



Florida Department of
Law Enforcement

Guy M. Tunnell
Commissioner

**Criminal Justice
Professionalism Program
Alcohol Testing Program**

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MEMORANDUM

TO: Alcohol Testing Program Department Inspectors

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

DATE: February 10, 2005

SUBJECT: CMI, Inc. Intoxilyzer 8000 Instrumentation Evaluation - April 2002

Attached you will find the CMI, Inc. Intoxilyzer 8000 Instrumentation Evaluation Report dated July 29, 2002. The report was generated using data obtained during evaluations conducted on April 30, 2002, in accordance with applicable rules and forms in effect at that time.

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

LDB

Attachments

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

**Evaluation Conducted April 30, 2002
Tampa, Florida
Florida Department of Law Enforcement
Alcohol Testing Program**



Florida Department of
Law Enforcement

Alcohol Testing Program

700 South Babcock Street
Suite 401
Melbourne, FL 32901
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James T. "Tim" Moore
Commissioner

July 29, 2002

MEMORANDUM

TO: Laura Barfield, Program Manager

FROM: Roger Skipper, Regional Inspector

A handwritten signature in black ink, appearing to be "R. Skipper", is written over the "FROM:" line. The signature is enclosed in a large, loopy circle.

SUBJECT: Approval Evaluation of Intoxilyzer Model 8000
Serial Numbers 80-000208 and 80-000209

Attached are the results of the approval evaluation for the Intoxilyzer 8000 model breath testing instrument conducted on April 30, 2002.

RGS/rgs

atch: narrative, data sheets

**INSTRUMENT EVALUATION
INTOXILYZER MODEL 8000
APRIL 30, 2002**

GENERAL:

On April 30, 2002, the FDLE Alcohol Testing Program conducted an evaluation of the CMI Inc. Intoxilyzer 8000[®] Breath Test Instrument as part of the approval process for use in the State of Florida. The evaluation was conducted at the Tampa Regional Operations Center, Florida Department of Law Enforcement, 4211-A Lois Avenue, Tampa Florida, 33614. The evaluation followed the protocols required by the applicable rules and forms. Additional procedures to ensure the reliability of the results are also listed. Participating members and equipment and supplies used are noted where appropriate.

MEMBERS PRESENT:

Rafael Madrigal, Assistant General Counsel (Madrigal)
John Cooper, Regional Inspector (Cooper)
Dwite Hackney, Regional Inspector (Hackney)
Matthew Malhiot, Regional Inspector (Malhiot)
Warren Sanger, Regional Inspector (Sanger)
Roger Skipper, Regional Inspector (Skipper, Evaluation Coordinator)
Donald Suereth, Regional Inspector (Suereth)

INSTRUMENT EVALUATED:

Intoxilyzer Model 8000, serial numbers 80-000208 and 80-000209.

AUTHORITY AND PROTOCOL:

Florida Statutes 316, 322 and 327
Chapter 11D-8, Florida Administrative Code
FDLE/ATP Form 34, Instrument Evaluation Procedures

EQUIPMENT AND SUPPLIES USED:

Reference Sample Devices (Simulators):

Guth Model 104-D serial numbers SD1011, SD1016, SD1010, SD1026, SD1009, SD1013, SD1012, SD1014, SD1017, SD1019.

Guth Model 34C serial numbers G2407, G2406, G2880, G2878.

Guth Model 210021 serial number DR1279.

Digital Thermometers:

ERTCO-Euthechnics Model 4400 serial numbers 300505, 300948, 300502, 300504, 300949, 300918.

ALCOHOL REFERENCE SOLUTIONS:

VALUE	LOT#	EXP. DATE	BOTTLE#
0.02	200201D	01/23/04	00208/00211/00202
0.05	200203B	03/26/04	00234/00243
0.08	200203C	03/26/04	00095/00105
0.15*	N/A	N/A	10/12
0.20	200203D	03/26/02	00345/00344
0.30*	N/A	N/A	8/10
0.40	200107B	07/12/03	00029/00036

ACETONE STOCK SOLUTION:

N/A	2001A	N/A	N/A
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ALCOHOL STOCK SOLUTION

N/A	2001D	N/A	N/A
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ALCOHOL DRY GAS REFERENCE STANDARDS:

0.05	211602I	04/29/04	N/A
0.08	210201I	04/15/04	N/A
0.20	211601I	04/29/04	N/A

Alcohol reference solutions were manufactured by Alcohol Countermeasure Systems™ or by Laura Barfield, Program Manager, Alcohol Testing Program (designated by *). Scotty Specialty Gases manufactured dry gas reference standards™. Laura Barfield manufactured alcohol and acetone stock solutions. All solutions were analyzed and/or approved by Laura Barfield, Program Manager.

Distilled water used was produced by Laboratory Services, Florida Department of Law Enforcement, Tampa, Florida. A sufficient quantity was preserved for analysis by Laura Barfield, Program Manager.

OTHER SUPPLIES AND EQUIPMENT:

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

PROCESS:

1. At 8:00 A.M., Skipper conducted a briefing with all personnel participating in the evaluation. The following procedures were discussed and implemented:
 - a. All simulators used were checked for temperature and airtight seal prior to use. Simulators used were recorded.
 - b. FDLE/ATP Form 34 was read and each step discussed.
 - c. D. Hackney was assigned to monitor room temperature.
 - d. All testing solutions and gases were recorded.
 - e. Instrument operation was briefed and demonstrated.
 - f. Instruments were turned on and prepared for testing. Each instrument was allowed to warm up for a minimum of thirty minutes.
 - g. Simulators were prepared and allowed to warm up for a minimum of thirty minutes.
 - h. A diagnostic test, printer test, and evidential breath test were conducted on each instrument.
 - i. A minimum of fifty simulator tests at each solution value were conducted on each instrument. Refer to narrative and data sheets for results and/or exceptions.
 - j. A minimum of fifty mouth alcohol tests were conducted on each instrument. Refer to narrative and data sheets for results and/or exceptions.
 - k. The process was suspended from 1:35 P.M. to 1:55 P.M. for lunch.
 - l. The process was concluded at 10:00 P.M.
 - m. Access to the room was monitored at all times by Alcohol Testing Program personnel. All inspectors reviewed all test results. Madrigal was present and observed, but did not participate in the actual testing process.
 - n. The temperature of the testing room was checked every thirty minutes. The minimum temperature recorded was 68.40°F, and the maximum temperature recorded was 71.08°F.

EXCEPTIONS.

INSTRUMENT 80-000208:

1. The breath test affidavit failed to print completely on the first evidential breath test with external printer attached. On the second test, the affidavit printed correctly. Probable cause: software.
2. Three exceptions occurred during the mouth alcohol tests. On sample #5, the sample was introduced at the wrong time, on sample #12, the sample was introduced improperly, and on sample #35, a cell phone was used next to the instrument, causing a radio interference flag.
3. During the 0.20 simulator tests, the results were noted to be consistently dropping in value. After the 20th sample, a 0.40 simulator was attached. The results for this simulator were low and erratic. All connections were checked. It was then noted that air was being drawn in through the breath tube at the same time that a sample was being taken from the simulator. Blocking the breath tube resulted in closer to target values. This is symptomatic of a failed one-way valve. Testing was terminated at this point.

INSTRUMENT 80-000209:

1. One exception occurred during the mouth alcohol tests. On sample #48, the sample was introduced improperly.
2. During the 0.02 simulator tests, the instrument reported interferent at simulator sample #42. During simulator sample #44, the instrument reported interferent and an alcohol reading during the subsequent airblank. Testing was suspended and the room checked for sources of interferents. The instrument was purged for 15 minutes. The instrument reported interferent when none was known to be present for two more 0.02 samples and for three 0.05 simulator samples. Mr. Toby Hall, CMI Inc., was contacted for guidance. He attributed the exceptions to software failure. Testing was terminated.

TEST DATA SHEET FOR INSTRUMENT SERIAL NUMBER 80-000208 04/30/2002

Test #	0.00	0.00A	0.02	0.05	0.08	0.15	0.20	0.30	0.40	MOU/ALCO
1	0.000	0.000*	0.020	0.048	0.080	0.150	0.196	NOTE 2	0.329	YES
2	0.000	0.000*	0.020	0.048	0.081	0.150	0.196		0.352	YES
3	0.000	0.000*	0.020	0.049	0.082	0.151	0.196		0.331	YES
4	0.000	0.000*	0.020	0.050	0.082	0.151	0.196		0.364	YES
5	0.000	0.000*	0.020	0.049	0.081	0.151	0.195		0.248	NO ¹
6	0.000	0.000*	0.020	0.048	0.082	0.152	0.195		0.156	YES
7	0.000	0.000*	0.020	0.049	0.082	0.152	0.195		0.331	YES
8	0.000	0.000*	0.020	0.049	0.081	0.151	0.194		0.320	YES
9	0.000	0.000*	0.019	0.049	0.082	0.151	0.193		0.322	YES
10	0.000	0.000*	0.019	0.049	0.081	0.150	0.192		0.308	YES
11	0.000	0.000*	0.020	0.049	0.082	0.151	0.192		0.322	YES
12	0.000	0.000*	0.019	0.048	0.081	0.151	0.192		0.323	NO ²
13	0.000	0.000*	0.018	0.049	0.082	0.151	0.192		0.326	YES
14	0.000	0.000*	0.018	0.050	0.082	0.151	0.191		0.327	YES
15	0.000	0.000*	0.019	0.049	0.081	0.152	0.192		0.329	YES
16	0.000	0.000*	0.019	0.049	0.081	0.151	0.192		0.328	YES
17	0.000	0.000*	0.018	0.049	0.082	0.151	0.192		0.385	YES
18	0.000	0.000*	0.017	0.050	0.082	0.151	0.192		0.375	YES
19	0.000	0.000*	0.018	0.050	0.081	0.152	0.193		0.386	YES
20	0.000	0.000*	0.017	0.050	0.082	0.152	0.191		0.389	YES
21	0.000	0.000*	0.014	0.049	0.081	0.151	NOTE 1		NOTE 1	YES
22	0.000	0.000*	0.015	0.049	0.081	0.152				YES
23	0.000	0.000*	0.019	0.049	0.081	0.152				YES
24	0.000	0.000*	0.019	0.049	0.082	0.151				YES
25	0.000	0.000*	0.019	0.049	0.081	0.151				YES
26	0.000	0.000*	0.019	0.050	0.081	0.152				YES
27	0.000	0.000*	0.019	0.050	0.082	0.152				YES
28	0.000	0.000*	0.019	0.049	0.082	0.152				YES
29	0.000	0.000*	0.019	0.050	0.080	0.152				YES
30	0.000	0.000*	0.019	0.048	0.081	0.151				YES
31	0.000	0.000*	0.019	0.050	0.081	0.152				YES
32	0.000	0.000*	0.019	0.049	0.082	0.152				YES
33	0.000	0.000*	0.019	0.049	0.081	0.151				YES

34	0.000	0.000*	0.019	0.050	0.081	0.151	YES
35	0.000	0.000*	0.019	0.050	0.082	0.152	NO ³
36	0.000	0.000*	0.019	0.050	0.082	0.152	YES
37	0.000	0.000*	0.019	0.049	0.082	0.152	YES
38	0.000	0.000*	0.018	0.049	0.082	0.151	YES
39	0.000	0.000*	0.020	0.050	0.081	0.152	YES
40	0.000	0.000*	0.020	0.050	0.081	0.151	YES
41	0.000	0.000*	0.018	0.050	0.081	0.150	YES
42	0.000	0.000*	0.019	0.049	0.081	0.152	YES
43	0.000	0.000*	0.019	0.049	0.080	0.152	YES
44	0.000	0.000*	0.019	0.049	0.082	0.151	YES
45	0.000	0.000*	0.019	0.049	0.082	0.152	YES
46	0.000	0.000*	0.020	0.051	0.081	0.152	YES
47	0.000	0.000*	0.019	0.050	0.081	0.150	YES
48	0.000	0.000*	0.019	0.050	0.081	0.152	YES
49	0.000	0.000*	0.019	0.050	0.081	0.152	YES
50	0.000	0.000*	0.019	0.050	0.082	0.152	YES
51			0.019				YES
52							YES
53							YES

ASD: 0.0009 0.0005 0.0005 0.0005 0.0006

* = Interferent Detected

ASD = Average Standard Deviation

NOTE 1: Testing stopped

NOTE 2: Testing not conducted

NO¹ = Sample introduced at wrong time

NO² = Sample introduced improperly

NO³ = RFI detected(cell phone)

Testing not completed on 0.20, 0.30, and 0.40 ethanol simulator tests due to valve failure.
Please see attached narrative.

TEST C SHEET FOR INSTRUMENT SERIAL NUMBER 80-000209 04/2002

TEST #	0.00	0.00A	0.02	0.05	0.08	0.15	0.20	0.30	0.40	MOU/ALCO
1	0.000	0.000*	0.020	NOTE 1	NOTE 4	NOTE 4	NOTE 4	0.288	0.390	YES
2	0.000	0.000*	0.020	0.049				0.291	0.392	YES
3	0.000	0.000*	0.020	0.050				0.290	0.391	YES
4	0.000	0.000*	0.019	0.049				0.291	0.391	YES
5	0.000	0.000*	0.020	0.000				0.290	0.392	YES
6	0.000	0.000*	0.019	NOTE 1				0.292	0.391	YES
7	0.000	0.000*	0.019	0.048				0.292	0.392	YES
8	0.000	0.000*	0.020	0.048				0.291	0.390	YES
9	0.000	0.000*	0.020	0.049				0.292	0.391	YES
10	0.000	0.000*	0.020	0.050				0.292	0.390	YES
11	0.000	0.000*	0.019	0.050				0.291	0.391	YES
12	0.000	0.000*	0.019	0.049				0.292	0.390	YES
13	0.000	0.000*	0.019	0.049				0.292	0.390	YES
14	0.000	0.000*	0.019	0.049				0.292	0.390	YES
15	0.000	0.000*	0.019	0.050				0.292	0.392	YES
16	0.000	0.000*	0.019	0.048				0.292	0.390	YES
17	0.000	0.000*	0.018	0.000				0.292	0.390	YES
18	0.000	0.000*	0.019	0.049				0.293	0.390	YES
19	0.000	0.000*	0.019	0.048				0.293	0.392	YES
20	0.000	0.000*	0.019	0.049				0.292	0.391	YES
21	0.000	0.000*	0.019	0.050				0.290	0.389	YES
22	0.000	0.000*	0.018	0.050				0.291	0.389	YES
23	0.000	0.000*	0.018	0.048				0.292	0.389	YES
24	0.000	0.000*	0.019	0.050				0.293	0.390	YES
25	0.000	0.000*	0.020	0.050				0.293	0.390	YES
26	0.000	0.000*	0.019	0.050				0.294	0.390	YES
27	0.000	0.000*	0.019	0.051				0.295	0.390	YES
28	0.000	0.000*	0.019	0.049				0.293	0.391	YES
29	0.000	0.000*	0.019	0.050				0.294	0.390	YES
30	0.000	0.000*	0.018	0.048				0.294	0.389	YES
31	0.000	0.000*	0.018	0.049				0.293	0.391	YES
32	0.000	0.000*	0.019	0.049				0.295	0.391	YES
33	0.000	0.000*	0.019	NOTE 1				0.295	0.388	YES
34	0.000	0.000*	0.019	49.000				0.294	0.389	YES
35	0.000	0.000*	0.019	0.049				0.294	0.389	YES
36	0.000	0.000*	0.019	0.049				0.293	0.389	YES
37	0.000	0.000*	0.020	0.049				0.294	0.390	YES
38	0.000	0.000*	0.019	NOTE 3				0.293	0.388	YES
39	0.000	0.000*	0.019					0.294	0.387	YES
40	0.000	0.000*	0.019					0.293	0.388	YES
41	0.000	0.000*	0.018					0.288	0.387	YES
42	0.000	0.000*	NOTE 1					0.293	0.388	YES

43	0.000	0.000*	0.018	0.294	0.389	YES
44	0.000	0.000*	NOTE 1/2	0.294	0.390	YES
45	0.000	0.000*	0.018	0.296	0.390	YES
46	0.000	0.000*	0.018	0.294	0.390	YES
47	0.000	0.000*	0.018	0.294	0.390	YES
48	0.000	0.000*	0.018	0.295	0.390	NO ¹
49	0.000	0.000*	NOTE 1	0.294	0.389	YES
50	0.000	0.000*	0.000	0.296	0.388	YES
51			NOTE 2			YES
52			NOTE 3			
53						

ASD: 0.0015 0.0009

ASD = Average Standard Deviation

NOTE 1: Interferent Detected, no result given

NOTE 2: ETOH reading after airblank

NOTE 3: Simulator tests stopped, see narrative

NOTE 4: Simulator tests not conducted, see narrative

NO¹ = Sample introduced improperly