

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

**GAMMA RAY / NEUTRON / CCL**

AP # 15-059-26,979

File No.

Company **Haas Petroleum, LLC**  
 Well **Detar No. 5-HP**  
 Field **Paola - Rantoul**  
 County **Franklin** State **Kansas**

Location  
**1700' FNL & 3135' FEL**  
**SW-NE-SE-NW**

Sec **3** Twp. **16S** Rge. **21E**  
 Permanent Datum **GL** Elevation **1012'**  
 Log Measured From **GL**  
 Drilling Measured From **GL**

Other Services  
 Perforate  
 Elevation  
 K.B. NA  
 D.F. NA  
 G.L. 1012'

Date **07-02-2015**

Run Number	One
Depth Driller	740.0
Depth Logger	729.0
Bottom Logged Interval	728.0
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.	104
Location	Osawatomie
Recorded By	Steve Windisch
Witnessed By	John Haas

RUN	BORE-HOLE RECORD				CASING RECORD			
	No.	BIT	FROM	TO	SIZE	WGT.	FROM	TO
One	9.875"	0.0	20.0	7.00"	17.0 #	0.0	0.0	20.0
Two	5.625"	20.0	740.0	2.875"	6.5 #	0.0	0.0	731.0

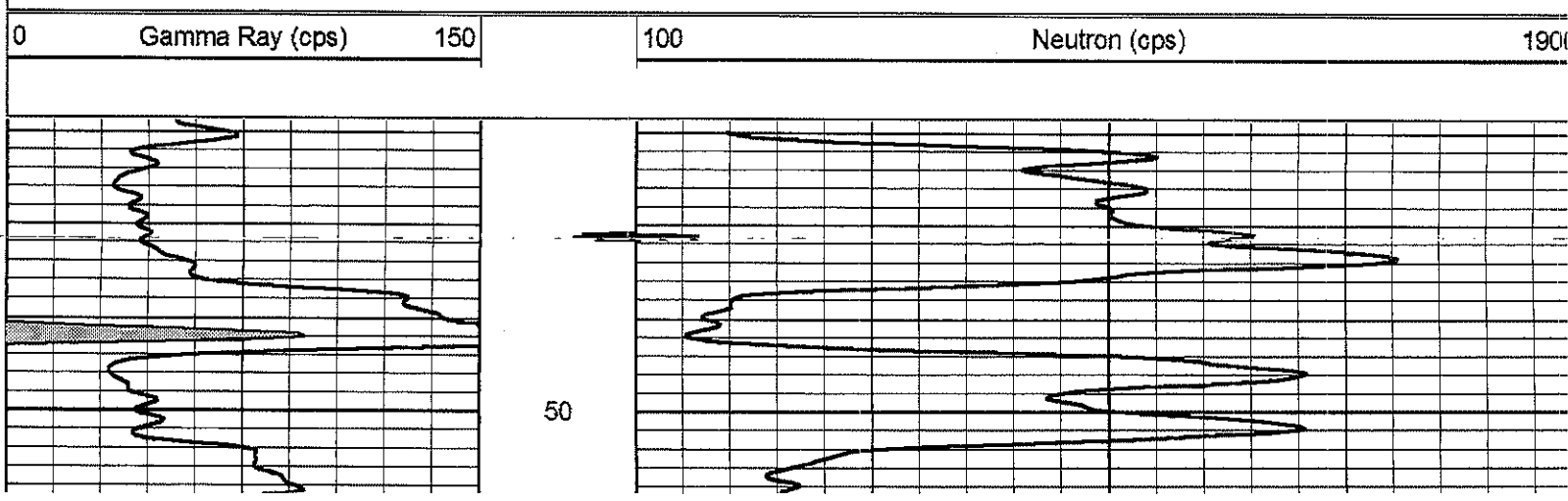
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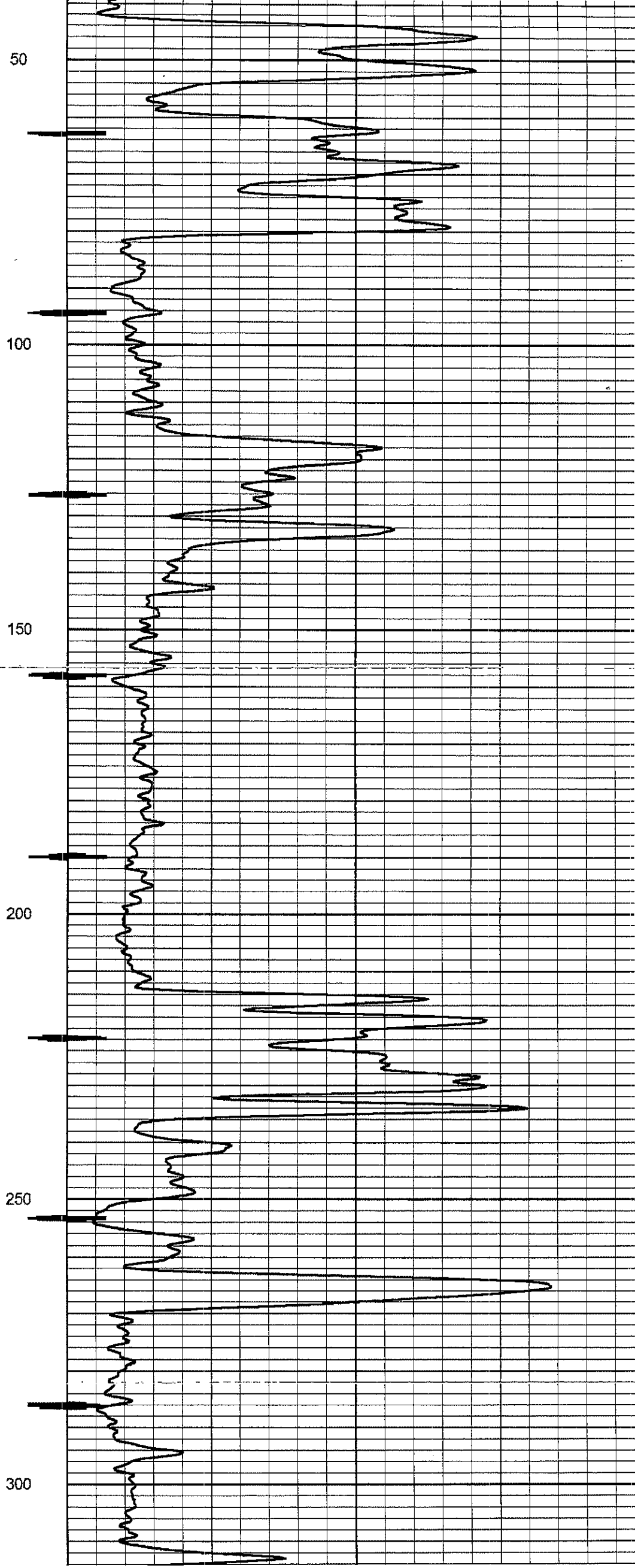
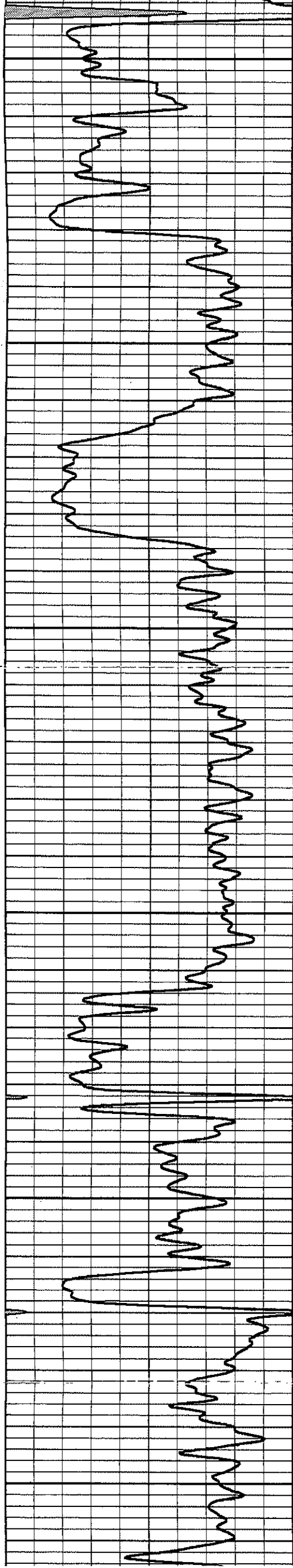
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs,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

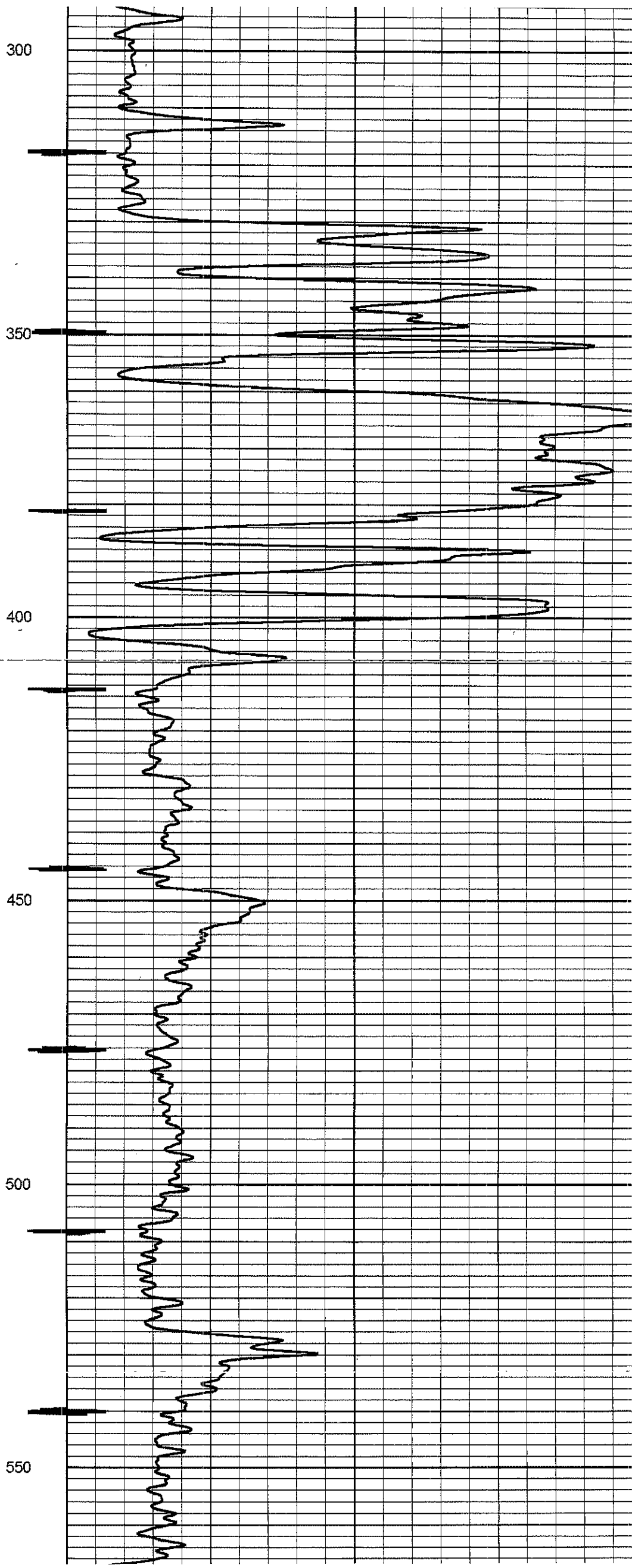
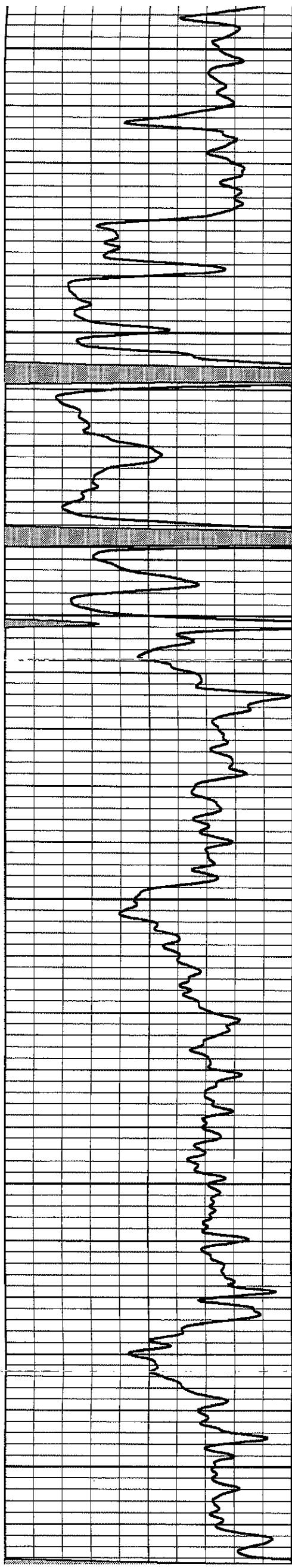
Comments

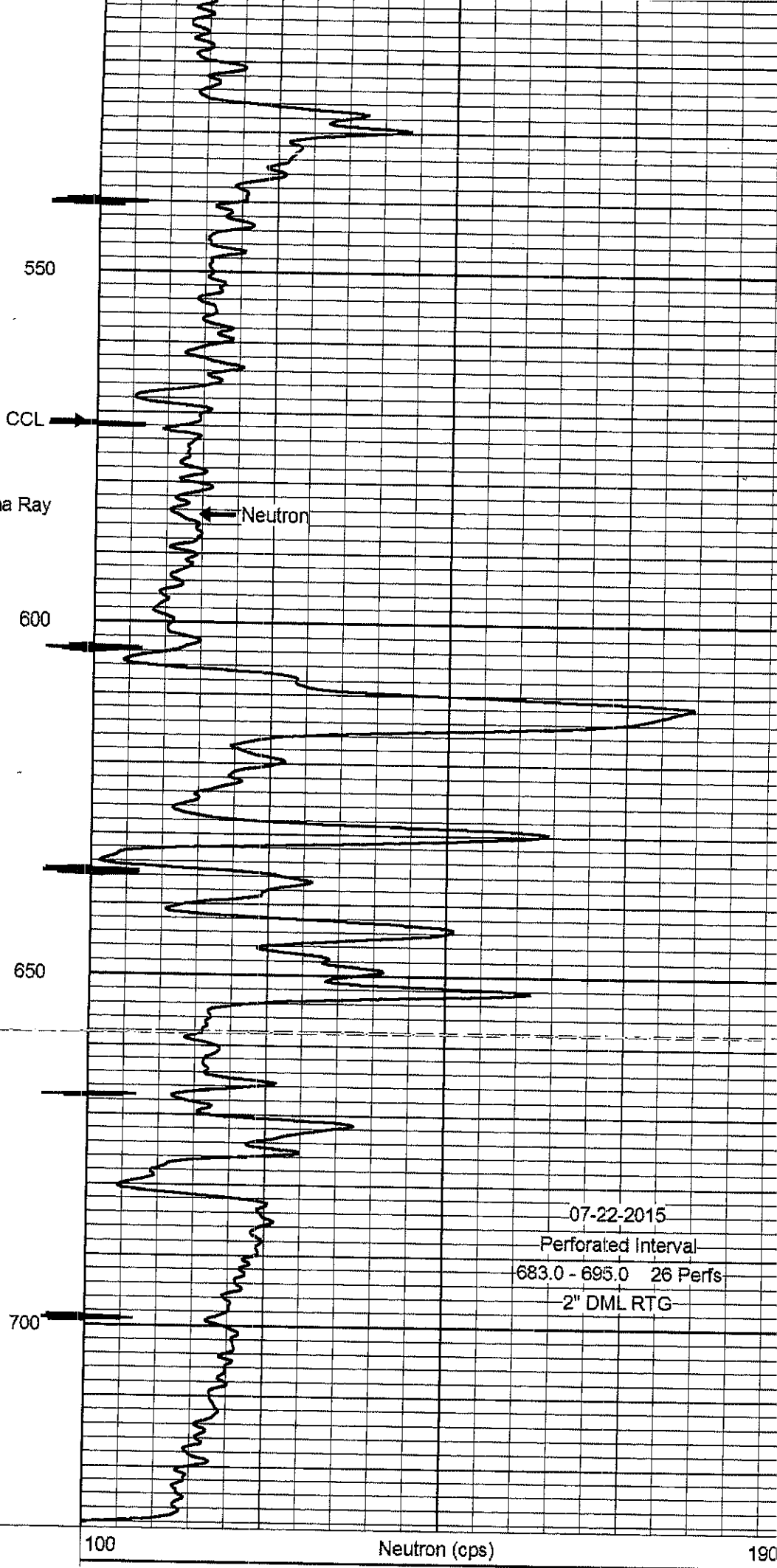
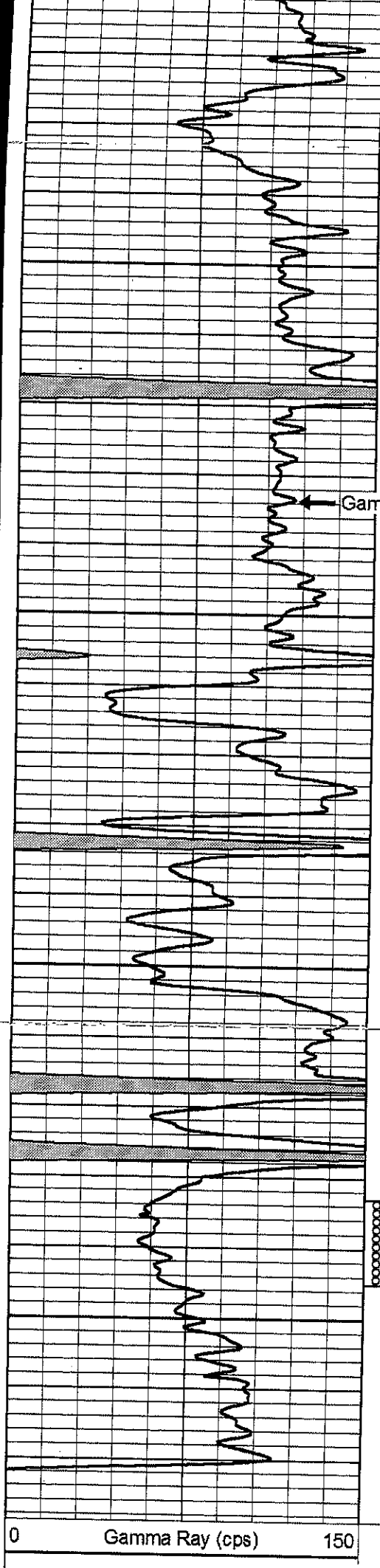
Drilling Contractor :  
 Skyy Drilling, LLC

Database File: detar 5hp.db  
 Dataset Pathname: pass1  
 Presentation Format: gr-n-ccl  
 Dataset Creation: Thu Jul 02 15:42:55 2015 by Log SCH 111116  
 Charted by: Depth in Feet scaled 1:240









07-22-2015  
Perforated Interval  
683.0 - 695.0 26 Perfs  
2" DML RTG

0 Gamma Ray (cps) 150

100 Neutron (cps) 190