



MIDWEST SURVEYS

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

GAMMA RAY / NEUTRON / CCL

File No.

API # 15-207-28,561

Company **Hass Petroleum, LLC**

Well **Arnold No. 1-HP**

Field **Winterscheid**

County **Woodson** State **Kansas**

Location **250' FNL & 2390' FEL
NW-NW-NW-NE** Other Services
Perforate

Sec. **35** Twp. **23s** Rge. **14e** Elevation
Permanent Datum **GL** Elevation **1128'** K.B. **1128'**
Log Measured From **GL** D.F. **NA**
Drilling Measured From **KB 7' from GL** G.L. **1135'**

Date	06-18-2013		
Run Number	One		
Depth Driller	1999.0		
Depth Logger	1720.8		
Bottom Logged Interval	1719.8		
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.	Location	107	Osawatomie
Recorded By	Steve Windisch		
Witnessed By	Mark Haas		

BORE-HOLE RECORD				CASING RECORD			
RUN No.	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	1999.0	4.50"	10.5 #	0.0	1724.0

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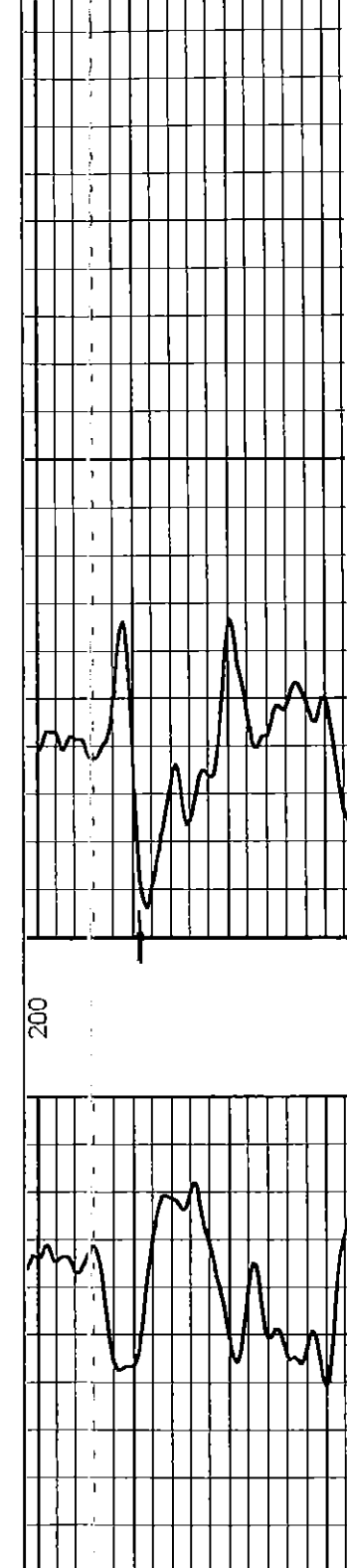
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs,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

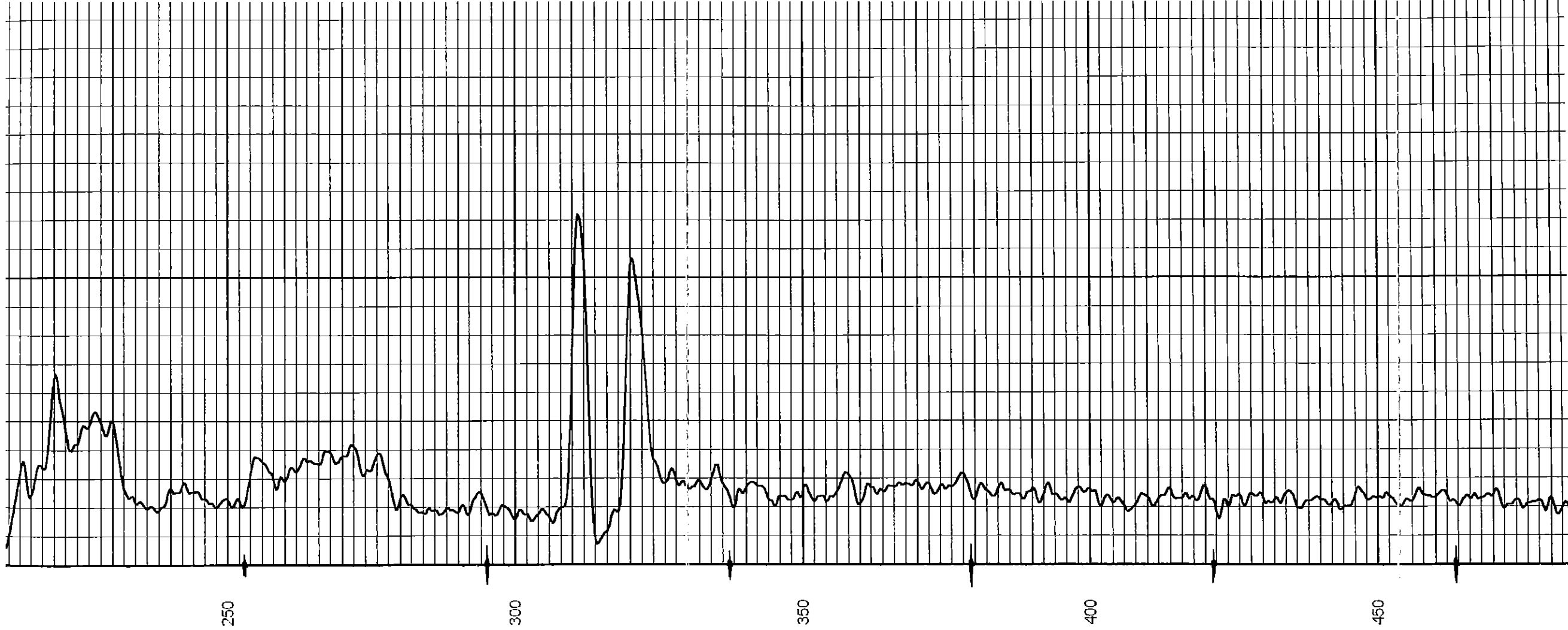
Comments

Drilling Contractor :
Skyy Drilling, LLC
Rig # 3

Database File: arnold1hp.db
Dataset Pathname: pass1
Presentation Format: gr-n-ccl
Dataset Creation: Tue Jun 18 13:50:08 2013 by Log SCH 111116
Charted by: Depth in Feet scaled 1:240

0	Gamma Ray (cps)	150
150	Gamma Ray (cps)	300
	-1 CCL 1	10
	Neutron (cps)	210





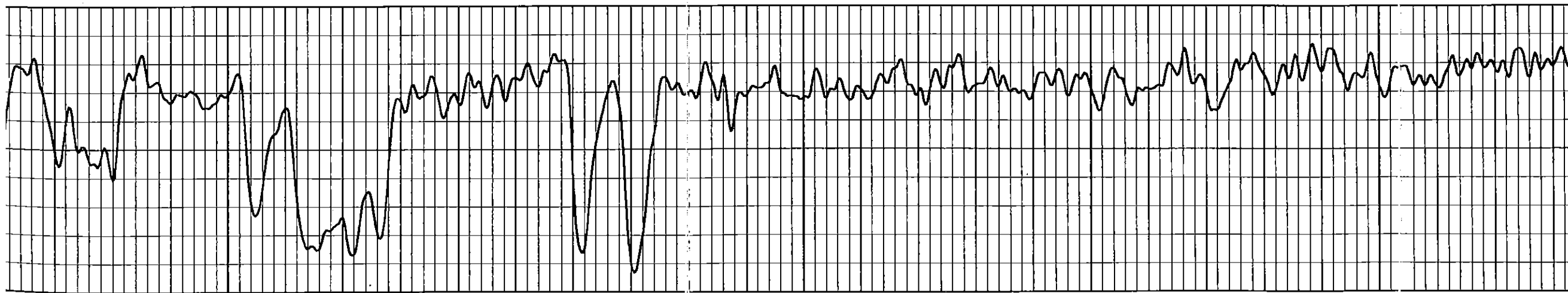
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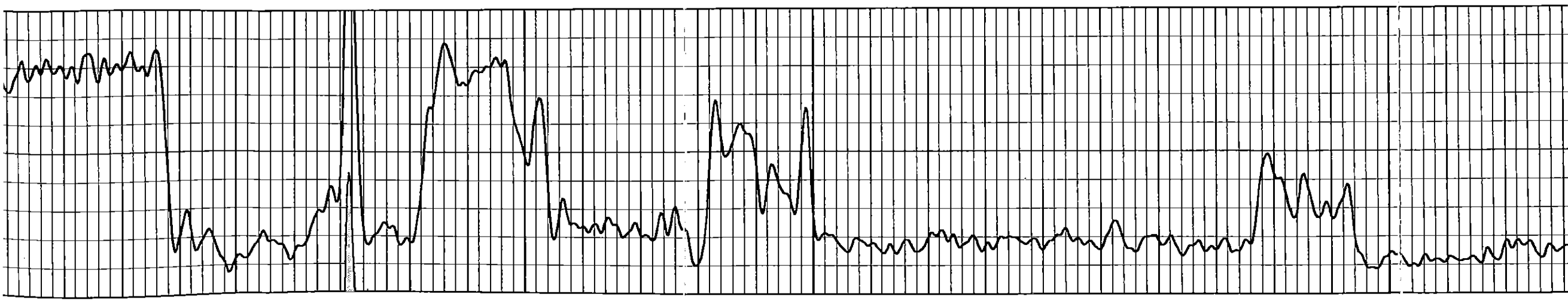
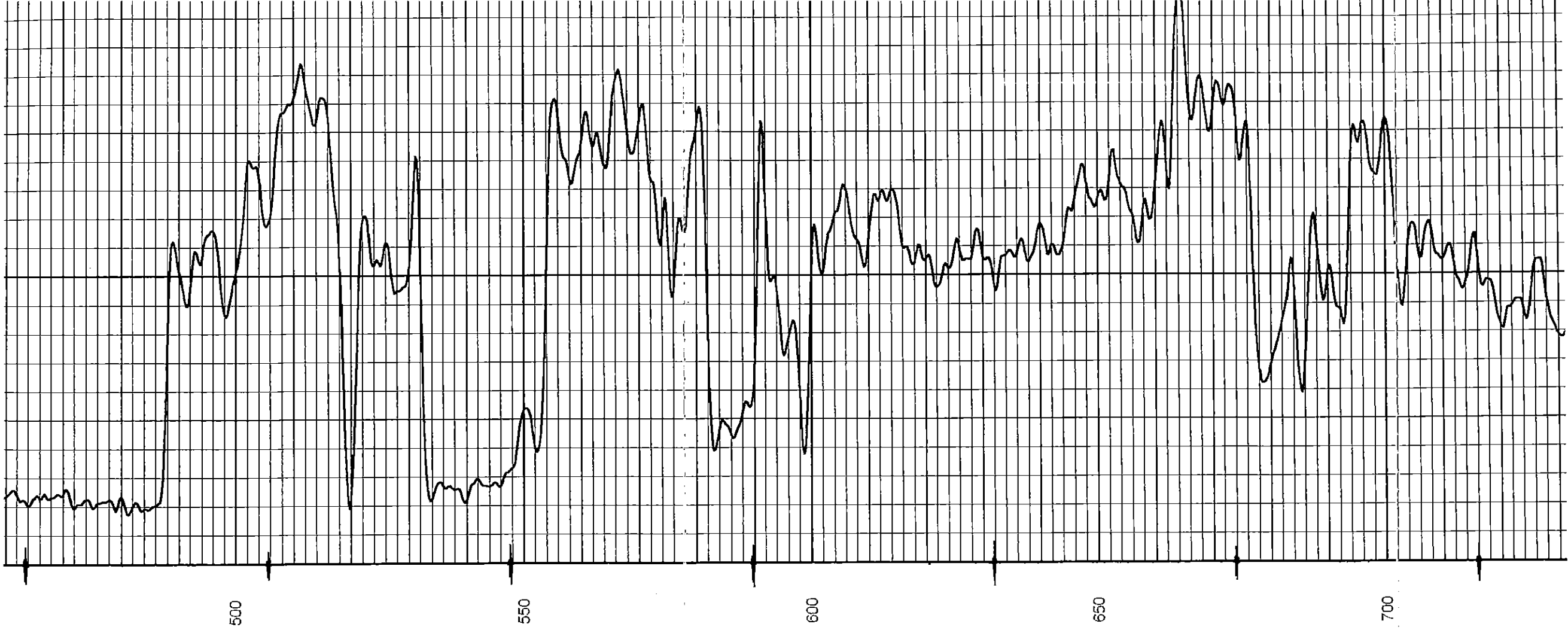
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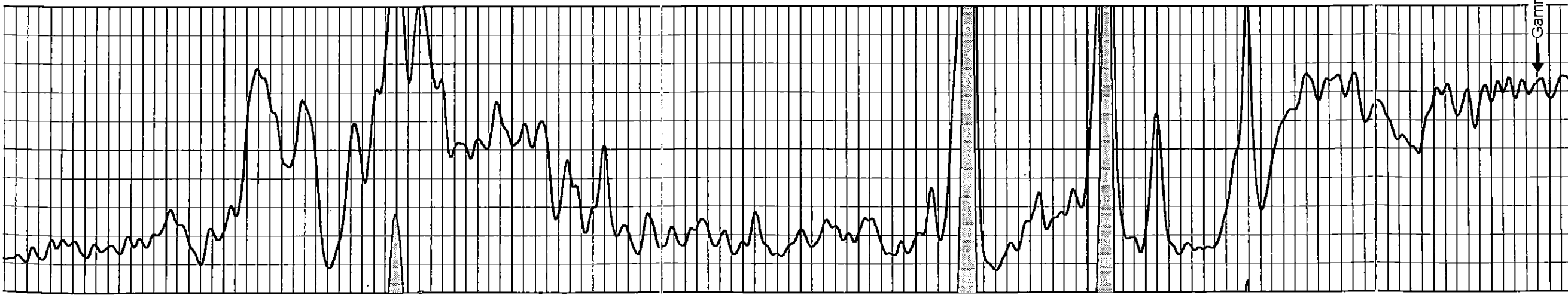
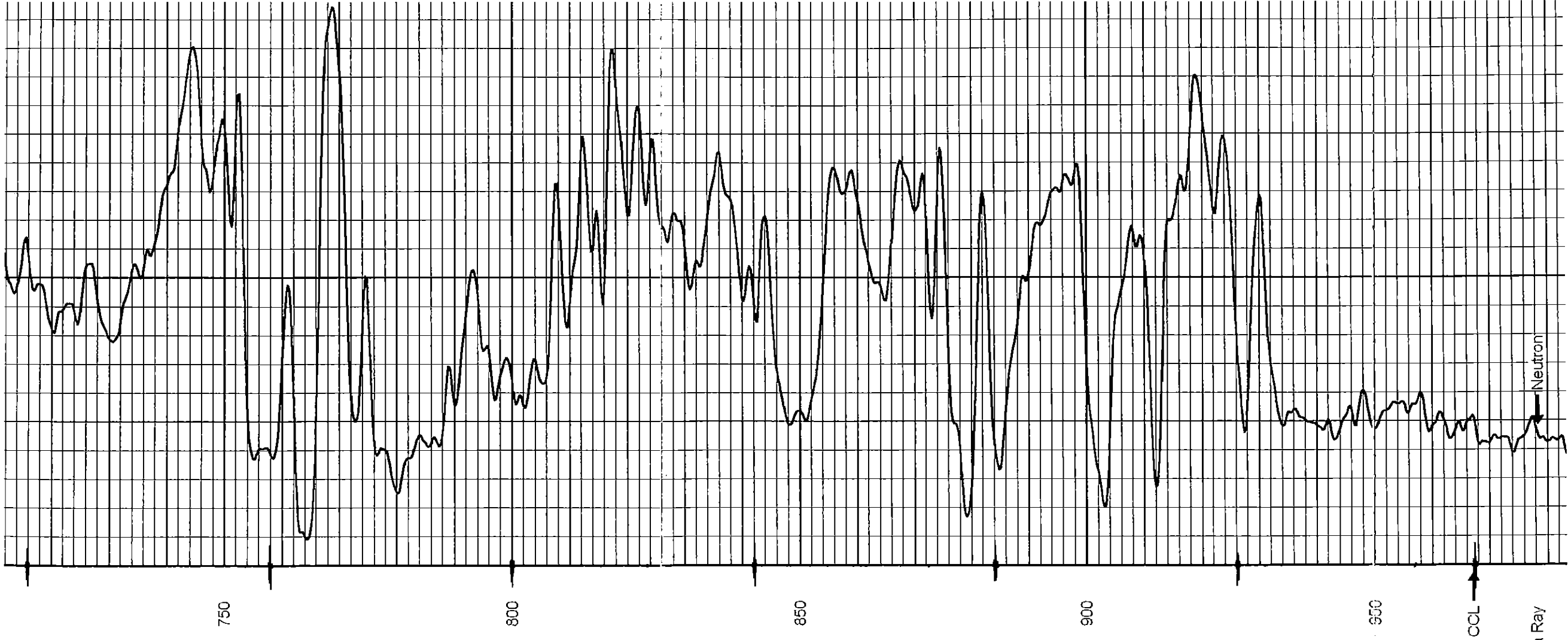
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400

450

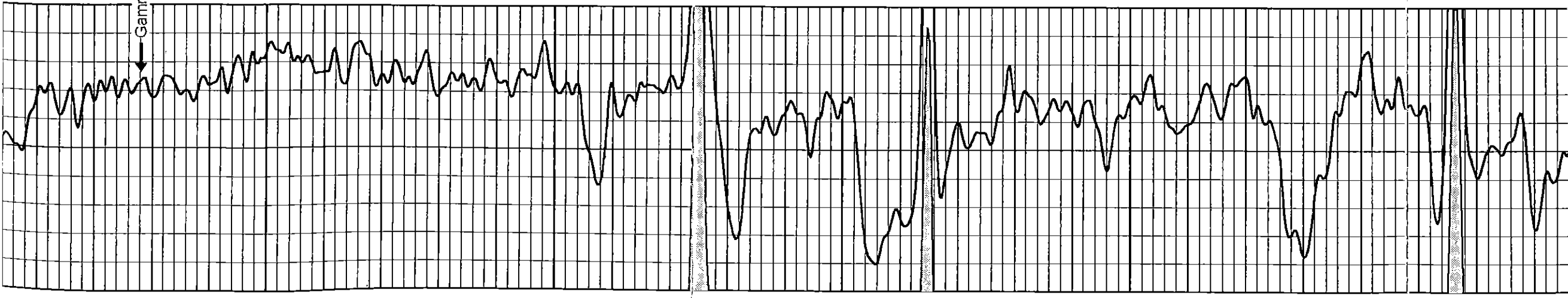
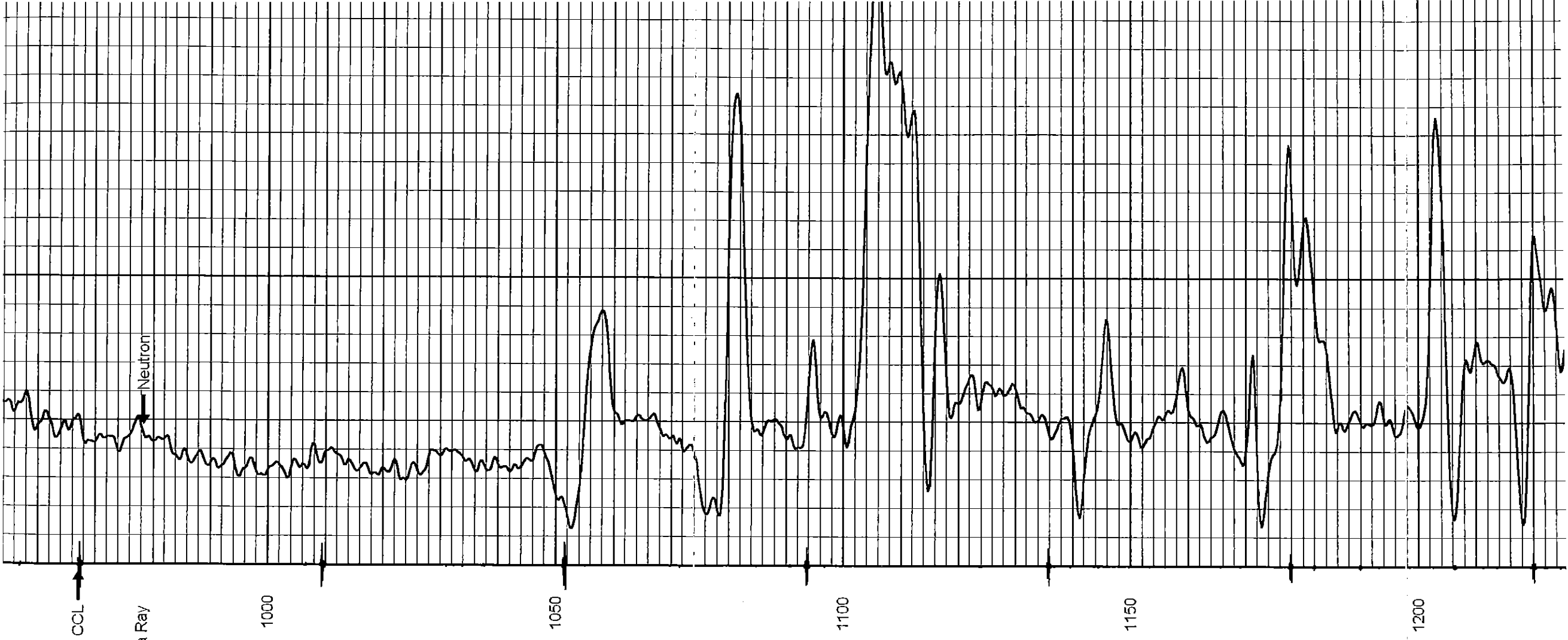


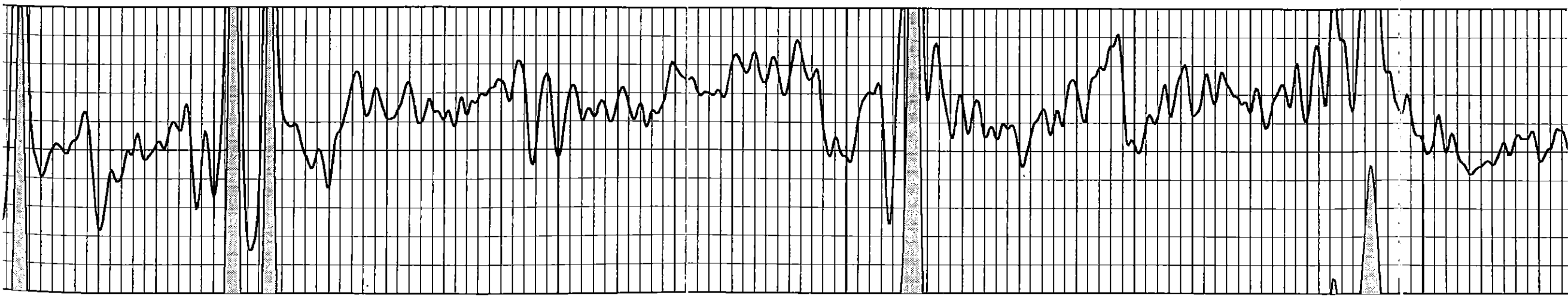
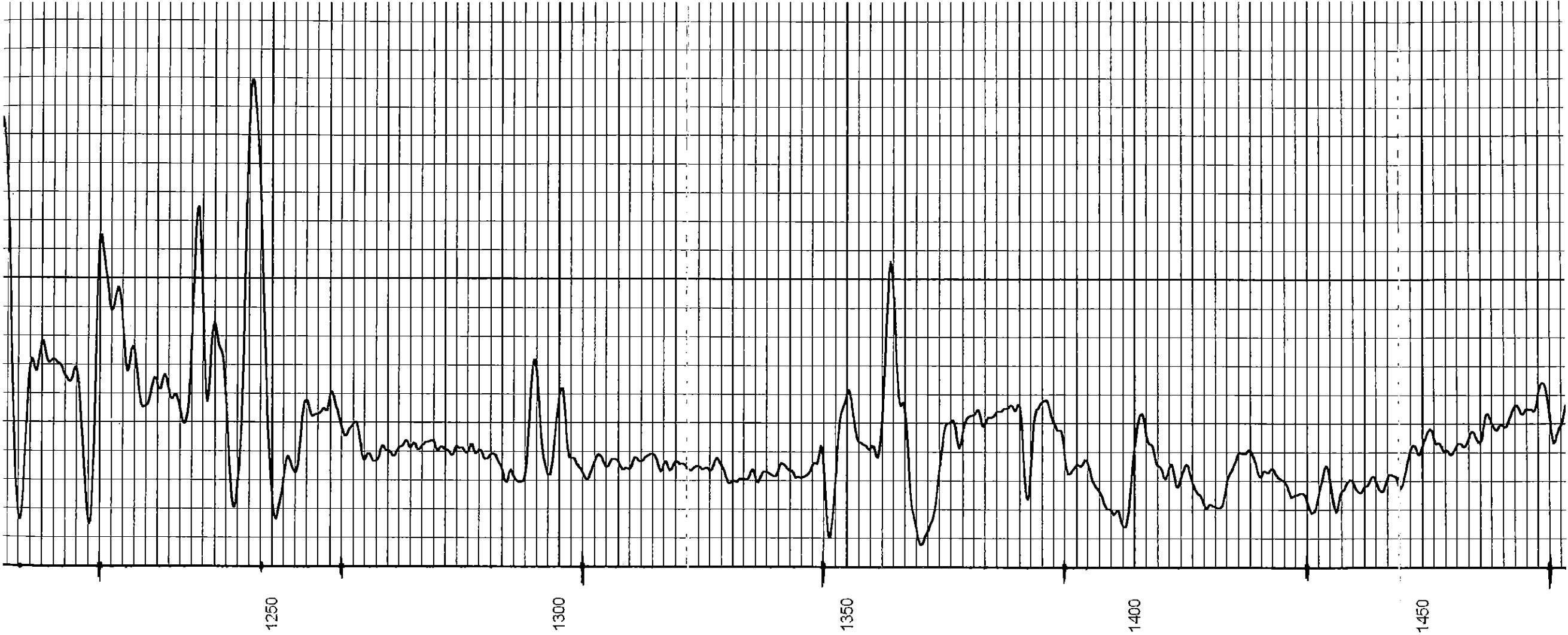


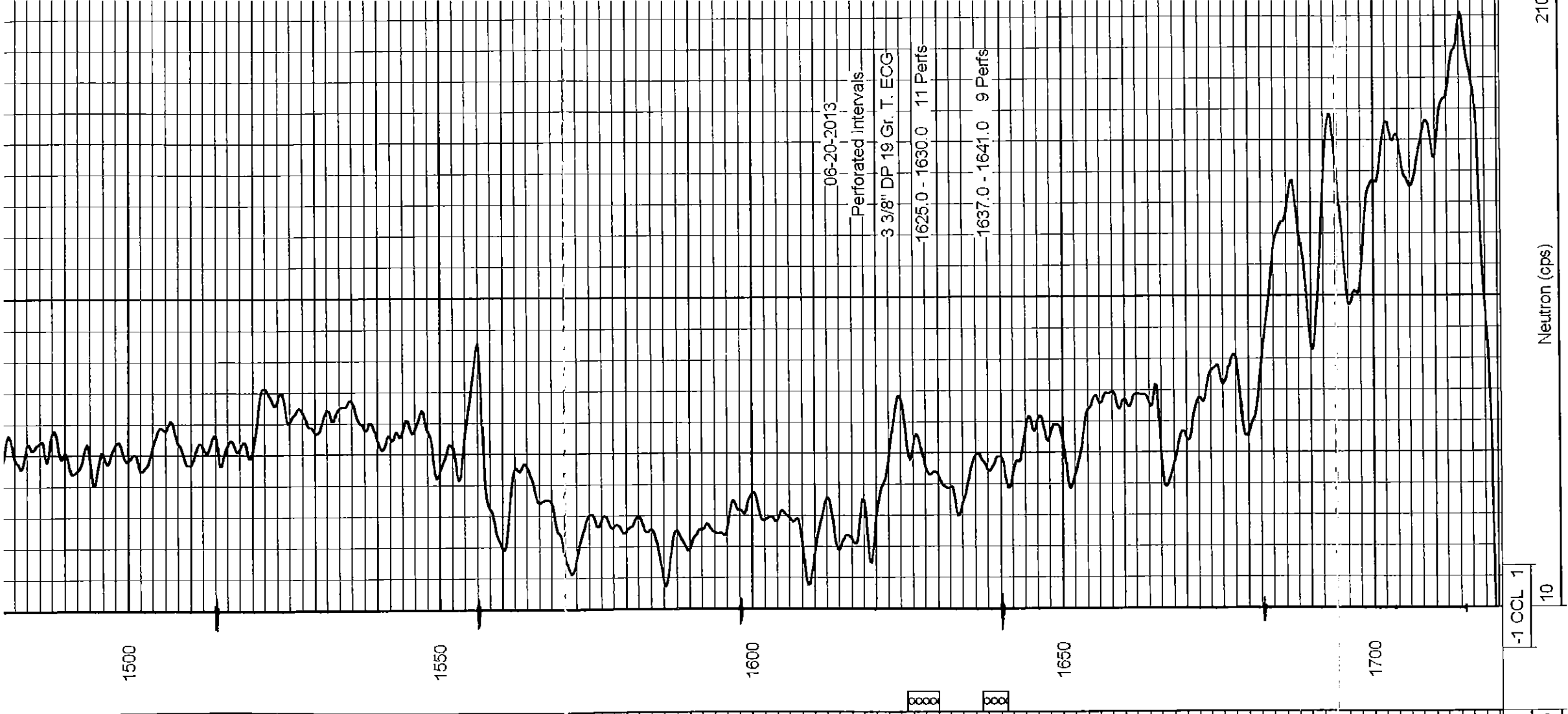
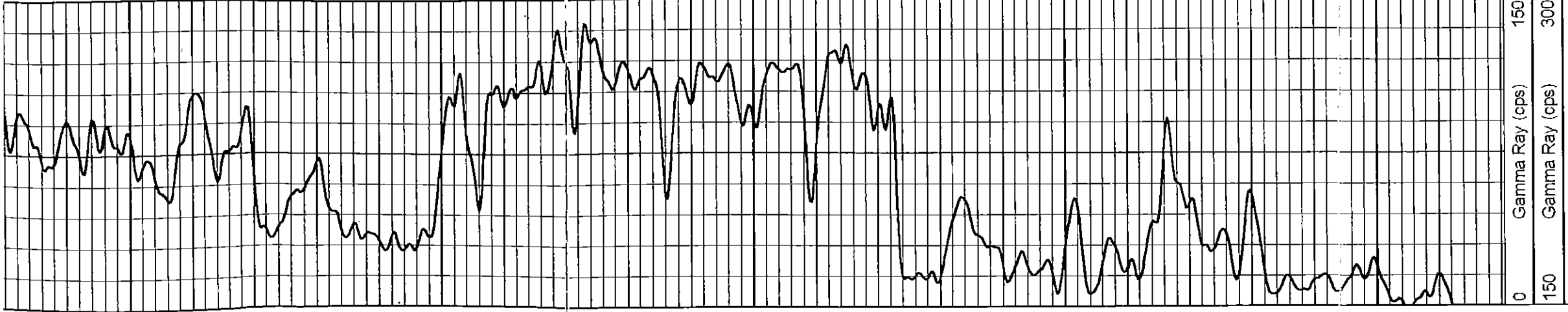


Neutron

Gamma Ray







0 150 300

Gamma Ray (cps)

Gamma Ray (cps)

-1 10

Neutron (cps)

1500 1550 1600 1650 1700

06-20-2013
Perforated Intervals
3 3/8" DP 19 Gr. T. ECG
1625.0 - 1630.0 11 Perfs
1637.0 - 1641.0 9 Perfs