



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

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, December 02, 2016

National Transportation Safety Board  
505 South 336th Street, Suite 540  
Federal Way, WA 98003

ACCIDENT # 0145    INDIVIDUAL#: 001    NAME: [REDACTED]    MODE: AVIATION  
DATE OF ACCIDENT 07/23/2016    DATE RECEIVED 07/26/2016    PUTREFACTION: Yes  
N # 502WC    NTSB # WPR16FA148    CAMI REF # 201600145001  
LOCATION OF ACCIDENT Zamora, CA  
SPECIMENS Bile, Blood (Femoral), Blood (Heart), Blood (Subclav.), Gastric, Heart, Kidney, Liver, Lung, Muscle, Spleen, Urine

**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

-Notes:  
Insufficient specimen for analysis.

**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 Urine

**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), marijuana (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/>).

- >> 72.35 (ug/ml, ug/g) Acetaminophen detected in Urine
- >> Chlorpheniramine detected in Blood (Subclav.)
- >> Chlorpheniramine detected in Liver
- >> 0.122 (ug/mL, ug/g) Cyclobenzaprine detected in Blood (Heart)
- >> Cyclobenzaprine detected in Urine
- >> Desmethylsertraline detected in Liver
- >> Desmethylsertraline detected in Lung
- >> Desmethyltramadol (O-) NOT detected in Blood (Heart)
- >> Desmethyltramadol (O-) detected in Urine

CONTINUATION OF REF#: 201600145001 - [REDACTED]

- >> 0.016 (ug/mL, ug/g) Dihydrocodeine detected in Blood (Heart)
- >> 0.987 (ug/mL, ug/g) Dihydrocodeine detected in Urine
- >> Diphenhydramine detected in Muscle
- >> Diphenhydramine detected in Blood (Heart)
- >> Hydrocodone detected in Urine
- >> Hydrocodone detected in Blood (Heart)
- >> Hydromorphone NOT detected in Blood (Heart)
- >> 1.233 (ug/mL, ug/g) Hydromorphone detected in Urine
- >> Ibuprofen detected in Urine
- >> Morphine NOT detected in Blood (Heart)
- >> 0.094 (ug/ml, ug/g) Morphine detected in Urine
- >> 0.085 (ug/mL, ug/g) Norcyclobenzaprine detected in Blood (Heart)
- >> Norcyclobenzaprine detected in Urine
- >> Sertraline detected in Liver
- >> Sertraline detected in Lung
- >> Tramadol NOT detected in Blood (Heart)
- >> 0.121 (ug/mL, ug/g) Tramadol detected in Urine

[REDACTED]

[REDACTED]

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