

Breath Alcohol Testing Instrument Operational and Technical Review

The Public Health Electronics Technician of The Vermont Department of Health Laboratory has responsibility to ensure the continued operation of the State of Vermont evidential Breath Alcohol Testing Instrumentation.

The State of Vermont is currently employs the National Patent Analytical Systems Inc. (NPAS) BAC DataMaster. While this system has worked well during the life of the program we have been advised by NPAS that the Chip Set of the CPU that runs the BAC DataMaster is no longer in production and that the BAC DataMaster will soon not be produced. This would also hold true for the supply of CPU boards that are the operating system or CPU of the BAC Datamaster. When the expected life of an instrument like this and the length of time that this system has been employed is taken into consideration one would have to conclude that this instrumentation has served The State of Vermont Very Well.

With this information, the state of Vermont has appropriated some money for replacement instrumentation and has undertaken to evaluate of some instruments as possible replacements for the BAC DataMaster. This report describes positive and negative critique of the instruments that have been tested. The primary focus of this will be on the ease of use, customer service response, maintainability, safety and overall usability of the instruments. The instruments are not to be compared to each other but to themselves.

CMI Intoxilyzer 8000 Operational and Technical Review

Unit delivers quick results.

Display, user interface is a two-line alphanumeric display type. That is difficult to have adequate information displayed on.

When calling Customer Service, I was placed on hold for a long time, never did get to talk to a person for help. Left a Message Waiting a call back 12/22/05 1330hrs. Placed another phone call 12/28/2005 and was able to talk to a person in customer service in reference to some errors the instrument gave during testing.

Instrument did not auto adjust for daylight savings time.

Instrument does not appear easy to maintain, when talking to customer service it was explained to me that it is in fact harder then one might imagine taking apart and reassembling. Before the instrument was shipped back to the Vendor the instrument was opened up and inspected, They seemed right to disassemble and reassemble is time consuming, and to change out almost any componet requires one to move the optical bench, this in turn would require a recalibration making most field maintenance imposable.

Instrument does not utilize heated simulator hose's thus the possibility of condensation is higher in the simulator hoses this in turn has the possibility of increasing the standard deviation of an accuracy and prestion check.

Instrument has a warm-up period if not used for several minutes; the unit takes a minute to warm up.

Instrument comes with a handle, this may encourage subjects to pickup instrument and use in a manor not conducive to the manufactures recommendations or the safety of others in the area of the subject.

The reprint option is only available for the last test performed.

Printer paper is thermal type, has a tendency to fade over time, unit has capability to print on a laser printer.

Printer paper is difficult to change / replace.

Menu of options and technical changes is difficult to navigate, not intuitive.

Drager Alcotest 7110 MKIII-C Operational and Technical Review

When running a "Supervisor test" the instrument does not print out the average or Standard deviation.

Menu of options and technical changes is difficult to navigate, not intuitive.

Instrument is slow to provide results.

Request for service Help 12/22/05 during AM, Response was Tuesday someone should be in to help you. !2/27/2005 @1330

Instrument does not appear easy to maintain.

Instrument comes with a handle, this may encourage subjects to pickup instrument and use in a manor not conducive to the manufactures recommendations or the safety of others in the area of the subject.

Printer paper is difficult to change / replace.

Unit utilizes two printers, one onboard and one off board.

Instrument does not utilize heated simulator hose's.

Display, user interface is a two-line alphanumeric display type.

Instruments are duel technology.

N.P.A.S. DataMaster DMT Operational and Technical Review

Unit has a touch screen display.

Display is graphics capable.

Customer service is a known, and readily available.

Easily opened to perform maintenance.

Unit displays and adjusts voltages without having to open the unit.

Some spare parts are already in stock.

Many spare parts can be acquired locally.

Unit utilizes Off the Shelf USB devices such as a Keyboard.

Unit uses a off the shelf USB printer.

Windows based operating system is easy to understand, intuitive to people that understand windows based Operating Systems at a basic level.

Reprints of tests performed on the unit are accessible until download is completed.