Isotopic U, Th-Pb on lunar soil samples 12070 and 12032 yield discordant ages, in contrast to the concordant results obtained on the Apollo 11 samples. This soil appears to have been derived from a system of lunar age which has not been closed; i.e., has undergone a loss of lead relative to uranium. Data on crystalline rock 12063 is similar to Apollo 11 crystalline rocks, in that if one accepts the Rb-Sr and K-Ar data of other workers as indicating the true age of crystallization, this rock contained highly radiogenic lead at the time of its formation. Rb-Sr and U, Th-Pb data will be reported on additional Apollo 12 samples, as well as improved data from Apollo 11 samples.