



**VERMONT FORENSIC LABORATORY**

PO BOX 47  
WATERBURY, VERMONT 05676-0047  
TEL: 802-244-8788  
FAX: 802-241-5557  
<http://vfl.vermont.gov>

**DATAMASTER TECHNICAL SUPPORT INQUIRY**

Agency/Site: Wilmington PD DataMaster Serial #: 300151

Date: 4/7/2013 Requestor: Ethan Kipnes

Instrument Supervisor: Ethan Kipnes Phone #: (802) 464-8593

Taken By: Amanda Bolduc

---

Problem: "Simulator Out of Range" errors

---

---

---

---

---

Laboratory Response: Requested a Breath Record History report and copies of recent Solution Changes. A. Bolduc and R. Driscoll analyzed records and observed rapid solution depletion. R. Driscoll will troubleshoot on site.

---

---

---

Work Performed: Ran Accuracy & Precision to check current status of simulator solution concentration. Test showed solution was at 0.098 g/210L (within specifications). The simulator was leak checked and the jar was observed for any cracks/chips in the glass. No leaks were found with the simulator. Replaced the simulator jar o-ring and checked tubing for leaks as part of the APM protocol. Replaced the simulator port o-rings since they had deteriorated and ran another Accuracy & Precision test. At this time the solution was still at 0.098 g/210L (target concentration for that lot of solution is 0.099 g/210L). It is possible that the jar was leaking slightly after previous solution changes to cause the rapid depletion. Informed DMT supervisor to make sure the jar is tightened correctly.

---

---

---

On Site     In-house    Attachments: 9 pages

Performed By: R. Driscoll *RD*    Date: 4/17/2013

Final Review: [Signature]    Date: 4/17/2013

Driscoll, Rob

---

From: Bolduc, Amanda  
Sent: Thursday, April 11, 2013 1:29 PM  
To: Driscoll, Rob  
Subject: FW: Wilmington PD DMT issues  
Attachments: DMT Records 4-11-13.pdf

Amanda Bolduc, MFS  
Alcohol Program Forensic Chemist  
Vermont Forensic Laboratory  
Department of Public Safety  
103 South Main Street  
Waterbury, VT 05676  
(802) 241-5300 (ph)  
(802) 585-0504 (cell)  
(802) 241-5557 (fax)  
[Amanda.bolduc@state.vt.us](mailto:Amanda.bolduc@state.vt.us)

The information transmitted by the following e-mail is intended only for the addressee and may contain confidential and/or privileged material. Any interception, review, retransmission, dissemination, or other use of, or taking of any action upon this information by persons or entities other than the intended recipient is prohibited by law and may subject them to criminal or civil liability. If you received this communication in error, please contact us immediately at 802-244-8788 and delete the communication from any computer or network system.

-----Original Message-----

From: Denault, Mark  
Sent: Thursday, April 11, 2013 11:54 AM  
To: Bolduc, Amanda; Szarejko, Joseph M.; Brown, Steven  
Subject: RE: Wilmington PD DMT issues

Amanda,

Here are the records you requested. I you can see I have provided them to WCSA Office for there records as well. Please advise if we need to do more on this end.

Thank you Mark

Mark J. Denault  
Detective Sergeant  
Wilmington Police Department  
97 East Main Street PO Box 217  
Wilmington VT 05363  
Office 1-802-464-8593  
Direct Line 1-802-464-2326 Ext. 135  
E-mail [mark.denault@state.vt.us](mailto:mark.denault@state.vt.us)

---

From: Bolduc, Amanda

Sent: Monday, April 08, 2013 6:43 AM  
To: Kipnes, Ethan; Driscoll, Rob  
Cc: Denault, Mark; Szarejko, Joseph M.  
Subject: RE: Wilmington PD DMT issues

Ethan,

I have cc'd Rob Driscoll on this issues. We'll have some solution sent out to you. Can you send me copies of your sim solution change reports and a history report from the beginning of the year until now? We'll take a look at the simulator info and see if there is a trend. Have you done a leak check on the simulator?

Amanda

---

From: Kipnes, Ethan  
Sent: Sunday, April 07, 2013 10:54 AM  
To: Bolduc, Amanda  
Cc: Denault, Mark; Szarejko, Joseph M.  
Subject: Wilmington PD DMT issues

Hi Amanda,

Sorry if you are not the person I am supposed to go to directly, but yours was the only contact info I could find for DMT issues.

We have been experiencing some Datamaster DMT issues here in Wilmington lately. I came in on Sunday to find an email from Sgt. Matt Murano indicating that the unit registered "Simulator Out of Range" the previous evening. I ran an Accuracy and Precision check which actually showed within range but just barely so I decided to change the simulator solution. Changed solution and came in way out of range on testing. Changed solution a second time and it came within range this time. Looking back through our records, we had the same issue only about 3 weeks ago - solution was changed at that time as well and obviously only lasted for 3 weeks.

So, as of right now, the machine is in range and on line but I'm not sure it will stay that way for long.

And we are also out of simulator solution since we have had to change it so many times lately.

I only work part time on weekends, so please connect with Chief Szarejko or Detective Sergeant Denault to follow up during the week. I have copied them so that they are aware.

Thanks,  
Ethan Kipnes  
Wilmington Police Department  
(802) 464-8593

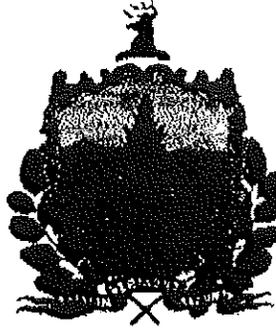
# Breath Record History

Test Date	Test Time	Agency	Operator Name	Alcohol Val. 1	Alcohol Val. 2	Sim. Conc. 1	Sim. Conc. 2	Status Message
04/06/2013	19:27:57	WILMINGTON PD	M MURANO			0.095		Simulator Out of Range
03/17/2013	01:54:03	WILMINGTON PD	M MURANO	0.165	0.161	0.098	0.098	
03/15/2013	18:53:09	BRATTLEBORO VSP	CHRIS LORA			0.094		Simulator Out of Range
02/19/2013	22:51:26	WILMINGTON PD	M MURANO	0.048		0.096		
02/03/2013	02:10:22	BRATTLEBORO VSP	JEFFREY E TRUDEAU			0.093		Simulator Out of Range
01/20/2013	02:12:58	BRATTLEBORO VSP	JEFFREY E TRUDEAU	REFUSED		0.094		



# SOLUTION CHANGE

Data Master DMT: 300151  
Location: Wilmington PD  
Date: 04/07/2013  
Performed by: ETHAN R KIPNES



## Accuracy and Precision Check

Concentration = 0.099 g/210L  
Lot# = 12-90-100  
Range = 0.094 - 0.104  
Average = 0.085 g/210L  
Std Dev = 0.0000

Average out of range

Simulator Temperature: 33.9°C

Solution Change Failed

Performed by

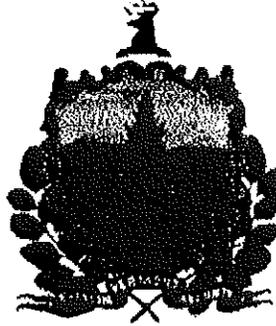
*Ethan Kipnes*

Date

04/11/2013

# SOLUTION CHANGE

DataMaster DMT: 300151  
Location: Wilmington PD  
Date: 04/07/2013  
Performed by: ETHAN R KIPNES



## Accuracy and Precision Check

Concentration = 0.099 g/210L  
Lot # = 12-90-100  
Range = 0.094 - 0.104  
Average = 0.099 g/210L  
Std Dev = 0.0000

Simulator Temperature: 33.9°C

Performed by

*Ethan Kipnes*

Date

04/11/2013



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 300151  
 Location: Wilmington PD

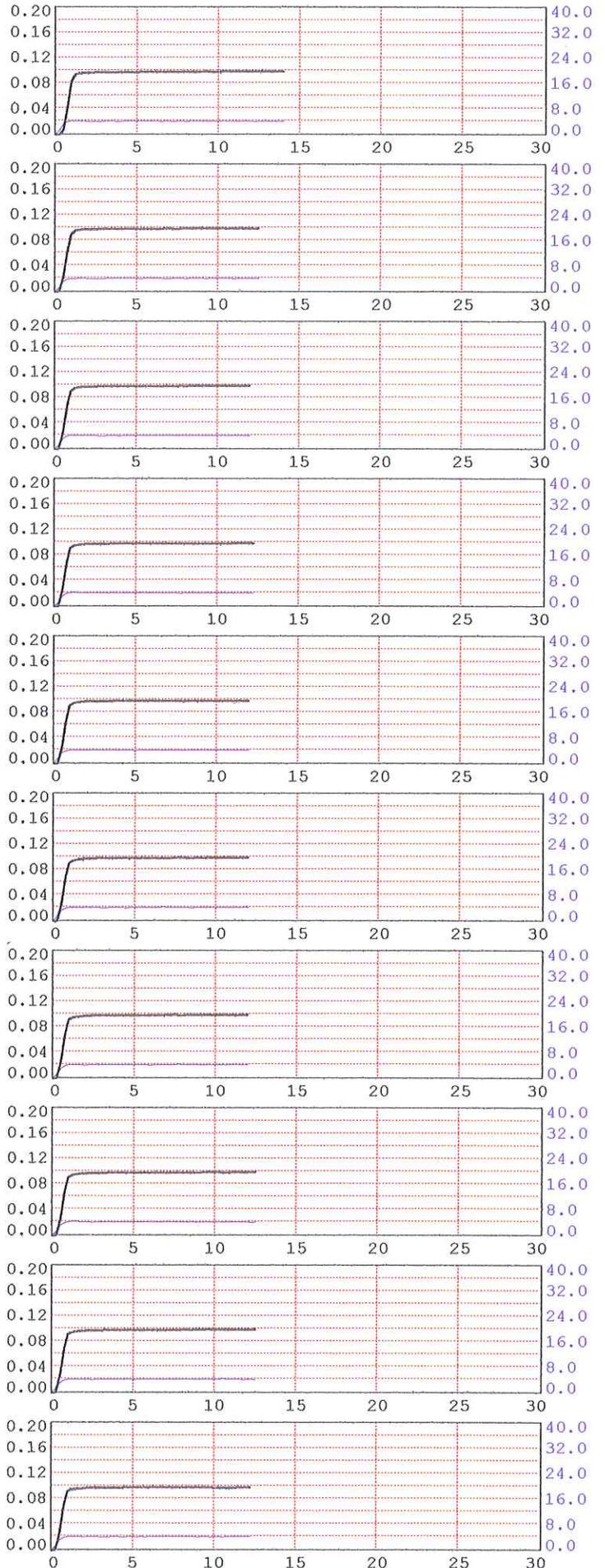
Date: 04/17/2013  
 Time: 09:44:52

SUPERVISOR NAME:  
 ROBERT DRISCOLL

SOLUTION LOT #: 12-90-100  
 SOLUTION CONCENTRATION: 0.099

BLANK TEST	0.000	09:45
CALIBRATION CHECK	PASSED	09:45
SIMULATOR VAPOR 33.8°C	0.099	09:46
SIMULATOR VAPOR 33.9°C	0.099	09:47
SIMULATOR VAPOR 33.9°C	0.099	09:48
SIMULATOR VAPOR 33.9°C	0.098	09:49
SIMULATOR VAPOR 33.9°C	0.098	09:50
SIMULATOR VAPOR 33.8°C	0.099	09:51
SIMULATOR VAPOR 33.8°C	0.099	09:52
SIMULATOR VAPOR 33.9°C	0.099	09:53
SIMULATOR VAPOR 33.9°C	0.099	09:54
SIMULATOR VAPOR 33.9°C	0.097	09:55
BLANK TEST	0.000	09:56

Average = 0.098  
 Std Dev = 0.000



# ANNUAL PREVENTATIVE MAINTENANCE



DataMaster DMT: 300151  
 Location: Wilmington PD  
 Calibration Date: 12/07/2011  
 Certification Date: 12/08/2011  
 Installation Date: 08/10/2012  
 APM Date: 04/17/2013  
 Performed by: ROBERT DRISCOLL

## Diagnostic Results

### VERSIONS

DMT: 1.01  
 PIC: 2.06  
 Modem: 2.4  
 Questions: 2.1

### TEMPERATURES

Sample Chamber = 49.5°C  
 Breath Tube = 44.1°C  
 Digital Sim = 33.9°C

### SETTINGS

Lamp Voltage = 1.71 V  
 Cooler Voltage = 1.73 V  
 Bias Voltage = 80 V  
 Chopper Freq = 545 Hz

### PUMP INFO

Flow Rate = 5.034 L/M

### DETECTOR INFO

PUMP	ON	OFF
MAX (V)	0.4150	0.4179
MIN (V)	0.4134	0.4163

### FILTER INFO

Filter 1	0.417	Zero = true
Filter 2	1.142	Zero = true
Filter 3	0.712	Zero = true

### CALIBRATION CHECK

Xq = 0.088 1.08%

**APM PASSED**

## Simulator Vapor Test

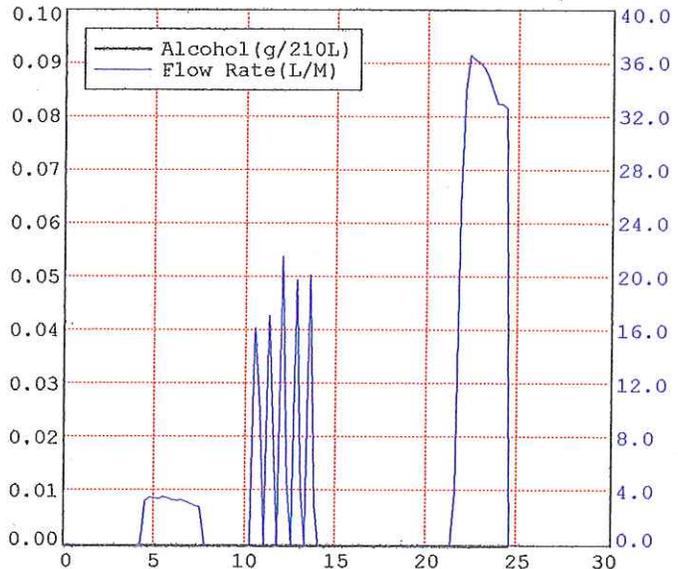
Concentration = 0.099 g/210L  
 Lot # = 12-90-100  
 Range = 0.094 - 0.104  
 Simulator Vapor = 0.097 g/210L

## RF Detection Test

Passed

## Sample Acceptance Test

Passed



NIST Thermometer S/N 111814522  
 33.9°C RCD  
 4/17/13

Performed by

RD

Date

04/17/2013

Reviewed by

\_\_\_\_\_

Date

\_\_\_\_\_



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 300151  
Location: Wilmington PD

Date: 04/17/2013  
Time: 10:14:33

SUPERVISOR NAME:  
ROBERT DRISCOLL

SOLUTION LOT #: 12-90-100  
SOLUTION CONCENTRATION: 0.099

BLANK TEST	0.000	10:15
CALIBRATION CHECK	PASSED	10:15
SIMULATOR VAPOR 34.0°C	0.098	10:15
SIMULATOR VAPOR 33.9°C	0.098	10:17
SIMULATOR VAPOR 33.9°C	0.098	10:18
SIMULATOR VAPOR 33.9°C	0.098	10:19
SIMULATOR VAPOR 33.9°C	0.098	10:20
SIMULATOR VAPOR 34.0°C	0.098	10:21
SIMULATOR VAPOR 33.9°C	0.098	10:22
SIMULATOR VAPOR 34.0°C	0.098	10:23
SIMULATOR VAPOR 33.9°C	0.099	10:24
SIMULATOR VAPOR 33.9°C	0.098	10:25
BLANK TEST	0.000	10:26

Average = 0.098  
Std Dev = 0.000

