

Figure 8-7 shows median alkalinity concentrations for the five samples over the 14 week test period. Three rocks BCS3-PA, KBF-WV and MKSS-PA produced significant alkalinity, with concentrations ranging from about 200 to 400 mg/L from weeks 4 to 14. These three rocks also produced leachates that were at saturation for the mineral calcite throughout the 14 week test (Figure 8-6). These samples were able to continuously dissolve the maximum amount of calcite

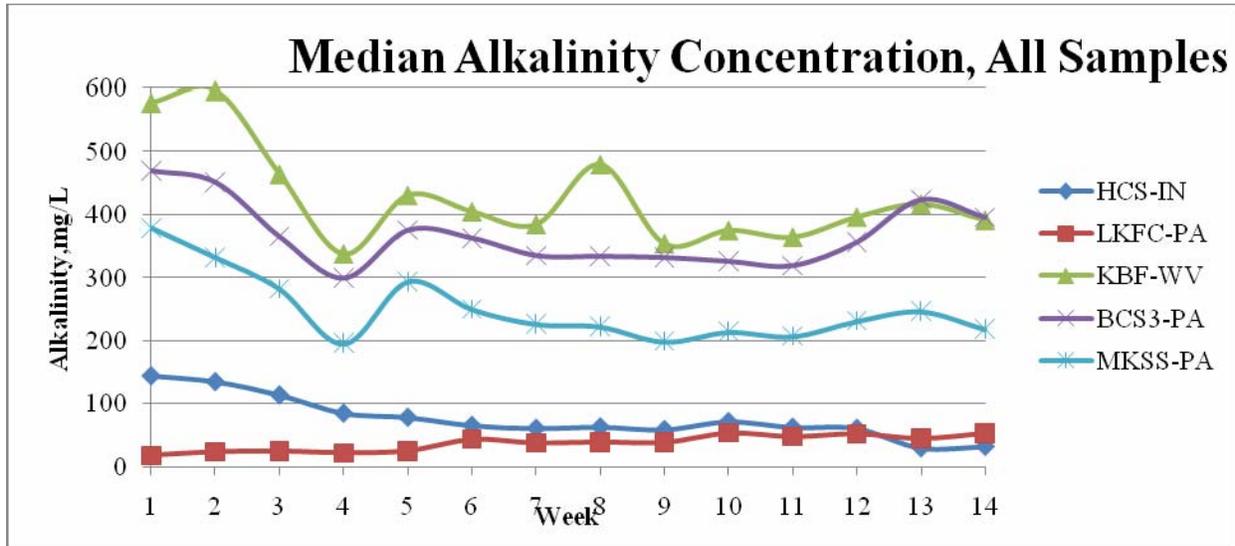


Figure 8-7. Alkalinity Concentration Weeks 1 to 14 for Five Rocks. Values are medians of all labs.

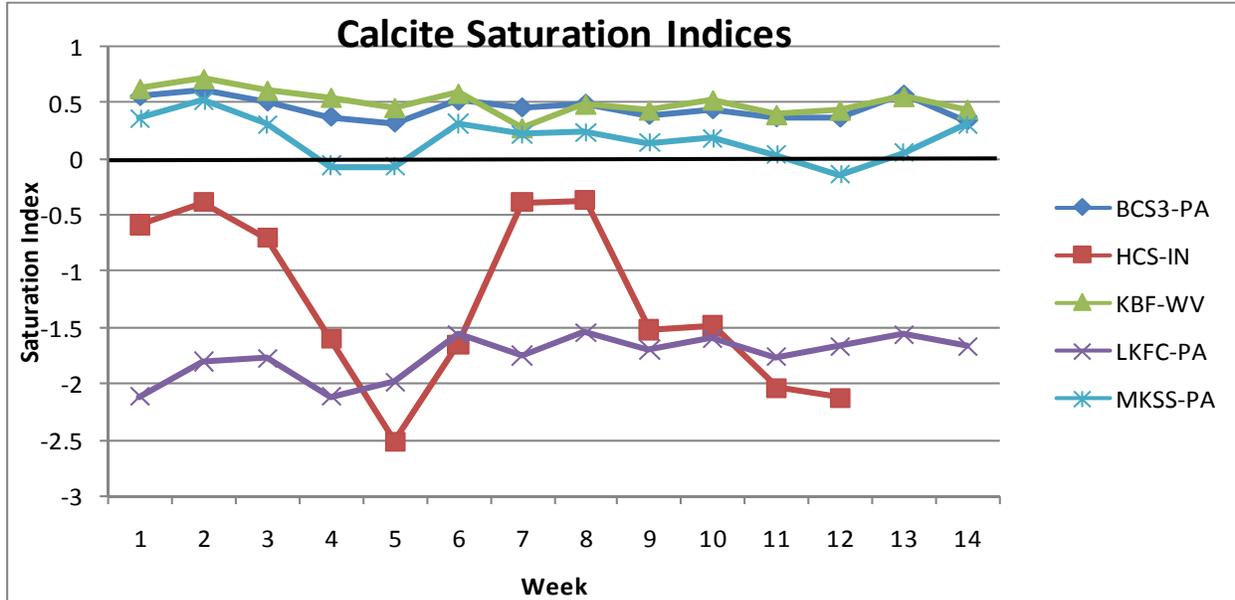


Figure 8-8. Calcite Saturation Indices Weeks 1 to 14 for Five Rocks. Values are medians of four labs.

that the water could hold during the test and are significant sources of acid neutralization in the test. The saturation index calculations are based on chemical equilibrium concepts, and are described in Appendix B of Draft Method 1627 document (2008). The computer code PHREEQCI (Parkhurst and Appelo, 1999) was used to calculate calcite and other mineral