



DUAL INDUCTION LOG

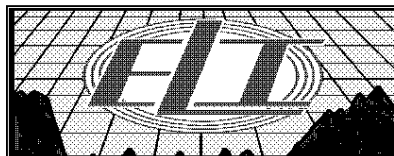
Company	ETERNITY EXPLORATION, LLC		
Well	LANDENBURGER NO.1		
Field	WILDCAT		
County	THOMAS	State	KANSAS
Location:	API # : 15-193-20980-00-00		Other Services CNL/CDL MEL/SONIC
Permanent Datum	GROUND LEVEL	Elevation	3027
Log Measured From	KELLY BUSHING	5' A.G.L.	
Drilling Measured From	KELLY BUSHING		
SEC 13 TWP 9S RGE 32W			
330' FSL & 330' FEL			
Date	12/10/16		
Run Number	ONE		
Depth Driller	4730		
Depth Logger	4731		
Bottom Logged Interval	4729		
Top Log Interval	0		
Casing Driller	8 5/8"@249'		
Casing Logger	246'		
Bit Size	7 7/8"		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 5,000 PPM	
Density / Viscosity	9.3/80		
pH / Fluid Loss	9.4/8.0		
Source of Sample	FLOWLINE		
Rim @ Meas. Temp	1.0@80		
Rmf @ Meas. Temp	.75@80		
Rmc @ Meas. Temp	1.2@80		
Source of Rmf / Rmc	MEASUREMENT		
Rim @ BHT	.65@123		
Time Circulation Stopped	2 HOURS		
Time Logger on Bottom			
Maximum Recorded Temperature	123 DEG/F		
Equipment Number	922339		
Location	HAYS, KANSAS		
Recorded By	JUSTIN HENRICKSON		
Witnessed By	KIM SHOEMAKER	CARLO UGOLINI	

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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, KANSAS (785) 628-6395
DIRECTIONS
INTERSTATE EXIT #70
5 NORTH TO J ROAD, 2 EAST, NORTHWEST INTO



MAIN PASS

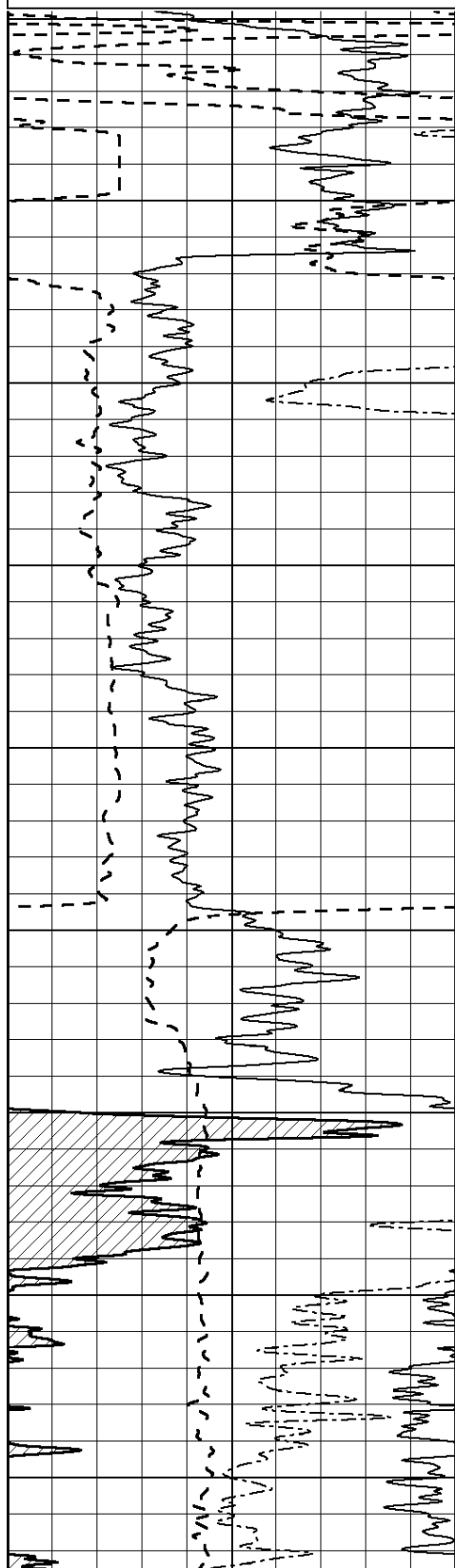
Database File: 1333dildn.db
Dataset Pathname: pass3.3
Presentation Format: _dil2
Dataset Creation: Sat Dec 10 04:06:07 2016 by Calc SOC 120430
Charted by: Depth in Feet scaled 1:600

0	Gamma Ray (GAPI)	150
-100	SP (mV)	100
0	RWA (Ohm-m)	1

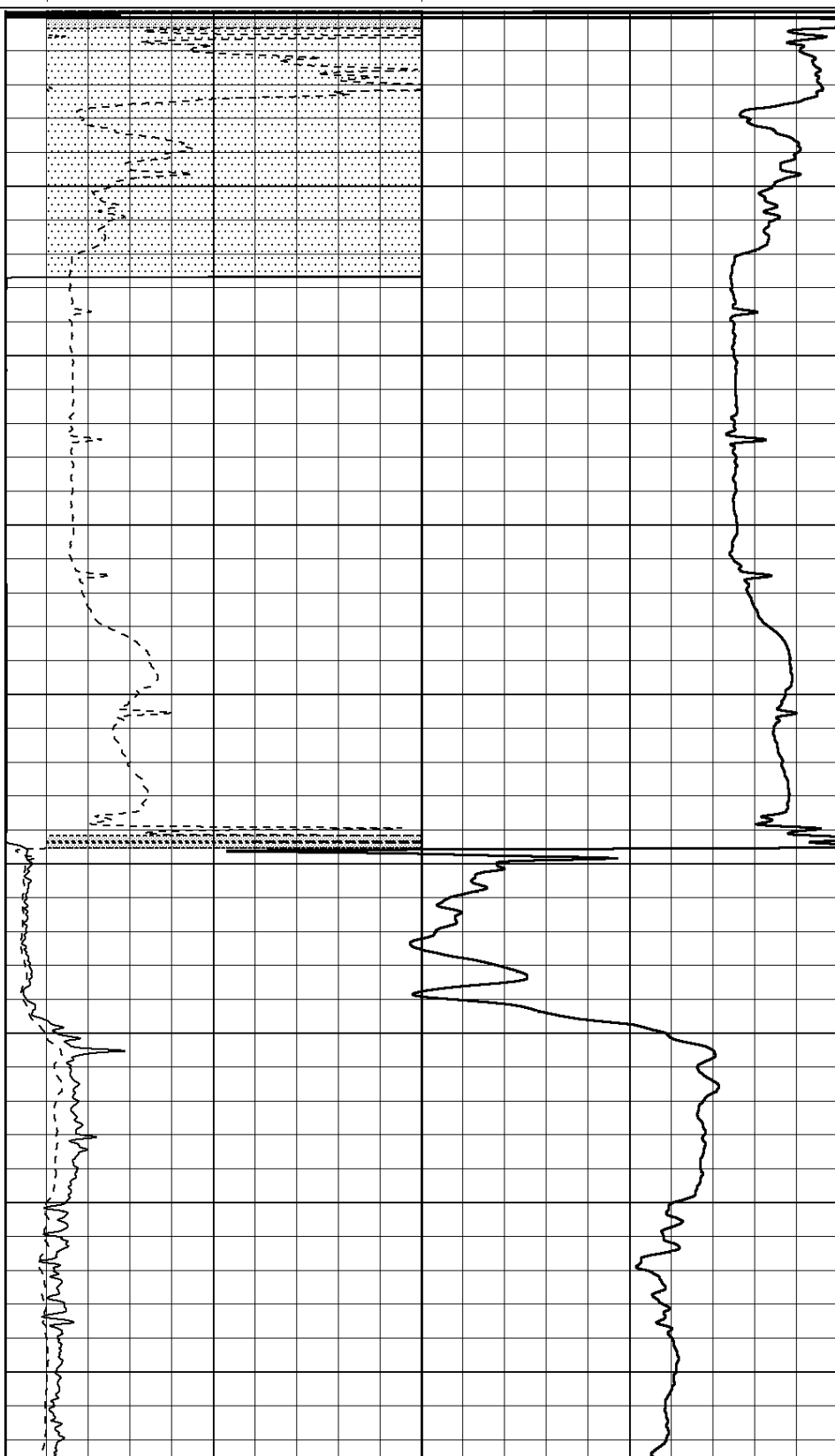
0	RLL3 (Ohm-m)	50
0	RILD (Ohm-m)	50

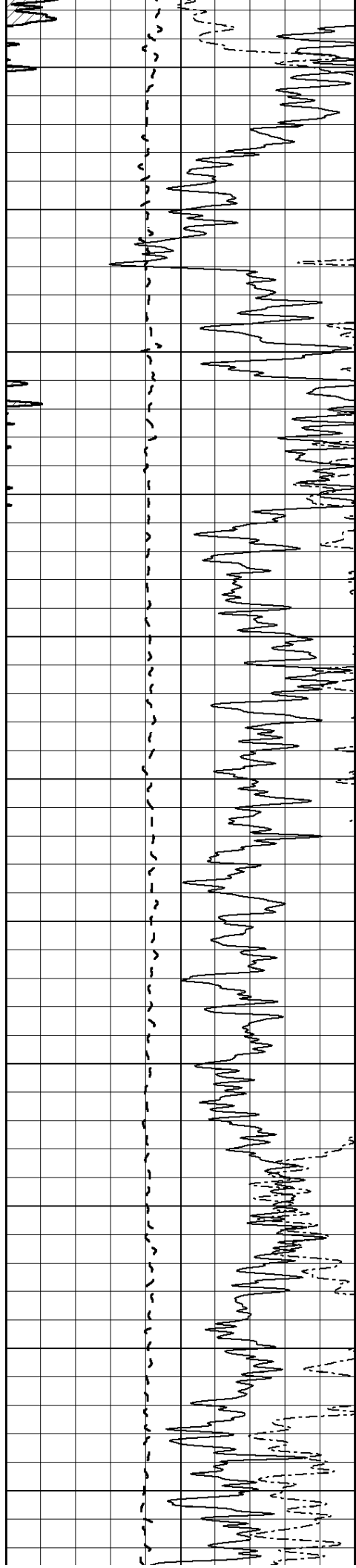
1000	CILD (mmho/m)	0
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50	RILD X10 (Ohm-m)	500
50	RLL3 X10 (Ohm-m)	500



0
50
100
150
200
250
300
350
400





450

500

550

600

650

700

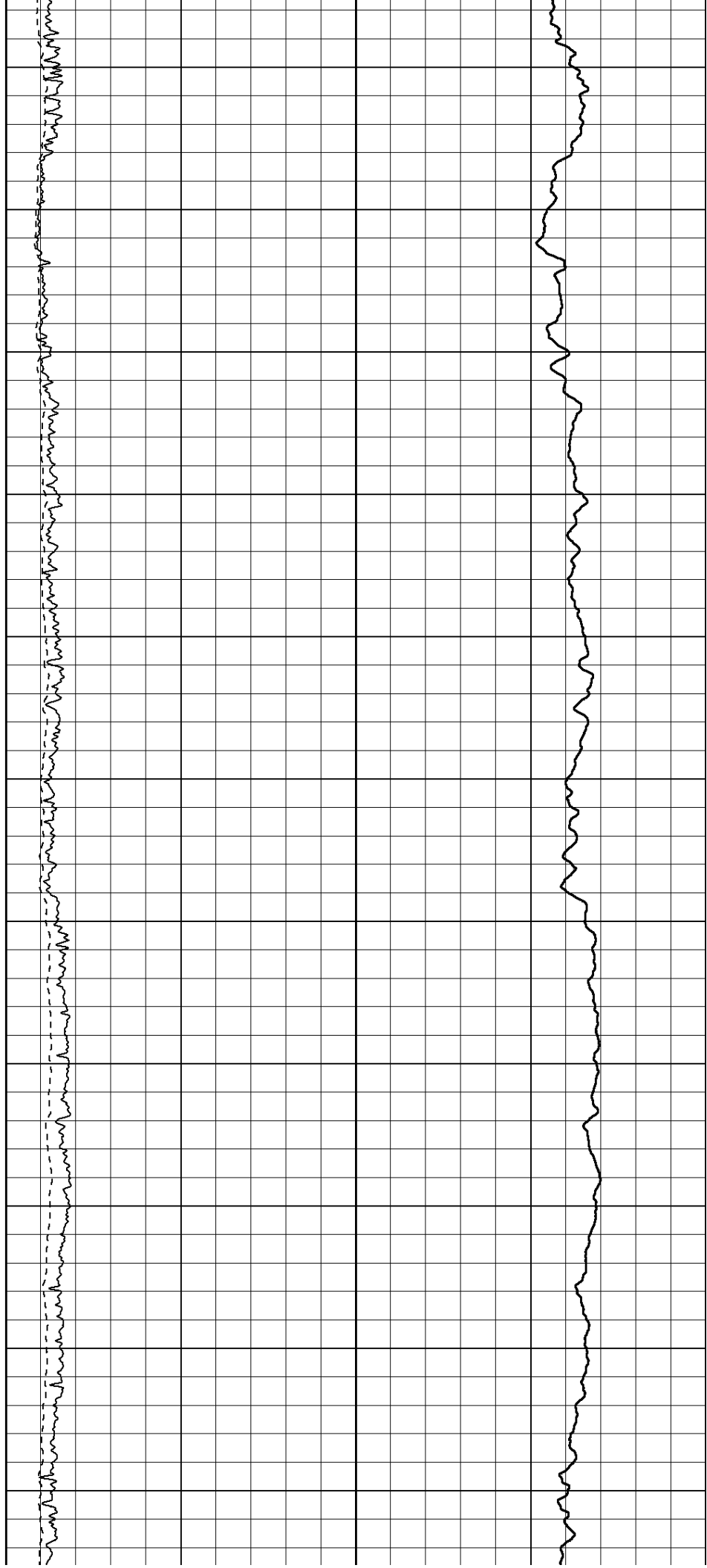
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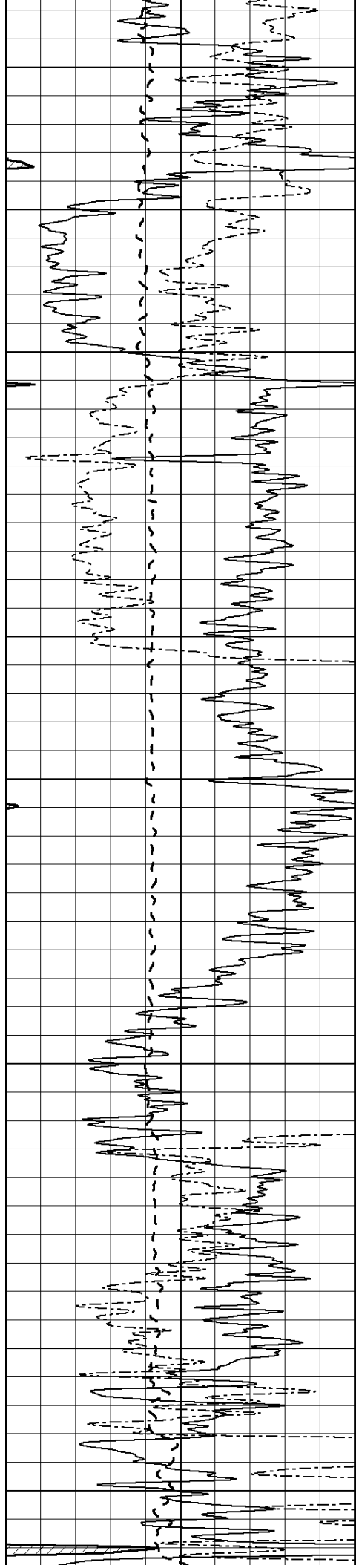
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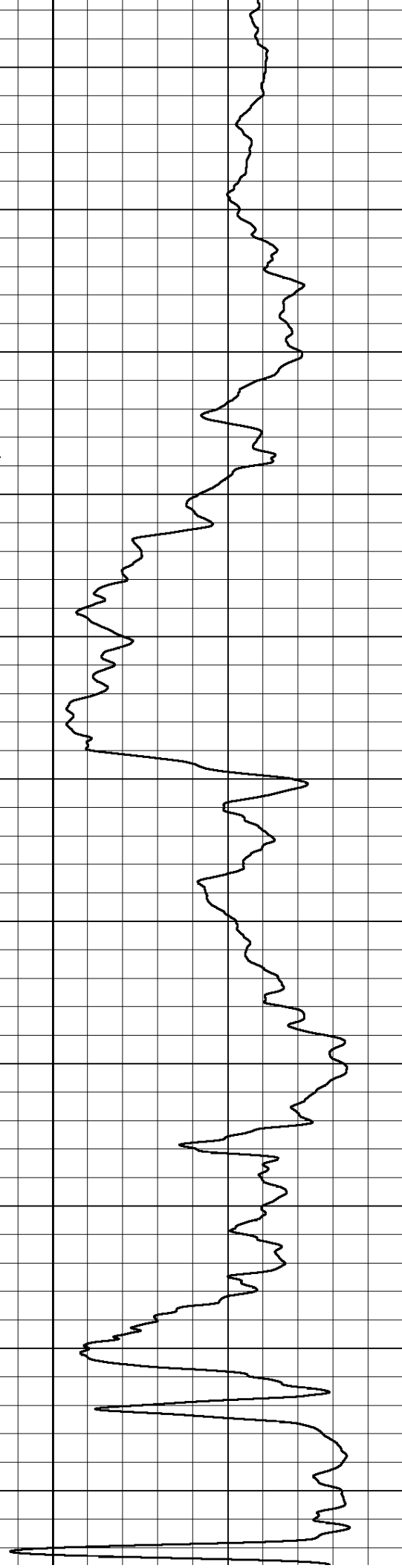
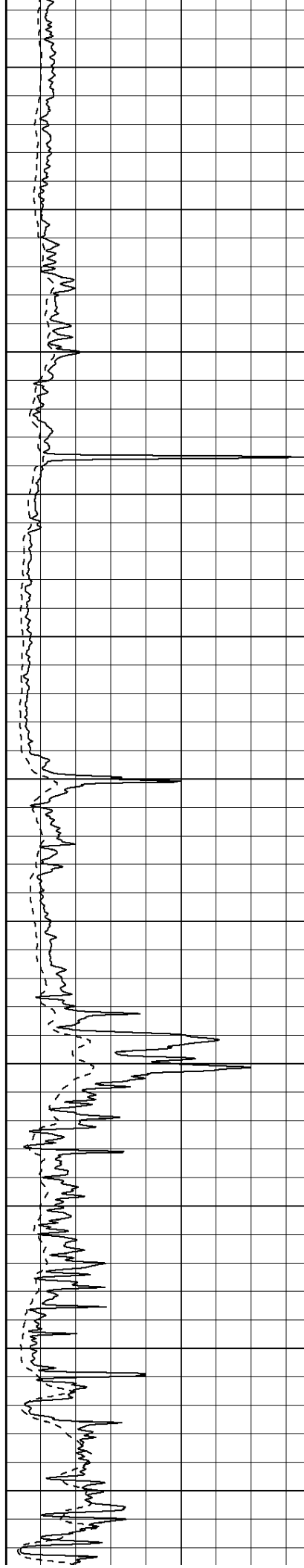
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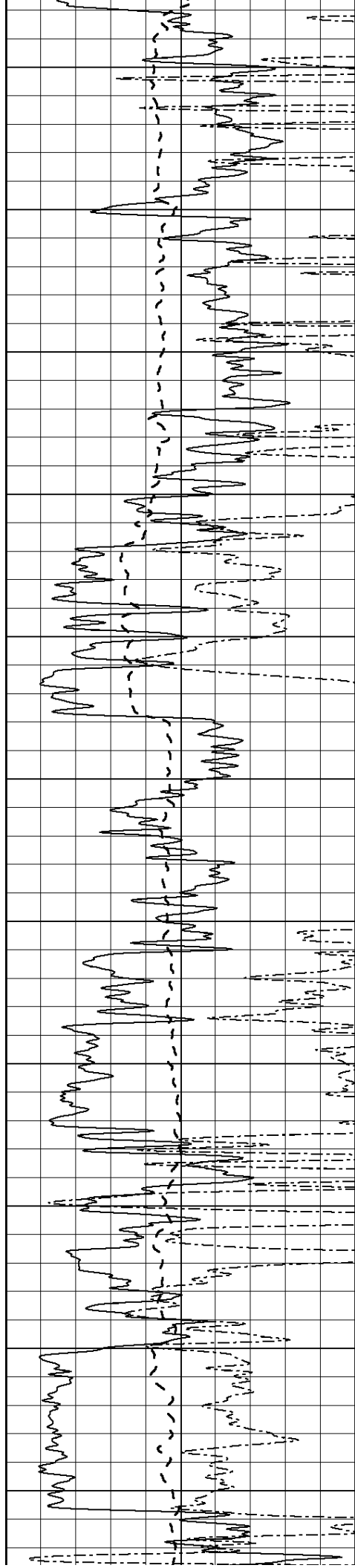
950





1000
1050
1100
1150
1200
1250
1300
1350
1400
1450
1500





1550

1600

1650

1700

1750

1800

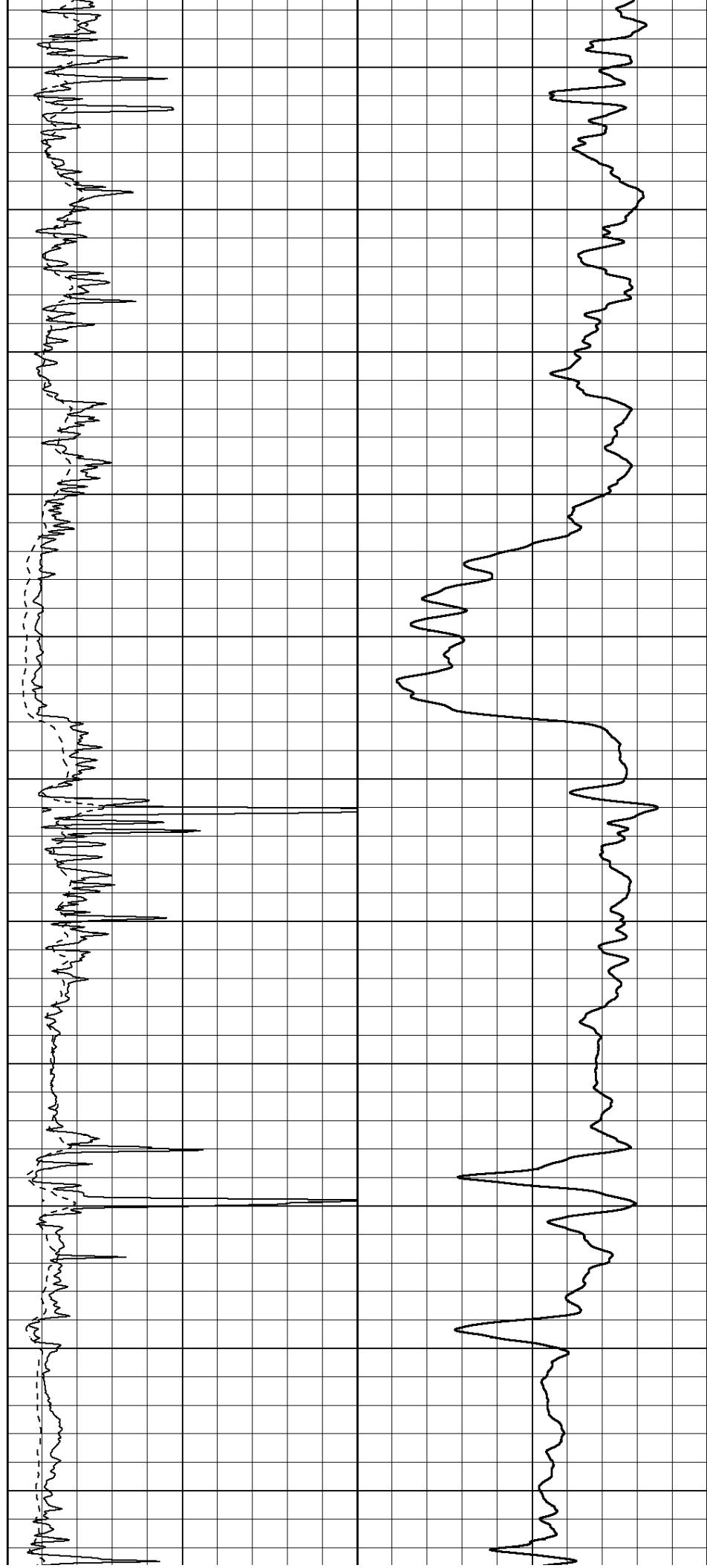
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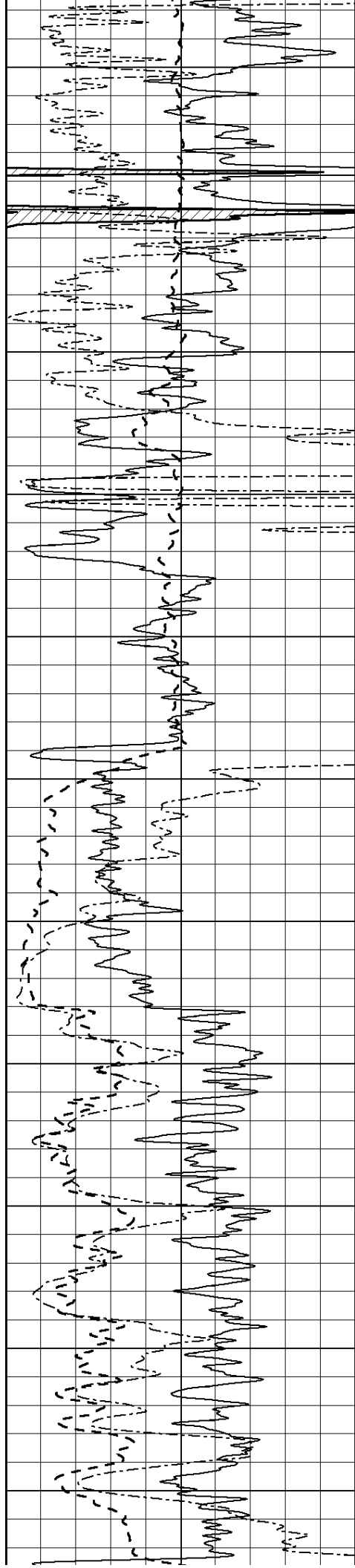
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1950

2000

2050





2100

2150

2200

2250

2300

2350

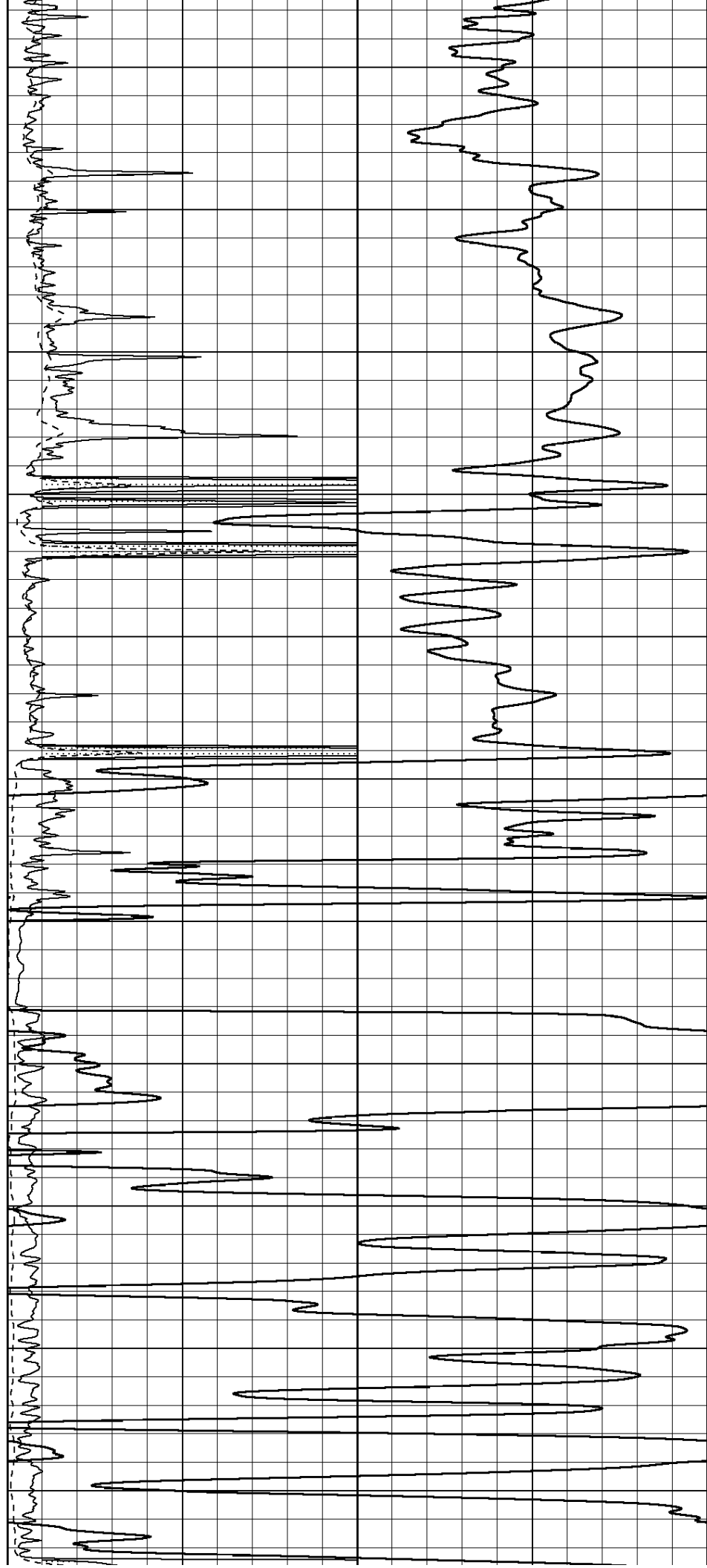
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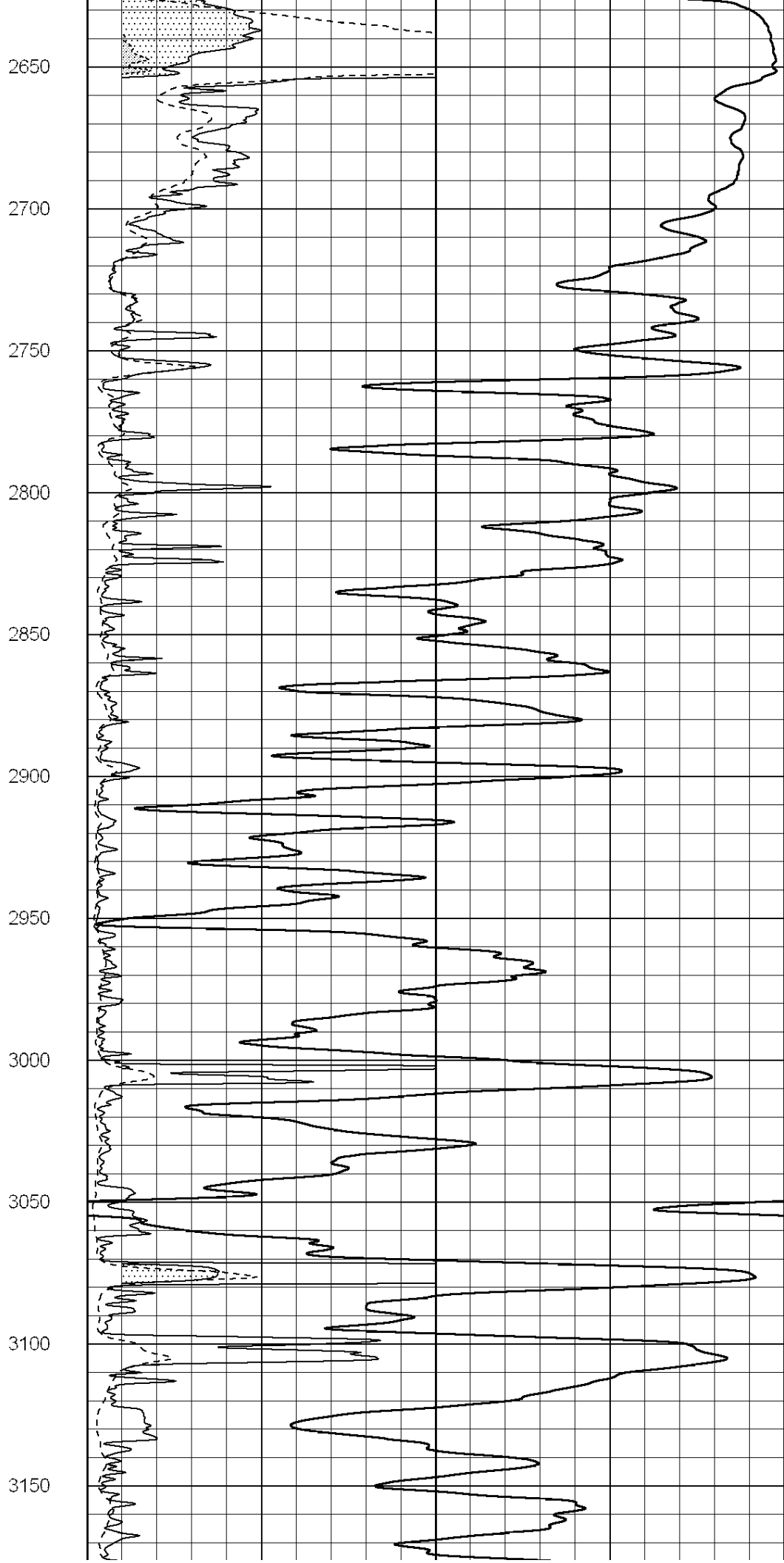
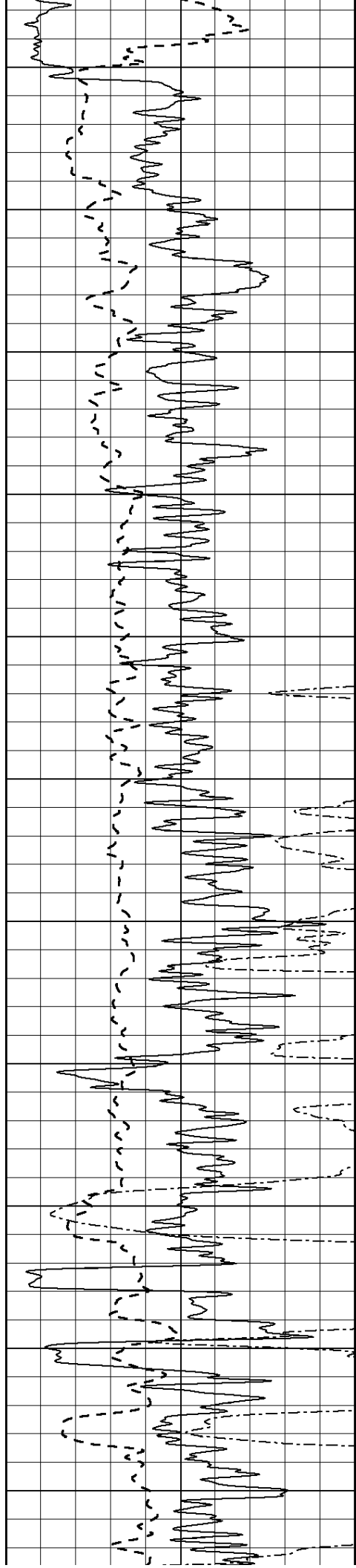
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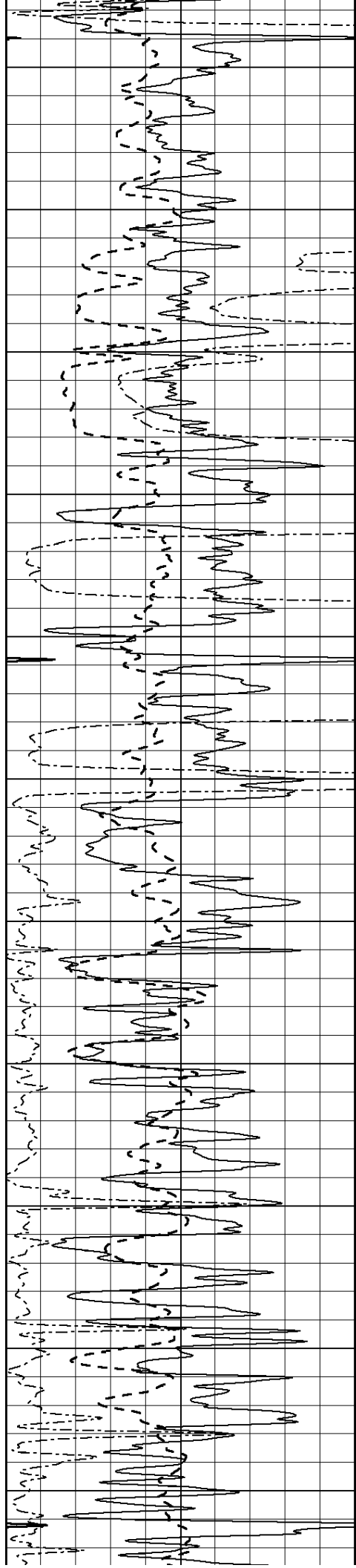
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2550

2600







3200

3250

3300

3350

3400

3450

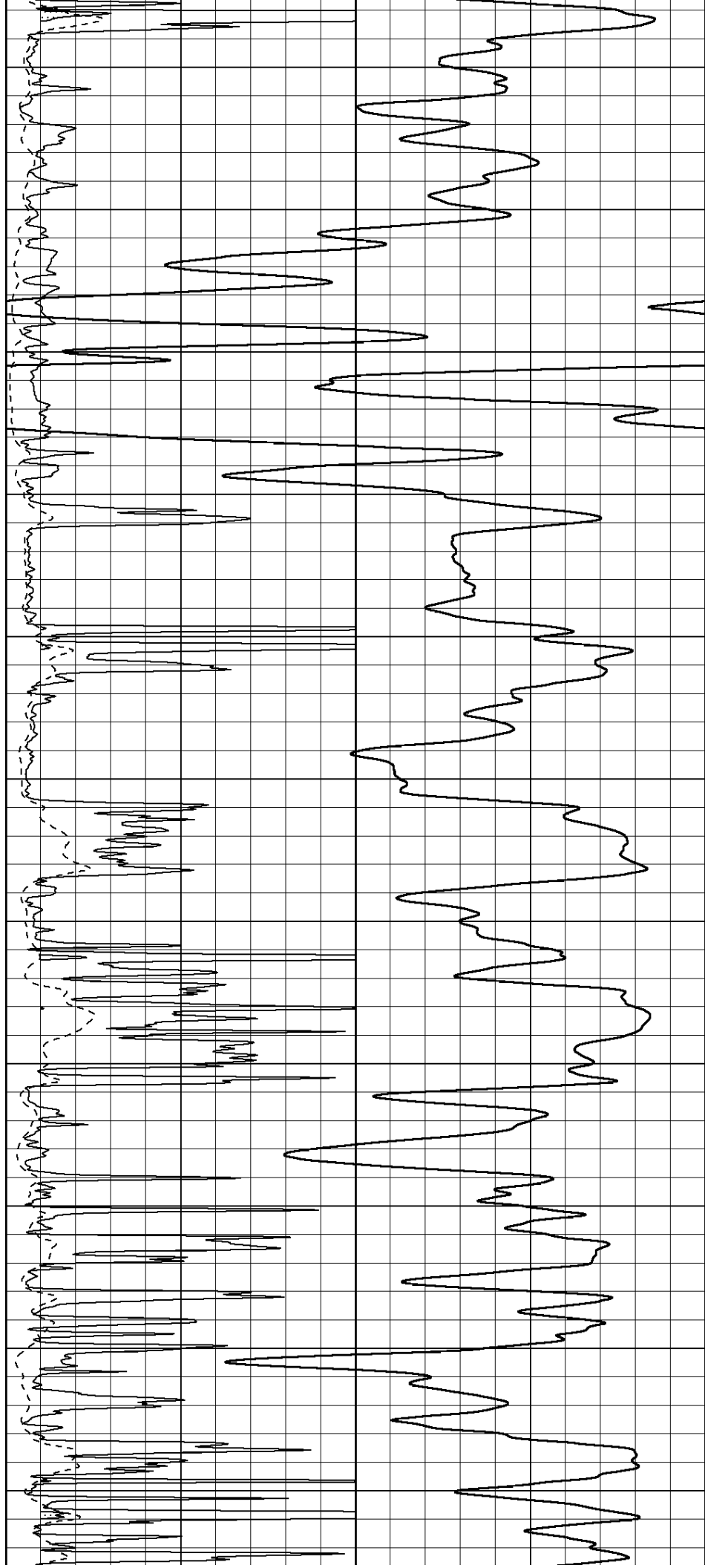
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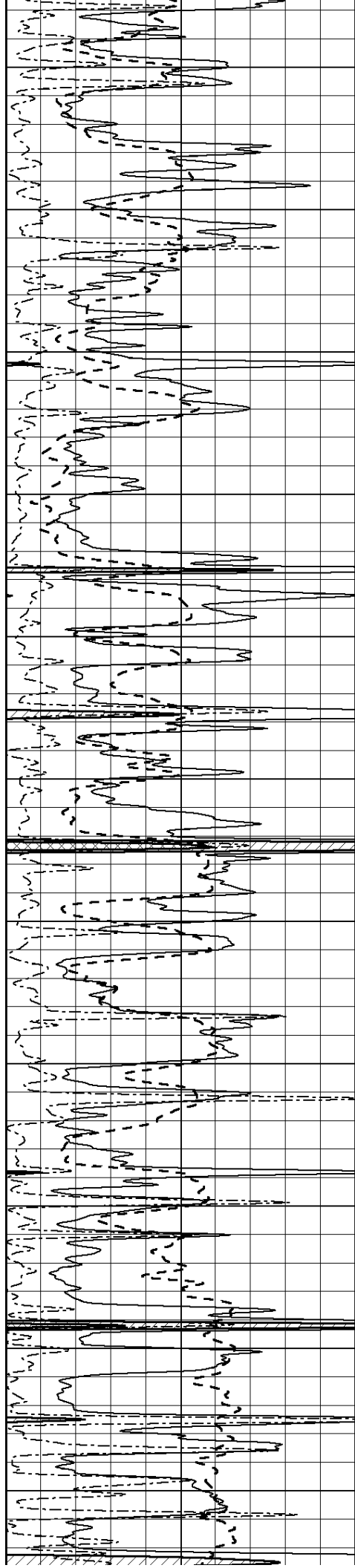
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3600

3650

3700





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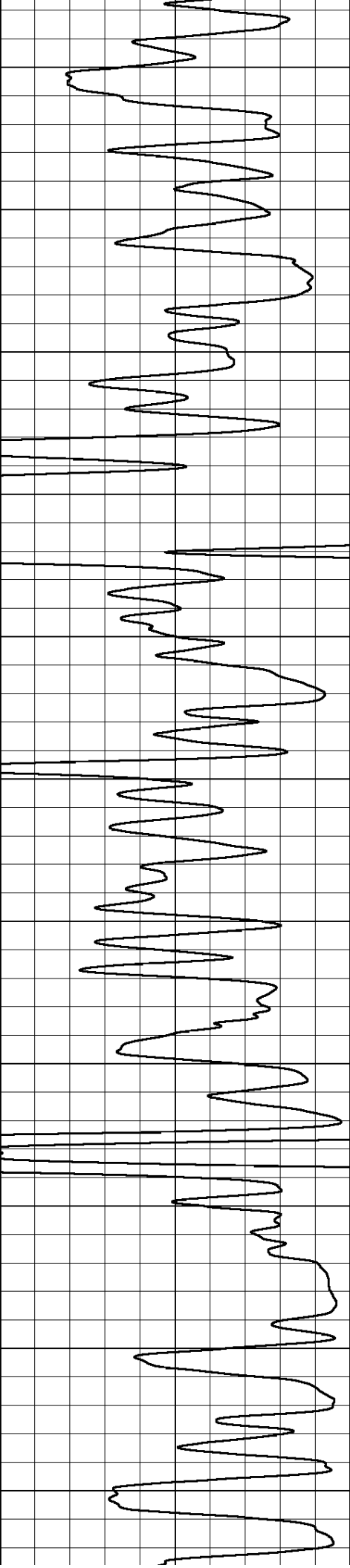
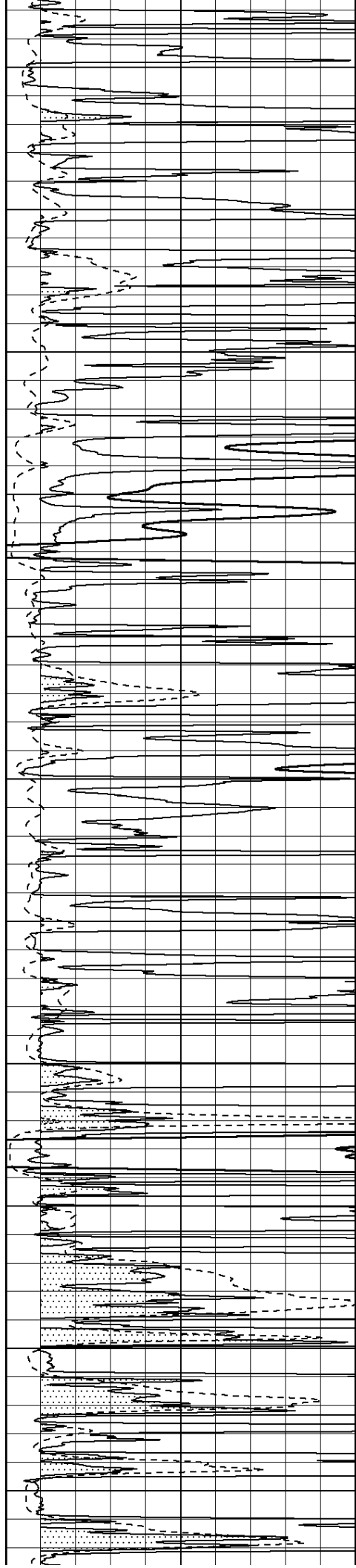
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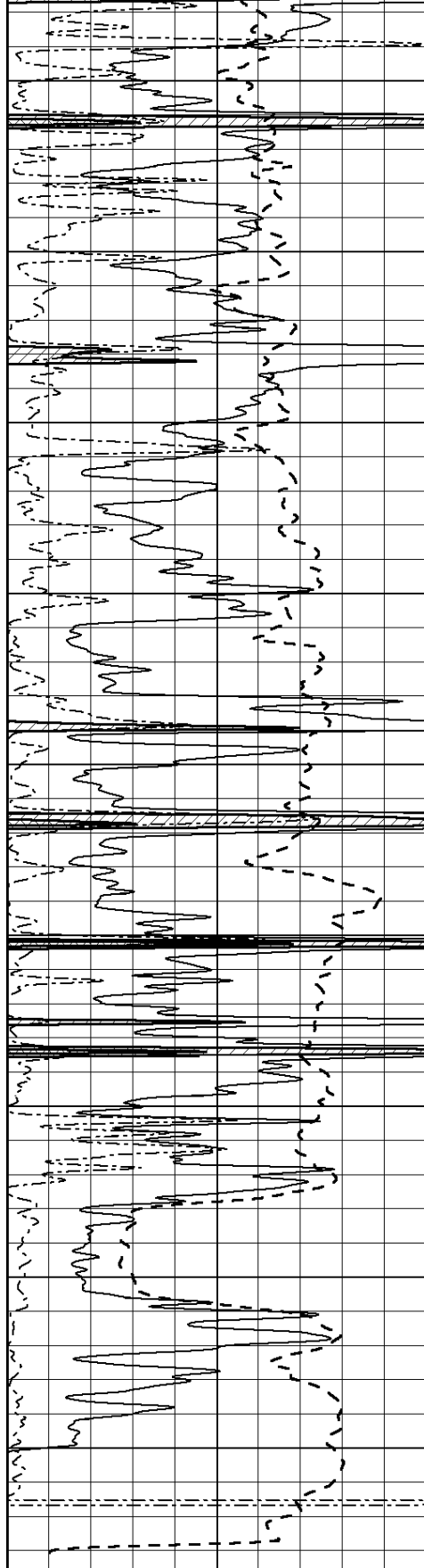
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4150

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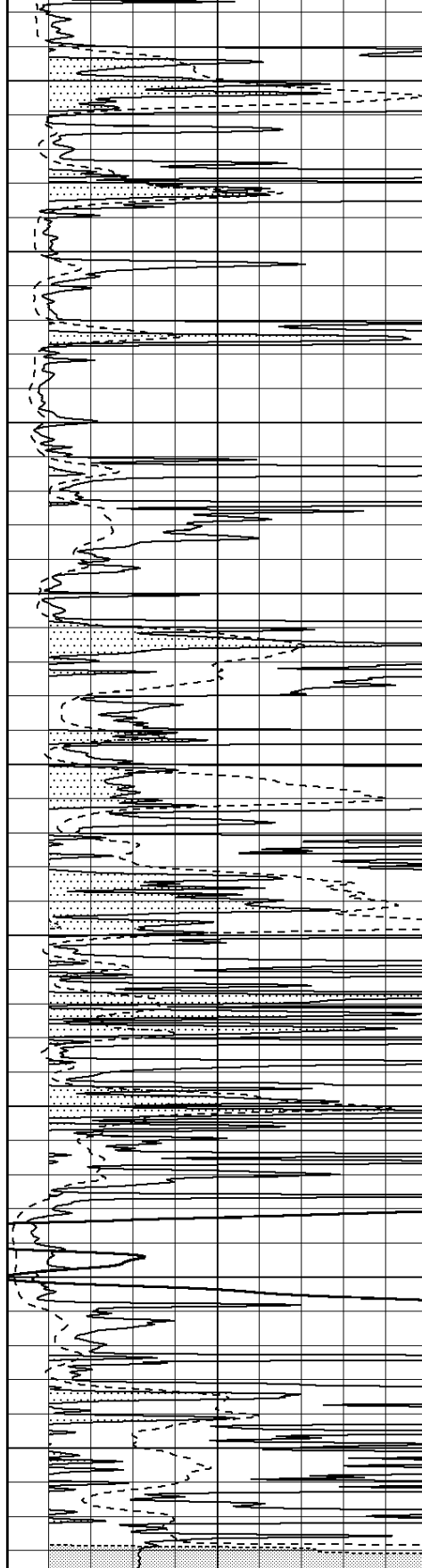
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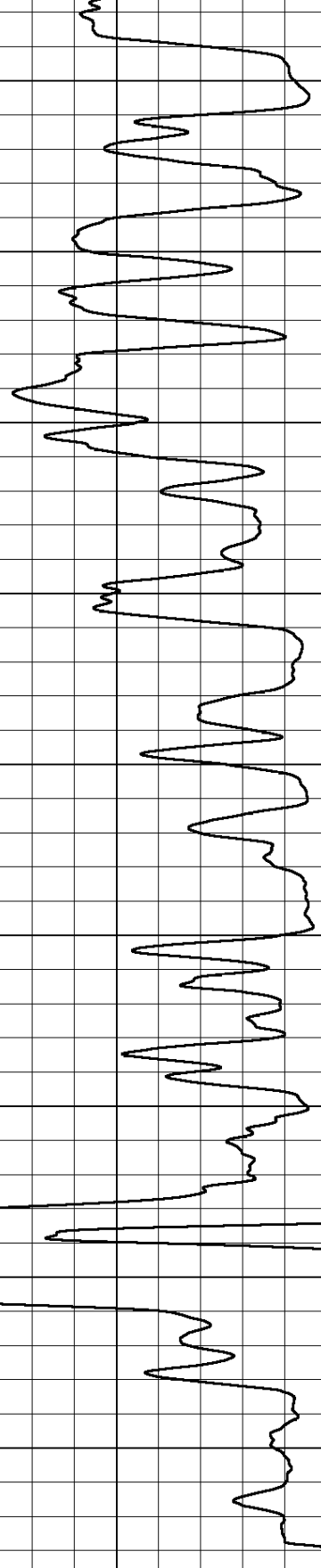
4300
4350
4400
4450
4500
4550
4600
4650
4700

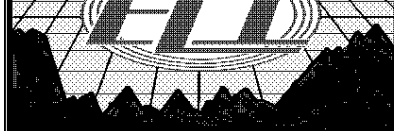
0 Gamma Ray (GAPI) 150
-100 SP (mV) 100
0 RWA (Ohm-m) 1



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

50 RILD X10 (Ohm-m) 500
50 RLL3 X10 (Ohm-m) 500



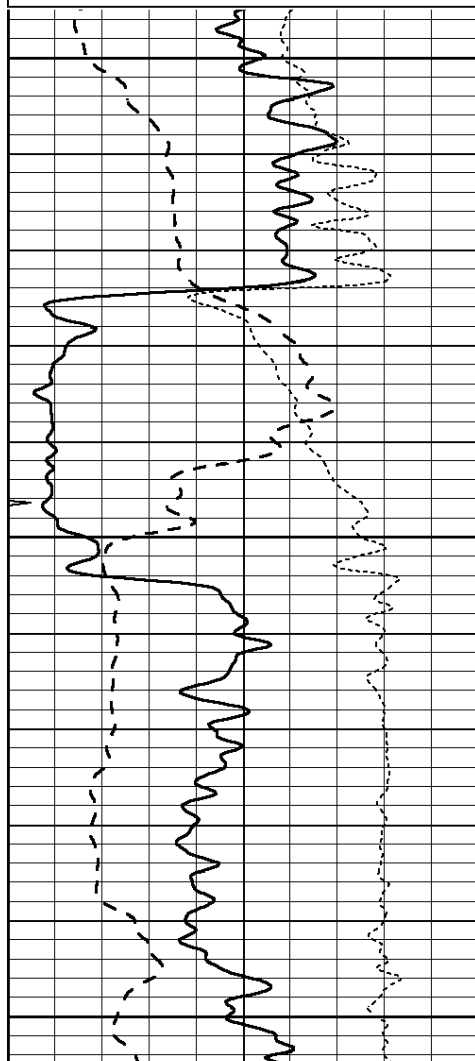


ANHYDRITE

Database File: 1333dildn.db
Dataset Pathname: pass3.2
Presentation Format: _dil
Dataset Creation: Sat Dec 10 03:41:11 2016 by Calc SOC 120430
Charted by: Depth in Feet scaled 1:240

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

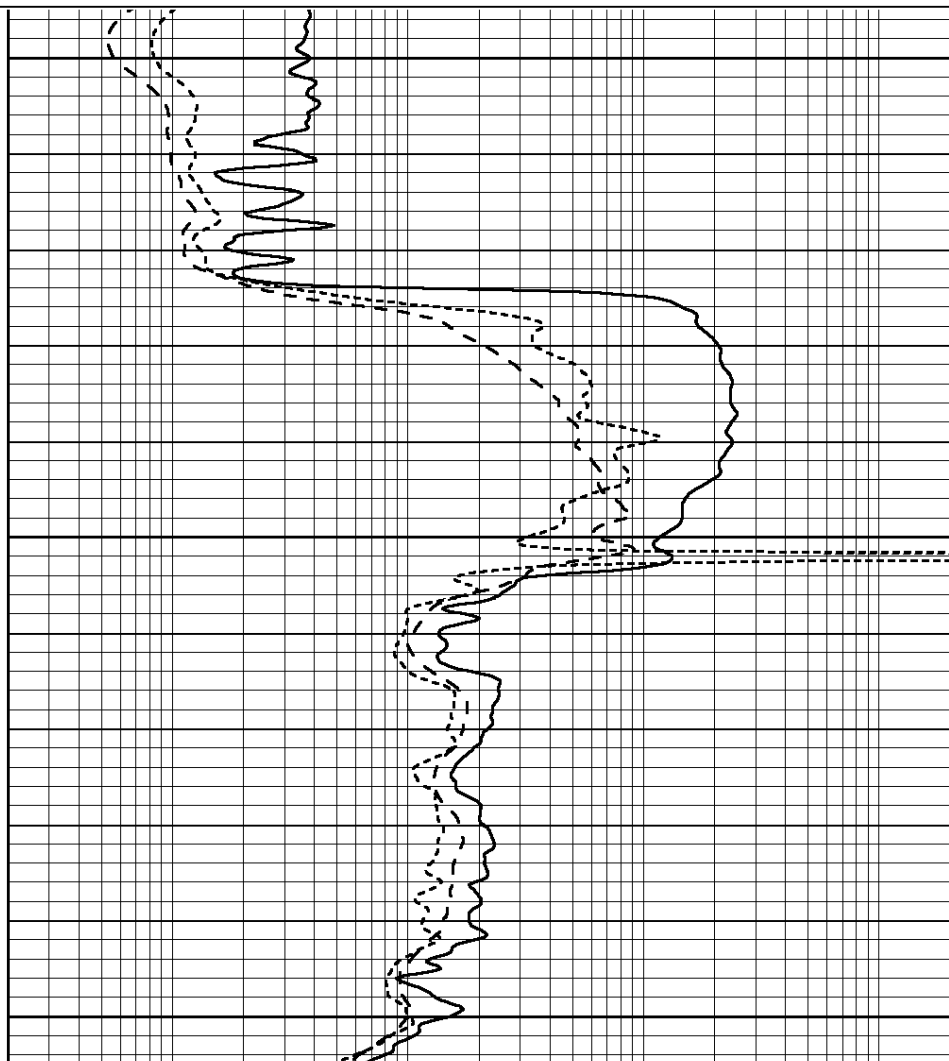
0.2	SHALLOW GUARD (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000



2600

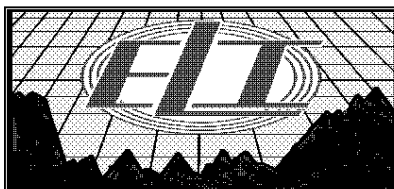
2650

2700



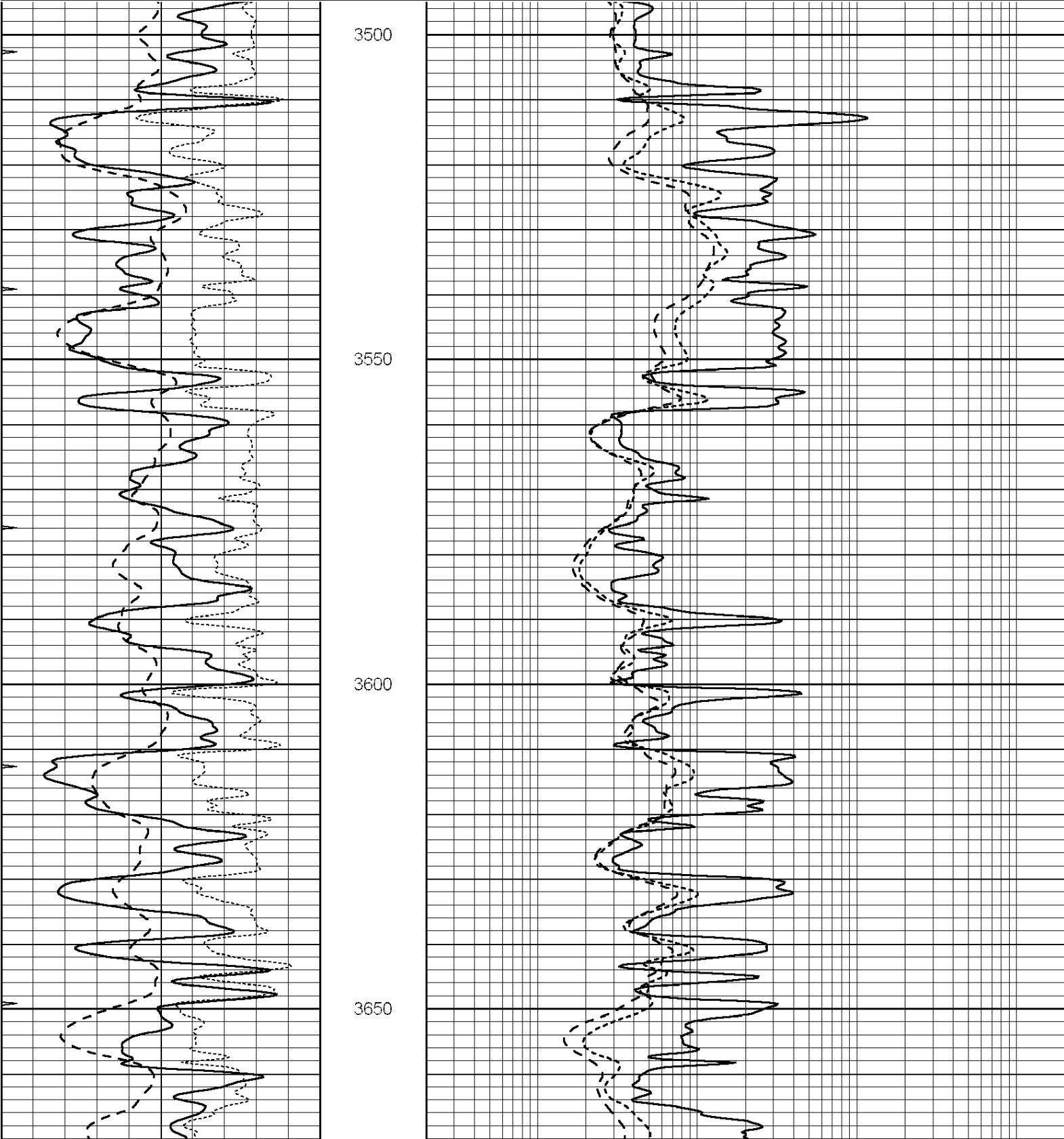
0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50
0	MINMK	20

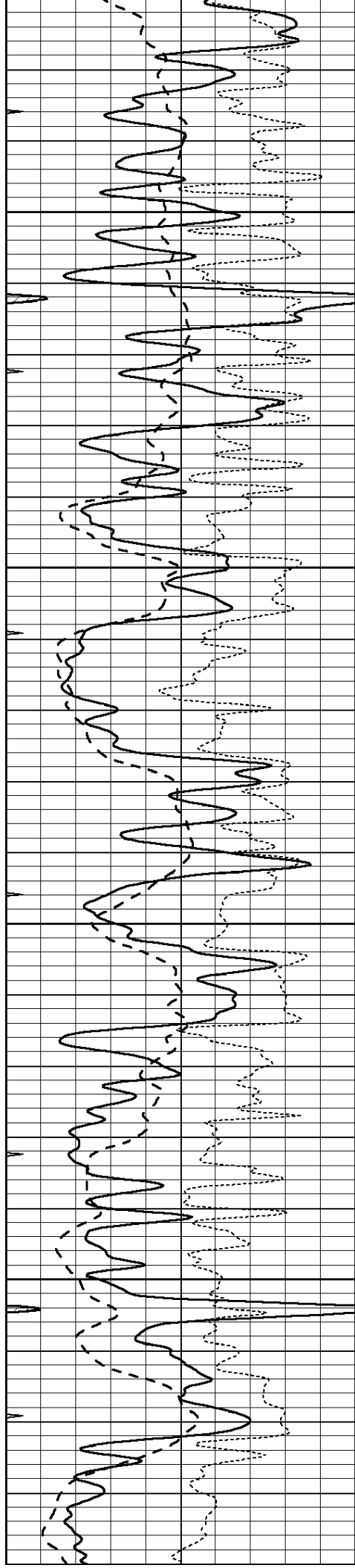
0.2	SHALLOW GUARD (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000



MAIN PASS

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			



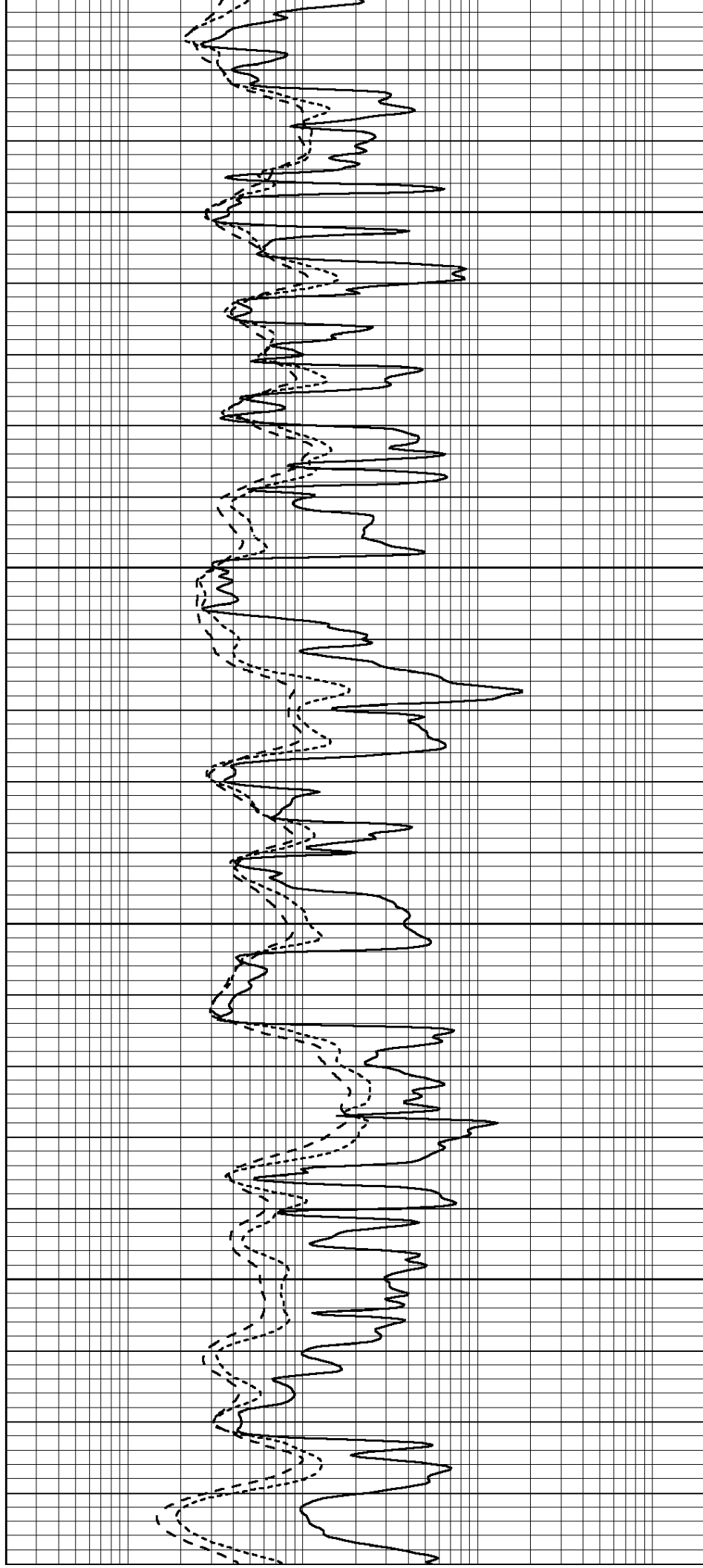


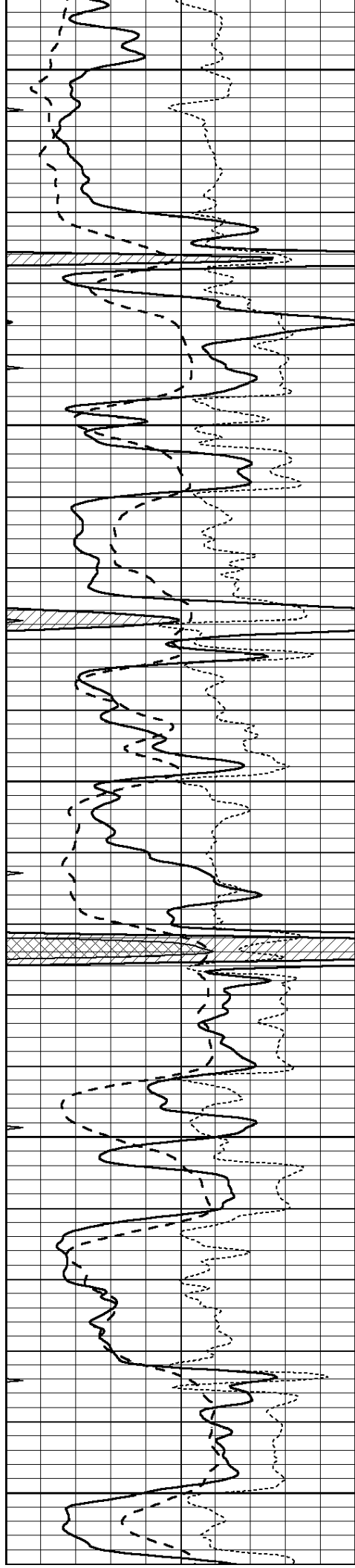
3700

3750

3800

3850





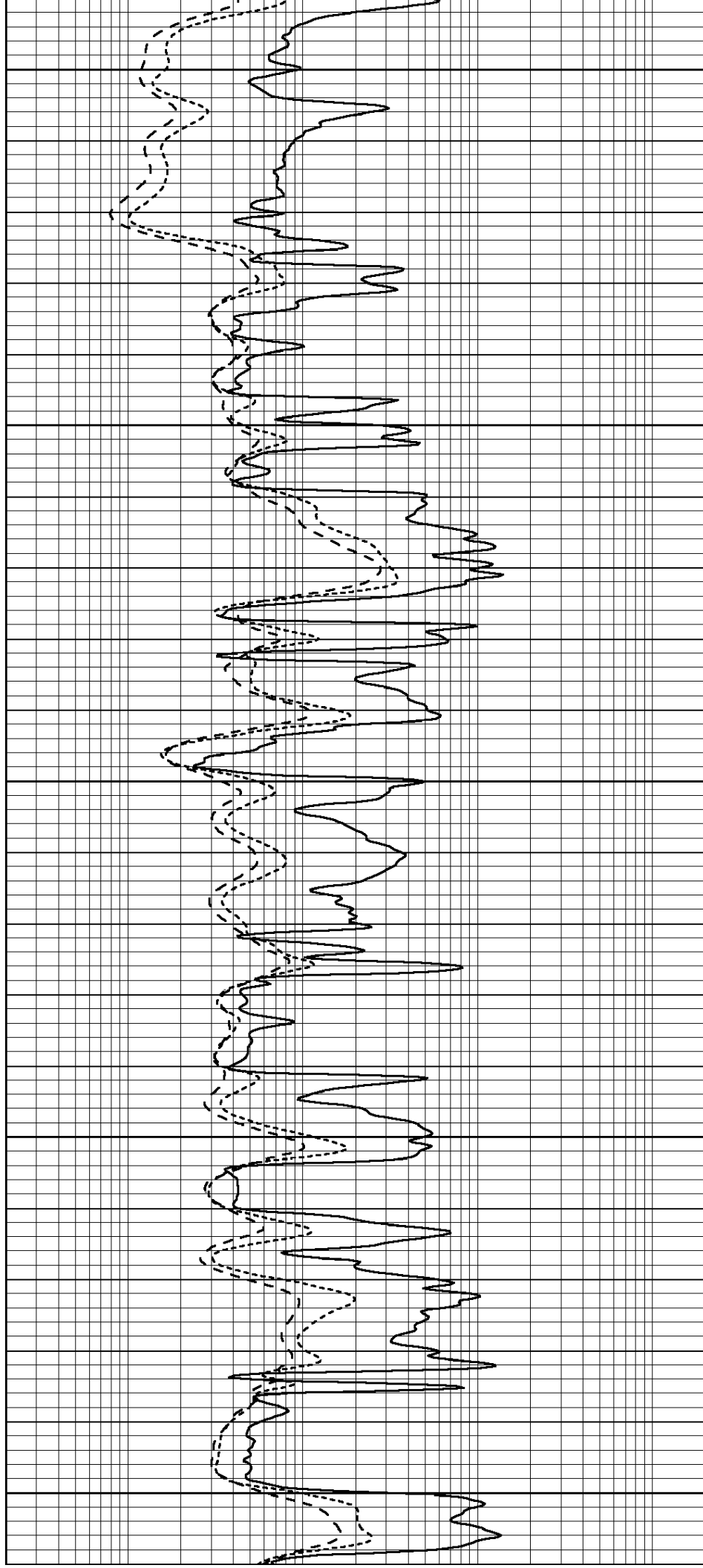
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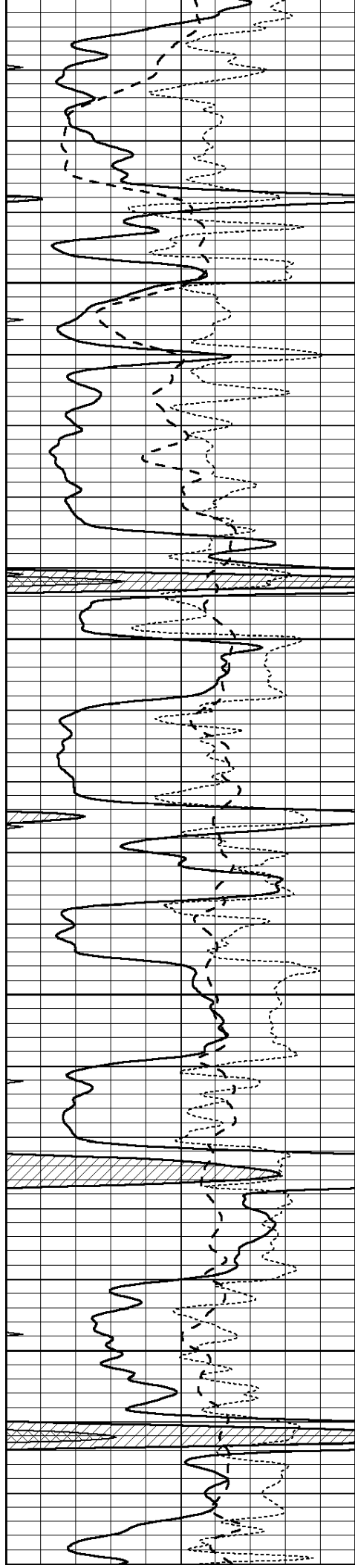
3950

4000

4050

4100



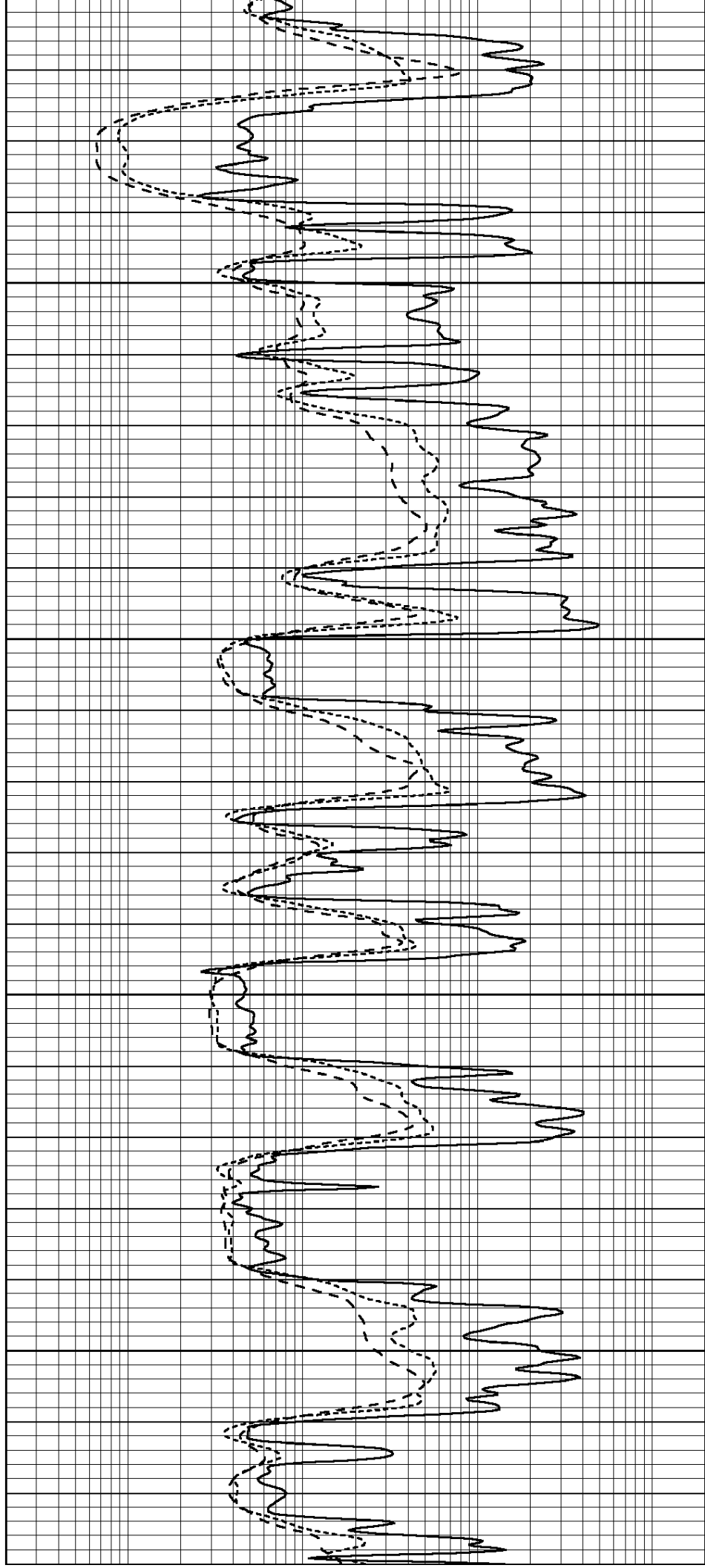


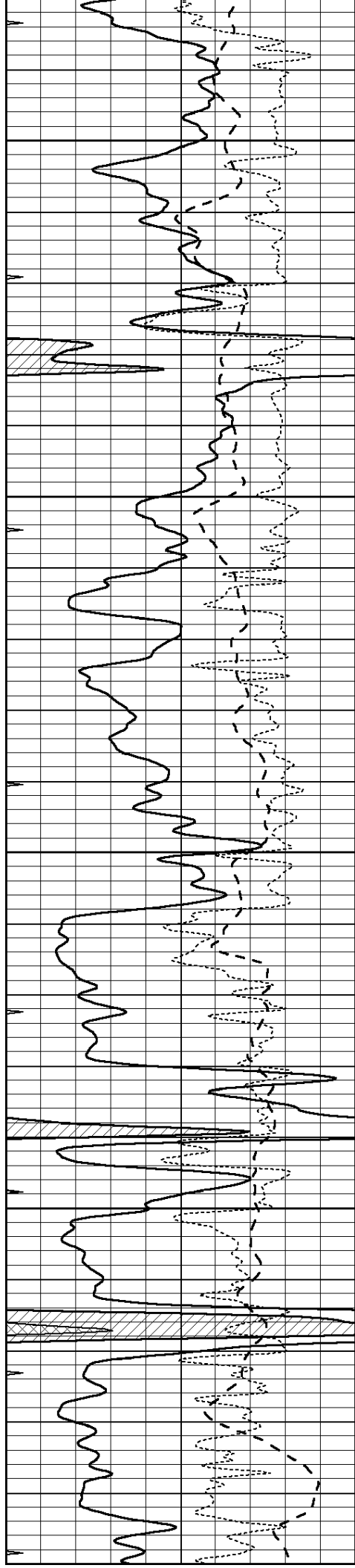
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4200

4250

4300





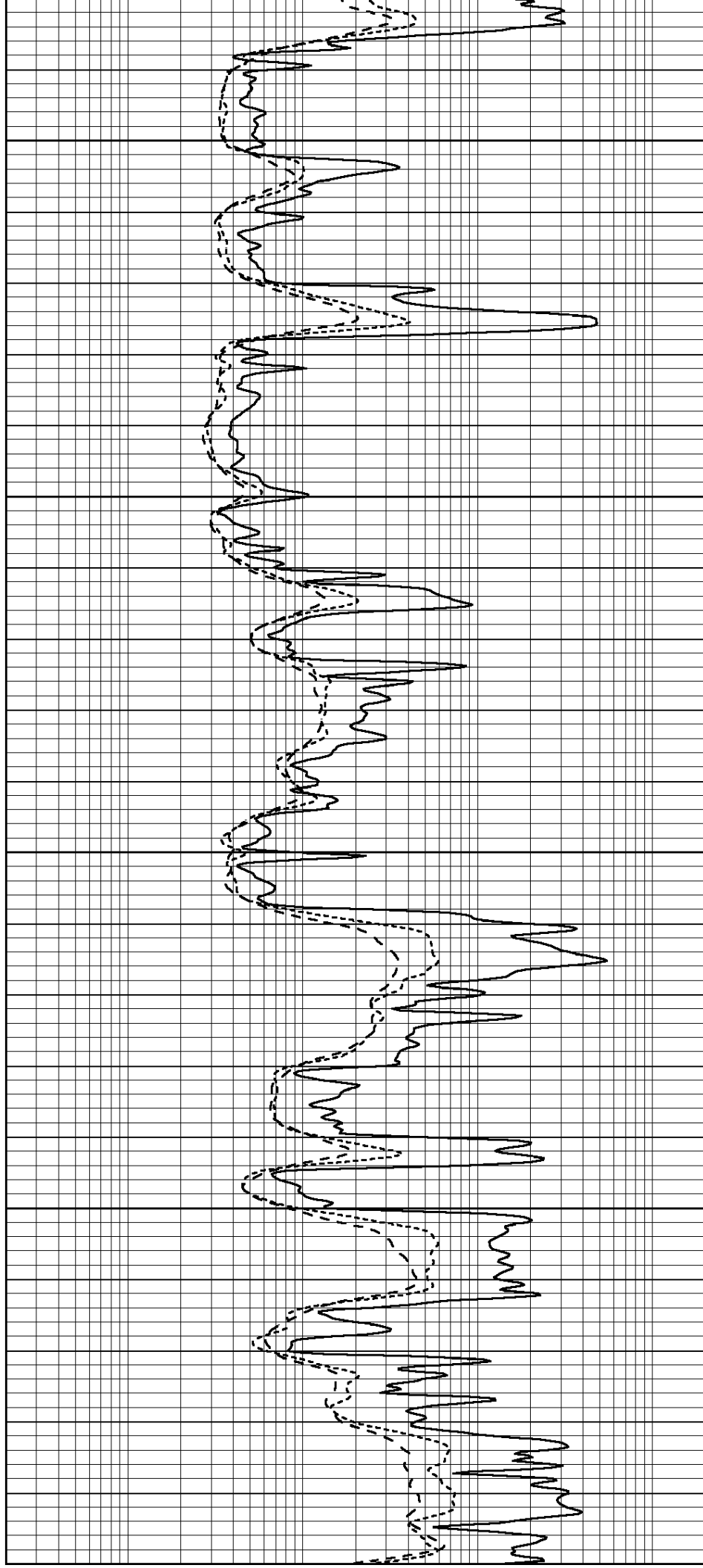
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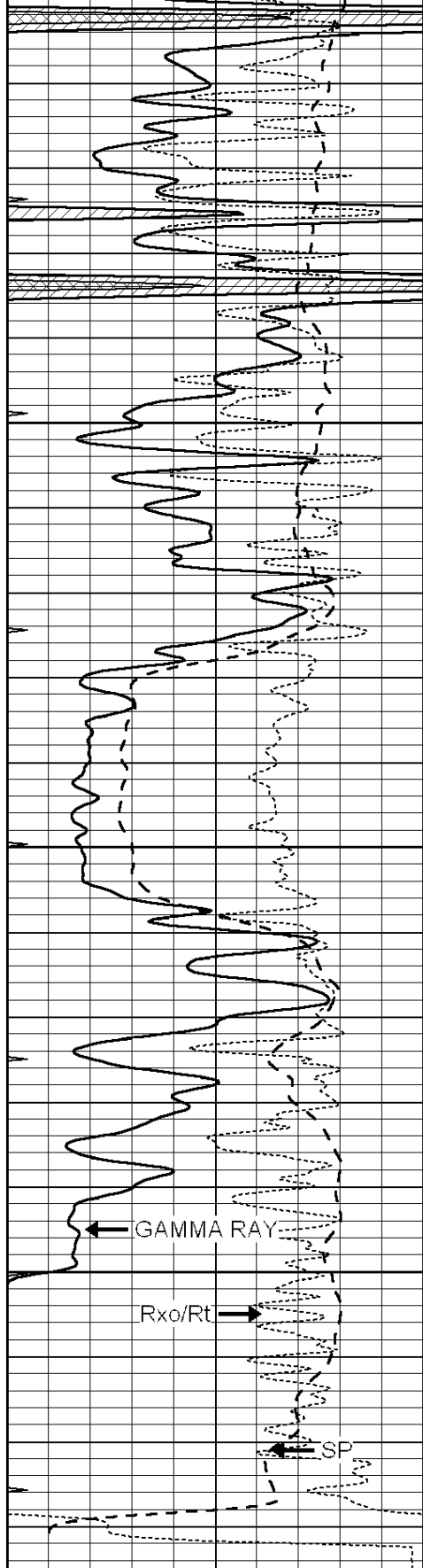
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4450

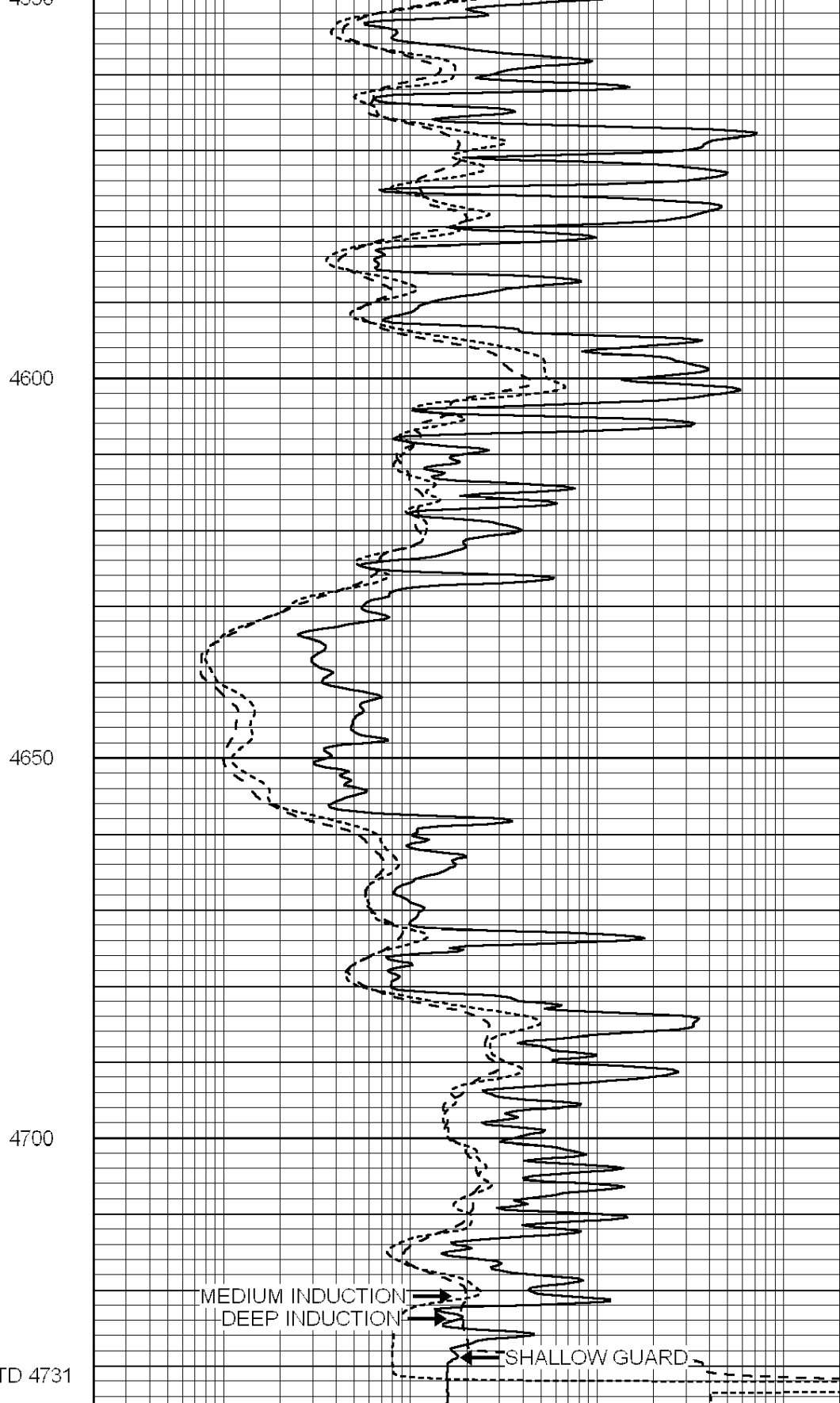
4500

4550



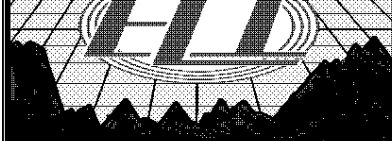


0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50
0	MINMK	20



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



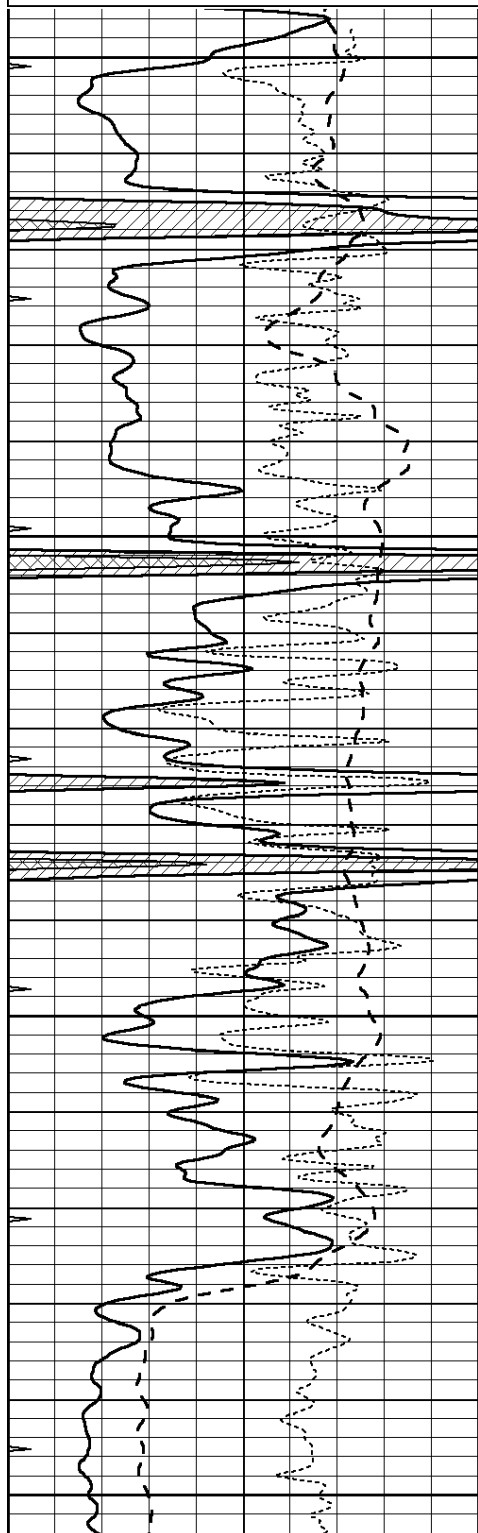


REPEAT SECTION

Database File: 1333dildn.db
Dataset Pathname: pass2.1
Presentation Format: _dil
Dataset Creation: Sat Dec 10 03:40:09 2016 by Calc SOC 120430
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

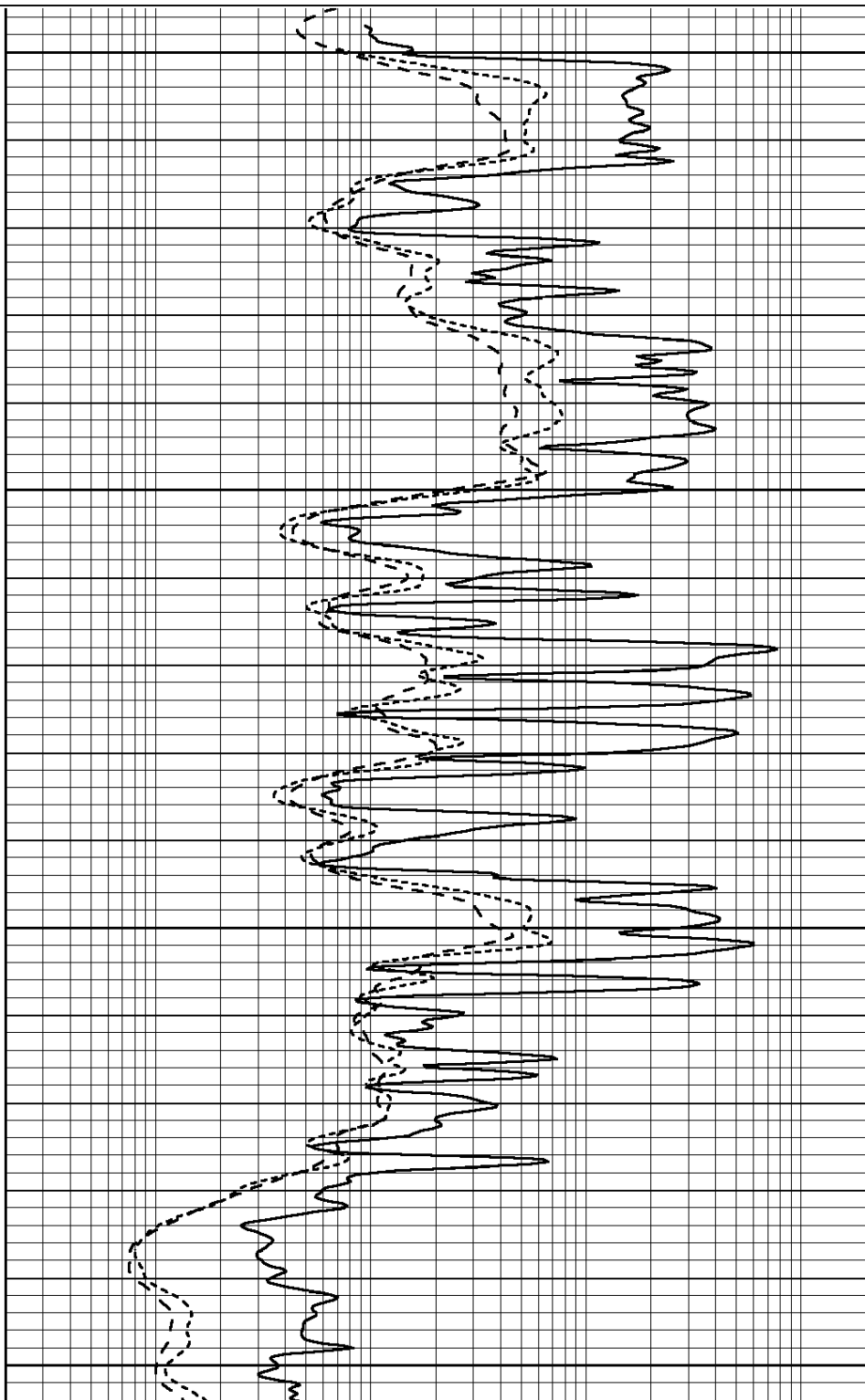


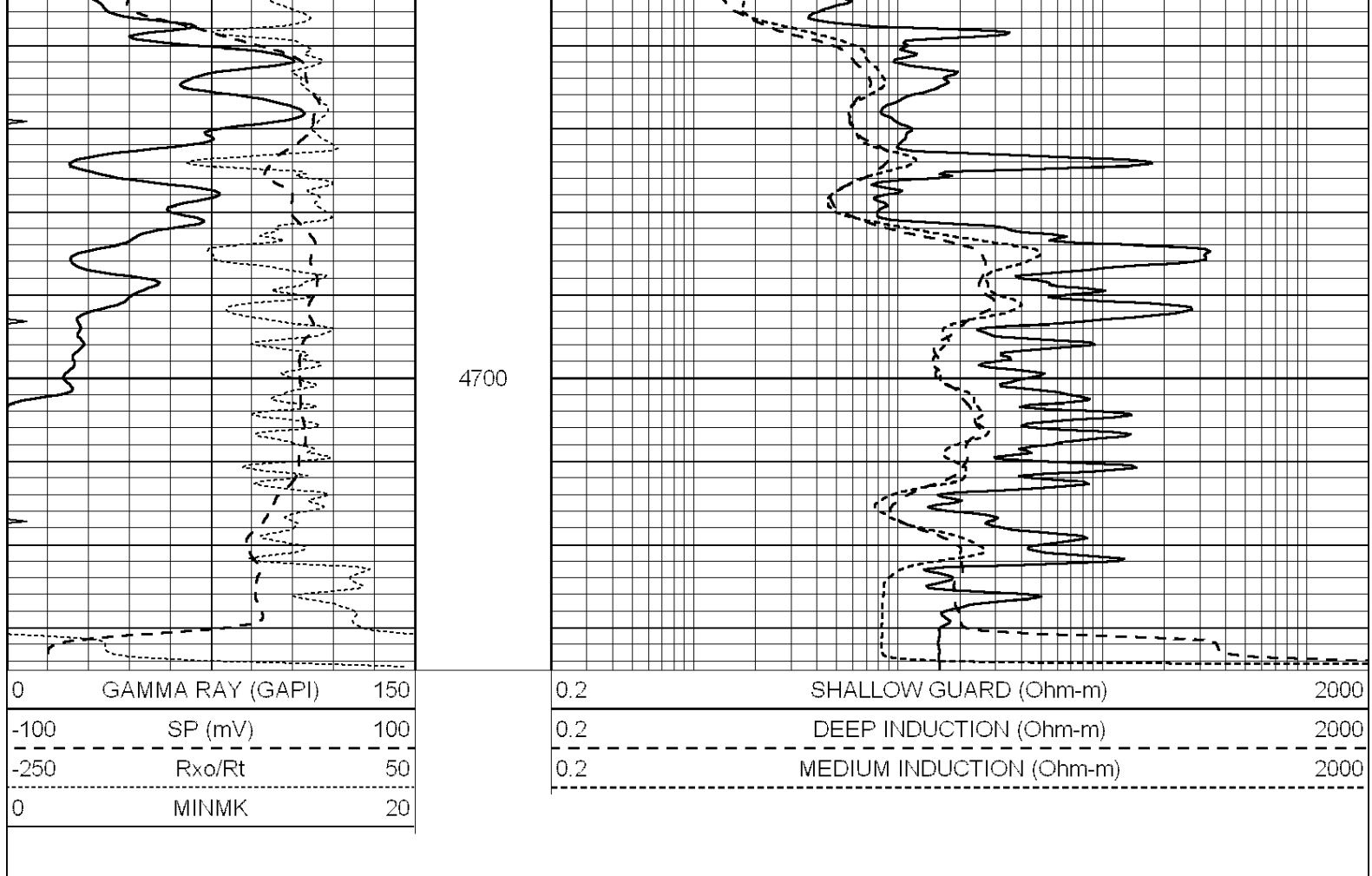
4500

4550

4600

4650





Calibration Report									
Database File:		1333dildn.db							
Dataset Pathname:		pass3.1							
Dataset Creation:		Sat Dec 10 03:26:59 2016 by Calc SOC 120430							
Dual Induction Calibration Report									
Serial-Model:		PROBE7-DILG							
Surface Cal Performed:		Thu Nov 03 11:12:55 2016							
Downhole Cal Performed:		Mon Jul 28 12:02:56 2008							
After Survey Verification Performed:		Mon Jul 28 12:02:56 2008							
Surface Calibration									
Readings				References			Results		
Loop:	Air	Loop		Air	Loop		m	b	
Deep	-0.014	0.629	V	0.000	400.000	mmho/m	625.000	0.000	
Medium	0.039	0.728	V	0.000	464.000	mmho/m	675.000	-45.000	
Internal:	Zero	Cal		Zero	Cal		m	b	
Deep	0.011	0.610	V	0.000	400.000	mmho/m	667.135	-7.256	
Medium	0.005	0.712	V	0.000	464.000	mmho/m	655.677	-3.102	
Downhole Calibration									
Readings				References			Results		
	Zero	Cal		Zero	Cal		m'	b'	
Deep	0.000	0.000	mmho/m	14.508	388.384	mmho/m	1.000	0.000	
Medium	0.000	0.000	mmho/m	166.367	504.400	mmho/m	1.000	0.000	
LL3		7.500	V		1400.000	Ohm-m			
		0.000	V		20.000	Ohm-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: 004N Model: PRB								

Master Calibration				Performed Fri May 30 11:01:00 2014				
	Background	Magnesium		Aluminum		Sandstone		
Window 1	1378.8	10804.6		3492.0		12453.4		cps
Window 2	1262.4	9313.5		3076.7		10594.7		cps
Window 3	1077.6	5668.7		2076.0		6314.8		cps
Window 4	306.4	313.0		306.4		315.6		cps
Long Space	0.0	8051.0		1814.3		9332.3		cps
Short Space	1.9	1706.1		1146.0		1707.6		cps
Rho		1.7100		2.5900		1.3800		g/cc
Pe		0.0000		2.5700		1.5500		
Rib Angle	: 45.0	Rib Slope	: 1.002	Density/Spine Ratio				: 0.571
Spine Angle	: 75.0	Spine Slope	: 3.745	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 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:				070808				
Tool Model:				Probe				

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:	Mon Aug 22 01:00:15 2016		
Calibrator Value:	1.0	GAPI	
Background Reading:	0.0	cps	
Calibrator Reading:	1.0	cps	
Sensitivity:	0.2800	GAPI/cps	