10002

DRAFT

Bulk Soil

5629 grams

Introduction

10002 is the number given the bulk soil returned in ALSRC 1003. 10084 and 10086 are portions of 10002. Please see section on 10084.

Petrography

The grain size distribution of 10002 was originally reported by LSPET (1969)(figure 1).

Chemistry

There are no "bulk" analyses of 10002, as such. However, 10084 was a split of 10002, and presumably the same (< 1mm). There is a partial analysis of a large split (301 g) by radiation counting in LSPET (1969) and O'Kelley et al. (1970)(table 1).

Cosmogenic isotopes and exposure ages

LSPET (1969) and O'Kelley et al. (1970) determined the cosmic-ray-induced activity of 10002 as 26Al = 97 dpm/kg, 22Na = 44 dpm/kg, 46Sc = 9 dpm/kg, 54Mn = 28 dpm/kg and 56Co = 27 dpm/kg.

Processing

There are reports that the bulk soil sample (10002) was partly in a "Teflon bag", and partly loose in the ALSRC. The ALSRC also contained a mesh of aluminum wire called "York mesh", and it must have been difficult to extract the soil from this mesh. Sample containers are discussed in the tool catalog by Judy Allton (1989).

The processing of 10002 was complicated and is a bit of a mystery. That's because some of it was used in the quarantine studies, some was split off to be the primary soil samples 10084 and 10086. It is not known which parts were sieved, nor what size sieves were used and when. Apparently, a portion of ,26 was sieved in 1980 for Larry Taylor.

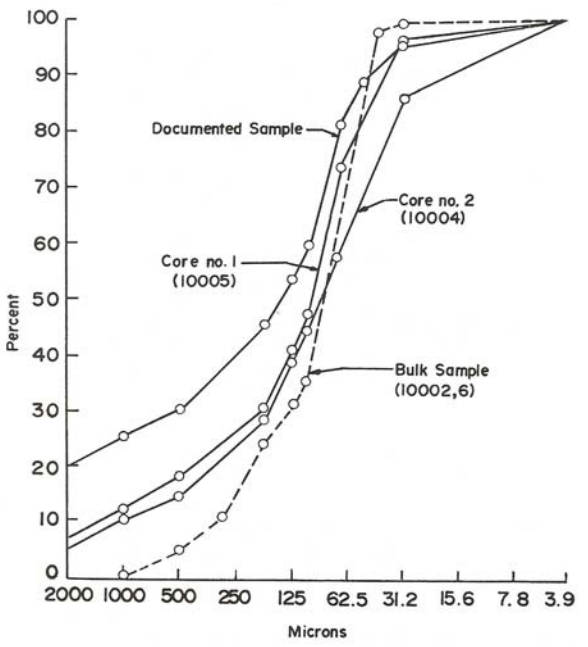
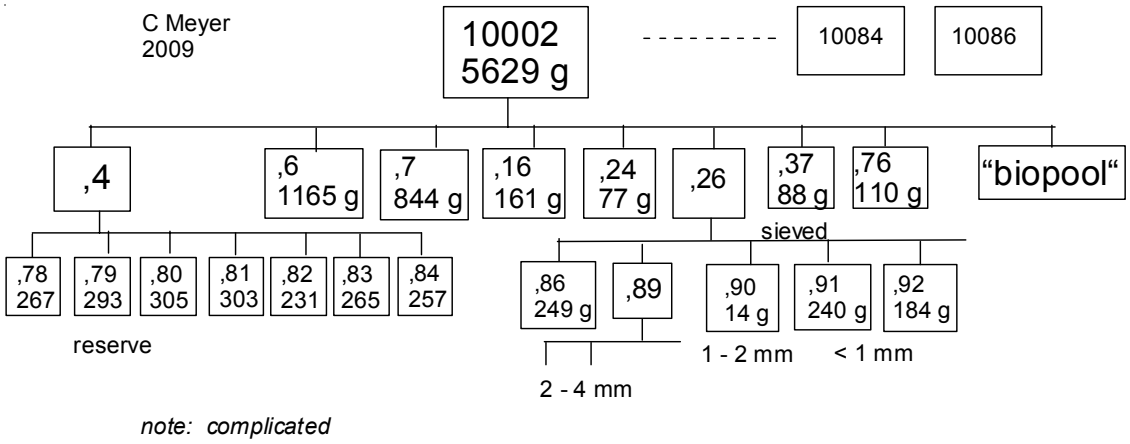


Figure 1: Grain size distribution of 10002 compared with cores (LSPET 1969).

Table 1. Chemical composition of 10002.

reference	LSPET69	O'Kelley70
weight	301 g	
K2O	0.132 (a)	
Th ppm	1.6 (a)	
U ppm	0.46 (a)	

technique: (a) radiation counting



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