

R J R I n t e r o f f i c e M e m o r a n d u m

Re: Analysis of Flavor Crystals by EDX

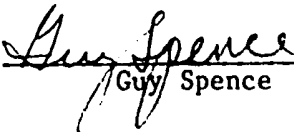
Date: December 14, 1984

To: Dr. Donald L. Roberts

From: Guy Spence

EDX and SEM analyses showed crystals that were composed of silicon and zirconium. The crystals were somewhat larger than the previous samples I analyzed. In this batch a typical crystal was ca. 1.5 mm-2.0 mm on the long axis while the photomicrographs of former sample crystals showed comparable dimensions of 0.7 mm + 0.2 mm. Some small crystalline fragments were also seen in this particular batch.

The EDX spectra, when the integrals of X-ray counting for silicon and zirconium were determined, less background, showed silicon to constitute 58.5% of the spectrum and zirconium 41.5%. Bear in mind, though, that these are only good estimates, and the numbers are made a little less reliable because both elements show counts for 2 adjacent, but minor, characteristic energy lines.



Guy Spence

/bmg

Xc: Mr. J. A. Giles
Dr. J. T. Dobbins, Jr.