



MIDWEST SURVEYS

LOGGING - PERFORATING - CONSULTING SERVICES
P.O. Box 68, Osawatomie, KS 66064
913 / 755 - 2128

GAMMA RAY / NEUTRON / CCL

File No.

API # 15-207-28,478

Company **Haas Petroleum, LLC**
Well **Arnold No. 12-HP**
Field **Winterscheid**
County **Woodson** State **Kansas**

Location **2140' FNL & 2390' FEL
NW-SW-SW-NE** Other Services
Perforate
Sec. **35** Twp. **23s** Rge. **14e** Elevation
Permanent Datum **GL** Elevation **1125'** K.B. **1132'**
Log Measured From **GL** D.F. **NA**
Drilling Measured From **KB 7' from GL** G.L. **1125'**

Date	09-05-2013
Run Number	One
Depth Driller	1717.0
Depth Logger	1681.0
Bottom Logged Interval	1680.0
Top Log Interval	200.0
Fluid Level	Full
Type Fluid	Water
Density / Viscosity	NA
Salinity - PPM Cl	NA
Max Recorded Temp	NA
Estimated Cement Top	0.0
Equipment No.	107
Location	Osawatomie
Recorded By	Steve Windisch
Witnessed By	Mark Haas

BORE-HOLE RECORD				CASING RECORD			
RUN	BIT	FROM	TO	SIZE	WGT.	FROM	TO
One	12.25"	0.0	40.0	8.625"	22.0 #	0.0	40.0
Two	6.75"	40.0	1712.0	4.50"	10.5 #	0.0	1684.0

<<< Fold Here >>>

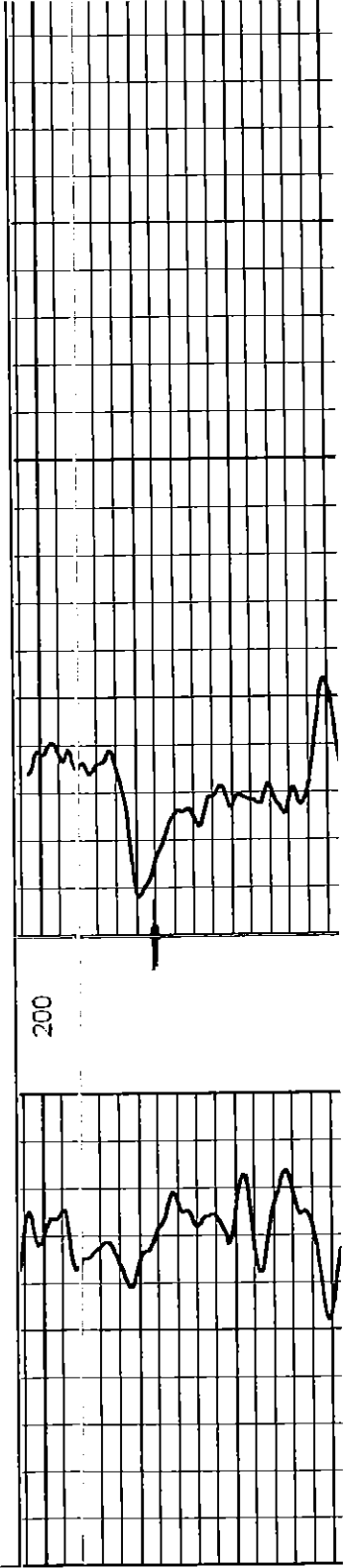
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, 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.

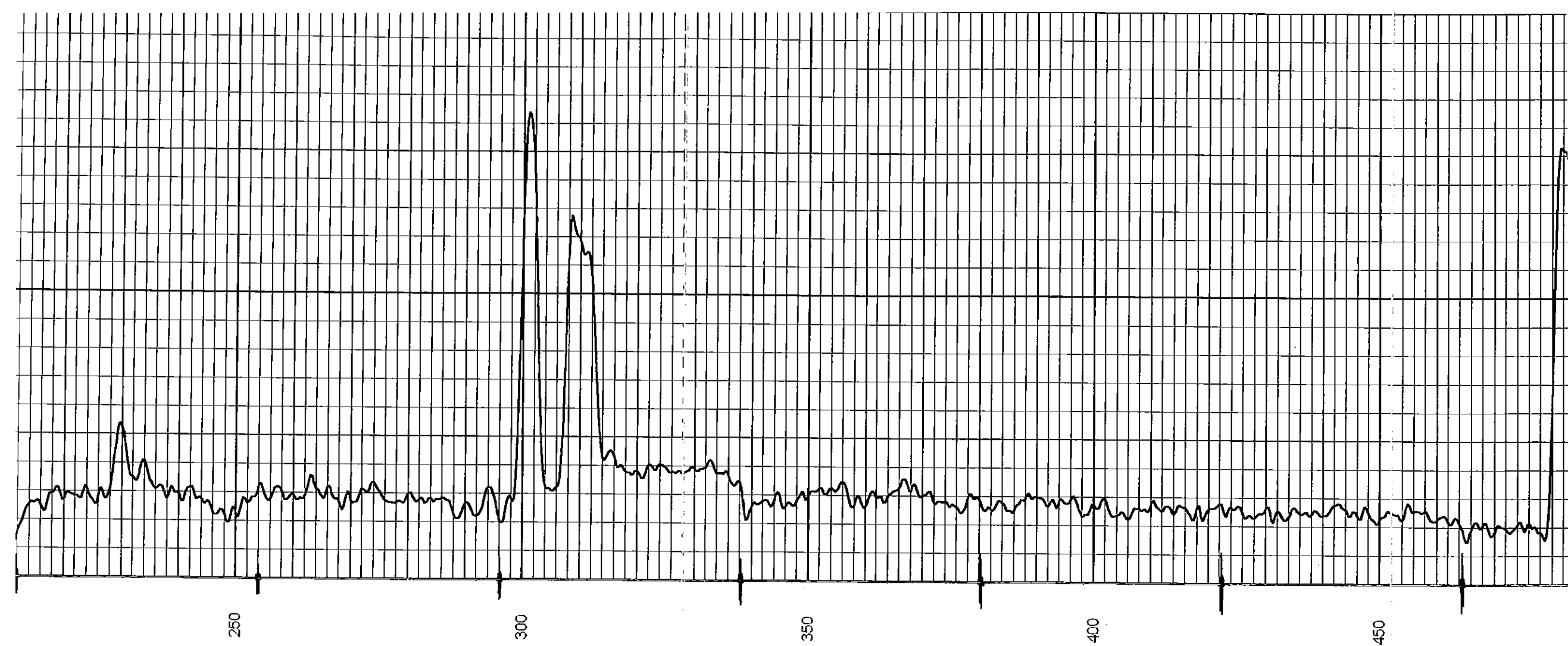
Comments

Drilling Contractor :
Skyy Drilling, LLC
Rig # 3

Database File: arnold12hp.db
Dataset Pathname: pass1
Presentation Format: gr-n-ccl
Dataset Creation: Thu Sep 05 14:30:37 2013 by Log SCH 111116
Charted by: Depth in Feet scaled 1:240

0	Gamma Ray (cps)	150	-1 CCL 1	10	Neutron (cps)	2100
150	Gamma Ray (cps)	300				





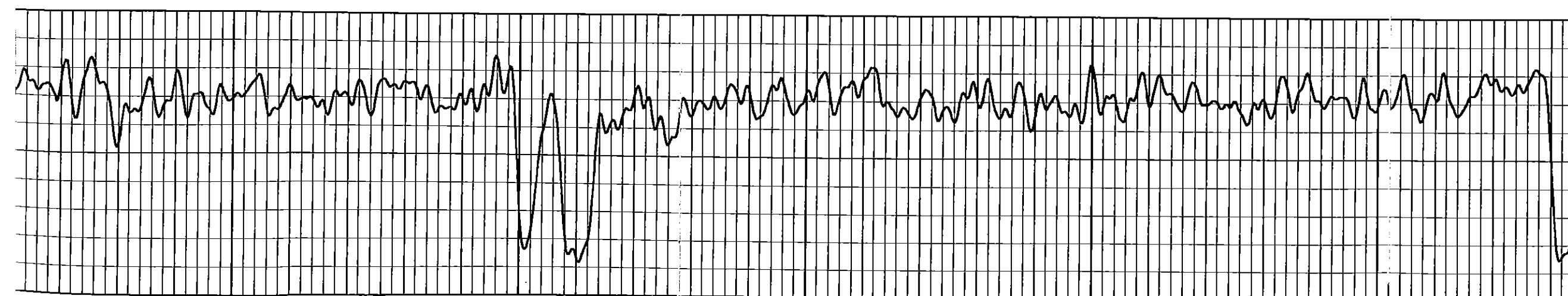
250

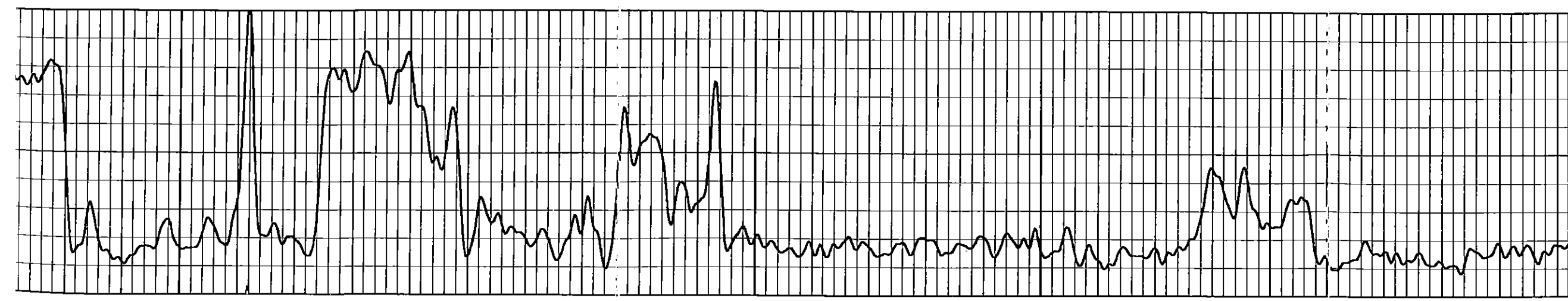
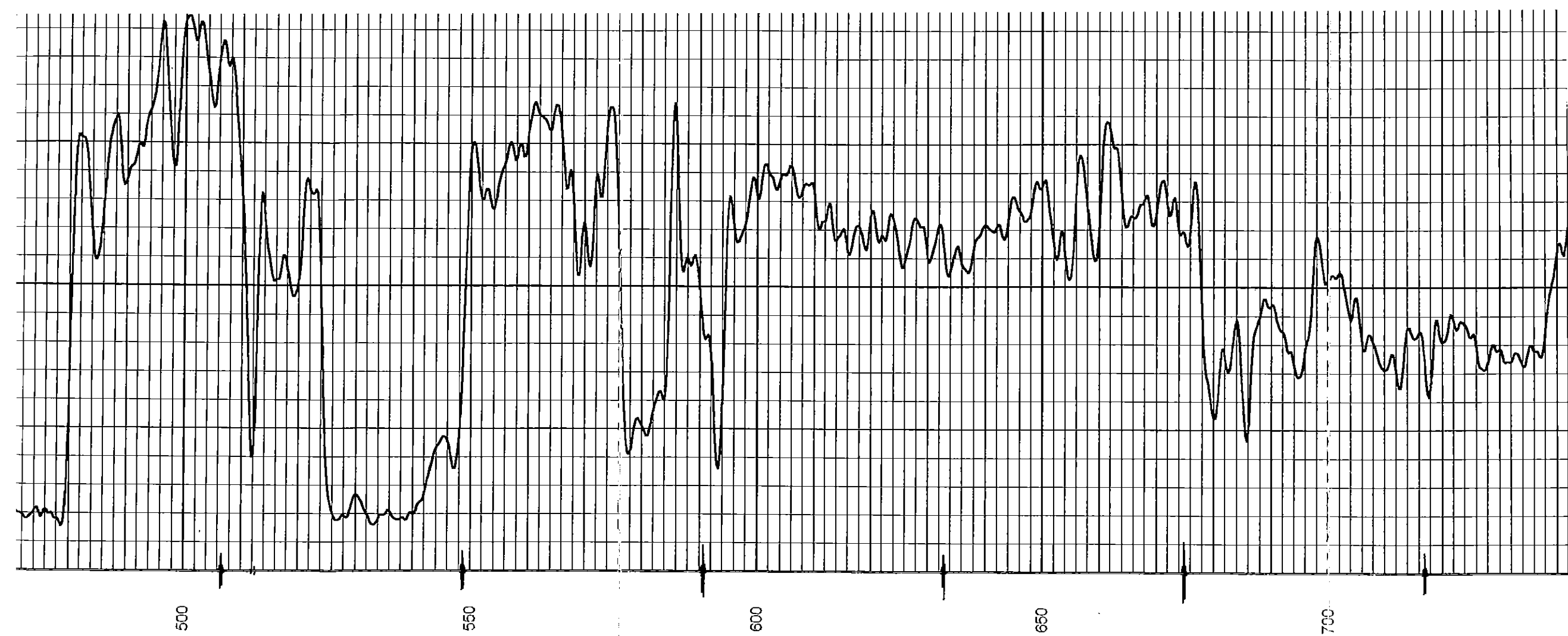
300

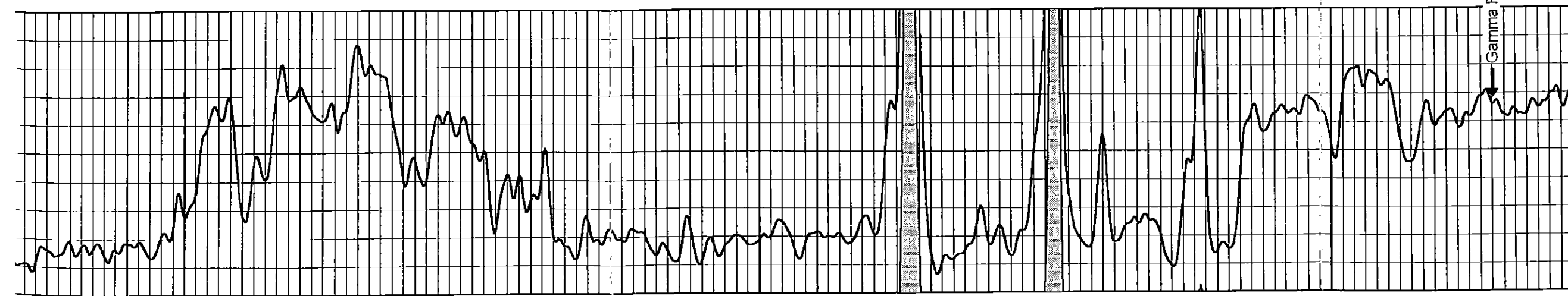
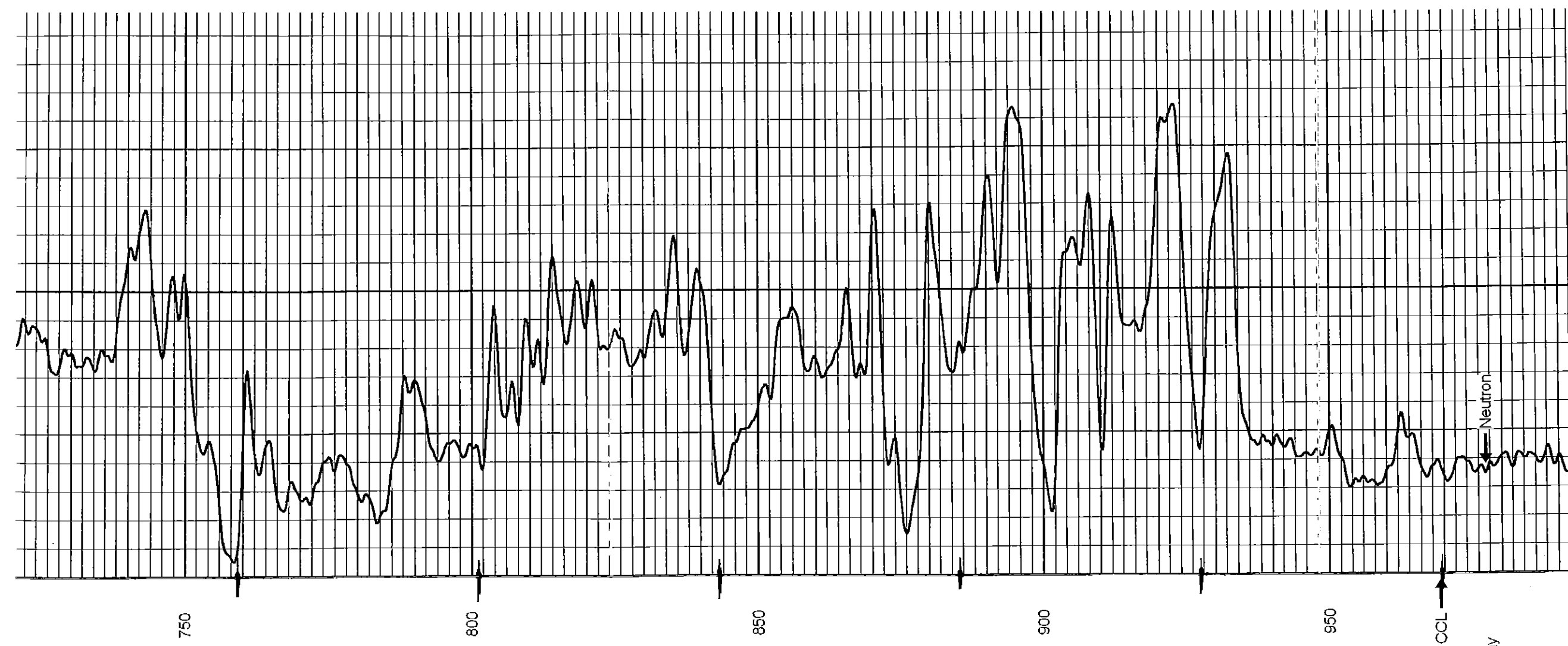
350

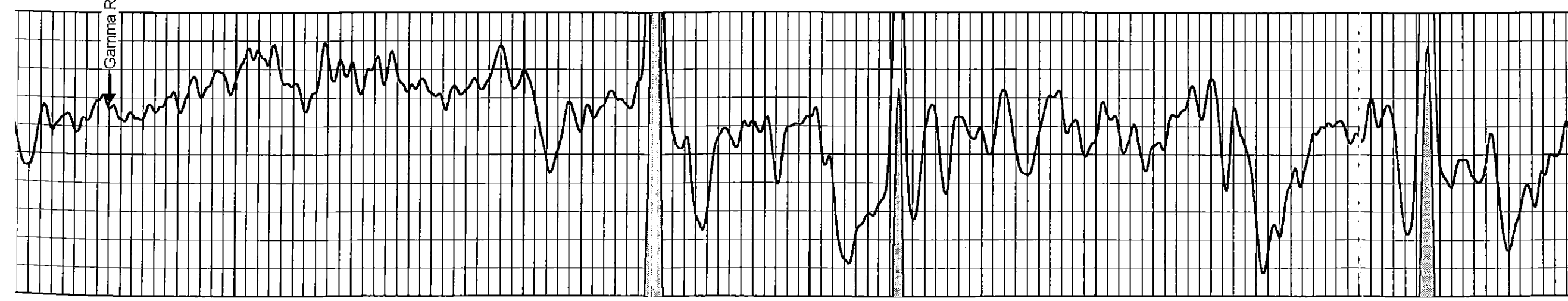
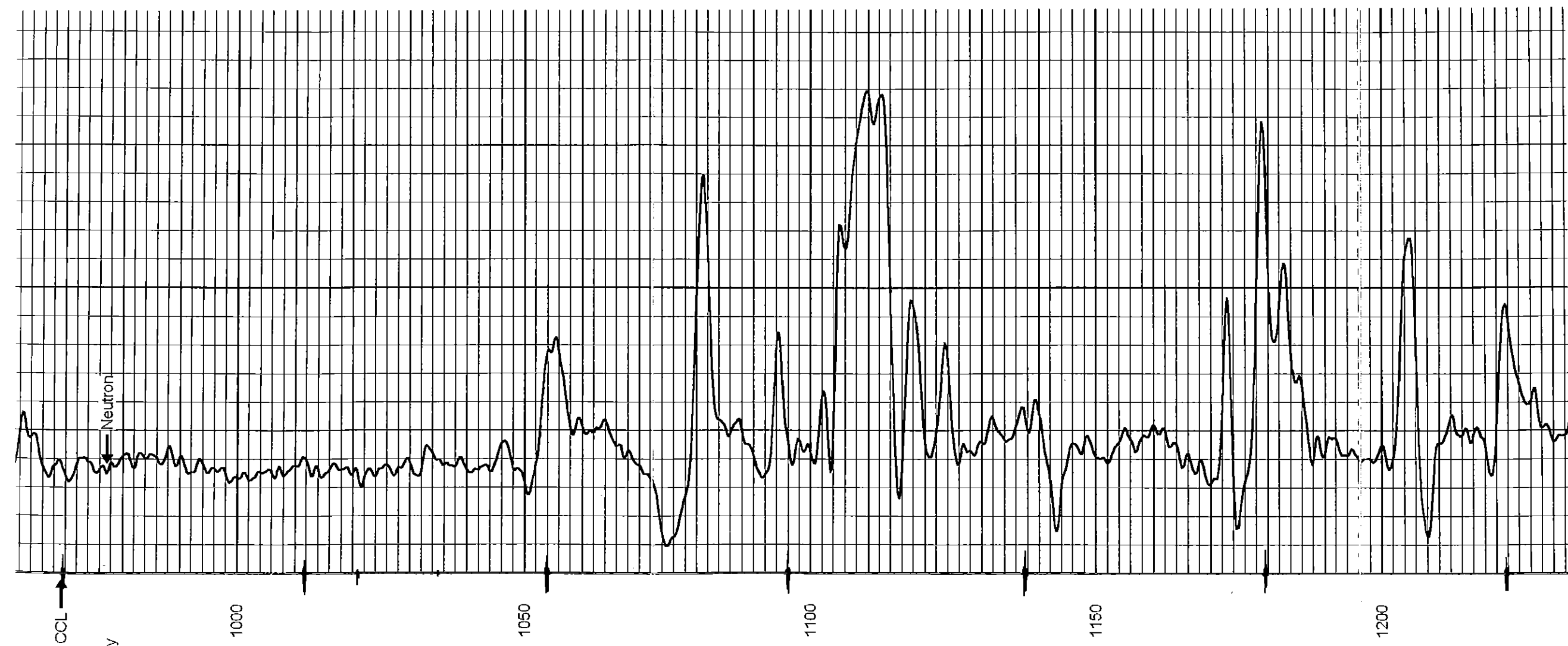
400

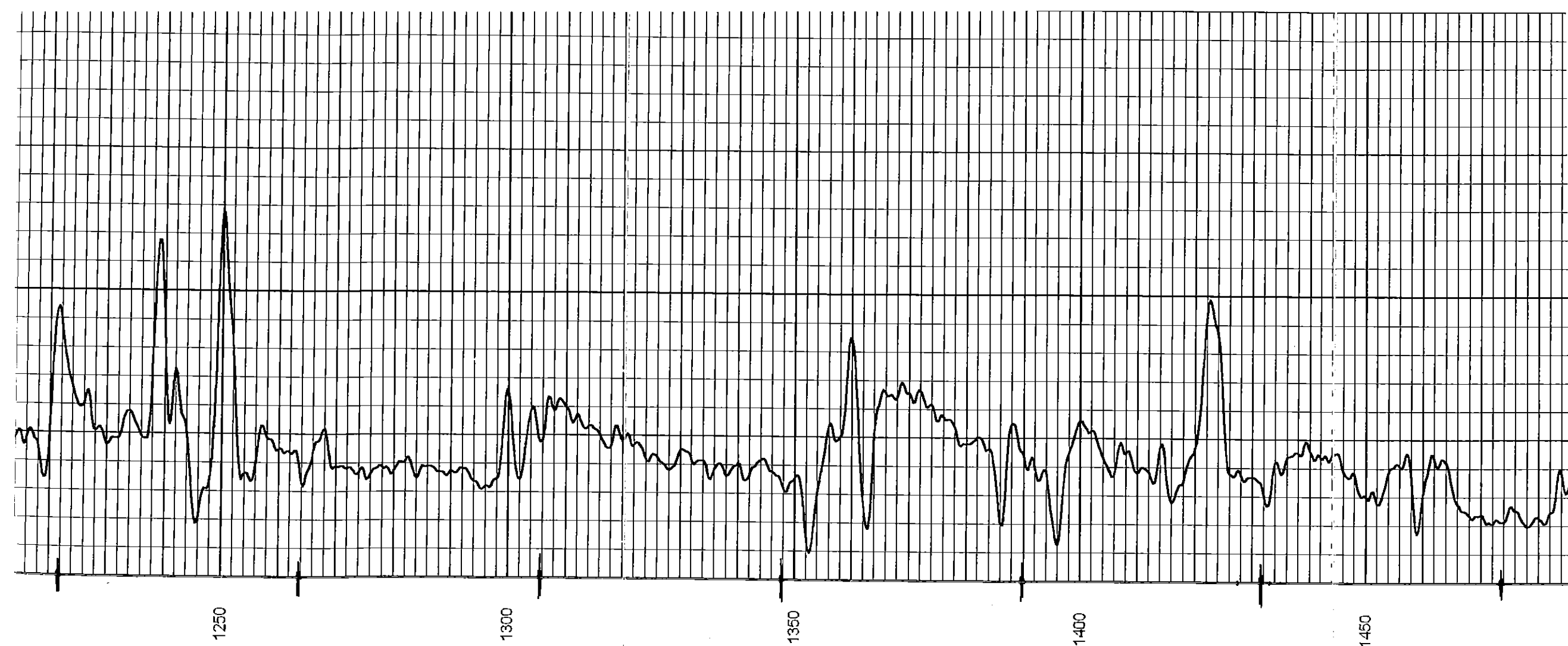
450











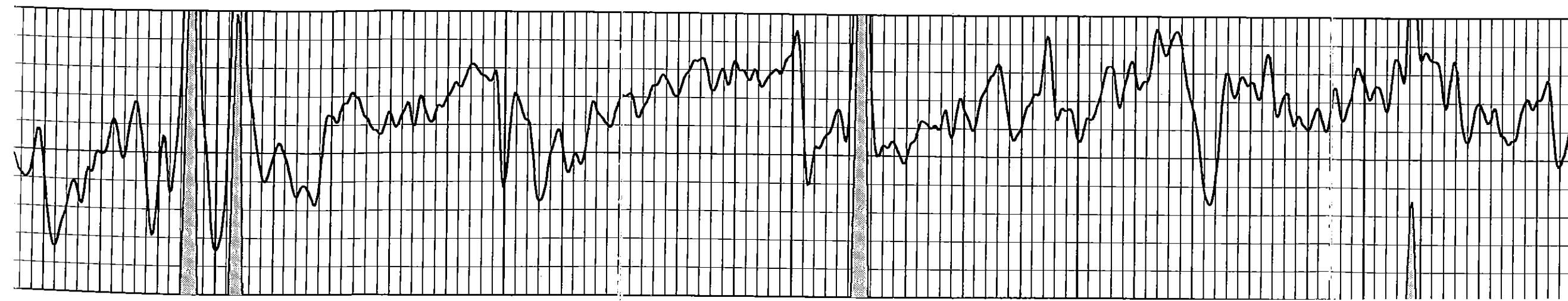
1250

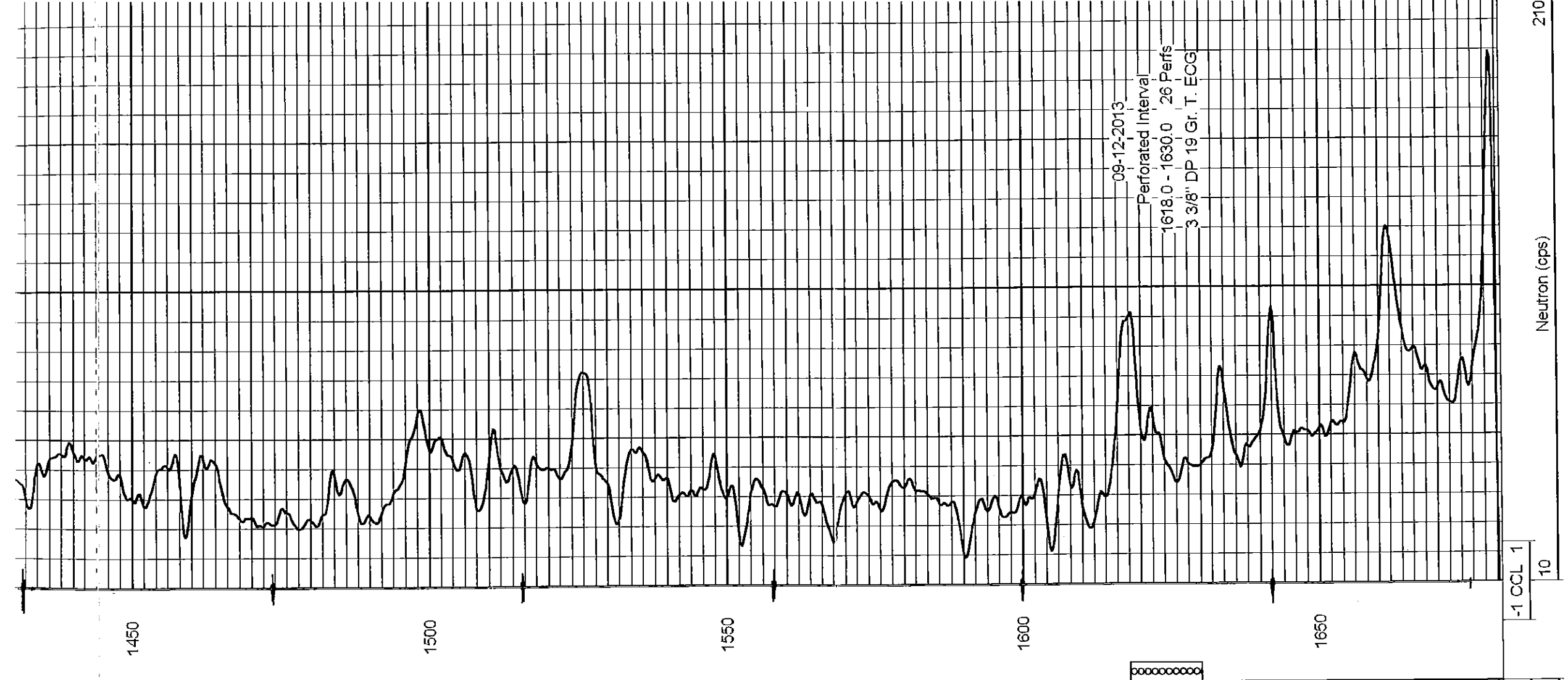
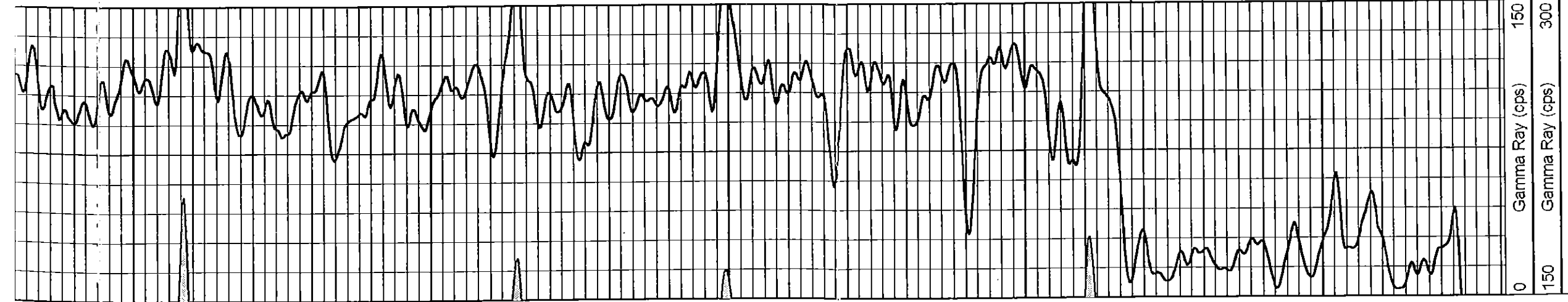
1300

1350

1400

1450





1450

1500

1550

1600

1650