

**DUAL  
INDUCTION  
LOG**

Company DIXON OPERATING COMPANY, LLC.  
Well BYER #1-3  
Field MIKES METEOR  
County STAFFORD  
State KANSAS

Company DIXON OPERATING COMPANY, LLC.  
Well BYER #1-3  
Field MIKES METEOR  
County STAFFORD State KANSAS

Location: API #: 15-185-23986-0000  
2310' FSL & 350' FEL  
SEC 3 TWP 23S RGE 12W  
Permanent Datum GROUND LEVEL Elevation 1831  
Log Measured From KELLY BUSHING 9' A.G.L.  
Drilling Measured From KELLY BUSHING  
Other Services CDL/CNL/PE MEL/SON  
Elevation K.B. 1840 D.F. 1838 G.L. 1831

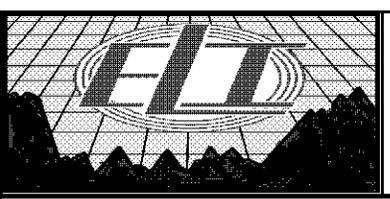
Date	7/1/17
Run Number	ONE
Depth Driller	3880
Depth Logger	3874
Bottom Logged Interval	3872
Top Log Interval	00
Casing Driller	8 5/8" @ 367'
Casing Logger	366'
Bit Size	7 7/8
Type Fluid in Hole	CHEMICAL MUD
Density / Viscosity	9.2/51
PH / Fluid Loss	9.0/10.6
Source of Sample	FLOWLINE
Rm @ Meas. Temp	.60 @ 85F
Rmt @ Meas. Temp	.45 @ 85F
Rmc @ Meas. Temp	.72 @ 85F
Source of Rmf / Rmc	MEASUREMENT
Rm @ BHT	.44 @ 115F
Time Circulation Stopped	2 HOURS
Time Logger on Bottom	
Maximum Recorded Temperature	115F
Equipment Number	3802
Location	HAYS, KANSAS
Recorded By	JASON CAPPELLUCCI
Witnessed By	CHUCK SCHMALTZ

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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  
HWY 281 & HWY 19 - SOUTH TO 70TH RD. (QUIVIRA BLKTOP)  
7 EAST TO 70 RD. - 1 1/4 NORTH - WEST INTO

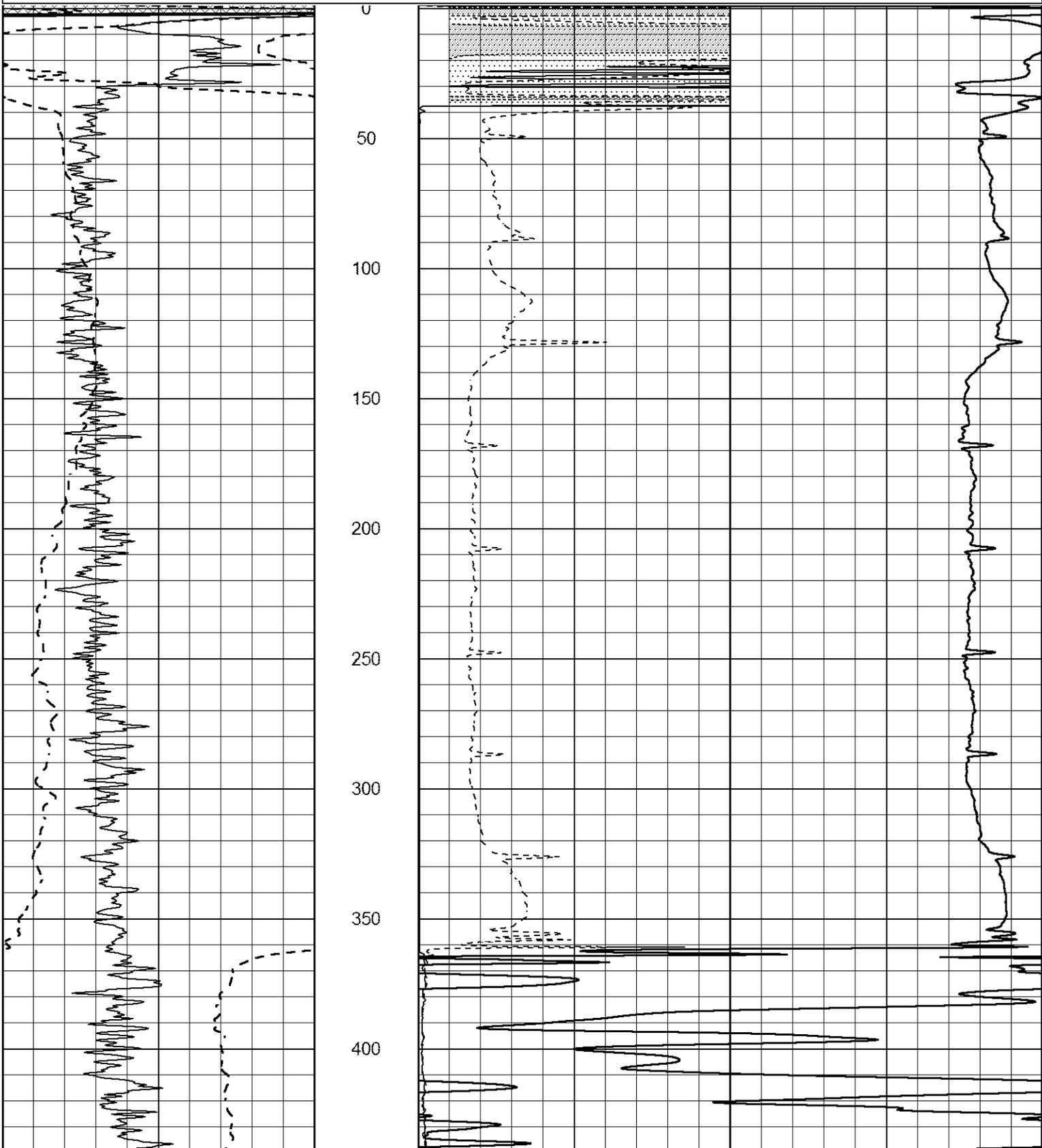


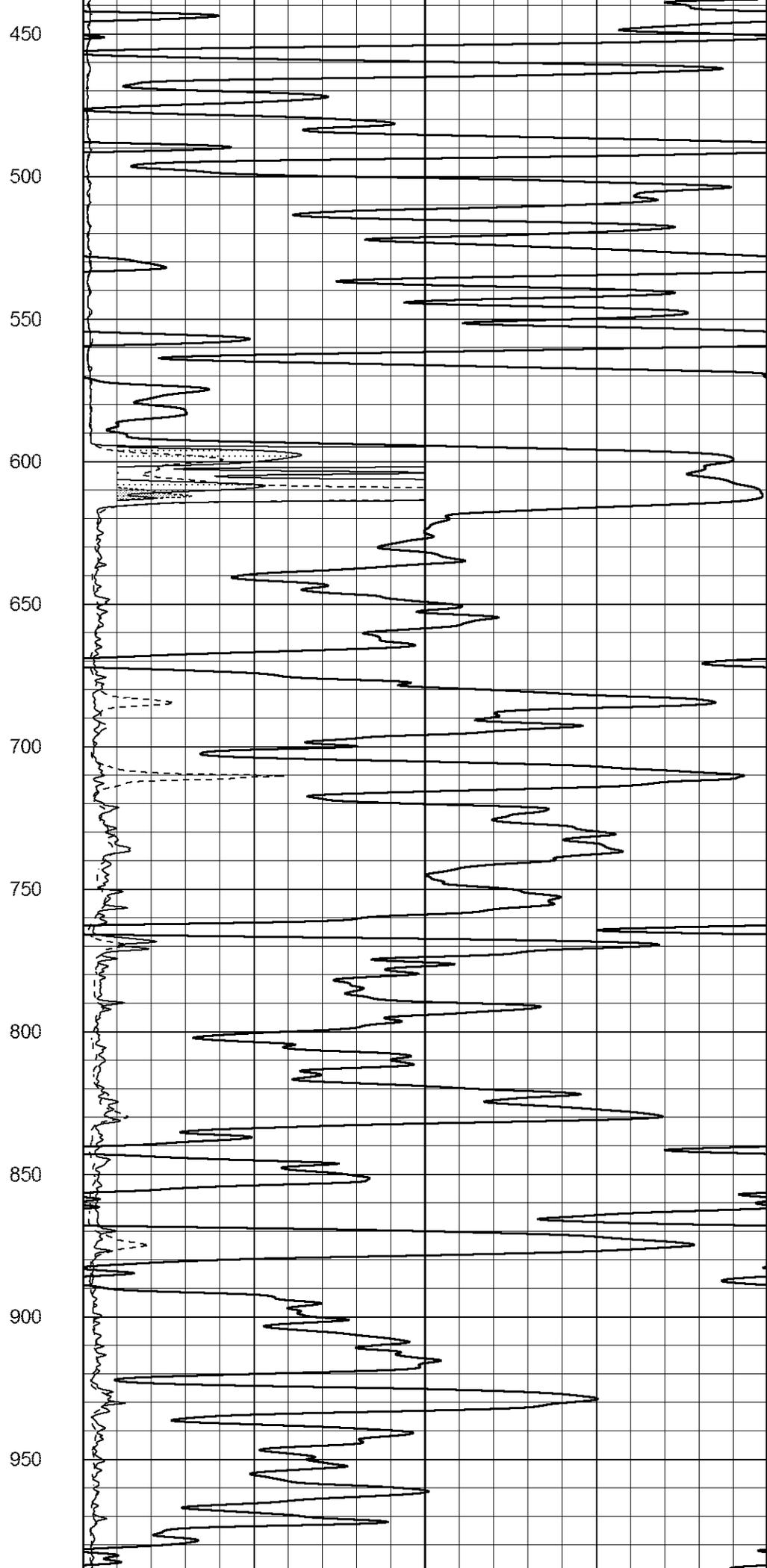
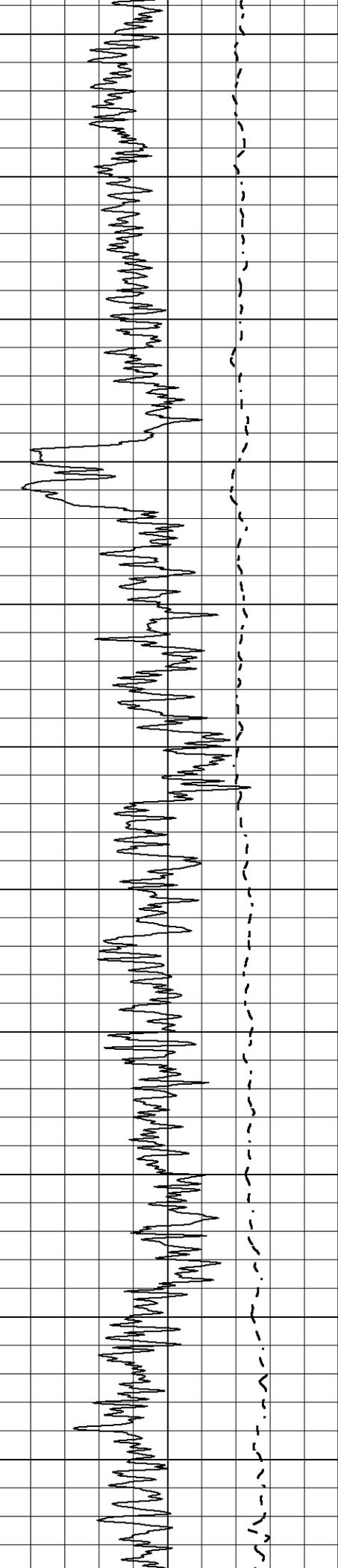
**MAIN SECTION**

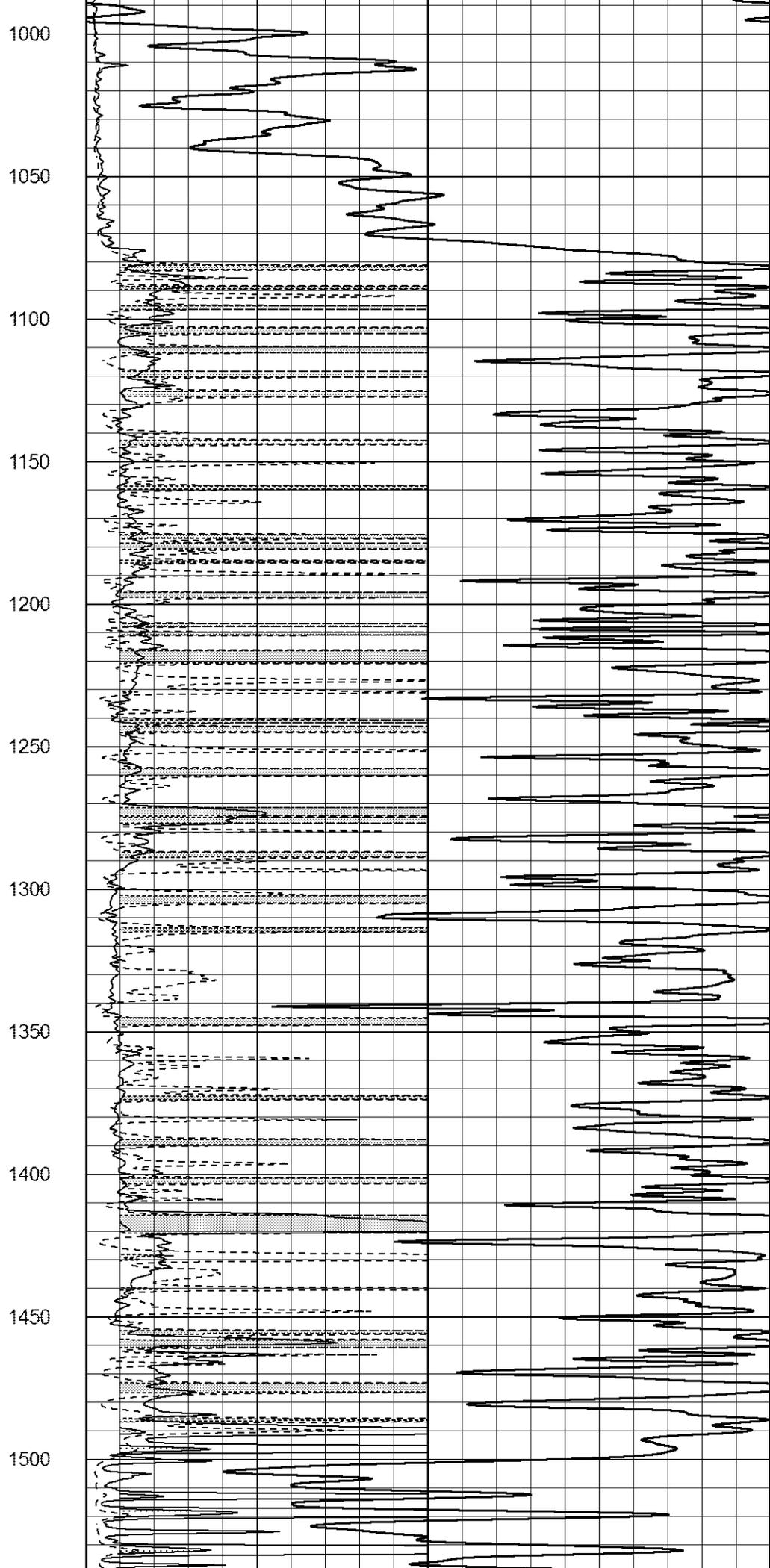
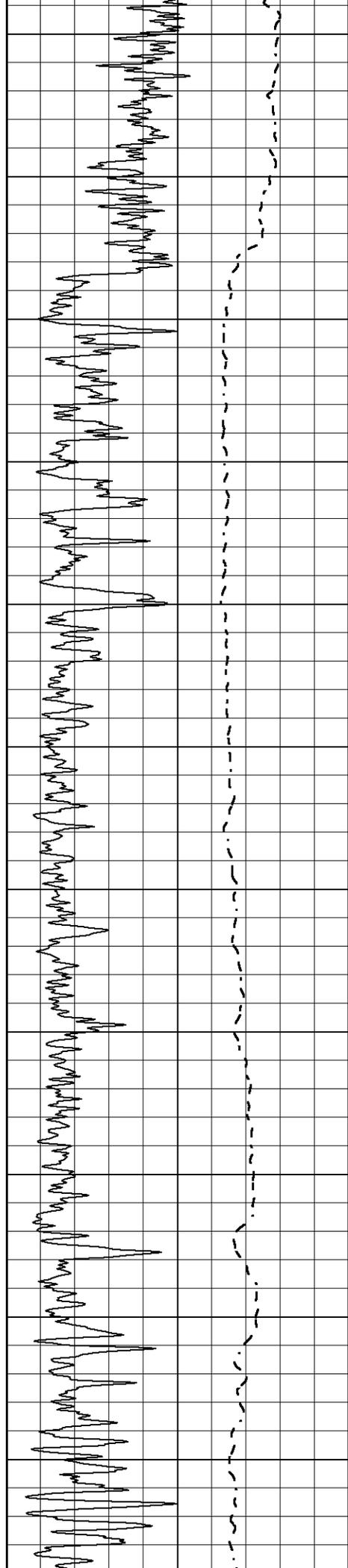
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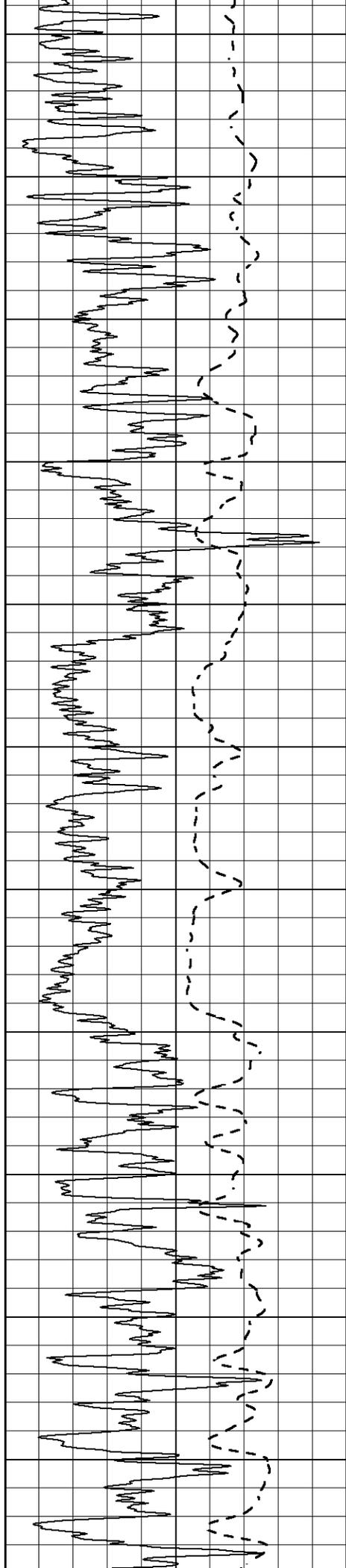
0 Gamma Ray (GAPI) 150  
 -100 SP (mV) 100

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









1550

1600

1650

1700

1750

1800

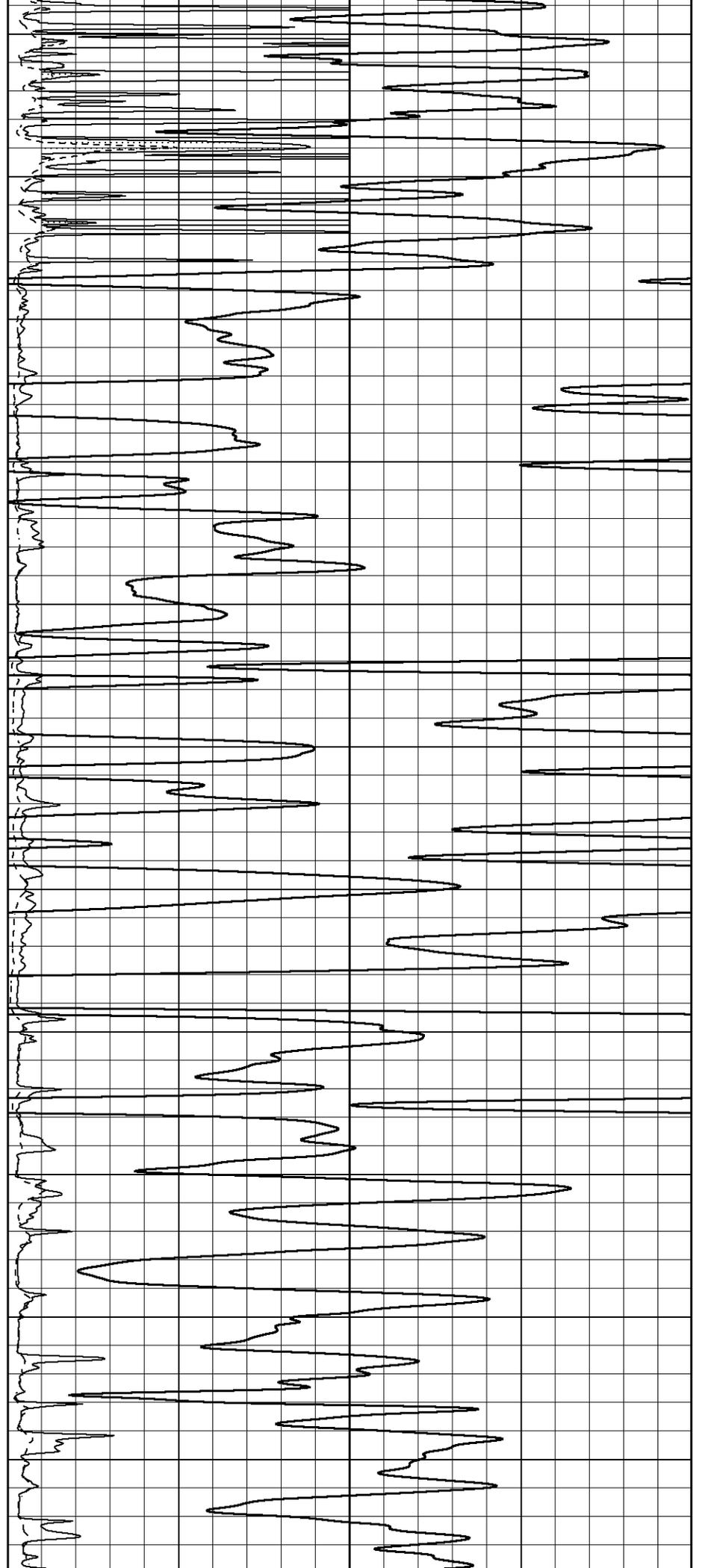
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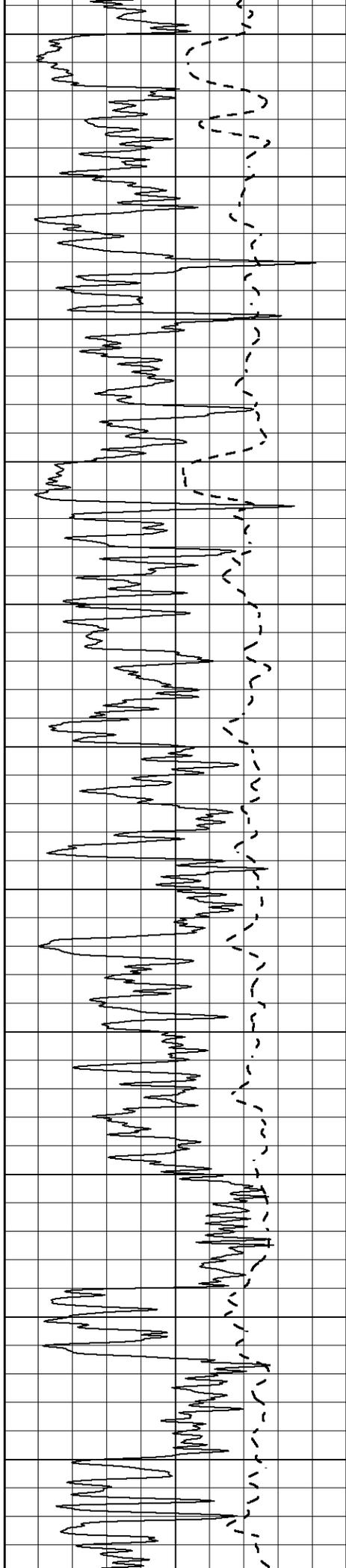
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1950

2000

2050





2100

2150

2200

2250

2300

2350

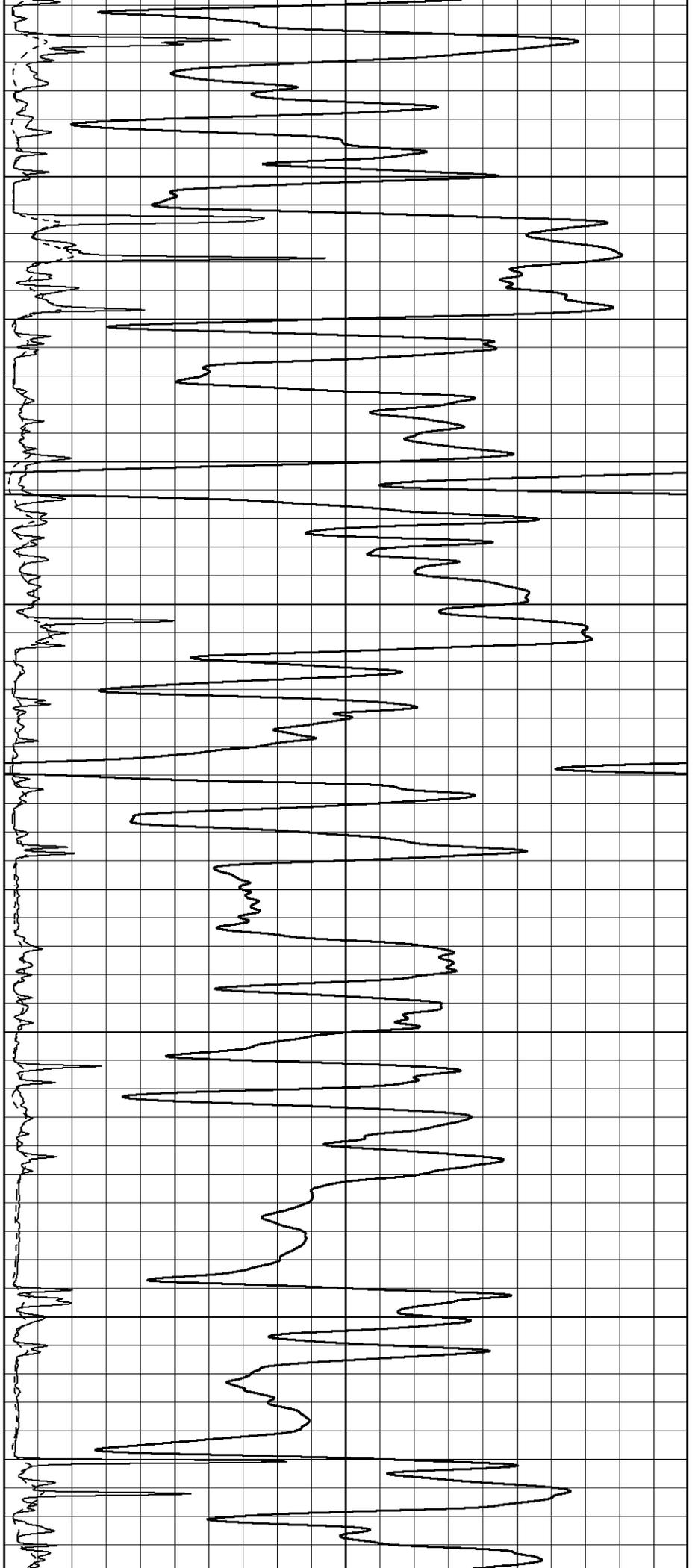
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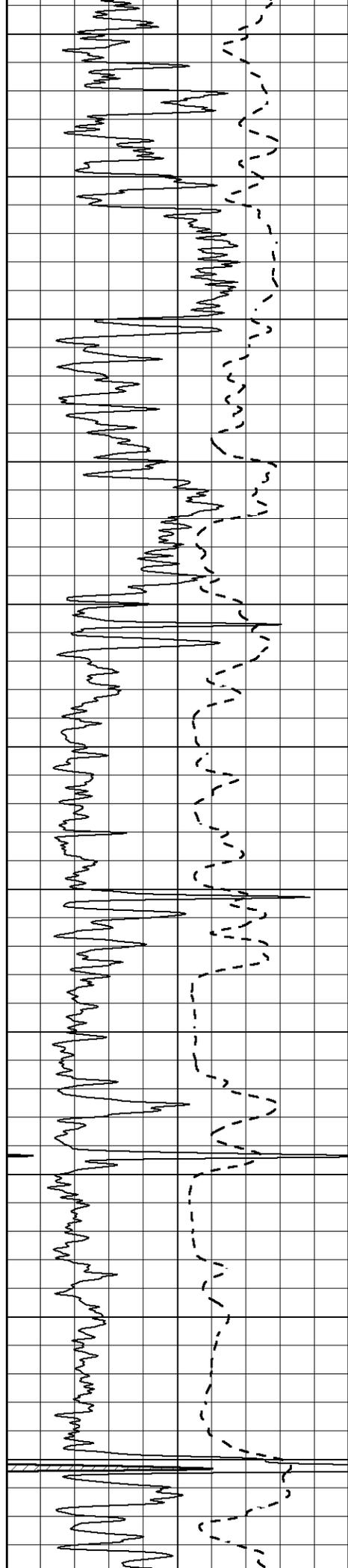
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2500

2550

2600





2650

2700

2750

2800

2850

2900

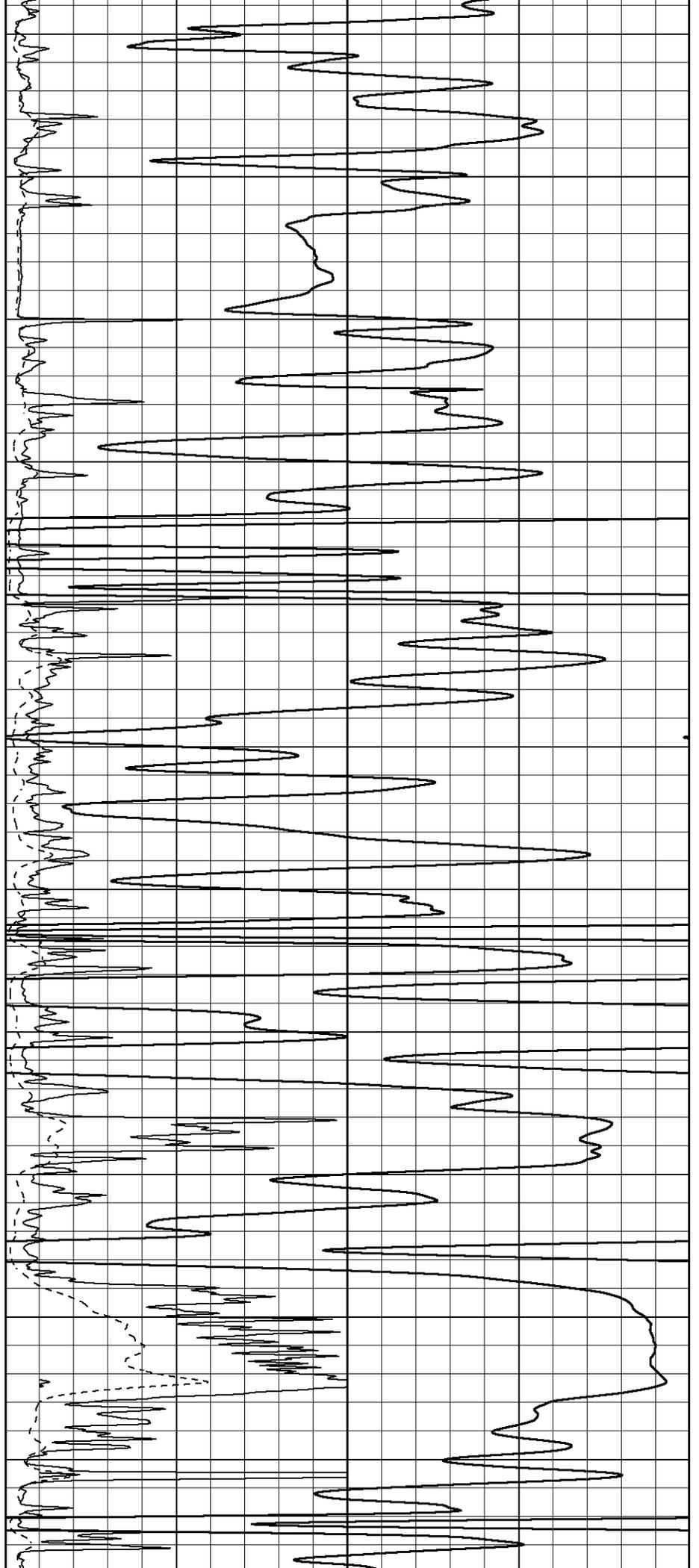
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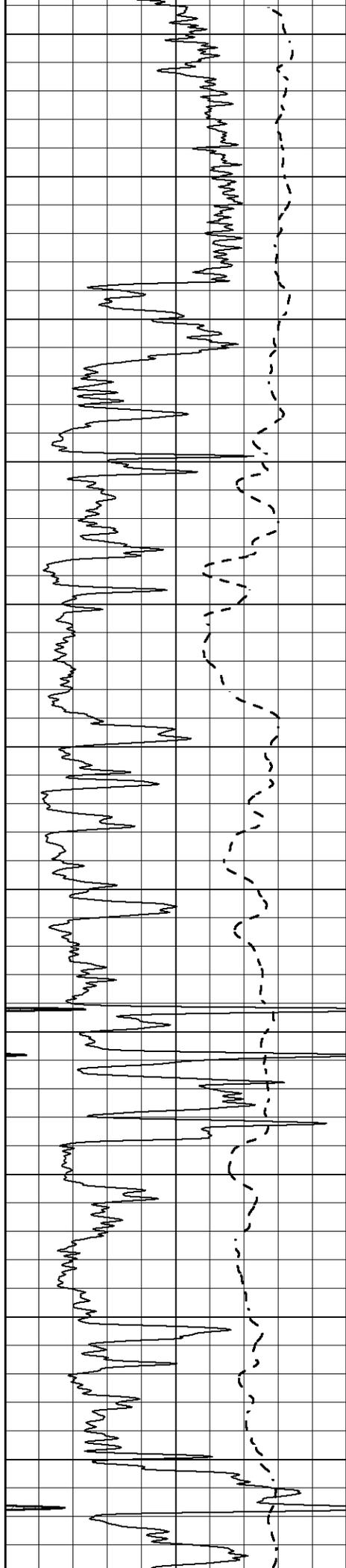
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3050

3100

3150





3200

3250

3300

3350

3400

3450

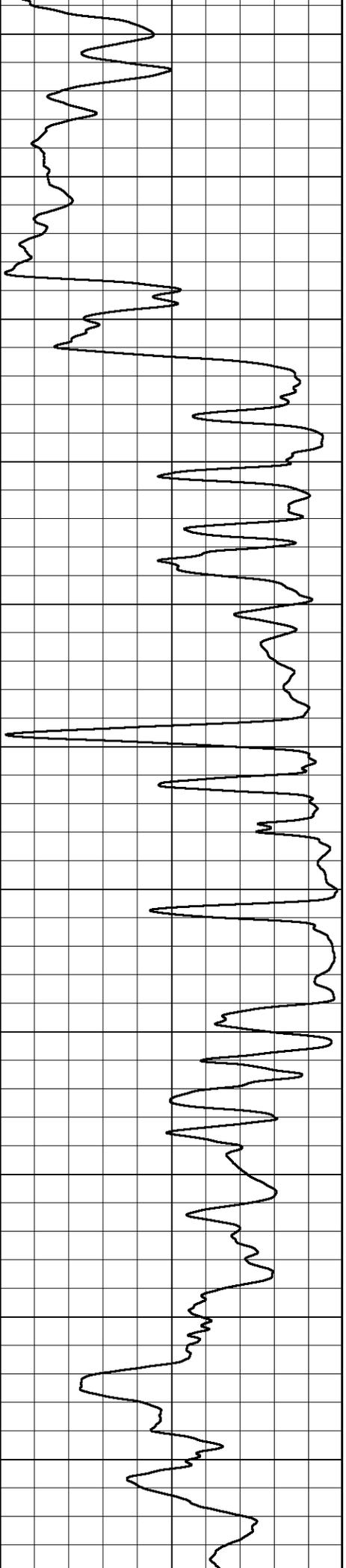
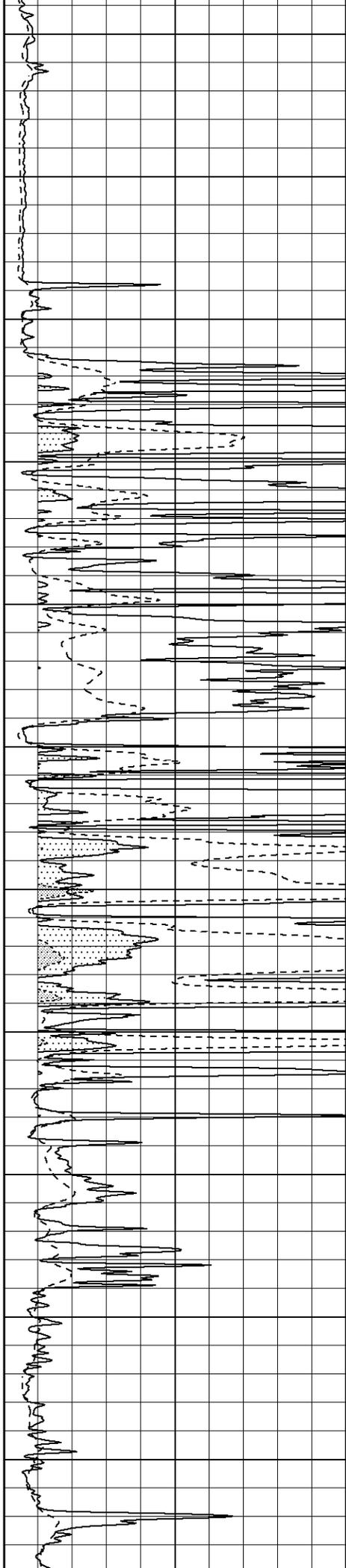
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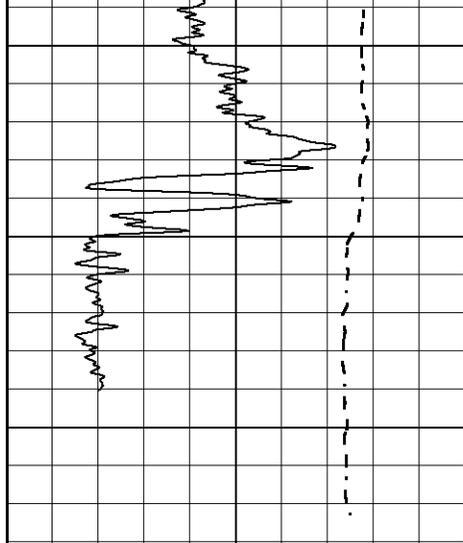
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3600

3650

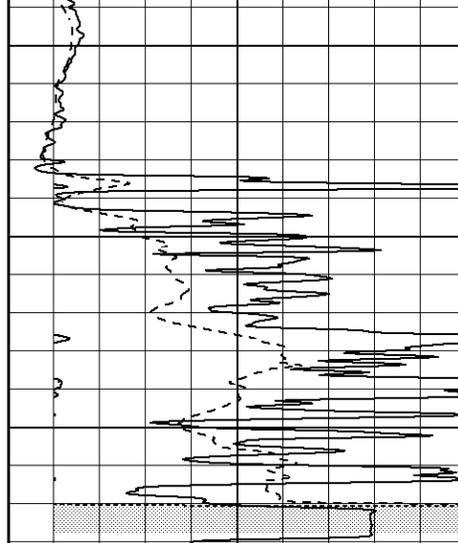
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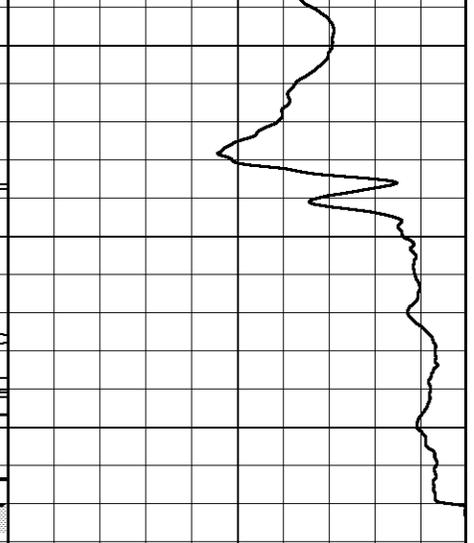


0 Gamma Ray (GAPI) 150  
 -100 SP (mV) 100

3750  
 3800  
 3850



1000 CILD (mmho/m) 0



0 RLL3 (Ohm-m) 50

0 Deep Induction (Ohm-m) 50

50 RILD X10 (Ohm-m) 500

50 RLL3 X10 (Ohm-m) 500

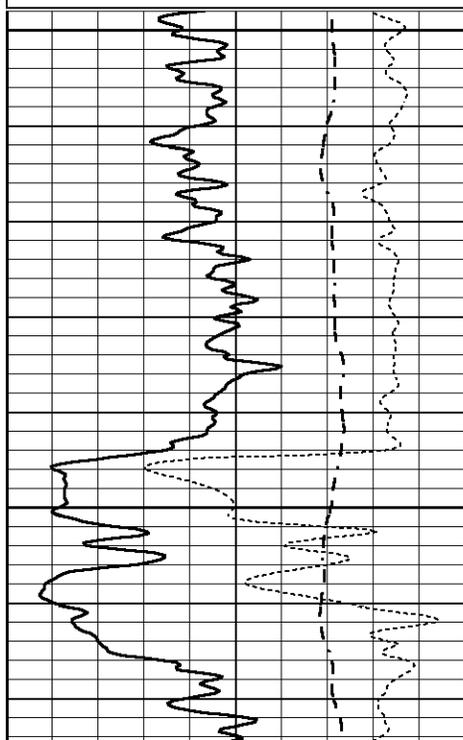


# ANHYDRITE

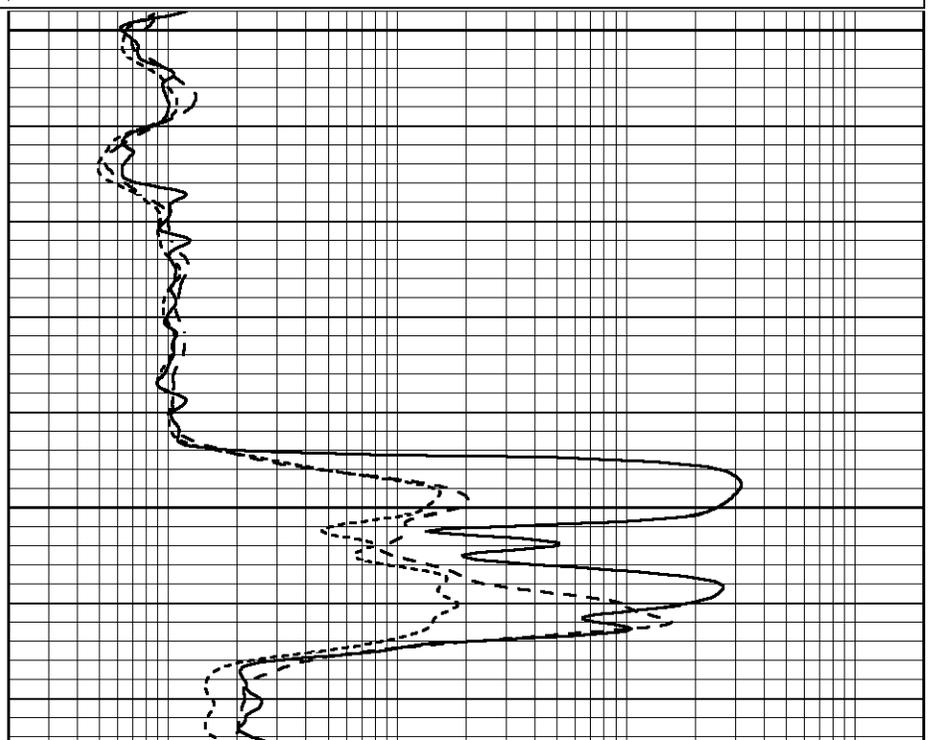
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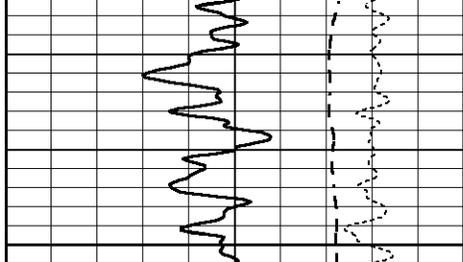
0 GAMMA RAY (GAPI) 150  
 -100 SP (mV) 100  
 -250 Rxo/Rt 50

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



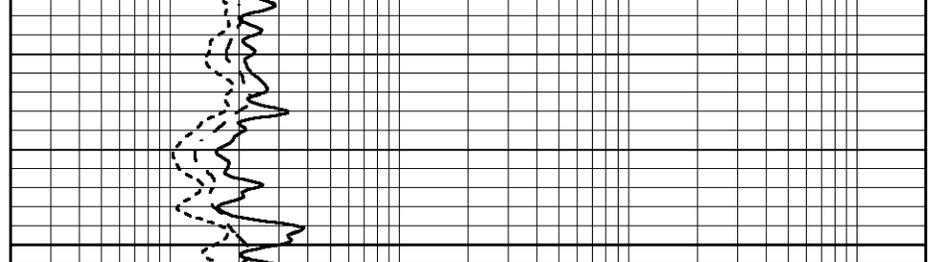
550  
 600



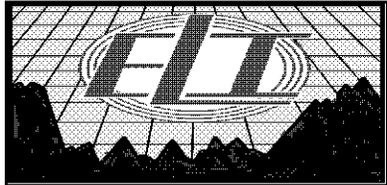


650

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

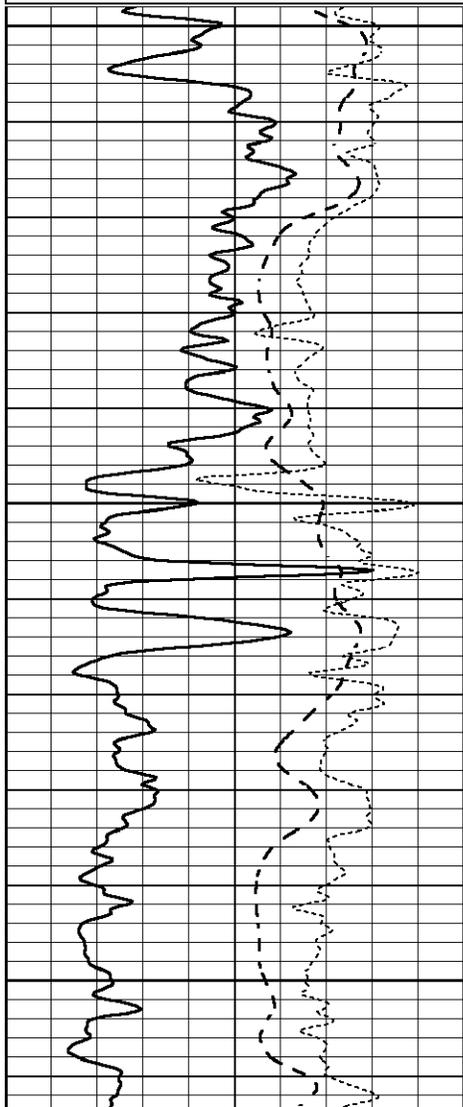


# MAIN SECTION

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 Dataset Pathname pass3.1  
 Presentation Format \_dil  
 Dataset Creation Sat Jul 01 06:29:31 2017  
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0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50

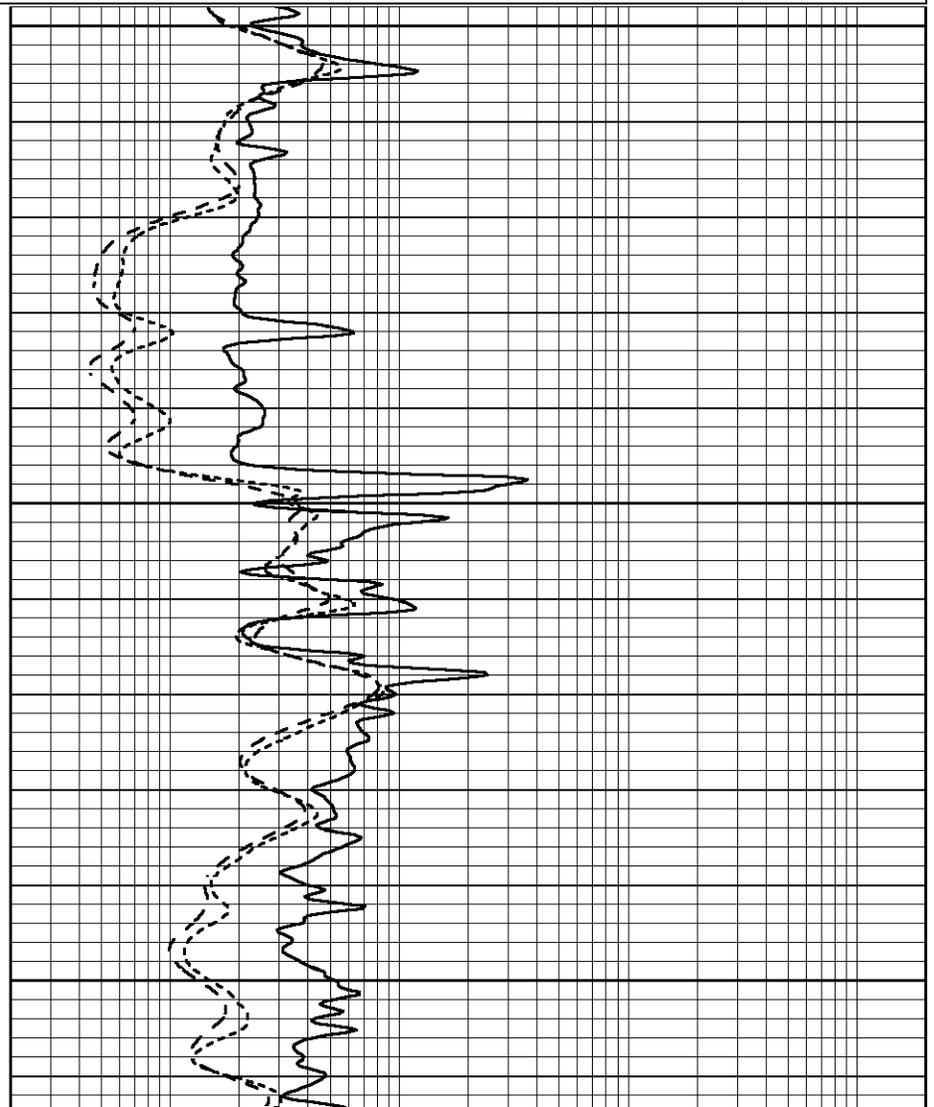
0.2	SHALLOW GUARD (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000

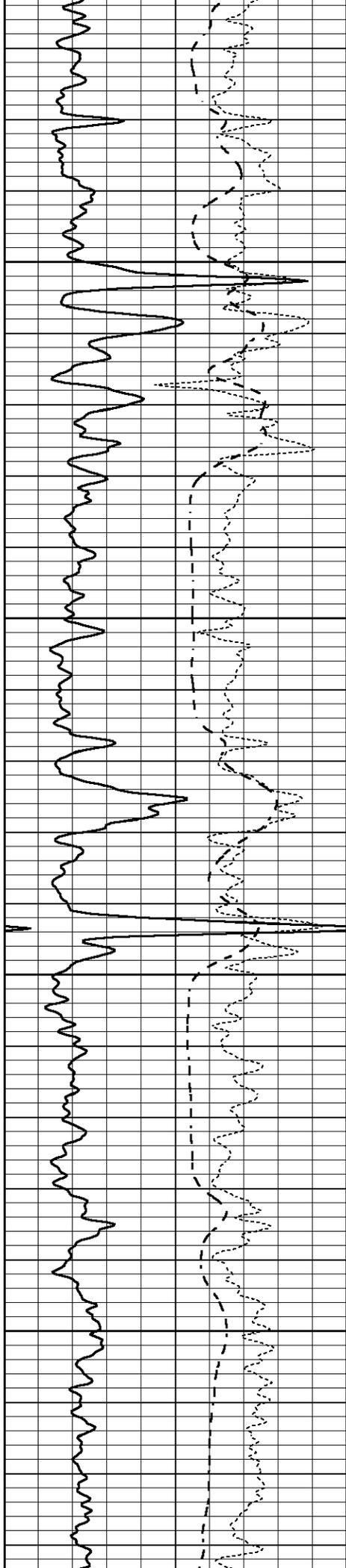


2800

2850

2900



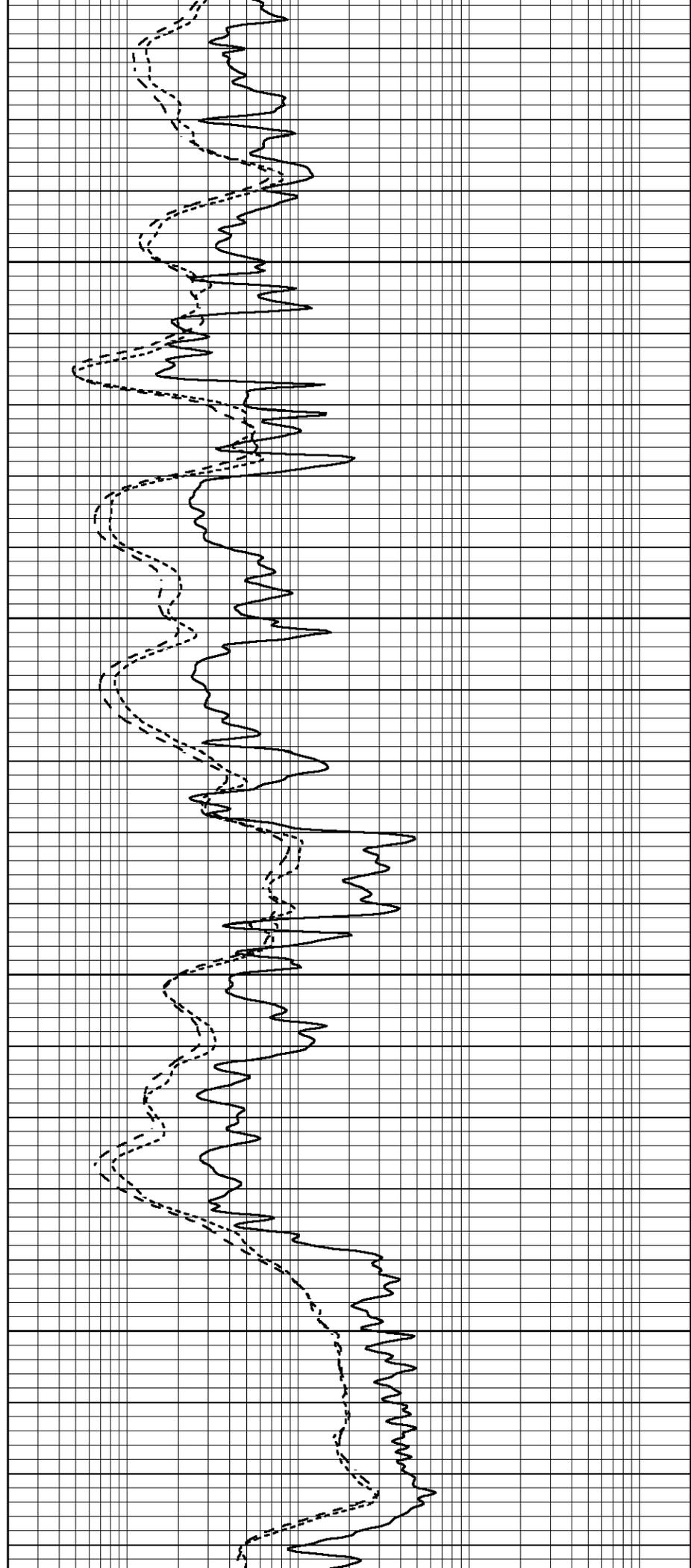


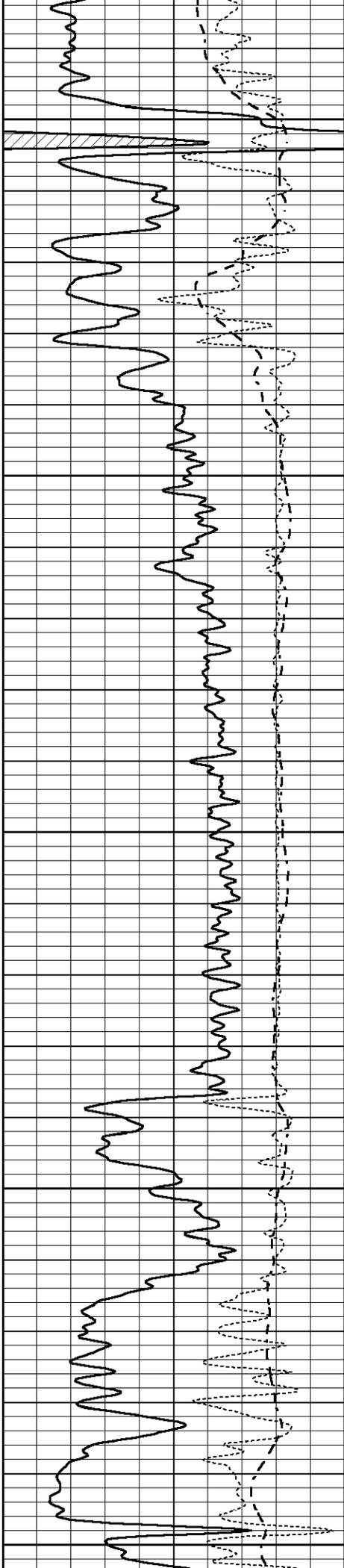
2950

3000

3050

3100





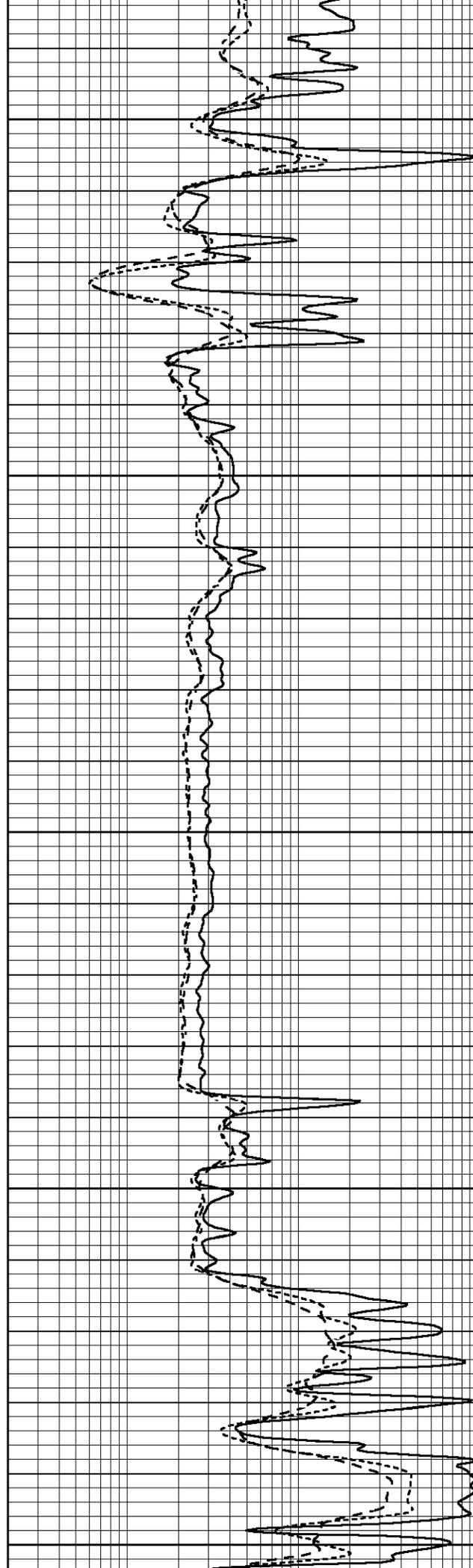
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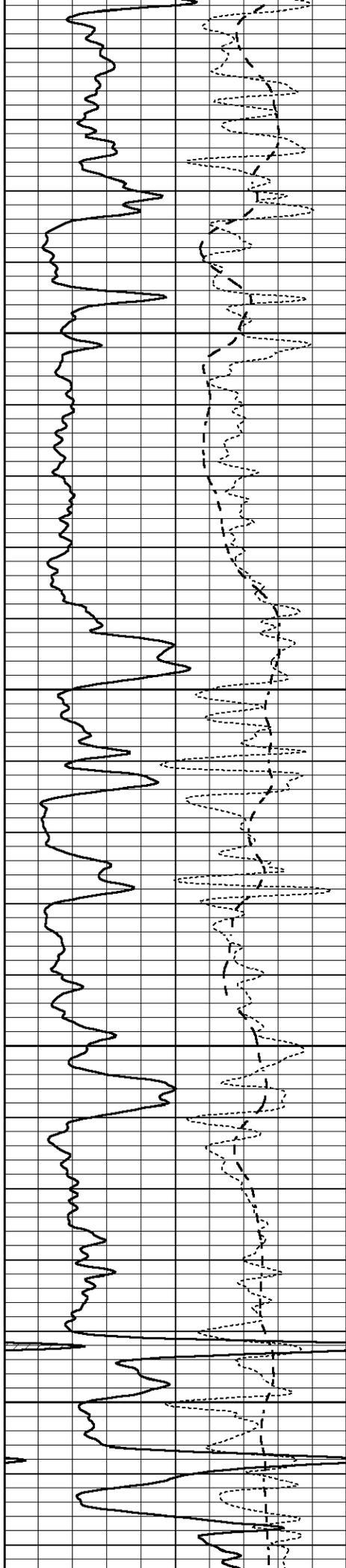
3200

3250

3300

3350



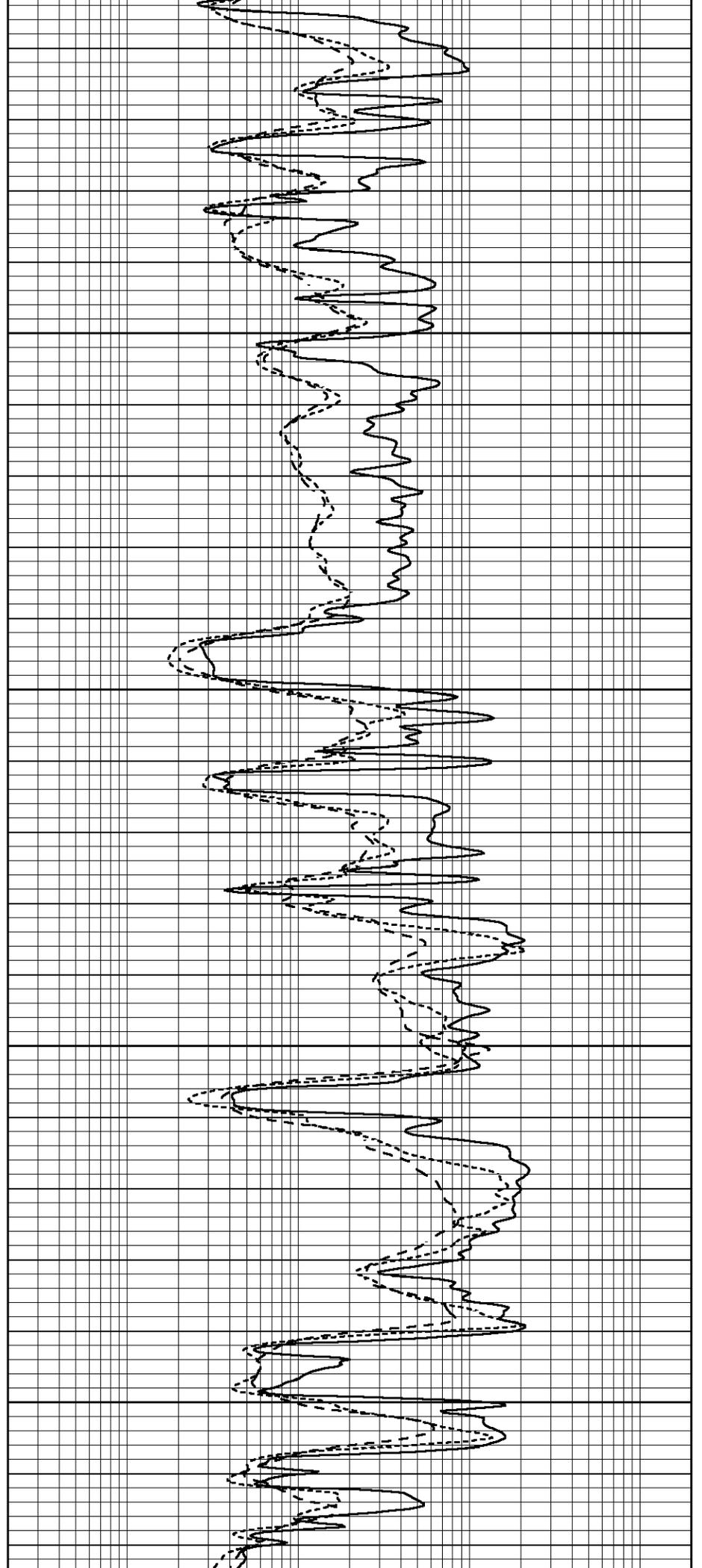


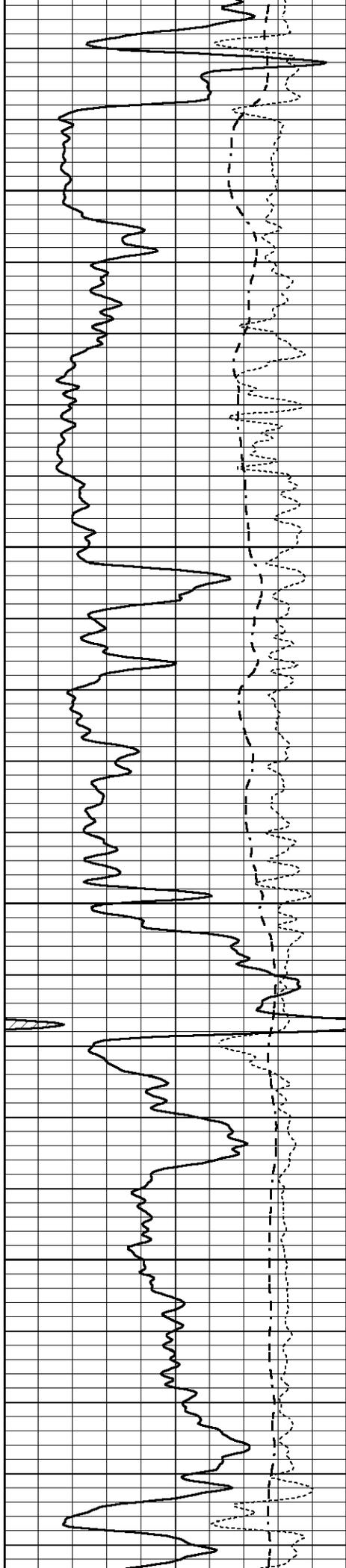
3400

3450

3500

3550



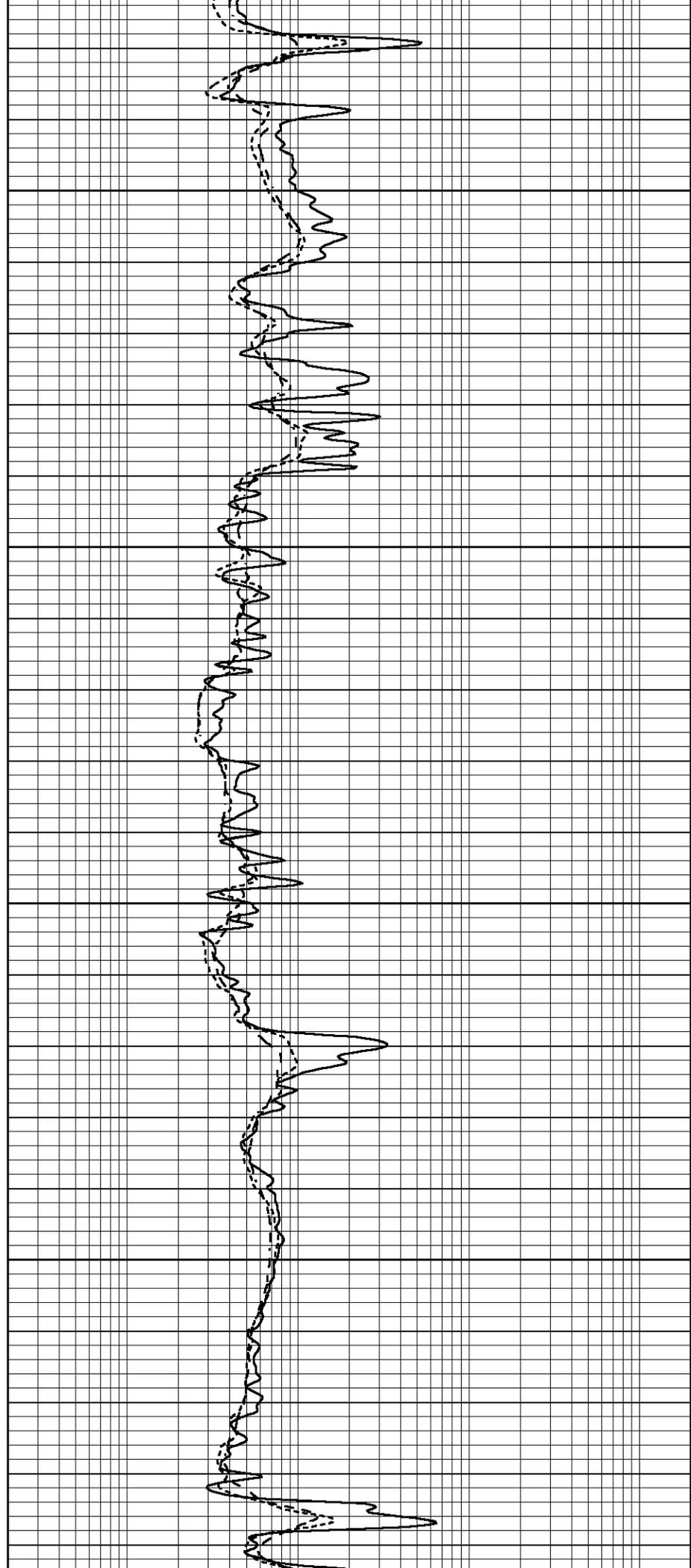


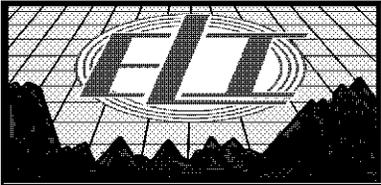
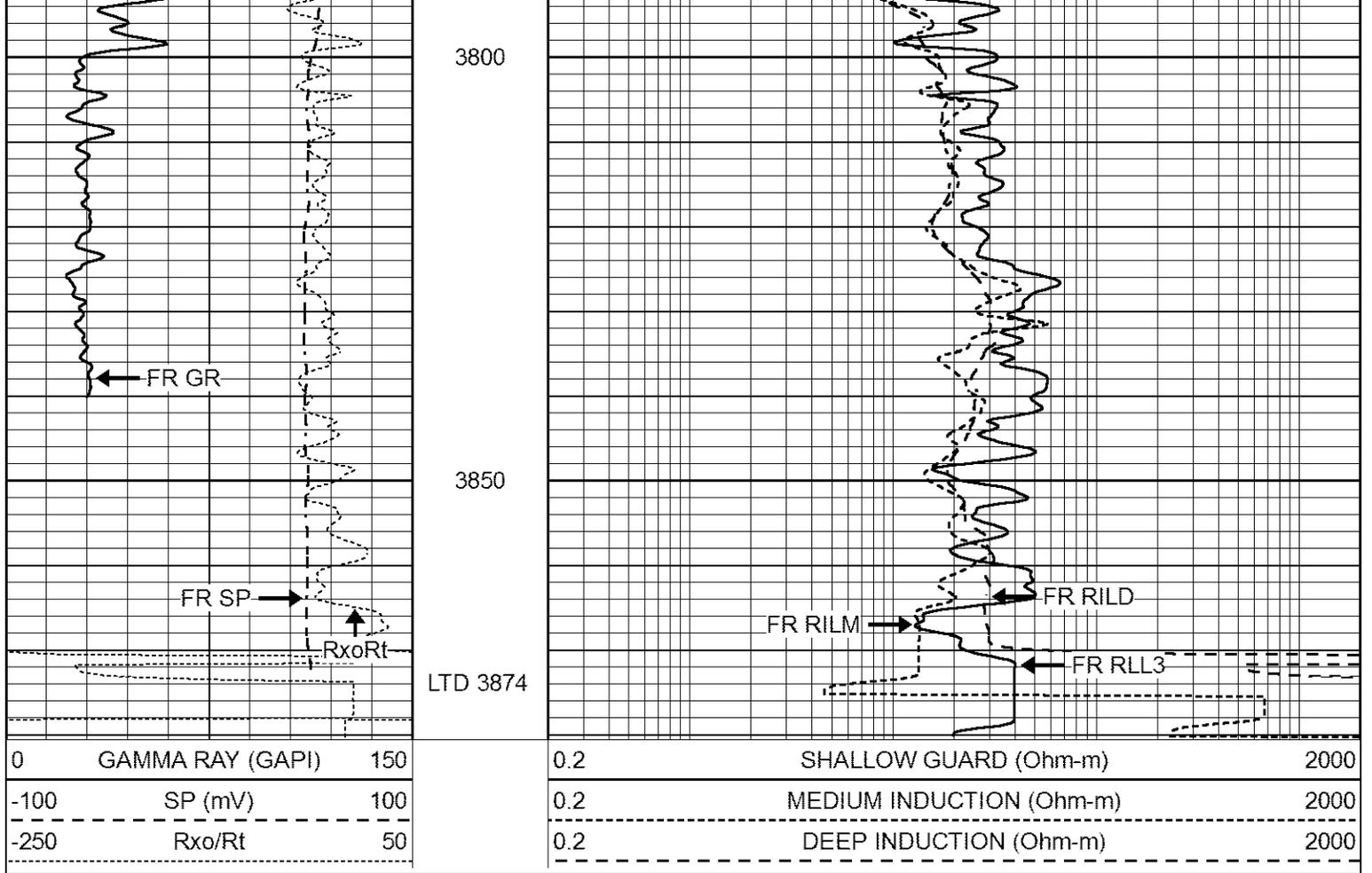
3600

3650

3700

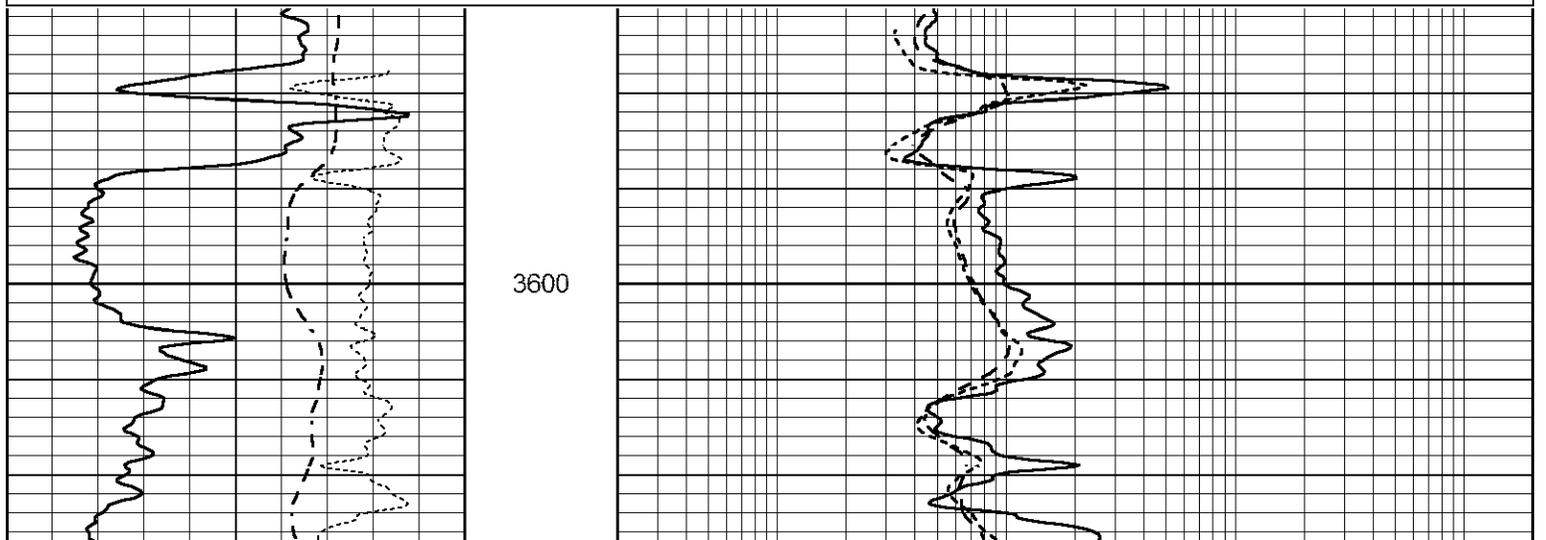
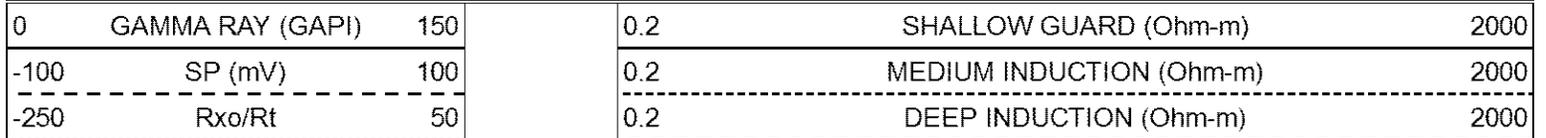
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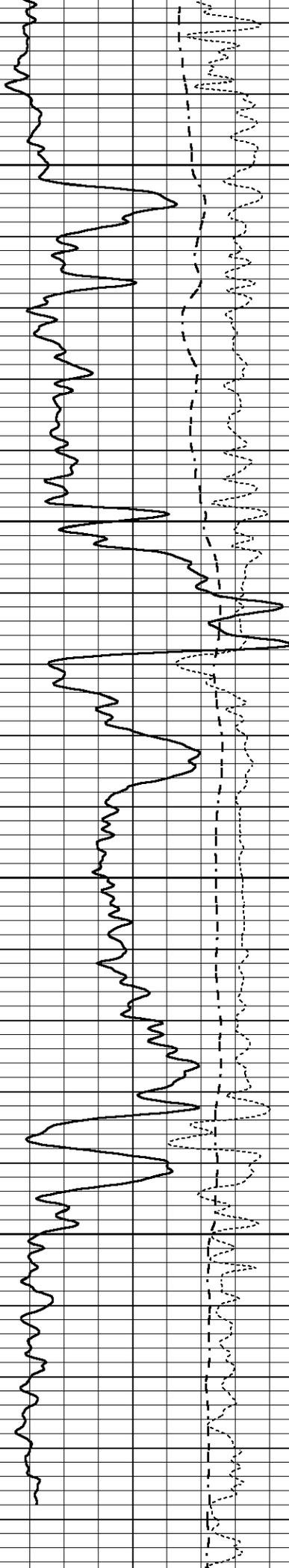




# REPEAT SECTION

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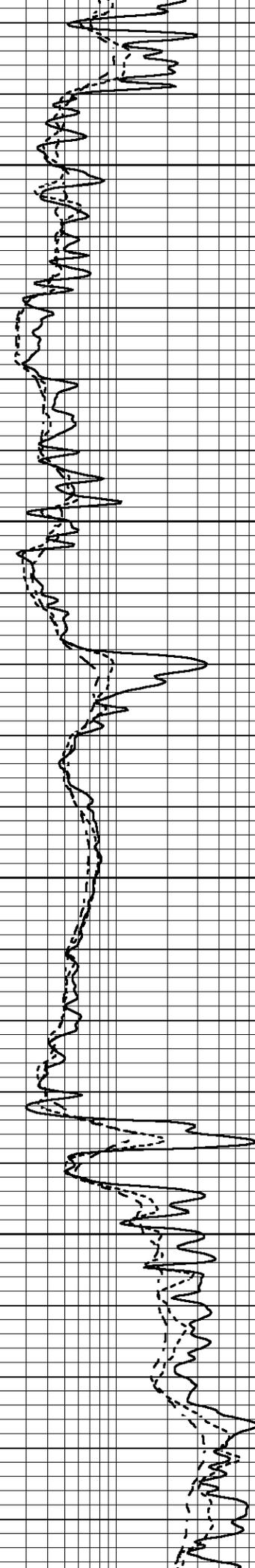


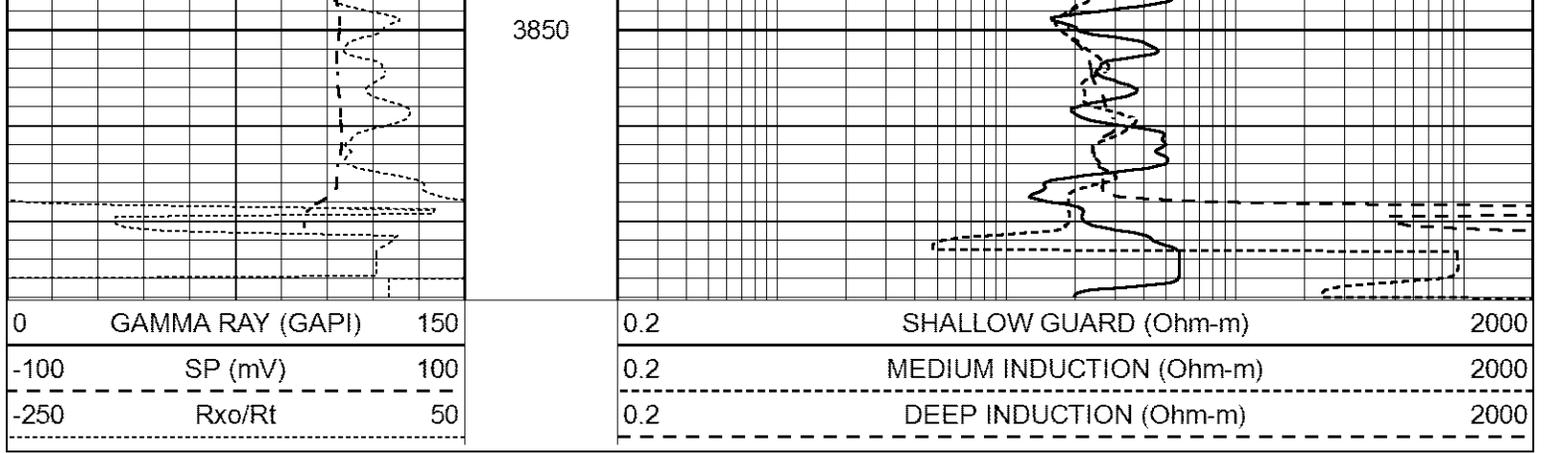
3650

3700

3750

3800





Calibration Report

Database File 1566pe8.db  
 Dataset Pathname pass2.1  
 Dataset Creation Sat Jul 01 06:15:22 2017

Dual Induction Calibration Report

Serial-Model: FW1410-56-Probe  
 Surface Cal Performed: Fri Mar 13 14:03:50 2015  
 Downhole Cal Performed: Fri Mar 13 15:37:29 2015  
 After Survey Verification Performed: Fri Mar 13 15:37:29 2015

Surface Calibration

Loop:	Readings			References			Results	
	Air	Loop		Air	Loop		m	b
Deep	0.008	0.765	V	1.000	400.000	mmho/m	527.061	-3.201
Medium	-0.056	0.761	V	1.000	464.000	mmho/m	567.187	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		1500.000	Ohm-m		
		0.001	V		20.000	Ohm-m		
		-7.085	V		6000.000	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: 140704  
 Model: V4\_10P  
 Source Number: 74GBq-19

	<u>Background</u>	<u>Aluminum</u>	<u>Magnesium</u>		
Window 1	613.01	6027.40	27508.60	cps	
Window 2	48.21	1424.77	7132.66	cps	
Window 4	266.48	1373.19	5767.15	cps	
Window 5	622.07	10090.30	18937.90	cps	
Window 6	49.07	1682.84	3271.18	cps	
Window 8	298.04	3248.38	5980.58	cps	
Bulk Density	-	2.6020	1.6830	g/cc	
Pe	-	3.0000	2.5070	b/e	
LS Alpha:	: -1.8451	SS Alpha:	: -0.7542	LS CPE:	: 1.0882
LS Beta:	: 138648.8473	SS Beta:	: 21960.9250	SS CPE:	: 1.5181

## 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: Wed Feb 11 18:53:41 2015

Results		References (in)		Gain	Offset
<u>Low</u>	<u>High</u>	<u>Low</u>	<u>High</u>		
1107.5	7124.1	8.0	15.0	0.0	6.5

## Before Survey Caliper Verification

Performed:

	<u>Reference</u>	<u>Reading</u>
Caliper (in)	_____	_____

## After Survey Caliper Verification

Performed:

	<u>Reference</u>	<u>Reading</u>
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:	070558	
Tool Model:	Probe1	
Performed:	Mon May 22 14:24:46 2017	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	0.3000	GAPI/cps