

deviations (RSD's), (c) the leaching effectiveness of the column and humidity cell methods (d) the effect of removing the fines (i.e. 2 smallest particle size classes < #35 mesh), and (e) influence of different leaching column diameters (i.e. 2", 4" and 6"). The concentration data for leaching column and humidity cell effluent for the 3 rock types are presented in Appendix D.

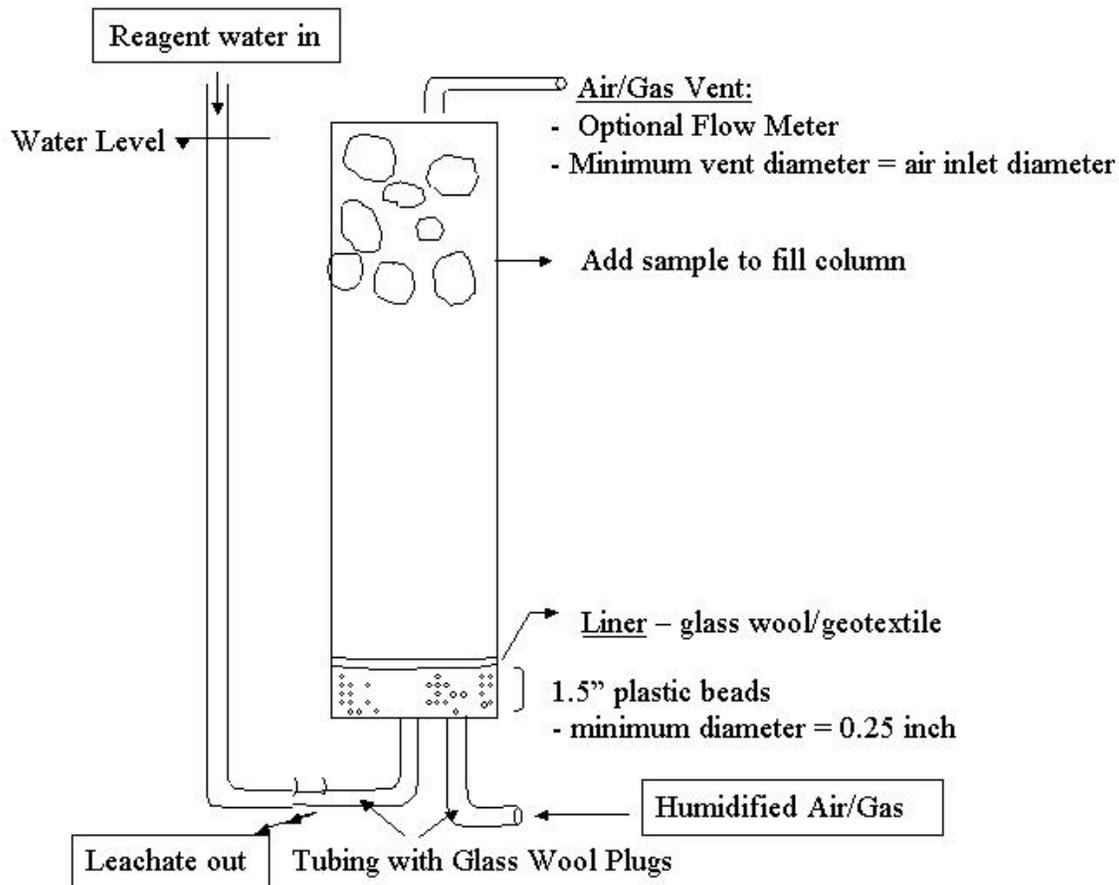


Figure 3.1. Revised Leaching Column Design.

comparison of the two gas mixture options: Statistical comparisons between samples exposed to a constant flow of CO₂-enhanced air and those exposed to reagent water saturated with CO₂-enhanced gas mixture during wet weathering were determined using paired t-tests. For each parameter, sample type, method type, and week, the difference was calculated between the mean of the results for duplicate samples exposed to constant CO₂-enhanced air and the mean of the results for duplicate samples exposed to saturated reagent water. The mean of the weekly differences was then calculated for each parameter, sample and method type, and paired t-tests were run to determine whether the mean of the differences was significantly greater or less than 0. Sample results were evaluated as (1) straight concentrations, and (2) “normalized” to account for the volume of sample collected and the weight of sample exposed to weathering. Sample results were normalized by multiplying concentration by the volume of sample collected, then dividing by the total weight of the sample to obtain mg/kg.