**MIDWEST SURVEYS**
Well Site Services
801 E. 17th Ave.
Hays, KS 67601
(785) 625-5696

API # 15-191-22,507

| | |
|---|---|
| Co. | GARRA RAY CEMENT BOND LOG, |
| Well | Subsidiary No. 3-4 |
| Field | Rush |
| County | Sumner |
| State | Kansas |

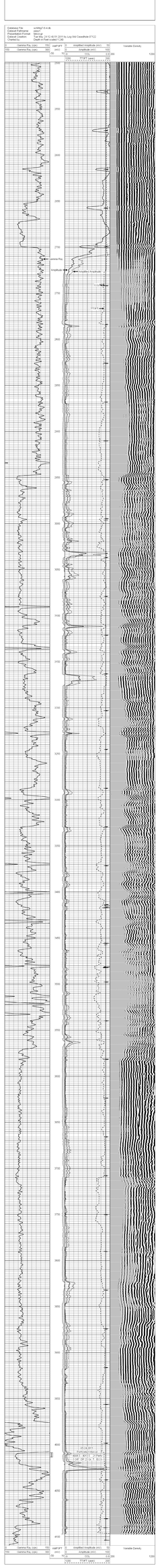
| Run No. | Date | Time | Depth Driller | Depth Logger | Bottom Logged Interval | Top Log Interval | Casing Driller | Casing Logger | Bit Size |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 10-24-2011 | | 3370 | 3366 | 3364 | 2700 | 8 5/8" | 8 5/8" | 7 7/8" |

| Type Log | Scale | Max. Rec. Temp. | Equipment Number | Location | Recorded By | Witnessed By |
|---|---|---|---|---|---|---|
| Gamma Ray, Cement Bond Log, Variable Density | 5" = 100' | 109 F | 2310 PAL & 1007 FEL | Hays, KS | Brian Rohleder | Jim Rohleder |

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 interpretations, 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:
Val Drilling Company
Rig No.: 3

Database File: ochkay2-9-4-db
Dataset Pathname: ch4
Presentation Format: bhcs-gr
Dataset Creation: Tue Mar, 24 10:43:51 2015 by Log-Ware Classic-ET32
Charted by: Depth in Feet scaled 1:240

0 Gamma Ray (API) 100 | GAPI/FT 0 | Amplified Amplitude (mv) 50 | Variable Density
100 Gamma Ray (API) 200 | (mv) 10 | Amplitude (mv) 500 | 0.0 DTA 0.5 | 0.0 DTC 0.5 | 0.0 DTS 0.5 | FEET (MM) 1:240 | 1000