

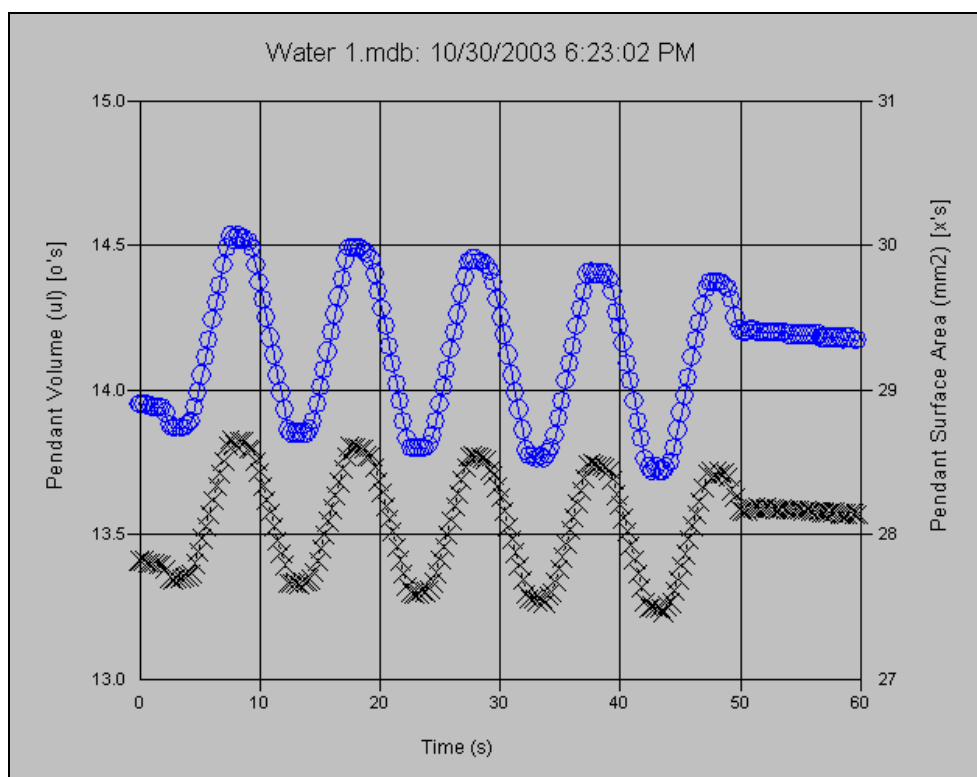
Syringe Pump Performance

31 October 2003

The following graph shows typical (not optimized) performance of the FTA200 syringe pump. A Hamilton Gas-Tight 500 μ l syringe was used. The instrument was

- sitting on a simple table (no air table)
- used a 20 gauge (0.914mm OD) stainless steel needle
- did not have a cuvette for protection against air currents

The pump was programmed using the automatic macro to run 4 ½ cycles after a short wait. The movie continued for a ten seconds after the pump stopped.



The top curve shows the measured pendant volume and the bottom shows the measured pendant drop surface area. The overall surface area perturbation was 3.5% peak-to-peak. Larger perturbations appear even less noisy because the effects of ambient vibration are relatively less. The slight downward slope is from evaporation, because no protective cuvette was used.

File: SyringePumpPerformance.doc