



NABORS

**COMPLETION
& PRODUCTION
SERVICES CO.**

**DUAL
INDUCTION
LOG**

Company	RITCHIE EXPLORATION, INC.		
Well	#1 HUSEMAN 19 D		
Field	MICHIGAN NORTH		
County	SCOTT	State	KANSAS
Location:	AP1 #: 15-171-21029-0000		Other Services
	1635' FSL & 540' FEL		CDL/CNL
	S/2 - NE - SE		
	SEC 19 TWP 16S RGE 31W		
Permanent Datum	GROUND LEVEL	Elevation	2947
Log Measured From	KELLY BUSHING 5' A.G.L.	K.B. 2952	
Drilling Measured From	KELLY BUSHING	D.F. 2950	
		G.L. 2947	
Date	3/5/14		
Run Number	ONE		
Depth Driller	4750		
Depth Logger	4753		
Bottom Logged Interval	4751		
Top Log Interval	00		
Casing Driller	8 5/8" @ 221'		
Casing Logger			
Bit Size	7 7/8"		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 3100 PPM	
Density / Viscosity	9.4/56		
pH / Fluid Loss	10.0/7.2		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	1.5 @ 81F		
Rmt @ Meas. Temp	.56 @ 81F		
Rmc @ Meas. Temp	.90 @ 81F		
Source of Rmt / Rmc	MEASUREMENT		
Rm @ BHT	.99 @ 122F		
Time Circulation Stopped	2 HOURS		
Time Logger on Bottom	7:10 P.M.		
Maximum Recorded Temperature	122F		
Equipment Number	4010		
Location	HAYS, KANSAS		
Recorded By	JASON CAPPELLUCCI		
Witnessed By	MIKE ENGELBRECHT		

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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.

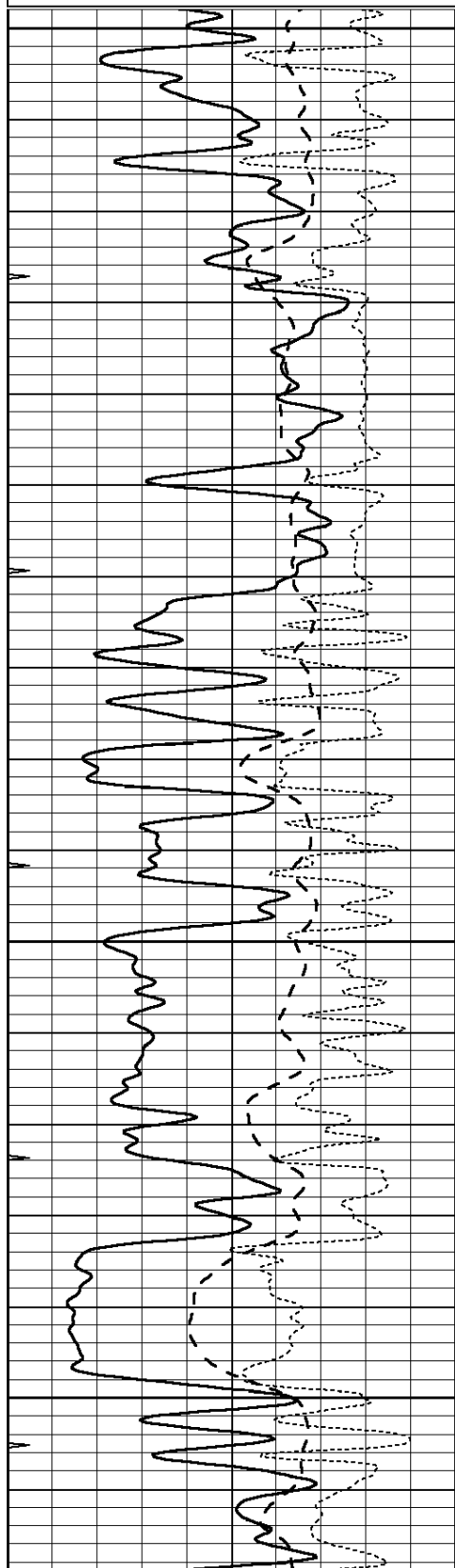
Comments

THANK YOU FOR USING NABORS, HAYS, KS. (785) 628-6395
DIRECTIONS:
HEALY, KS. - 9 WEST TO RODEO RD. - 3 NORTH - 1 EAST - NORTH INTO

Database File: 24006ddn.db
 Dataset Pathname: pass4.1
 Presentation Format: _dil
 Dataset Creation: Wed Mar 05 20:07:11 2014 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

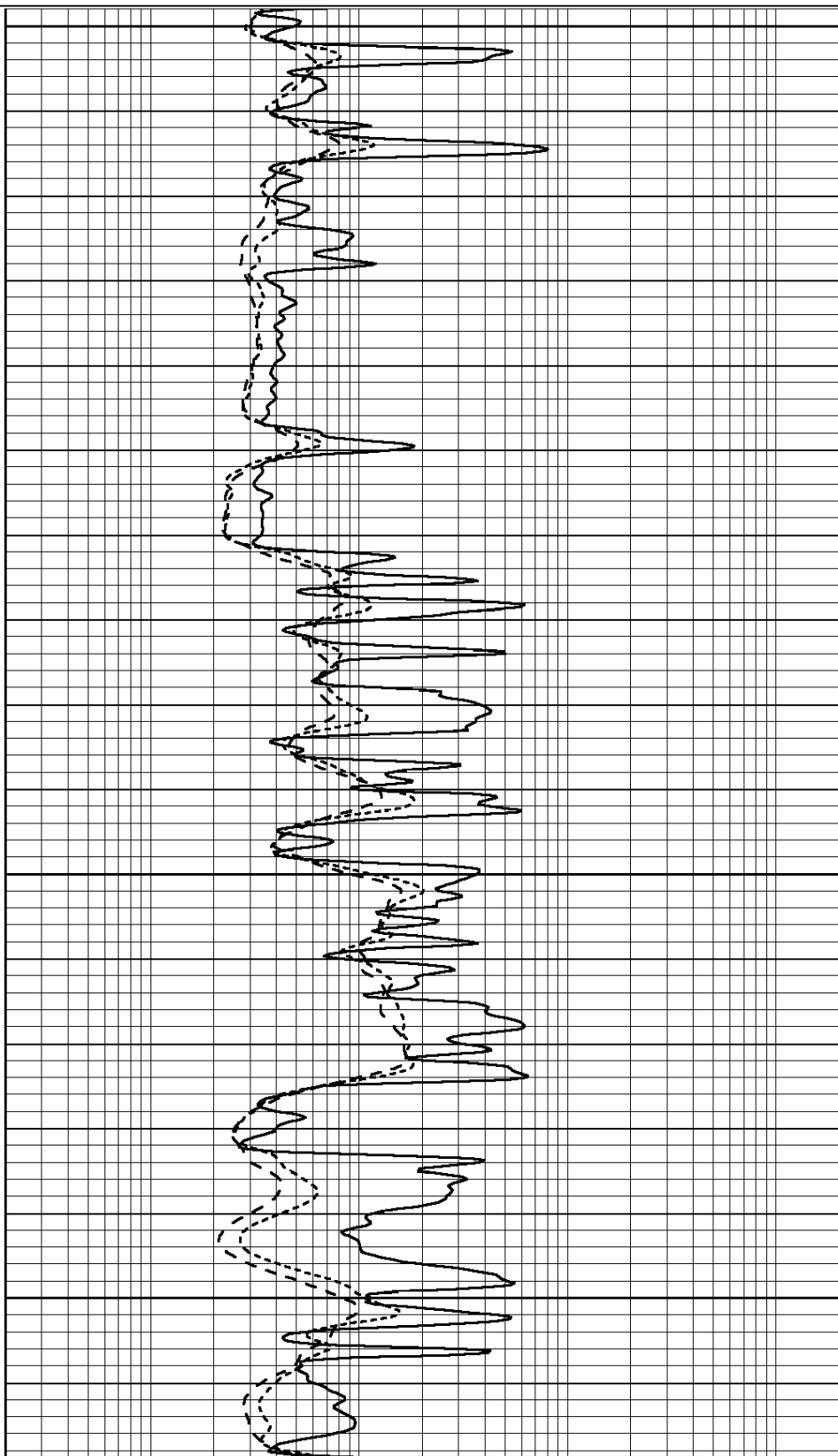


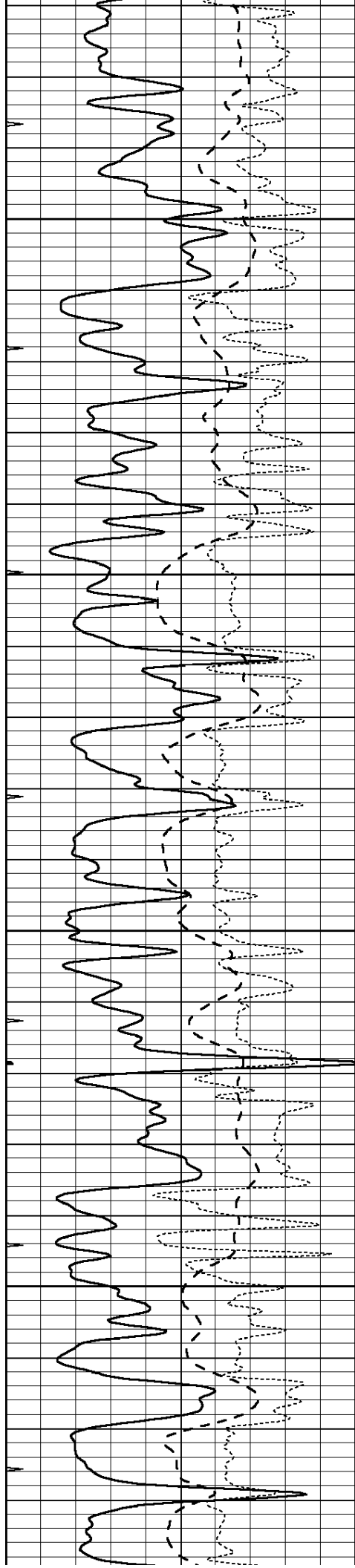
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3550

3600

3650



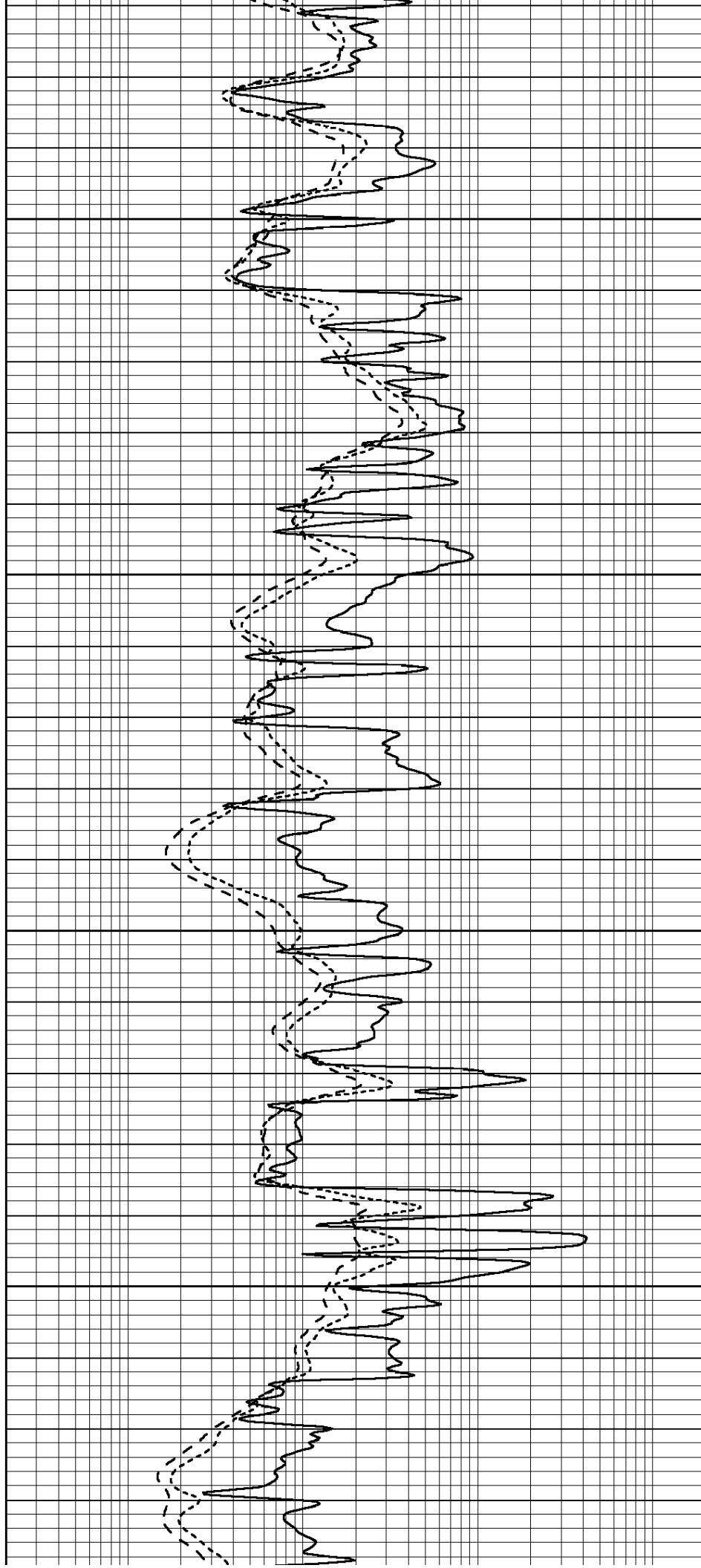


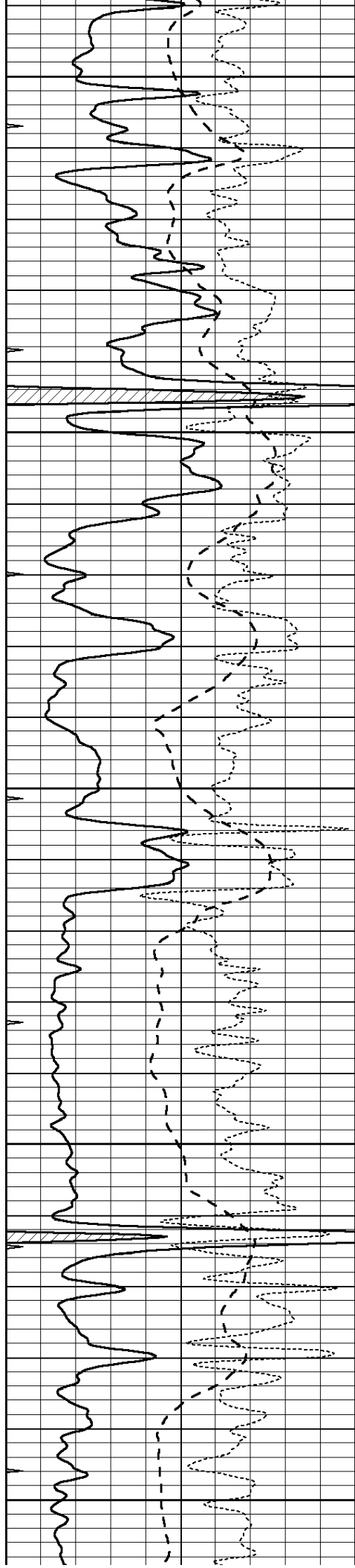
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3750

3800

3850





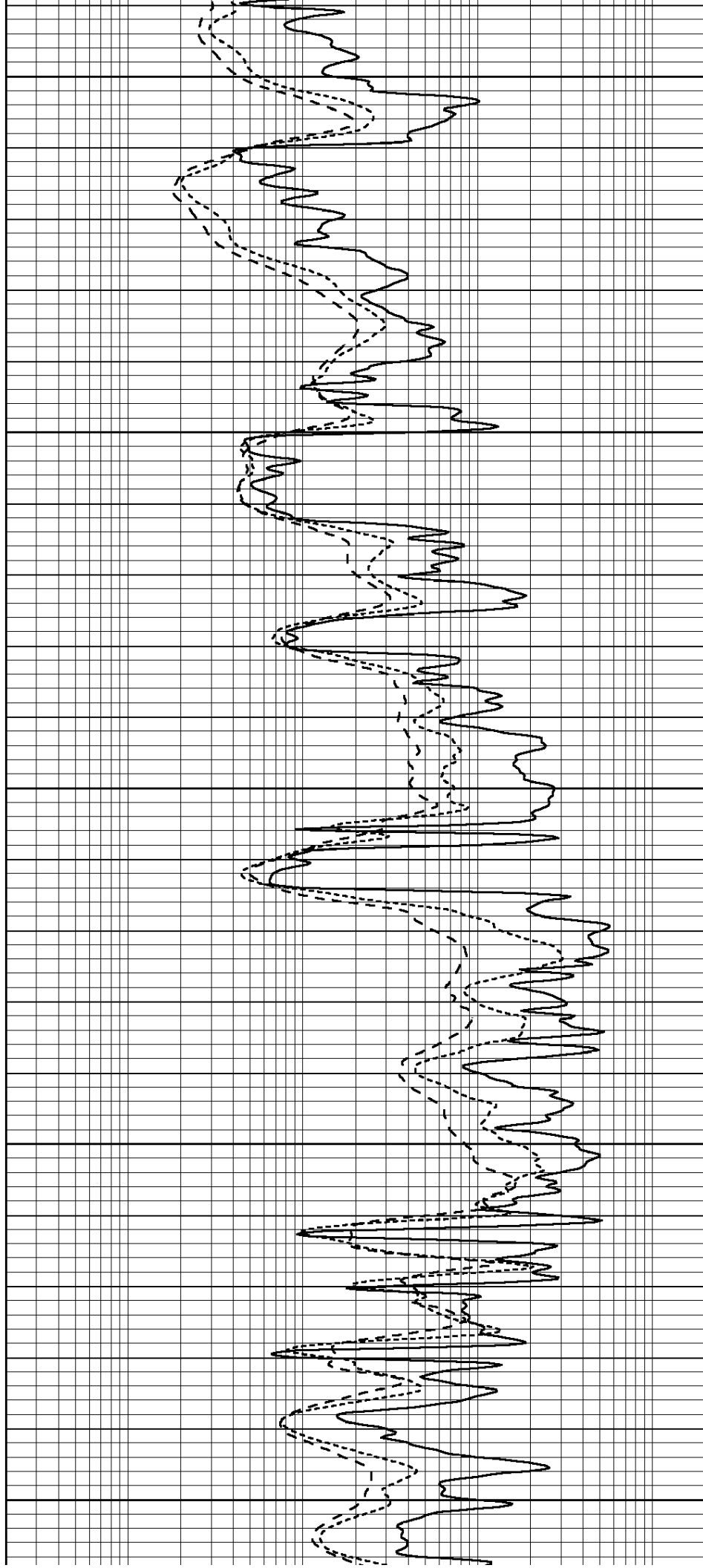
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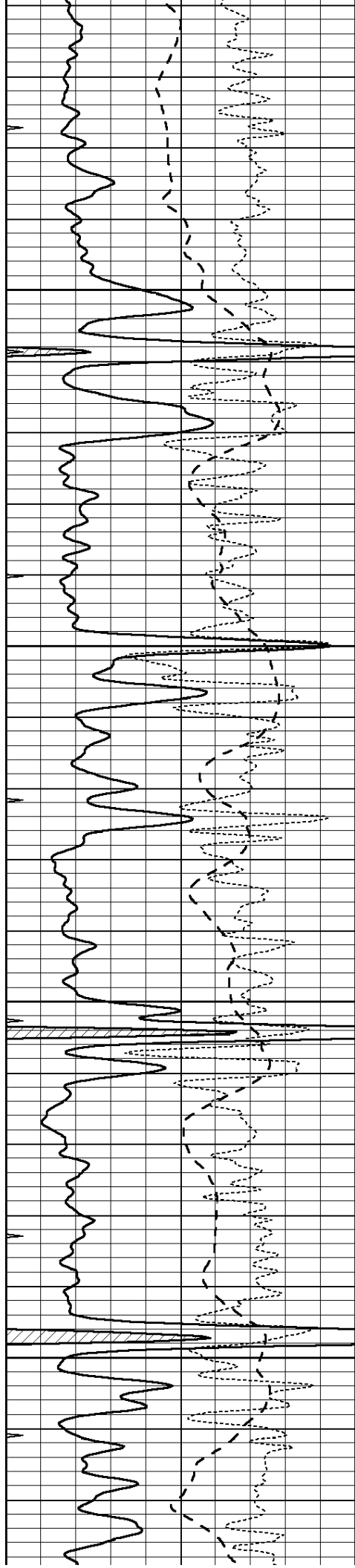
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4000

4050

4100



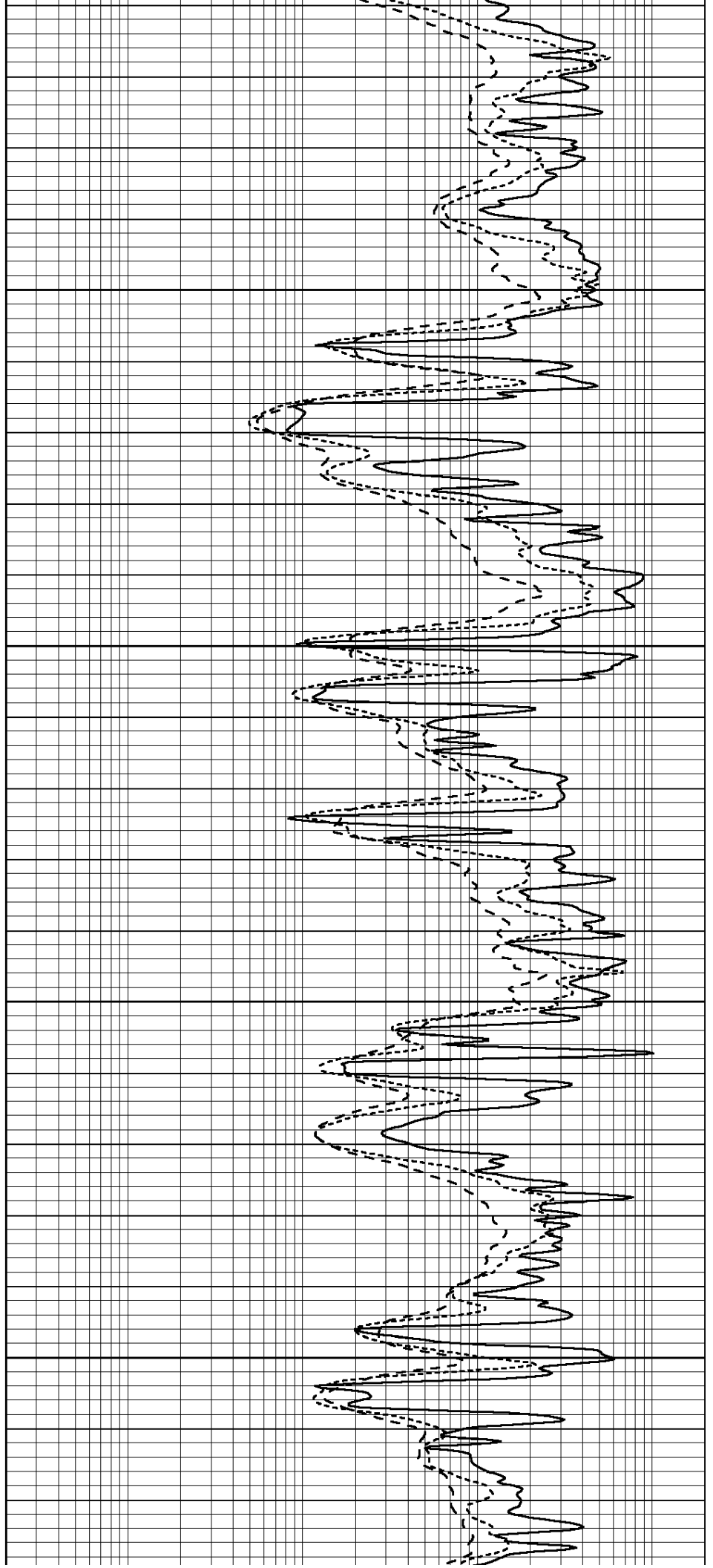


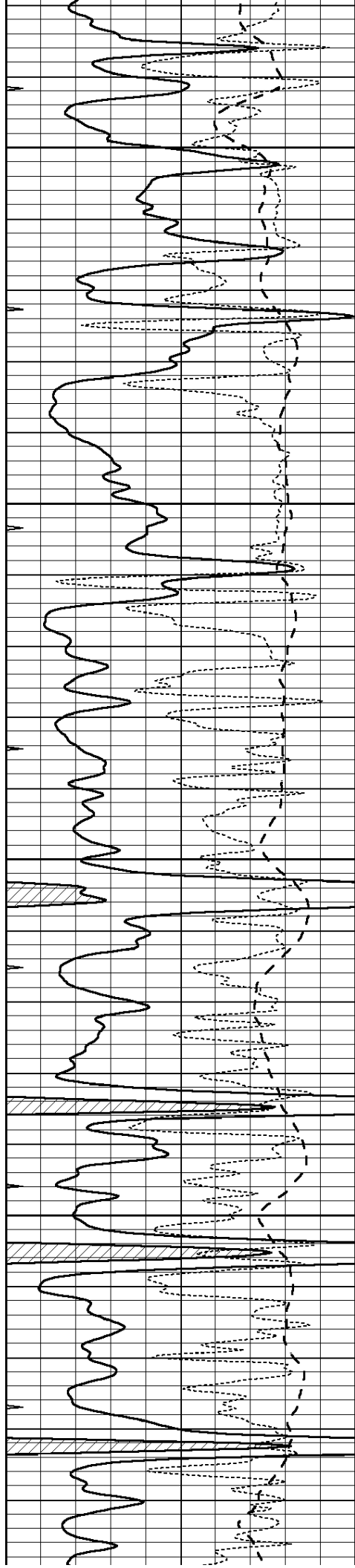
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4200

4250

4300



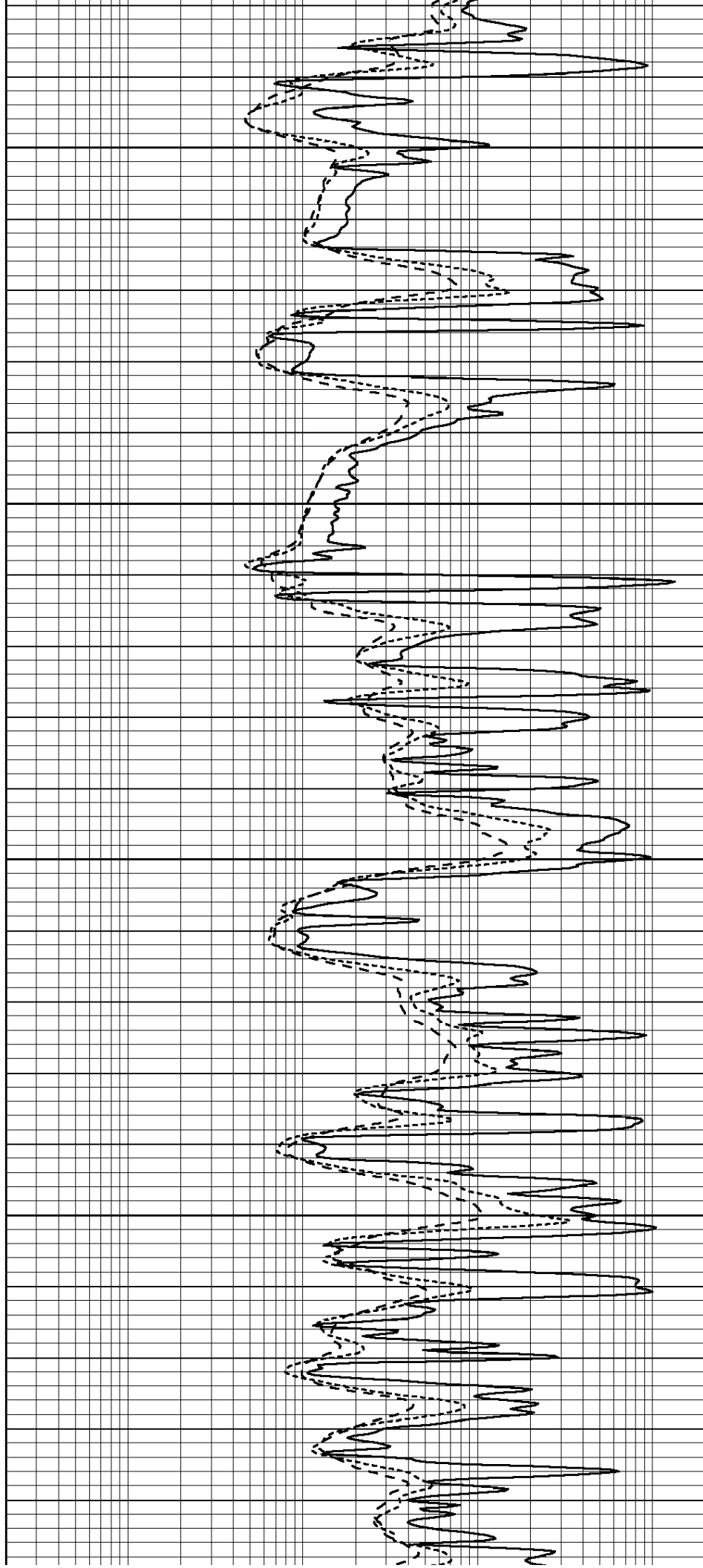


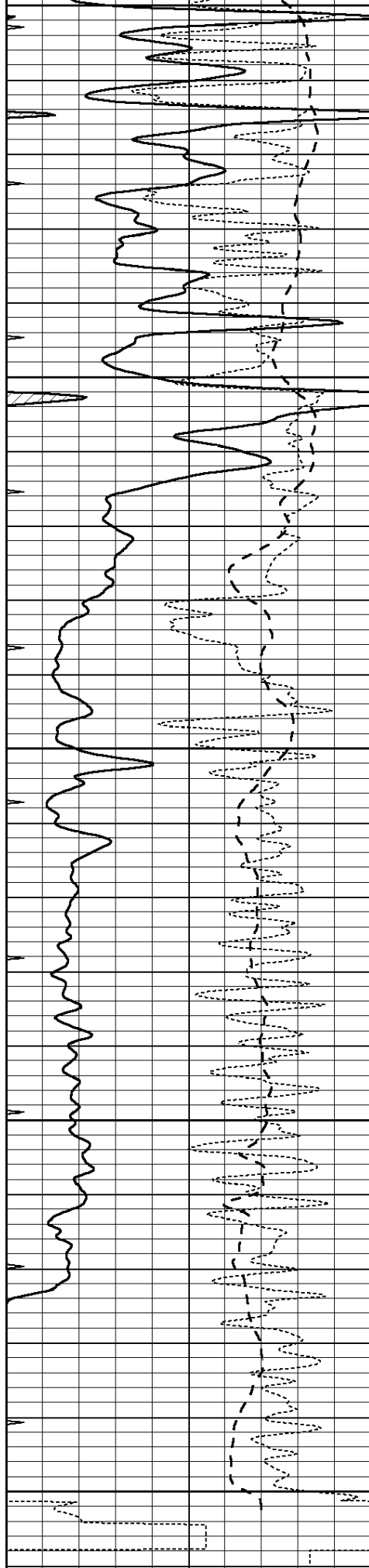
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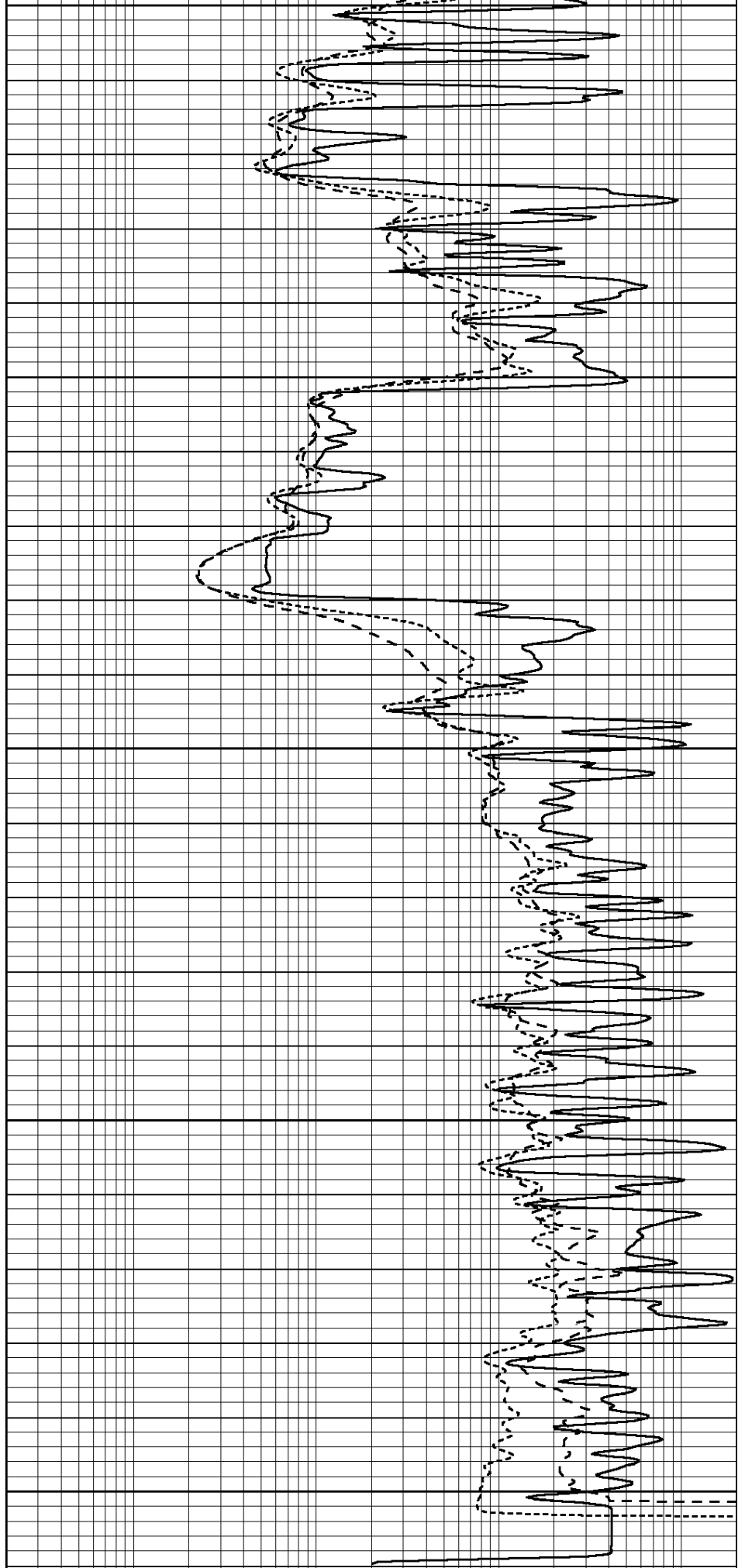
4500





0 GAMMA RAY (GAPI) 150
-100 SP (mV) 100

4550
4600
4650
4700
4750



0.2 SHALLOW GUARD (Ohm-m) 2000
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