

Florida Department of Law Enforcement Alcohol Testing Program

CERTIFICATE OF ASSURANCE

Alcohol Reference Solution Lot #: 2000-03C

Lot # 2000-03C Meets Department Standards

Ethanol Concentration: 0.2420 g/100mL

Lot Approved: April 12, 2000

Expected Breath Test Instrument Reading: 0.200 g/210L

Source: Alcohol Countermeasure Systems

The Florida Department of Law Enforcement Alcohol Testing Program (Department) assures that Florida citizens are provided with accurate, precise, and reliable breath alcohol tests for use in traffic court proceedings. Alcohol Reference Solution (ARS) used in Florida is prepared by the Department or by a source approved by the Department, and is an important part of the Department's assurance to Florida citizens and courts.

The Department tests newly manufactured ARS by gas chromatography to determine accuracy of preparation and uniformity within the lot. Lots meeting Department standards are approved for use in Florida. The gas chromatographic testing consists of the analysis of at least ten bottles of ARS in triplicate. Analysis of all ARS bottles must produce three valid test results. Individual test results are an estimate of the ARS ethanol concentration, and the average of the results is the best estimate of the ARS ethanol concentration.

Lots having 30 analytical determinations within the following acceptable ranges will be accurate and uniform within the lot and are approved for use in the State of Florida:

Vapor Alcohol Target Concentration (g/210L)	ARS Target (g/100mL)	ARS Acceptable Range (g/100mL)
0.050	0.0605	0.0586 to 0.0623
0.080	0.0968	0.0938 to 0.0997
0.200	0.2420	0.2347 to 0.2492

A lot meeting the above criteria has an alcohol concentration indistinguishable from an alcohol target concentration of 0.2420 g/100mL. It will provide a vapor alcohol reading at or between 0.190 g/210L to 0.210 g/210L when tested by a properly calibrated breath test instrument operated in compliance with Chapter 11D-8, F.A.C.

The ethanol concentrations (g/100mL) and descriptive statistics for lot 2000-03C are:

0.2452	0.2459	0.2460	0.2454	0.2464	0.2460	0.2458 g/100mL Average 0.0004 g/100mL standard deviation 0.2449 g/100mL minimum observation 0.2465 g/100mL maximum observation 30 observations
0.2456	0.2455	0.2460	0.2454	0.2455	0.2456	
0.2465	0.2461	0.2459	0.2458	0.2461	0.2454	
0.2449	0.2459	0.2453	0.2457	0.2463	0.2458	
0.2457	0.2452	0.2461	0.2463	0.2461	0.2457	

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Signature

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Title