



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

**GAMMA RAY / NEUTRON / CCL**

File No. Company A & L Energy Operations, LLC  
 Well Thoren No.- 83  
 Field Little Wakarusa

County Douglas State Kansas

Location 1190' FNL & 1850' FEL  
 SW-SE-NW-NE

Other Services Perforate

Sec. 6 Twp. 14S Rge. 21E  
 Permanent Datum GL Elevation NA  
 Log Measured From GL K.B. NA  
 Drilling Measured From GL D.F. NA  
 G.L. NA

Date 07-12-2012  
 Run Number One  
 Depth Drier 755.0  
 Depth Logger 741.6  
 Bottom Logged Interval 740.6  
 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 Munsch  
 Witnessed By Jerald Heelm

BORE-HOLE RECORD				CASING RECORD			
RUN No.	BIT FROM	TO	SIZE	WGT.	FROM	TO	
One	9.875"	0.0	44.5	7.07"	0.0	44.6	
Two	5.625"	44.5	755.0	2.875"	0.0	744.7	

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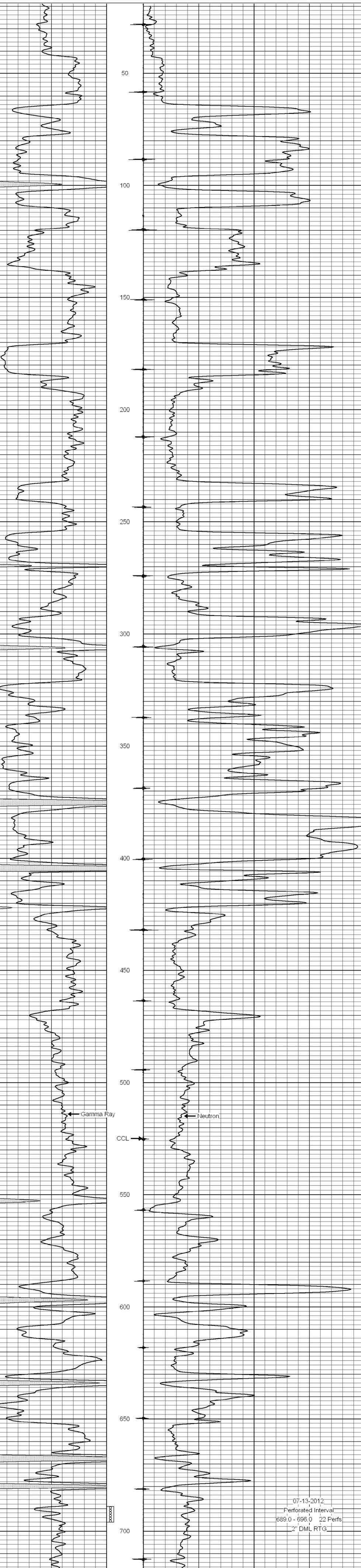
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs,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

Database File: thoren83.db  
 Dataset Pathname: pass1  
 Presentation Format: gr-n-ccl  
 Dataset Creation: Thu Jul 12 13:32:38 2012 by Log SCH 111116  
 Charted by: Depth in Feet scaled 1:240

0 Gamma Ray (cps) 150 10 Neutron (cps) 2100



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