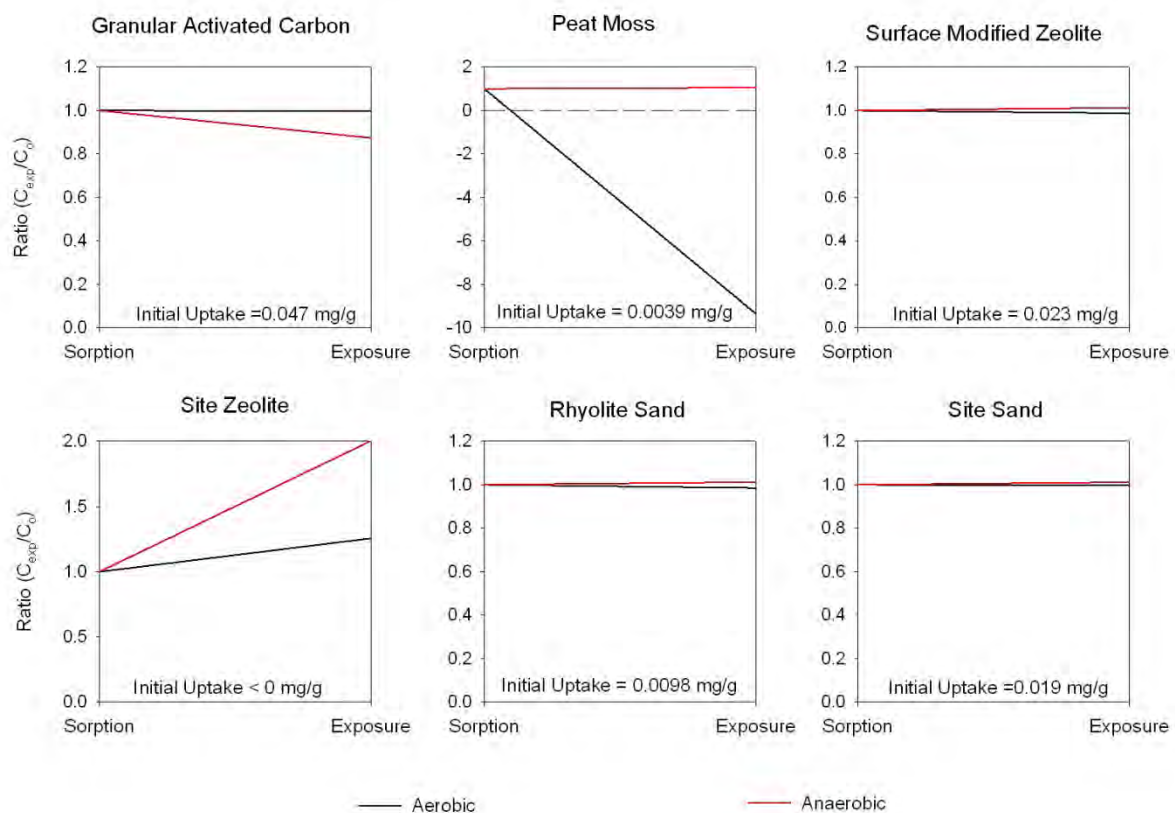


Appendix D: Aerobic and Anaerobic Leaching Tests

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.

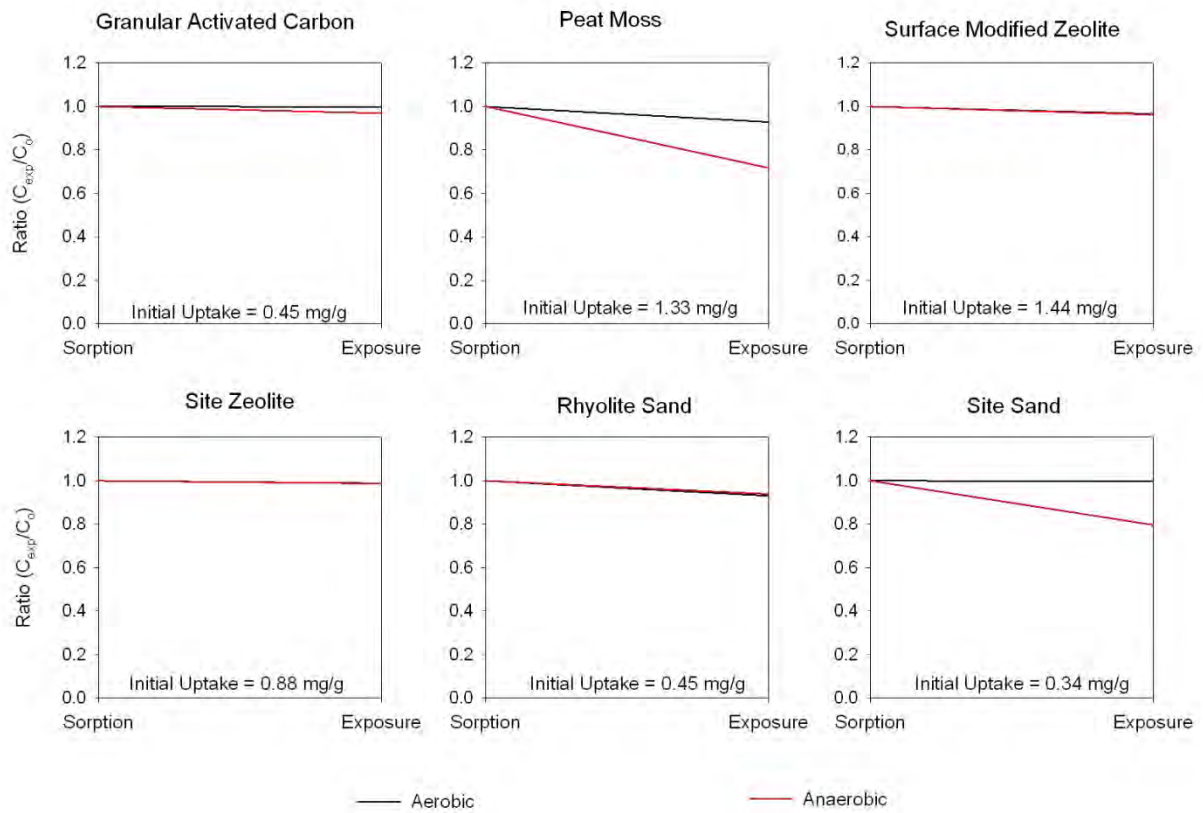
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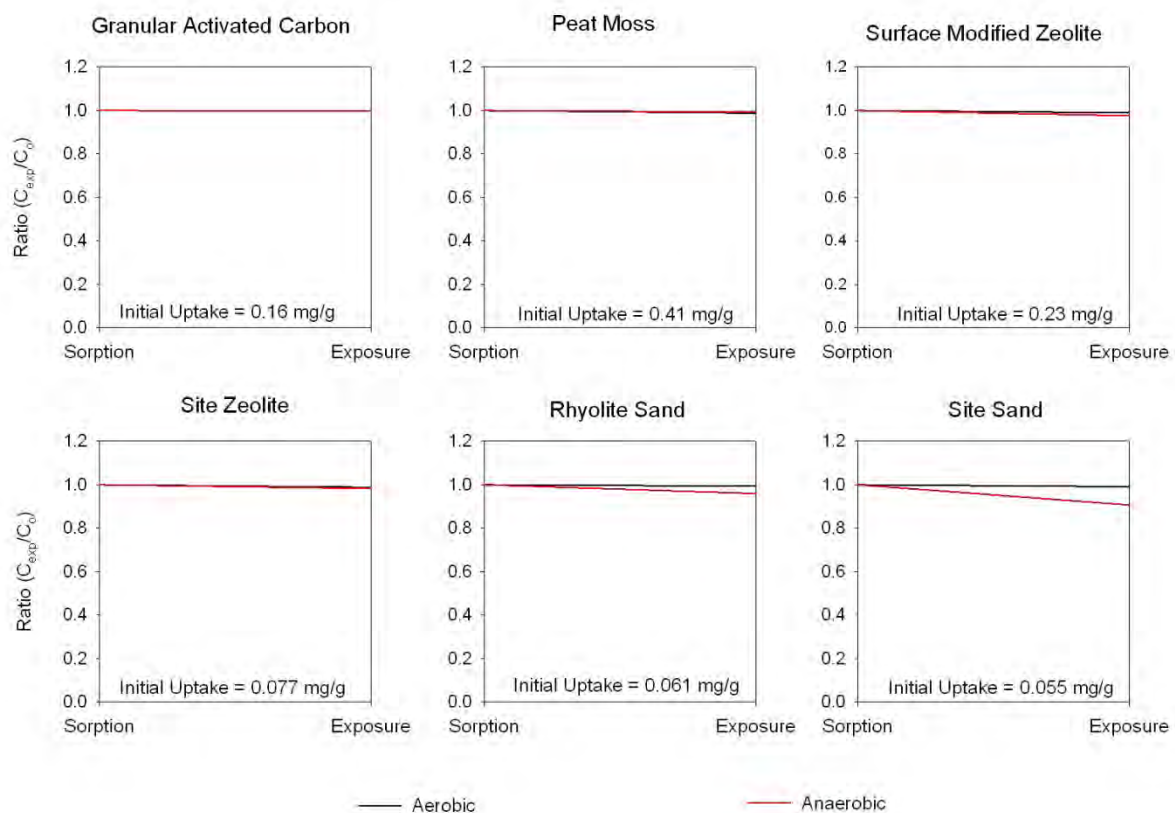
Aluminum

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



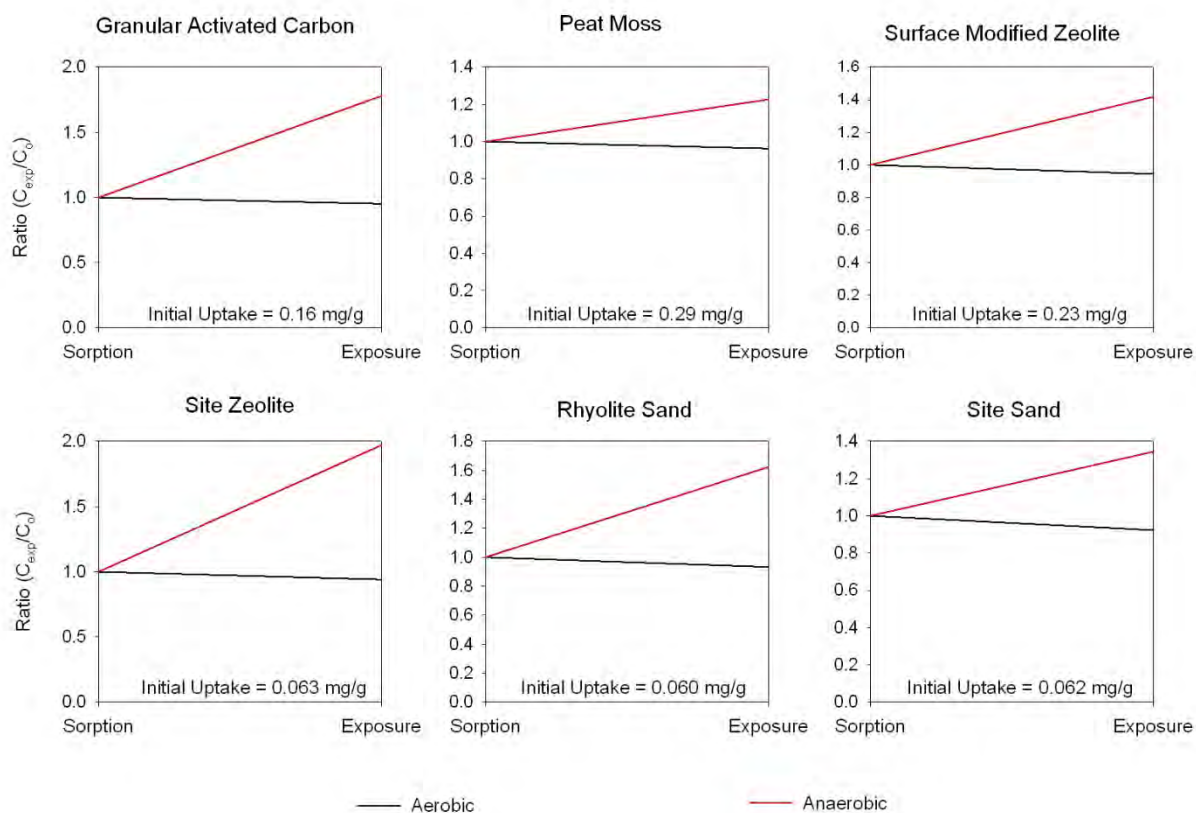
Ammonia

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



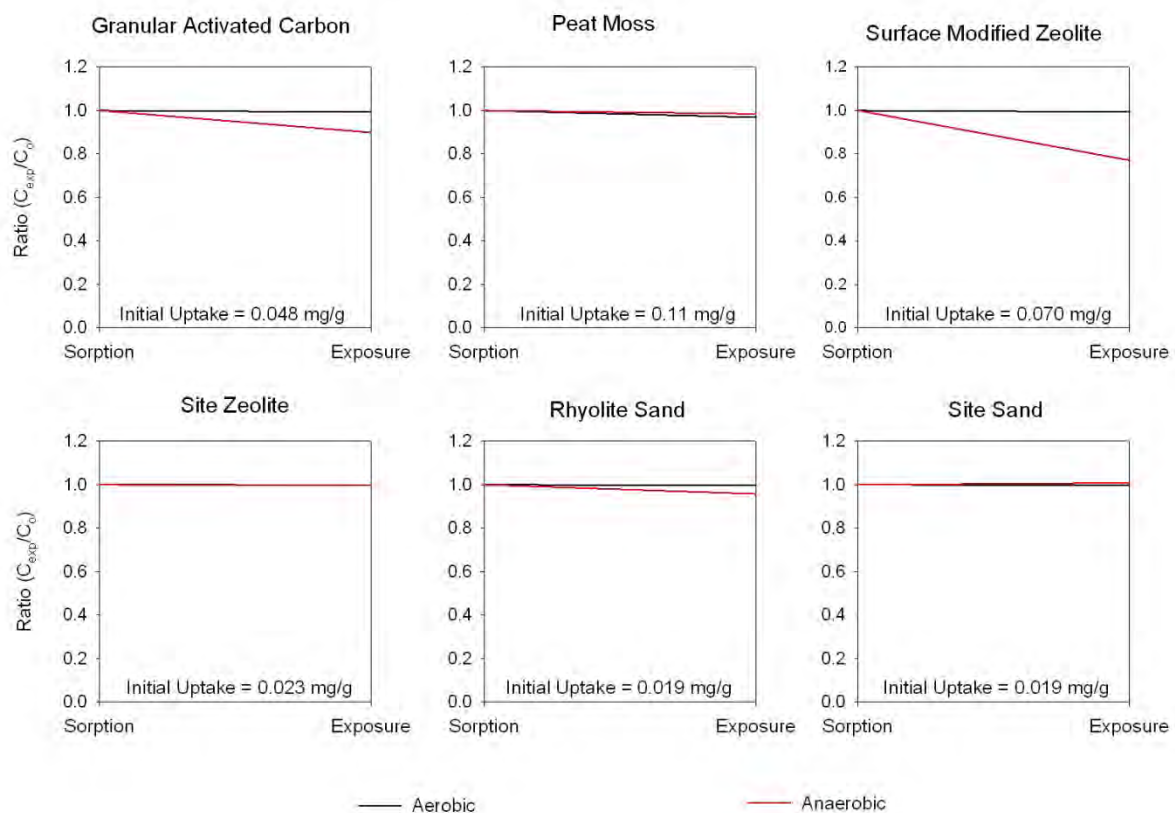
Antimony

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



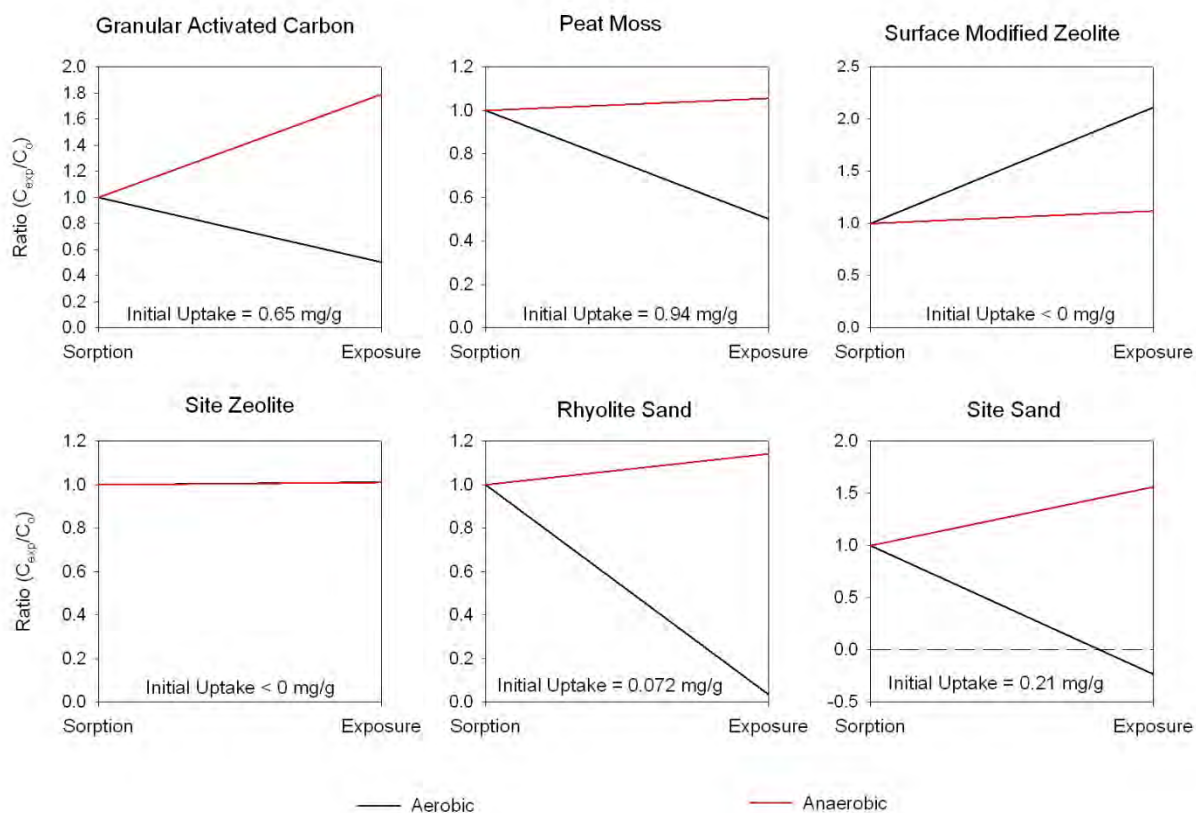
Boron

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



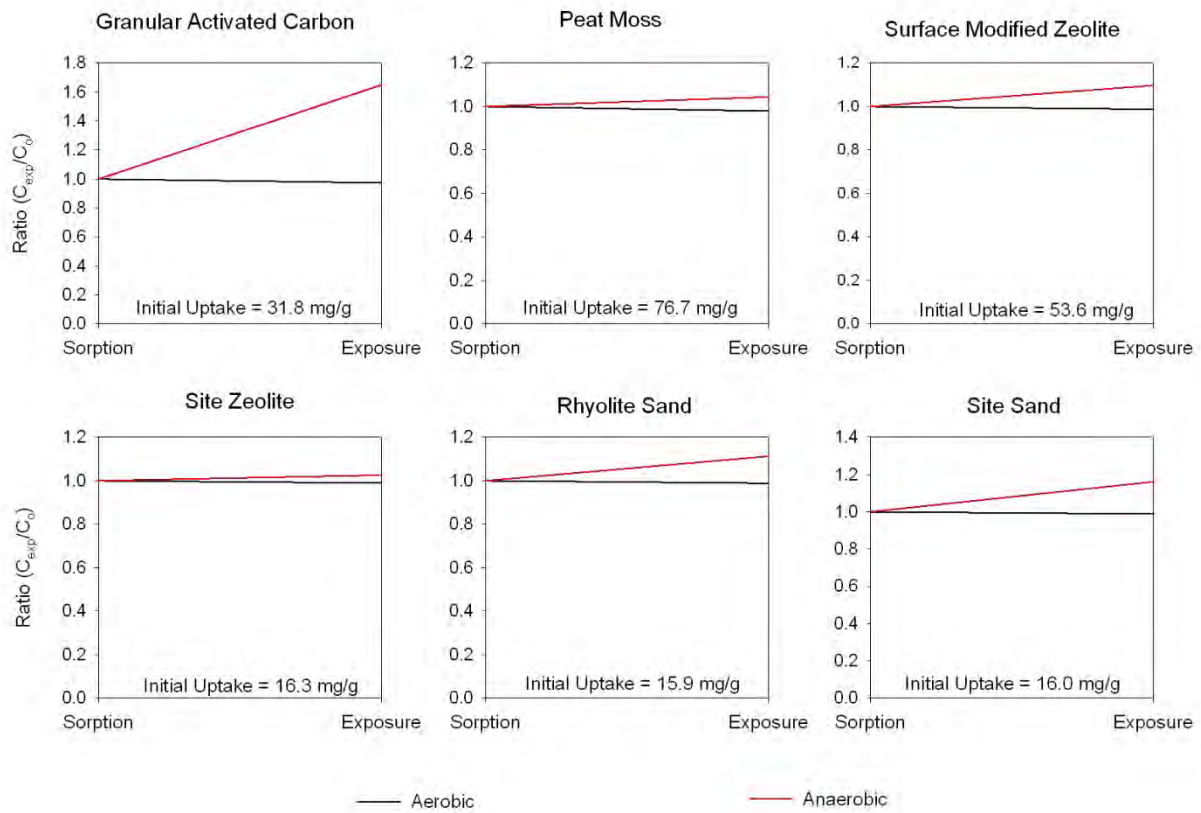
Cadmium

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



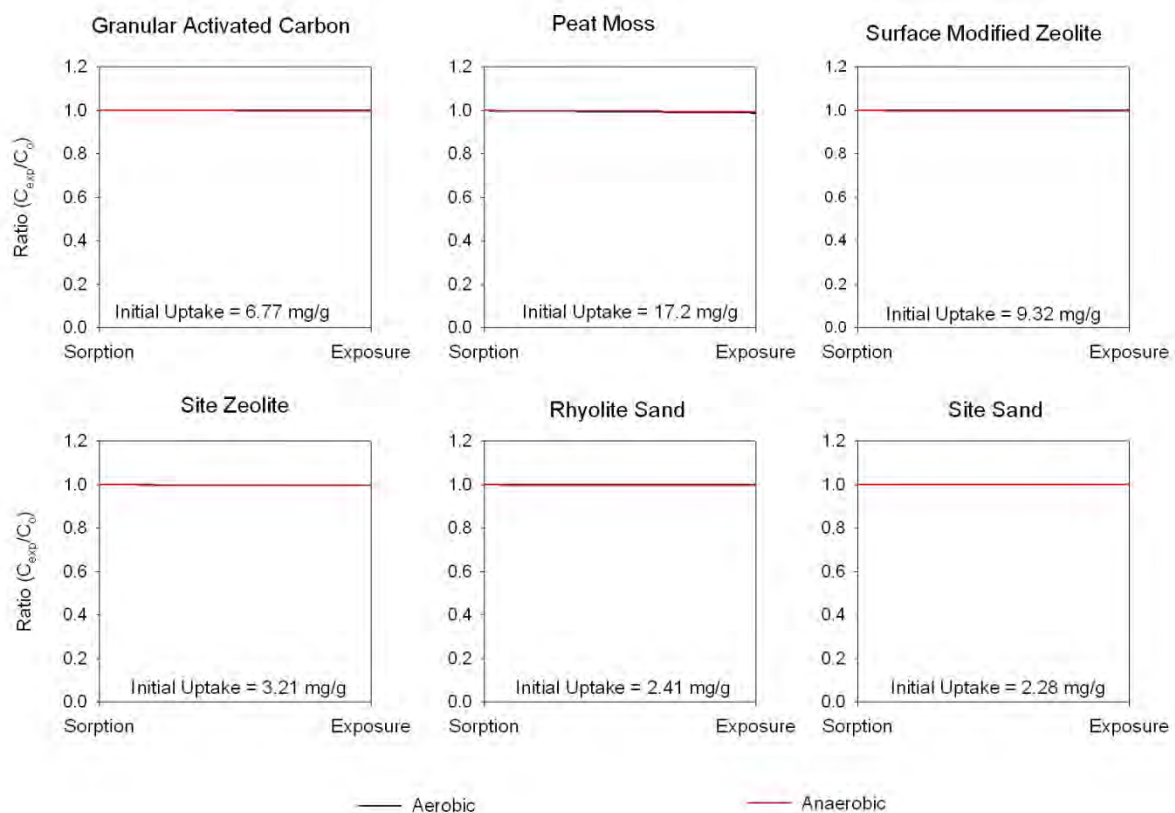
Calcium

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



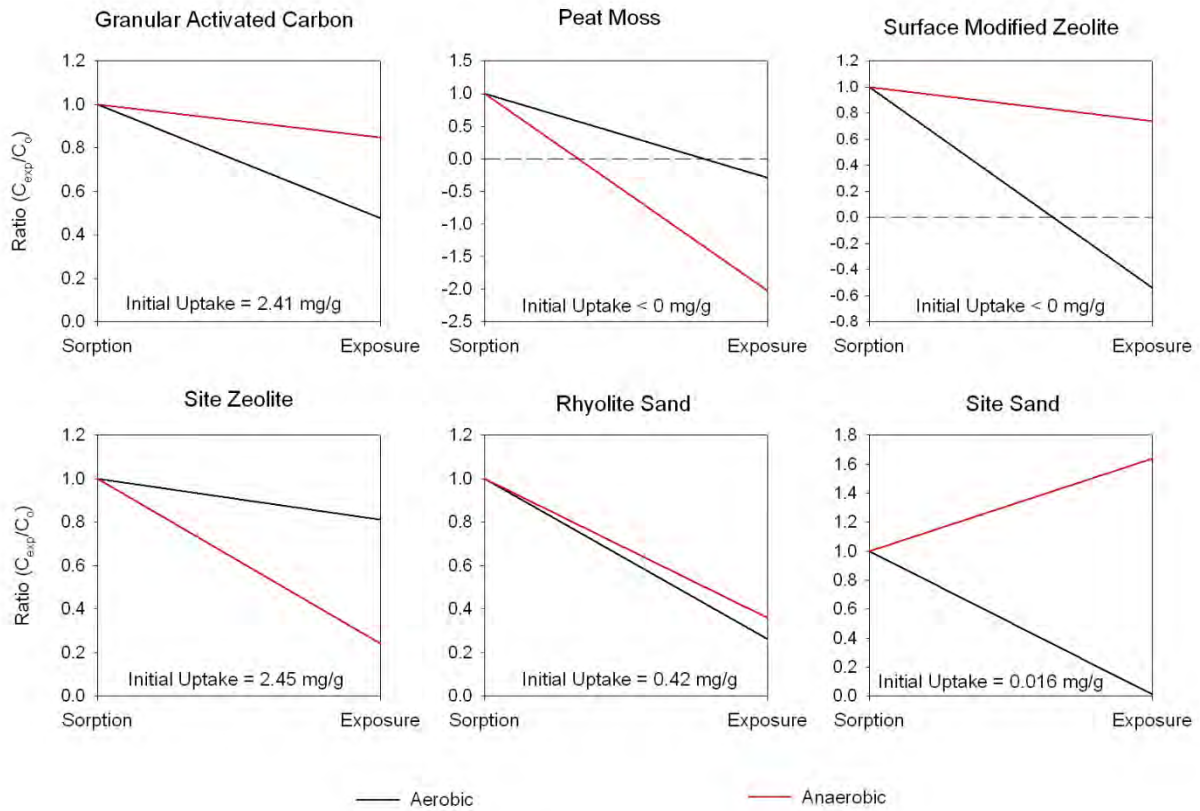
Chloride

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



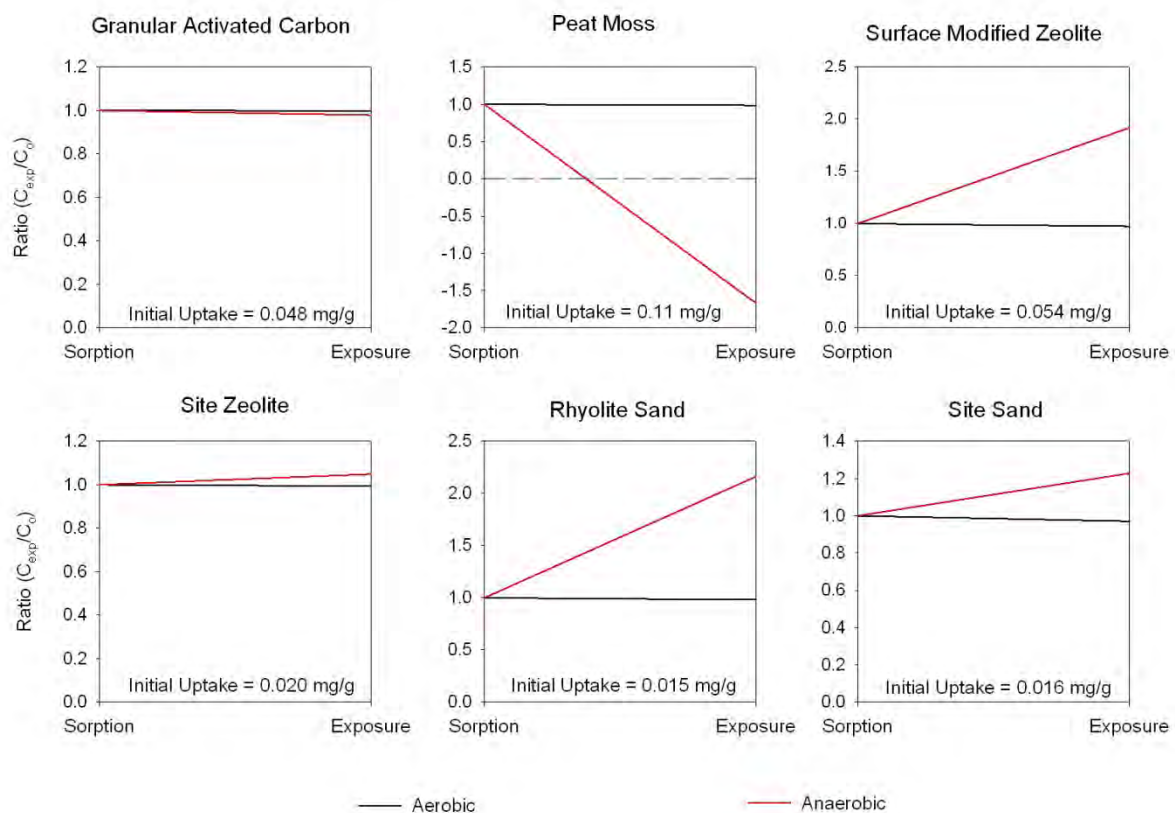
Chromium

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



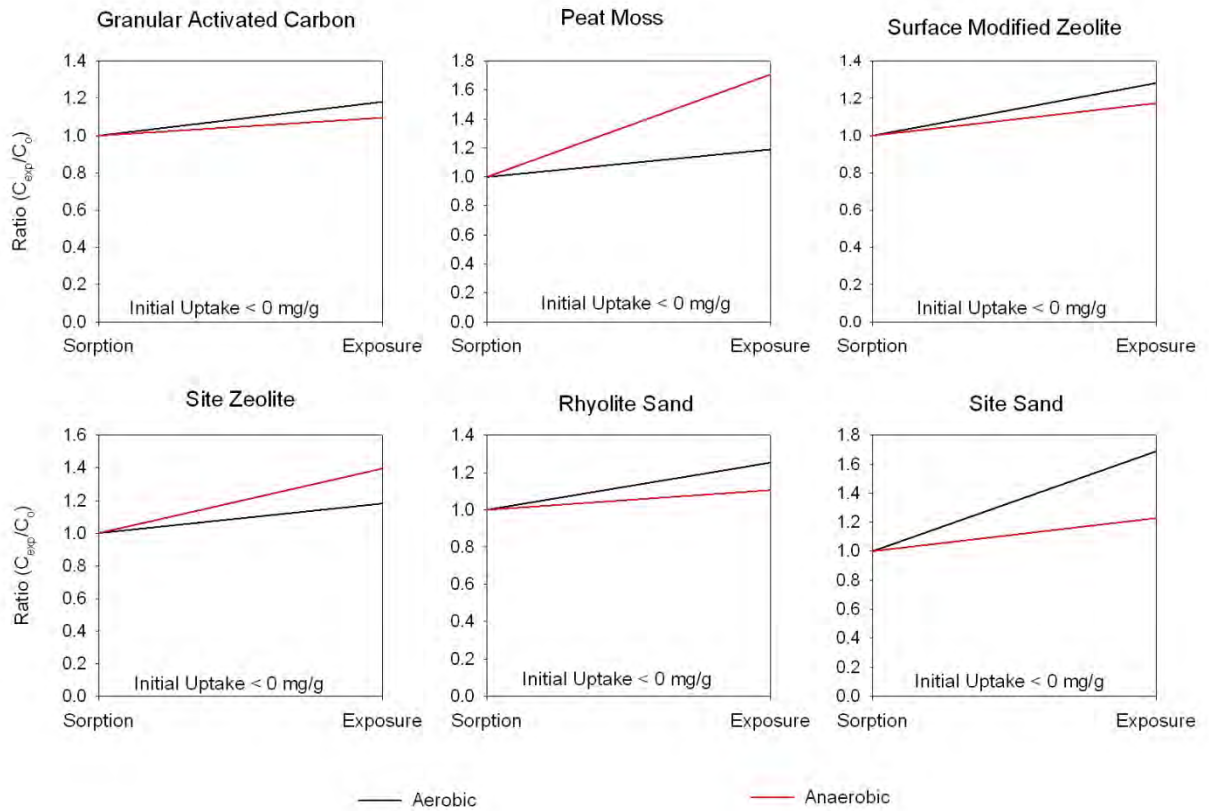
Chemical Oxygen Demand

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



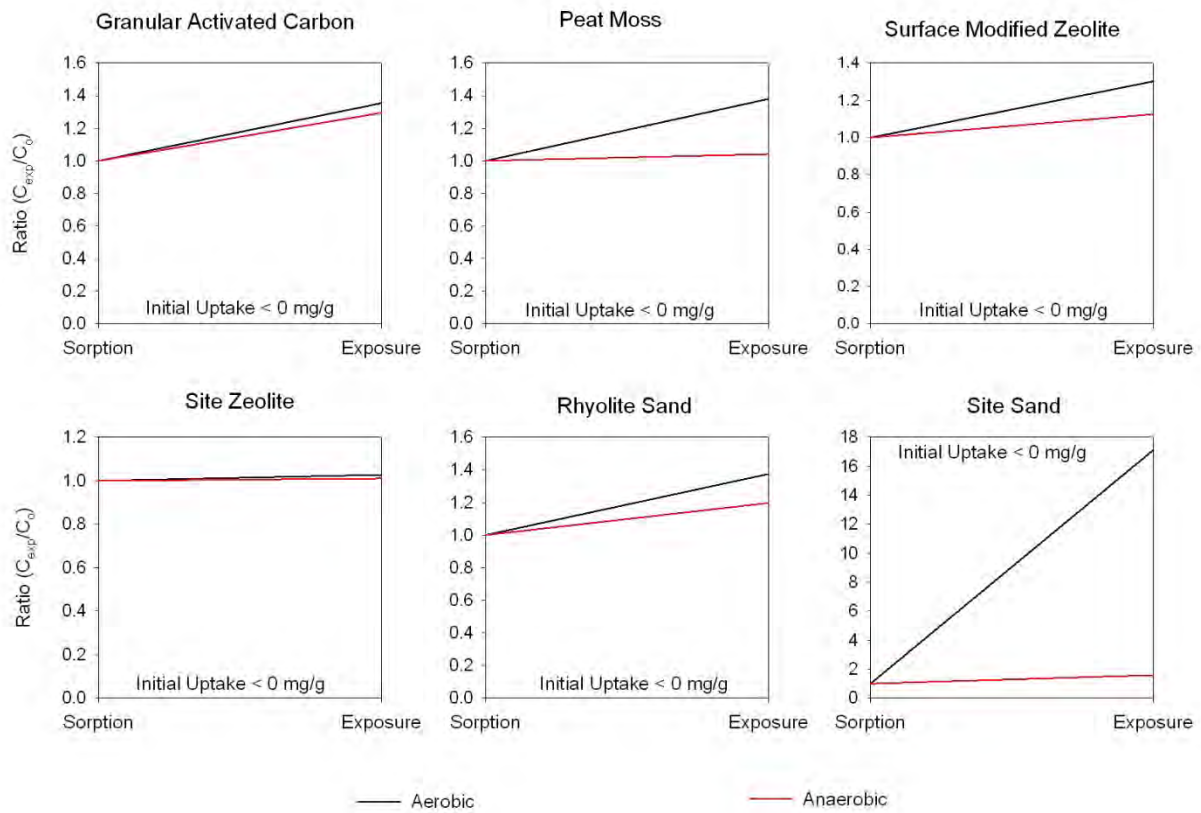
Copper

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



Fluoride

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



Hardness

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

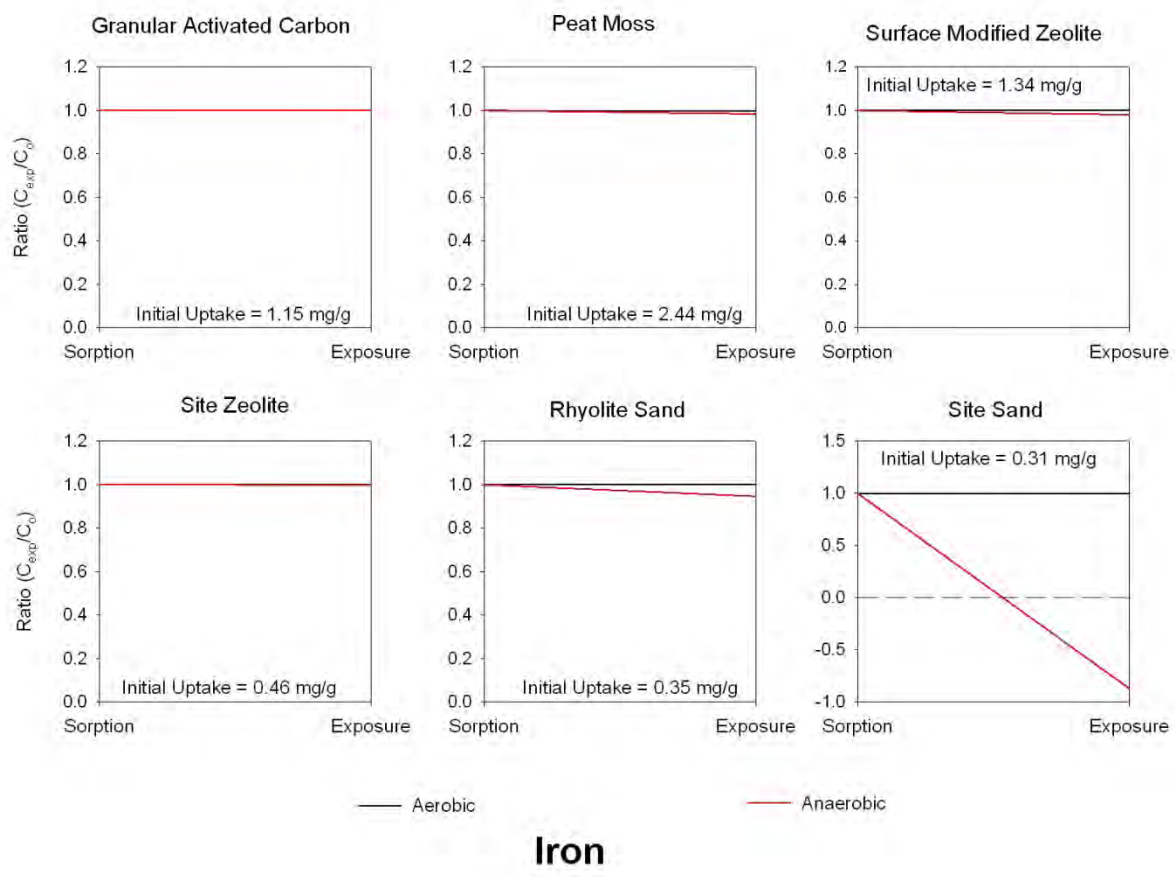
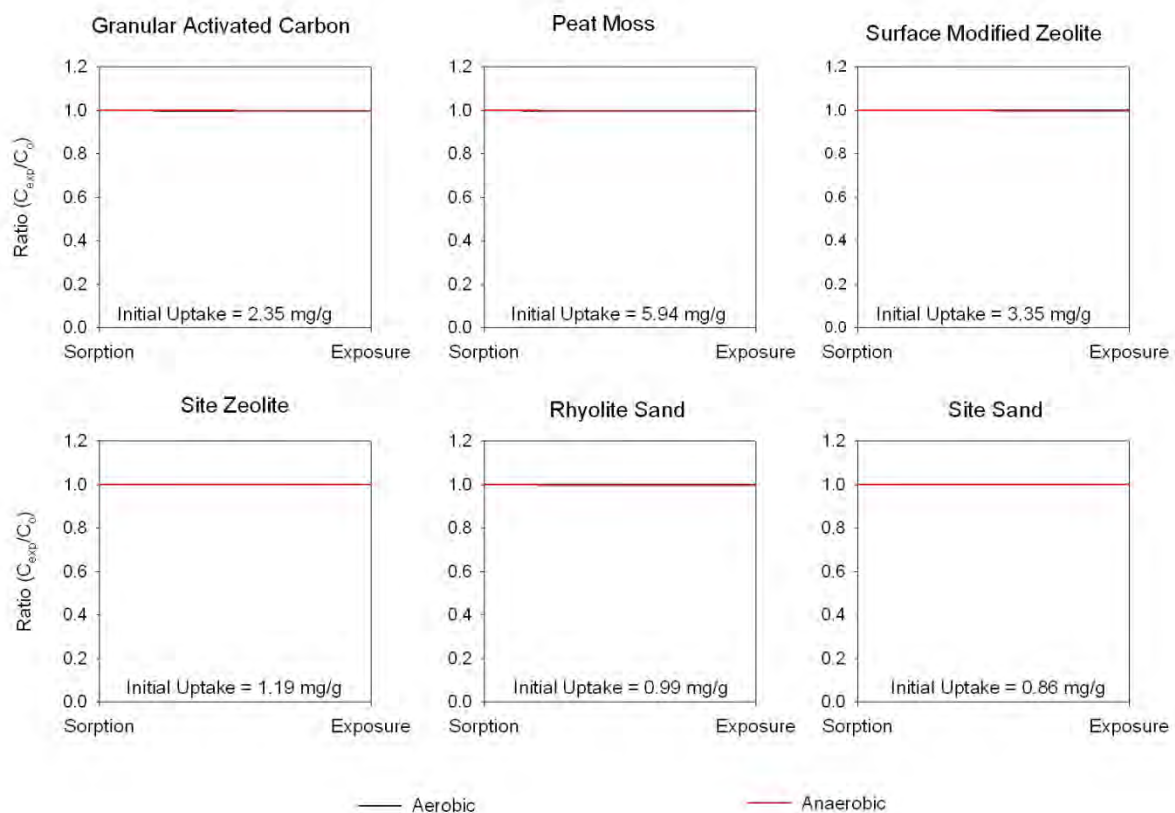
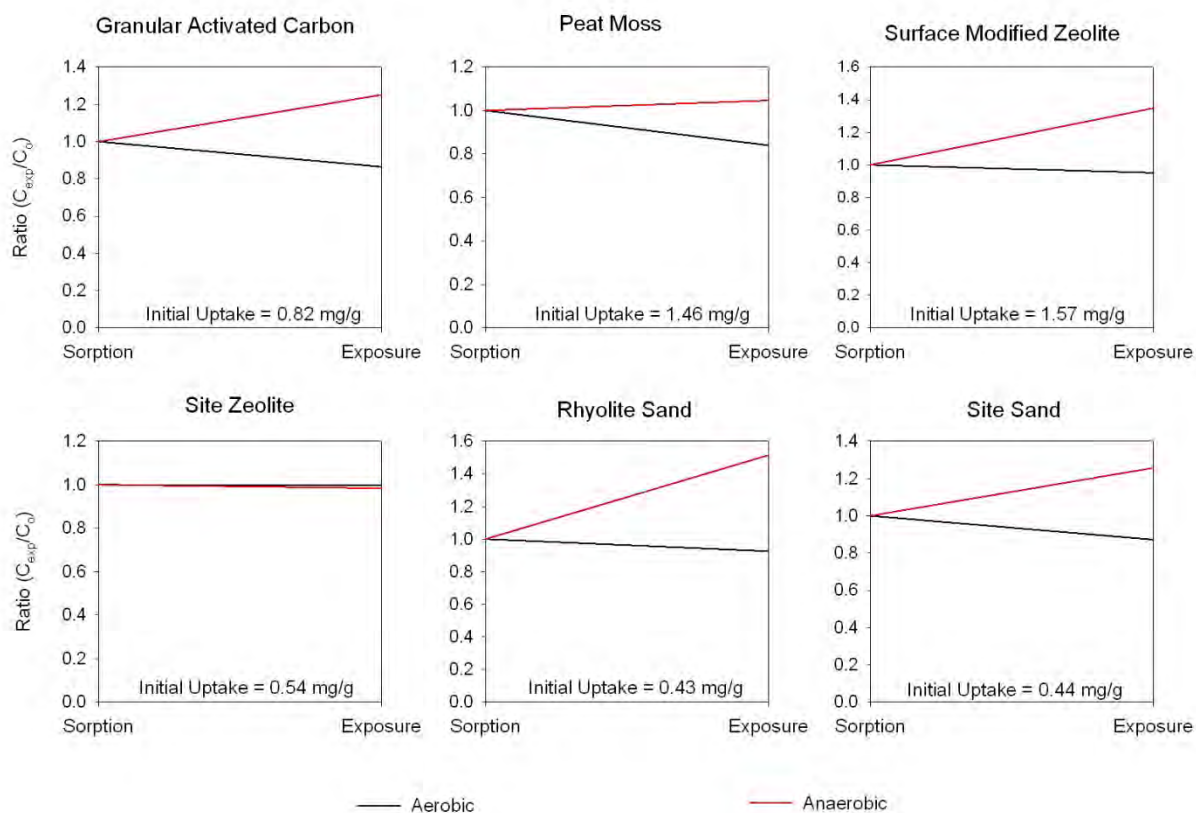


Figure D-13. Iron Uptake and Retention after Aerobic versus Anaerobic Exposure



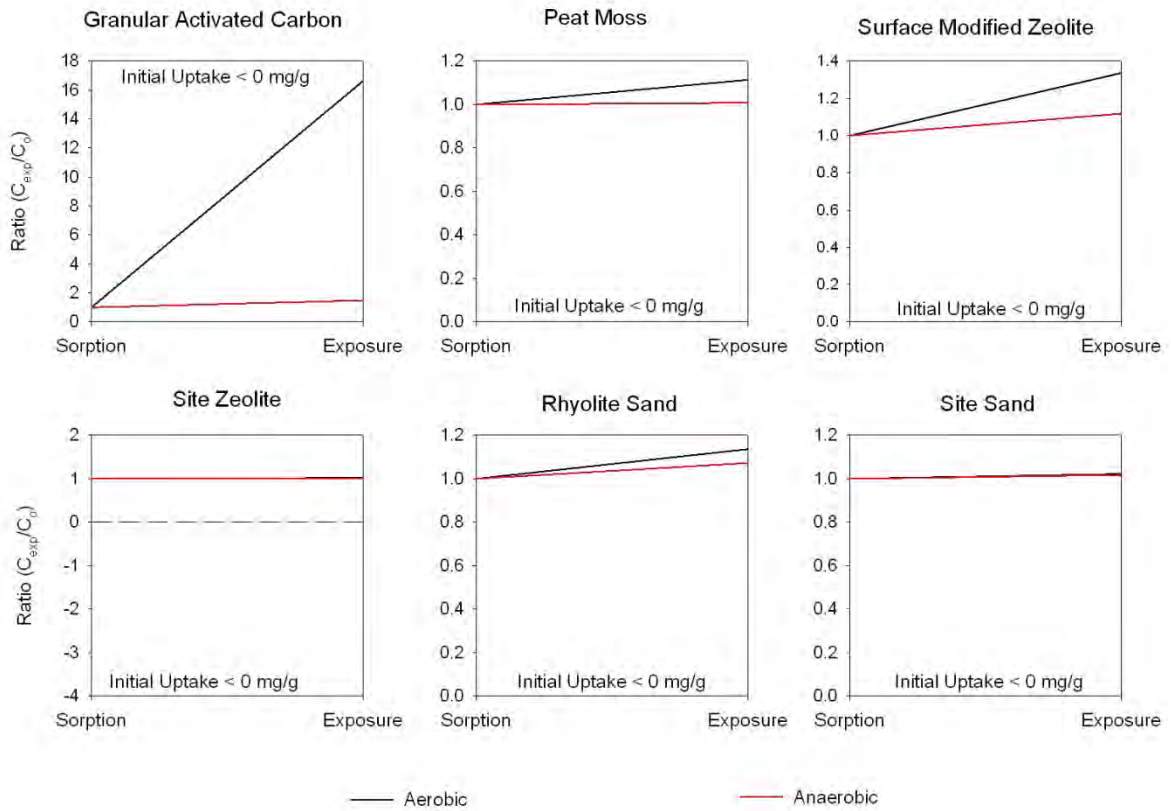
Lead

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



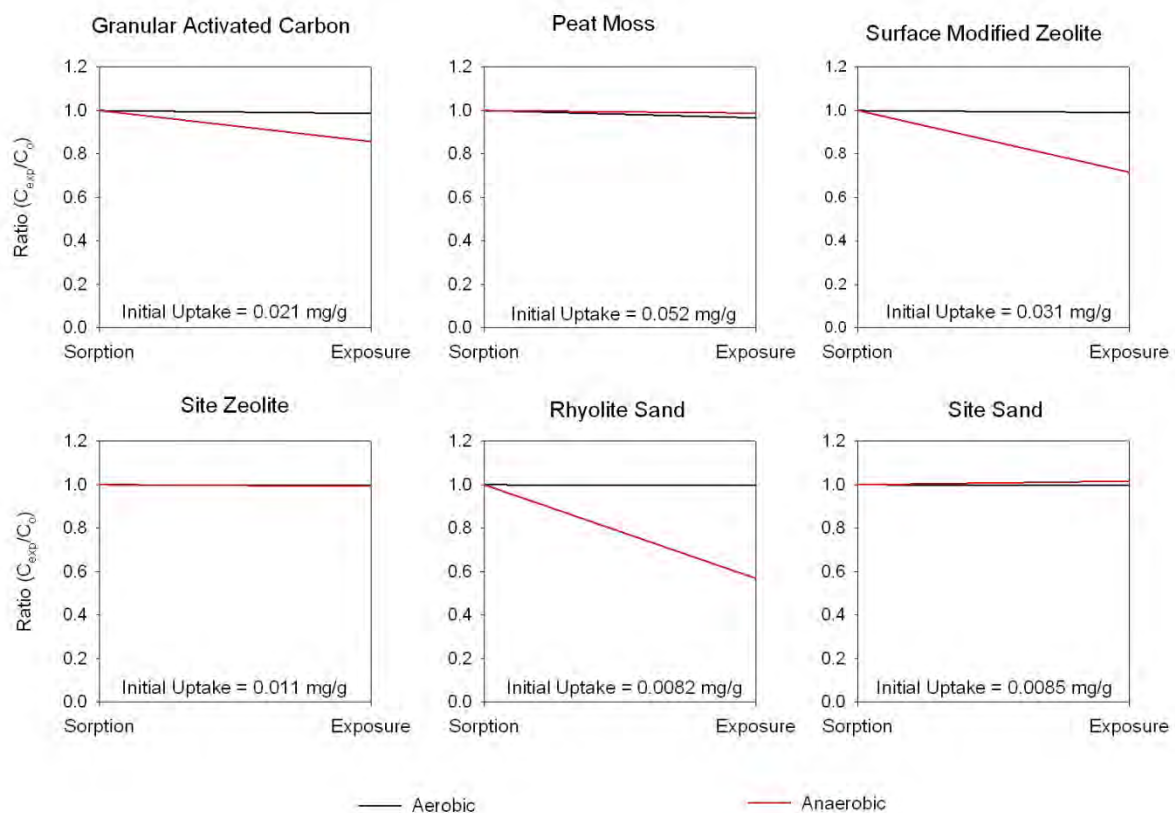
Magnesium

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



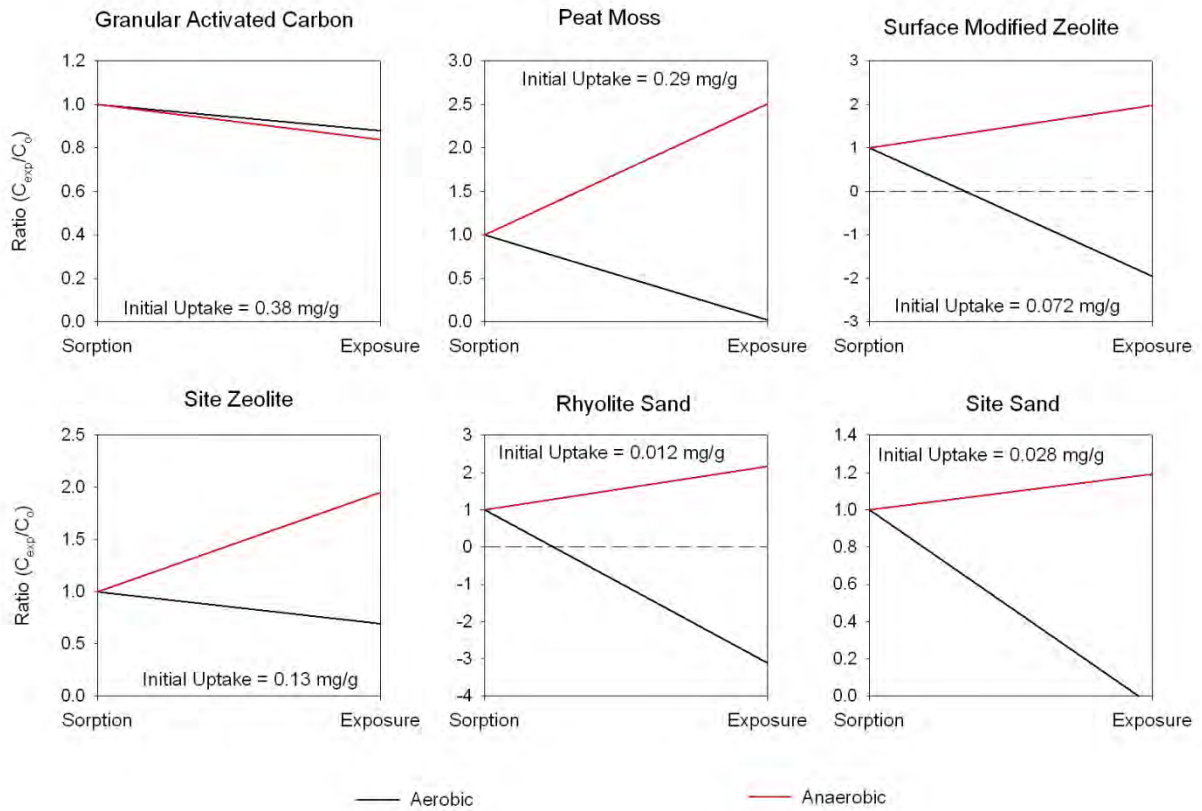
Manganese

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



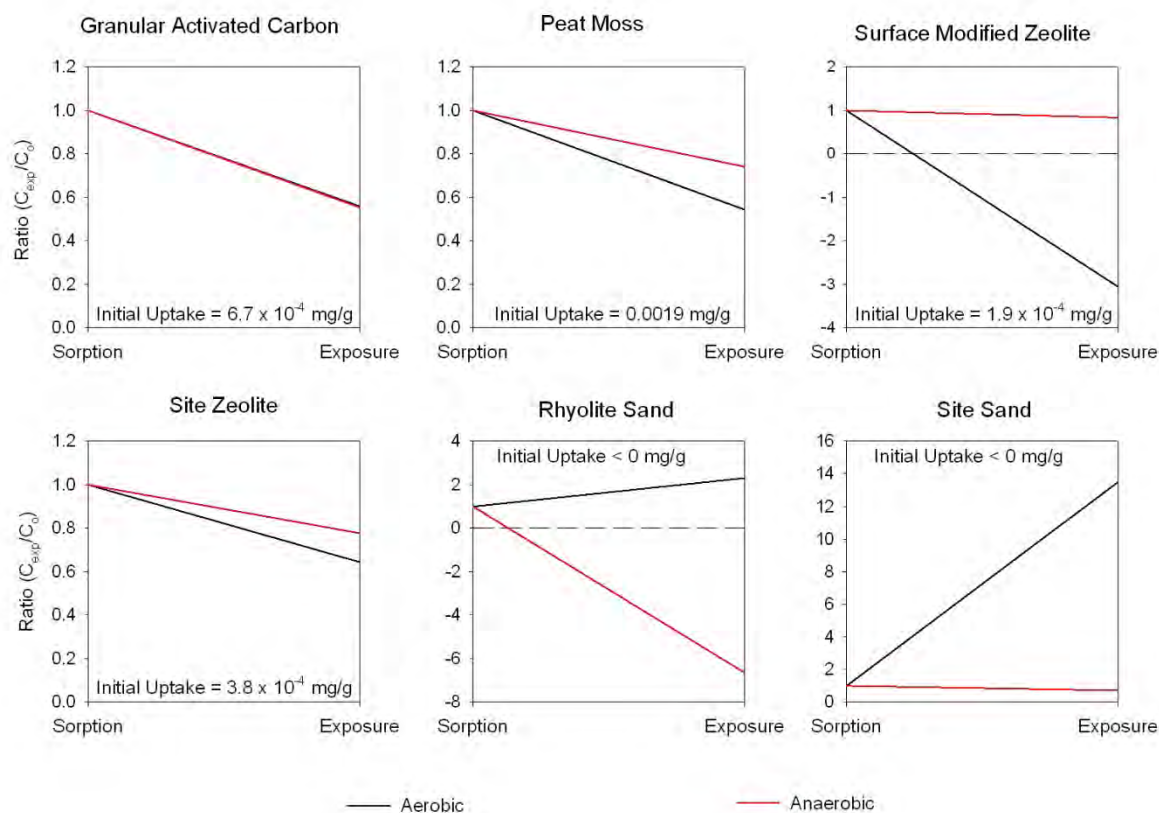
Nickel

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



Nitrate

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



Nitrite

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

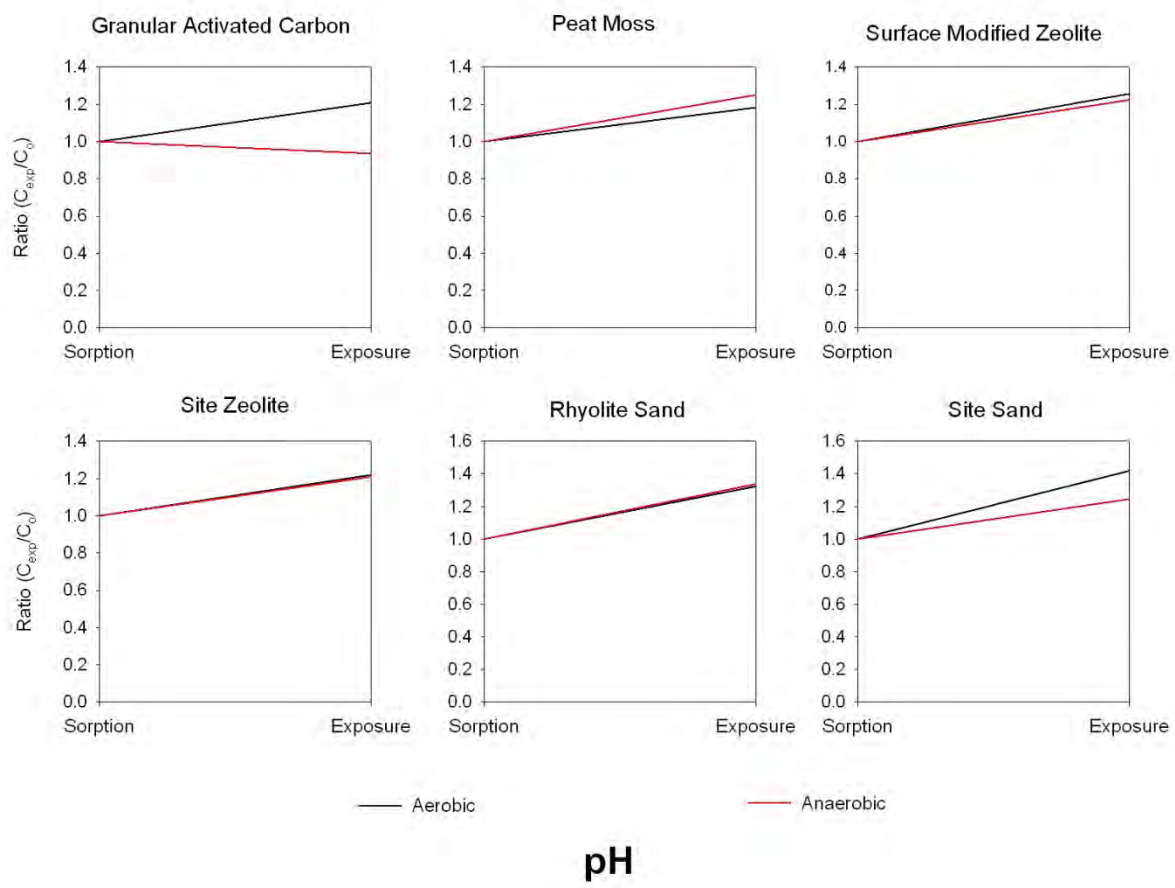
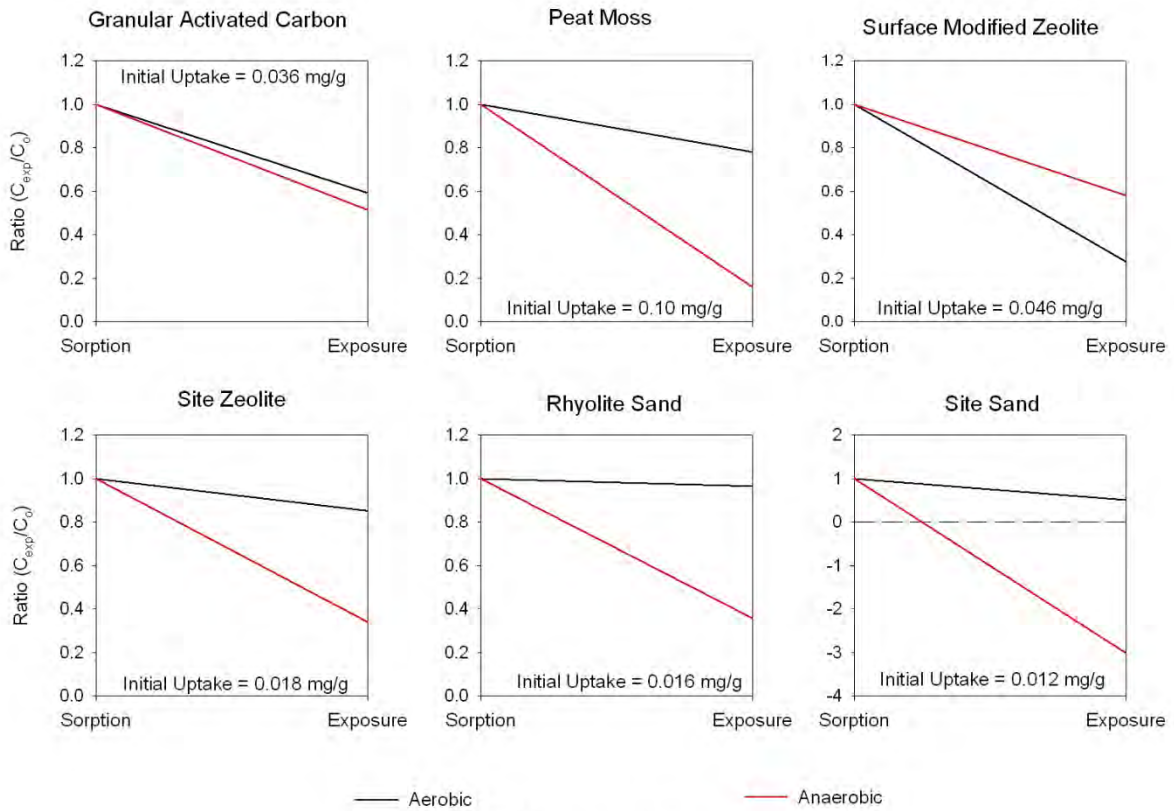
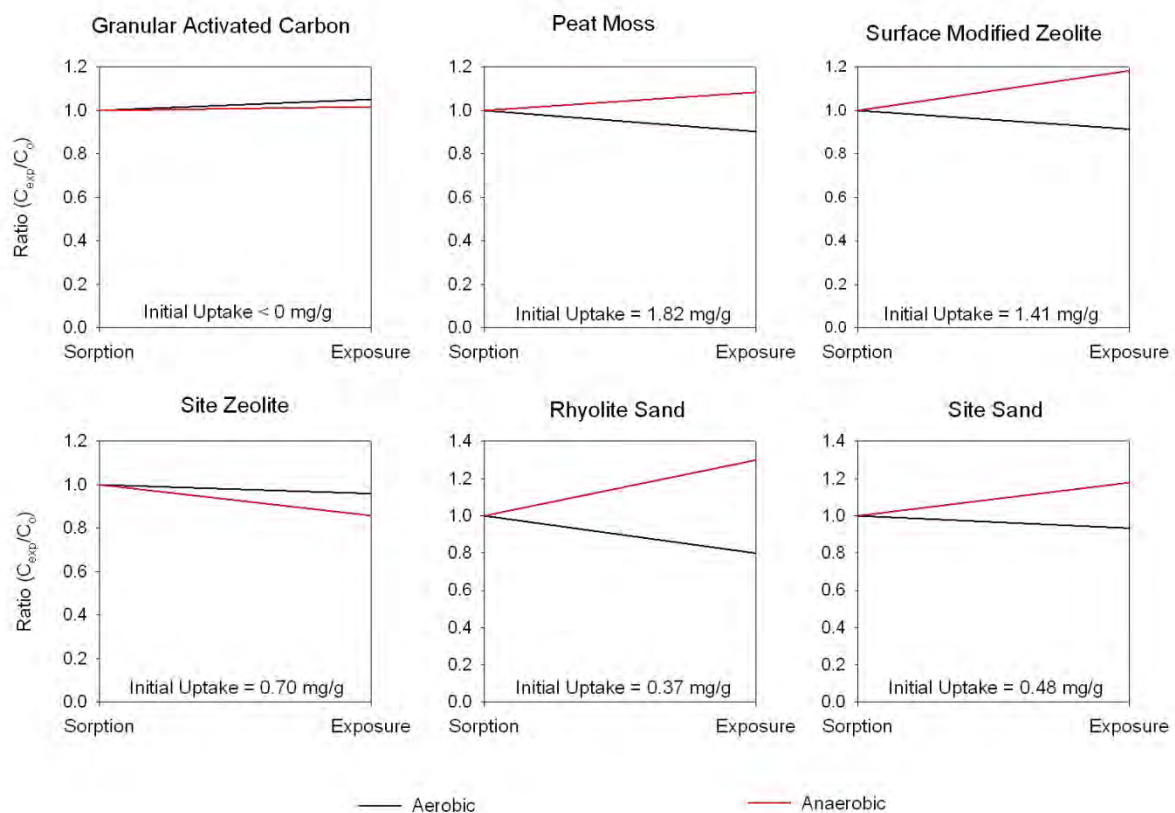


Figure D-20. pH Uptake and Retention after Aerobic versus Anaerobic Exposure



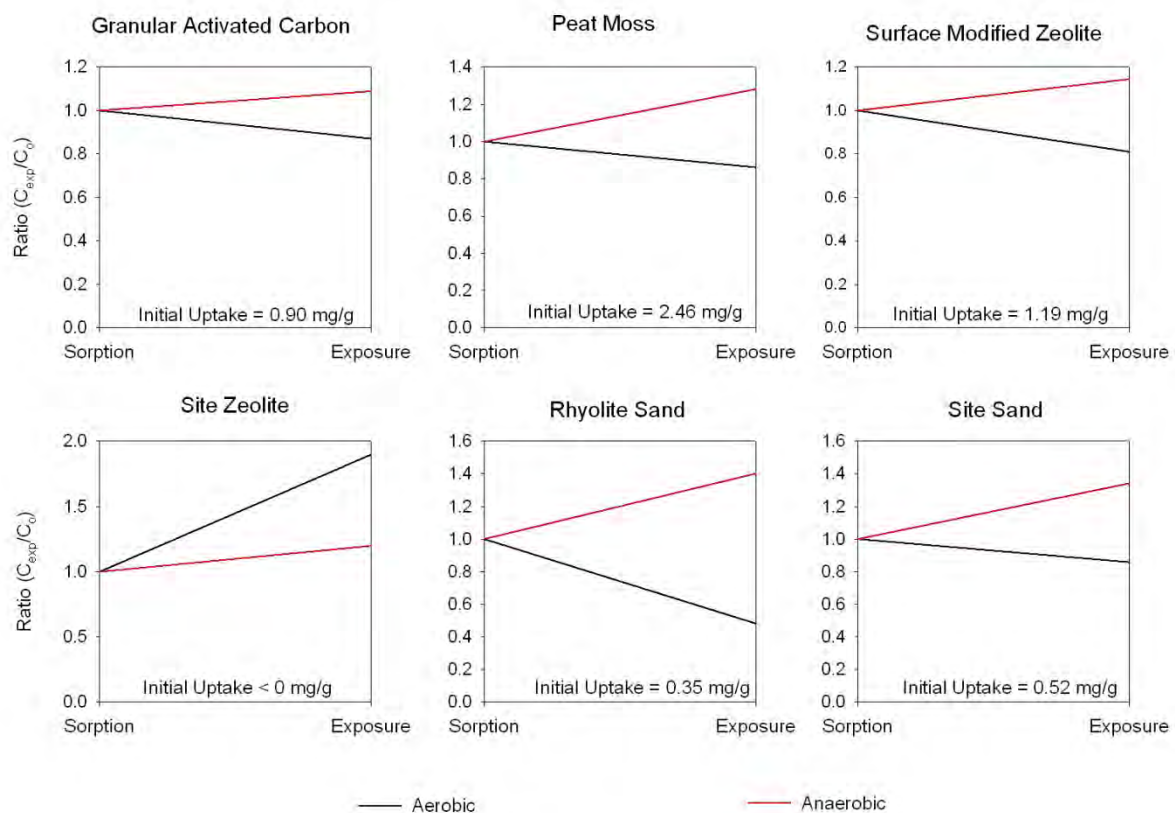
Phosphate

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



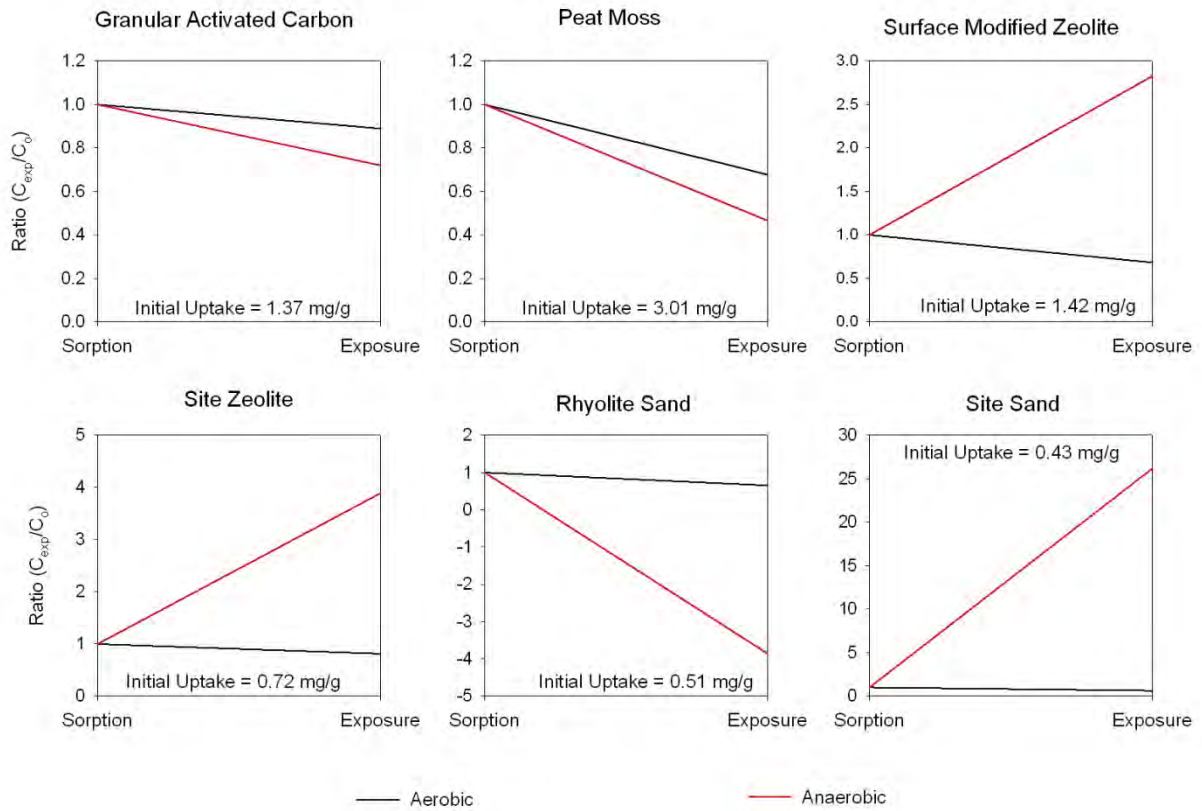
Potassium

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



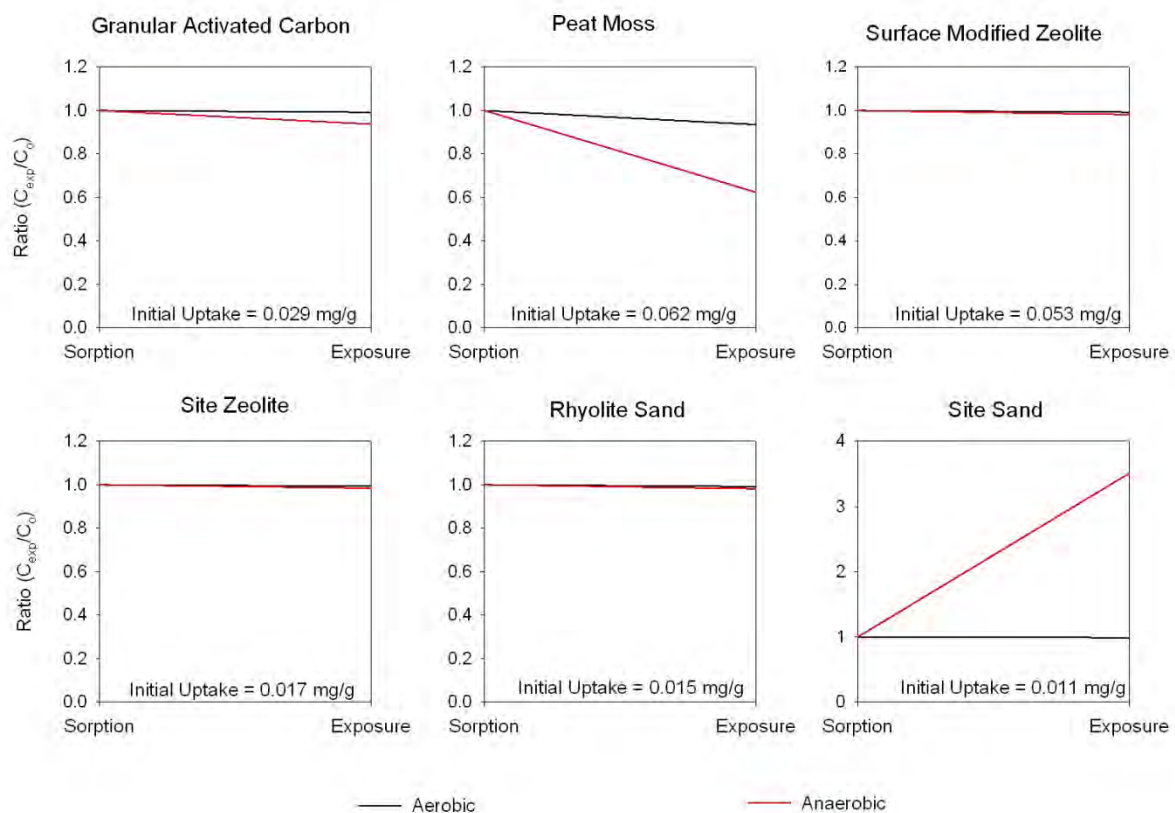
Sodium

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



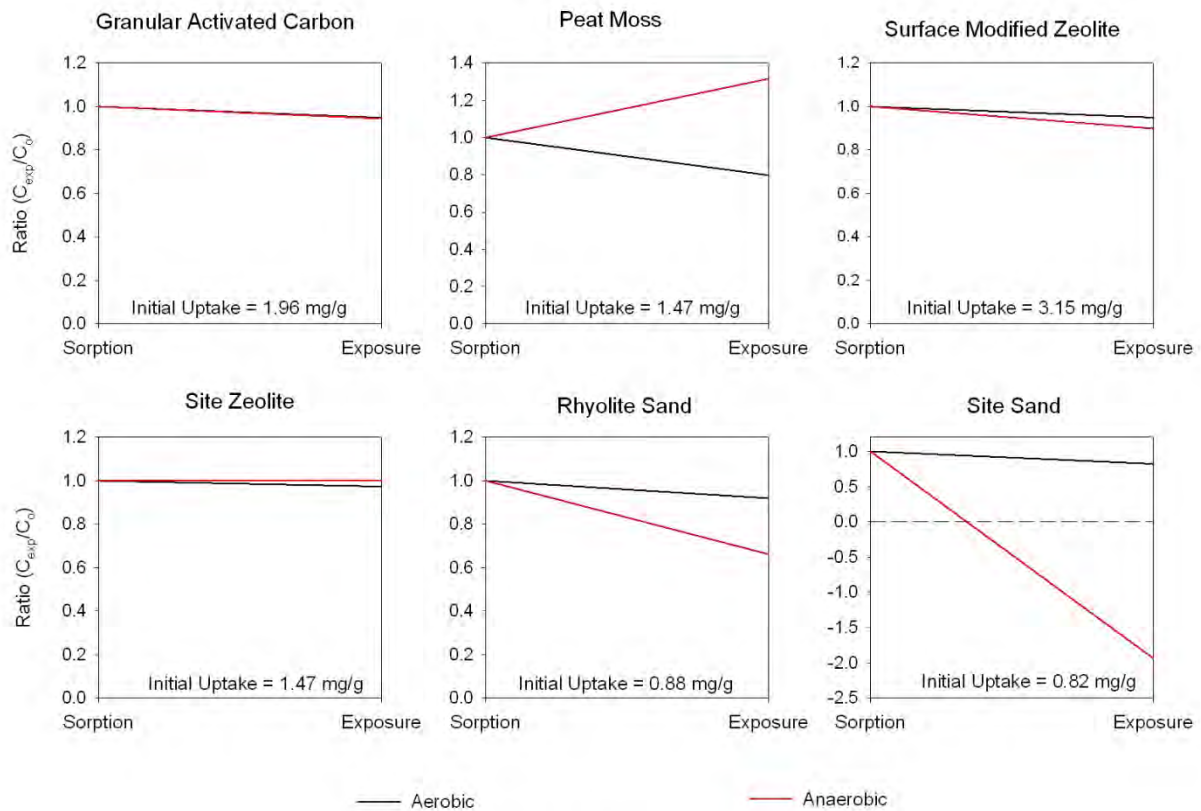
Sulfate

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



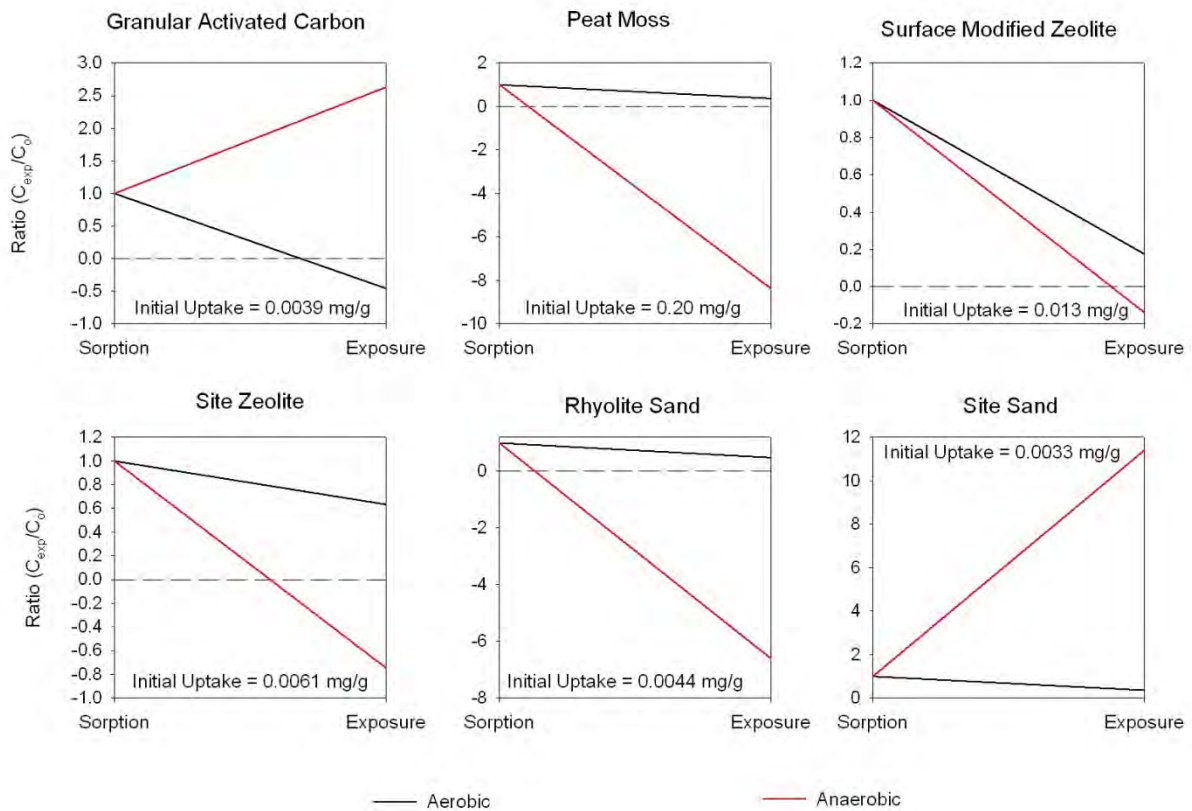
Thallium

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



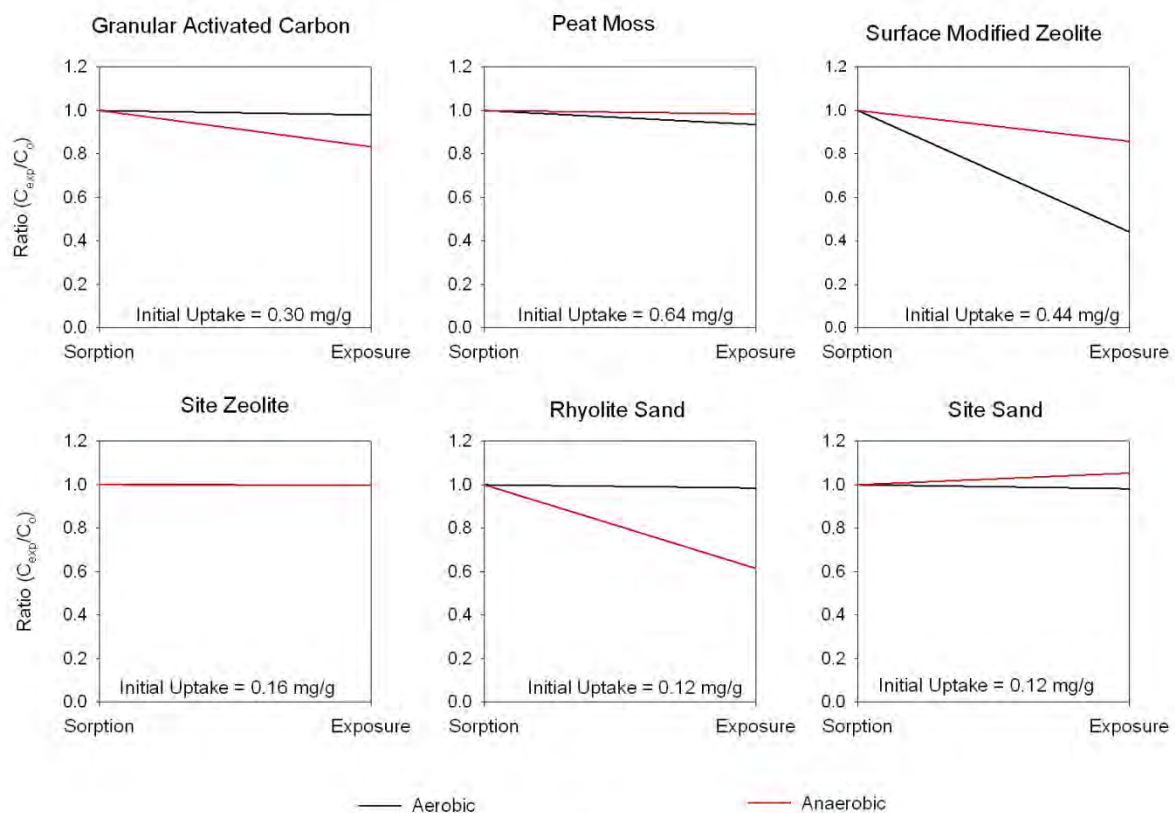
Total Nitrogen

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



Total Phosphorus

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



Zinc

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