

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

MODE: AVIATION

Monday, December 02, 2013

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

 ACCIDENT #
 0191
 INDIVIDUAL#:
 001
 NAME:
 VENGUSWAMY, NARAYAN

 DATE OF ACCIDENT
 09/25/2013
 DATE RECEIVED
 10/01/2013

 N#
 406DC
 NTSB #
 CEN13FA558

 10/01/2013
 PUTREFACTION:
 No

 A558
 CAMI REF # 201300191001

LOCATION OF ACCIDENT Bolingbrook, IL

SPECIMENS Bile, Blood, Brain, Gastric, Heart, Kidney, Liver, Lung, Muscle, Spinal Fluid, Spleen, 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

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 Vitreous

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/).

- >> 148 (ng/mL, ng/g) Fentanyl detected in Blood
- >> 89 (ng/mL, ng/g) Fentanyl detected in Liver
- >> Lidocaine detected in Liver
- >> Lidocaine detected in Blood
- >> 1.372 (ug/mL, ug/g) Midazolam detected in Blood
- >> Midazolam detected in Liver

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