



**MIDWEST SURVEYS**  
 LOGGING - PERFORATING - CONSULTING SERVICES  
 P.O. Box 68, Osawatomie, KS 66064  
 913 / 785 - 2128

**GAMMA RAY / NEUTRON / CCL**

File No. \_\_\_\_\_

Company **Birk Petroleum**

Well **Sutherland No.23**

Field **Crandall North**

County **Coffey** State **Kansas**

Location **165' FSL & 445' FEL**

Other Services **Perforate**

Sec. 31 Twp. 22S Rge. 16E

Perforated Datum Log Measured From Drilling Measured From

Elevation 1003' KB NA D.F. NA G.L. 1003'

Date 09-16-2014

Run Number One

Depth Driller 1135.0

Depth Logger 1124.0

Bottom Logged Interval 1124.0

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. Location 102 Osawatomie

Recorded By Gary Mundsich

Witnessed By Brian Birk

BOREHOLE RECORD		CASINGS RECORD	
NO.	BIT FROM TO	SIZE	WGT FROM TO
One	9.875' 0.0 4.00	7.00"	17.0# 0.0 4.00
Two	6.25" 4.00 1135.0	2.875"	6.5# 0.0 1127.0

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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 :  
 Woco Drilling, LLC.

Database File: sutherland23.db  
 Dataset Pathname: pass1  
 Presentation Format: gr-n-ccl  
 Dataset Creation: Tue Sep 16 14:35:32 2014 by Log SCH 111116  
 Charted by: Depth in Feet scaled 1:240

