



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: Hardwick PD DataMaster Serial #: 103509

Date: 4/5/2014 Requestor: Michael Gero

Instrument Supervisor: Michael Gero Phone #: (802) 472-5475

Taken By: R. Driscoll

Problem: DataMaster Supervisor concerned with low simulator solution concentration post solution change.

Laboratory Response: R. Driscoll to troubleshoot in the field.

Work Performed: Checked simulator solution temperature with NIST thermometer s/n: 111814517; temperature reading 34.1 degrees C. Leak checked simulator and found a large leak at the lid o-ring and a cracked port o-ring. Replaced port o-ring and tightened jar to fix the leak. Ran a Diagnostic check and all parameters are within specifications. Accuracy and Precision check shows the simulator solution concentration to be .097g/210L (certified to be .099g/210L). Simulator solution is within specifications; will monitor usage to track depletion.

On Site In-house

Attachments: 5 pages

Performed By: Robert Driscoll RCD

Date: 4/7/2014

Final Review: [Signature]

Date: 4/8/2014

Driscoll, Rob

From: Gero, Michael
Sent: Saturday, April 05, 2014 4:20 PM
To: Driscoll, Rob
Cc: Cochran, Aaron; Glodgett, Michael; Gero, Michael
Subject: Sim Solution etc.

Sir;

The DMT gave another officer an "out of range" as it had a .093% BAC self-check with s\im-solution with a lower range of .094%.

It did pass Accuracy and Precision Test with .094's approximately five times and .095's the other five. Per Chief I changed the simulator solution.

The new solution has the same range (lower end being .094%) and tested out at .094% meaning 1/1000th of a percent lower and it's out of range. The other bottles have the same range. Can we get a tech to come look at the DMT or whatever will yield a better result?

Respectfully;
SnrPtl. Michael R. Gero

Driscoll, Rob

From: Gero, Michael
Sent: Sunday, April 06, 2014 10:52 AM
To: Driscoll, Rob
Cc: DPS - hdwkpd0all
Subject: DMT errors follow-up

Sir;

As indicated in my earlier e-mail the DMT went out of range, I changed the solution and it went out of range again, received a third bottle of solution from Morriston PD and changed it. It tested out within 2/1000th's of the lower range.

Lamoille had the same issue with a similar lot number (middle two digits 16) so possibly the solution strength is an issue, if not, then a tech person with knowledge beyond my cert will be needed.

Thank you in advance for your time.

Respectfully;
SnrPtl. Michael R. Gero

Status Record History

Status Date	Status Time	Test Type	Status Message
04/01/2014	19:46:39	DUI Subject Record	Simulator Out of Range
04/06/2014	00:58:44	DUI Subject Record	Simulator Out of Range

4 of 6 RD

DIAGNOSTIC RESULT



DataMaster DMT:103509
Location: Hardwick-Greensboro PD
Calibration Date: 07/29/2013
Certification Date:07/29/2013
Installation Date: 07/30/2013
Test Date: 04/07/2014
Test Time: 10:17:53

VERSIONS

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

TEMPERATURES

Sample Chamber = 48.9°C
Breath Tube = 47.9°C
Digital Sim = 34.2°C

SETTINGS

Lamp Voltage = 1.60 V
Cooler Voltage = 1.59 V
Bias Voltage = 81 V
Chopper Freq = 541 Hz

PUMP INFO

Flow Rate = 5.399 L/M

DETECTOR INFO

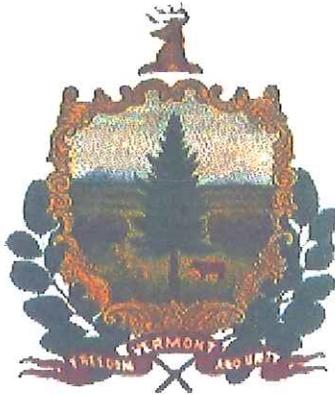
PUMP	ON	OFF
MAX(V)	0.0165	0.0183
MIN(V)	0.0148	0.0171

FILTER INFO

Filter 1	0.018	Zero = true
Filter 2	0.334	Zero = true
Filter 3	-0.018	Zero = true

CALIBRATION CHECK

Xq = 0.088 0.30%



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 103509
Location: Hardwick-Greensboro PD

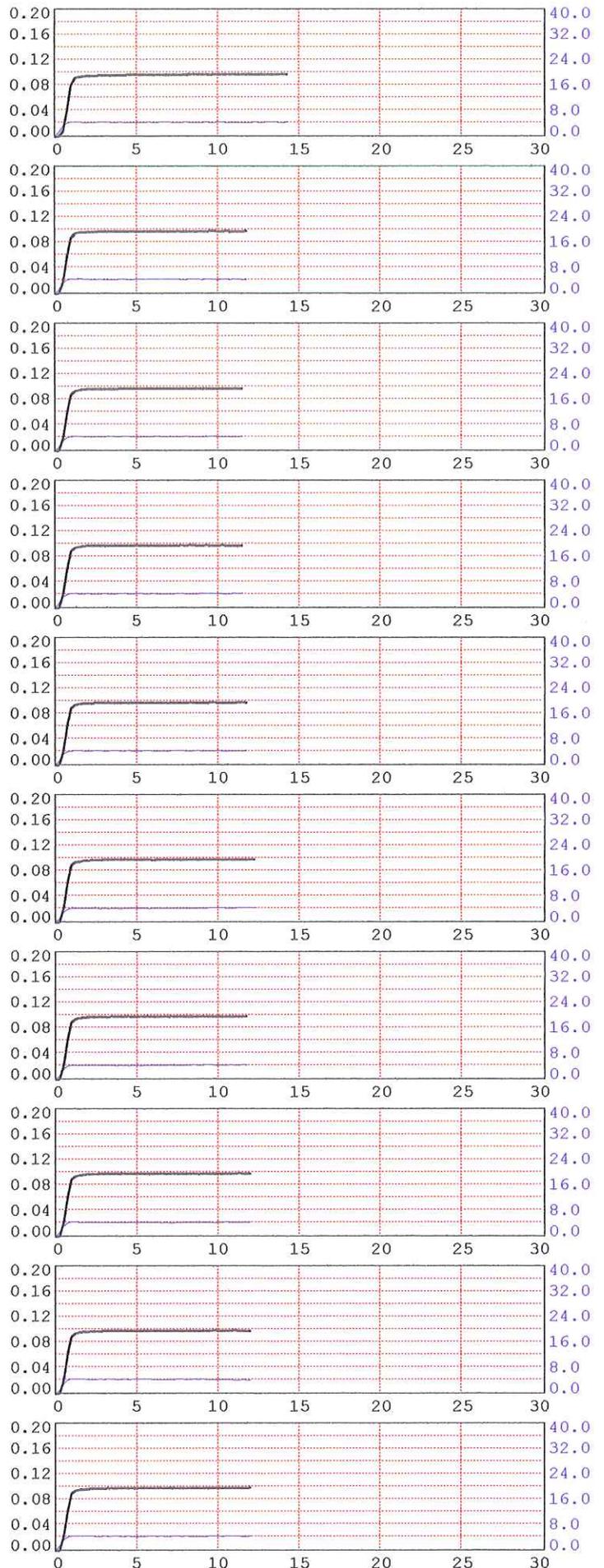
Date: 04/07/2014
Time: 10:27:00

SUPERVISOR NAME:
ROBERT DRISCOLL

SOLUTION LOT #: 13-19-100
SOLUTION CONCENTRATION: 0.099

BLANK TEST	0.000	10:27
CALIBRATION CHECK	PASSED	10:28
SIMULATOR VAPOR 34.1°C	0.097	10:28
SIMULATOR VAPOR 34.1°C	0.098	10:29
SIMULATOR VAPOR 34.1°C	0.097	10:30
SIMULATOR VAPOR 34.1°C	0.098	10:31
SIMULATOR VAPOR 34.2°C	0.098	10:32
SIMULATOR VAPOR 34.1°C	0.098	10:33
SIMULATOR VAPOR 34.1°C	0.098	10:34
SIMULATOR VAPOR 34.1°C	0.098	10:35
SIMULATOR VAPOR 34.1°C	0.099	10:36
SIMULATOR VAPOR 34.1°C	0.098	10:37
BLANK TEST	0.000	10:38

Average = 0.097
Std Dev = 0.000



6 of 6 RD