

TECHNICAL SERVICE RESPONSE NO.: UT047

<u>Subject</u>: Analysis of an Unknown Substance After a Suspected Alien Abduction (September 2005)

Date: April 11, 2006 Requested By: (Undisclosed)

<u>Reported By</u>: P. A. Budinger Analytical Scientist

Background/Objective:

The background as described by the witness follows:

"About a month ago I woke up with a clearish, yellowish substance dried on my stomach and in my belly button. It was not on my nightgown or sheets. It itched, and when I scratched my stomach, it flaked off. I used the Q-tips to clean it up. When I told Richard Lee about this about a week later, he told me to keep the Q-tips, so I rescued them with the other Q-tips in the waste basket. I used 3 of them to clean up the yellowish substance. I didn't have any signs of infection or other reason for the substance.

The next night I woke up upside down in my bed, like I had been thrown there rather carelessly. I don't end up that way in my normal sleep. I don't have any memories of anything happening.

The night after that, I woke up with a very small amount of the yellowish substance on my stomach again. I think I cleaned that up with a wash cloth.

After one of these nights I weighed myself and found I was 10 lbs. lighter than I was the night before. I think that was after the 2nd night when I woke up on the bed wrong, but I can't swear to which night it was. I honestly felt like I'd been given an alien amniocentisus after the first night, and that they had done a follow up on the third night. I did go to the doctor, and I'm not pregnant now so far as I know and they did do the tests. I'm also having problems with a hyperthyroid if that can play into any of this."

The object is to identify the substance on the Q-tips.

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Conclusions:

•The analysis shows the substance on the Q-tip consists of an inorganic sulfate and a protein-type material. Specifically, the sulfate may be ammonium sulfate, and its origin is unknown. The protein is from a biological source such as fluids excreted from mammals, which would include humans. This material is similar to materials such as lymph, mucus, perspiration, and blood plasma. The specific identification remains elusive. It is my opinion that the biological material originates from the witness. The substance was noted to fluoresce under UV light.

•It should be noted that a trace amount of long chain carboxylic acid is indicated. This is thought to be from outside contamination.

Sample and Procedure:

The Q-tips were received on October 8, 2005. A yellow material was noted to be on the surfaces.

The Q-tips were immersed in water to dissolve the yellow material. In addition the extract was put on a silica Sep-Pak cartridge in order to separate the components. The substance was desorbed from the Sep-Pak using progressively polar solvents, i.e. hexane; 50:50 hexane:acetone; water. Infrared spectra¹ were obtained from the extract and the Sep-Pak fractions. The spectra were obtained on the Nicolet Avatar 360 spectrometer using the Harrick SplitPea[™] ATR sampling accessory.

The material on the Q-tip was also observed under UV light (Optical Engineering's Model 22-UV).

Results:

Infrared analysis of a water extract of the Q-tip suggests the substance is a mixture of at least two components. These are a sulfate, and a protein containing material. Specifically, the sulfate may be ammonium sulfate. The protein compares to references of fluids excreted by the human body. For example, things like lymph, mucus, perspiration, blood plasma. Following is a spectrum of the yellow substance from the Q-tip with pertinent peaks labeled. References of ammonium sulfate and human biological materials, which are proteins such as

¹ **Infrared Spectroscopy (IR):** Infrared spectroscopy is used for the molecular structure identification and quantitation 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.

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lymph, mucus, perspiration, blood plasma, are included at the end of this report for comparison.



A Sep-Pak separation was done on the extract to separate its components. Each fraction was identified using infrared analysis. The following table shows the fractions, roughly estimated amounts, and the compositions.

Sep-Pak Fraction	Amounts	Infrared Identification
Initial Sample Wash Through	Small	Amide type material, probably protein; inorganic sulfate which could be ammonium sulfate.
Hexane	Trace	Possible long chain carboxylic acid. May be from contamination.
1:1 Hexane:Acetone	Trace	Possible long chain carboxylic acid. May be from contamination.
Water	Large	Amide type material which is a protein: most similar to as lymph, mucus, perspiration, and blood plasma.

Table Showing Sep-Pak Fractionation Results

Infrared spectra of each fraction follow with pertinent peaks labeled. As indicated previously, assorted references are at the end for comparison.

Infrared Spectra of Sep-Pak Fractions: Initial Sample Wash-Through; Hexane; 1:1 Hexane: Acetone; Water





Infrared Reference Spectrum of Ammonium Sulfate

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Infrared Reference Spectra of Human Biological References: Lymph, Mucus, Perspiration, Blood Plasma



The substance was noted to fluoresce when observed under UV light.

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