



Florida Department of Law Enforcement

James T. "Tim" Moore  
Commissioner

Criminal Investigation and Forensic Science Services

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### Certificate of Assurance

Simulator Solution Lot #98050

Concentration: 0.2420 G/dL  
Expected Breath Test Instrument Reading: 0.200 G/210L

Lot Approved April 90, 1998

Certificate Prepared May 4, 1998

Simulator solution used in the State of Florida is prepared by a vendor on behalf of the Florida Department of Law Enforcement Alcohol Testing Program. The Alcohol Testing Program analyzes simulator solution bottles from each new lot to approve the lot for use in the State of Florida.

Simulator solution bottle samples are prepared and then analyzed by gas chromatography (GC). Three sub-samples from each simulator solution bottle analyzed are combined in a GC vial, and three vials are prepared from each analyzed simulator solution bottle.

The GC vial ethanol concentrations from each analyzed simulator solution bottle are averaged to yield an estimated concentration for each bottle. The sample bottles received and the data obtained must meet the following criteria for a lot of simulator solution to be approved for use in Florida:

- Eight or more of the ten simulator solution bottles received must be suitable for analysis;
- Two of the three GC autosampler vials must provide an analytical result for each bottle;
- The difference between any two analytical results for a bottle must be 0.0100 G/dL or less;
- Six or more of the analyzed simulator solution bottles must provide an average result; and
- All average results must fall on or between 0.2320 G/dL to 0.2520 G/dL ethanol.

A lot meeting the above criteria has a concentration indistinguishable from 0.2420 G/dL ethanol, is labeled to provide a breath reading of 0.20, and will provide a breath reading on or between 0.190 G/210L to 0.210 G/210L on a properly calibrated breath test instrument when inspected in compliance with the procedures specified in Chapter 11D-8, F.A.C.

The analytical results for lot 98050 are:

Sample Label	Bottle Number	Ethanol (G/dL)	
SIM01	0012	0.2489	<b>0.2486 G/dL Mean</b> 0.0006 G/dL standard deviation 0.2476 G/dL minimum observation 0.2493 G/dL maximum observation 10 observations
SIM02	0014	0.2490	
SIM03	0954	0.2488	
SIM04	1842	0.2476	
SIM05	0953	0.2486	
SIM06	1843	0.2476	
SIM07	0013	0.2493	
SIM08	0955	0.2488	
SIM09	1845	0.2489	
SIM10	1844	0.2483	

Thomas M. Wood  
Senior Crime Laboratory Analyst



Florida Department of  
Law Enforcement

Criminal Investigation &  
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May 6, 1998

**MEMORANDUM**

TO: File

FROM: Tom Wood, Senior Crime Laboratory Analyst *TMW*

SUBJECT: Pre-Distribution Quality Assurance Analysis of Simulator Solution Lot #98050

**SAMPLE RECEIPT INSPECTION**

The samples for lot # 98050 were received April 17<sup>th</sup> and inspected prior to analysis on April 28<sup>th</sup>. The samples were in a clean, dry, sealed, unpunctured, unstained brown cardboard shipping container. Samples for lots 98030 and 98040 were also enclosed in the shipping container. The packing material, one empty bottle box, was clean, dry, unpunctured and unstained. The bottles for lot 98050 were contained in pairs in five clean, dry, unsealed, unpunctured and unstained brown cardboard boxes, each labeled "Alcohol Reference Solution, Lot # 98050."

Each of the 10 bottles was shrink wrapped with clean, dry, unpunctured clear polyethylene. No moisture was observed under any of the shrink wrap. Each bottle was full to at least the shoulder with clear, debris free fluid. The inner cap seal of each bottle was intact upon opening.

The following bottle numbers were received:

- 0012
- 0013
- 0014
- 0953
- 0954
- 0955
- 1842
- 1843
- 1844
- 1845

Each bottle labeled contained the following information:

- White label
- Lot number
- 275 gallon lot
- 500 mL nom fill
- 3/24/98 manuf.
- 3/24/99 expire
- Bottle number

**SAMPLE PREPARATION**

Three autosampler vials of three aliquots each were prepared for each bottle. In accordance with established procedure, the sample bottles were sorted into a random order, as was the autosampler

vial preparation list. The pipettor/diluter delivered 400 uL internal standard (40% stop installed) and 100 uL sample (no stop installed). There were no incidents of note during the preparation.

#### **GAS CHROMATOGRAPHIC ANALYSIS**

The autosampler vials were put into the specified order for GC analysis in the instrument carousel. The established method, sequence and summary report were prepared for this lot of simulator solution. The analysis proceeded without incident.

#### **DATA PROCESSING**

The data were processed without incident. The specifications described in the Certificate of Analysis were met. Lot #98050 was approved for use in Florida.

TMW/hs