DATAMASTER DMT

INSTRUMENT SUPERVISOR

&

RECORD ADMINISTRATOR

MANUAL

August 2011

The information provided in this manual is not designed to make the DataMaster DMT Supervisor or Record Administrator an expert on the DataMaster DMT. This manual will familiarize the Supervisor and Record Administrator with the instrument in order to perform simple maintenance and repairs and to provide copies of records as needed. An understanding of mechanics, optics, and electronics is not required to perform simple maintenance and repairs on the DataMaster DMT.

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SECTION I

LOCATION AND PERSONNEL REQUIREMENTS

DATAMASTER DMT LOCATION REQUIREMENTS

An instrument cannot be installed for evidentiary use at a location unless the host agency agrees to the following:

- Provide personnel to be trained as and available to perform the duties of a DataMaster DMT Supervisor and Record Administrator. The Supervisor will assume the duties of the Record Administrator if a second individual is not available.
- Keep a complete record of use and maintenance and, when required, submit copies of records to DataMaster Technical Services or other requesting agencies.
- Maintain the instrument and surrounding area in which it is installed according to the initial specifications and any subsequent modifications required by DataMaster Technical Services.

DataMaster Technical Services may withdraw approval of a site if:

- The host agency has failed to adhere to the conditions listed above.
- The instrument is being underutilized.
- There are reason(s) which makes the site unsatisfactory for continued DataMaster DMT use.

ACCESS

- The DataMaster DMT should never be accessible to unsupervised, unauthorized persons.
- Access by appropriate personnel and certified law enforcement officers for maintenance and processing DUI subjects should be allowed 24 hours a day seven days a week.
- Only trained DataMaster DMT Supervisors and designated personnel may perform maintenance on an instrument.

CLEANING and VENTILATION

- The instrument and surrounding area should be kept clean with little or no dust or dirt accumulation.
- The instrument cover and supporting surface may be cleaned with a damp cloth.
- Cleaning supplies, paint, paint supplies and other chemicals should not be stored near the instrument.
- The room should have adequate ventilation to facilitate cooling of the instrument and minimize the presence of potentially interfering substances.
- Nothing should be placed behind or around the instrument that would obstruct ventilation of the instrument.
- Beverages or other liquids should not be placed on or in the immediate area of the instrument.

MOVING AN INSTRUMENT

- Contact DataMaster Technical Services if there is a need to move an instrument beyond the length of the power cord.

POWER REQUIREMENTS

- Power to the DataMaster DMT should be provided from a low use 15 amp minimum, grounded 120 VAC ± 10% line which operates at a frequency of 60HZ.
- The DataMaster DMT is to be plugged into the supplied line conditioner or an approved uninterruptible power supply (UPS).

PRINTER MAINTENANCE

- Each agency is responsible for ensuring that a complete set of replacement printer cartridges, print heads and paper are available at all times.
- Contact DataMaster Technical Services with questions regarding replacement, sharing or networking printers.

SUPPORTING SURFACE

- The supporting surface should be solid, level and at a comfortable working height for operators.
- Minimum surface dimensions should be 36 inches wide by 24 inches deep to support the instrument and accompanying printer.
- Some locations may require the instrument be bolted to the supporting surface.

STORAGE SPACE

- Adequate storage space for logbooks and processing supplies should be provided close to the instrument.

TELEPHONE ACCESS

- A dedicated phone line or analog phone line extension is recommended to be connected to the DataMaster DMT. This would allow DataMaster Technical Services remote access to the instrument.
- An existing phone line cannot go through dispatch, a switchboard, or be transferred.
- Contact DataMaster Technical Services for more information and specifications.

TEMPERATURE REQUIREMENTS

- The room temperature should be maintained between 65ºF and 78ºF and humidity between 30-50% while using the DataMaster DMT.
- A fan, dehumidifier, heater or air conditioner may be used to control the room temperature and humidity; however nothing should be blowing directly on the instrument.

ACCESS LEVELS

Operator Level: **No Password Required.**
Administer DUI and Check-In breath tests.
Copy last breath report generated.

Administrator Level: **Password Required.**
Access to all options available to an Operator.
Set Date and Time.
Reprint breath reports not accessible when using the copy button.
Print copies of reports in response to discovery requests.
Generate “History Reports”.
Export data as needed.

Supervisor Level: **Password Required.**
Access to all options available to Operators and Administrators.
Perform “Simulator Solution Change”.
Perform “Routine Performance Check”.
Perform “Diagnostic Test”.
Perform “Accuracy and Precision Test”.
View read-only Technician Screen.
Purge the Sample Chamber
Remove/Return instrument to service

Technician Level: **Only available to DataMaster Technical Services.**

LOG ON / LOG OFF PROCEDURE

After selecting a protocol or procedure, the instrument will prompt the user to enter a password. Once a password is entered, the Home screen will display the access level in the lower right corner. Always log off when finished with the instrument.

To log on, you may also:

LOG ON:

1. Touch the screen to deactivate the screen saver.
2. Touch the DataMaster DMT logo in the top left corner of the screen to open the drop-down menu.
3. Select “Security” →”Enter Password”.
4. Enter password.

LOG OFF:

1. Touch the screen to deactivate the screen saver.
2. Touch the DataMaster DMT logo in the top left corner of the screen to open the drop-down menu.
3. Select “Security” →”Log Off”.

SECTION II

RECORD ADMINISTRATION

DUTIES OF THE DATAMASTER DMT RECORD ADMINISTRATOR

DataMaster DMT Record Administrators will not be responsible for, or trained in maintenance or repairs on the DataMaster DMT. A DataMaster Supervisor will complete the duties of a Record Administrator when a second individual is not available.

REPRINT COPIES OF BREATH REPORTS

PROVIDE MONTHLY UPDATES AND RESPOND TO DISCOVERY REQUESTS

DOWNLOAD OR EXPORT DATA

DataMaster DMT Record Administrators may periodically be requested to manually export data from the DMT. This request would come from DataMaster Technical Services and therefore will come with instructions.

REPRINTING SUBJECT TESTS

- If no other tests have been run, an exact duplicate of the last test performed may be reprinted by pressing the “COPY” button. This button is available to all operators.
- Record Administrators may retrieve previous evidentiary breath reports by accessing the “Reports” menu

1. Touch the screen to deactivate the screen saver.
2. Touch the DataMaster DMT logo in the top left corner of the screen to open the drop-down menu.
3. Select “Reports”.
4. Enter password.
5. On the right side of the screen, scroll down to “Breath Records”
6. Touch the + symbol next to “Breath Records” to open the drop-down list of breath reports.
7. Open the report(s) for the date in question by touching the date or the + next to the date.
8. Select the desired breath report by highlighting the time on the right side of the screen.
9. When you have selected the breath report in question, press “Print”.
10. You will be given the options of printing a paper copy, printing an electronic copy to a USB storage device or both. Select the printing method desired and press “Okay”.
    - If you print to a USB data storage device, power the instrument off / on once the device is removed.
11. Exit and Log off.

PROCESSING MONTHLY UPDATES AND DISCOVERY REQUESTS

- At the beginning of each month all records generated during the previous month in connection with the DataMaster DMT should be sent to your local State's Attorney's Office. This includes:
    - Photocopies of Operator Use logbook (Alc 603) (if used in your county) and Check Up and Maintenance logbook (Alc 803) for the previous month.
    - Copies of any generated reports (ex: RPC, Simulator Solution Change).
    - Print-outs of instrument Status Record, Log On Record, and Breath Record History reports.
    - Any other DMT related materials generated over the previous month.
- If you receive a discovery request, you may refer the requestor to the State's Attorney's Office for copies of documents that have been previously provided.
- Refer to Appendix A for a check list of available documents which may be used when providing monthly updates.

REPRINTING REPORTS

1. Touch the screen to deactivate the screen saver.
2. Touch the DataMaster DMT logo in the top left corner of the screen to open the drop-down menu.
3. Select "Reports".
4. Enter password.
5. The right side of the screen lists all records stored on the instrument sorted by type.
6. Touch the + symbol next to a report type to open the drop-down list of reports sorted by date and time.
7. If more than one record was generated on a date, open the reports for the date in question by touching the + next to the date.
8. Select the desired report by highlighting it on the right side of the screen. The report highlighted will be displayed on the left side of the screen.
9. When you have selected the report desired, press "Print".
10. You will be given the options of printing a paper copy, printing an electronic copy to a USB storage device or both. Select the printing method desired and press "Okay".
    - If you print to a USB data storage device, power the instrument off / on once the device is removed.
11. Exit and Log off when all printing is complete.

PRINTING HISTORY REPORTS

1. Touch the screen to deactivate the screen saver.
2. Touch the DataMaster DMT logo in the top left corner of the screen to open the drop-down menu.
3. Select “Reports”.
4. Enter password.
5. Touch the DataMaster DMT logo in the top left corner of the Reports screen to open the history report drop-down menu.
    a. Select “Breath Record History”.
    b. Uncheck the “All Dates” box.
        i. If you leave the “All Dates” box checked, it will print out the entire history of the unit from activation by DataMaster Technical Services through the present.
    c. Enter the dates for the data range to be printed.
    d. Press “Print”.
    e. You will be given the options of printing a paper copy, printing an electronic copy to a USB storage device or both. Select the printing method desired and press “Okay”.
        i. If you print to a USB data storage device, power the instrument off/on once the device is removed.
    f. Repeat steps b. through e. for the “Status Record History” and “Log On History” reports.
6. See Appendices B, C and D for examples.

SECTION III

SUPERVISOR FUNCTIONS

DUTIES OF THE DATAMASTER DMT SUPERVISOR

DataMaster DMT Supervisors will also assume the duties of a Record Administrator if another individual is not available.

MAINTAIN REPORTS, RECORDS AND LOGS

- The DataMaster DMT Supervisor will ensure the following logbooks provided by DataMaster Technical Services are kept complete:
  - Operator Use Logbook (Alc 603) (if used in your county).
  - Check Up and Maintenance Logbook (Alc 803).
- The Supervisor will ensure all generated reports are filed in the DataMaster DMT documents binder.

MAINTAIN INSTRUMENT SECURITY

- The supervisory functions of the DataMaster DMT should not be accessible to unauthorized persons at any time. If you step away from the instrument, ***Log Off.***
- Do not give out password, security screwdriver or simulator key.

PERFORM SIMPLE MAINTENANCE

- Perform Simulator Solution Change when necessary (see page 15).
- Replace printer ink cartridges, print heads and paper.
- Correct date and/or time discrepancies (see page 21).
- Repair or correct errors and problems as needed (see Section V page 28).

PERFORM ROUTINE PERFORMANCE CHECK

- The DataMaster DMT Supervisor shall perform Routine Performance Checks during the months of **February, June, and October**.
- For additional instructions concerning the Routine Performance Check (RPC) see page 17.

MAINTAIN DATAMASTER SUPPLIES

- DataMaster mouthpieces and simulator solution may be obtained by contacting DataMaster Technical Services. A shipment will be sent as soon as practical.
- All empty or expired bottles of solution should be returned to DataMaster Technical Services.
- Do not stockpile DataMaster supplies.

SUPPORT DATAMASTER OPERATORS

- Assisting DataMaster Operators: Refer to the *DataMaster DMT Infrared Breath Testing Manual.*

DATAMASTER TECHNICAL SERVICES NOTIFICATION TIME FRAMES:

- DataMaster Technical Services should be notified **AS SOON AS POSSIBLE** of any service needs.
- Two weeks advance notice should be given if there is a need to move an instrument beyond the length of the power cord.
- Two weeks advanced notice should be given if building renovations will result in modification to an existing DataMaster location.
- In the event of an emergency or a natural disaster (e.g. flood, extreme cold, major building damage, etc.), if the DMT can be moved without compromising safety, please move instrument to a secure location.

SIMULATOR SOLUTION

- When a new simulator solution is added, the certified concentration of the solution is entered into the DMT. The instrument will calculate a ±5% acceptance range based on this concentration. If, while running a test, the simulator result is beyond ±5%, the instrument will display the error “Simulator Out of Range” and will not allow a subject sample to be provided until a passing simulator result is attained.
- DataMaster DMT Supervisors should periodically check the documented simulator vapor result in the Operator Use Logbook (Alc 603) (if used in your county). If the solution appears to be nearing the -5% value, the Supervisor should perform a simulator solution change.
- Each bottle of simulator solution is labeled with the lot number, certified value, acceptable range, preparation date and expiration date. When changing solutions, use the oldest solutions first.

SIMULATOR SOLUTION CHANGE

1. Gather supplies: a bottle of simulator solution and a few paper towels.
    a. Ensure the solution is not expired. The expiration date means that the solution must be placed in service prior to that date. It does not mean that the solution has to be removed by that date.
2. Unplug the simulator. Unlock the arms from around the simulator head.
3. Disconnect the BNC connector and the quick connects from the simulator vapor ports. (See figure 4, page 26)
4. Unscrew the simulator head from the simulator jar.
5. Discard the used simulator solution.
6. Using a clean paper towel, carefully wipe the simulator head mechanism and wipe the jar dry.
7. Inspect the simulator O-ring and jar for damage.
8. Pour the new simulator solution into the jar, avoid splashing and glugging.
9. Replace the simulator head. Ensure the simulator jar is properly threaded to the simulator head. It should be snug. Do not over tighten.
10. Plug the simulator in. Ensure the paddle is rotating.
11. Reconnect the BNC connector and reconnect the quick connects on the simulator head to the simulator tower.
12. Lock the arms around the simulator head.
13. Affix one simulator solution label to the top of the simulator head.
14. Touch the screen to deactivate the screen saver.
15. Touch the DataMaster DMT logo in the top left corner of the screen to open the drop-down menu.

16. Select “Protocols” →”Simulator Solution Change”.
17. Enter password.
18. Enter your name, the solution concentration and the lot number in the required fields. Press “Okay”.
19. The DMT will count down from 30 minutes while the solution comes to temperature. The instrument will automatically begin its checks once the timer has concluded.
20. Accuracy and Precision Check.
    a. Five replicates of the Simulator Vapor will be analyzed.
    b. The instrument will calculate a ±5% acceptance range of the simulator solution based on the certified value entered. If the average is not within ±5% the DMT will abort the test, see page 32: “Simulator Out of Range”.
    c. The calculated standard deviation must be less than 0.0020. If it is greater than 0.0020 the DMT will abort the test, see page 33: “Standard Deviation Out of Range”.
21. Once the Simulator Solution Change is complete the instrument will prompt for the Supervisor’s signature. Sign the box and press “Accept” to complete.
22. File with your onsite DMT maintenance records. If any failing reports are generated prior to receiving a passing Simulator Solution Change, those should be kept with the passing report.
23. Log Off.
24. Affix the remaining simulator solution label to the Check Up and Maintenance Logbook [Alc 803]. Under the label write “Simulator Solution Change”. Write your name and date where indicated.
25. In the Operators Logbook (Alc 603) (if used in your county) write your name and date. Under “Subjects Name”, write “TEST/Simulator Solution Change” and the average result from the Accuracy and Precision Check under “Simulator Vapor 1”.

See Appendix E for an example of a Simulator Solution Change Report.

ROUTINE PERFORMANCE CHECK

The DataMaster DMT Supervisor shall perform Routine Performance Checks during the months of **February, June, and October** of each year. A reminder will be displayed on the DataMaster DMT "Ready, Push Run" screen during the months of February, June and October. The reminder states "*Routine Performance Check Now Due*". If the Routine Performance Check is not completed before the end of the required month, the instrument will automatically be removed from service until such time as a passing RPC is completed. The instrument will display "*Routine Performance Check Required*".

1. Gather Supplies:
    a. A bottle of Simulator Solution.
        i. Ensure the solution is not expired. The expiration date means that the solution must be placed in service prior to that date. It does not mean that the solution has to be removed by that date.
    b. A handheld portable radio.
    c. A mouthpiece.
2. Unplug the simulator. Unlock the arms from around the simulator head.
3. Disconnect the BNC connector and the quick connects from the simulator vapor ports. (See page 26, figure 4).
4. Unscrew the simulator head from the simulator jar.
5. Discard the used simulator solution.
6. Using a clean paper towel, carefully wipe the simulator head mechanism and wipe the jar dry.
7. Inspect the simulator O-ring and jar for damage.
8. Pour the new simulator solution into the jar, avoid splashing and glugging.
9. Replace the simulator head. Ensure the simulator jar is properly threaded to the simulator head. It should be snug. Do not over tighten.
10. Plug the simulator in. Ensure the paddle is rotating.
11. Reconnect the BNC connector and reconnect the quick connects on the simulator head to the simulator tower.
12. Lock the arms around the simulator head.
13. Affix one simulator solution label to the top of the simulator head.
14. Touch the screen to deactivate the screen saver.
15. Touch the DataMaster DMT logo in the top left corner of the screen to open the drop-down menu.
16. Select "Protocols" →Routine Performance Check.
17. Enter password.
18. Enter your name, the solution concentration and the lot number in the required fields. Press OK.

19. The DMT will count down from 30 minutes while the solution comes to temperature. The instrument will automatically begin its checks once the timer is exhausted.

20. Diagnostic Check.

a. The instrument will perform a self test of components to ensure proper operation and specifications are met.

b. If any of the specifications are out of range, the DMT will abort the test.

21. Accuracy and Precision Check.

a. Five replicates of the Simulator Vapor will be analyzed.

b. The instrument will calculate a ±5% acceptance range of the simulator solution based on the certified value entered. If the average is not within ±5% the DMT will abort the test, see page 32: “Simulator Out of Range”.

c. The calculated standard deviation must be less than 0.0020. If it is greater than 0.0020 the DMT will abort the test, see page 27: “Standard Deviation Out of Range”.

22. Radio Frequency Detection Test.

a. A box will appear on the screen saying “RF Detection Test”, “Detector Voltage” and the actual voltage numbers will be displayed.

b. **If your agency DOES NOT have a console radio, skip to step c.** If your agency has a console radio, have dispatch key all routinely used frequencies.

i. The DataMaster DMT should **NOT** detect radio frequency during the console radio test.

ii. The detector voltage should **NOT** shift by more than 0.003V.

- If the detector voltage shifts by more than 0.003V and Radio Frequency is **NOT** detected, press Cancel to abort the test, remove the instrument from service and contact DataMaster Technical Services.

iii. If the DataMaster DMT detects a frequency from the console radio, it will move on to step 23, the Sample Acceptance test. This is **ACCEPTABLE.** The Handheld Radio frequency transmitter test will be skipped at this point.

- Once the RPC Protocol is complete, perform a Check-In breath test. On the data entry screen, enter “RPC TEST” for the first name and “RF TEST” for the last name.
- When the instrument prompts “Please Blow”, finish the RF detection test by following step c below. Attach the Check-In report to the RPC report.
- Note on the RPC report “Console radio caused RF detection”.

c. Key a handheld radio in close proximity to the breath tube.

i. The detector voltage should change significantly and the DMT should report RF Detected. The instrument will beep and will immediately move on to the Sample Acceptance test.

ii. If the detector voltage shifts by more than 0.003V and Radio Frequency is **NOT** detected, press Cancel to abort the test, remove the instrument from service and contact DataMaster Technical Services.

23. Sample Acceptance Test.

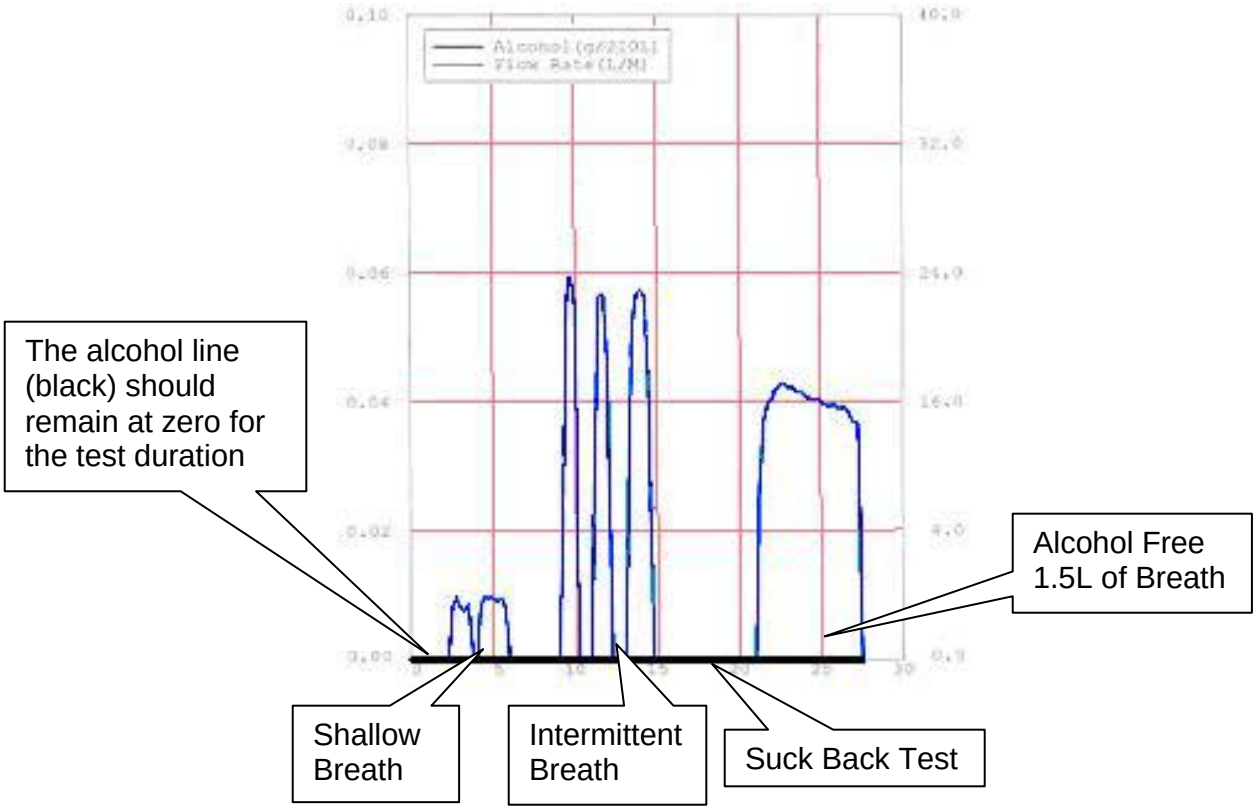
a. Press “OK” when you are ready to start the test.

b. The DMT will run through a series of quality control checks.

c. When prompted “Please Blow” and an intermittent tone is heard, insert a new mouthpiece into the breath tube.

d. A proper Sample Acceptance Test consists of 4 types of air flow; a shallow breath; intermittent breath; a suck back test; and a valid, alcohol-free sample. During the testing sequence, the bottom left corner of the screen will display each instruction for 15 seconds for each type of breath. It may not be necessary to use the entire 15 seconds per sample type. Once complete, a proper Sample Acceptance Test graph should look like the one below.

Figure 1: Proper Sample Acceptance Test



- **Shallow Breath**: Very lightly blow a small amount of air into the mouth piece, allowing some air to escape out the sides of your mouth. The air flow should be very slight, but strong enough to just register air flow (blue line) on the screen. Blow for a few seconds then stop. The instrument should **not** report an alcohol response (black line) and should **not** accept the sample.
- **Intermittent Breath**: Strongly blow into the mouth piece for 1-2 seconds and stop a couple of times. Be careful not to suck back on the mouth piece

between puffs of air. The instrument should **not** report an alcohol response (black line) and should **not** accept the sample.

- **Suck Back Test**: **VERY GENTLY** suck back on the mouth piece just enough so you feel a one-way valve stop the air flow (less than one second of pressure). If you suck too hard, you may damage the one-way valve. Once you feel this one way valve hit, you are finished. **Do not continue to suck back on the breath tube. Once is enough.** The instrument should **not** report an alcohol response (black line) and should **not** accept the sample.
- **1.5L Alcohol Free Sample:** While watching the total volume box in the bottom right corner of the screen, provide a sample of 1.5L to 1.7L of air to the instrument. The instrument should accept a sample that is greater than 1.5L of air. The instrument should **not** report an alcohol response.
- **If any elevation of the alcohol line above 0 is visible, rerun the Sample Acceptance Test.**

e. Once the last sample has been provided to the instrument, it will end the testing sequence.

f. A box will pop up asking “Did Instrument Pass All Sample Acceptance Checks? Yes/No”

i. If one of the first three breaths (shallow, intermittent or suck-back) was accepted by the instrument as a valid breath (meaning it ended the testing sequence) the test is considered failing.

ii. If a response is noted on the alcohol line, the test is considered failing.

iii. If the sample Acceptance test fails, select “No”. The instrument will then prompt the operator to enter a reason for the failure. Contact DataMaster Technical Services for assistance.

24. Once the RPC is complete the instrument will prompt for the Supervisor’s signature. Sign the box and press “Accept” when complete. The report will print in duplicate.

a. File one copy with your onsite DataMaster DMT records. If any failing reports are generated prior to receiving a passing RPC, those should be kept with the passing RPC.

b. Send one copy of the RPC Report(s) to DataMaster Technical Services. If any failing reports are generated prior to receiving a passing RPC, those should also be sent to DataMaster Technical Services. A reason for the failure should be documented on the report.

c. **DataMaster Technical Services will only accept color copies or color scans**.

25. Log Off.

26. Affix the remaining simulator solution label to the Check Up and Maintenance Logbook [Alc 803]. Under the label write “Routine Performance Check” or “RPC”. Write your name and date where indicated.

27. In the Operators Logbook (Alc 603) (if used in your county) write you name and date. Under “Subjects Name” write “TEST/RPC” and the average result from the Accuracy and Precision Check under “Simulator Vapor 1”.

See Appendix F for an example of a Routine Performance Check Report.

SET DATE AND TIME

- The DataMaster DMT automatically corrects for daylight savings and leap year.
- There are two methods available to change the date or time:
  1. Touch the screen to deactivate the screen saver.
  2. Double tap on the date/time field in the upper right corner of the screen.
  3. Enter password.
  4. A box will pop up allowing you to select the date and adjust the time.
  5. Once complete, press “Apply” to save the settings.
  6. Exit and Log Off.

OR

  1. Touch the screen to deactivate the screen saver.
  2. Touch the DataMaster DMT logo in the top left corner of the screen to open the drop-down menu.
  3. Select “Functions” →”Set Date/Time”.
  4. Enter password.
  5. A box will pop up allowing you to select the date and adjust the time.
  6. Once complete, press “Apply” to save the settings.
  7. Exit and Log Off.

DIAGNOSTIC TEST

- As a method for troubleshooting, the Supervisor may need to perform a Diagnostic Test on the DMT.
- The Diagnostic Test checks software, hardware, optics and mechanical function.
- To perform a Diagnostic Test:
  1. Touch the screen to deactivate the screen saver.
  2. Touch the DataMaster DMT logo in the top left corner of the screen to open the drop-down menu.
  3. Select “Diagnostic”.
  4. Enter password.
  5. Once the test is complete and the report prints, Log Off.
- See Appendix D for an example of a Diagnostic Report.

ACCURACY AND PRECISION CHECK

- As a method for troubleshooting, the Supervisor may need to perform an Accuracy and Precision Check on the DMT.
- The Accuracy and Precision Check will run ten replicate samples of the Simulator Vapor and report the average concentration and standard deviation of the results.
- To perform an Accuracy and Precision Check:
  1. Touch the screen to deactivate the screen saver.
  2. Touch the DataMaster DMT logo in the top left corner of the screen to open the drop-down menu.
  3. Select “Accuracy and Precision”.
  4. Enter password.
  5. Once the test is complete and the report prints, Log Off.
- See Appendix E for an example of an Accuracy and Precision Check Report.

TECHNICIAN SCREEN

- As a method for troubleshooting, DataMaster Technical Services may request the Supervisor to access the Technician Screen and relay information to a Technician.
- The Technician Screen displays voltage, temperature and filter settings for the DMT.
- To access the Technician Screen:
  1. Touch the screen to deactivate the screen saver.
  2. Touch the DataMaster DMT logo in the top left corner of the screen to open the drop-down menu.
  3. Select “Technician Mode”.
  4. Enter password.
  5. When finished, Exit and Log Off.

PURGE SAMPLE CHAMBER

- As a method for troubleshooting, the Supervisor may need to purge the sample chamber.
- To purge the sample chamber:
  1. Touch the screen to deactivate the screen saver.
  2. Touch the DataMaster DMT logo in the top left corner of the screen to open the drop-down menu.
  3. Select “Functions” → ”Purge Sample Chamber”.
  4. Enter Password.
  5. Allow the instrument to purge for 1-2 minutes unless otherwise instructed.
  6. Exit and Log Off.

REMOVE FROM SERVICE / RETURN TO SERVICE

- To remove an instrument from service:
  1. Touch the screen to deactivate the screen saver.
  2. Touch the DataMaster DMT logo in the top left corner of the screen to open the drop-down menu.
  3. Select “Functions” →”Remove From Service”.
  4. Enter password.
  5. The screen will now display “Not in service” in the bottom left corner of the screen where “Ready, Push Run” would be.
  6. Log Off.

- To return the instrument to service:
  1. Touch the screen to deactivate the screen saver.
  2. Touch the DataMaster DMT logo in the top left corner of the screen to open the drop-down menu.
  3. Select “Functions” →”Return to Service”.
  4. Enter password.
  5. The screen will now display “Ready, Push Run” in the bottom left corner.
  6. Log Off.

SECTION IV

COMPONENTS

EXTERNAL COMPONENTS

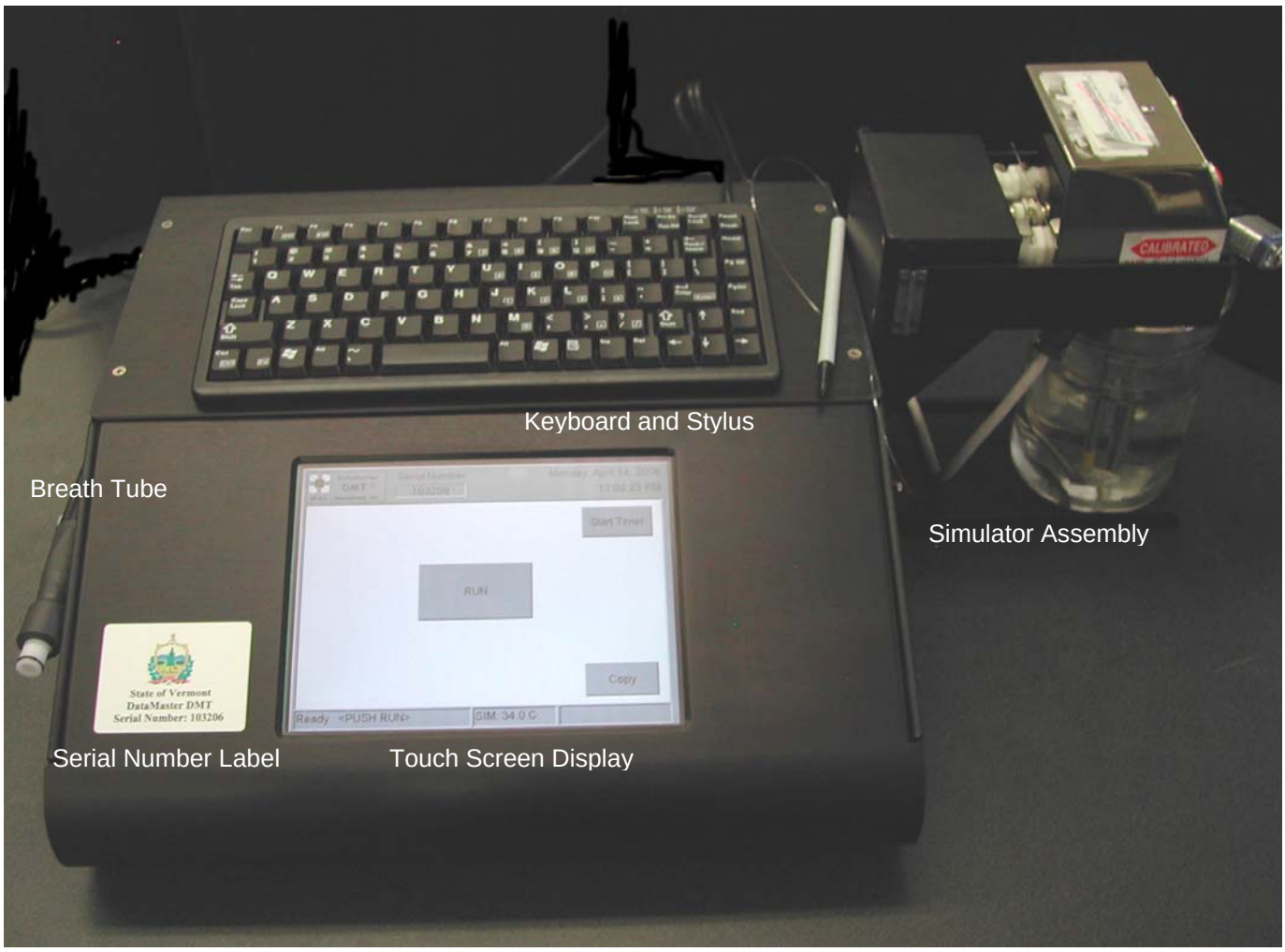


Figure 2: Front view of DataMaster DMT

Figure 3: Back view of DataMaster DMT

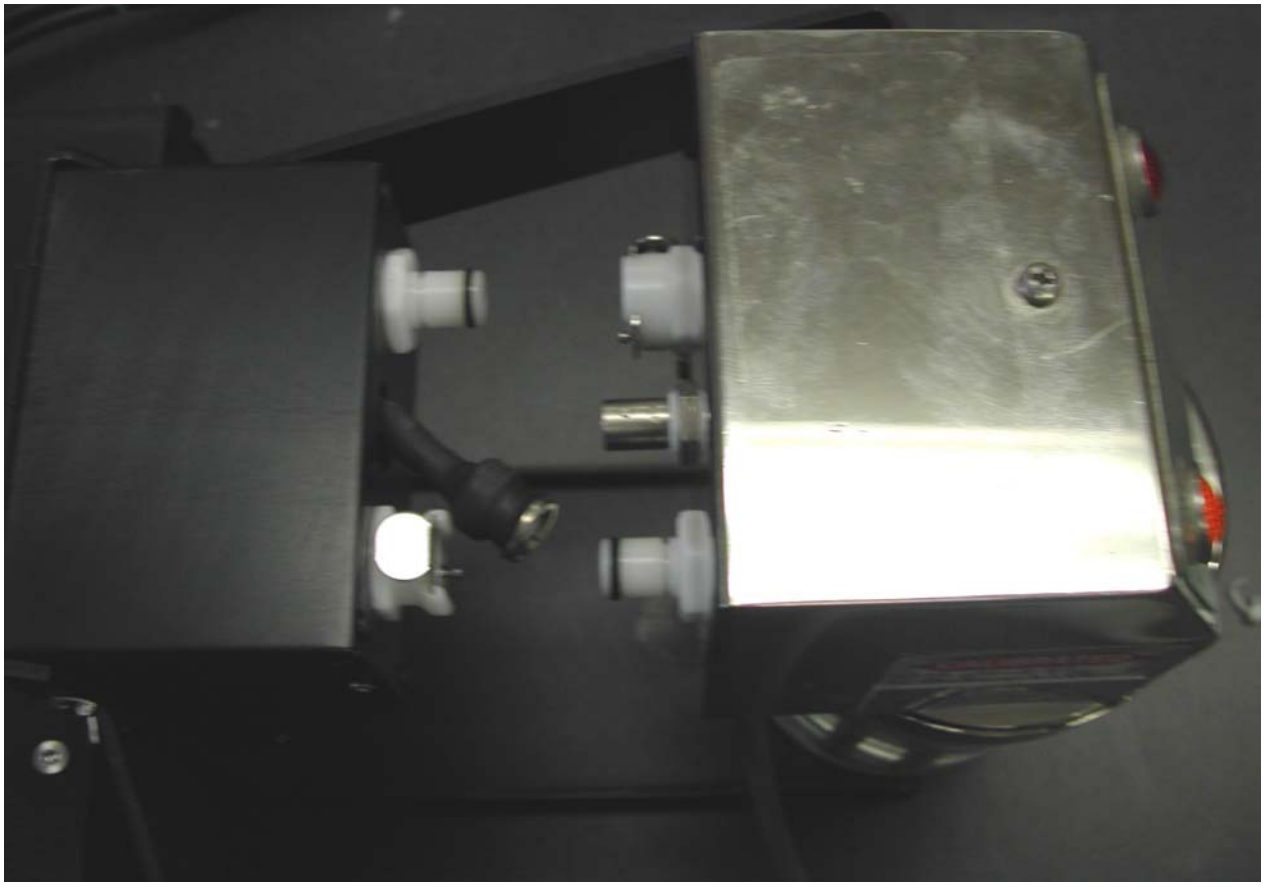


Figure 4: Simulator tower and simulator head quick connects, BNC connector, disconnected.

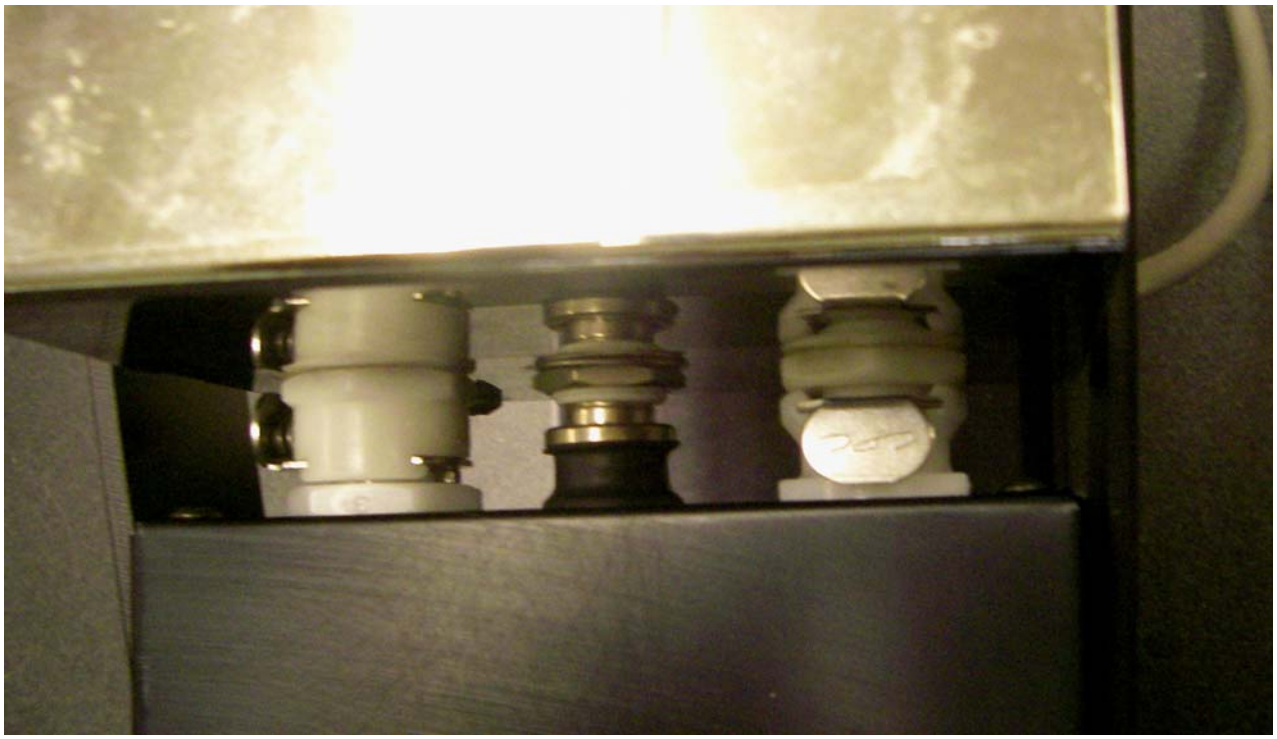


Figure 5: Simulator tower and simulator head quick connects, BNC connector, connected.

INTERNAL COMPONENTS

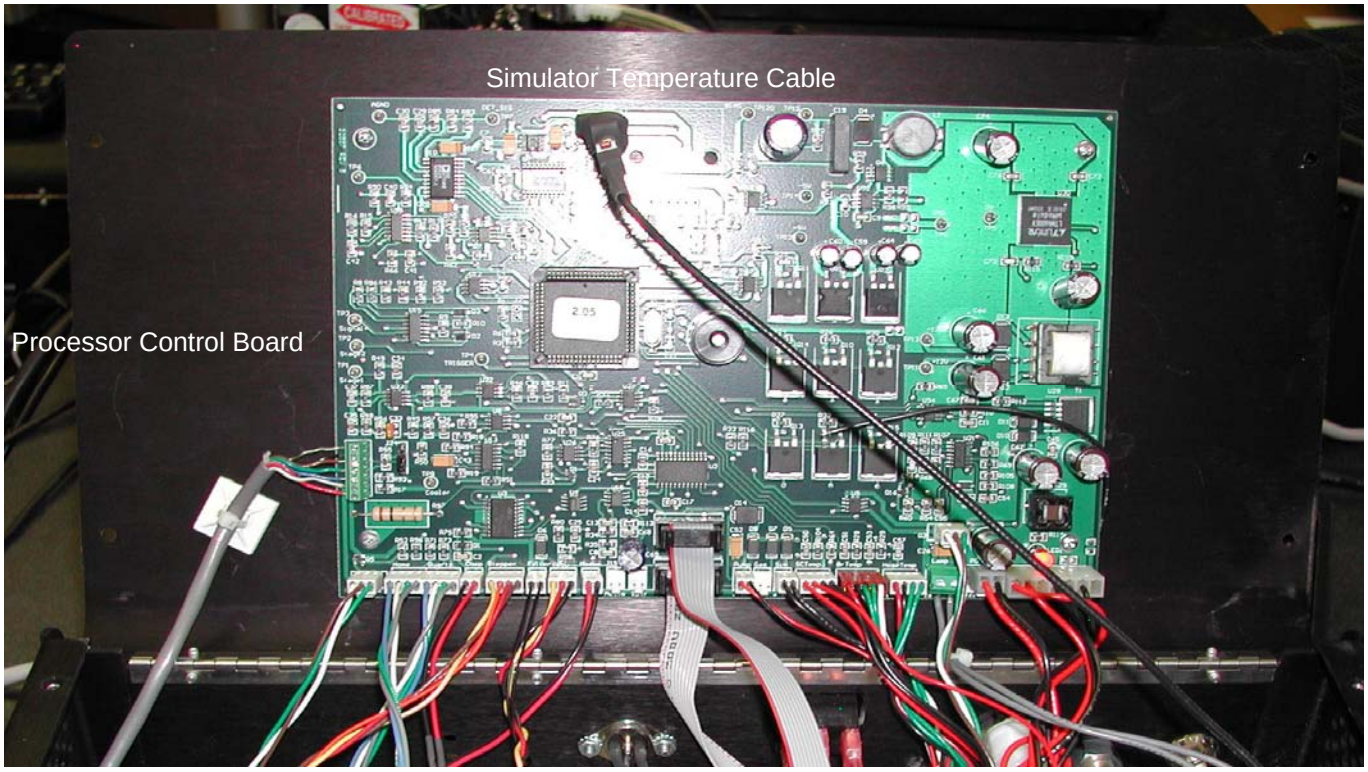


Figure 6: Internal view under lid of DataMaster DMT.

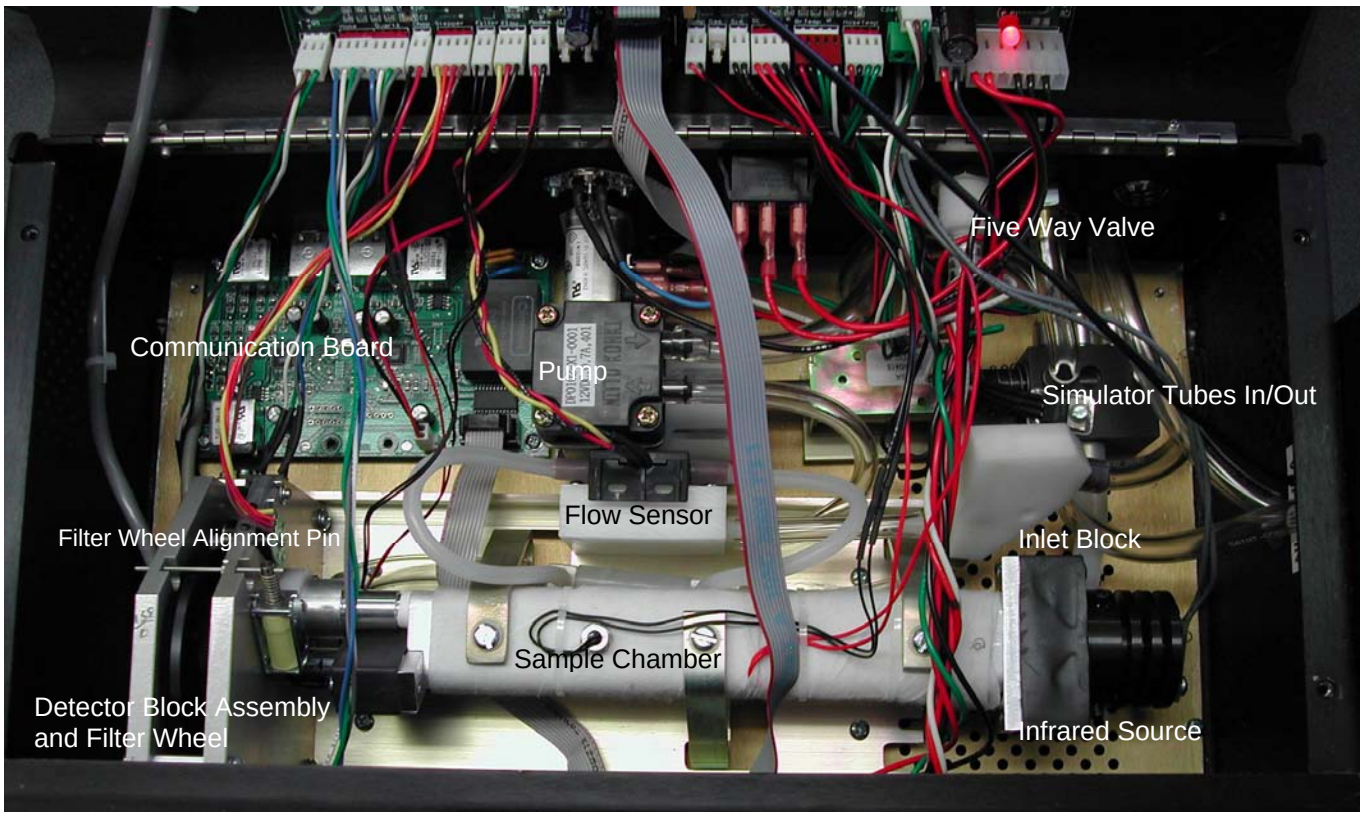


Figure 7: Internal view of DataMaster DMT.

SECTION V

ERROR MESSAGES AND TROUBLESHOOTING

ERROR MESSAGES AND RESPONSES

- If any of the following error messages or conditions occurs, follow the procedures as described. These procedures are to be performed by trained DataMaster DMT Supervisors only.
- Law enforcement officers that are not DataMaster DMT Supervisors should refer to the *DataMaster DMT Infrared Breath Testing Manual.*
- DataMaster DMT Supervisors are responsible for the simulator key and the security screwdriver necessary to access the simulator or the internal components of the DMT.
- If you are temporarily able to remedy a situation, but the situation reoccurs contact DataMaster Technical Services.
- All actions taken on a DataMaster DMT to remedy a condition or error message should be documented in the "Checkup and Maintenance Logbook" (Alc 803).
- If you are unable to remedy a condition or error, document the problem in the "Checkup and Maintenance Logbook" (Alc 803), remove the instrument from service and contact DataMaster Technical Services.
- When contacting DataMaster Technical Services, provide the following information:
  1. Your name, phone number, location and DataMaster DMT serial number.
  2. The error message and/or condition that has occurred.
  3. Test results during and after error message or condition.
  4. What you have attempted to remedy the situation, along with results of tests.

ERRORS

AMBIENT FAIL: The instrument is detecting alcohol in the ambient air.

1. Remove the mouthpiece from the breath tube.
2. Remove possible contamination sources from the processing area.
3. Open windows or use a fan to draw fresh air into the room if possible.
4. Purge the sample chamber for at least 5 minutes.

BLANK ERROR: The instrument is unable to reach zero apparent alcohol.

1. Remove the mouthpiece from the breath tube.
2. Remove possible contamination sources from the processing area.
3. Open windows or use a fan to draw fresh air into the room if possible.
4. Purge the sample chamber for at least 5 minutes.

BREATH TUBE TEMPERATURE OUT OF RANGE: The breath tube temperature is out of specification.

1. Check the breath tube temperature by accessing the Technician Screen.
2. Reseat the breath tube and the breath tube power connections.

CALIBRATION CHECK ERROR: The instrument is not reading the quartz filter correctly.

1. Power the instrument off, wait one minute then turn it on.
2. Perform a diagnostic test.

COMMUNICATION ERROR: The embedded pc is not communicating with the controller board correctly.

1. Turn the instrument off, wait one minute then turn it on.

DETECTOR OVERFLOW: The detector is out of range or a subject's BrAC is greater than 0.600

1. Ensure the breath tube is free from obstruction, including removing the mouthpiece.
2. Purge the Sample Chamber for at least 5 minutes.
3. If the error remains, turn the instrument off, wait one minute then turn it on. Once the instrument displays "Ready, Push Run" perform a Diagnostic Test.

FILTER # (1,2,3) WON'T ZERO: One of the filters is not reading properly.

1. Ensure the breath tube is free from obstruction, including removing the mouthpiece.
2. Ensure the room temperature is within acceptable operating temperature.
3. Ensure the ambient air surrounding the instrument is free from alcohol and other contaminants. Ventilate the room if necessary.
4. Purge the sample chamber for 1-2 minutes.
5. If the error remains, turn the instrument off, wait one minute then turn it on. Once the screen displays "Ready, Push Run" perform a Diagnostic Test.

FILTER WHEEL ERROR: The filter wheel is not activating properly.

1. Turn the instrument off, wait one minute then turn it on.
2. Perform a Diagnostic Test.

INTERFERENCE (SIMULATOR SAMPLE): The ratio between the measurements at the three filers is not what is expected for ethanol on the simulator sample.

1. Try the test again.
2. Ensure the room temperature is within acceptable operating temperature.

3. Ensure the ambient air surrounding the instrument is free from alcohol and other contaminants. Ventilate the room if necessary.
4. Change the simulator solution.

INTERFERENCE (SUBJECT SAMPLE): The ratio between the measurements at the three filers is not what is expected for ethanol on the subject's sample.

1. When the DataMaster DMT prompts "SUBJECT TAKE SECOND TEST? YES or NO" select "YES" and have the subject provide a second sample.
2. Ensure the room temperature is within acceptable operating temperature.
3. Ensure the ambient air surrounding the instrument is free from contaminants. Ventilate the room if necessary.
4. If error message remains, you may have the subject's blood drawn.

INVALID: An abnormal breath profile has been obtained during sample delivery.

1. Restart the testing process from the "RUN" screen including the fifteen minute observation period.
2. Instruct the subject again on proper delivery of a breath sample.

KEYBOARD DOES NOT FUNCTION:

1. Reseat the keyboard in the USB port at the back of the instrument.
2. Plug the keyboard into a different USB port.
3. If available try a different USB keyboard

LOCKED OR FROZEN DISPLAY: The instrument is not responding to either the keyboard or the touch screen.

1. Turn the instrument off, wait one minute then turn it on.

PLEASE BLOW flashes but instrument does not accept a sample.

1. Refer to graphic display to ensure subject is providing adequate air flow.
2. Remove the mouthpiece from the breath tube and replace with a new mouthpiece.
3. Attempt another breath sample.
4. Reseat the breath tube connection.
5. Check to ensure the 5-way valve is not stuck.
6. If the error remains, turn the instrument off, wait one minute then turn it on.

PUMP ERROR: The flow detector does not detect pump operation or the pump speed is incorrect.

1. Ensure the breath tube is free from obstruction, including removing the mouthpiece.

2. Open the cover of the instrument
    a. Ensure all tubing is properly connected and free from kinks.
    b. Ensure the plunger on the five-way valve is moving freely.
3. Turn the instrument off, wait one minute then turn it on. Once the instrument displays "Ready, Push Run" perform a Diagnostic Test.

SAMPLE CHAMBER TEMPERATURE OUT OF RANGE: Sample chamber is not between 45°C and 55°C.

1. Ensure that the room temperature is within acceptable operating temperature.
2. Check the sample chamber temperature by accessing the Technician Screen.
    a. If the sample chamber temperature is too high, turn the instrument off and allow it to cool for 15 minutes then turn it on. Once the instrument displays "Ready, Push Run", perform a Diagnostic Test.
    b. If the sample chamber temperature is too low, turn the instrument off, wait one minute then turn it on. Once the instrument displays "Ready, Push Run", perform a Diagnostic Test.

SIMULATOR OUT OF RANGE: Reported simulator vapor concentration is not within ±5% of the certified concentration. This error may occur during a subject breath test, or during the Accuracy and Precision Test performed during a testing protocol.

1. If the result is 0.000, ensure the 5-way valve is not stuck.
2. If the result is low due to solution depletion, perform a Simulator Solution Change.
3. If the result is out of range not due to depletion, try the test again.
4. Ensure the simulator is properly connected to the simulator tower.
5. Ensure the simulator jar is properly threaded to the simulator head.
6. Inspect the simulator O-ring and jar for damage.
7. Open the instrument cover and ensure the tubing properly connected and not kinked.
8. Repeat the test using a different lot of solution.
9. Supervisors may perform an Accuracy and Precision Check to asses the simulator vapor concentration.

SIMULATOR TEMPERATURE OUT OF RANGE: Reported simulator temperature is not within 33.5°C and 34.5°C.

1. Check the simulator temperature by accessing the Technician Screen.
2. If the simulator temperature reads 0.0ºC:
    a. Reseat the BNC connector on the simulator head.
    b. Ensure the BNC connector is not touching the surrounding opening on the simulator tower.

c. Open the cover of the instrument and ensure the simulator temperature cable is properly connected to the processor control board (see figure 6 page 27).

3. If the simulator temperature reads greater than 34.5ºC:
   a. Ensure the simulator paddle is turning properly.
      i. If it is not turning properly, carefully unscrew the simulator jar from the simulator head.
      ii. Lift the simulator head just until the simulator paddle is above the surface of the solution. Using your finger, gently turn the paddle.
      iii. If it begins to turn properly, reattach the simulator head to the simulator jar.
      iv. If it does not start turning properly, unplug the simulator, remove the instrument from service and contact DataMaster Technical Services.
   b. Ensure the room temperature is within acceptable operating temperature. Adjust room temperature as needed.
4. If the simulator temperature reads less than 33.5ºC:
   a. Ensure the simulator is plugged in.
   b. Verify the power light is on and the heater light is on or blinking.
   c. Ensure the room temperature is within acceptable operating temperature. Adjust room temperature as needed.

SIMULATOR TIME OUT: The simulator took too long to reach plateau while running a Simulator Vapor test.

1. Attempt the test again.
2. Ensure the simulator head is properly threaded onto the simulator jar.
3. Inspect the simulator O-ring and jar for damage.
4. Ensure that the quick connects on the simulator head are properly connected to the ports on the simulator tower.
5. Open the cover and ensure the tubing is properly connected and free from kinks.

STANDARD DEVIATION OUT OF RANGE: During an Accuracy and Precision Check, the standard deviation result is greater than 0.0020.

1. Try the test again.
2. Ensure the simulator is properly connected to the simulator tower.
3. Ensure the simulator jar is properly threaded to the simulator head.
4. Inspect the simulator O-ring and jar for damage.
5. Open the instrument cover and ensure the tubing is properly connected and not kinked.
6. Supervisors may perform an Accuracy and Precision Test to asses the simulator vapor concentration.

PRINTER PROBLEMS: The instrument is unable to communicate with the printer.

1. Ensure the USB cable is connected to both the DataMaster DMT and the printer.
2. Ensure the printer is on and has ink and paper.
3. Turn the instrument off, wait one minute then turn it on and attempt reprint.
4. A different printer may be used; however the DMT requires a very specific print language which is not compatible with many printers. Contact DataMaster Technical Serivces.

RADIO FREQUENCY DETECTED: A radio frequency transmission has been detected in the testing environment.

1. Ensure that there are no active transmitters in the processing area.
2. If transmissions from dispatch are causing radio frequency issues, advise officers of possible “RF Detected” errors when performing breath tests due to dispatch transmissions.
3. If RF Detected is a frequent problem, contact DataMaster Technical Services.

Appendix

DataMaster DMT Monthly Update Check-list

Department/Agency:_____ DM serial #:_____

Supervisor:_____ Date: _____/_____/_____

	Provided	None this month
Operators Logbook	☐	☐
Maintenance Logbook	☐	☐
Breath Test History Report	☐	☐
Status History Report	☐	☐
Log On History Report	☐	☐
Calibration Report	☐	☐
Certification Report	☐	☐
Installation Report	☐	☐
Annual Preventative Maintenance	☐	☐
Routine Performance Check	☐	☐
Simulator Solution Change	☐	☐
Other Reports	☐	☐

List other report type and date:

_____

_____

_____

Breath Record History

Test Date	Test Time	Agency	Operator Name	Alcohol Val. 1	Alcohol Val. 2	Sim. Conc. 1	Sim. Conc. 2	Status Message
07/18/2011	01:05:32	Podunk	JOHNNY SLAUGHTER	0.100	0.080	0.103	0.103	
07/18/2011	01:32:59	vdhl	KIRK N KKI	0.000		0.102	0.103	RESPONSE TIMEOUT
07/18/2011	13:09:23	vdhl	KIRK L TEST	INCOMPLETE	0.000	0.102		
07/18/2011	13:20:25	vdhl	KIRK L TESTING	INCOMPLETE	INCOMPLETE	0.102	0.103	
07/18/2011	13:37:04	VDHL	KIRK L TESTING			0.102		RESPONSE TIMEOUT
07/18/2011	13:42:30	VDHL	KIRK L TESTING	INCOMPLETE	REFUSED	0.102		
07/18/2011	13:57:25	vdhl	TESTER CHESTER			INTERFERENCE		Interference Detected
07/19/2011	08:07:52	VDHL	A L B			0.101		RESPONSE TIMEOUT
07/19/2011	08:17:29	VDHL	A L B	INCOMPLETE	INCOMPLETE	0.102	0.102	
07/19/2011	08:41:06	VDHL	A B					Pump Error
07/19/2011	08:42:55	VDHL	A B	INCOMPLETE	INCOMPLETE	0.101		
07/19/2011	08:56:28	VDHL	A L B	INTERFERENCE	INTERFERENCE	0.100	0.101	
07/19/2011	09:04:31	VDHL	A B	INTERFERENCE		0.101		
07/19/2011	09:10:27	VDHL	A B	INVALID		0.101		
07/19/2011	09:20:21	VDHL	A B	INVALID		0.101		
07/19/2011	09:27:31	VDHL	A B	0.000	INVALID	0.100	0.100	
07/19/2011	13:36:41	VDHL	A B					User Abort
07/21/2011	09:48:35	vdhl	SRM SOFTWARE TEST	INCOMPLETE	INCOMPLETE	0.102	0.103	
07/21/2011	10:54:42	vdhl	SRM SOFTWARE TEST	INTERFERENCE		0.101		
07/21/2011	11:00:39	vdhl	SRM SOFTWARE TEST	0.000		0.100		
07/21/2011	11:08:24	VDHL	SRM SOFTWARE TEST	0.000	INTERFERENCE	0.101	0.101	
07/21/2011	11:48:50	vdhl	SRM SOFTWARE TEST	INTERFERENCE	INTERFERENCE	0.102	0.102	
07/21/2011	12:02:45	vdhl	SRM SOFTWARE TEST			0.101		RESPONSE TIMEOUT
07/21/2011	12:07:18	VDHL	SRM SOFTWARE TEST	INTERFERENCE		0.101		RESPONSE TIMEOUT
08/02/2011	12:33:15	vdhl	KIRK K TESTER	0.000		0.101		
08/02/2011	12:54:16	vdhl	KIK K TESTER	INCOMPLETE	INCOMPLETE	0.099	0.099	
08/02/2011	13:37:18	vdhl	KIRK K TESTER	0.000		0.100	0.099	RESPONSE TIMEOUT
08/03/2011	15:41:37	VDHL	SRM SRM	0.000		0.099		

Status Record History

Status Date	Status Time	Test Type	Status Message
07/18/2011	01:39:41	DUI Subject Record	RESPONSE TIMEOUT
07/18/2011	12:42:49	Installation Record	SITE DOES NOT MEET SPECIFICATION
07/18/2011	12:47:34	Installation Record	ACCURACY AND PRECISION CHECK FAILED
07/18/2011	12:53:41	Installation Record	ACCURACY AND PRECISION CHECK FAILED
07/18/2011	13:40:23	DUI Subject Record	RESPONSE TIMEOUT
07/18/2011	13:59:01	DUI Subject Record	Interference Detected
07/19/2011	08:11:14	DUI Subject Record	RESPONSE TIMEOUT
07/19/2011	08:41:18	Check-In Confirmation Record	Pump Error
07/19/2011	12:53:47	Installation Record	SITE DOES NOT MEET SPECIFICATION
07/19/2011	13:25:52	APM Record	SITE DOES NOT MEET SPECIFICATION
07/21/2011	08:40:25	Installation Record	ACCURACY AND PRECISION CHECK FAILED
07/21/2011	08:48:16	Installation Record	ACCURACY AND PRECISION CHECK FAILED
07/21/2011	08:58:13	Installation Record	ACCURACY AND PRECISION CHECK FAILED
07/21/2011	09:10:30	Installation Record	ACCURACY AND PRECISION CHECK FAILED
07/21/2011	09:28:58	Installation Record	ACCURACY AND PRECISION CHECK FAILED
07/21/2011	12:06:07	DUI Subject Record	RESPONSE TIMEOUT
07/21/2011	12:11:58	DUI Subject Record	RESPONSE TIMEOUT
07/26/2011	08:19:58	Calibration Record	Pump Error
07/26/2011	09:59:58	Calibration Record	Pump Error
07/26/2011	10:06:36	Calibration Record	Pump Error
07/26/2011	10:45:17	Calibration Record	Calibration Error
07/27/2011	12:38:14	Accuracy & Precision Records	Pump Error
07/27/2011	12:39:15	Accuracy & Precision Records	Pump Error
07/27/2011	12:42:23	Accuracy & Precision Records	Simulator Timed Out
07/27/2011	13:44:00	Accuracy & Precision Records	Interference Detected
07/27/2011	14:20:25	Accuracy & Precision Records	Interference Detected
07/29/2011	14:36:03	Installation Record	ACCURACY AND PRECISION CHECK FAILED
08/01/2011	07:50:01	APM Record	ACCURACY AND PRECISION CHECK FAILED
08/01/2011	13:37:40	Diagnostic Record	RF Detected
08/02/2011	11:17:01	Installation Record	SAMPLE ACCEPTANCE TEST FAILED
08/02/2011	11:19:09	Installation Record	Diagnostic Check Failed
08/02/2011	11:21:17	Installation Record	Diagnostic Check Failed
08/02/2011	13:44:52	DUI Subject Record	RESPONSE TIMEOUT
08/02/2011	14:49:36	RPC Record	SAMPLE ACCEPTANCE TEST FAILED
08/02/2011	14:51:46	RPC Record	Diagnostic Check Failed
08/02/2011	14:53:52	RPC Record	Diagnostic Check Failed
08/02/2011	14:56:16	RPC Record	Diagnostic Check Failed
08/02/2011	14:59:02	RPC Record	Diagnostic Check Failed
08/03/2011	07:03:11	APM Record	Diagnostic Check Failed
08/03/2011	08:30:28	RPC Record	ACCURACY AND PRECISION CHECK FAILED
08/03/2011	13:44:59	Installation Record	Diagnostic Check Failed
08/03/2011	13:49:17	Installation Record	Diagnostic Check Failed
08/03/2011	13:53:21	Installation Record	Diagnostic Check Failed
08/03/2011	14:02:31	Installation Record	Diagnostic Check Failed
08/04/2011	10:07:55	Installation Record	Diagnostic Check Failed
08/04/2011	10:14:33	Installation Record	Diagnostic Check Failed
08/04/2011	10:17:15	Installation Record	Diagnostic Check Failed
08/04/2011	10:21:37	Installation Record	ACCURACY AND PRECISION CHECK FAILED
08/04/2011	10:32:12	Installation Record	SAMPLE ACCEPTANCE TEST FAILED
08/04/2011	10:34:01	Installation Record	Diagnostic Check Failed

Log On Record History

Test Date	Test Time	Name
08/08/2011	16:16:25	Steven Merrill
08/08/2011	16:18:21	Steven Merrill
08/09/2011	13:36:25	Steven Merrill
08/09/2011	15:34:12	Steven Merrill
08/10/2011	10:06:53	Steven Merrill
08/10/2011	11:06:56	Steven Merrill
08/10/2011	13:07:59	Steven Merrill
08/10/2011	15:38:36	Steven Merrill
08/10/2011	16:06:18	Steven Merrill
08/11/2011	08:00:14	Steven Merrill
08/11/2011	09:48:35	Steven Merrill
08/11/2011	11:11:55	Steven Merrill
08/11/2011	13:20:06	Steven Merrill
08/11/2011	14:44:37	Steven Merrill
08/12/2011	07:48:53	Steven Merrill
08/12/2011	08:09:40	Steven Merrill
08/12/2011	08:57:10	Steven Merrill
08/12/2011	10:46:45	Steven Merrill
08/12/2011	14:16:39	Kirk Kimball
08/12/2011	14:46:14	Steven Merrill
08/12/2011	15:55:11	Kirk Kimball
08/15/2011	08:16:59	Steven Merrill
08/15/2011	08:34:48	Steven Merrill
08/15/2011	09:42:02	Steven Merrill
08/15/2011	10:54:10	Steven Merrill
08/18/2011	12:19:12	Steven Merrill
08/18/2011	13:39:09	Steven Merrill
08/18/2011	15:38:32	Steven Merrill
08/19/2011	09:04:39	Amanda Bolduc
08/19/2011	09:04:53	Supervisor
08/19/2011	09:05:20	Amanda Bolduc
08/22/2011	08:51:14	Amanda Bolduc

SOLUTION CHANGE

DataMaster DMT: 100169
Location: VDHL DEMO
Date: 08/22/2011
Performed by: AMANDA BOLDUC

Accuracy and Precision Check

Concentration	= 0.100 g/210L
Lot #	= 11-40-100
Range	= 0.095 - 0.105
Average	= 0.099 g/210L
Std Dev	= 0.0000

Simulator Temperature: 33.6°C

Performed by Amanda B Bolduc Date 08/22/2011

DMT Serial Number #100169 Page 1 of 1 08/22/2011 11:37 AM

ROUTINE PERFORMANCE CHECK REPORT

DataMaster DMT: 100169
Location: VDHL DEMO
Calibration Date: 08/10/2011
Certification Date: 08/10/2011
Installation Date: 08/22/2011
RPC Date: 08/22/2011
Supervisor Name: AMANDA BOLDUC

Diagnostic Results

```
VERSIONS
DMT: 1.00
PIC: 2.06
Modem: 2.1
Questions: 2.0

TEMPERATURES

Sample Chamber = 48.9°C
Breath Tube    = 46.6°C
Digital Sim    = 33.7°C

SETTINGS
Lamp Voltage   = 1.85 V
Cooler Voltage = 1.92 V
Bias Voltage   = 80 V
Chopper Freq   = 529 Hz

PUMP INFO
Flow Rate = 5.313 L/M

DETECTOR INFO
PUMP     ON        OFF
MAX(V)  -0.0598   -0.0559
MIN(V)  -0.0614   -0.0569

FILTER INFO
Filter 1  -0.057  Zero = true
Filter 2   0.276  Zero = true
Filter 3   0.566  Zero = true

CALIBRATION CHECK
Xq  = 0.095  0.00%
```

Routine Performance Check Passed

Accuracy and Precision Check

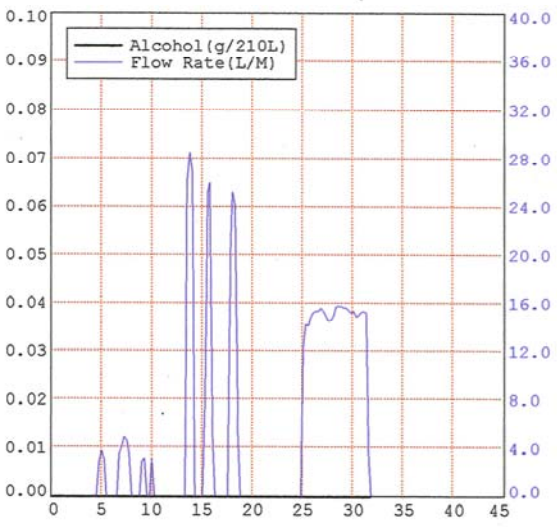
Concentration	= 0.100 g/210L
Lot #	= 11-40-100
Range	= 0.095 - 0.105
Average	= 0.099 g/210L
Std Dev	= 0.0000

RF Detection Test

Passed

Sample Acceptance Test

Passed



Performed by Amanda Bolduc Date 08/22/2011

Reviewed by _____ Date _____

DMT Serial Number #100169 Page 1 of 1 08/22/2011 10:58 AM

DIAGNOSTIC RESULT

DataMaster DMT: 100169
Location:
Calibration Date: 08/10/2011
Certification Date: 08/10/2011
Installation Date:
Test Date: 08/18/2011
Test Time: 12:19:22

```
VERSIONS
DMT: 1.00
PIC: 2.06
Modem: 2.1
Questions: 2.0

TEMPERATURES

Sample Chamber = 48.9°C
Breath Tube    = 48.0°C
Digital Sim    = 0.0°C

SETTINGS
Lamp Voltage   = 1.85 V
Cooler Voltage = 1.92 V
Bias Voltage   = 80 V
Chopper Freq   = 531 Hz

PUMP INFO
Flow Rate = 5.343 L/M

DETECTOR INFO
PUMP     ON         OFF
MAX(V)   -0.0498    -0.0467
MIN(V)   -0.0510    -0.0488

FILTER INFO
Filter 1  -0.049  Zero = true
Filter 2   0.284  Zero = true
Filter 3   0.565  Zero = true

CALIBRATION CHECK
Xq  = 0.096  0.83%
```

ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100169

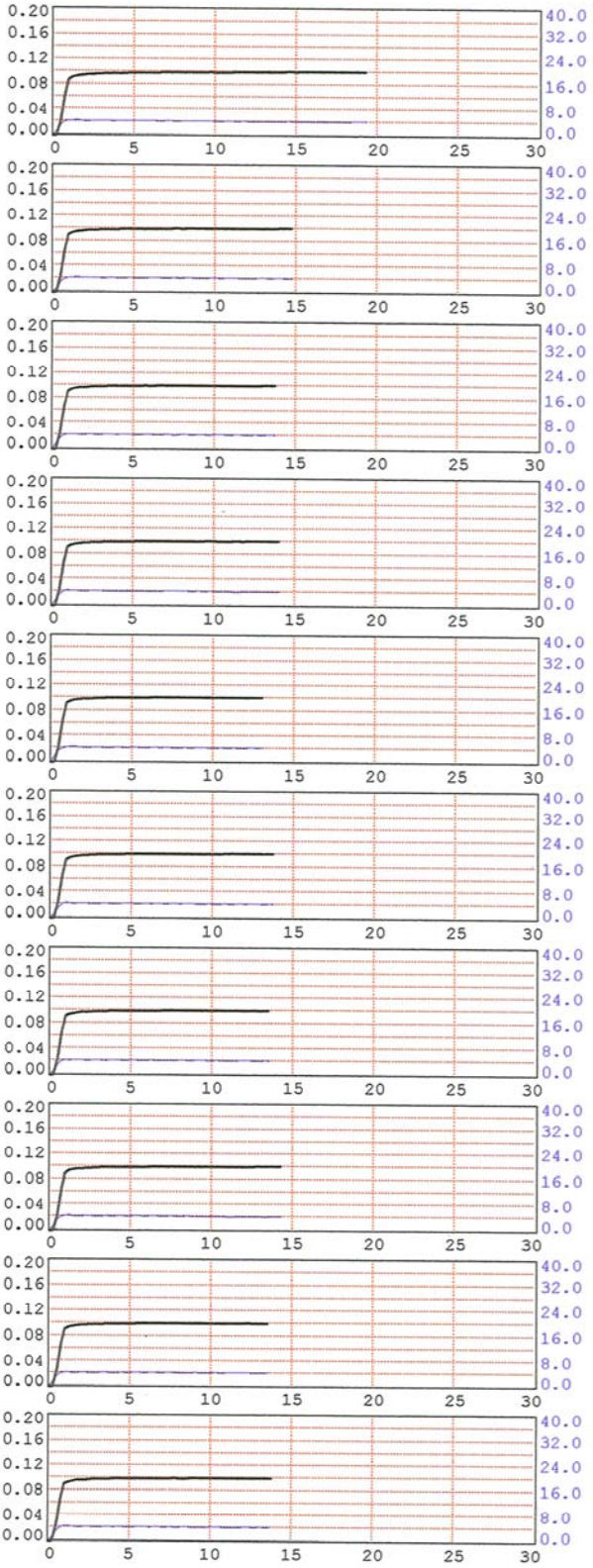
Date: 08/18/2011
Time: 15:56:39

SUPERVISOR NAME:
STEVEN R MERRILL

SOLUTION LOT #: GUTH 1105
SOLUTION CONCENTRATION: 0.100

BLANK TEST	0.000	15:57
CALIBRATION CHECK	PASSED	15:57
SIMULATOR VAPOR 33.7°C	0.100	15:58
SIMULATOR VAPOR 33.7°C	0.100	15:59
SIMULATOR VAPOR 33.7°C	0.100	16:00
SIMULATOR VAPOR 33.7°C	0.100	16:01
SIMULATOR VAPOR 33.7°C	0.100	16:02
SIMULATOR VAPOR 33.8°C	0.100	16:03
SIMULATOR VAPOR 33.7°C	0.100	16:04
SIMULATOR VAPOR 33.7°C	0.100	16:05
SIMULATOR VAPOR 33.7°C	0.100	16:06
SIMULATOR VAPOR 33.6°C	0.100	16:07
BLANK TEST	0.000	16:08

Average = 0.100
Std Dev = 0.000



DMT Serial Number #100169

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