



U.S. Department
of Transportation
**Federal Aviation
Administration**

Mike Monroney
Aeronautical Center

P.O. Box 25082
Oklahoma City, Oklahoma 73125

Friday, October 29, 2010

National Transportation Safety Board
2001 Route 46, Suite 504
Parsippany, NJ 07054

ACCIDENT # 0227 INDIVIDUAL#: 001 NAME: KOKOLIS, THEODORE P. MODE: AVIATION
DATE OF ACCIDENT 08/07/2010 DATE RECEIVED 09/15/2010 PUTREFACTION: Yes
N # 28MR NTSB # ERA10FA404 CAMI REF # 201000227001
LOCATION OF ACCIDENT Saltsburg, PA
SPECIMENS Bile, Blood (Heart), Brain, Gastric, Heart, Kidney, Liver, Lung, Muscle, Spinal Fluid, Spleen, Urine, Vitreous

FINAL FORENSIC TOXICOLOGY FATAL ACCIDENT REPORT

CARBON MONOXIDE: The carboxyhemoglobin (COHb) saturation is determined by spectrophotometry with a 10% cut off and confirmed by chromatography.

>> NO CARBON MONOXIDE detected in Blood (Heart)

CYANIDE: The presence of cyanide is screened by Conway Diffusion. Positive cyanides are quantitated by spectrophotometry and confirmed by chromatography. The reporting cutoff for cyanide is 0.25 ug/mL. Normal blood cyanide concentrations are less than 0.15 ug/mL, while lethal concentrations are greater than 3 ug/mL.

>> NO CYANIDE detected in Blood (Heart)

VOLATILES: The volatile concentrations are determined by headspace gas chromatography at a cut off of 10 mg/dL. Where possible, positive ethanol values are confirmed by Radiative Energy Attenuation.

>> NO ETHANOL detected in Vitreous

DRUGS: Immunoassay and/or chromatography are used to screen for drugs. GC/Mass Spec, HPLC/Mass Spec, or GC/FTIR is used to confirm most positive results. Concentrations (ug/mL) at or below those in () can be determined for, but not limited to, the following drugs: amphetamines (0.010), opiates (0.010), marihuana (0.001), cocaine (0.020), phencyclidine (0.002), benzodiazepines (0.030), barbiturates (0.060), antidepressants (0.100), and antihistamines (0.020). For comprehensive information concerning all drugs detected by the laboratory, see the CAMI Drug Information Web Site <http://jag.camii.jccbi.gov/toxicology/>.

>> NO DRUGS listed above detected in Urine

Dennis V. Canfield, Ph. D.
Manager, Bioaeronautical Sci.
Research Lab CAMI

2010.11.17 11:08:54 -06'00'



NMS Labs

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Robert A. Middleberg, PhD, DABFT, DABCC-TC, Laboratory Director

Corrected Report

Report Issued 08/25/2010 10:00

Last Report Issued 08/16/2010 13:00

Patient Name KOKOLIS, THEODORE
Patient ID CHW10-201
Chain 11198132
Age 66
Gender Male
Workorder 10177792

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To: 10192
Westmoreland County Coroner's Office
Attn: Kenneth A. Bacha/Ste.602
Courthouse Sq, 2 North Main St
Greensburg, PA 15601

Positive Findings:

None Detected

See Detailed Findings section for additional information

Testing Requested:

Analysis Code	Description
1005B	Carbon Monoxide Profile, Blood (Forensic)
8051B	Postmortem Toxicology - Basic, Blood

Tests Not Performed:

Part or all of the requested testing was unable to be performed. Refer to the Analysis Summary and Reporting Limits section for details.

Specimens Received:

ID	Tube/Container	Volume/ Mass	Collection Date/Time	Matrix Source	Miscellaneous Information
001	Gray Top Tube	8.5 mL	08/08/2010 10:30	Cardiac Blood	
002	Gray Top Tube	8 mL	08/08/2010 10:30	Cardiac Blood	
003	Red Top Tube	1 mL	08/08/2010 10:30	Bile	
004	Red Top Tube	9 mL	08/08/2010 10:30	Urine	

All sample volumes/weights are approximations.

Specimens received on 08/11/2010.

The undersigned certifies that this is a
RED INK STAMP COPY
of the original from the
Westmoreland County Coroner's Office

By: 
DO NOT DUPLICATE



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Workorder 10177792
Chain 11198132
Patient ID CHW10-201

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Detailed Findings:

Examination of the specimen(s) submitted did not reveal any positive findings of toxicological significance by procedures outlined in the accompanying Analysis Summary.

Sample Comments:

- 001 * Patient Name modified 08/24/10. Previous value: DOE, JOHN #1
001 * Age modified 08/24/10. Previous value: Not Given

Chain of custody documentation has been maintained for the analyses performed by NMS Labs.

Unless alternate arrangements are made by you, the remainder of the submitted specimens will be discarded six (6) weeks from the date of this report; and generated data will be discarded five (5) years from the date the analyses were performed.

Workorder 10177792 was electronically
signed on 08/25/2010 09:10 by:

Susan Crookham,
Certifying Scientist

Analysis Summary and Reporting Limits:**Acode 1005B - Carbon Monoxide Profile, Blood (Forensic) - Cardiac Blood**

-Analysis by Microdiffusion (MD) for:

<u>Compound</u>	<u>Rpt. Limit</u>	<u>Compound</u>	<u>Rpt. Limit</u>
Carboxyhemoglobin	N/A		

Testing Not Performed: Test was canceled due to [Interfering Substance].

-Analysis by Spectrophotometry (SP) for:

<u>Compound</u>	<u>Rpt. Limit</u>	<u>Compound</u>	<u>Rpt. Limit</u>
Carboxyhemoglobin	N/A		

Testing Not Performed: Test was canceled due to [Interfering Substance].

Acode 8051B - Postmortem Toxicology - Basic, Blood - Cardiac Blood

-Analysis by Enzyme-Linked Immunosorbent Assay (ELISA) for:

<u>Compound</u>	<u>Rpt. Limit</u>	<u>Compound</u>	<u>Rpt. Limit</u>
Amphetamines	20 ng/mL	Methadone	25 ng/mL
Barbiturates	0.040 mcg/mL	Opiates	20 ng/mL
Benzodiazepines	100 ng/mL	Phencyclidine	10 ng/mL
Cannabinoids	10 ng/mL	Propoxyphene	50 ng/mL
Cocaine / Metabolites	20 ng/mL		

-Analysis by Enzyme-Linked Immunosorbent Assay (ELISA) for:

<u>Compound</u>	<u>Rpt. Limit</u>	<u>Compound</u>	<u>Rpt. Limit</u>
Buprenorphine	0.50 ng/mL		



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Workorder 10177792
Chain 11198132
Patient ID CHW10-201

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Analysis Summary and Reporting Limits:

-Analysis by Headspace Gas Chromatography (GC) for:

<u>Compound</u>	<u>Rpt. Limit</u>	<u>Compound</u>	<u>Rpt. Limit</u>
Acetone	1.0 mg/dL	Isopropanol	1.0 mg/dL
Ethanol	10 mg/dL	Methanol	5.0 mg/dL