

Gantt, Rebecca (USAVAE)

From: Jason Miller <jvmiller@fbi.gov>
Sent: Friday, December 20, 2024 1:54 PM
To: Rachelann Cardwell; Hickok, Lucyna (NF) (FBI); Gantt, Rebecca (USAVAE)
Cc: Warren, Jacob (NSD); SABT-NF@ic.fbi.gov; Vanarsdale, Kelly A. (LD) (FBI)
Subject: RE: NF-3706759; FBI Lab# 2024-02692 - Explosives Chemistry Expedited Results

Categories: Spafford (ATAC)

This e-mail is intended for investigative lead, intelligence, and/or information purposes only. It may not be used as an FBI Laboratory Report of Examination in a criminal trial. The forensic examiner will issue an administratively and technically reviewed Report of Examination in the forensic discipline of Explosives Chemistry once the review of all relevant case information and the physical examination of evidence is complete. This preliminary analysis is based on chemical analysis of submitted evidence. Information contained in this communication is subject to change.

The information below pertains to chemical analysis of the main charge powder and fuse from FBI NF Item 23, FBI Laboratory Item 13 (Device #4).

FBI Laboratory Item 13-1: Piece of fuse from Item 13 (Device #4)

Preliminary results: Powder removed from the core of the fuse was identified as the low explosive black powder. The powder was tested for thermal susceptibility (flame test) with positive results.

FBI Laboratory Item 25: Powder from Device #4

Preliminary results: This powder was identified as a low explosive mixture of potassium perchlorate (an oxidizer) and aluminum powder (a fuel). This mixture is commonly known as flash powder. The powder was tested for thermal susceptibility with positive results.

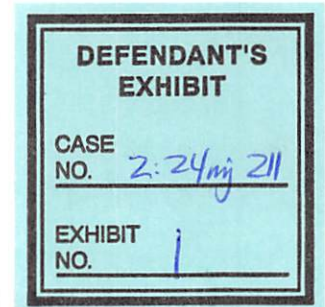
The remaining items at the FBI Laboratory will be analyzed as a routine matter. If the status or priority of the case changes, please let us know.

Please let me know if you have any questions.

Jason

SSA Jason V Miller

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From: Vanarsdale, Kelly A. (LD) (FBI) <kavanarsdale@fbi.gov>
Sent: Thursday, December 19, 2024 5:32 PM
To: Cardwell, Rachelann (NF) (TFO) <RCARDWELL@FBI.GOV>; Hickok, Lucyna (NF) (FBI) <LHICKOK@FBI.GOV>; Gantt, Rebecca (USAVAE) <Rebecca.Gantt@usdoj.gov>
Cc: Warren, Jacob (NSD) (JMD) <Jacob.Warren2@usdoj.gov>; Miller, Jason V. (LD) (FBI) <jvmiller@fbi.gov>; SABT-NF <SABT-NF@ic.fbi.gov>
Subject: NF-3706759; FBI Lab# 2024-02692

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technically reviewed Report of Examination in the forensic discipline of Explosive and Hazardous Devices once the review of all relevant case information and the physical examination of evidence is complete. This preliminary analysis is based on a cursory review of the submitted evidence and information provided by your office. Information contained in this communication is subject to change.

This submission in FBI Case NF-3706759 was assigned FBI Laboratory Number 2024-02692, Submission #1.

An LER (FD-1121) was not received at the time the evidence was submitted; however, per SSA Jason Miller, FBI Laboratory Explosives Chemistry Examiner who was on scene during the search and evidence collection, only Explosives and Hazardous Devices and Explosive Chemistry examinations are requested.

A total of nine (9) devices (labeled Devices 1 – 9 upon inventory at the FBI Laboratory) were received with Submission #1. For purposes of this e-mail, the preliminary analysis of only one (1) of the devices will be summarized. This Item is FBI NF Item 23, FBI Laboratory Item 13 (Device #4).

It is my opinion as an Explosives and Hazardous Devices Examiner that, present in Device #4 are the rendered-safe remains of an Improvised Explosive Device (IED), commonly referred to as a homemade bomb. This opinion is based on the examiner's cursory analysis of the submitted evidence and is contingent upon forthcoming Explosives Chemistry identification of actual explosive materials within the device. This is based on the **pending final Explosives Chemistry results of powder removed from Device #4 (FBI NF Item 21, FBI Laboratory Item 25).**

An IED consists of an explosive main charge, initiation system, and sometimes a container and/or enhancements.

- Device #4, was comprised of suspected low explosive main charge material (pending explosive chemistry results), suspected hobby fuse (pending explosive chemistry results) inserted as an initiation system, and an outer hard plastic tube with closed ends utilized as a main charge container. Inside the outer tube was a thinner plastic tube. Between the outer and inner tubes were metal spheres. The addition of metal spheres would enhance the fragmentation effect of the device upon its explosion. The device was most logically designed to function by time delay wherein a suitable heat source such as a flame applied to the exterior end of the hobby fuse would cause the fuse to burn down into the tube where it would initiate the explosive main charge, causing the IED to explode.

Properly assembled and initiated, an IED of this type is capable of causing property damage, personal injury, and/or death.

A destructive device is an IED that has the functional characteristics and/or design elements of a weapon or is utilized as a weapon. These elements of a destructive device are purely technical, not legal, and are not meant to infer the intent of the individual(s) that constructed the device.

It is my opinion as an Explosives and Hazardous Devices Examiner that this IED (Device #4) incorporated a weapon design element, **pending Explosives Chemistry results**, therefore it is technically considered a destructive device. Specifically, this IED incorporated a container(s) made of hard material and metal spheres which enhance the capability of this IED to cause property damage, personal injury, and/or death.

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