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SENT VIA ELECTRONIC MAIL: kristen.sullivan@massmail.state.ma.us

September 12, 2017

Kristen Sullivan
Laboratory Director
Massachusetts State Police Crime Laboratory
124 Acton St.
Maynard, MA 01754

Re: Freedom of Information Request: Annual Certification - Written Protocol

Dear Ms. Sullivan,

Pursuant to the Freedom of Information provisions of Federal Law set out in 5 U.S.C. 552, and set forth in Massachusetts General Laws chapter 4 § 7, chapter 66, and chapter 66A, and chapter 121 of the 2016 Session Laws, please provide the following:

1. A copy of any and all protocols and/or procedures utlized by the Office of Alcohol Testing for the annual certification and/or calibration of any and all breathalyzer devices employed in Massachusetts prior to the implementation of the Draeger Alcotest 9510 in Massachusetts.

Thank you for your assistance in this matter. Please feel free to send the requested materials electronically to my email address. Should you have any questions or concerns, please do not hesitate to contact my office.

Sincerely,

Joseph D. Bernard (emb)

Joseph D. Bernard
JDB/emb

The Commonwealth of Massachusetts
Department of State Police

CHARLES D. BAKER
GOVERNOR

KARYN E. POLITO
LIEUTENANT GOVERNOR

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124 Acton Street
Maynard, Massachusetts 01754
Phone 978.451.3300 Facsimile 978.451.3301

September 26, 2017

Joseph Bernard, Esq.
One Monarch Place, Suite 1100
Springfield, MA 01103
VIA ELECTRONIC MAIL (joe@bernardatlaw.com)

Dear Attorney Bernard,

The Massachusetts State Police ("Department") has received your September 12, 2017 request for any and all protocols and or procedures utilized by the Office of Alcohol Testing for the annual certification and/or calibration of any and all breathalyzer devices employed in Massachusetts prior to the implementation of the Draeger Alcotest 9510 in Massachusetts. The Department considers your request pursuant to G.L. c.66, §10, the Massachusetts Public Records Law.

Enclosed please find the responsive documents I could locate pursuant to your request. Deputy Laboratory Director Albert Elian located "Certification Procedure for the Alcotest 7110 MKIII-C & CU34 3.2007 and a 13 page Draft Protocol Version 1.5 Certification Procedure for the Alcotest 7110 MKIII-C & CU34, dated 5/19/2010. None of the prior drafts of the former could be located despite the revision history. Further enclosed is an un-dated Certification Procedure for the Alcotest 7110 MKIII-C & CU34. Lastly, a 6.2011 certification procedure for the Alcotest 9510 was located during the search for responsive records. Melissa O'Meara and Daniel Renczkowski have informed me that neither of them utilized this document and are unaware of date and author of this document.

If you object to this response, you may appeal to the Supervisor of Records in accordance with M.G.L. c. 66, §10(b) and 950 CMR 32.00. Please do not hesitate to contact me with any questions or concerns. There will be no charge for production of these documents.

Sincerely,
Kerry A. Collins
Kerry A. Collins
Legal Counsel

DEVAL L. PATRICK
GOVERNOR

TIMOTHY P. MURRAY
LIEUTENANT GOVERNOR

KEVIN M. BURKE
SECRETARY

COLONEL MARK F. DELANEY
SUPERINTENDENT

The Commonwealth of Massachusetts

Department of State Police

Office of Alcohol Testing
31 Macarthur Avenue
Devens, Massachusetts 01434
Tel 978.392.4050 Fax 978.392.4030

Certification Procedure for the Alcotest 7110 MKIII-C & CU34

Instrumentation is scanned into the office upon arrival.

The programming parameters below are set on all new instrumentation:

SIM-EQULIB=2
STND-CONFIG, Abs-Tol = 0.010 and Relative Tolerance=7%
SIM-POWER (Check the space bar toggles power on and off.)

The annual certification procedure includes the following:

VERSION (Record version. Upgrade to current version if applicable)
SET-CLOCK (Check date and time are correct)
PRINTOUT=3
SOLN-TESTS=255
SOLN-DAYS=182

Insert the black calibration key.
Initiate the PROBE function and adjust to 100.
Initiate the SIMTEMP function.
CALIBRATE the instrument using a 0.100% calibration standard approved or manufactured by OAT.
Initiate the STND-CHECK function using a 0.100% calibration standard approved or manufactured by OAT with a lot number different from the lot number utilized to CALIBRATE the instrument.
Initiate the EBT-CERT function to check the instrument calibration using 0.300%, 0.200%, 0.080% and 0.020% ethanol standard solutions approved or manufactured by OAT.
Check the probe value using an external water bath.
Fill the simulator with 500 mL of H2O. Heat the water for a minimum of 30 minutes. Check the temperature of the water utilizing an external thermometer. Adjust the temperature, if necessary, to read 34° C.
Initiate the SIM-CERT function to check the simulator calibration using a 0.155% ethanol standard solution approved or manufactured by OAT.
Initiate the ABA function using the 0.155% ethanol standard solution approved or manufactured by OAT.

Upgrade the computer software, instrument firmware, location of instrument, and instrument database, if necessary.

3/2007, Updated 7/2008, Updated 10/2008, Updated 11/2009, Updated 12/2009

MASSACHUSETTS STATE POLICE
FORENSIC SERVICES GROUP

Certification Procedure for the Alcotest 7110 MKIII-C & CU34

Version 1.5

TABLE OF CONTENTS

1 PURPOSE

The purpose of this document is to outline the annual certification procedure for the Alcotest 7110 MKIII-C and the CU34 simulator used for breath testing pursuant to MGL 90-24K and 501 CMR 2.00 et seq.

2 DEFINITIONS

2.1 Calibration Solution

2.1.1 The 0.100% ethanol solution used to calibrate and check the calibration MKIII-C. The solution is heated to 34°C (+/- 1°C) prior to use.

2.2 Certification Solution

2.2.1 The 0.020%, 0.080%, 0.200% and 0.300% ethanol solutions The solutions are heated to 34°C (+/- 1°C) prior to use.

2.3 Simulator Solution

2.3.1 A 0.155% ethanol solution. The solution is heated to 34°C (+/- 1°C) prior to use.

2.4 Calibrate

2.4.1 The process used to calibrate the IR & EC detectors using a calibration solution.

2.5 STND-CHECK – Standard Check

2.5.1 The process that initiates three (3) tests using a calibration solution. This process must utilize a different calibration standard than that used for the calibration process.

2.6 EBT-CERT – Evidential Breath Test Instrument Certification

2.6.1 The process that certifies the BT or instrument.

2.7 SIM-CERT – Simulator Certification

2.7.1 The process that certifies the simulator.

2.8 ABA – Air Breath Air

2.8.1 The process that tests a sample through the breath hose.

2.9 Reagents

2.10 Reagent Preparation

2.11 Equipment

3 INTAKE AND RETURN

3.1 Intake

3.1.1 Instrumentation will be visually inspected upon receiptUpdate the instrument at location to OAT.

3.2 Return

3.2.1 Update the instrument location to the assigned department after the certification process has been completed.

3.3 Repairs

3.3.1 Update the instrument location to reflect the location of the repair facility.

4 PREPARATION

4.1 Instrumentation Set-Up

4.1.1 Connect printer, keyboard, PC and power cord to breath test instrument (BT) and turn on.

4.2 Firmware VERSION Check

4.2.1 Review and confirm the firmware version.

4.2.1.1 Install the correct version.

4.2.1.2 If the version is not correct, see (Diagnostic & Repair).

4.2.2 *Enter Service Notes:*

4.3 SET-CLOCK

4.3.1 INSERT white key

4.3.1.1 Set current date and time

4.3.2 Enter *Service Notes:*

4.3.3 REMOVE white key

5 DIAGNOSTIC CHECK

5.1 STND-CHECK – Standard Check

5.1.1 Initiate: STND-CHECK process

5.1.2 Review: Standard check report.

5.1.3 Enter *Service Notes:*

6 CALIBRATION/ADJUSTMENT

6.1 PROBE

6.1.1 Insert black key.

6.1.2 Initiate: PROBE process

6.1.2.1 Set Probe Value to 100

6.1.3 Confirm temperature is 34.0° ± 0.05° C

6.1.3.1 See Diagnostic & Repair process if temperature is out of range.

6.1.4 Enter *Service Notes.*

6.2 SIMTEMP – Simulator Temperature

6.2.1 Initiate: SIMTEMP process

6.2.1.1 Confirm OFFSET is set between 1827-1887 and GAIN is set at 2687.

6.2.2 Auto-adjust

6.2.3 Confirm Temperature is 34.0° ± 0.03° C

6.2.3.1 Repeat section 6.2.4 once, if the temperature is outside the acceptable tolerances. See Diagnostic & Repair If it fails a second time.

6.2.4 Enter*Service Notes.*

6.3 CALIBRATE

6.3.1 Initiate: CALIBRATE process

6.3.1.1 Enter: 0.100 as the concentration of the calibration solution

6.3.2 Enter *Service Notes:*

6.4 STND-CHECK – Standard Check

6.4.1 Initiate: STND-CHECK process

6.4.2 The standard check results are within acceptable tolerances if:

1) The individual results fall between 0.095%-0.105%.
2) The IR results of the three (3) analyses agree within ±0.005
3) The EC results of the three (3) analyses agree within ±0.005
4) The IR & EC results of each analysis agree within ±0.005

6.4.3 Review: Standard check results.

6.4.4 Enter *Service Notes:*

6.4.4.1 Repeat section 6.3 once if the Standard Check results are outside the acceptable tolerances. Refer to the Diagnostic & Repair process if the Standard Check fails a second time.

6.4.5 Turn off the instrument .

7 CERTIFICATION PROCESS

7.1 EBT-CERT – Evidential Breath Test Instrument Certification

7.1.1 Turn on the instrument.

7.1.2 Initiate the EBT-CERT process

Confirm the instrument calibration using ethanol standard solutions approved or manufactured by OAT. The instrument will be certified only if all the IR results are within the acceptable tolerances provided in the table below:

Concentration	Number of Tests	Acceptable Tolerances +/- 0.01%
0.020 %	Three	0.017% - 0.023%
0.080 %	Three	0.077% - 0.083 %
0.200 %	Three	0.197% - 0.203 %
0.300 %	One	0.295 % - 0.305 %

7.1.3 Refer to the Diagnostic & Repair process if any of the results are outside the acceptable tolerances. .

7.2 PROBE

7.2.1 Connect the assigned simulator and temperature probe to the instrument.

7.2.2 Initiate the PROBE process.

7.2.2.1 Adjust the probe value until you obtain a reading of 34.0°C.

7.2.2.2 Refer to the Diagnostic & Repair process.if 34.0°C cannot be achieved.

7.2.3 Record the probe value.

7.2.4 Enter *Service Notes:*

7.2.5 Turn the instrument off.

7.3 SIM-CERT

7.3.1 Turn on the instrument.

7.3.2 Initiate the SIM-CERT process.

7.3.2.1 Confirm the simulator calibration using an ethanol standard solution approved or manufactured by OAT. The simulator will be certified only if all the IR results are within the acceptable tolerances provided in the table below.

Concentration	Acceptable Tolerances (+/- 0.010%)
0.155%	0.145%-0.165%

7.3.3 Refer to the Diagnostic & Repair process if any of the results are outside the acceptable tolerances.

7.4 ABA

7.4.1 Initiate the ABA process

7.4.1.1 Initiate a Breath Test through the breath hose.

7.5 BT Review Process

7.5.1 Review printouts for accuracy prior to certification

7.5.2 The Reviewer

7.5.2.1 A Chemist must perform this review and must be different from the analyst.

7.5.3 The Review

7.5.3.1 Verify the following information on the printouts:

1. Firmware Version
2. Serial Number
3. Location Name
4. Date
5. Test Types Performed

7.5.3.2 Verify that all test results are within the acceptable tolerances.

7.5.3.3 Certify the BT if no errors are detected.

7.5.3.4 A Supervisor must be consulted if the reviewer disagrees with the analyst. The Supervisor will determine if the certification procedure is complete or if further testing is required.

7.5.3.5 It is the responsibility of the analyst to ensure the review has been completed and the breath test instrument has been certified prior to the instrument being returned to the department.

7.6 BT Certification

7.6.1 Certify the instrument if all the IR results are within the acceptable tolerances.

7.6.2 Refer to the Diagnostic & Repair process, if any of the results are outside the acceptable tolerances.

7.6.3 Review the ABA report.

7.6.4 Enter Service Notes.

7.6.5 Turn the instrument off.

7.7 Additional Requirements

7.7.1 The parameters below are performed at the end of the certification process only if necessary:

Location of the instrument to the assigned department Operator database update, Computer software upgrade

7.8 New Equipment Settings

7.8.1 The programming parameters below are set on all new instruments:

SIM-EQULIB = 2 (unless the police department indicates otherwise.).
STND-CONFIG, Abs-Tol = 0.010 and Relative Tolerance = 7%
SIM-POWER (Check the space bar toggles power on and off to the simulator.)

7.8.2 Departmental / Environmental Variables

PRINTOUT = 3 (unless the police department indicates otherwise).
SIM-EQULIB=2

8 REFERENCES

Dubowski, Kurt M. (1979). Breath-Alcohol Simulators: Scientific Basis and Actual Performance. *Journal of Analytical Toxicology, Volume 3*, pg. 177-182.

9 REVISION HISTORY

REVISION DATE	VERSION	APPROVAL	TOTAL PAGES	REVISION
3/2007	1.0	BBO	1	Original
7/2008	1.1	BBO	1	SOLN-DAYS changed. ABA added.
10/2008	1.2	BBO	1	Solution approved or manufactured by OAT.
11/2009	1.3	BBO	1	Separation of parameters for new BTs vs. annual certification procedure. More detailed EBT-CERT and SIM-CERT explanation.
12/2009	1.4	BBO	1	More detailed STND-CHECK explanation.

10 AUTHORIZATION

Approved by:

_____ _____

Director - Office of Alcohol Testing Date

The Commonwealth of Massachusetts
Department of State Police

DEVAL L. PATRICK
GOVERNOR

TIMOTHY P. MURRAY
LIEUTENANT GOVERNOR

KEVIN M. BURKE
SECRETARY

COLONEL MARK F. DELANEY
SUPERINTENDENT

Office of Alcohol Testing
31 Macarthur Avenue
Devens, Massachusetts 01434
Tel 978.392.4050 Fax 978.392.4030

Certification Procedure for the Alcotest 7110 MKIII-C & CU34

There are several steps performed during the certification process.

The instrumentation is scanned into the office upon arrival. The parameters listed below are checked:

SOLN-TESTS=255
SOLN-DAYS=182
SIM-EQULIB=2
STND-CONFIG, Abs-Tol = 0.010 and Relative Tolerance=7%
SIM-POWER (Check the space bar toggles power on and off.)
SET-CLOCK (Check date and time are correct)
VERSION (Record version. Upgrade to current version if applicable)

Insert the black calibration key.
Adjust PROBE to 100.
Perform SIMTEMP.
CALIBRATE the instrument using a 0.100% calibration standard manufactured by OAT.
Perform STND-CHECK.
Perform EBT-CERT using a 0.300%, 0.200%, 0.080% and 0.020% standard solution manufactured by OAT.
Check PROBE value using an external water bath.
Perform SIM-CERT using a 0.155% standard solution manufactured by OAT.

Upgrade computer software, instrument firmware, location of instrument, instrument clock and instrument database if necessary.

DEVAL L. PATRICK
GOVERNOR

TIMOTHY P. MURRAY
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MARY ELIZABETH HEFFERNAN
SECRETARY

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SUPERINTENDENT

The Commonwealth of Massachusetts

Department of State Police

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Certification Procedure for the Alcotest 9510

All instrumentation is to be inventoried upon arrival at the Office of Alcohol Testing (OAT).

New instrumentation:

Initial set-up is required for all new instrumentation.

1. Update operating system, measurement system firmware and configuration files.
2. Enable instrument.
3. Set printer settings to 1.
4. Add department location.
5. Select department location.
6. Enter/ confirm department network address.
7. Enter the following external standard parameters:
   - -Tol. Abs. = 0.010
   - -Tol. Rel. = 7.0 %
8. Enter/ confirm CommHub address and transfer rate.
9. Download Breath Test Operator Database.
10. Set Leakage Detection to 15.

Annual certification procedure:

1. Insert Access Key
2. Check Firmware Version (Print version. Upgrade to current version, if applicable.)
3. Set Date and Time to current.
4. Update IP address.
5. Set Barometric Pressure.
6. Calibrate the instrument.
7. Check the calibration of the instrument.
   - If test results are not within 0.095%-0.105%, repeat step 6.
   - If test results are not within 0.095%-0.105% after the second calibration, set the instrument aside for 24 hours. Otherwise, proceed to step 8.
8. Test the instrument using 0.100% dry gas via inlet 1.
   - If test results are not within 0.098%-0.102%, adjust the EC drygas offset and the drygas % for the calgas inlet.
9. Test the instrument using 0.400% solution via the cuvette.
   - If test results are not within 0.392%-0.408%, adjust the EC quadratic correction factor and the IR slope multiplier.
10. Test the instrument using 0.200% dry gas via inlet 1.
11. Test the instrument using 0.080% dry gas via inlet 1.

12. Test the instrument using 0.020% dry gas via inlet 2.
13. Test the instrument using 0.080% solution via the breath hose.
14. Check transducer for connectivity.
15. Update BT Certification Date.
16. Update IP address to respective department.
17. Remove Access Key.

All instrumentation is to be inventoried upon distribution from the Office of Alcohol Testing (OAT).