



# DUAL INDUCTION LOG

Company MUSTANG ENERGY CORP.

Well GARY #1

Field STAR

County ELLIS

State KANSAS

Location: API #: 15-051-27003-0000

1705' FSL & 1940' FEL

Other Services  
CDL/CNL  
ML

SEC 31 TWP 11S RGE 19W

Permanent Datum GROUND LEVEL Elevation 2145

Log Measured From KELLY BUSHING 7' A.G.L.

Drilling Measured From KELLY BUSHING

Elevation

K.B. 2152

D.F. 2150

G.L. 2145

Date	6/5/21
Run Number	ONE
Depth Driller	3790
Depth Logger	3790
Bottom Logged Interval	3788
Top Log Interval	00
Casing Driller	8 5/8" @ 223
Casing Logger	223
Bit Size	7 7/8"
Type Fluid in Hole	CHEMICAL MUD
Density / Viscosity	9.1/58
pH / Fluid Loss	10.0/8.0
Source of Sample	FLOWLINE
Rm @ Meas. Temp	.8@ 70F
Rmf @ Meas. Temp	.6@ 70F
Rmc @ Meas. Temp	.96 @ 70F
Source of Rmf / Rmc	MEASURED
Rm @ BHT	.49@ 114F
Time Circulation Stopped	2 HOURS
Time Logger on Bottom	////
Maximum Recorded Temperature	114F
Equipment Number	1523
Location	HAYS, KANSAS
Recorded By	GUS PFANENSTIEL
Witnessed By	CAMERON BRIN

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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, HAYS, KS. (785) 628-6395

DIRECTIONS: YOCEMENTO NORTH TO HOMESTEAD RD. WEST 2 MILES NORTH 1/2, WEST INTO.

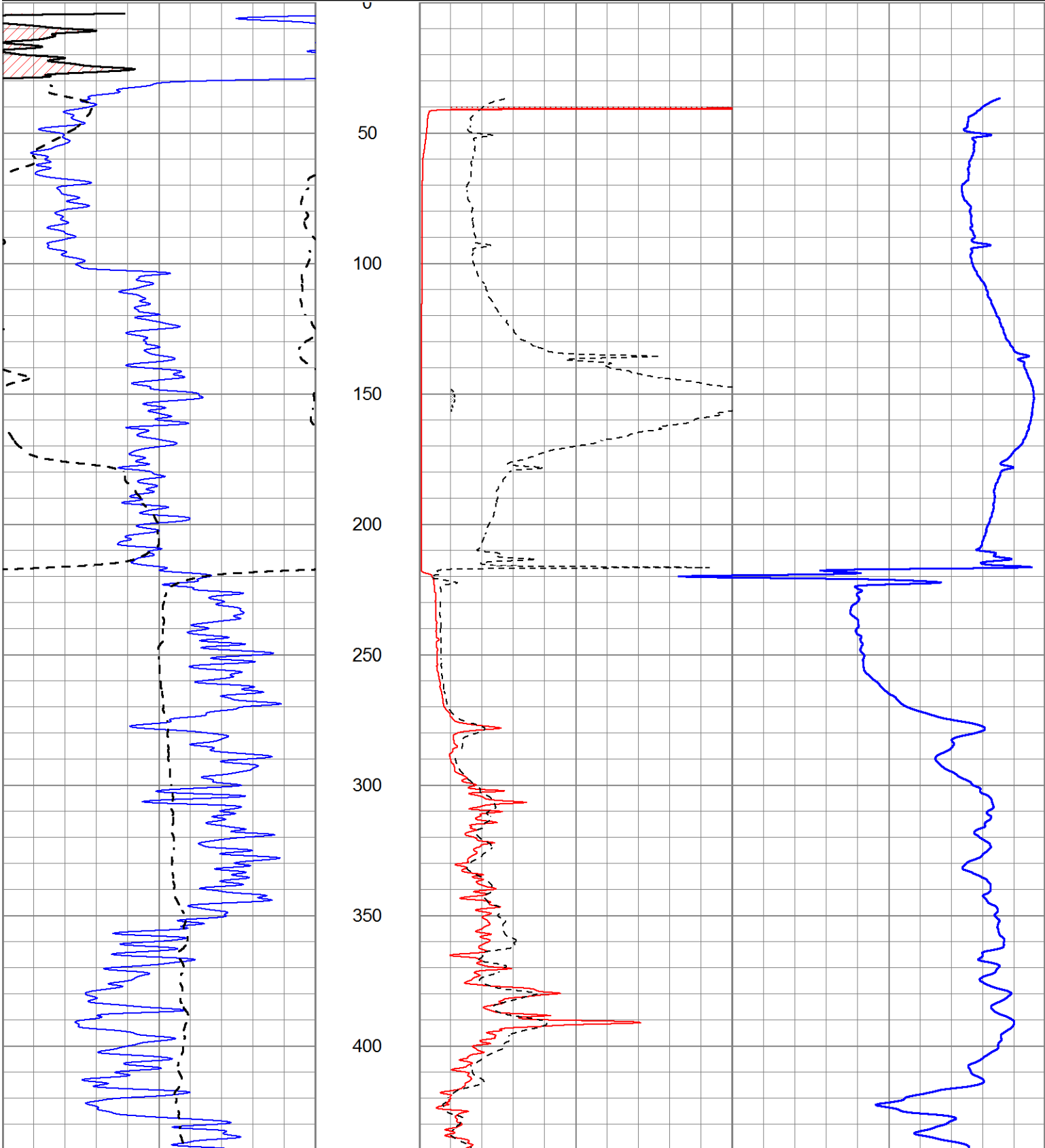


# MAIN PASS

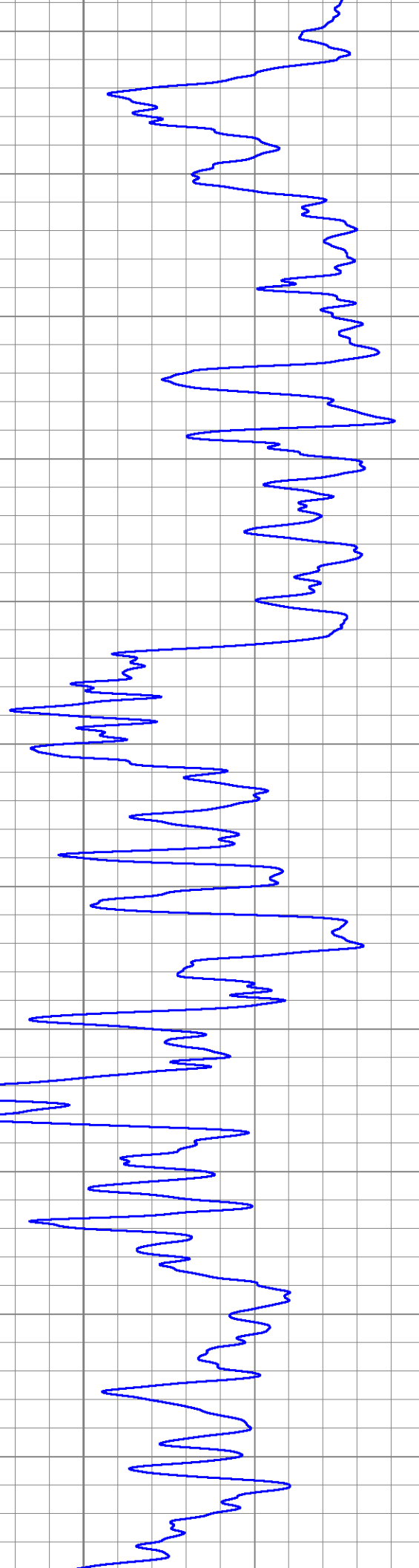
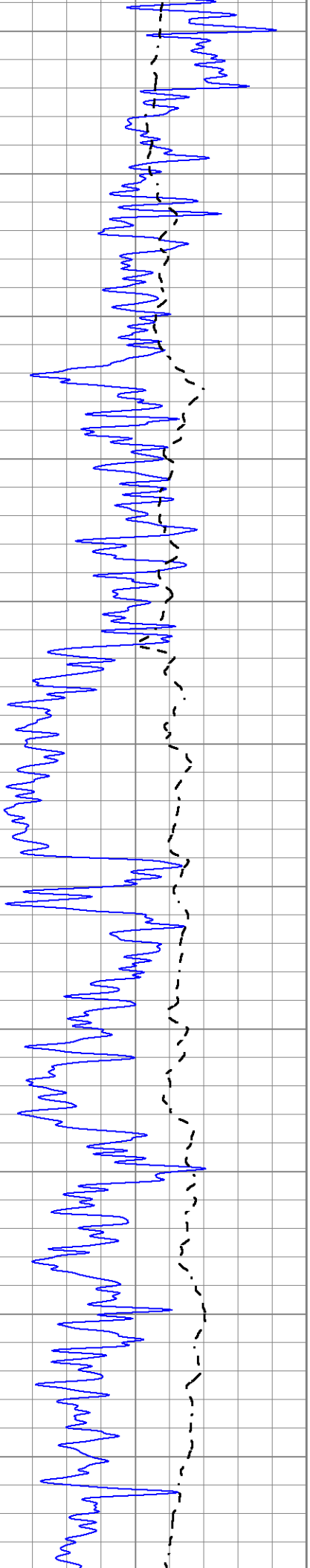
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 Presentation Format \_dil2  
 Dataset Creation Sat Jun 05 17:15:20 2021  
 Charted by Depth in Feet scaled 1:600

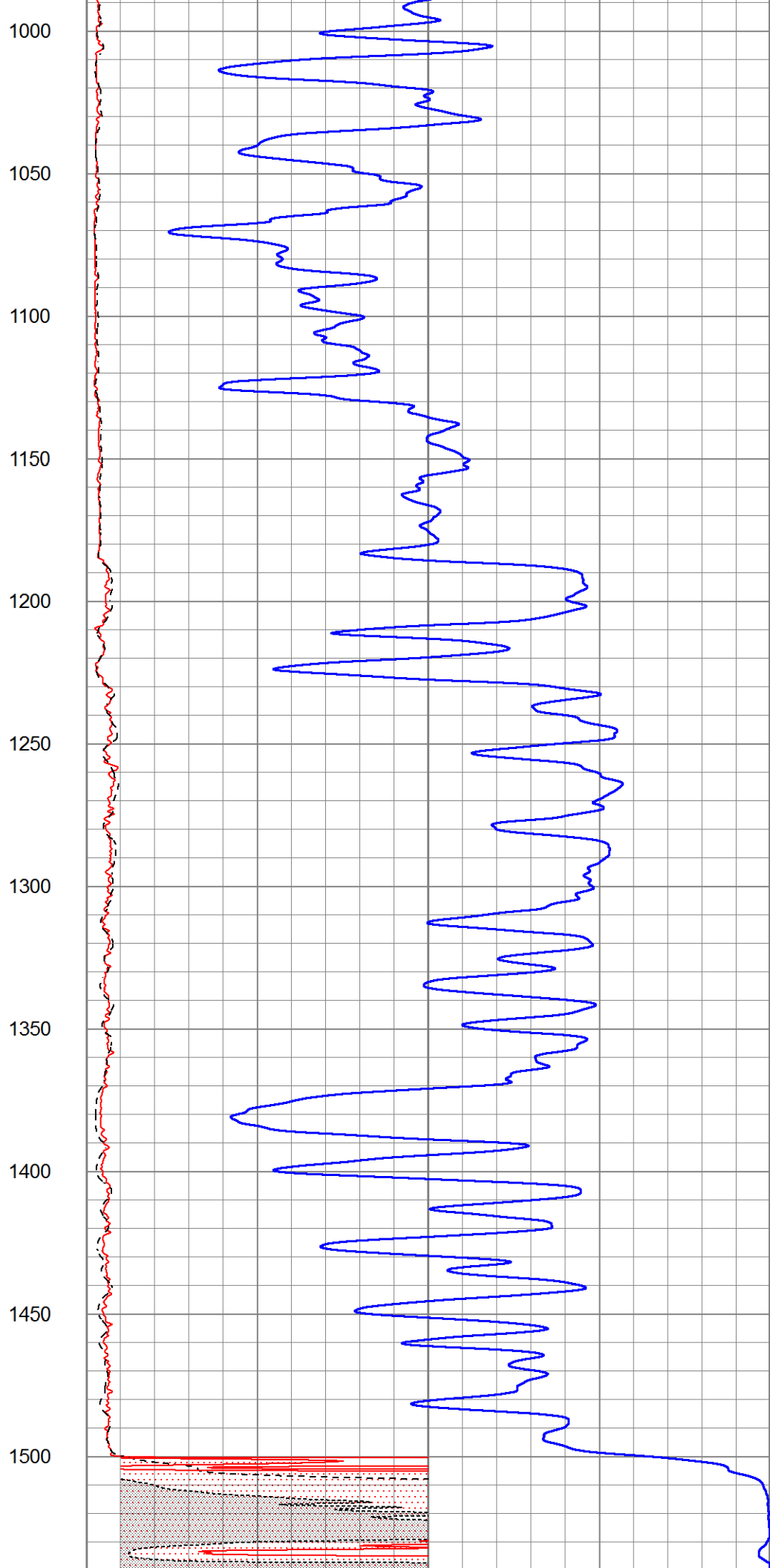
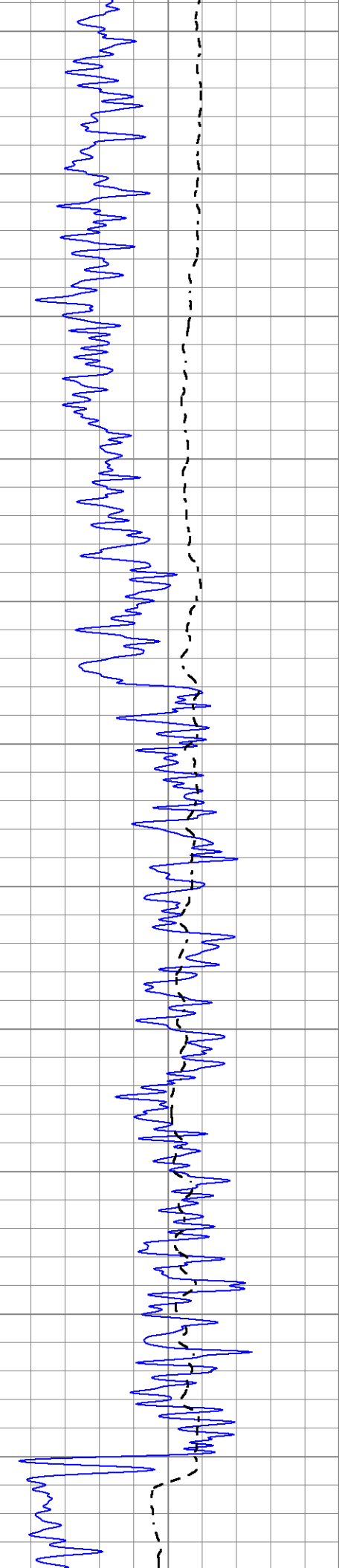
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-100	SP (mV)	100

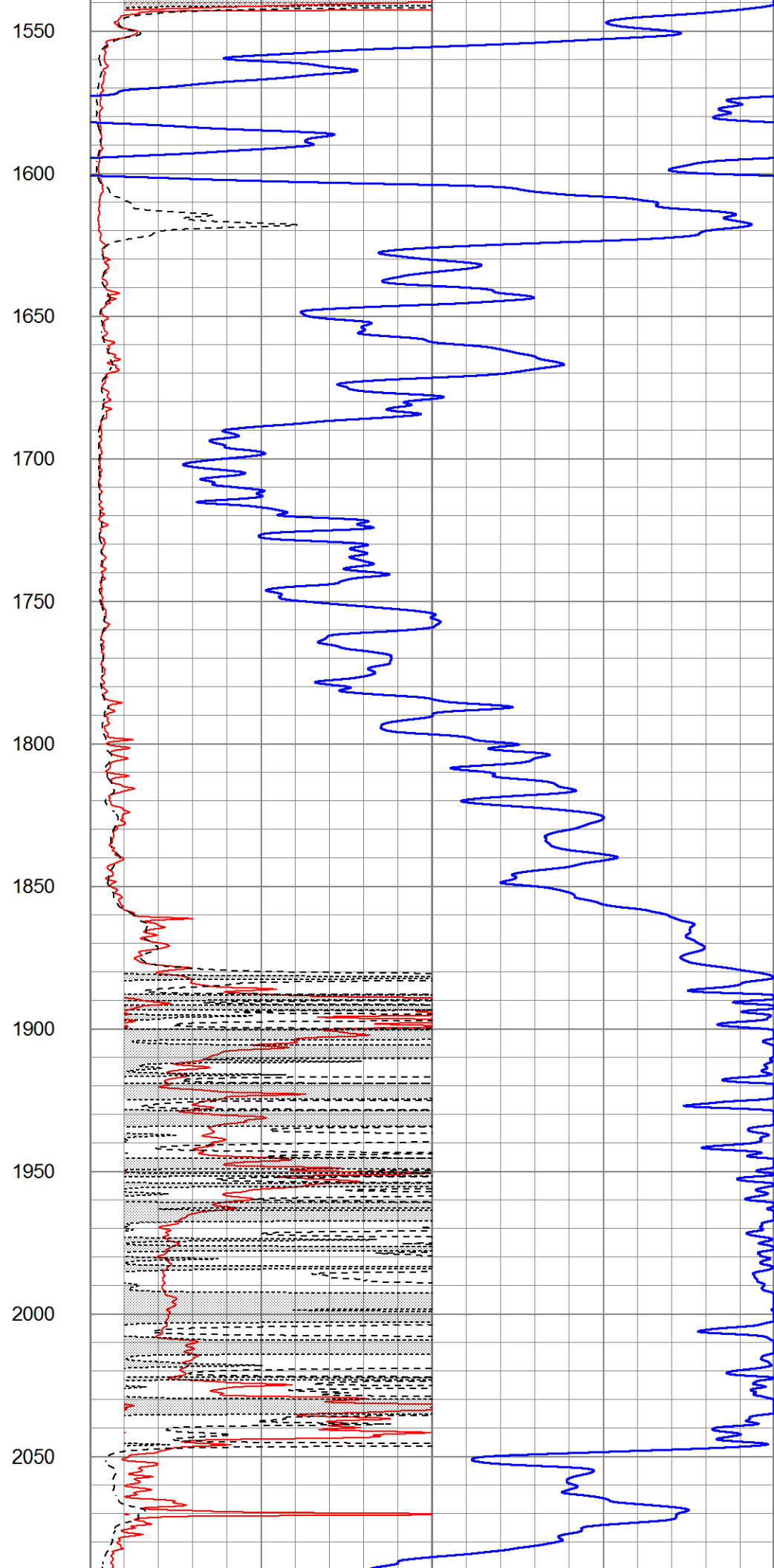
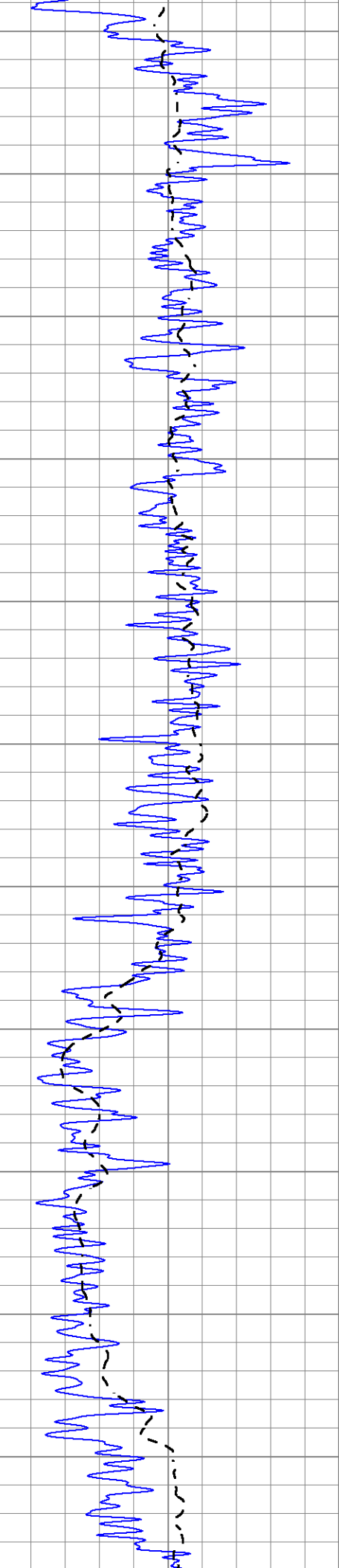
1000	CILD (mmho/m)	0
0	RLL3 (Ohm-m)	50
0	RILD (Ohm-m)	50
50	RILD X10 (Ohm-m)	500
50	RLL3 X10 (Ohm-m)	500

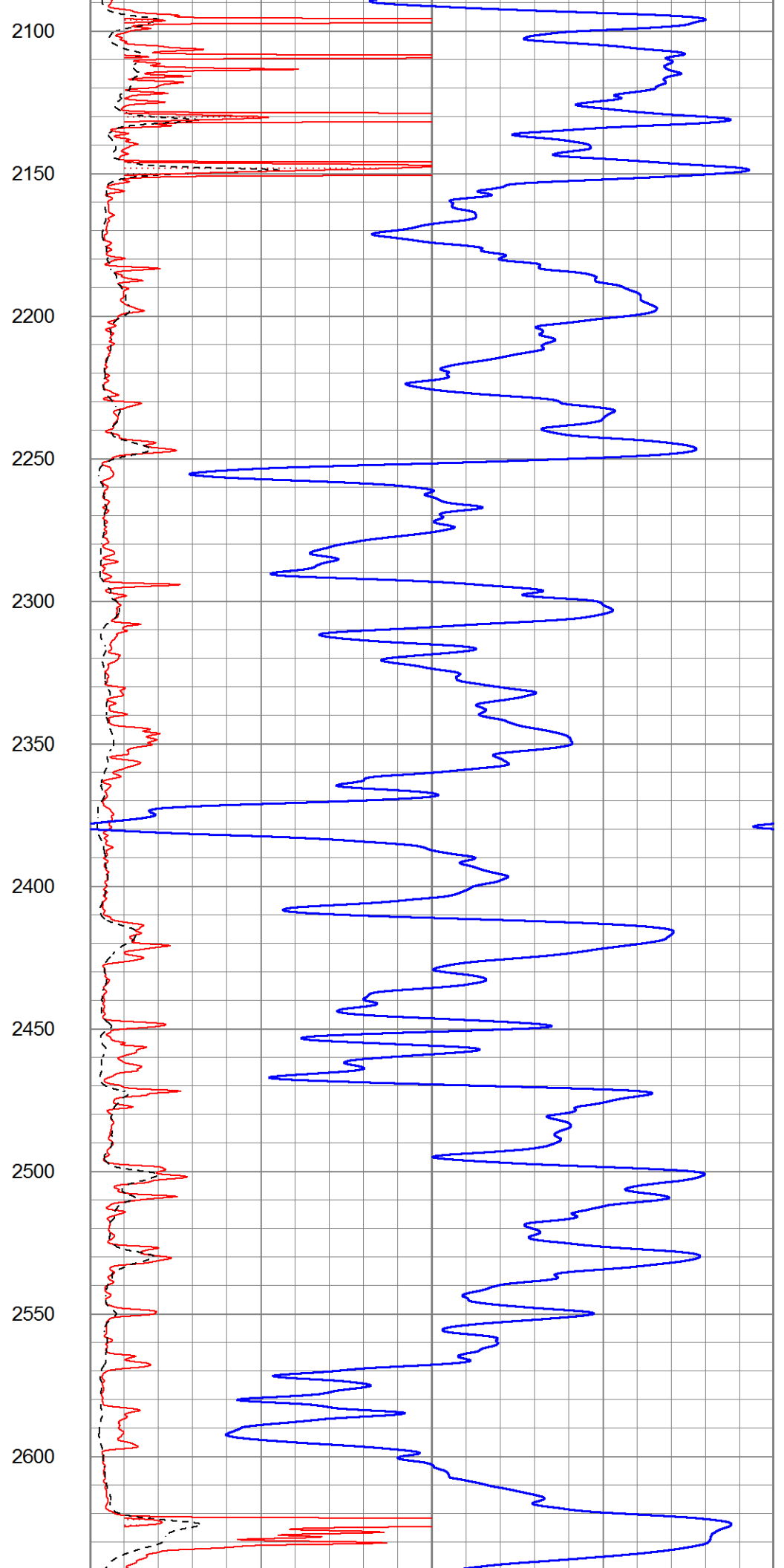
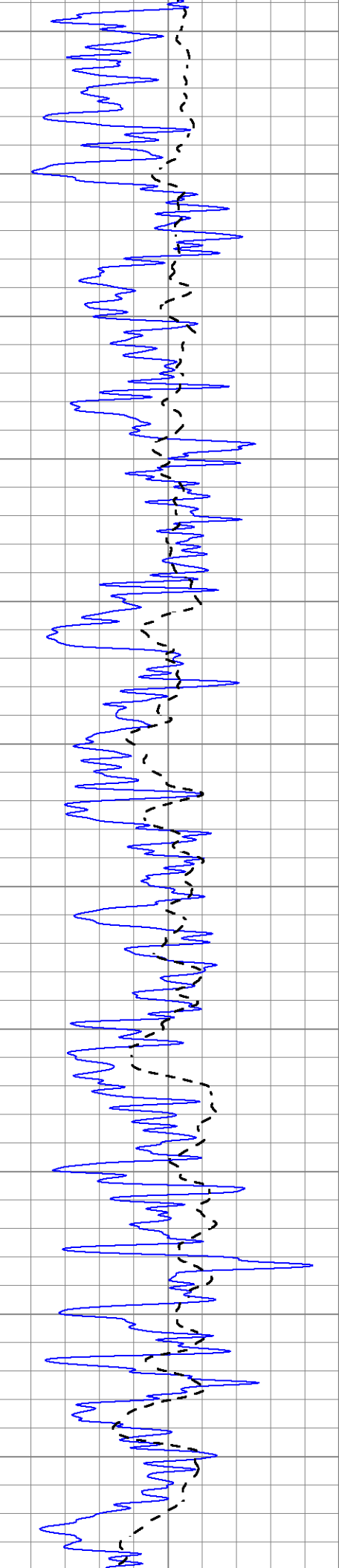


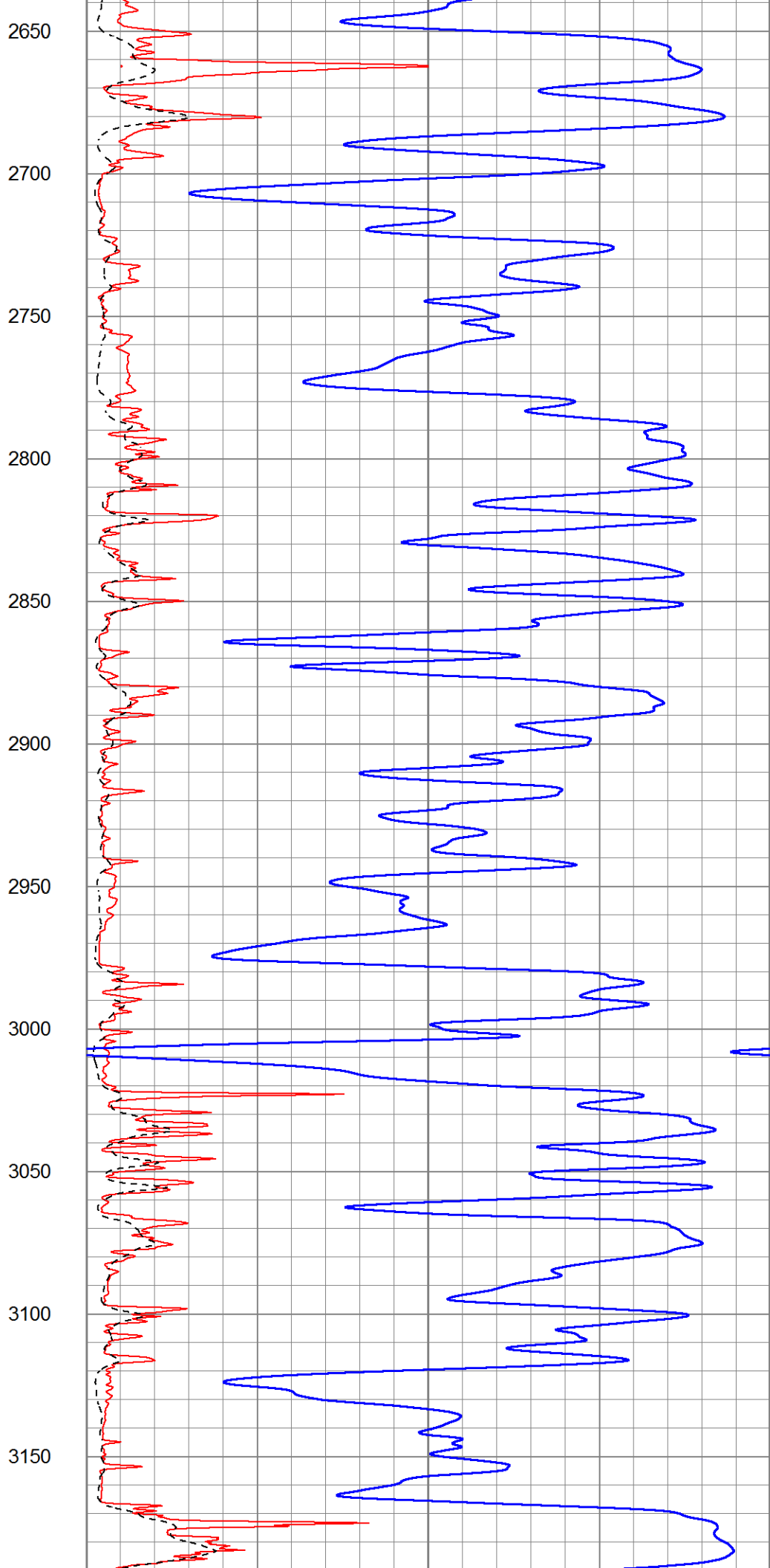
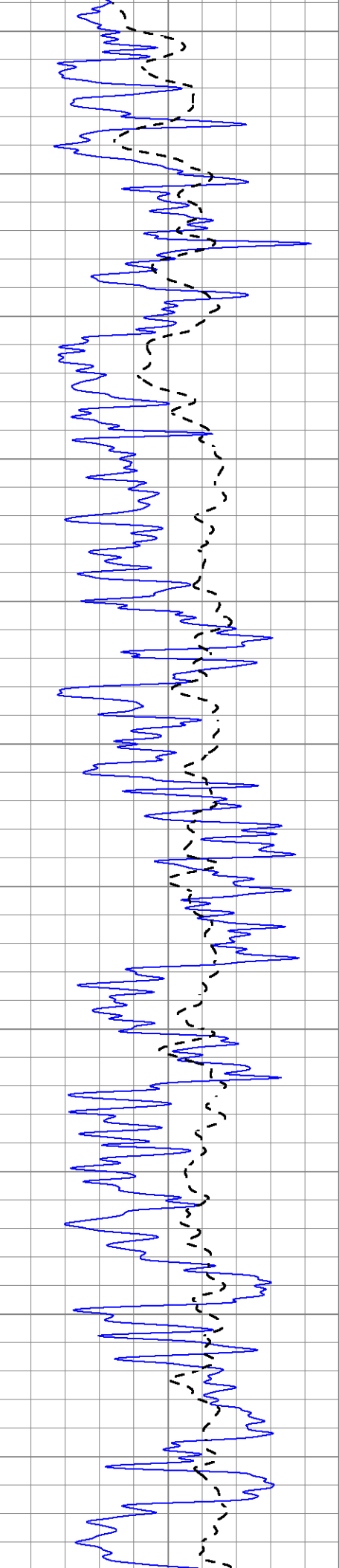
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500  
550  
600  
650  
700  
750  
800  
850  
900  
950

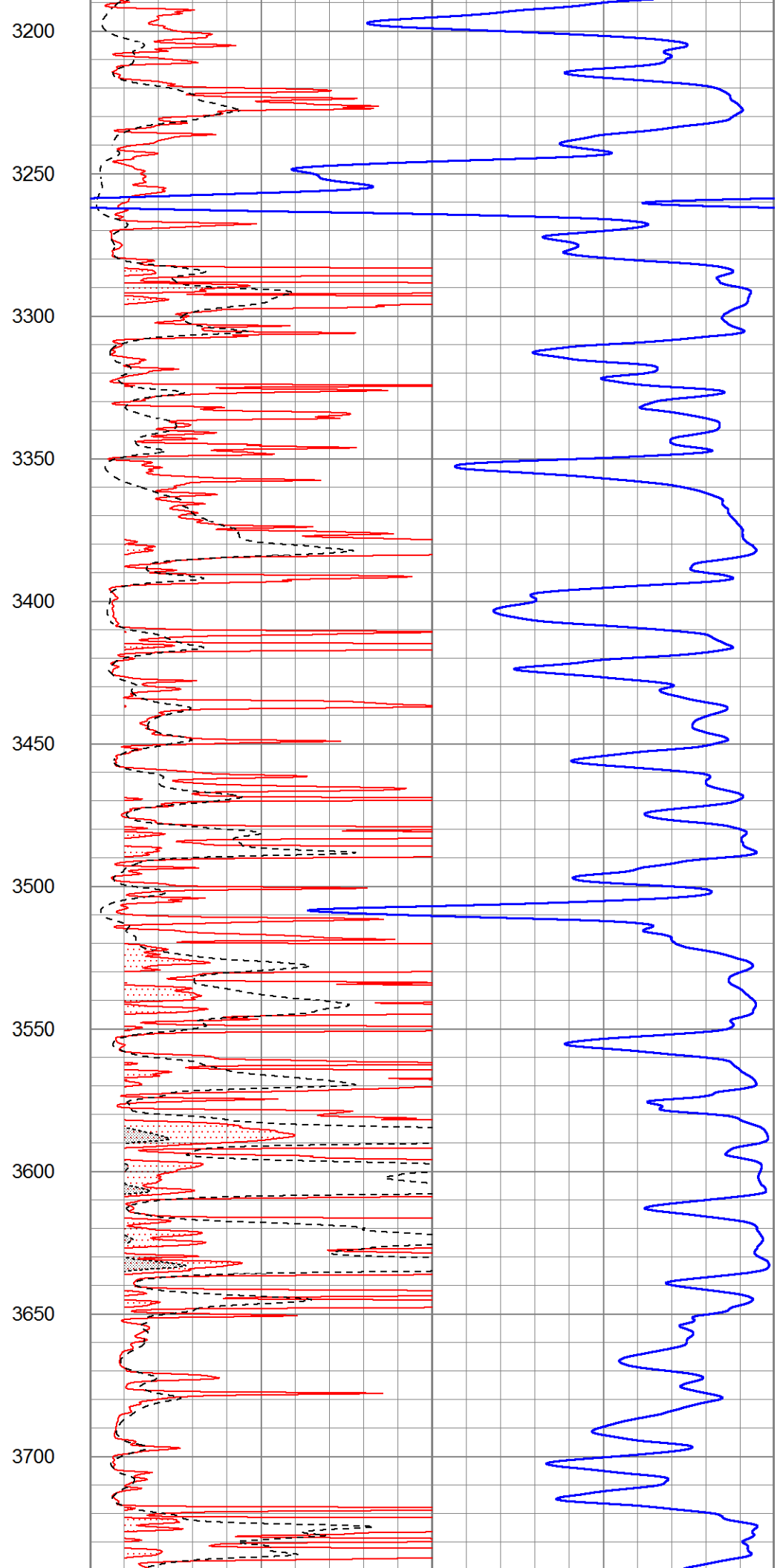
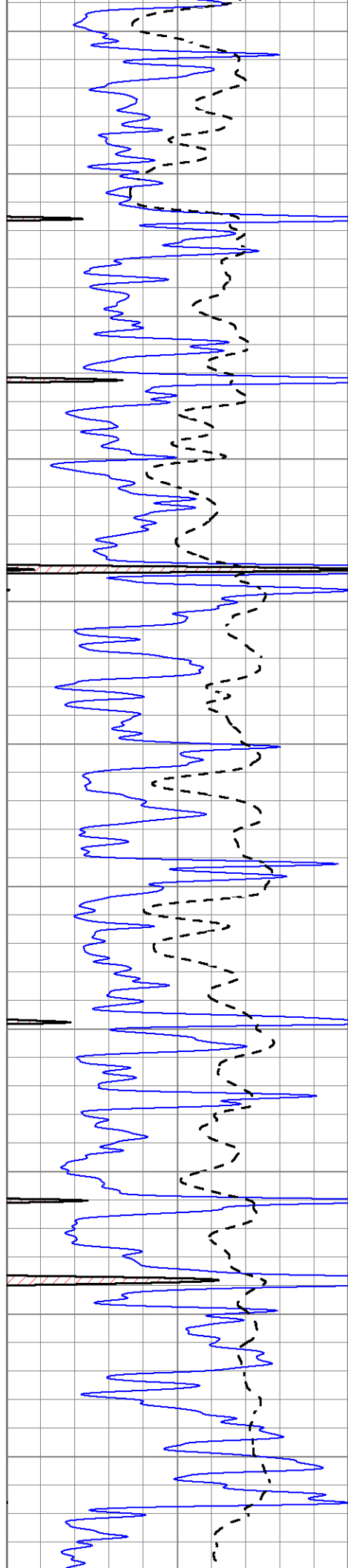


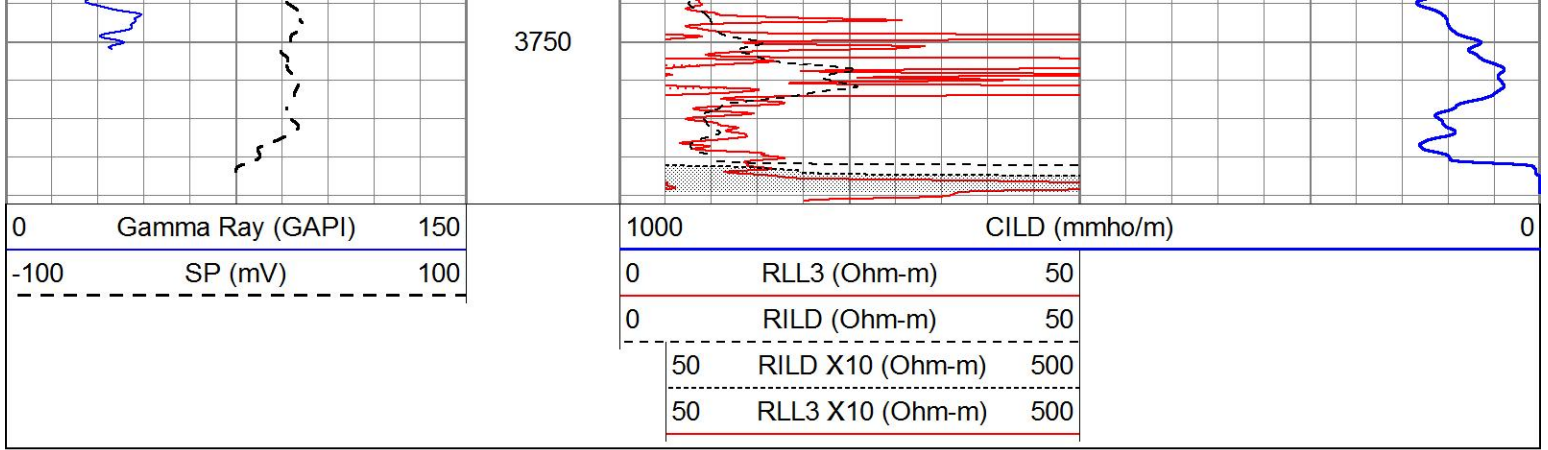










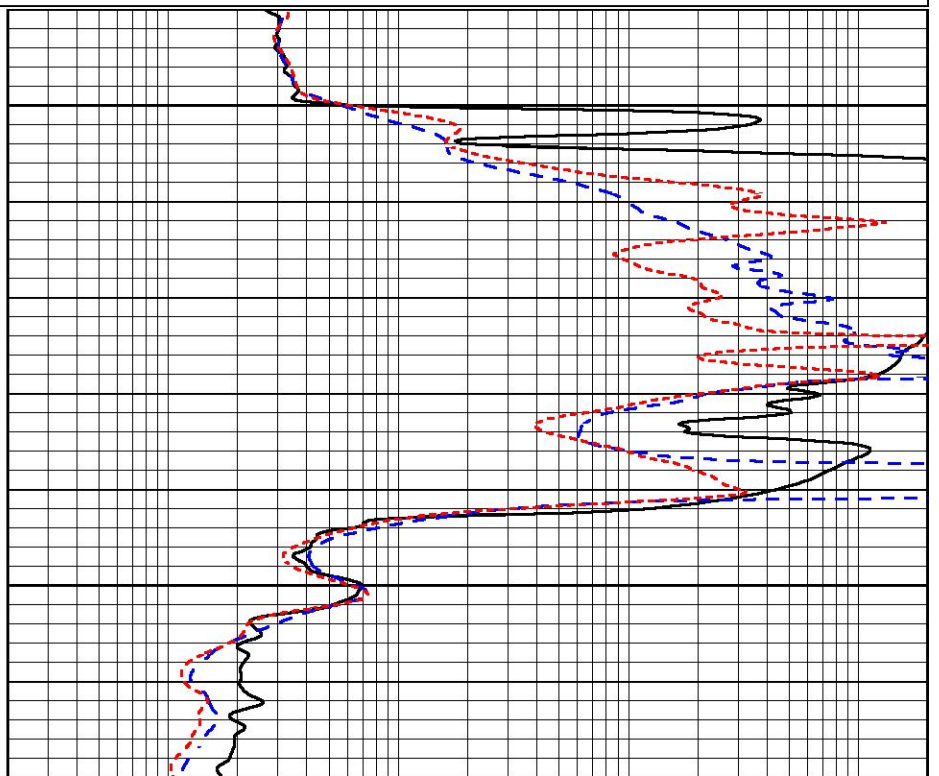
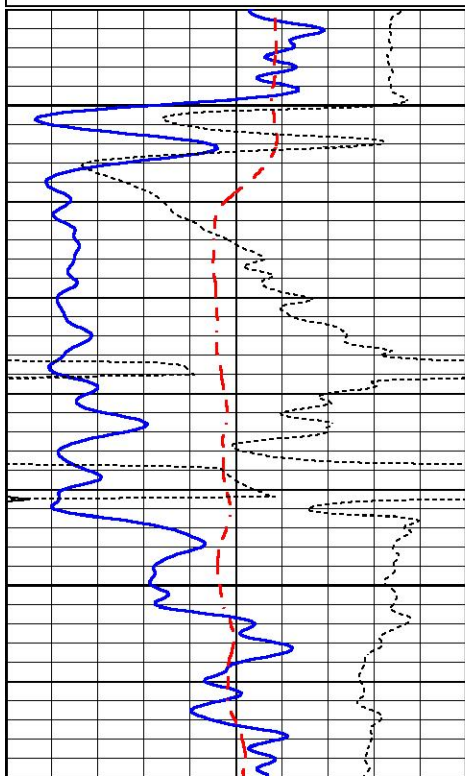


# MAIN PASS

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 Dataset Pathname pass3.1  
 Presentation Format \_dil  
 Dataset Creation Sat Jun 05 17:15:20 2021  
 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



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

0.2	SHALLOW GUARD (Ohm-m)	2000
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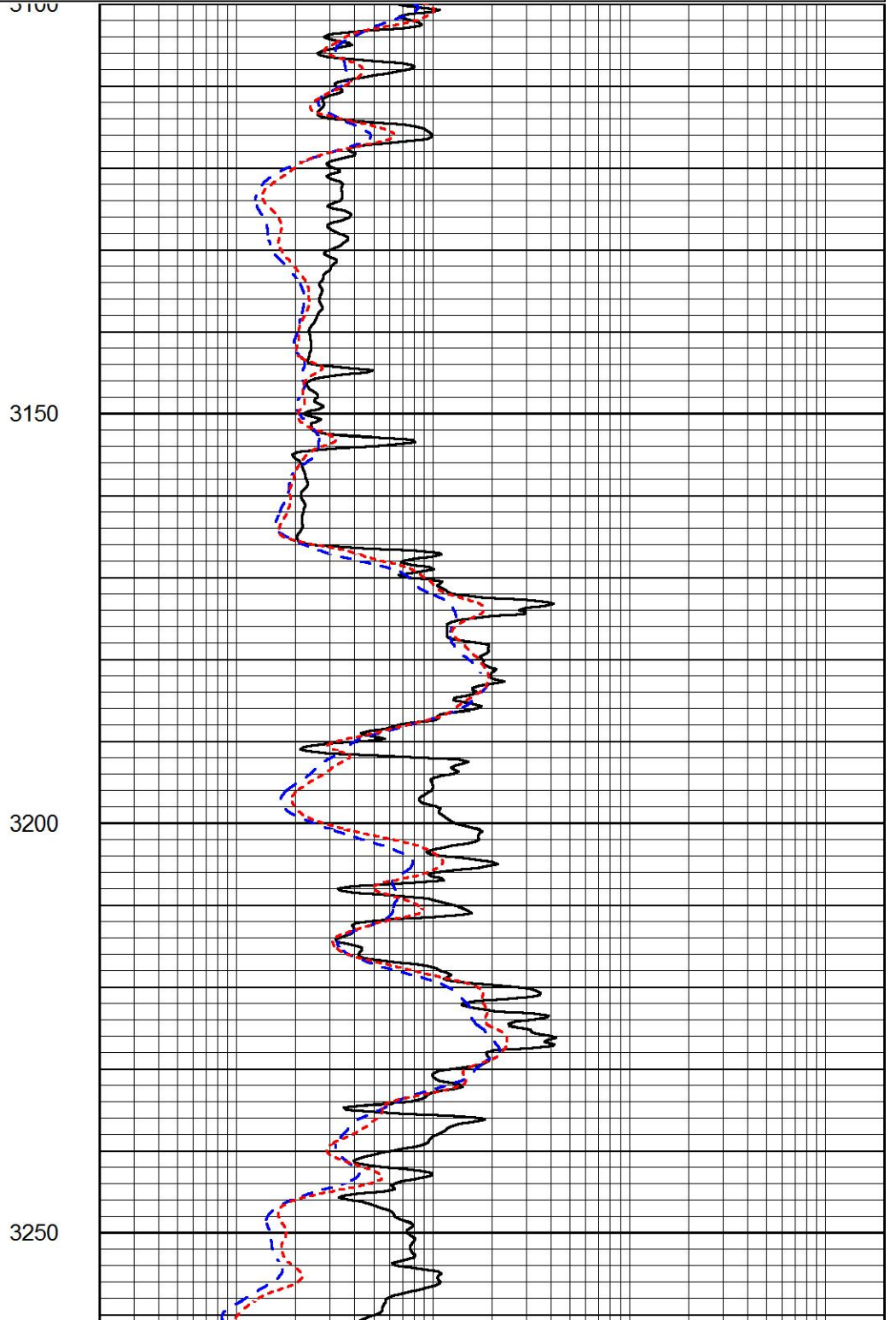
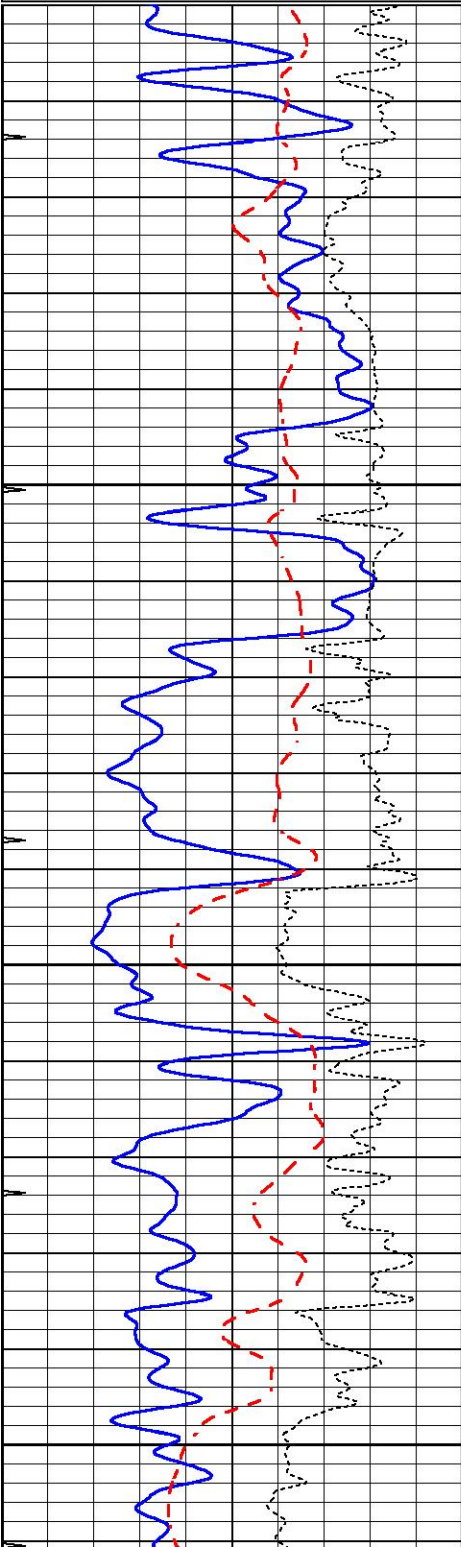


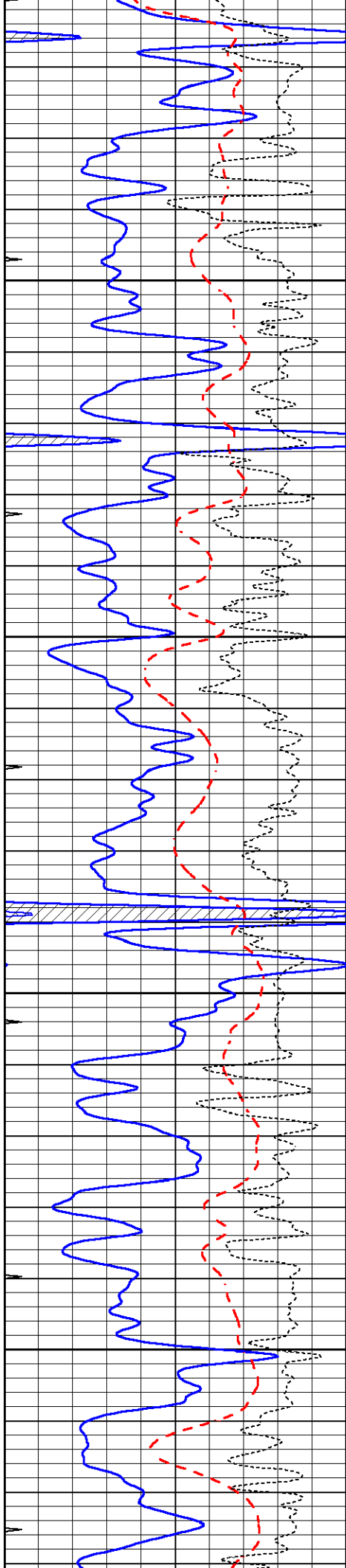
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-100	SP (mV)	100
-250	Rxo/Rt	50
0	MINMK	20

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0.2	DEEP INDUCTION (Ohm-m)	2000
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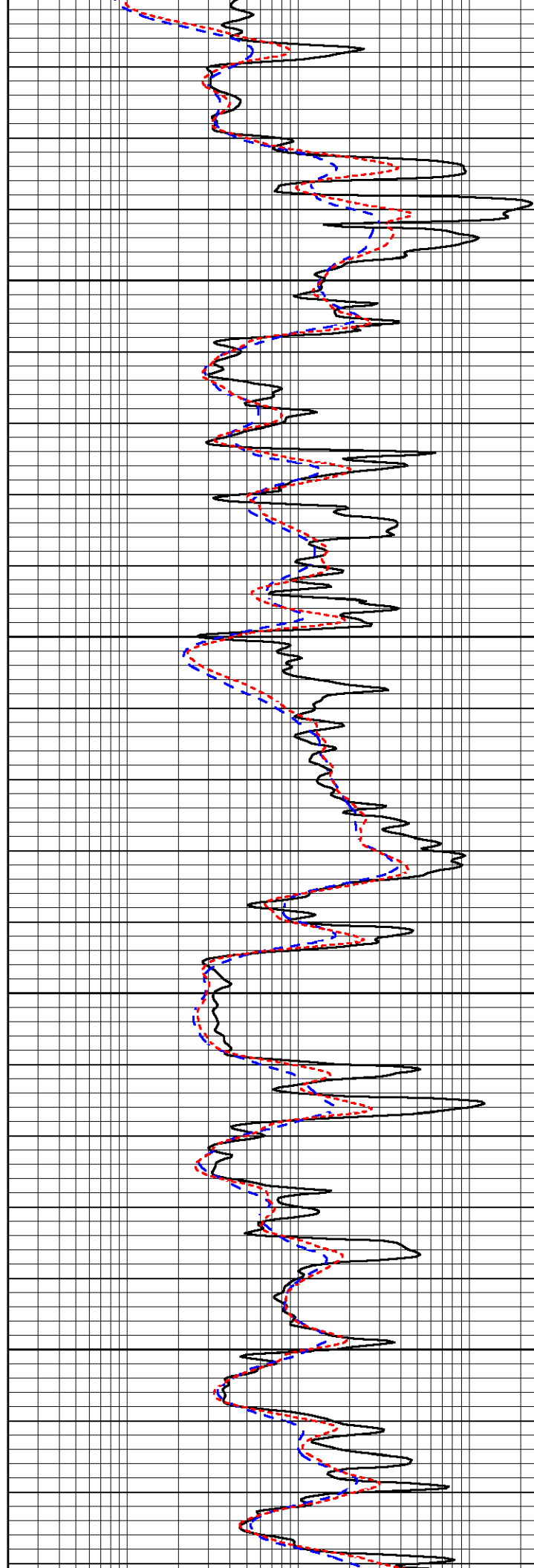


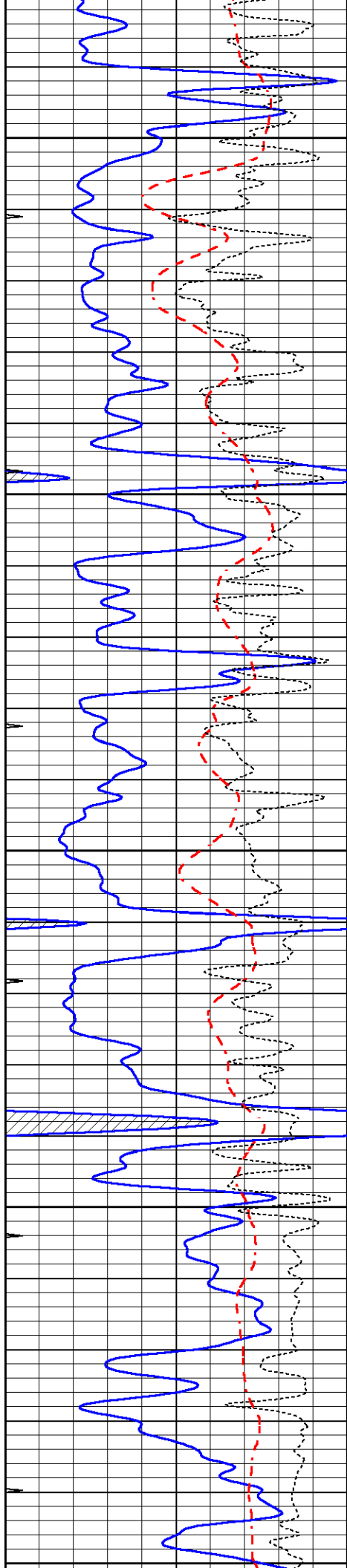
3300

3350

3400

3450





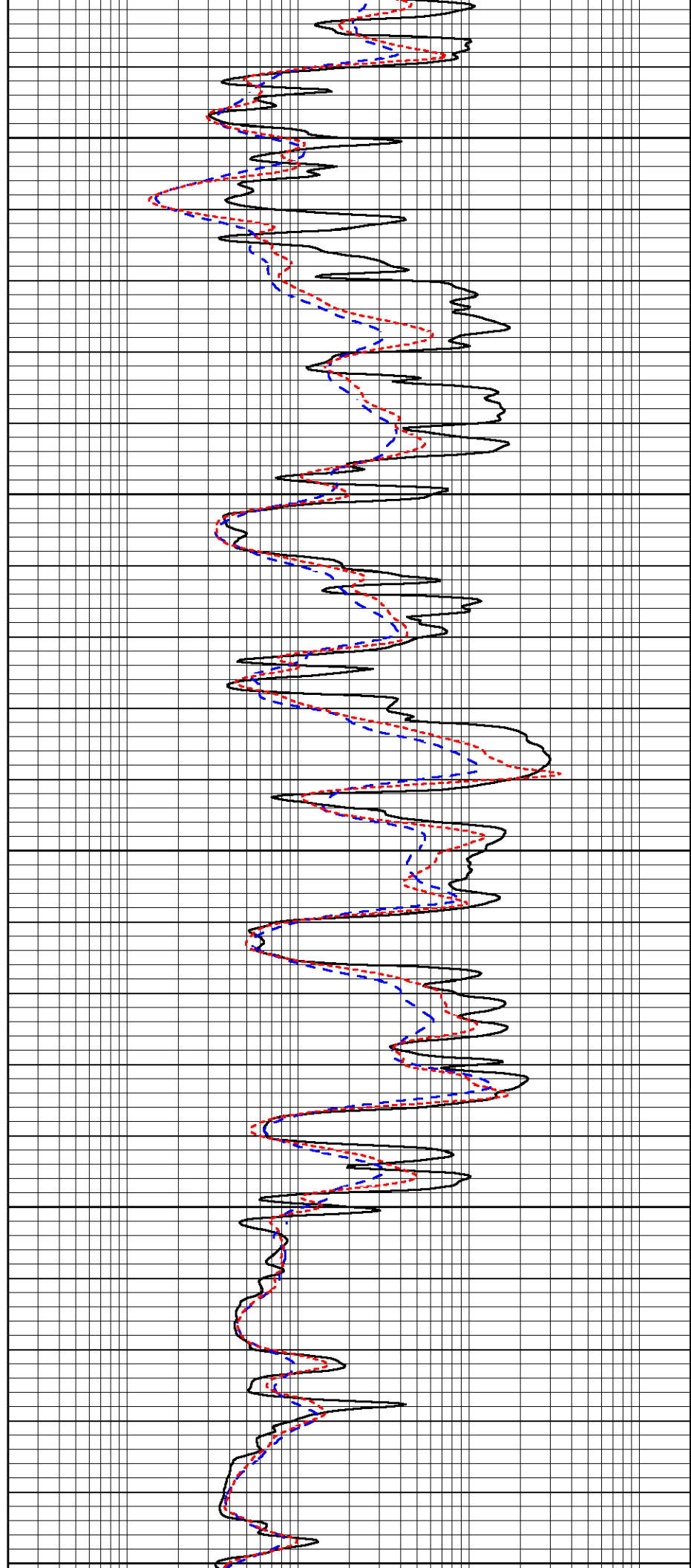
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3550

3600

3650

3700



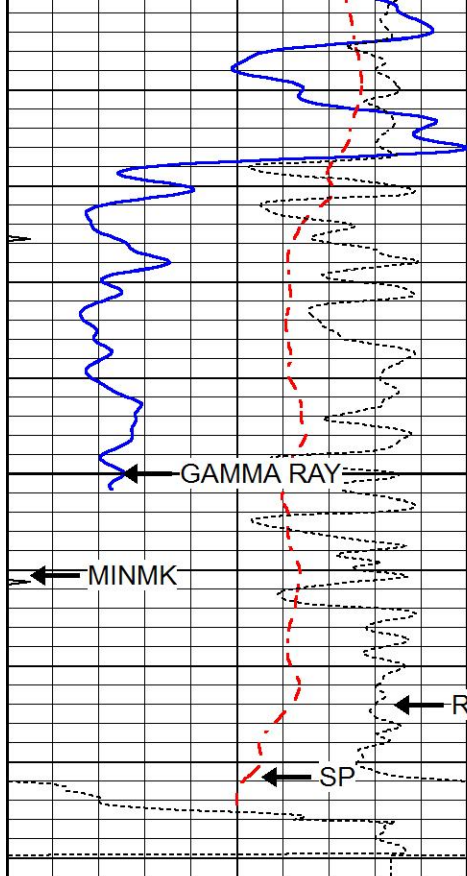
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3550

3600

3650

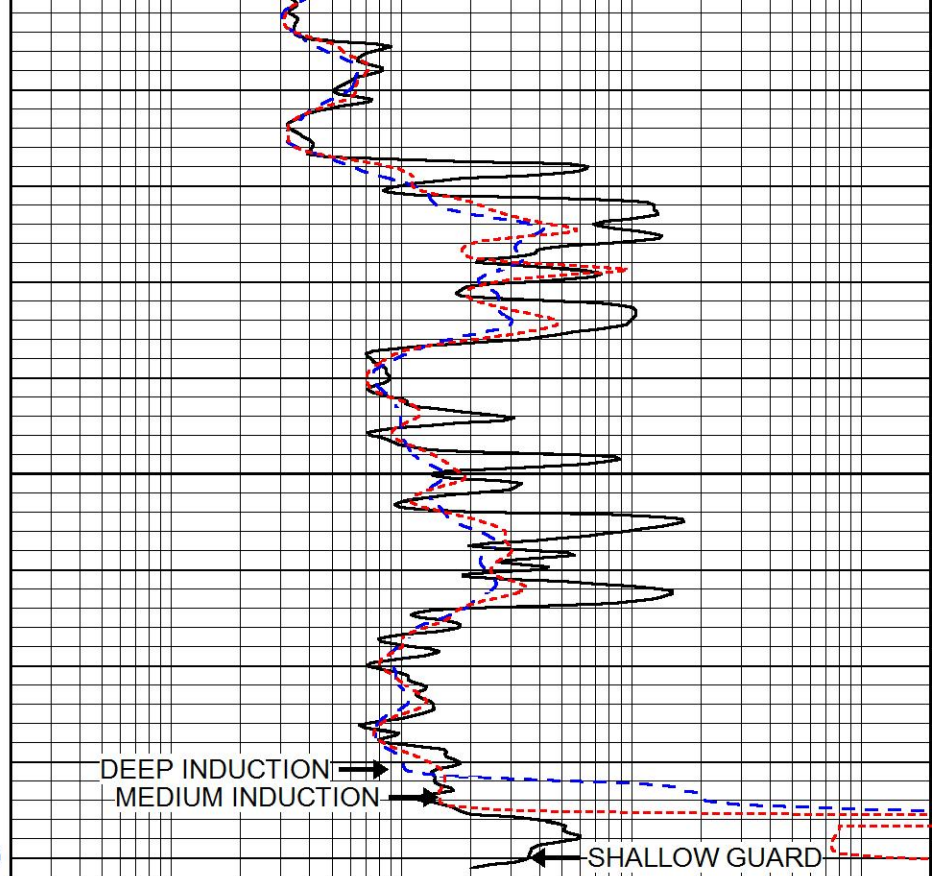
3700



3750

LTD 3790

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

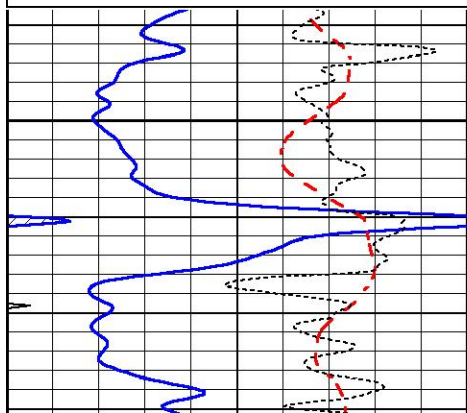


# REPEAT SECTION

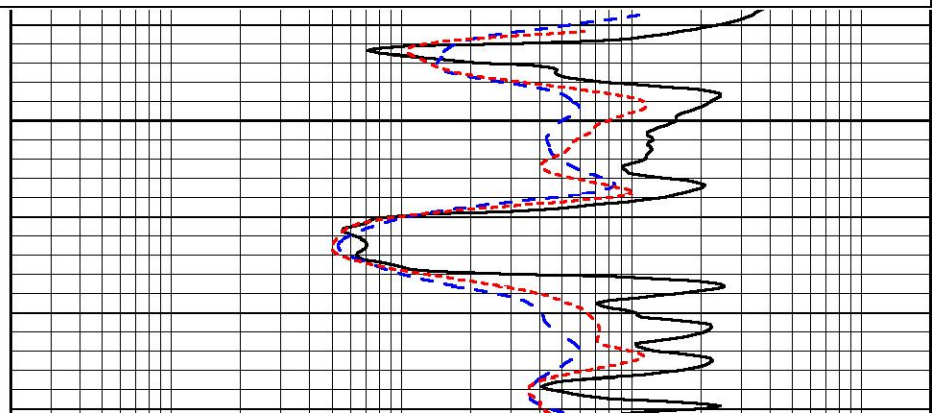
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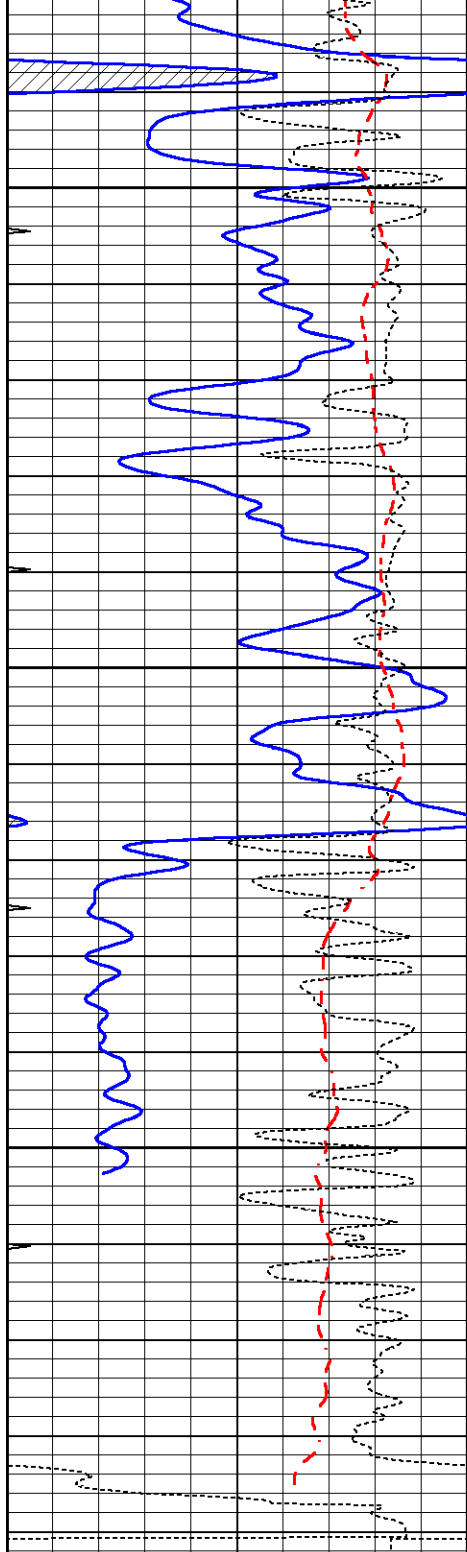
0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50
0	MINMK	20

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



3600



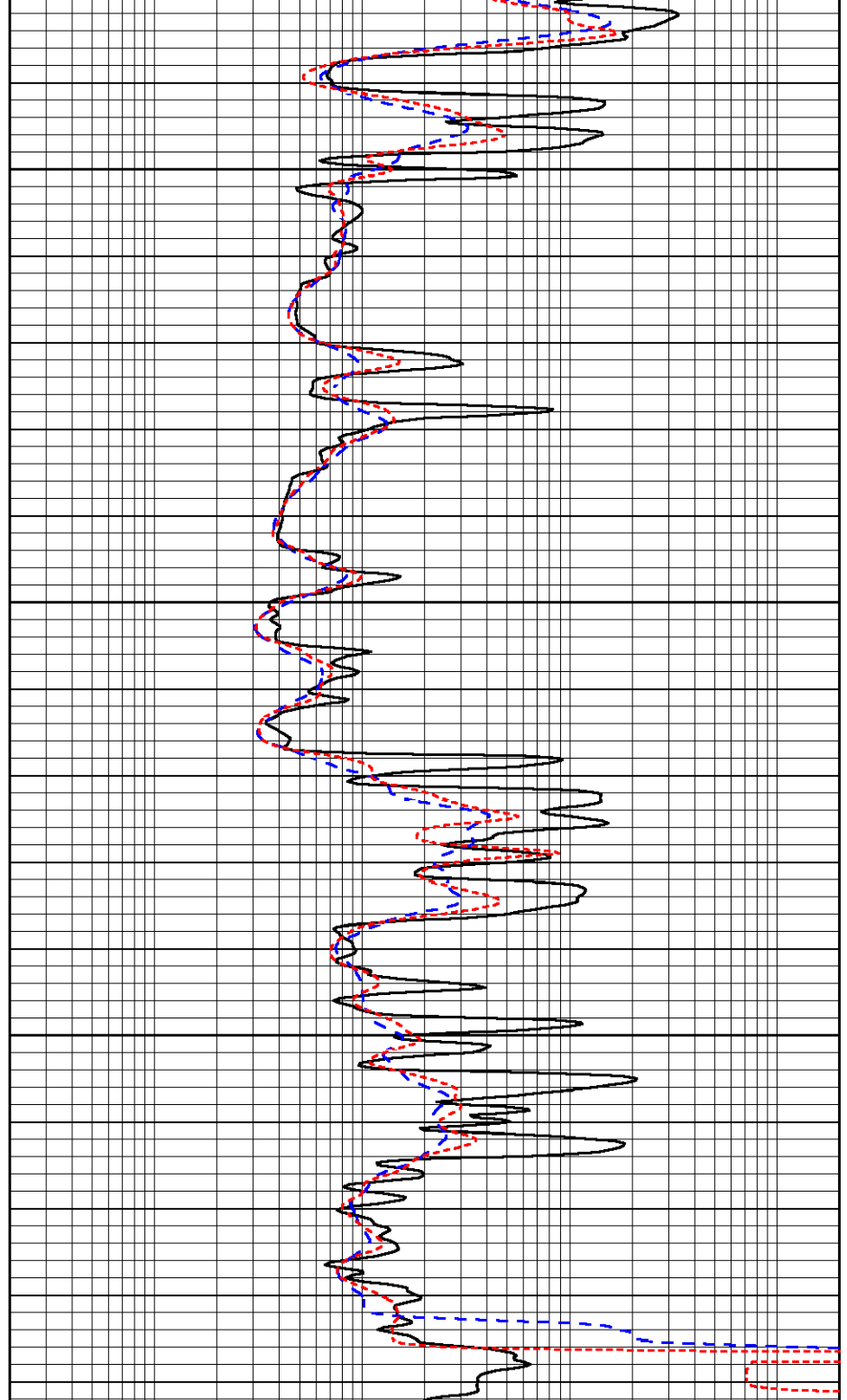


3650

3700

3750

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 5440ddn.db  
 Dataset Pathname pass2.1  
 Dataset Creation Sat Jun 05 16:21:49 2021

### Dual Induction Calibration Report

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

Surface Calibration								
Loop:	Readings			References			Results	
	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: 001N      Model: PRB

Master Calibration					Performed Thu Mar 19 11:30:16 2020			
	Background	Magnesium	Aluminum	Aluminum+Fe				
Window 1	1572.2	7510.8	2837.3	2643.1				cps
Window 2	1446.2	6523.9	2552.8	2409.9				cps
Window 3	1060.9	3611.4	1731.5	1684.8				cps
Window 4	145.5	363.4	363.2	368.1				cps
Long Space	0.0	5077.7	1106.6	963.7				cps
Short Space	3.1	1709.3	1103.4	916.9				cps
Rho		1.7100	2.5900	0.0000				g/cc
Pe		2.0000	2.7500	5.7900				
Rib Angle	: 44.0	Rib Slope	: 0.965	Density/Spine Ratio			: 0.555	
Spine Angle	: 74.0	Spine Slope	: 3.481	Spine Intercept			: -17.4	

Before Survey Verification					Performed Wed Dec 31 18:00:00 1969			
	Background	Magnesium	Aluminum	Aluminum+Fe				
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: 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: Thu Jul 30 20:04:35 2020

Calibrator Value: 150.0 GAPI

Background Reading: 0.0 cps  
Calibrator Reading: 276.0 cps

Sensitivity:

0.7500

GAPI/cps