



# NABORS

**COMPLETION  
& PRODUCTION  
SERVICES CO.**

**COMPENSATED  
DENSITY / NEUTRON  
PE LOG**

Company		MULL DRILLING COMPANY, INC.	
Well	APC - BAUGHMAN UNIT #1-35		
Field	WILDCAT		
County	CHEYENNE	State	COLORADO
Location:	APC - BAUGHMAN UNIT #1-35		Other Services DIL/MEL SONIC
660' FSL & 330' FWL			
Permanent Datum	GROUND LEVEL	Elevation	4218
Log Measured From	KELLY BUSHING 11' A.G.L.		Elevation K.B. 4229 D.F. 4227 G.L. 4218
Drilling Measured From	KELLY BUSHING		
Date	8/2/13		
Run Number	ONE		
Depth Driller	5490		
Depth Logger	5492		
Bottom Logged Interval	5468		
Top Log Interval	3800		
Casing Driller	8 5/8" @ 651'		
Casing Logger	649		
Bit Size	7 7/8"		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 4,700 PPM	
Density / Viscosity	9.2/55		
pH / Fluid Loss	10.0/8.8		
Source of Sample	FLOWLINE		
Rim @ Meas. Temp	.700 @ 90F		
Rmf @ Meas. Temp	.525 @ 90F		
Rmc @ Meas. Temp	.840 @ 90F		
Source of Rmf / Rmc	MEASUREMENT		
Rim @ BHT	.488 @ 129F		
Time Circulation Stopped	3 HOURS		
Time Logger on Bottom	9:15 A.M.		
Maximum Recorded Temperature	129F		
Equipment Number	4854		
Location	HAYS, KANSAS		
Recorded By	JEFF LUEBBERS		
Witnessed By	PHIL ASKEY	GREG TWOMBLY	JERRY ROANE

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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  
CHEYENNE WELLS, CO. 13S. ON HWY 385 TO "RD. C", 6 W. TO "T", 3/4S., E. INTO

Database File:

011197pe.db

Dataset Pathname:

pass3.13

Presentation Format:

ldt\_neu

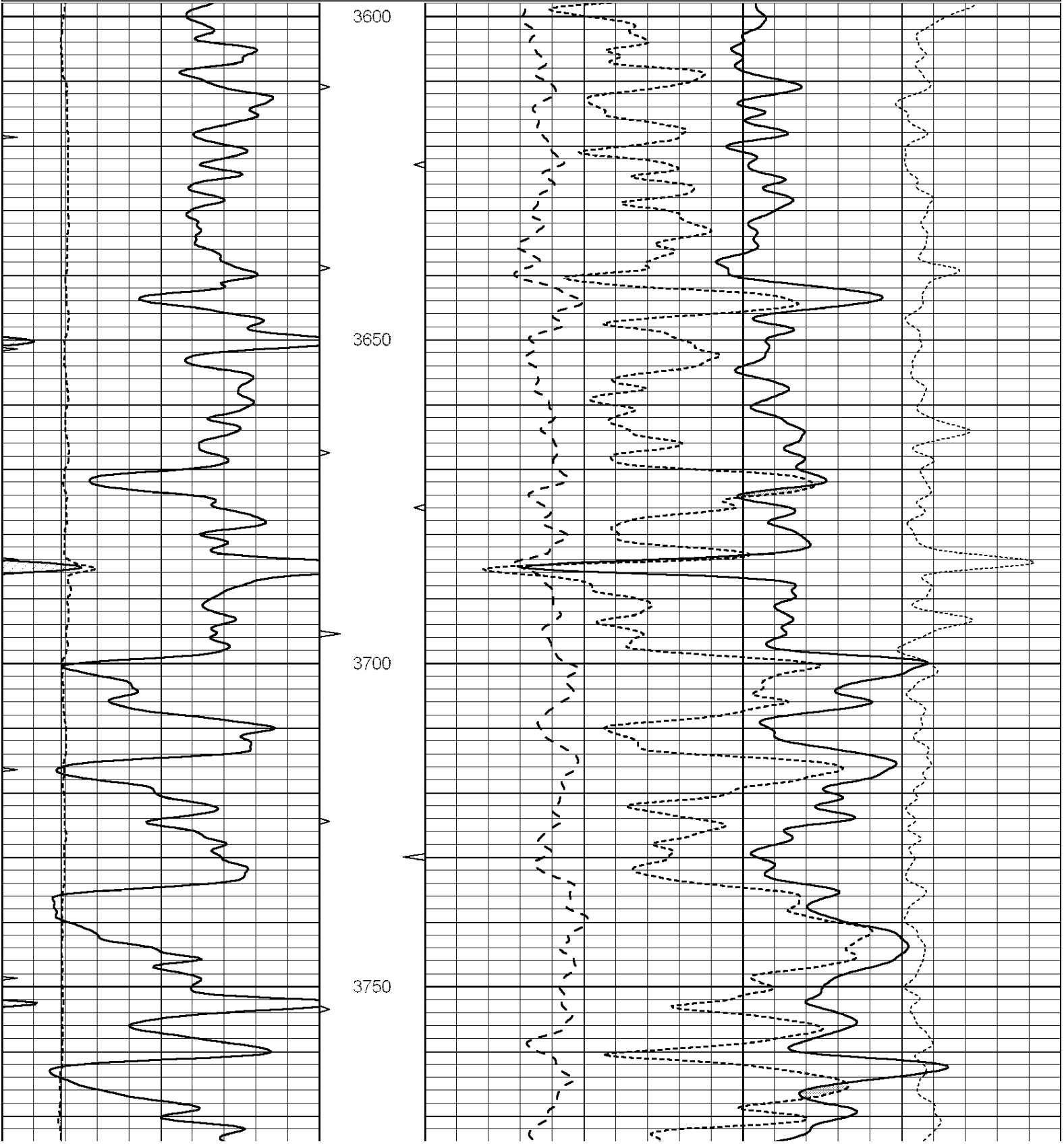
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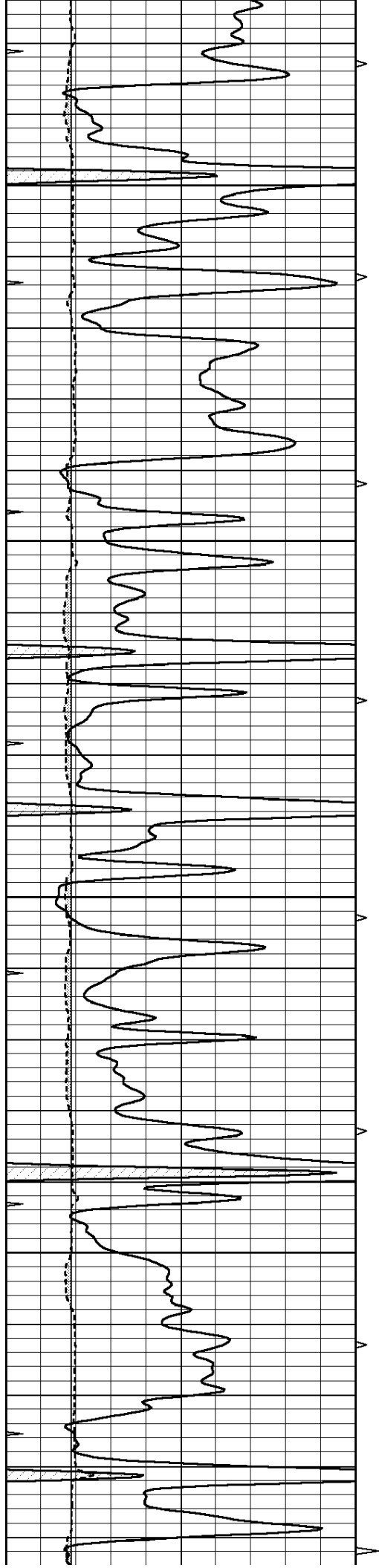
Fri Aug 02 11:44:34 2013

Charted by:

Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150	ABHV	30	COMPENSATED DENSITY (pu)				-10	
6	CALIPER (in)	16	10 (ft3)	0	30	COMPENSATED NEUTRON (pu)				-10
-----										
0	MINMK	20	TBHV	0	PE	10	-0.25	CORRECTION (g/cc)	0.25	
			0 (ft3)	10	-----					



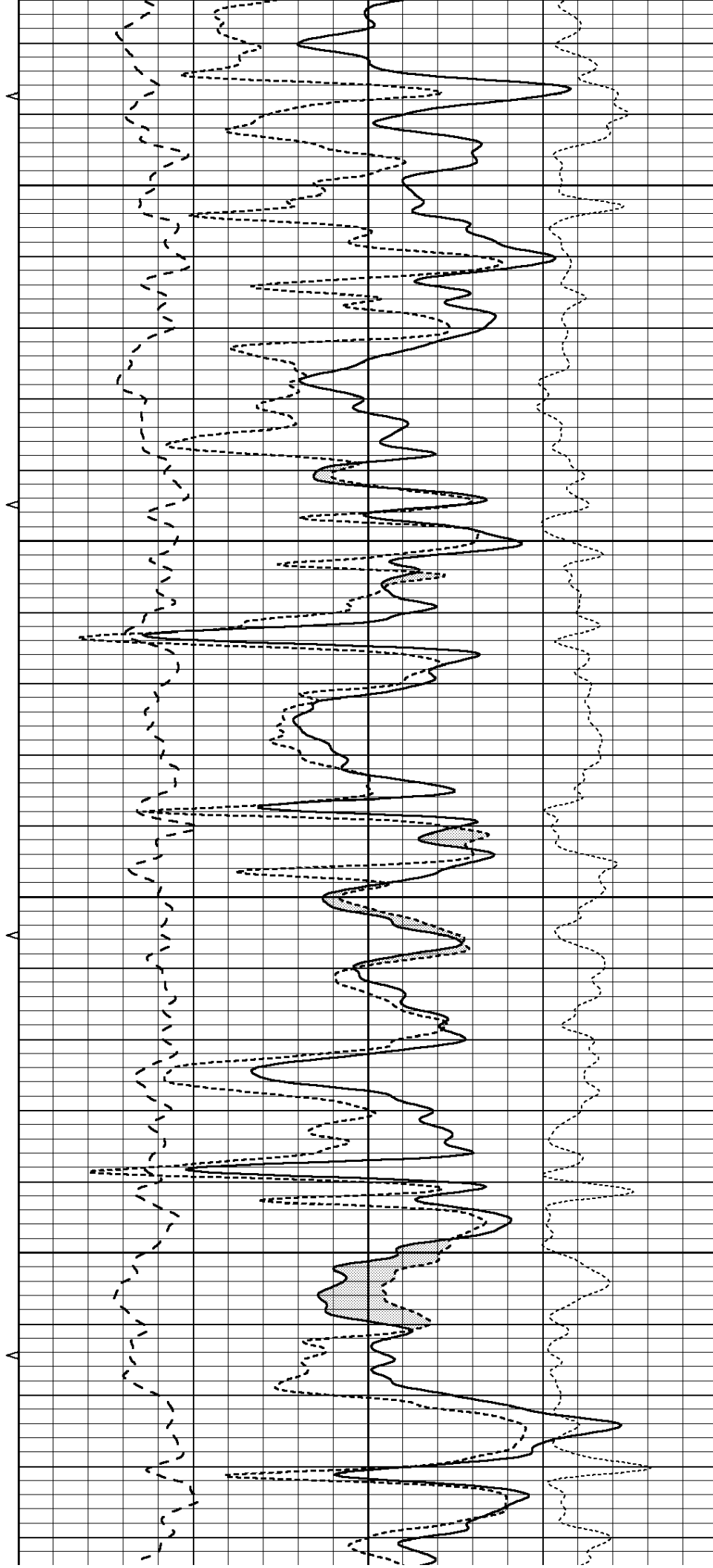


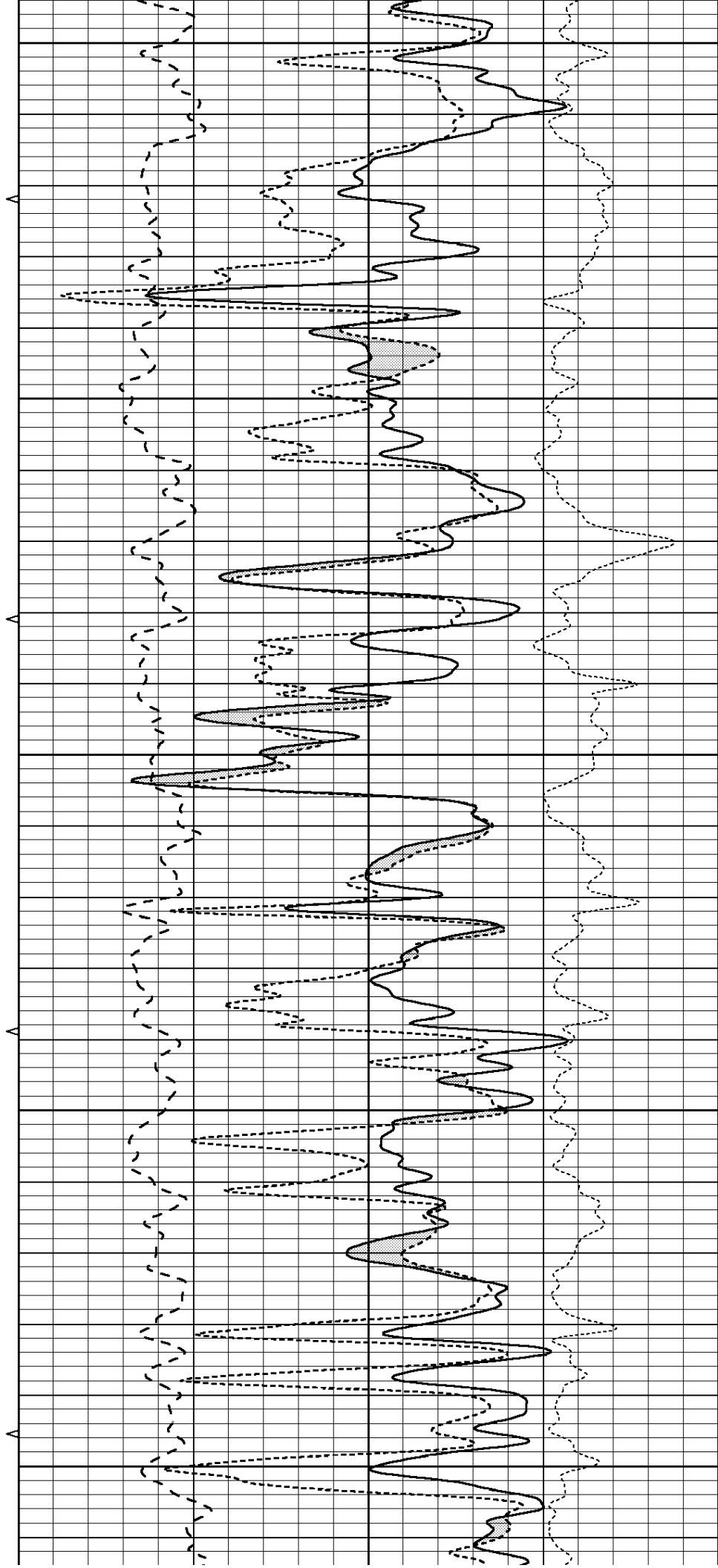
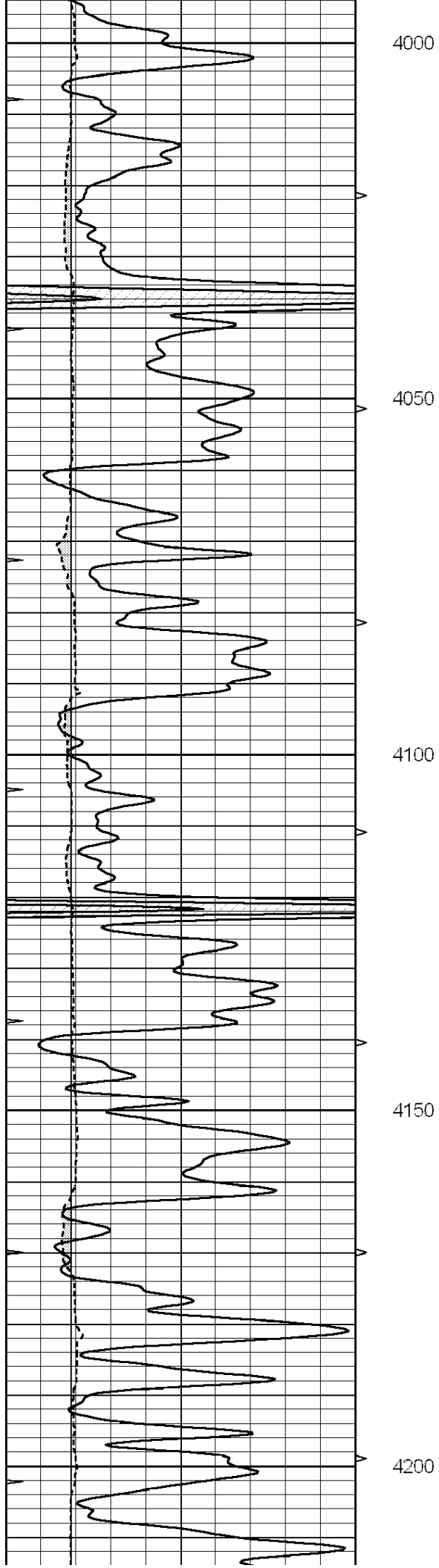
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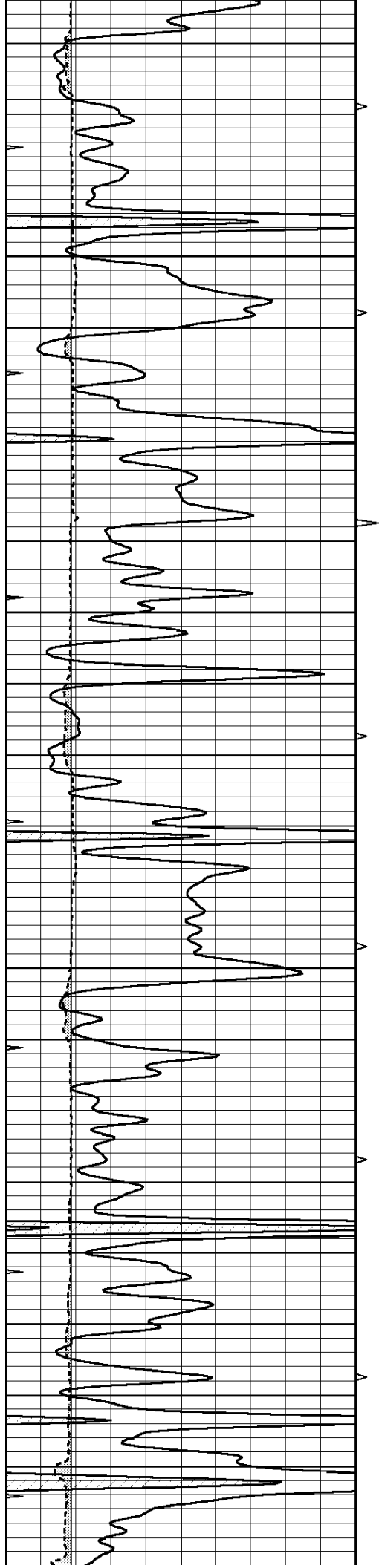
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3950





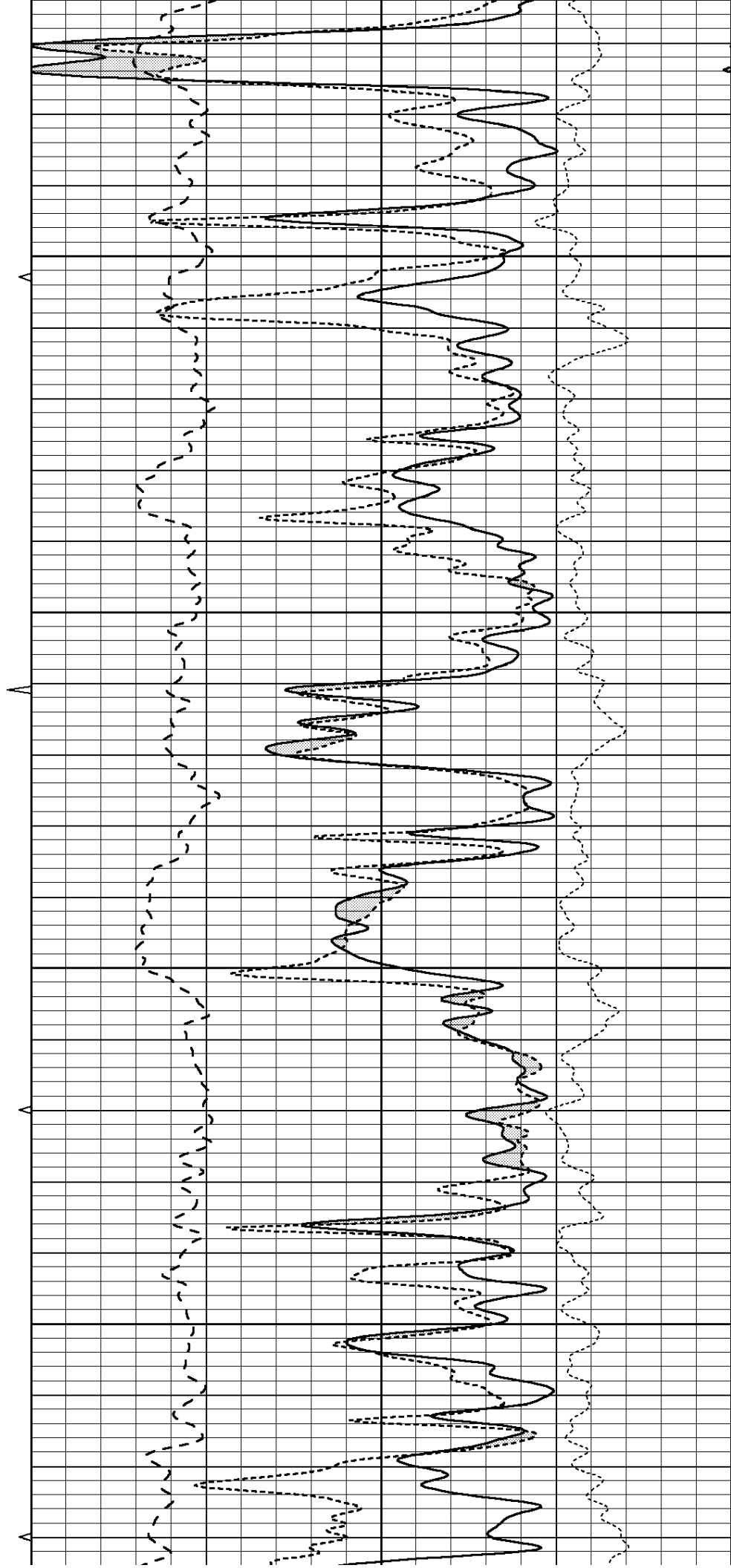


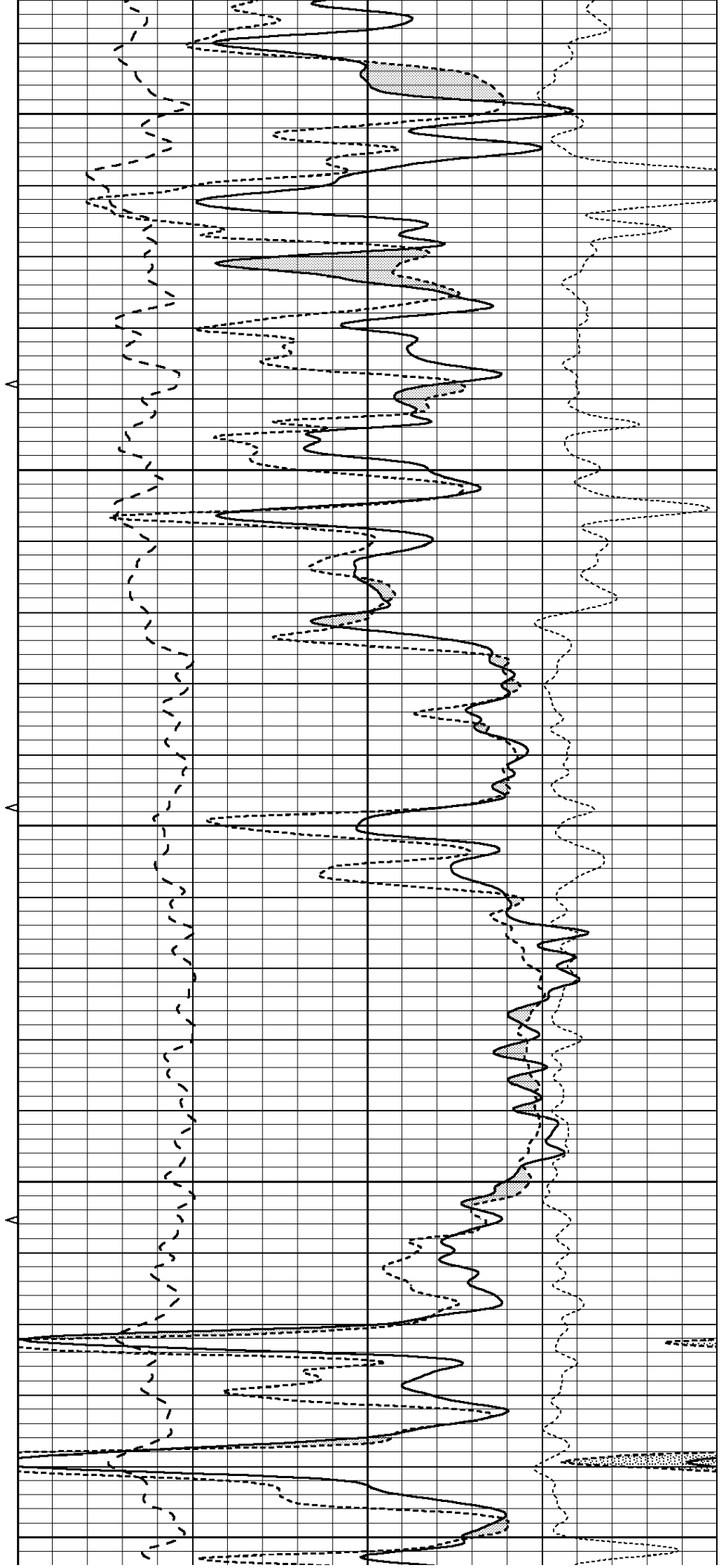
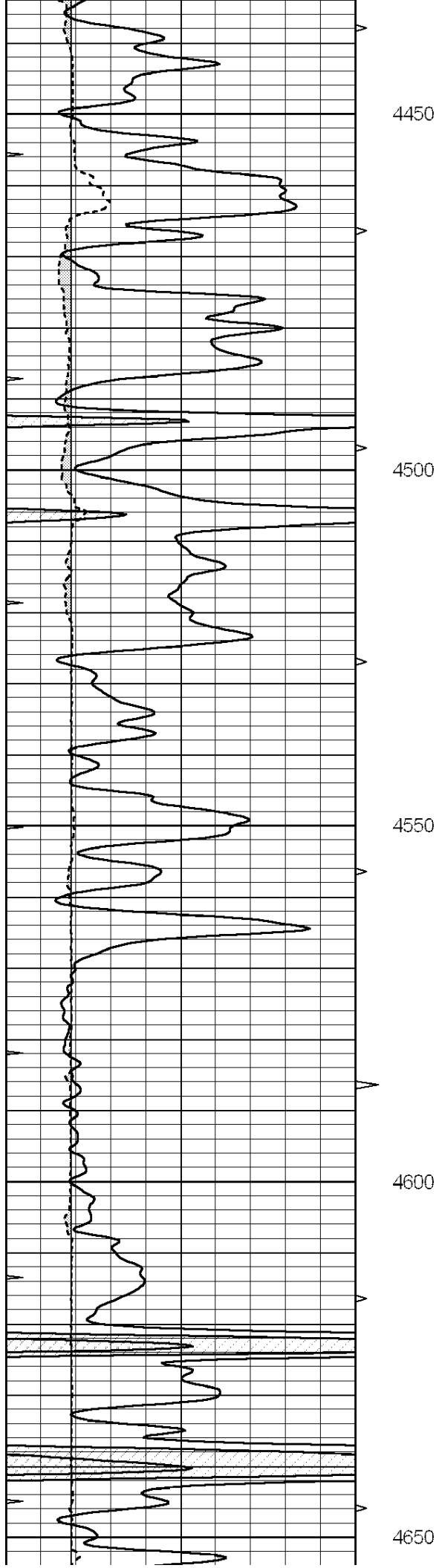
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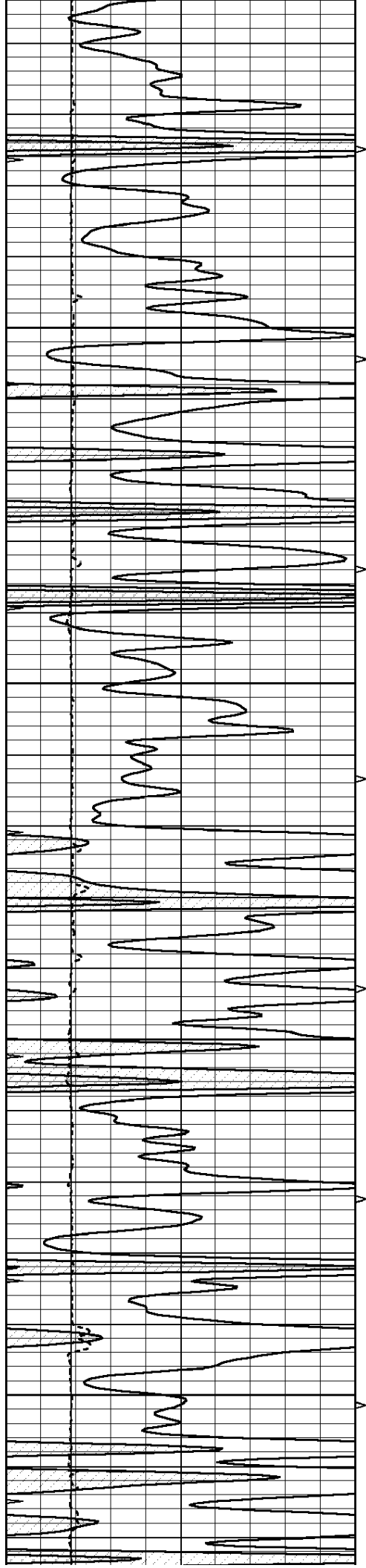
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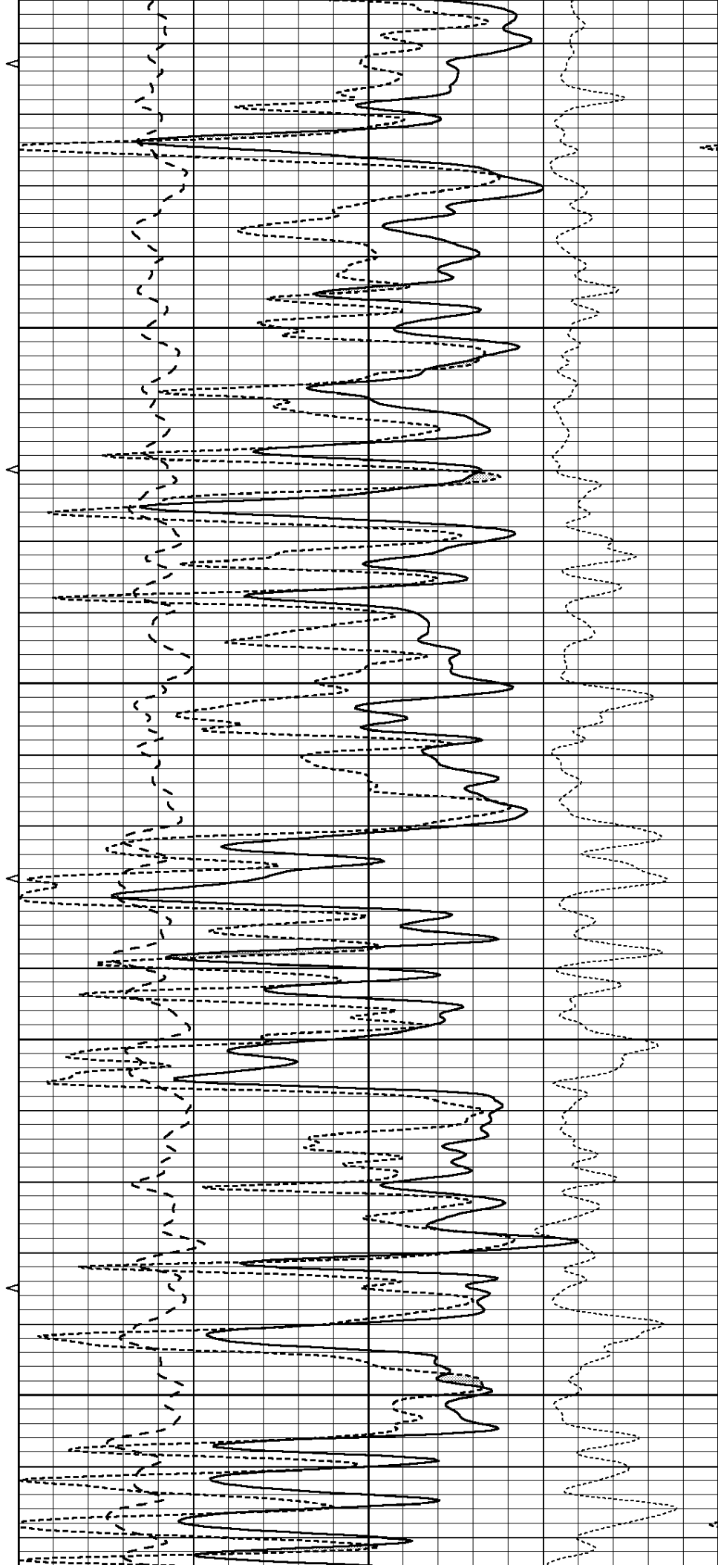


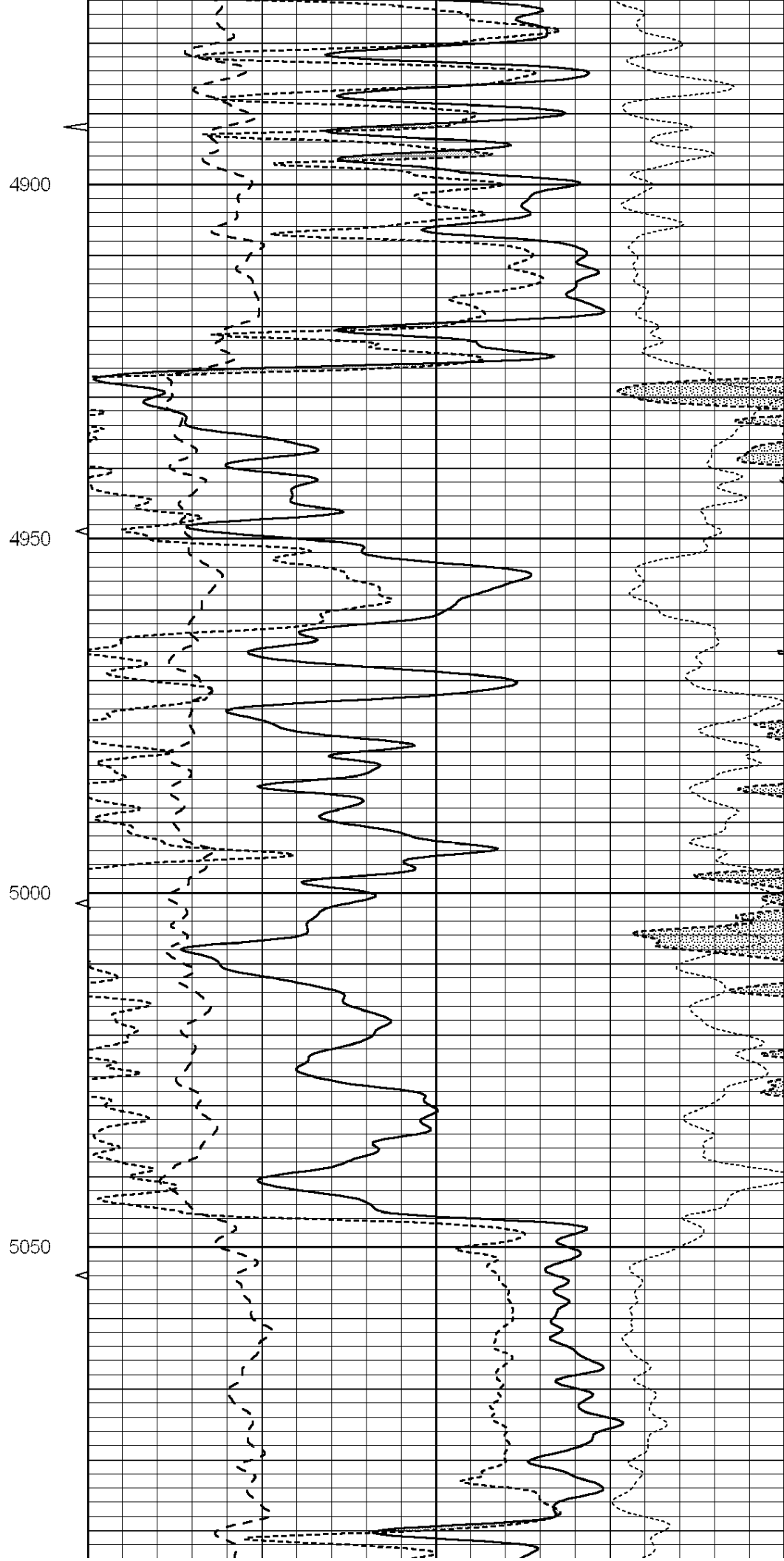
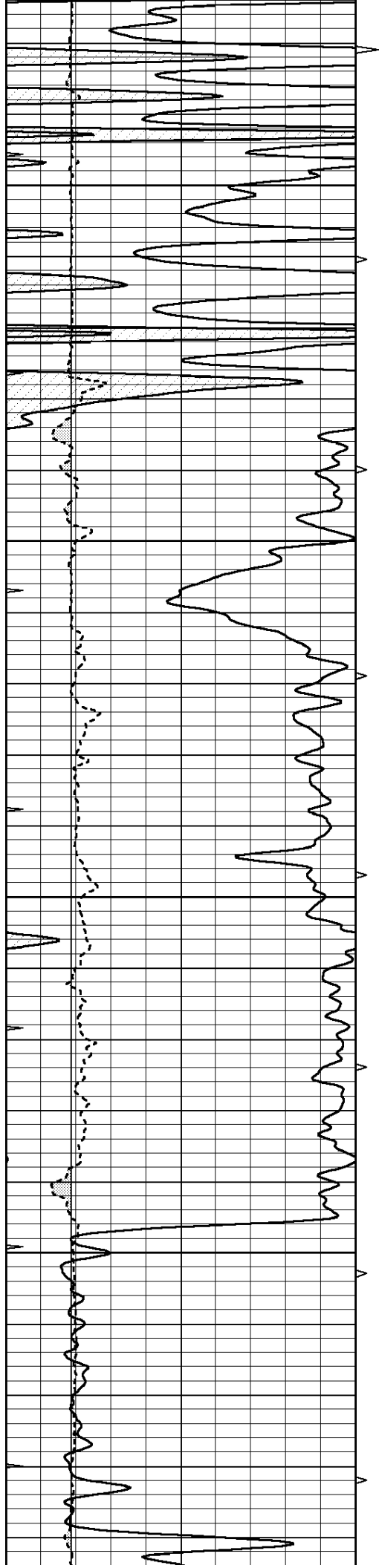
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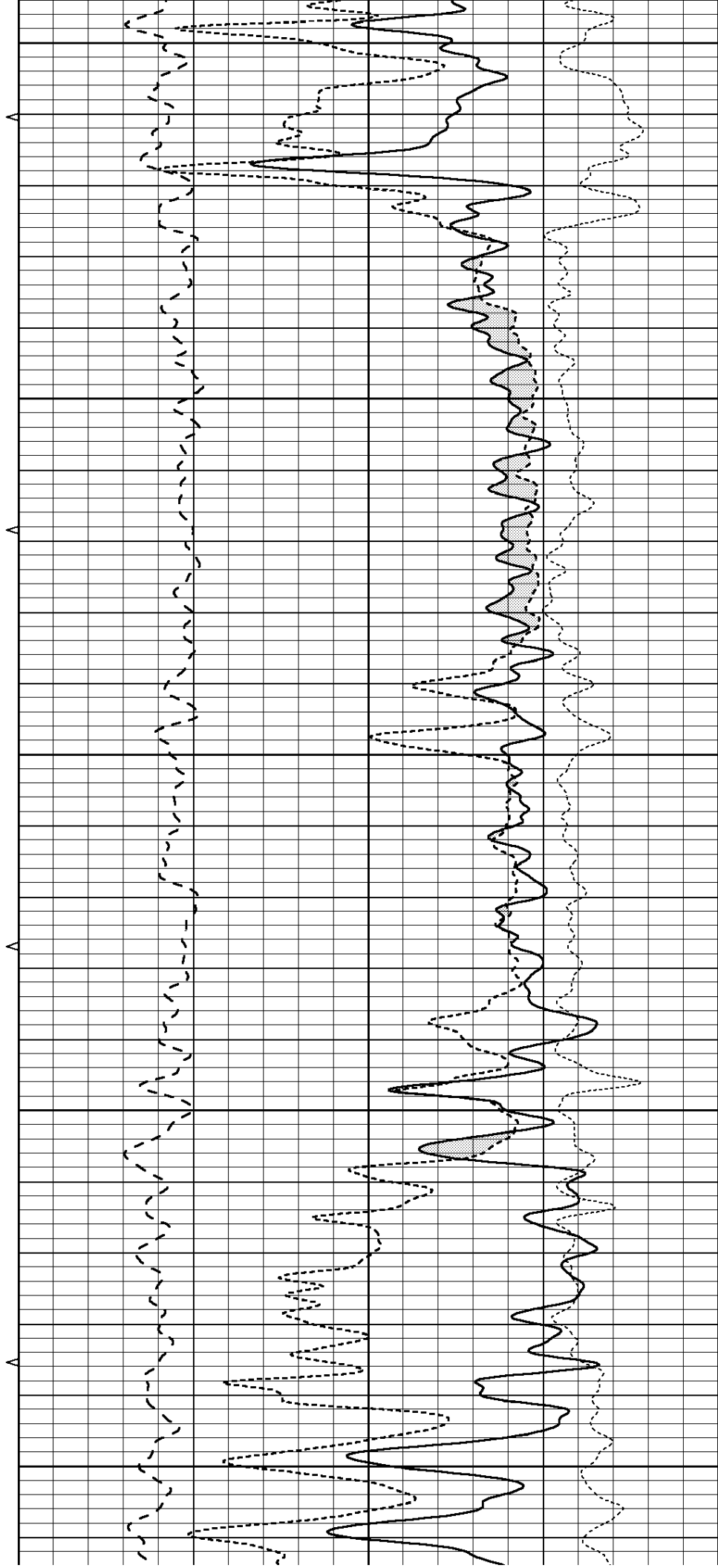
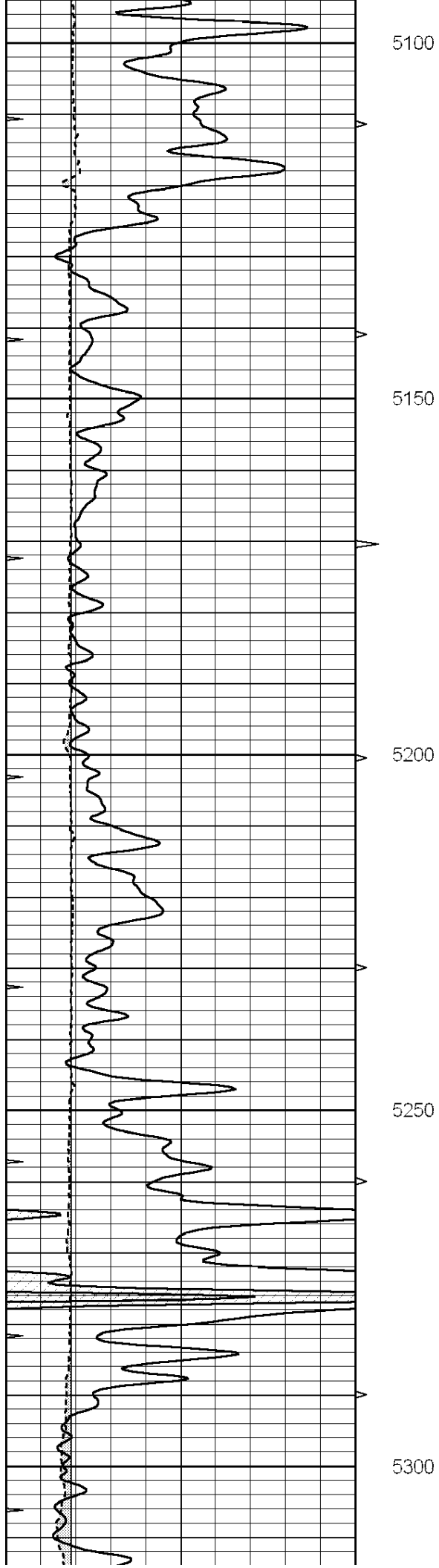
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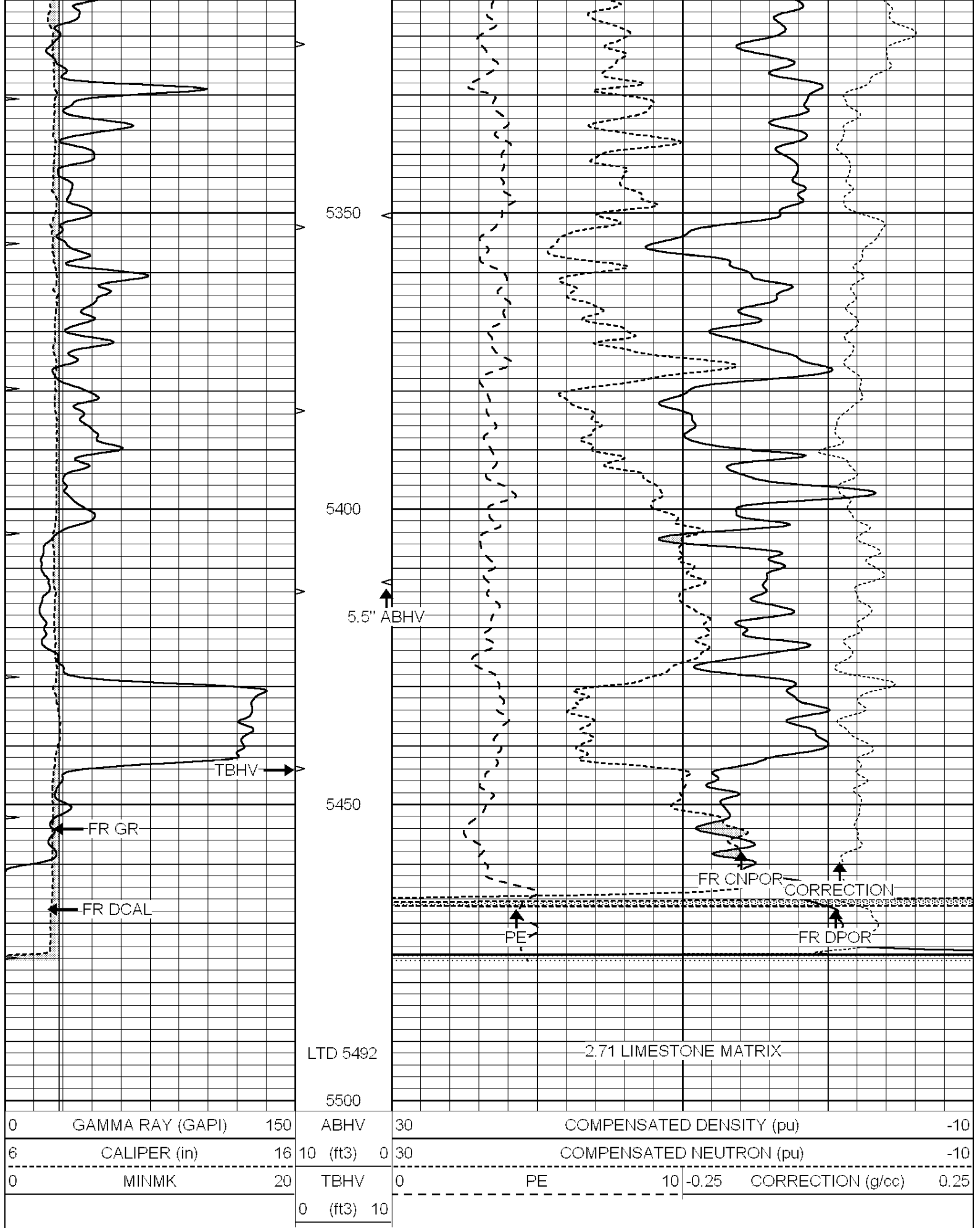
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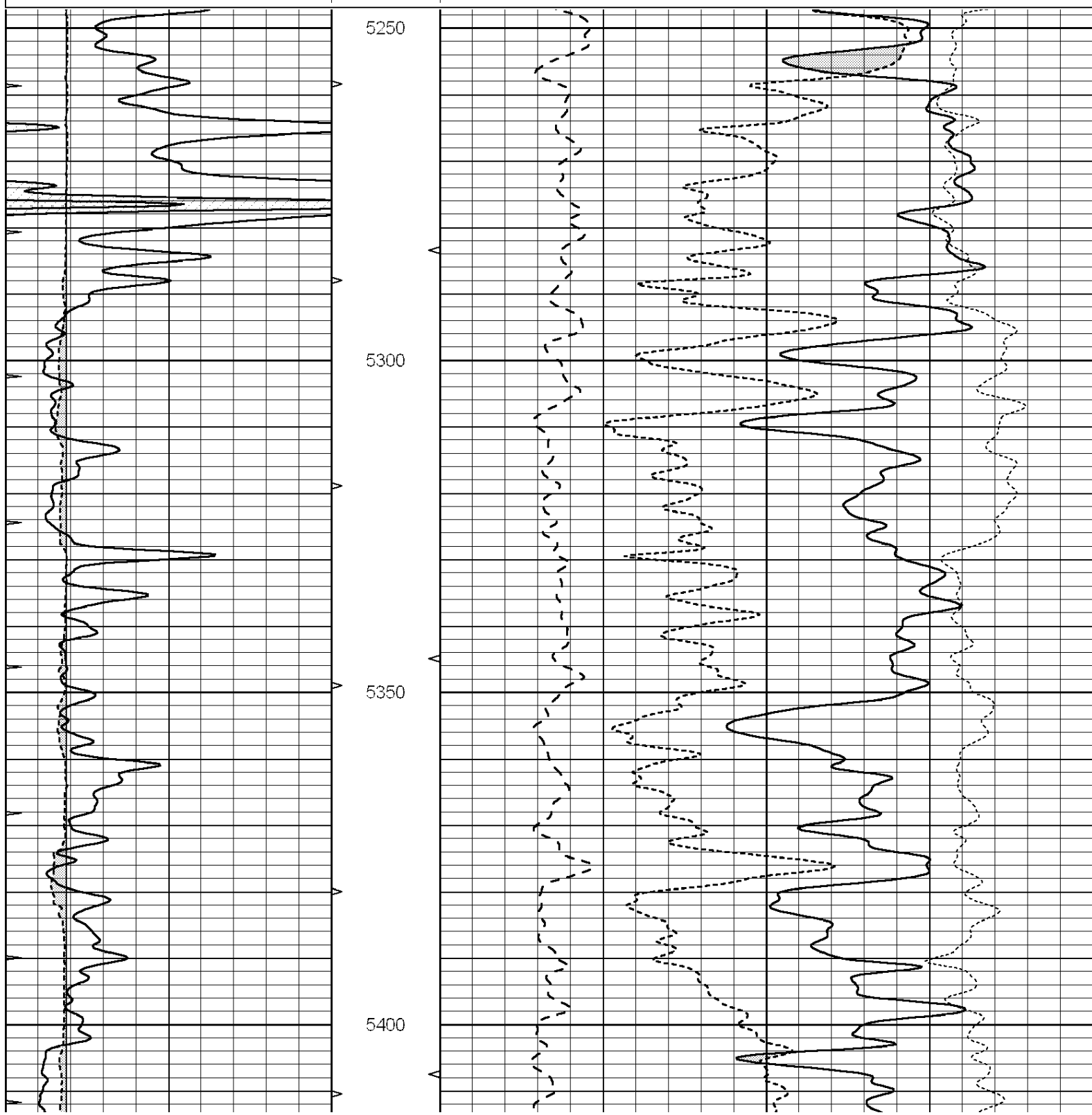


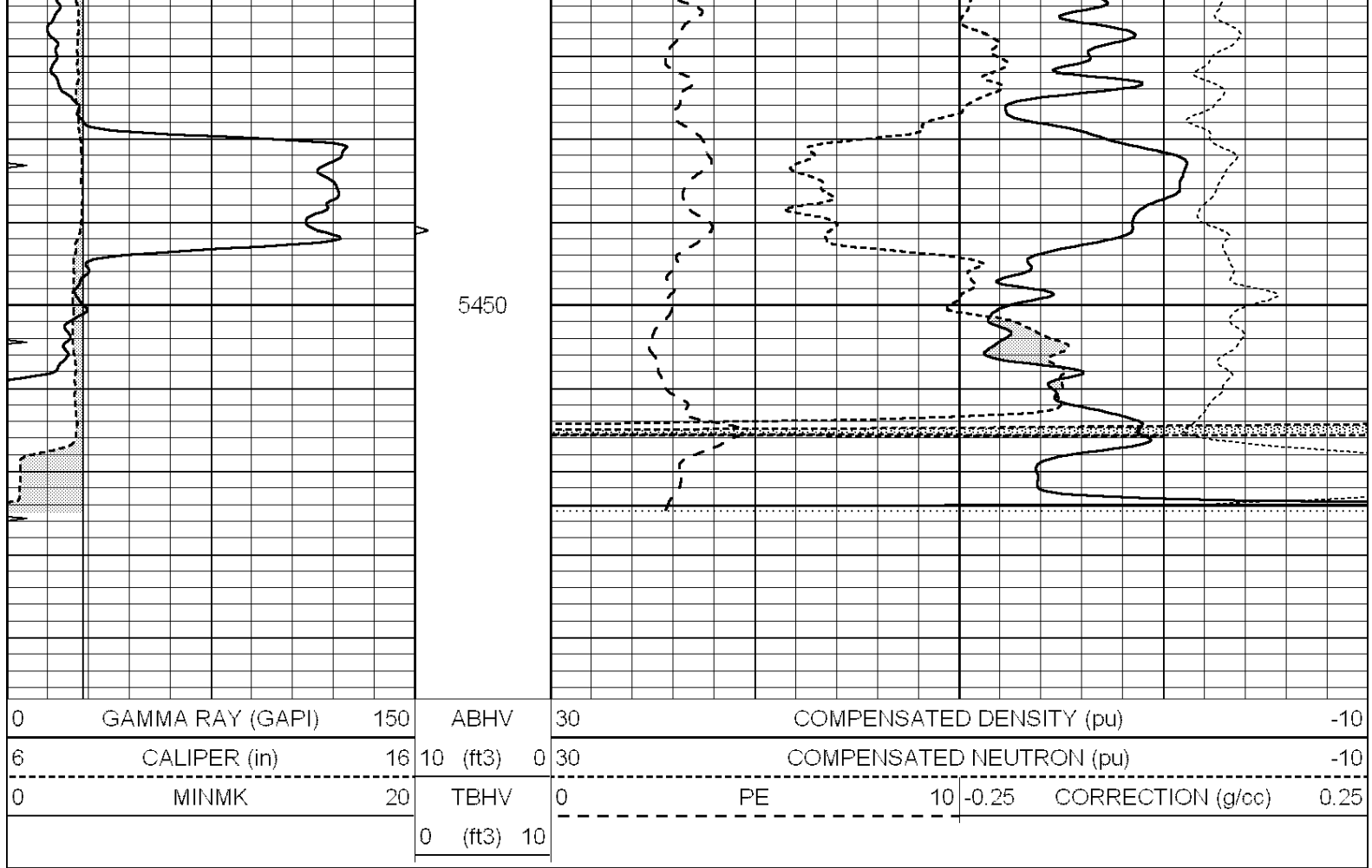




Database File: 011197pe.db  
Dataset Pathname: pass2.5  
Presentation Format: ldt\_neu  
Dataset Creation: Fri Aug 02 10:58:02 2013 by Calc SOC 120430  
Charted by: Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150	ABHV	30	COMPENSATED DENSITY (pu)			-10	
6	CALIPER (in)	16	10 (ft3)	0	30	COMPENSATED NEUTRON (pu)			-10
0	MINMK	20	TBHV	0	PE	10	-0.25	CORRECTION (g/cc)	0.25
			0 (ft3)	10					





### Calibration Report

Database File: 011197pe.db  
 Dataset Pathname: pass3.13  
 Dataset Creation: Fri Aug 02 11:44:34 2013

### Dual Induction Calibration Report

Serial-Model: PROBE9-DILG  
 Surface Cal Performed: Thu Jul 11 13:14:55 2013  
 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	621.923	5.000
Medium	0.039	0.728	V	0.000	464.000	mmho/m	640.000	-3.000
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		
		7.000	V		1000.000	Ohm-m		



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:	070559		
Tool Model:	OPEN_GR		
Performed:	Wed Jun 12 18:25:42 2013		
Calibrator Value:	1.0	GAPI	
Background Reading:	0.0	cps	
Calibrator Reading:	1.0	cps	
Sensitivity:	0.3500	GAPI/cps	