



MIDWEST SURVEYS

LOGGING - PERFORATING - CONSULTING SERVICES

P.O. Box 68, Osawatomie, KS 66064

913 / 755 - 2128

GAMMA RAY / NEUTRON / CCL

File No.

API # 15-003-25,882

Company **Haas Petroleum, LLC**
 Well **Zastrow No. 18-HP**
 Field **Garnett Shoestring**
 County **Anderson** State **Kansas**

Location

495' FNL & 690' FWL
SW-NE-NW-NW

Other Services

Perforate

Sec. **13** Twp. **20s** Rge. **20e**

Elevation

Permanent Datum **GL** Elevation **NA**

K.B. NA

Log Measured From **GL**

D.F. NA

Drilling Measured From **GL**

G.L. NA

| | |
|------------------------|----------------|
| Date | 07-09-2013 |
| Run Number | One |
| Depth Driller | 780.0 |
| Depth Logger | 761.4 |
| Bottom Logged Interval | 760.4 |
| Top Log Interval | 20.0 |
| 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 | John Haas |

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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 :
Town Oilfield Services, Inc.

Database File: zastrow18hp.db

Dataset Pathname: pass1

Presentation Format: gr-n-ccl

Dataset Creation: Tue Jul 09 11:10:04 2013 by Log SCH 111116

Charted by: Depth in Feet scaled 1:240

-1 CCL 1

150

Gamma Ray (cps)

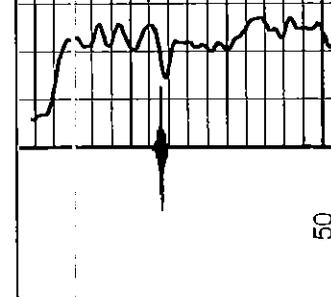
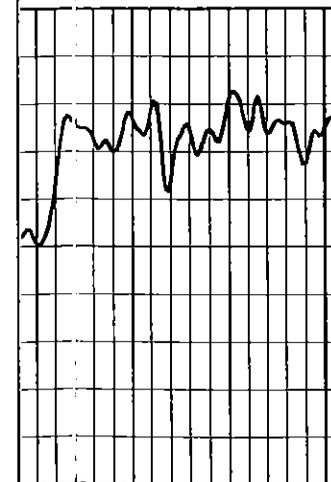
300

Gamma Ray (cps)

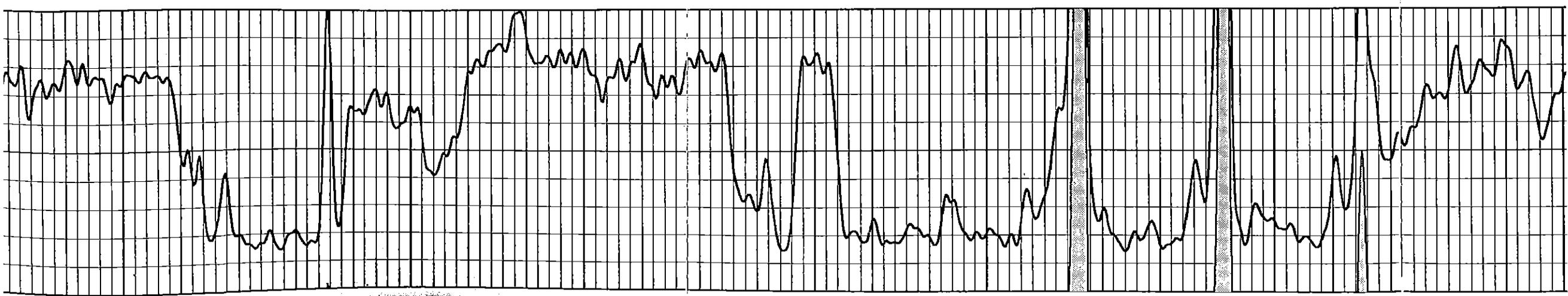
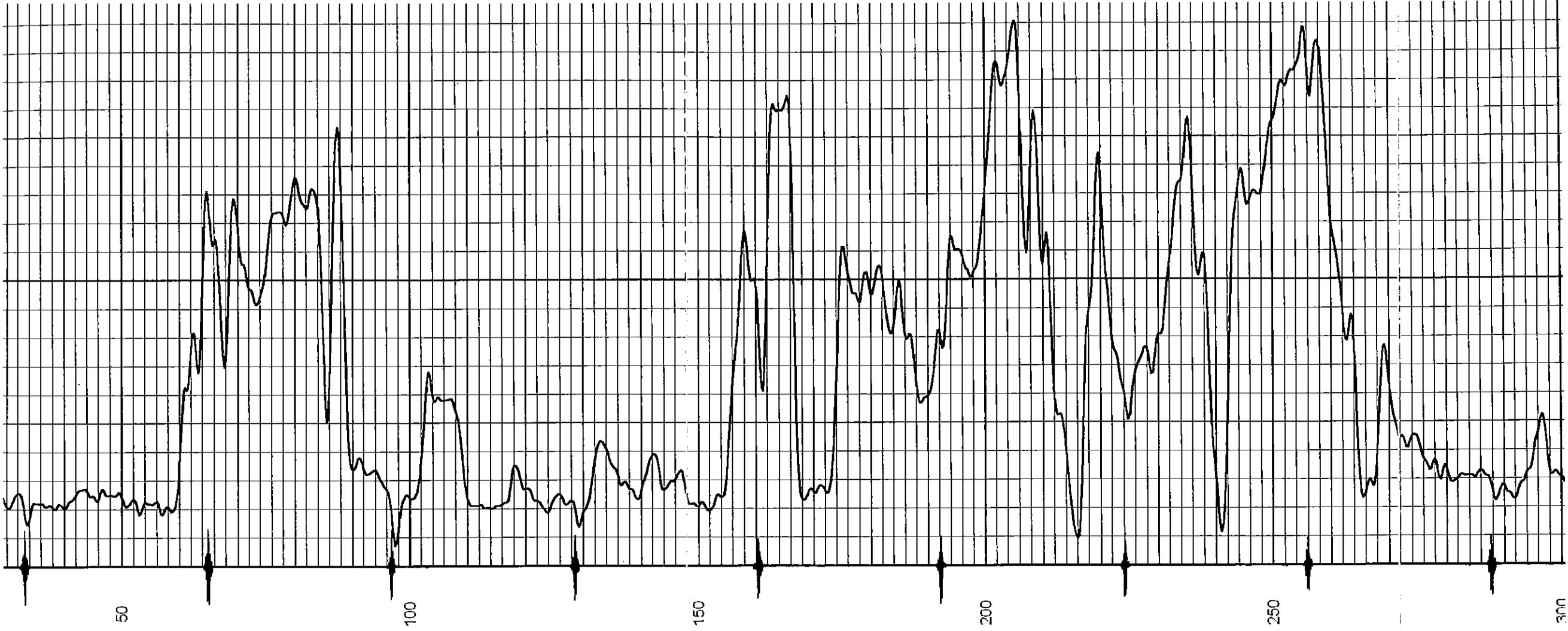
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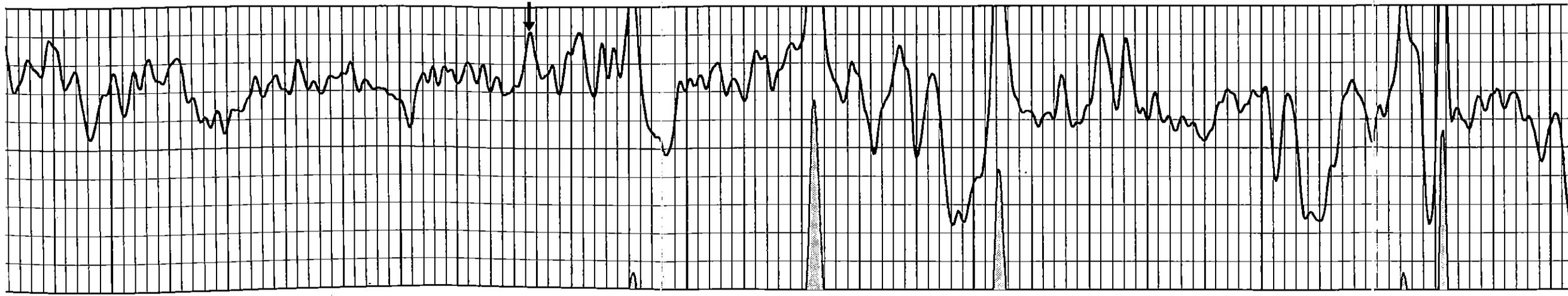
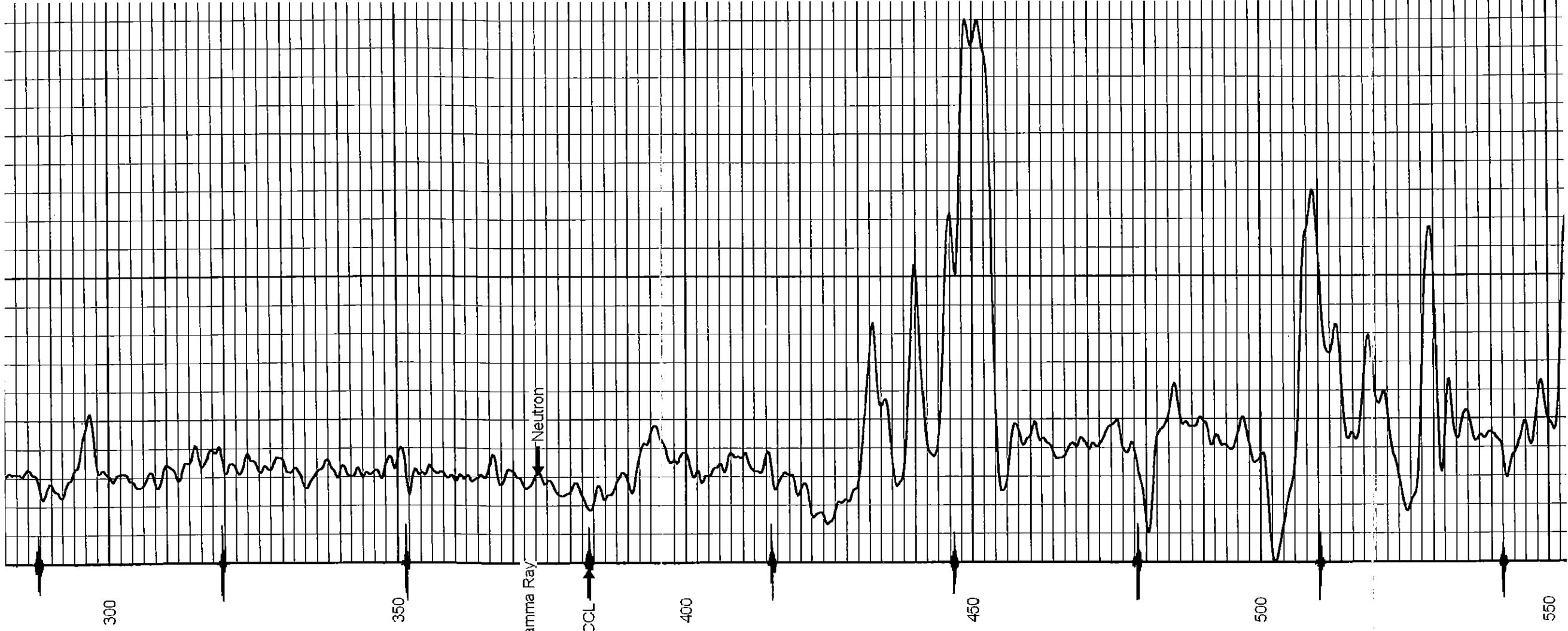
Neutron (cps)

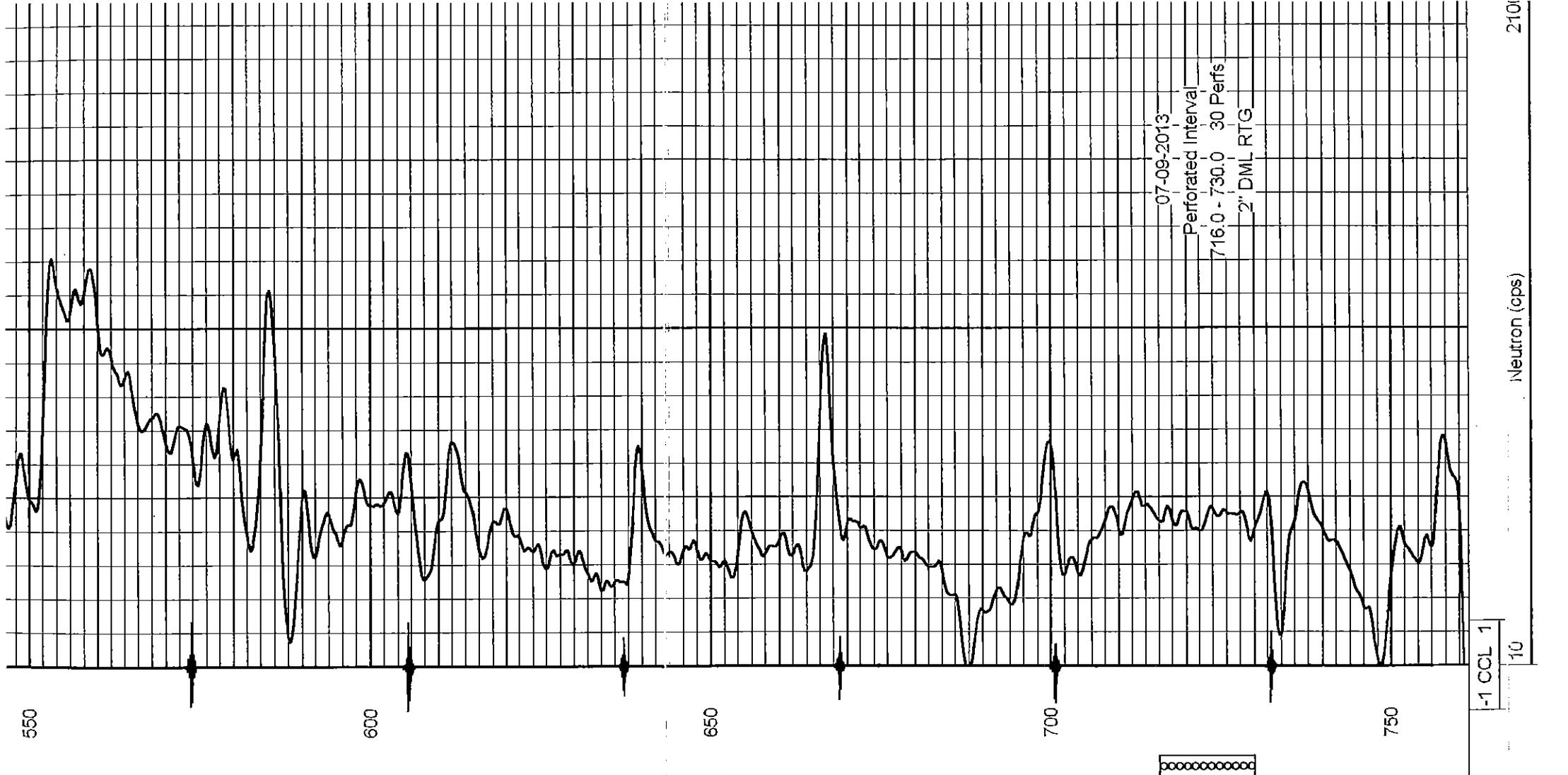
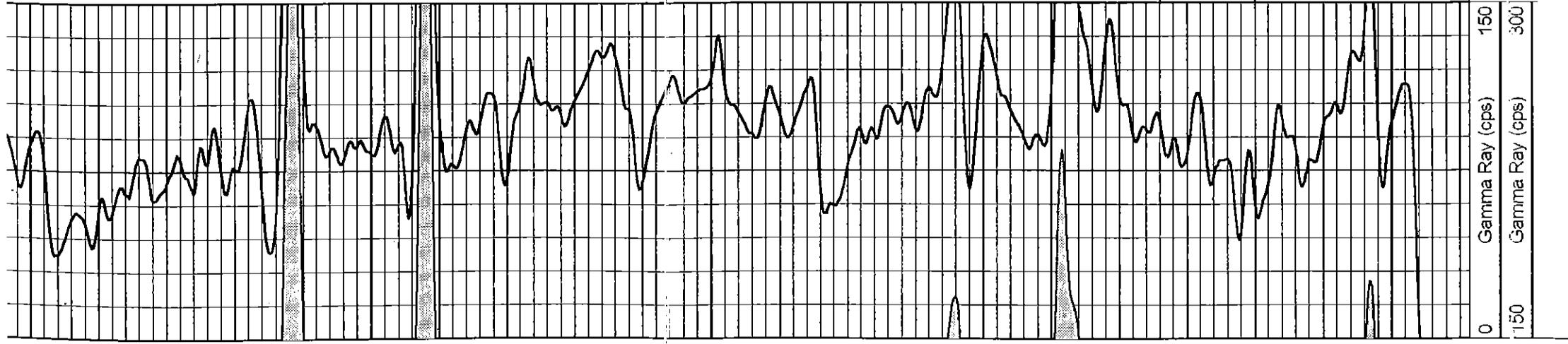
2100



50







07-09-2013

Perforated Interval
716.0 - 730.0 30 Perfs
2" DML RTG

-1 CCL 1

0 150
150 300

210