Appendix D: Aerobic and Anaerobic Leaching Tests

This appendix contains the entire data set for the aerobic and anaerobic testing. Testing was performed for the potential components of the final media mix as described in Section 3. The data points labeled as sorption is the initial loading of the media. The exposure data points are the loadings on the media after the media has been exposed to unspiked stormwater for a minimum of three weeks. The data in these graphs have been normalized by dividing the water constituent concentration in both sorption and exposure by the post-sorption water concentration and by dividing by the mass of the media. The initial loading on the media also is given on each figure as mg constituent/g media. Initial loadings that are less than zero indicate that the media released that constituent rather than removing it from the water. Decreases in concentration after exposure ($C_{exp}/C_o < 1$) indicate that pollutant retention during quiescent times is not likely to occur, and the constituent(s) will likely be washed out during the first flush. Increases in concentration after exposure ($C_{exp}/C_o > 1$) indicate that additional pollutant retention capacity was available.

List of Figures for Appendix D

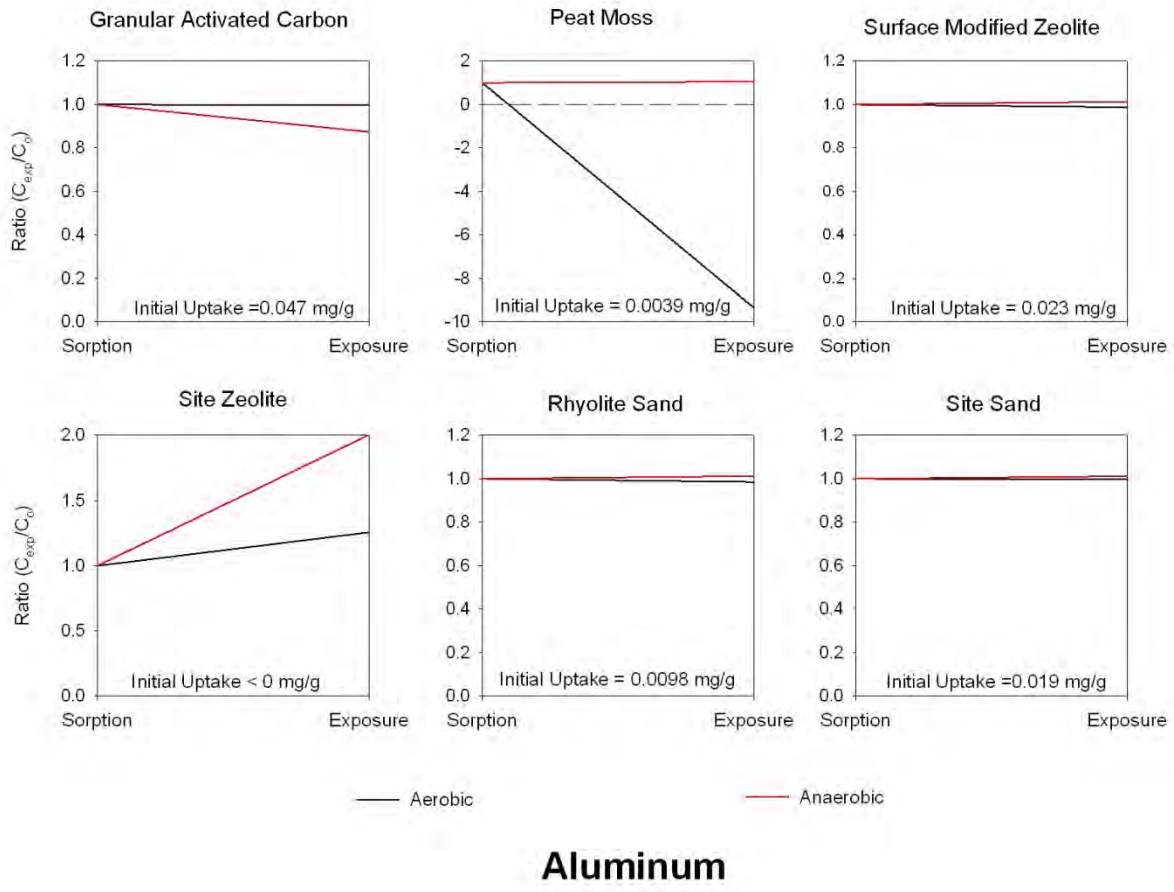

Figure D-1. Aluminum Uptake and Retention after Aerobic versus Anaerobic Exposure

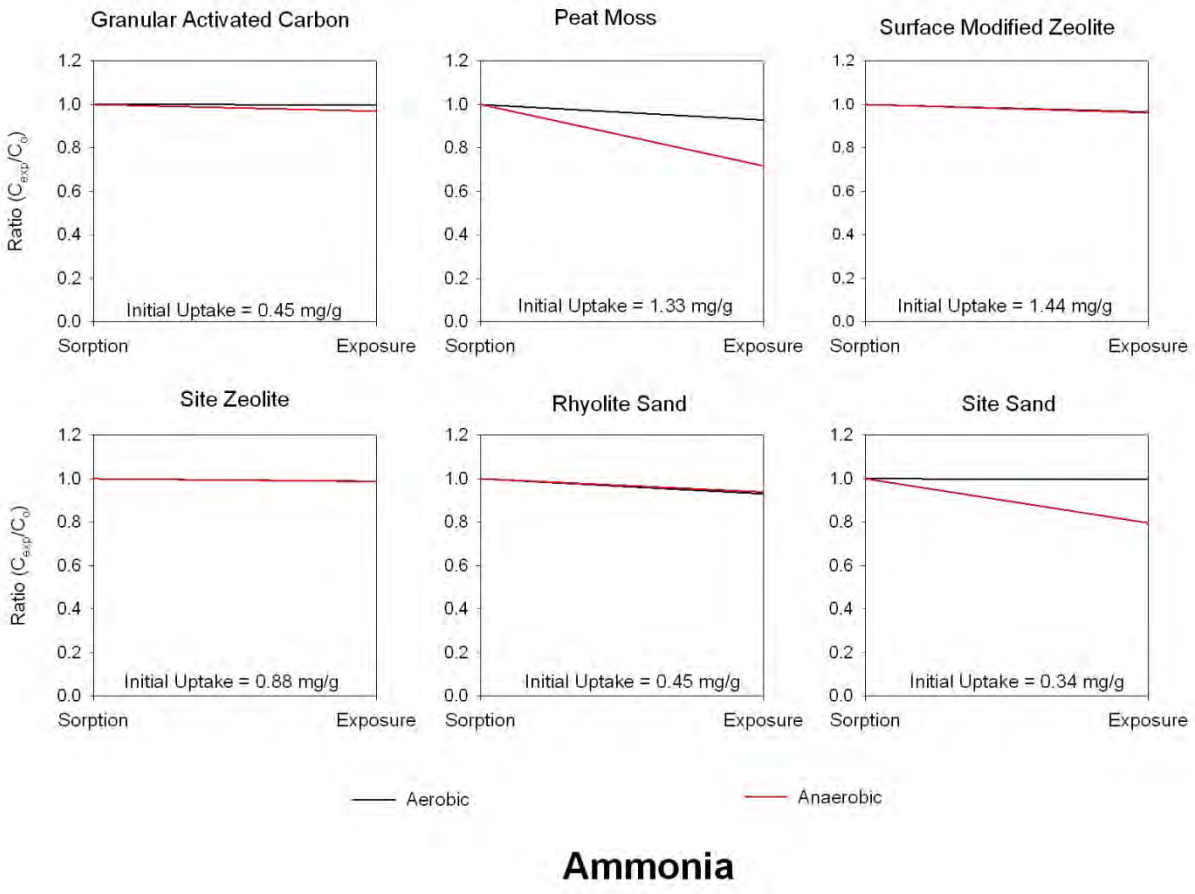

Figure D-2. Ammonia Uptake and Retention after Aerobic versus Anaerobic Exposure

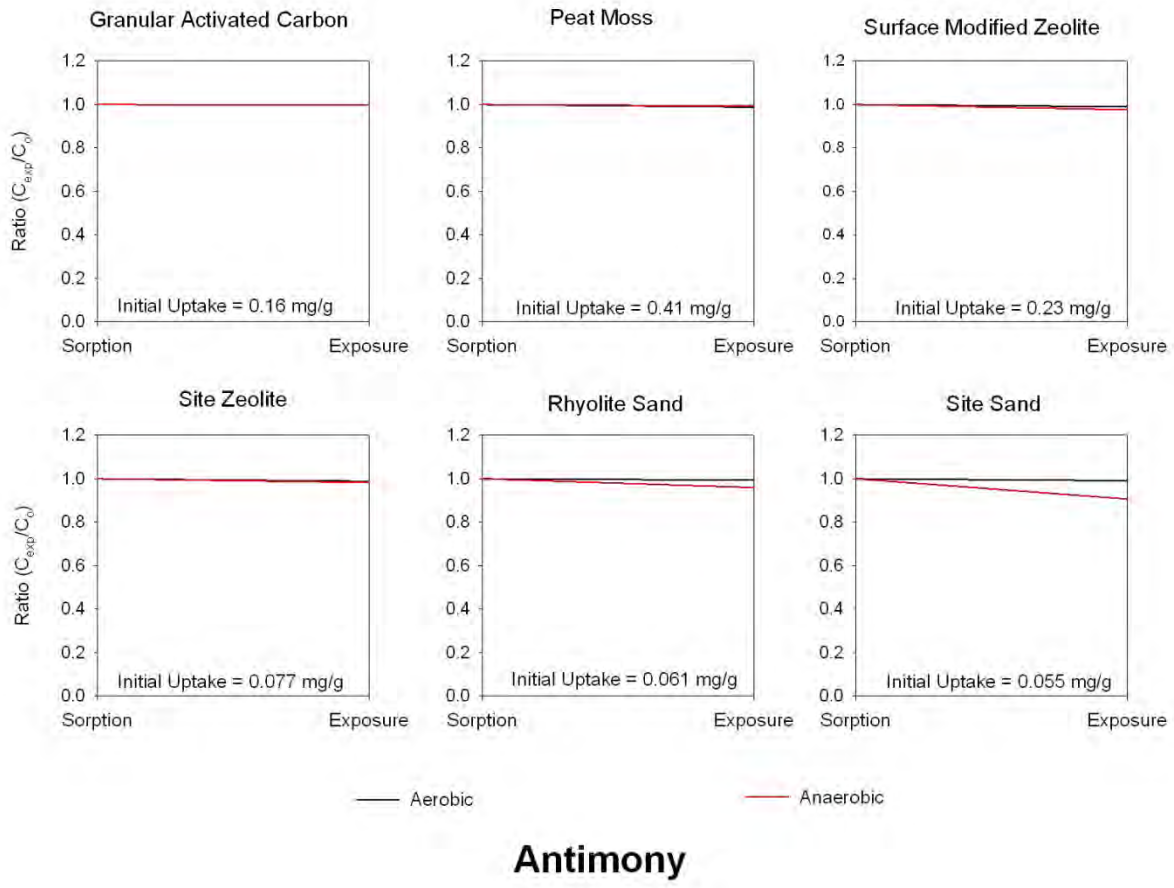

Figure D-3. Antimony Uptake and Retention after Aerobic versus Anaerobic Exposure

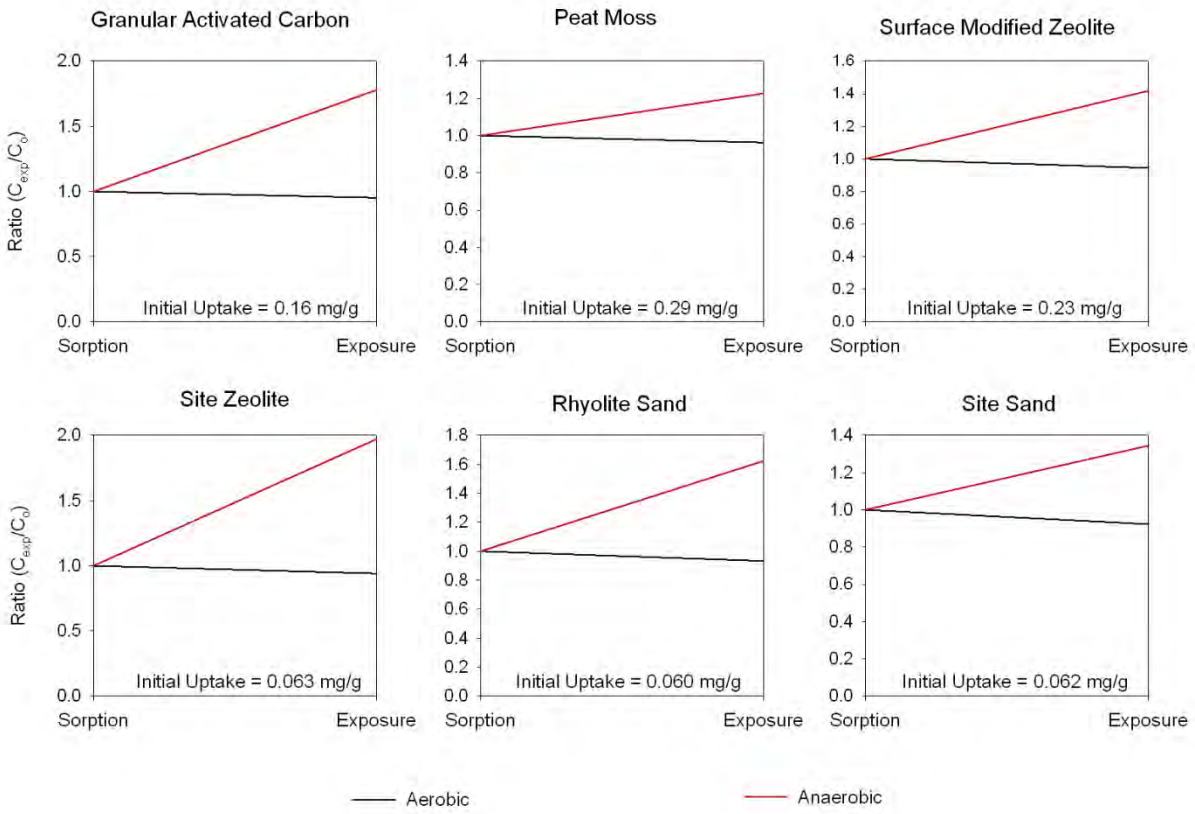

Figure D-4. Boron Uptake and Retention after Aerobic versus Anaerobic Exposure

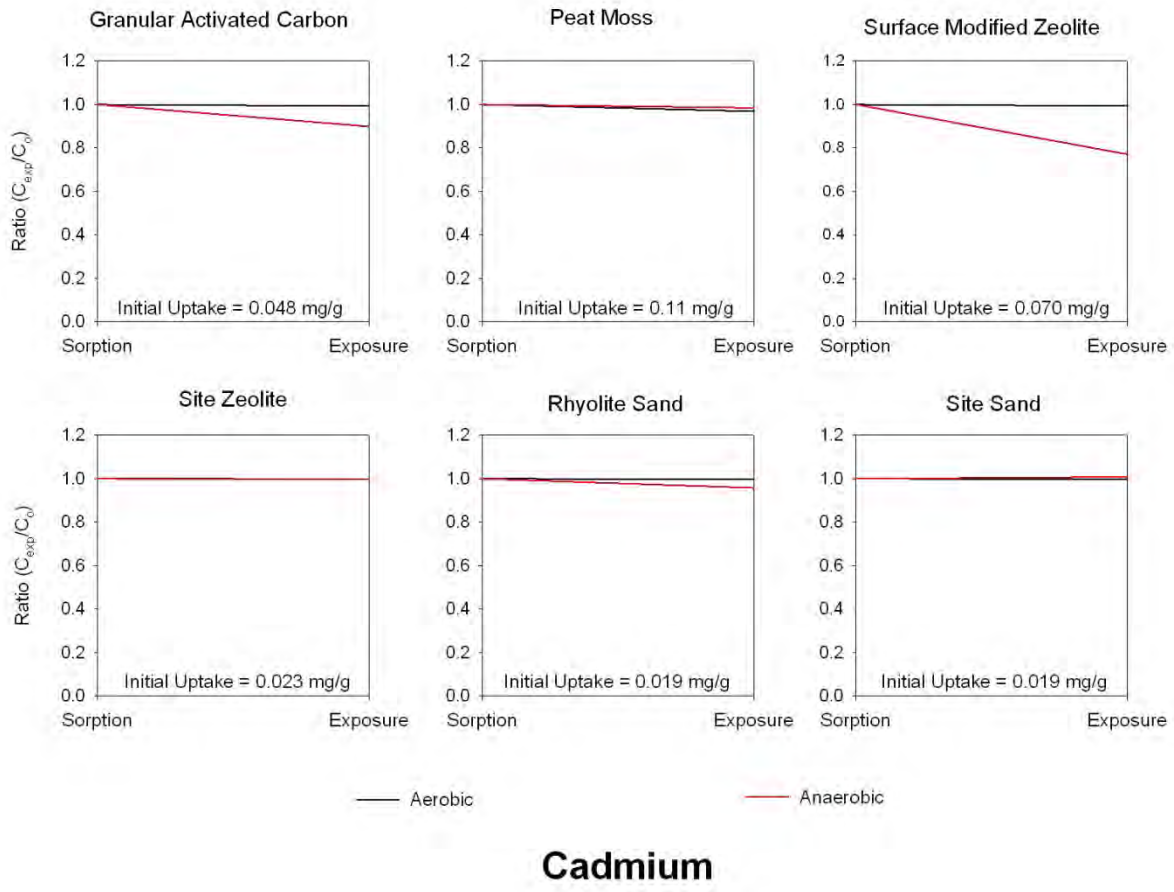

Figure D-5. Cadmium Uptake and Retention after Aerobic versus Anaerobic Exposure

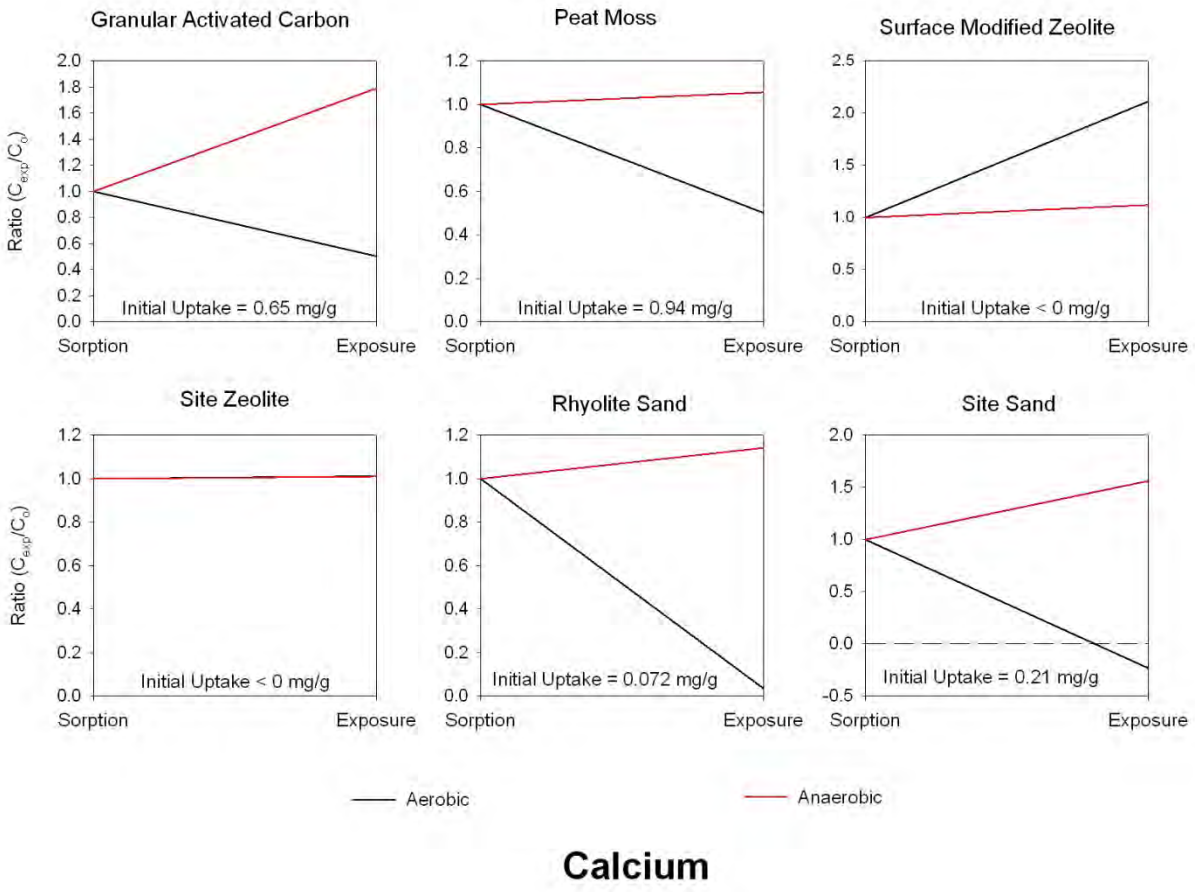

Figure D-6. Calcium Uptake and Retention after Aerobic versus Anaerobic Exposure

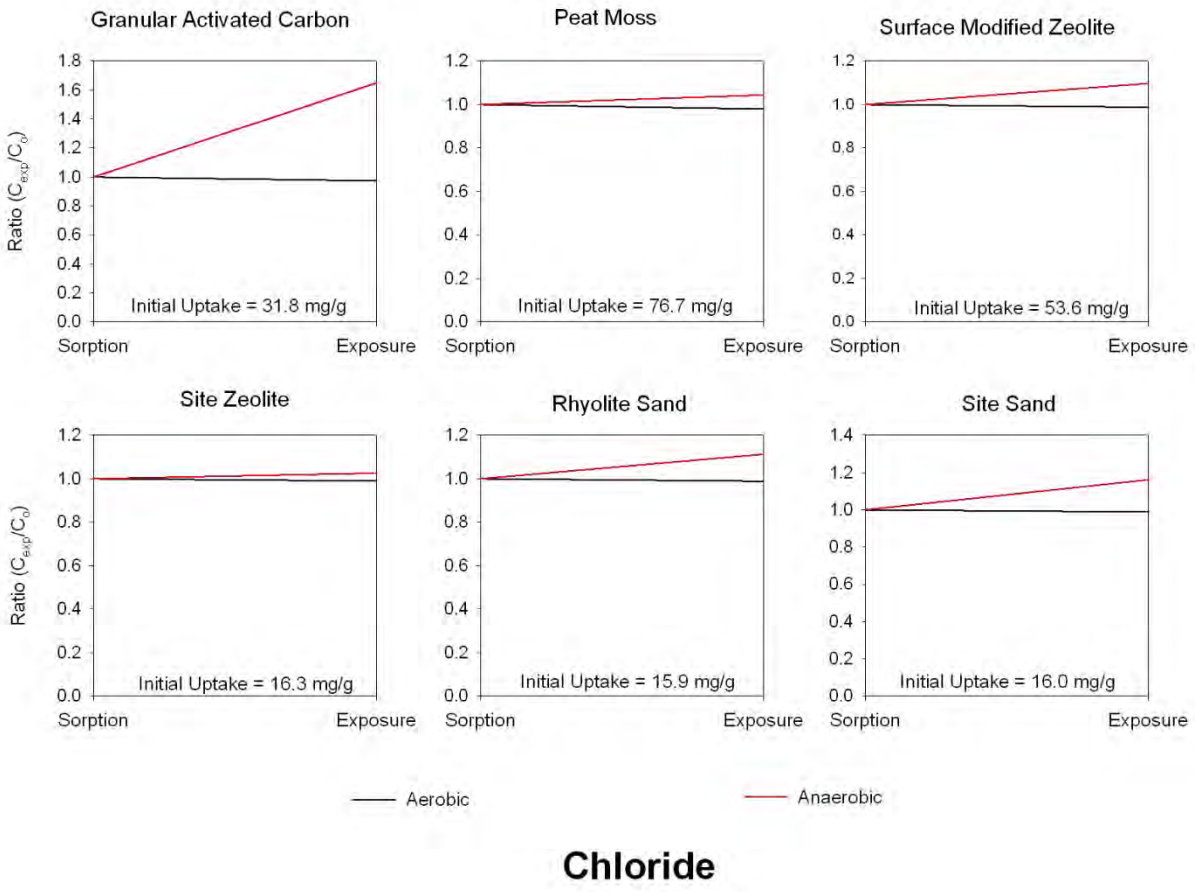

Figure D-7. Chloride Uptake and Retention after Aerobic versus Anaerobic Exposure

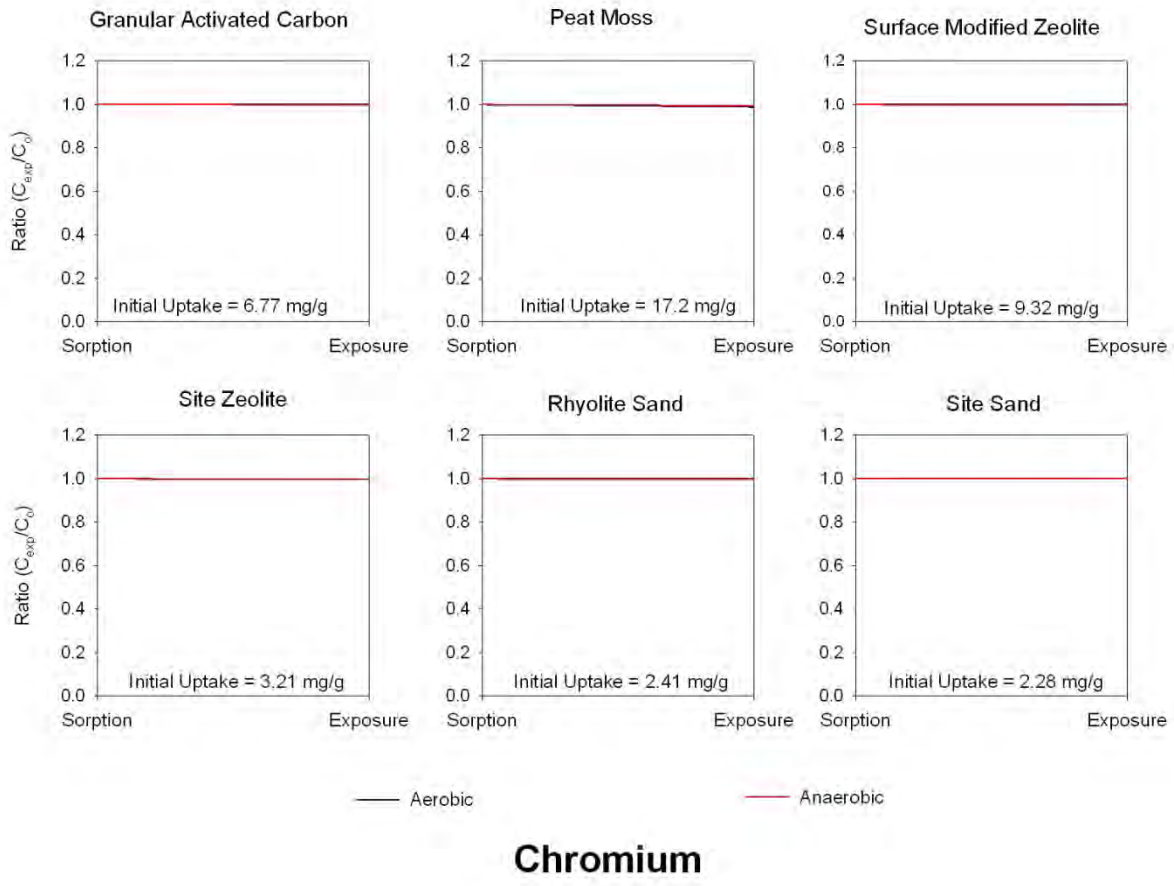

Figure D-8. Chromium Uptake and Retention after Aerobic versus Anaerobic Exposure

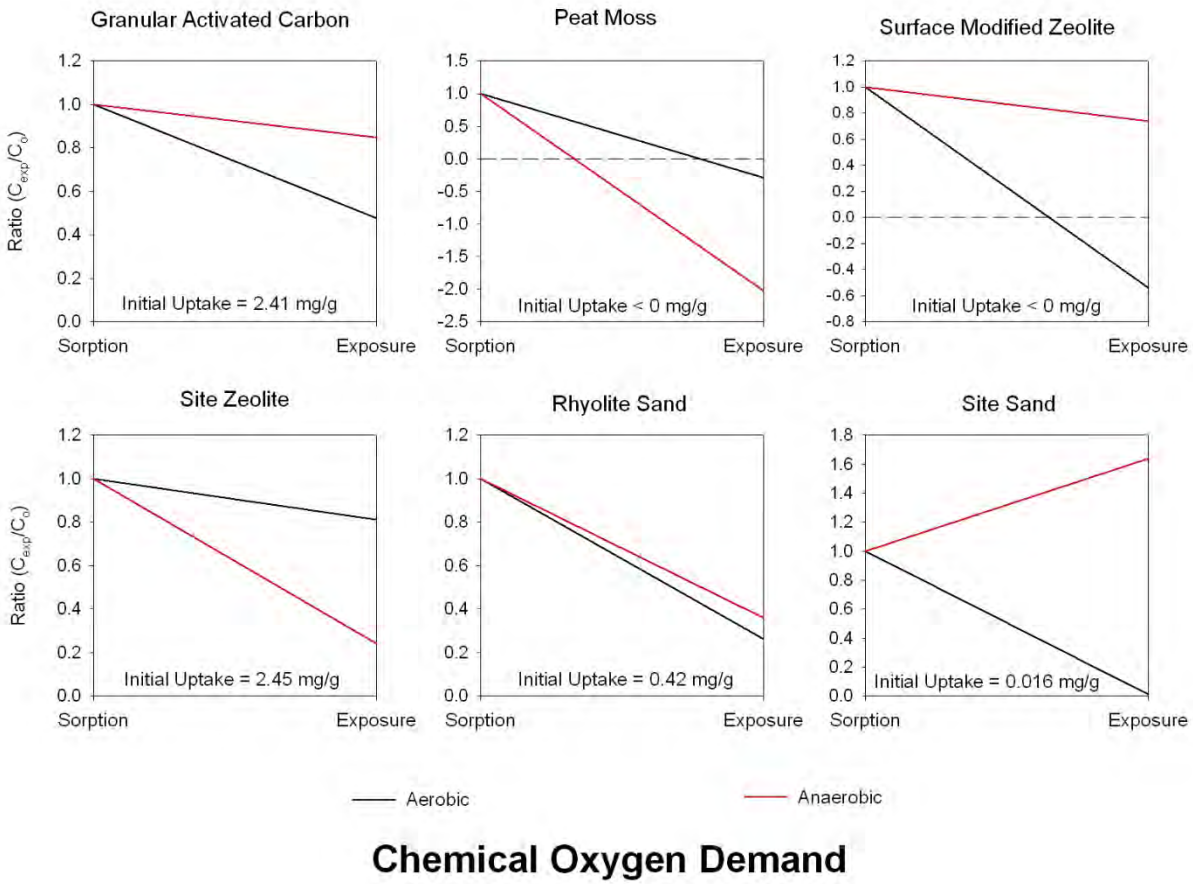

Figure D-9. Chemical Oxygen Demand Uptake and Retention after Aerobic versus Anaerobic Exposure

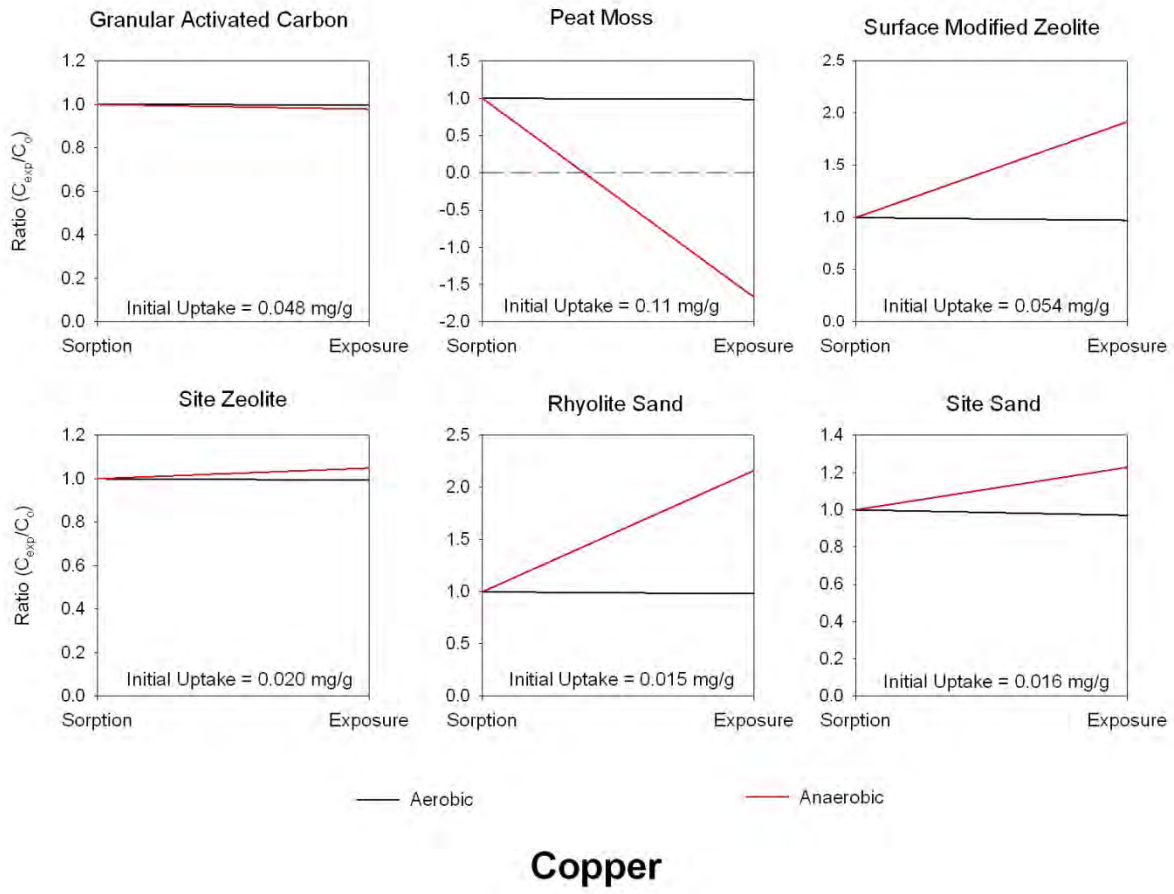

Figure D-10. Copper Uptake and Retention after Aerobic versus Anaerobic Exposure

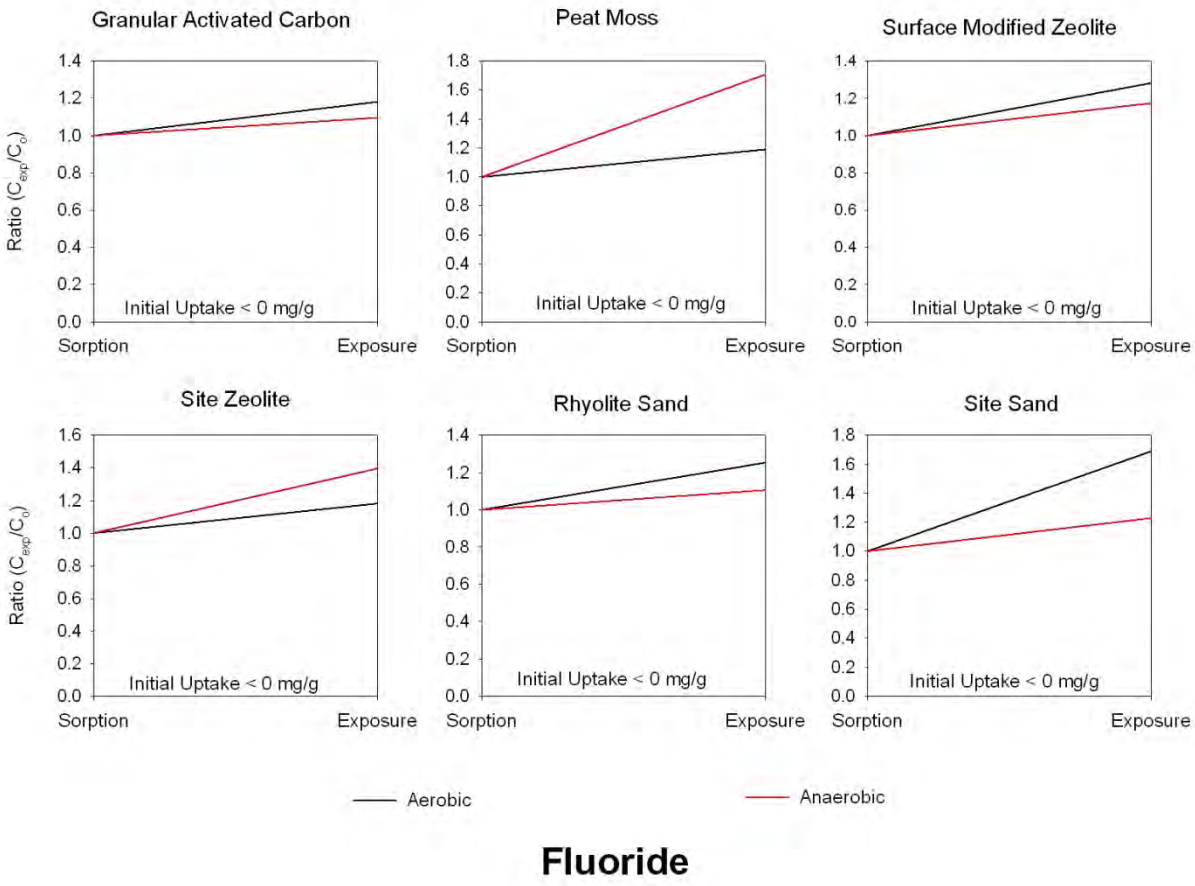

Figure D-11. Fluoride Uptake and Retention after Aerobic versus Anaerobic Exposure

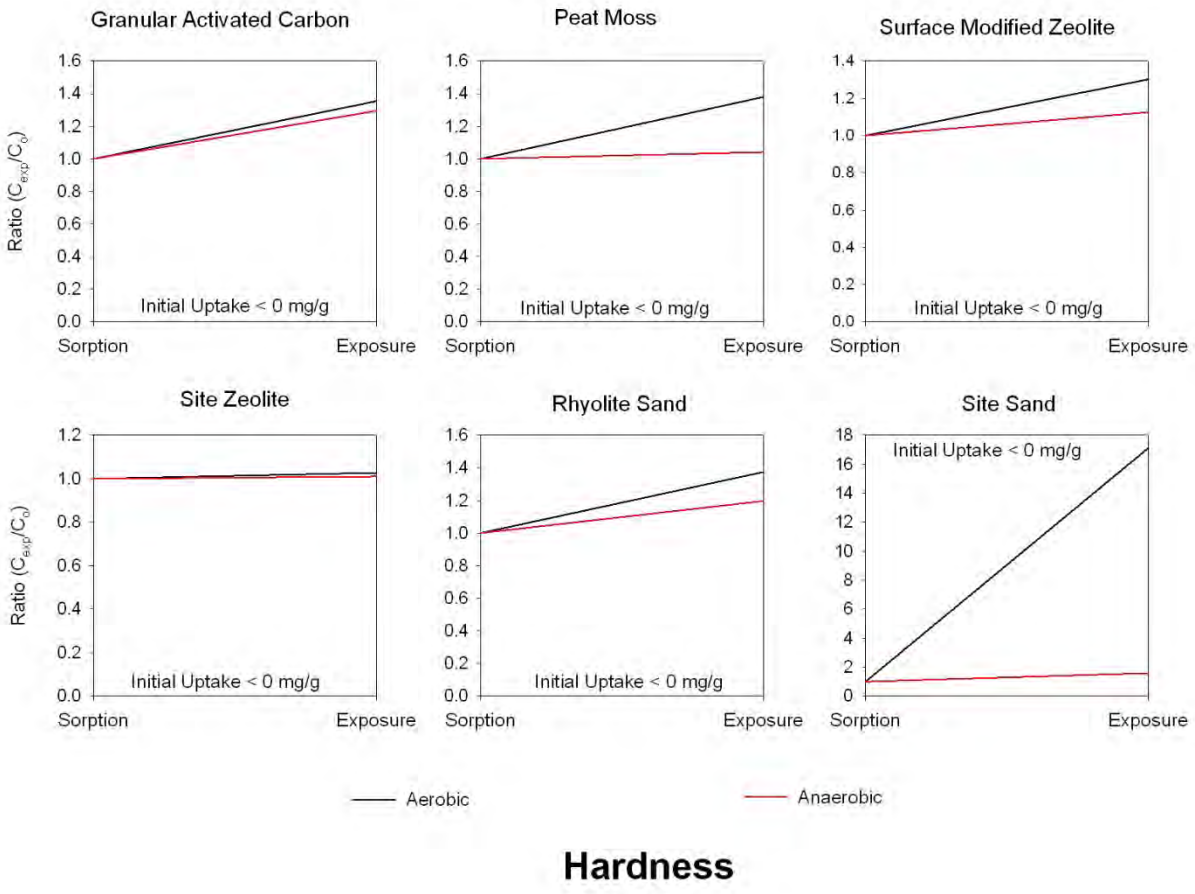

Figure D-12. Hardness Uptake and Retention after Aerobic versus Anaerobic Exposure

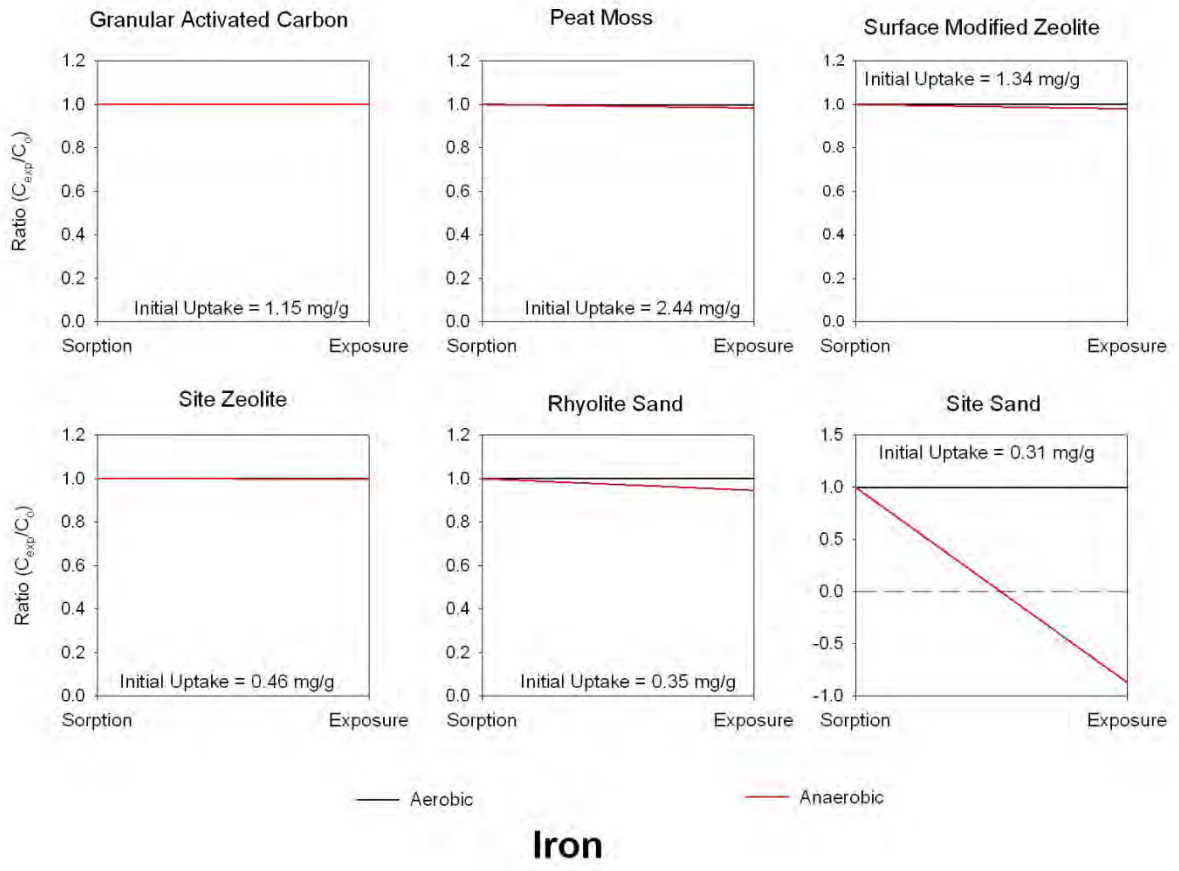

Figure D-13. Iron Uptake and Retention after Aerobic versus Anaerobic Exposure

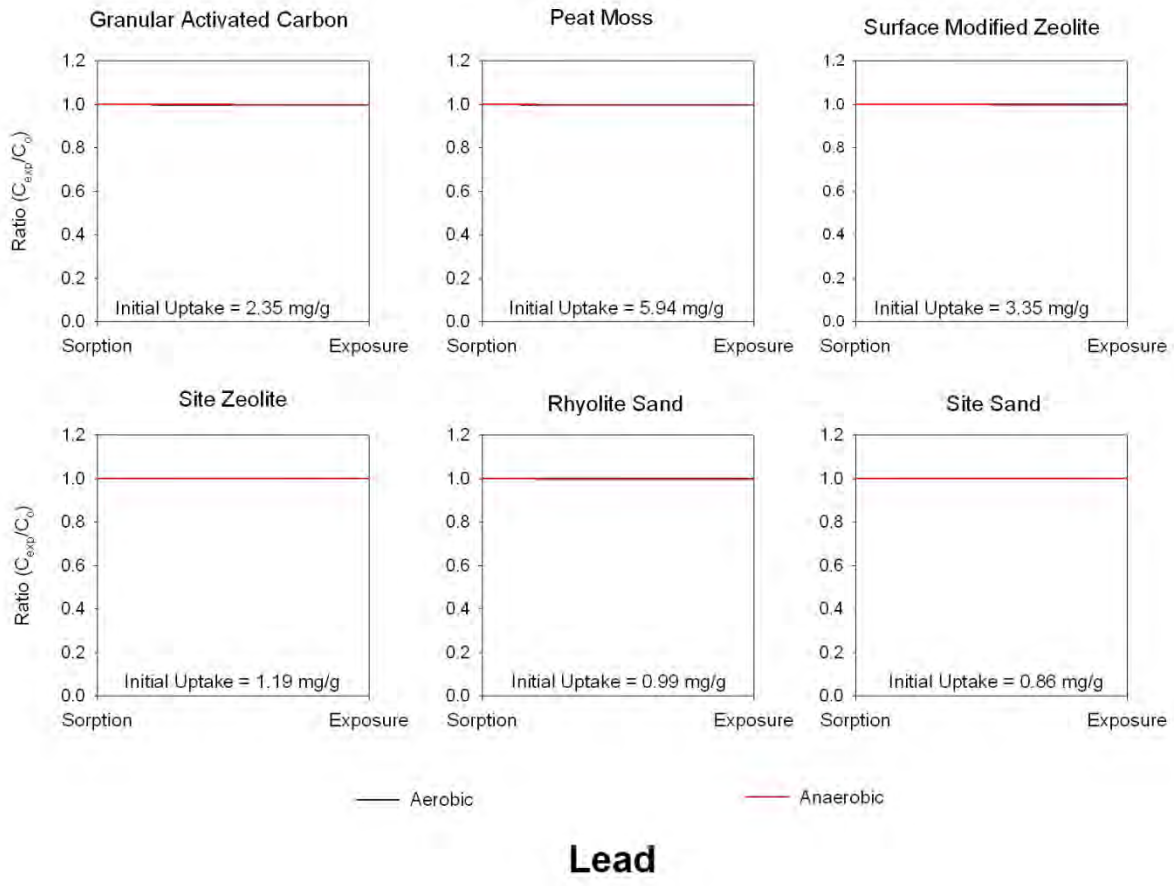

Figure D-14. Lead Uptake and Retention after Aerobic versus Anaerobic Exposure

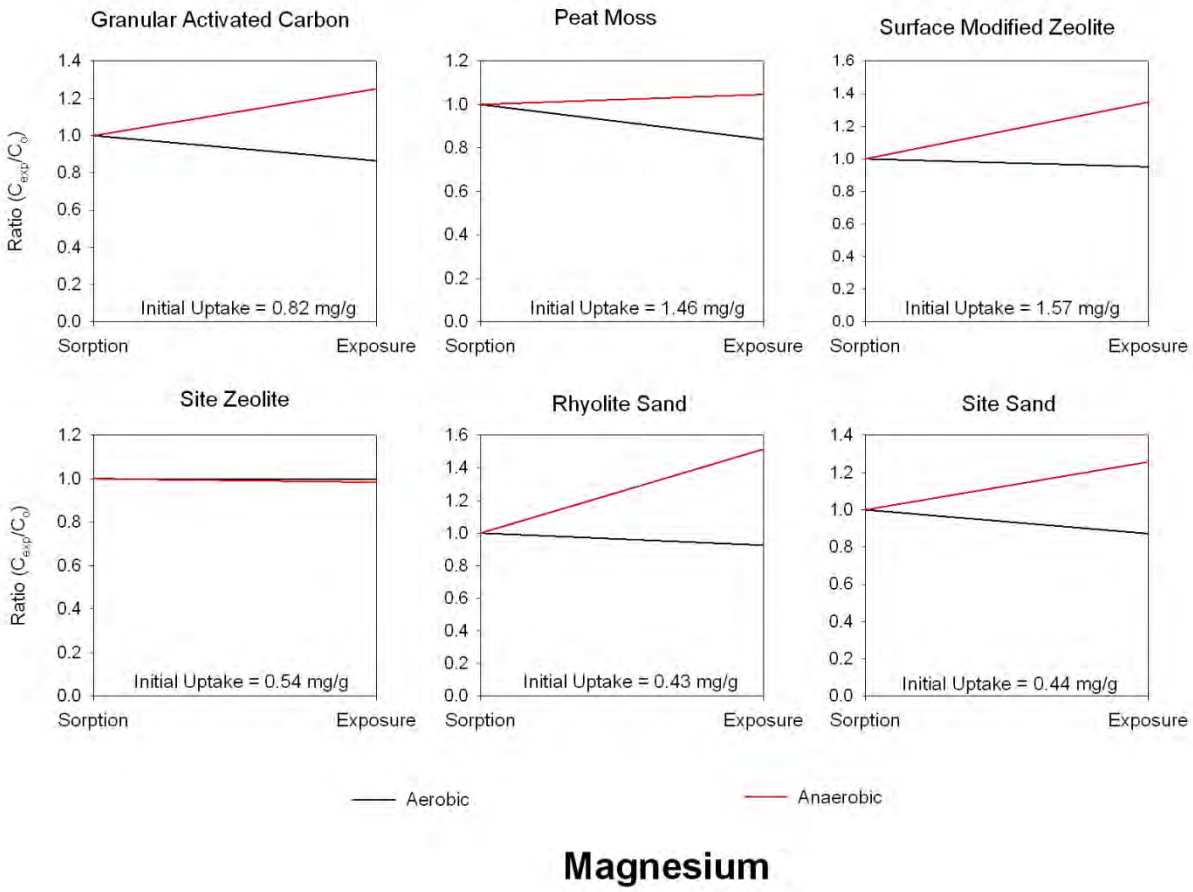

Figure D-15. Magnesium Uptake and Retention after Aerobic versus Anaerobic Exposure

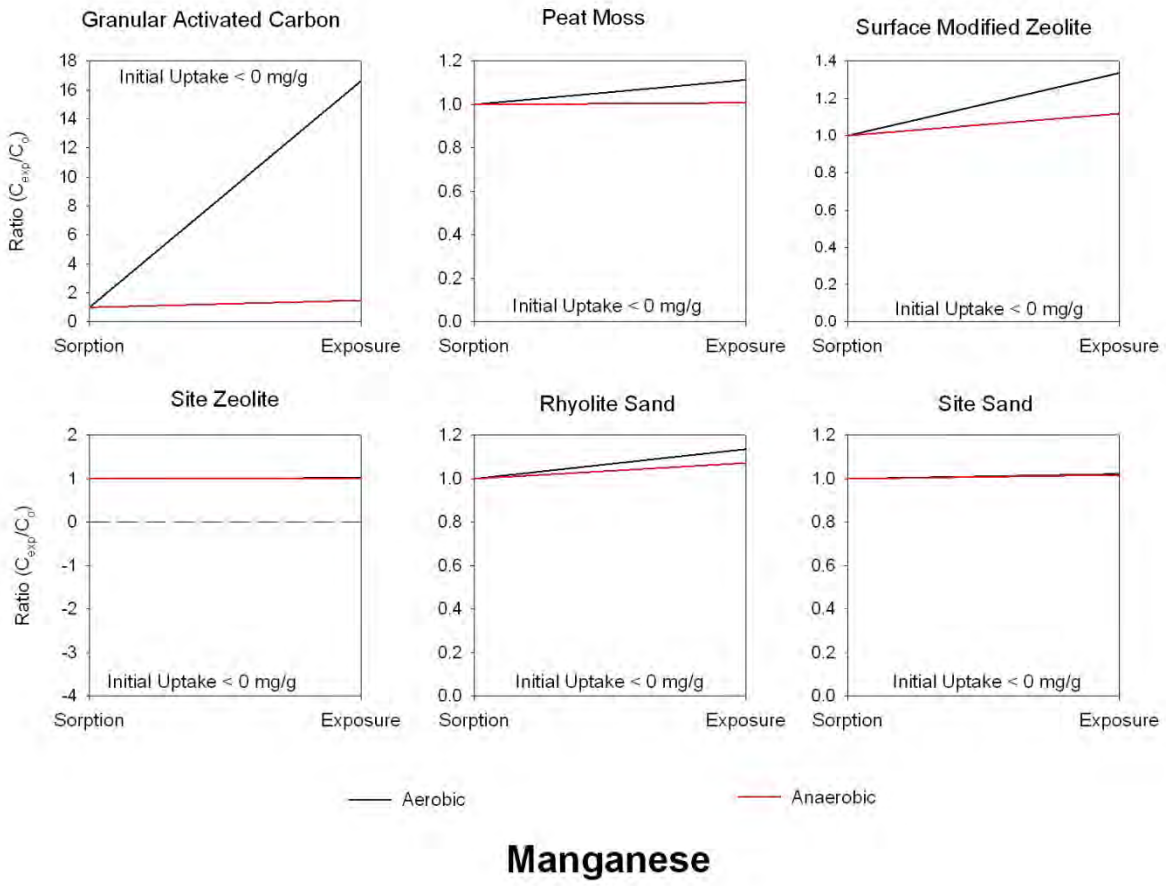

Figure D-16. Manganese Uptake and Retention after Aerobic versus Anaerobic Exposure

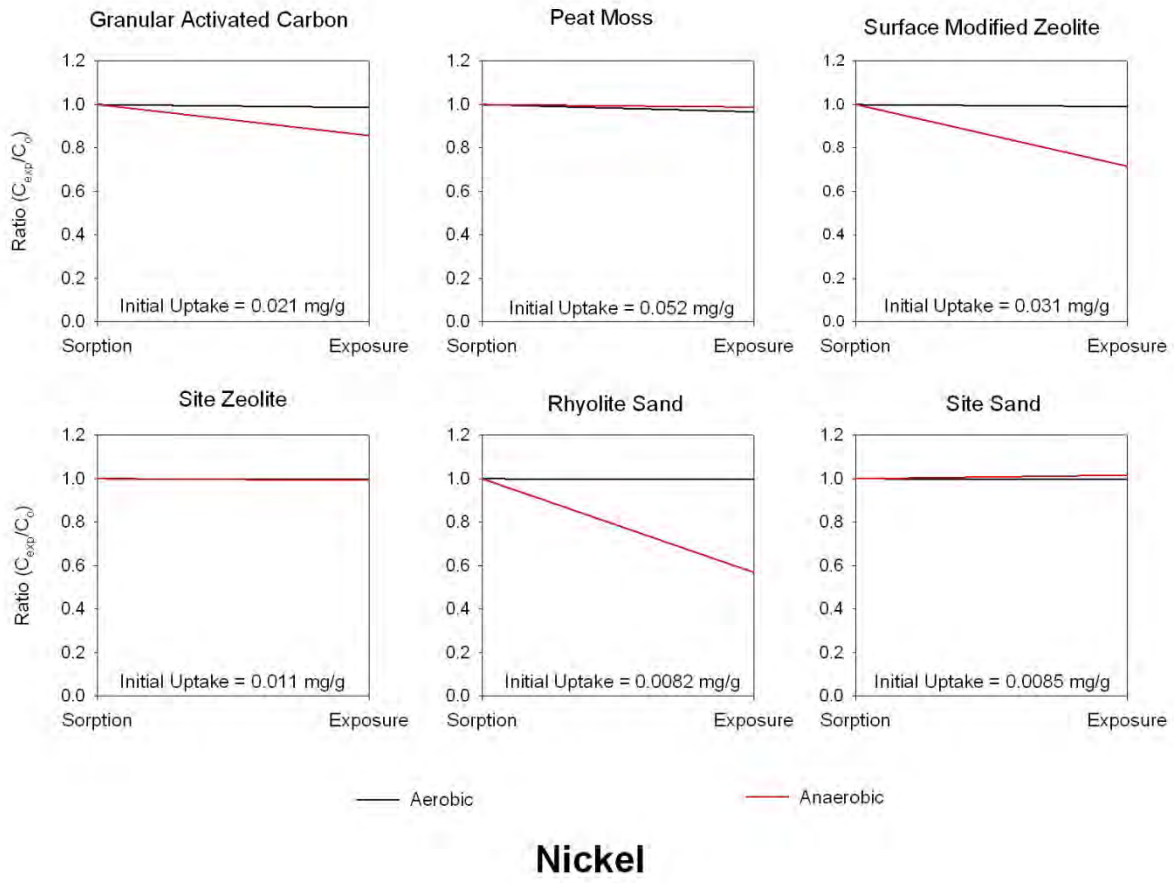

Figure D-17. Nickel Uptake and Retention after Aerobic versus Anaerobic Exposure

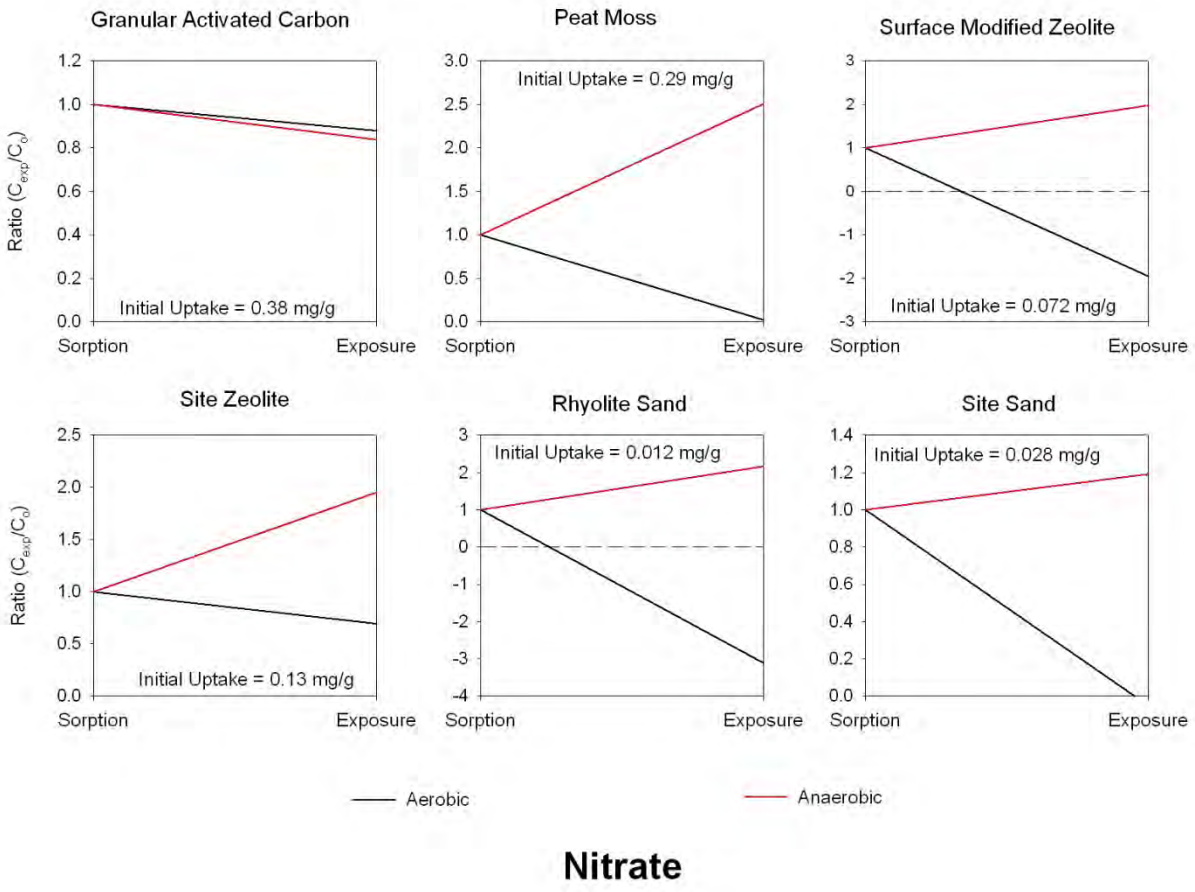

Figure D-18. Nitrate Uptake and Retention after Aerobic versus Anaerobic Exposure

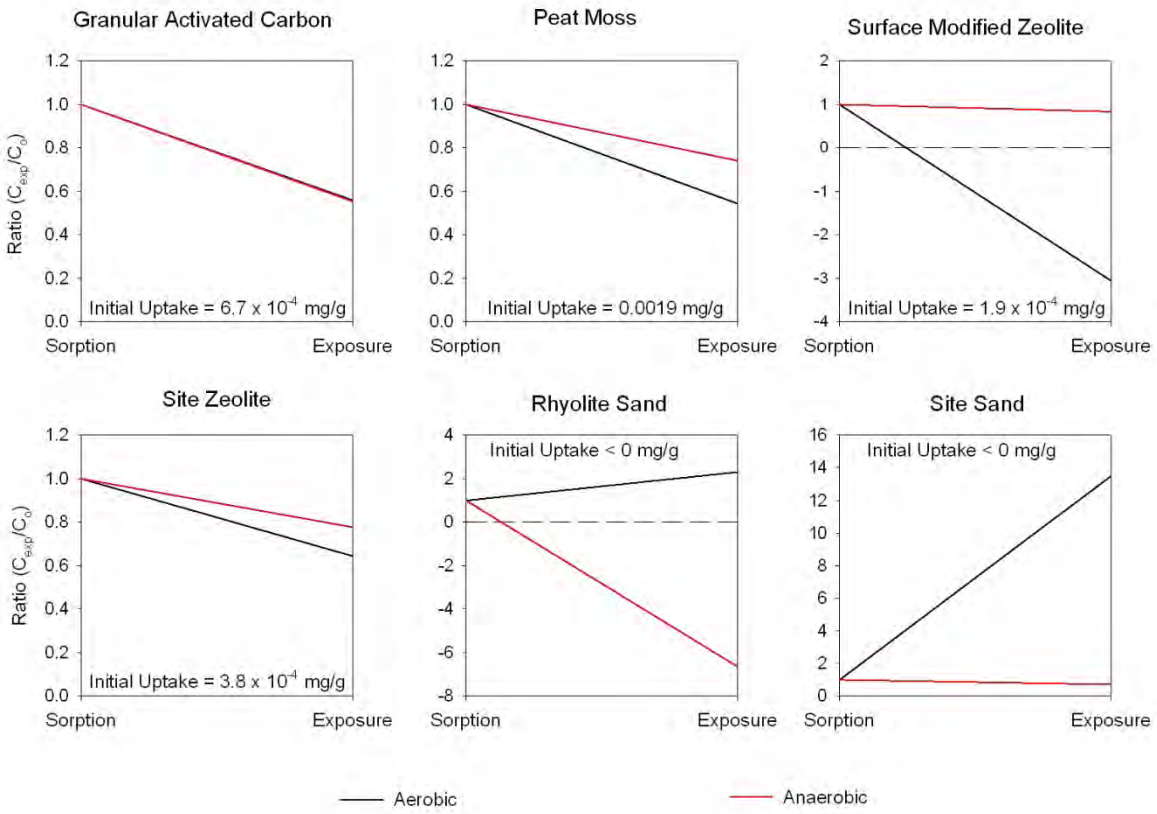

Figure D-19. Nitrite Uptake and Retention after Aerobic versus Anaerobic Exposure

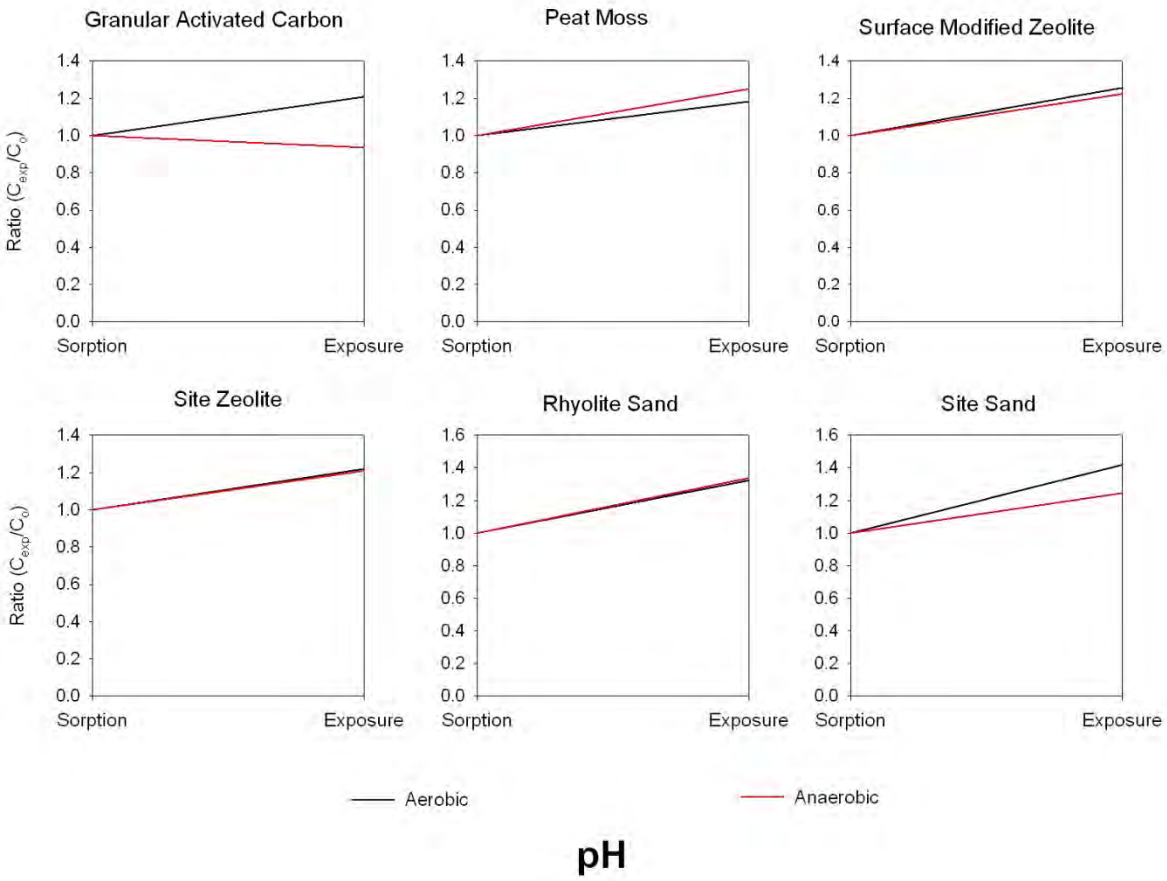

Figure D-20. pH Uptake and Retention after Aerobic versus Anaerobic Exposure

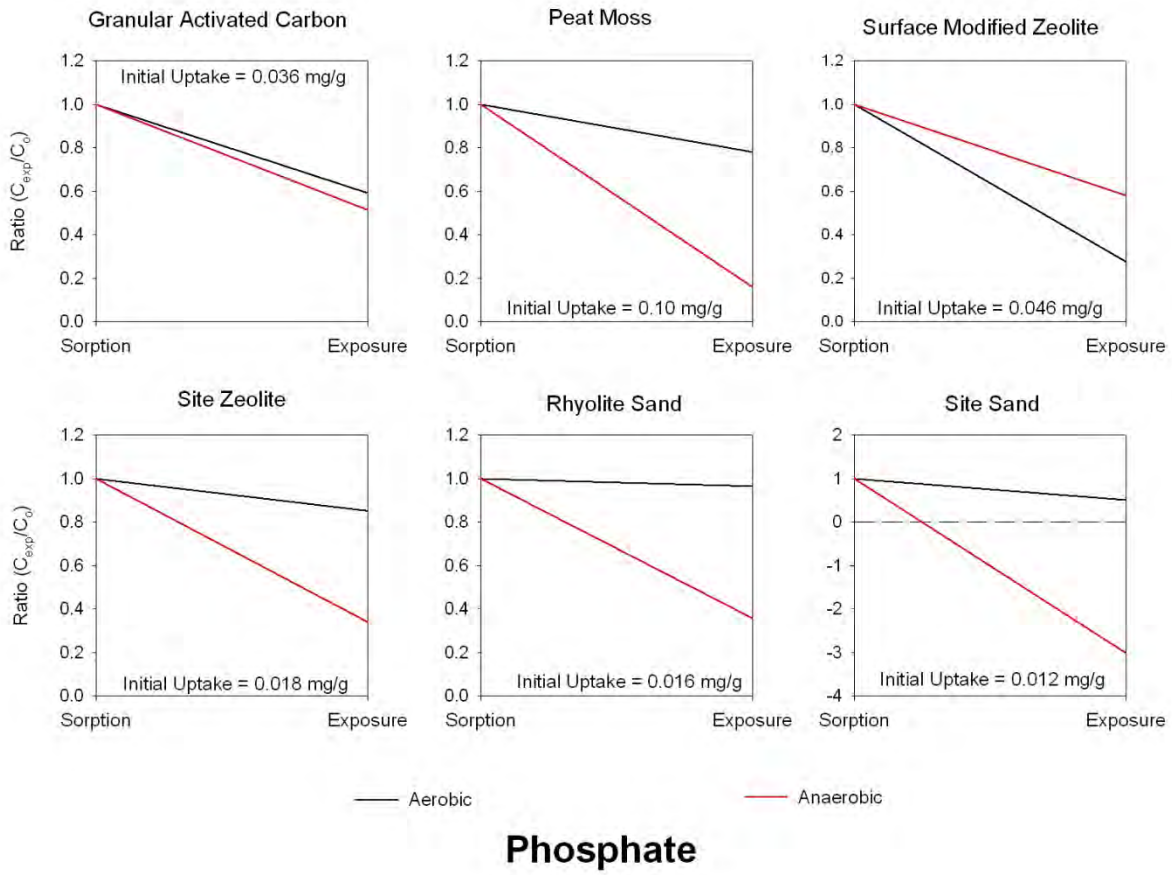

Figure D-21. Phosphate Uptake and Retention after Aerobic versus Anaerobic Exposure

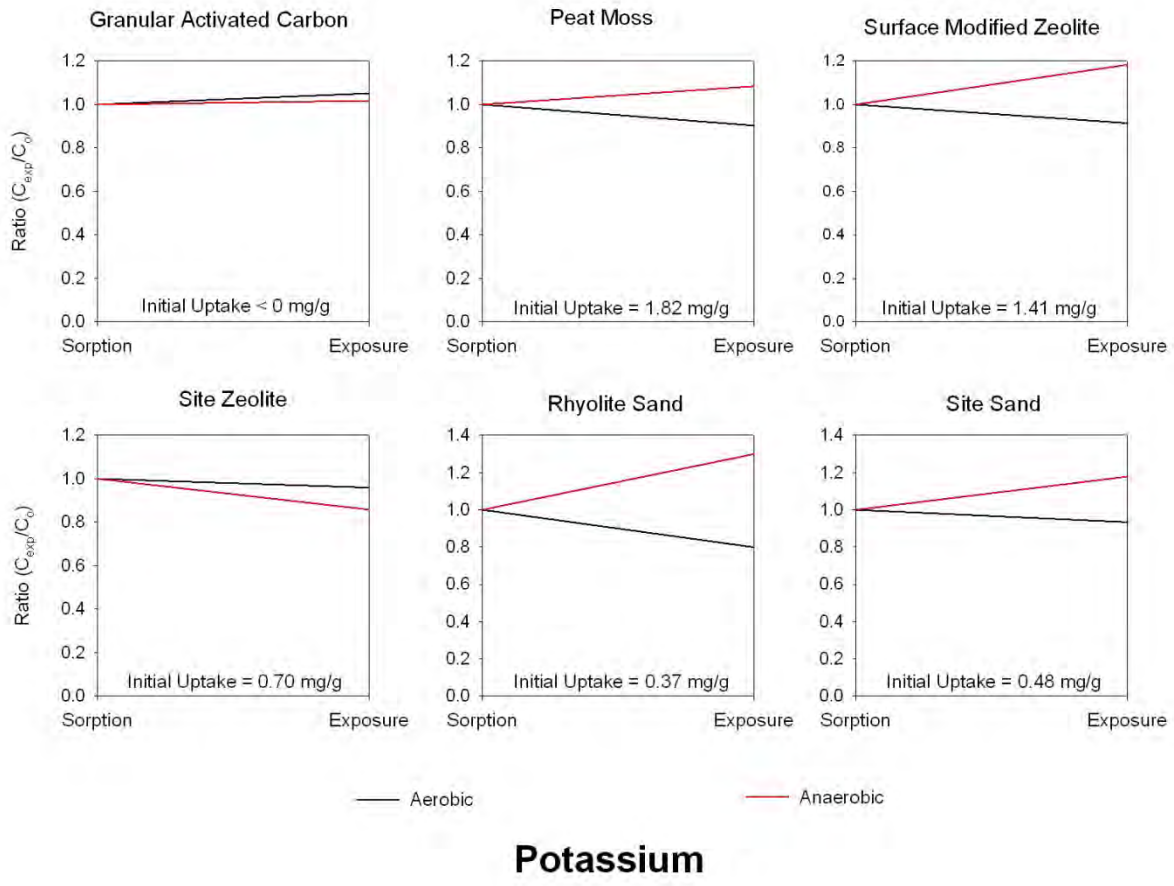

Figure D-22. Potassium Uptake and Retention after Aerobic versus Anaerobic Exposure

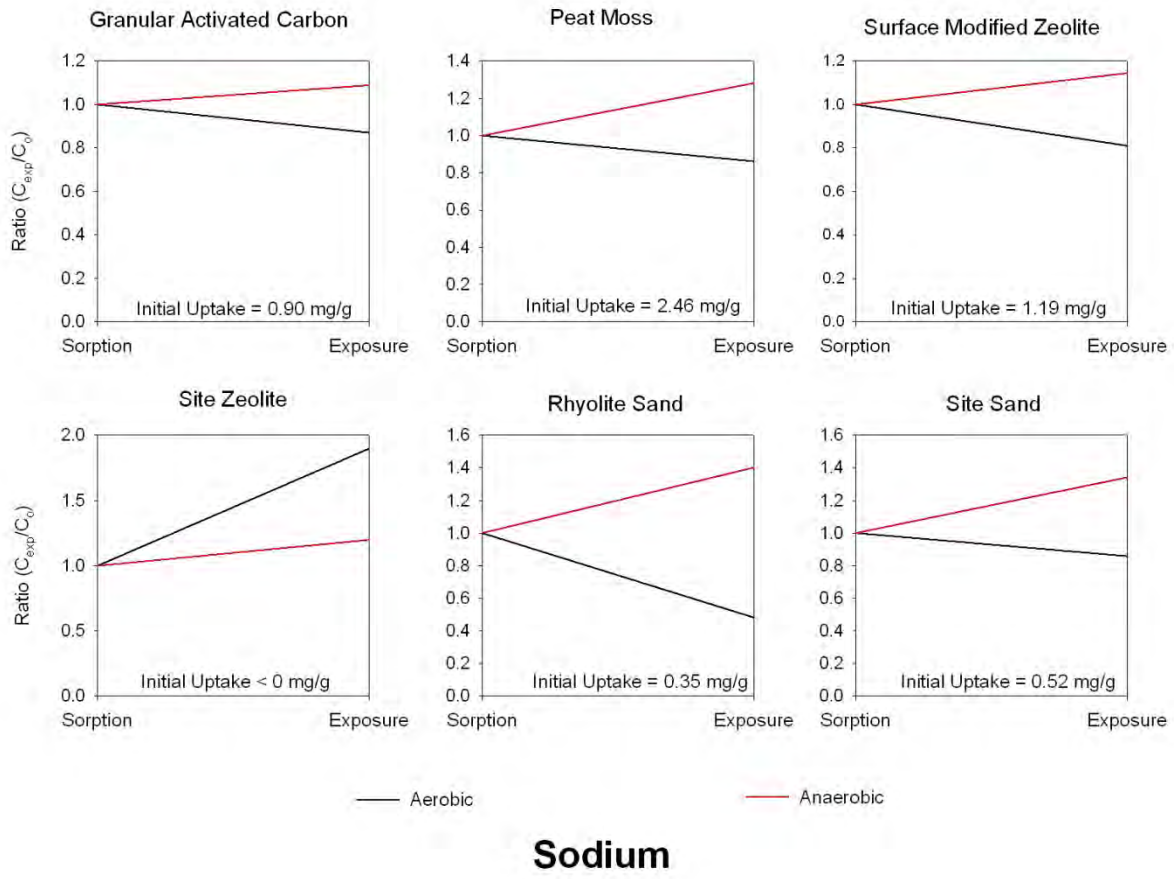

Figure D-23. Sodium Uptake and Retention after Aerobic versus Anaerobic Exposure

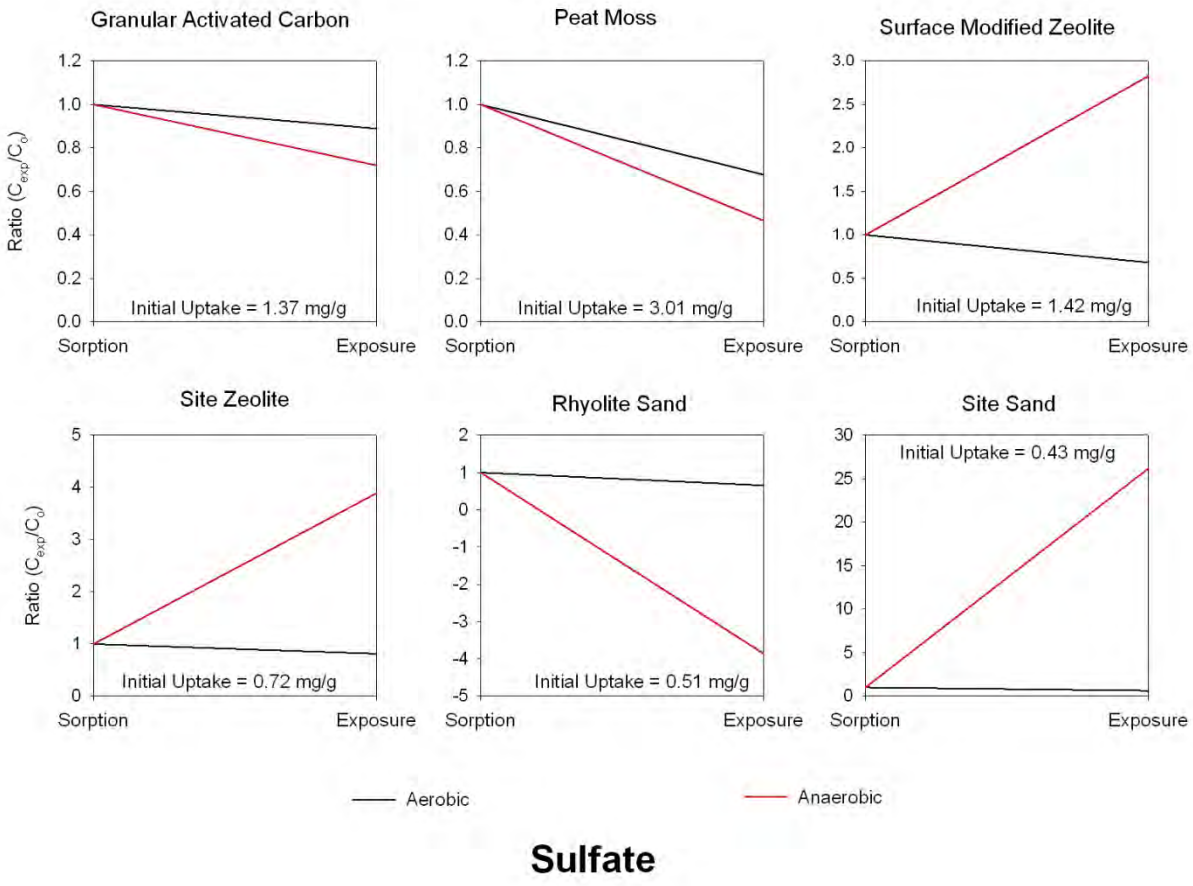

Figure D-24. Sulfate Uptake and Retention after Aerobic versus Anaerobic Exposure

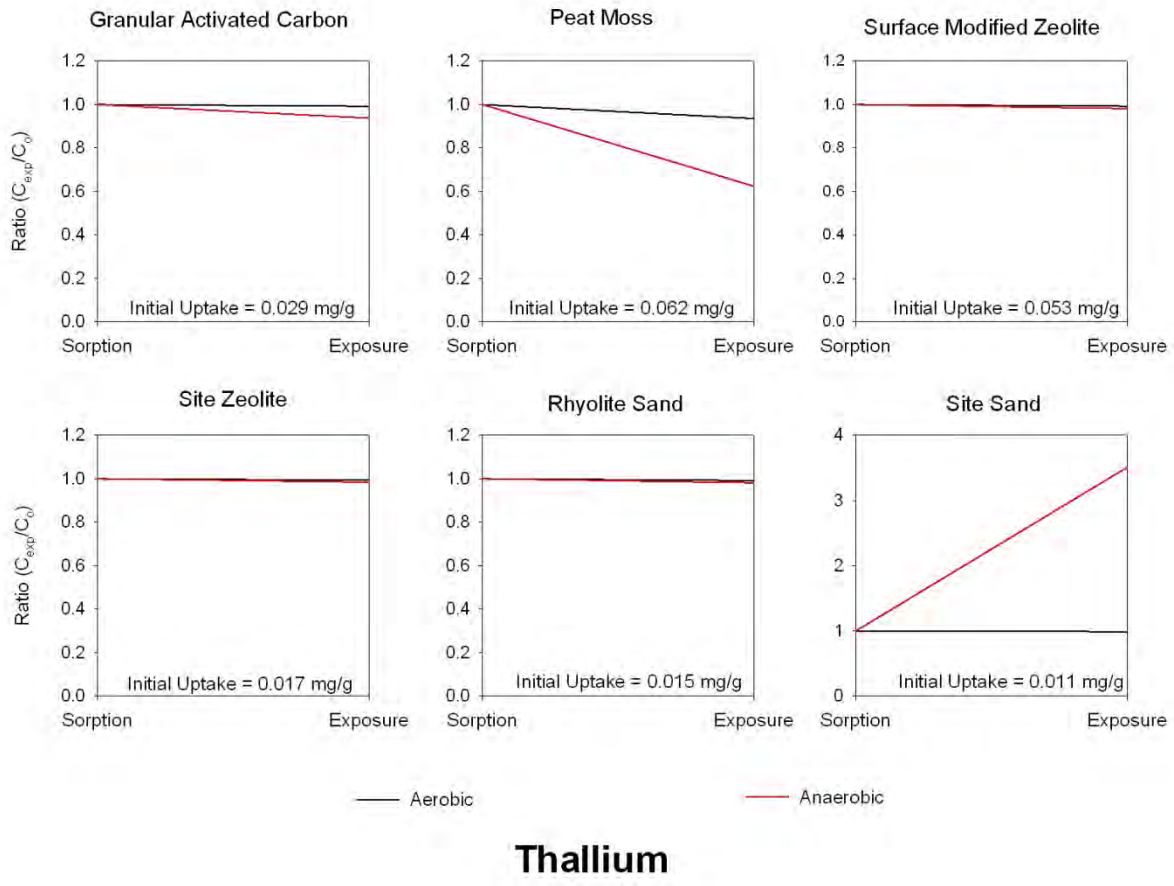

Figure D-25. Thallium Uptake and Retention after Aerobic versus Anaerobic Exposure

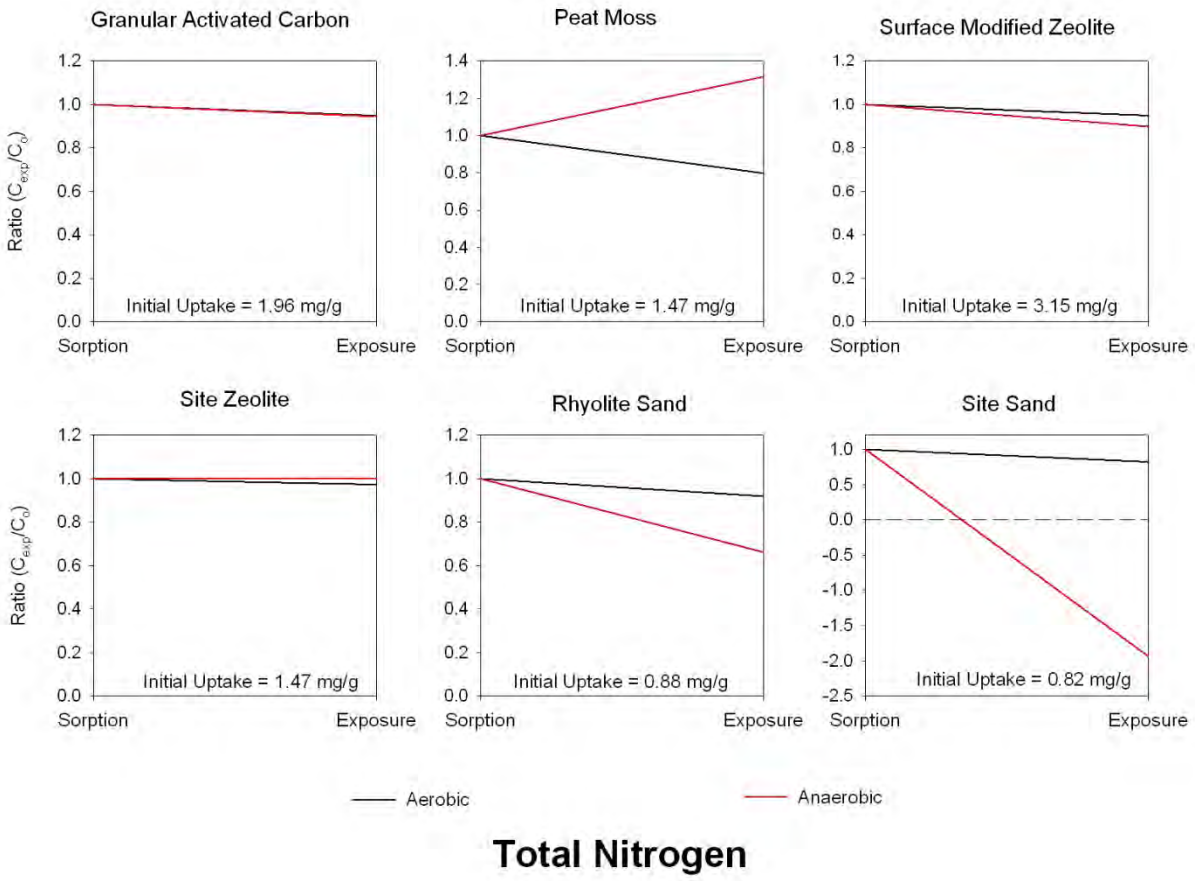

Figure D-26. Total Nitrogen Uptake and Retention after Aerobic versus Anaerobic Exposure

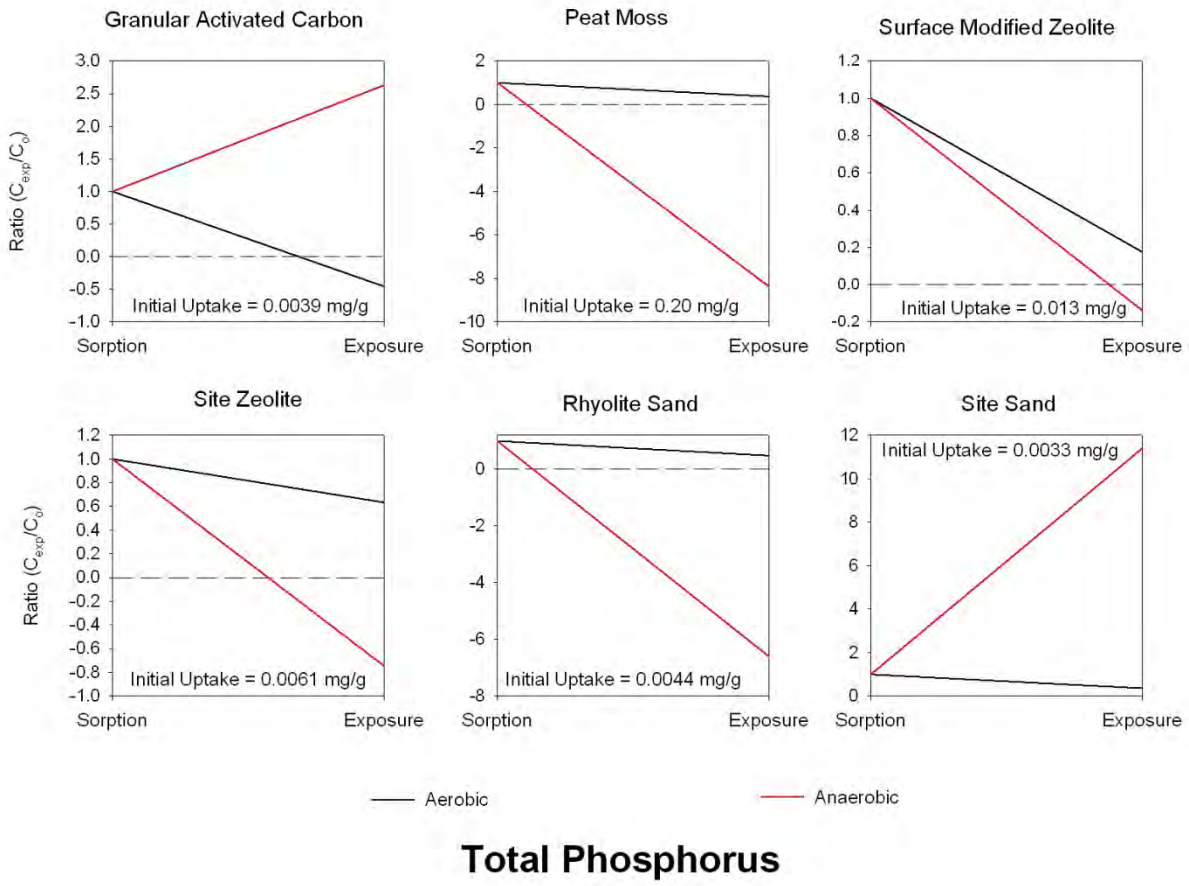

Figure D-27. Total Phosphorus Uptake and Retention after Aerobic versus Anaerobic Exposure

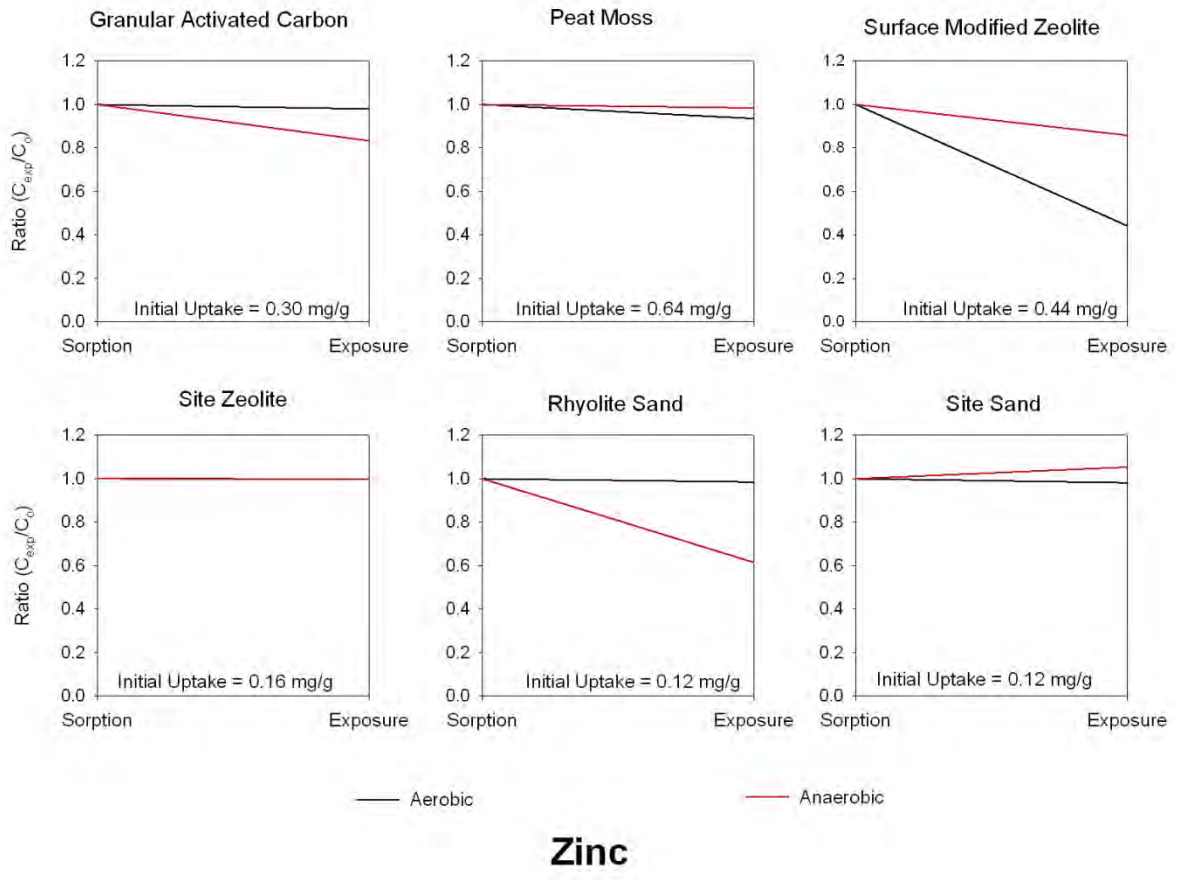

Figure D-28. Zinc Uptake and Retention after Aerobic versus Anaerobic Exposure