



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

Wednesday, January 04, 2012

National Transportation Safety Board
1515 W. 190th St., Suite 555
Gardena, CA 90248

ACCIDENT # 0268 **INDIVIDUAL#:** 001 **NAME:** CLINE, NATHAN L. **MODE:** AVIATION
DATE OF ACCIDENT 11/10/2011 **DATE RECEIVED** 11/17/2011 **PUTREFACTION:** No
 N # 11QV **NTSB #** WPR12MA034 **CAMI REF #** 201100268001
LOCATION OF ACCIDENT Pukoo, HI
SPECIMENS Bile, Blood, Gastric, Heart, Liver, Lung, Muscle, 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.

>> INSUFFICIENT SPECIMEN FOR ANALYSIS

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.

>> INSUFFICIENT SPECIMEN FOR ANALYSIS

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 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). For comprehensive information concerning all drugs detected by the laboratory, see the CAMI Drug Information Web Site <http://jag.cami.jccbi.gov/toxicology/>.

>> NO DRUGS listed above detected in Urine

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