

Microgram

Bulletin

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- JUNE 2009 -

- INTELLIGENCE ALERT -

ECSTASY MIMIC TABLETS (ACTUALLY CONTAINING N-BENZYLPIPERAZINE (BZP), 1-(3-TRIFLUOROMETHYL)PHENYLPIPERAZINE (TFMPP), AND CAFFEINE) IN ASHEVILLE, NORTH CAROLINA

The North Carolina State Bureau of Investigation, Western Regional Laboratory (Asheville, North Carolina) received five tablets shaped like the heads of Ninja Turtles, Snoopy, and Barack Obama, suspected Ecstasy (see Photo 1). Analysis of the tablets by GC/MS revealed that the tablets contained BZP, TFMPP, and caffeine (the predominant compound). Clandestine tablet

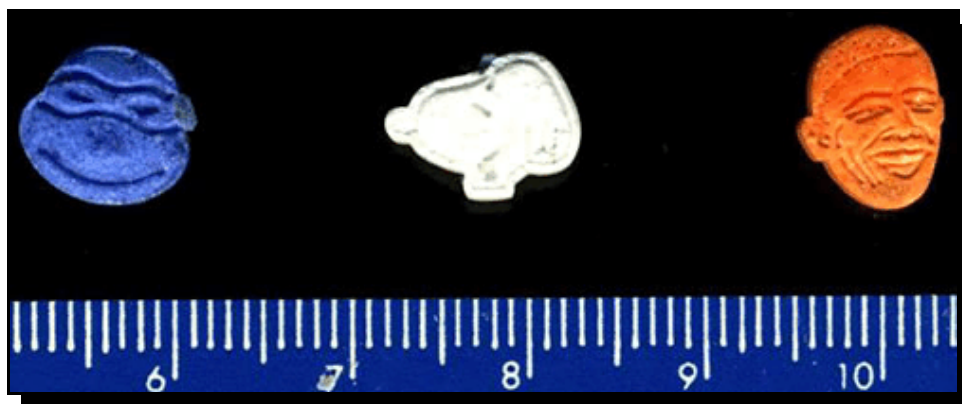


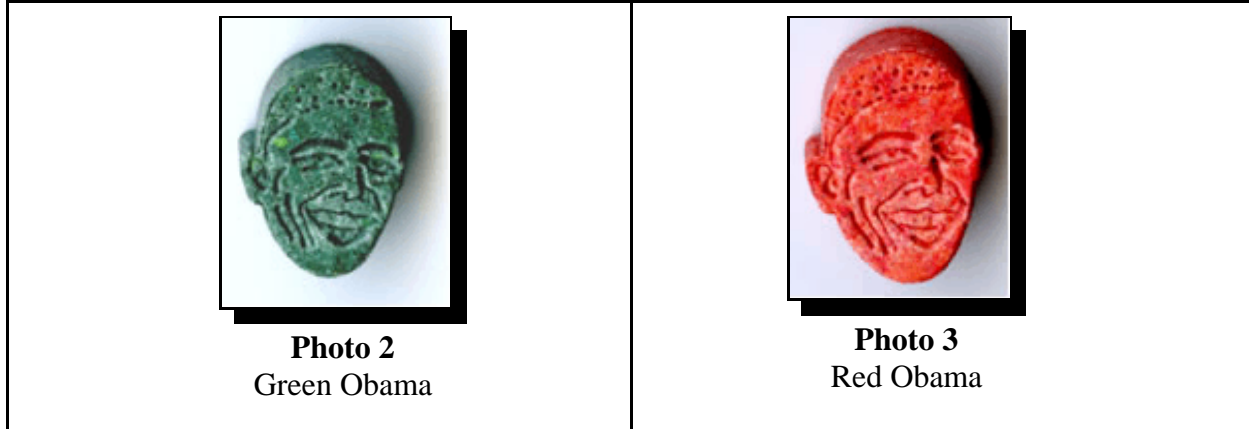
Photo 1-Scale is centimeters

preparations containing BZP are common submissions; however, these were the first tablets of their kind to be submitted to the laboratory. Most tablets submitted are round and vary in imprint/stamps. These tablets were quite detailed.

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- INTELLIGENCE ALERT -

NEW TREND IN ECSTASY MIMIC TABLETS SEEN IN SOUTHWESTERN U.S.



The DEA Southwest Laboratory (Vista, California) is seeing a new trend in the shape and design of illicit tablets in seizures throughout the southwest region of the U.S. (see Photos 2-15). The laboratory is receiving Ecstasy mimic and Ecstasy exhibits with different designs, colors, and shapes than the more typical round tablets. The Ecstasy mimic designs include: Barack Obama, Homer and Bart Simpson, Snoopy, Ninja Turtles, and Transformer Decepticon and Autobot designs. The contents of the tablets vary, but generally include a mixture of BZP, TFMPP, and caffeine. Other components in some tablets are dextromethorphan, methamphetamine, and dimethylsulfone. Ecstasy designs include: a mushroom (resembling one from the Super Mario Brothers video game) and Garfield. The mushroom and Garfield Ecstasy tablets contain 3,4-methylenedioxymethamphetamine (MDMA), methamphetamine, and caffeine.

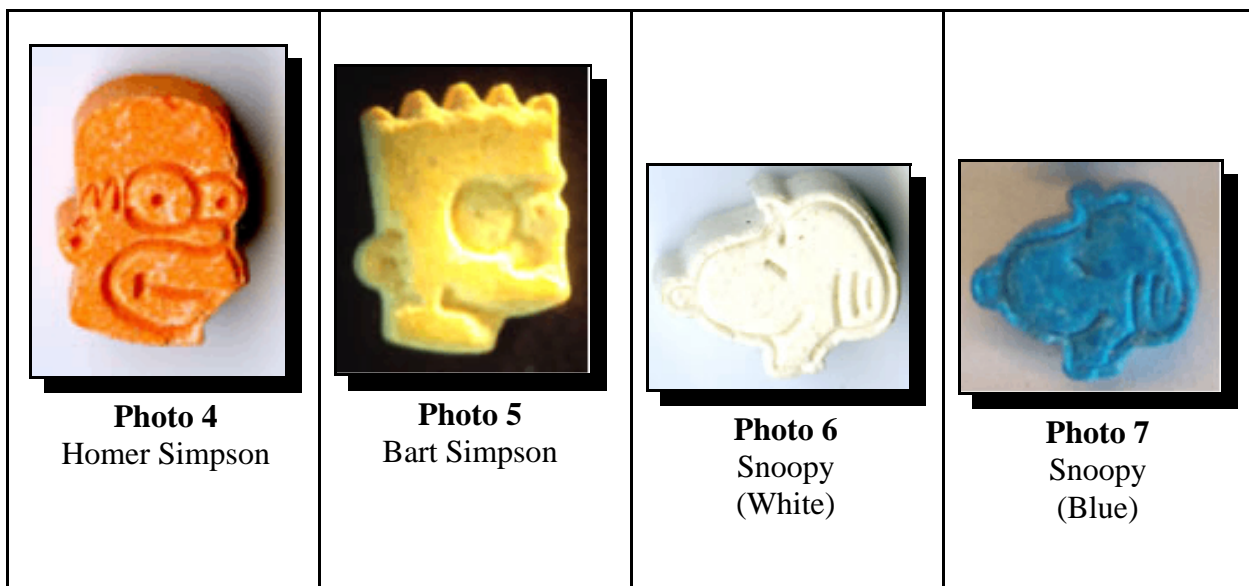




Photo 8
Ninja Turtle



Photo 9
Autobot
(White)



Photo 10
Decepticon
(Blue)



Photo 11
Decepticon
(Green)



Photo 12
Autobot
(Red)



Photo 13
Mushroom



Photo 14
Garfield
(Blue)

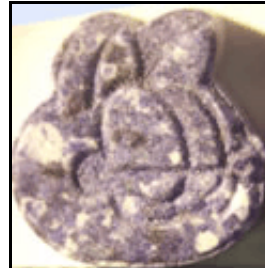


Photo 15
Garfield
(Purple)

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- INTELLIGENCE ALERT -

OBAMA, SNOOPY, AND OTHER BZP TABLET TRENDS APPEAR IN OKLAHOMA

The Oklahoma State Bureau of Investigation Northeast Regional Laboratory (Tahlequah, Oklahoma) received 100 tablets of suspected MDMA. The tablets were of various cartoon shapes including: Autobot, Decepticon, Bart and Homer Simpson, Ninja Turtle, and Smurf (see Photo16). There were also some tablets shaped like Barack Obama and Snoopy. Analysis of the tablets by GC/FID and GC/MS confirmed BZP, TFMPP, and caffeine. No quantitative analysis was performed. This is the second submission of BZP to the laboratory.

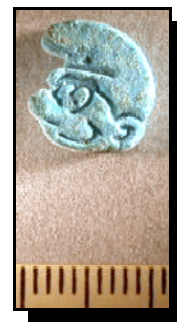


Photo 16

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- INTELLIGENCE ALERT -

COUNTERFEIT PHENTERMINE TABLETS (ACTUALLY CONTAINING FENFLURAMINE) IN MISSION, KANSAS

The Johnson County Crime Laboratory (Mission, Kansas) received a submission of 18 oval-shaped, white tablets with blue speckles (see Photo 17). The tablets were imprinted with "A 159." A reference search of the imprint indicated that the tablets should contain phentermine hydrochloride. However, analysis by GC/MS, confirmed the presence of fenfluramine (not quantitated, but a high loading based on the TIC), which was removed from the U.S. market in 1997. This was the first submission of this type tablet to the laboratory.



Photo 17

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- INTELLIGENCE ALERT -

RECORD SEIZURE OF PHENCYCLIDINE BY KANSAS BUREAU OF INVESTIGATION

The Kansas Bureau of Investigation Laboratory (Great Bend) received 10 one-liter plastic bottles containing a straw-colored liquid with a strong ether-like odor, suspected phencyclidine (PCP). The bottles were in an ice-filled cooler (see Photo 18) in the trunk of a vehicle. The caps on all the bottles were further sealed with an adhesive substance. Preliminary analysis revealed a basic pH. Analysis of the liquid by GC/MS confirmed ethyl ether and an average concentration of 65.5 milligrams/milliliter PCP (ranging from 47-89 milligrams/milliliter). This was the largest exhibit of PCP submitted to the laboratory and the only instance of this packaging method.



Photo 18

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- INTELLIGENCE ALERT -

LIQUOR BOTTLES CONTAINING XYLAZINE SOLUTION IN CLEVELAND, OHIO

The Ohio Bureau of Criminalistics Identification and Investigation (Richfield, Ohio) received two bottles of clear liquid suspected to contain dissolved cocaine (not pictured). The bottles contained a total of 1,253 grams of liquid. Analysis by color test indicated a positive blue color, suggesting the presence of cocaine; however, GC/MS and FTIR confirmed xylazine, a veterinary product used in the sedation of large animals, which is not controlled under US federal law. This is the first submission of this kind to the laboratory. [Editor's Notes: Xylazine is reportedly a common heroin adulterant in Puerto Rico and has been linked to nine deaths. Additional information on this topic can be found in the American Academy of Forensic Sciences 2009

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- INTELLIGENCE ALERT -

OXANDROLONE “PAPERS” AT THE DALLAS/FORT WORTH AIRPORT

The DEA South Central Laboratory (Dallas, Texas) received two white paper layers, glued together (not pictured), suspected LSD. Presumptive screening with ultraviolet light and paradimethylaminobenzaldehyde were negative for LSD. Analysis by GC/MS, HPLC, and FTIR identified oxandrolone (controlled in the US as a Schedule III steroid) in residual amounts. This is the first instance in which the laboratory received a steroid exhibit of this type.

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- INTELLIGENCE ALERT -

“CAT CLAW” AT MIAMI INTERNATIONAL AIRPORT

The DEA Southeast Laboratory (Miami, Florida) received 12 bags of “Uña De Gato,” or “cat claw” (see Photos 19 and 20), suspected to contain cocaine hydrochloride. The white powder was contained in plastic bags wrapped in black tape. The black-taped packages were further contained in pieces of hollowed out parquet flooring. Strips of bark (similar to actual “Uña De Gato”) were glued to all sides of the hollowed out flooring. Analysis of the white powder (total net mass 3,893 grams) by GC/MS and FTIR confirmed 93% cocaine hydrochloride.



Photo 19



Photo 20

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- INTELLIGENCE ALERT -

BZP TABLETS IN NEW YORK, NEW YORK

The DEA Northeast Laboratory (New York, New York) received 170 purple tablets (not pictured) with a Transformer Decepticon logo. Analysis of the tablets (total net mass 49 grams) by GC/MS, GC/FID and HPLC-MSD indicated 139 milligrams/tablet of BZP with TFMPP and caffeine. The laboratory has received numerous submissions of tablets containing BZP; however, this is the second known submission of the purple Transformer Decepticon logo tablets containing BZP.

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- INTELLIGENCE BRIEF -

DEXTROPROPOXYPHENE-LACED COGNAC LIQUOR IN MICHIGAN

The Michigan State Police Forensic Laboratory (Sterling Heights, Michigan) received a submission of an opened bottle of cognac liquor suspected to contain 21 dissolved Darvocet tablets (see Photo 21). The exhibit was seized after a man reportedly became ill from drinking the cognac. During initial examination, a chalky substance and sediment were observed in the brown liquid inside the bottle. Analysis of the exhibit by GC/MS, GC, and crystal test identified dextropropoxyphene and acetaminophen, ingredients of the commercial preparation Darvocet.



Photo 21

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SELECTED REFERENCES

[The Selected References section is a compilation of recent publications of presumed interest to forensic chemists. Unless otherwise stated, all listed citations are published in English. Abbreviated mailing address information duplicates that provided by the abstracting service. Patents and Proceedings are reported only by their *Chemical Abstracts* citation number.]

1. Bonadio F, Margot P, Delemont O, Esseiva P. **Optimization of HS-SPME/GC-MS analysis and its use in the profiling of illicit ecstasy tablets (Part 1).** *Forensic Science International* 2009;187(1-3):73-80. [Editor's Notes: A headspace solid-phase microextraction procedure (HS-SPME) was developed for the profiling of traces present in 3,4-methylenedioxymethylamphetamine (MDMA). A total of 31 compounds were identified as traces related to MDMA synthesis. The use of a restricted set of 10 target compounds was also proposed for developing a screening tool for clustering samples having a close profile. The results show that HS-SPME, coupled with the suitable statistical method, is a powerful tool for profiling. Contact: Ecole des Sciences Criminelles, Institut de Police Scientifique, University of Lausanne, Batochime, Lausanne-Dorigny CH-1015, Switzerland.]

2. Brewster VL, Edwards HGM, Hargreaves MD, Munshi T. **Identification of the date-rape drug GHB and its precursor GBL by Raman spectroscopy.** *Drug Testing and Analysis* 2009;1(1):25-31. [Editor's Notes: Using bench-top and portable Raman spectroscopy, gamma hydroxybutyric acid (GHB) as a sodium salt and GBL are detected in a variety of containers. The detection of both GBL and GHB in a range of liquid matrixes simulating "spiked" beverages is also demonstrated. Contact: Raman Spectroscopy Group, Division of Chemical and Forensic Sciences, University of Bradford BD7 1DP, UK.]
3. Gostic T, Klemenc S, Stefane B. **A study of the thermal decomposition of adulterated cocaine samples under optimized aerobic pyrolytic conditions.** *Forensic Science International* 2009;187(1-3):19-28. [Editor's Notes: Presents the title study. Contact: Ministry of the Interior, Forensic Research Center, Vodovodna 95, Ljubljana 1000, Slovenia.]
4. Kocak A, Lucania JP, Berets SL. **Some advances in Fourier transform infrared transflection analysis and potential applications in forensic chemistry.** *Applied Spectroscopy* 2009;63(5):507-511. [Editor's Notes: The transflection technique has a higher sensitivity for bands in the mid-IR offering a significant potential for both qualitative and quantitative analysis in this region. Small amounts of illegal drugs can be identified with little or no sample preparation. Contact: John Jay College of Criminal Justice, Department of Sciences, The City University of New York, New York, NY 10019.]
5. Milliet Q, Weyermann C, Esseiva P. **The profiling of MDMA tablets: A study of the combination of physical characteristics and organic impurities as sources of information.** *Forensic Science International* 2009;187(1-3):58-65. [Editor's Notes: Presents the title study. Contact: Ecole des Sciences Criminelles, Institut de Police Scientifique, University of Lausanne, Batochime, Lausanne-Dorigny CH-1015, Switzerland.]
6. Westphal F, Junge T, Girreser U, Stobbe S, Perez SB. **Structure elucidation of a new designer benzylpiperazine: 4-Bromo-2,5-dimethoxybenzylpiperazine.** *Forensic Science International* 2009;187(1-3):87-96. [Editor's Notes: A new designer benzylpiperazine was seized in Hamburg, Germany for the first time. Interpreting the results of GC-MS, GC-MS/MS, and NMR identified the compound as 4-bromo-2,5-dimethoxybenzylpiperazine. Additional instrumental data is presented. Contact: Landeskriminalamt Schleswig-Holstein, Muehlenweg 166, Kiel 24116, Germany.]

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THE DEA FY 2010 STATE AND LOCAL FORENSIC CHEMISTS SEMINAR SCHEDULE

The FY 2010 schedule for the State and Local Forensic Chemists Seminar is as follows:

November 2-6, 2009
March 1-5, 2010
May 31-June 4, 2010
September 13-17, 2010

The school is open only to forensic chemists working for law enforcement agencies. It is intended for chemists who have completed their agency's internal training program and have also been working on the bench for at least one year. There is no tuition charge. The course is held at the Hyatt Place Dulles North Hotel in Sterling, Virginia (near the Washington/Dulles International Airport). A copy of the application form is reproduced on the last page of the August 2004 issue of *Microgram Bulletin* (see: <http://www.dea.gov/programs/forensicsci/microgram/mg0804/aug04.pdf>). Completed applications

should be mailed to the Special Testing and Research Laboratory (Attention: J. Head) at: 22624 Dulles Summit Court, Dulles, VA 20166. For additional information, call 703/668-3349.

SCIENTIFIC MEETINGS

Title: 19th Annual CLIC Technical Training Seminar

Sponsoring organization: Clandestine Laboratory Investigating Chemists Association

Inclusive dates: September 9-12, 2009 (September 8-workshop)

Location: Sheraton Hotel in Birmingham, Alabama

Additional info: Meeting fee-\$350 for members and \$400 for non-members.

Workshop topic-Basic Methamphetamine Synthesis

Workshop Fee-\$125 for members and \$150 for non-members

Contact information: Pam Smith, Email: p1947s -at- hotmail.com (Replace the word -at- with the symbol @)

Website: None

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