



Florida Department of
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Rick Scott, *Governor*
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Jeff Atwater, *Chief Financial Officer*
Adam Putnam, *Commissioner of Agriculture*

MEMORANDUM

TO: Department Inspectors

FROM: Laura D. Barfield, Alcohol Testing Program Manager *LDB*

DATE: November 27, 2012

SUBJECT: CMI Inc. Intoxilyzer 8000 Instrumentation Evaluation Report – August 2006
Amended November 2012

Attached you will find the CMI, Inc. Intoxilyzer 8000 Instrumentation Evaluation Report dated November 25, 2006, and AMENDED on November 27, 2012. The report was originally generated using data obtained during the evaluation conducted on July 31 through August 1, 2006, in accordance with applicable rules and forms in effect at that time. The Purpose, Instrumentation Used and Conclusion sections of the report are being amended November 27, 2012, to document features/updates to the instrument that were also evaluated.

Based on the results of this evaluation:

- The CMI, Inc. Intoxilyzer 8000 remains approved for use as an evidentiary breath test instrument in the State of Florida;
- Originally evaluated January 4, 2006, software version 8100.26 has again been evaluated in accordance with Instrument Evaluation Procedures FDLE/ATP Form 34 Revised March 2004, and meets the requirements of Rule 11D-8.003(2), Florida Administrative Code; and
- The evaluated feature/update to the CMI, Inc. Intoxilyzer 8000 did not affect the accuracy and reliability of alcohol test results obtained. These feature/update included the following:
 - System Board Part Number 310338G.

If you have any questions, please feel free to contact me.

LDB

Attachments

**Florida Department of Law Enforcement
Alcohol Testing Program**

**CMI, Inc. Intoxilyzer 8000
Instrumentation Evaluation Report**

**Report Prepared November 25, 2006
AMENDED
November 27, 2012**

**July 31 and August 1, 2006
Ponte Vedra, Florida**

CMI, Inc. Intoxilyzer 8000
Instrumentation Evaluation Report
Conducted in Accordance with Chapter 11D-8, FAC March 2006 and corresponding
FDLE/ATP Form 34 Instrument Evaluation Procedures

Introduction

In order to be considered valid under Florida law, the analysis of a person's breath must have been administered substantially in accordance with methods and procedures approved by the Florida Department of Law Enforcement (FDLE), using instrumentation approved by FDLE. The FDLE Alcohol Testing Program has been granted specific and exclusive statutory authority to ensure the accuracy and reliability of breath alcohol test results and to approve breath test instrumentation and methods of breath analysis. The process for evaluation of breath test instrumentation for evidentiary use in Florida is prescribed by Chapter 11D-8, Florida Administrative Code.

Purpose

The CMI, Inc. Intoxilyzer 8000 was approved for evidentiary use by the Florida Department of Law Enforcement Alcohol Testing Program on November 5, 2002. The purpose of this evaluation is to assess the CMI, Inc. Intoxilyzer 8000, using infrared light absorption as the method of analysis and the following feature/update:

- System Board Part Number 310338G

The evaluation process ensures that the methodology utilized by the breath test instrumentation provides accurate and scientifically reliable analytical results. Evaluations are not intended to approve individual parts or components of the breath test instrumentation.

Testing Location and Operating Conditions

Testing Location: Sawgrass Marriott Resort
 1000 PGA Tour Boulevard
 Ponte Vedra, FL 32082

Operating Conditions: Indoors, 73 to 74⁰ F

FDLE Personnel Present During the Evaluation

Laura D. Barfield, Program Manager
Matthew E. Malhiot, Department Inspector
Dwite N. Hackney, Department Inspector
George L. Venturi, Department Inspector
Roger G. Skipper, Department Inspector
Donald P. Suereth, Department Inspector
Margaret M. Geddings, Department Inspector-In-Training (Observer)
Sandra G. Veiga, Department Inspector-In-Training (Observer)

Instrumentation Used

The following Intoxilyzer 8000 breath test instruments were provided on loan by the manufacturer, CMI, Inc.

- **CMI, Inc. Intoxilyzer 8000, Serial Number 80-001173** - Exhaust block assembly – hole in check valve; Four (4) rubber feet; No shrink wrap cover on the ends of the breath hose; No

room temperature vulcanization (RTV) applied to the power supply coils; No update to case mold - case part number(s) cover (top) 440980 and chassis (bottom) 440988; No update to ring detect capacitor – 0.047 Microfarad; 2MB memory storage capacity; Update to screw securing check valve housing in exhaust block assembly – 5mm screw; No update to system board - part number 310338E.

- **CMI, Inc. Intoxilyzer 8000, Serial Number 80-001175** – Exhaust block assembly – hole in check valve; Four (4) rubber feet; Shrink wrap cover on both ends of the breath hose; Room temperature vulcanization (RTV) applied to the power supply coils; Update to case mold - case part number(s) cover (top) 440980 Rev B and chassis (bottom) 440988 Rev A; Update to ring detect capacitor – 0.47 Microfarad; 2MB memory storage capacity; Update to screw securing check valve housing in exhaust block assembly – 5mm screw; Update to system board - part number 310338G.

Instrumentation Description

- Make and Model Designation: CMI, Inc. Intoxilyzer 8000, listed on the US Department of Transportation Conforming Products List of Evidential Breath Measurement Devices.
- Method of Analysis: Non-dispersive infrared light absorption.
- Software Version: 8100.26
- Description of Instrumentation: An infrared-based instrument designed for both mobile and stationary evidential breath alcohol testing.
- Specification for Precision: Average Standard deviation of 0.003 g/210L or better.
- Response Prescribed to Denote an Interferent: Display INTERFERENT DETECT and a high/low tone will sound.
- Response Prescribed to Denote Mouth Alcohol: Display SLOPE NOT MET and a high/low tone will sound.

Equipment and Supplies

Reference Sample Devices (Simulators)

All simulators were operated within 34 ± 0.2 C and had air leak resistant seals. The make, model and serial number of each simulator is outlined in Appendix A.

Digital Thermometer

The make, model and serial number of the digital thermometer is outlined in Appendix A.

External Printers

The make, model and serial number of each external printer is outlined in Appendix A.

Standards, Solutions, and Deionized Water

All alcohol reference solutions were analyzed by the Florida Department of Law Enforcement in accordance with Rule 11D-8.0035(2)(a), FAC. The dry gas standard was prepared and certified by Scott Specialty Gases, Inc. The results of the alcohol reference solution analyses and the certified concentration of the dry gas standard are outlined in Appendix B. Acetone Stock Solution, Lot Numbers 2005-D and 2006-D, and Mouth Alcohol Solution, Lot Numbers 2006-A and 2006-B, prepared and analyzed by the Florida Department of Law Enforcement were used for the acetone interference tests and the mouth alcohol tests, respectively. Deionized water obtained from the FDLE Tallahassee Regional Operations Center Laboratory was analyzed by gas chromatography prior to the evaluation.

Other Supplies

All other supplies and equipment used were commercially available and compatible with this type of instrumentation (printer tape, mouthpieces, tubing, office supplies, etc.).

Procedures

0.00 g/210L Test, Acetone Interference Test and Mouth Alcohol Test

The Intoxilyzer 8000 instrumentation was subjected to twenty-five (25) repetitions of a 0.00 g/210L test, twenty-five (25) repetitions of an acetone interference test, and twenty-five repetitions of a mouth alcohol test. The results are outlined in Appendix C-1 and Appendix C-2.

Alcohol Reference Solution Analyses

The Intoxilyzer 8000 instrumentation was subjected to twenty-five (25) repetitions of alcohol reference solution analyses at each of the following concentrations: 0.05, 0.08, 0.20 g/210L. The results are outlined in Appendix C-1 and Appendix C-2.

Dry Gas Standard Analyses

The Intoxilyzer 8000 instrumentation was subjected to twenty-five (25) repetitions of dry gas standard analyses at the following concentration: 0.08 g/210L. The results are outlined in Appendix C-1 and Appendix C-2.

Analytical Results

All results met the requirements of FDLE/ATP Form 34 Instrument Evaluation Procedures for accuracy, precision, and correct instrument responses as prescribed by the manufacturer.

Conclusion

The results of this evaluation establish that the CMI, Inc. Intoxilyzer 8000 evidentiary breath test instrument, using software version 8100.26 and the feature/update identified above, produces accurate and reliable breath alcohol test results.

Based on the results of this evaluation:

- (1) The CMI, Inc. Intoxilyzer 8000 remains approved for use as an evidentiary breath test instrument in the State of Florida;
- (2) Originally evaluated January 4, 2006, software version 8100.26 has again been evaluated in accordance with Instrument Evaluation Procedures FDLE/ATP Form 34 Revised March 2004, and meets the requirements of Rule 11D-8.003(2), Florida Administrative Code; and
- (3) The evaluated feature/update to the CMI, Inc. Intoxilyzer 8000 did not affect the accuracy and reliability of alcohol test results obtained. This feature/update included the following:
 - System Board Part Number 310338G.

APPENDIX A

External Equipment

Reference Sample Devices (Simulators)

Make	Model	Serial Number
Repco Marketing	3402-2K	2235
Repco Marketing	3402-2K	2236
Repco Marketing	3402-2K	2237
Repco Marketing	3402-2K	2238
Repco Marketing	3402-2K	2239
Guth	10-4D	SD1011
Guth	10-4D	SD1018
Guth	10-4D	SD1022
Guth	34C	G2840
Guth	34C	G2883

Digital Thermometers

Make	Model	Serial Number
Ertco-Eutechnics	4400	300504

External Printers

Make	Model	Serial Number
Samsung	ML1750	BAA303716R
Brother	HL5240	5J239707

APPENDIX B

Alcohol Reference Solution

	0.05 g/210L (g/100mL)	0.08 g/210L (g/100mL)	0.20 g/210L (g/100mL)
Source	Alcohol Countermeasure Systems, Inc.	Alcohol Countermeasure Systems, Inc.	Alcohol Countermeasure Systems, Inc.
Lot Number	200509A	200509B	200509C
Manufacture Date	9/22/2005	9/22/2005	9/22/2005
Expiration Date	9/22/2007	9/22/2007	9/22/2007
Approval Date	11/17/2005	11/17/2005	11/17/2005
Target Concentration (g/100mL)	0.0605	0.0968	0.2420
Acceptable Range (g/100mL)	0.0586 to 0.0623	0.0938 to 0.0997	0.2347 to 0.2492
1	0.0604	0.0973	0.2457
2	0.0598	0.0976	0.2459
3	0.0604	0.0978	0.2473
4	0.0603	0.0987	0.2444
5	0.0600	0.0982	0.2456
6	0.0601	0.0972	0.2446
7	0.0603	0.0972	0.2456
8	0.0604	0.0980	0.2459
9	0.0599	0.0981	0.2462
10	0.0595	0.0976	0.2456
11	0.0600	0.0971	0.2464
12	0.0601	0.0973	0.2458
13	0.0594	0.0972	0.2451
14	0.0595	0.0968	0.2448
15	0.0596	0.0977	0.2455
16	0.0609	0.0972	0.2453
17	0.0593	0.0979	0.2467
18	0.0600	0.0970	0.2461
19	0.0596	0.0972	0.2460
20	0.0598	0.0973	0.2474
Mean	0.0600	0.0975	0.2458
Std Dev	0.0004	0.0005	0.0008
Minimum	0.0593	0.0968	0.2444
Maximum	0.0609	0.0987	0.2474

Dry Gas Standard

Manufacturer	Lot Number	Expiration Date	Certified Concentration
Scott Specialty Gases, Inc.	6188011	July 10, 2008	0.080 g/210L

APPENDIX C-1

Analytical Results

Intoxilyzer 8000 S.N. 80-001173

	0.00 g/210L Test (g/210L)	0.05 g/210L Test (g/210L)	0.08 g/210L Test (g/210L)	0.20 g/210L Test (g/210L)	0.08 g/210L (g/210L) Dry Gas Std Test	Acetone Interference Test * = Interferent Detect	Mouth Alcohol Test * = Slope Not Met
1	0.000	0.048	0.079	0.200	0.079	INT*	SNM*
2	0.000	0.049	0.078	0.200	0.078	INT*	SNM*
3	0.000	0.049	0.078	0.198	0.079	INT*	SNM*
4	0.000	0.048	0.079	0.199	0.079	INT*	SNM*
5	0.000	0.048	0.078	0.197	0.079	INT*	SNM*
6	0.000	0.048	0.078	0.197	0.079	INT*	SNM*
7	0.000	0.048	0.078	0.197	0.079	INT*	SNM*
8	0.000	0.048	0.078	0.196	0.079	INT*	SNM*
9	0.000	0.048	0.078	0.196	0.079	INT*	SNM*
10	0.000	0.048	0.079	0.196	0.080	INT*	SNM*
11	0.000	0.048	0.078	0.196	0.079	INT*	SNM*
12	0.000	0.048	0.078	0.195	0.079	INT*	SNM*
13	0.000	0.048	0.078	0.196	0.079	INT*	SNM*
14	0.000	0.049	0.078	0.196	0.080	INT*	SNM*
15	0.000	0.048	0.078	0.196	0.079	INT*	SNM*
16	0.000	0.048	0.077	0.195	0.079	INT*	SNM*
17	0.000	0.048	0.079	0.195	0.079	INT*	SNM*
18	0.000	0.048	0.079	0.195	0.079	INT*/PUR ¹	SNM*
19	0.000	0.048	0.078	0.196	0.079	INT*	SNM*
20	0.000	0.049	0.078	0.195	0.079	INT*	SNM*
21	0.000	0.048	0.078	0.196	0.079	INT*	SNM*
22	0.000	0.048	0.078	0.196	0.079	INT*	SNM*
23	0.000	0.048	0.078	0.196	0.080	INT*	SNM*
24	0.000	0.048	0.079	0.195	0.080	INT*	SNM*
25	0.000	0.048	0.079	0.196	0.080	INT*	SNM*
26						INT*	
27						INT*	
28						INT*	
Mean		0.048	0.078	0.196	0.079		
Std Dev		0.0004	0.0005	0.0014	0.0005		
Minimum		0.048	0.077	0.195	0.078		
Maximum		0.049	0.079	0.200	0.080		

Average Standard Deviation: 0.0007

¹Failed to purge due to ambient saturation. Area cleared and testing continued.

APPENDIX C-2
Analytical Results
Intoxilyzer 8000 S.N. 80-001175

	0.00 g/210L Test (g/210L)	0.05 g/210L Test (g/210L)	0.08 g/210L Test (g/210L)	0.20 g/210L Test (g/210L)	0.08 g/210L (g/210L) Dry Gas Std Test	Acetone Interference Test * = Interferent Detect	Mouth Alcohol Test * = Slope Not Met
1	0.000	0.049	0.084	0.198	0.079	INT*	SNM*
2	0.000	0.050	0.083	0.198	0.079	INT*	SNM*
3	0.000	0.050	0.082	0.198	0.079	INT*	SNM*
4	0.000	0.050	0.082	0.199	0.079	INT*	SNM*
5	0.000	0.050	0.083	0.199	0.079	INT*	SNM*
6	0.000	0.050	0.083	0.199	0.079	INT*	SNM*
7	0.000	0.050	0.083	0.199	0.079	INT*	SNM*
8	0.000	0.051	0.082	0.199	0.079	INT*	SNM*
9	0.000	0.050	0.083	0.197	0.080	INT*	SNM*
10	0.000	0.050	0.082	0.197	0.079	INT*	SNM*
11	0.000	0.050	0.082	0.196	0.080	INT*	SNM*
12	0.000	0.050	0.082	0.197	0.080	INT*	SNM*
13	0.000	0.050	0.082	0.197	0.080	INT*	SNM*
14	0.000	0.050	0.082	0.197	0.079	INT*	SNM*
15	0.000	0.050	0.082	0.197	0.080	INT*	SNM*
16	0.000	0.051	0.082	0.199	0.079	INT*	SNM*
17	0.000	0.050	0.082	0.198	0.079	INT*	SNM*
18	0.000	0.050	0.082	0.199	0.080	INT*	SNM*
19	0.000	0.050	0.082	0.199	0.080	INT*	SNM*
20	0.000	0.050	0.082	0.198	0.080	INT*	SNM*
21	0.000	0.050	0.082	0.199	0.079	INT*	SNM*
22	0.000	0.050	0.082	0.198	0.080	INT*	SNM*
23	0.000	0.050	0.082	0.199	0.080	INT*	SNM*
24	0.000	0.050	0.082	0.199	0.080	INT*	SNM*
25	0.000	0.051	0.082	0.199	0.080	INT*	SNM*
Mean		0.050	0.082	0.198	0.079		
Std Dev		0.0004	0.0005	0.0009	0.0005		
Minimum		0.049	0.082	0.196	0.079		
Maximum		0.051	0.084	0.199	0.080		

Average Standard Deviation: 0.0006