



**MIDWEST SURVEYS**  
 LOGGING - PERFORATING - CONSULTING SERVICES  
 P.O. Box 68, Ossawatimie, KS 68064  
 913 / 755 - 2128

**GAMMA RAY / NEUTRON / CCL**

File No.

Company **Birk Petroleum**  
 Well **Thomsen No.-16**  
 Field **Crandall North**  
 County **Coffey** State **Kansas**

Location **2475 FSL & 165 FEL**  
**NE-NE-NE-SE**

Sec. **36** Twp. **22s** Rge. **15e**  
 Permian Datum **GL** Elevation **1046'**  
 Log Measured From **GL** KB NA  
 Drilling Measured From **GL** DF NA  
**GL 1046'**

Date **08-26-2014**

Run Number **One**

Depth Diller **1168.0**

Depth Logger **1148.0**

Bottom Logged Interval **1147.0**

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 **102** Location **Ossawatimie**

Recorded by **Gary Windisch**

Witnessed by **Brian Birk**

BOREHOLE RECORD

RUN No. **BIT** FROM TO

One **9.875'** 40.0

Two **6.25'** 40.0

SIZE WT. FROM TO

One **9.875'** 17.0# 0.0

Two **6.25'** 2.875# 0.0

1153.0

CASINGS RECORD

TO

40.0

1153.0

1153.0

1153.0

1153.0

1153.0

1153.0

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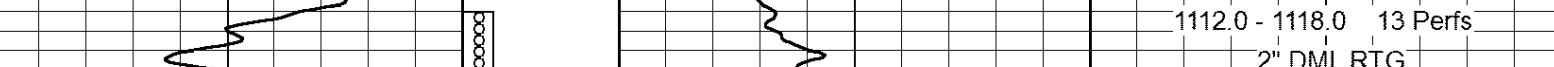
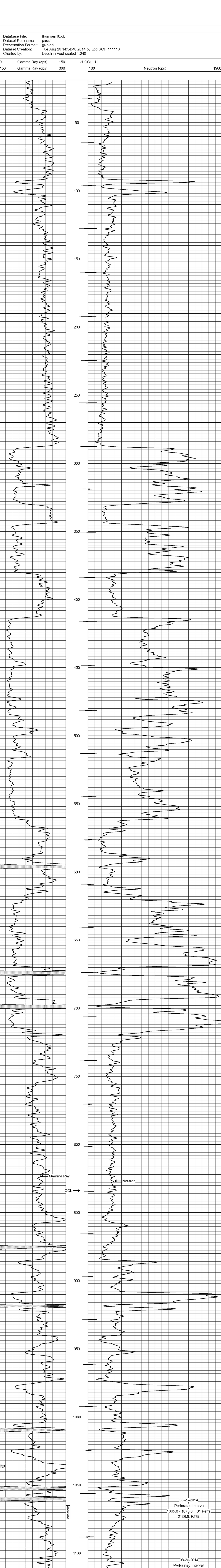
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All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on 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 :  
 Woco Drilling, Inc.

Database File: thomsen16.db  
 Dataset Pathname: pass1  
 Presentation Format: gr-n-ccl  
 Dataset Creation: Tue Aug 26 14:54:40 2014 by Log SCH 111116  
 Charted by: Depth in Feet scaled 1:240



08-26-2014  
 Perforated Interval  
 1065.0 - 1075.0 31 Perfs  
 2" DML RTG

08-26-2014  
 Perforated Interval  
 1112.0 - 1118.0 13 Perfs  
 2" DML RTG