



VERMONT FORENSIC LABORATORY

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DATAMASTER TECHNICAL SUPPORT INQUIRY

Agency/Site: Windham CSO - Vernon DataMaster Serial #: 100141

Date: 12/04/2015 Requestor: Chris Norton

Instrument Supervisor: Chris Norton Phone #: (802)254-6962

Taken By: Rob Driscoll

Problem: Simulator time out during DUI subject test.

Laboratory Response: R. Driscoll asked the DMT supervisor to run an Accuracy and Precision test. That test also failed for a simulator time out. Alcohol program staff will troubleshoot onsite.

Work Performed: While inspecting the DMT there was an oscillation in the detector voltage at the higher end of the acceptable limit. Tried to run an Accuracy and Precision test and noticed that once the instrument's lid was opened the oscillation stopped. A grounding strap was added from the Controller PCB to the chassis with no change. The instrument was then removed from service and brought back to the VFL for troubleshooting. While at the VFL, the failure could not be reproduced, and the detector voltage was stable. The detector was replaced as a precaution and the instrument was Calibrated, Certified, and will now need to be installed at the agency.

On Site In-house Attachments: 10 pages

Performed By: Rob Driscoll Date: 2/22/2016
Final Review: [Signature] Date: 2/22/16

CALIBRATION REPORT

DataMaster DMT: 100141
Calibration Date: 02/22/2016
Calibrated by: ROBERT DRISCOLL
Lot: 15-26-100



Ca	=	0.100		
CAL	=	0.972550	0.800	<= CAL < 1.200
b1	=	0.000	0.000	<= b1 < 0.004
b2	=	0.005	0.002	<= b2 < 0.010
b3	=	0.000	0.000	<= b3 < 0.004
Xq	=	0.101	0.050	<= Xq < 0.200
a21	=	1.198492	1.050	<= a21 < 1.300
a31	=	0.453770	0.300	<= a31 < 0.800

Performed by

RD

Date

02/22/2016



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMaster DMT: 100141

Date: 02/22/2016

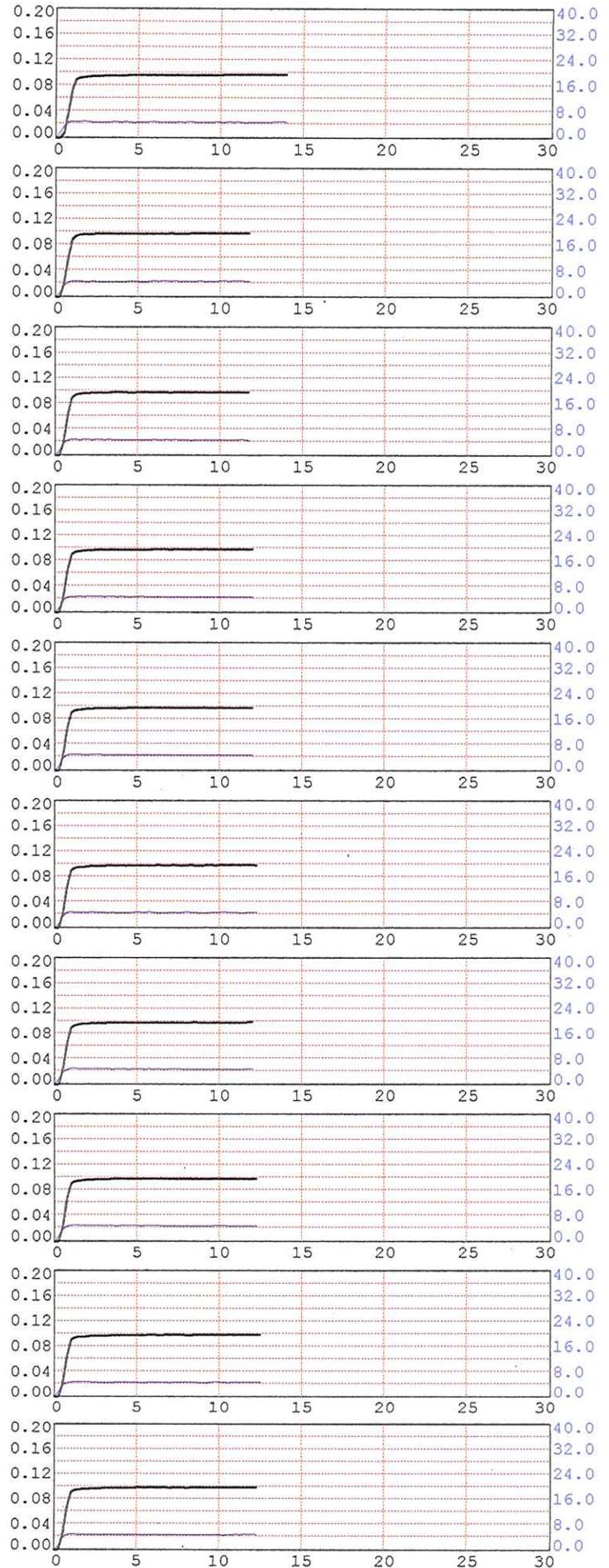
Time: 10:14:05

SUPERVISOR NAME:
RCD CAL CHECK

SOLUTION LOT #: GUTH 15120
SOLUTION CONCENTRATION: 0.100

BLANK TEST	0.000	10:14
CALIBRATION CHECK	PASSED	10:15
SIMULATOR VAPOR 33.9°C	0.097	10:15
SIMULATOR VAPOR 34.0°C	0.098	10:16
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 34.0°C	0.099	10:20
SIMULATOR VAPOR 34.0°C	0.098	10:21
SIMULATOR VAPOR 34.0°C	0.098	10:22
SIMULATOR VAPOR 34.0°C	0.099	10:23
SIMULATOR VAPOR 34.0°C	0.099	10:24
BLANK TEST	0.000	10:25

Average = 0.098
Std Dev = 0.0006



CERTIFICATION REPORT

DataMaster DMT: 100141
Calibration Date: 02/22/2016
Certification Date: 02/22/2016
Certified by: ROBERT DRISCOLL



Diagnostic Results

VERSIONS

DMT: 2.00
PIC: 2.06
Modem: 2.6
Questions: 2.1

TEMPERATURES

Sample Chamber = 49.1°C
Breath Tube = 43.9°C
Digital Sim = 33.9°C

SETTINGS

Lamp Voltage = 1.67 V
Cooler Voltage = 1.64 V
Bias Voltage = 80 V
Chopper Freq = 538 Hz

PUMP INFO

Flow Rate = 6.063 L/M

DETECTOR INFO

	PUMP ON	OFF
MAX (V)	0.0699	0.0724
MIN (V)	0.0687	0.0709

FILTER INFO

Filter 1	0.072	Zero = true
Filter 2	0.392	Zero = true
Filter 3	0.684	Zero = true

CALIBRATION CHECK

Xq = 0.101 0.09%

Options

OPTIONS

Units

Alcohol..... g/210L

Simulator

Tolerance Check..... yes
Standard Type..... wet
Nominal..... 0.100
Digital Simulator..... Guth34CNP

Subject

Ask Questions..... yes
Number of Tests..... 2
Alcohol Display..... yes
Volume Display..... yes
Query Refusal..... yes
Copies..... 3
Simulator Before..... yes
Simulator Between..... yes
Simulator After..... no
Observation Time..... 0

Supervisor

Number of Tests..... 10

Calibration

Standard Type..... wet
Nominal..... 0.100
Nominal (Dry Gas)..... 0.100
Number of Tests..... 1

Printer

Printer On..... yes

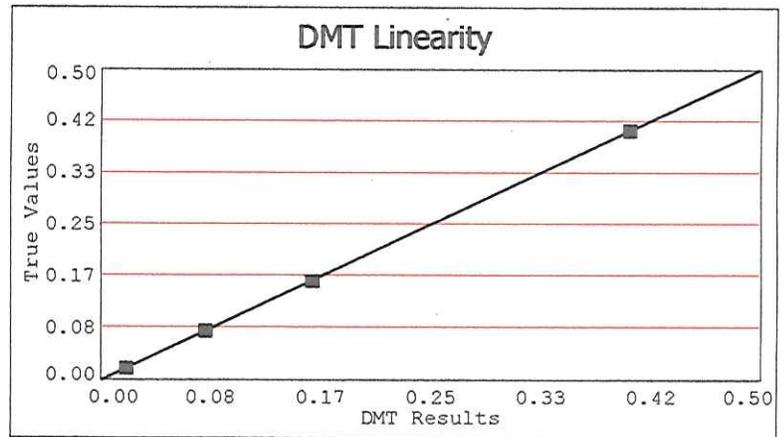
Software Configuration

Data Collection..... yes

Linearity Check Results

True Value	Reported Average	Std Dev
0.020 g/210L	0.019 g/210L	0.0005
Lot # 16-01-020		
0.080 g/210L	0.079 g/210L	0.0003
Lot # 15-15-080		
0.160 g/210L	0.160 g/210L	0.0003
Lot # 15-27-160		
0.402 g/210L	0.400 g/210L	0.0011
Lot # 15-10-400		

R² = 1



Acetone Interference Test

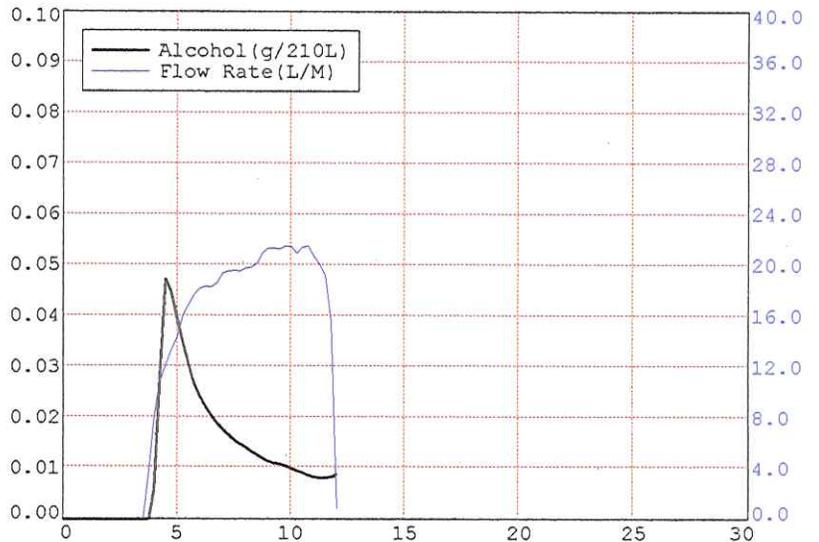
Lot # 16-02-080A1
Interference Detected

Mouth Alcohol Test

Mouth Alcohol Detected

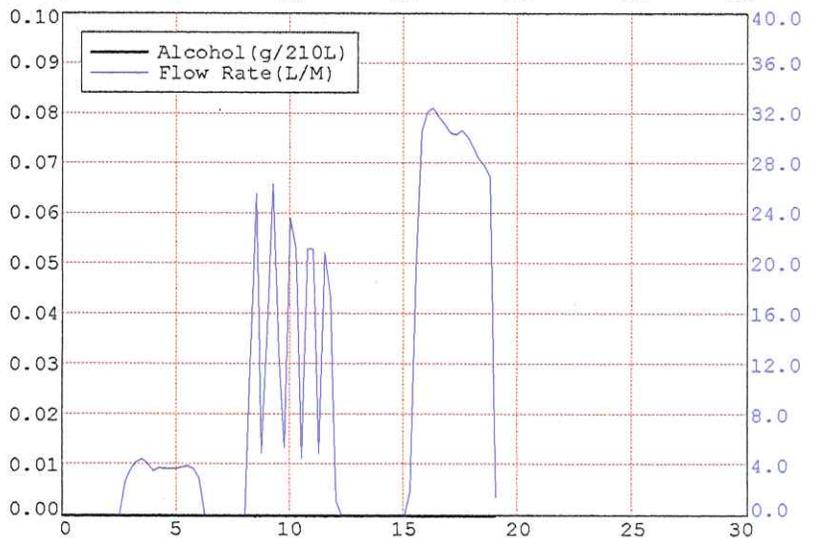
RF Detection Test

Passed



Sample Acceptance Test

Passed



CERTIFICATION PASSED

Performed by AS RD

Date 02/22/2016

Reviewed by AS

Date 2/22/16

Driscoll, Rob

From: Driscoll, Rob
Sent: Monday, December 07, 2015 2:32 PM
To: Chris Norton
Subject: Re: Vernon DMT

Thank you, I will let you know when I can come down to take a look.

Regards,
Rob

Sent from my iPhone

On Dec 7, 2015, at 2:07 PM, Chris Norton <cnorton@windhamcountyvt.gov> wrote:

It has been done. Simulator Time Out

On Mon, Dec 7, 2015 at 8:54 AM, Driscoll, Rob <Rob.Driscoll@vermont.gov> wrote:

Chris,

When you have a chance, can you run an Accuracy and Precision test on your DMT. I will be able to evaluate the data from our Host computer once it has been completed.

Thank you,

Rob

Robert Driscoll

Vermont Forensics Laboratory

45 State Drive

Waterbury, VT 05671

Electronics Technician

Rob.Driscoll@Vermont.gov

Desk: [\(802\) 241-5817](tel:8022415817)

Cell: [\(802\) 585-0123](tel:8025850123)

From: cnorton@windhamsheriff.com [mailto:cnorton@windhamsheriff.com] **On Behalf Of** Chris Norton
Sent: Friday, December 04, 2015 6:37 PM
To: Driscoll, Rob
Subject: Re: Vernon DMT

Rob,

The Vernon DMT again gave a simulator timeout error when my deputy tried to process a DUI last night.

On Tue, Nov 3, 2015 at 6:26 AM, Driscoll, Rob <Rob.Driscoll@vermont.gov> wrote:

Chris,

Thank you. I wanted to make sure before I drove down as I have been very busy.

Regards,

Rob

Sent from my iPhone

On Nov 3, 2015, at 6:24 AM, Chris Norton <cnorton@windhamcountyyvt.gov> wrote:

After the last email I rechecked all the connections, unscrewed the simulator head, check the seal screwed it back on and then ran and accuracy and precision check and it worked fine. I then placed it back in service and it malfunctioned again.

On Nov 3, 2015 6:07 AM, "Driscoll, Rob" <Rob.Driscoll@vermont.gov> wrote:

Has anybody even checked the simulator, or has the instrument just been left in use until it could fail again?

Rob

Sent from my iPhone

On Nov 3, 2015, at 5:04 AM, Chris Norton <cnorton@windhamcountyvt.gov> wrote:

It happened again. I've placed it out of service once again.

On Mon, Oct 26, 2015 at 8:12 AM, Driscoll, Rob <Rob.Driscoll@vermont.gov> wrote:

Chris,

There should be a key for the simulator lock at one of your agencies. Please make sure the Jar is not cross threaded and tight. Also make sure the quick connects both "click" while pushing the simulator onto the tower. In looking at past reports, the instrument was not having this issue until after your October RPC. Let me know if this resolves your problem.

Regards,
Rob

Robert Driscoll

Vermont Forensics Laboratory

45 State Drive

Waterbury, VT 05671

Electronics Technician

Rob.Driscoll@Vermont.gov

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Cell: [\(802\) 585-0123](tel:(802)585-0123)

From: cnorton@windhamsheriff.com
[mailto:cnorton@windhamsheriff.com] **On Behalf Of** Chris Norton
Sent: Sunday, October 25, 2015 9:39 AM
To: Driscoll, Rob
Subject: Vernon DMT

The Vernon DMT is out of service due to the simulator timing out. I checked the connections to the simulator and ran a accuracy and precision check. It was fine until the seventh test where out again gave the error. Unfortunately whomever was the DMT supervisor for Vernon PD did not leave a DMT tool so I could not check the internal connections.

--

DFC. Chris Norton

Windham County Sheriff's Office-Vernon Division

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www.windhamsheriff.com

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ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMaster DMT: 100141
 Location: WINDHAM COUNTY SO - Vernon

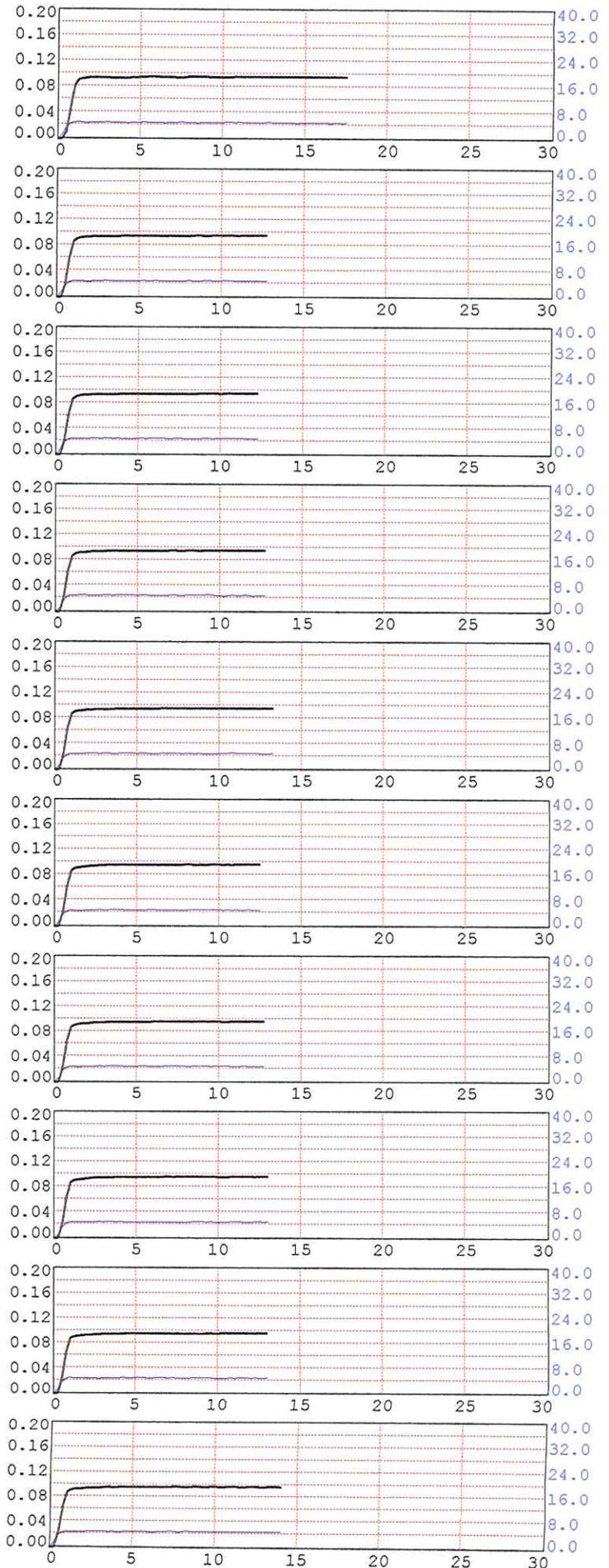
Date: 12/08/2015
 Time: 11:55:51

SUPERVISOR NAME:
 ROBERT DRISCOLL

SOLUTION LOT #: 15-23-100
 SOLUTION CONCENTRATION: 0.097

BLANK TEST	0.000	11:56
CALIBRATION CHECK	PASSED	11:56
SIMULATOR VAPOR 34.0°C	0.095	11:57
SIMULATOR VAPOR 34.0°C	0.096	11:58
SIMULATOR VAPOR 34.0°C	0.096	11:59
SIMULATOR VAPOR 34.0°C	0.096	12:00
SIMULATOR VAPOR 34.0°C	0.096	12:01
SIMULATOR VAPOR 34.0°C	0.097	12:02
SIMULATOR VAPOR 34.0°C	0.097	12:03
SIMULATOR VAPOR 34.0°C	0.097	12:04
SIMULATOR VAPOR 34.0°C	0.097	12:05
SIMULATOR VAPOR 34.0°C	0.097	12:06
BLANK TEST	0.000	12:07

Average = 0.096
 Std Dev = 0.0006



1104 11 RD