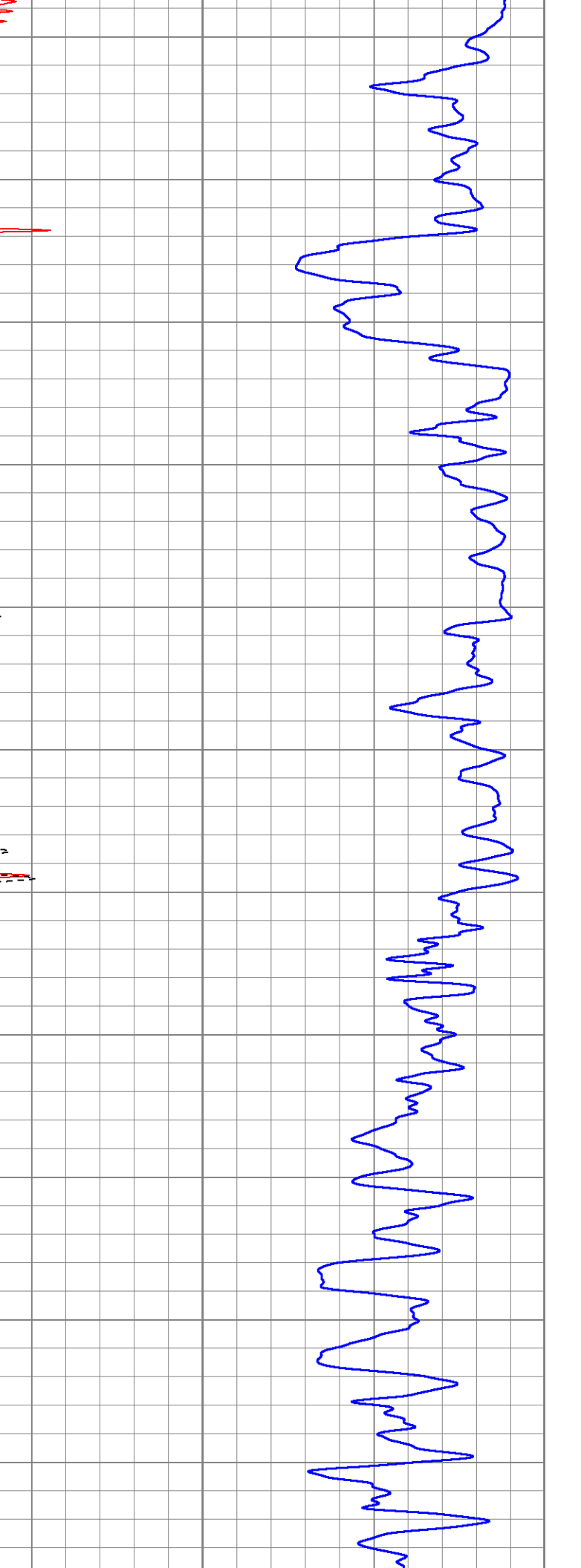
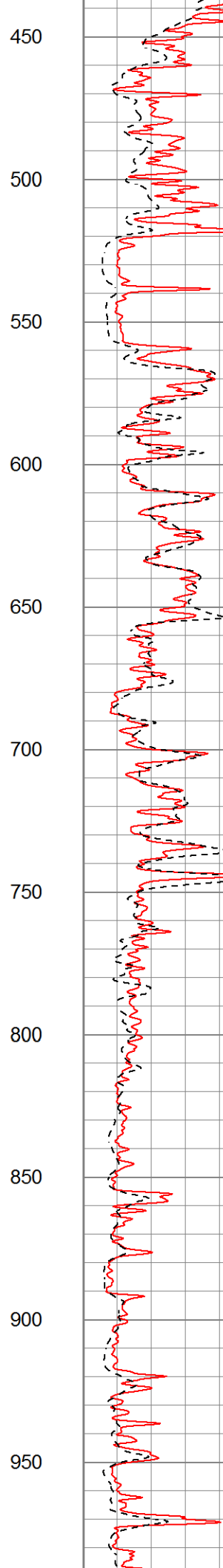
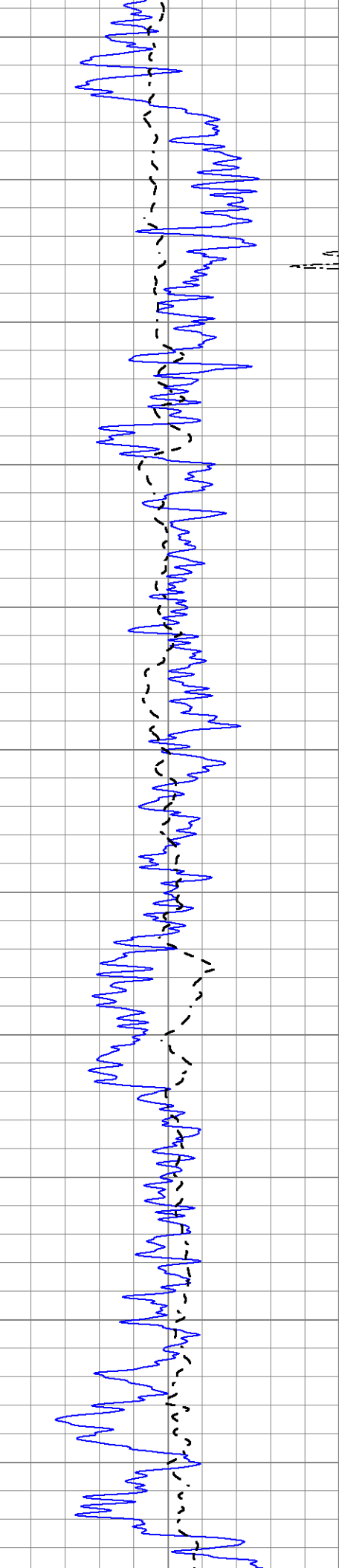


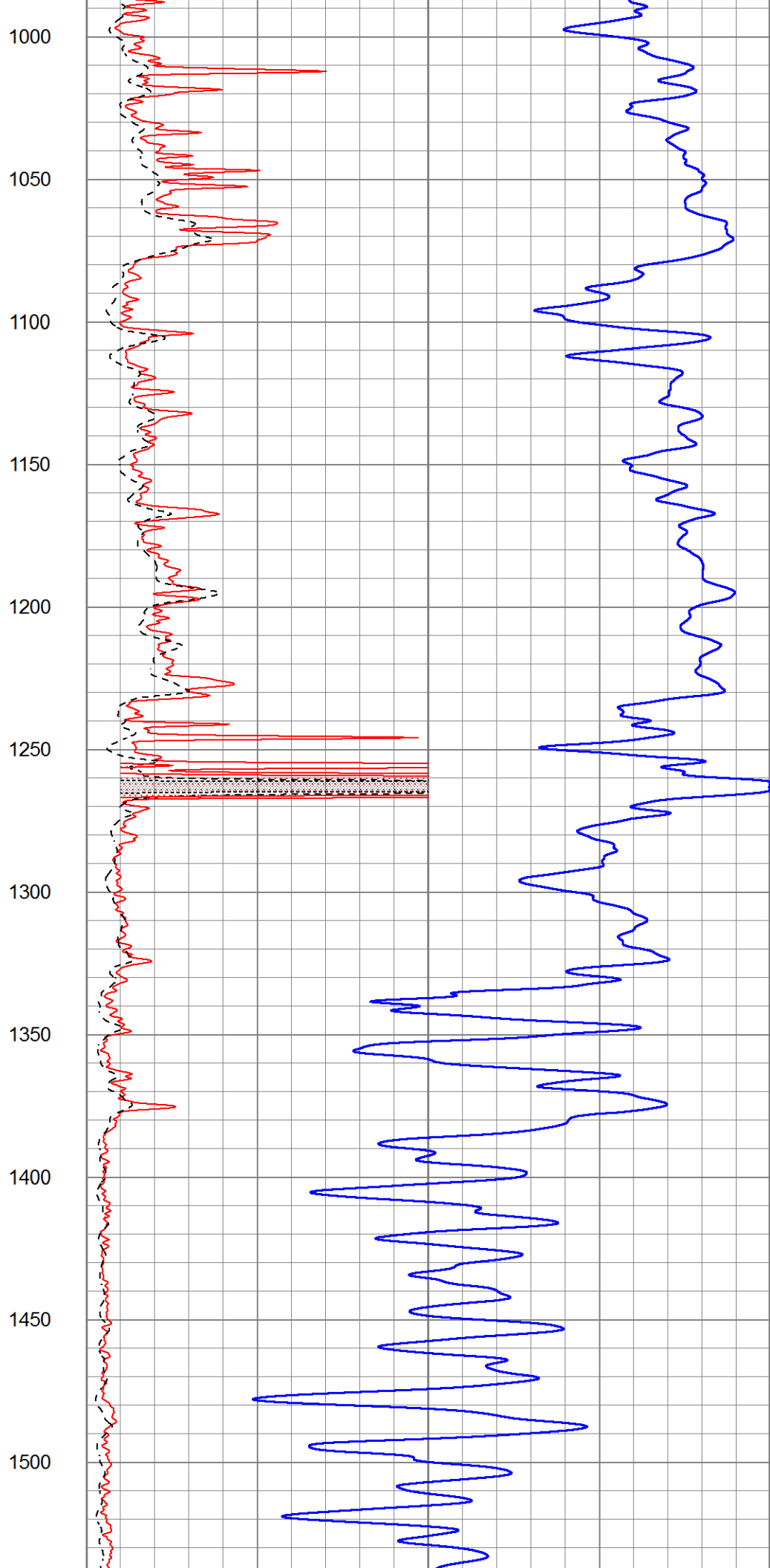
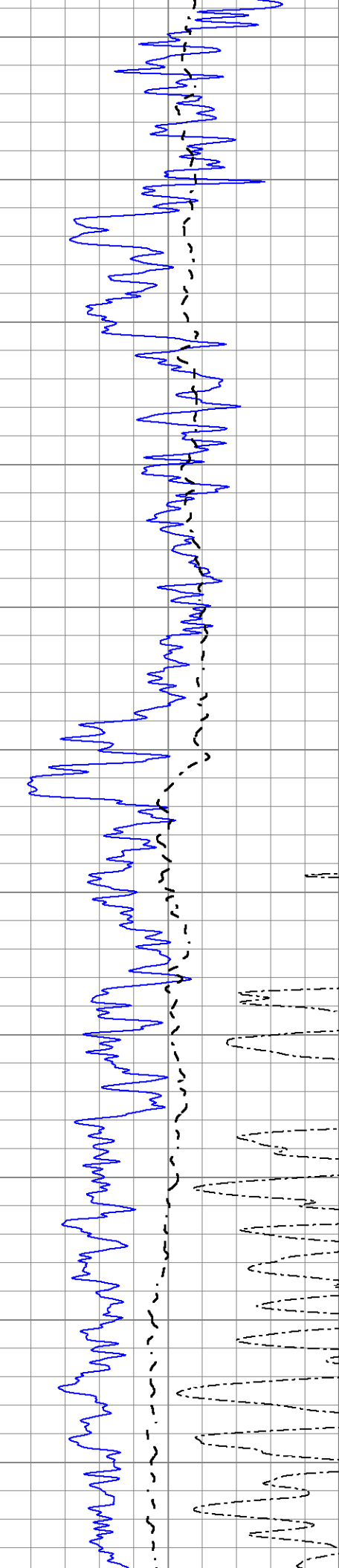
# MAIN SECTION

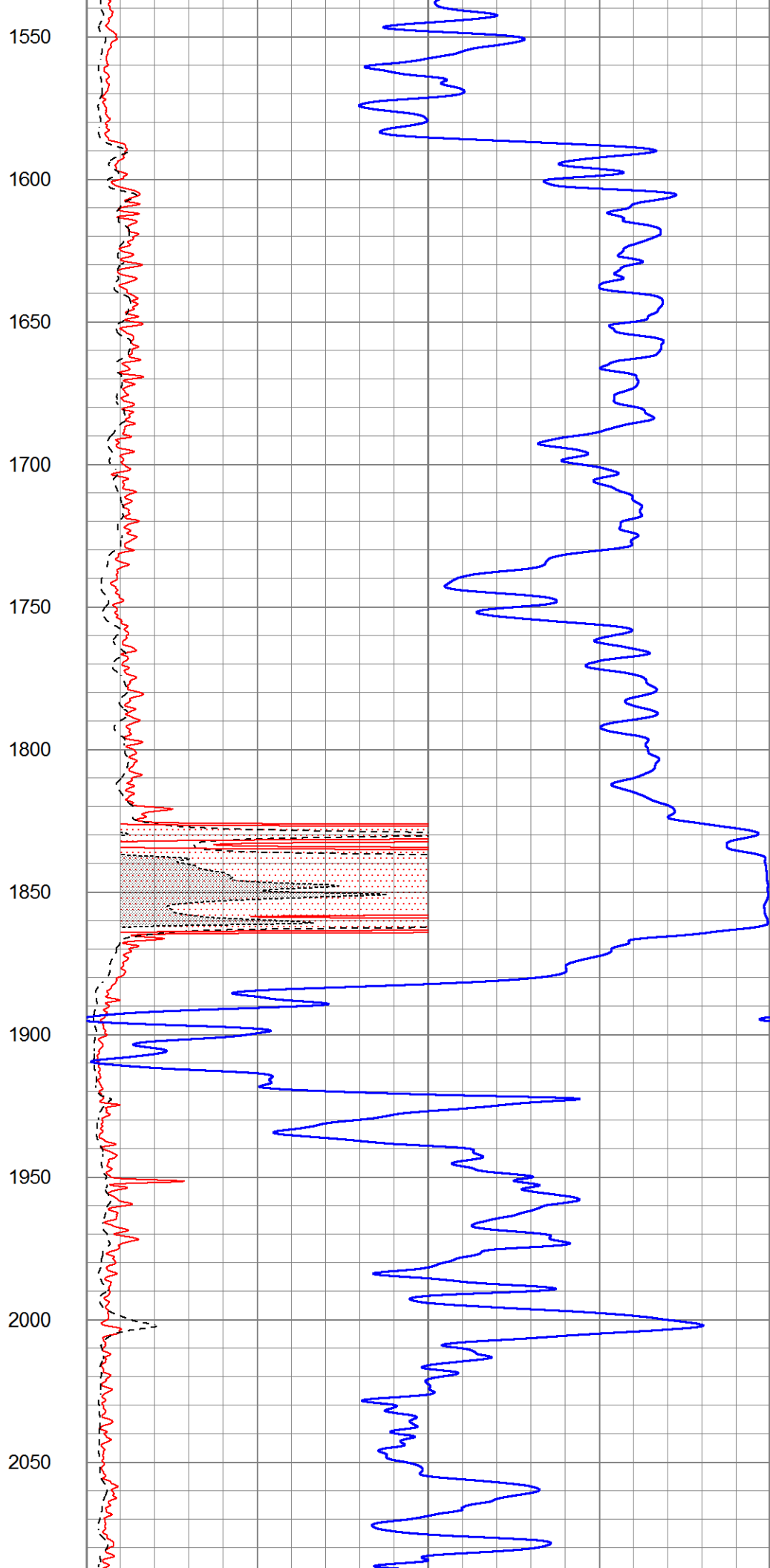
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 Presentation Format dil2  
 Dataset Creation Mon Jan 03 11:21:10 2022  
 Charted by Depth in Feet scaled 1:600

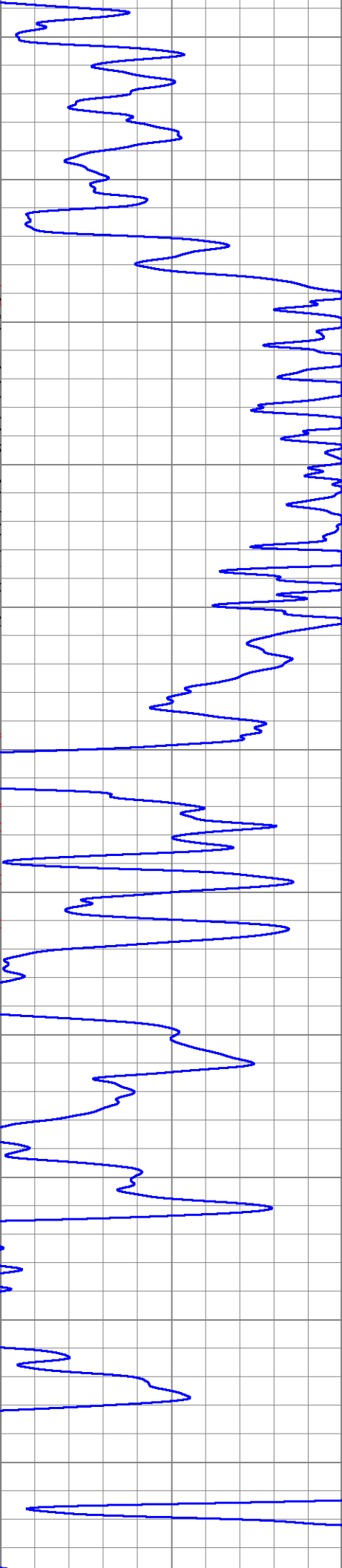
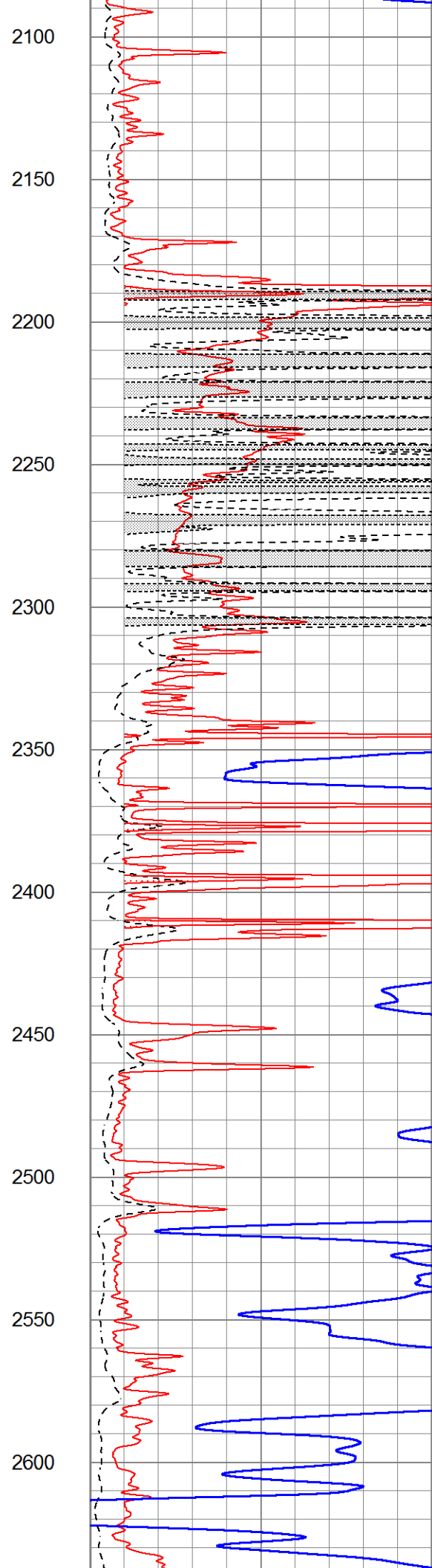
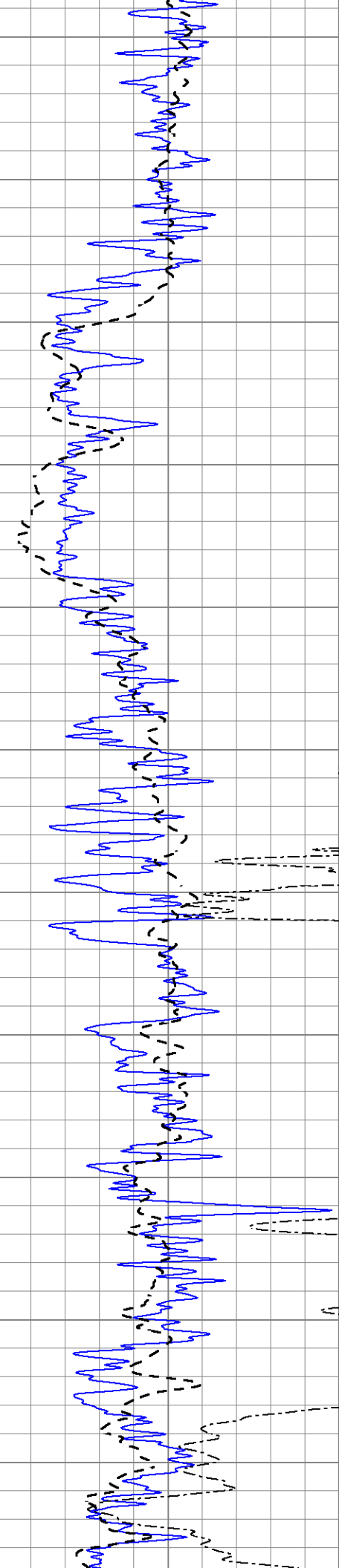
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-100	SP (mV)	100	0	RLL3 (Ohm-m)	50
0	RWA (Ohm-m)	1	0	RILD (Ohm-m)	50
			50	RILD X10 (Ohm-m)	500
			50	RLL3 X10 (Ohm-m)	500

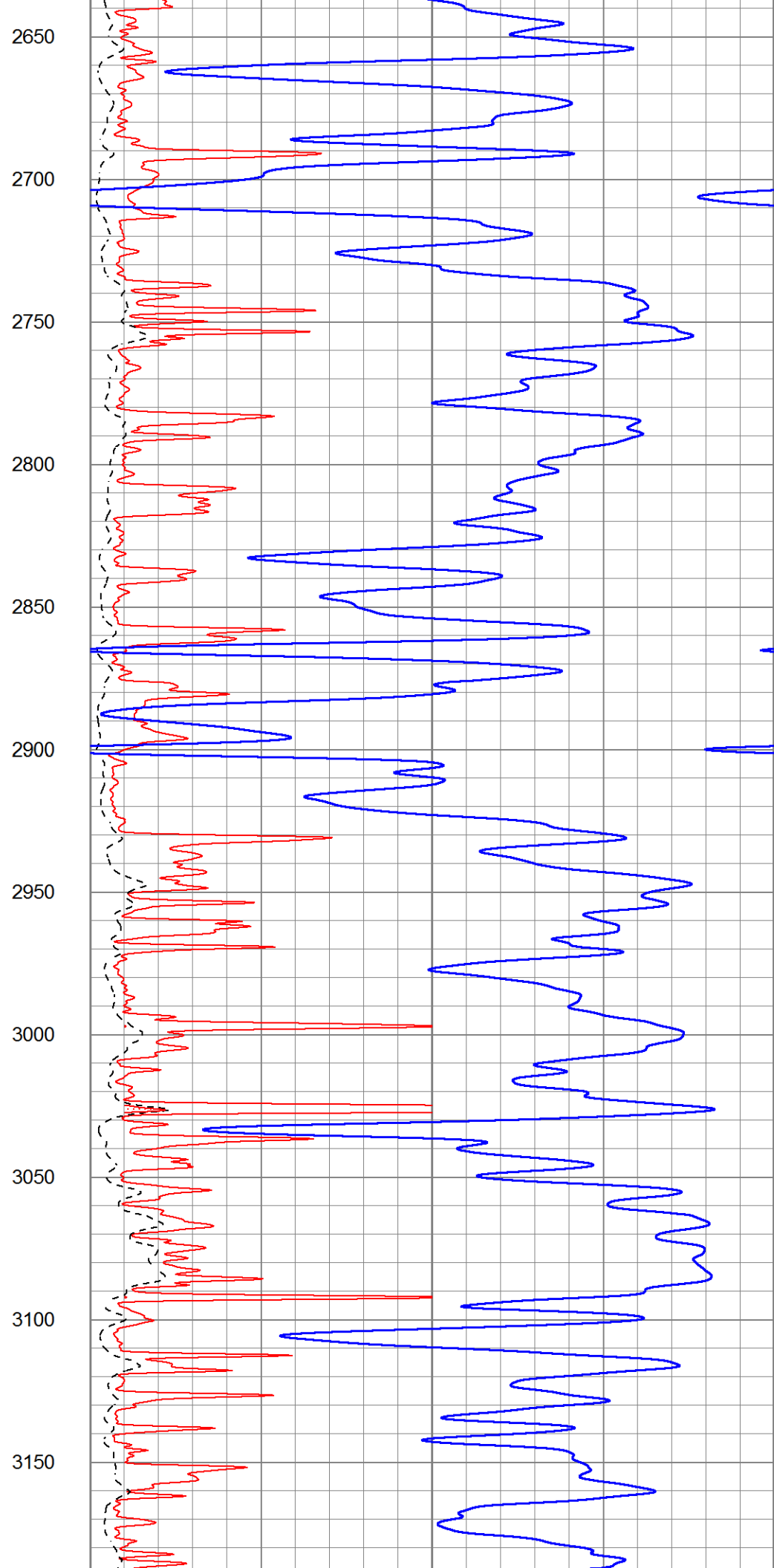
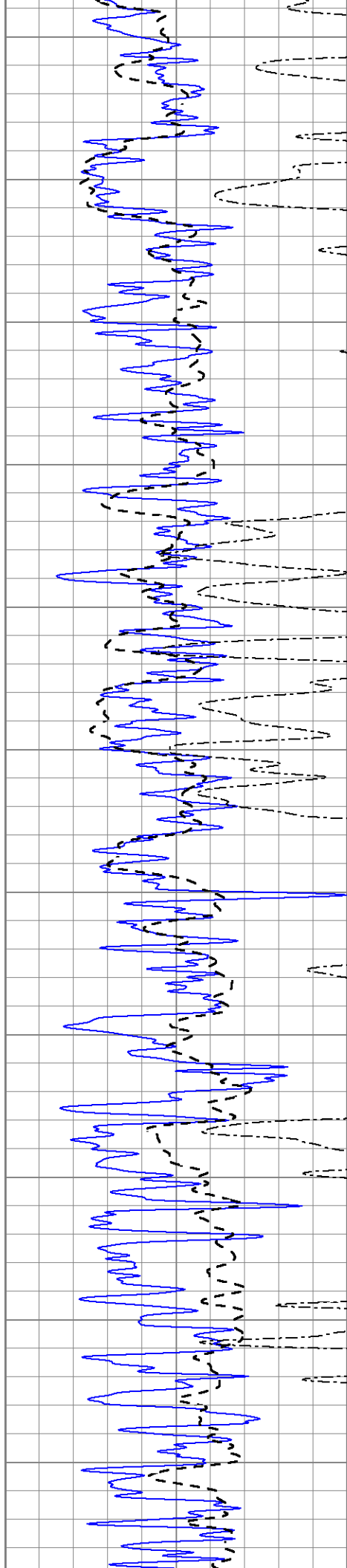


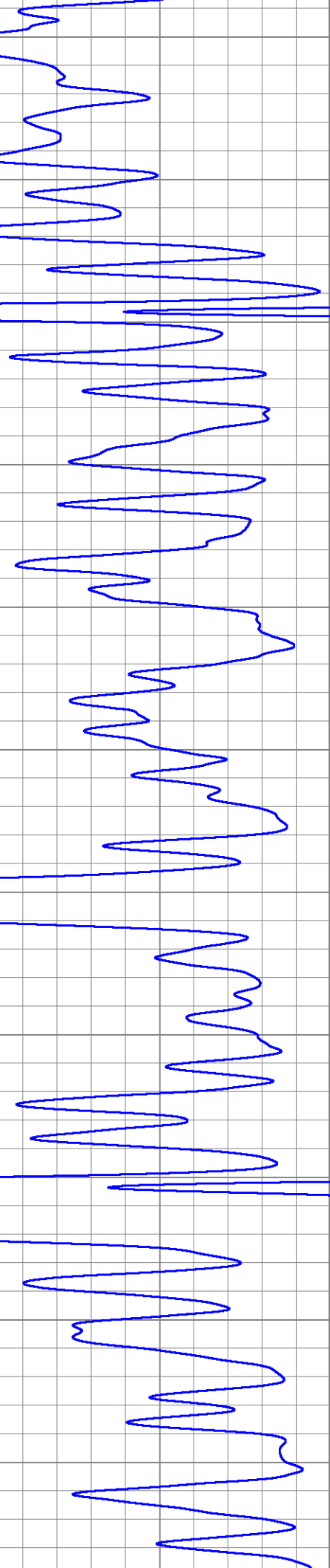
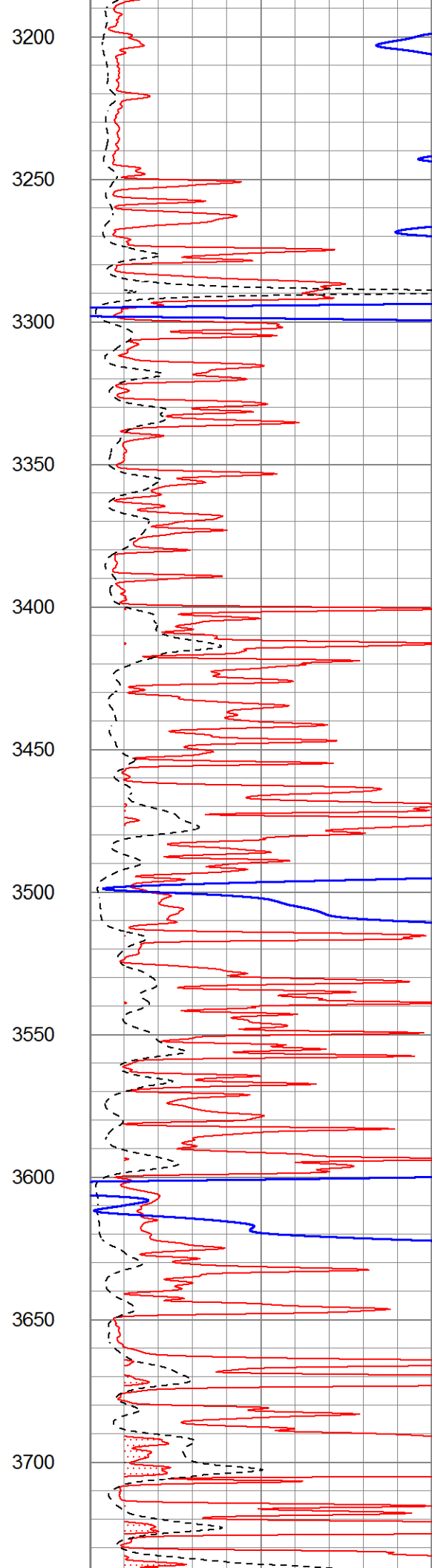
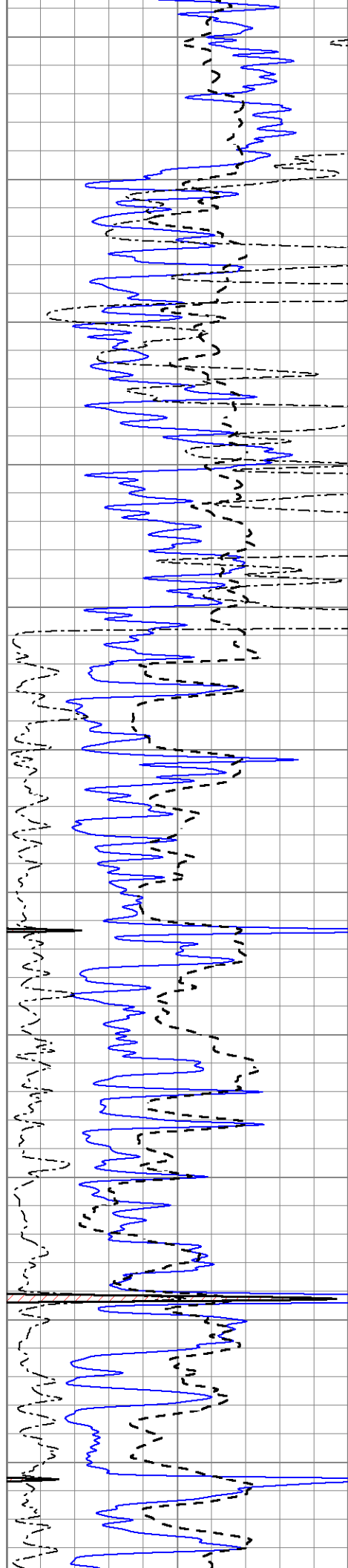


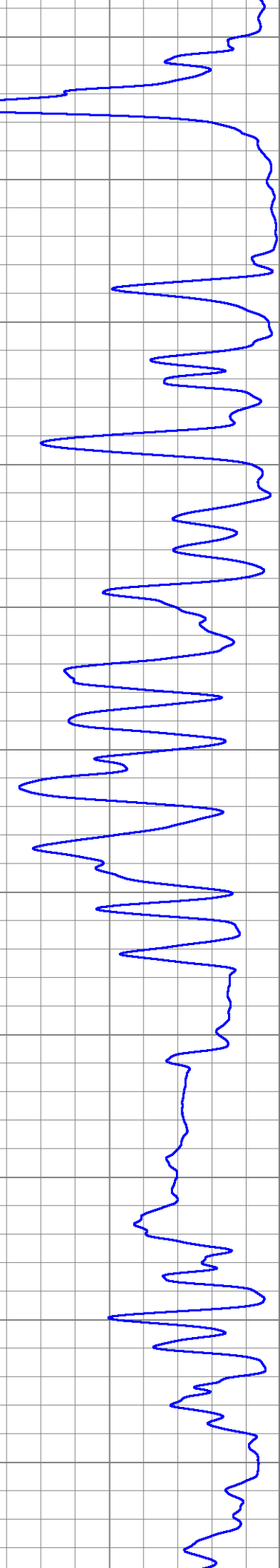
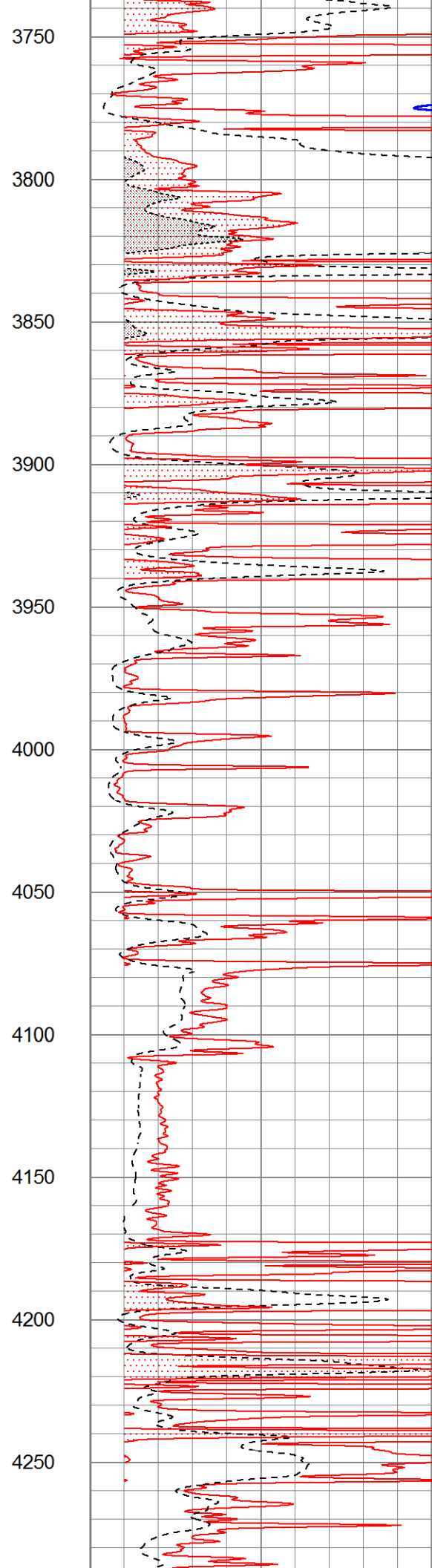
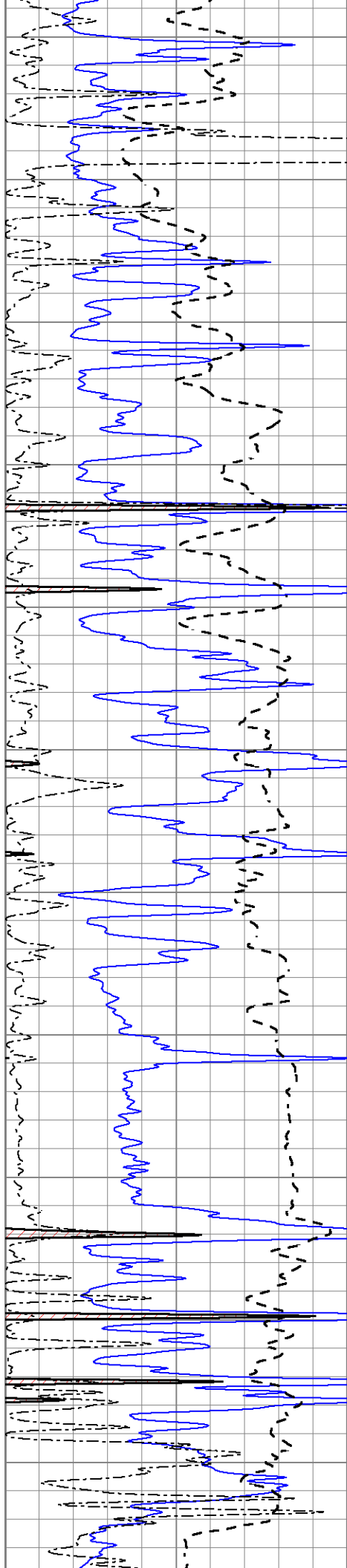


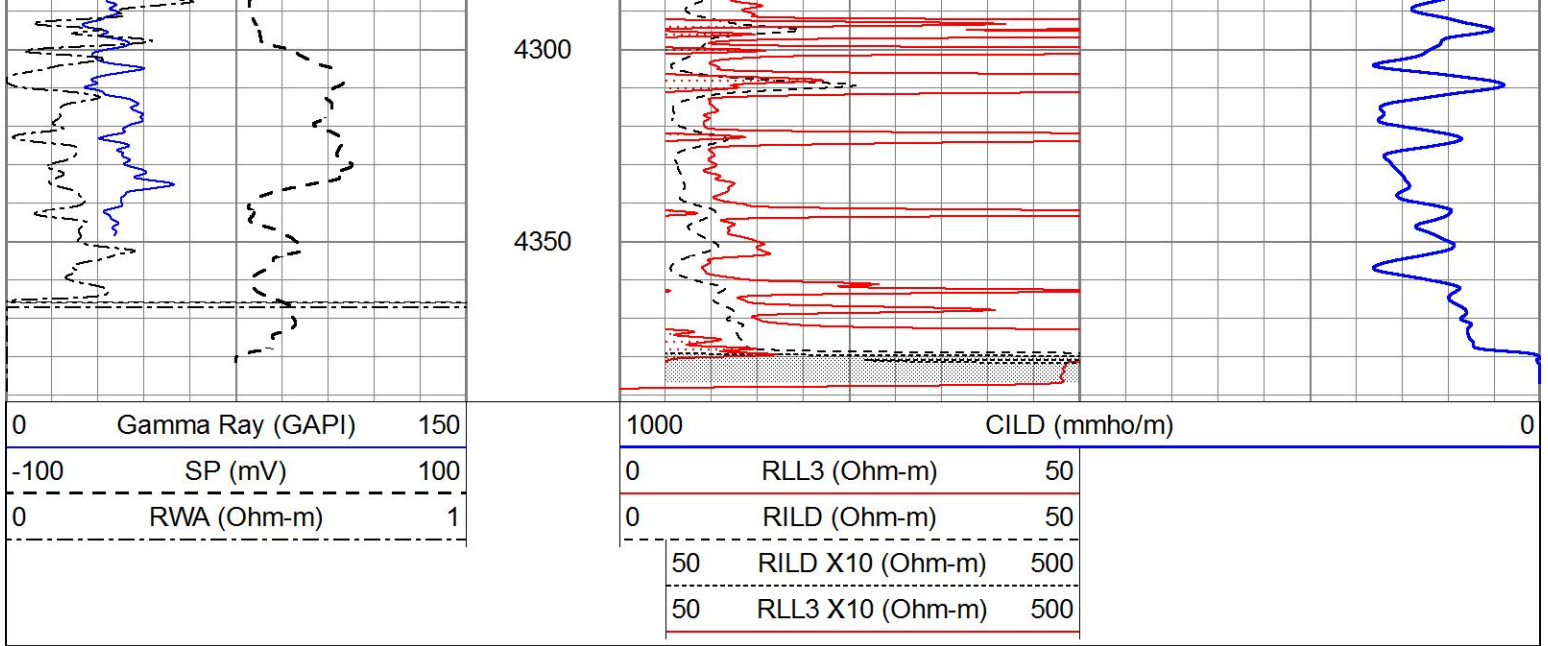








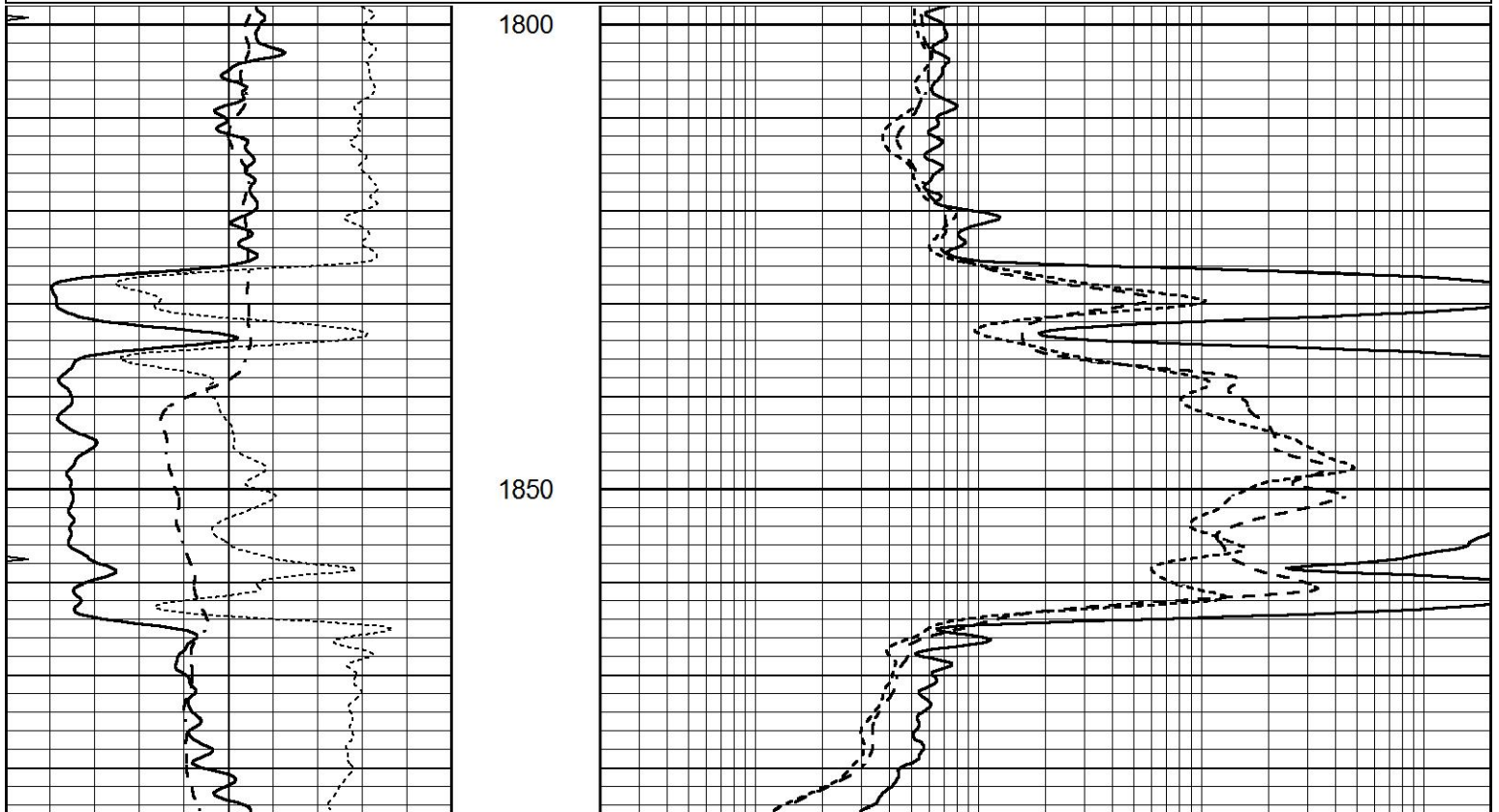


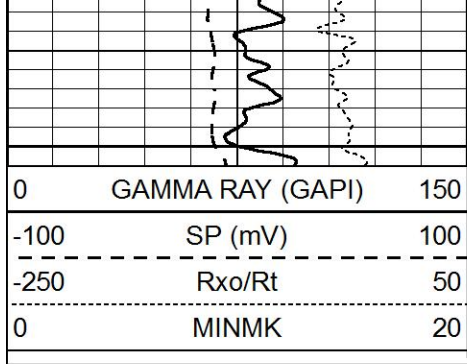


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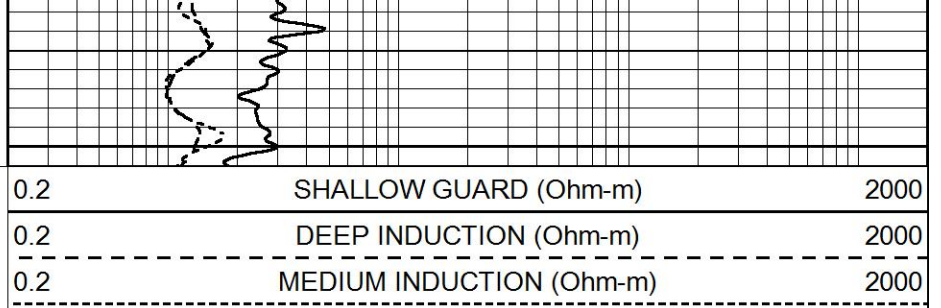
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 Presentation Format \_dil  
 Dataset Creation Mon Jan 03 11:21:25 2022  
 Charted by Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150	0.2	SHALLOW GUARD (Ohm-m)	2000
-100	SP (mV)	100	0.2	DEEP INDUCTION (Ohm-m)	2000
-250	Rxo/Rt	50	0.2	MEDIUM INDUCTION (Ohm-m)	2000
0	MINMK	20			



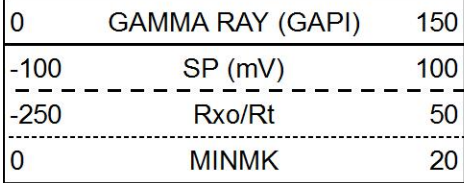


1900

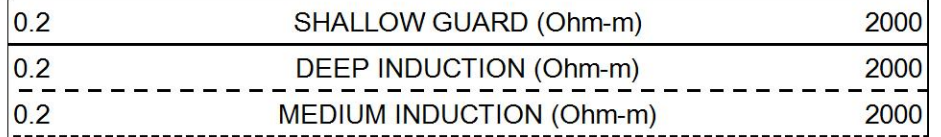


# MAIN SECTION

Database File 5931ddn.db  
 Dataset Pathname pass3.4M  
 Presentation Format \_dil  
 Dataset Creation Mon Jan 03 11:21:10 2022  
 Charted by Depth in Feet scaled 1:240

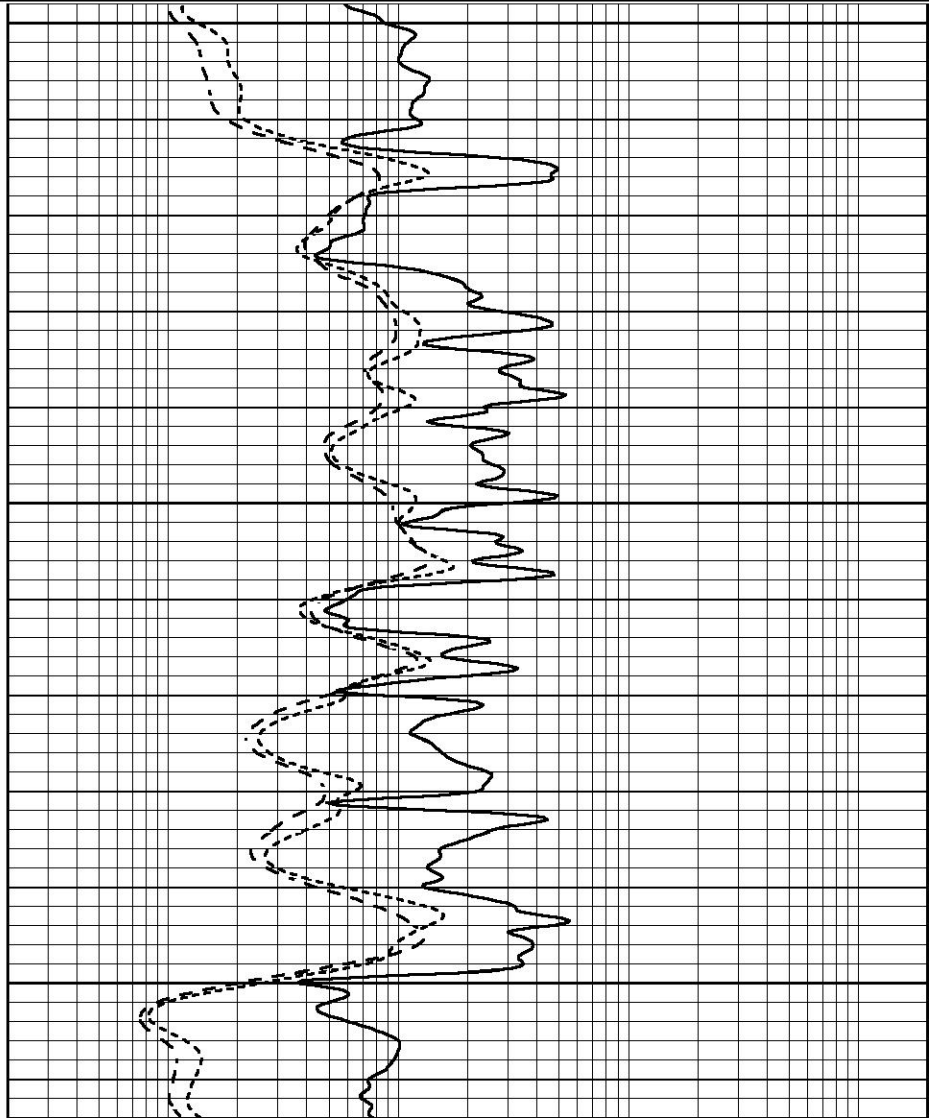
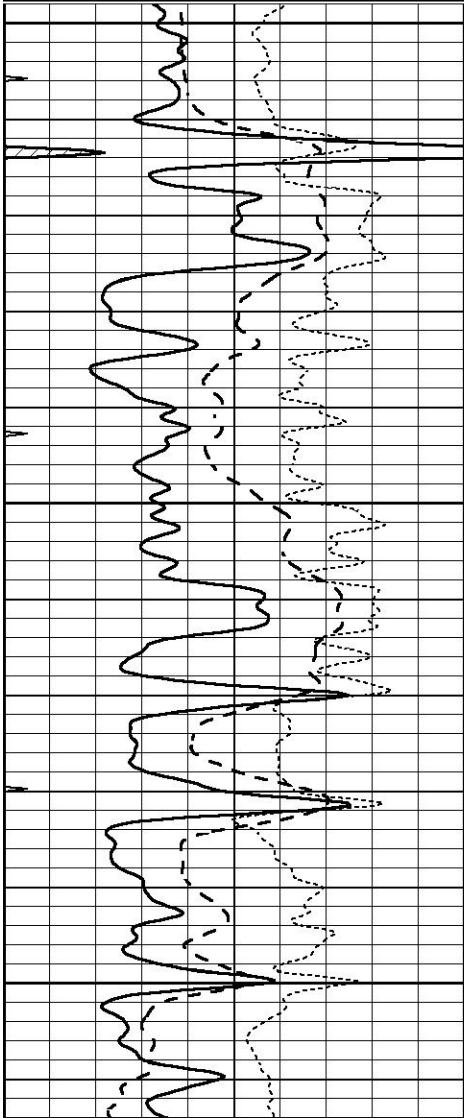


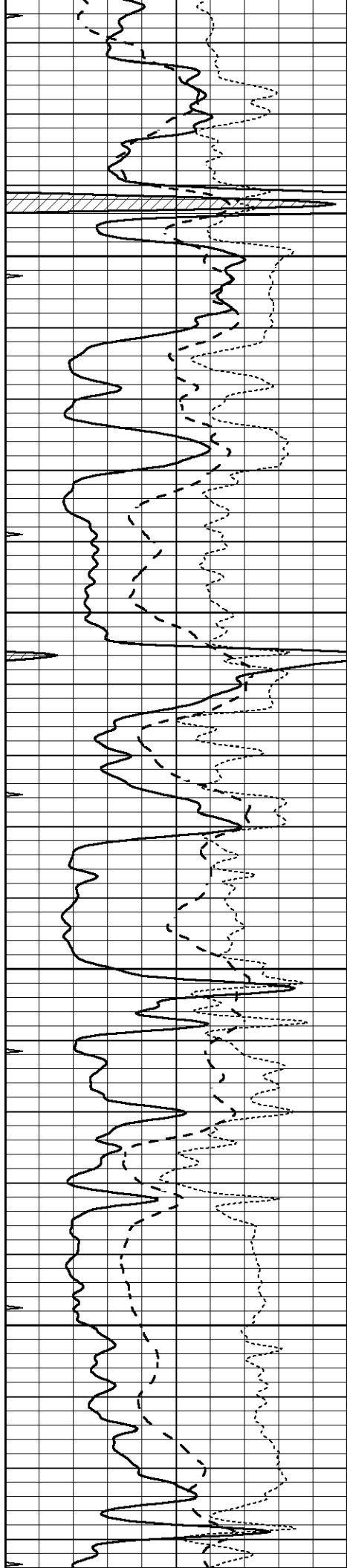
3500



3550

3600



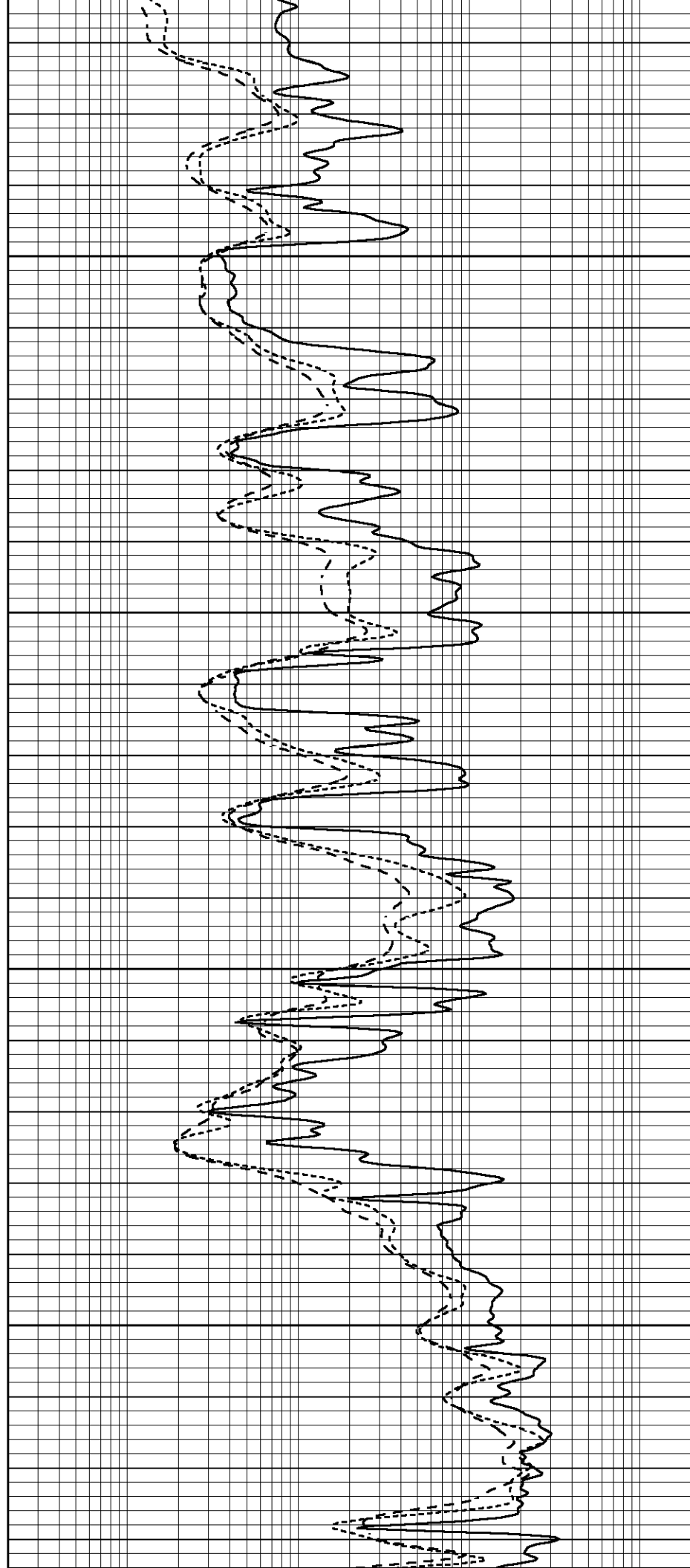


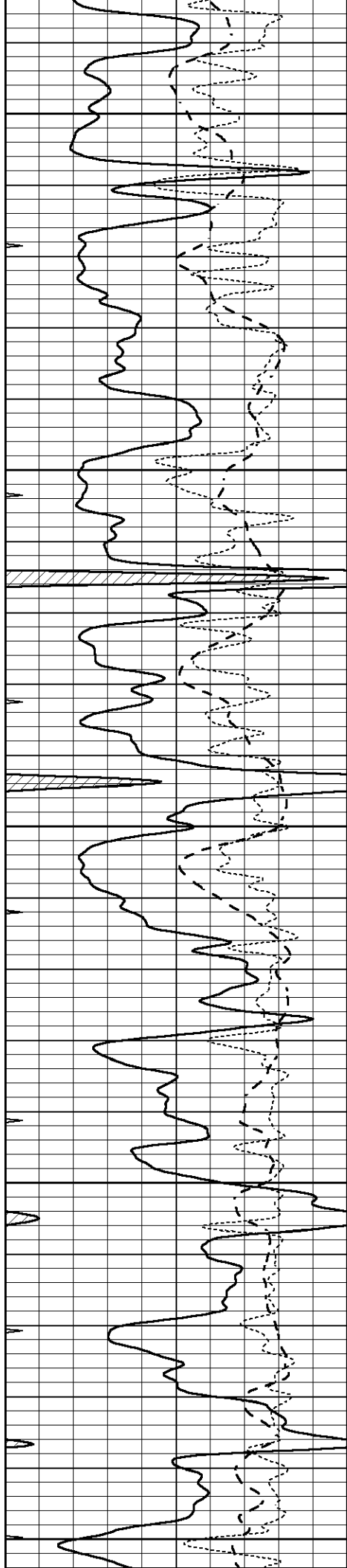
3650

3700

3750

3800





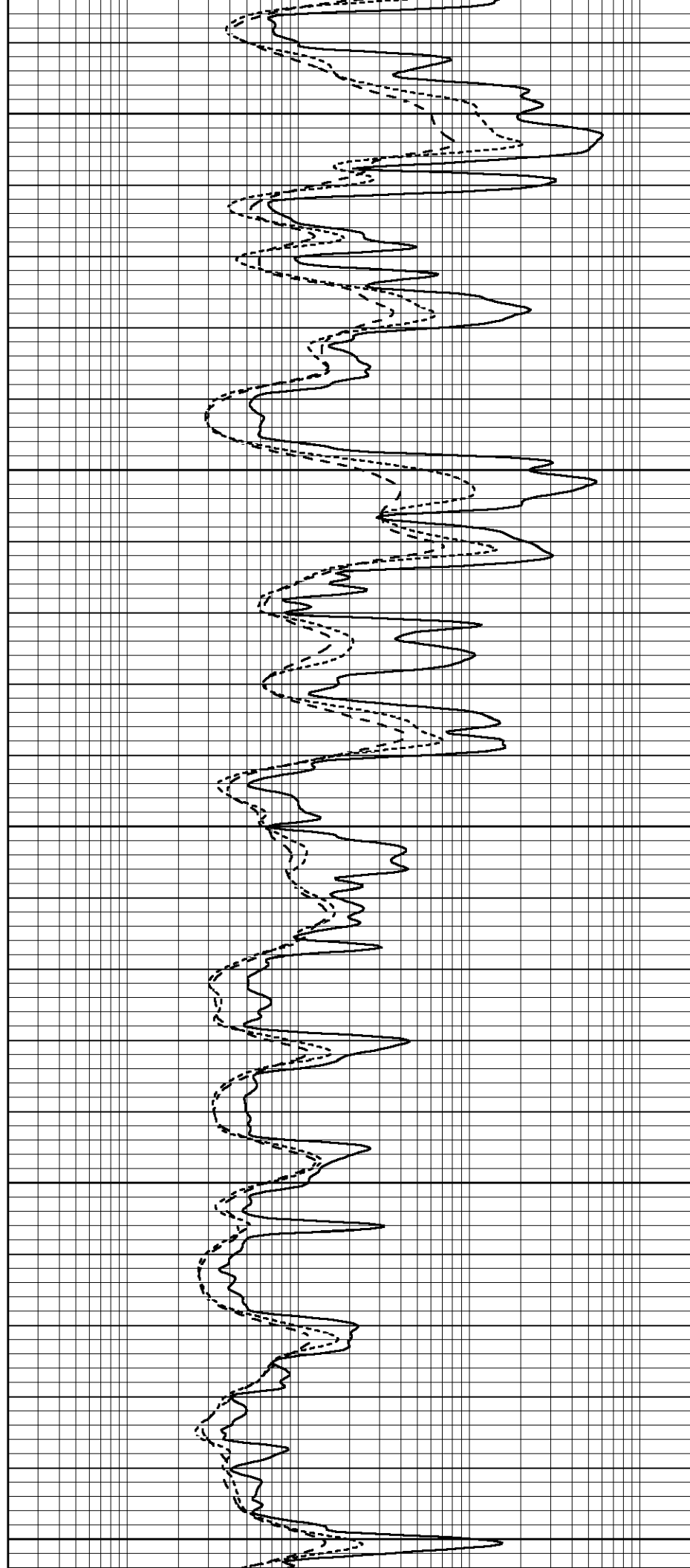
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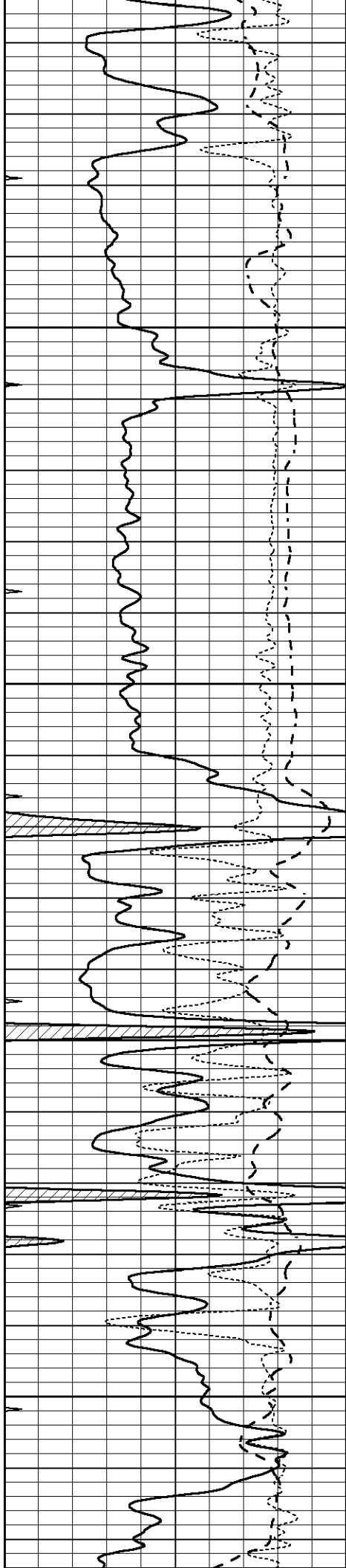
3900

3950

4000

4050



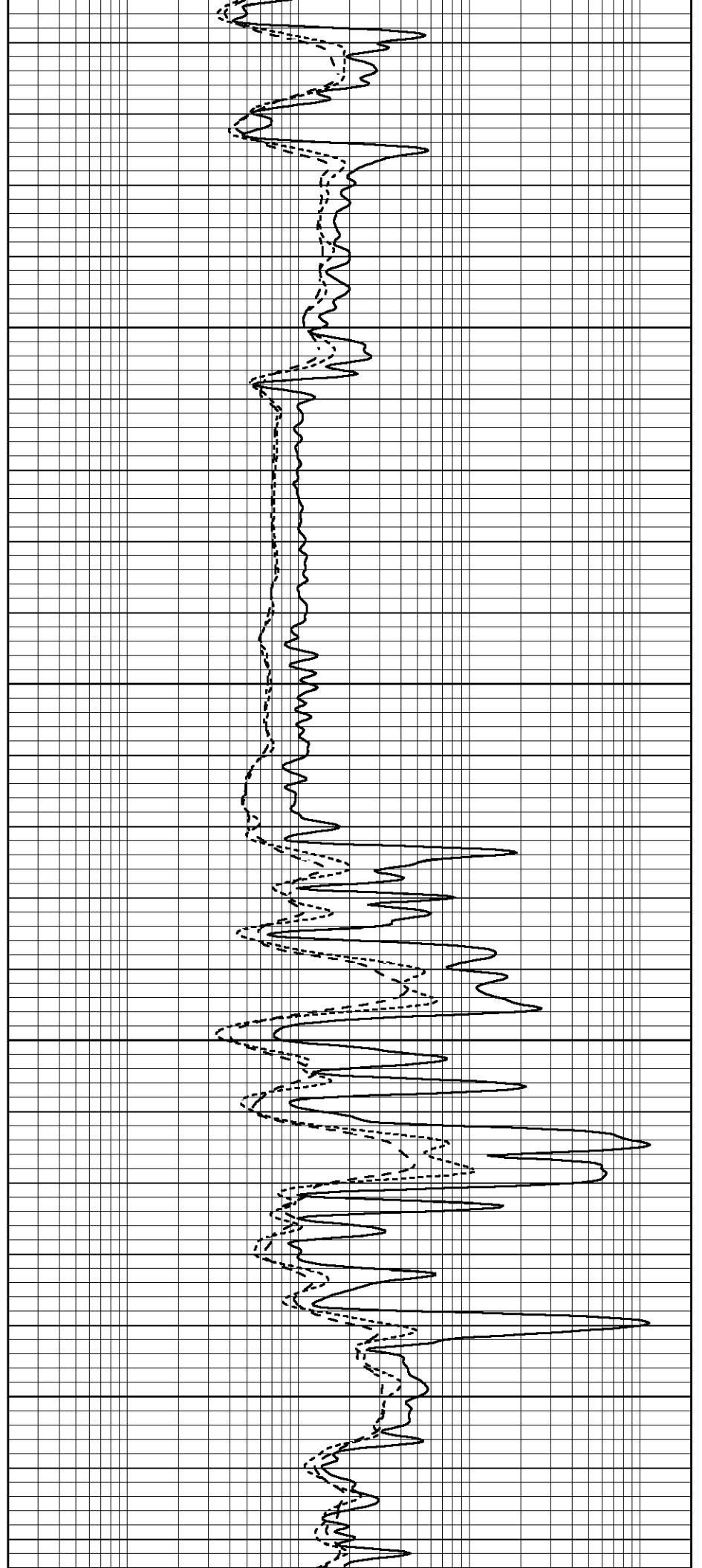


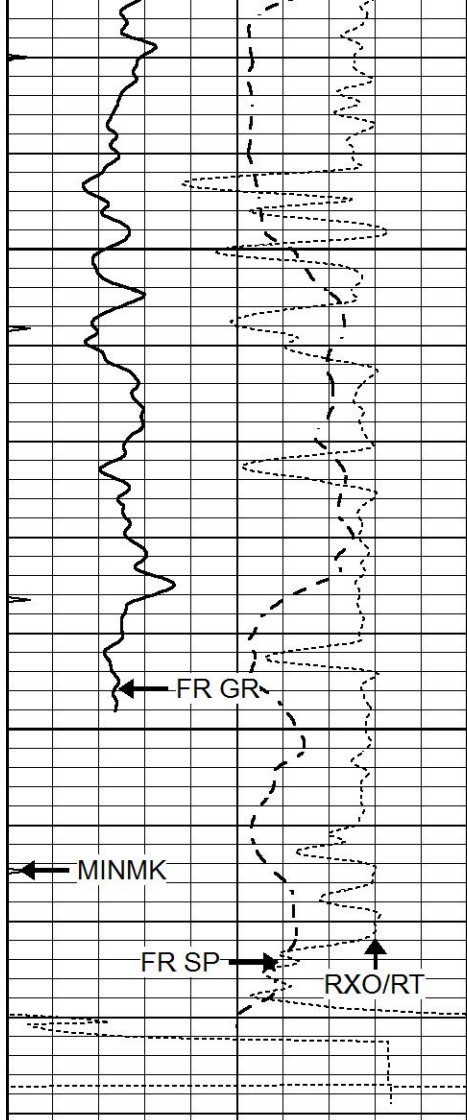
4100

4150

4200

4250



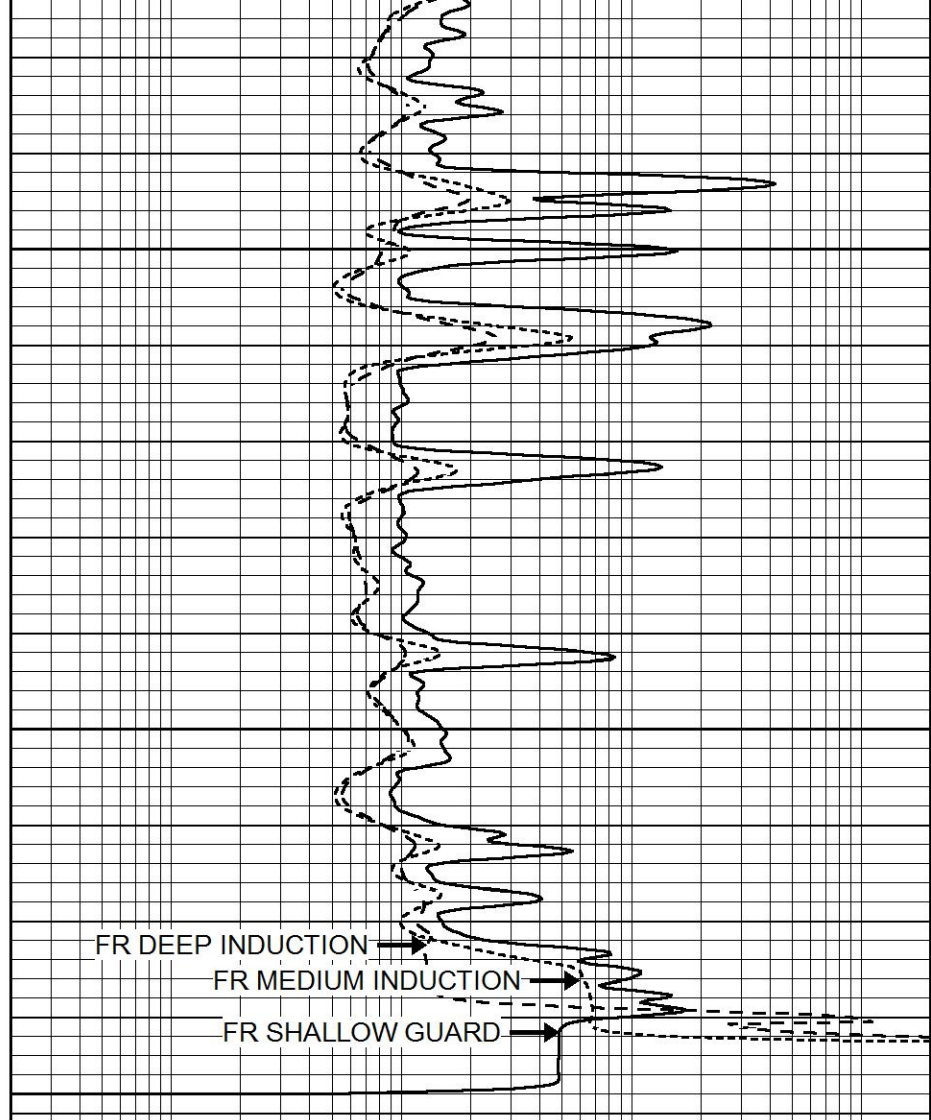


4300

4350

LTD 4384

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



# REPEAT SECTION

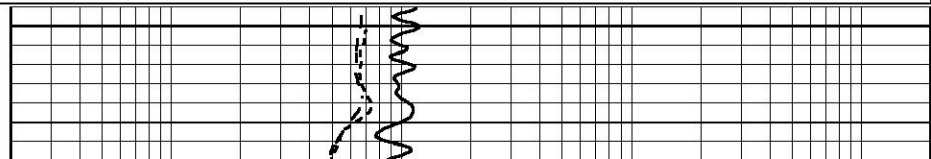
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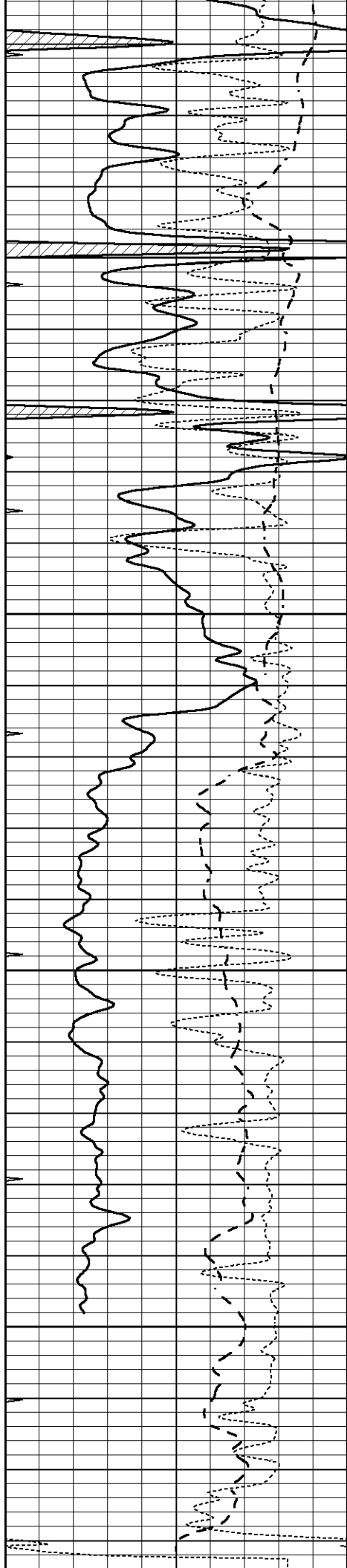
0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50
0	MINMK	20

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



4150



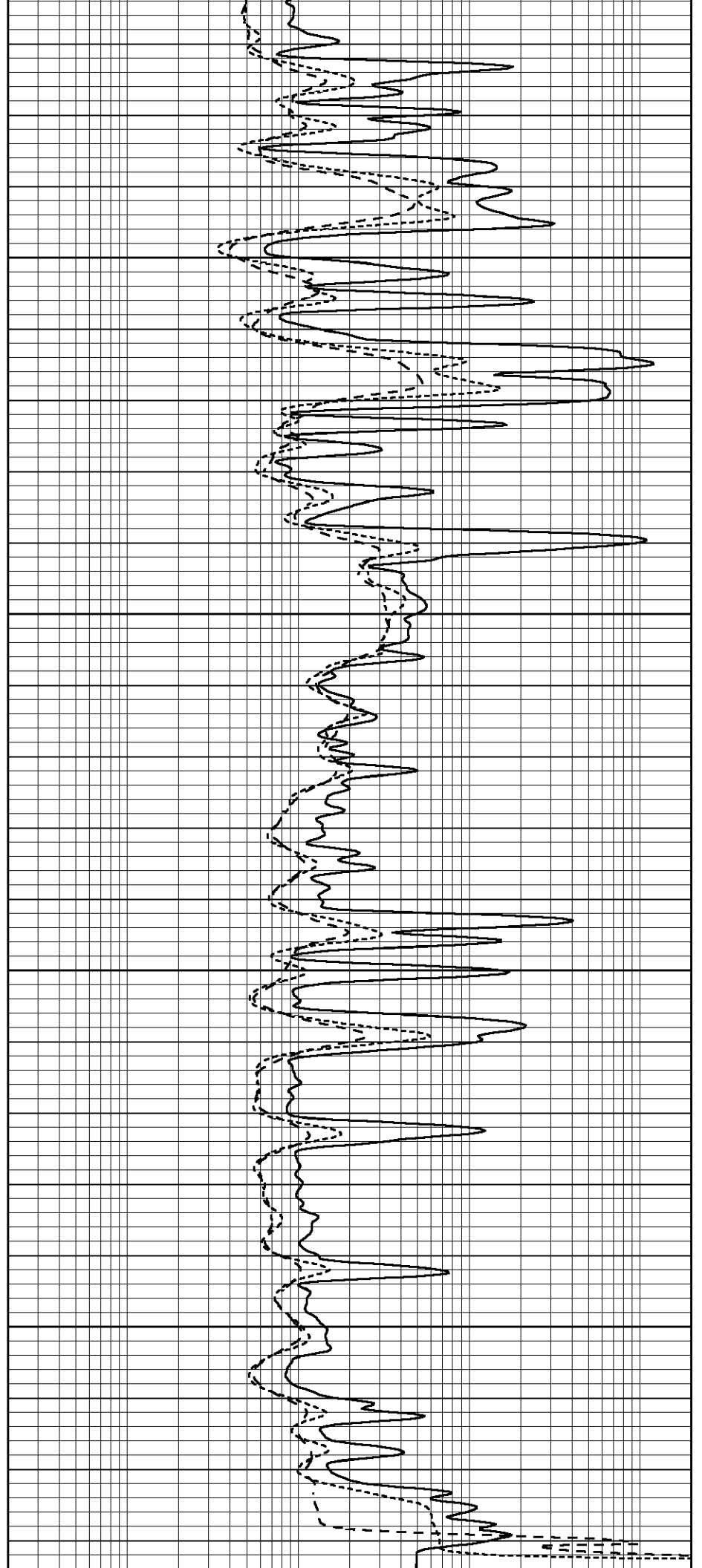


4200

4250

4300

4350



0	GAMMA RAY (GAPI)	150	0.2	SHALLOW GUARD (Ohm-m)	2000
-100	SP (mV)	100	0.2	DEEP INDUCTION (Ohm-m)	2000
-250	Rxo/Rt	50	0.2	MEDIUM INDUCTION (Ohm-m)	2000
0	MINMK	20			

### Calibration Report

Database File 5931ddn.db  
 Dataset Pathname pass3.4M  
 Dataset Creation Mon Jan 03 11:21:10 2022

### Dual Induction Calibration Report

Serial-Model: DIL4-GEAR  
 Surface Cal Performed: Mon Jan 03 09:12:09 2022  
 Downhole Cal Performed: Tue Sep 25 17:01:29 2001  
 After Survey Verification Performed: Sat Jun 11 16:07:12 2005

#### Surface Calibration

Loop:	Readings			V	References			Results	
	Air	Loop			Air	Loop		m	b
Deep	0.008	0.666		0.000	400.000	mmho/m	580.000	-3.000	
Medium	-0.003	0.769		0.000	462.500	mmho/m	560.000	-3.000	
Internal:	Zero	Cal		Zero	Cal		m	b	
Deep	0.013	0.651	V	0.000	400.000	mmho/m	627.541	-8.365	
Medium	0.020	0.754	V	0.000	462.500	mmho/m	630.311	-12.549	

#### Downhole Calibration

Internal:	Readings			mmho/m	References			Results	
	Zero	Cal			Zero	Cal		m	b
Deep	0.000	1.000	mmho/m	0.000	1.000	mmho/m	1.000	0.000	
Medium	0.000	1.000	mmho/m	0.000	1.000	mmho/m	1.000	0.000	
Shallow	2.525	0.026	V	500.000	2.000	Ohm-m	250.000	-3.000	

#### After Survey Verification

Internal:	Readings			mmho/m	Targets			Results	
	Zero	Cal			Zero	Cal		m'	b'
Deep	0.000	1.000	mmho/m	0.000	1.000	mmho/m	1.000	0.000	
Medium	0.000	1.000	mmho/m	0.000	1.000	mmho/m	1.000	0.000	
Shallow	0.000	0.000	Ohm-m	500.000	2.000	Ohm-m	1.000	0.000	

### Litho Density Calibration Report

Serial: 003 Model: PRB

#### Master Calibration

Performed Fri Mar 05 10:51:07 2021

	Background	Magnesium	Aluminum	Aluminum+Fe	
Window 1	1570.6	10682.1	3457.0	3096.9	cps
Window 2	1451.7	9432.7	3101.4	2816.5	cps
Window 3	1334.0	7160.6	2532.0	2369.3	cps
Window 4	370.4	373.1	366.4	370.9	cps
Long Space	0.0	7981.0	1649.7	1364.8	cps

Short Space	2.8	3522.0	2211.0	1823.6	cps
Rho		1.7100	2.5900	0.0000	g/cc
Pe		2.0000	2.7500	5.7900	

Rib Angle	: 43.5	Rib Slope	: 0.951	Density/Spine Ratio	: 0.535
Spine Angle	: 73.5	Spine Slope	: 3.386	Spine Intercept	: -18.7

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 Pe			0.0000	0.0000	

After 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 Pe			0.0000	0.0000	

Compensated Neutron Calibration Report

Serial Number: 070808PMC  
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: 070558  
Tool Model: OPEN\_GR  
Performed: Sun Jan 02 21:54:21 2022

Calibrator Value: 1.0 GAPI

Background Reading: 0.0 cps  
Calibrator Reading: 1.0 cps

Sensitivity:

0.2500

GAPI/cps