



**COMPLETION
& PRODUCTION
SERVICES CO.**

**DUAL
INDUCTION
LOG**

Company MUSTANG ENERGY CORPORATION
Well HERRMAN #1-8
Field
County RUSH
State KANSAS

Company	MUSTANG ENERGY CORPORATION	Location:	API # : 15-165-22010-0000	Other Services
Well	HERRMAN #1-8		1175' FNL & 930' FEL	CDL/CNL
Field				MEL/SON
County	RUSH			Elevation
				K.B. 2017
				D.F. 2015
				G.L. 2009

Date	1/30/13
Run Number	ONE
Depth Driller	3690
Depth Logger	3688
Bottom Logged Interval	3686
Top Log Interval	00
Casing Driller	8 5/8" @ 1181
Casing Logger	1180
Bit Size	7 7/8"
Type Fluid in Hole	CHEMICAL MUD
Density / Viscosity	8.8/58
pH / Fluid Loss	10.5/8.0
Source of Sample	FLOWLINE
Rm @ Meas. Temp	.80 @ 52F
Rmt @ Meas. Temp	.60 @ 52F
Rmc @ Meas. Temp	.96 @ 52F
Source of Rmf / Rmc	MEASUREMENT
Rm @ BHT	.36 @ 113F
Time Circulation Stopped	2 HOURS
Time Logger on Bottom	
Maximum Recorded Temperature	113F
Equipment Number	4010
Location	HAYS, KANSAS
Recorded By	JASON CAPPELLUCCI
Witnessed By	HERB DEINES

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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 NABORS HAYS, KANSAS (785) 628-6395
DIRECTIONS
SCHOENCHEN, KS. - S. TO AVE. B. - 1 W. - 1/8 S. - W. INTO



MAIN SECTION

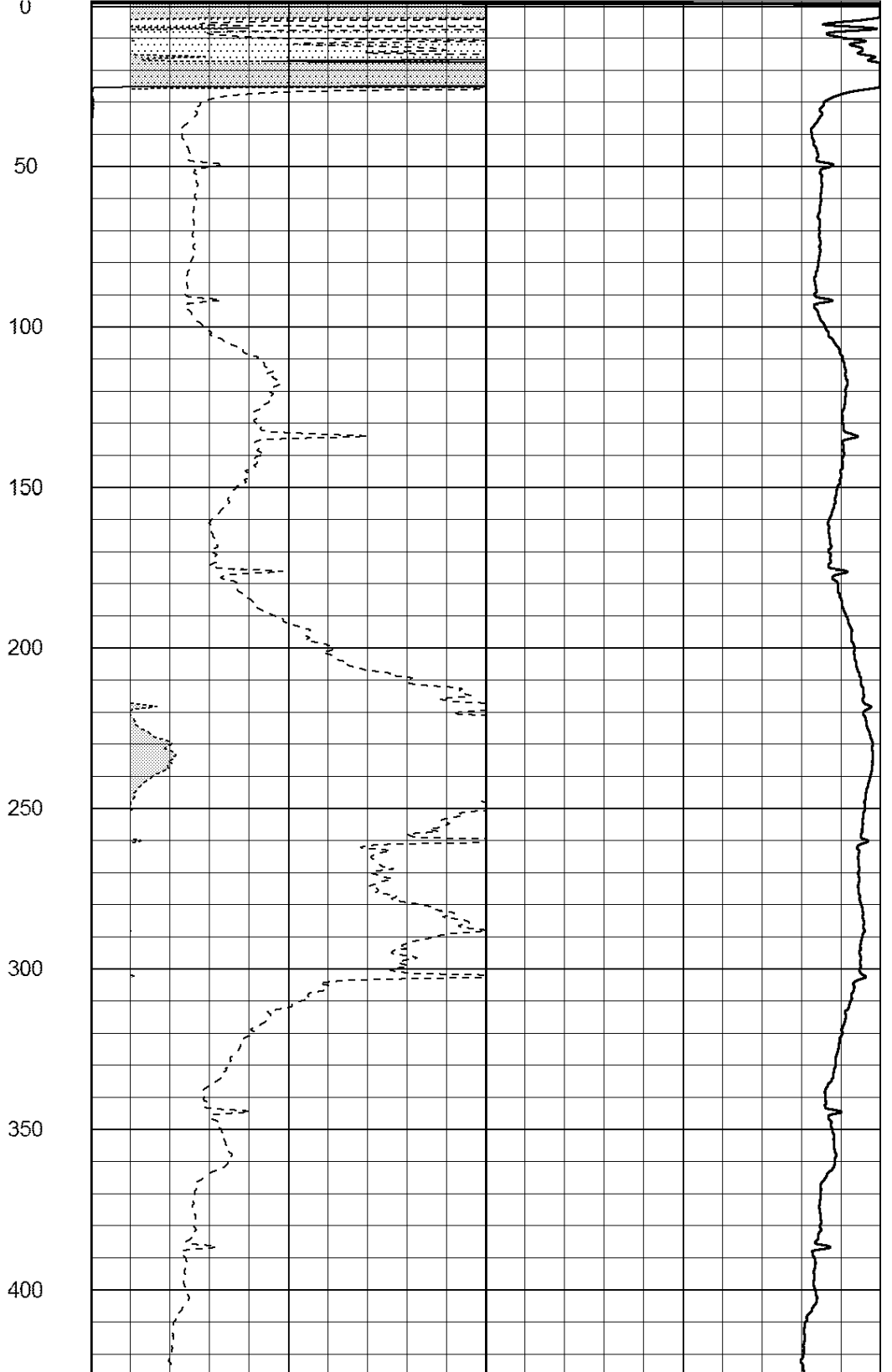
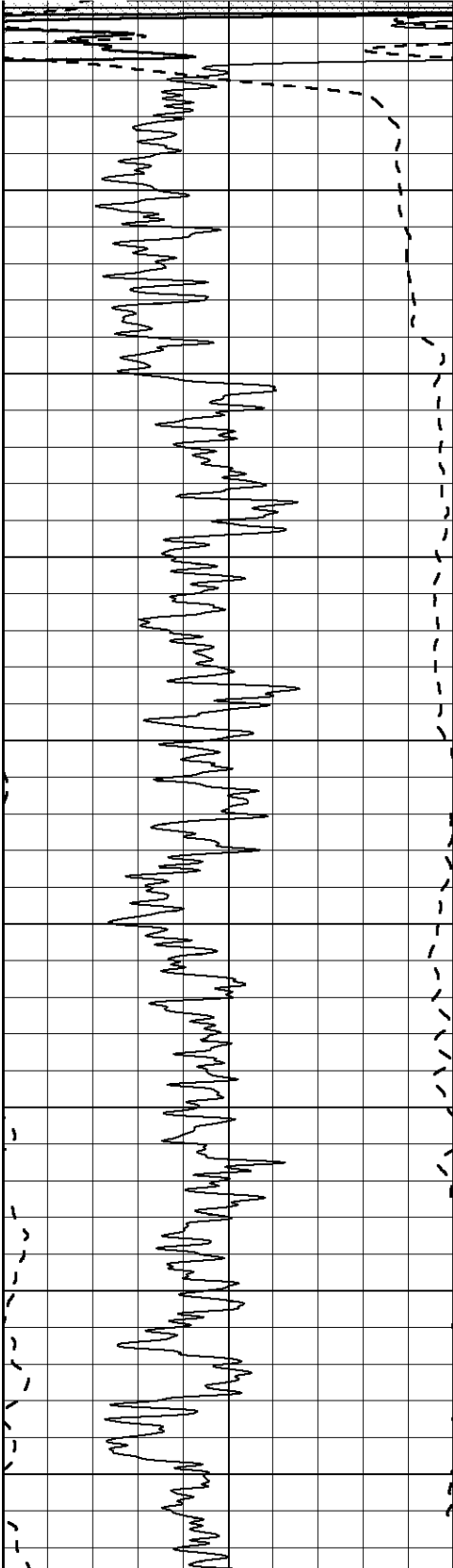
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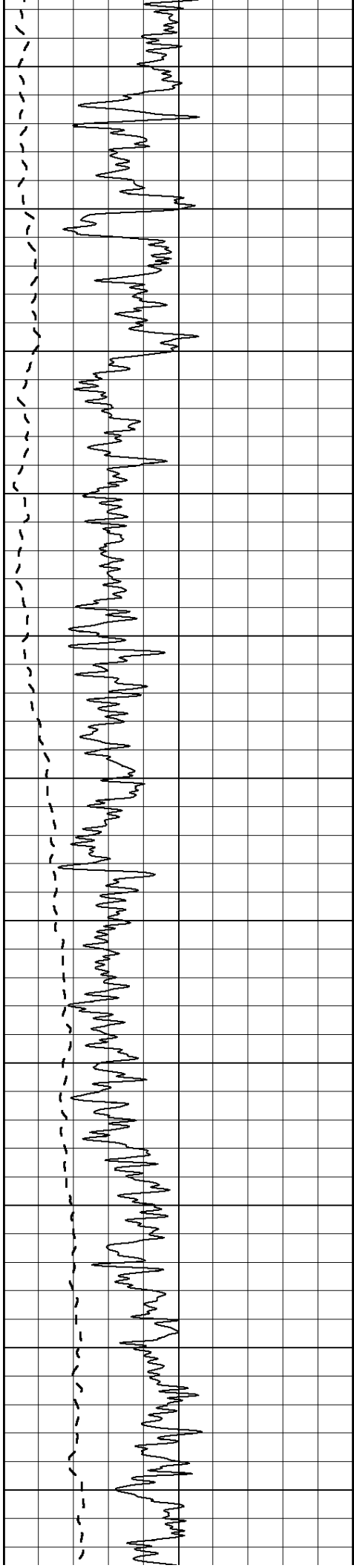
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-100	SP (mV)	100

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





450

500

550

600

650

700

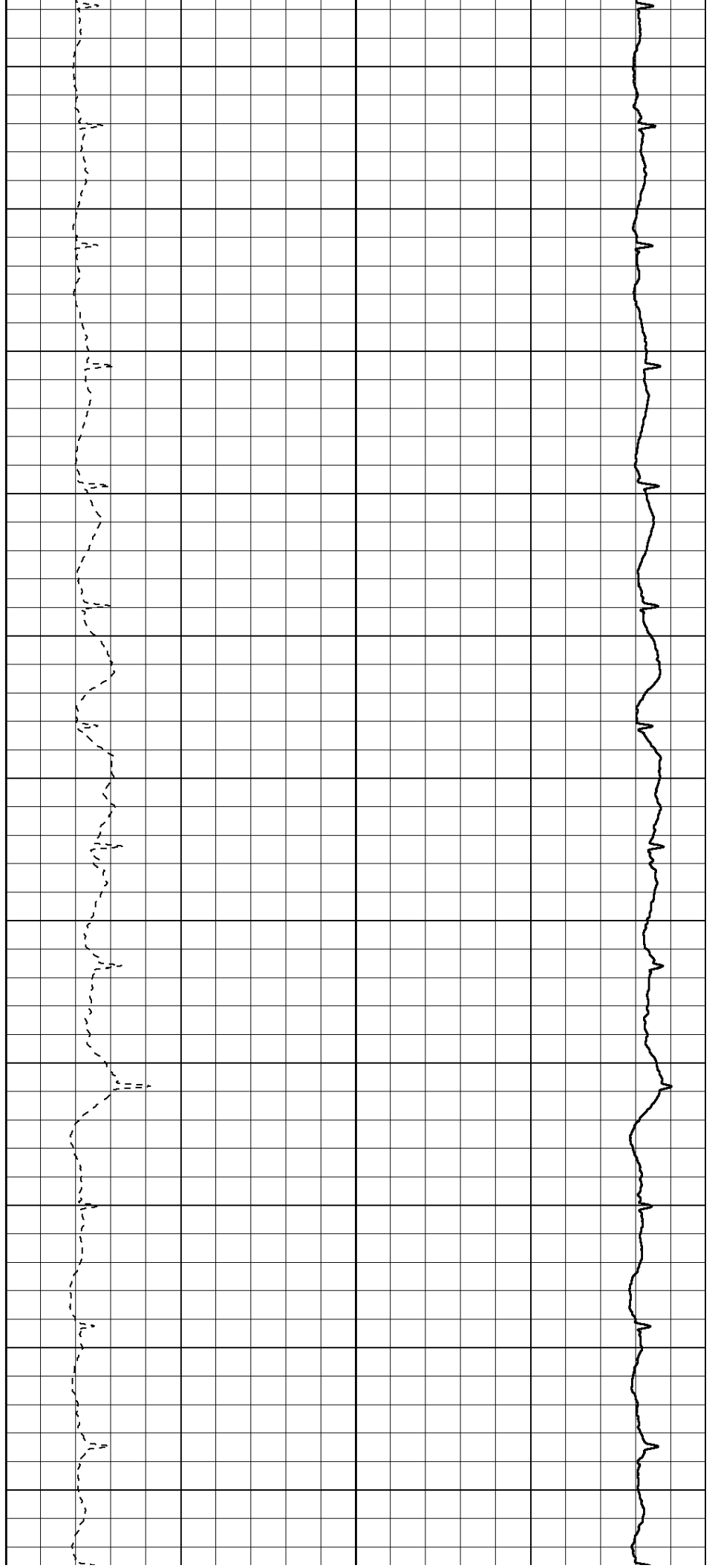
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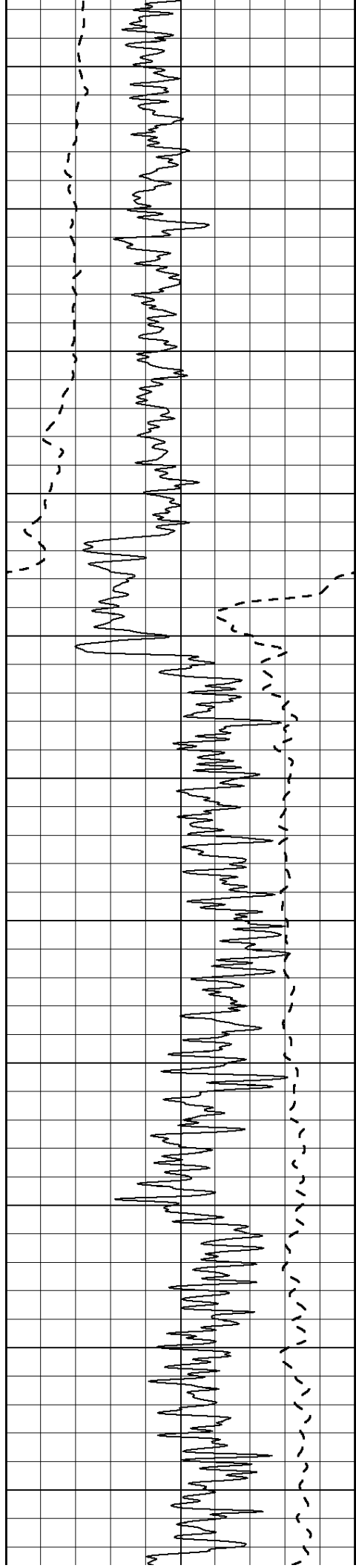
800

850

900

950





1000

1050

1100

1150

1200

1250

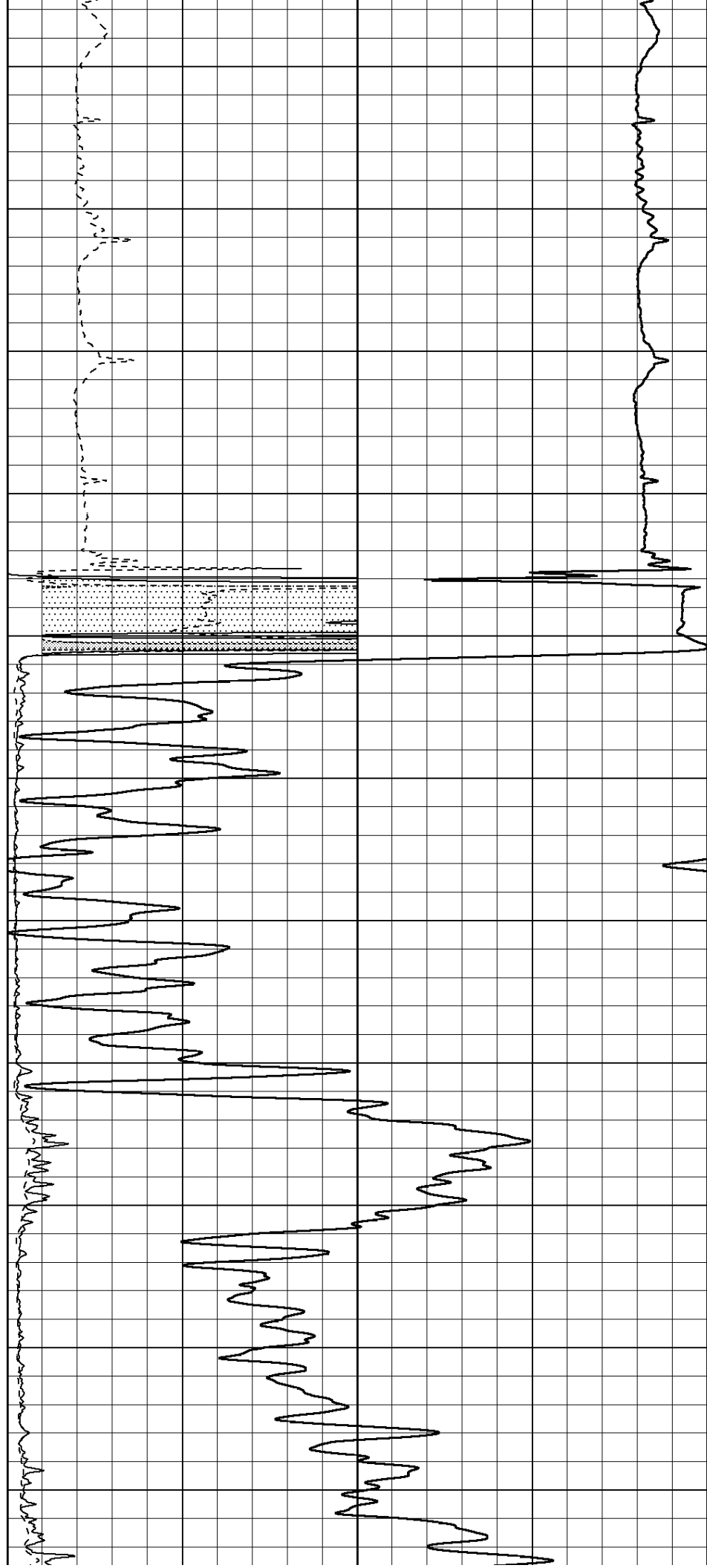
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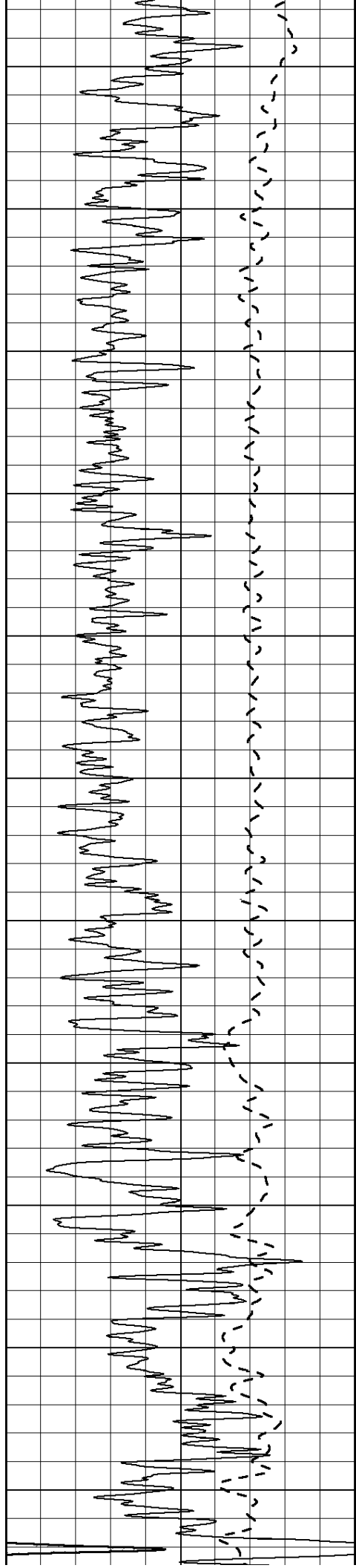
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1400

1450

1500





1550

1600

1650

1700

1750

1800

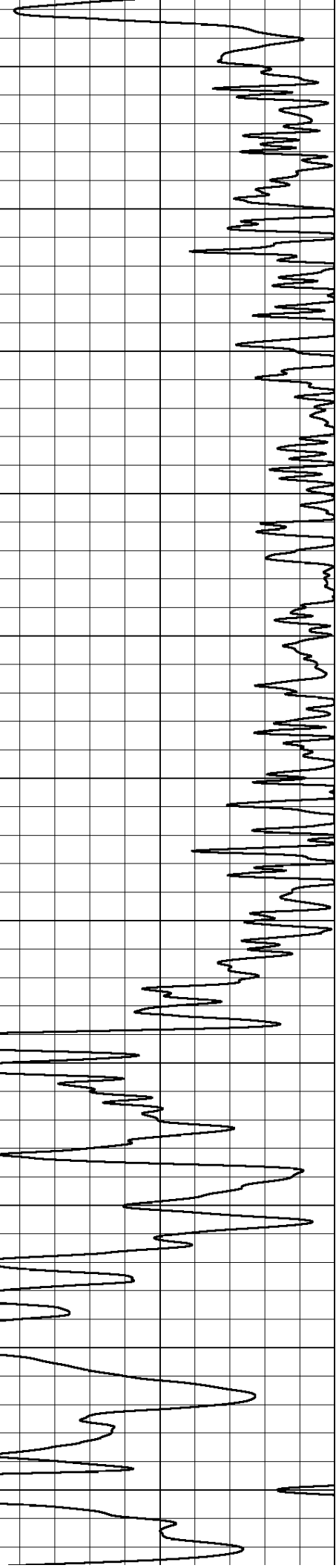
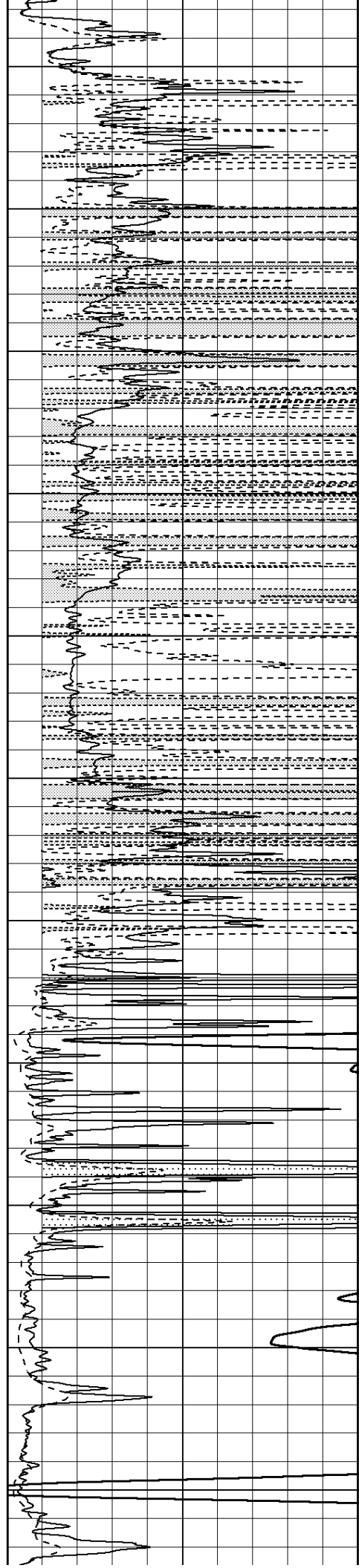
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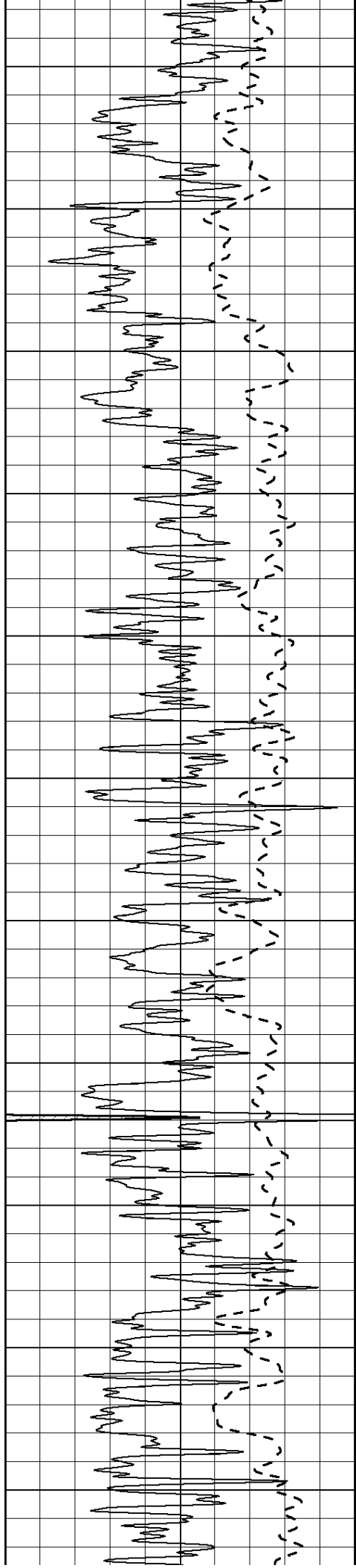
1900

1950

2000

2050





2100

2150

2200

2250

2300

2350

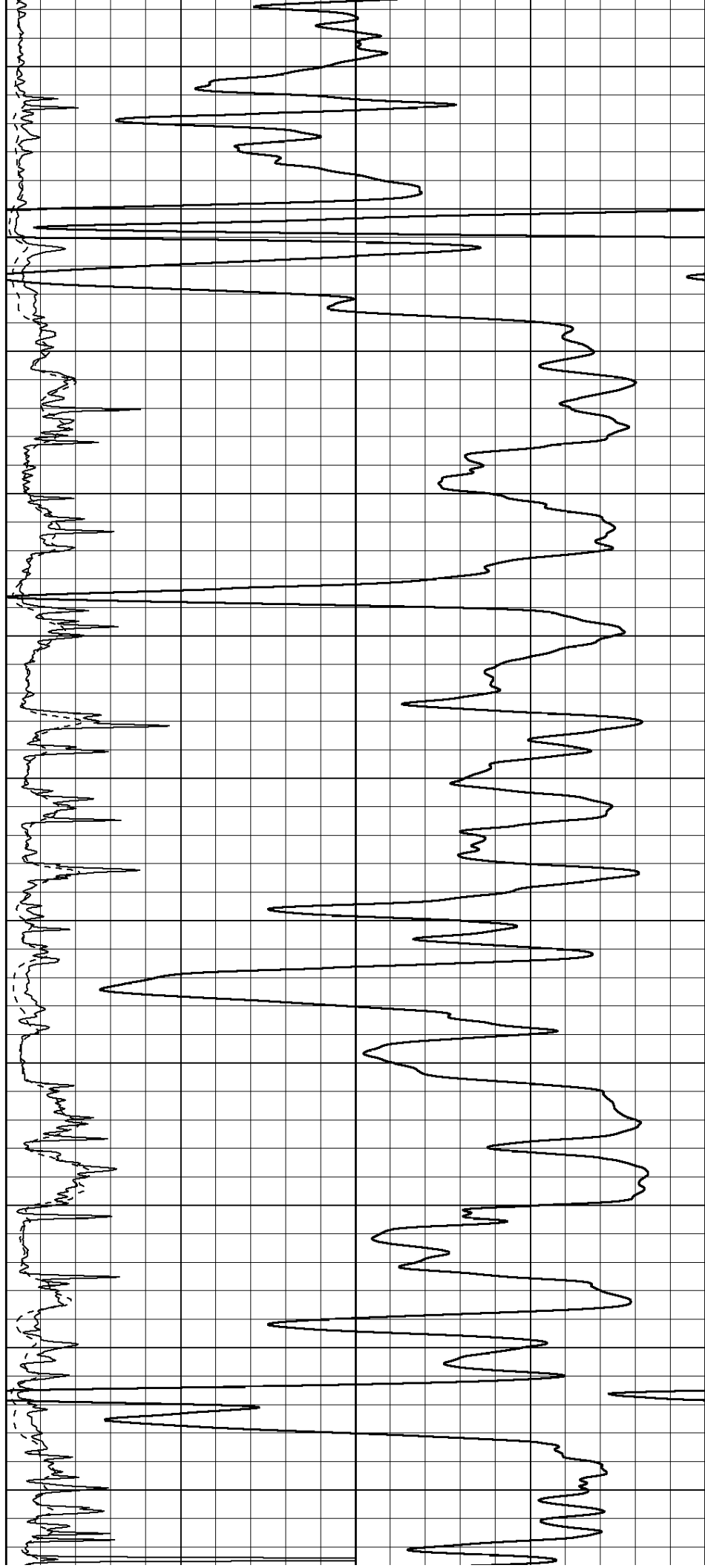
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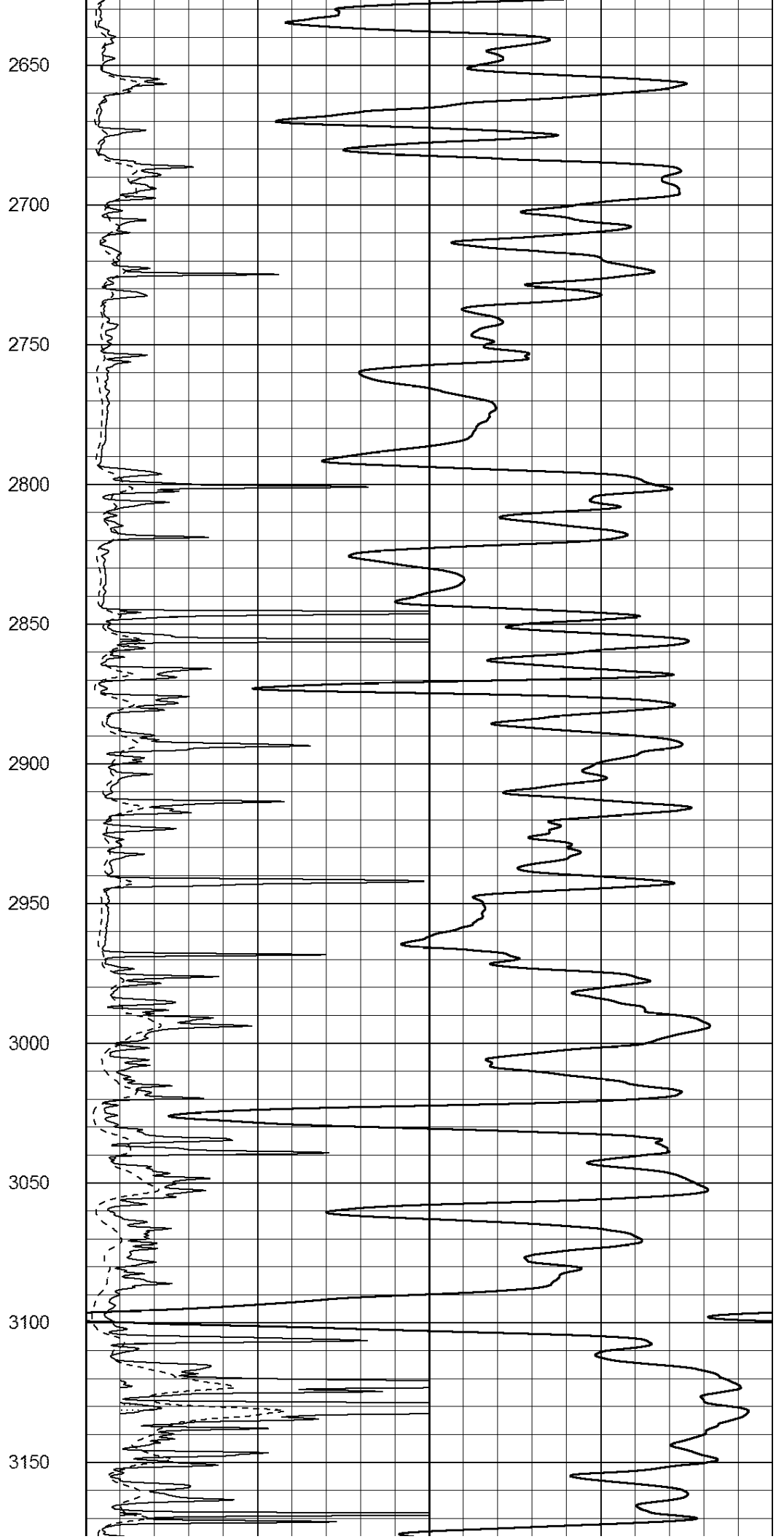
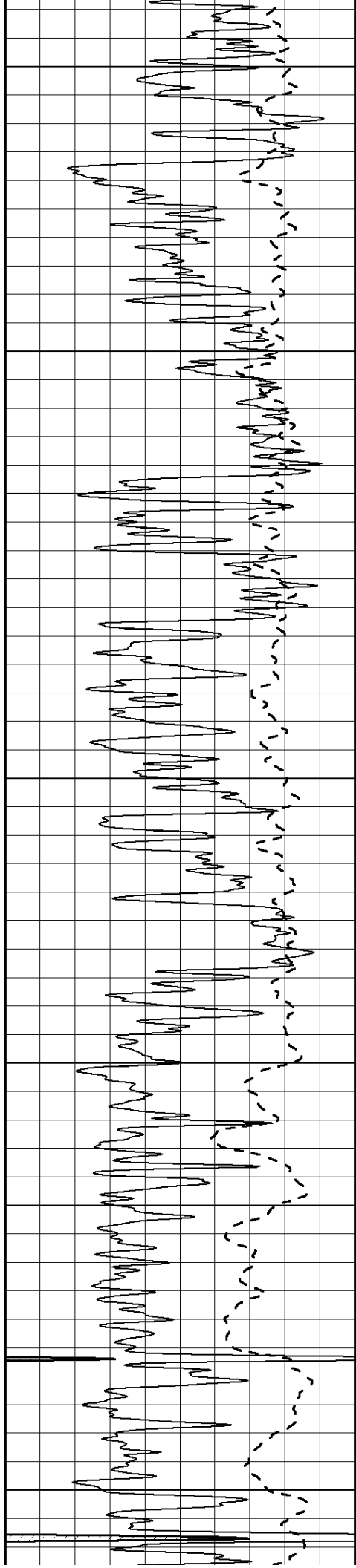
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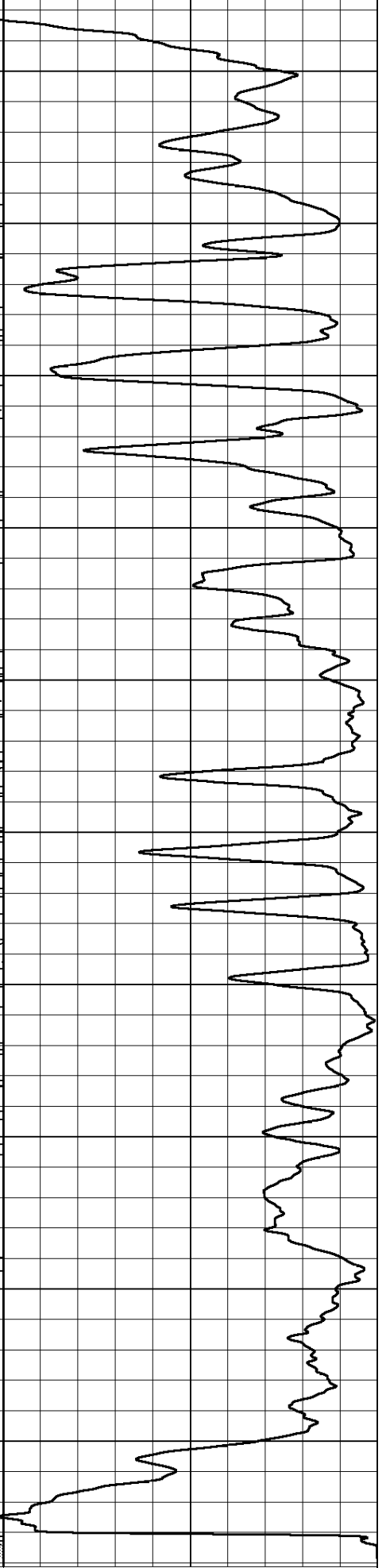
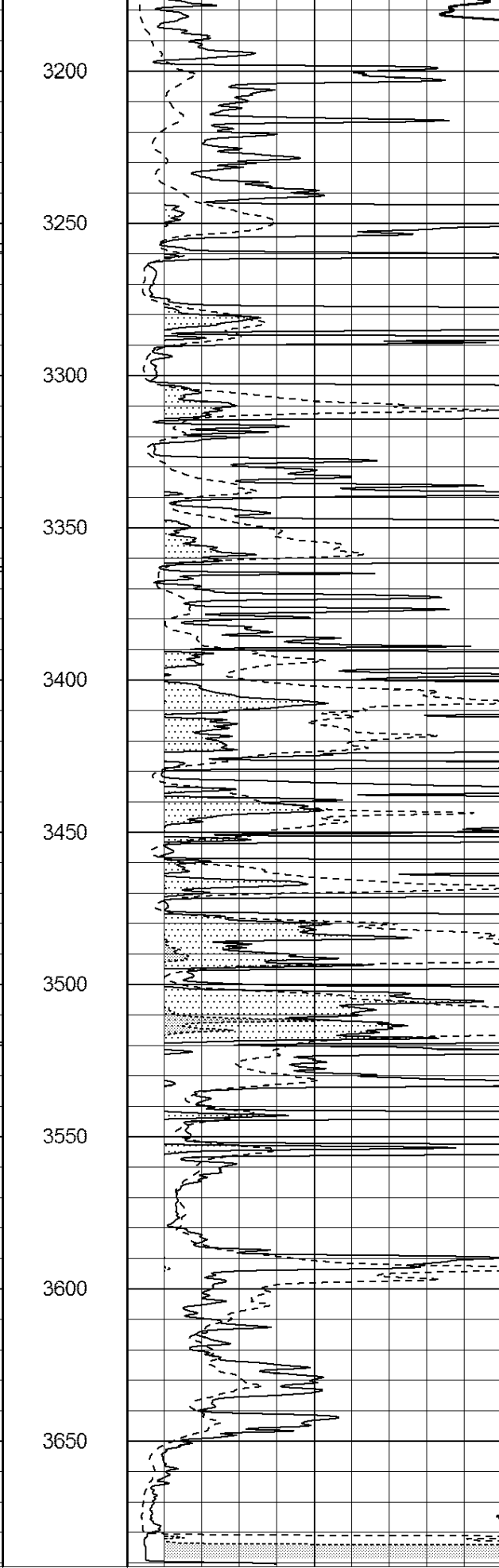
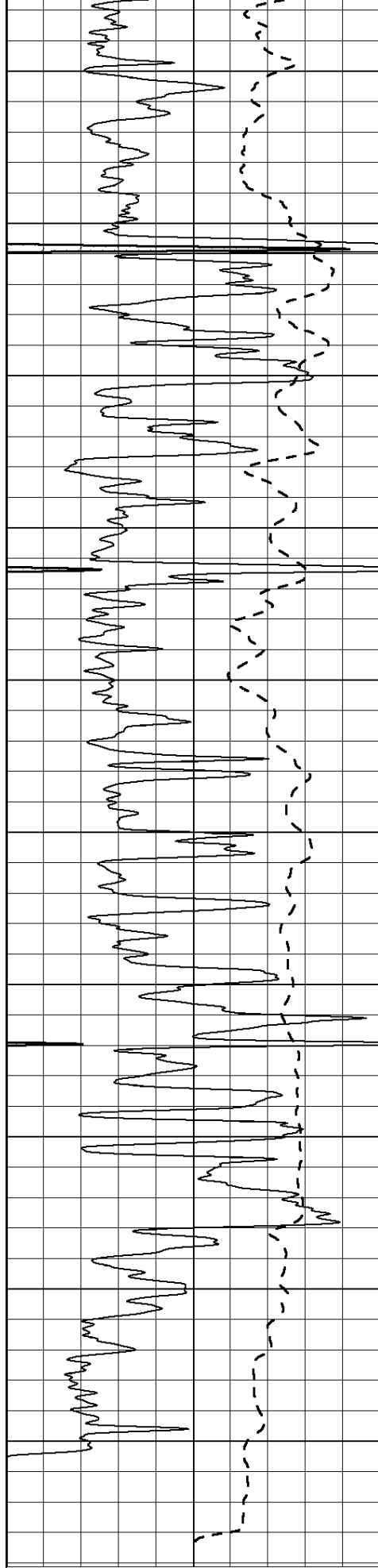
2500

2550

2600







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

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

1000 CIL D (mmho/m) 0

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

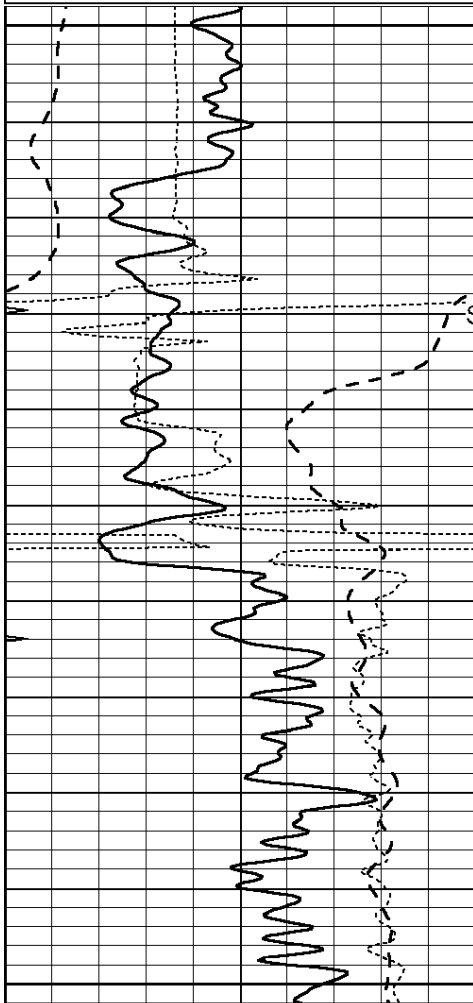


ANHYDRITE

Database File: 010636ddn.db
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 Presentation Format: _dil
 Dataset Creation: Wed Jan 30 11:03:58 2013 by Calc Open-Cased 090629
 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

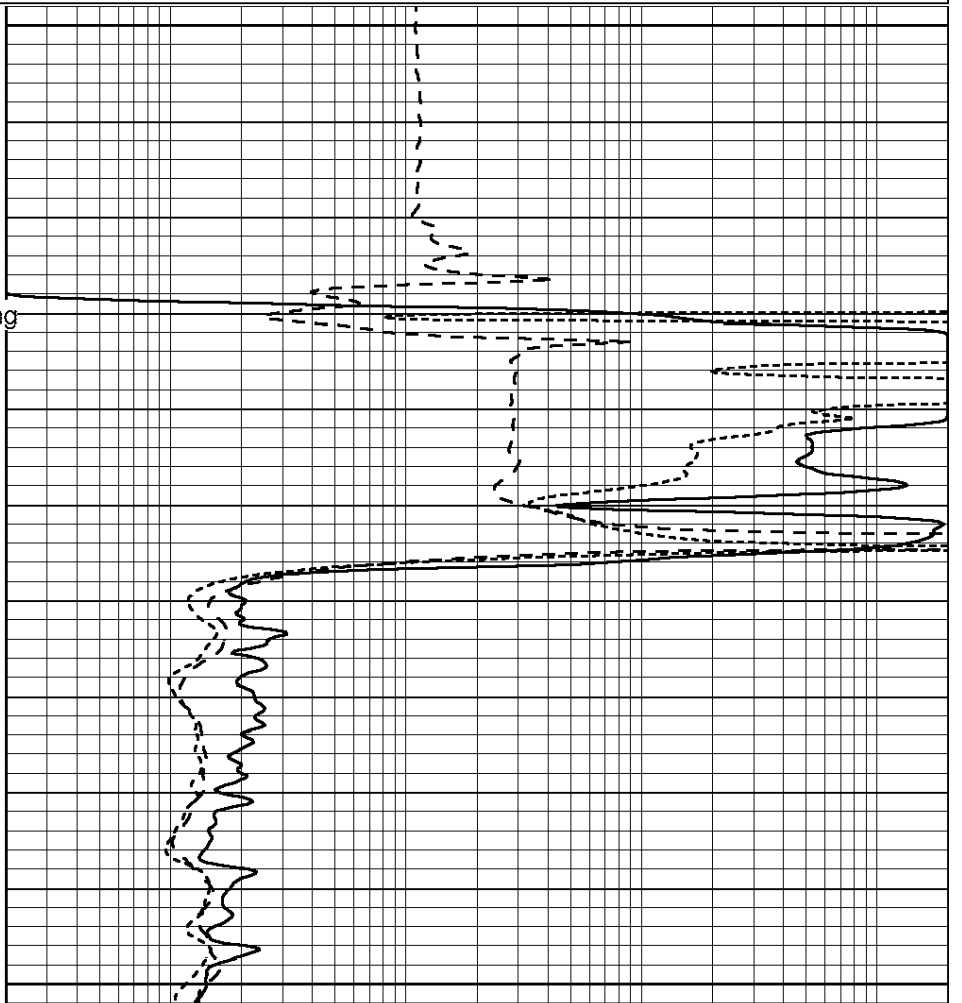


1150

Surface Casing

1200

1250



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

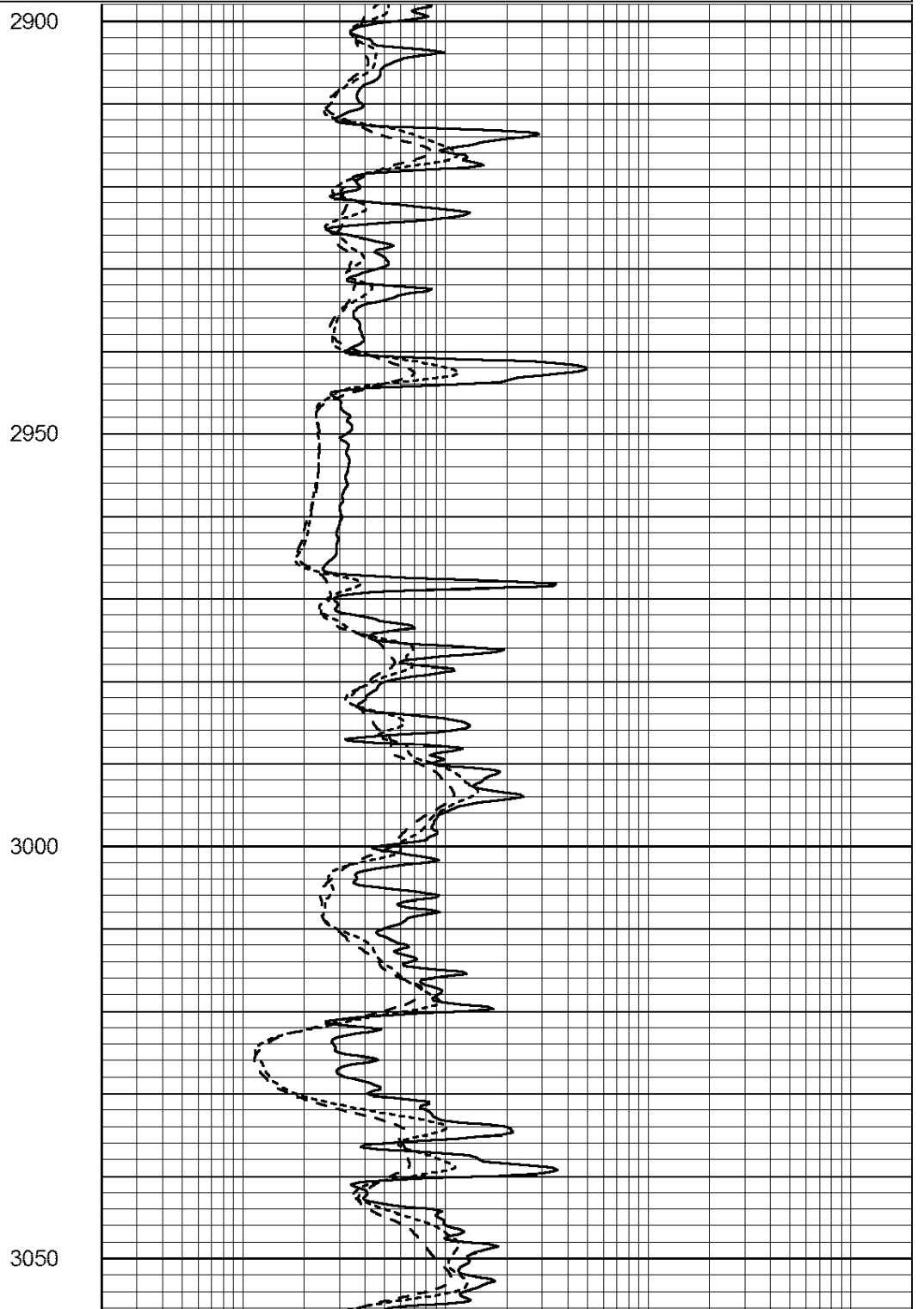
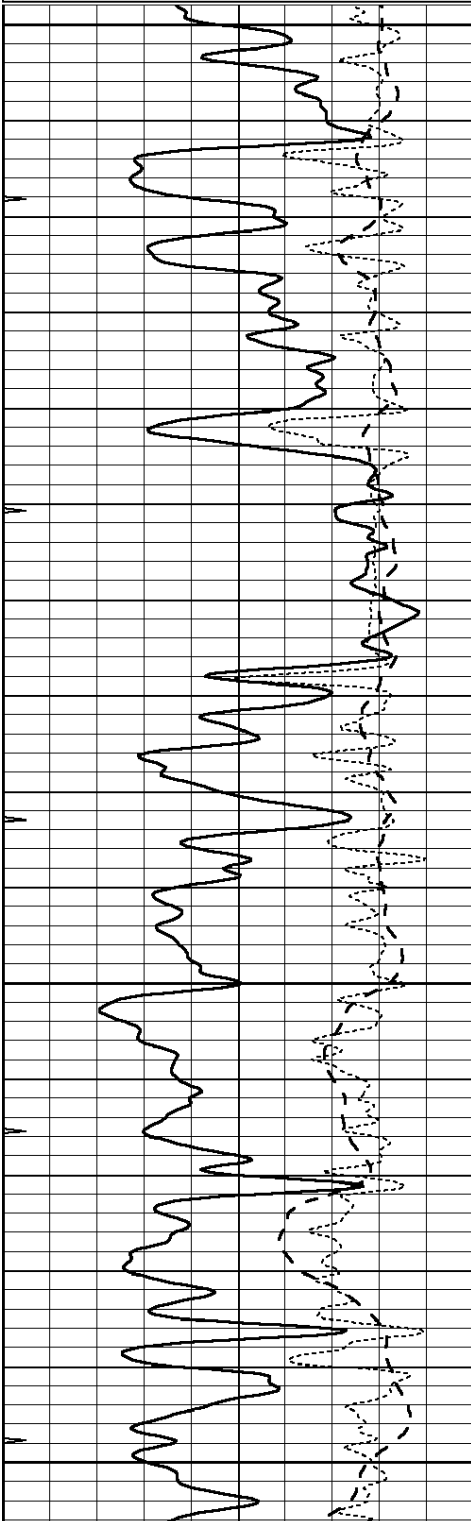
0.2	SHALLOW GUARD (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000

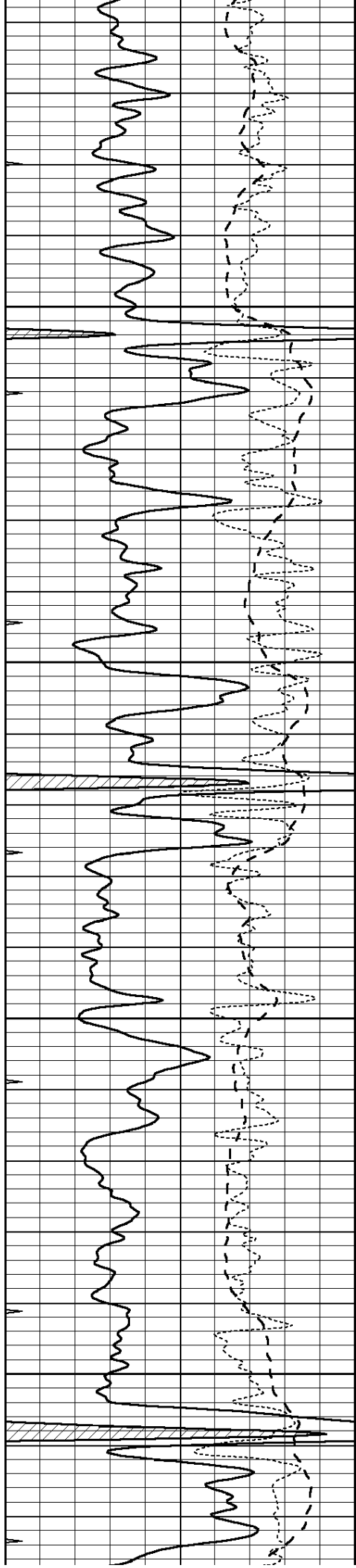
MAIN SECTION

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 Dataset Pathname: pass3.1
 Presentation Format: _dil
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 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



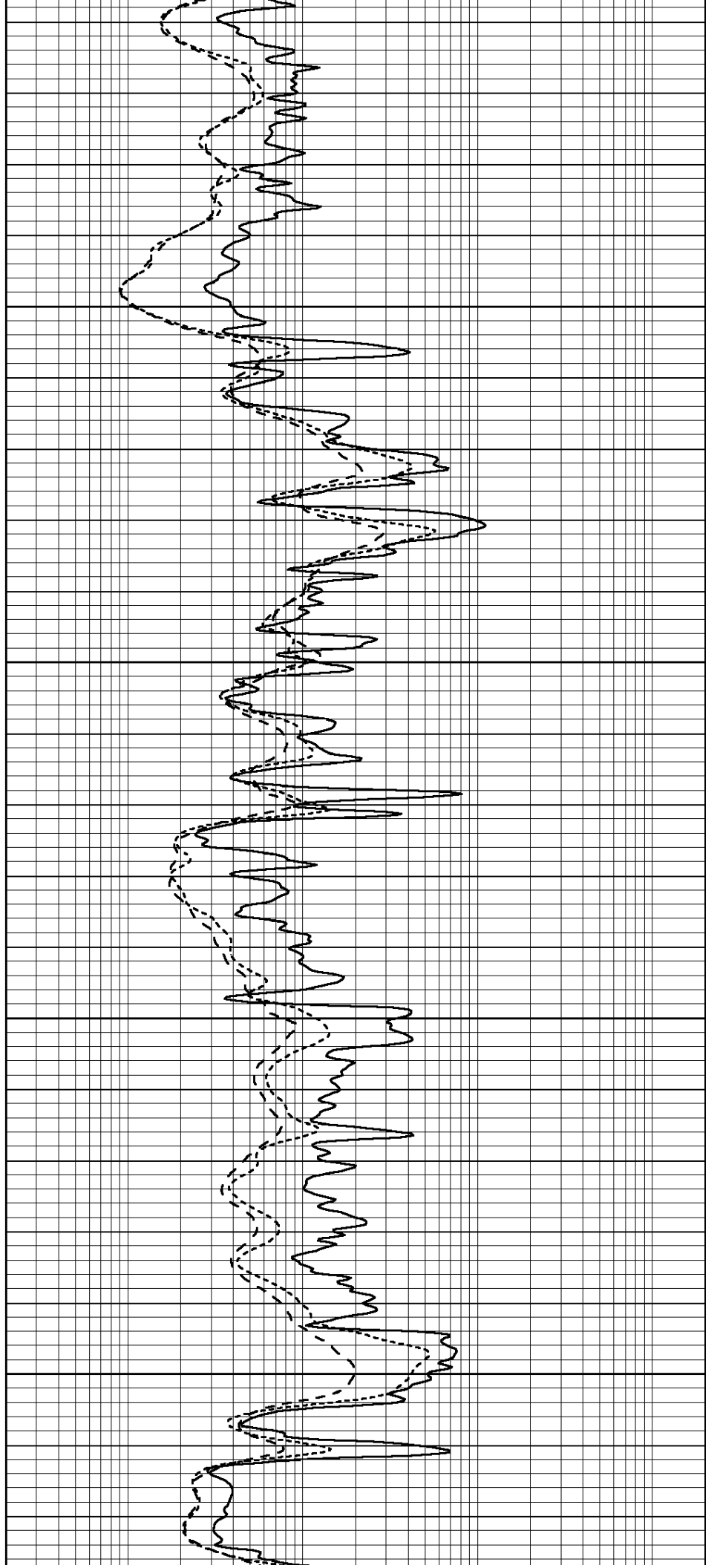


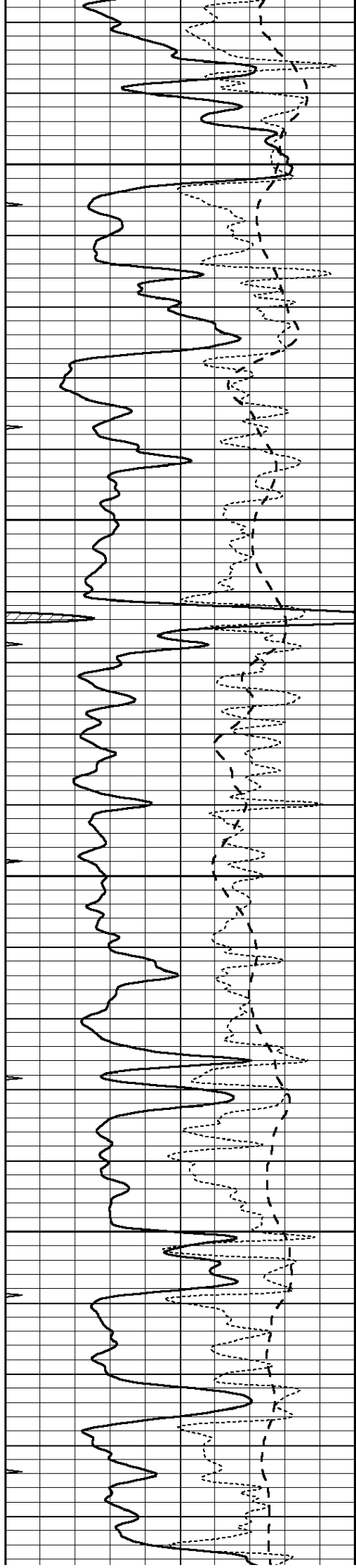
3100

3150

3200

3250



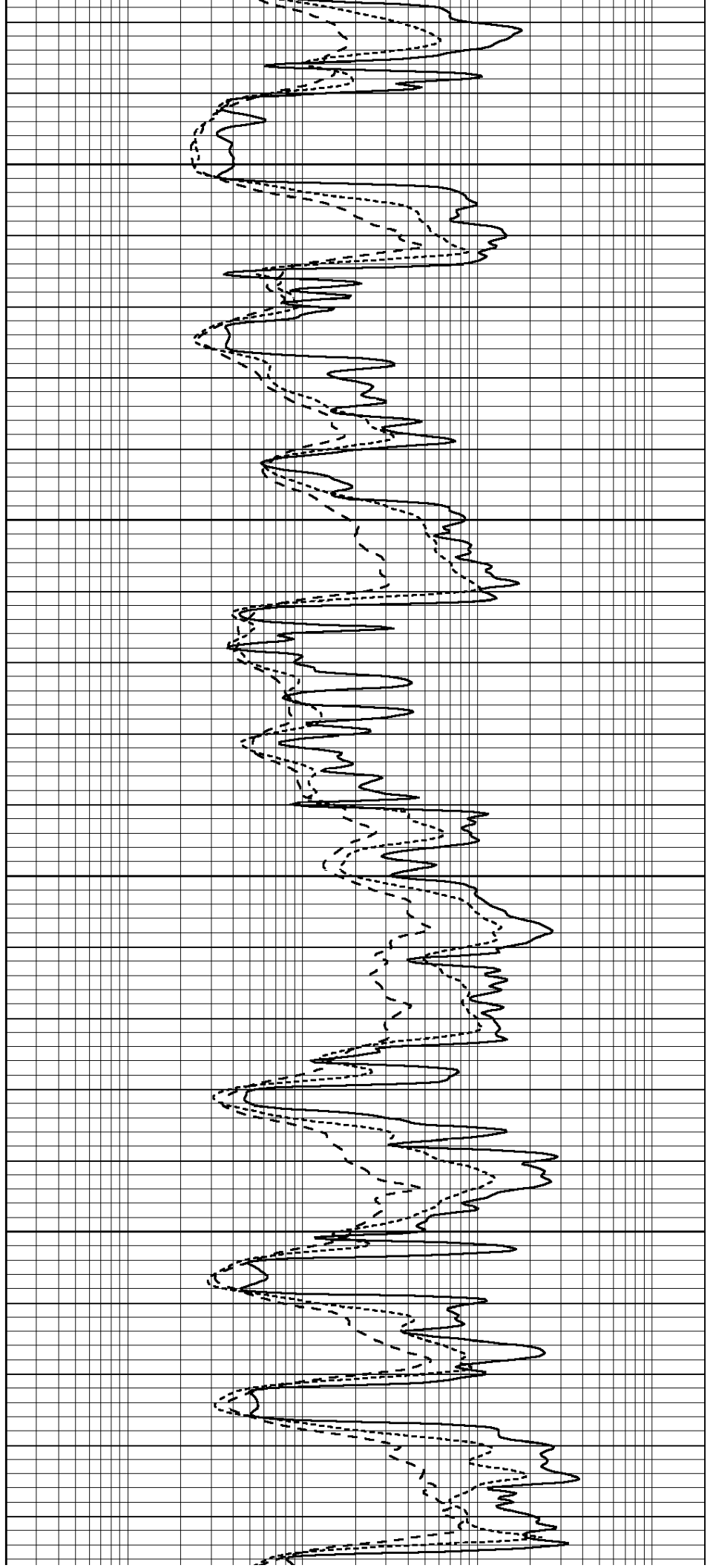


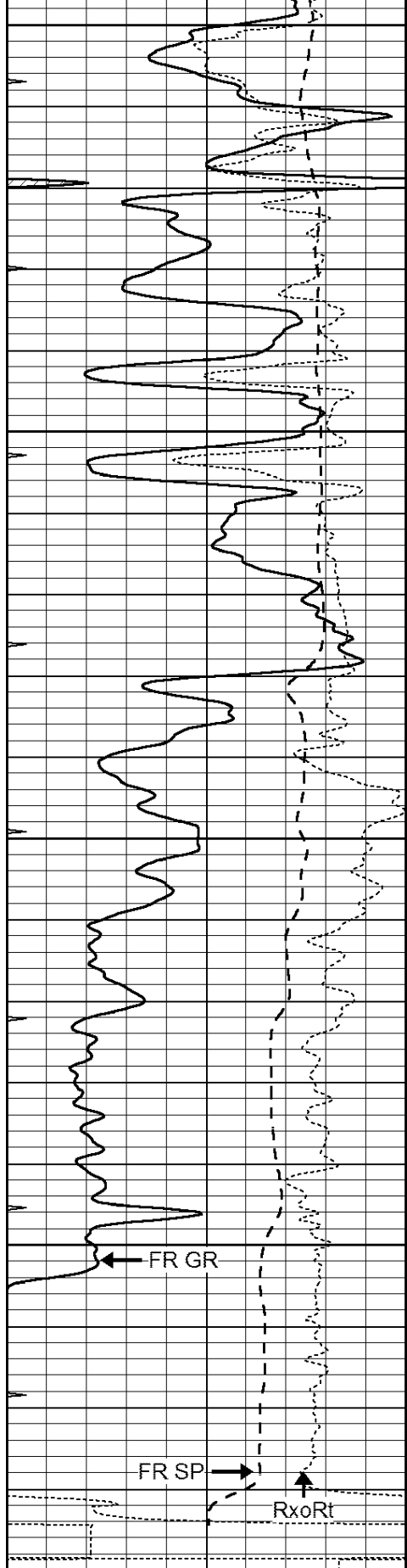
3300

3350

3400

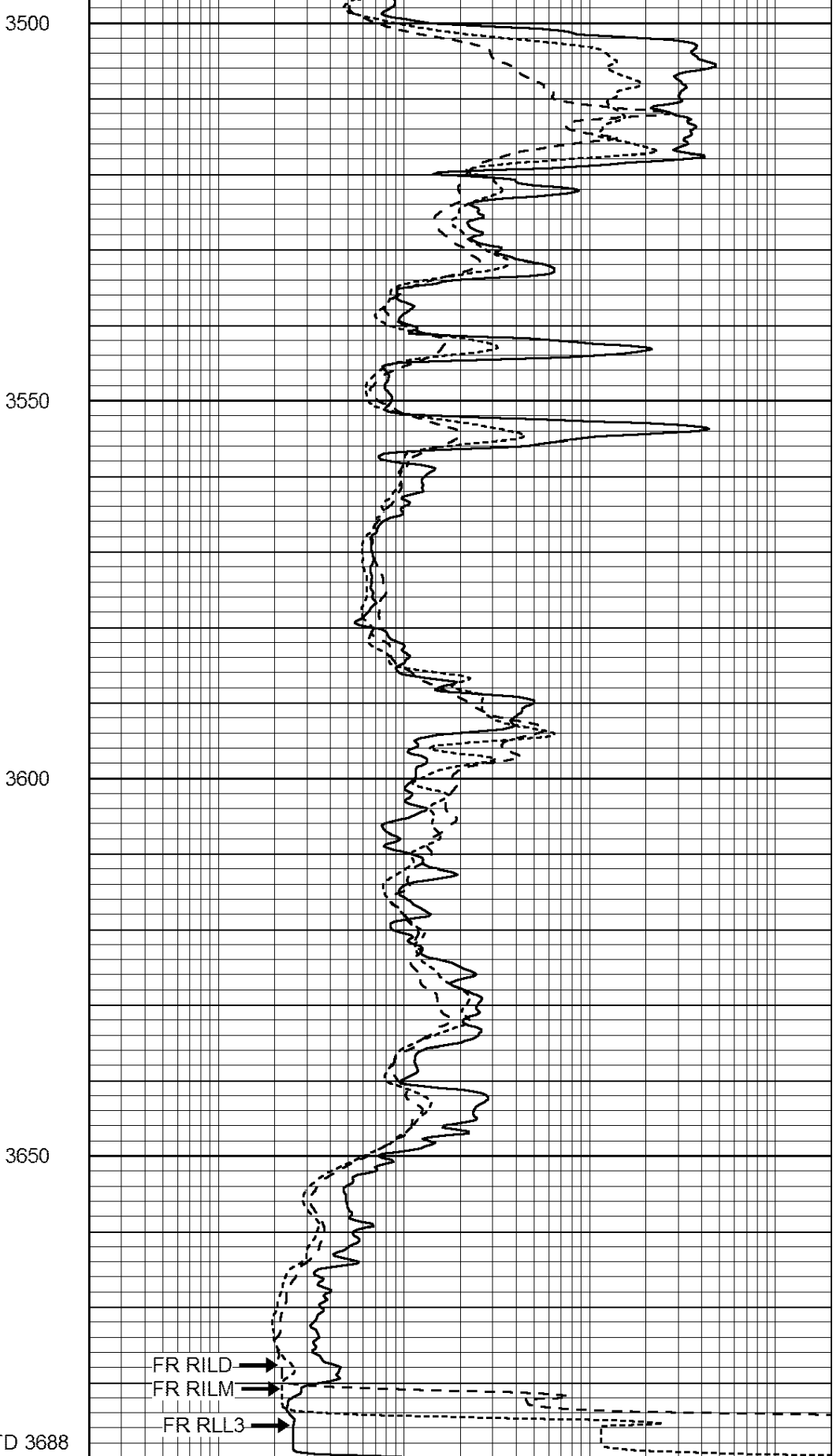
3450





LTD 3688

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



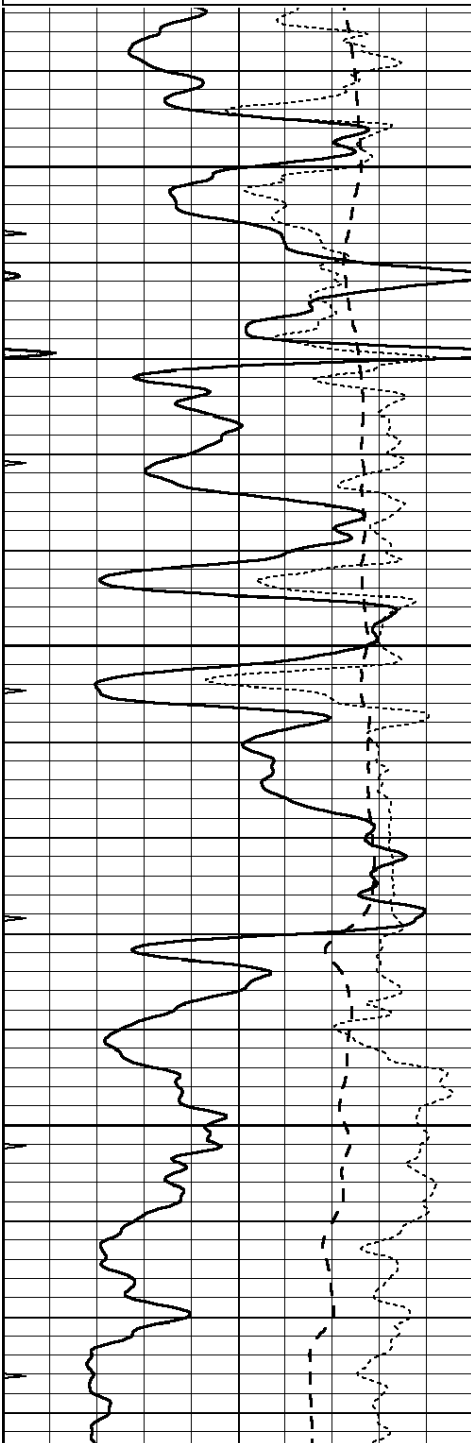
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REPEAT SECTION

Database File: 010636ddn.db
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 Presentation Format: _dil
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 Charted by: Depth in Feet scaled 1:240

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

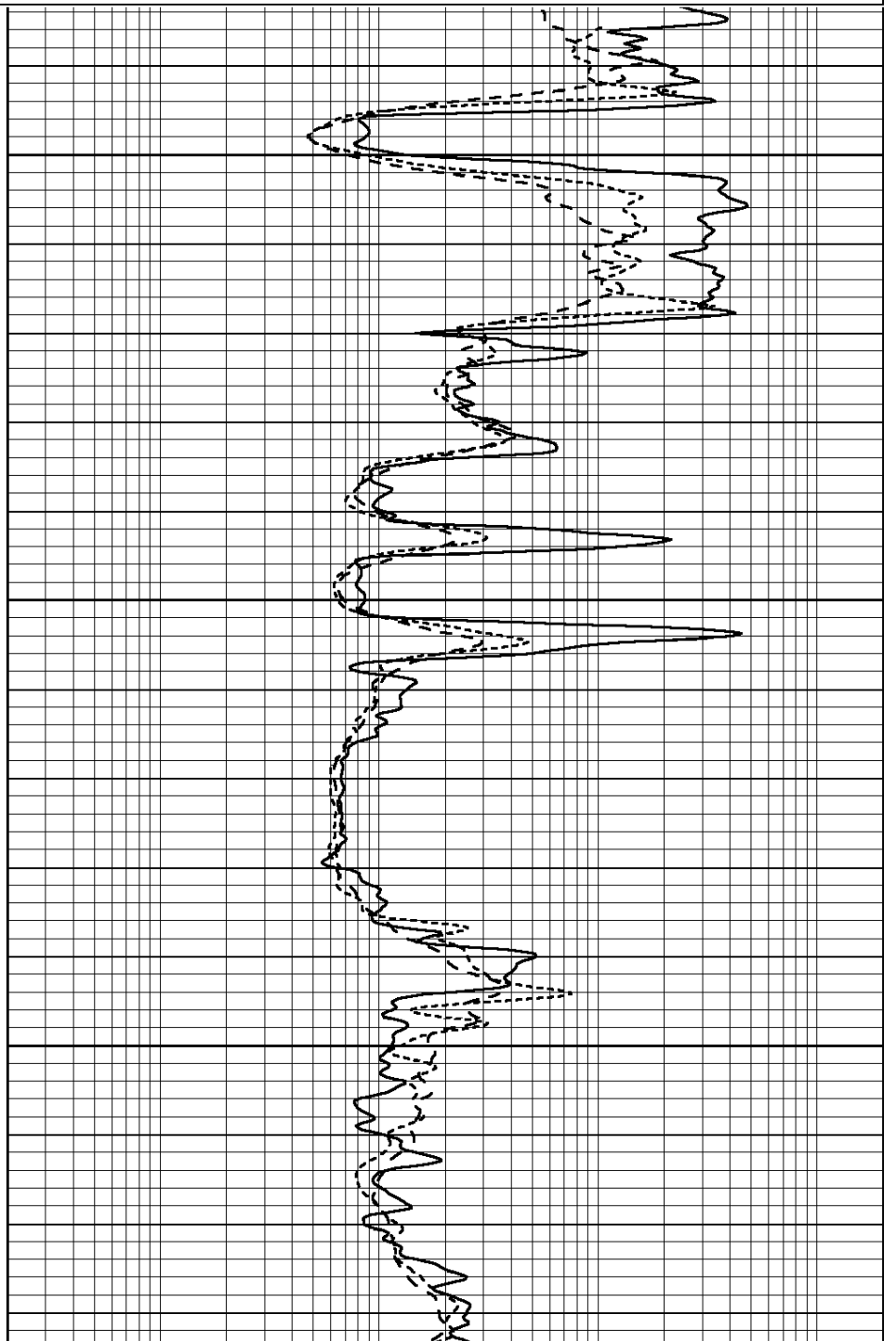
0.2	SHALLOW GUARD (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000



3500

3550

3600



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		

Compensated Density Calibration Report

Serial-Model: GEAR3-GEARHART
Source / Verifier: 143 / 143
Master Calibration Performed: Fri Jan 04 15:48:16 2013
Before Survey Verification Performed:
After Survey Verification Performed:

Master Calibration

	Density		Far Detector	Near Detector	
Magnesium	1.710	g/cc	935.36	501.55	cps
Aluminum	2.580	g/cc	209.32	357.01	cps
Spine Angle = 77.21			Density/Spine Ratio = 0.567		
	Size		Reading		
Small Ring	8.00	in	4.29	V	
Large Ring	14.00	in	6.24	V	

Before Survey Verification

Target	Measured
g/cc	g/cc
g/cc	g/cc
g/cc	g/cc

After Survey Verification

Target	Measured
g/cc	g/cc
g/cc	g/cc
g/cc	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

POST-SURVEY VERIFICATION

	Detector	Readings	Measured	Target
1)	Short Space Long Space	cps cps	pu	pu
2)	Short Space Long Space	cps cps	pu	pu
3)	Short Space Long Space	cps cps	pu	pu

Gamma Ray Calibration Report

Serial Number: #8
 Tool Model: OPEN
 Performed: Mon Jun 13 16:56:43 2011

 Calibrator Value: 150.0 GAPI

 Background Reading: 0.0 cps
 Calibrator Reading: 175.0 cps

 Sensitivity: 0.8371 GAPI/cps