THESE RECORDS MAY BE RELEASABLE UNDER THE FOIA REQUEST 15 DAYS AFTER SIGNATURE DATE UNLESS WE HEAR OTHERWISE FROM FAA NTSB COUNSEL



Mike Monroney Aeronautical Center P.O. Box 25082 Oklahoma City, Oklahoma 73125

Friday, May 19, 2017

National Transportation Safety Board 4760 Oakland Street, Suite 500

Denver, CO 80239

ACCIDENT # 0088 INDIVIDUAL#: 003 NAME: MODE: AVIATION

DATE OF ACCIDENT 04/28/2017 DATE RECEIVED 05/03/2017 PUTREFACTION: No

N# 933DC **NTSB#** CEN17FA168 **CAMI REF#** 201700088003

LOCATION OF ACCIDENT Amarillo, TX

SPECIMENS Muscle

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.

>> NOT PERFORMED

CYANIDE: The presence of cyanide is screened by Conway Diffusion, when the COHb level is equal to or greater than 10% or upon special request. 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.

>> NOT PERFORMED

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 Muscle

DRUGS: Specimens are analyzed using immunoassay, chromatography, GC/MS, HPLC/MS, or GC/FTIR. Concentrations (ug/mL) at or above 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). Drugs and/or their metabolites, that are not impairing or abused, may be reported from the initial tests. See the CAMI Drug Information Web Site for additional information (http://jag.cami.jccbi.gov/toxicology/).

>> NO DRUGS listed above detected in Muscle

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Russell Lewis, Ph.D., F-ABFT TC, FAA, Forensic Toxicology Research Team CAMI

c=US, o=U.S. Government, ou=AMC, ou=AMC, cn=RUSSELL J LEWIS 2017.05.23 11:18:42 -05'00'

THESE RECORDS MAY BE RELEASABLE UNDER THE FOIA REQUEST 15 DAYS AFTER SIGNATURE DATE UNLESS WE HEAR OTHERWISE FROM FAA NTSB COUNSEL



Mike Monroney Aeronautical Center P.O. Box 25082 Oklahoma City, Oklahoma 73125

Friday, May 26, 2017

National Transportation Safety Board 4760 Oakland Street, Suite 500 Denver, CO 80239

ACCIDENT # 0088 INDIVIDUAL#: 001 NAME: MODE: AVIATION

DATE OF ACCIDENT 04/28/2017 DATE RECEIVED 05/03/2017 PUTREFACTION: No

N# 933DC **NTSB#** CEN17FA168 **CAMI REF#** 201700088001

LOCATION OF ACCIDENT Amarillo, TX

SPECIMENS Liver, Lung, Muscle

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.

>> NOT PERFORMED

CYANIDE: The presence of cyanide is screened by Conway Diffusion, when the COHb level is equal to or greater than 10% or upon special request. 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.

>> NOT PERFORMED

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 Muscle
- >> NO ETHANOL detected in Liver

DRUGS: Specimens are analyzed using immunoassay, chromatography, GC/MS, HPLC/MS, or GC/FTIR. Concentrations (ug/mL) at or above 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). Drugs and/or their metabolites, that are not impairing or abused, may be reported from the initial tests. See the CAMI Drug Information Web Site for additional information (http://jag.cami.jccbi.gov/toxicology/).

- >> Yohimbine detected in Liver
- >> Yohimbine detected in Muscle



Russell Lewis, Ph.D., F-ABFT TC, FAA, Forensic Toxicology Research Team CAMI c=US, o=U.S. Government, ou=AMC, ou=AMC, cn=RUSSELL J LEWIS 2017.06.06 10:21:37 -05'00'

THESE RECORDS MAY BE RELEASABLE UNDER THE FOIA REQUEST 15 DAYS AFTER SIGNATURE DATE UNLESS WE HEAR OTHERWISE FROM FAA NTSB COUNSEL



Mike Monroney Aeronautical Center P.O. Box 25082 Oklahoma City, Oklahoma 73125

201700088002

CAMI REF#

Monday, June 05, 2017

National Transportation Safety Board 4760 Oakland Street, Suite 500

Denver, CO 80239

ACCIDENT # 0088 INDIVIDUAL#: 002 NAME: MODE: AVIATION

DATE OF ACCIDENT 04/28/2017 DATE RECEIVED 05/03/2017 PUTREFACTION: No

N# 933DC **NTSB#** CEN17FA168

LOCATION OF ACCIDENT Amarillo, TX

SPECIMENS Kidney, Liver, Lung, Muscle

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.

>> NOT PERFORMED

CYANIDE: The presence of cyanide is screened by Conway Diffusion, when the COHb level is equal to or greater than 10% or upon special request. 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.

>> NOT PERFORMED

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 Muscle
- >> NO ETHANOL detected in Liver

DRUGS: Specimens are analyzed using immunoassay, chromatography, GC/MS, HPLC/MS, or GC/FTIR. Concentrations (ug/mL) at or above 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). Drugs and/or their metabolites, that are not impairing or abused, may be reported from the initial tests. See the CAMI Drug Information Web Site for additional information (http://jag.cami.jccbi.gov/toxicology/).

- >> Desloratadine detected in Liver
- >> Loratadine detected in Liver
- >> Loratadine detected in Muscle
- >> Warfarin detected in Liver
- >> Warfarin detected in Muscle



Russell Lewis, Ph.D., F-ABFT TC, FAA, Forensic Toxicology Research Team CAMI c=US, o=U.S. Government, ou=AMC, ou=AMC, cn=RUSSELL J LEWIS 2017.06.06 10:22:17 -05'00'