

**Vermont Department of Health Laboratory  
Organic Chemistry Program  
Memorandum**

To: Rutland County State's Attorneys Office  
From: Kirk Kimball  
Date: July 13, 2011  
Re: Rutland VSP DMT instrument #100132

This is to inform you of the reason for the temporary removal of DataMaster DMT Instrument # 100132 from the Rutland VT State Police barracks.

Amanda Bolduc was asked for an affidavit concerning this instrument on 5/3/11. While reviewing the pre-deployment binder, VDHL maintenance folder (hard copy) and the electronic instrument folder a discrepancy was found. This discrepancy was a Technical Support Inquiry (TSI) which was created 5/24/10, and filed in the electronic instrument folder but not in the instrument pre-deployment binder. The TSI states that the work performed was replacing the detector with a "reworked detector block with a new filter wheel". The reason for this repair work was a failed interference check of the 0.01 acetone in 0.04 ethanol solution during pre-deployment testing on 4/6/10. The normal lab practice was to restart the pre-deployment testing from the beginning when a major repair was performed. This was due to the TSI not being in the pre-deployment paperwork and the chemist not looking in the electronic instrument folder. The instrument was retested with the 0.01 acetone in 0.04 ethanol interference solution (9/7/10) resulting in 100% detection of the interference. The last linearity test was completed (9/8/10). The instrument was recalibrated and certified on 9/09/10. The instrument was installed in the field on 9/16/11. On 2/25/11, a passing Routine Performance Check (RPC) was performed by the site DMT supervisor. On May 3, 2011, the instrument was removed from the field by myself and returned to VDHL.

On May 4, 2011, the instrument was turned on at VDHL and four solutions containing interfering compounds were analyzed by Amanda Bolduc (Public Health Chemist III), 10 times each and witnessed by me. The solutions were as follows:  
0.04 methanol in water: 100% detection of the interference.  
0.04 isopropanol in water: 100% detection of the interference.  
0.04 isopropanol in 0.08 ethanol in water: 100% detection of the interference.  
0.04 methanol in 0.08 ethanol in water: 100% detection of the interference.

Based on the data collected on 5/4/11, and the retest of the 0.01 acetone in 0.04 ethanol solution on 9/7/10, I can state that the instrument was capable of detecting interferences from acetone, methanol and isopropanol while deployed in the field. All data generated by DMT instrument # 100132 between 9/16/10, and 5/3/11, is accurate, precise and reliable.

If you have any questions concerning the DMT instruments or Alcohol Program please feel free to contact me directly. Thank You.

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