

Frontier Analysis, Ltd

TECHNICAL SERVICE RESPONSE NO.: UT092

Subject: Analysis of a Specimen Pulled from an Experiencer's Back (April 4, 2012, Northwestern, Pennsylvania)

Date: April 5, 2016

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Background/Objective:

A specimen which included a small fiber was removed from the back of an Experiencer on April 4, 2012. There is also a crystalline material included with the specimen. The object is to determine the composition of the specimen and crystal, and whether it could be related to an alien implant. Another specimen from the same experiencer was recently analyzed.¹

Conclusions:

- The specimen is a multi-component mixture. In order of approximate concentration these include calcium carbonate (calcite), ester type material (possible glycerol type or sorbitan monooleate) and quartz. Visually noted is a fiber which is a minor part of the specimen. It could not be identified because of the interference of the other components. However, it is speculated to be of plant origin.
- The crystal is identified as sucrose which is commonly known as sugar.
- The specimen and crystal are not related to an alien implant. The above components are very common with many uses. Quartz (possible sand) and calcium carbonate (calcite) are common minerals in soil. There are other uses. The ester appears to be of natural origin, i.e. it's commonly found in plants, human respiratory products, animals.

¹ Frontier Analysis TSR No.: UT091

Procedure:

The sample was received on March 10, 2016, submitted in a small resealable plastic bag labeled "4/14/2012 from back".

Infrared² spectra were obtained from the specimen and crystal on the Thermo Electron Avatar 360 spectrometer using the Smart Herrick diamond sampling accessory. Photographs were also obtained from the Leica GZ6 stereomicroscope interfaced to a Canon A520 digital camera.

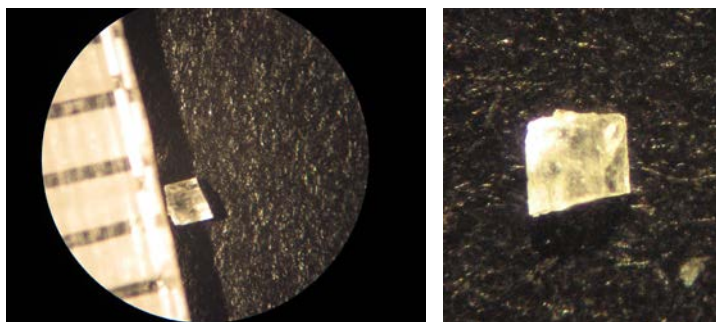
Results:

A microscope photograph obtained of the specimen next to a ruler graduated in millimeters shows the specimen is about 2 mm in length and less than 0.5 mm wide. There is a fibrous material which is a minor component of the specimen and appears to be less than 0.1 mm thickness. The photograph follows.



The Specimen

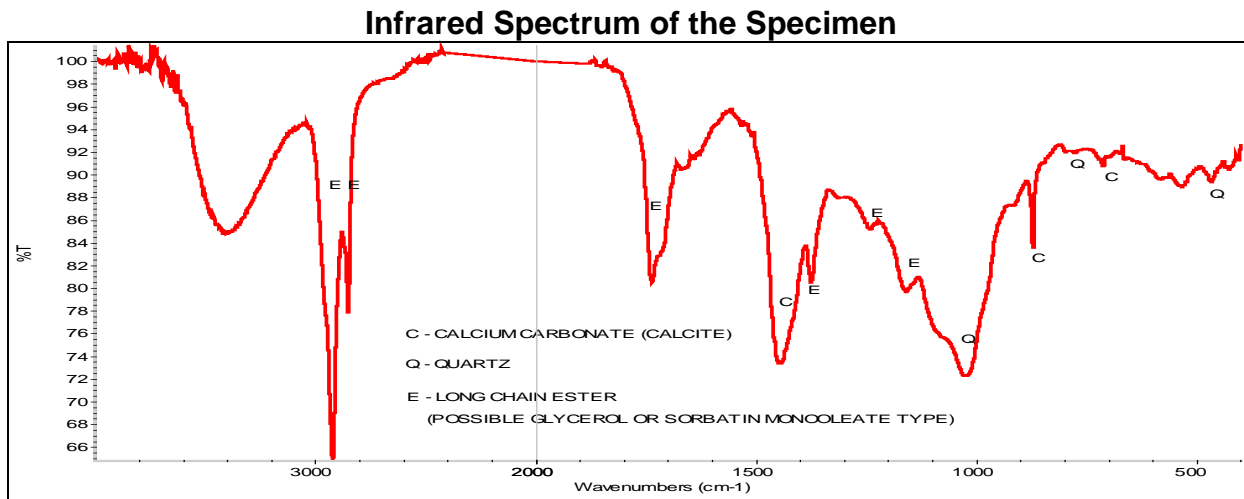
A photograph of a crystalline material shows it is cube shaped and has no color. It is very small at about 0.5 mm. Following are two photographs showing the crystal next to a ruler (millimeter) and a close up view.



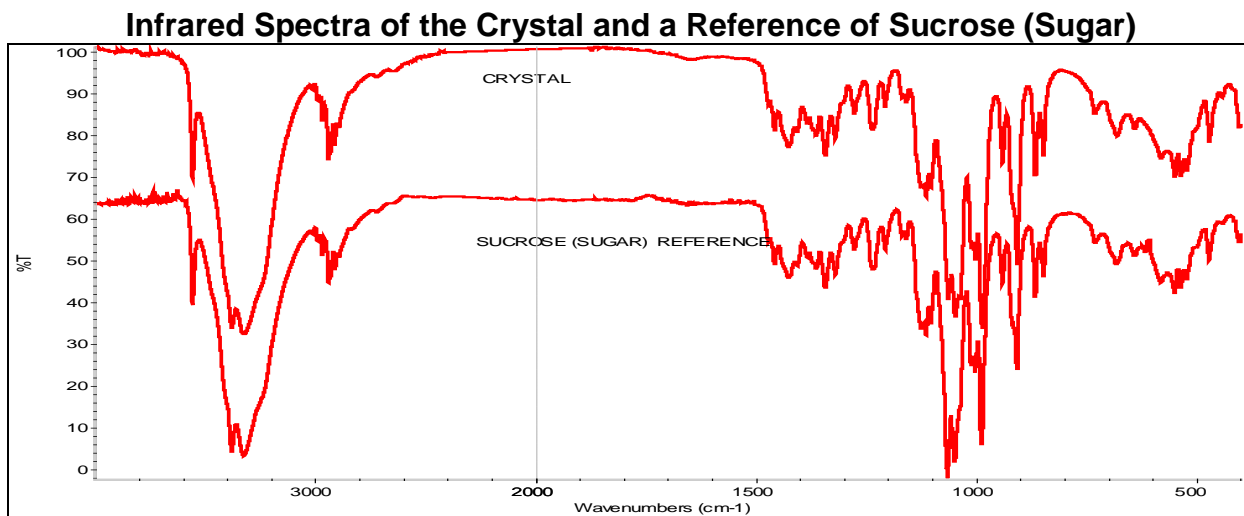
The Crystal

² **FT-IR (Fourier Transform Infrared Spectroscopy):** Infrared spectroscopy is used for the molecular structure identification and quantification of solids, liquids, and gases. An infrared spectrum is the result of light (in the 2 to 25 micron wavelength range) interacting with the vibrations of molecules. The particular set of vibrations of a molecule gives rise to specific spectral absorption bands, often referred to as the "fingerprint" spectrum.

The infrared spectrum of the specimen shows it is composed of four or more components. Identified are calcium carbonate (calcite) and quartz. Both could be mineral components of soil/sand. There is also a significant amount of a long chain ester, which more specifically could be a glycerol type derivative or similar to sorbitan monooleate. The fiber absorption bands are masked by those of the other components so could not be specifically identified. It is pure speculation, but it could be plant derived. Following is the spectrum with components identified.



Infrared analysis of the crystal definitely identifies it as sucrose also known as sugar. Following are spectra of the crystal along with a reference of sugar for comparison. It is a perfect match.



File: UT092

Phyllis A. Budinger