

SOUTH CAROLINA LAW ENFORCEMENT DIVISION

4400 BROAD RIVER ROAD
COLUMBIA, SOUTH CAROLINA 29210

POLICY #: 8.12.22	DATE: 09/01/93	REVISION DATE: 03/21/97
TITLE: IMPLIED CONSENT - SIMULATOR SOLUTION ANALYSIS		PAGE 1 OF 2

RESPONSIBLE AUTHORITY: SPECIAL AGENT IN CHARGE OF
FORENSIC SERVICES LABORATORY

RELATED STANDARDS/STATUTES/REFERENCES: S.C. Code of Laws, Section 56-5-2950
S.C. Code of Laws, Section 50-21-114
S.C. Code of Laws, Section 55-1-100
S.C. Code of Laws, Section 56-1-2130

GENERAL PURPOSE: To set forth policies for the administration of implied consent breath alcohol tests.

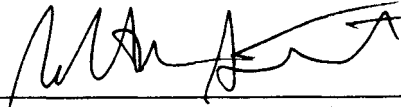
POLICY: The Division will establish procedures for properly conducting implied consent BAC DataMaster breath alcohol tests.

SPECIFIC PROCEDURES: Each new lot of simulator solution to be used with the BAC DataMaster will be analyzed by SLED using the analytical principle of headspace gas chromatography. The particular protocol selected will depend on the type of headspace gas chromatography instrumentation used to perform the testing and may be adapted to facilitate simulator solution analysis. The basic elements are:

- (1) Analysis is performed on an automated head-space gas chromatography system utilizing a minimum of 40 samples (1 internal standard blank, 15 ethanol standards, and 24 samples of simulator solution).
- (2) An internal standard quantitation method is utilized.
- (3) The instrument is calibrated prior to analysis of the solution. Typically, 0.10% ethanol standards, obtained from an independent source, are utilized. Other standard concentrations, obtained from an independent source, may also be utilized in the calibration. A minimum of 15 aliquots of each standard concentration is placed into the autosampler vials.
- (4) Two bottles of simulator solution of a particular lot are sampled with a minimum of 12 aliquots from each.
- (5) The average of the minimum 24 simulator solution readings should be 0.121 grams ethanol per 100 milliliters of solution plus or minus 5% (0.115% through 0.127%, inclusive).
- (6) The records of each completed analysis (hard copy and/or computer data) will be maintained for a minimum of three years.

- (7) Ethanol is the only volatile substance to be quantitatively analyzed. Others will be checked by a visual inspection of the chromatograms.

BY ORDER OF:



CHIEF OF SLED