

Analysis of Sample

COPY

Date analyzed - 17 October, 2001

Date of Report - 18 October, 2001

Sample SP002.57, letter/powder

I received the sample (in ziplock bags) from [redacted] on the afternoon of 17 October, 2001. The sample was taken into B-3. Insufficient powder was on the letter, so powdery material was scraped from the envelope and put into a small, tared, glass container. The container was reweighed and the net weight of the powdery material was determined to be 0.013 grams. To the material was added 987 μ l of sterile water for injection to make a total of 1 gram (and approximately 1 ml) of suspension. Ten-fold dilutions were plated out onto TSA, then incubated overnight. Plate counts were made, and it was determined that the original tube contained 2.72×10^{10} CFU per ml. Since there was 0.013 grams of material, this calculates to be 2.1×10^{12} CFU per gram of powder material.

Visual inspection of the suspension of material under phase contrast microscopy found no visible vegetative cells, no visible debris, and very few small clumps. Most of the material appeared to be individual refractile spores.

Interpretations and conclusions: If this is a preparation of bacterial spores, it is an extremely pure preparation, and an extremely high concentration. These are not "garage" spores. The nature of the spore preparation suggests very highly that professional manufacturing techniques were used in the production and purification of the spores, as well as in converting the spores into an extremely fine powder.

Bruce E. Ivins, 18 Oct, 2001

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