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From: Schwab, Kellogg

To: Don O'Neal

Sent: Friday, May 04, 2007 3:12 PM

Subject: Water filters

Dear Don, I hope all is well. First I must apologize in the delay in touching base with you. I have 4 Masters students graduating this spring and there has been a flurry of thesis edits, presentations etc. I will give you a brief update and then will organize a more formal report and send that to you as well. Succinctly, both the Berkefeld and Winfield (the short stubby filter) effectively filter all bacteria from laboratory test water. We have tested both units multiple times and they consistently remove at least four logs of bacteria. With respect to virus removal, neither filter was able to significantly remove viruses from the water, with less than one log of viruses being retained. This is not unexpected as the pore size of the filters (0.9 microns) is much larger than the size of our MS2 test virus (0.025 microns). We will be conducting additional experiments with both types of filters using more turbid water (i.e. water containing high levels of particles) to evaluate potential fouling and potential enhancement of virus removal. Sincerely,
Kellogg

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